Analytical Resources, LLC
Analytical Chemists and Consultants

11 May 2023

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

RE: AOC5 MR Phase 1

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

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

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

Associated Work Order(s)	Associated SDG ID(s)
23A0420	N/A

Susan Dunnihoo

Digitally signed by Susan Dunnihoo
Date: 2023.05.11 10:59:43 -07'00'

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

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

Analytical Resources, LLC

Susan Dunnihoo, Director, Client Services

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

Cert# 100006-012

1 of 1

CHAIN-OF-CUSTODY/TEST REQUEST FORM

№ 3981

Project/Client Name: AOCSMR Phase 1
Project Number: 210075.0102
Contact Name: Amara VanderVoet
Sampled By: Windward

Ship to: ARL
Attn: Sue Dunihoo
Shipper: Courier
Form filled out by: AV

Shipping Date: 1/19/23
Airbill Number:
Turnaround requested: Std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) PCBs	SMS SVOCs	TOC Total solids	SMS Metals	DLE	Archive	Arsenic	CPAHs	Comments / Instructions [Jar tag number(s)]
1/19/23	0810	LDW23-SC1045	4	sediment	X	X	X	X	X	X			
	0837	LDW23-SC1052	3		X	—	X	—	—	X	—	—	
	0916	LDW23-SC1057	3		X	—	X	—	~~X~~	X	—	—	
	0955	LDW23-IT1051	4		X	—	X	—	X	X	X	X	
	1032	LDW23-SC1125	3		X	—	X	—	—	X	—	—	
	1046	LDW23-SC1132	3		X	—	X	—	—	X	—	—	
	1225	LDW23-SC1003	~~3~~ 4		X	X	X	X	NA	X	—	—	
	1155	LDW23-SC1004	~~3~~ 4		X	X	X	X	X	X	—	—	
	1340	LDW23-SC1082	4		X	X	X	X	NA	X	—	—	
				AV 1/19/23									
		Total Number of Containers	32	Purchase Order / Statement of Work # APJ-110222-AOCS-ARL									

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Amara VanderVoet	Phillip	Print name:	
Signature:	Company: ARL	Signature:	Company:
Company: Windward	Date/Time: 1/19/23 15:55	Company:	
Date/Time: 1/19/23 1555		Date/Time:	Date/Time:

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

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

To be completed by Laboratory upon sample receipt:

Date of receipt:: 1/19/23	Laboratory W.O. #: 23A0420
Condition upon receipt: Good	Time of receipt: 15:55
Cooler temperature: 4.4°C, 3.6°C	Received by: Phillip Bates

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Anchor QEA/ Windward Project Name: LDW AOCs MR Phase 1

COC No(s): 3981 NA Delivered by: Fed-Ex UPS Courier Hand Delivered Other:

Assigned ARI Job No: 23A0420 Tracking No: NA

Preliminary Examination Phase:

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

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 4.4 3.9 3.6

Time 16:15 Temp Gun ID#: 90097208

If cooler temperature is out of compliance fill out form 00070F

Cooler Accepted by: PIB Date: 1/19/23 Time: 15:55

Complete custody forms and attach all shipping documents

Log-In Phase:

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

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

Samples Logged by: PIB Date: 1/20/23 Time: 10:32 Labels checked by:

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

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

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle, WA 98101	Project Manager: Ali Judkins	05/11/2023 10:01

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Matrix	Date Sampled	Date Received
23A0420-01	LDW23-SC1045	Solid	01/19/23 08:10	01/19/23 15:55
23A0420-02	LDW23-SC1052	Solid	01/19/23 08:37	01/19/23 15:55
23A0420-03	LDW23-SC1057	Solid	01/19/23 09:16	01/19/23 15:55
23A0420-04	LDW23-IT1051	Solid	01/19/23 09:55	01/19/23 15:55
23A0420-05	LDW23-SC1125	Solid	01/19/23 10:32	01/19/23 15:55
23A0420-06	LDW23-SC1132	Solid	01/19/23 10:46	01/19/23 15:55
23A0420-07	LDW23-SC1003	Solid	01/19/23 12:25	01/19/23 15:55
23A0420-08	LDW23-SC1004	Solid	01/19/23 11:55	01/19/23 15:55
23A0420-09	LDW23-SC1082	Solid	01/19/23 13:40	01/19/23 15:55

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	11-May-2023 10:01

Case Narrative

Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Work Order: 23A0420

Sample receipt

Samples as listed on the preceding page were received 19-Jan-2023 15:55 under ARI work order 23A0420. For details regarding sample receipt, please refer to the Cooler Receipt Form. Samples were frozen on receipt to preserve holding times.

Semivolatiles - EPA Method SW8270E

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

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits except for response of naphthalene at 5x the MRL. As samples had low response of naphthalene, all values were well below regulatory limits, and QC samples had acceptable recovery for naphthalene, the client was informed of the and no further corrective action was taken. Associated results have been "B"-flagged.

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries for bis(2-ethylhexyl)phthalate (BEHP) were low of control limits. The relative percent differences (RPD) for 4-methylphenol was high of control limits. As the associated sample values were well below regulatory limits, the outliers are flagged and no futher corrective action was taken for this sample set.

The matrix spike/matrix spike duplicate (MS/MSD) percent recoveries for bis(2-ethylhexyl)phthalate were low of control limits and flagged on the summary sheet. The relative percent differences (RPD) were within advisory control limits.

The reference material (SRM) percent for bis(2-ethylhexyl)phthalate was low of control limits. As the associated sample values were well below regulatory limits, the outliers are flagged and no further corrective action was taken for this sample set.

The outliers for the BEHP were thought to be due to the GPC cleanup step and the GPC column associated with the extract cleanups was recalibrated.

Semivolatiles - EPA Method SW8270E-SIM

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

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

Internal standard areas were within limits.

Surrogate percent recoveries for d14-p-Terphenyl high of control limits are flagged on the summary sheets.

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

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	11-May-2023 10:01

Case Narrative

The blank spike duplicate (BSD) spike recovery for pentachlorophenol was high of control limits. The relative percent differences (RPD) were high of control limits for benzoic acid and 2,4-dimethyl phenol, flagged on the summary sheet. As the bias was high for pentachlorophenol and the acidic compounds were in control for the matrix QC, no further action was taken.

The matrix spike/matrix spike duplicate (MS/MSD) percent recoveries for pentachlorophenol were high of advisory control limits and the relative percent differences (RPD) were within advisory control limits.

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

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

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

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries for dibenzo[a,h]anthracene-d14 high of control limits are flagged on the summary sheets.

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

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

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

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

Pesticides - EPA Method SW8081B (Hexachlorobenzene)

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

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

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

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

The batch BLB0382 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits, reported under work order 23A0419.

PCB Aroclors - EPA Method SW8082A

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

SLC0014-ICV2, SLC0014-CCV2, SLC0014-CCV4 and SLC0014-CCV6 failed high for aroclor 1260 on the ZB5 column. Associated data is reported from the ZB35 column as primary.

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	11-May-2023 10:01

Case Narrative

Response for the internal standard hexabromobiphenyl failed low the ZB5 column for several samples. Associated data is reported from the ZB35 column as primary.

The surrogate percent recoveries were within control limits.

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

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

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

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

Total Metals - EPA Method 6020B

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

Calibration standards SLE0043-CCVB, SLE0043-CCVD and SLE0043-CCVK showed lead high of limits and affected samples were not reported for lead from this run. Analyses where cadmium was noted to be noisy, scandium was high or germanium was low were not reported from the run. SLE0043-IFA showed chromium-53 high. SLE0043-CRL1 showed copper high but passed on the rerun. SLE0043-HCV2 showed lead high.

Sequence SLE0138 calibrations showed outliers for chromium and lead, with affected analytes not reported. SLE0138-IFA and SLE138-IFB showed vanadium-1 and chromium-53 high.

Standard SLE0163-CCVC showed lead high of limits. Affected analytes were not reported. SLE0163-IFA showed chromium-53 high. The analyst noted SLE0163-ICB1, SLE0163-CCB1 and SLE0163-IFA1 to be noisy in standard mode.

The method blank(s) were clean at the reporting limits, with low level response for copper. Sample results were greater than ten times the blank level, so no reruns were performed. Associated positive results have been "B"-flagged.

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

The batch BLD0396 duplicate (DUP) relative percent differences (RPD) were outside advisory control limits for lead and copper and flagged on the summary sheet, reported under work order 23A0417.

The batch BLD0396 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits, reported under work order 23A0417.

Digests diluted to mitigate matrix interference have been "D"-flagged.

Total Mercury - EPA Method 7471B

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

Initial and continuing calibrations were within method requirements.

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

The blank spike (BS/LCS) percent recovery was within control limits.

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	11-May-2023 10:01

Case Narrative

The batch BLD0397 duplicate (DUP) relative percent difference (RPD) was high of advisory control limits, an indicator of sample homogeneity. Results reported under work order 23A0417.

The batch BLD0397 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were high of advisory control limits, also likely caused by sample homogeneity. The post spike had an acceptable recovery, reported under work order 23A0417.

Wet Chemistry (Total Organic Carbon and Total Solids)

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

Initial and continuing calibrations were within method requirements.

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

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

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

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

Dioxin/Furans - EPA Method 1613

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

Response was low of control limits for 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8-HxCDF and 1,2,3,7,8,9-HxCDF in SLC0171-CCV1. Response was low of control limits for 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,7,8,9-HxCDF and 13C12-2,3,7,8-TCDF in SLC0171-CCV2. As the responses were only slightly out of recovery windows and issues are attributed to the sample matrix, the analyst declined to run the batch extracts a fourth time.

Recovery was low of limits for 11,2,3,4,7,8-HxCDF, 13C12-1,2,3,4,6,7,8-HpCDF and 13C12-1,2,3,4,7,8,9-HpCDF in SLC0176-CCV1. Recovery was low of limits for 13C12-1,2,3,4,6,7,8-HpCDF, 13C12-1,2,3,4,7,8-HxCDF and 13C12-1,2,3,6,7,8-HxCDF in SLC0176-CCV2.

The cleanup surrogate percent recoveries were within control limits.

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

The OPR (Ongoing Precision and Recovery) standard percent recoveries were within control limits.

The batch BLB0228 duplicate (DUP) relative percent difference (RPD) were outside advisory control limits for 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD and 2,3,4,6,7,8-HxCDF, reported under work order 23A0417.

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

Results that have been "X" flagged indicate possible interference from CDPEs (chlorinated diphenyl ethers).

QUALIFIERS AND NOTES

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

ICP-MS Metals

Analyzed with Secondary Isotopes

ICPMS metals are quantitated with the primary Ion and major wavelength unless interference is noted. When secondary ions are used for quantitation, both ions will be reported for laboratory and matrix QC.

These results were reported from a secondary ion:

Labnumber	SampleName	Analyte
23A0420-07	LDW23-SC1003	Copper-65

LDW23-SC1045

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-01 A	SDG:	23A0420
Sampled:	01/19/23 08:10	Prepared:	02/20/23 16:23	File ID:	NT1003172310.D
% Solids:	54.71	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/18/23 00:09
Batch:	BLB0495	Sequence:	SLC0473	Initial/Final:	18.29 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00046
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	141		4.4	20.0
106-44-5	4-Methylphenol	1	58.2		7.4	20.0
91-20-3	Naphthalene	1	16.2	J, B	4.2	20.0
91-57-6	2-Methylnaphthalene	1	12.9	J	4.5	20.0
208-96-8	Acenaphthylene	1	9.1	J	6.2	20.0
131-11-3	Dimethylphthalate	1	4.6	J	4.4	20.0
83-32-9	Acenaphthene	1	9.9	J	5.2	20.0
132-64-9	Dibenzofuran	1	20.0	U	14.1	20.0
86-73-7	Fluorene	1	20.0	U	14.6	20.0
85-01-8	Phenanthrene	1	61.5		8.7	20.0
120-12-7	Anthracene	1	28.8		7.2	20.0
206-44-0	Fluoranthene	1	162		6.1	20.0
129-00-0	Pyrene	1	169		5.7	20.0
85-68-7	Butylbenzylphthalate	1	15.1	J	9.4	20.0
56-55-3	Benzo(a)anthracene	1	87.4		6.0	20.0
218-01-9	Chrysene	1	124		6.1	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	43.3	J	5.5	50.0
	Benzofluoranthenes, Total	1	244		10.0	40.0
50-32-8	Benzo(a)pyrene	1	99.6		4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	56.2		14.6	20.0
53-70-3	Dibenzo(a,h)anthracene	1	20.2		17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	70.0		13.6	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	749.52	260	34.7	27 - 120	
Phenol-d5	749.52	331	44.2	29 - 120	
2-Chlorophenol-d4	749.52	471	62.9	31 - 120	
1,2-Dichlorobenzene-d4	499.68	311	62.3	32 - 120	
Nitrobenzene-d5	499.68	363	72.7	30 - 120	
2-Fluorobiphenyl	499.68	388	77.7	35 - 120	

LDW23-SC1045

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

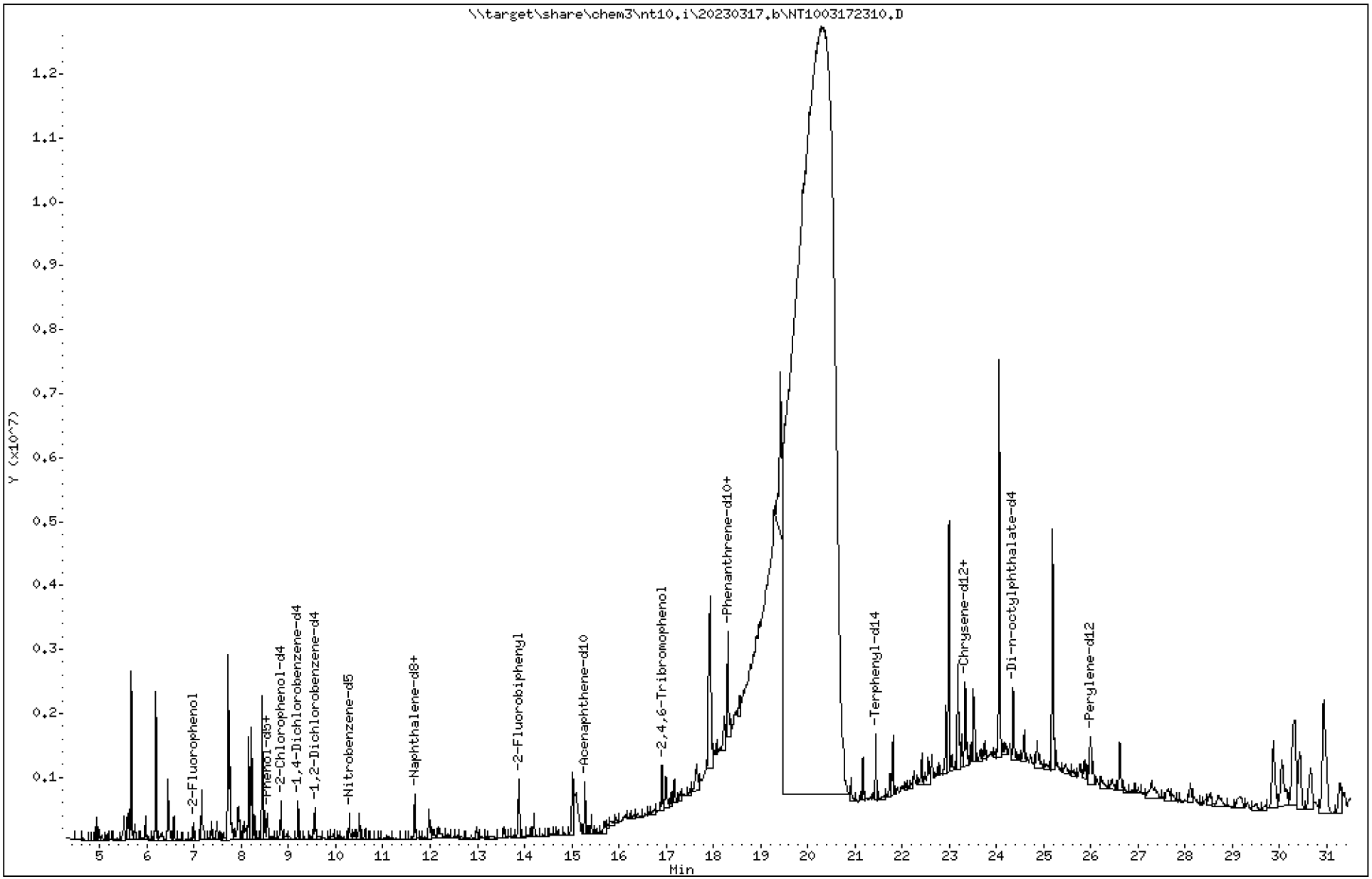
Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-01 A	SDG:	23A0420
Sampled:	01/19/23 08:10	Prepared:	02/20/23 16:23	File ID:	NT1003172310.D
% Solids:	54.71	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/18/23 00:09
Batch:	BLB0495	Sequence:	SLC0473	Initial/Final:	18.29 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00046
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	749.52	682	90.9	24 - 134	
p-Terphenyl-d14	499.68	406	81.2	37 - 120	

Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172310.D
Date : 18-MAR-2023 00:09
Client ID:
Sample Info: 23A0420-01

Instrument: nt10.i
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172310.D

Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

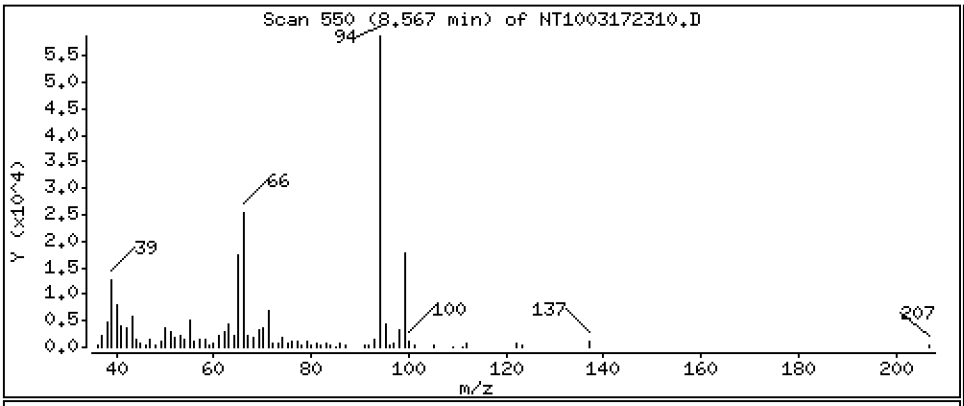
Operator: VTS

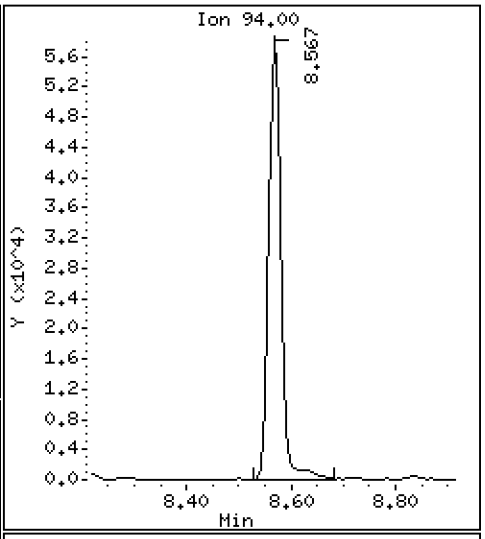
Column phase: ZB-5msi

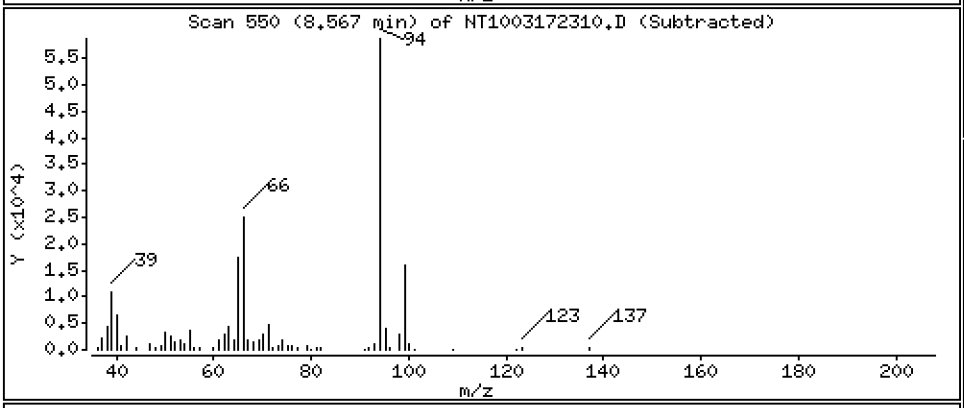
Column diameter: 0.25

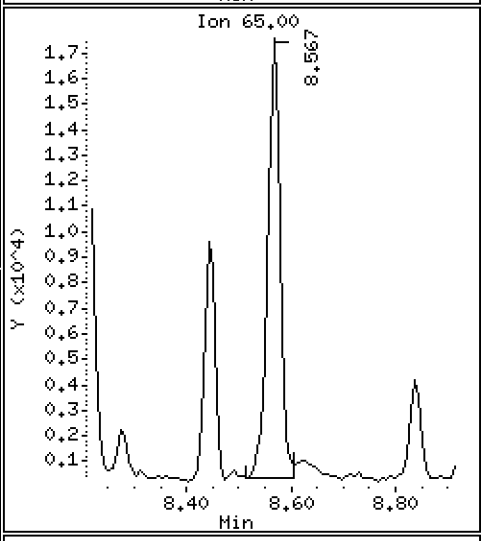
3 Phenol

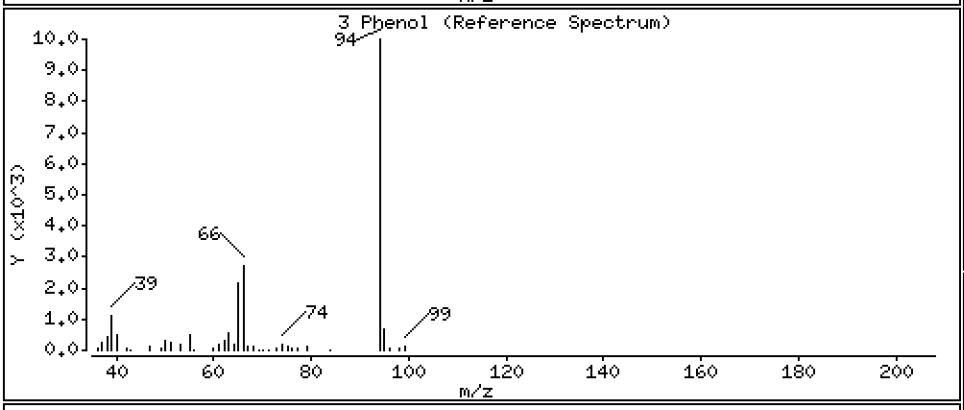
Concentration: 1.407 ug/mL

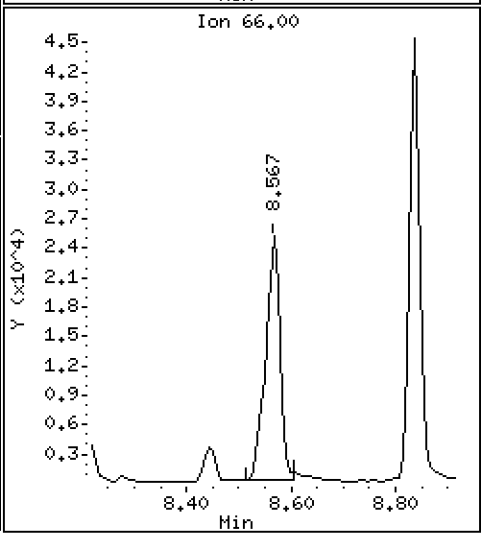


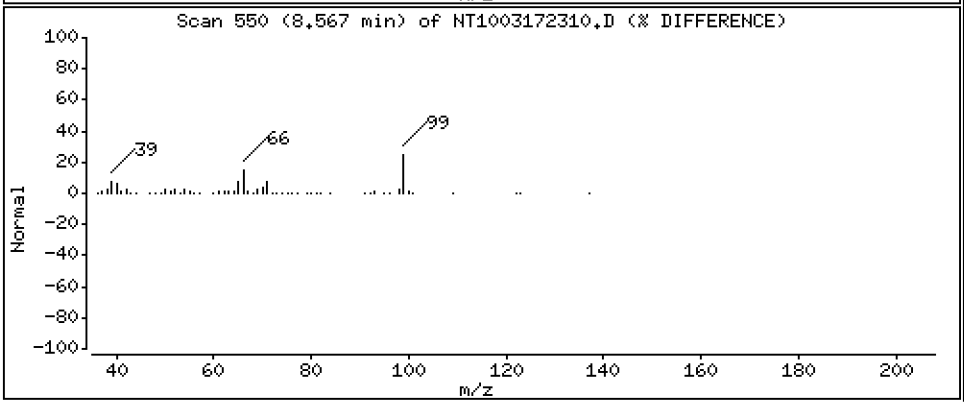












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

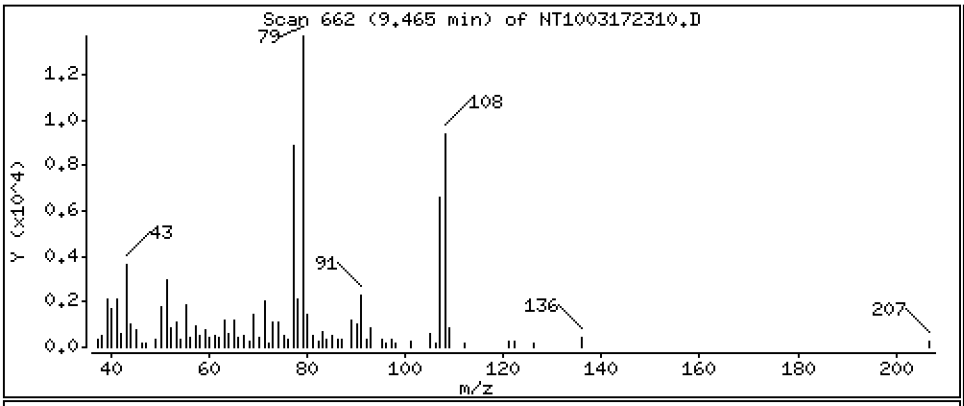
Operator: VTS

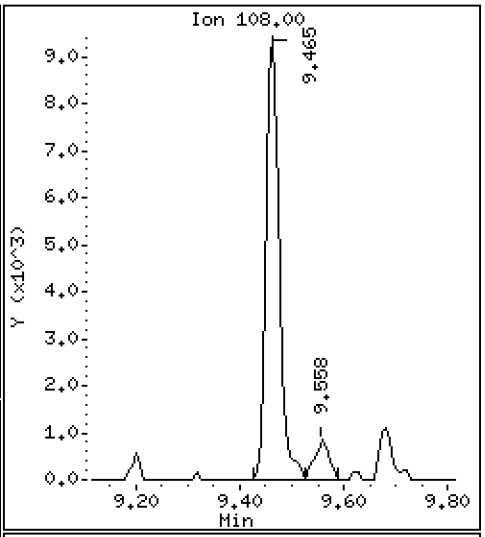
Column phase: ZB-5msi

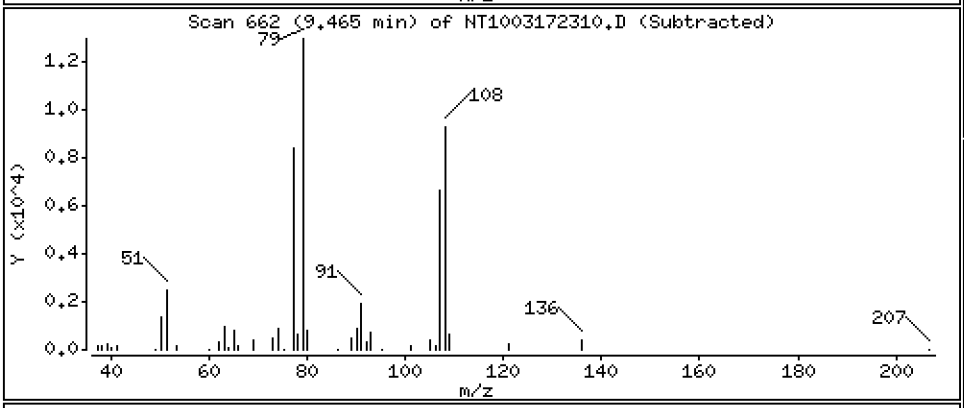
Column diameter: 0.25

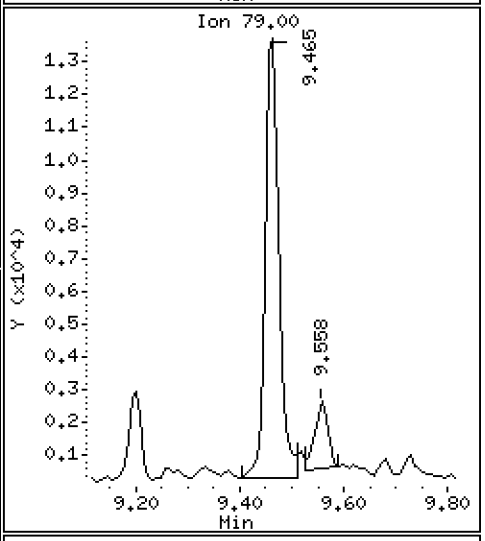
11 Benzyl alcohol

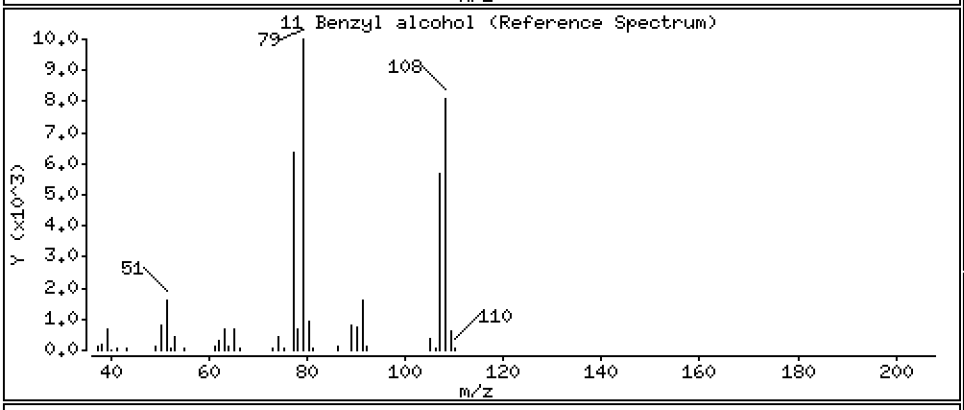
Concentration: 0.5197 ug/mL

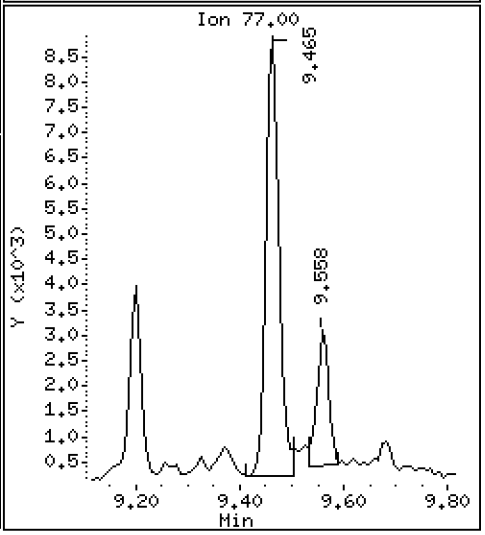


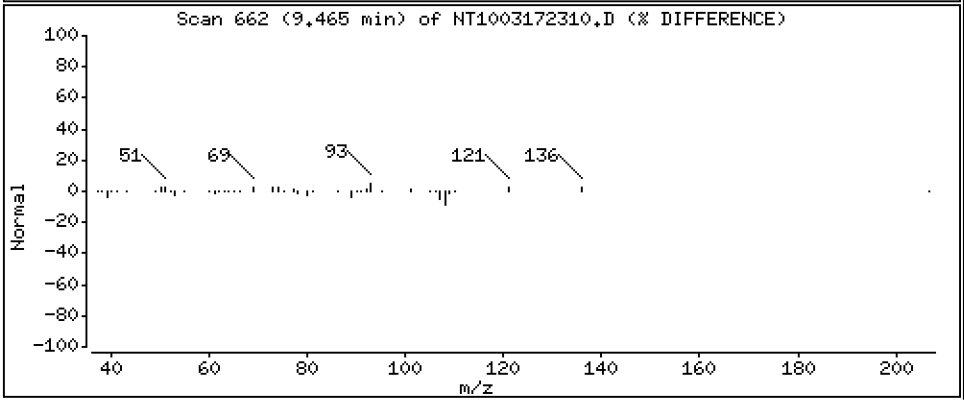












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

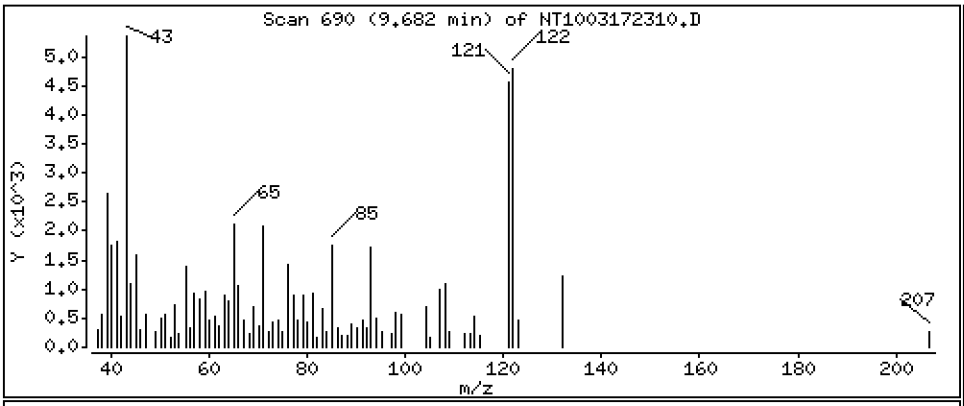
Operator: VTS

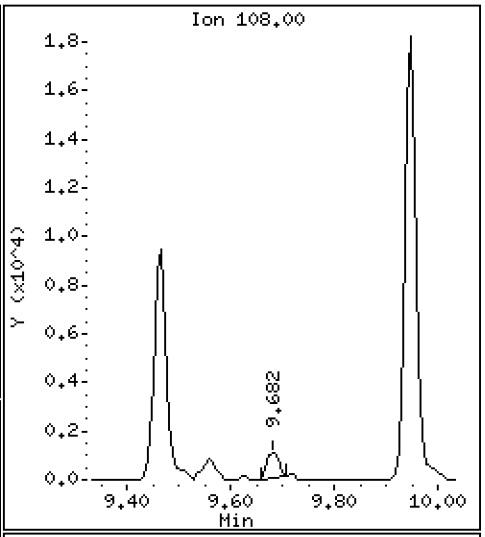
Column phase: ZB-5msi

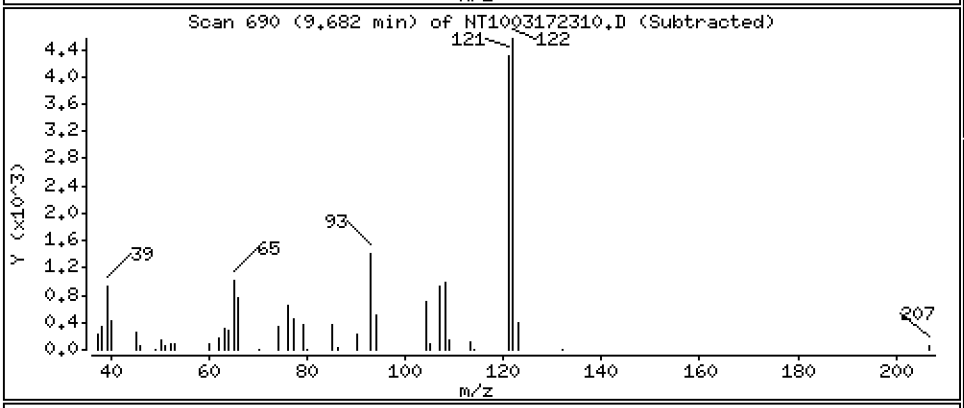
Column diameter: 0.25

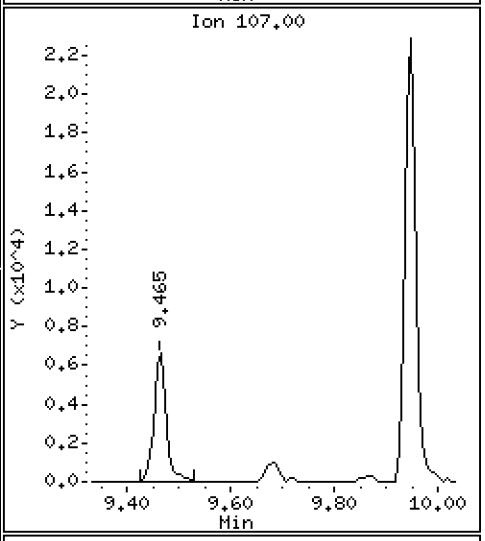
13 2-Methylphenol

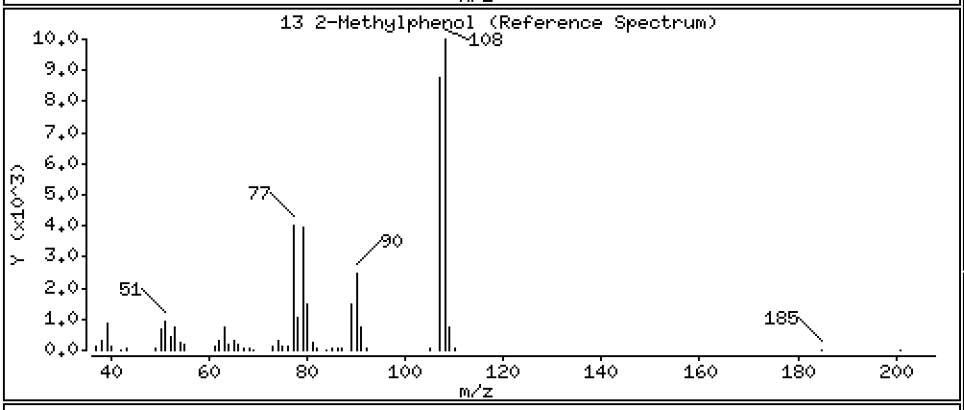
Concentration: 0.03331 ug/mL

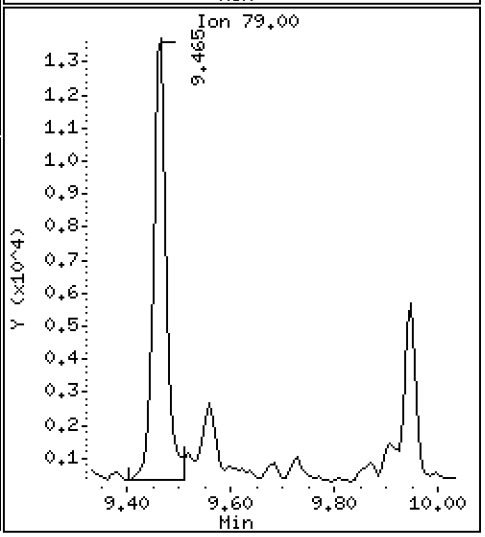


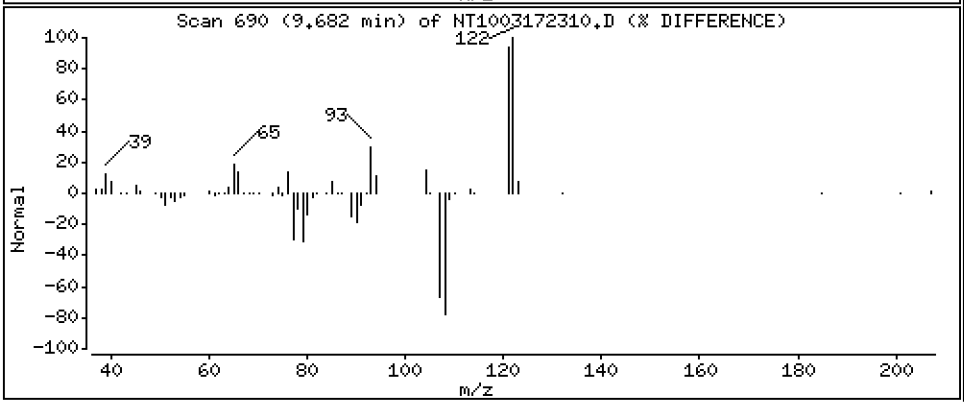












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

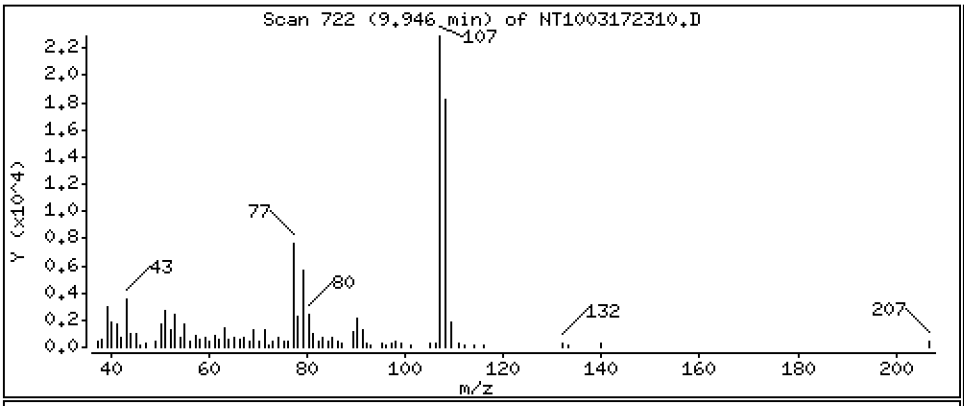
Operator: VTS

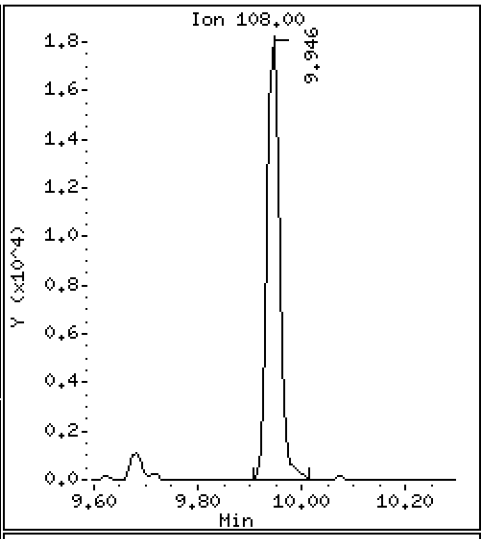
Column phase: ZB-5msi

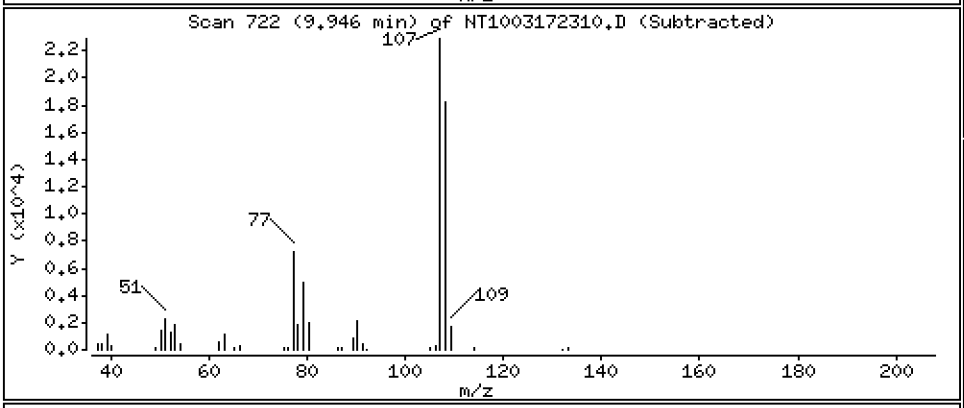
Column diameter: 0.25

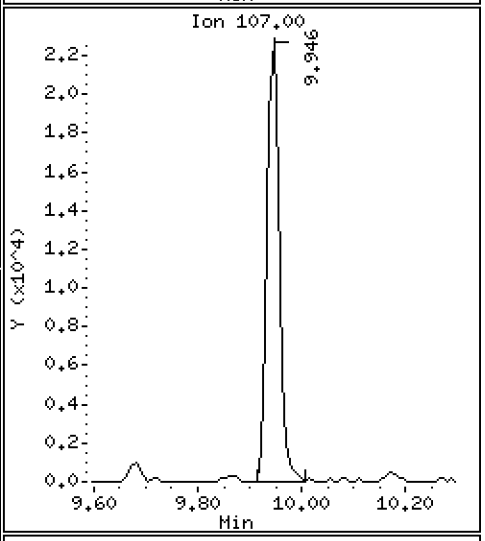
15 4-Methylphenol

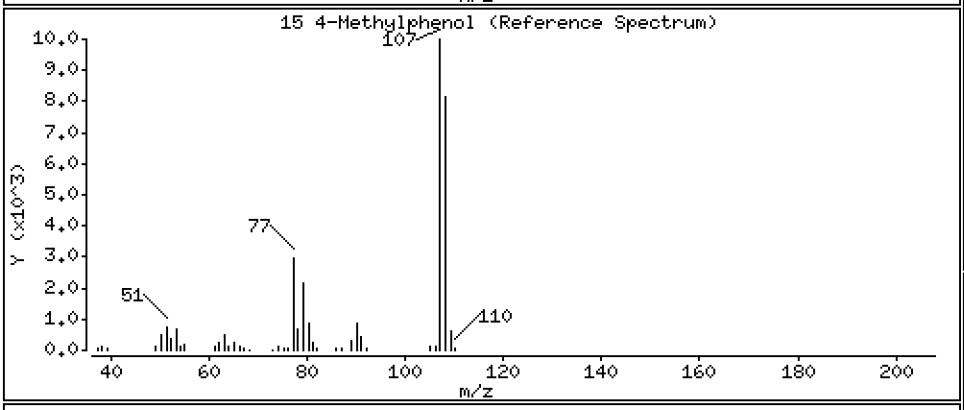
Concentration: 0.5824 ug/mL

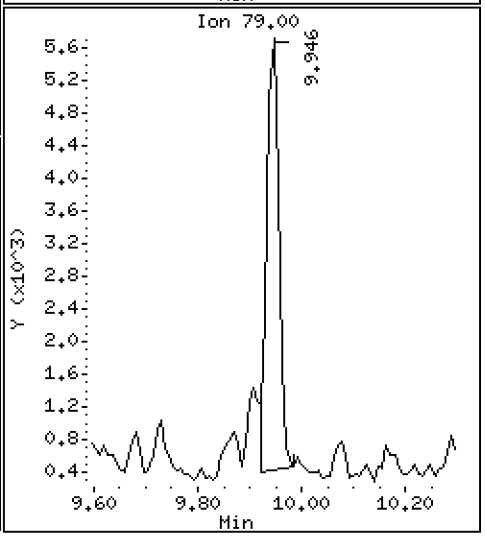


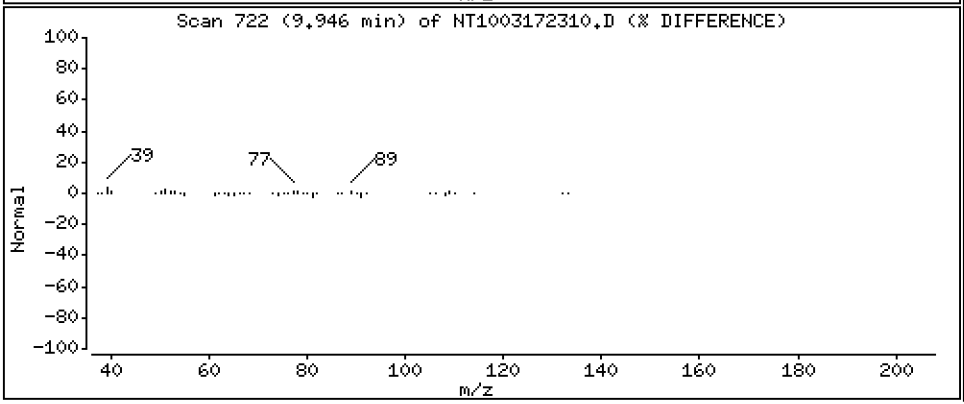












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

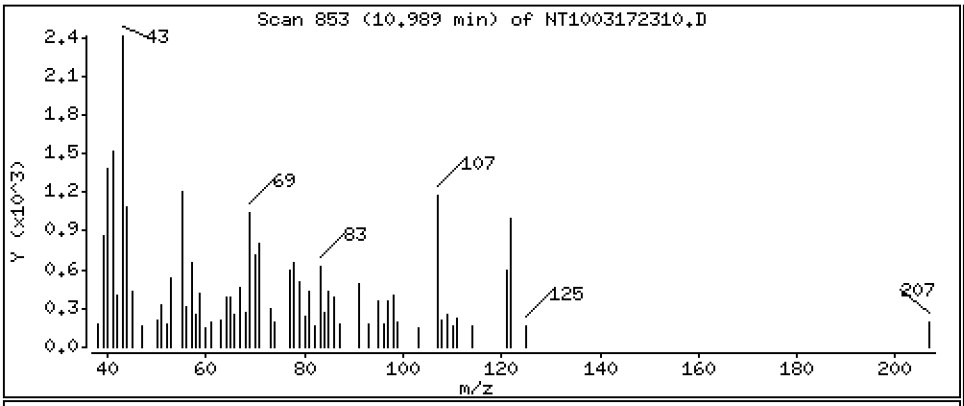
Operator: VTS

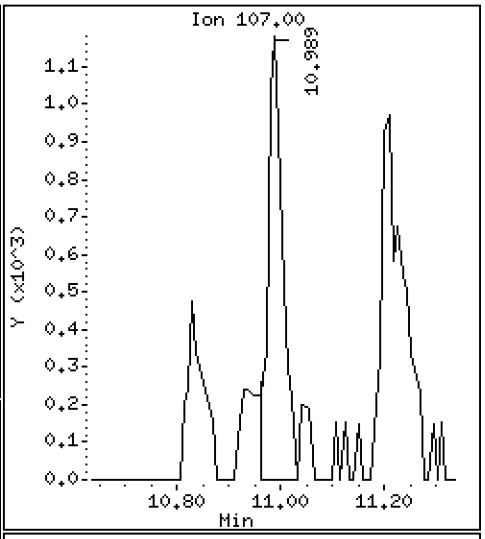
Column phase: ZB-5msi

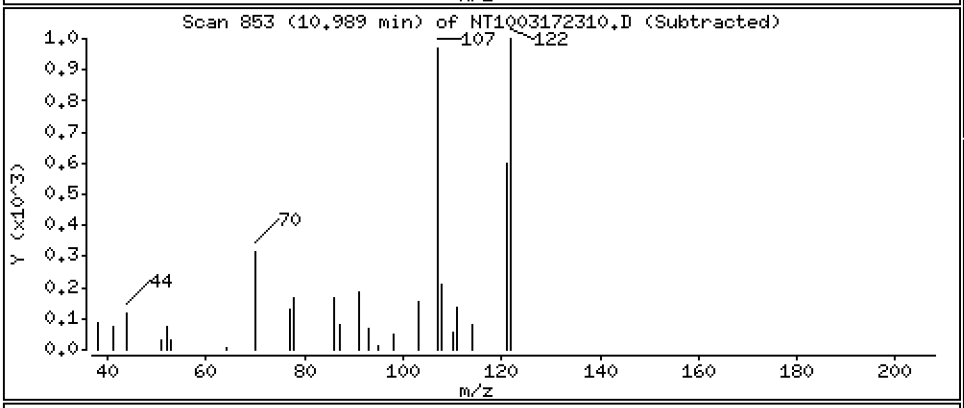
Column diameter: 0.25

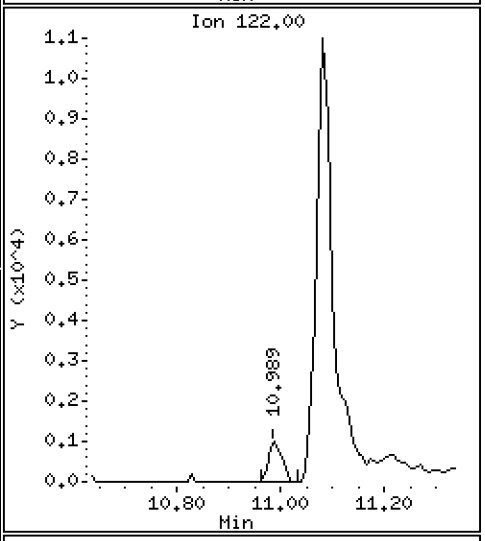
22 2,4-Dimethylphenol

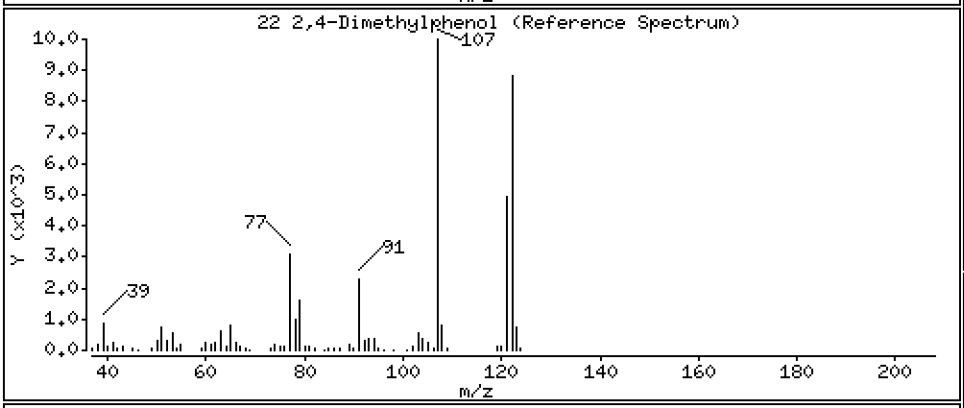
Concentration: 0.04678 ug/mL

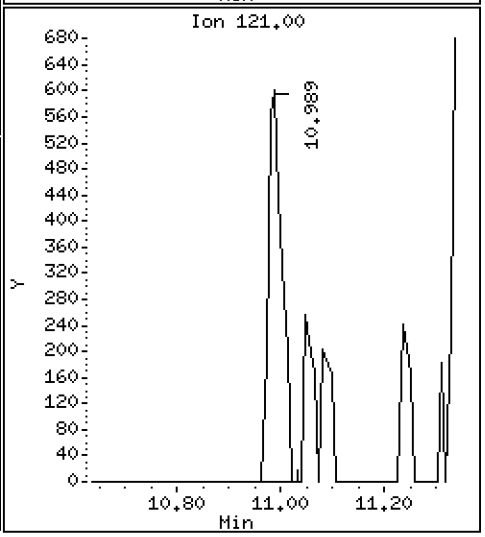


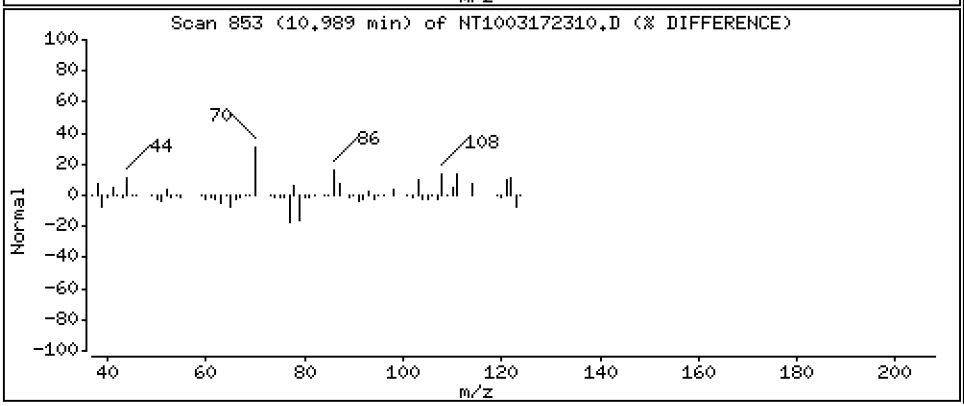












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

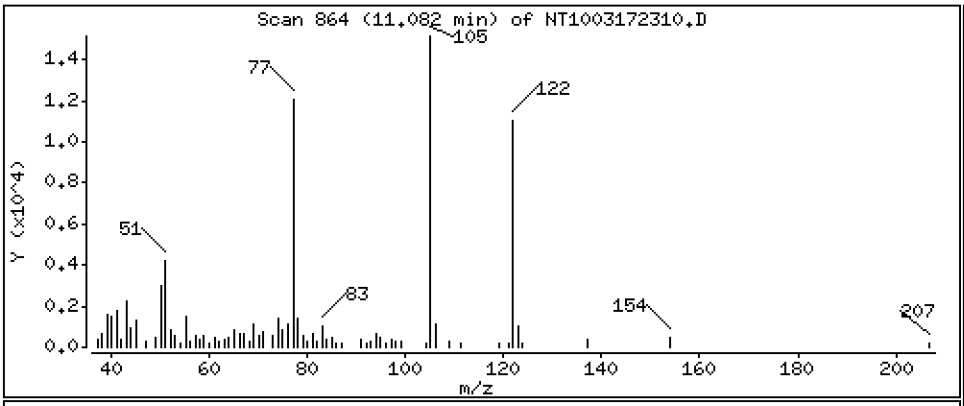
Operator: VTS

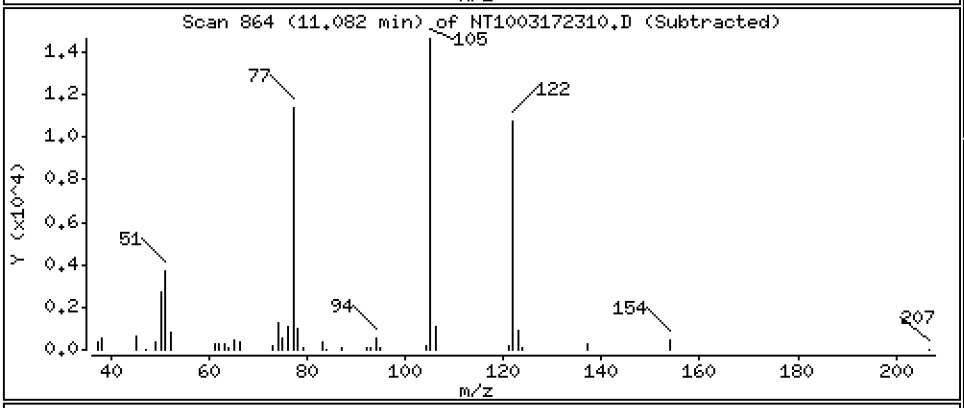
Column phase: ZB-5msi

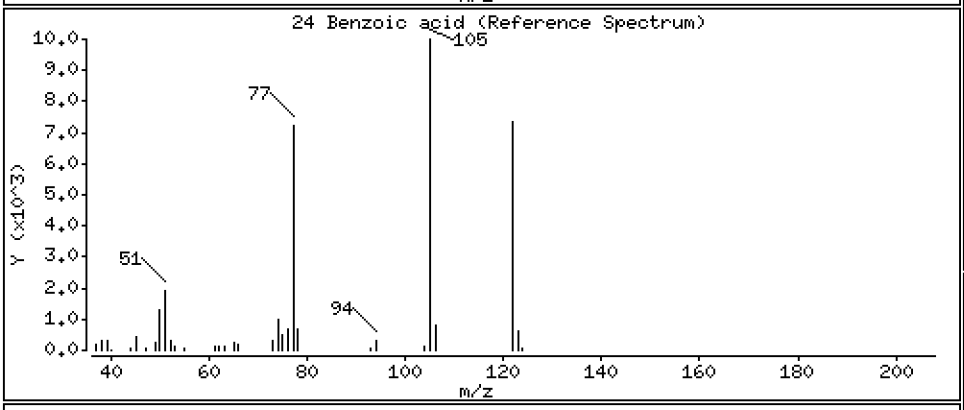
Column diameter: 0.25

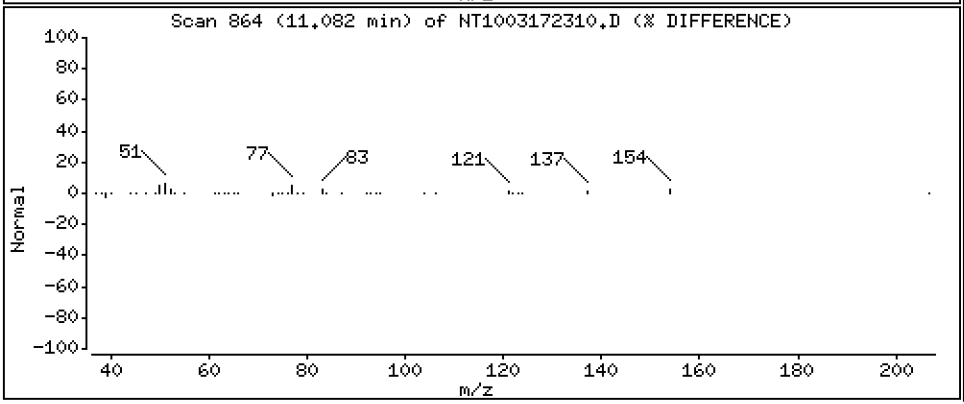
24 Benzoic acid

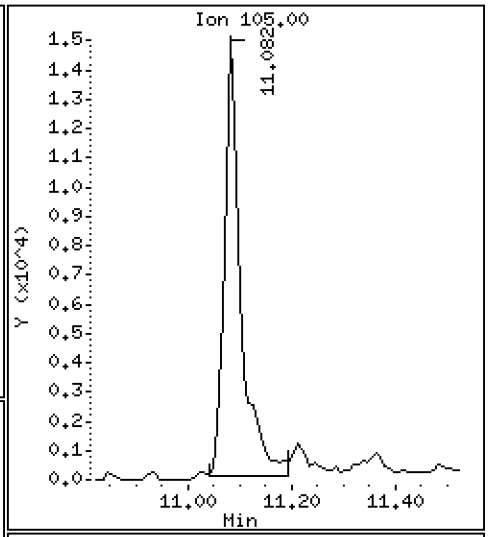
Concentration: 1.163 ug/mL

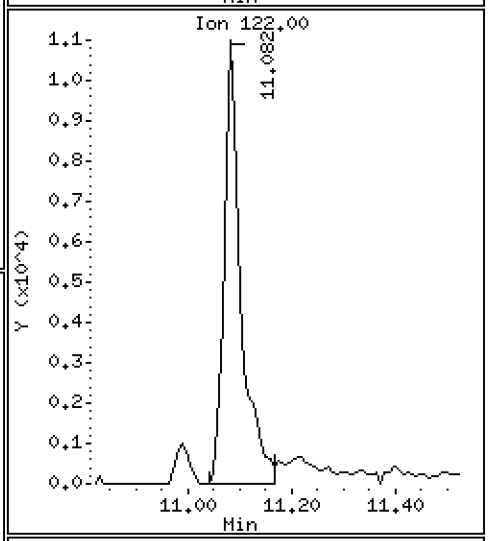


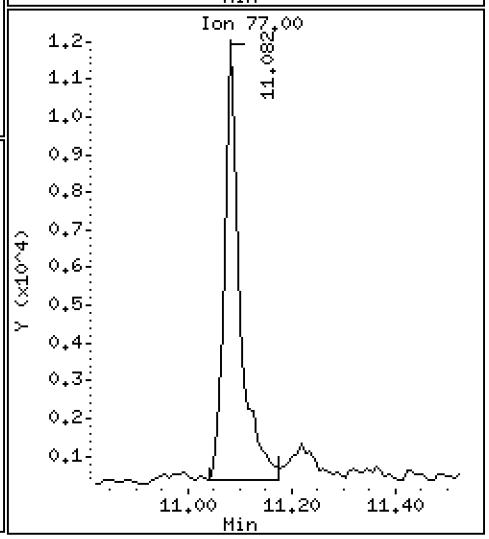












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

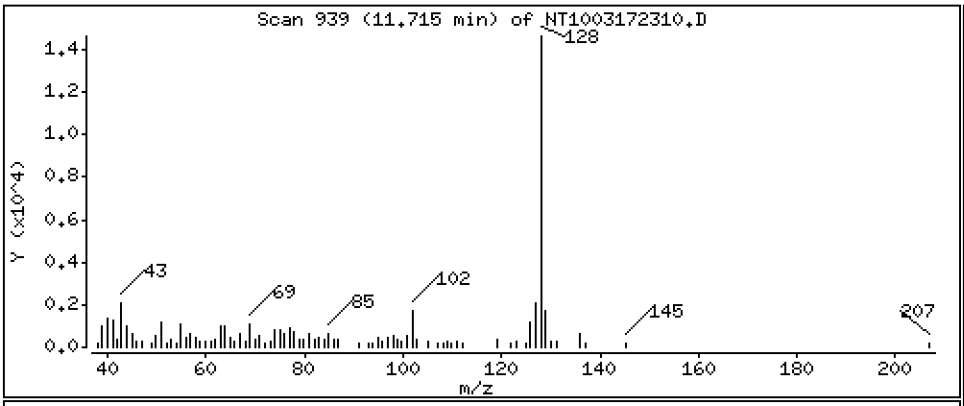
Operator: VTS

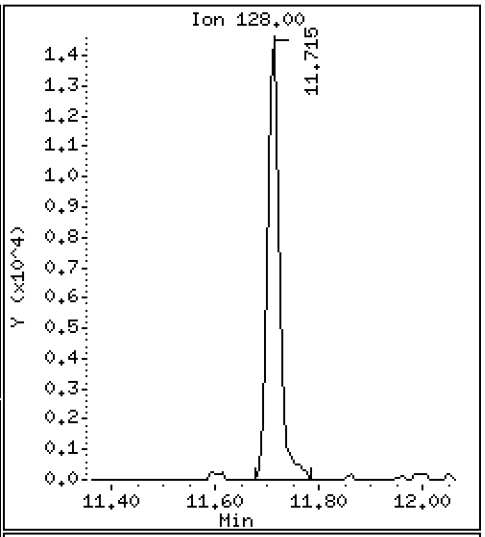
Column phase: ZB-5msi

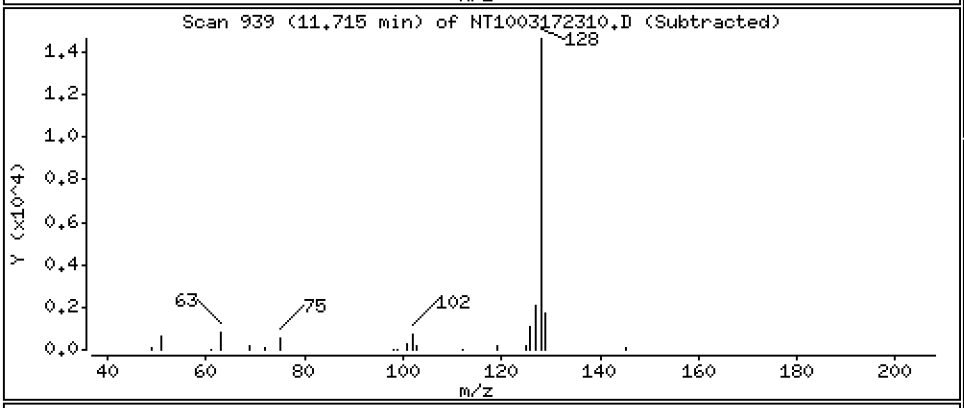
Column diameter: 0.25

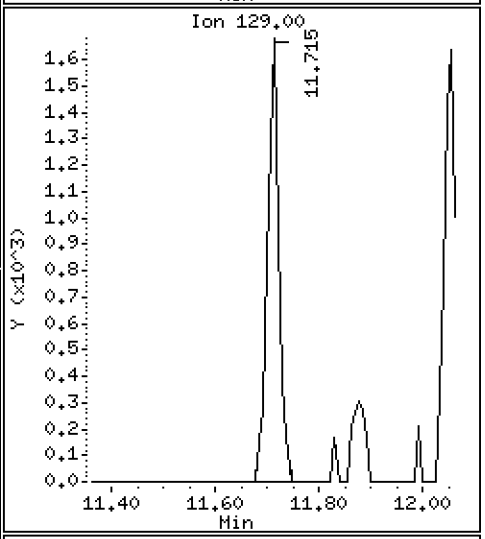
28 Naphthalene

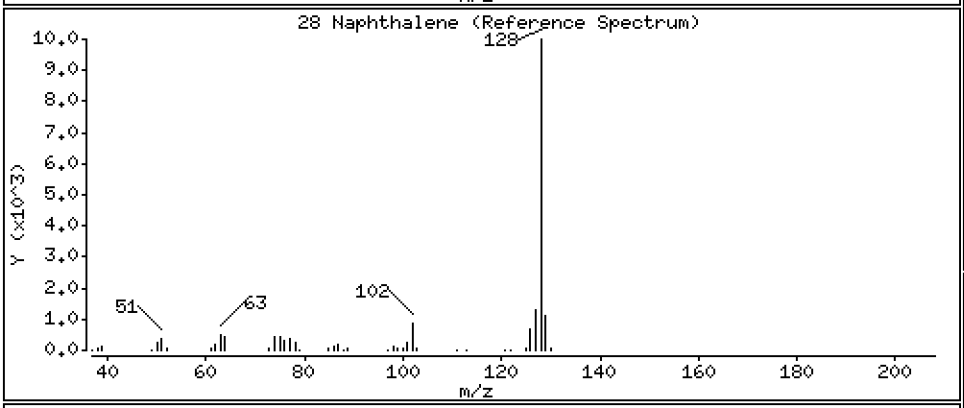
Concentration: 0.1622 ug/mL

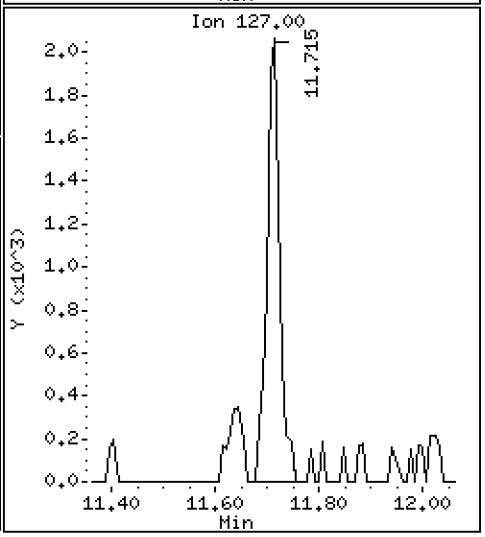


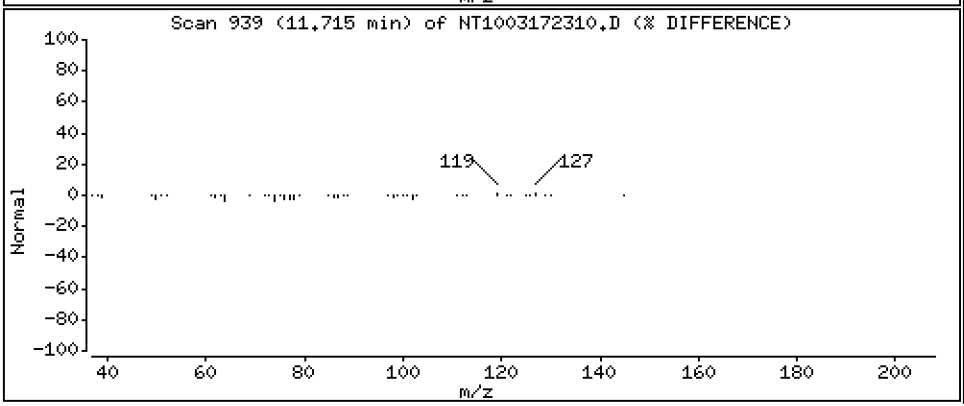












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

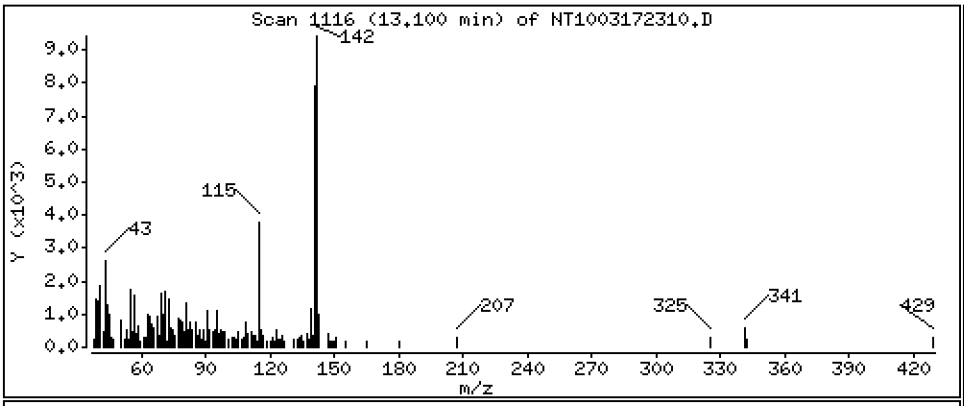
Operator: VTS

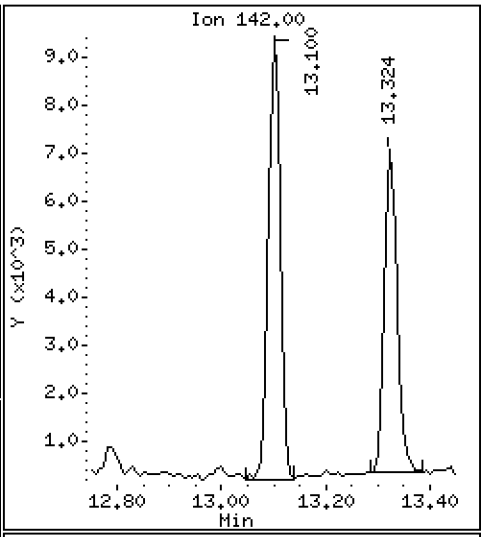
Column phase: ZB-5msi

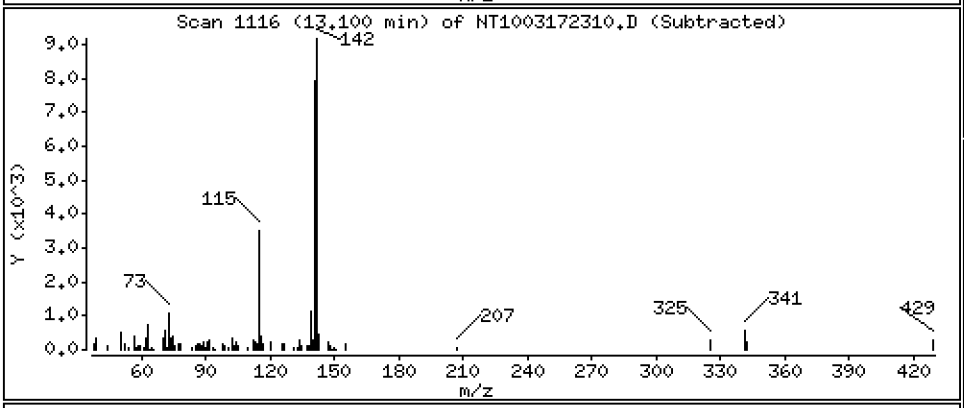
Column diameter: 0.25

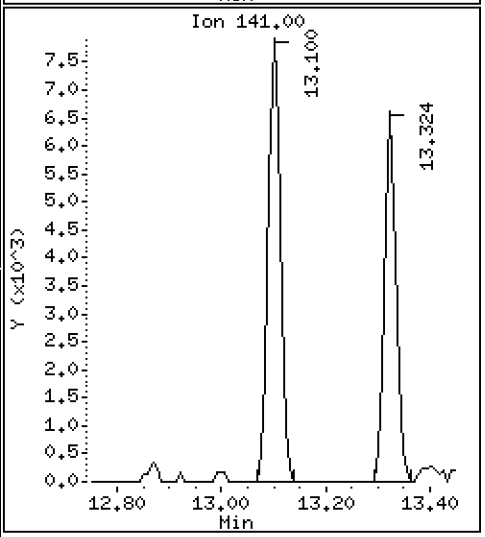
32 2-Methylnaphthalene

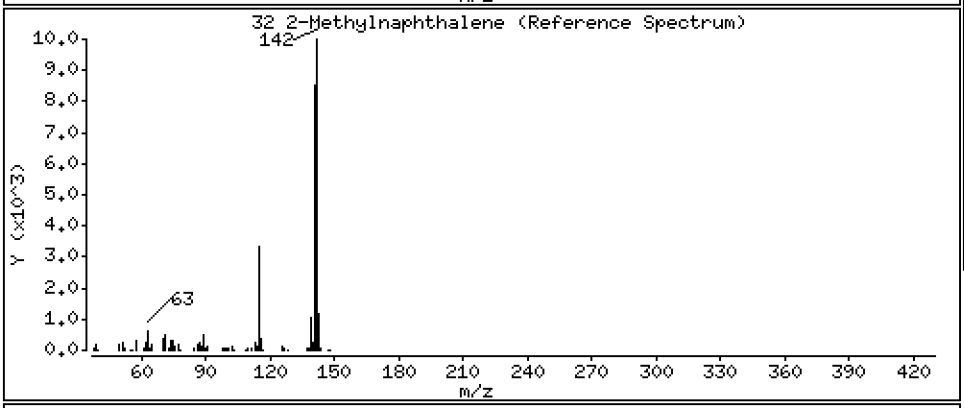
Concentration: 0.1289 ug/mL

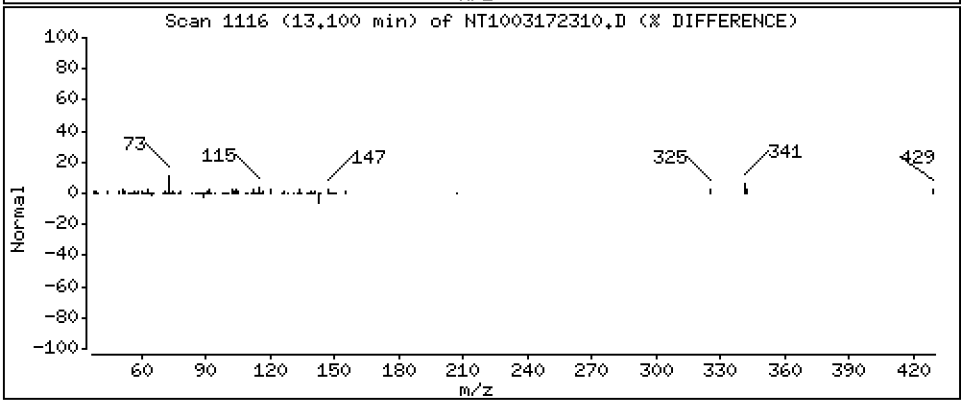












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172310.D

Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

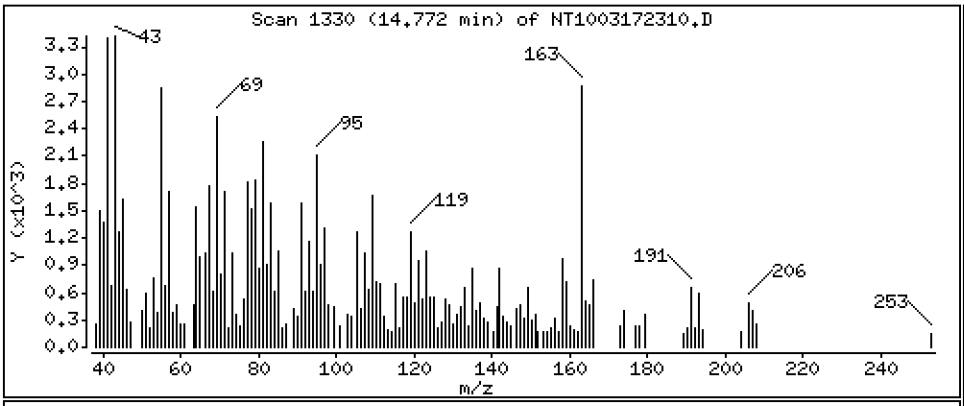
Operator: VTS

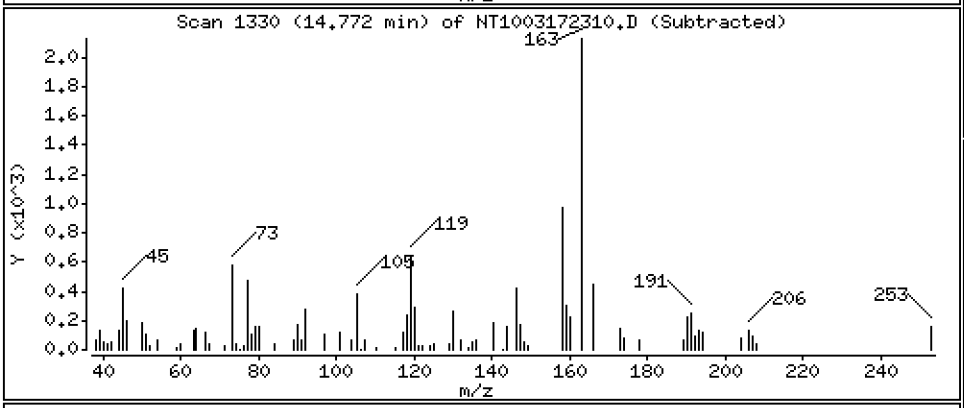
Column phase: ZB-5msi

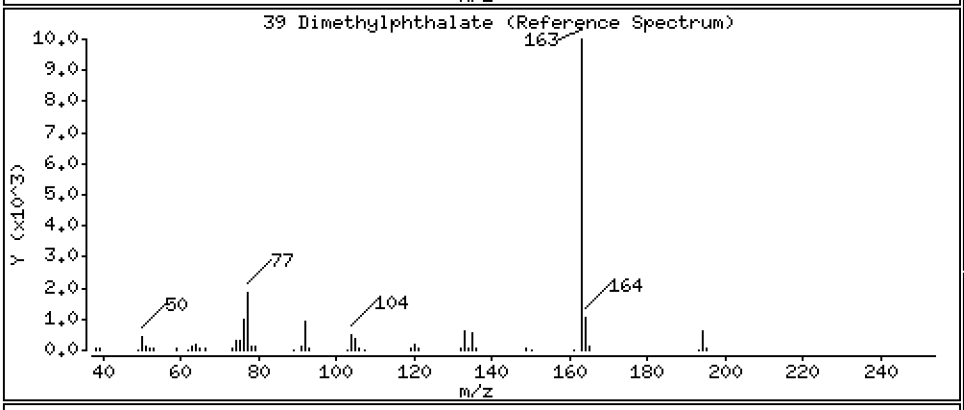
Column diameter: 0.25

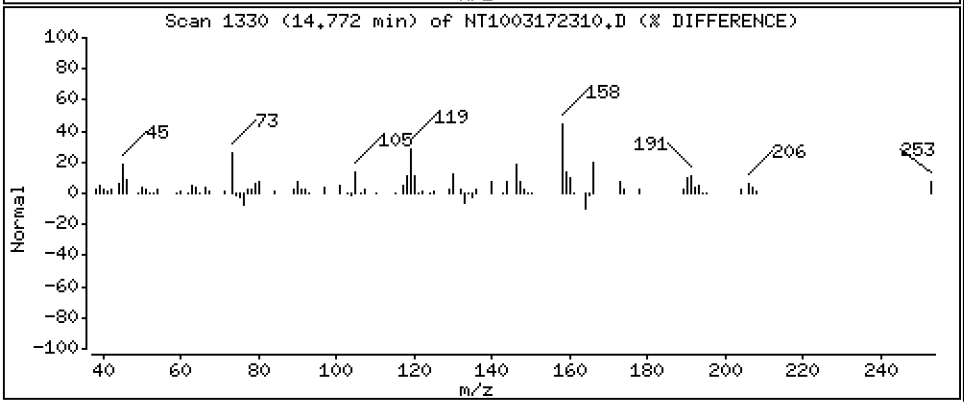
39 Dimethylphthalate

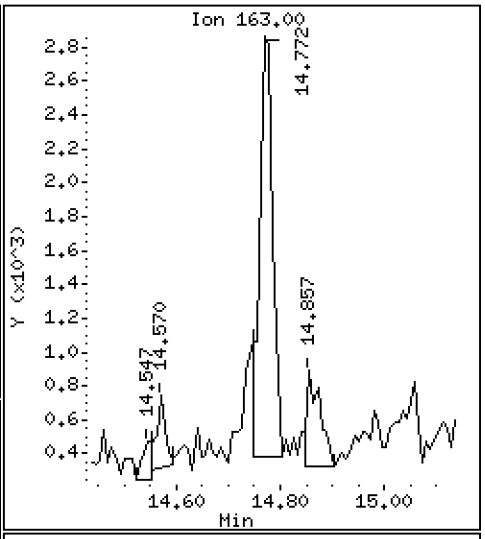
Concentration: 0.04606 ug/mL

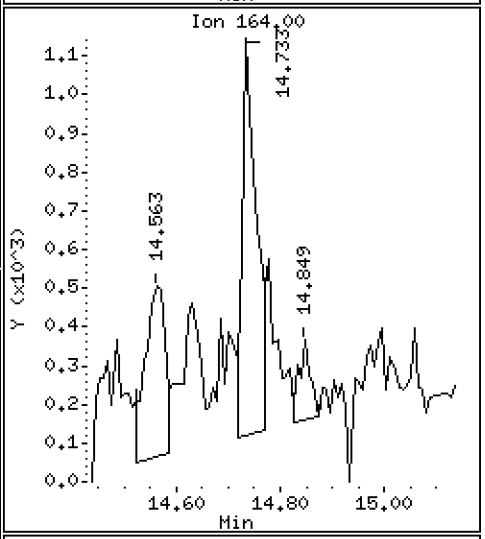


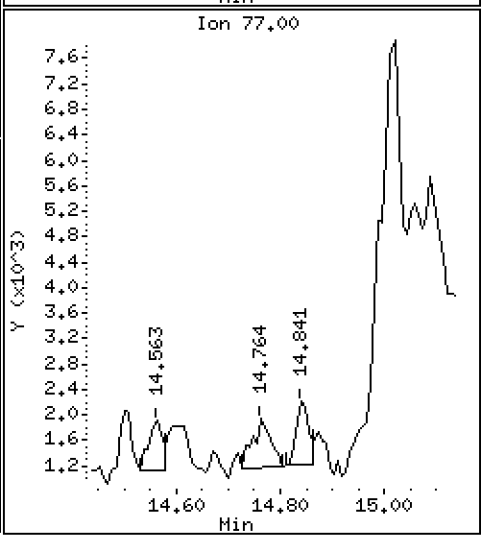












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

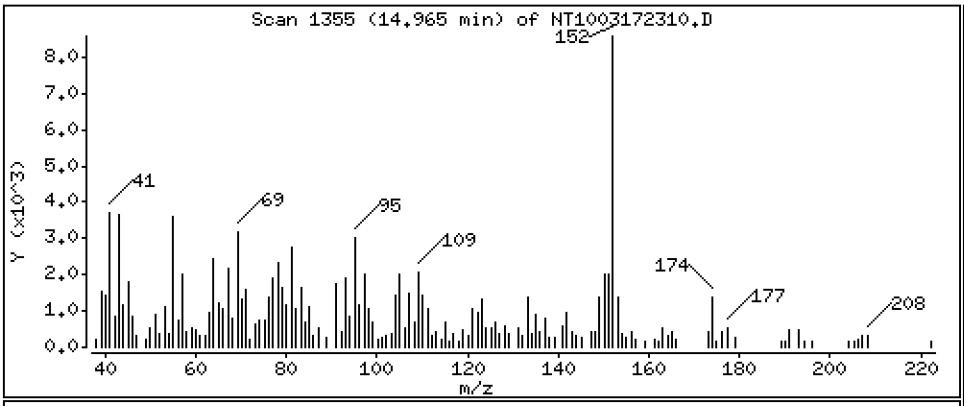
Operator: VTS

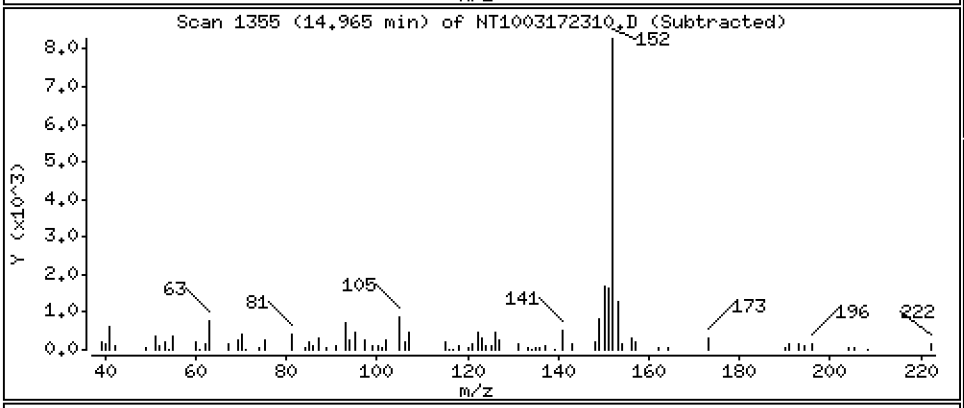
Column phase: ZB-5msi

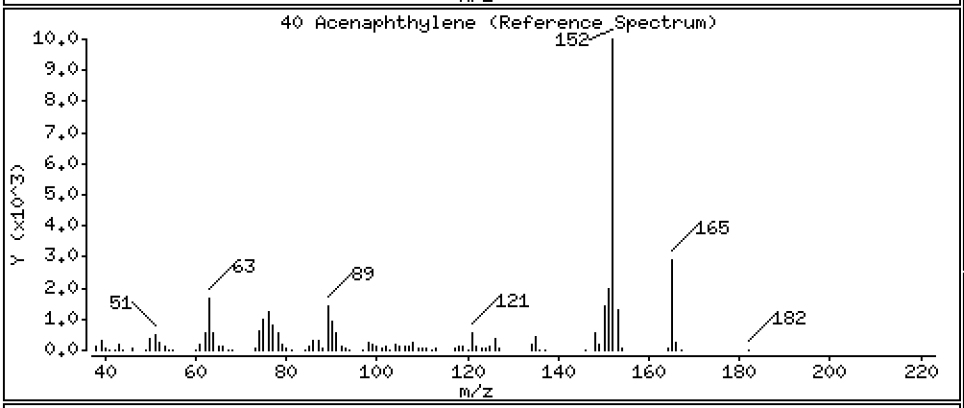
Column diameter: 0.25

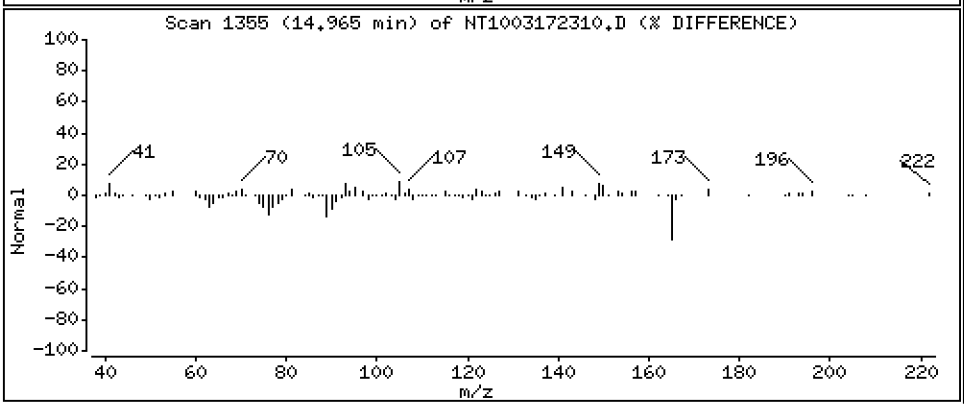
40 Acenaphthylene

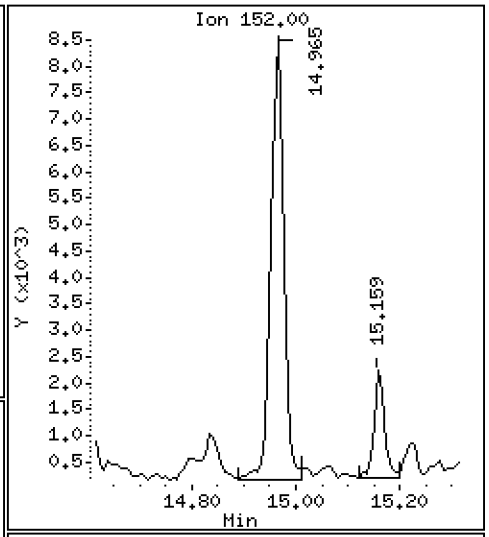
Concentration: 0.09102 ug/mL

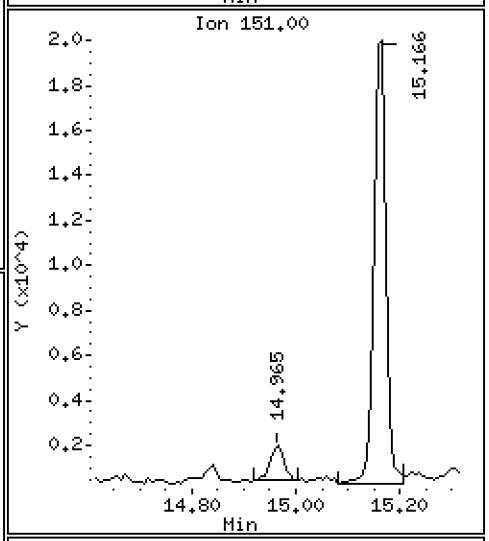


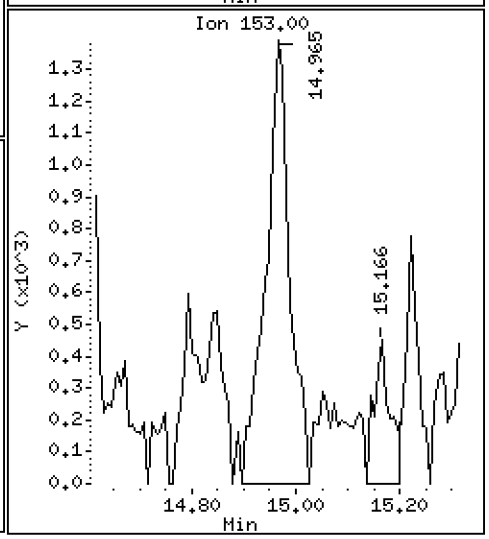












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

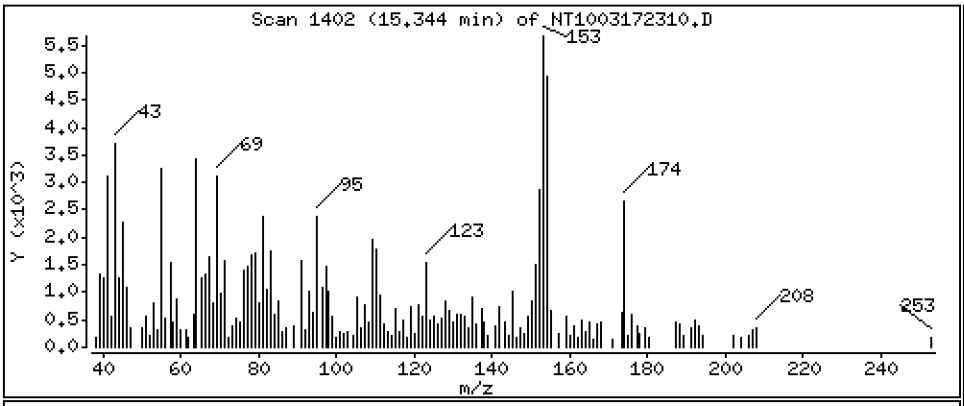
Operator: VTS

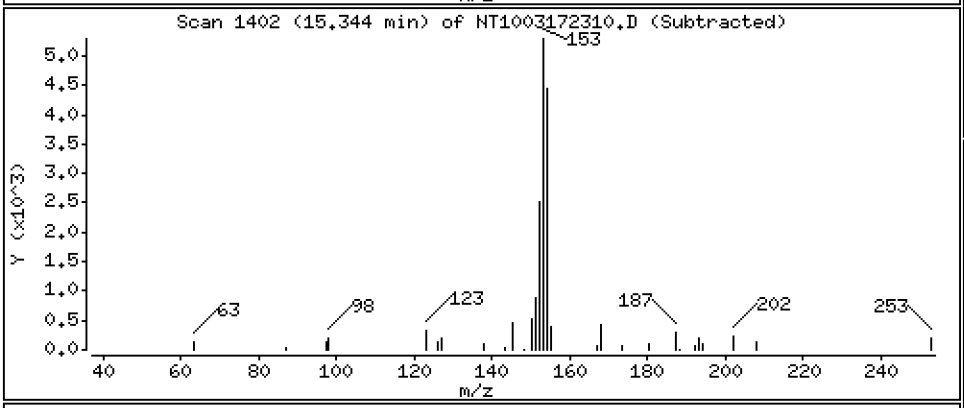
Column phase: ZB-5msi

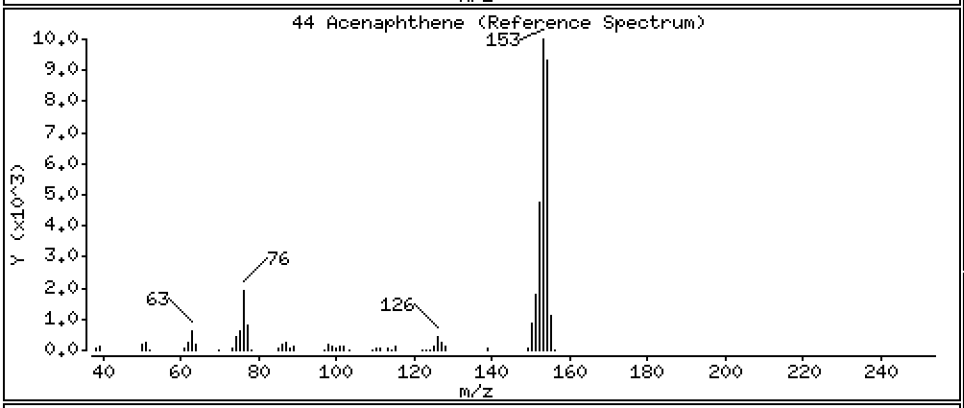
Column diameter: 0.25

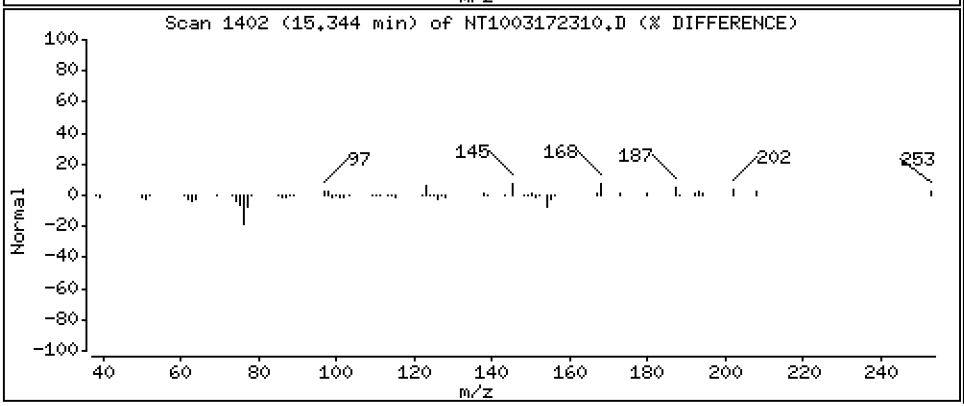
44 Acenaphthene

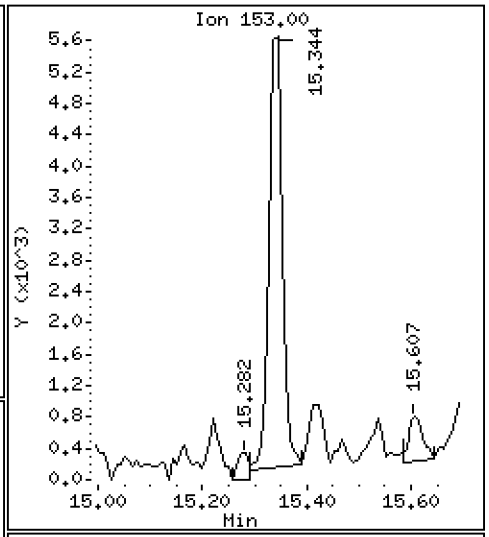
Concentration: 0.09920 ug/mL

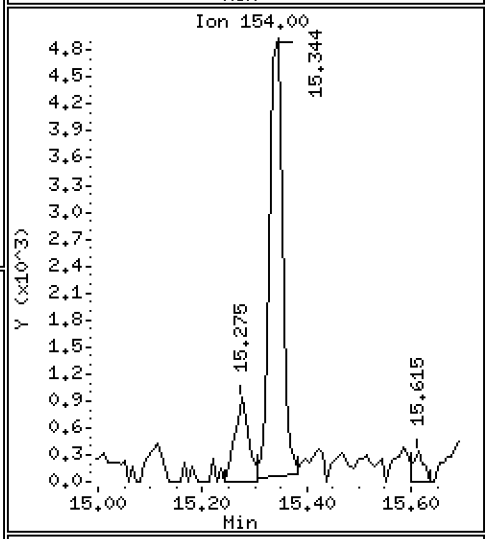


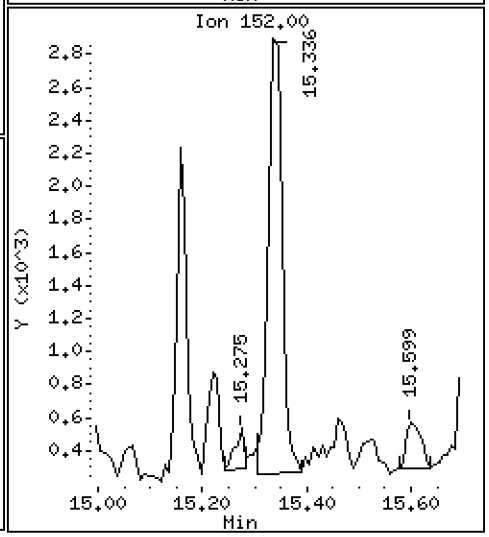












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

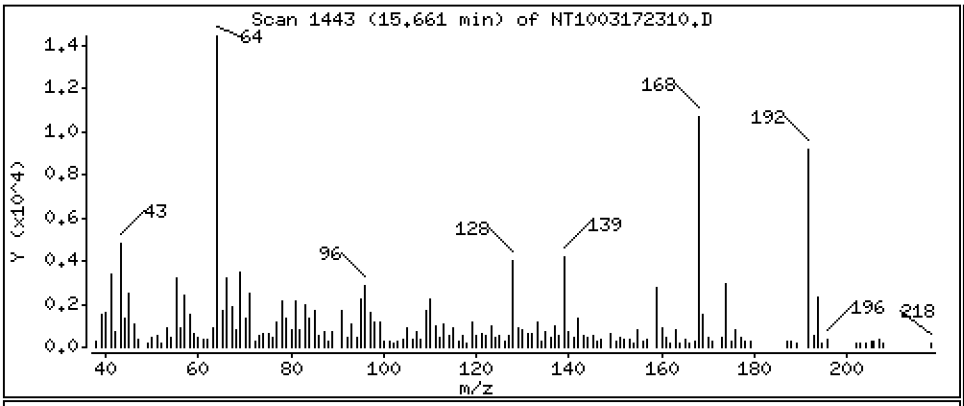
Operator: VTS

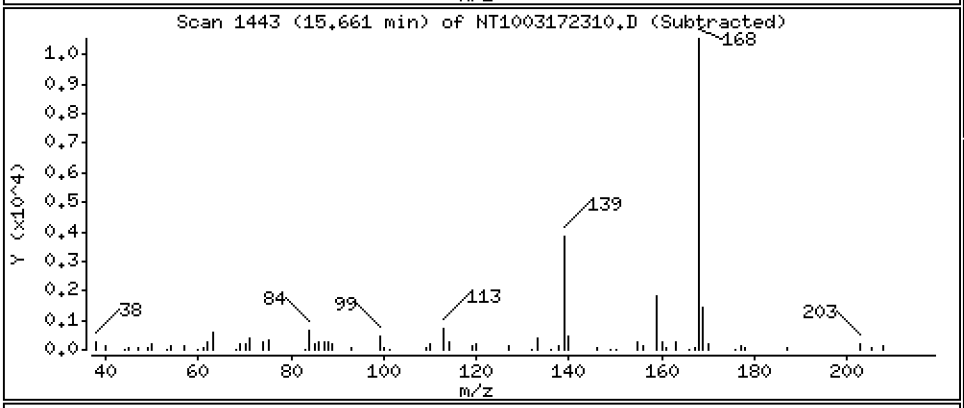
Column phase: ZB-5msi

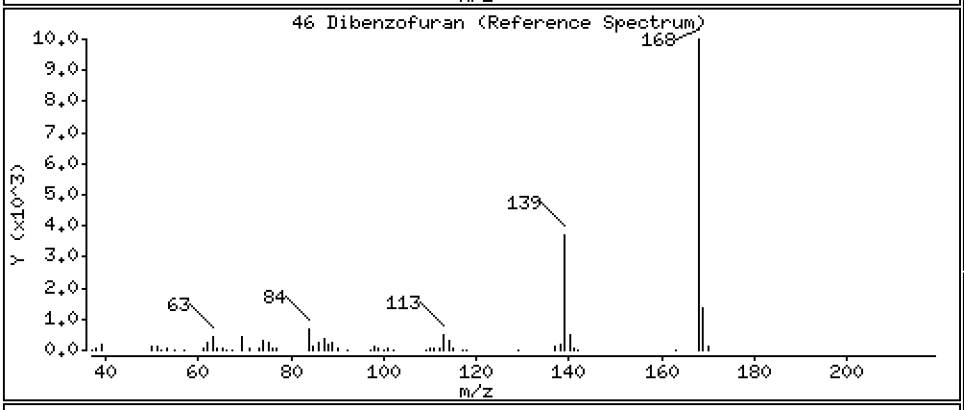
Column diameter: 0.25

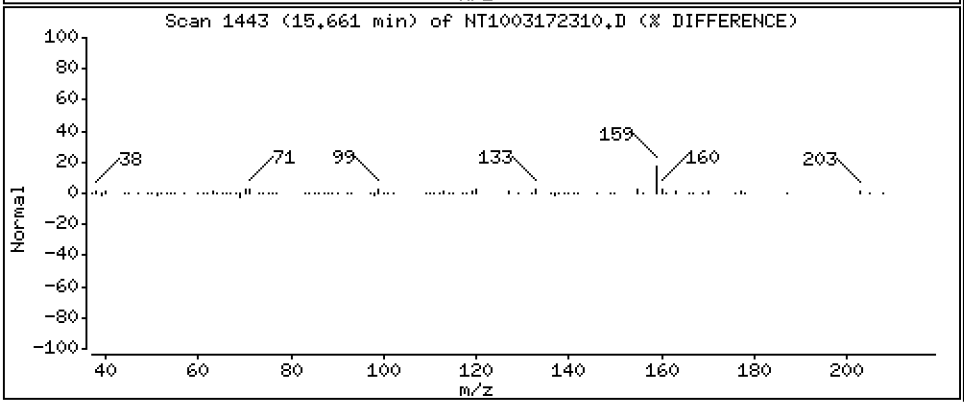
46 Dibenzofuran

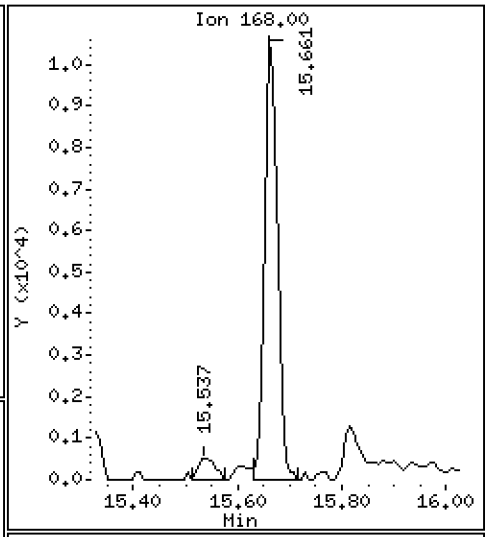
Concentration: 0.1281 ug/mL

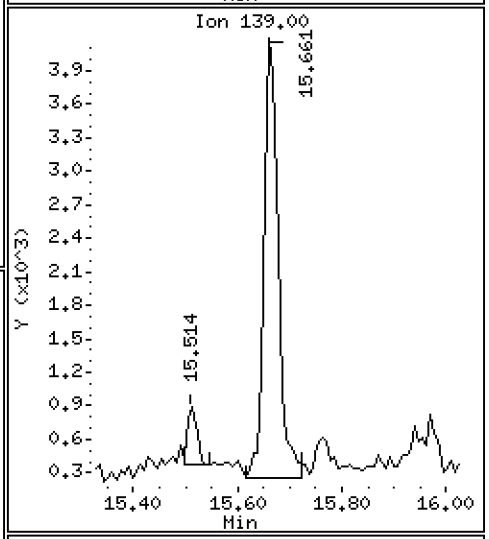


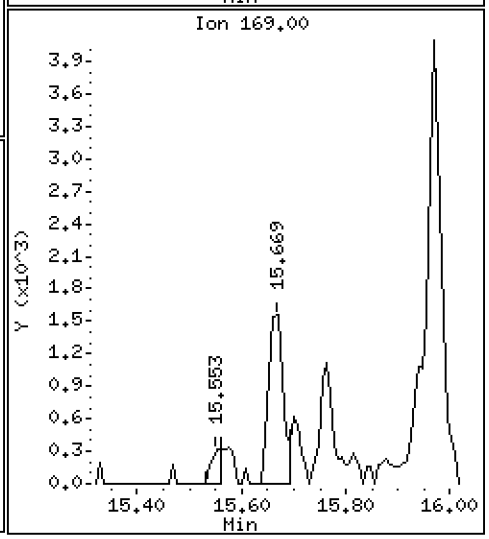












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

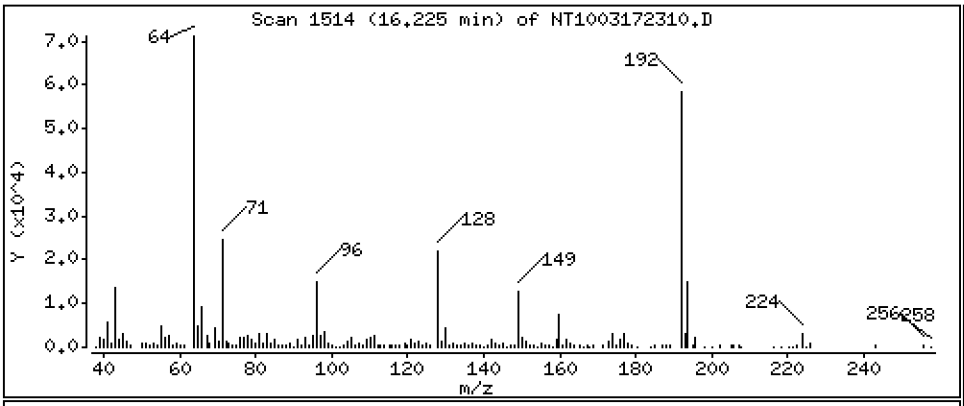
Operator: VTS

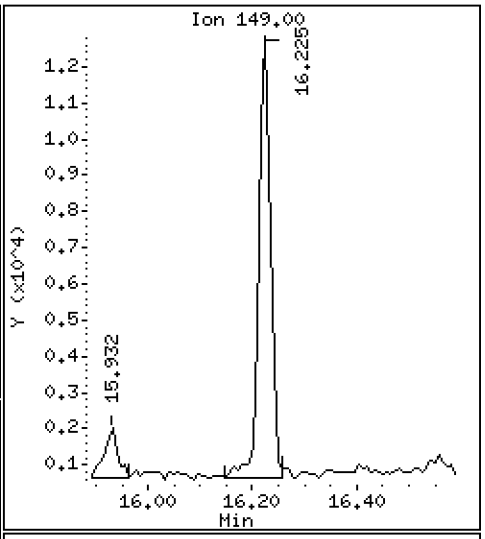
Column phase: ZB-5msi

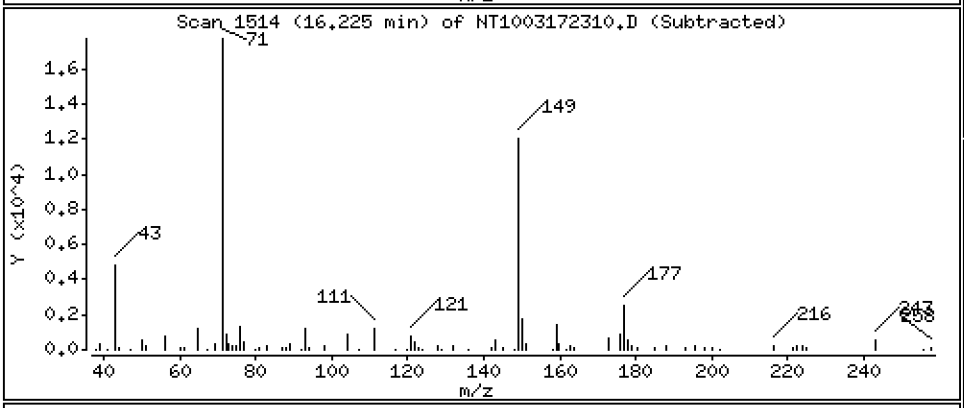
Column diameter: 0.25

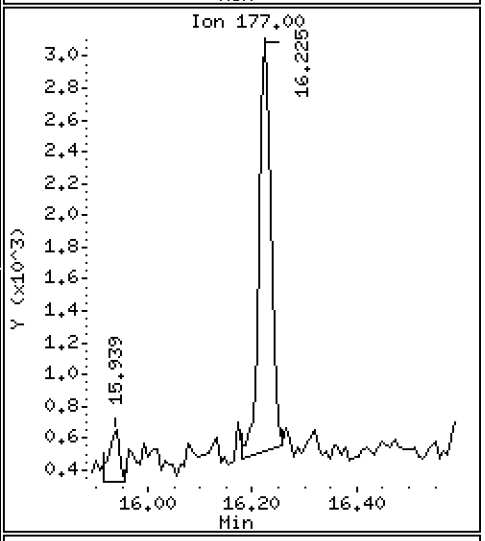
50 Diethylphthalate

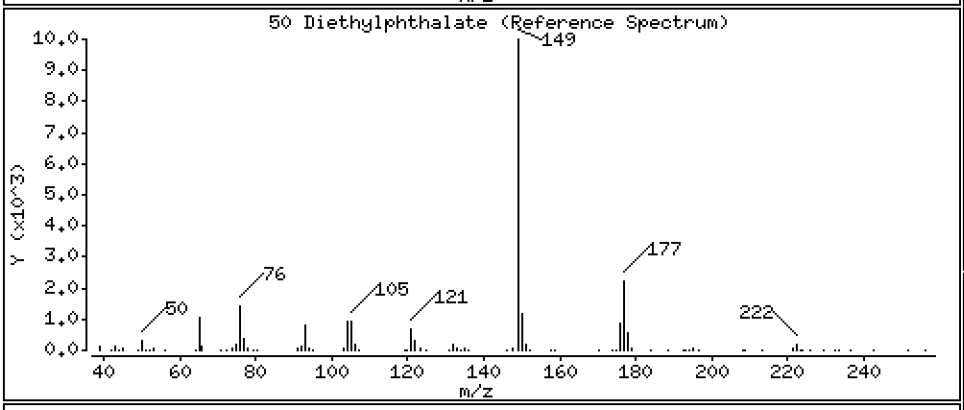
Concentration: 0.1974 ug/mL

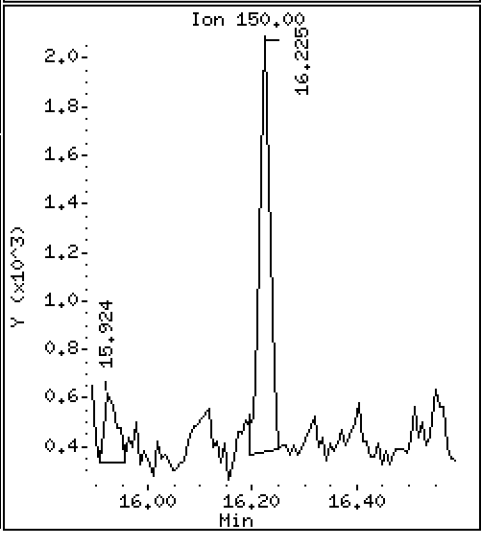


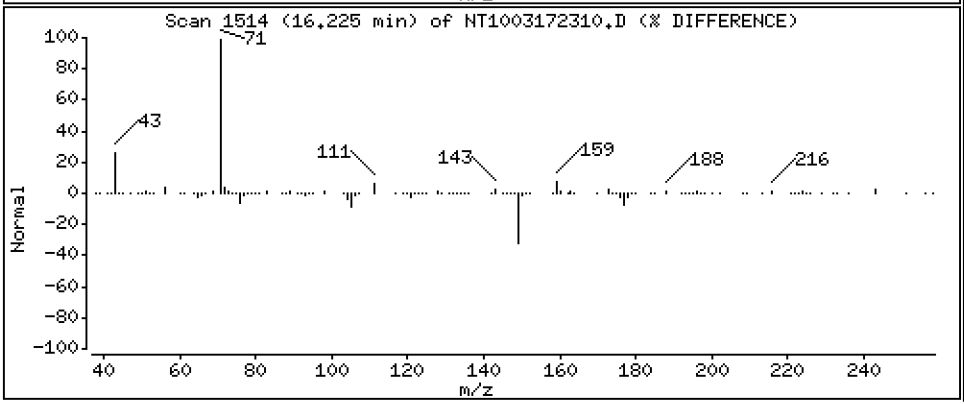












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

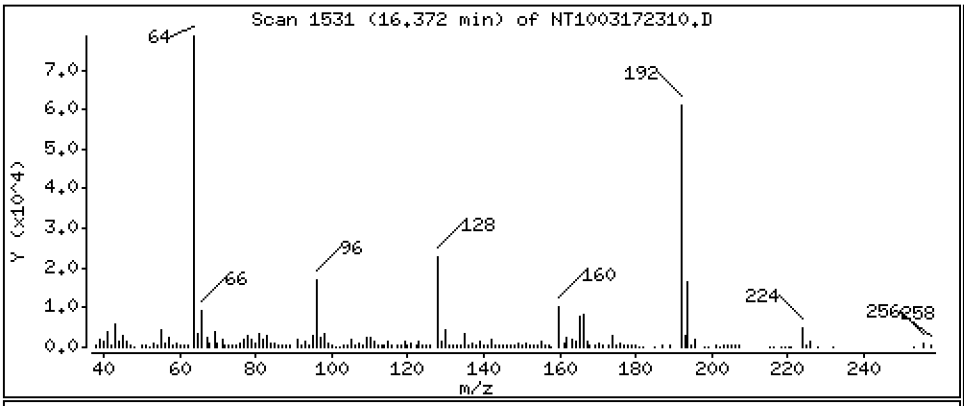
Operator: VTS

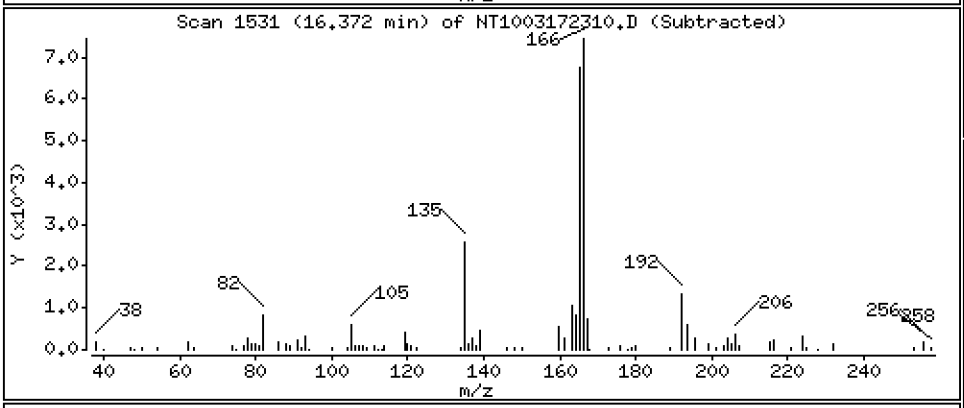
Column phase: ZB-5msi

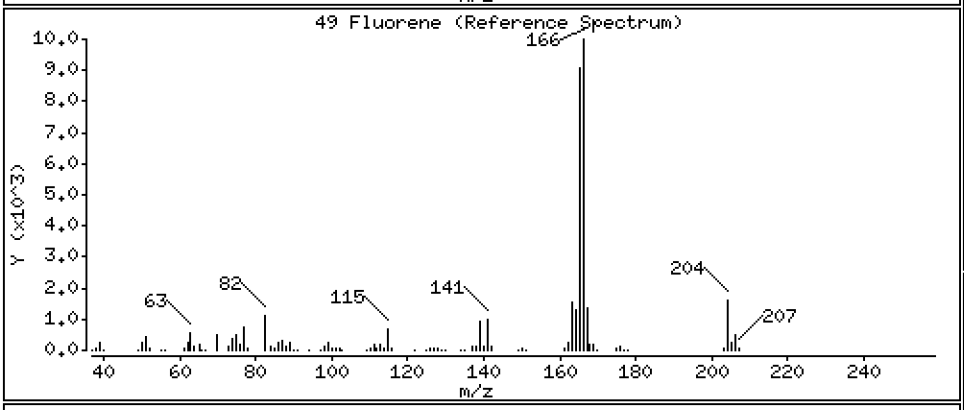
Column diameter: 0.25

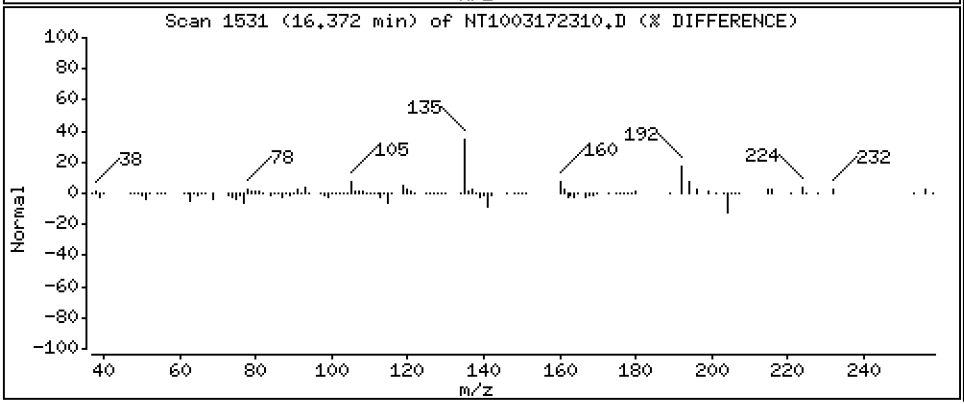
49 Fluorene

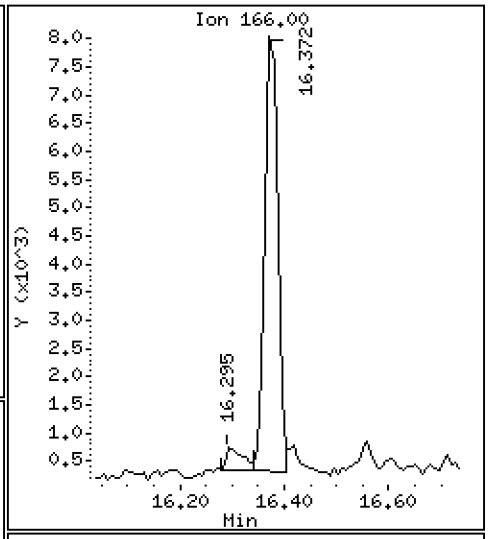
Concentration: 0.1191 ug/mL

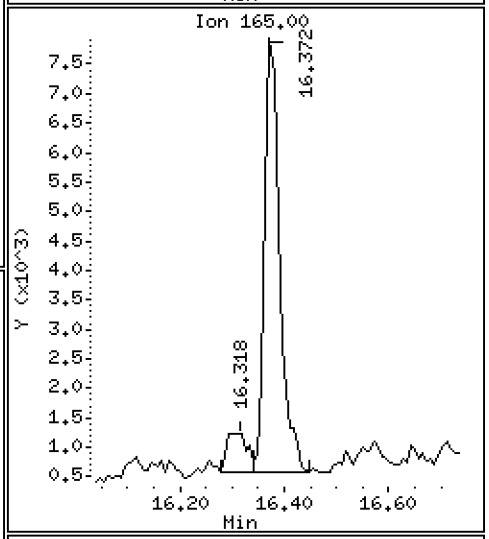


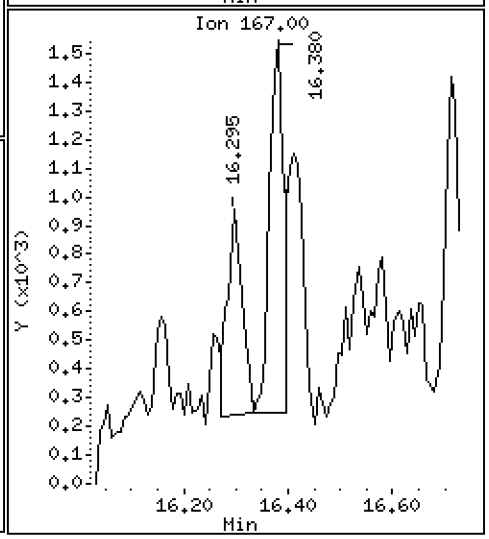












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

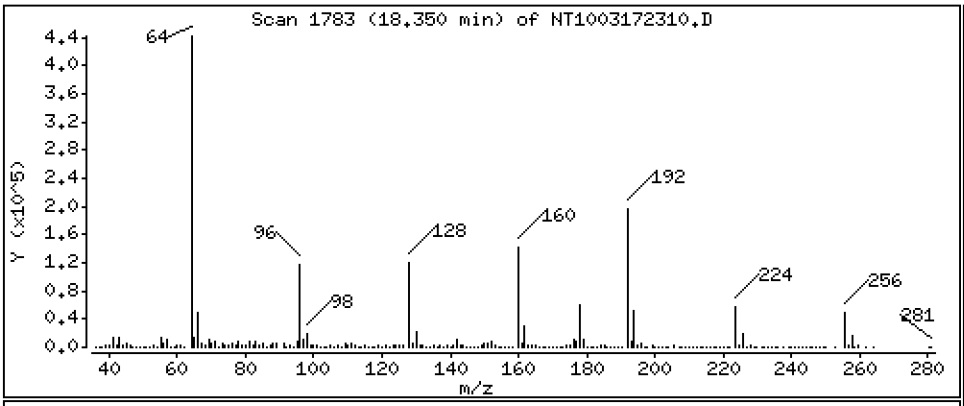
Operator: VTS

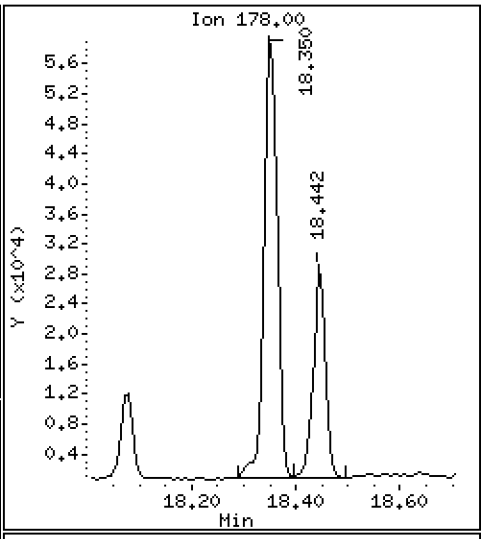
Column phase: ZB-5msi

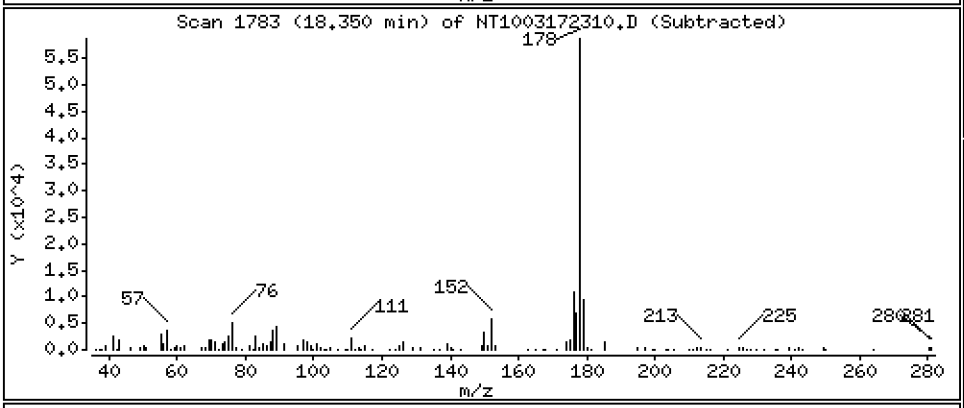
Column diameter: 0.25

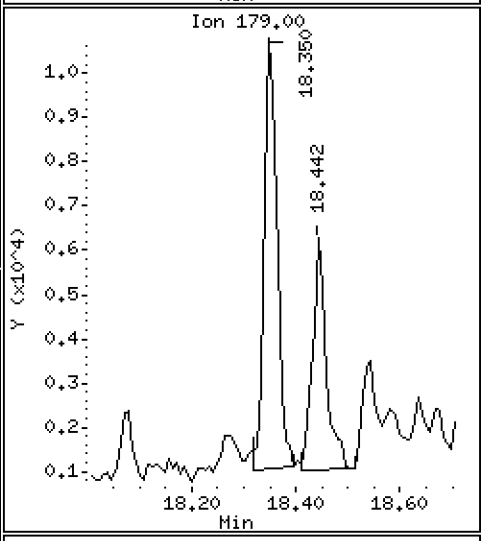
60 Phenanthrene

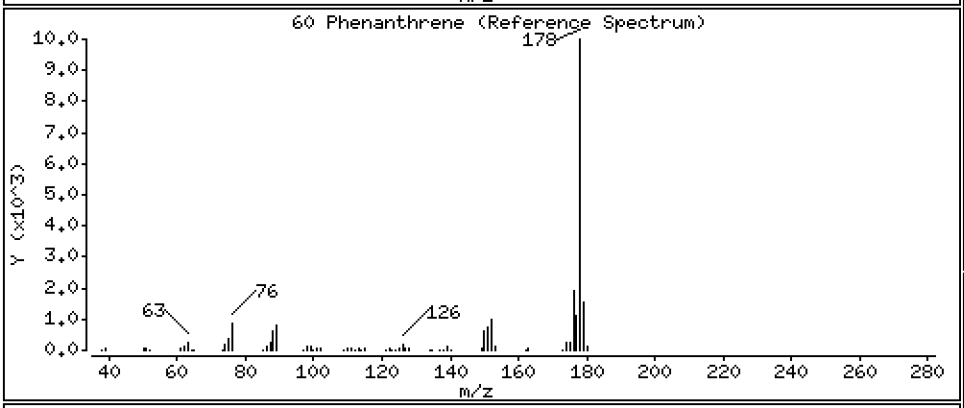
Concentration: 0.6150 ug/mL

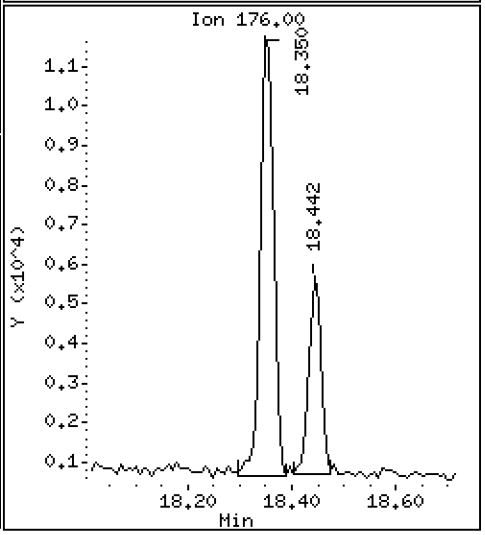


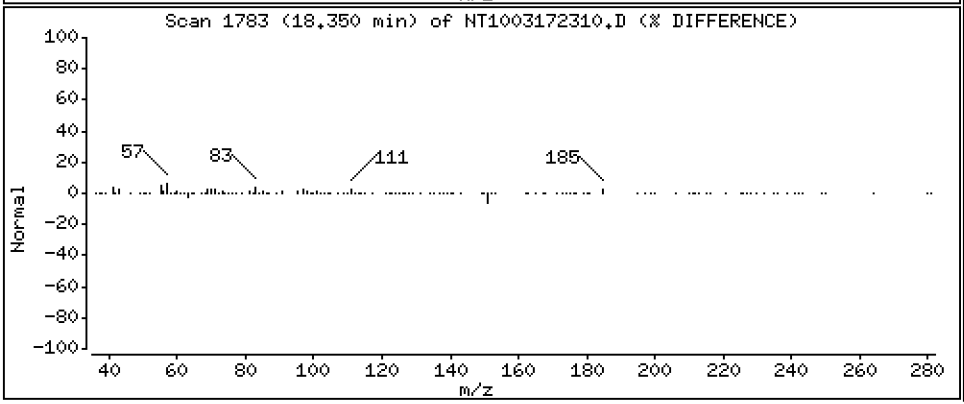












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172310.D

Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

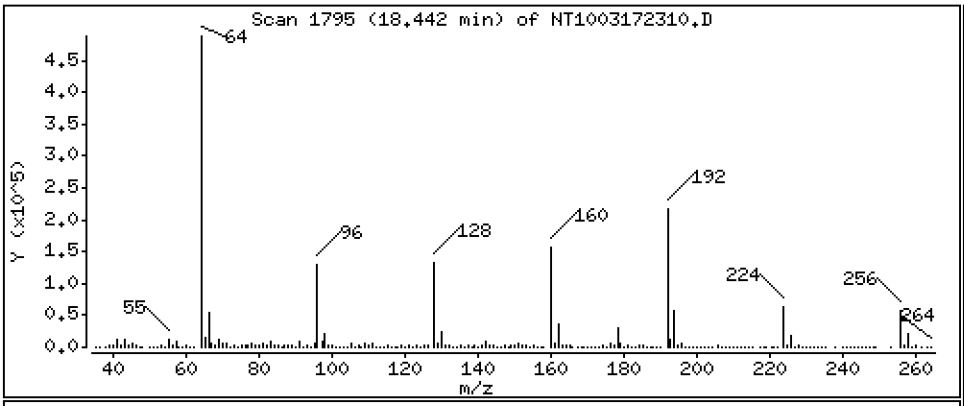
Operator: VTS

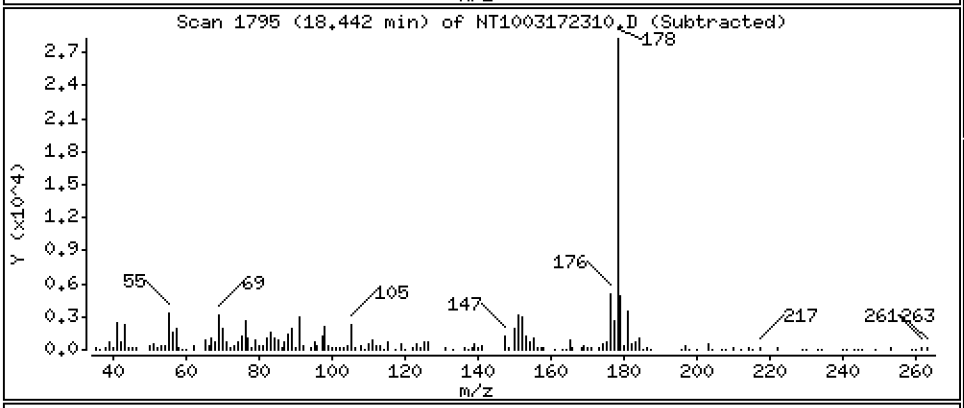
Column phase: ZB-5msi

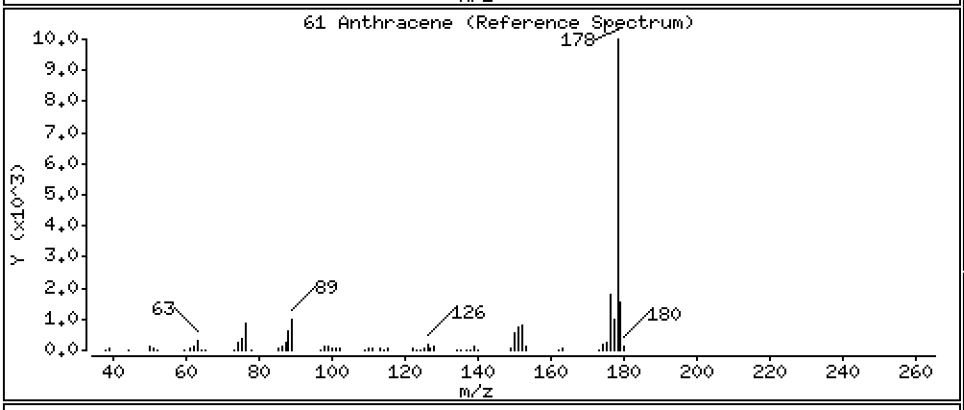
Column diameter: 0.25

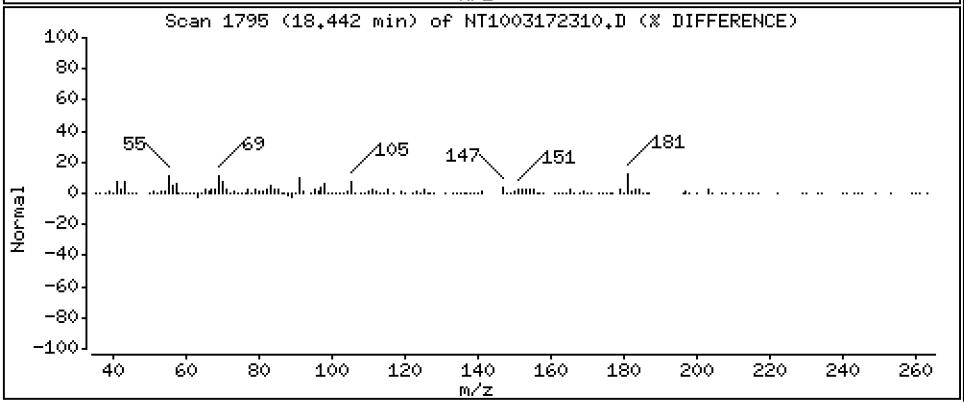
61 Anthracene

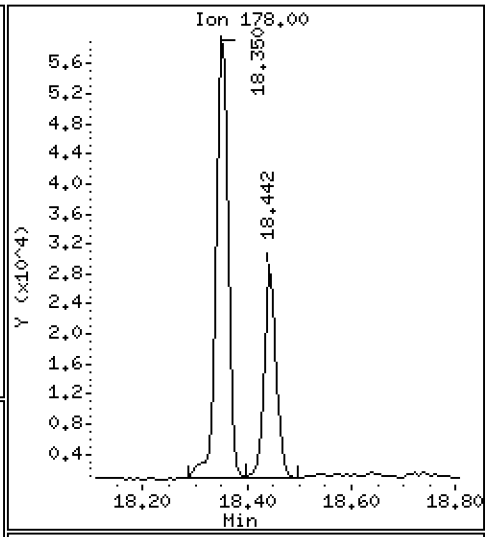
Concentration: 0.2879 ug/mL

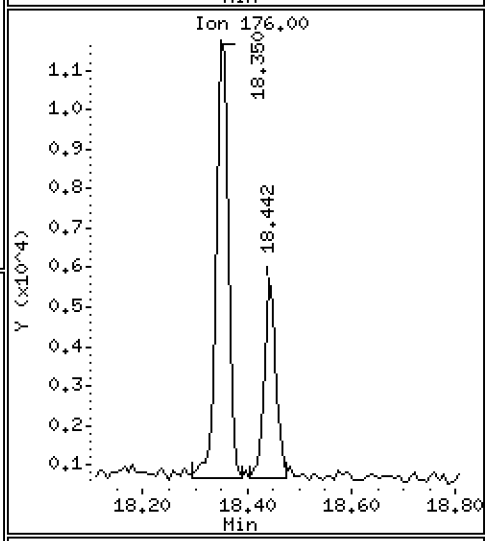


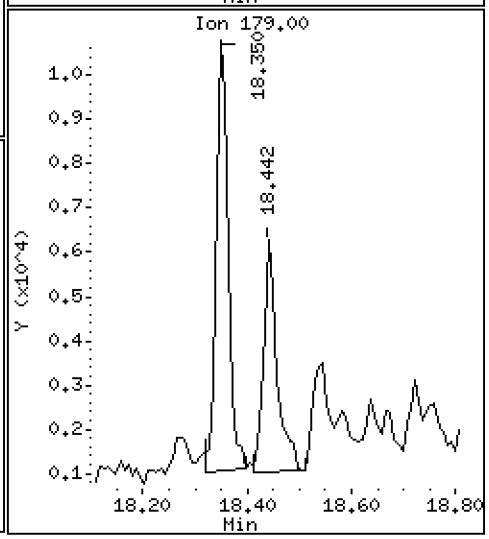












Date : 18-MAR-2023 00:09

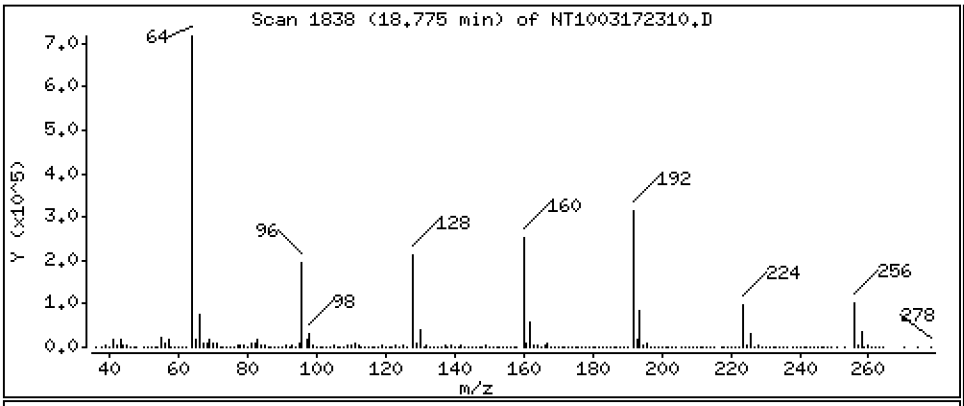
Client ID: Instrument: nt10.i

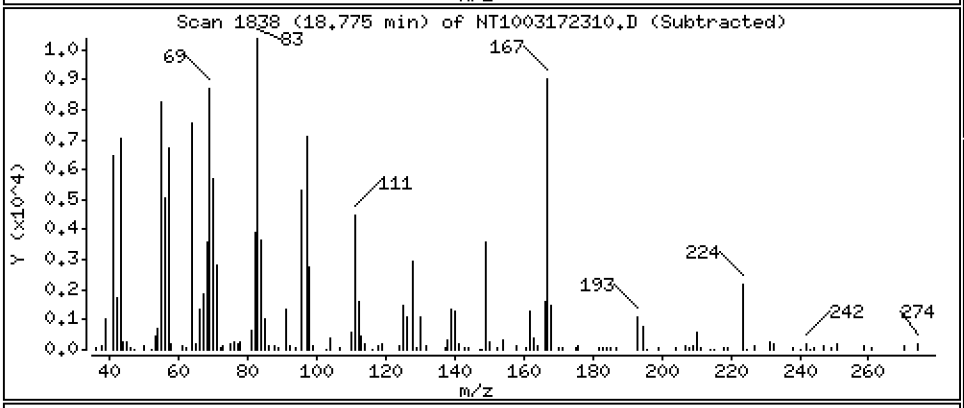
Sample Info: 23A0420-01

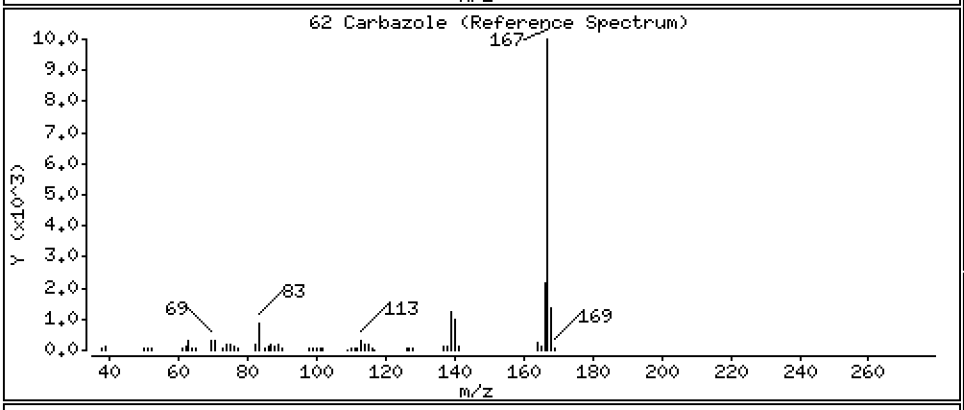
Operator: VTS

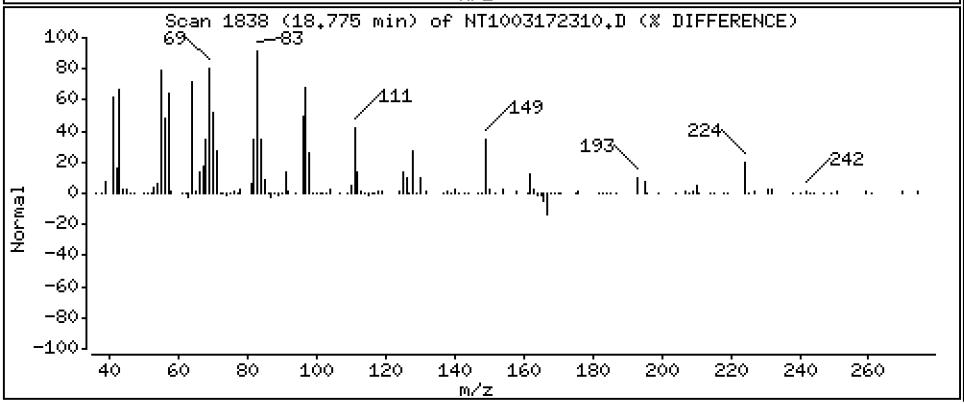
Column phase: ZB-5msi Column diameter: 0.25

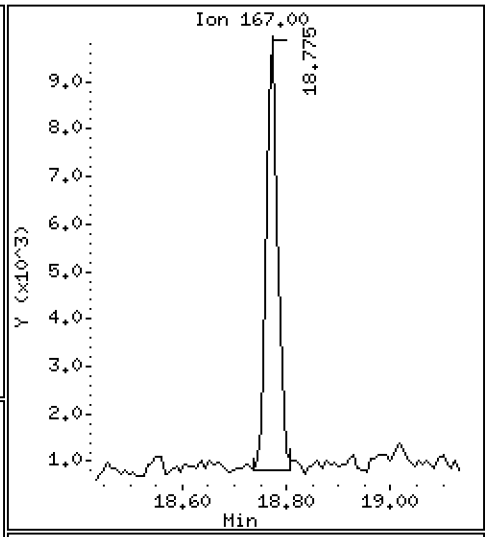
62 Carbazole Concentration: 0.09909 ug/mL

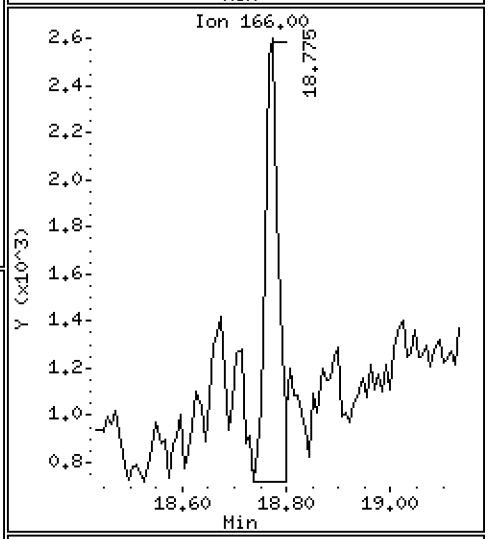


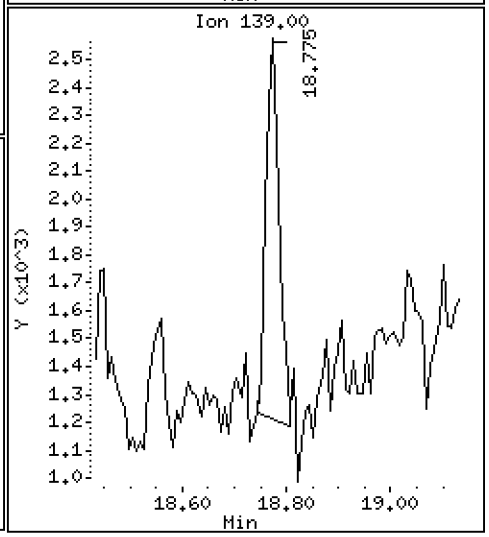












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

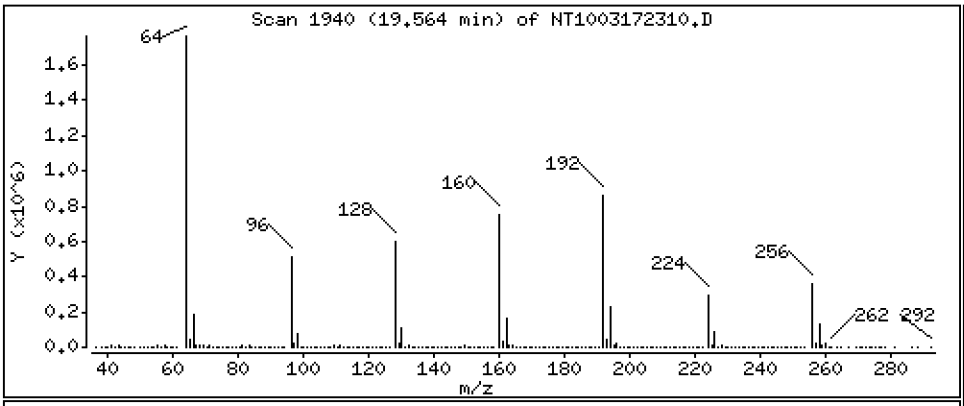
Operator: VTS

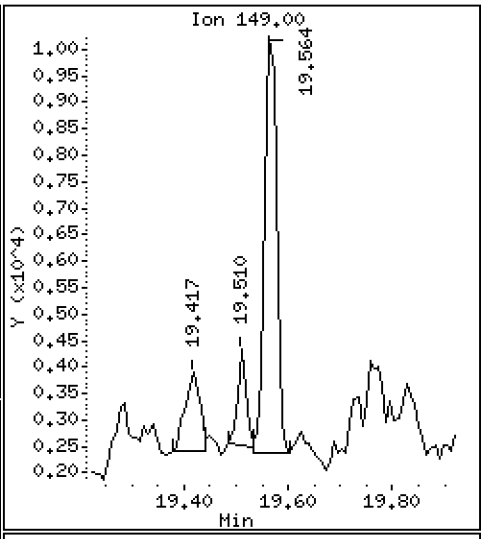
Column phase: ZB-5msi

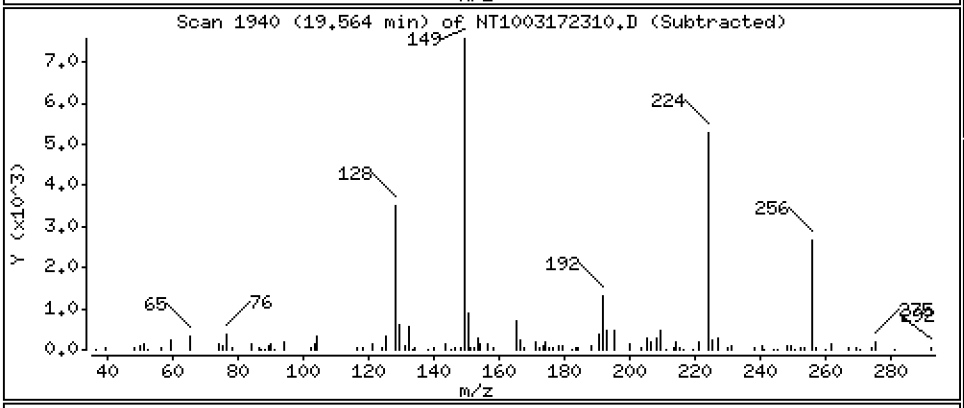
Column diameter: 0.25

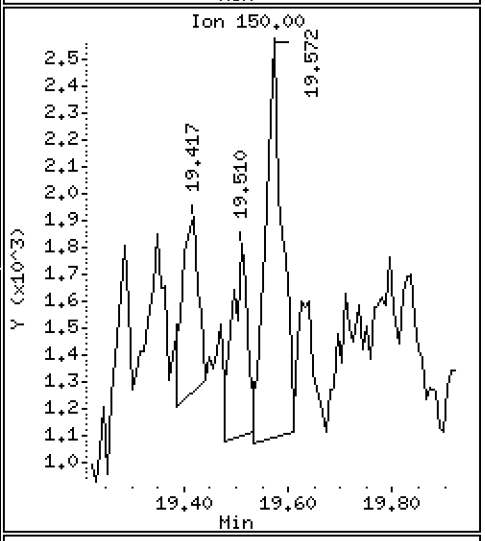
63 Di-n-butylphthalate

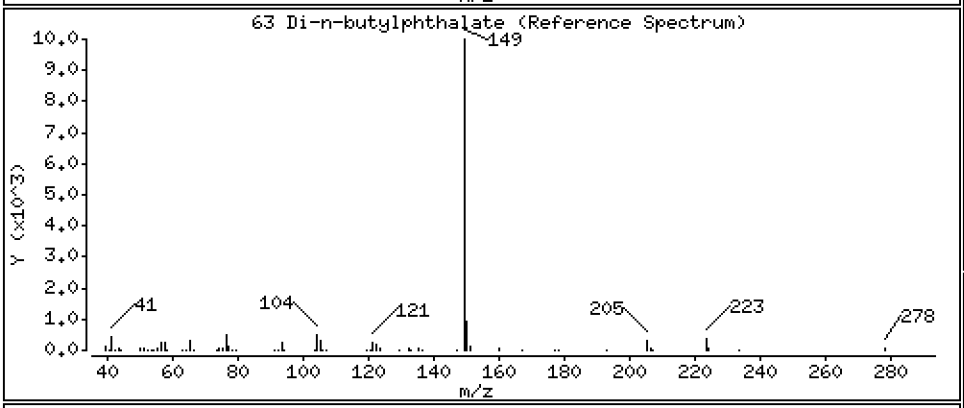
Concentration: 0.06423 ug/mL

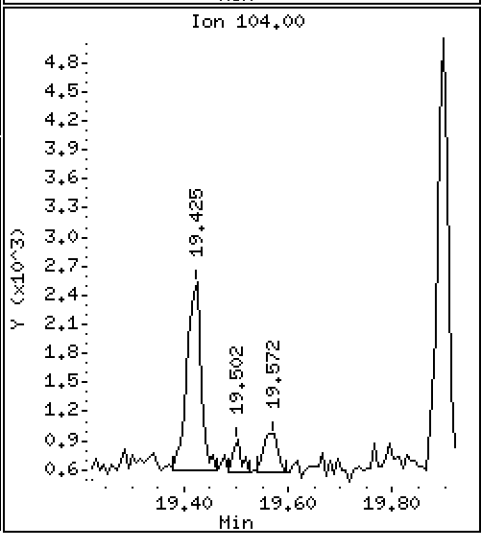


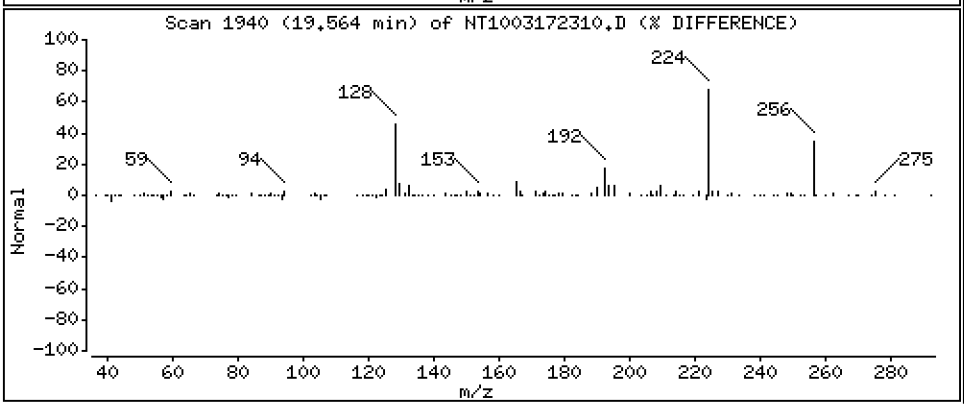












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

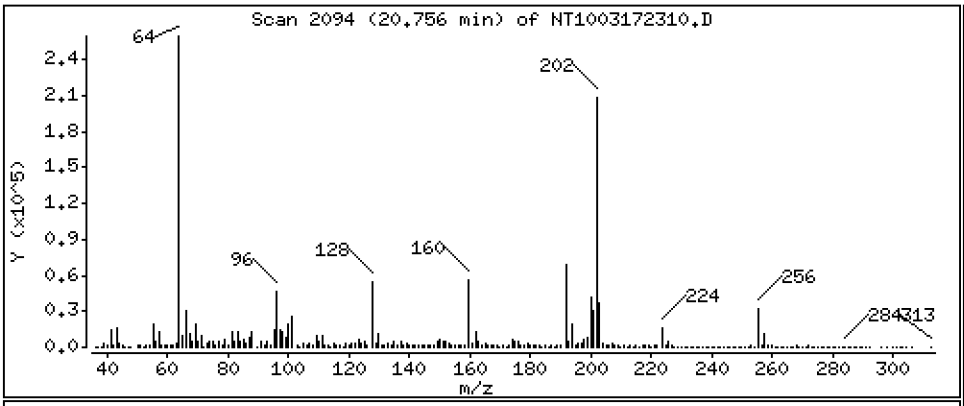
Operator: VTS

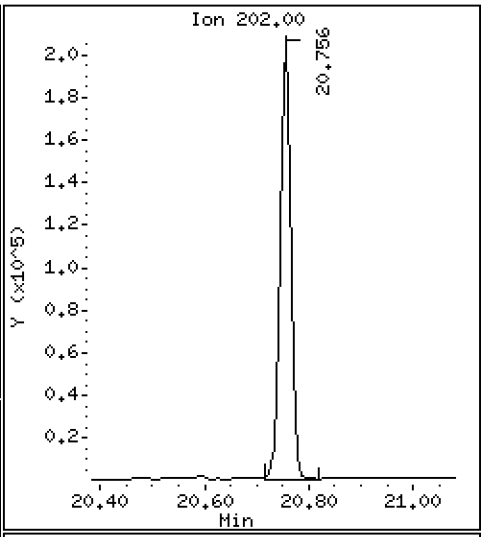
Column phase: ZB-5msi

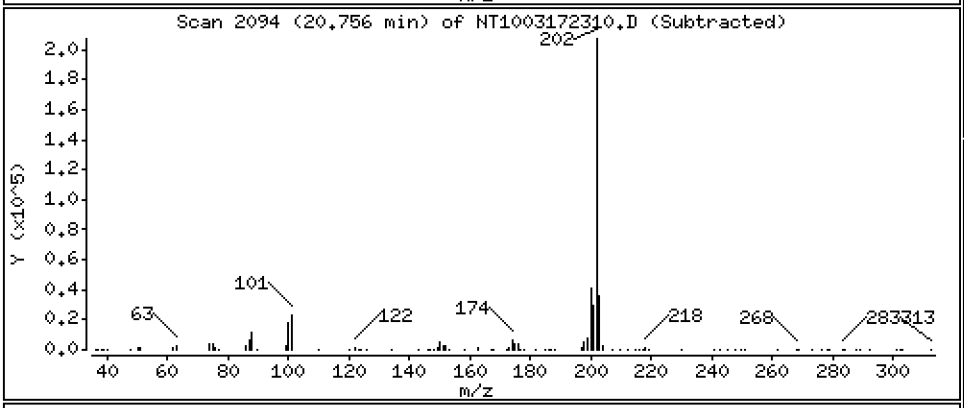
Column diameter: 0.25

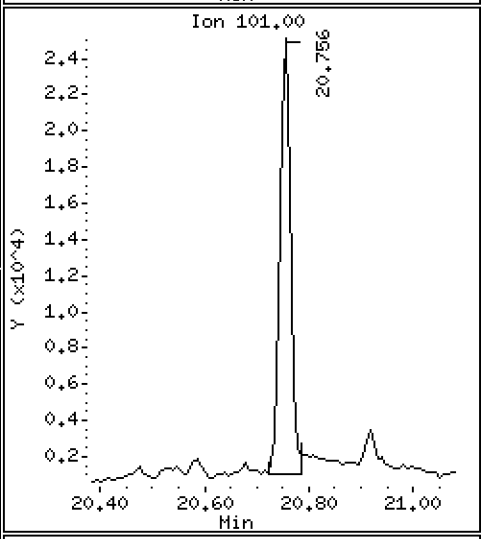
64 Fluoranthene

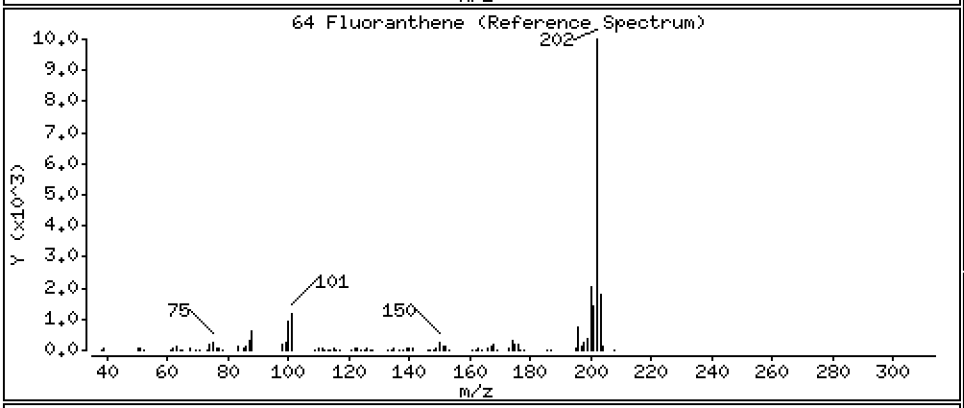
Concentration: 1.624 ug/mL

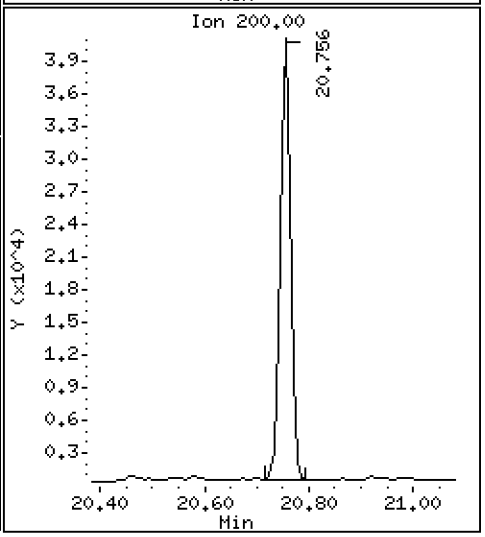


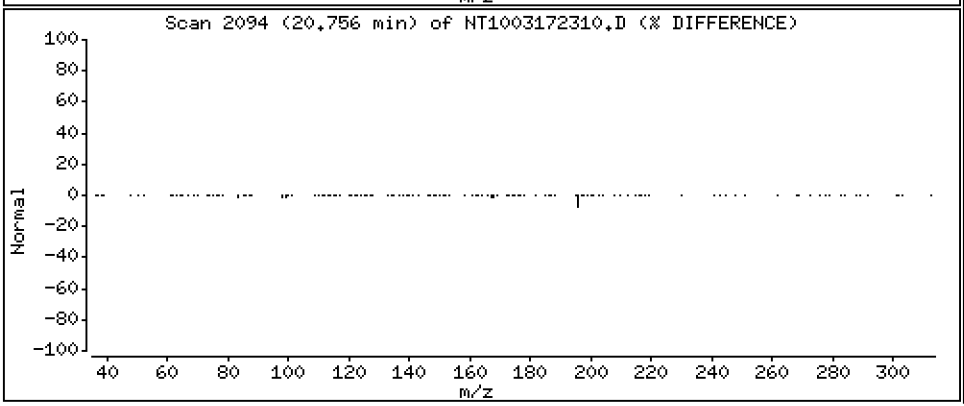












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

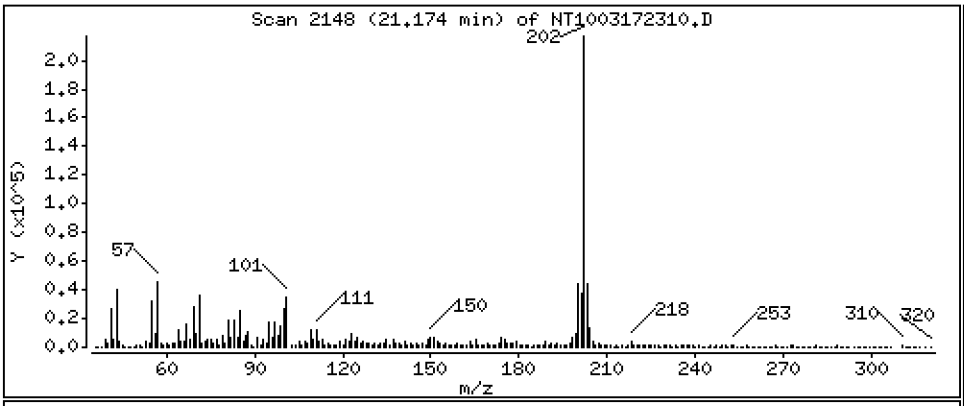
Operator: VTS

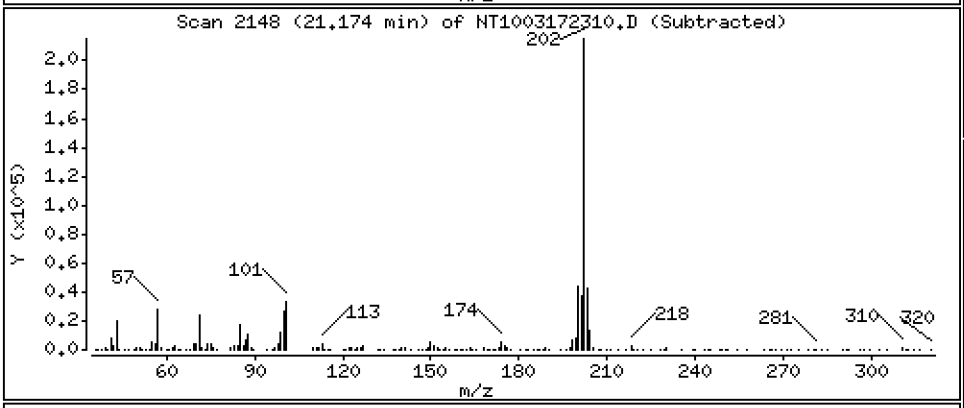
Column phase: ZB-5msi

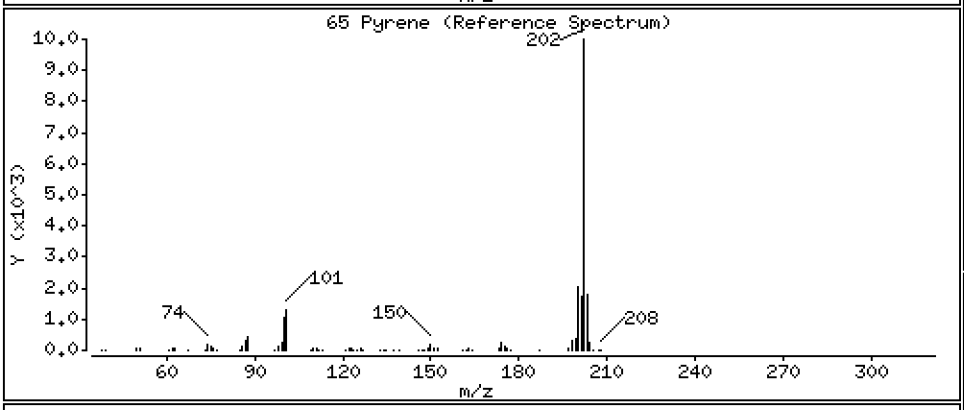
Column diameter: 0.25

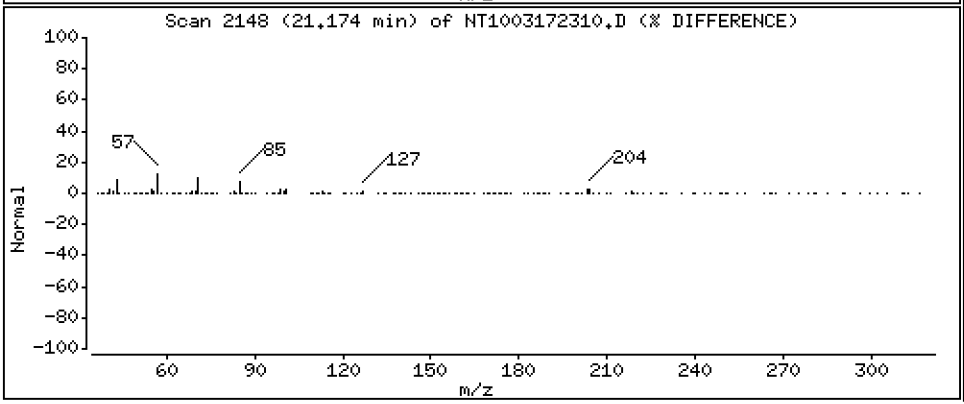
65 Pyrene

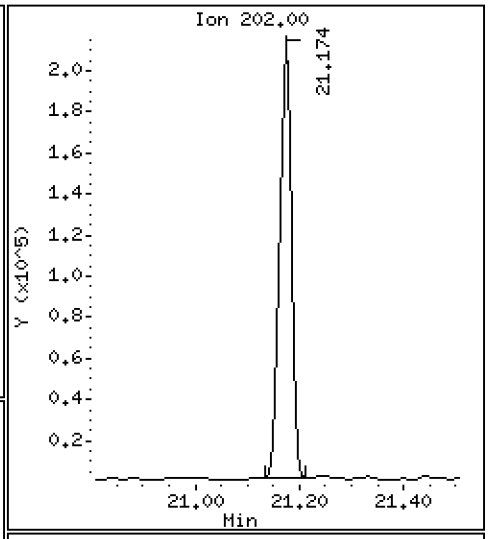
Concentration: 1.695 ug/mL

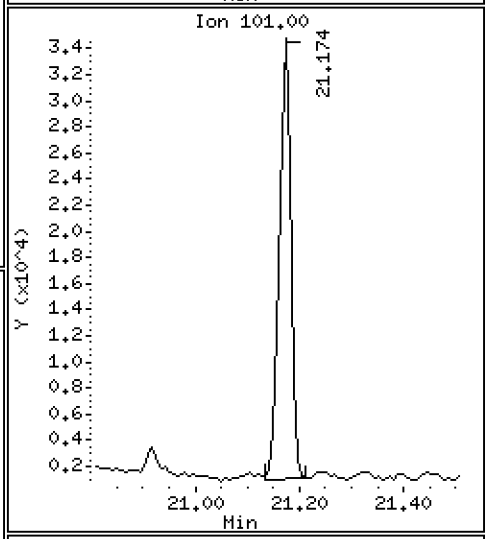


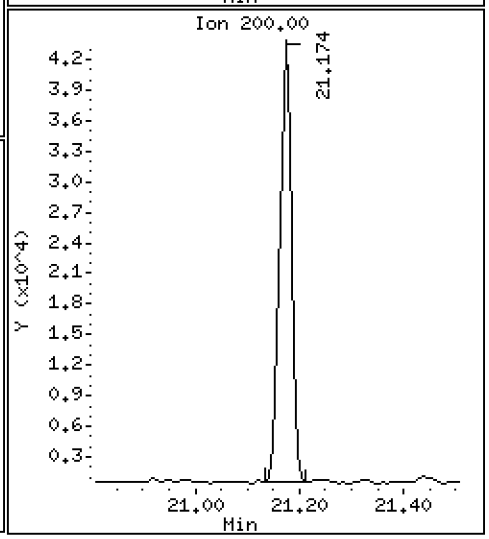












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

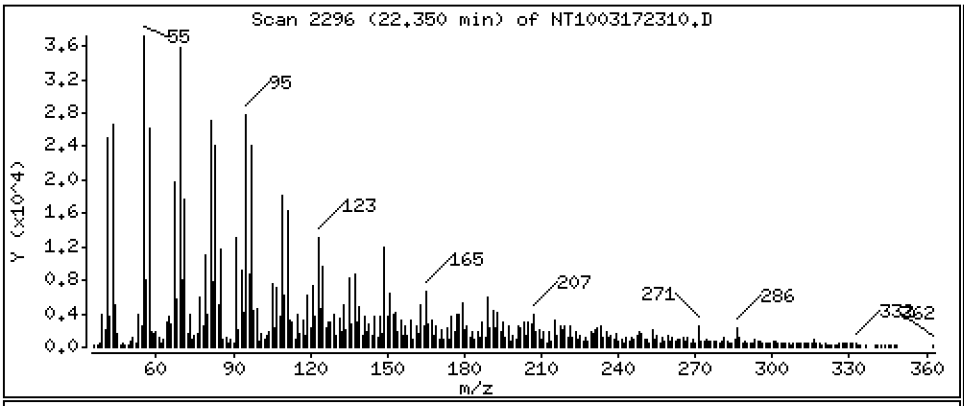
Operator: VTS

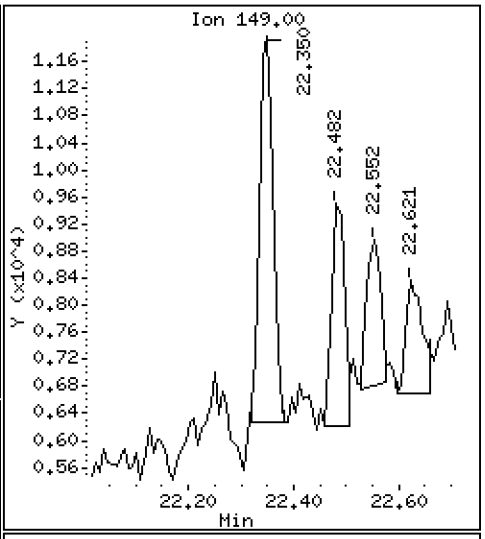
Column phase: ZB-5msi

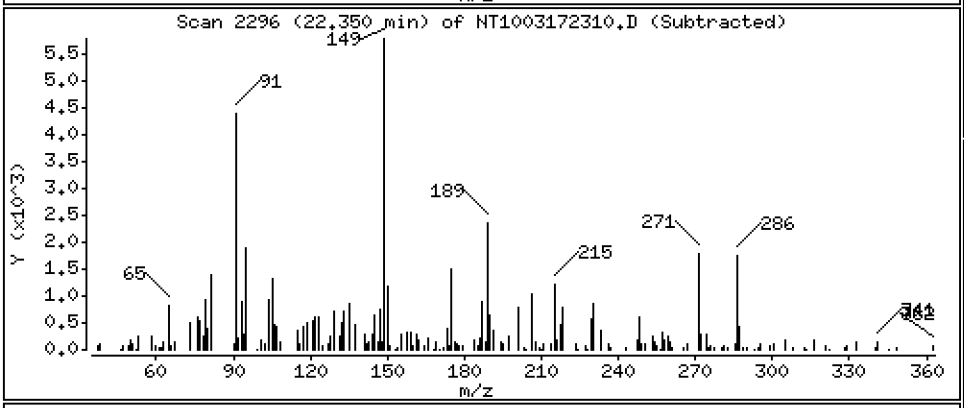
Column diameter: 0.25

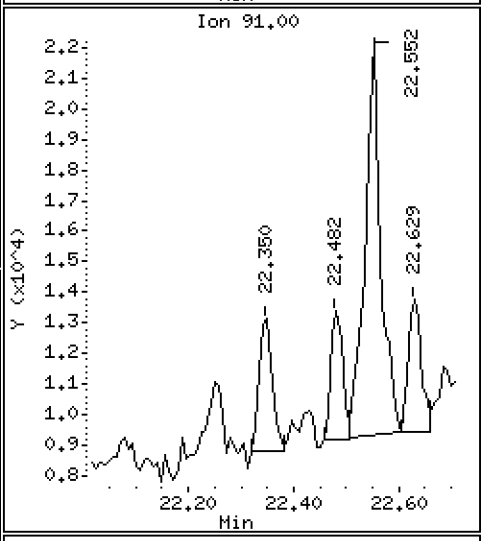
67 Butylbenzylphthalate

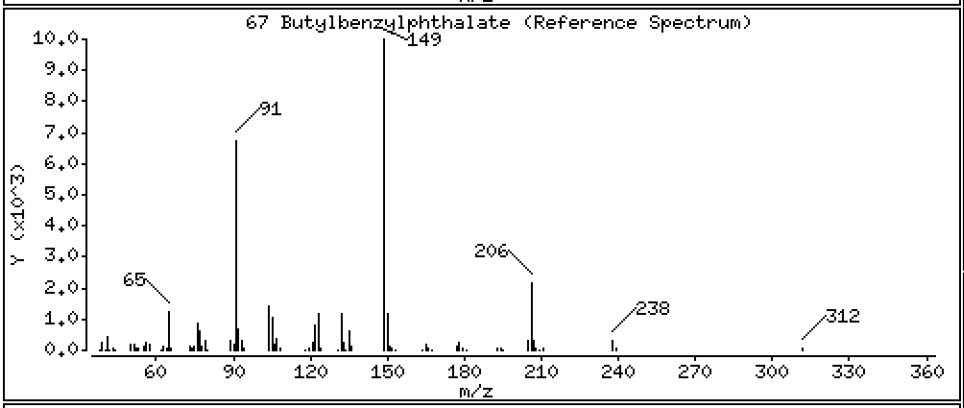
Concentration: 0.1516 ug/mL

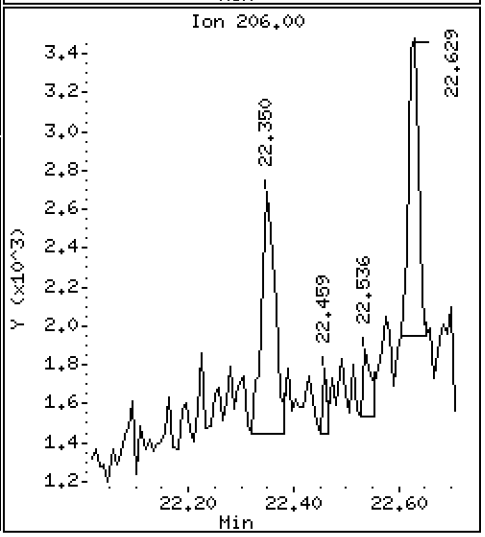


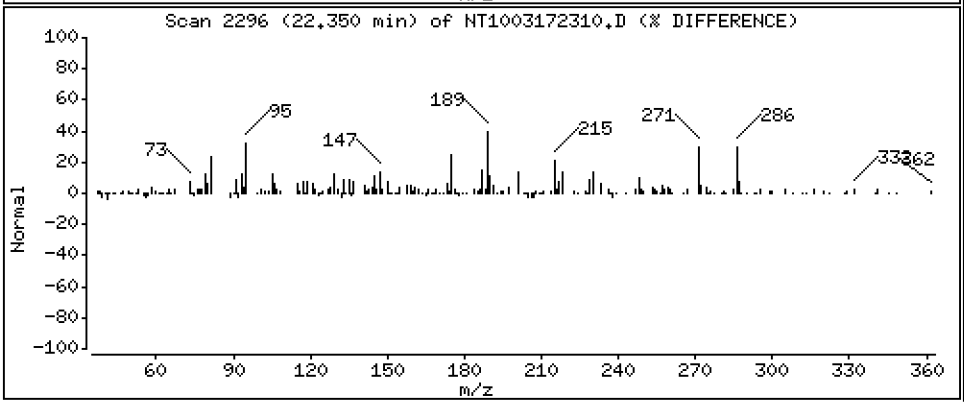












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

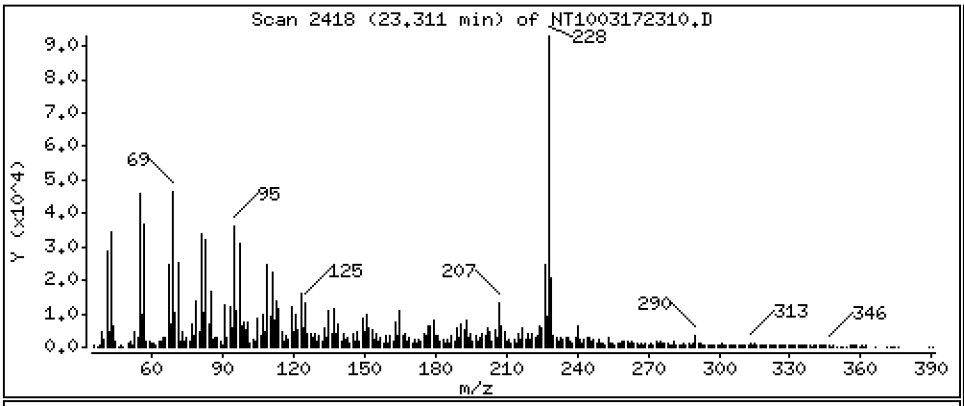
Operator: VTS

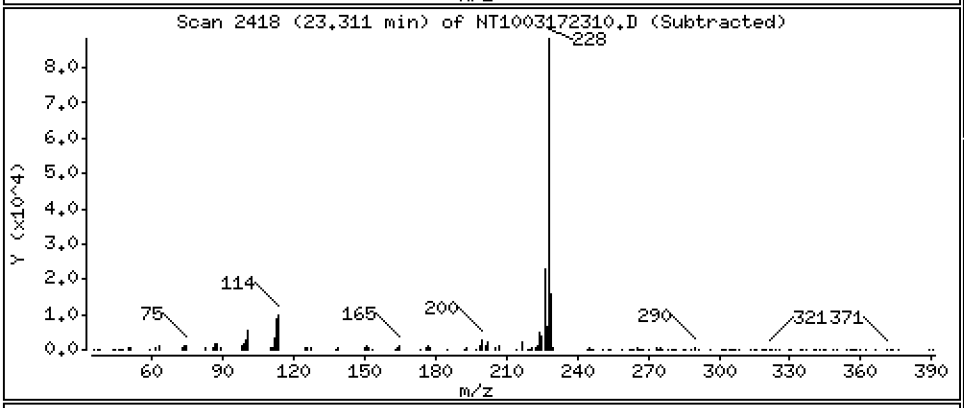
Column phase: ZB-5msi

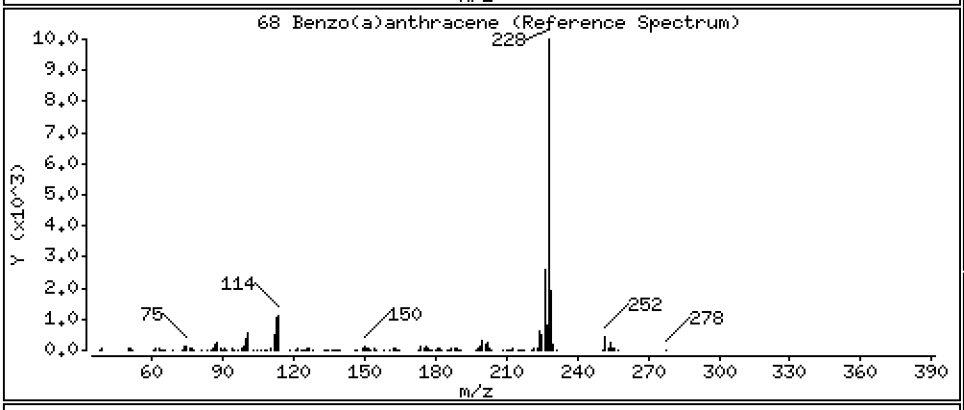
Column diameter: 0.25

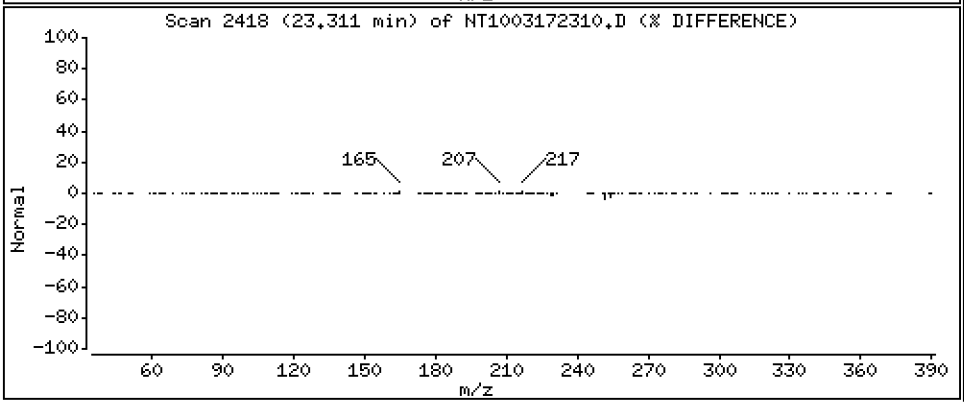
68 Benzo(a)anthracene

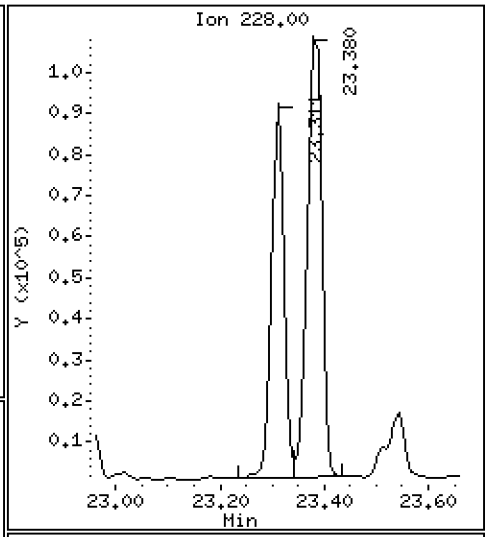
Concentration: 0.8746 ug/mL

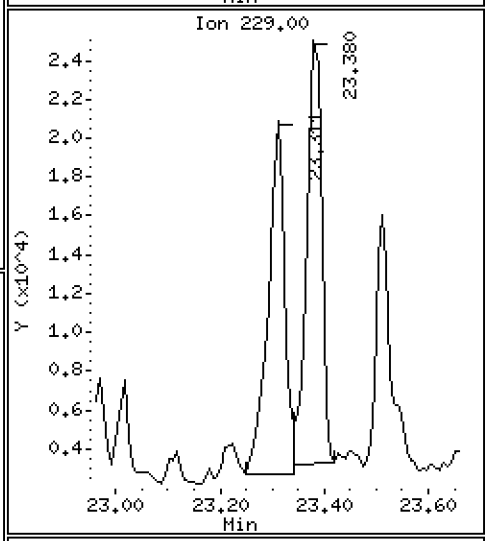


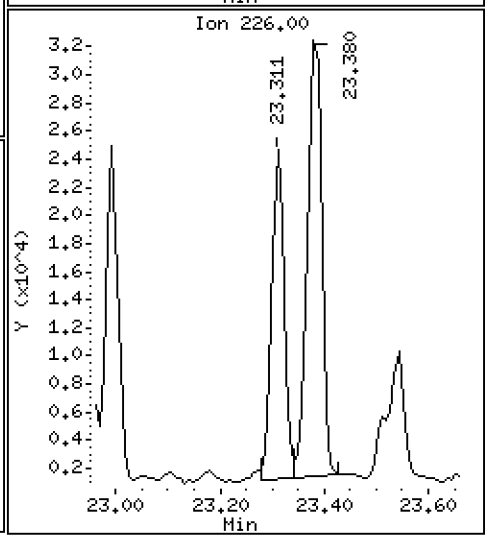












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

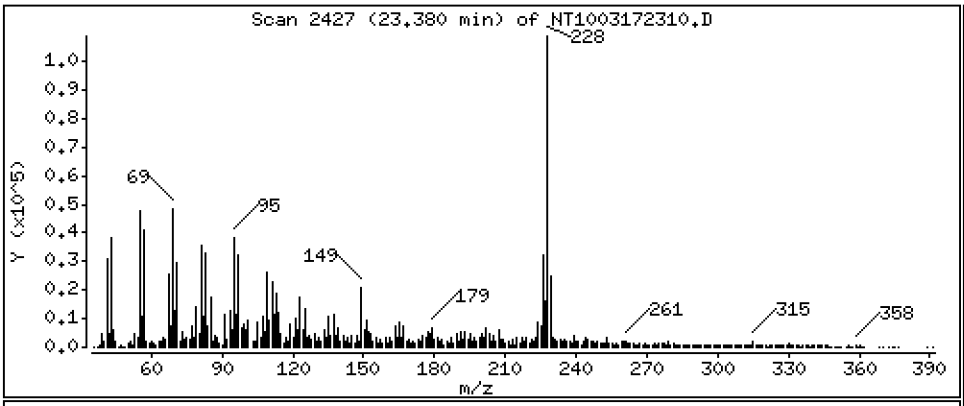
Operator: VTS

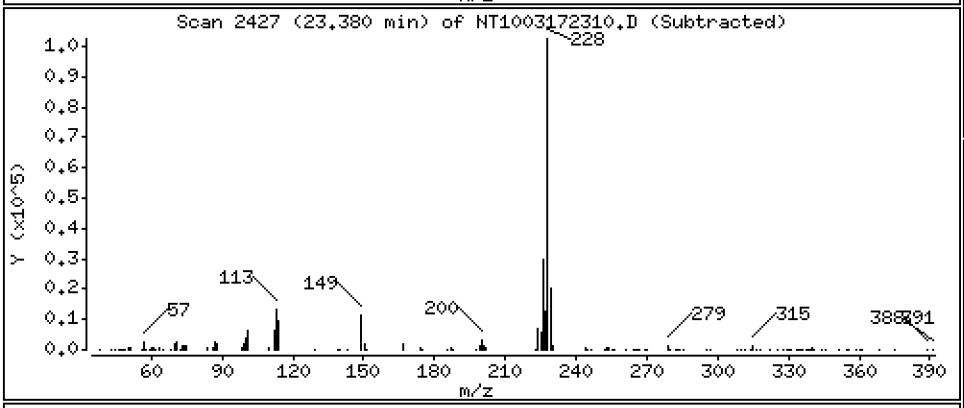
Column phase: ZB-5msi

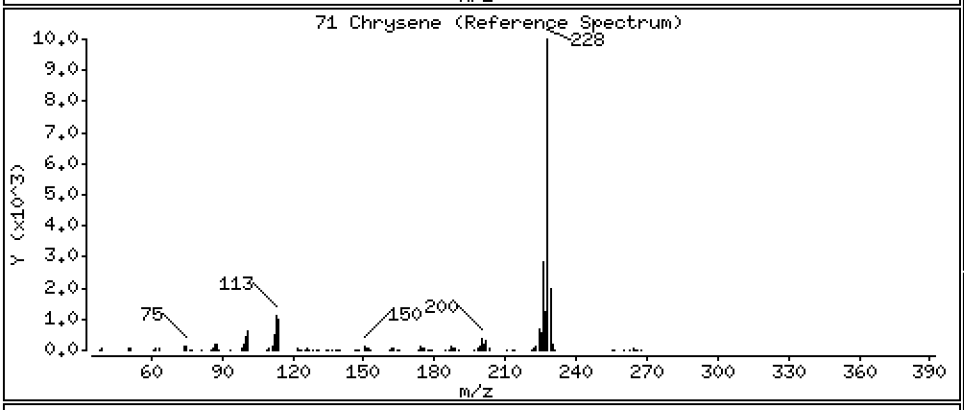
Column diameter: 0.25

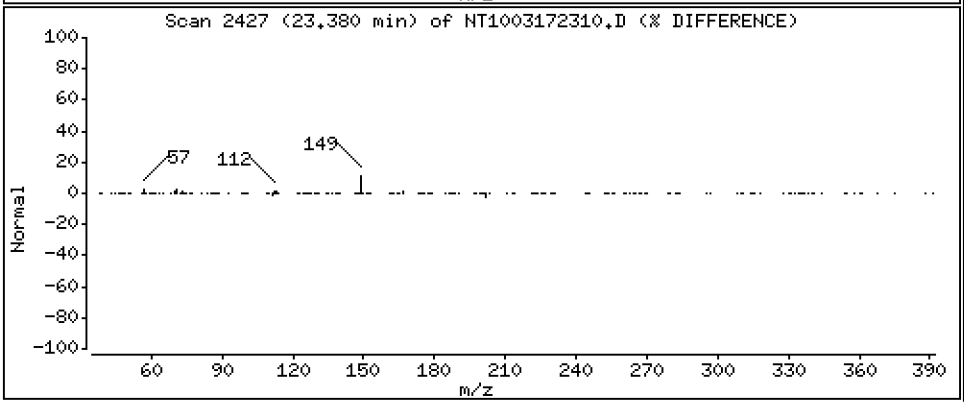
71 Chrysene

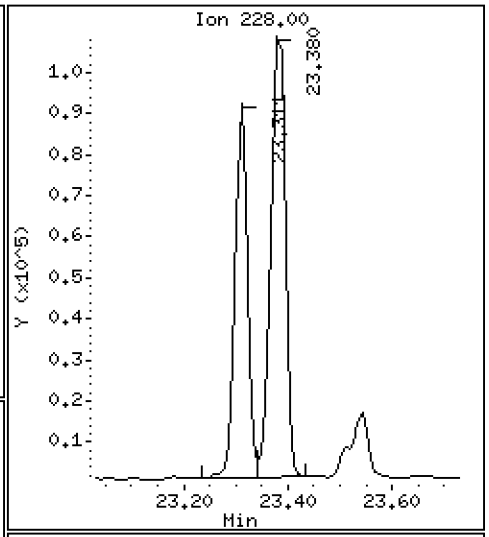
Concentration: 1.241 ug/mL

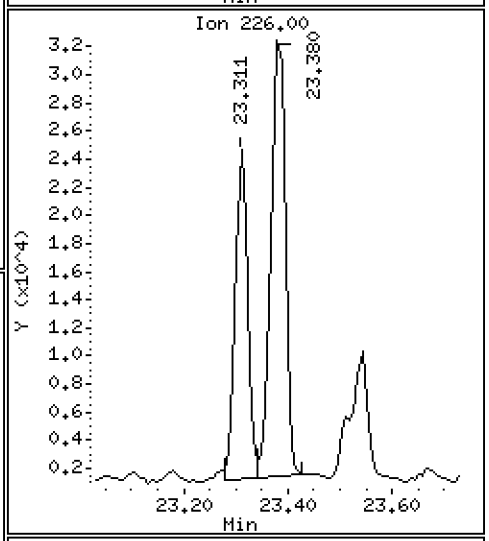


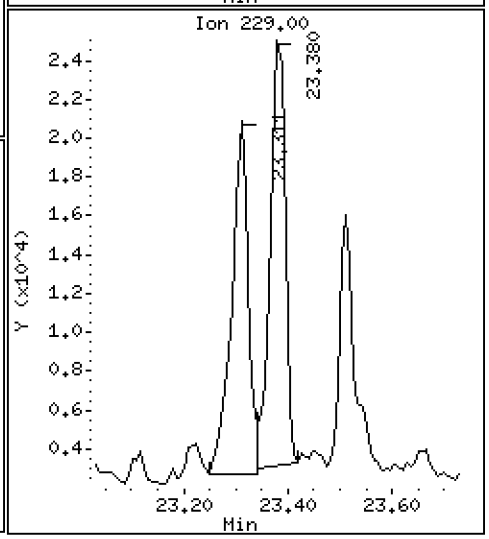












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

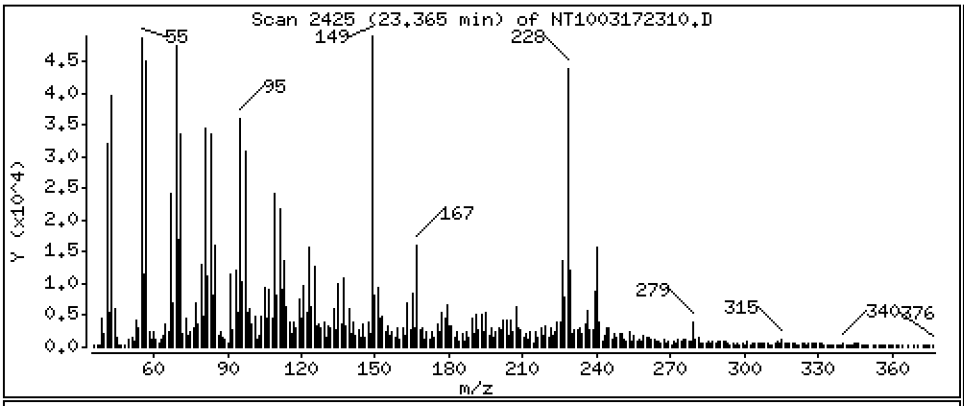
Operator: VTS

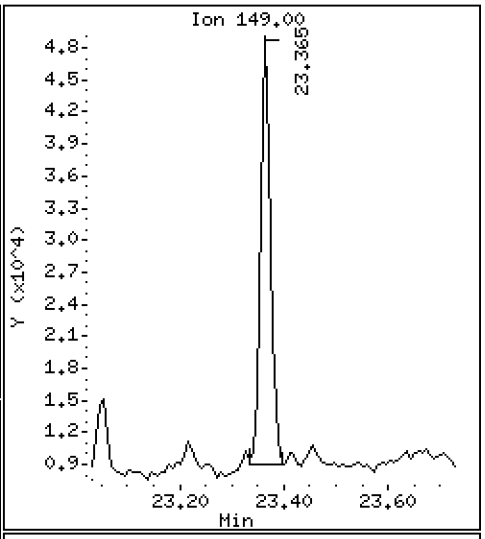
Column phase: ZB-5msi

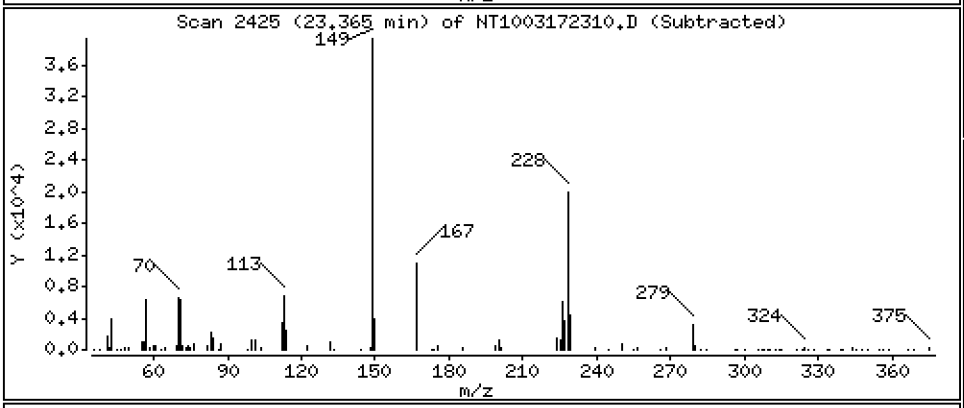
Column diameter: 0.25

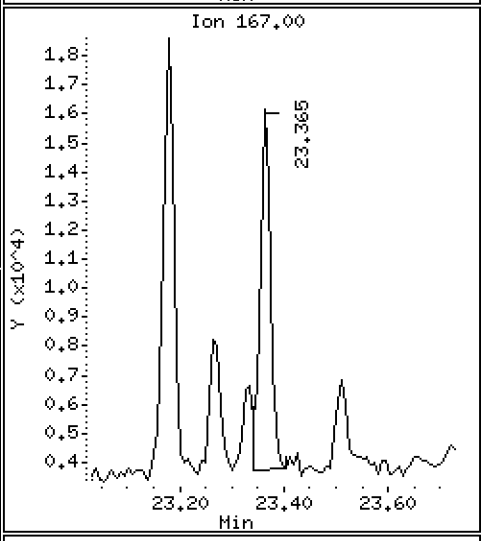
72 bis(2-Ethylhexyl)phthalate

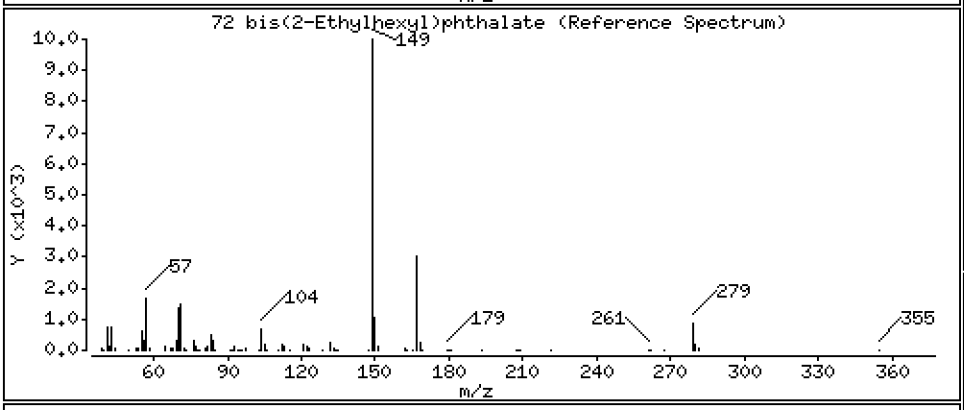
Concentration: 0.4329 ug/mL

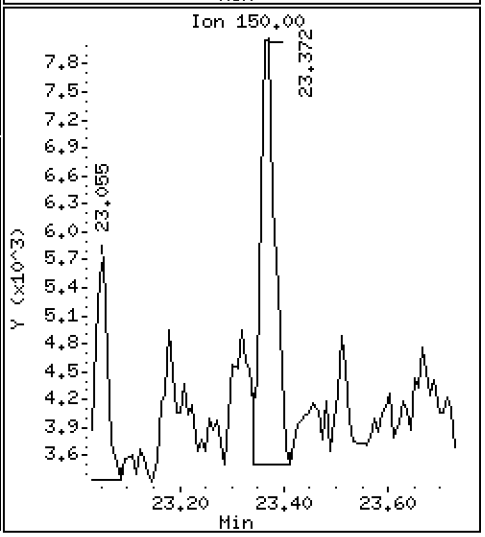


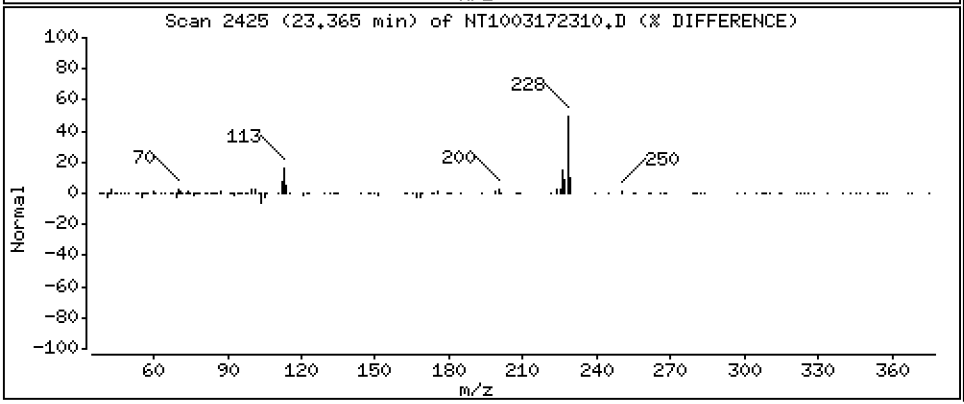












Date : 18-MAR-2023 00:09

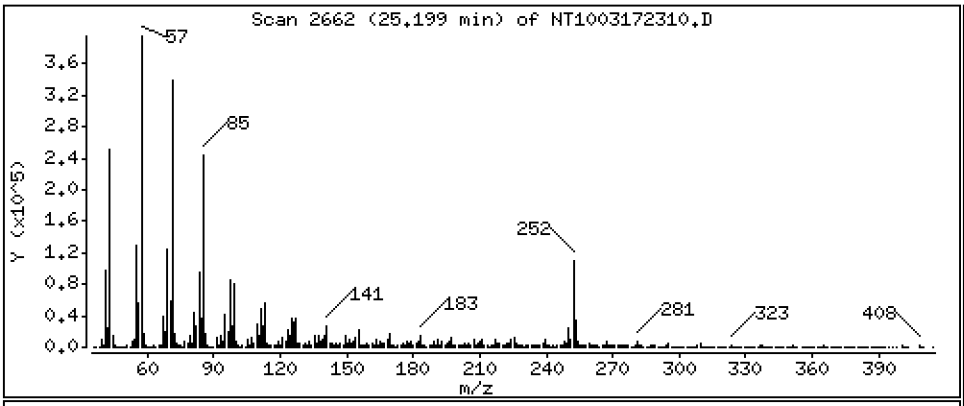
Client ID: Instrument: nt10.i

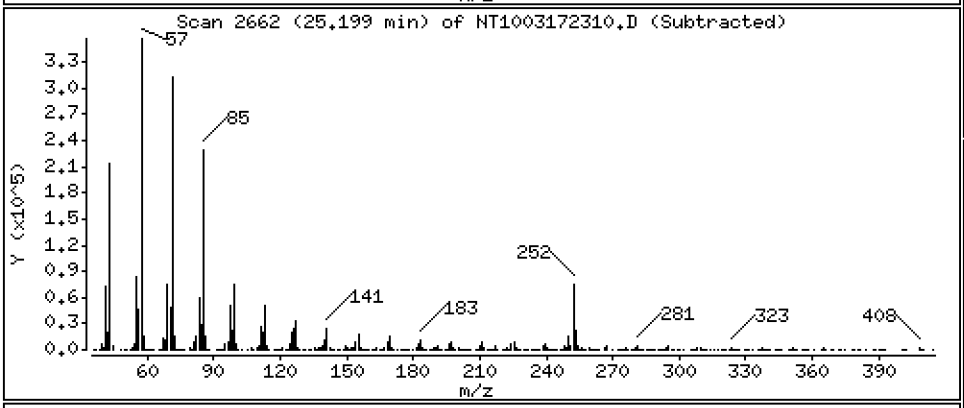
Sample Info: 23A0420-01

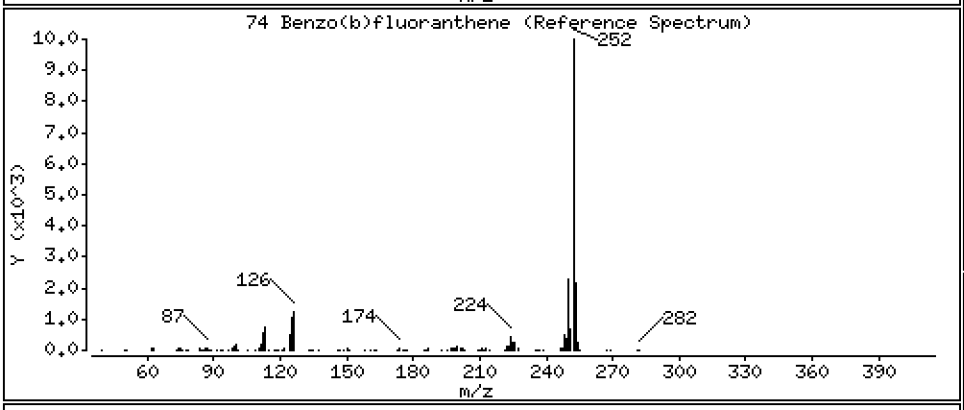
Operator: VTS

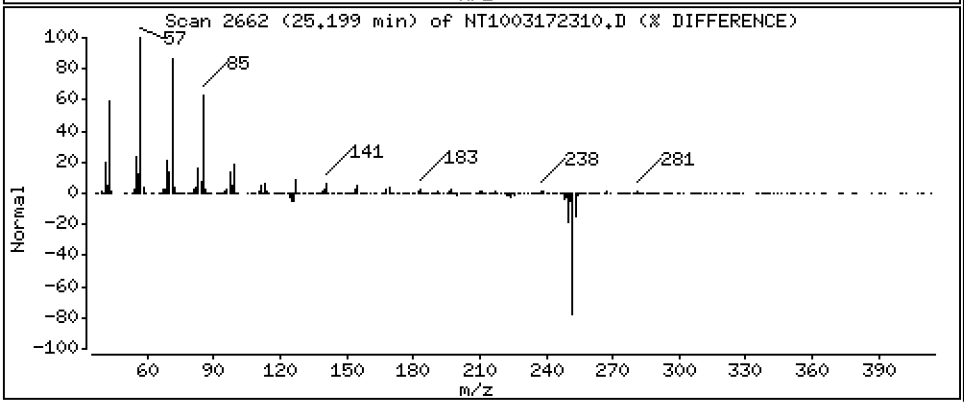
Column phase: ZB-5msi Column diameter: 0.25

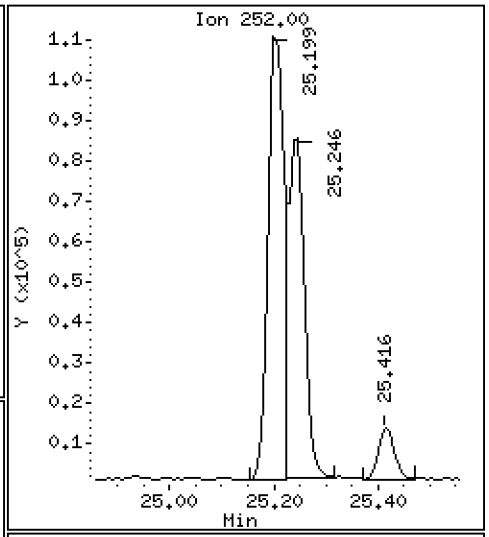
74 Benzo(b)fluoranthene Concentration: 1.320 ug/mL

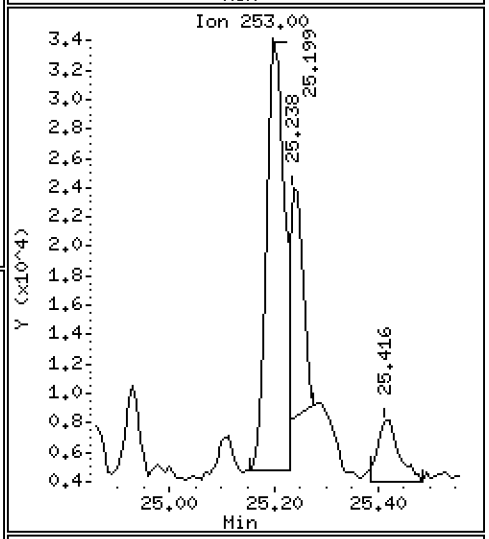


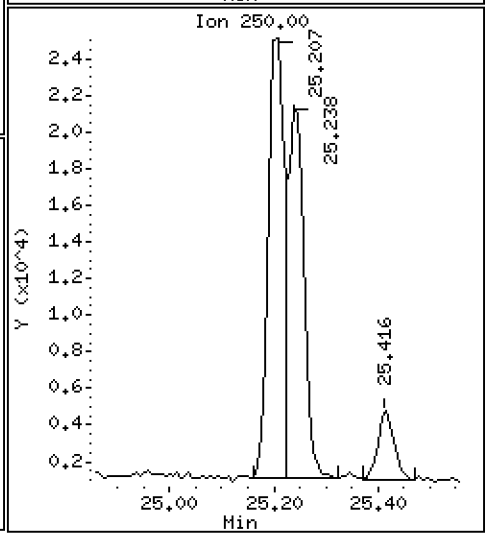












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

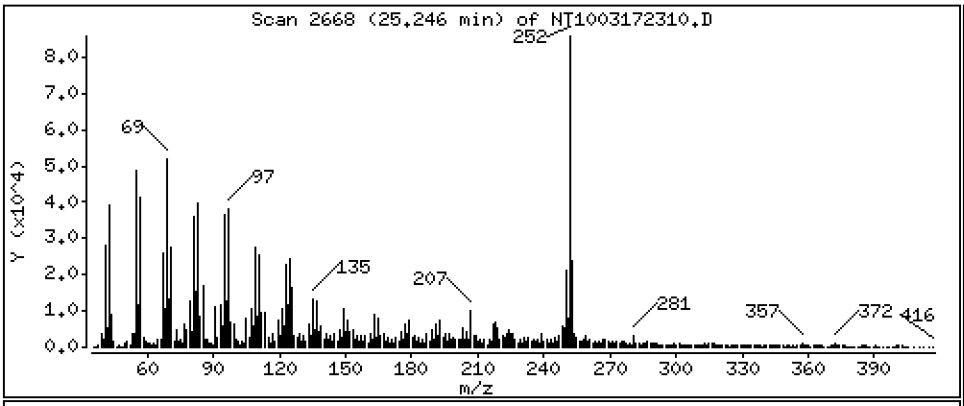
Operator: VTS

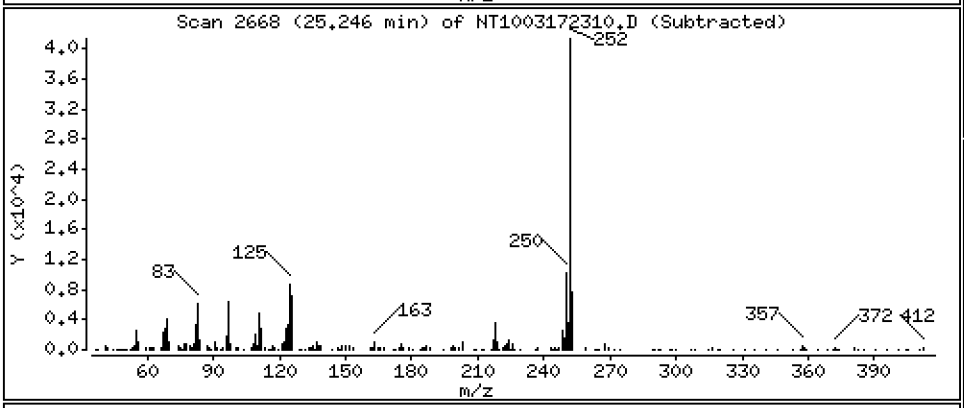
Column phase: ZB-5msi

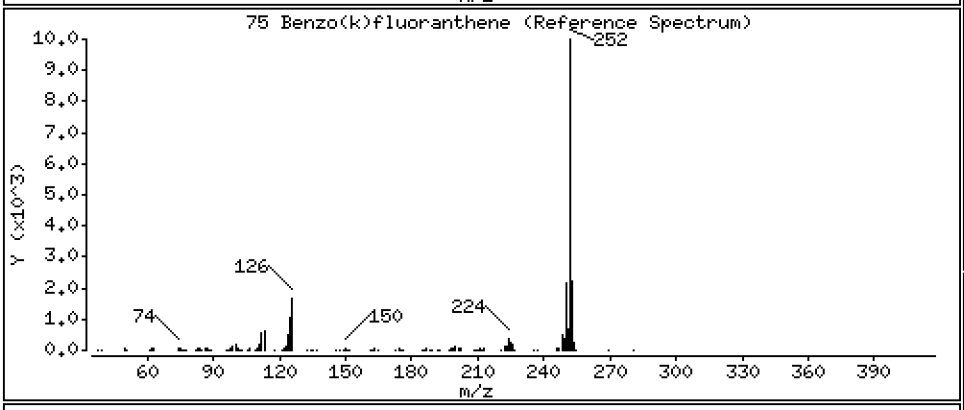
Column diameter: 0.25

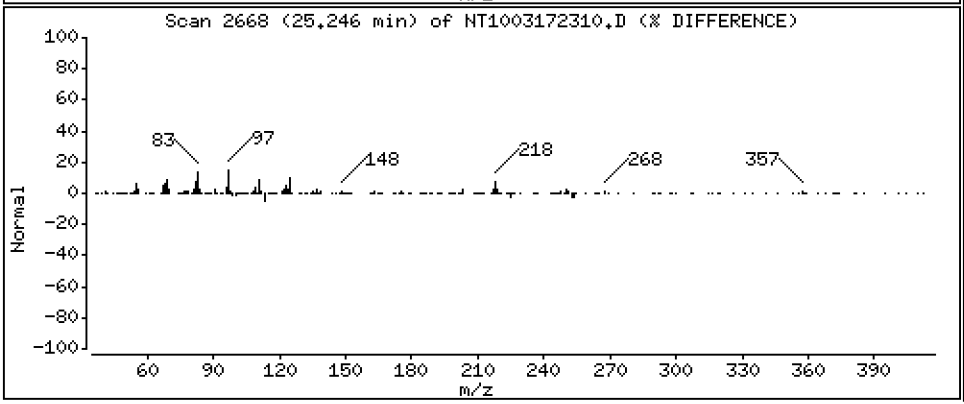
75 Benzo(k)fluoranthene

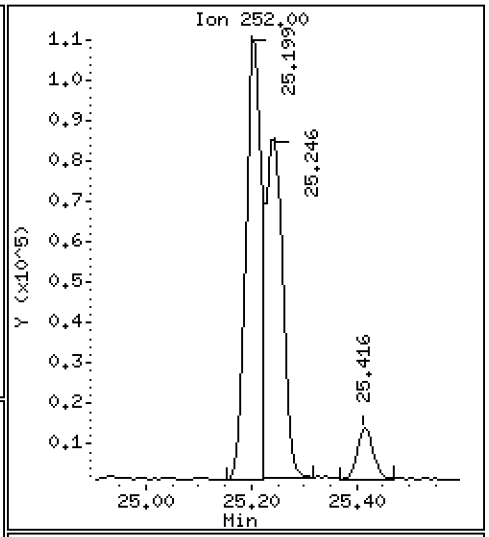
Concentration: 1.179 ug/mL

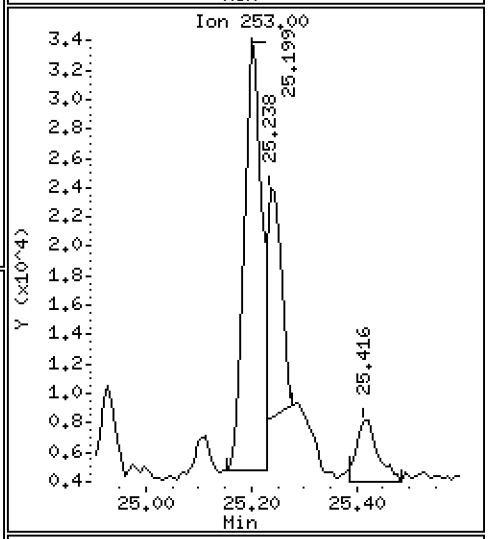


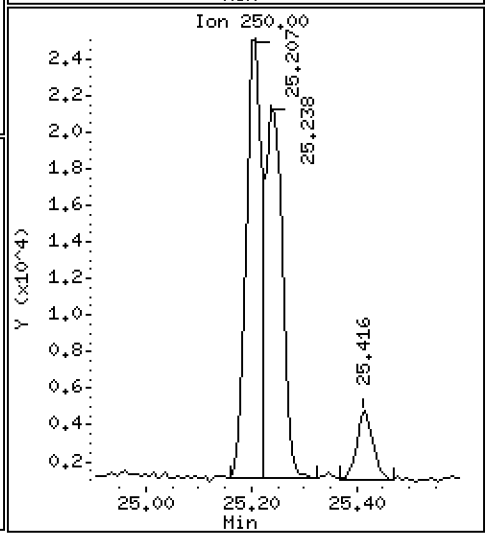












Date : 18-MAR-2023 00:09

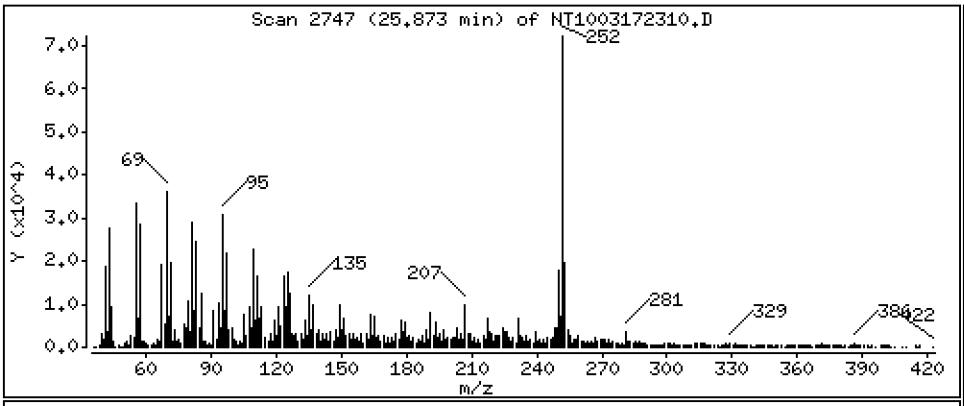
Client ID: Instrument: nt10.i

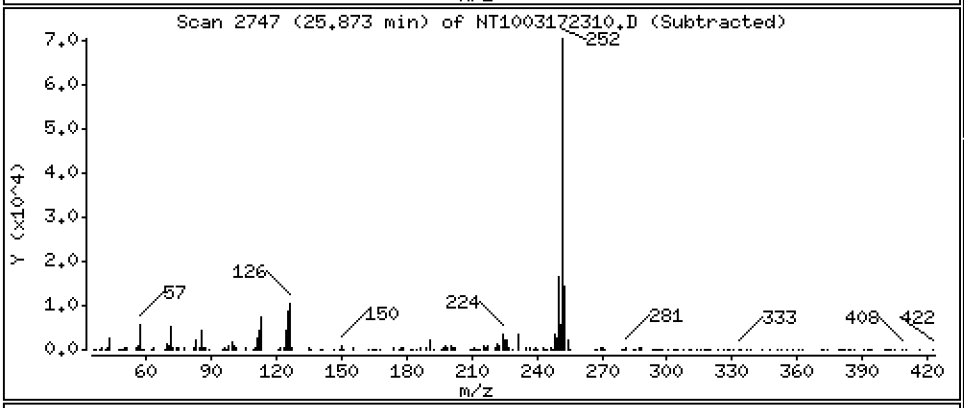
Sample Info: 23A0420-01

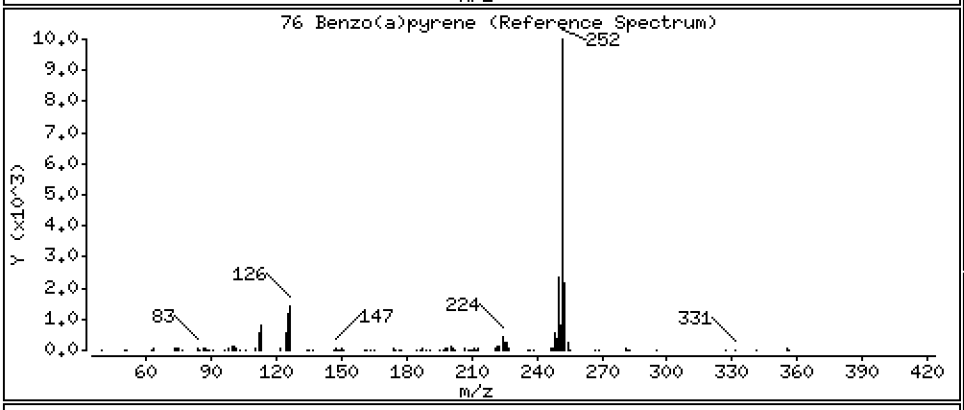
Operator: VTS

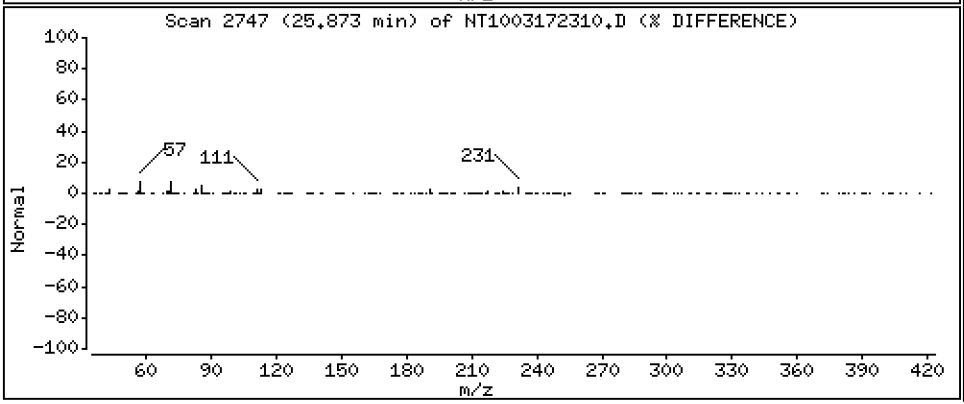
Column phase: ZB-5msi Column diameter: 0.25

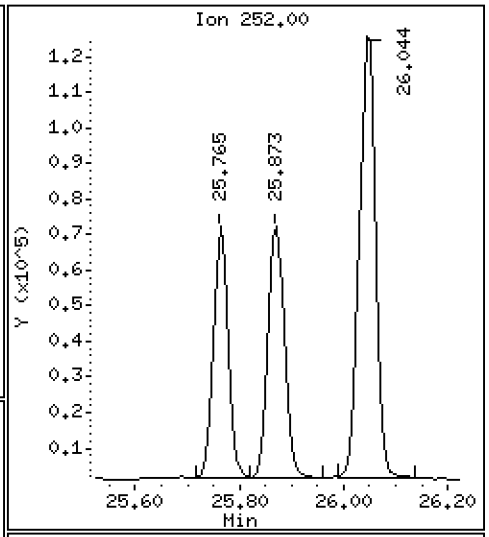
76 Benzo(a)pyrene Concentration: 0.9962 ug/mL

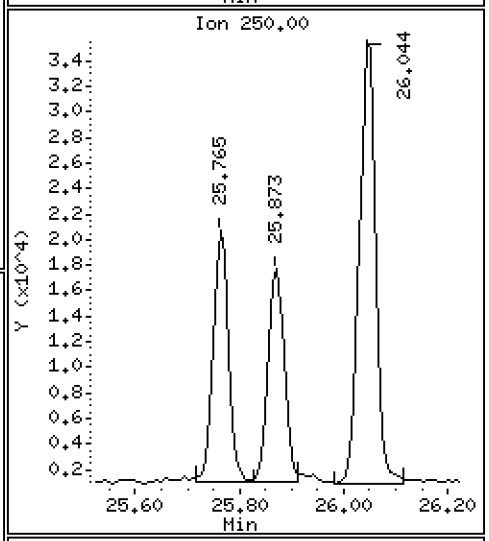


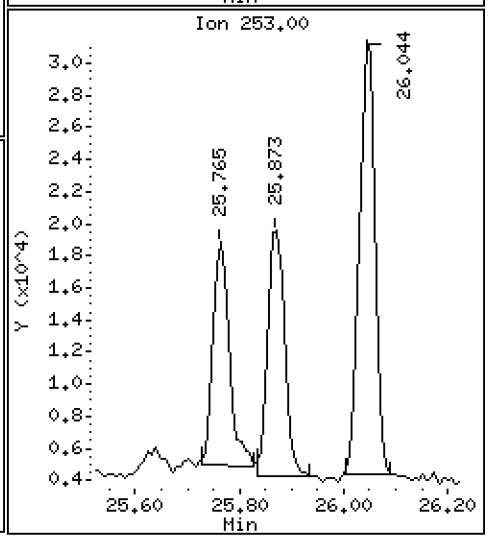












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

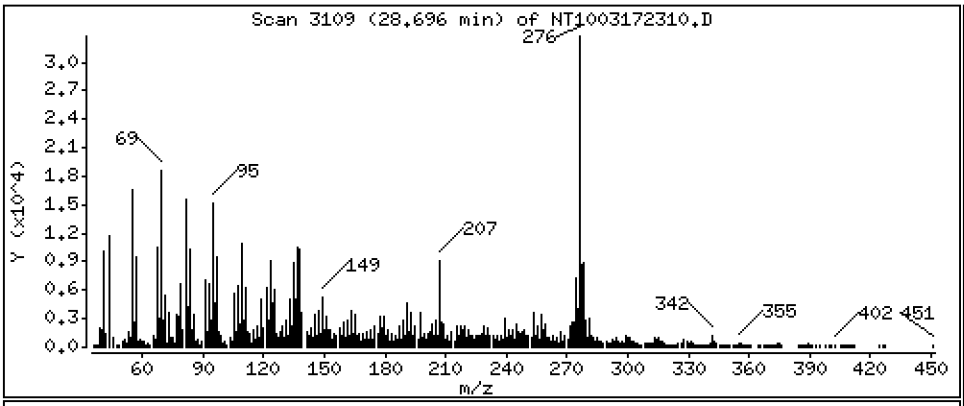
Operator: VTS

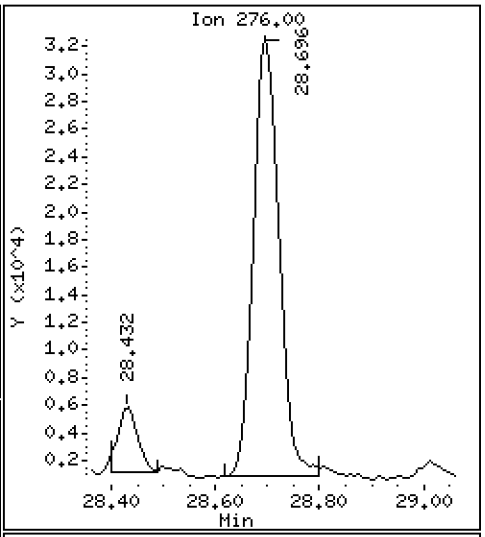
Column phase: ZB-5msi

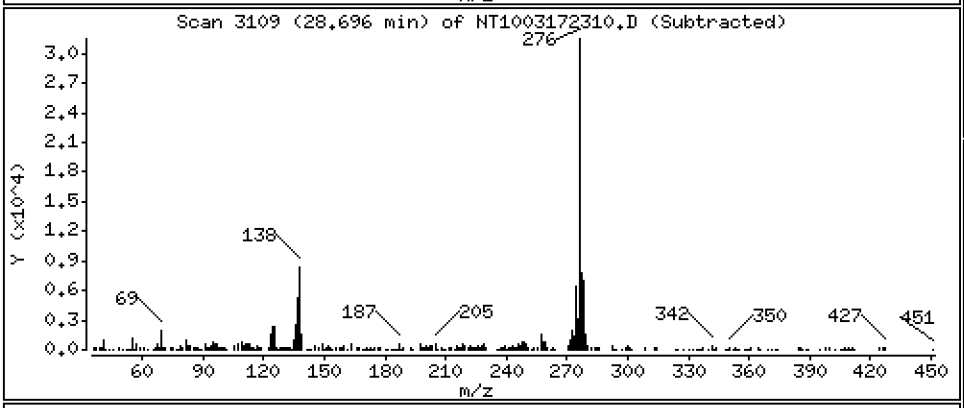
Column diameter: 0.25

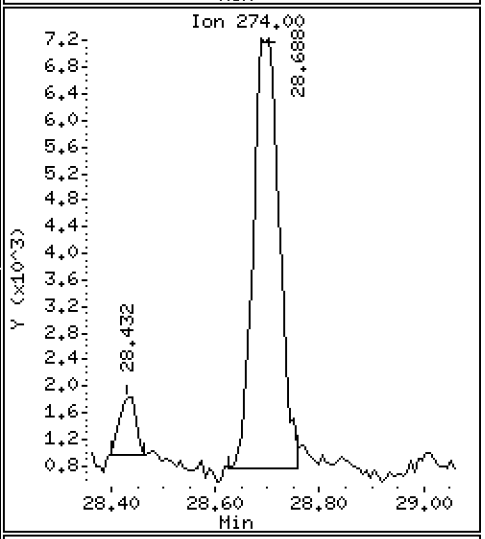
78 Indeno(1,2,3-cd)pyrene

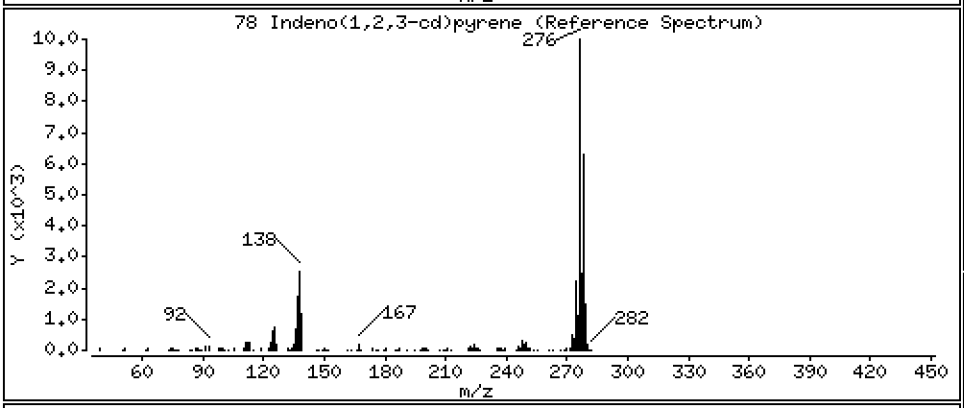
Concentration: 0.5622 ug/mL

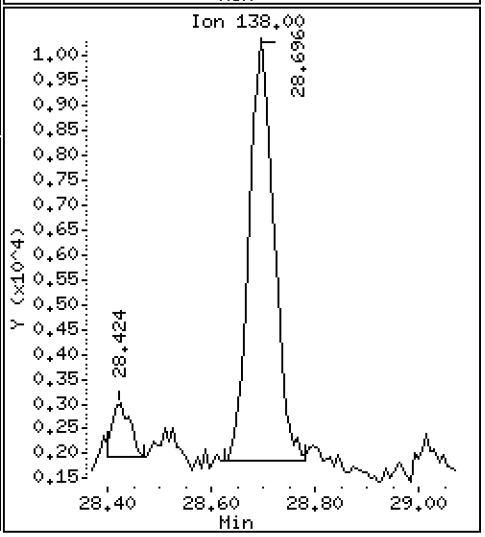


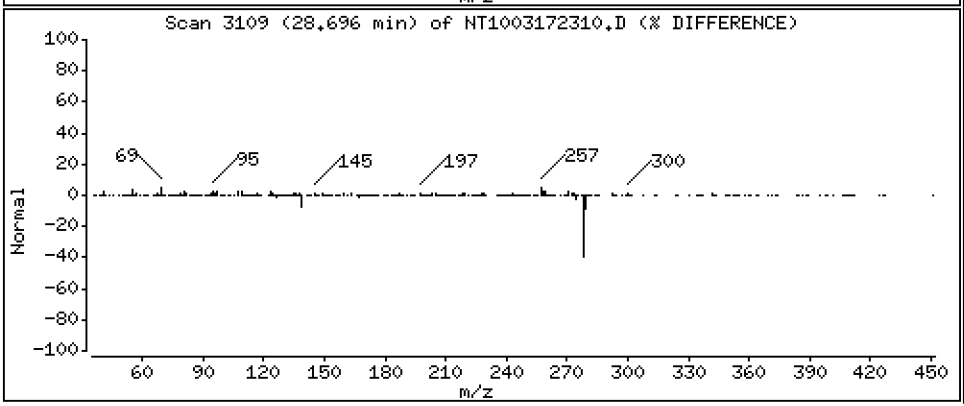












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172310.D

Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

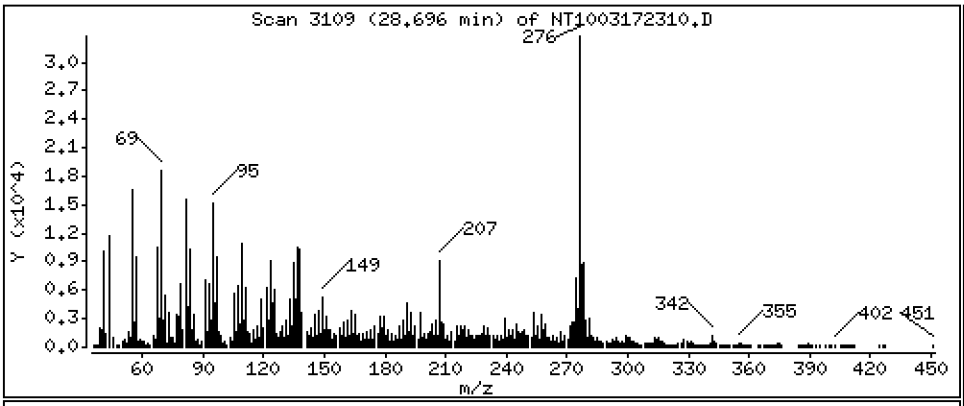
Operator: VTS

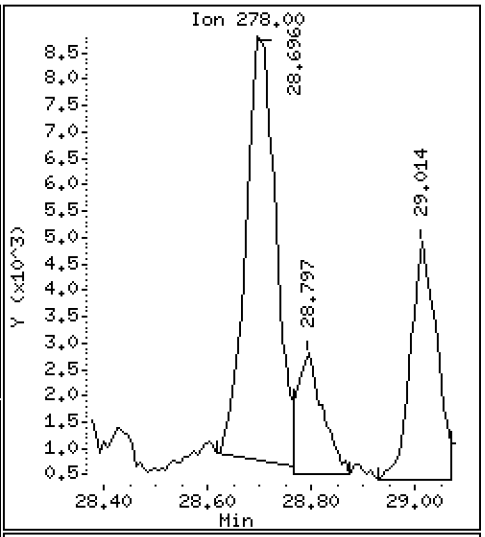
Column phase: ZB-5msi

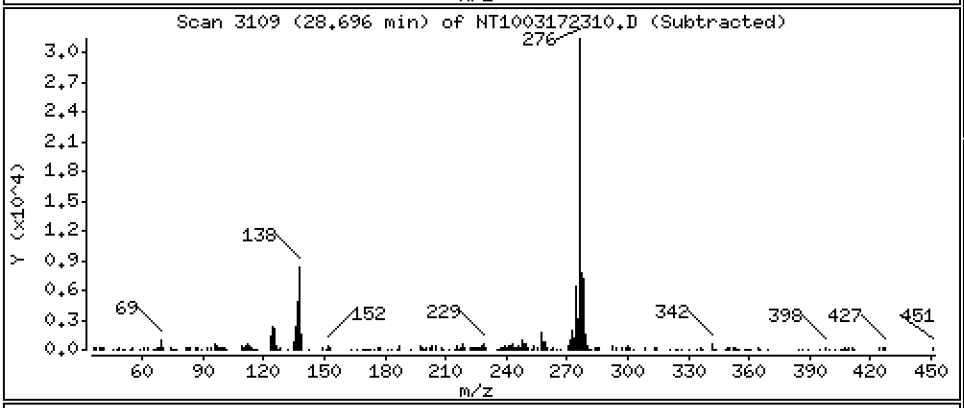
Column diameter: 0.25

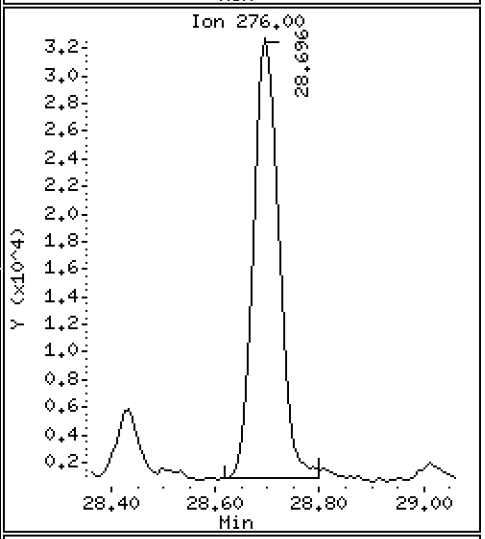
79 Dibenzo(a,h)anthracene

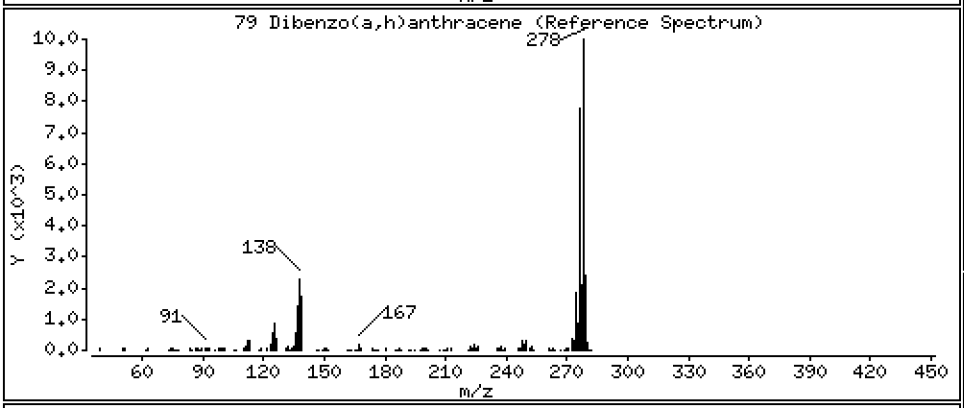
Concentration: 0.2025 ug/mL

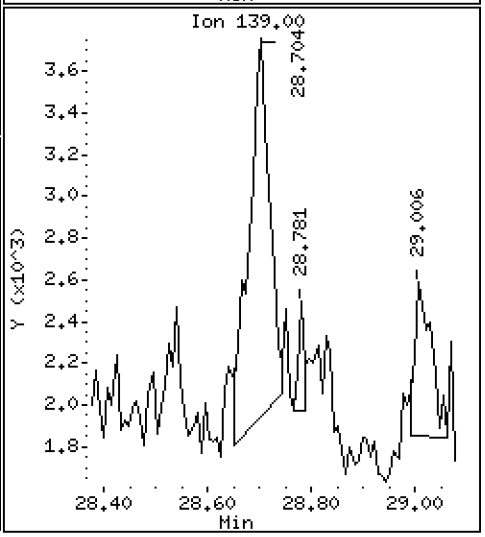


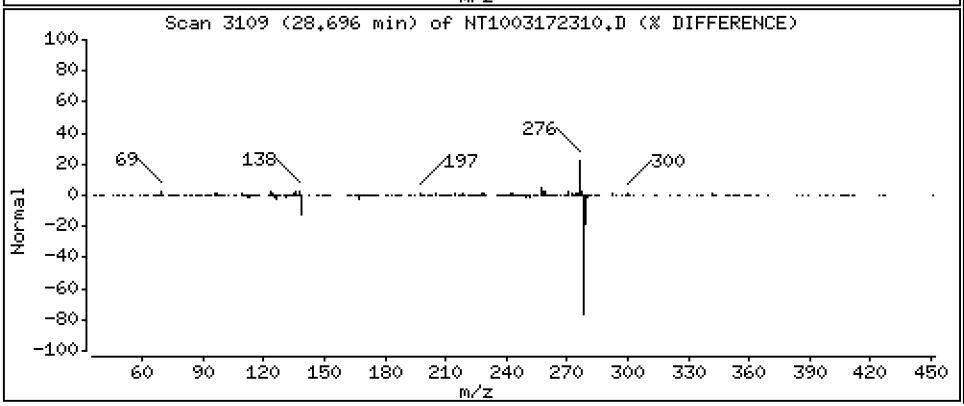












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

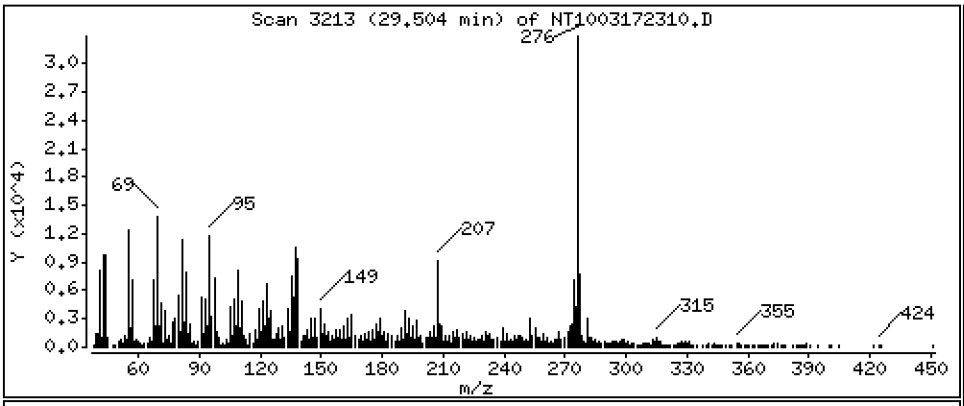
Operator: VTS

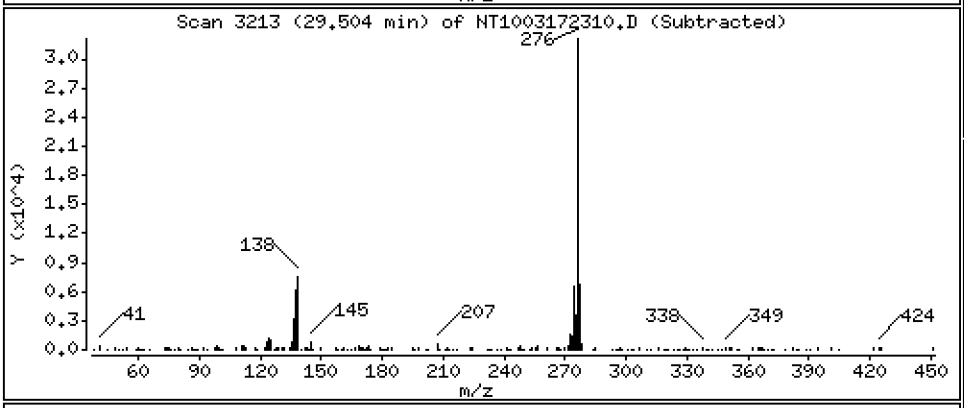
Column phase: ZB-5msi

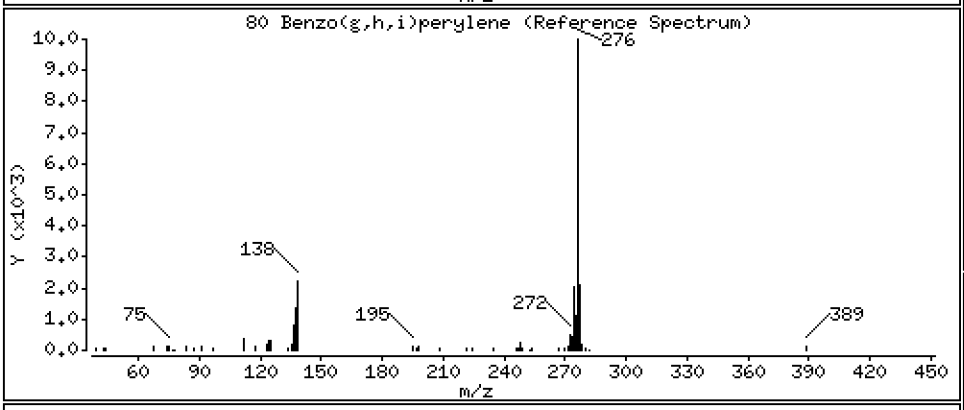
Column diameter: 0.25

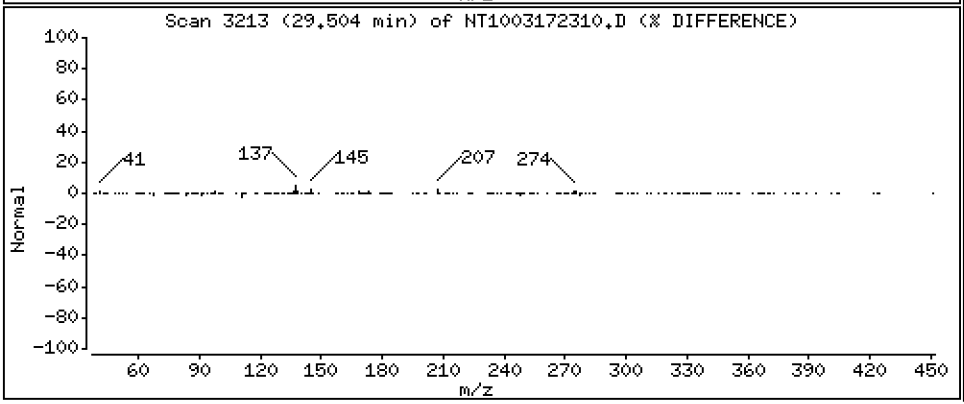
80 Benzo(g,h,i)perylene

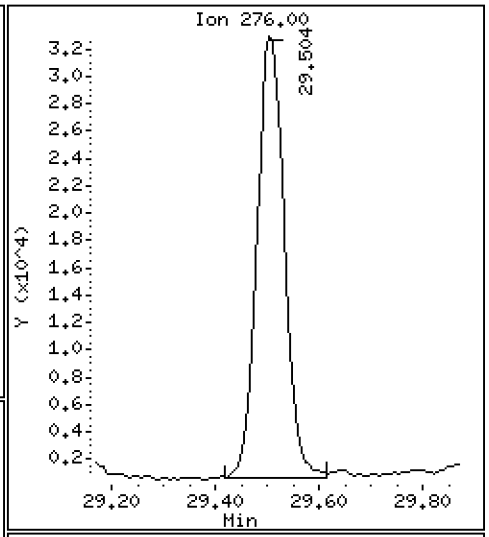
Concentration: 0.7006 ug/mL

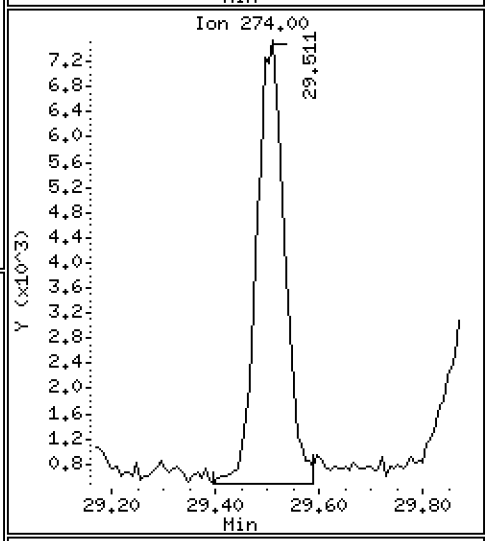


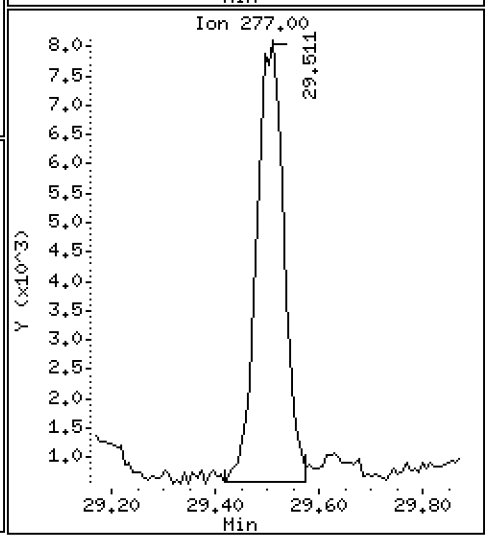












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172310.D

Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

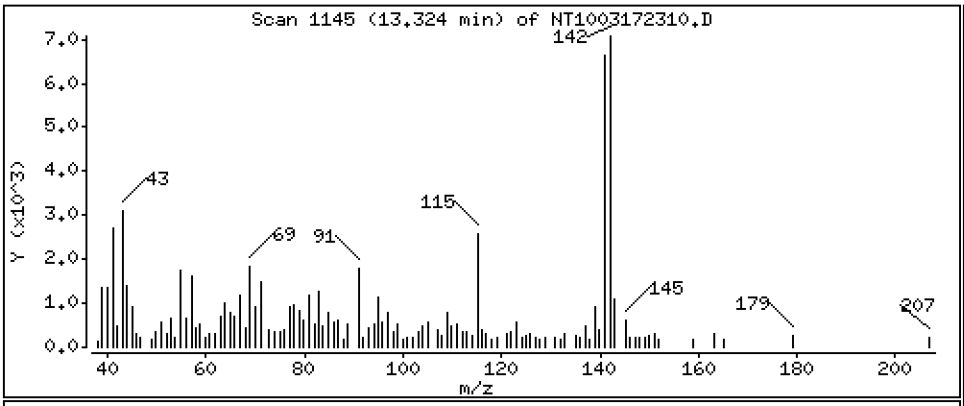
Operator: VTS

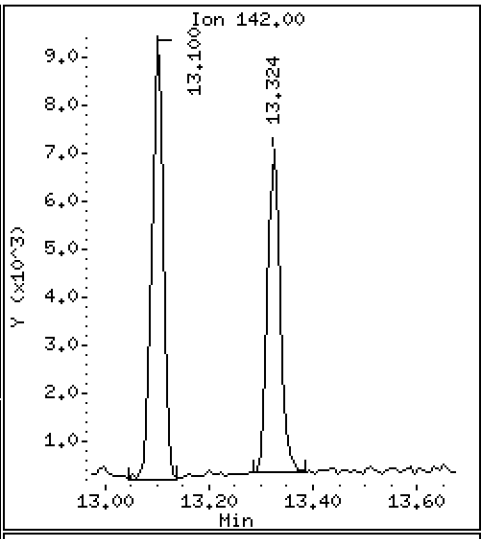
Column phase: ZB-5msi

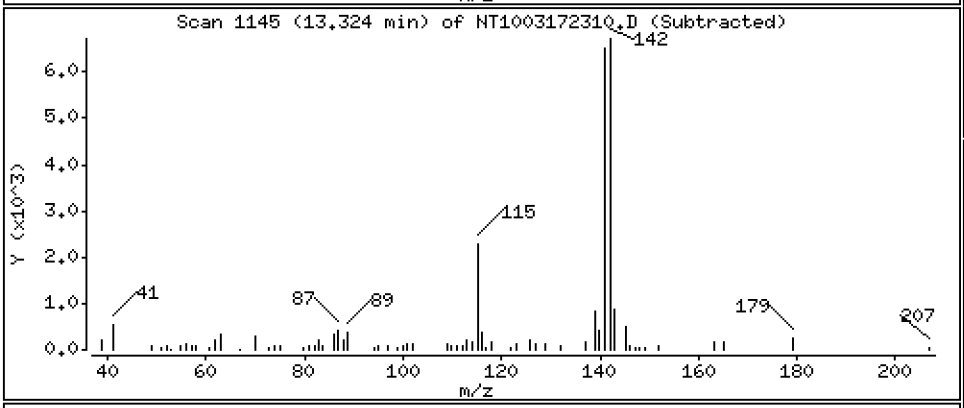
Column diameter: 0.25

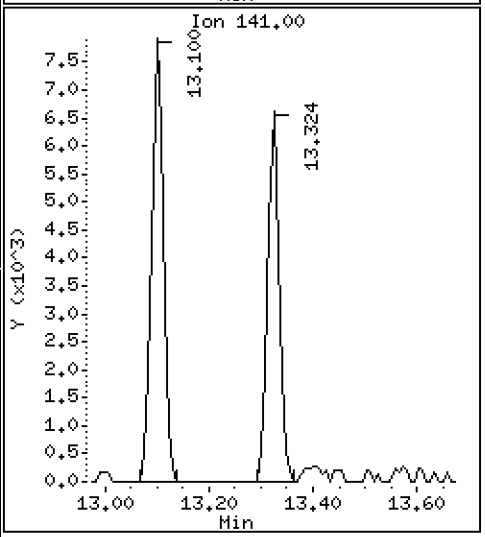
105 1-methylnaphthalene

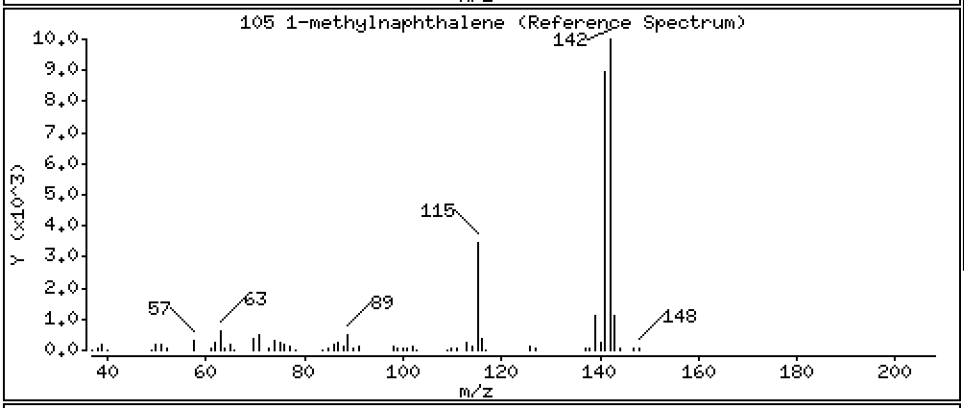
Concentration: 0.1091 ug/mL

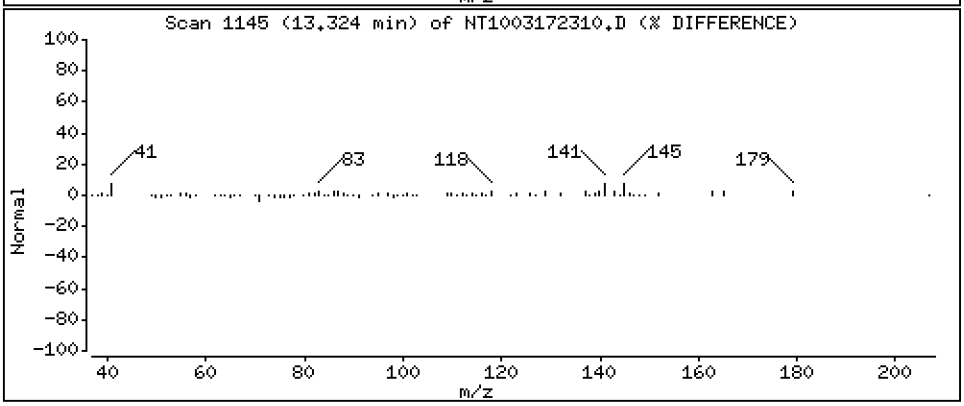












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

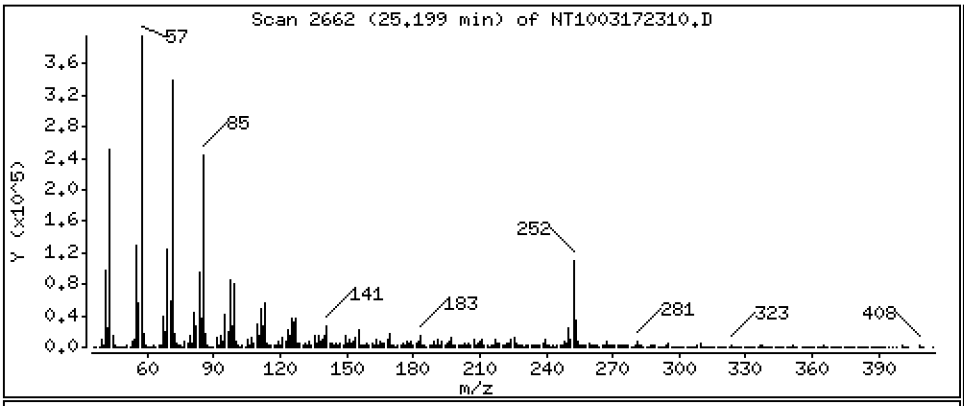
Operator: VTS

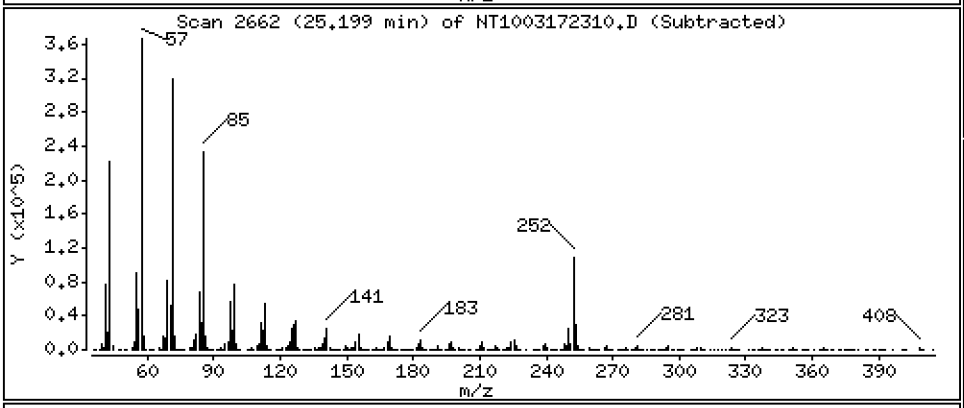
Column phase: ZB-5msi

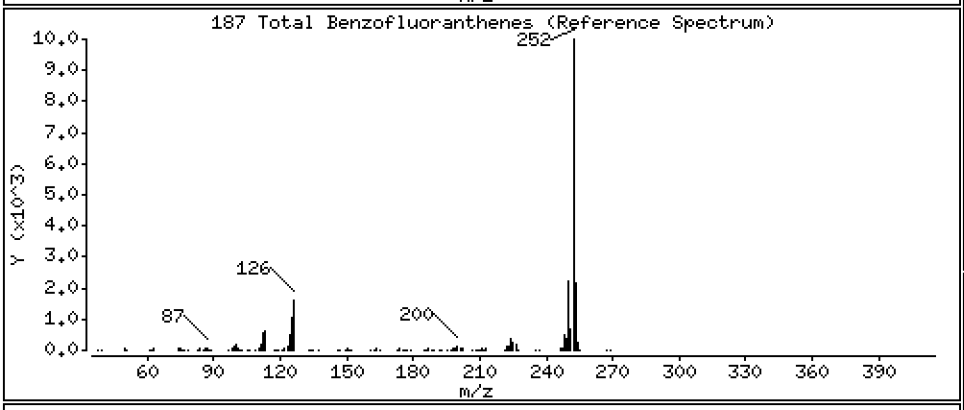
Column diameter: 0.25

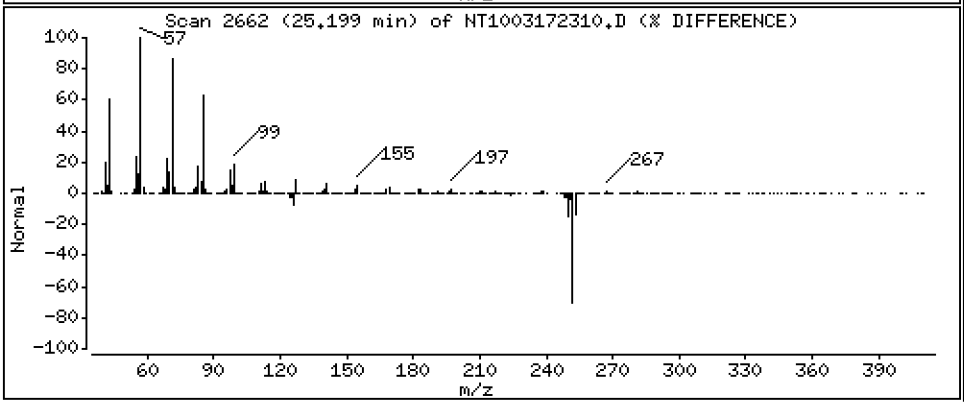
187 Total Benzofluoranthenes

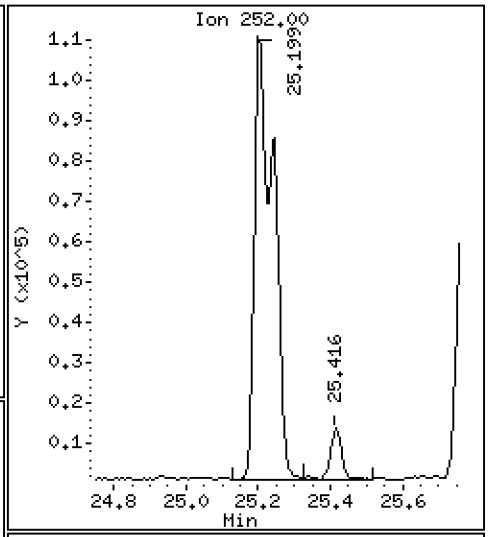
Concentration: 2.439 ug/mL

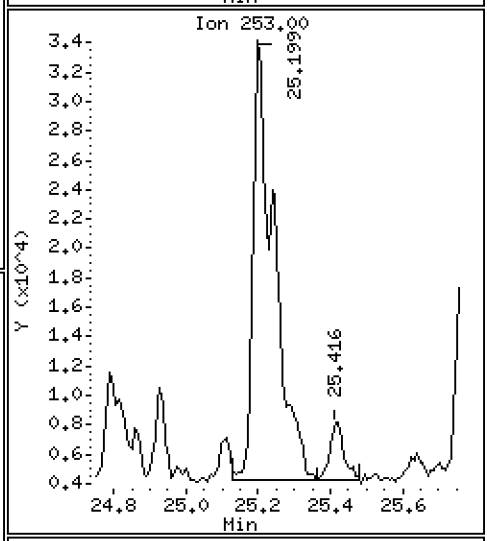


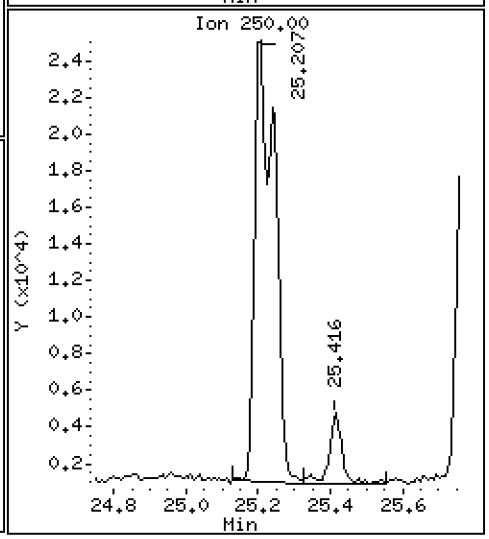












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230317.b\NT1003172310.D
Lab Smp Id: 23A0420-01
Inj Date : 18-MAR-2023 00:09
Operator : VTS Inst ID: nt10.i
Smp Info : 23A0420-01
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230317.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

								CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)	
$	1 2-Fluorophenol	112	6.975	6.975	(0.758)	123405	2.60186	2.602	
$	2 Phenol-d5	99	8.543	8.543	(0.929)	206365	3.31667	3.317	
	3 Phenol	94	8.566	8.566	(0.931)	90958	1.40678	1.407	
$	5 2-Chlorophenol-d4	132	8.837	8.837	(0.960)	250486	4.71441	4.714	
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.						
	6 2-Chlorophenol	128	Compound Not Detected.						
	7 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	8 1,4-Dichlorobenzene-d4	152	9.200	9.200	(1.000)	156838	4.00000		
	9 1,4-Dichlorobenzene	146	Compound Not Detected.						
$	10 1,2-Dichlorobenzene-d4	152	9.557	9.557	(1.039)	118852	3.11482	3.115	
	12 1,2-Dichlorobenzene	146	Compound Not Detected.						
	11 Benzyl alcohol	108	9.464	9.464	(1.029)	15773	0.51974	0.5197	
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.						
	13 2-Methylphenol	108	9.682	9.682	(1.052)	1570	0.03331	0.03331(M)	
	17 Hexachloroethane	117	Compound Not Detected.						
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.						
	15 4-Methylphenol	108	9.946	9.946	(1.081)	28923	0.58240	0.5824	
$	18 Nitrobenzene-d5	82	10.287	10.287	(0.881)	207744	3.63295	3.633	
	19 Nitrobenzene	77	Compound Not Detected.						
	20 Isophorone	82	Compound Not Detected.						
	21 2-Nitrophenol	139	Compound Not Detected.						
	22 2,4-Dimethylphenol	107	10.989	10.989	(0.941)	2411	0.04678	0.04678	
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	24 Benzoic acid	105	11.082	11.175	(0.949)	33369	1.16318	1.163	
	25 2,4-Dichlorophenol	162	Compound Not Detected.						
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	27 Naphthalene-d8	136	11.676	11.676	(1.000)	566529	4.00000		
	28 Naphthalene	128	11.715	11.715	(1.003)	24350	0.16224	0.1622	
	29 4-Chloroaniline	127	Compound Not Detected.						
	30 Hexachlorobutadiene	225	Compound Not Detected.						
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	32 2-Methylnaphthalene	142	13.099	13.099	(1.122)	13962	0.12891	0.1289	
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.						

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.881	13.881	(0.909)	462099	3.88371	3.884
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	14.771	14.787	(0.967)	4501	0.04606	0.04606
	40	Acenaphthylene	152	14.965	14.965	(0.980)	13665	0.09102	0.09102
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	15.274	15.282	(1.000)	300789	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	15.344	15.344	(1.005)	9200	0.09920	0.09920
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	15.661	15.676	(1.025)	17516	0.12807	0.1281
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	16.225	16.240	(1.062)	18925	0.19740	0.1974
	49	Fluorene	166	16.372	16.387	(1.072)	12815	0.11910	0.1191
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	16.911	16.919	(1.107)	95656	6.81993	6.820
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.303	18.310	(1.000)	596211	4.00000	
	60	Phenanthrene	178	18.349	18.357	(1.003)	99983	0.61500	0.6150
	61	Anthracene	178	18.442	18.457	(1.008)	44892	0.28786	0.2879
	62	Carbazole	167	18.775	18.782	(1.026)	13848	0.09909	0.09909
	63	Di-n-butylphthalate	149	19.564	19.572	(1.069)	12070	0.06423	0.06423
	64	Fluoranthene	202	20.755	20.732	(0.889)	304985	1.62446	1.624
	65	Pyrene	202	21.173	21.158	(0.907)	326385	1.69468	1.695
$	66	Terphenyl-d14	244	21.444	21.436	(0.919)	587516	4.06208	4.062
	67	Butylbenzylphthalate	149	22.350	22.358	(0.958)	10249	0.15157	0.1516
	68	Benzo(a)anthracene	228	23.310	23.310	(0.999)	144234	0.87456	0.8746
*	69	Chrysene-d12	240	23.341	23.341	(1.000)	467242	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	23.380	23.380	(1.002)	200023	1.24141	1.241
	72	bis(2-Ethylhexyl)phthalate	149	23.364	23.380	(0.960)	54076	0.43287	0.4329
*	134	Di-n-octylphthalate-d4	153	24.347	24.363	(1.000)	854021	4.00000	
	73	Di-n-octylphthalate	149	Compound Not Detected.					
	74	Benzo(b)fluoranthene	252	25.199	25.207	(0.970)	225898	1.32027	1.320
	75	Benzo(k)fluoranthene	252	25.245	25.253	(0.971)	204871	1.17919	1.179(H)
	76	Benzo(a)pyrene	252	25.873	25.873	(0.996)	152387	0.99617	0.9962
*	77	Perylene-d12	264	25.989	25.997	(1.000)	527842	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.695	28.711	(1.104)	109419	0.56222	0.5622
	79	Dibenzo(a,h)anthracene	278	28.695	28.726	(1.104)	32726	0.20254	0.2025(H)
	80	Benzo(g,h,i)perylene	276	29.503	29.519	(1.135)	117997	0.70058	0.7006
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	13.324	13.324	(1.141)	10829	0.10913	0.1091
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.199	25.253	(0.970)	402943	2.43910	2.439
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172310.D
Lab Smp Id: 23A0420-01
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230317.b\ABN.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:02
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	132765	66383	265530	156838	18.13
27 Naphthalene-d8	497947	248974	995894	566529	13.77
42 Acenaphthene-d10	271928	135964	543856	300789	10.61
59 Phenanthrene-d10	497390	248695	994780	596211	19.87
69 Chrysene-d12	391403	195702	782806	467242	19.38
134 Di-n-octylphthala	674651	337326	1349302	854021	26.59
77 Perylene-d12	408663	204332	817326	527842	29.16

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.20	8.70	9.70	9.20	0.00
27 Naphthalene-d8	11.68	11.18	12.18	11.68	0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.27	-0.05
59 Phenanthrene-d10	18.31	17.81	18.81	18.30	-0.04
69 Chrysene-d12	23.34	22.84	23.84	23.34	0.00
134 Di-n-octylphthala	24.36	23.86	24.86	24.35	-0.06
77 Perylene-d12	26.00	25.50	26.50	25.99	-0.03

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

REVIEW SUMMARY FOR FILE - NT1003172310.D

Lab ID: 23A0420-01
nt10.i, 20230317.b\ABN.m,   18-MAR-2023 00:09

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

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.949	0.957	-0.0080	Benzoic acid

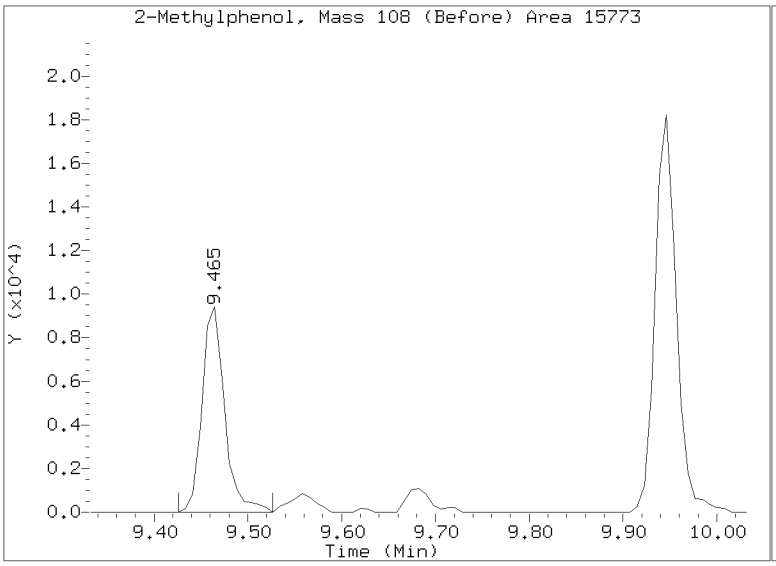
RRT check based on Ccal File: NT1003172302.D

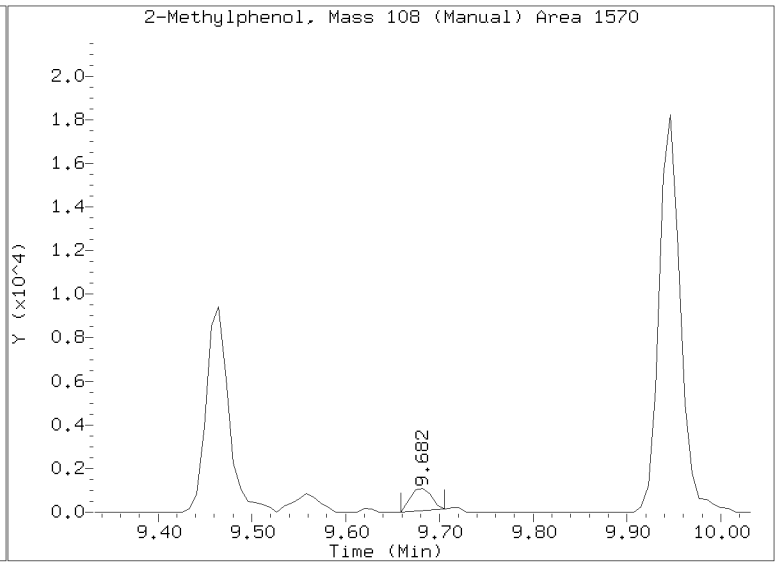
On Column LOD for nt10.i, 20230317.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230317.b/NT1003172310.D
Injection Date: 18-MAR-2023 00:09
Lab ID:23A0420-01 Client ID:
Report Date: 03/30/2023 07:22





LDW23-SC1003

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-07 A	SDG:	23A0420
Sampled:	01/19/23 12:25	Prepared:	02/20/23 16:23	File ID:	NT1003172311.D
% Solids:	51.28	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/18/23 00:47
Batch:	BLB0495	Sequence:	SLC0473	Initial/Final:	19.51 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00046
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	199		4.4	20.0
106-44-5	4-Methylphenol	1	92.0		7.4	20.0
91-20-3	Naphthalene	1	23.3	B	4.2	20.0
91-57-6	2-Methylnaphthalene	1	17.0	J	4.5	20.0
208-96-8	Acenaphthylene	1	12.8	J	6.2	20.0
131-11-3	Dimethylphthalate	1	7.4	J	4.4	20.0
83-32-9	Acenaphthene	1	12.3	J	5.2	20.0
132-64-9	Dibenzofuran	1	18.2	J	14.1	20.0
86-73-7	Fluorene	1	20.7		14.6	20.0
85-01-8	Phenanthrene	1	92.9		8.7	20.0
120-12-7	Anthracene	1	53.5		7.2	20.0
206-44-0	Fluoranthene	1	313		6.1	20.0
129-00-0	Pyrene	1	319		5.7	20.0
85-68-7	Butylbenzylphthalate	1	18.8	J	9.4	20.0
56-55-3	Benzo(a)anthracene	1	138		6.0	20.0
218-01-9	Chrysene	1	182		6.1	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	77.1		5.5	50.0
	Benzofluoranthenes, Total	1	394		10.0	40.0
50-32-8	Benzo(a)pyrene	1	163		4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	89.0		14.6	20.0
53-70-3	Dibenzo(a,h)anthracene	1	31.3		17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	109		13.6	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	749.65	233	31.1	27 - 120	
Phenol-d5	749.65	305	40.6	29 - 120	
2-Chlorophenol-d4	749.65	463	61.7	31 - 120	
1,2-Dichlorobenzene-d4	499.76	305	61.1	32 - 120	
Nitrobenzene-d5	499.76	334	66.9	30 - 120	
2-Fluorobiphenyl	499.76	393	78.7	35 - 120	

LDW23-SC1003

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

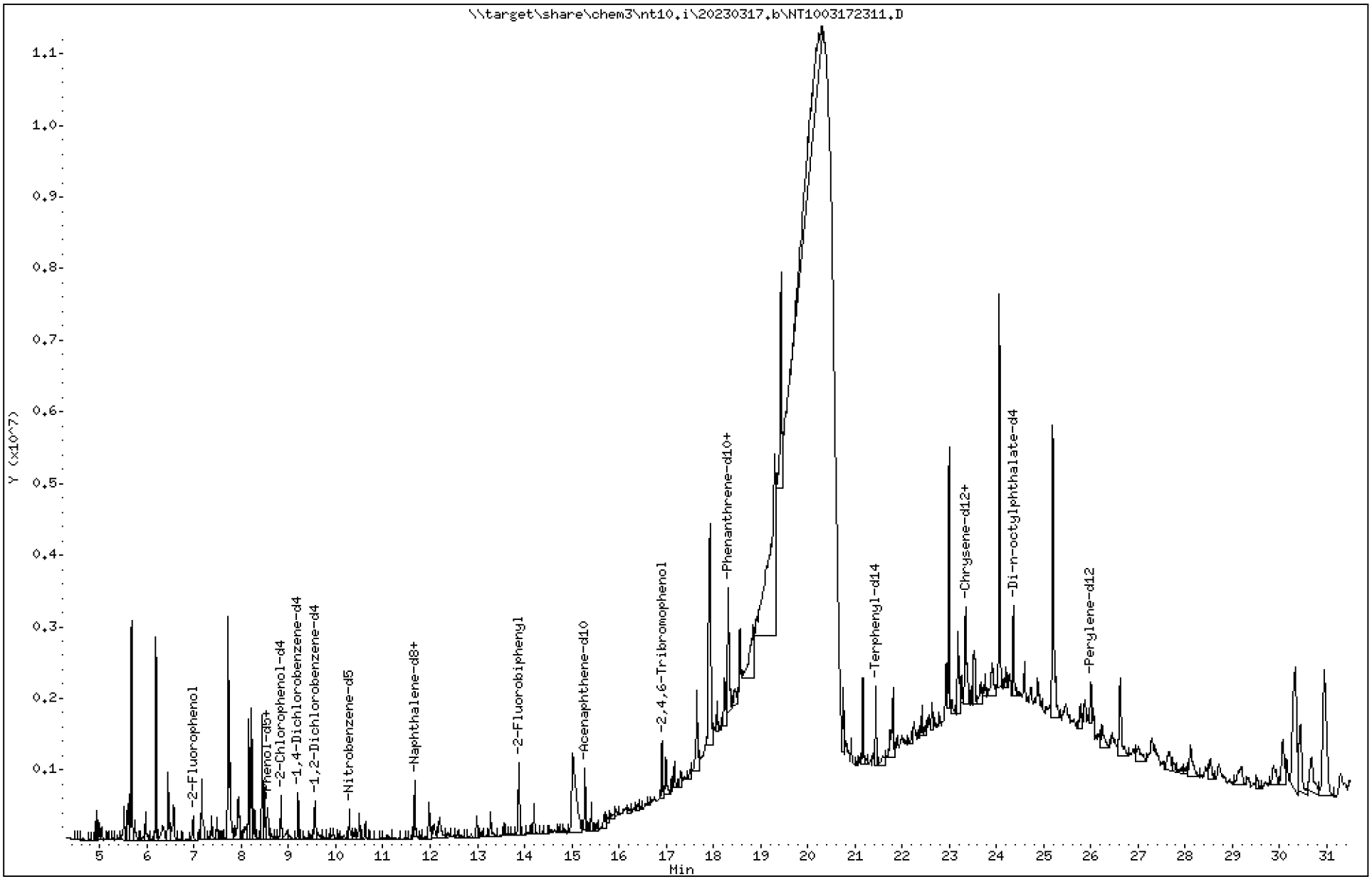
Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-07 A	SDG:	23A0420
Sampled:	01/19/23 12:25	Prepared:	02/20/23 16:23	File ID:	NT1003172311.D
% Solids:	51.28	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/18/23 00:47
Batch:	BLB0495	Sequence:	SLC0473	Initial/Final:	19.51 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00046
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	749.65	680	90.7	24 - 134	
p-Terphenyl-d14	499.76	417	83.4	37 - 120	

Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172311.D
Date : 18-MAR-2023 00:47
Client ID:
Sample Info: 23A0420-07

Instrument: nt10.i
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

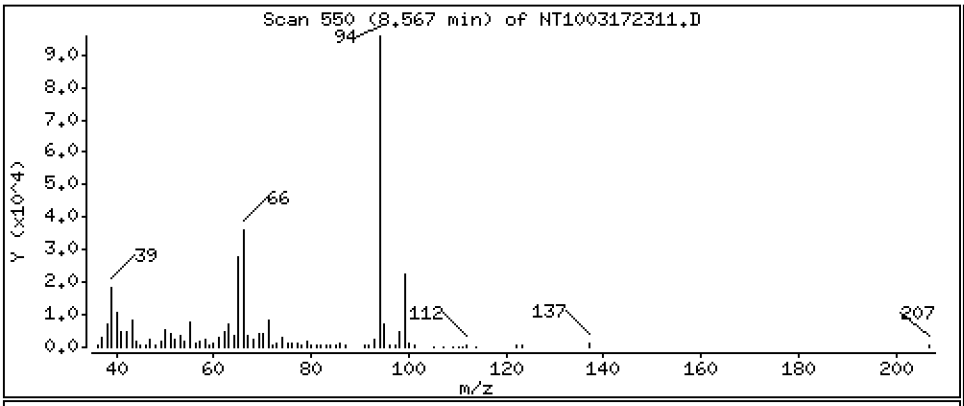
Operator: VTS

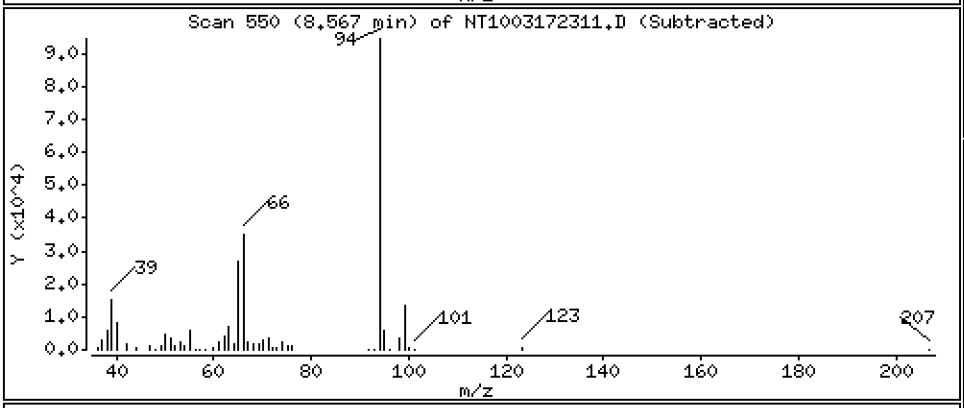
Column phase: ZB-5msi

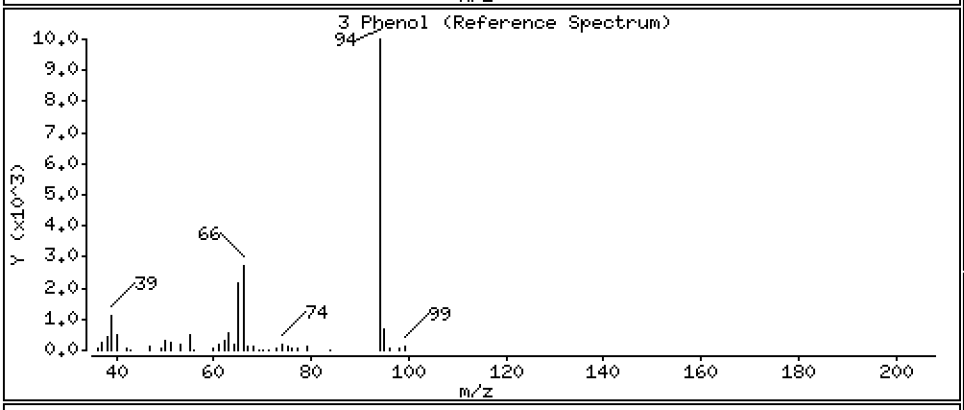
Column diameter: 0.25

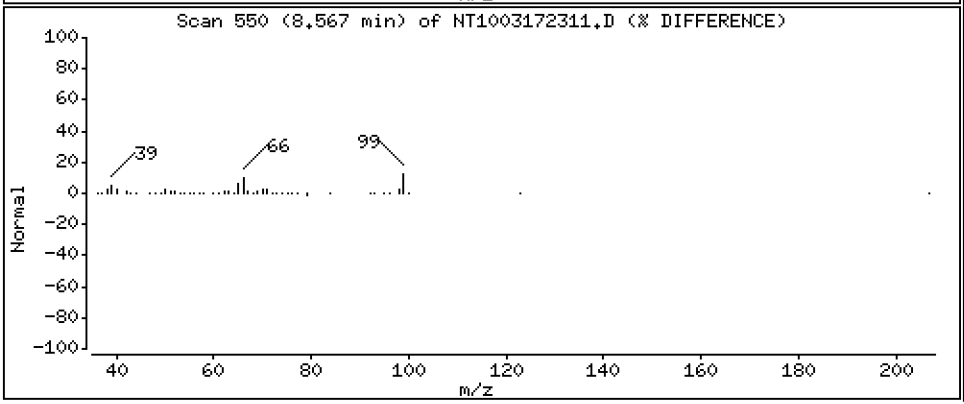
3 Phenol

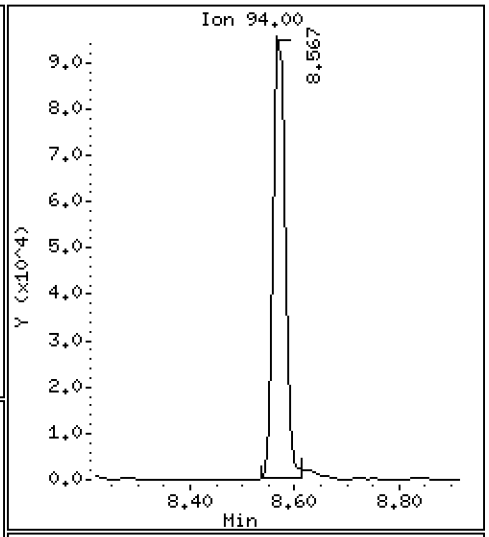
Concentration: 1.988 ug/mL

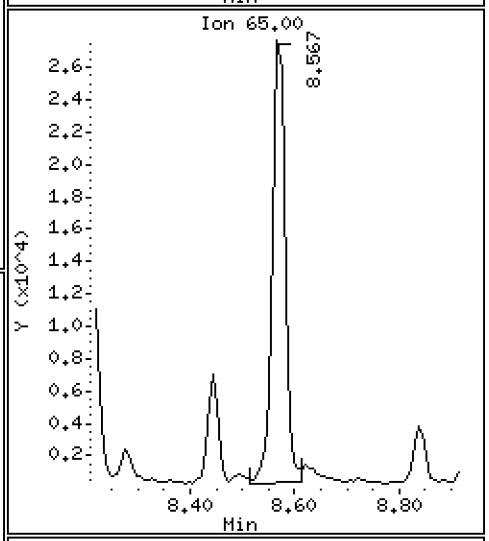


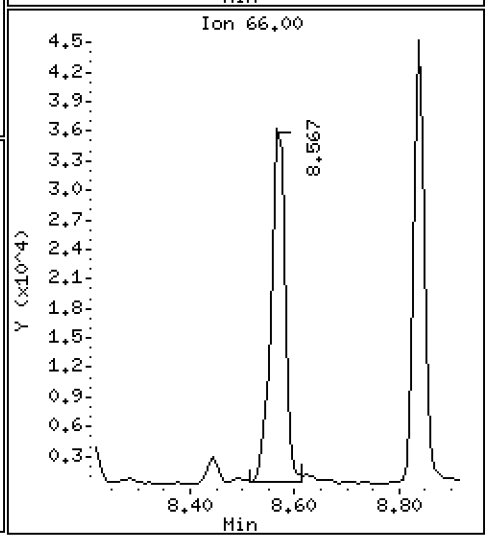












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

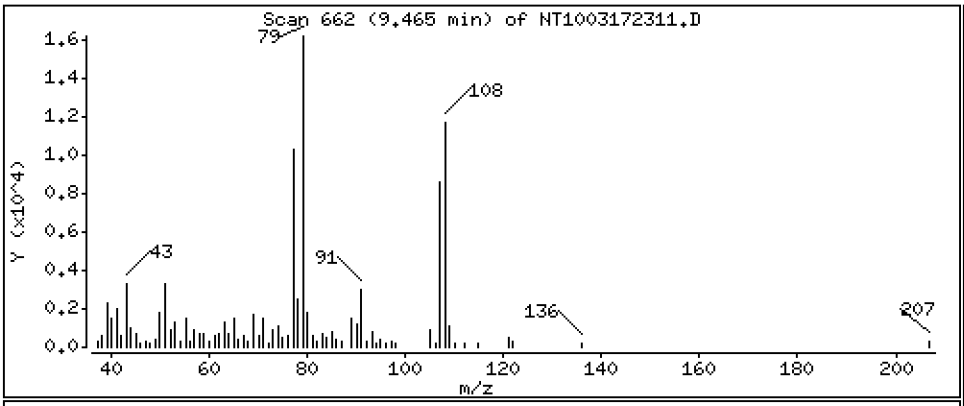
Operator: VTS

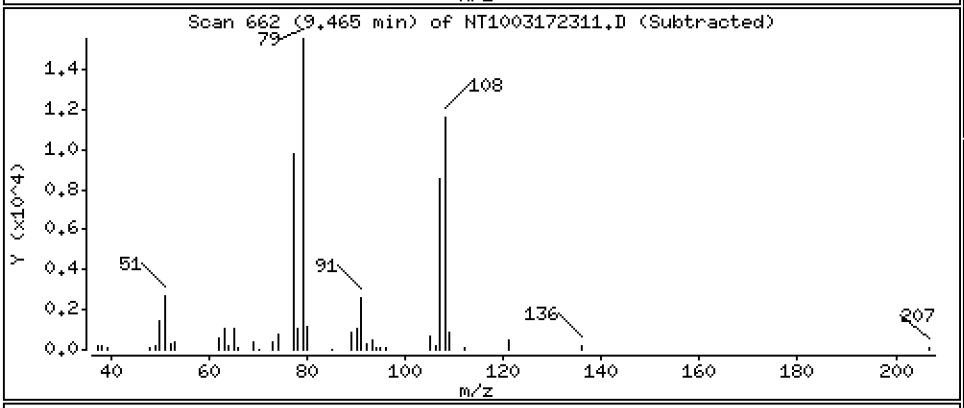
Column phase: ZB-5msi

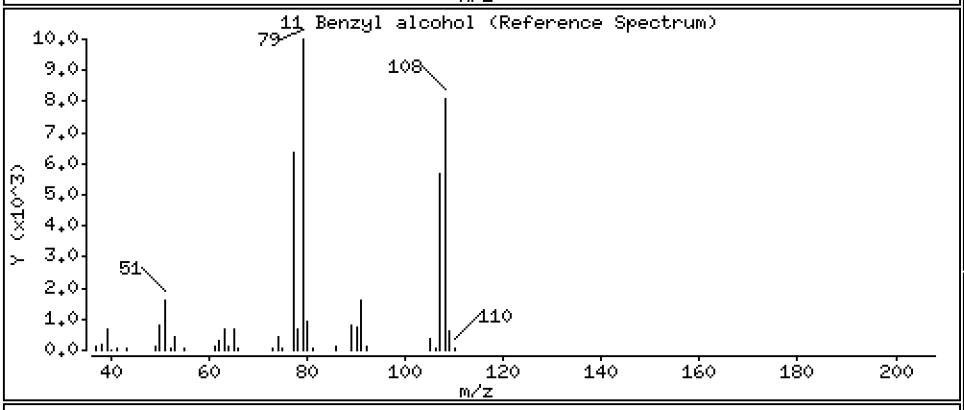
Column diameter: 0.25

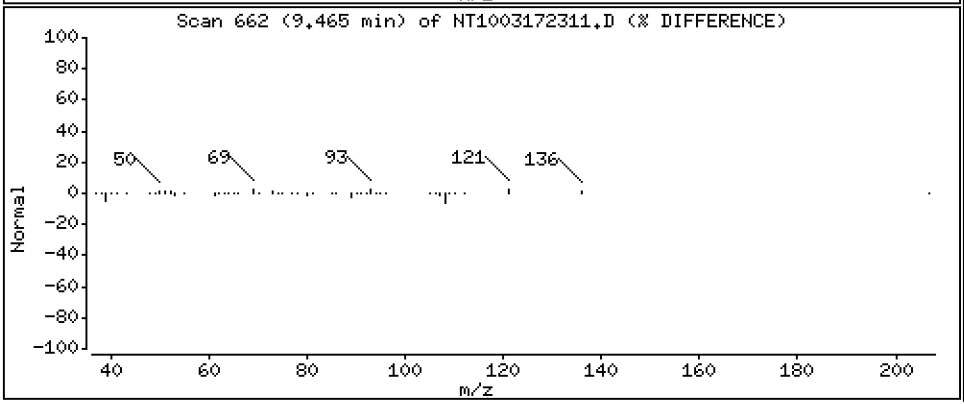
11 Benzyl alcohol

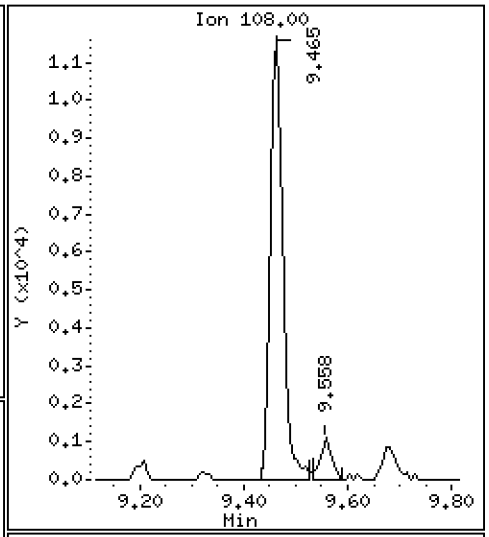
Concentration: 0.5519 ug/mL

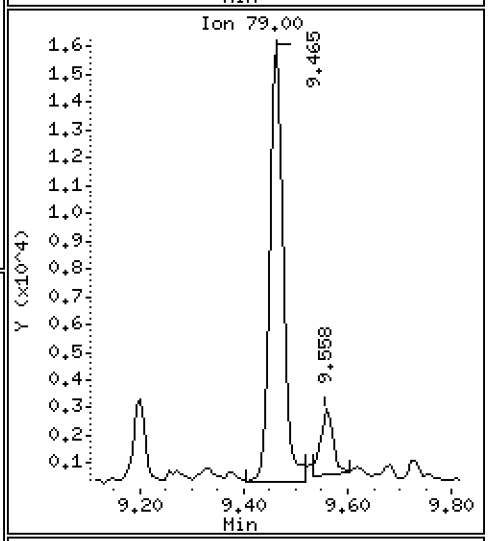


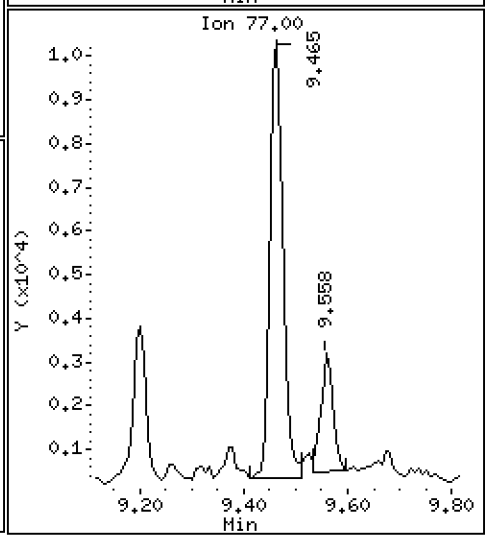












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

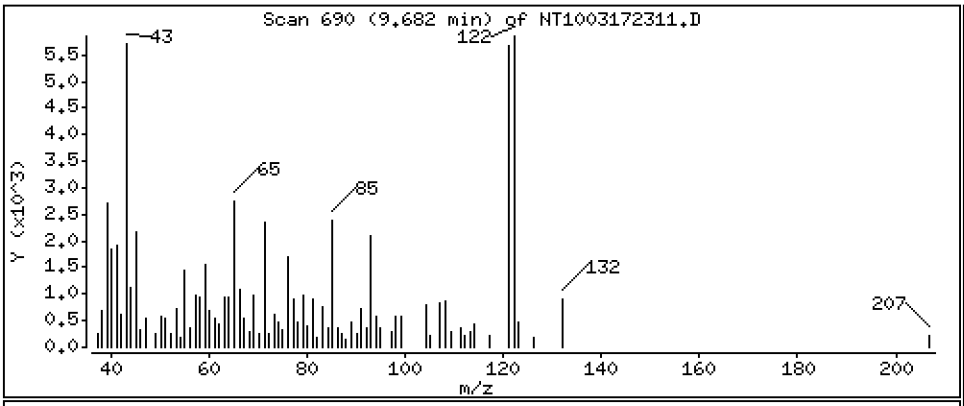
Operator: VTS

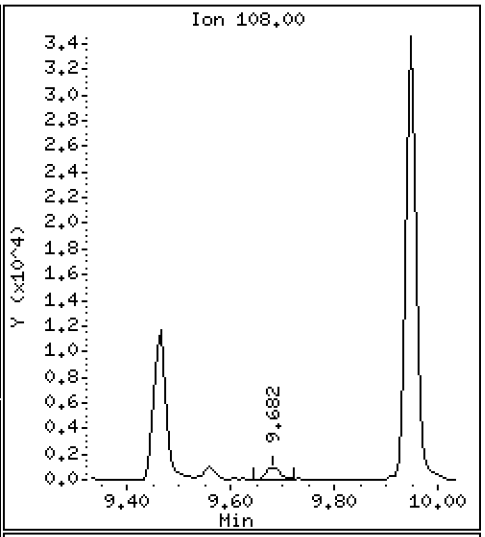
Column phase: ZB-5msi

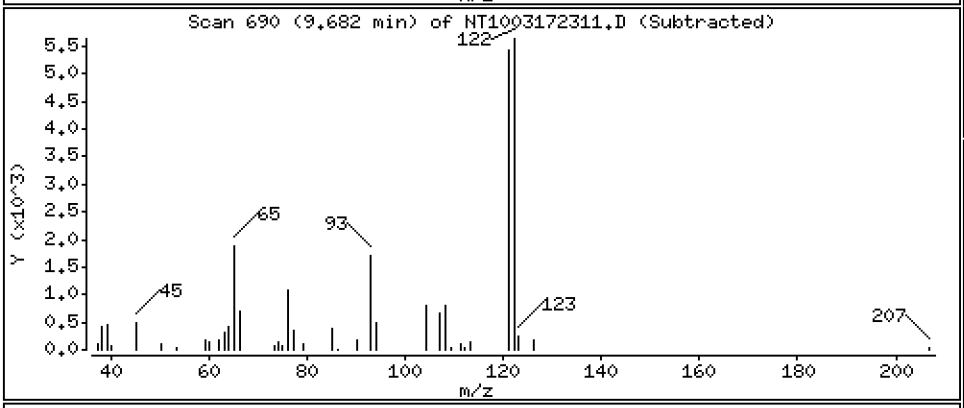
Column diameter: 0.25

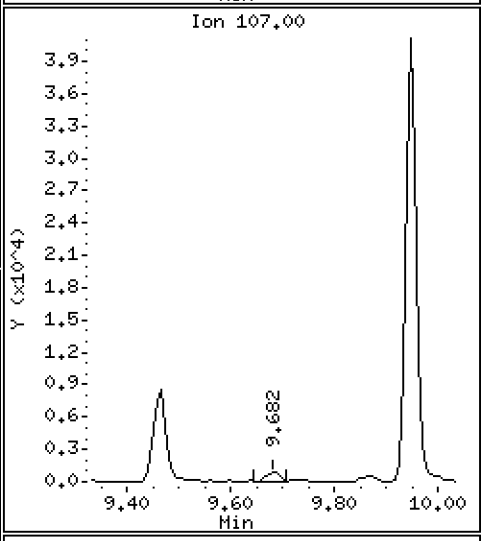
13 2-Methylphenol

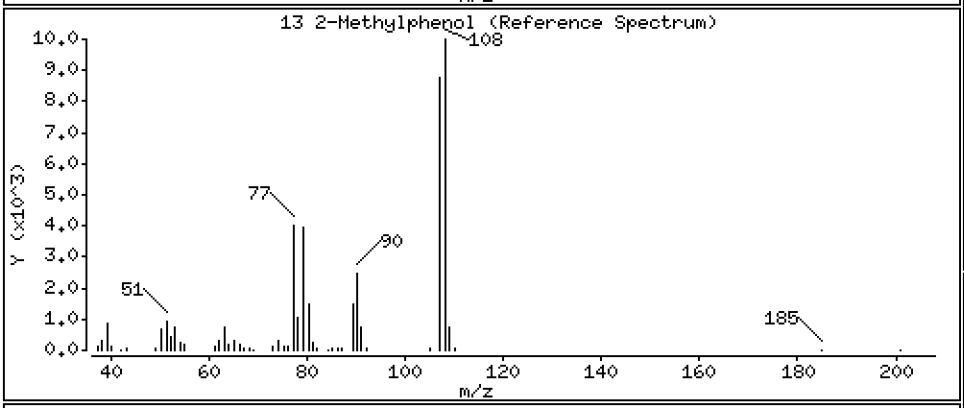
Concentration: 0.03262 ug/mL

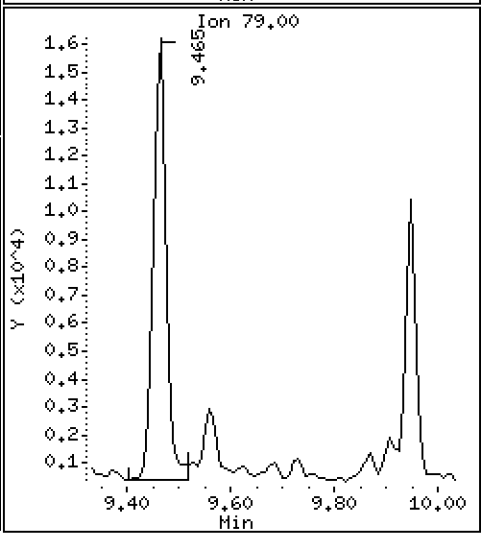


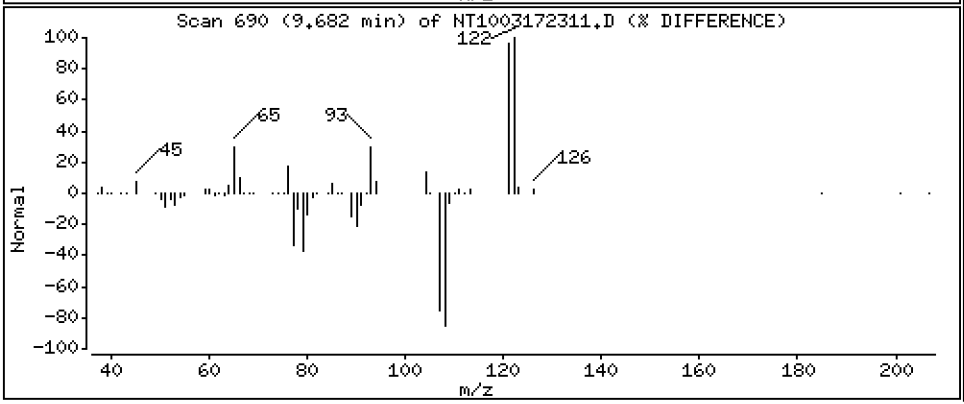












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

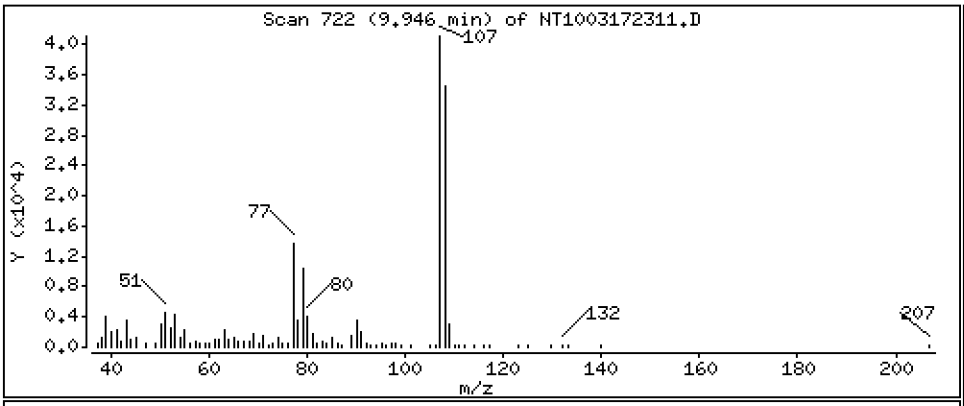
Operator: VTS

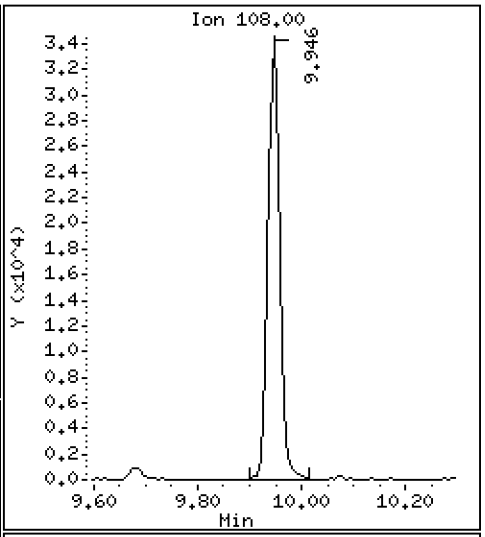
Column phase: ZB-5msi

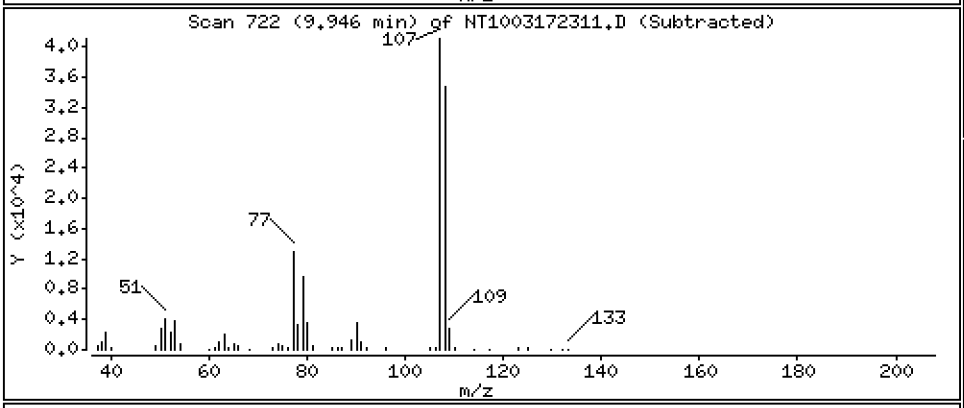
Column diameter: 0.25

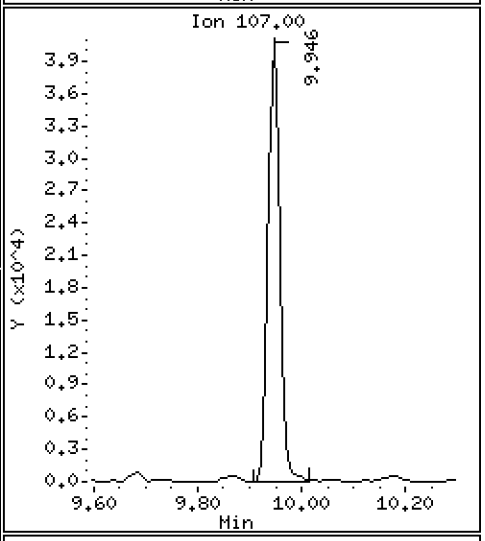
15 4-Methylphenol

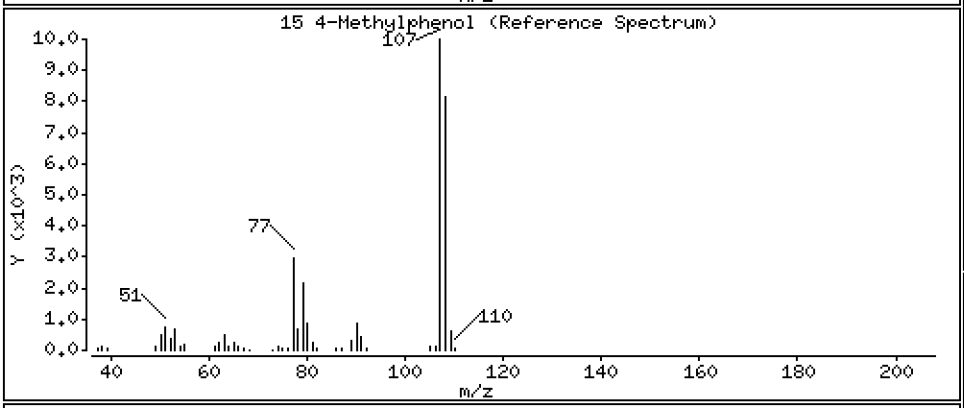
Concentration: 0.9207 ug/mL

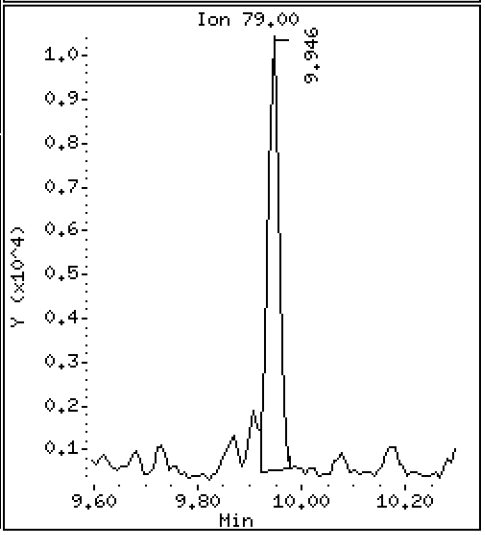


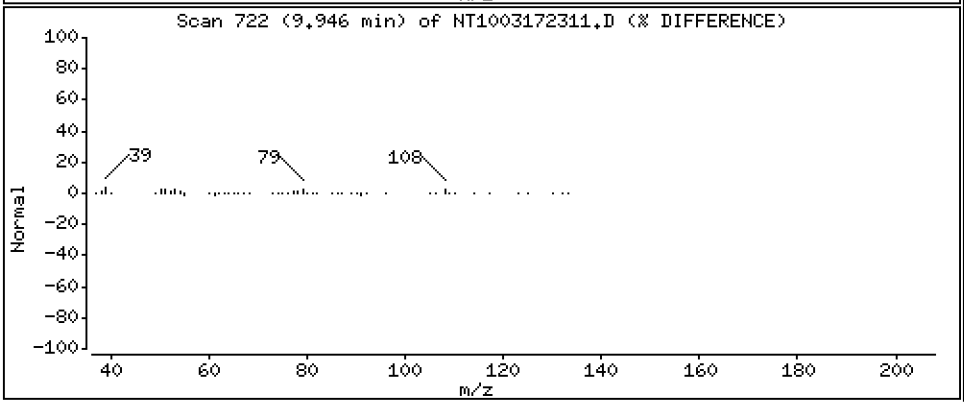












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172311.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

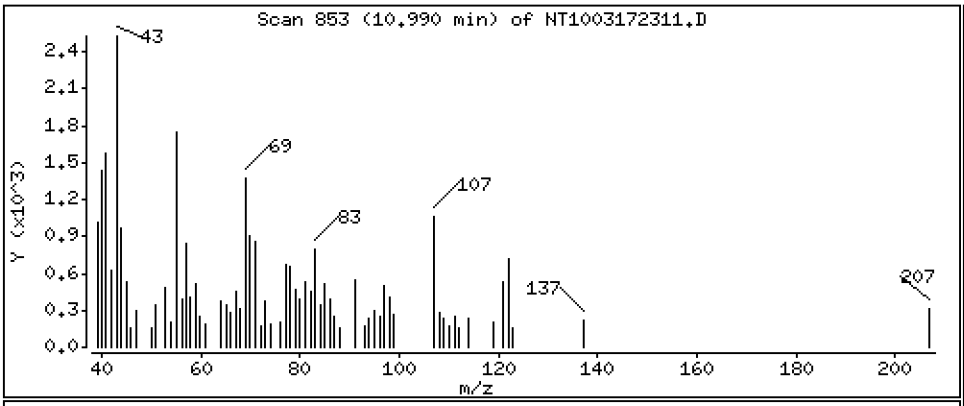
Operator: VTS

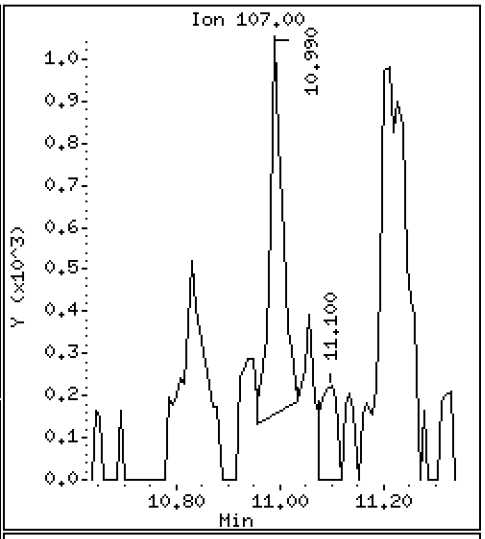
Column phase: ZB-5msi

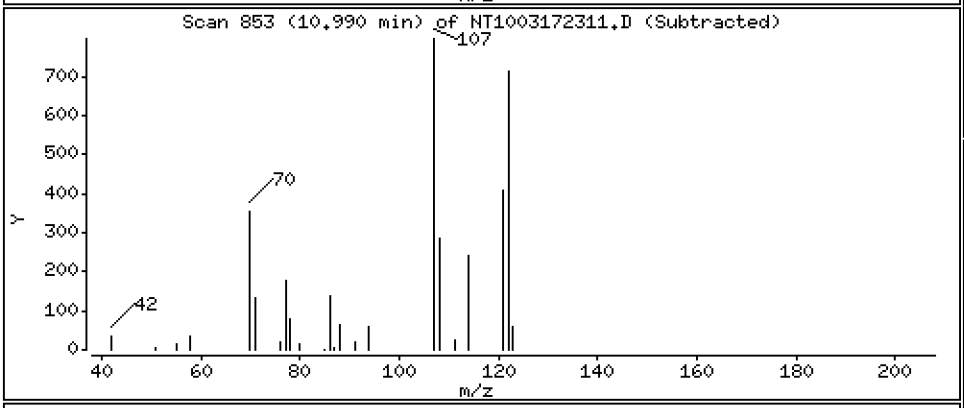
Column diameter: 0.25

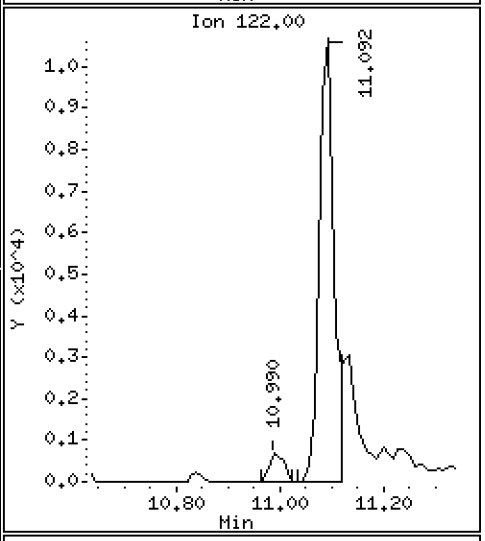
22 2,4-Dimethylphenol

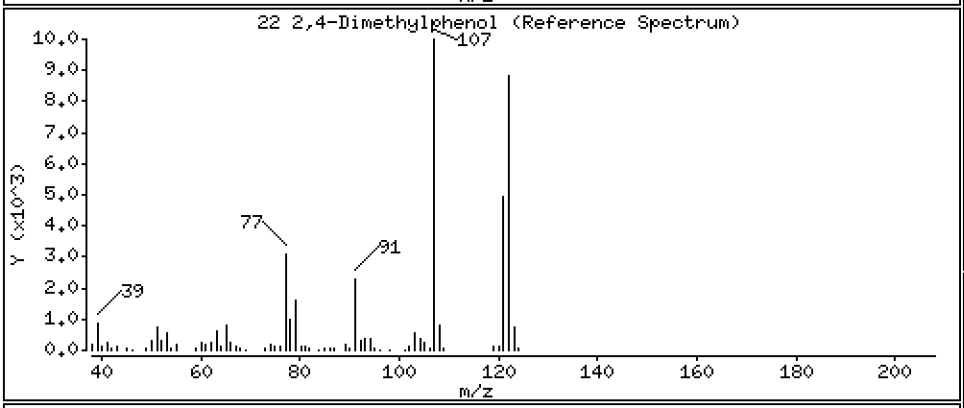
Concentration: 0.02673 ug/mL

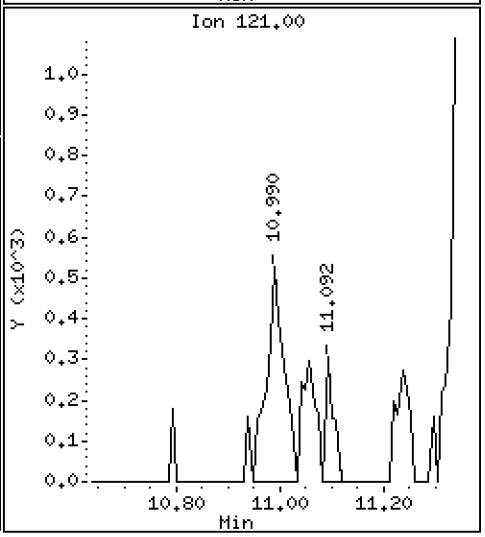


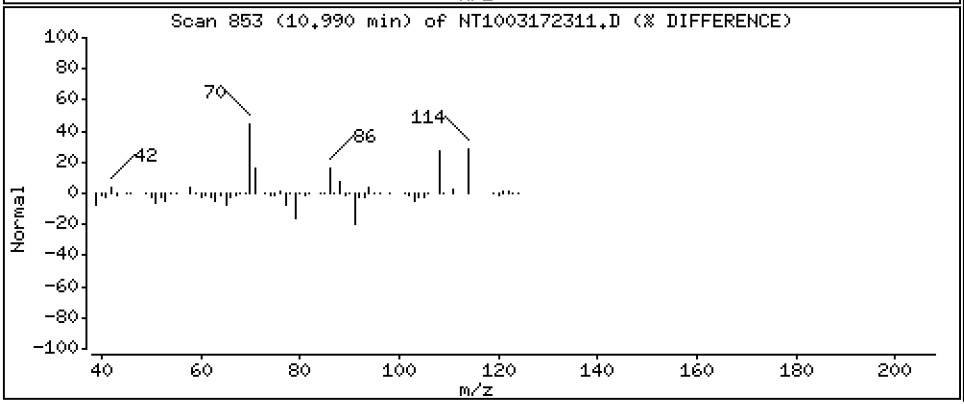












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172311.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

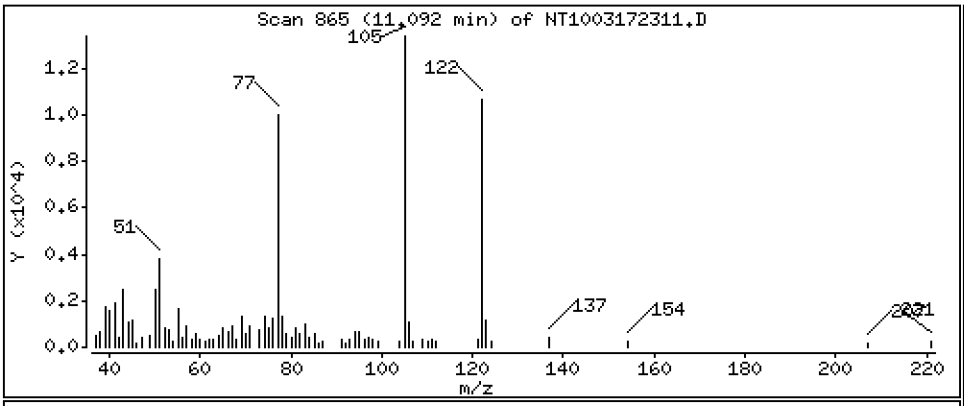
Operator: VTS

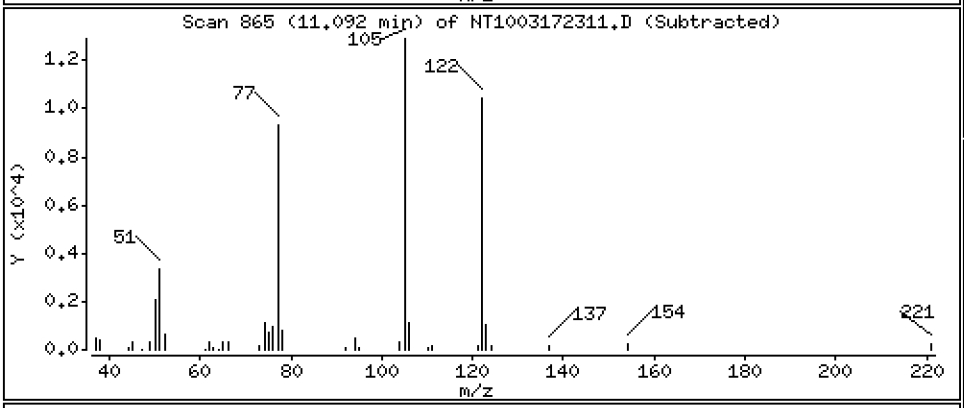
Column phase: ZB-5msi

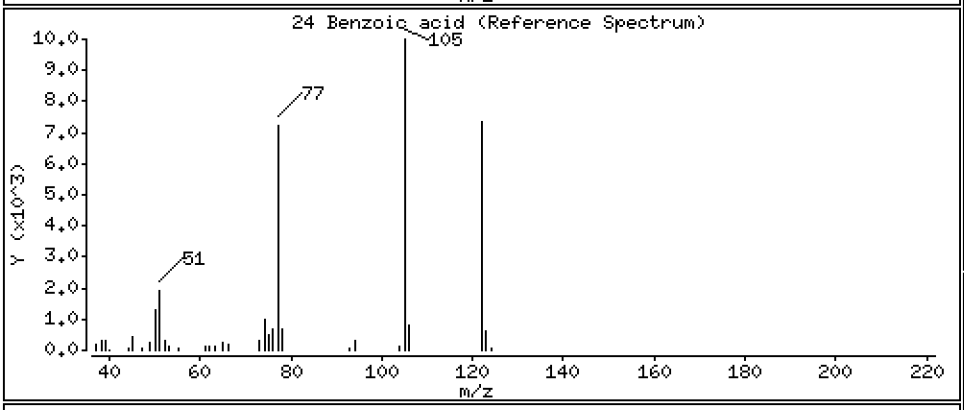
Column diameter: 0.25

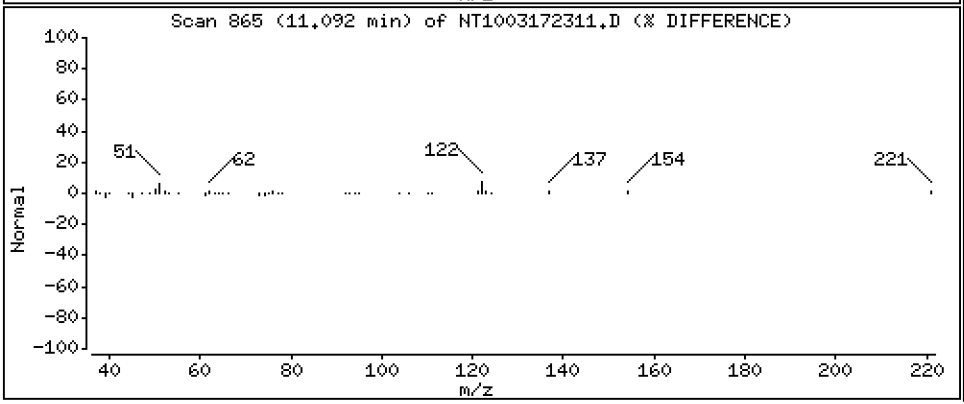
24 Benzoic acid

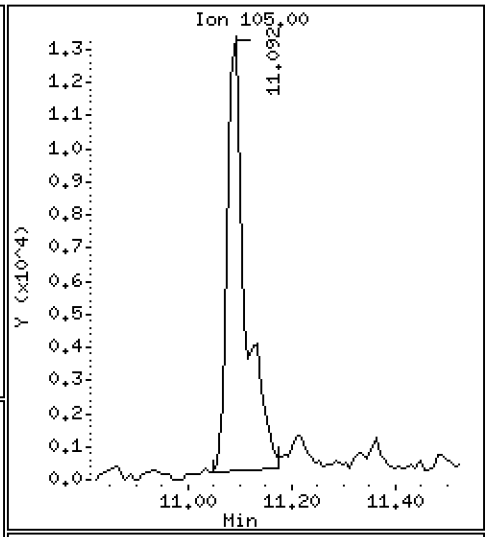
Concentration: 0.9950 ug/mL

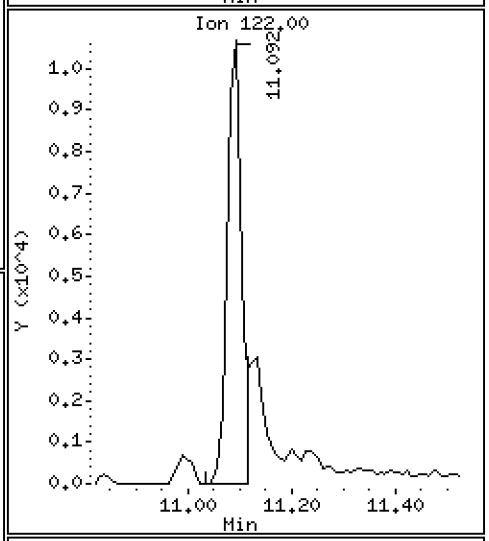


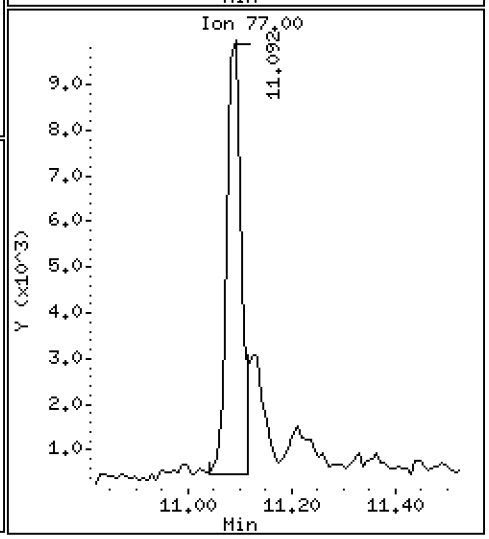












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

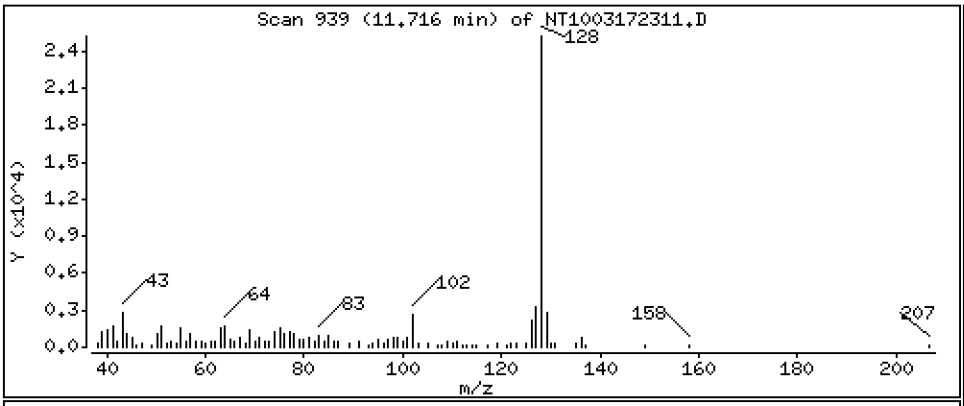
Operator: VTS

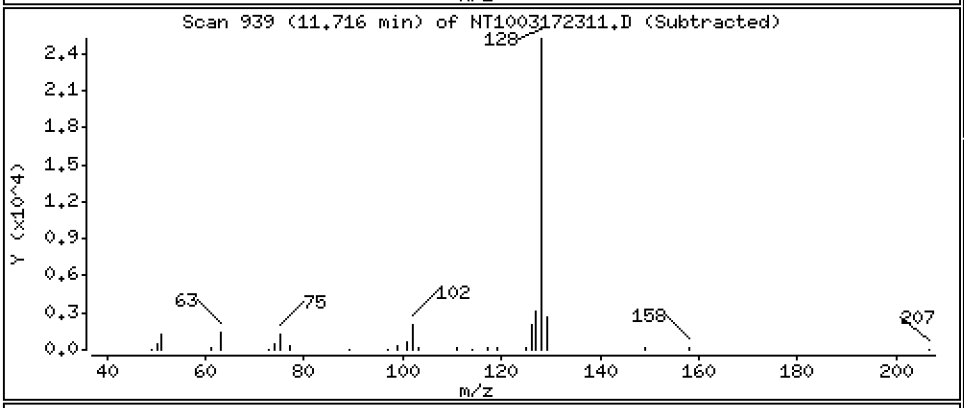
Column phase: ZB-5msi

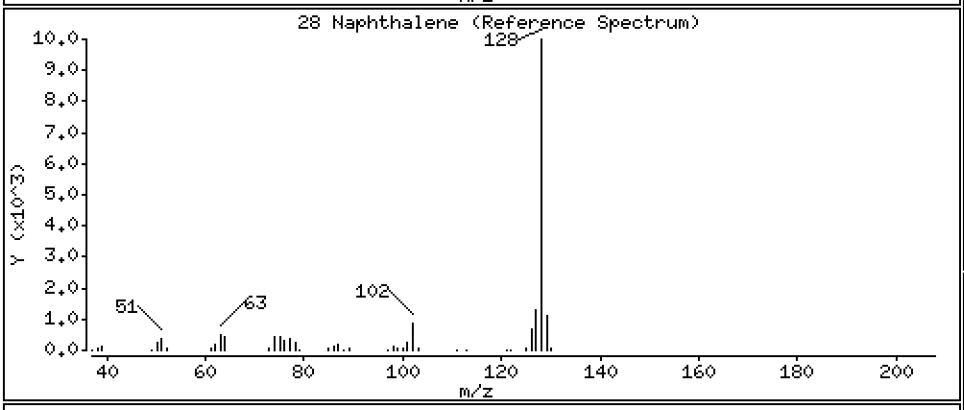
Column diameter: 0.25

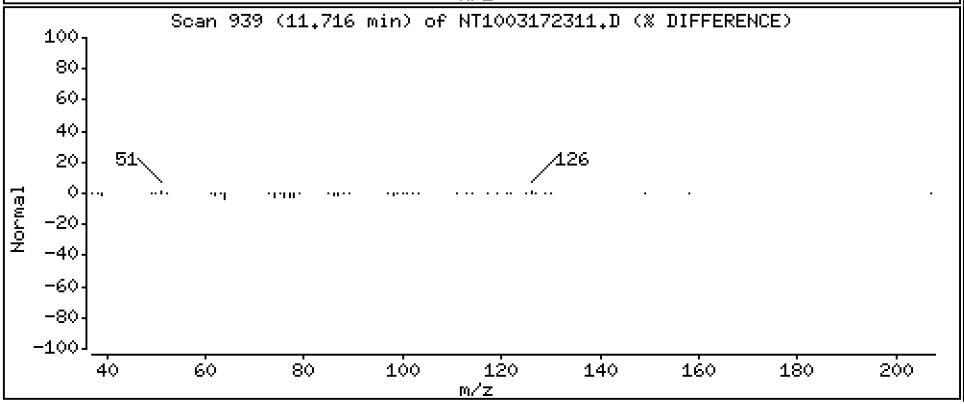
28 Naphthalene

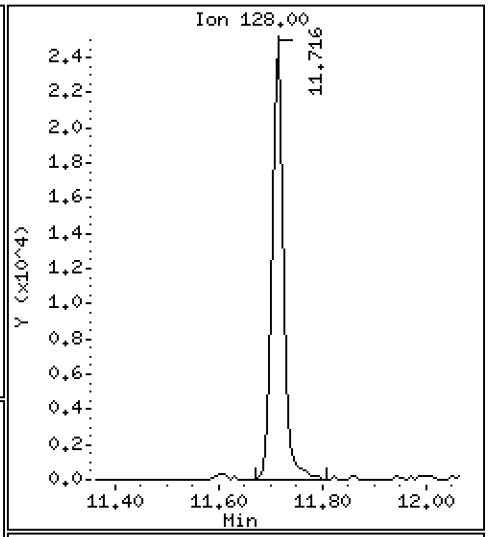
Concentration: 0.2333 ug/mL

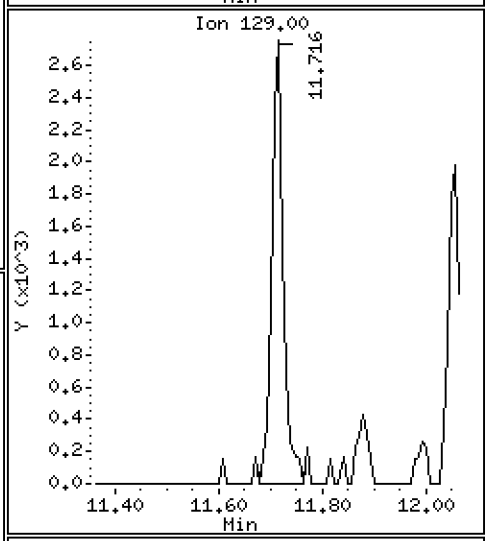


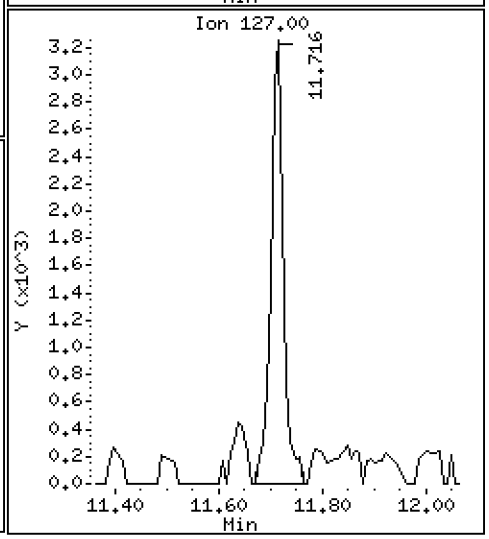












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

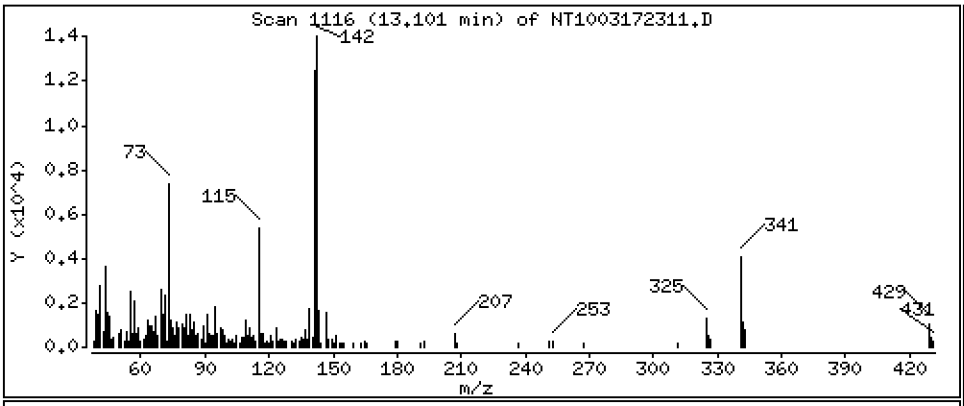
Operator: VTS

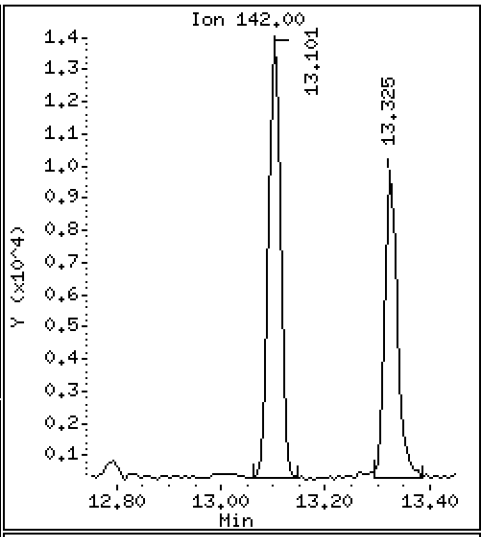
Column phase: ZB-5msi

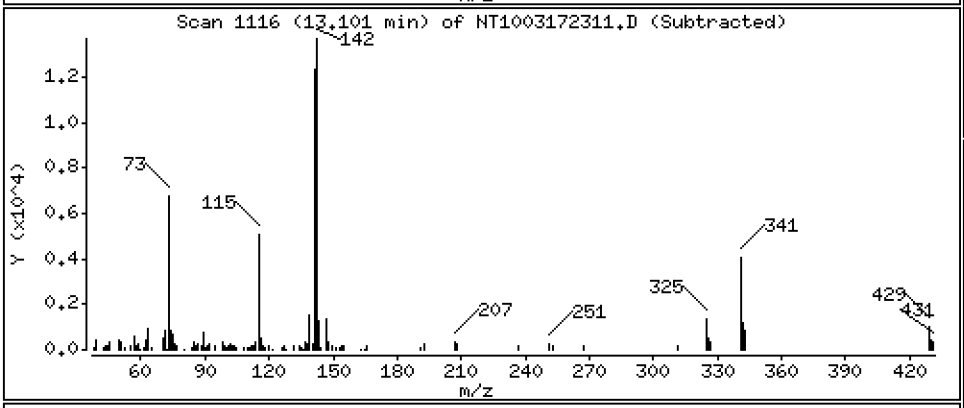
Column diameter: 0.25

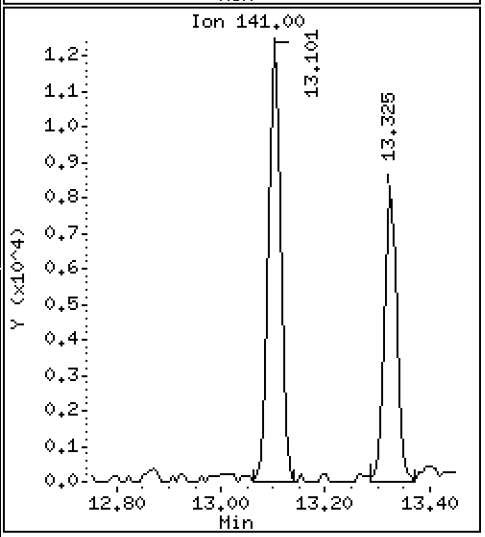
32 2-Methylnaphthalene

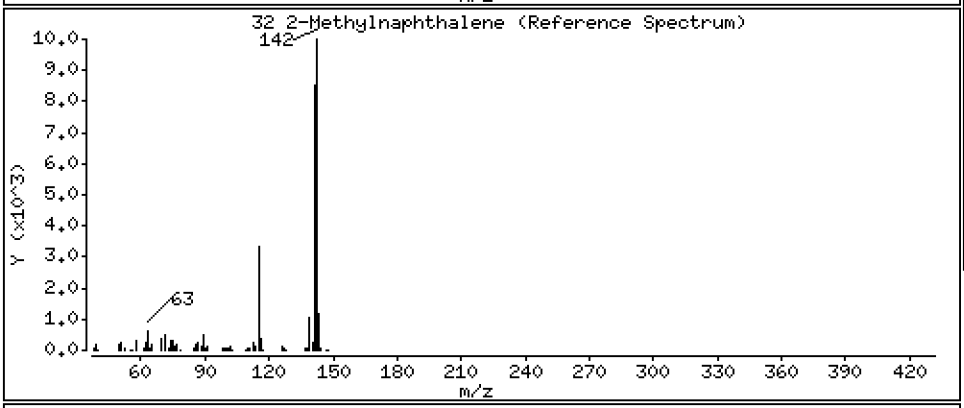
Concentration: 0.1699 ug/mL

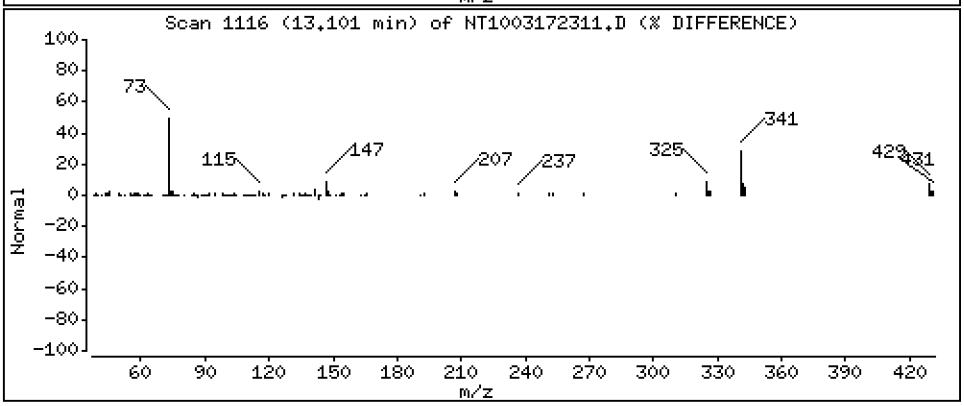












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172311.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

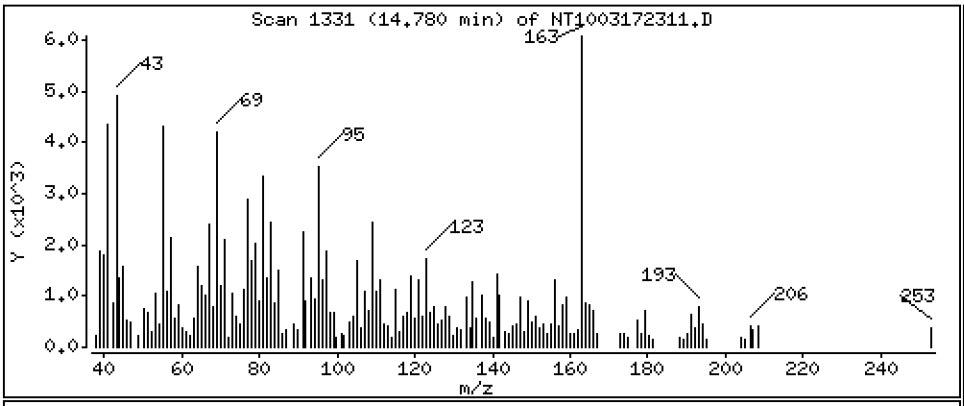
Operator: VTS

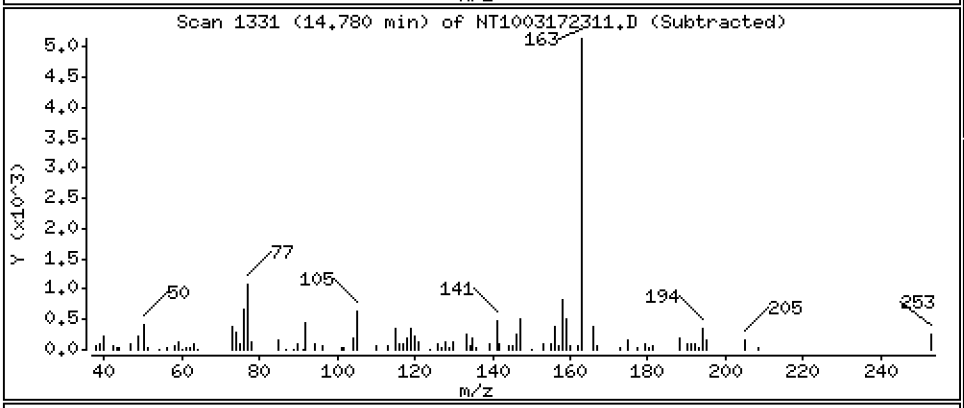
Column phase: ZB-5msi

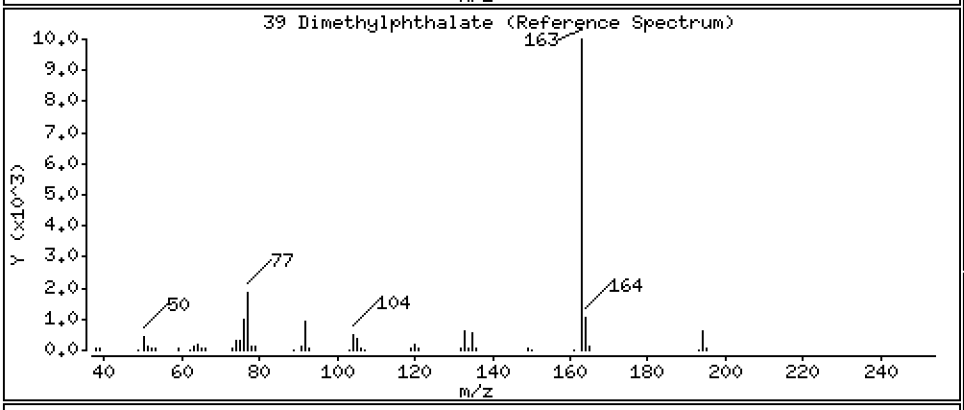
Column diameter: 0.25

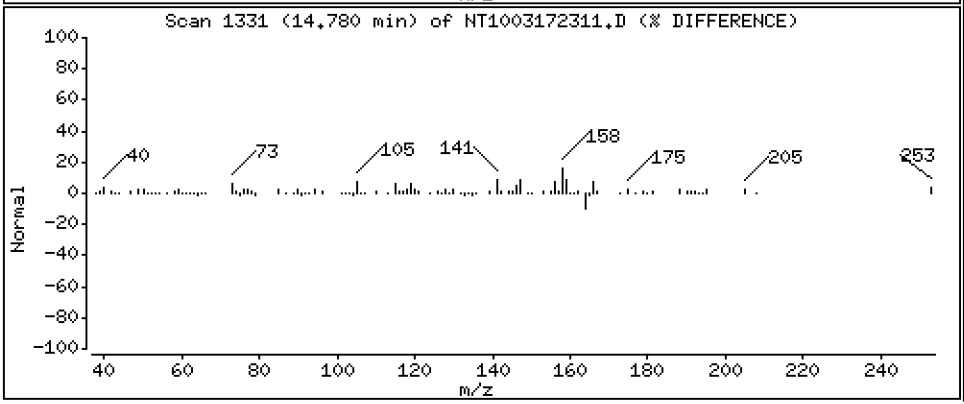
39 Dimethylphthalate

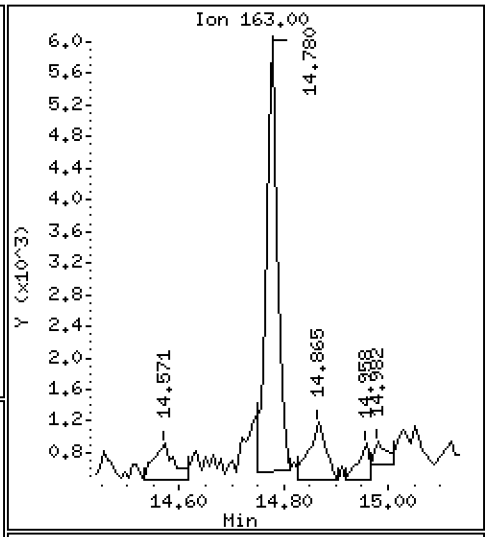
Concentration: 0.07383 ug/mL

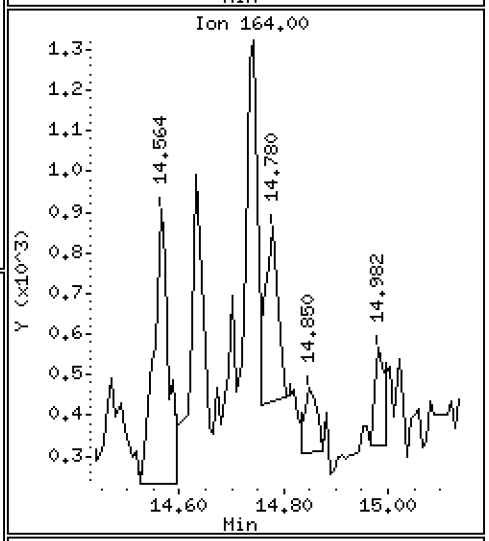


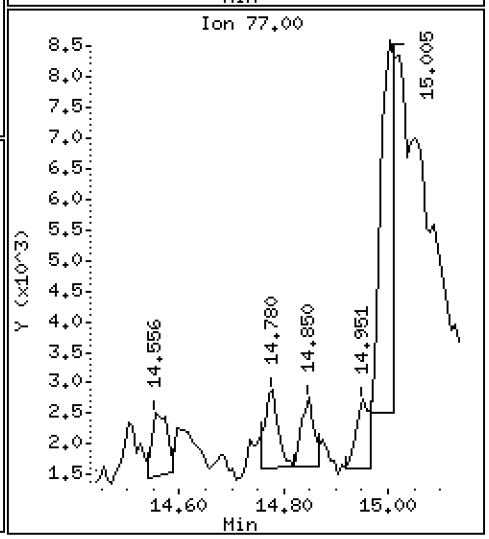












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

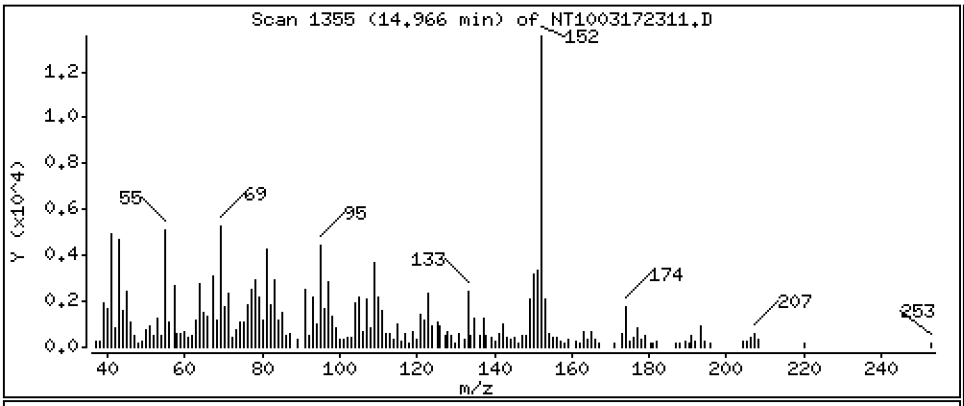
Operator: VTS

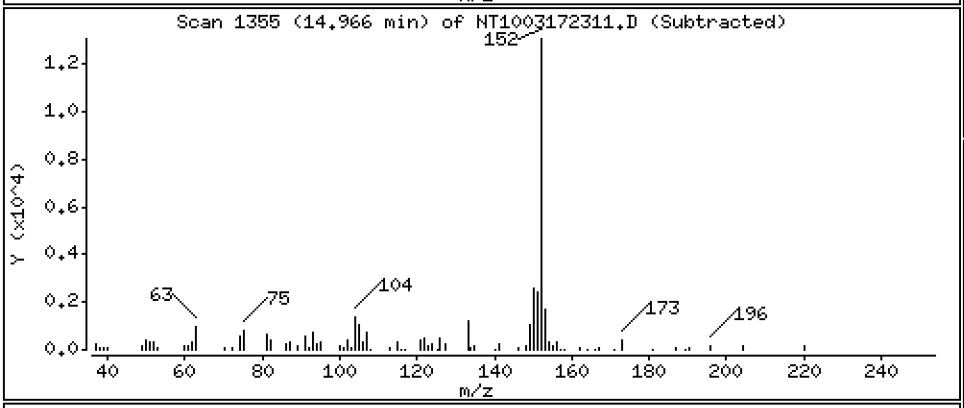
Column phase: ZB-5msi

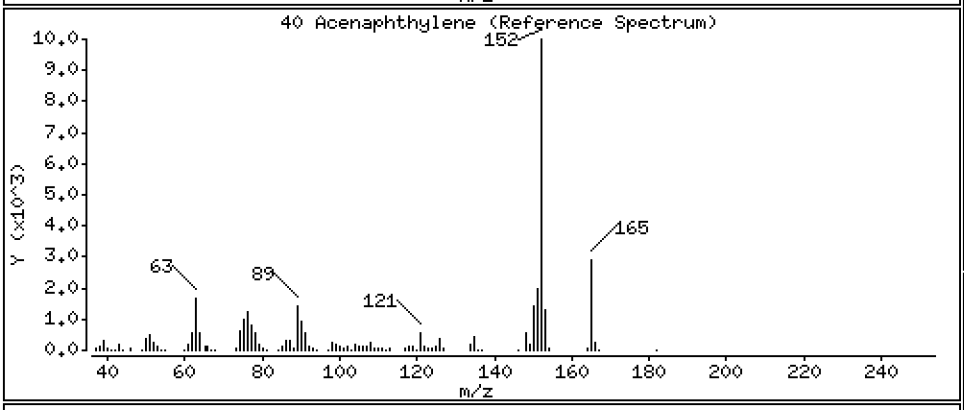
Column diameter: 0.25

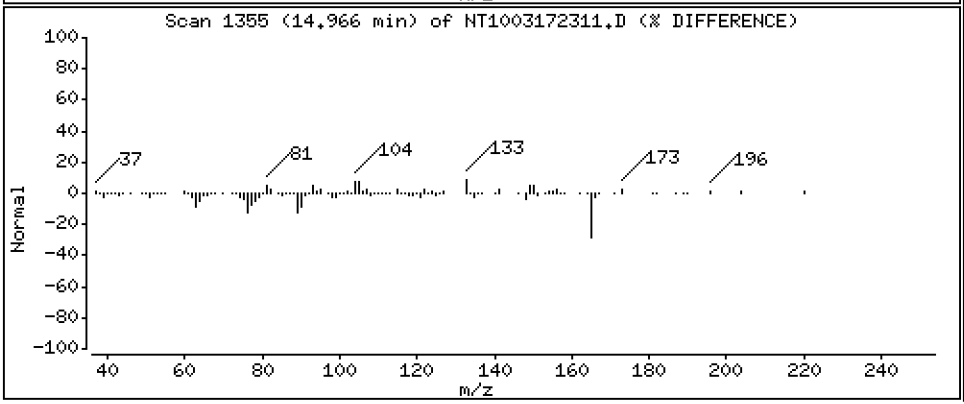
40 Acenaphthylene

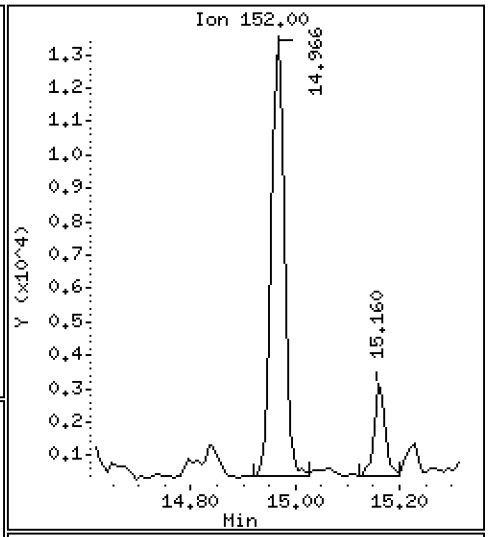
Concentration: 0.1281 ug/mL

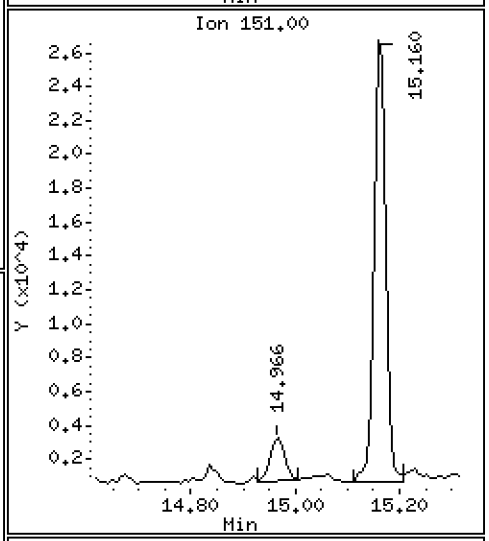


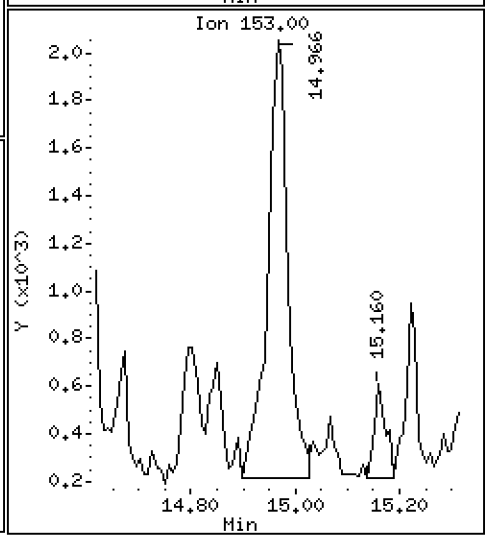












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

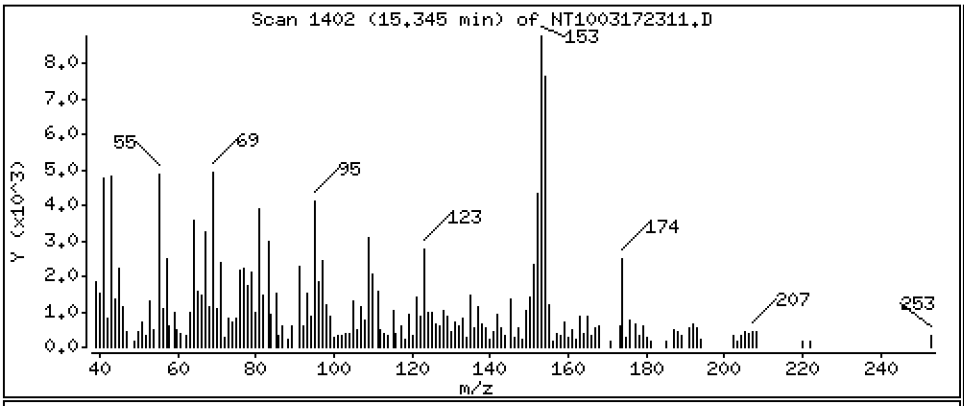
Operator: VTS

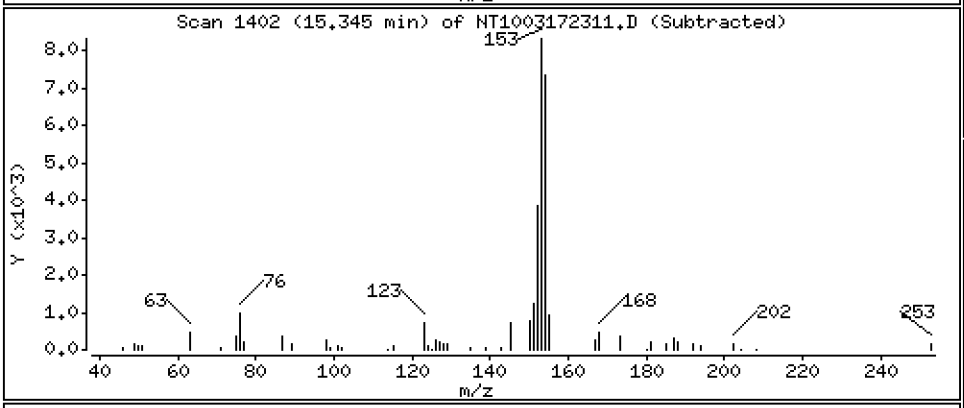
Column phase: ZB-5msi

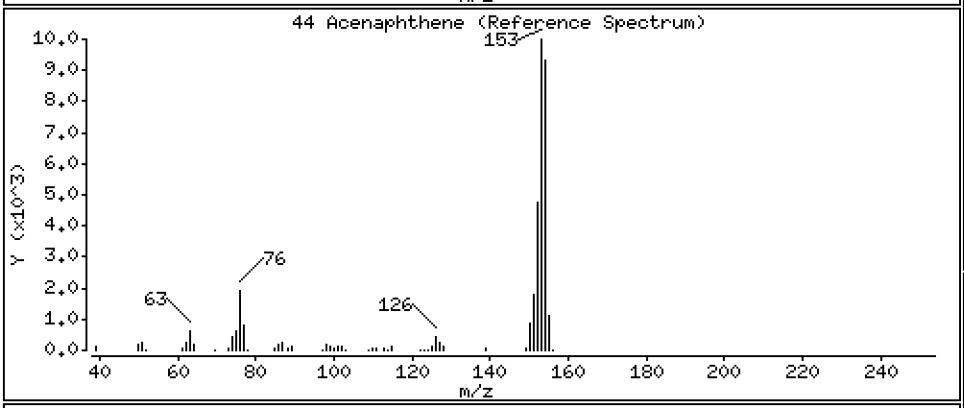
Column diameter: 0.25

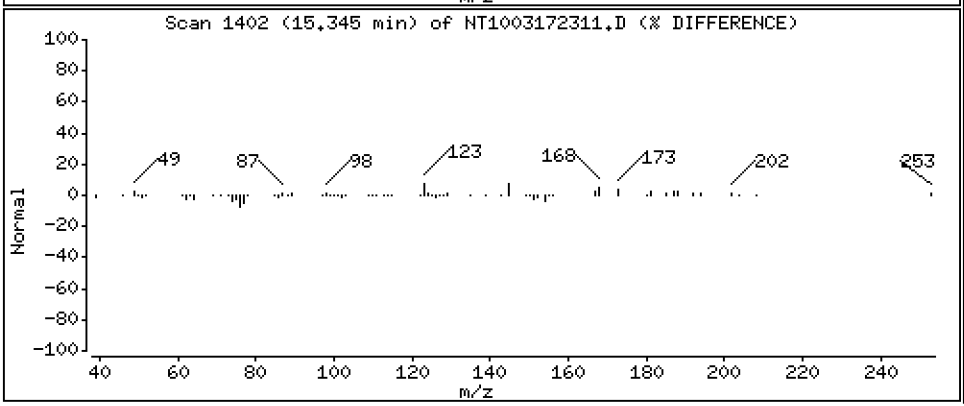
44 Acenaphthene

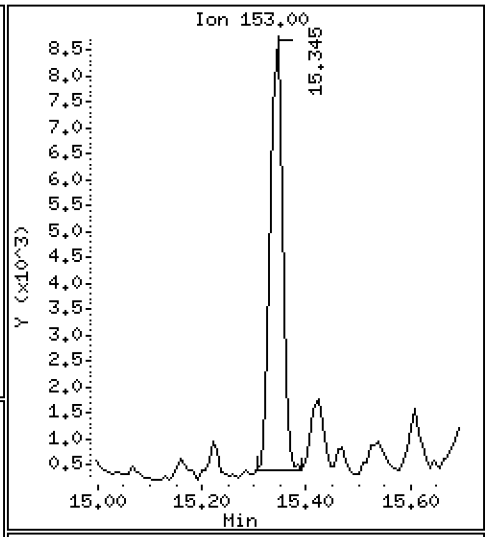
Concentration: 0.1230 ug/mL

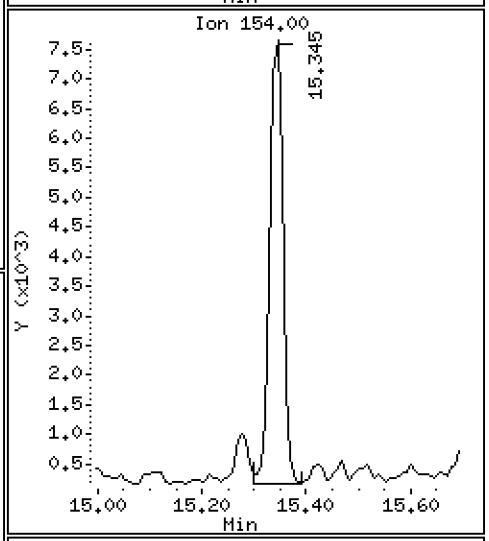


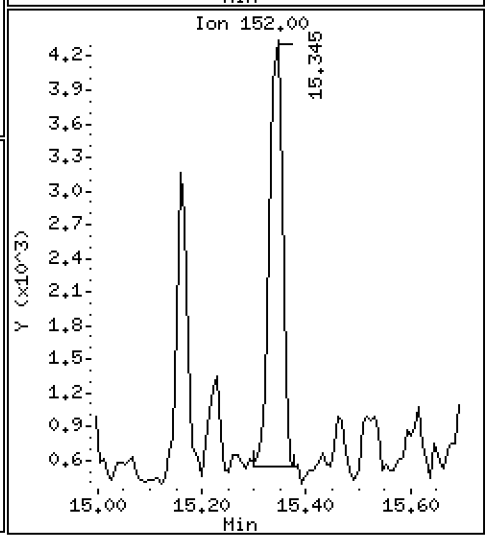












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

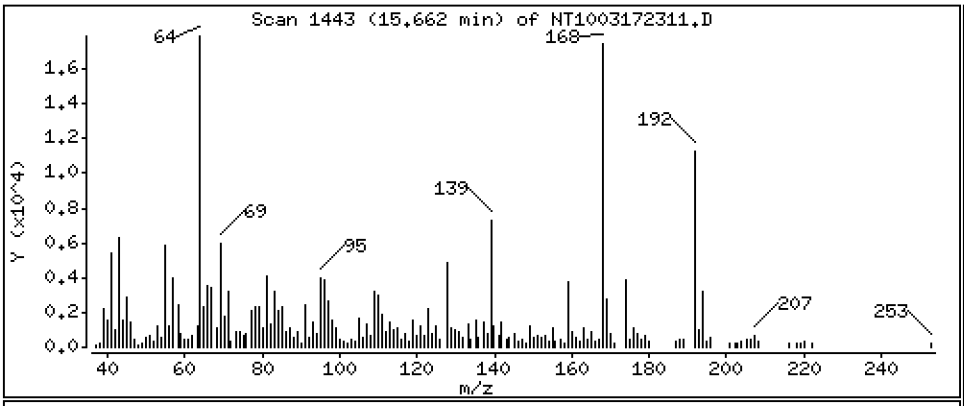
Operator: VTS

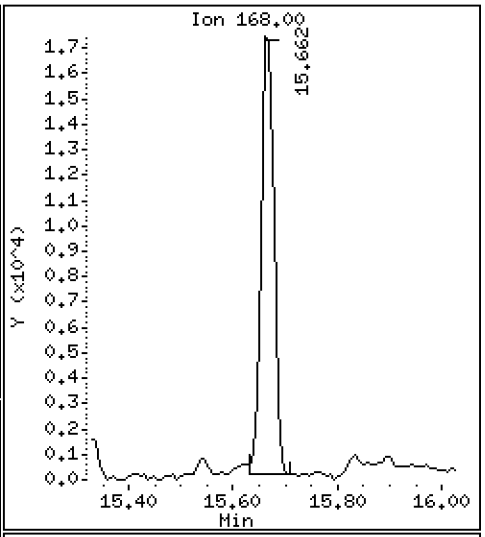
Column phase: ZB-5msi

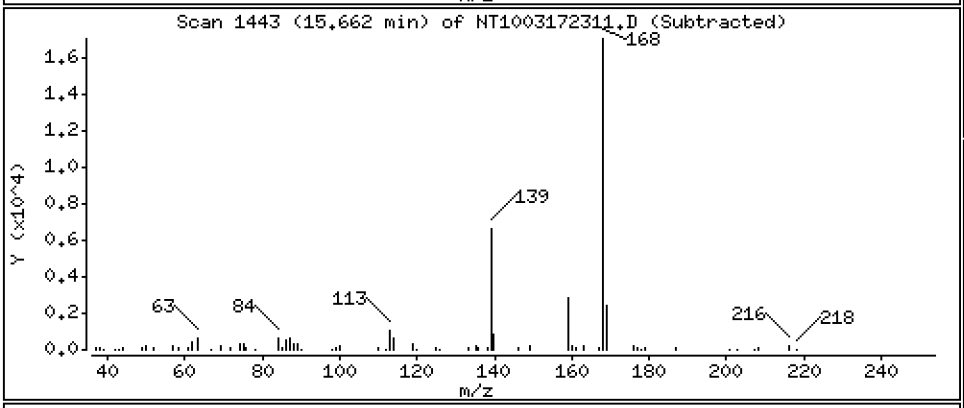
Column diameter: 0.25

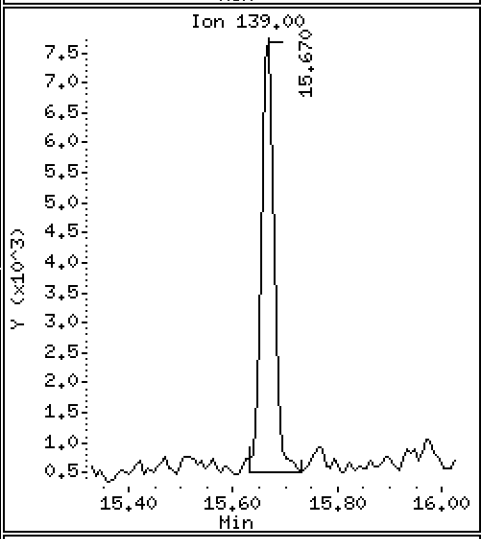
46 Dibenzofuran

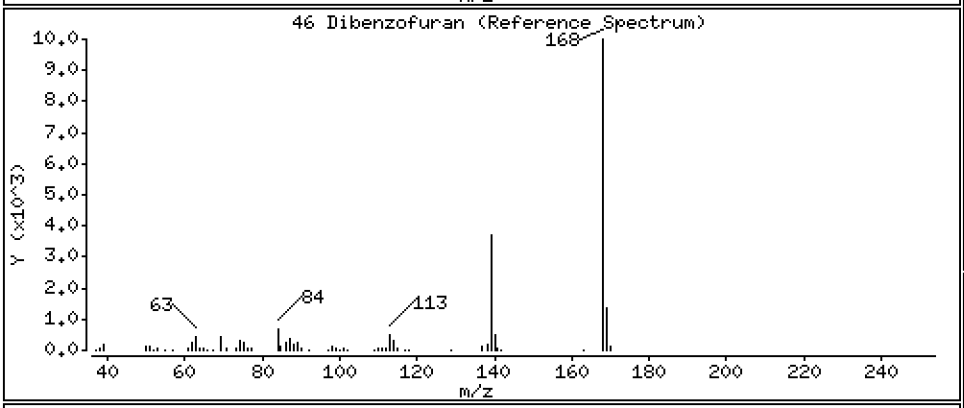
Concentration: 0.1818 ug/mL

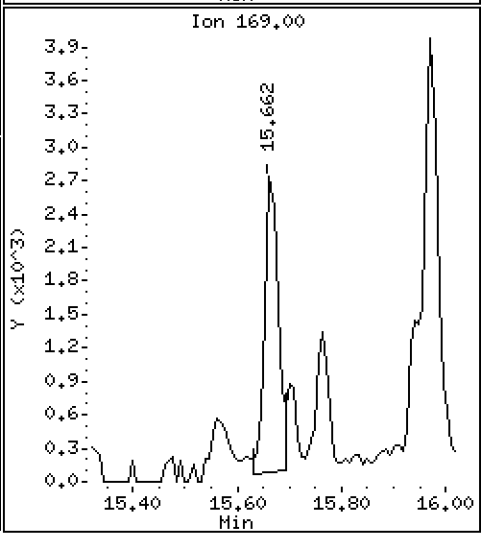


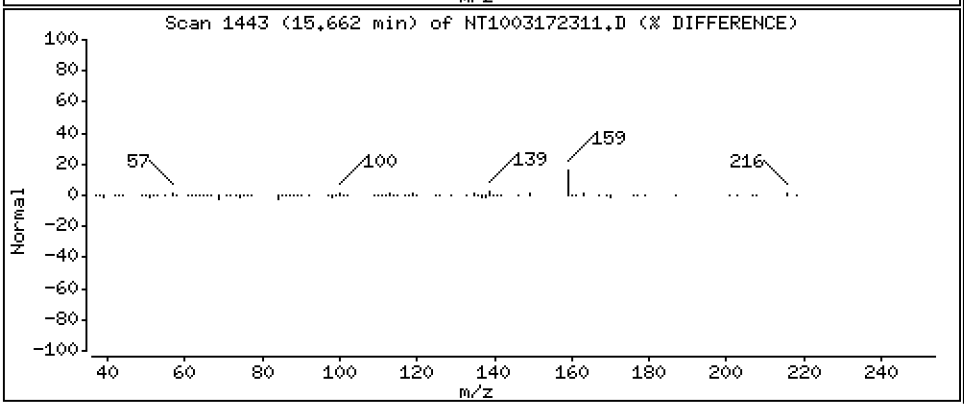












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172311.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

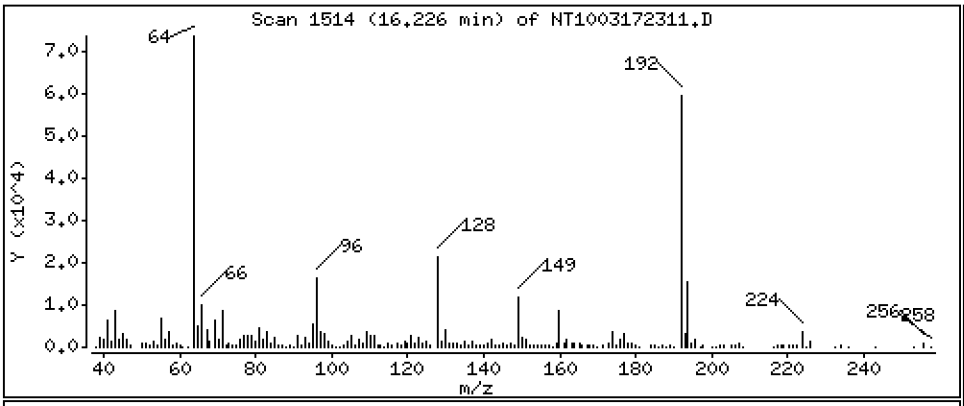
Operator: VTS

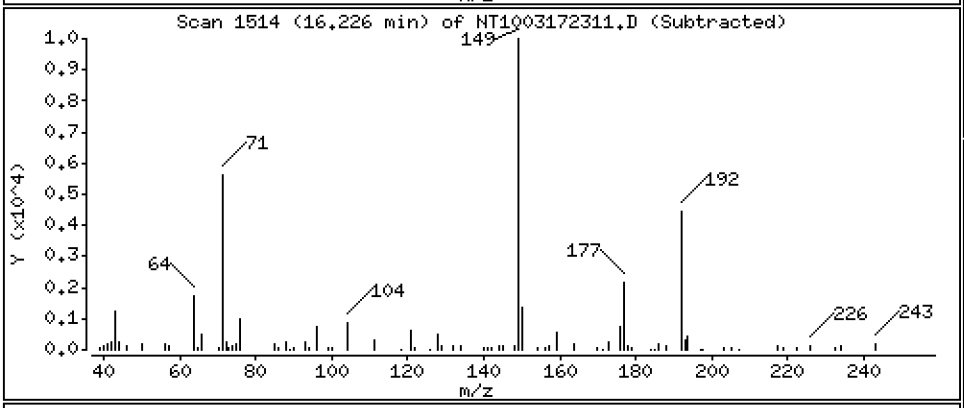
Column phase: ZB-5msi

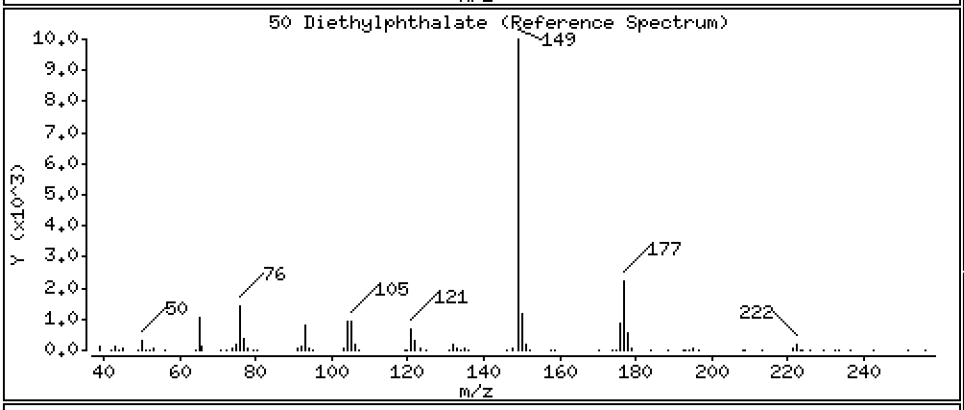
Column diameter: 0.25

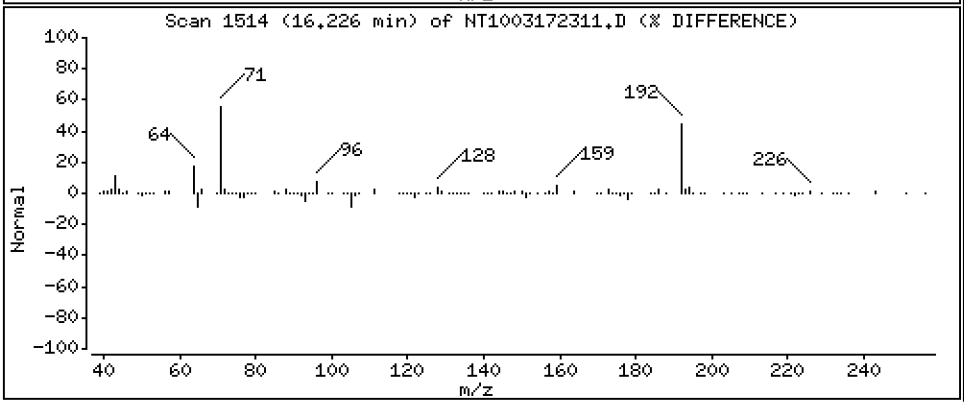
50 Diethylphthalate

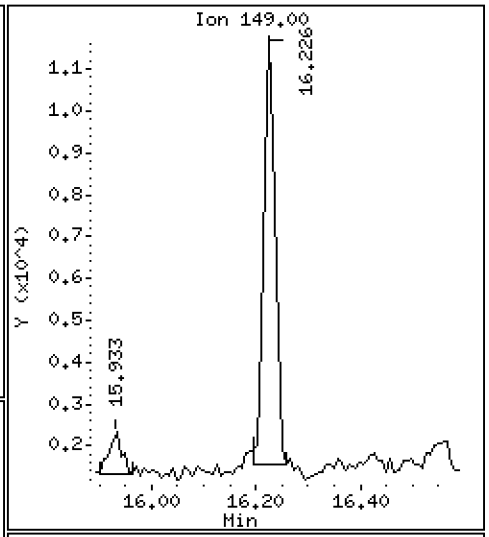
Concentration: 0.1387 ug/mL

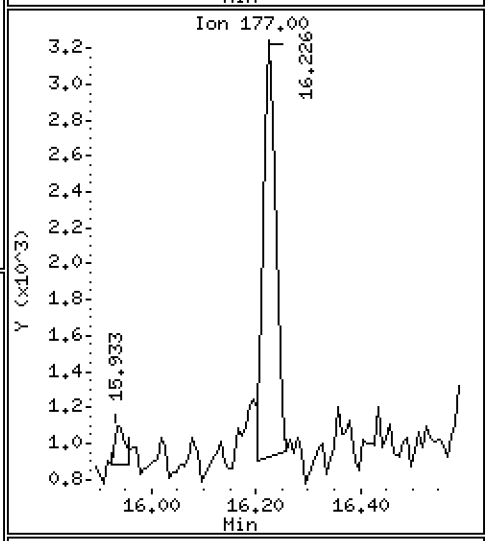


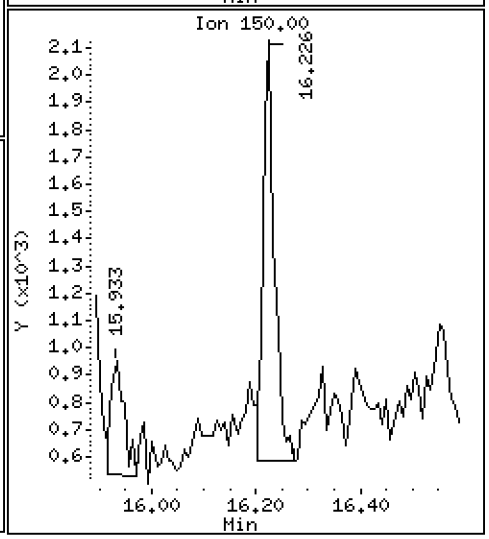












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172311.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

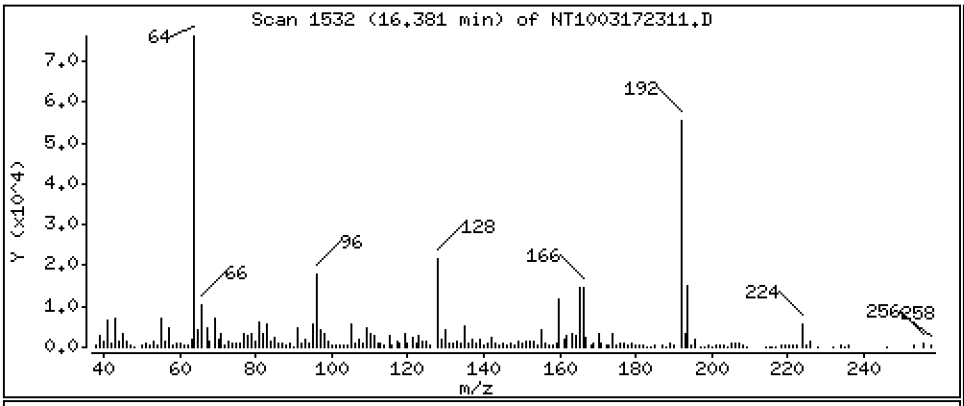
Operator: VTS

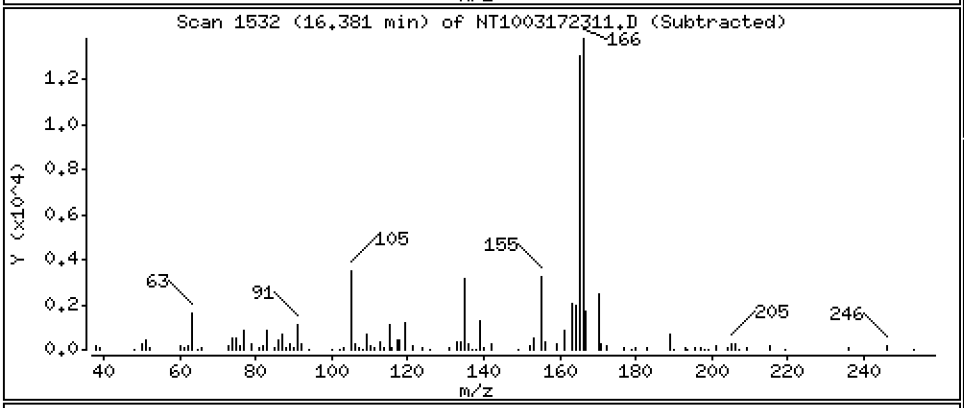
Column phase: ZB-5msi

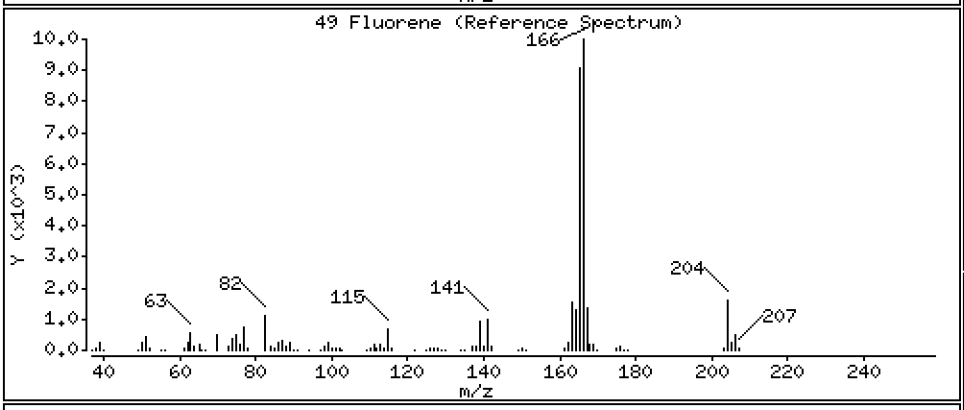
Column diameter: 0.25

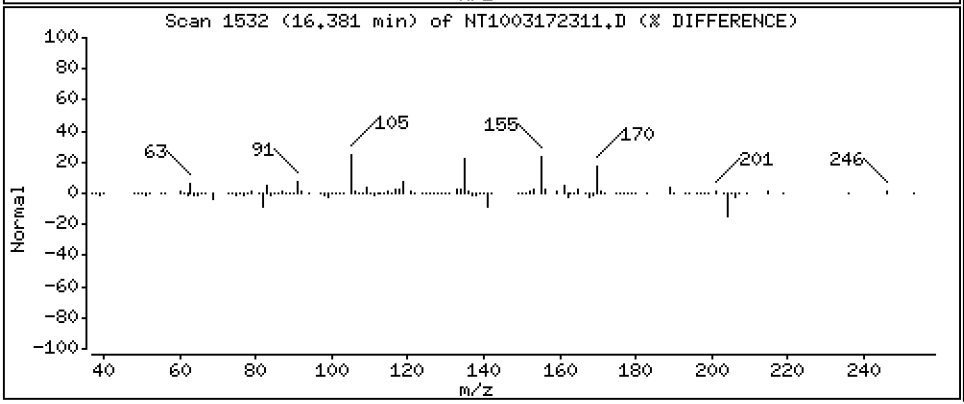
49 Fluorene

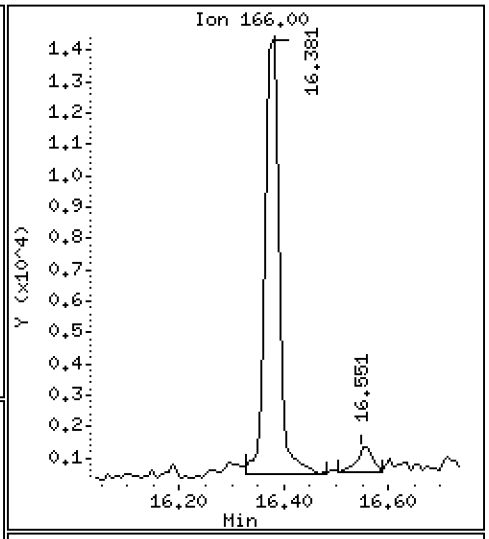
Concentration: 0.2072 ug/mL

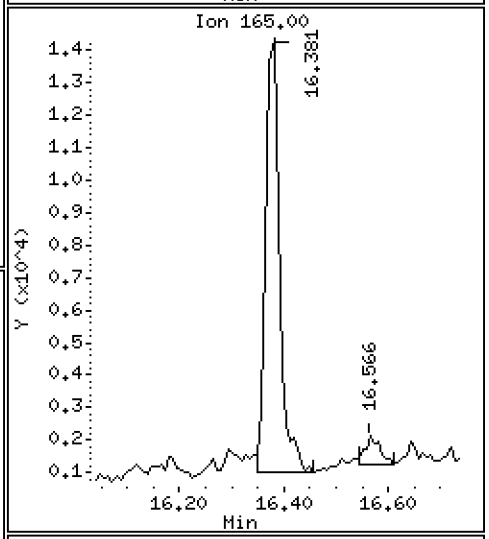


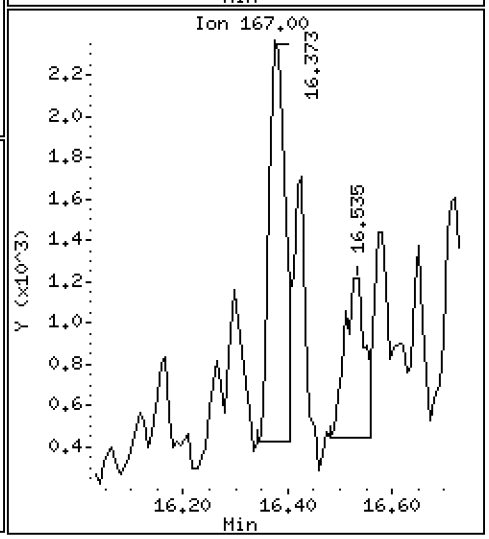












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

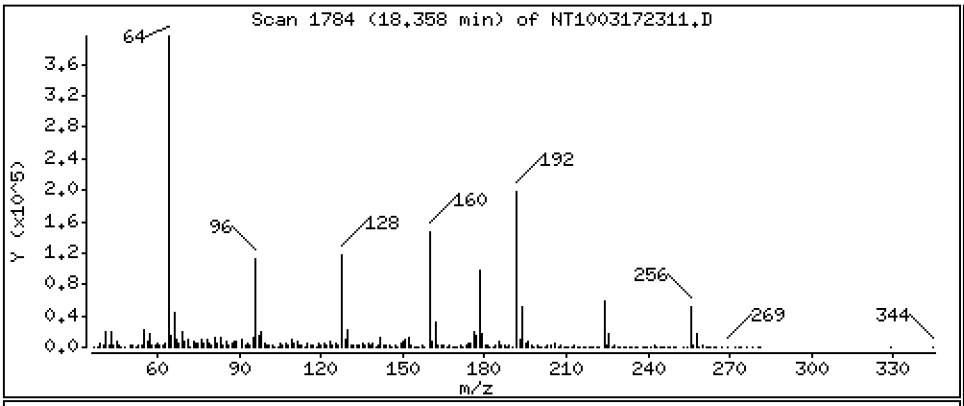
Operator: VTS

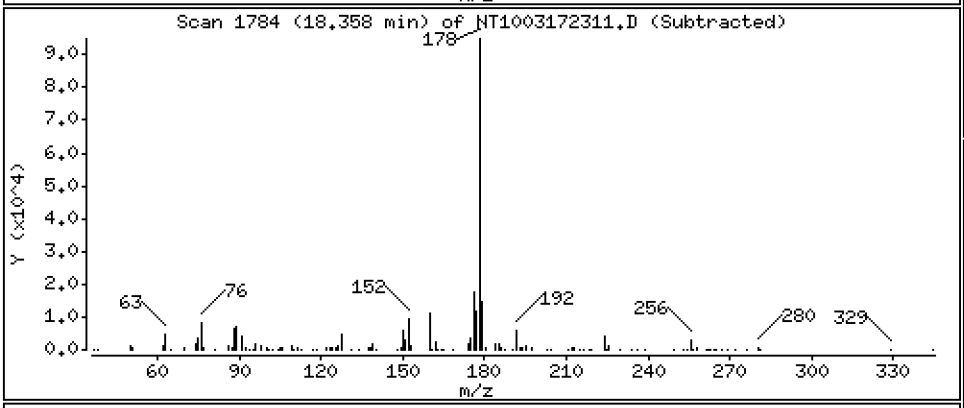
Column phase: ZB-5msi

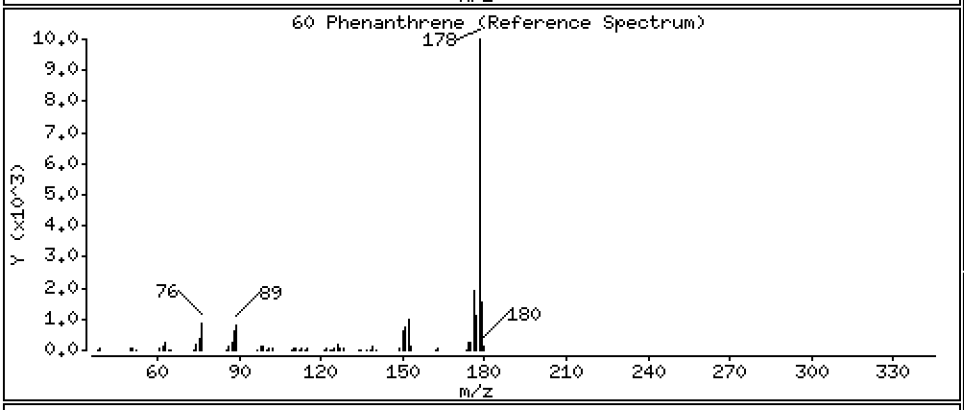
Column diameter: 0.25

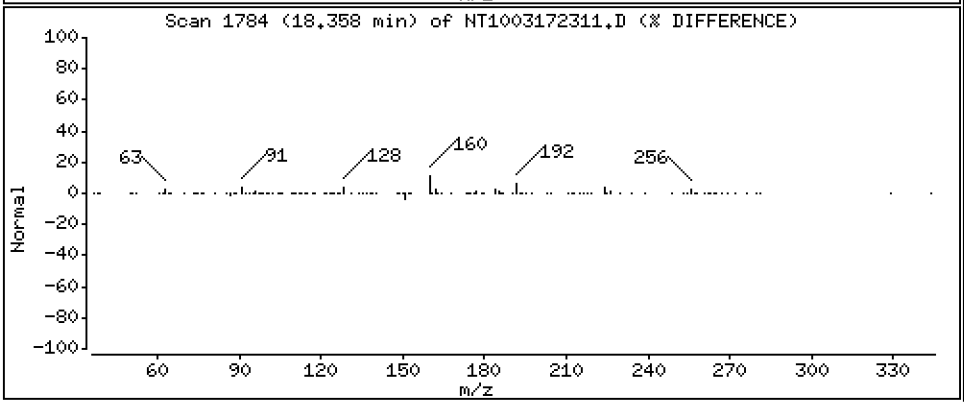
60 Phenanthrene

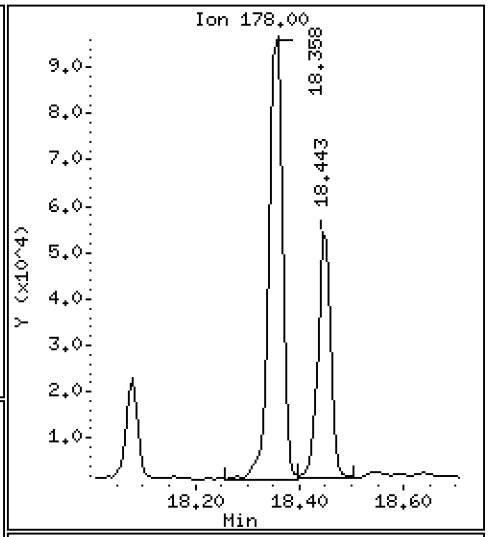
Concentration: 0.9298 ug/mL

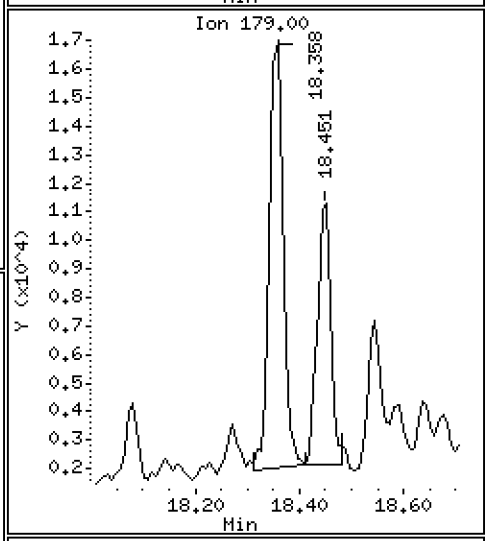


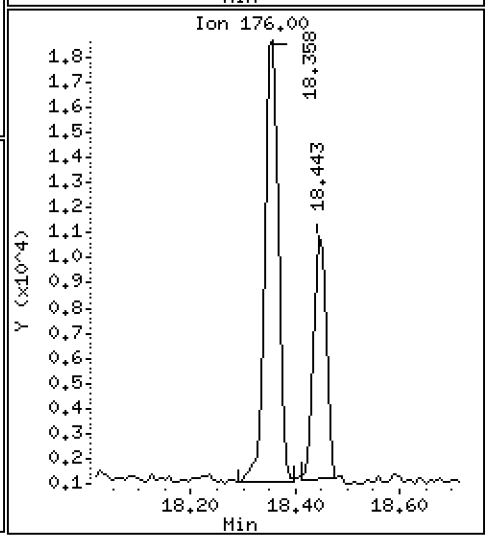












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172311.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

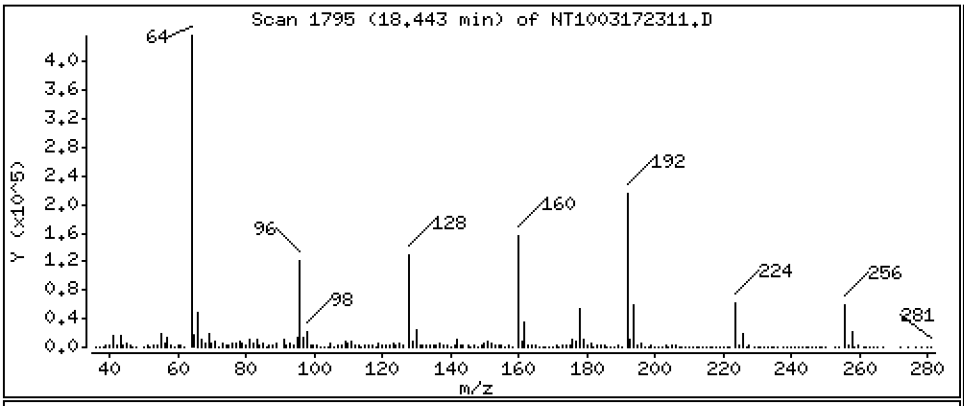
Operator: VTS

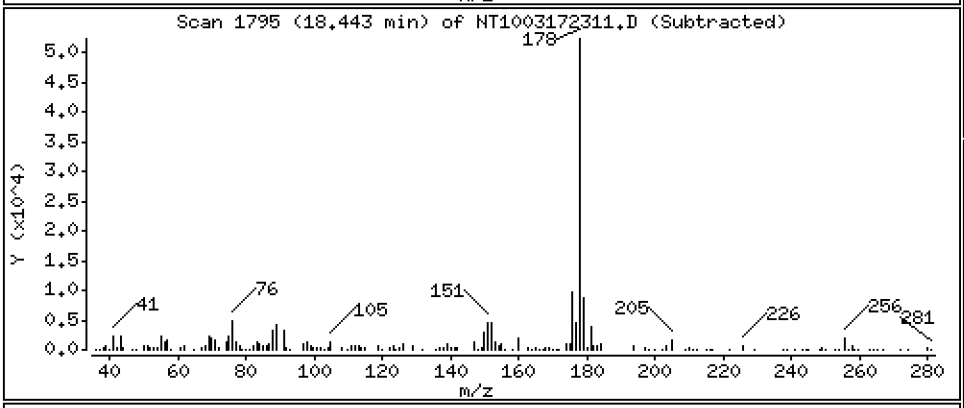
Column phase: ZB-5msi

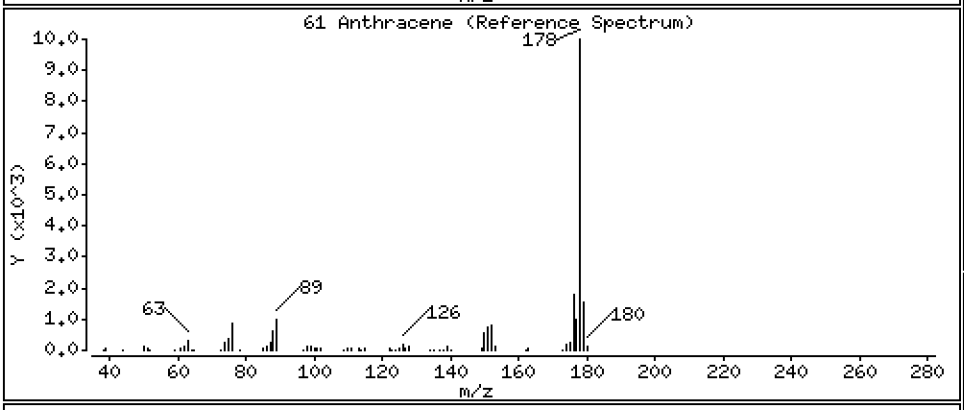
Column diameter: 0.25

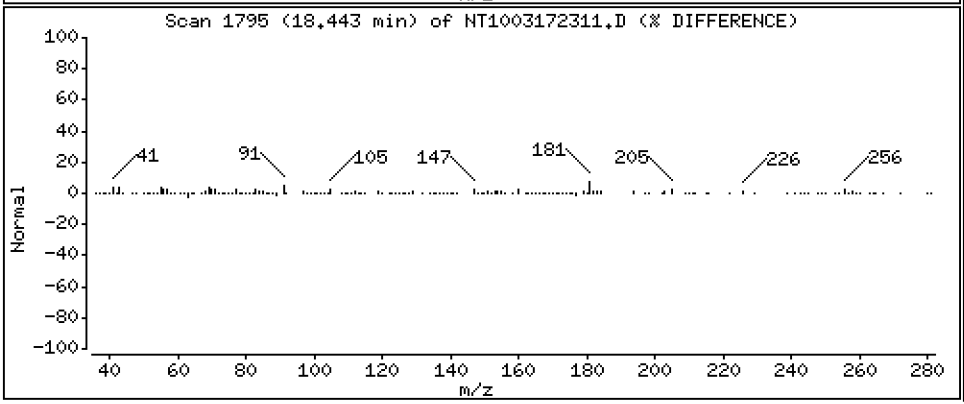
61 Anthracene

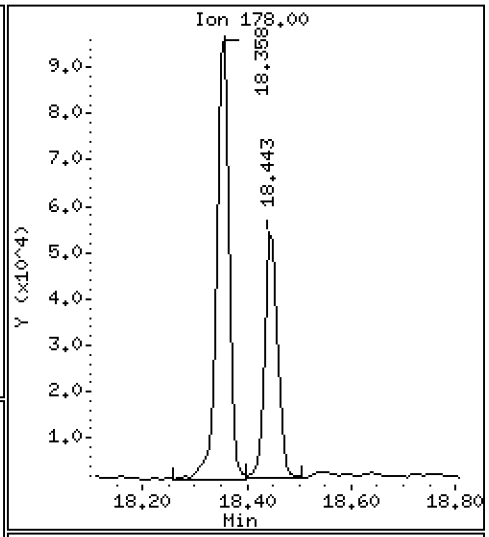
Concentration: 0.5350 ug/mL

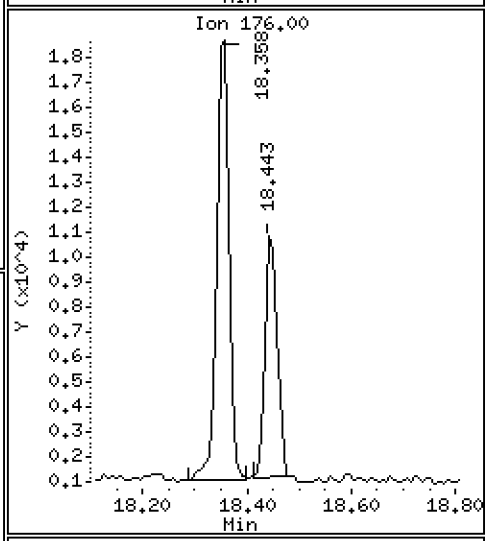


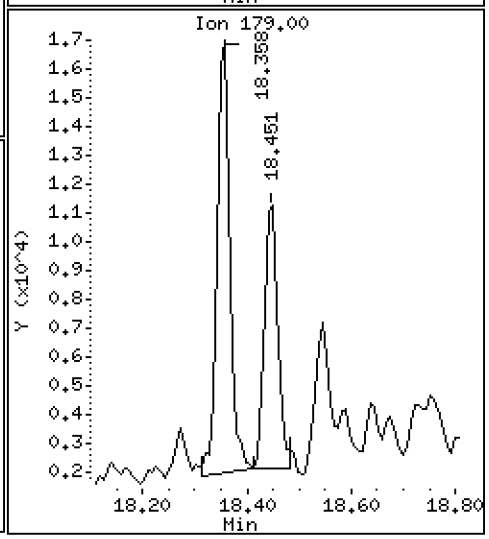












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

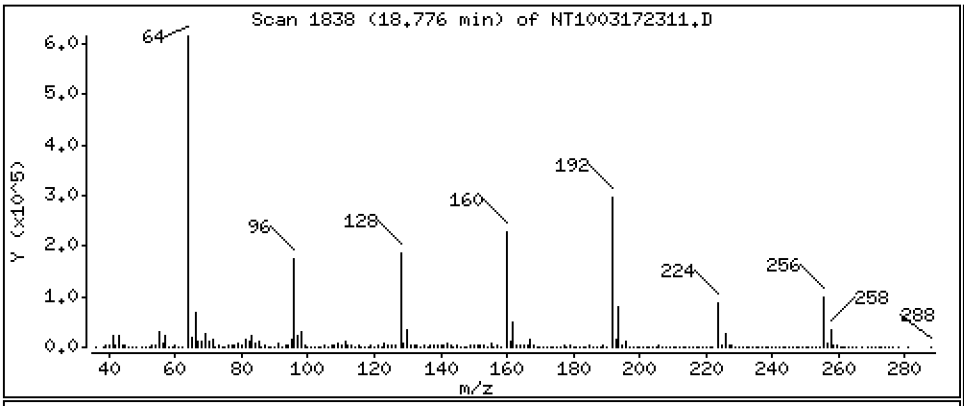
Operator: VTS

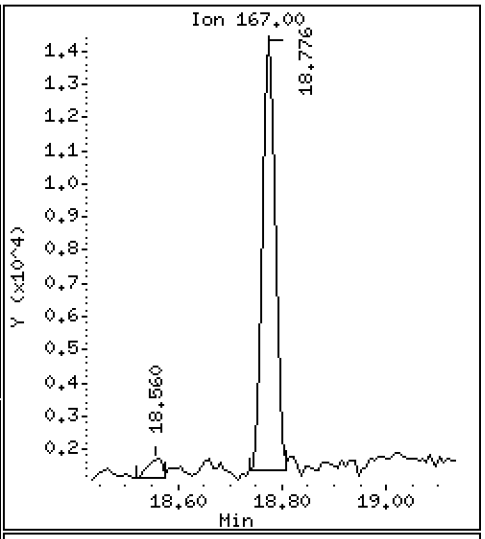
Column phase: ZB-5msi

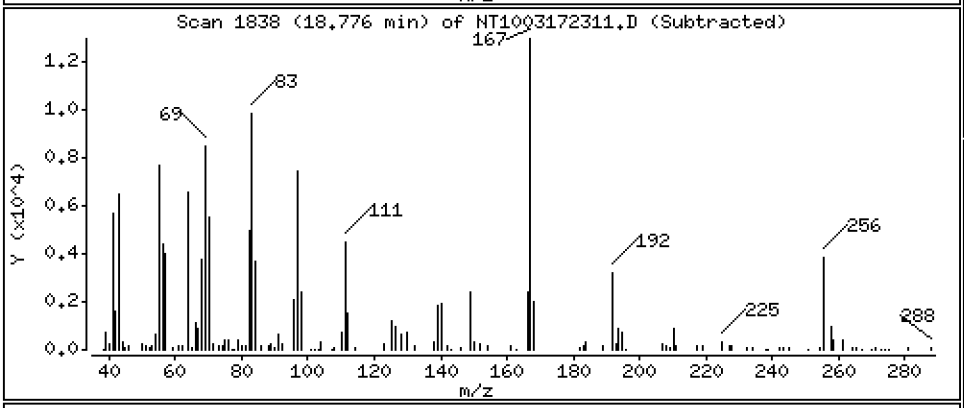
Column diameter: 0.25

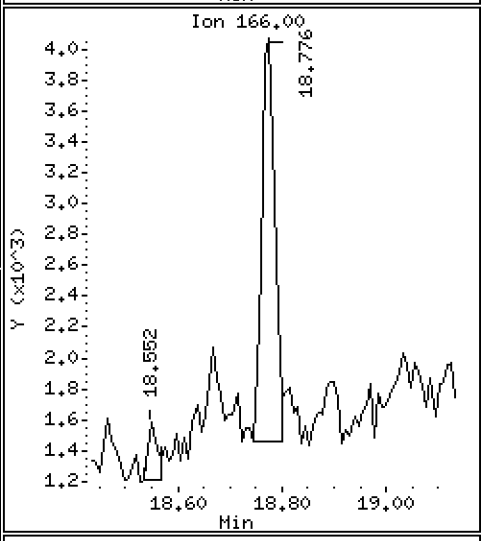
62 Carbazole

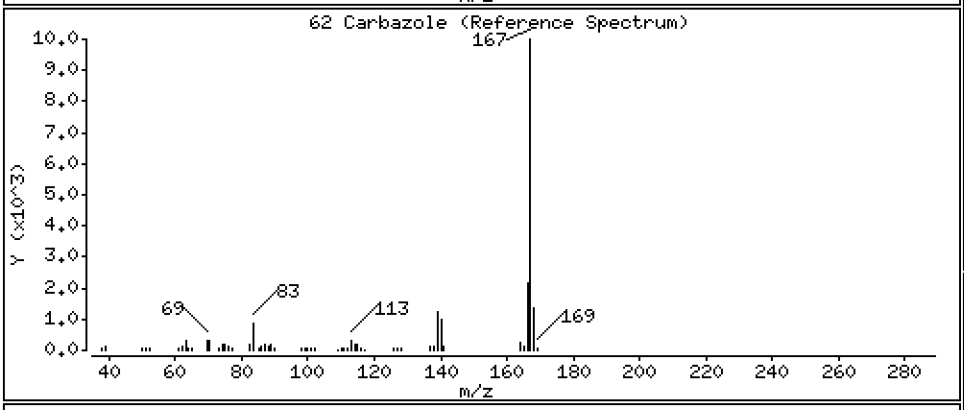
Concentration: 0.1438 ug/mL

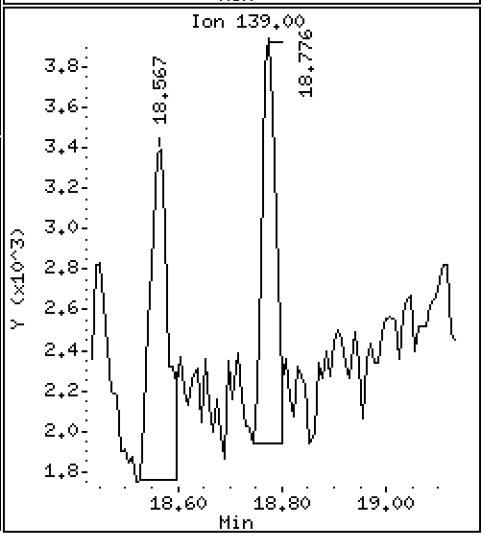


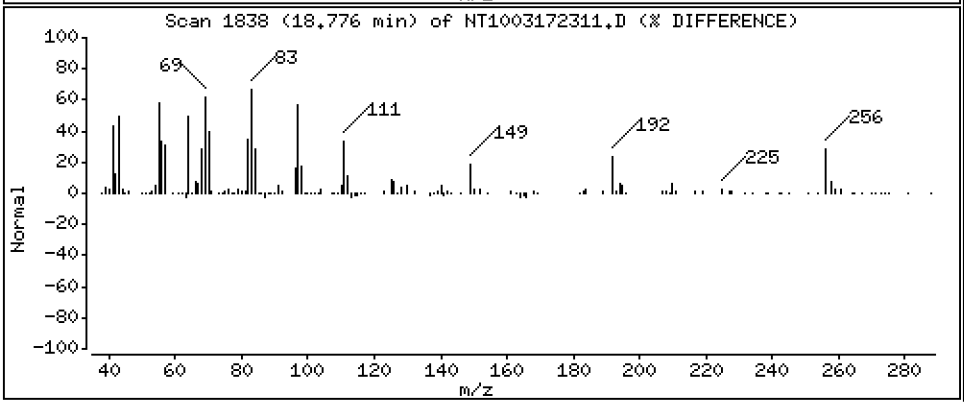












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

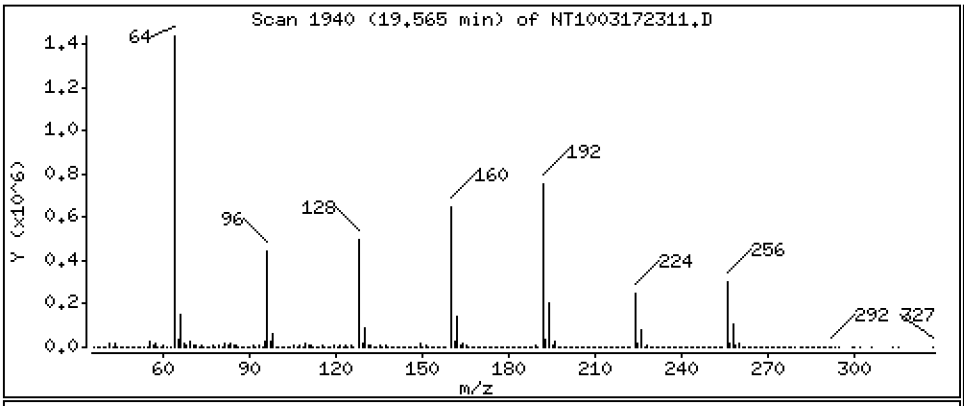
Operator: VTS

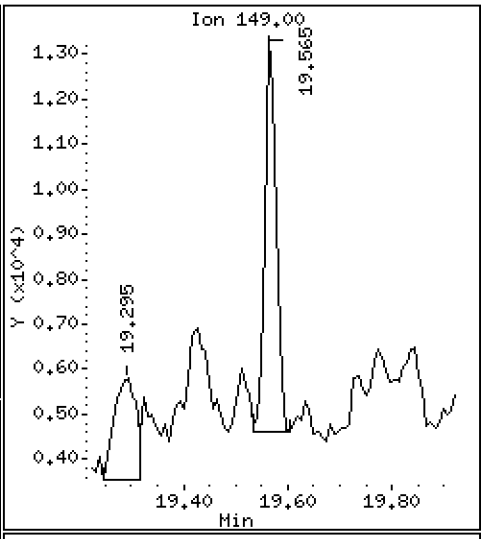
Column phase: ZB-5msi

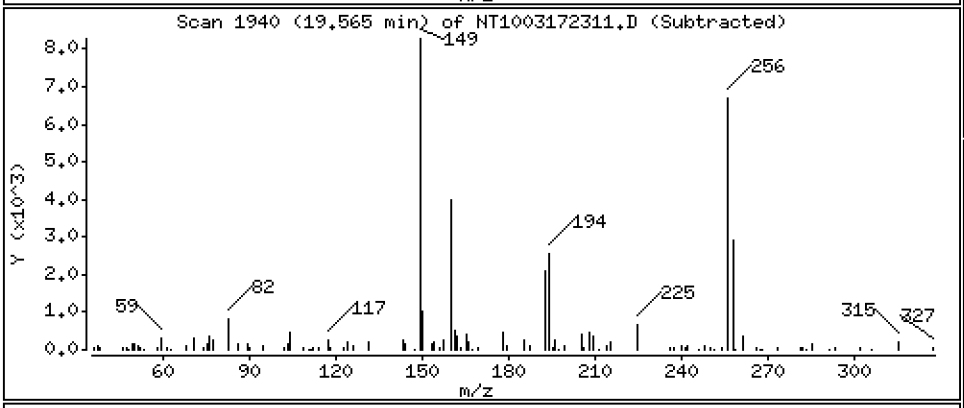
Column diameter: 0.25

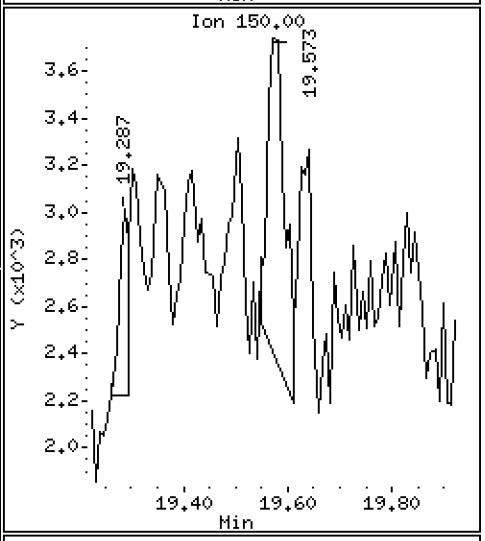
63 Di-n-butylphthalate

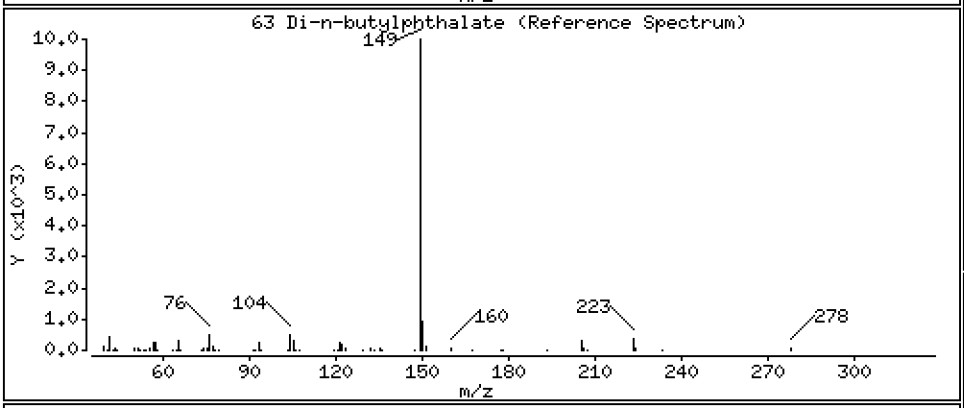
Concentration: 0.06119 ug/mL

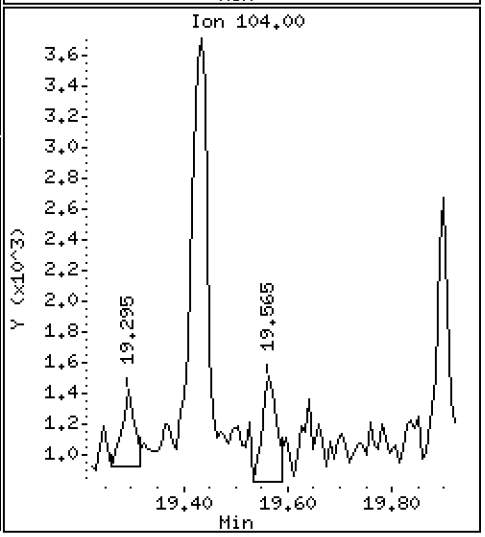


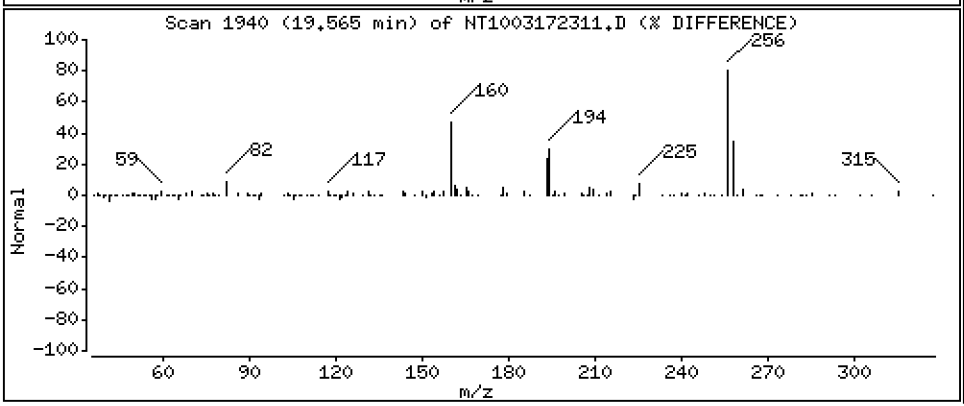












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

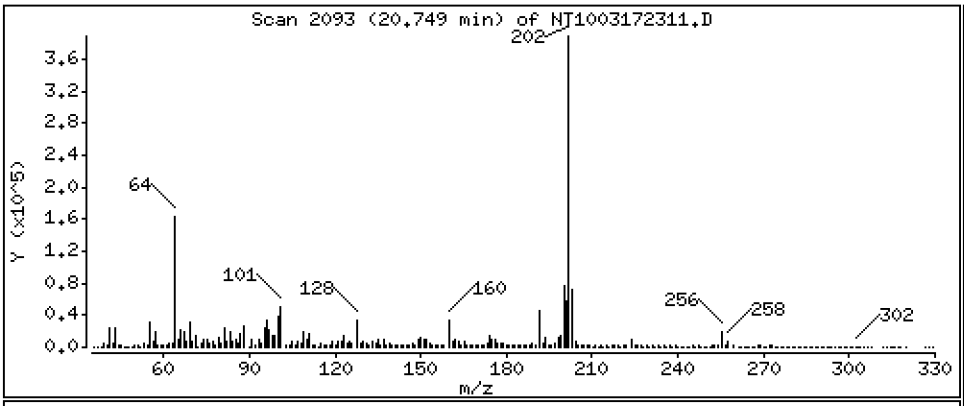
Operator: VTS

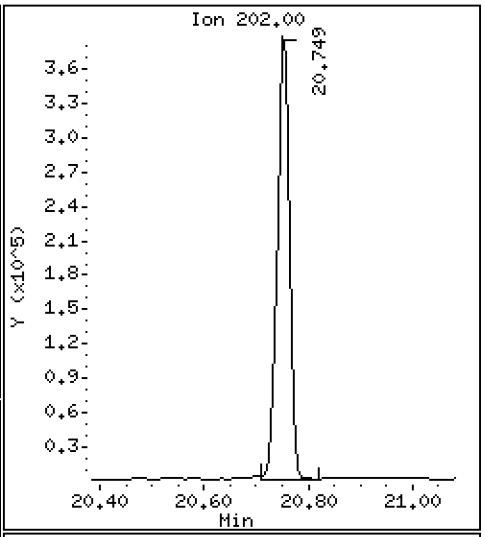
Column phase: ZB-5msi

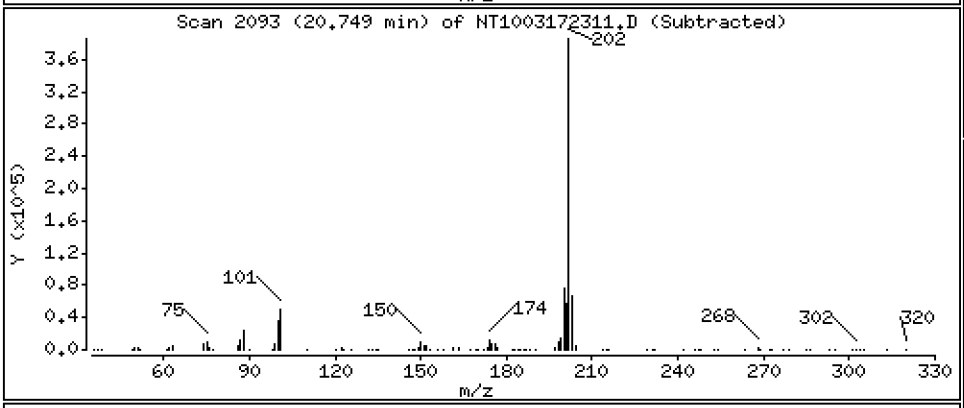
Column diameter: 0.25

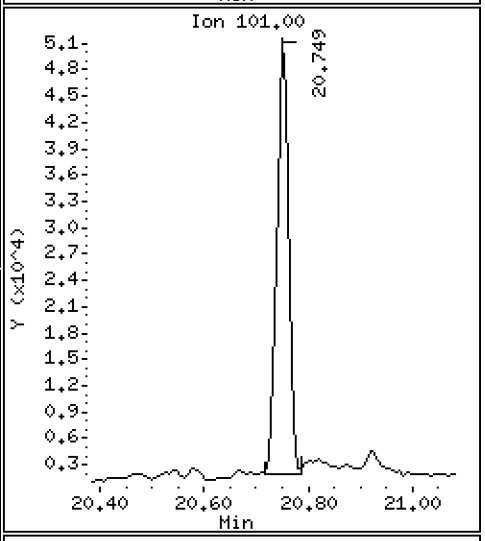
64 Fluoranthene

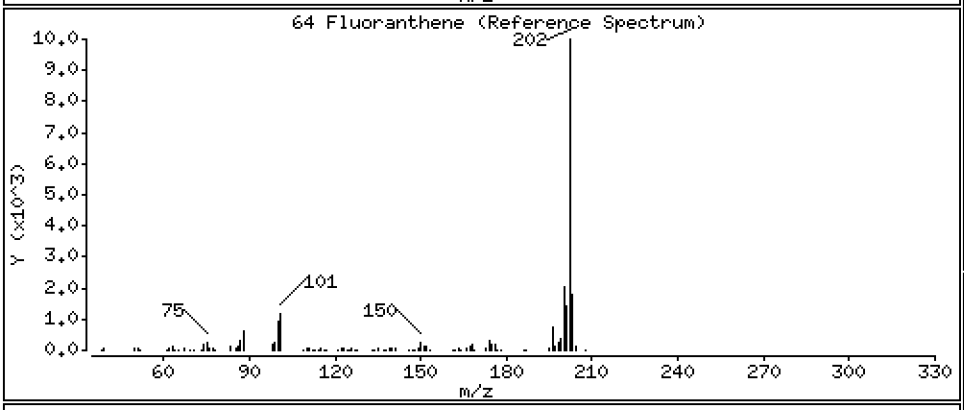
Concentration: 3.135 ug/mL

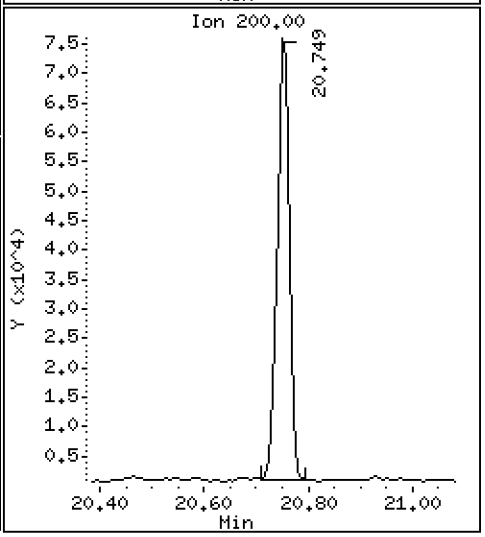


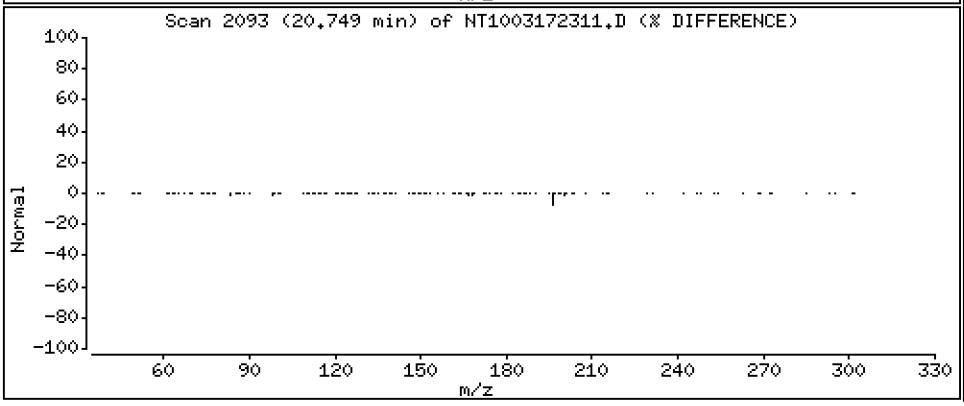












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

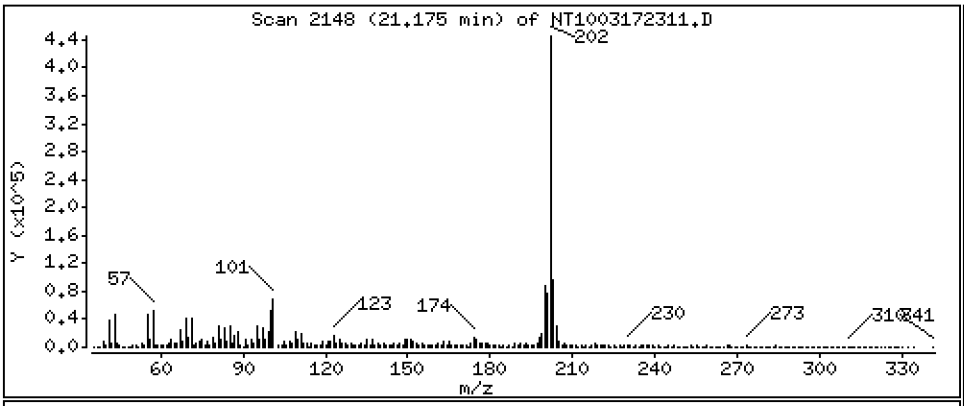
Operator: VTS

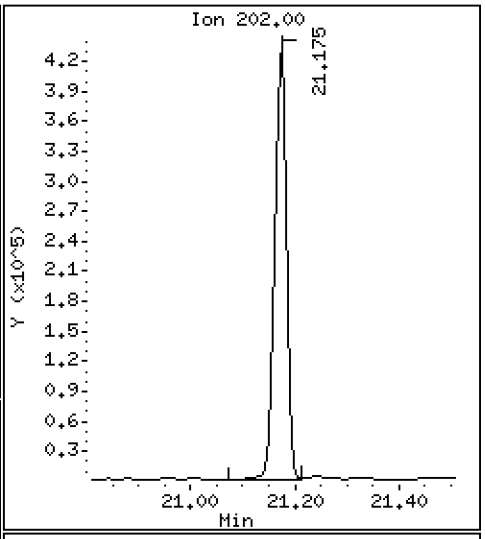
Column phase: ZB-5msi

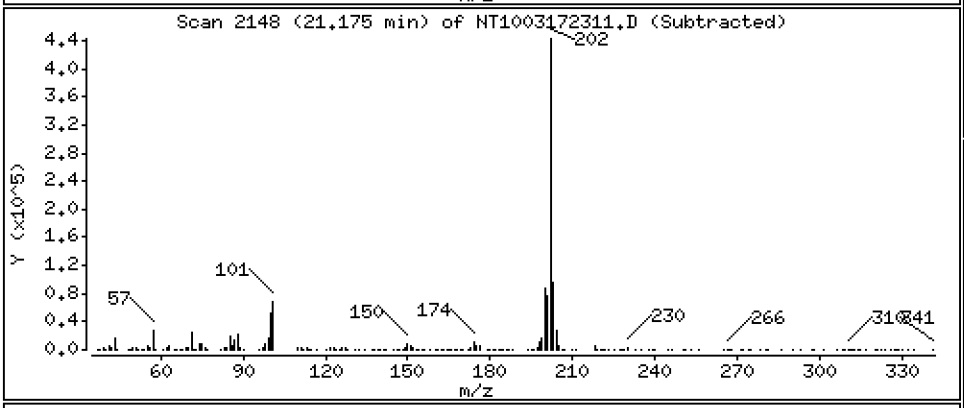
Column diameter: 0.25

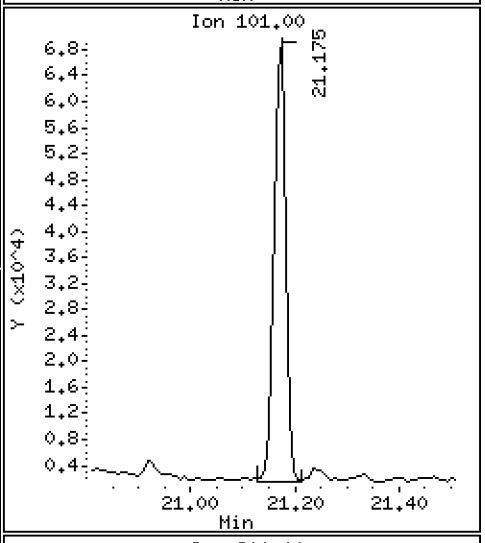
65 Pyrene

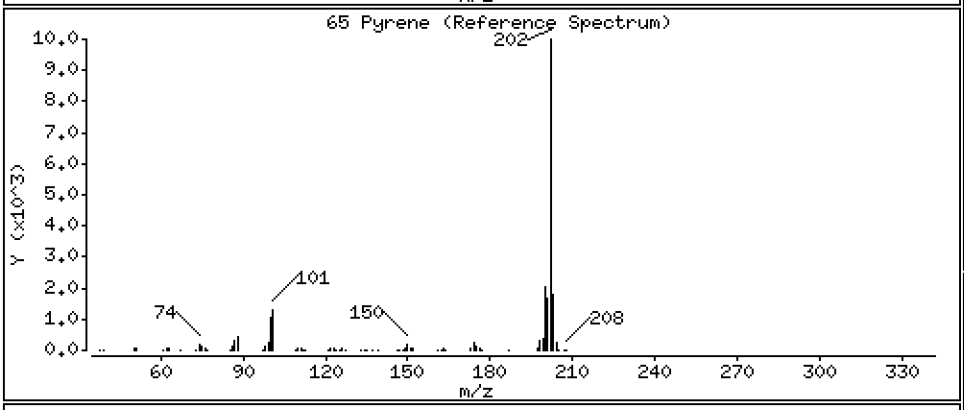
Concentration: 3.196 ug/mL

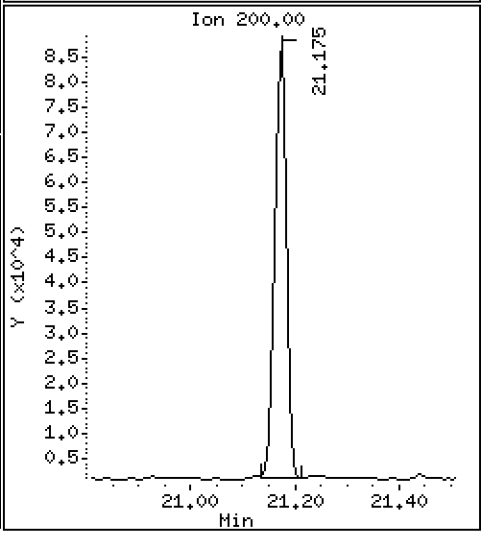


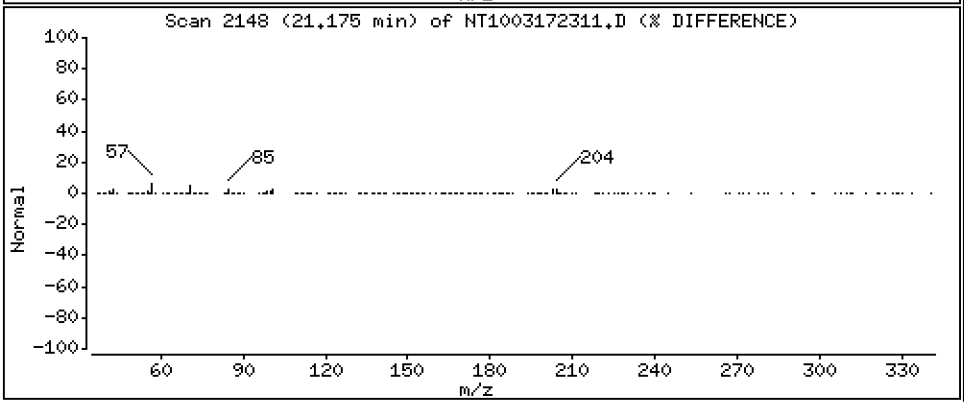












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

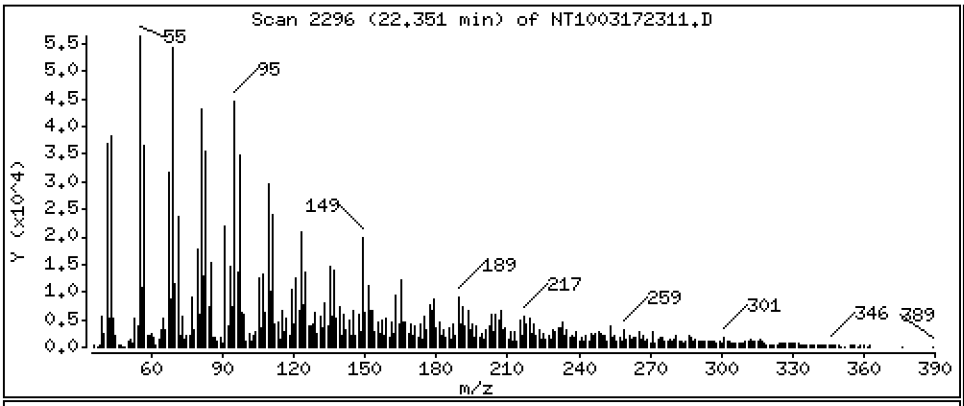
Operator: VTS

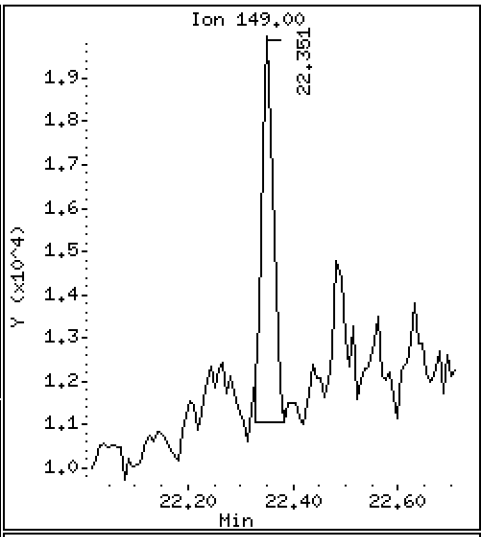
Column phase: ZB-5msi

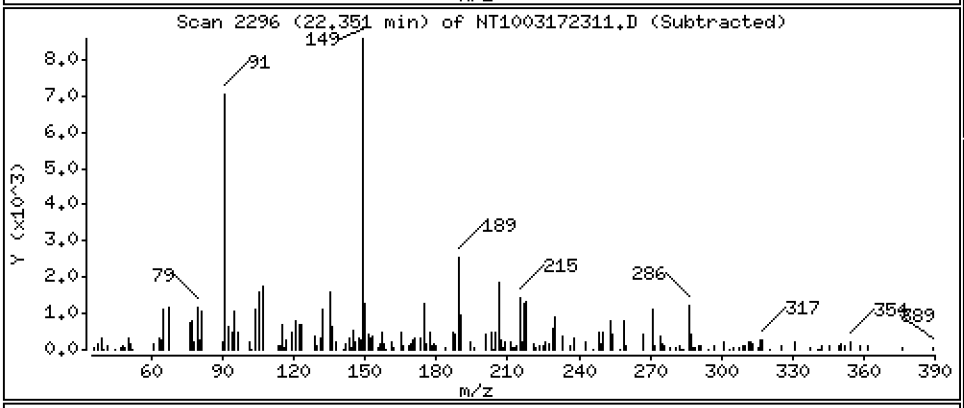
Column diameter: 0.25

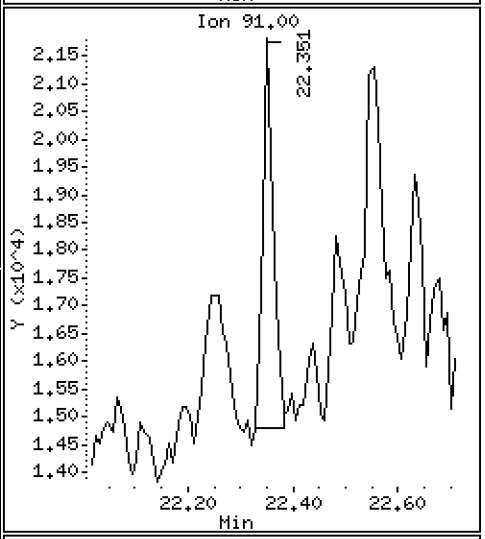
67 Butylbenzylphthalate

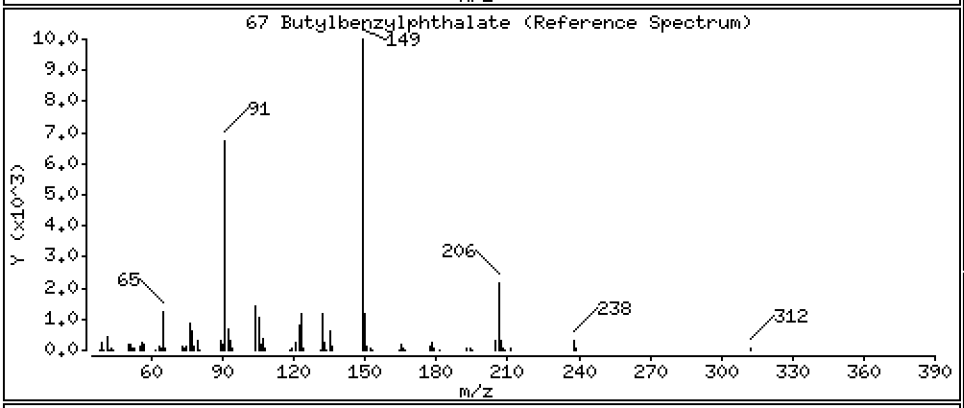
Concentration: 0.1877 ug/mL

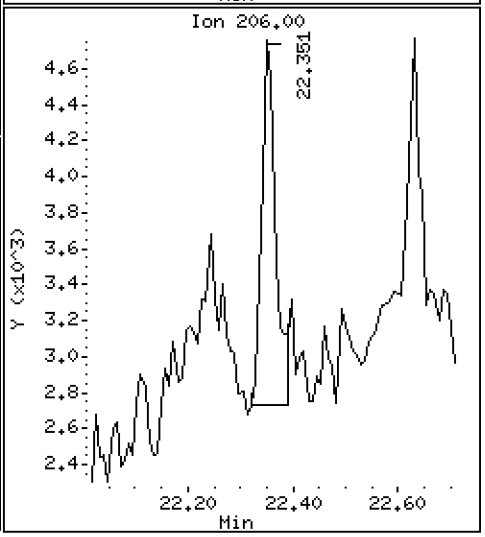


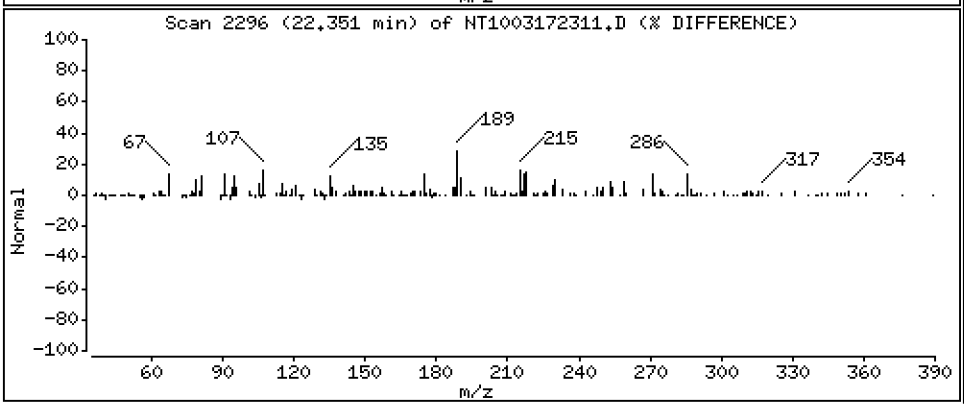












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

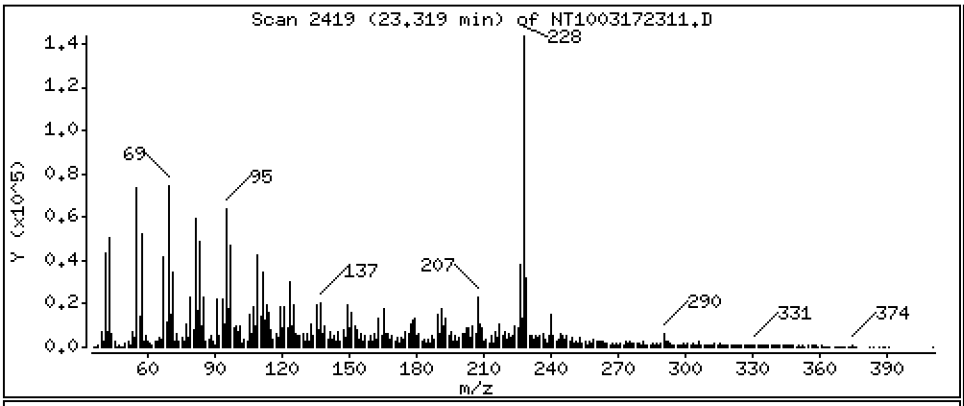
Operator: VTS

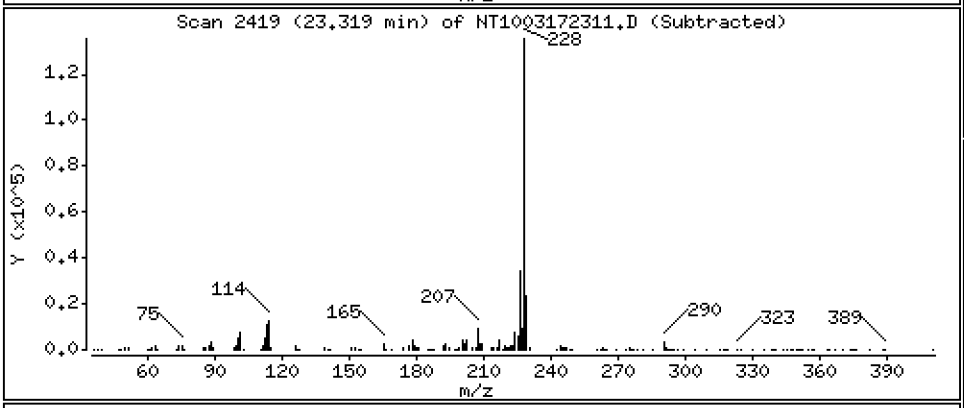
Column phase: ZB-5msi

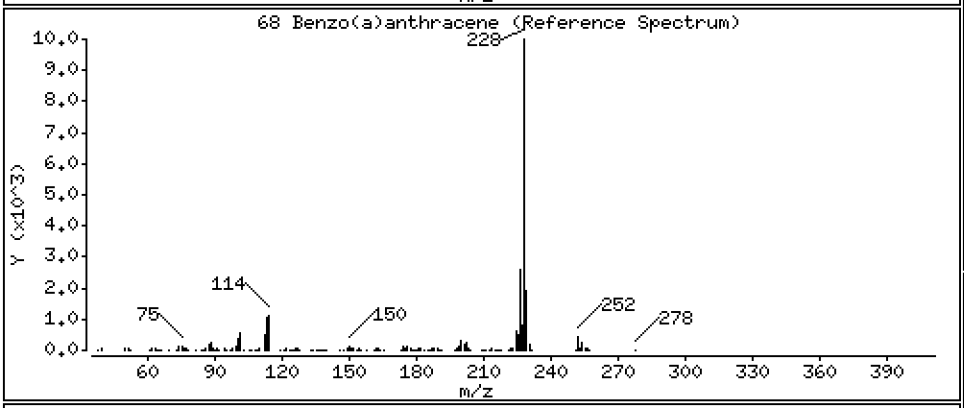
Column diameter: 0.25

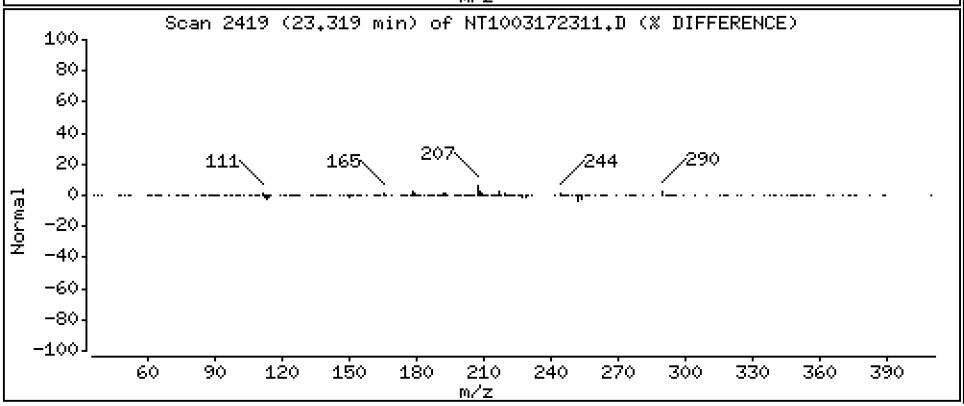
68 Benzo(a)anthracene

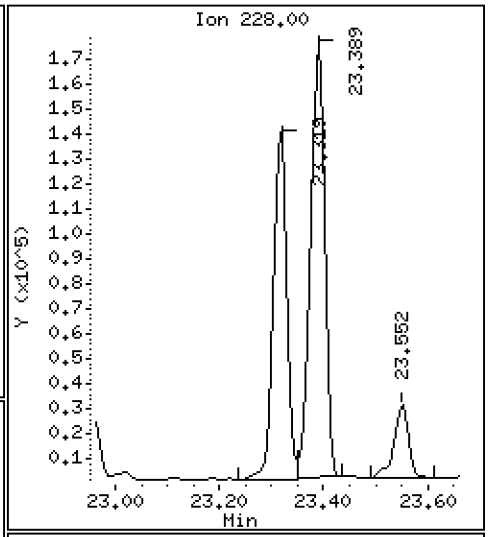
Concentration: 1.377 ug/mL

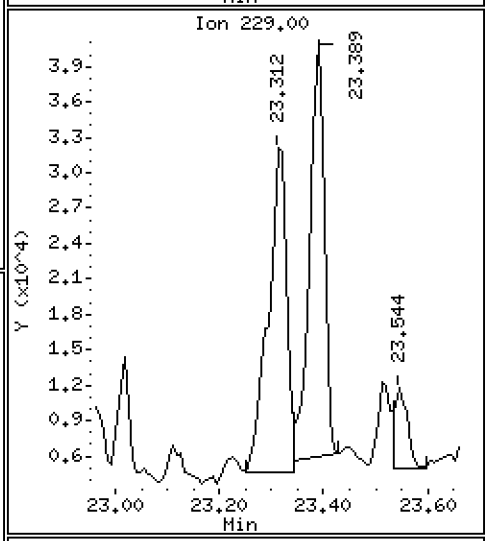


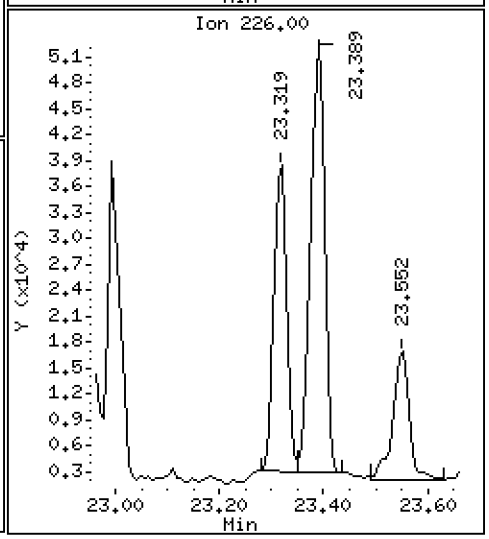












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

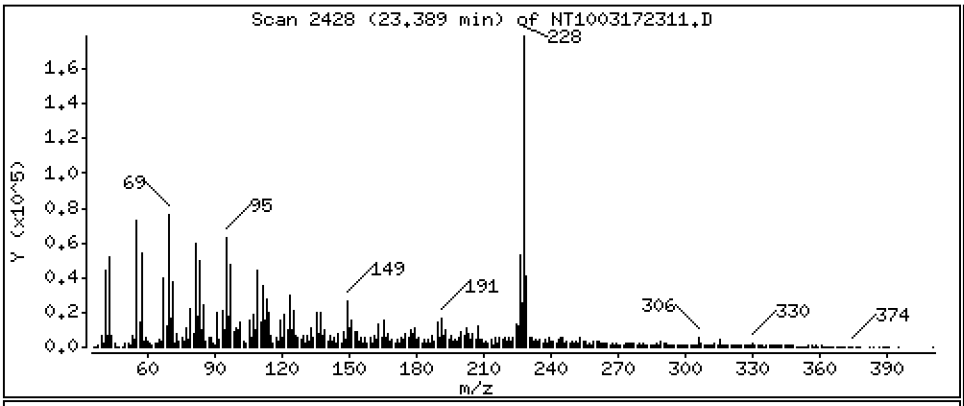
Operator: VTS

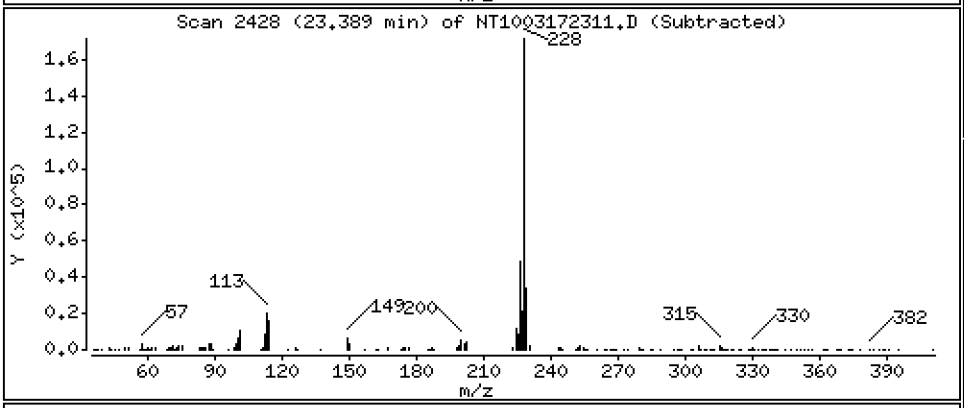
Column phase: ZB-5msi

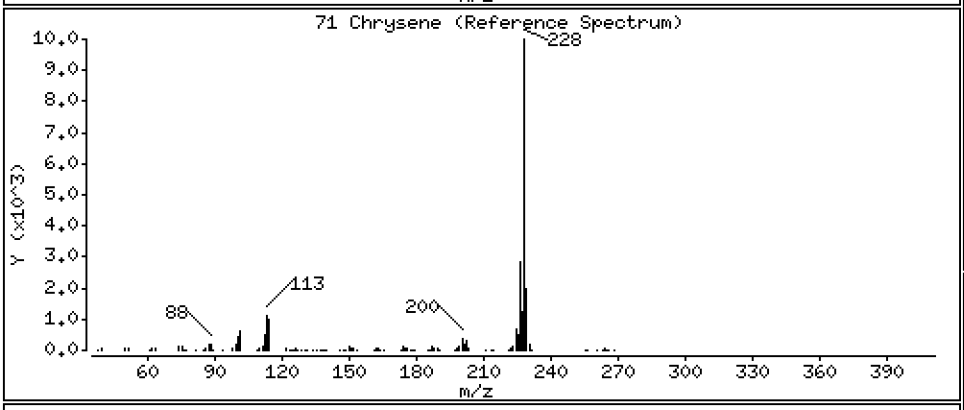
Column diameter: 0.25

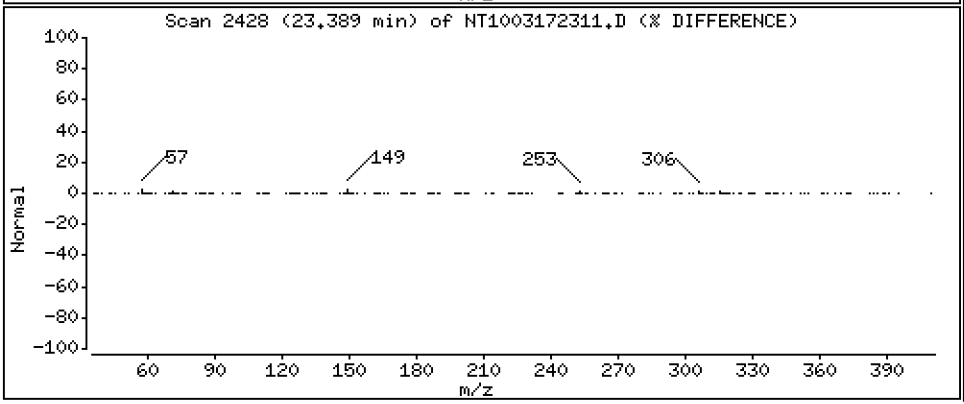
71 Chrysene

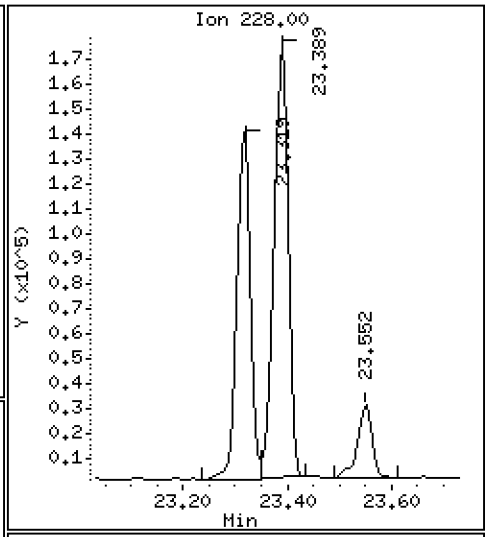
Concentration: 1.818 ug/mL

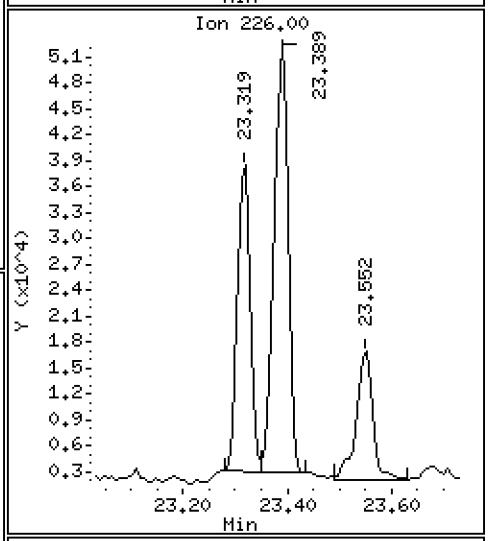


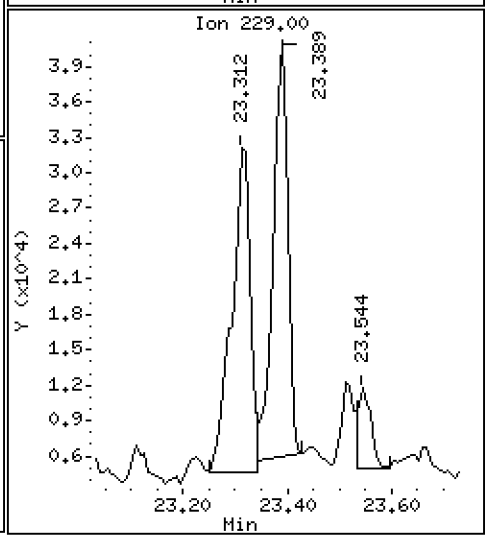












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

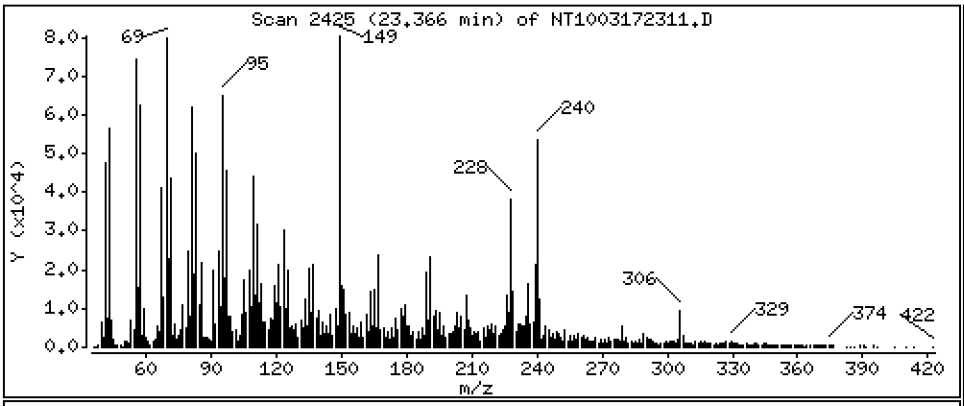
Operator: VTS

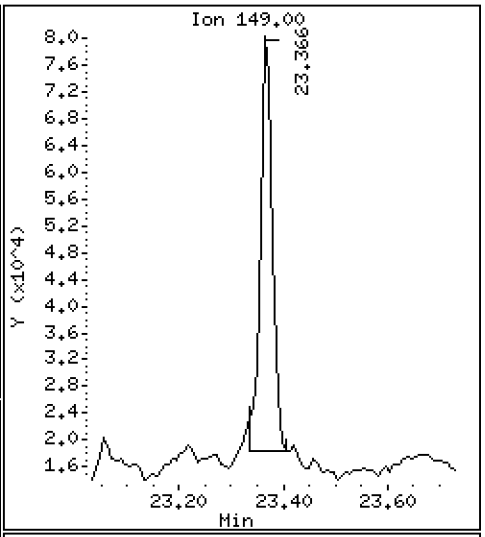
Column phase: ZB-5msi

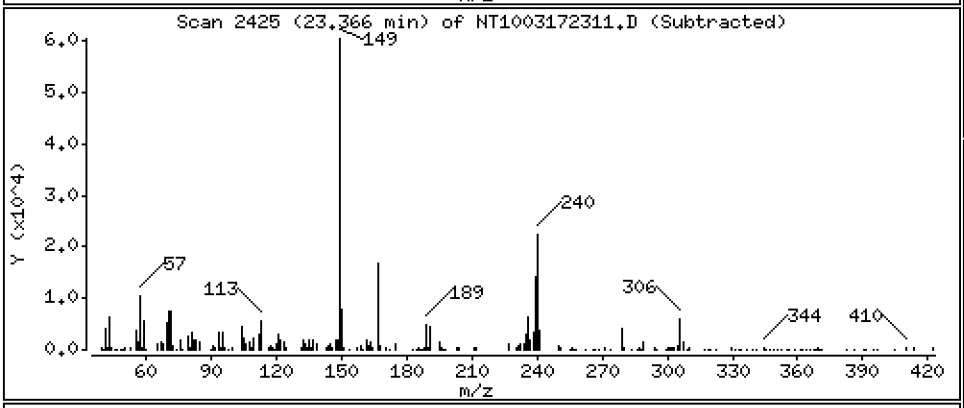
Column diameter: 0.25

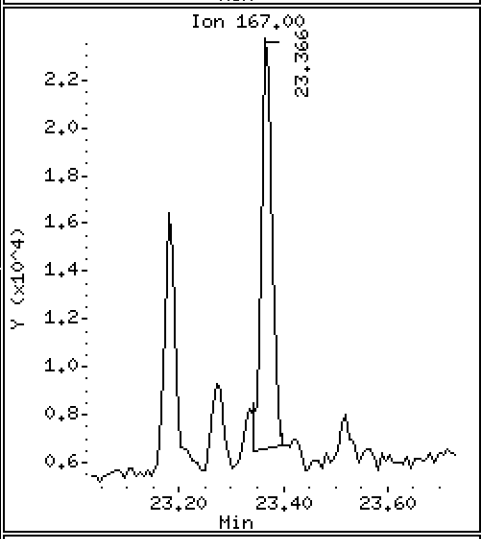
72 bis(2-Ethylhexyl)phthalate

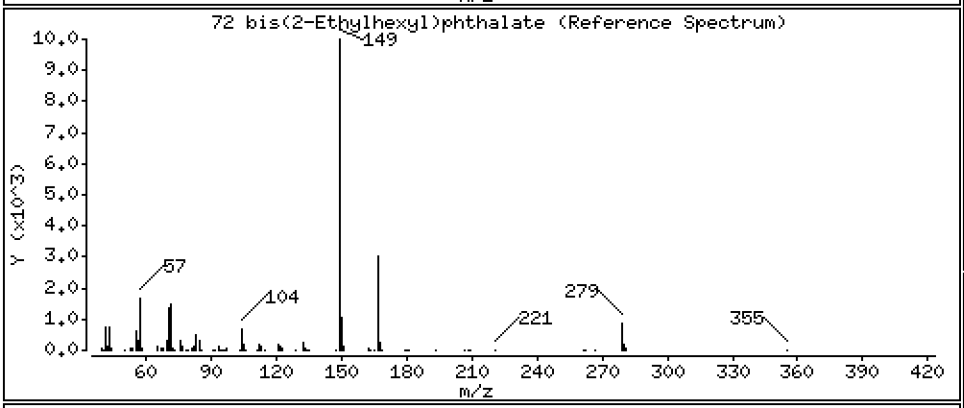
Concentration: 0.7709 ug/mL

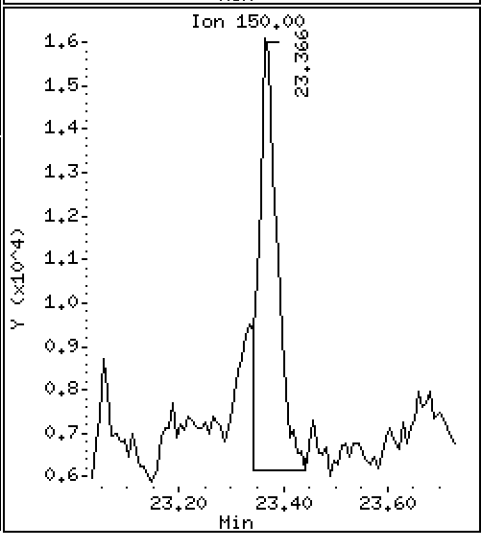


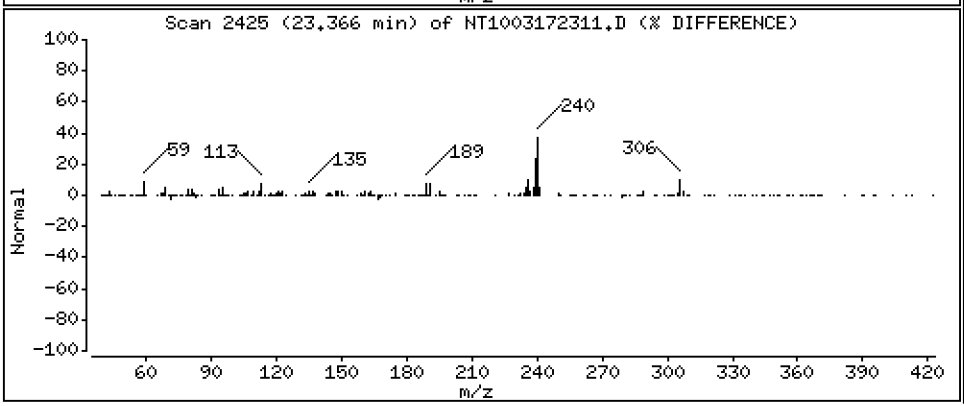












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

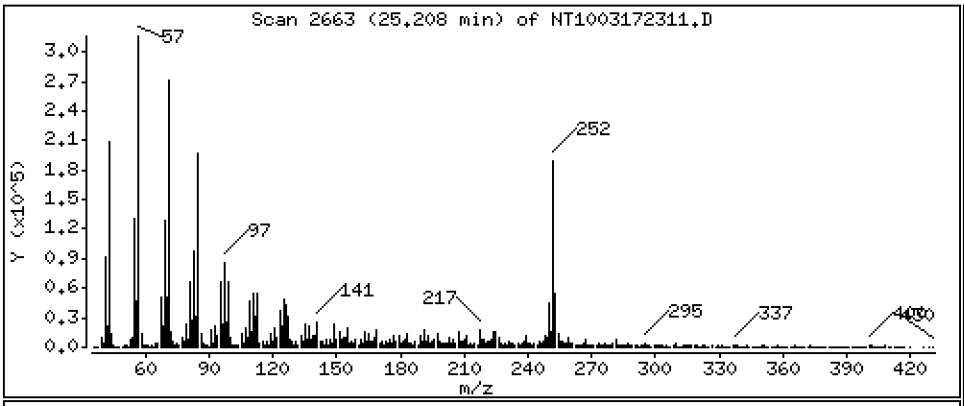
Operator: VTS

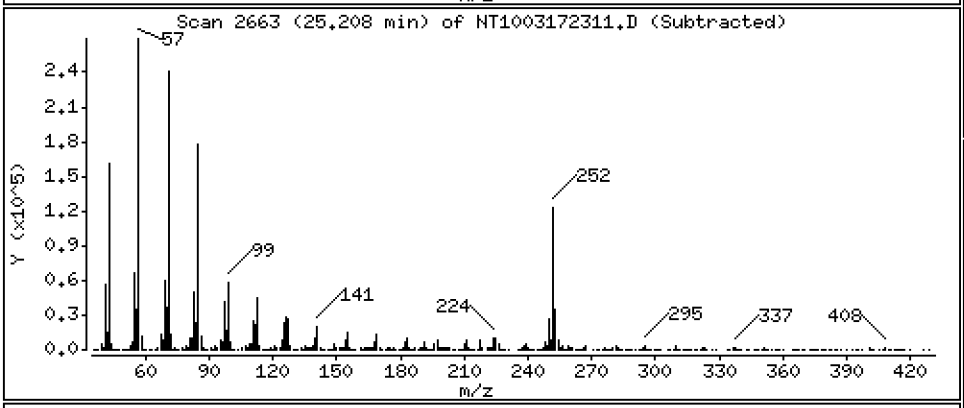
Column phase: ZB-5msi

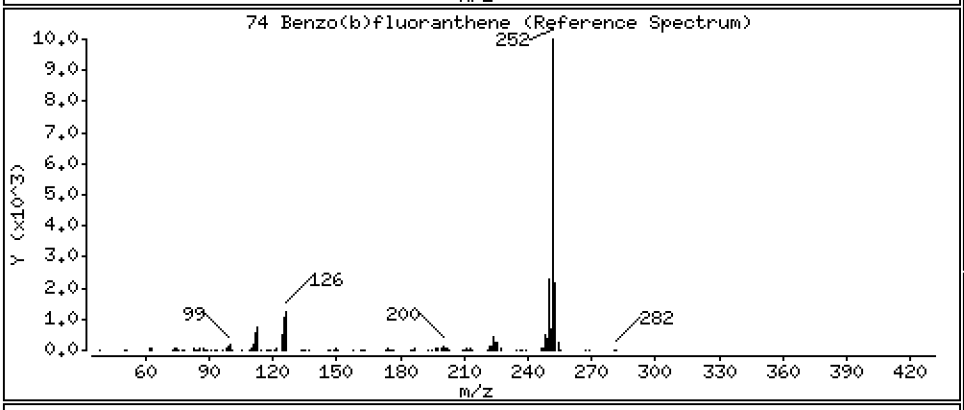
Column diameter: 0.25

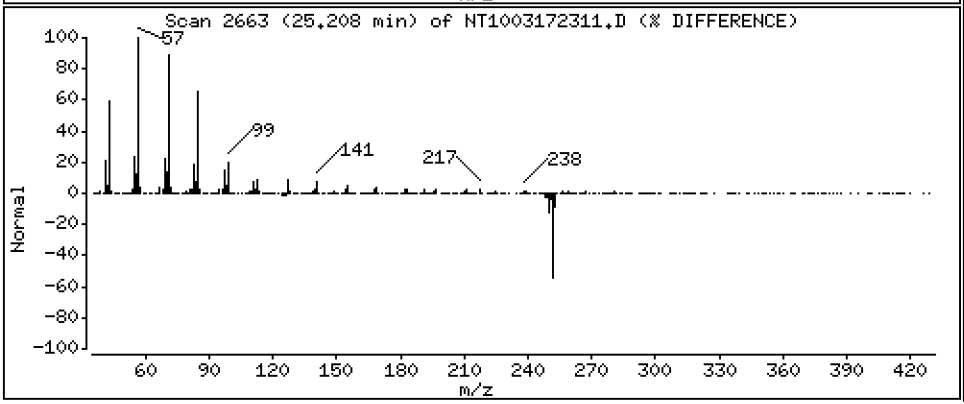
74 Benzo(b)fluoranthene

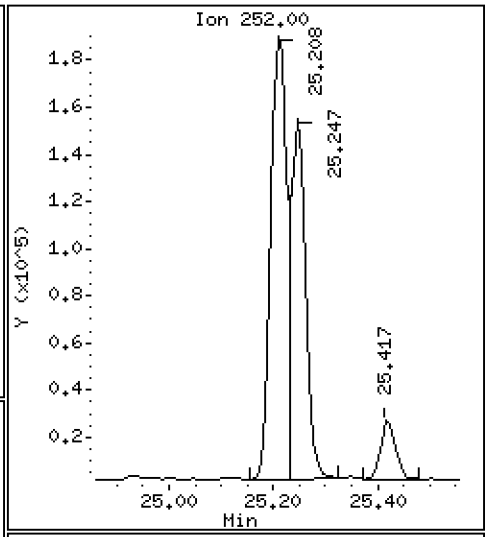
Concentration: 2.298 ug/mL

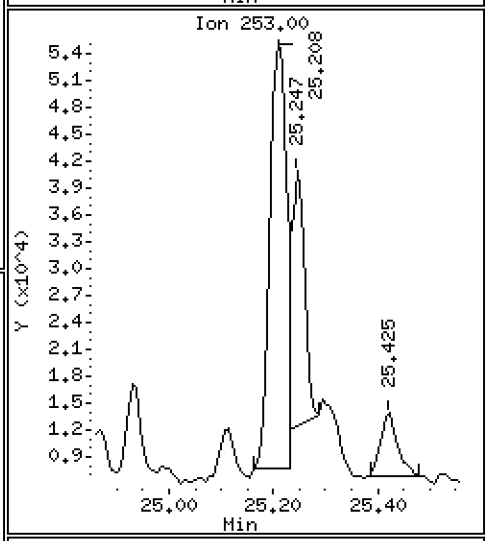


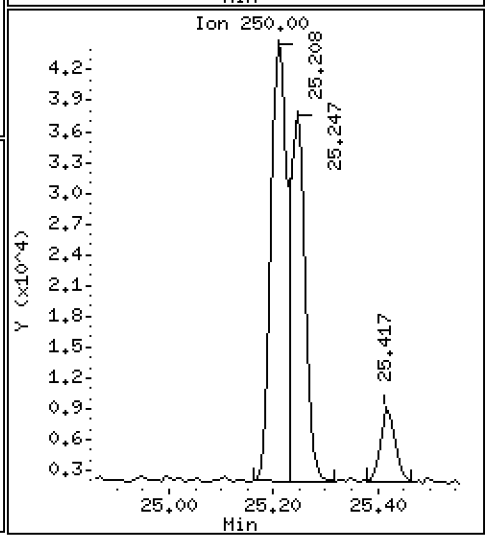












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

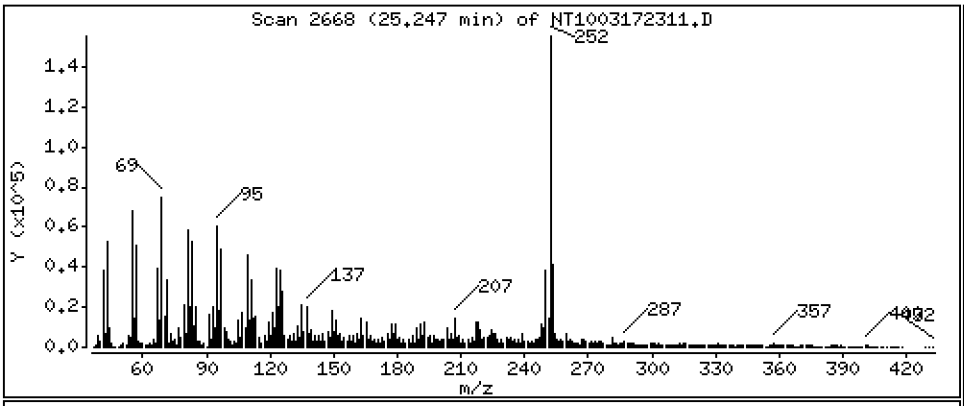
Operator: VTS

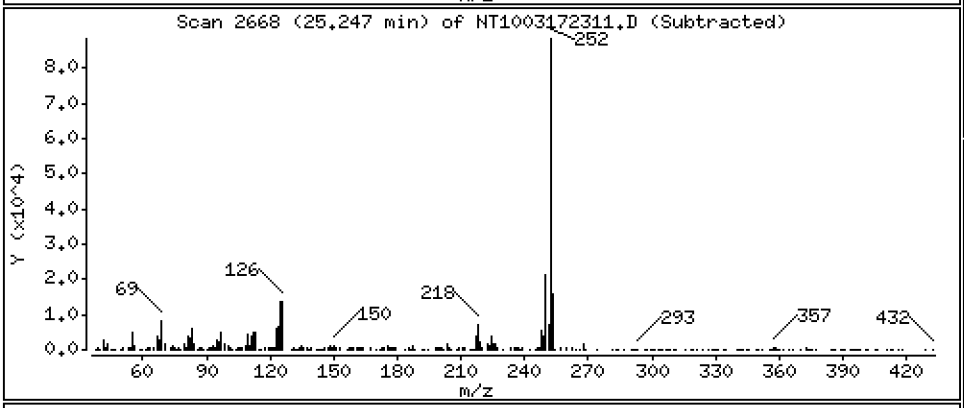
Column phase: ZB-5msi

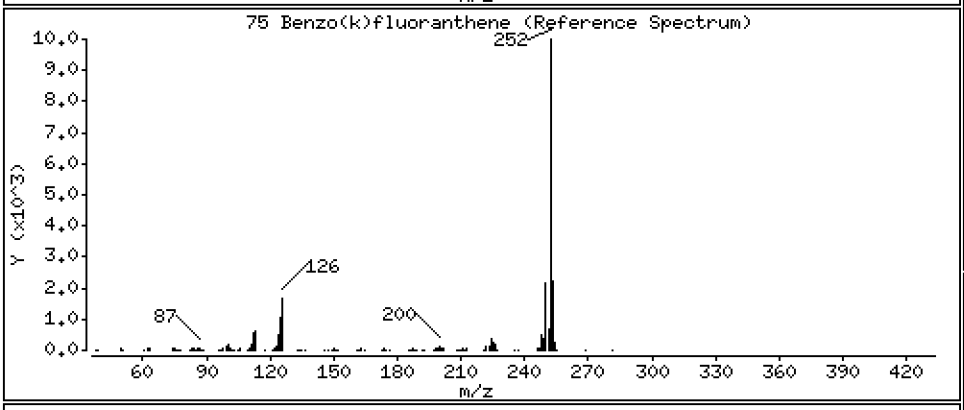
Column diameter: 0.25

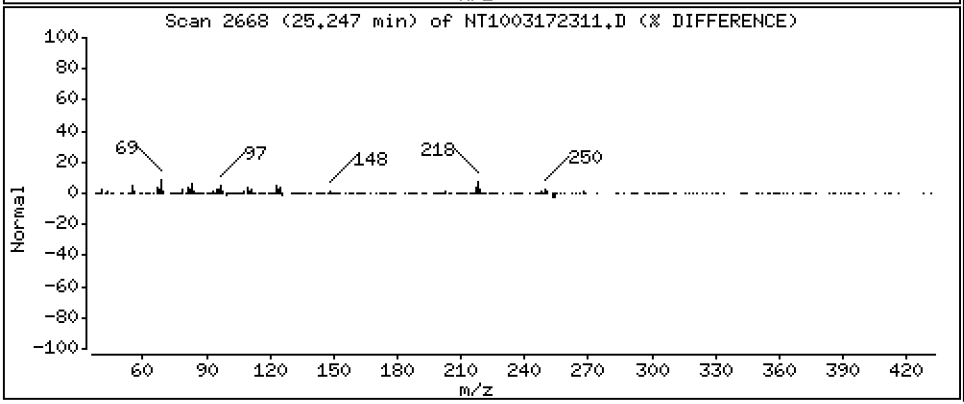
75 Benzo(k)fluoranthene

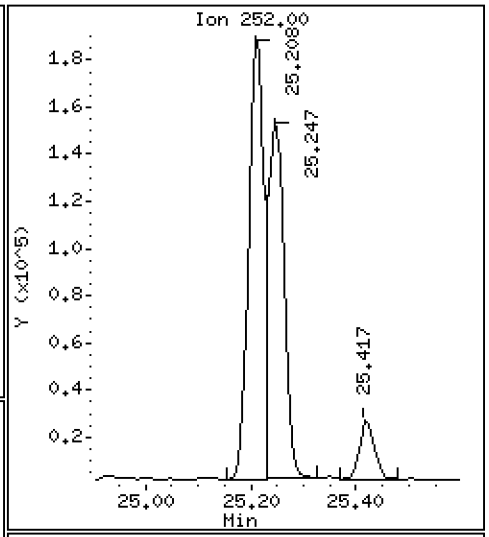
Concentration: 1.771 ug/mL

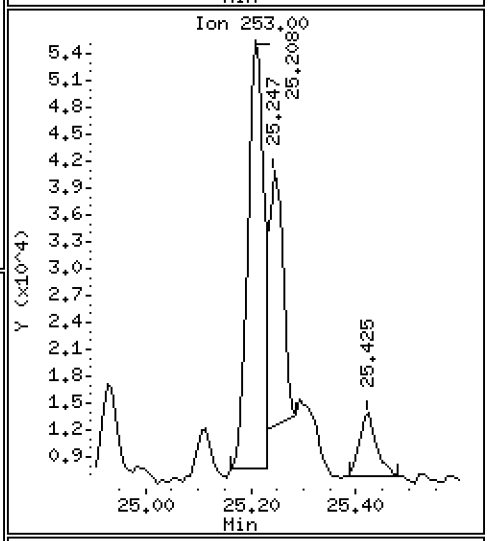


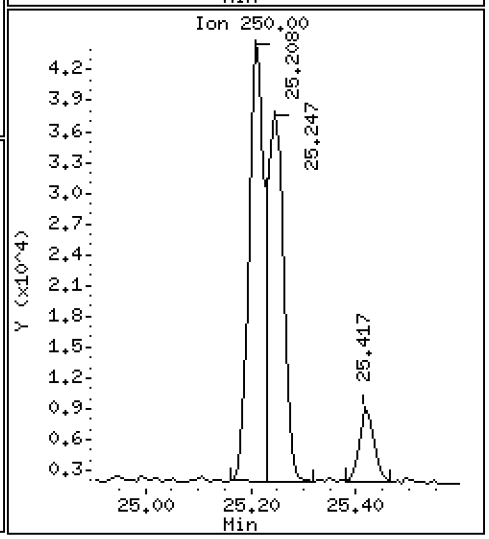












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

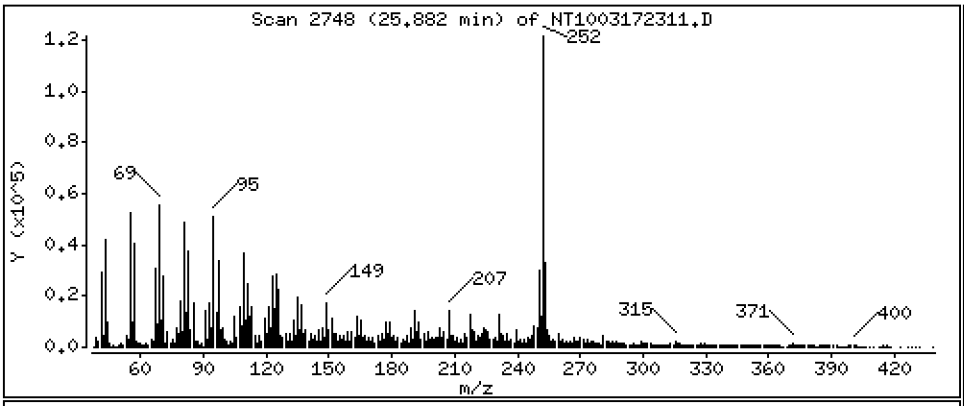
Operator: VTS

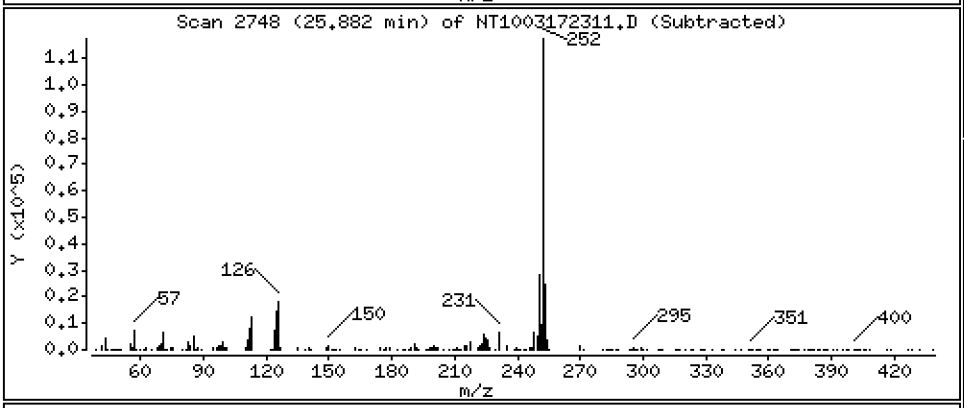
Column phase: ZB-5msi

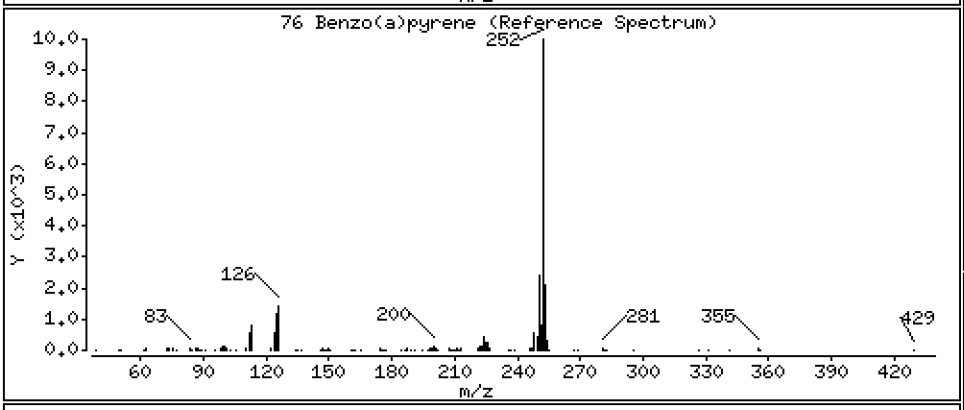
Column diameter: 0.25

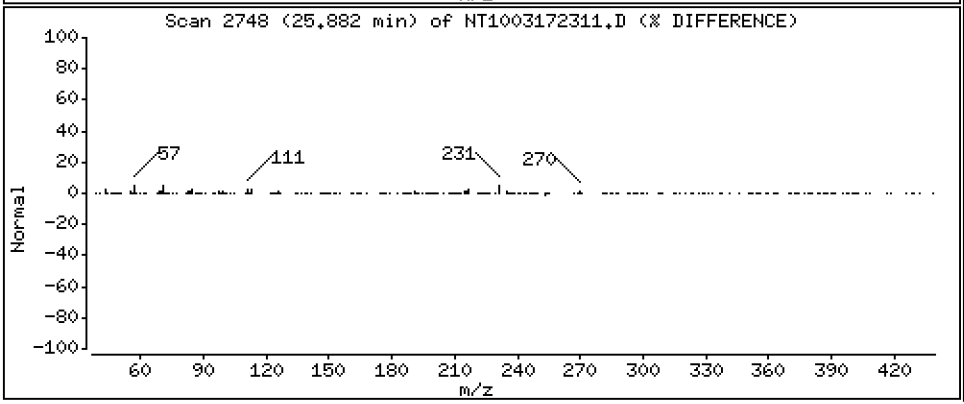
76 Benzo(a)pyrene

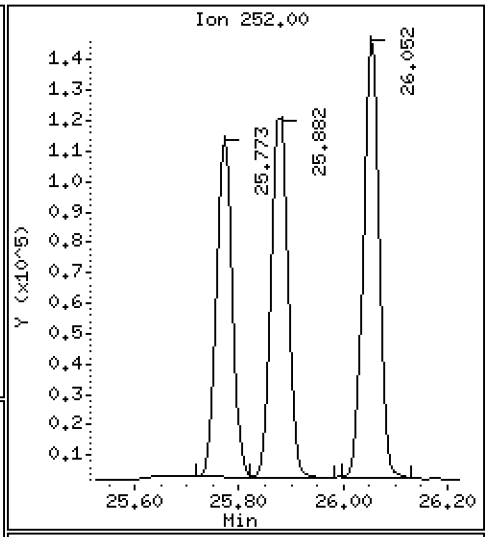
Concentration: 1.627 ug/mL

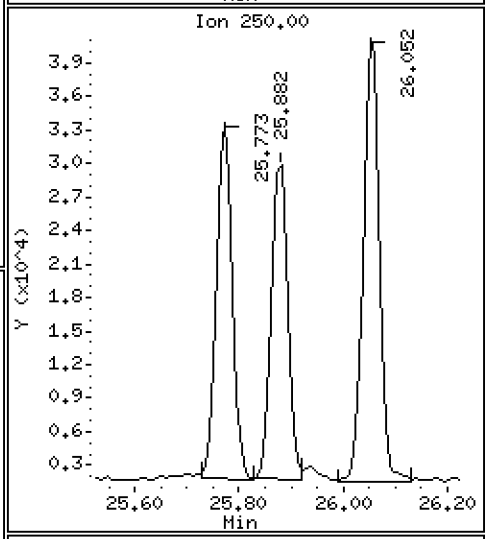


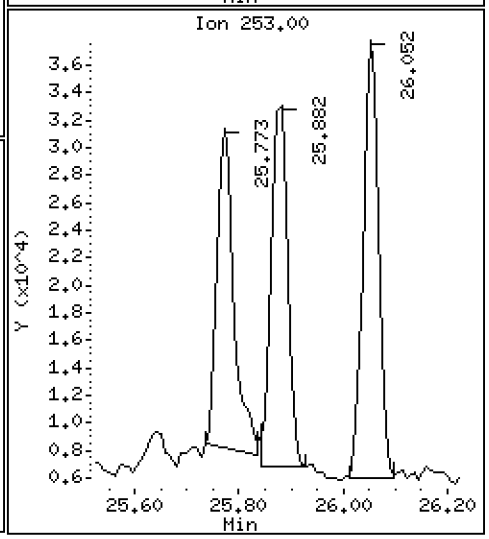












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172311.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

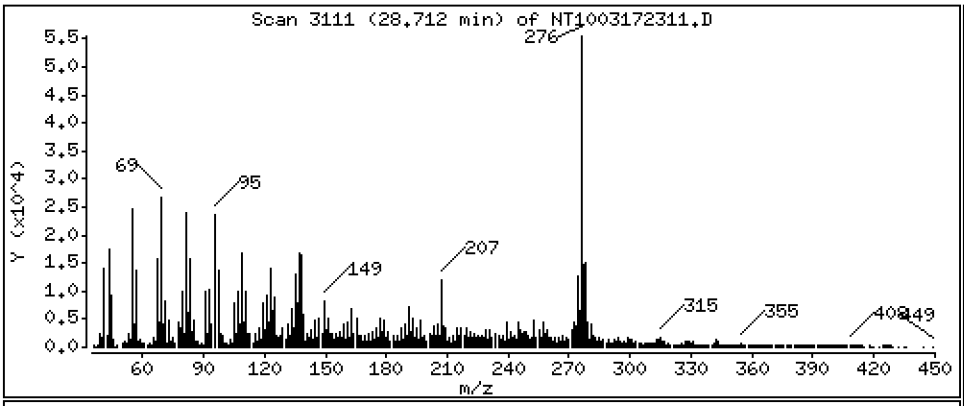
Operator: VTS

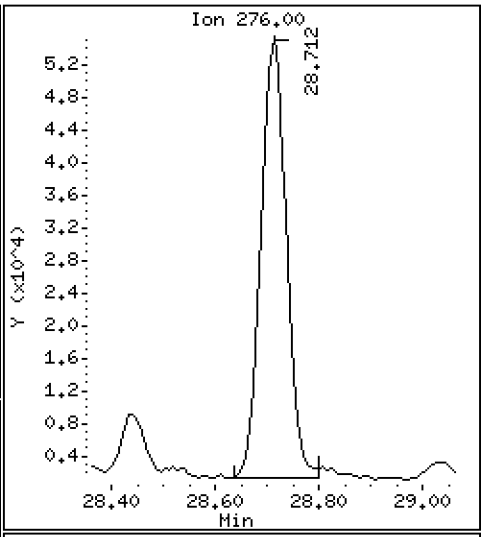
Column phase: ZB-5msi

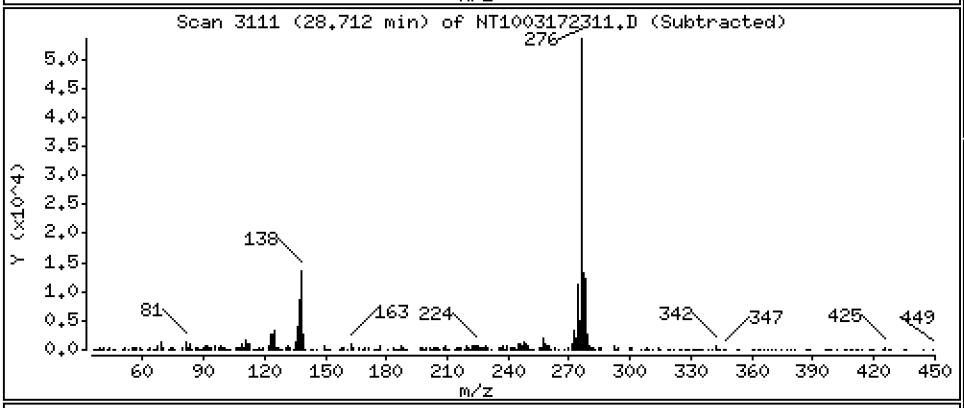
Column diameter: 0.25

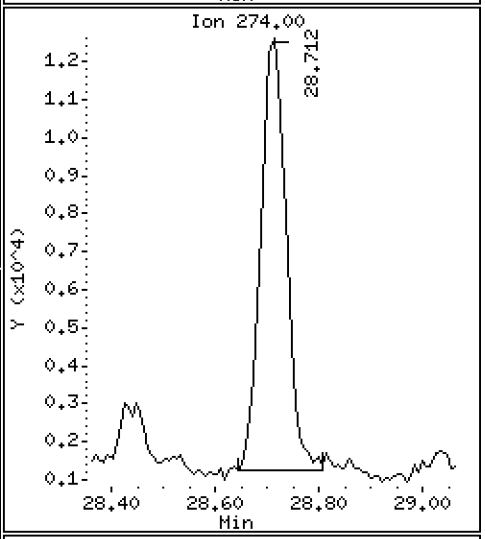
78 Indeno(1,2,3-cd)pyrene

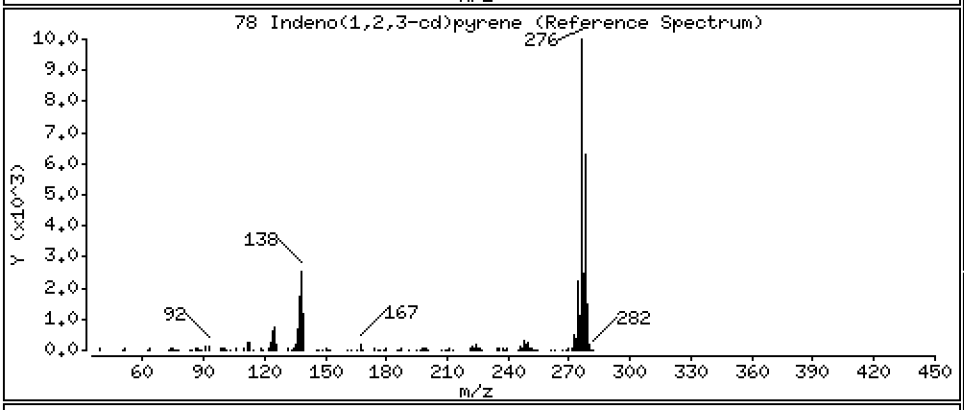
Concentration: 0.8900 ug/mL

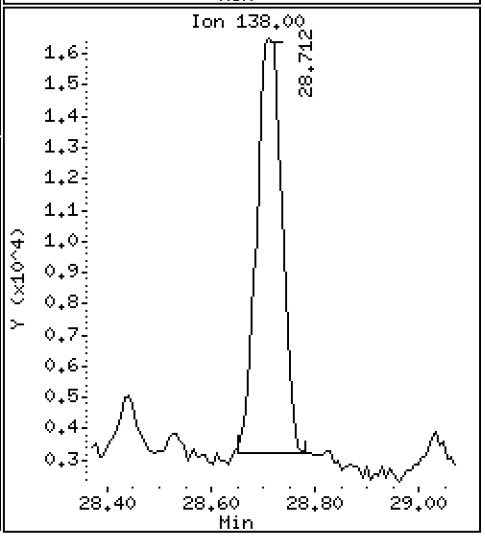


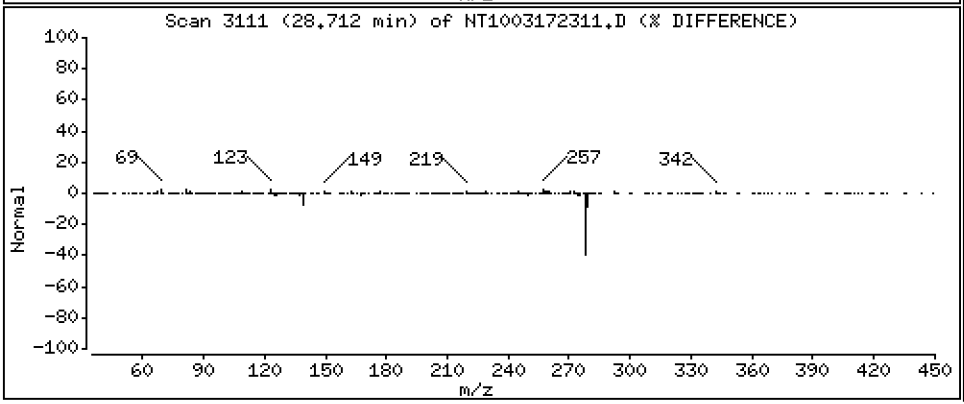












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

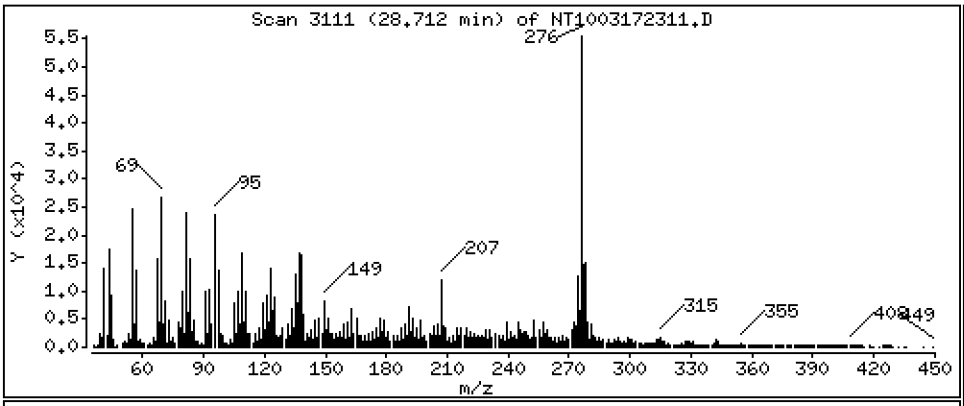
Operator: VTS

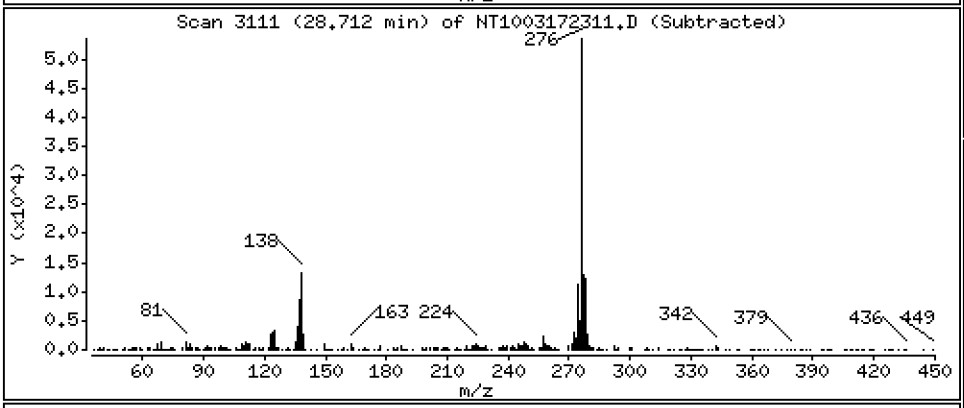
Column phase: ZB-5msi

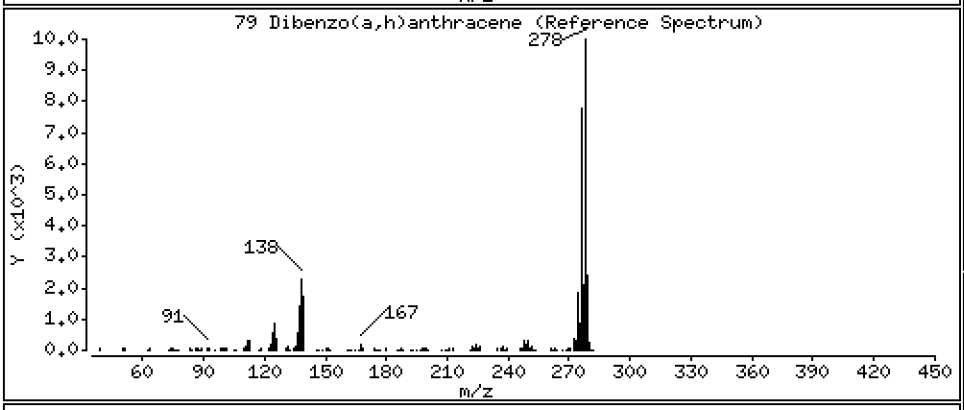
Column diameter: 0.25

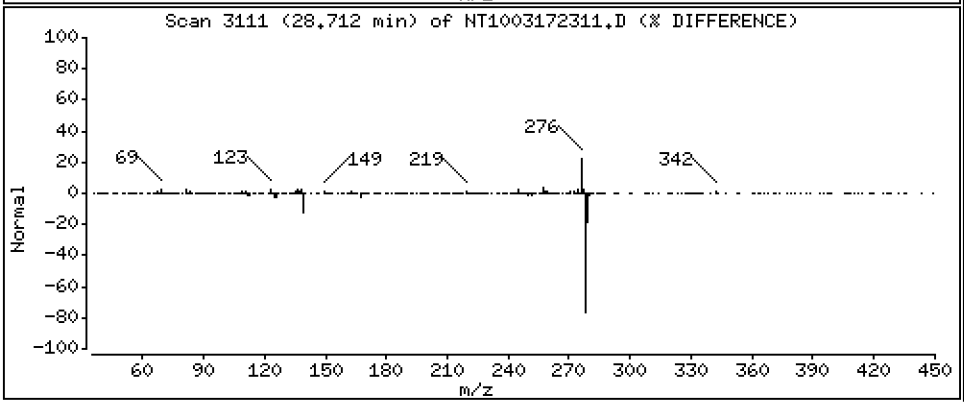
79 Dibenzo(a,h)anthracene

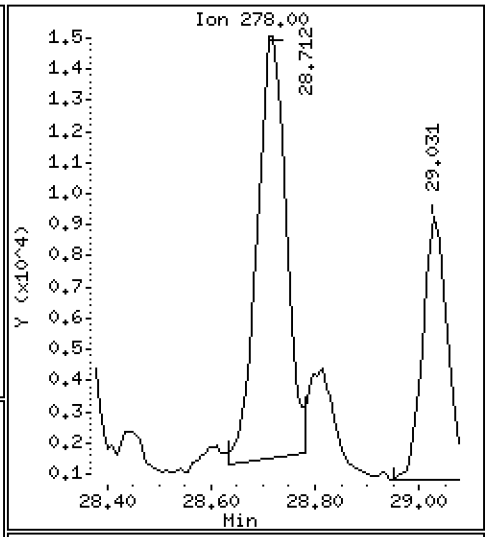
Concentration: 0.3131 ug/mL

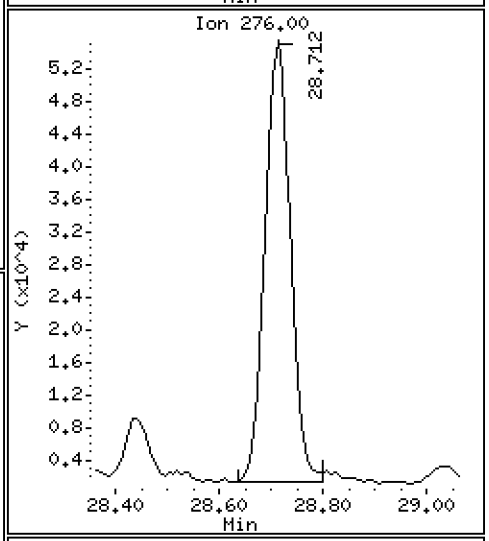


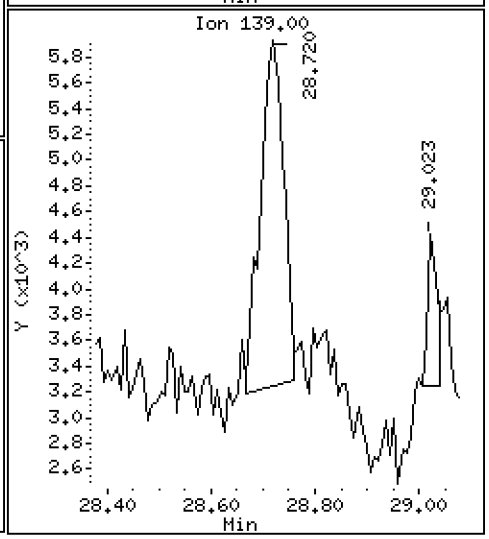












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

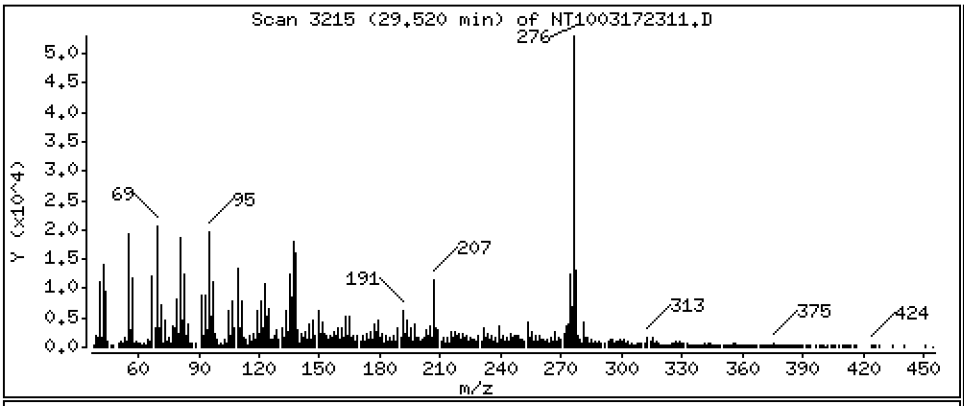
Operator: VTS

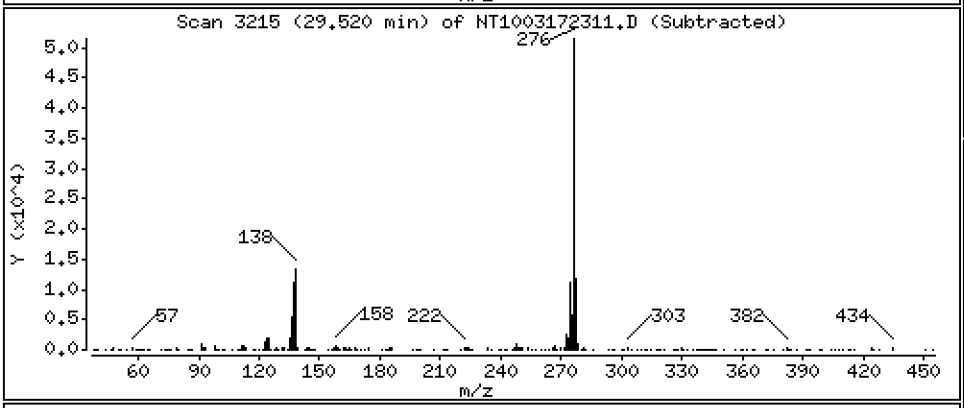
Column phase: ZB-5msi

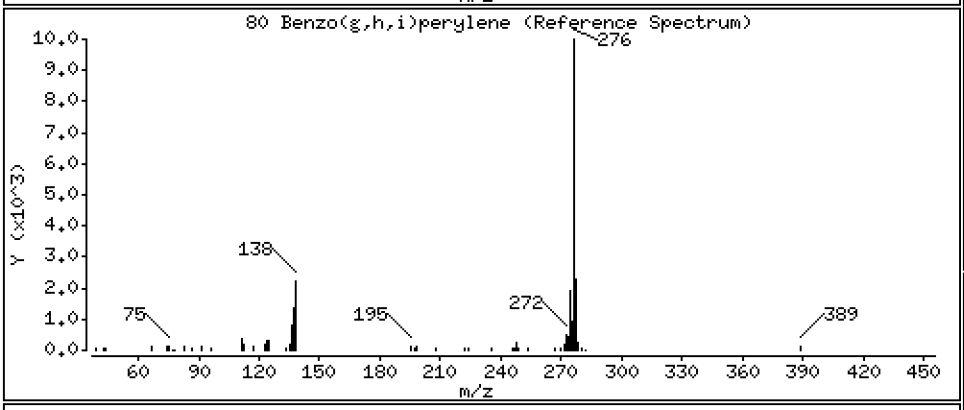
Column diameter: 0.25

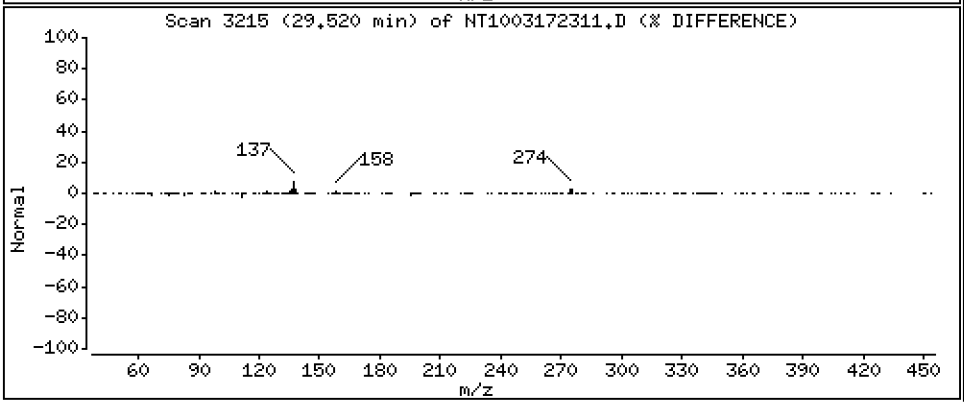
80 Benzo(g,h,i)perylene

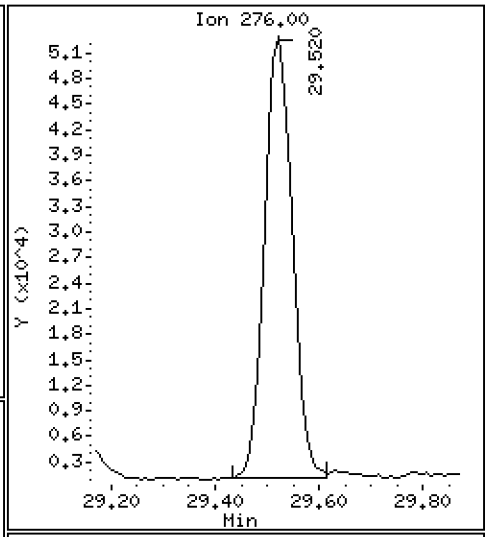
Concentration: 1.090 ug/mL

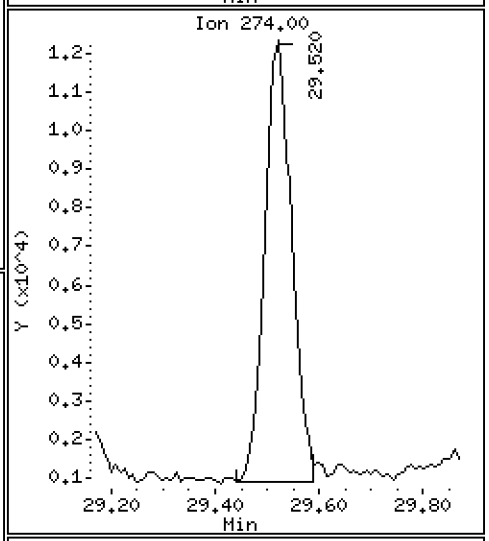


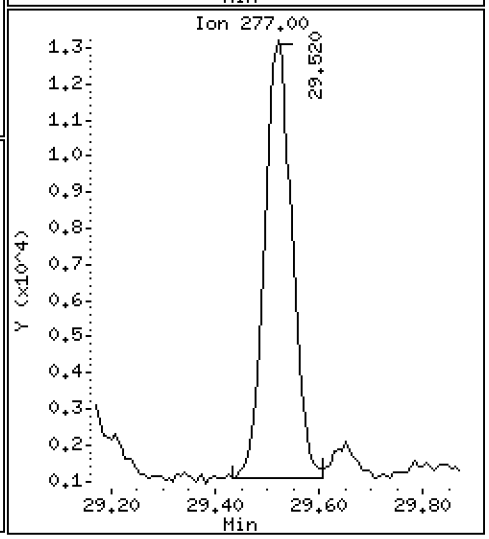












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

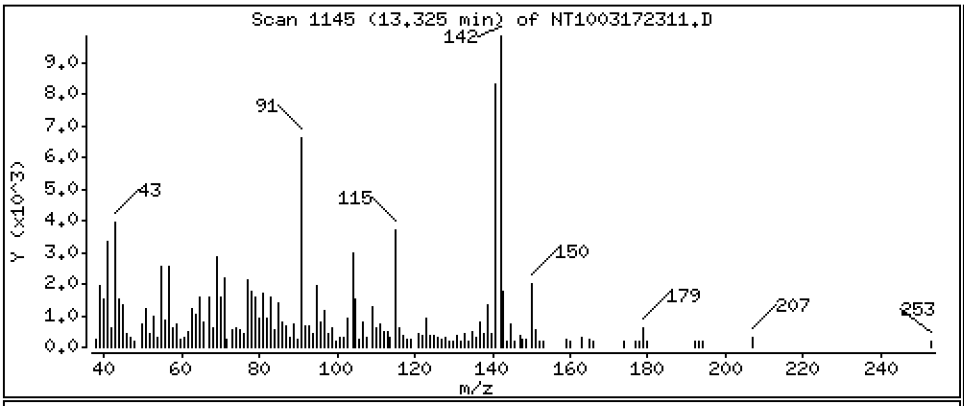
Operator: VTS

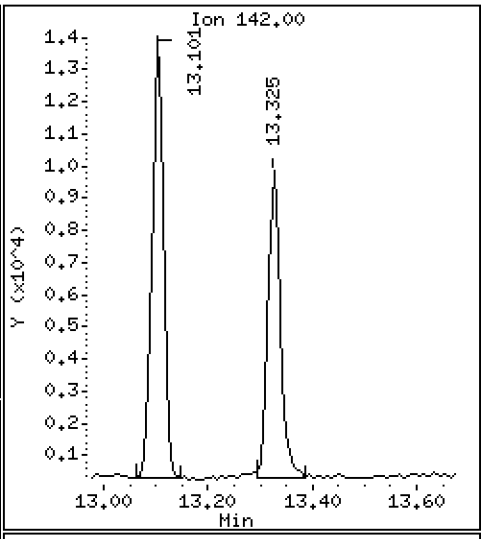
Column phase: ZB-5msi

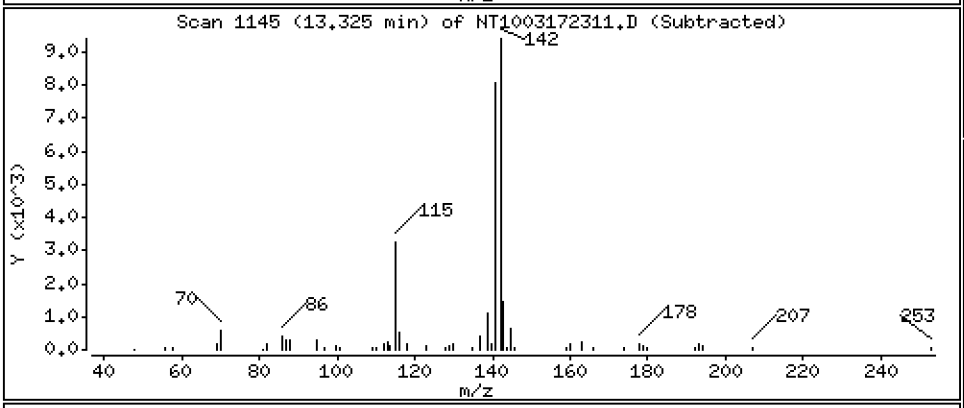
Column diameter: 0.25

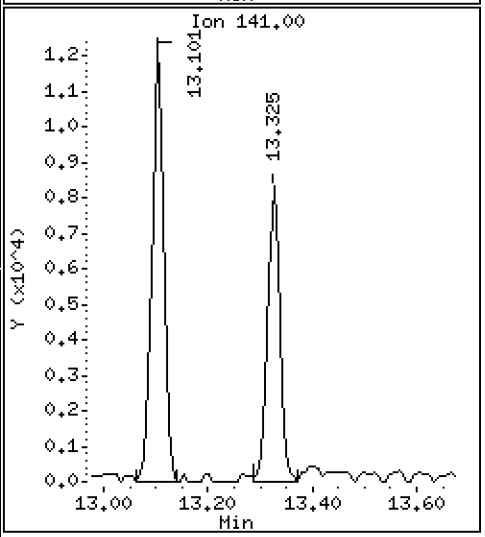
105 1-methylnaphthalene

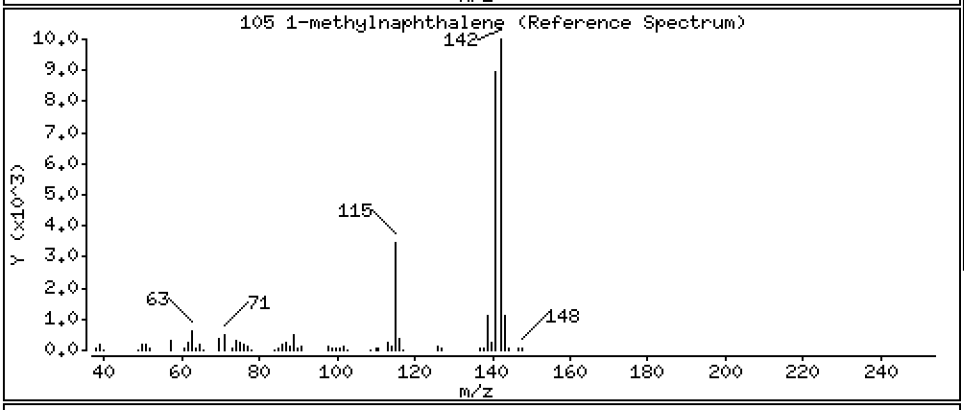
Concentration: 0.1336 ug/mL

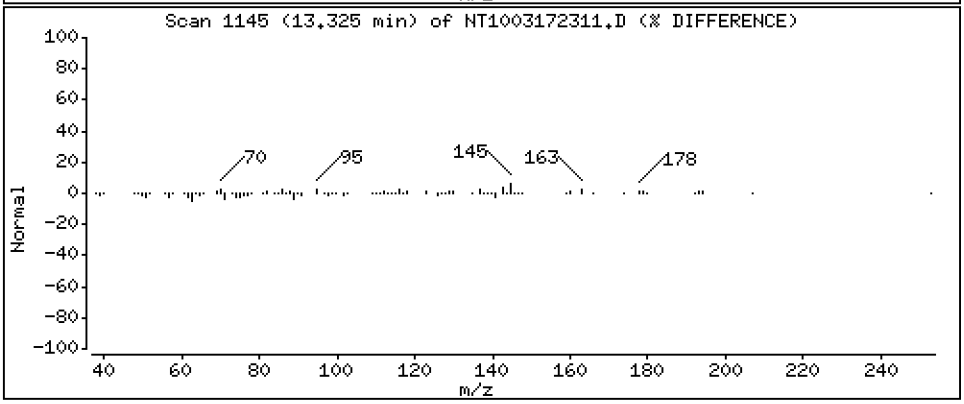












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

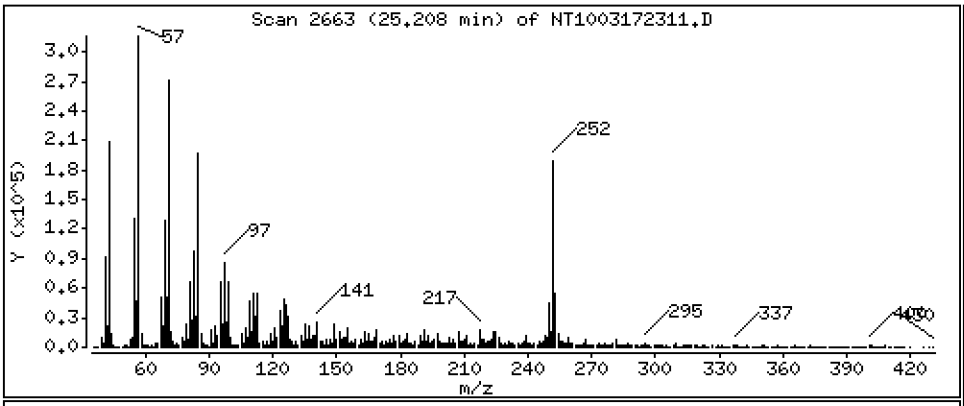
Operator: VTS

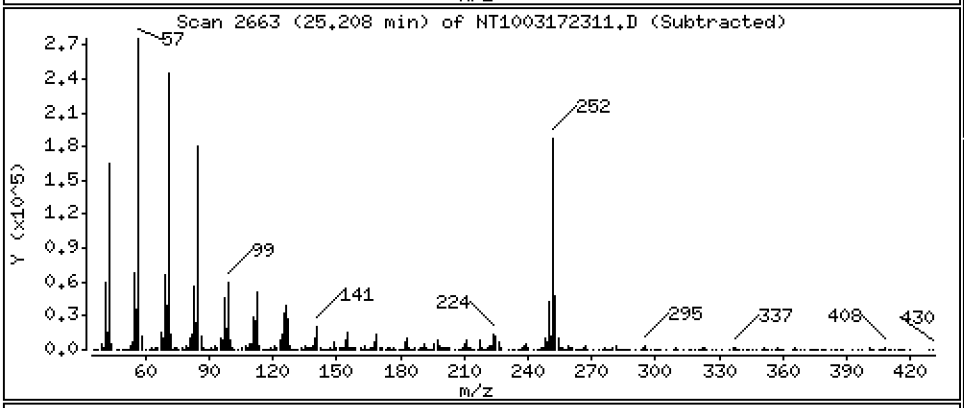
Column phase: ZB-5msi

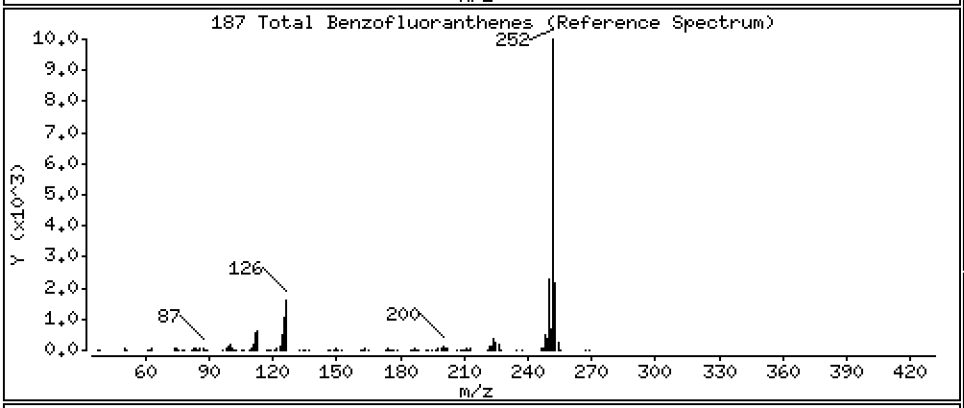
Column diameter: 0.25

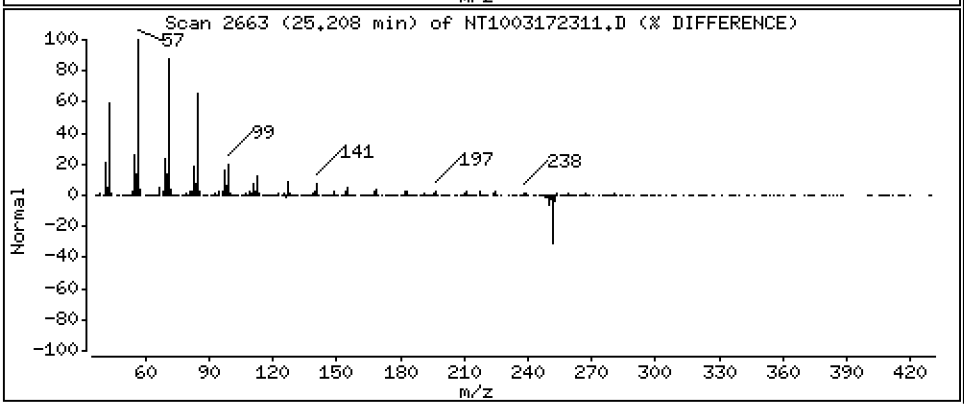
187 Total Benzofluoranthenes

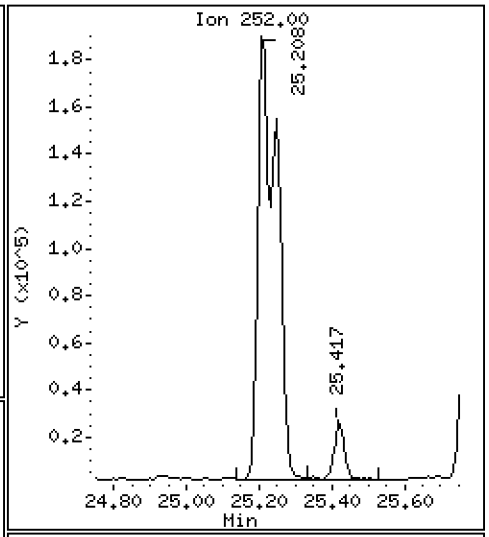
Concentration: 3.941 ug/mL

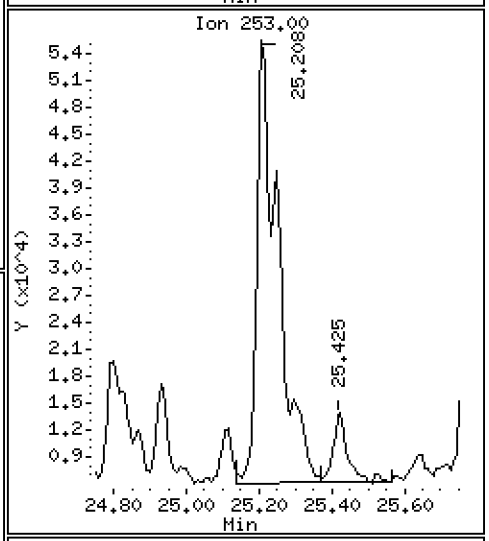


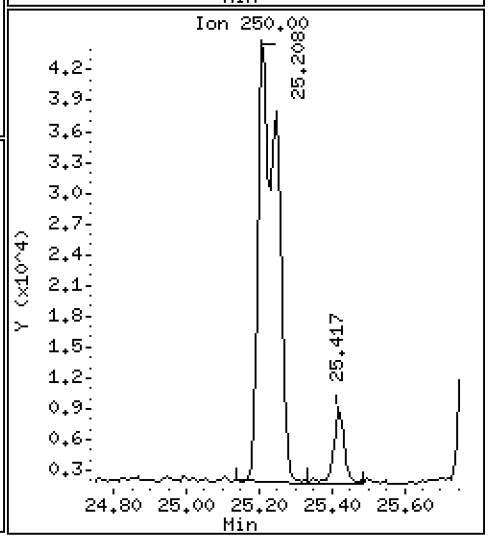












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230317.b\NT1003172311.D
Lab Smp Id: 23A0420-07
Inj Date : 18-MAR-2023 00:47
Operator : VTS Inst ID: nt10.i
Smp Info : 23A0420-07
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230317.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

								CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.983	6.975	(0.759)	123652	2.33204	2.332
$	2 Phenol-d5	99	8.551	8.543	(0.929)	212050	3.04852	3.049
	3 Phenol	94	8.567	8.566	(0.931)	143702	1.98807	1.988
$	5 2-Chlorophenol-d4	132	8.837	8.837	(0.960)	274858	4.62740	4.627
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	9.201	9.200	(1.000)	175334	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.558	9.557	(1.039)	130236	3.05311	3.053
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	9.465	9.464	(1.029)	18724	0.55189	0.5519
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	9.682	9.682	(1.052)	1719	0.03262	0.03262(M)
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.946	9.946	(1.081)	51118	0.92074	0.9207
$	18 Nitrobenzene-d5	82	10.287	10.287	(0.881)	216525	3.34475	3.345
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	10.990	10.989	(0.941)	1560	0.02673	0.02673
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	11.091	11.175	(0.950)	32301	0.99496	0.9950(M)
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.677	11.676	(1.000)	641354	4.00000	
	28 Naphthalene	128	11.716	11.715	(1.003)	39631	0.23326	0.2333
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	13.100	13.099	(1.122)	20832	0.16990	0.1699
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

		QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36	2-Fluorobiphenyl	172	13.882	13.881	(0.909)	528390	3.93281	3.933
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	Compound Not Detected.					
39	Dimethylphthalate	163	14.780	14.787	(0.968)	8146	0.07383	0.07383
40	Acenaphthylene	152	14.966	14.965	(0.980)	21708	0.12806	0.1281
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	15.275	15.282	(1.000)	339645	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	15.345	15.344	(1.005)	12883	0.12302	0.1230
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.662	15.676	(1.025)	28073	0.18178	0.1818
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	16.226	16.240	(1.062)	15011	0.13866	0.1387
49	Fluorene	166	16.380	16.387	(1.072)	25180	0.20725	0.2072
51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55	2,4,6-Tribromophenol	330	16.913	16.919	(1.107)	107768	6.80433	6.804
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	18.311	18.310	(1.000)	650888	4.00000	
60	Phenanthrene	178	18.358	18.357	(1.003)	165030	0.92984	0.9298
61	Anthracene	178	18.443	18.457	(1.007)	91082	0.53498	0.5350
62	Carbazole	167	18.776	18.782	(1.025)	21939	0.14380	0.1438
63	Di-n-butylphthalate	149	19.565	19.572	(1.068)	12554	0.06119	0.06119
64	Fluoranthene	202	20.749	20.732	(0.889)	628586	3.13500	3.135
65	Pyrene	202	21.174	21.158	(0.907)	657460	3.19647	3.196
$ 66	Terphenyl-d14	244	21.445	21.436	(0.918)	643900	4.16861	4.169
67	Butylbenzylphthalate	149	22.351	22.358	(0.957)	13554	0.18765	0.1877
68	Benzo(a)anthracene	228	23.319	23.310	(0.999)	242460	1.37659	1.377
* 69	Chrysene-d12	240	23.350	23.341	(1.000)	498997	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	23.388	23.380	(1.002)	312886	1.81830	1.818
72	bis(2-Ethylhexyl)phthalate	149	23.365	23.380	(0.959)	99970	0.77091	0.7709
* 134	Di-n-octylphthalate-d4	153	24.356	24.363	(1.000)	886315	4.00000	
73	Di-n-octylphthalate	149	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	25.208	25.207	(0.970)	409929	2.29766	2.298
75	Benzo(k)fluoranthene	252	25.246	25.253	(0.971)	320811	1.77085	1.771
76	Benzo(a)pyrene	252	25.881	25.873	(0.996)	259575	1.62733	1.627
* 77	Perylene-d12	264	25.998	25.997	(1.000)	550397	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	28.712	28.711	(1.104)	180617	0.89002	0.8900
79	Dibenzo(a,h)anthracene	278	28.712	28.726	(1.104)	52752	0.31310	0.3131
80	Benzo(g,h,i)perylene	276	29.520	29.519	(1.135)	191422	1.08996	1.090
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	13.325	13.324	(1.141)	15014	0.13365	0.1336
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.208	25.253	(0.970)	678807	3.94058	3.941
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172311.D
Lab Smp Id: 23A0420-07
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230317.b\ABN.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:02
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	132765	66383	265530	175334	32.06
27 Naphthalene-d8	497947	248974	995894	641354	28.80
42 Acenaphthene-d10	271928	135964	543856	339645	24.90
59 Phenanthrene-d10	497390	248695	994780	650888	30.86
69 Chrysene-d12	391403	195702	782806	498997	27.49
134 Di-n-octylphthala	674651	337326	1349302	886315	31.37
77 Perylene-d12	408663	204332	817326	550397	34.68

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.20	8.70	9.70	9.20	0.00
27 Naphthalene-d8	11.68	11.18	12.18	11.68	0.01
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	-0.04
59 Phenanthrene-d10	18.31	17.81	18.81	18.31	0.01
69 Chrysene-d12	23.34	22.84	23.84	23.35	0.04
134 Di-n-octylphthala	24.36	23.86	24.86	24.36	-0.03
77 Perylene-d12	26.00	25.50	26.50	26.00	0.00

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

REVIEW SUMMARY FOR FILE - NT1003172311.D

Lab ID: 23A0420-07
nt10.i, 20230317.b\ABN.m,   18-MAR-2023 00:47

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

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.950	0.957	-0.0073	Benzoic acid

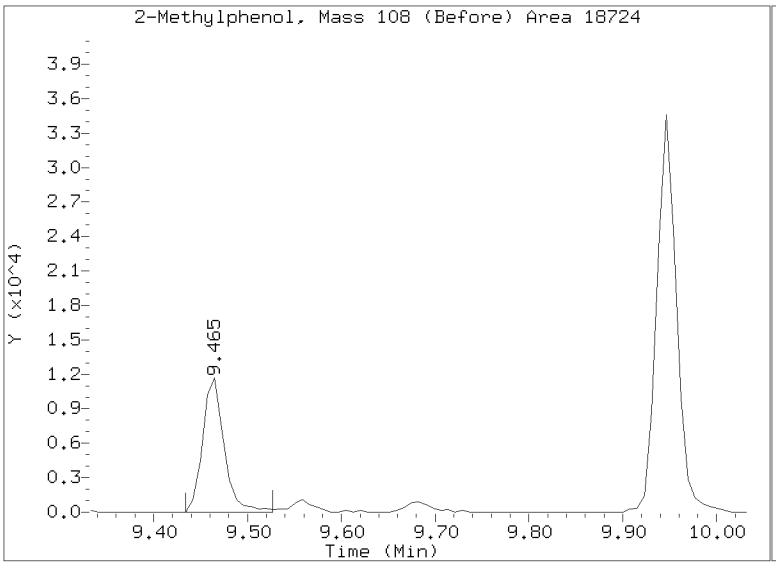
RRT check based on Ccal File: NT1003172302.D

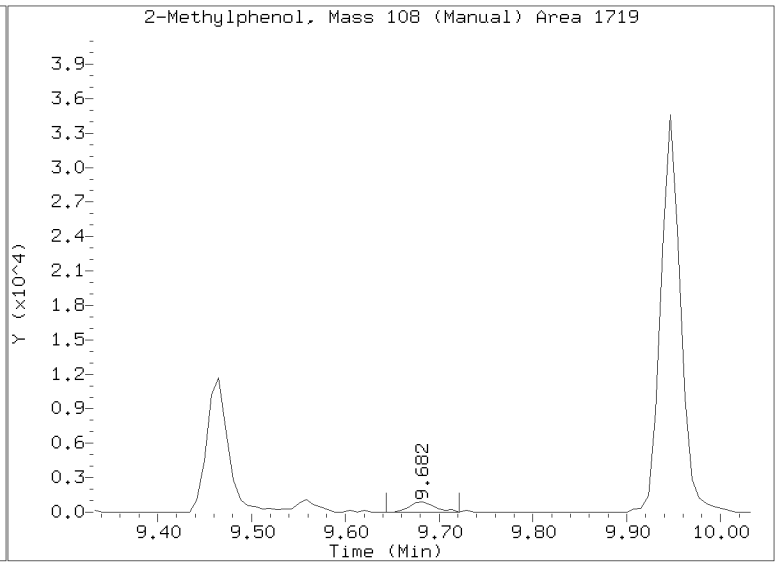
On Column LOD for nt10.i, 20230317.b\ABN.m, ICAL.sub = 0.0000

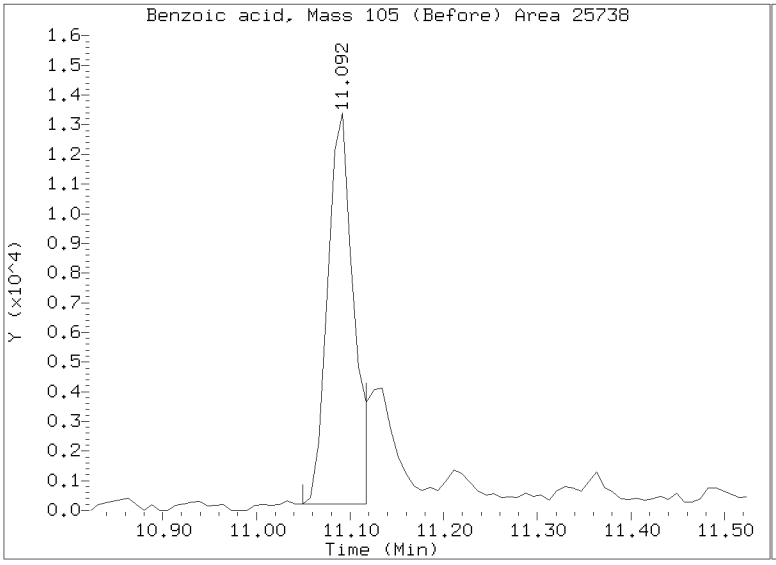
* Only compounds listed in the work order have been verified by the analyst *

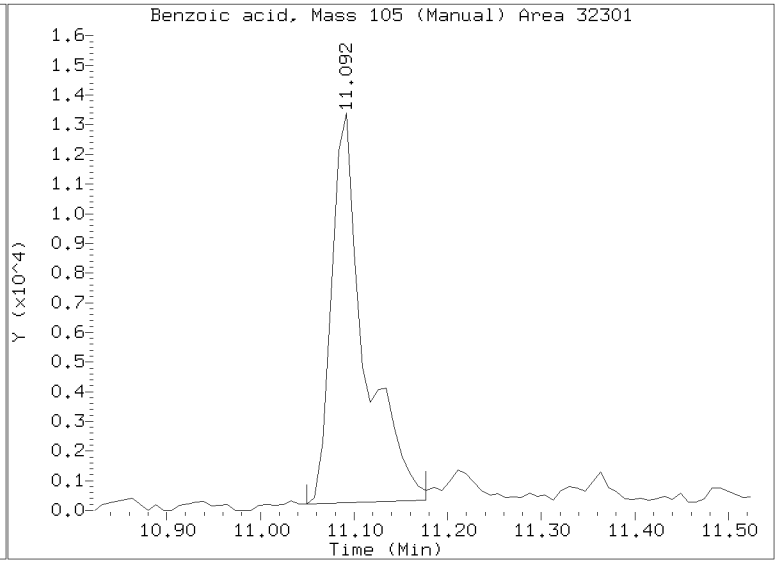
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230317.b/NT1003172311.D
Injection Date: 18-MAR-2023 00:47
Lab ID:23A0420-07 Client ID:
Report Date: 03/30/2023 07:22









Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1004

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-08 A	SDG:	23A0420
Sampled:	01/19/23 11:55	Prepared:	02/20/23 16:23	File ID:	NT1003172312.D
% Solids:	59.89	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/18/23 01:25
Batch:	BLB0495	Sequence:	SLC0473	Initial/Final:	16.73 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00046
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	86.5		4.4	20.0
106-44-5	4-Methylphenol	1	91.9		7.4	20.0
91-20-3	Naphthalene	1	14.7	J, B	4.2	20.0
91-57-6	2-Methylnaphthalene	1	11.3	J	4.5	20.0
208-96-8	Acenaphthylene	1	9.7	J	6.2	20.0
131-11-3	Dimethylphthalate	1	8.4	J	4.4	20.0
83-32-9	Acenaphthene	1	8.7	J	5.2	20.0
132-64-9	Dibenzofuran	1	20.0	U	14.1	20.0
86-73-7	Fluorene	1	20.0	U	14.5	20.0
85-01-8	Phenanthrene	1	97.0		8.7	20.0
120-12-7	Anthracene	1	36.1		7.2	20.0
206-44-0	Fluoranthene	1	224		6.1	20.0
129-00-0	Pyrene	1	265		5.7	20.0
85-68-7	Butylbenzylphthalate	1	43.5		9.4	20.0
56-55-3	Benzo(a)anthracene	1	98.8		5.9	20.0
218-01-9	Chrysene	1	150		6.0	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	83.8		5.4	49.9
	Benzofluoranthenes, Total	1	310		10.0	39.9
50-32-8	Benzo(a)pyrene	1	126		4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	69.4		14.6	20.0
53-70-3	Dibenzo(a,h)anthracene	1	24.8		17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	85.1		13.6	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	748.53	273	36.5	27 - 120	
Phenol-d5	748.53	340	45.4	29 - 120	
2-Chlorophenol-d4	748.53	495	66.1	31 - 120	
1,2-Dichlorobenzene-d4	499.02	319	63.9	32 - 120	
Nitrobenzene-d5	499.02	347	69.5	30 - 120	
2-Fluorobiphenyl	499.02	389	78.0	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1004

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

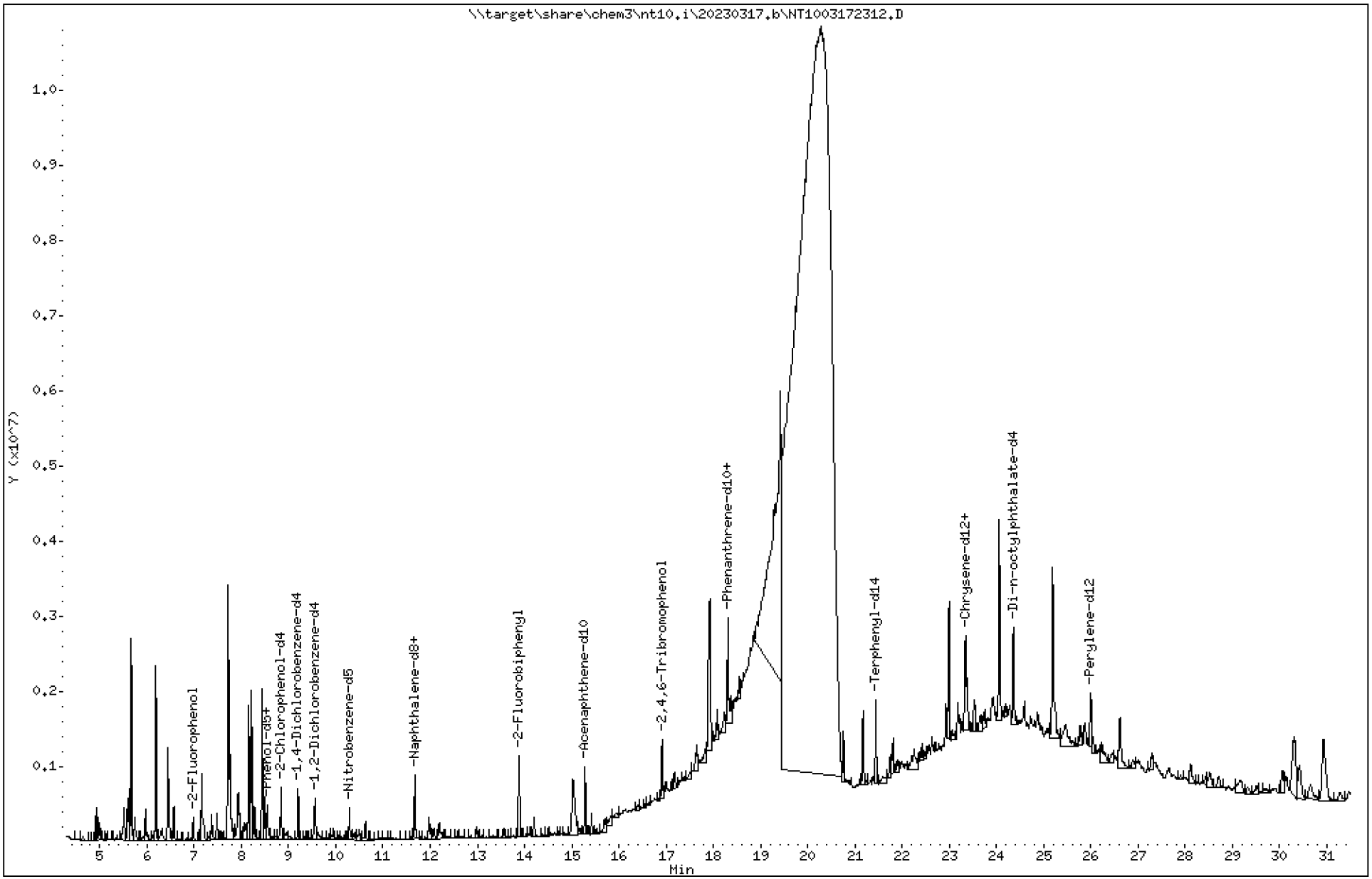
Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-08 A	SDG:	23A0420
Sampled:	01/19/23 11:55	Prepared:	02/20/23 16:23	File ID:	NT1003172312.D
% Solids:	59.89	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/18/23 01:25
Batch:	BLB0495	Sequence:	SLC0473	Initial/Final:	16.73 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00046
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	748.53	657	87.8	24 - 134	
p-Terphenyl-d14	499.02	419	83.9	37 - 120	

Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172312.D
Date : 18-MAR-2023 01:25
Client ID:
Sample Info: 23A0420-08

Instrument: nt10.i
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

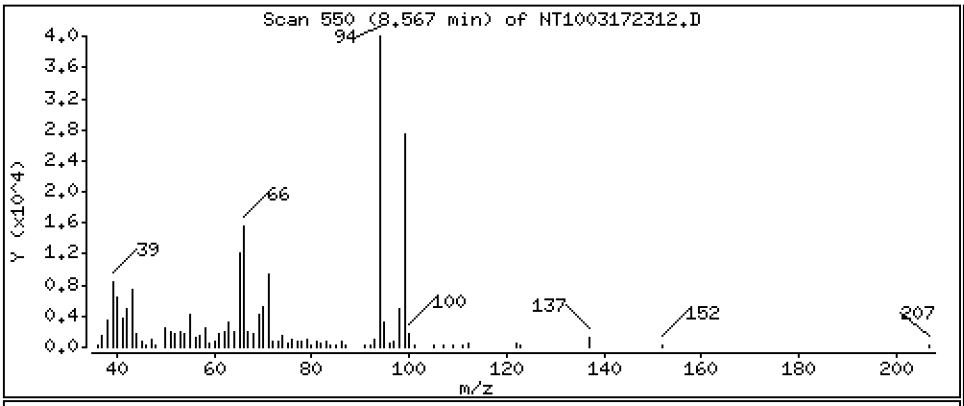
Operator: VTS

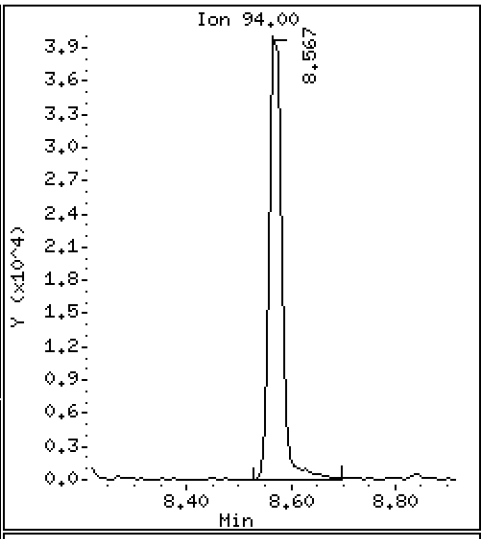
Column phase: ZB-5msi

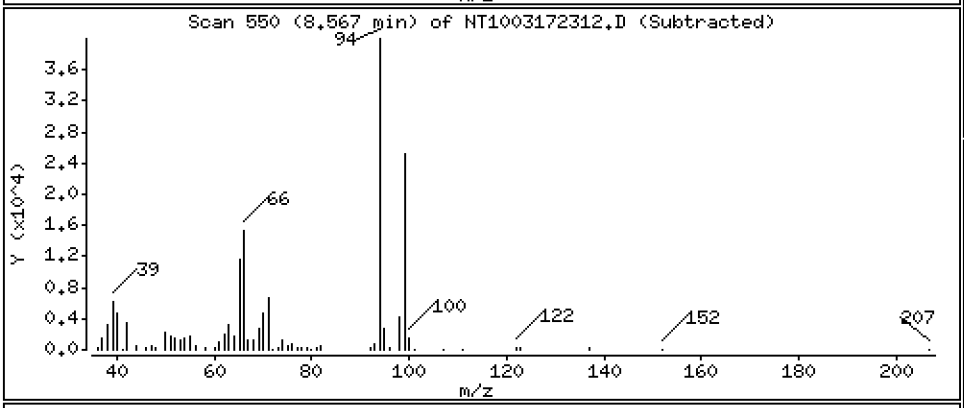
Column diameter: 0.25

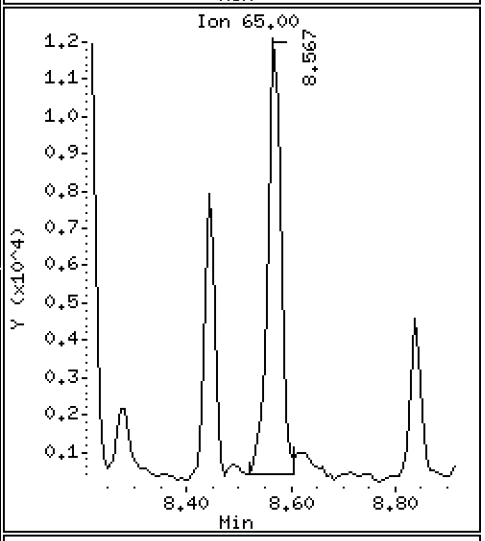
3 Phenol

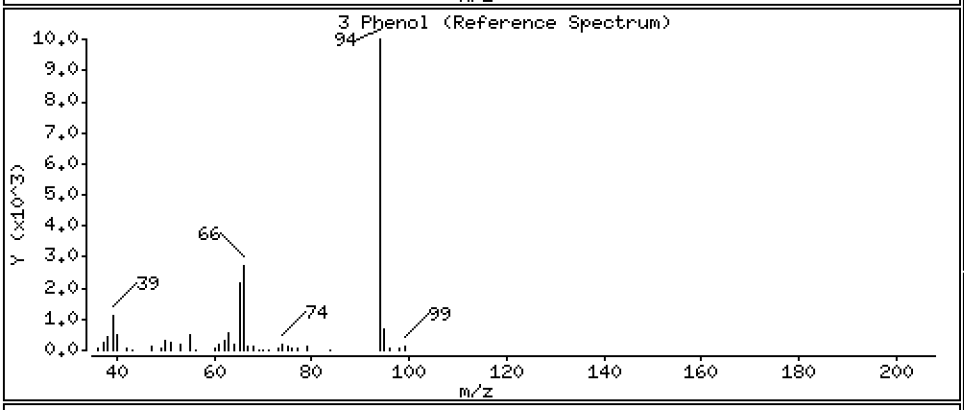
Concentration: 0.8672 ug/mL

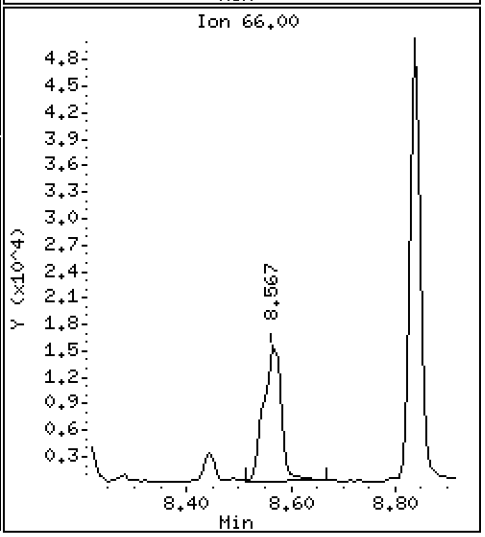


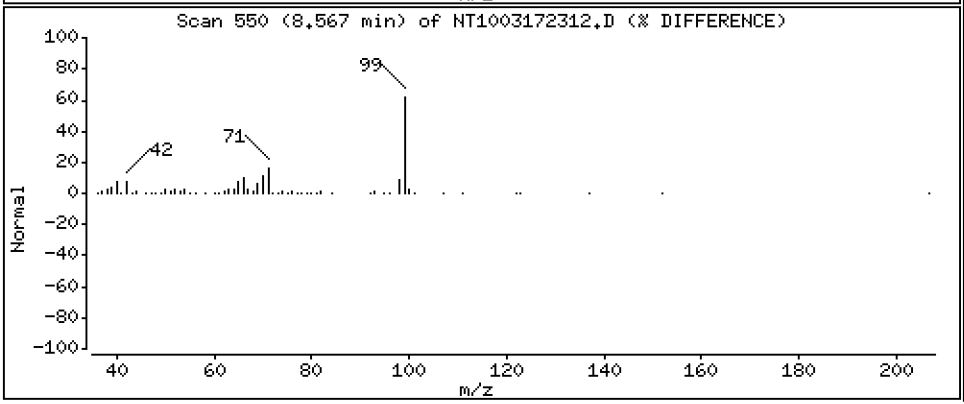












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

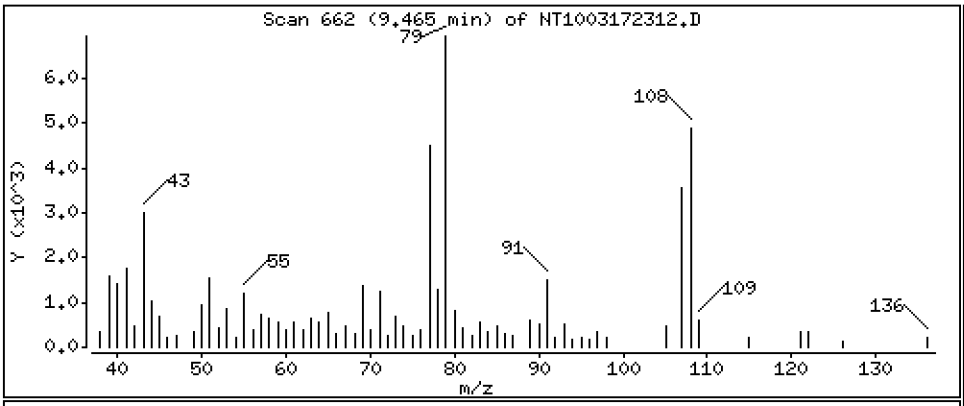
Operator: VTS

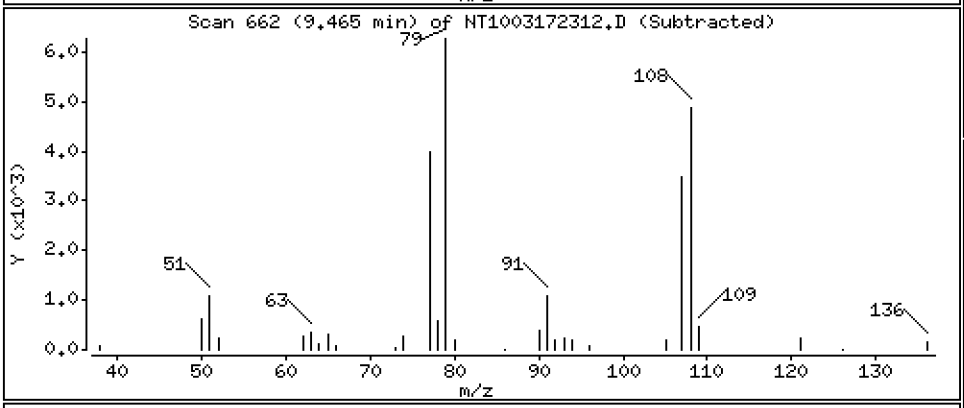
Column phase: ZB-5msi

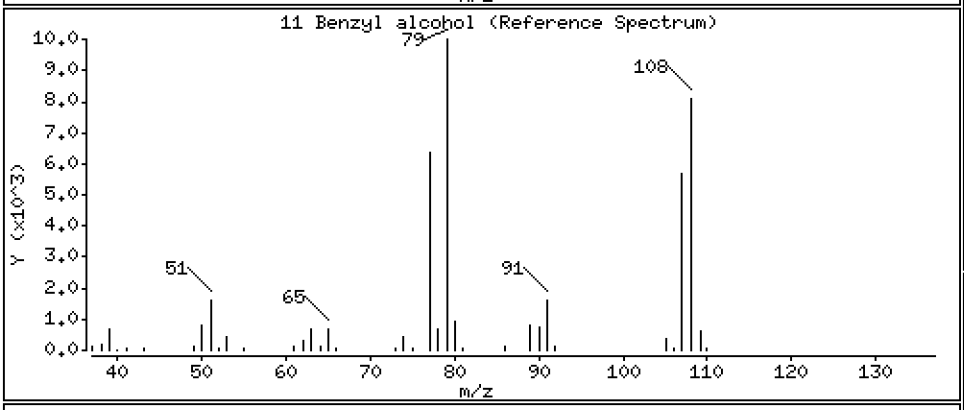
Column diameter: 0.25

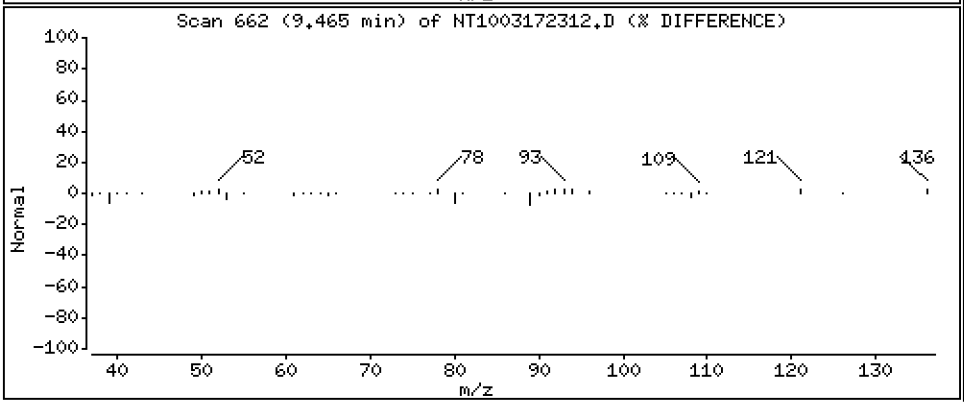
11 Benzyl alcohol

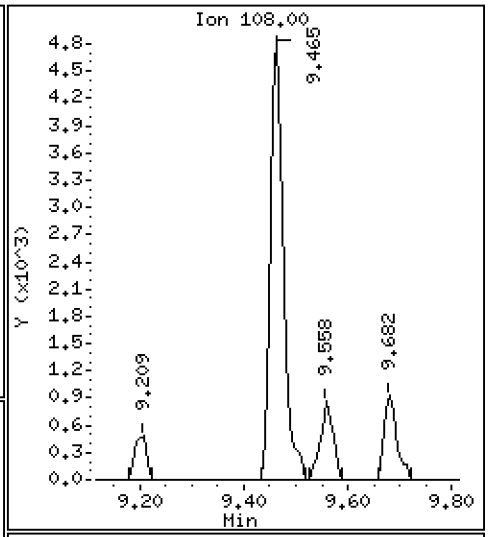
Concentration: 0.2306 ug/mL

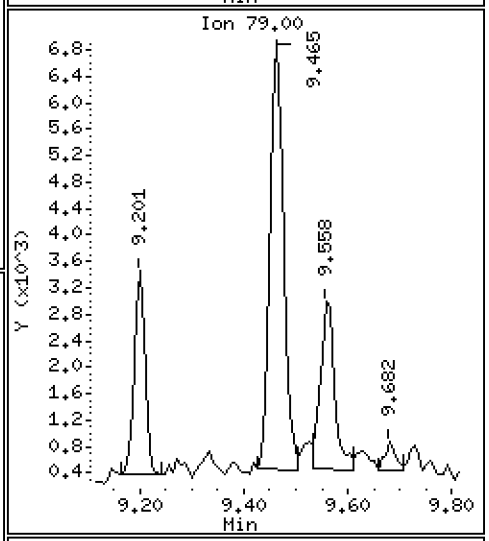


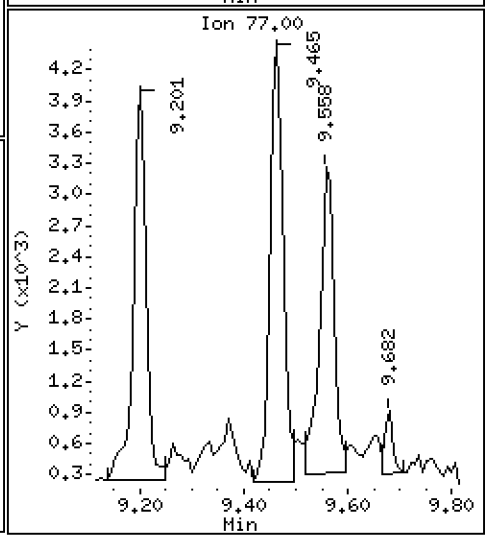












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

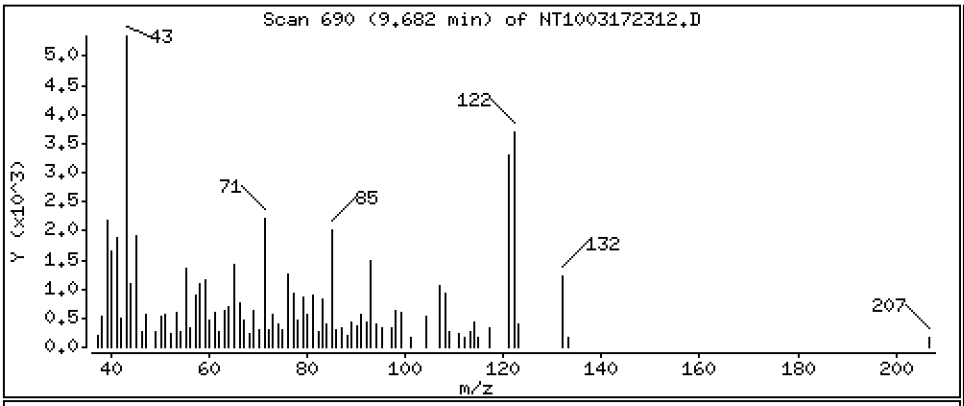
Operator: VTS

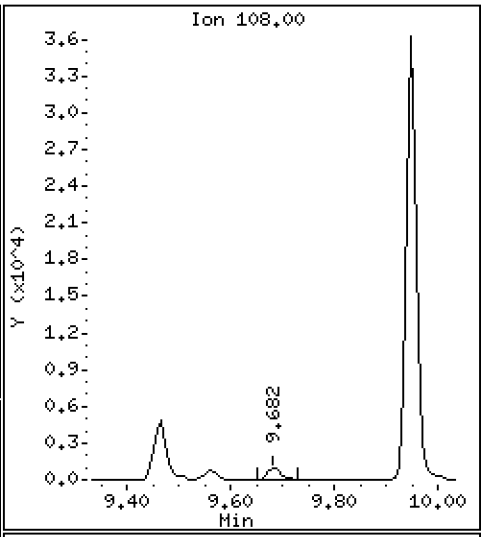
Column phase: ZB-5msi

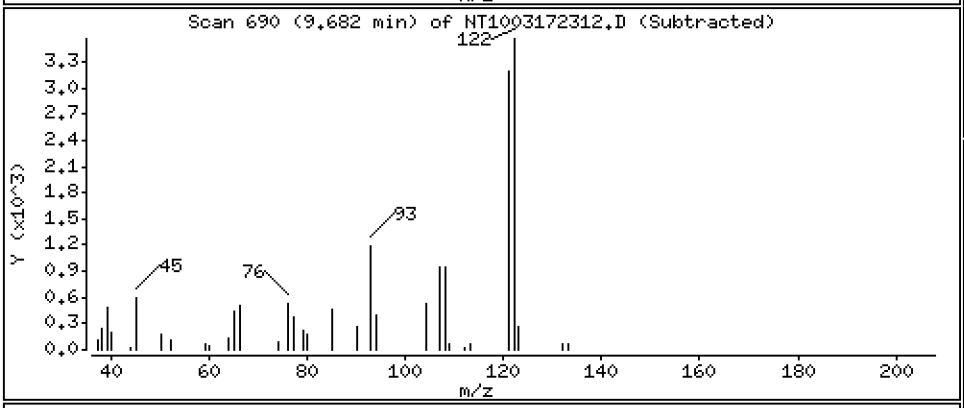
Column diameter: 0.25

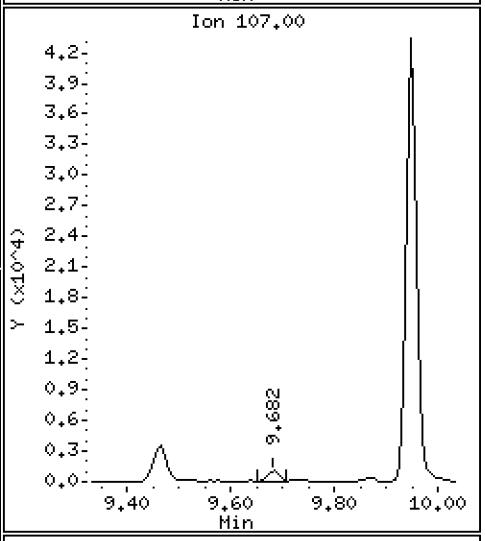
13 2-Methylphenol

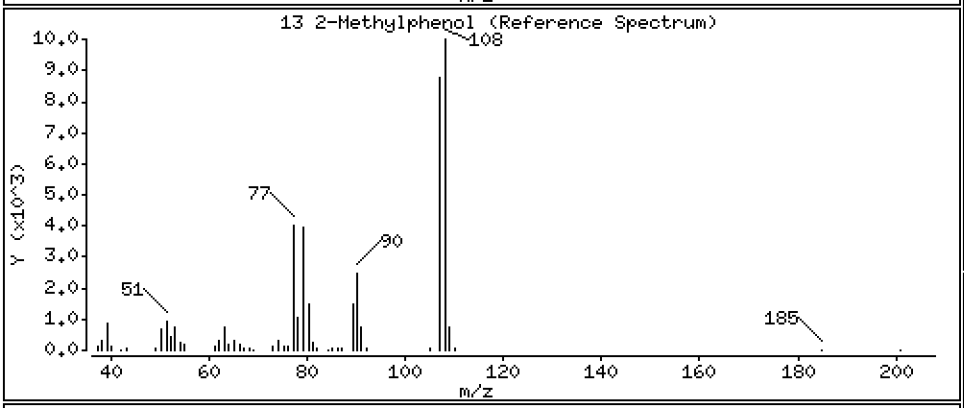
Concentration: 0.03048 ug/mL

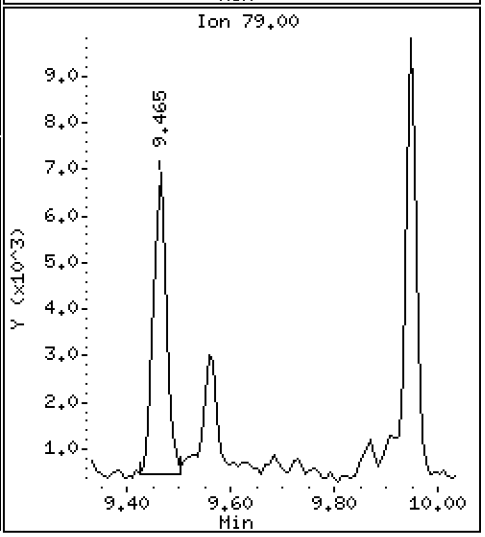


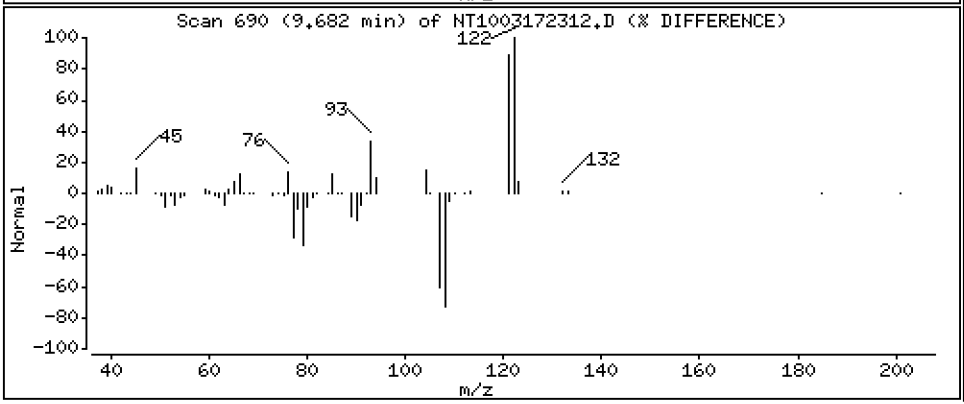












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

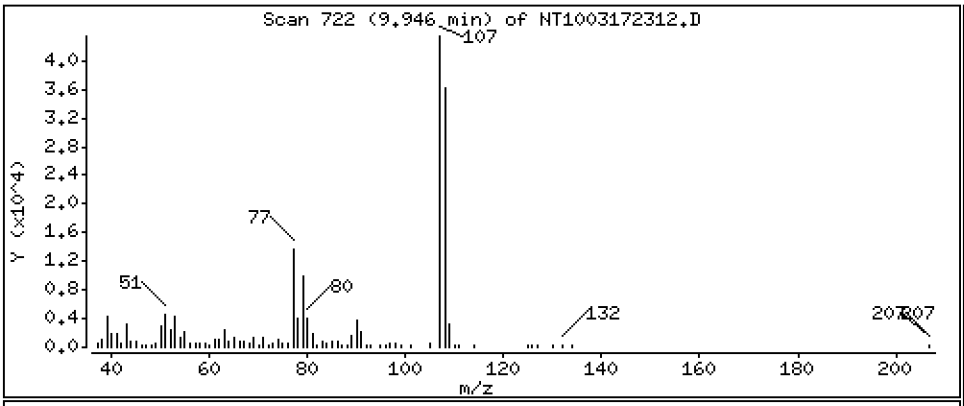
Operator: VTS

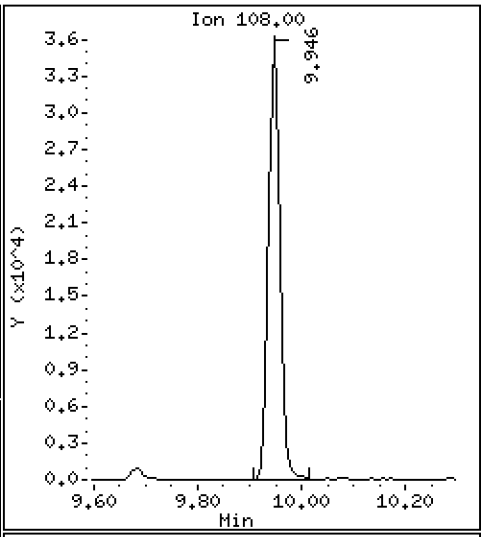
Column phase: ZB-5msi

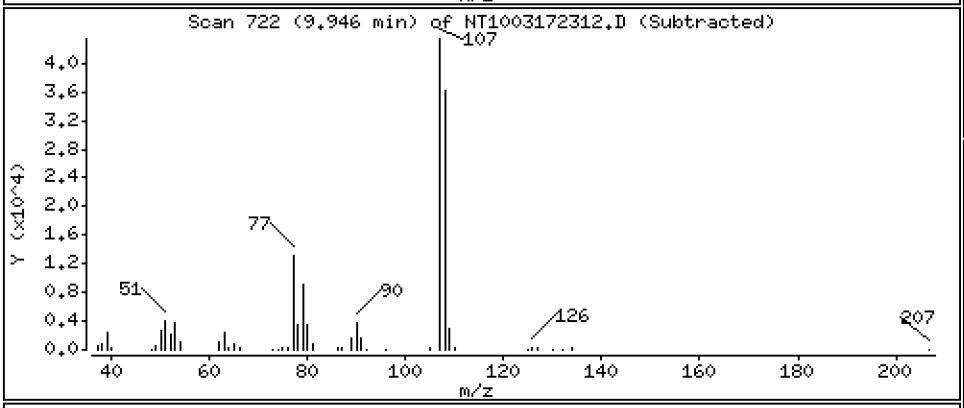
Column diameter: 0.25

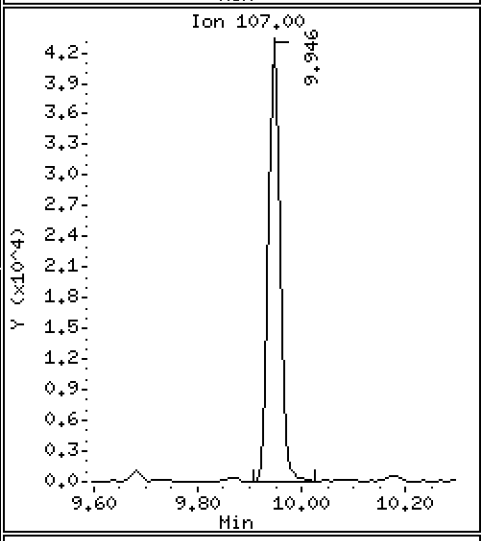
15 4-Methylphenol

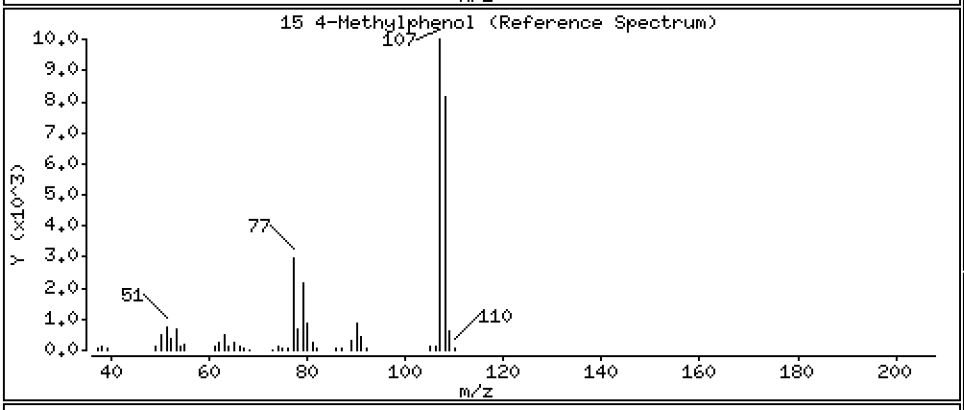
Concentration: 0.9209 ug/mL

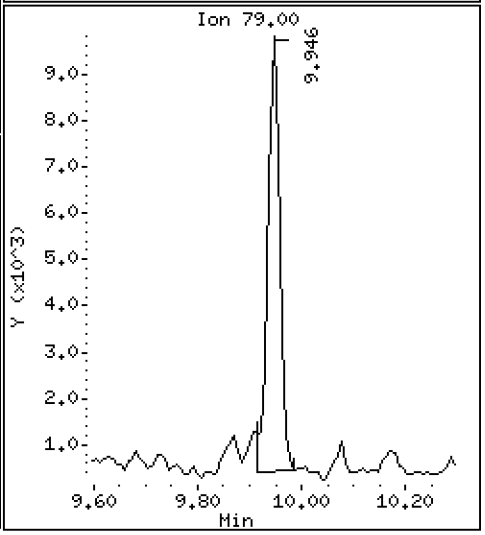


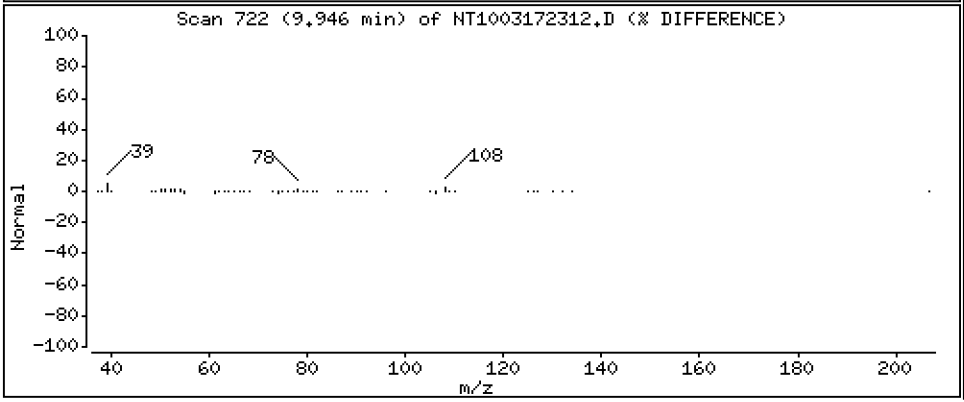












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

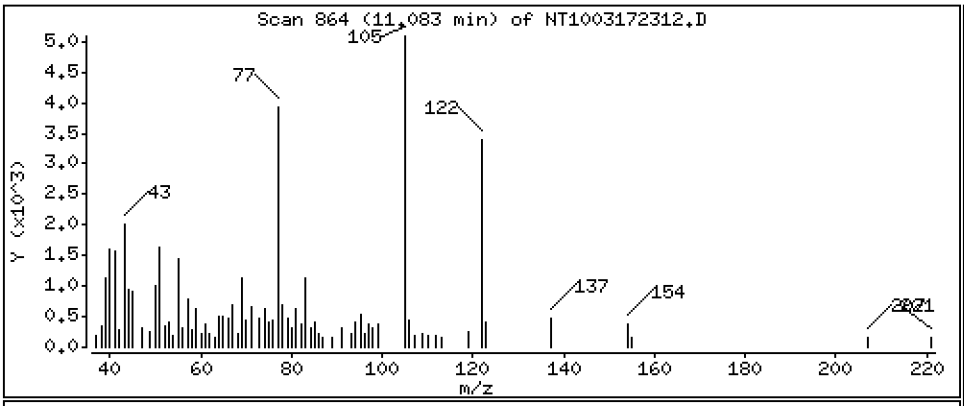
Operator: VTS

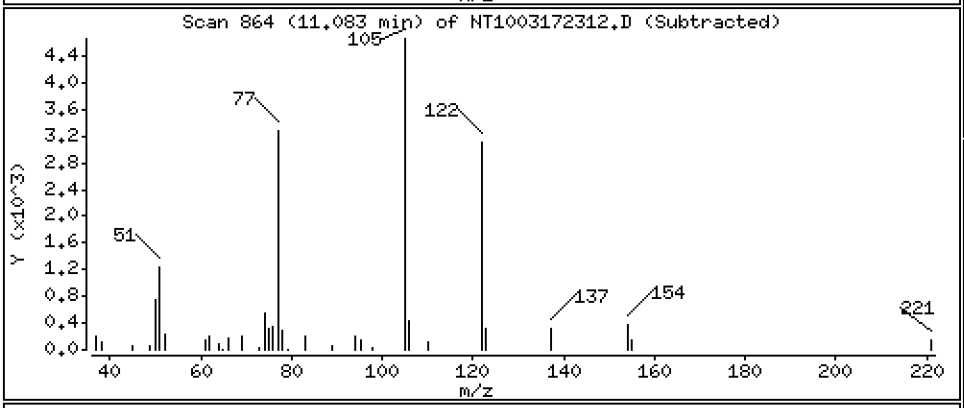
Column phase: ZB-5msi

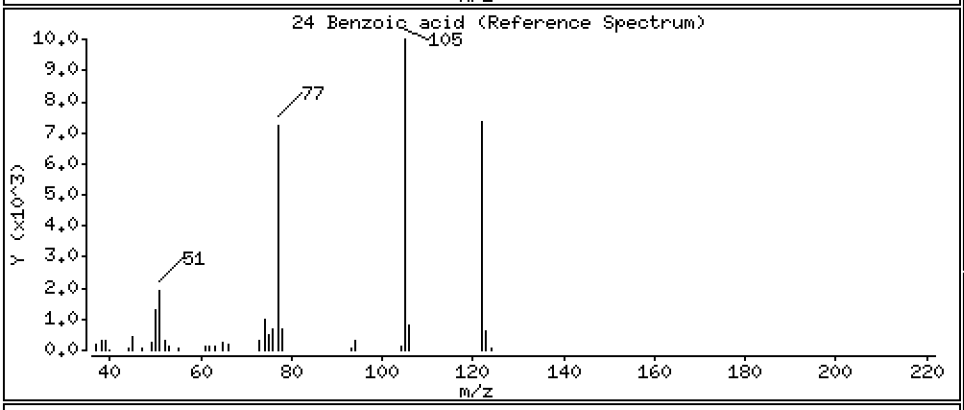
Column diameter: 0.25

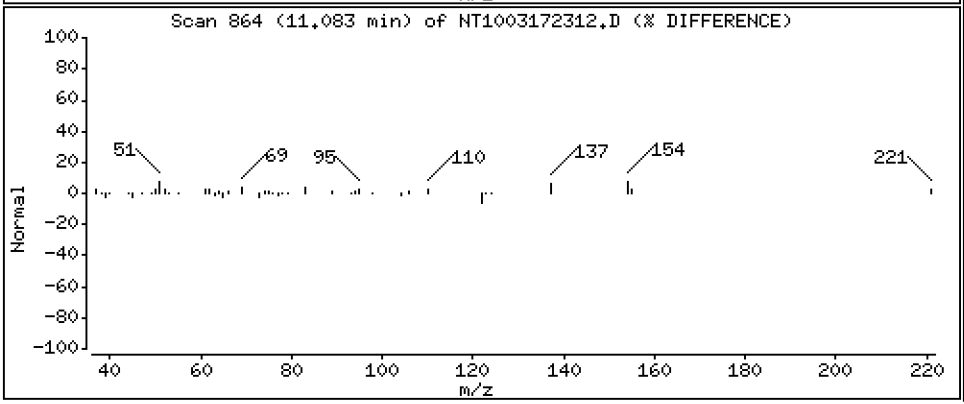
24 Benzoic acid

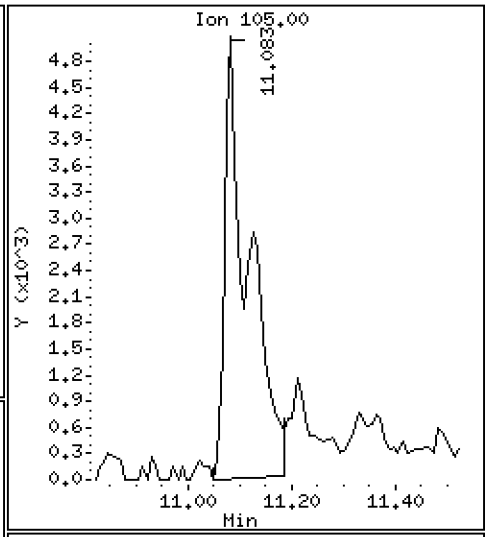
Concentration: 0.4997 ug/mL

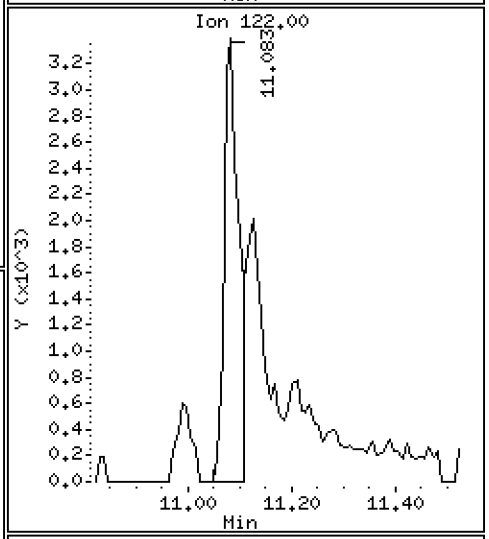


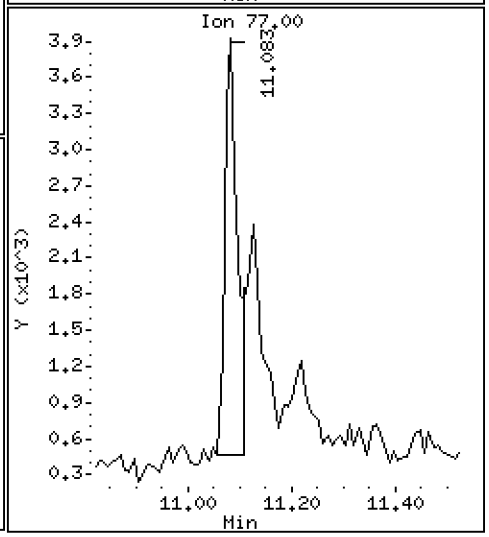












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172312.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

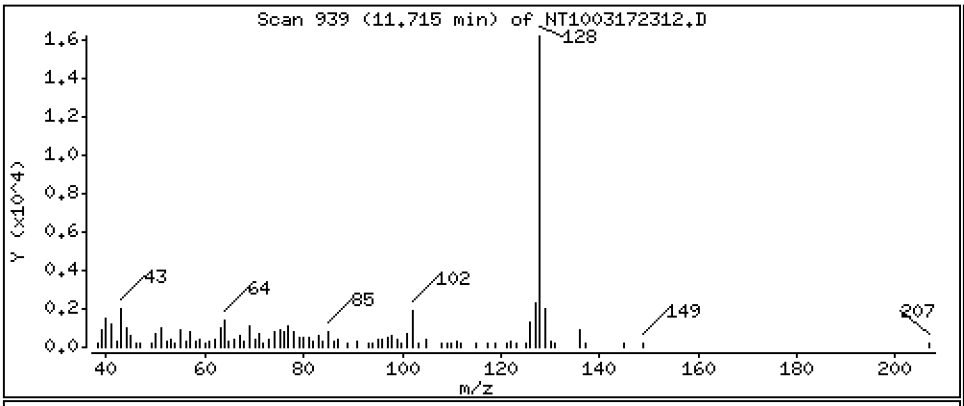
Operator: VTS

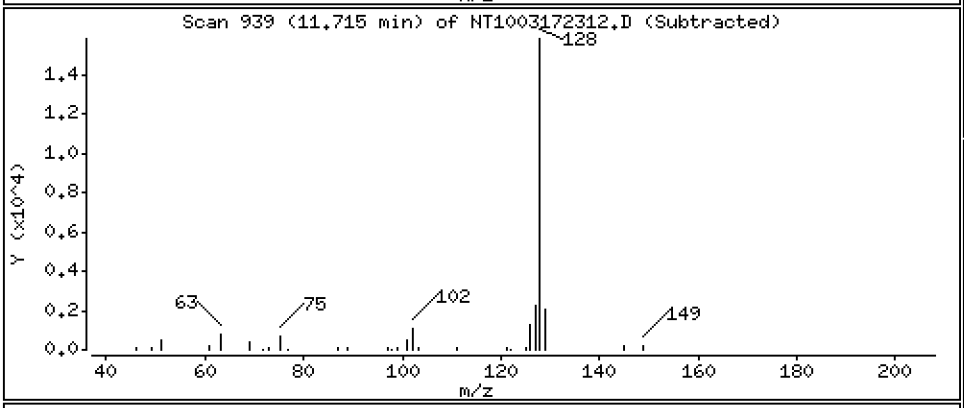
Column phase: ZB-5msi

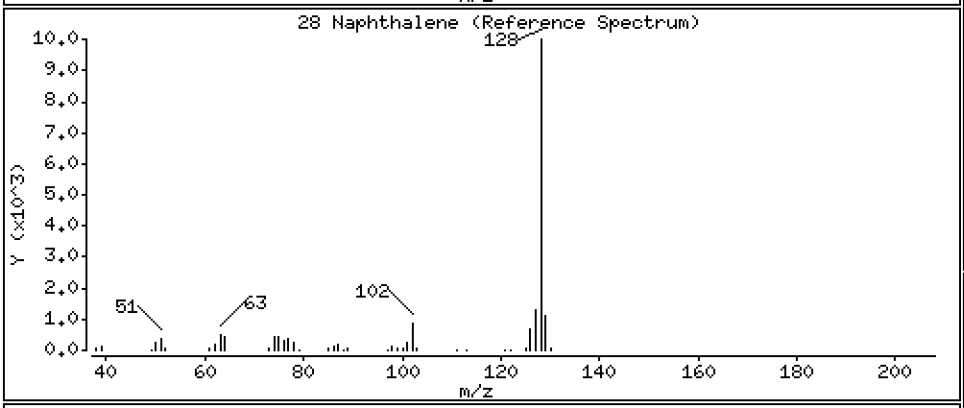
Column diameter: 0.25

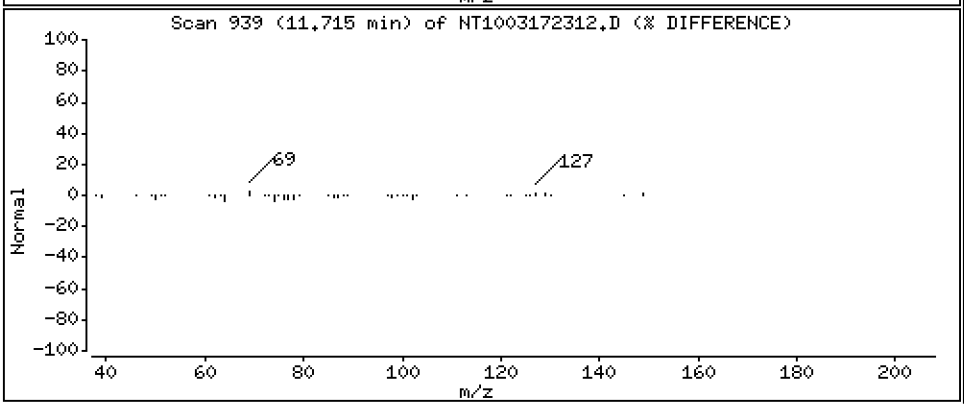
28 Naphthalene

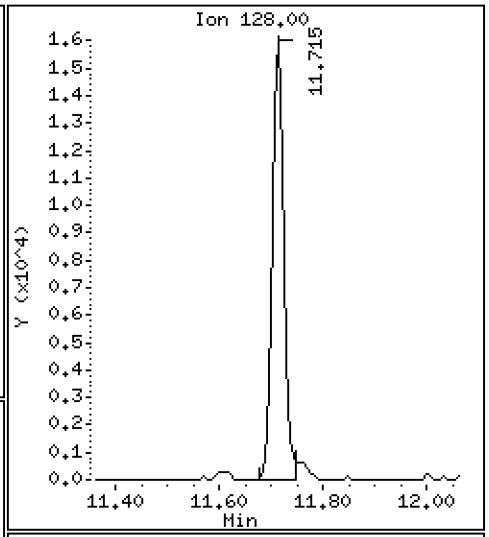
Concentration: 0.1474 ug/mL

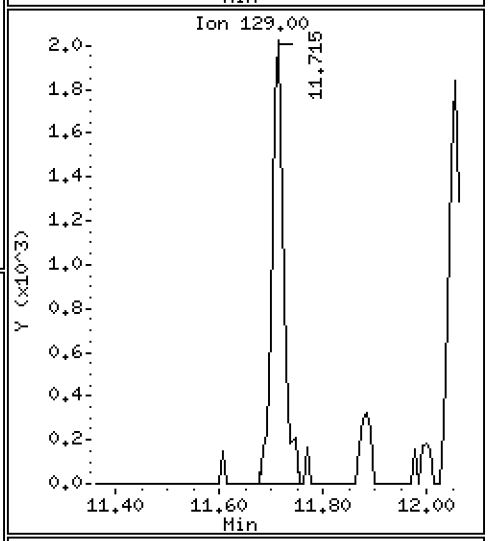


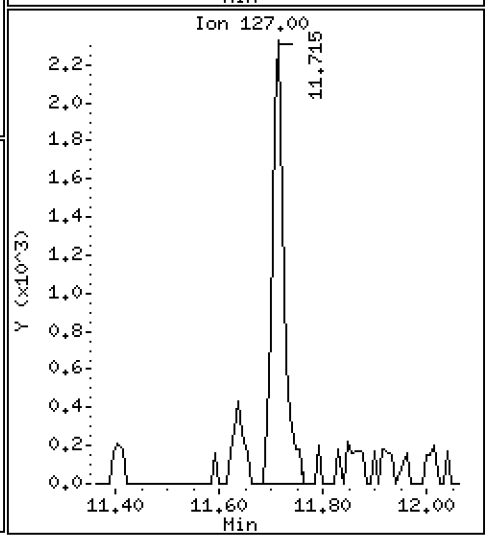












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

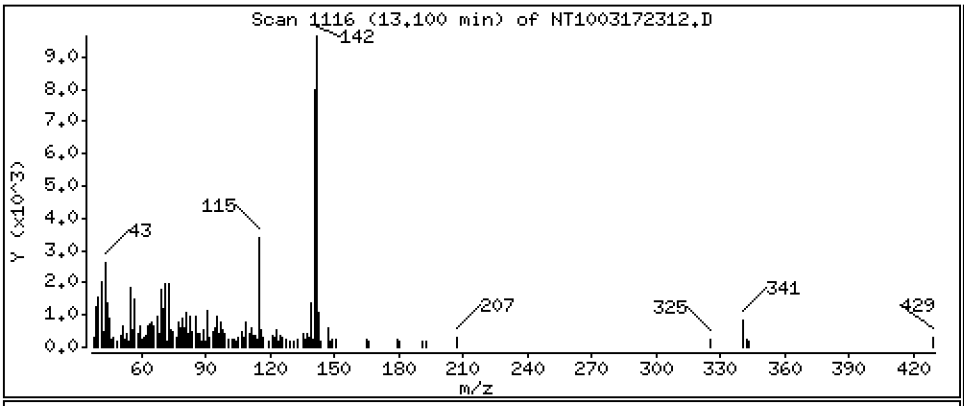
Operator: VTS

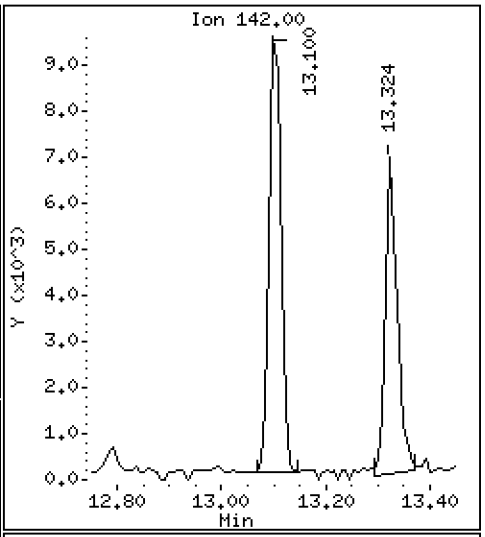
Column phase: ZB-5msi

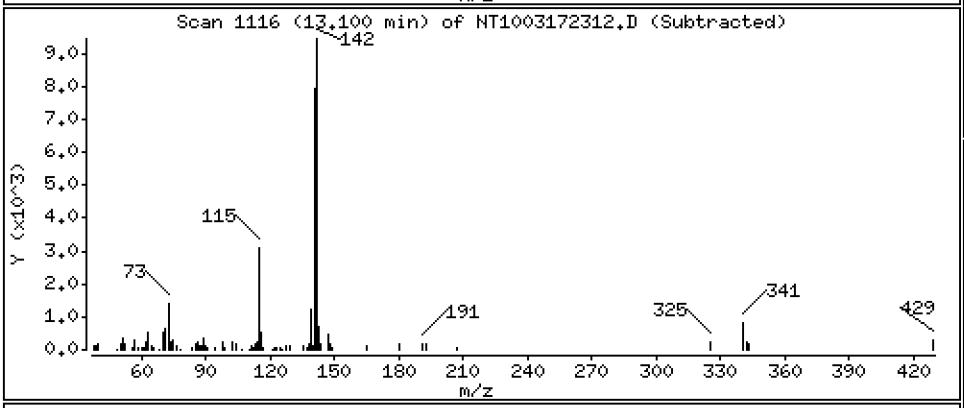
Column diameter: 0.25

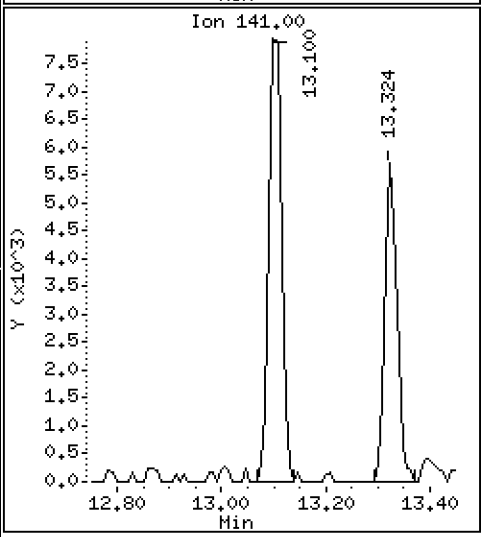
32 2-Methylnaphthalene

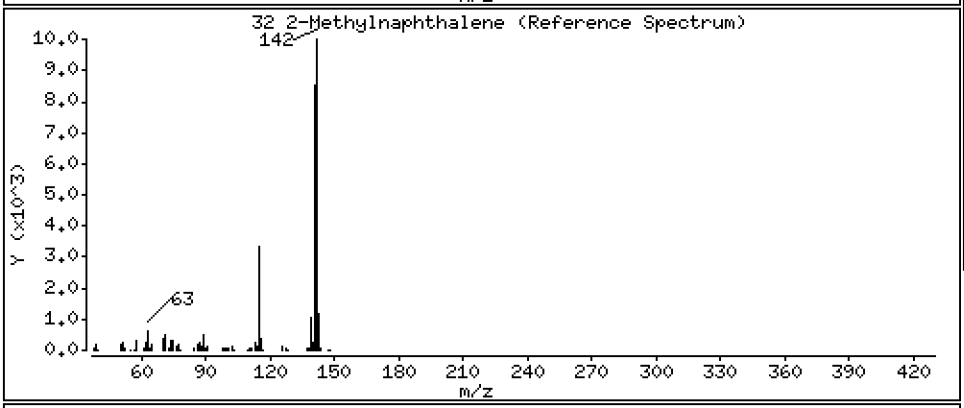
Concentration: 0.1129 ug/mL

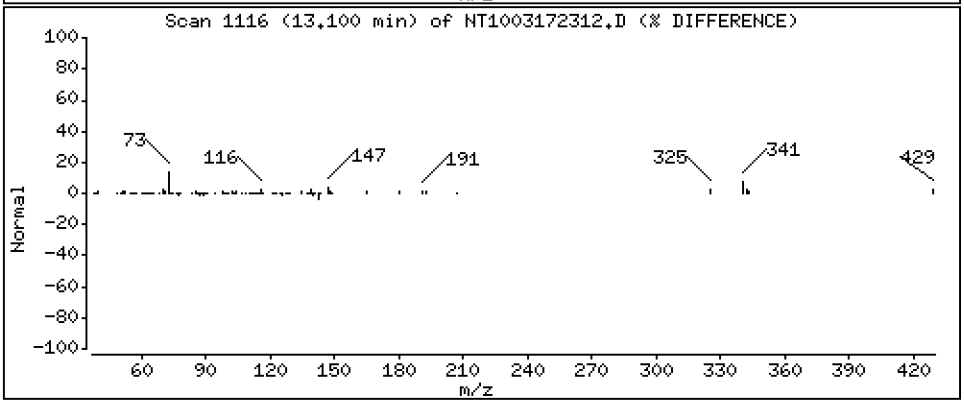












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172312.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

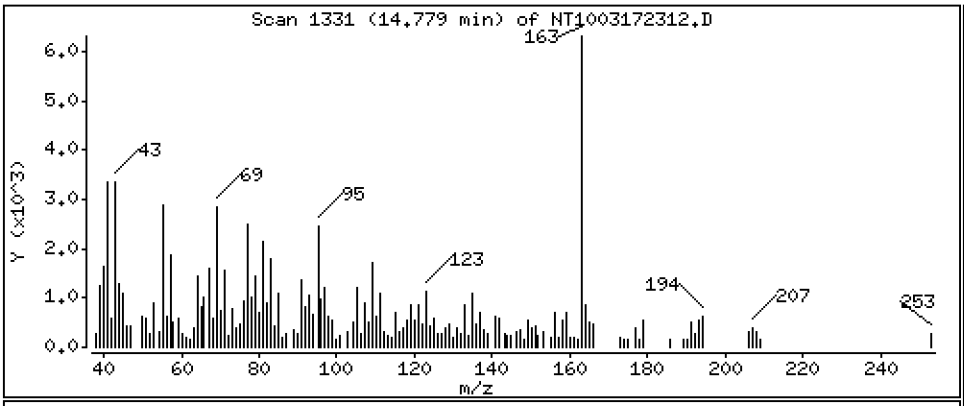
Operator: VTS

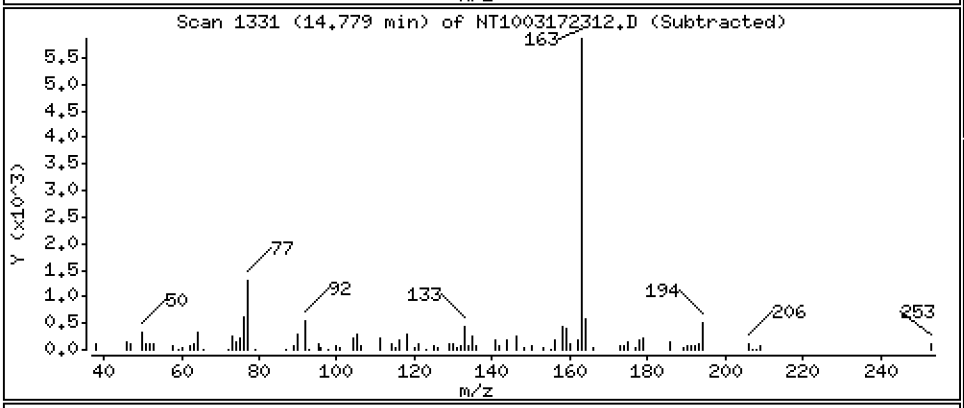
Column phase: ZB-5msi

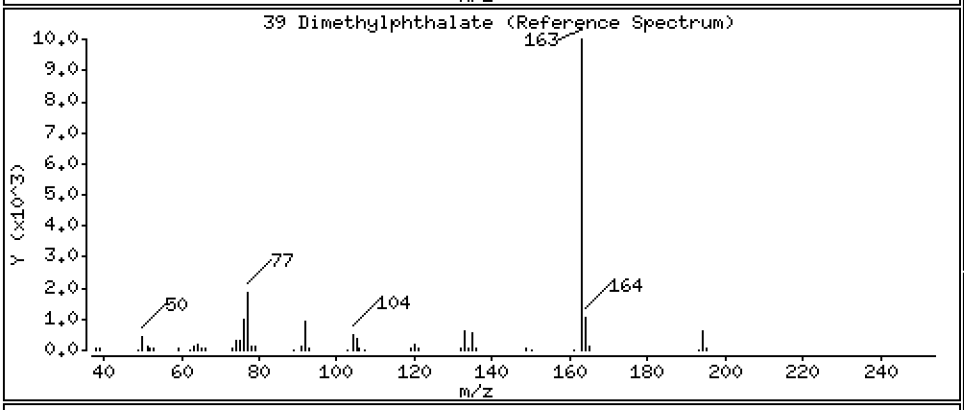
Column diameter: 0.25

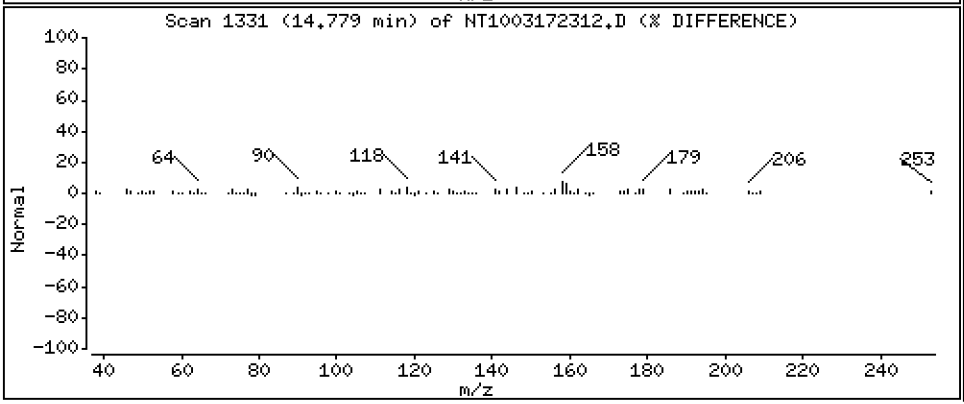
39 Dimethylphthalate

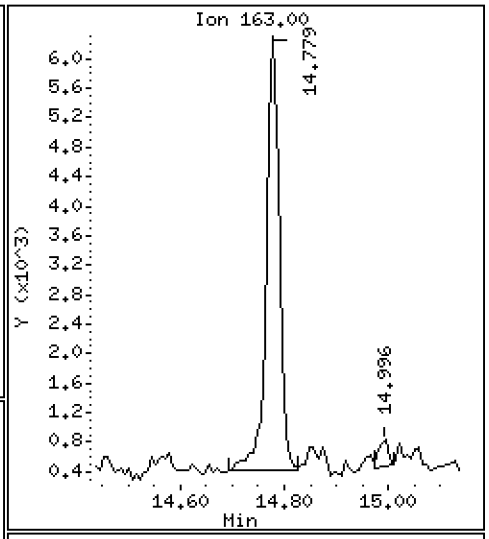
Concentration: 0.08456 ug/mL

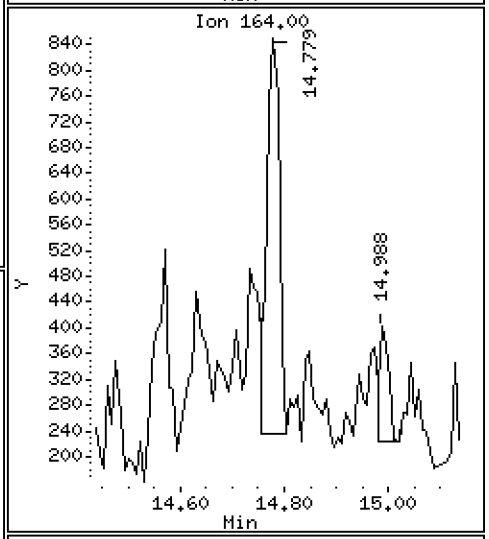


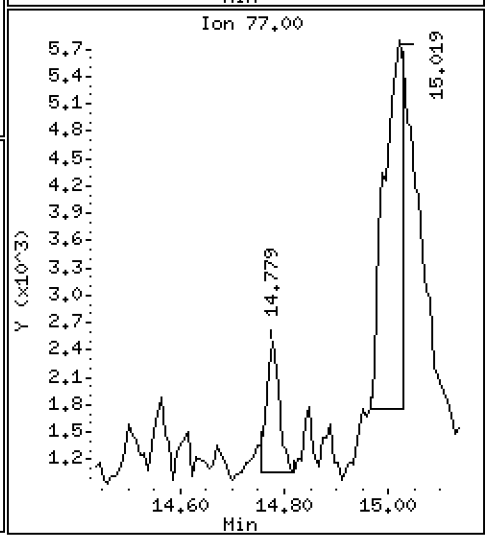












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

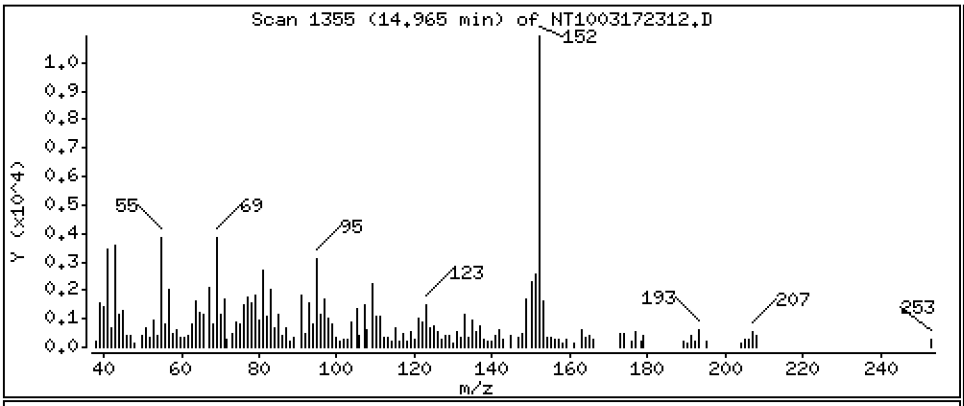
Operator: VTS

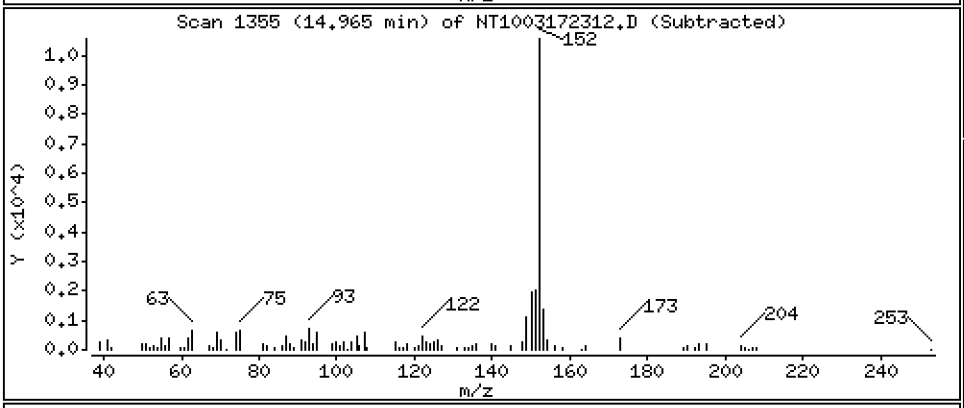
Column phase: ZB-5msi

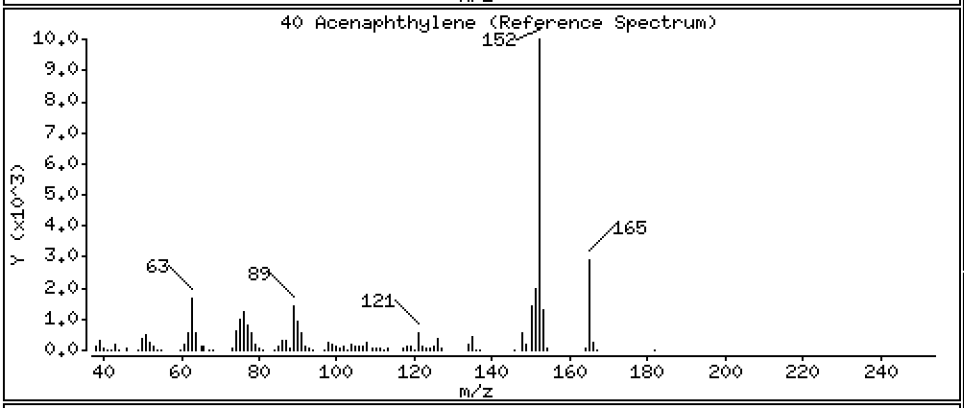
Column diameter: 0.25

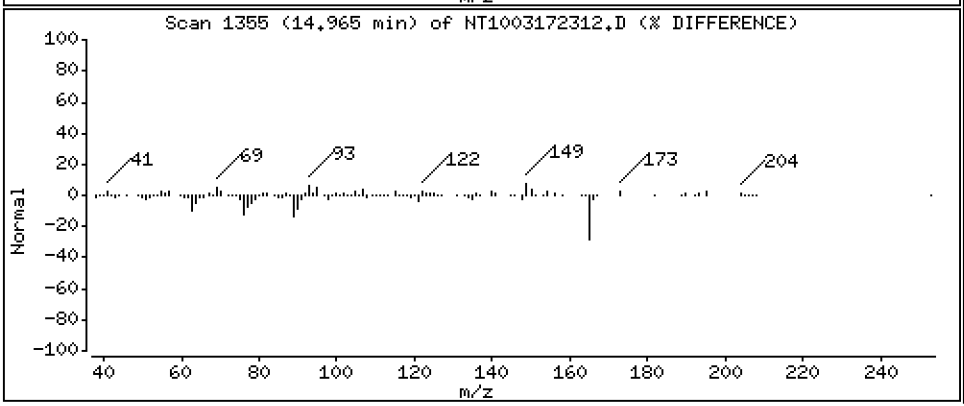
40 Acenaphthylene

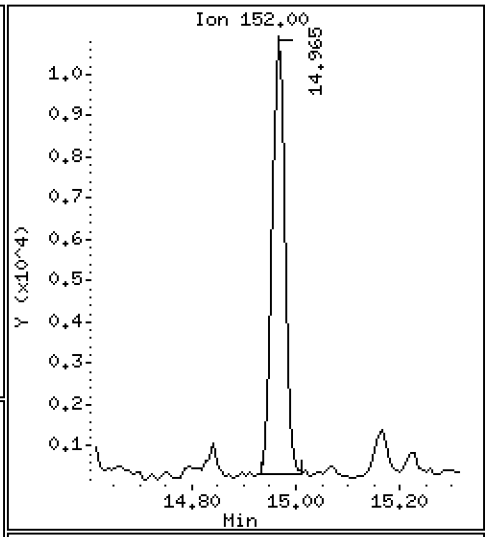
Concentration: 0.09714 ug/mL

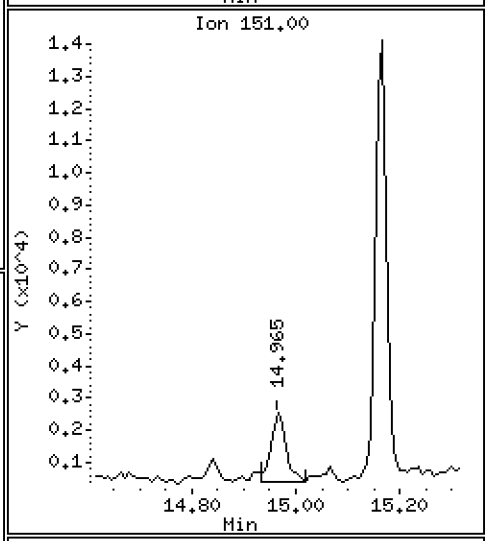


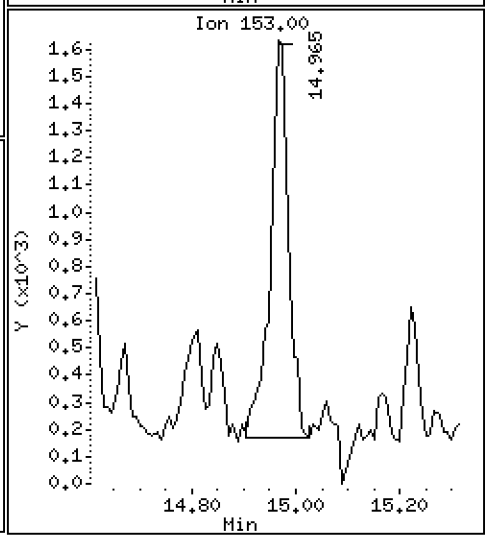












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172312.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

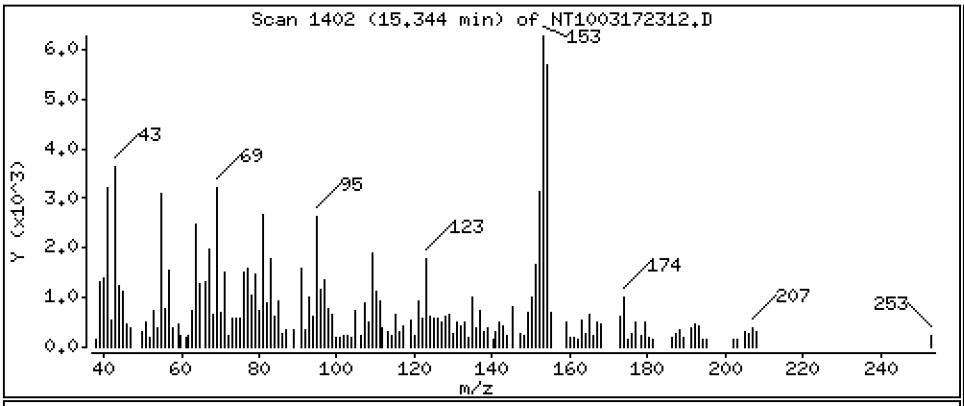
Operator: VTS

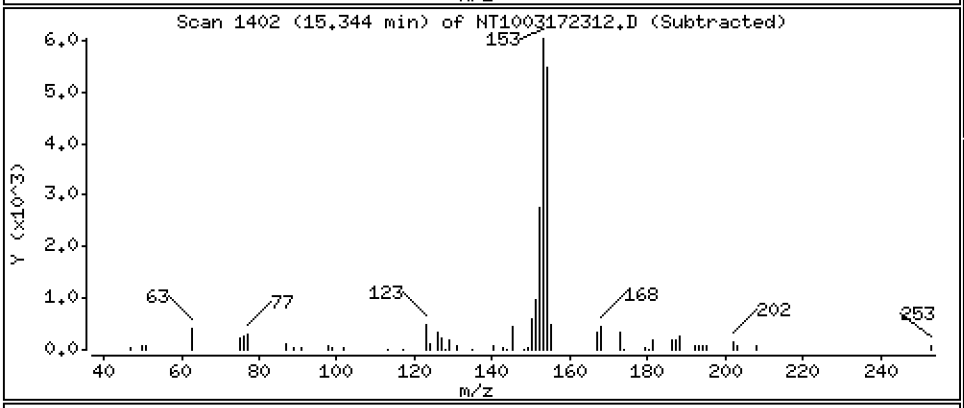
Column phase: ZB-5msi

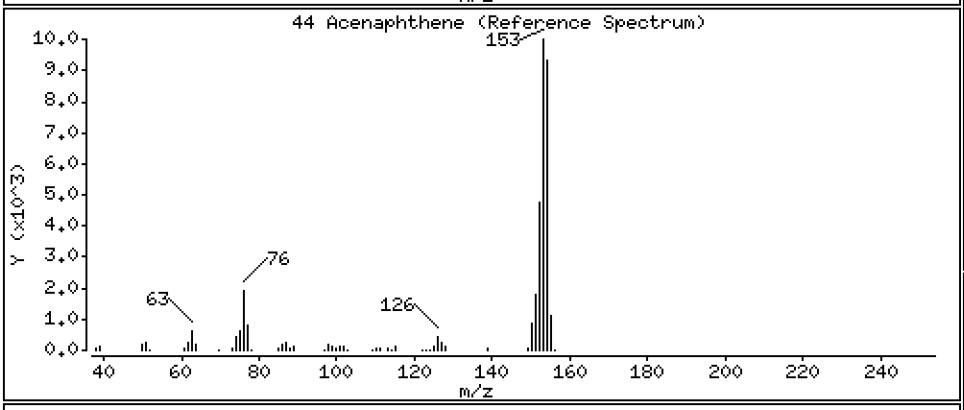
Column diameter: 0.25

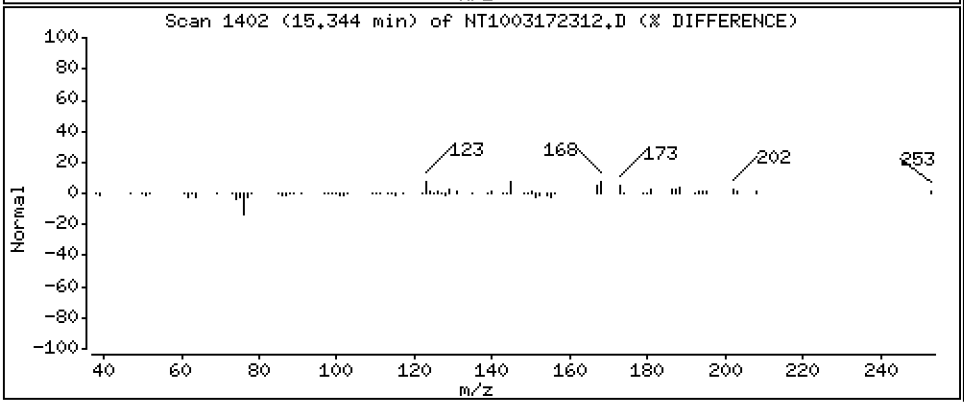
44 Acenaphthene

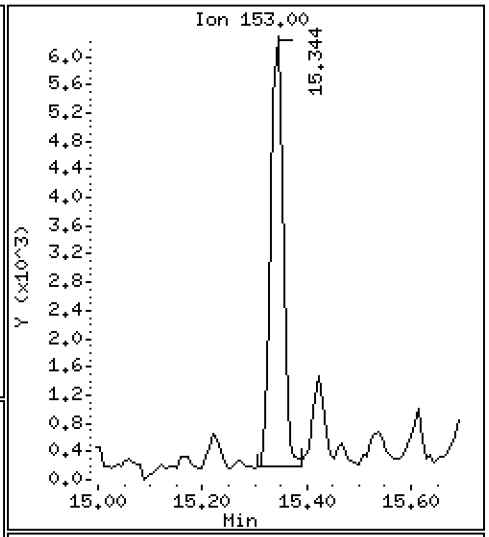
Concentration: 0.08692 ug/mL

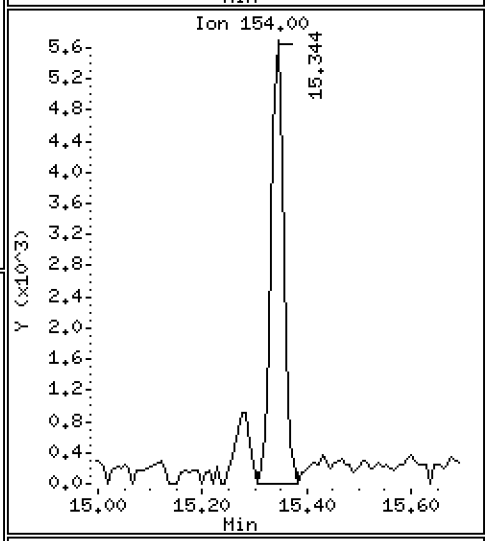


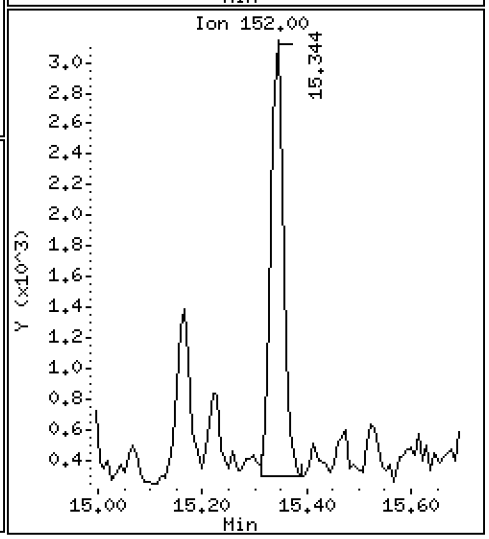












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172312.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

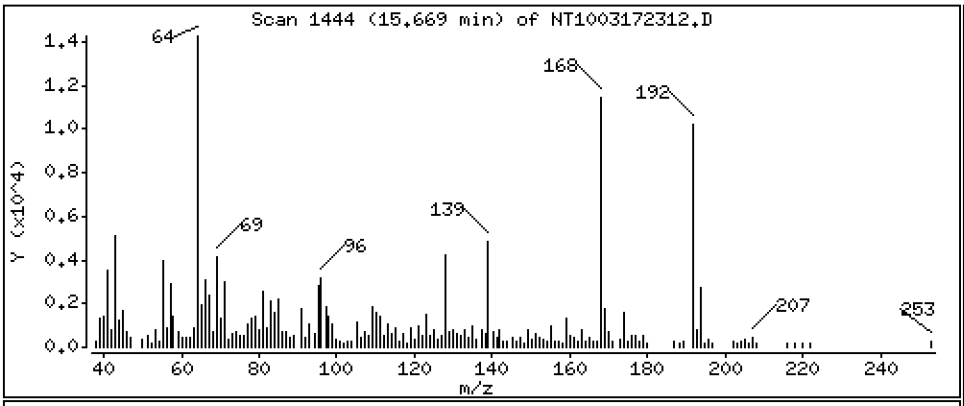
Operator: VTS

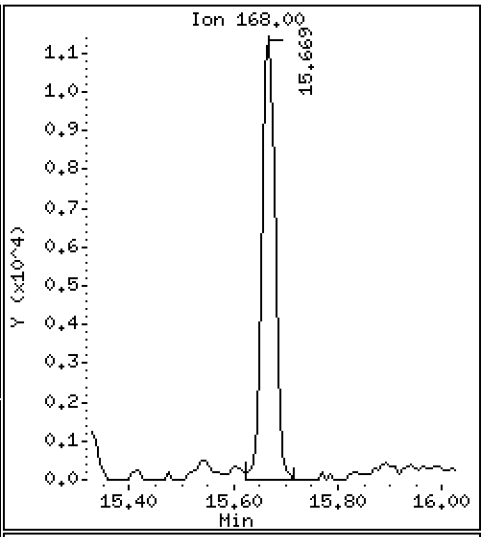
Column phase: ZB-5msi

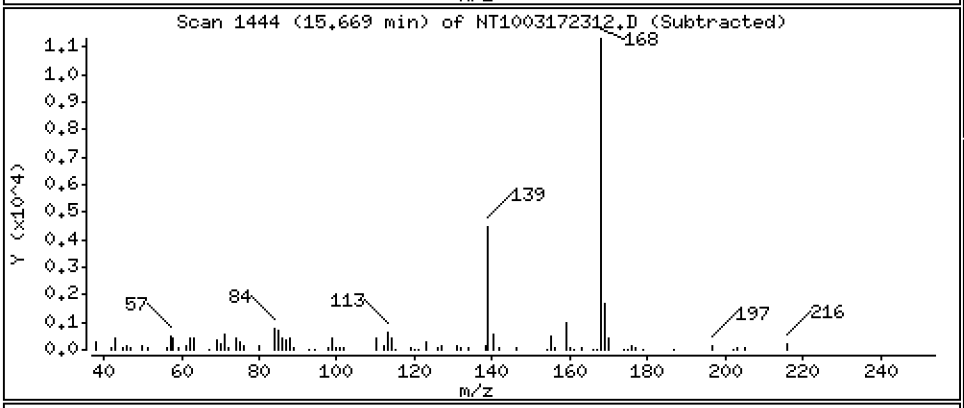
Column diameter: 0.25

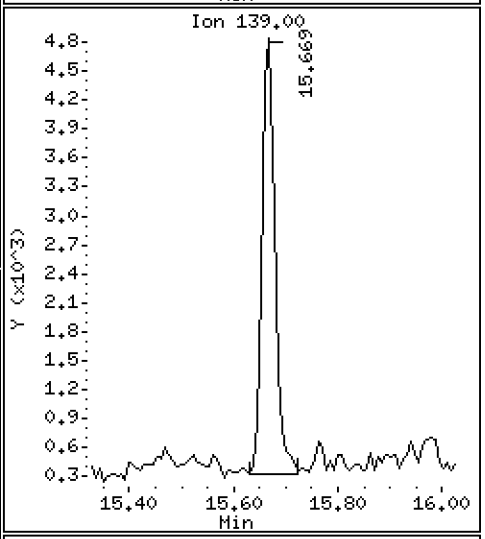
46 Dibenzofuran

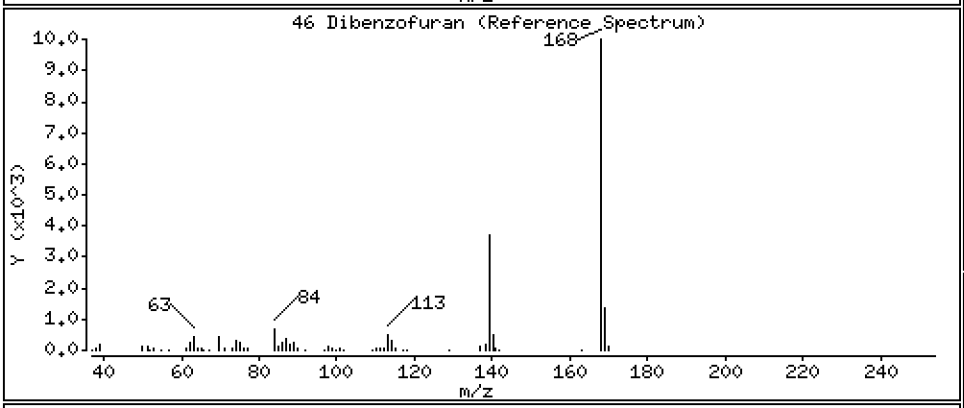
Concentration: 0.1194 ug/mL

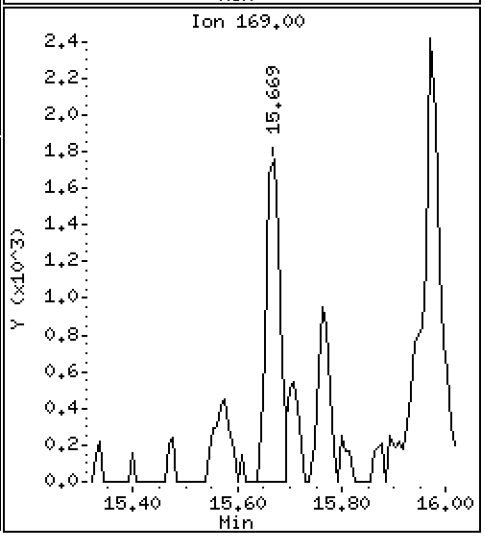


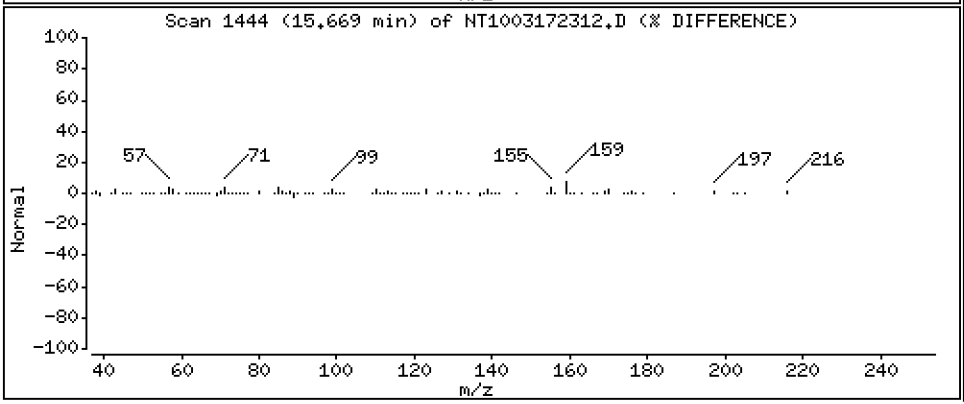












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

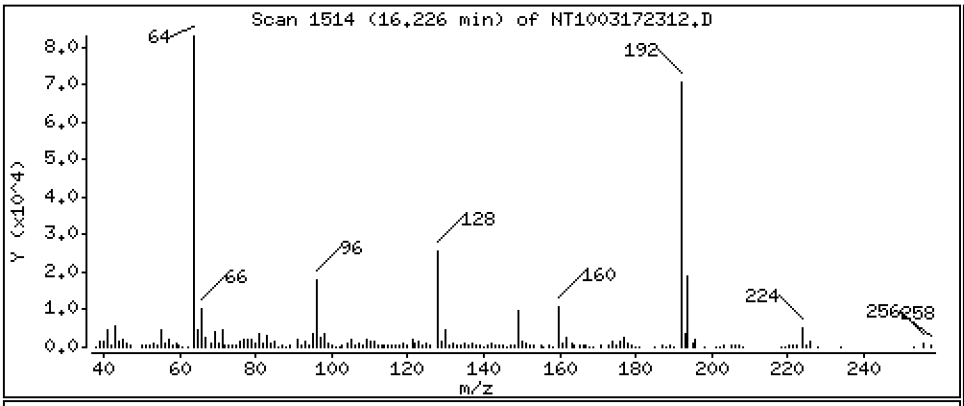
Operator: VTS

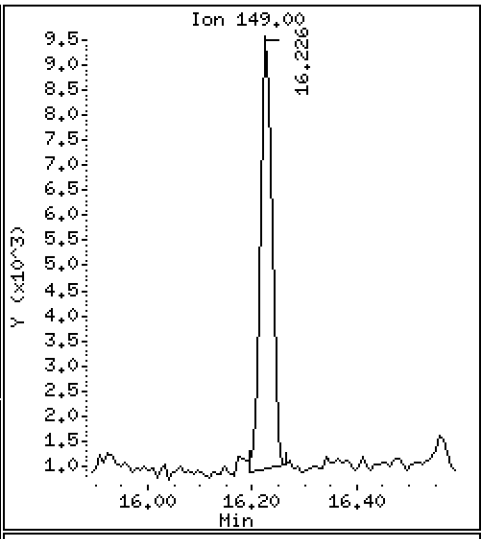
Column phase: ZB-5msi

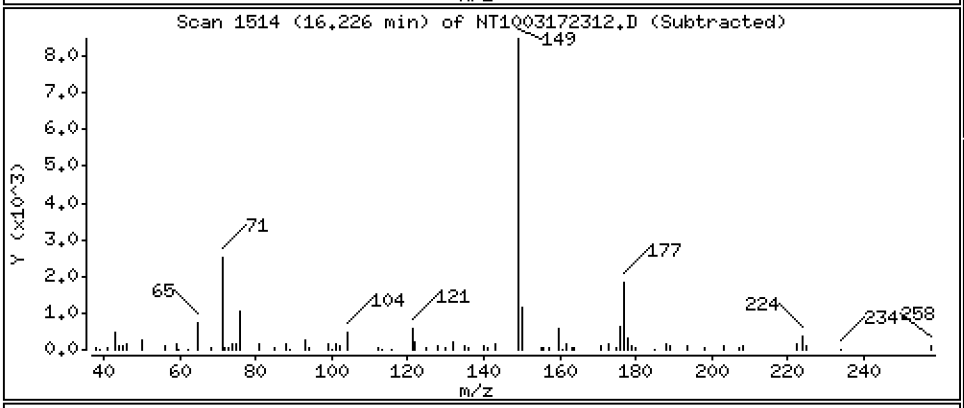
Column diameter: 0.25

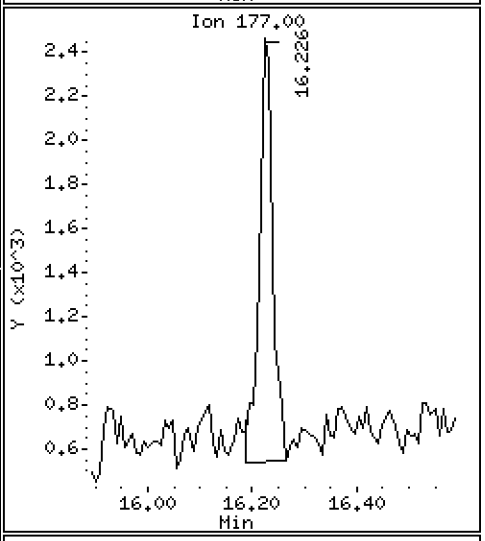
50 Diethylphthalate

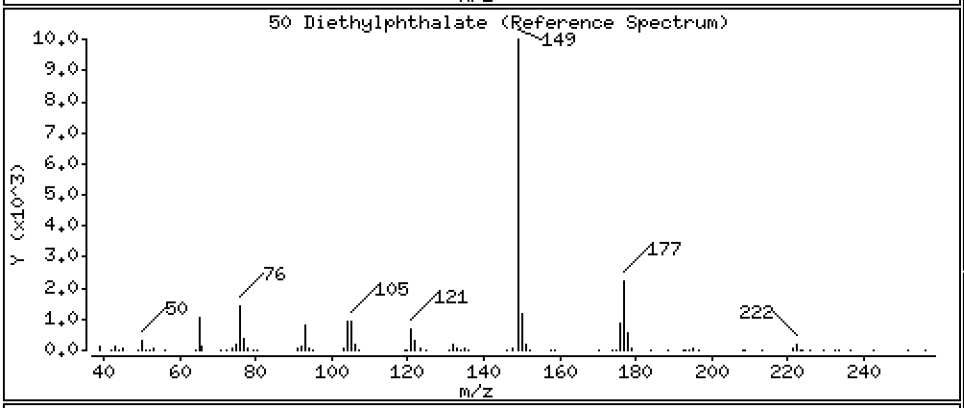
Concentration: 0.1156 ug/mL

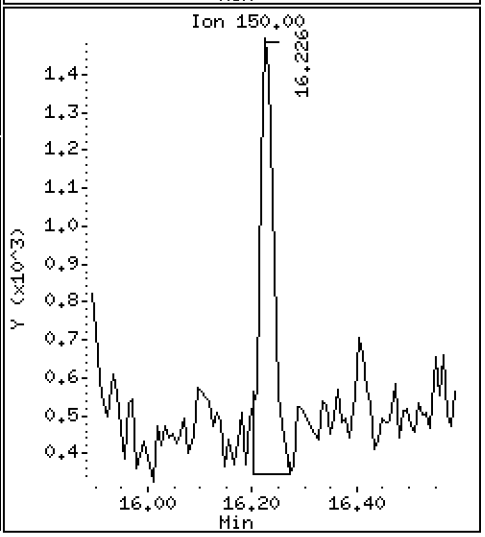


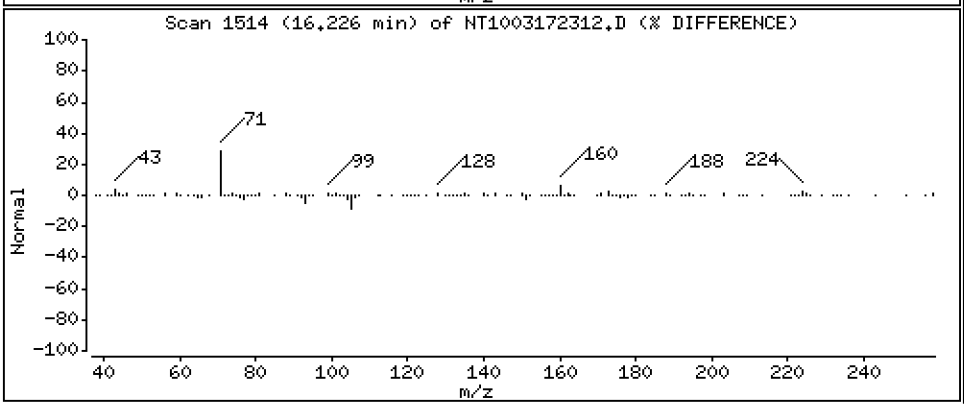












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

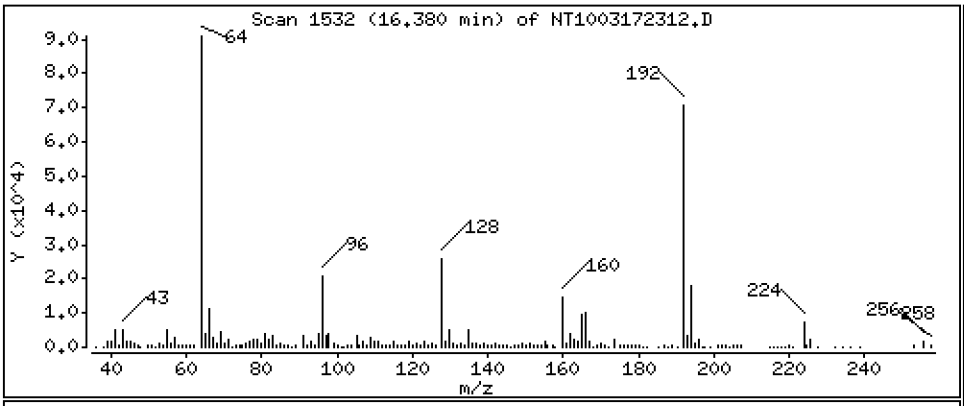
Operator: VTS

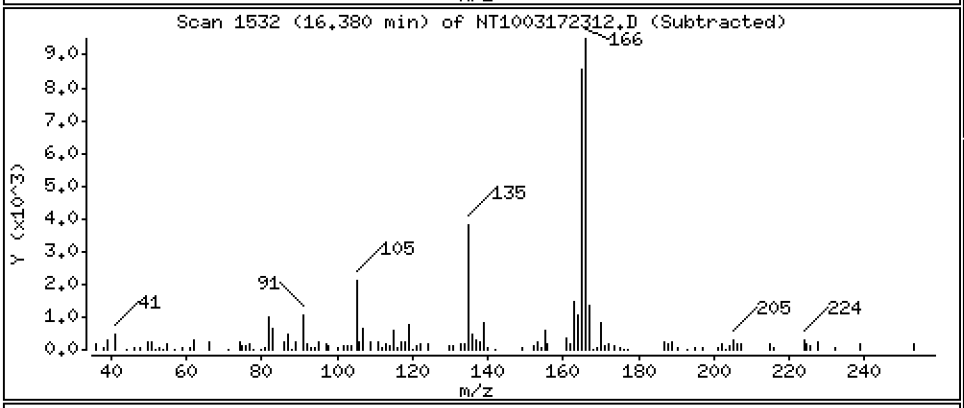
Column phase: ZB-5msi

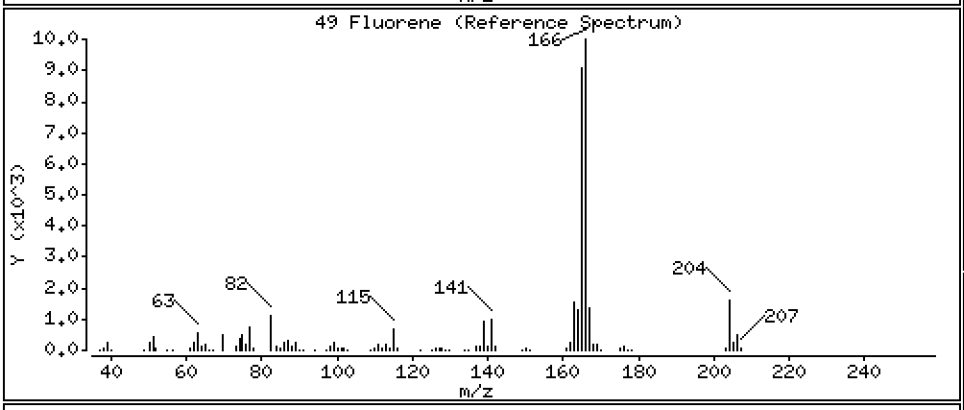
Column diameter: 0.25

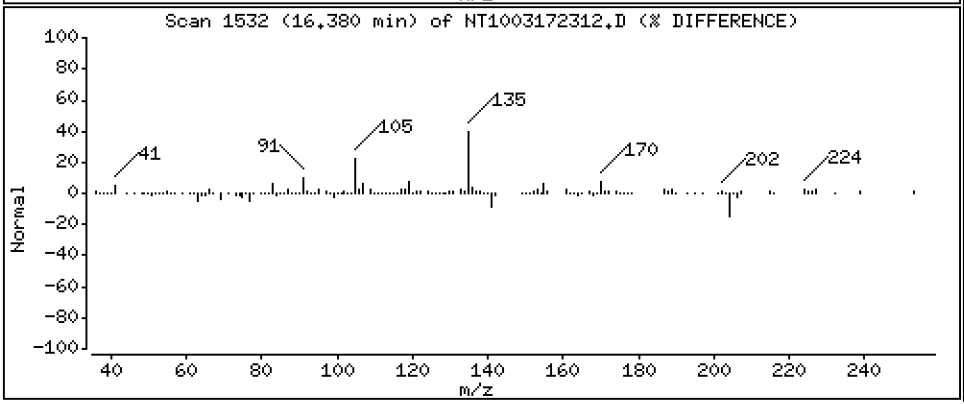
49 Fluorene

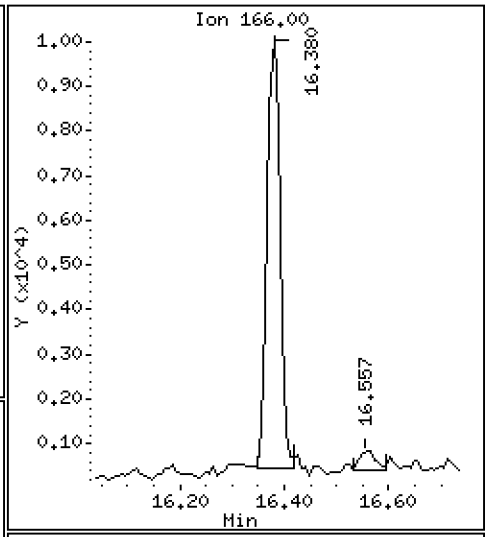
Concentration: 0.1252 ug/mL

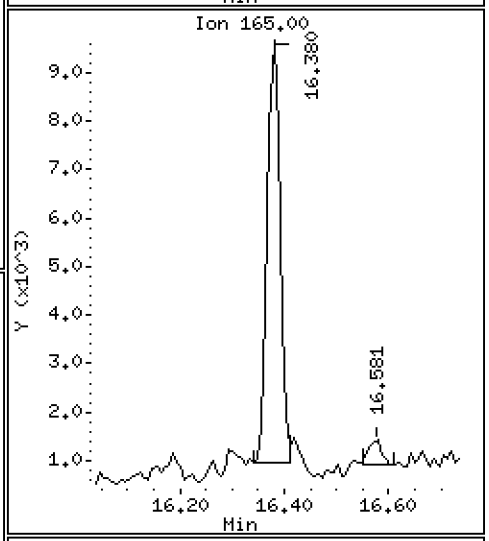


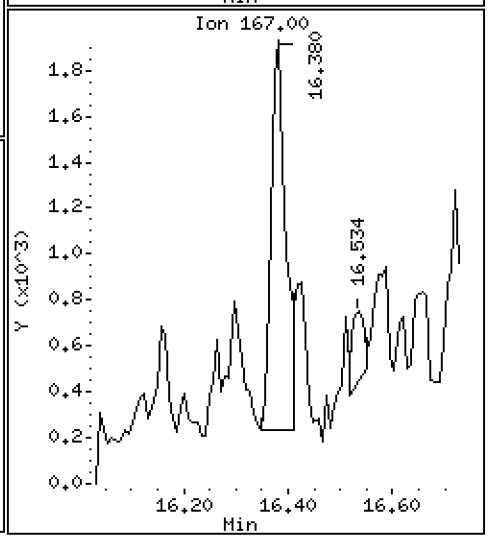












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

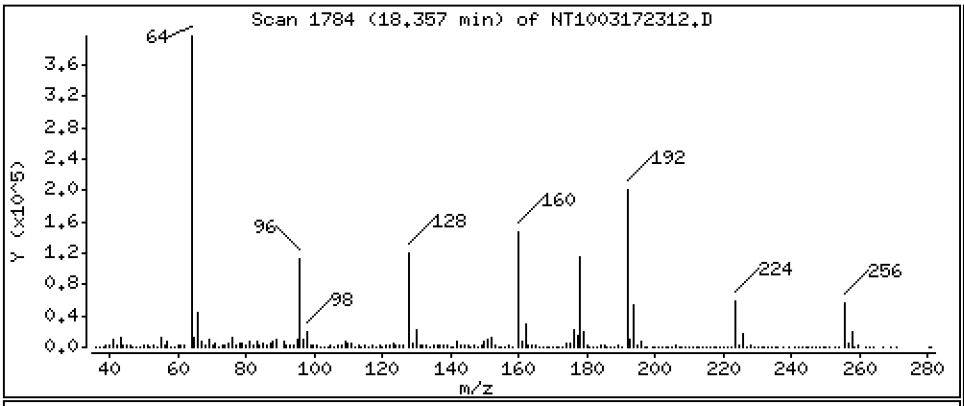
Operator: VTS

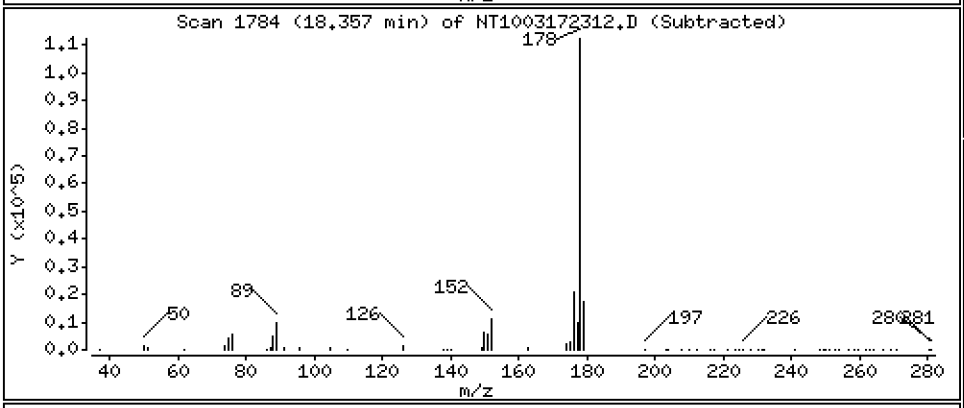
Column phase: ZB-5msi

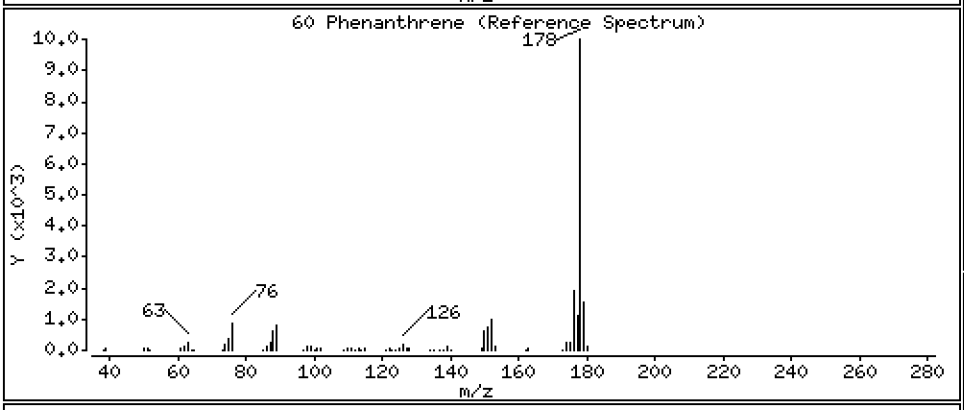
Column diameter: 0.25

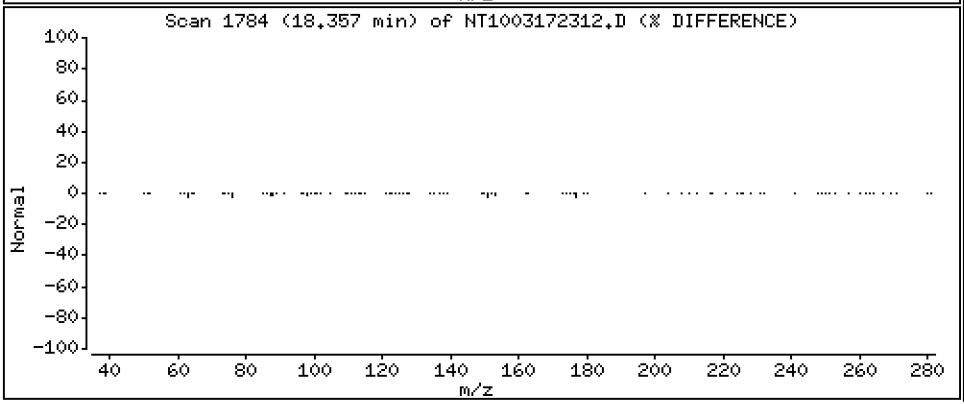
60 Phenanthrene

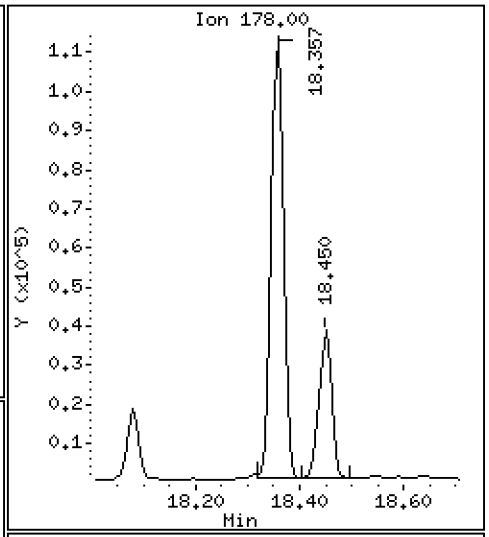
Concentration: 0.9720 ug/mL

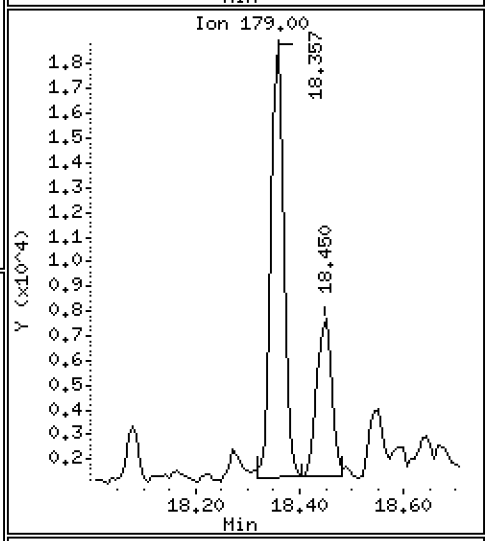


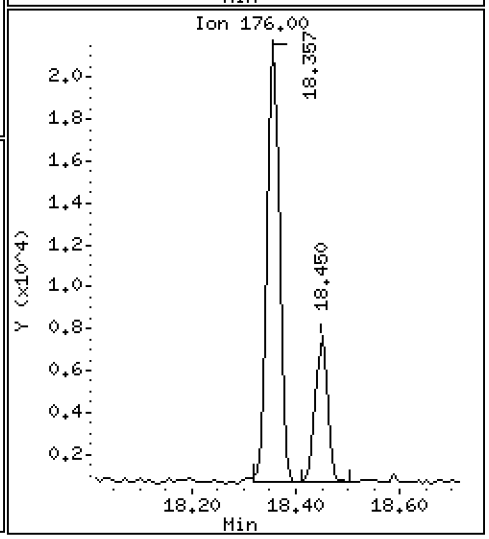












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

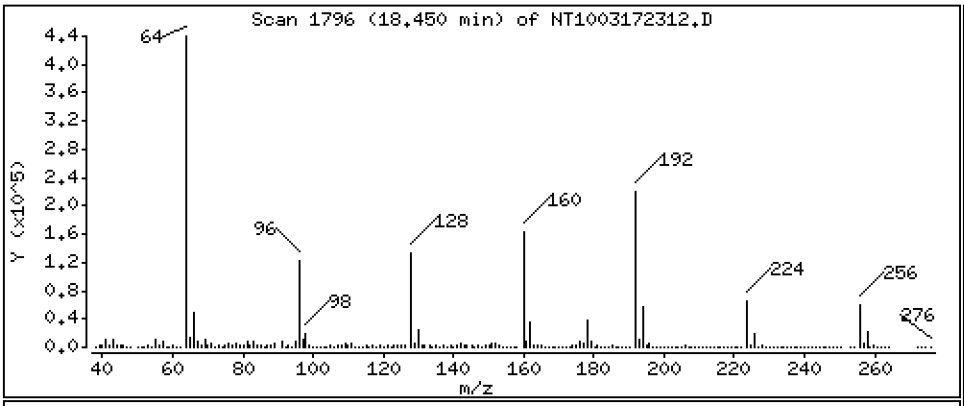
Operator: VTS

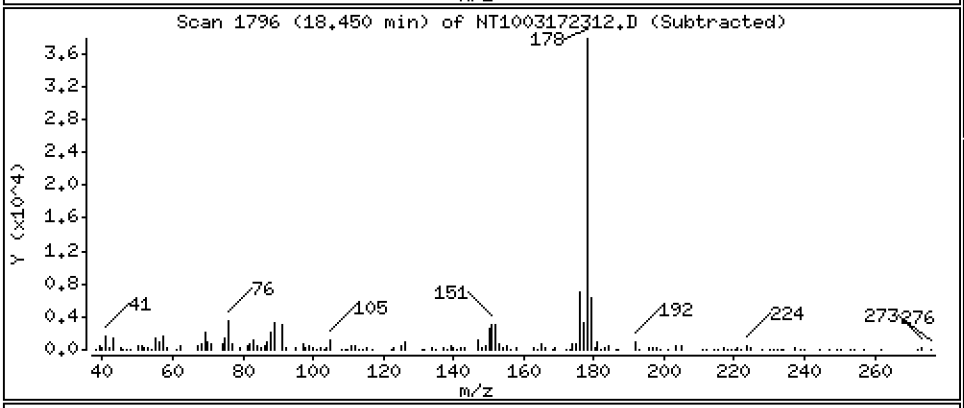
Column phase: ZB-5msi

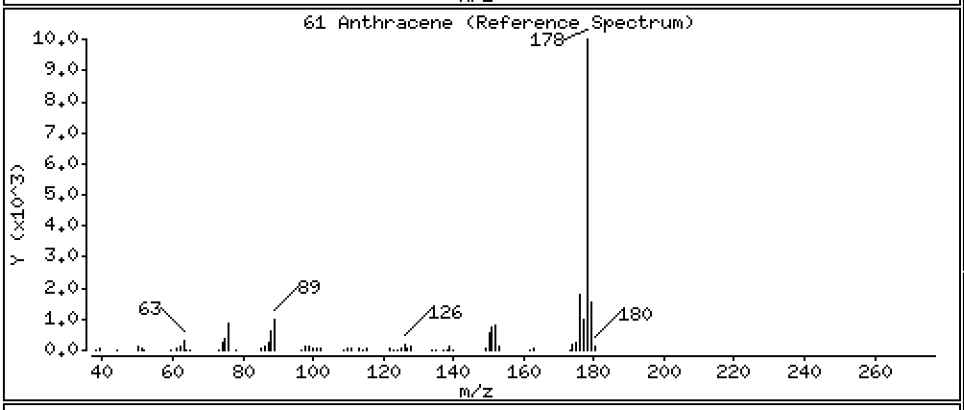
Column diameter: 0.25

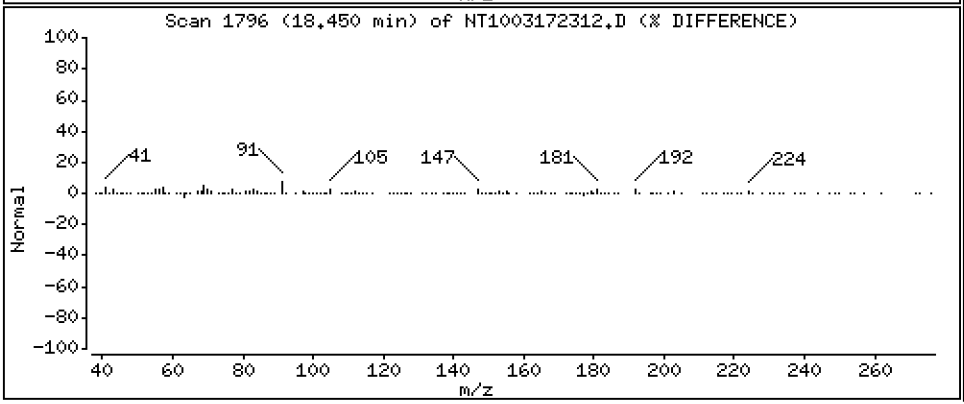
61 Anthracene

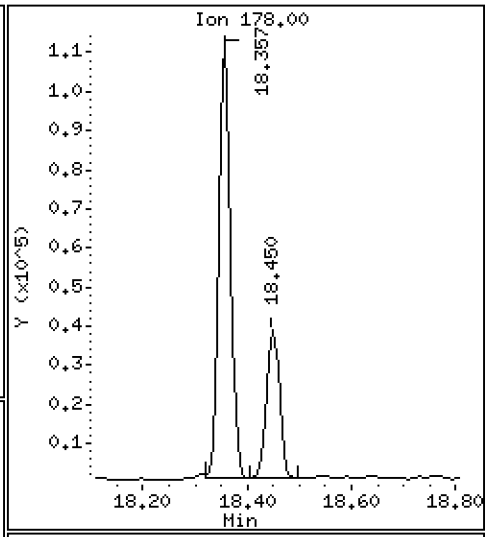
Concentration: 0.3613 ug/mL

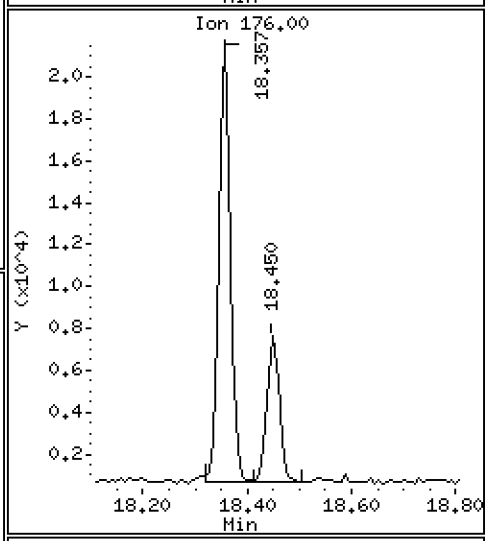


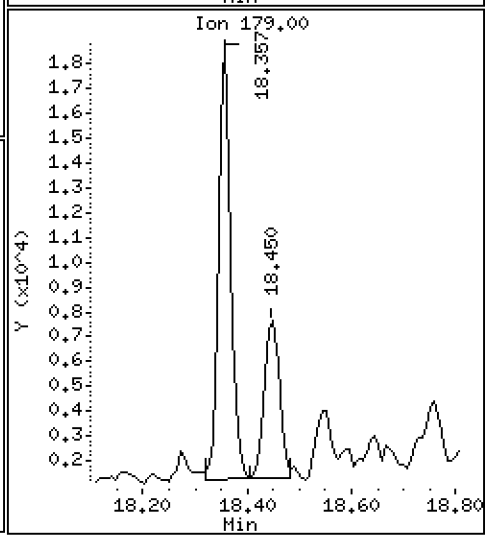












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

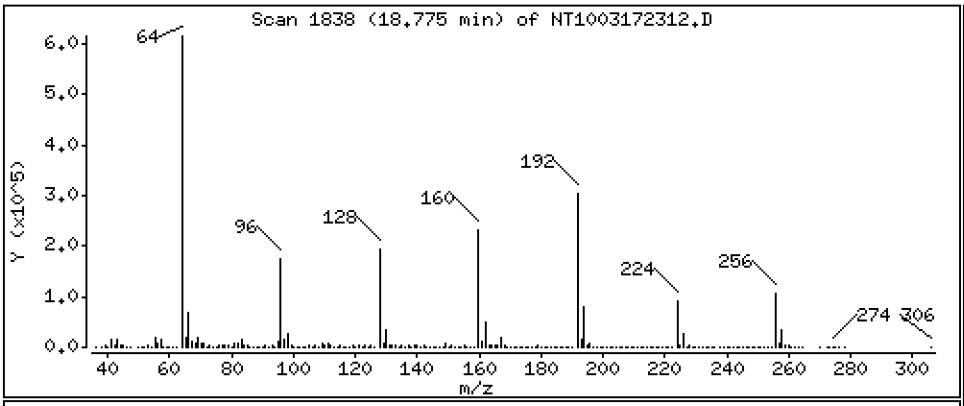
Operator: VTS

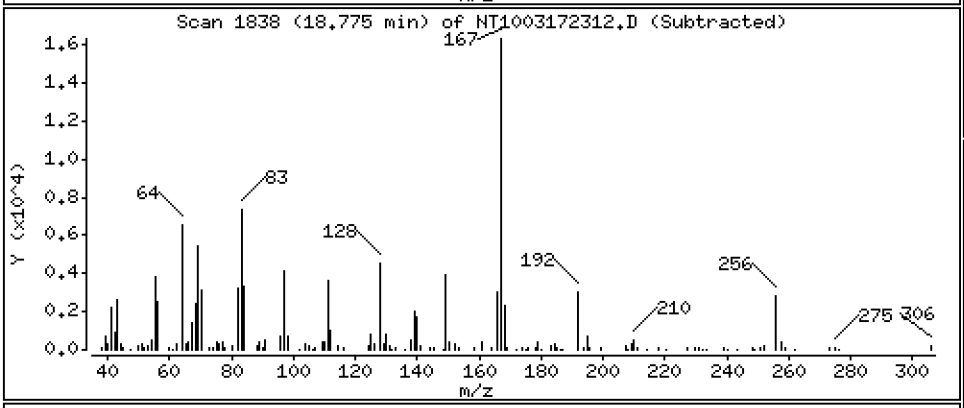
Column phase: ZB-5msi

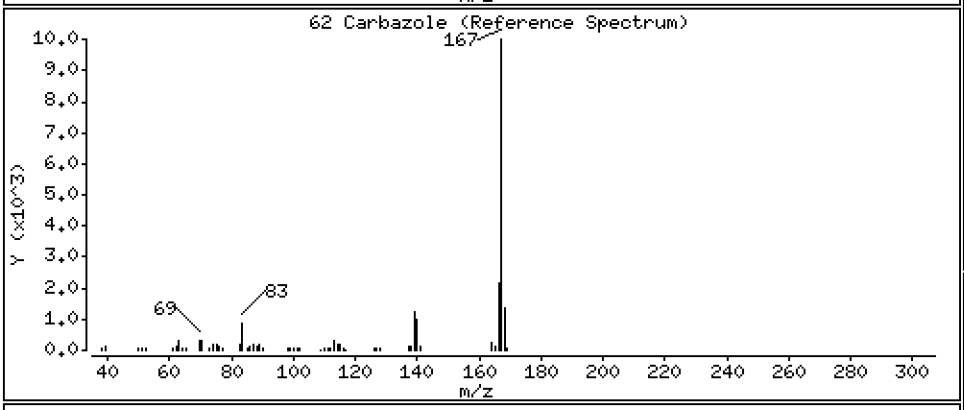
Column diameter: 0.25

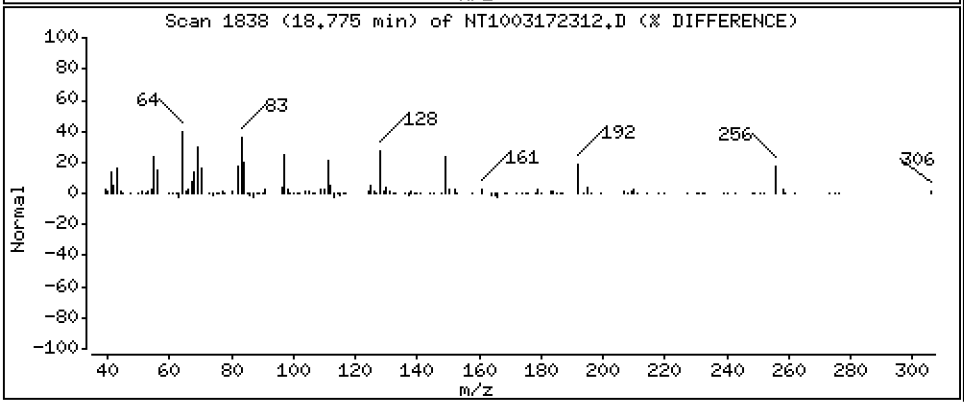
62 Carbazole

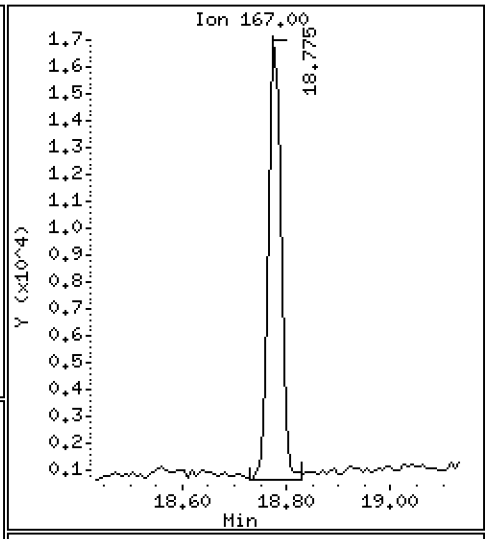
Concentration: 0.1675 ug/mL

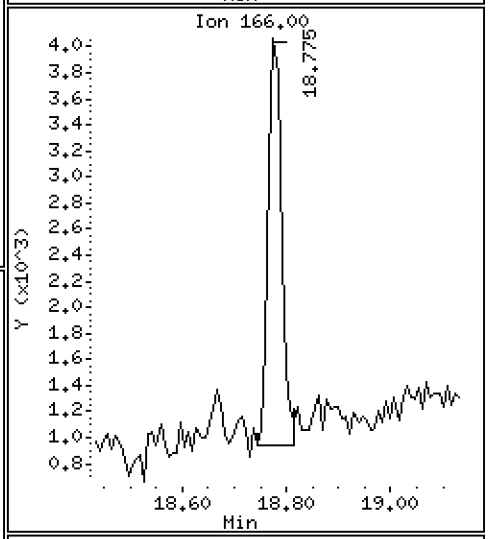


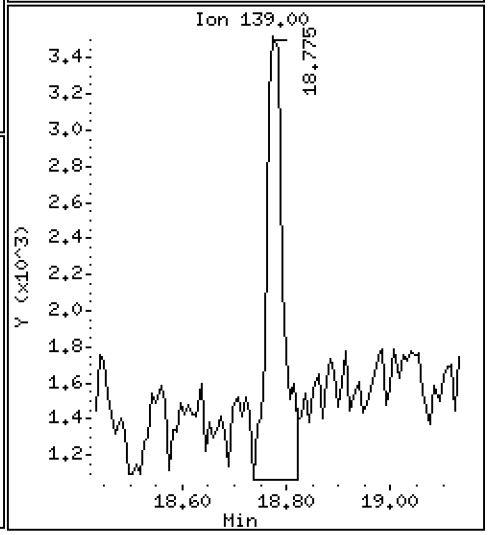












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172312.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

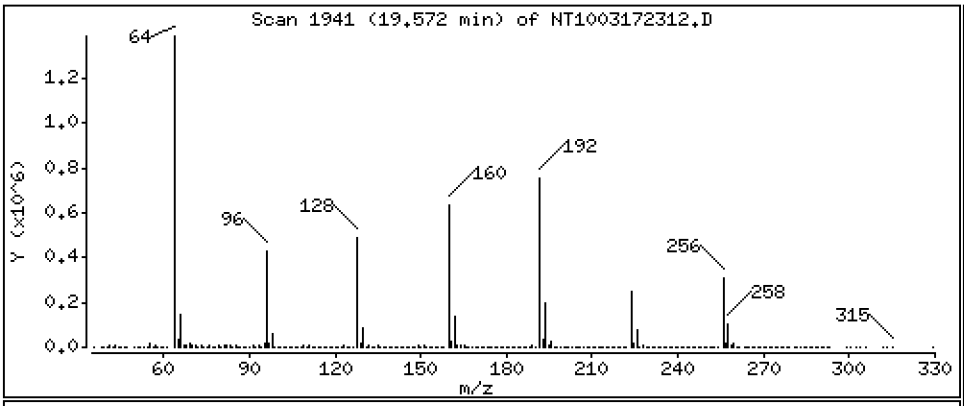
Operator: VTS

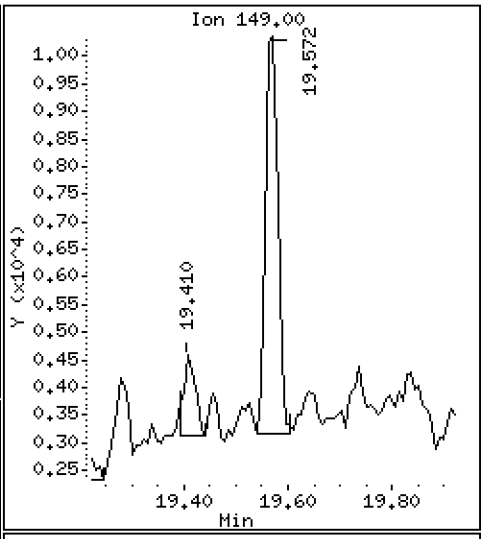
Column phase: ZB-5msi

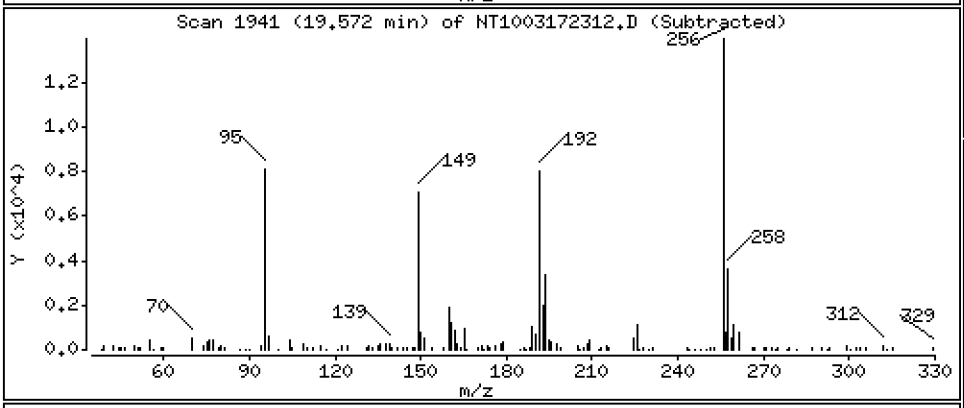
Column diameter: 0.25

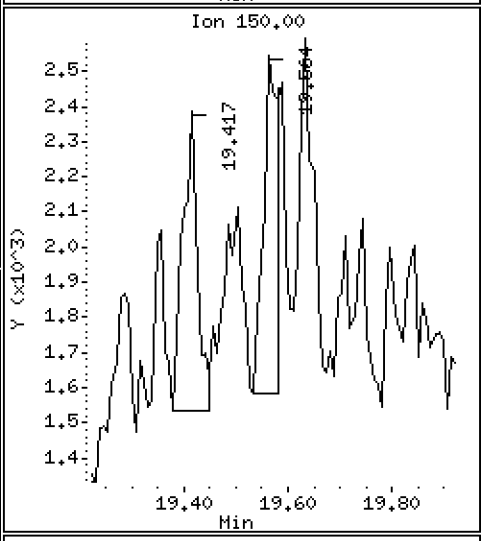
63 Di-n-butylphthalate

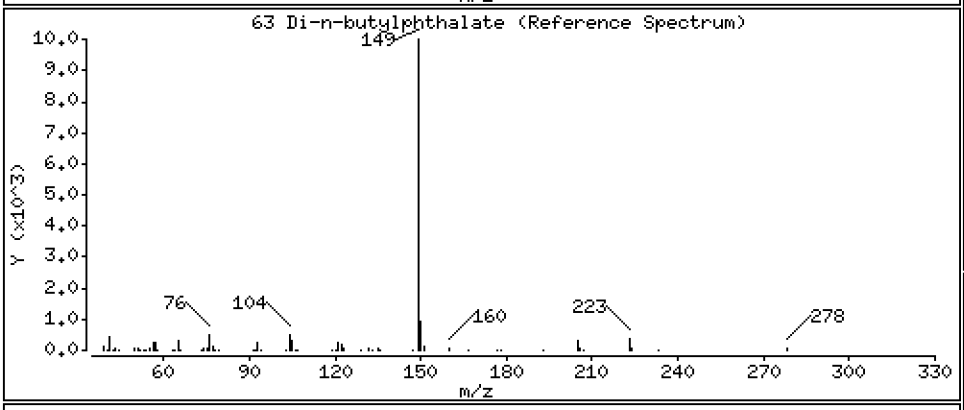
Concentration: 0.05413 ug/mL

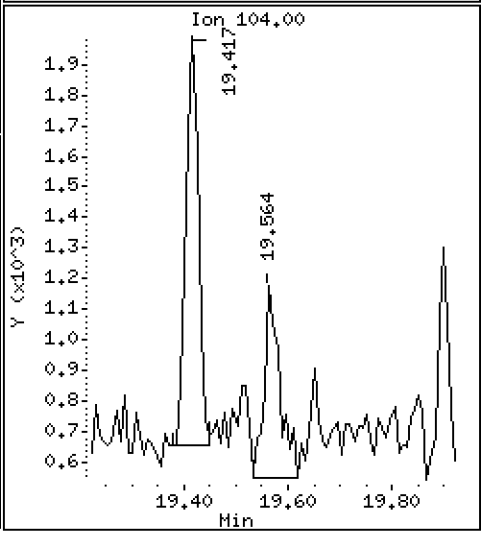


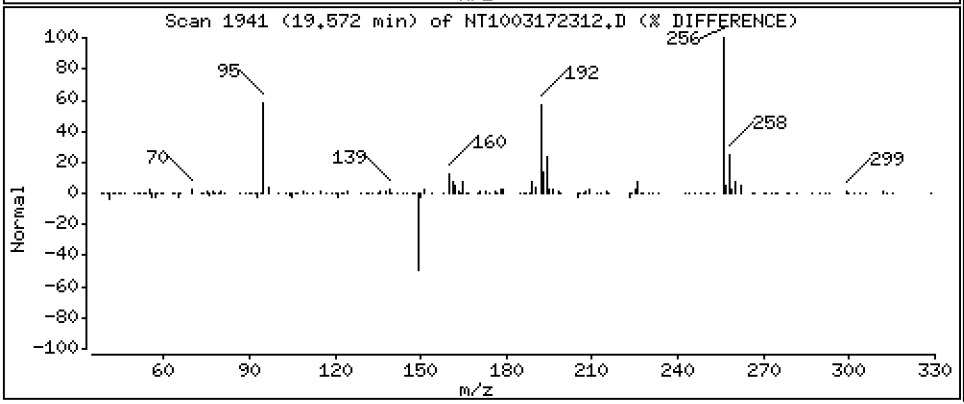












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172312.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

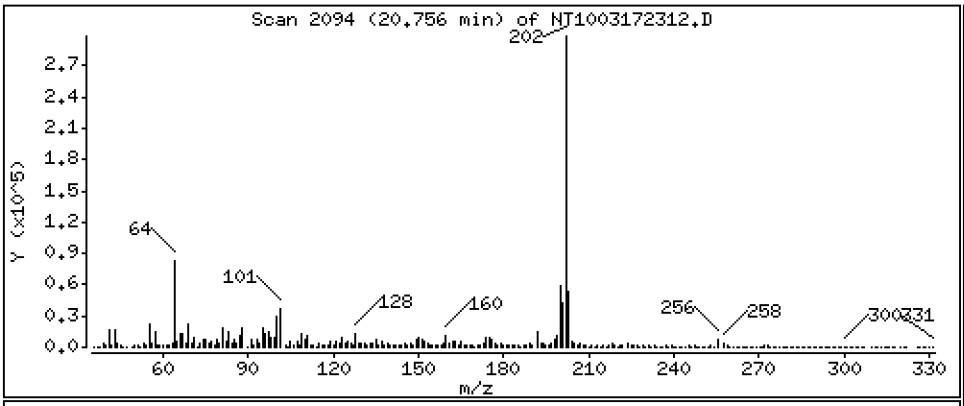
Operator: VTS

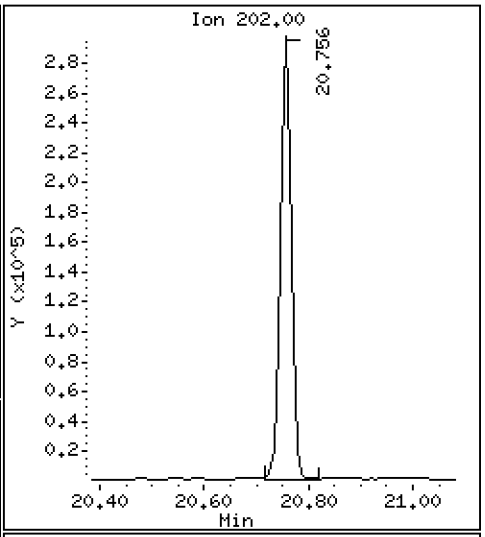
Column phase: ZB-5msi

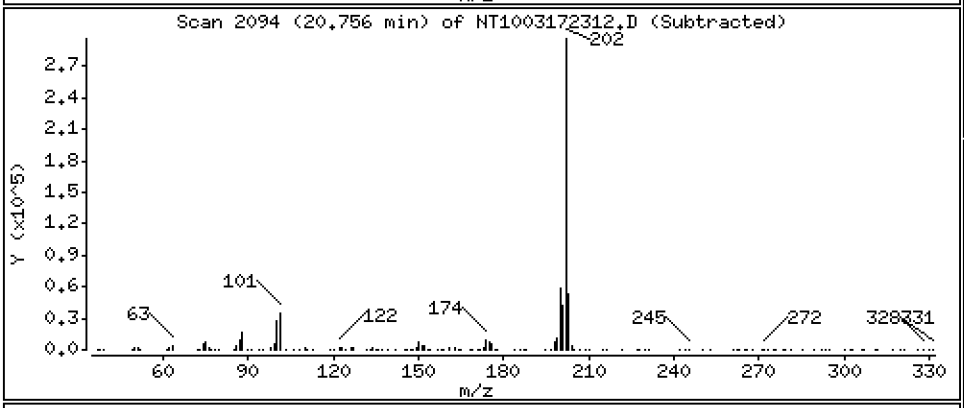
Column diameter: 0.25

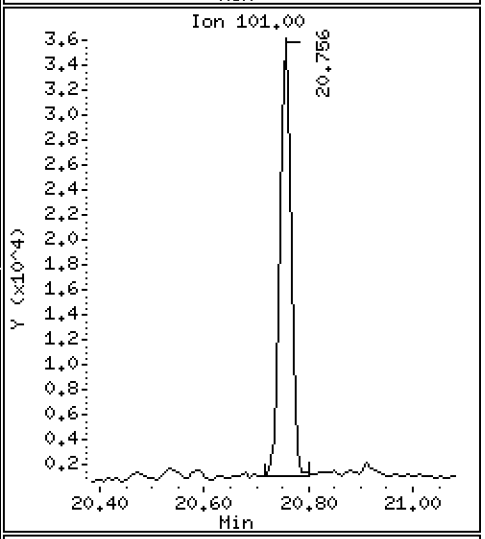
64 Fluoranthene

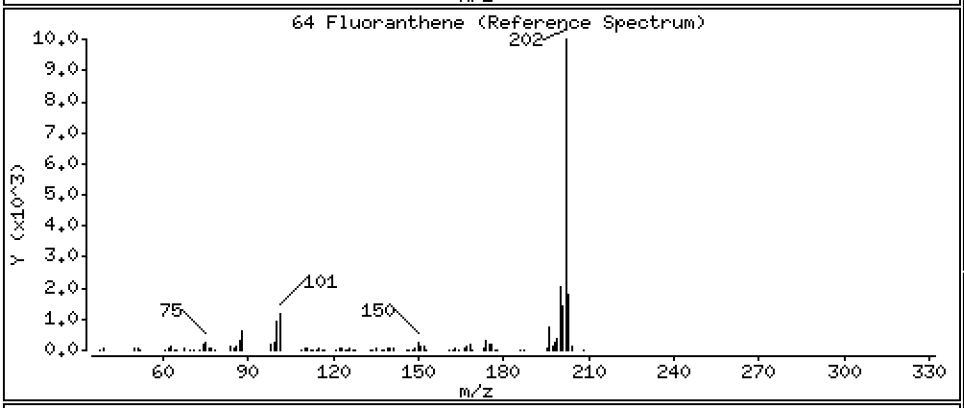
Concentration: 2.246 ug/mL

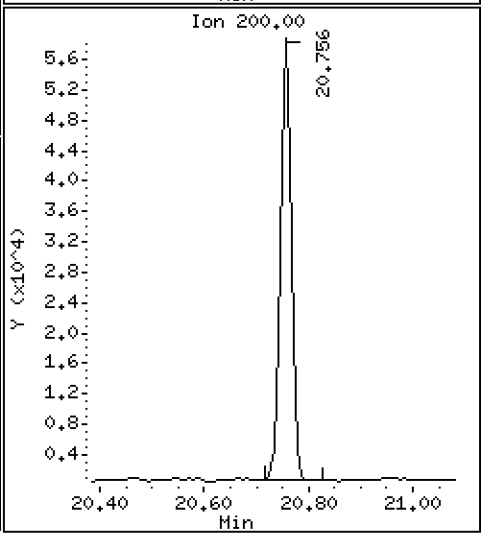


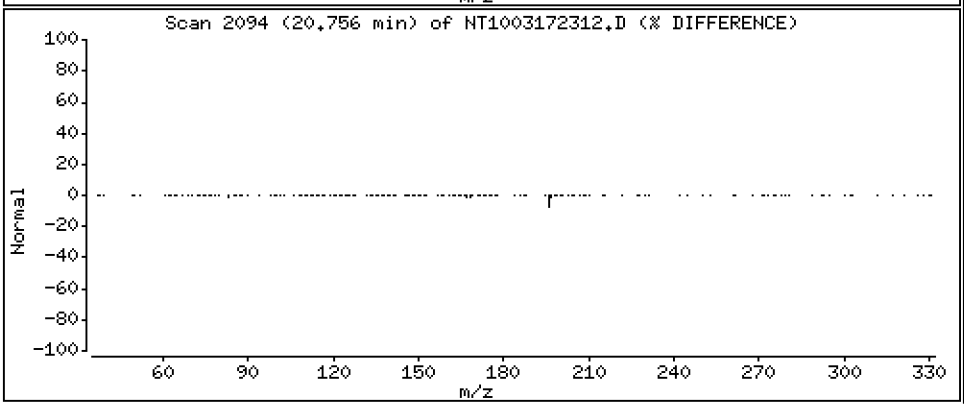












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

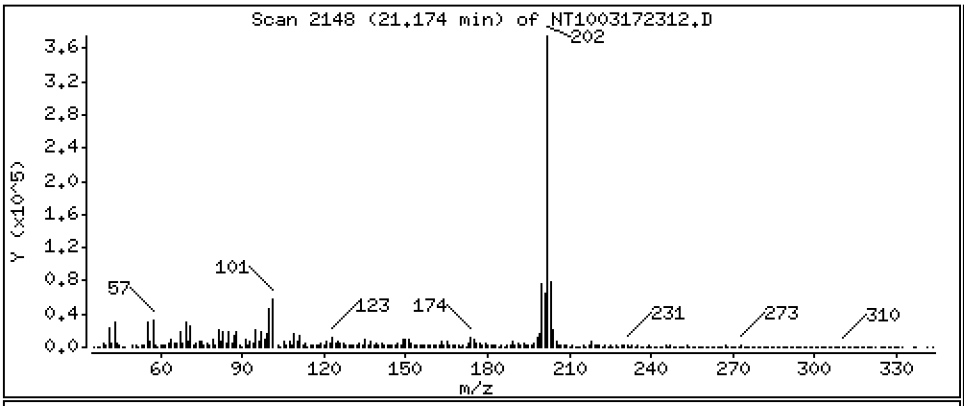
Operator: VTS

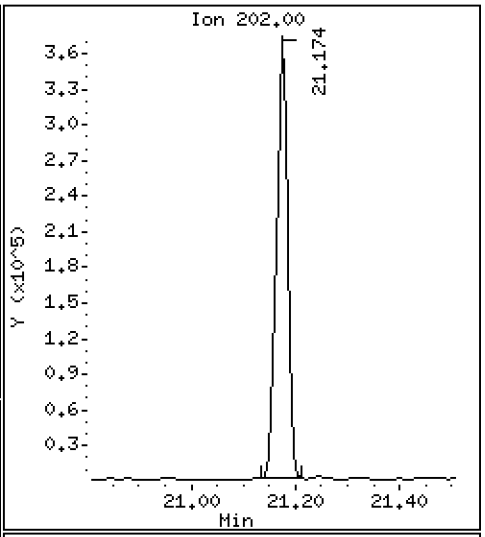
Column phase: ZB-5msi

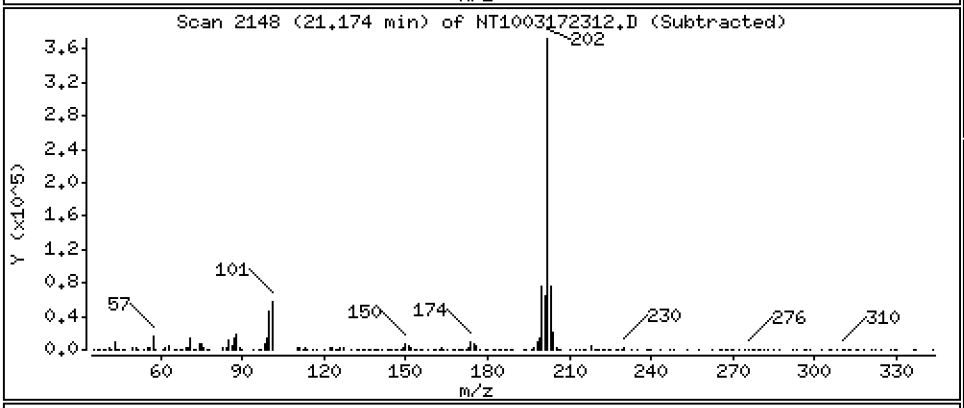
Column diameter: 0.25

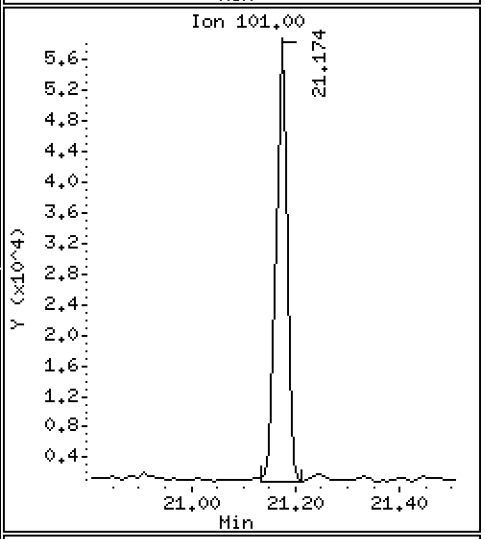
65 Pyrene

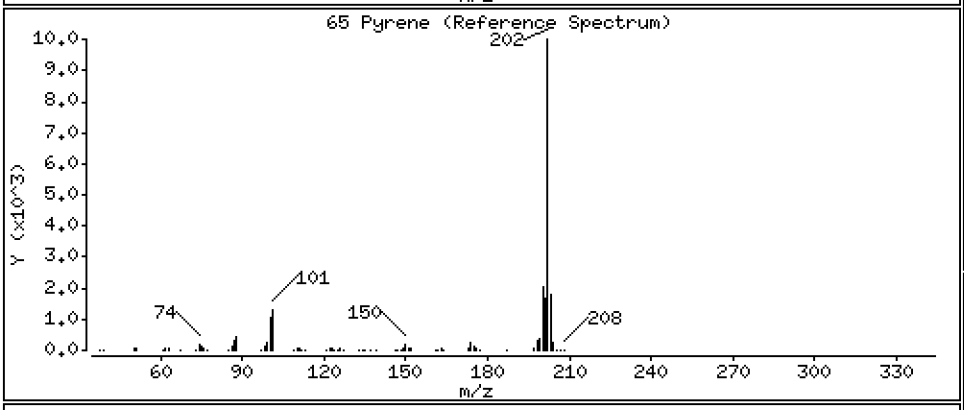
Concentration: 2.656 ug/mL

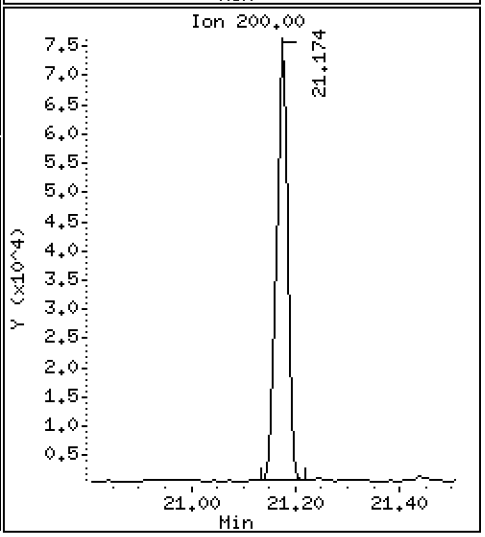


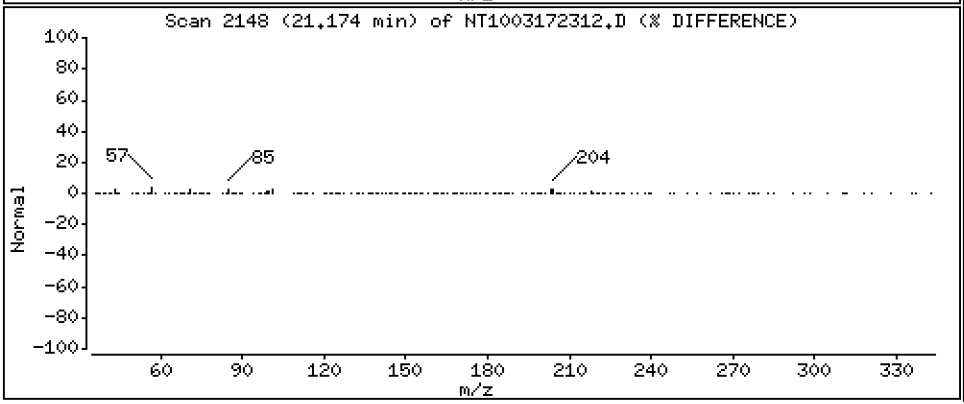












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

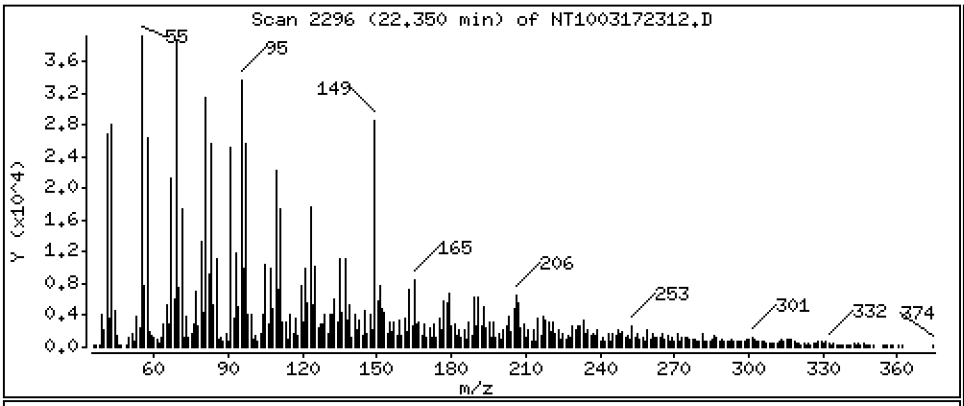
Operator: VTS

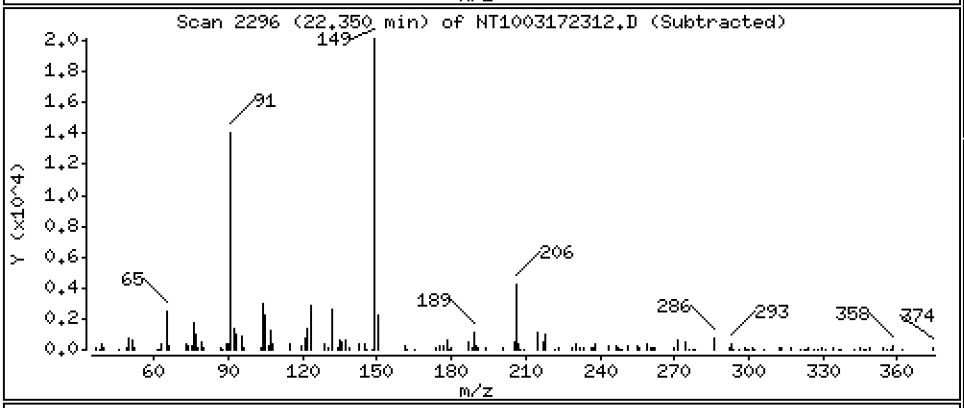
Column phase: ZB-5msi

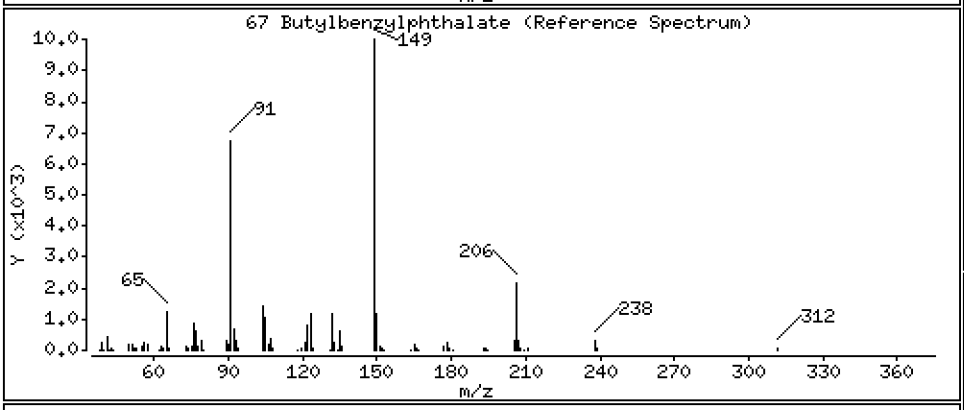
Column diameter: 0.25

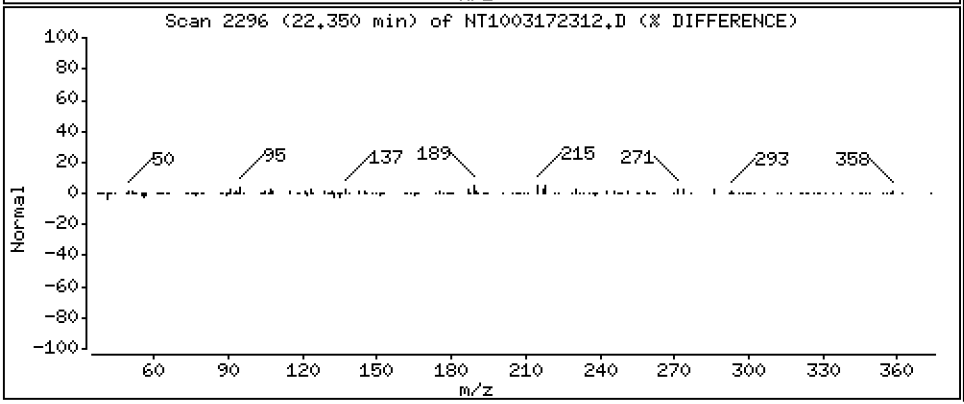
67 Butylbenzylphthalate

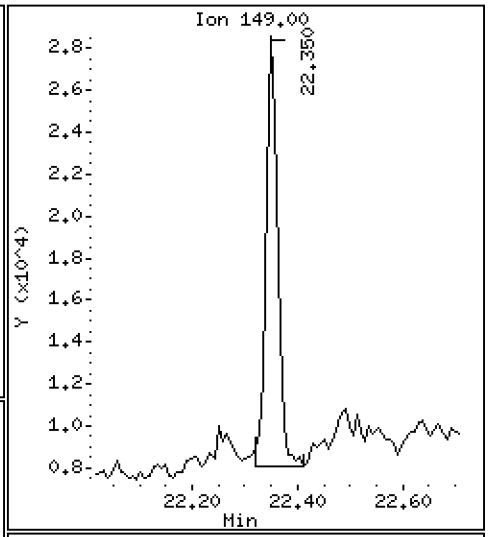
Concentration: 0.4363 ug/mL

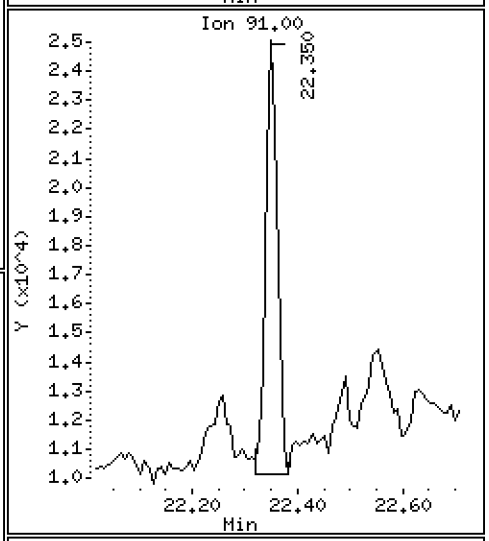


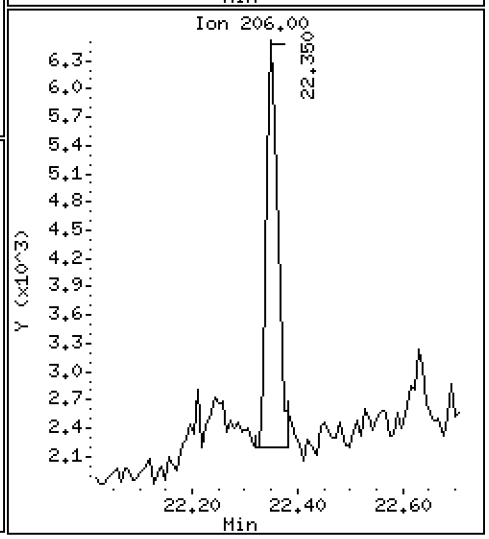












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

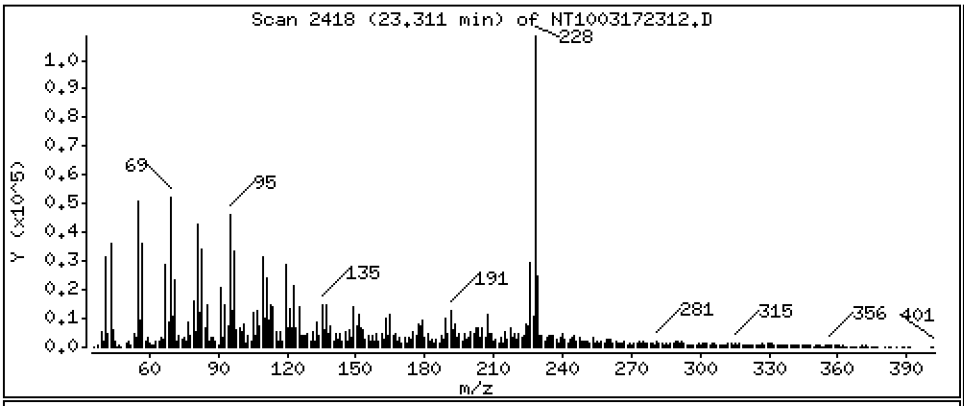
Operator: VTS

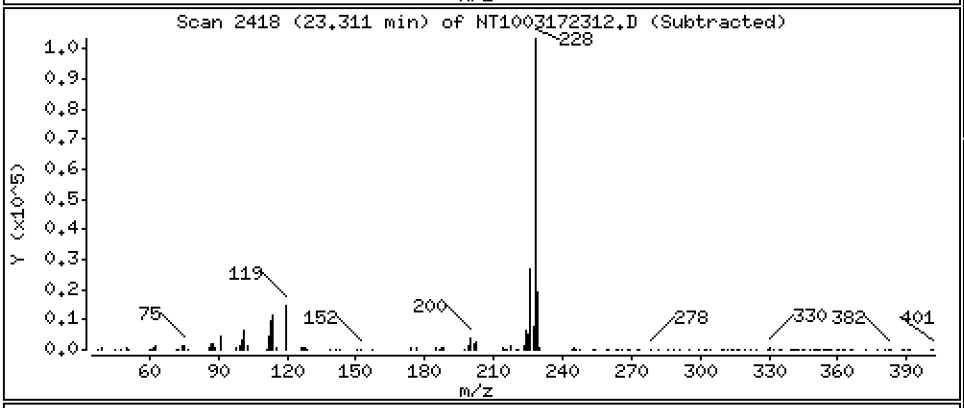
Column phase: ZB-5msi

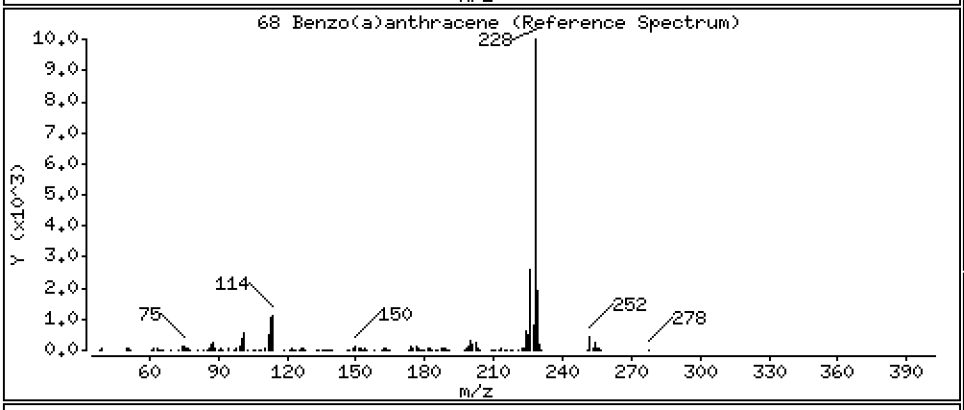
Column diameter: 0.25

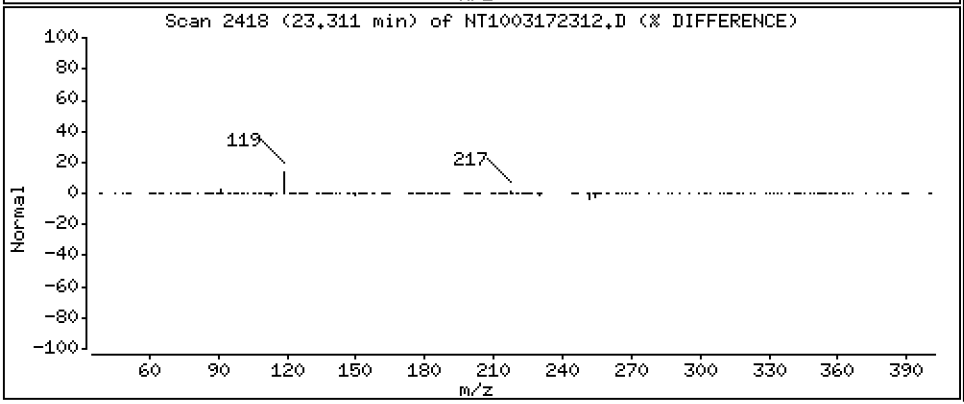
68 Benzo(a)anthracene

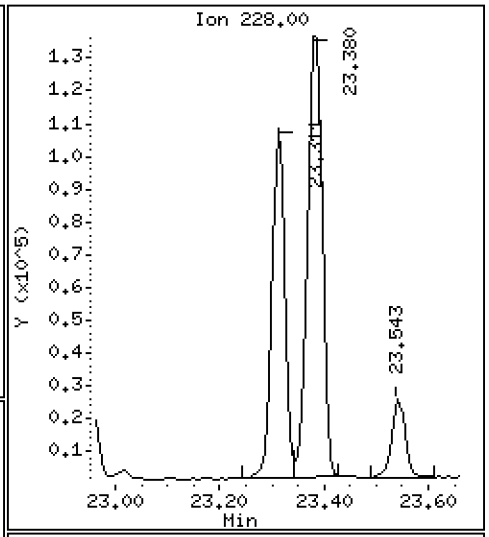
Concentration: 0.9895 ug/mL

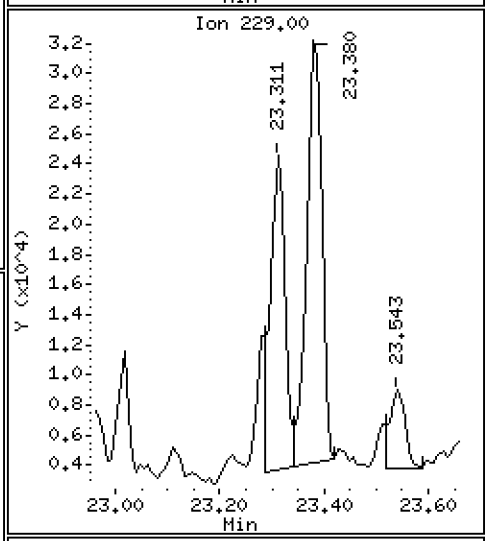


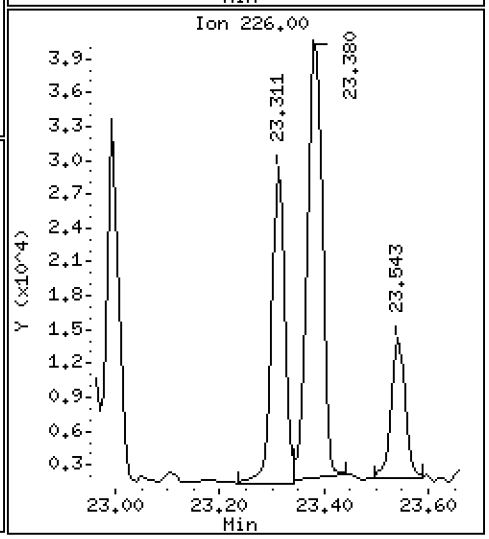












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

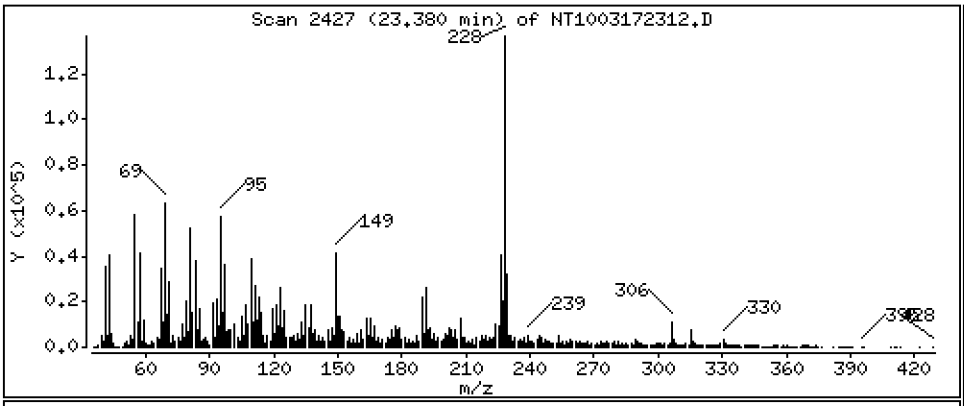
Operator: VTS

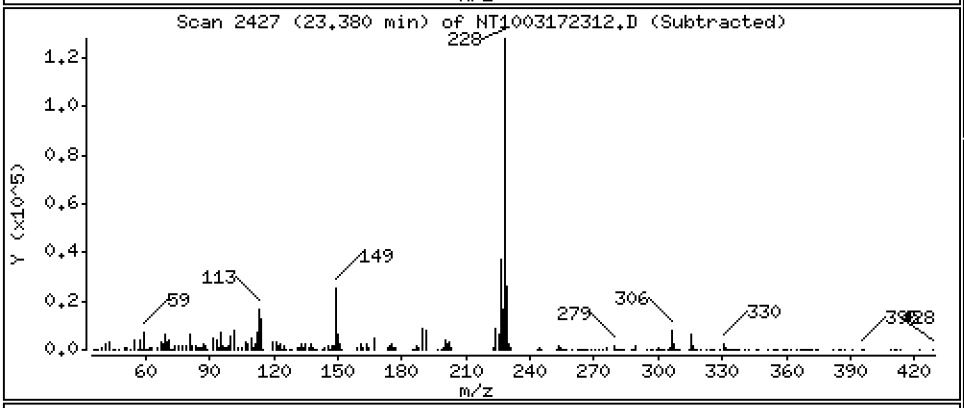
Column phase: ZB-5msi

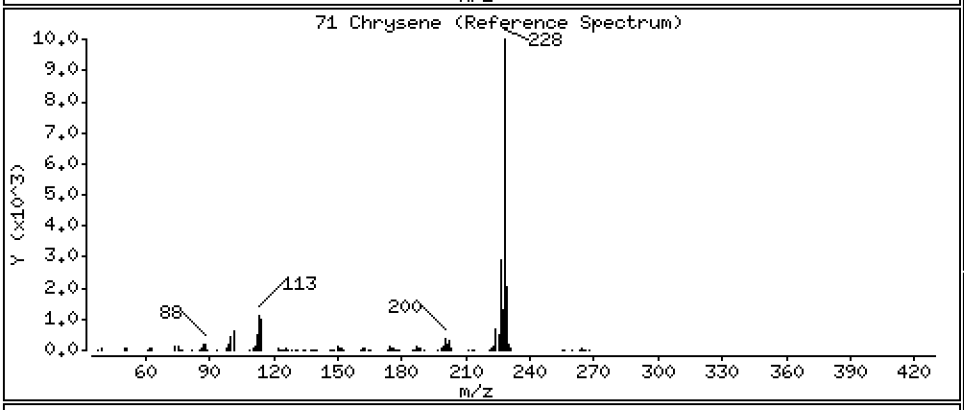
Column diameter: 0.25

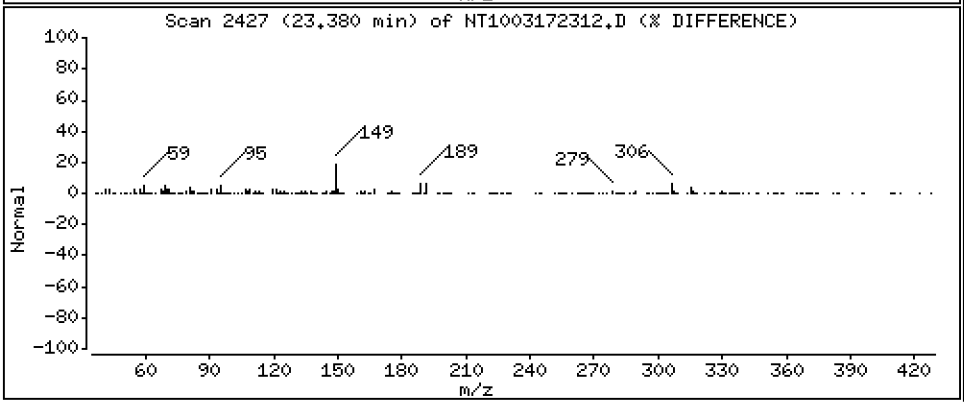
71 Chrysene

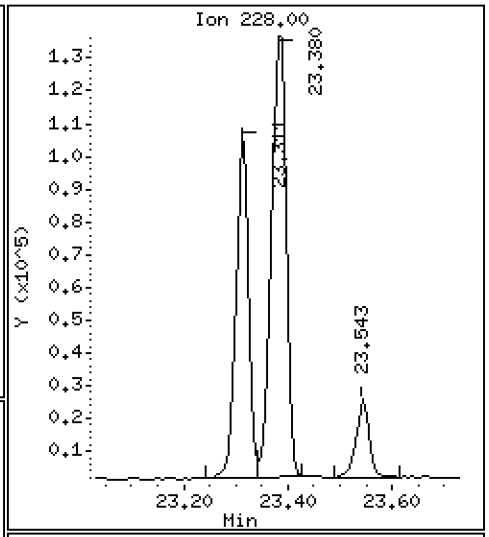
Concentration: 1.506 ug/mL

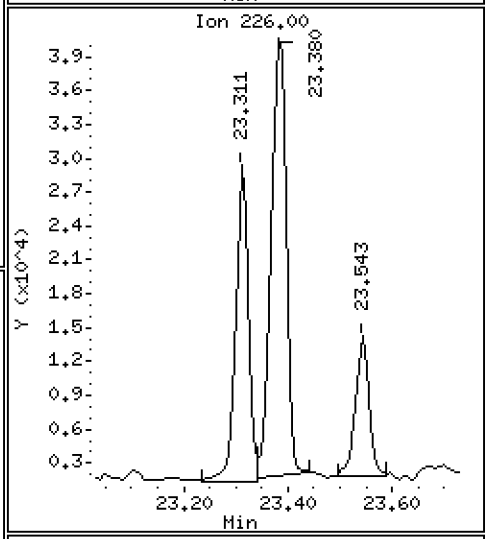


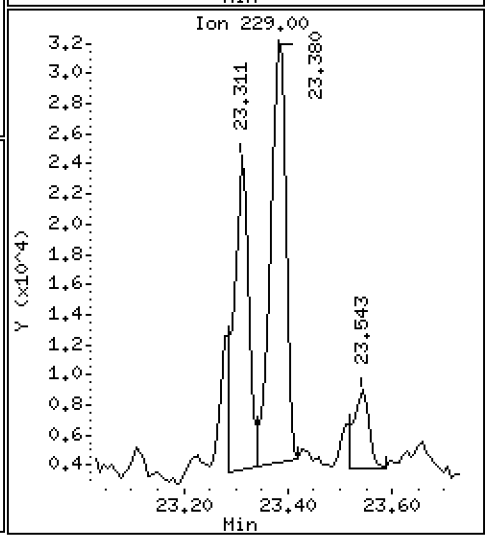












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

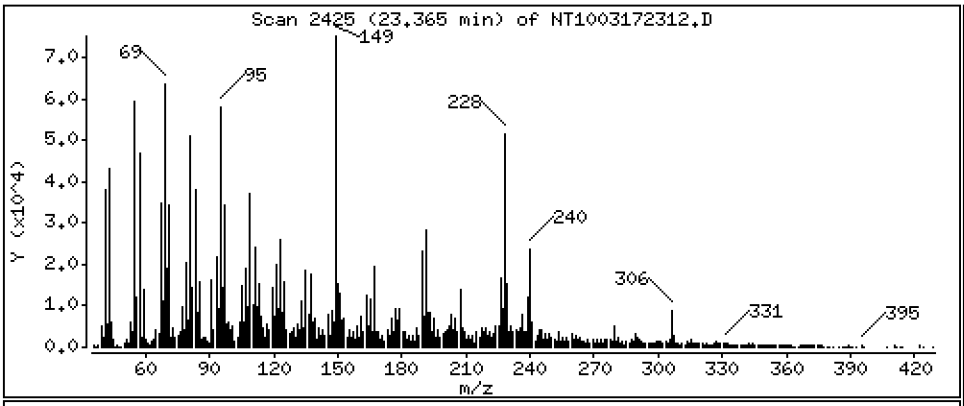
Operator: VTS

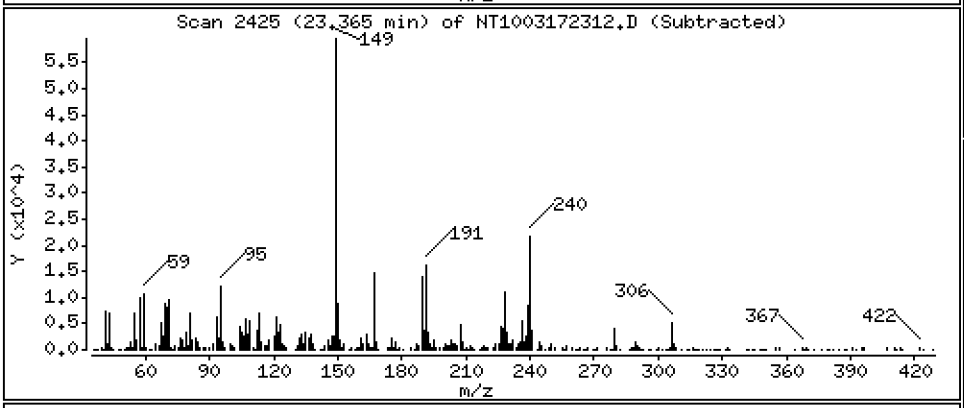
Column phase: ZB-5msi

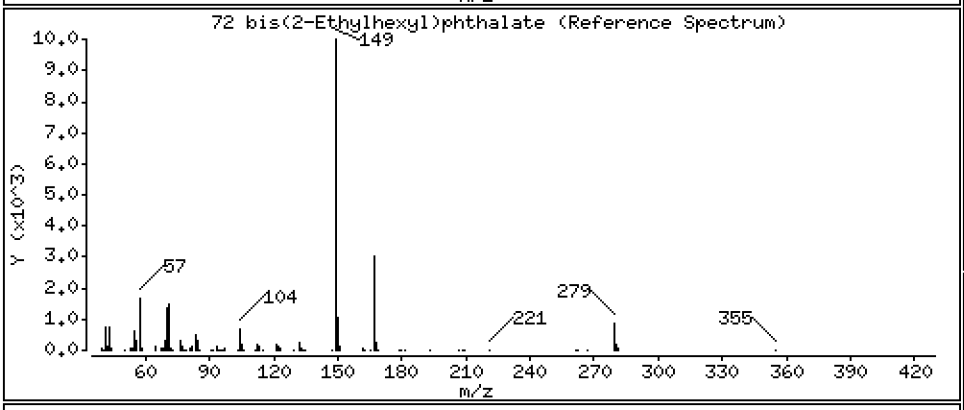
Column diameter: 0.25

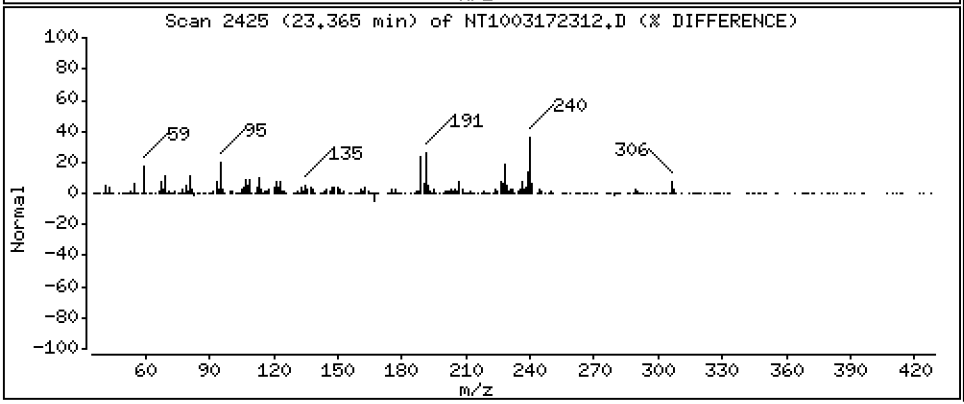
72 bis(2-Ethylhexyl)phthalate

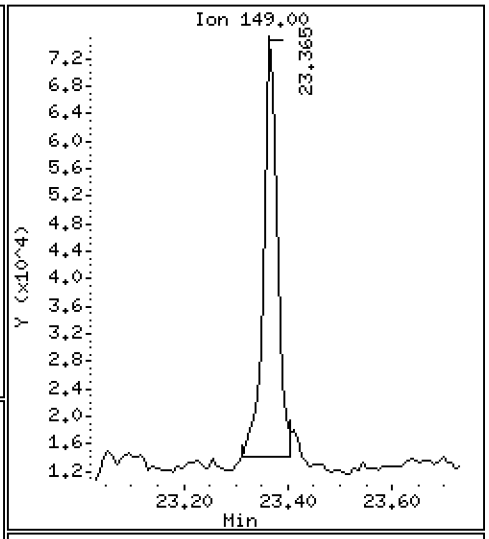
Concentration: 0.8398 ug/mL

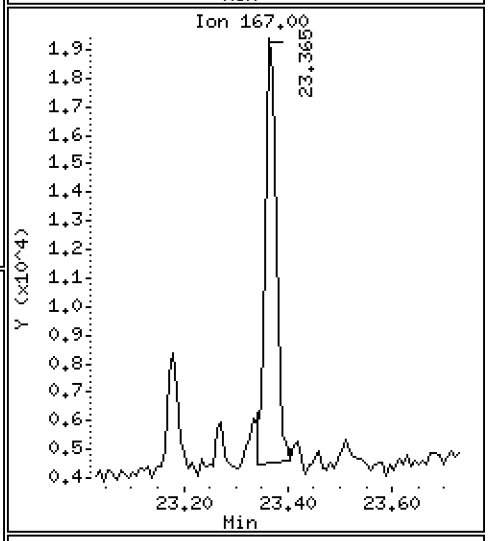


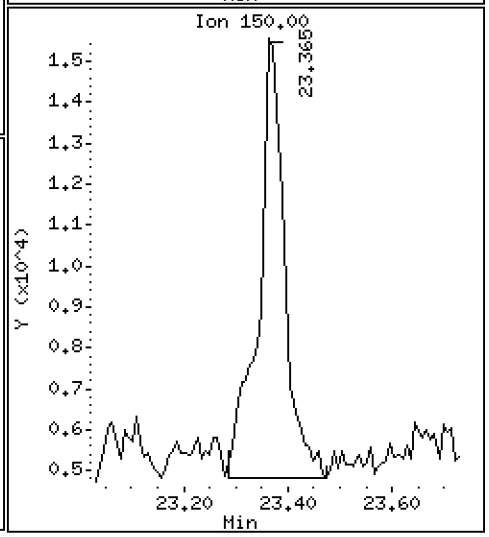












Date : 18-MAR-2023 01:25

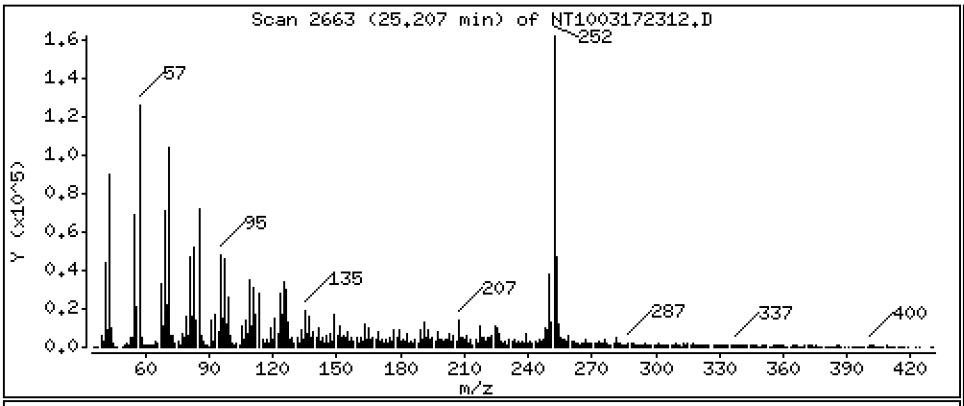
Client ID: Instrument: nt10.i

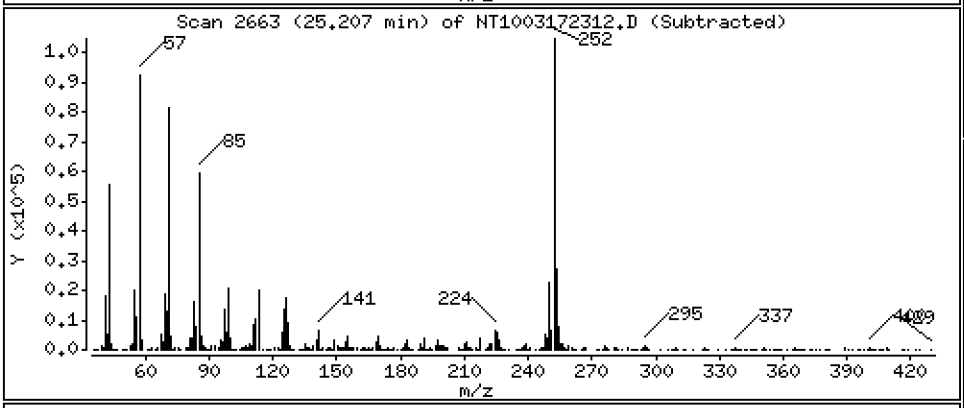
Sample Info: 23A0420-08

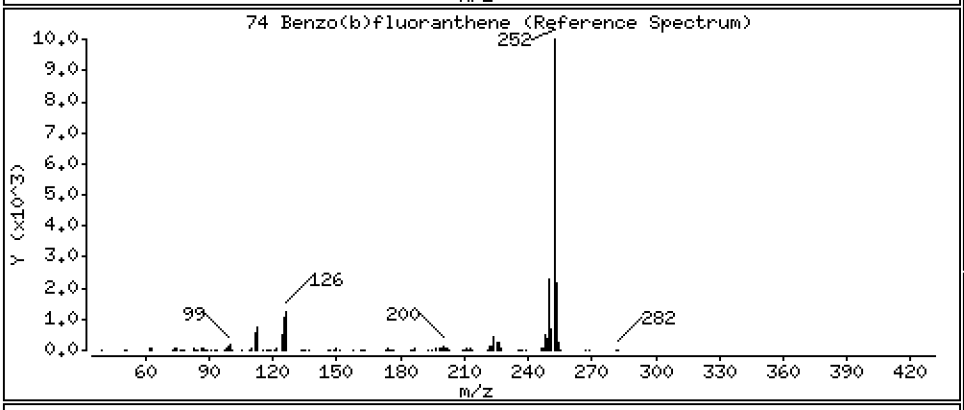
Operator: VTS

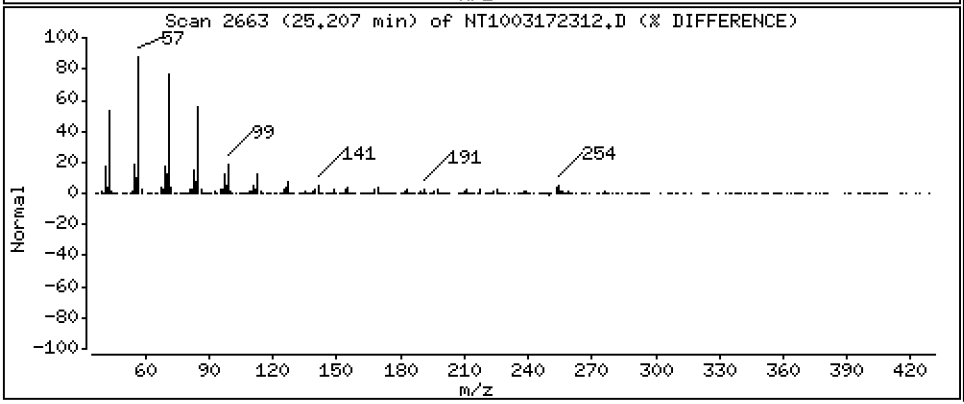
Column phase: ZB-5msi Column diameter: 0.25

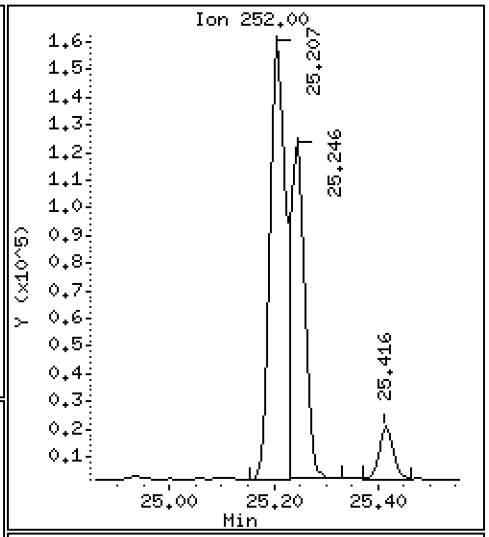
74 Benzo(b)fluoranthene Concentration: 1.845 ug/mL

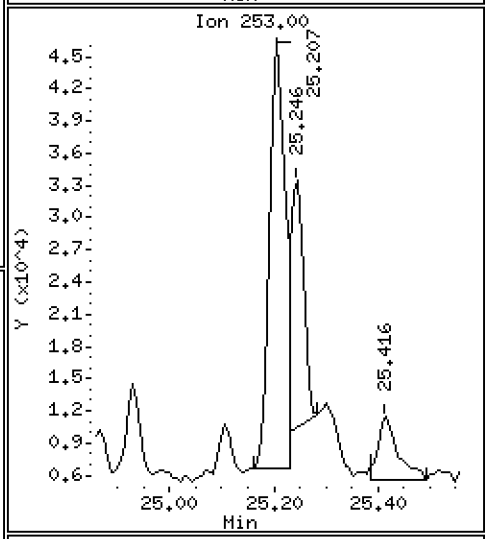


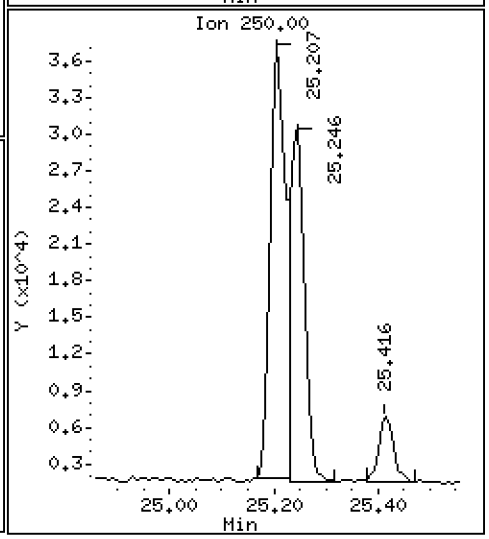












Date : 18-MAR-2023 01:25

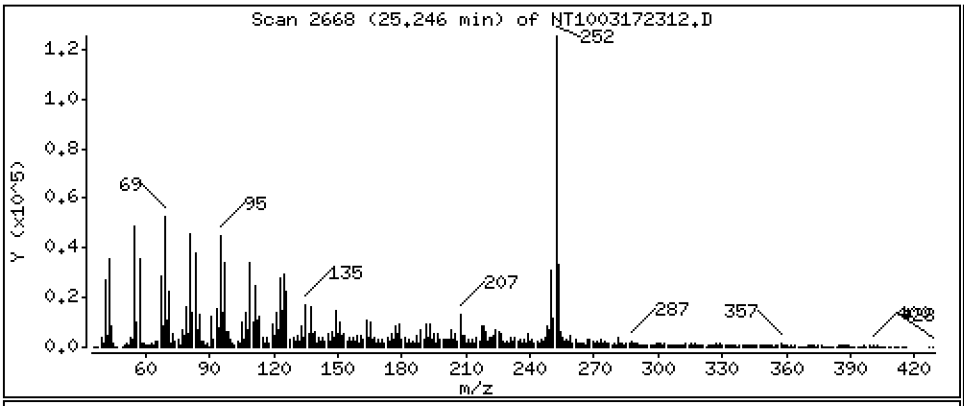
Client ID: Instrument: nt10.i

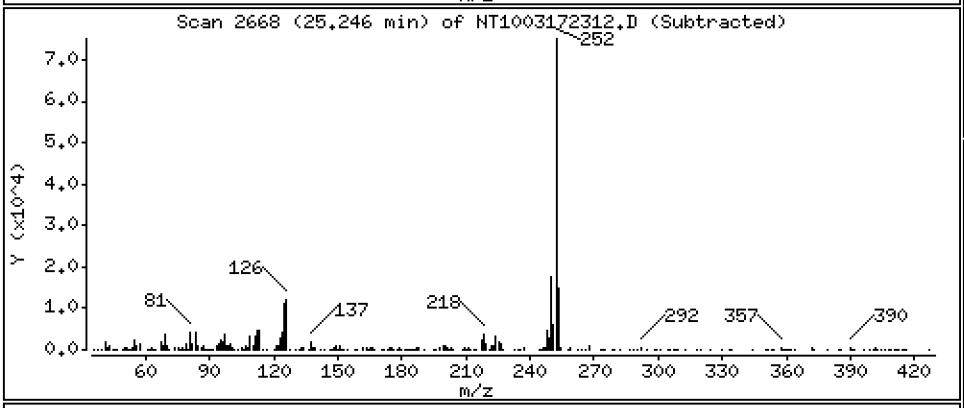
Sample Info: 23A0420-08

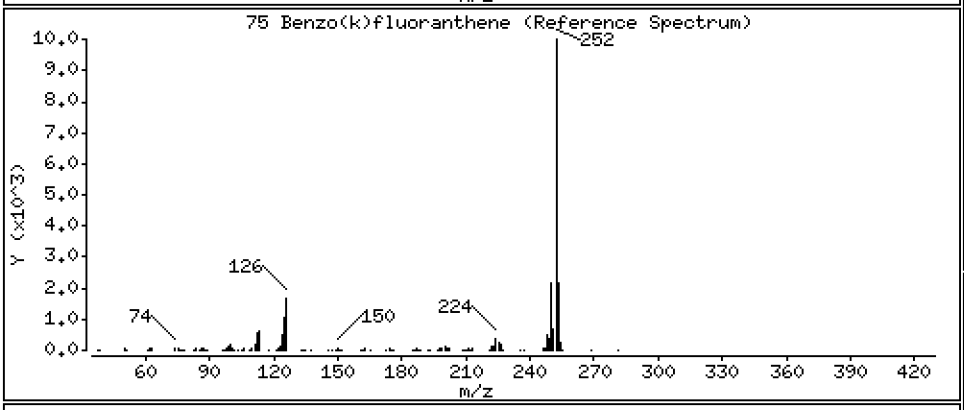
Operator: VTS

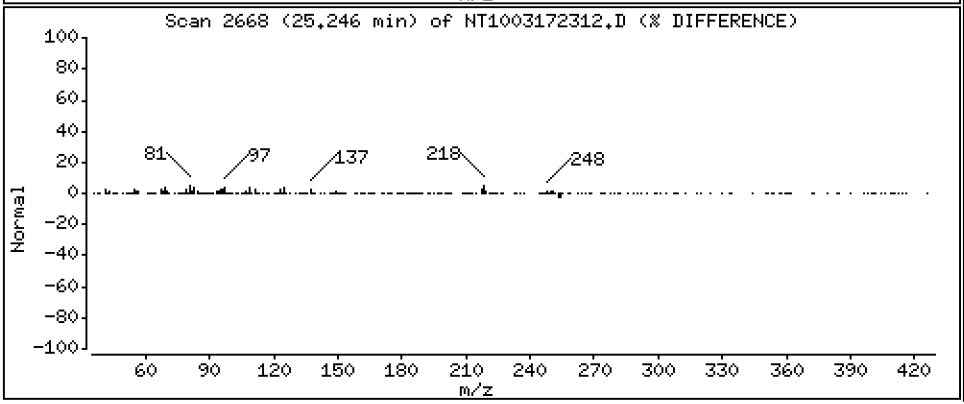
Column phase: ZB-5msi Column diameter: 0.25

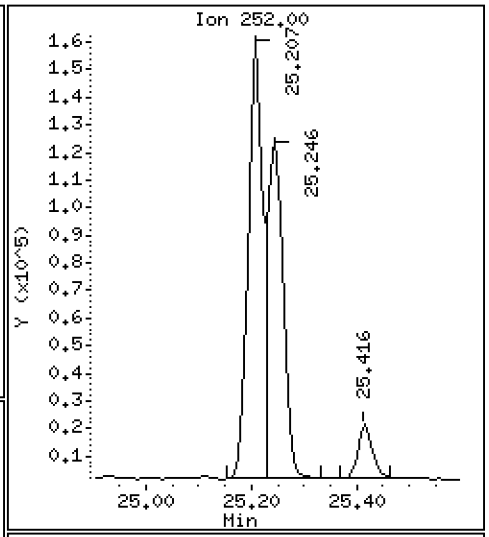
75 Benzo(k)fluoranthene Concentration: 1.344 ug/mL

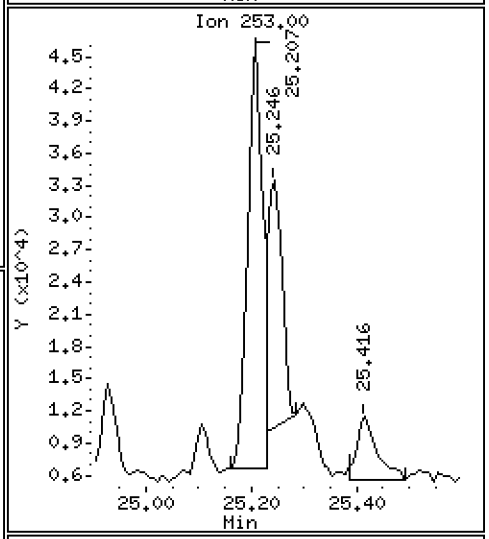


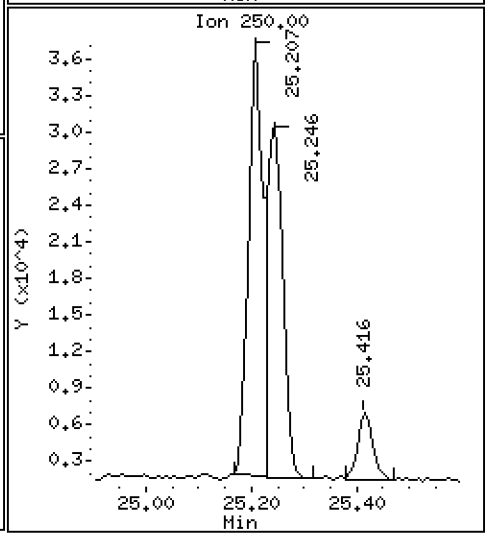












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

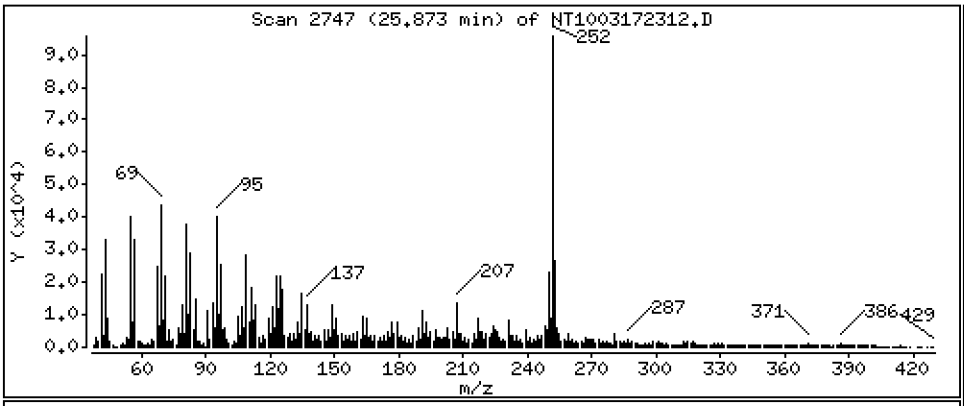
Operator: VTS

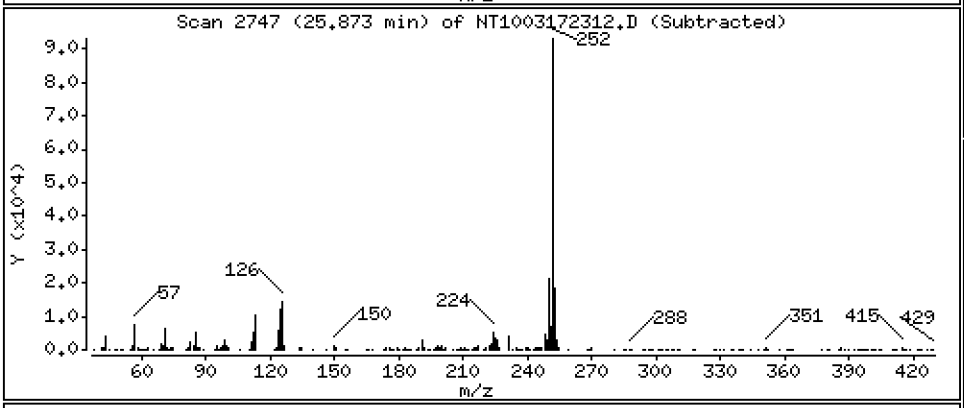
Column phase: ZB-5msi

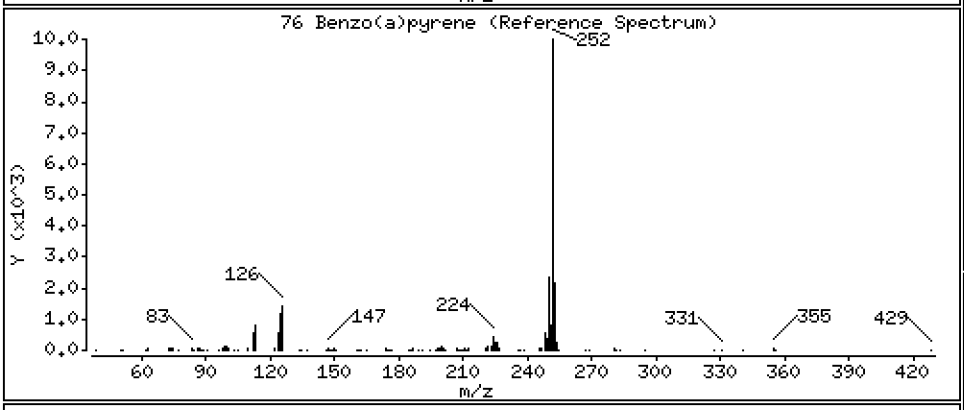
Column diameter: 0.25

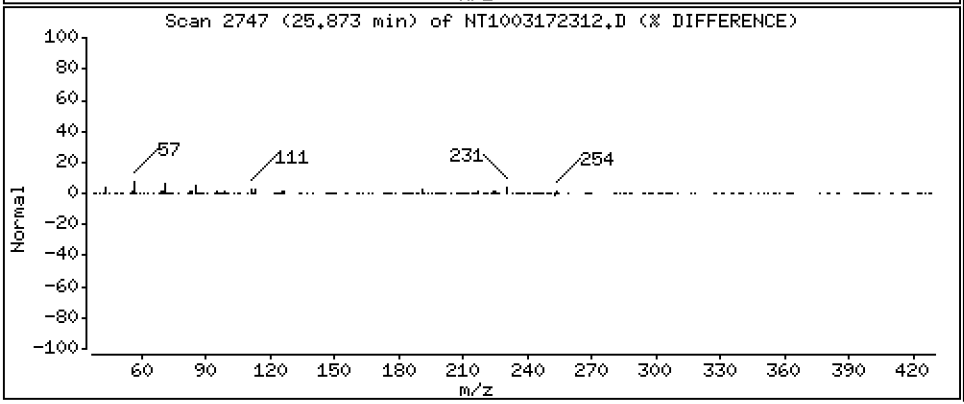
76 Benzo(a)pyrene

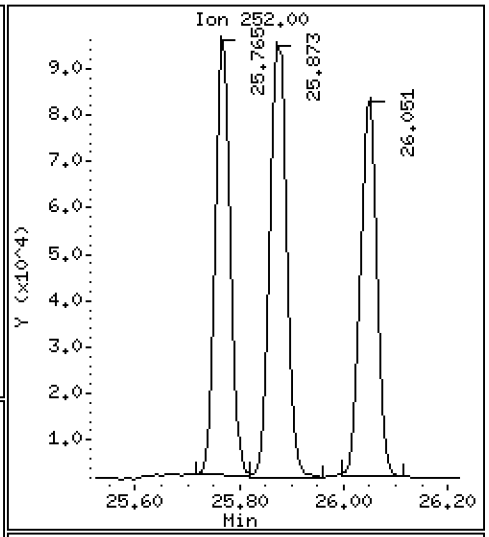
Concentration: 1.266 ug/mL

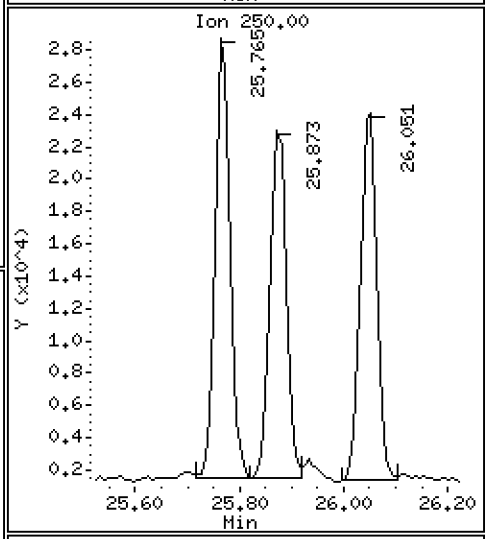


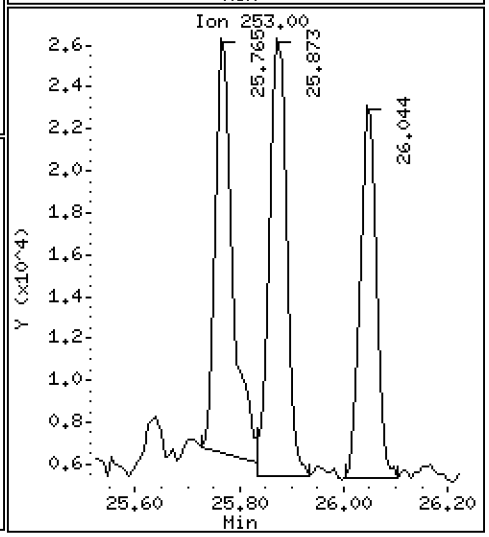












Date : 18-MAR-2023 01:25

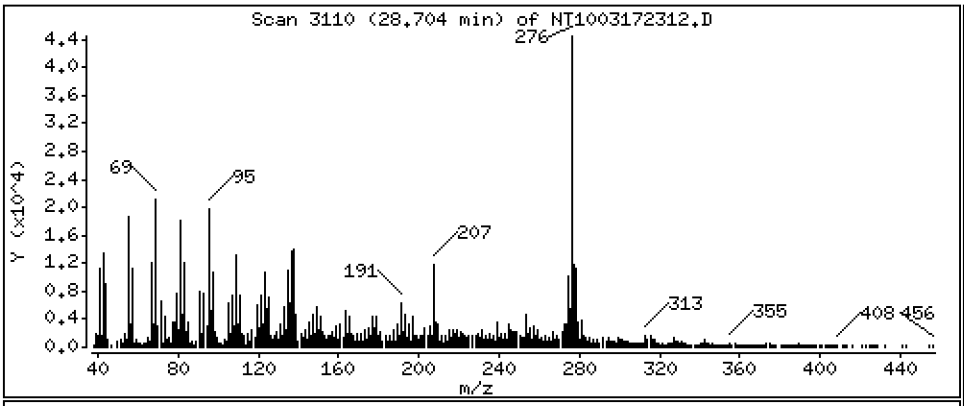
Client ID: Instrument: nt10.i

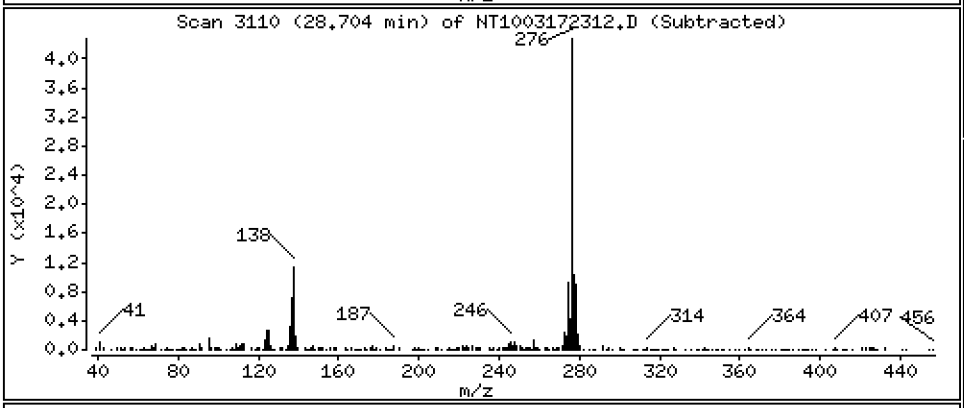
Sample Info: 23A0420-08

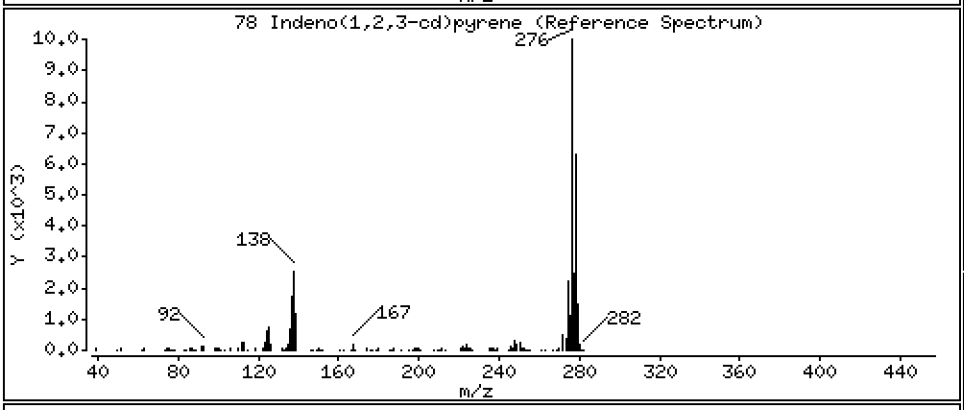
Operator: VTS

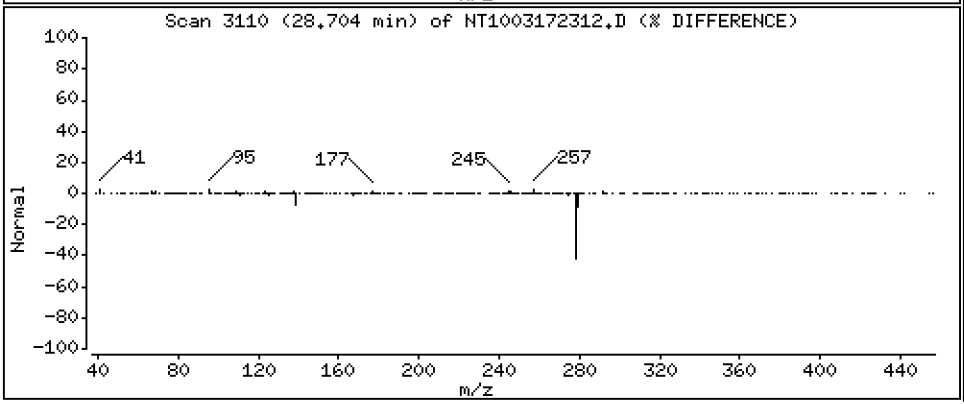
Column phase: ZB-5msi Column diameter: 0.25

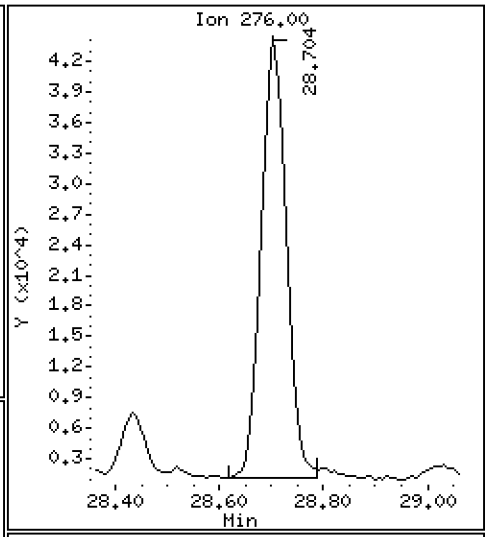
78 Indeno(1,2,3-cd)pyrene Concentration: 0.6958 ug/mL

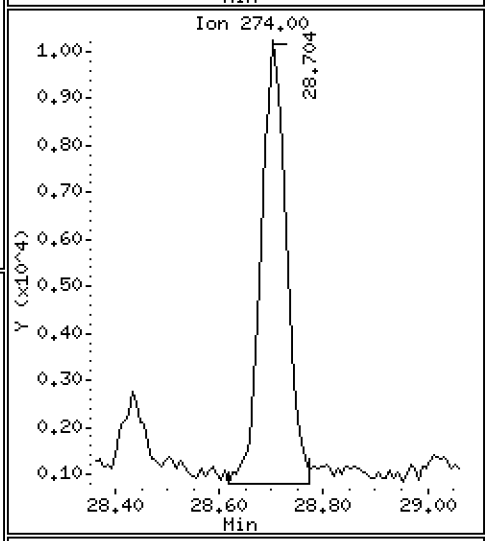


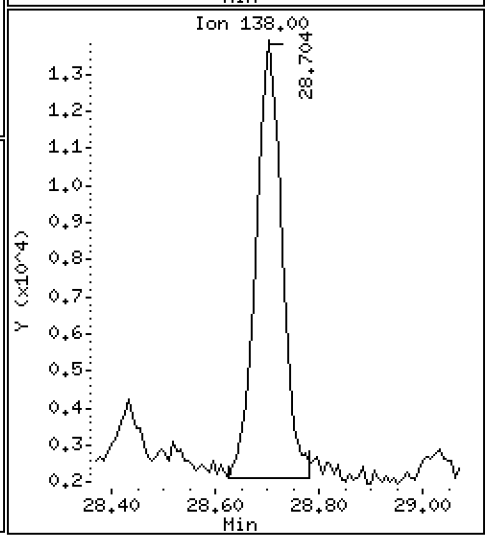












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

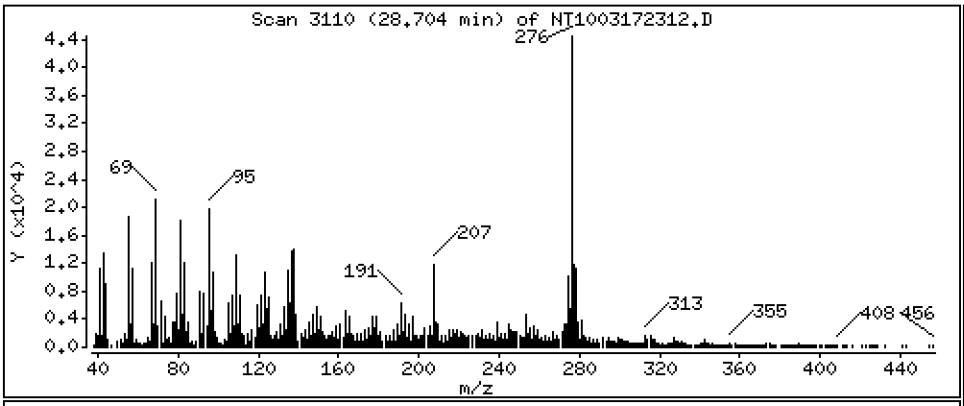
Operator: VTS

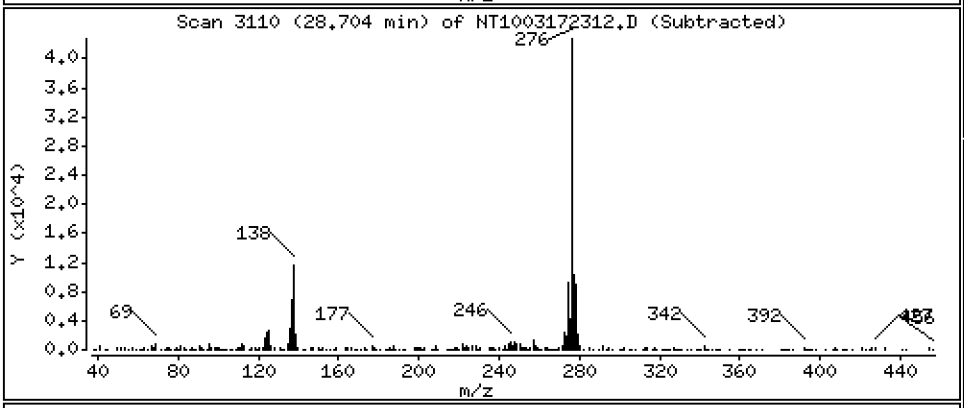
Column phase: ZB-5msi

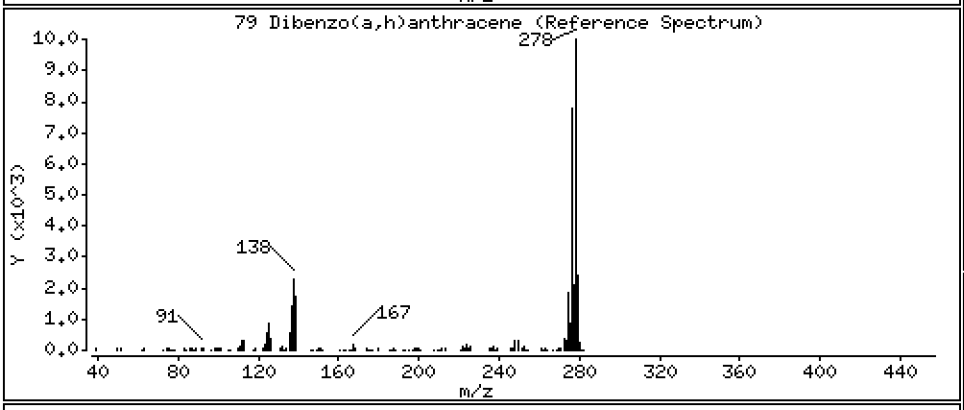
Column diameter: 0.25

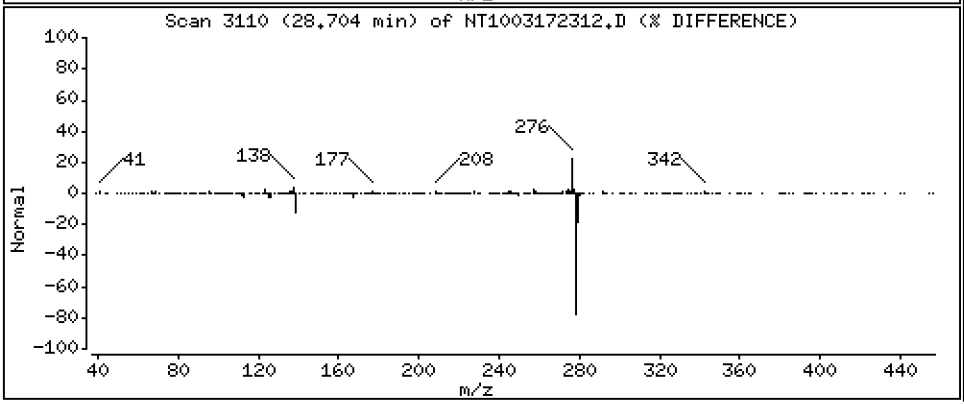
79 Dibenzo(a,h)anthracene

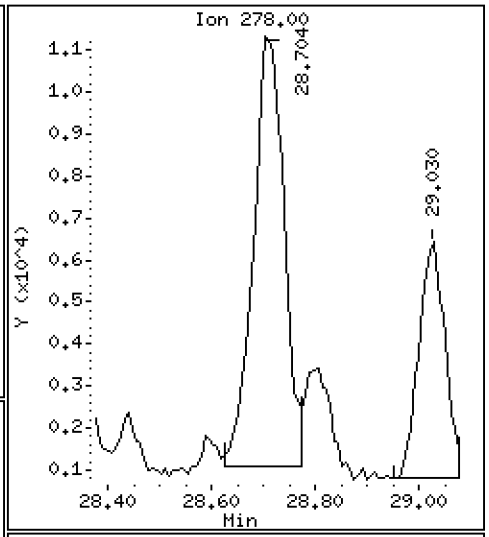
Concentration: 0.2484 ug/mL

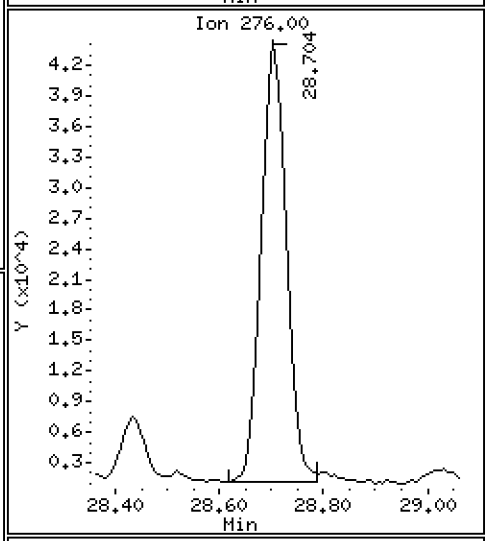


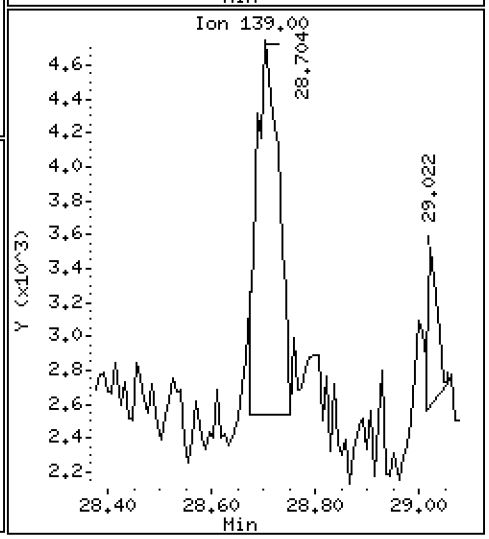












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

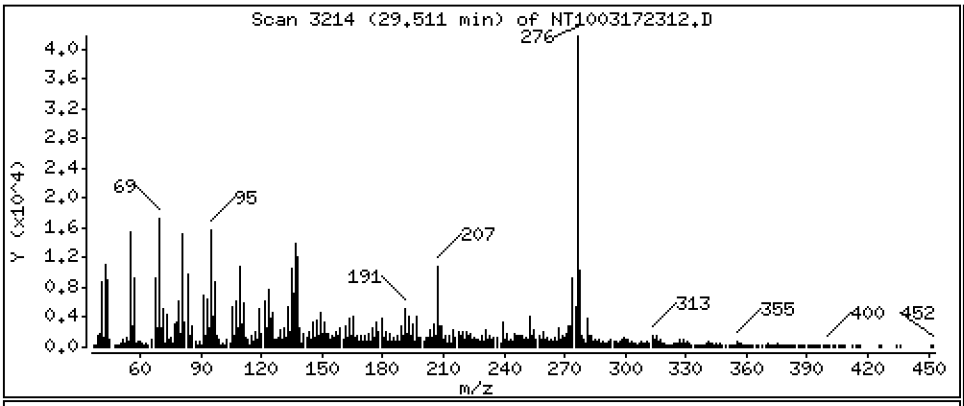
Operator: VTS

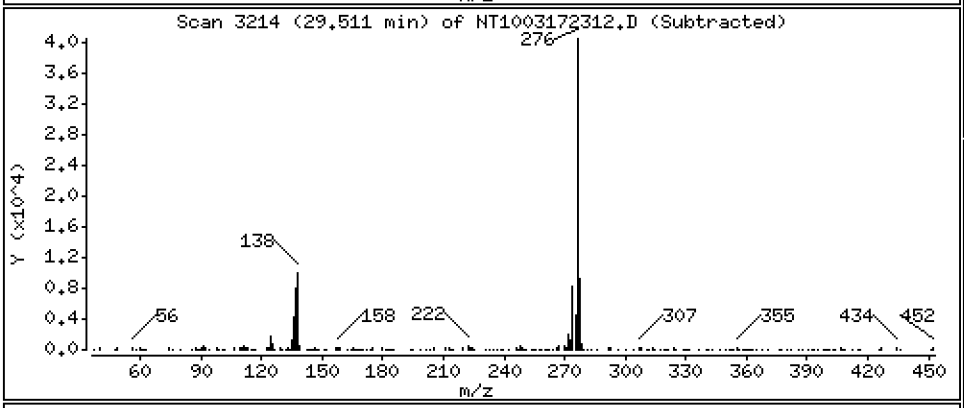
Column phase: ZB-5msi

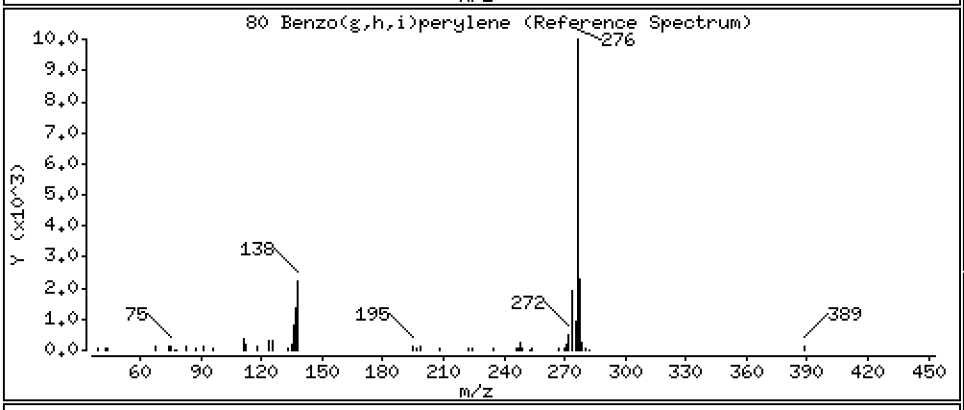
Column diameter: 0.25

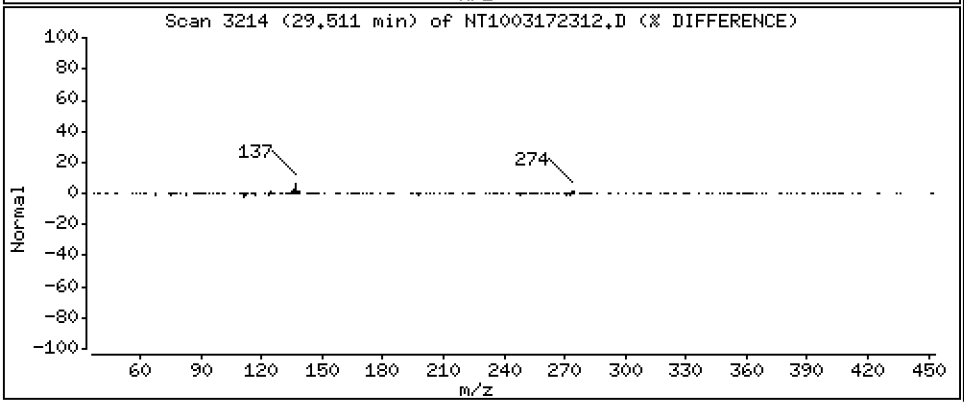
80 Benzo(g,h,i)perylene

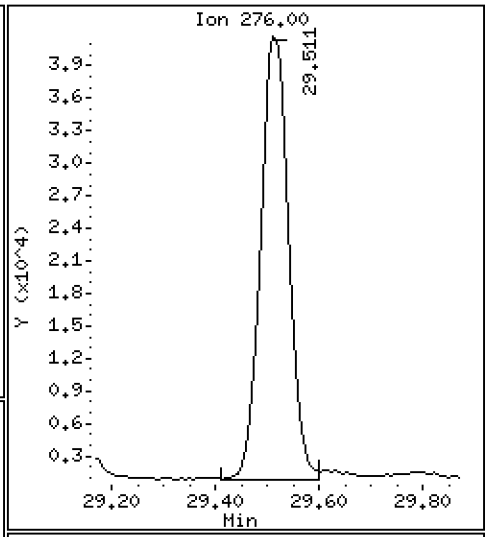
Concentration: 0.8530 ug/mL

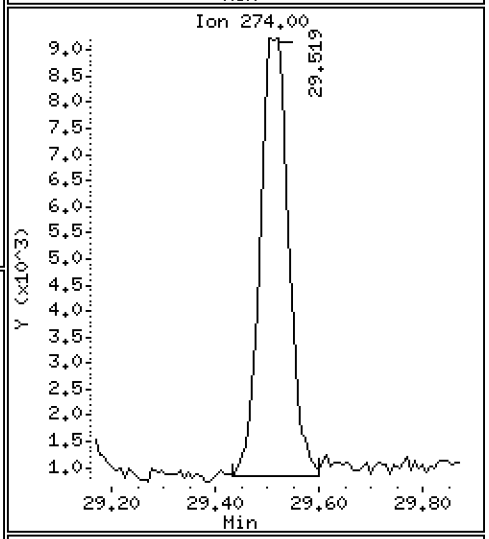


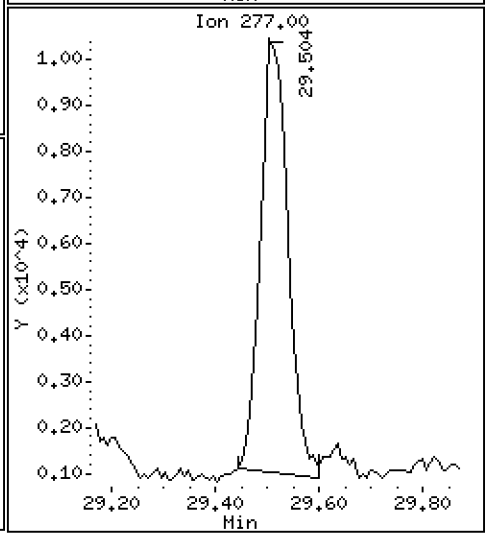












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

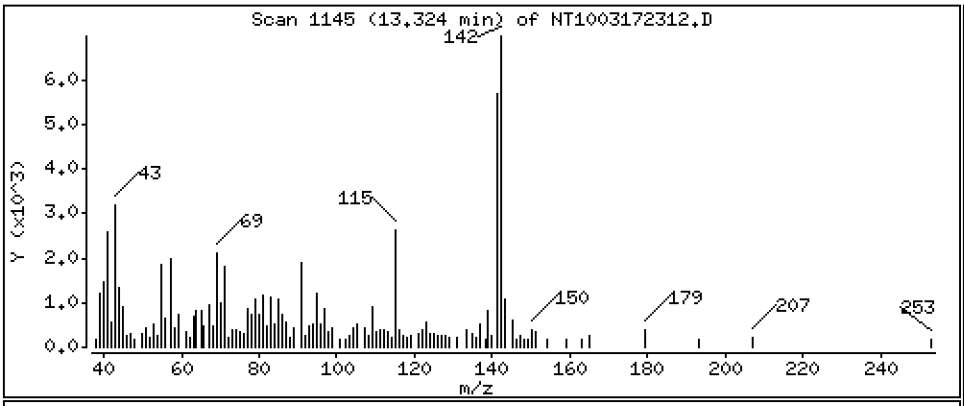
Operator: VTS

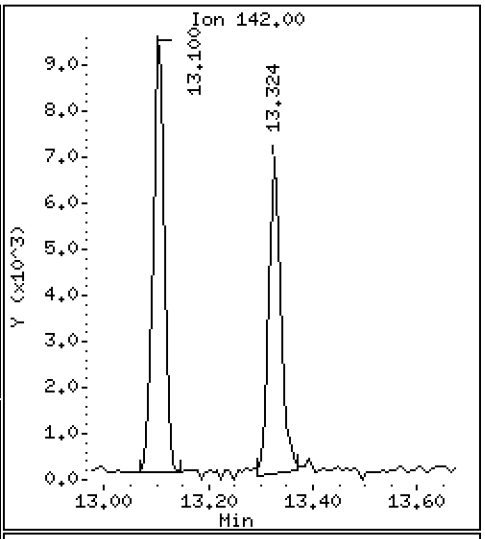
Column phase: ZB-5msi

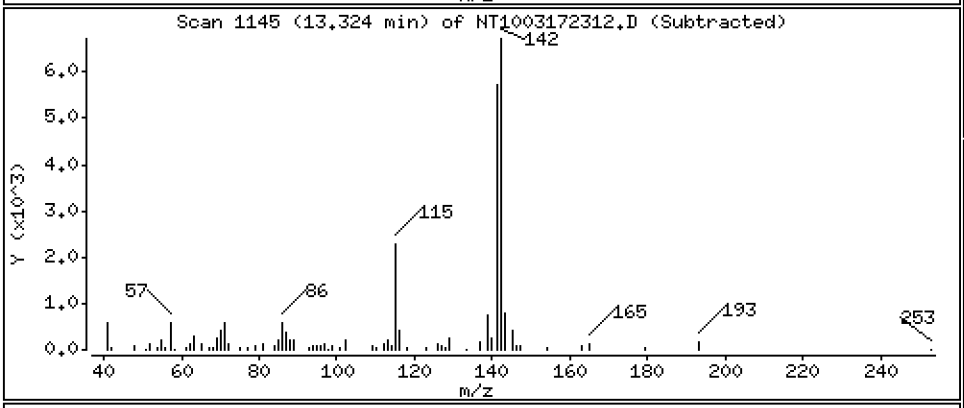
Column diameter: 0.25

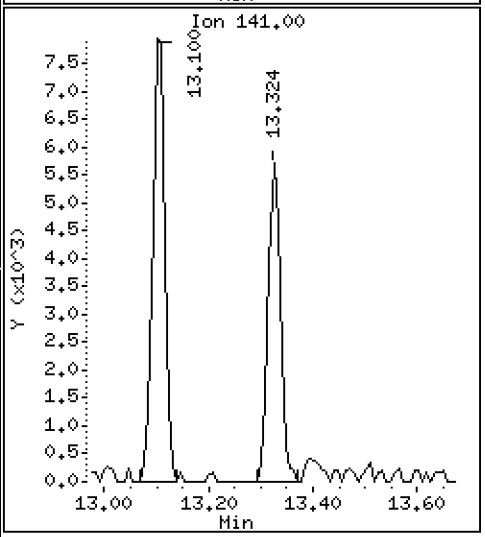
105 1-methylnaphthalene

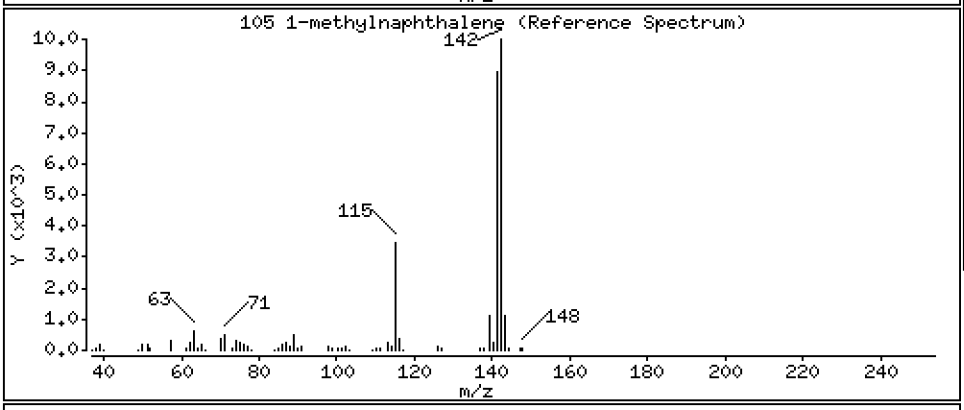
Concentration: 0.09055 ug/mL

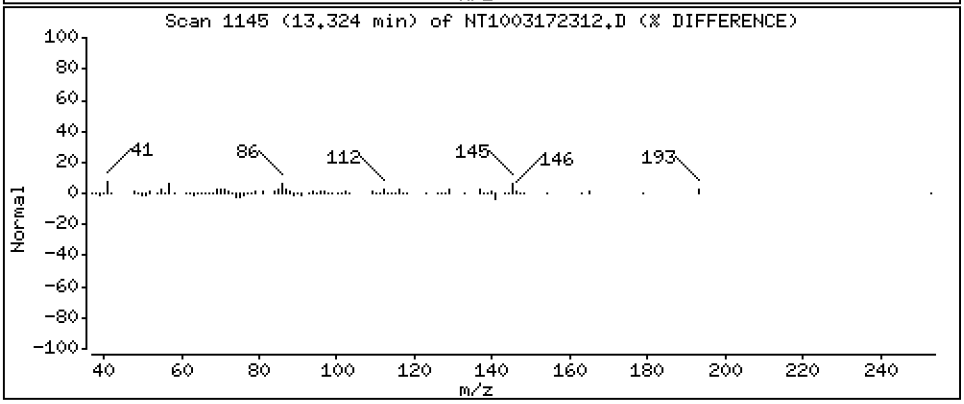












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

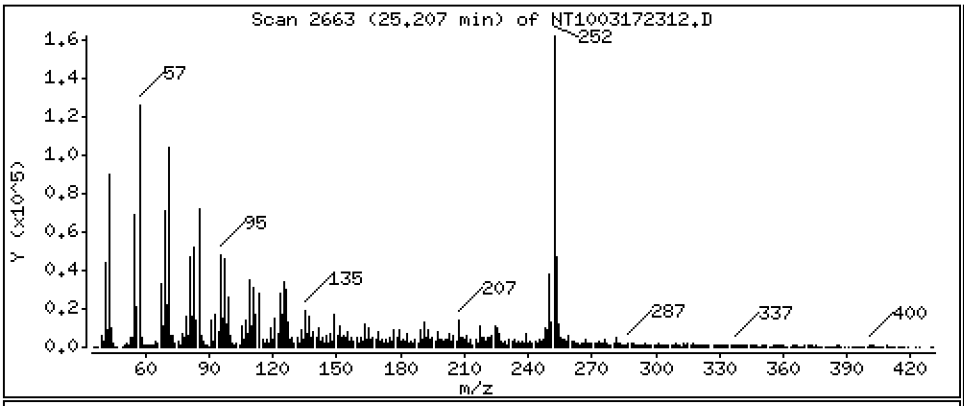
Operator: VTS

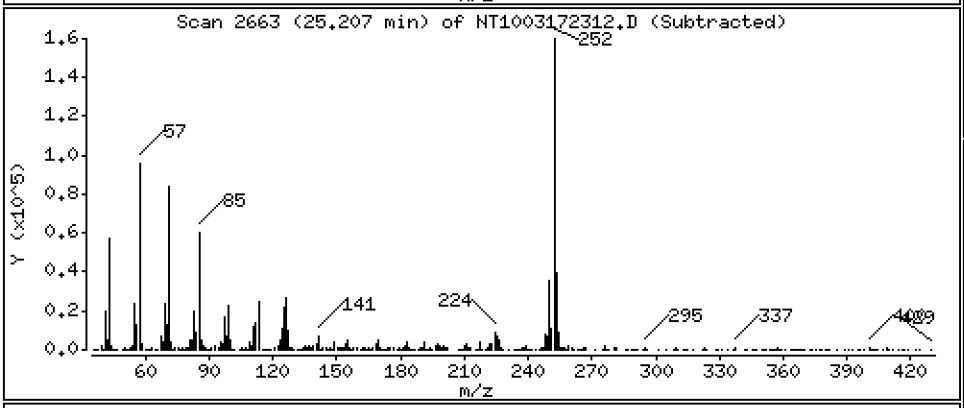
Column phase: ZB-5msi

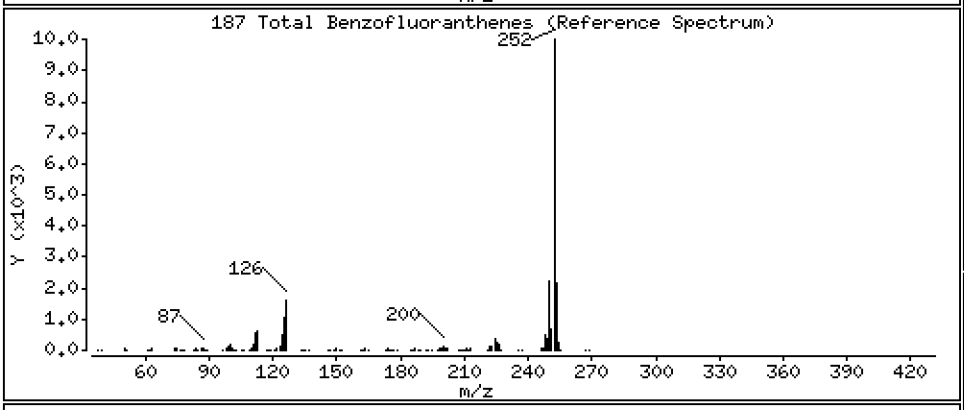
Column diameter: 0.25

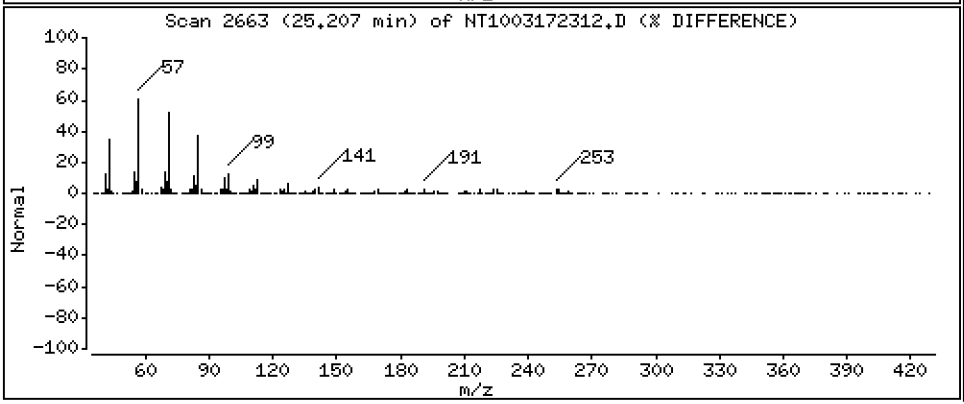
187 Total Benzofluoranthenes

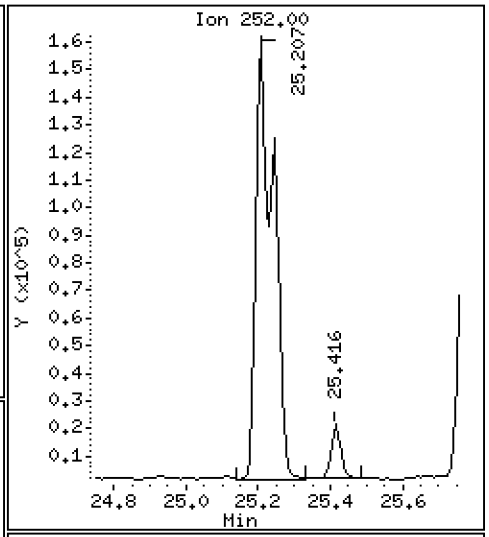
Concentration: 3.101 ug/mL

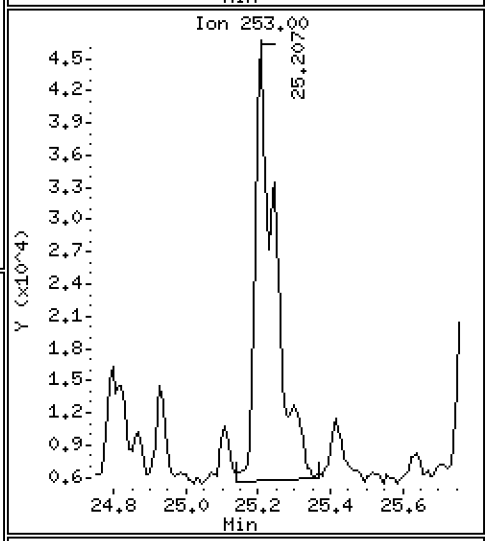


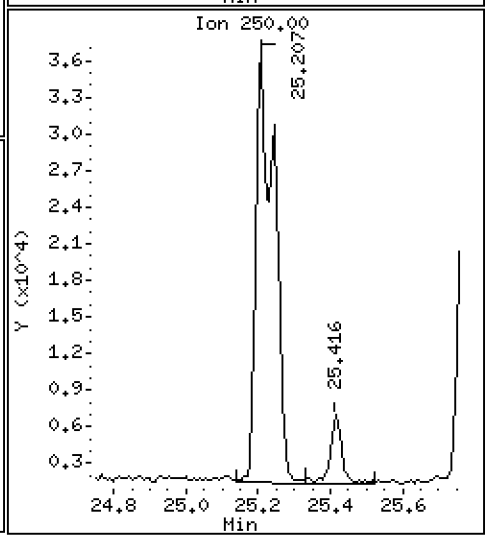












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230317.b\NT1003172312.D
Lab Smp Id: 23A0420-08
Inj Date : 18-MAR-2023 01:25
Operator : VTS Inst ID: nt10.i
Smp Info : 23A0420-08
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230317.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

								CONCENTRATIONS	
		QUANT SIG						ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/mL)
$	1 2-Fluorophenol	112	6.982	6.975	(0.759)	147770		2.73885	2.739
$	2 Phenol-d5	99	8.551	8.543	(0.929)	241178		3.40750	3.407
	3 Phenol	94	8.566	8.566	(0.931)	63780		0.86716	0.8672
$	5 2-Chlorophenol-d4	132	8.837	8.837	(0.960)	299539		4.95598	4.956
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.						
	6 2-Chlorophenol	128	Compound Not Detected.						
	7 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	8 1,4-Dichlorobenzene-d4	152	9.201	9.200	(1.000)	178410		4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.						
$	10 1,2-Dichlorobenzene-d4	152	9.558	9.557	(1.039)	138613		3.19347	3.193
	12 1,2-Dichlorobenzene	146	Compound Not Detected.						
	11 Benzyl alcohol	108	9.464	9.464	(1.029)	7961		0.23061	0.2306
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.						
	13 2-Methylphenol	108	9.682	9.682	(1.052)	1634		0.03048	0.03048(M)
	17 Hexachloroethane	117	Compound Not Detected.						
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.						
	15 4-Methylphenol	108	9.946	9.946	(1.081)	52026		0.92094	0.9209
$	18 Nitrobenzene-d5	82	10.287	10.287	(0.881)	231018		3.47608	3.476
	19 Nitrobenzene	77	Compound Not Detected.						
	20 Isophorone	82	Compound Not Detected.						
	21 2-Nitrophenol	139	Compound Not Detected.						
	22 2,4-Dimethylphenol	107	Compound Not Detected.						
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	24 Benzoic acid	105	11.082	11.175	(0.949)	16637		0.49973	0.4997(M)
	25 2,4-Dichlorophenol	162	Compound Not Detected.						
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	27 Naphthalene-d8	136	11.676	11.676	(1.000)	658429		4.00000	
	28 Naphthalene	128	11.715	11.715	(1.003)	25719		0.14745	0.1474
	29 4-Chloroaniline	127	Compound Not Detected.						
	30 Hexachlorobutadiene	225	Compound Not Detected.						
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	32 2-Methylnaphthalene	142	13.099	13.099	(1.122)	14212		0.11290	0.1129
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.						

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	13.881	13.881	(0.908)	543127	3.89867	3.899
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	14.779	14.787	(0.967)	9674	0.08456	0.08456
	40 Acenaphthylene	152	14.965	14.965	(0.979)	17075	0.09714	0.09714
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	15.282	15.282	(1.000)	352175	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.344	15.344	(1.004)	9439	0.08692	0.08692
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.668	15.676	(1.025)	19121	0.11941	0.1194
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	16.225	16.240	(1.062)	12981	0.11564	0.1156
	49 Fluorene	166	16.380	16.387	(1.072)	15767	0.12516	0.1252
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	16.912	16.919	(1.107)	108113	6.58128	6.581
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.311	18.310	(1.000)	666439	4.00000	
	60 Phenanthrene	178	18.357	18.357	(1.003)	176638	0.97202	0.9720
	61 Anthracene	178	18.450	18.457	(1.008)	62978	0.36128	0.3613
	62 Carbazole	167	18.775	18.782	(1.025)	26165	0.16750	0.1675
	63 Di-n-butylphthalate	149	19.572	19.572	(1.069)	11369	0.05413	0.05413
	64 Fluoranthene	202	20.755	20.732	(0.889)	447838	2.24605	2.246
	65 Pyrene	202	21.173	21.158	(0.907)	543303	2.65625	2.656
$	66 Terphenyl-d14	244	21.444	21.436	(0.919)	644734	4.19739	4.197
	67 Butylbenzylphthalate	149	22.350	22.358	(0.958)	31385	0.43627	0.4363
	68 Benzo(a)anthracene	228	23.310	23.310	(0.999)	173309	0.98949	0.9895
*	69 Chrysene-d12	240	23.341	23.341	(1.000)	496218	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.380	23.380	(1.002)	257784	1.50647	1.506
	72 bis(2-Ethylhexyl)phthalate	149	23.364	23.380	(0.959)	108570	0.83981	0.8398
*	134 Di-n-octylphthalate-d4	153	24.355	24.363	(1.000)	883552	4.00000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	25.207	25.207	(0.970)	332961	1.84479	1.845
	75 Benzo(k)fluoranthene	252	25.246	25.253	(0.971)	246398	1.34445	1.344
	76 Benzo(a)pyrene	252	25.873	25.873	(0.995)	204326	1.26623	1.266
*	77 Perylene-d12	264	25.997	25.997	(1.000)	556801	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.703	28.711	(1.104)	142841	0.69578	0.6958
	79 Dibenzo(a,h)anthracene	278	28.703	28.726	(1.104)	42335	0.24838	0.2484
	80 Benzo(g,h,i)perylene	276	29.511	29.519	(1.135)	151553	0.85302	0.8530
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	142	13.324	13.324	(1.141)	10443	0.09055	0.09055
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.207	25.253	(0.970)	540477	3.10146	3.101
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172312.D
Lab Smp Id: 23A0420-08
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230317.b\ABN.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:02
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	132765	66383	265530	178410	34.38
27 Naphthalene-d8	497947	248974	995894	658429	32.23
42 Acenaphthene-d10	271928	135964	543856	352175	29.51
59 Phenanthrene-d10	497390	248695	994780	666439	33.99
69 Chrysene-d12	391403	195702	782806	496218	26.78
134 Di-n-octylphthala	674651	337326	1349302	883552	30.96
77 Perylene-d12	408663	204332	817326	556801	36.25

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.20	8.70	9.70	9.20	0.00
27 Naphthalene-d8	11.68	11.18	12.18	11.68	0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	0.00
59 Phenanthrene-d10	18.31	17.81	18.81	18.31	0.00
69 Chrysene-d12	23.34	22.84	23.84	23.34	0.00
134 Di-n-octylphthala	24.36	23.86	24.86	24.36	-0.03
77 Perylene-d12	26.00	25.50	26.50	26.00	0.00

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

REVIEW SUMMARY FOR FILE - NT1003172312.D

Lab ID: 23A0420-08
nt10.i, 20230317.b\ABN.m,   18-MAR-2023 01:25

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

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.949	0.957	-0.0080	Benzoic acid

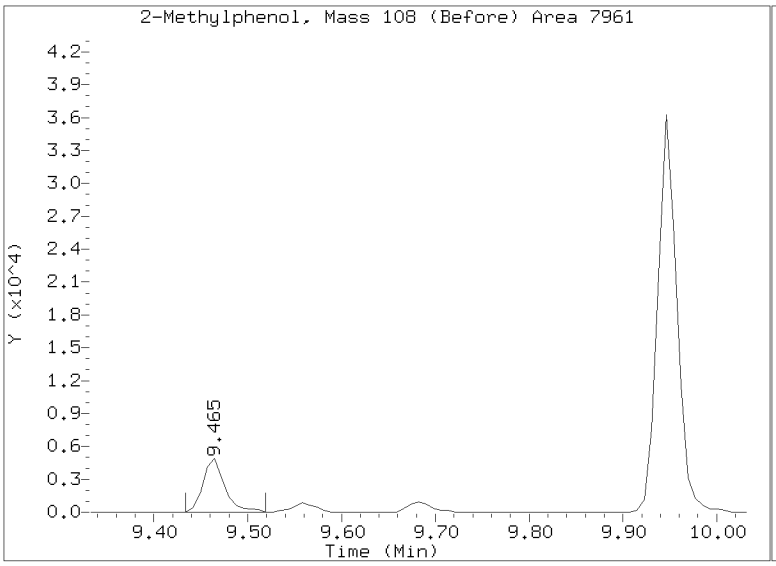
RRT check based on Ccal File: NT1003172302.D

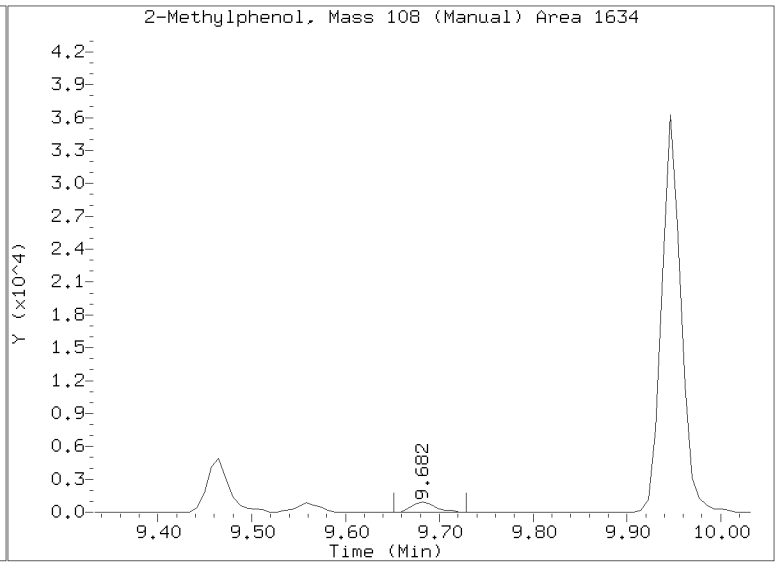
On Column LOD for nt10.i, 20230317.b\ABN.m, ICAL.sub = 0.0000

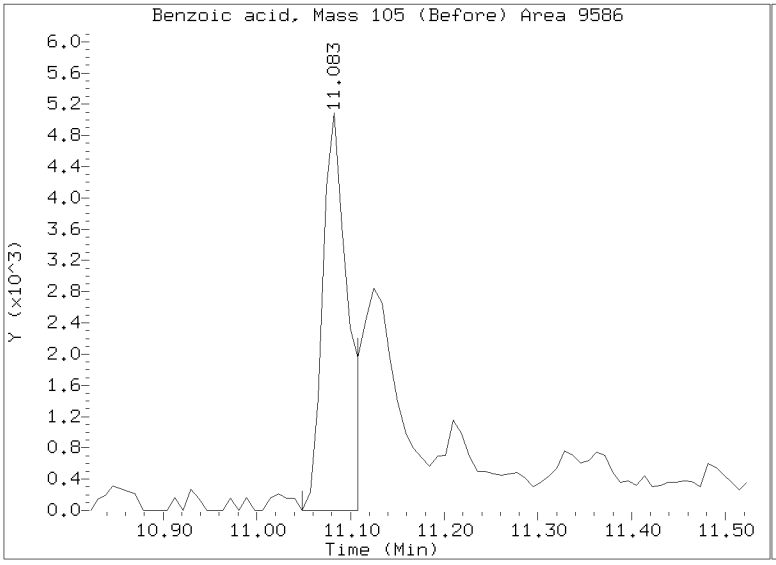
* Only compounds listed in the work order have been verified by the analyst *

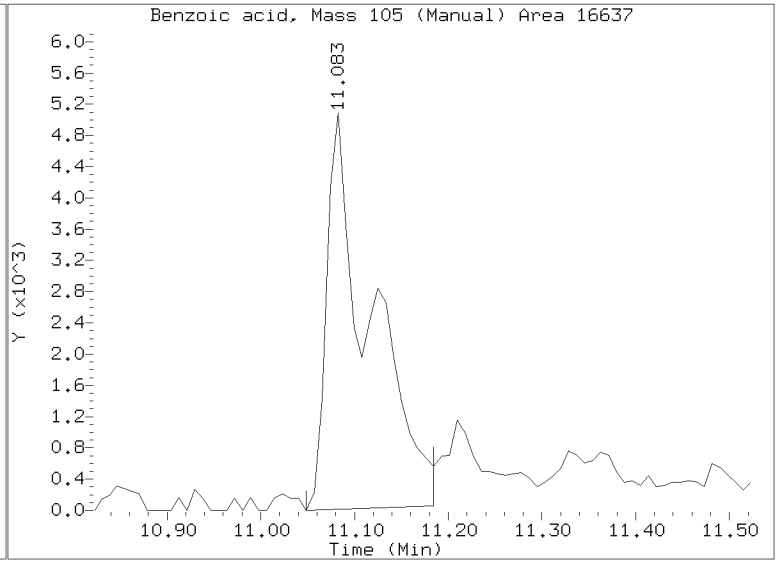
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230317.b/NT1003172312.D
Injection Date: 18-MAR-2023 01:25
Lab ID:23A0420-08 Client ID:
Report Date: 03/30/2023 07:22









LDW23-SC1082

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-09 A	SDG:	23A0420
Sampled:	01/19/23 13:40	Prepared:	02/20/23 16:23	File ID:	NT1003172315.D
% Solids:	58.87	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/18/23 03:19
Batch:	BLB0495	Sequence:	SLC0473	Initial/Final:	16.99 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00046
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	83.7		4.4	20.0
106-44-5	4-Methylphenol	1	58.4		7.4	20.0
91-20-3	Naphthalene	1	42.1	B	4.2	20.0
91-57-6	2-Methylnaphthalene	1	24.0		4.5	20.0
208-96-8	Acenaphthylene	1	15.7	J	6.2	20.0
131-11-3	Dimethylphthalate	1	20.0	U	4.4	20.0
83-32-9	Acenaphthene	1	11.1	J	5.2	20.0
132-64-9	Dibenzofuran	1	14.6	J	14.1	20.0
86-73-7	Fluorene	1	20.0	U	14.6	20.0
85-01-8	Phenanthrene	1	63.6		8.7	20.0
120-12-7	Anthracene	1	19.6	J	7.2	20.0
206-44-0	Fluoranthene	1	58.6		6.1	20.0
129-00-0	Pyrene	1	161		5.7	20.0
85-68-7	Butylbenzylphthalate	1	20.0	U	9.4	20.0
56-55-3	Benzo(a)anthracene	1	28.3		6.0	20.0
218-01-9	Chrysene	1	43.0		6.1	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	46.3	J	5.5	50.0
	Benzofluoranthenes, Total	1	122		10.0	40.0
50-32-8	Benzo(a)pyrene	1	57.8		4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	23.0		14.6	20.0
53-70-3	Dibenzo(a,h)anthracene	1	20.0	U	17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	32.7		13.6	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	749.85	249	33.2	27 - 120	
Phenol-d5	749.85	324	43.2	29 - 120	
2-Chlorophenol-d4	749.85	477	63.6	31 - 120	
1,2-Dichlorobenzene-d4	499.90	315	63.0	32 - 120	
Nitrobenzene-d5	499.90	347	69.4	30 - 120	
2-Fluorobiphenyl	499.90	411	82.3	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1082

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

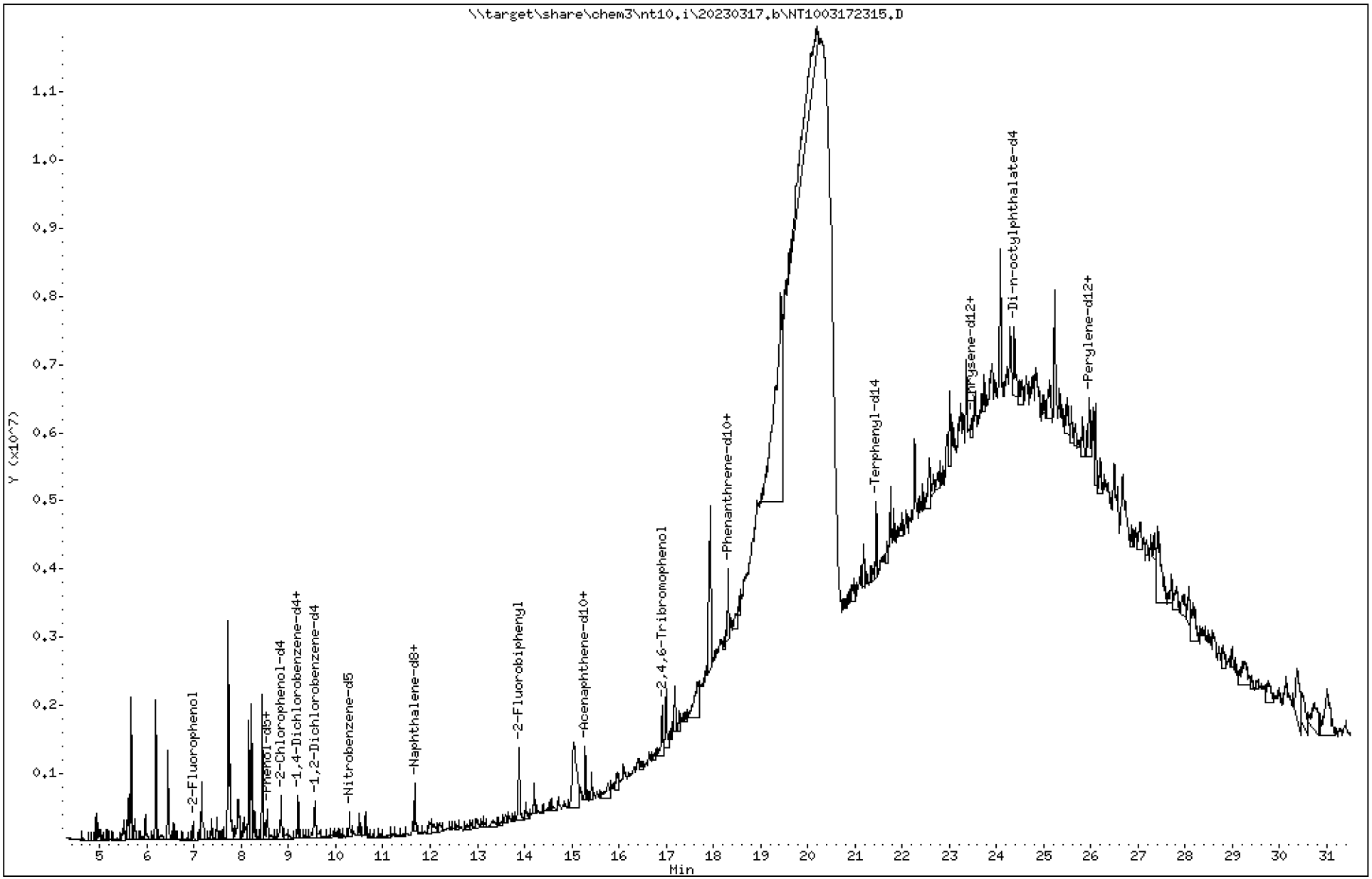
Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-09 A	SDG:	23A0420
Sampled:	01/19/23 13:40	Prepared:	02/20/23 16:23	File ID:	NT1003172315.D
% Solids:	58.87	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/18/23 03:19
Batch:	BLB0495	Sequence:	SLC0473	Initial/Final:	16.99 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00046
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	749.85	694	92.5	24 - 134	
p-Terphenyl-d14	499.90	429	85.7	37 - 120	

Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172315.D
Date : 18-MAR-2023 03:19
Client ID:
Sample Info: 23A0420-09

Instrument: nt10.i
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172315.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

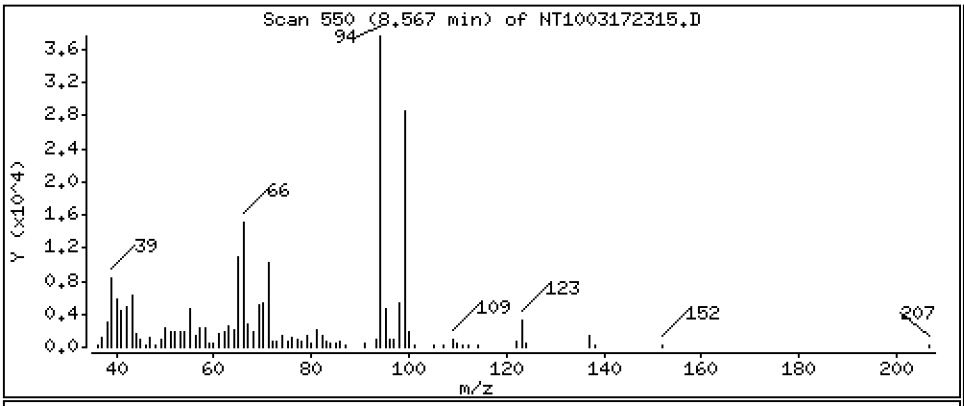
Operator: VTS

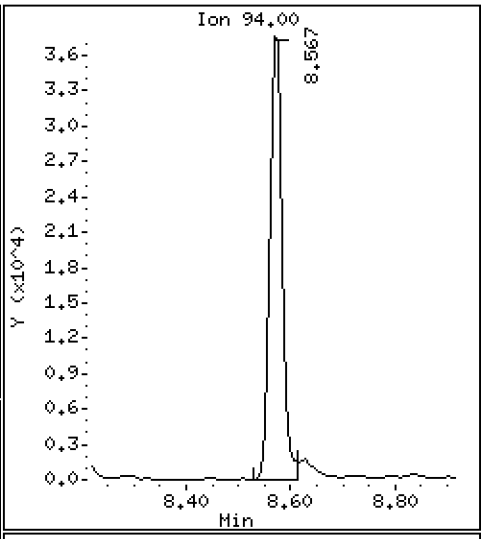
Column phase: ZB-5msi

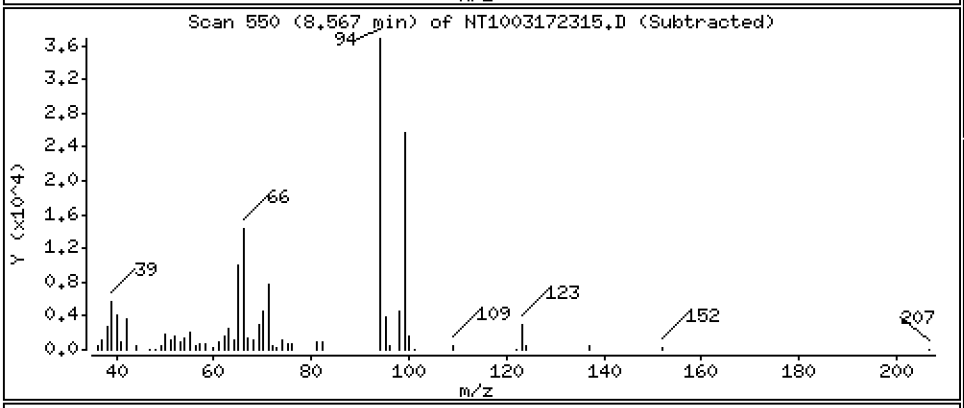
Column diameter: 0.25

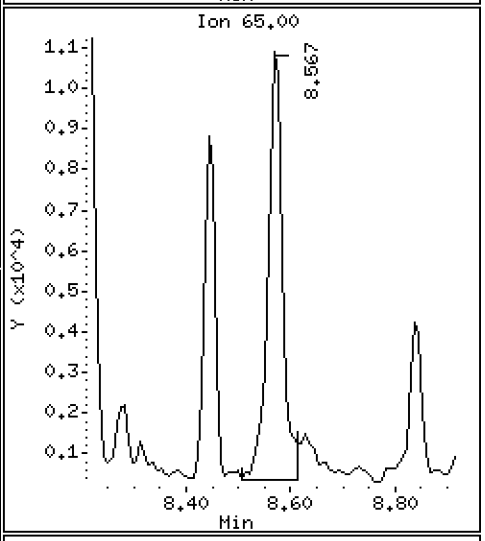
3 Phenol

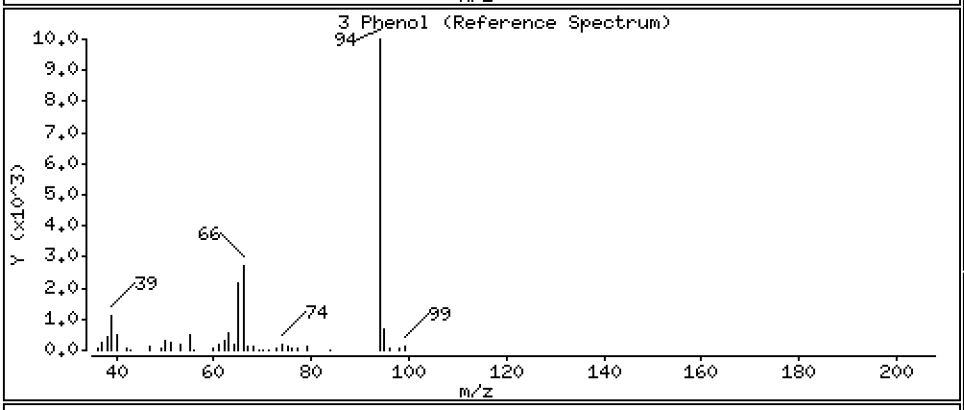
Concentration: 0.8371 ug/mL

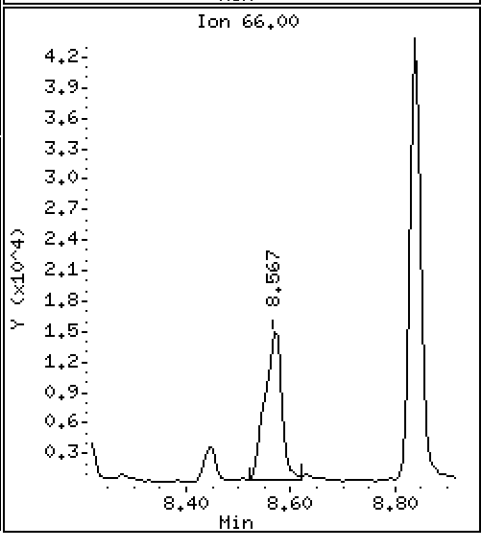


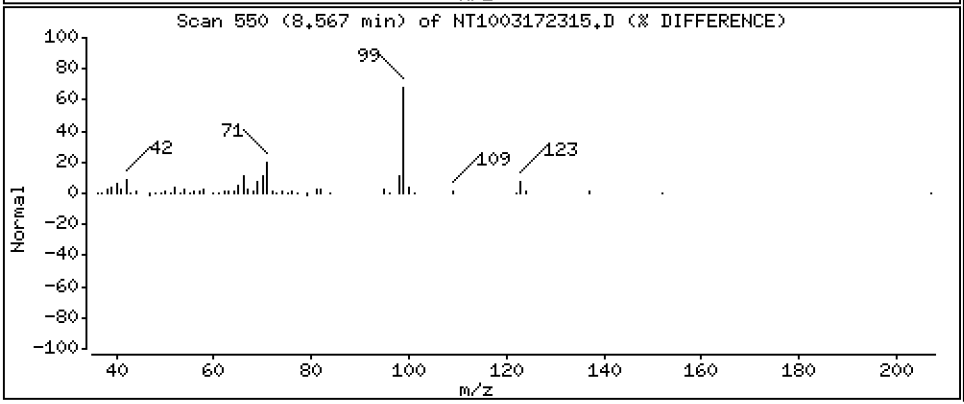












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

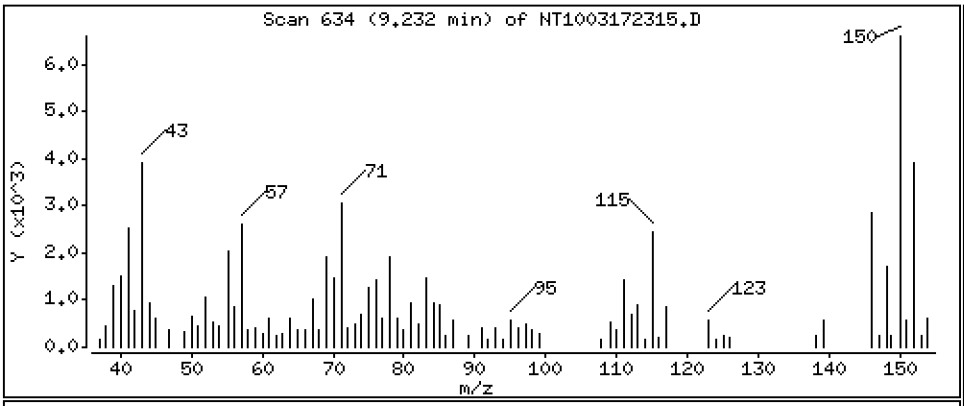
Operator: VTS

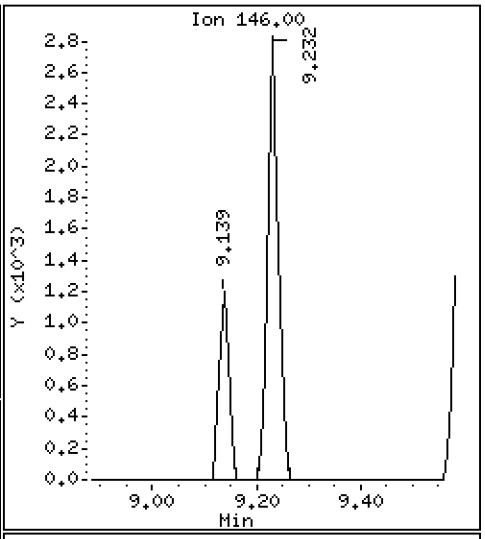
Column phase: ZB-5msi

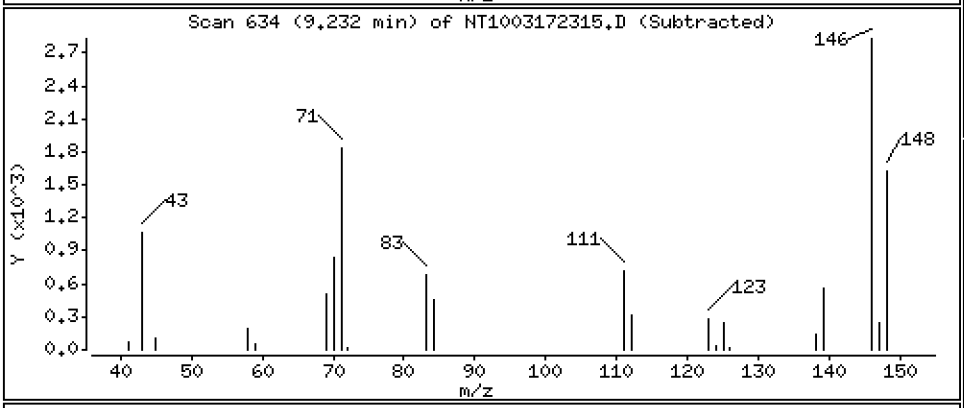
Column diameter: 0.25

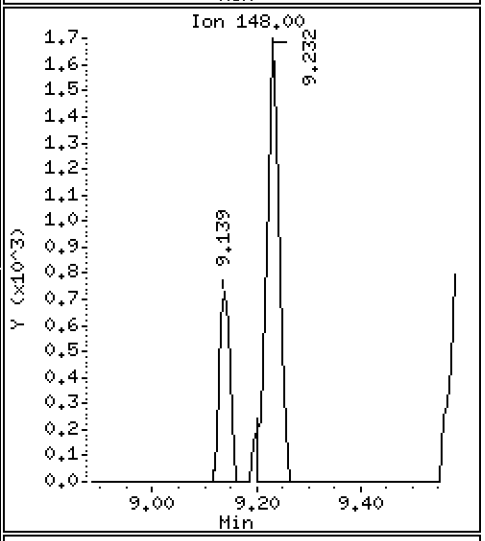
9 1,4-Dichlorobenzene

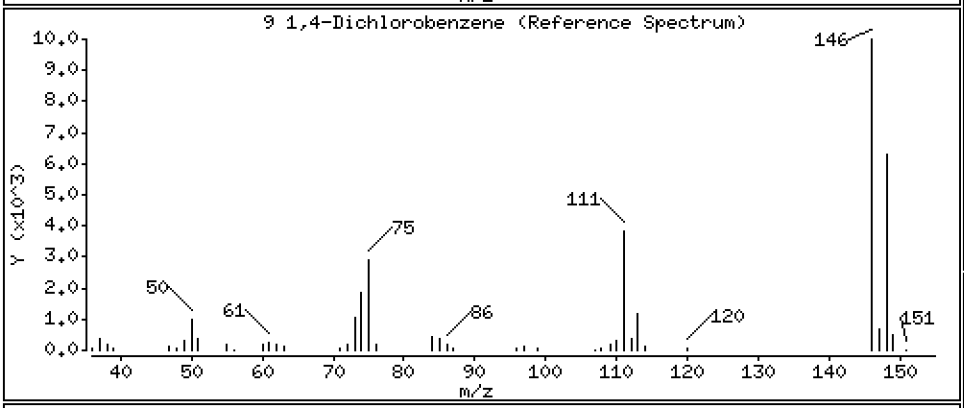
Concentration: 0.06298 ug/mL

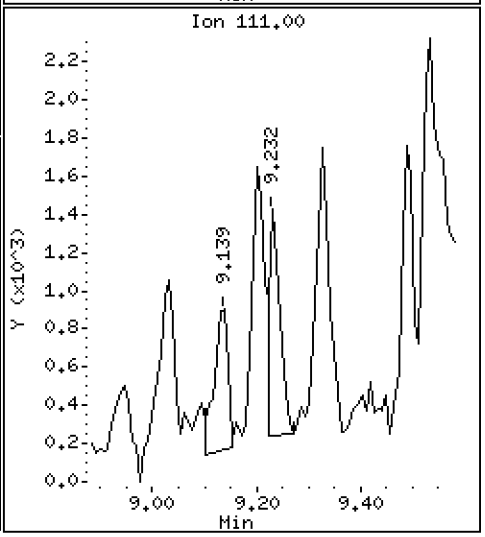


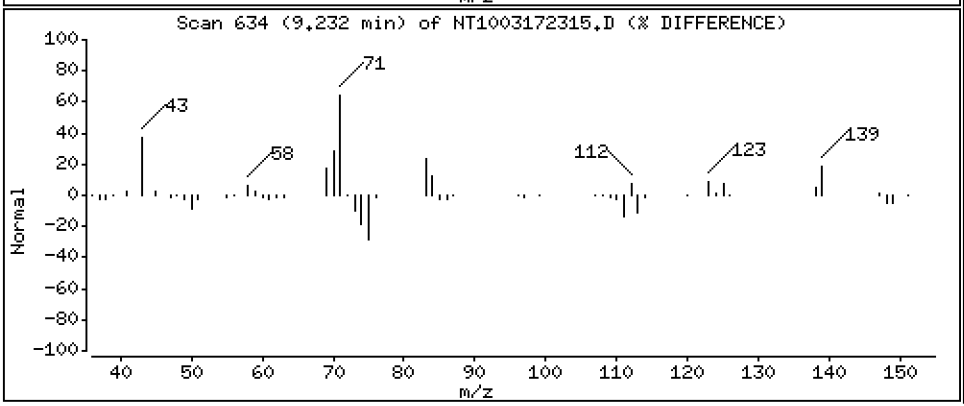












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

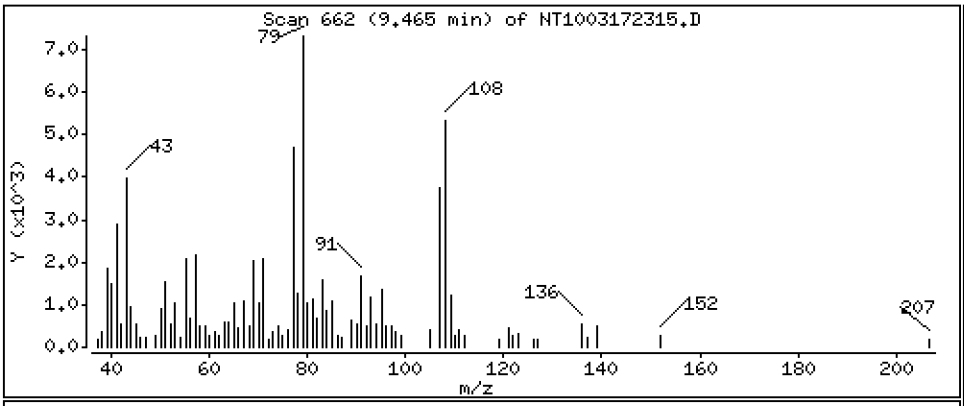
Operator: VTS

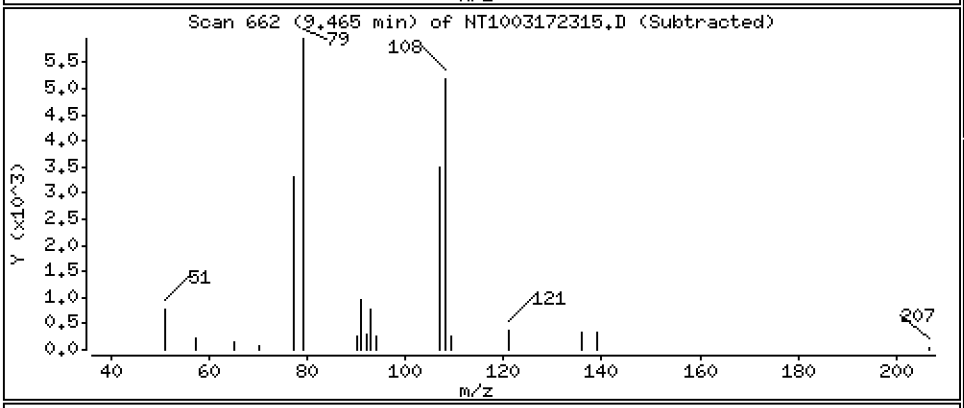
Column phase: ZB-5msi

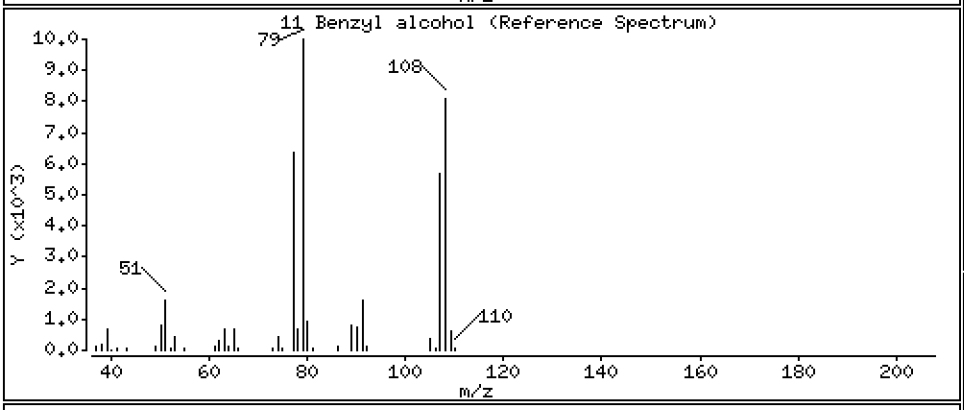
Column diameter: 0.25

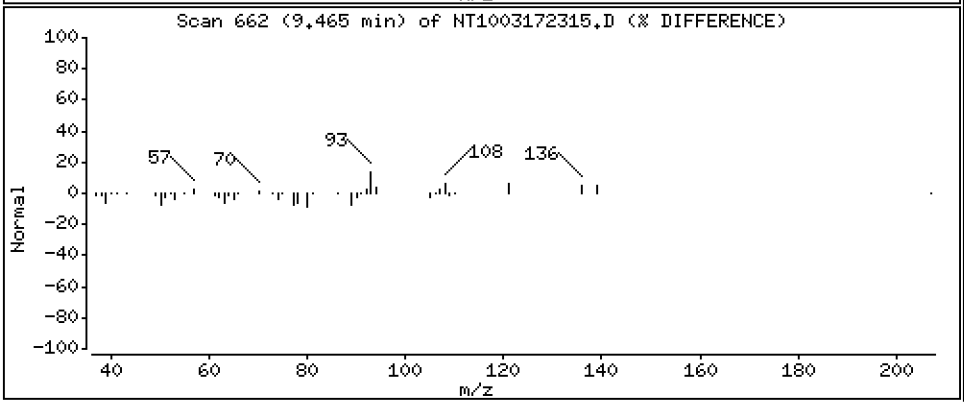
11 Benzyl alcohol

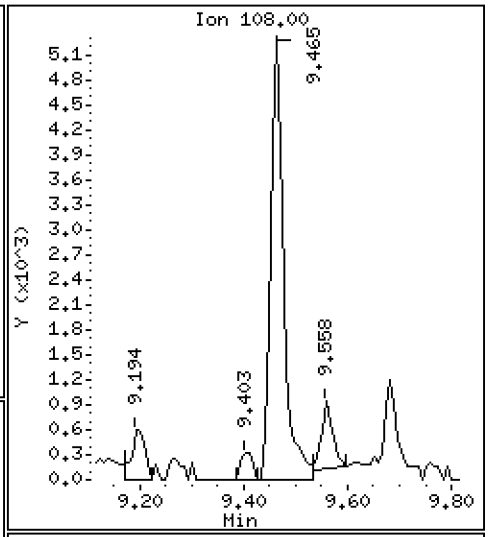
Concentration: 0.2616 ug/mL

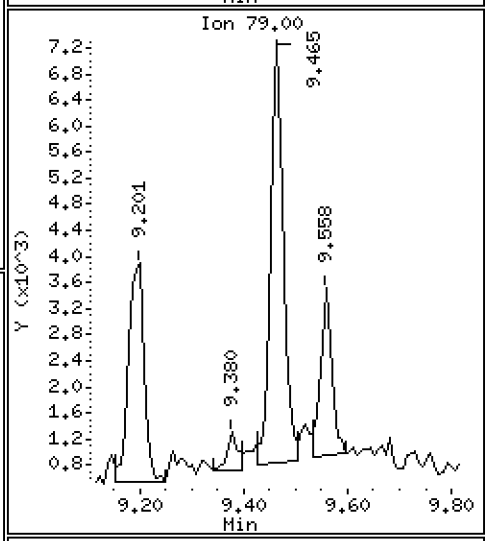


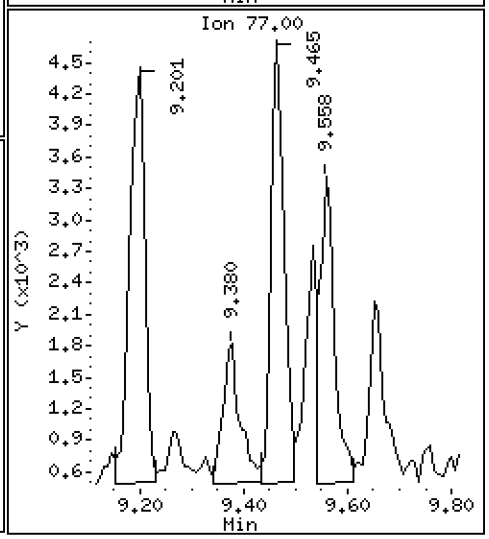












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

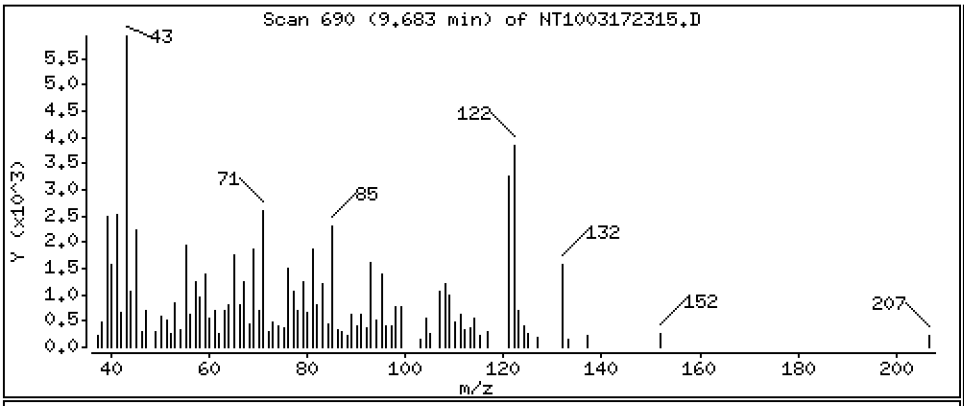
Operator: VTS

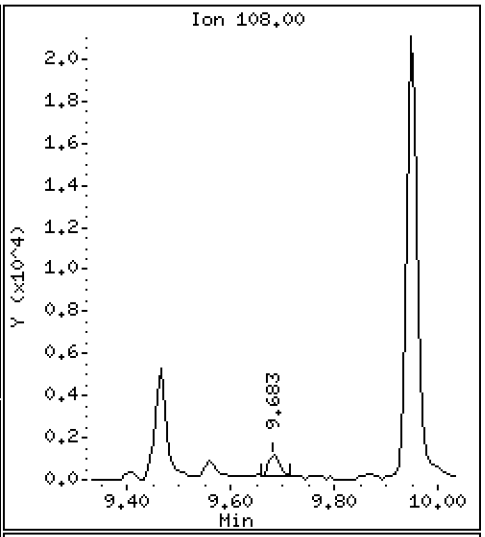
Column phase: ZB-5msi

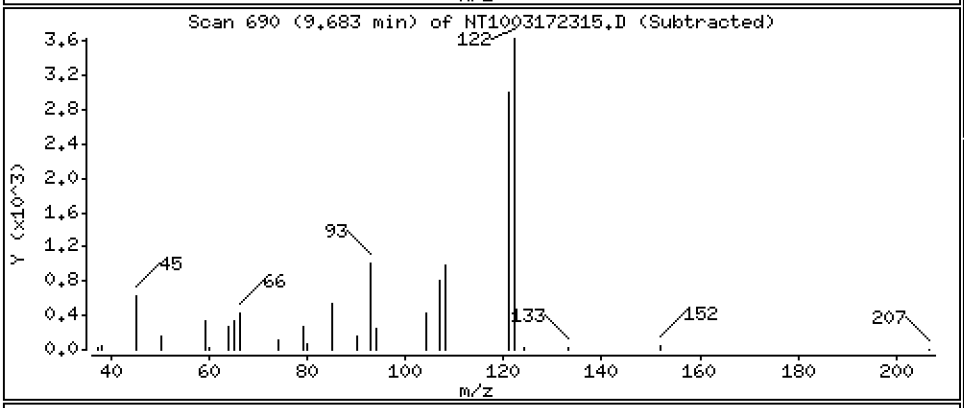
Column diameter: 0.25

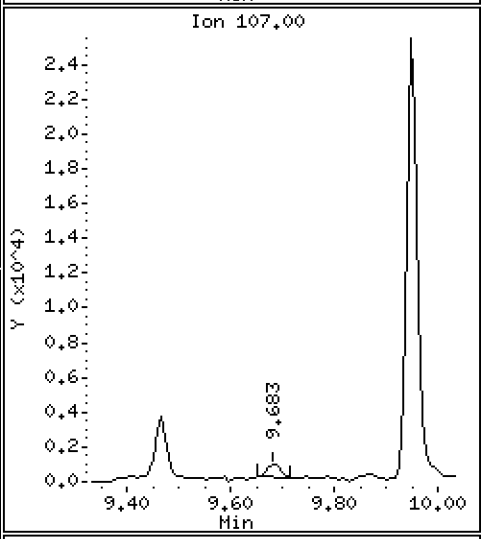
13 2-Methylphenol

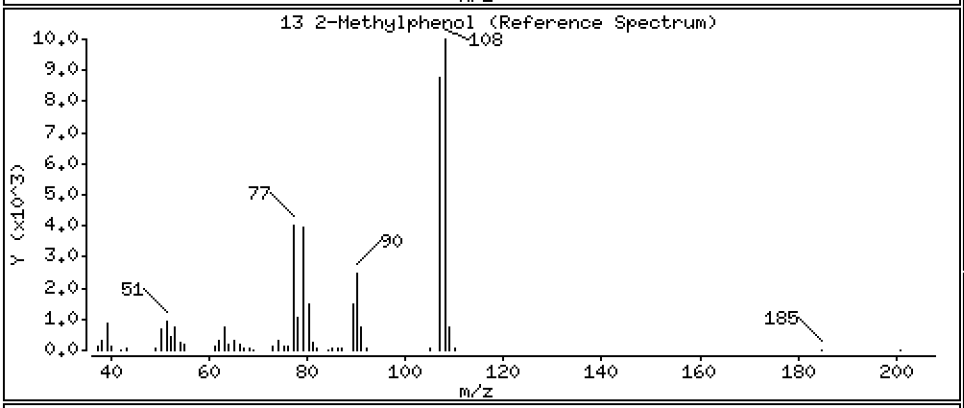
Concentration: 0.02690 ug/mL

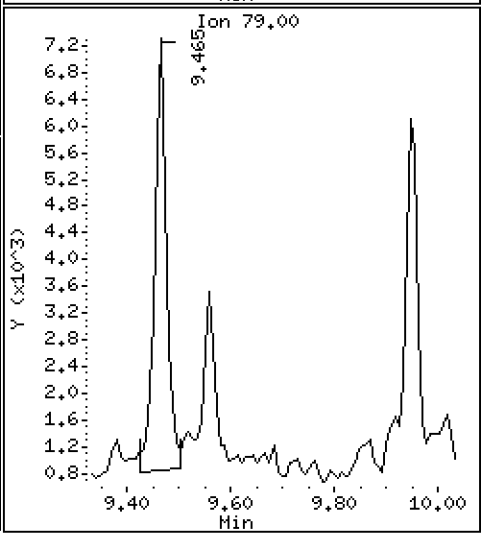


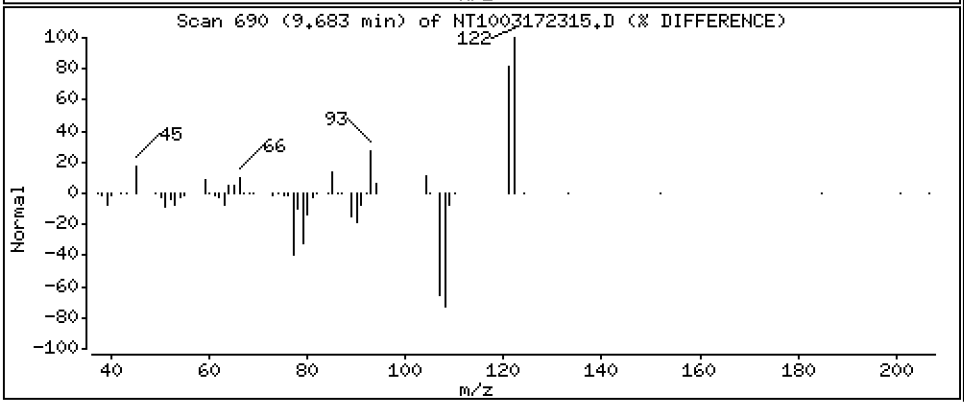












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

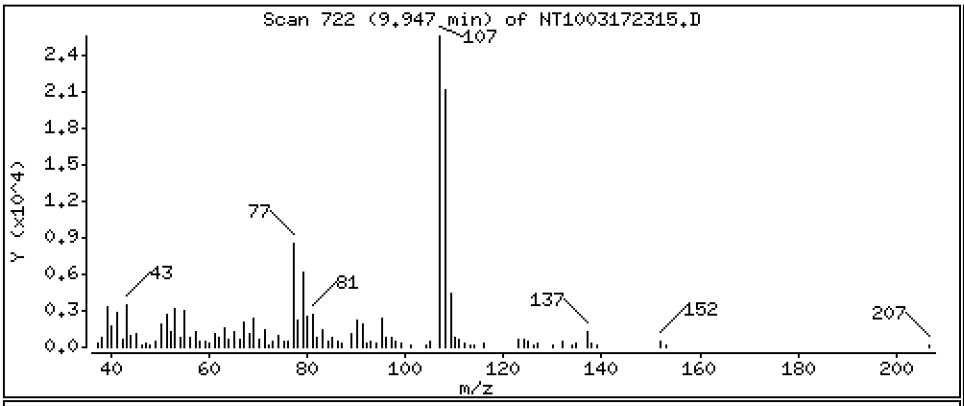
Operator: VTS

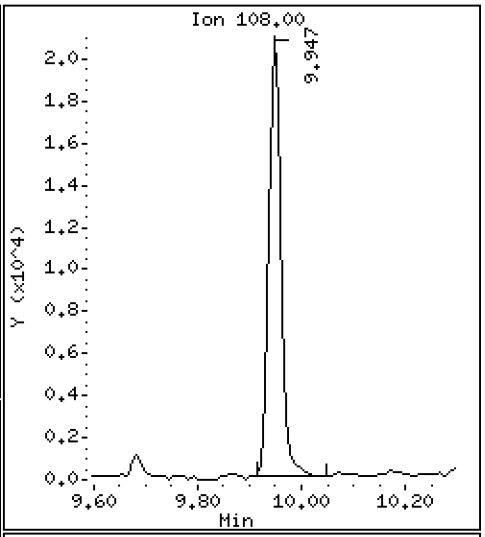
Column phase: ZB-5msi

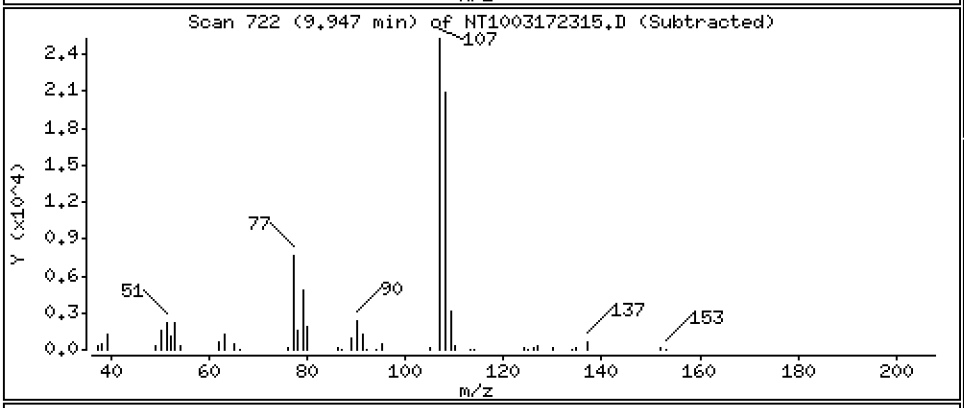
Column diameter: 0.25

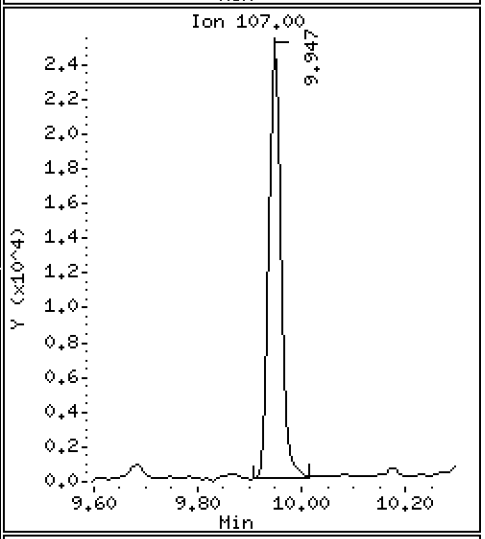
15 4-Methylphenol

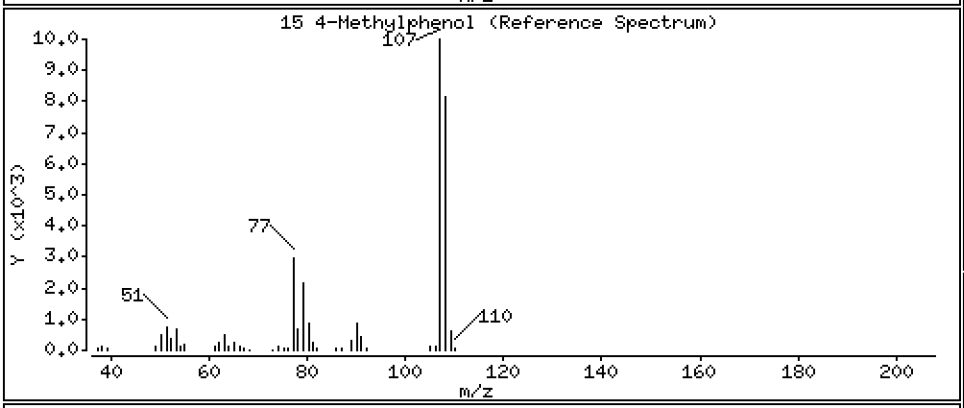
Concentration: 0.5840 ug/mL

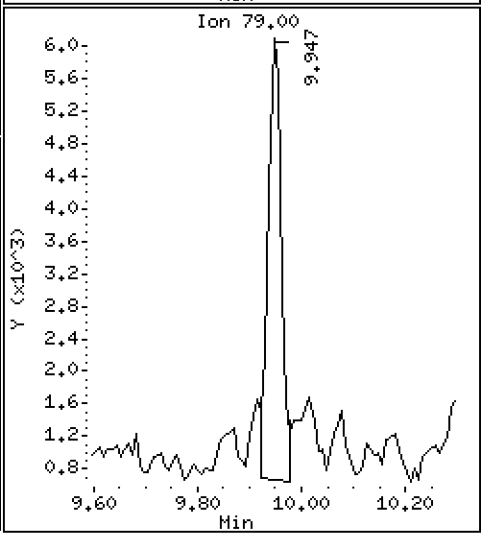


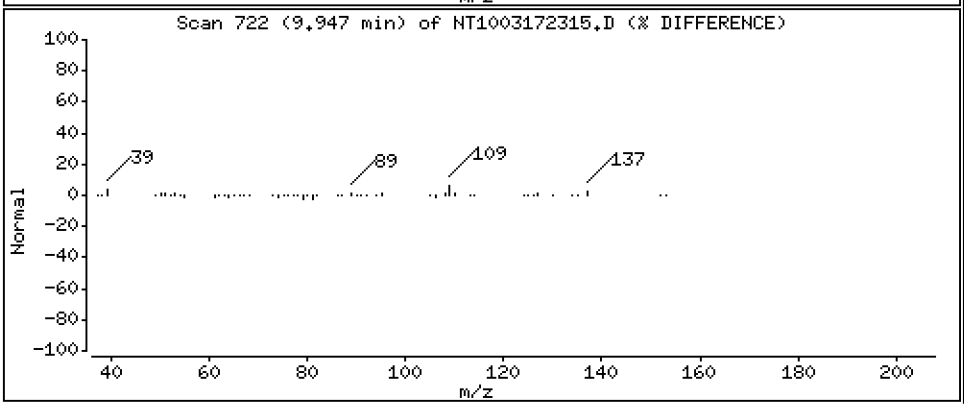












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

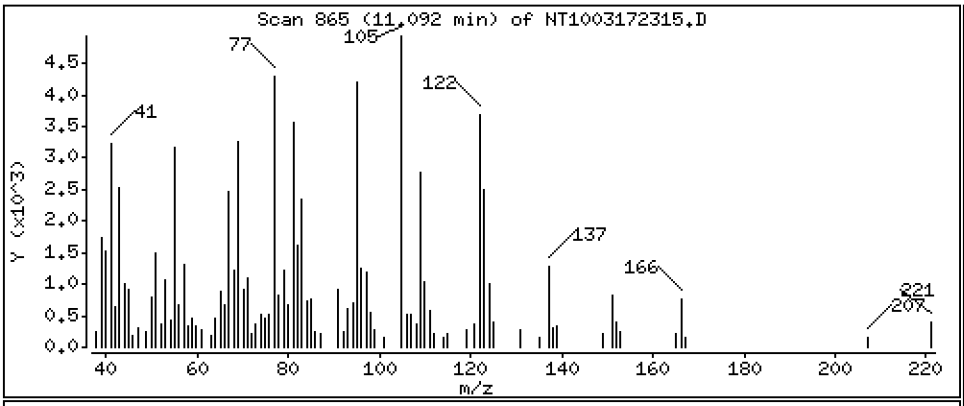
Operator: VTS

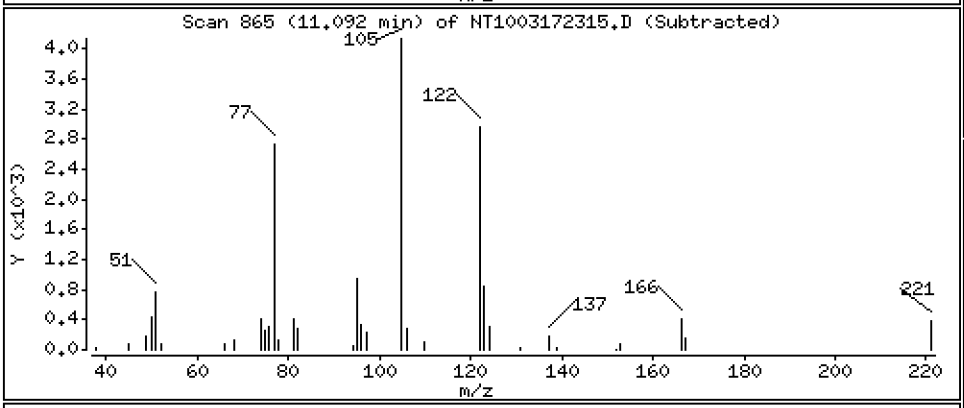
Column phase: ZB-5msi

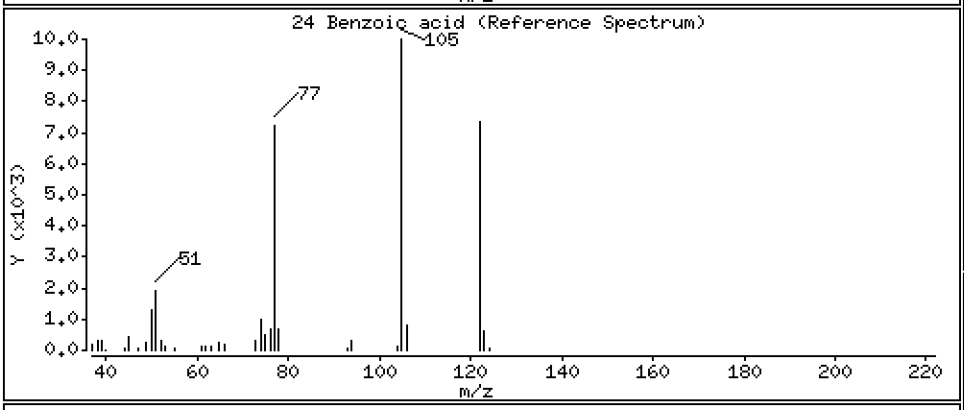
Column diameter: 0.25

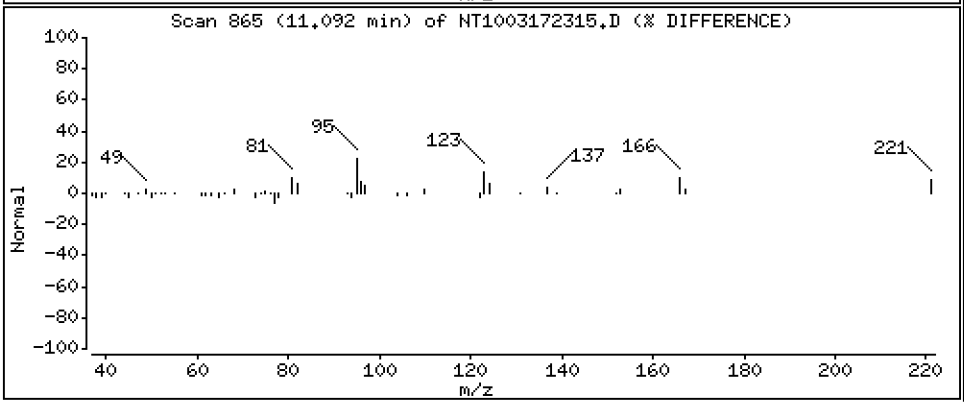
24 Benzoic acid

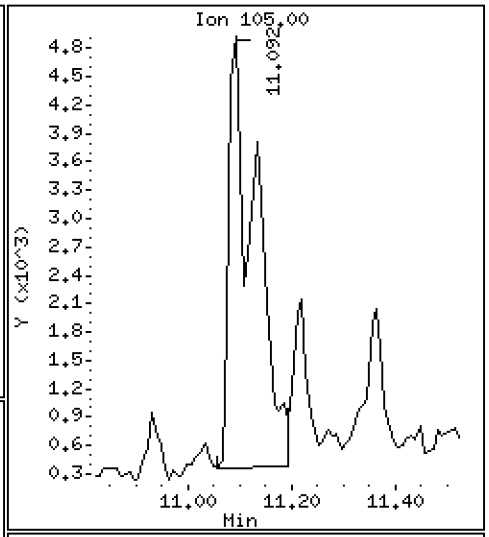
Concentration: 0.5277 ug/mL

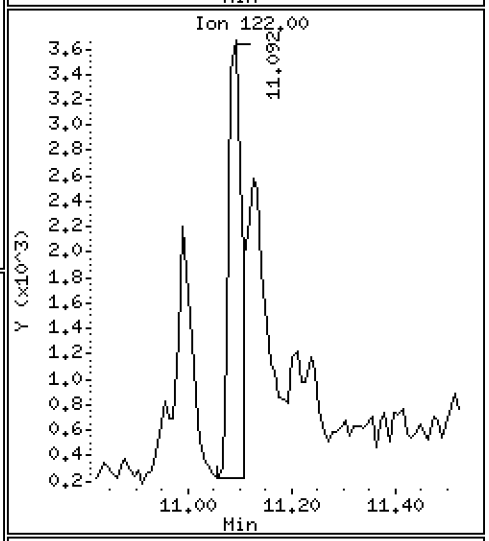


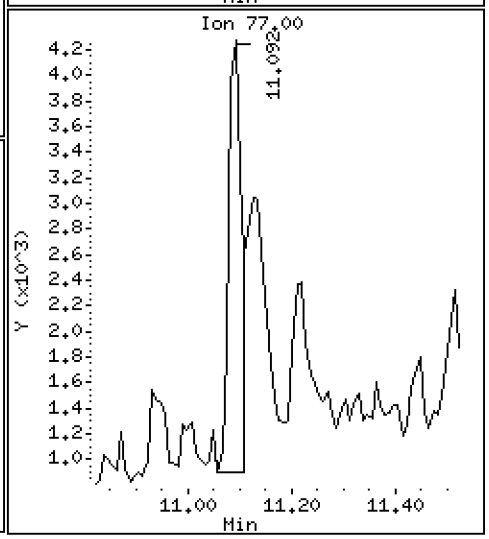












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

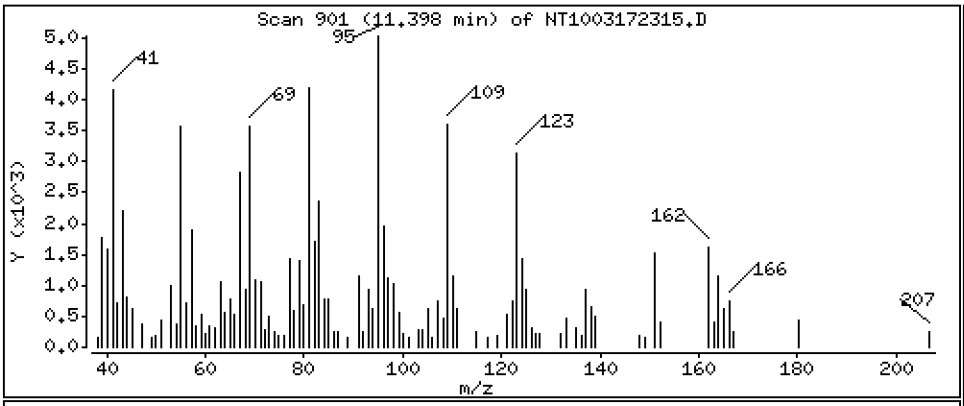
Operator: VTS

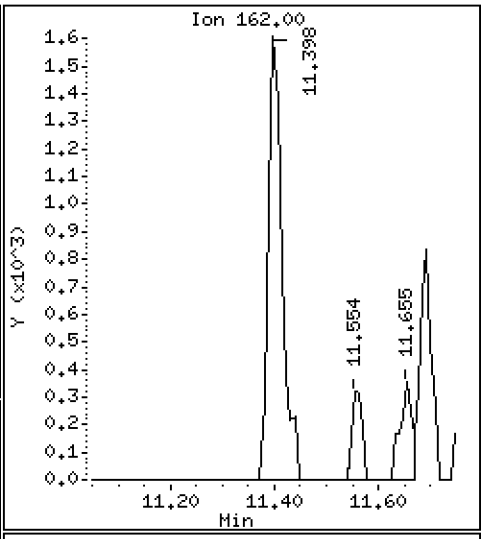
Column phase: ZB-5msi

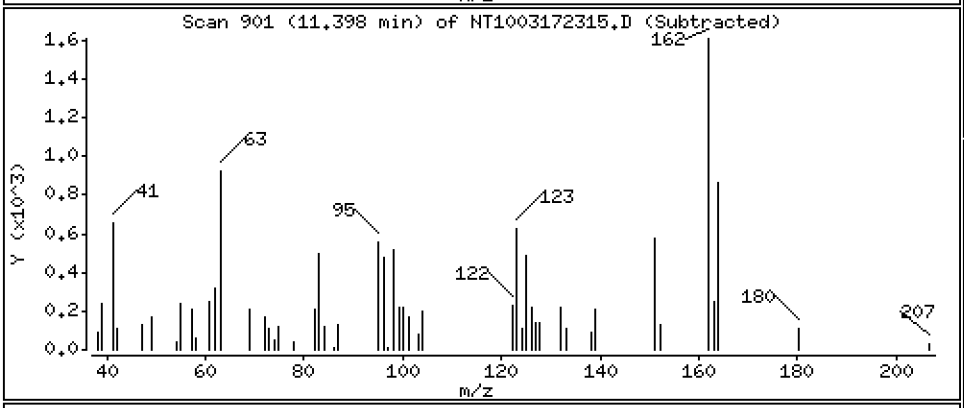
Column diameter: 0.25

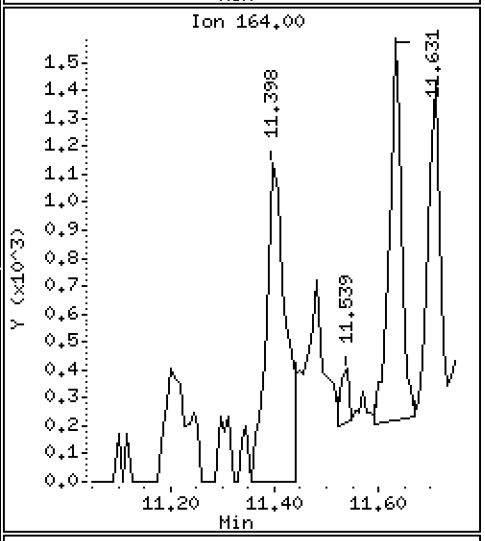
25 2,4-Dichlorophenol

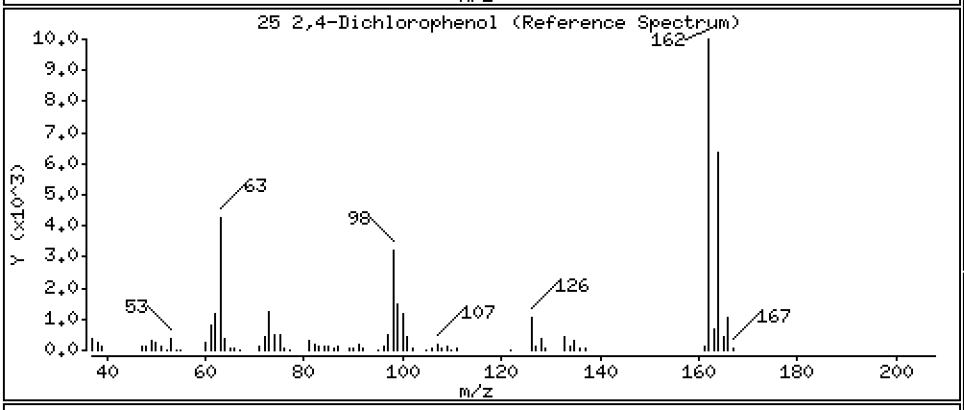
Concentration: 0.06663 ug/mL

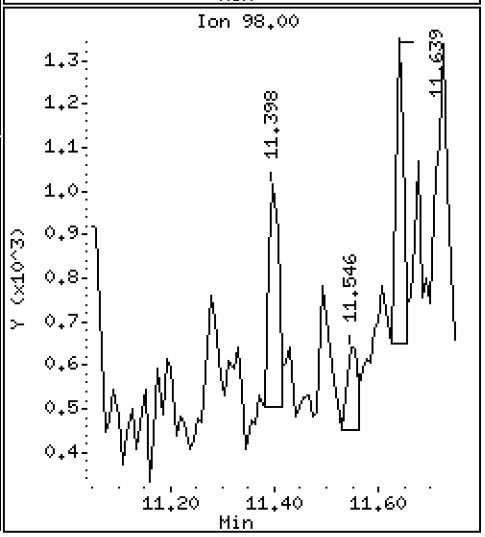


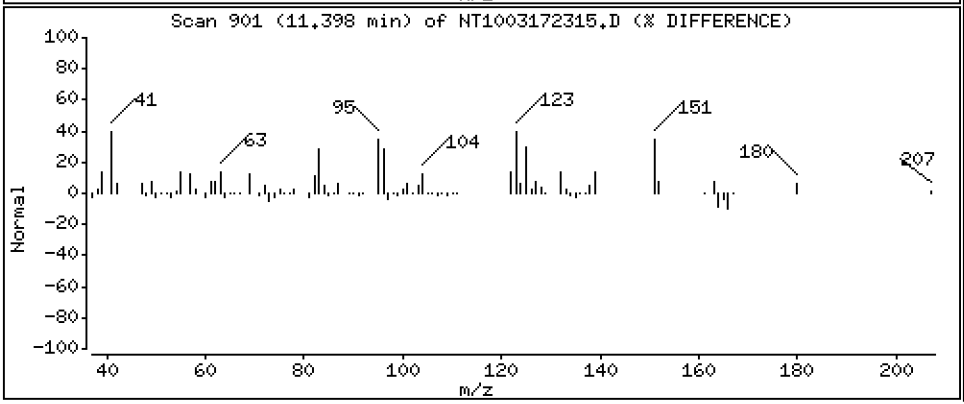












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

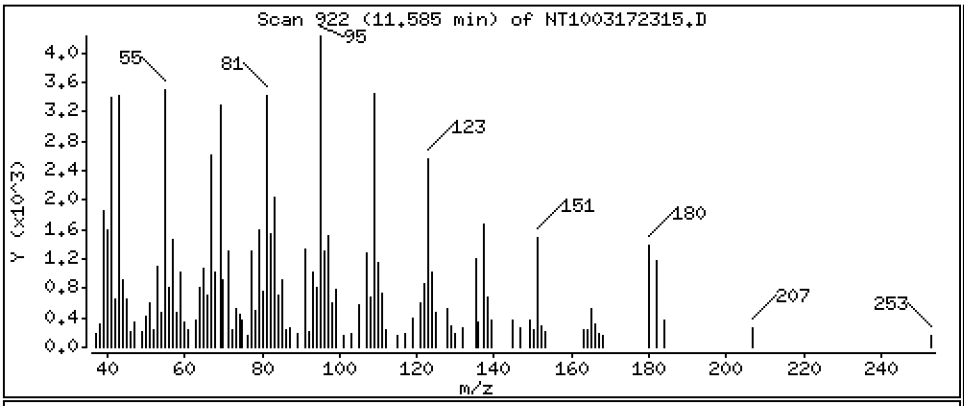
Operator: VTS

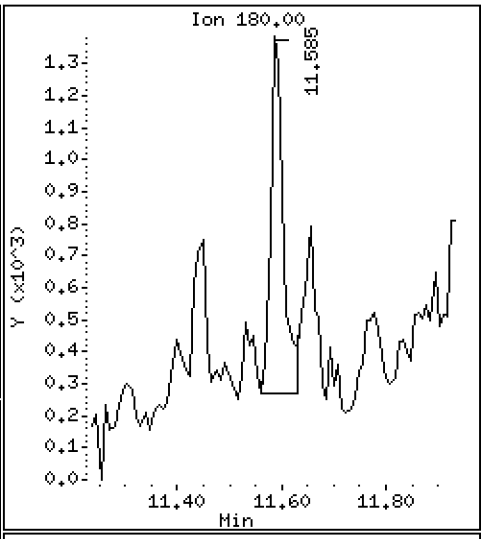
Column phase: ZB-5msi

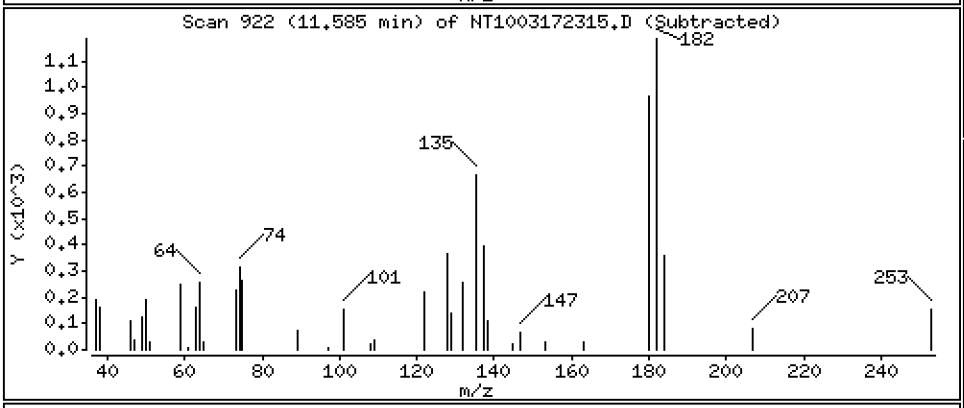
Column diameter: 0.25

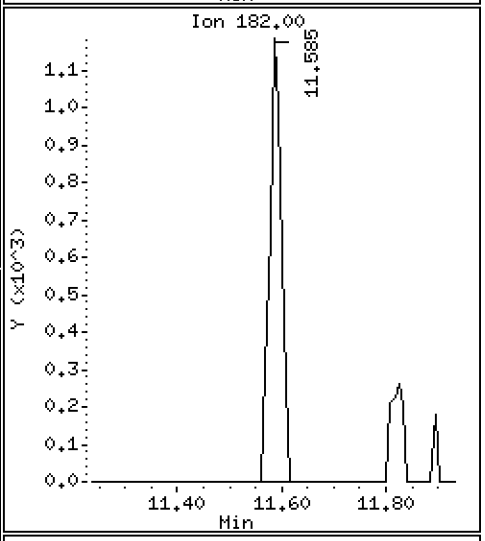
26 1,2,4-Trichlorobenzene

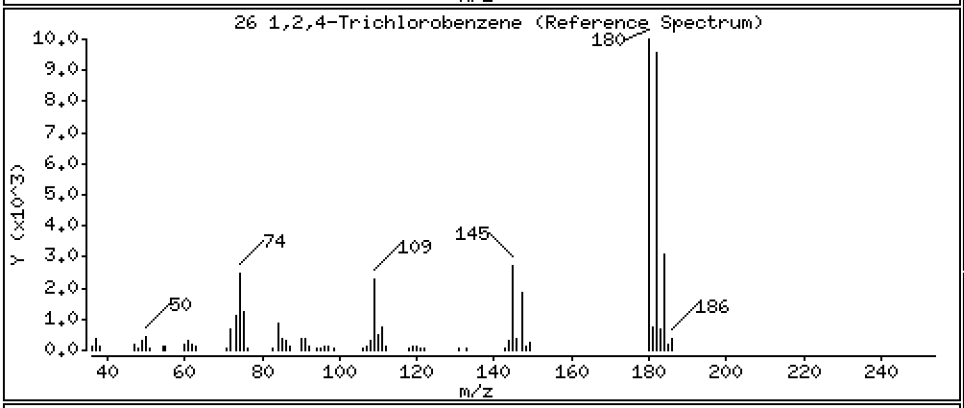
Concentration: 0.03643 ug/mL

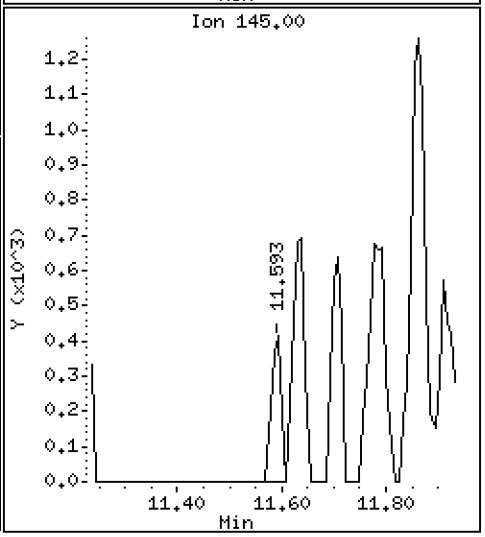


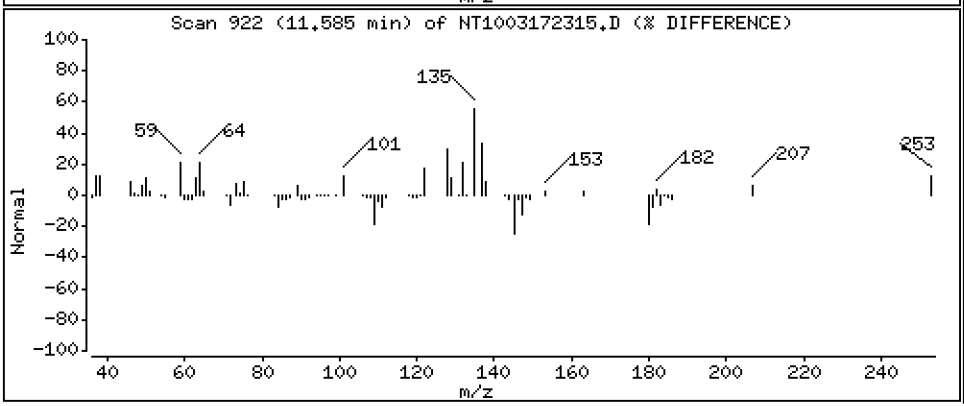












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172315.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

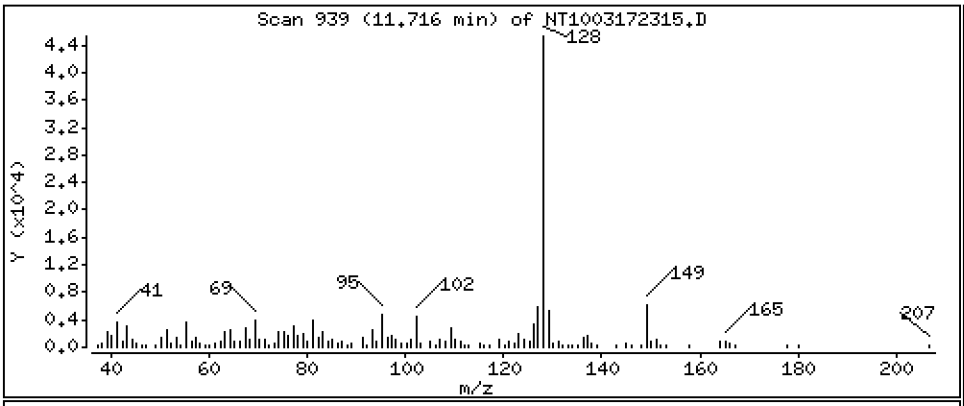
Operator: VTS

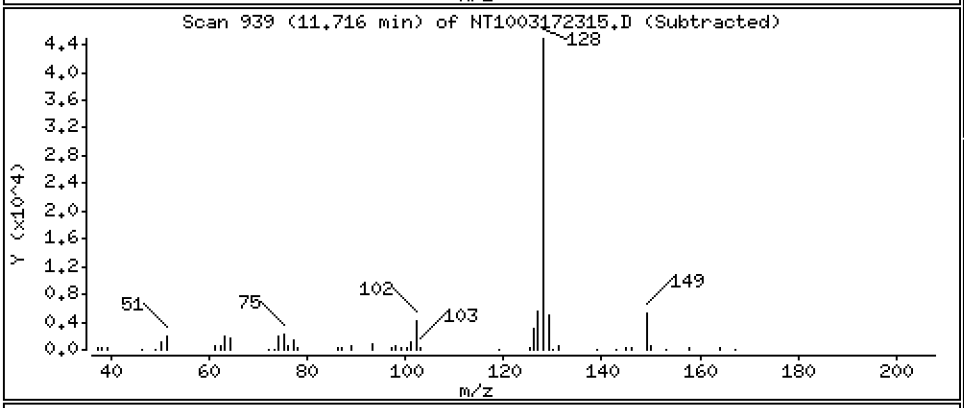
Column phase: ZB-5msi

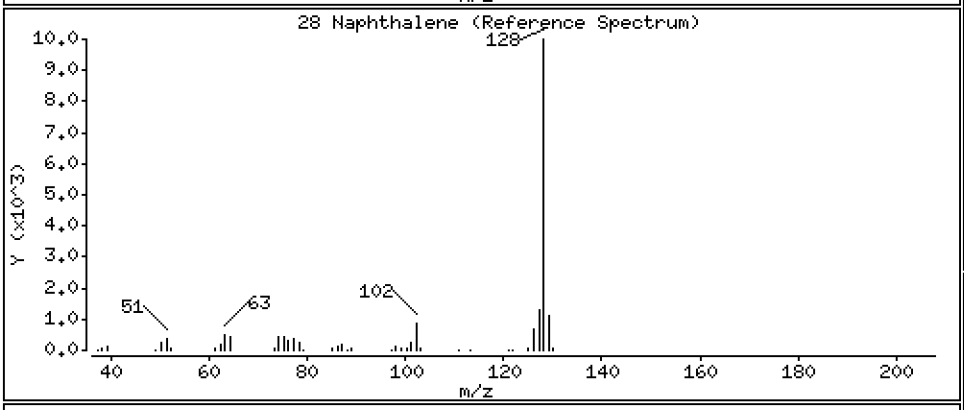
Column diameter: 0.25

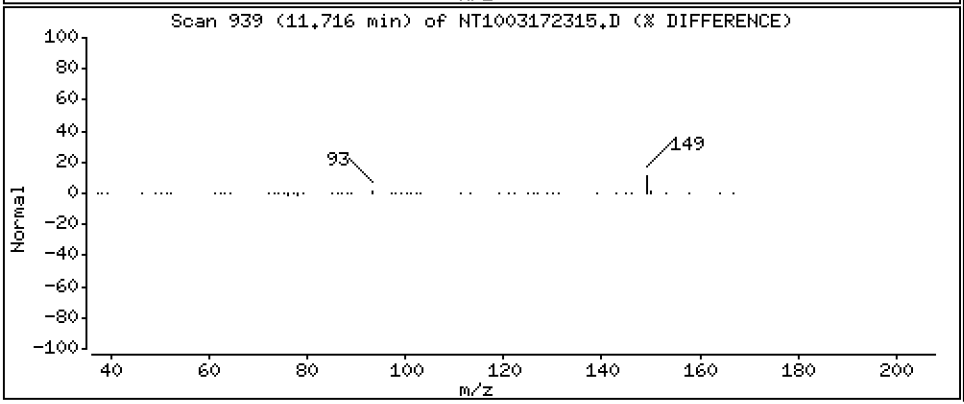
28 Naphthalene

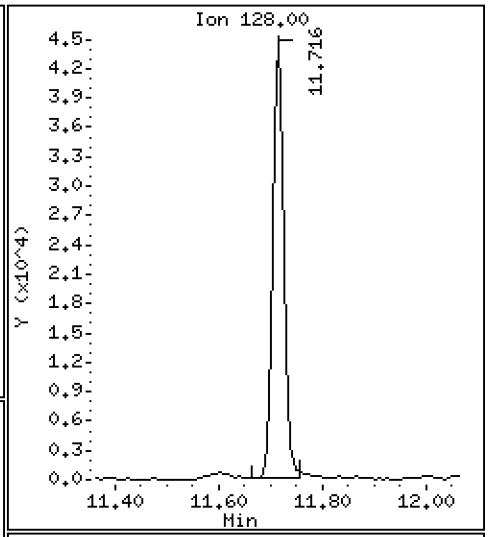
Concentration: 0.4216 ug/mL

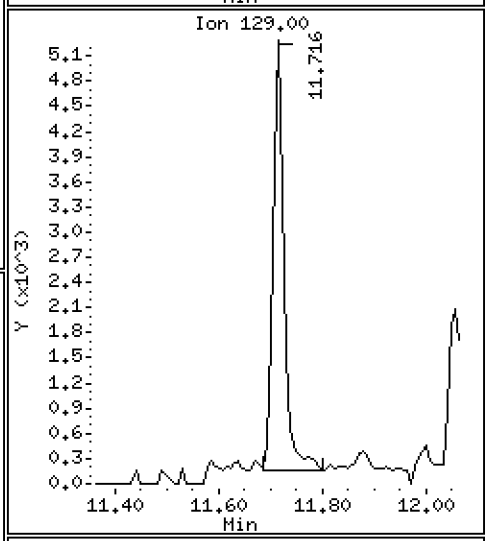


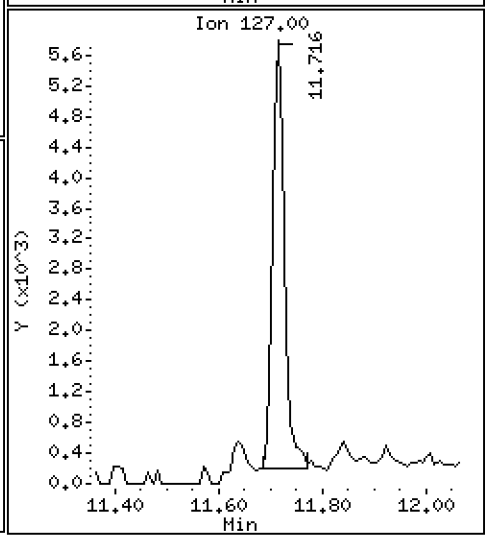












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

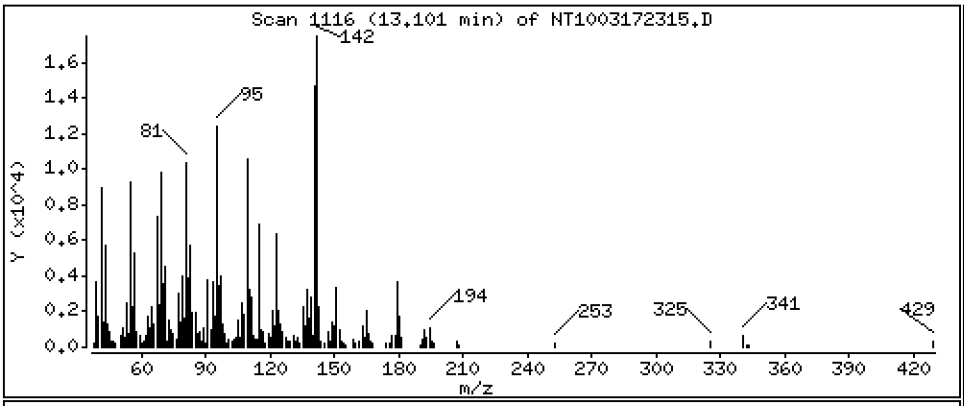
Operator: VTS

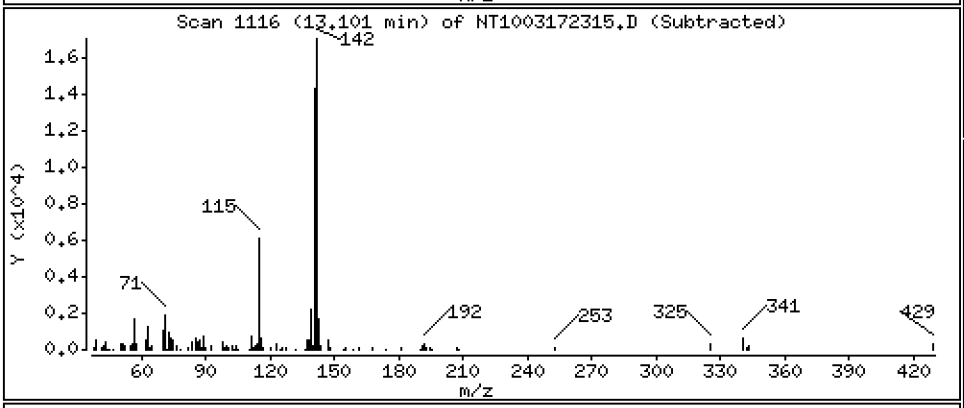
Column phase: ZB-5msi

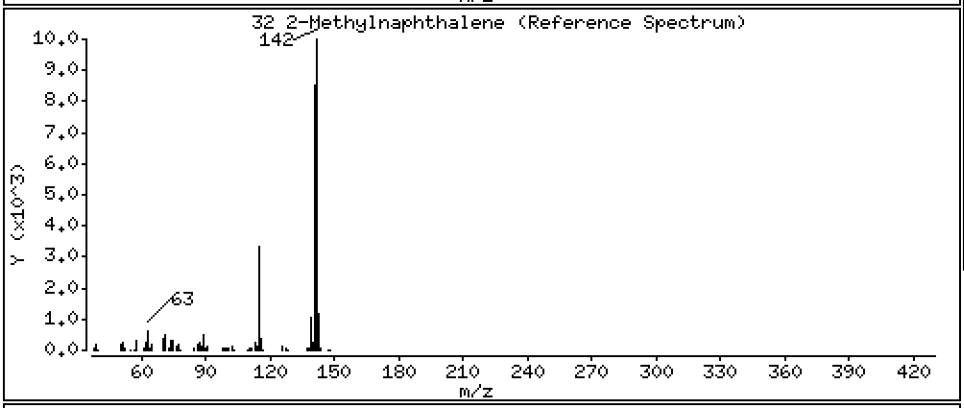
Column diameter: 0.25

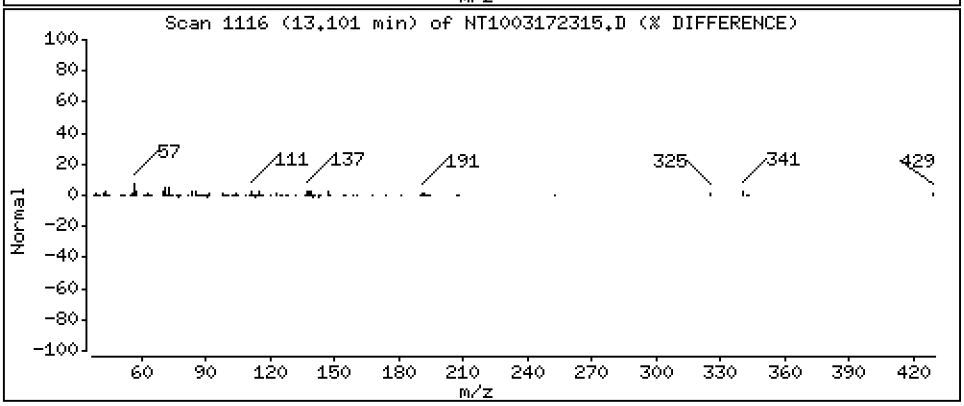
32 2-Methylnaphthalene

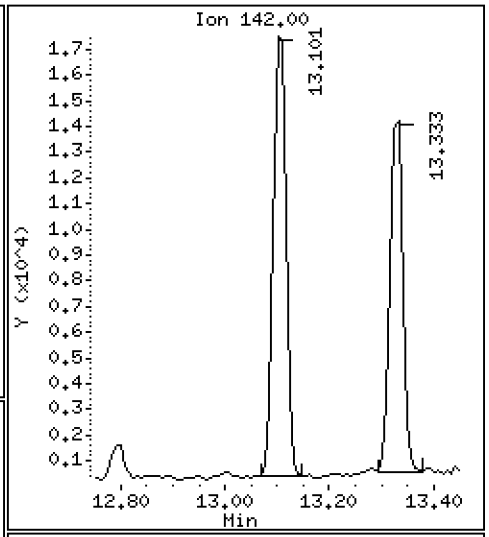
Concentration: 0.2403 ug/mL

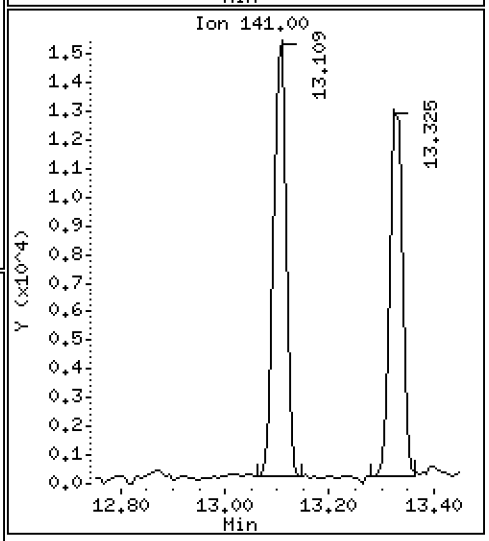












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

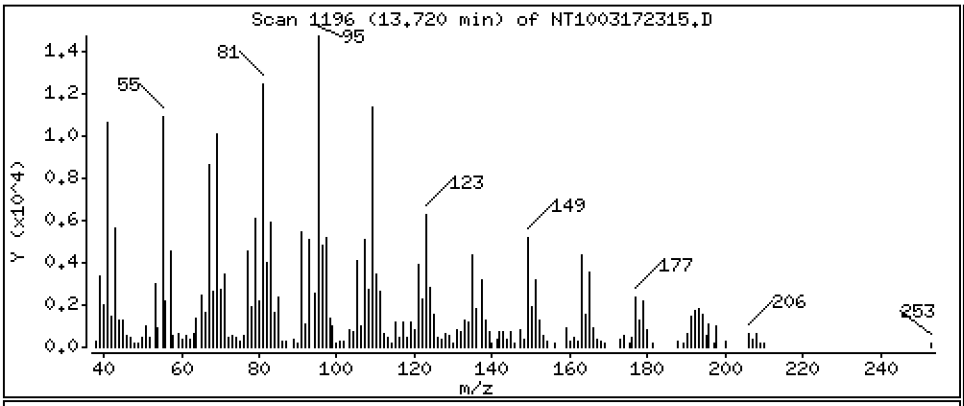
Operator: VTS

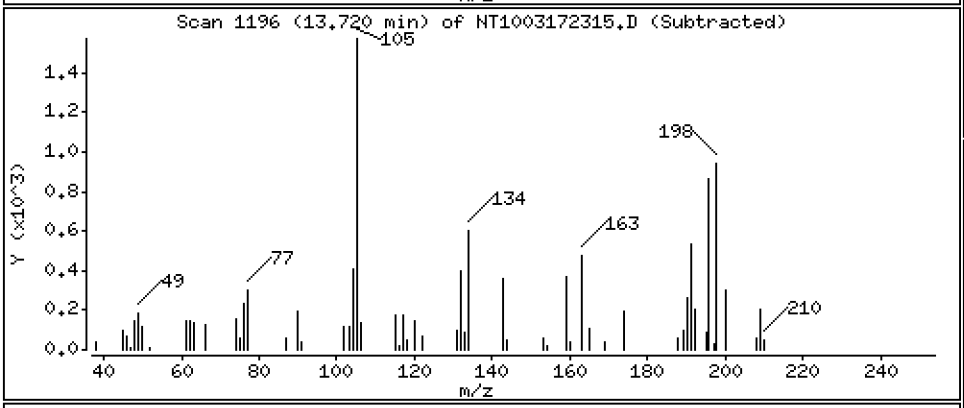
Column phase: ZB-5msi

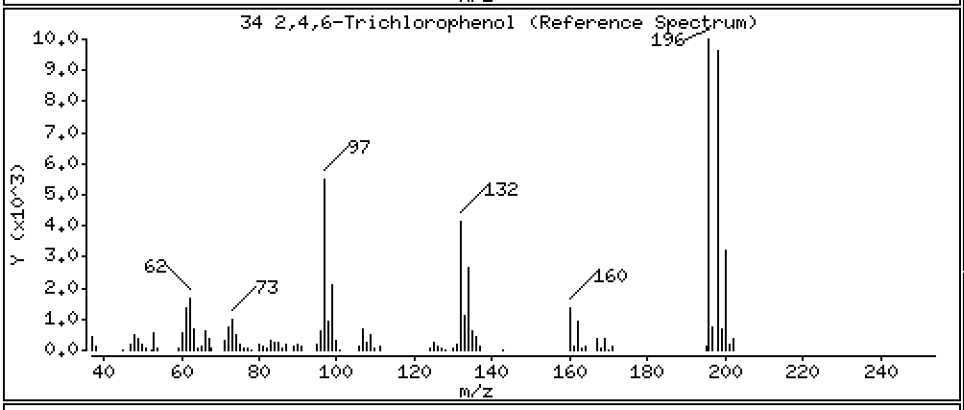
Column diameter: 0.25

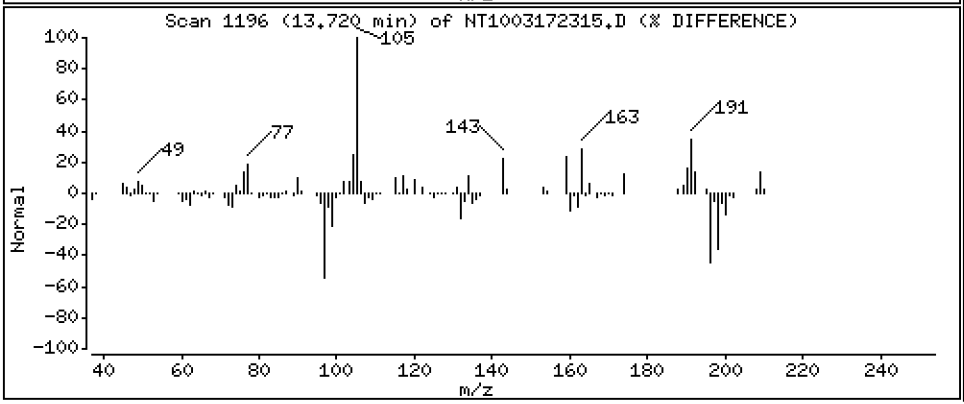
34 2,4,6-Trichlorophenol

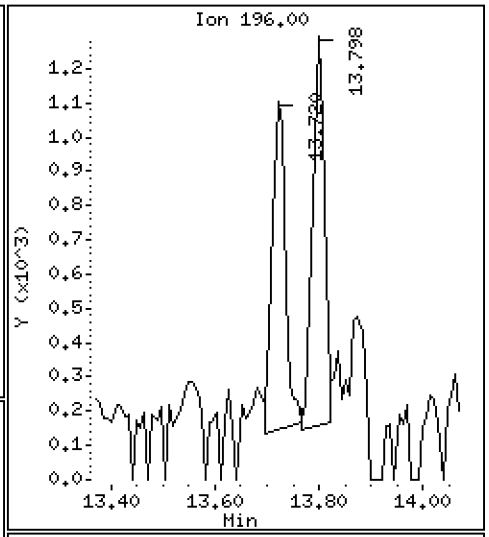
Concentration: 0.04958 ug/mL

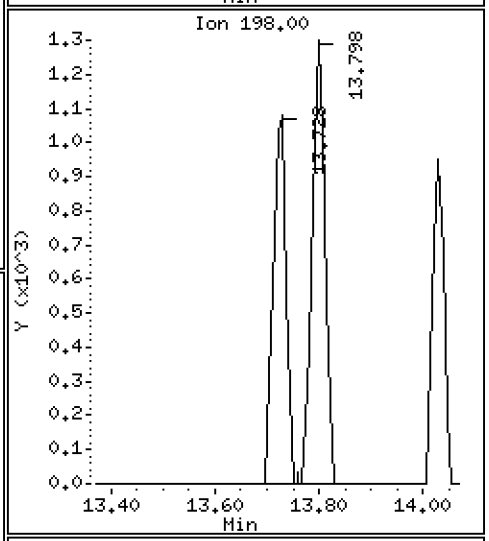


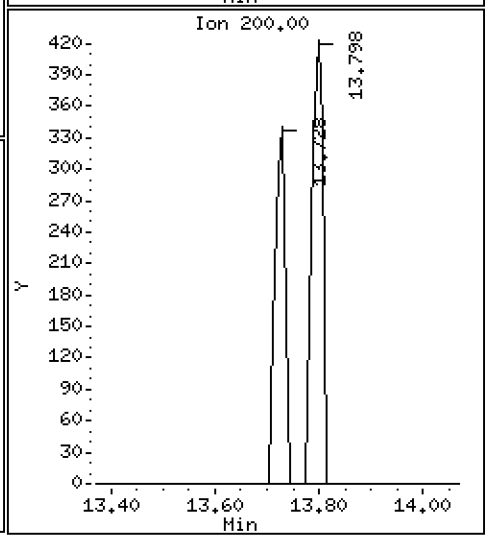












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

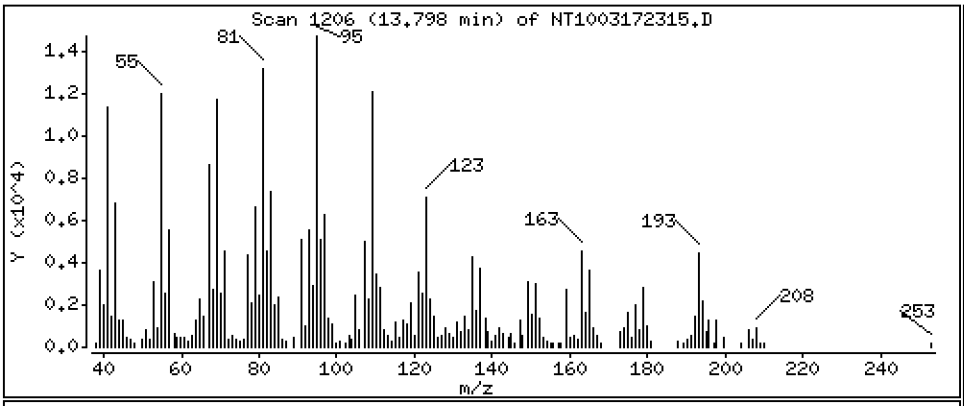
Operator: VTS

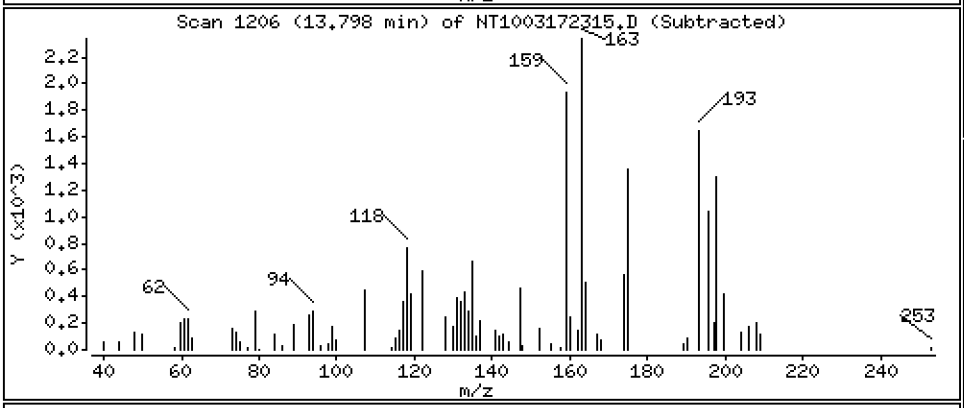
Column phase: ZB-5msi

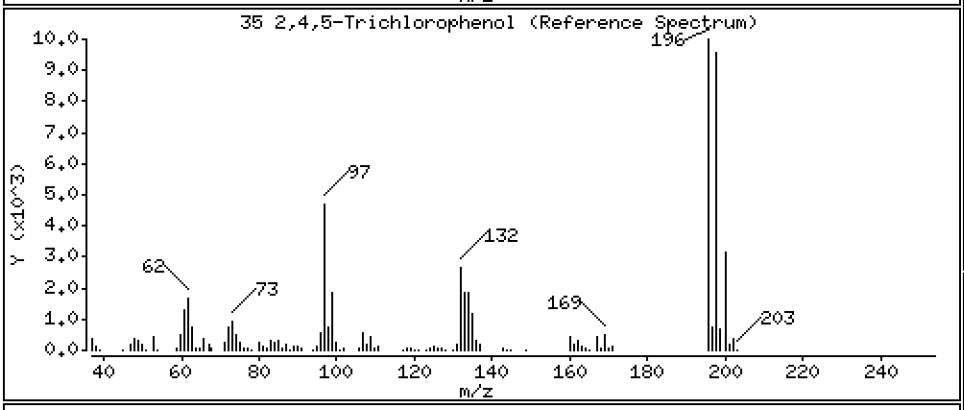
Column diameter: 0.25

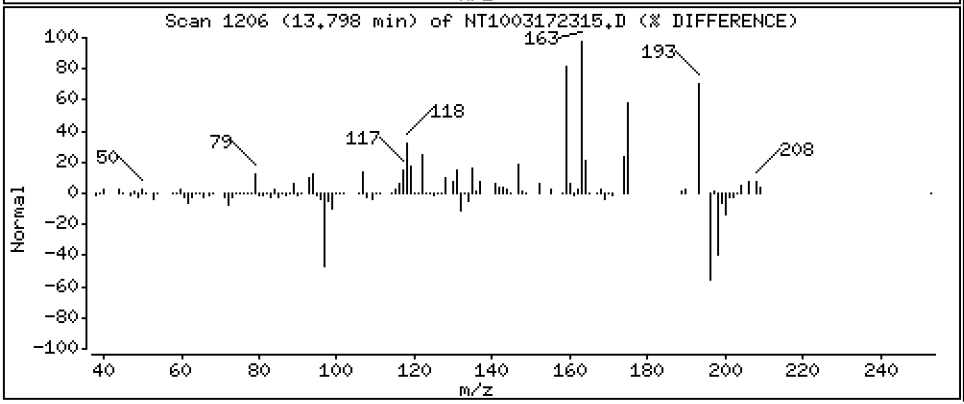
35 2,4,5-Trichlorophenol

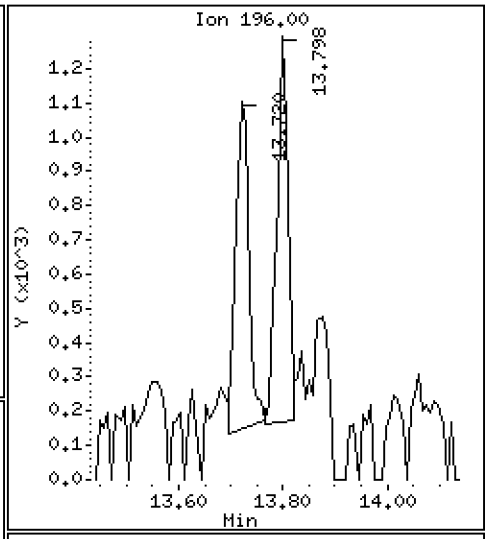
Concentration: 0.04580 ug/mL

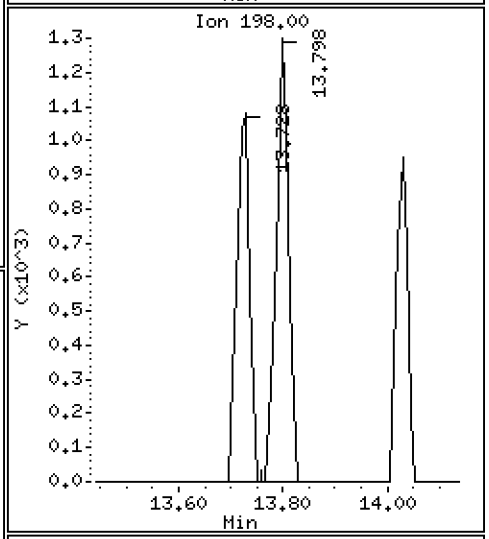


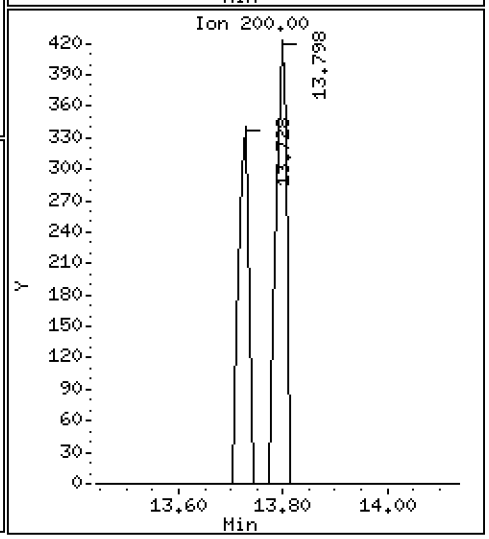












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

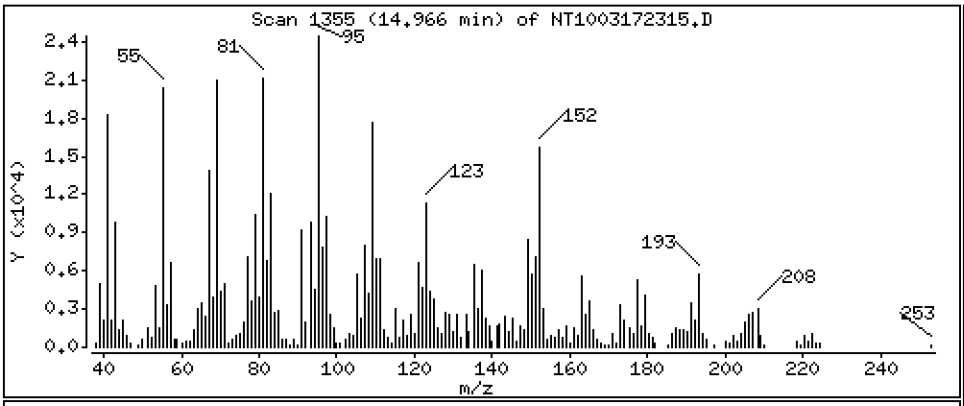
Operator: VTS

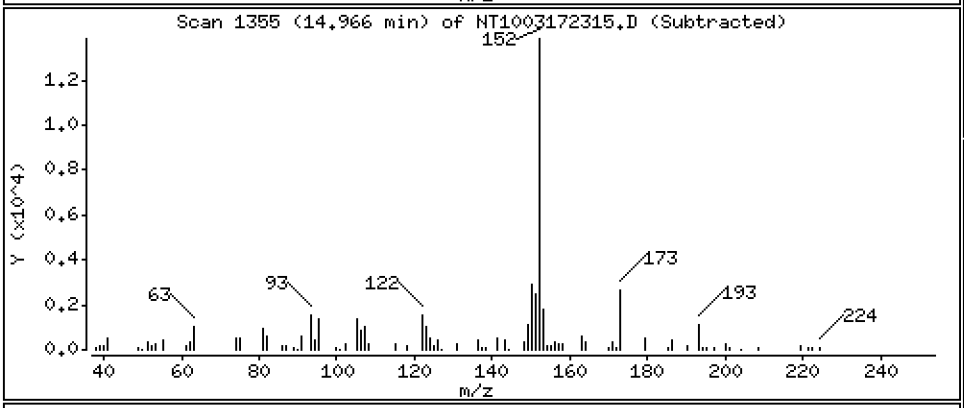
Column phase: ZB-5msi

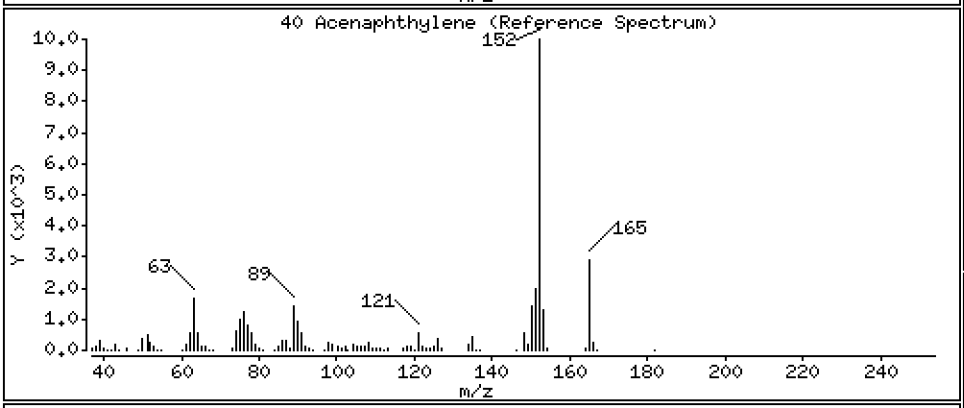
Column diameter: 0.25

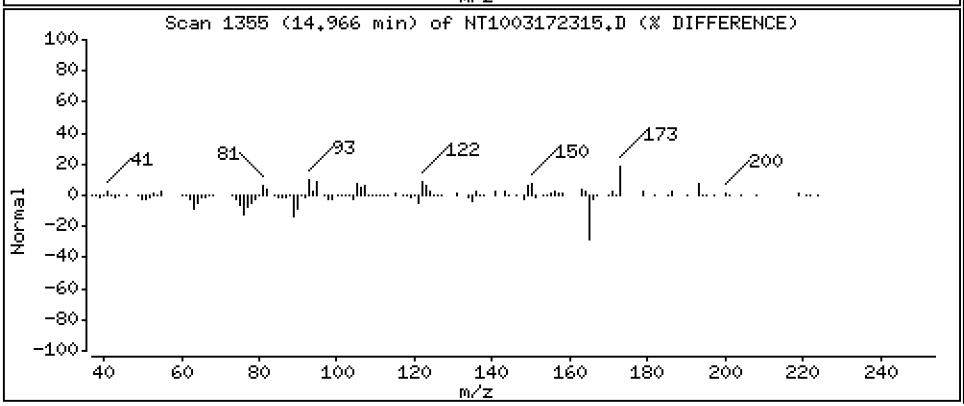
40 Acenaphthylene

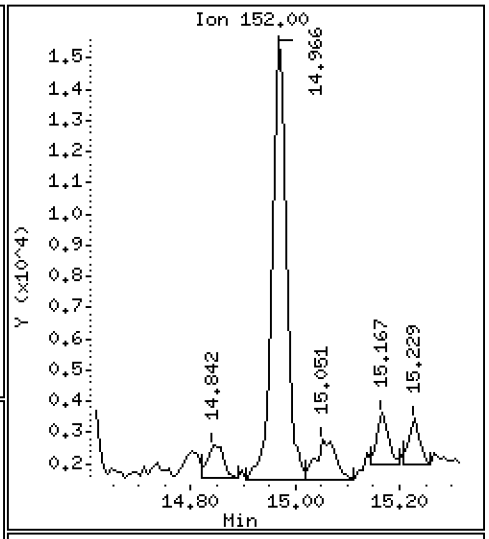
Concentration: 0.1565 ug/mL

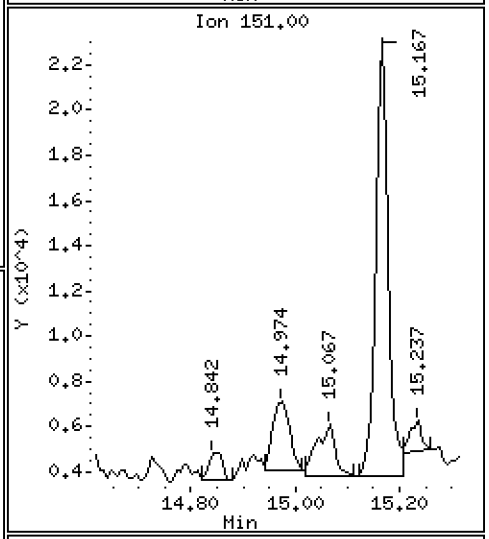


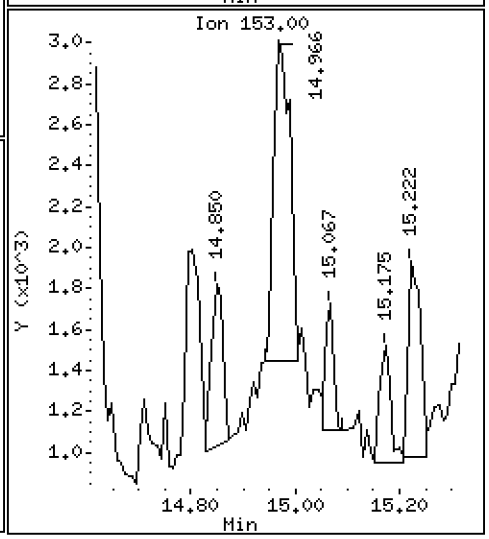












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

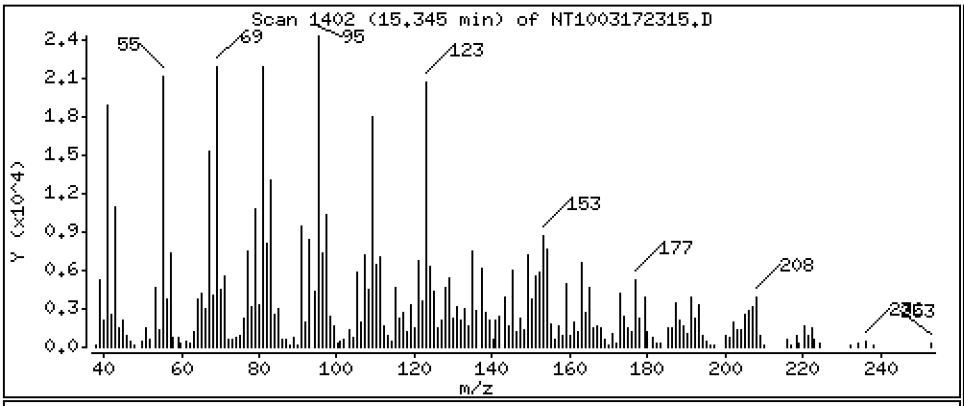
Operator: VTS

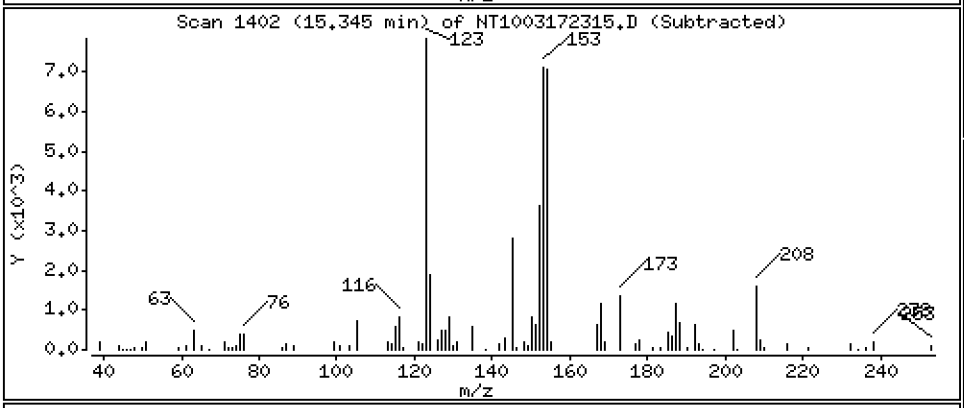
Column phase: ZB-5msi

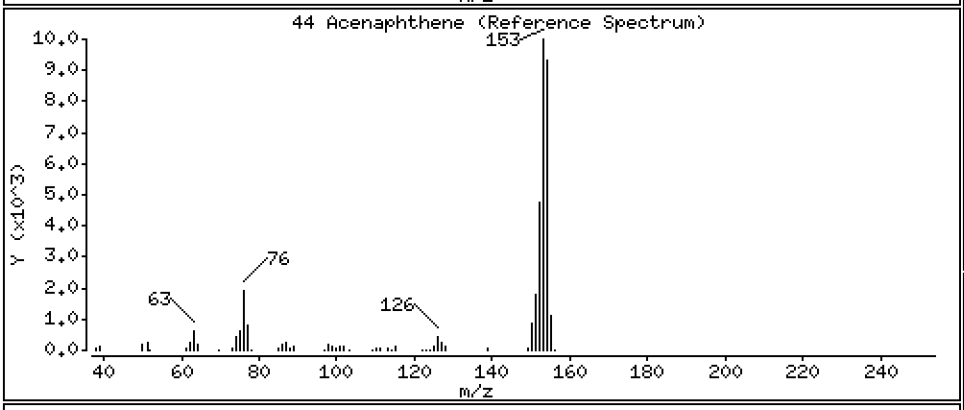
Column diameter: 0.25

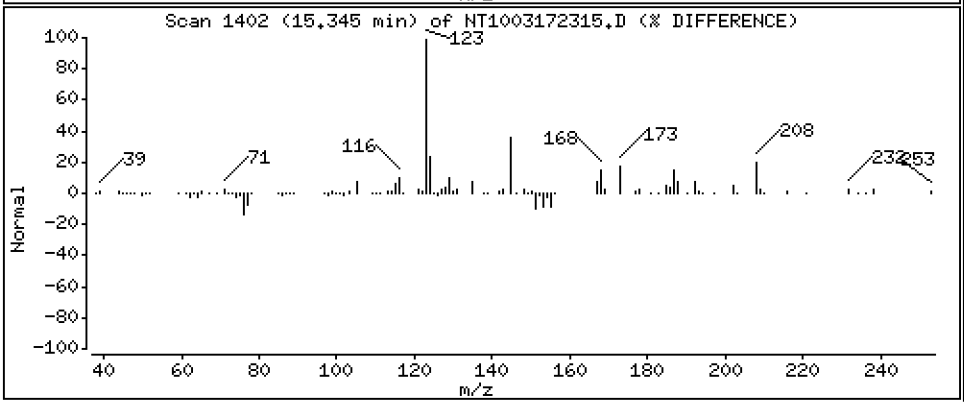
44 Acenaphthene

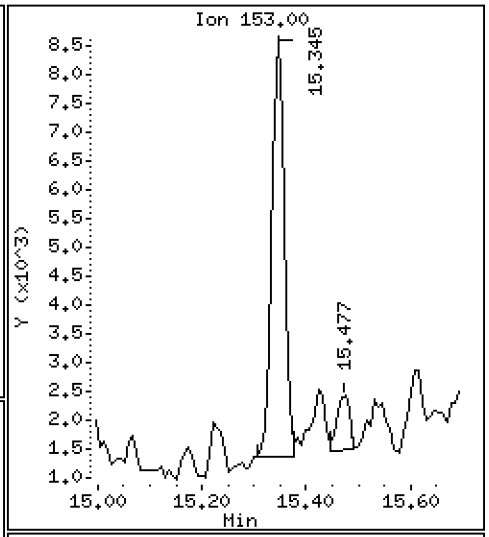
Concentration: 0.1113 ug/mL

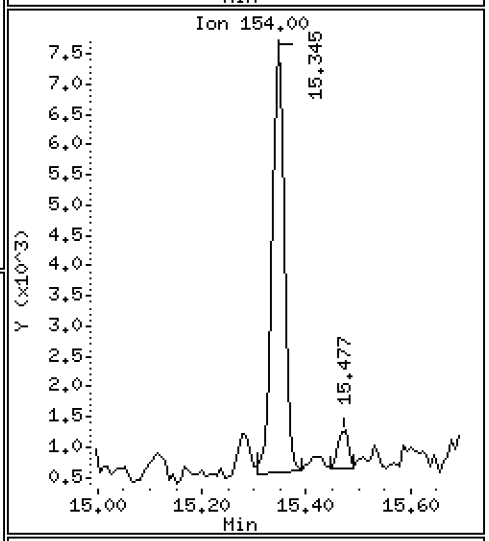


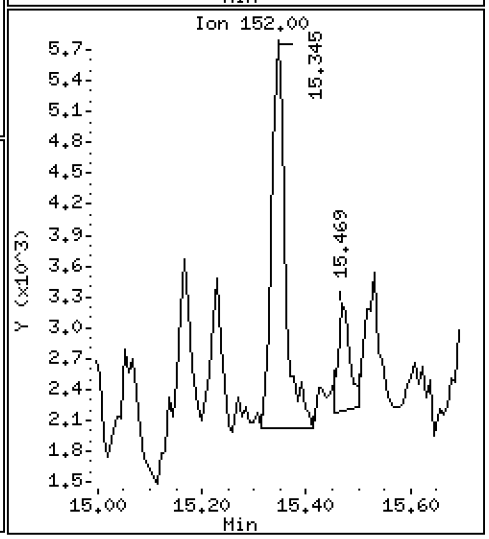












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

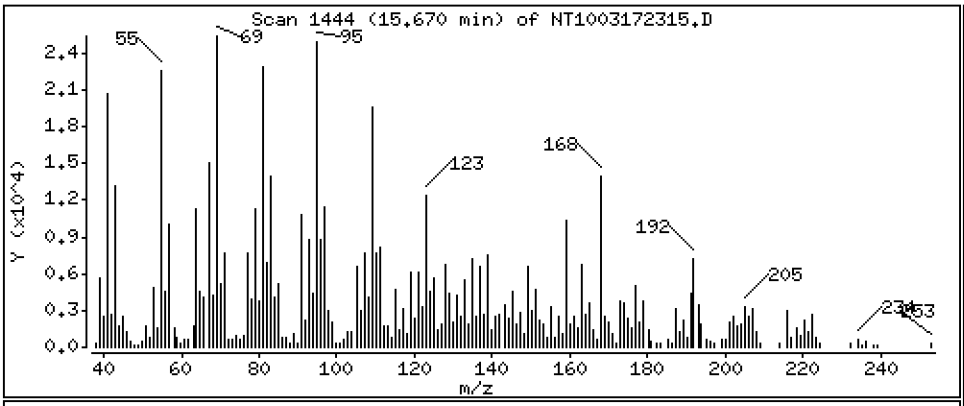
Operator: VTS

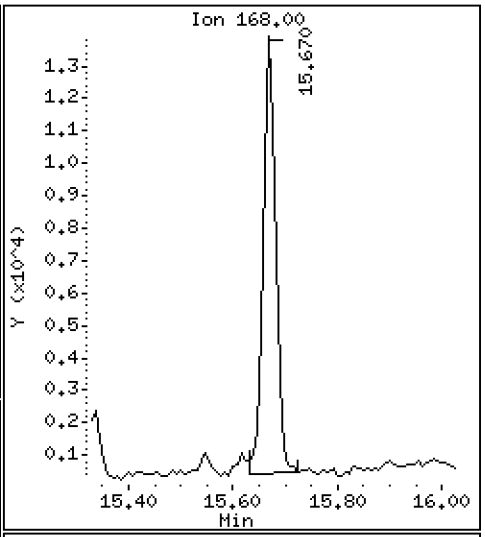
Column phase: ZB-5msi

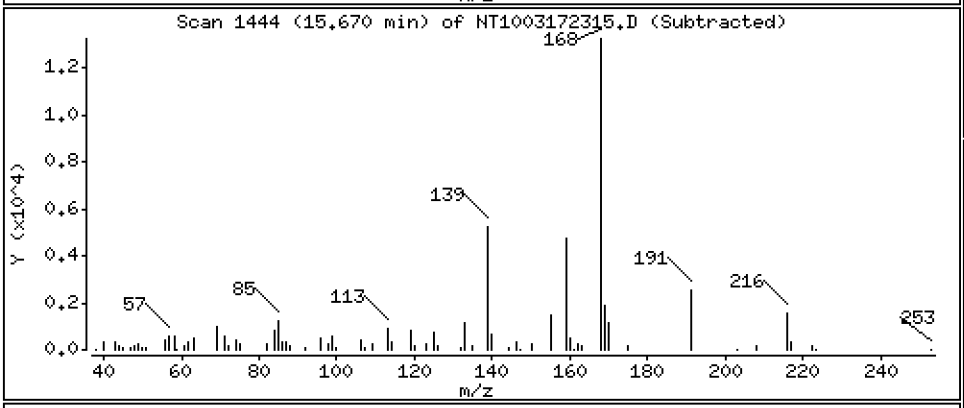
Column diameter: 0.25

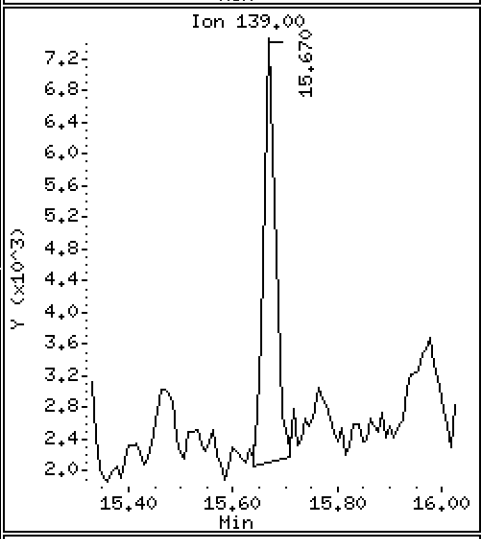
46 Dibenzofuran

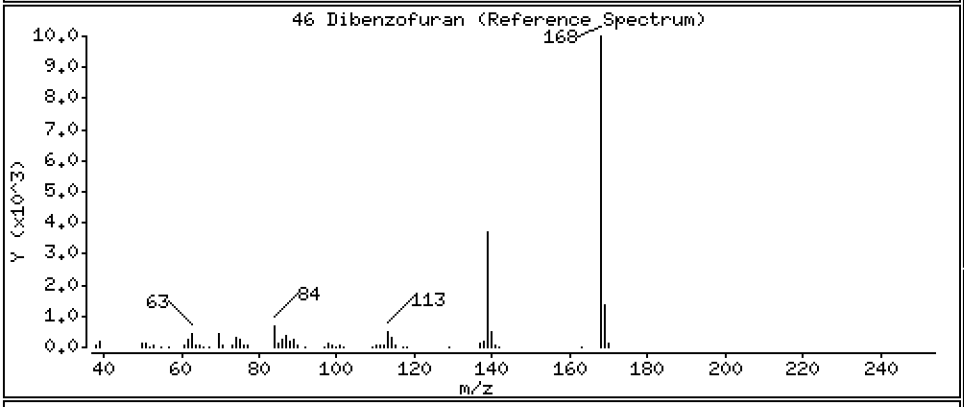
Concentration: 0.1461 ug/mL

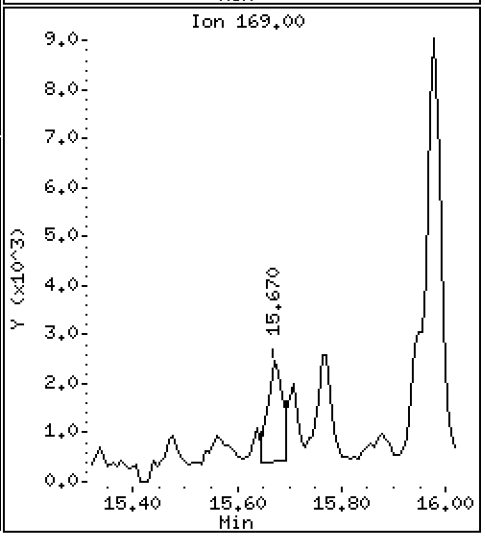


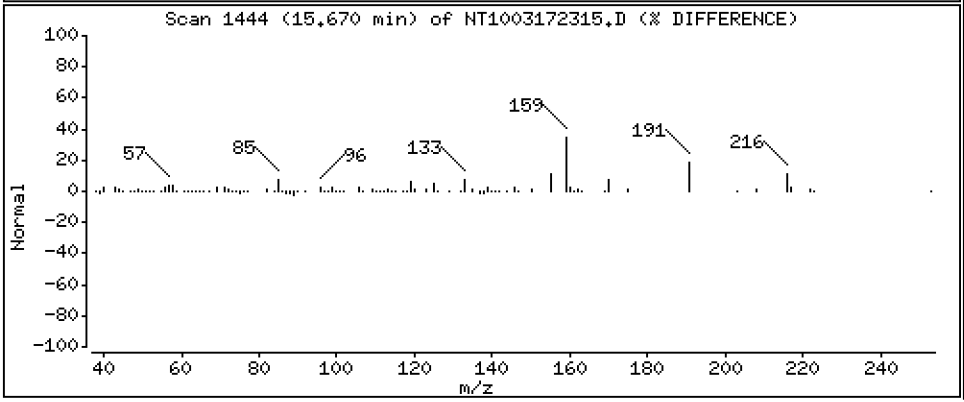












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172315.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

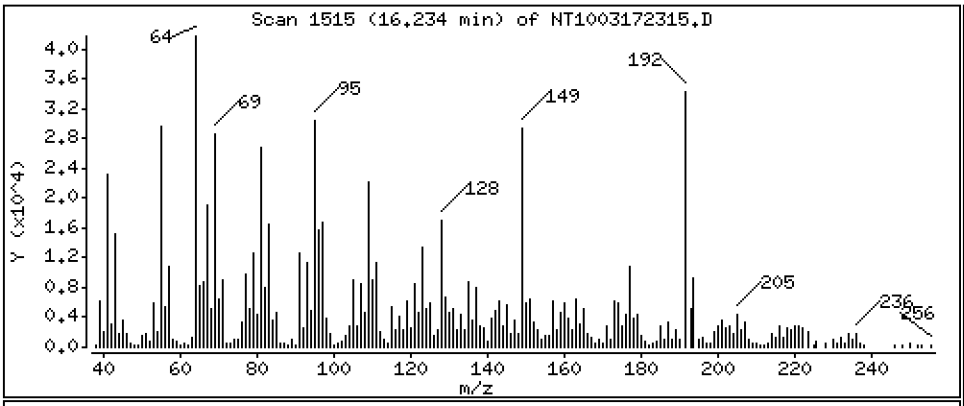
Operator: VTS

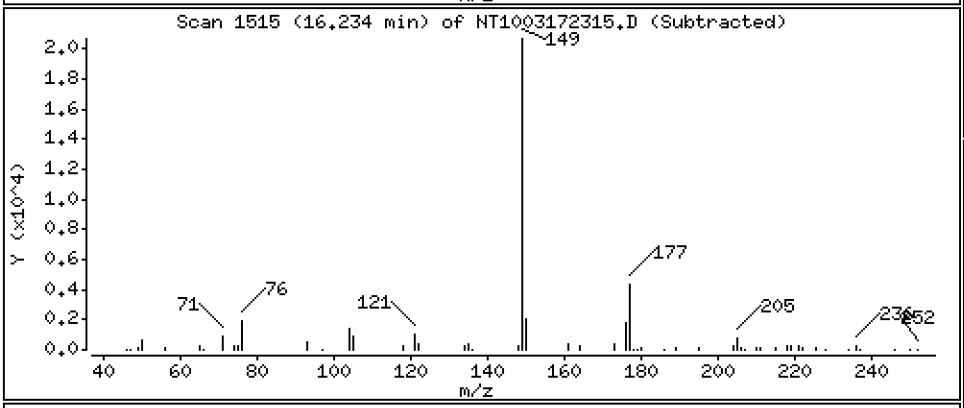
Column phase: ZB-5msi

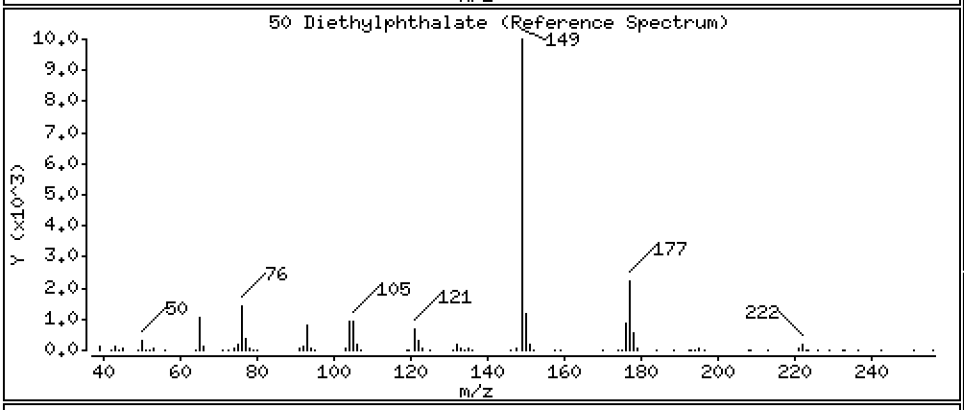
Column diameter: 0.25

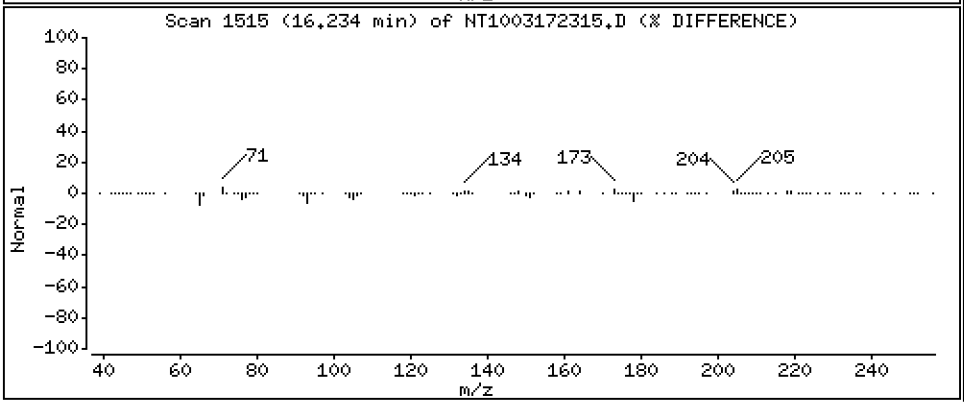
50 Diethylphthalate

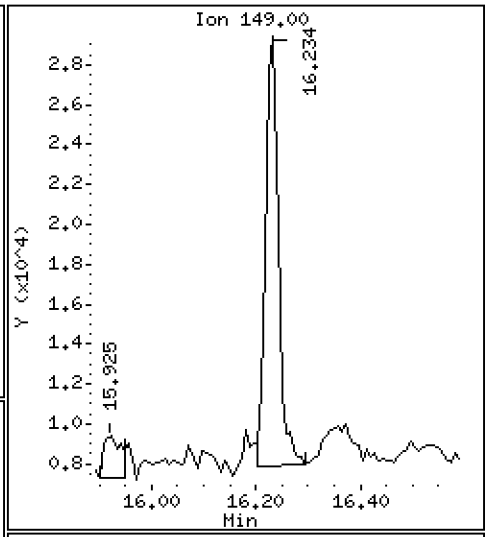
Concentration: 0.3362 ug/mL

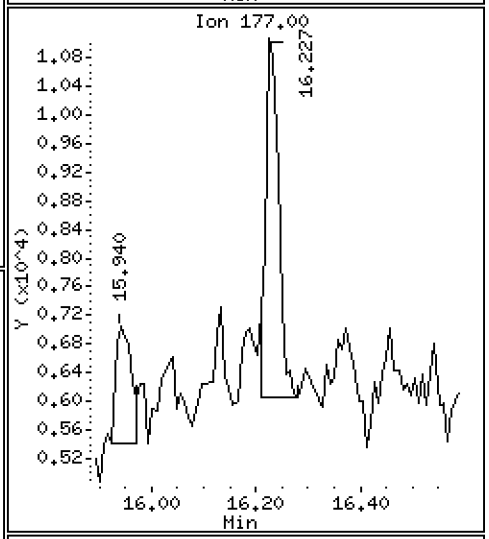


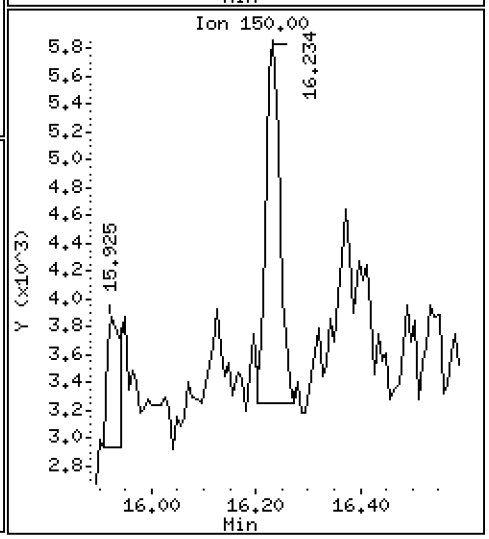












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

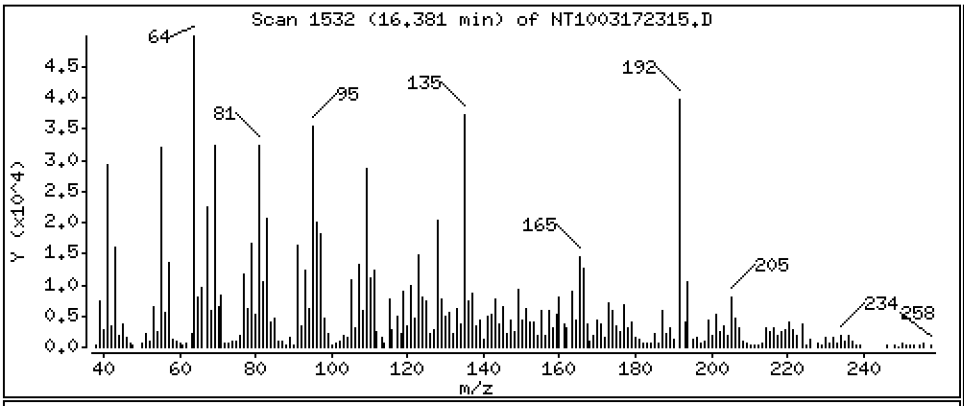
Operator: VTS

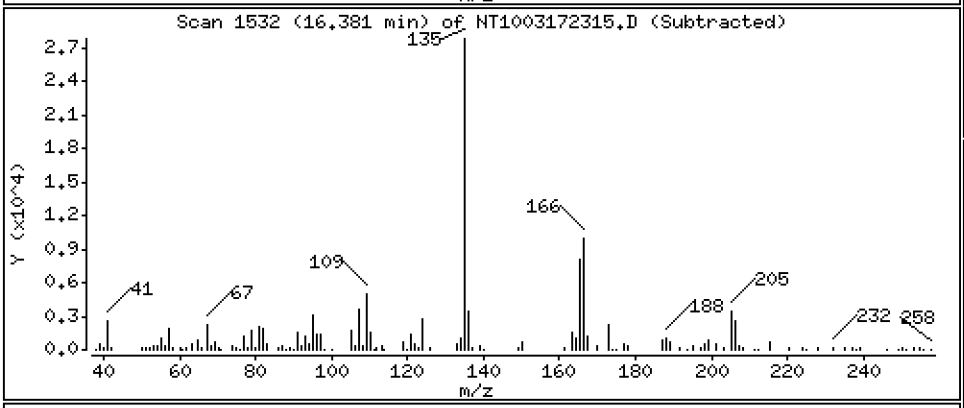
Column phase: ZB-5msi

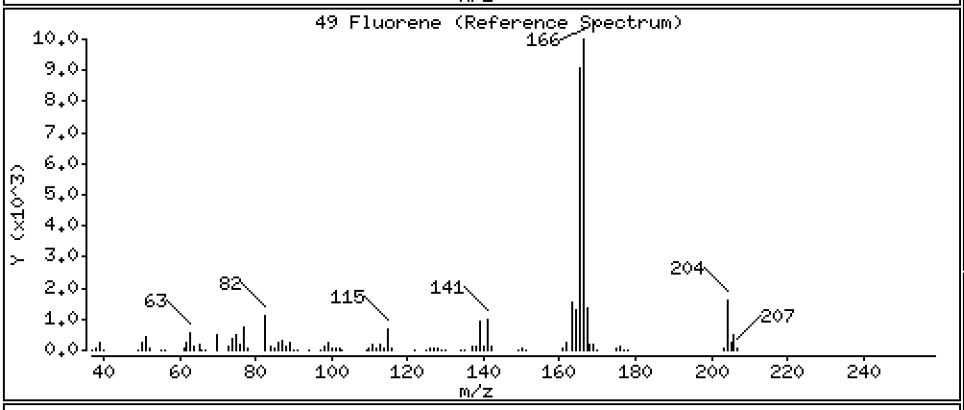
Column diameter: 0.25

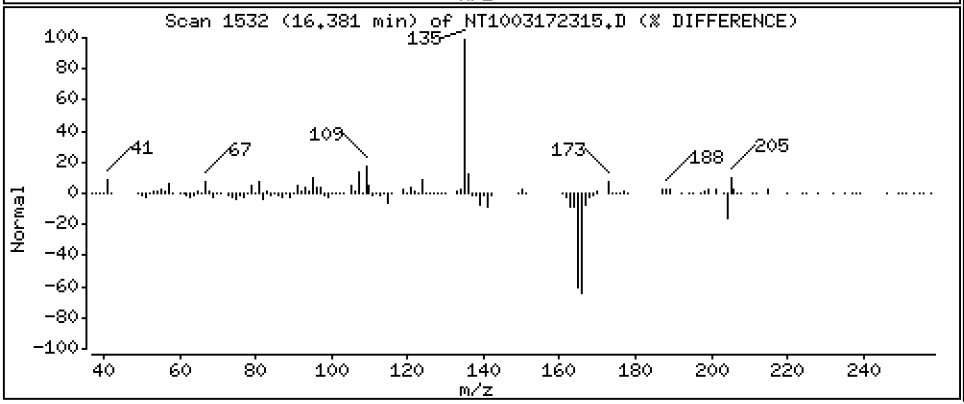
49 Fluorene

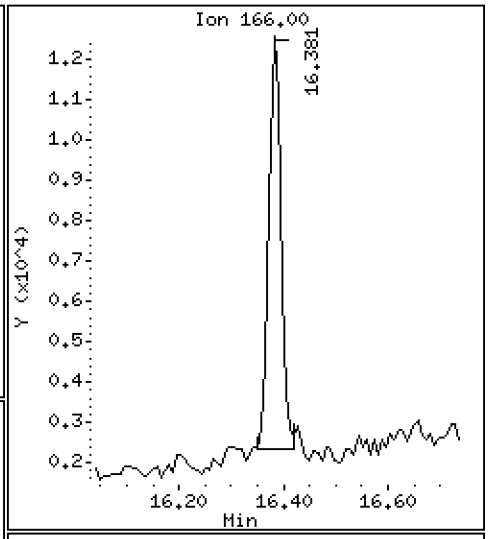
Concentration: 0.1316 ug/mL

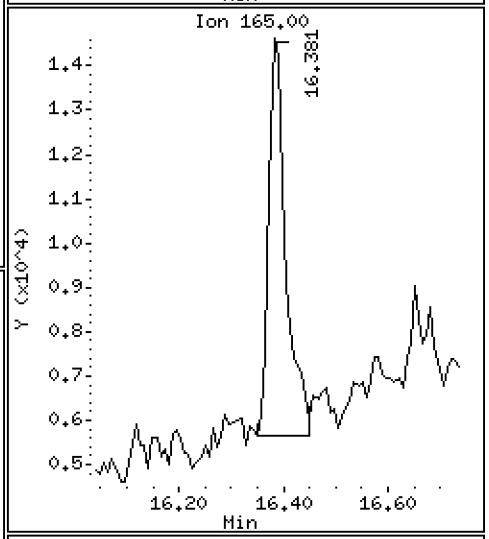


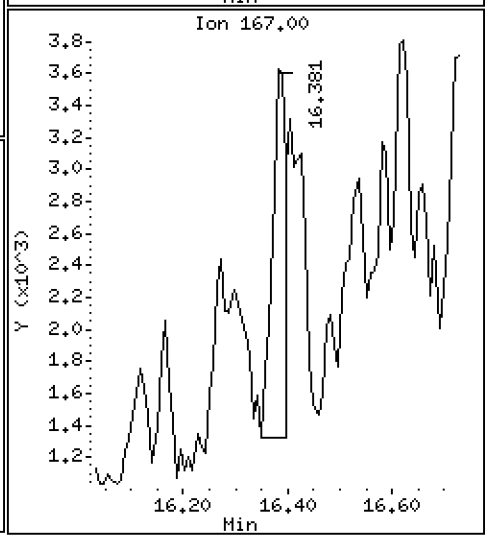












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

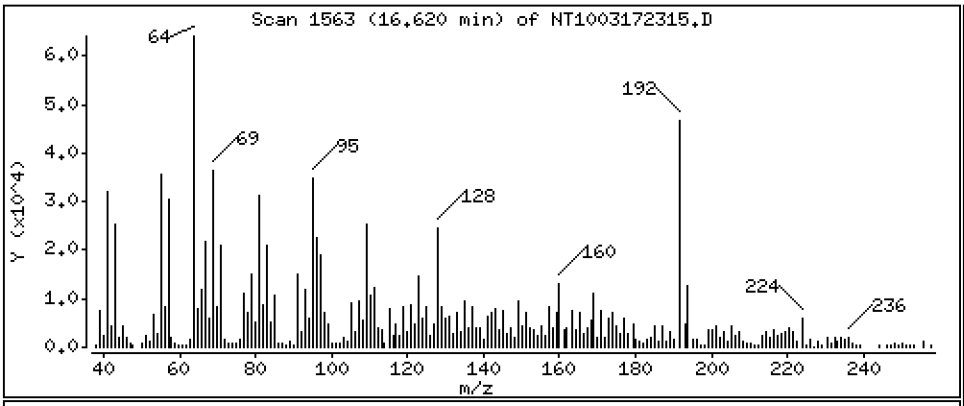
Operator: VTS

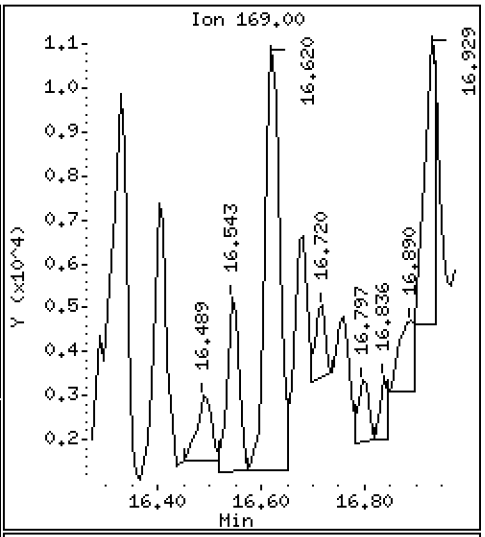
Column phase: ZB-5msi

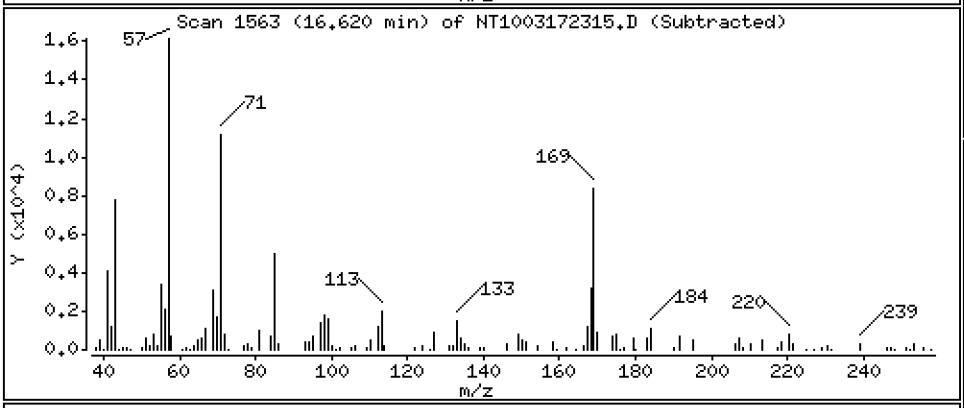
Column diameter: 0.25

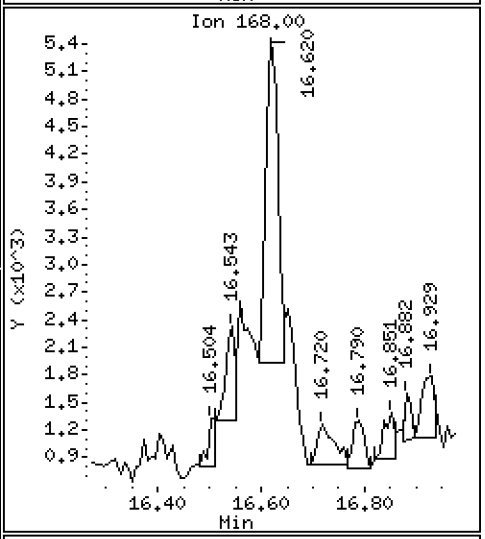
54 N-Nitrosodiphenylamine

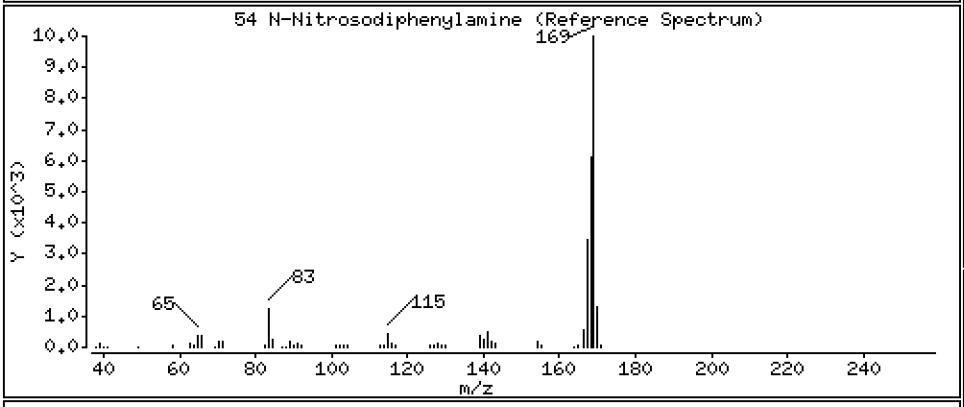
Concentration: 0.2135 ug/mL

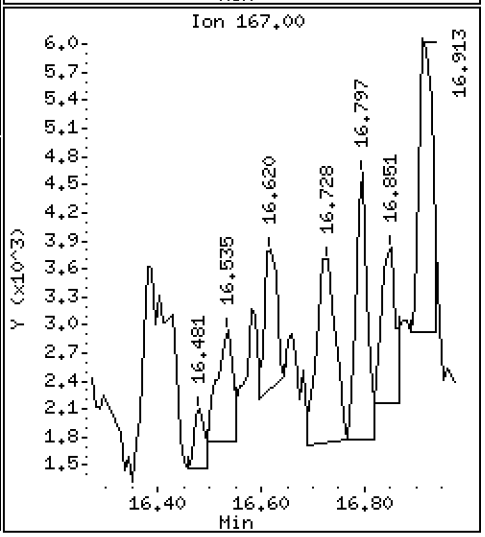


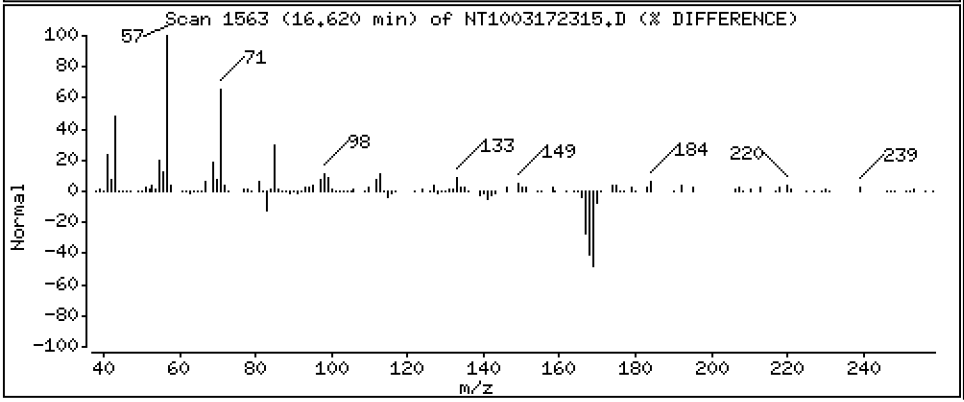












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

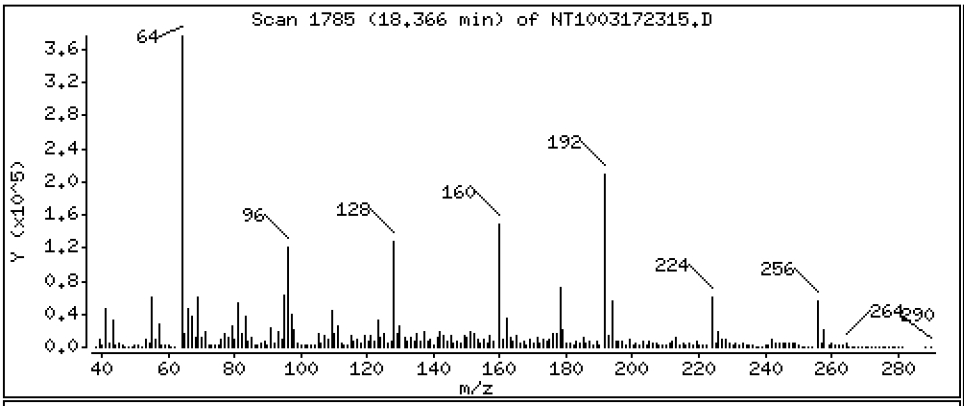
Operator: VTS

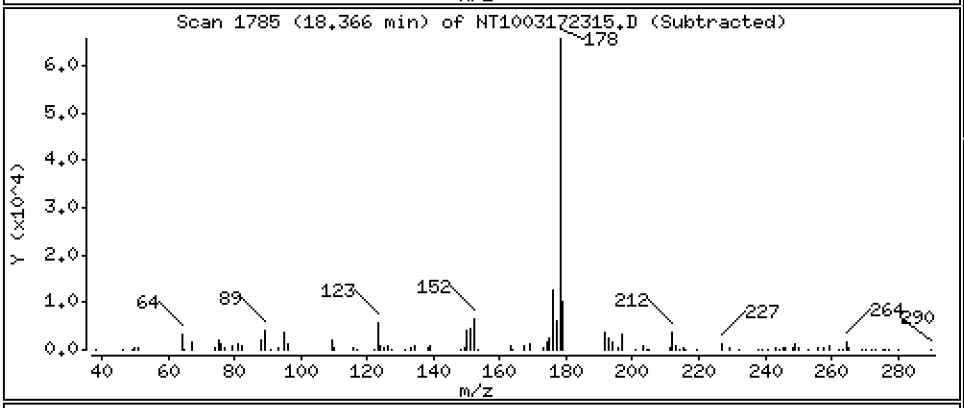
Column phase: ZB-5msi

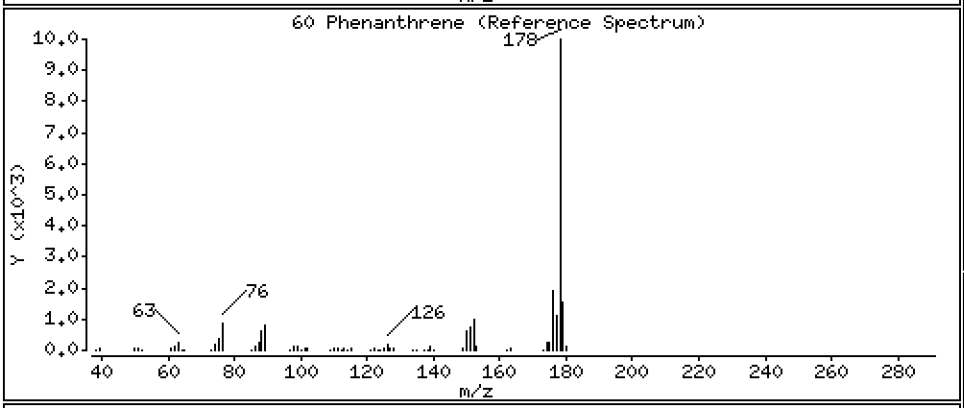
Column diameter: 0.25

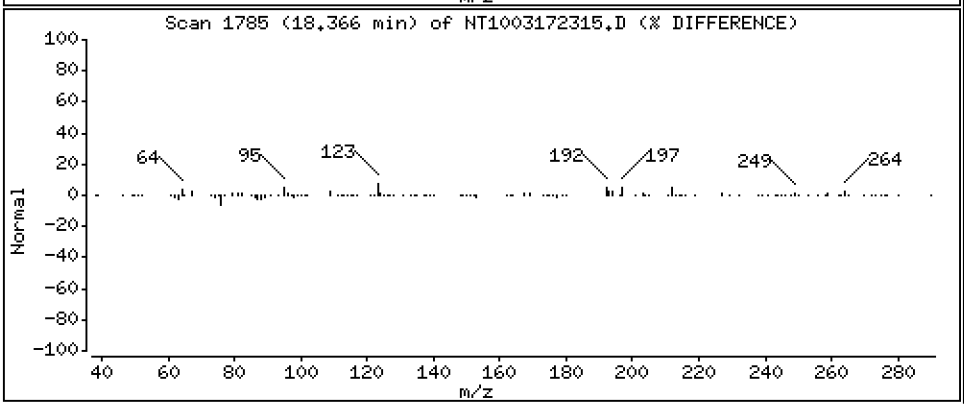
60 Phenanthrene

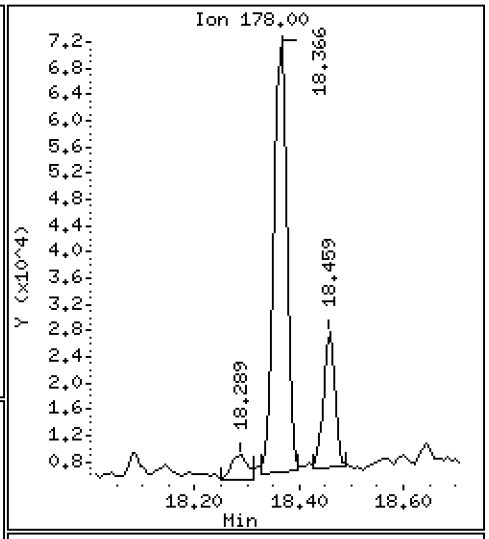
Concentration: 0.6364 ug/mL

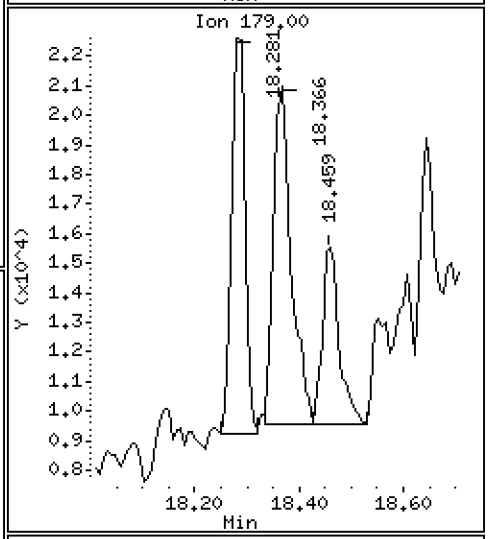


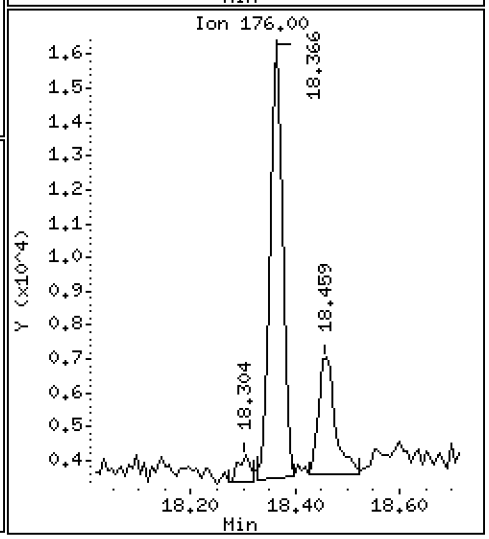












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

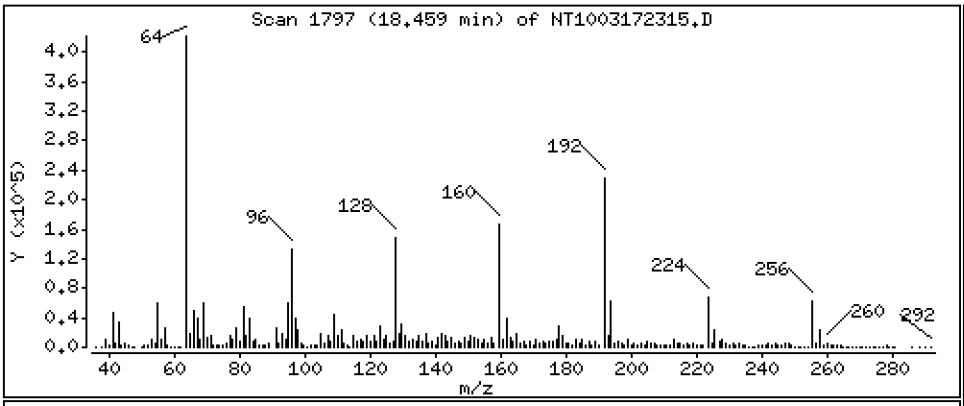
Operator: VTS

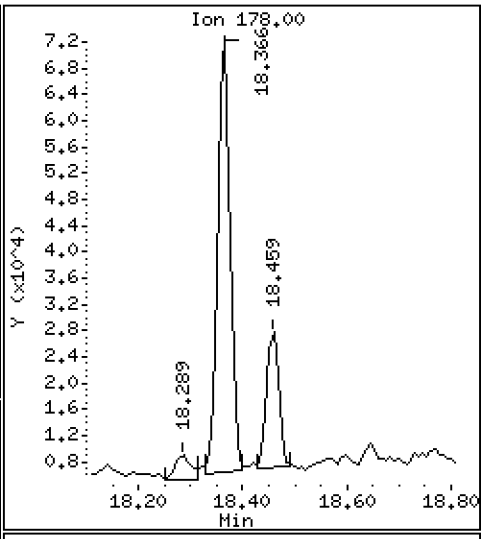
Column phase: ZB-5msi

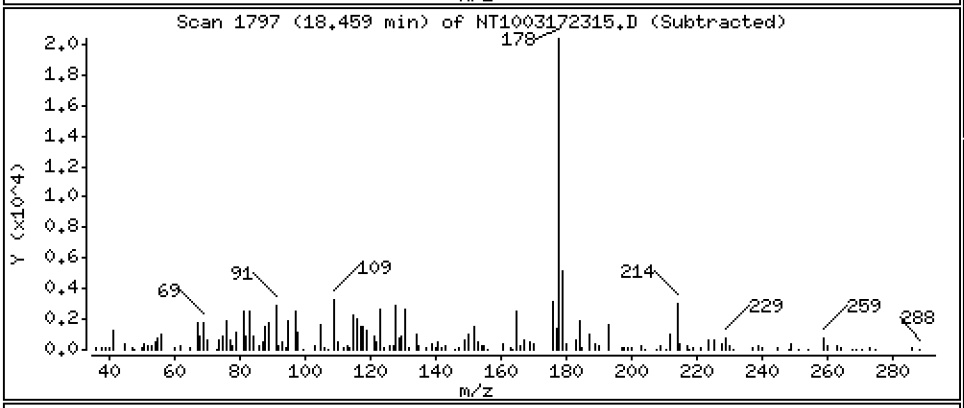
Column diameter: 0.25

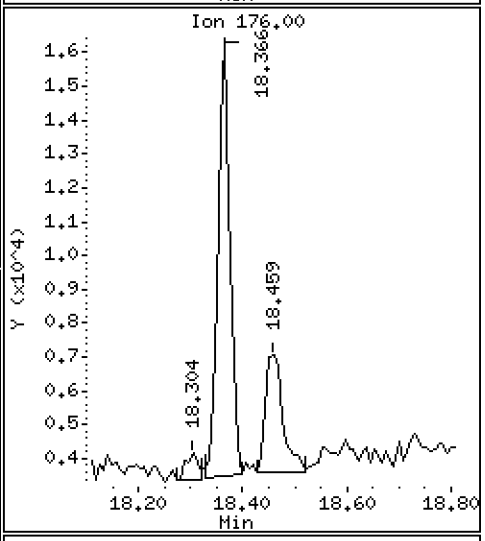
61 Anthracene

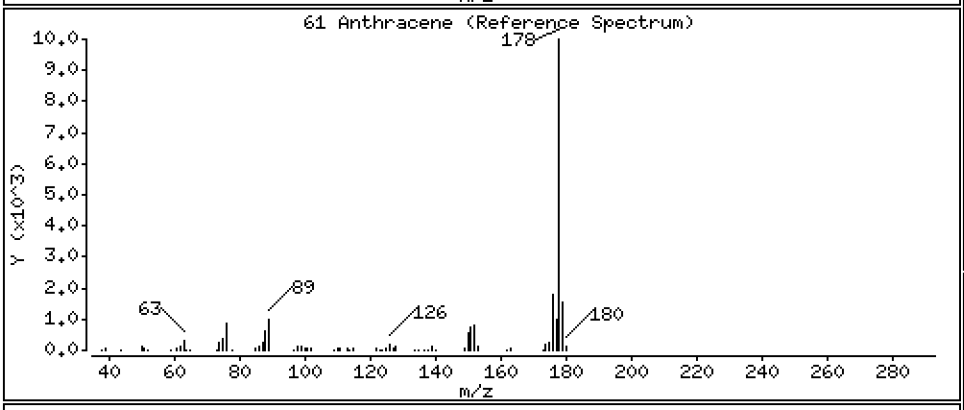
Concentration: 0.1964 ug/mL

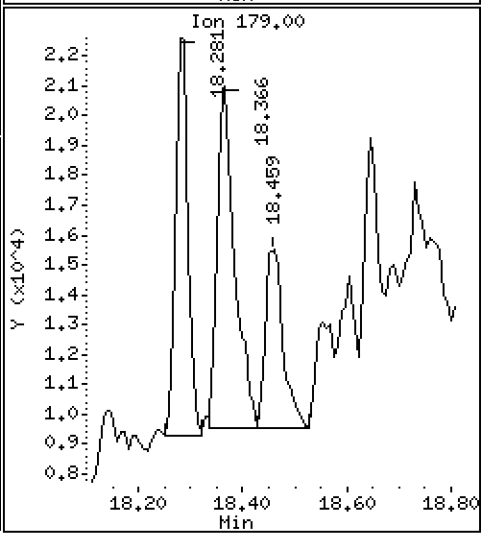


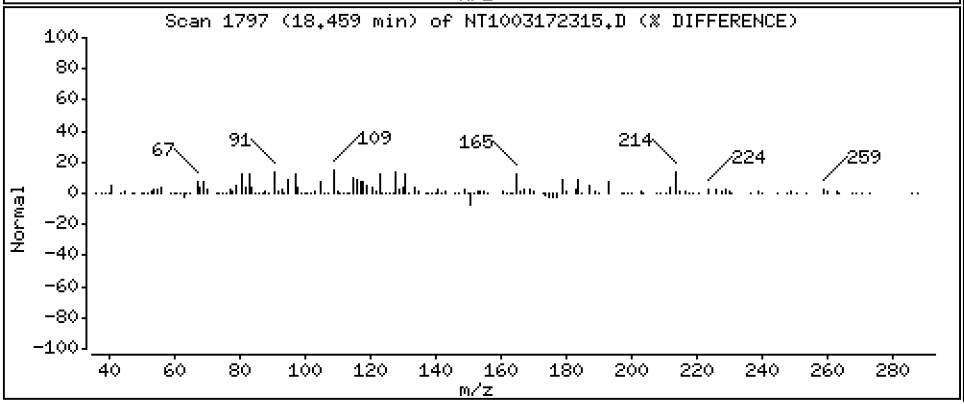












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

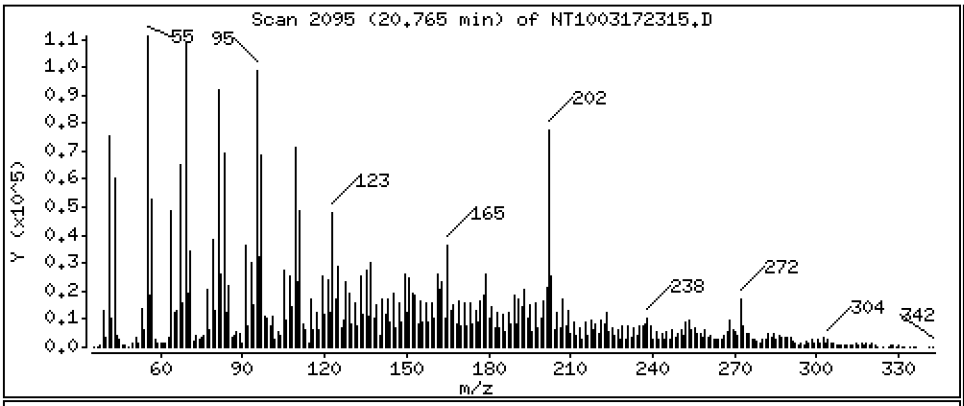
Operator: VTS

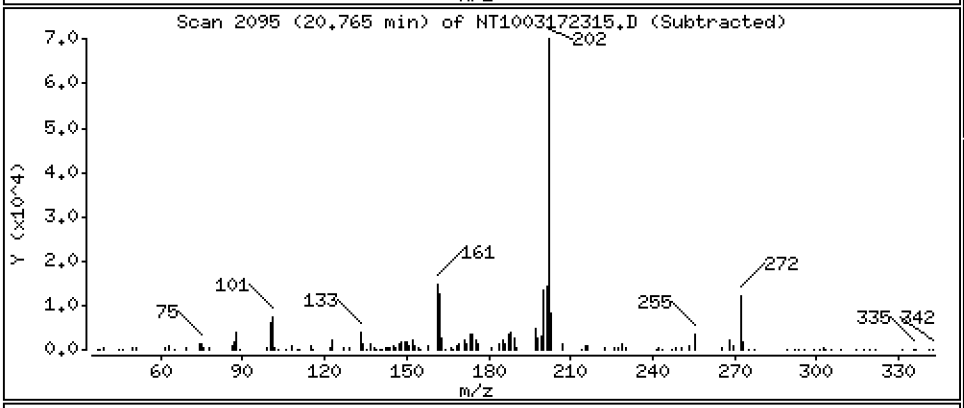
Column phase: ZB-5msi

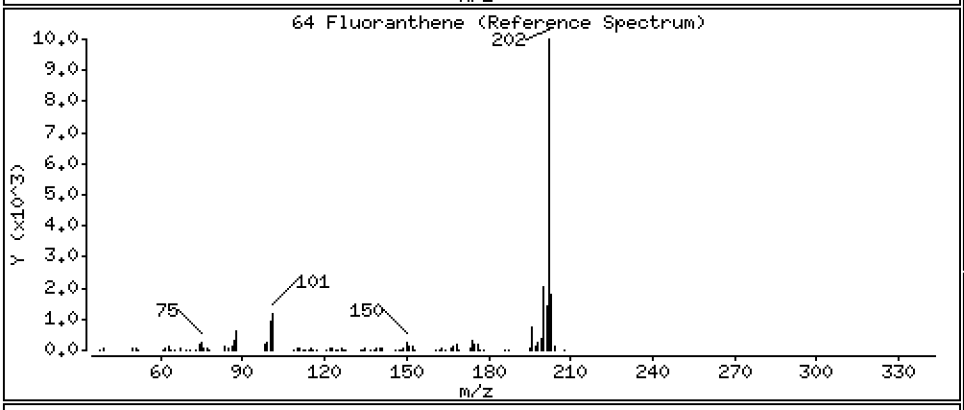
Column diameter: 0.25

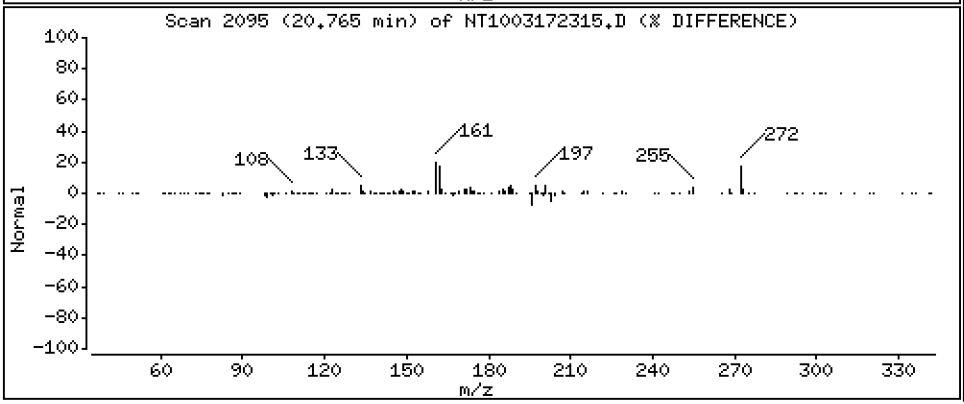
64 Fluoranthene

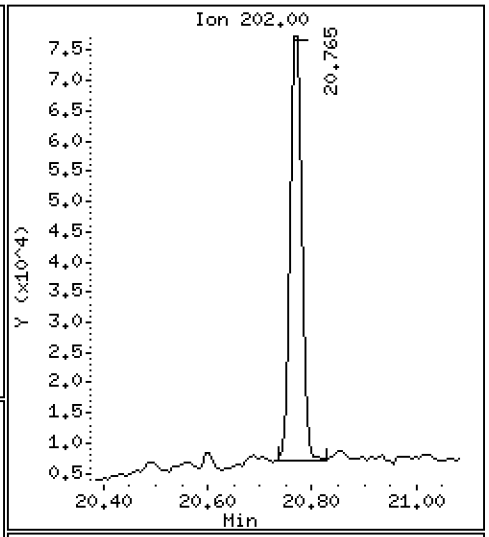
Concentration: 0.5861 ug/mL

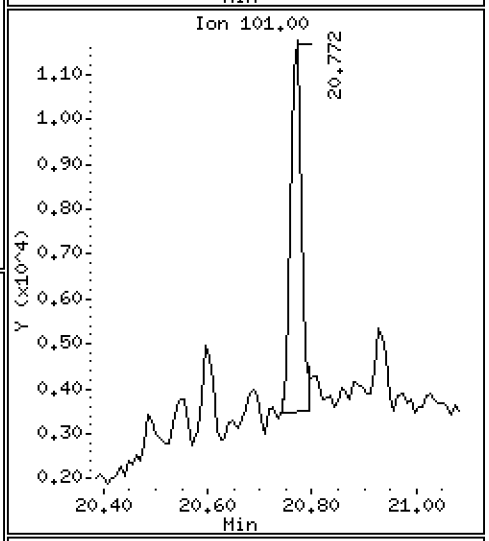


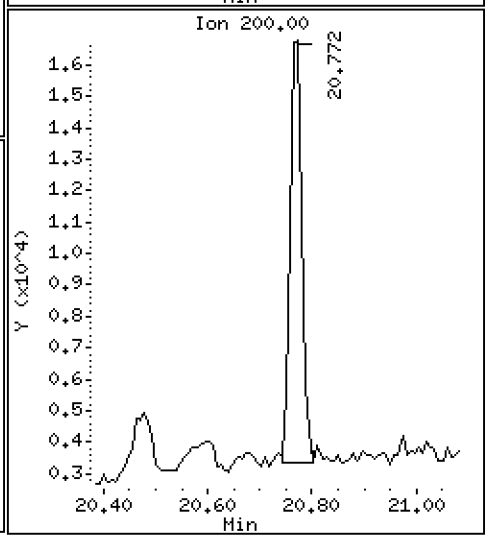












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

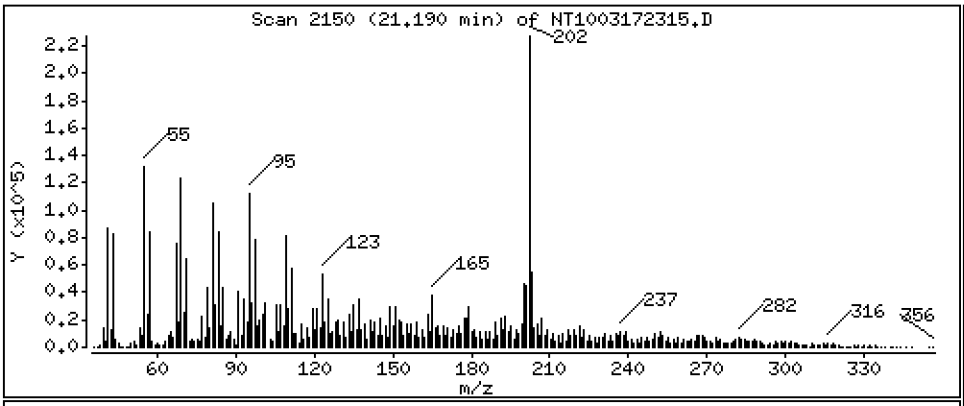
Operator: VTS

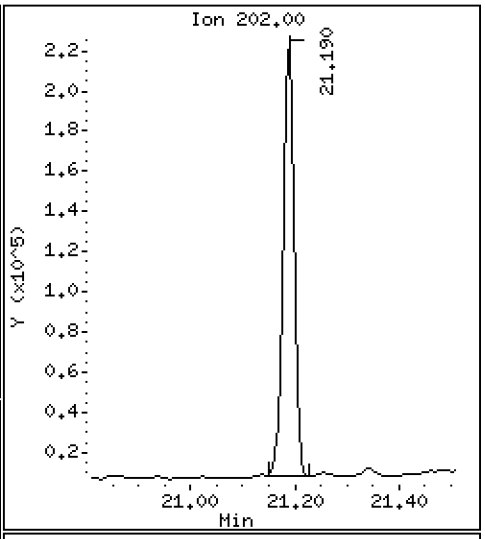
Column phase: ZB-5msi

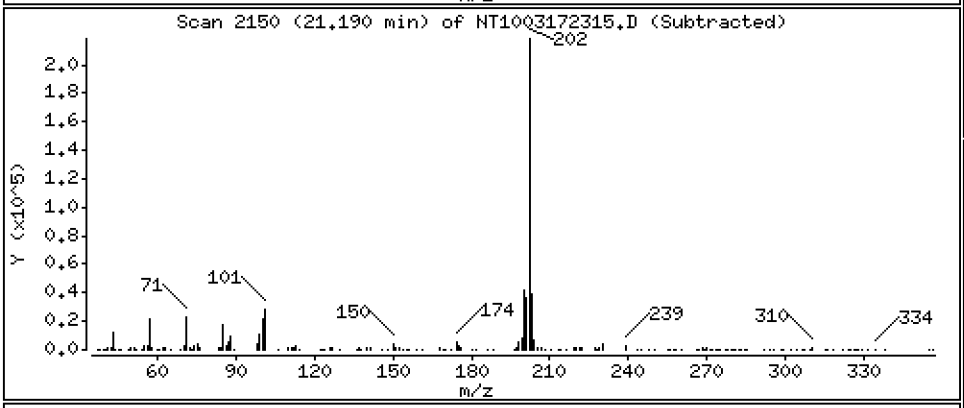
Column diameter: 0.25

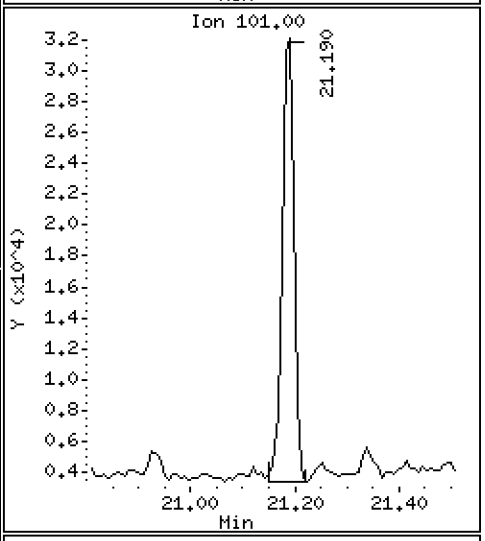
65 Pyrene

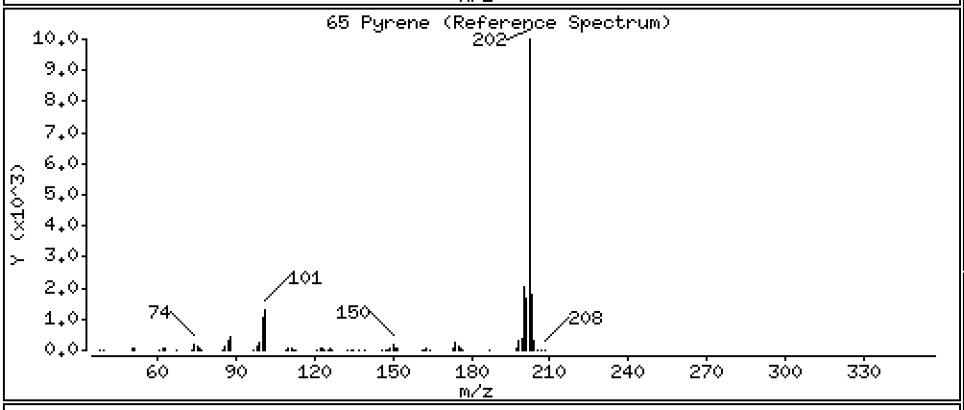
Concentration: 1.611 ug/mL

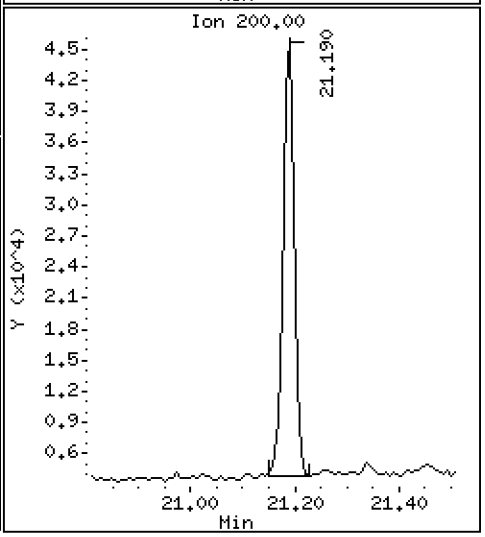


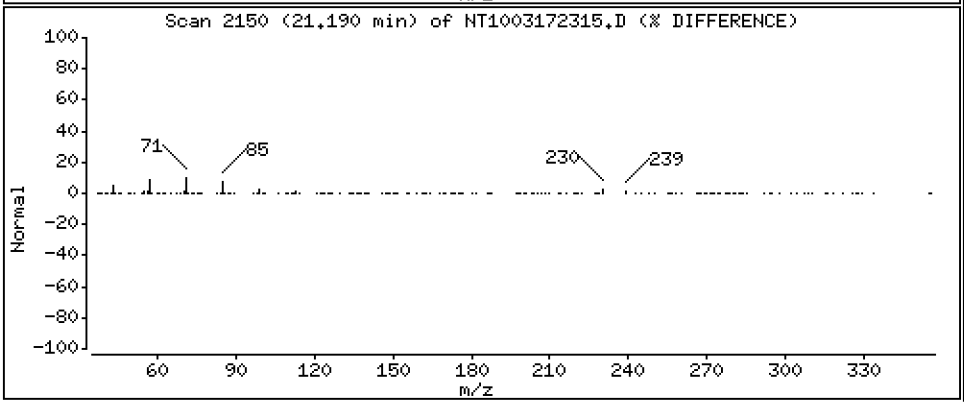












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172315.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

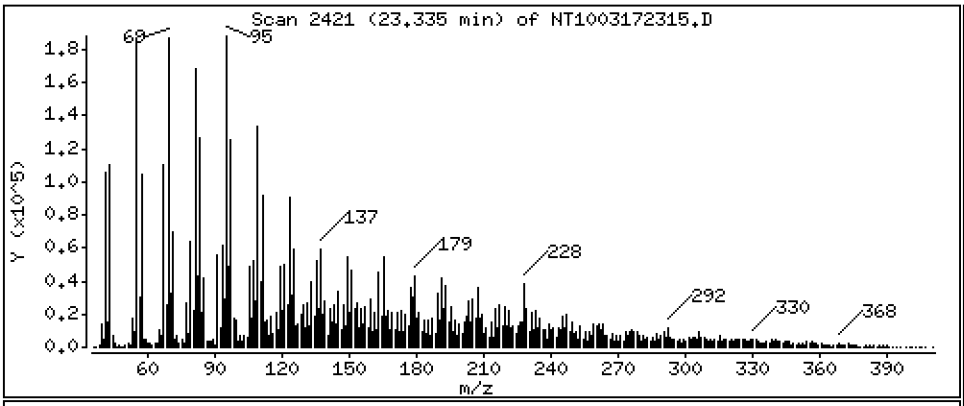
Operator: VTS

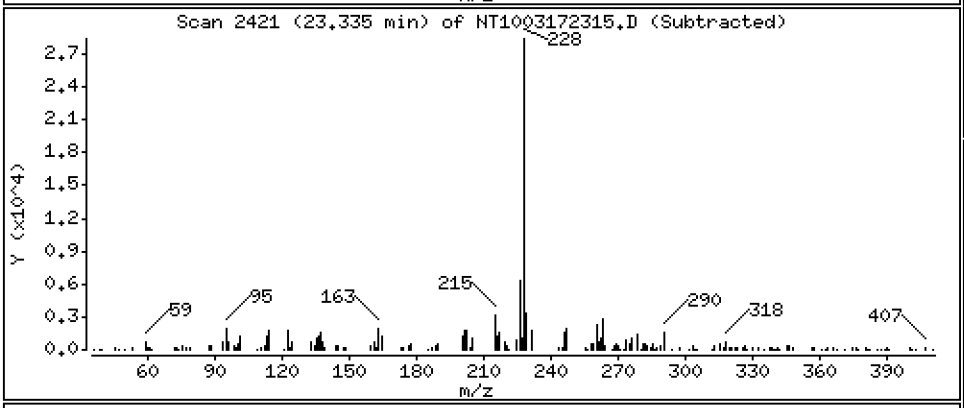
Column phase: ZB-5msi

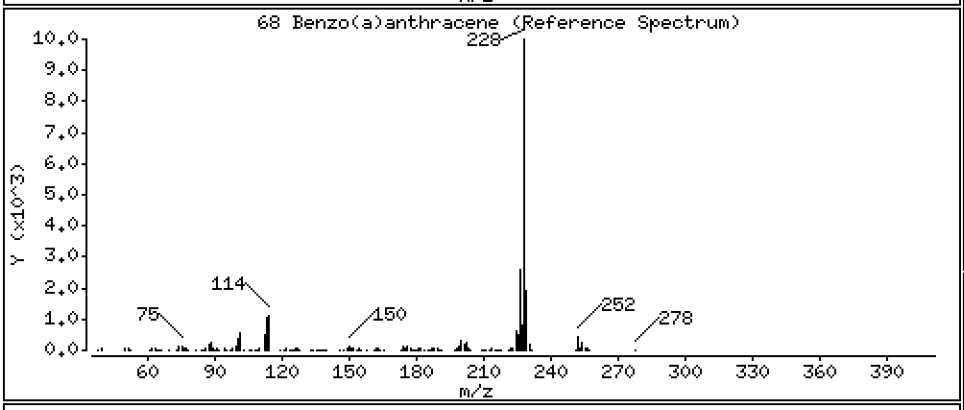
Column diameter: 0.25

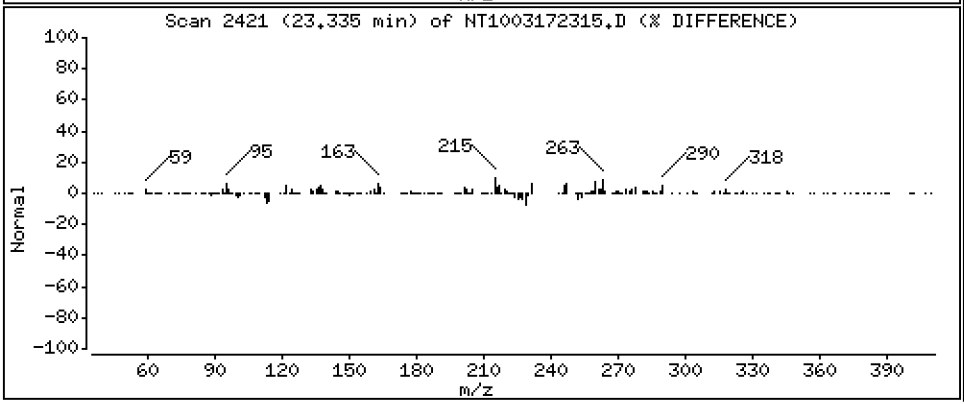
68 Benzo(a)anthracene

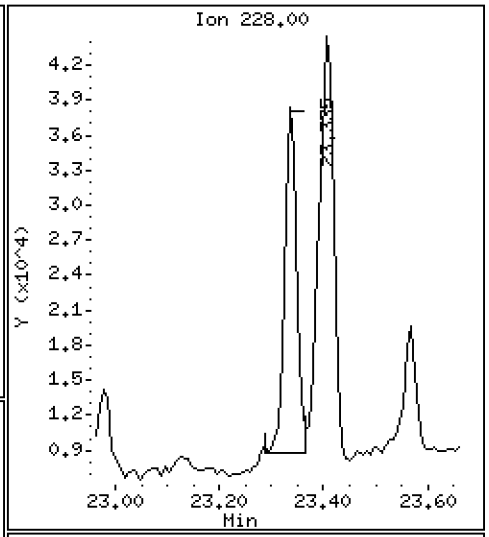
Concentration: 0.2833 ug/mL

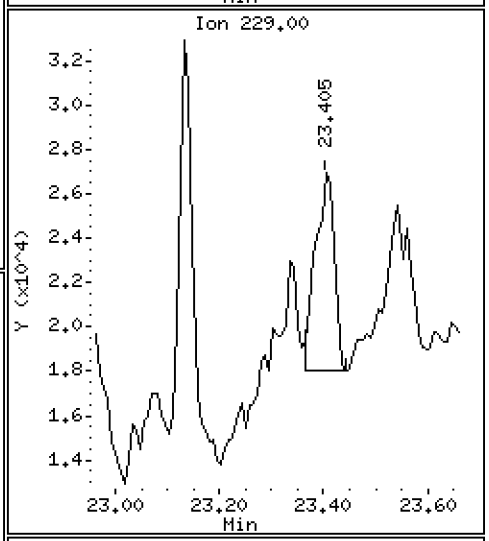


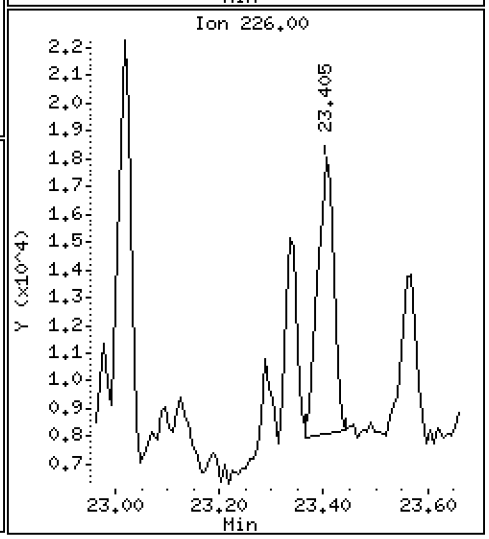












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

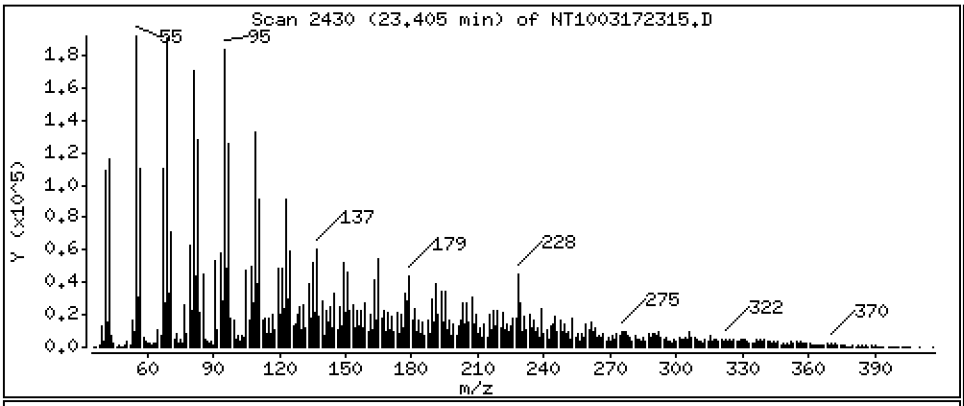
Operator: VTS

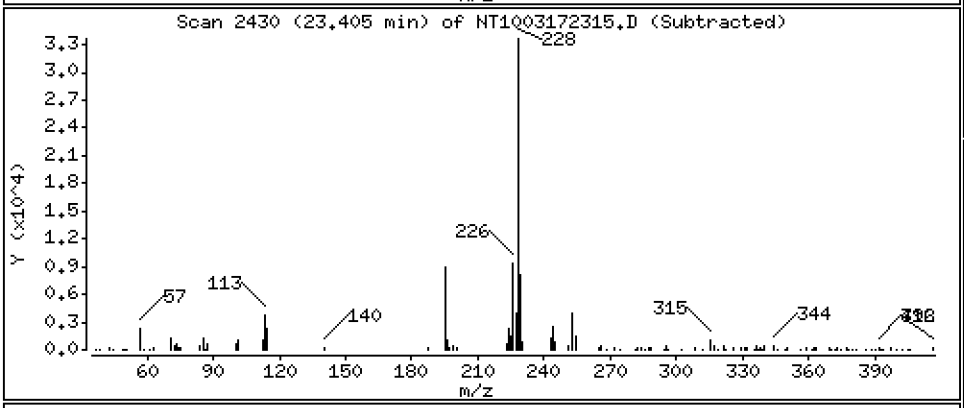
Column phase: ZB-5msi

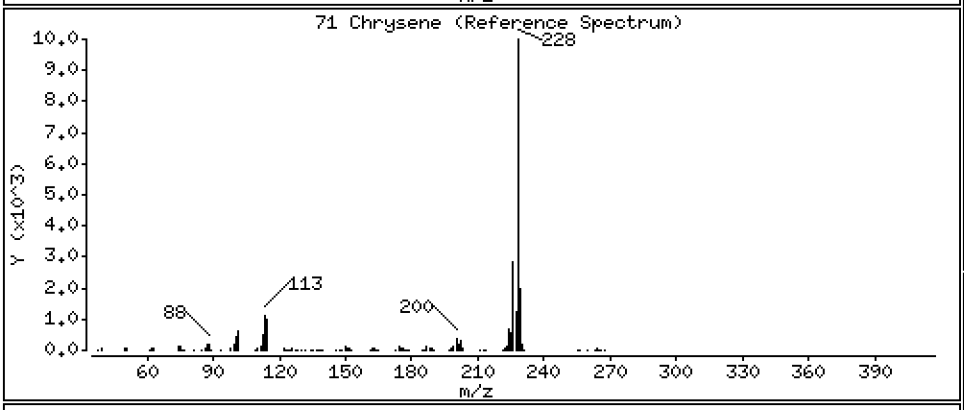
Column diameter: 0.25

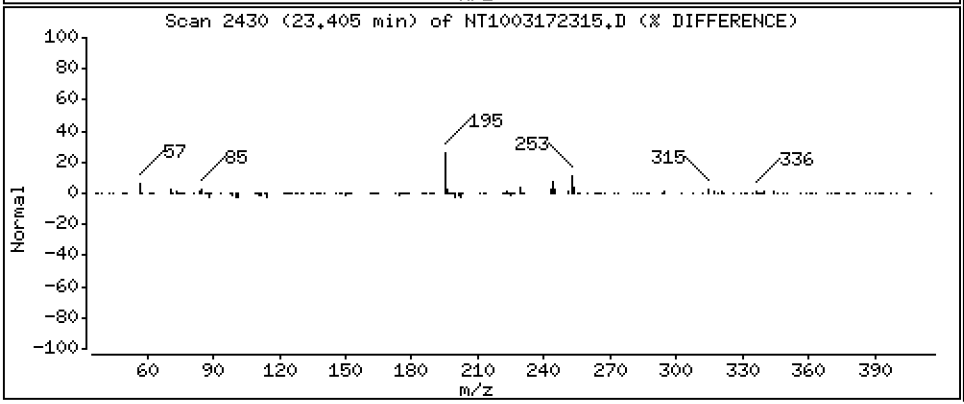
71 Chrysene

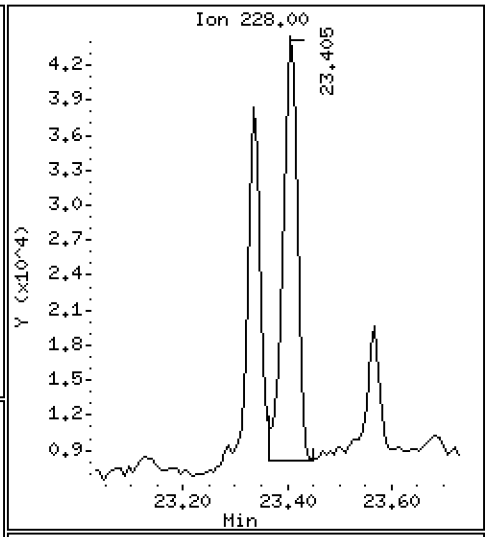
Concentration: 0.4300 ug/mL

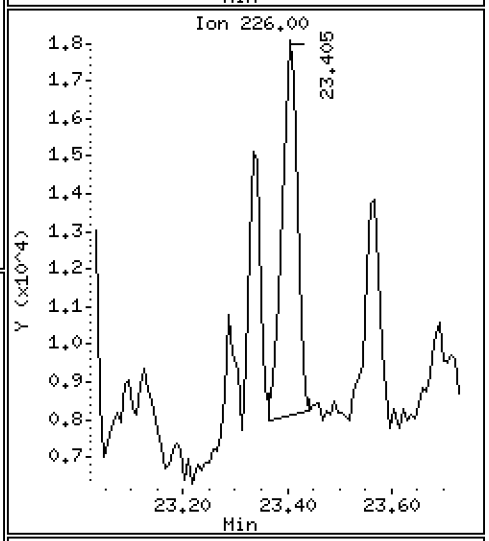


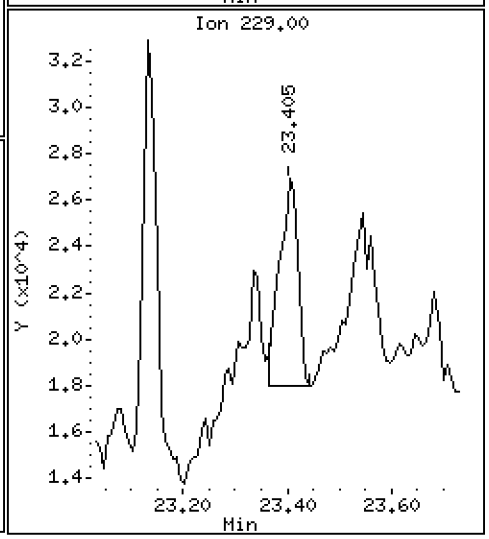












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

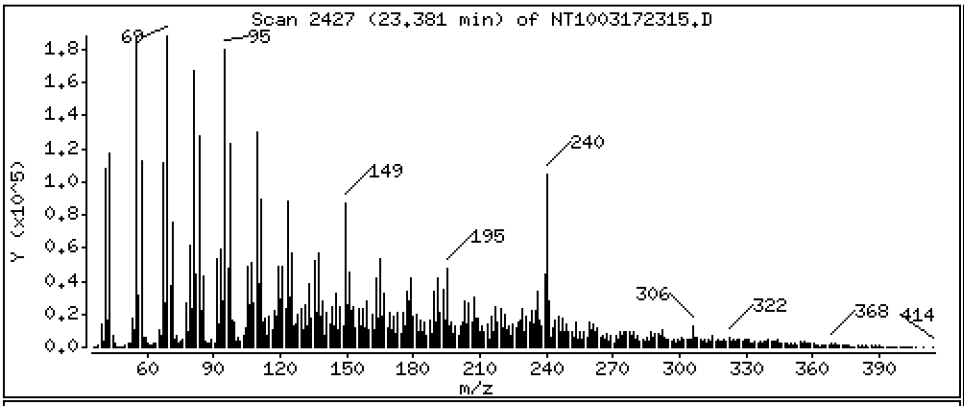
Operator: VTS

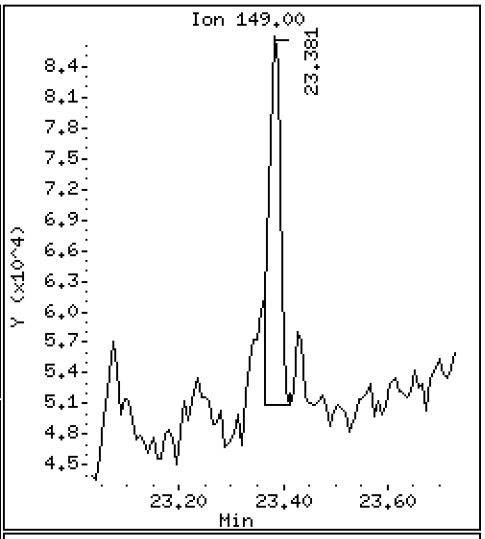
Column phase: ZB-5msi

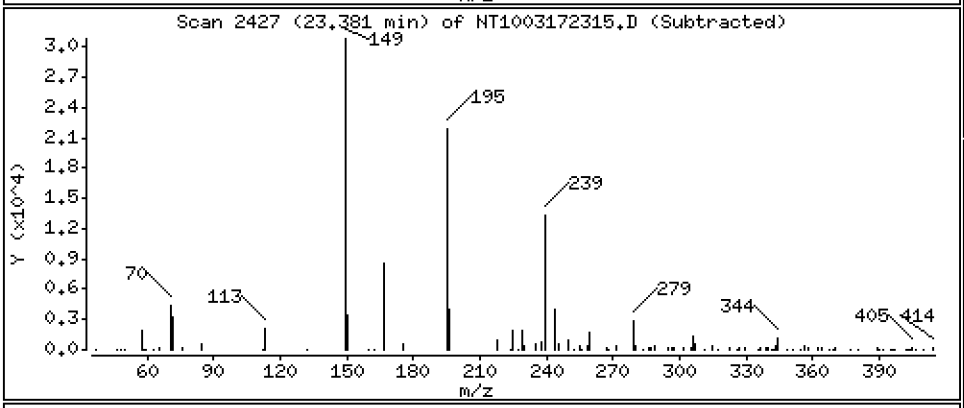
Column diameter: 0.25

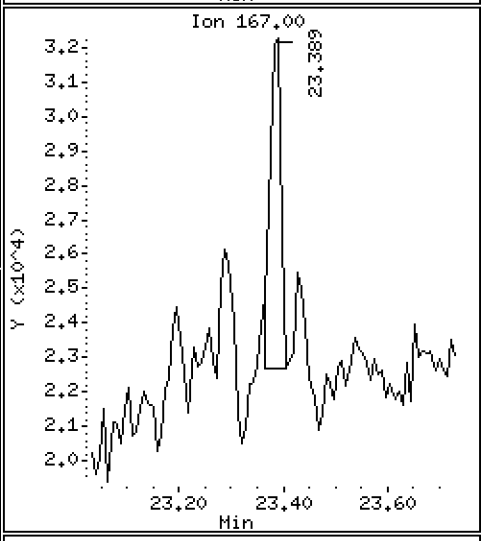
72 bis(2-Ethylhexyl)phthalate

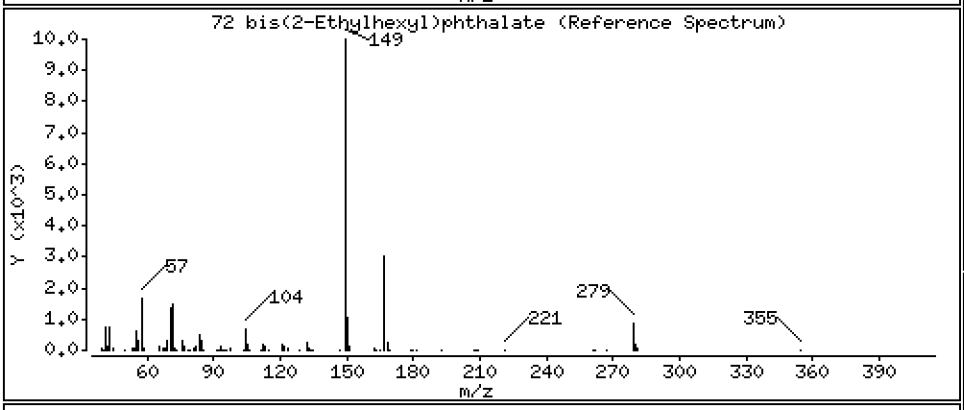
Concentration: 0.4634 ug/mL

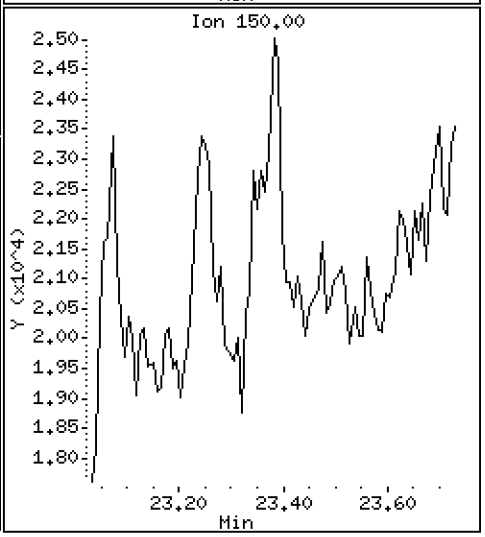


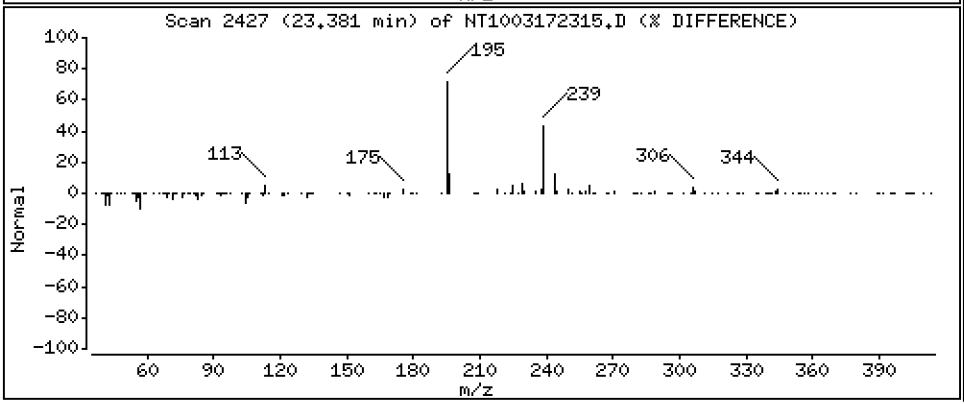












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

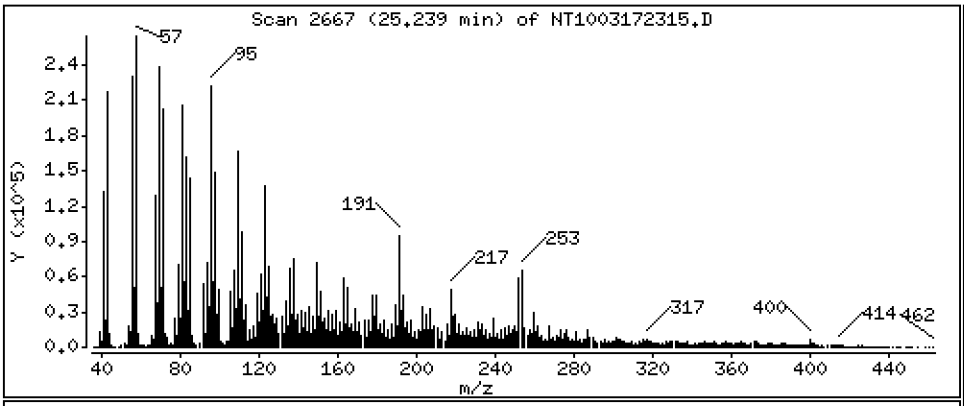
Operator: VTS

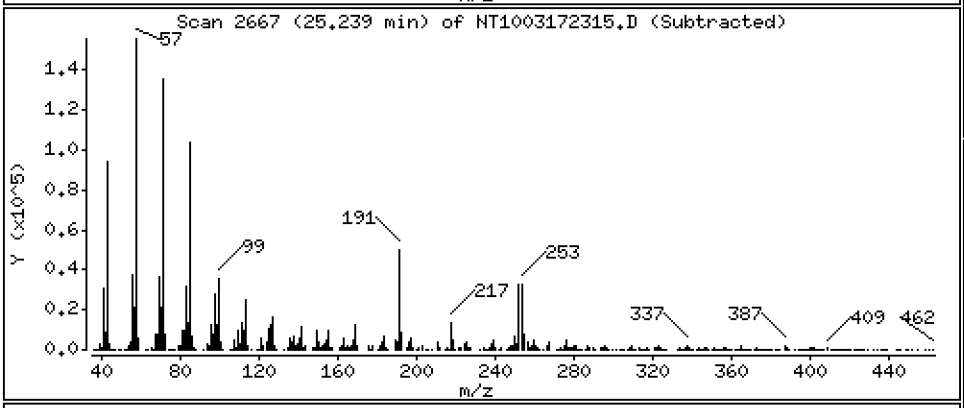
Column phase: ZB-5msi

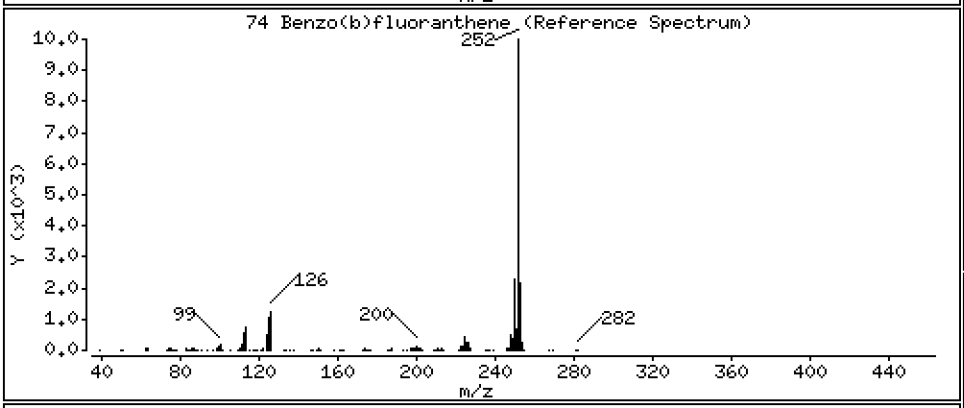
Column diameter: 0.25

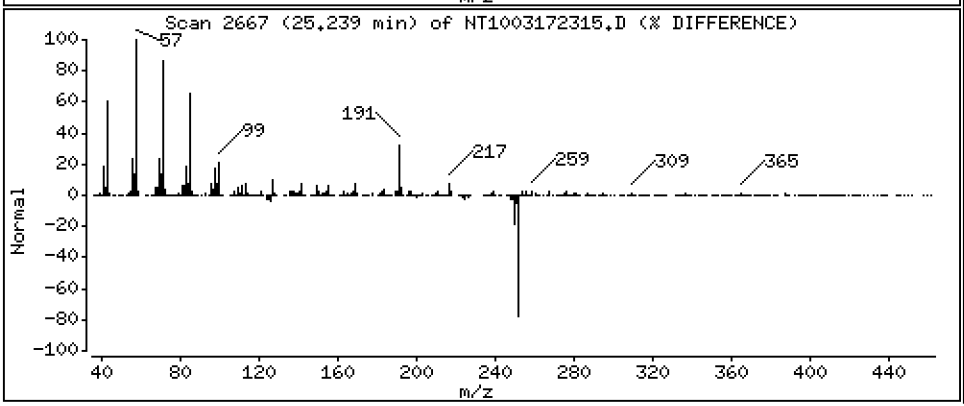
74 Benzo(b)fluoranthene

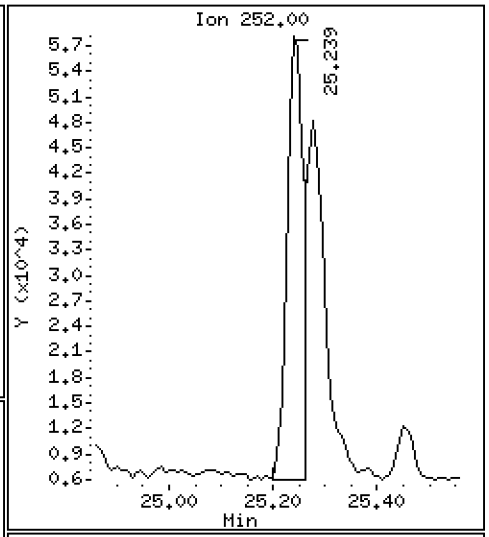
Concentration: 0.6749 ug/mL

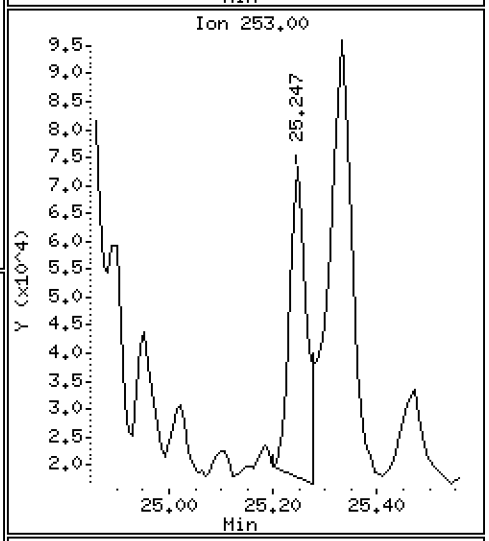


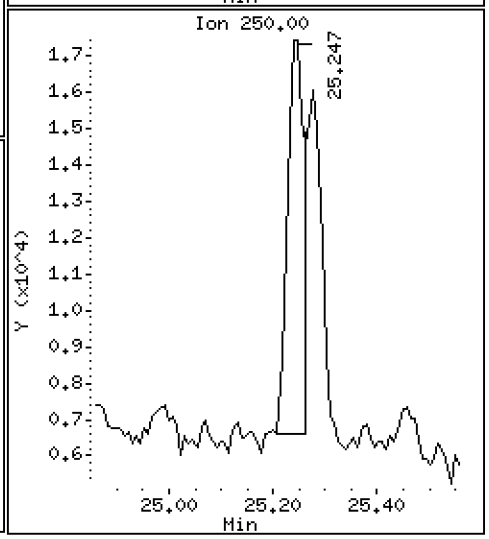












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

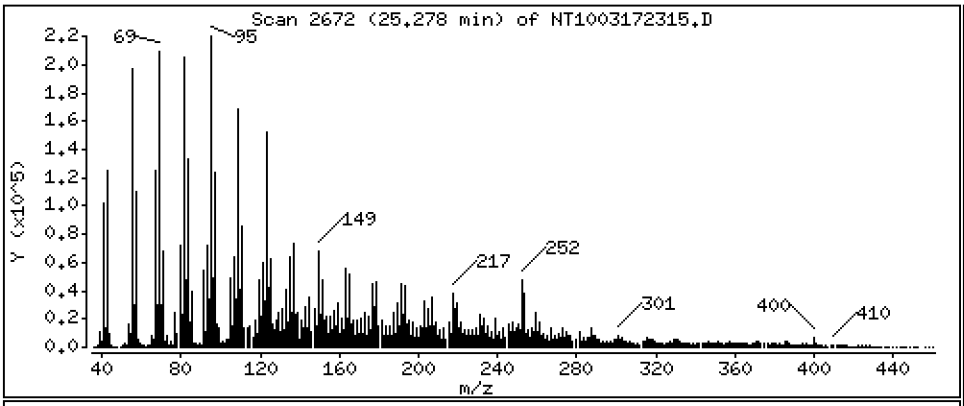
Operator: VTS

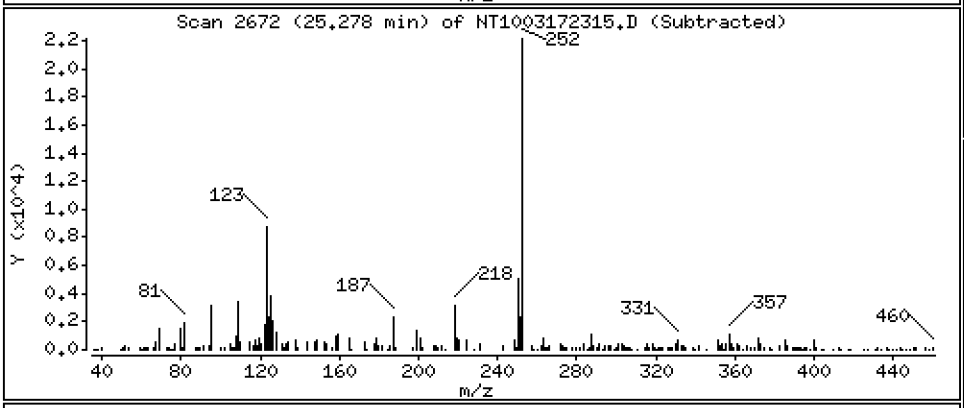
Column phase: ZB-5msi

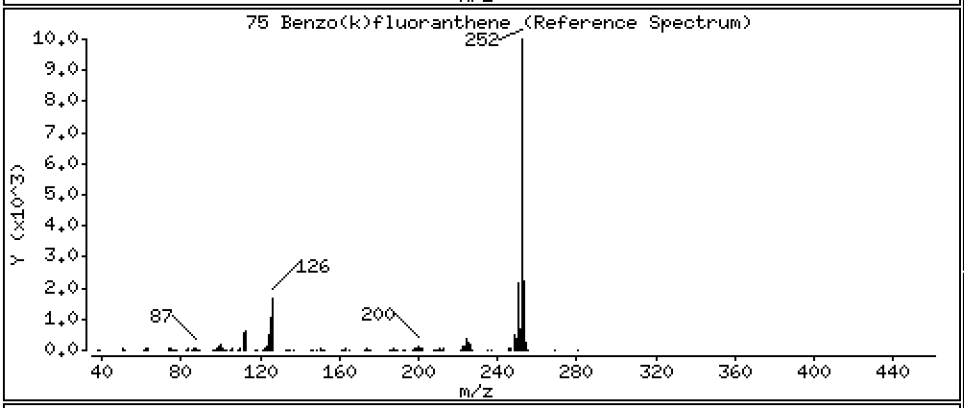
Column diameter: 0.25

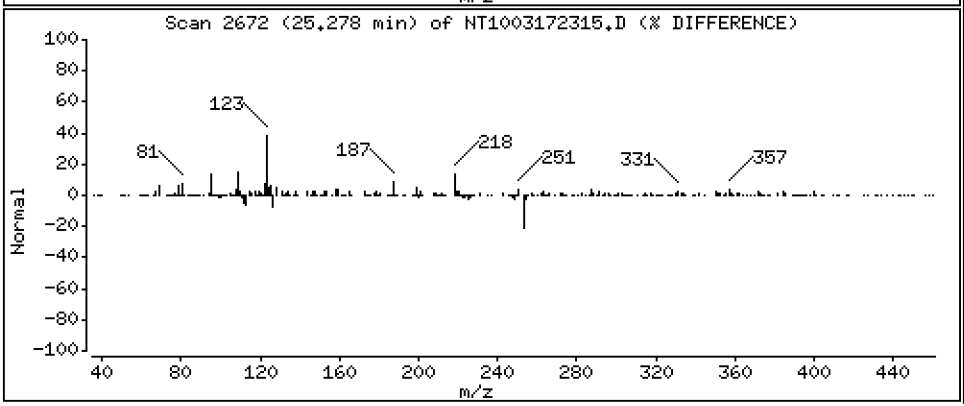
75 Benzo(k)fluoranthene

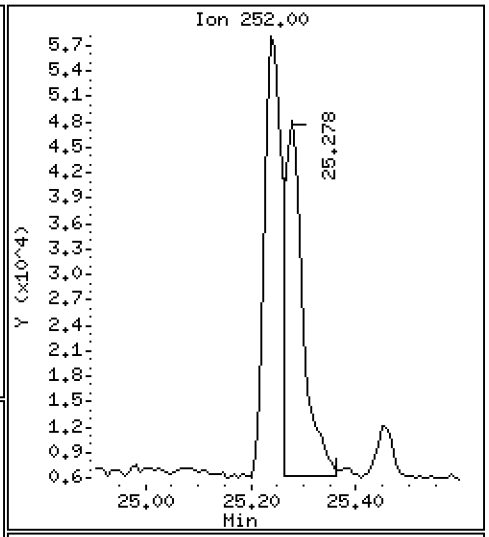
Concentration: 0.6039 ug/mL

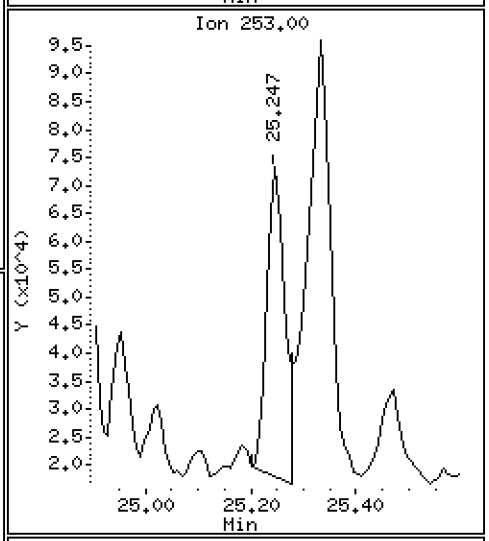


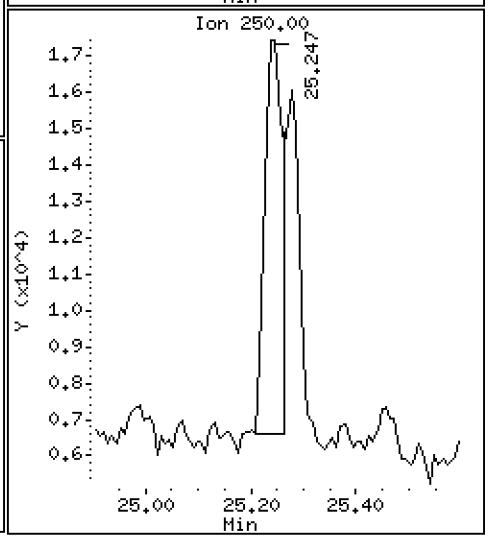












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

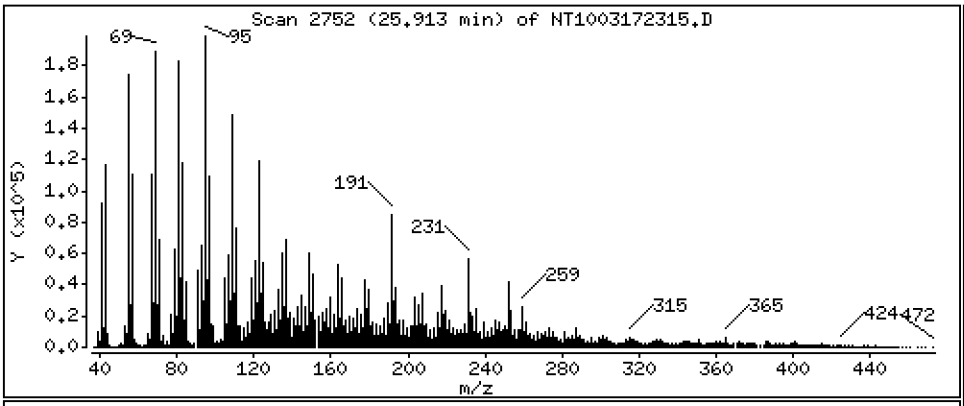
Operator: VTS

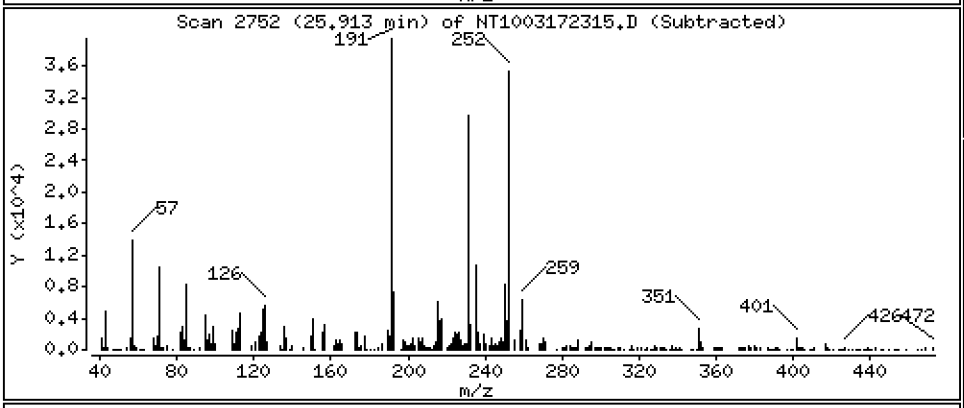
Column phase: ZB-5msi

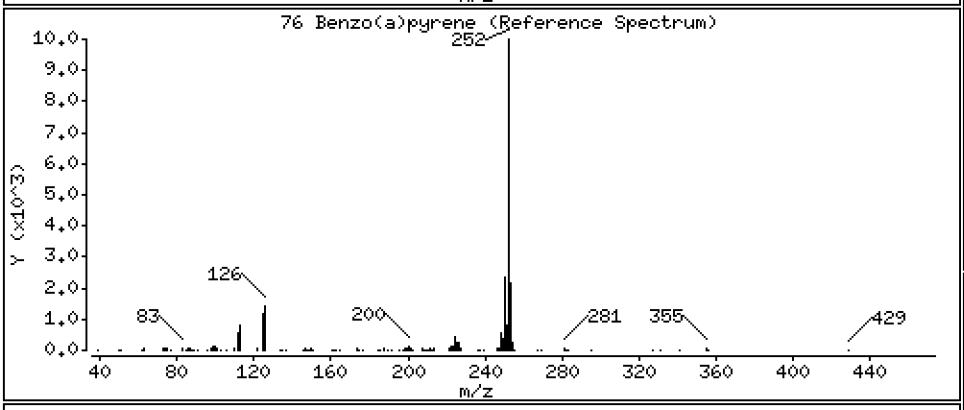
Column diameter: 0.25

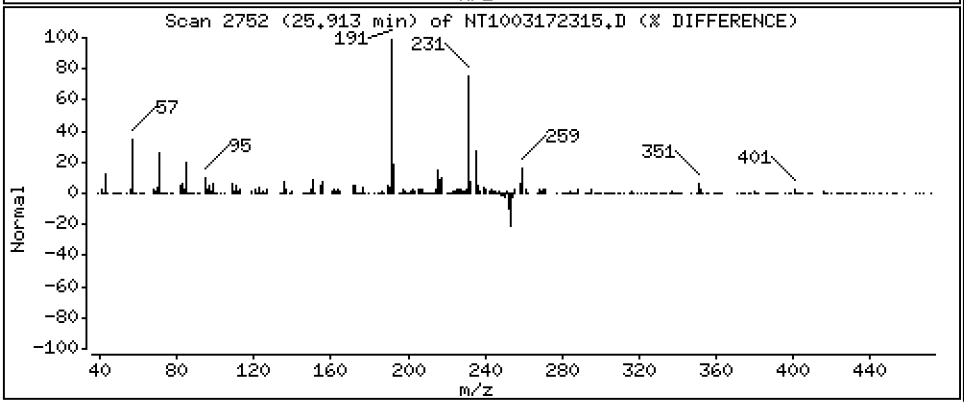
76 Benzo(a)pyrene

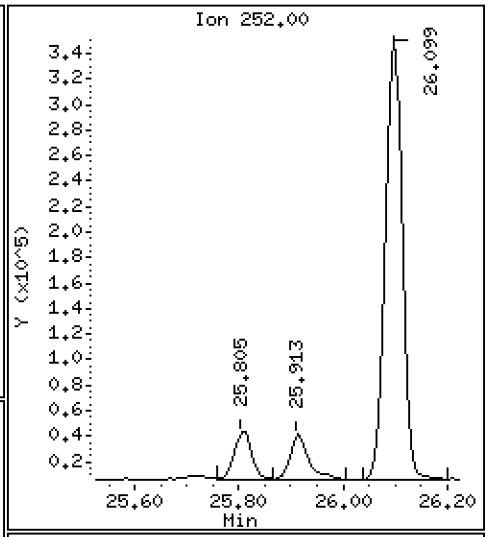
Concentration: 0.5782 ug/mL

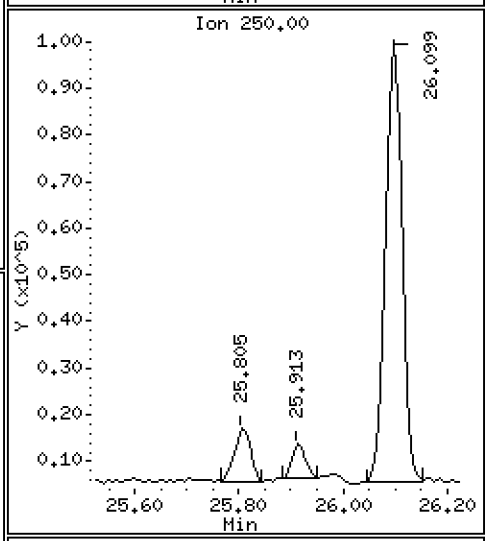


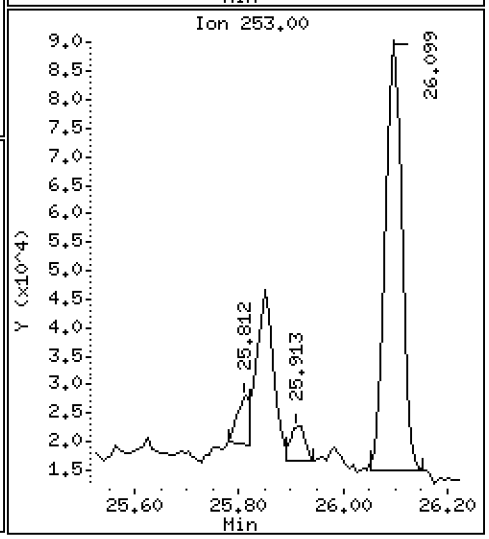












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

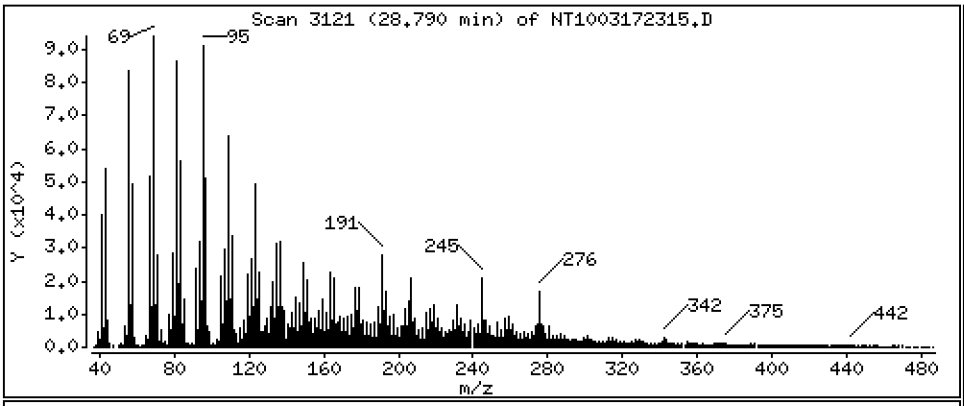
Operator: VTS

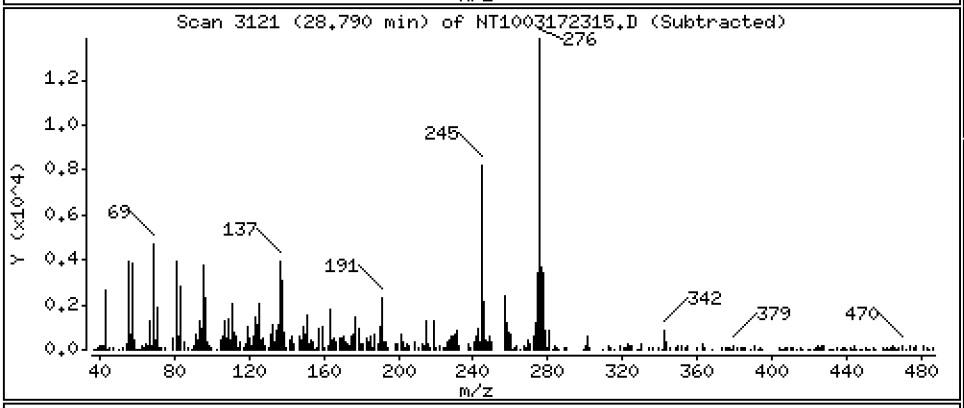
Column phase: ZB-5msi

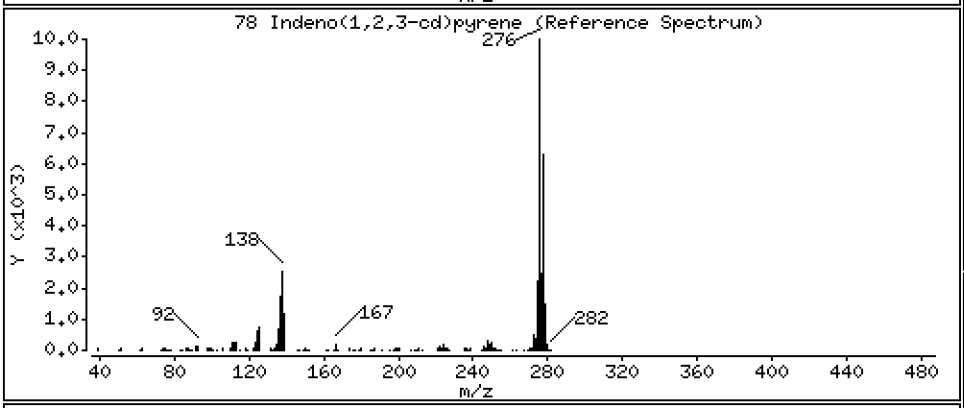
Column diameter: 0.25

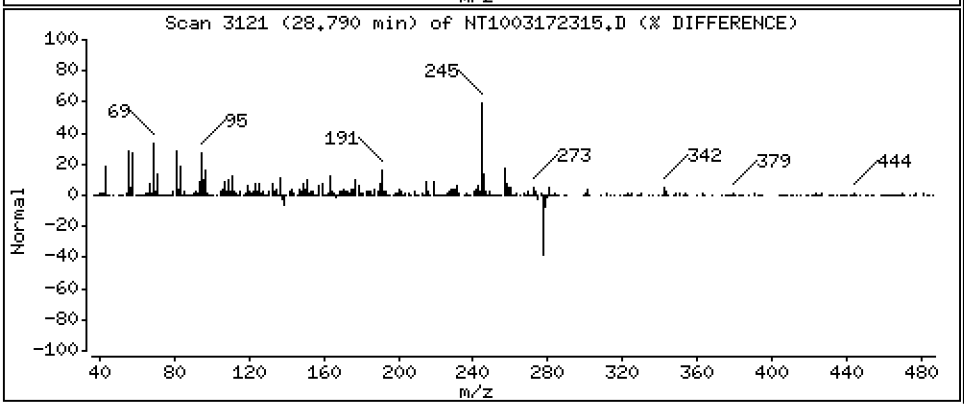
78 Indeno(1,2,3-cd)pyrene

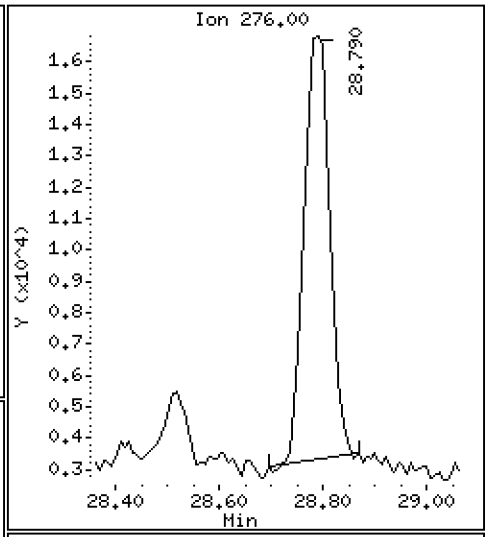
Concentration: 0.2301 ug/mL

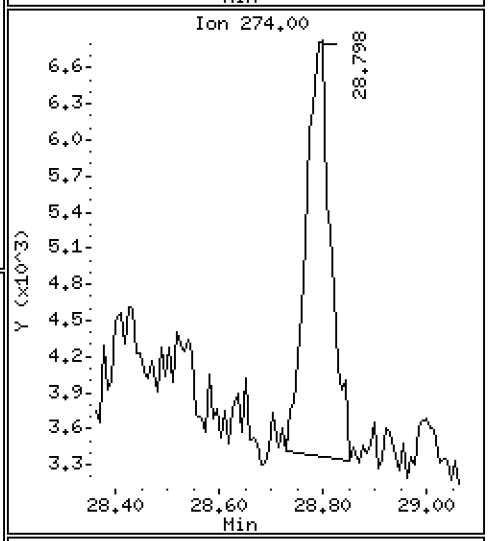


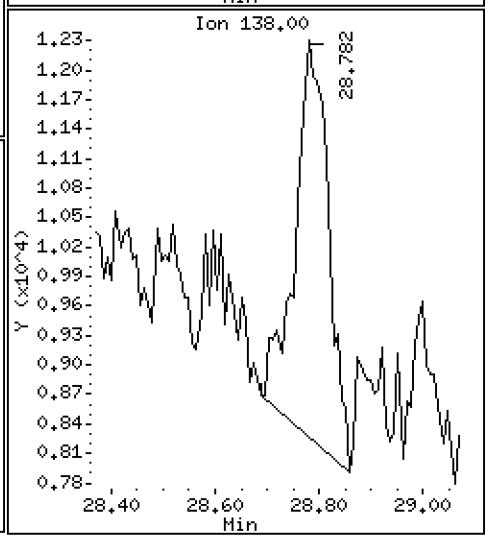












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

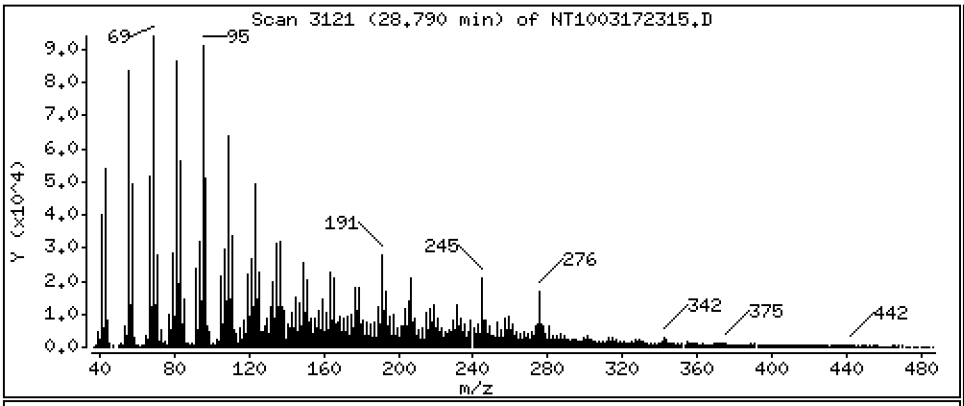
Operator: VTS

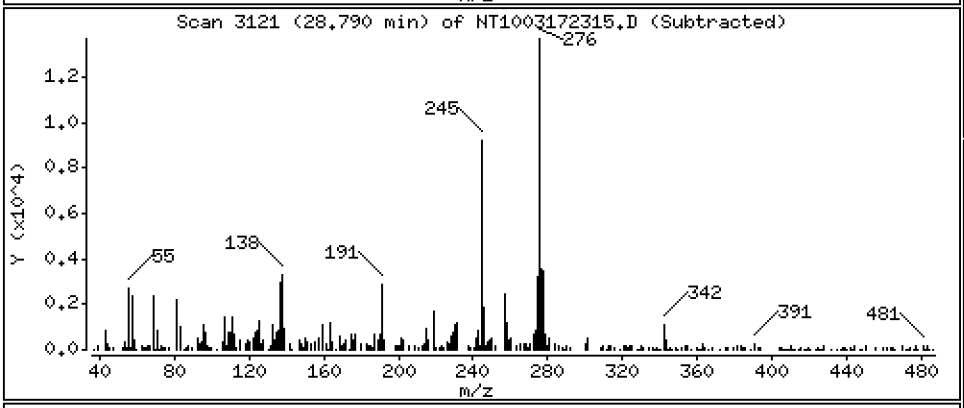
Column phase: ZB-5msi

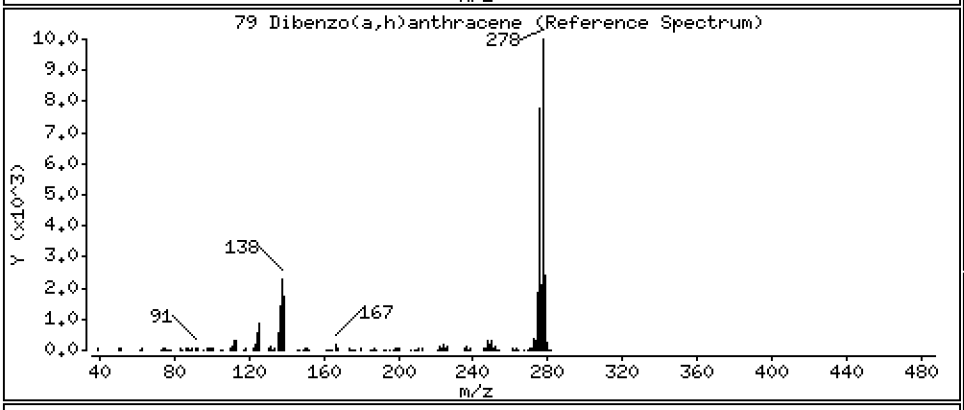
Column diameter: 0.25

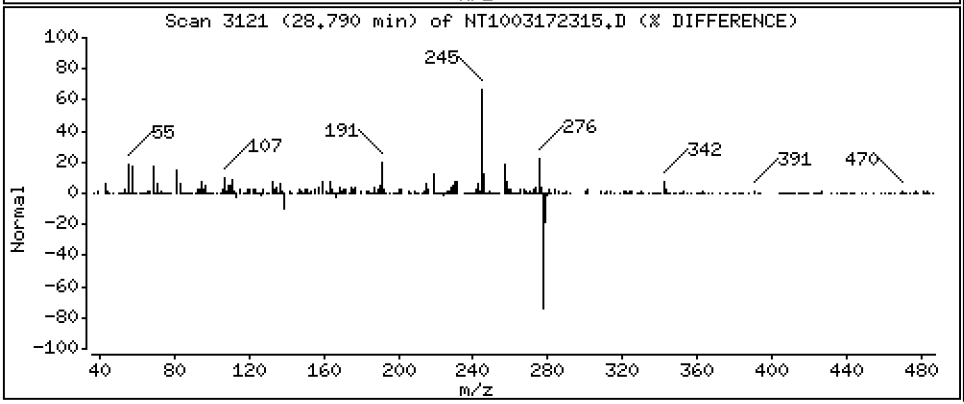
79 Dibenzo(a,h)anthracene

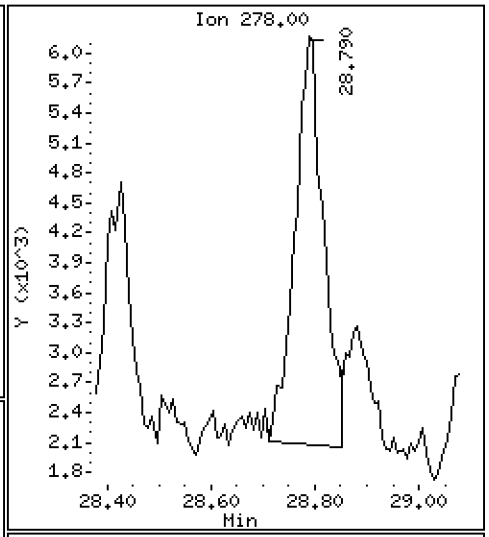
Concentration: 0.09509 ug/mL

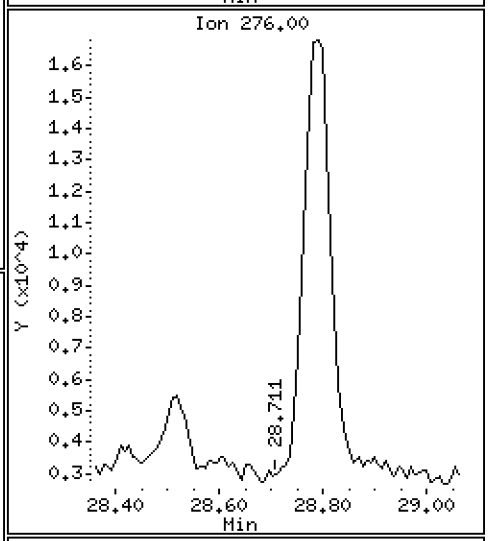


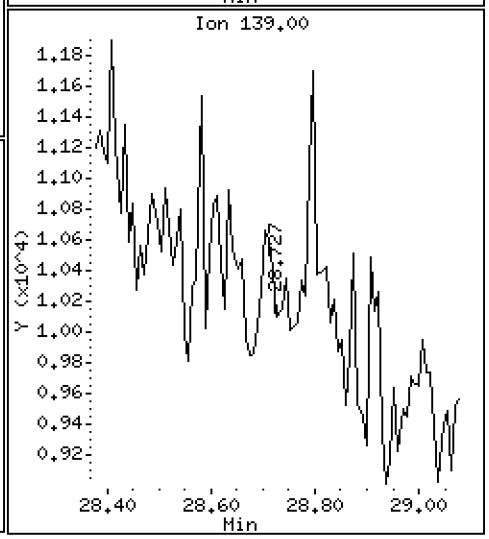












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

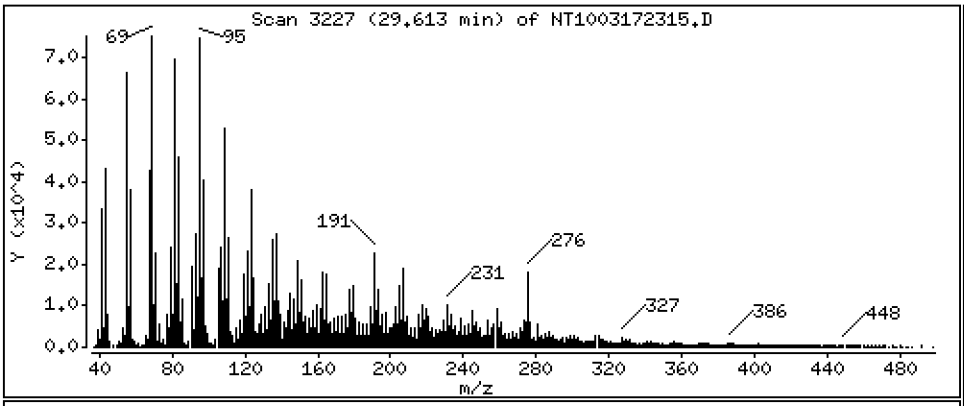
Operator: VTS

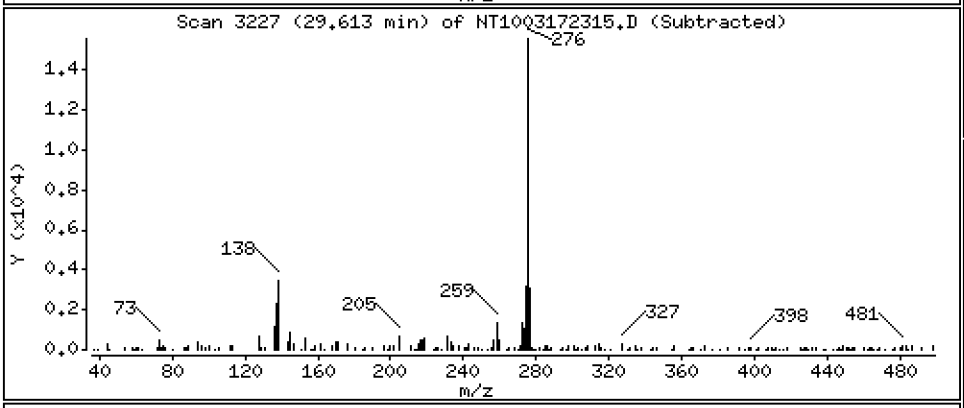
Column phase: ZB-5msi

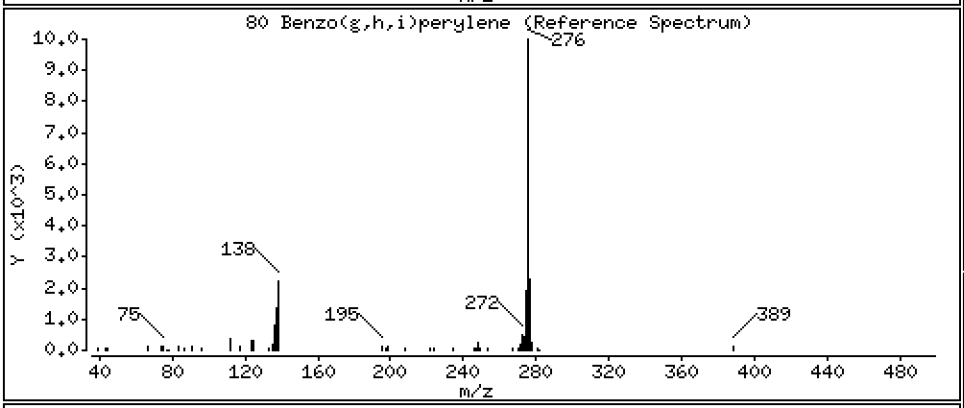
Column diameter: 0.25

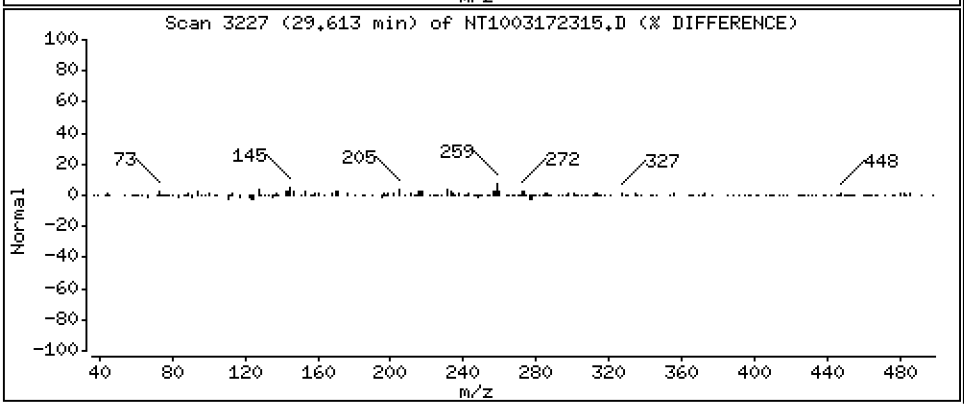
80 Benzo(g,h,i)perylene

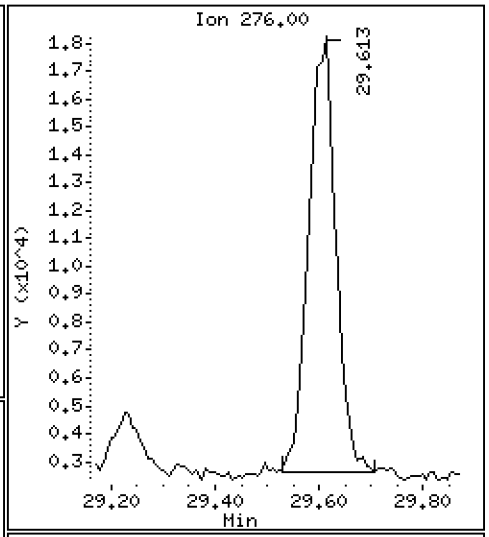
Concentration: 0.3268 ug/mL

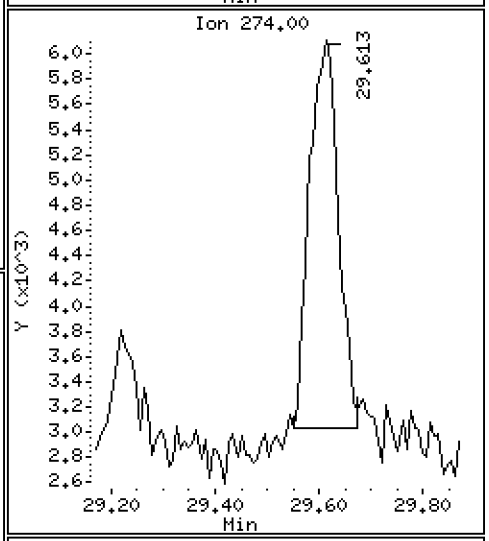


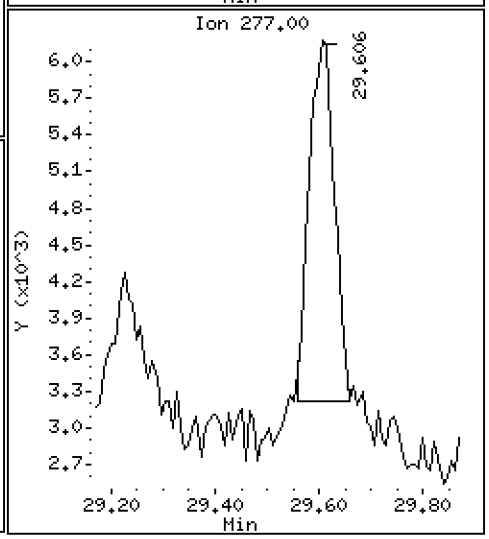












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

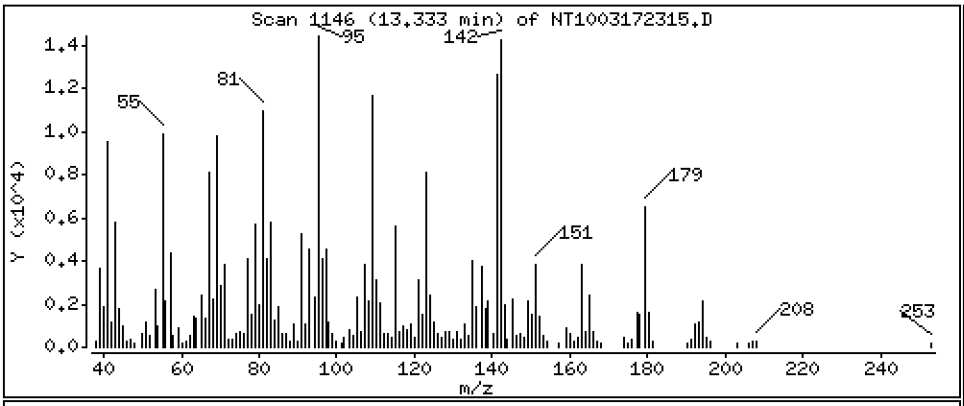
Operator: VTS

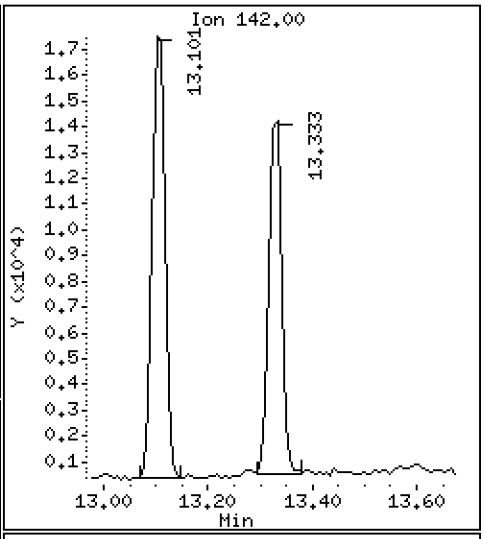
Column phase: ZB-5msi

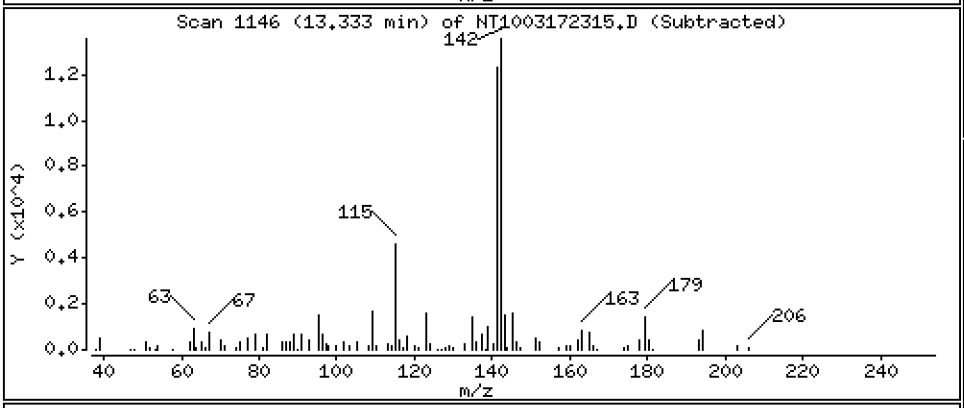
Column diameter: 0.25

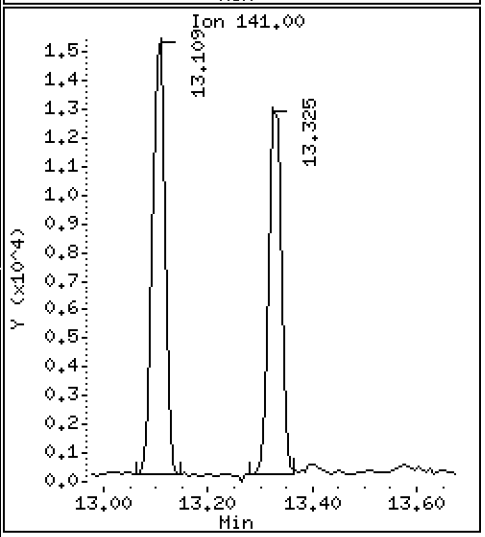
105 1-methylnaphthalene

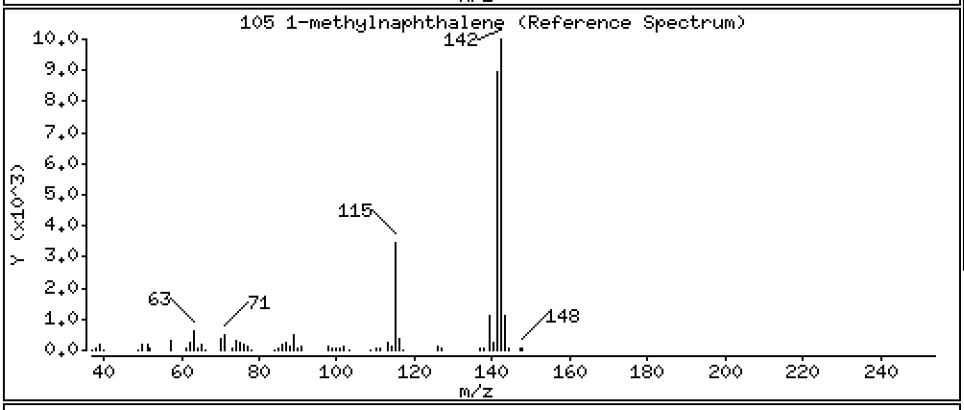
Concentration: 0.2066 ug/mL

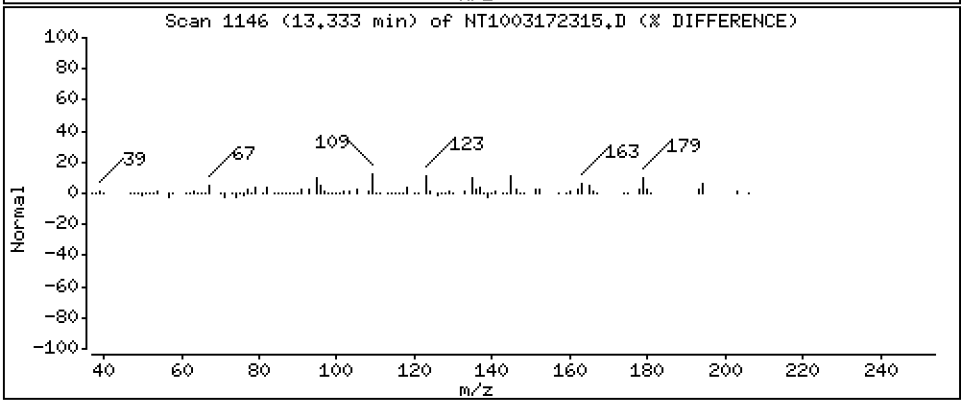












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

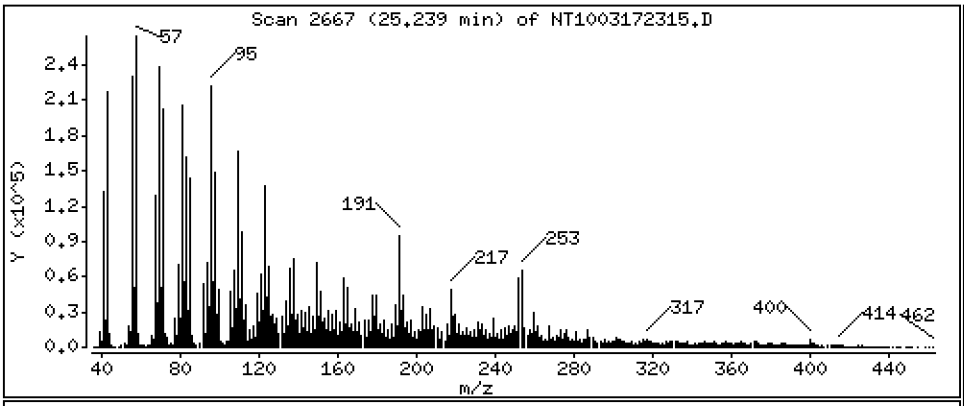
Operator: VTS

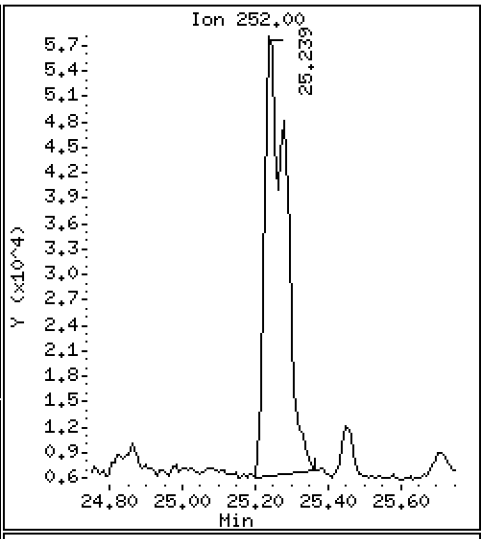
Column phase: ZB-5msi

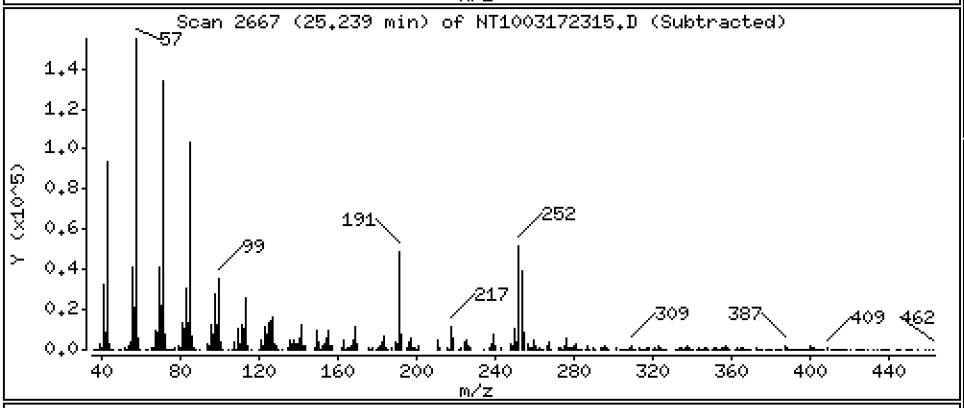
Column diameter: 0.25

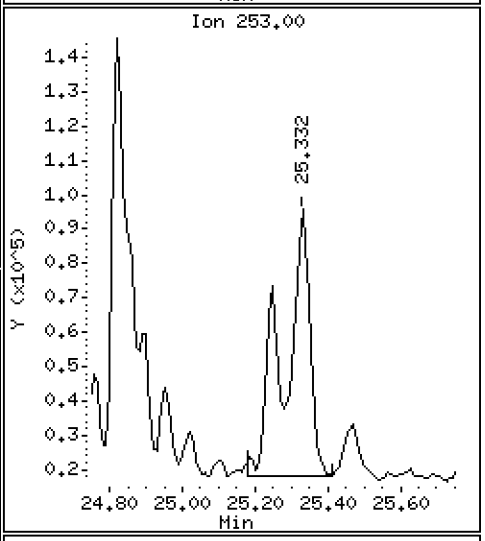
187 Total Benzofluoranthenes

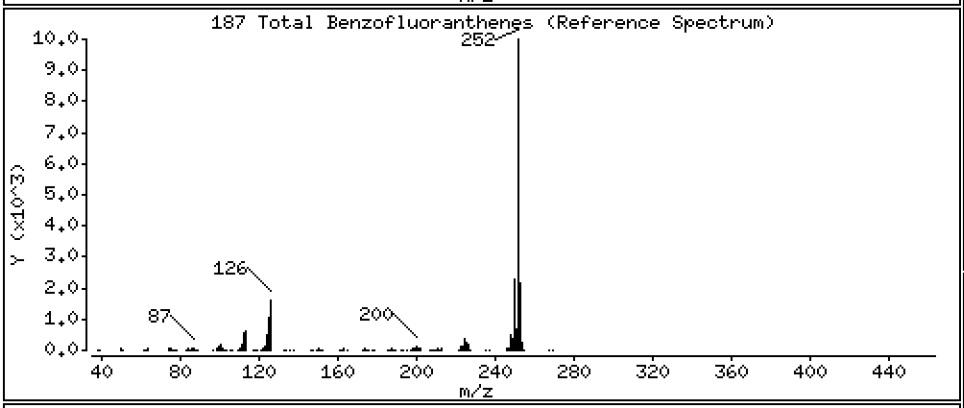
Concentration: 1.225 ug/mL

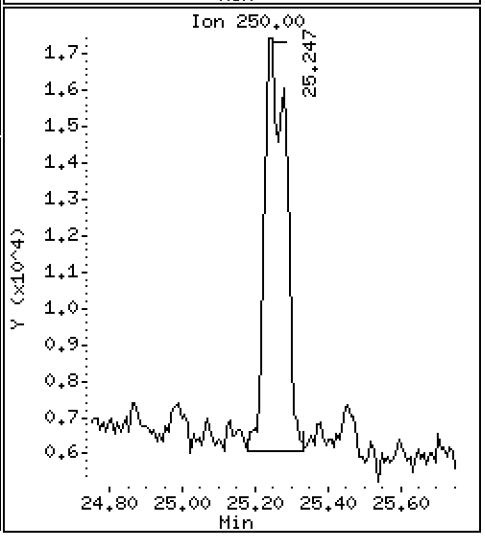


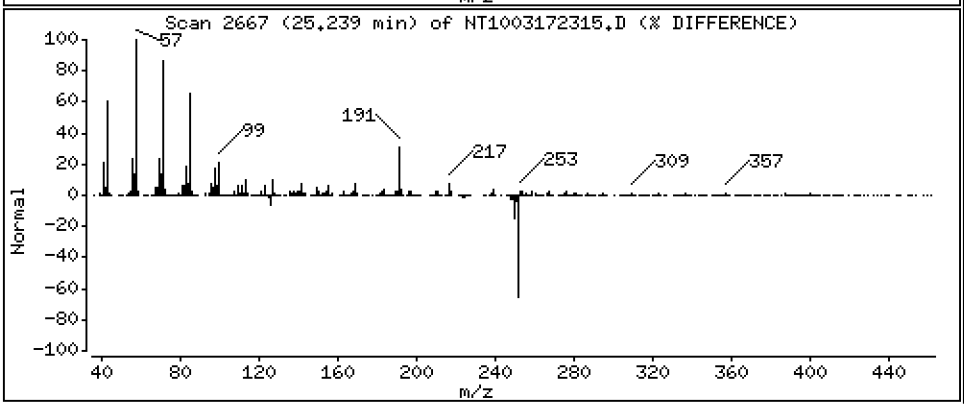












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230317.b\NT1003172315.D
Lab Smp Id: 23A0420-09
Inj Date : 18-MAR-2023 03:19
Operator : VTS Inst ID: nt10.i
Smp Info : 23A0420-09
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230317.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

								CONCENTRATIONS	
		QUANT SIG						ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/mL)
$	1 2-Fluorophenol	112	6.983	6.975	(0.759)	130361		2.49297	2.493
$	2 Phenol-d5	99	8.551	8.543	(0.929)	222132		3.23814	3.238
	3 Phenol	94	8.567	8.566	(0.931)	59674		0.83712	0.8371
$	5 2-Chlorophenol-d4	132	8.837	8.837	(0.960)	279603		4.77314	4.773
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.						
	6 2-Chlorophenol	128	Compound Not Detected.						
	7 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	8 1,4-Dichlorobenzene-d4	152	9.201	9.200	(1.000)	172915		4.00000	
	9 1,4-Dichlorobenzene	146	9.232	9.231	(1.003)	3924		0.06298	0.06298
$	10 1,2-Dichlorobenzene-d4	152	9.558	9.557	(1.039)	132457		3.14862	3.149
	12 1,2-Dichlorobenzene	146	Compound Not Detected.						
	11 Benzyl alcohol	108	9.465	9.464	(1.029)	8753		0.26160	0.2616
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.						
	13 2-Methylphenol	108	9.682	9.682	(1.052)	1398		0.02690	0.02690(M)
	17 Hexachloroethane	117	Compound Not Detected.						
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.						
	15 4-Methylphenol	108	9.946	9.946	(1.081)	31977		0.58403	0.5840
$	18 Nitrobenzene-d5	82	10.287	10.287	(0.881)	214915		3.46879	3.469
	19 Nitrobenzene	77	Compound Not Detected.						
	20 Isophorone	82	Compound Not Detected.						
	21 2-Nitrophenol	139	Compound Not Detected.						
	22 2,4-Dimethylphenol	107	Compound Not Detected.						
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	24 Benzoic acid	105	11.092	11.175	(0.950)	16379		0.52770	0.5277(M)
	25 2,4-Dichlorophenol	162	11.397	11.396	(0.976)	2978		0.06663	0.06663
	26 1,2,4-Trichlorobenzene	180	11.585	11.583	(0.992)	1911		0.03643	0.03643
*	27 Naphthalene-d8	136	11.677	11.676	(1.000)	613822		4.00000	
	28 Naphthalene	128	11.716	11.715	(1.003)	68554		0.42158	0.4216
	29 4-Chloroaniline	127	Compound Not Detected.						
	30 Hexachlorobutadiene	225	Compound Not Detected.						
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	32 2-Methylnaphthalene	142	13.101	13.099	(1.122)	28197		0.24028	0.2403
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.						

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
Compounds								
34	2,4,6-Trichlorophenol	196	13.720	13.718	(0.898)	1630	0.04958	0.04958
35	2,4,5-Trichlorophenol	196	13.797	13.788	(0.903)	1673	0.04580	0.04580
$ 36	2-Fluorobiphenyl	172	13.882	13.881	(0.908)	541435	4.11466	4.115
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	Compound Not Detected.					
39	Dimethylphthalate	163	Compound Not Detected.					
40	Acenaphthylene	152	14.966	14.965	(0.979)	25990	0.15654	0.1565
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	15.283	15.282	(1.000)	332649	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	15.345	15.344	(1.004)	11418	0.11132	0.1113
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.669	15.676	(1.025)	22099	0.14611	0.1461
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	16.234	16.240	(1.062)	35648	0.33622	0.3362
49	Fluorene	166	16.381	16.387	(1.072)	15664	0.13164	0.1316
51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	16.620	16.626	(0.907)	17930	0.21345	0.2135
$ 55	2,4,6-Tribromophenol	330	16.920	16.919	(1.107)	107620	6.93915	6.939
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	18.319	18.310	(1.000)	628288	4.00000	
60	Phenanthrene	178	18.366	18.357	(1.003)	109036	0.63644	0.6364
61	Anthracene	178	18.459	18.457	(1.008)	32274	0.19638	0.1964
62	Carbazole	167	Compound Not Detected.					
63	Di-n-butylphthalate	149	Compound Not Detected.					
64	Fluoranthene	202	20.764	20.732	(0.889)	116958	0.58611	0.5861
65	Pyrene	202	21.190	21.158	(0.907)	329856	1.61140	1.611
$ 66	Terphenyl-d14	244	21.453	21.436	(0.918)	659091	4.28742	4.287
67	Butylbenzylphthalate	149	Compound Not Detected.					
68	Benzo(a)anthracene	228	23.334	23.310	(0.999)	49662	0.28331	0.2833(M)
* 69	Chrysene-d12	240	23.365	23.341	(1.000)	496616	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	23.404	23.380	(1.002)	73641	0.43001	0.4300
72	bis(2-Ethylhexyl)phthalate	149	23.381	23.380	(0.959)	52748	0.46338	0.4634
* 134	Di-n-octylphthalate-d4	153	24.380	24.363	(1.000)	778184	4.00000	
73	Di-n-octylphthalate	149	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	25.239	25.207	(0.969)	118282	0.67491	0.6749
75	Benzo(k)fluoranthene	252	25.278	25.253	(0.971)	107471	0.60391	0.6039(M)
76	Benzo(a)pyrene	252	25.913	25.873	(0.995)	90605	0.57825	0.5782
* 77	Perylene-d12	264	26.036	25.997	(1.000)	540661	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	28.790	28.711	(1.106)	45864	0.23007	0.2301(M)
79	Dibenzo(a,h)anthracene	278	28.790	28.726	(1.106)	15738	0.09509	0.09509(M)
80	Benzo(g,h,i)perylene	276	29.613	29.519	(1.137)	56375	0.32678	0.3268
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	13.333	13.324	(1.142)	22214	0.20661	0.2066
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.239	25.253	(0.969)	207311	1.22514	1.225(M)
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172315.D
Lab Smp Id: 23A0420-09
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230317.b\ABN.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:02
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	132765	66383	265530	172915	30.24
27 Naphthalene-d8	497947	248974	995894	613822	23.27
42 Acenaphthene-d10	271928	135964	543856	332649	22.33
59 Phenanthrene-d10	497390	248695	994780	628288	26.32
69 Chrysene-d12	391403	195702	782806	496616	26.88
134 Di-n-octylphthala	674651	337326	1349302	778184	15.35
77 Perylene-d12	408663	204332	817326	540661	32.30

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.20	8.70	9.70	9.20	0.00
27 Naphthalene-d8	11.68	11.18	12.18	11.68	0.01
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	0.01
59 Phenanthrene-d10	18.31	17.81	18.81	18.32	0.05
69 Chrysene-d12	23.34	22.84	23.84	23.37	0.10
134 Di-n-octylphthala	24.36	23.86	24.86	24.38	0.07
77 Perylene-d12	26.00	25.50	26.50	26.04	0.15

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

REVIEW SUMMARY FOR FILE - NT1003172315.D

Lab ID: 23A0420-09
nt10.i, 20230317.b\ABN.m,   18-MAR-2023 03:19

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

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.950	0.957	-0.0073	Benzoic acid

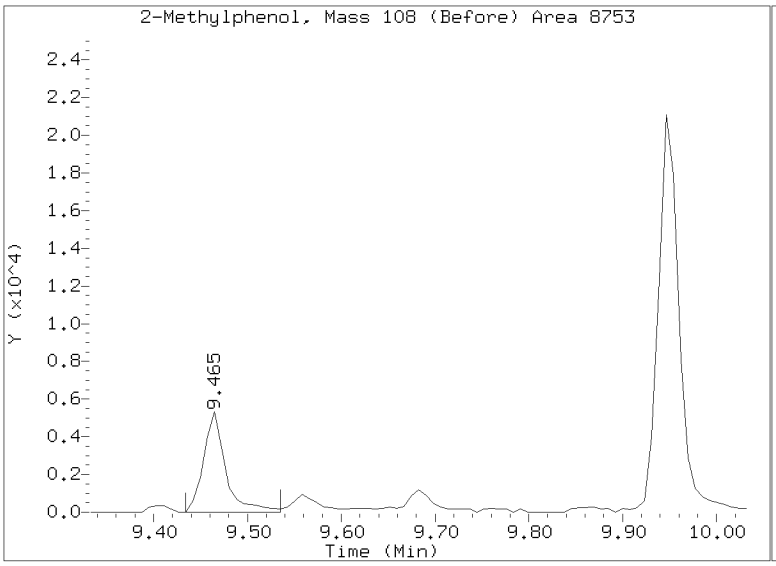
RRT check based on Ccal File: NT1003172302.D

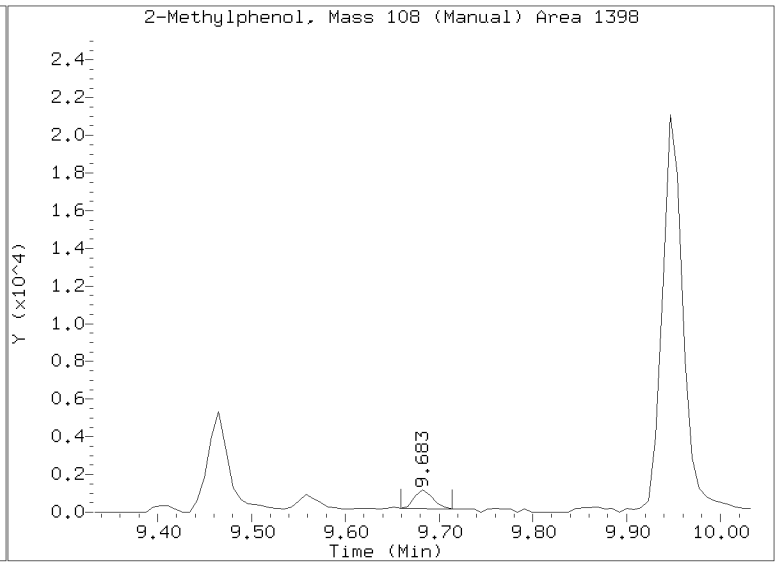
On Column LOD for nt10.i, 20230317.b\ABN.m, ICAL.sub = 0.0000

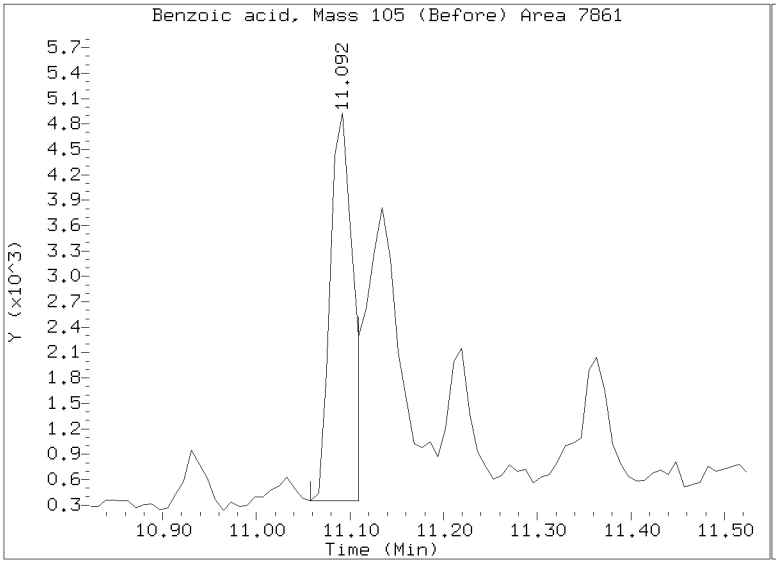
* Only compounds listed in the work order have been verified by the analyst *

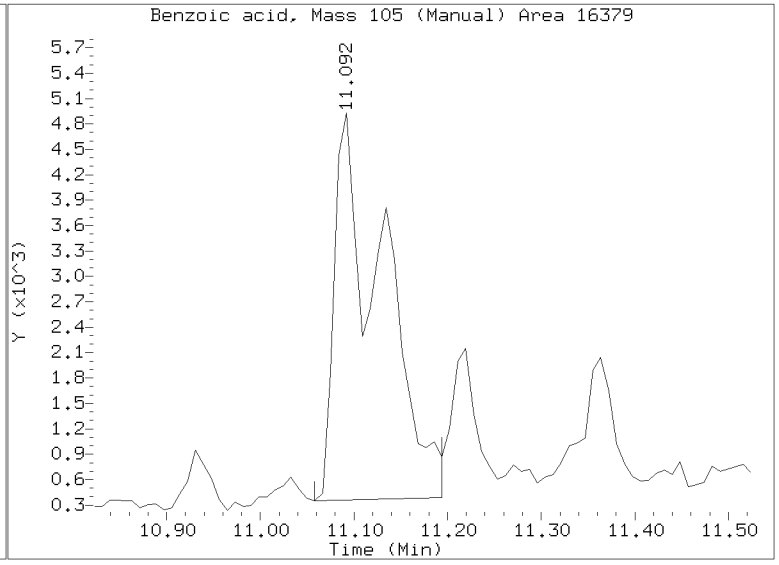
Quant Ion Manual Peak Adjustment Report

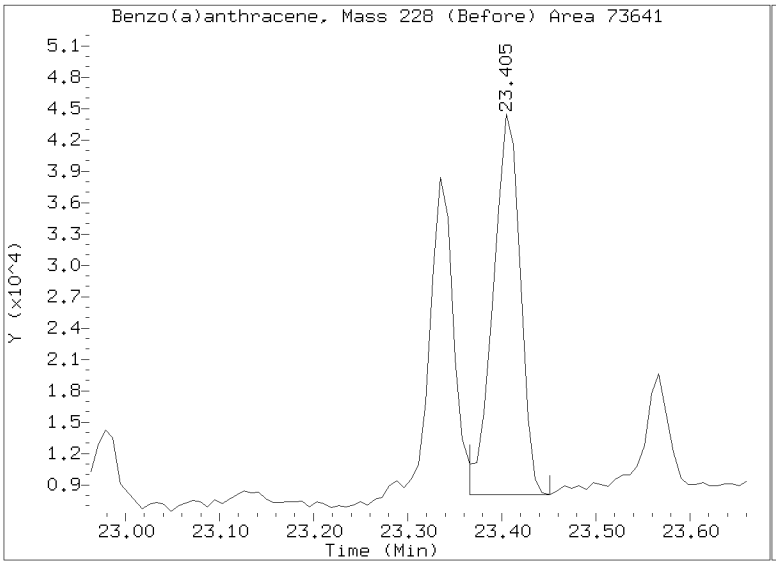
Datafile: //target/share/chem3/nt10.i/20230317.b/NT1003172315.D
Injection Date: 18-MAR-2023 03:19
Lab ID:23A0420-09 Client ID:
Report Date: 03/30/2023 07:23

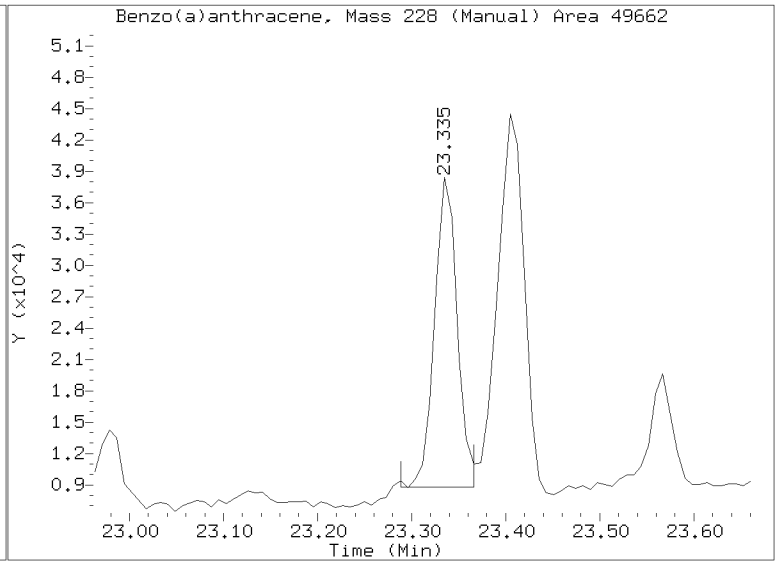






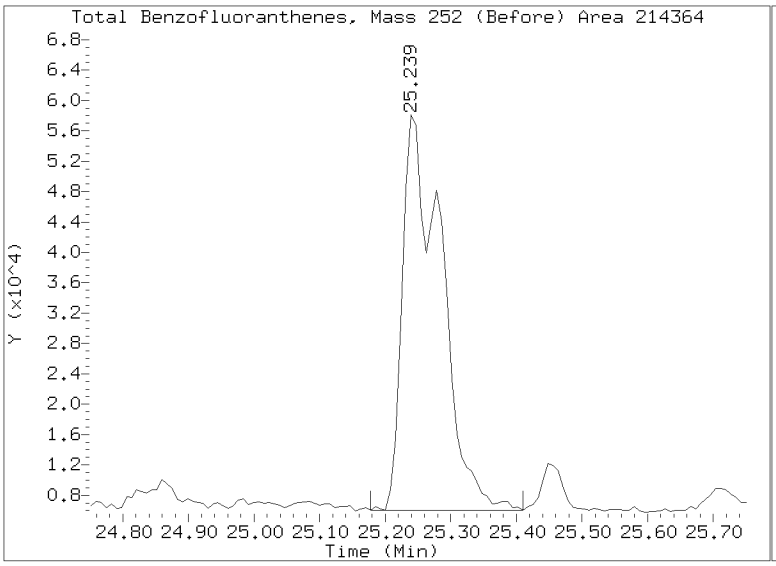


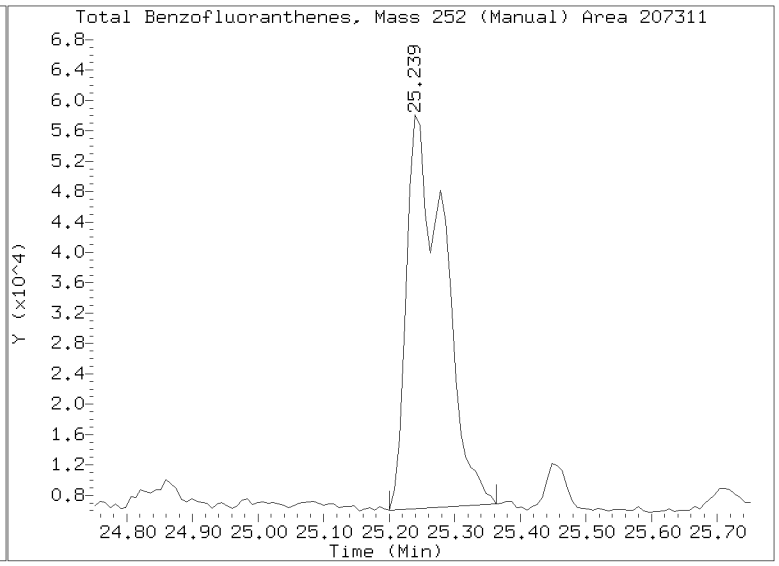


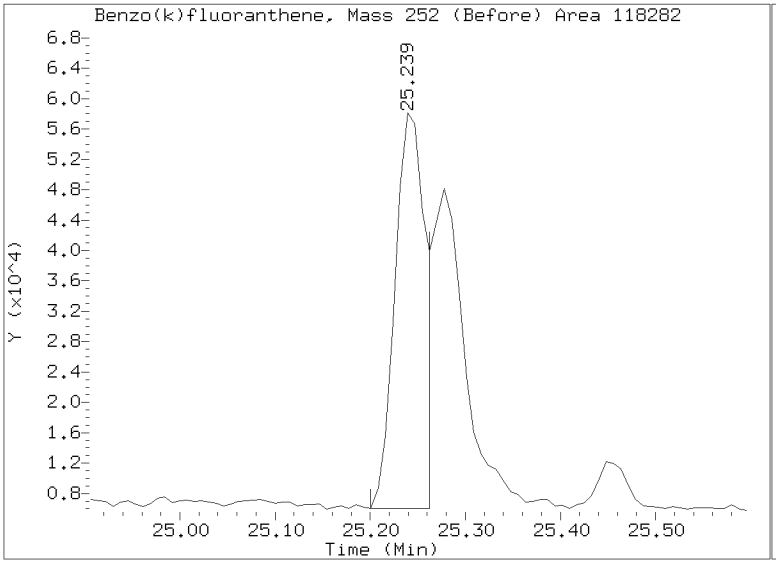


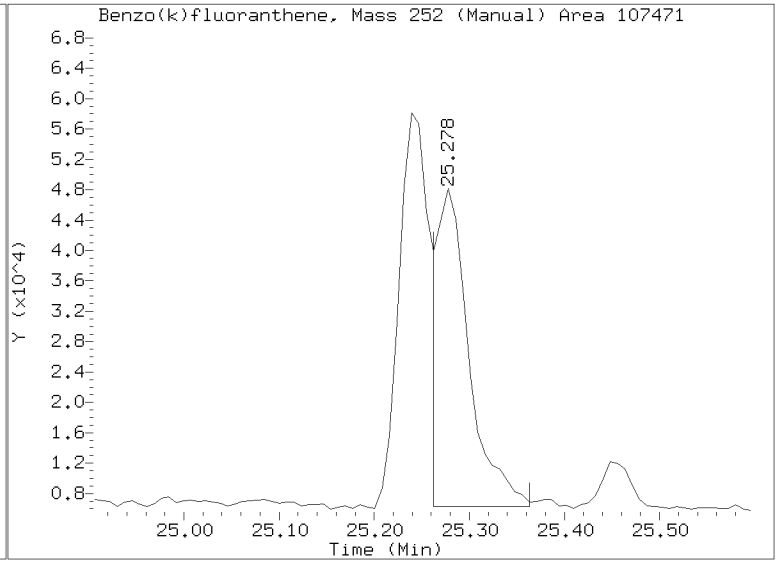
Quant Ion Manual Peak Adjustment Report

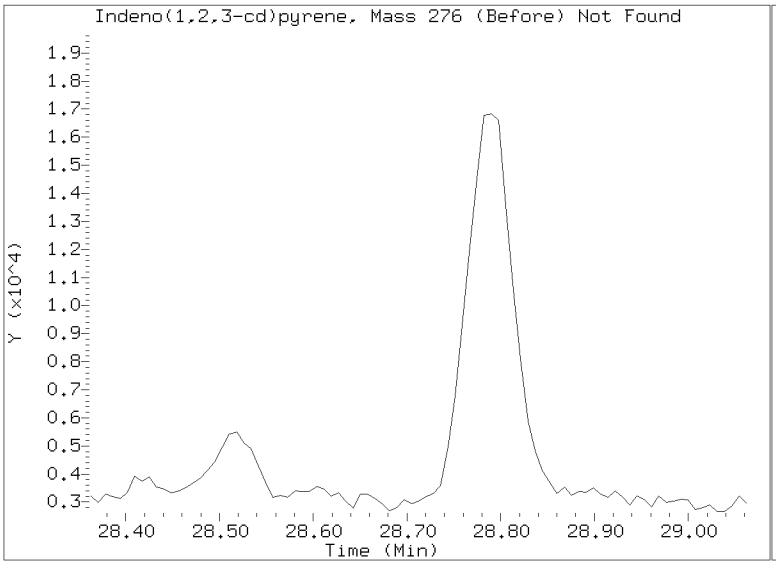
Datafile: //target/share/chem3/nt10.i/20230317.b/NT1003172315.D
Injection Date: 18-MAR-2023 03:19
Lab ID:23A0420-09 Client ID:
Report Date: 03/30/2023 07:23

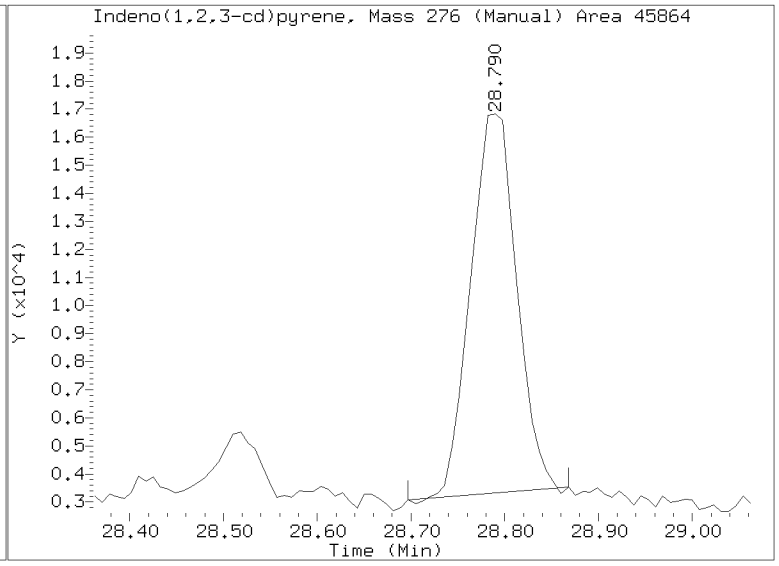






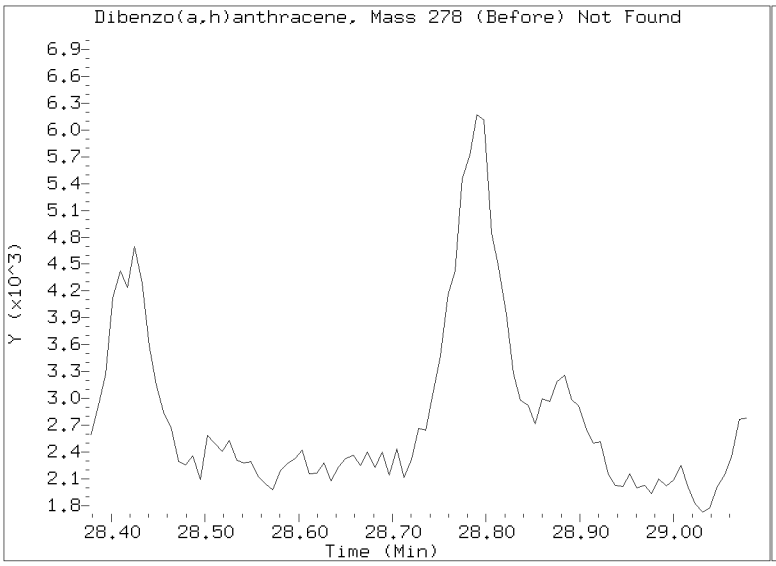


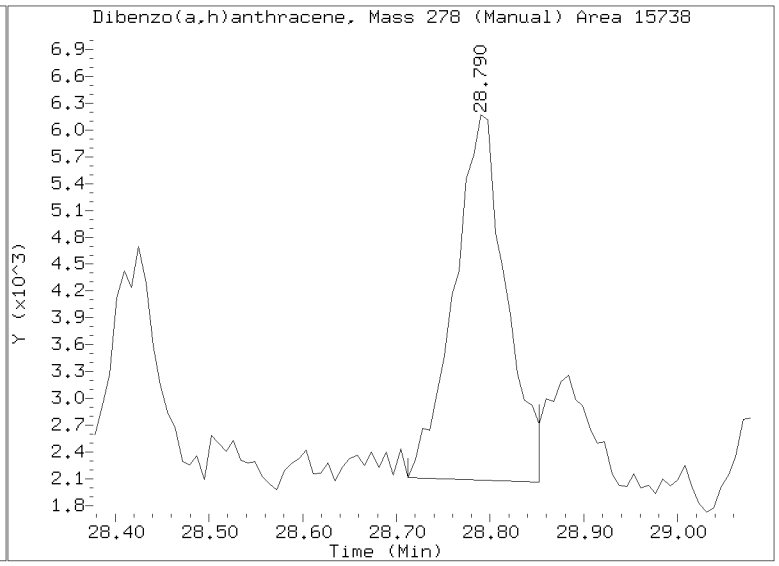




Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230317.b/NT1003172315.D
Injection Date: 18-MAR-2023 03:19
Lab ID:23A0420-09 Client ID:
Report Date: 03/30/2023 07:23





PREPARATION BATCH SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC SDG: 23A0420

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

Batch: BLB0495 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1045	23A0420-01	NT1003172310.D	02/20/23 16:23	
LDW23-SC1003	23A0420-07	NT1003172311.D	02/20/23 16:23	
LDW23-SC1004	23A0420-08	NT1003172312.D	02/20/23 16:23	
LDW23-SC1082	23A0420-09	NT1003172315.D	02/20/23 16:23	
Blank	BLB0495-BLK1	NT1003172306.D	02/20/23 16:23	
LCS	BLB0495-BS1	NT1003172307.D	02/20/23 16:23	
LCS Dup	BLB0495-BSD1	NT1003172308.D	02/20/23 16:23	
LDW23-SC1004	BLB0495-MS1	NT1003172313.D	02/20/23 16:23	
LDW23-SC1004	BLB0495-MSD1	NT1003172314.D	02/20/23 16:23	
Reference	BLB0495-SRM1	NT1003172309.D	02/20/23 16:23	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0495

Prepared using: EPA 3546 (Microwave)

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

Matrix: Solid Date Prepared: 02/20/23 Balance ID: B14646614 Set Up By: CTO 2/20/23

WO Comments

23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

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

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

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0420-01 A	54.7	(18.28) 18.29	(1:1)	1mL	1	0.5	
23A0420-07 A	51.3	(19.50) 19.51	(1:1)	1mL	1	0.5	
23A0420-08 A	59.9	(16.70) 16.73	(1:1)	1mL	1	0.5	
23A0420-09 A	58.9	(16.99) 16.99	(1:1)	1mL	1	0.5	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLB0495-BLK1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLB0495-BS1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLB0495-BSD1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLB0495-MS1	59.9	(16.70) 16.70	(1:1)	1mL	1	0.5	Use 23A0420-08
BLB0495-MSD1	59.9	(16.70) 16.70	(1:1)	1mL	1	0.5	Use 23A0420-08
BLB0495-SRM1	100.0	~~(10.00)~~ (1.00) 1.00 +1g DI WATER	(1:1)	1mL	1	0.5	Use K003477

Client ID Verified By 02/20/23 Date

Preparation Reviewed By NM3 2/24/23 Date

Extraction Date and Time 02/20/23 16:23

Printed: 2/20/2023 9:16:59AM

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0495

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps

Microwave
(1) 2 3
02/21/23
GT Analyst/Date

Pre-GPC KD
100°C
Exchange to Hexane
(add 10 mL to KD)
(0) 2 4 5 6
AV 02/21
Analyst/Date

TurboVap
Pre GPC
1 2 3 (4) 5
TWC 2/22/23
Analyst/Date

Post GPC KD
80-85°C
(1) 0 2 4 5 6
LO 2-24
Analyst/Date

TurboVap
1 2 3 (4) 5
AW3 2/24/23
Analyst/Date

Water Wash
AW3 2/24/23
Analyst/Date

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: GT Date: 02/21/23	
Anhydrous Sodium Sulfate	LΦΦ1285
1:1 Methylene Chloride/Acetone	LΦΦ1416
Methylene Chloride	KΦΦ5941
Pre-Deactivated Glass Wool	LΦΦΦ252
Pre GPC KD Analyst: AV Date: 02/21/2023	
~~Pre-Deactivated Glass Wool~~	
~~Anhydrous Sodium Sulfate~~ SH 2/22/23	
Methylene Chloride	KΦΦ5158
Hexane	LΦΦ4889
GPC Filter Prep Analyst: TWC Date: 2/22/23	
Methylene Chloride	KΦΦ5158
GPC Filter	
GPC Analyst: SH Date: 2/22/23	
Methylene Chloride	KΦΦ5198
GPC Calibration File	CLAΦΦ86-GPC1
Post GPC KD Analyst: LO Date: 2-24-23	
Methylene Chloride	KΦΦ5158
Vialing Analyst: AW3 Date: 2/24/23	
Methylene Chloride	KΦΦ5158

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 100/150µg/mL	A L001153 Exp Date: 8/1/2023	50µL	GT	
Full List Spike (Freezer) 100µg/mL	7 K011369 (V) Exp KΦ11297 Date: 8/3/2023	50µL	GT	
Base Spike 200µg/mL	56 K011369 (V) Exp KΦΦ3759 Date: 4/19/2023	50µL	GT	
Acid Spike 100/200µg/mL	38 K011369 (V) Exp KΦΦ3764 Date: 4/19/2023	50µL	GT	

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: PSDOA / SVOC Extraction Batch BLB0495

Total Solids Batch: BLB0154 Work Order(s): 23A0420

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☒ Standing Water Decanted (Not shared)= 01-09.	MJ 02/14/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☒ Oily, obvious fuel/sulfur odors= 01-09.	MJ 02/14/23
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	MJ 02/14/23
☒ Multiple Jars Y / (N)	MJ 02/14/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0495

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

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

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : BLK1

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/22/2023 9:04 PM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : BS1

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/22/2023 10:02 PM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : BSD1

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/22/2023 11:01 PM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : SRM1

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/22/2023 11:59 PM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : 23A0420-01

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/23/2023 12:58 AM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : 23A0420-07

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/23/2023 1:56 AM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : 23A0420-08

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/23/2023 2:55 AM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : MS1

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/23/2023 3:54 AM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : 23A0420-09

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/23/2023 5:51 AM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0226	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8270E

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1003	23A0420-07	NT1003172311.D	02/24/2023	
LDW23-SC1004	23A0420-08	NT1003172312.D	02/24/2023	
Matrix Spike Dup	BLB0495-MSD1	NT1003172314.D	02/24/2023	
Matrix Spike	BLB0495-MS1	NT1003172313.D	02/24/2023	
Reference	BLB0495-SRM1	NT1003172309.D	02/24/2023	
LDW23-SC1045	23A0420-01	NT1003172310.D	02/24/2023	
LCS	BLB0495-BS1	NT1003172307.D	02/24/2023	
Blank	BLB0495-BLK1	NT1003172306.D	02/24/2023	
LDW23-SC1082	23A0420-09	NT1003172315.D	02/24/2023	
LCS Dup	BLB0495-BSD1	NT1003172308.D	02/24/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0226

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLB0150-GPC1** **Printed: 2/24/2023 2:43:53PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0420-01	A	LDW23-SC1045	A 04	1	1	8270E-SIM Dual Scan SVOC	2/24/2023	NRB	
23A0420-01	A	LDW23-SC1045	A 03	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/24/2023	NRB	
23A0420-07	A	LDW23-SC1003	A 04	1	1	8270E-SIM Dual Scan SVOC	2/24/2023	NRB	
23A0420-07	A	LDW23-SC1003	A 03	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/24/2023	NRB	
23A0420-08	A	LDW23-SC1004	A 03	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/24/2023	NRB	
23A0420-08	A	LDW23-SC1004	A 04	1	1	8270E-SIM Dual Scan SVOC	2/24/2023	NRB	
23A0420-09	A	LDW23-SC1082	A 03	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/24/2023	NRB	
23A0420-09	A	LDW23-SC1082	A 04	1	1	8270E-SIM Dual Scan SVOC	2/24/2023	NRB	
BLB0495-BLK1	-	Blank	-	1	1	-	2/24/2023	NRB	
BLB0495-BLK2	-	Blank	-	1	1	-	2/24/2023	NRB	
BLB0495-BS1	-	LCS	-	1	1	-	2/24/2023	NRB	
BLB0495-BS2	-	LCS	-	1	1	-	2/24/2023	NRB	
BLB0495-BSD1	-	LCS Dup	-	1	1	-	2/24/2023	NRB	
BLB0495-BSD2	-	LCS Dup	-	1	1	-	2/24/2023	NRB	
BLB0495-MS1	-	Matrix Spike	-	1	1	-	2/24/2023	NRB	
BLB0495-MS2	-	Matrix Spike	-	1	1	-	2/24/2023	NRB	
BLB0495-MSD1	-	Matrix Spike Dup	-	1	1	-	2/24/2023	NRB	
BLB0495-MSD2	-	Matrix Spike Dup	-	1	1	-	2/24/2023	NRB	
BLB0495-SRM1	-	Reference	-	1	1	-	2/24/2023	NRB	
BLB0495-SRM2	-	Reference	-	1	1	-	2/24/2023	NRB	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8270E

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLB0495-BLK1	File ID:	NT1003172306.D
Sampled:	N/A	Prepared:	02/20/23 16:23	Analyzed:	03/17/23 21:36
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 1 mL
Batch:	BLB0495	Sequence:	SLC0473	Calibration:	GC00046
Instrument:	NT10	Column:	ZB-5MSi	Cleanups:	GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
108-95-2	Phenol	1	20.0	U	4.4	20.0
106-44-5	4-Methylphenol	1	20.0	U	7.4	20.0
91-20-3	Naphthalene	1	101		4.2	20.0
91-57-6	2-Methylnaphthalene	1	18.7	J	4.5	20.0
208-96-8	Acenaphthylene	1	20.0	U	6.2	20.0
131-11-3	Dimethylphthalate	1	20.0	U	4.4	20.0
83-32-9	Acenaphthene	1	20.0	U	5.2	20.0
132-64-9	Dibenzofuran	1	20.0	U	14.1	20.0
86-73-7	Fluorene	1	20.0	U	14.6	20.0
85-01-8	Phenanthrene	1	20.0	U	8.7	20.0
120-12-7	Anthracene	1	20.0	U	7.2	20.0
206-44-0	Fluoranthene	1	20.0	U	6.1	20.0
129-00-0	Pyrene	1	20.0	U	5.7	20.0
85-68-7	Butylbenzylphthalate	1	20.0	U	9.4	20.0
56-55-3	Benzo(a)anthracene	1	20.0	U	6.0	20.0
218-01-9	Chrysene	1	20.0	U	6.1	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	50.0	U	5.5	50.0
	Benzofluoranthenes, Total	1	40.0	U	10.0	40.0
50-32-8	Benzo(a)pyrene	1	20.0	U	4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	20.0	U	14.7	20.0
53-70-3	Dibenzo(a,h)anthracene	1	20.0	U	17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	20.0	U	13.6	20.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	289	38.6	27 - 120	
Phenol-d5	750.00	356	47.4	29 - 120	
2-Chlorophenol-d4	750.00	535	71.3	31 - 120	
1,2-Dichlorobenzene-d4	500.00	375	75.0	32 - 120	
Nitrobenzene-d5	500.00	402	80.5	30 - 120	
2-Fluorobiphenyl	500.00	406	81.2	35 - 120	
2,4,6-Tribromophenol	750.00	498	66.4	24 - 134	
p-Terphenyl-d14	500.00	464	92.8	37 - 120	

Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172306.D

Date : 17-MAR-2023 21:36

Client ID:

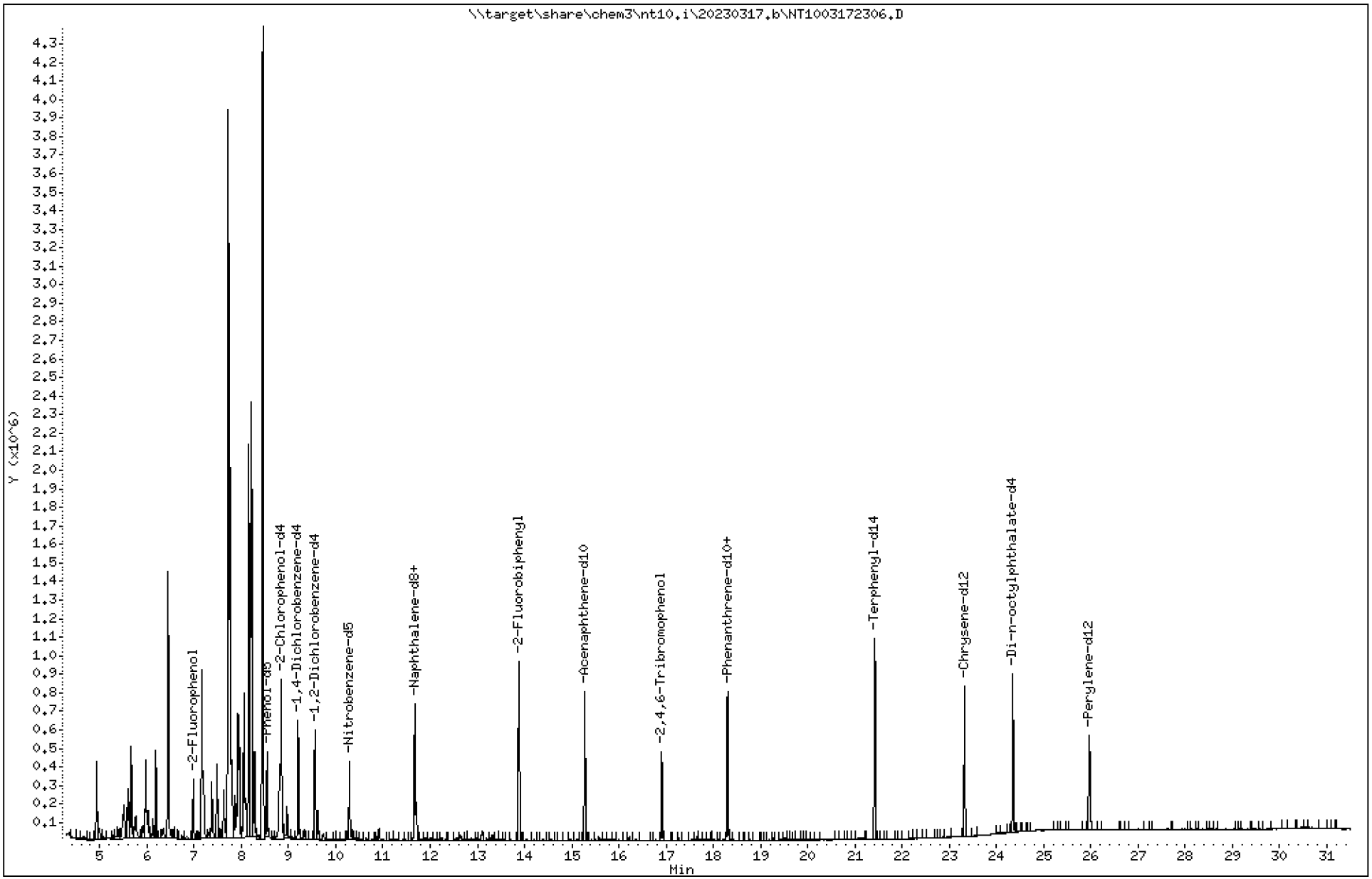
Instrument: nt10.i

Sample Info: BLB0495-BLK1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172306.D

Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK1

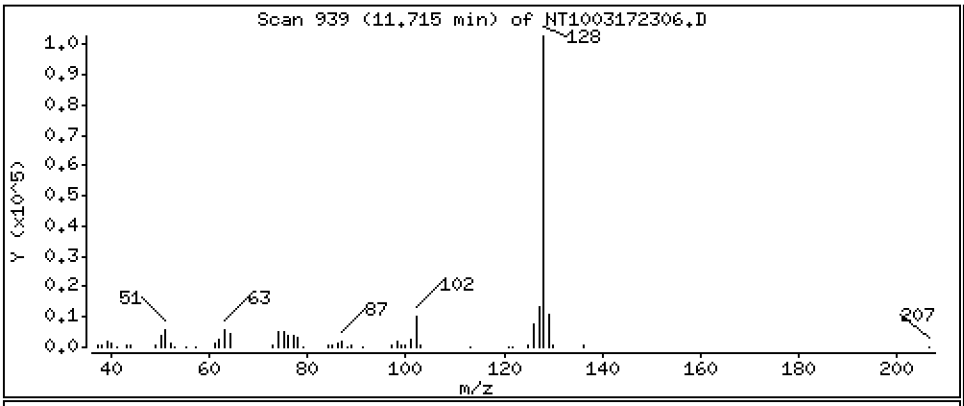
Operator: VTS

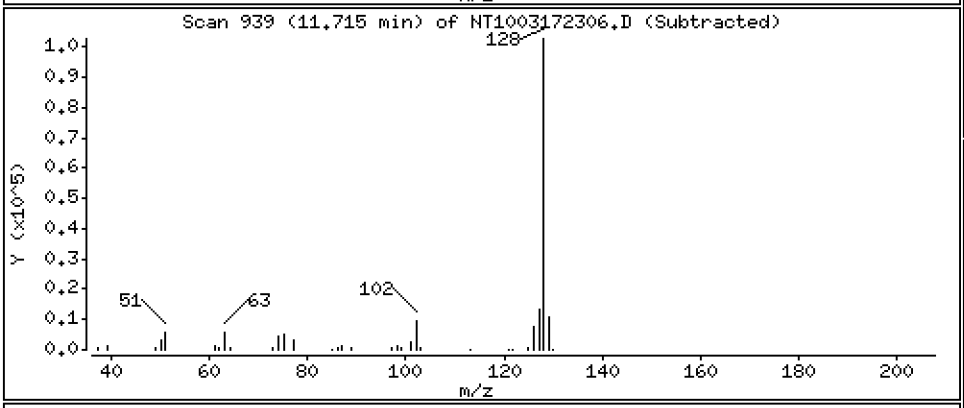
Column phase: ZB-5msi

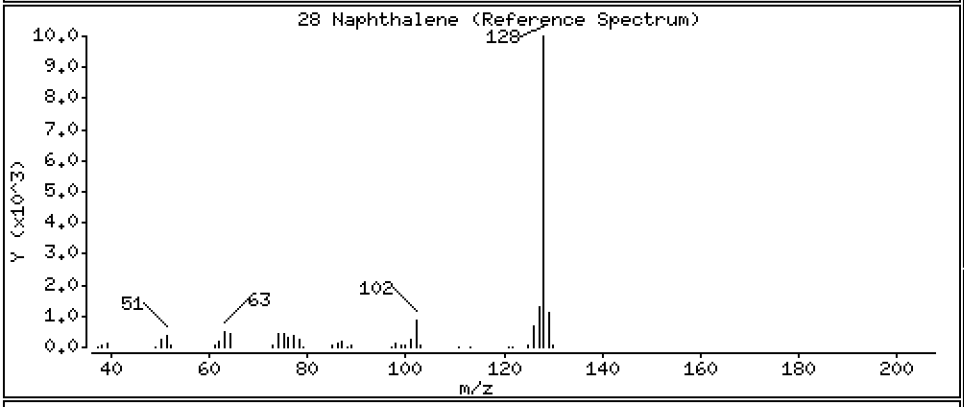
Column diameter: 0.25

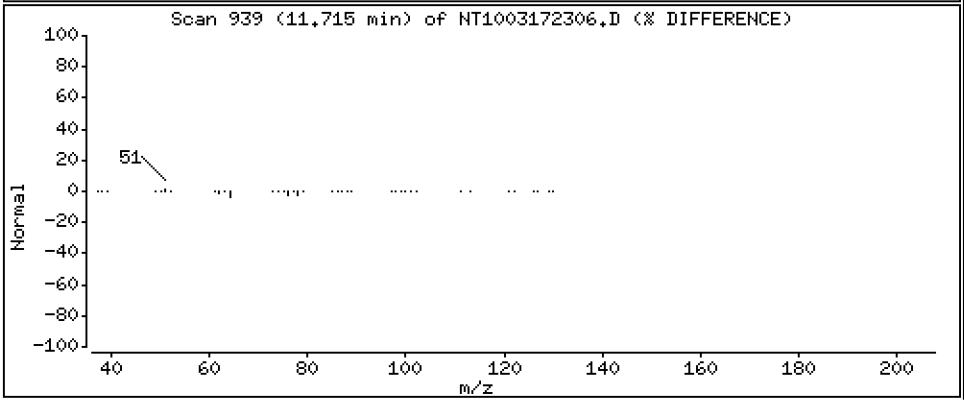
28 Naphthalene

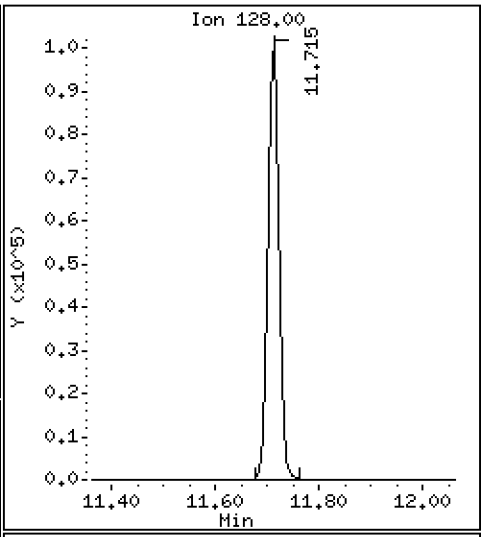
Concentration: 1.013 ug/mL

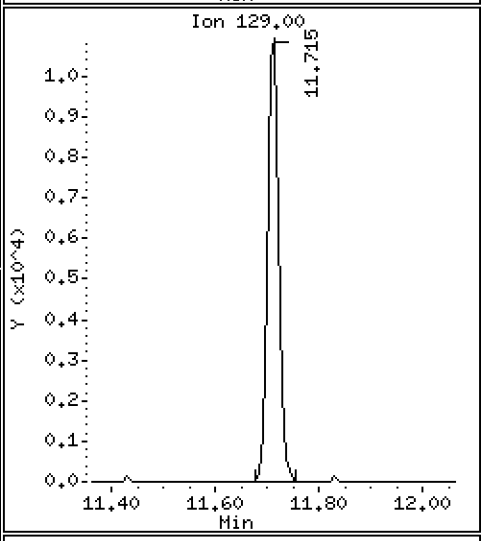


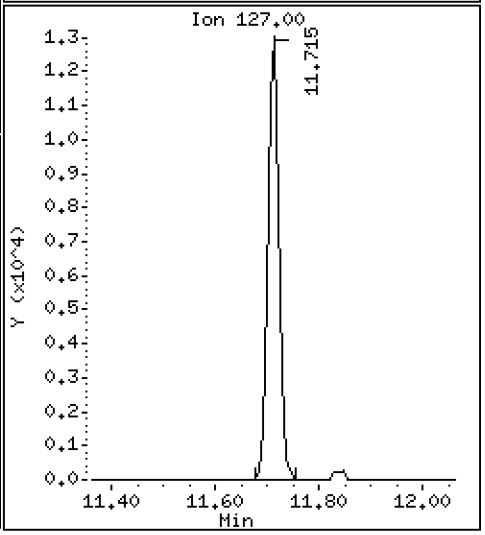












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK1

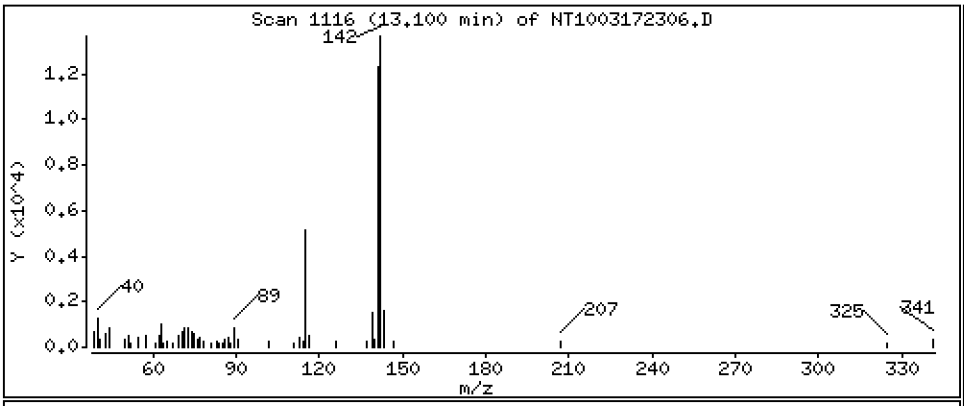
Operator: VTS

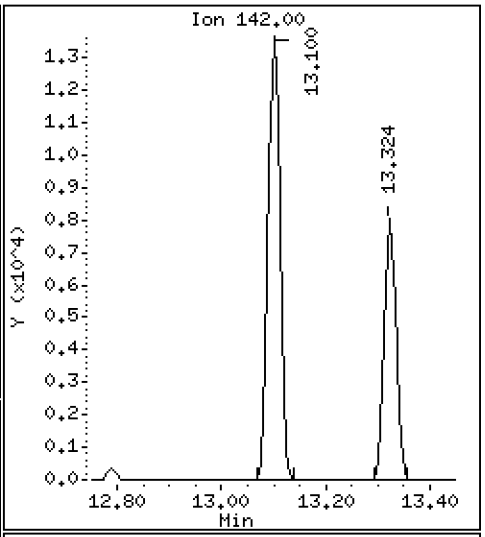
Column phase: ZB-5msi

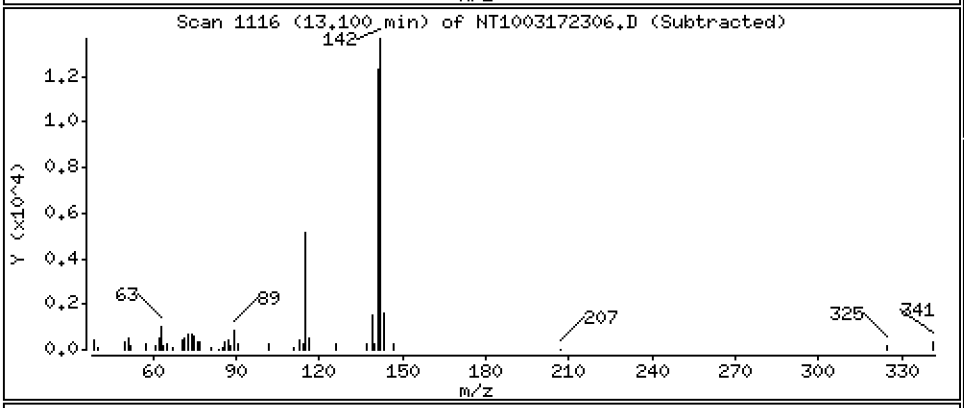
Column diameter: 0.25

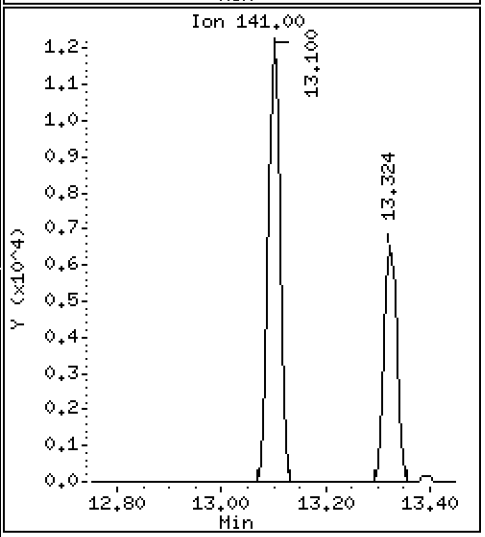
32 2-Methylnaphthalene

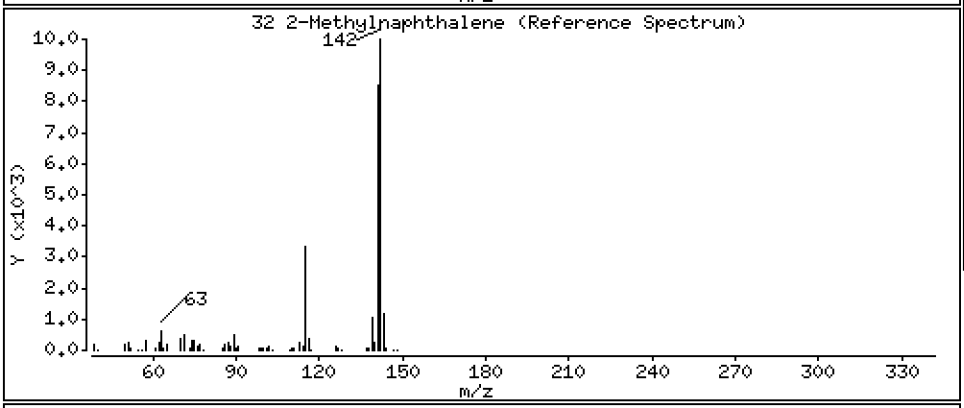
Concentration: 0.1867 ug/mL

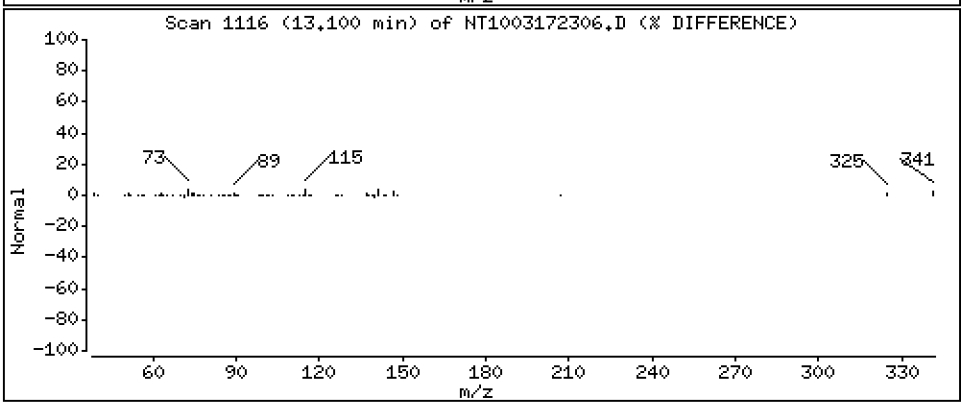












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK1

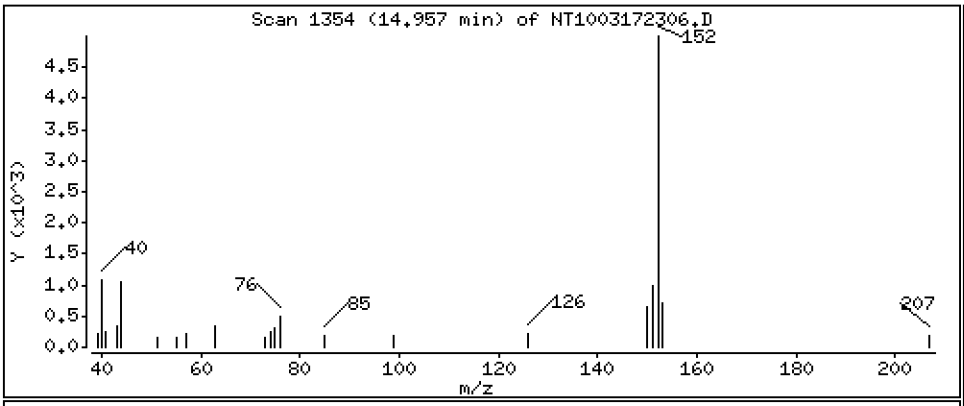
Operator: VTS

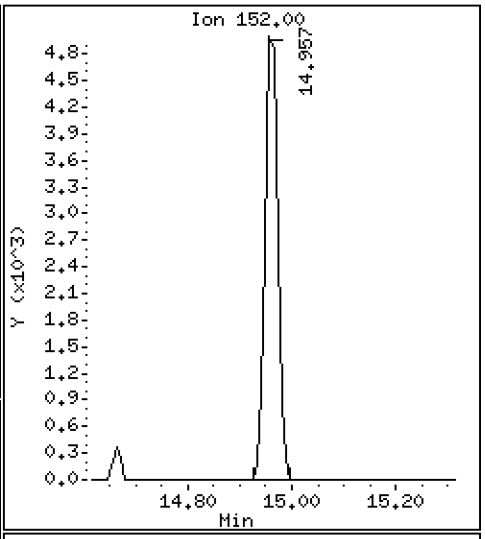
Column phase: ZB-5msi

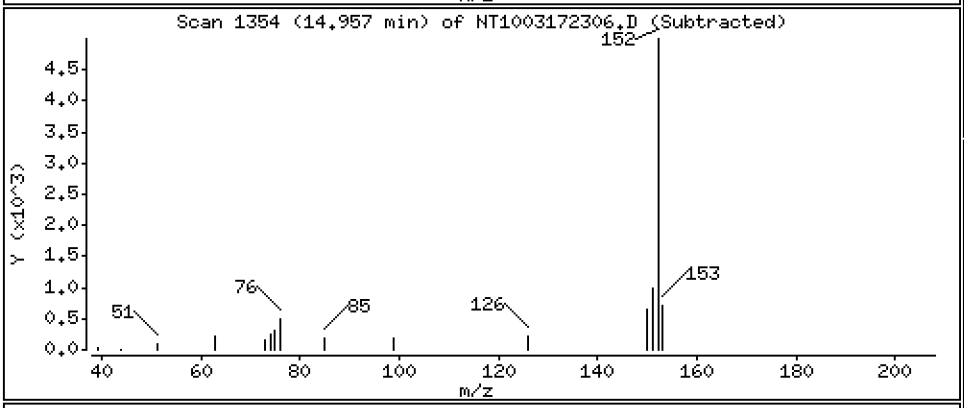
Column diameter: 0.25

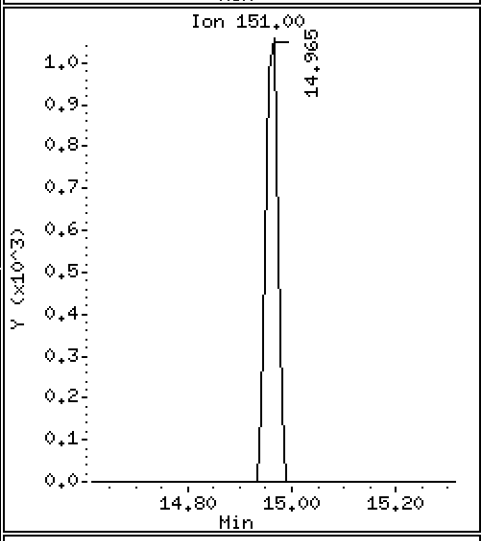
40 Acenaphthylene

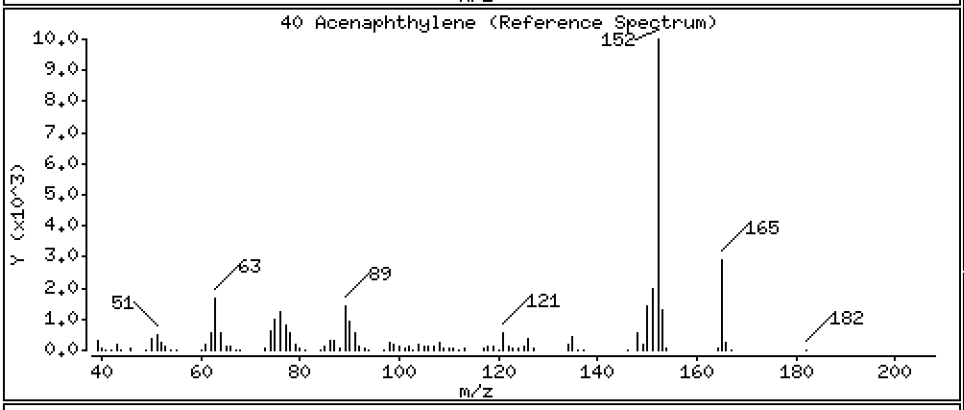
Concentration: 0.05361 ug/mL

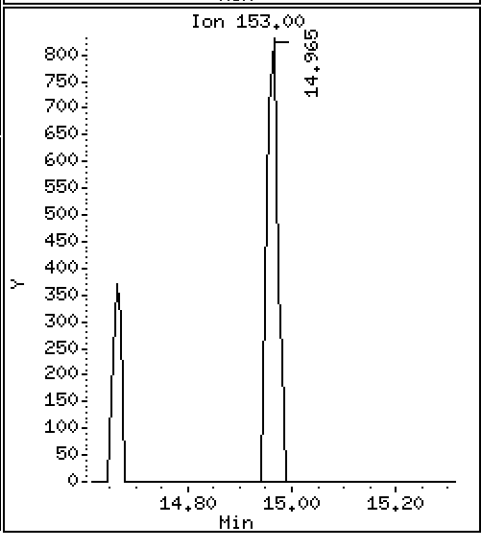


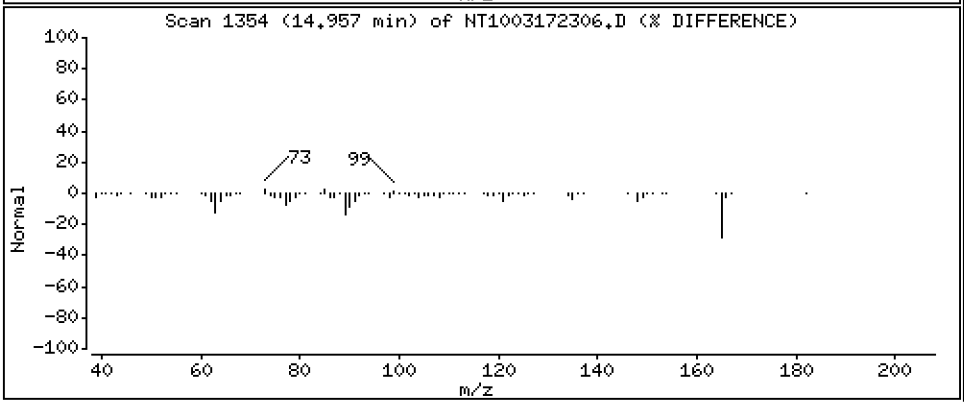












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK1

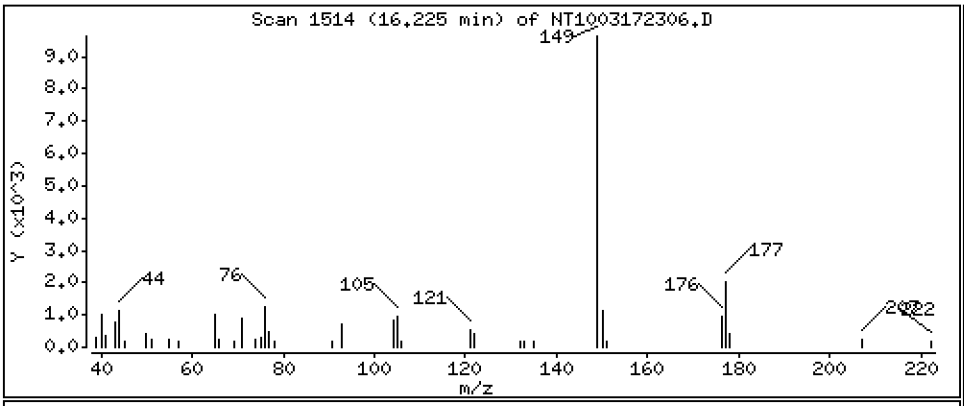
Operator: VTS

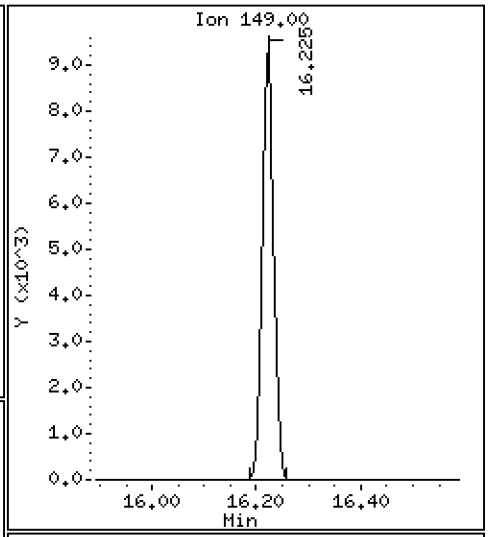
Column phase: ZB-5msi

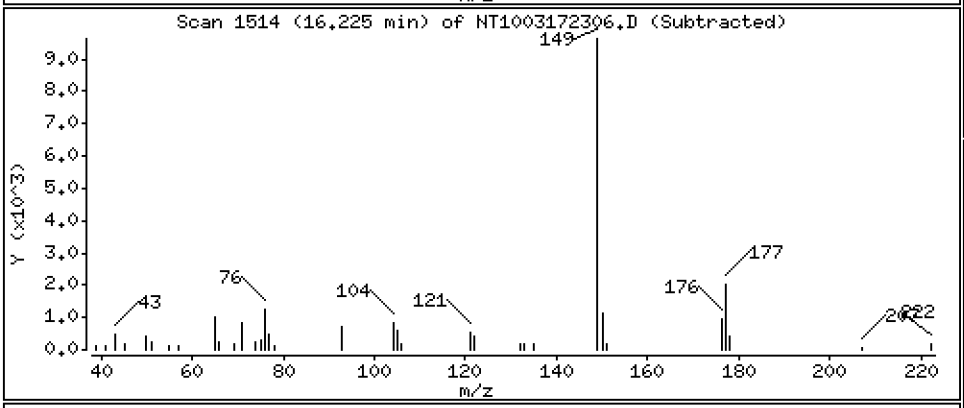
Column diameter: 0.25

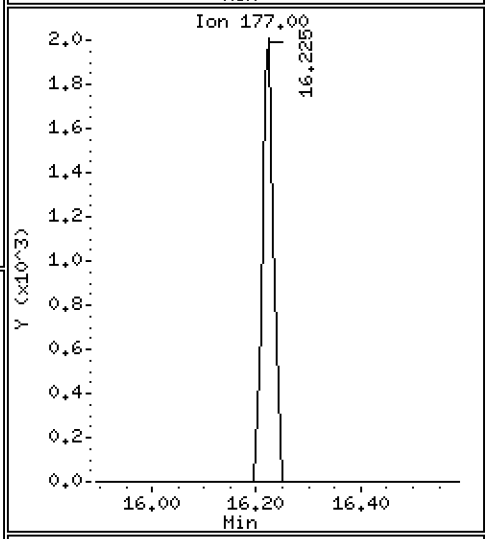
50 Diethylphthalate

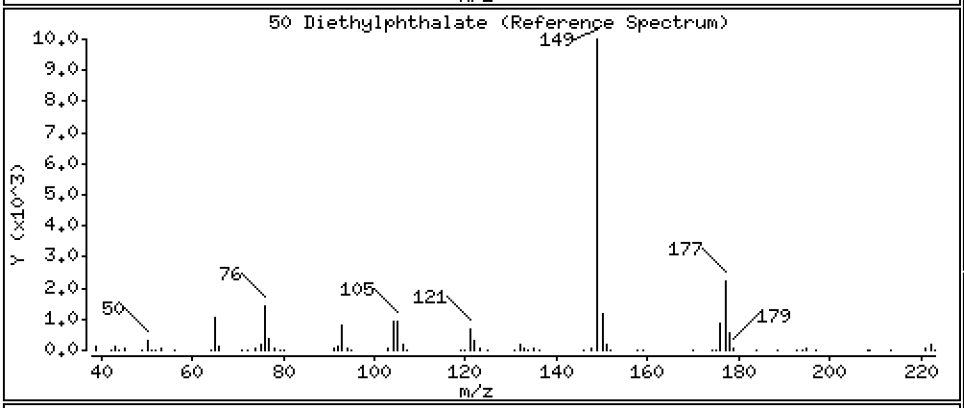
Concentration: 0.1469 ug/mL

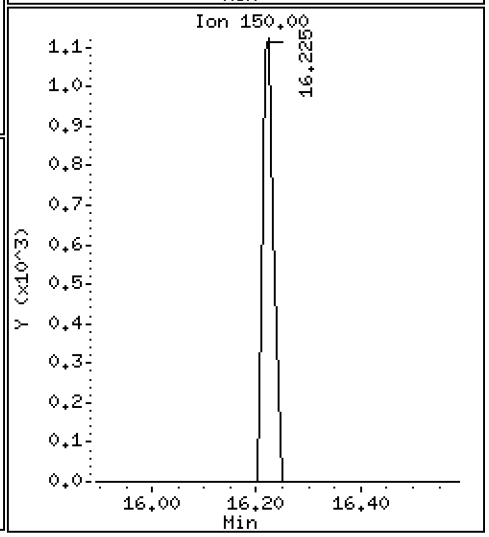


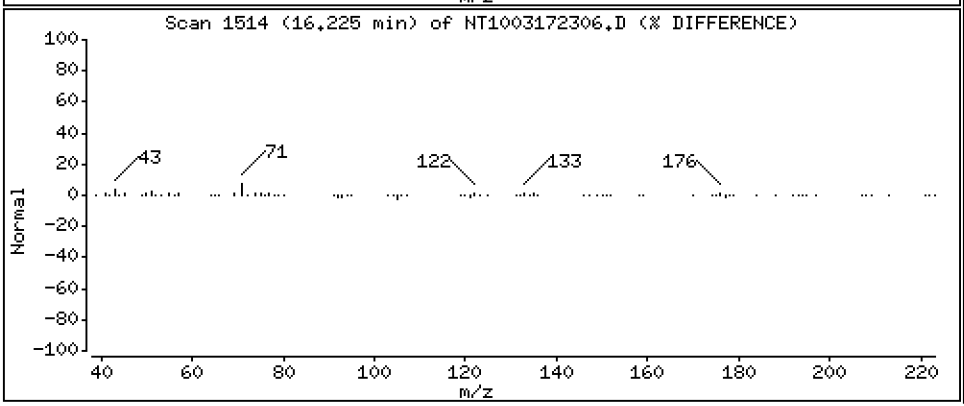












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK1

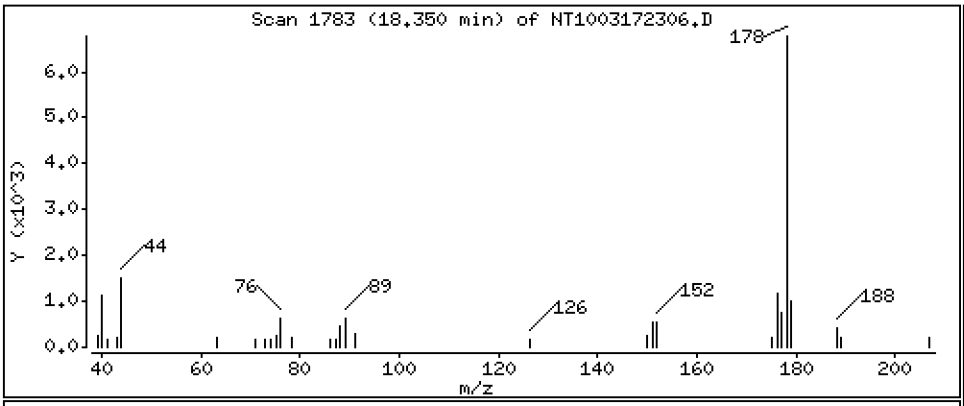
Operator: VTS

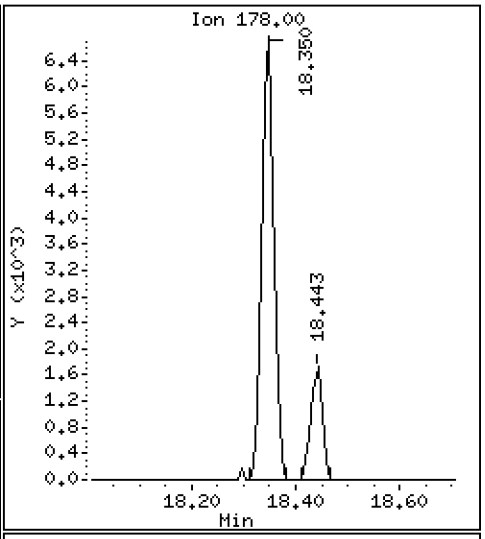
Column phase: ZB-5msi

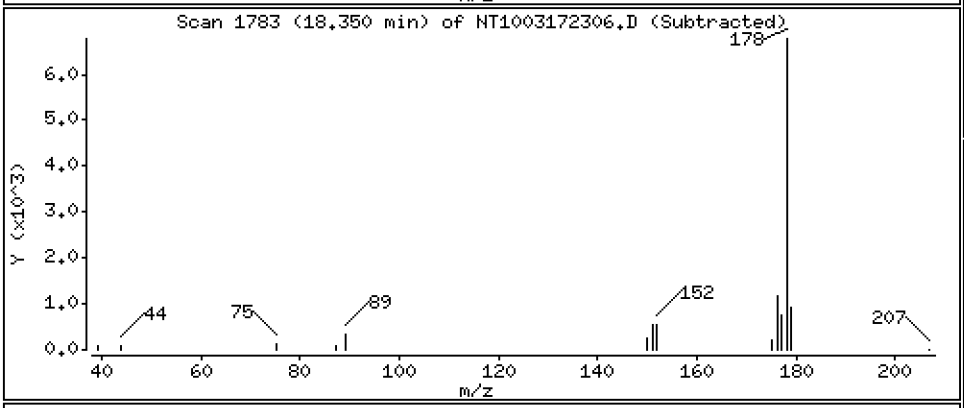
Column diameter: 0.25

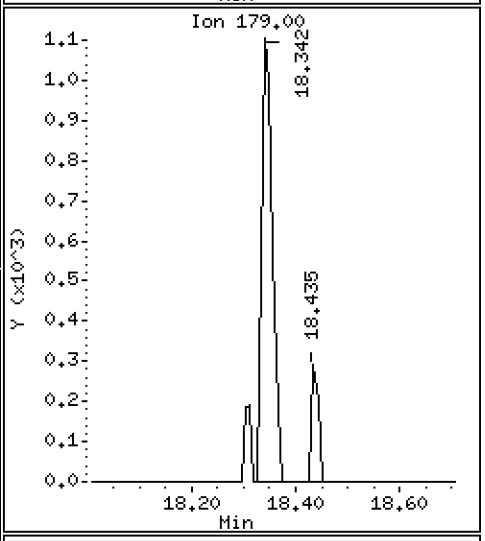
60 Phenanthrene

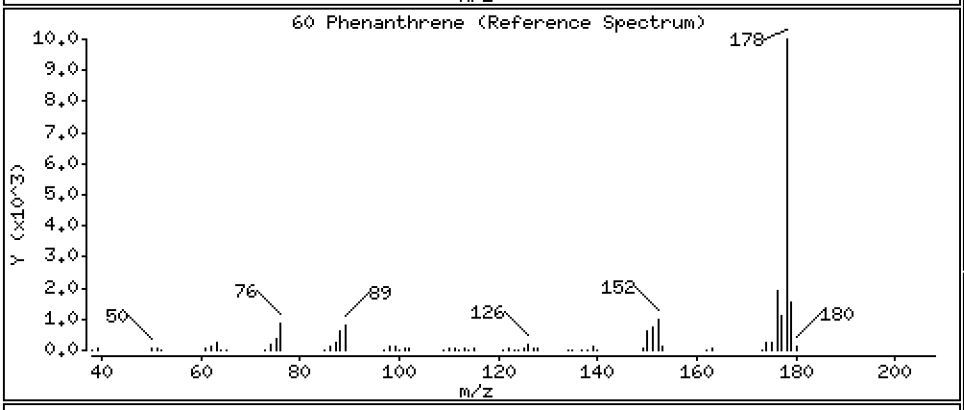
Concentration: 0.07439 ug/mL

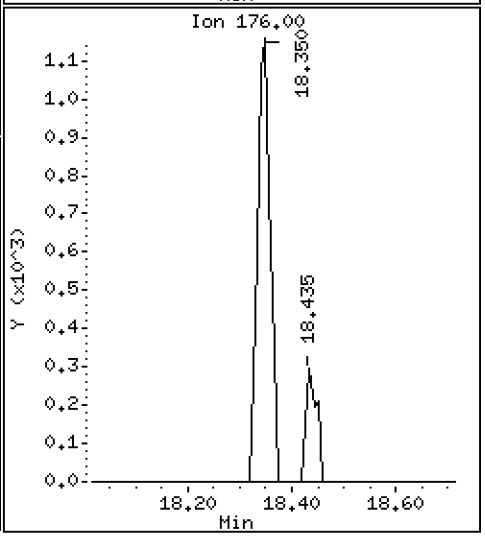


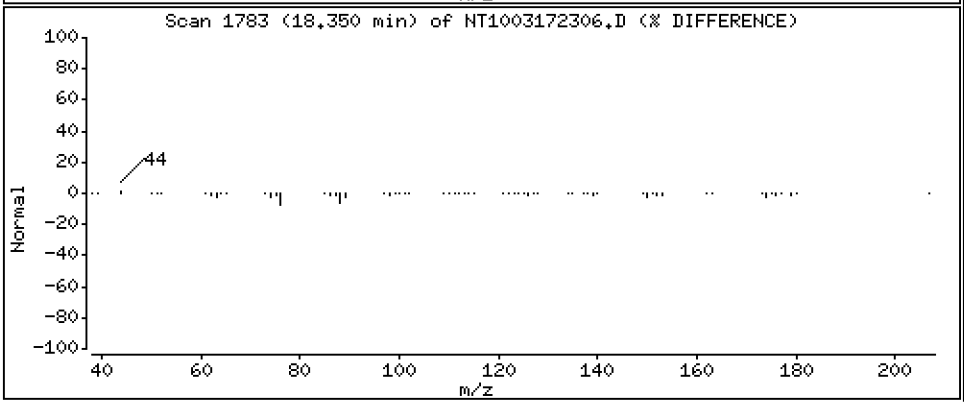












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK1

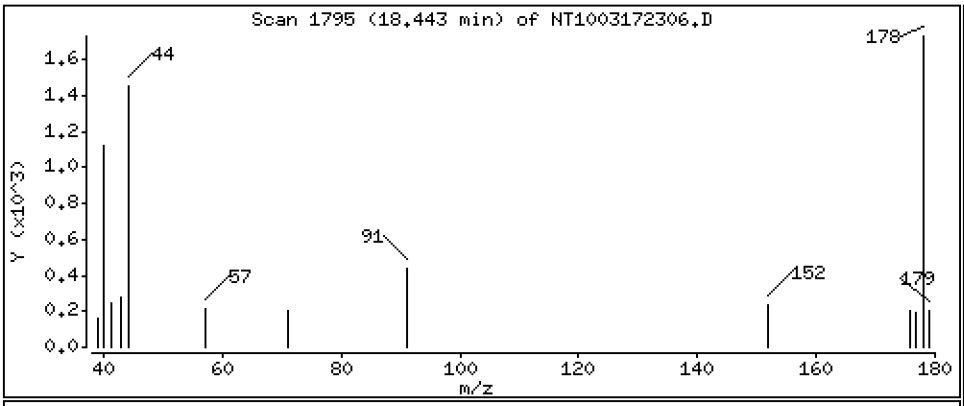
Operator: VTS

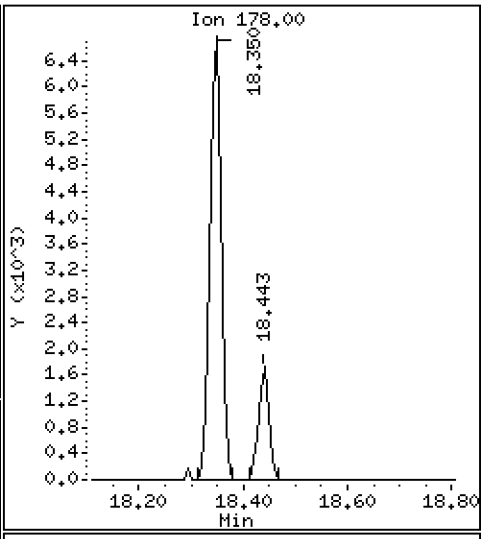
Column phase: ZB-5msi

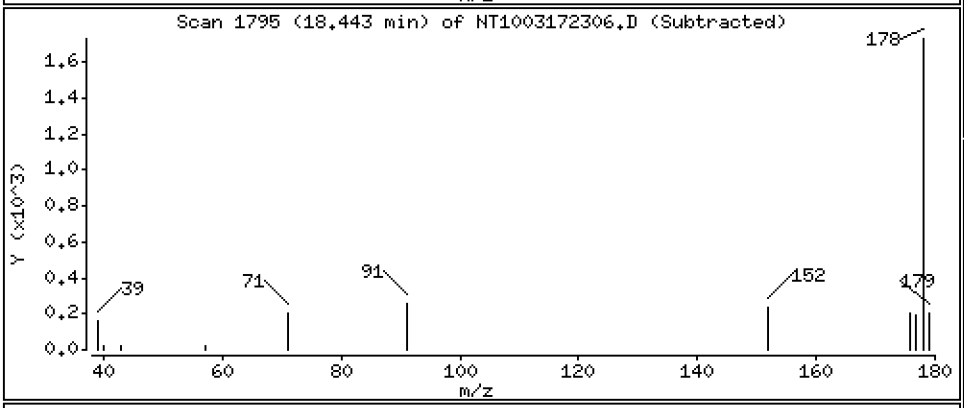
Column diameter: 0.25

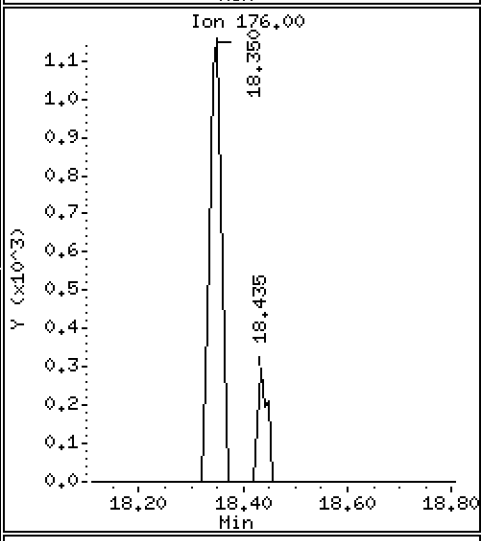
61 Anthracene

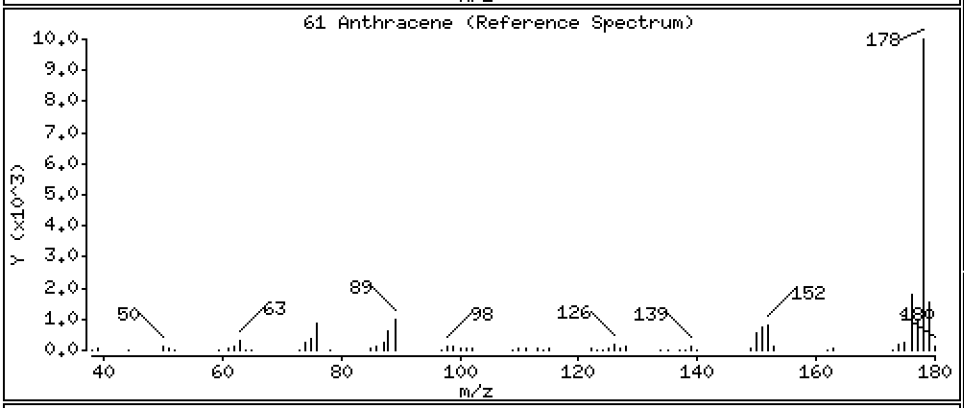
Concentration: 0.01790 ug/mL

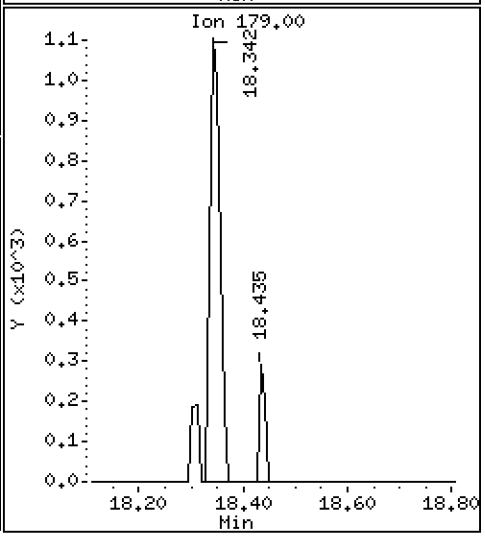


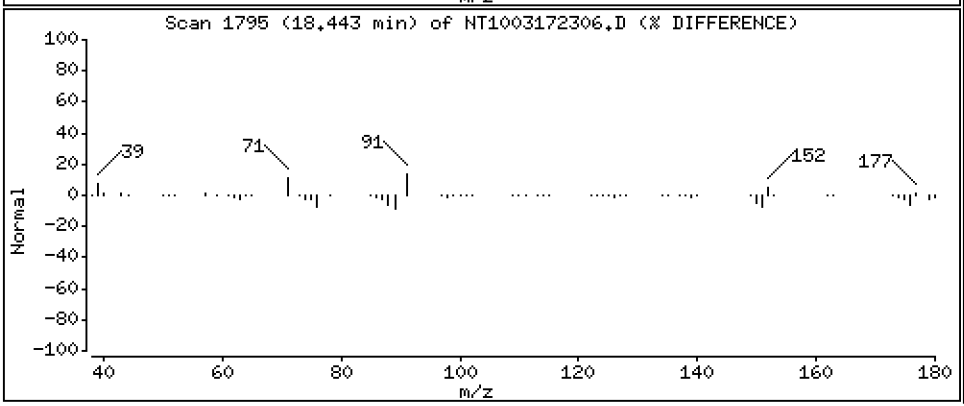












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK1

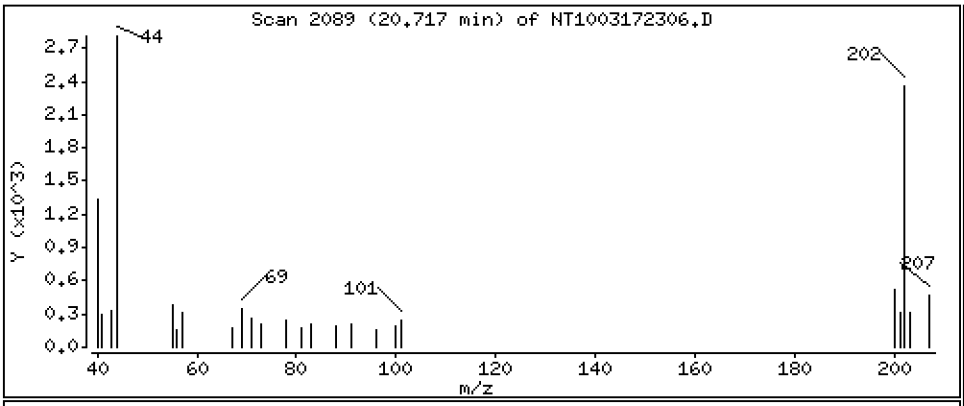
Operator: VTS

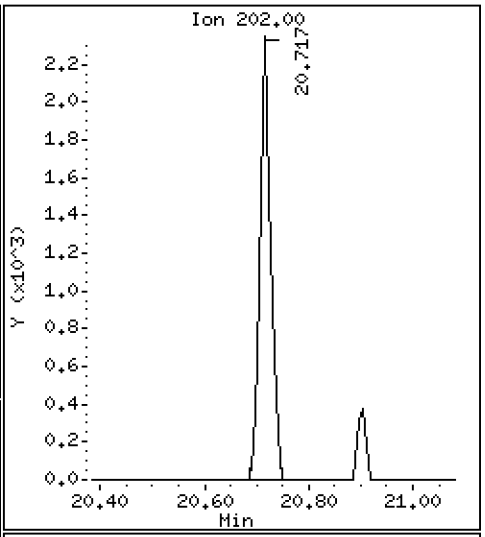
Column phase: ZB-5msi

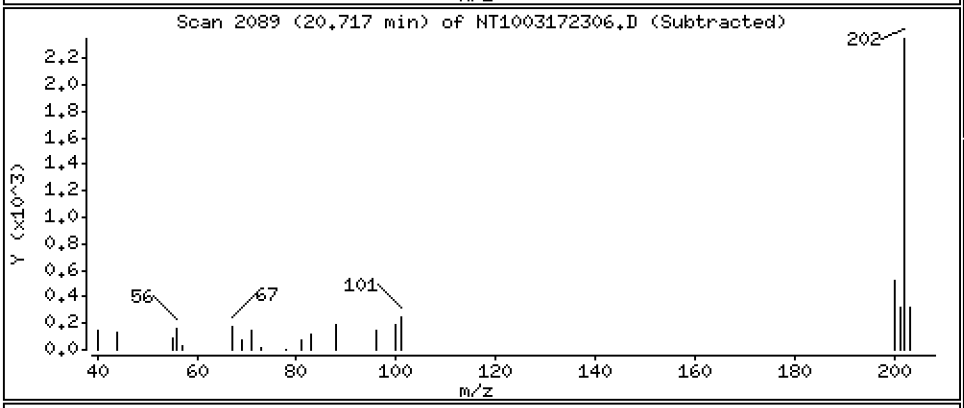
Column diameter: 0.25

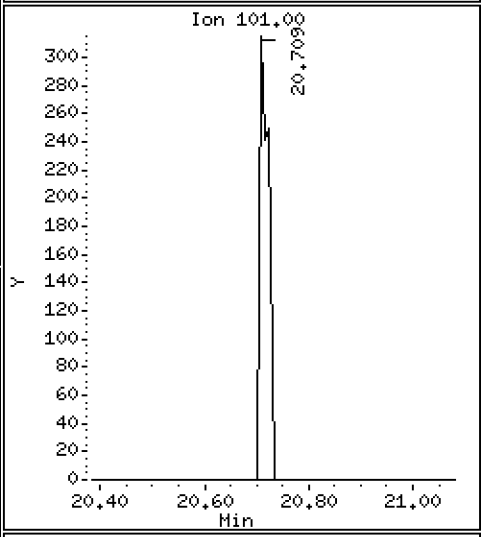
64 Fluoranthene

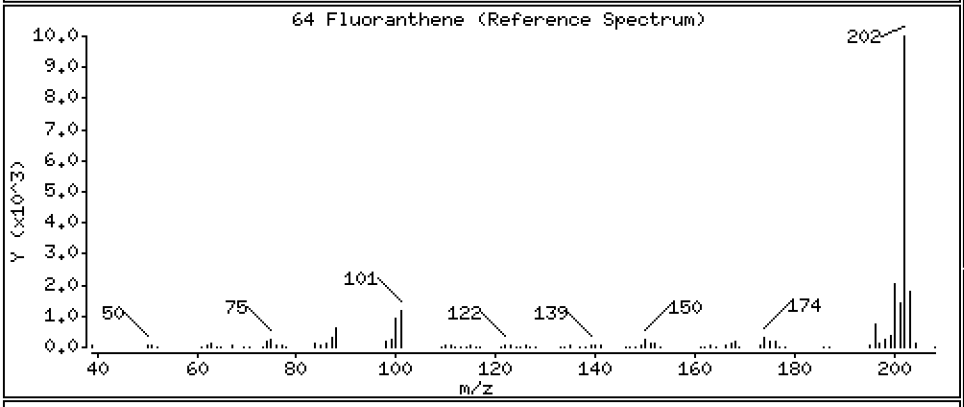
Concentration: 0.02004 ug/mL

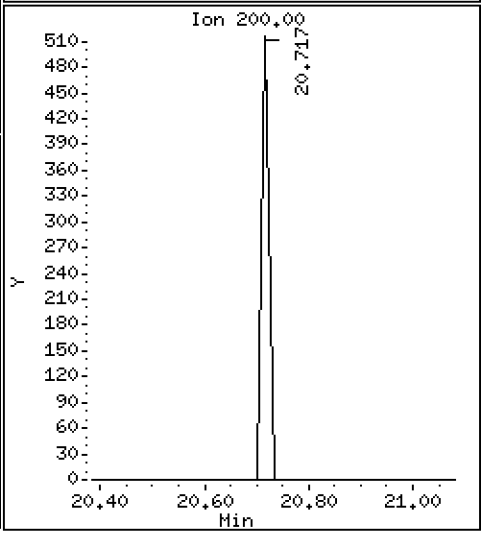


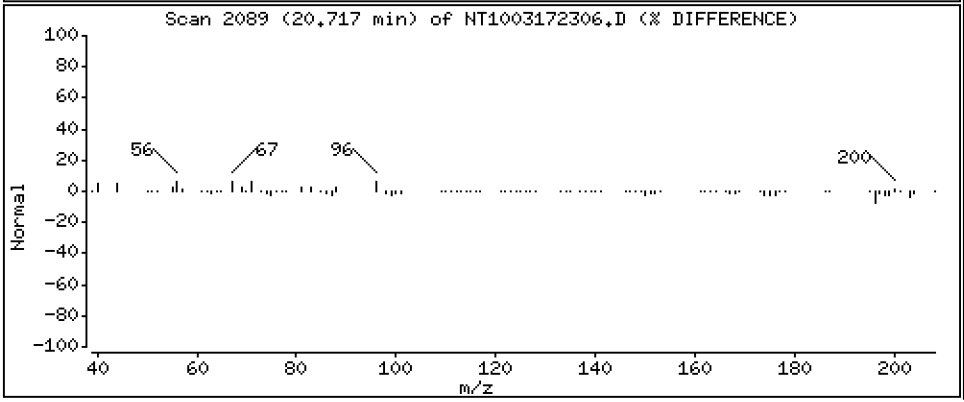












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK1

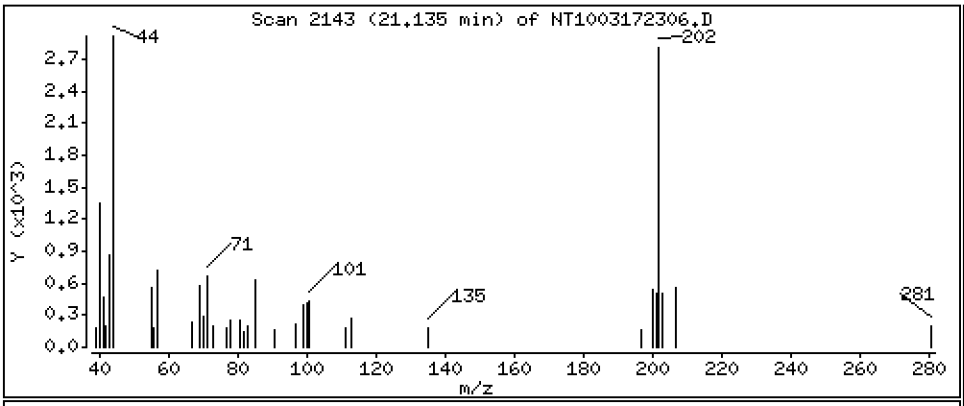
Operator: VTS

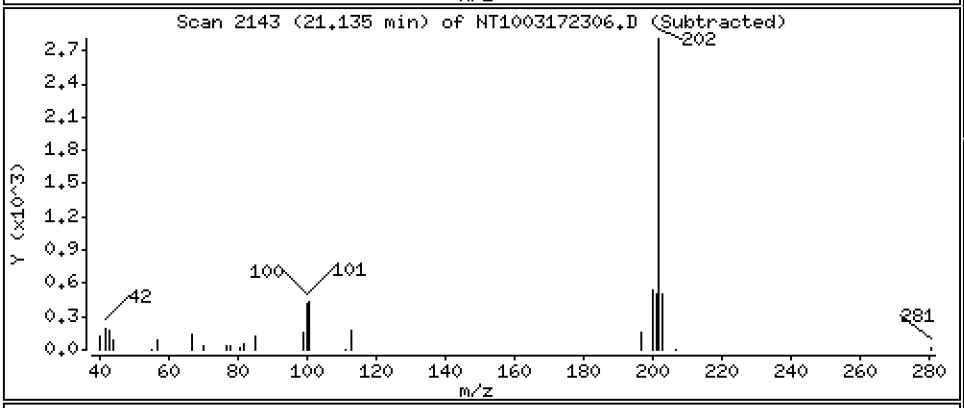
Column phase: ZB-5msi

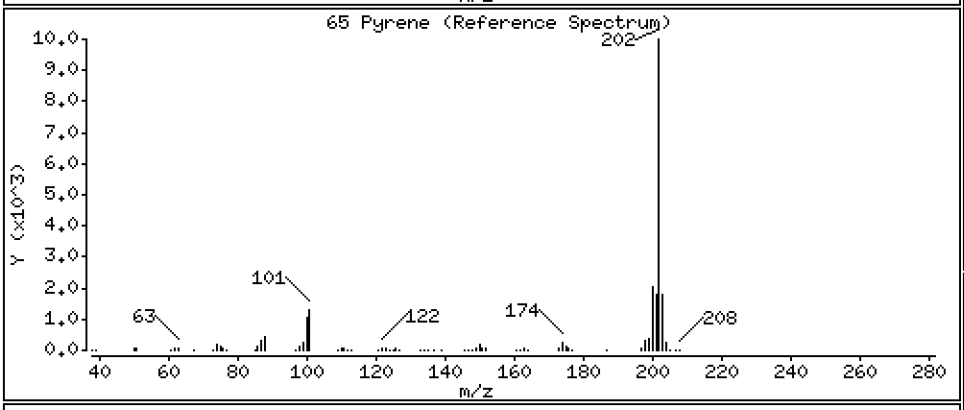
Column diameter: 0.25

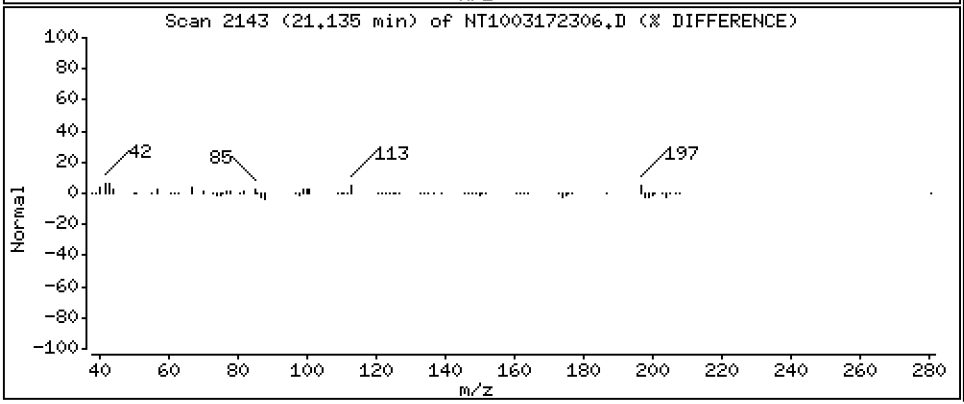
65 Pyrene

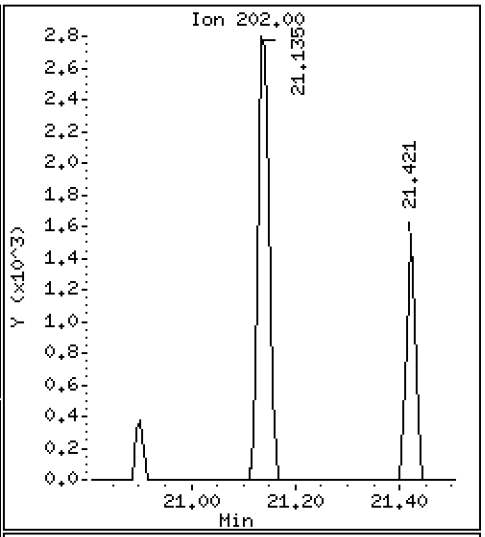
Concentration: 0.02593 ug/mL

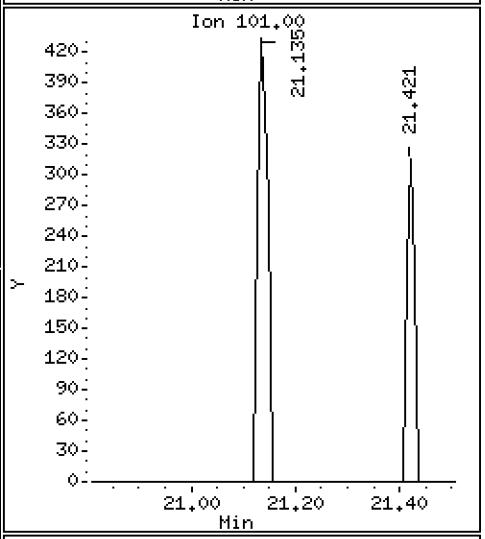


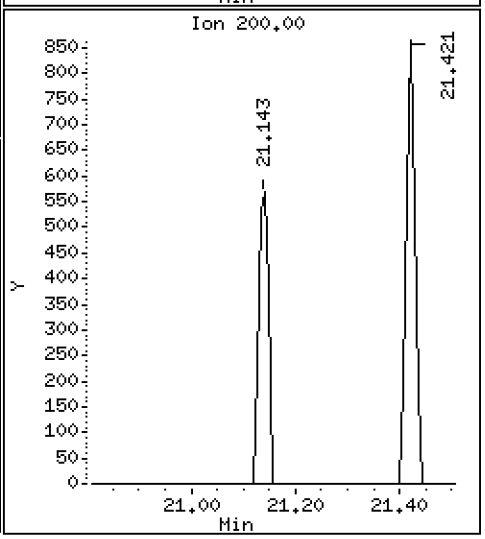












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK1

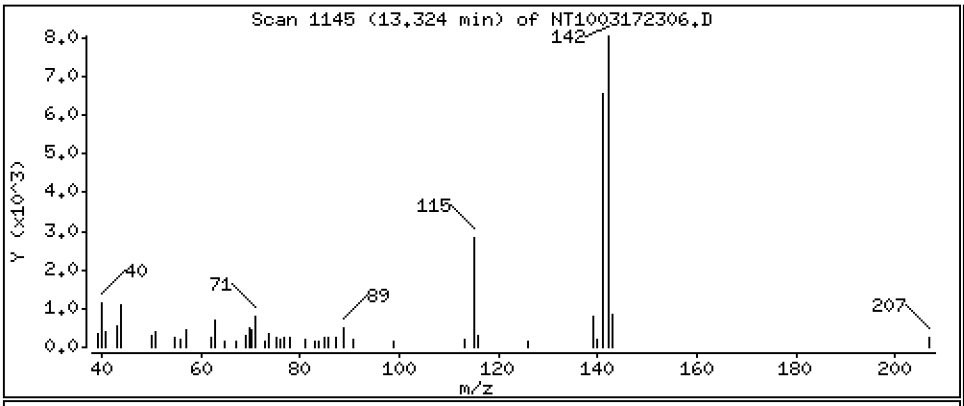
Operator: VTS

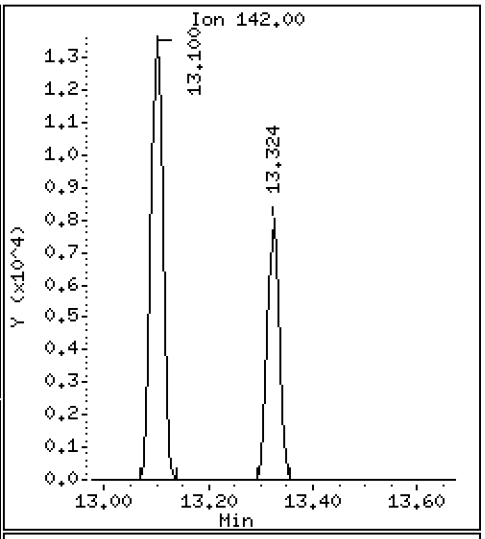
Column phase: ZB-5msi

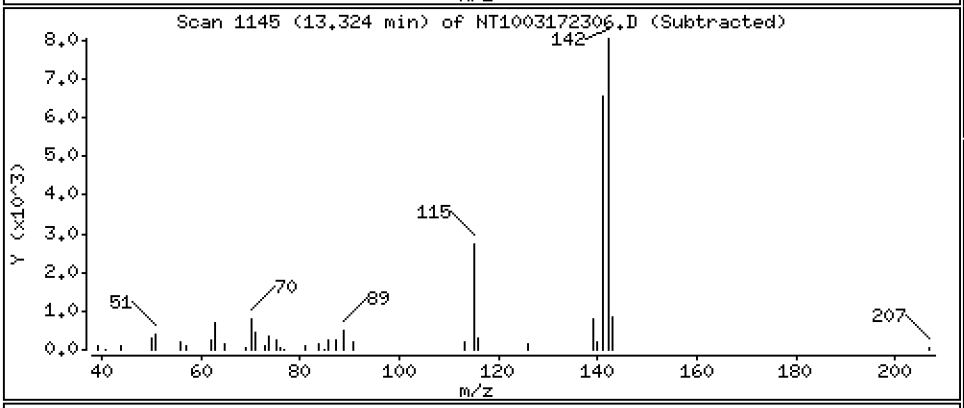
Column diameter: 0.25

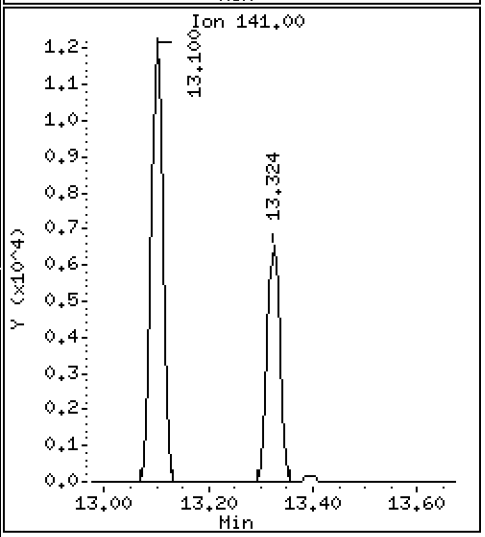
105 1-methylnaphthalene

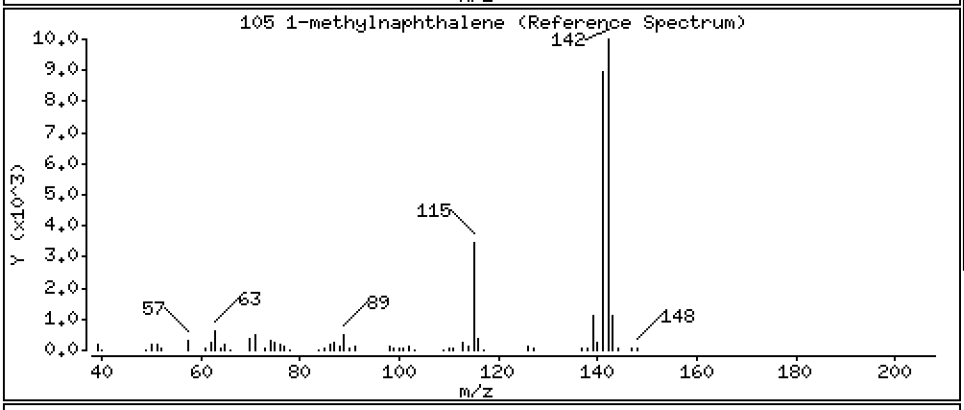
Concentration: 0.1178 ug/mL

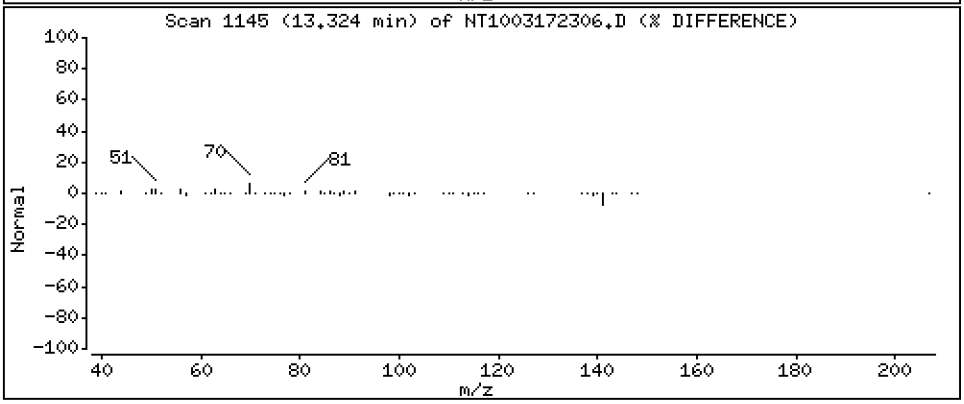












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230317.b\NT1003172306.D
Lab Smp Id: BLB0495-BLK1
Inj Date : 17-MAR-2023 21:36
Operator : VTS Inst ID: nt10.i
Smp Info : BLB0495-BLK1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230317.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	6.982	6.975	(0.759)	141379	2.89328	2.893
$	2	Phenol-d5	99	8.543	8.543	(0.929)	228082	3.55805	3.558
	3	Phenol	94	Compound Not Detected.					
$	5	2-Chlorophenol-d4	132	8.837	8.837	(0.960)	292921	5.35118	5.351
	4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6	2-Chlorophenol	128	Compound Not Detected.					
	7	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8	1,4-Dichlorobenzene-d4	152	9.200	9.200	(1.000)	161583	4.00000	
	9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10	1,2-Dichlorobenzene-d4	152	9.557	9.557	(1.039)	147408	3.74976	3.750
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	11	Benzyl alcohol	108	Compound Not Detected.					
	14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13	2-Methylphenol	108	Compound Not Detected.					
	17	Hexachloroethane	117	Compound Not Detected.					
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15	4-Methylphenol	108	Compound Not Detected.					
$	18	Nitrobenzene-d5	82	10.287	10.287	(0.882)	235914	4.02493	4.025
	19	Nitrobenzene	77	Compound Not Detected.					
	20	Isophorone	82	Compound Not Detected.					
	21	2-Nitrophenol	139	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	Compound Not Detected.					
	23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24	Benzoic acid	105	Compound Not Detected.					
	25	2,4-Dichlorophenol	162	Compound Not Detected.					
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.668	11.676	(1.000)	580695	4.00000	
	28	Naphthalene	128	11.715	11.715	(1.004)	155845	1.01307	1.013
	29	4-Chloroaniline	127	Compound Not Detected.					
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32	2-Methylnaphthalene	142	13.099	13.099	(1.123)	20729	0.18672	0.1867
	33	Hexachlorocyclopentadiene	237	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.881	13.881	(0.909)	483317	4.06062	4.061
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
	40	Acenaphthylene	152	14.957	14.965	(0.979)	8051	0.05361	0.05361
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	15.274	15.282	(1.000)	300894	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	Compound Not Detected.					
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	Compound Not Detected.					
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	16.225	16.240	(1.062)	14089	0.14691	0.1469
	49	Fluorene	166	Compound Not Detected.					
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	16.904	16.919	(1.107)	70000	4.97663	4.977
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.303	18.310	(1.000)	532566	4.00000	
	60	Phenanthrene	178	18.349	18.357	(1.003)	10803	0.07439	0.07439
	61	Anthracene	178	18.442	18.457	(1.008)	2493	0.01790	0.01790
	62	Carbazole	167	Compound Not Detected.					
	63	Di-n-butylphthalate	149	Compound Not Detected.					
	64	Fluoranthene	202	20.717	20.732	(0.888)	3270	0.02004	0.02004
	65	Pyrene	202	21.134	21.158	(0.906)	4340	0.02593	0.02593
$	66	Terphenyl-d14	244	21.421	21.436	(0.919)	583347	4.64064	4.641
	67	Butylbenzylphthalate	149	Compound Not Detected.					
	68	Benzo(a)anthracene	228	Compound Not Detected.					
*	69	Chrysene-d12	240	23.318	23.341	(1.000)	406088	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	Compound Not Detected.					
	72	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
*	134	Di-n-octylphthalate-d4	153	24.340	24.363	(1.000)	655299	4.00000	
	73	Di-n-octylphthalate	149	Compound Not Detected.					
	74	Benzo(b)fluoranthene	252	Compound Not Detected.					
	75	Benzo(k)fluoranthene	252	Compound Not Detected.					
	76	Benzo(a)pyrene	252	Compound Not Detected.					
*	77	Perylene-d12	264	25.966	25.997	(1.000)	399257	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	13.324	13.324	(1.142)	11982	0.11780	0.1178
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172306.D
Lab Smp Id: BLB0495-BLK1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230317.b\ABN.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:02
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	132765	66383	265530	161583	21.71
27 Naphthalene-d8	497947	248974	995894	580695	16.62
42 Acenaphthene-d10	271928	135964	543856	300894	10.65
59 Phenanthrene-d10	497390	248695	994780	532566	7.07
69 Chrysene-d12	391403	195702	782806	406088	3.75
134 Di-n-octylphthala	674651	337326	1349302	655299	-2.87
77 Perylene-d12	408663	204332	817326	399257	-2.30

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.20	8.70	9.70	9.20	0.00
27 Naphthalene-d8	11.68	11.18	12.18	11.67	-0.07
42 Acenaphthene-d10	15.28	14.78	15.78	15.27	-0.05
59 Phenanthrene-d10	18.31	17.81	18.81	18.30	-0.04
69 Chrysene-d12	23.34	22.84	23.84	23.32	-0.10
134 Di-n-octylphthala	24.36	23.86	24.86	24.34	-0.09
77 Perylene-d12	26.00	25.50	26.50	25.97	-0.12

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

REVIEW SUMMARY FOR FILE - NT1003172306.D

Lab ID: BLB0495-BLK1
nt10.i, 20230317.b\ABN.m,   17-MAR-2023 21:36

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1003172302.D

On Column LOD for nt10.i, 20230317.b\ABN.m, ICAL.sub = 0.0000

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

LCS / LCS DUPLICATE RECOVERY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/17/23 22:14
Batch:	BLB0495	Laboratory ID:	BLB0495-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 1 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Phenol	500	182		36.4	34 - 120
4-Methylphenol	500	199		39.9	29 - 120
Naphthalene	500	377	B	75.4	43 - 120
2-Methylnaphthalene	500	341		68.2	43 - 120
Acenaphthylene	500	356		71.1	42 - 120
Dimethylphthalate	500	442		88.4	43 - 120
Acenaphthene	500	375		75.0	45 - 120
Dibenzofuran	500	375		74.9	43 - 120
Fluorene	500	391		78.3	45 - 120
Phenanthrene	500	400		80.0	49 - 120
Anthracene	500	365		73.0	45 - 120
Fluoranthene	500	436		87.2	53 - 145
Pyrene	500	423		84.7	52 - 134
Butylbenzylphthalate	500	511		102	45 - 132
Benzo(a)anthracene	500	450		90.0	49 - 120
Chrysene	500	430		86.1	47 - 120
bis(2-Ethylhexyl)phthalate	500	138	*	27.5 *	34 - 130
Benzofluoranthenes, Total	1000	923		92.3	30 - 160
Benzo(a)pyrene	500	441		88.2	42 - 120
Indeno(1,2,3-cd)pyrene	500	418		83.6	42 - 163
Dibenzo(a,h)anthracene	500	426		85.3	30 - 133
Benzo(g,h,i)perylene	500	422		84.4	46 - 148

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	500	233		46.5	24.4	30	34 - 120
4-Methylphenol	500	329	*	65.7	49.0 *	30	29 - 120
Naphthalene	500	419	B	83.8	10.6	30	43 - 120
2-Methylnaphthalene	500	396		79.3	15.0	30	43 - 120
Acenaphthylene	500	399		79.8	11.6	30	42 - 120
Dimethylphthalate	500	494		98.8	11.1	30	43 - 120
Acenaphthene	500	426		85.1	12.6	30	45 - 120

* Indicates values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/17/23 22:53
Batch:	BLB0495	Laboratory ID:	BLB0495-BSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS Dup
Initial/Final:	10 g / 1 mL		

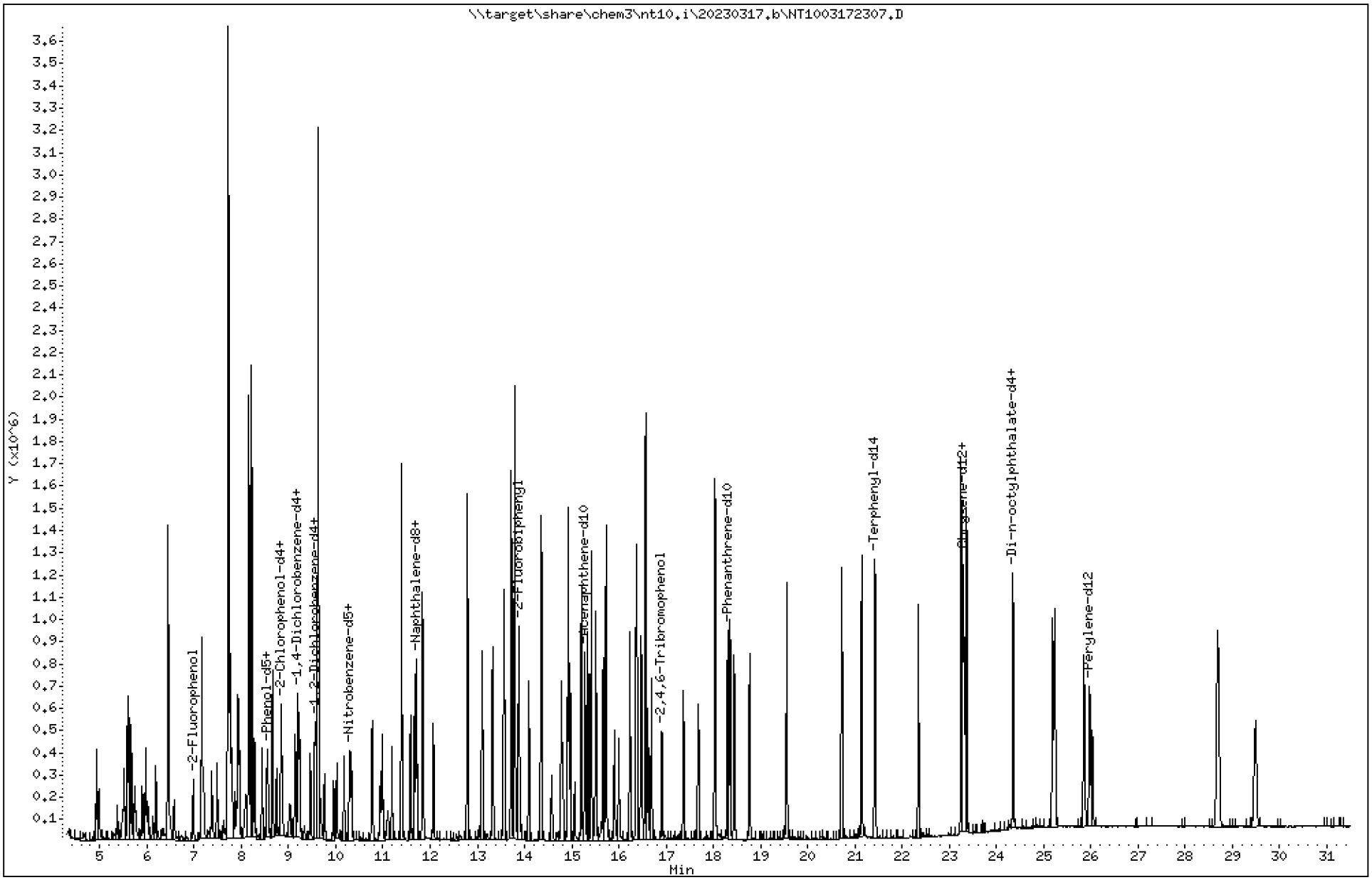
COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dibenzofuran	500	428		85.6	13.3	30	43 - 120
Fluorene	500	445		89.0	12.8	30	45 - 120
Phenanthrene	500	457		91.3	13.3	30	49 - 120
Anthracene	500	407		81.4	10.9	30	45 - 120
Fluoranthene	500	483		96.6	10.2	30	53 - 145
Pyrene	500	473		94.6	11.1	30	52 - 134
Butylbenzylphthalate	500	576		115	12.1	30	45 - 132
Benzo(a)anthracene	500	492		98.5	8.97	30	49 - 120
Chrysene	500	475		94.9	9.77	30	47 - 120
bis(2-Ethylhexyl)phthalate	500	156	*	31.3 *	12.7	30	34 - 130
Benzofluoranthenes, Total	1000	1040		104	11.7	30	30 - 160
Benzo(a)pyrene	500	483		96.6	9.01	30	42 - 120
Indeno(1,2,3-cd)pyrene	500	471		94.1	11.9	30	42 - 163
Dibenzo(a,h)anthracene	500	481		96.2	12.1	30	30 - 133
Benzo(g,h,i)perylene	500	477		95.4	12.3	30	46 - 148

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172307.D
Date : 17-MAR-2023 22:14
Client ID:
Sample Info: BLB0495-BS1

Instrument: nt10.i
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

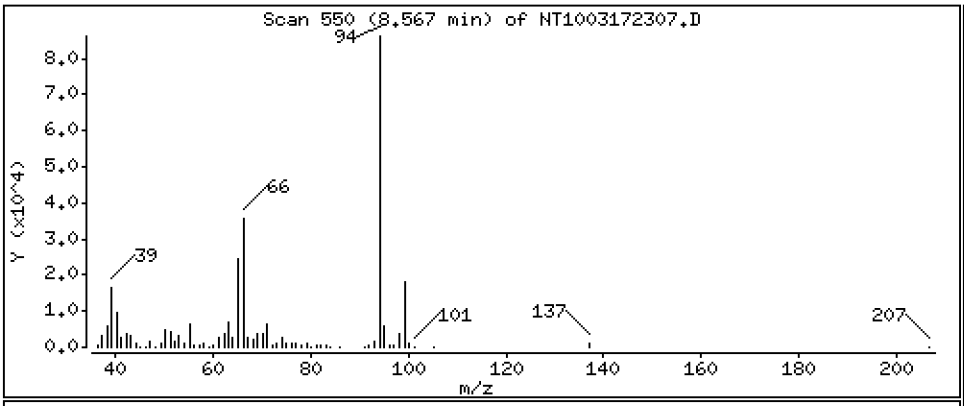
Operator: VTS

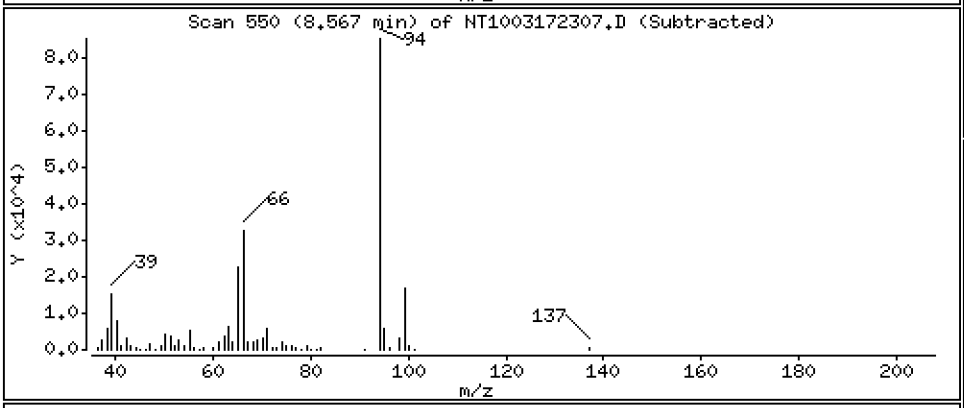
Column phase: ZB-5msi

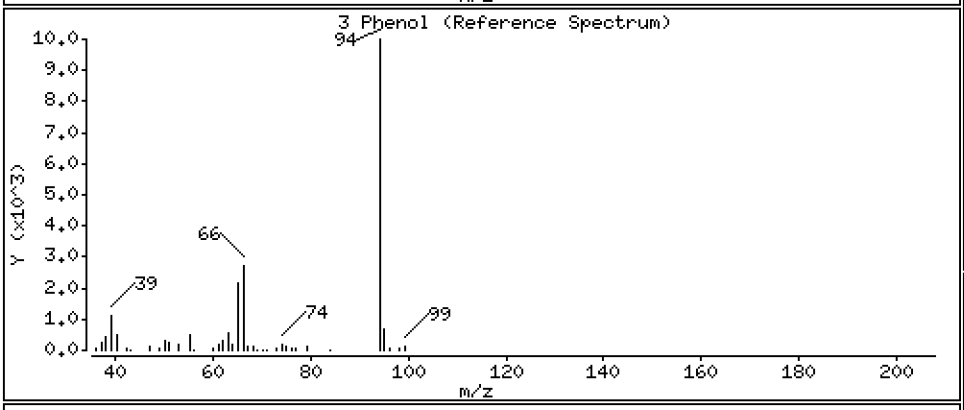
Column diameter: 0.25

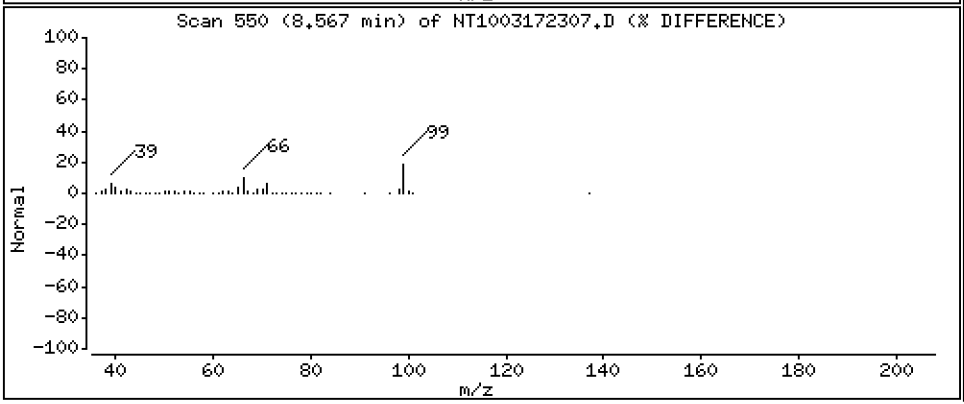
3 Phenol

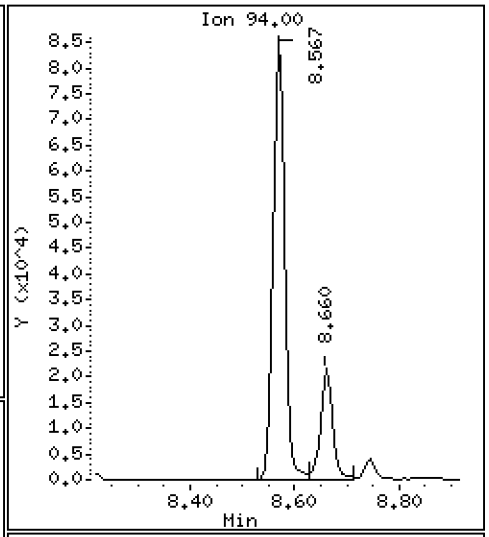
Concentration: 1.820 ug/mL

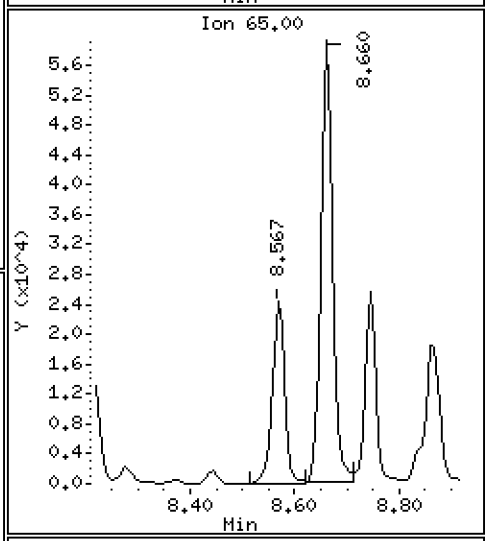


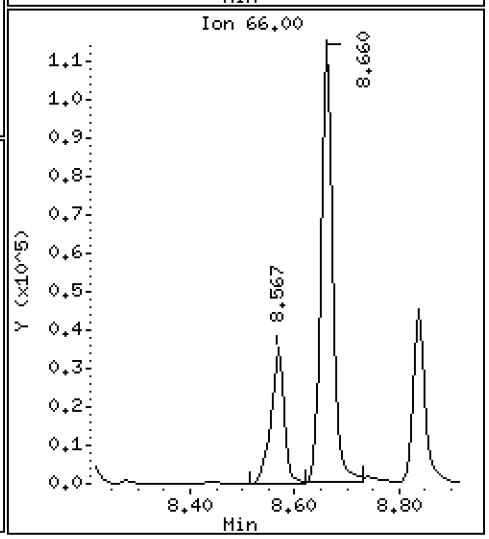












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

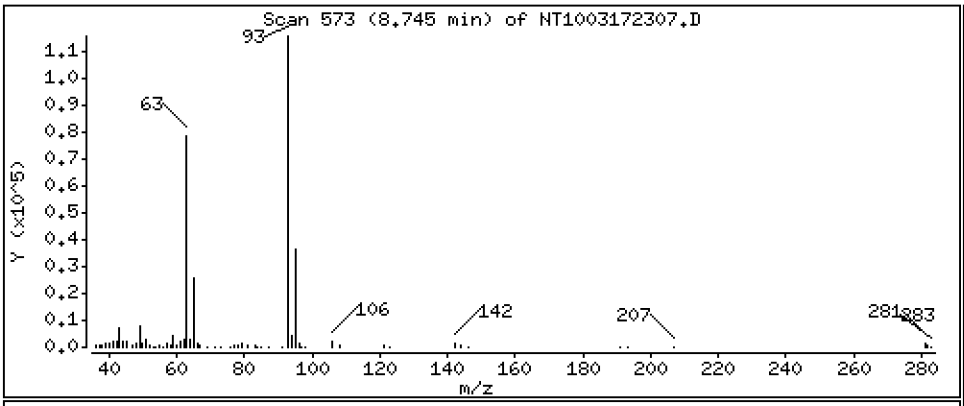
Operator: VTS

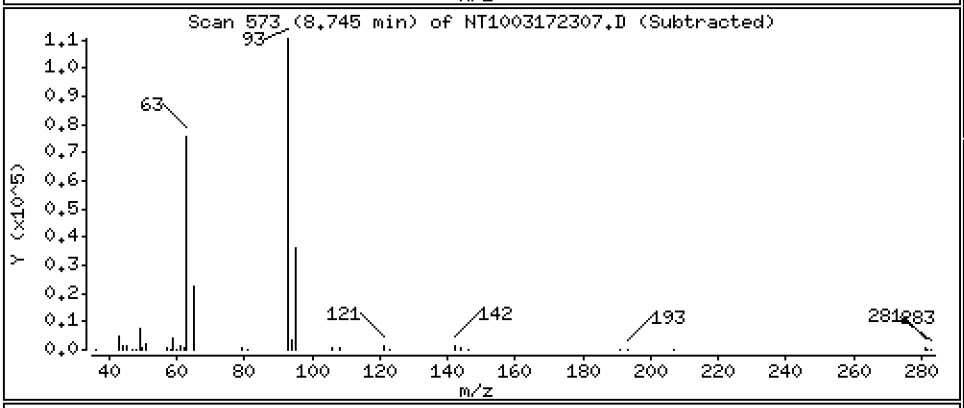
Column phase: ZB-5msi

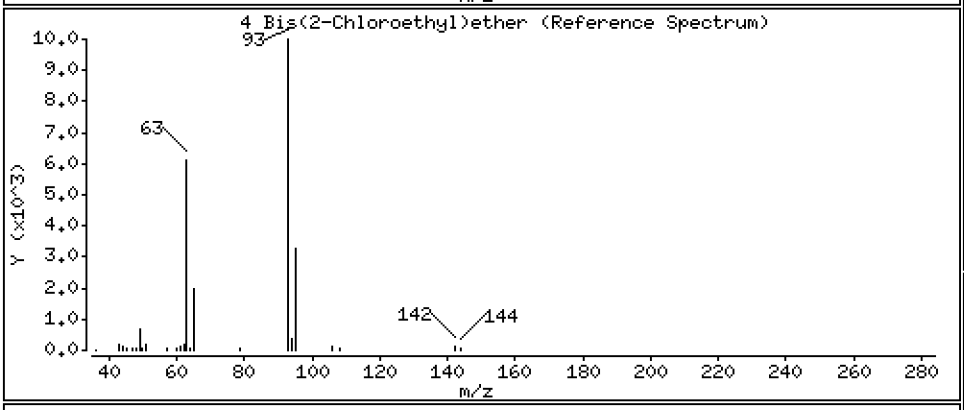
Column diameter: 0.25

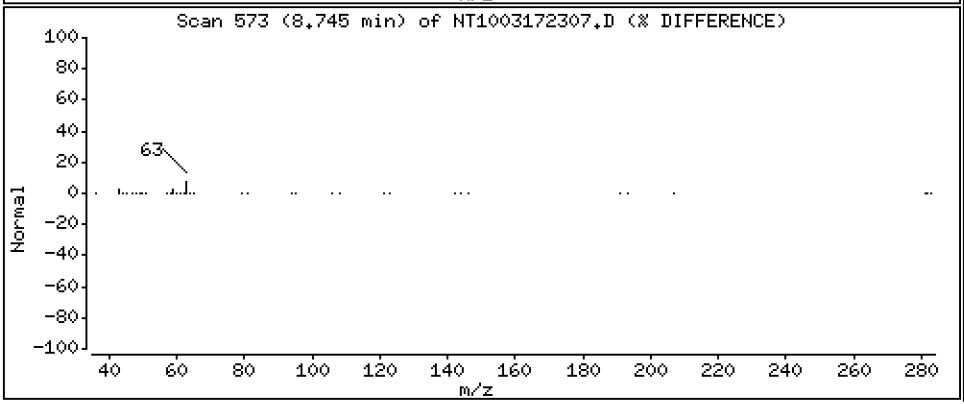
4 Bis(2-Chloroethyl)ether

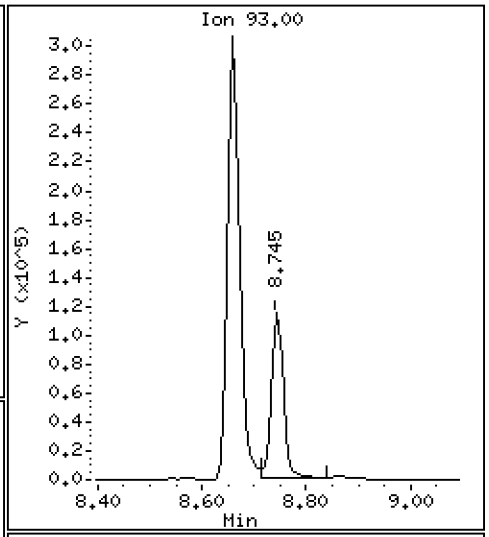
Concentration: 3.432 ug/mL

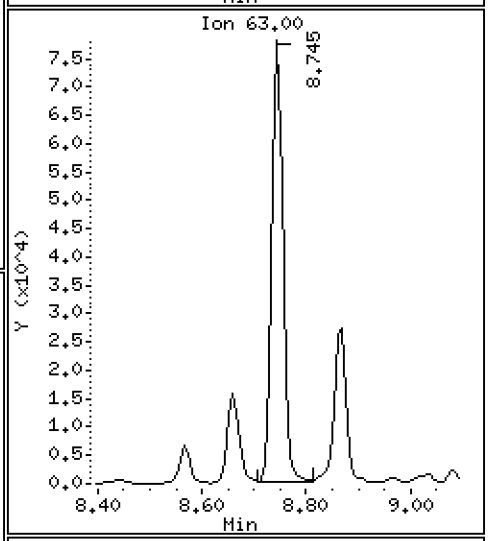


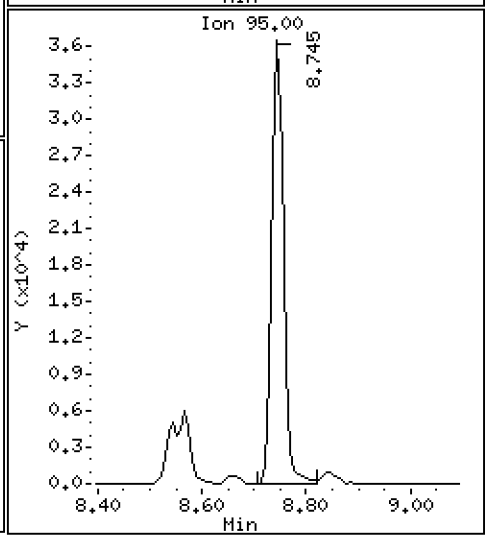












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

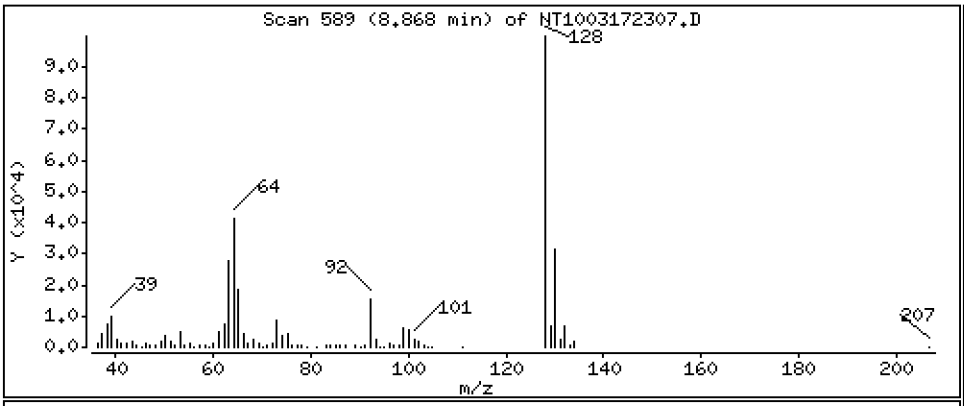
Operator: VTS

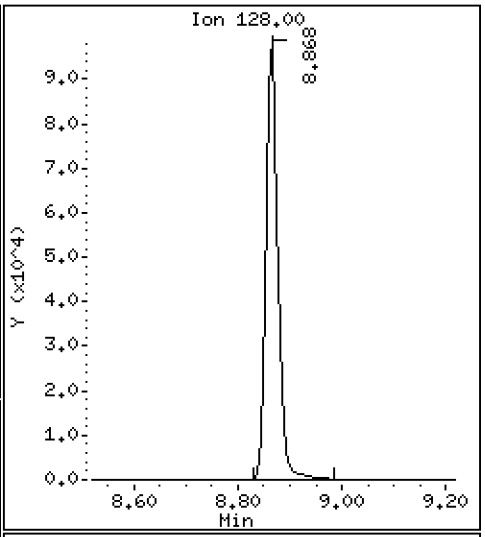
Column phase: ZB-5msi

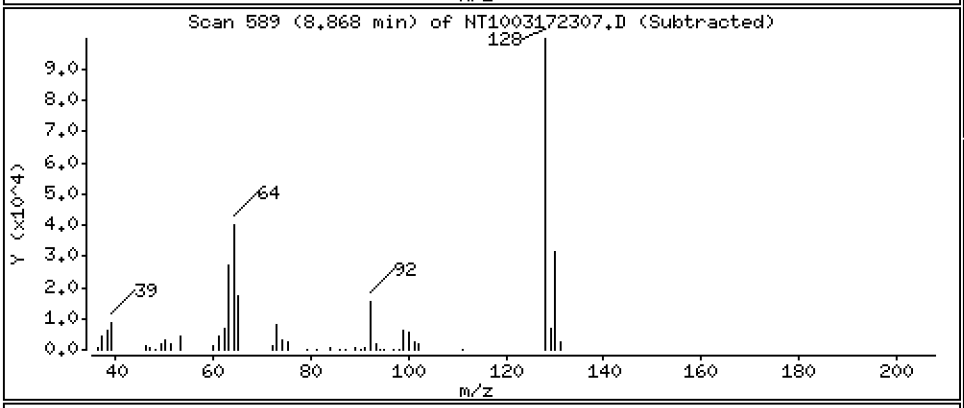
Column diameter: 0.25

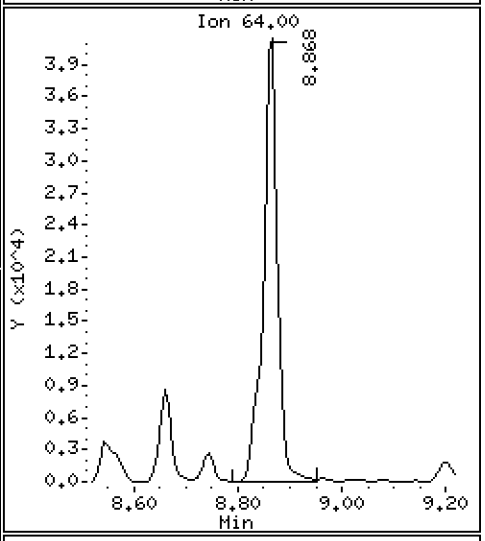
6 2-Chlorophenol

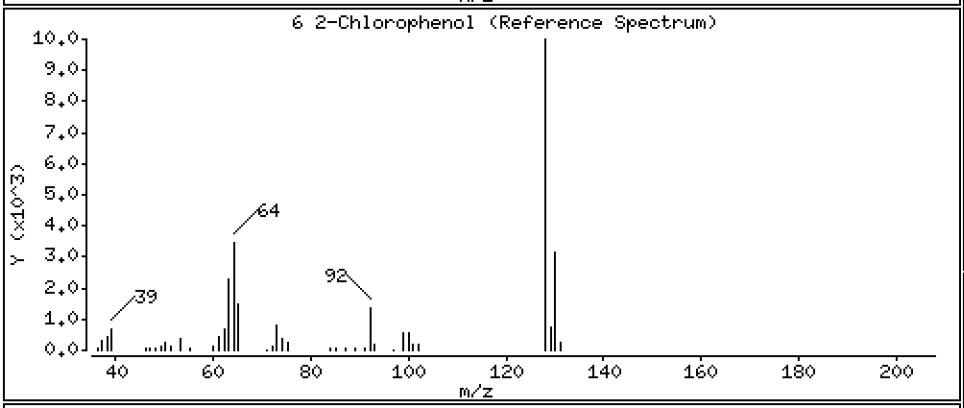
Concentration: 2.661 ug/mL

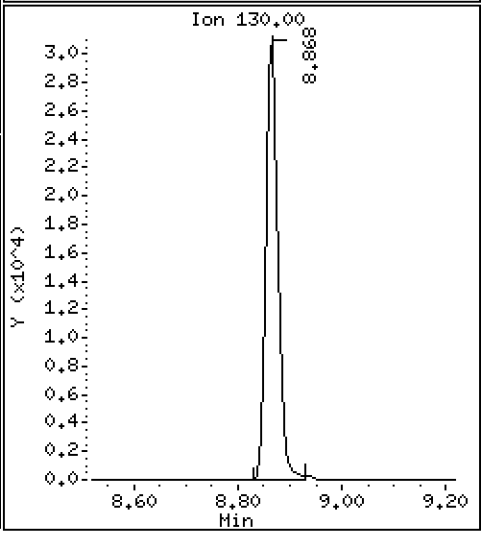


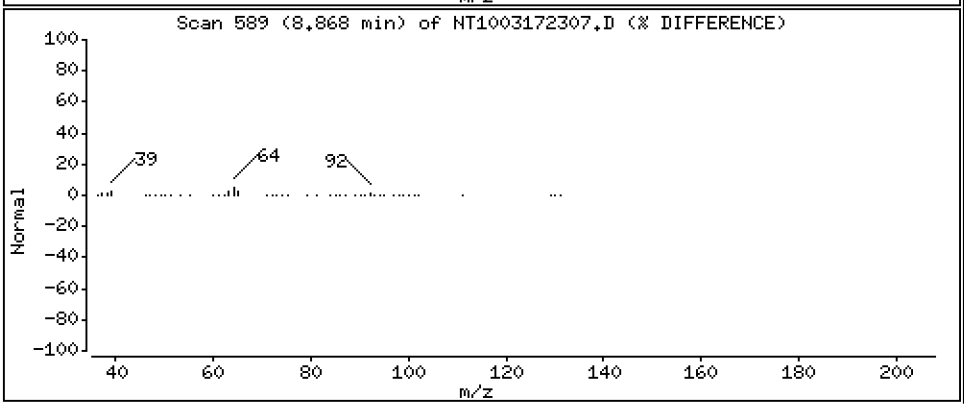












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

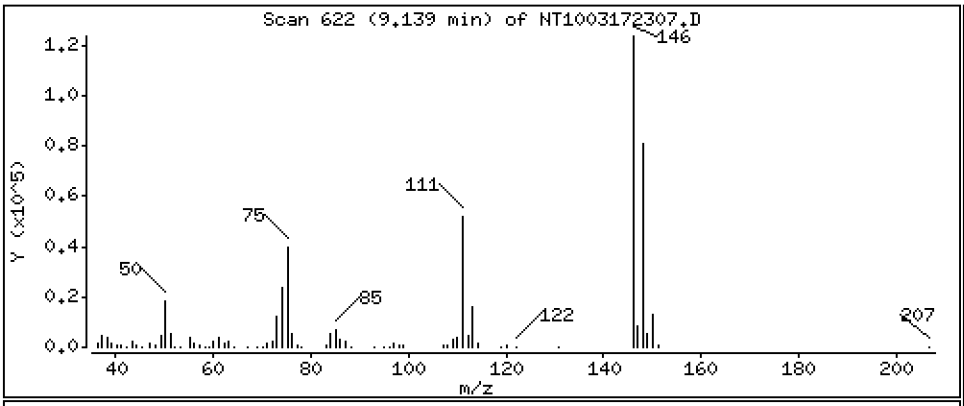
Operator: VTS

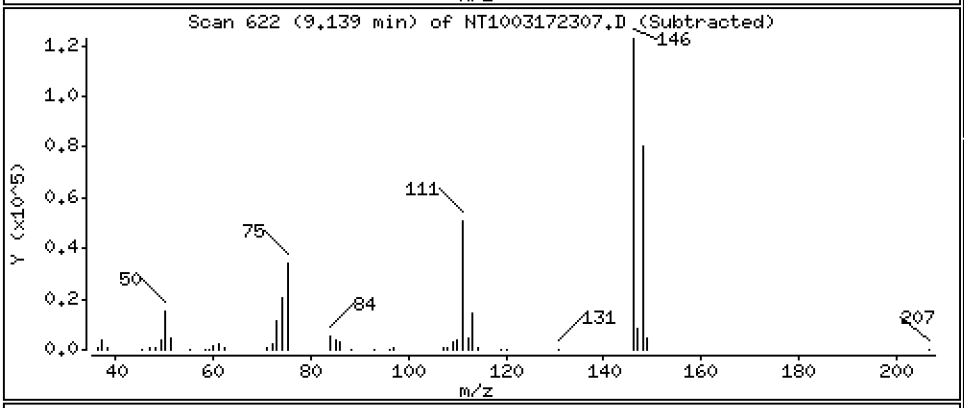
Column phase: ZB-5msi

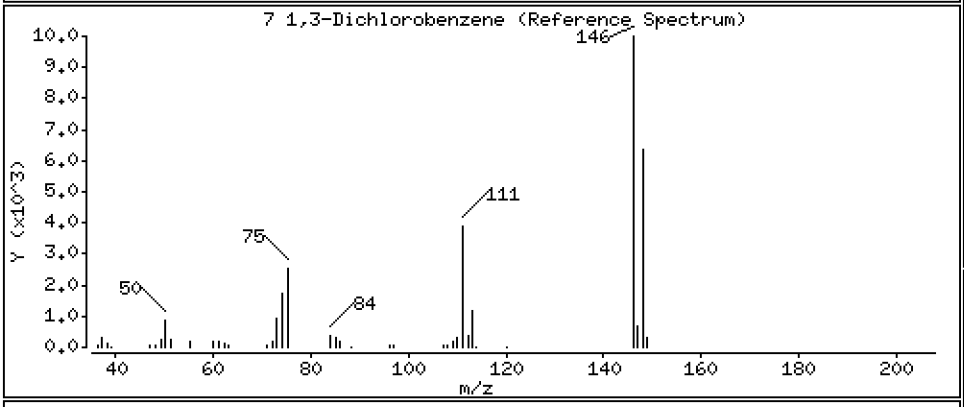
Column diameter: 0.25

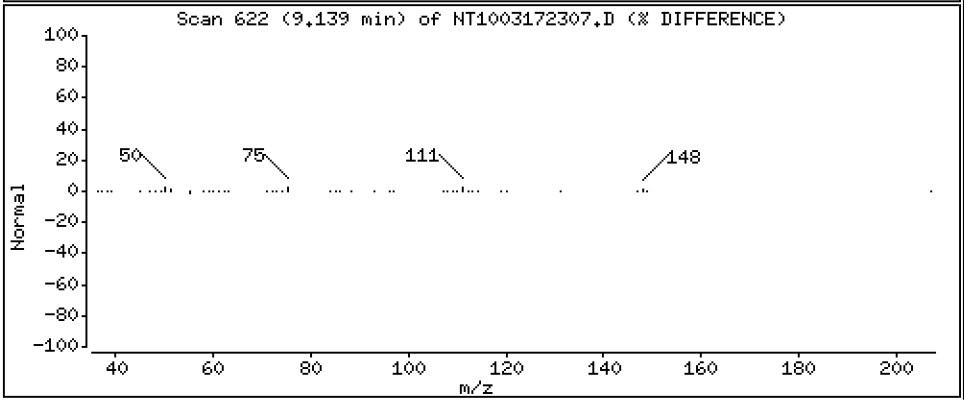
7 1,3-Dichlorobenzene

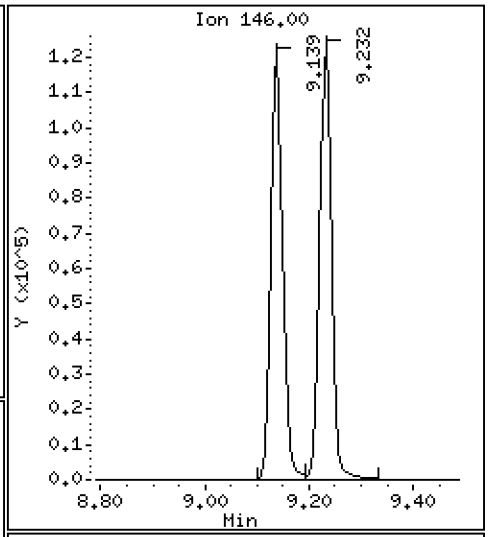
Concentration: 3.067 ug/mL

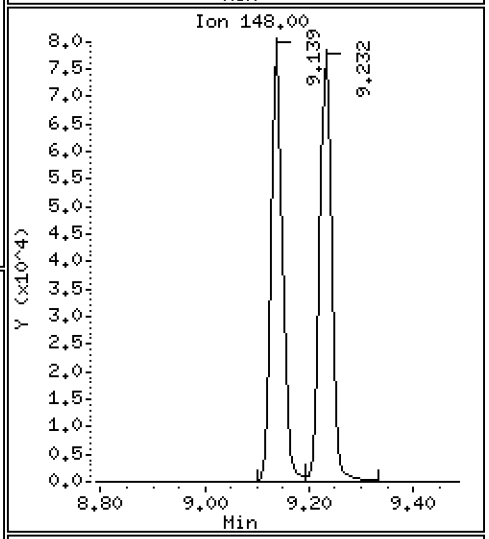


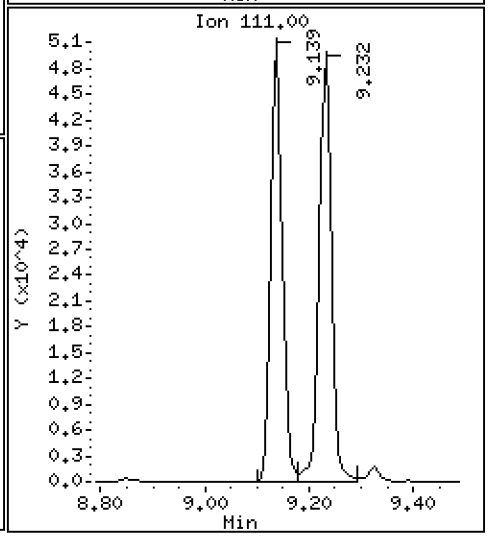












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

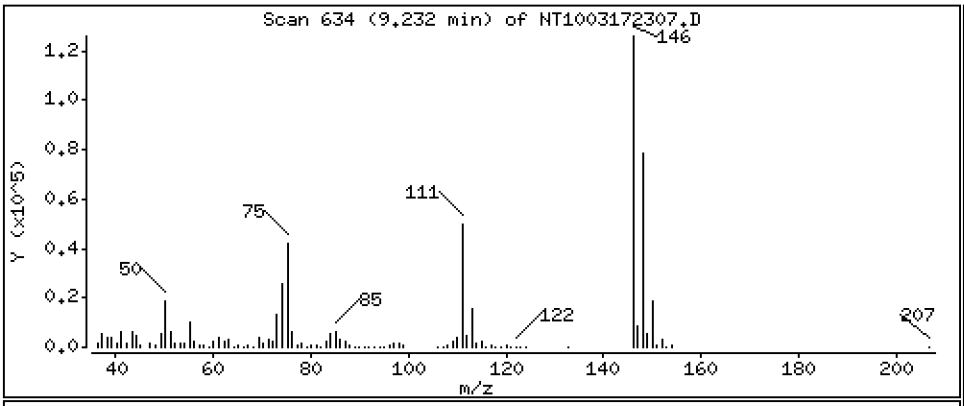
Operator: VTS

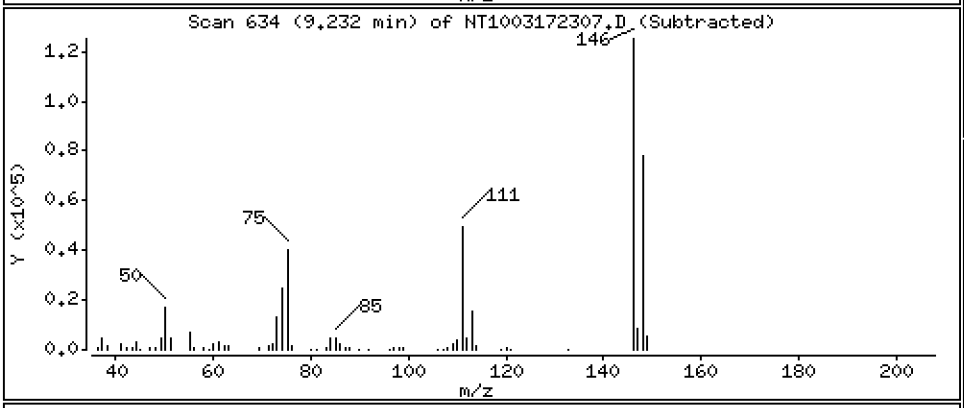
Column phase: ZB-5msi

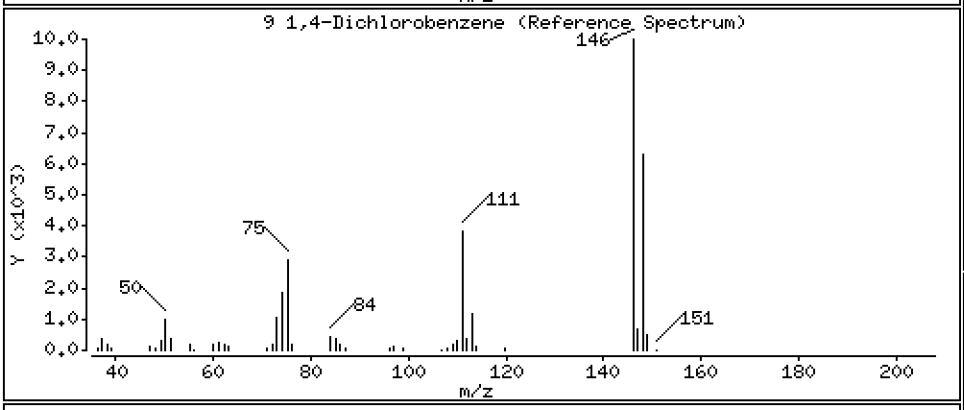
Column diameter: 0.25

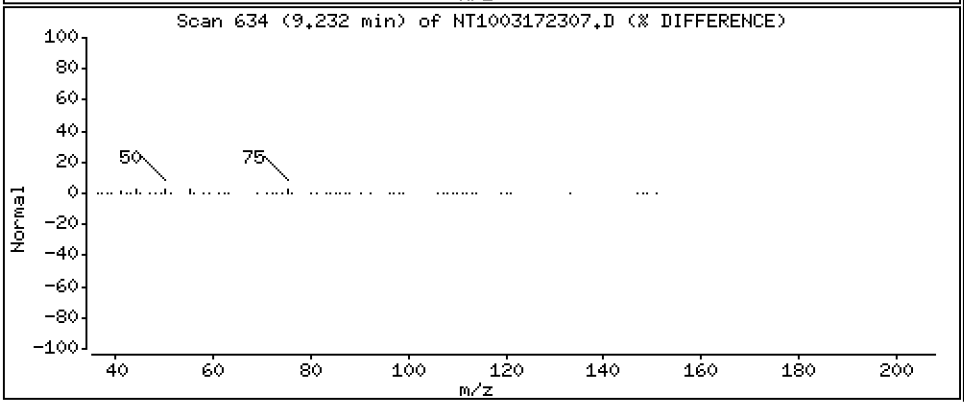
9 1,4-Dichlorobenzene

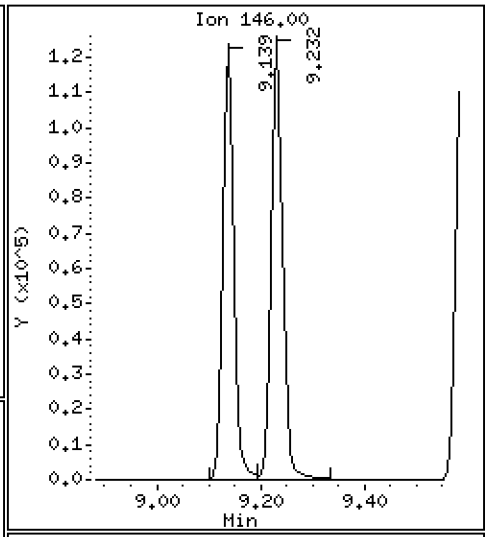
Concentration: 3.149 ug/mL

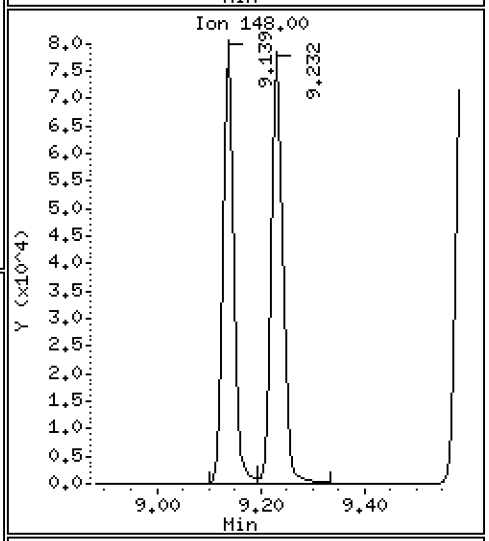


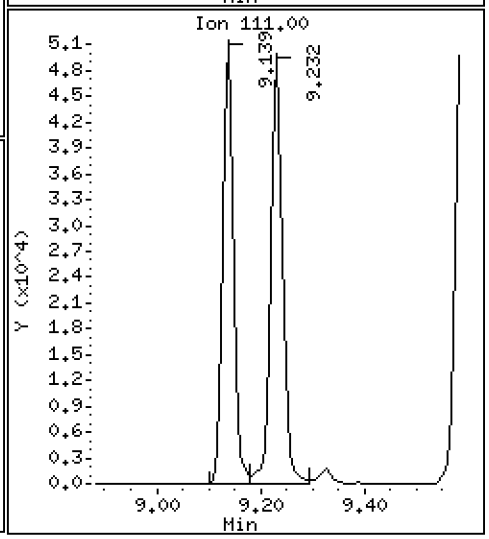












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

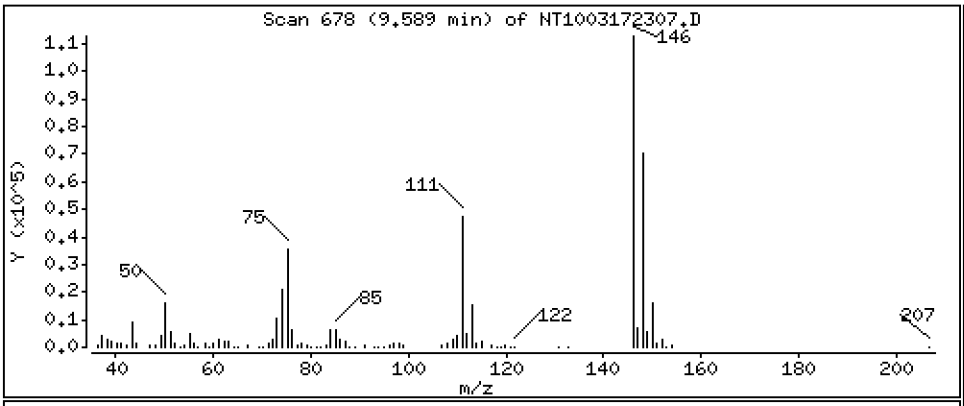
Operator: VTS

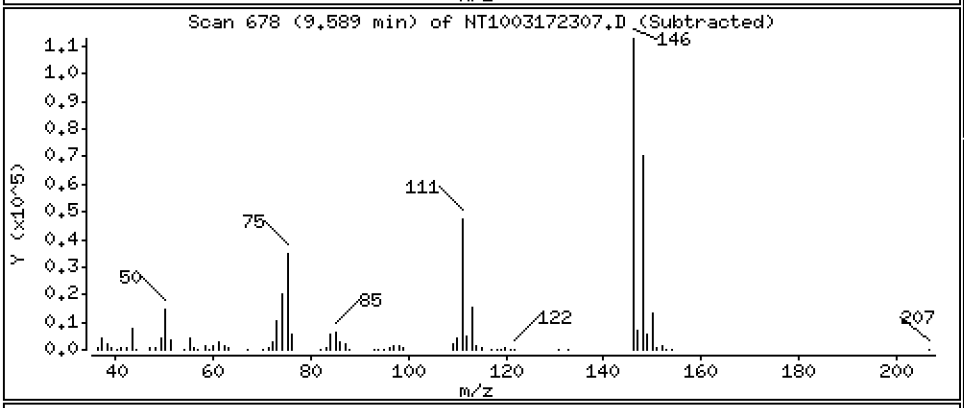
Column phase: ZB-5msi

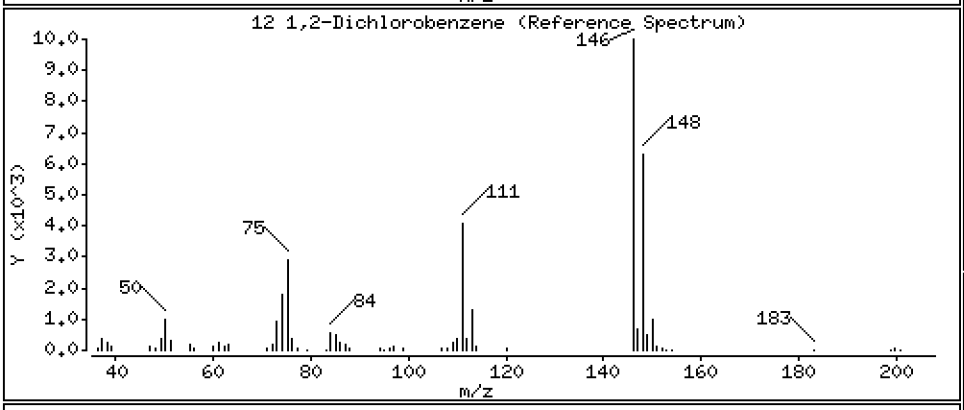
Column diameter: 0.25

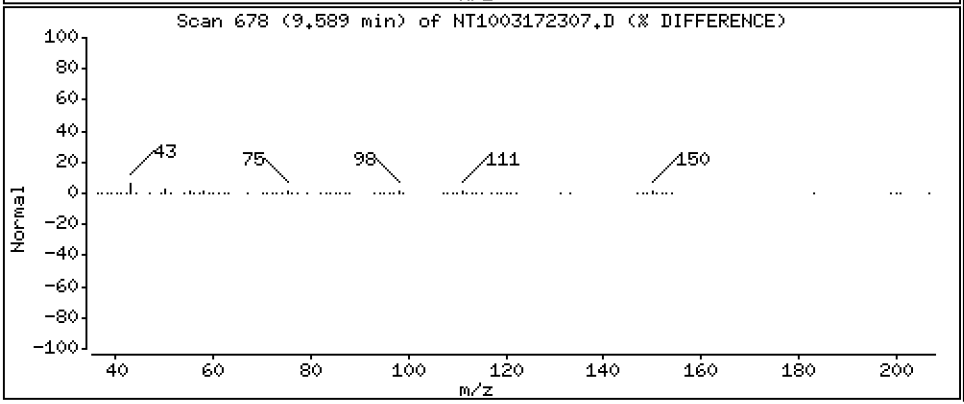
12 1,2-Dichlorobenzene

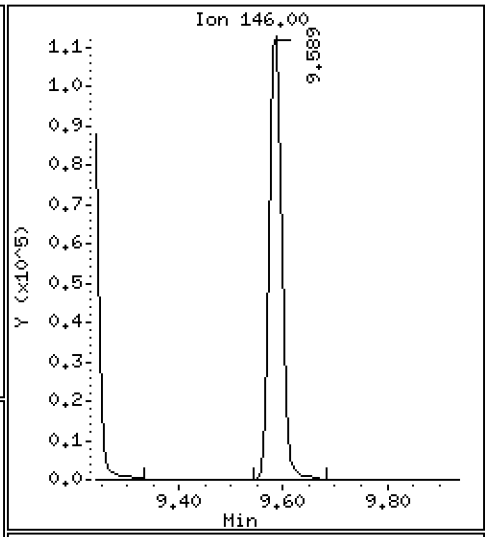
Concentration: 3.117 ug/mL

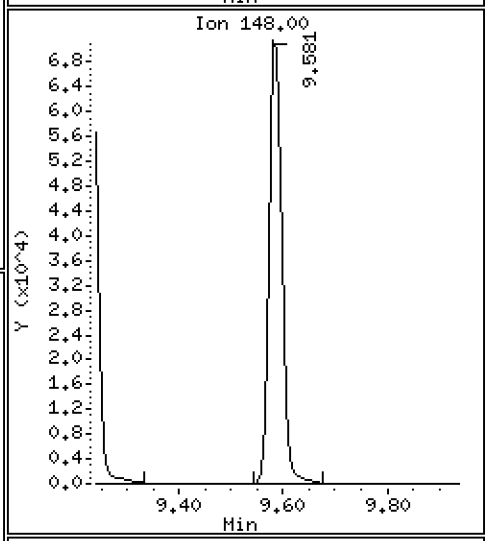


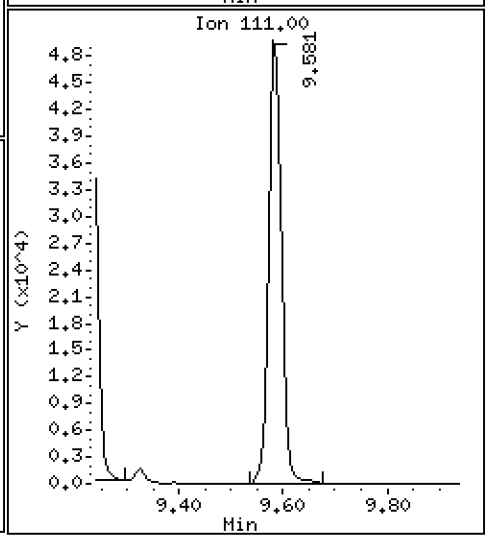












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

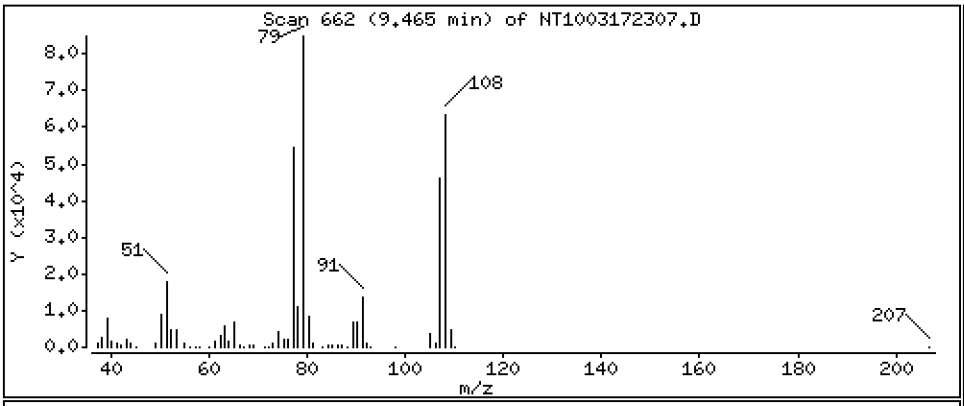
Operator: VTS

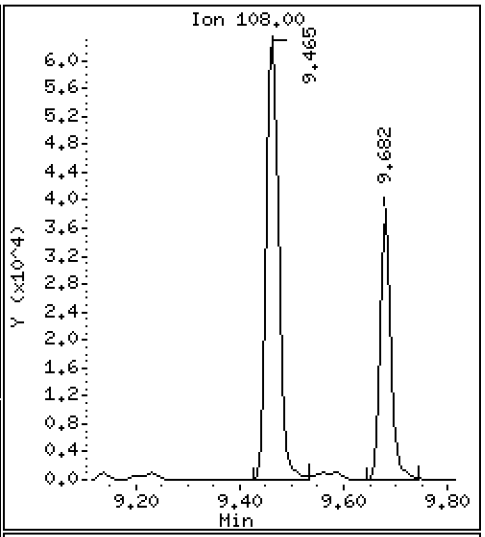
Column phase: ZB-5msi

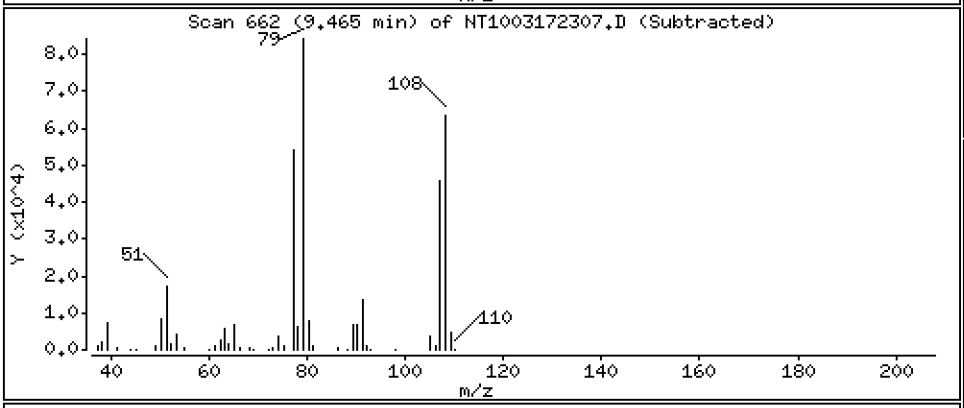
Column diameter: 0.25

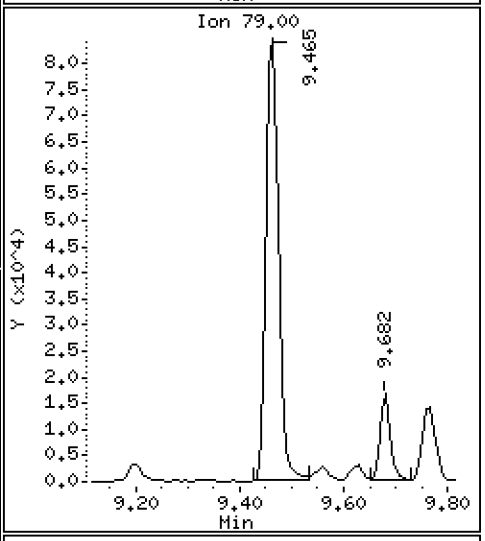
11 Benzyl alcohol

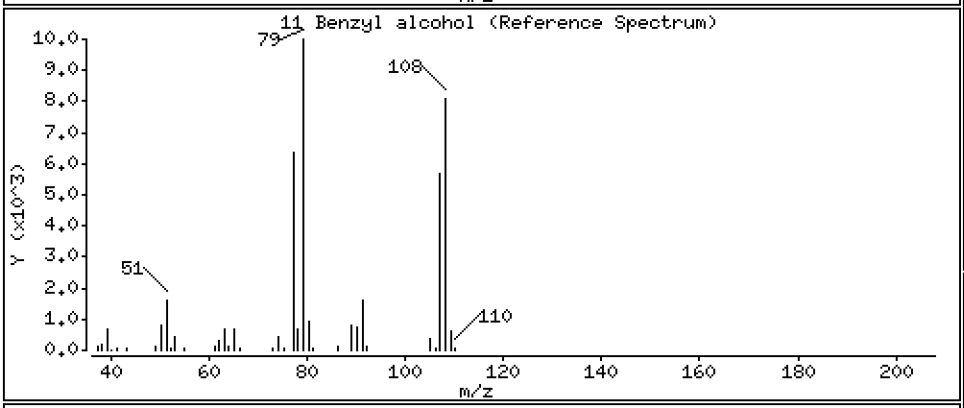
Concentration: 3.154 ug/mL

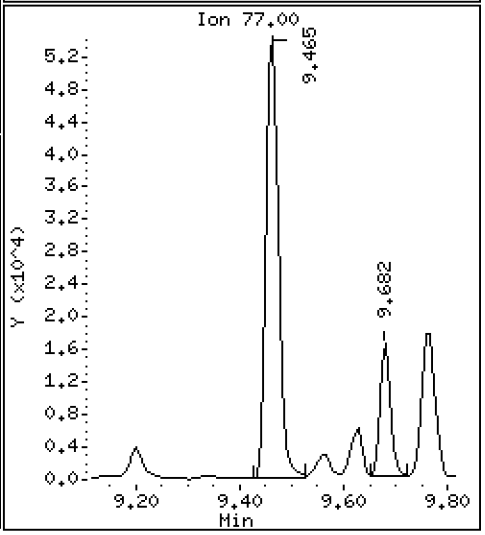


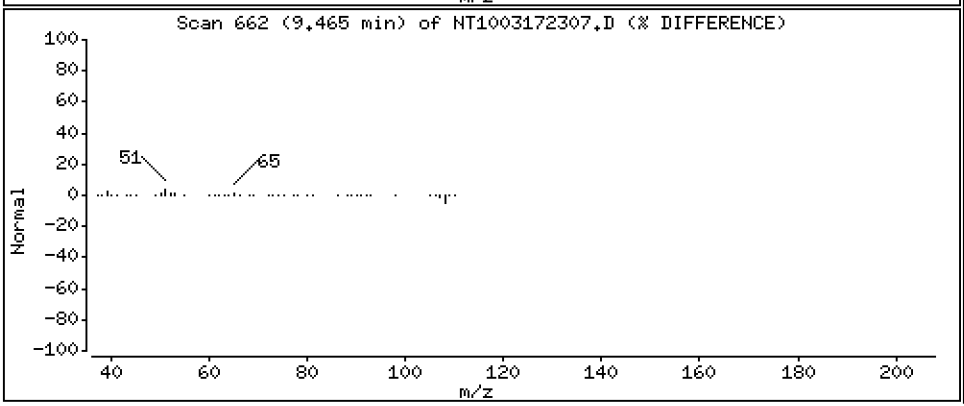












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

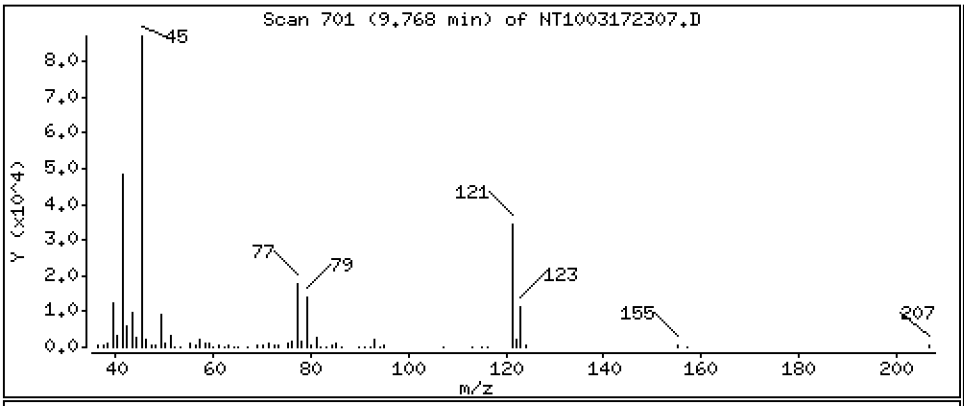
Operator: VTS

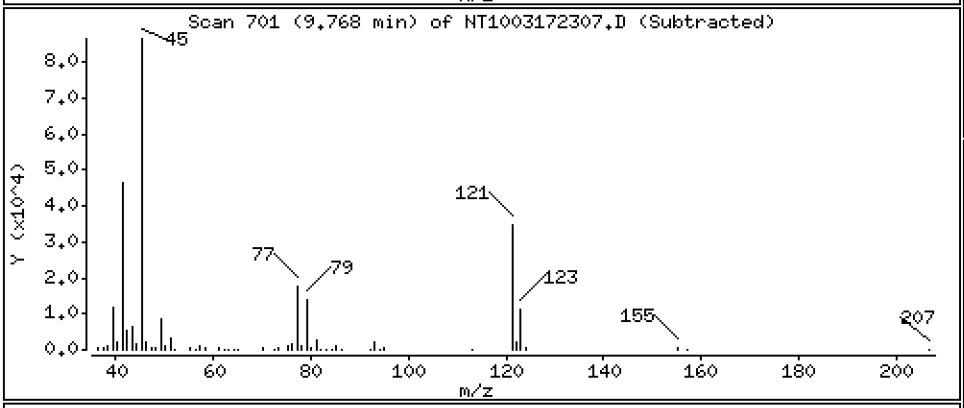
Column phase: ZB-5msi

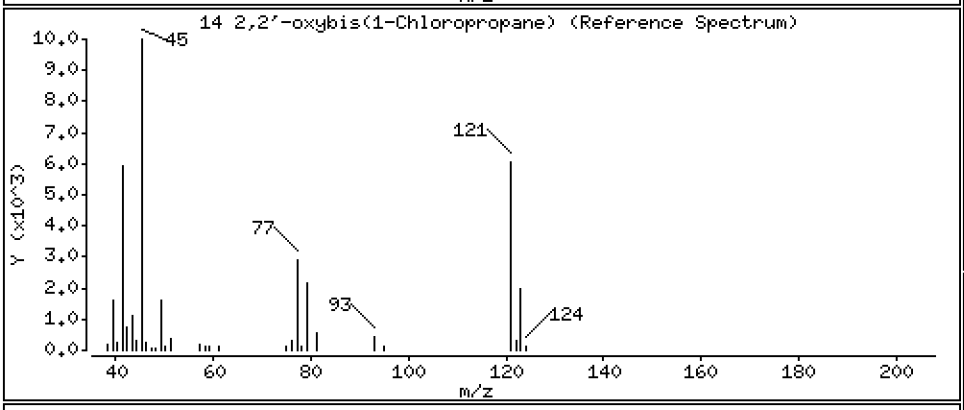
Column diameter: 0.25

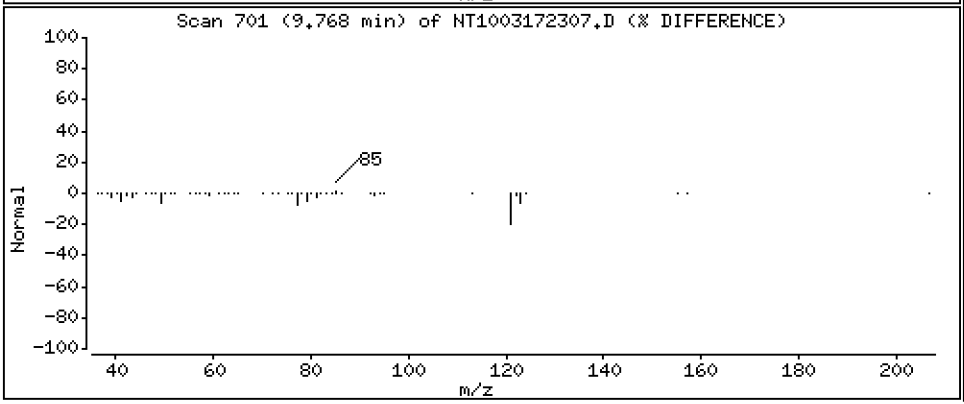
14 2,2'-oxybis(1-Chloropropane)

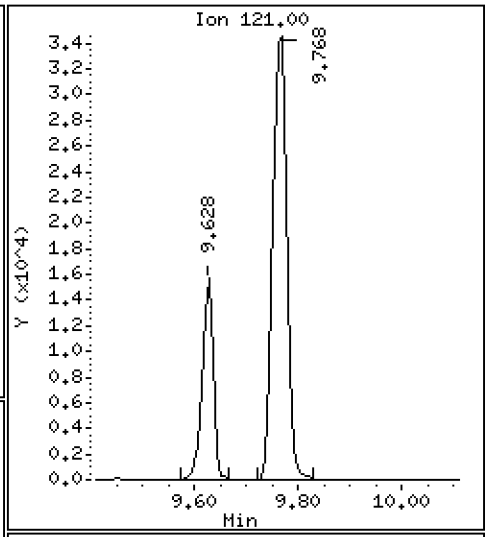
Concentration: 3.676 ug/mL

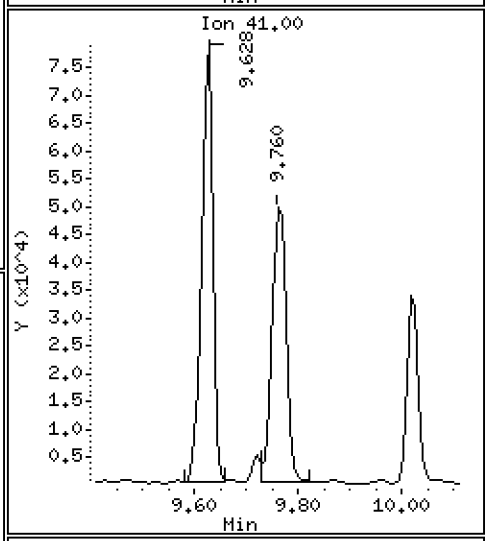


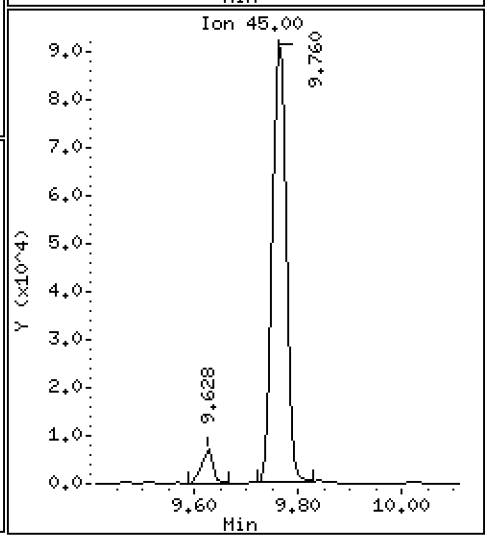












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

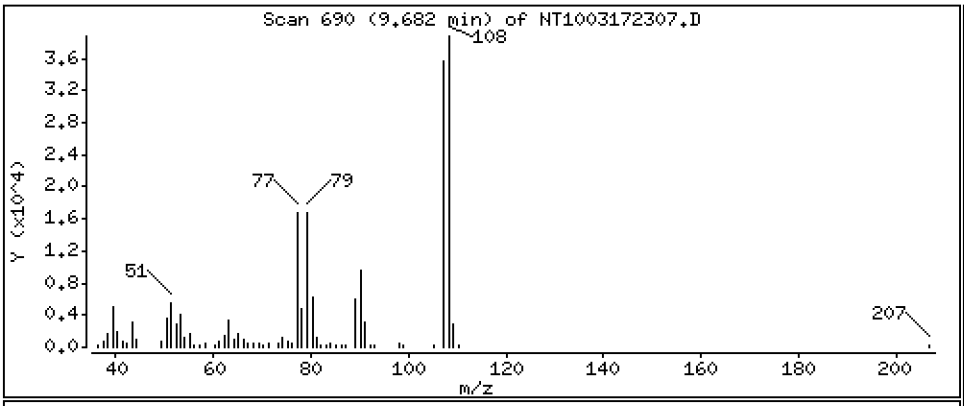
Operator: VTS

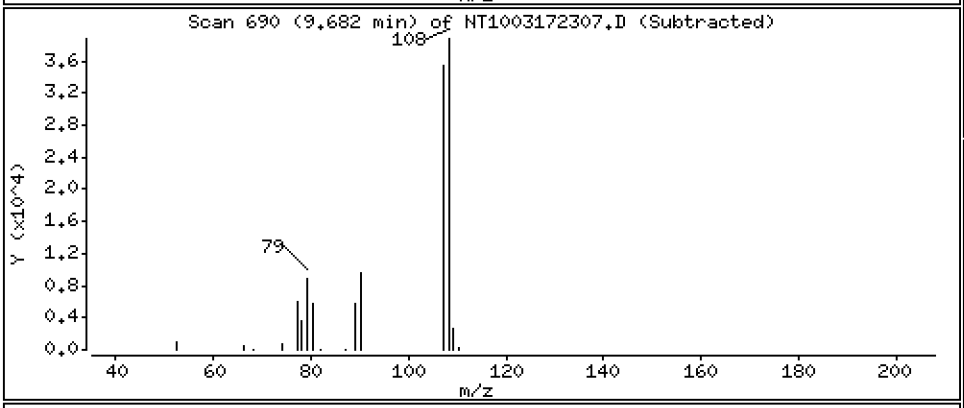
Column phase: ZB-5msi

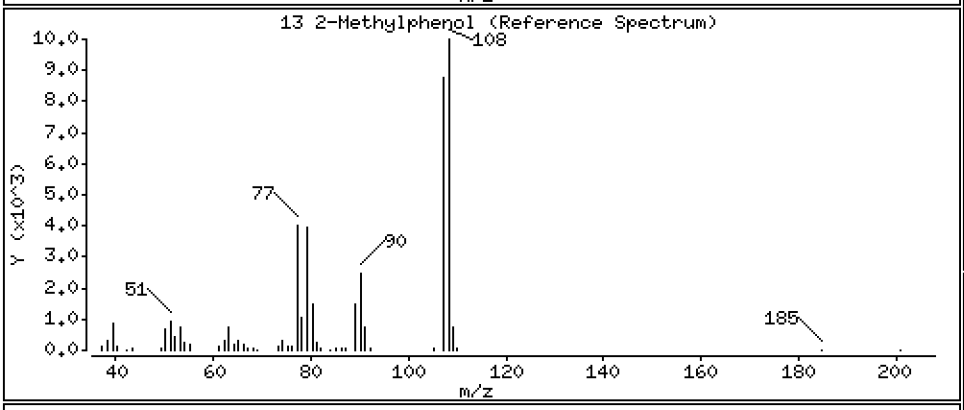
Column diameter: 0.25

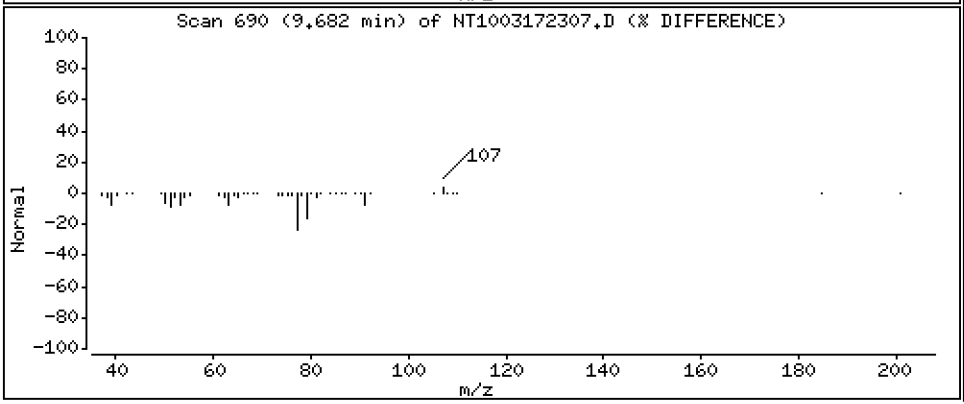
13 2-Methylphenol

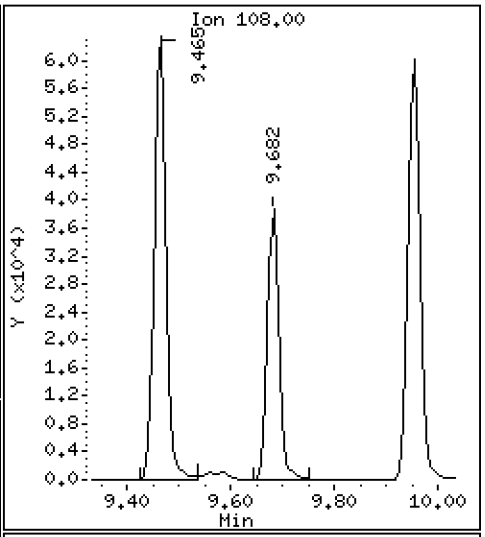
Concentration: 1.148 ug/mL

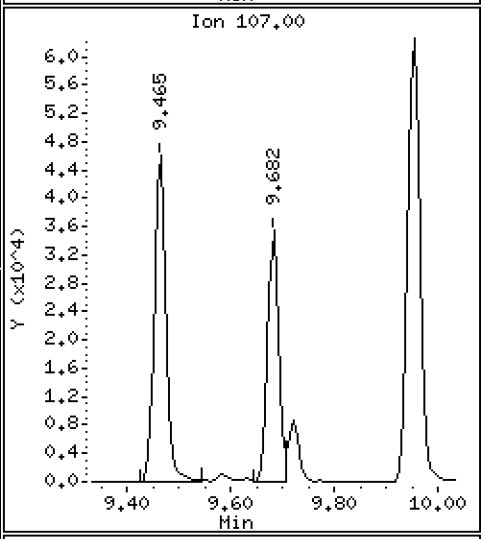


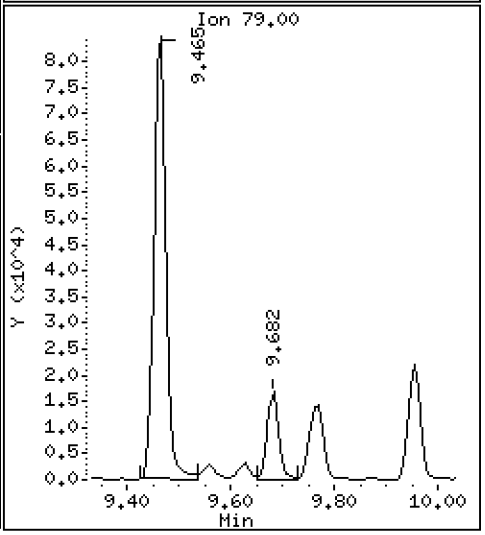












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

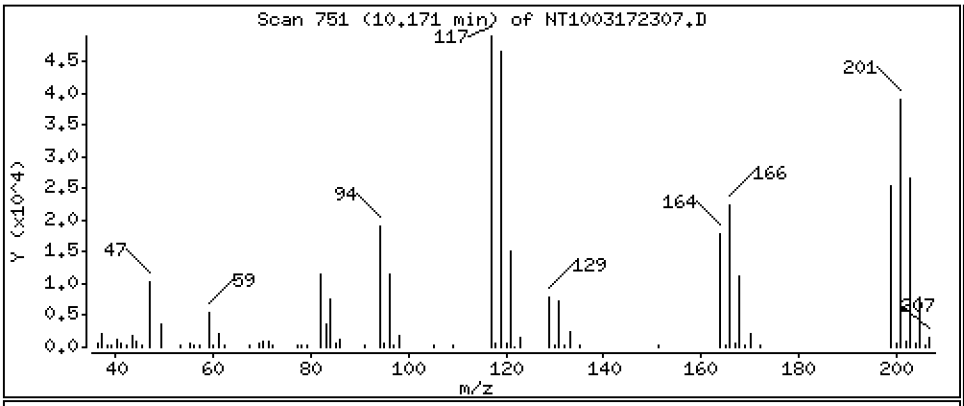
Operator: VTS

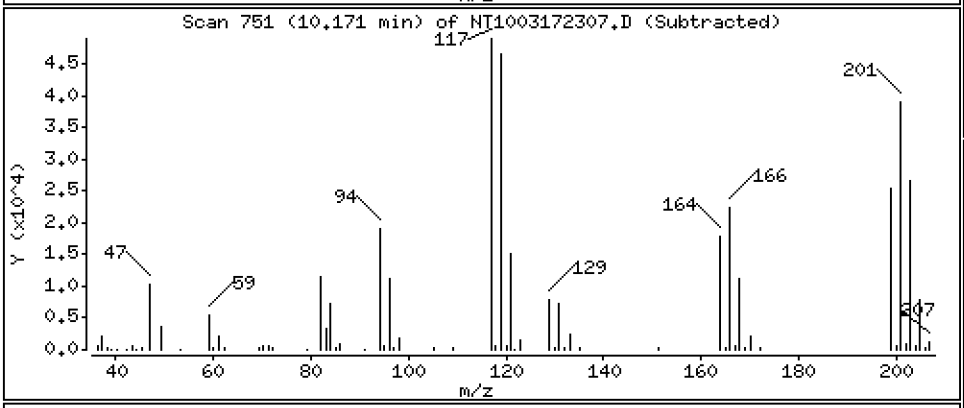
Column phase: ZB-5msi

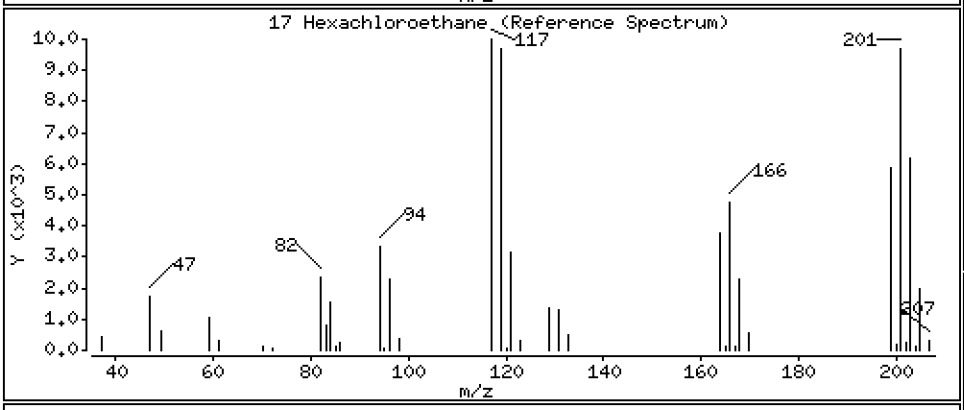
Column diameter: 0.25

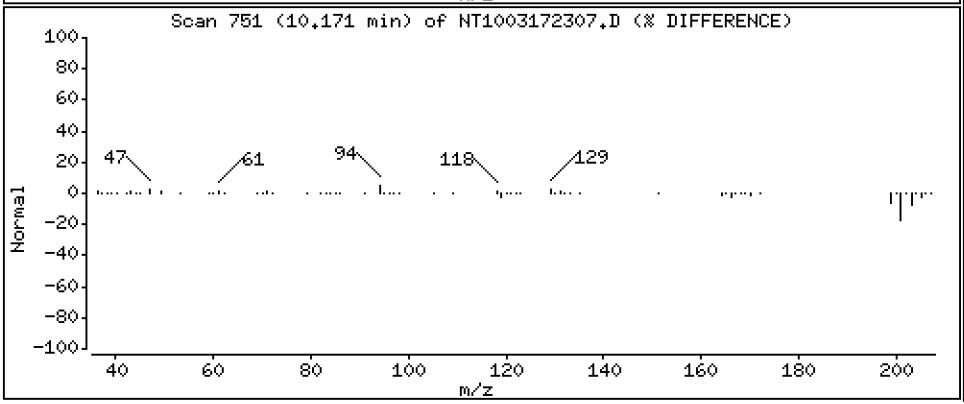
17 Hexachloroethane

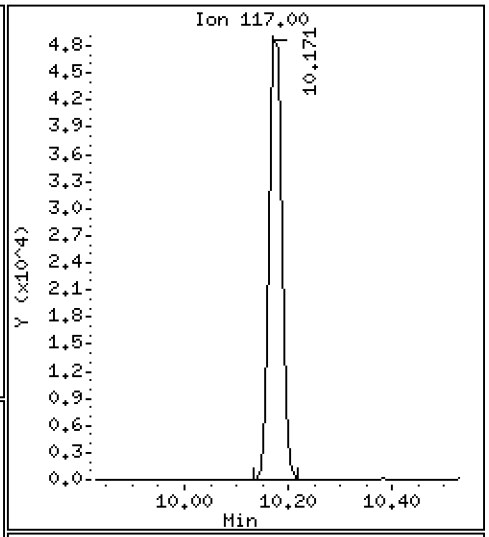
Concentration: 3.221 ug/mL

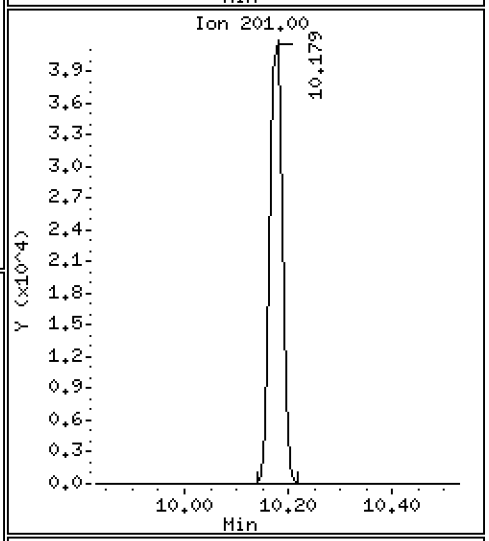


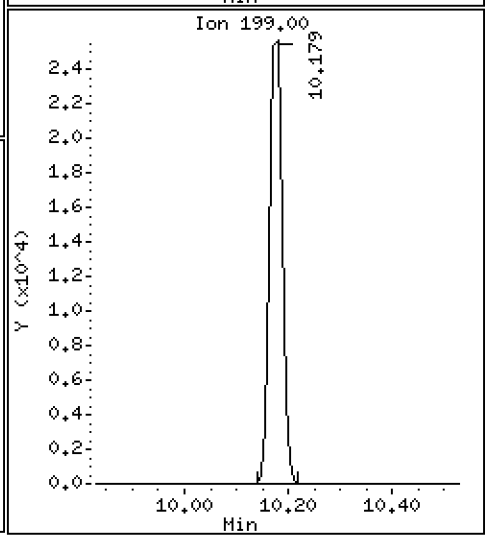












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

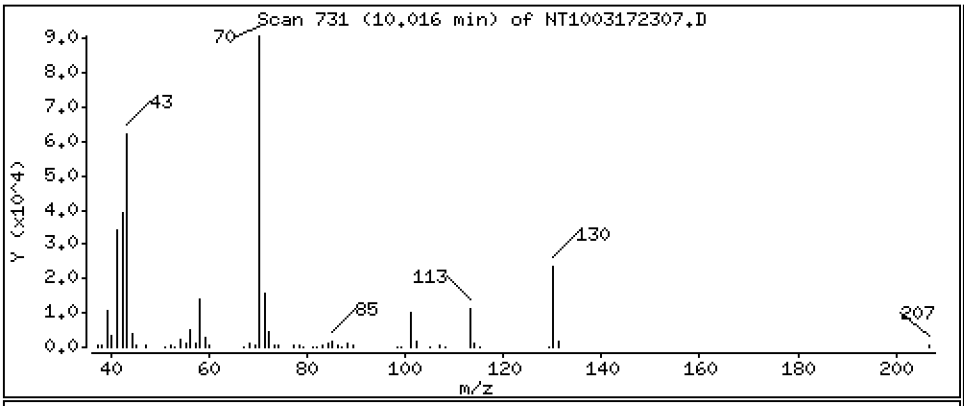
Operator: VTS

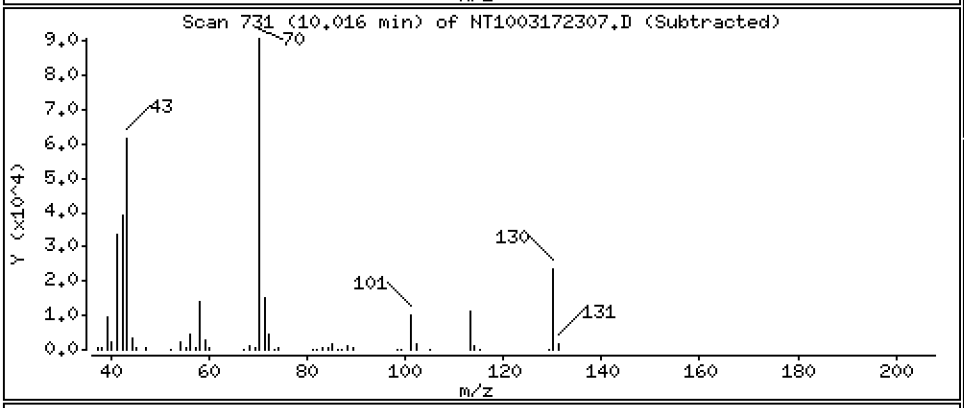
Column phase: ZB-5msi

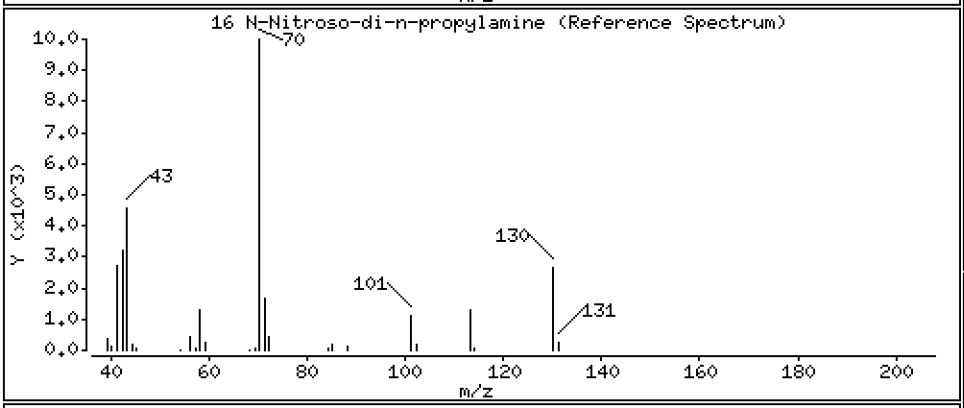
Column diameter: 0.25

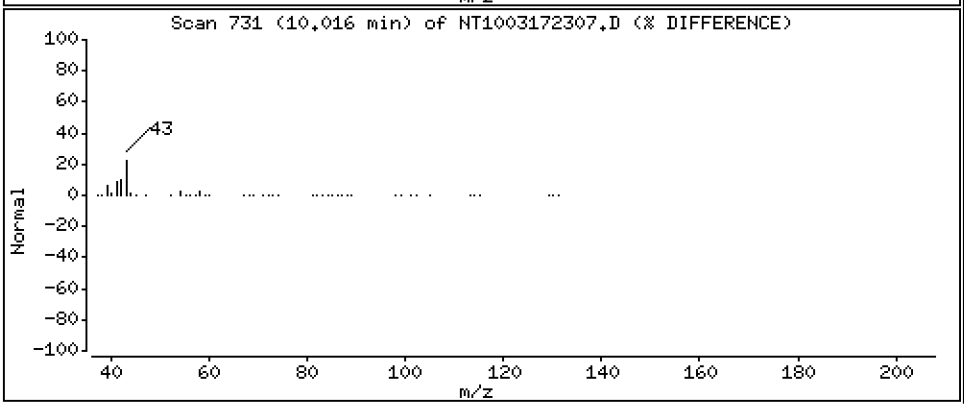
16 N-Nitroso-di-n-propylamine

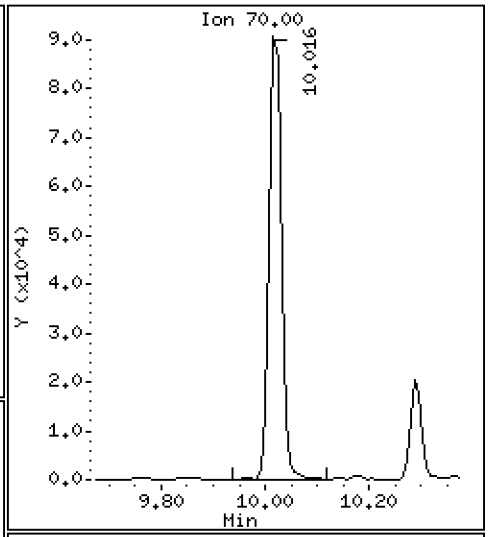
Concentration: 3.606 ug/mL

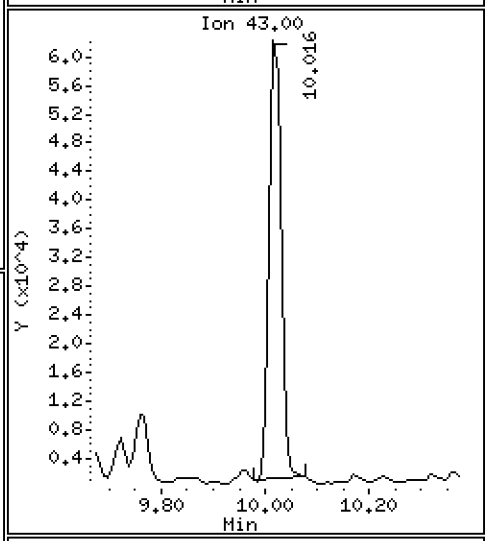


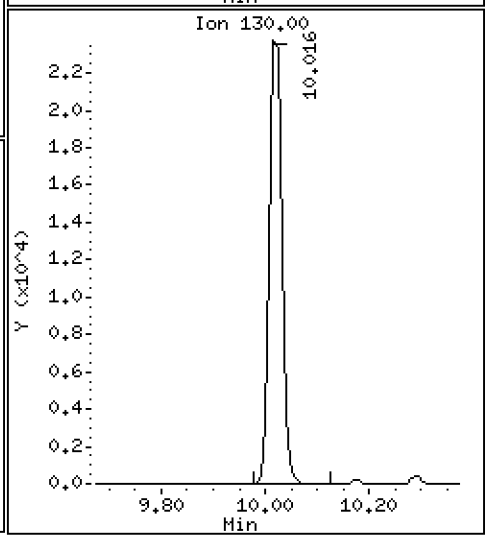












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172307.D

Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

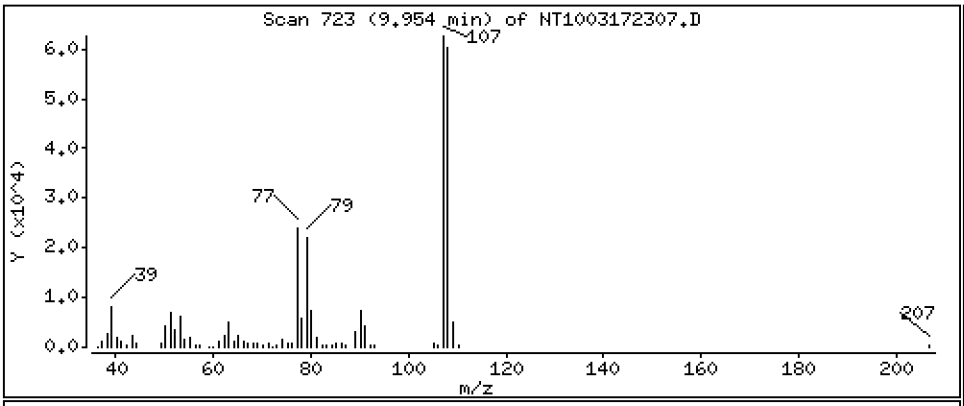
Operator: VTS

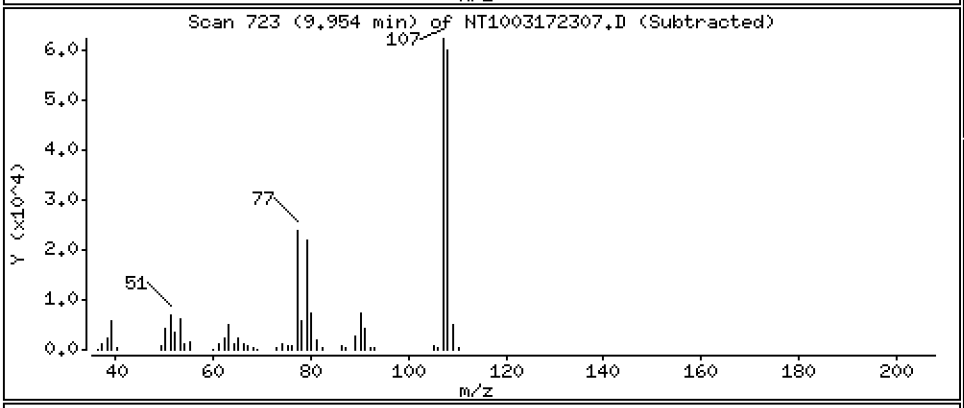
Column phase: ZB-5msi

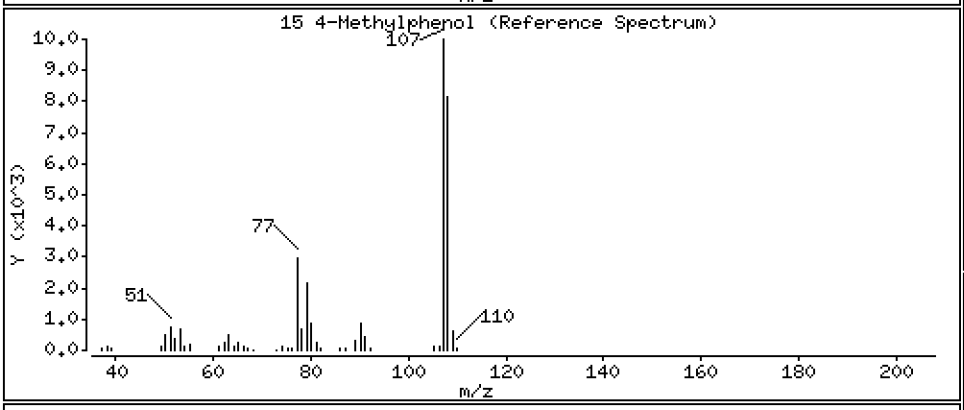
Column diameter: 0.25

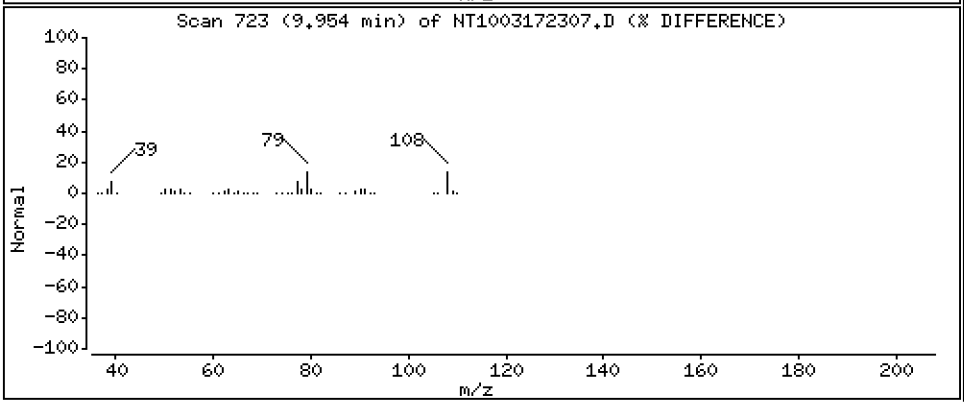
15 4-Methylphenol

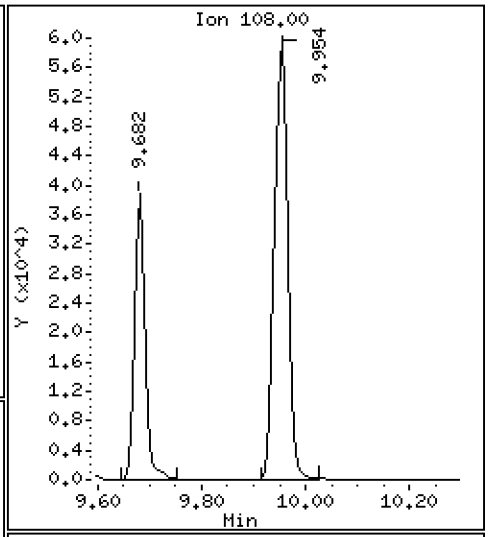
Concentration: 1.993 ug/mL

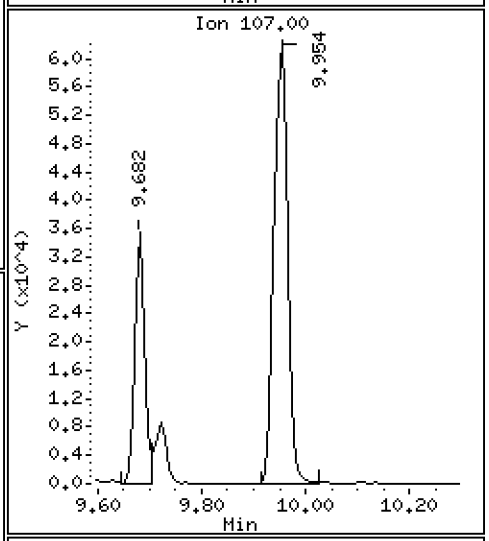


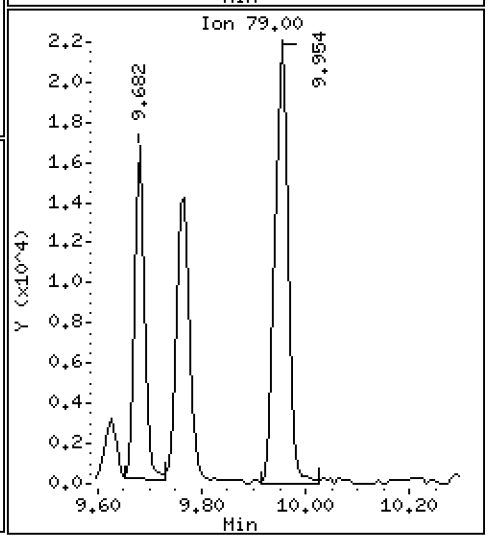












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

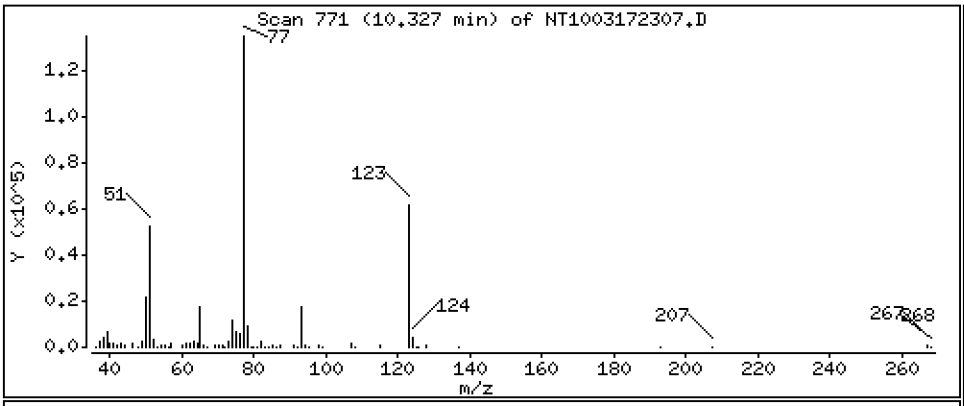
Operator: VTS

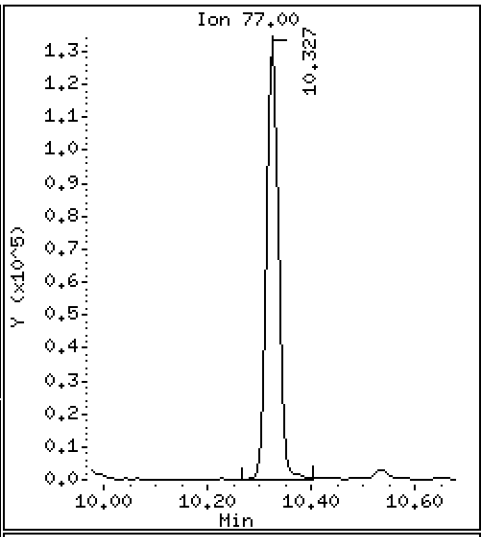
Column phase: ZB-5msi

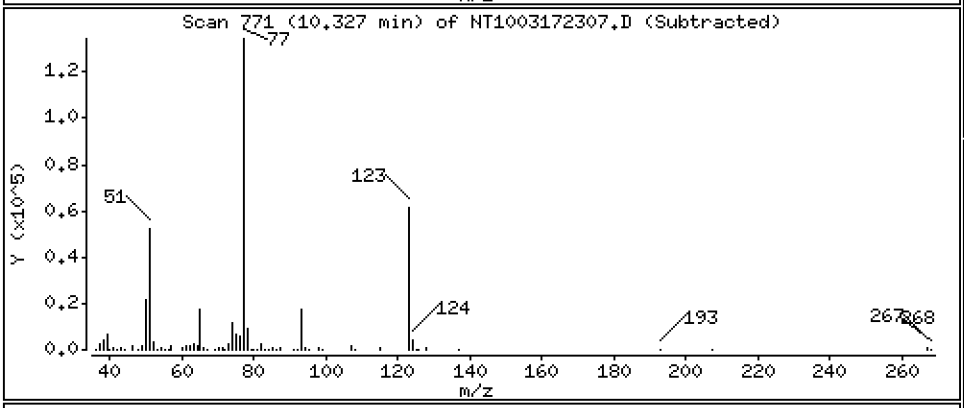
Column diameter: 0.25

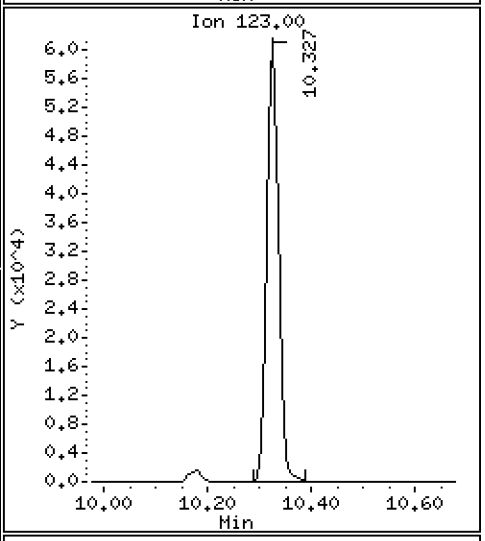
19 Nitrobenzene

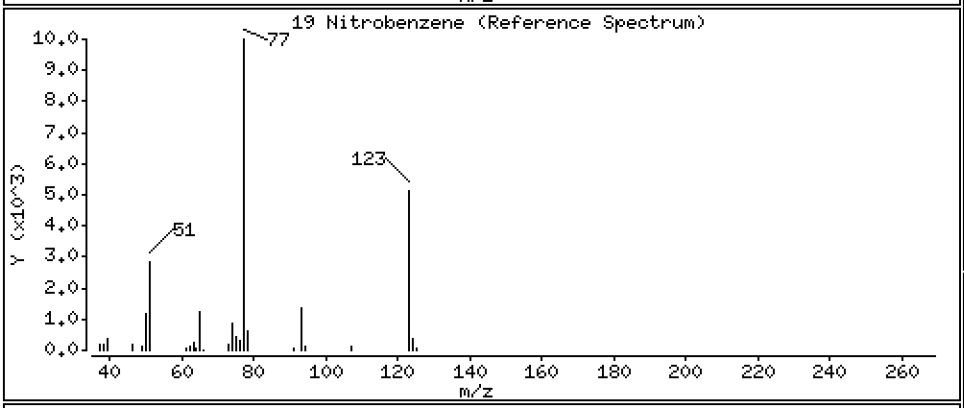
Concentration: 3.400 ug/mL

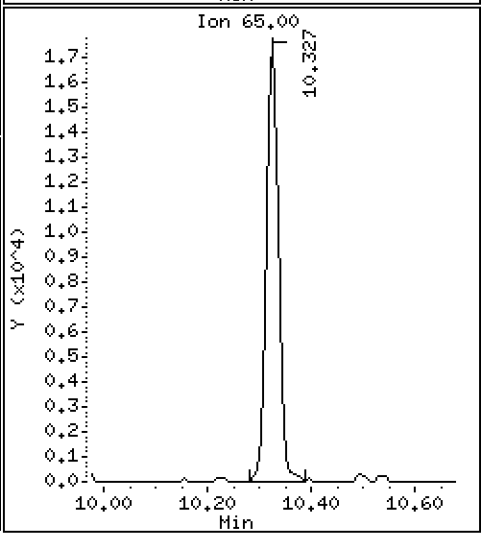


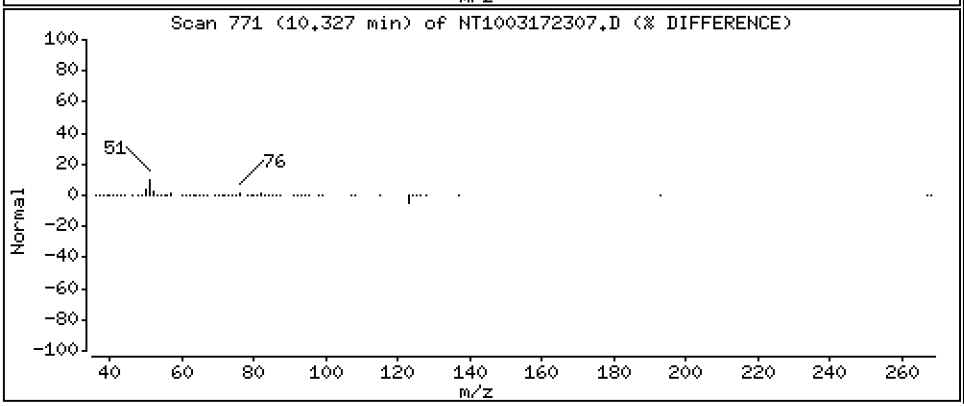












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

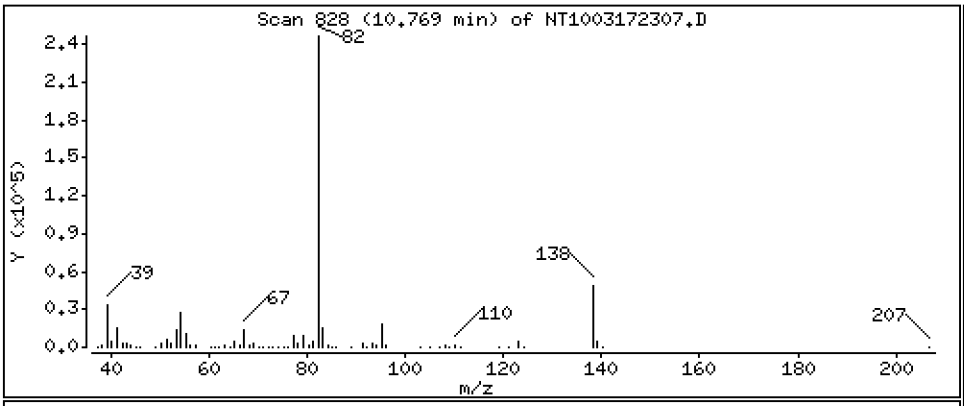
Operator: VTS

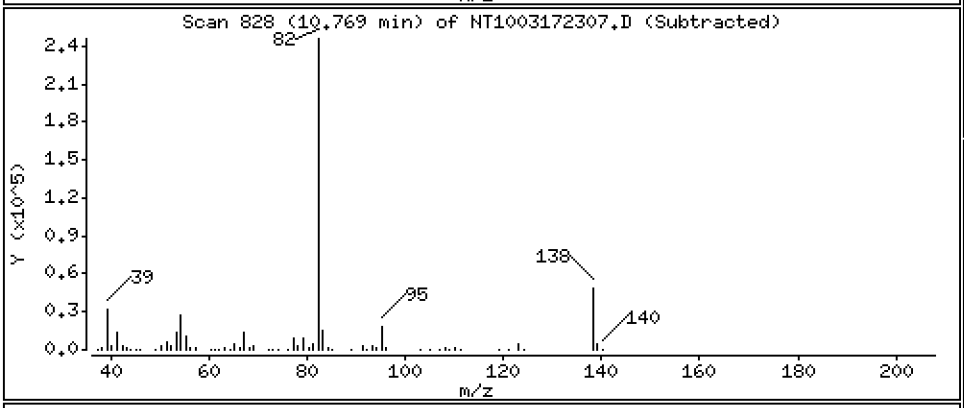
Column phase: ZB-5msi

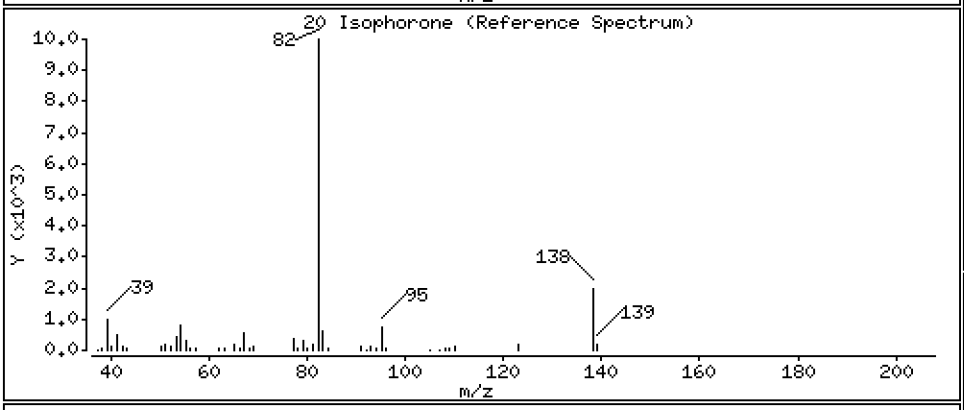
Column diameter: 0.25

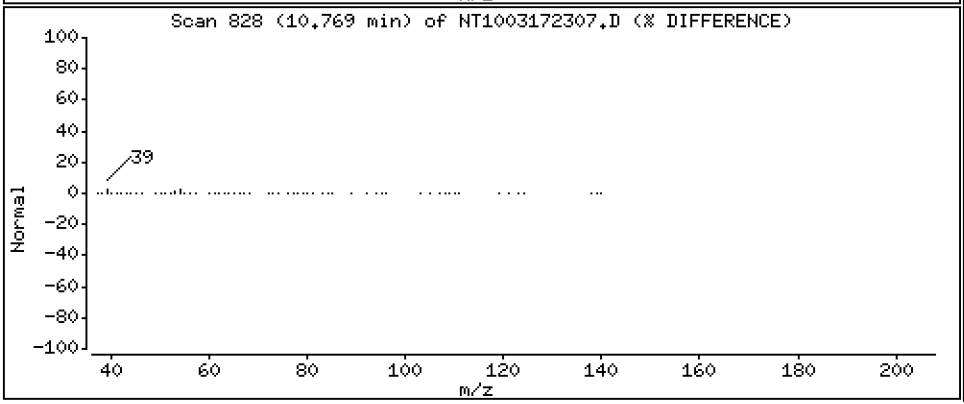
20 Isophorone

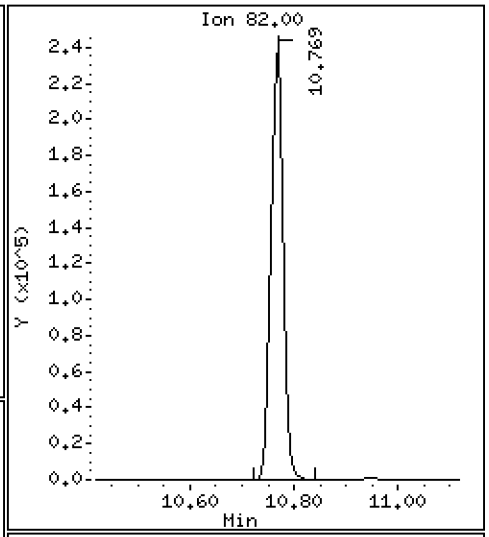
Concentration: 5.038 ug/mL

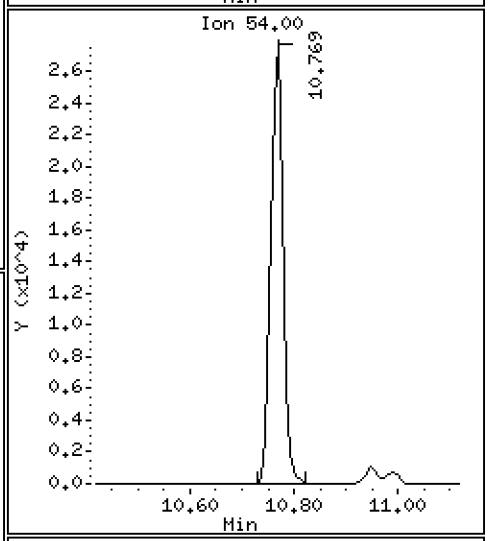


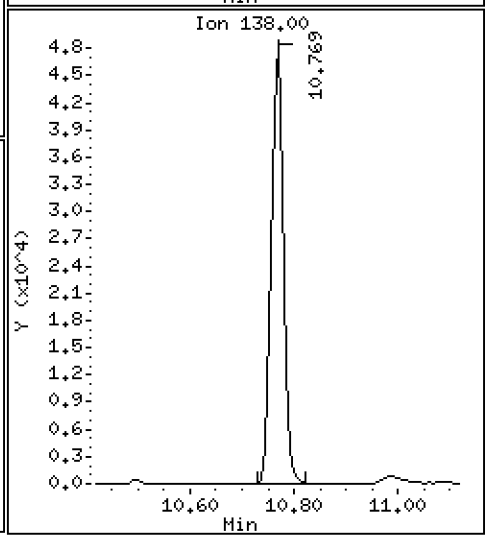












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

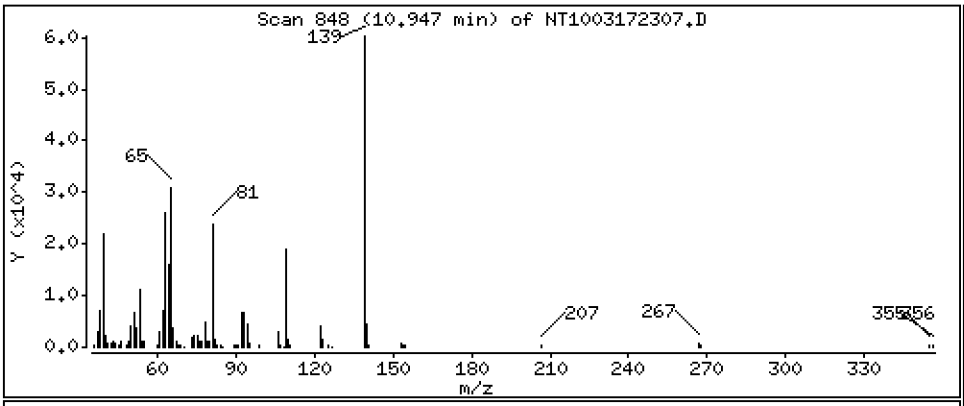
Operator: VTS

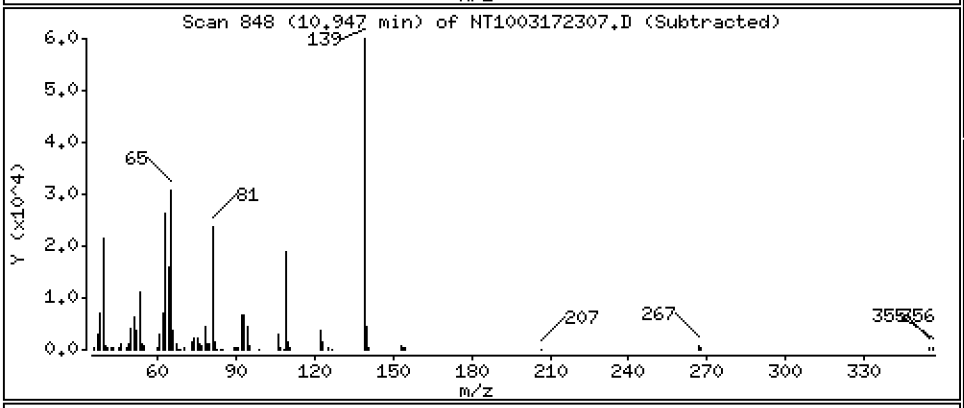
Column phase: ZB-5msi

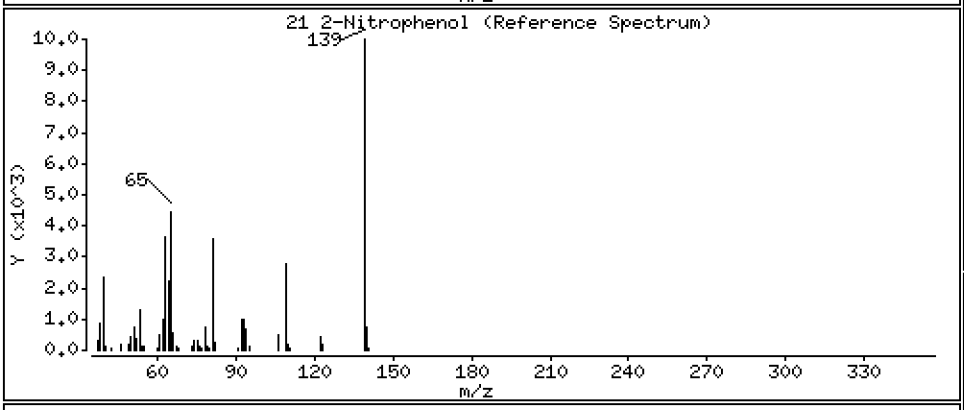
Column diameter: 0.25

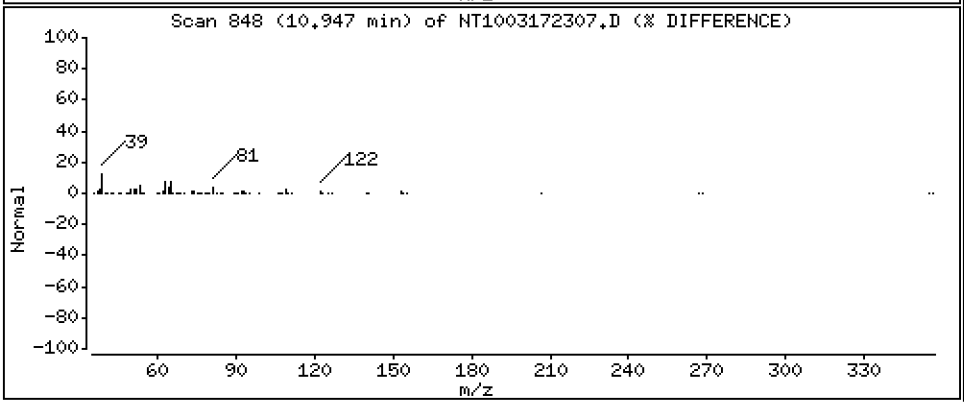
21 2-Nitrophenol

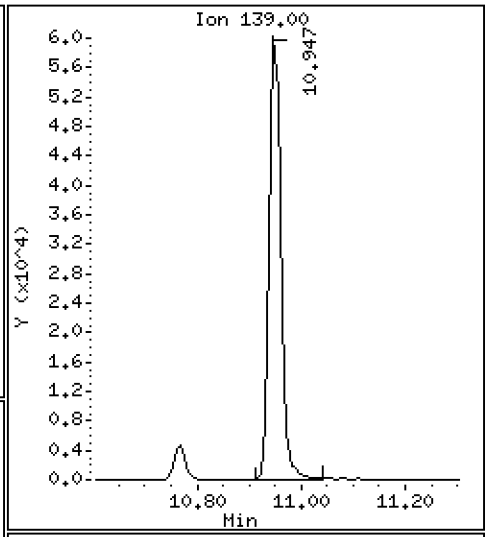
Concentration: 3.319 ug/mL

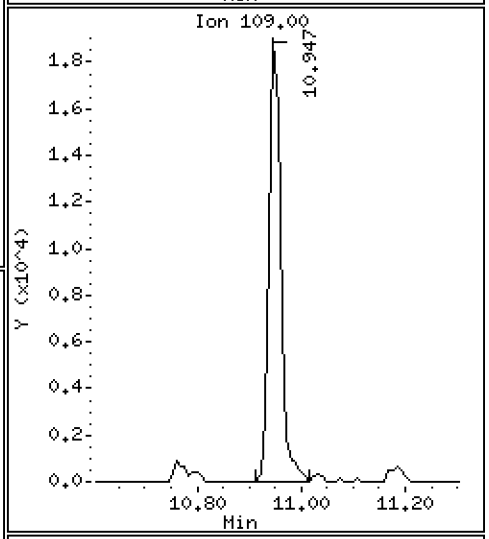


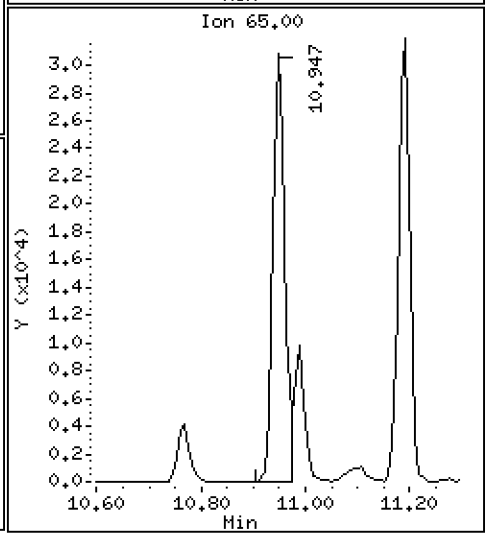












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

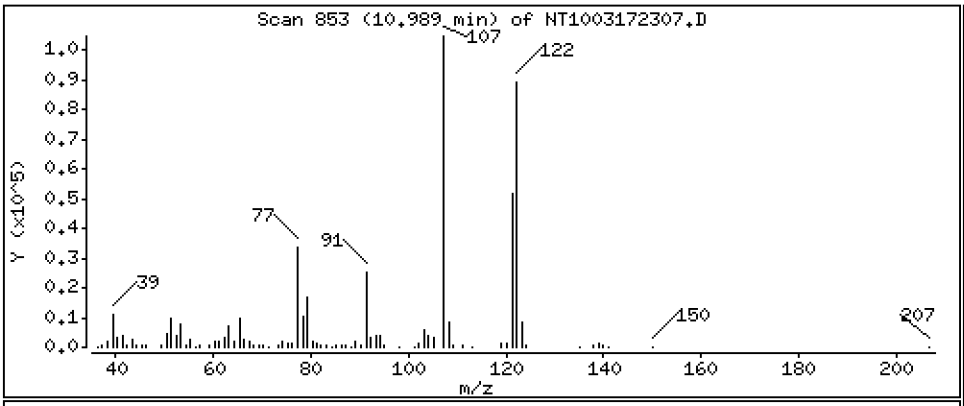
Operator: VTS

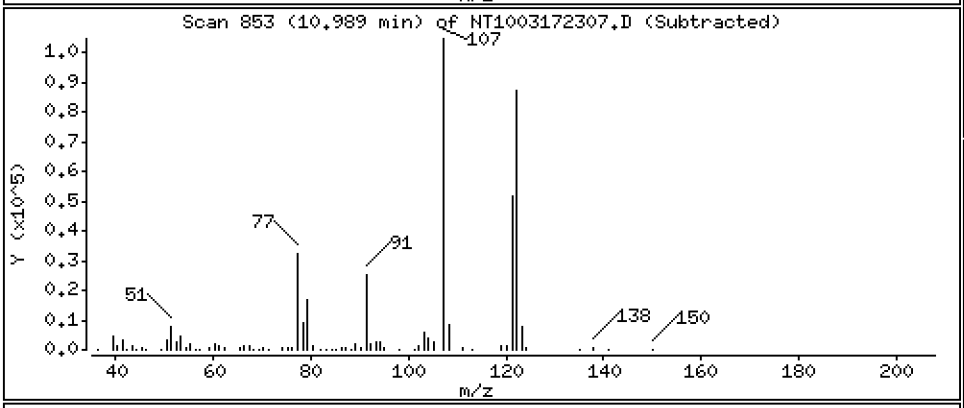
Column phase: ZB-5msi

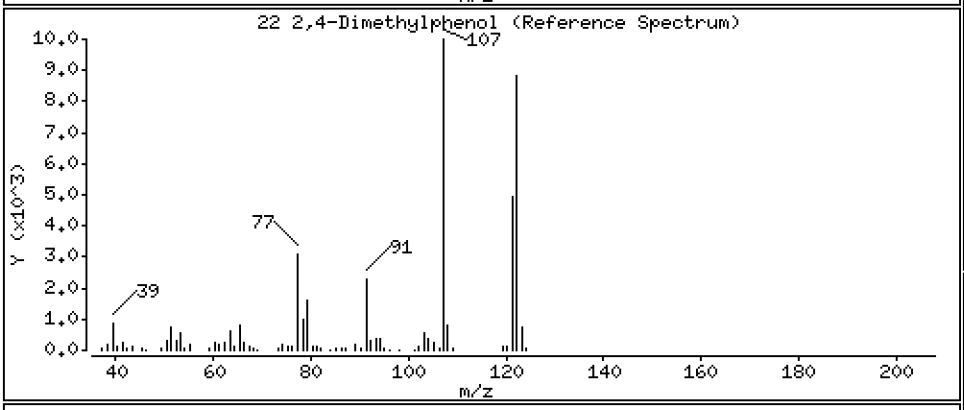
Column diameter: 0.25

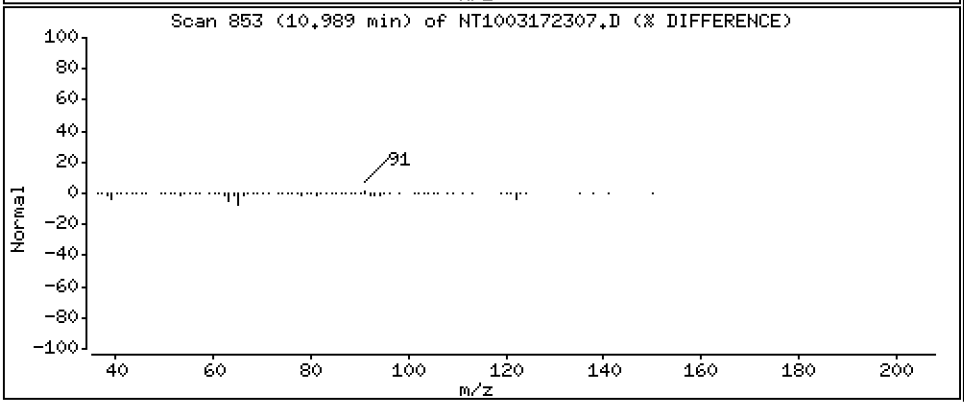
22 2,4-Dimethylphenol

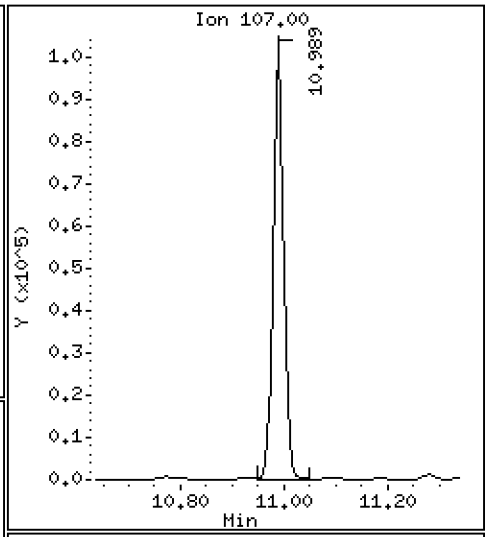
Concentration: 2.721 ug/mL

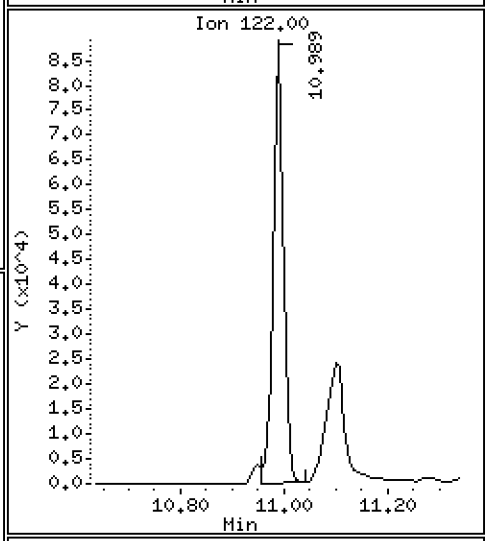


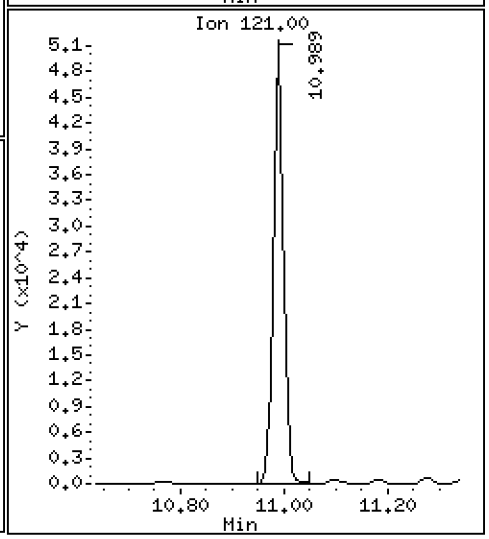












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

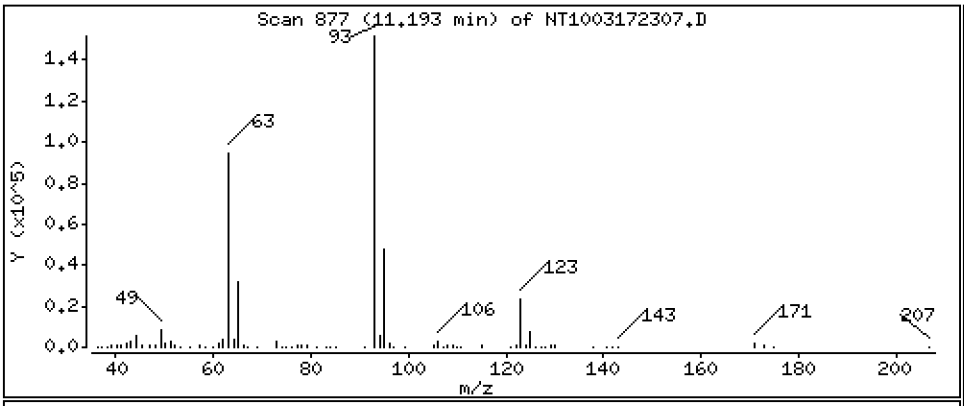
Operator: VTS

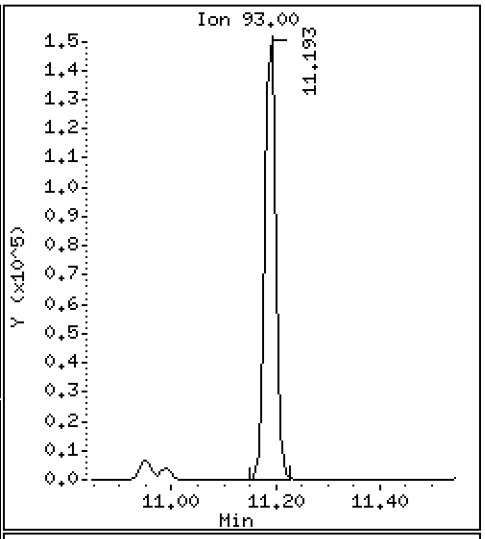
Column phase: ZB-5msi

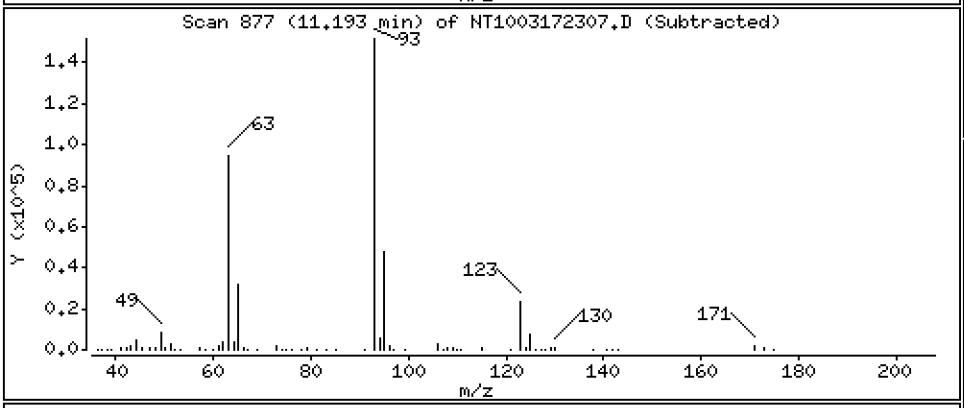
Column diameter: 0.25

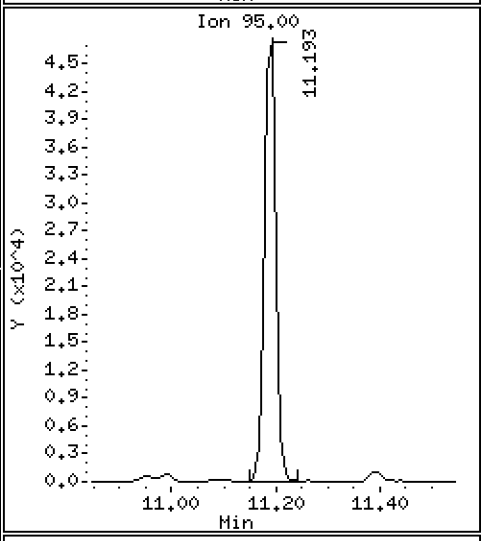
23 Bis(2-Chloroethoxy)methane

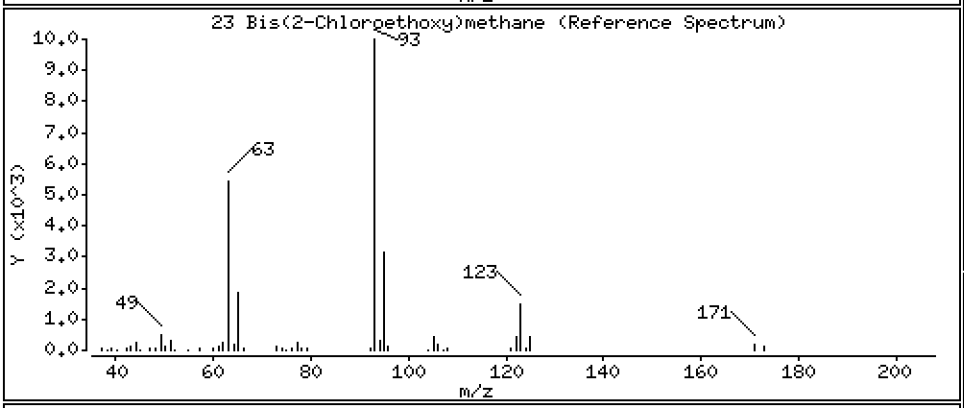
Concentration: 4.380 ug/mL

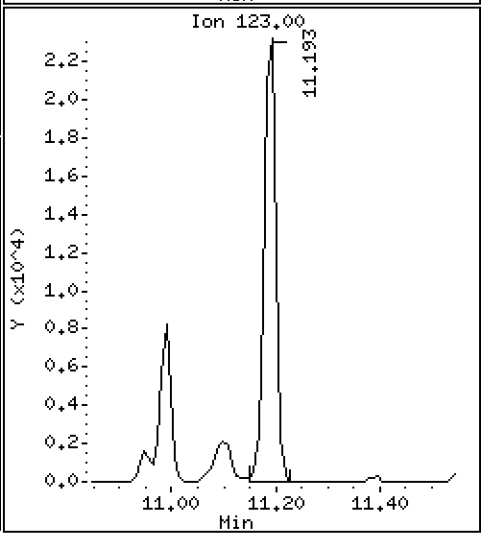


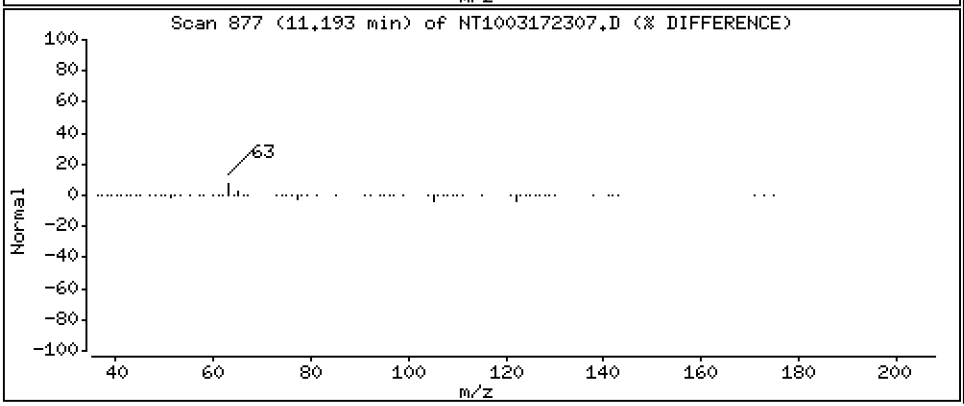












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

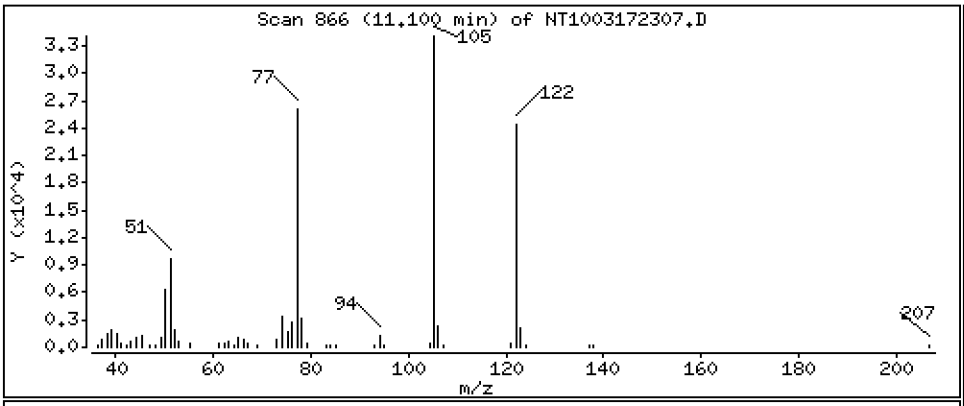
Operator: VTS

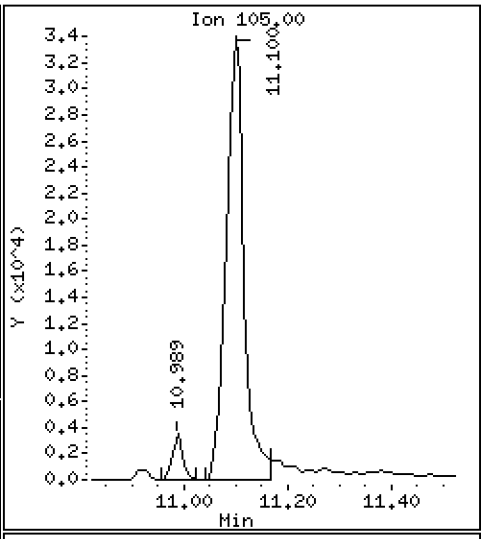
Column phase: ZB-5msi

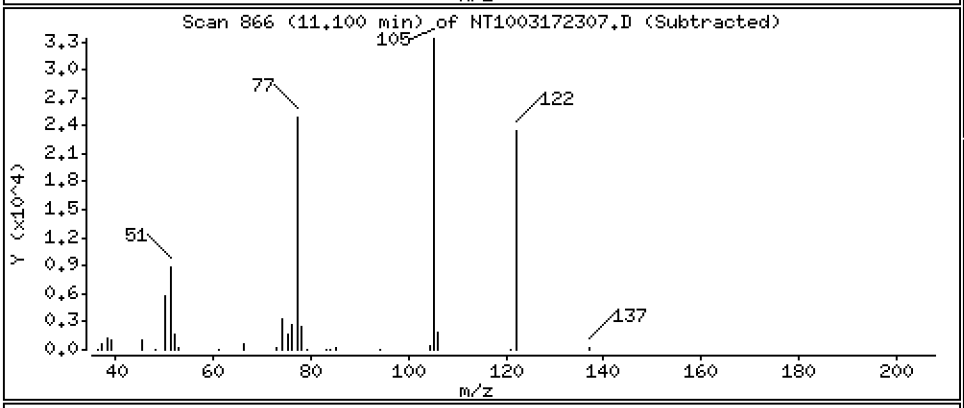
Column diameter: 0.25

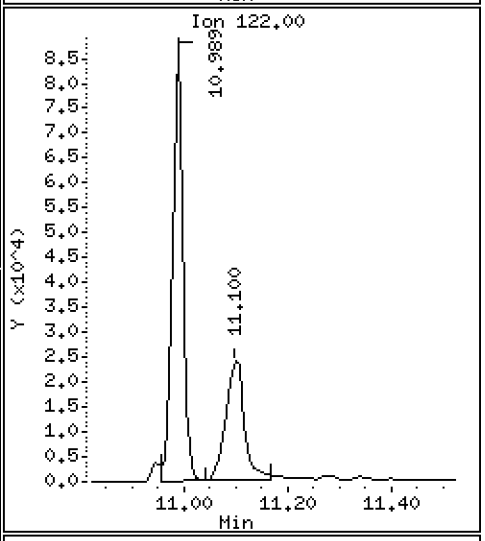
24 Benzoic acid

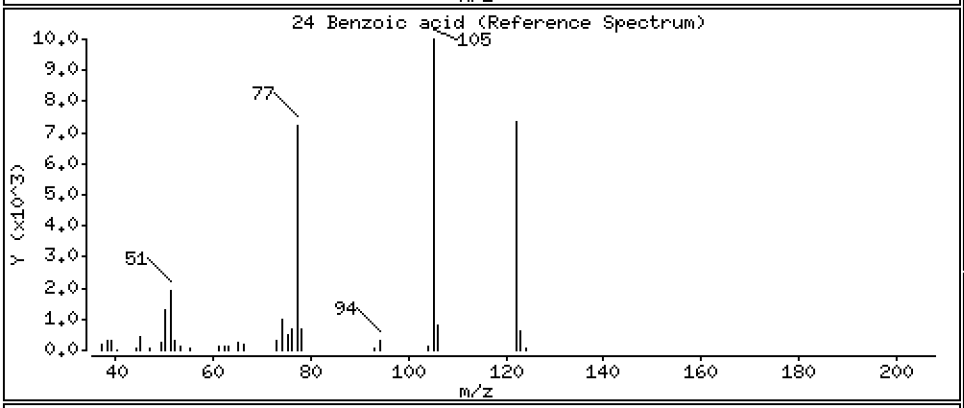
Concentration: 2.717 ug/mL

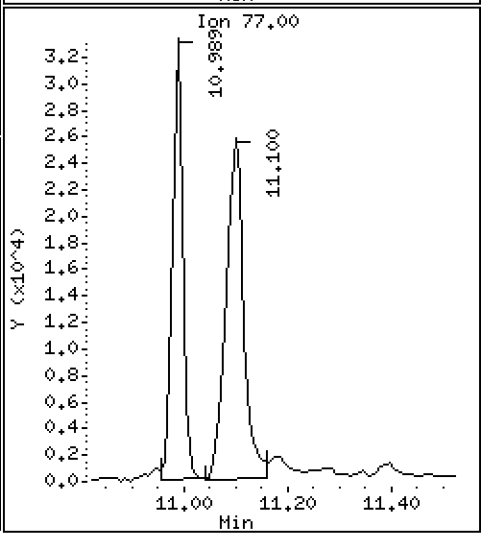


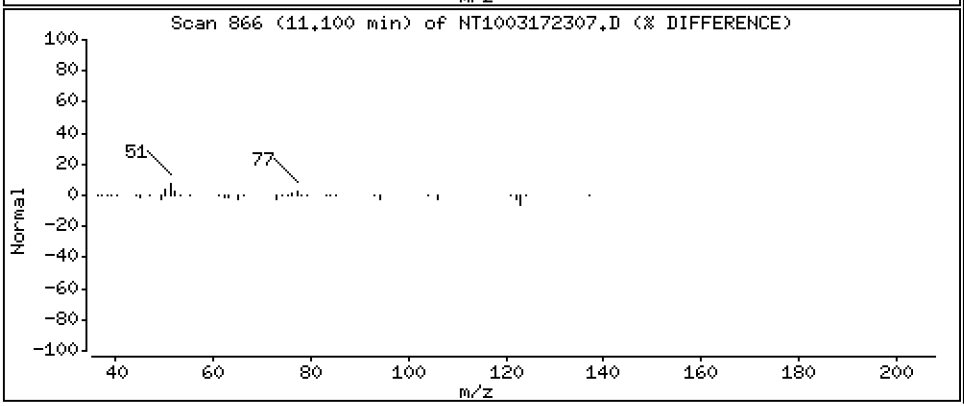












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

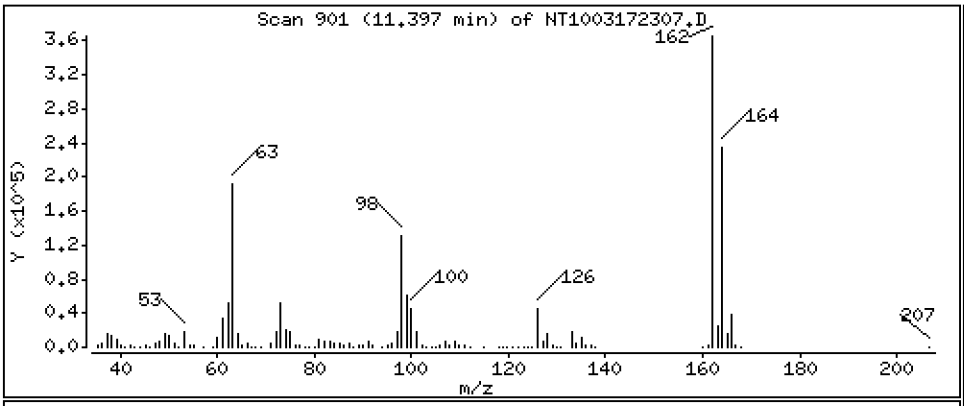
Operator: VTS

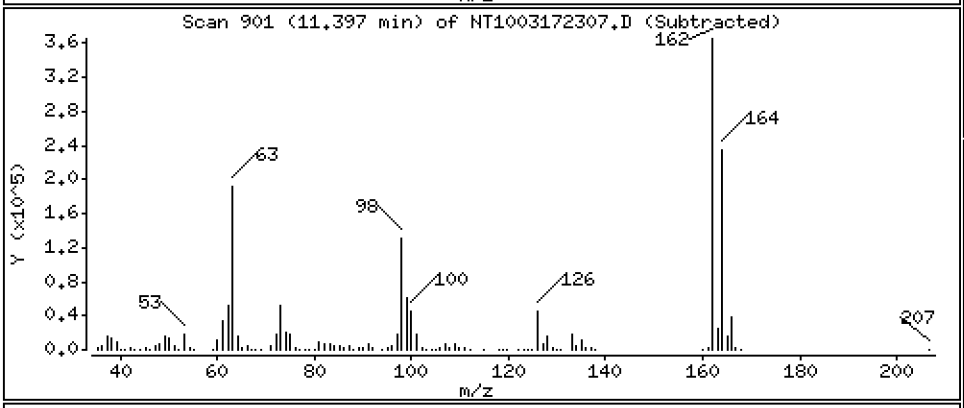
Column phase: ZB-5msi

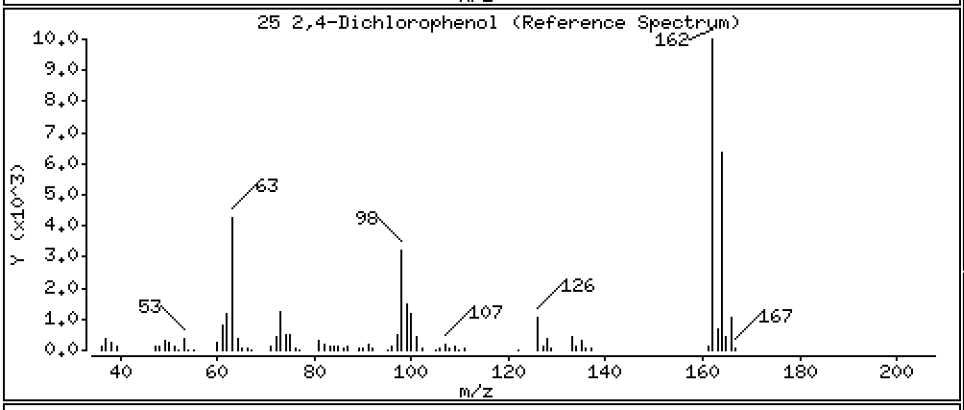
Column diameter: 0.25

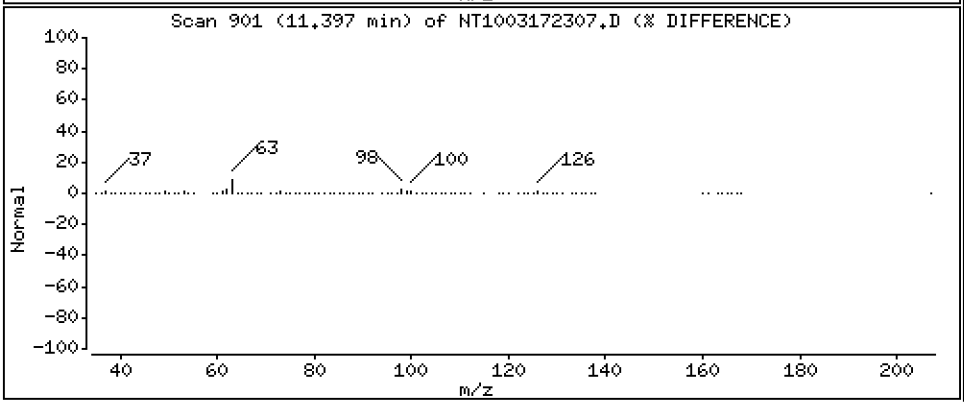
25 2,4-Dichlorophenol

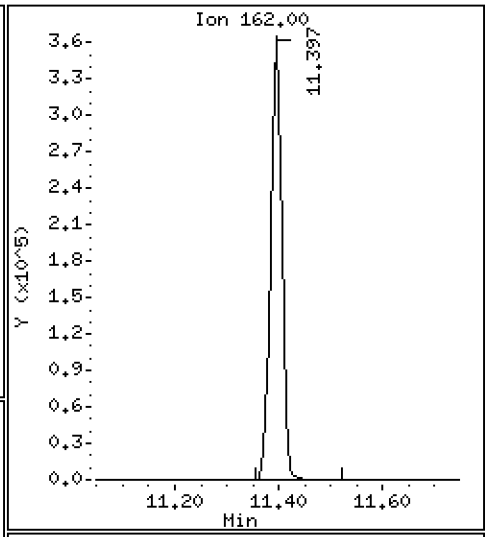
Concentration: 13.64 ug/mL

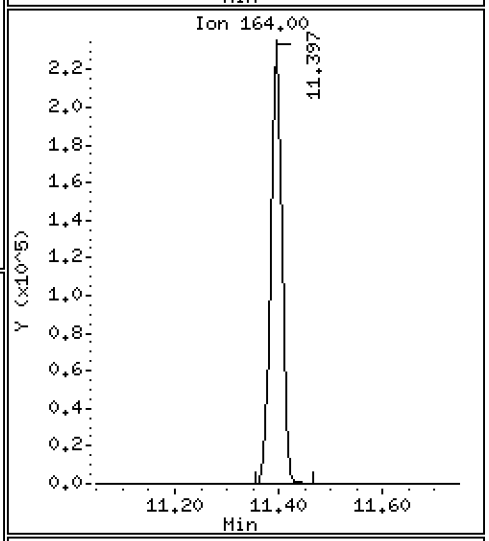


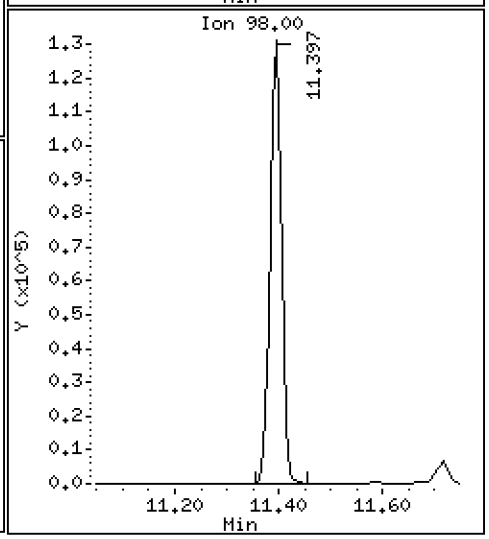












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

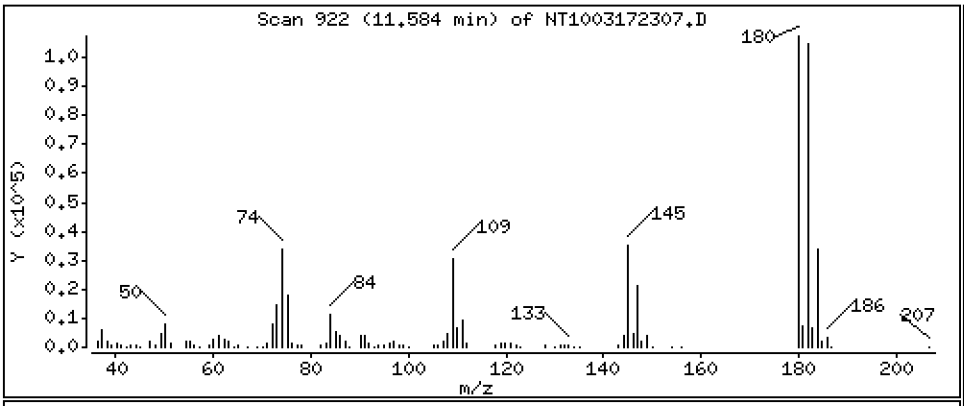
Operator: VTS

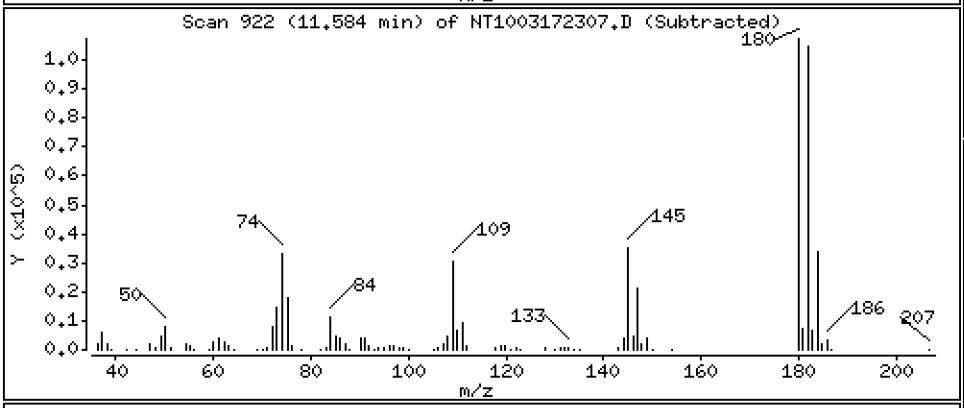
Column phase: ZB-5msi

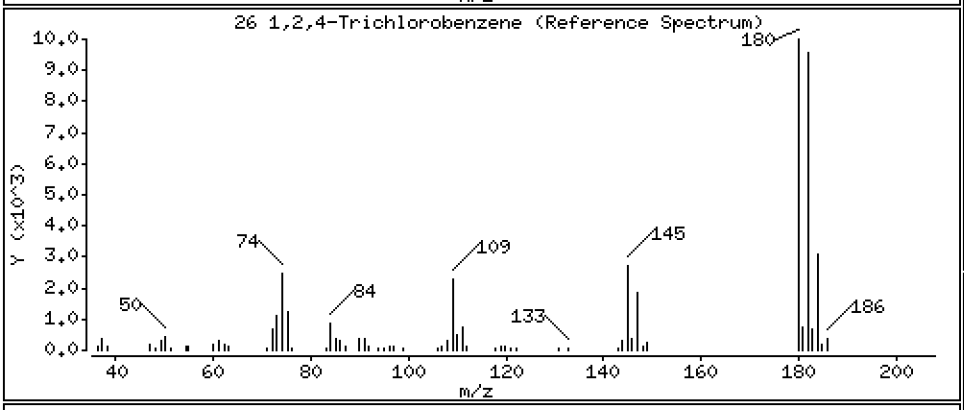
Column diameter: 0.25

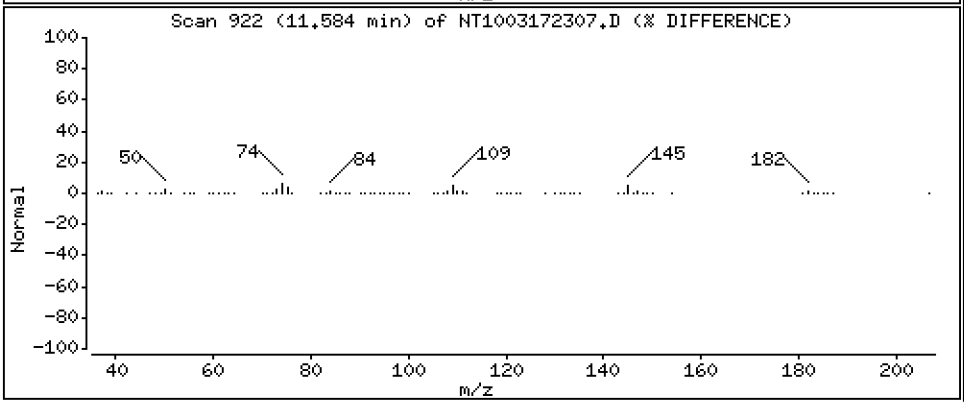
26 1,2,4-Trichlorobenzene

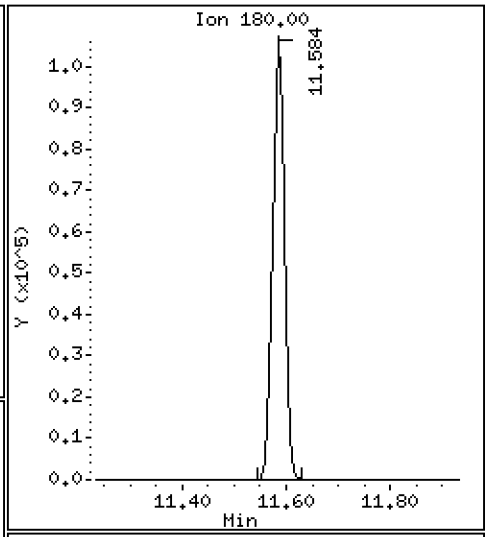
Concentration: 3.219 ug/mL

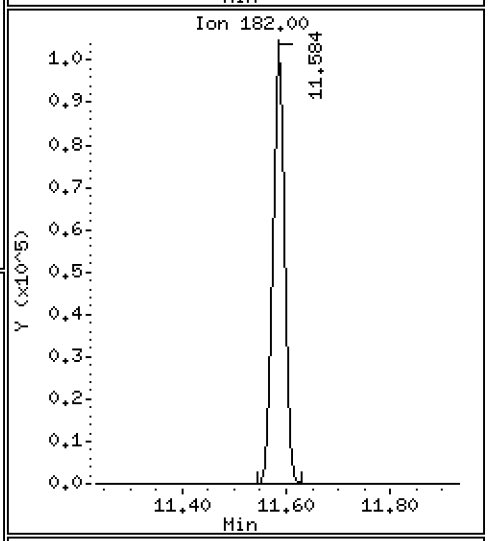


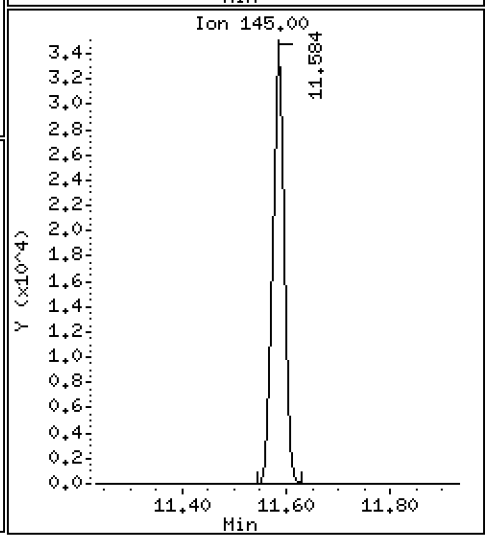












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

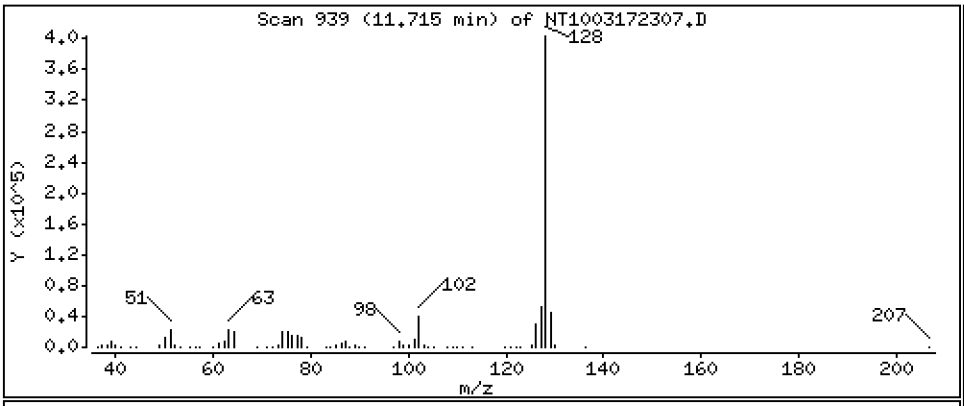
Operator: VTS

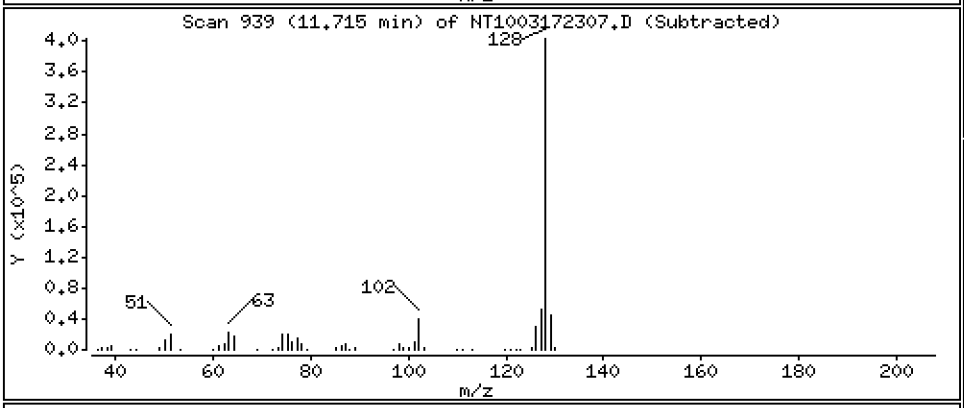
Column phase: ZB-5msi

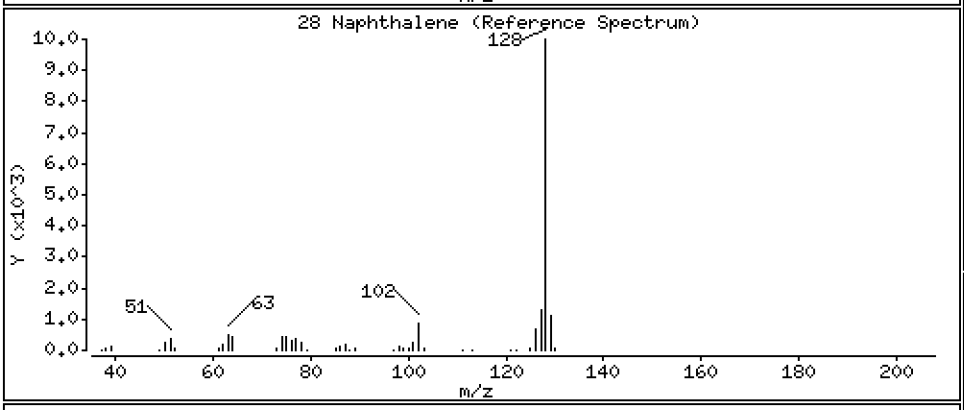
Column diameter: 0.25

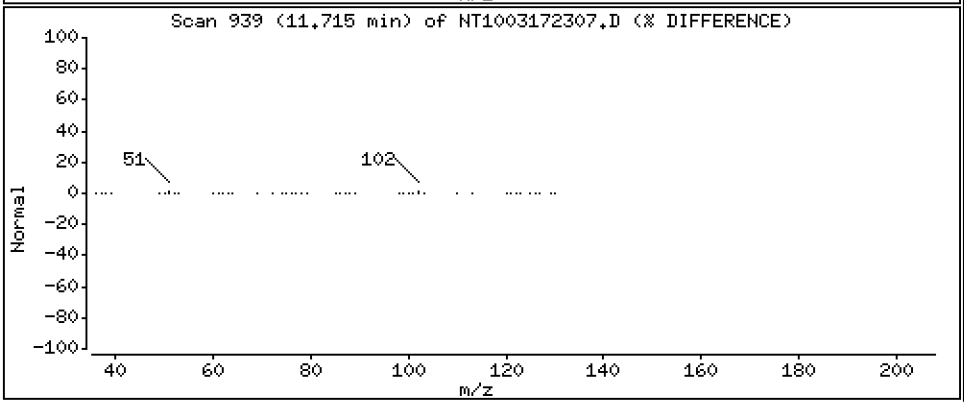
28 Naphthalene

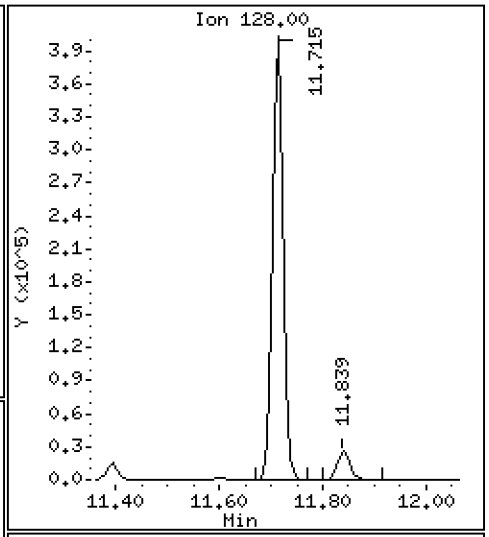
Concentration: 3.768 ug/mL

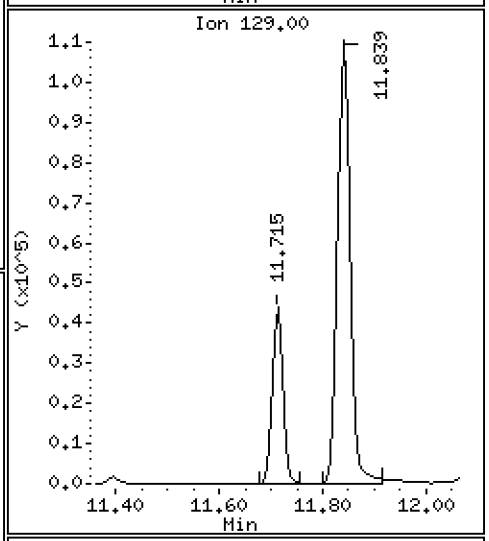


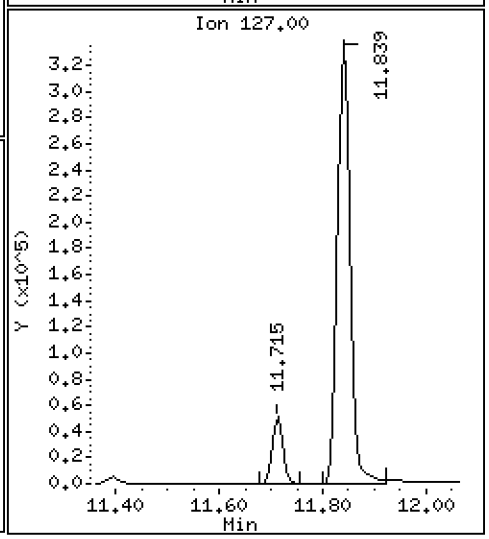












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

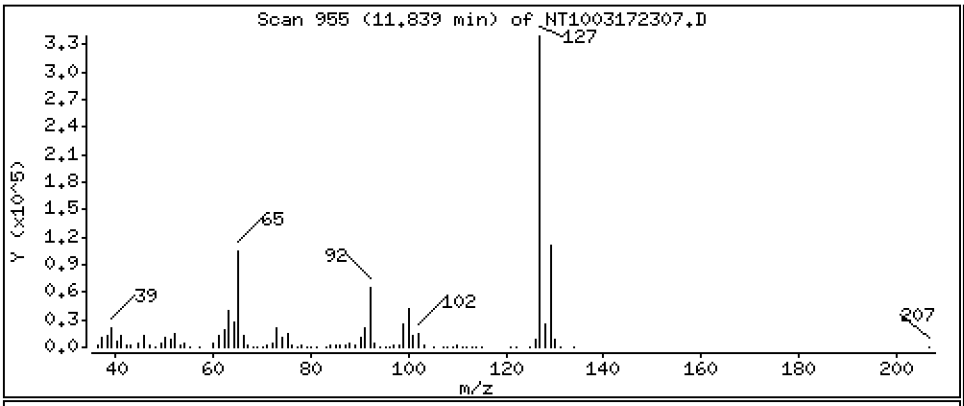
Operator: VTS

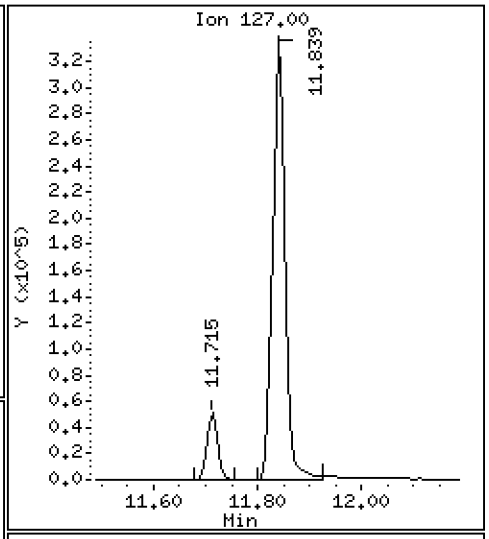
Column phase: ZB-5msi

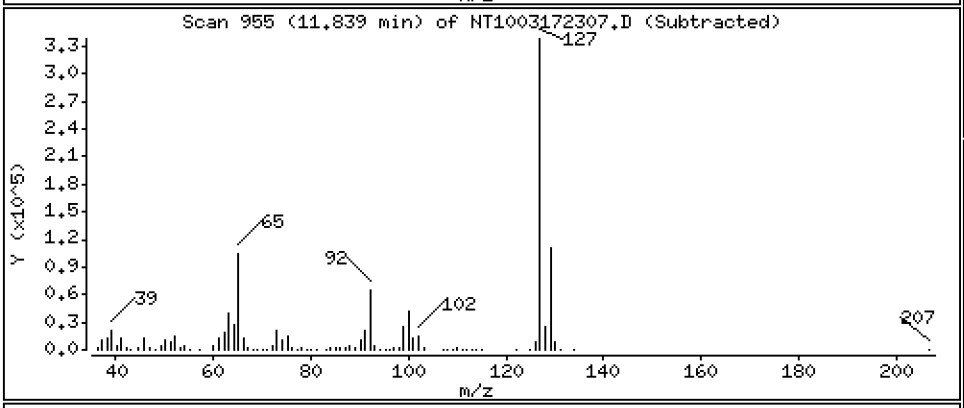
Column diameter: 0.25

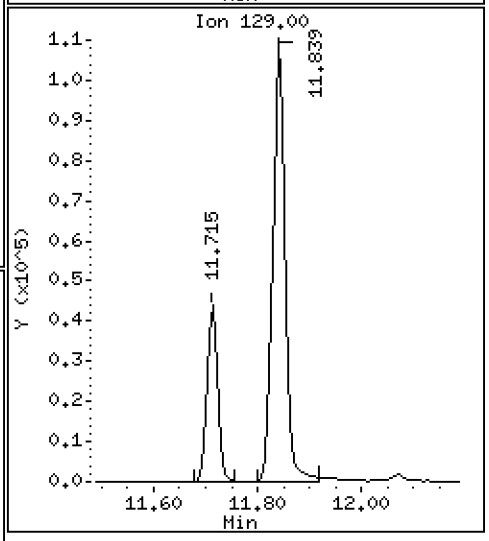
29 4-Chloroaniline

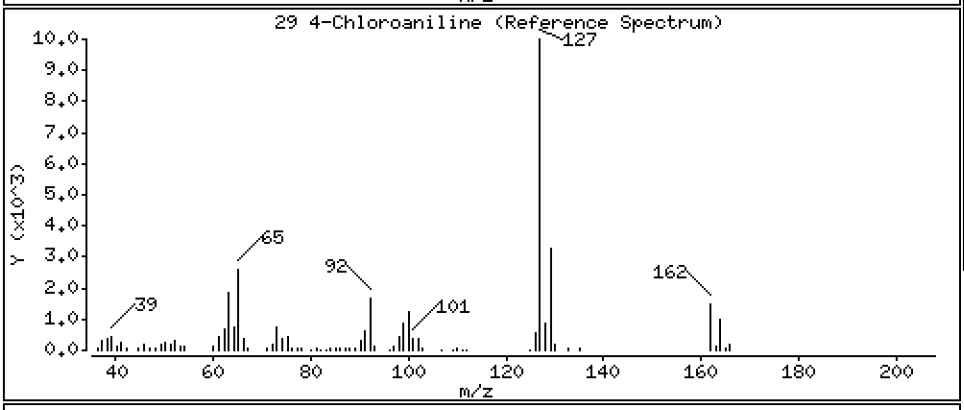
Concentration: 8.819 ug/mL

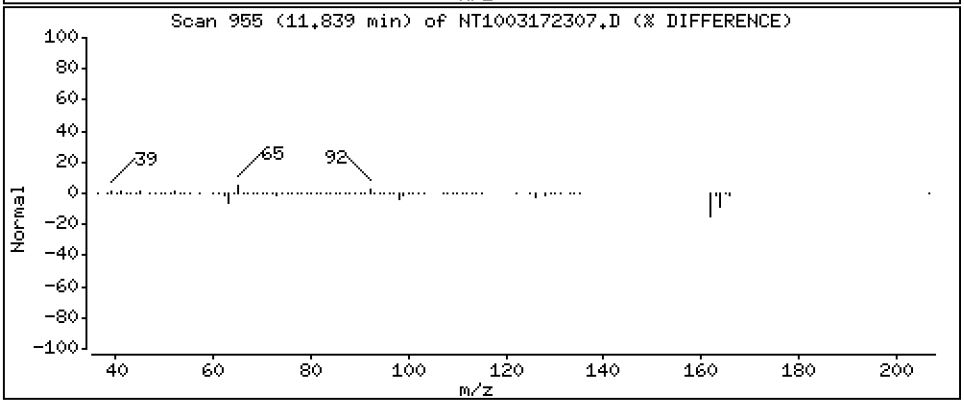












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

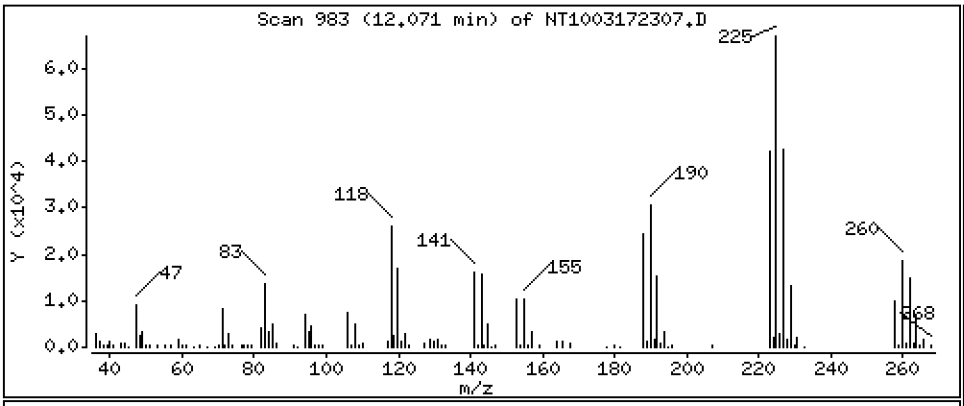
Operator: VTS

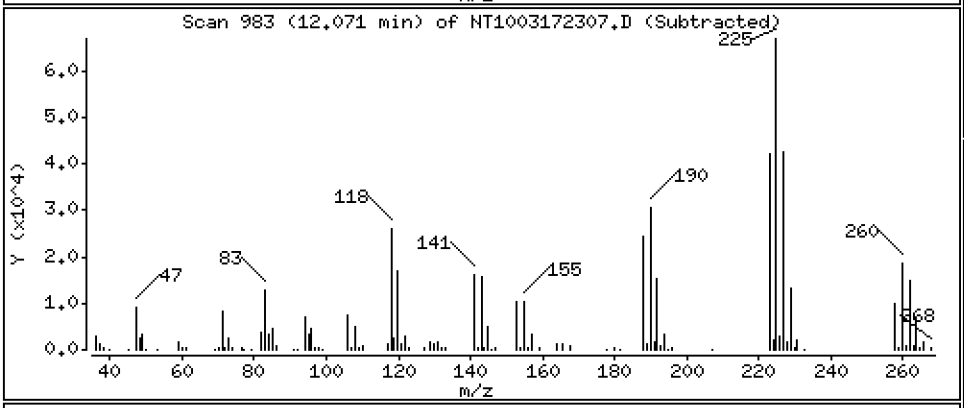
Column phase: ZB-5msi

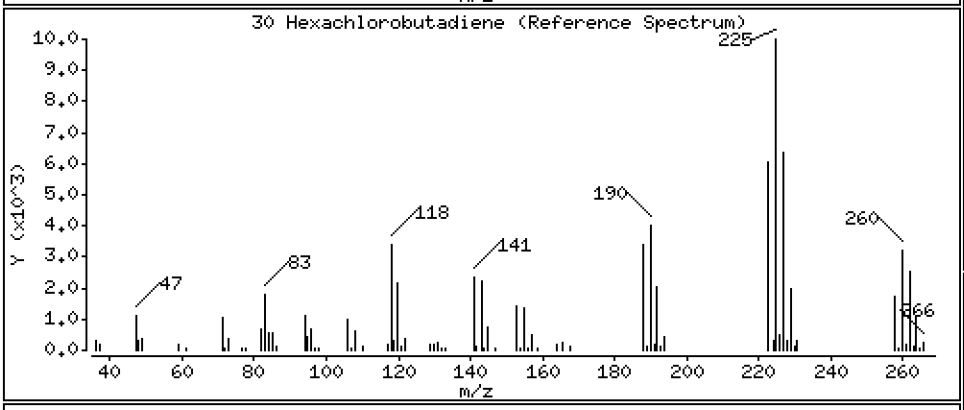
Column diameter: 0.25

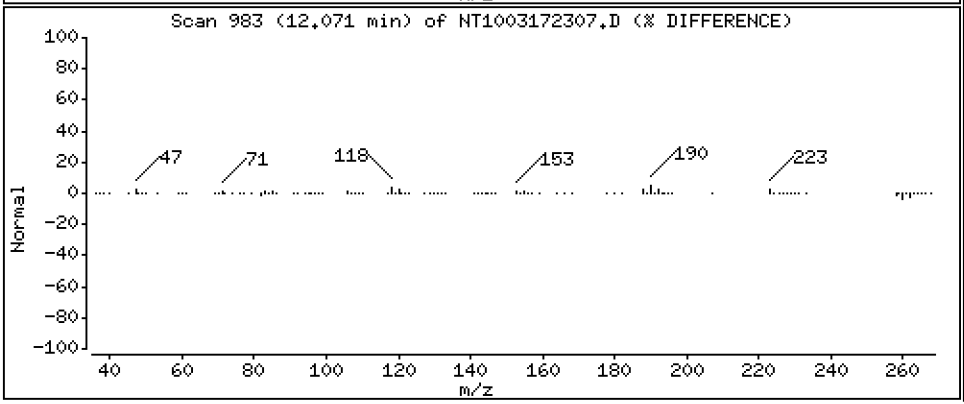
30 Hexachlorobutadiene

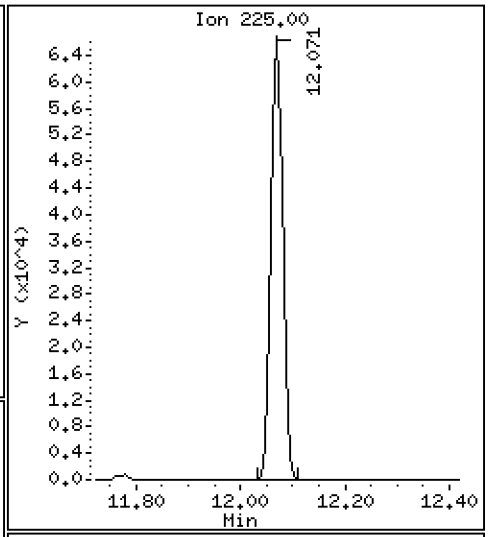
Concentration: 3.351 ug/mL

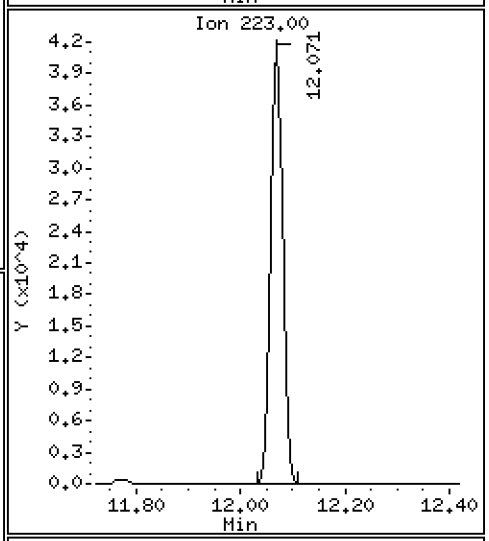


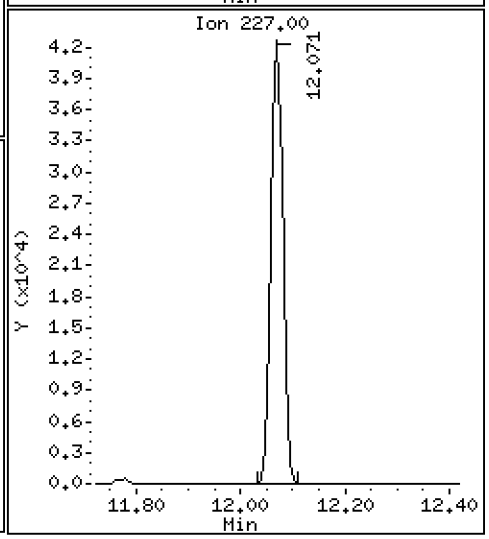












Date : 17-MAR-2023 22:14

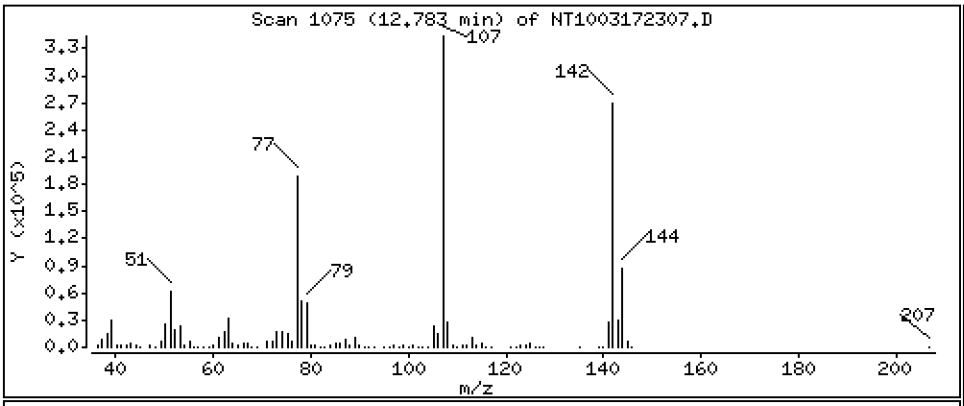
Client ID: Instrument: nt10.i

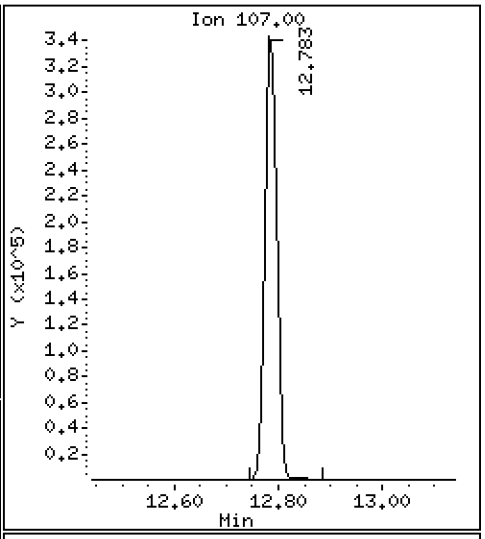
Sample Info: BLB0495-BS1

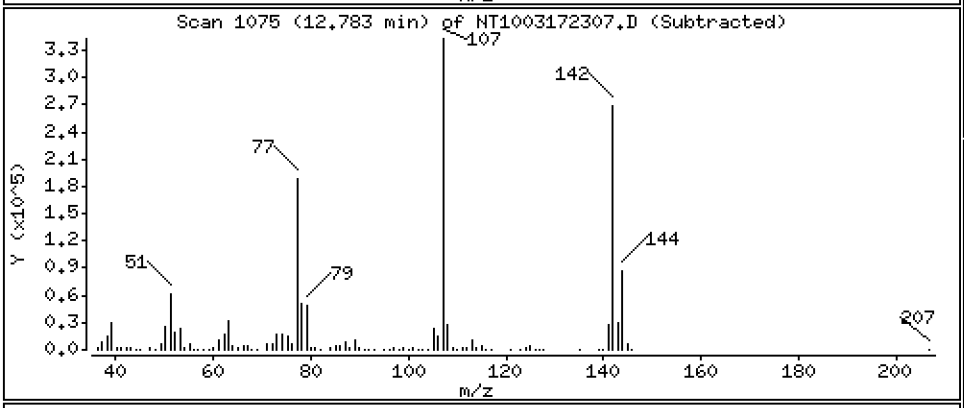
Operator: VTS

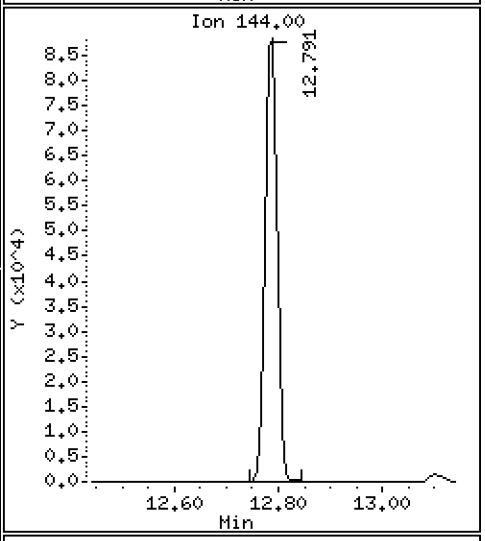
Column phase: ZB-5msi Column diameter: 0.25

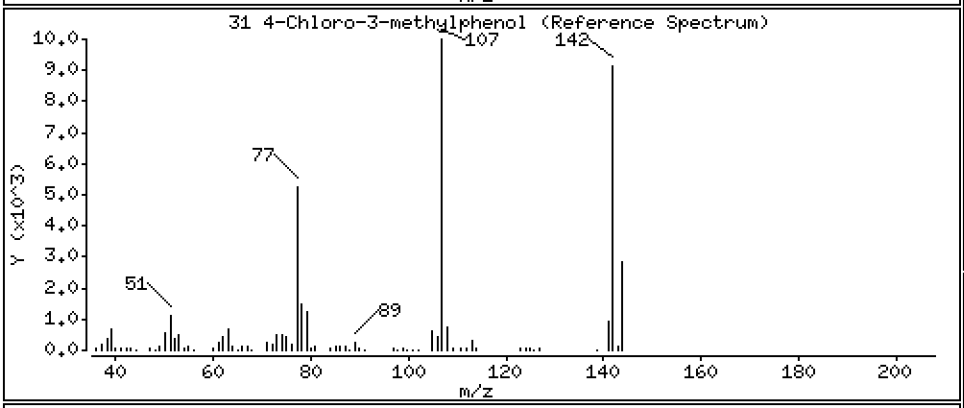
31 4-Chloro-3-methylphenol Concentration: 11.05 ug/mL

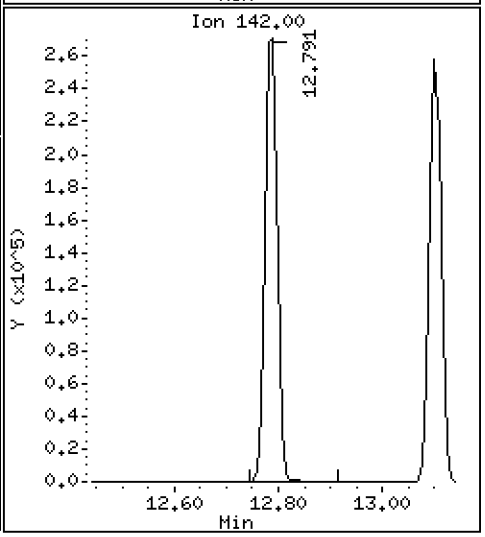


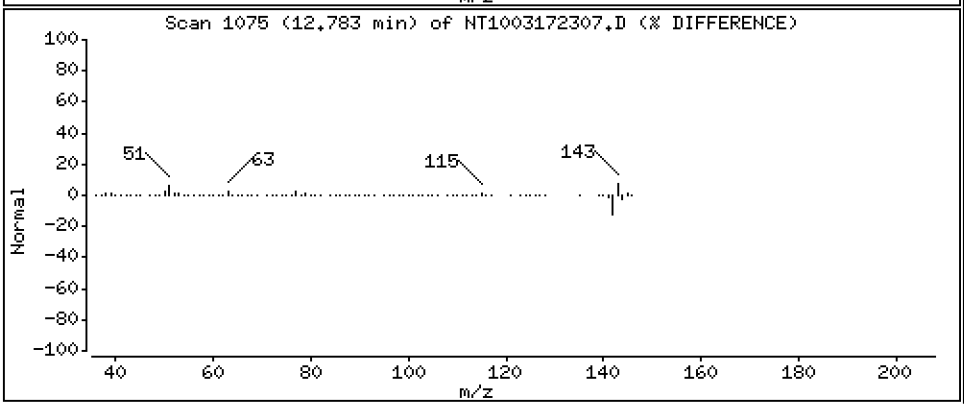












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

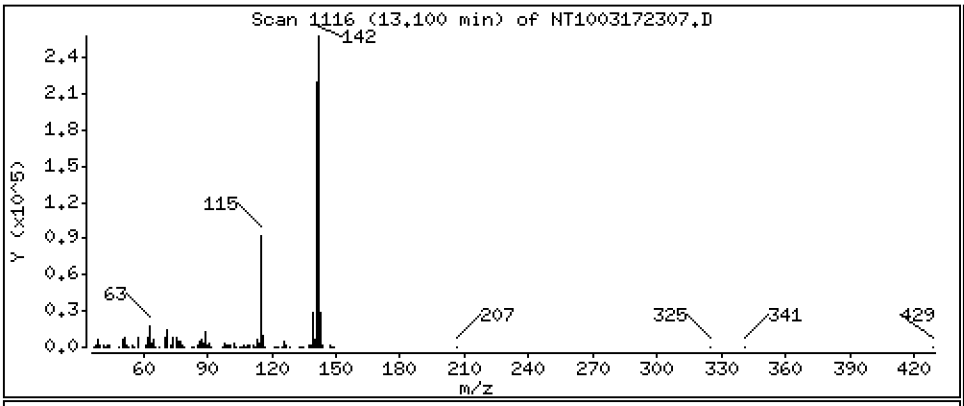
Operator: VTS

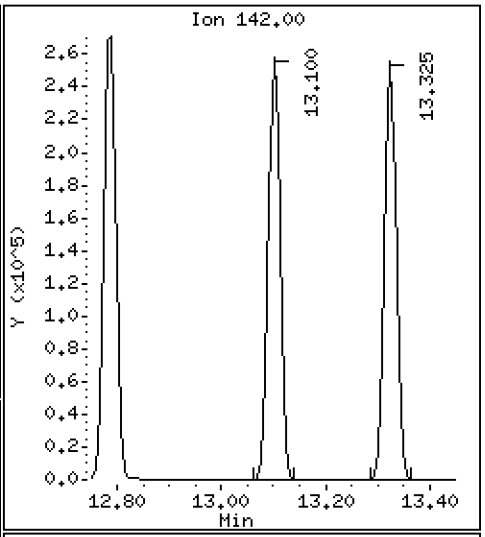
Column phase: ZB-5msi

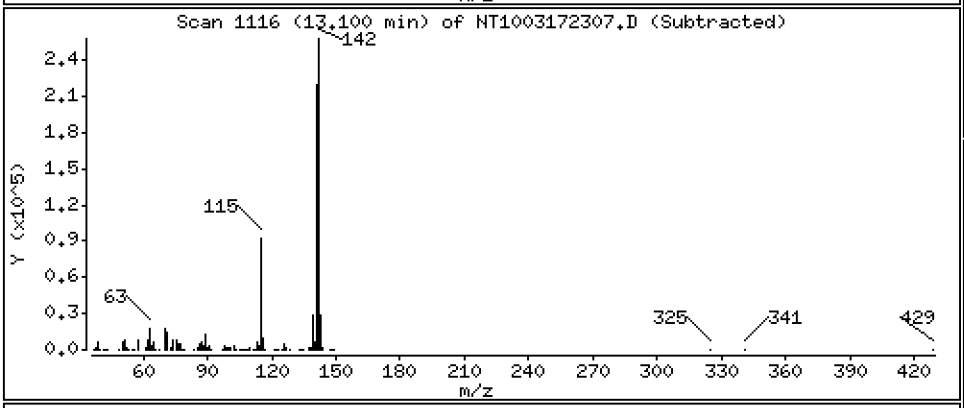
Column diameter: 0.25

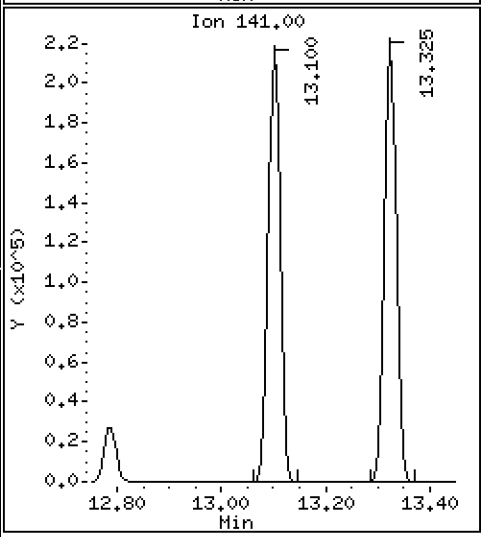
32 2-Methylnaphthalene

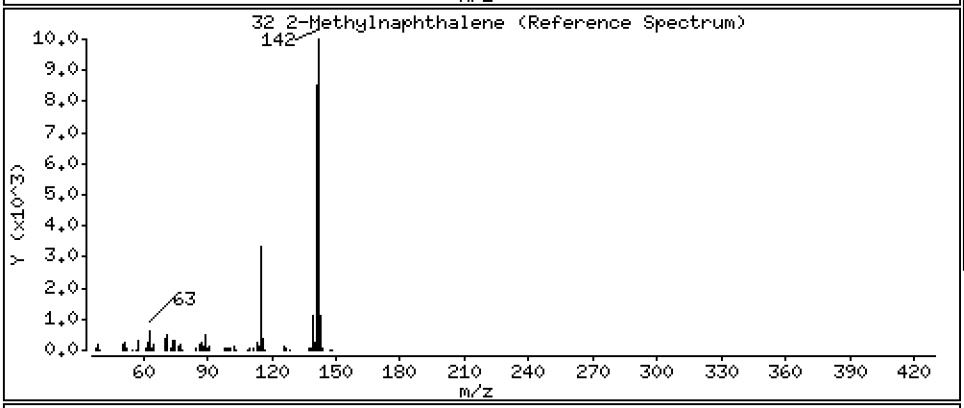
Concentration: 3.411 ug/mL

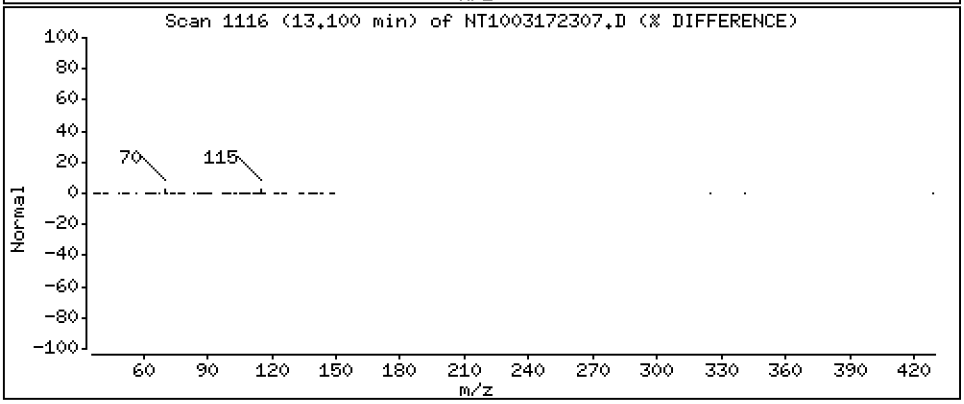












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

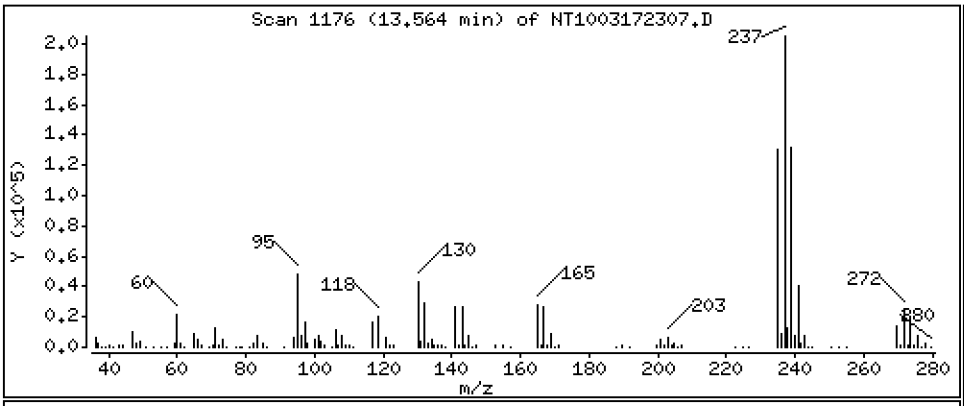
Operator: VTS

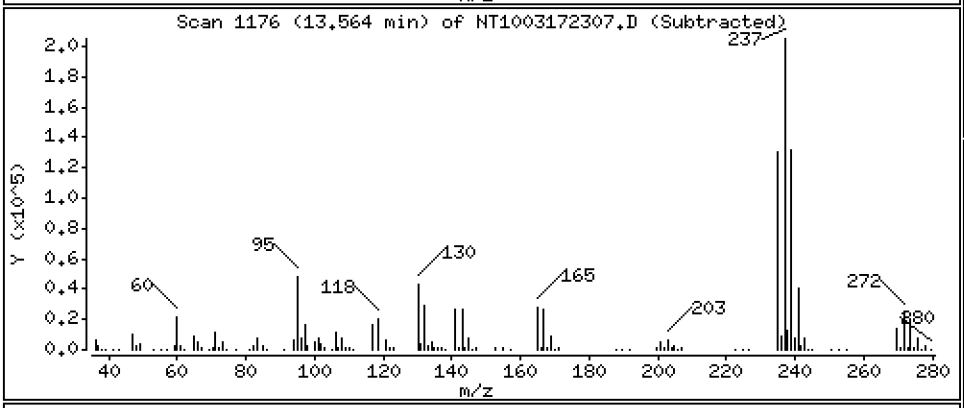
Column phase: ZB-5msi

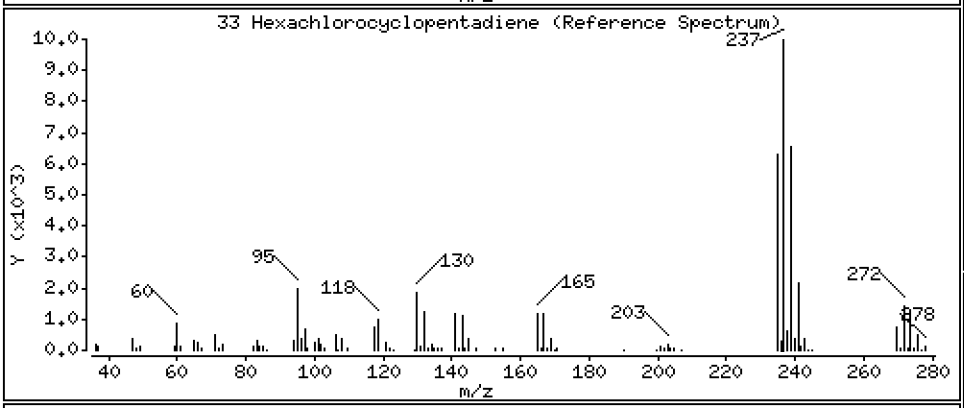
Column diameter: 0.25

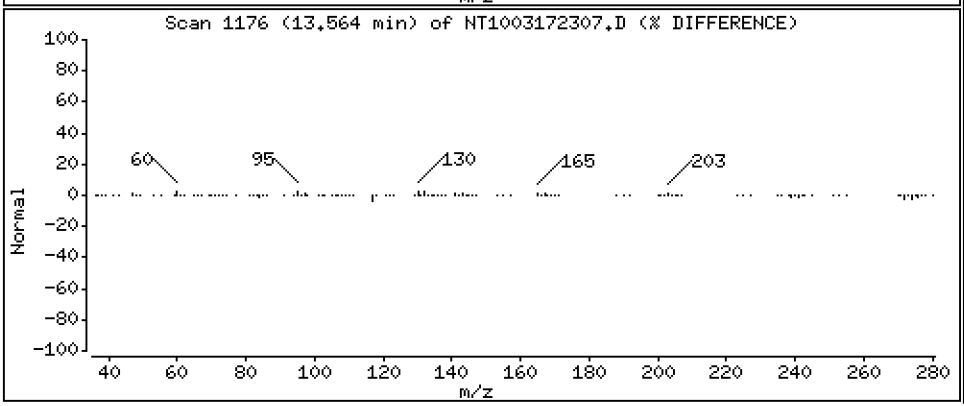
33 Hexachlorocyclopentadiene

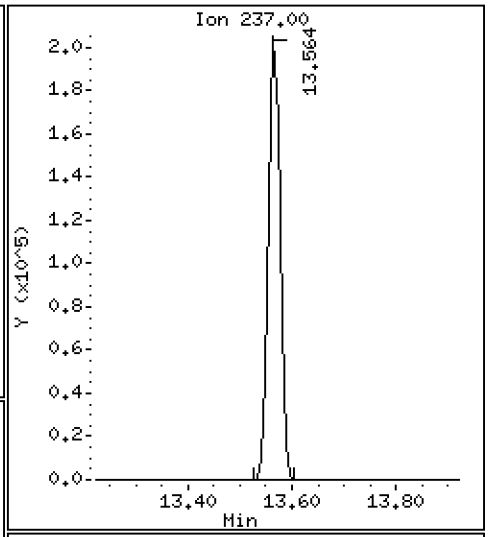
Concentration: 10.13 ug/mL

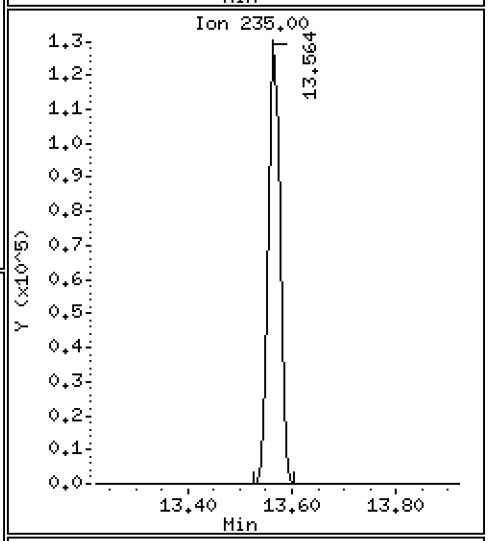


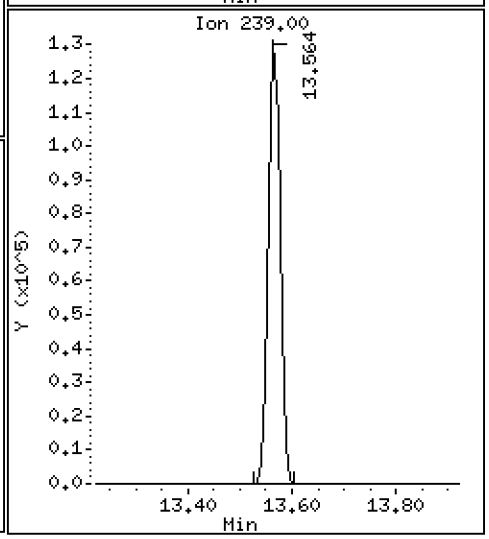












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

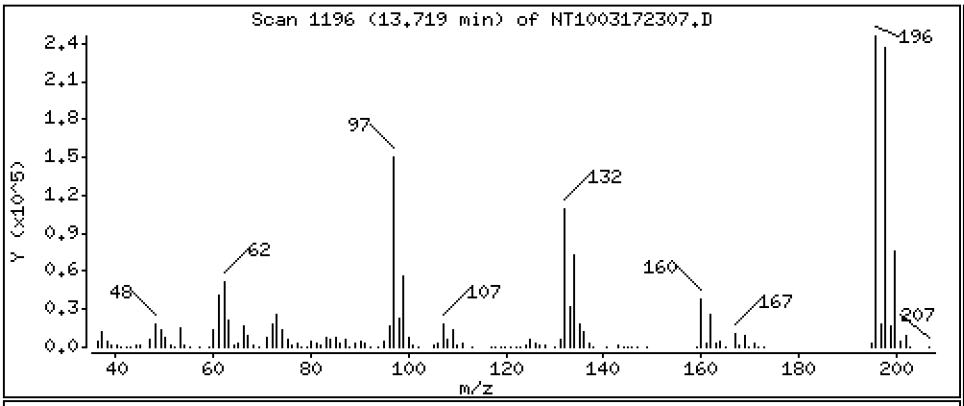
Operator: VTS

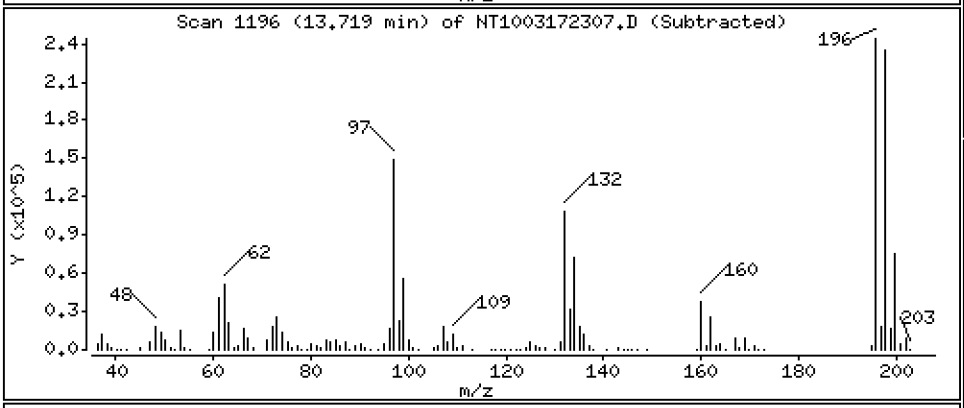
Column phase: ZB-5msi

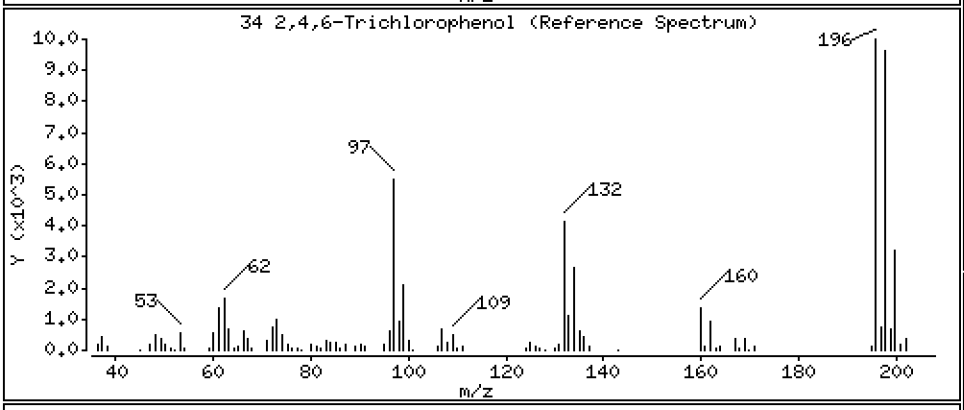
Column diameter: 0.25

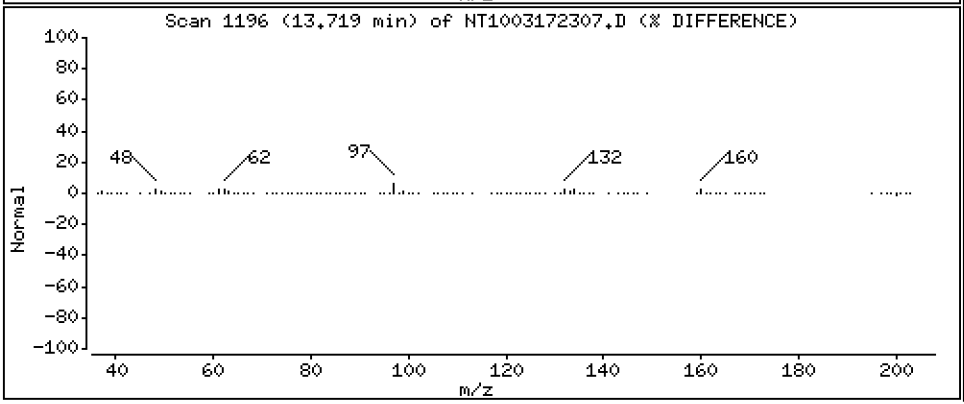
34 2,4,6-Trichlorophenol

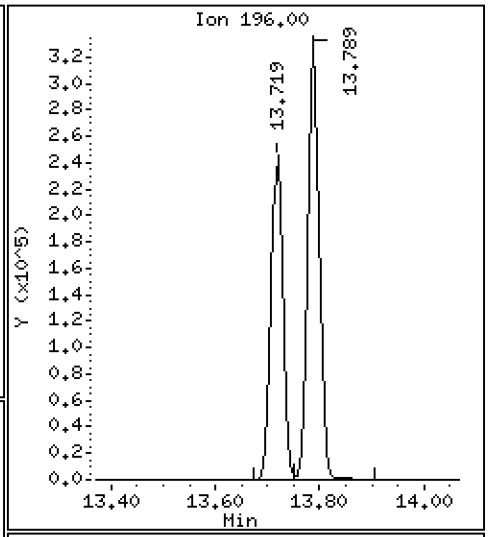
Concentration: 11.60 ug/mL

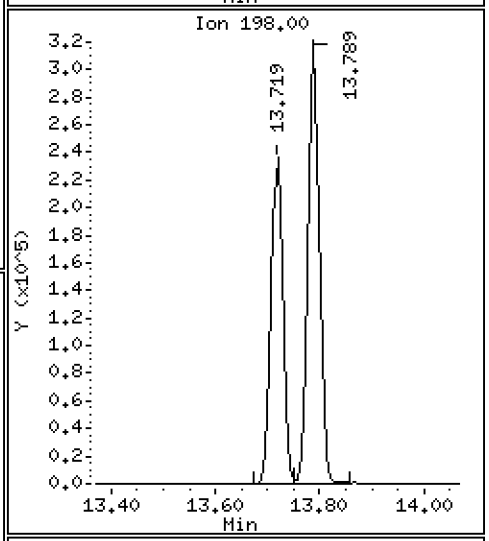


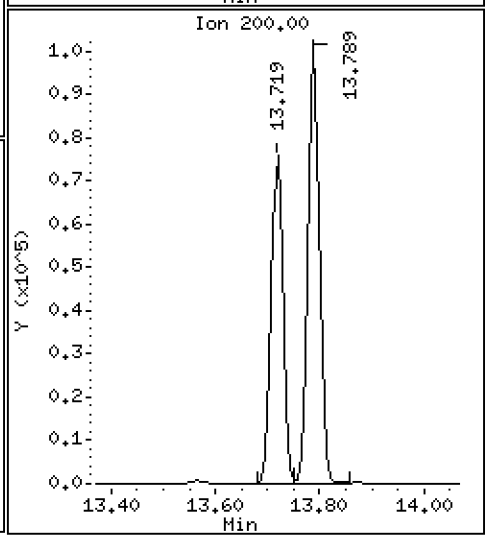












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

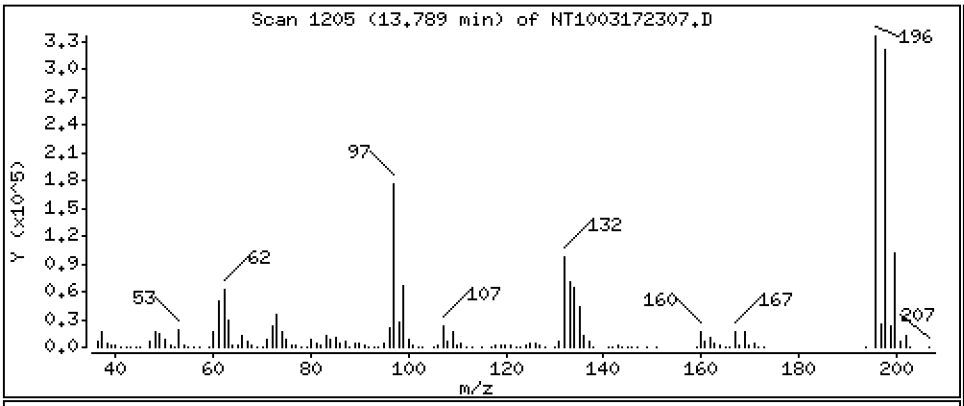
Operator: VTS

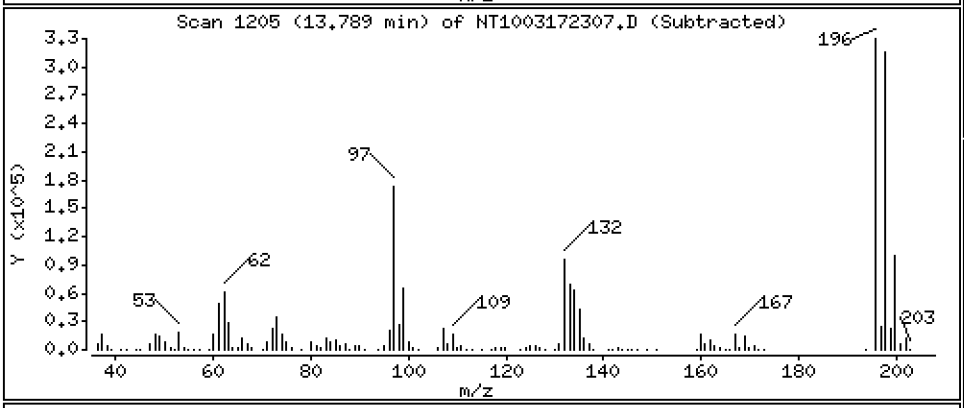
Column phase: ZB-5msi

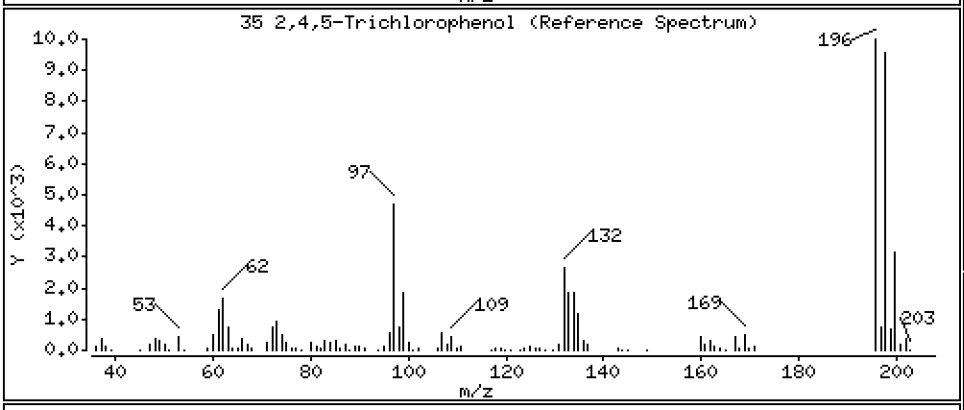
Column diameter: 0.25

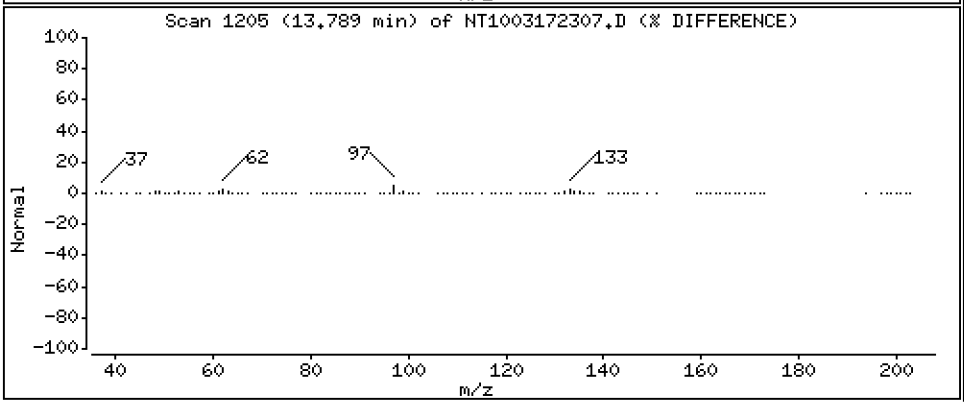
35 2,4,5-Trichlorophenol

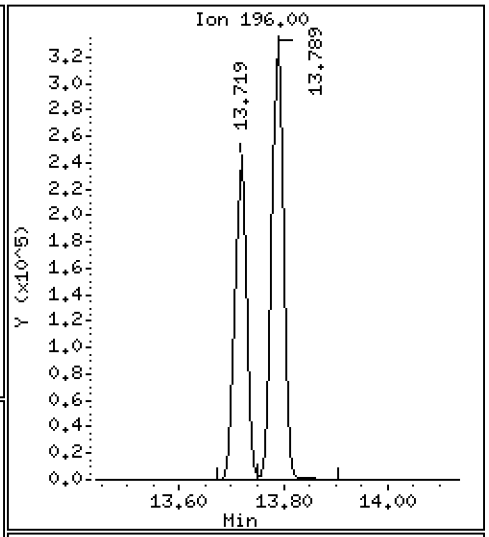
Concentration: 13.93 ug/mL

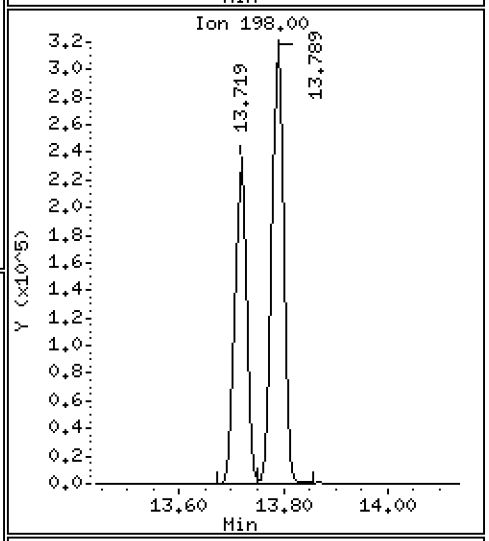


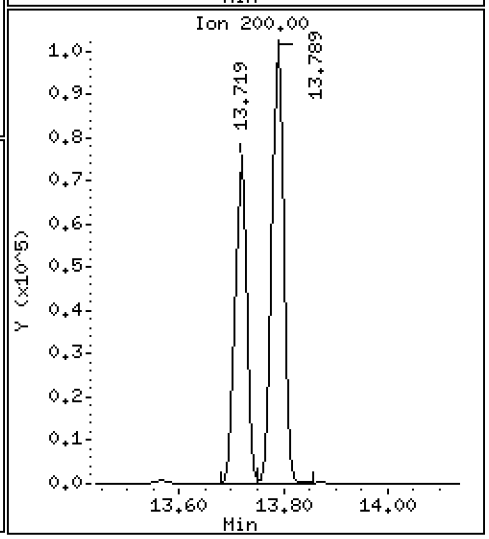












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

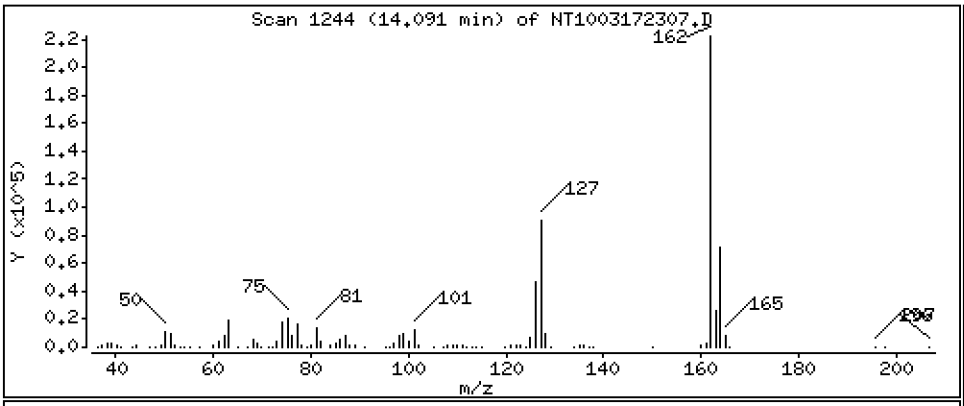
Operator: VTS

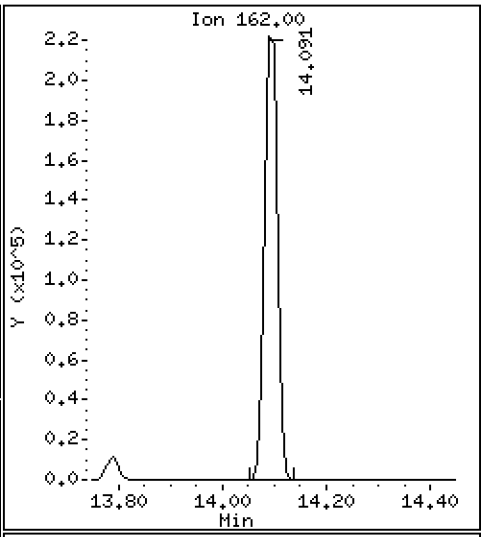
Column phase: ZB-5msi

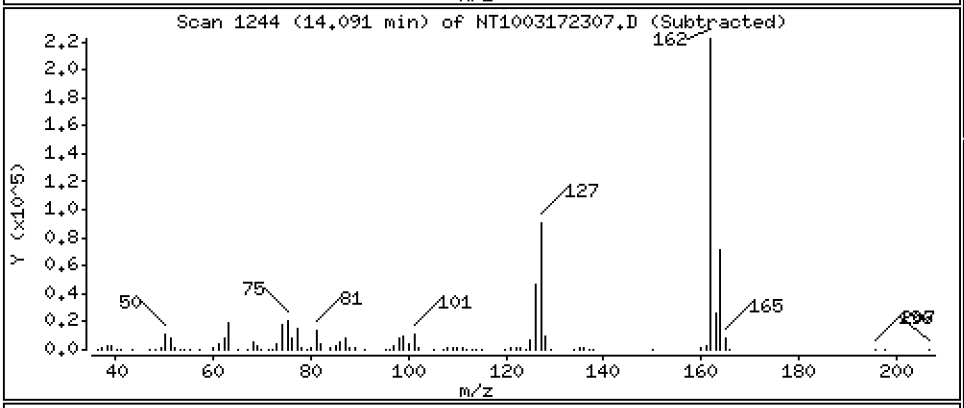
Column diameter: 0.25

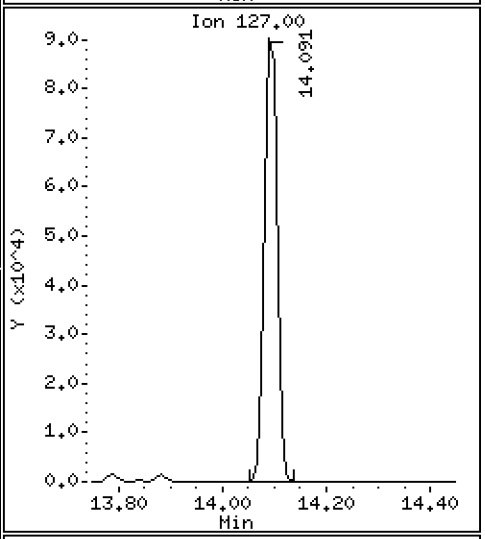
37 2-Chloronaphthalene

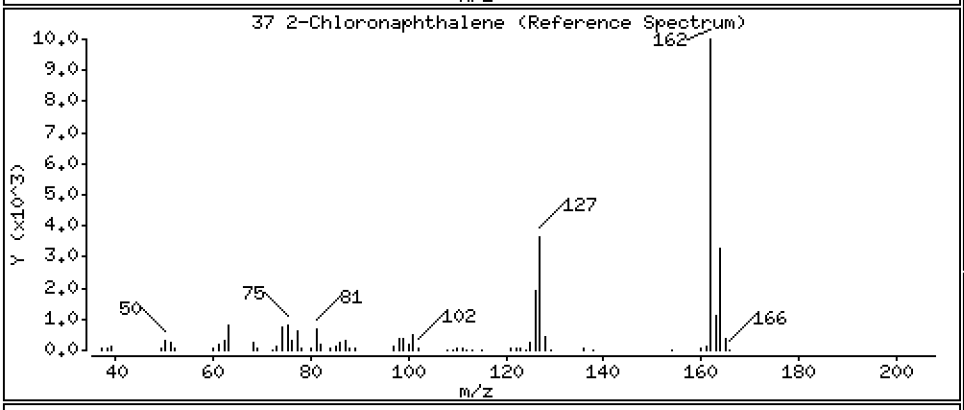
Concentration: 3.511 ug/mL

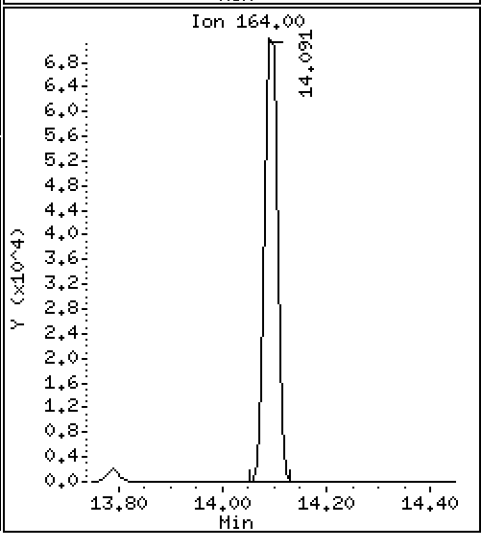


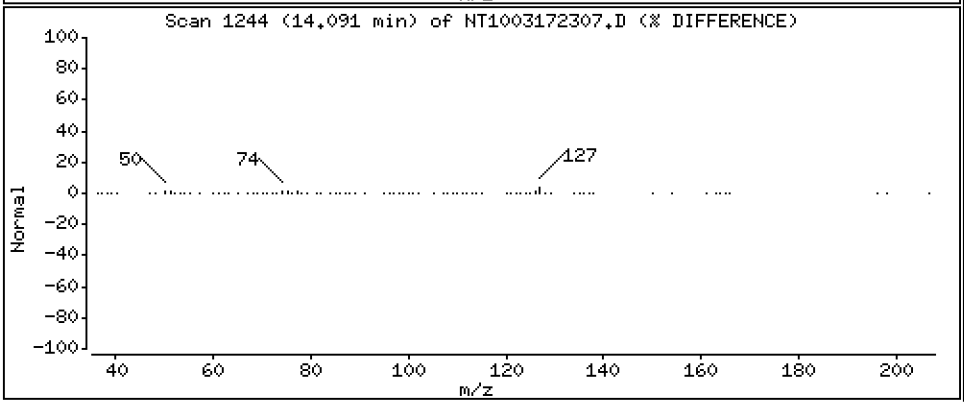












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

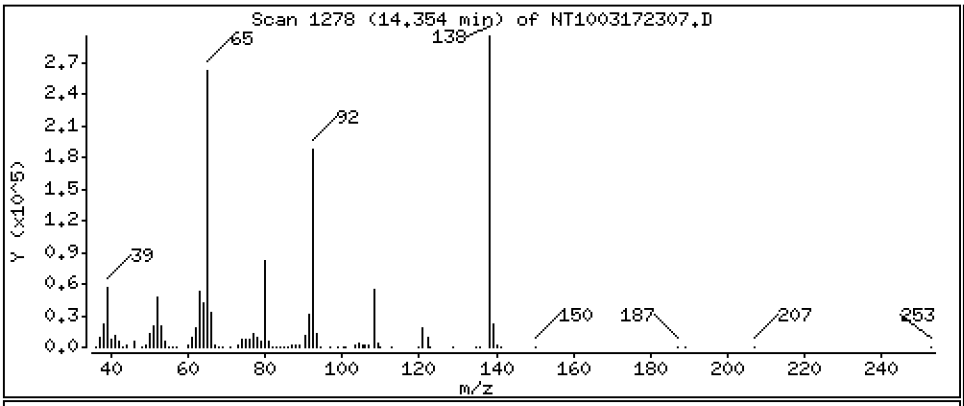
Operator: VTS

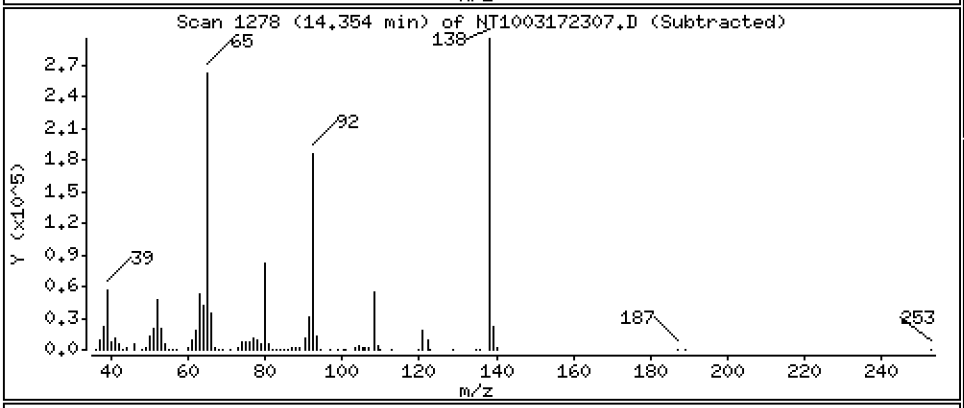
Column phase: ZB-5msi

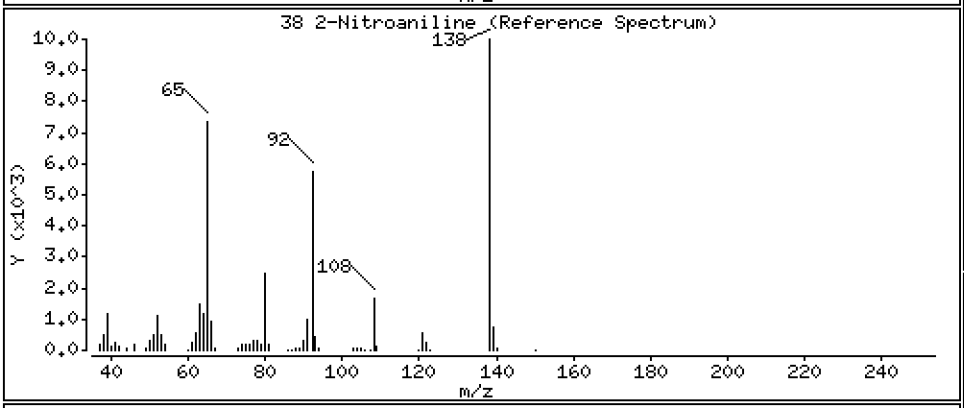
Column diameter: 0.25

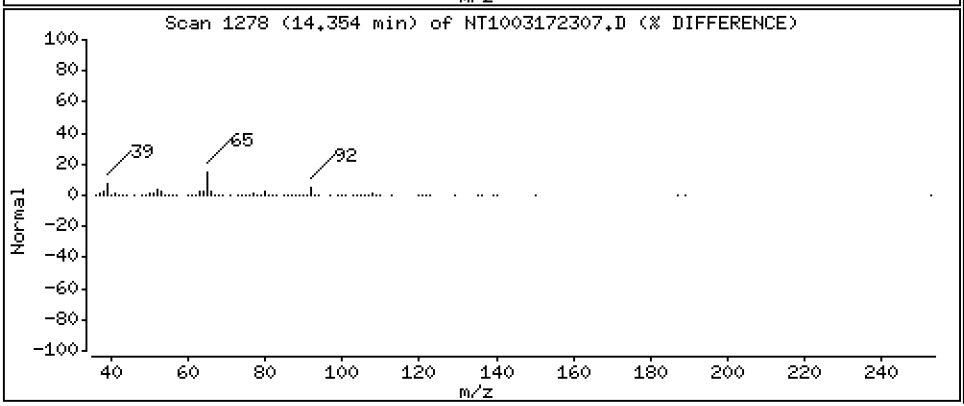
38 2-Nitroaniline

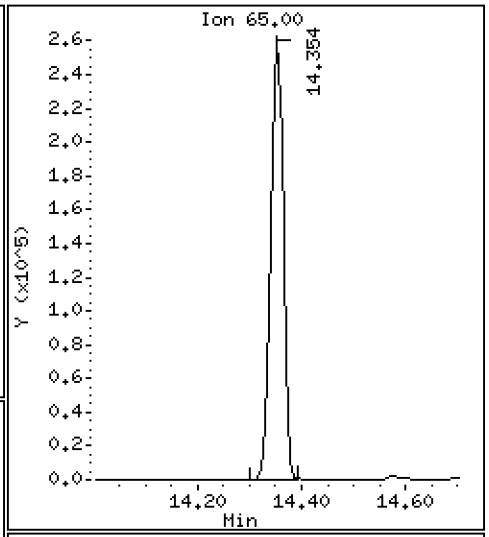
Concentration: 14.16 ug/mL

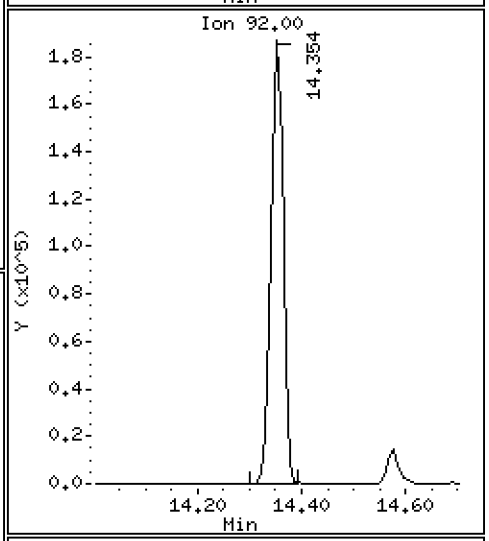


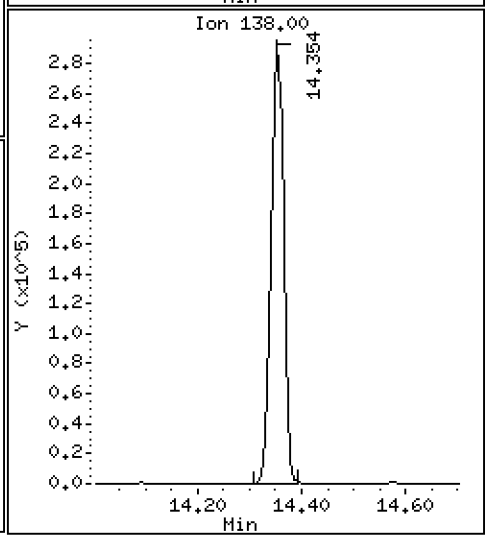












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

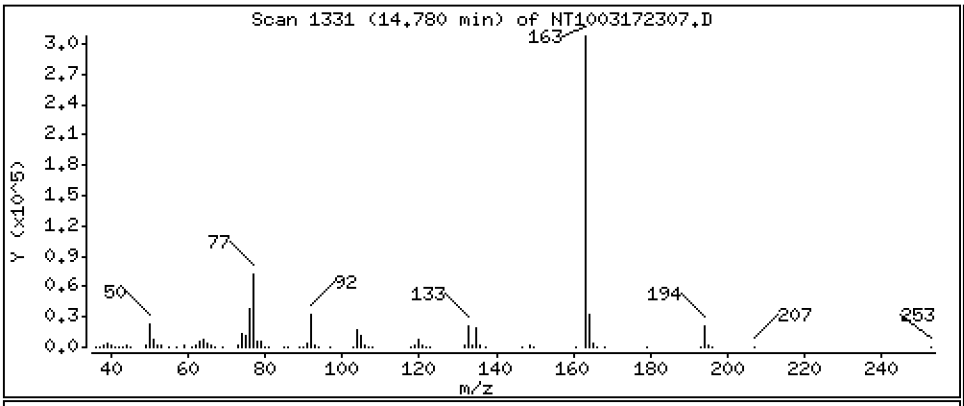
Operator: VTS

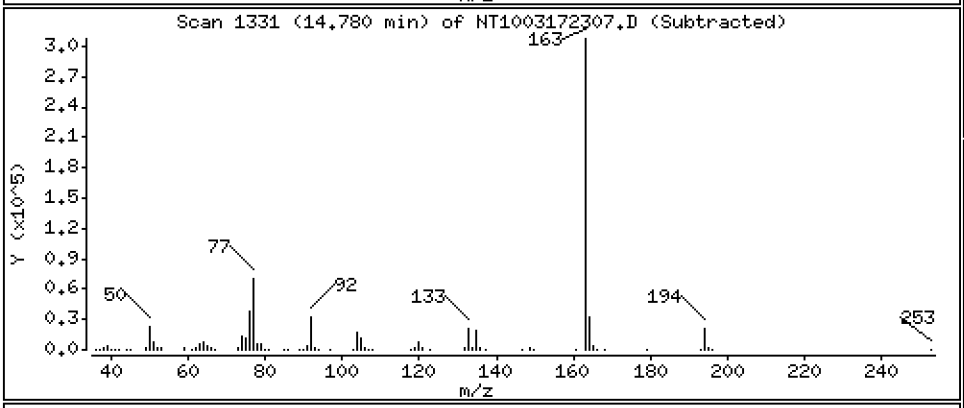
Column phase: ZB-5msi

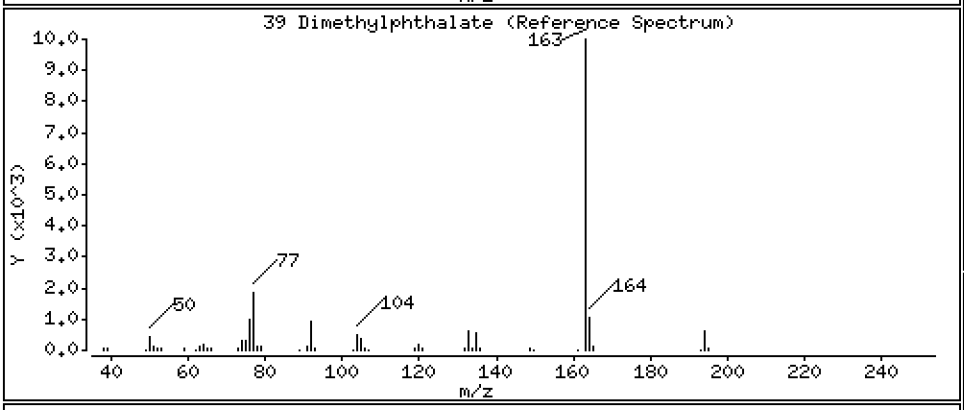
Column diameter: 0.25

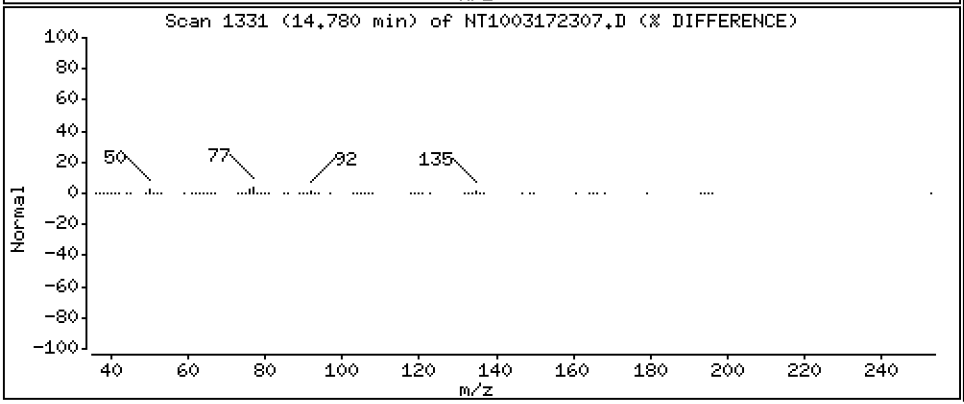
39 Dimethylphthalate

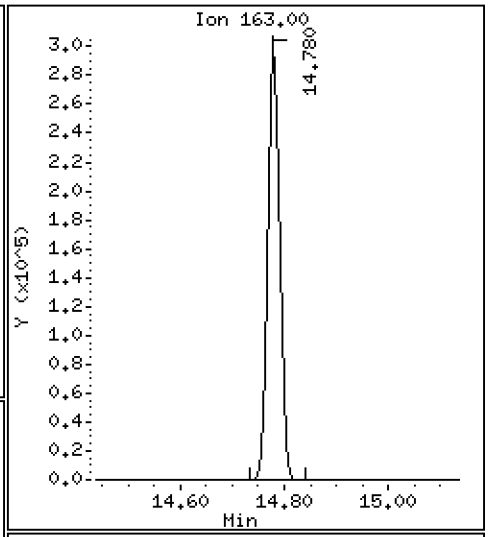
Concentration: 4.420 ug/mL

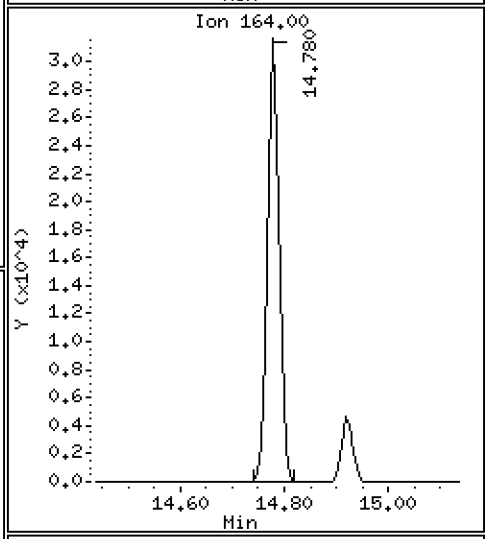


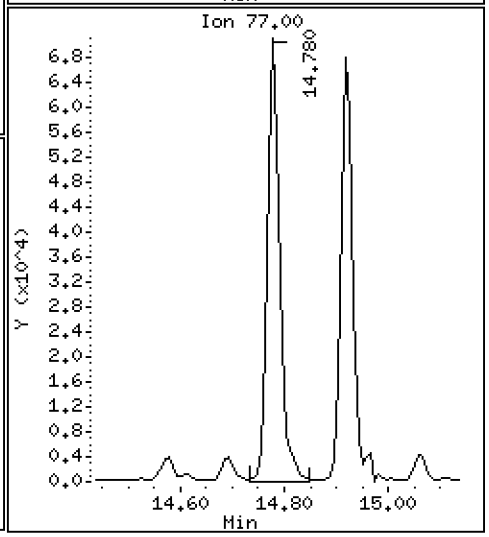












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

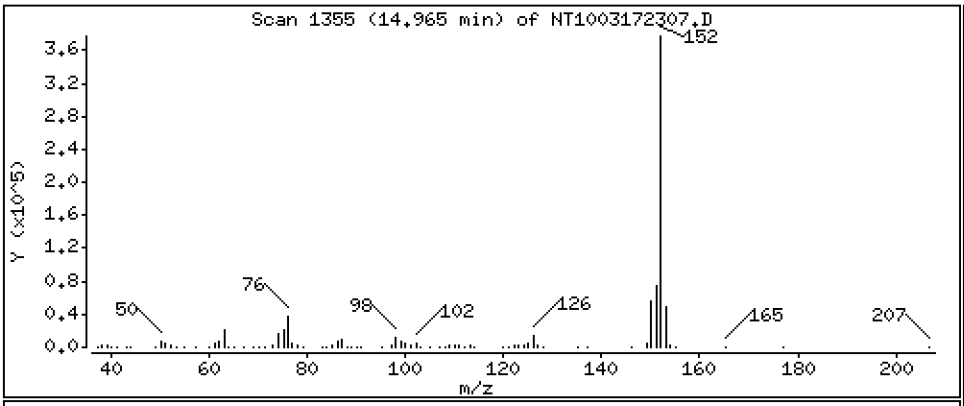
Operator: VTS

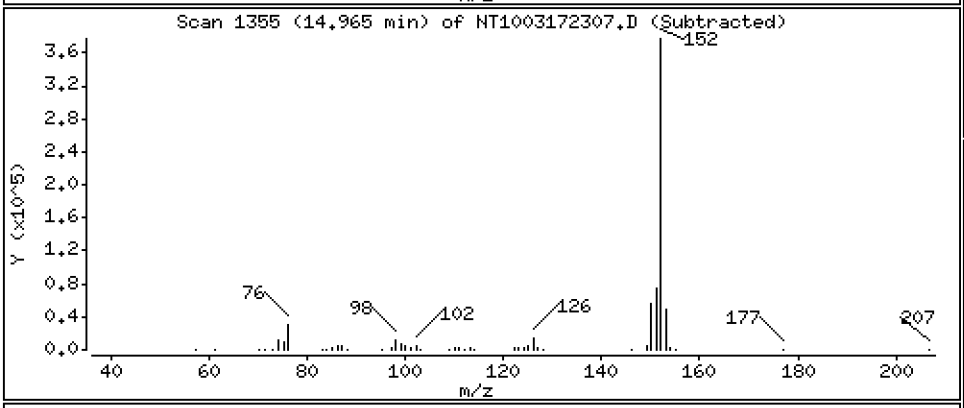
Column phase: ZB-5msi

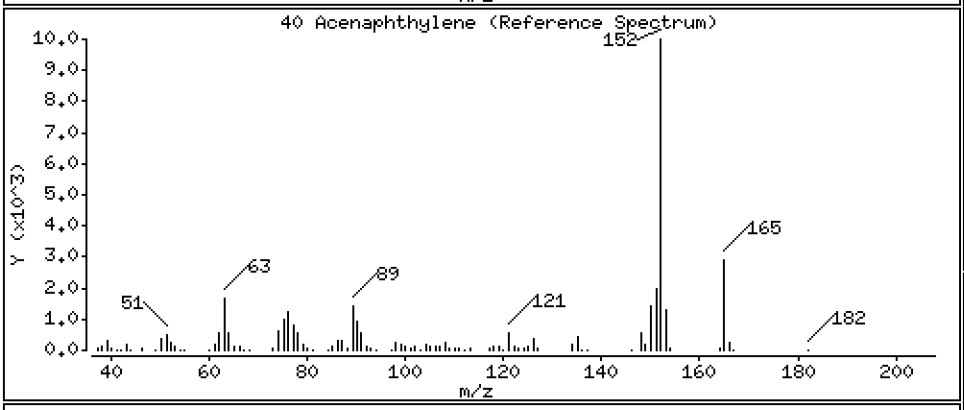
Column diameter: 0.25

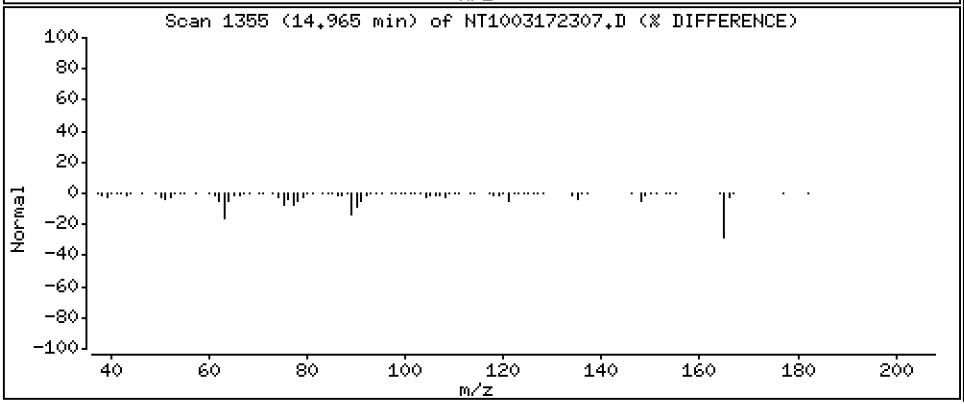
40 Acenaphthylene

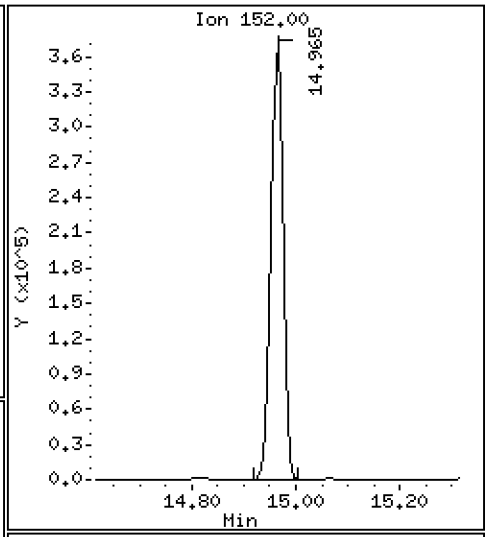
Concentration: 3.555 ug/mL

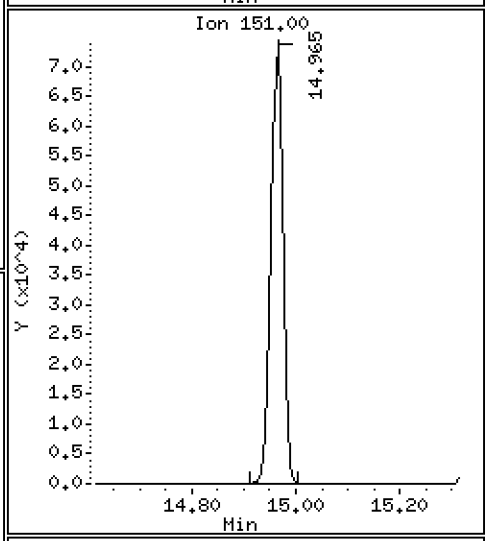


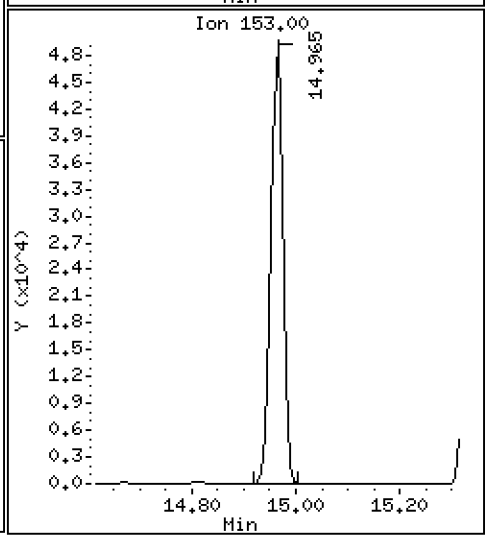












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

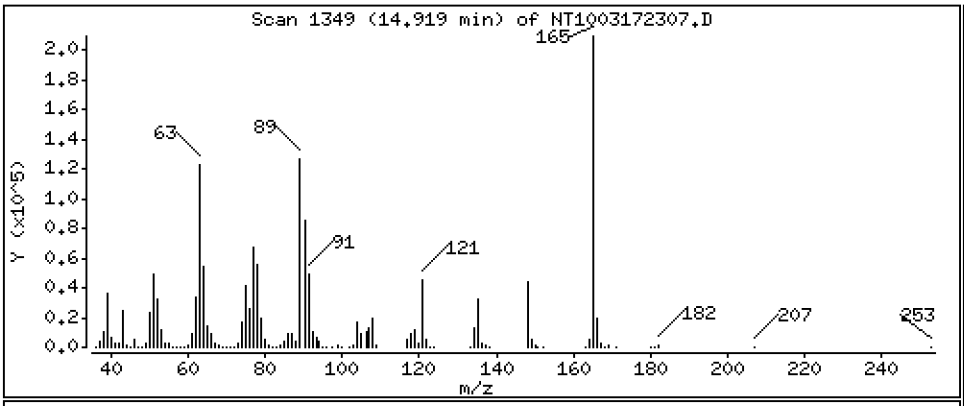
Operator: VTS

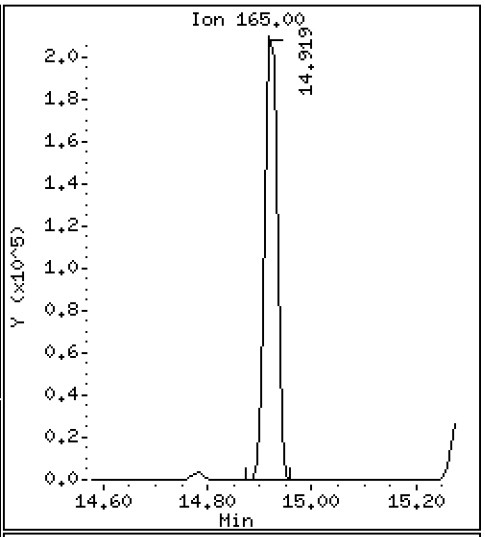
Column phase: ZB-5msi

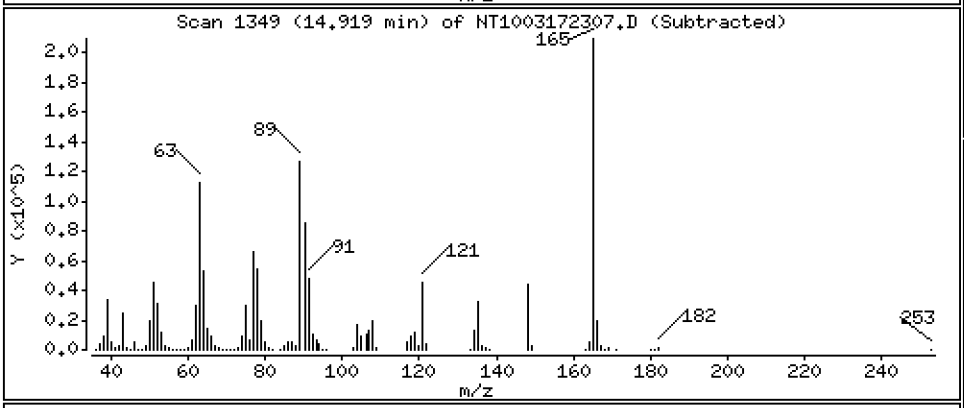
Column diameter: 0.25

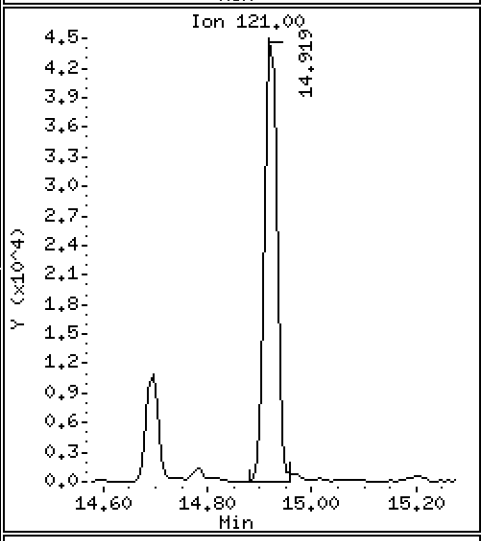
41 2,6-Dinitrotoluene

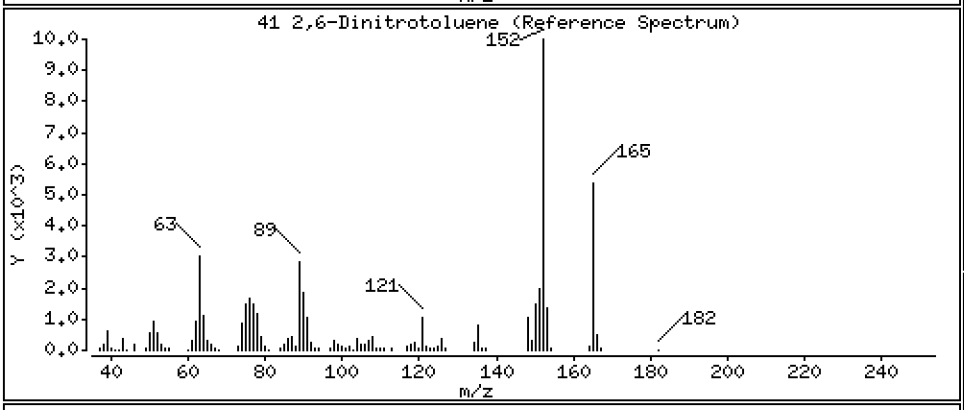
Concentration: 14.75 ug/mL

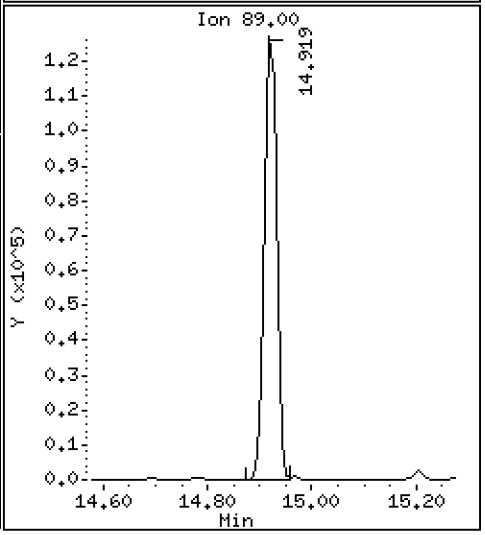


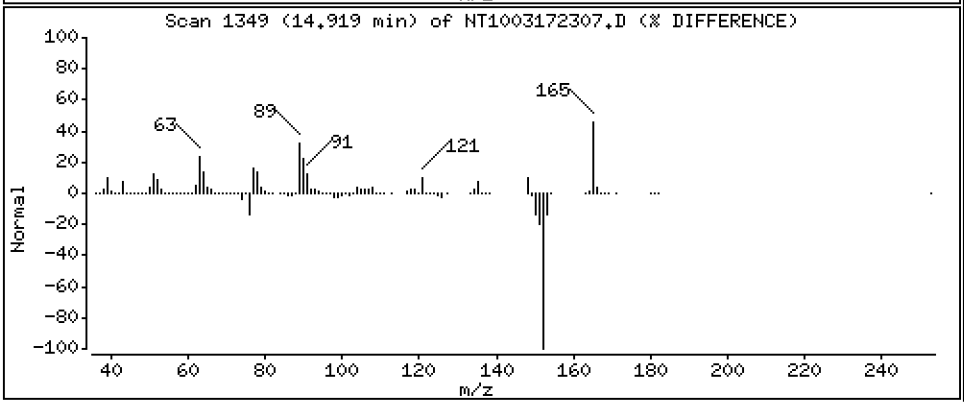












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

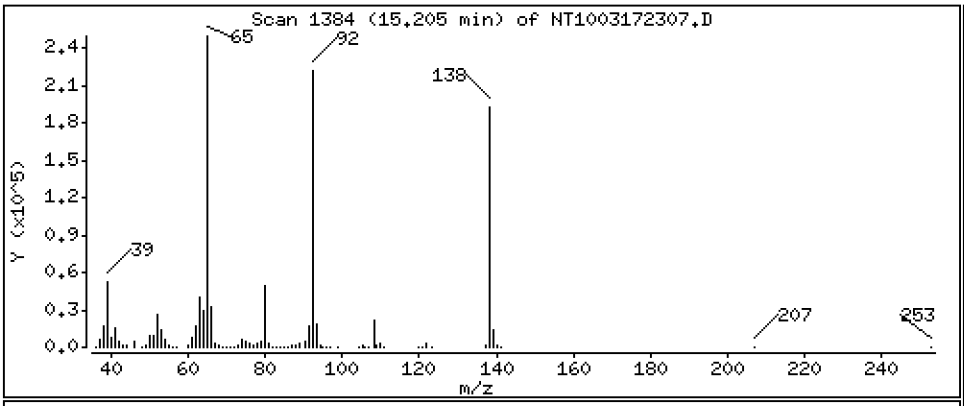
Operator: VTS

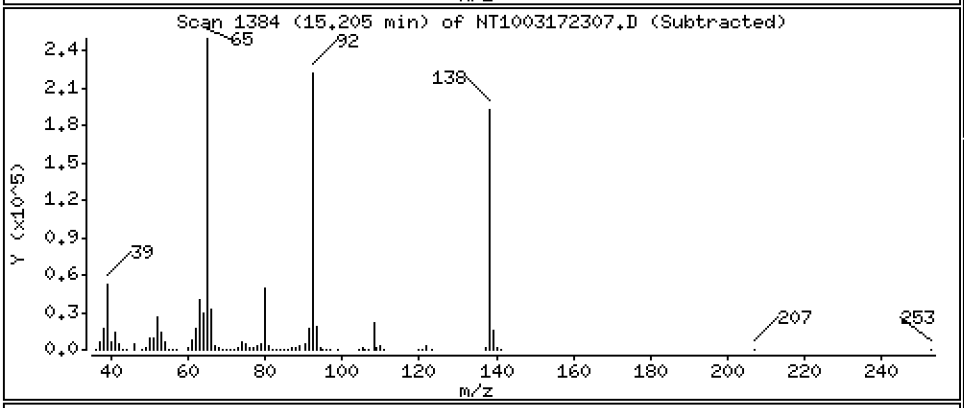
Column phase: ZB-5msi

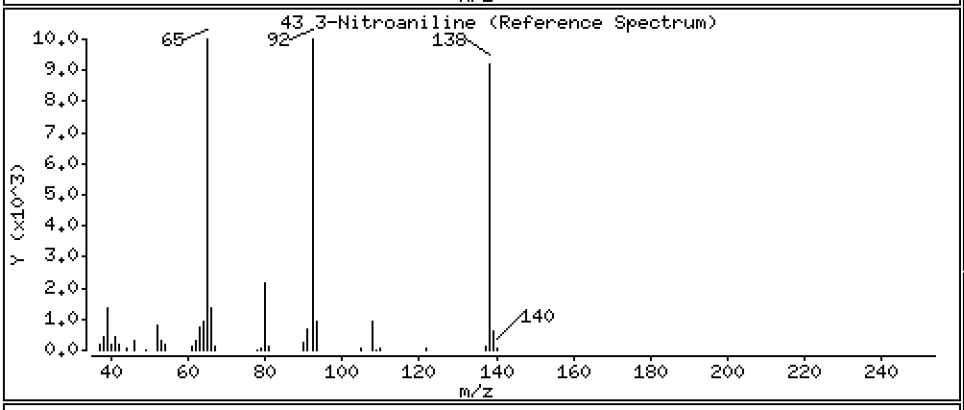
Column diameter: 0.25

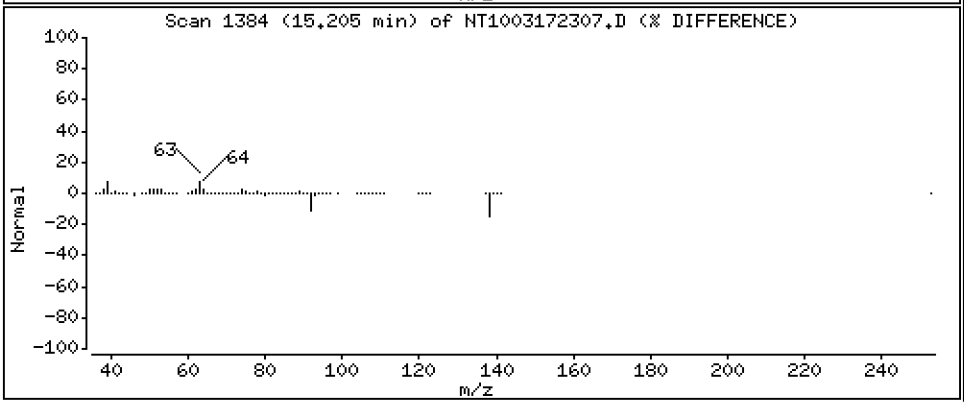
43 3-Nitroaniline

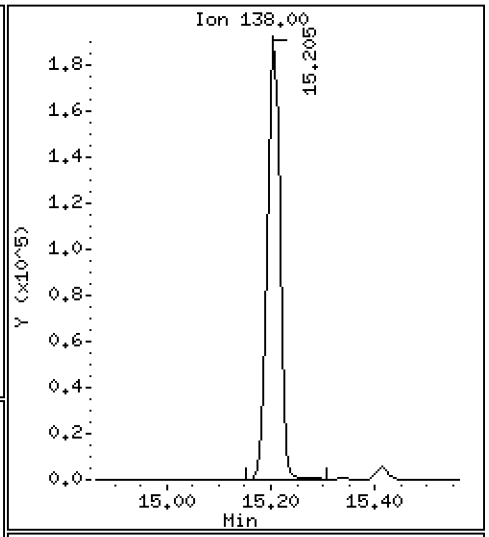
Concentration: 11.93 ug/mL

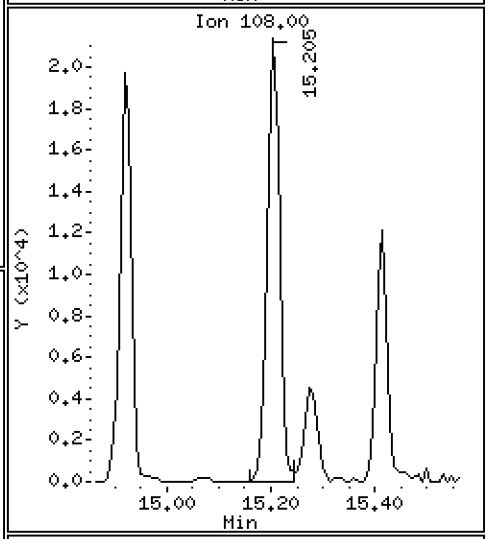


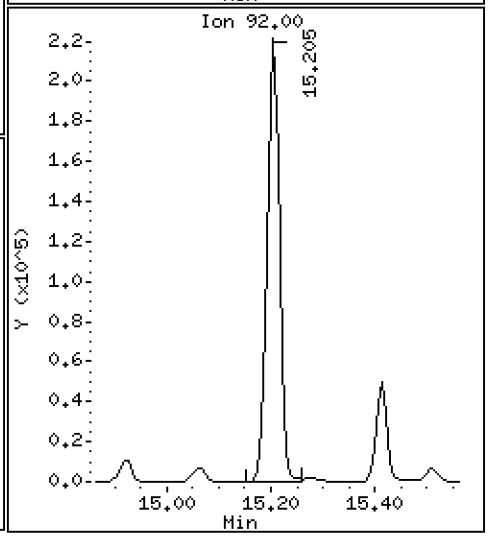












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

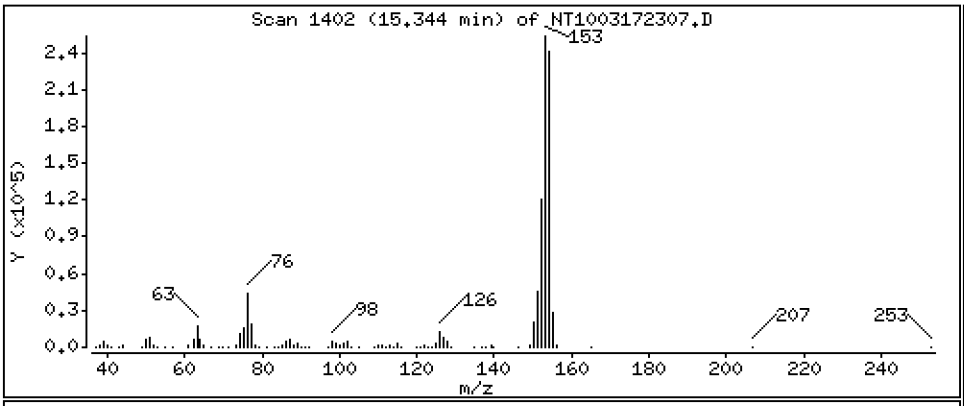
Operator: VTS

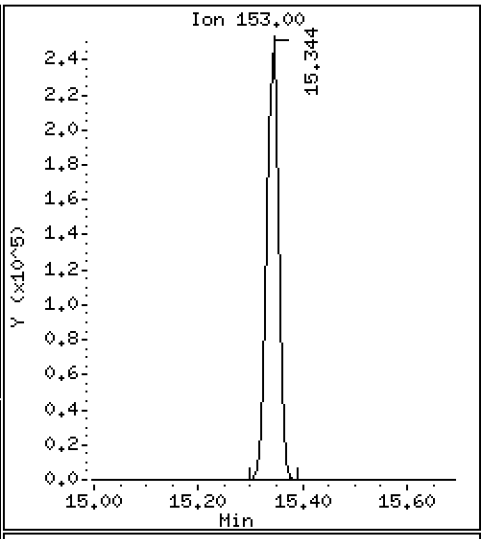
Column phase: ZB-5msi

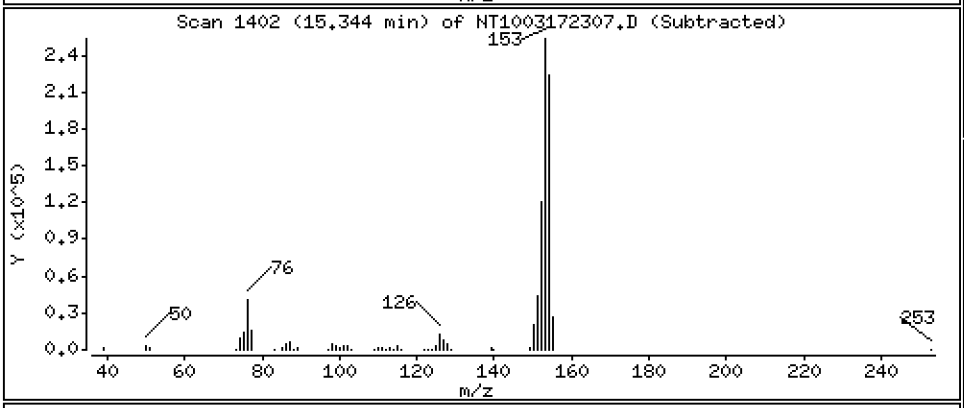
Column diameter: 0.25

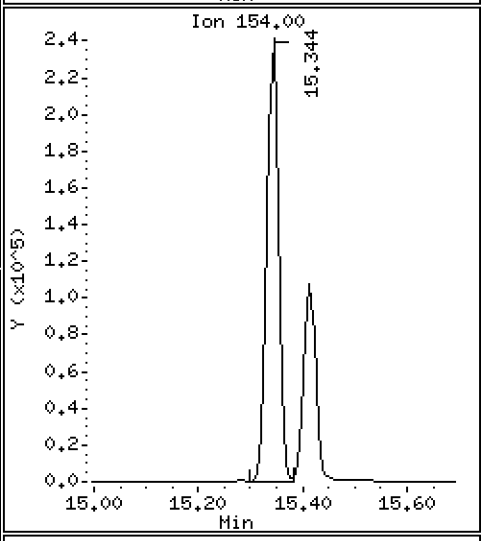
44 Acenaphthene

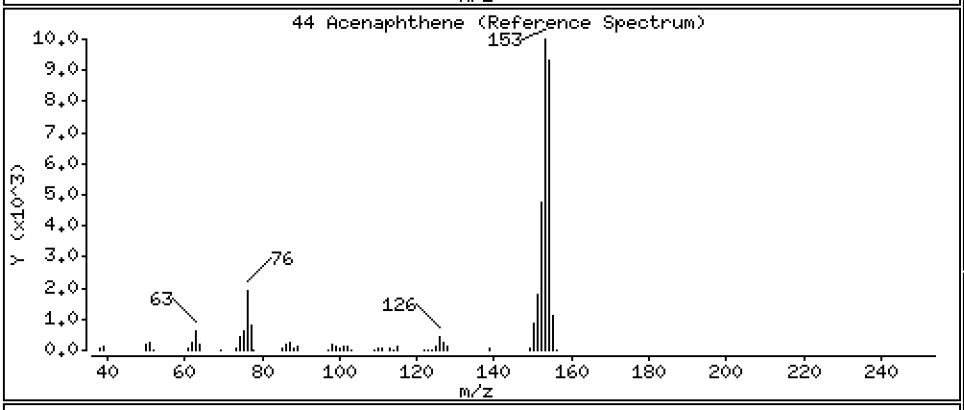
Concentration: 3.752 ug/mL

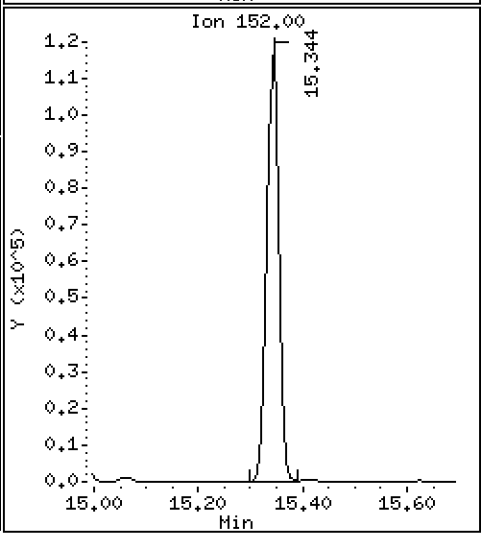


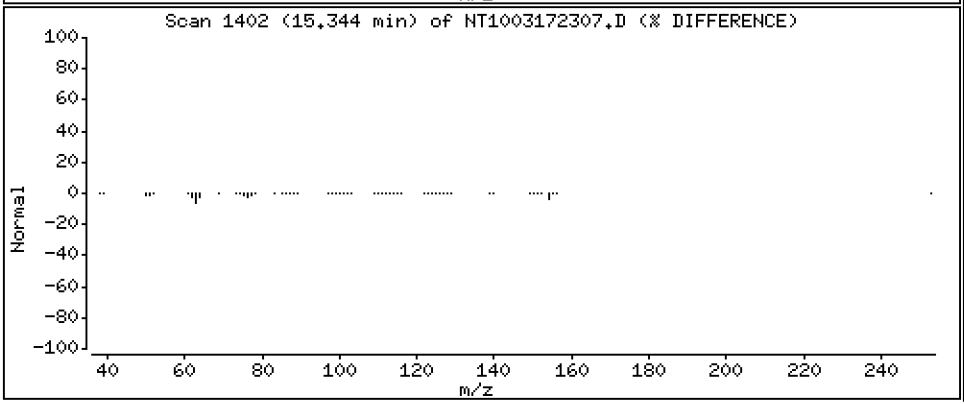












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

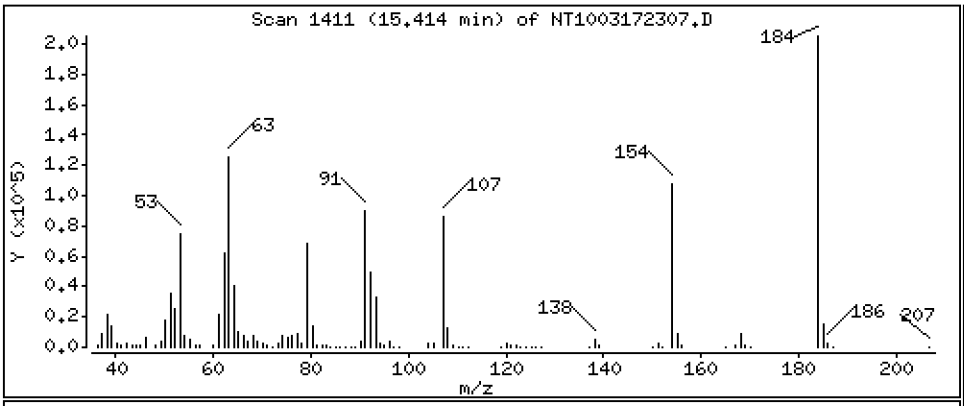
Operator: VTS

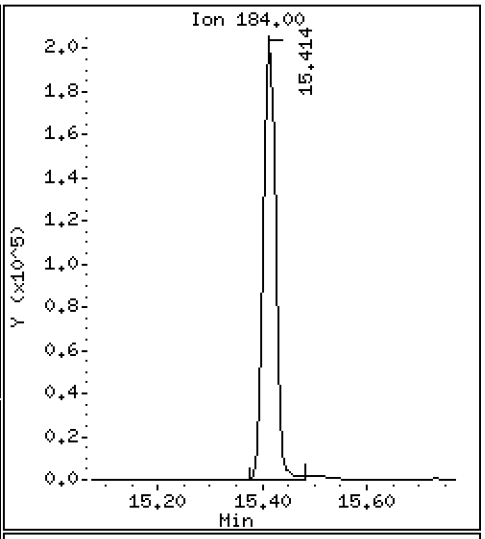
Column phase: ZB-5msi

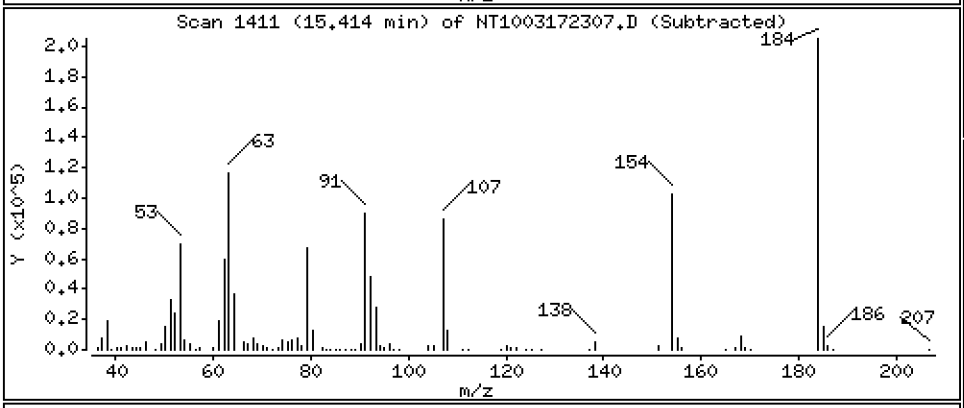
Column diameter: 0.25

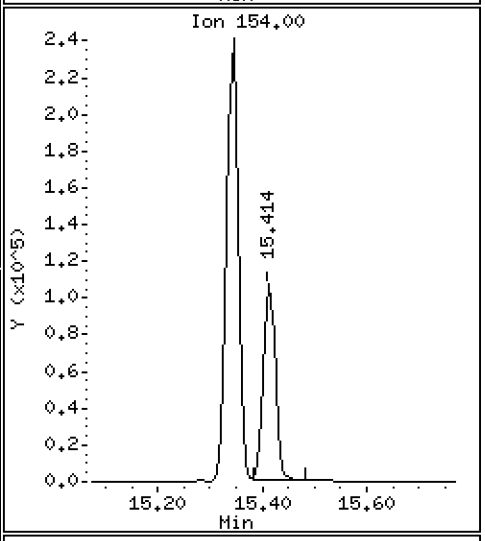
45 2,4-Dinitrophenol

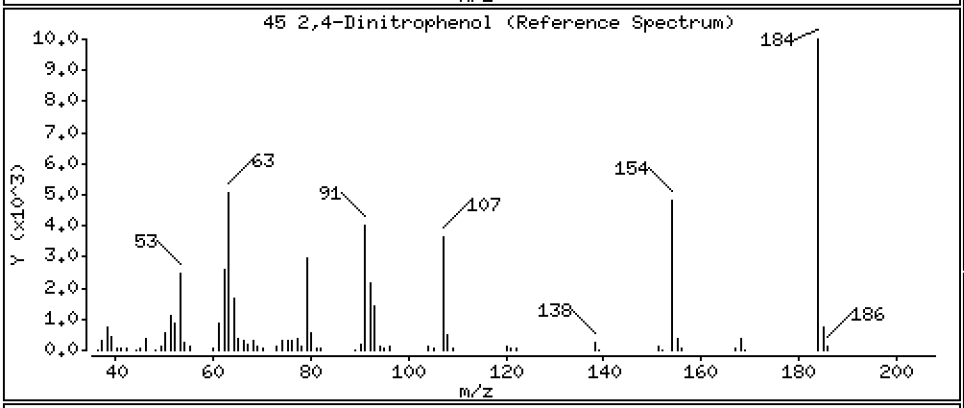
Concentration: 22.16 ug/mL

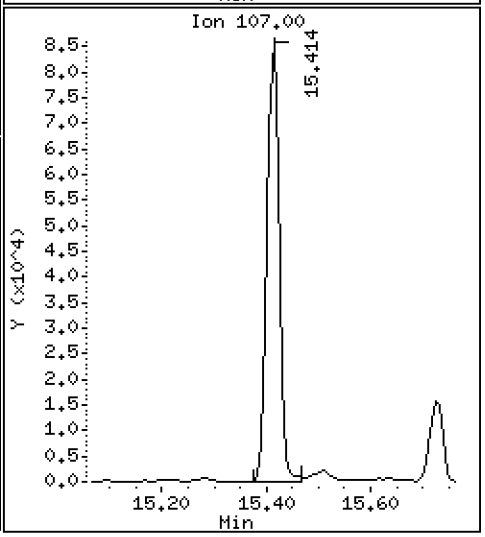


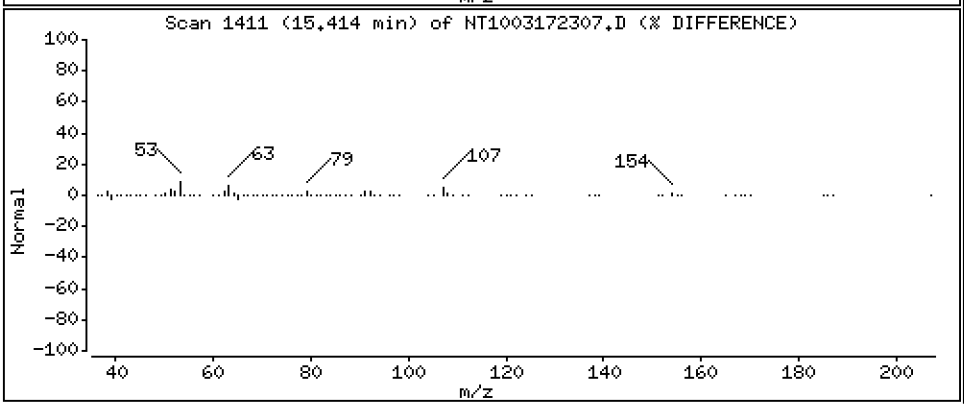












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

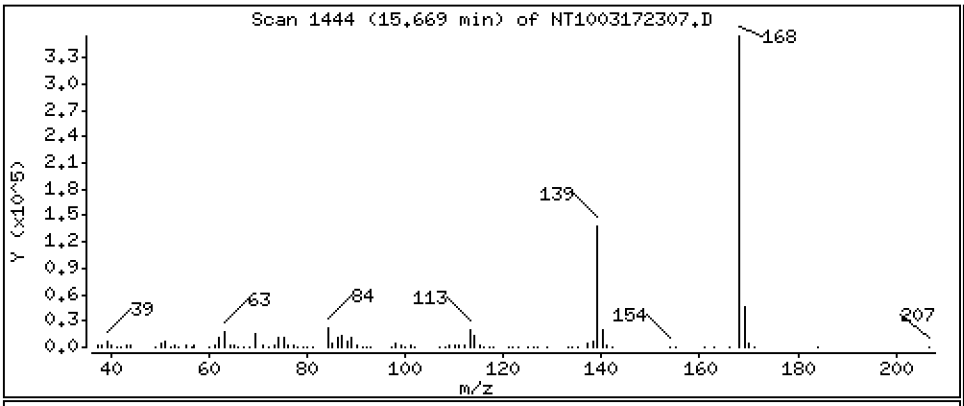
Operator: VTS

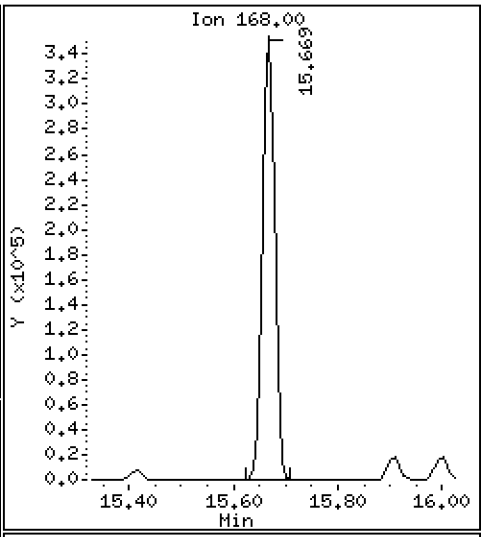
Column phase: ZB-5msi

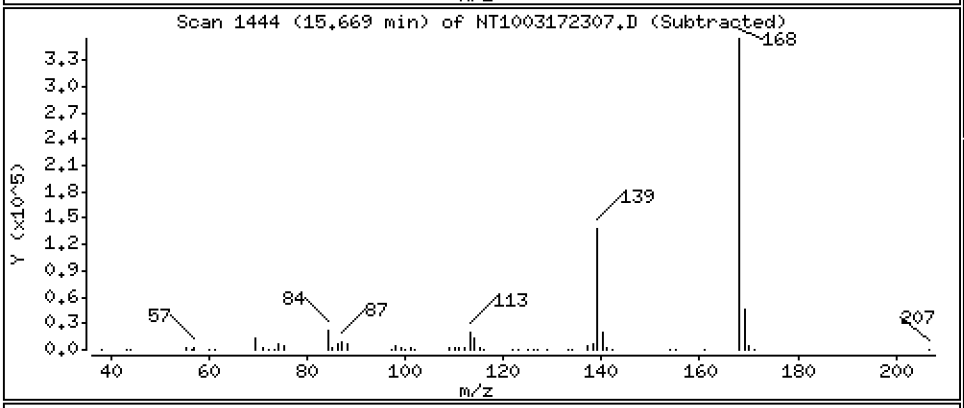
Column diameter: 0.25

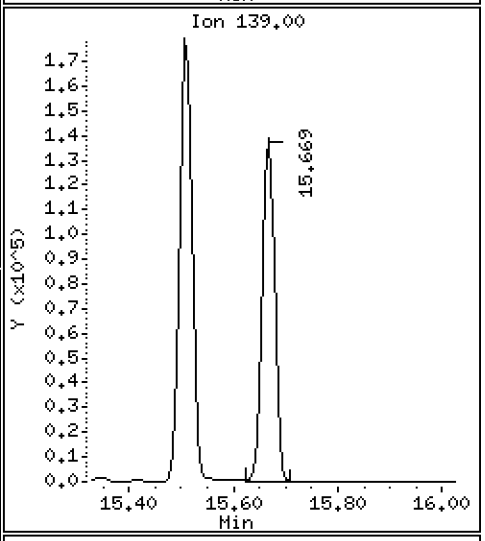
46 Dibenzofuran

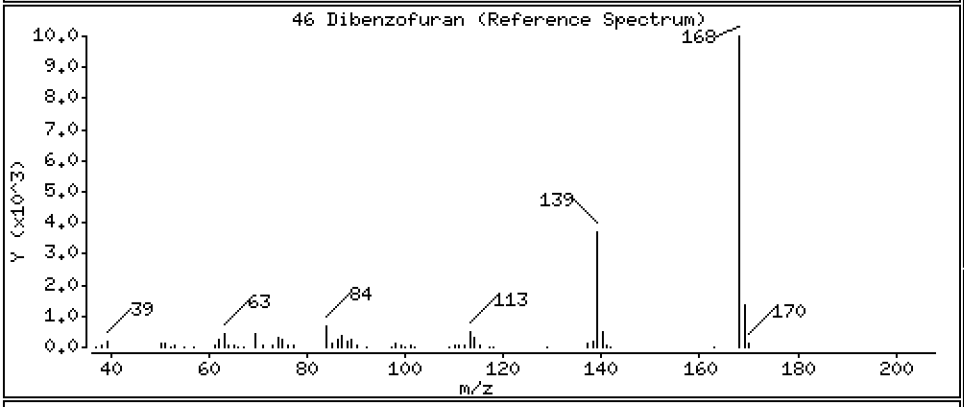
Concentration: 3.746 ug/mL

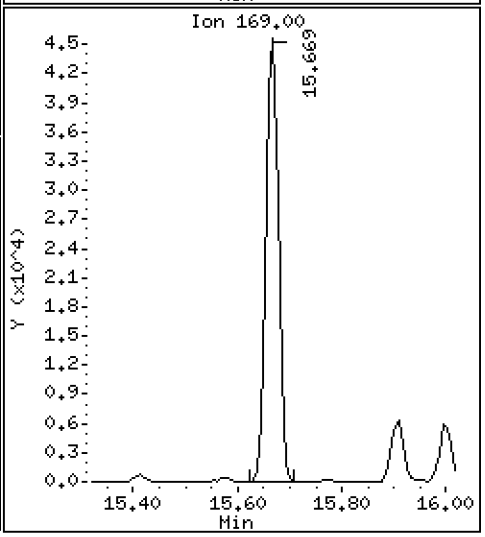


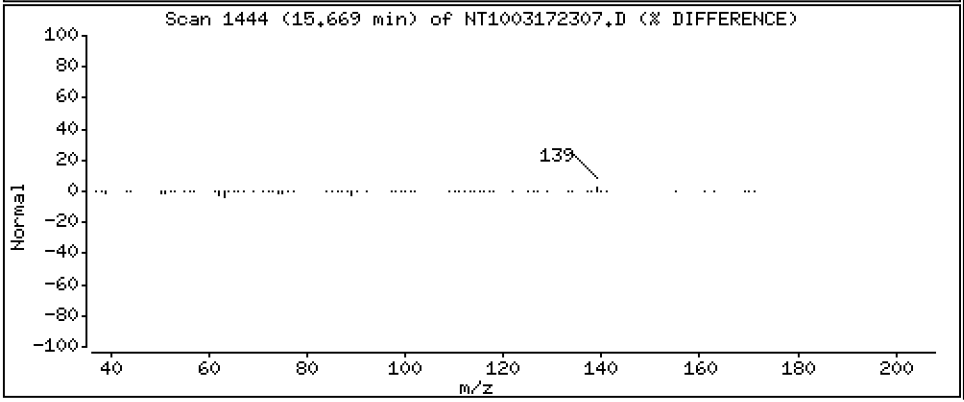












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

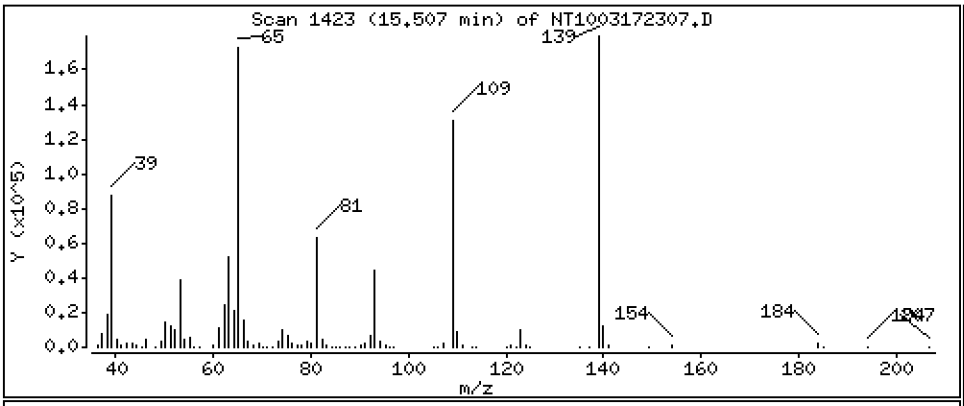
Operator: VTS

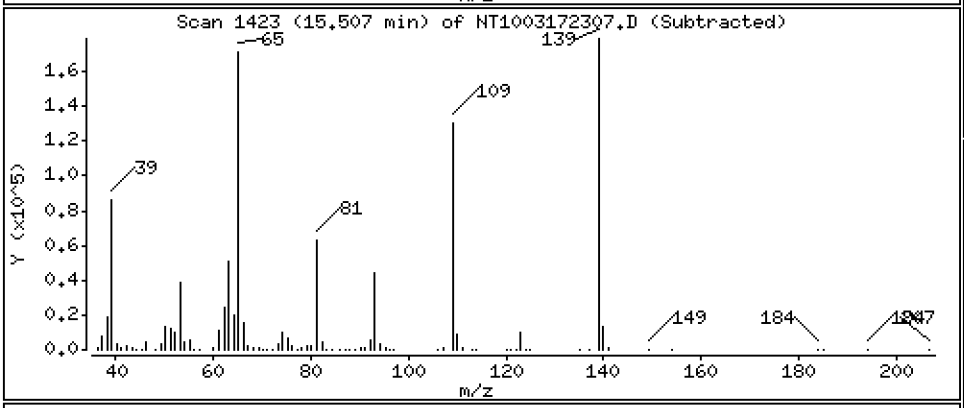
Column phase: ZB-5msi

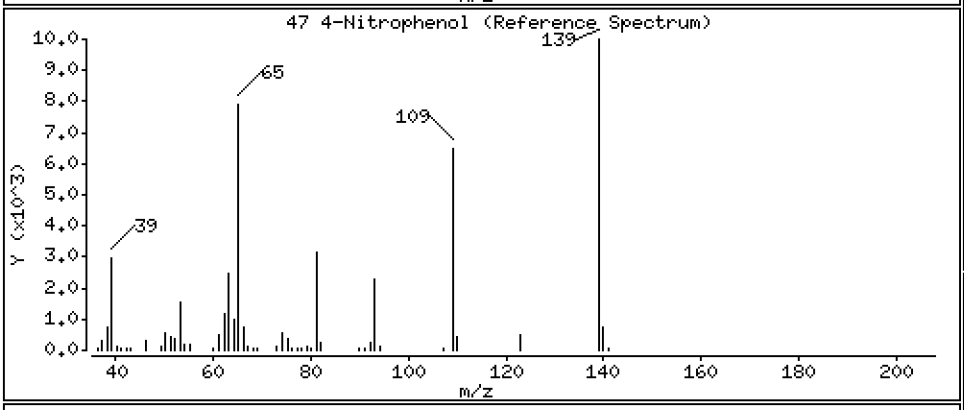
Column diameter: 0.25

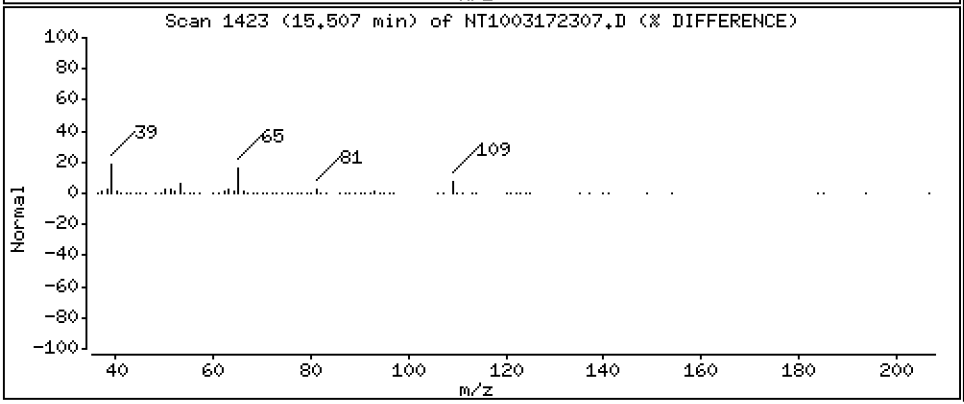
47 4-Nitrophenol

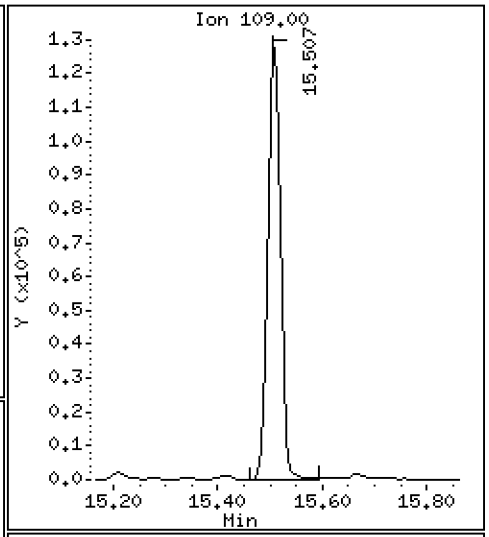
Concentration: 13.24 ug/mL

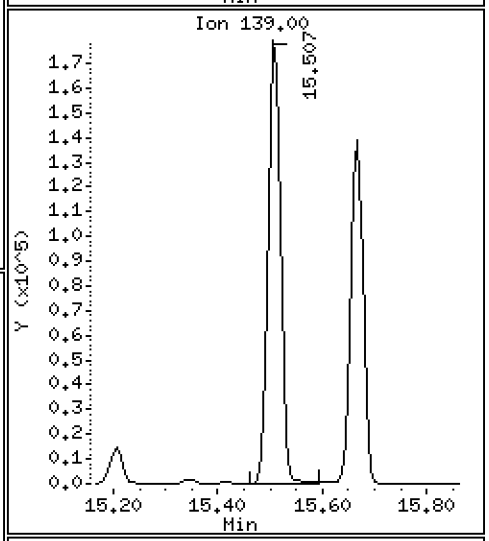


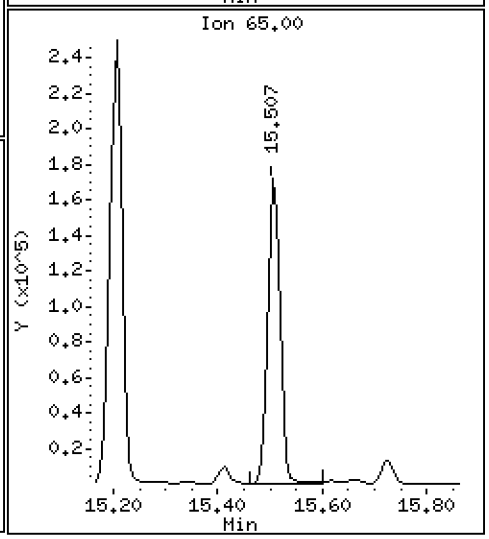












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

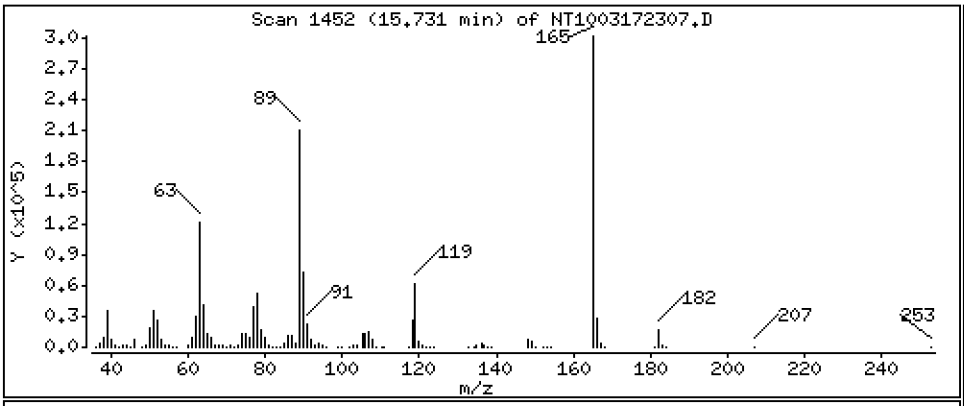
Operator: VTS

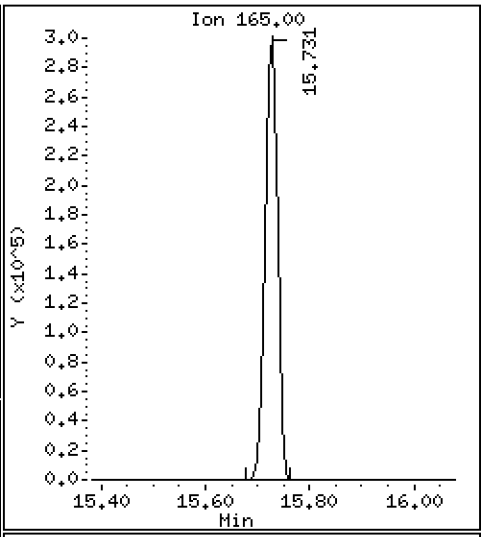
Column phase: ZB-5msi

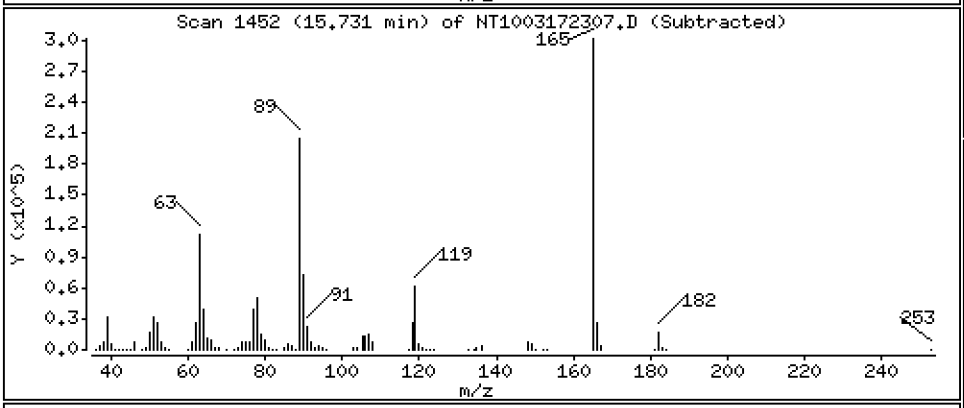
Column diameter: 0.25

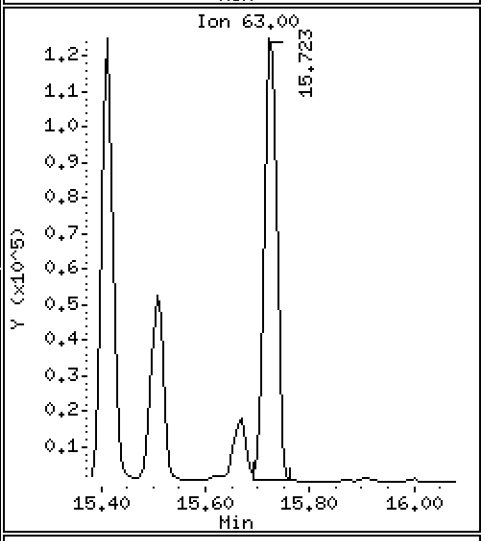
48 2,4-Dinitrotoluene

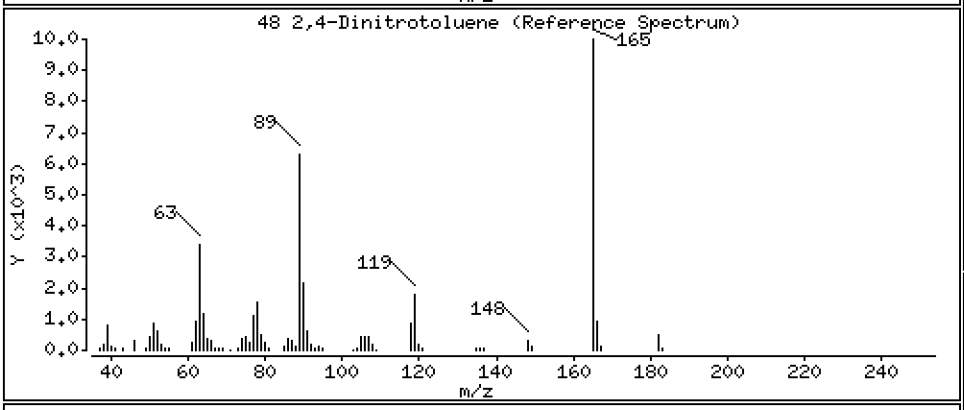
Concentration: 14.27 ug/mL

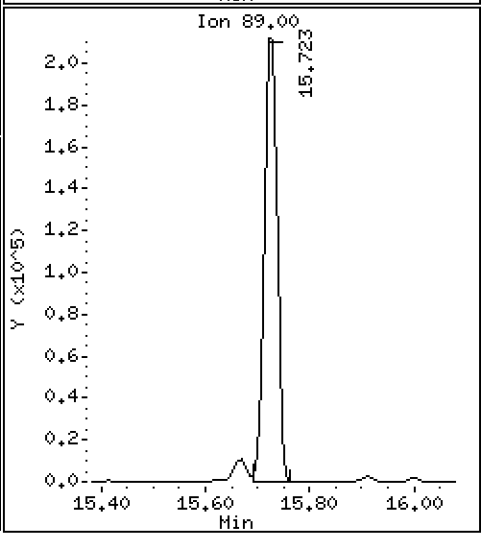


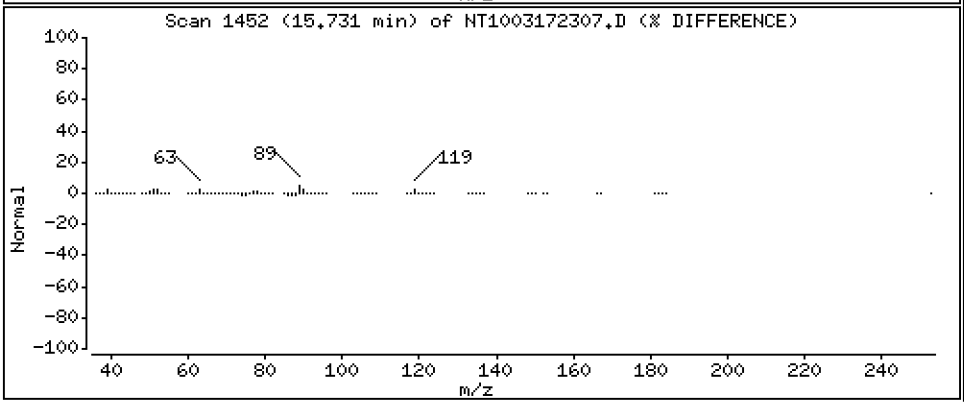












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172307.D

Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

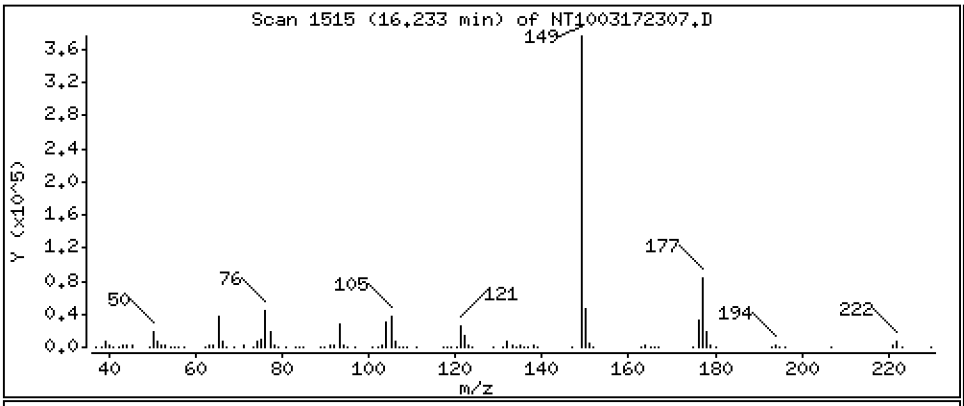
Operator: VTS

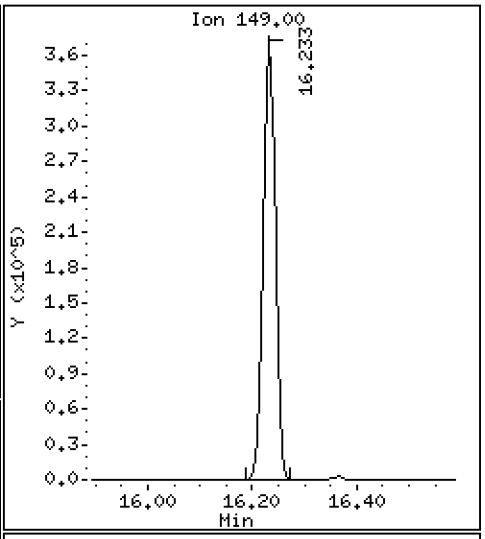
Column phase: ZB-5msi

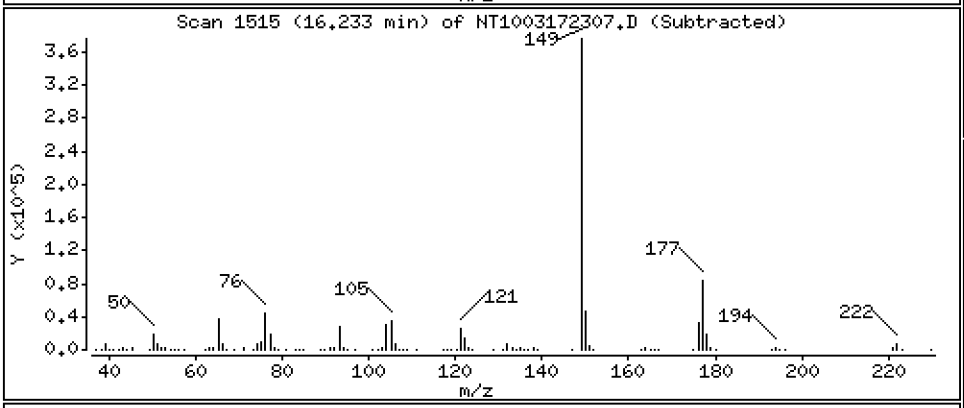
Column diameter: 0.25

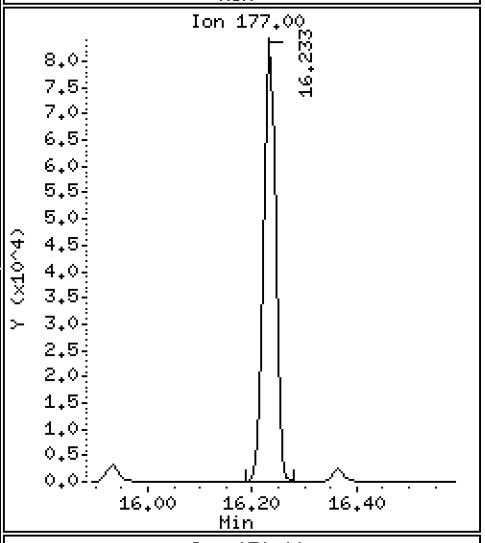
50 Diethylphthalate

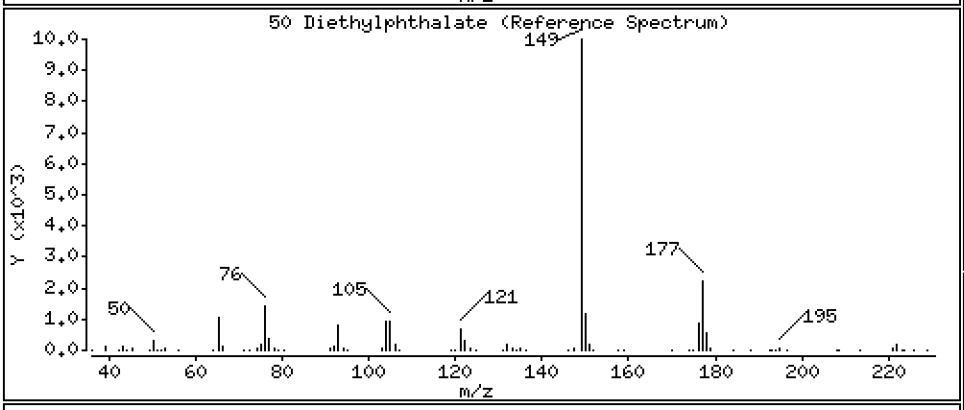
Concentration: 5.537 ug/mL

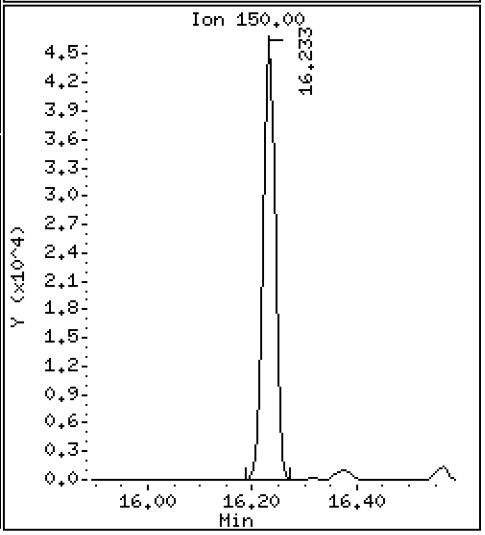


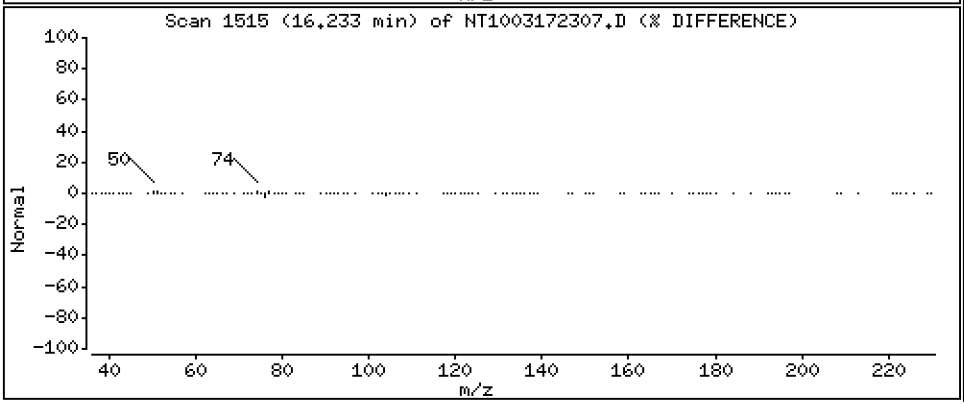












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

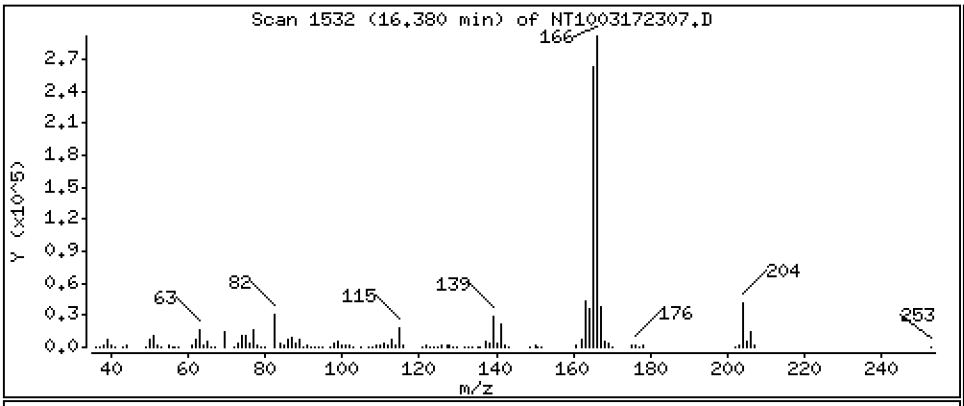
Operator: VTS

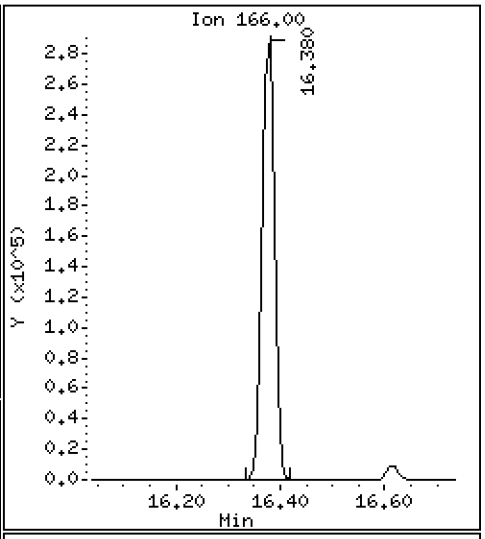
Column phase: ZB-5msi

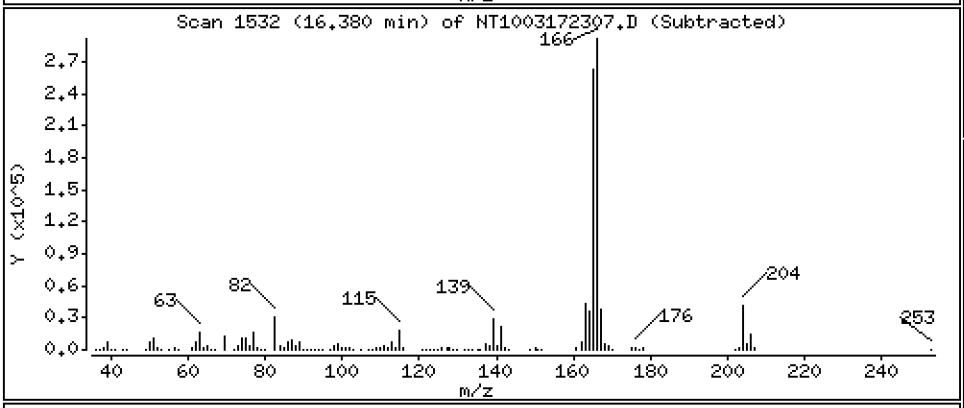
Column diameter: 0.25

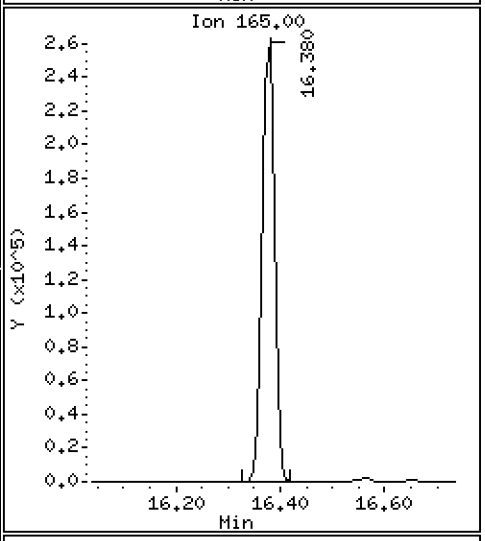
49 Fluorene

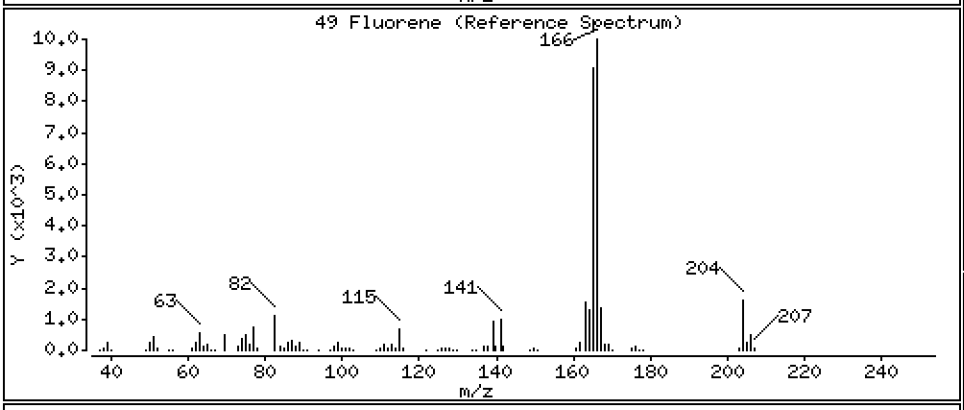
Concentration: 3.914 ug/mL

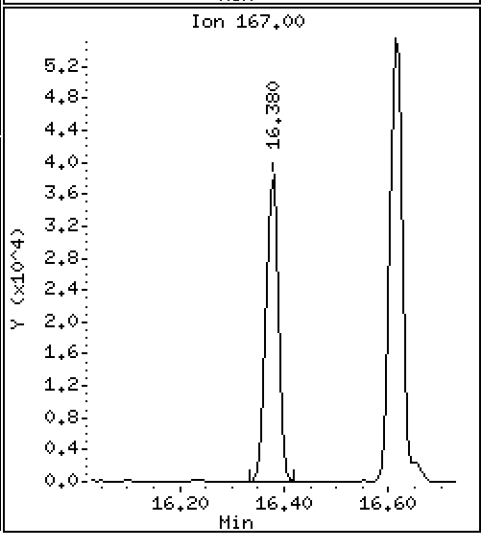


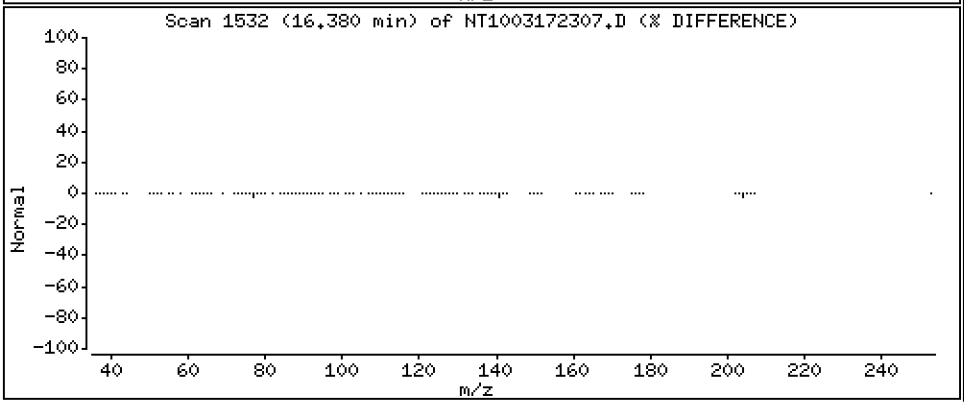












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

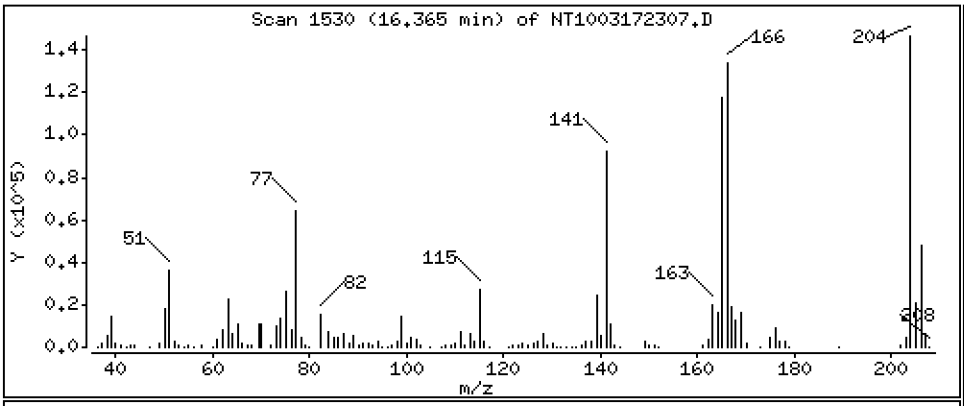
Operator: VTS

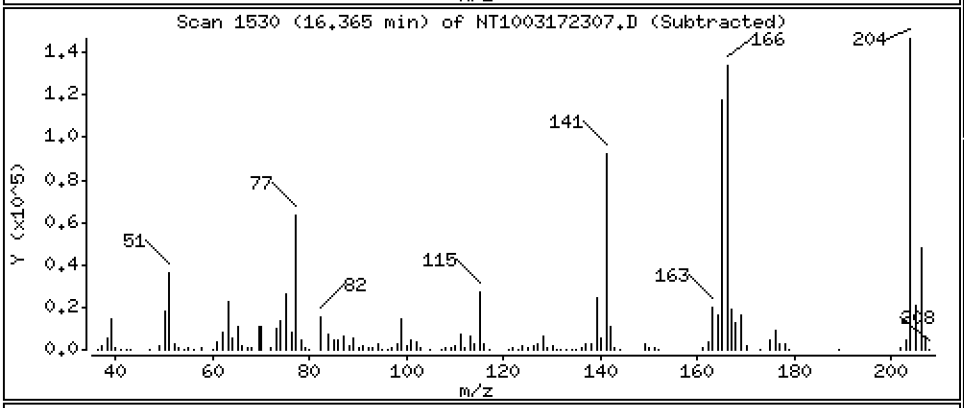
Column phase: ZB-5msi

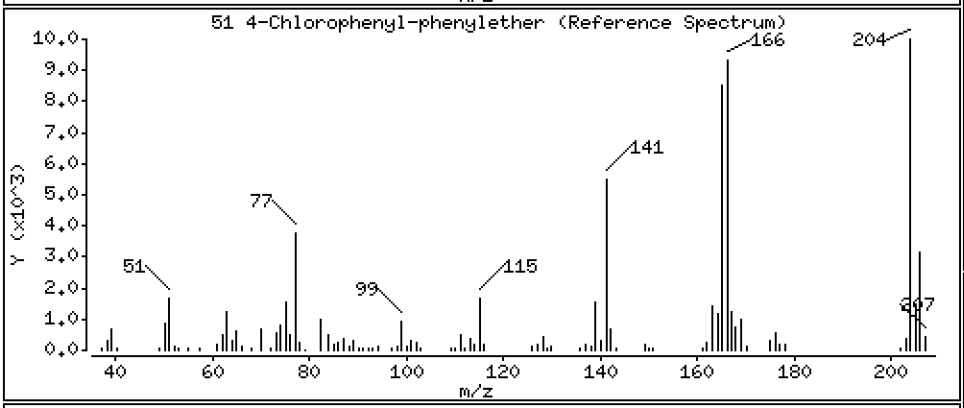
Column diameter: 0.25

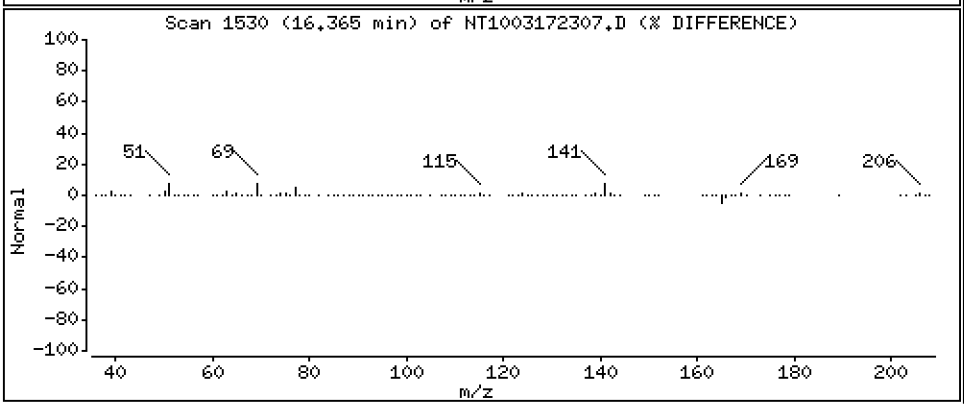
51 4-Chlorophenyl-phenylether

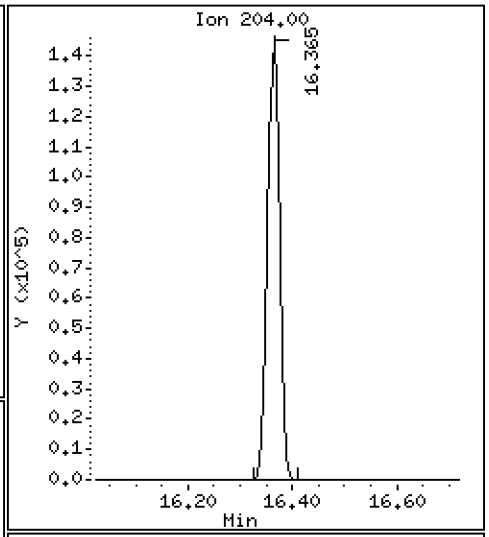
Concentration: 4.038 ug/mL

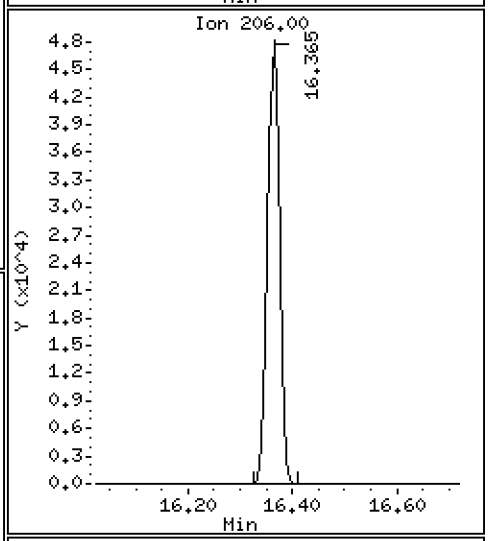


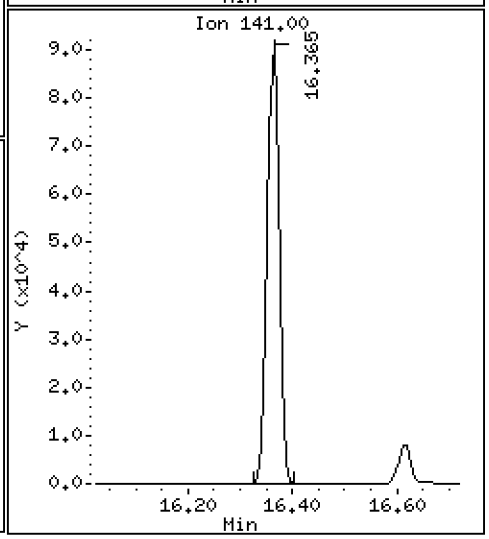












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

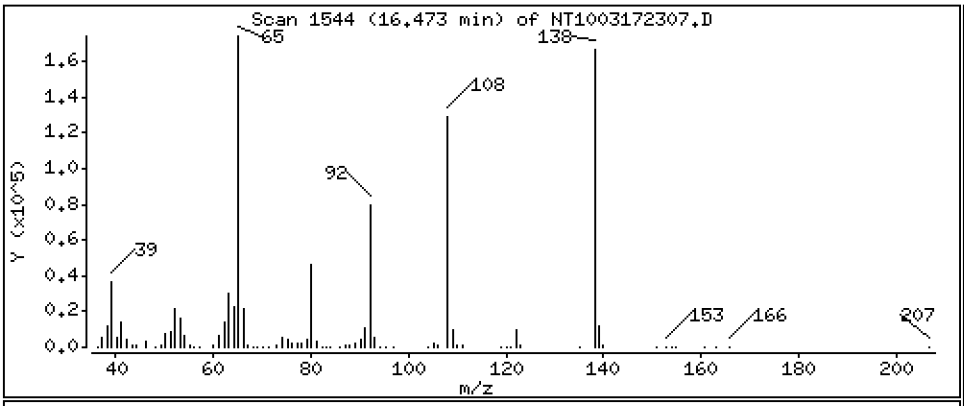
Operator: VTS

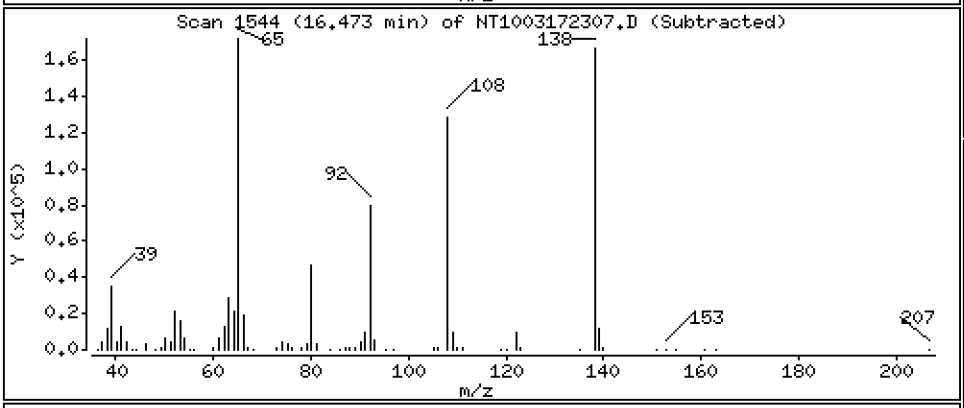
Column phase: ZB-5msi

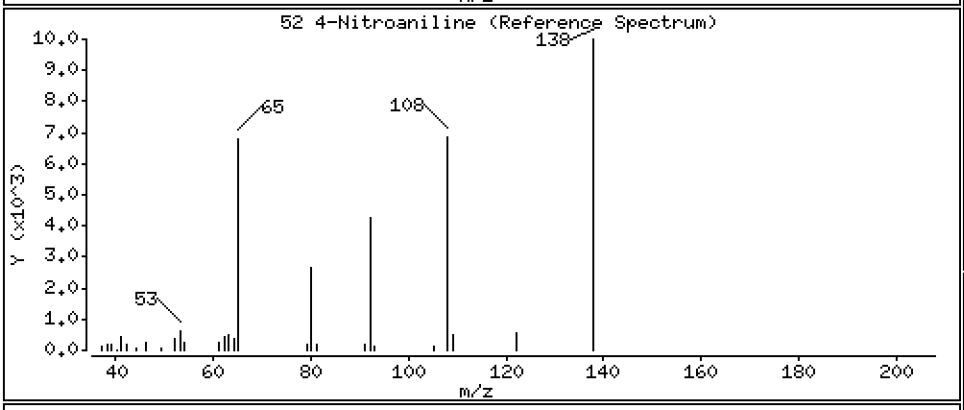
Column diameter: 0.25

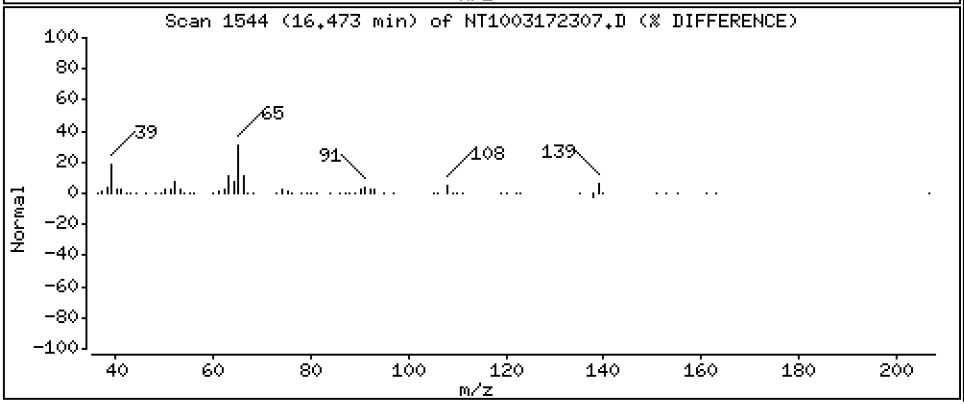
52 4-Nitroaniline

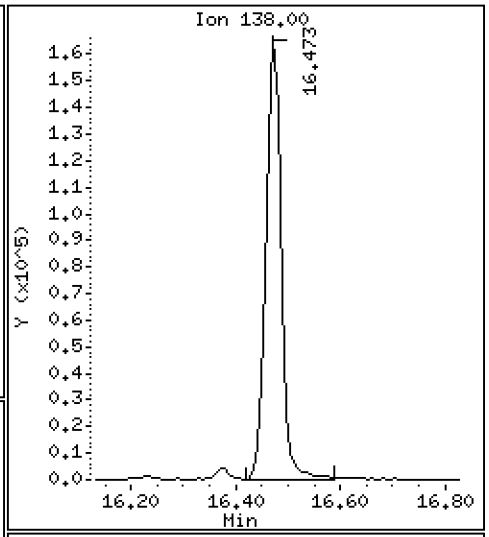
Concentration: 13.83 ug/mL

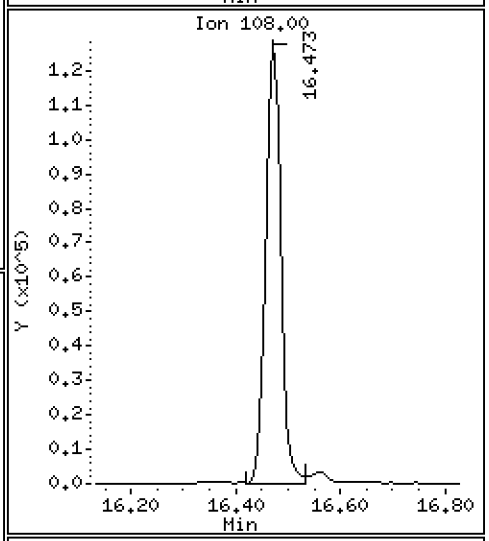


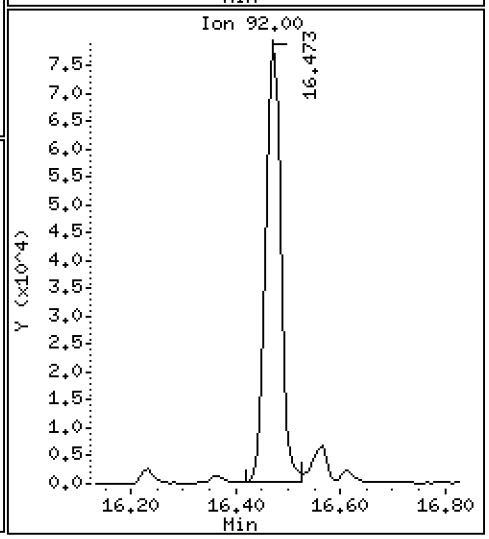












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

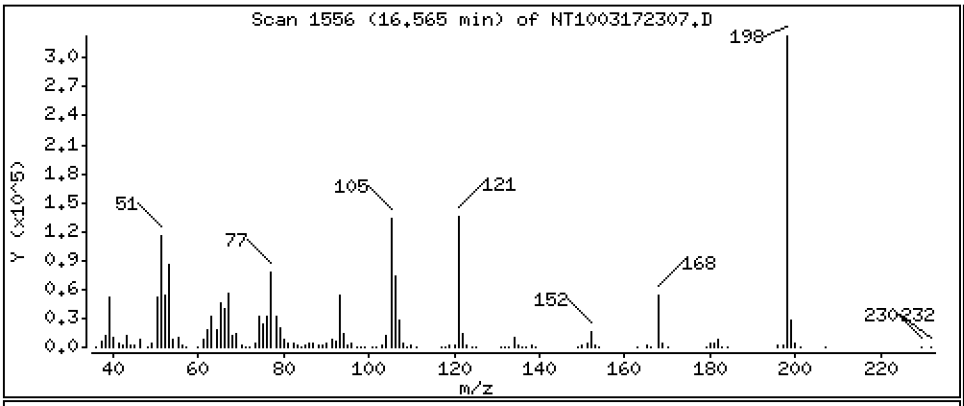
Operator: VTS

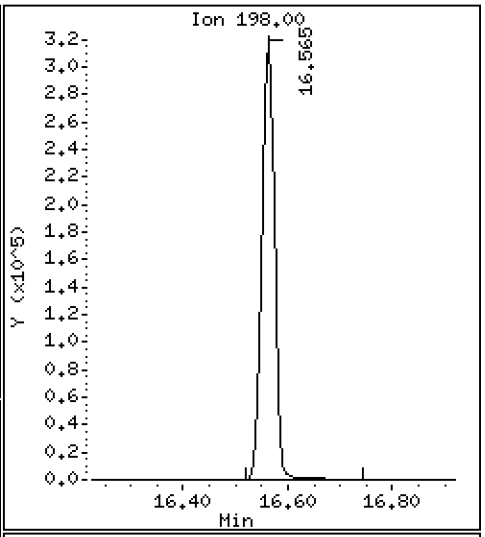
Column phase: ZB-5msi

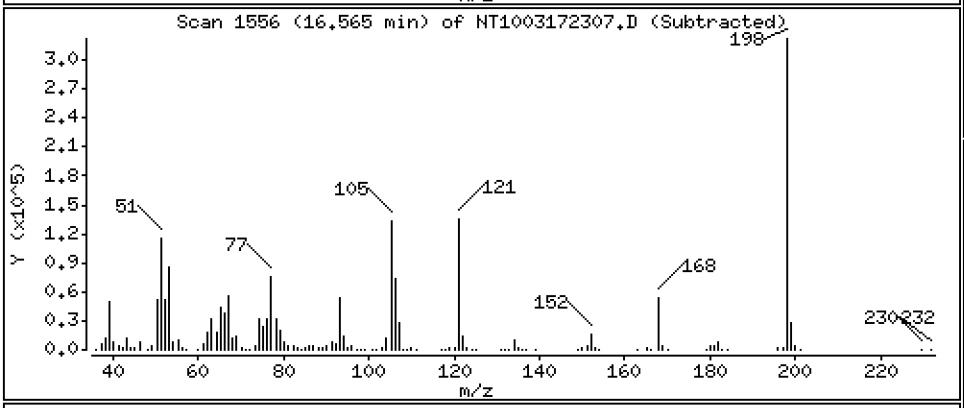
Column diameter: 0.25

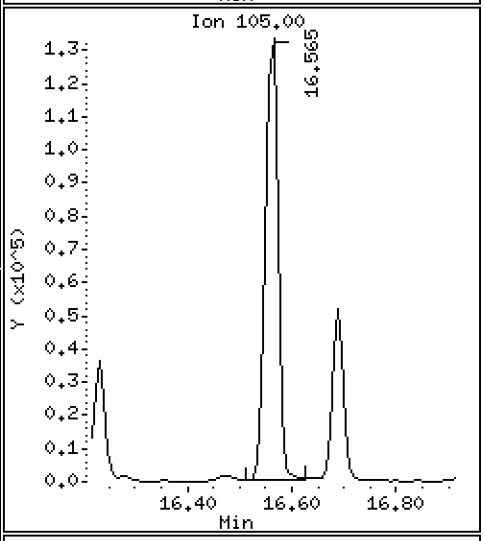
53 4,6-Dinitro-2-methylphenol

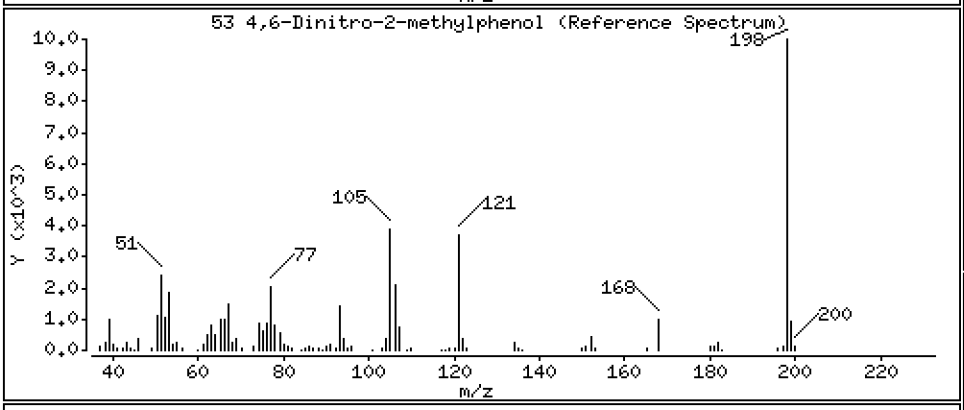
Concentration: 27.84 ug/mL

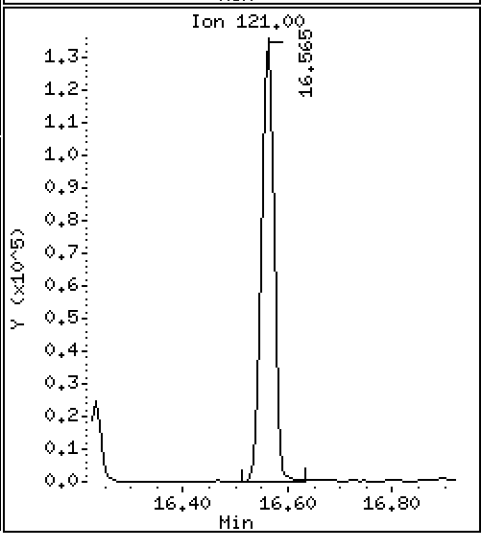


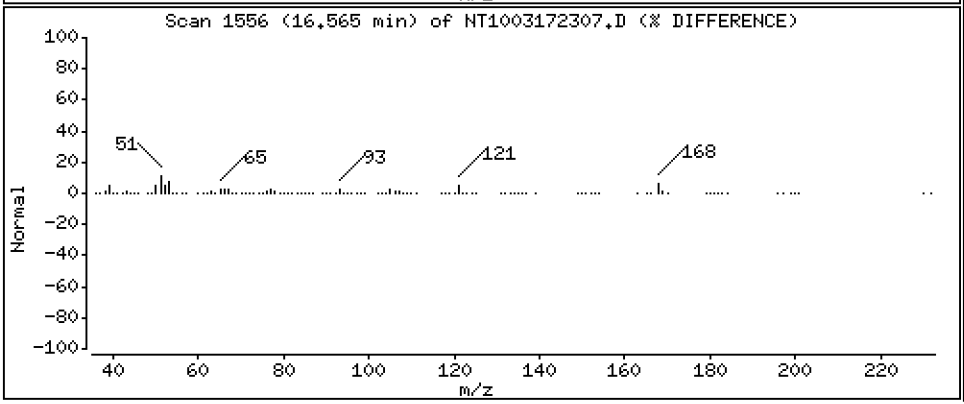












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

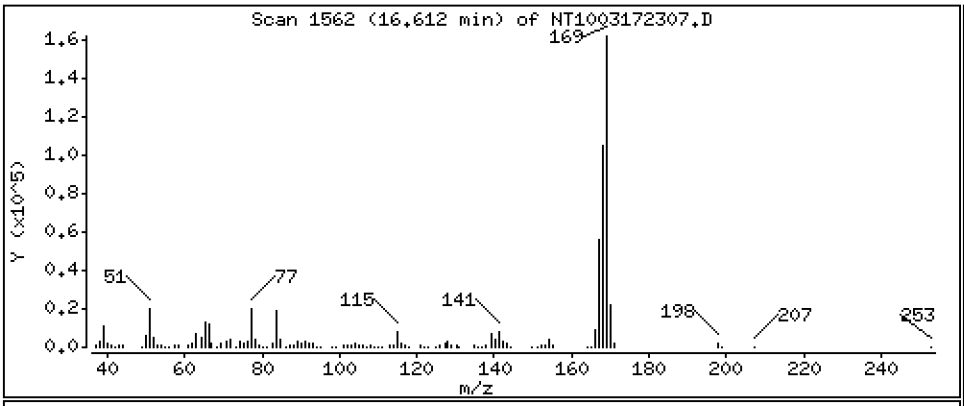
Operator: VTS

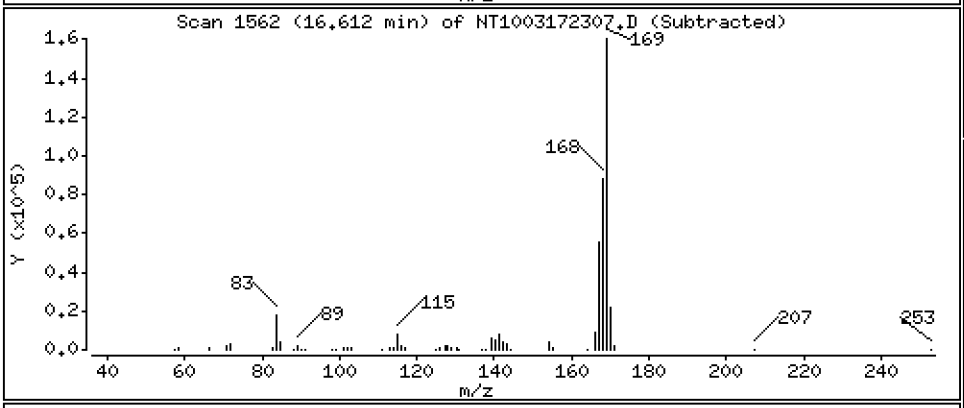
Column phase: ZB-5msi

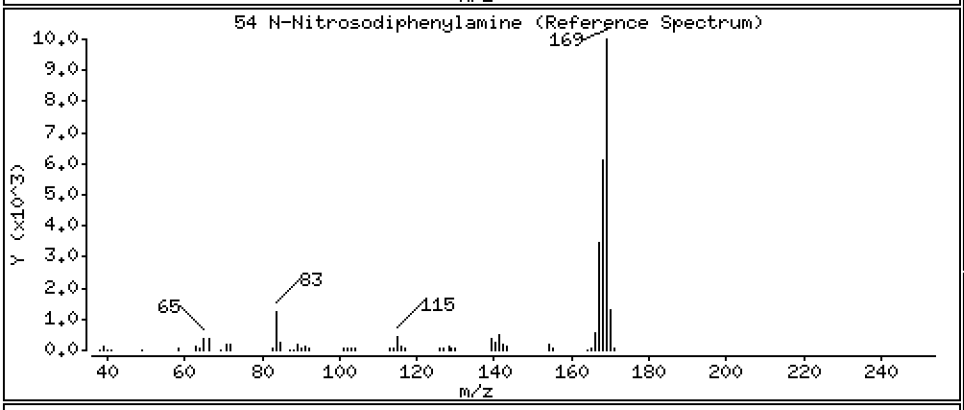
Column diameter: 0.25

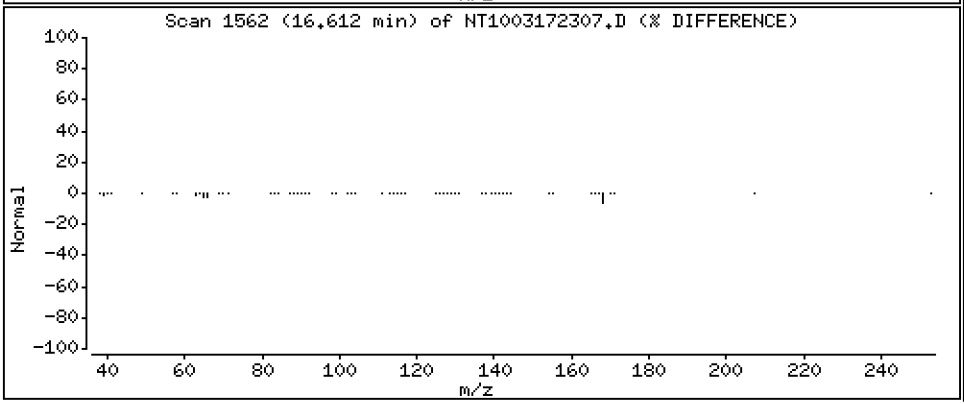
54 N-Nitrosodiphenylamine

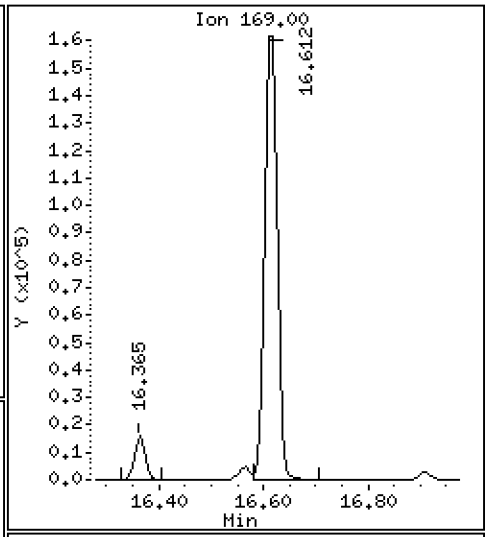
Concentration: 3.290 ug/mL

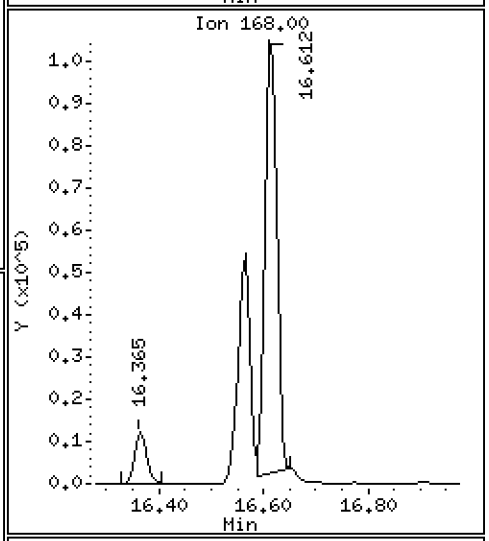


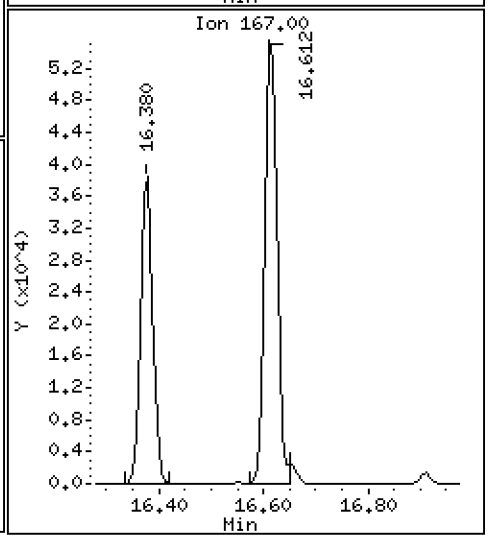












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

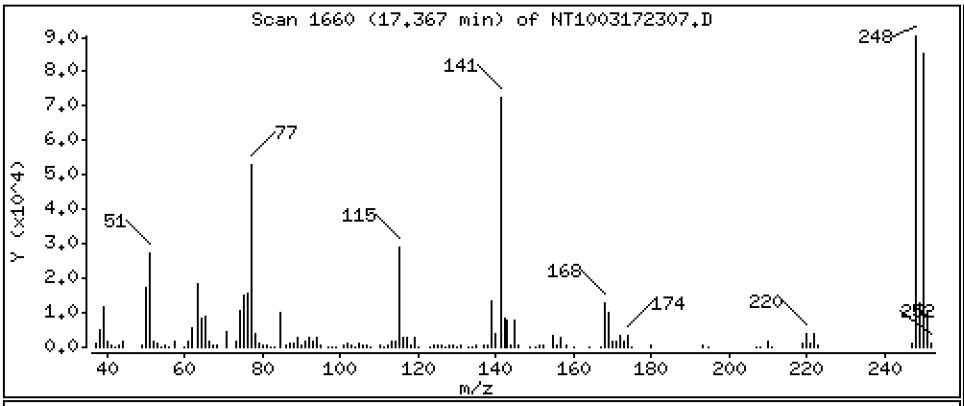
Operator: VTS

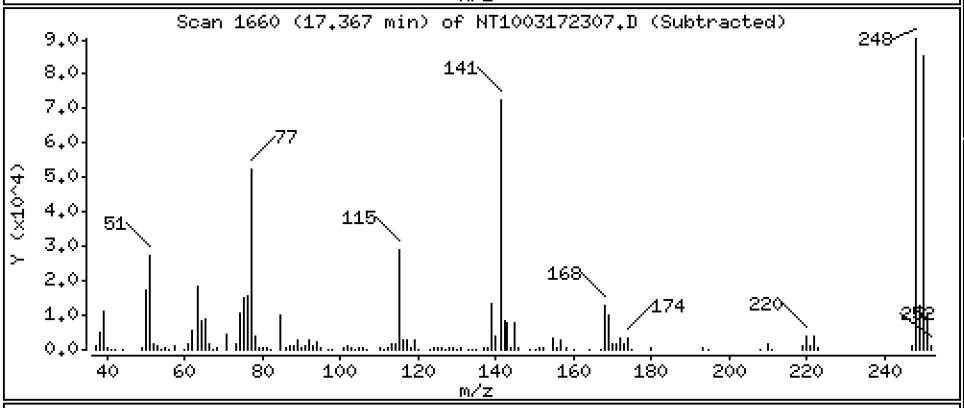
Column phase: ZB-5msi

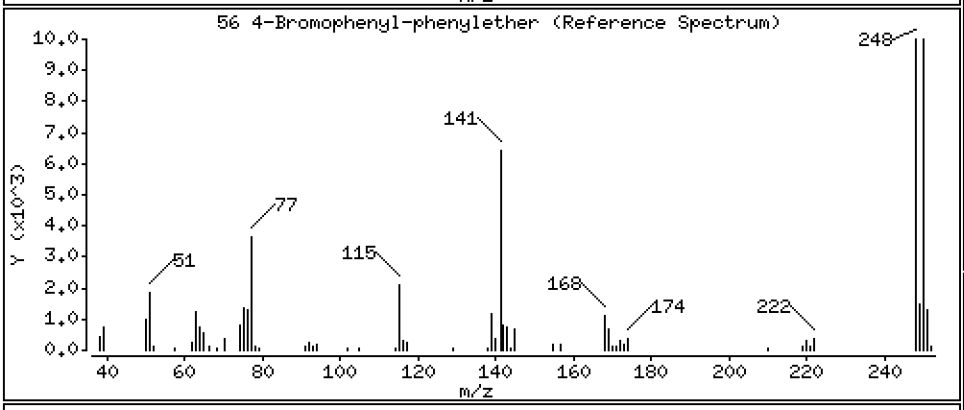
Column diameter: 0.25

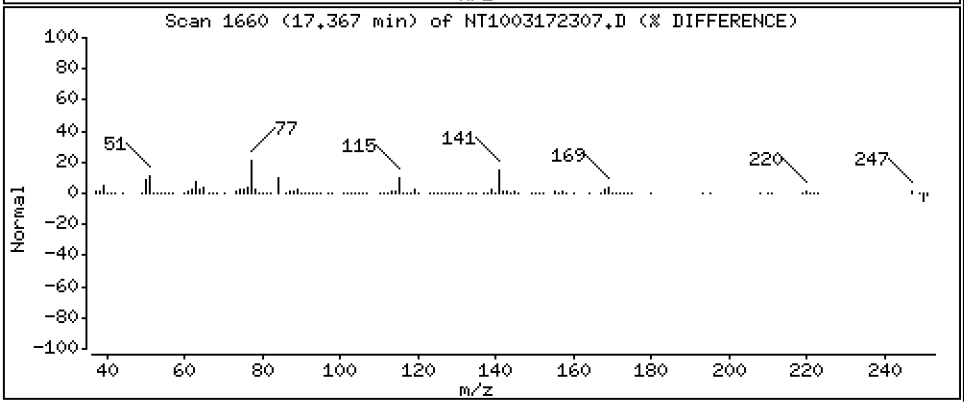
56 4-Bromophenyl-phenylether

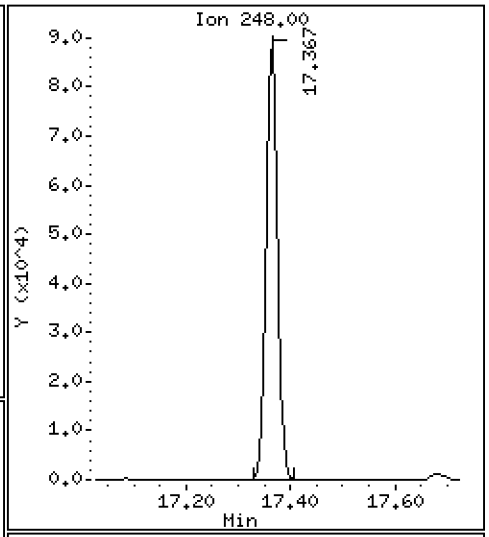
Concentration: 4.216 ug/mL

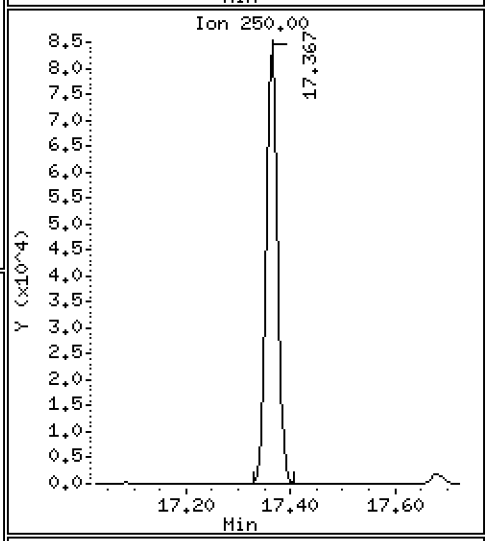


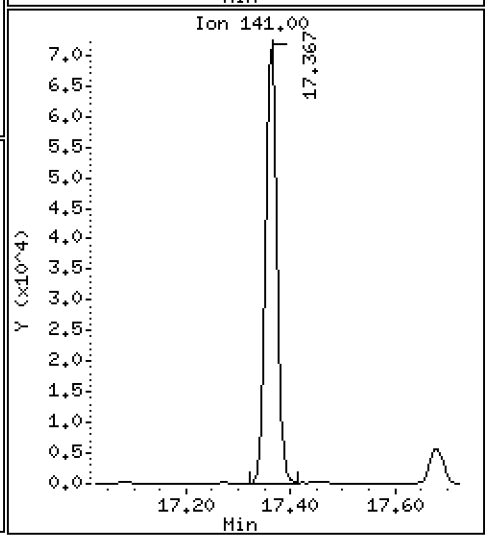












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172307.D

Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

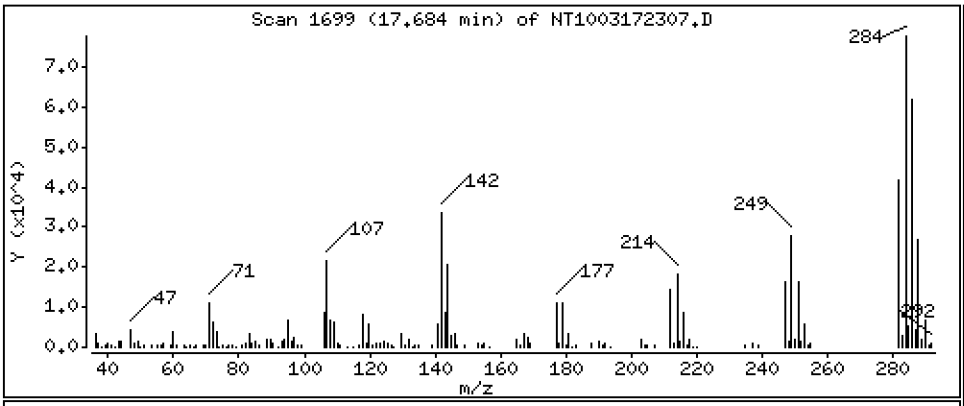
Operator: VTS

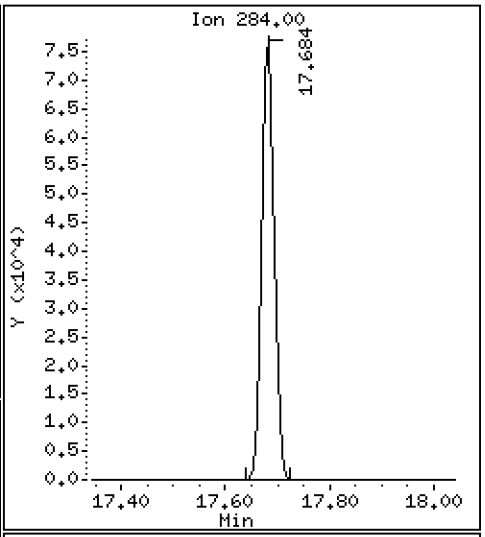
Column phase: ZB-5msi

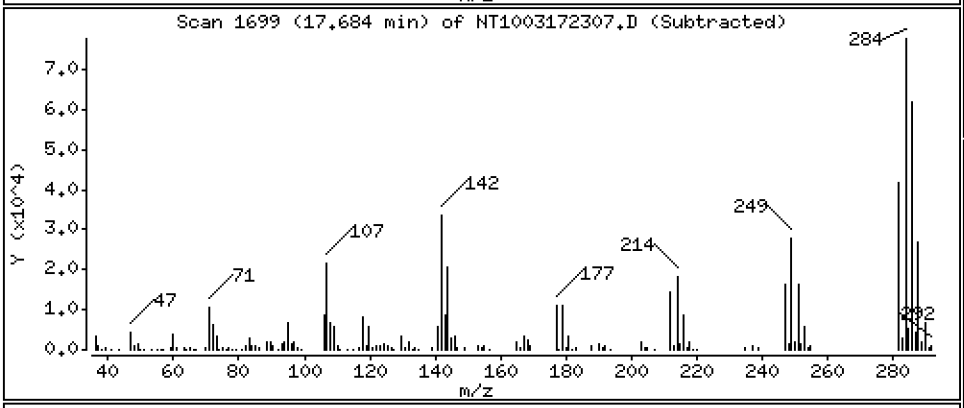
Column diameter: 0.25

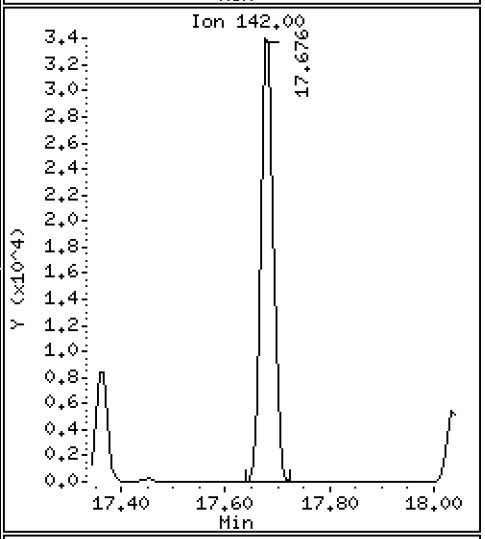
57 Hexachlorobenzene

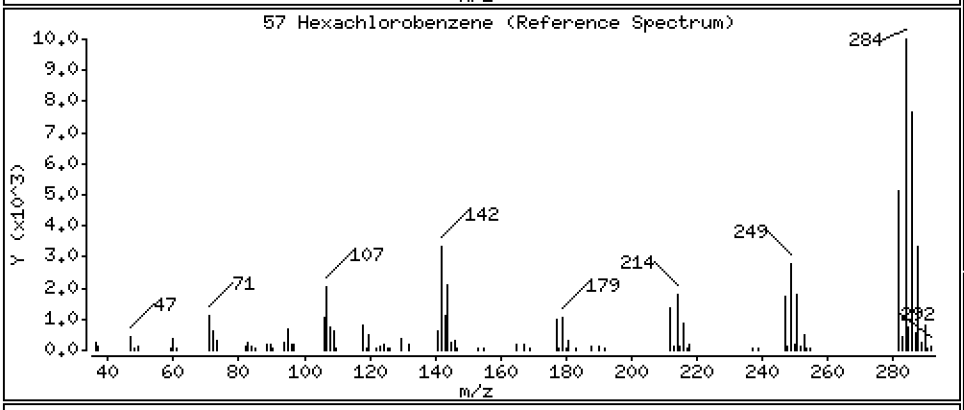
Concentration: 3.668 ug/mL

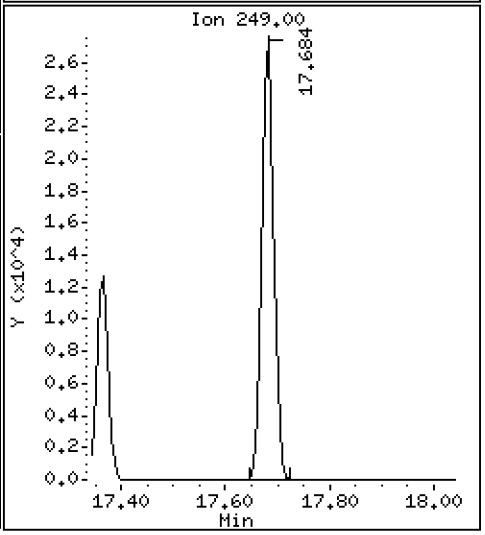


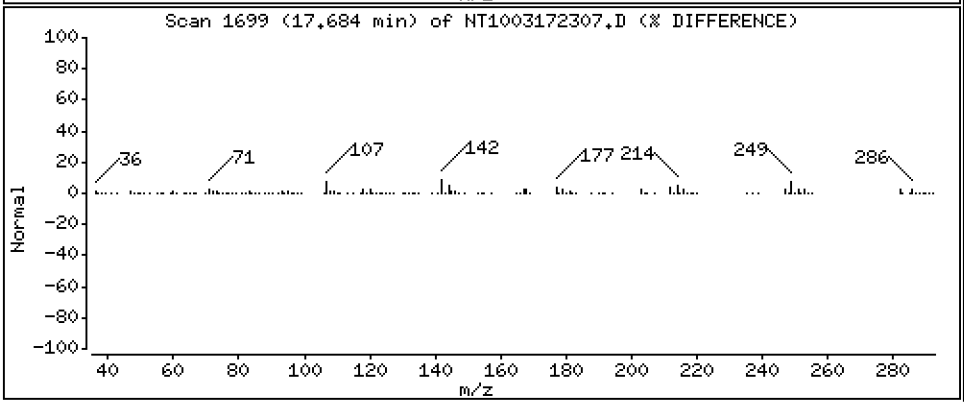












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

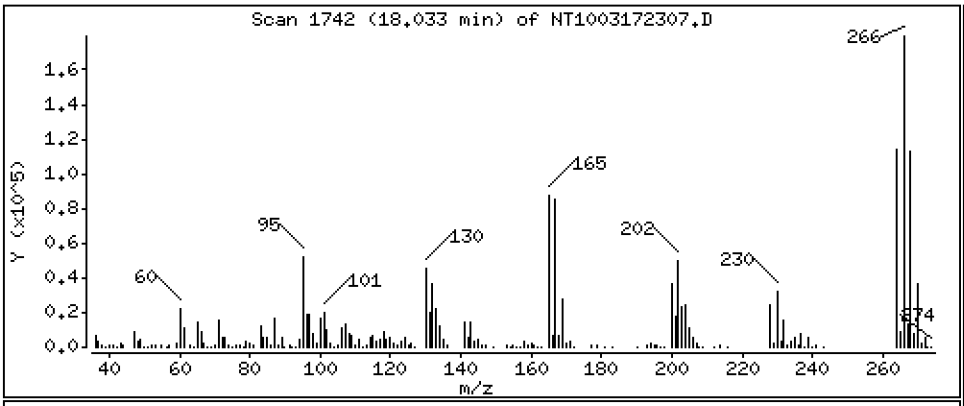
Operator: VTS

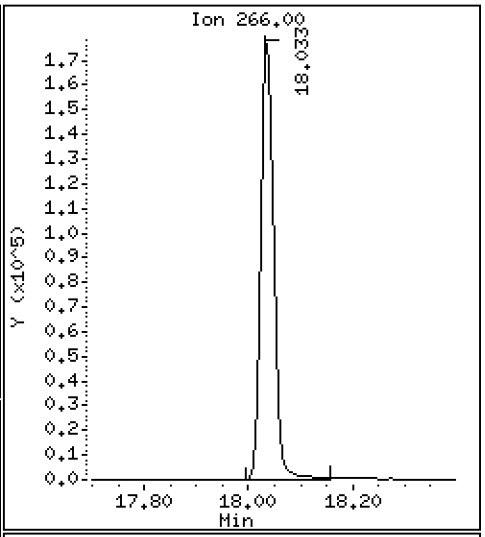
Column phase: ZB-5msi

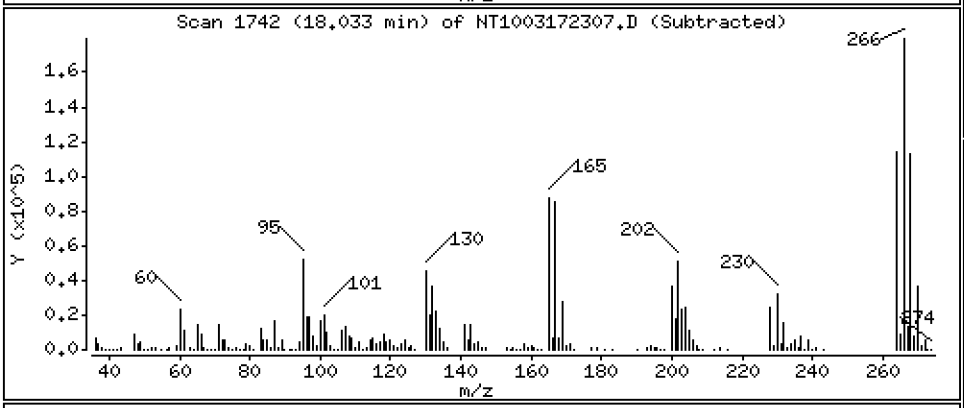
Column diameter: 0.25

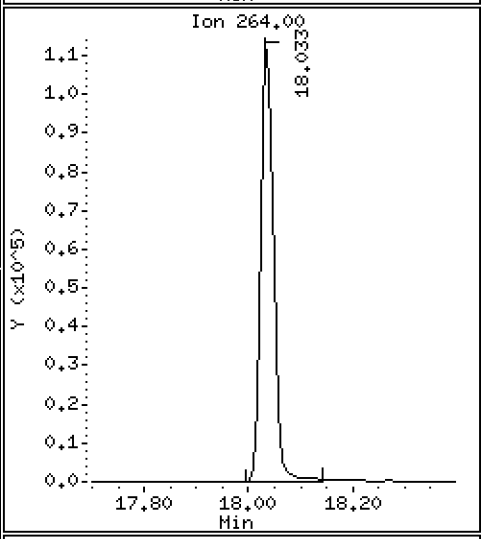
58 Pentachlorophenol

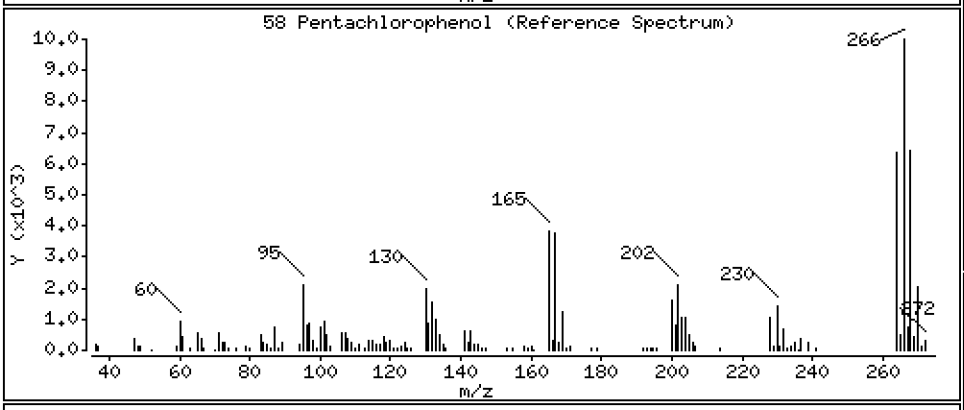
Concentration: 14.06 ug/mL

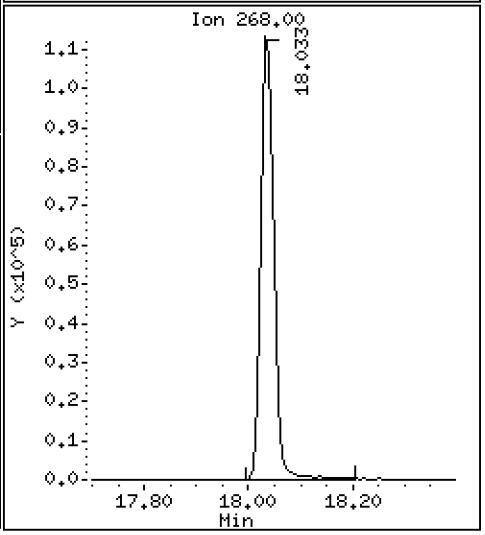


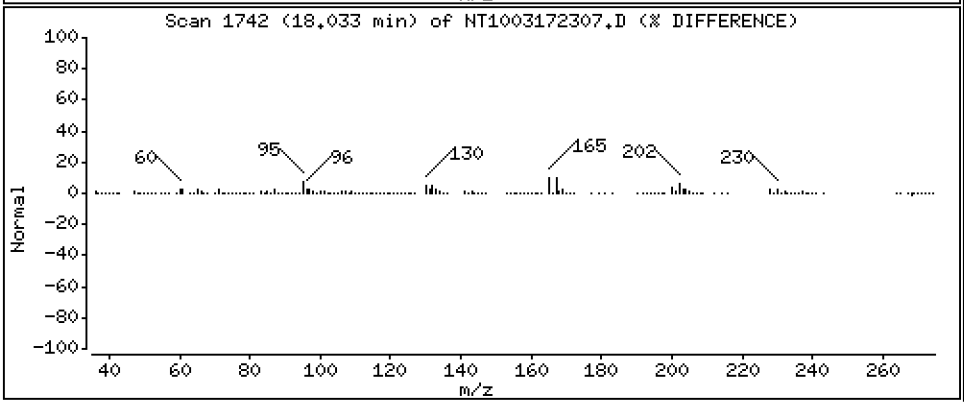












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

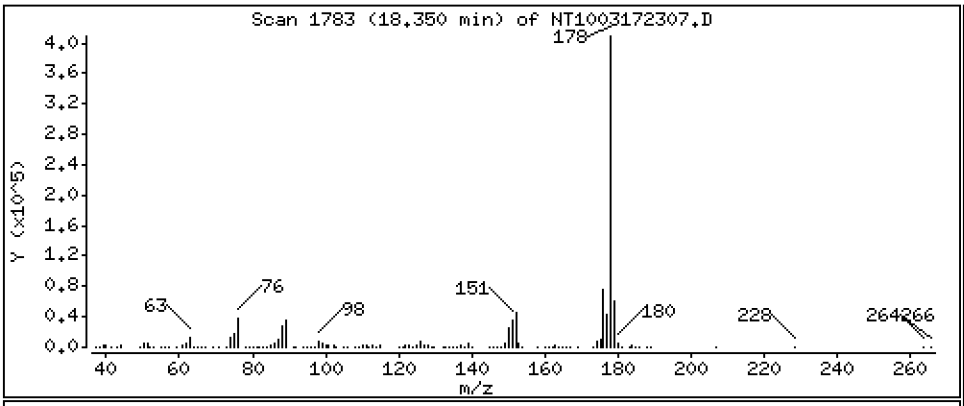
Operator: VTS

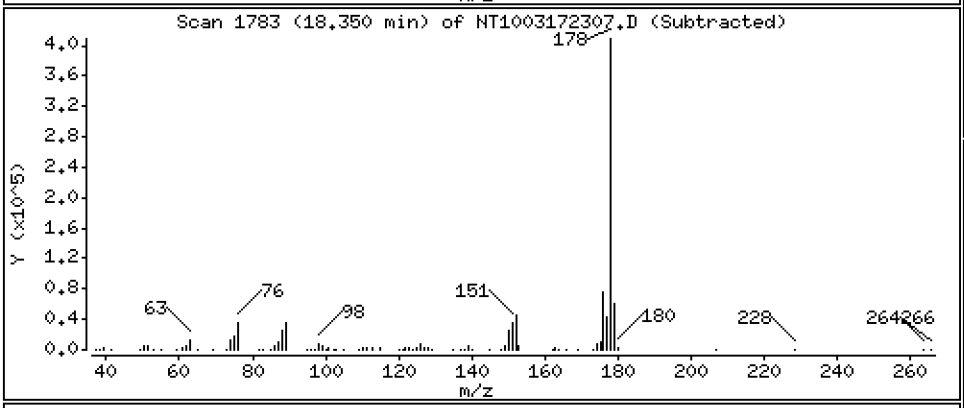
Column phase: ZB-5msi

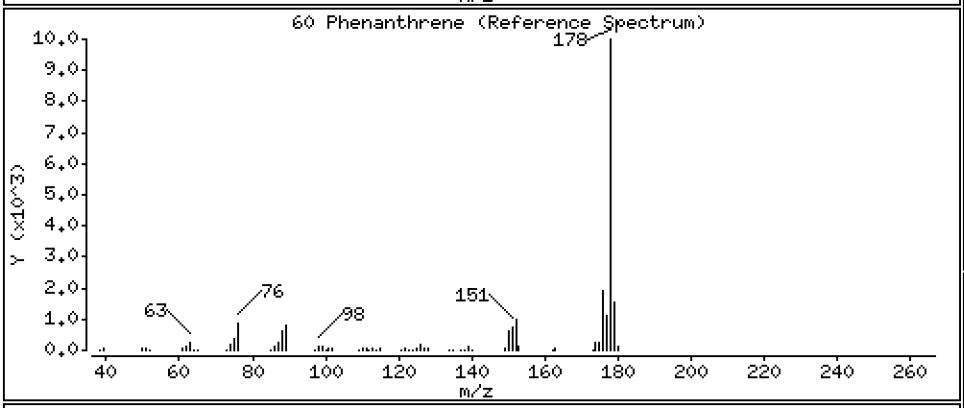
Column diameter: 0.25

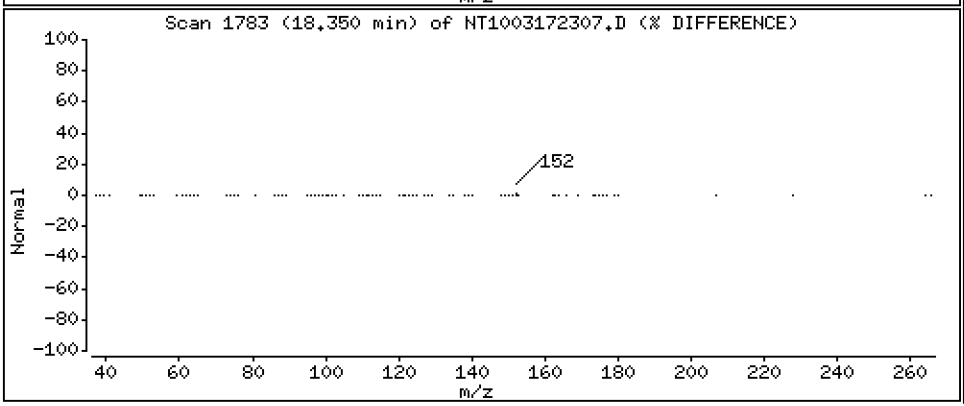
60 Phenanthrene

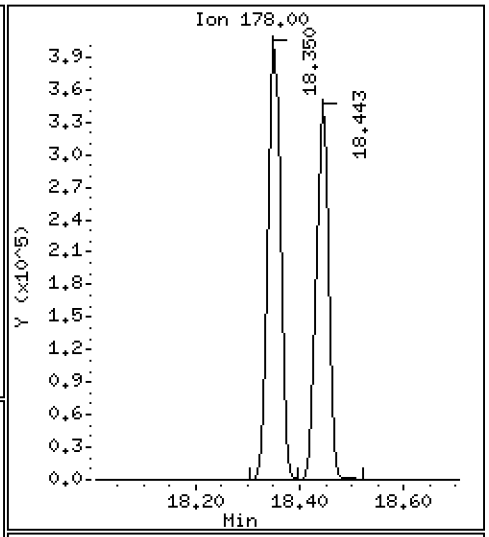
Concentration: 3.999 ug/mL

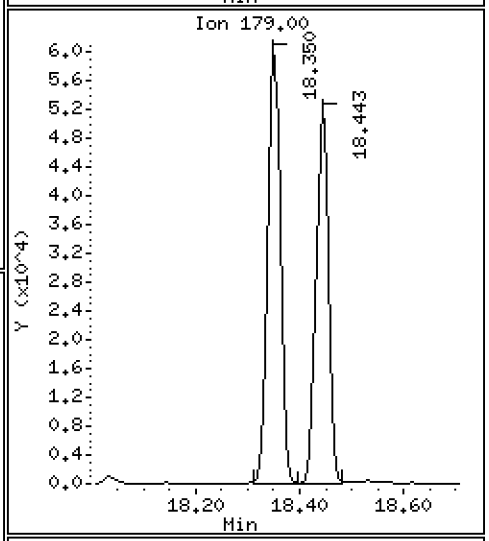


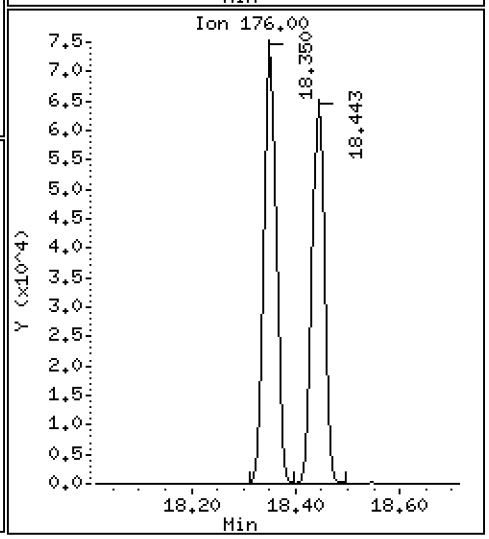












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

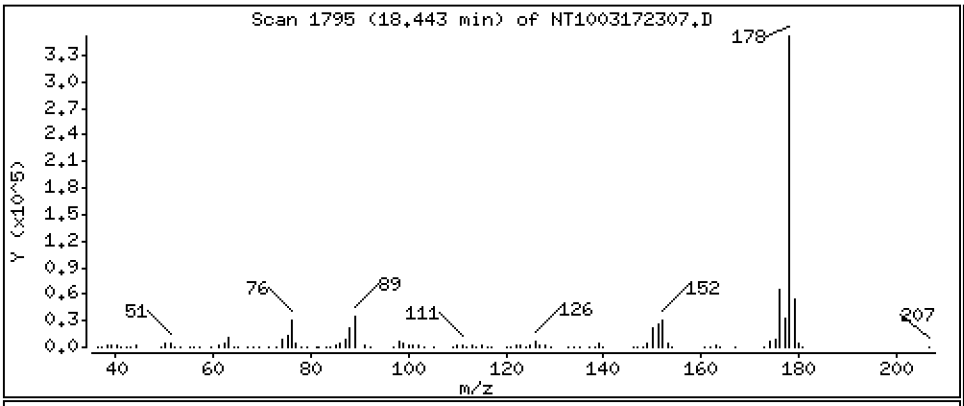
Operator: VTS

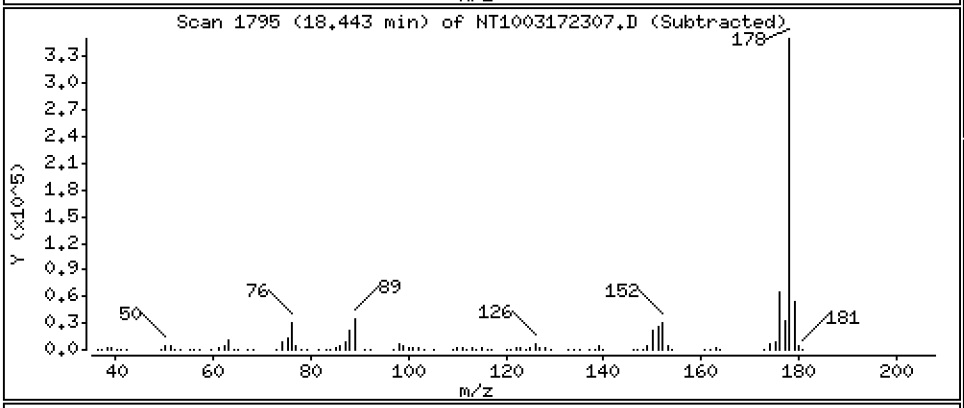
Column phase: ZB-5msi

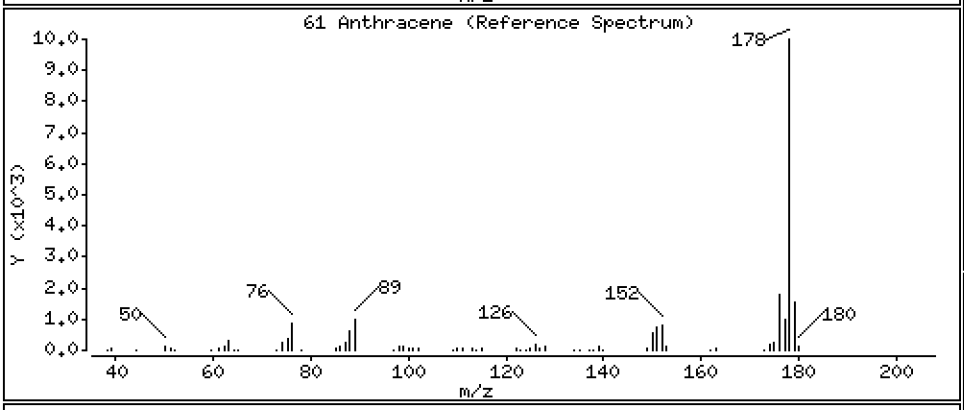
Column diameter: 0.25

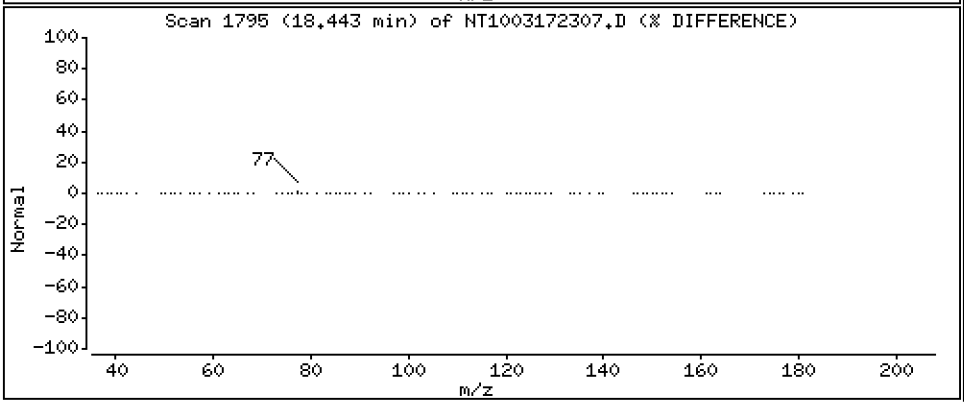
61 Anthracene

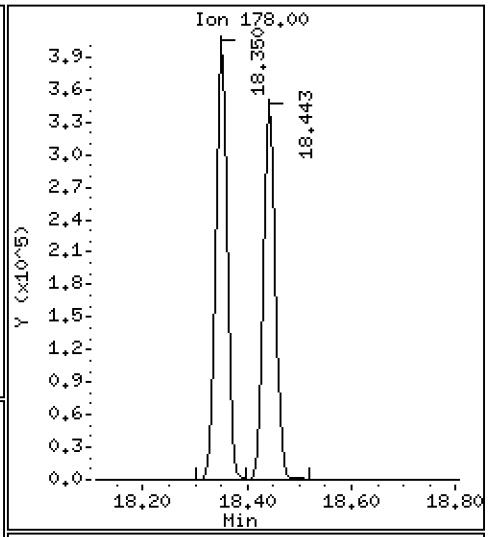
Concentration: 3.649 ug/mL

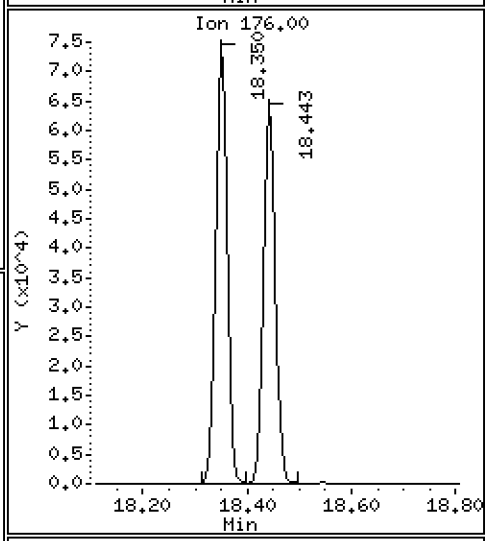


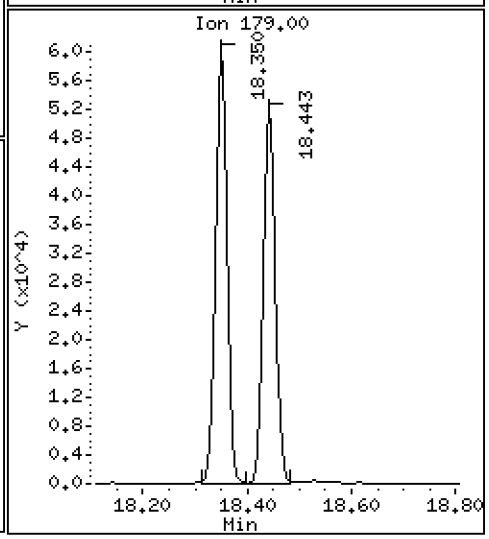












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

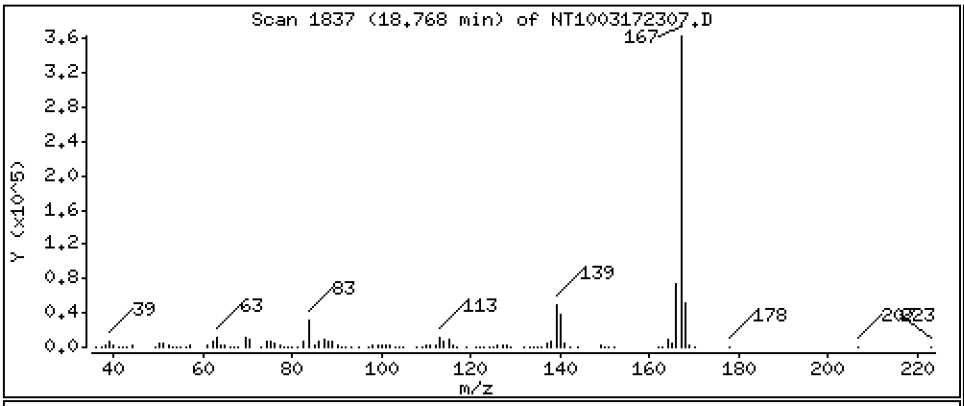
Operator: VTS

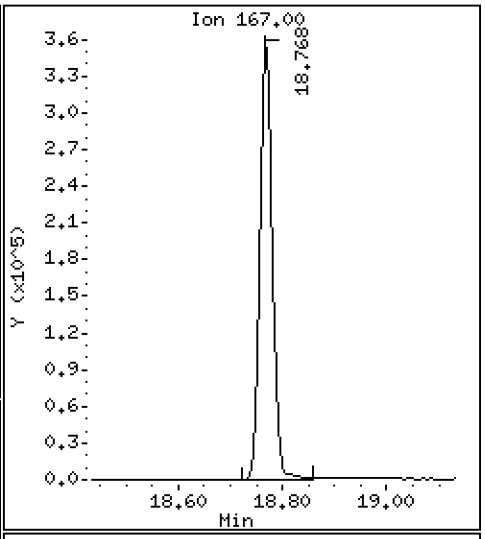
Column phase: ZB-5msi

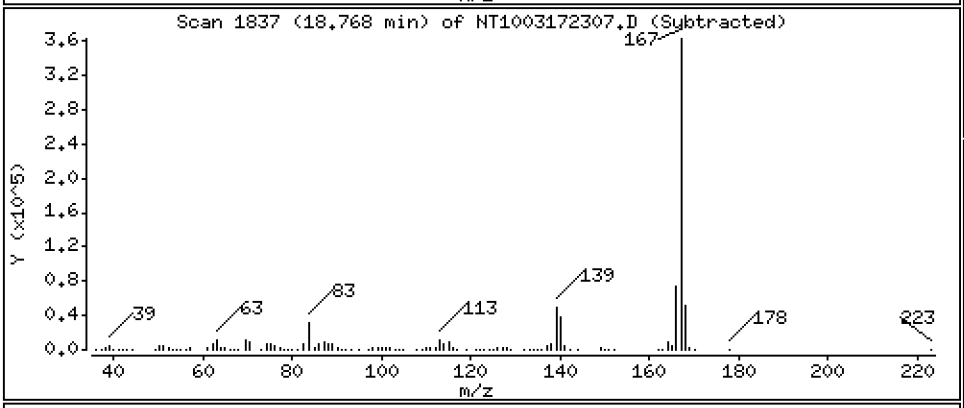
Column diameter: 0.25

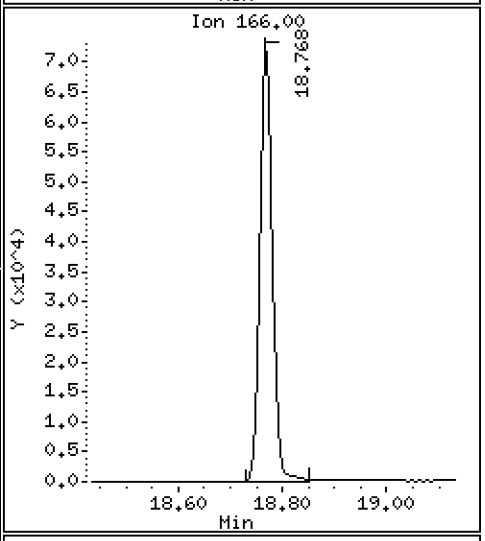
62 Carbazole

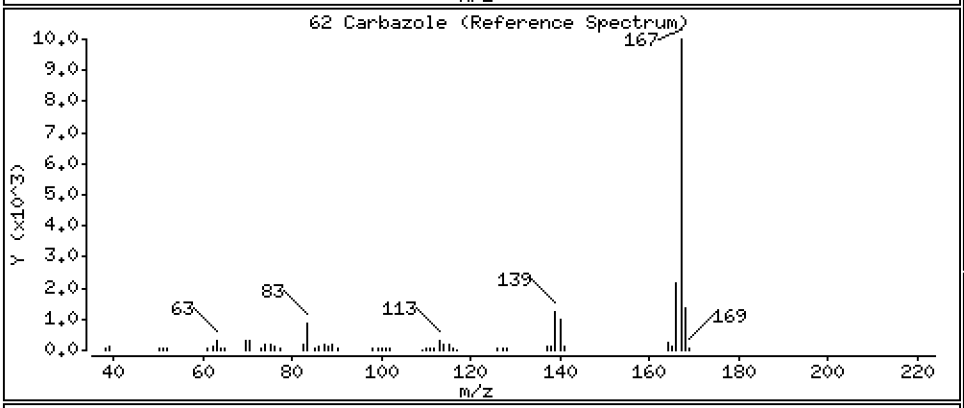
Concentration: 4.331 ug/mL

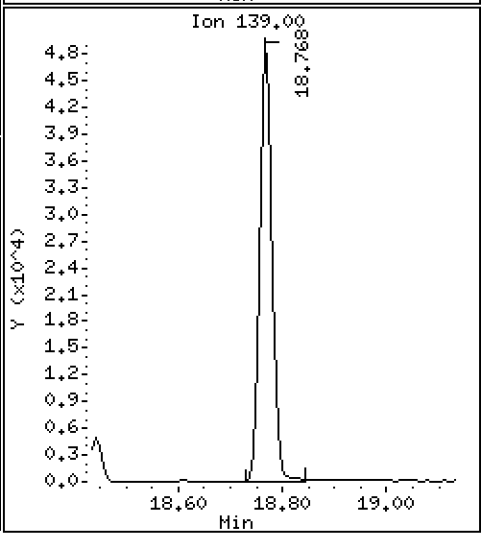


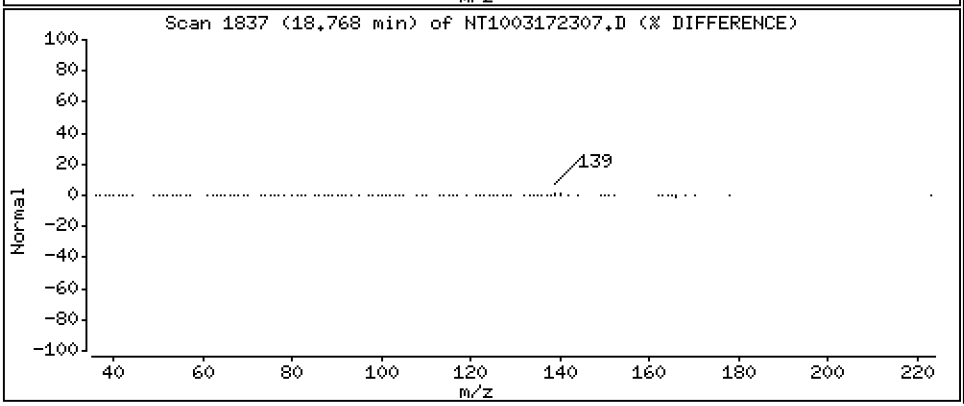












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

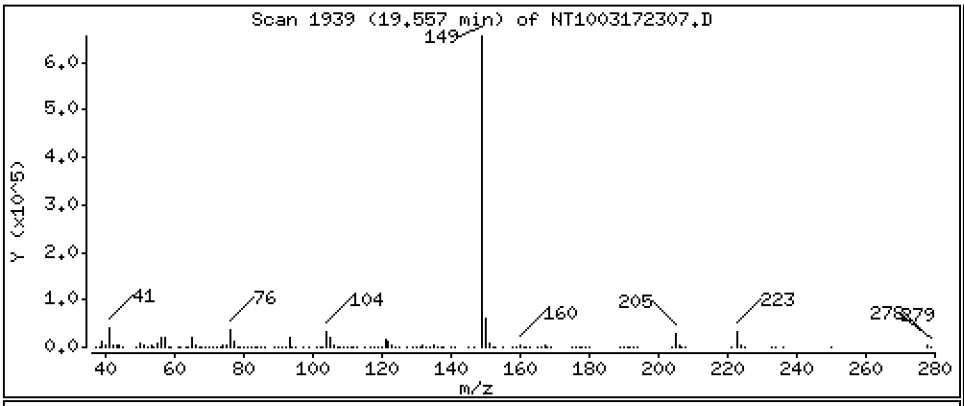
Operator: VTS

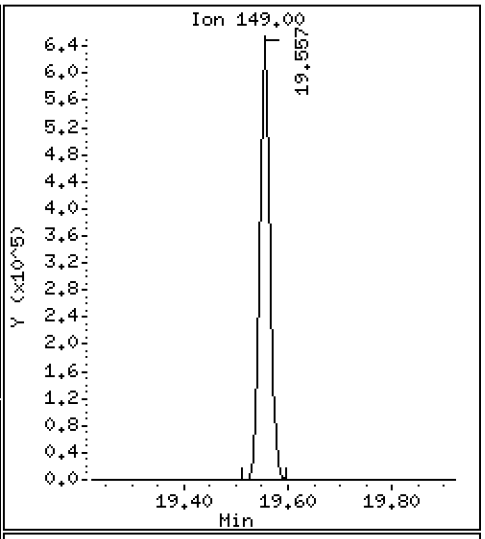
Column phase: ZB-5msi

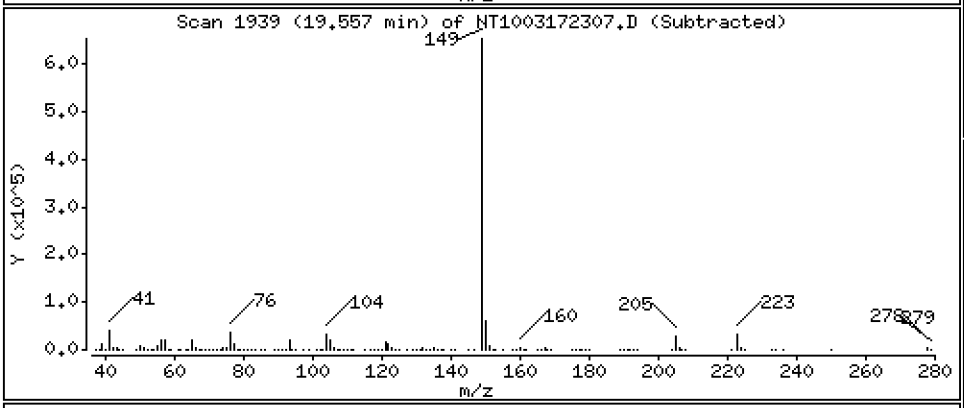
Column diameter: 0.25

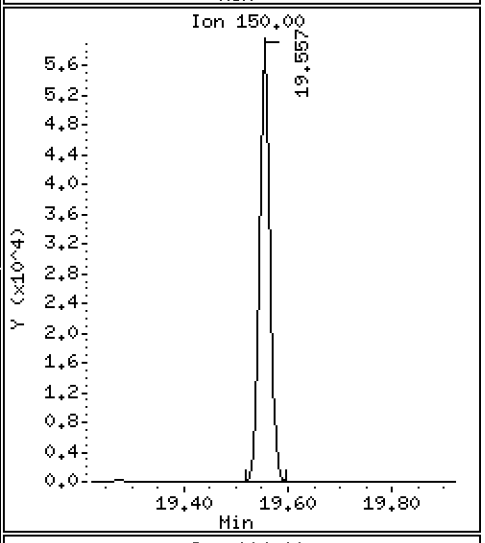
63 Di-n-butylphthalate

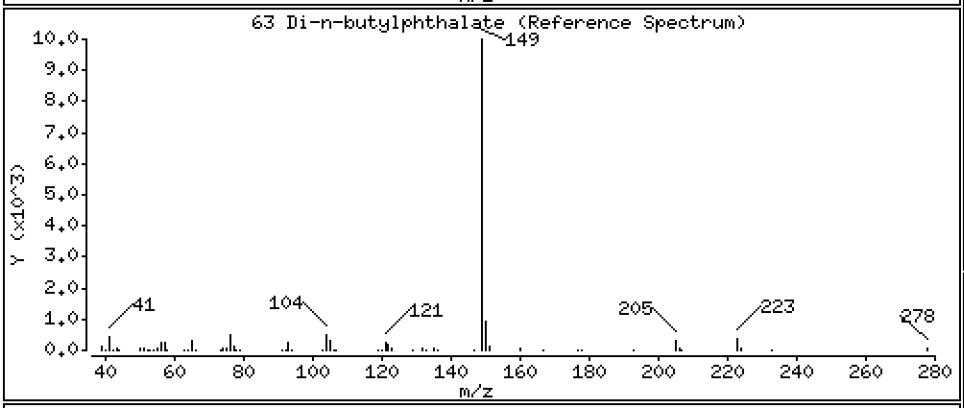
Concentration: 4.870 ug/mL

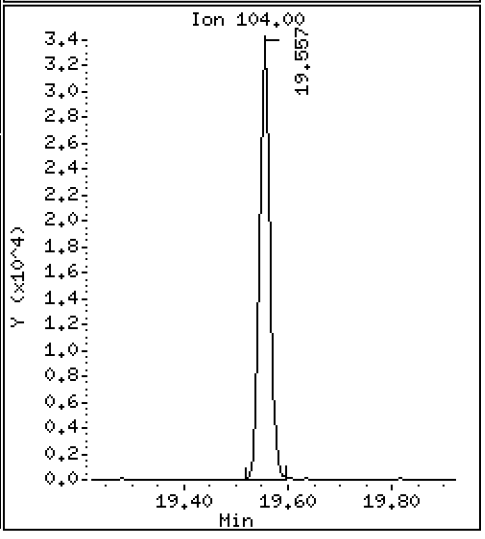


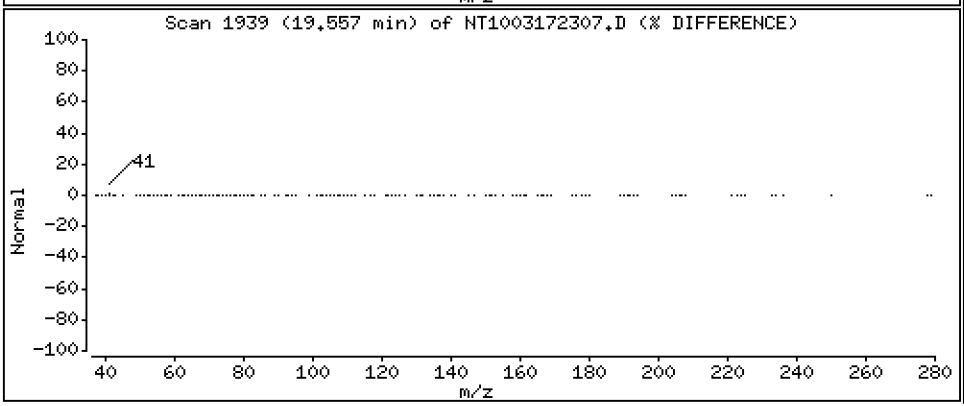












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

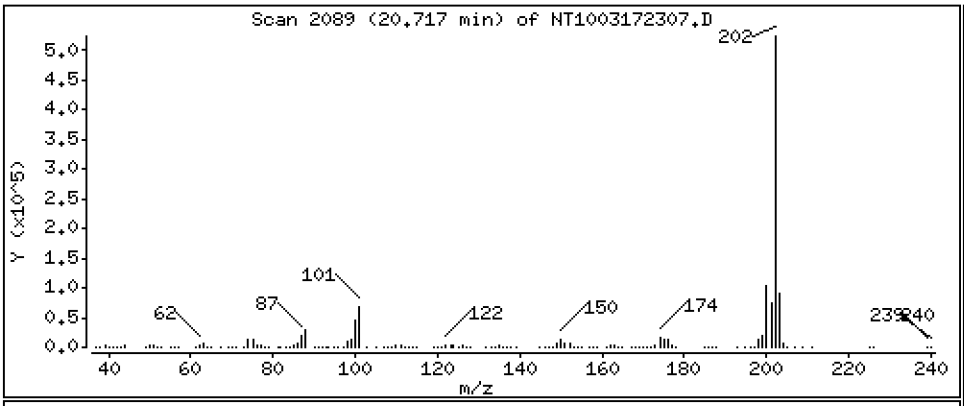
Operator: VTS

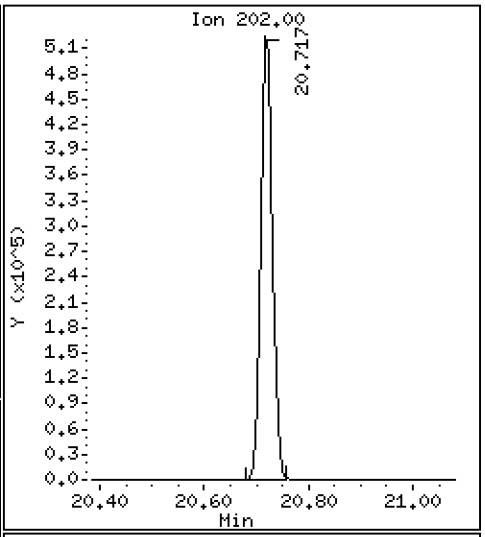
Column phase: ZB-5msi

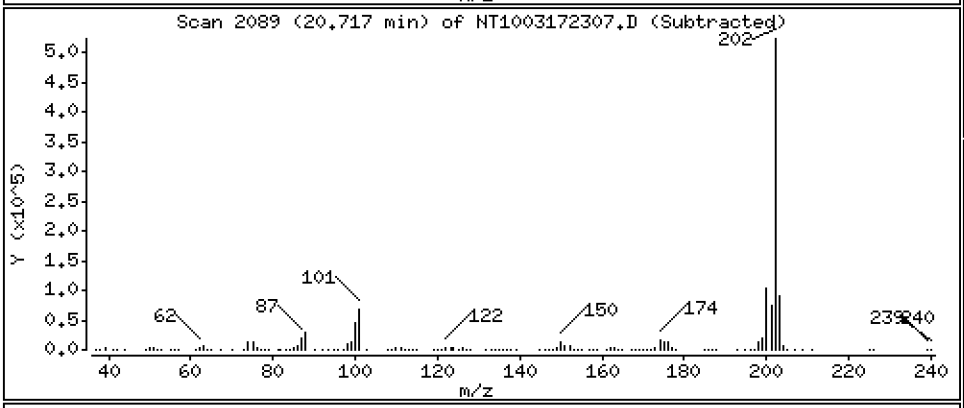
Column diameter: 0.25

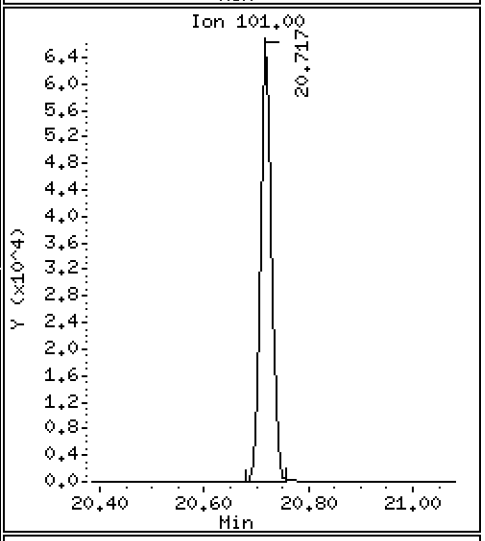
64 Fluoranthene

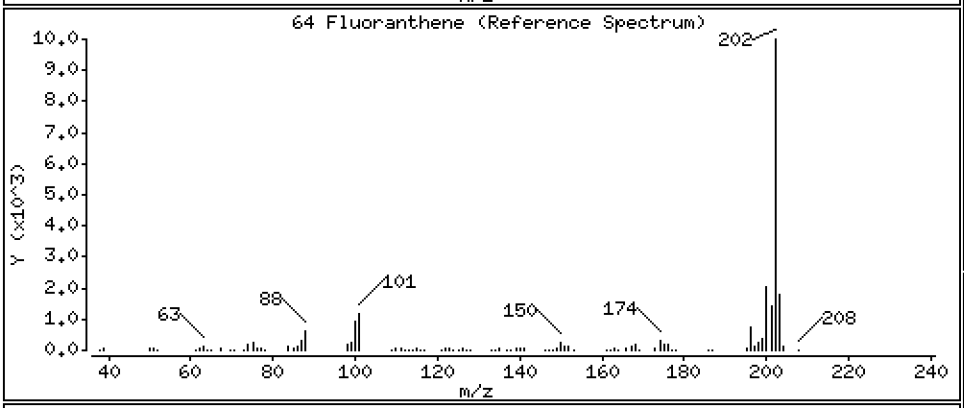
Concentration: 4.361 ug/mL

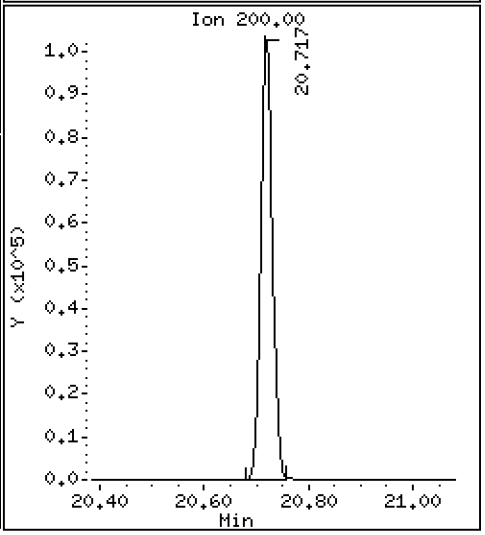


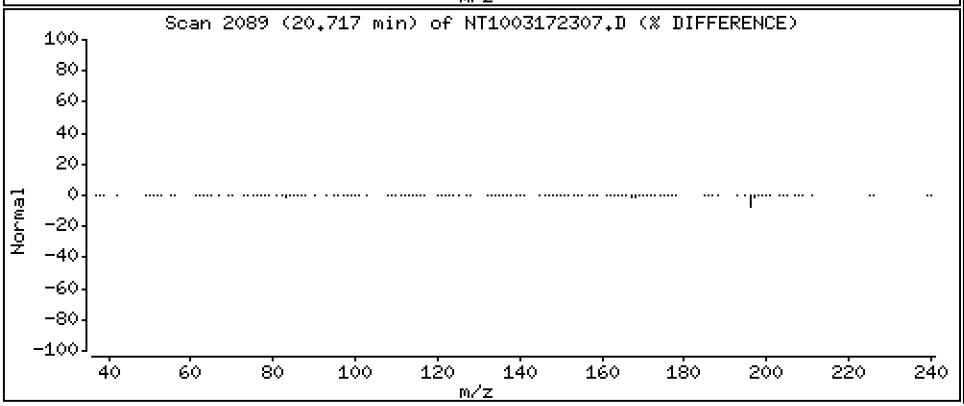












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

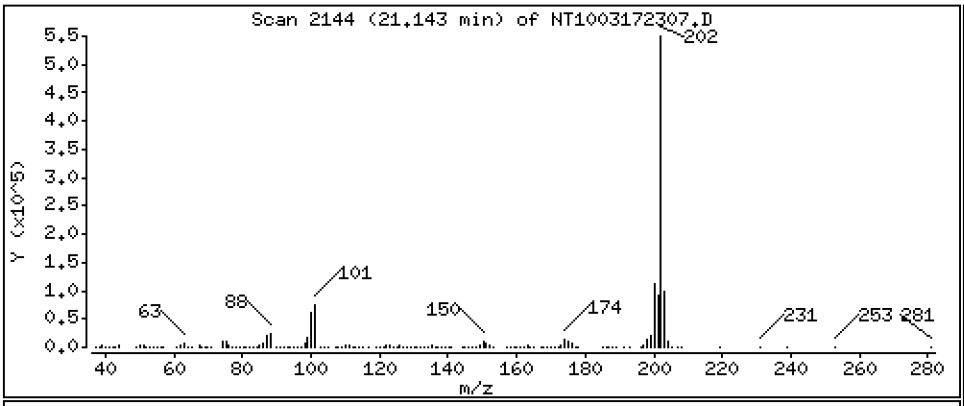
Operator: VTS

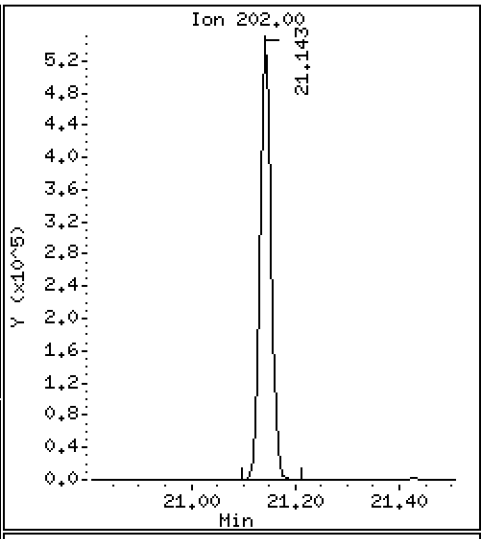
Column phase: ZB-5msi

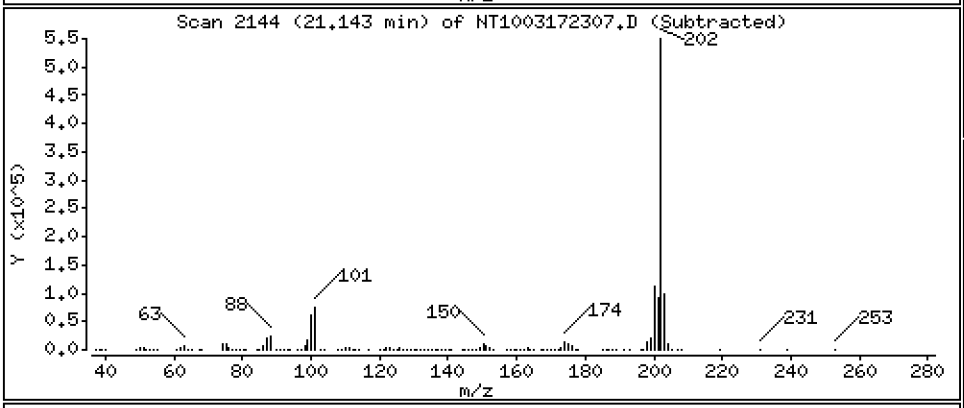
Column diameter: 0.25

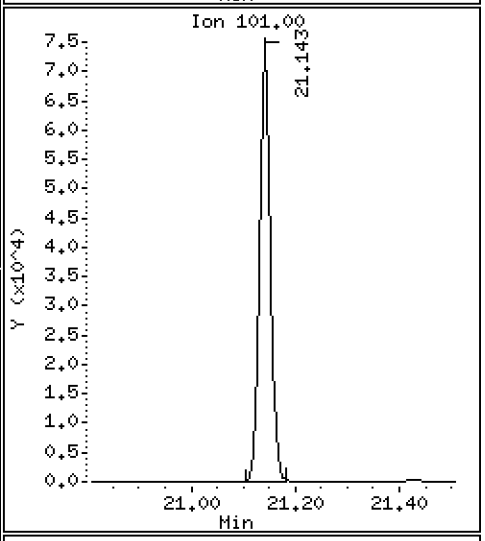
65 Pyrene

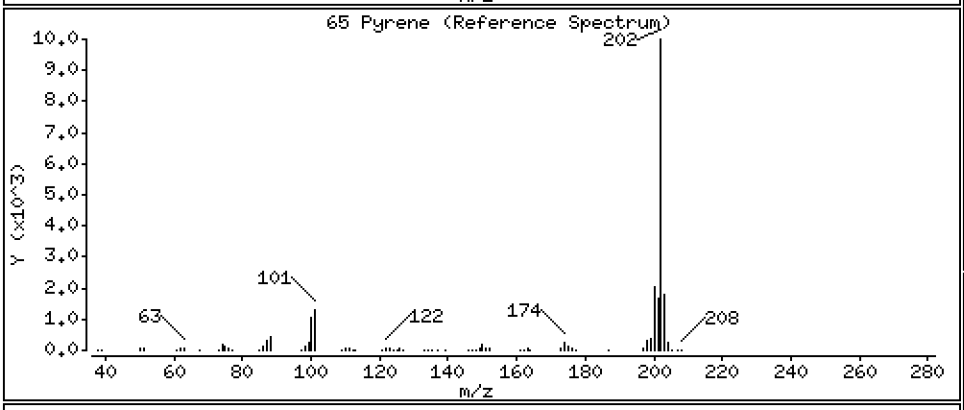
Concentration: 4.233 ug/mL

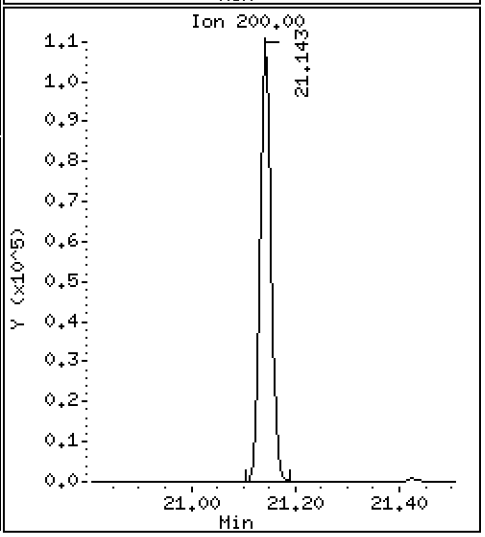


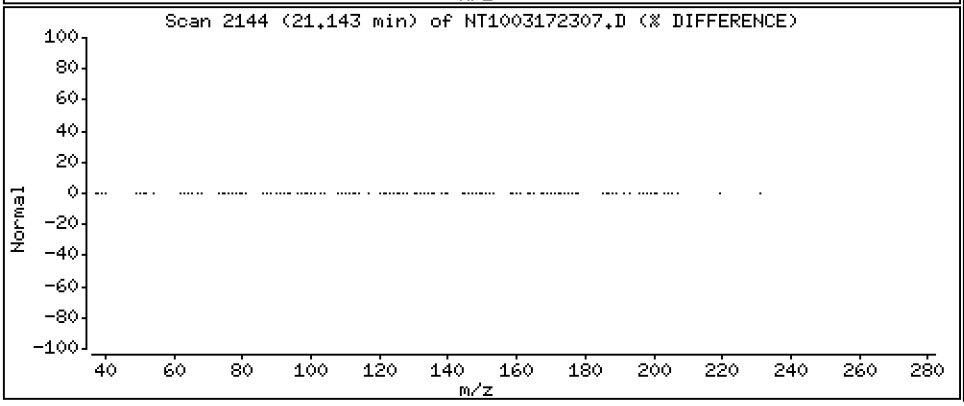












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

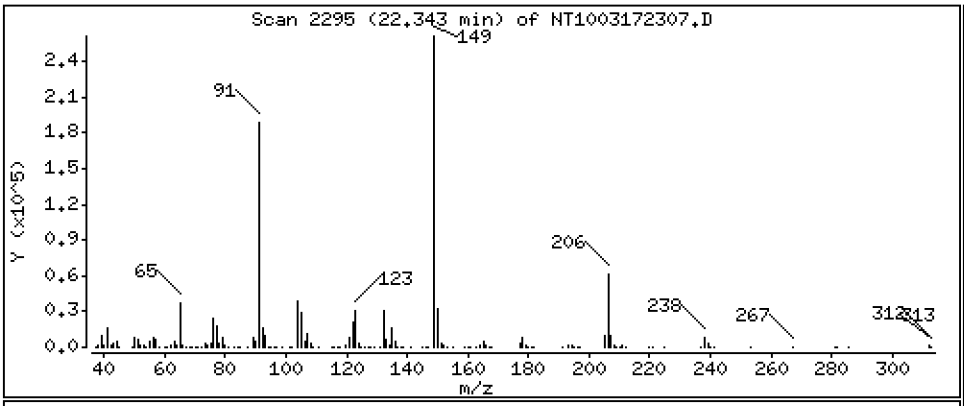
Operator: VTS

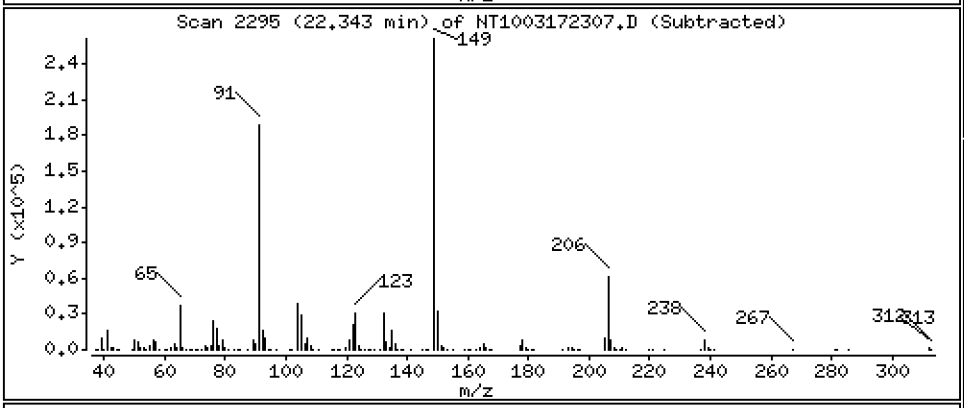
Column phase: ZB-5msi

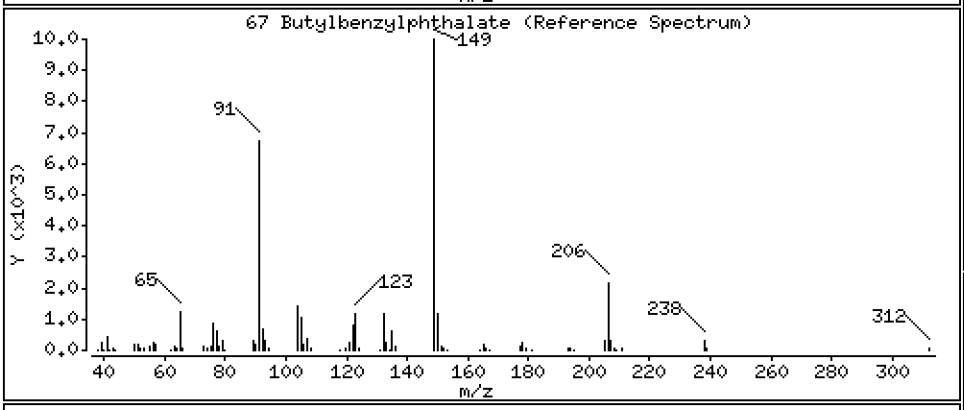
Column diameter: 0.25

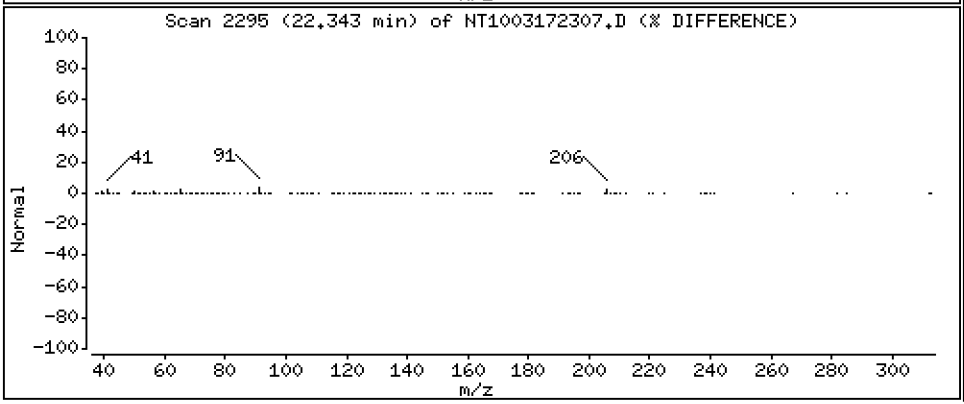
67 Butylbenzylphthalate

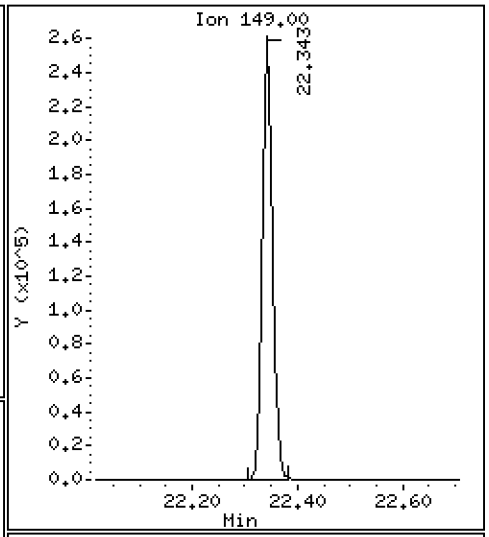
Concentration: 5.107 ug/mL

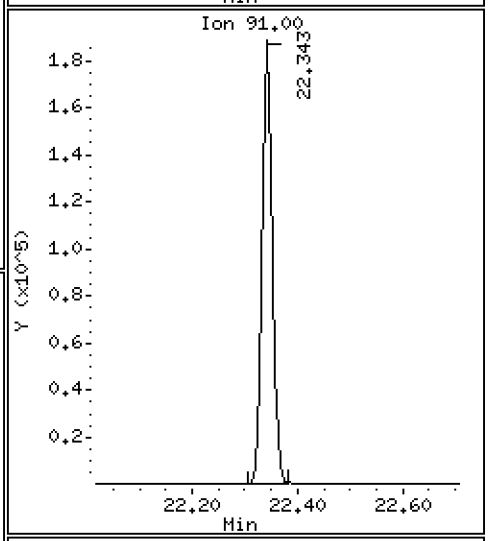


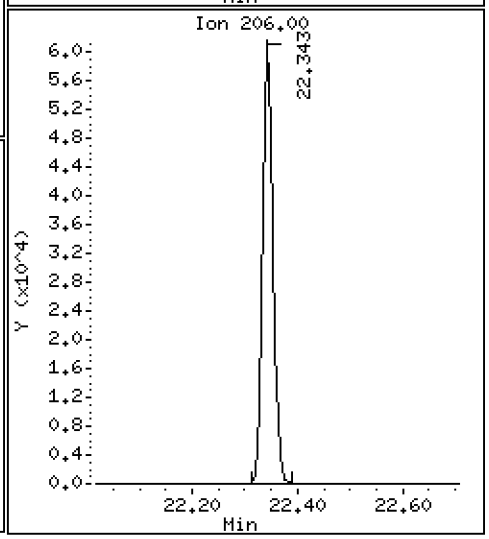












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172307.D

Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

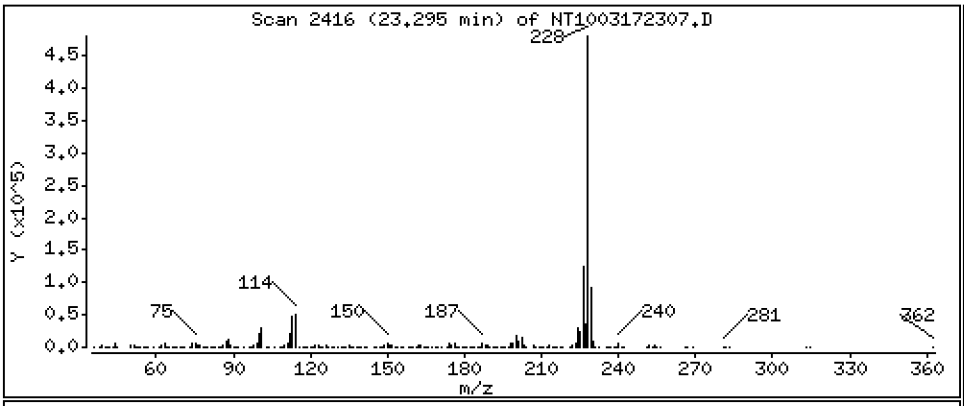
Operator: VTS

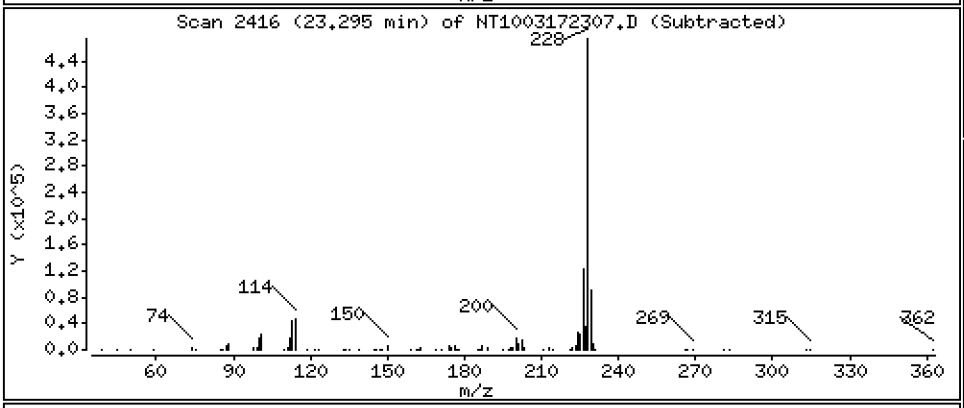
Column phase: ZB-5msi

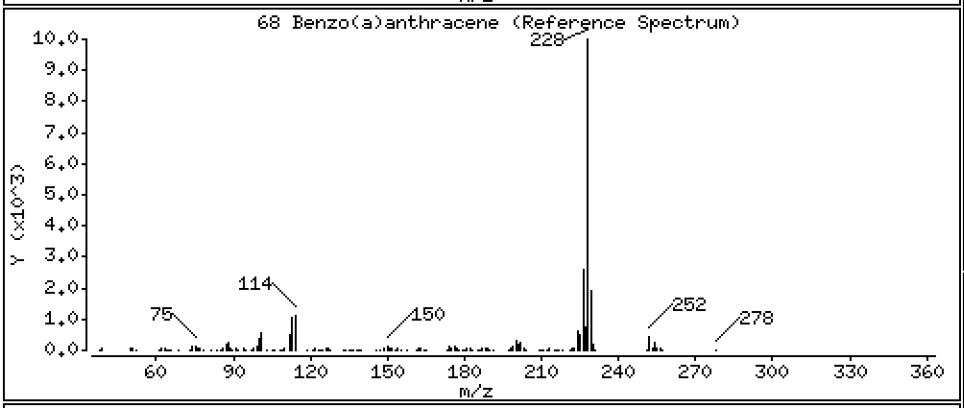
Column diameter: 0.25

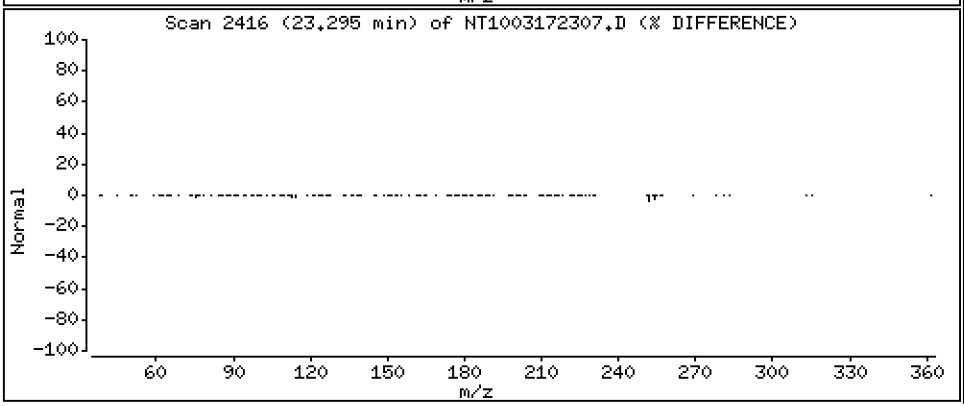
68 Benzo(a)anthracene

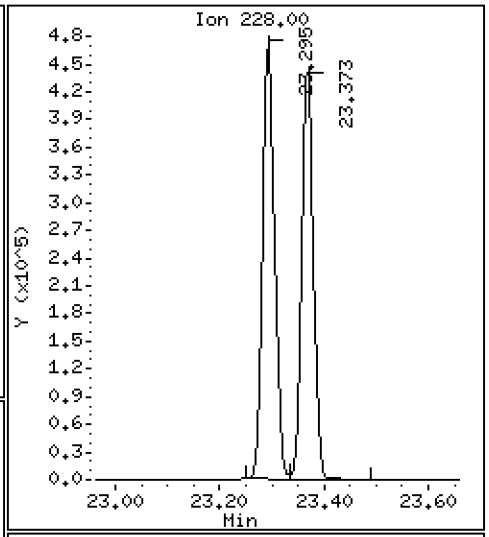
Concentration: 4.500 ug/mL

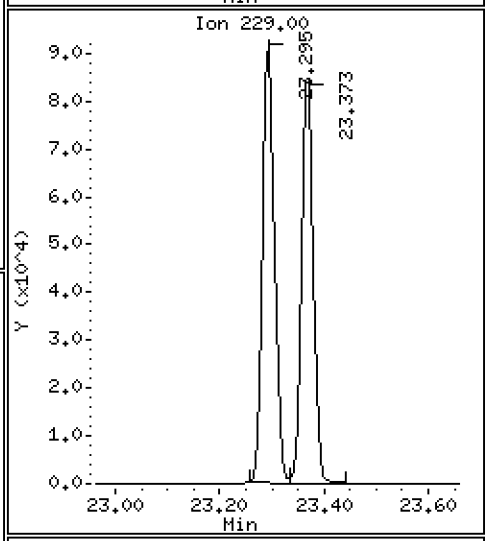


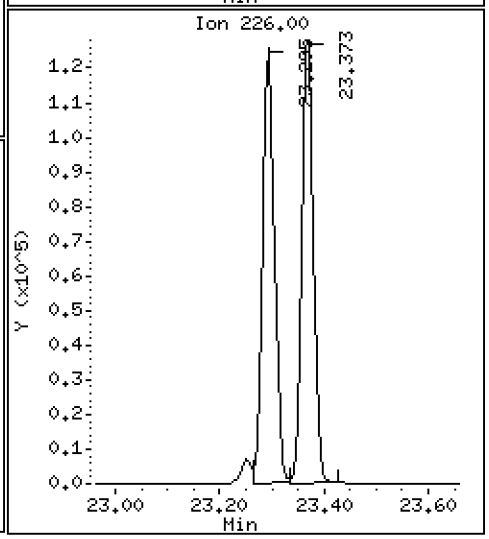












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

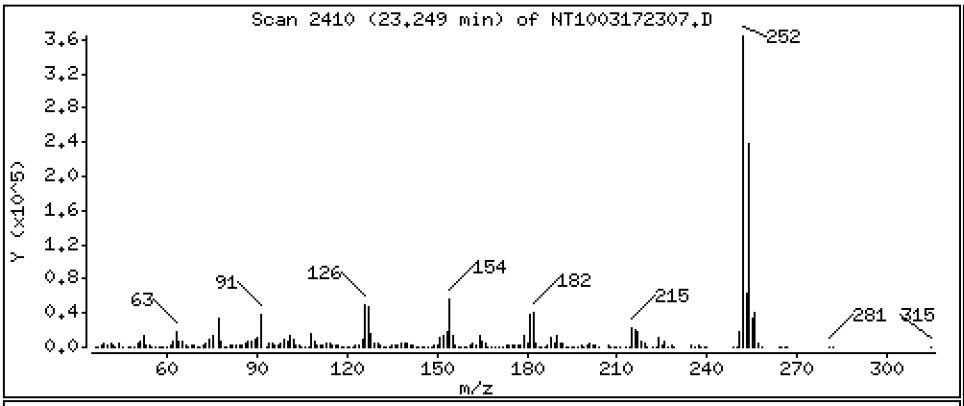
Operator: VTS

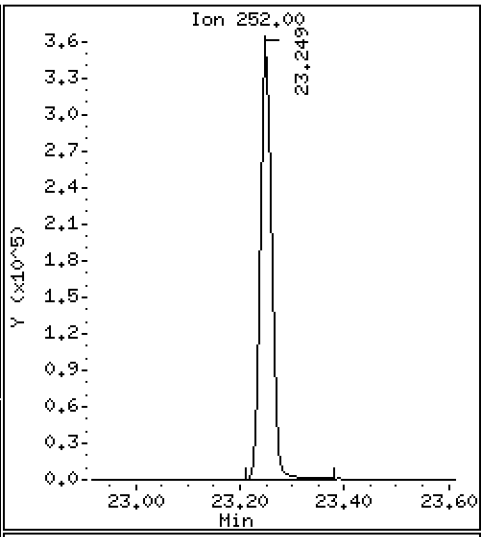
Column phase: ZB-5msi

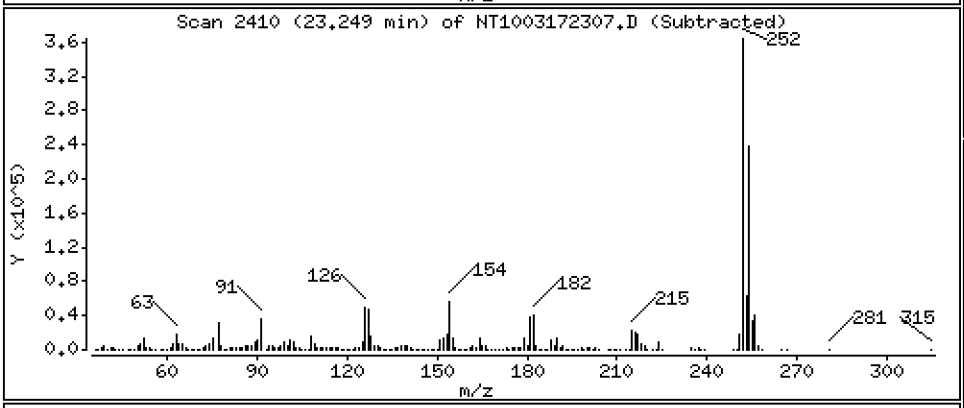
Column diameter: 0.25

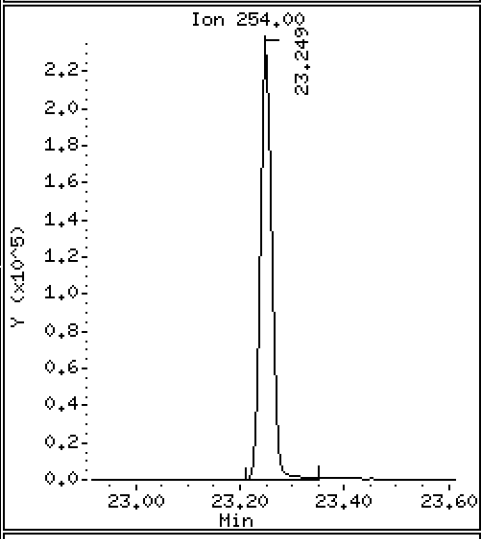
70 3,3'-Dichlorobenzidine

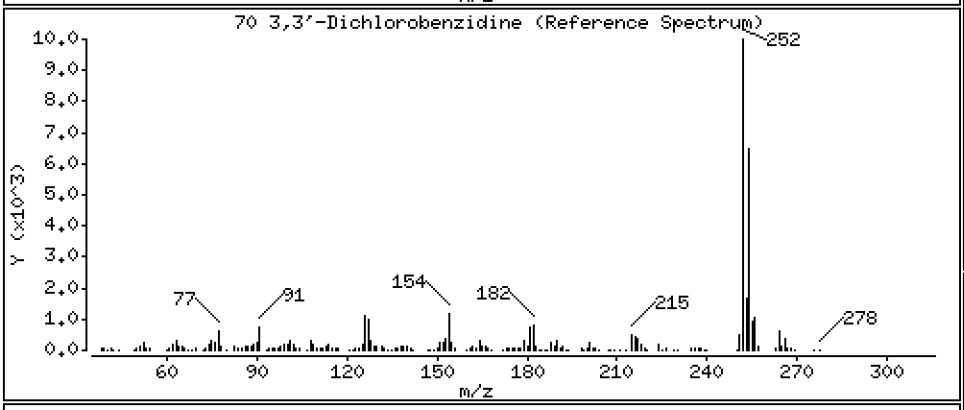
Concentration: 10.02 ug/mL

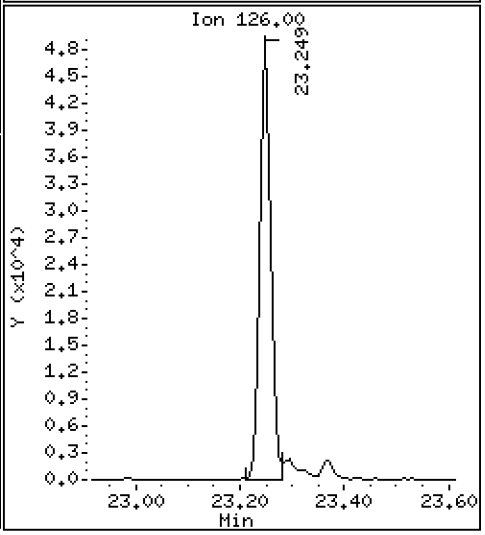


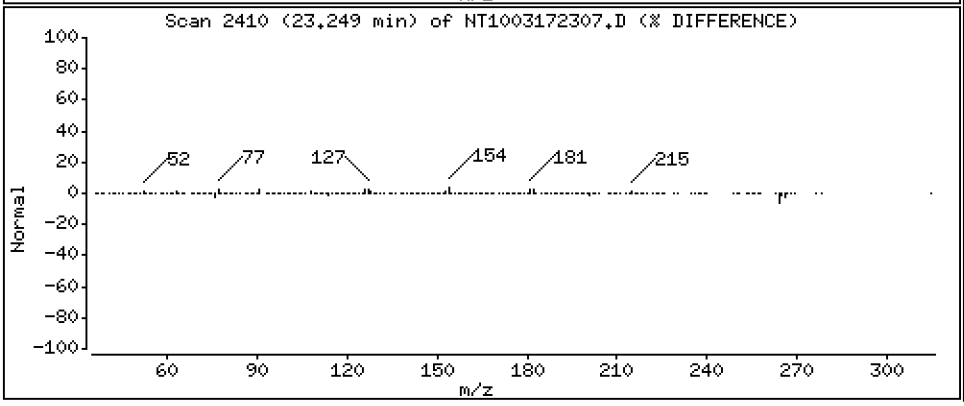












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

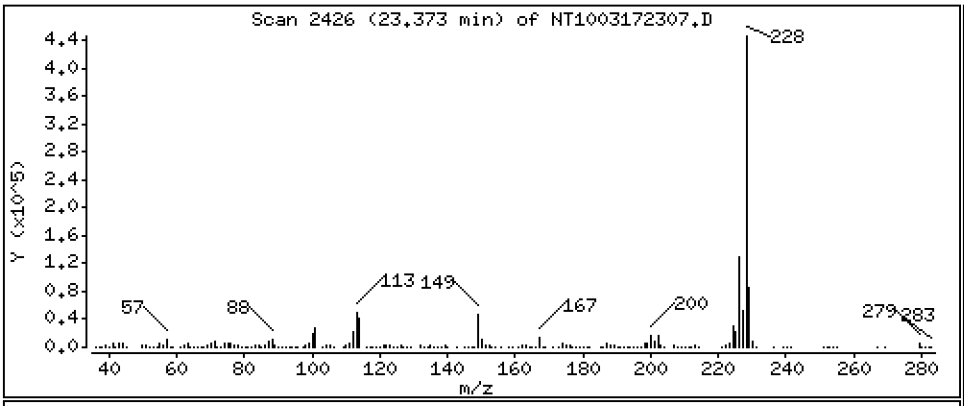
Operator: VTS

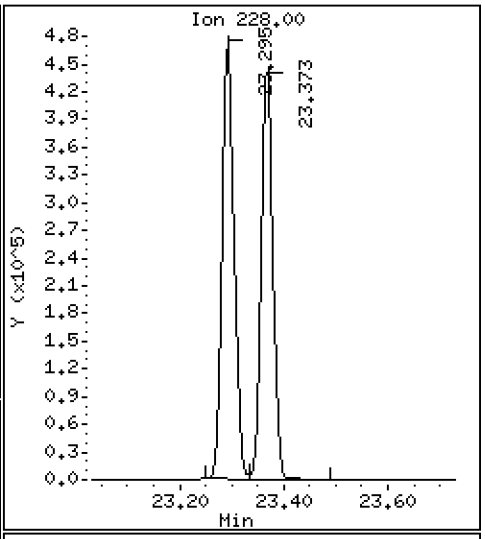
Column phase: ZB-5msi

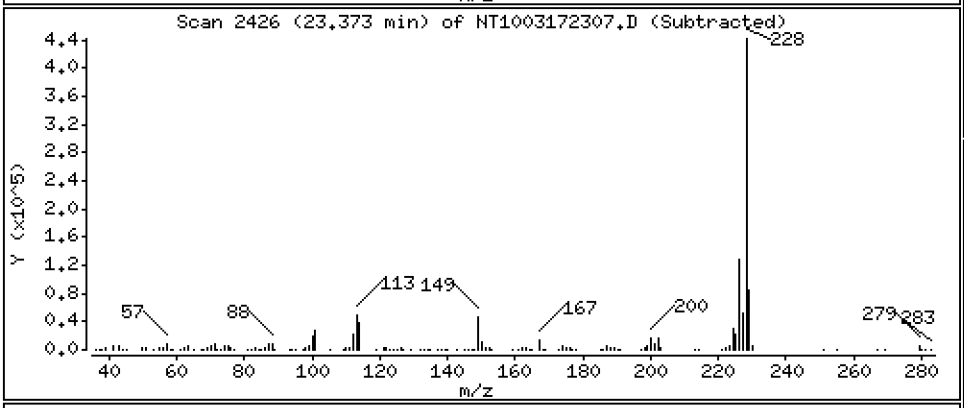
Column diameter: 0.25

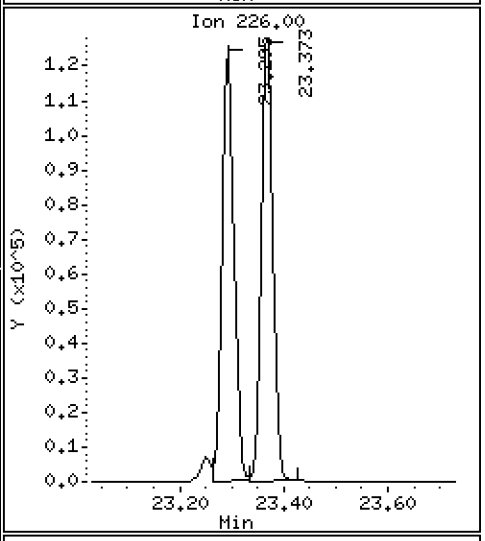
71 Chrysene

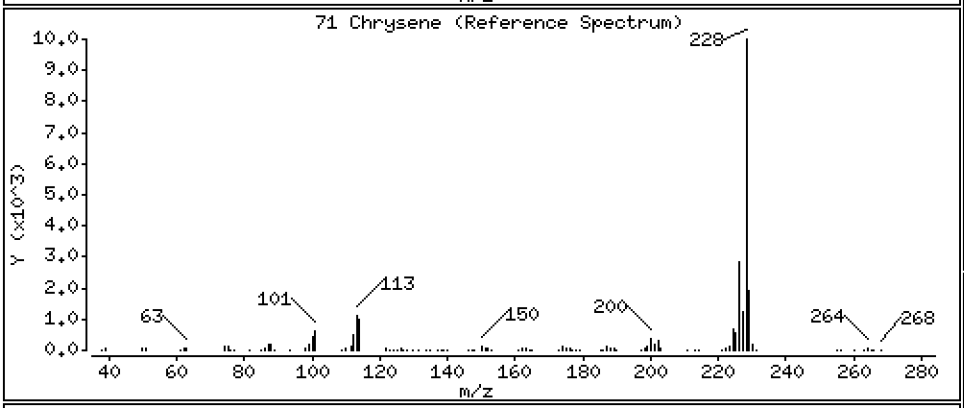
Concentration: 4.304 ug/mL

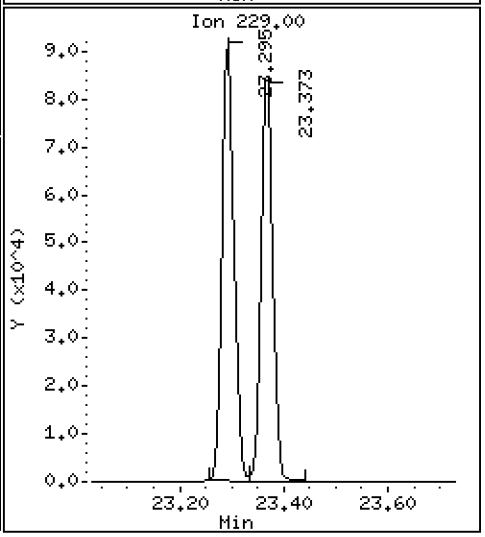


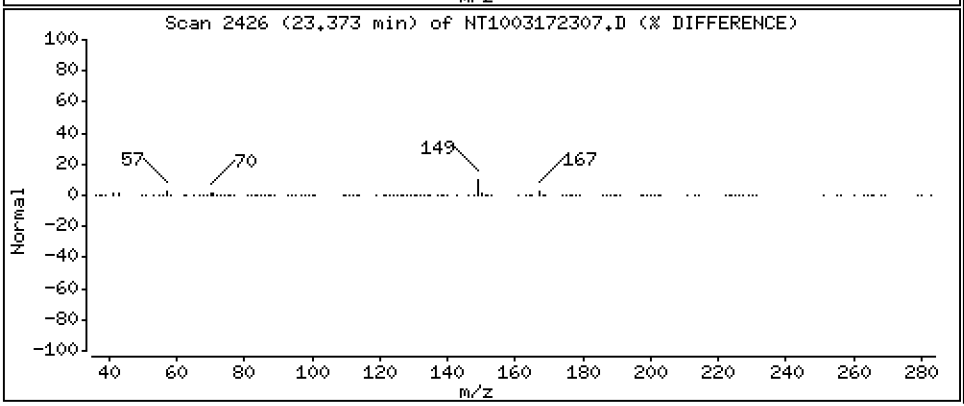












Date : 17-MAR-2023 22:14

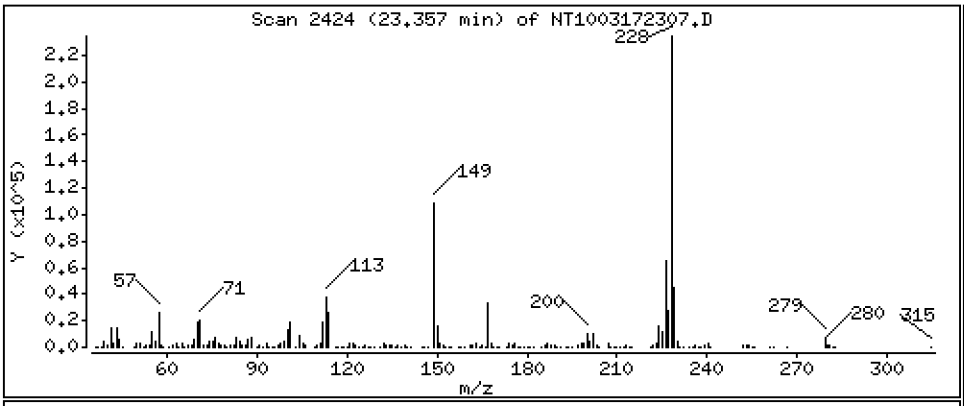
Client ID: Instrument: nt10.i

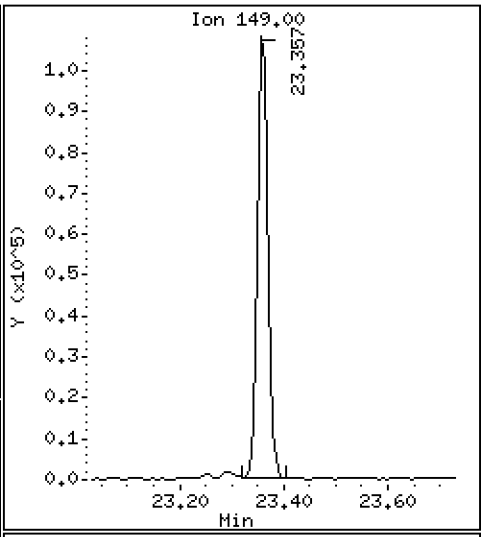
Sample Info: BLB0495-BS1

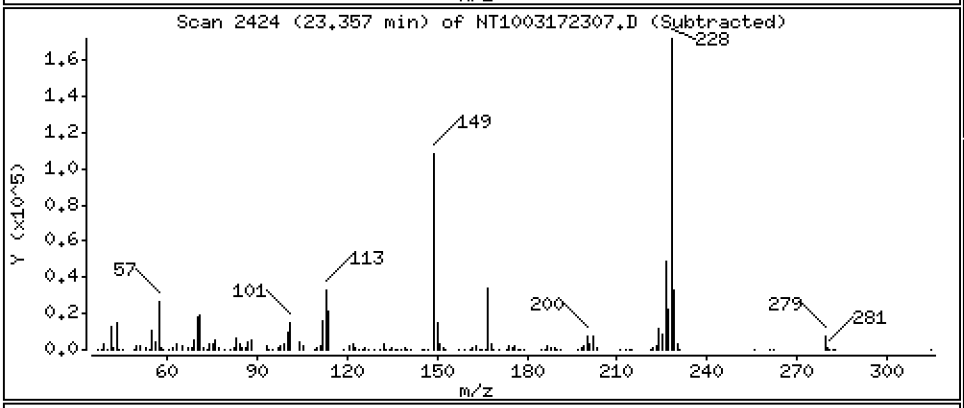
Operator: VTS

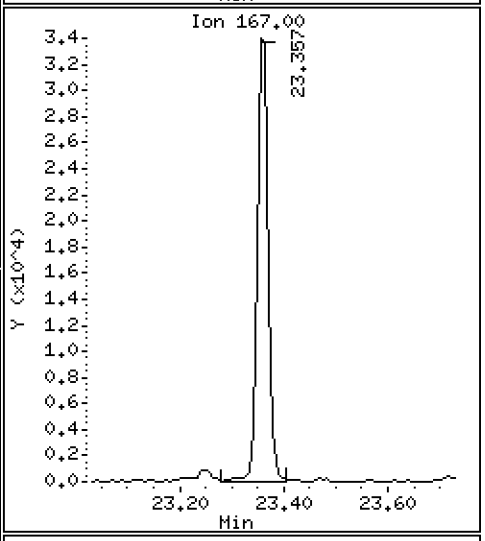
Column phase: ZB-5msi Column diameter: 0.25

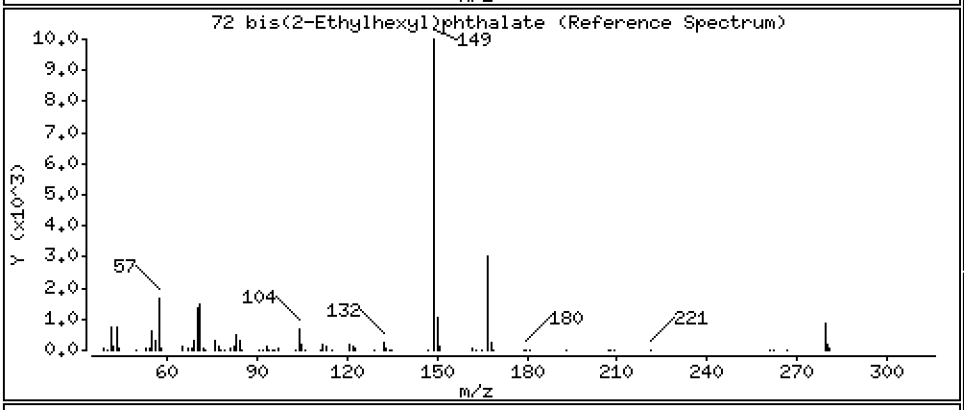
72 bis(2-Ethylhexyl)phthalate Concentration: 1.376 ug/mL

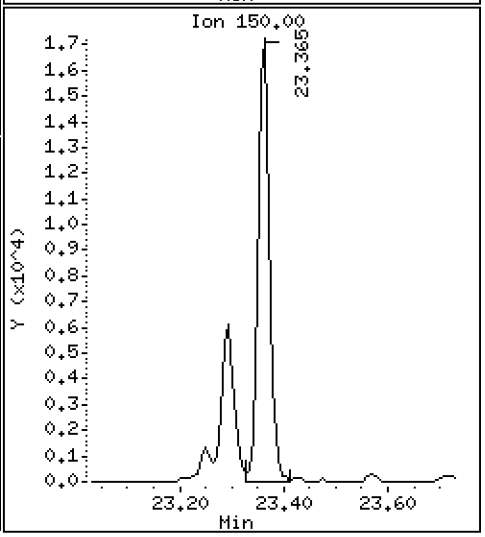


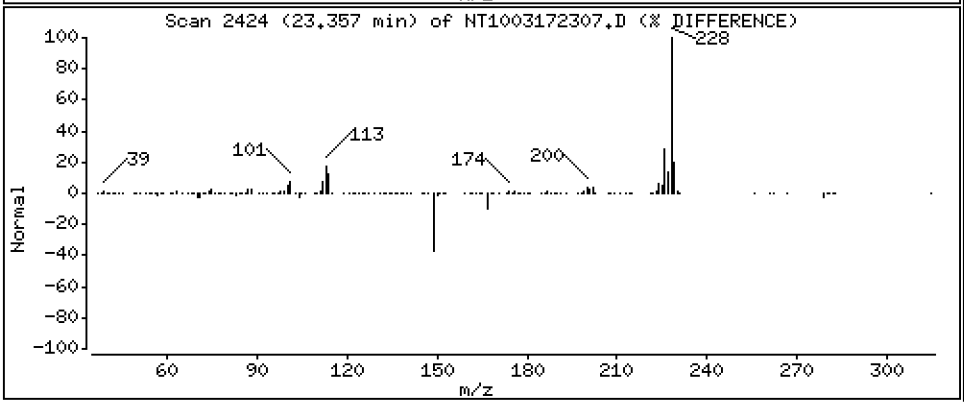












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172307.D

Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

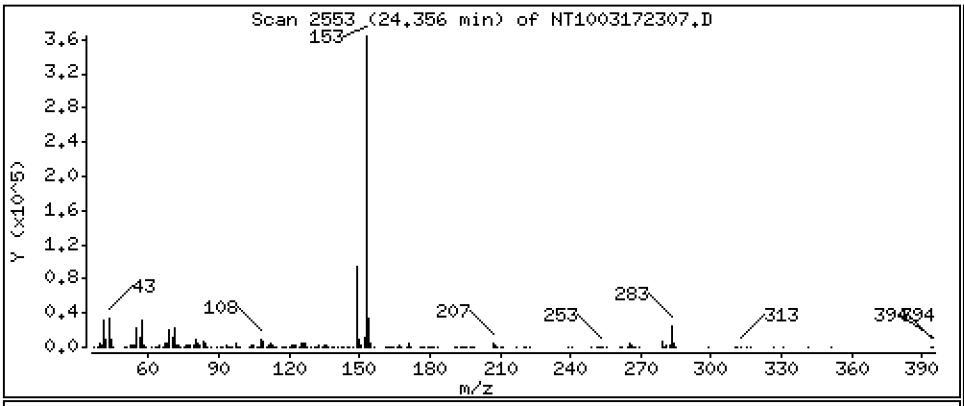
Operator: VTS

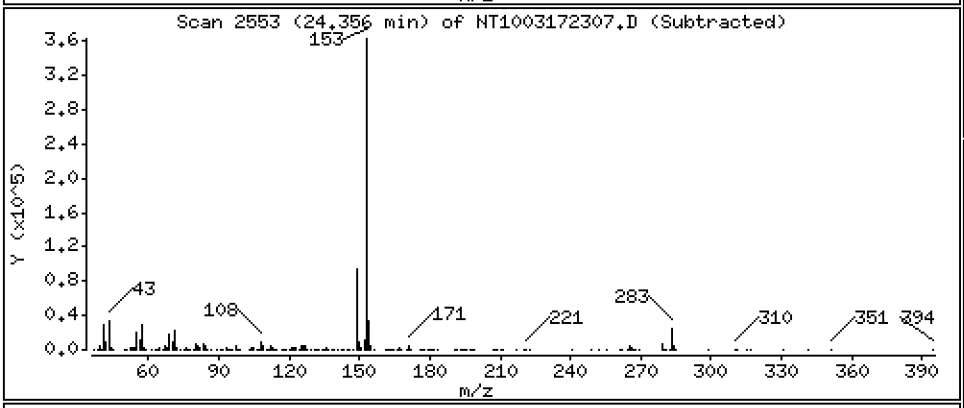
Column phase: ZB-5msi

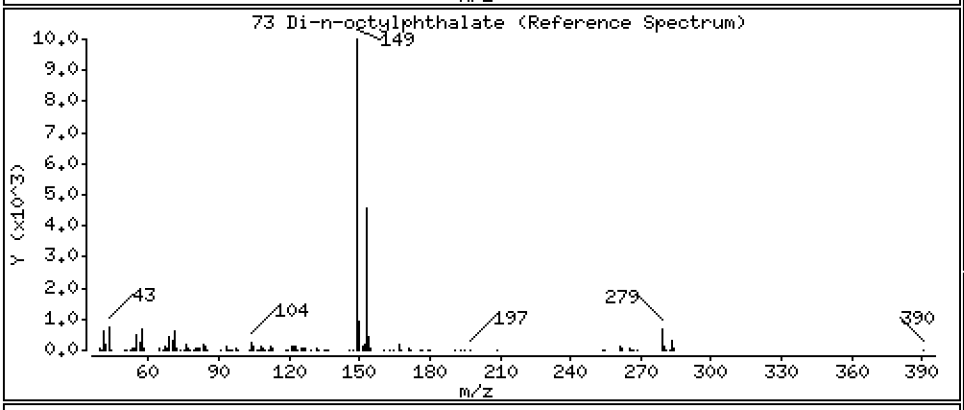
Column diameter: 0.25

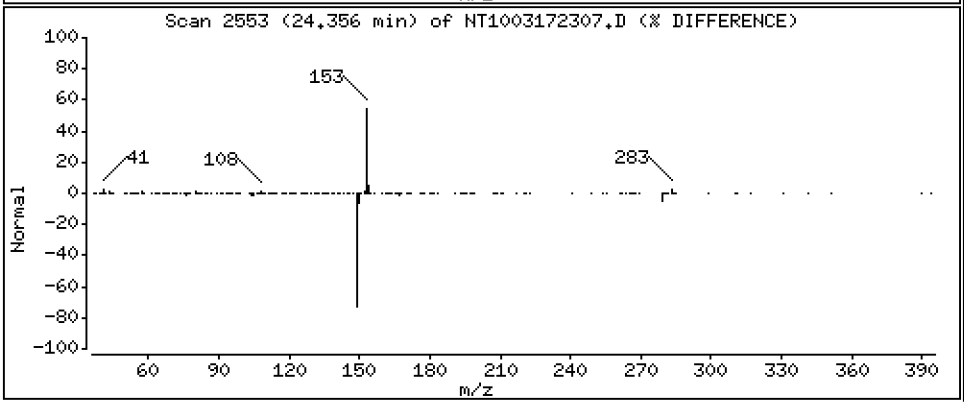
73 Di-n-octylphthalate

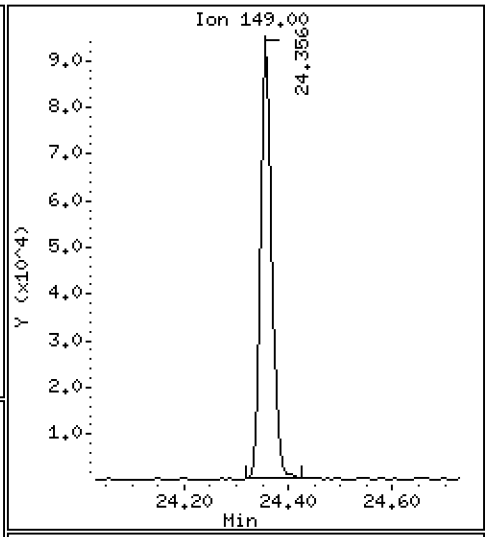
Concentration: 0.6937 ug/mL

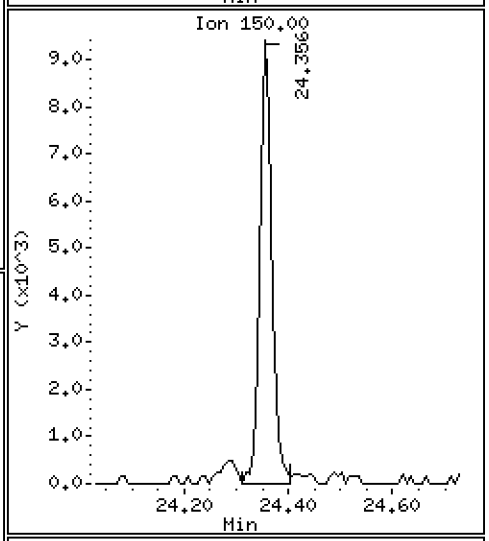


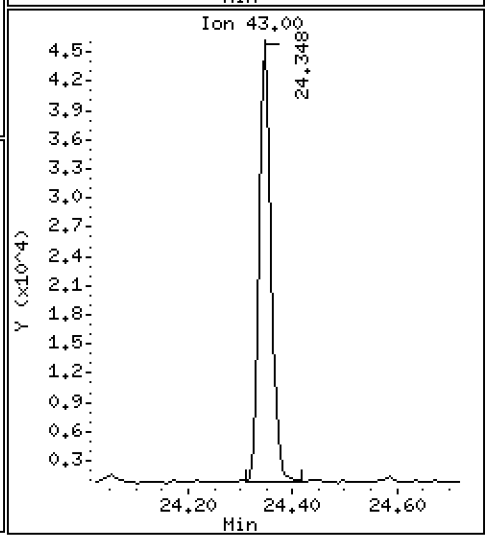












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172307.D

Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

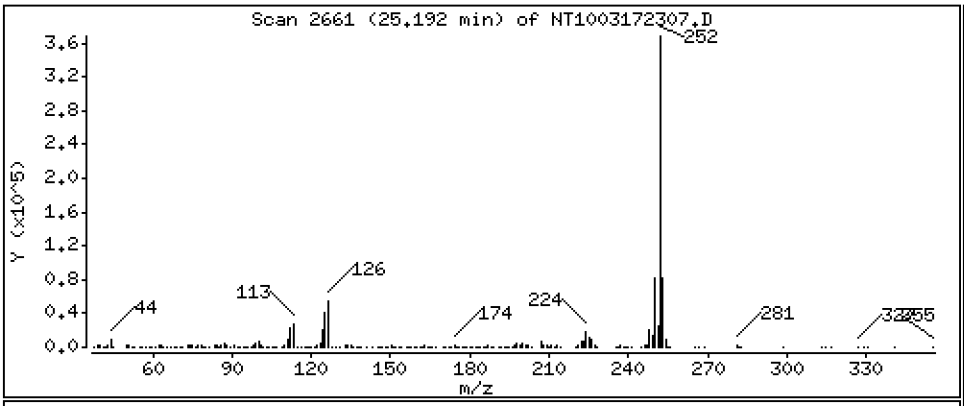
Operator: VTS

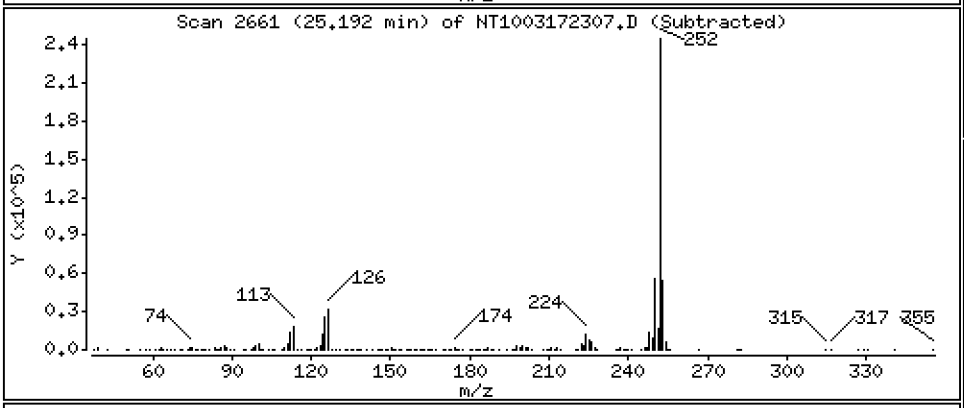
Column phase: ZB-5msi

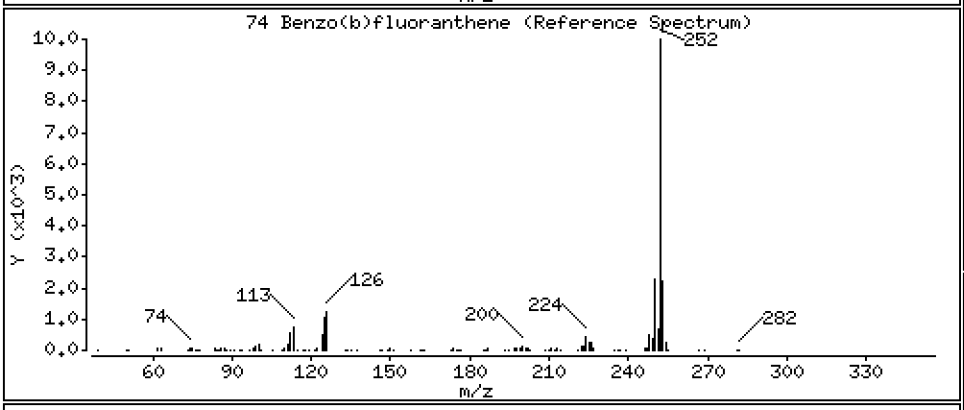
Column diameter: 0.25

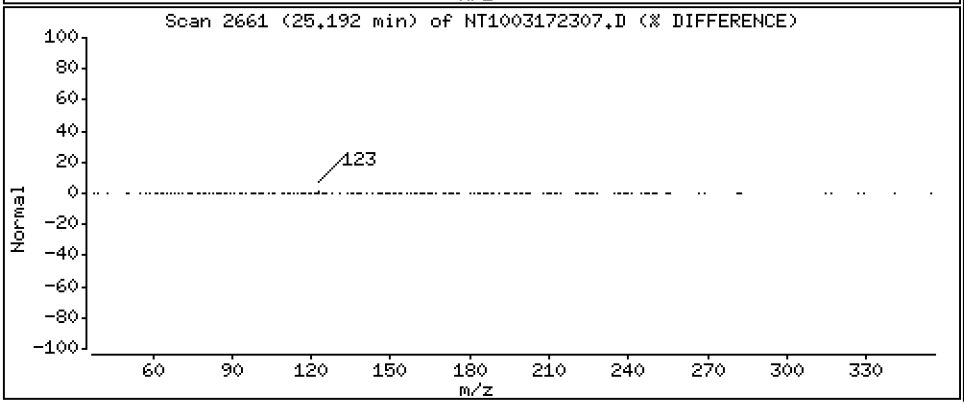
74 Benzo(b)fluoranthene

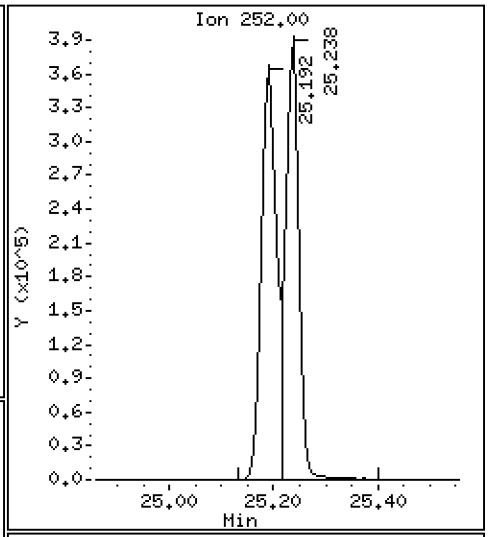
Concentration: 4.757 ug/mL

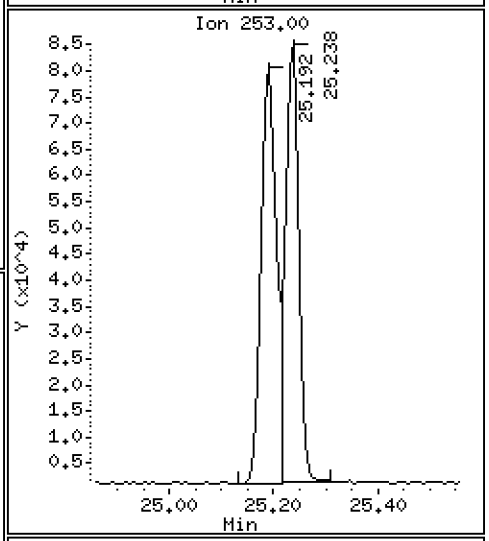


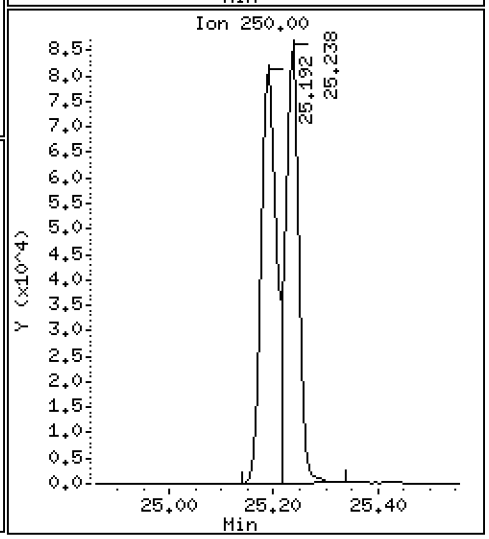












Date : 17-MAR-2023 22:14

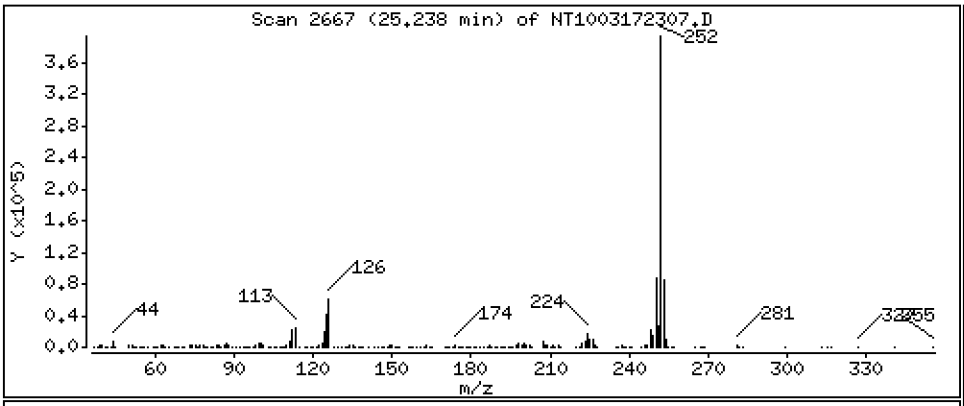
Client ID: Instrument: nt10.i

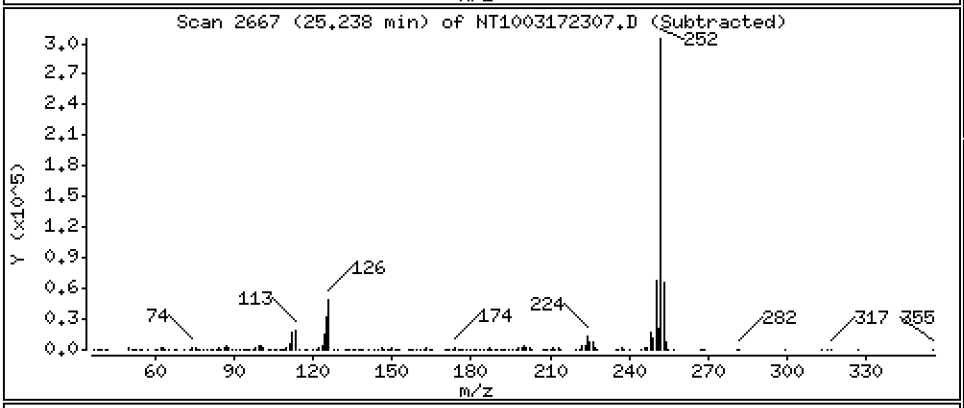
Sample Info: BLB0495-BS1

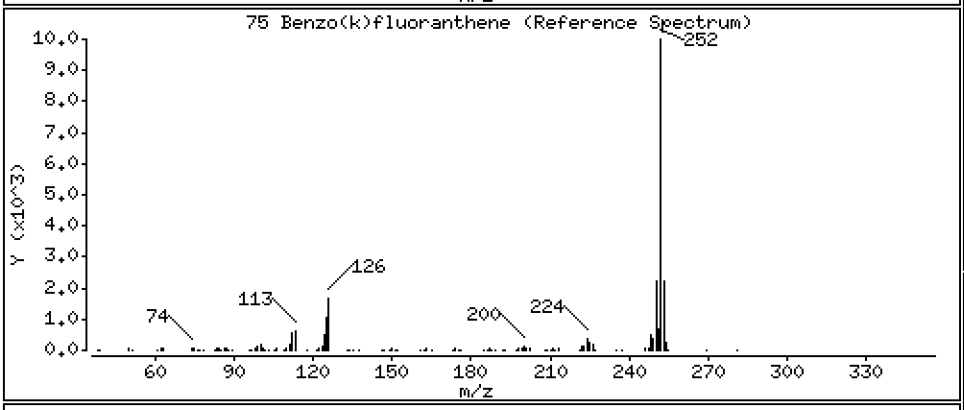
Operator: VTS

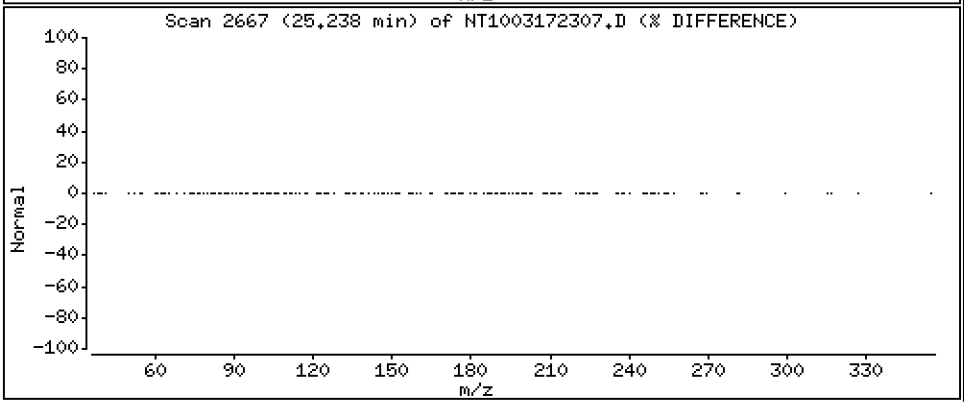
Column phase: ZB-5msi Column diameter: 0.25

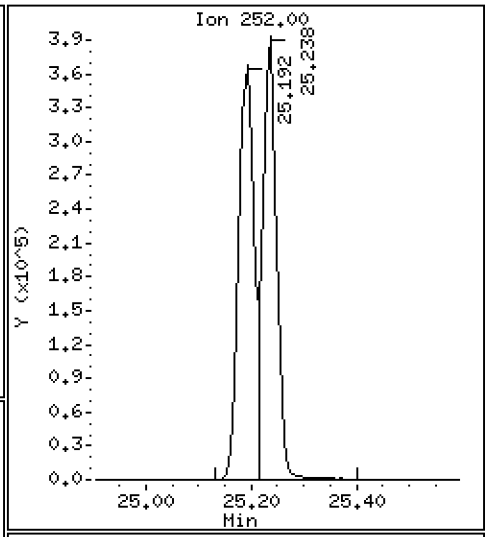
75 Benzo(k)fluoranthene Concentration: 4.532 ug/mL

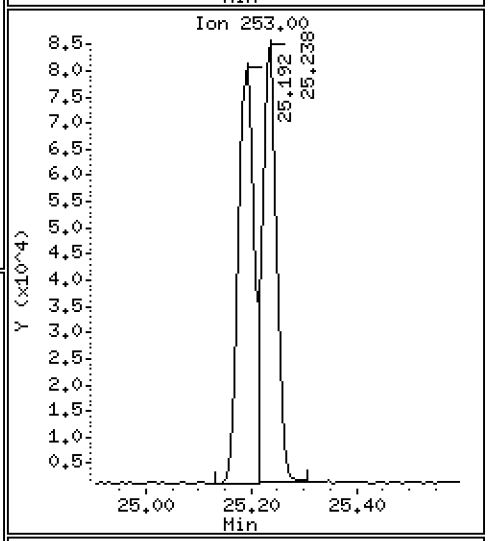


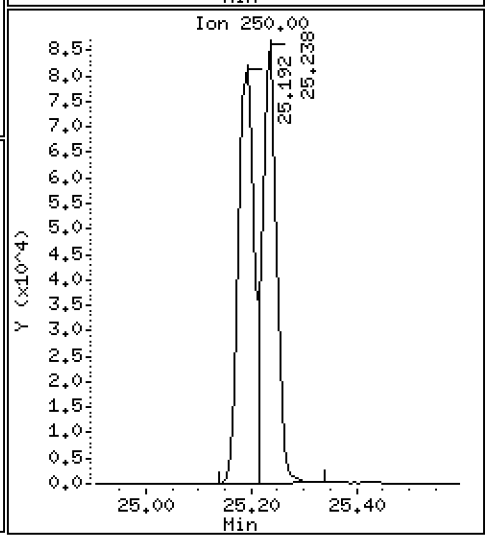












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

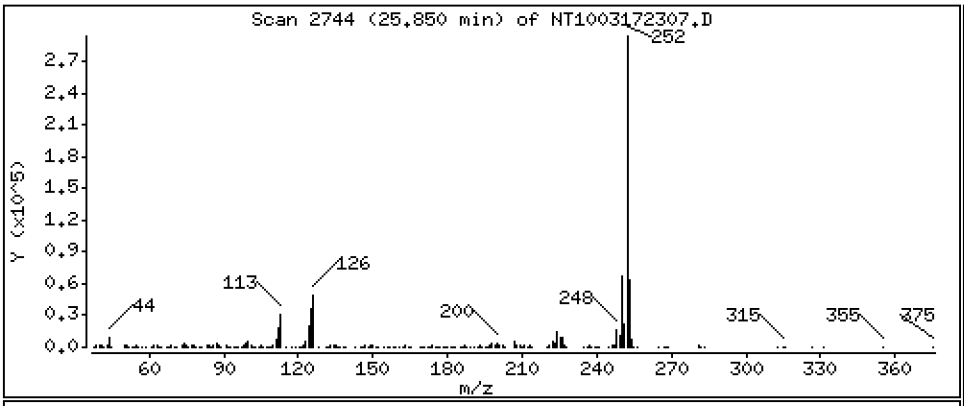
Operator: VTS

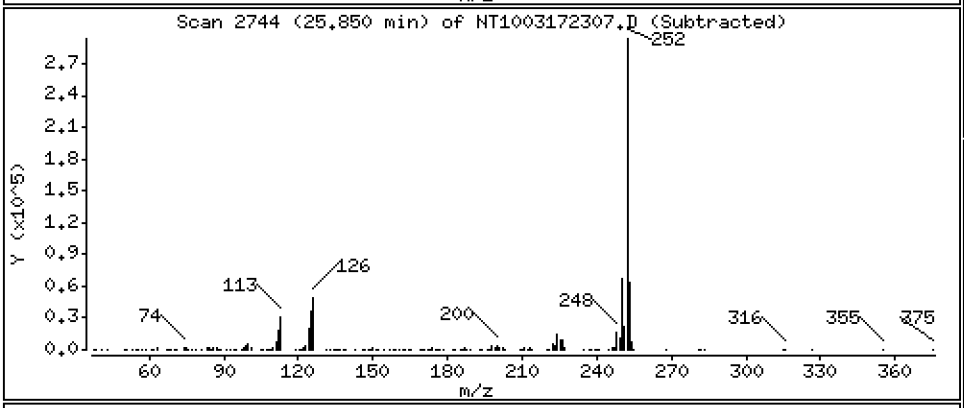
Column phase: ZB-5msi

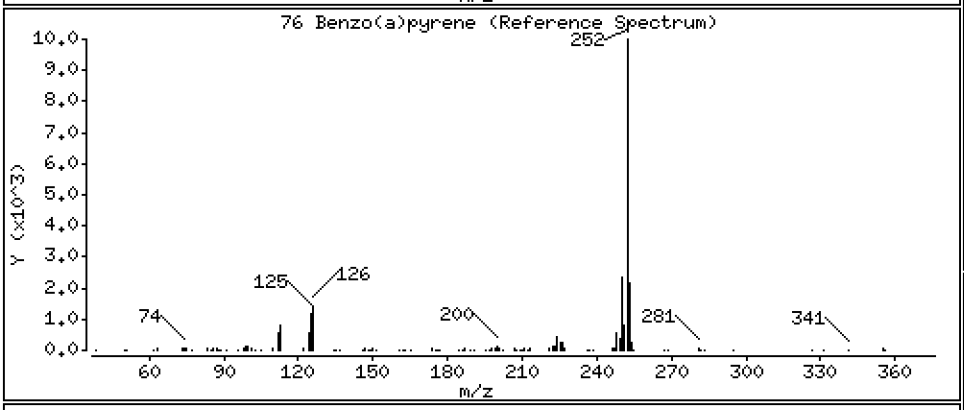
Column diameter: 0.25

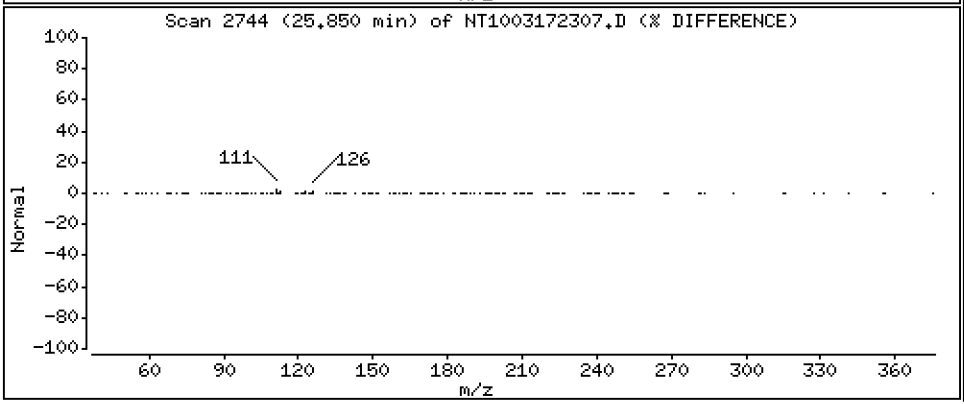
76 Benzo(a)pyrene

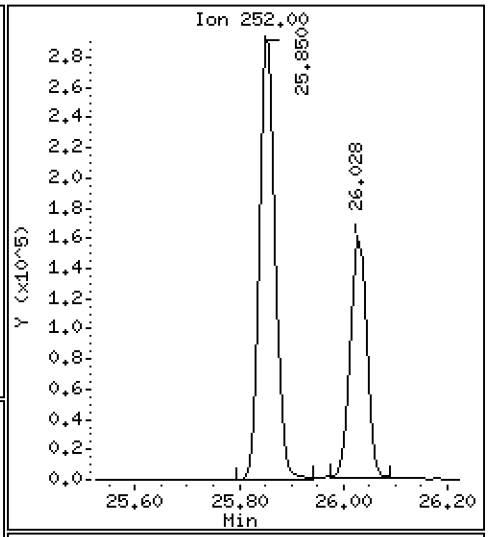
Concentration: 4.411 ug/mL

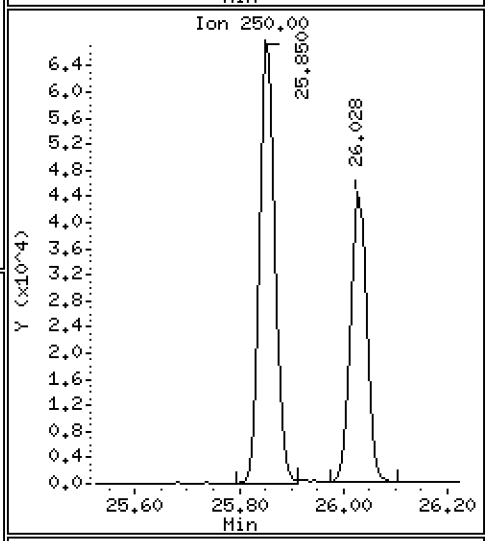


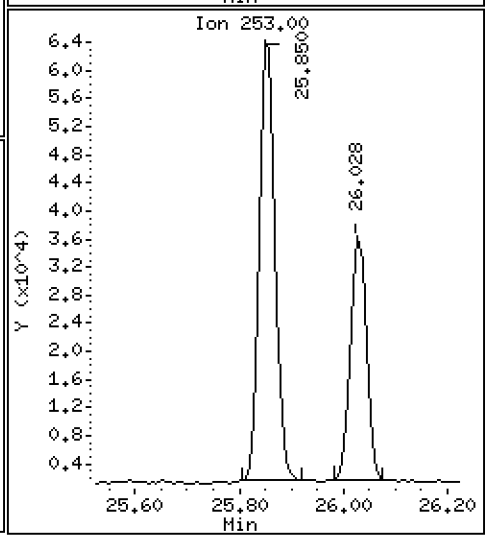












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

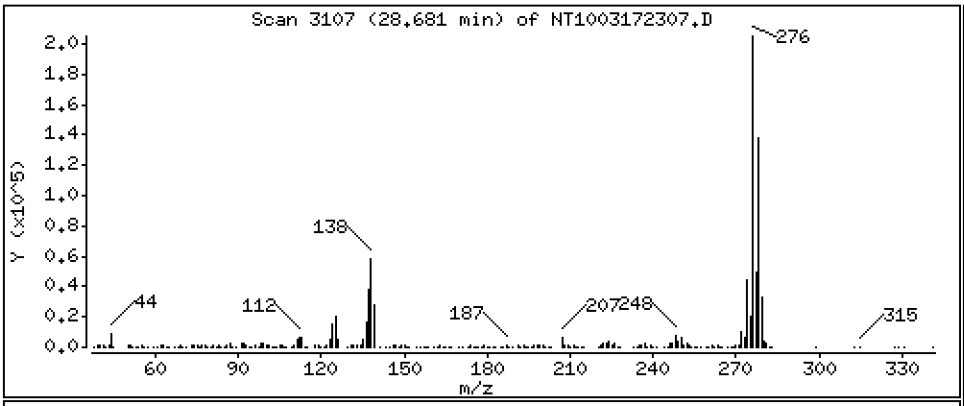
Operator: VTS

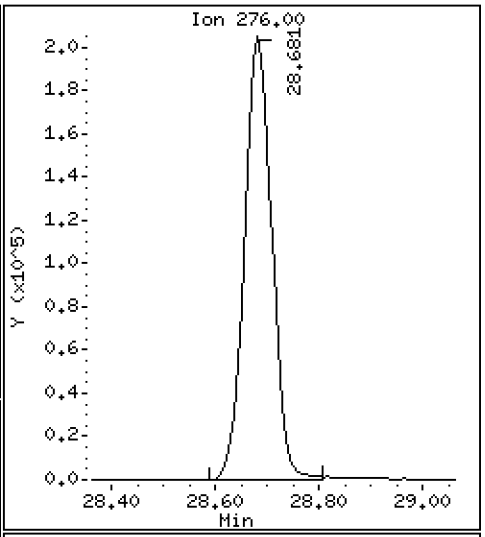
Column phase: ZB-5msi

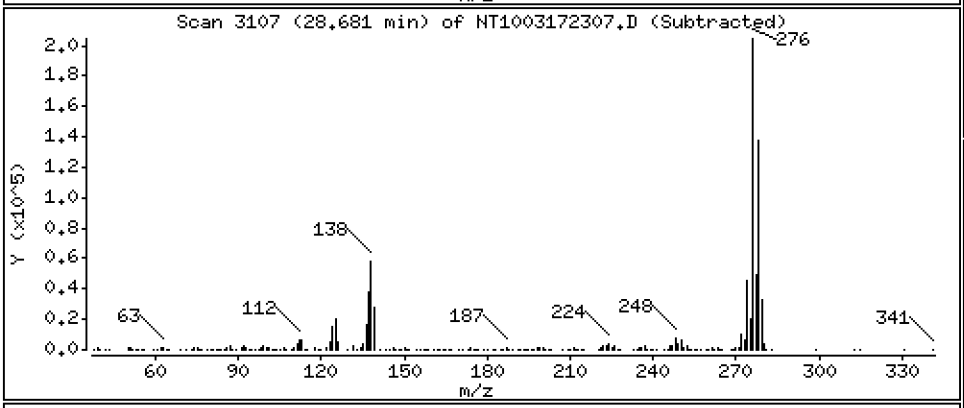
Column diameter: 0.25

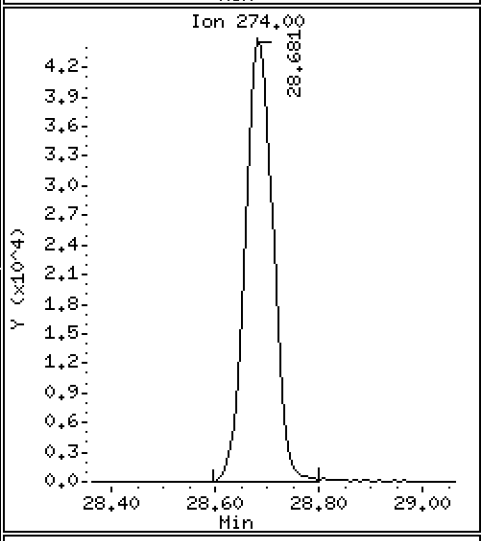
78 Indeno(1,2,3-cd)pyrene

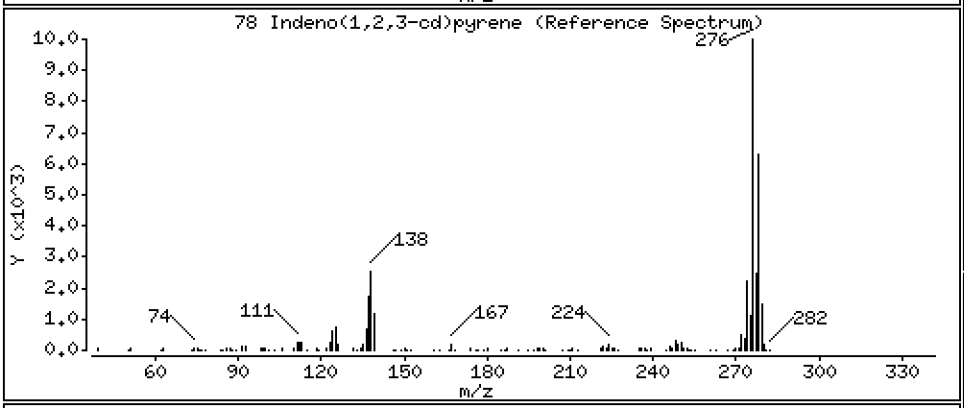
Concentration: 4.181 ug/mL

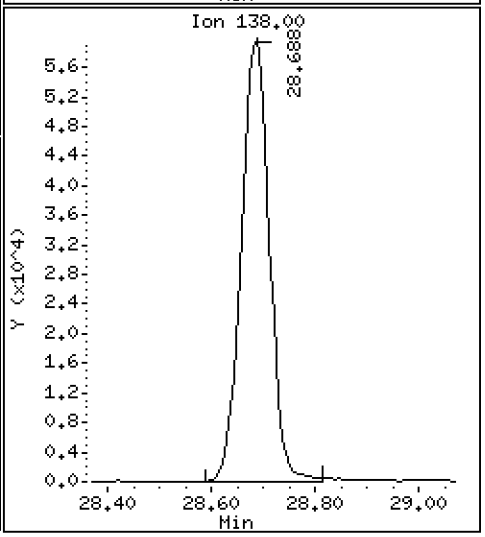


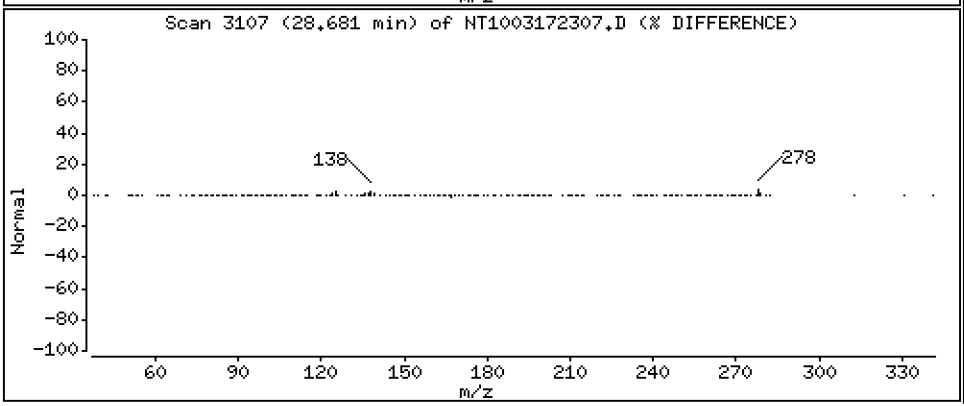












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

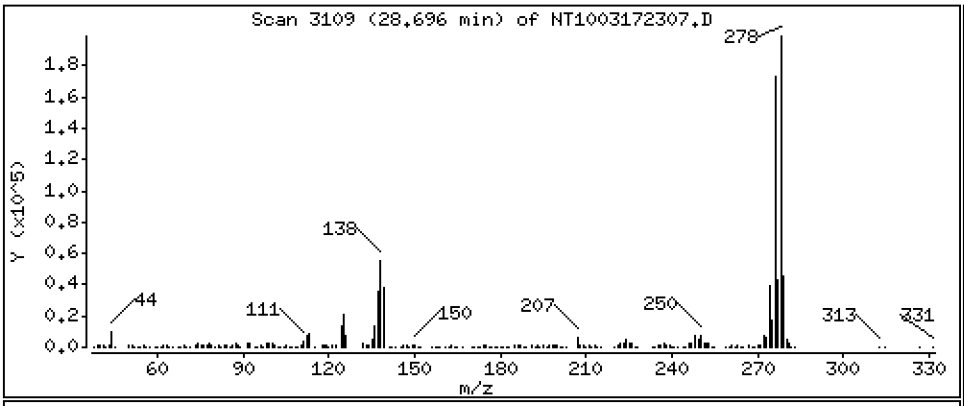
Operator: VTS

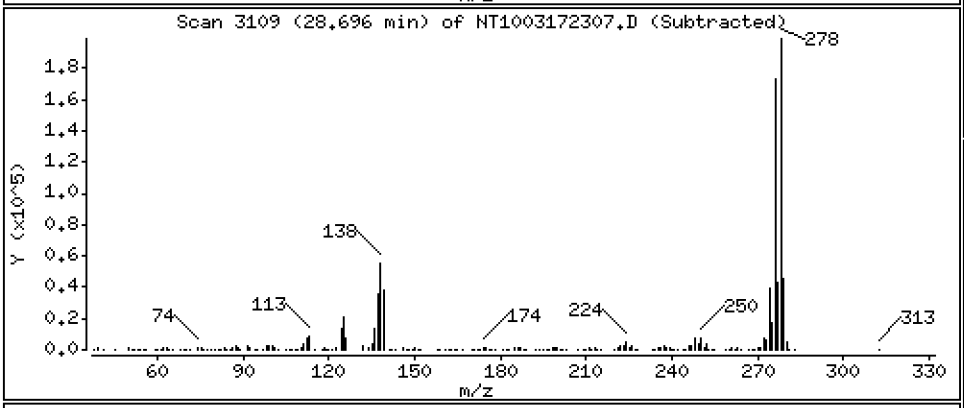
Column phase: ZB-5msi

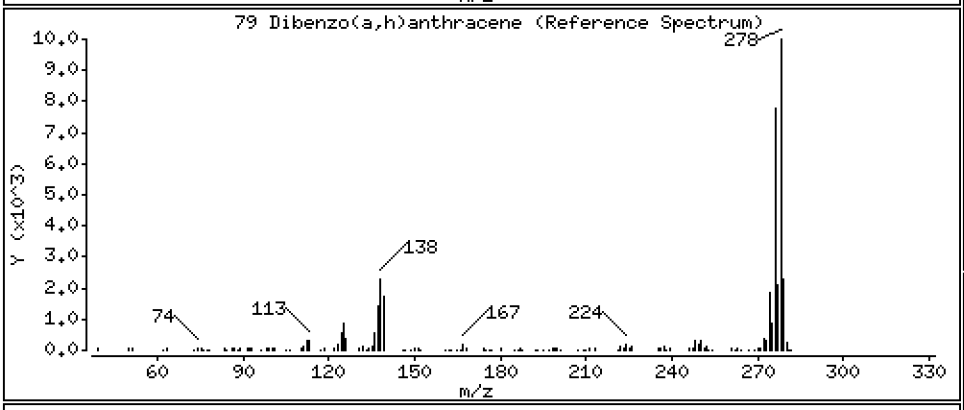
Column diameter: 0.25

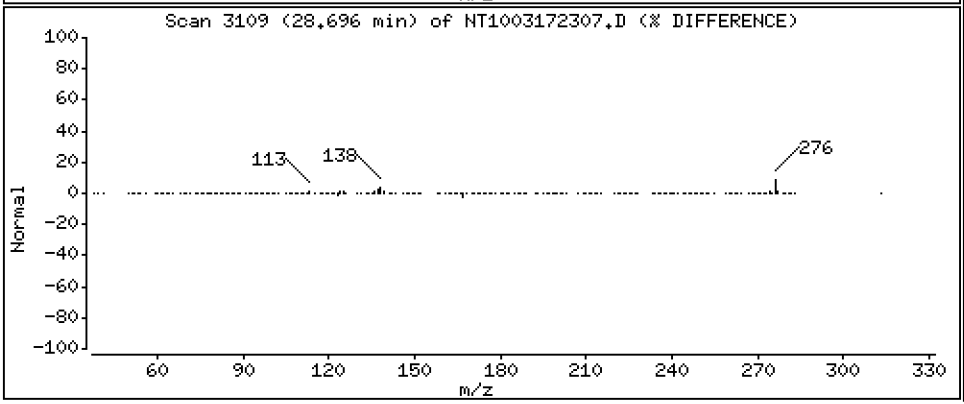
79 Dibenzo(a,h)anthracene

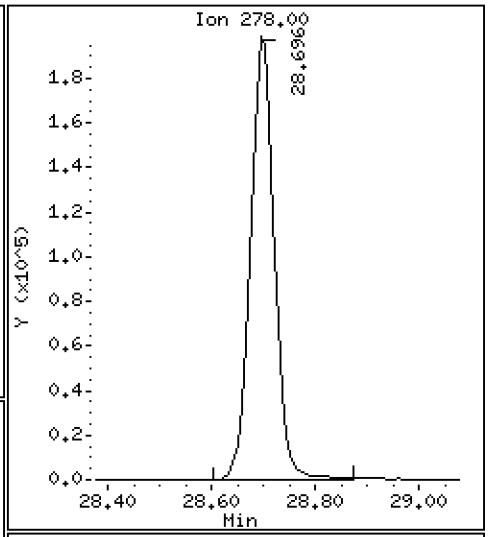
Concentration: 4.264 ug/mL

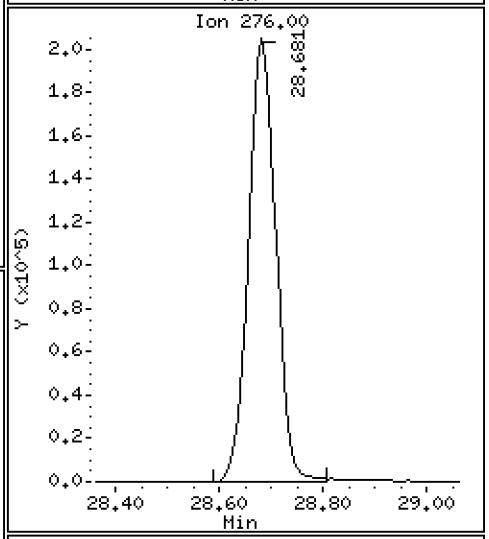


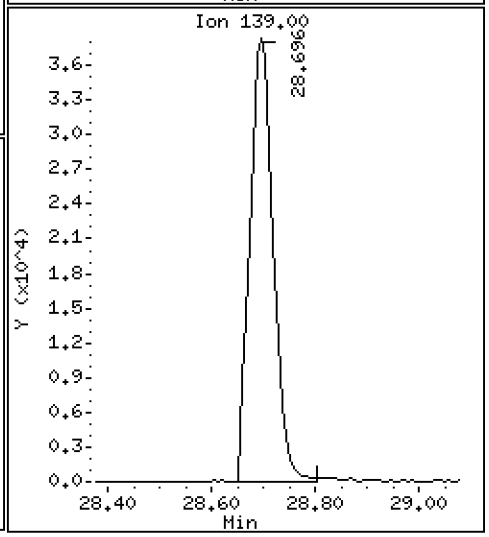












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

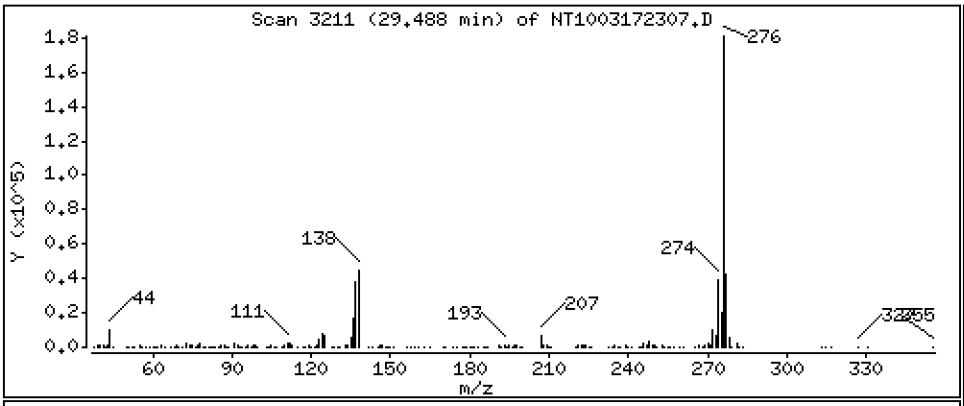
Operator: VTS

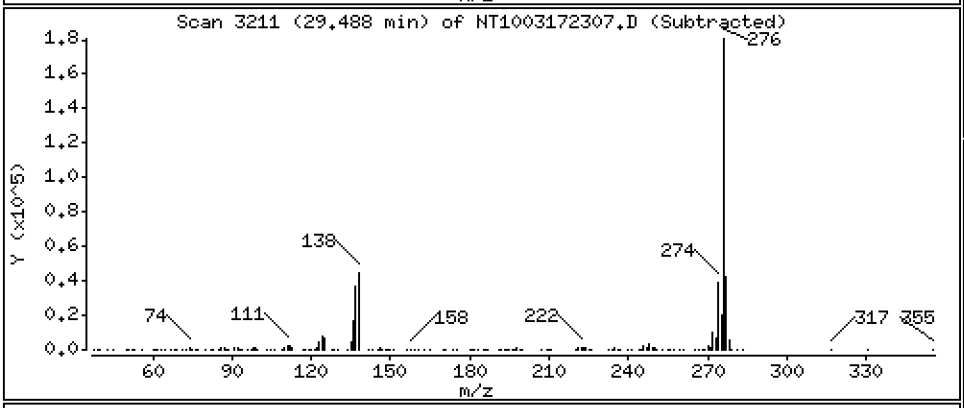
Column phase: ZB-5msi

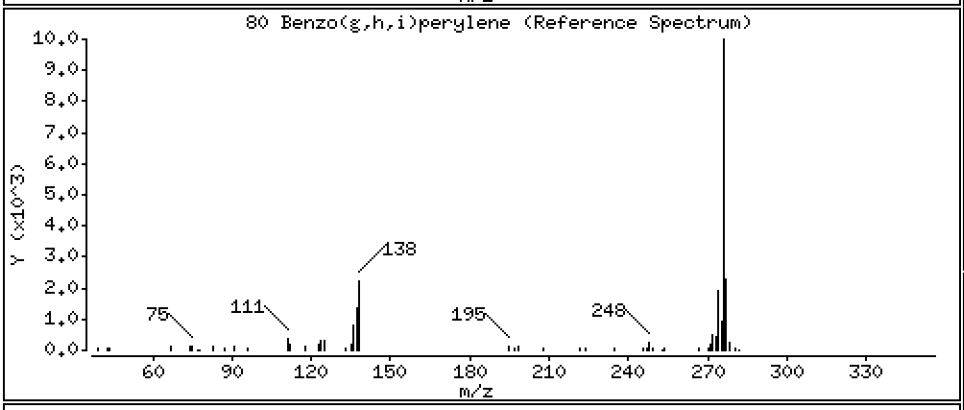
Column diameter: 0.25

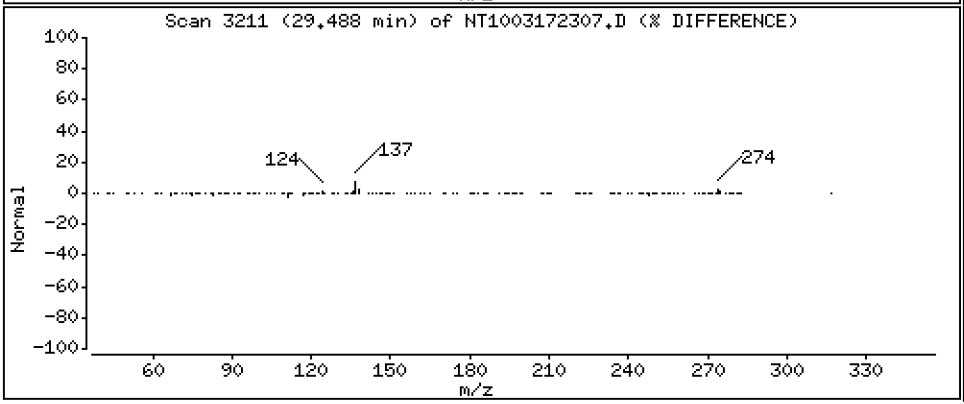
80 Benzo(g,h,i)perylene

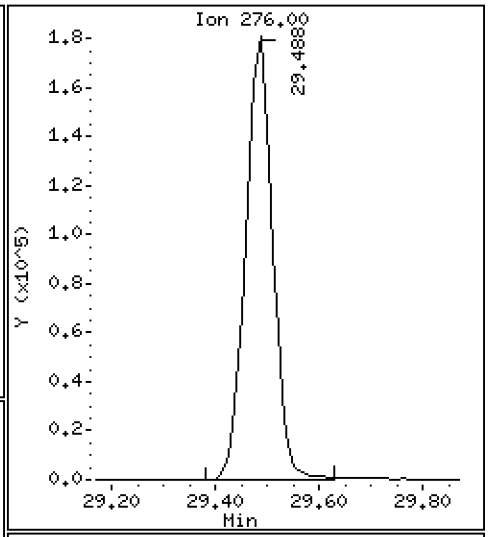
Concentration: 4.218 ug/mL

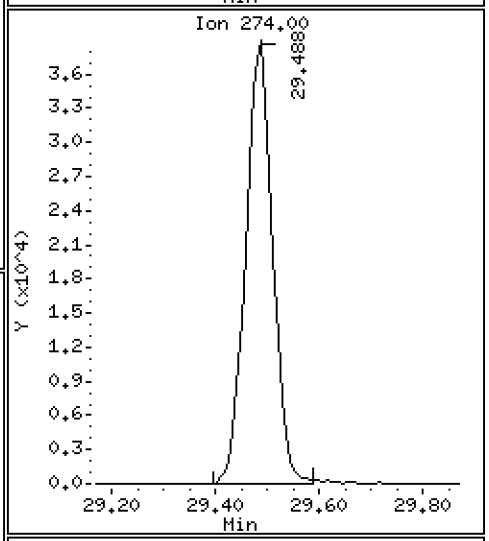


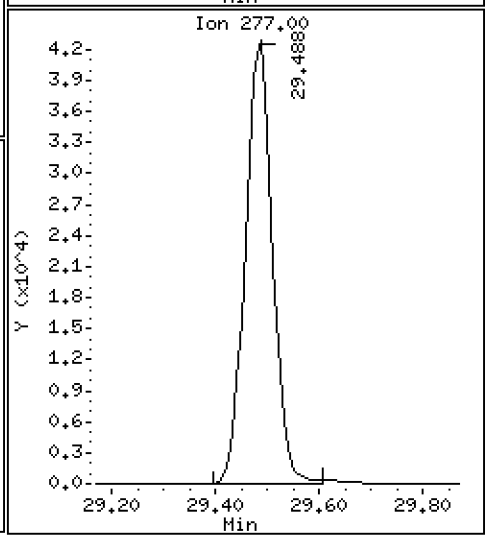












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

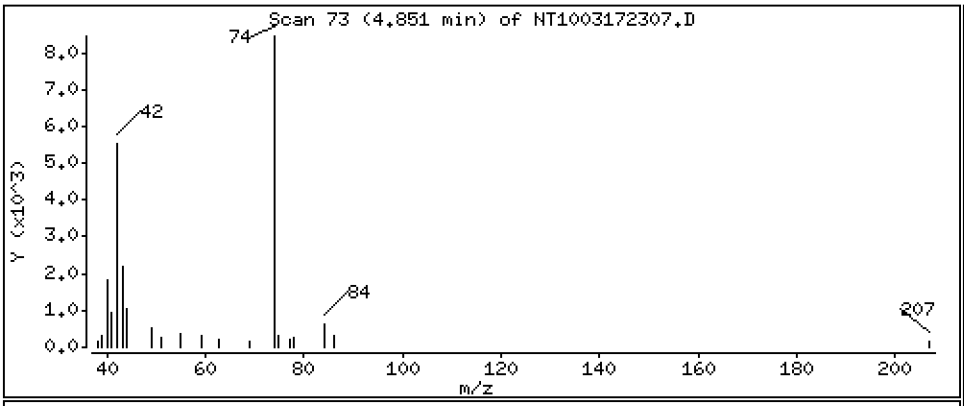
Operator: VTS

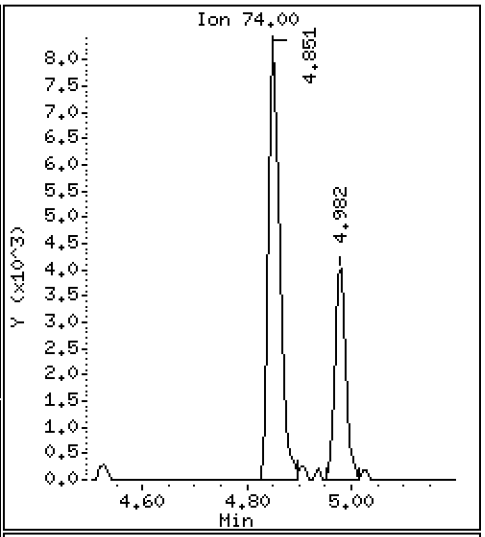
Column phase: ZB-5msi

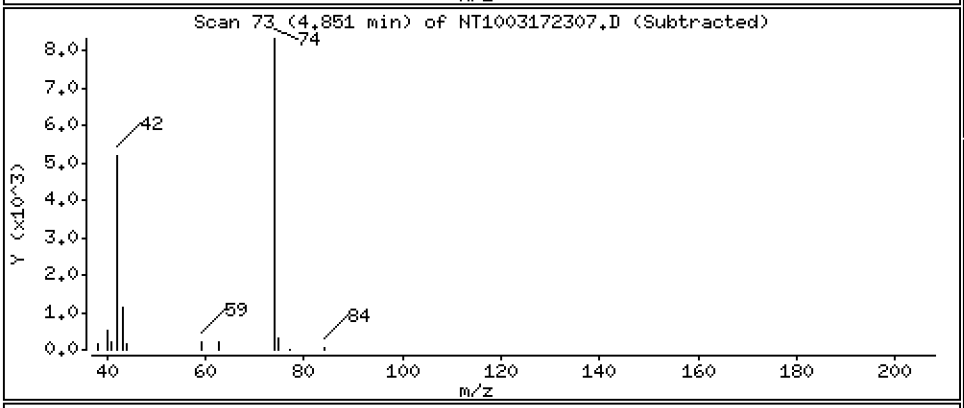
Column diameter: 0.25

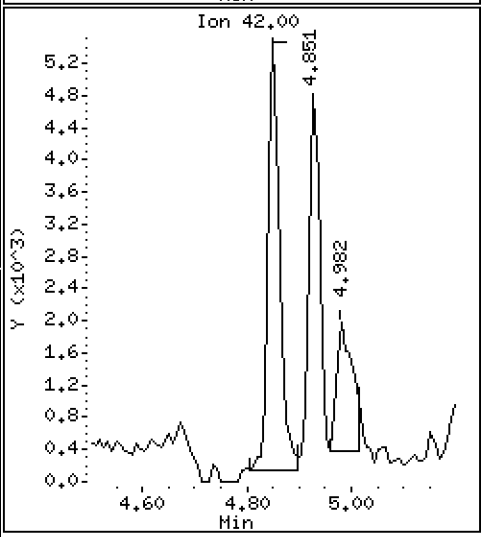
90 N-Nitrosodimethylamine

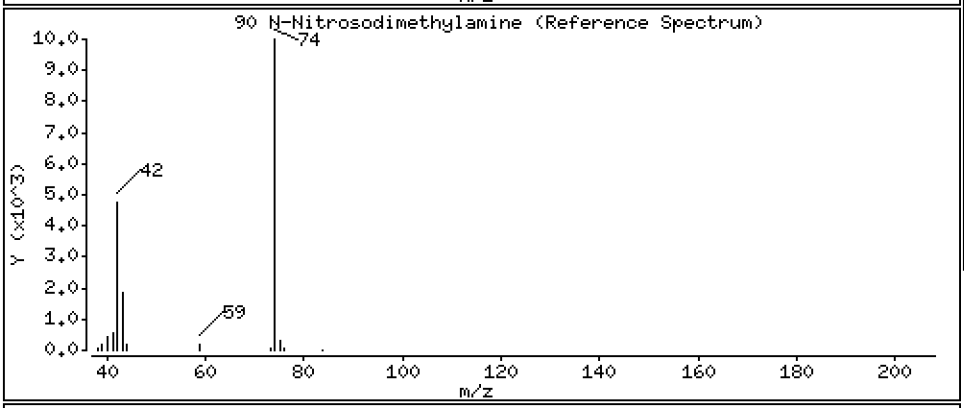
Concentration: 0.3700 ug/mL

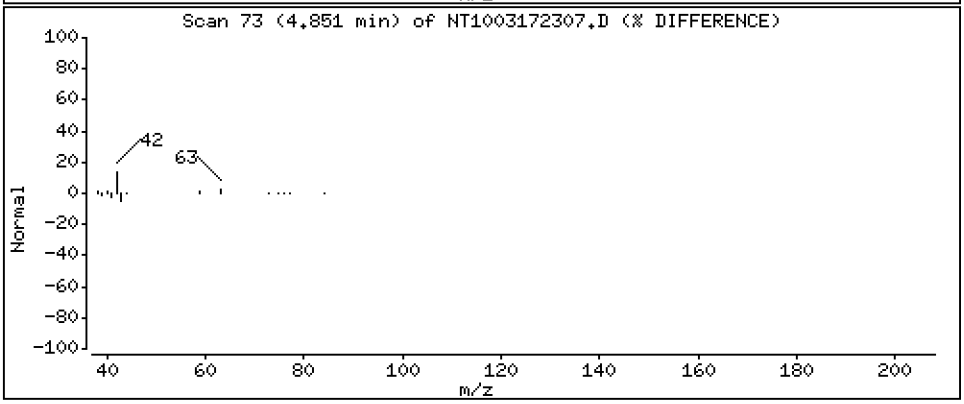












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

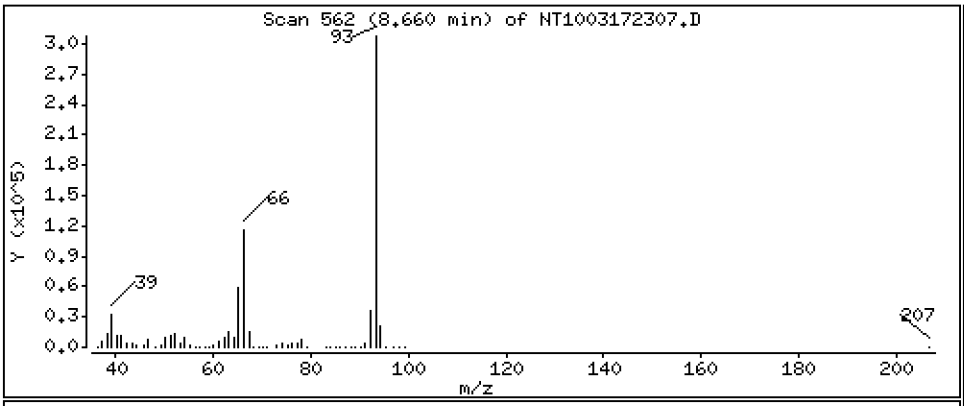
Operator: VTS

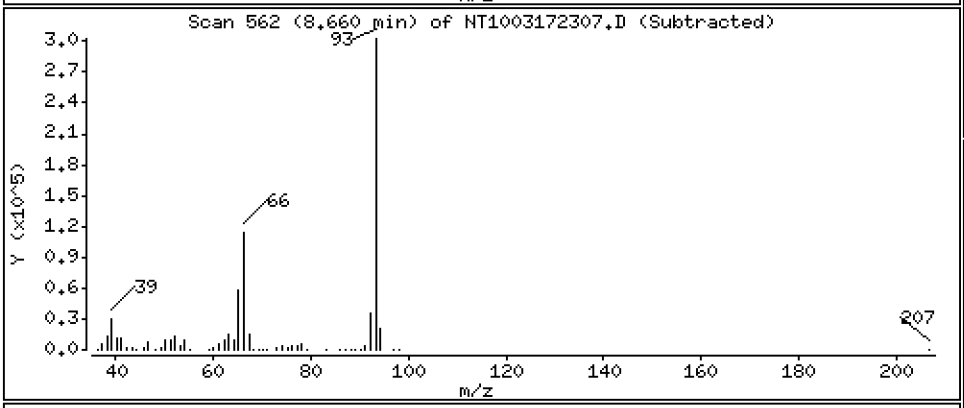
Column phase: ZB-5msi

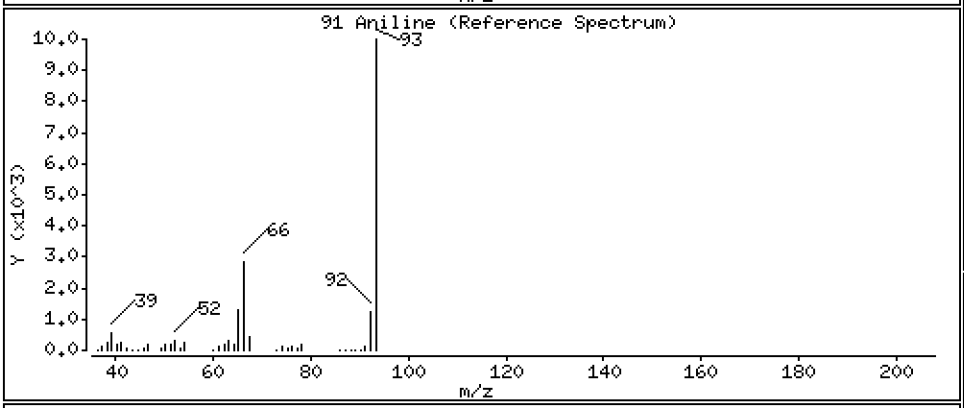
Column diameter: 0.25

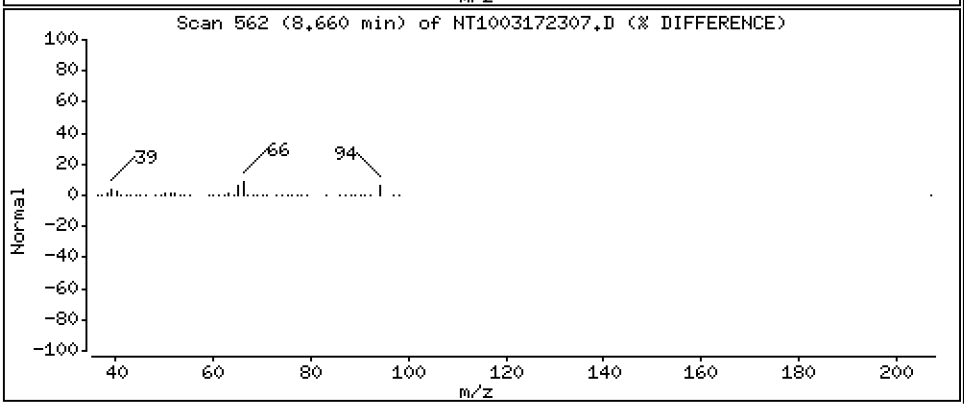
91 Aniline

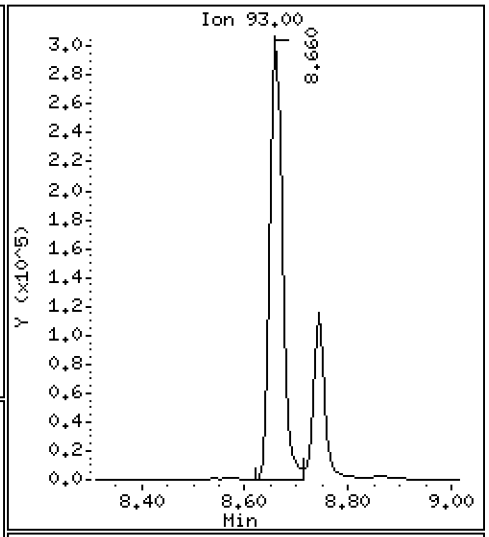
Concentration: 6.979 ug/mL

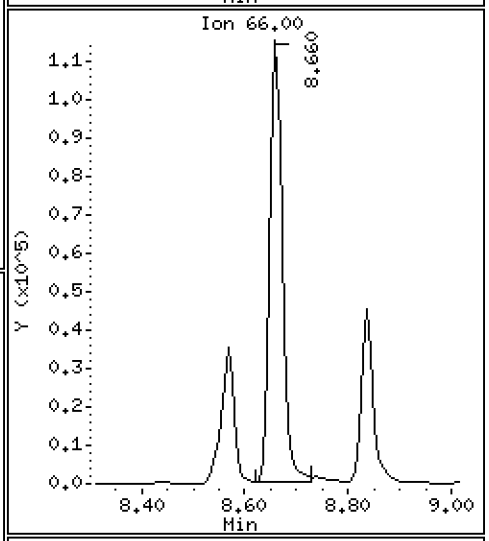


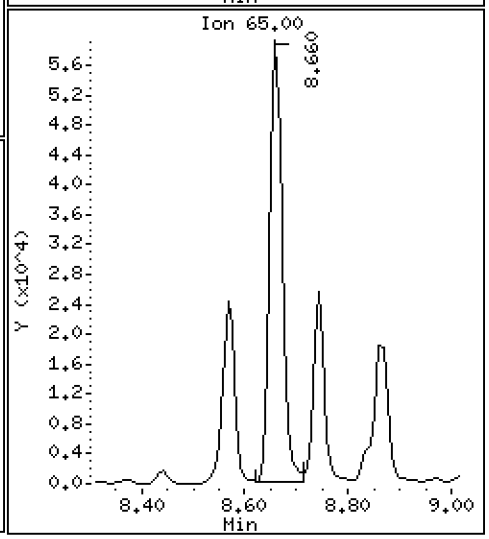












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

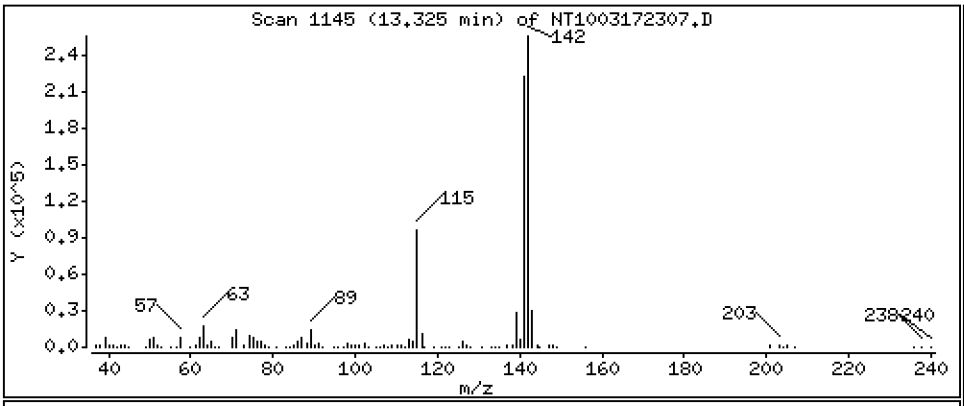
Operator: VTS

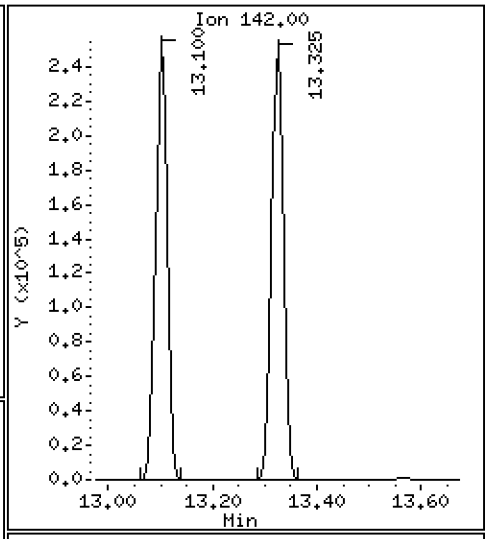
Column phase: ZB-5msi

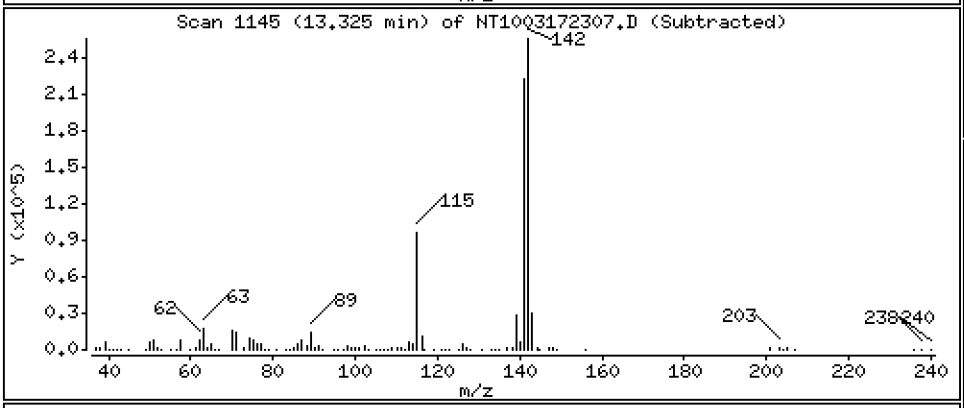
Column diameter: 0.25

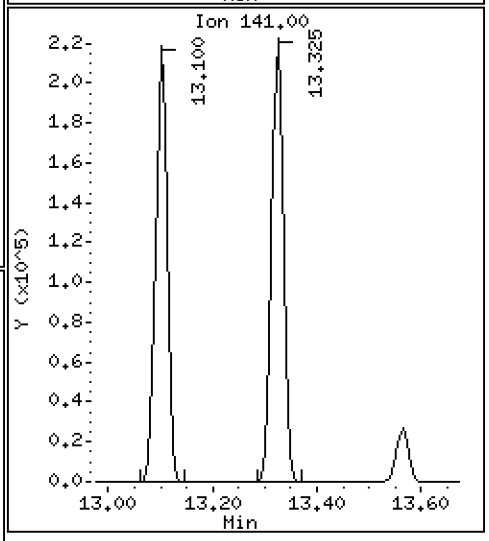
105 1-methylnaphthalene

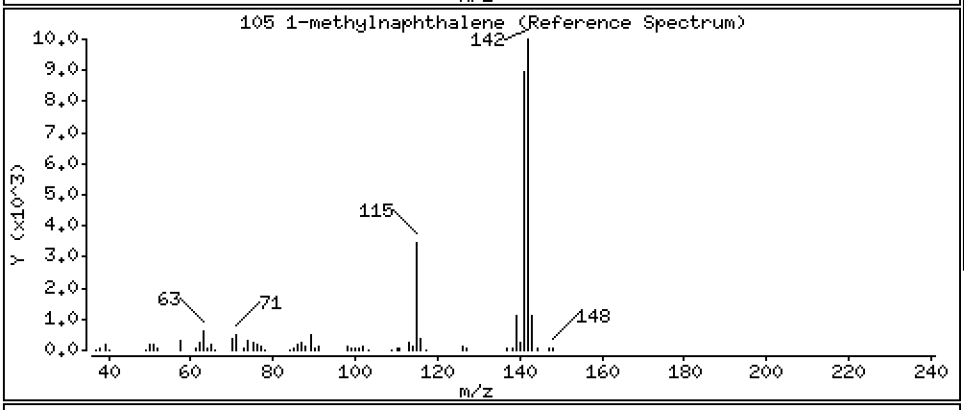
Concentration: 3.634 ug/mL

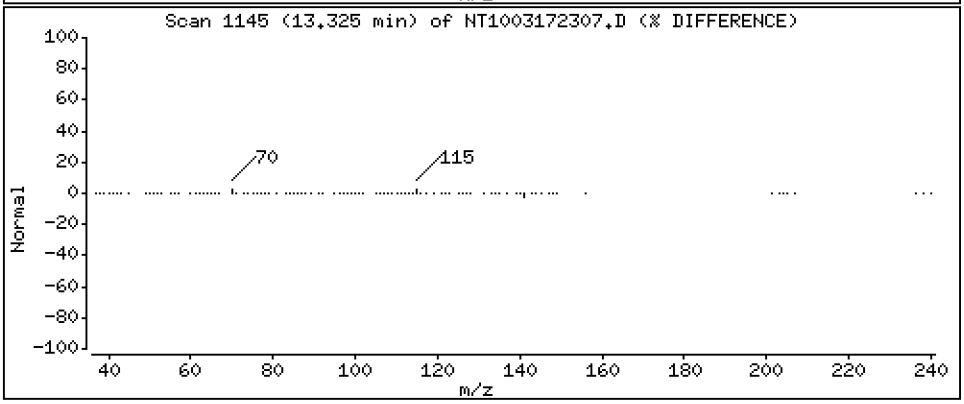












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

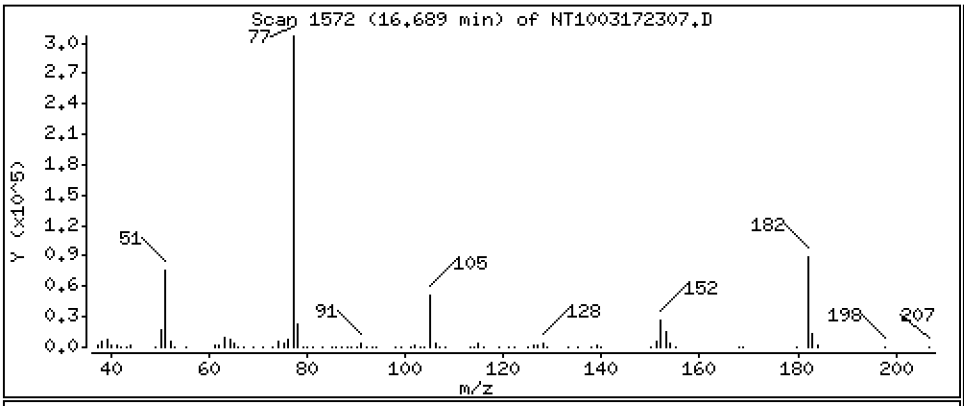
Operator: VTS

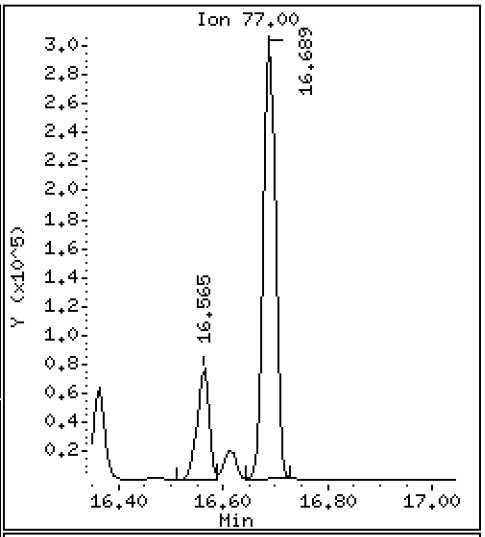
Column phase: ZB-5msi

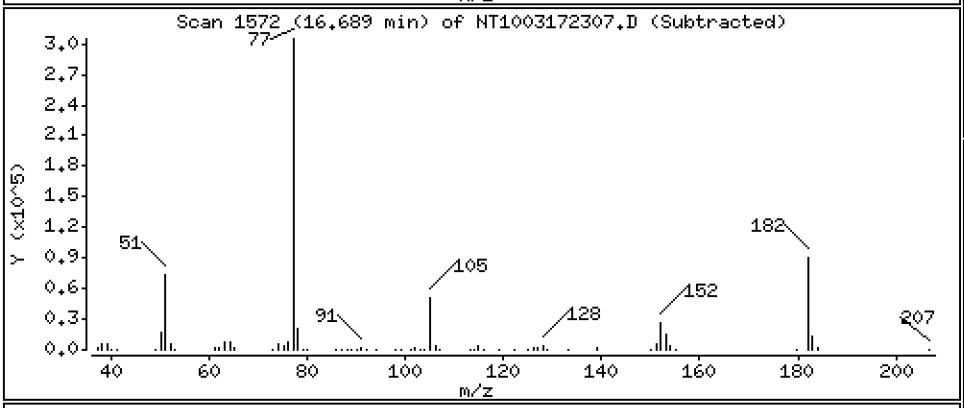
Column diameter: 0.25

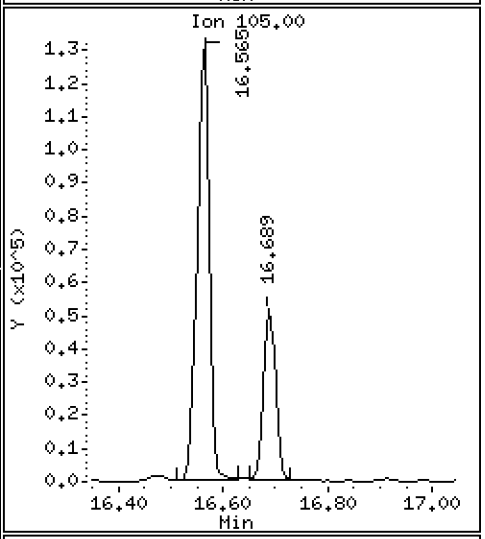
111 Azobenzene (1,2-DP-Hydrazine)

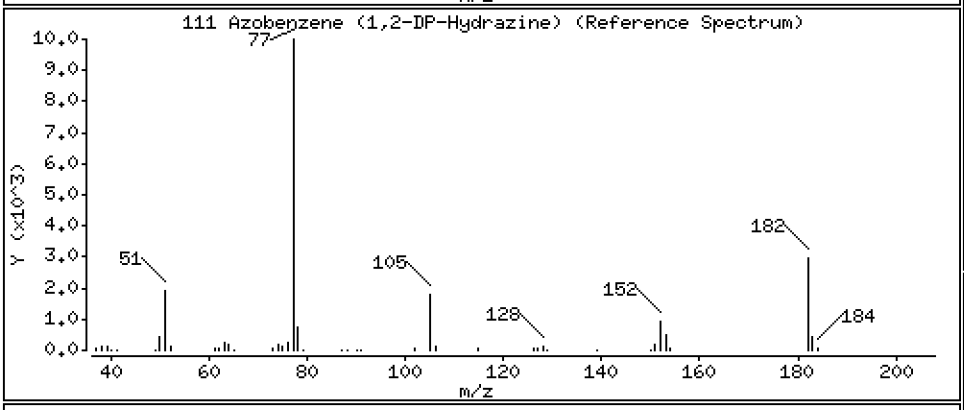
Concentration: 4.023 ug/mL

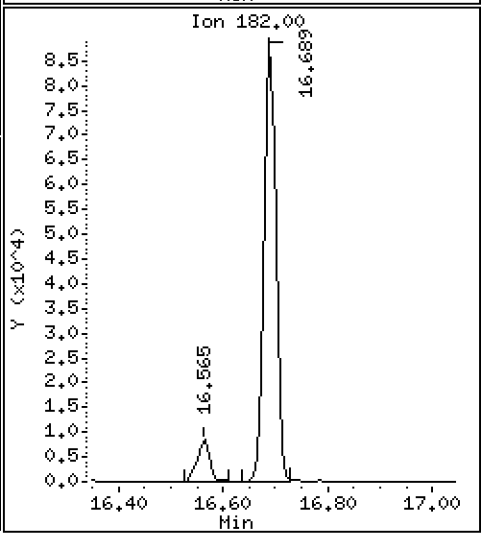


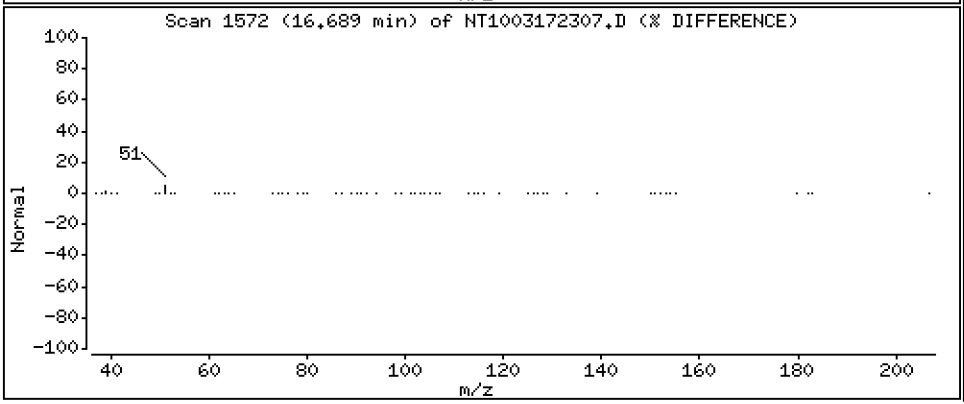












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

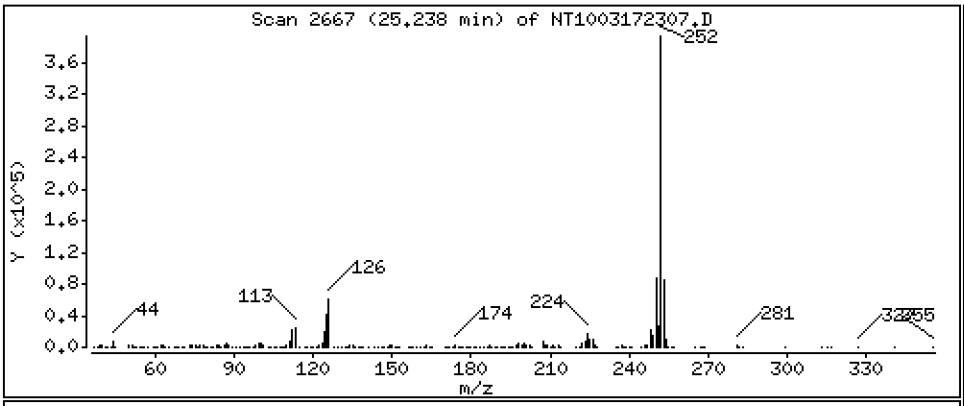
Operator: VTS

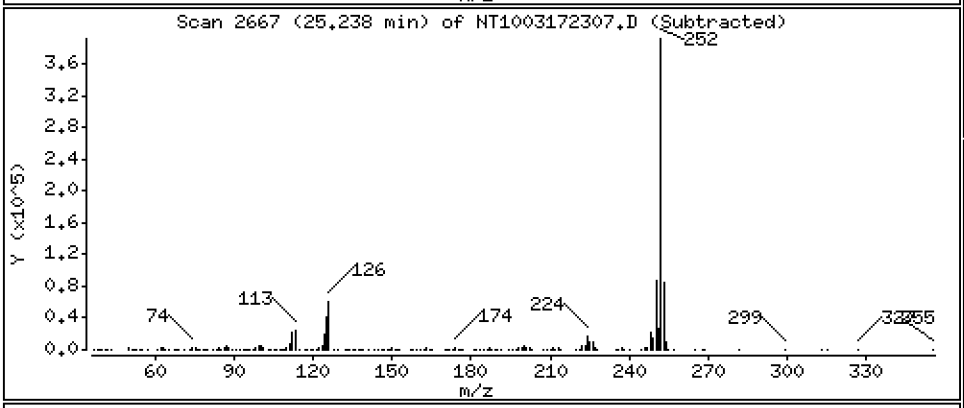
Column phase: ZB-5msi

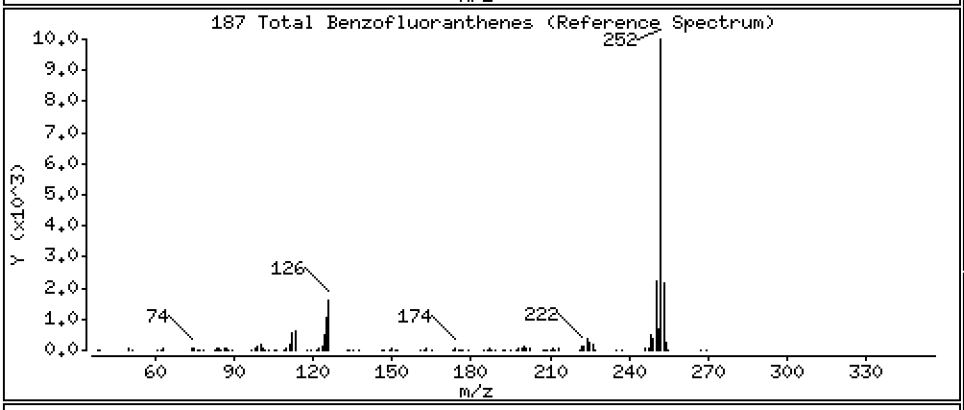
Column diameter: 0.25

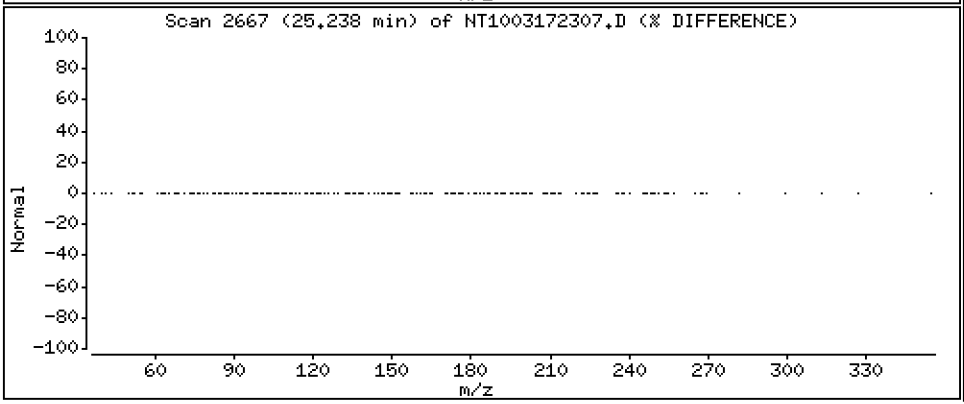
187 Total Benzofluoranthenes

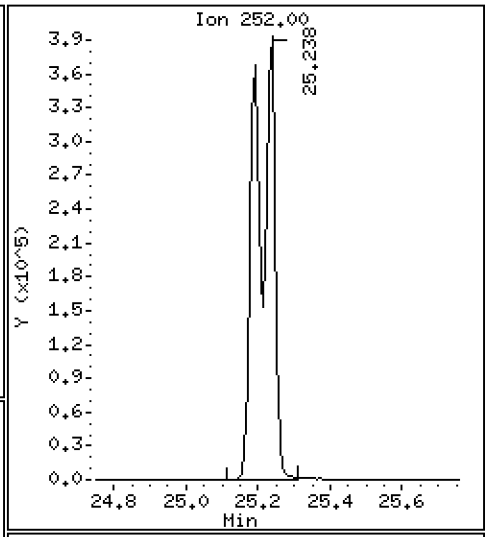
Concentration: 9.228 ug/mL

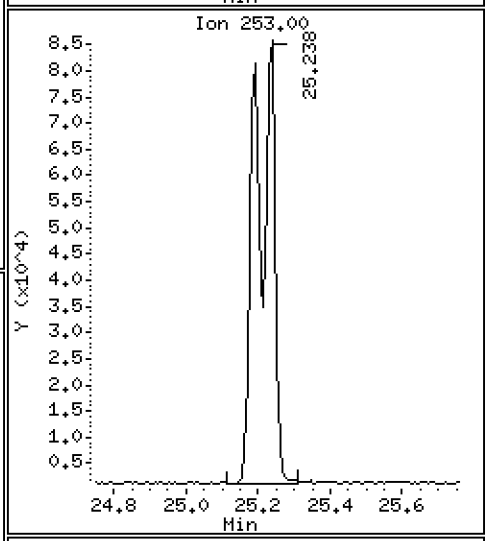


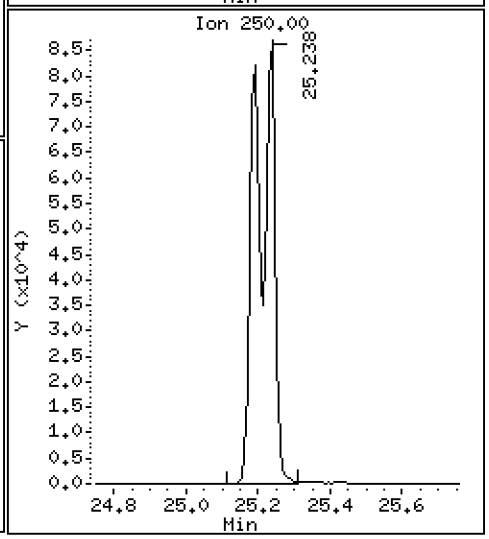












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS1

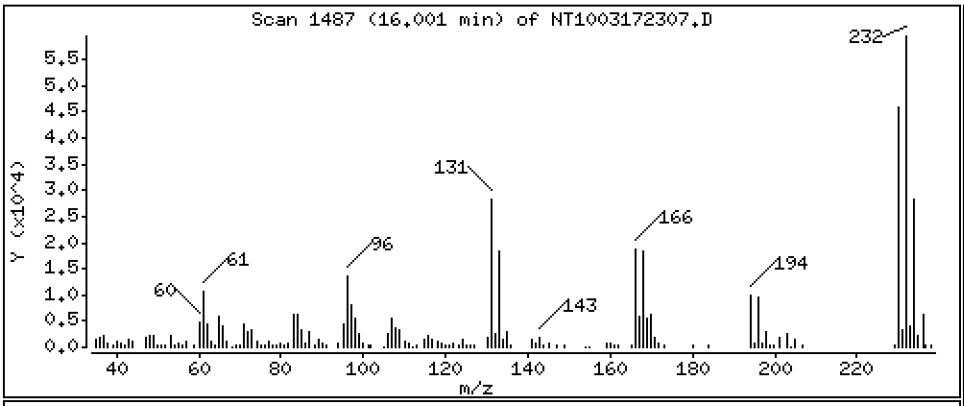
Operator: VTS

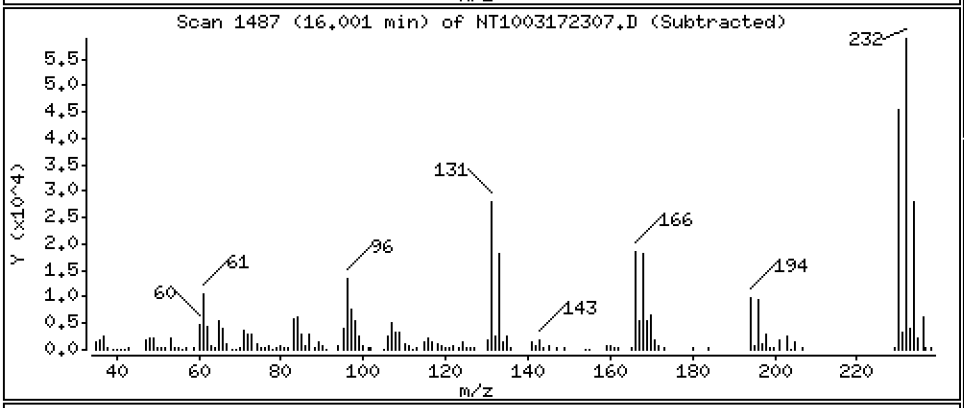
Column phase: ZB-5msi

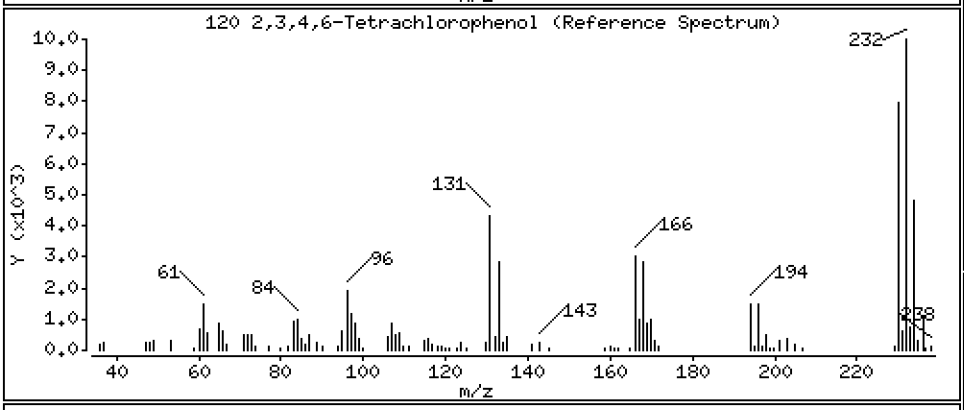
Column diameter: 0.25

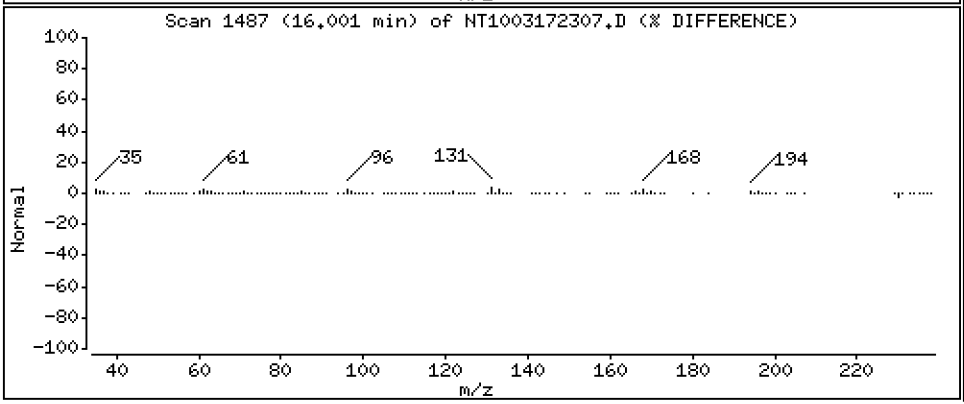
120 2,3,4,6-Tetrachlorophenol

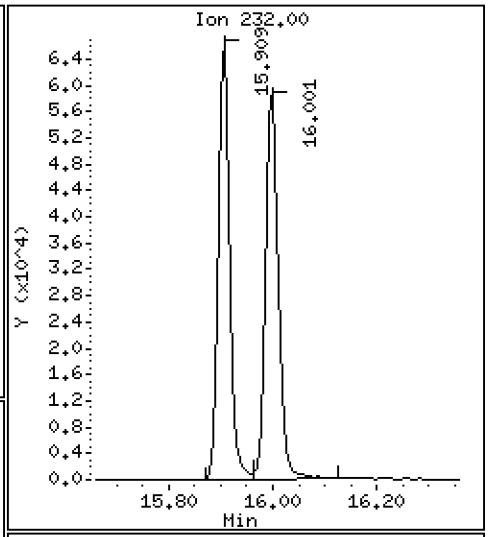
Concentration: 3.328 ug/mL

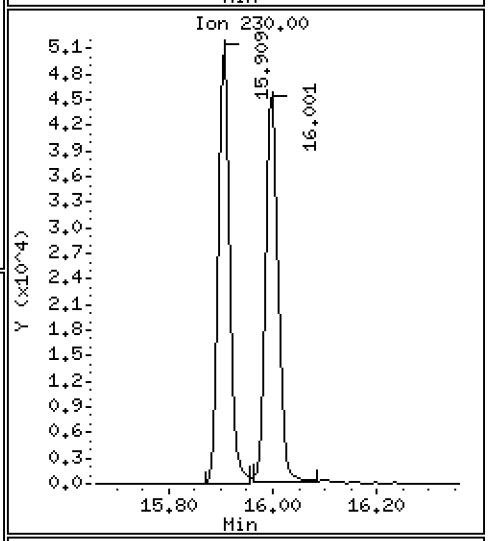


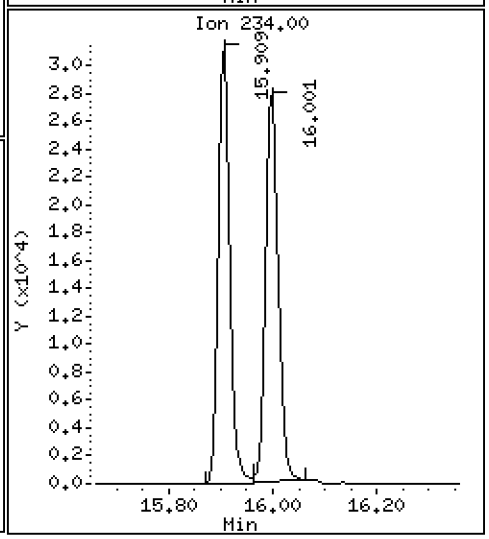












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230317.b\NT1003172307.D
Lab Smp Id: BLB0495-BS1
Inj Date : 17-MAR-2023 22:14
Operator : VTS Inst ID: nt10.i
Smp Info : BLB0495-BS1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230317.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.983	6.975	(0.759)	125399	2.51767	2.518
$	2 Phenol-d5	99	8.543	8.543	(0.929)	204889	3.13573	3.136
	3 Phenol	94	8.567	8.566	(0.931)	123608	1.82048	1.820
$	5 2-Chlorophenol-d4	132	8.837	8.837	(0.960)	265768	4.76323	4.763
	4 Bis(2-Chloroethyl)ether	93	8.744	8.744	(0.950)	172813	3.43163	3.432
	6 2-Chlorophenol	128	8.868	8.867	(0.964)	154614	2.66063	2.661
	7 1,3-Dichlorobenzene	146	9.139	9.138	(0.993)	188441	3.06727	3.067
*	8 1,4-Dichlorobenzene-d4	152	9.201	9.200	(1.000)	164701	4.00000	
	9 1,4-Dichlorobenzene	146	9.232	9.231	(1.003)	186882	3.14889	3.149
$	10 1,2-Dichlorobenzene-d4	152	9.558	9.557	(1.039)	135394	3.37894	3.379
	12 1,2-Dichlorobenzene	146	9.589	9.588	(1.042)	182040	3.11672	3.117
	11 Benzyl alcohol	108	9.465	9.464	(1.029)	100530	3.15442	3.154
	14 2,2'-oxybis(1-Chloropropane)	121	9.767	9.759	(1.062)	63053	3.67599	3.676
	13 2-Methylphenol	108	9.682	9.682	(1.052)	56830	1.14817	1.148
	17 Hexachloroethane	117	10.171	10.178	(1.105)	78429	3.22092	3.221
	16 N-Nitroso-di-n-propylamine	70	10.016	10.023	(1.089)	140931	3.60599	3.606(M)
	15 4-Methylphenol	108	9.954	9.946	(1.082)	103932	1.99288	1.993
$	18 Nitrobenzene-d5	82	10.287	10.287	(0.881)	225125	3.74437	3.744
	19 Nitrobenzene	77	10.326	10.326	(0.884)	200629	3.40030	3.400
	20 Isophorone	82	10.768	10.768	(0.922)	380267	5.03792	5.038
	21 2-Nitrophenol	139	10.946	10.955	(0.937)	95554	3.31898	3.319
	22 2,4-Dimethylphenol	107	10.989	10.989	(0.941)	147477	2.72124	2.721
	23 Bis(2-Chloroethoxy)methane	93	11.193	11.192	(0.959)	220814	4.37952	4.380
	24 Benzoic acid	105	11.099	11.175	(0.951)	82254	2.71747	2.717
	25 2,4-Dichlorophenol	162	11.396	11.396	(0.976)	591707	13.6436	13.64
	26 1,2,4-Trichlorobenzene	180	11.584	11.583	(0.992)	163891	3.21934	3.219
*	27 Naphthalene-d8	136	11.676	11.676	(1.000)	595659	4.00000	
	28 Naphthalene	128	11.715	11.715	(1.003)	594564	3.76786	3.768
	29 4-Chloroaniline	127	11.838	11.838	(1.014)	542886	8.81878	8.819
	30 Hexachlorobutadiene	225	12.070	12.070	(1.034)	99959	3.35103	3.351
	31 4-Chloro-3-methylphenol	107	12.782	12.790	(1.095)	518662	11.0473	11.05
	32 2-Methylnaphthalene	142	13.100	13.099	(1.122)	388388	3.41059	3.411
	33 Hexachlorocyclopentadiene	237	13.564	13.571	(0.888)	301771	10.1278	10.13

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
Compounds								
34	2,4,6-Trichlorophenol	196	13.719	13.718	(0.898)	369276	11.6050	11.60
35	2,4,5-Trichlorophenol	196	13.788	13.788	(0.903)	492502	13.9294	13.93
$ 36	2-Fluorobiphenyl	172	13.881	13.881	(0.909)	486257	3.81813	3.818
37	2-Chloronaphthalene	162	14.090	14.098	(0.922)	362099	3.51142	3.511
38	2-Nitroaniline	65	14.353	14.353	(0.940)	410215	14.1616	14.16
39	Dimethylphthalate	163	14.779	14.787	(0.968)	462332	4.42050	4.420
40	Acenaphthylene	152	14.965	14.965	(0.980)	571265	3.55516	3.555
41	2,6-Dinitrotoluene	165	14.918	14.926	(0.977)	333163	14.7460	14.75
* 42	Acenaphthene-d10	164	15.274	15.282	(1.000)	321951	4.00000	
43	3-Nitroaniline	138	15.205	15.212	(0.995)	304152	11.9269	11.93
44	Acenaphthene	153	15.344	15.344	(1.005)	372482	3.75224	3.752
45	2,4-Dinitrophenol	184	15.413	15.421	(1.009)	316167	22.1575	22.16
46	Dibenzofuran	168	15.669	15.676	(1.026)	548371	3.74603	3.746
47	4-Nitrophenol	109	15.506	15.514	(1.015)	210572	13.2377	13.24
48	2,4-Dinitrotoluene	165	15.730	15.730	(1.030)	476677	14.2745	14.27
50	Diethylphthalate	149	16.233	16.240	(1.063)	568194	5.53703	5.537
49	Fluorene	166	16.380	16.387	(1.072)	450774	3.91408	3.914
51	4-Chlorophenyl-phenylether	204	16.364	16.372	(1.071)	221155	4.03821	4.038
52	4-Nitroaniline	138	16.472	16.480	(1.078)	317740	13.8259	13.83
53	4,6-Dinitro-2-methylphenol	198	16.565	16.572	(0.905)	512141	27.8418	27.84
54	N-Nitrosodiphenylamine	169	16.611	16.626	(0.908)	259671	3.29027	3.290
$ 55	2,4,6-Tribromophenol	330	16.912	16.919	(1.107)	80528	5.35339	5.353
56	4-Bromophenyl-phenylether	248	17.367	17.374	(0.949)	139193	4.21593	4.216
57	Hexachlorobenzene	284	17.684	17.691	(0.966)	126978	3.66825	3.668
58	Pentachlorophenol	266	18.032	18.047	(0.985)	295911	14.0579	14.06
* 59	Phenanthrene-d10	188	18.303	18.310	(1.000)	590299	4.00000	
60	Phenanthrene	178	18.349	18.357	(1.003)	643694	3.99905	3.999
61	Anthracene	178	18.442	18.457	(1.008)	563474	3.64935	3.649
62	Carbazole	167	18.767	18.782	(1.025)	599278	4.33129	4.331
63	Di-n-butylphthalate	149	19.556	19.572	(1.068)	901378	4.87036	4.870
64	Fluoranthene	202	20.717	20.732	(0.888)	820416	4.36143	4.361
65	Pyrene	202	21.142	21.158	(0.906)	816838	4.23310	4.233
$ 66	Terphenyl-d14	244	21.421	21.436	(0.918)	692580	4.77930	4.779
67	Butylbenzylphthalate	149	22.342	22.358	(0.958)	357338	5.10653	5.107
68	Benzo(a)anthracene	228	23.295	23.310	(0.999)	743579	4.50001	4.500
* 69	Chrysene-d12	240	23.326	23.341	(1.000)	468141	4.00000	
70	3,3'-Dichlorobenzidine	252	23.248	23.264	(0.997)	530523	10.0234	10.02
71	Chrysene	228	23.372	23.380	(1.002)	694793	4.30383	4.304
72	bis(2-Ethylhexyl)phthalate	149	23.357	23.380	(0.959)	157255	1.37555	1.376
* 134	Di-n-octylphthalate-d4	153	24.348	24.363	(1.000)	781050	4.00000	
73	Di-n-octylphthalate	149	24.355	24.378	(1.000)	141785	0.69368	0.6937
74	Benzo(b)fluoranthene	252	25.192	25.207	(0.970)	757413	4.75680	4.757
75	Benzo(k)fluoranthene	252	25.238	25.253	(0.972)	732767	4.53213	4.532(H)
76	Benzo(a)pyrene	252	25.850	25.873	(0.995)	628007	4.41145	4.411
* 77	Perylene-d12	264	25.974	25.997	(1.000)	491214	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	28.680	28.711	(1.104)	757151	4.18052	4.181
79	Dibenzo(a,h)anthracene	278	28.696	28.726	(1.105)	641131	4.26384	4.264
80	Benzo(g,h,i)perylene	276	29.488	29.519	(1.135)	661142	4.21810	4.218
90	N-Nitrosodimethylamine	74	4.851	4.850	(0.527)	11757	0.36999	0.3700
91	Aniline	93	8.659	8.659	(0.941)	485515	6.97857	6.979
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	13.324	13.324	(1.141)	379139	3.63385	3.634
111	Azobenzene (1,2-DP-Hydrazine)	77	16.688	16.696	(1.093)	461167	4.02310	4.023

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.238	25.253	(0.972)	1418655	9.22775	9.228
120 2,3,4,6-Tetrachlorophenol	232	16.001	16.008	(1.048)	110141	3.32849	3.328

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172307.D
Lab Smp Id: BLB0495-BS1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230317.b\ABN.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:02
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	132765	66383	265530	164701	24.05
27 Naphthalene-d8	497947	248974	995894	595659	19.62
42 Acenaphthene-d10	271928	135964	543856	321951	18.40
59 Phenanthrene-d10	497390	248695	994780	590299	18.68
69 Chrysene-d12	391403	195702	782806	468141	19.61
134 Di-n-octylphthala	674651	337326	1349302	781050	15.77
77 Perylene-d12	408663	204332	817326	491214	20.20

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.20	8.70	9.70	9.20	0.00
27 Naphthalene-d8	11.68	11.18	12.18	11.68	0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.27	-0.05
59 Phenanthrene-d10	18.31	17.81	18.81	18.30	-0.04
69 Chrysene-d12	23.34	22.84	23.84	23.33	-0.07
134 Di-n-octylphthala	24.36	23.86	24.86	24.35	-0.06
77 Perylene-d12	26.00	25.50	26.50	25.97	-0.09

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

REVIEW SUMMARY FOR FILE - NT1003172307.D

Lab ID: BLB0495-BS1
nt10.i, 20230317.b\ABN.m,   17-MAR-2023 22:14

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.951	0.957	-0.0065	Benzoic acid

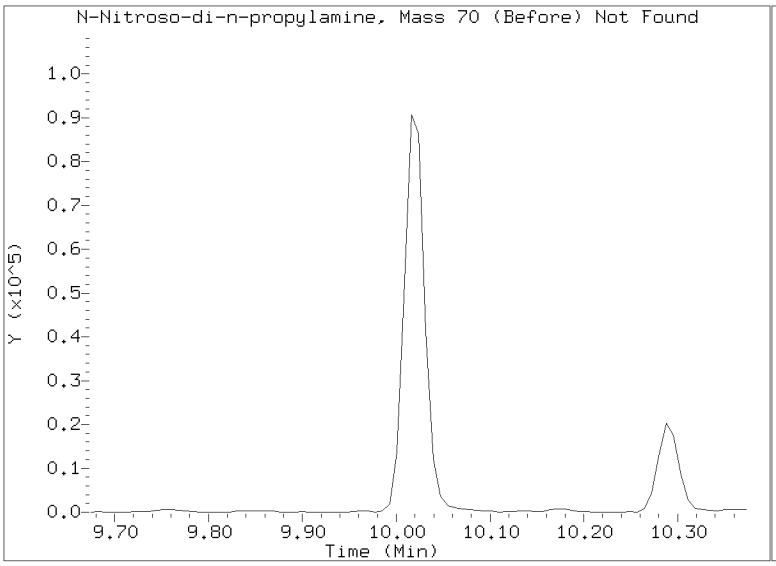
RRT check based on Ccal File: NT1003172302.D

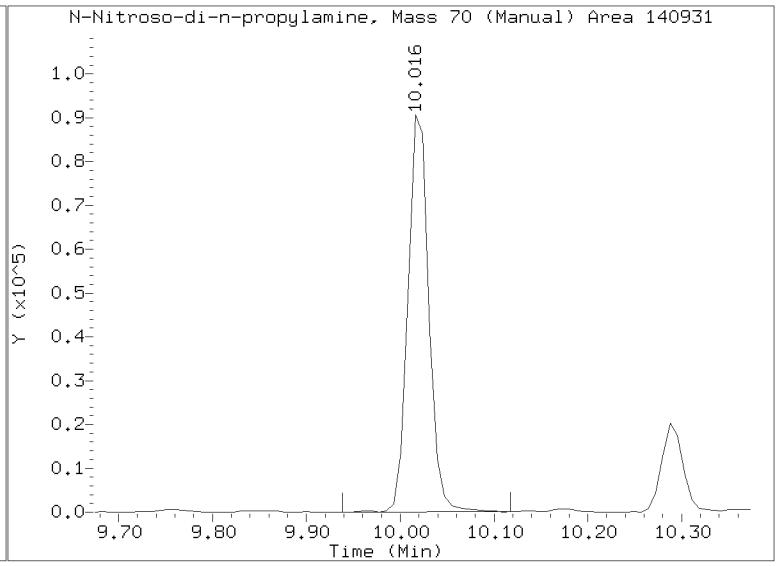
On Column LOD for nt10.i, 20230317.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230317.b/NT1003172307.D
Injection Date: 17-MAR-2023 22:14
Lab ID:BLB0495-BS1 Client ID:
Report Date: 03/30/2023 07:21





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Date : 17-MAR-2023 22:53

Client ID:

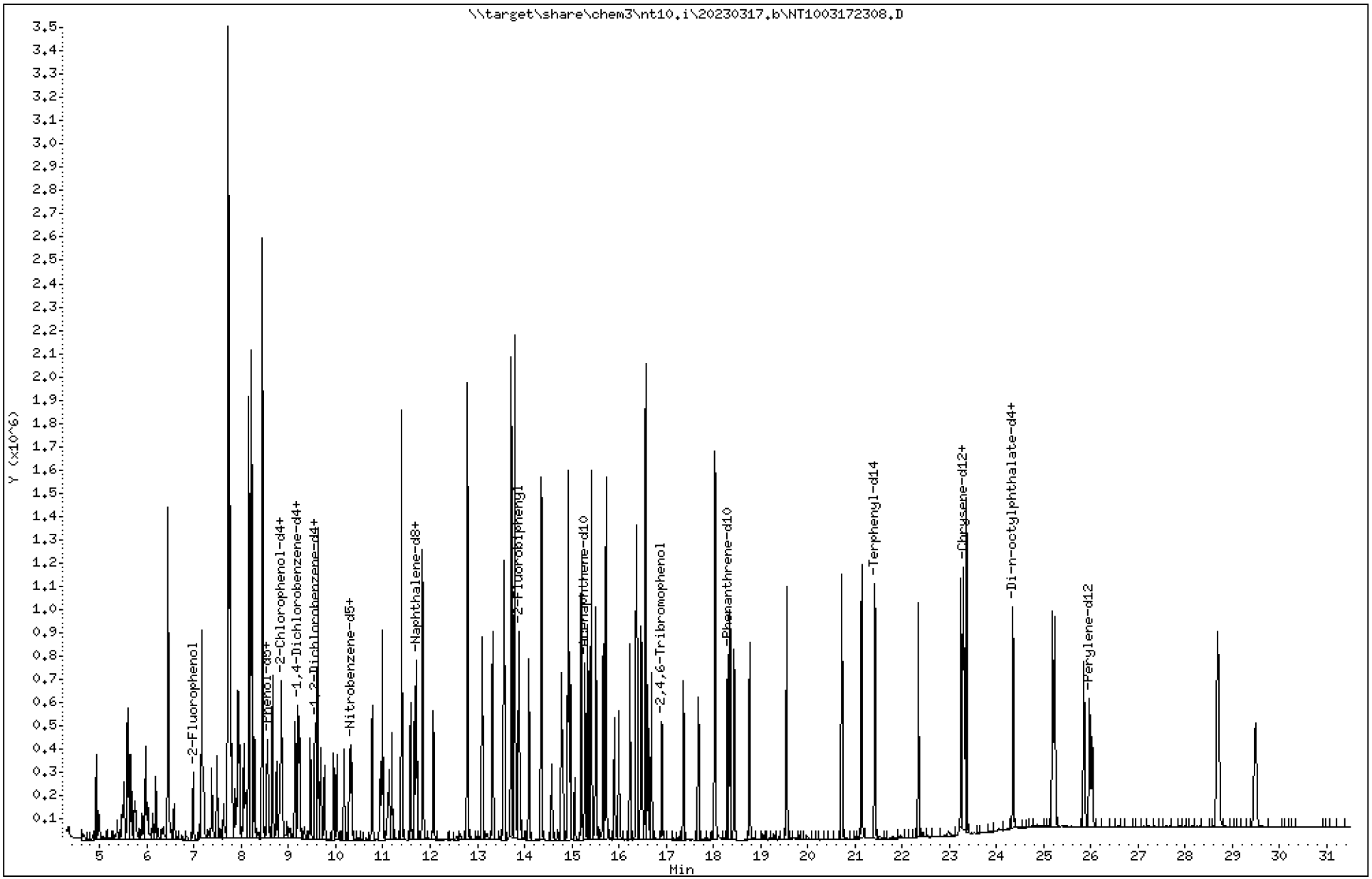
Instrument: nt10.i

Sample Info: BLB0495-BSD1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

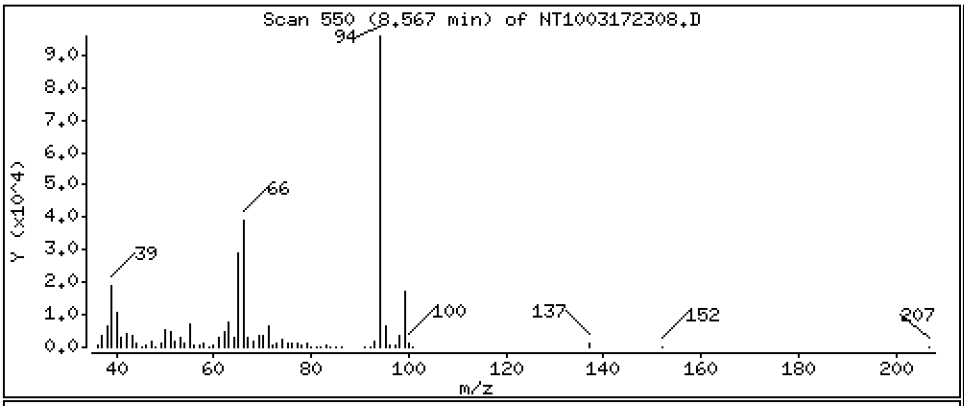
Operator: VTS

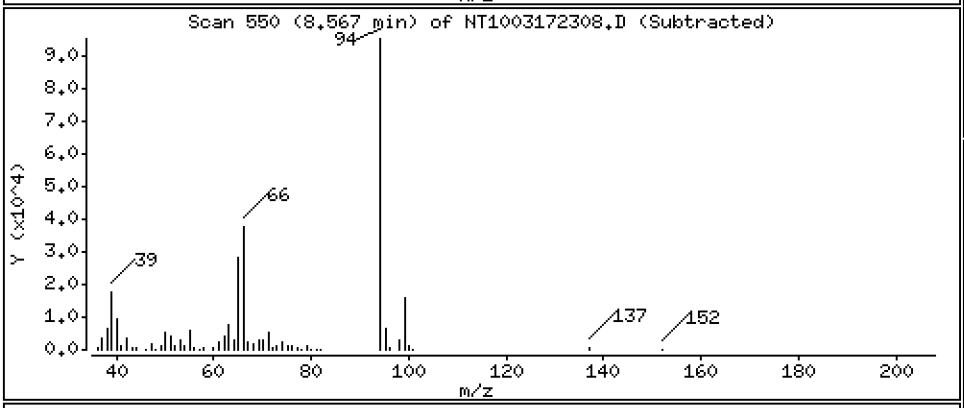
Column phase: ZB-5msi

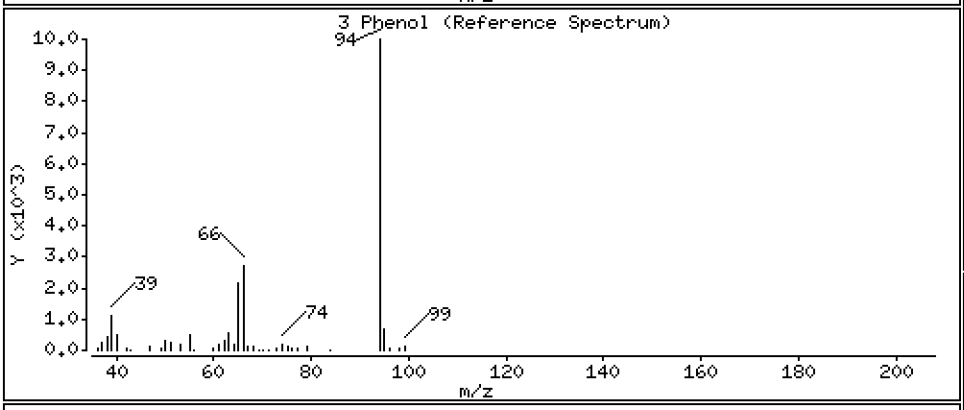
Column diameter: 0.25

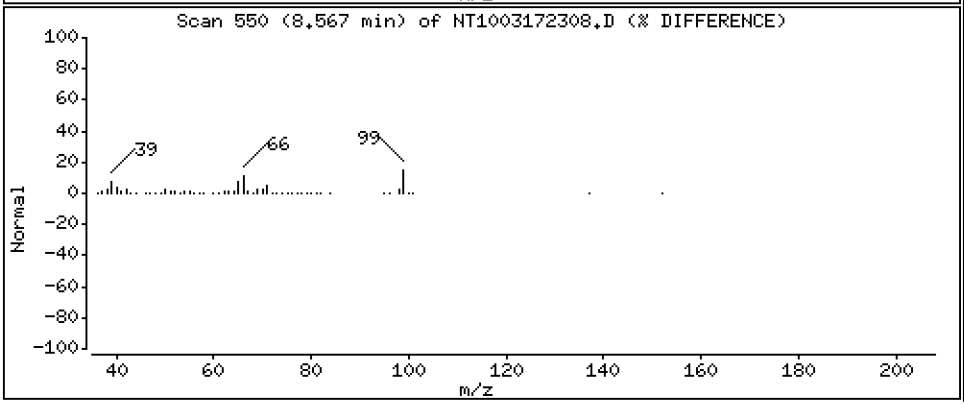
3 Phenol

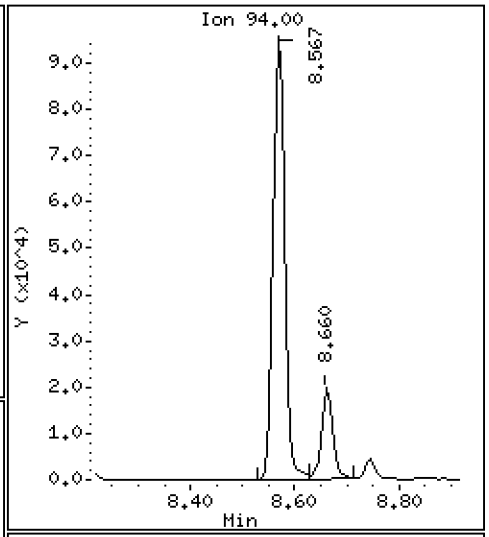
Concentration: 2.325 ug/mL

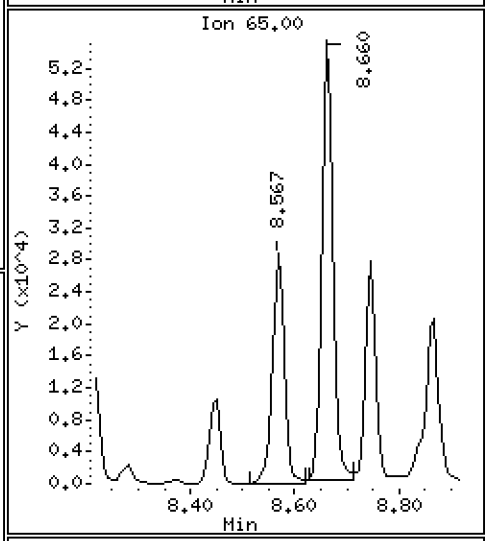


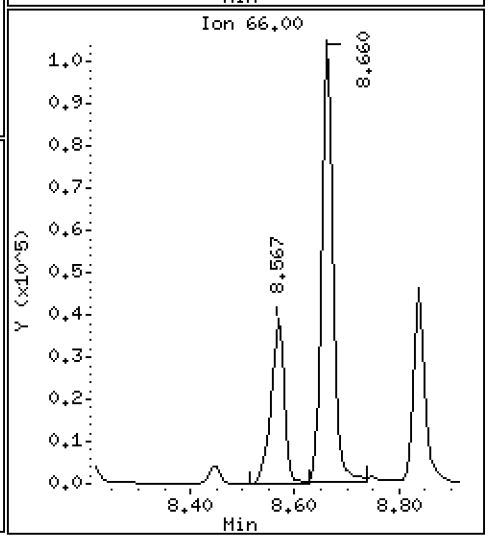












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

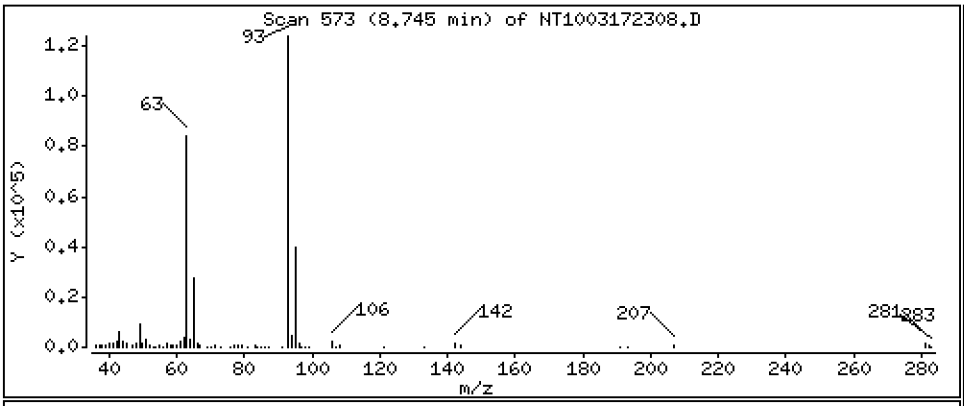
Operator: VTS

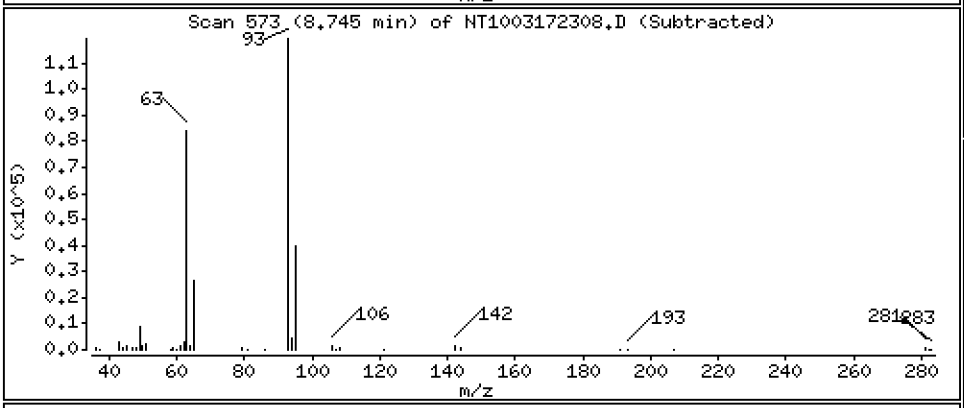
Column phase: ZB-5msi

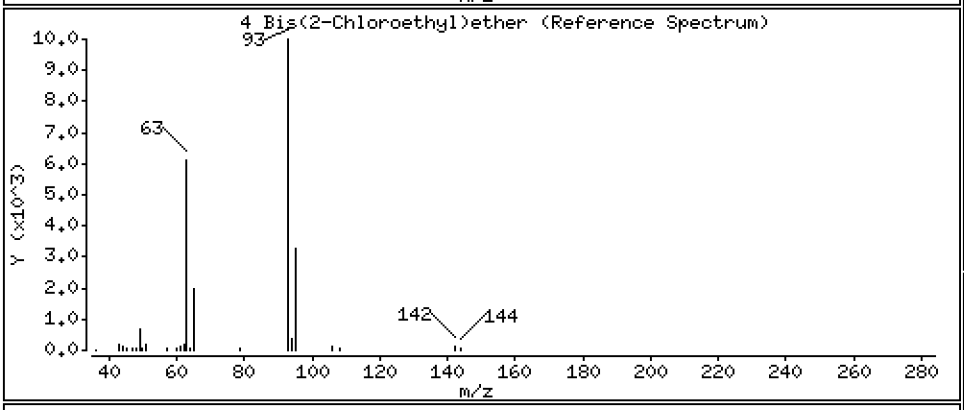
Column diameter: 0.25

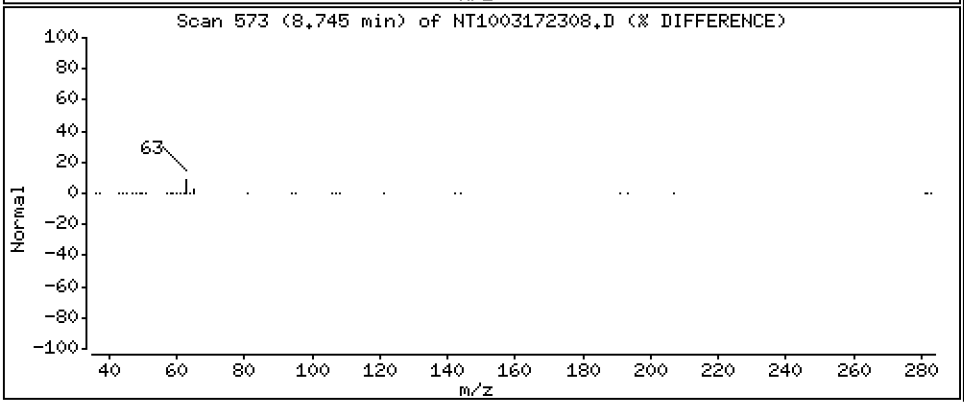
4 Bis(2-Chloroethyl)ether

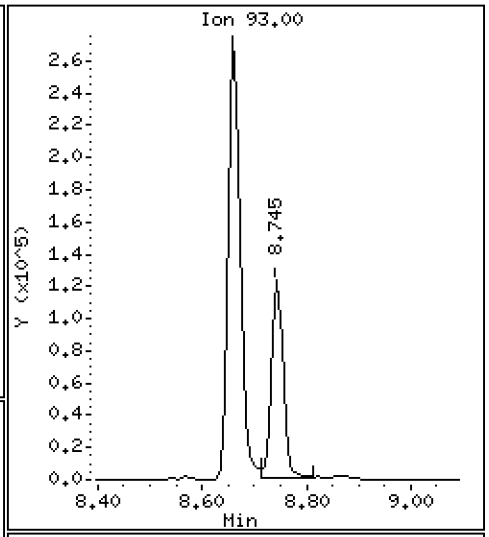
Concentration: 4.079 ug/mL

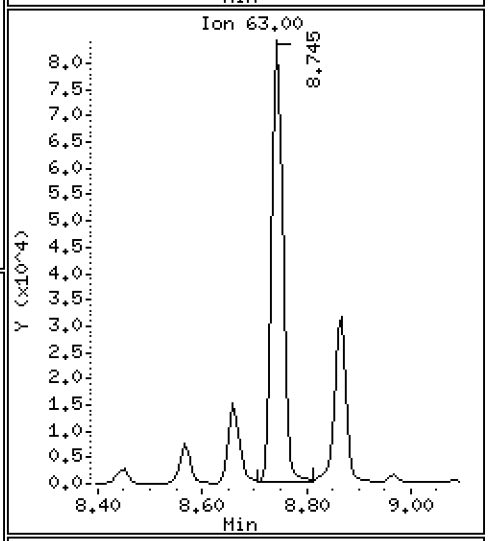


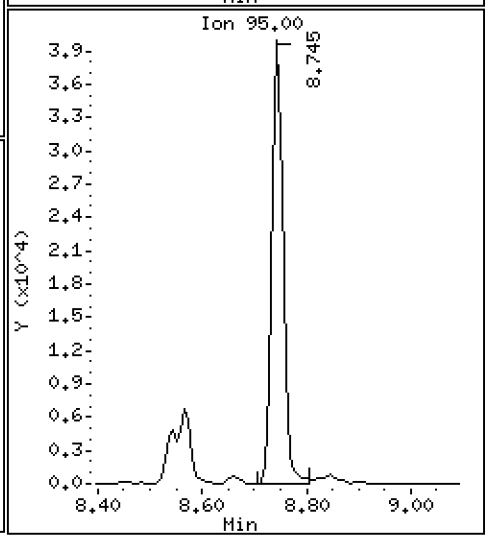












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

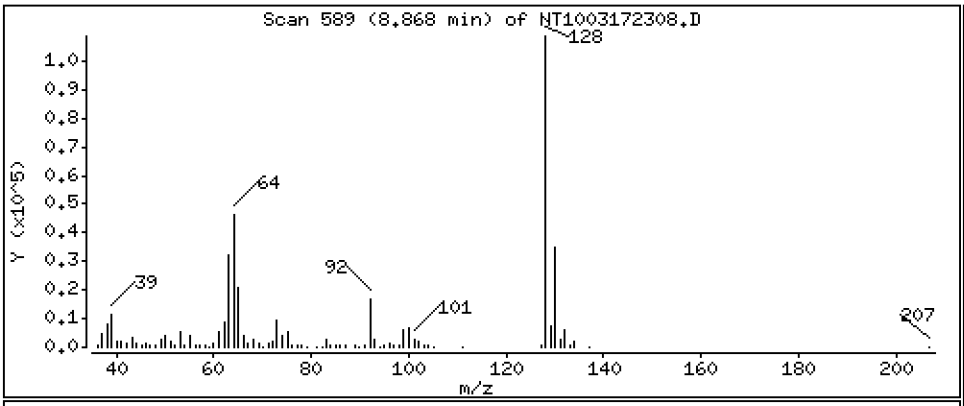
Operator: VTS

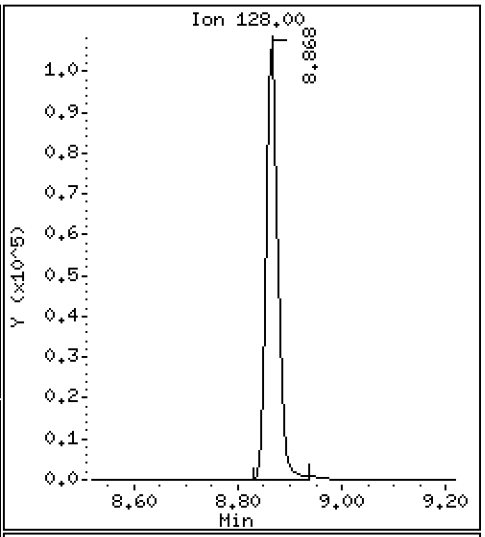
Column phase: ZB-5msi

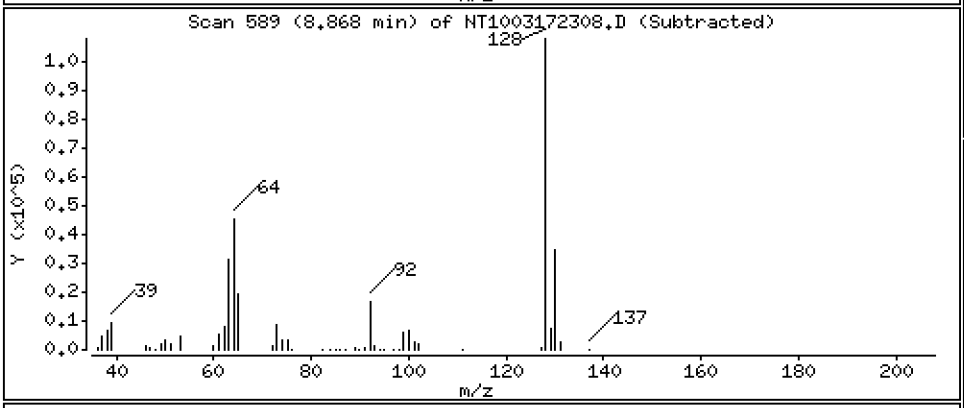
Column diameter: 0.25

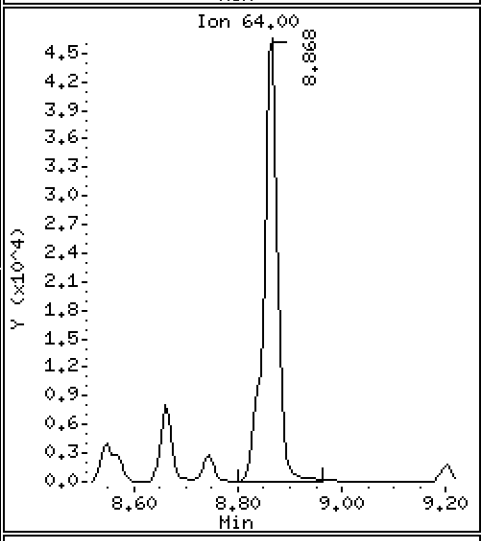
6 2-Chlorophenol

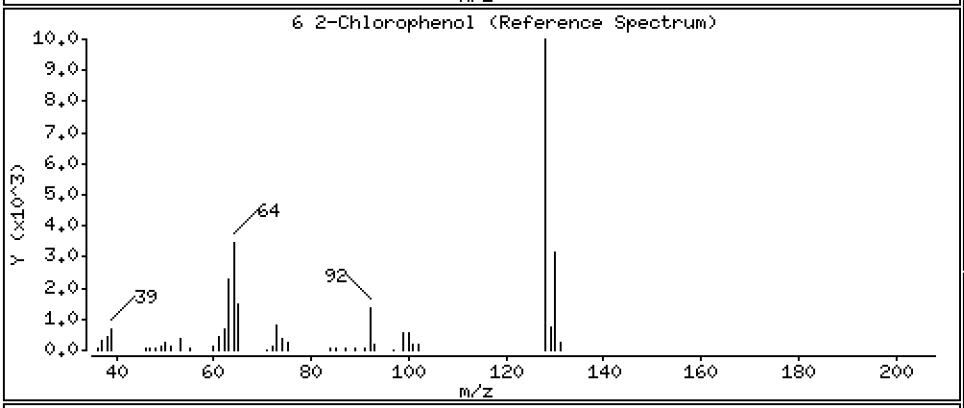
Concentration: 3.252 ug/mL

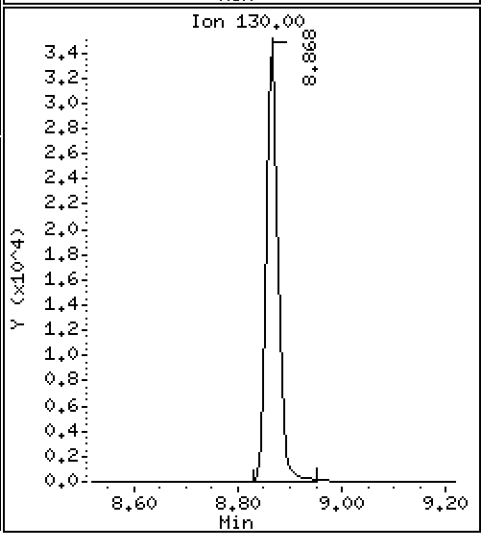


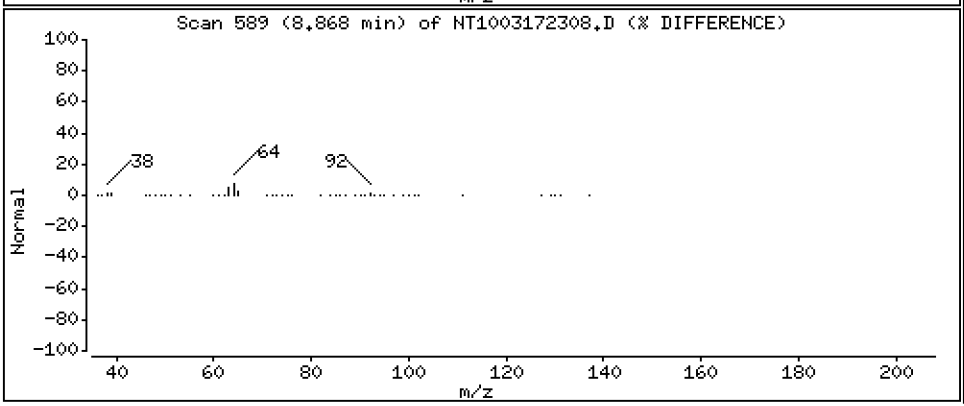












Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

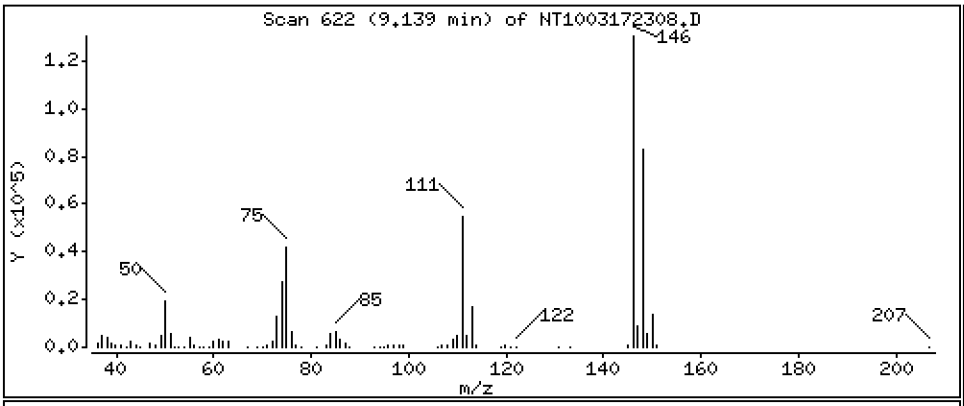
Operator: VTS

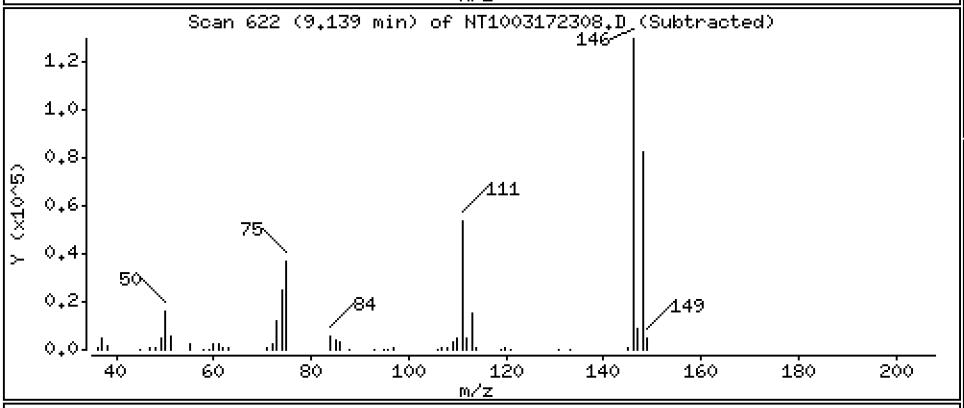
Column phase: ZB-5msi

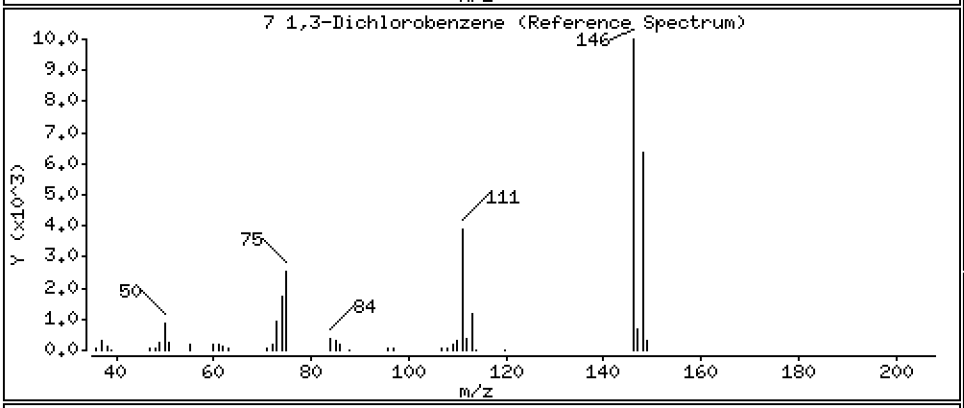
Column diameter: 0.25

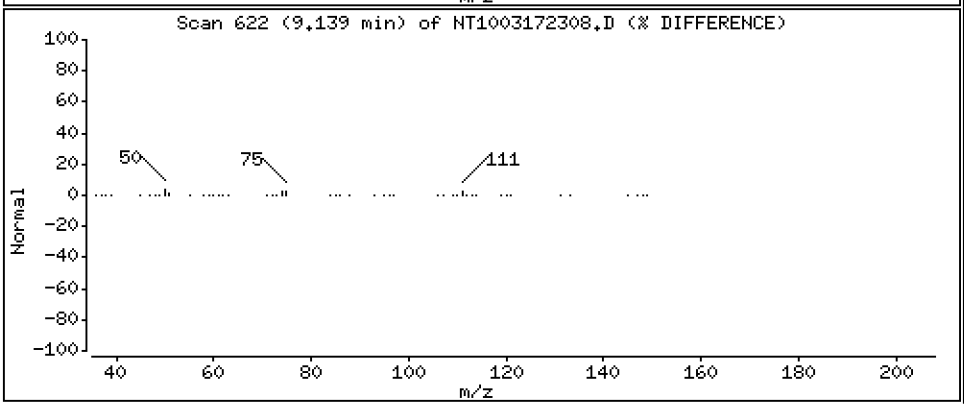
7 1,3-Dichlorobenzene

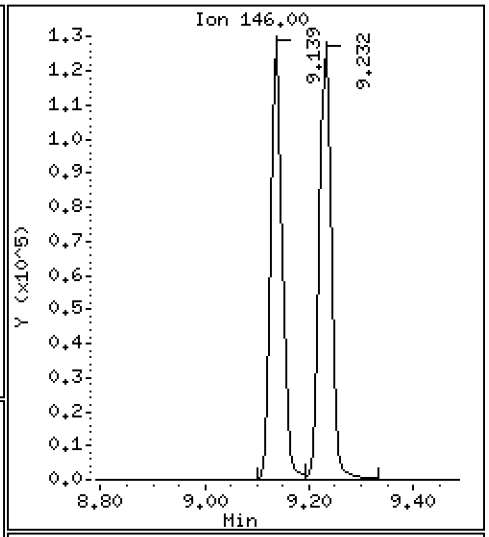
Concentration: 3.623 ug/mL

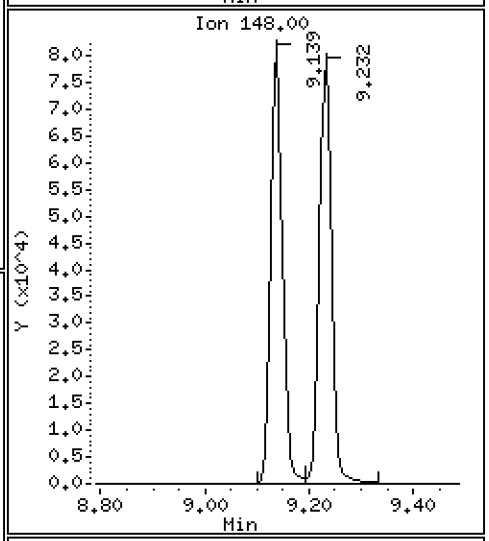


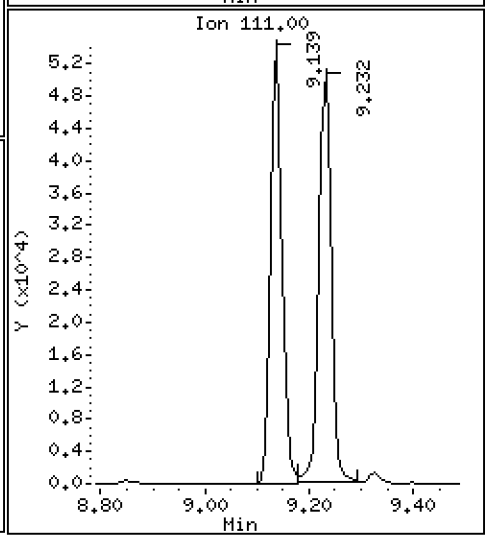












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

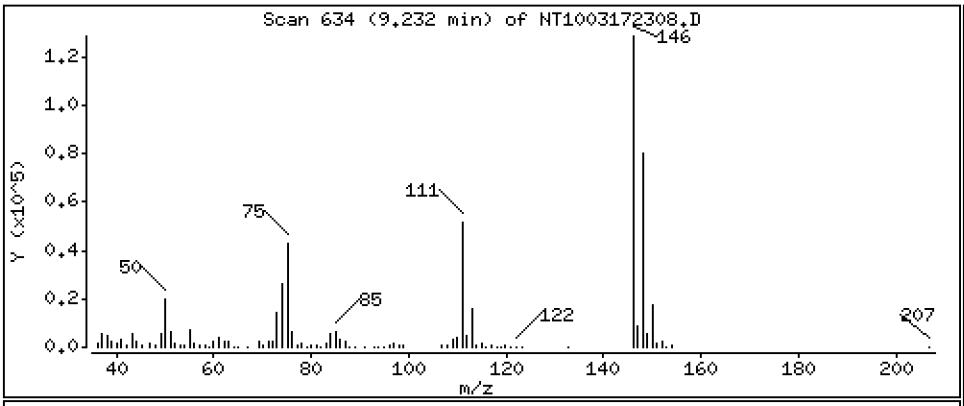
Operator: VTS

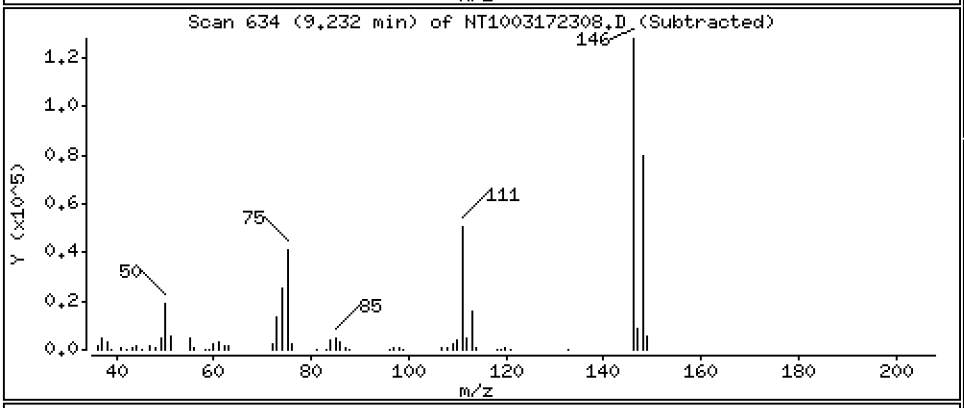
Column phase: ZB-5msi

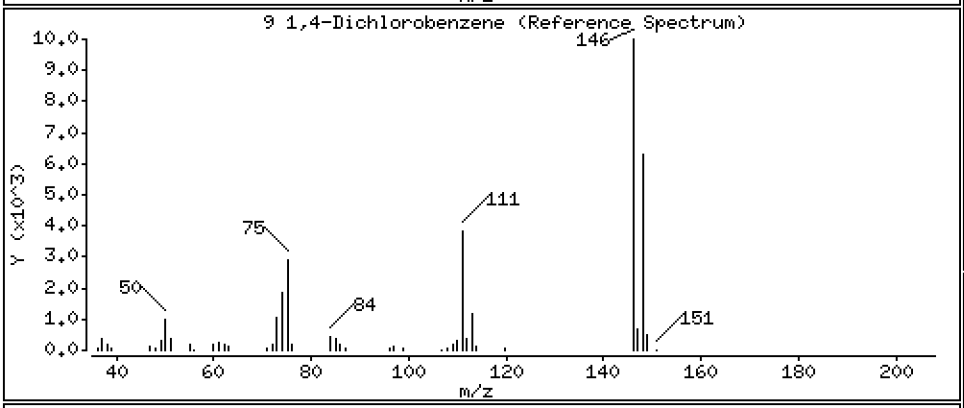
Column diameter: 0.25

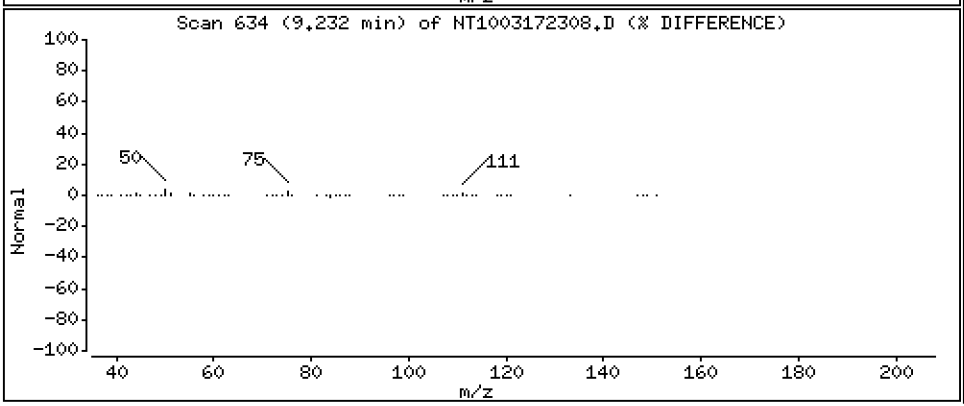
9 1,4-Dichlorobenzene

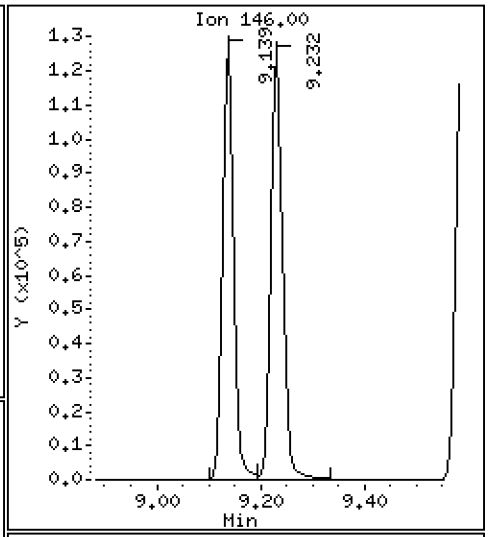
Concentration: 3.729 ug/mL

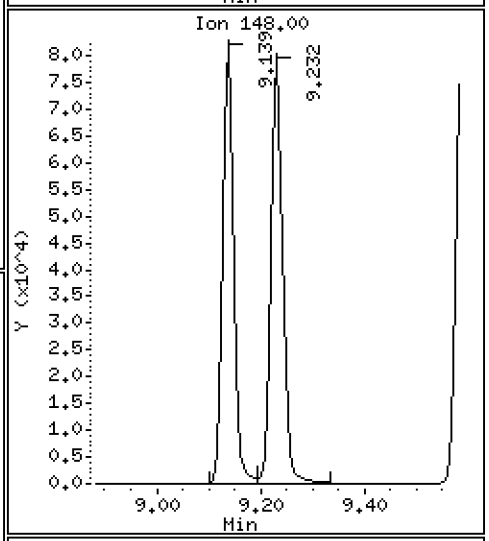


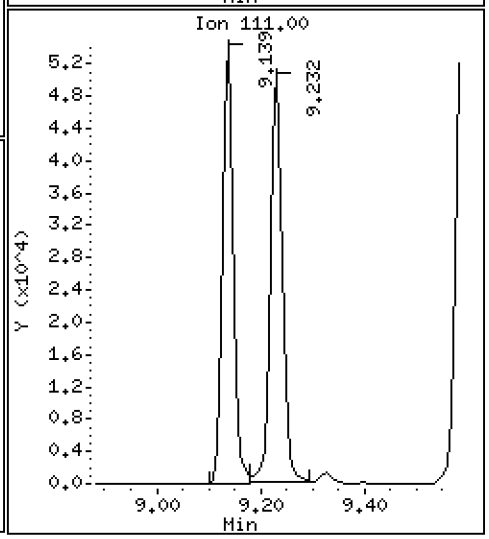












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

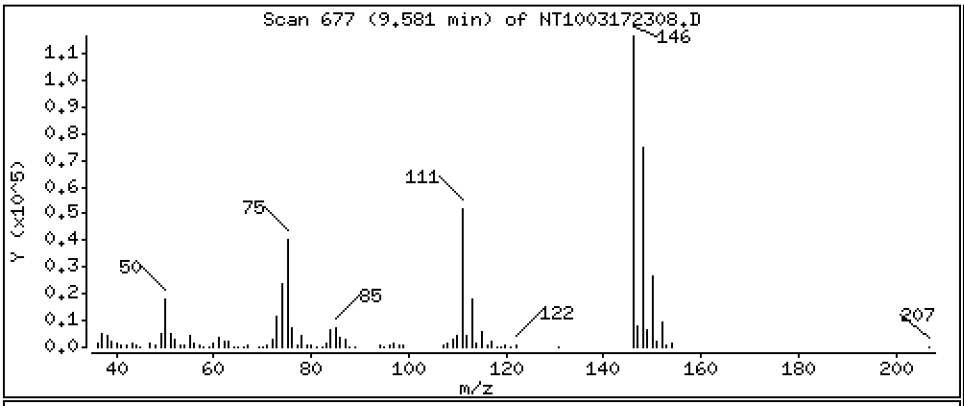
Operator: VTS

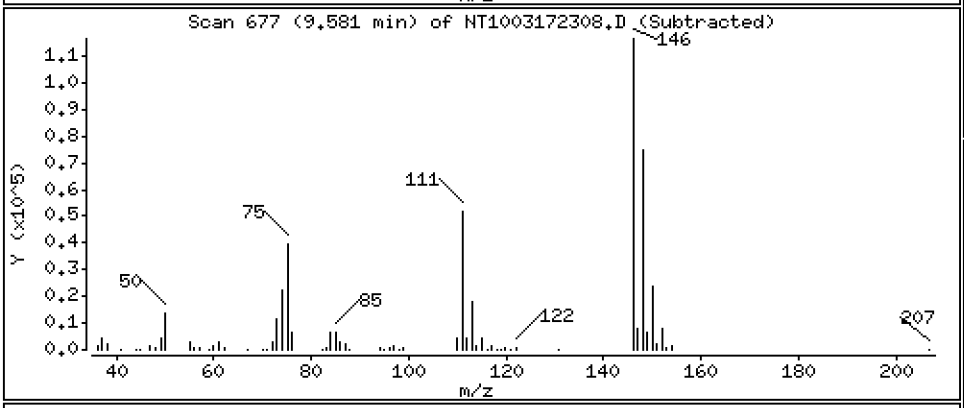
Column phase: ZB-5msi

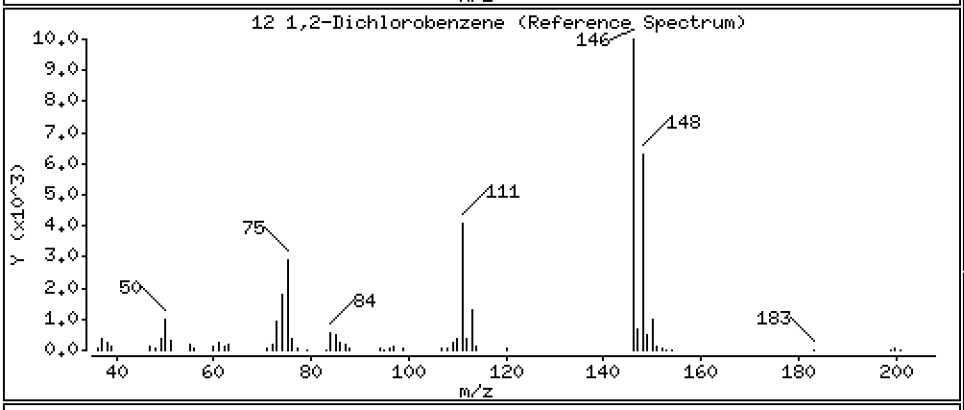
Column diameter: 0.25

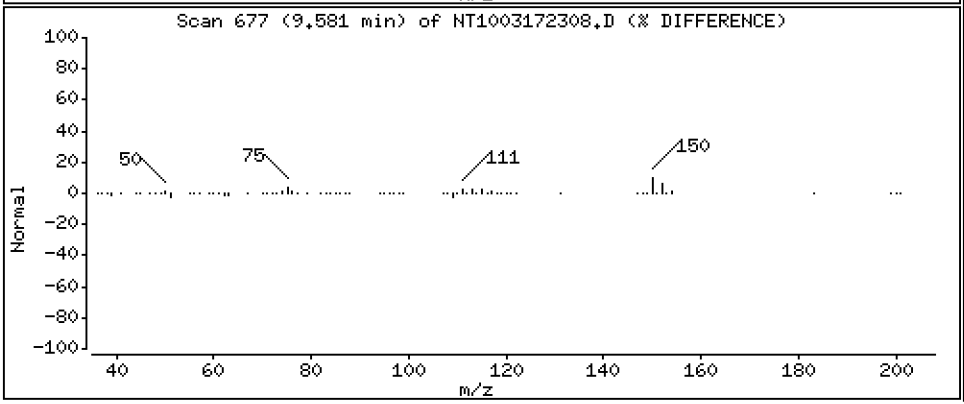
12 1,2-Dichlorobenzene

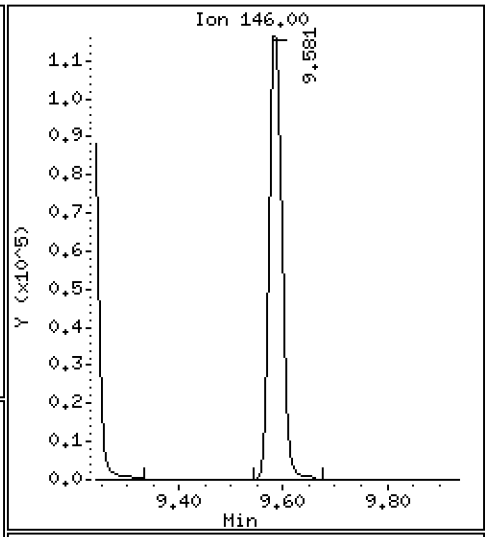
Concentration: 3.711 ug/mL

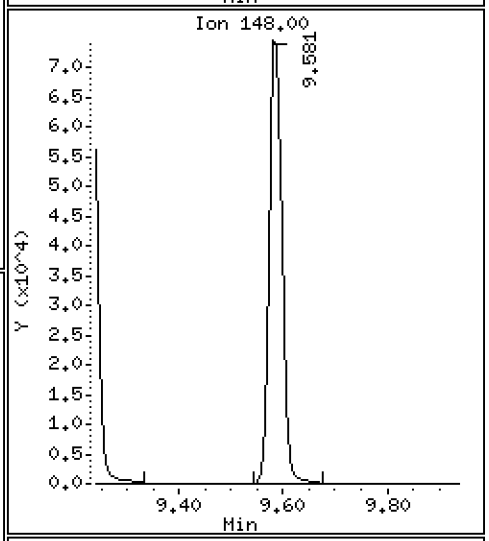


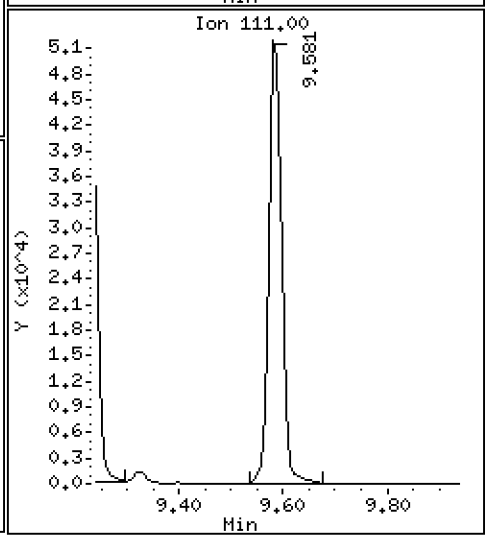












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

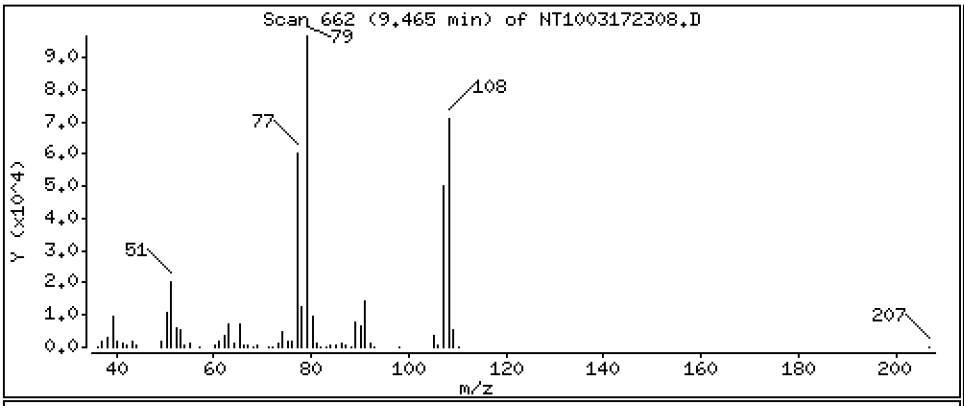
Operator: VTS

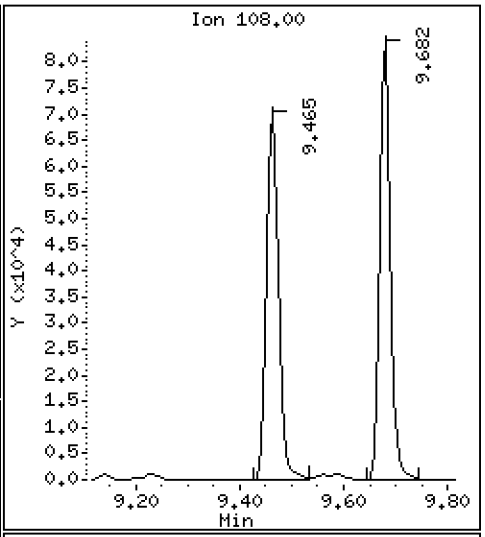
Column phase: ZB-5msi

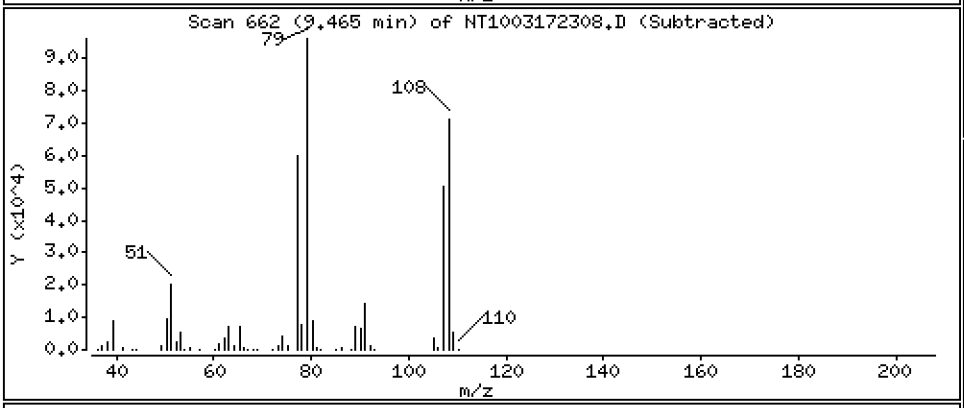
Column diameter: 0.25

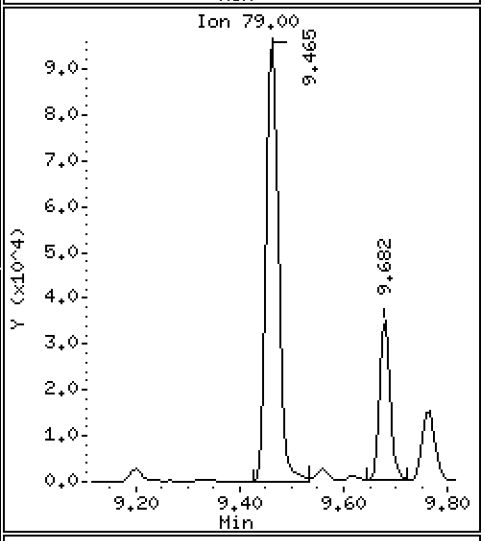
11 Benzyl alcohol

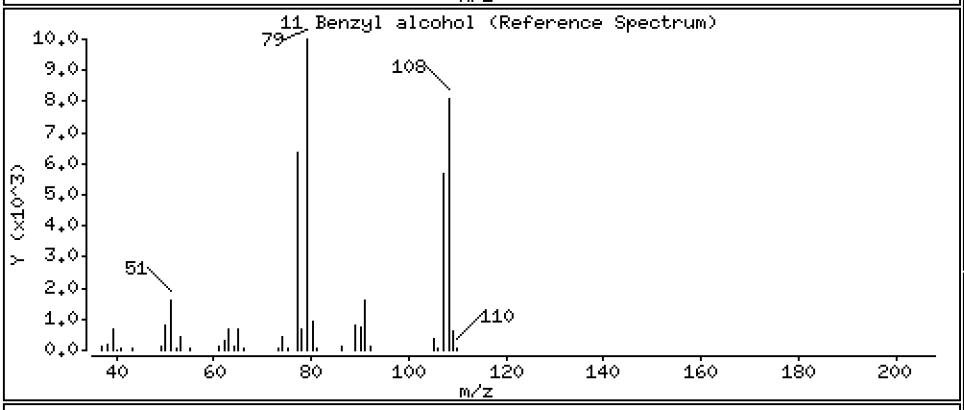
Concentration: 3.824 ug/mL

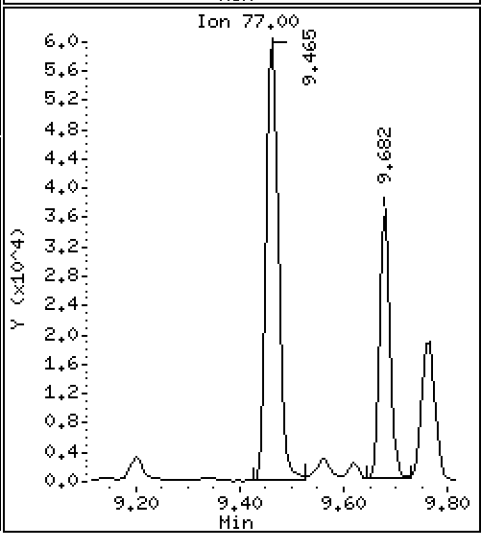


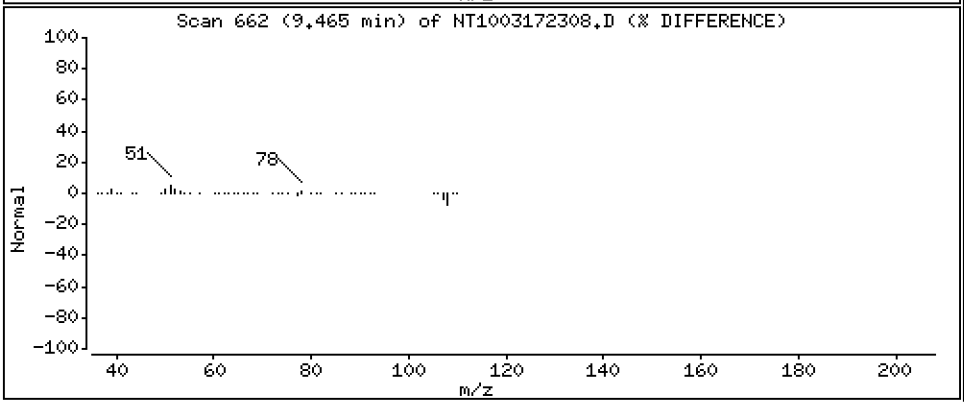












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

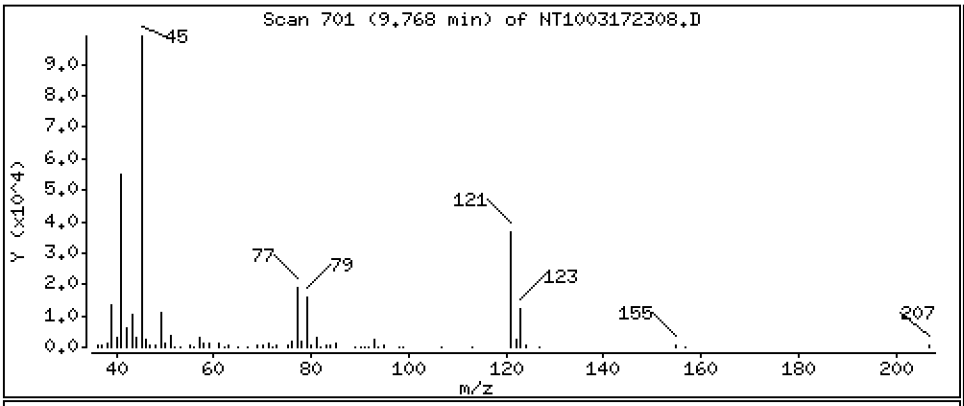
Operator: VTS

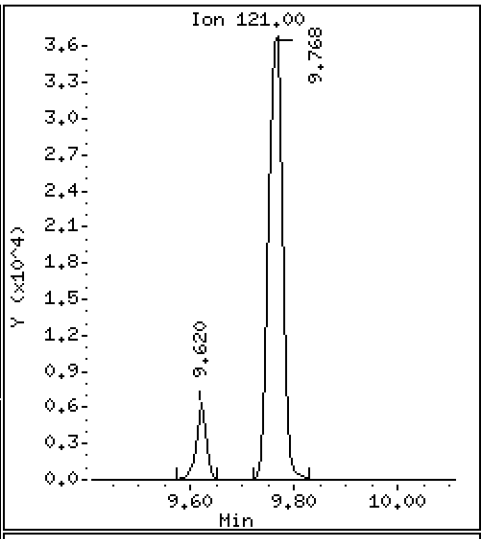
Column phase: ZB-5msi

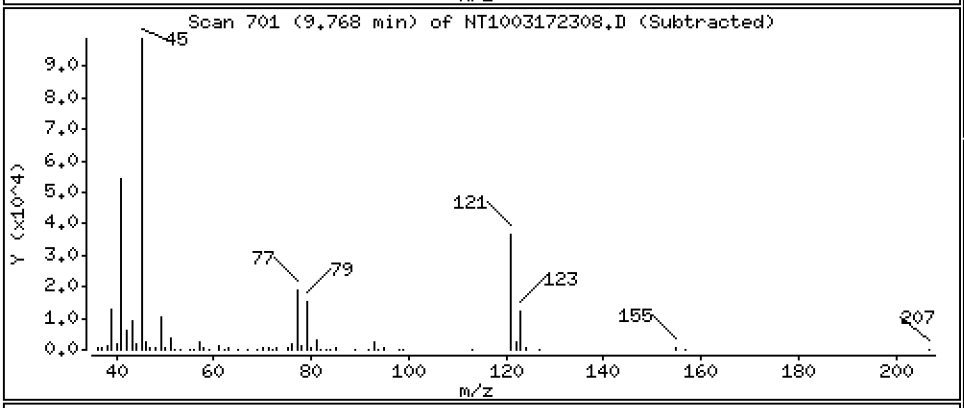
Column diameter: 0.25

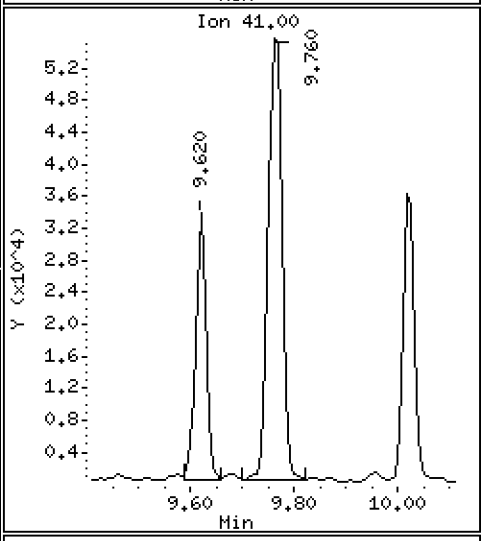
14 2,2'-oxybis(1-Chloropropane)

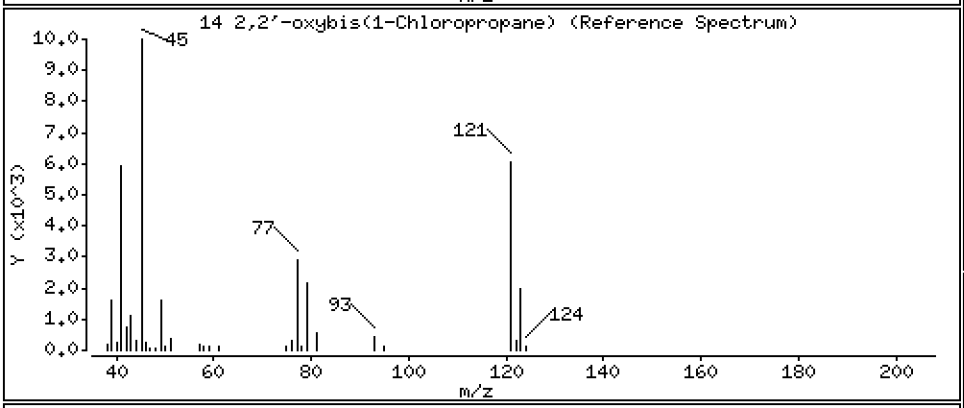
Concentration: 4.405 ug/mL

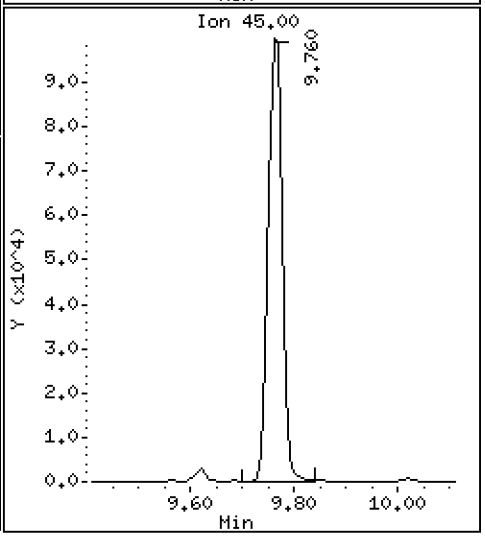


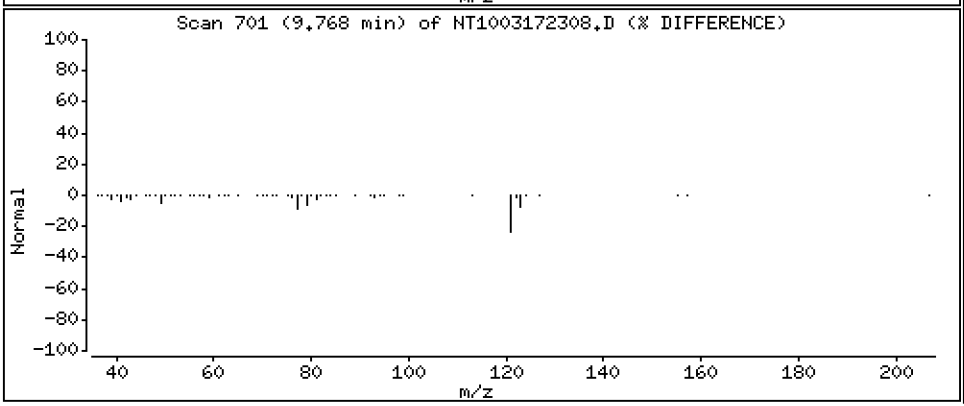












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

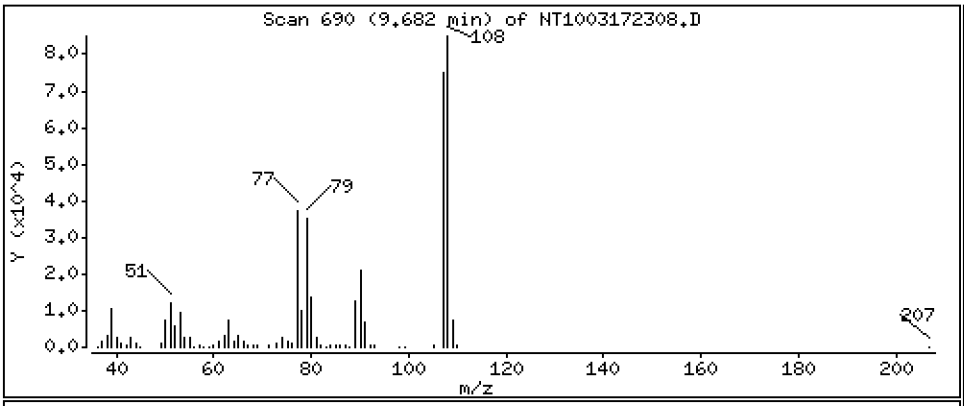
Operator: VTS

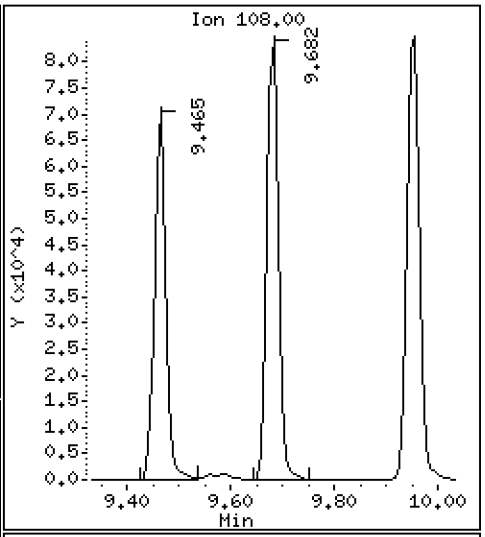
Column phase: ZB-5msi

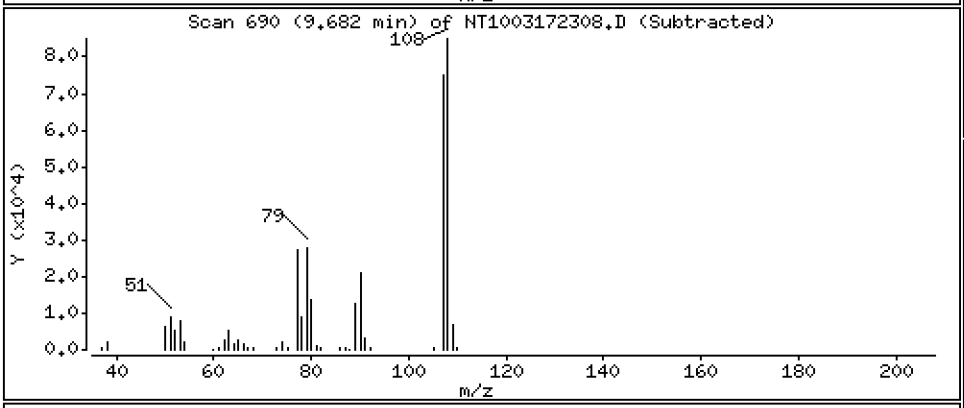
Column diameter: 0.25

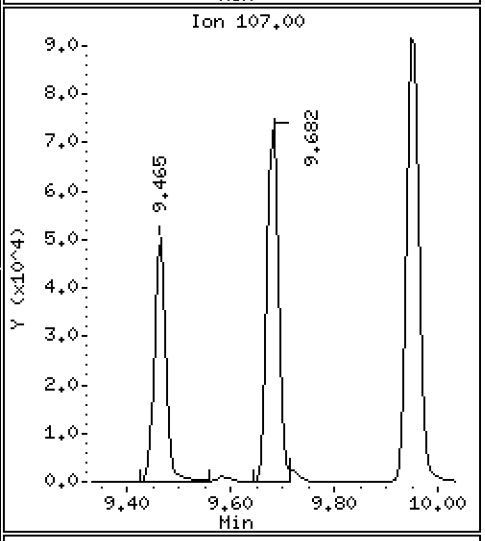
13 2-Methylphenol

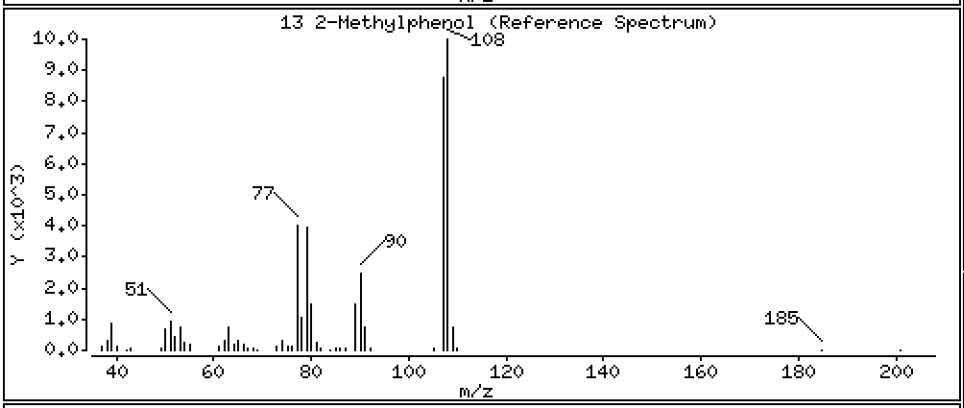
Concentration: 2.823 ug/mL

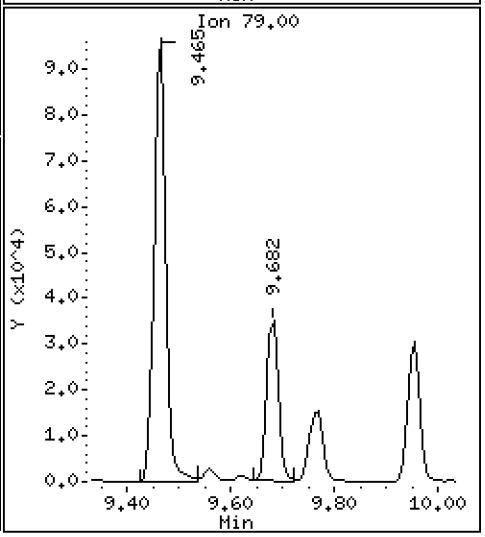


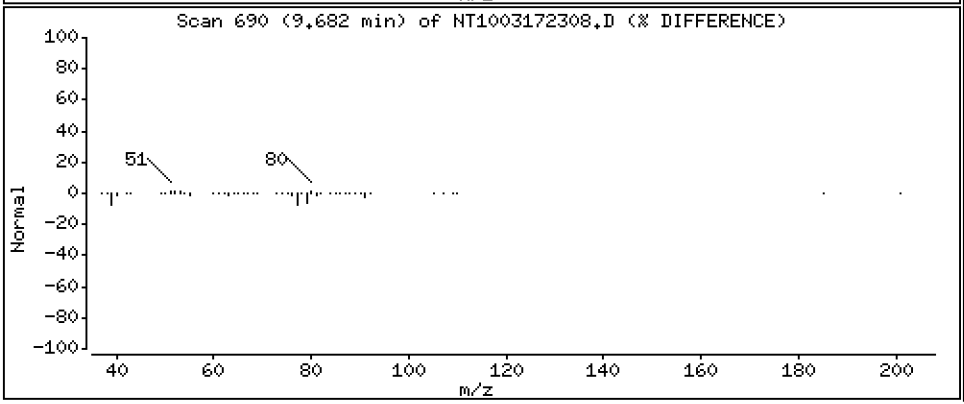












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

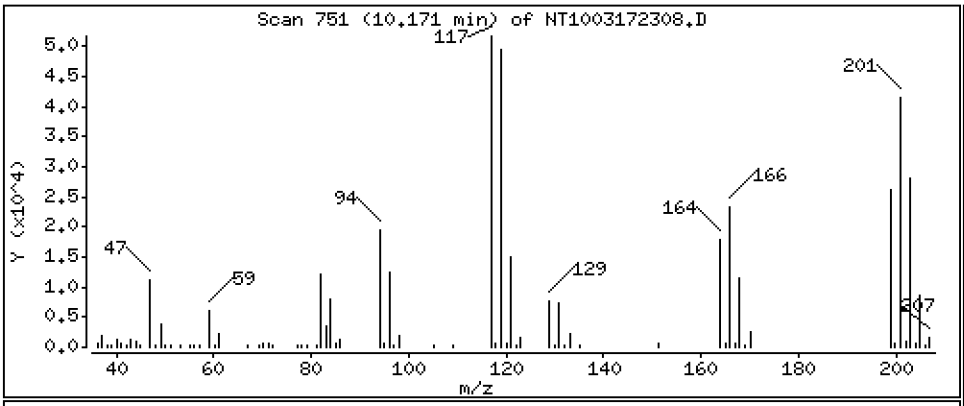
Operator: VTS

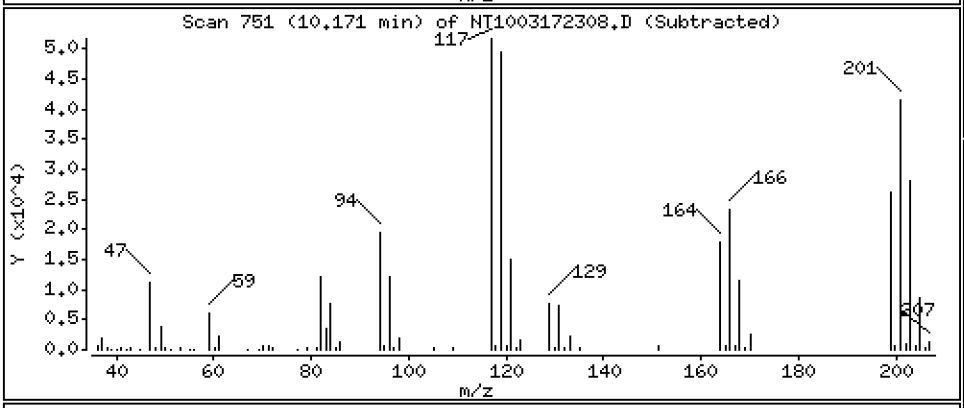
Column phase: ZB-5msi

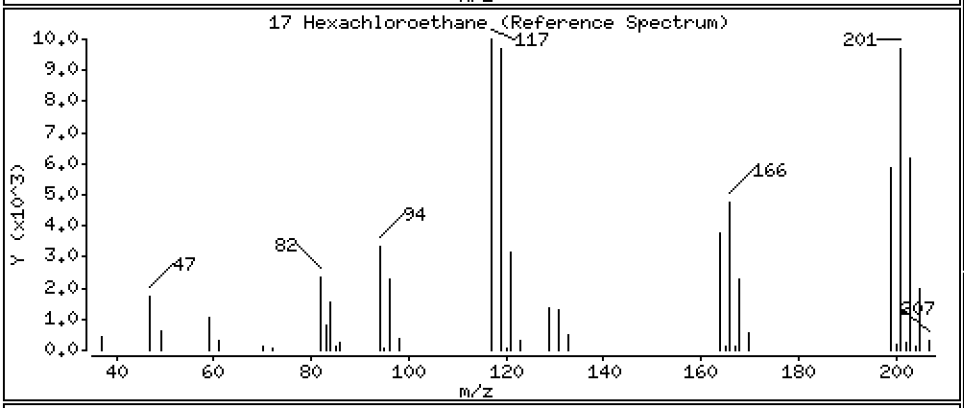
Column diameter: 0.25

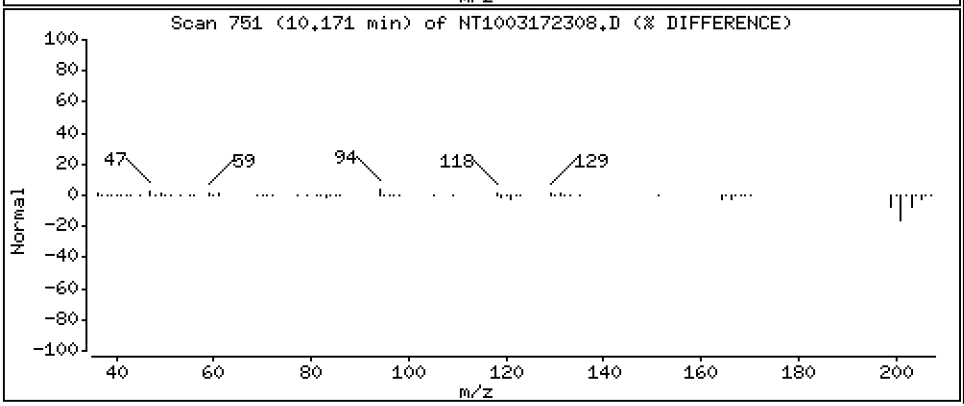
17 Hexachloroethane

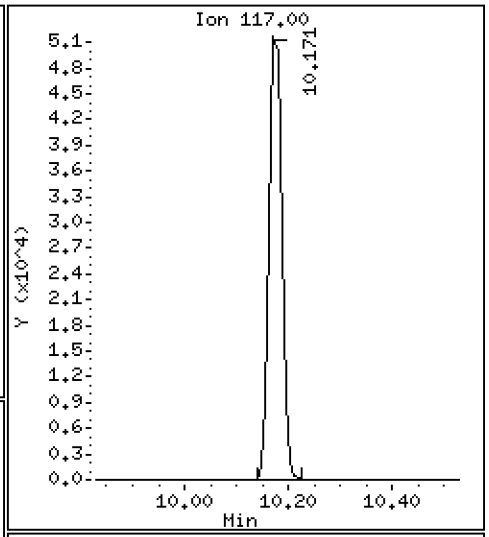
Concentration: 3.915 ug/mL

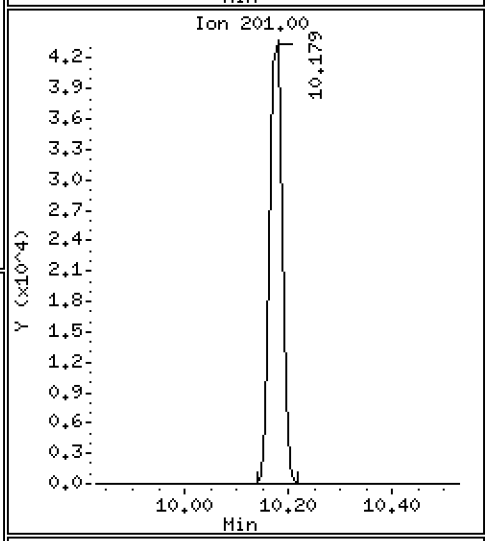


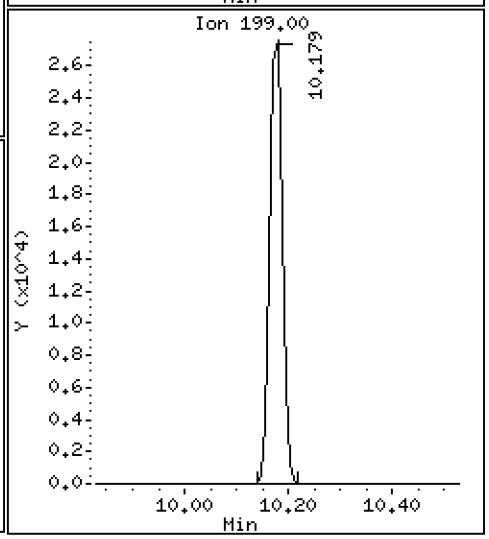












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

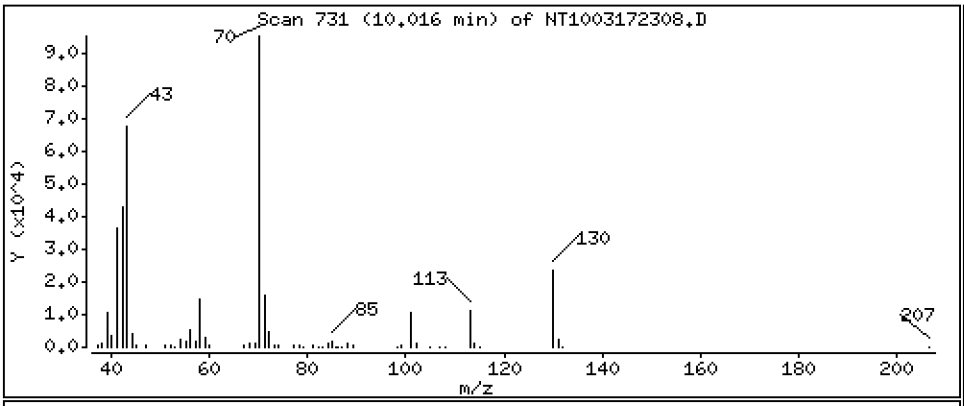
Operator: VTS

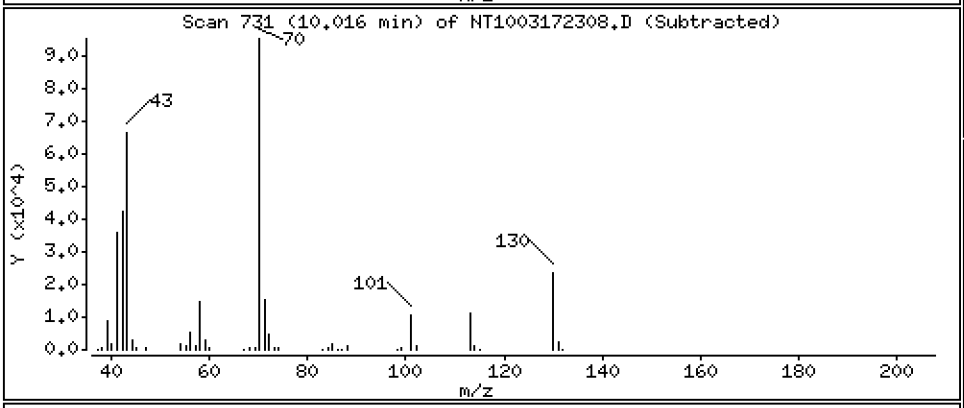
Column phase: ZB-5msi

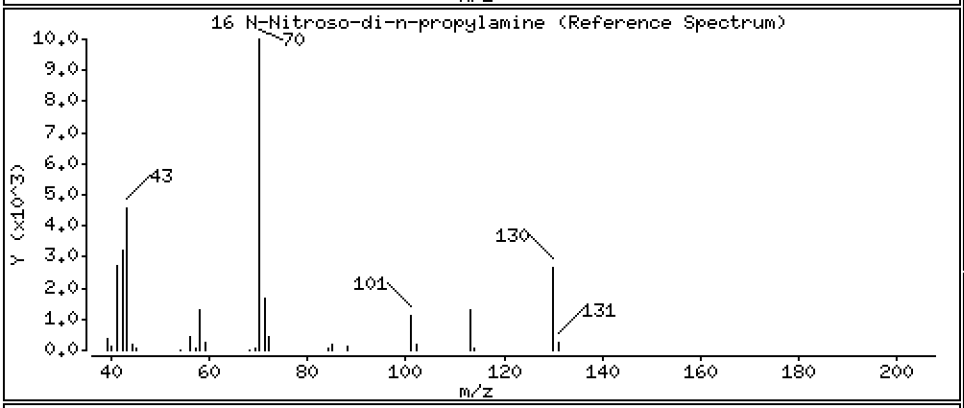
Column diameter: 0.25

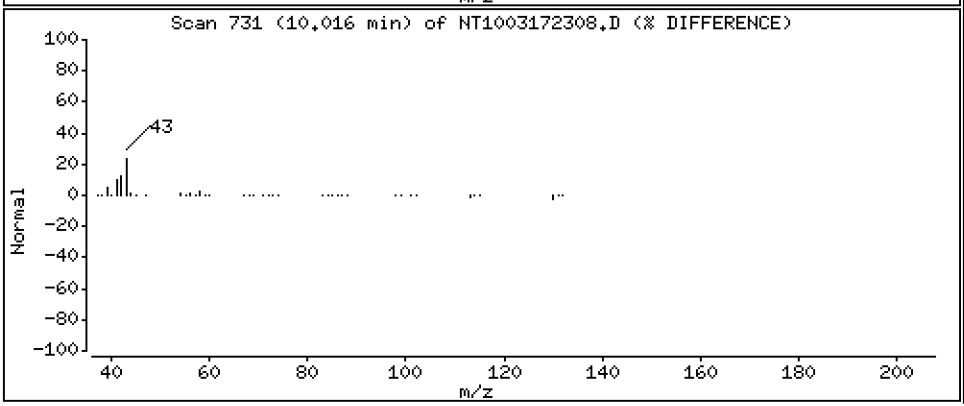
16 N-Nitroso-di-n-propylamine

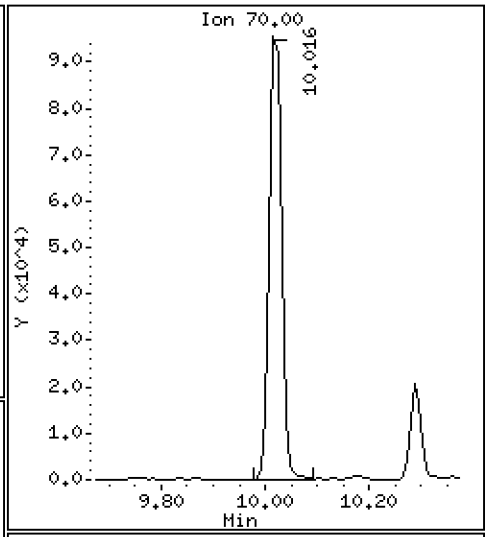
Concentration: 4.331 ug/mL

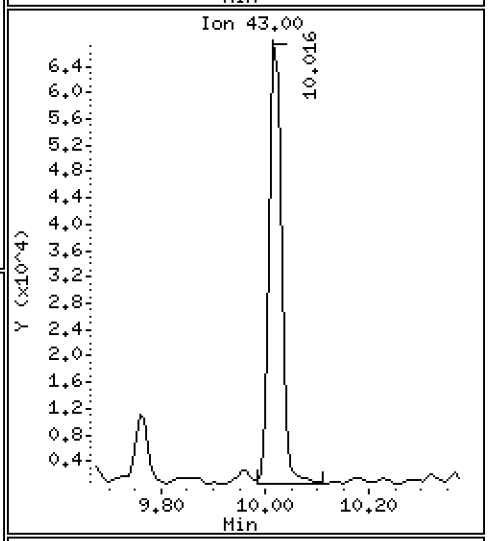


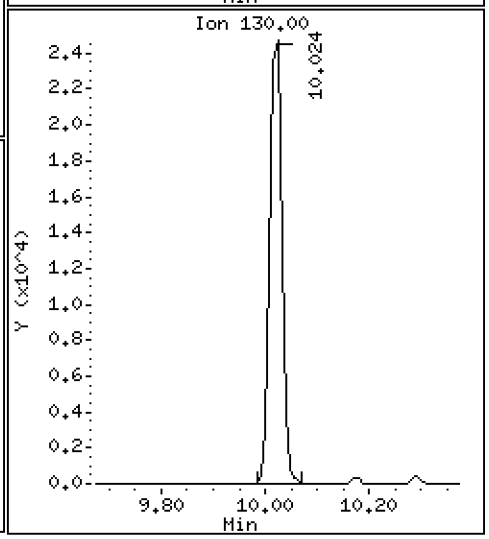












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

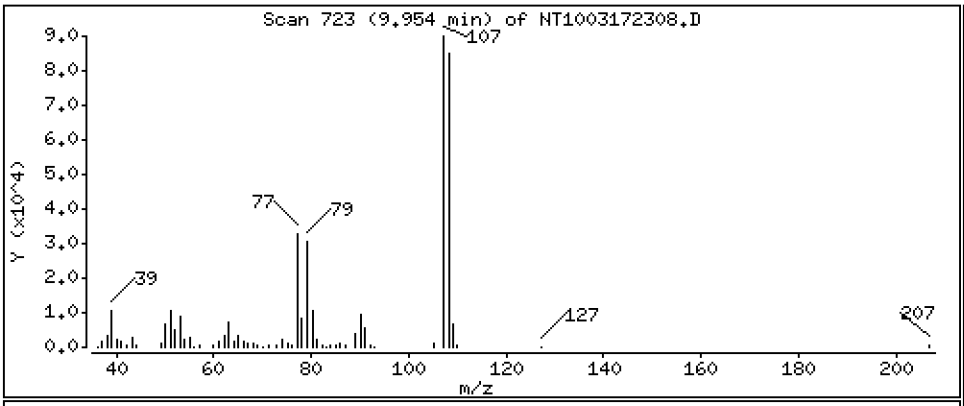
Operator: VTS

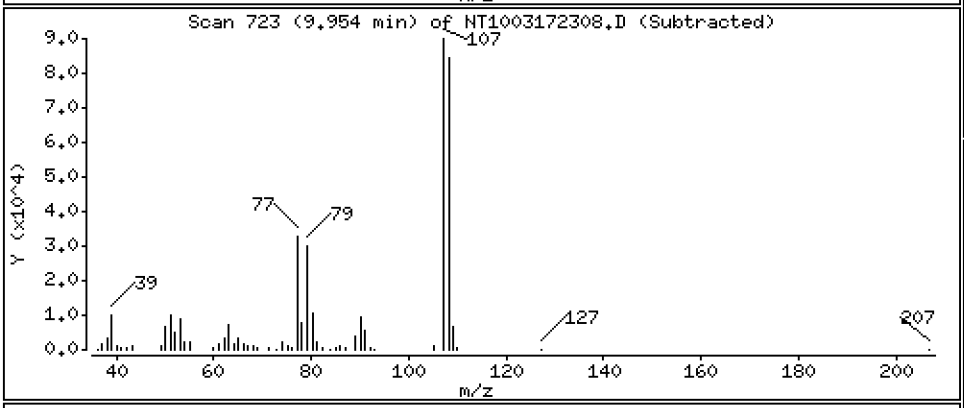
Column phase: ZB-5msi

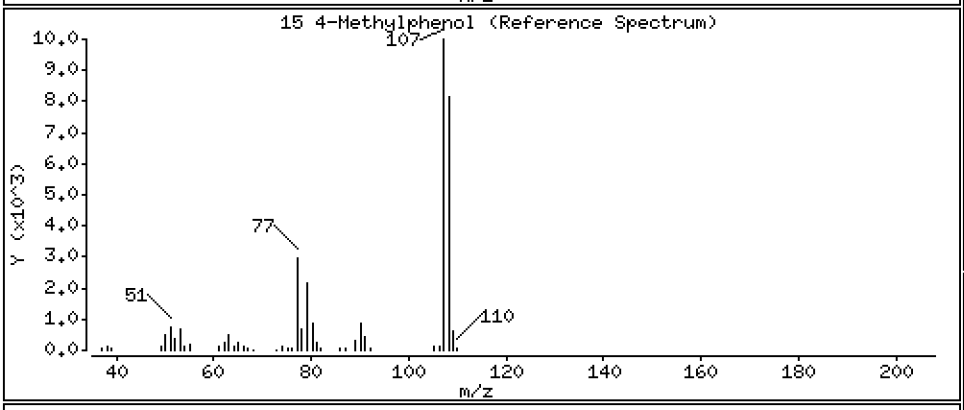
Column diameter: 0.25

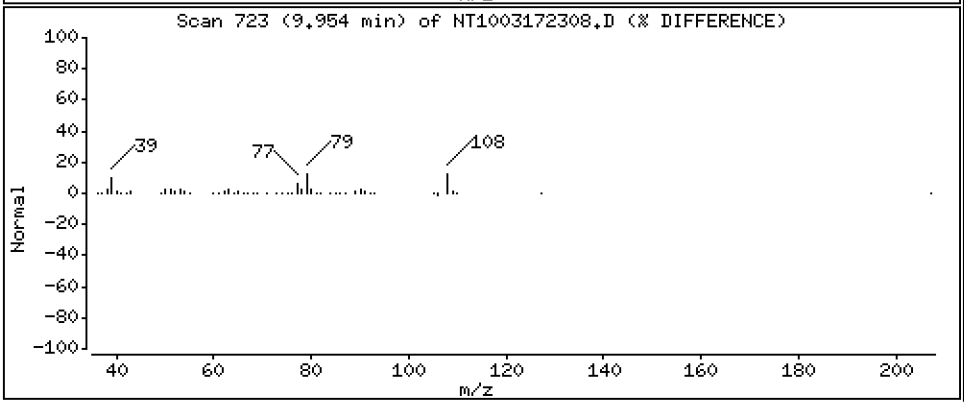
15 4-Methylphenol

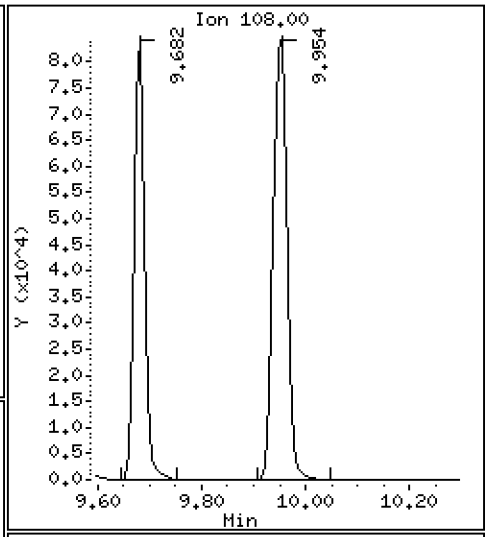
Concentration: 3.285 ug/mL

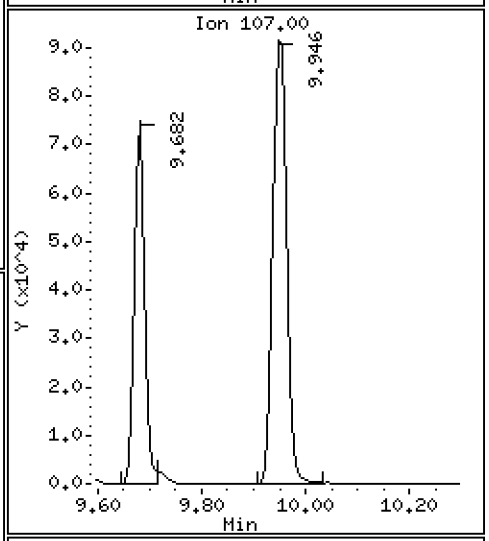


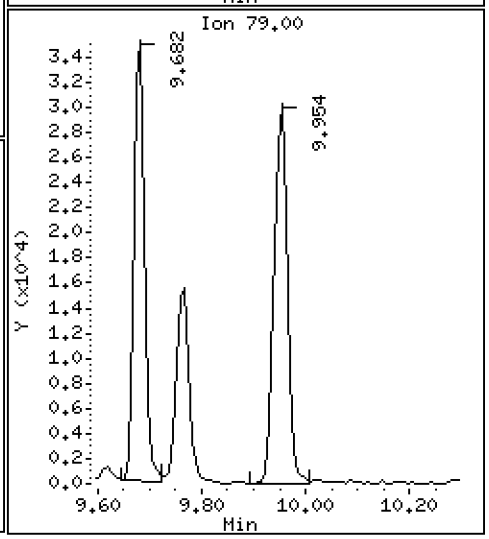












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

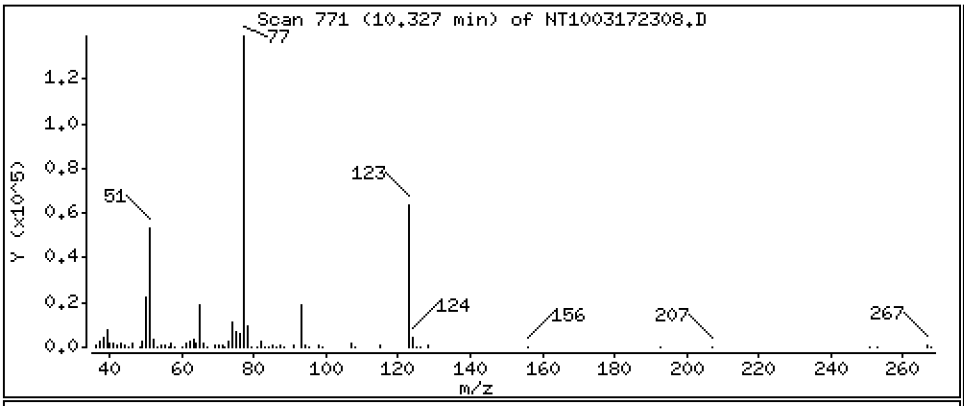
Operator: VTS

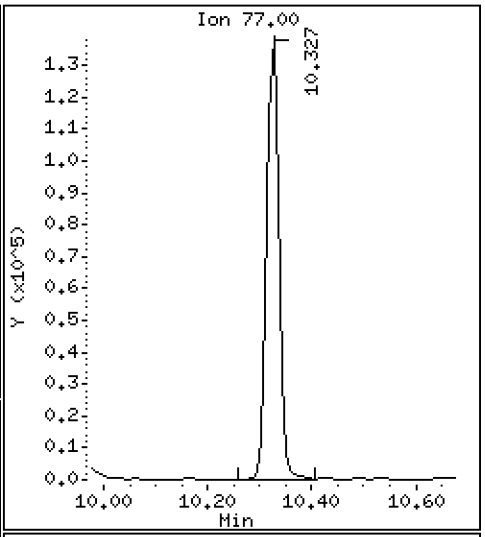
Column phase: ZB-5msi

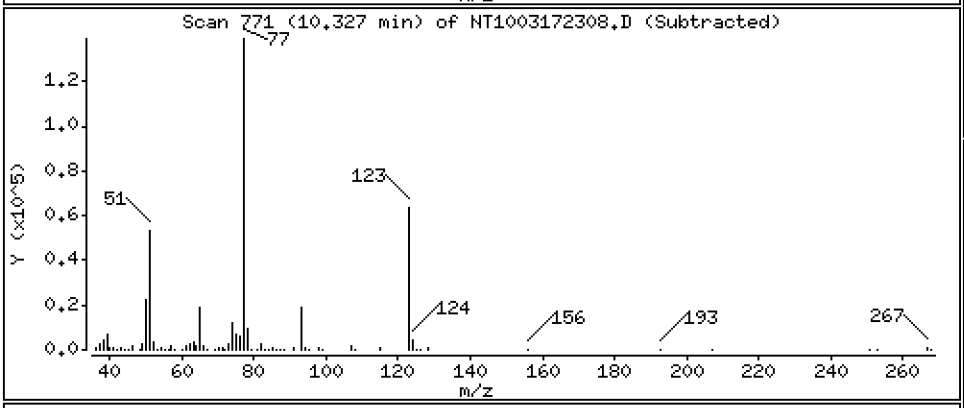
Column diameter: 0.25

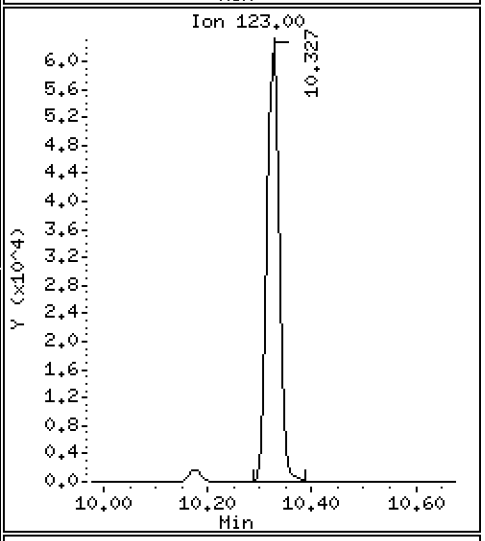
19 Nitrobenzene

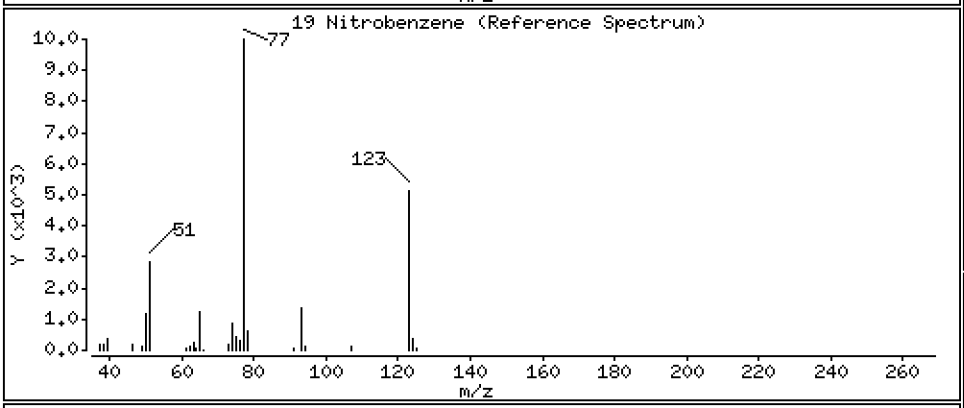
Concentration: 4.108 ug/mL

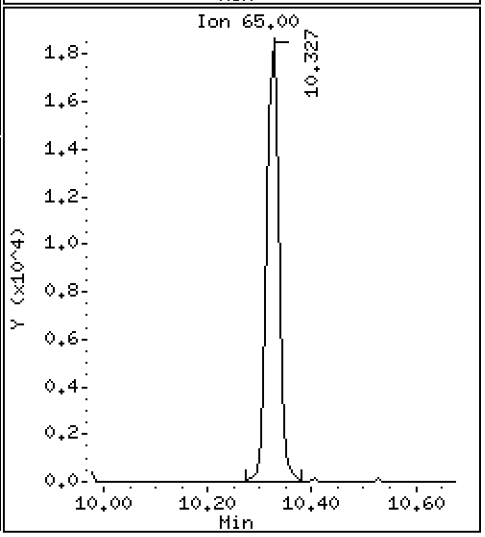


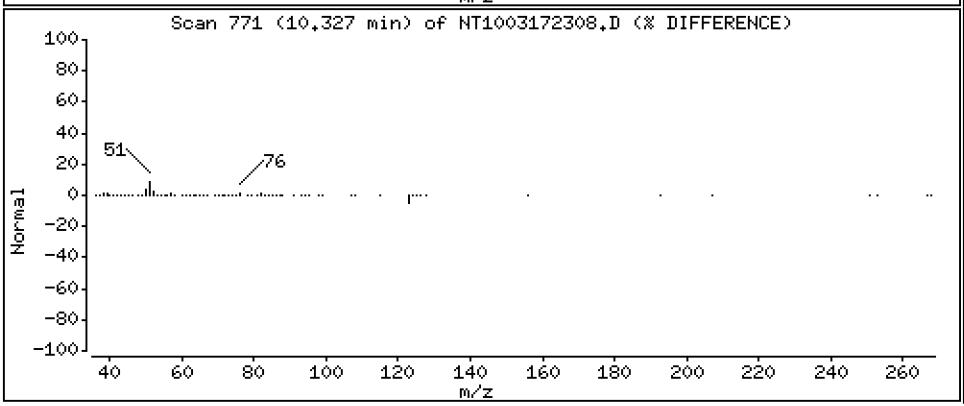












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

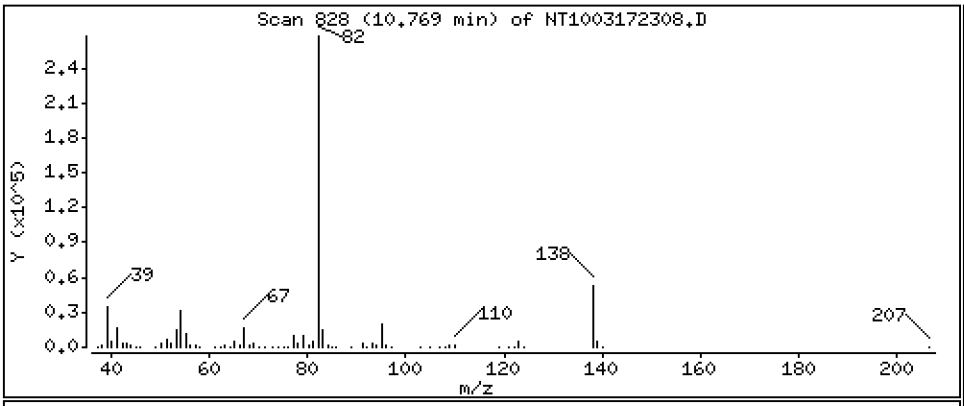
Operator: VTS

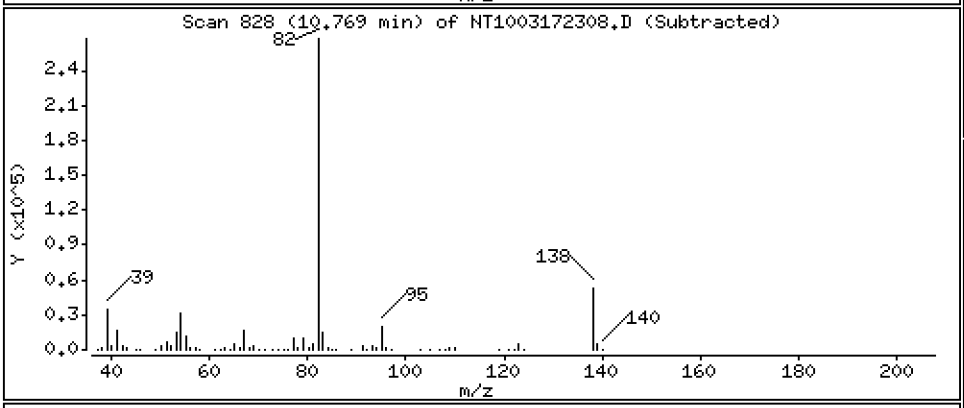
Column phase: ZB-5msi

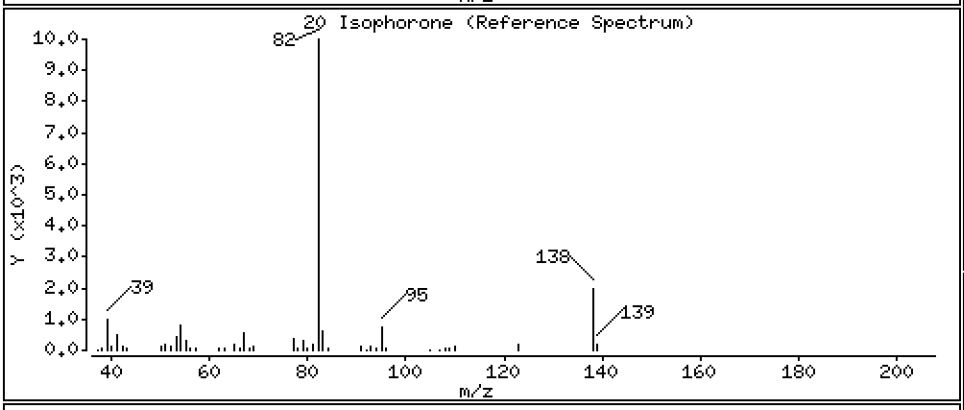
Column diameter: 0.25

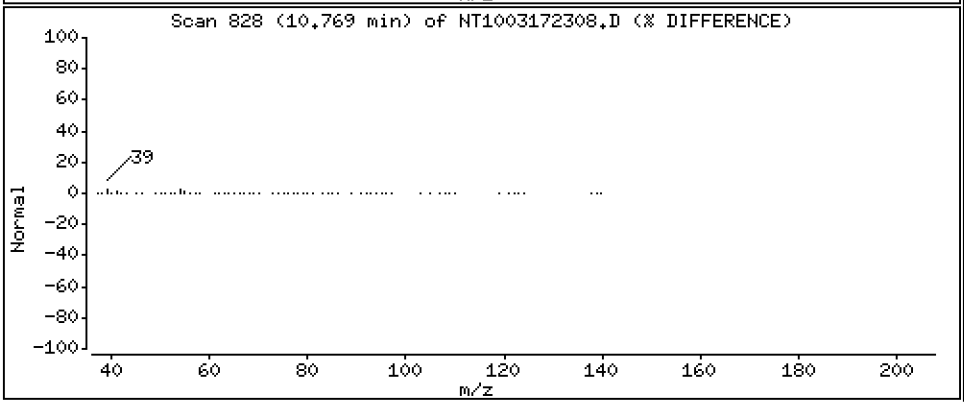
20 Isophorone

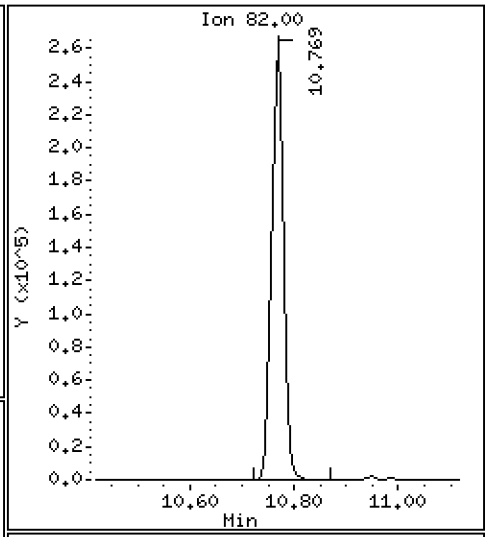
Concentration: 6.776 ug/mL

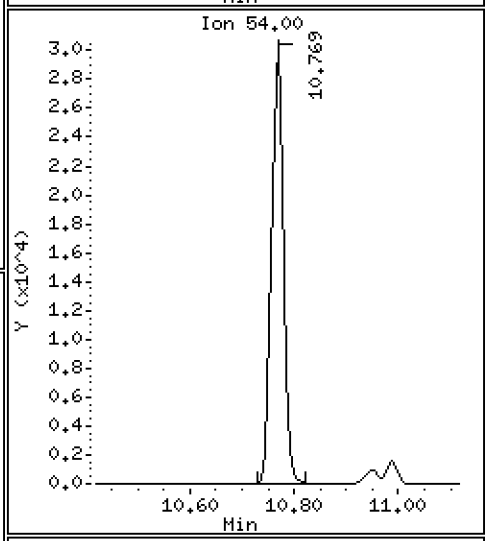


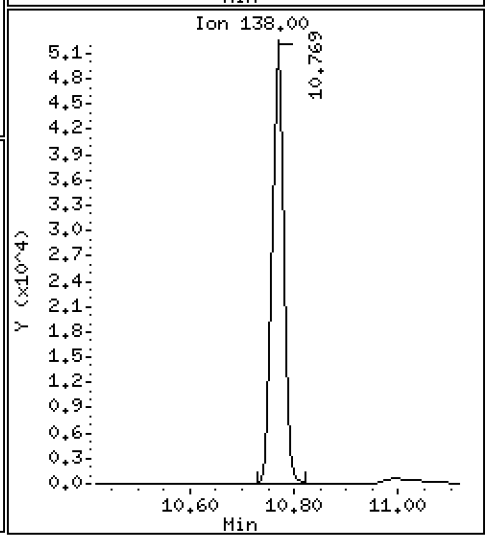












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

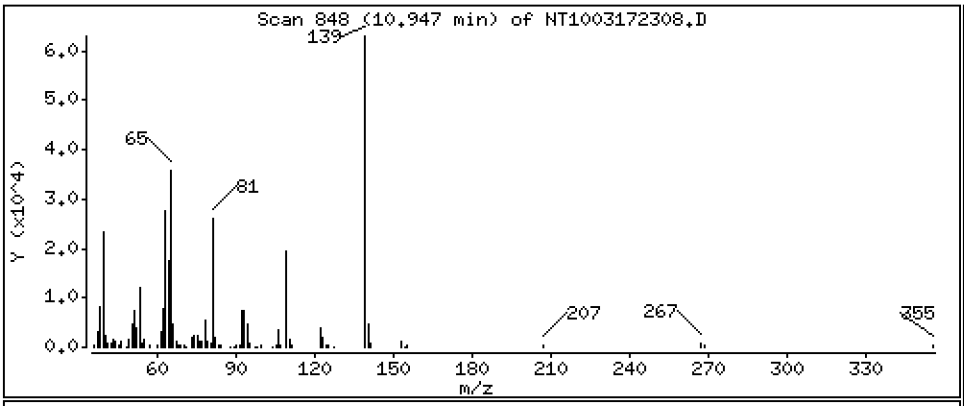
Operator: VTS

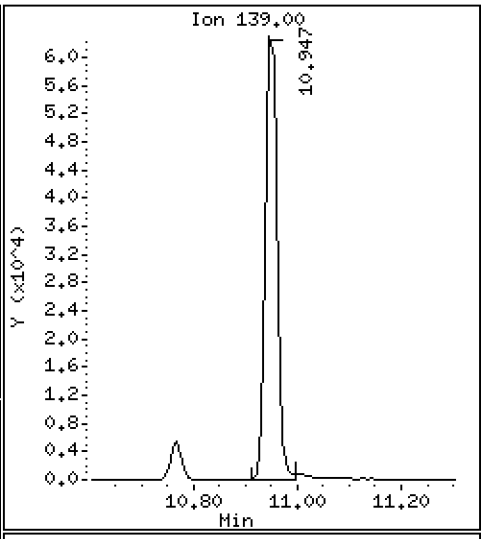
Column phase: ZB-5msi

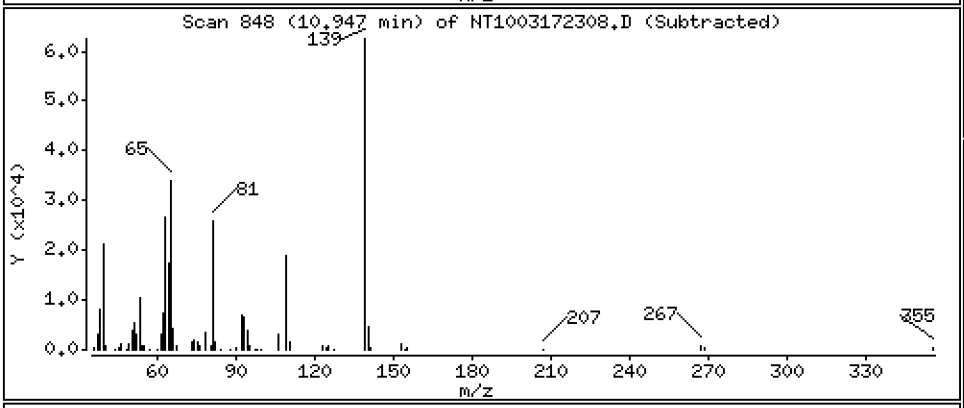
Column diameter: 0.25

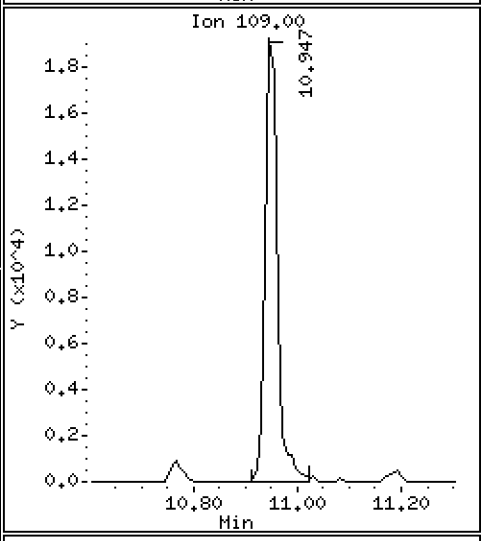
21 2-Nitrophenol

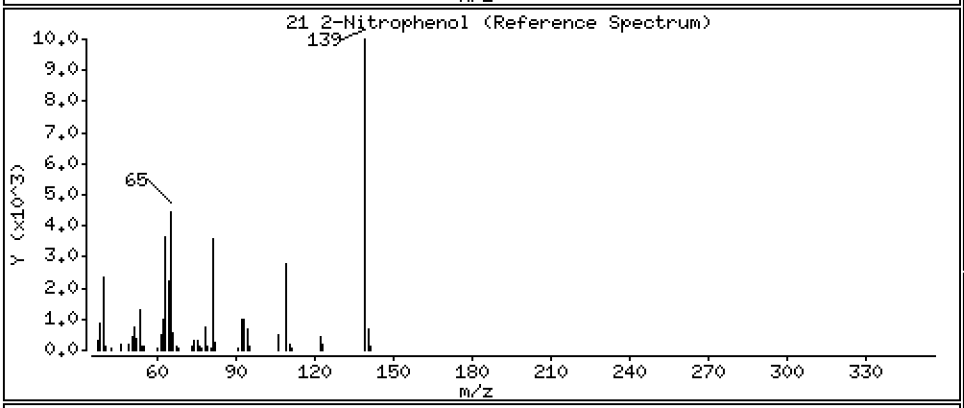
Concentration: 3.905 ug/mL

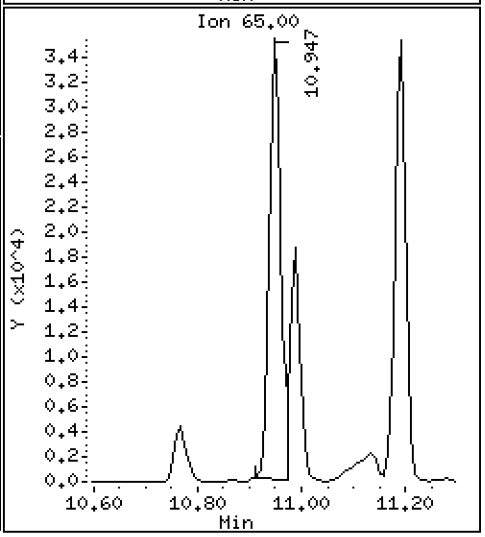


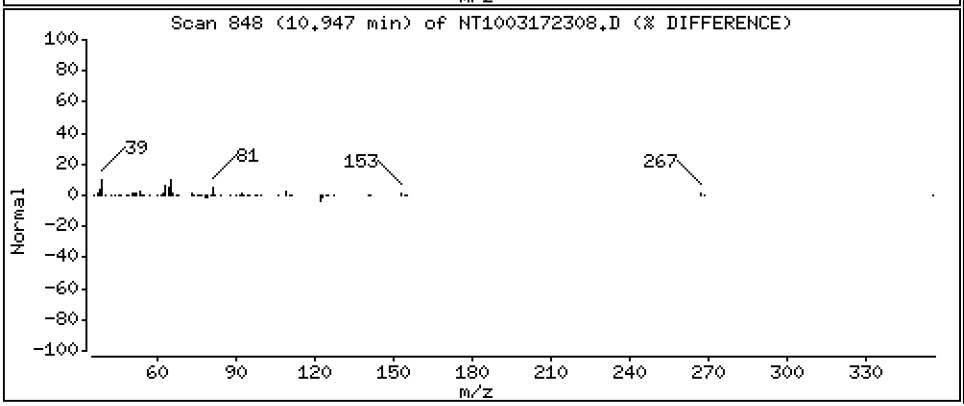












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

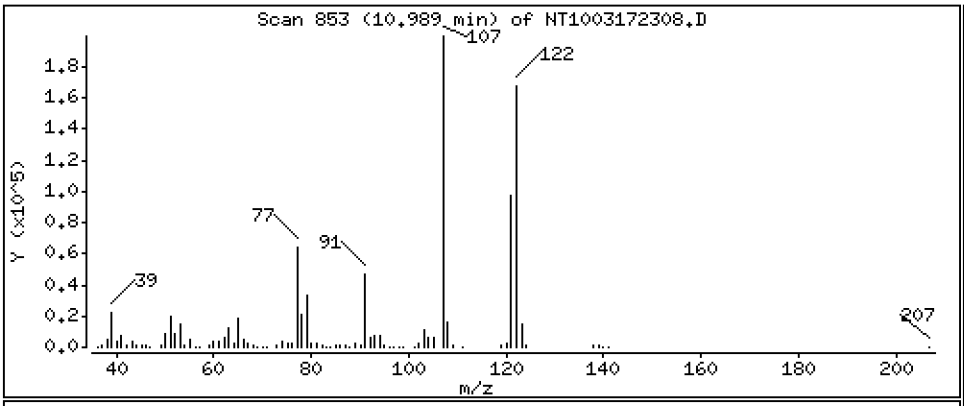
Operator: VTS

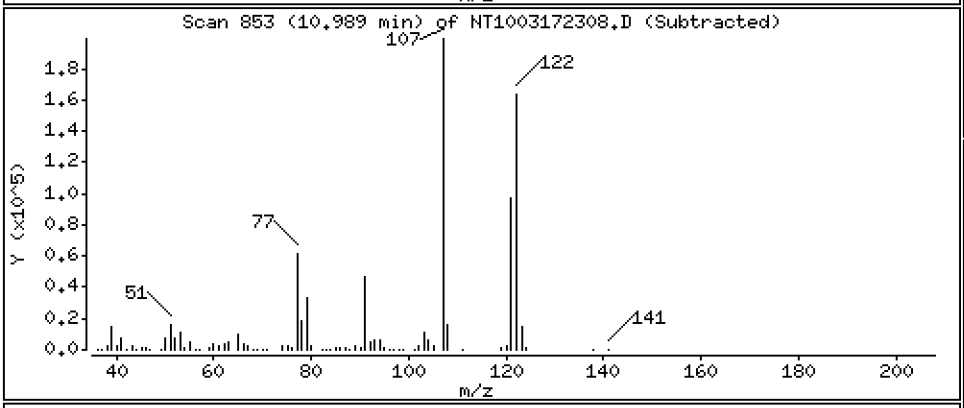
Column phase: ZB-5msi

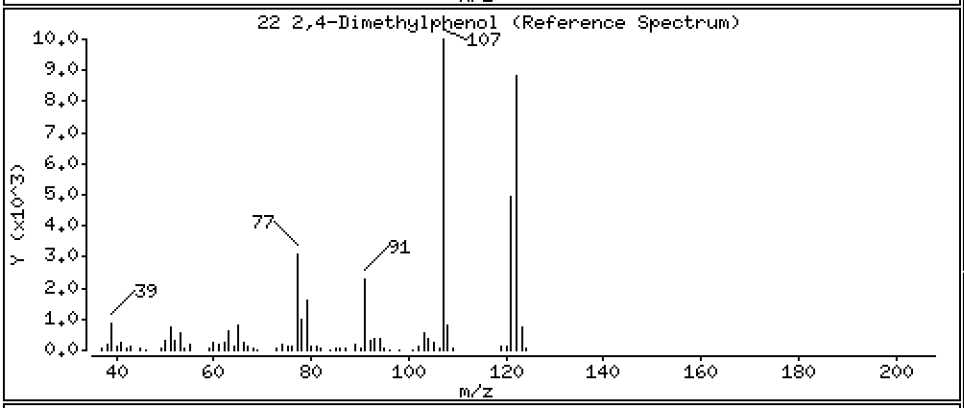
Column diameter: 0.25

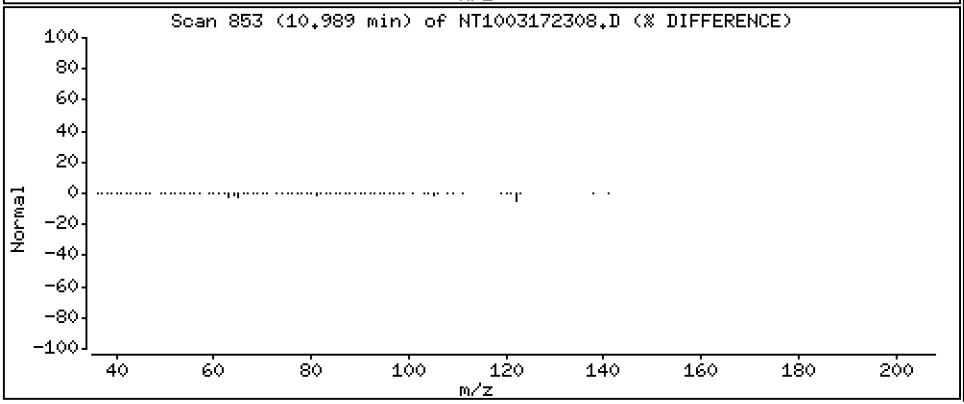
22 2,4-Dimethylphenol

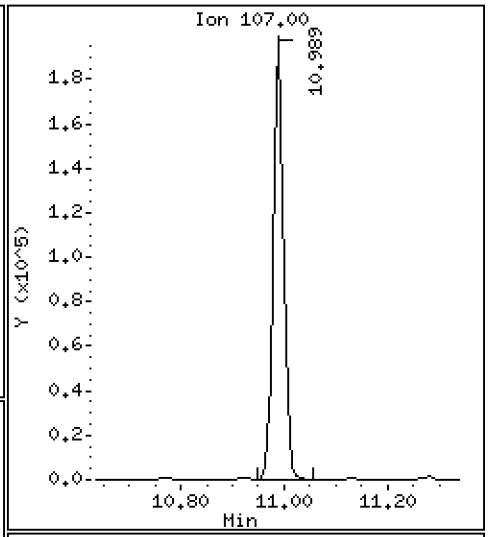
Concentration: 5.912 ug/mL

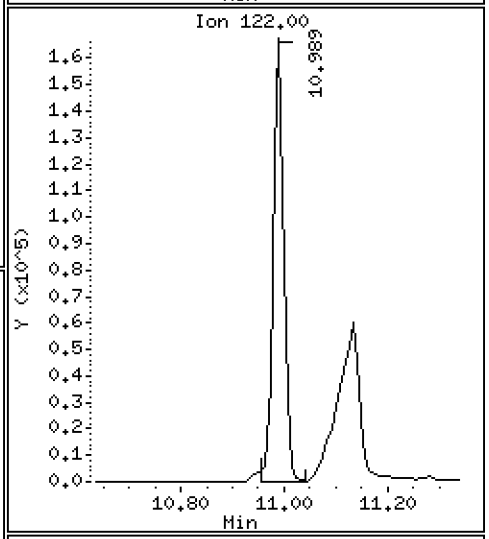


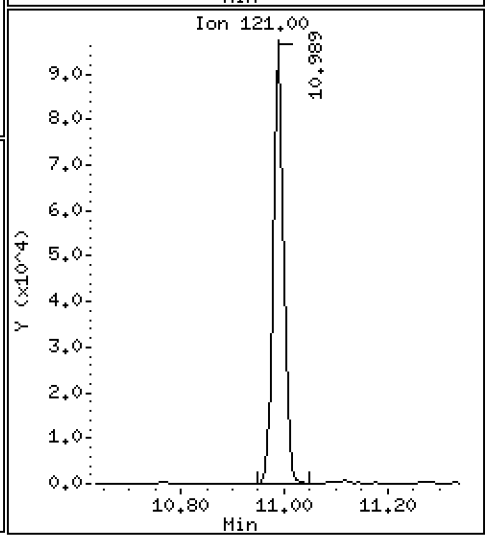












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

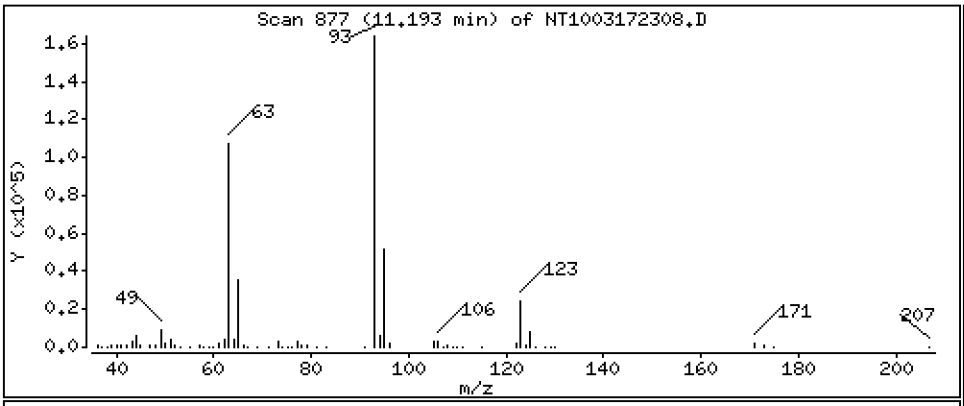
Operator: VTS

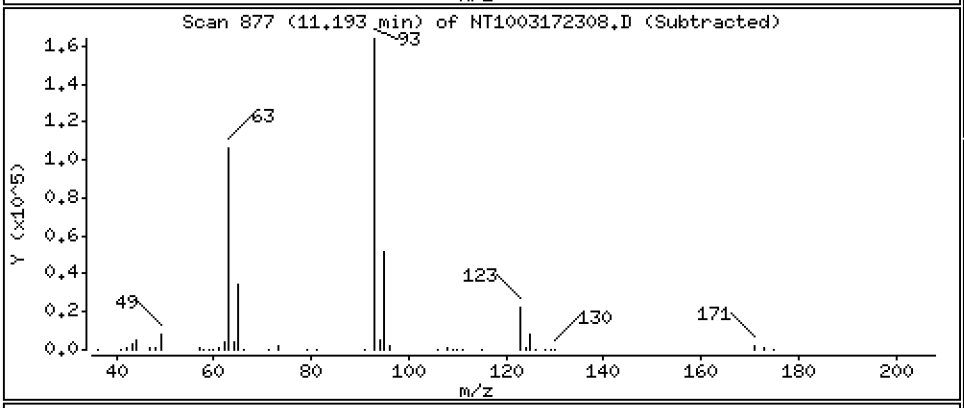
Column phase: ZB-5msi

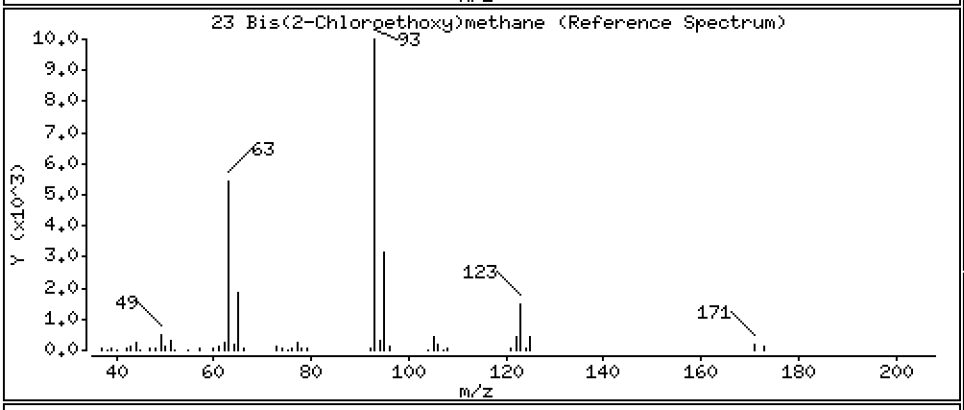
Column diameter: 0.25

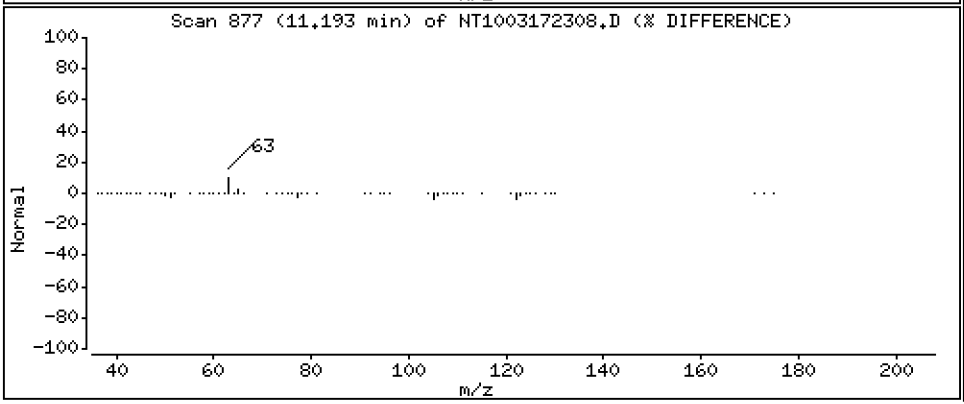
23 Bis(2-Chloroethoxy)methane

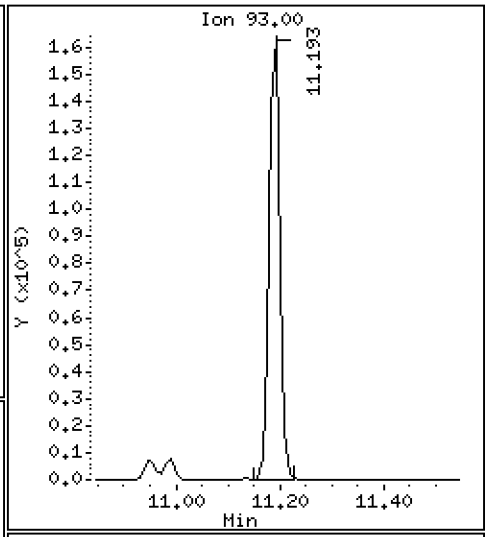
Concentration: 5.119 ug/mL

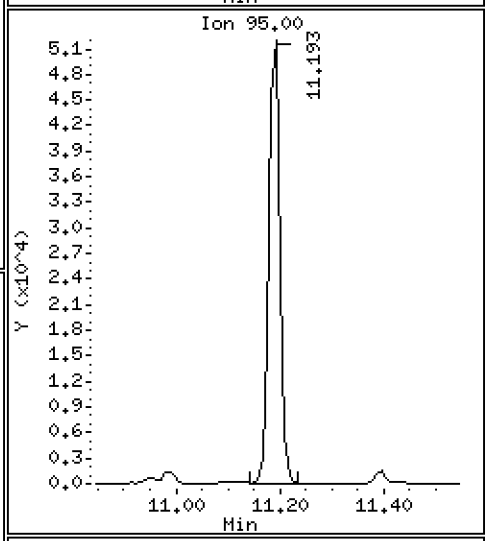


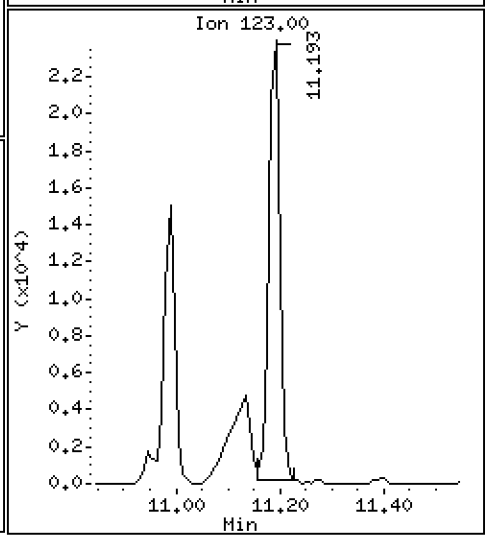












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

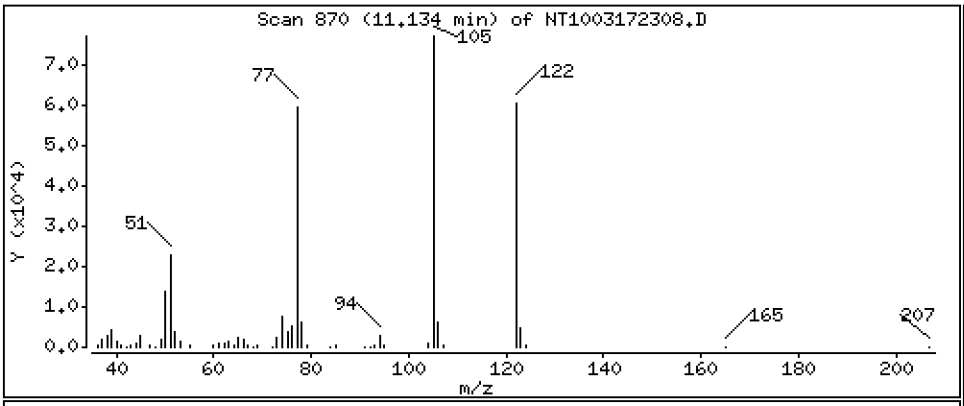
Operator: VTS

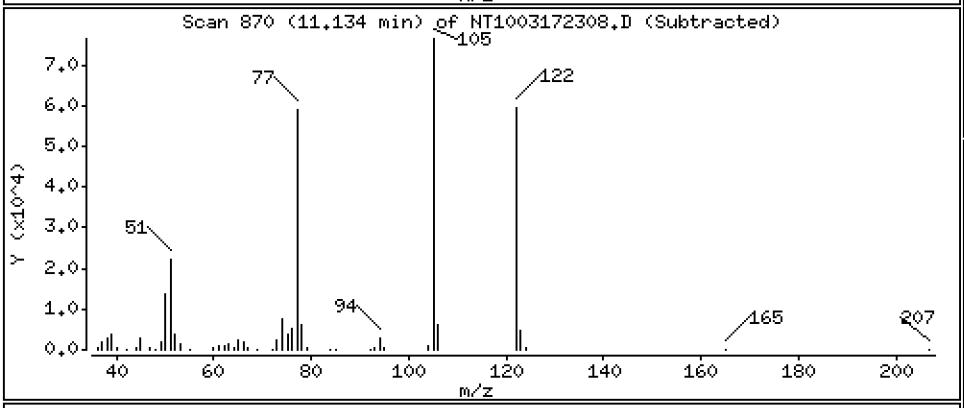
Column phase: ZB-5msi

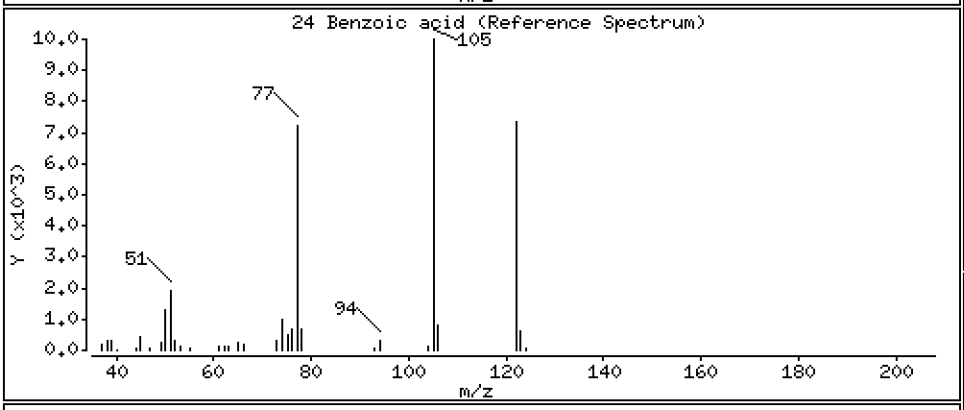
Column diameter: 0.25

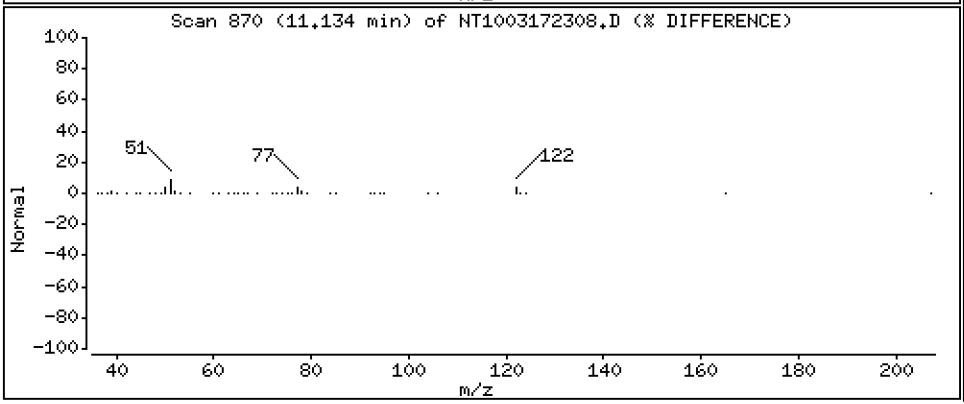
24 Benzoic acid

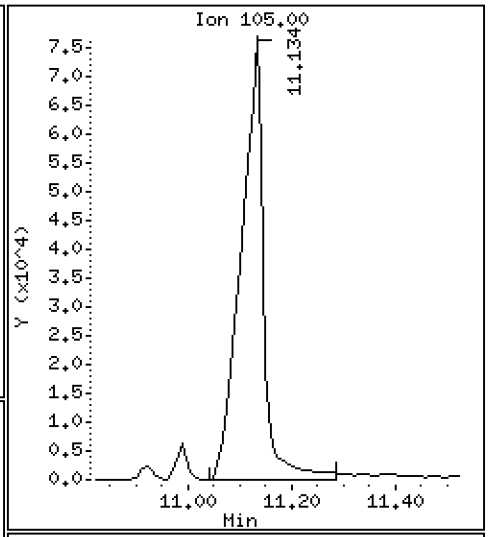
Concentration: 8.650 ug/mL

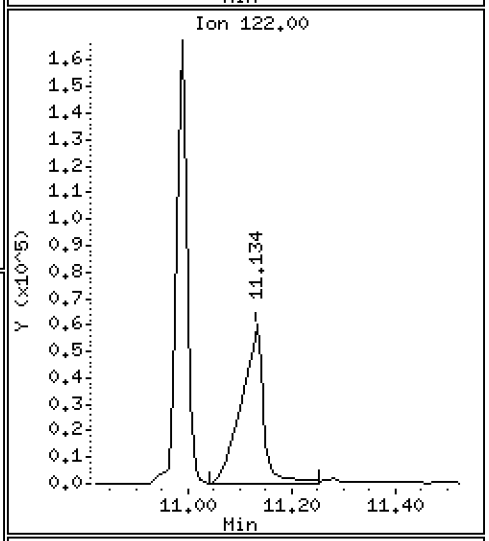


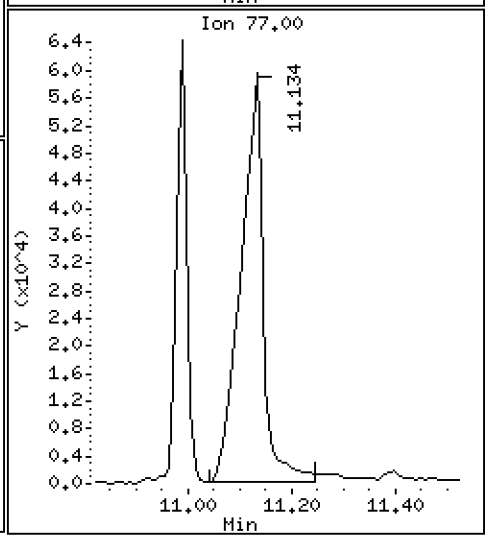












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

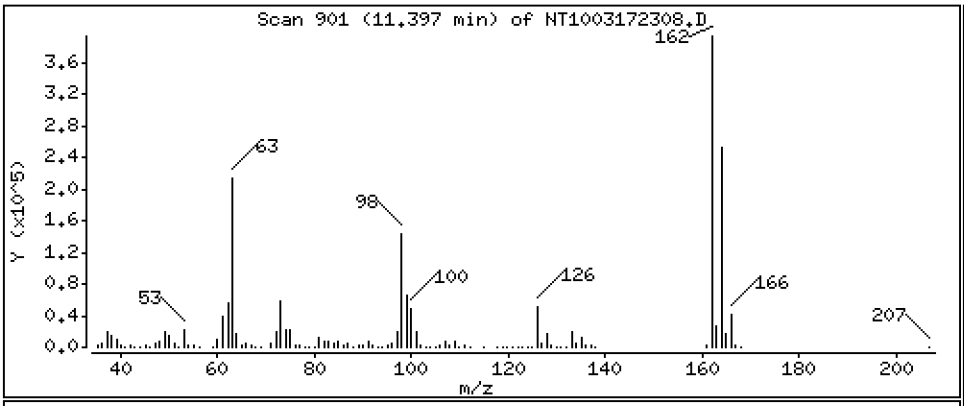
Operator: VTS

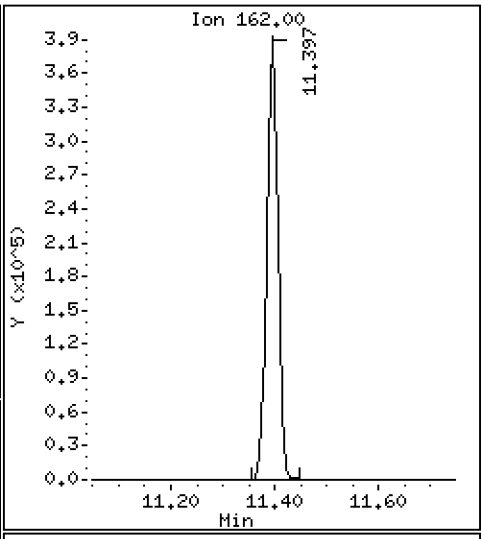
Column phase: ZB-5msi

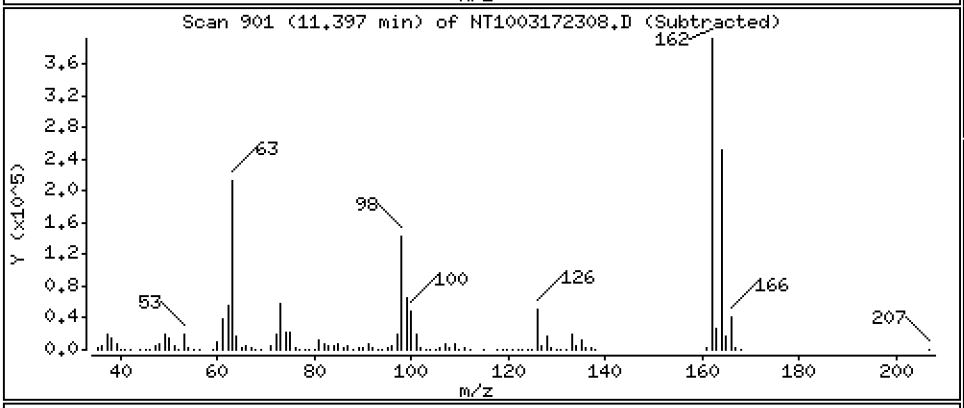
Column diameter: 0.25

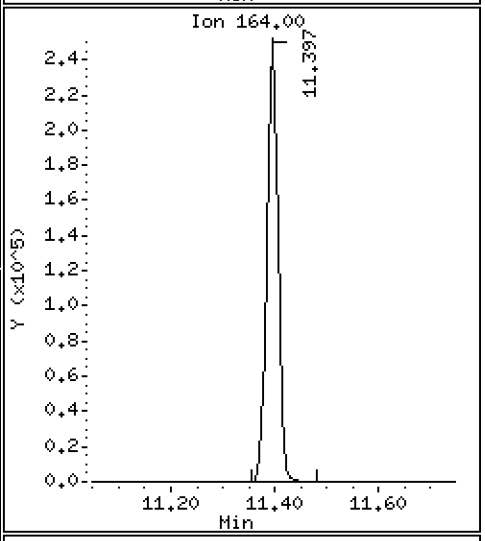
25 2,4-Dichlorophenol

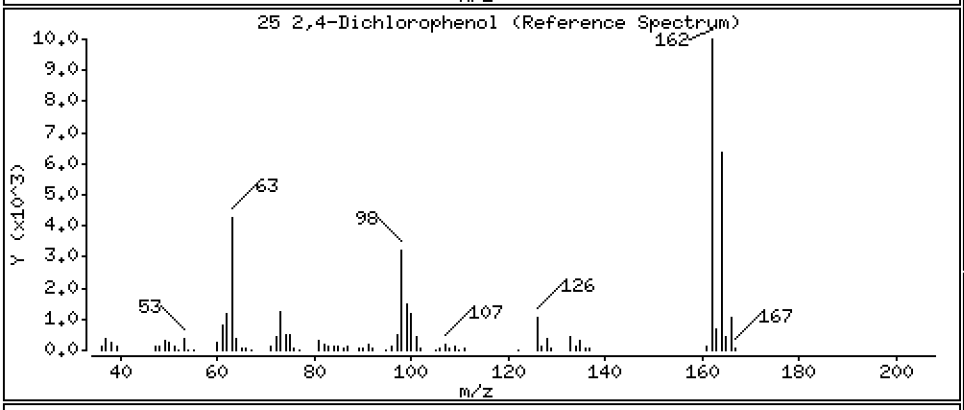
Concentration: 14.84 ug/mL

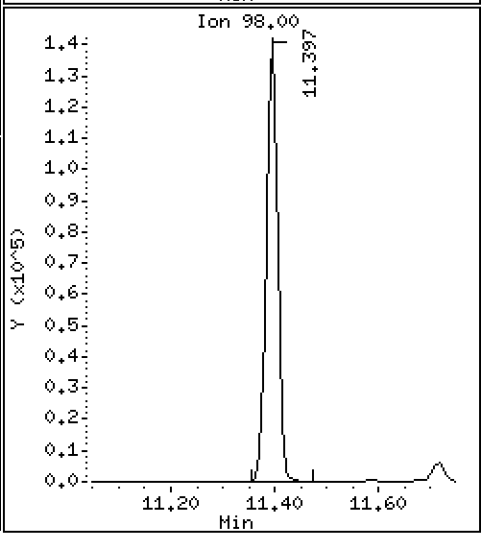


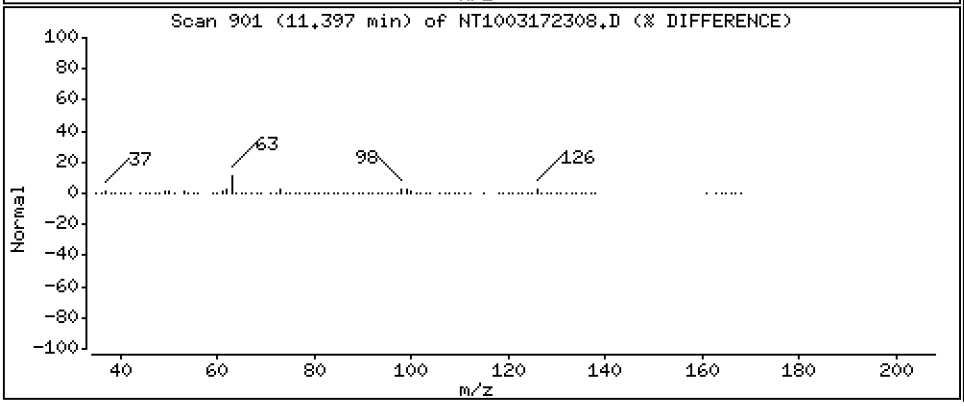












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

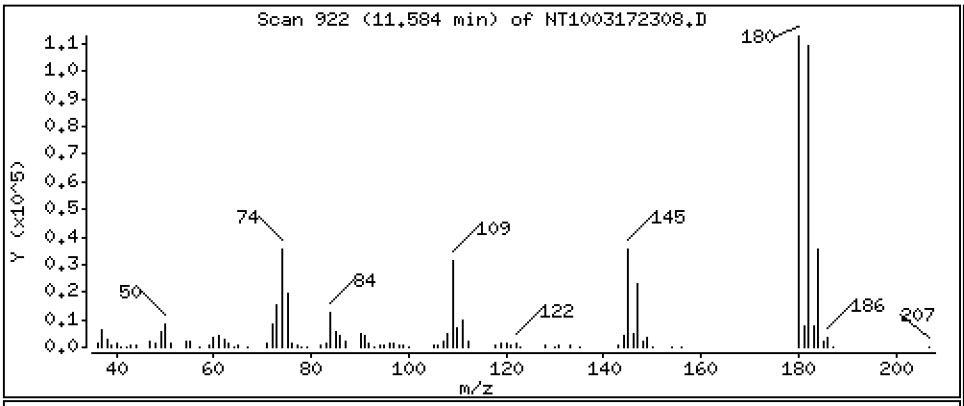
Operator: VTS

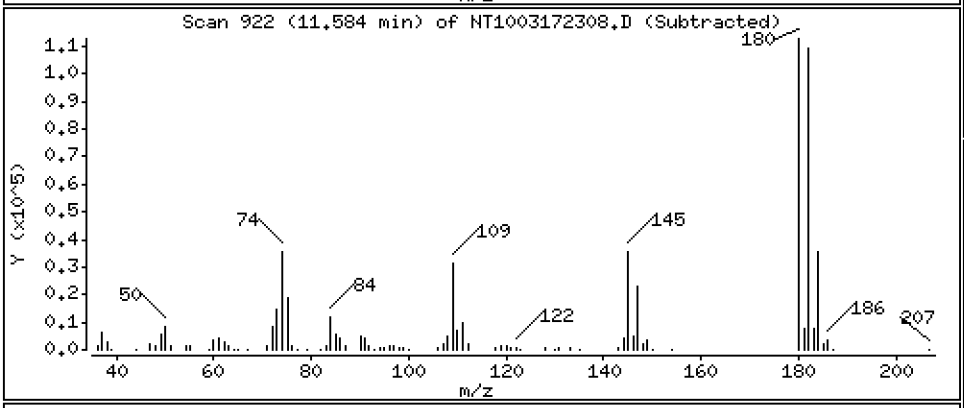
Column phase: ZB-5msi

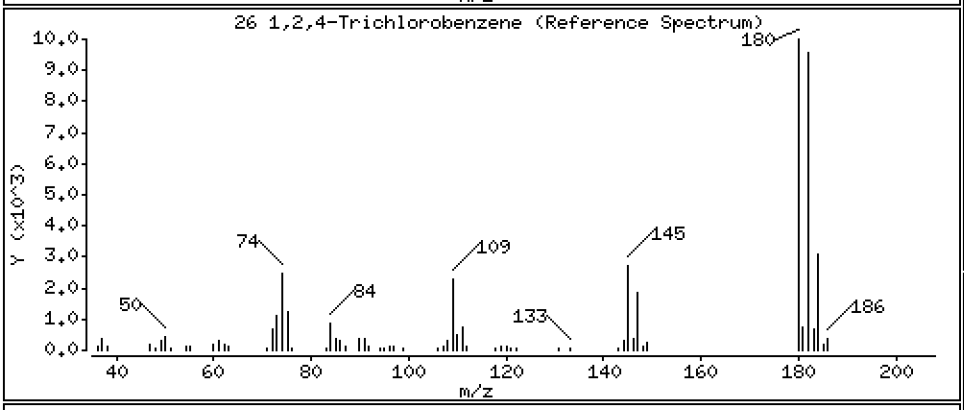
Column diameter: 0.25

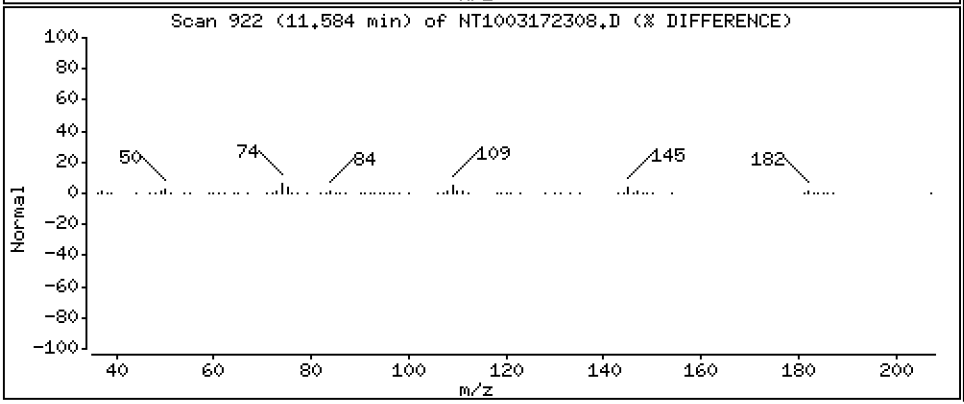
26 1,2,4-Trichlorobenzene

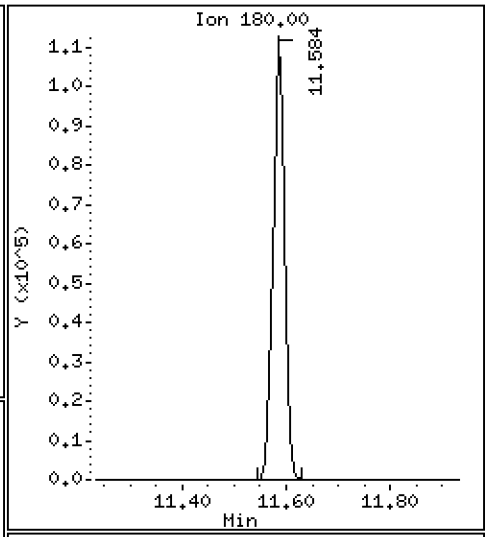
Concentration: 3.702 ug/mL

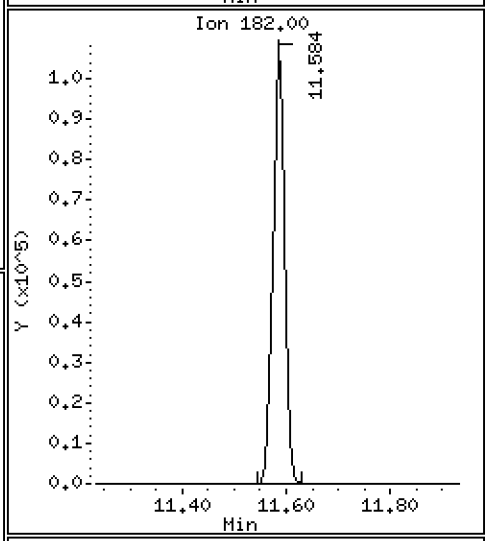


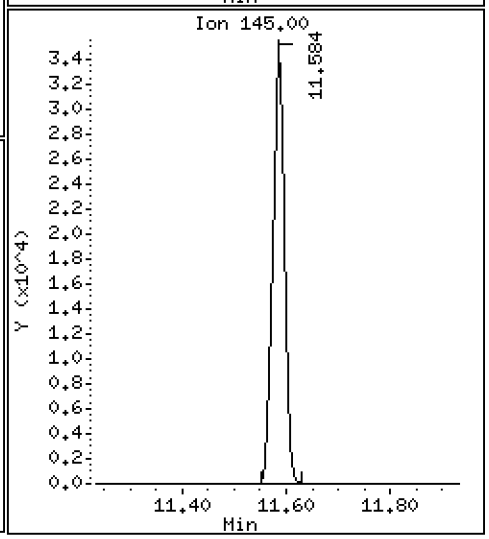












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

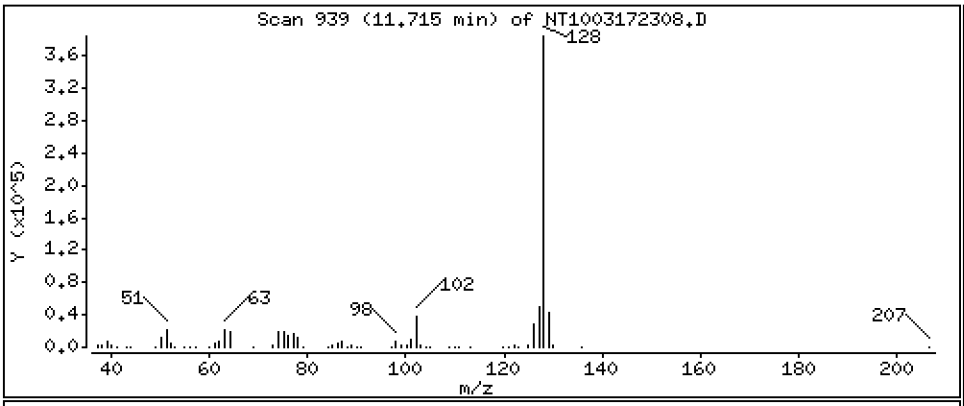
Operator: VTS

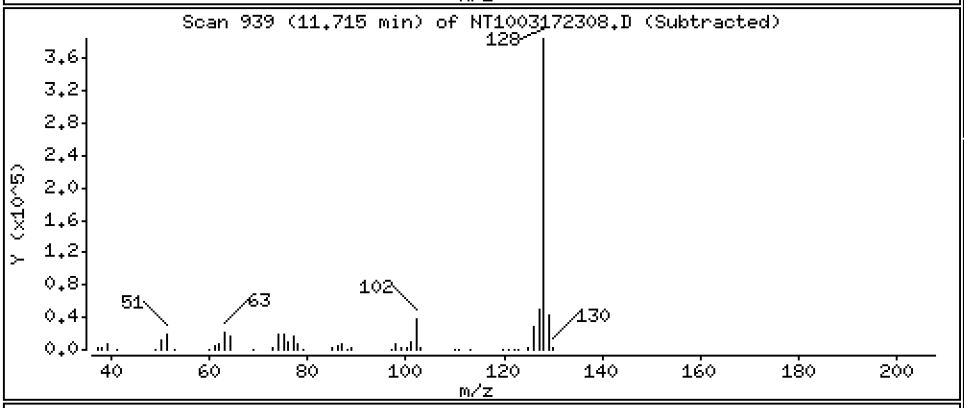
Column phase: ZB-5msi

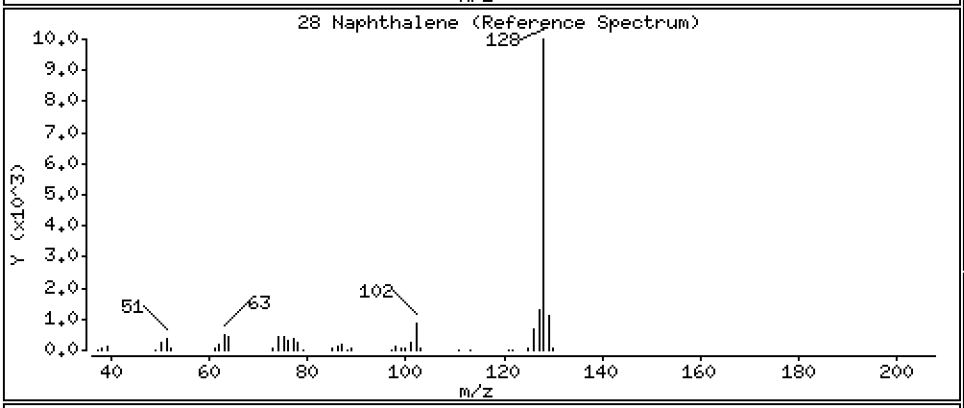
Column diameter: 0.25

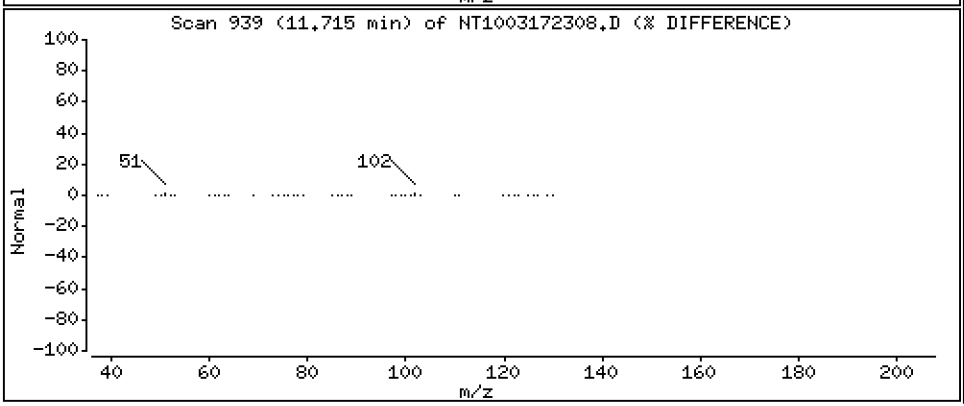
28 Naphthalene

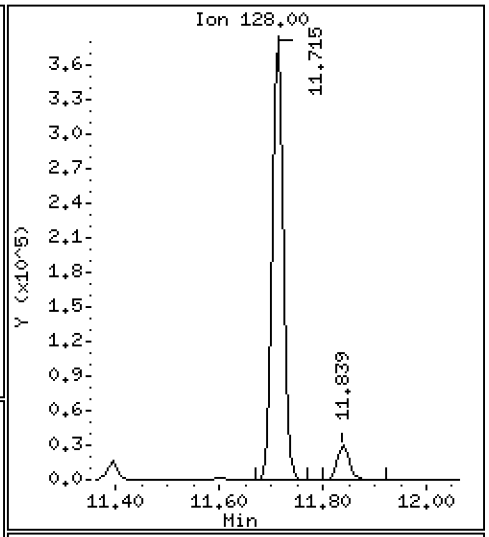
Concentration: 4.188 ug/mL

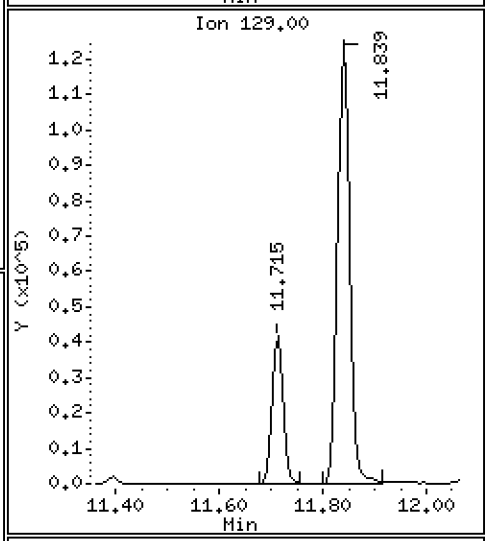


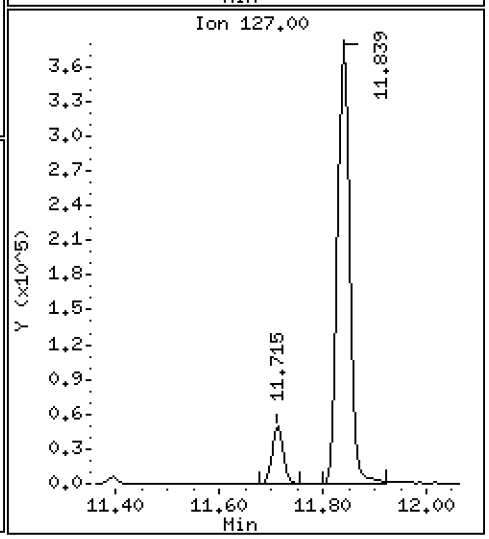












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

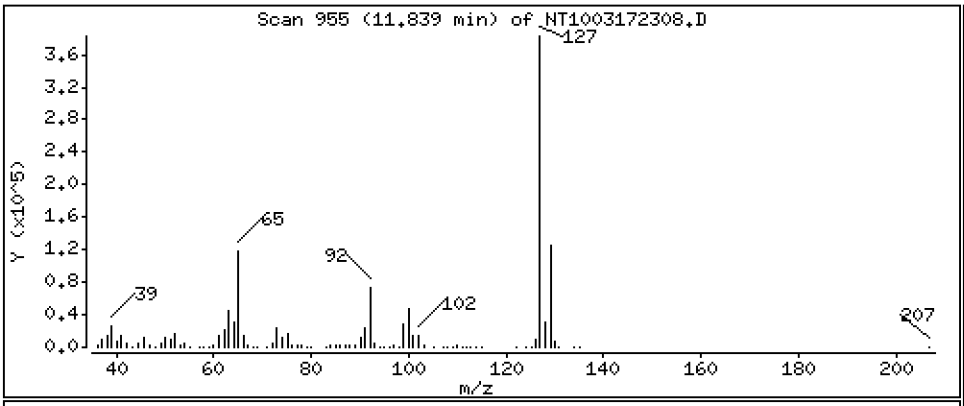
Operator: VTS

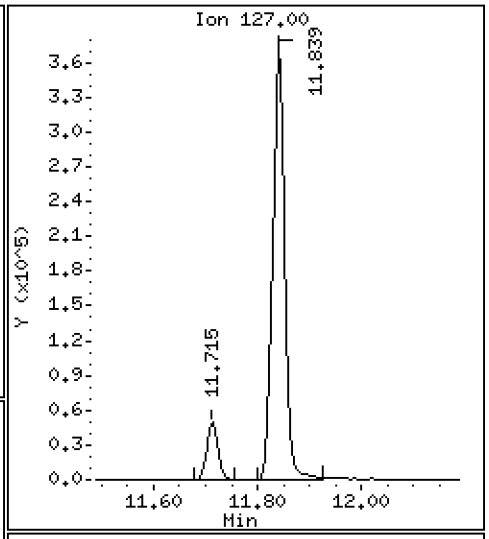
Column phase: ZB-5msi

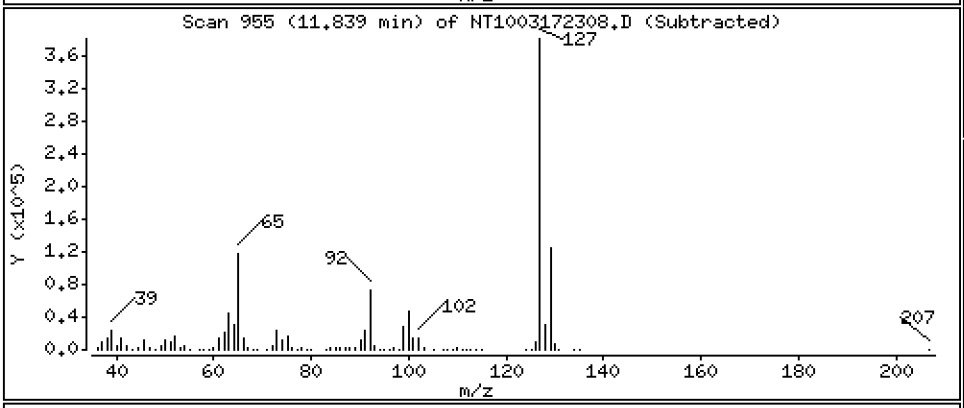
Column diameter: 0.25

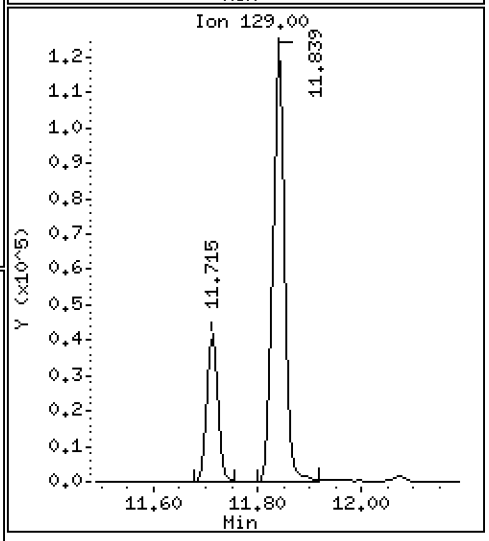
29 4-Chloroaniline

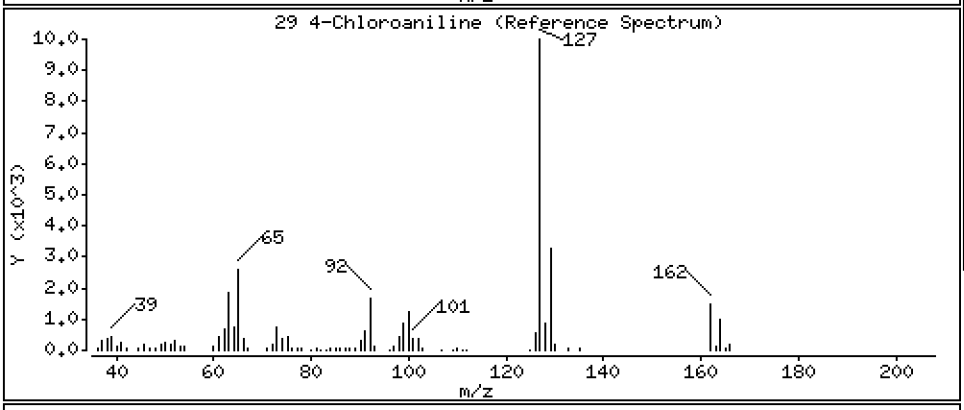
Concentration: 10.64 ug/mL

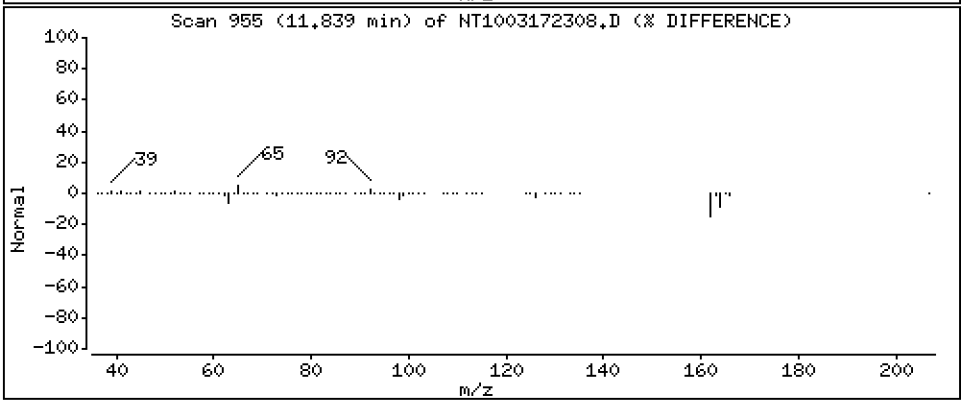












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

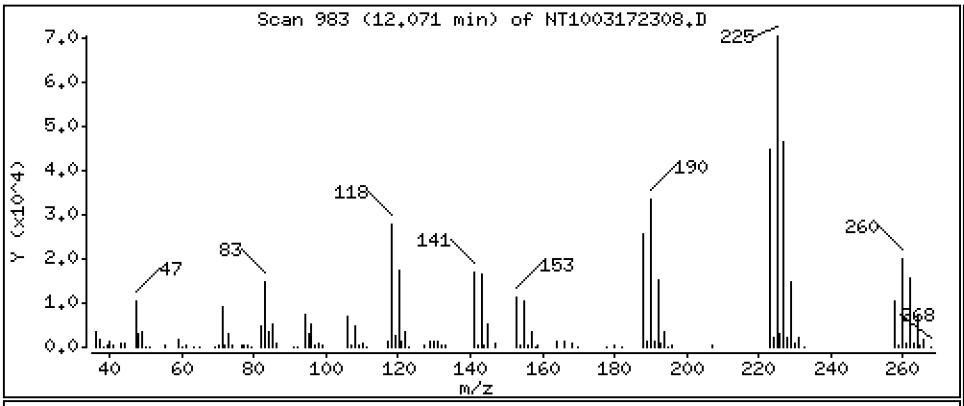
Operator: VTS

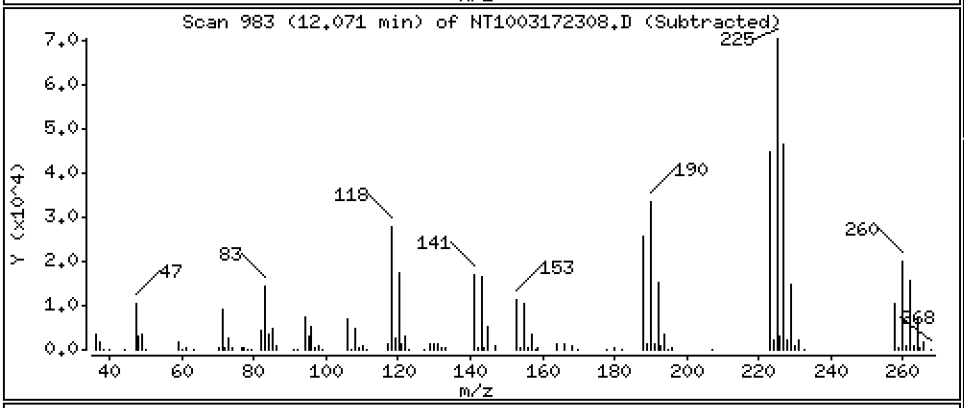
Column phase: ZB-5msi

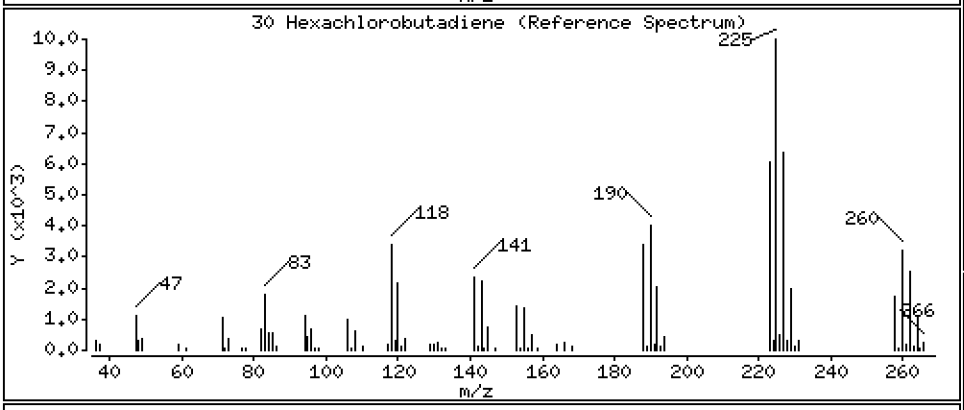
Column diameter: 0.25

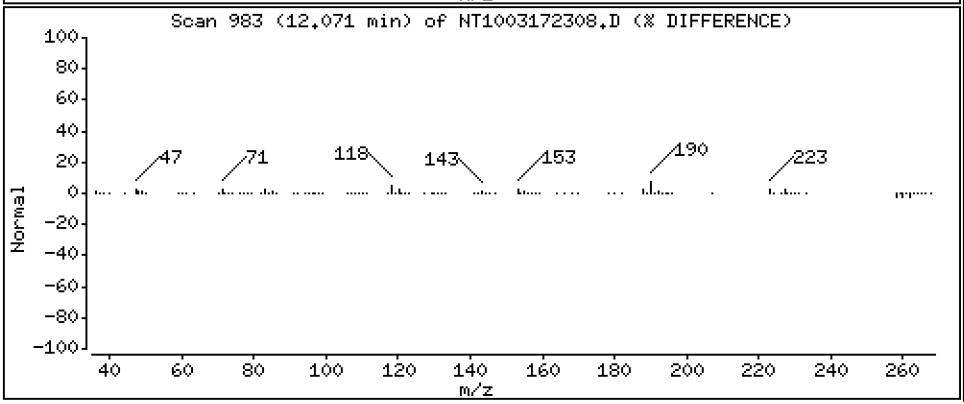
30 Hexachlorobutadiene

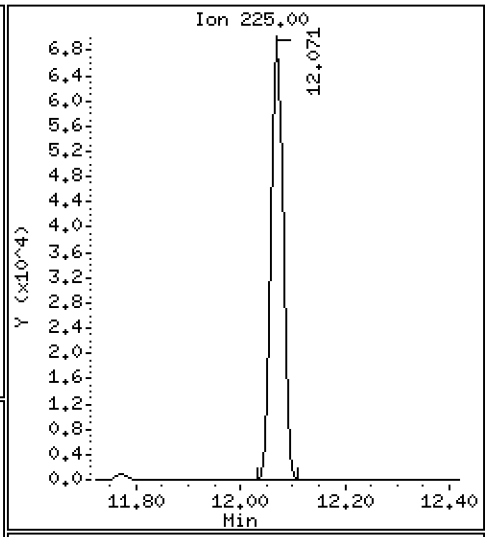
Concentration: 3.989 ug/mL

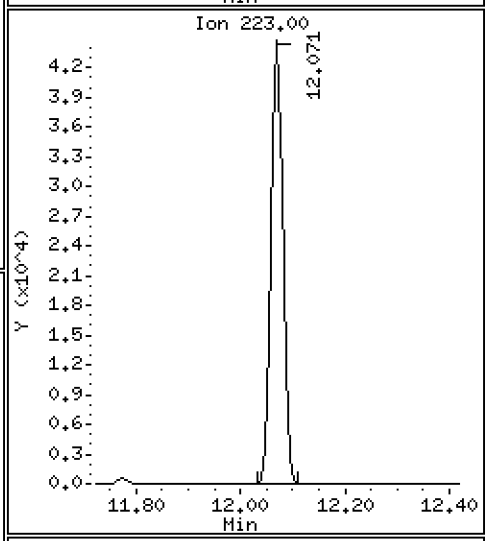


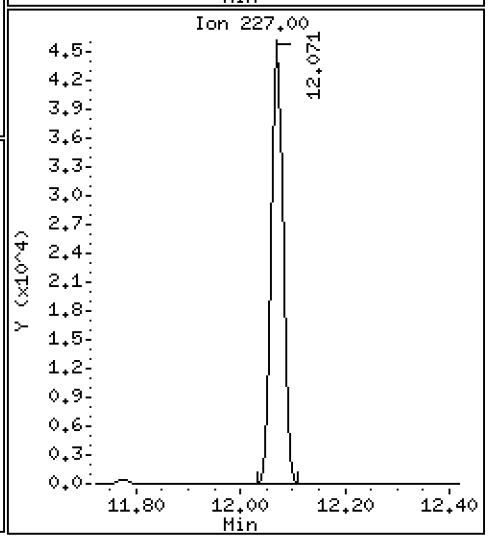












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

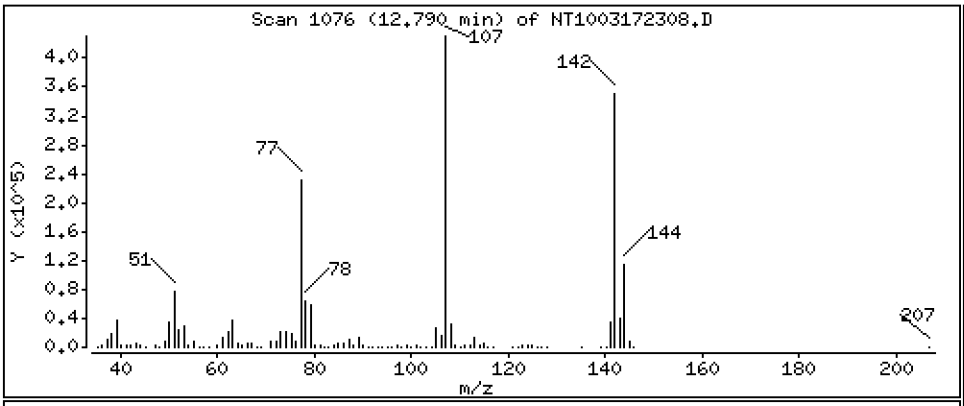
Operator: VTS

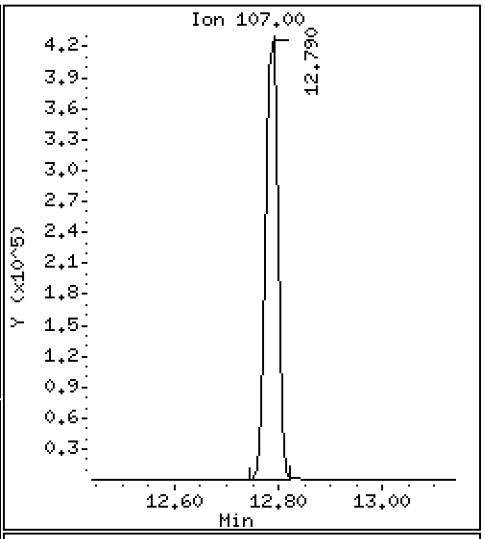
Column phase: ZB-5msi

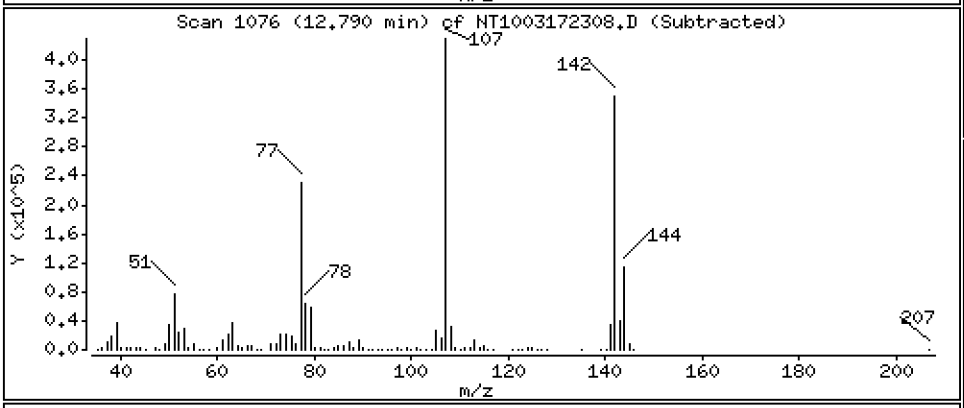
Column diameter: 0.25

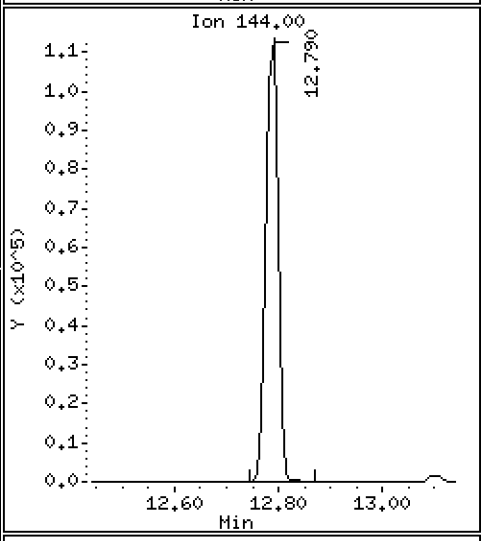
31 4-Chloro-3-methylphenol

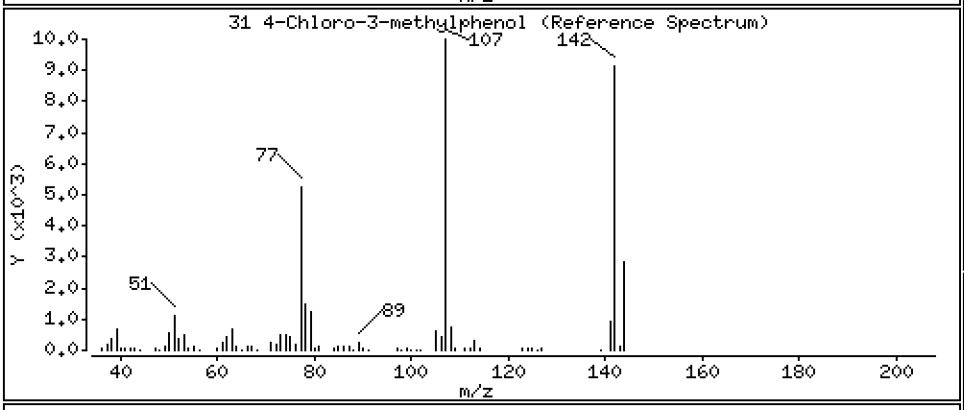
Concentration: 15.71 ug/mL

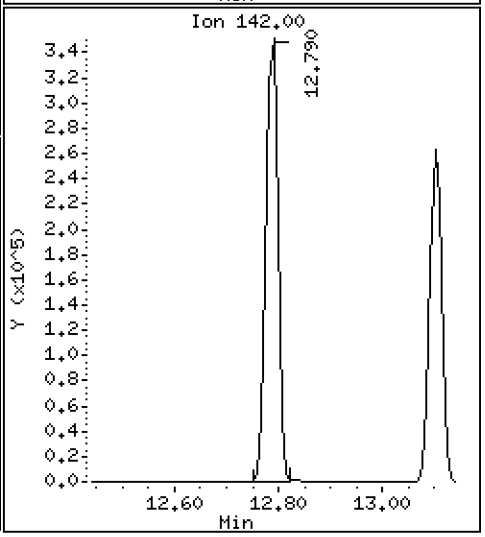


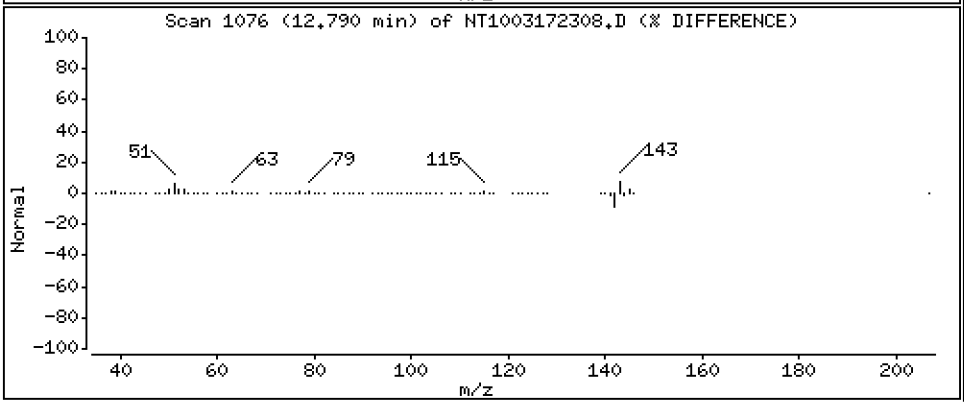












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

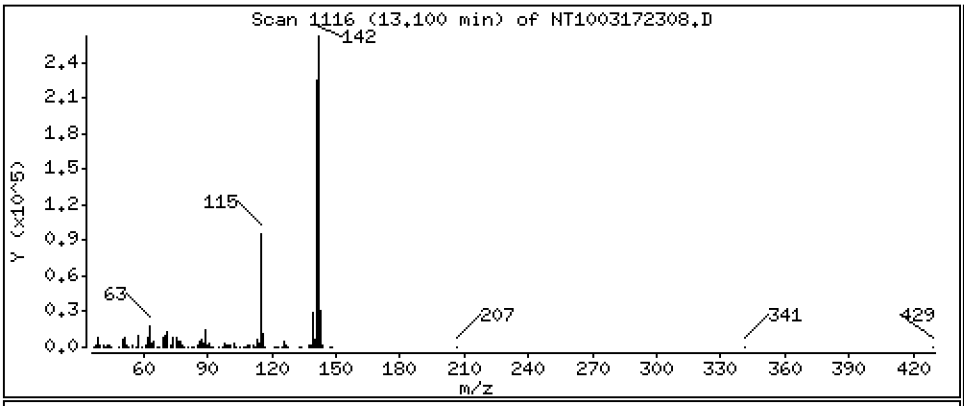
Operator: VTS

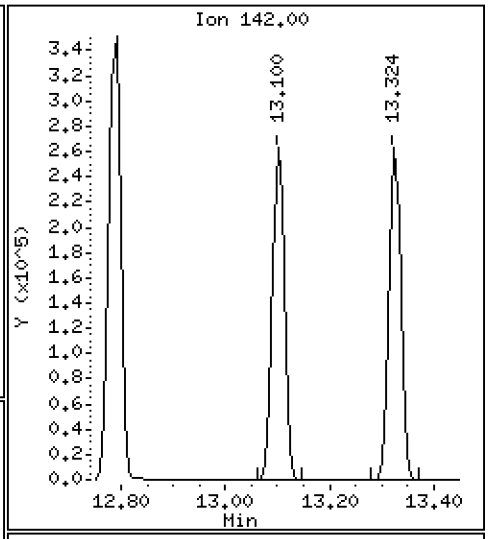
Column phase: ZB-5msi

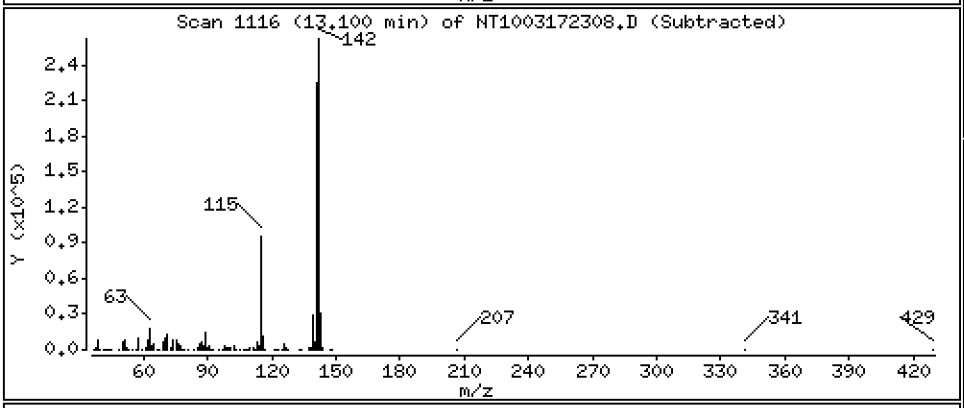
Column diameter: 0.25

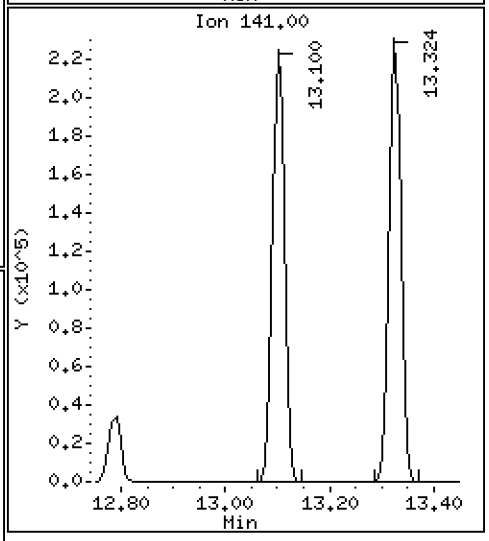
32 2-Methylnaphthalene

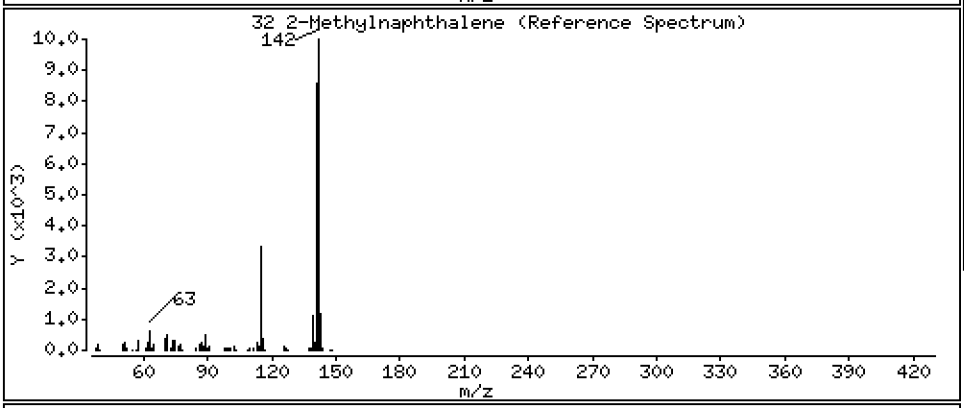
Concentration: 3.964 ug/mL

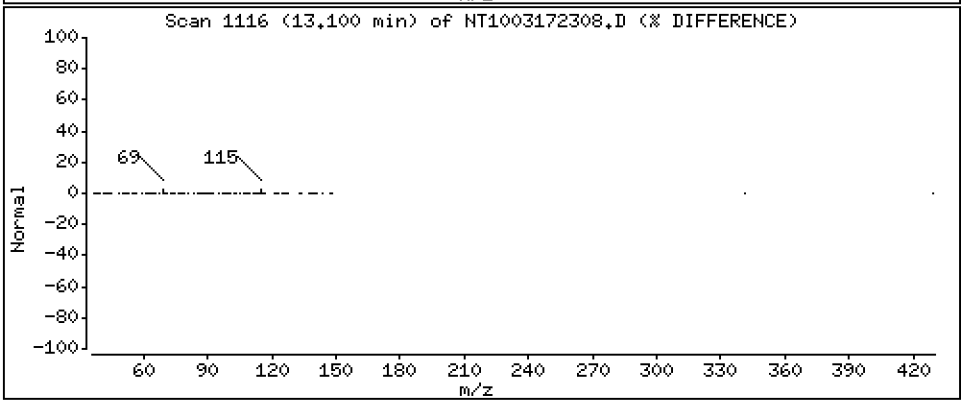












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

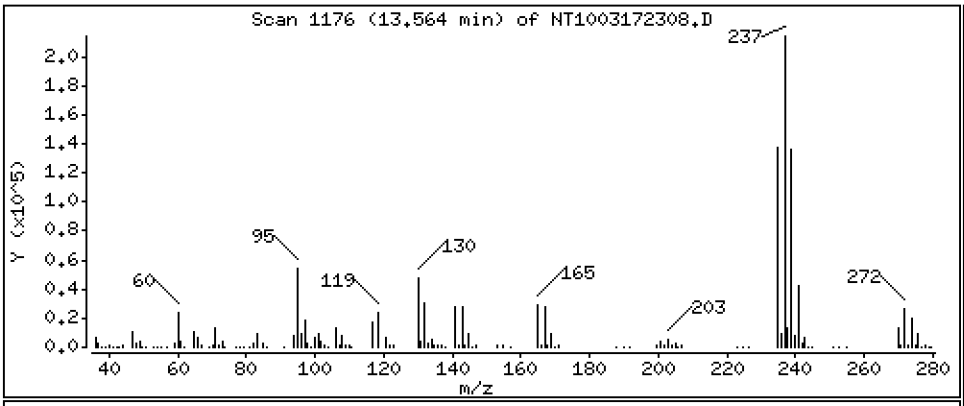
Operator: VTS

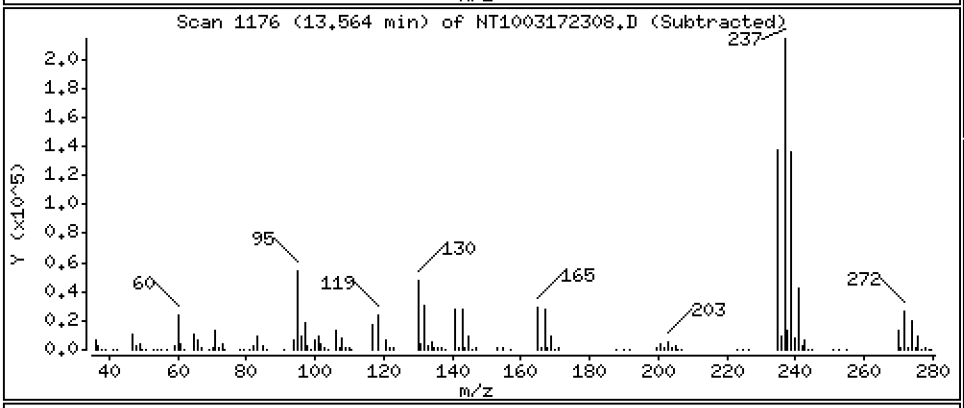
Column phase: ZB-5msi

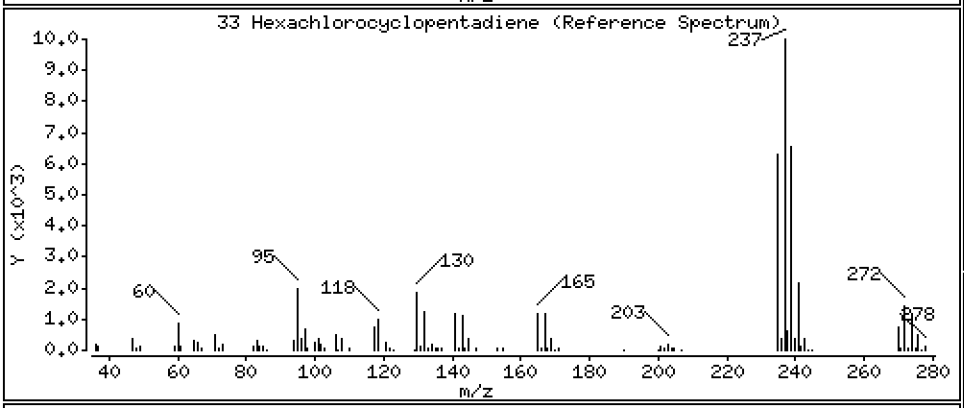
Column diameter: 0.25

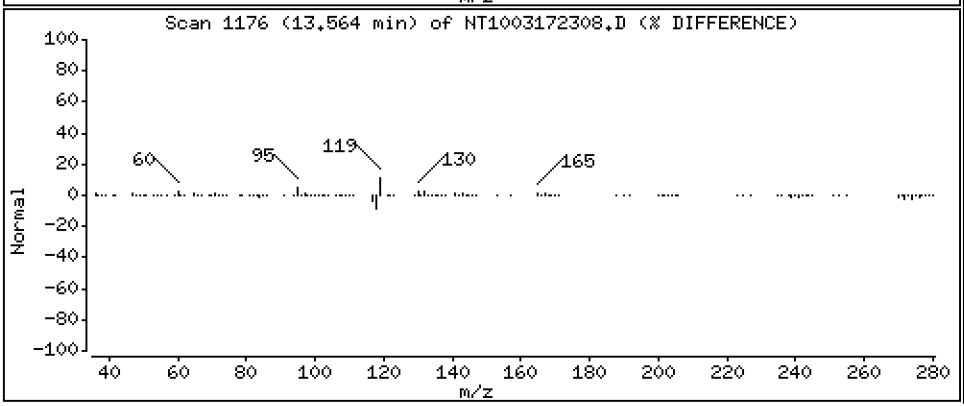
33 Hexachlorocyclopentadiene

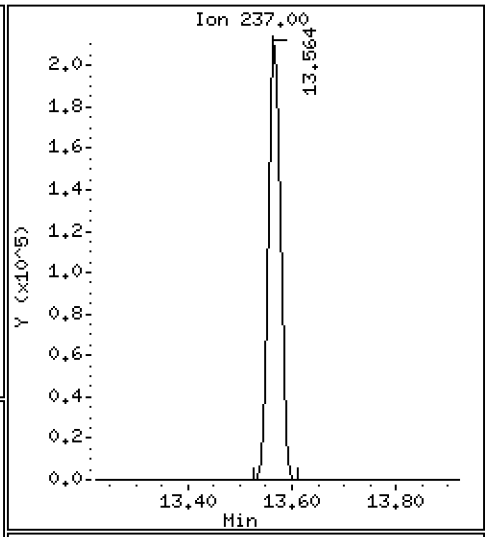
Concentration: 12.40 ug/mL

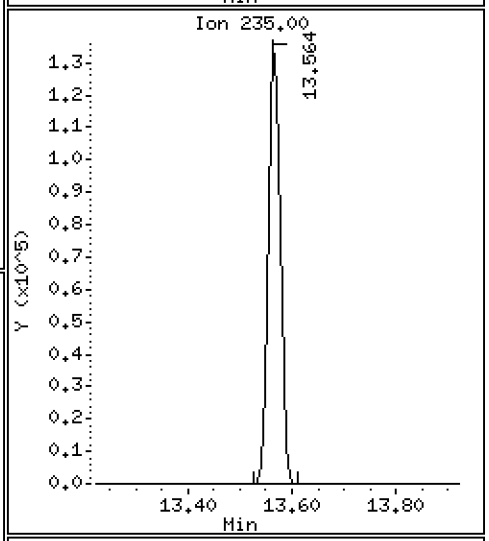


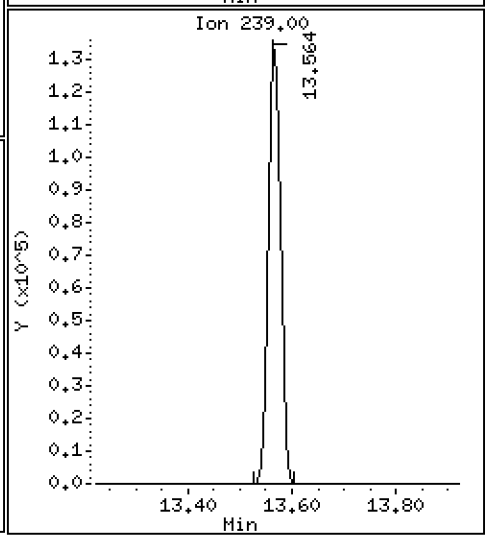












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

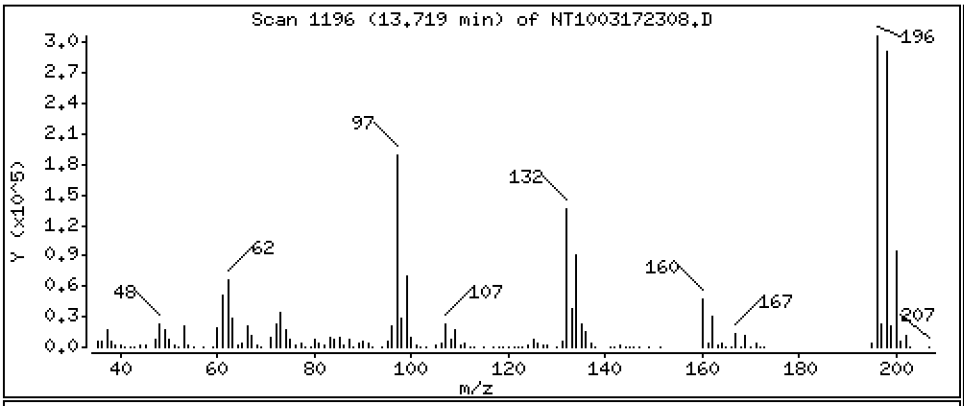
Operator: VTS

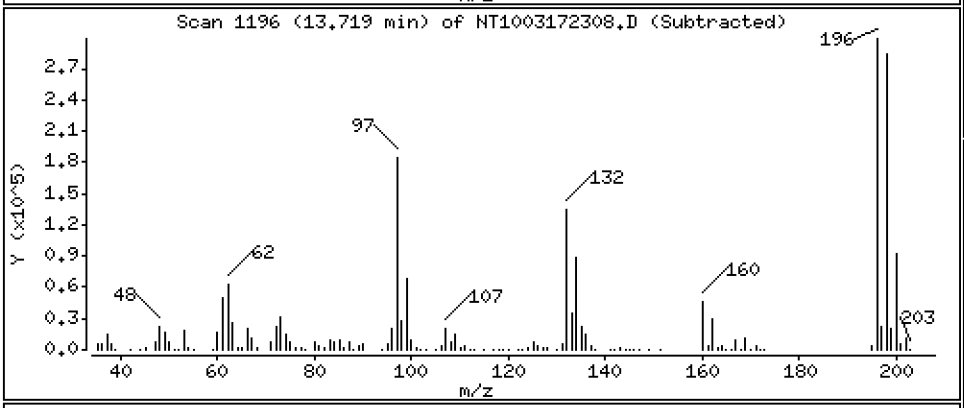
Column phase: ZB-5msi

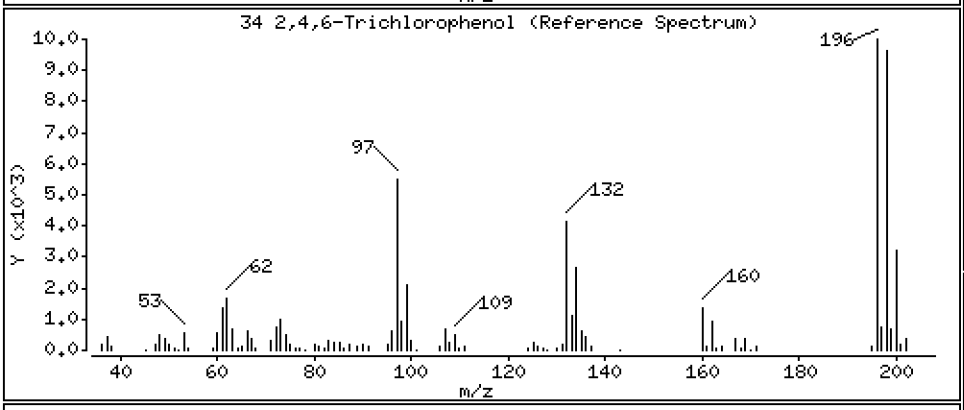
Column diameter: 0.25

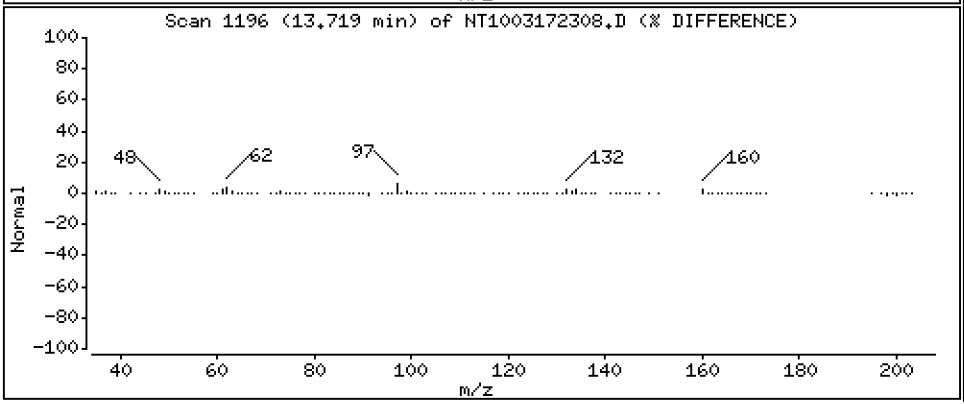
34 2,4,6-Trichlorophenol

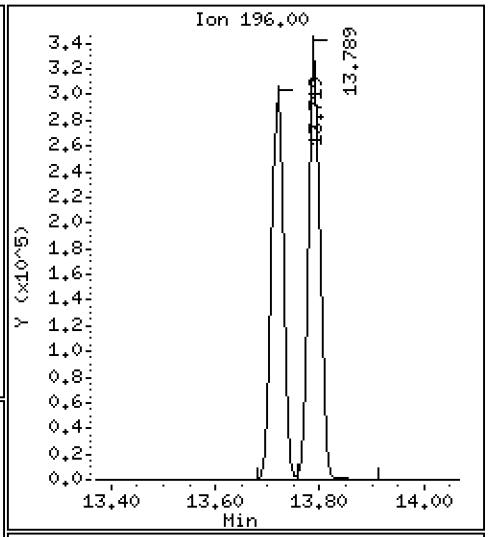
Concentration: 16.00 ug/mL

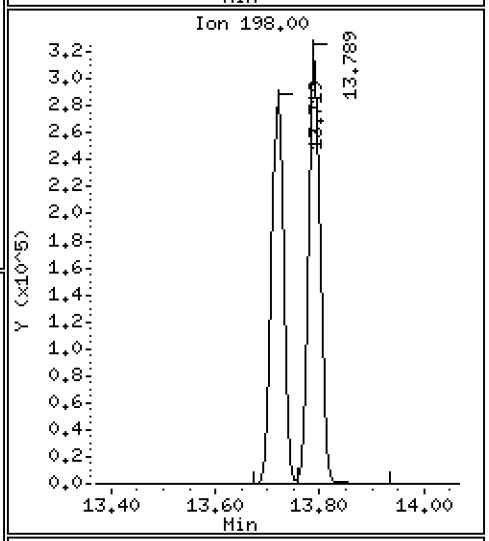


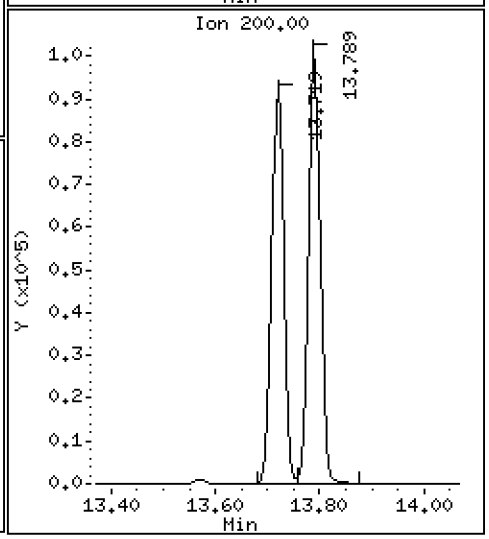












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

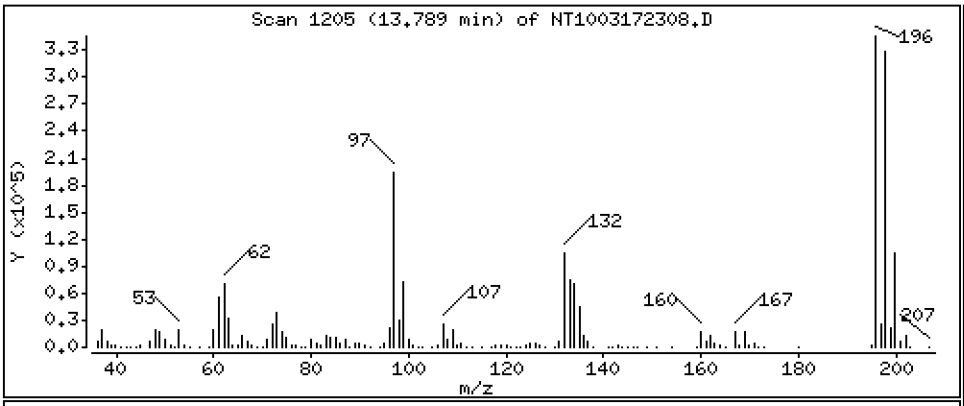
Operator: VTS

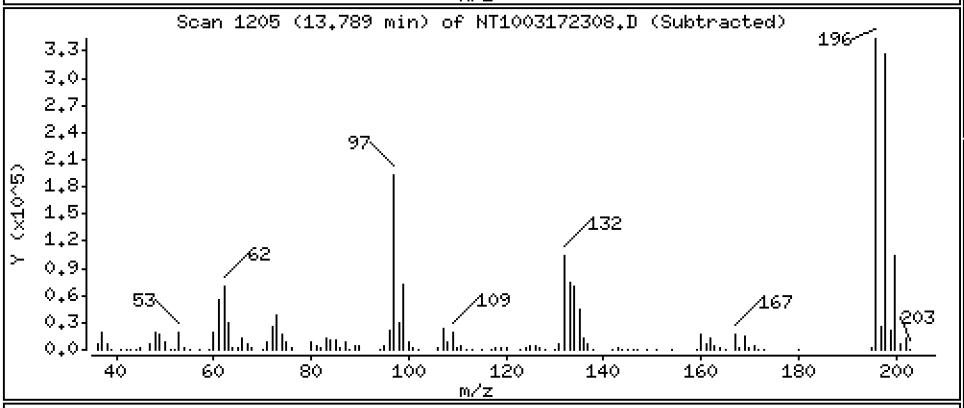
Column phase: ZB-5msi

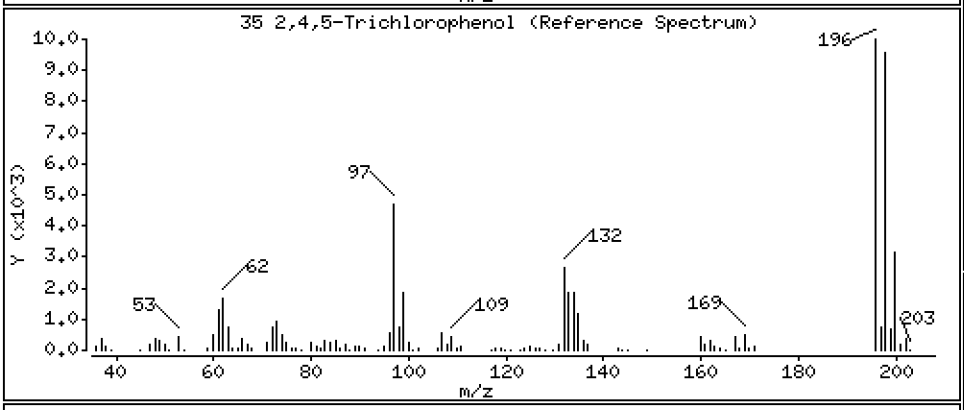
Column diameter: 0.25

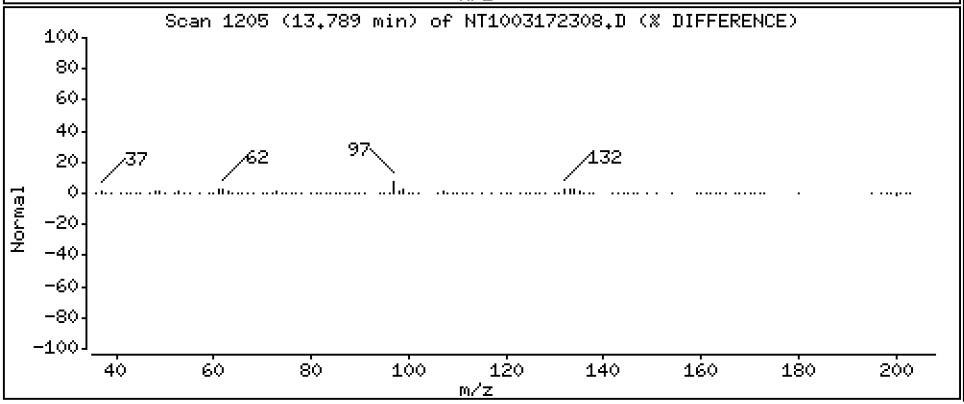
35 2,4,5-Trichlorophenol

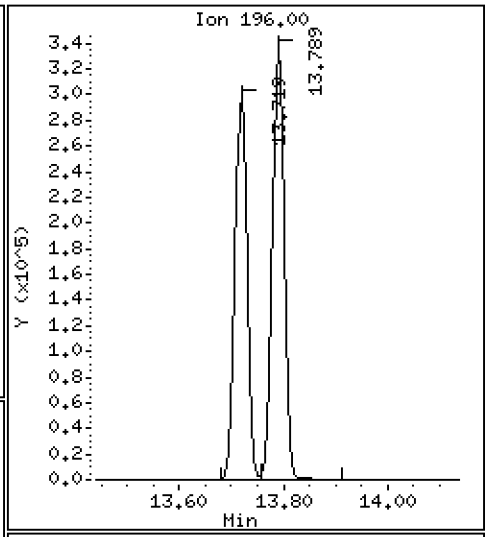
Concentration: 15.81 ug/mL

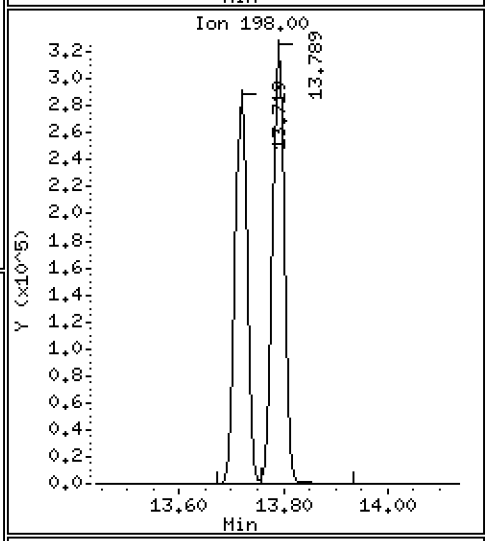


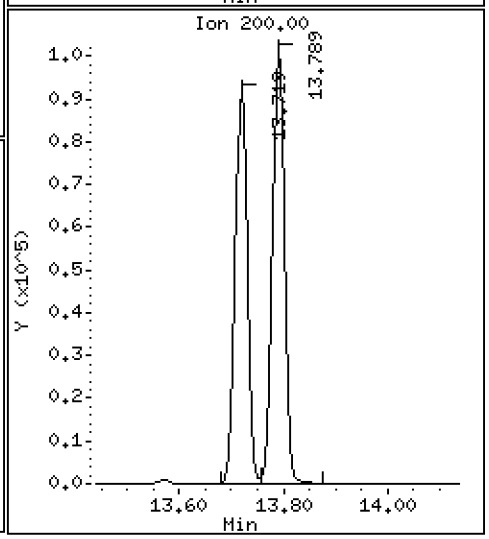












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

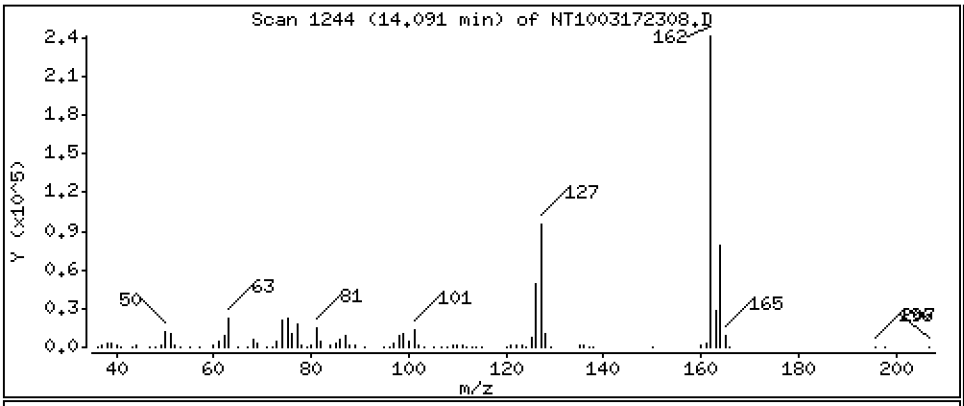
Operator: VTS

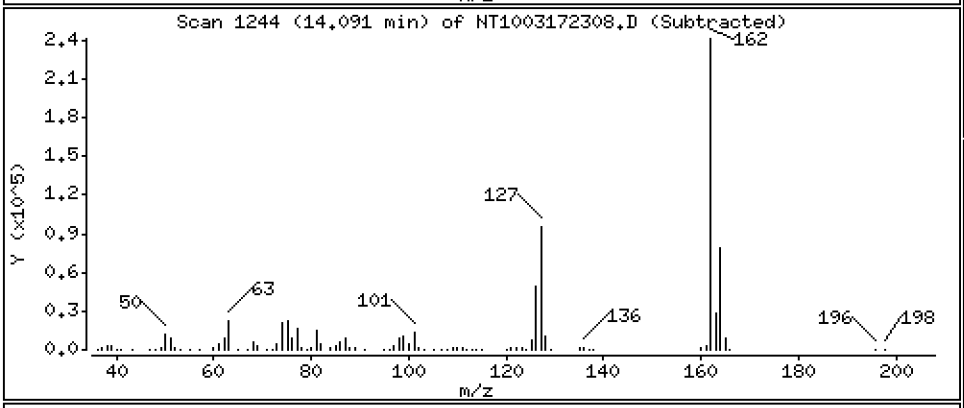
Column phase: ZB-5msi

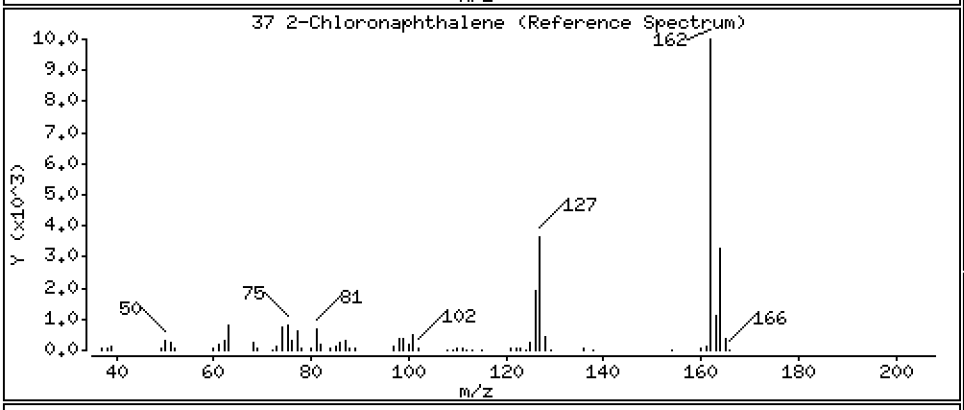
Column diameter: 0.25

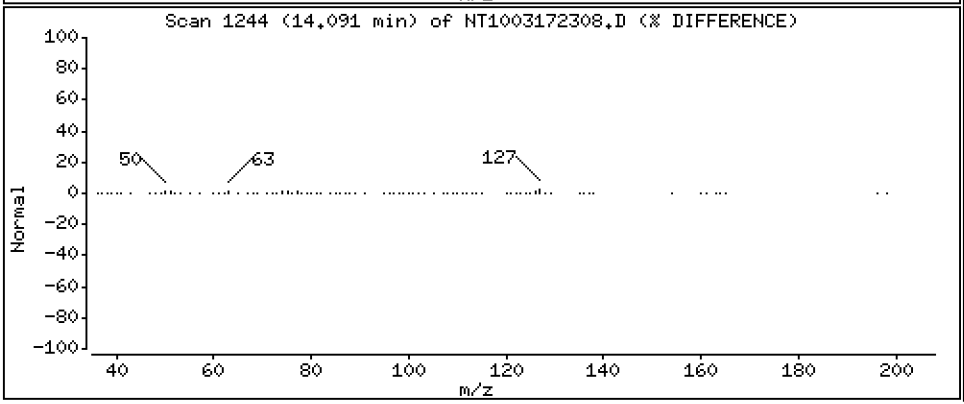
37 2-Chloronaphthalene

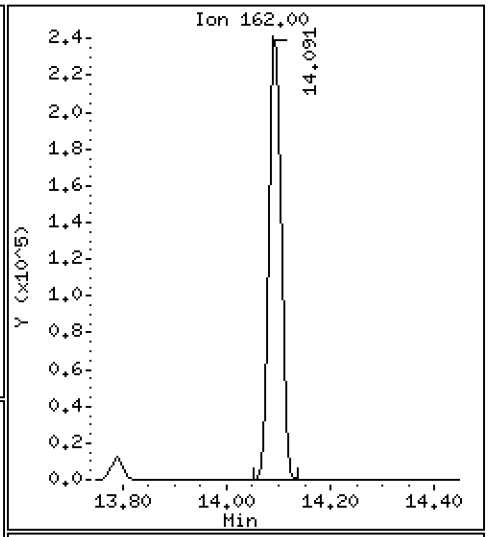
Concentration: 4.092 ug/mL

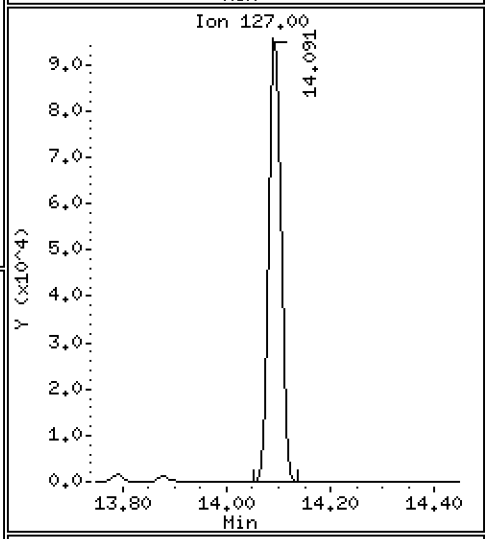


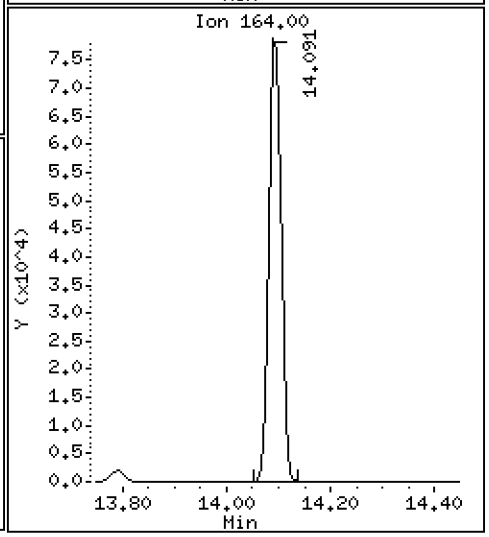












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

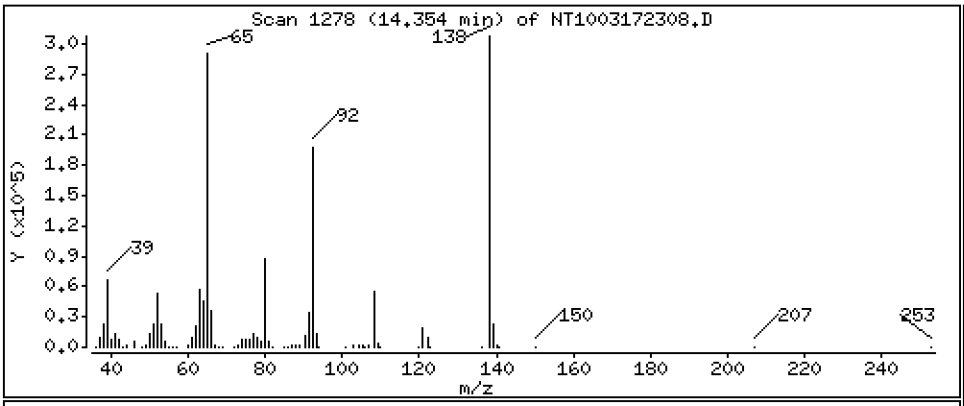
Operator: VTS

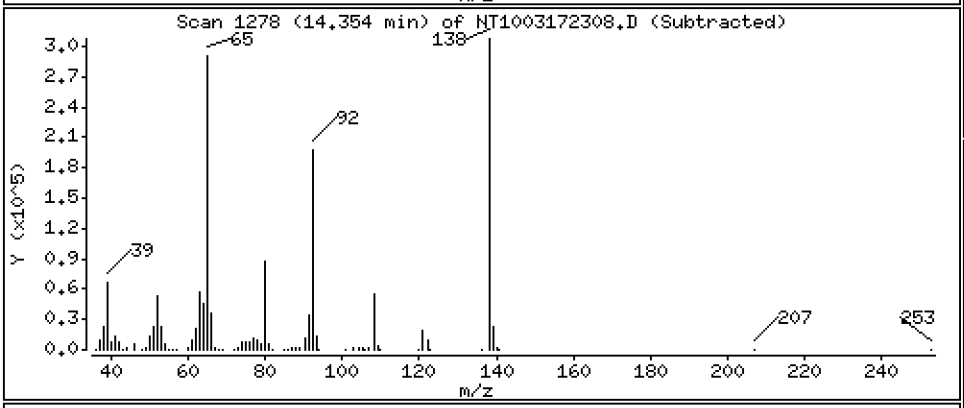
Column phase: ZB-5msi

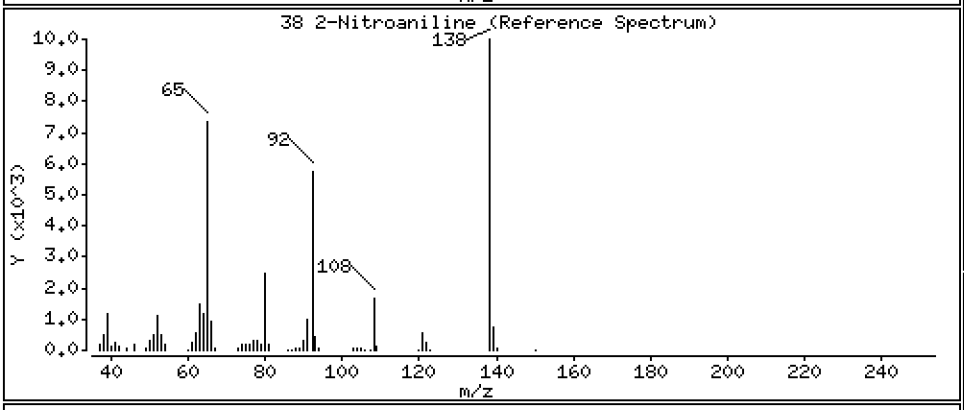
Column diameter: 0.25

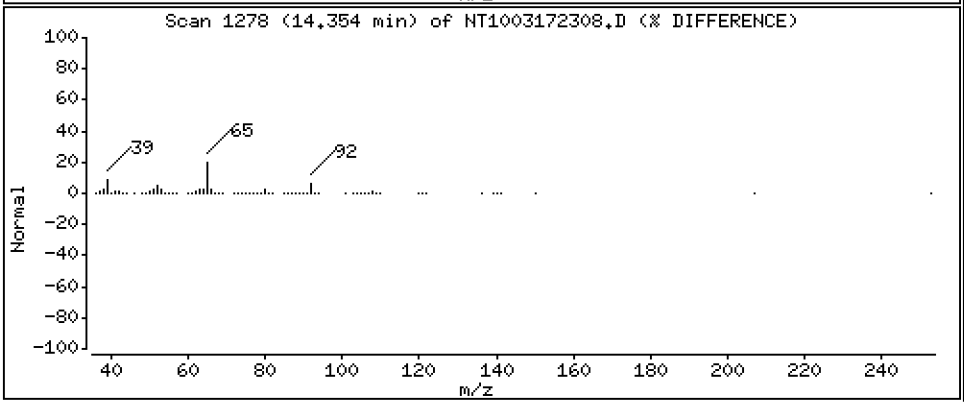
38 2-Nitroaniline

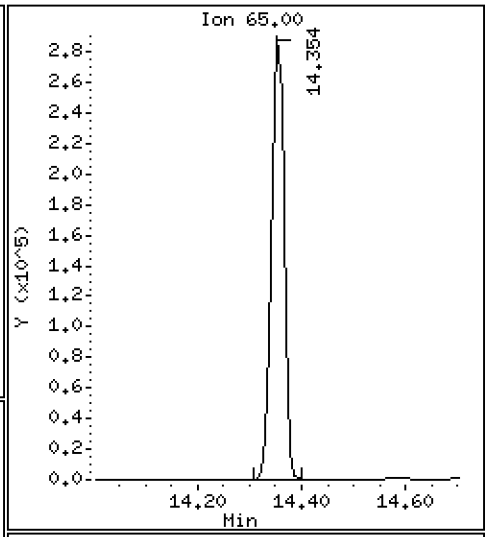
Concentration: 17.56 ug/mL

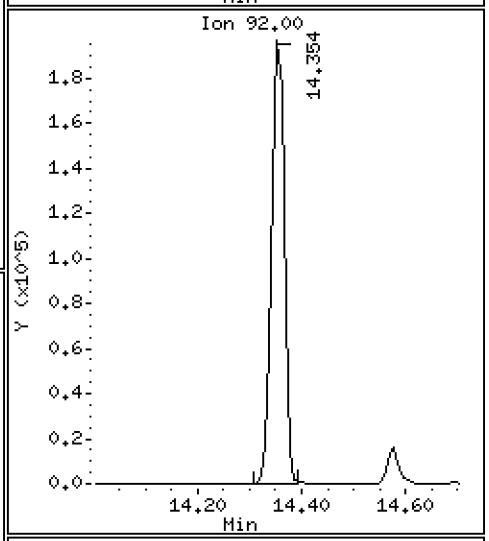


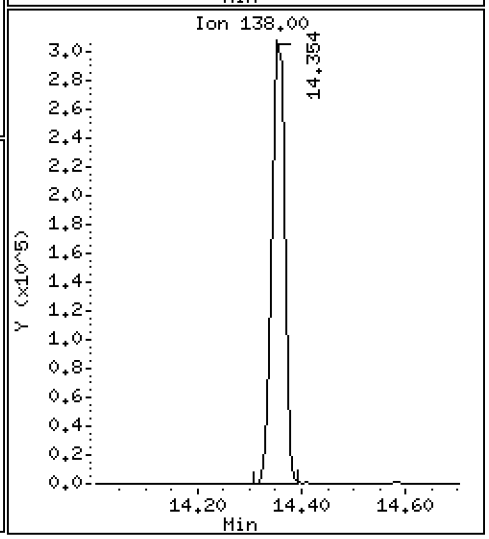












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

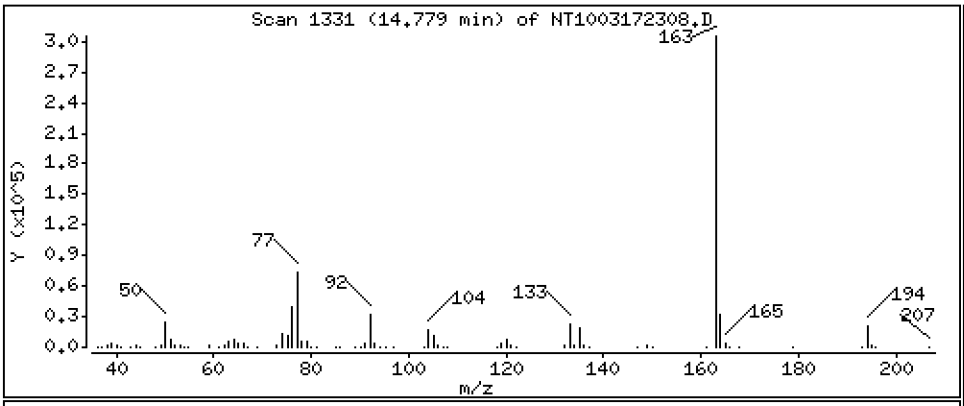
Operator: VTS

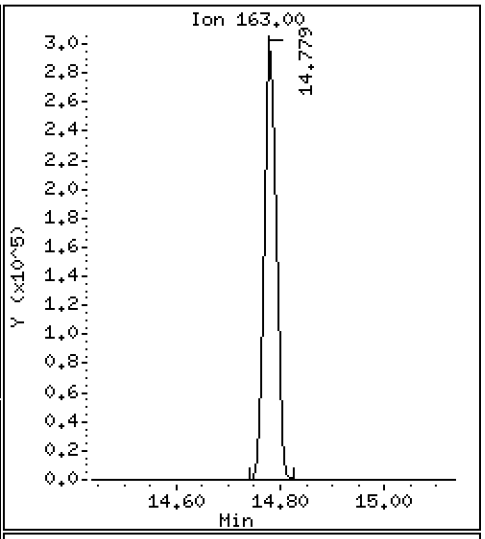
Column phase: ZB-5msi

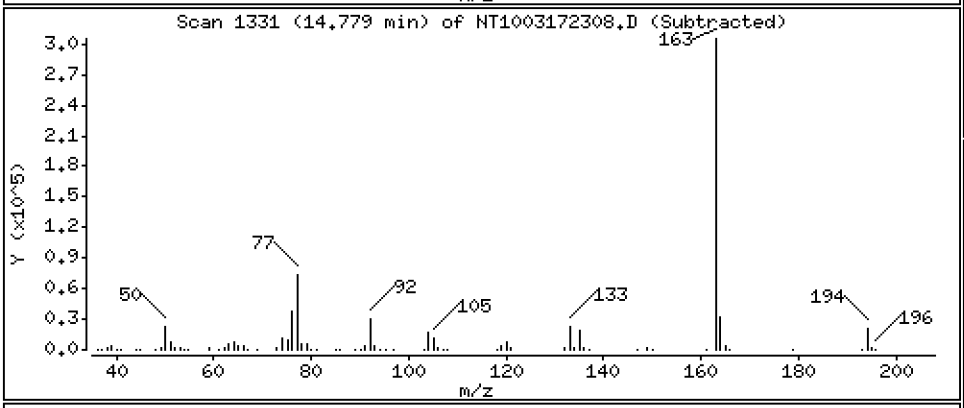
Column diameter: 0.25

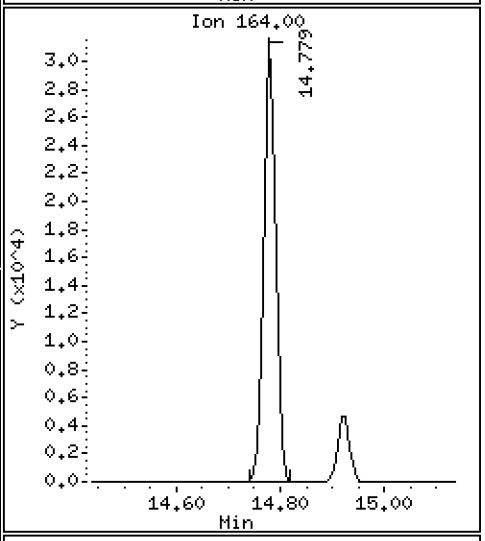
39 Dimethylphthalate

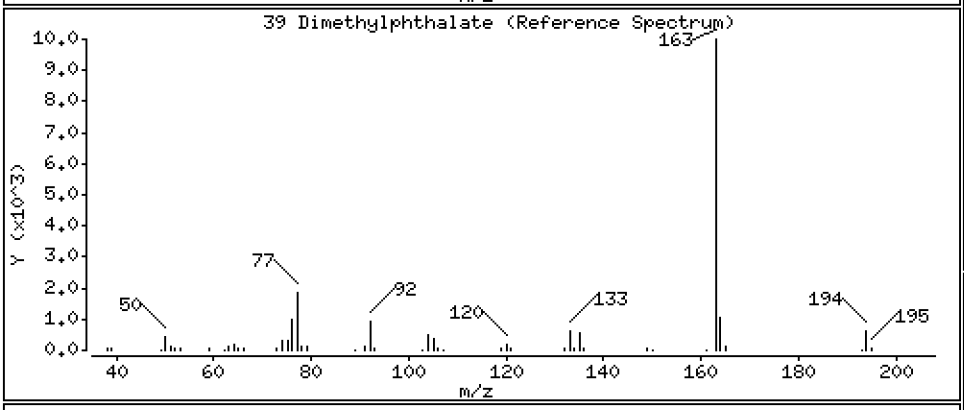
Concentration: 4.940 ug/mL

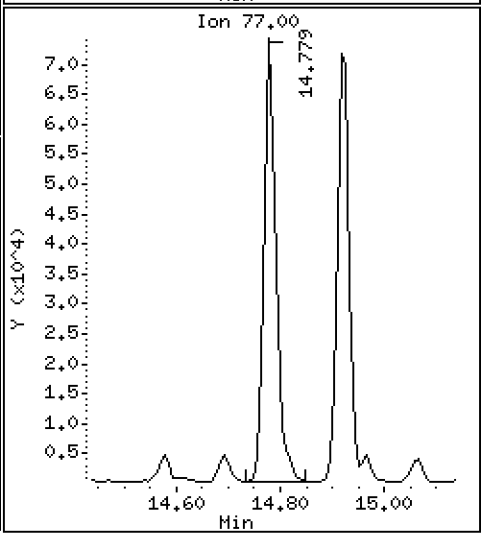


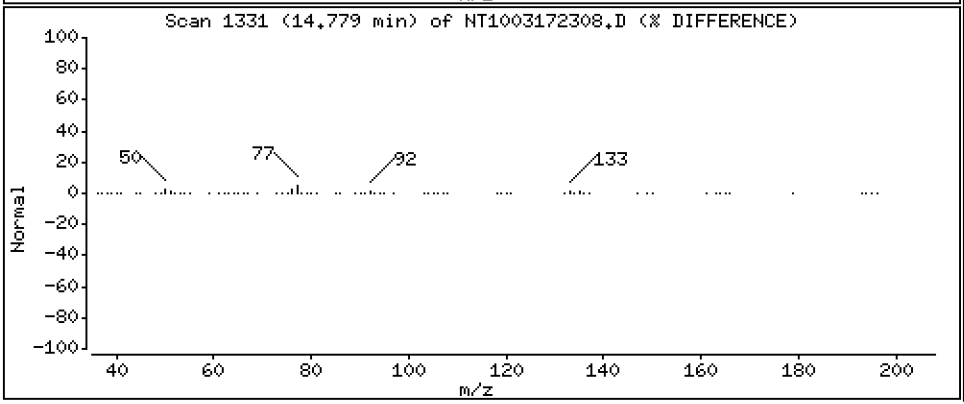












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

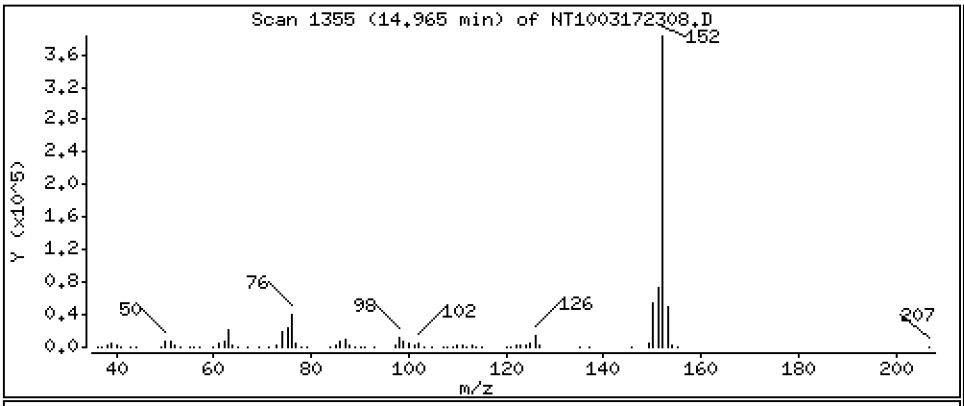
Operator: VTS

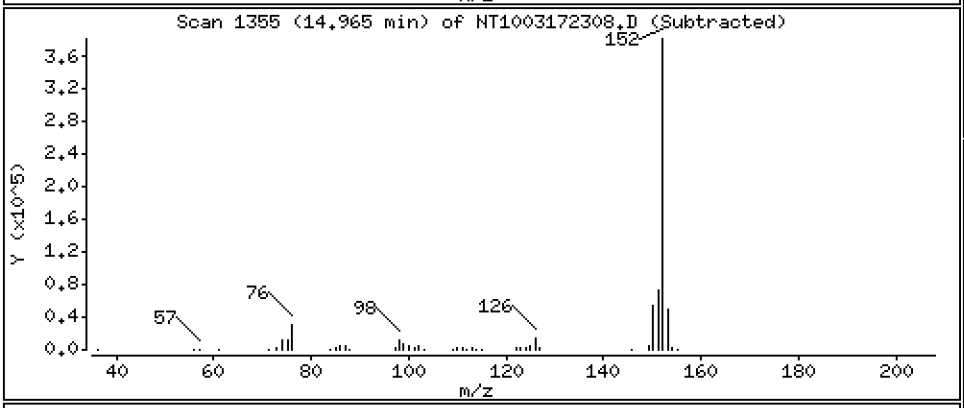
Column phase: ZB-5msi

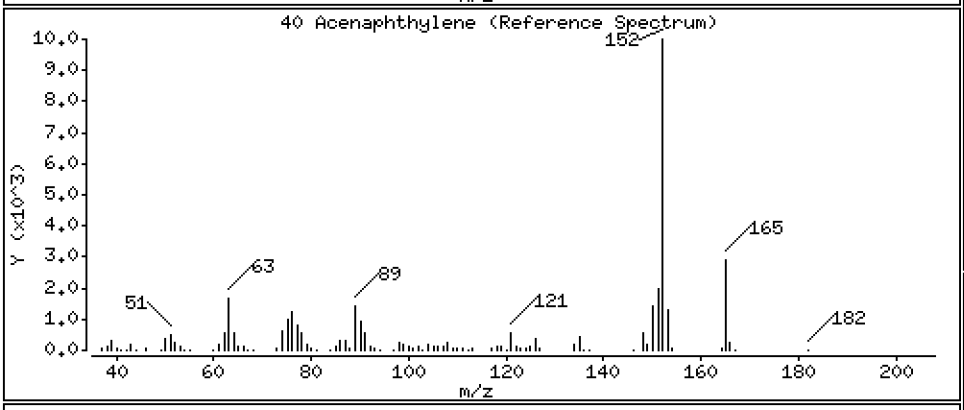
Column diameter: 0.25

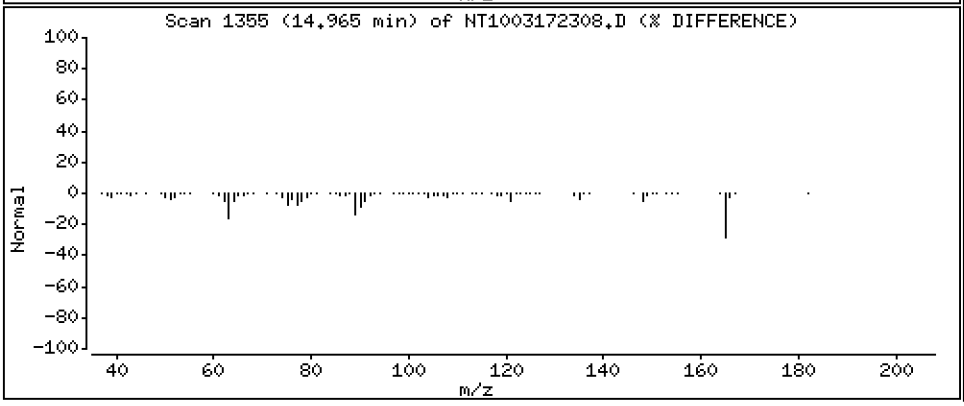
40 Acenaphthylene

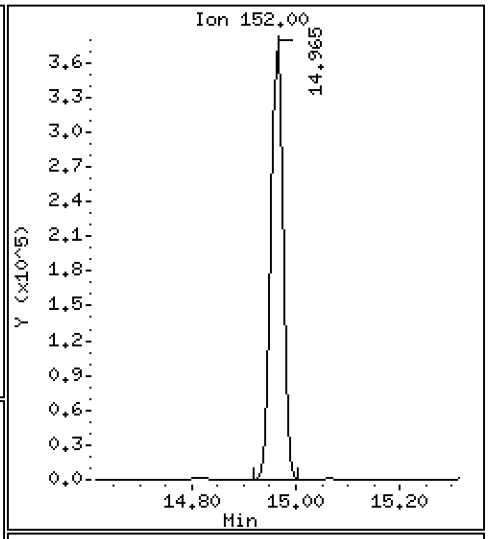
Concentration: 3.991 ug/mL

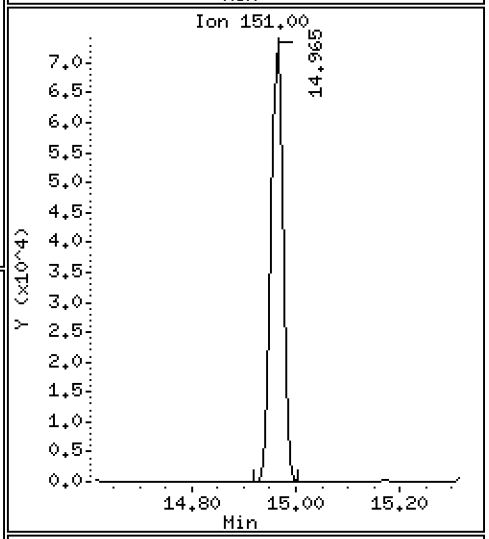


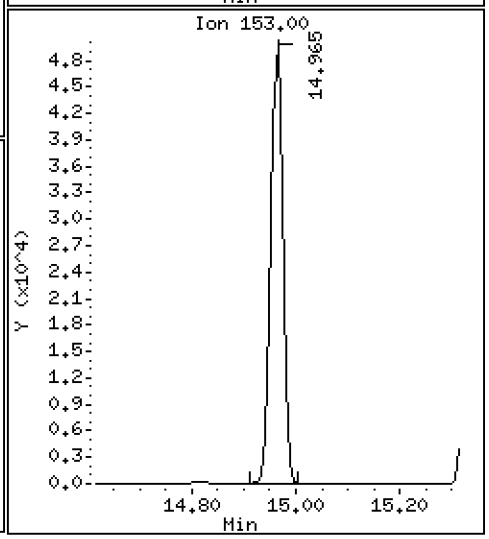












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

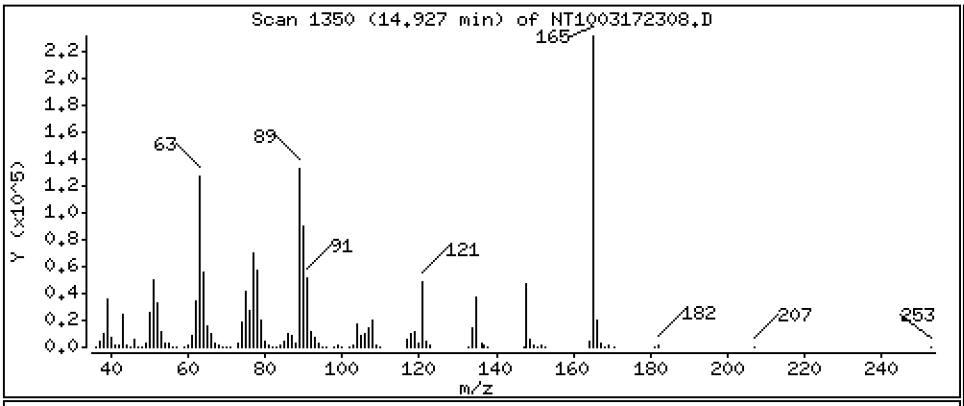
Operator: VTS

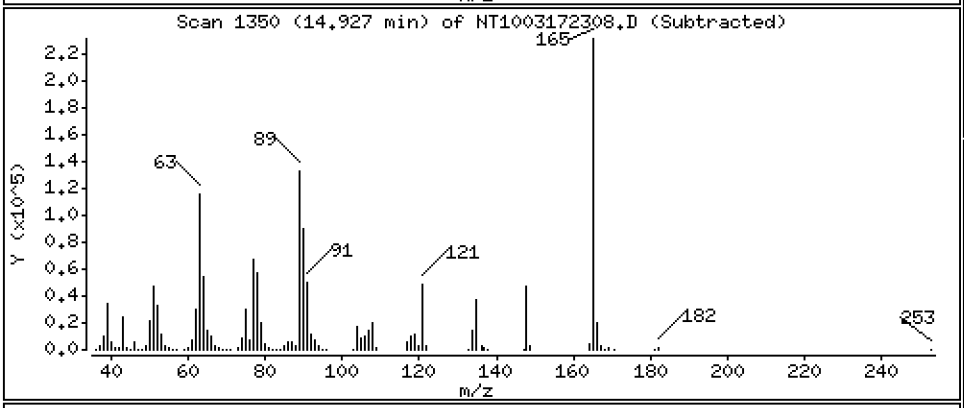
Column phase: ZB-5msi

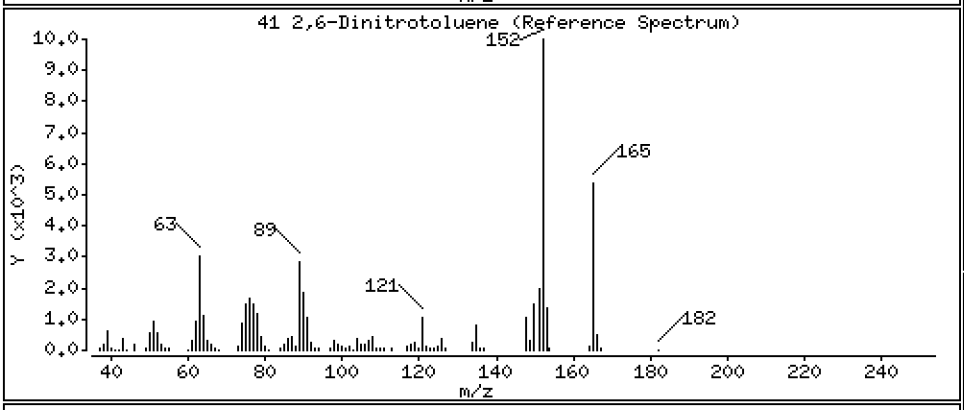
Column diameter: 0.25

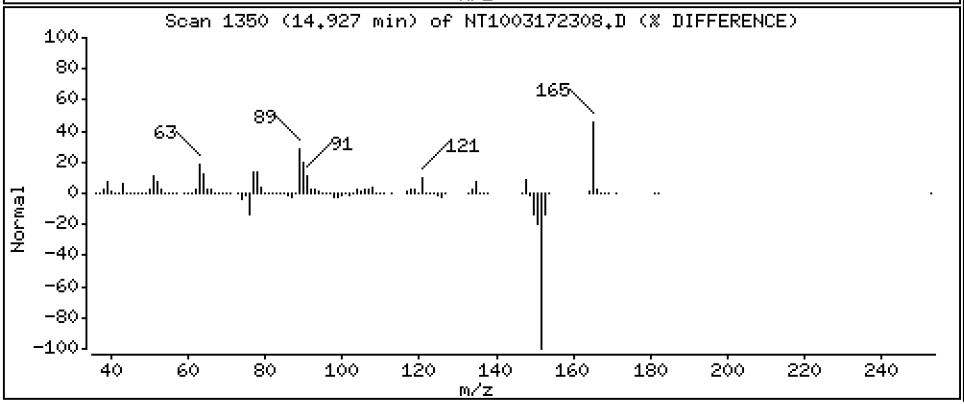
41 2,6-Dinitrotoluene

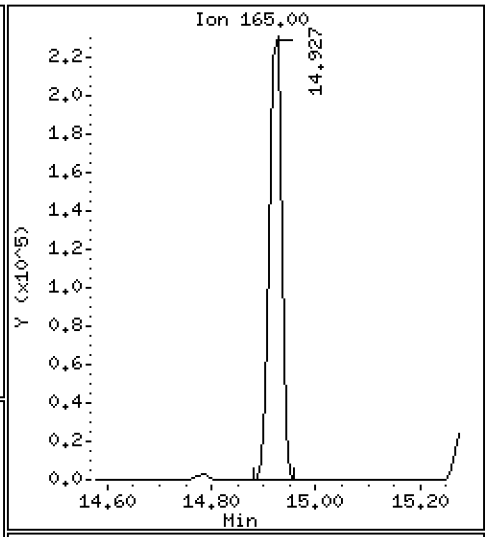
Concentration: 17.59 ug/mL

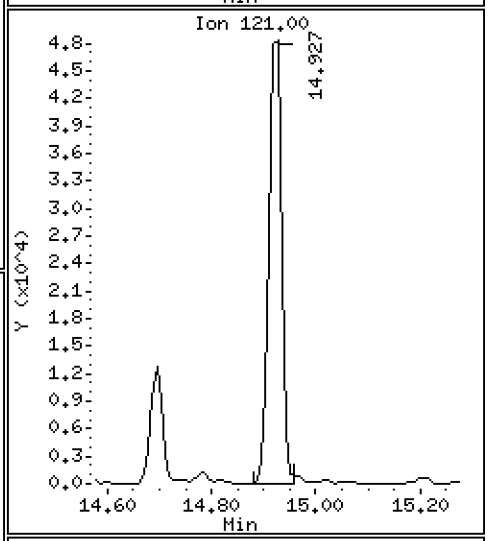


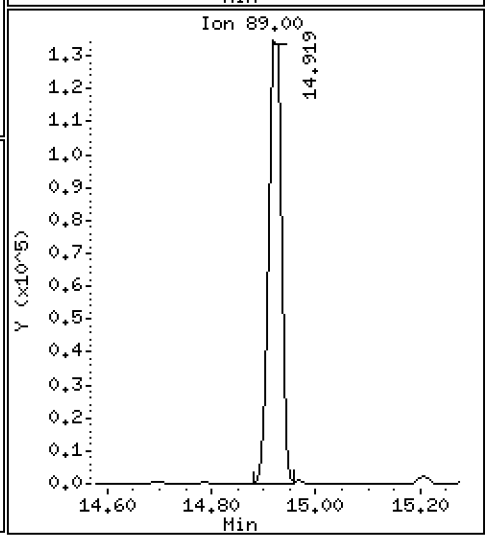












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

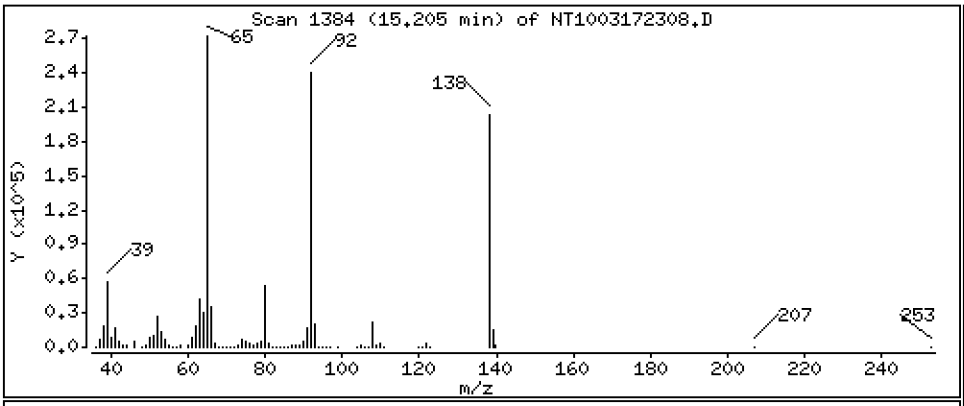
Operator: VTS

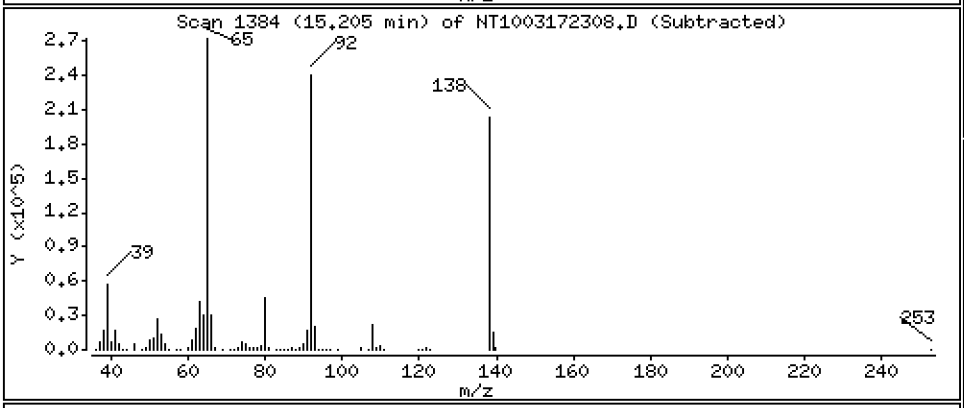
Column phase: ZB-5msi

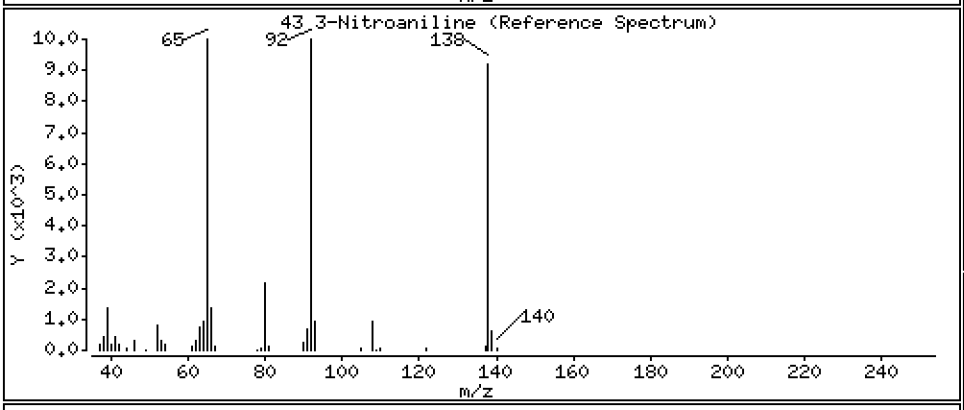
Column diameter: 0.25

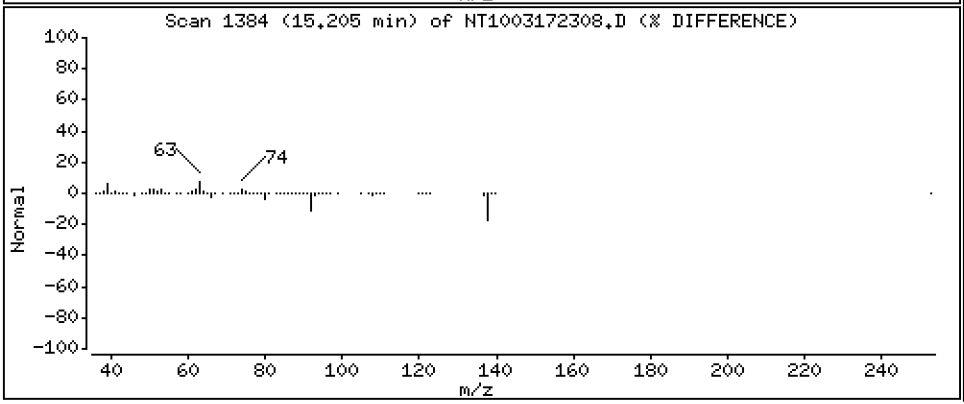
43 3-Nitroaniline

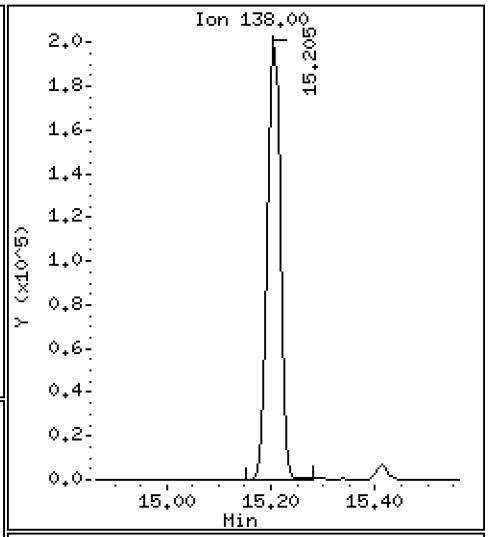
Concentration: 14.34 ug/mL

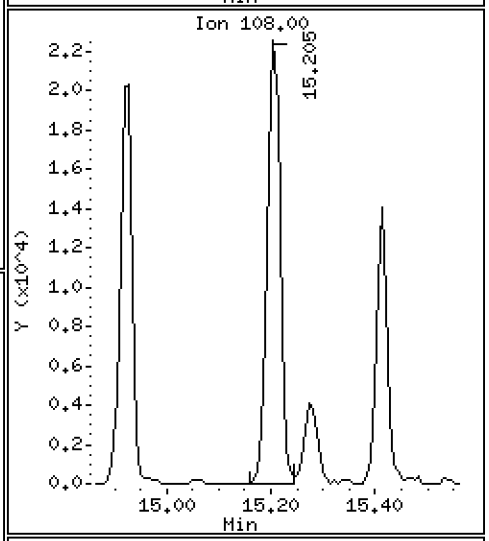


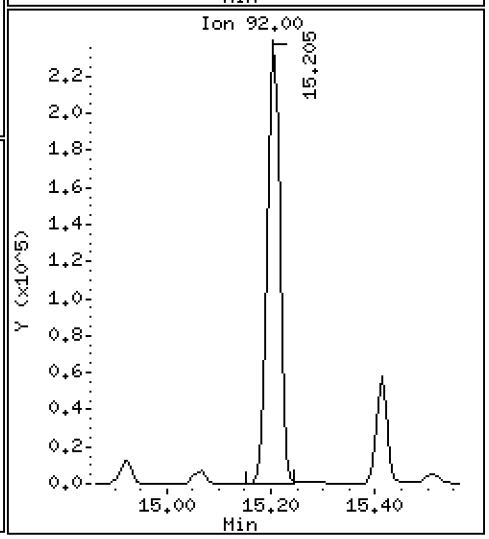












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

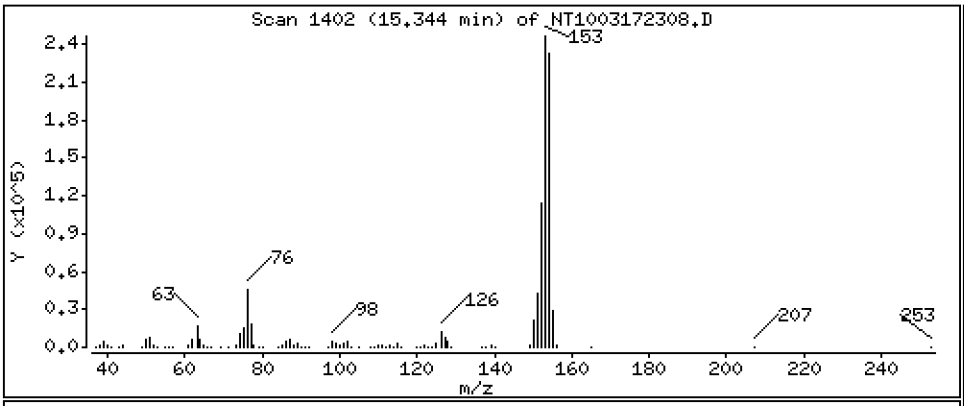
Operator: VTS

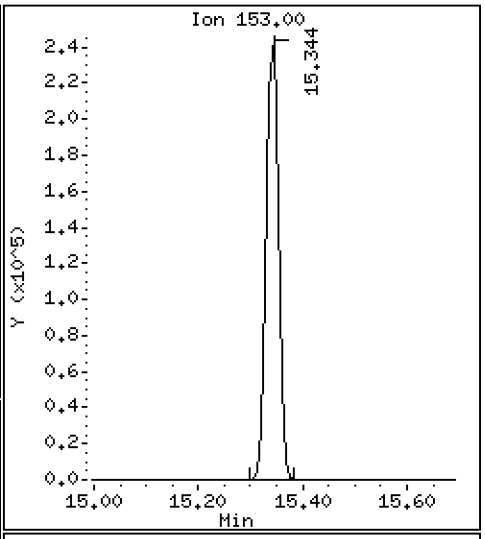
Column phase: ZB-5msi

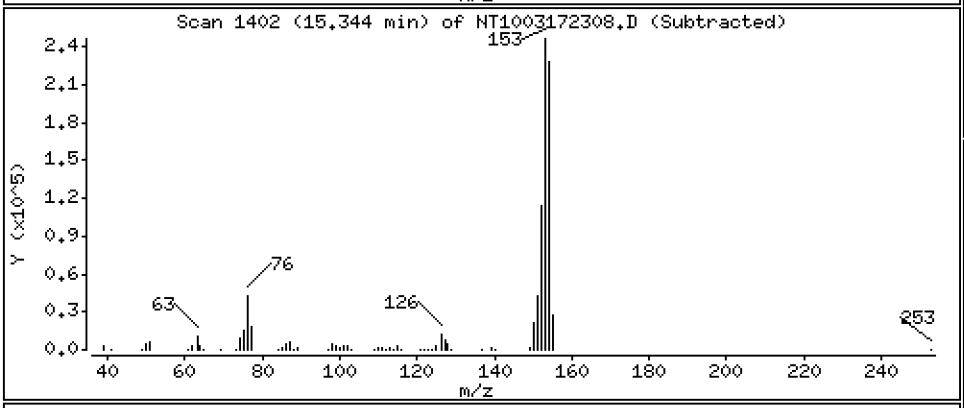
Column diameter: 0.25

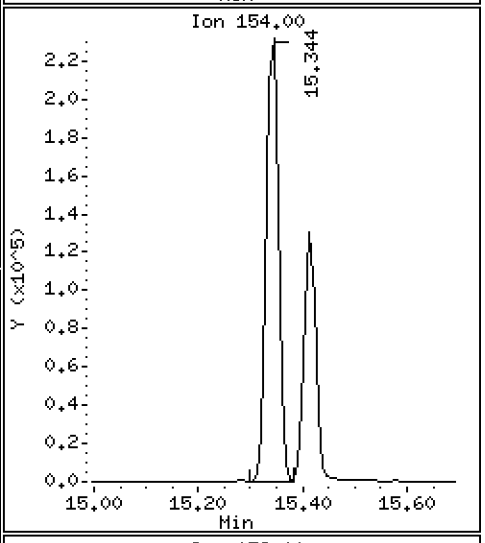
44 Acenaphthene

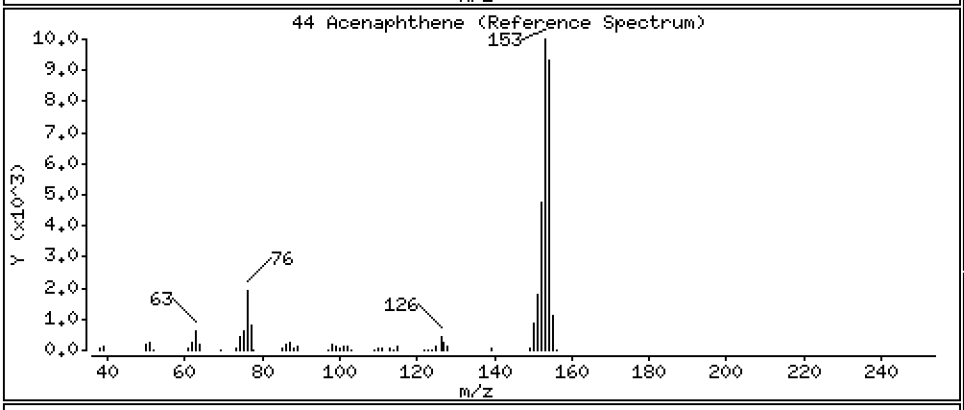
Concentration: 4.256 ug/mL

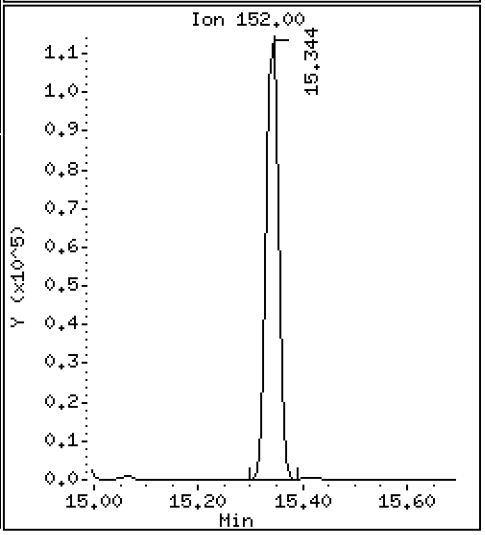


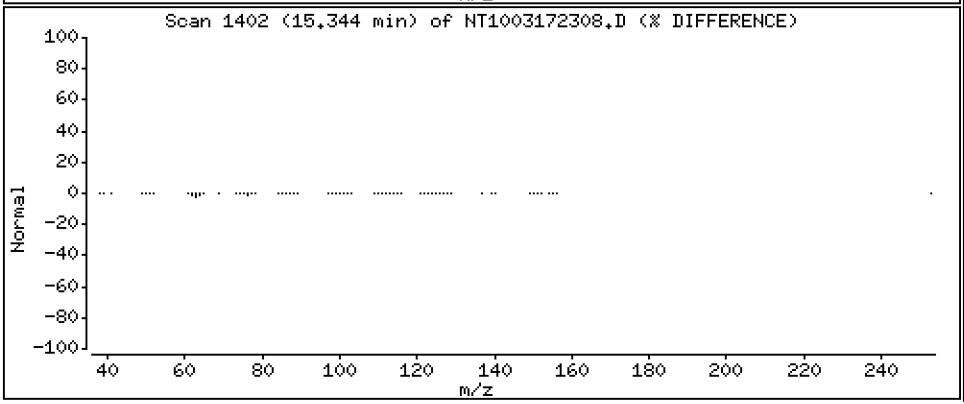












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

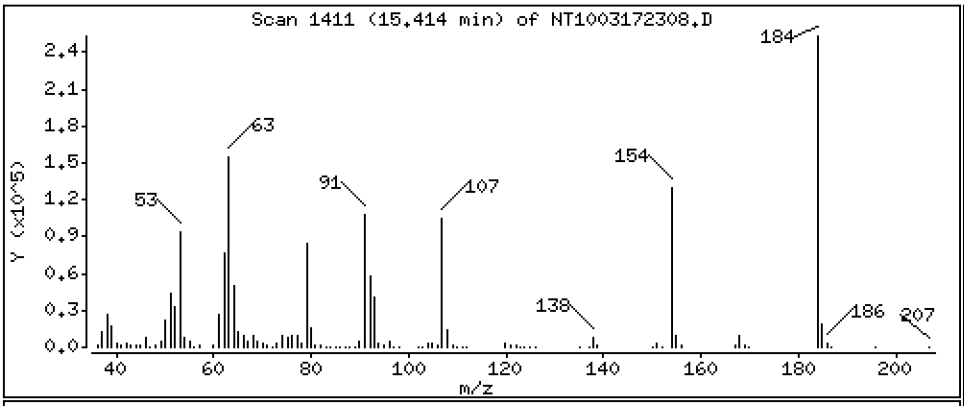
Operator: VTS

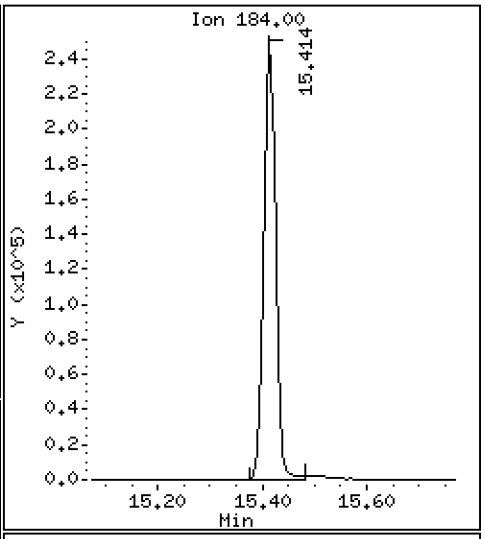
Column phase: ZB-5msi

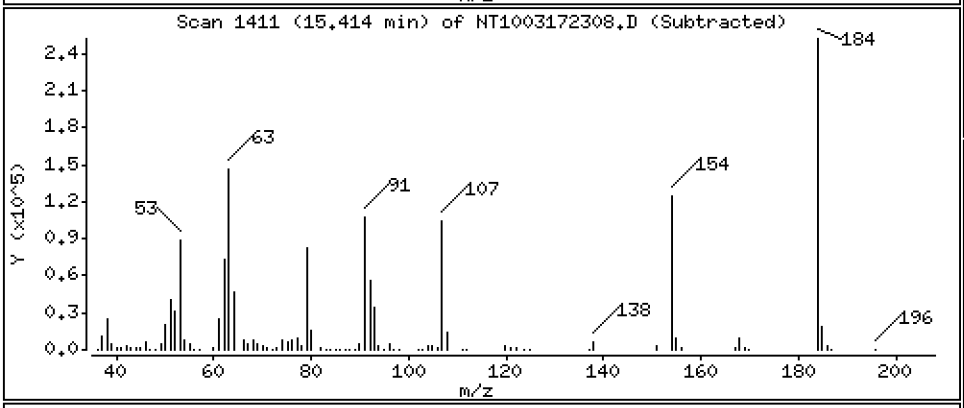
Column diameter: 0.25

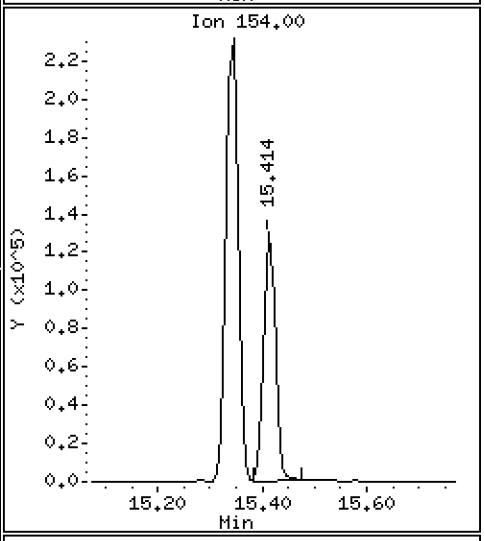
45 2,4-Dinitrophenol

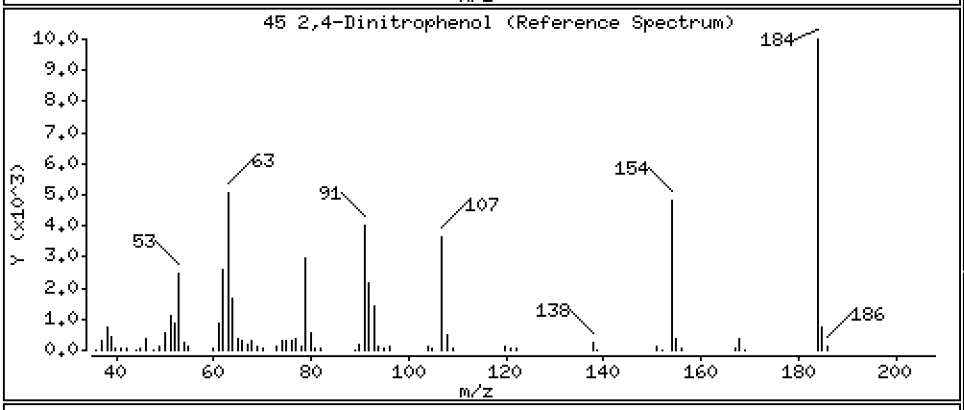
Concentration: 28.33 ug/mL

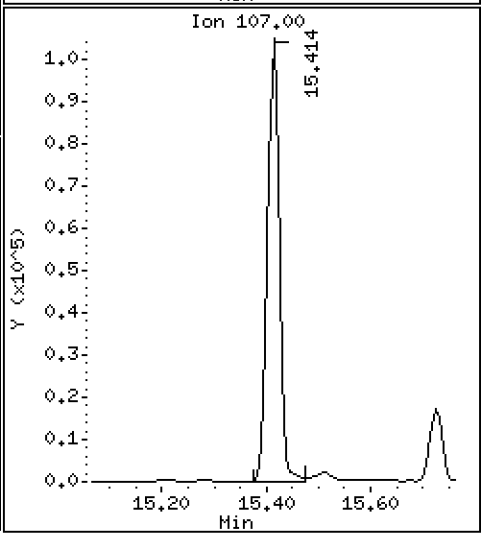


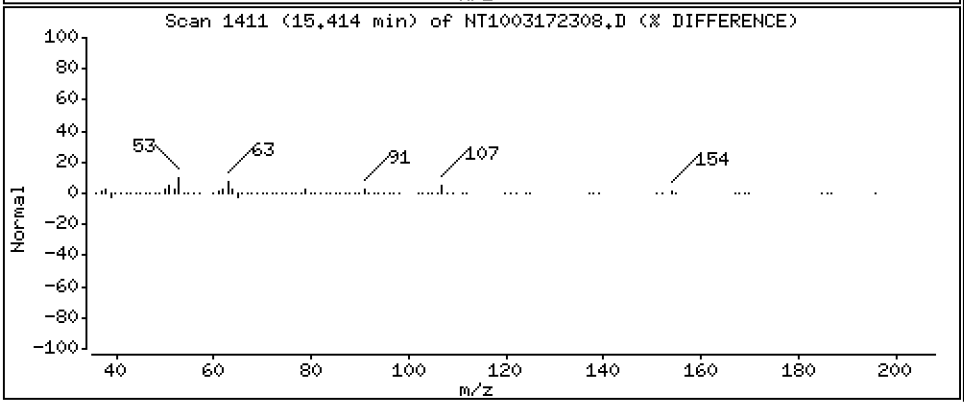












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

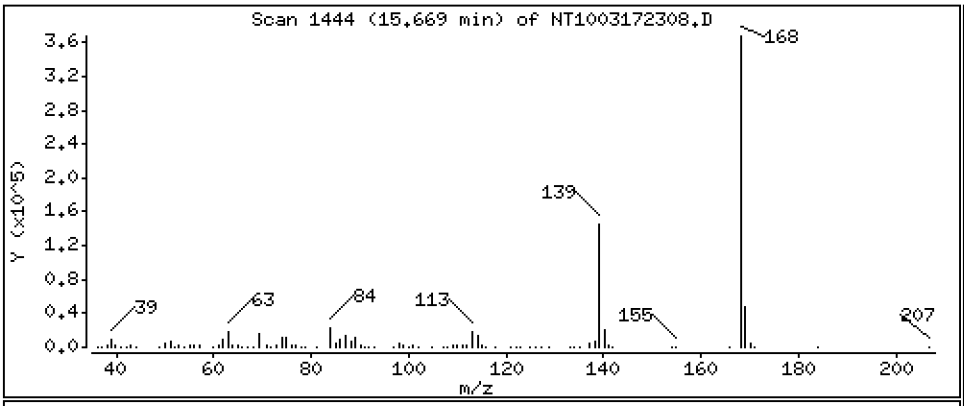
Operator: VTS

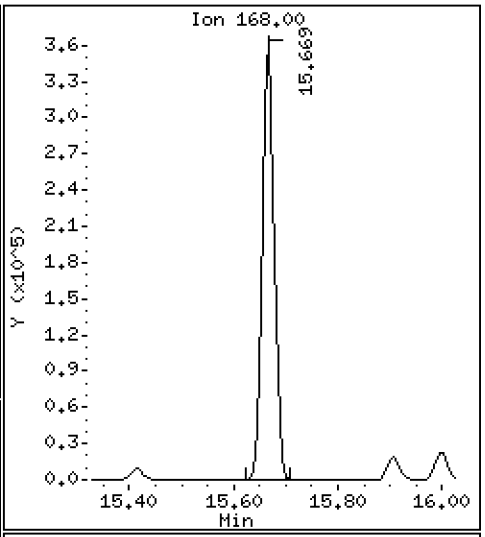
Column phase: ZB-5msi

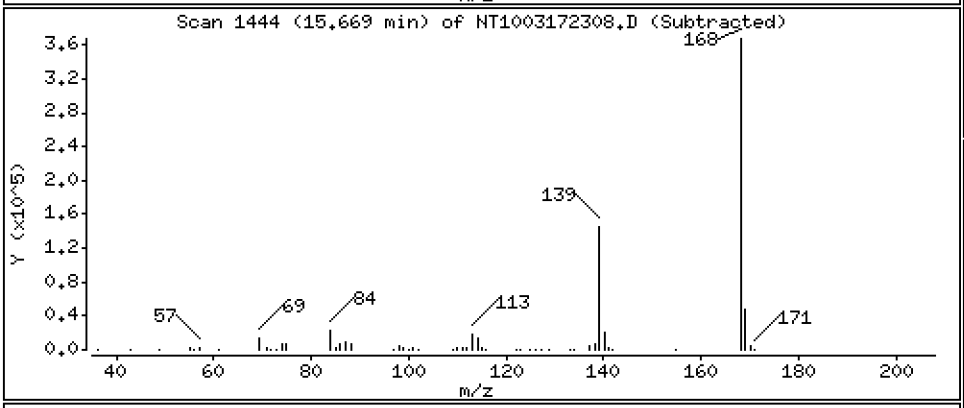
Column diameter: 0.25

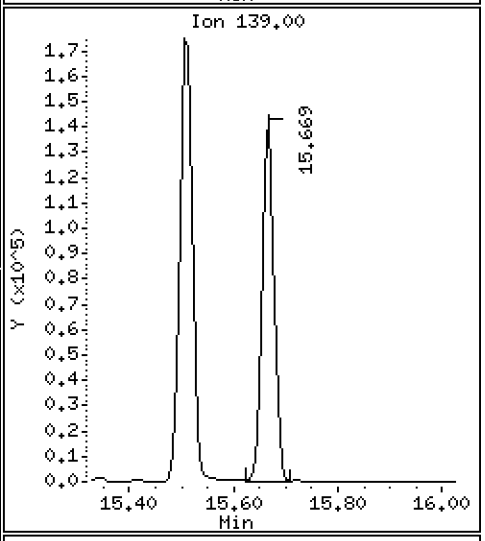
46 Dibenzofuran

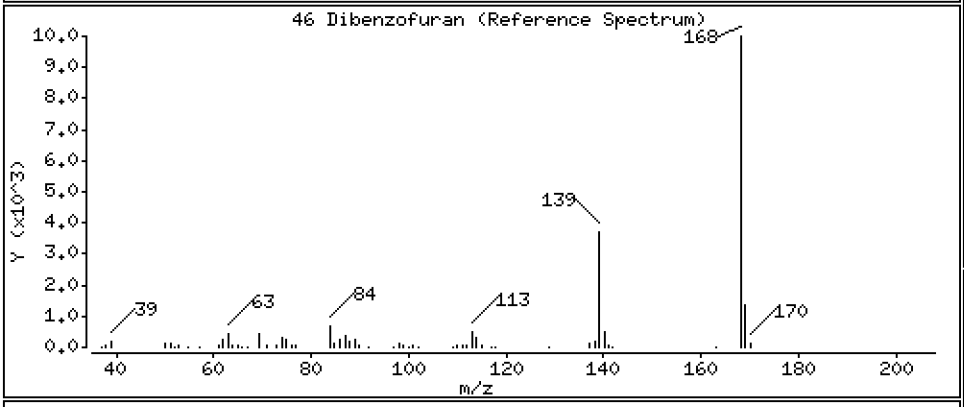
Concentration: 4.282 ug/mL

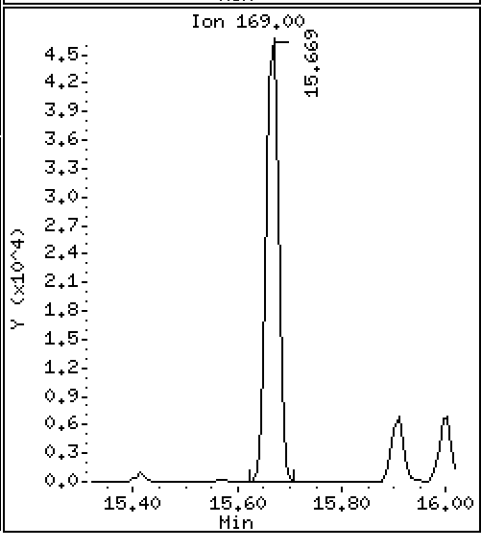


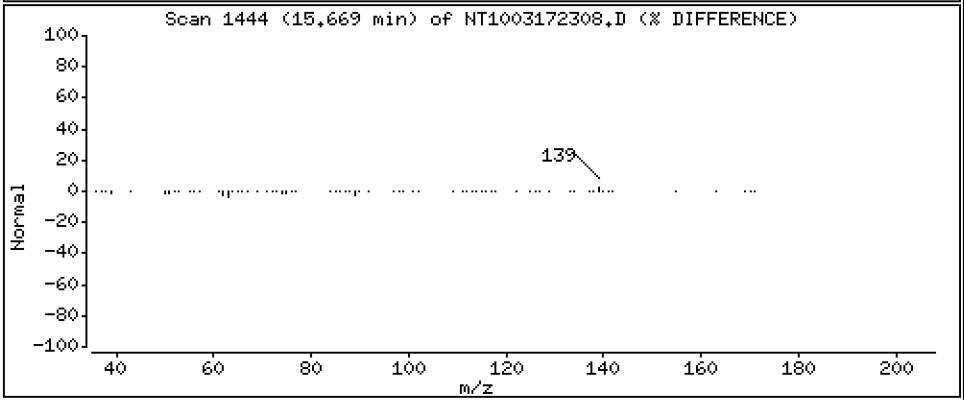












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

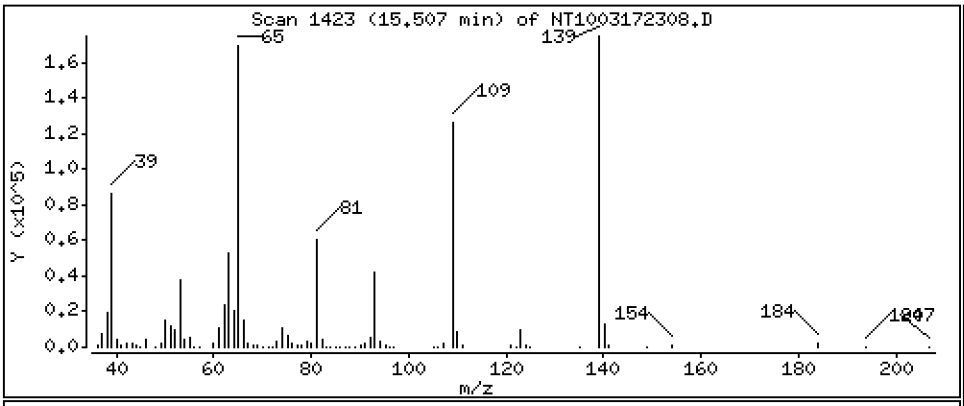
Operator: VTS

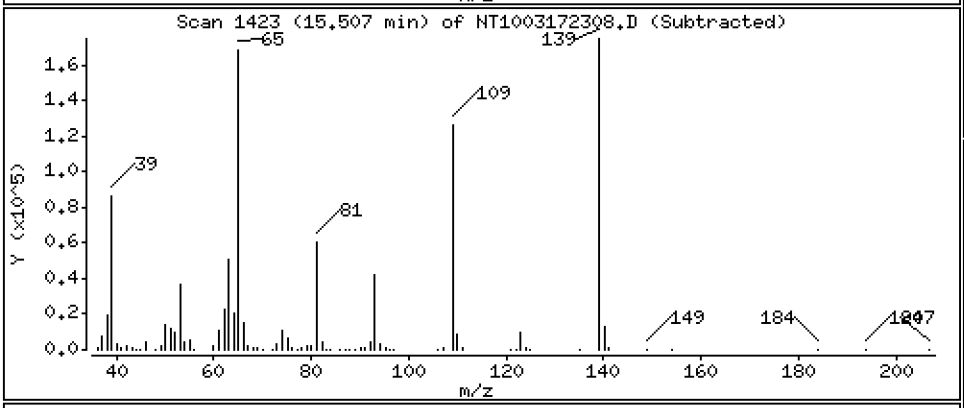
Column phase: ZB-5msi

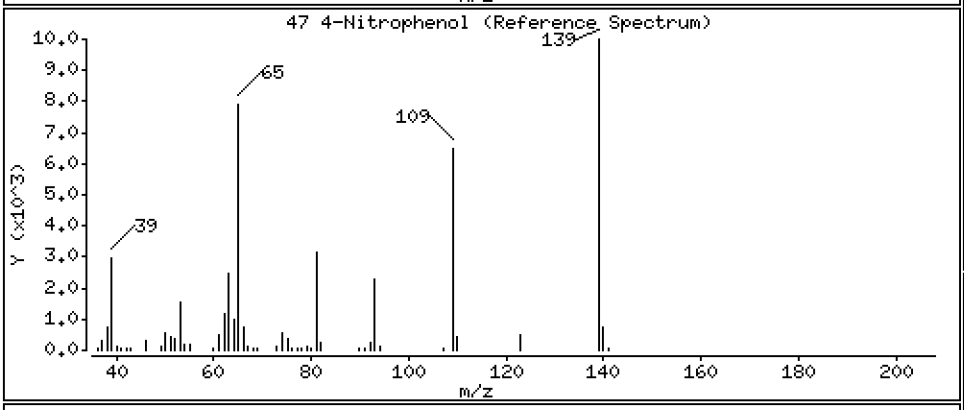
Column diameter: 0.25

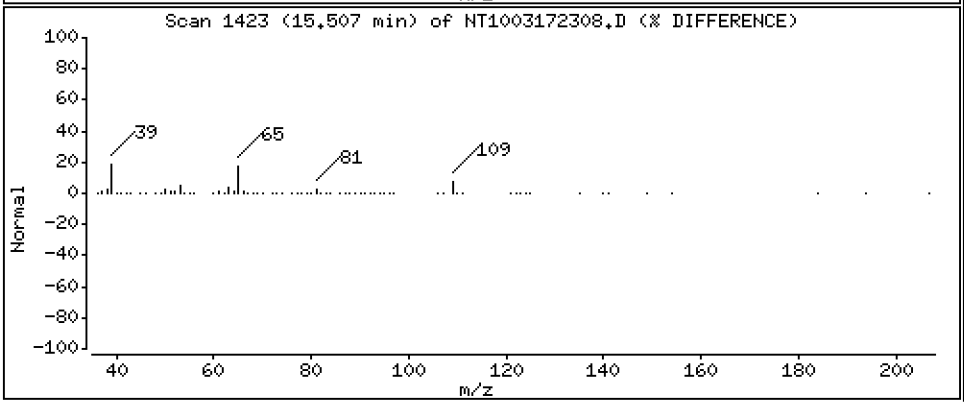
47 4-Nitrophenol

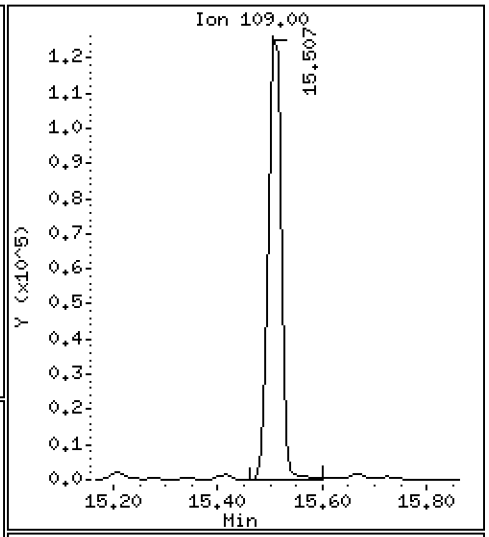
Concentration: 14.33 ug/mL

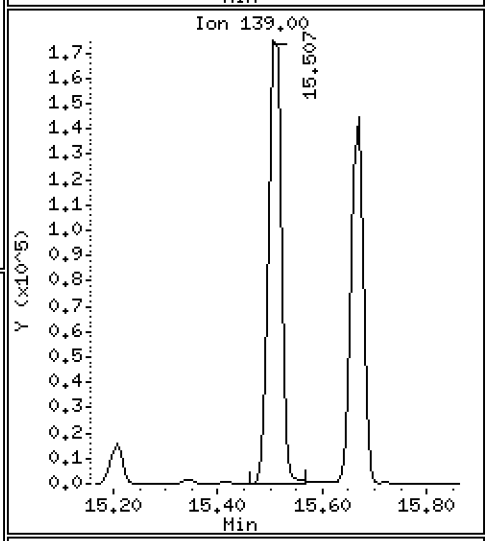


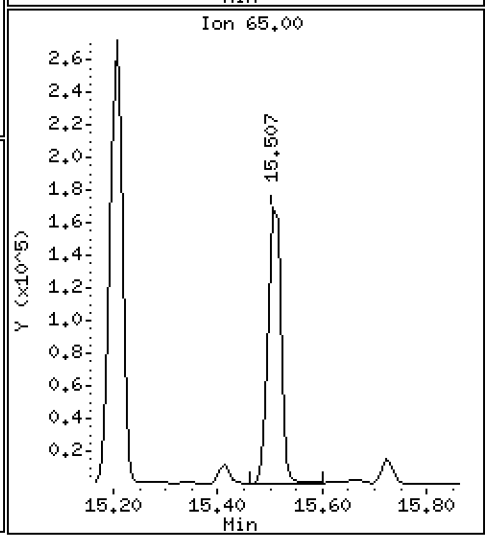












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

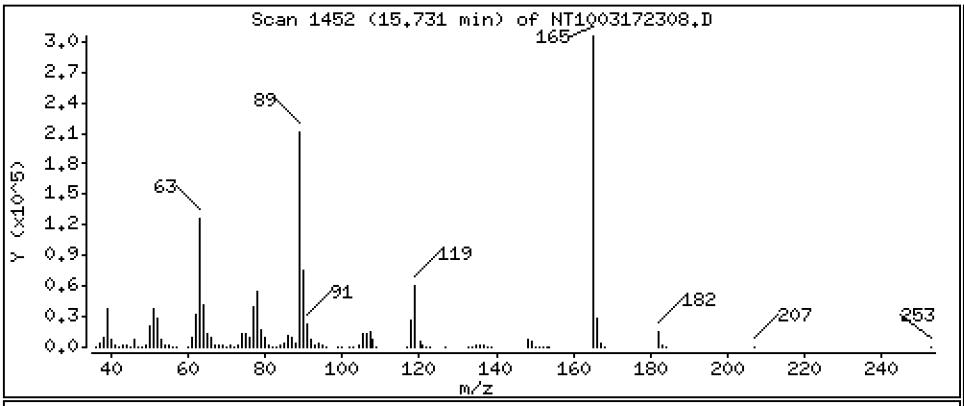
Operator: VTS

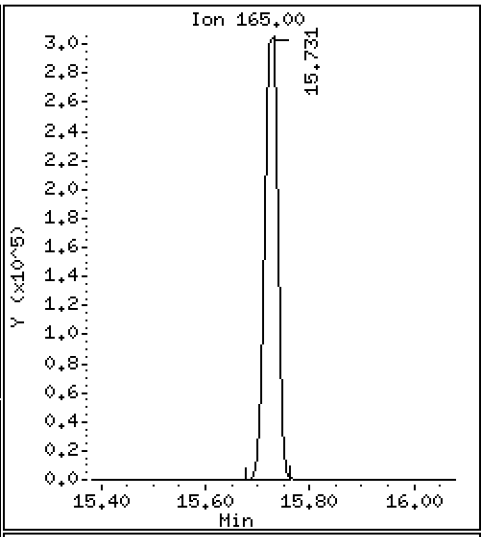
Column phase: ZB-5msi

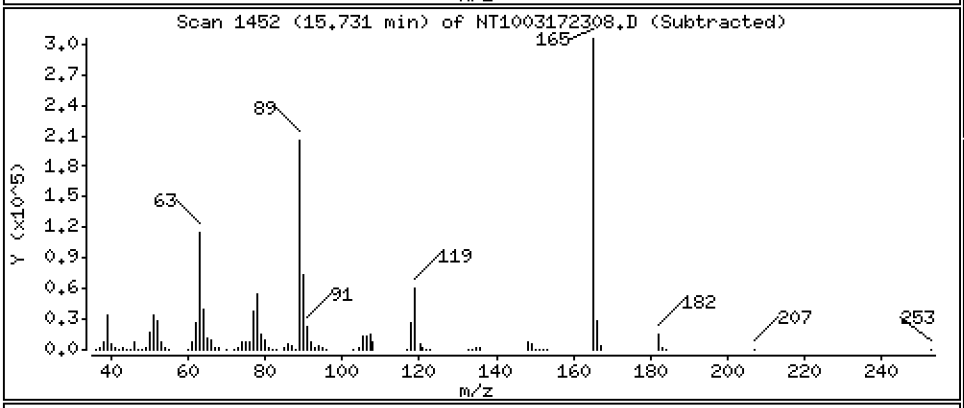
Column diameter: 0.25

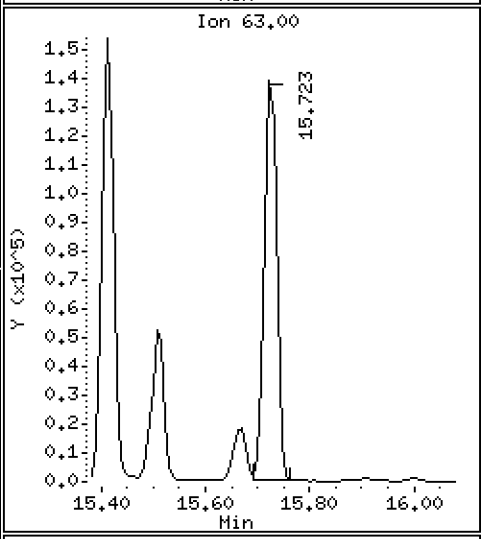
48 2,4-Dinitrotoluene

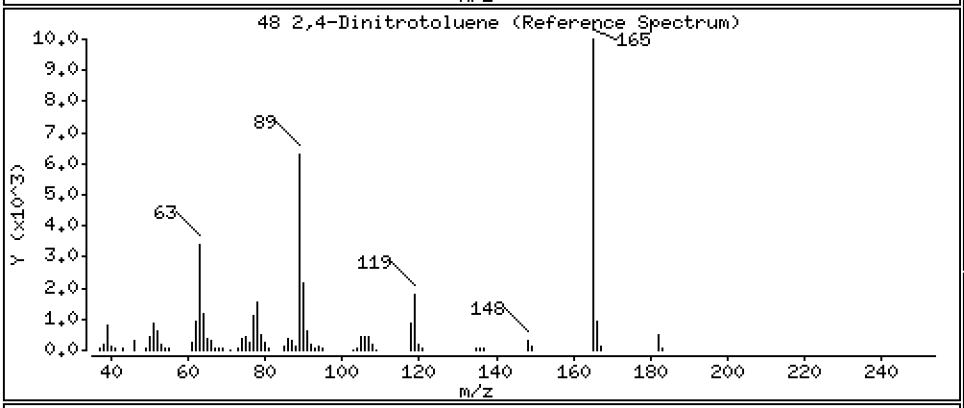
Concentration: 16.73 ug/mL

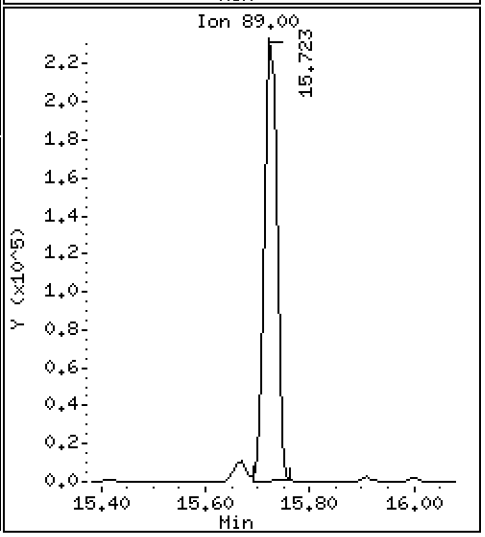


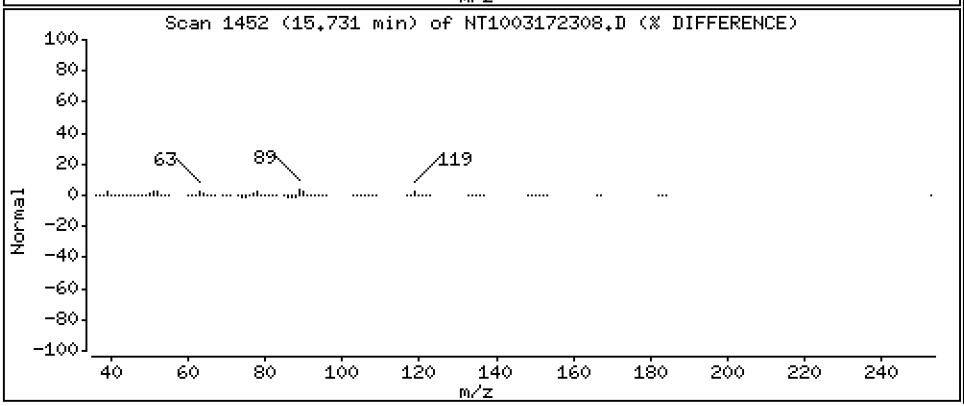












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

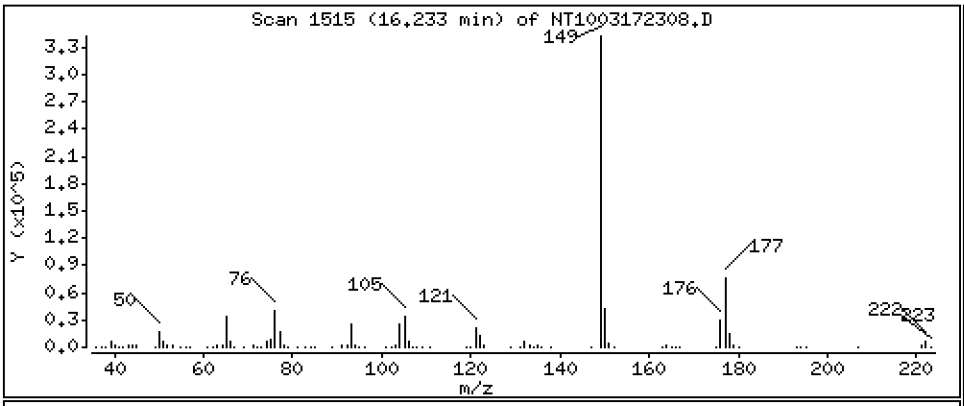
Operator: VTS

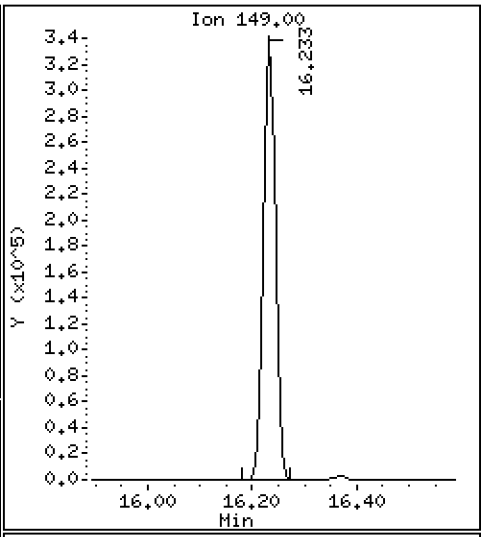
Column phase: ZB-5msi

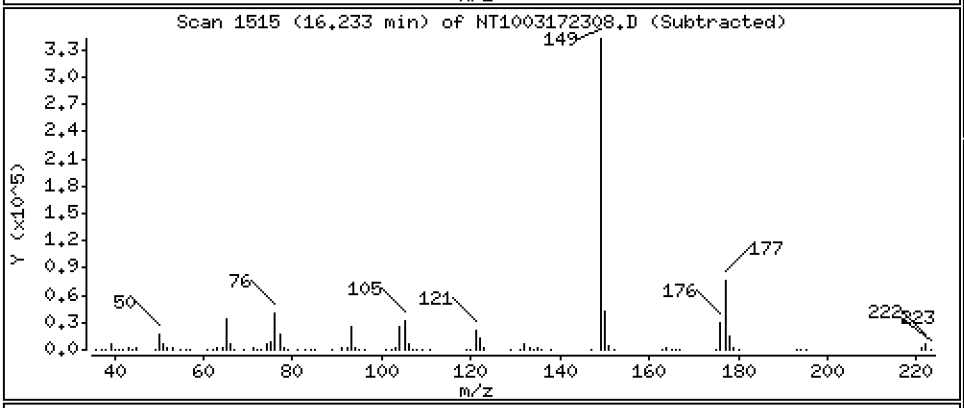
Column diameter: 0.25

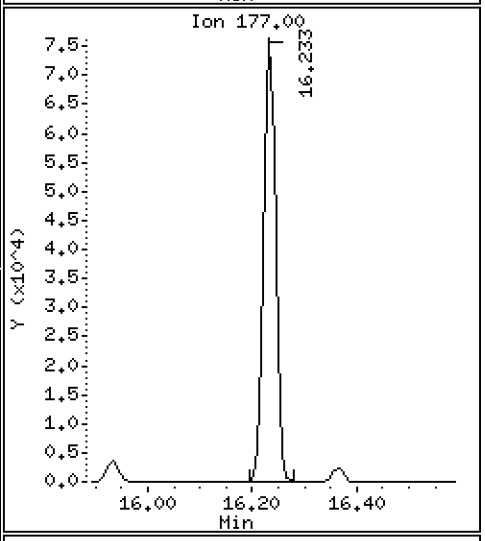
50 Diethylphthalate

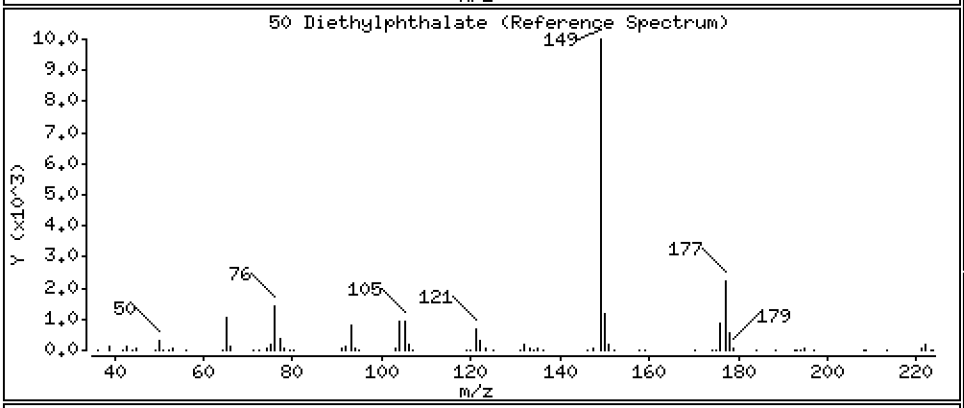
Concentration: 5.556 ug/mL

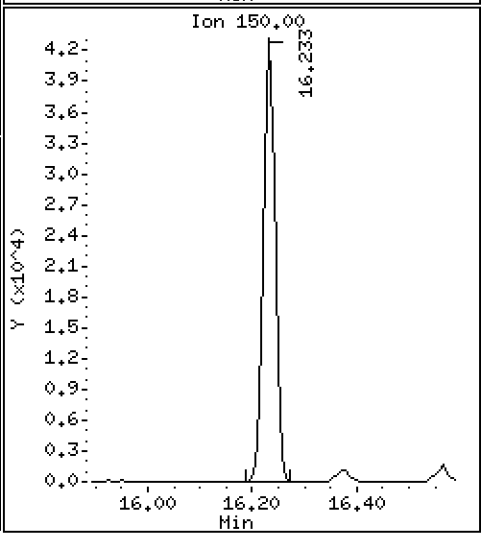


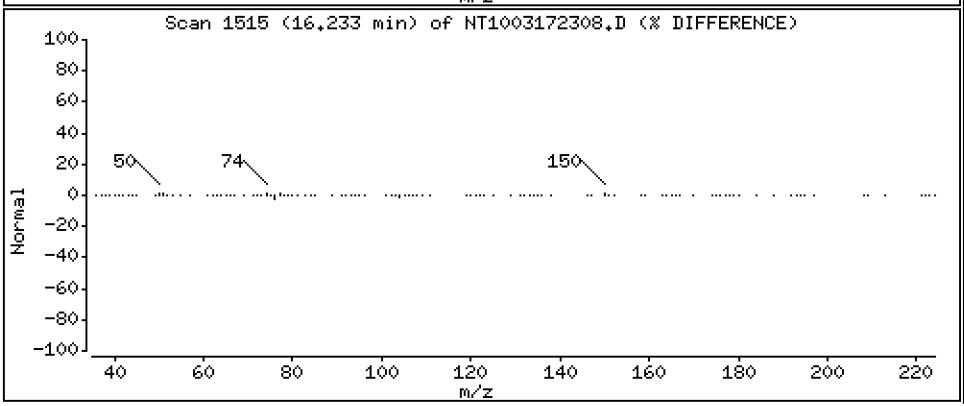












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

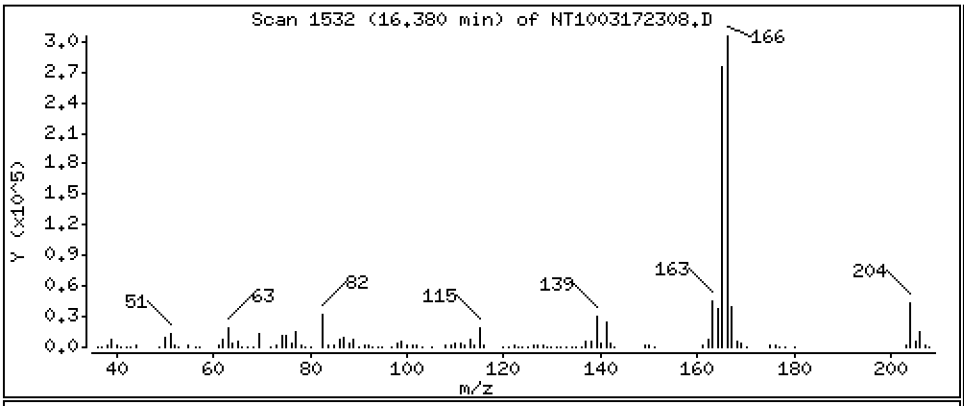
Operator: VTS

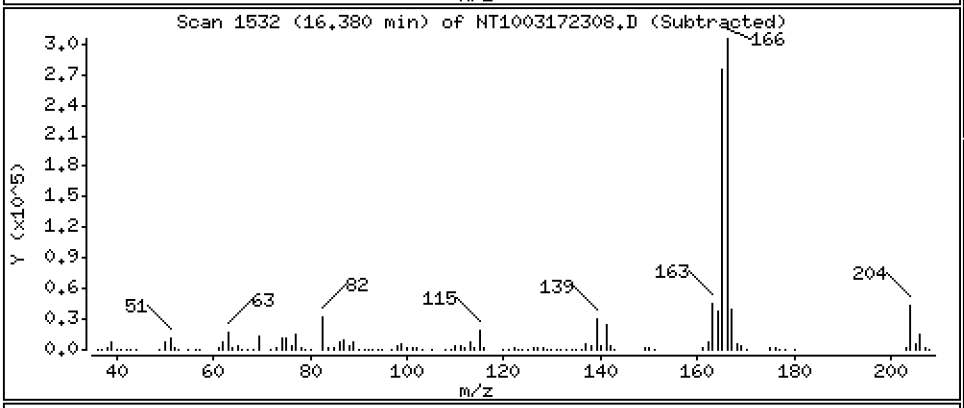
Column phase: ZB-5msi

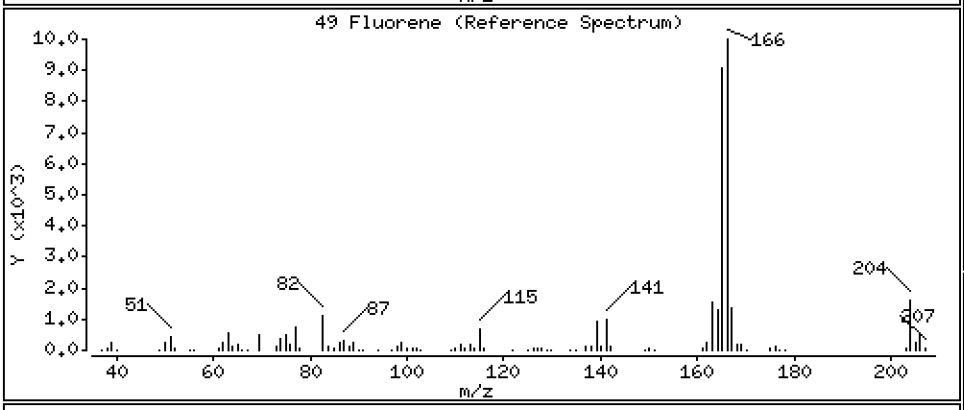
Column diameter: 0.25

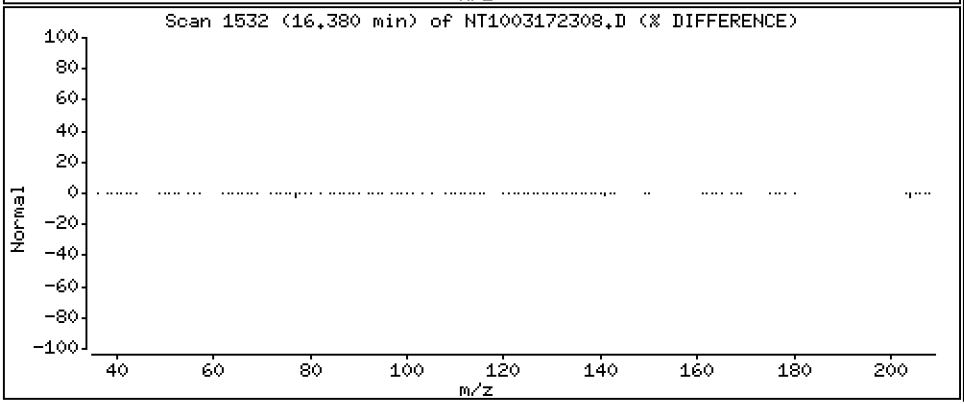
49 Fluorene

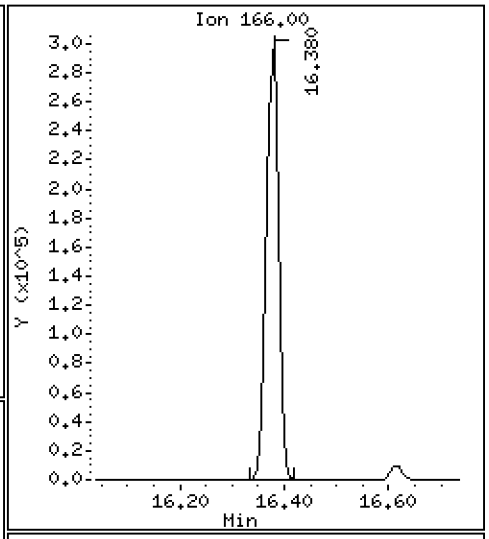
Concentration: 4.450 ug/mL

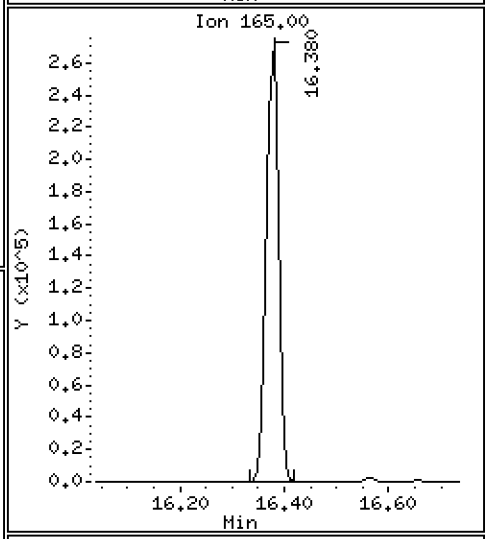


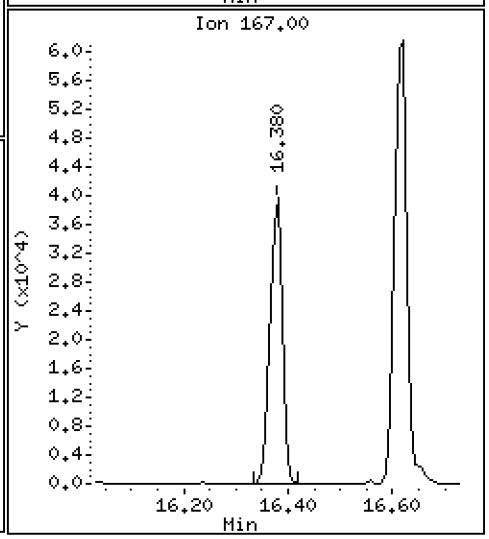












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

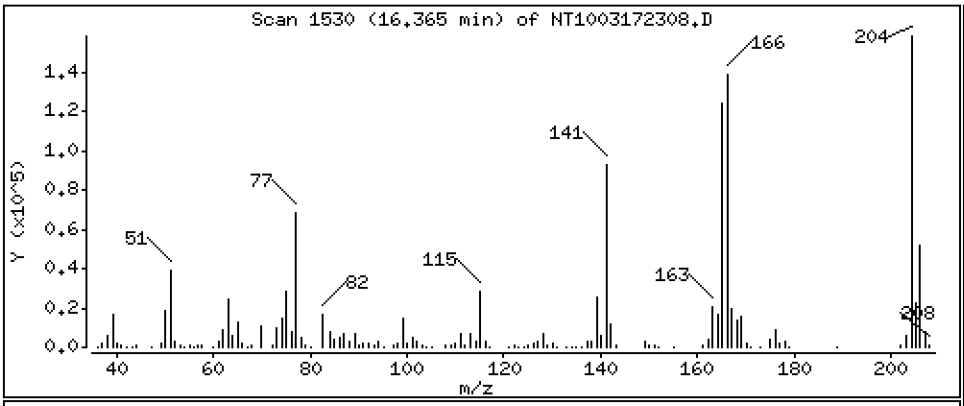
Operator: VTS

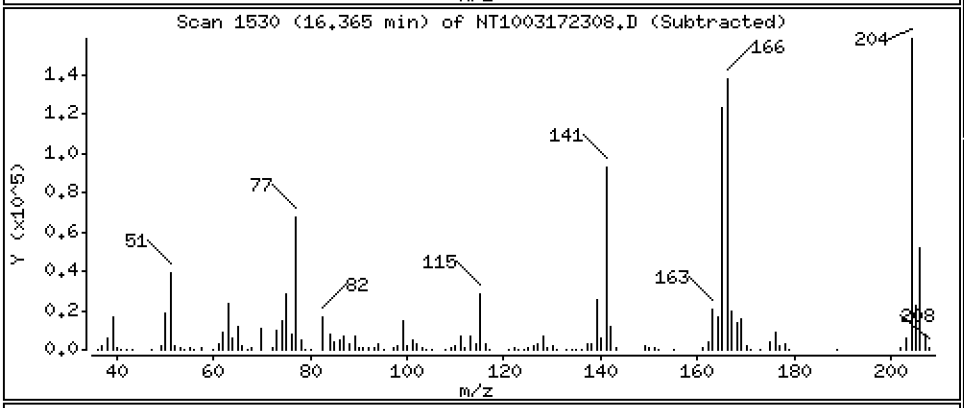
Column phase: ZB-5msi

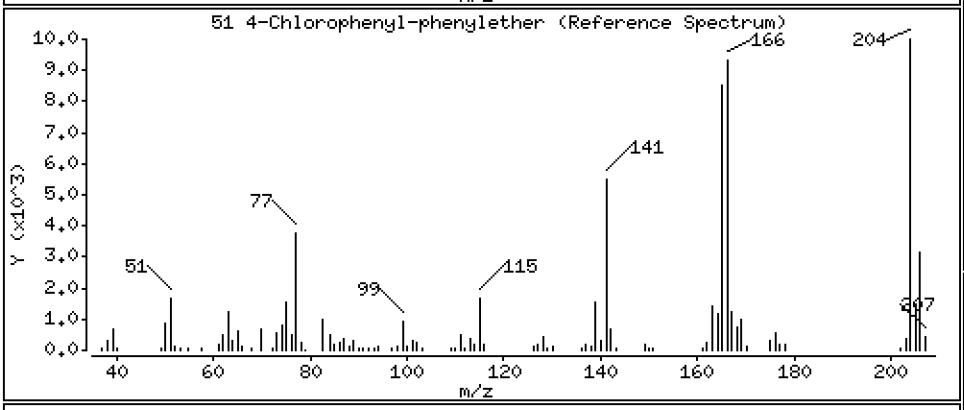
Column diameter: 0.25

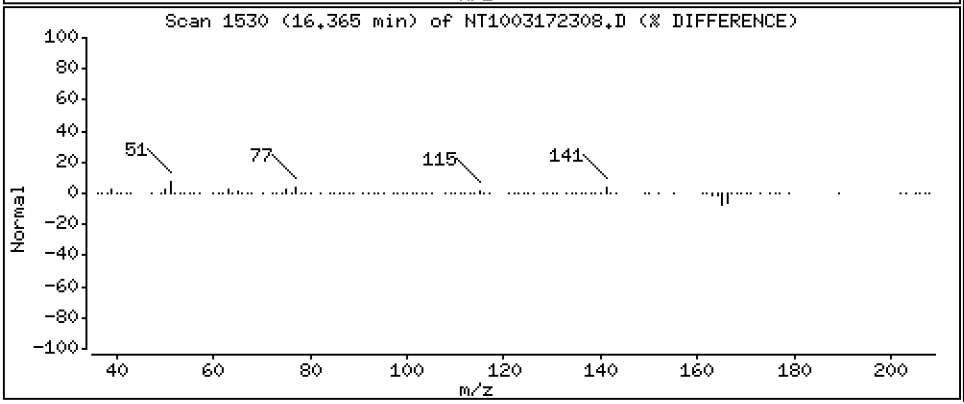
51 4-Chlorophenyl-phenylether

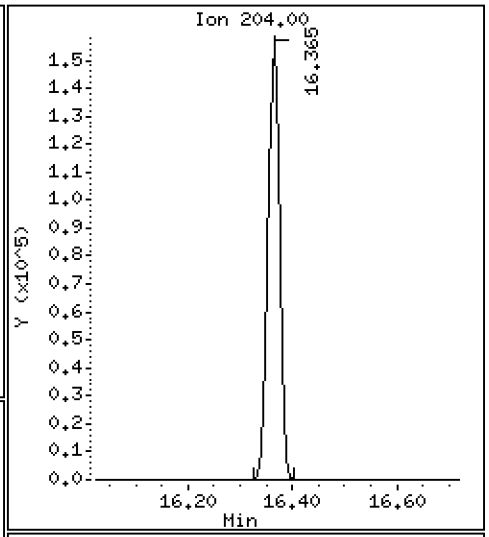
Concentration: 4.650 ug/mL

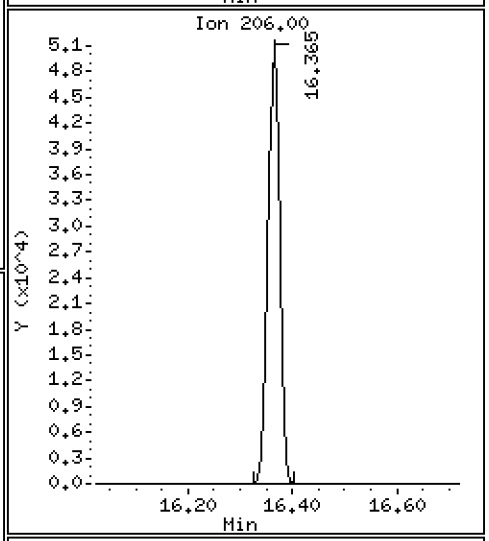


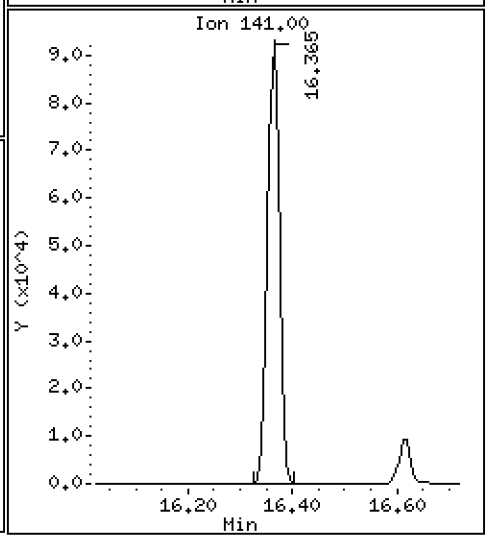












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

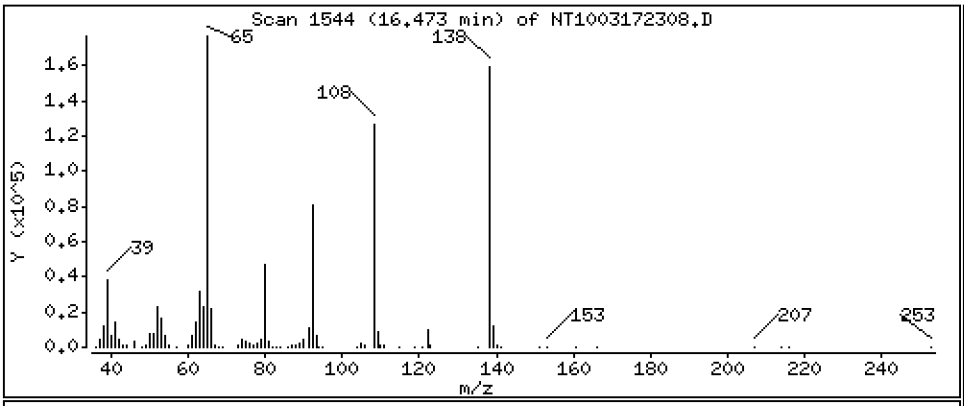
Operator: VTS

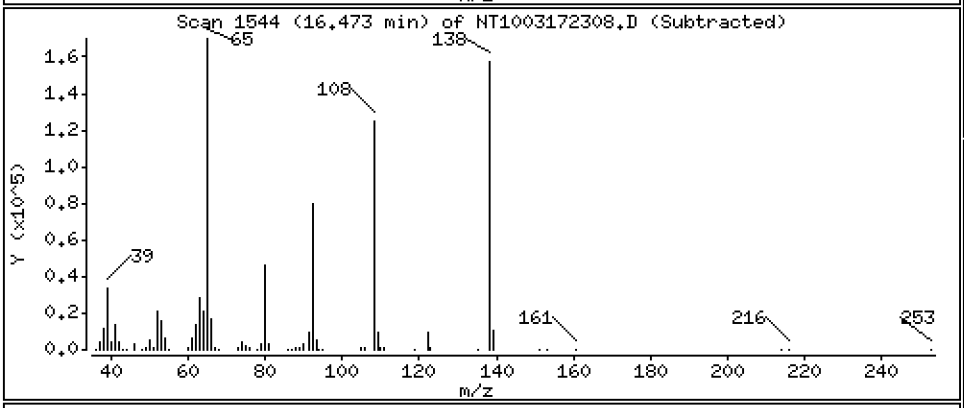
Column phase: ZB-5msi

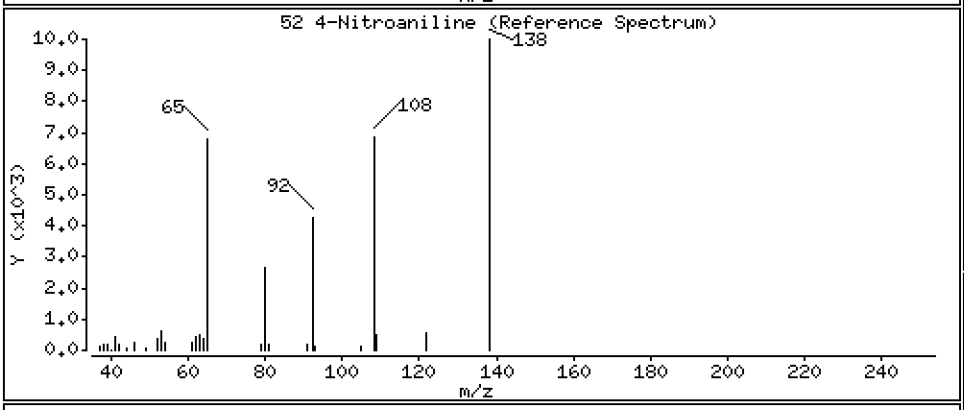
Column diameter: 0.25

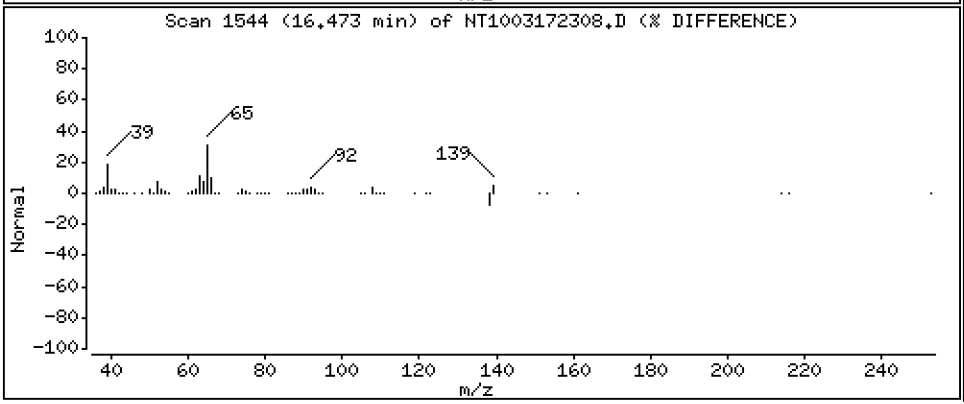
52 4-Nitroaniline

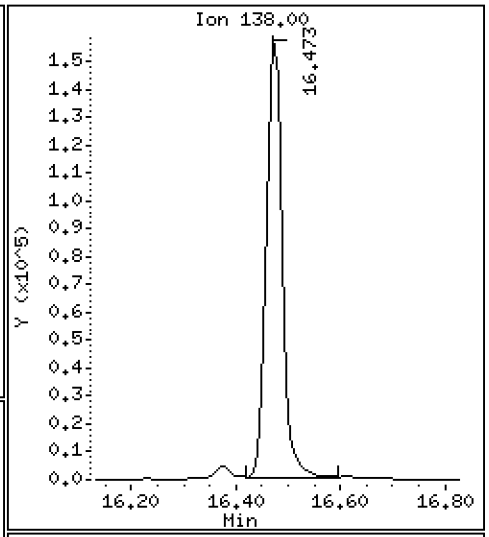
Concentration: 15.47 ug/mL

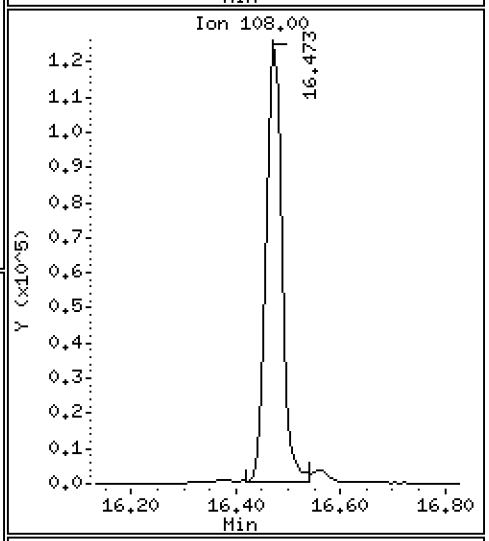


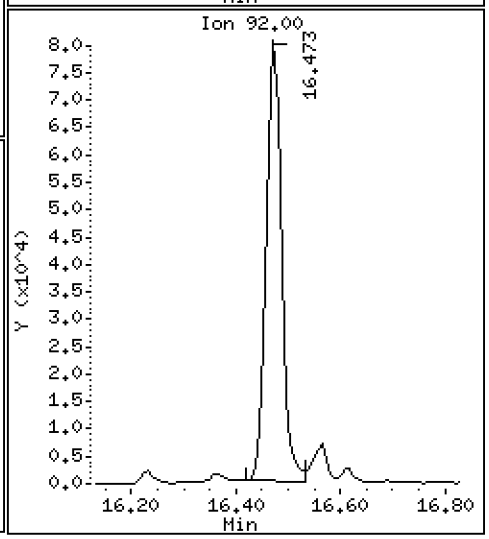












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

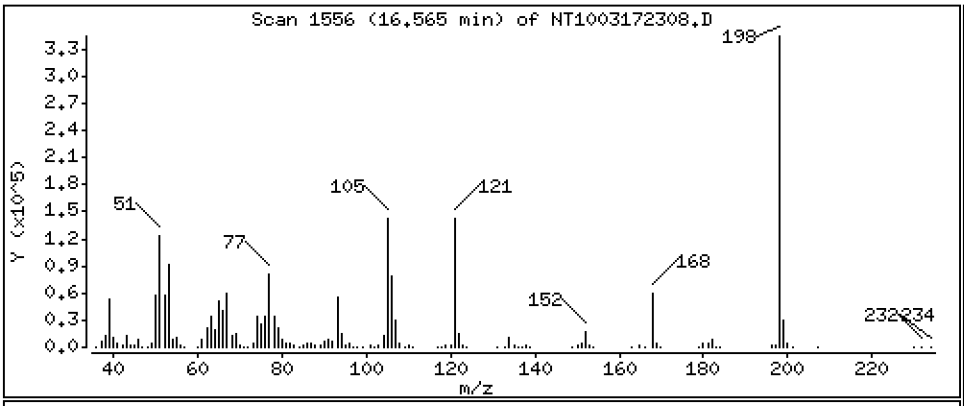
Operator: VTS

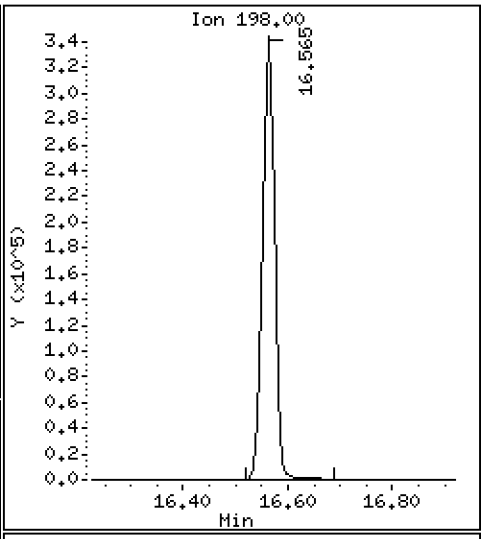
Column phase: ZB-5msi

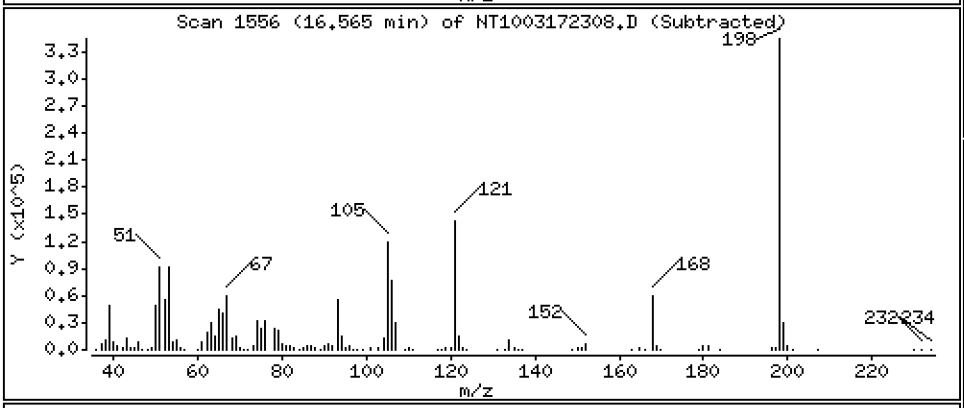
Column diameter: 0.25

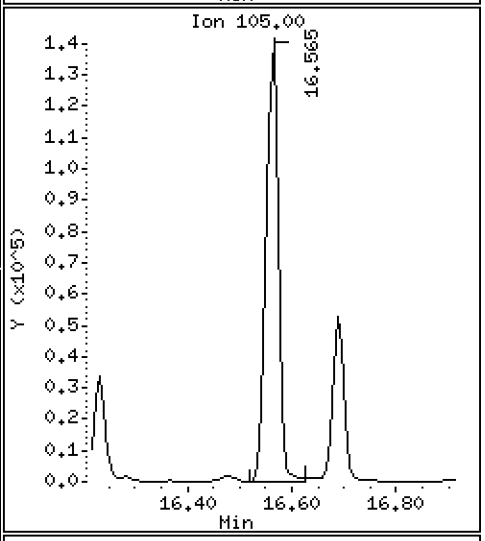
53 4,6-Dinitro-2-methylphenol

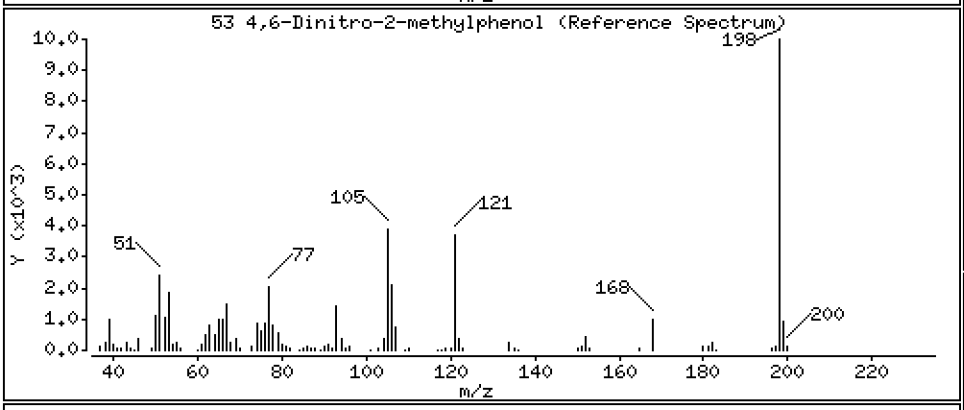
Concentration: 32.19 ug/mL

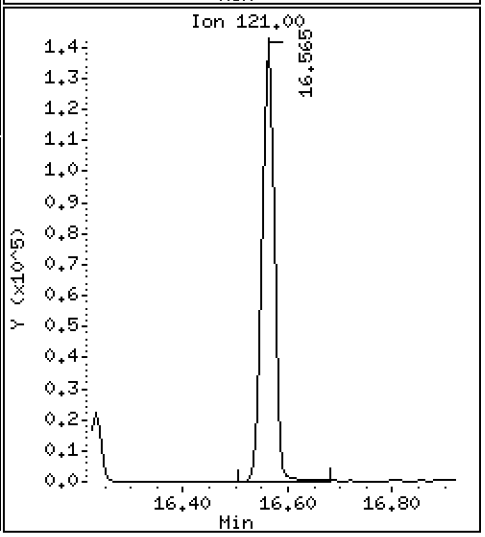


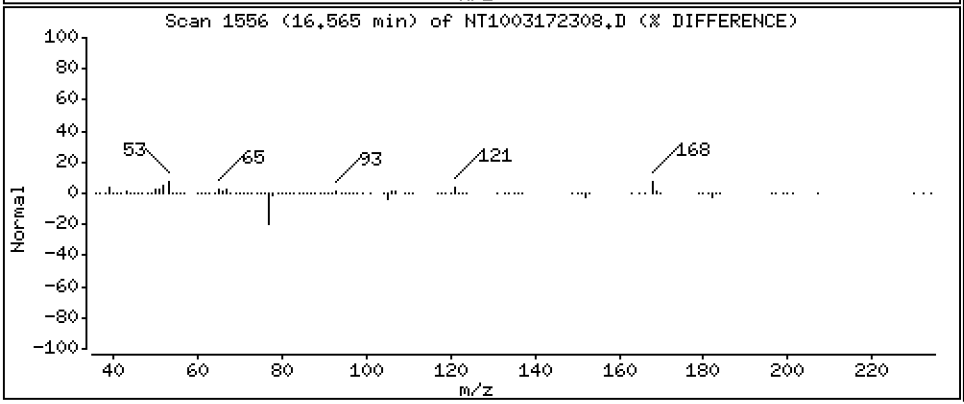












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

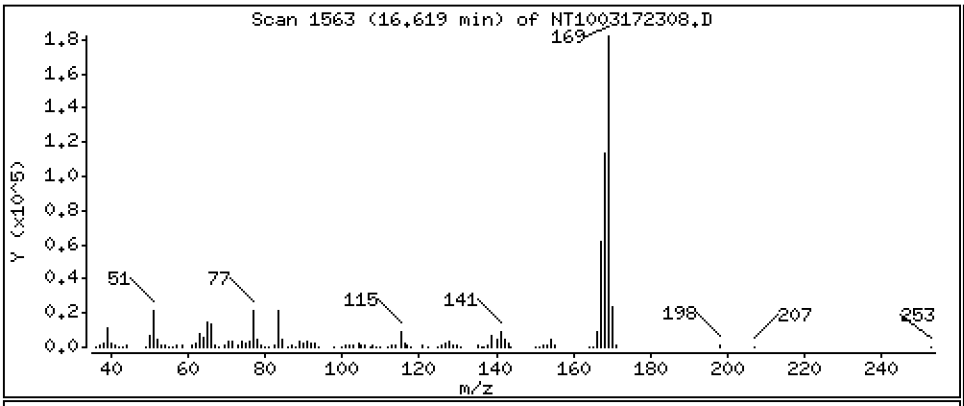
Operator: VTS

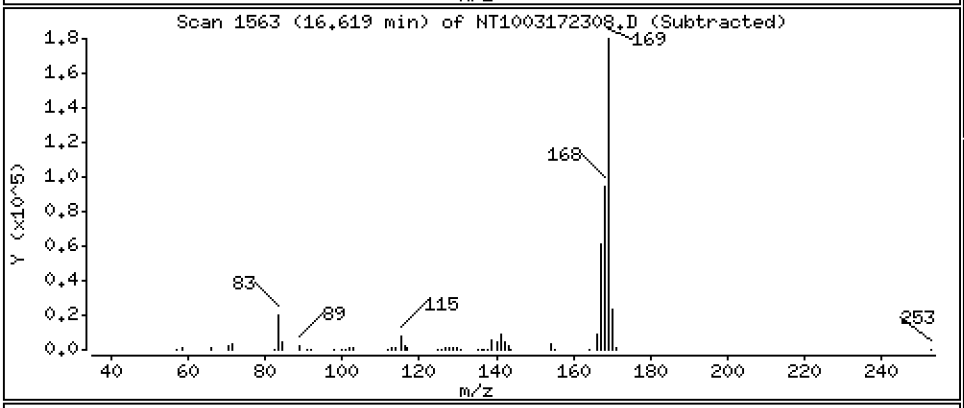
Column phase: ZB-5msi

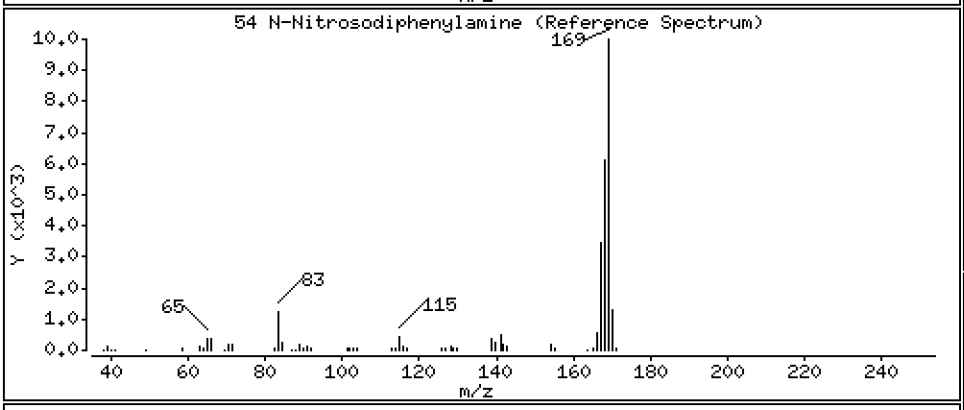
Column diameter: 0.25

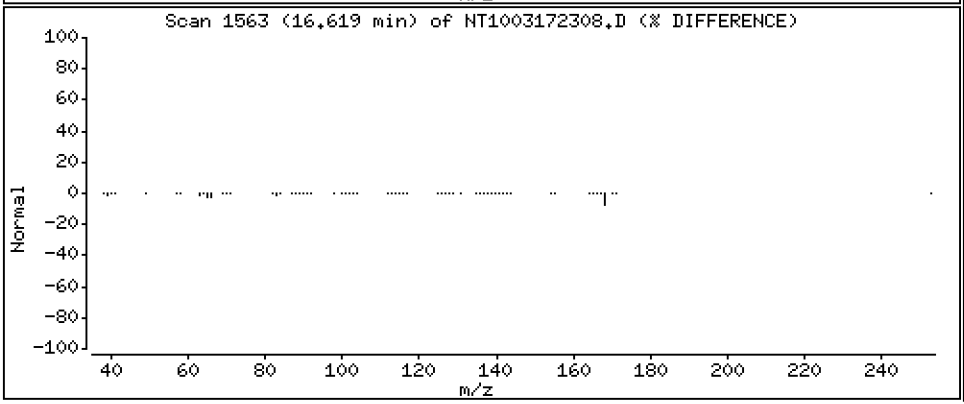
54 N-Nitrosodiphenylamine

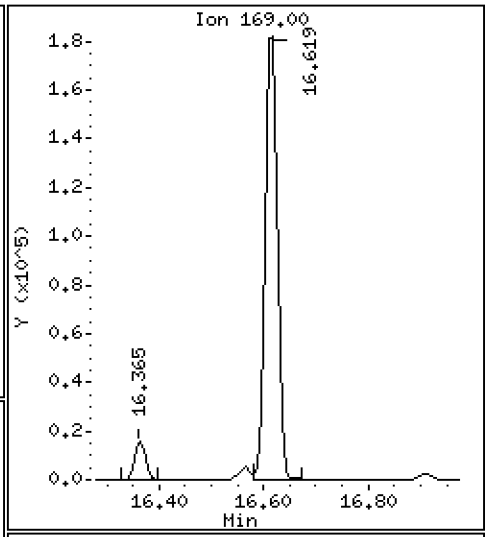
Concentration: 4.110 ug/mL

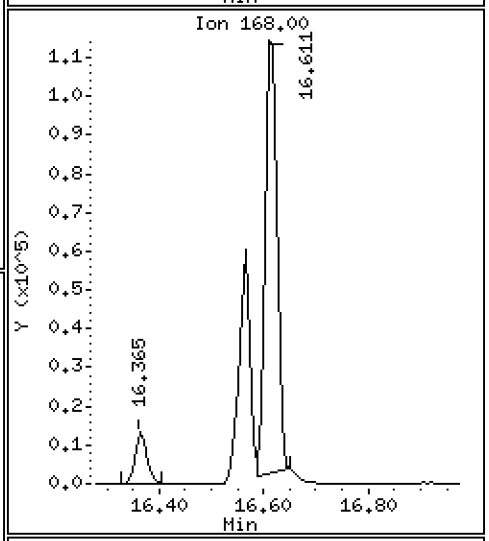


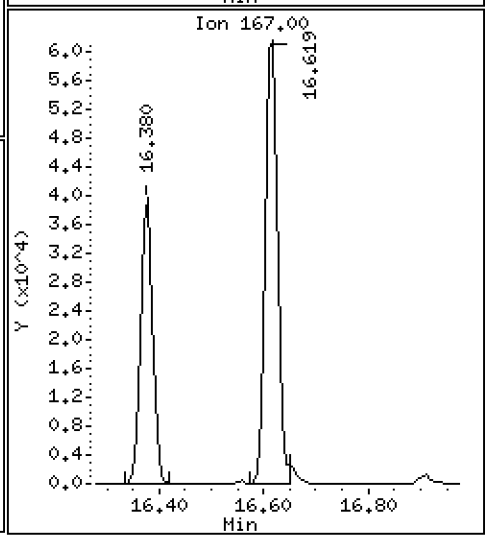












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

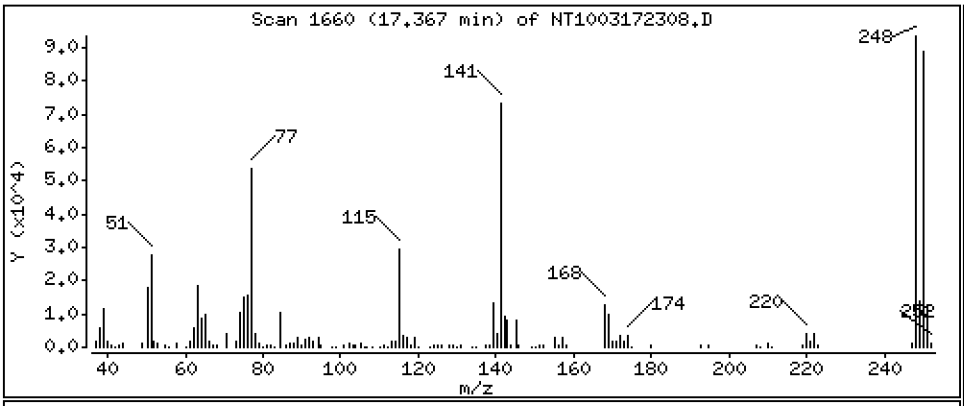
Operator: VTS

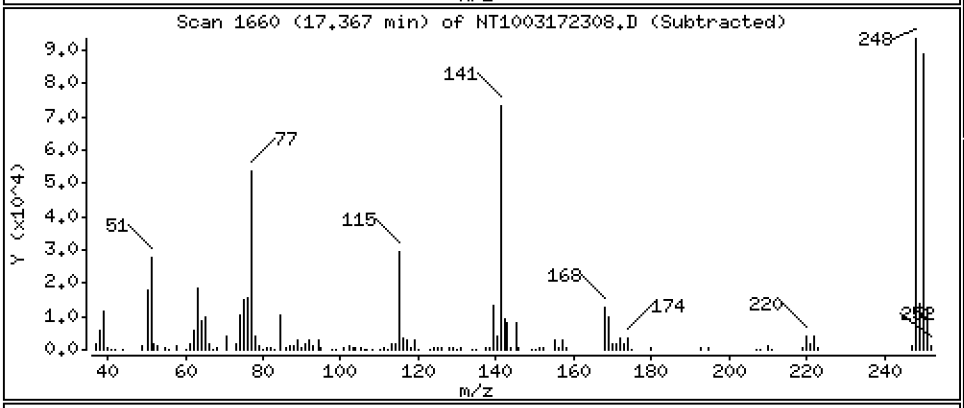
Column phase: ZB-5msi

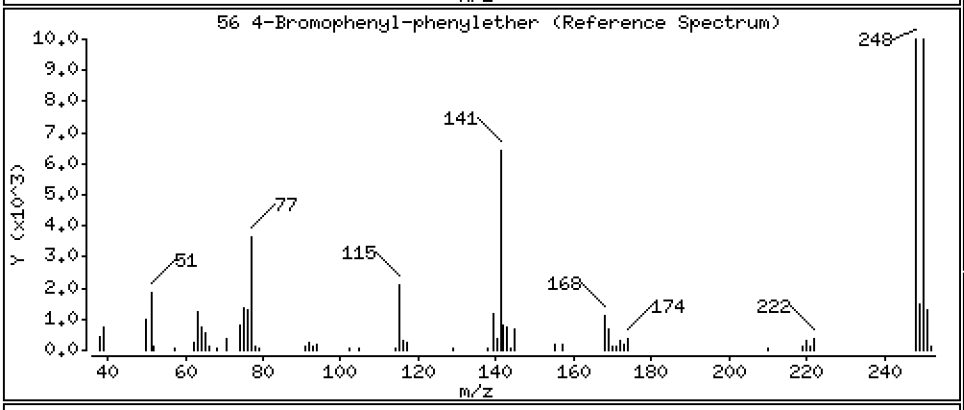
Column diameter: 0.25

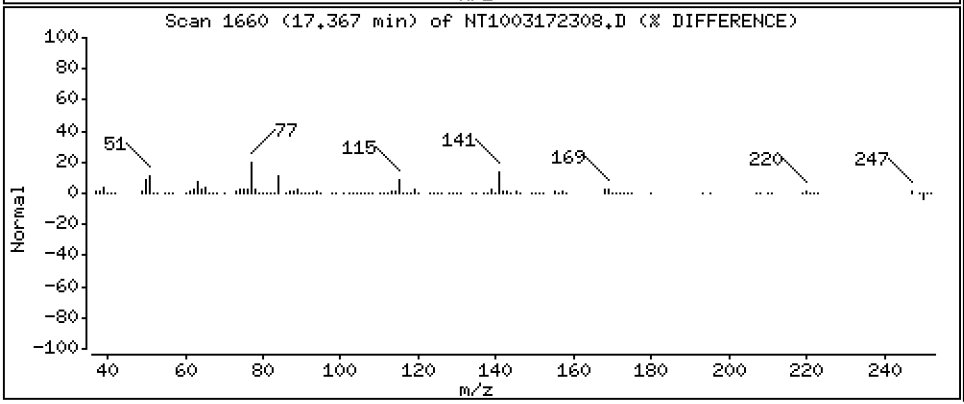
56 4-Bromophenyl-phenylether

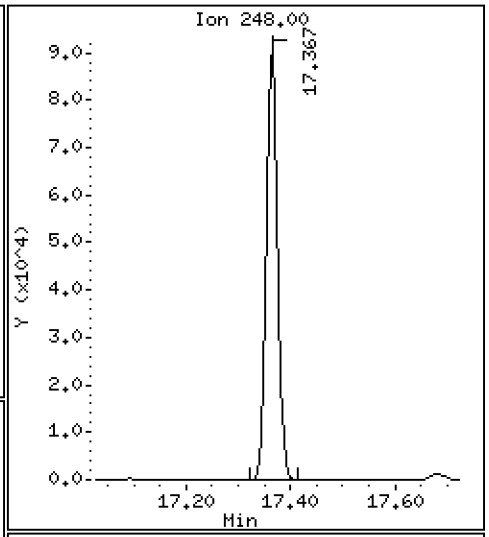
Concentration: 4.858 ug/mL

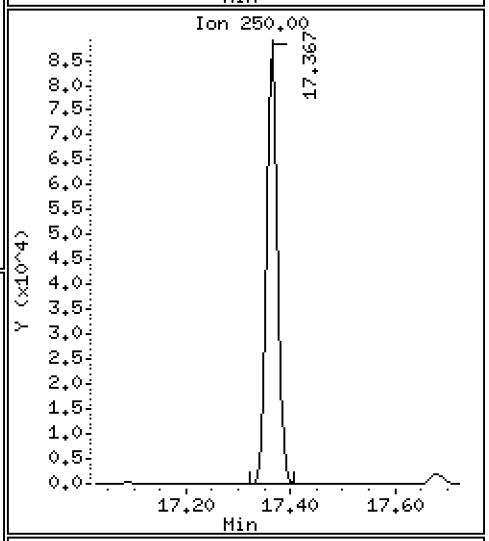


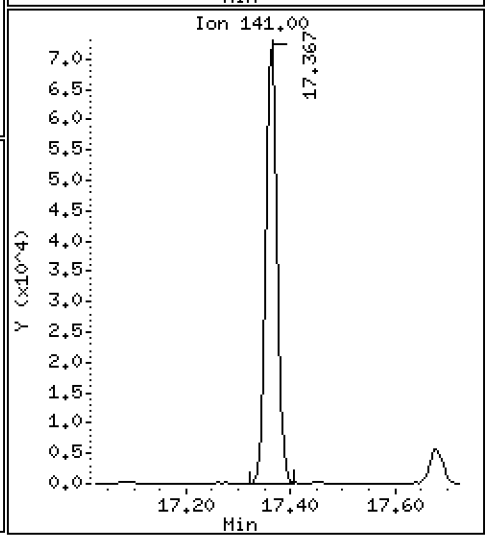












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

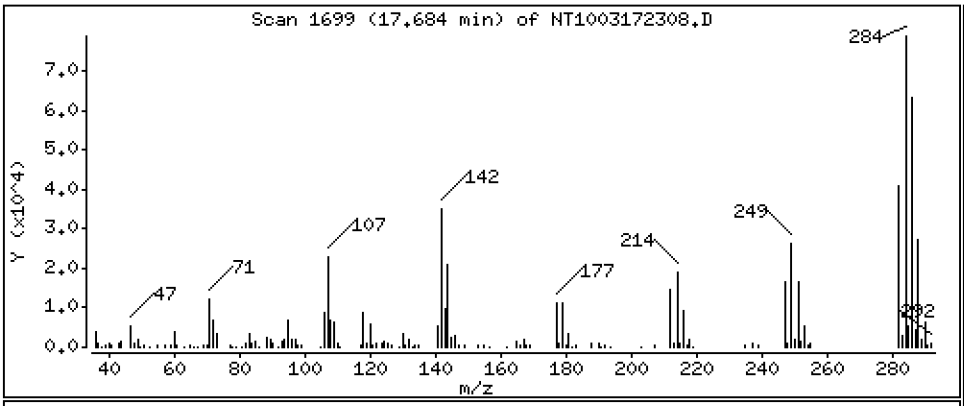
Operator: VTS

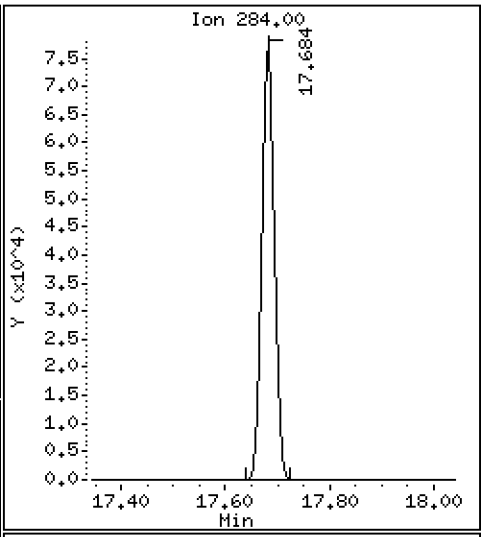
Column phase: ZB-5msi

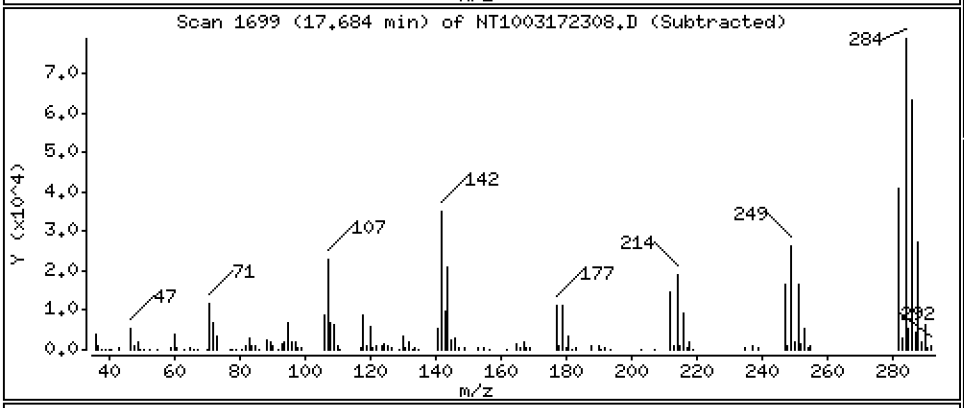
Column diameter: 0.25

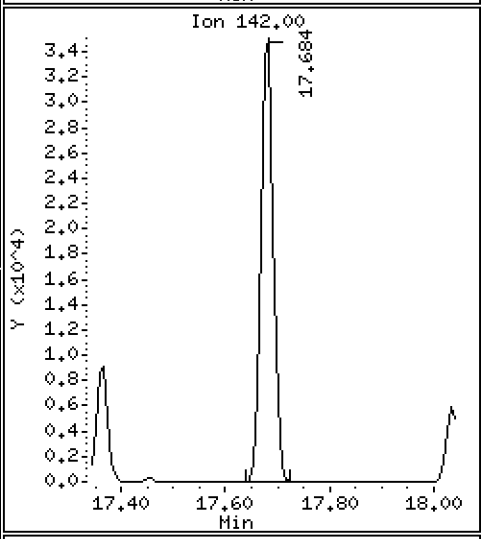
57 Hexachlorobenzene

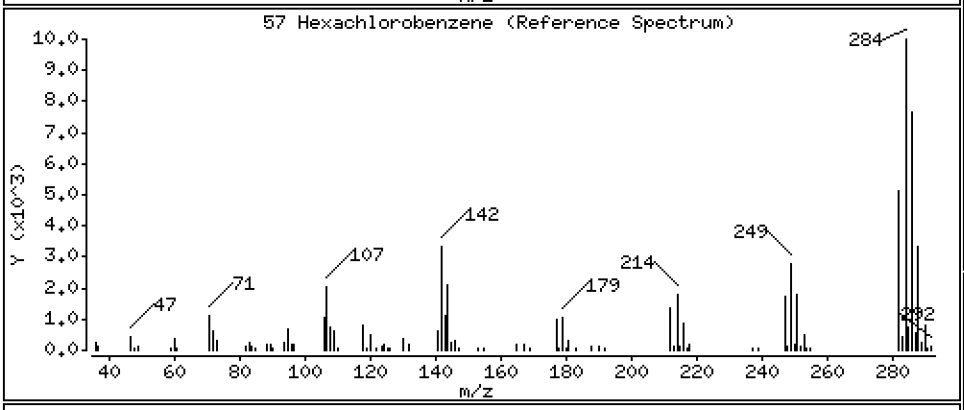
Concentration: 4.227 ug/mL

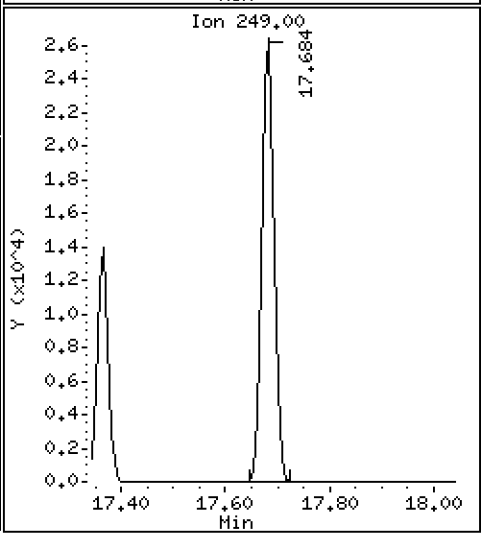


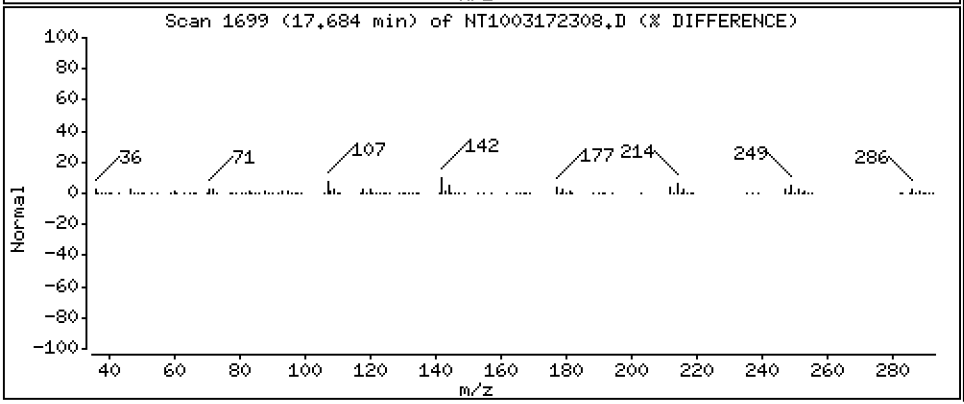












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

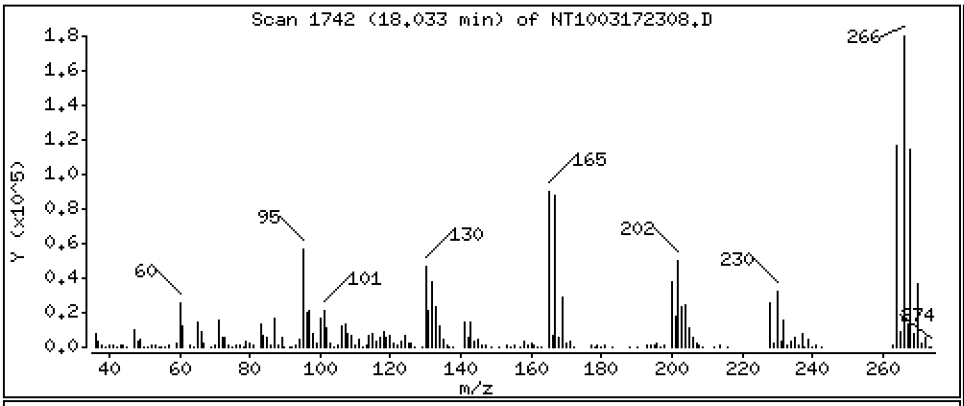
Operator: VTS

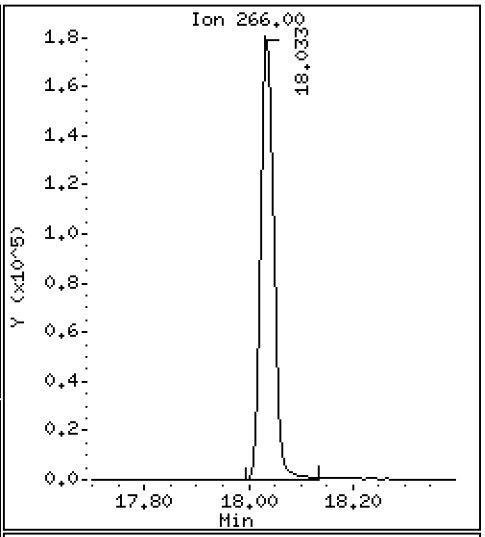
Column phase: ZB-5msi

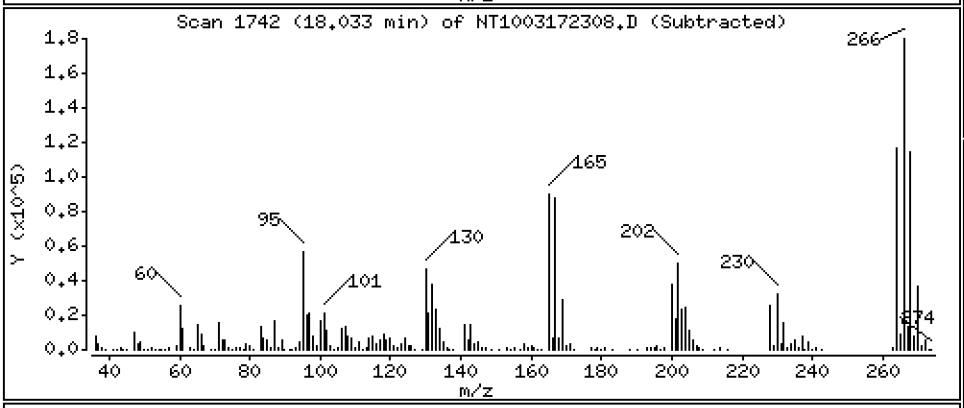
Column diameter: 0.25

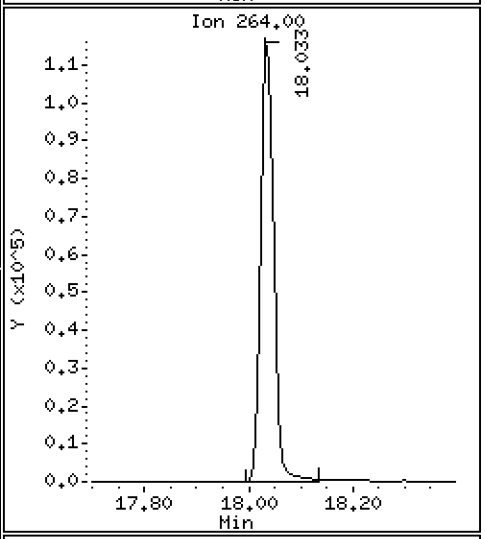
58 Pentachlorophenol

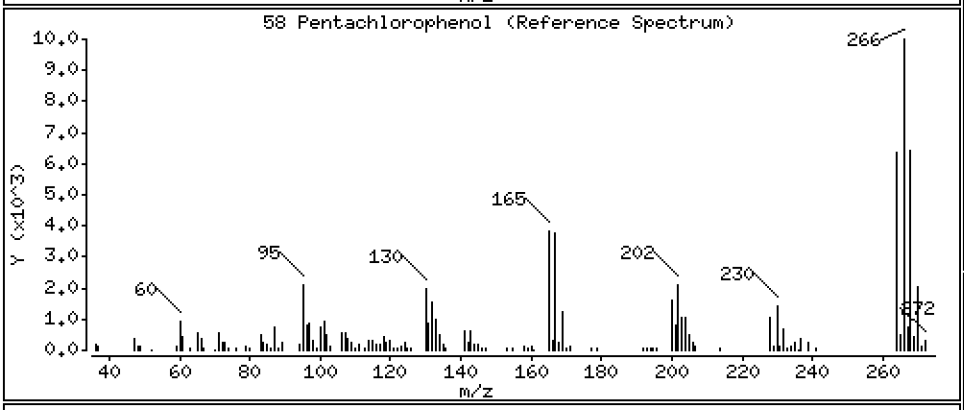
Concentration: 16.52 ug/mL

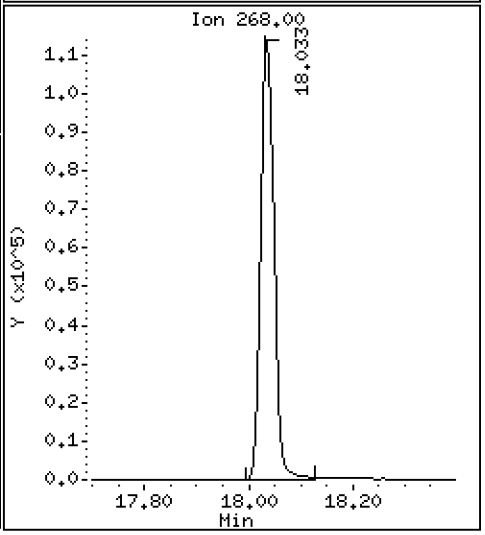


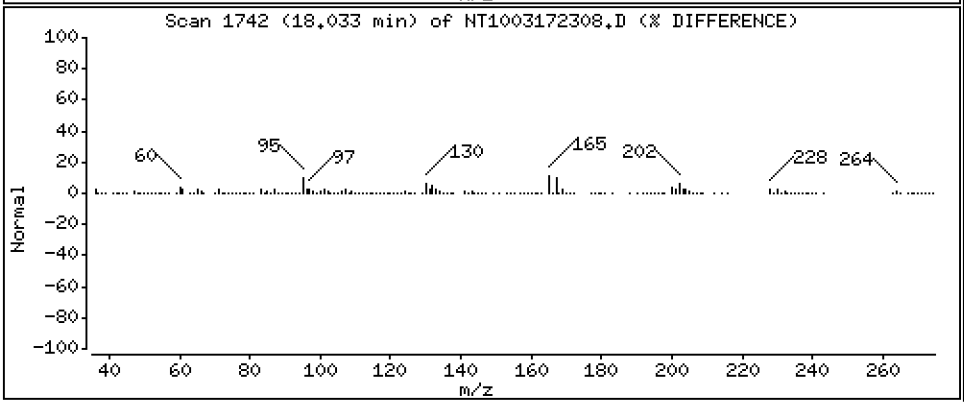












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

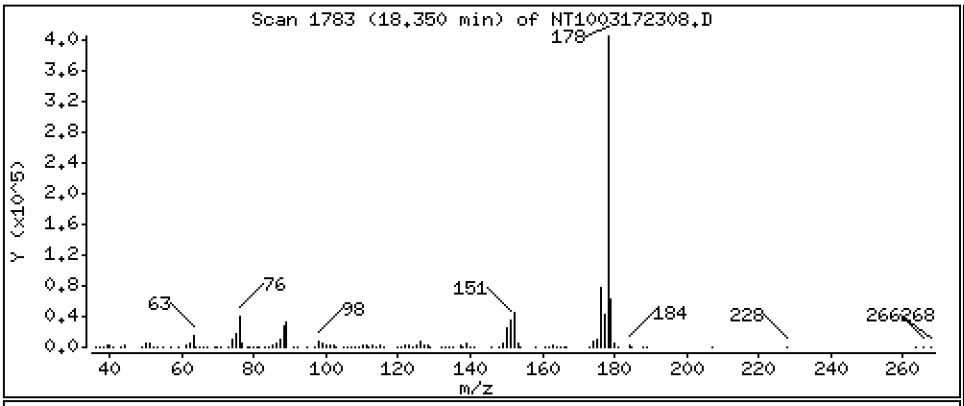
Operator: VTS

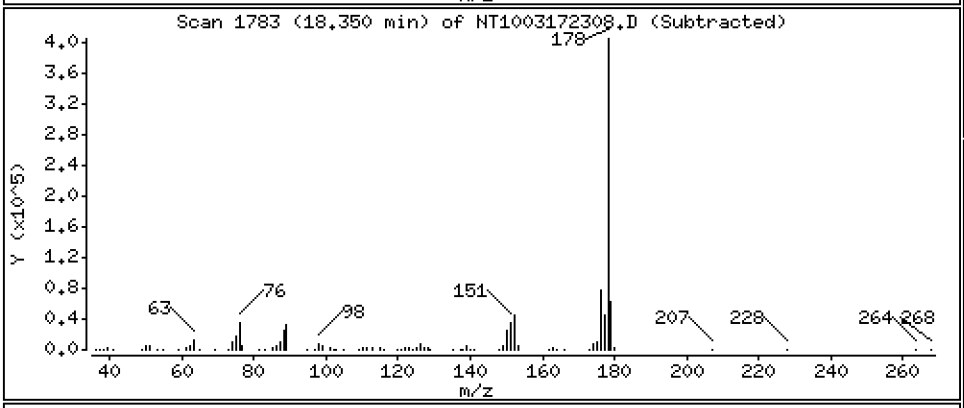
Column phase: ZB-5msi

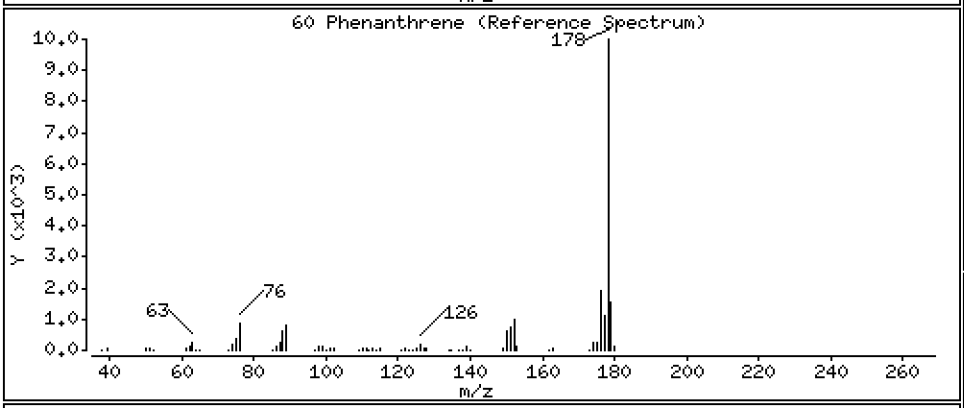
Column diameter: 0.25

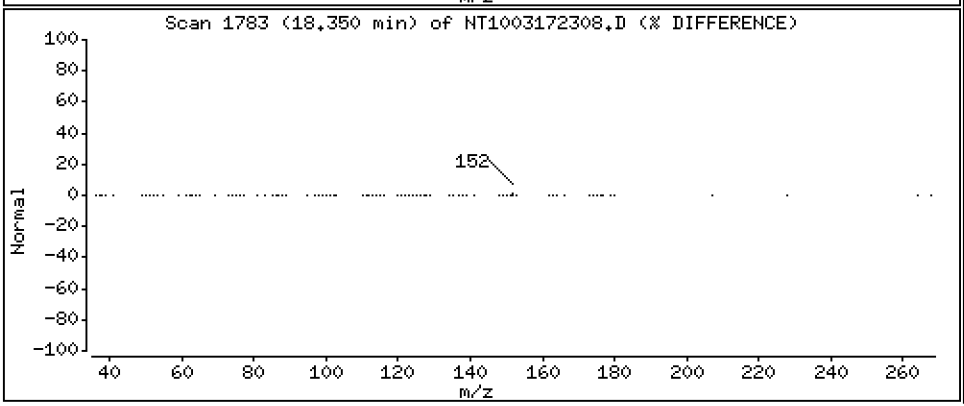
60 Phenanthrene

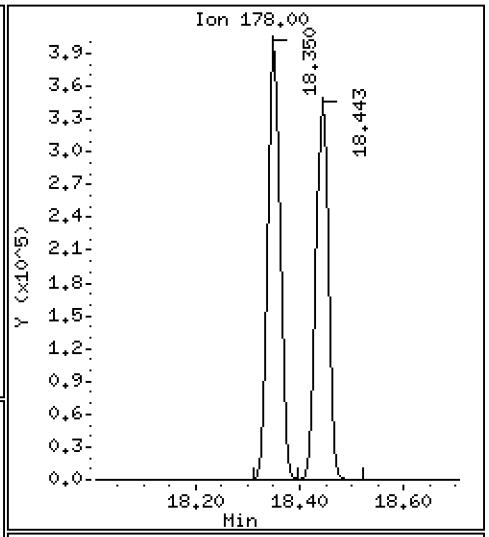
Concentration: 4.567 ug/mL

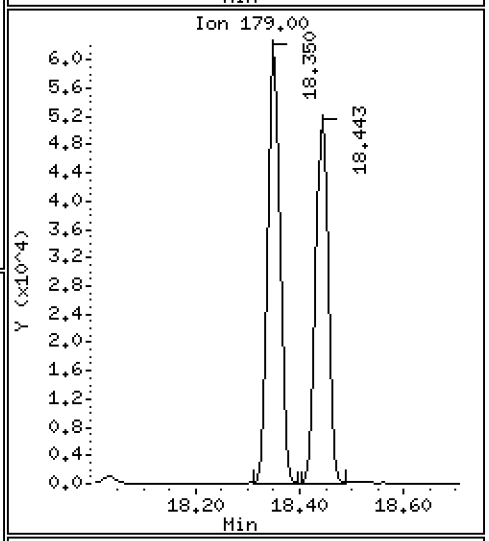


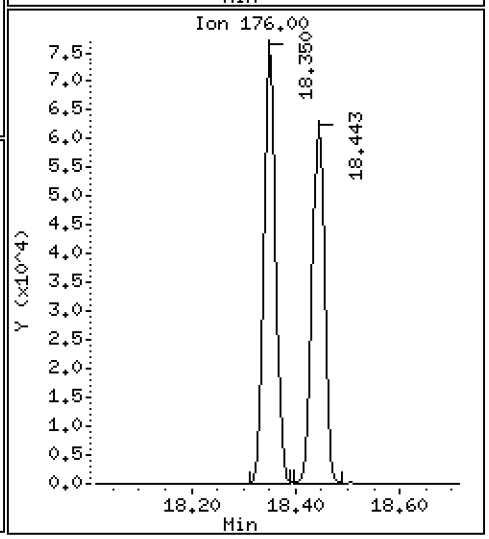












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

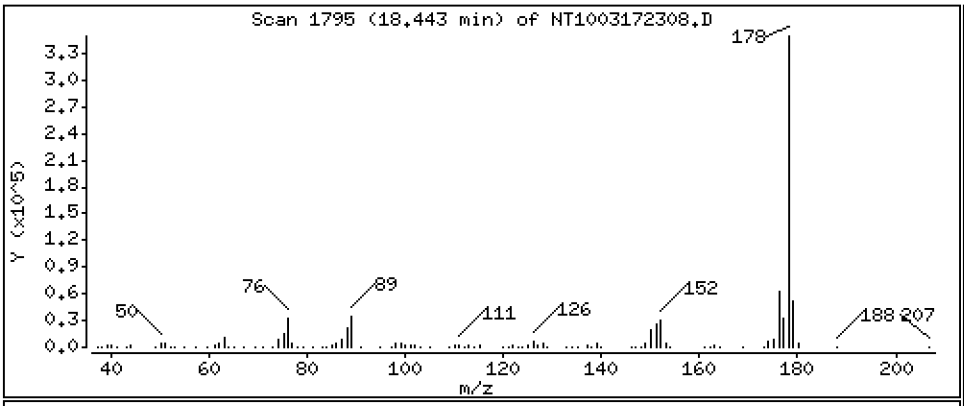
Operator: VTS

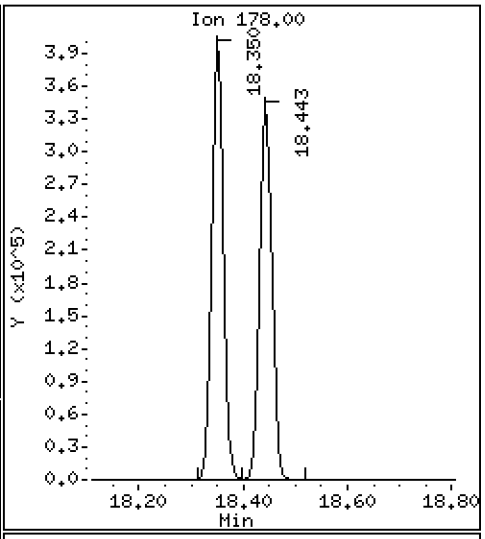
Column phase: ZB-5msi

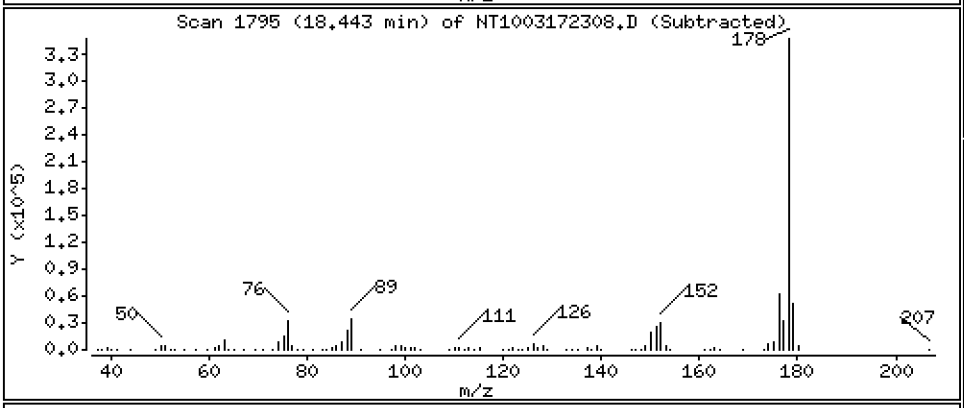
Column diameter: 0.25

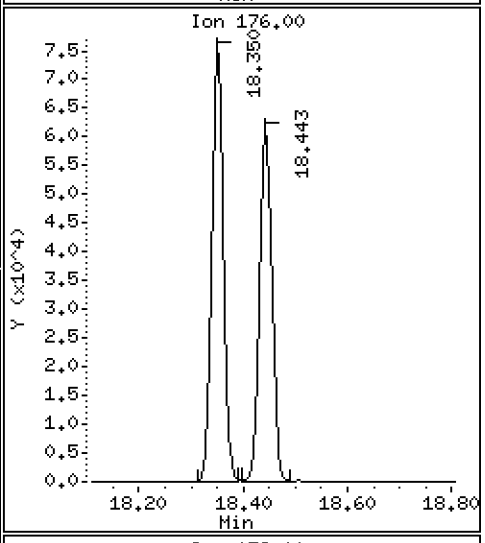
61 Anthracene

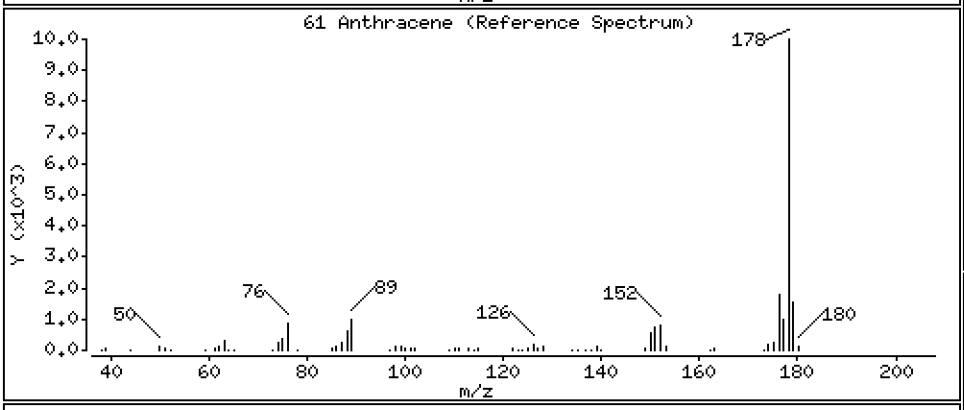
Concentration: 4.069 ug/mL

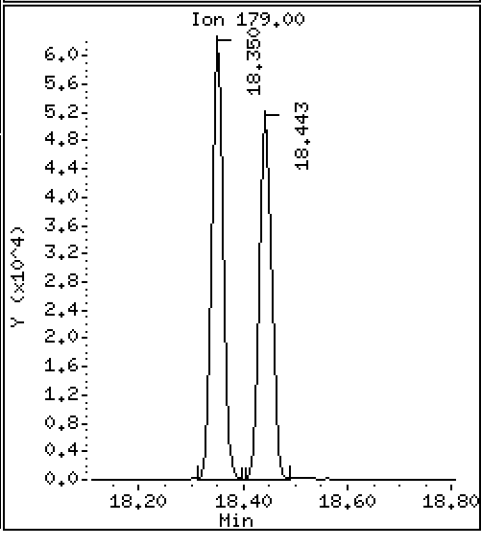


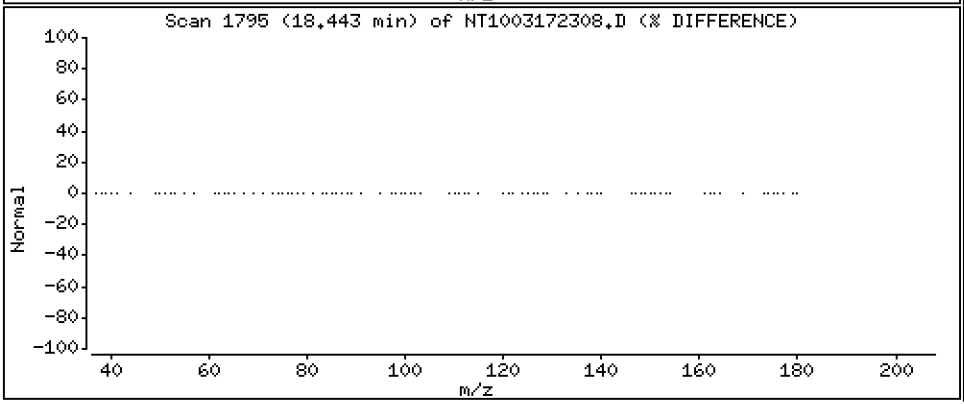












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

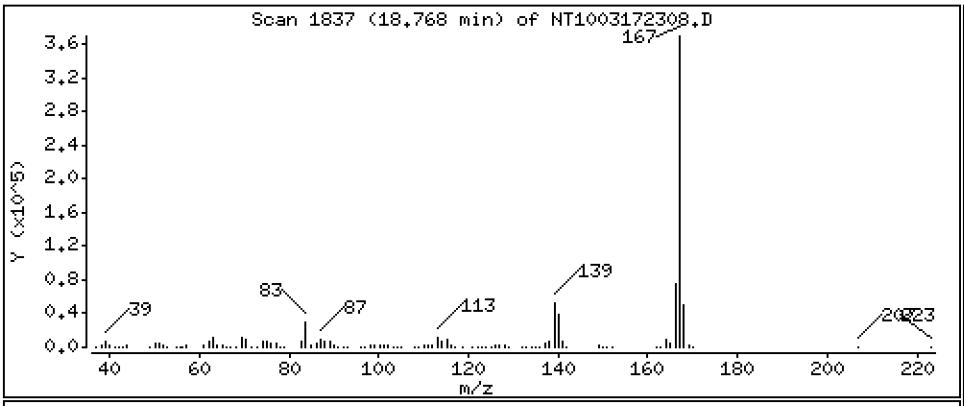
Operator: VTS

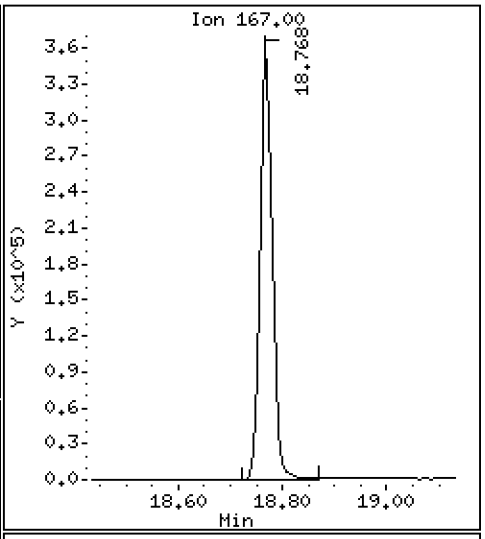
Column phase: ZB-5msi

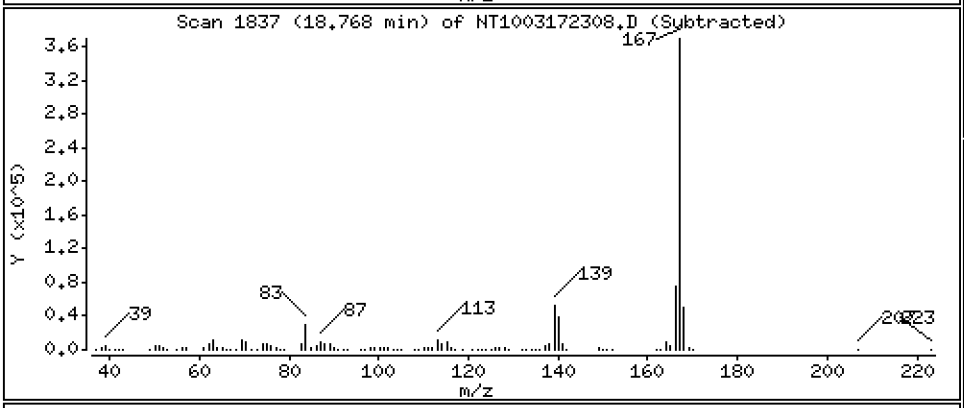
Column diameter: 0.25

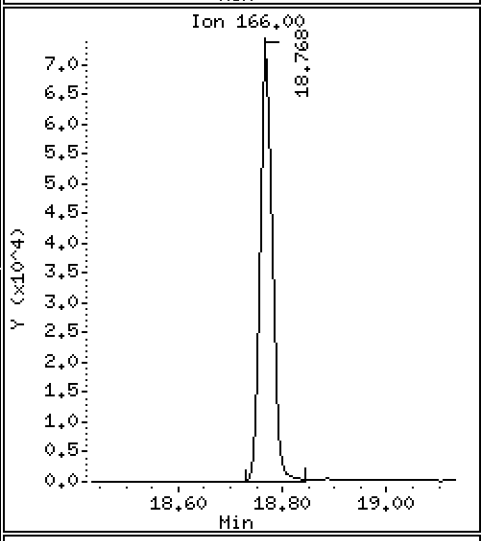
62 Carbazole

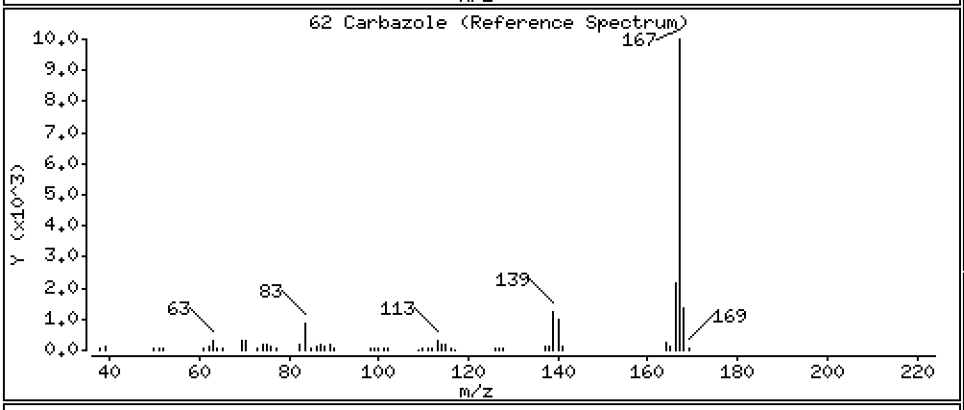
Concentration: 4.738 ug/mL

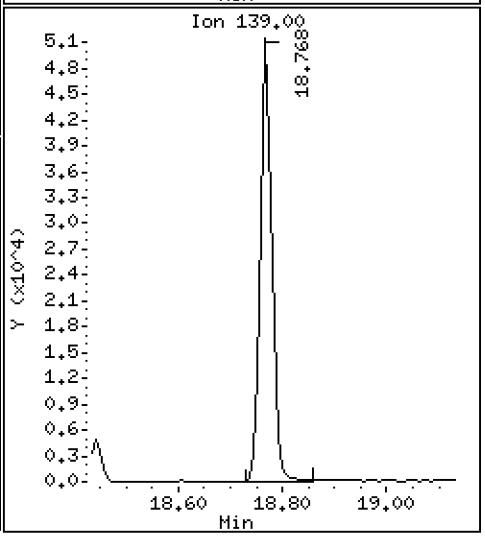


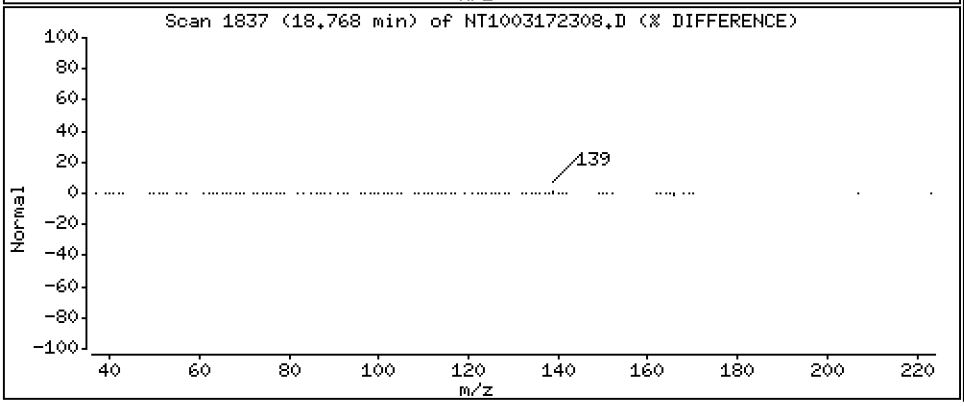












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

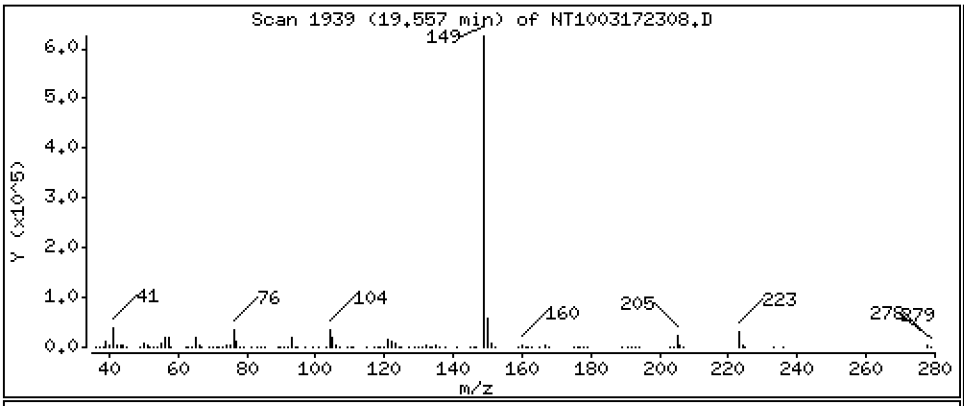
Operator: VTS

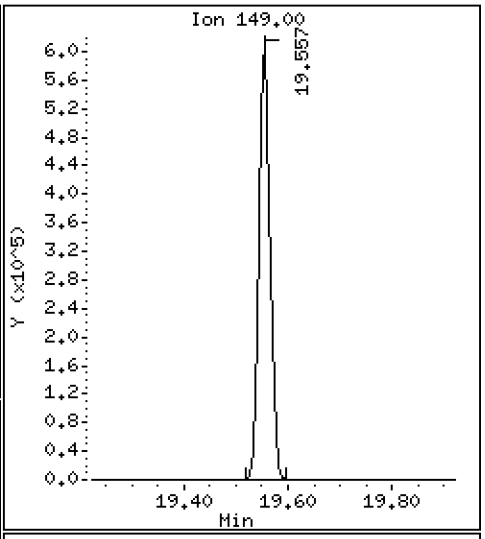
Column phase: ZB-5msi

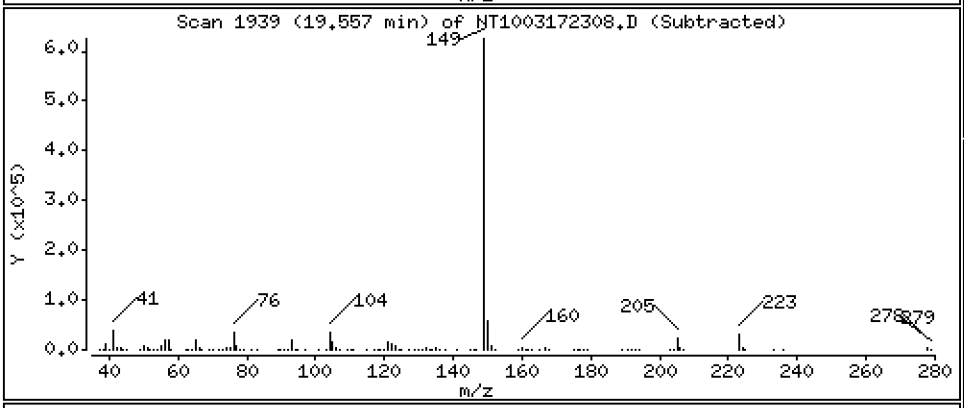
Column diameter: 0.25

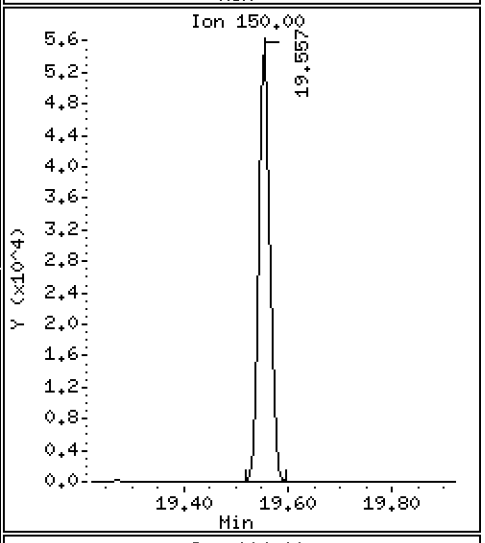
63 Di-n-butylphthalate

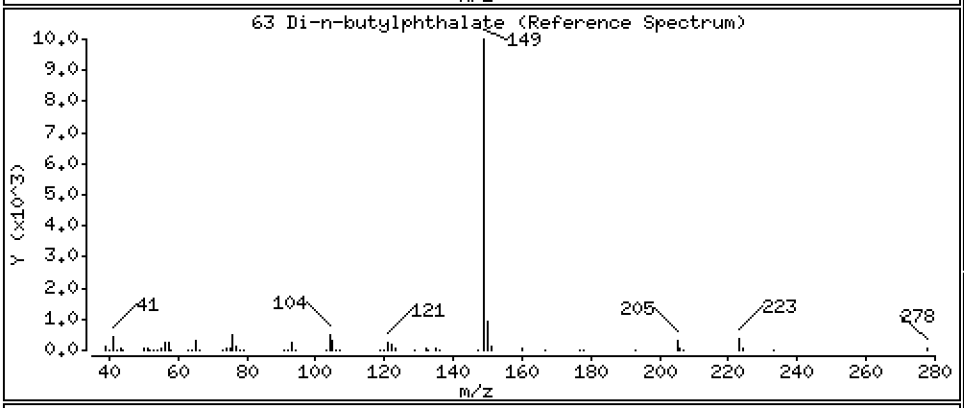
Concentration: 5.495 ug/mL

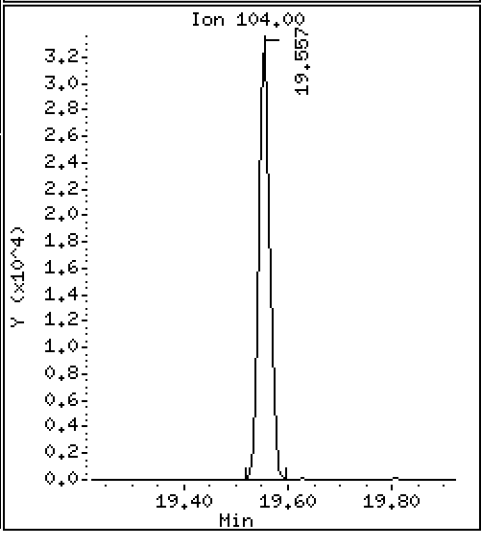


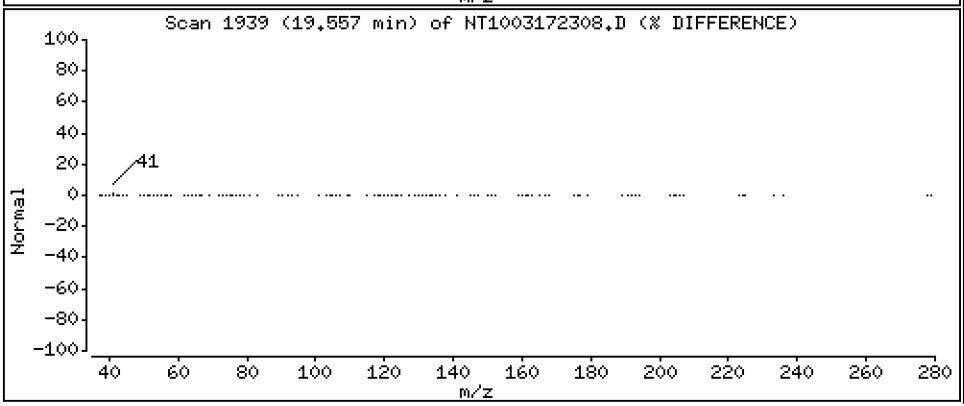












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

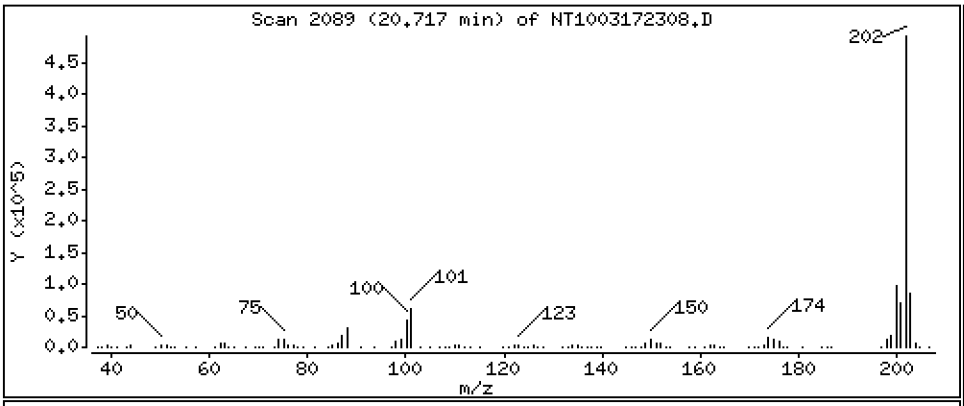
Operator: VTS

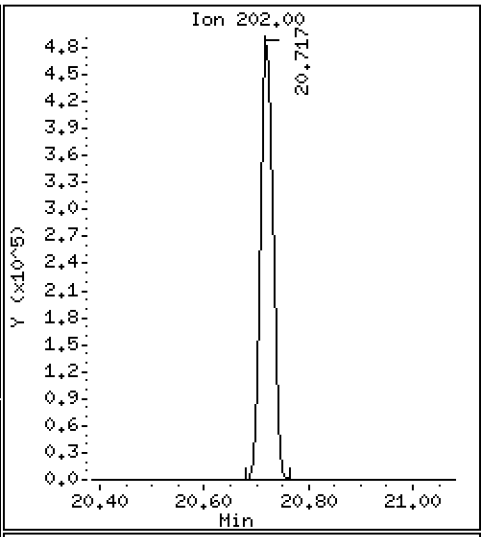
Column phase: ZB-5msi

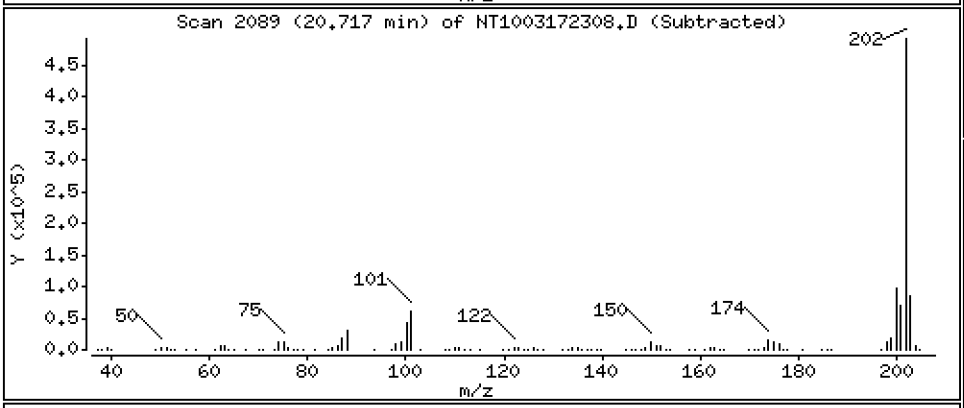
Column diameter: 0.25

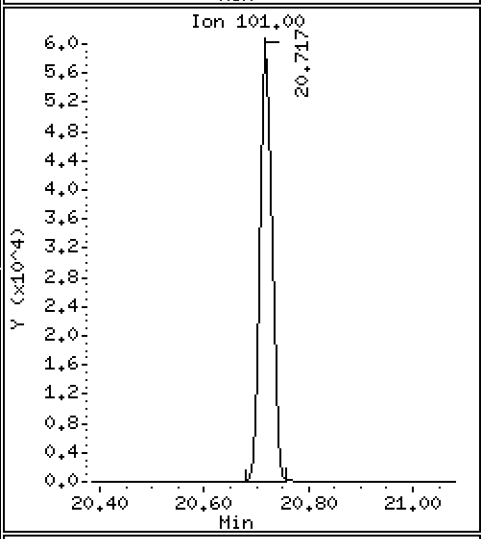
64 Fluoranthene

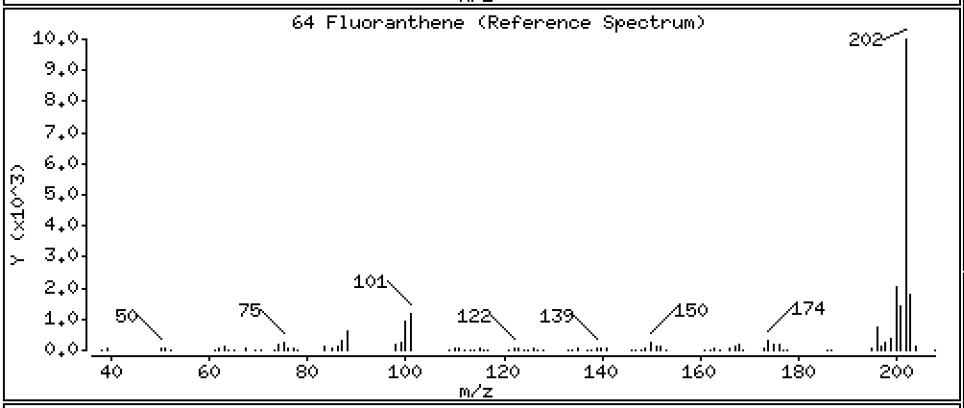
Concentration: 4.830 ug/mL

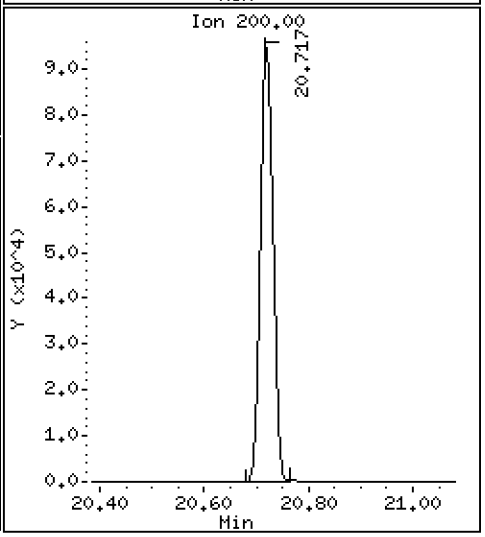


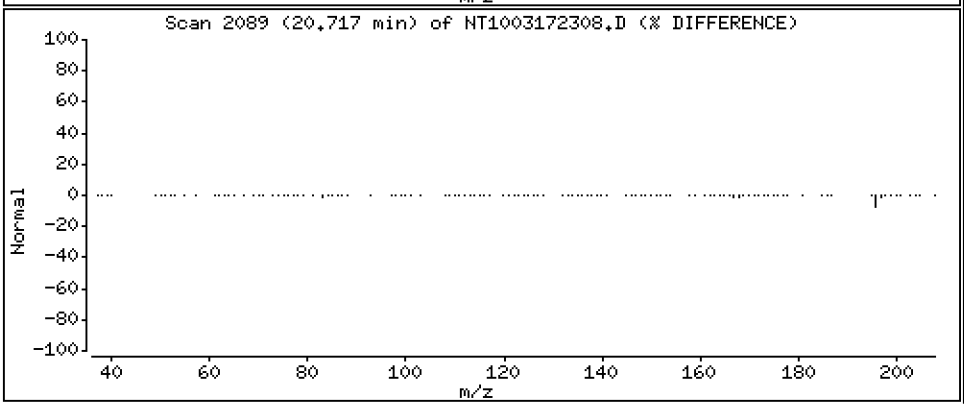












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

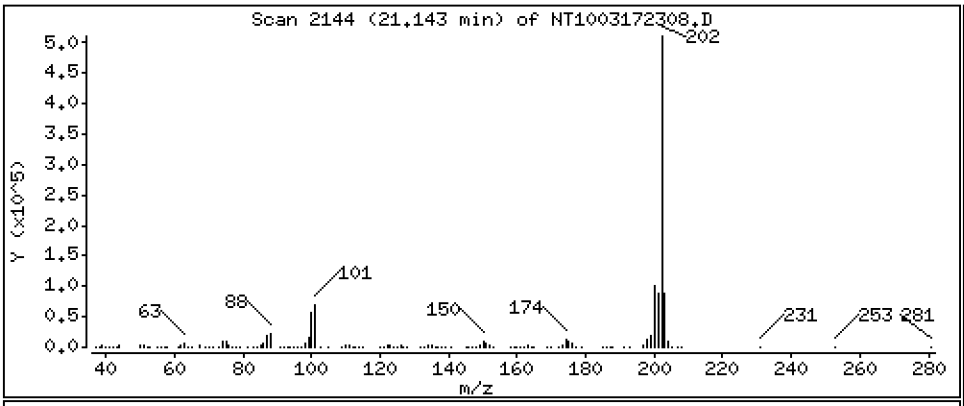
Operator: VTS

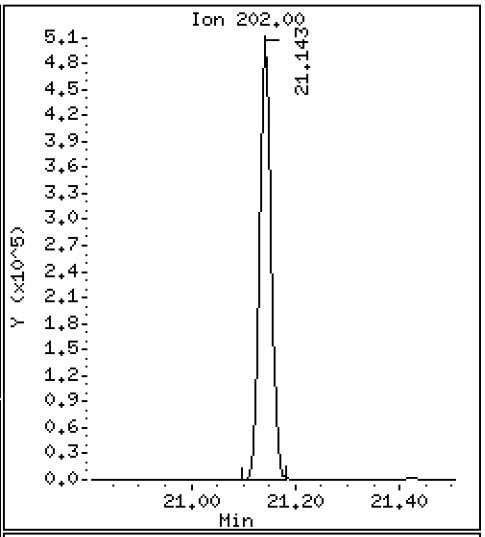
Column phase: ZB-5msi

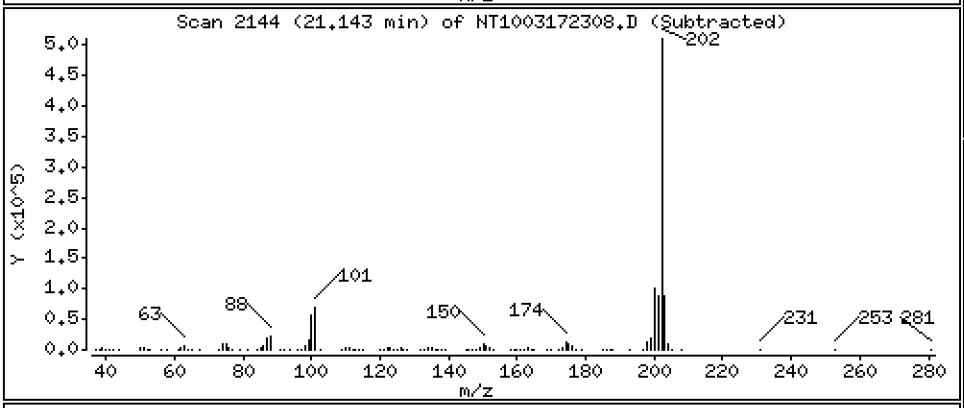
Column diameter: 0.25

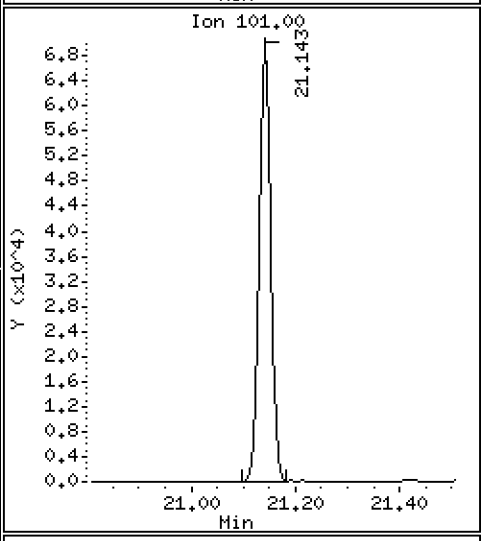
65 Pyrene

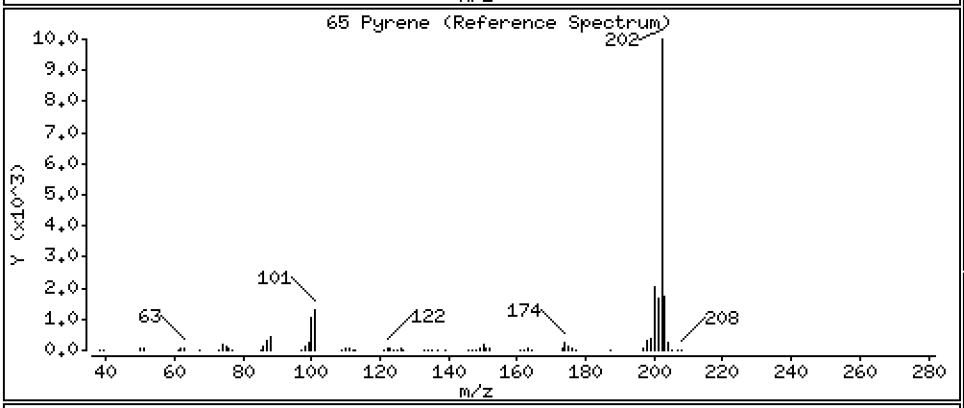
Concentration: 4.730 ug/mL

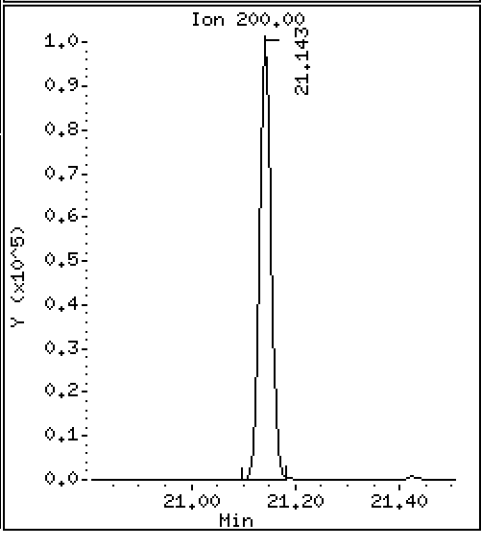


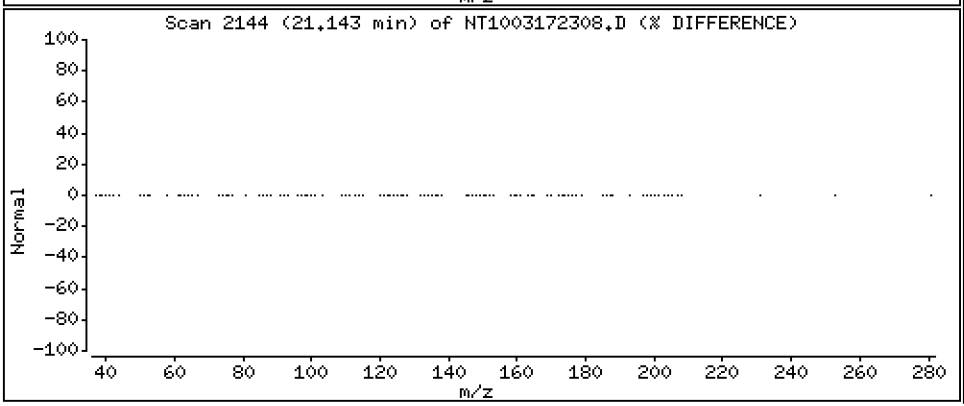












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

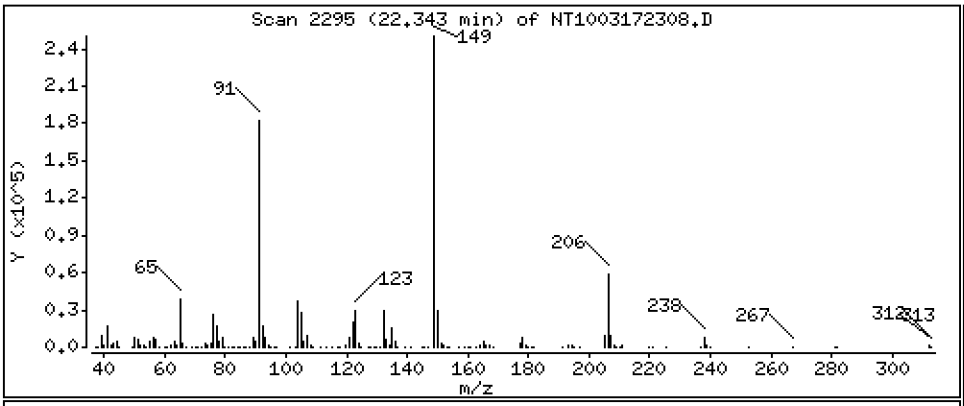
Operator: VTS

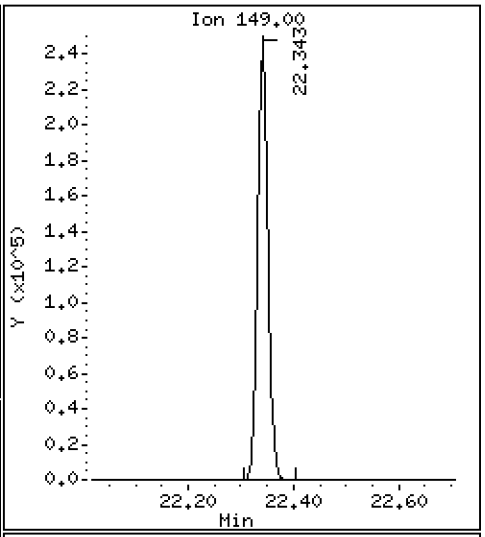
Column phase: ZB-5msi

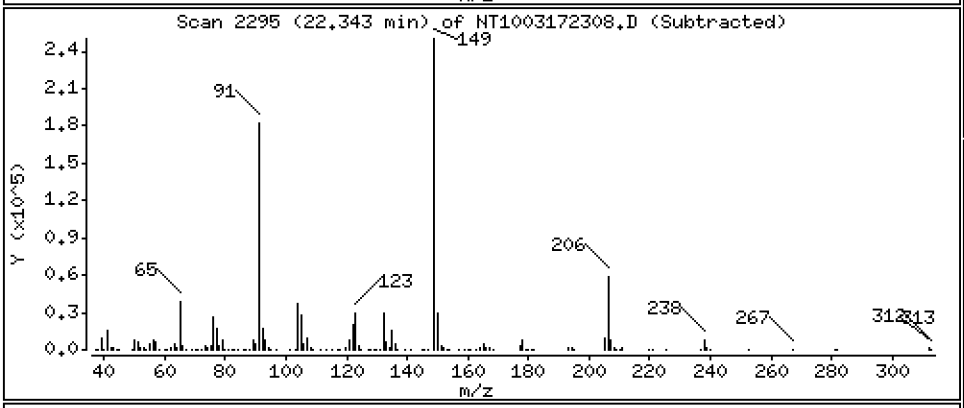
Column diameter: 0.25

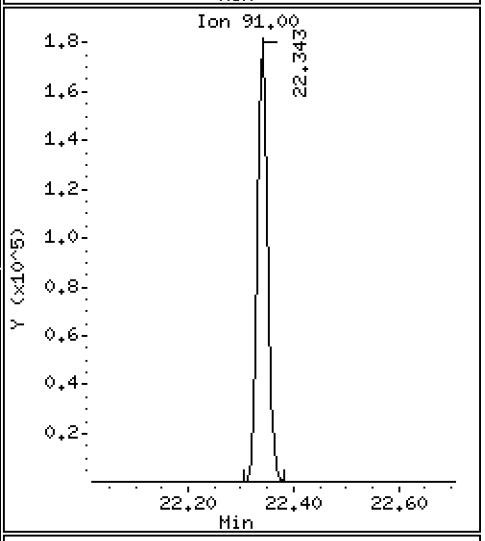
67 Butylbenzylphthalate

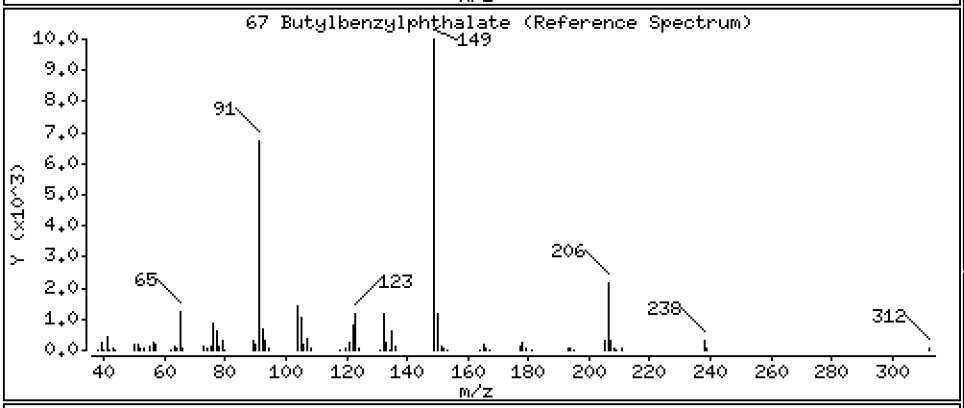
Concentration: 5.762 ug/mL

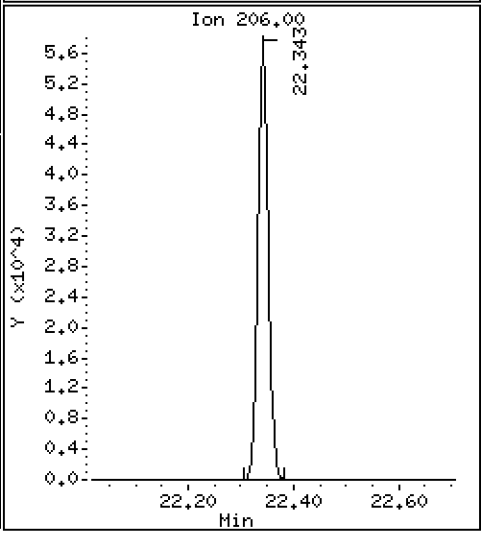


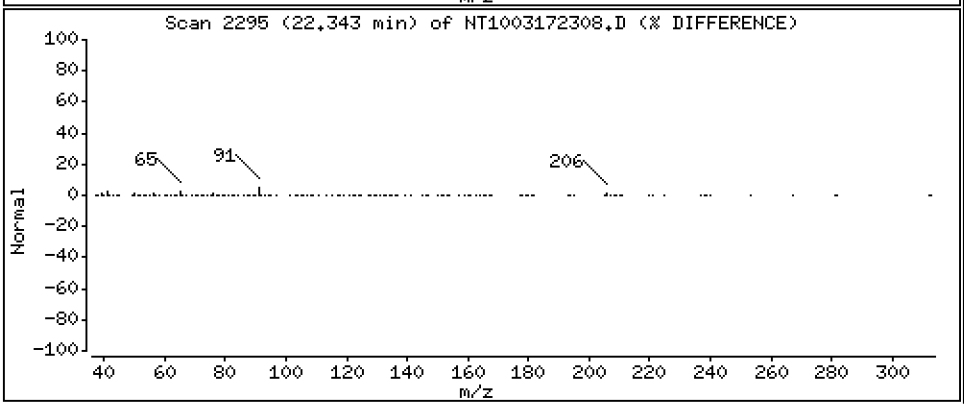












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

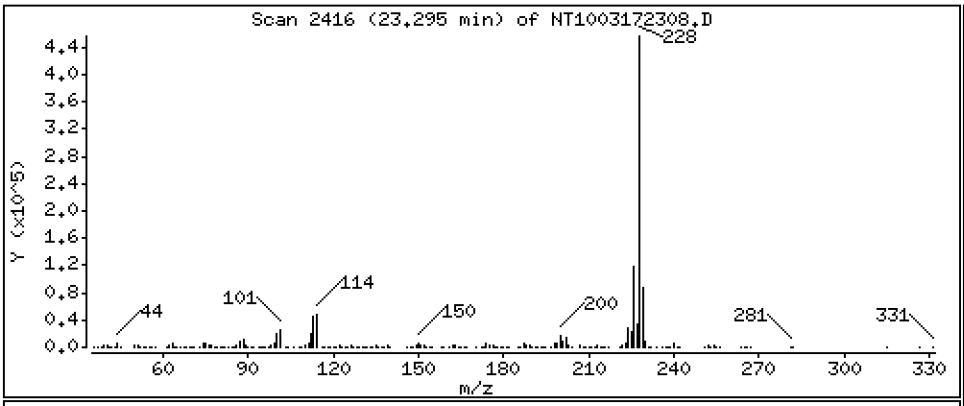
Operator: VTS

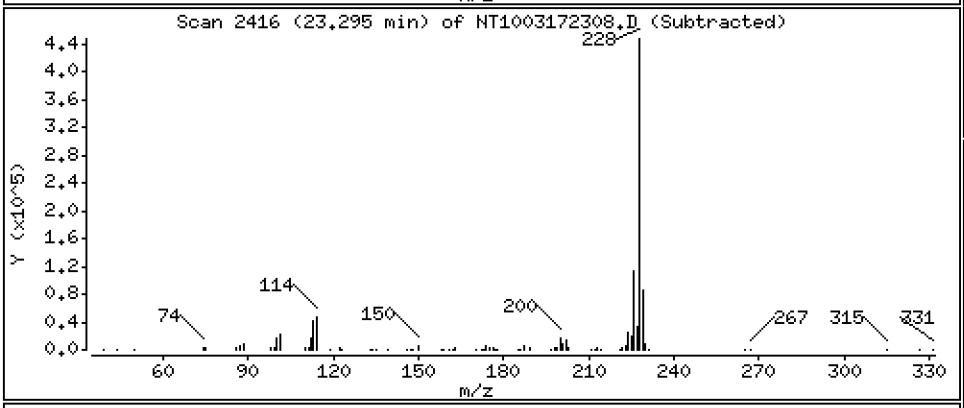
Column phase: ZB-5msi

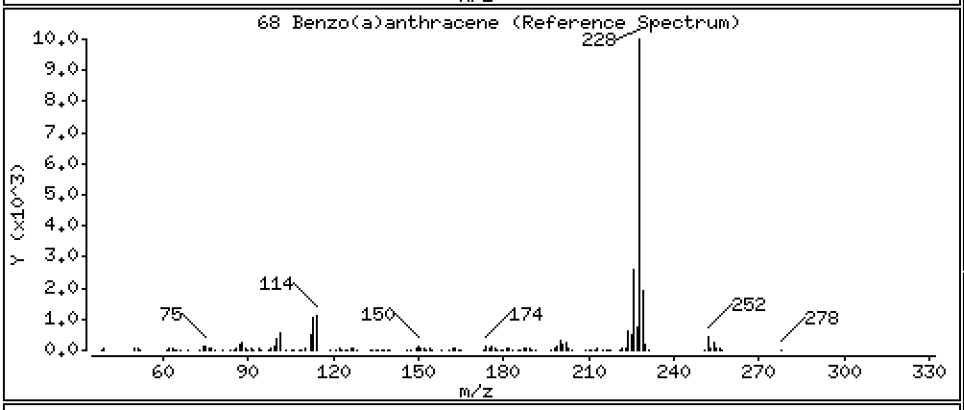
Column diameter: 0.25

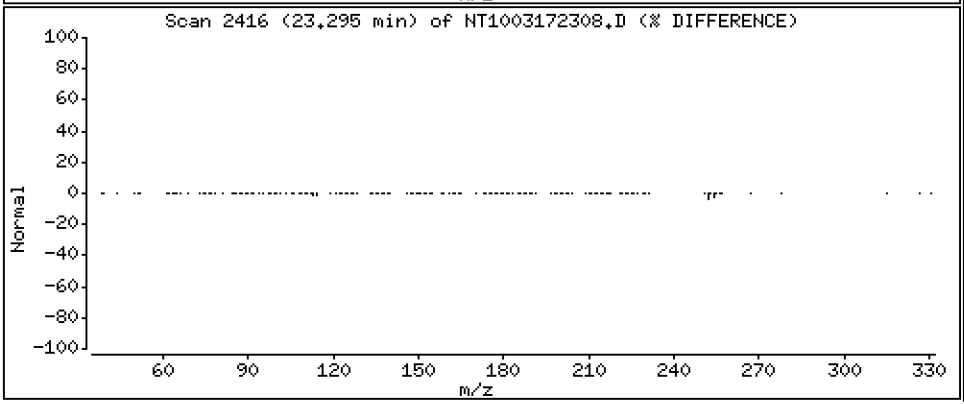
68 Benzo(a)anthracene

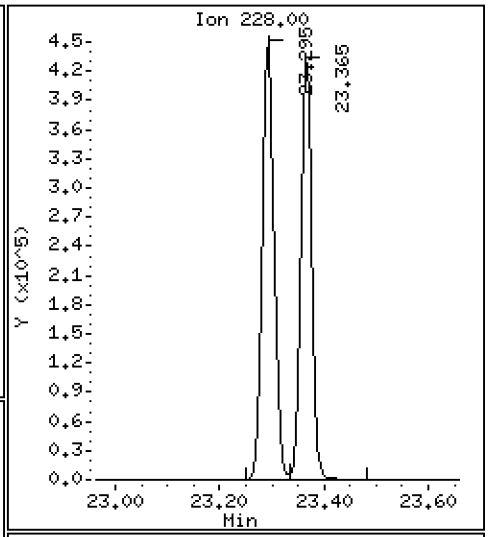
Concentration: 4.923 ug/mL

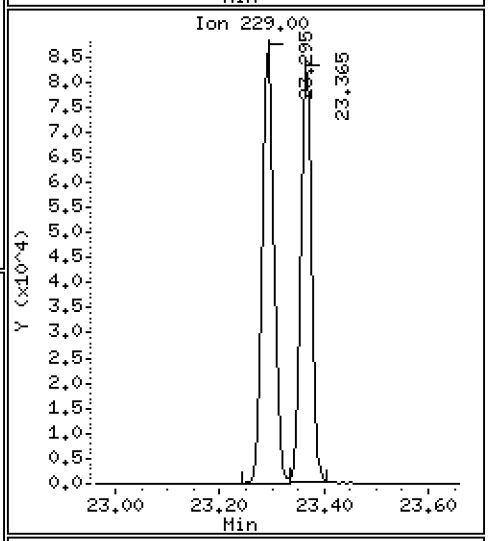


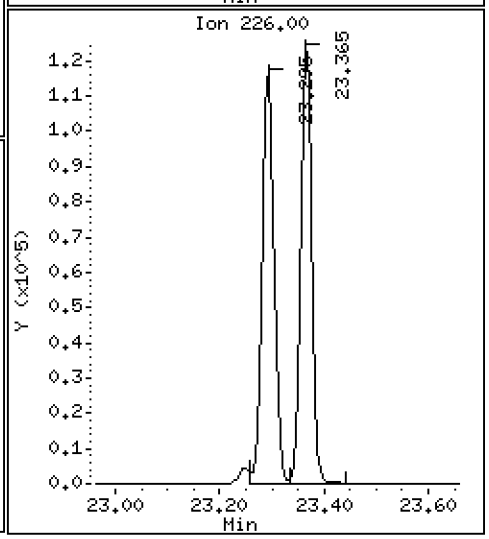












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

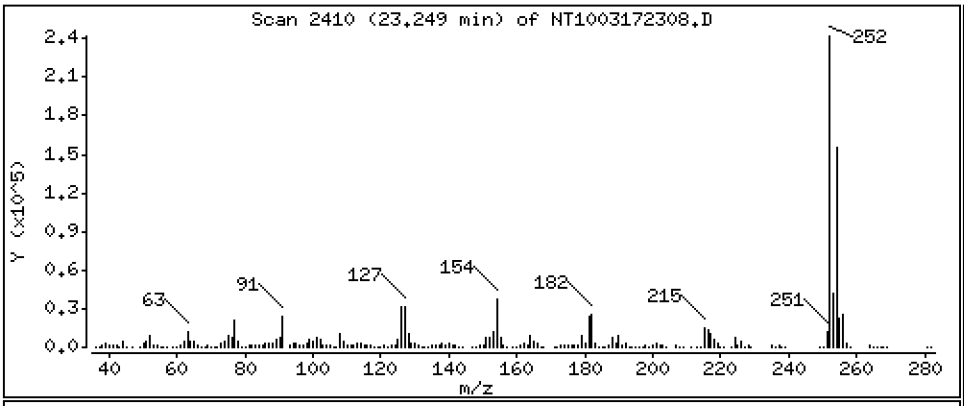
Operator: VTS

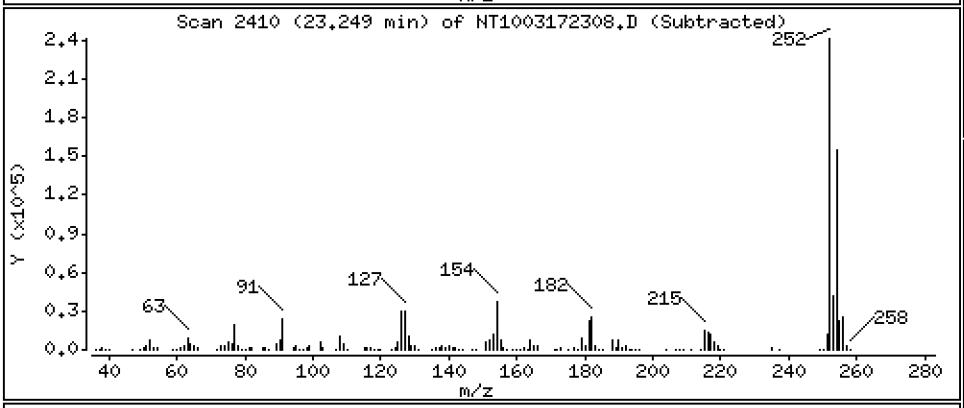
Column phase: ZB-5msi

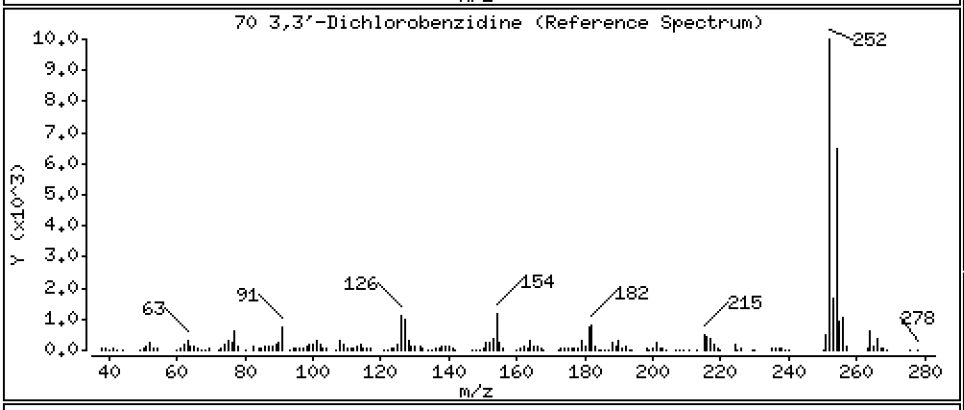
Column diameter: 0.25

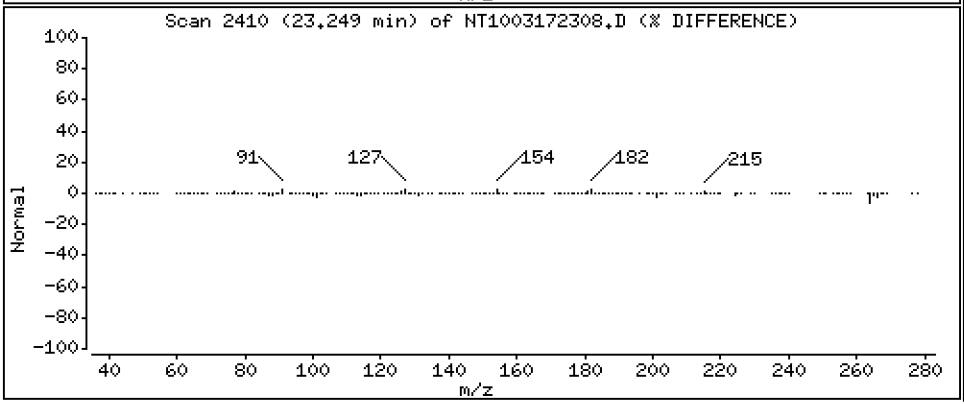
70 3,3'-Dichlorobenzidine

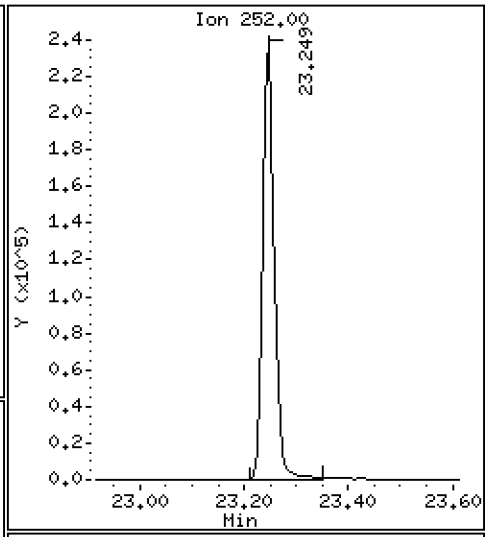
Concentration: 7.904 ug/mL

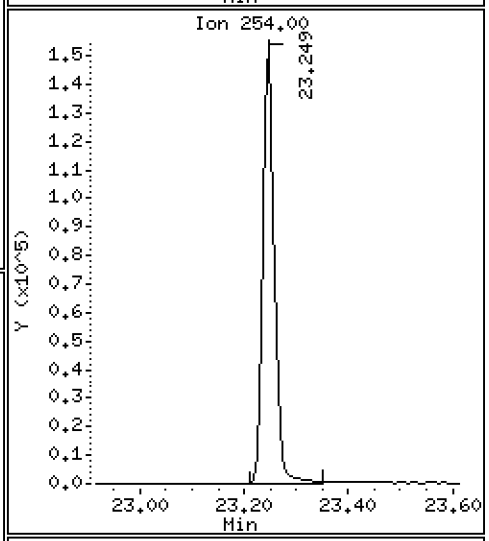


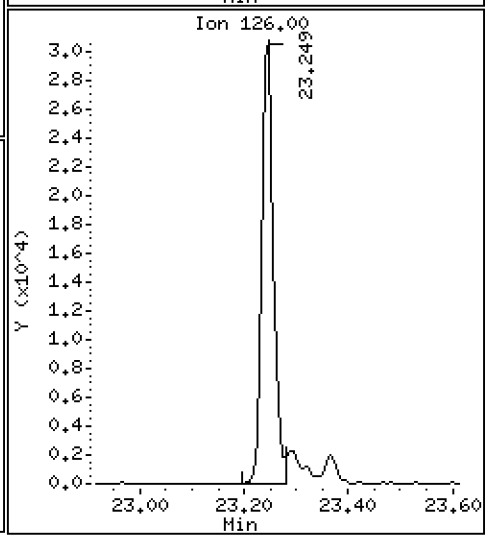












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

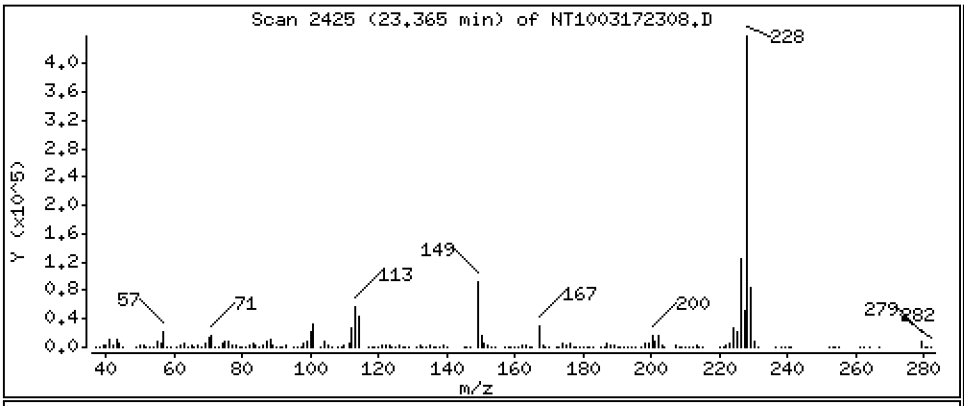
Operator: VTS

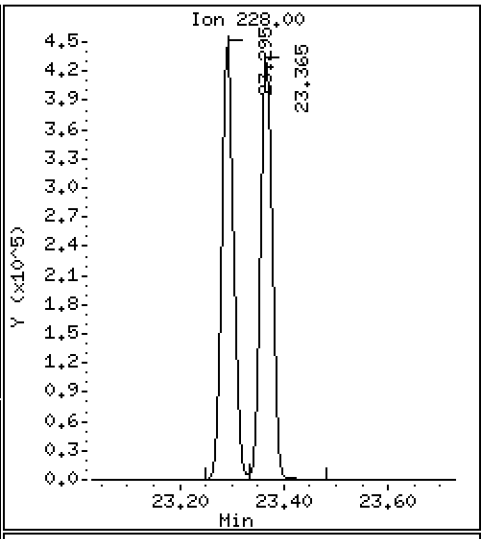
Column phase: ZB-5msi

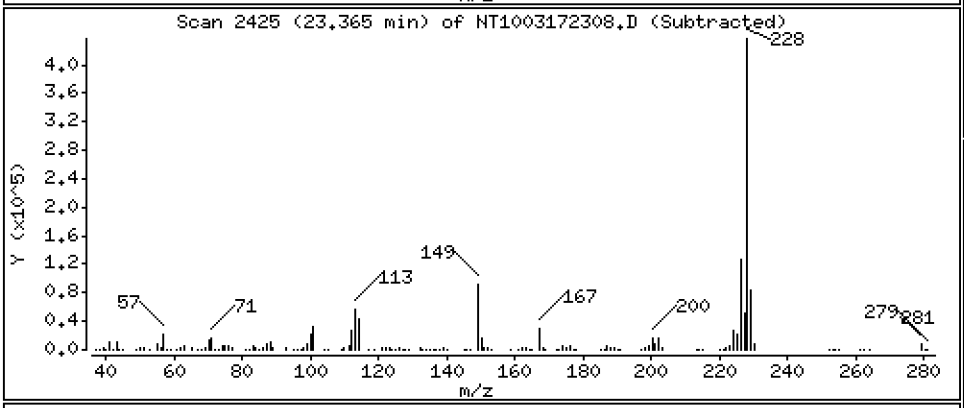
Column diameter: 0.25

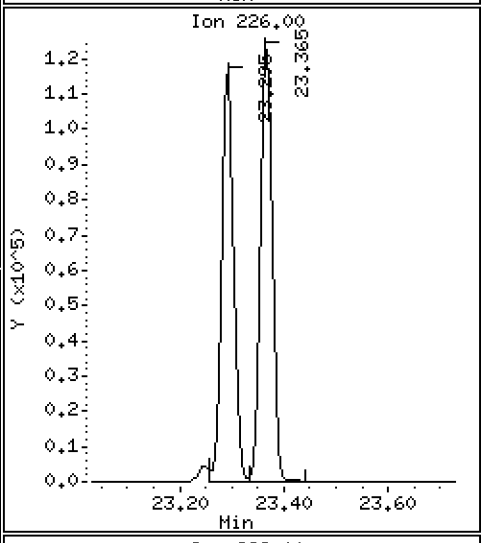
71 Chrysene

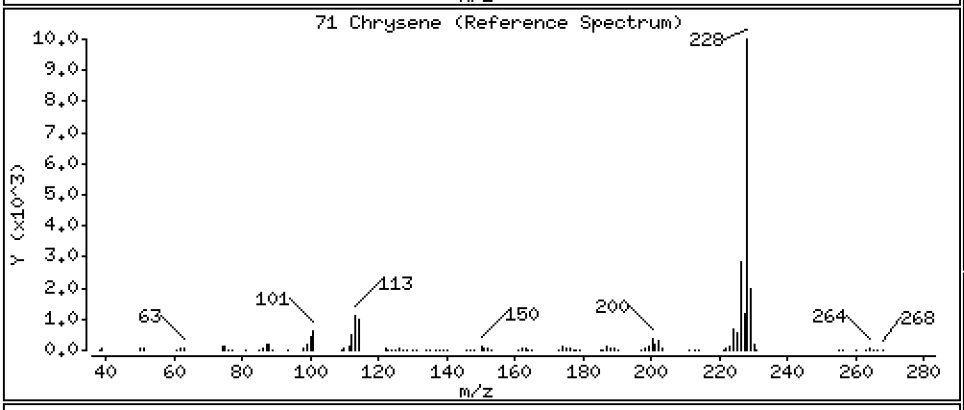
Concentration: 4.746 ug/mL

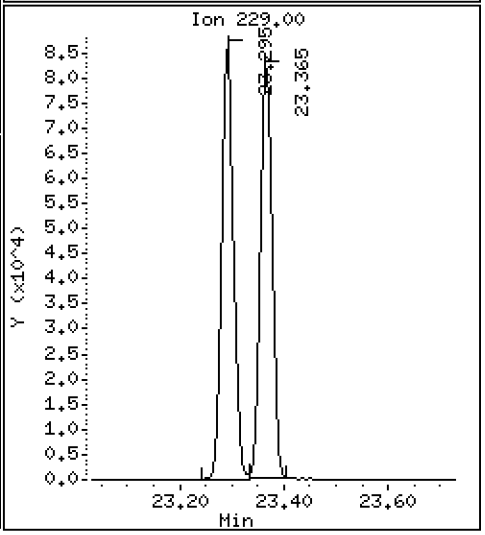


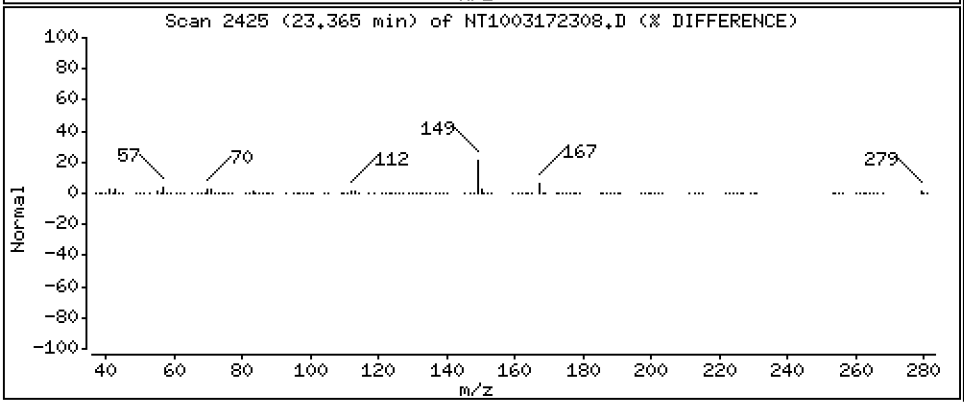












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

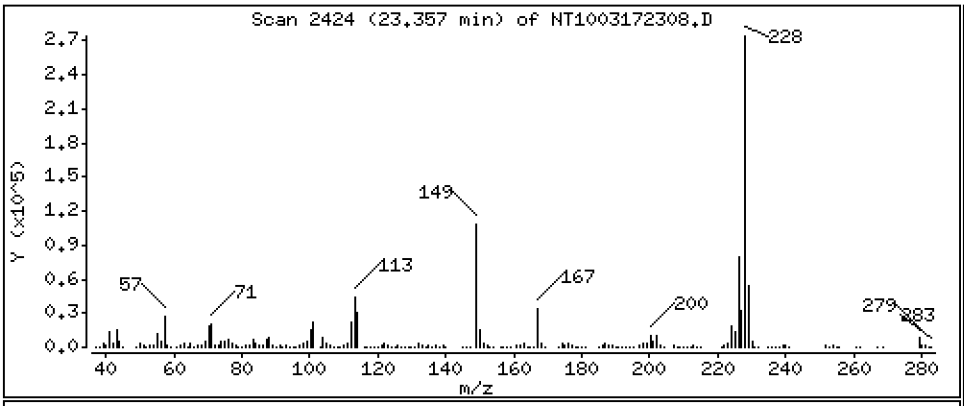
Operator: VTS

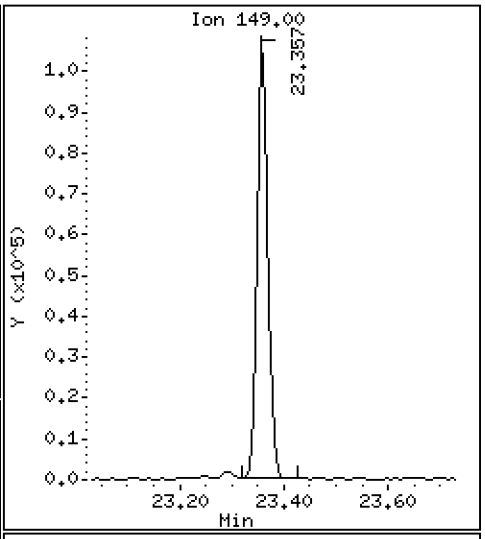
Column phase: ZB-5msi

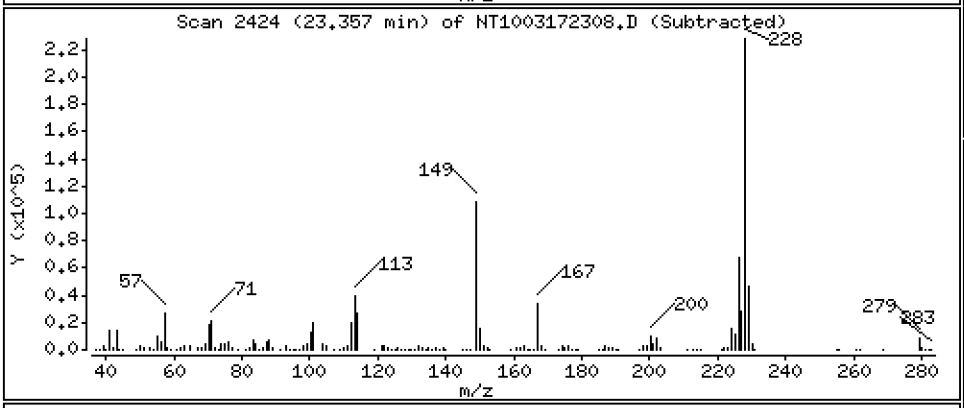
Column diameter: 0.25

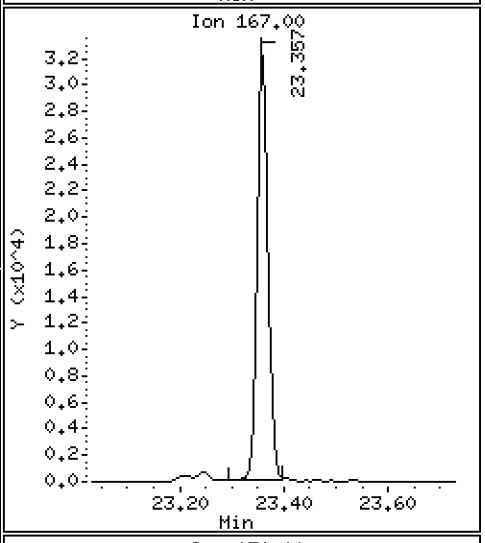
72 bis(2-Ethylhexyl)phthalate

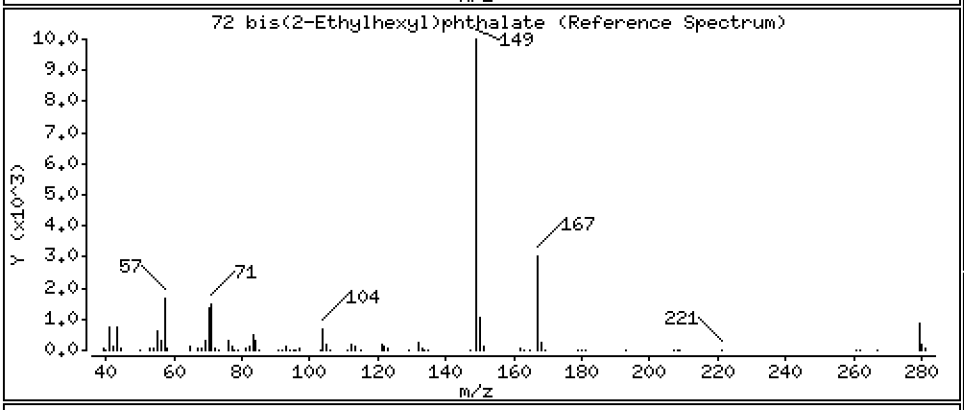
Concentration: 1.563 ug/mL

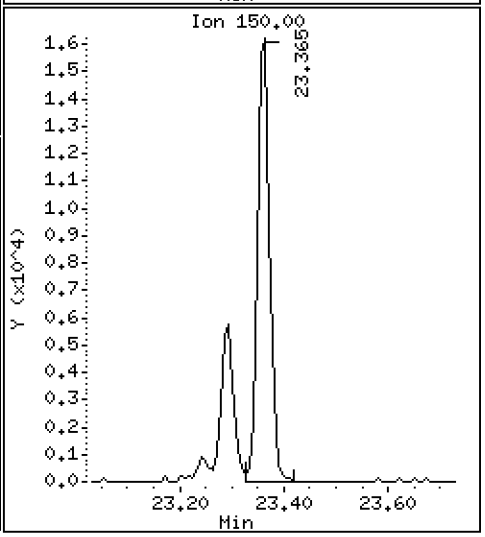


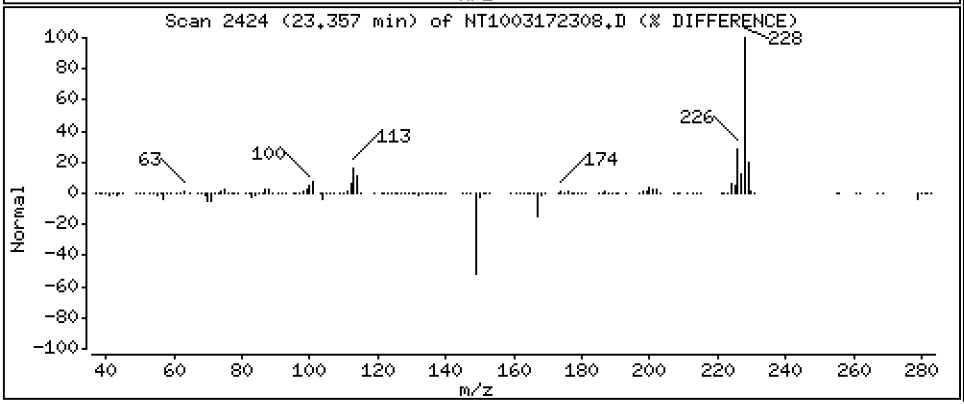












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

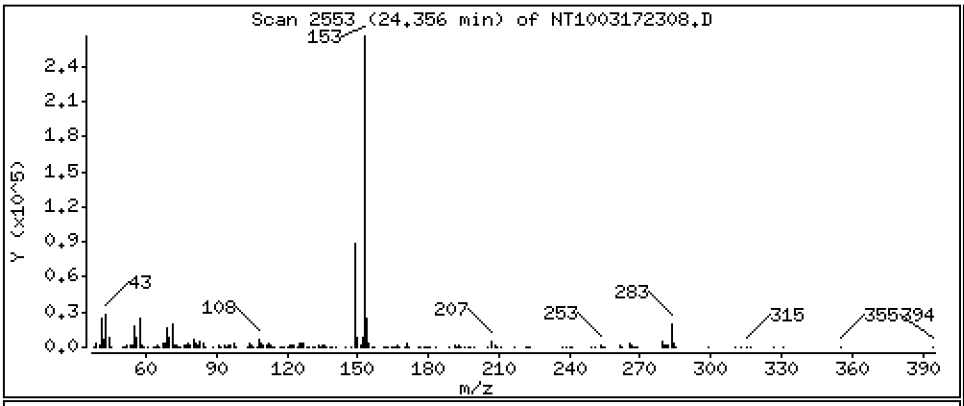
Operator: VTS

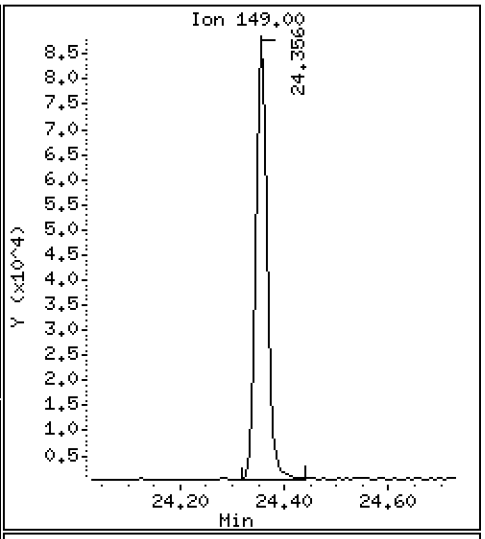
Column phase: ZB-5msi

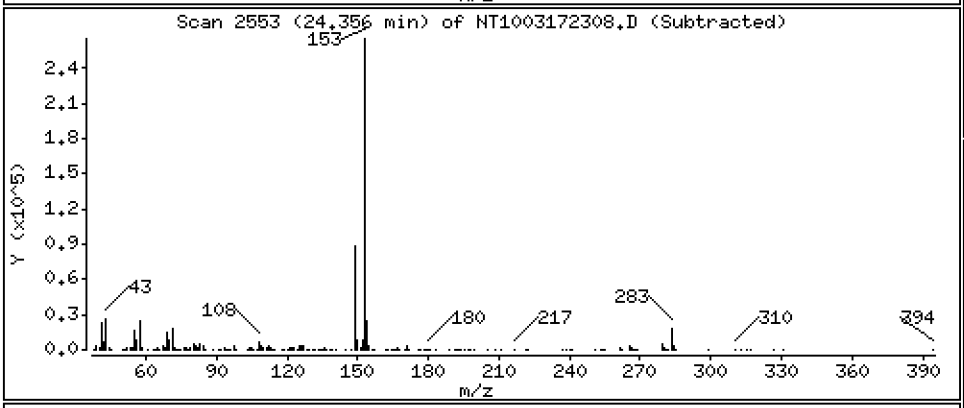
Column diameter: 0.25

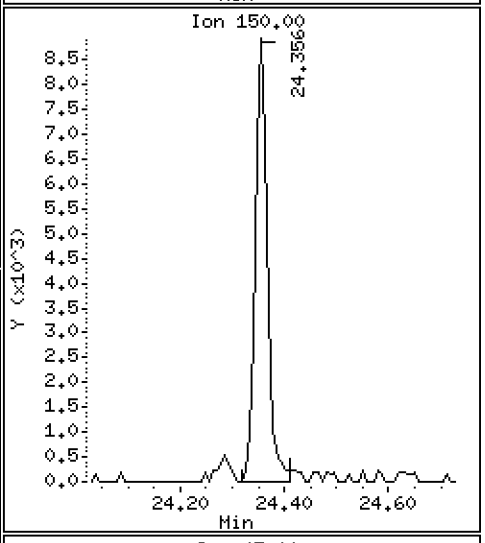
73 Di-n-octylphthalate

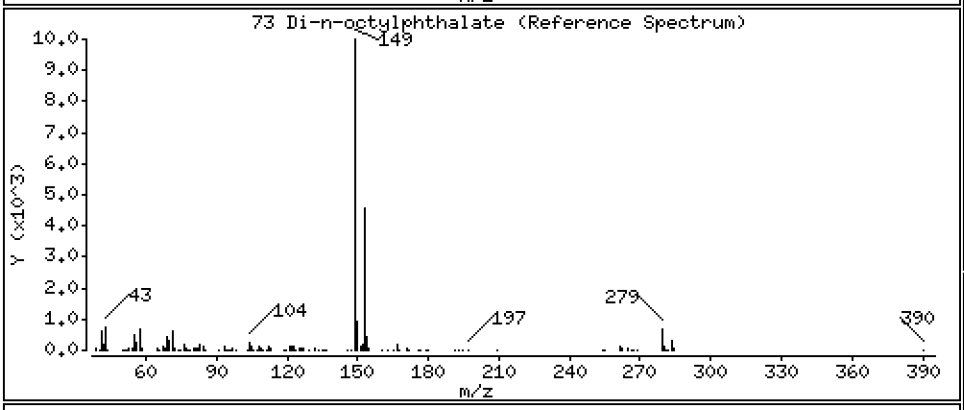
Concentration: 0.7898 ug/mL

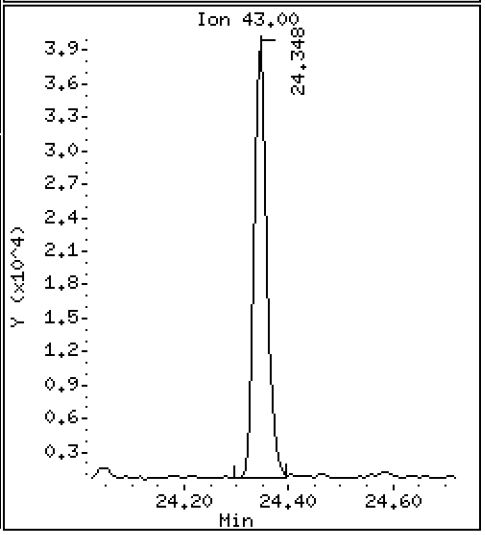


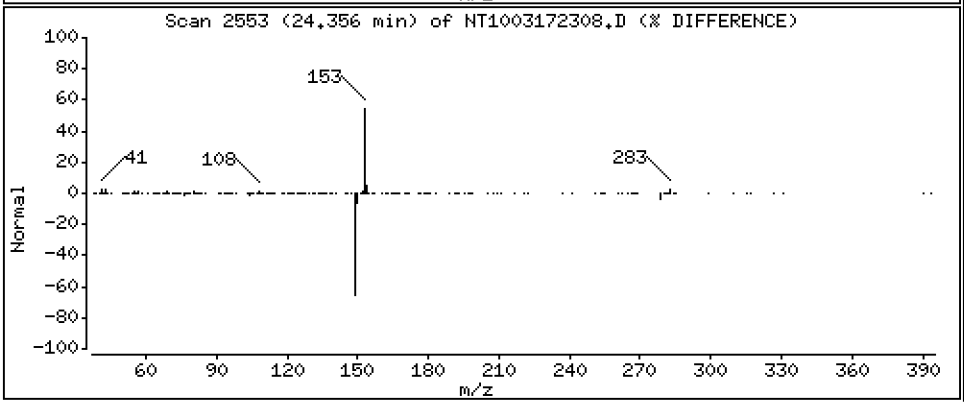












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

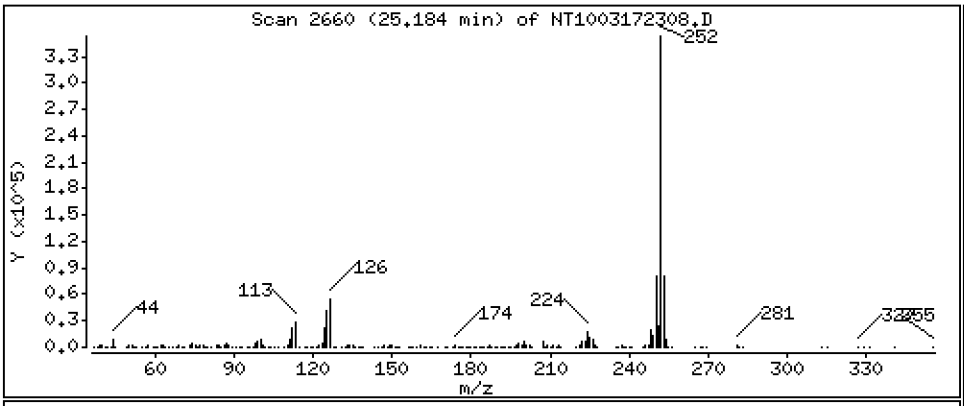
Operator: VTS

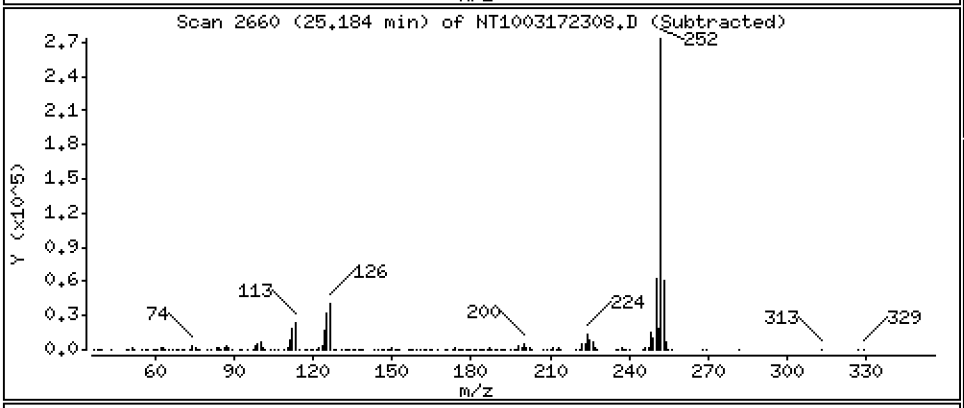
Column phase: ZB-5msi

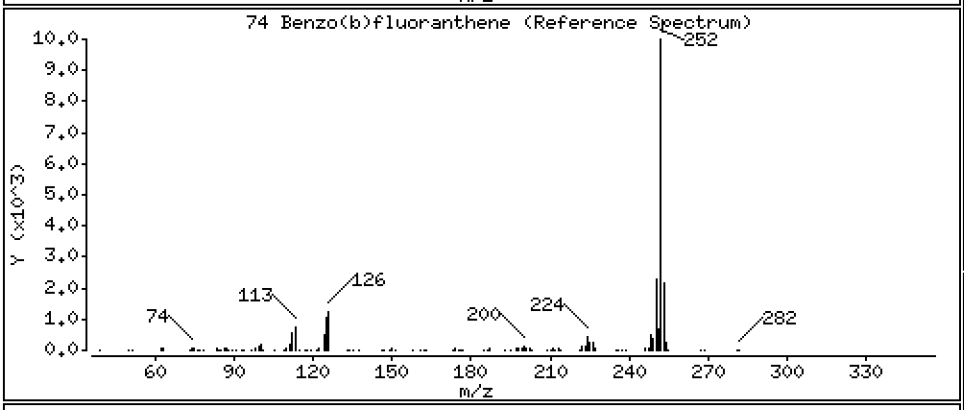
Column diameter: 0.25

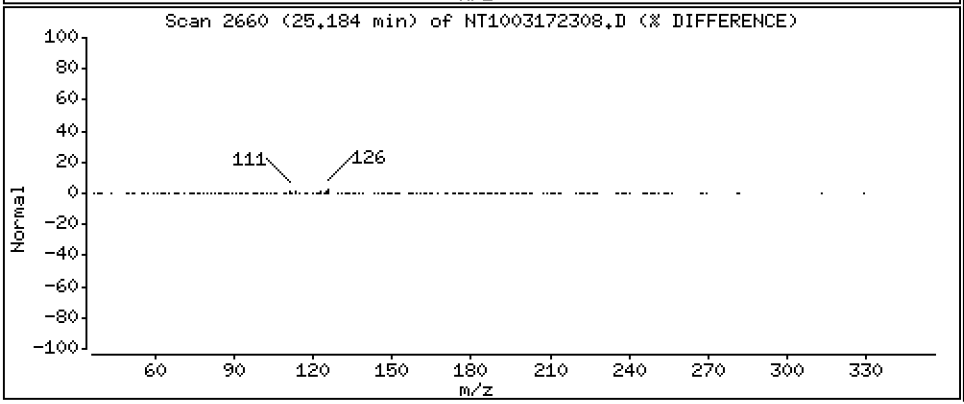
74 Benzo(b)fluoranthene

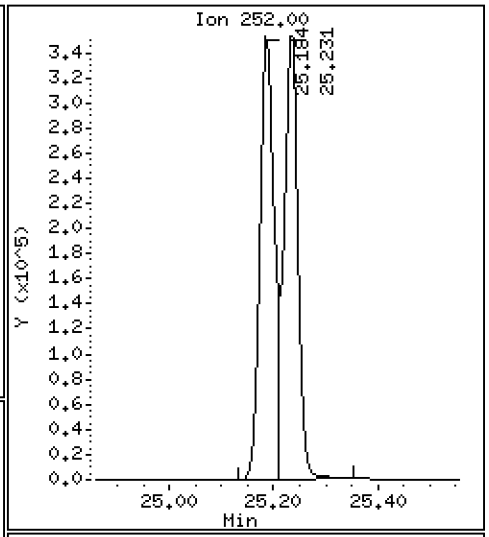
Concentration: 5.054 ug/mL

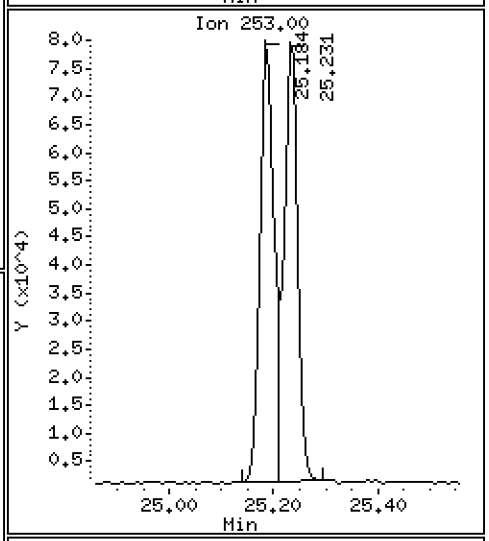


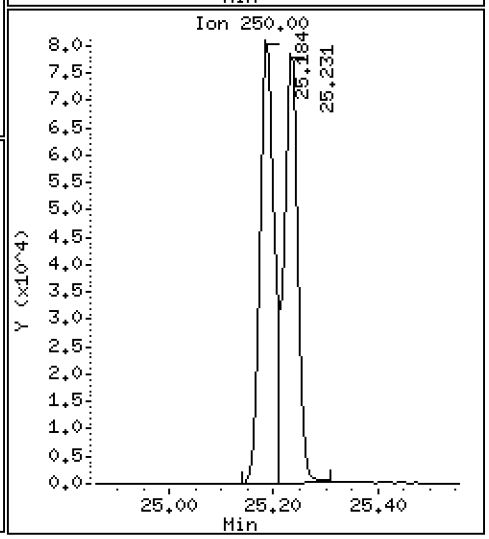












Date : 17-MAR-2023 22:53

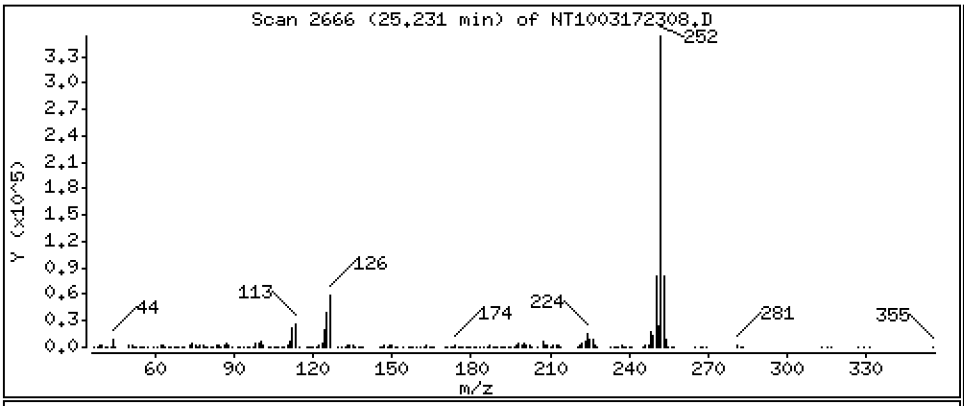
Client ID: Instrument: nt10.i

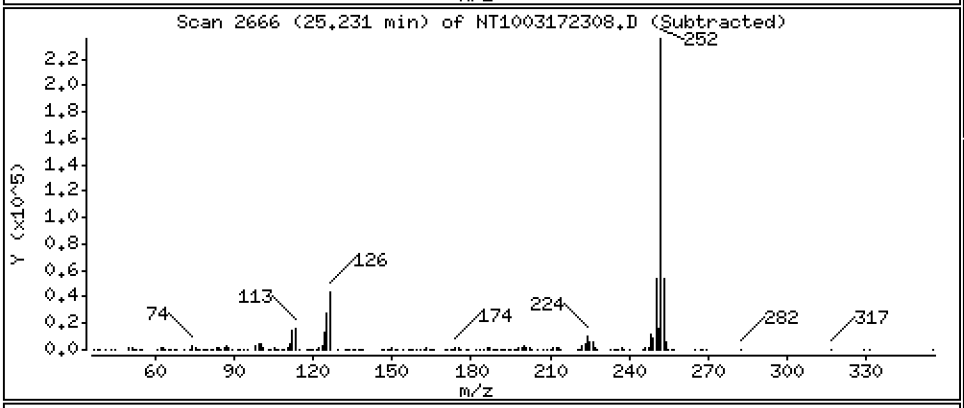
Sample Info: BLB0495-BSD1

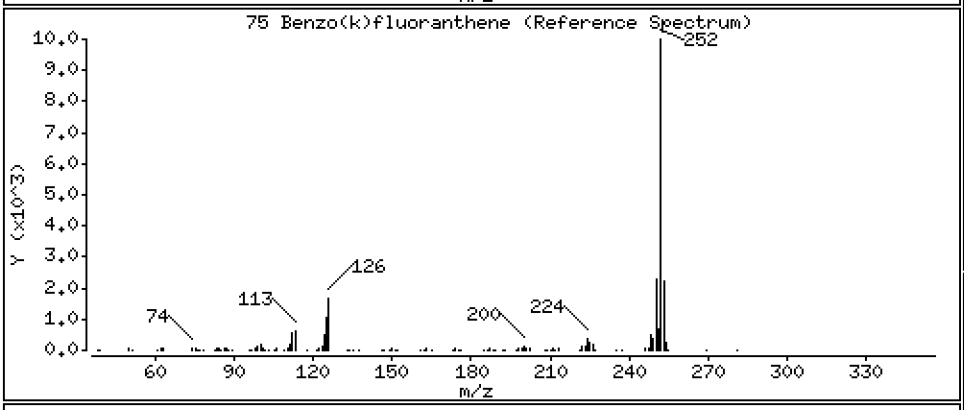
Operator: VTS

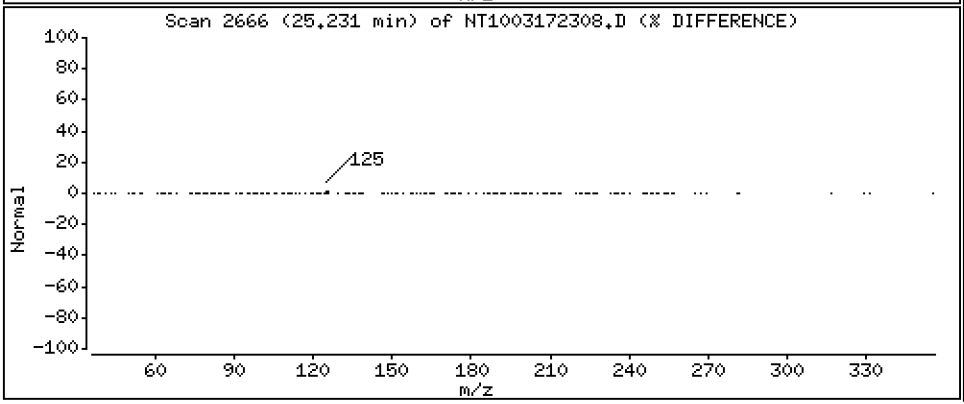
Column phase: ZB-5msi Column diameter: 0.25

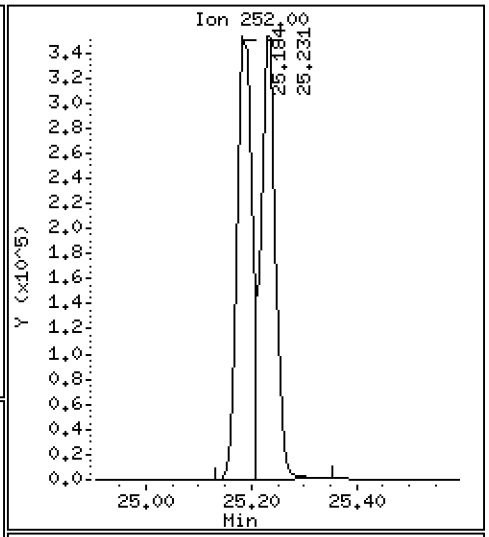
75 Benzo(k)fluoranthene Concentration: 5.383 ug/mL

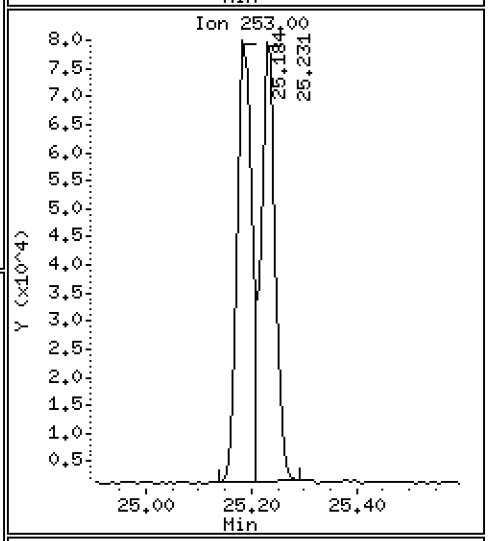


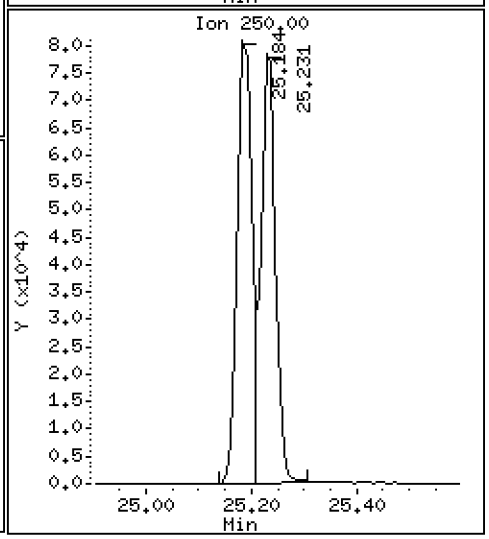












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

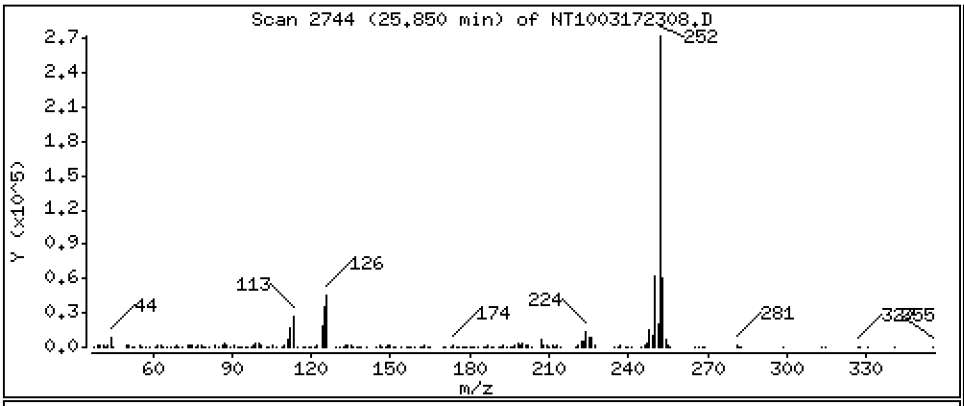
Operator: VTS

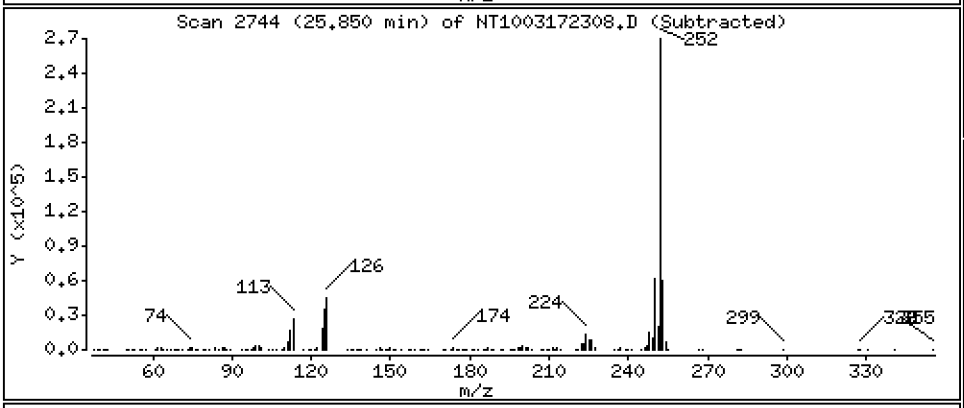
Column phase: ZB-5msi

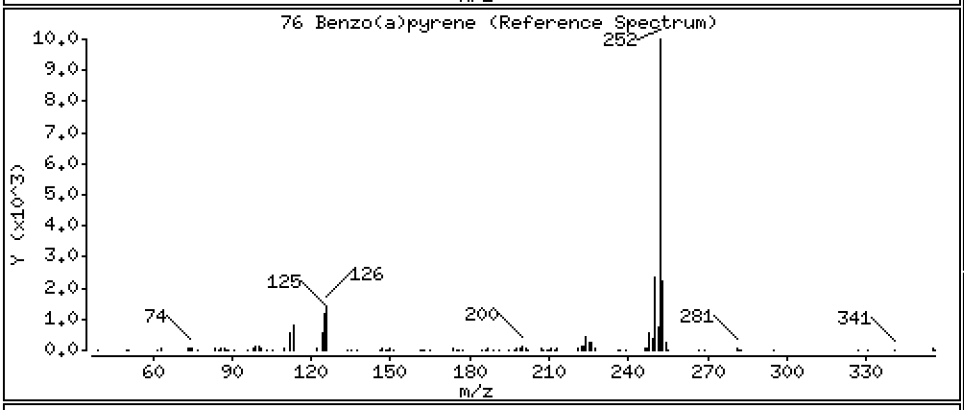
Column diameter: 0.25

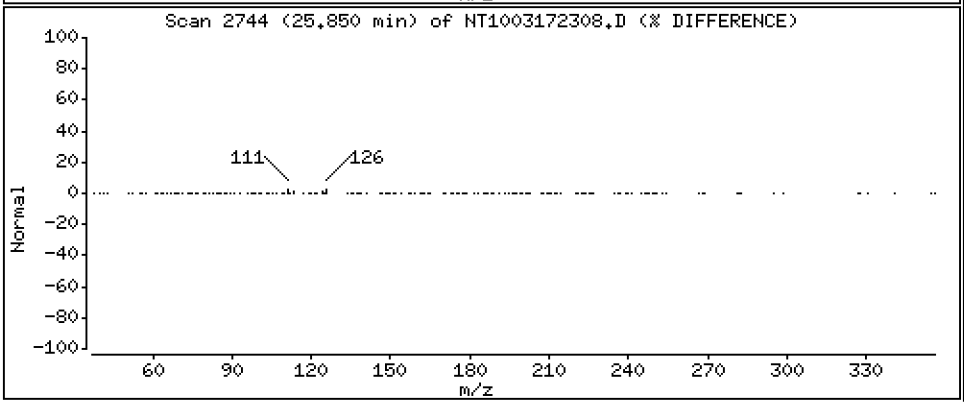
76 Benzo(a)pyrene

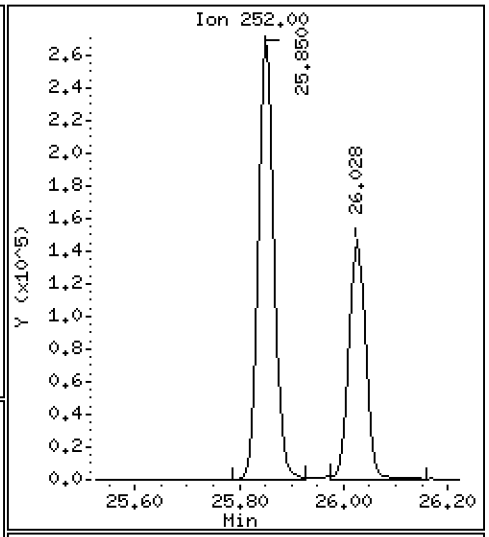
Concentration: 4.828 ug/mL

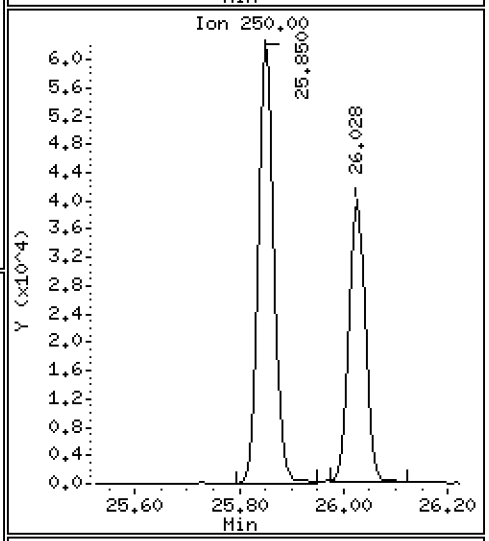


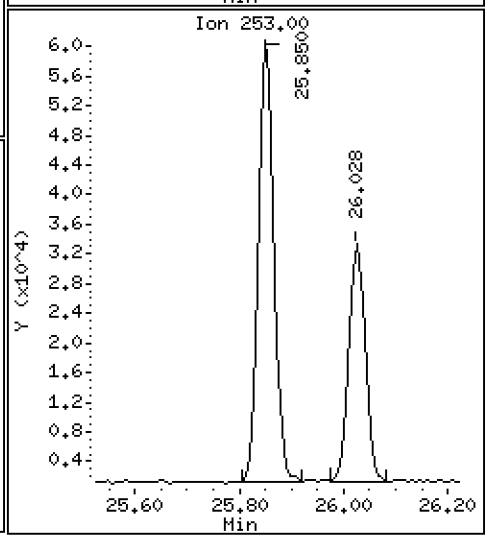












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

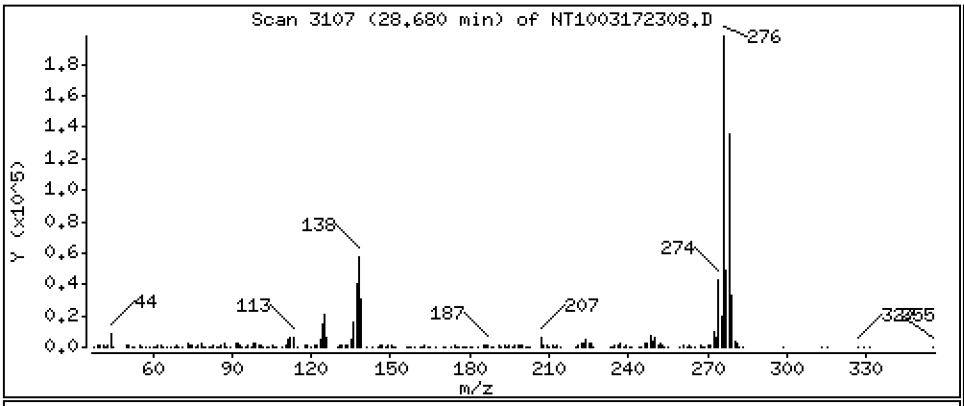
Operator: VTS

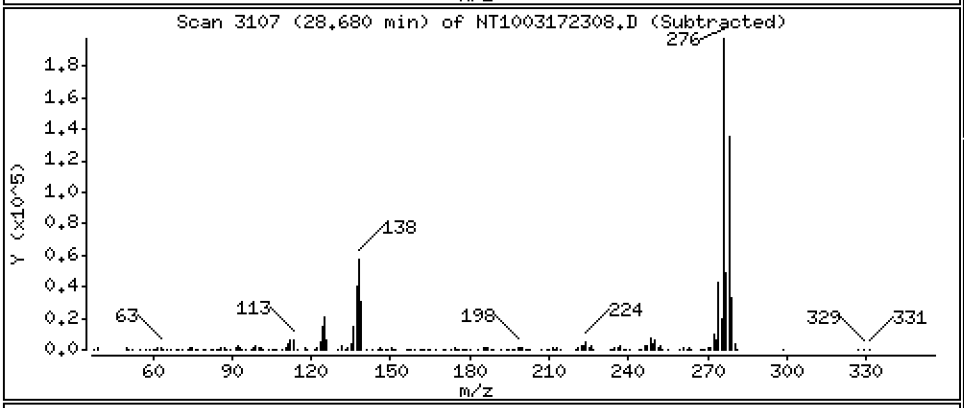
Column phase: ZB-5msi

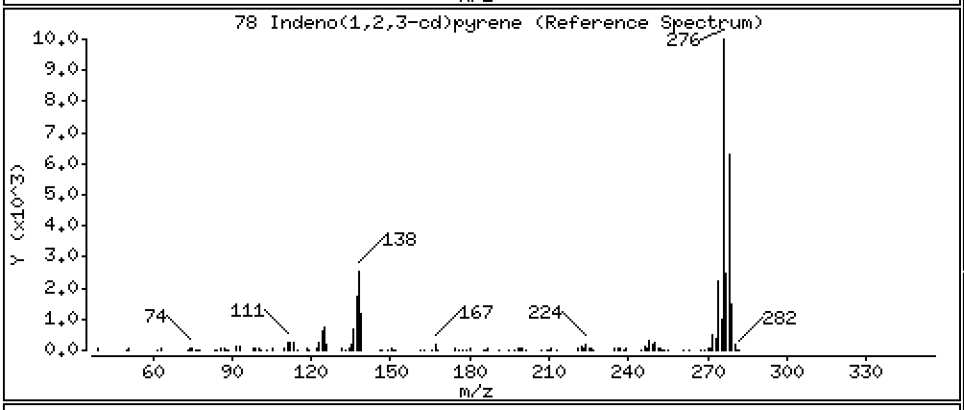
Column diameter: 0.25

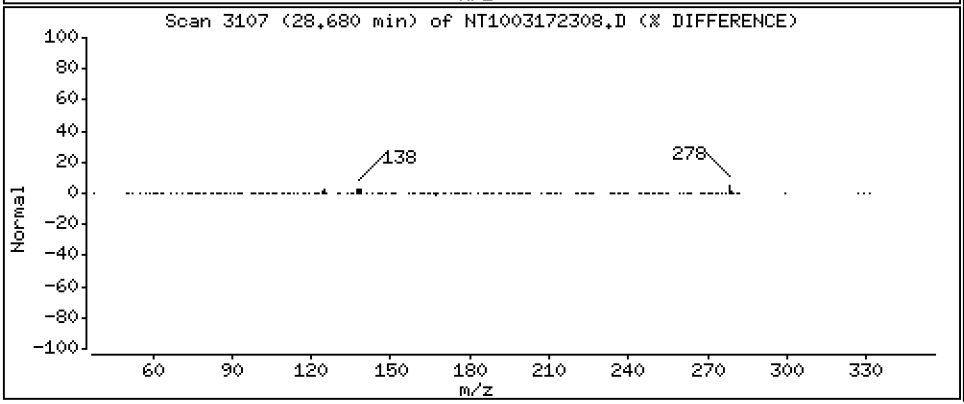
78 Indeno(1,2,3-cd)pyrene

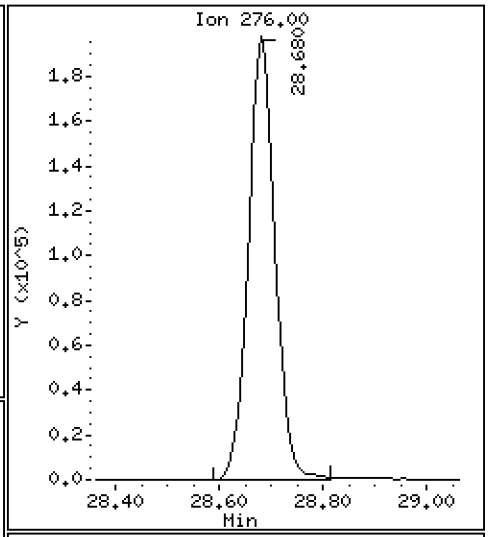
Concentration: 4.707 ug/mL

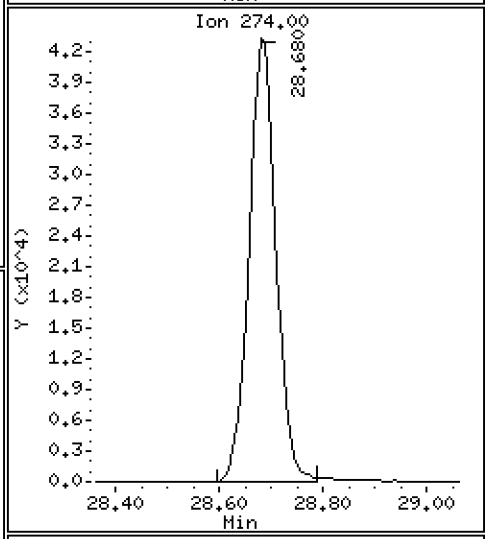


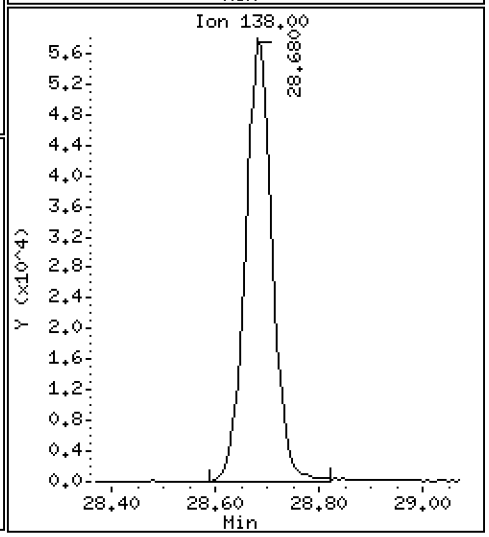












Date : 17-MAR-2023 22:53

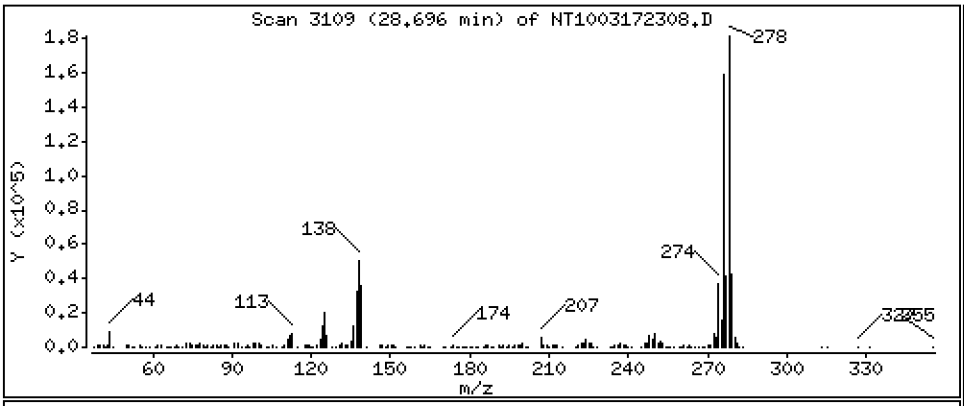
Client ID: Instrument: nt10.i

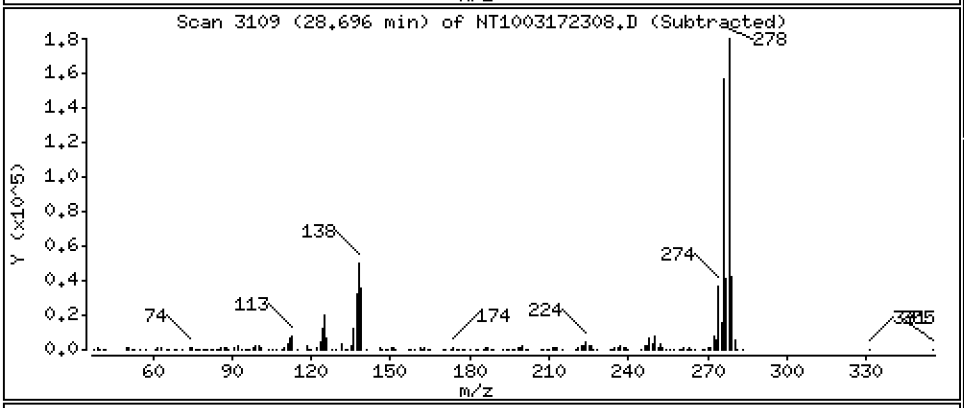
Sample Info: BLB0495-BSD1

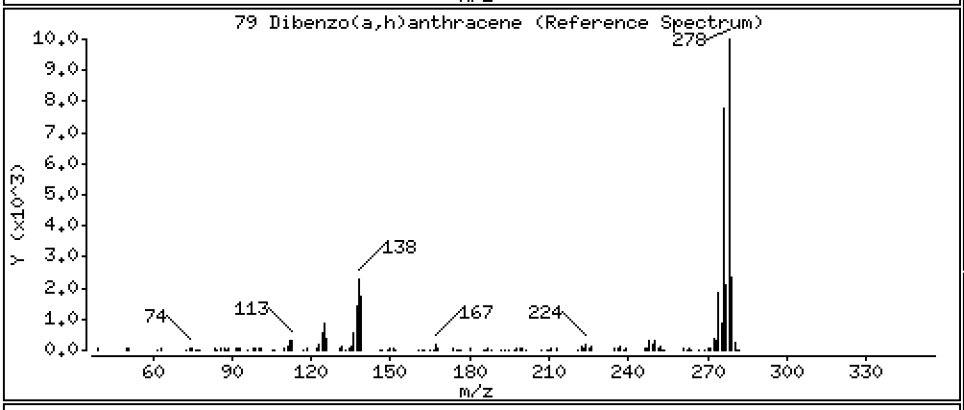
Operator: VTS

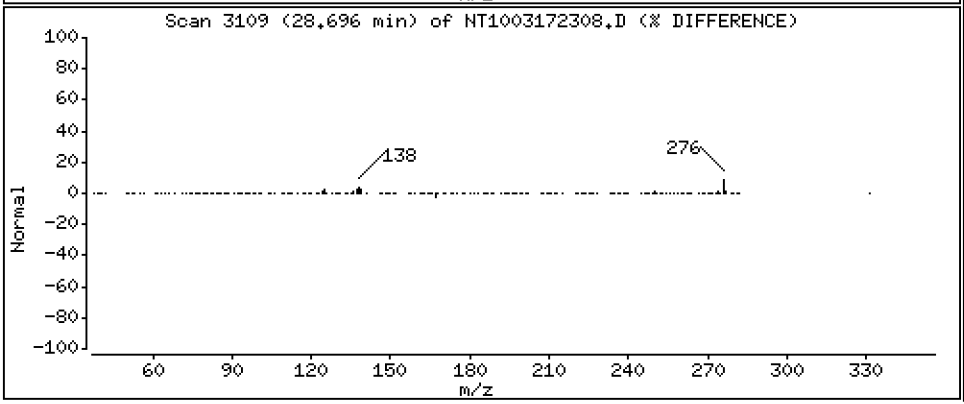
Column phase: ZB-5msi Column diameter: 0.25

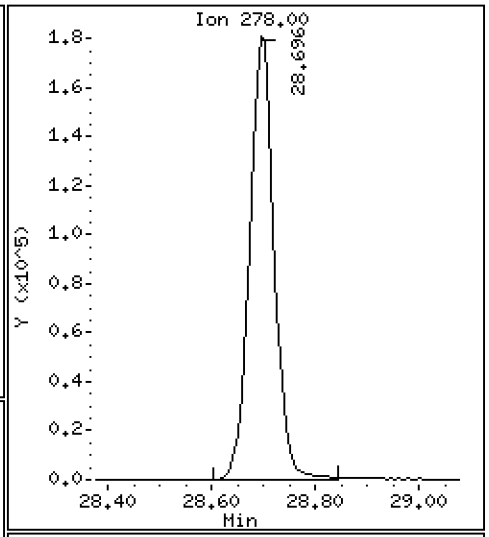
79 Dibenzo(a,h)anthracene Concentration: 4.812 ug/mL

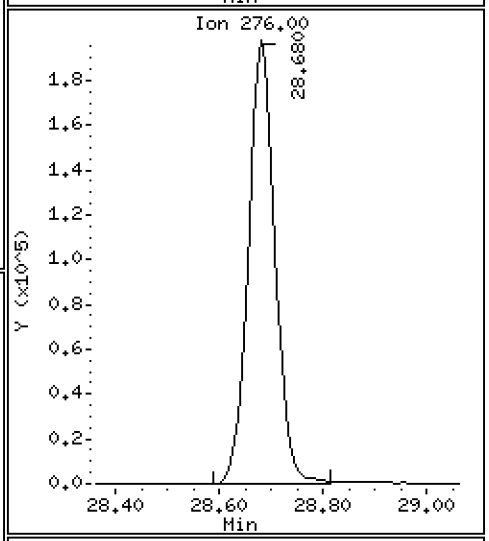


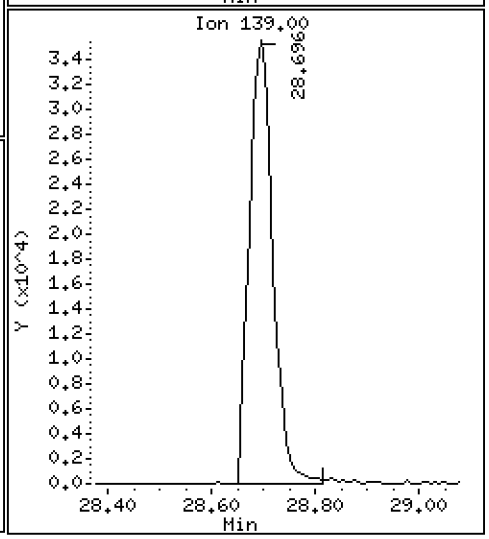












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

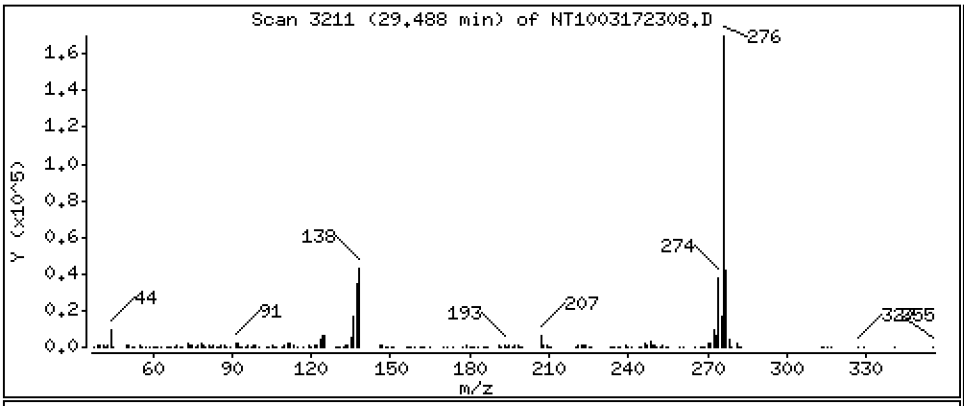
Operator: VTS

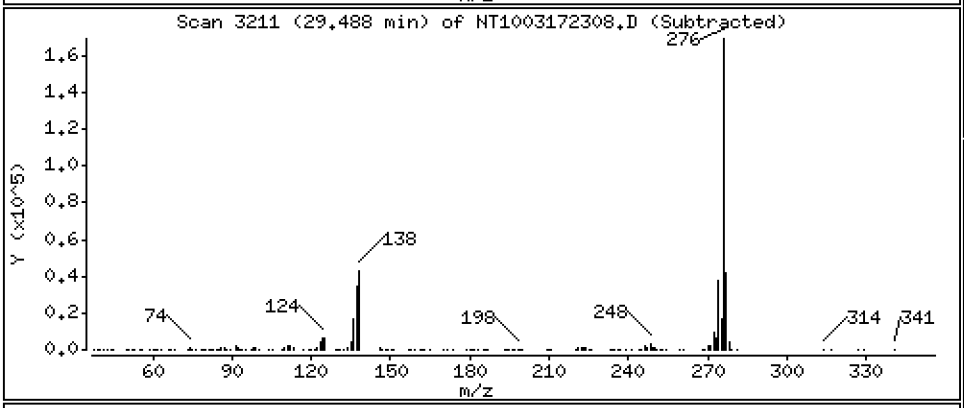
Column phase: ZB-5msi

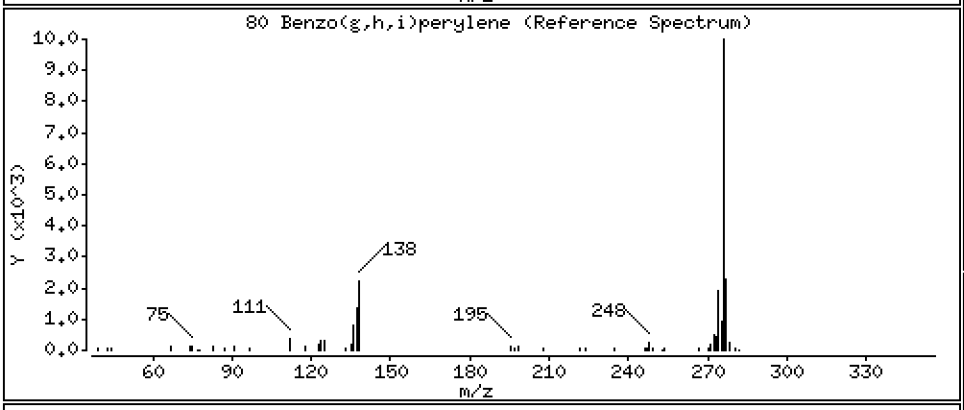
Column diameter: 0.25

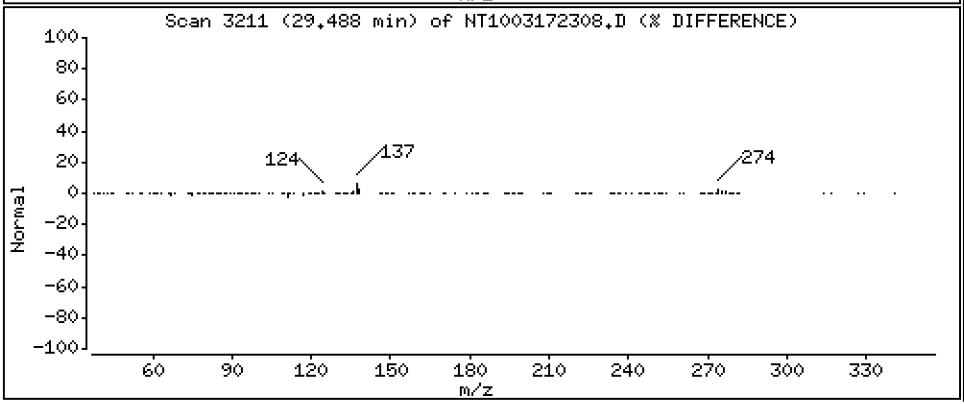
80 Benzo(g,h,i)perylene

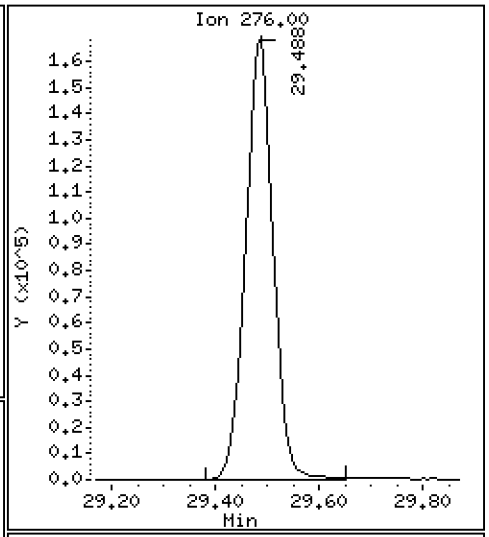
Concentration: 4.770 ug/mL

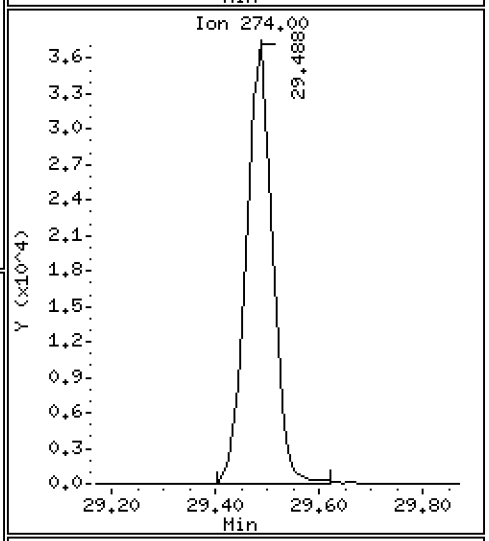


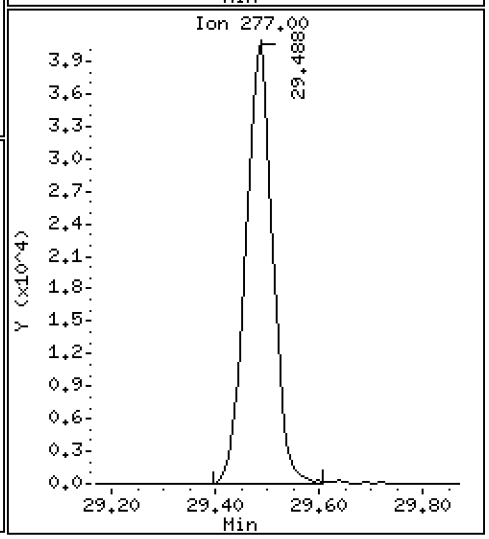












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

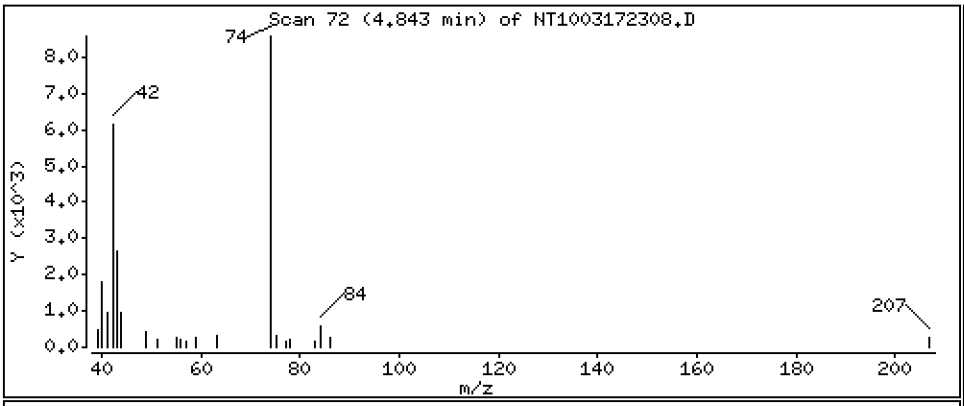
Operator: VTS

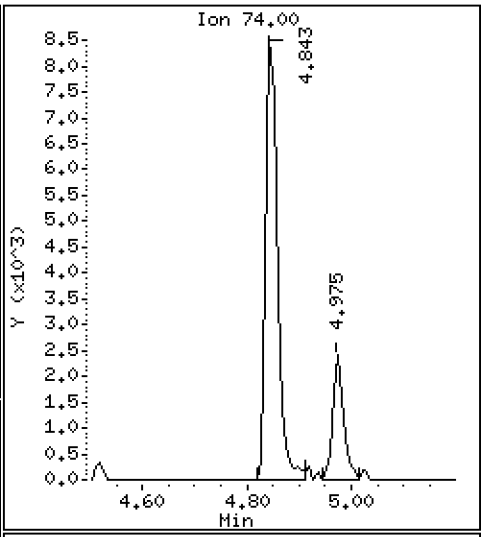
Column phase: ZB-5msi

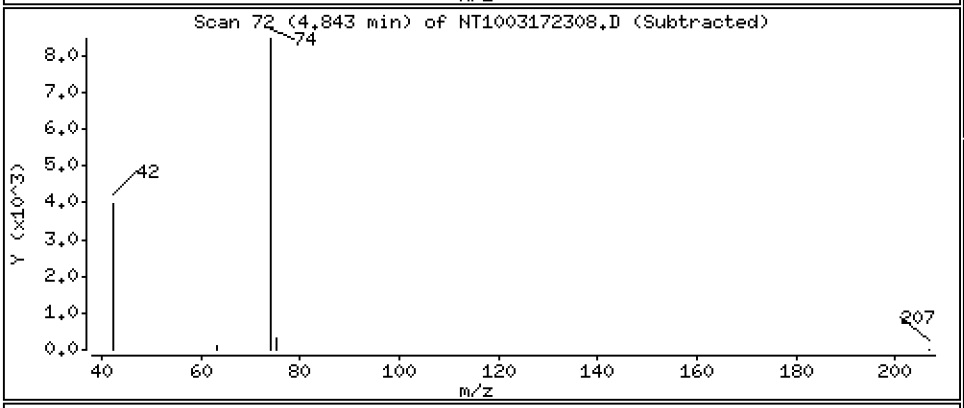
Column diameter: 0.25

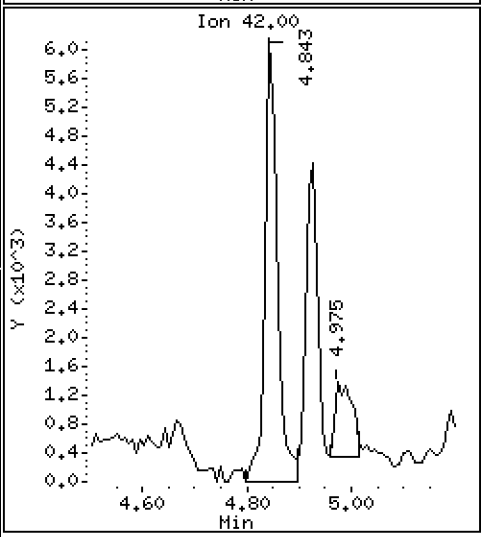
90 N-Nitrosodimethylamine

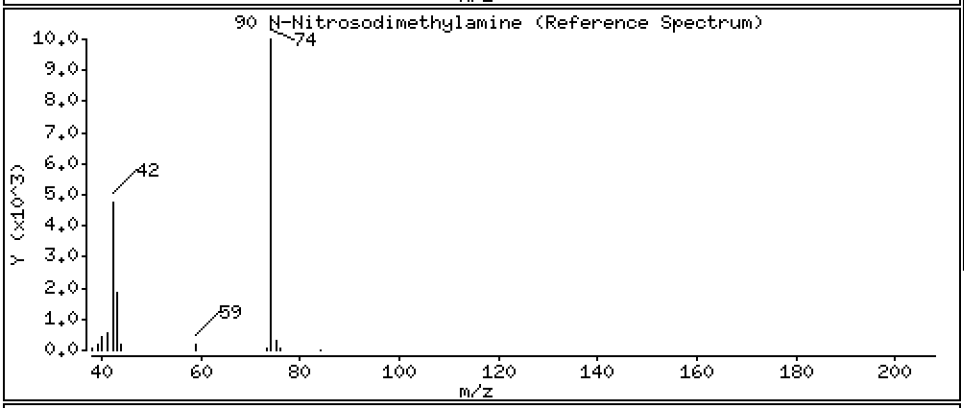
Concentration: 0.4491 ug/mL

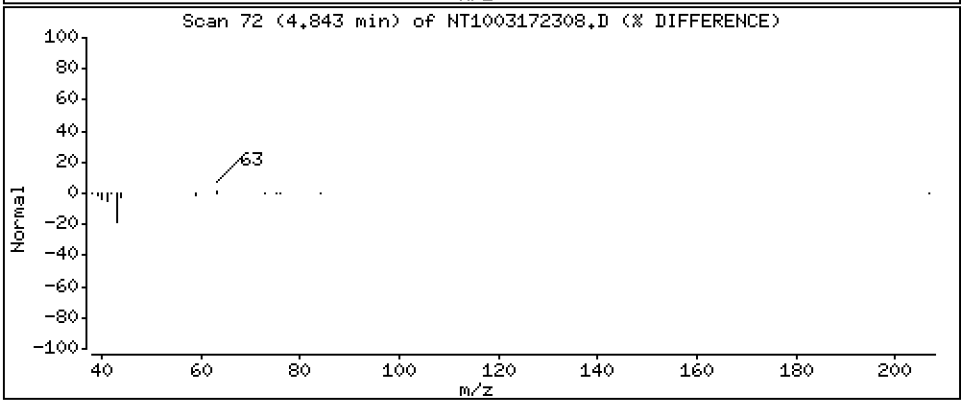












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

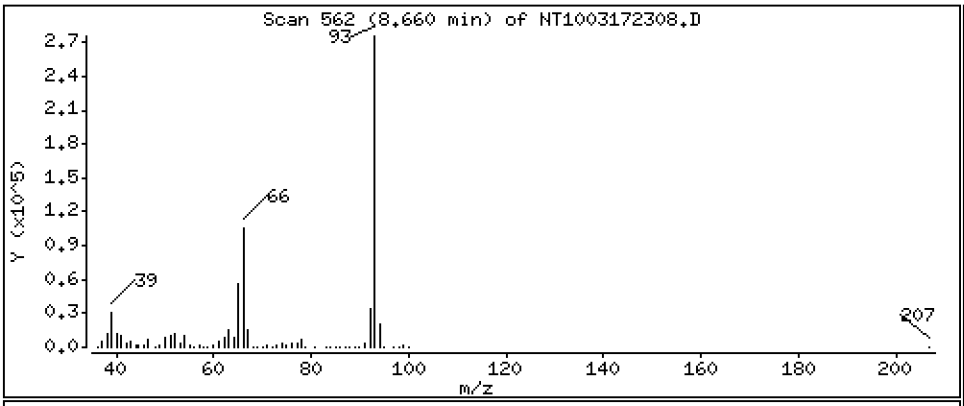
Operator: VTS

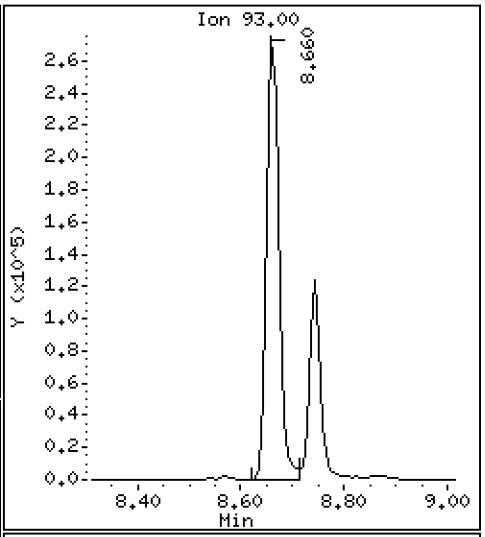
Column phase: ZB-5msi

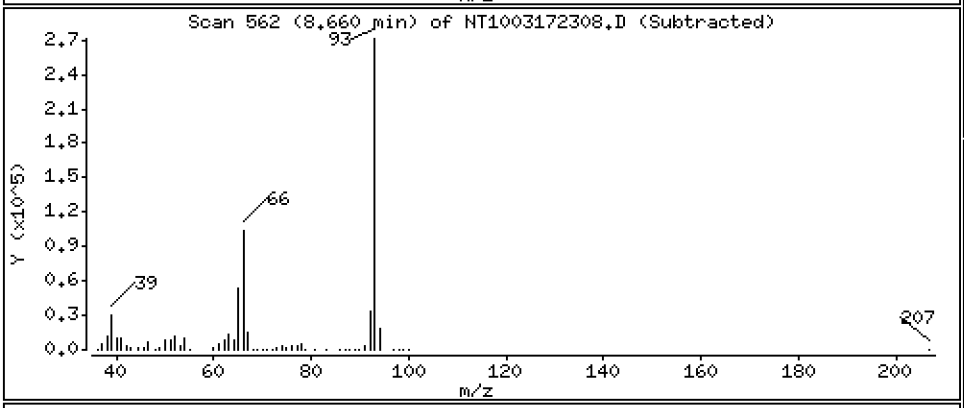
Column diameter: 0.25

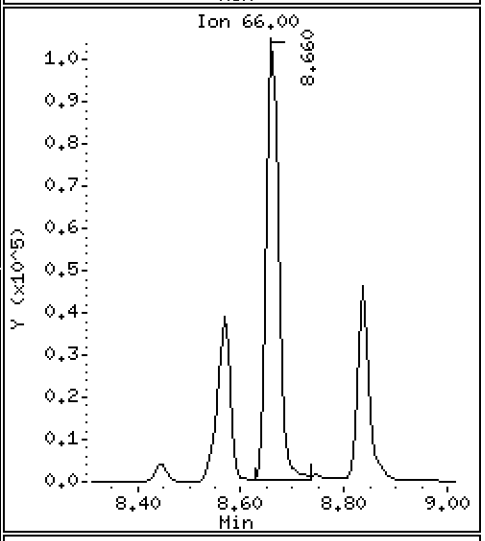
91 Aniline

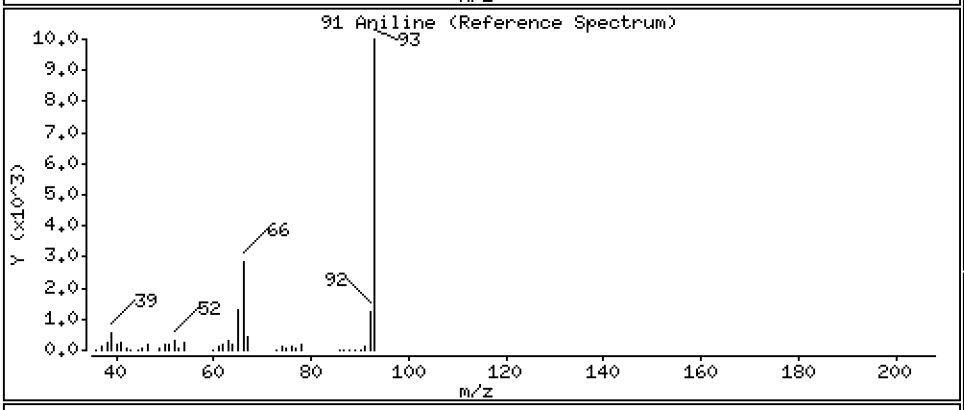
Concentration: 6.990 ug/mL

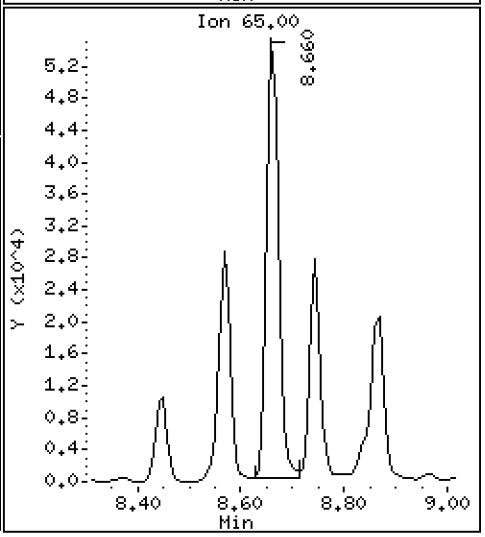


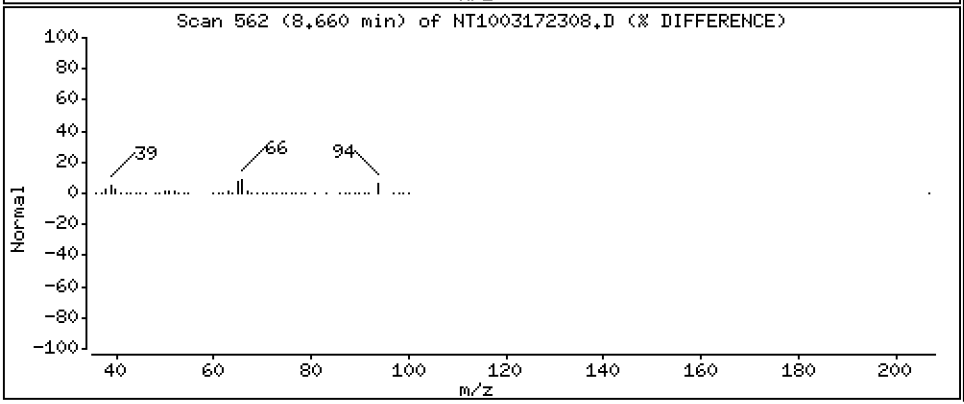












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

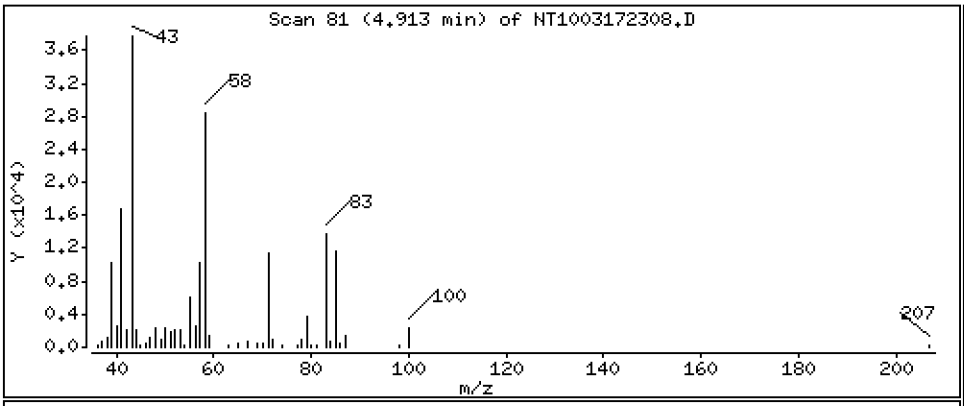
Operator: VTS

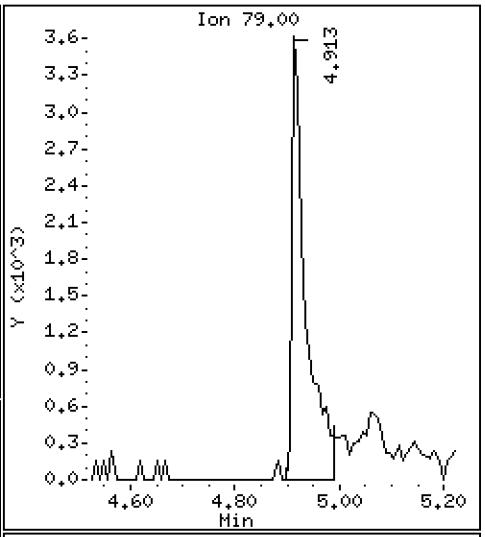
Column phase: ZB-5msi

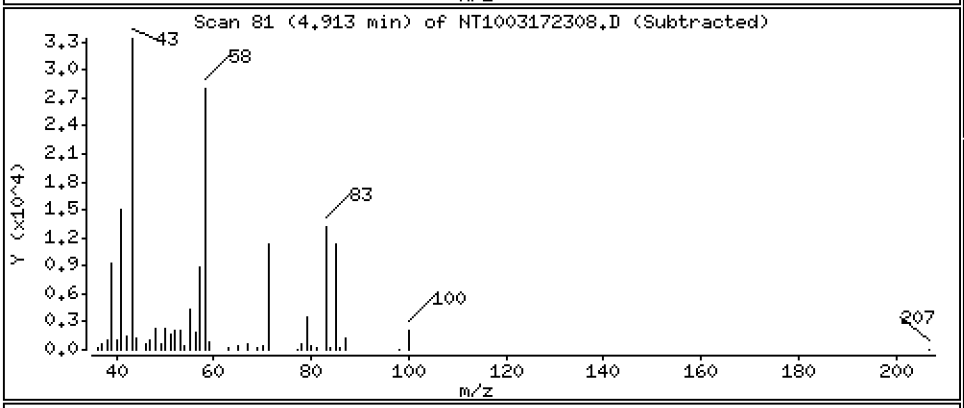
Column diameter: 0.25

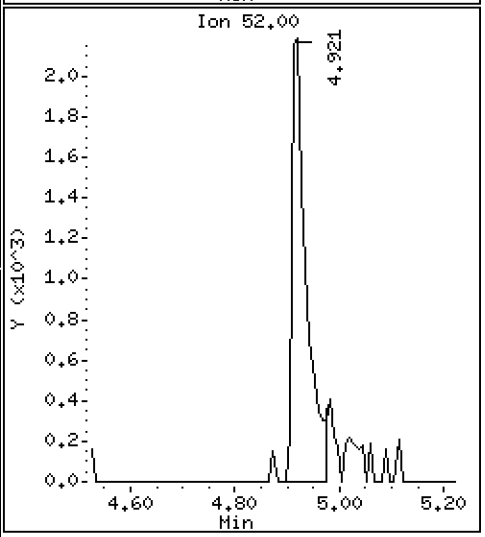
103 Pyridine

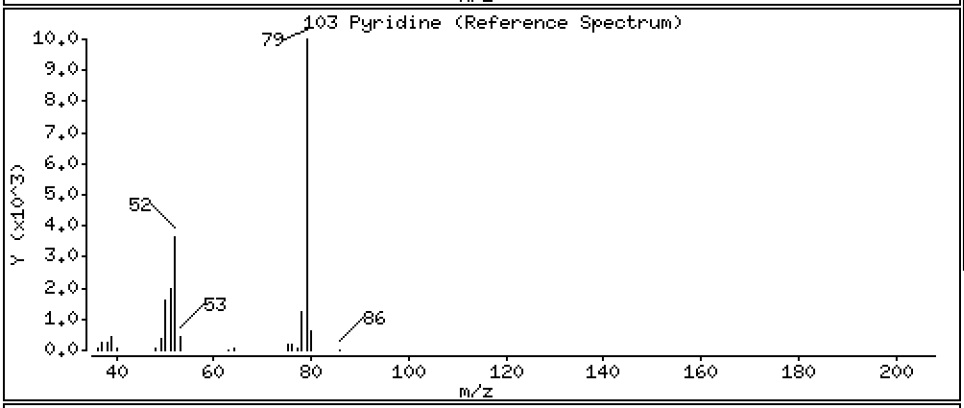
Concentration: 0.1593 ug/mL

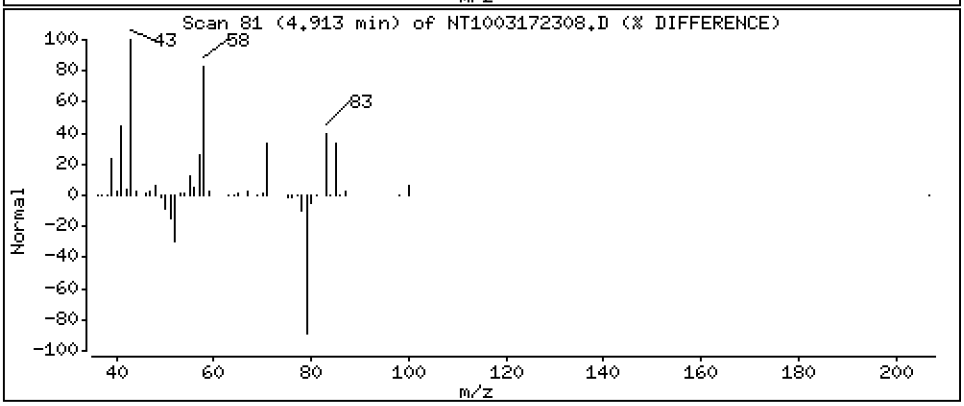












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

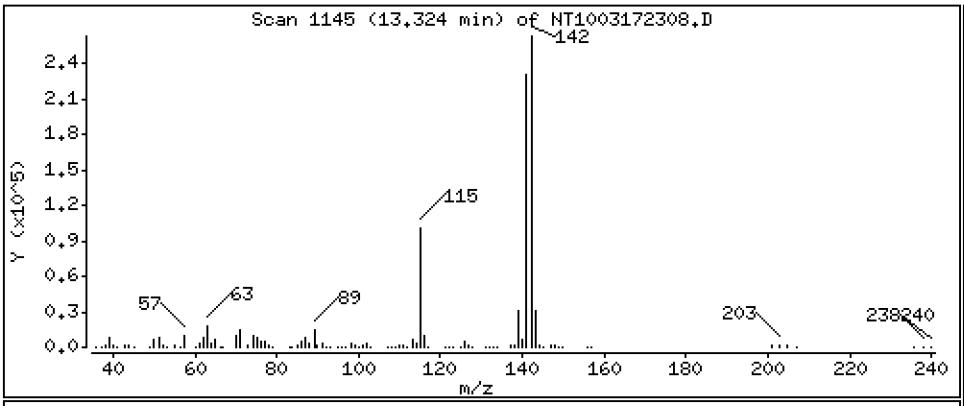
Operator: VTS

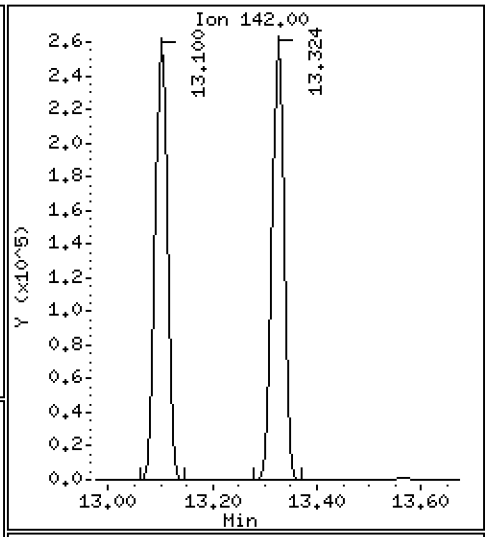
Column phase: ZB-5msi

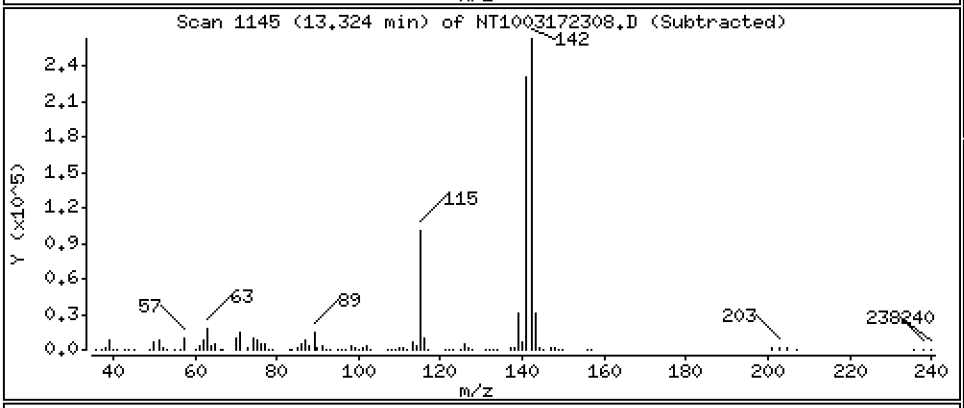
Column diameter: 0.25

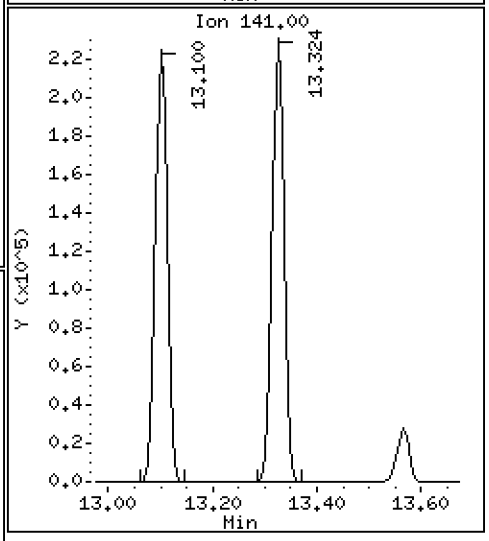
105 1-methylnaphthalene

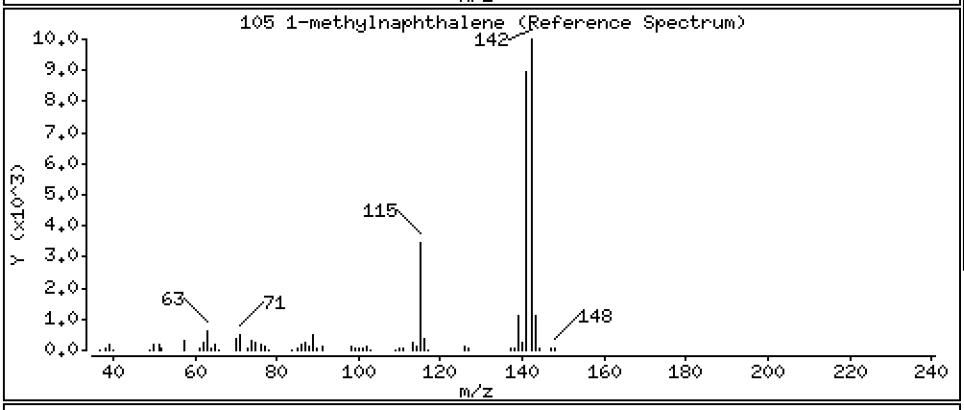
Concentration: 4.231 ug/mL

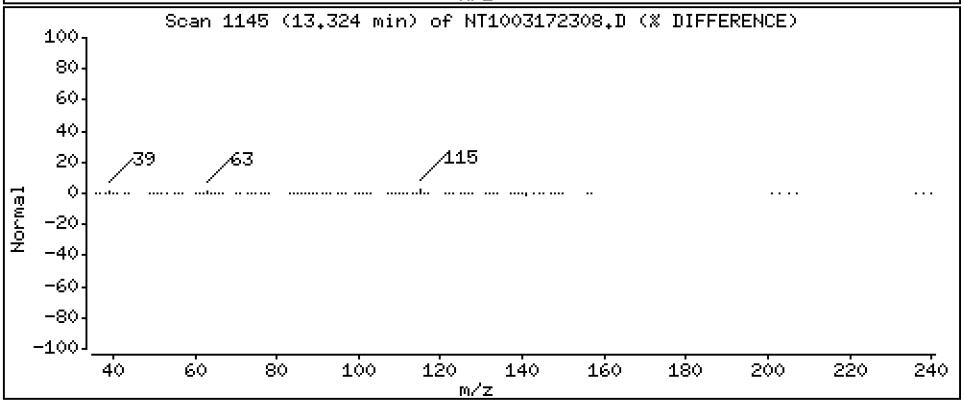












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

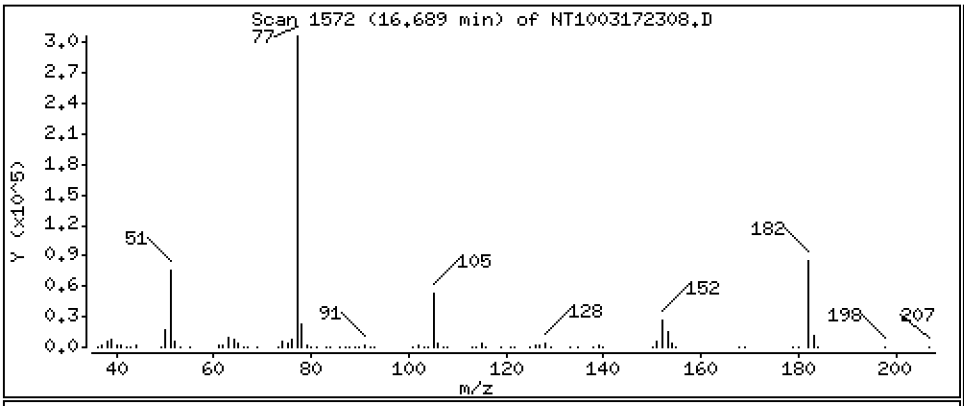
Operator: VTS

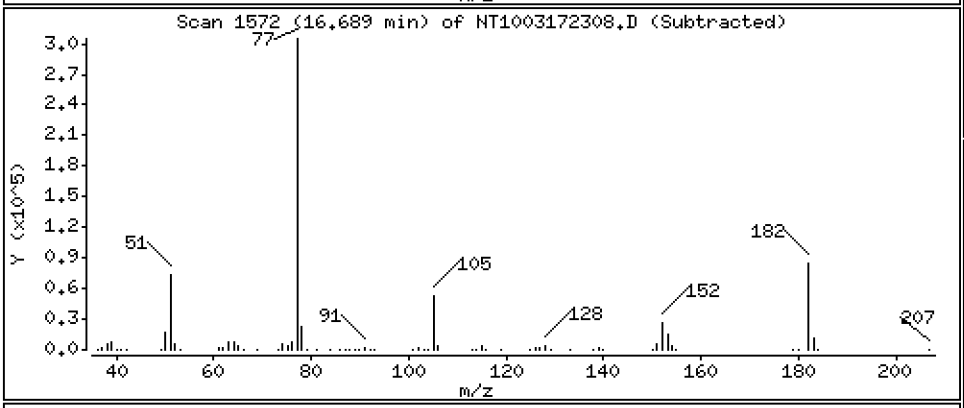
Column phase: ZB-5msi

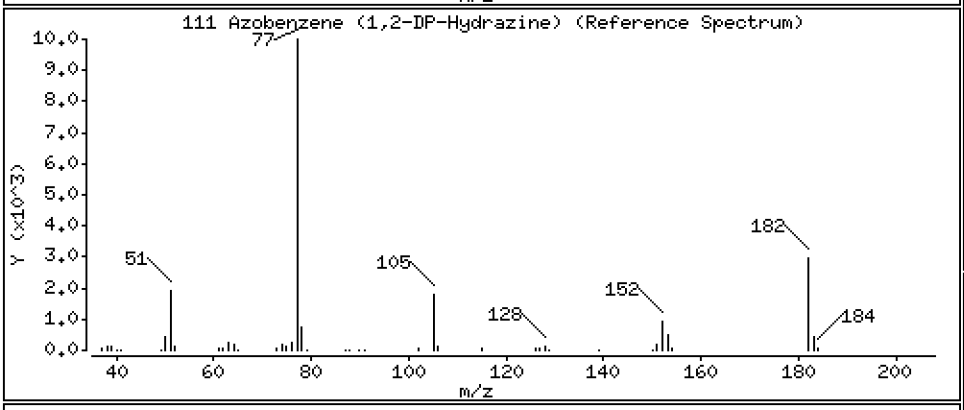
Column diameter: 0.25

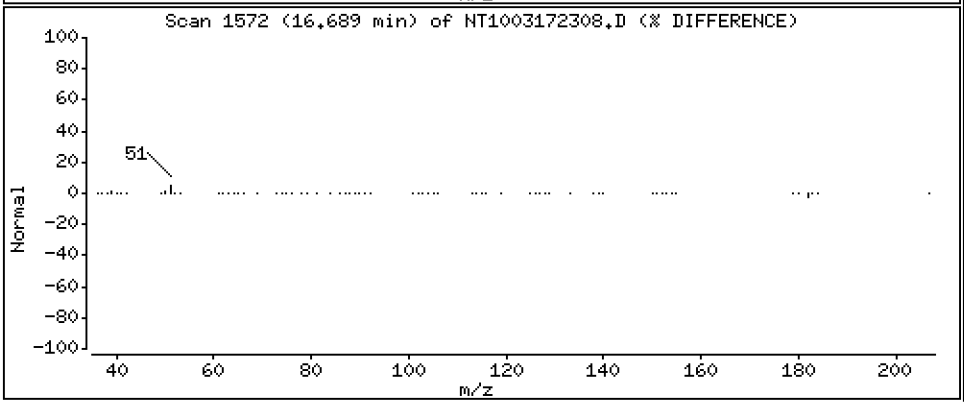
111 Azobenzene (1,2-DP-Hydrazine)

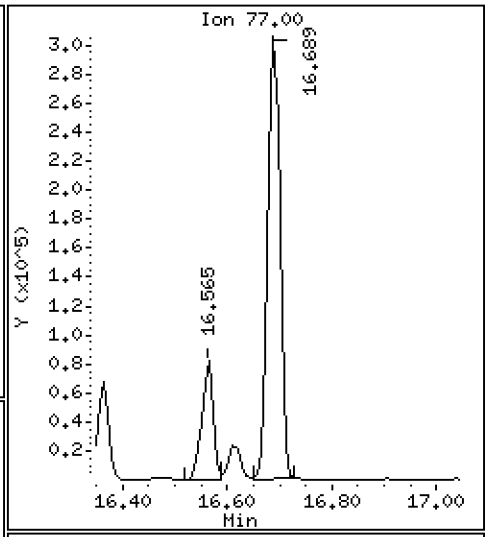
Concentration: 4.562 ug/mL

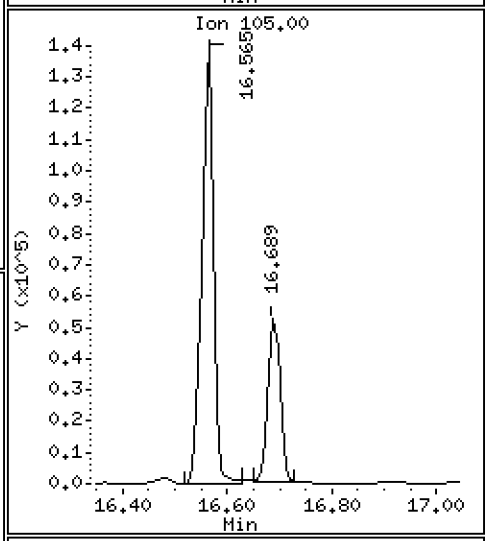


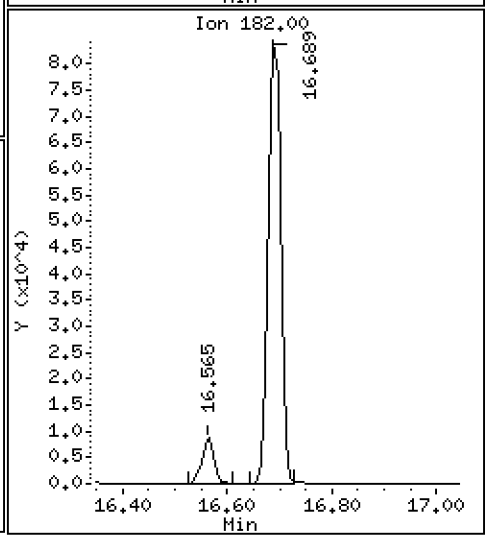












Date : 17-MAR-2023 22:53

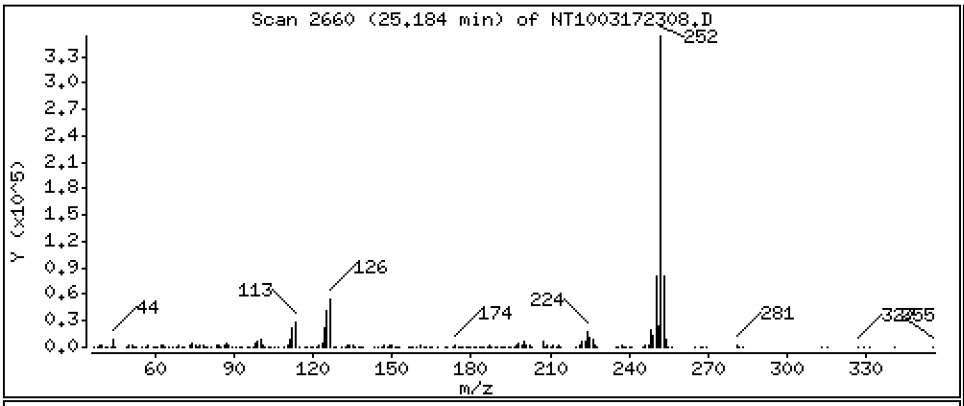
Client ID: Instrument: nt10.i

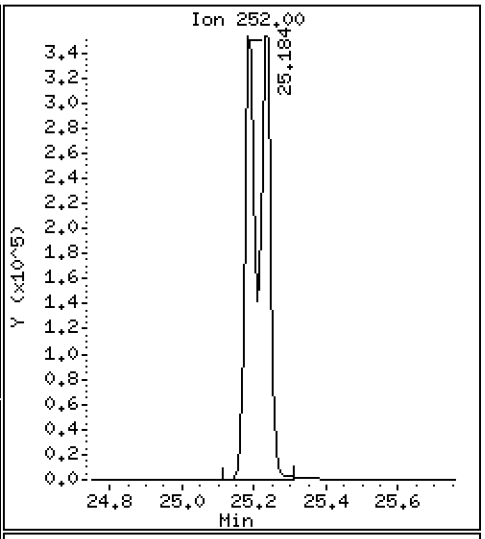
Sample Info: BLB0495-BSD1

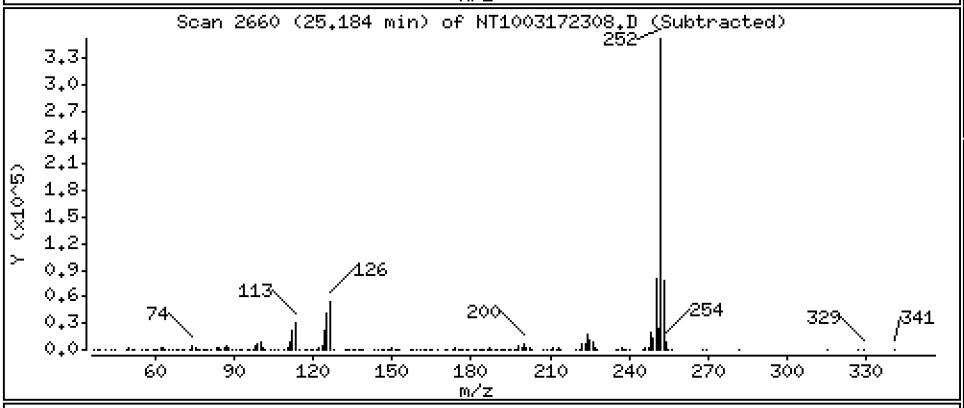
Operator: VTS

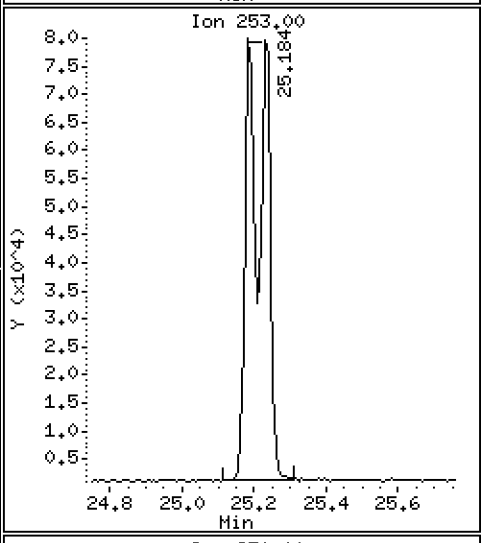
Column phase: ZB-5msi Column diameter: 0.25

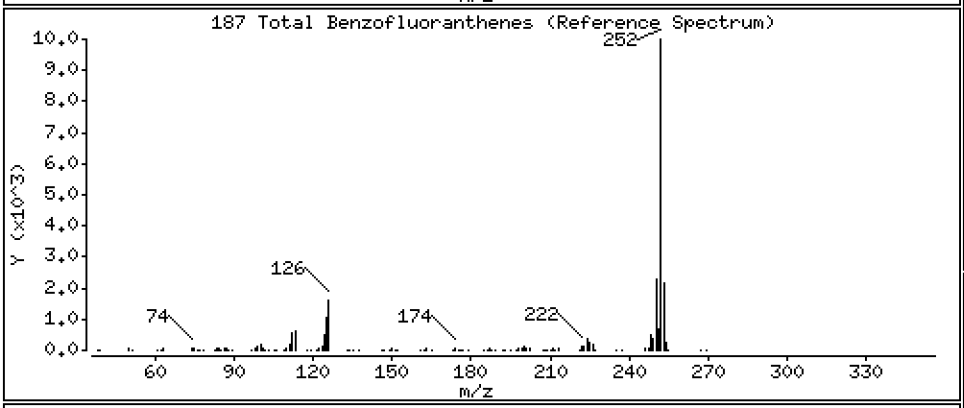
187 Total Benzofluoranthenes Concentration: 10.38 ug/mL

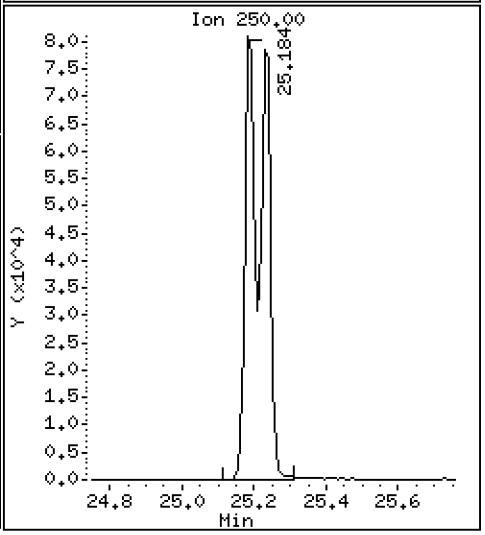


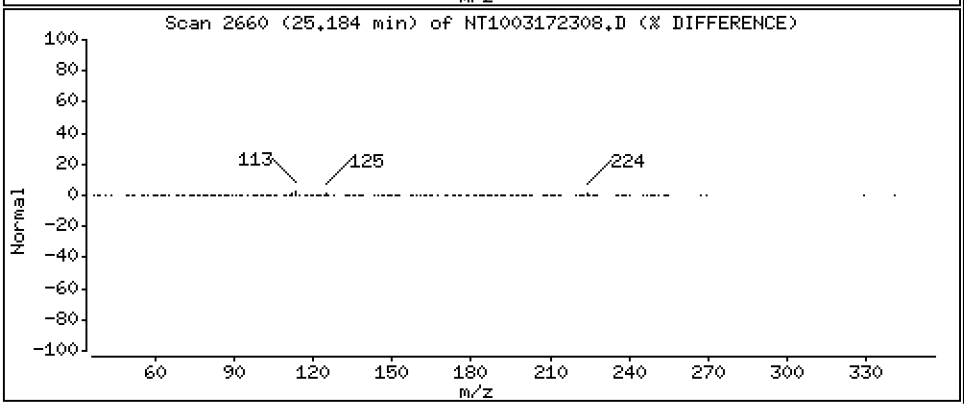












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD1

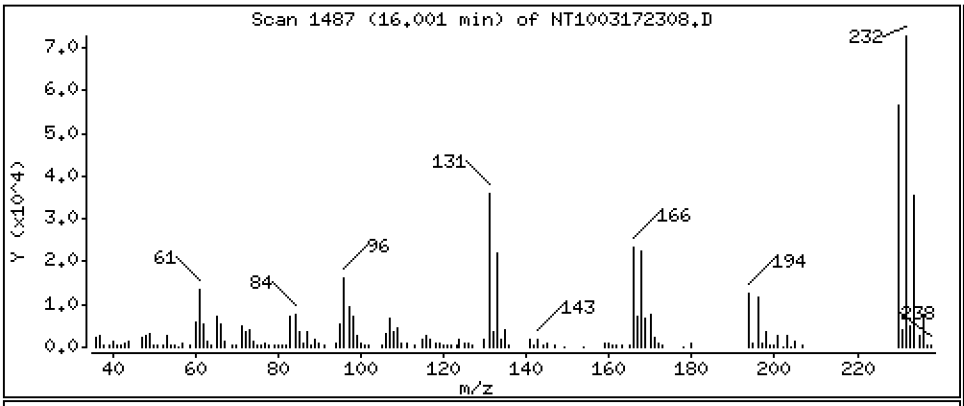
Operator: VTS

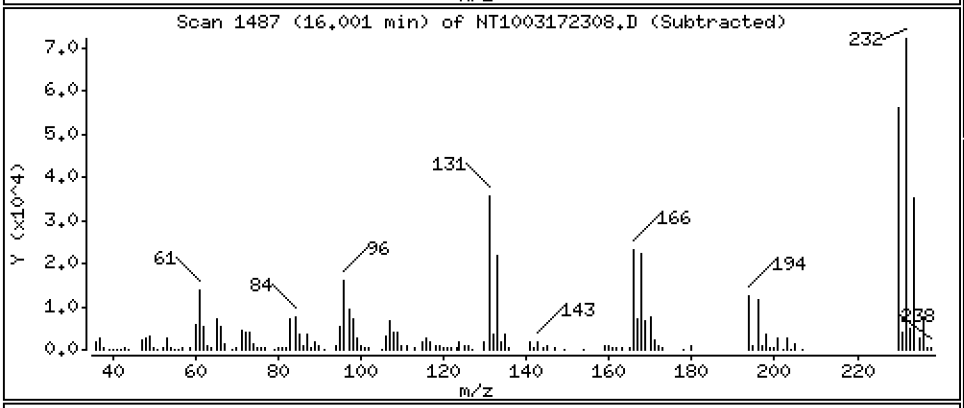
Column phase: ZB-5msi

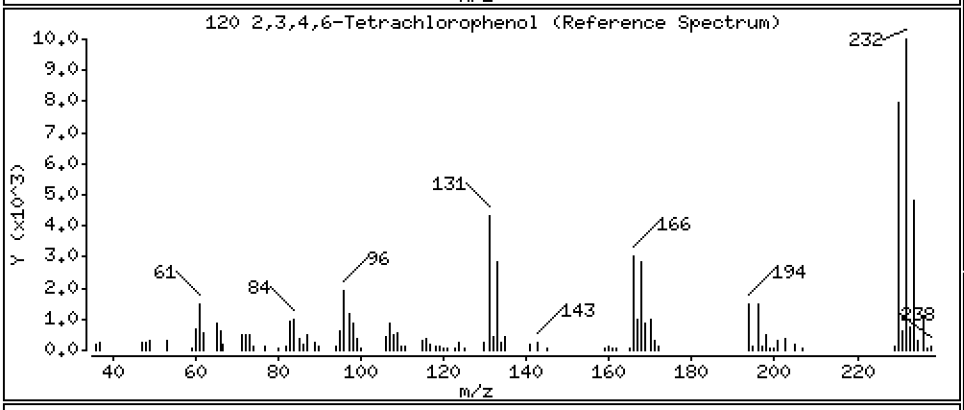
Column diameter: 0.25

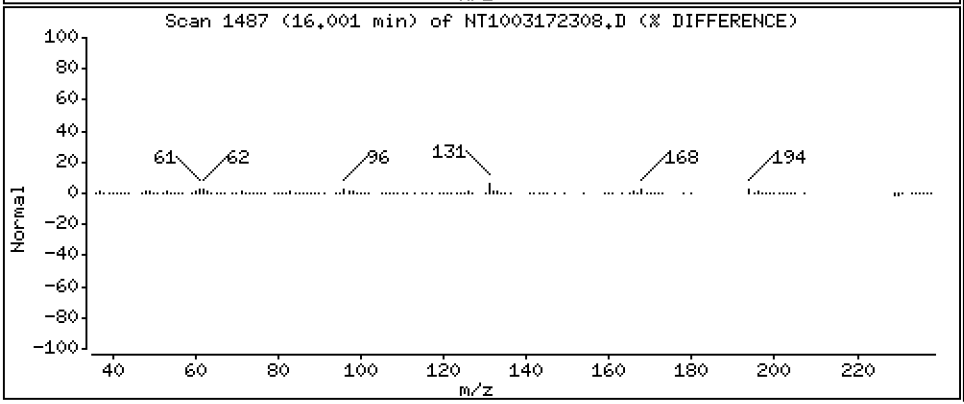
120 2,3,4,6-Tetrachlorophenol

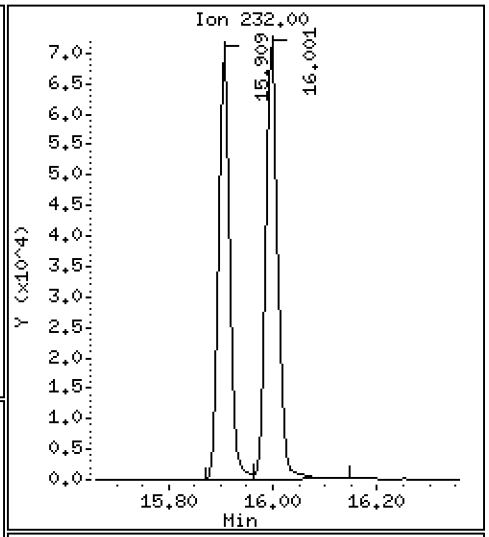
Concentration: 4.225 ug/mL

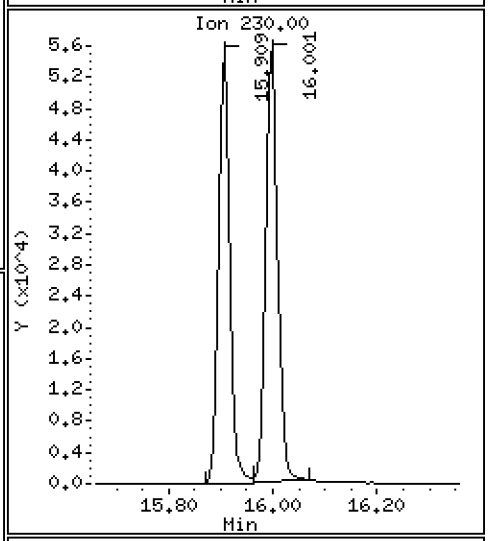


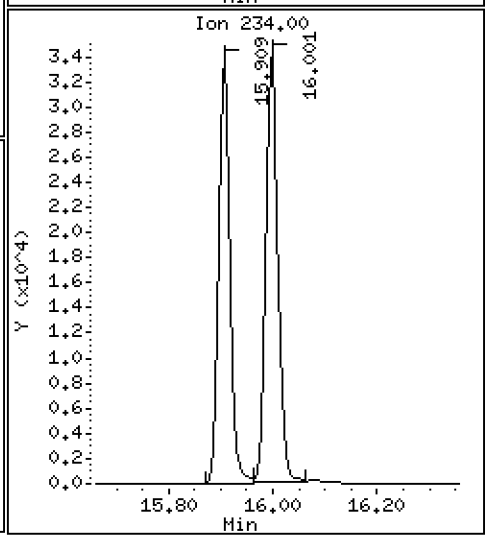












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230317.b\NT1003172308.D
Lab Smp Id: BLB0495-BSD1
Inj Date : 17-MAR-2023 22:53
Operator : VTS Inst ID: nt10.i
Smp Info : BLB0495-BSD1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230317.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.975	6.975	(0.758)	127594	2.89835	2.898
$	2 Phenol-d5	99	8.543	8.543	(0.929)	202807	3.51171	3.512
	3 Phenol	94	8.566	8.566	(0.931)	139553	2.32538	2.325
$	5 2-Chlorophenol-d4	132	8.837	8.837	(0.960)	257112	5.21359	5.214
	4 Bis(2-Chloroethyl)ether	93	8.744	8.744	(0.950)	181568	4.07924	4.079
	6 2-Chlorophenol	128	8.868	8.867	(0.964)	167032	3.25201	3.252
	7 1,3-Dichlorobenzene	146	9.139	9.138	(0.993)	196740	3.62314	3.623
*	8 1,4-Dichlorobenzene-d4	152	9.201	9.200	(1.000)	145573	4.00000	
	9 1,4-Dichlorobenzene	146	9.232	9.231	(1.003)	195627	3.72936	3.729
$	10 1,2-Dichlorobenzene-d4	152	9.558	9.557	(1.039)	127524	3.60072	3.601
	12 1,2-Dichlorobenzene	146	9.581	9.588	(1.041)	191601	3.71145	3.711
	11 Benzyl alcohol	108	9.464	9.464	(1.029)	107707	3.82370	3.824
	14 2,2'-oxybis(1-Chloropropane)	121	9.767	9.759	(1.062)	66783	4.40504	4.405
	13 2-Methylphenol	108	9.682	9.682	(1.052)	123494	2.82287	2.823
	17 Hexachloroethane	117	10.171	10.178	(1.105)	84248	3.91452	3.915
	16 N-Nitroso-di-n-propylamine	70	10.016	10.023	(1.089)	149600	4.33077	4.331
	15 4-Methylphenol	108	9.954	9.946	(1.082)	151428	3.28514	3.285
$	18 Nitrobenzene-d5	82	10.287	10.287	(0.881)	211861	3.95217	3.952
	19 Nitrobenzene	77	10.326	10.326	(0.884)	216111	4.10799	4.108
	20 Isophorone	82	10.768	10.768	(0.922)	456027	6.77614	6.776
	21 2-Nitrophenol	139	10.946	10.955	(0.937)	100303	3.90496	3.905
	22 2,4-Dimethylphenol	107	10.989	10.989	(0.941)	285647	5.91155	5.912
	23 Bis(2-Chloroethoxy)methane	93	11.192	11.192	(0.959)	230124	5.11908	5.119
	24 Benzoic acid	105	11.133	11.175	(0.953)	236678	8.65042	8.650
	25 2,4-Dichlorophenol	162	11.396	11.396	(0.976)	573971	14.8437	14.84
	26 1,2,4-Trichlorobenzene	180	11.584	11.583	(0.992)	168050	3.70237	3.702
*	27 Naphthalene-d8	136	11.676	11.676	(1.000)	531090	4.00000	
	28 Naphthalene	128	11.715	11.715	(1.003)	589211	4.18790	4.188
	29 4-Chloroaniline	127	11.838	11.838	(1.014)	583991	10.6399	10.64
	30 Hexachlorobutadiene	225	12.070	12.070	(1.034)	106086	3.98882	3.989
	31 4-Chloro-3-methylphenol	107	12.790	12.790	(1.095)	657516	15.7076	15.71
	32 2-Methylnaphthalene	142	13.100	13.099	(1.122)	402440	3.96364	3.964
	33 Hexachlorocyclopentadiene	237	13.564	13.571	(0.888)	331865	12.3982	12.40

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	13.719	13.718	(0.898)	457349	15.9992	16.00
35	2,4,5-Trichlorophenol	196	13.788	13.788	(0.903)	502222	15.8117	15.81
$ 36	2-Fluorobiphenyl	172	13.881	13.881	(0.909)	450229	3.93529	3.935
37	2-Chloronaphthalene	162	14.090	14.098	(0.922)	379039	4.09164	4.092
38	2-Nitroaniline	65	14.353	14.353	(0.940)	457013	17.5626	17.56
39	Dimethylphthalate	163	14.779	14.787	(0.968)	464099	4.93954	4.940
40	Acenaphthylene	152	14.965	14.965	(0.980)	576162	3.99139	3.991
41	2,6-Dinitrotoluene	165	14.926	14.926	(0.977)	356938	17.5860	17.59
* 42	Acenaphthene-d10	164	15.274	15.282	(1.000)	289222	4.00000	
43	3-Nitroaniline	138	15.205	15.212	(0.995)	328534	14.3409	14.34
44	Acenaphthene	153	15.344	15.344	(1.005)	379547	4.25608	4.256
45	2,4-Dinitrophenol	184	15.413	15.421	(1.009)	368288	28.3336	28.33
46	Dibenzofuran	168	15.668	15.676	(1.026)	563044	4.28151	4.282
47	4-Nitrophenol	109	15.506	15.514	(1.015)	204609	14.3282	14.33
48	2,4-Dinitrotoluene	165	15.730	15.730	(1.030)	499822	16.7264	16.73
50	Diethylphthalate	149	16.233	16.240	(1.063)	512206	5.55627	5.556
49	Fluorene	166	16.380	16.387	(1.072)	460389	4.44994	4.450
51	4-Chlorophenyl-phenylether	204	16.364	16.372	(1.071)	228782	4.65021	4.650
52	4-Nitroaniline	138	16.472	16.480	(1.078)	319459	15.4737	15.47
53	4,6-Dinitro-2-methylphenol	198	16.565	16.572	(0.905)	517369	32.1887	32.19
54	N-Nitrosodiphenylamine	169	16.619	16.626	(0.908)	282012	4.11037	4.110
$ 55	2,4,6-Tribromophenol	330	16.912	16.919	(1.107)	84166	6.23583	6.236
56	4-Bromophenyl-phenylether	248	17.367	17.374	(0.949)	139423	4.85753	4.858
57	Hexachlorobenzene	284	17.684	17.691	(0.966)	127198	4.22685	4.227
58	Pentachlorophenol	266	18.032	18.047	(0.985)	303902	16.5223	16.52
* 59	Phenanthrene-d10	188	18.303	18.310	(1.000)	513176	4.00000	
60	Phenanthrene	178	18.349	18.357	(1.003)	639098	4.56720	4.567
61	Anthracene	178	18.442	18.457	(1.008)	546194	4.06906	4.069
62	Carbazole	167	18.767	18.782	(1.025)	569934	4.73827	4.738
63	Di-n-butylphthalate	149	19.556	19.572	(1.068)	883556	5.49526	5.495
64	Fluoranthene	202	20.717	20.732	(0.888)	783705	4.83015	4.830
65	Pyrene	202	21.142	21.158	(0.907)	787224	4.72971	4.730
$ 66	Terphenyl-d14	244	21.421	21.436	(0.919)	584398	4.67538	4.675
67	Butylbenzylphthalate	149	22.342	22.358	(0.958)	349360	5.76190	5.762
68	Benzo(a)anthracene	228	23.295	23.310	(0.999)	701622	4.92270	4.923
* 69	Chrysene-d12	240	23.318	23.341	(1.000)	403797	4.00000	
70	3,3'-Dichlorobenzidine	252	23.248	23.264	(0.997)	360848	7.90404	7.904
71	Chrysene	228	23.364	23.380	(1.002)	660868	4.74601	4.746
72	bis(2-Ethylhexyl)phthalate	149	23.357	23.380	(0.959)	152705	1.56279	1.563
* 134	Di-n-octylphthalate-d4	153	24.348	24.363	(1.000)	667494	4.00000	
73	Di-n-octylphthalate	149	24.355	24.378	(1.000)	137956	0.78977	0.7898
74	Benzo(b)fluoranthene	252	25.184	25.207	(0.970)	676446	5.05355	5.054
75	Benzo(k)fluoranthene	252	25.230	25.253	(0.971)	731717	5.38346	5.383(H)
76	Benzo(a)pyrene	252	25.850	25.873	(0.995)	577751	4.82769	4.828
* 77	Perylene-d12	264	25.974	25.997	(1.000)	412942	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	28.680	28.711	(1.104)	716690	4.70718	4.707
79	Dibenzo(a,h)anthracene	278	28.695	28.726	(1.105)	608269	4.81206	4.812
80	Benzo(g,h,i)perylene	276	29.488	29.519	(1.135)	628566	4.77040	4.770
90	N-Nitrosodimethylamine	74	4.843	4.850	(0.526)	12612	0.44905	0.4491
91	Aniline	93	8.659	8.659	(0.941)	429801	6.98951	6.990
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	4.912	4.873	(0.534)	6871	0.15929	0.1593
105	1-methylnaphthalene	142	13.324	13.324	(1.141)	393601	4.23111	4.231
111	Azobenzene (1,2-DP-Hydrazine)	77	16.688	16.696	(1.093)	469810	4.56230	4.562

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.184	25.253	(0.970)	1341164	10.3773	10.38
120 2,3,4,6-Tetrachlorophenol	232	16.001	16.008	(1.048)	126350	4.22458	4.225

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172308.D
Lab Smp Id: BLB0495-BSD1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230317.b\ABN.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:02
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	132765	66383	265530	145573	9.65
27 Naphthalene-d8	497947	248974	995894	531090	6.66
42 Acenaphthene-d10	271928	135964	543856	289222	6.36
59 Phenanthrene-d10	497390	248695	994780	513176	3.17
69 Chrysene-d12	391403	195702	782806	403797	3.17
134 Di-n-octylphthala	674651	337326	1349302	667494	-1.06
77 Perylene-d12	408663	204332	817326	412942	1.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.20	8.70	9.70	9.20	0.00
27 Naphthalene-d8	11.68	11.18	12.18	11.68	0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.27	-0.05
59 Phenanthrene-d10	18.31	17.81	18.81	18.30	-0.04
69 Chrysene-d12	23.34	22.84	23.84	23.32	-0.10
134 Di-n-octylphthala	24.36	23.86	24.86	24.35	-0.06
77 Perylene-d12	26.00	25.50	26.50	25.97	-0.09

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

REVIEW SUMMARY FOR FILE - NT1003172308.D

Lab ID: BLB0495-BSD1
nt10.i, 20230317.b\ABN.m,   17-MAR-2023 22:53

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1003172302.D

On Column LOD for nt10.i, 20230317.b\ABN.m, ICAL.sub = 0.0000

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

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1004

MS / MS DUPLICATE RECOVERY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/18/23 02:03
Batch:	BLB0495	Laboratory ID:	BLB0495-MS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike
Initial/Final:	16.7 g / 1 mL	Source Sample:	LDW23-SC1004

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	Q	MS CONCENTRATION (ug/kg dry)	Q	MS % REC. #	QC LIMITS REC.
Phenol	500	86.5		290		40.8	34 - 120
4-Methylphenol	500	91.9		398		61.3	29 - 120
Naphthalene	500	14.7	J, B	348	B	66.7	43 - 120
2-Methylnaphthalene	500	11.3	J	374		72.6	43 - 120
Acenaphthylene	500	9.7	J	386		75.2	42 - 120
Dimethylphthalate	500	8.4	J	458		90.0	43 - 120
Acenaphthene	500	8.7	J	414		81.0	45 - 120
Dibenzofuran	500	ND	U	420		84.0	43 - 120
Fluorene	500	ND	U	496		99.2	45 - 120
Phenanthrene	500	97.0		495		79.6	49 - 120
Anthracene	500	36.1		434		79.6	45 - 120
Fluoranthene	500	224		563		67.8	53 - 145
Pyrene	500	265		621		71.2	52 - 134
Butylbenzylphthalate	500	43.5		555		102	45 - 132
Benzo(a)anthracene	500	98.8		577		95.7	49 - 120
Chrysene	500	150		616		93.0	47 - 120
bis(2-Ethylhexyl)phthalate	500	83.8		225	*	28.2 *	34 - 130
Benzofluoranthenes, Total	1000	310		1250		93.7	30 - 160
Benzo(a)pyrene	500	126		598		94.3	42 - 120
Indeno(1,2,3-cd)pyrene	500	69.4		506		87.3	42 - 163
Dibenzo(a,h)anthracene	500	24.8		476		90.3	30 - 133
Benzo(g,h,i)perylene	500	85.1		520		86.9	46 - 148

* Values outside of QC limits

MS / MS DUPLICATE RECOVERY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/18/23 02:41
Batch:	BLB0495	Laboratory ID:	BLB0495-MSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike Dup
Initial/Final:	16.7 g / 1 mL	Source Sample:	LDW23-SC1004

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	500	305		43.7	4.95	30	34 - 120
4-Methylphenol	500	427		67.0	6.84	30	29 - 120
Naphthalene	500	359	B	68.9	3.02	30	43 - 120
2-Methylnaphthalene	500	389		75.5	3.85	30	43 - 120
Acenaphthylene	500	397		77.4	2.80	30	42 - 120
Dimethylphthalate	500	480		94.3	4.62	30	43 - 120
Acenaphthene	500	432		84.6	4.26	30	45 - 120
Dibenzofuran	500	431		86.3	2.67	30	43 - 120
Fluorene	500	467		93.3	6.05	30	45 - 120
Phenanthrene	500	541		88.8	8.91	30	49 - 120
Anthracene	500	472		87.2	8.34	30	45 - 120
Fluoranthene	500	610		77.2	7.99	30	53 - 145
Pyrene	500	681		83.1	9.19	30	52 - 134
Butylbenzylphthalate	500	575		106	3.54	30	45 - 132
Benzo(a)anthracene	500	600		100	3.95	30	49 - 120
Chrysene	500	665		103	7.71	30	47 - 120
bis(2-Ethylhexyl)phthalate	500	219	*	27.0 *	2.66	30	34 - 130
Benzofluoranthenes, Total	1000	1320		101	5.47	30	30 - 160
Benzo(a)pyrene	500	639		103	6.70	30	42 - 120
Indeno(1,2,3-cd)pyrene	500	527		91.5	4.06	30	42 - 163
Dibenzo(a,h)anthracene	500	488		92.6	2.32	30	30 - 133
Benzo(g,h,i)perylene	500	541		91.1	3.97	30	46 - 148

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172313.D

Page 1

Date : 18-MAR-2023 02:03

Client ID:

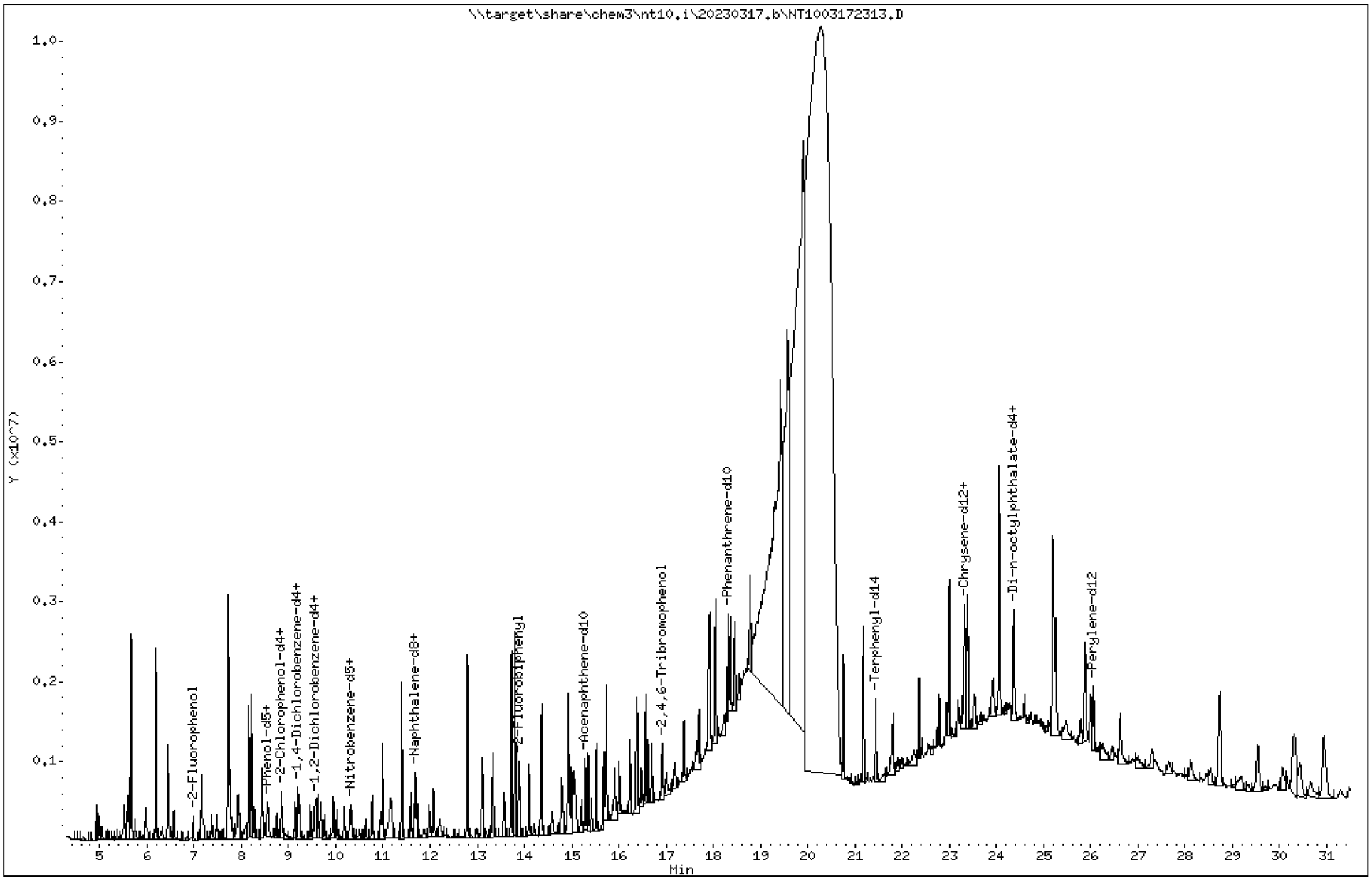
Instrument: nt10.i

Sample Info: BLB0495-MS1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

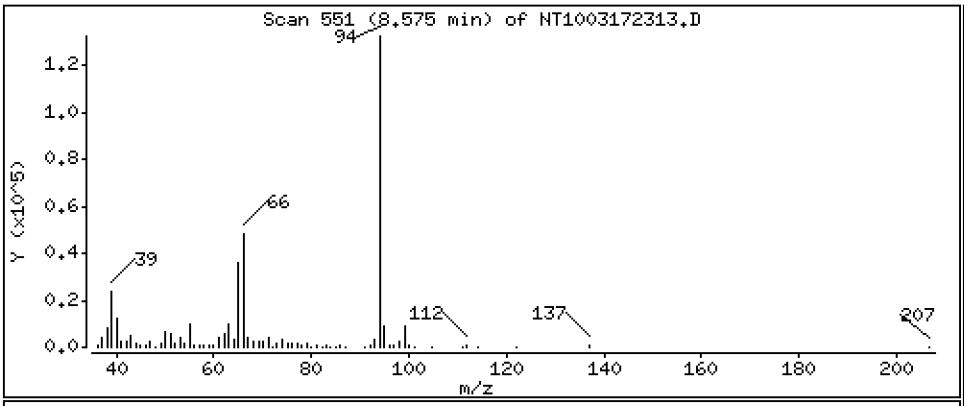
Operator: VTS

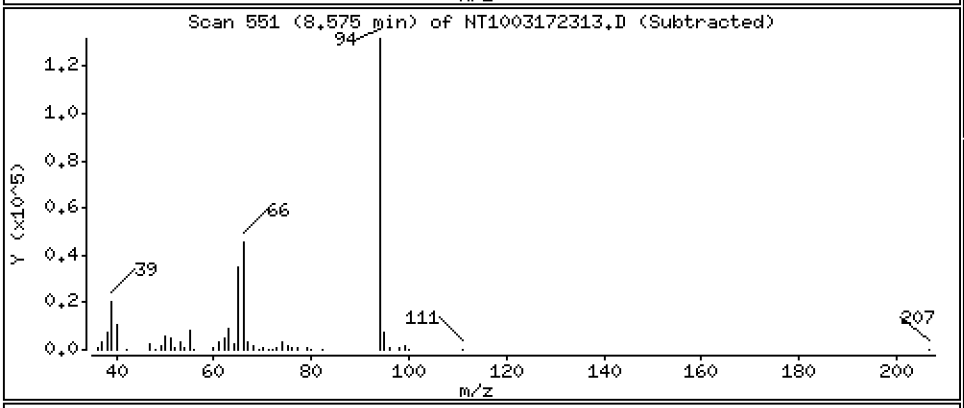
Column phase: ZB-5msi

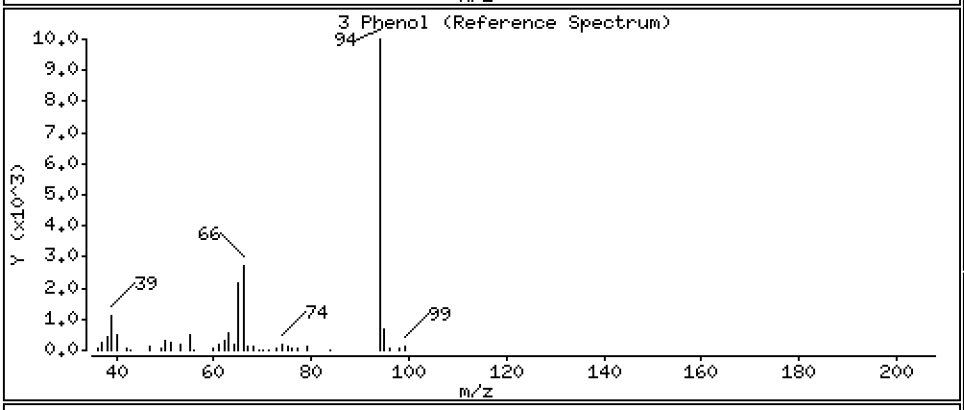
Column diameter: 0.25

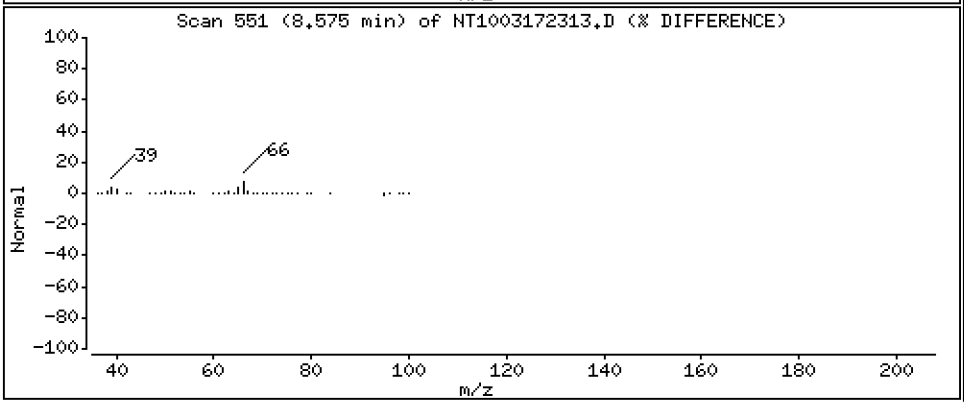
3 Phenol

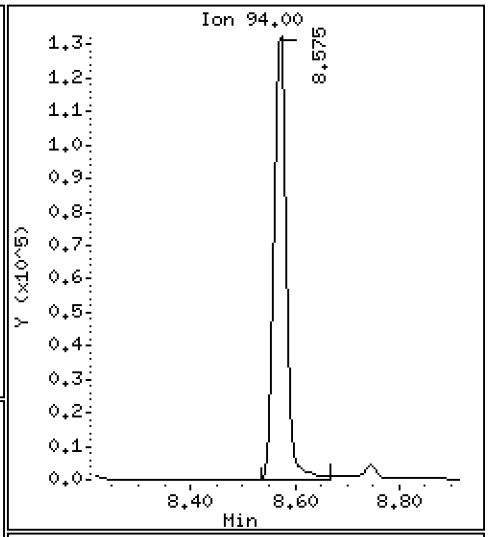
Concentration: 2.904 ug/mL

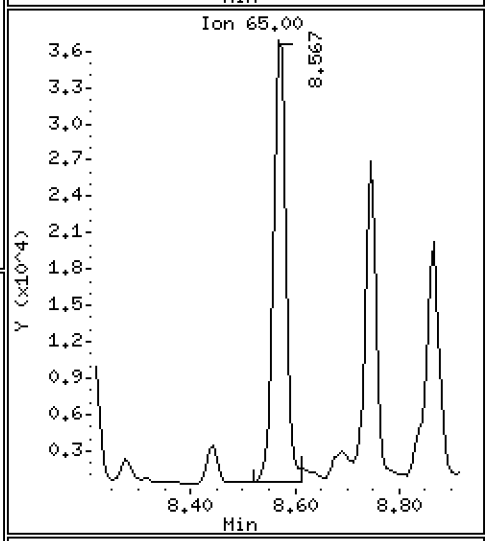


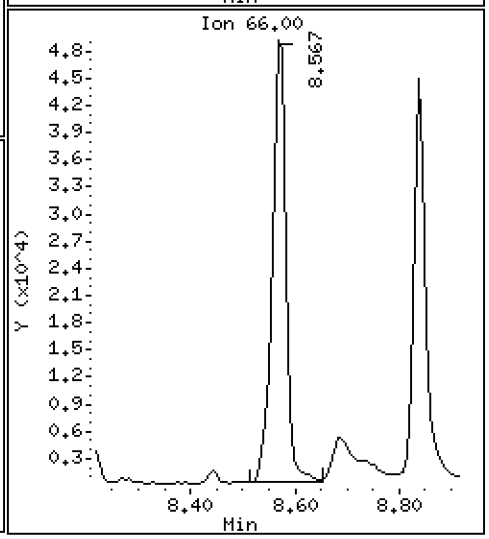












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

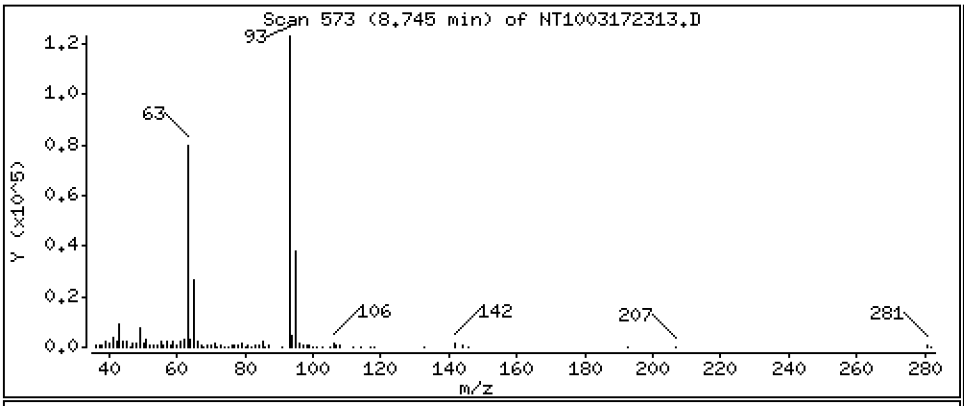
Operator: VTS

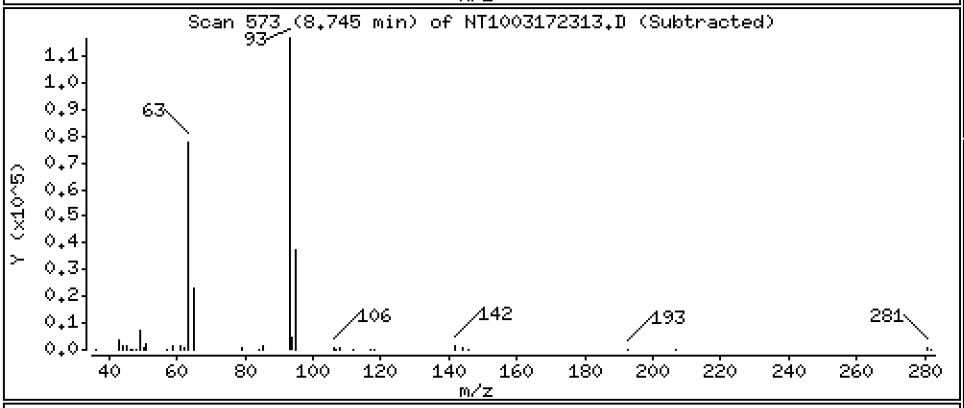
Column phase: ZB-5msi

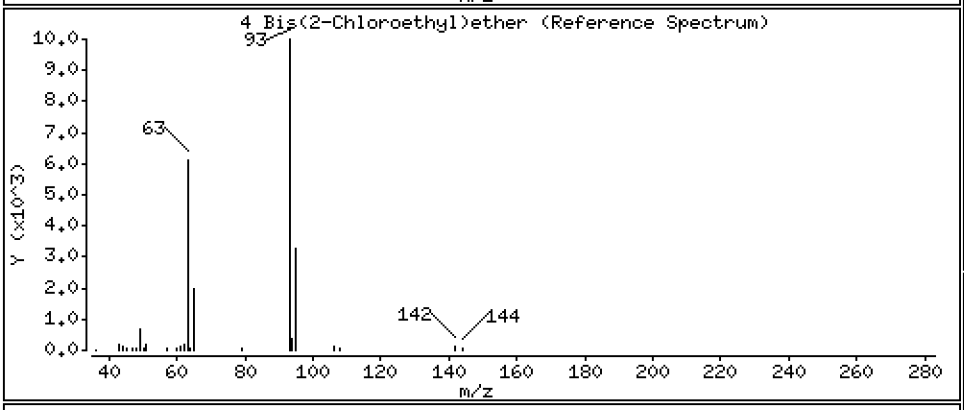
Column diameter: 0.25

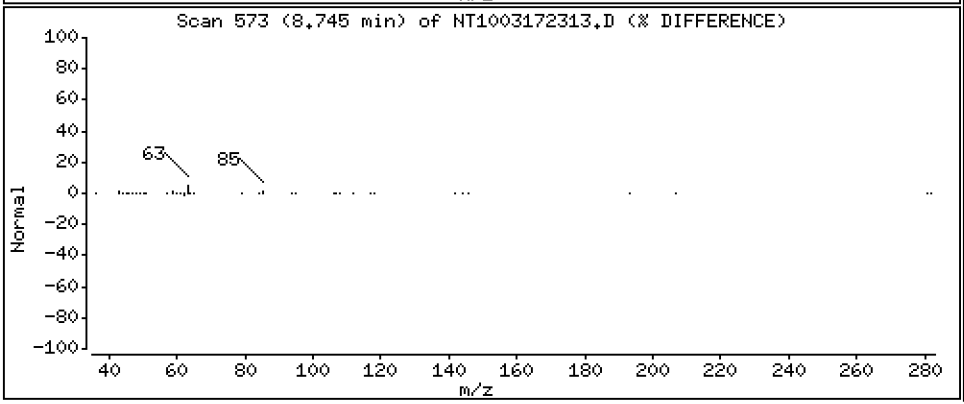
4 Bis(2-Chloroethyl)ether

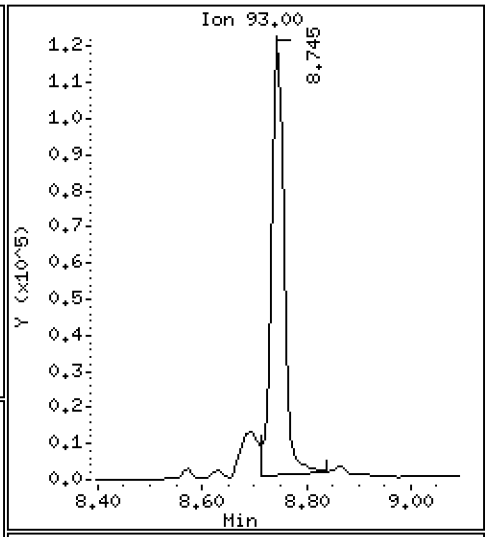
Concentration: 3.551 ug/mL

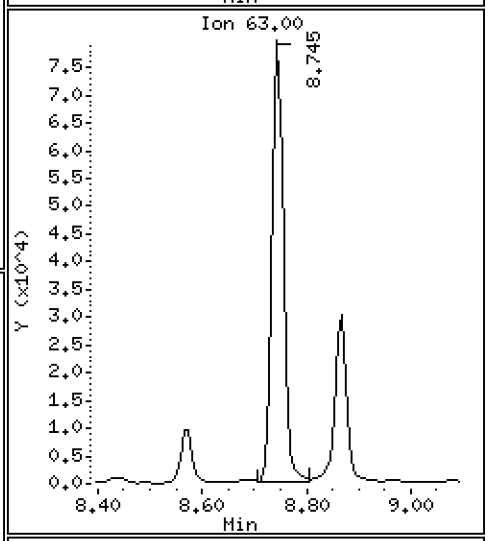


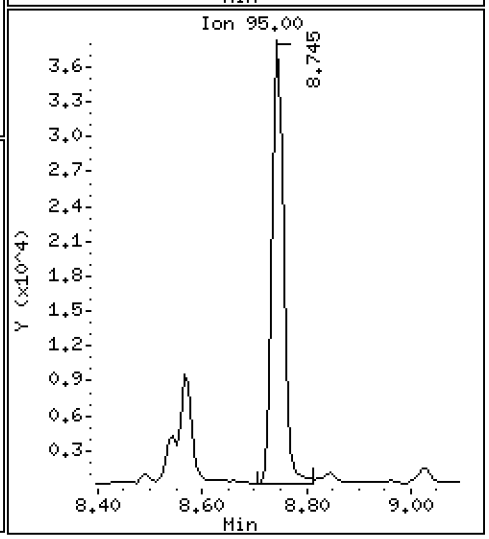












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172313.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

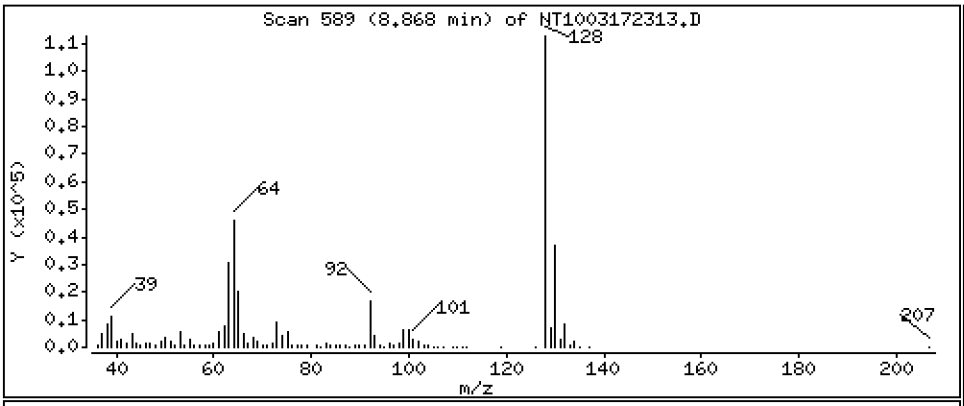
Operator: VTS

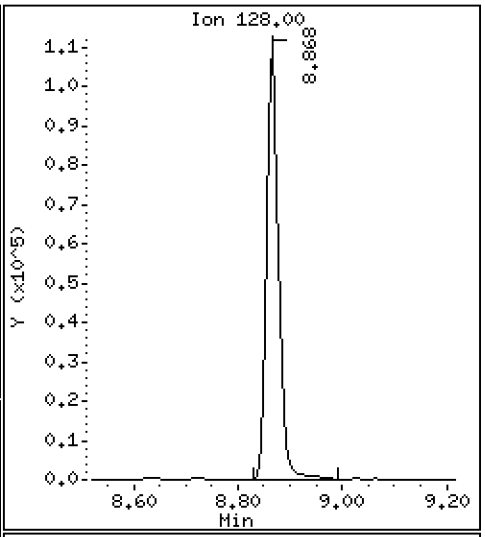
Column phase: ZB-5msi

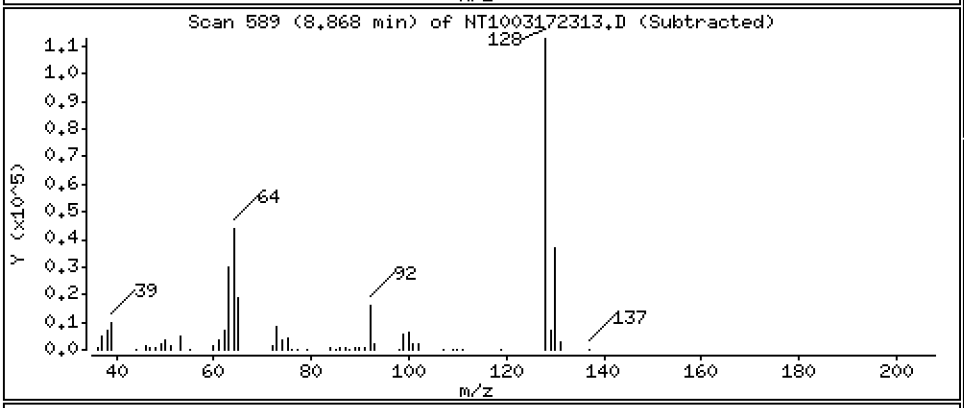
Column diameter: 0.25

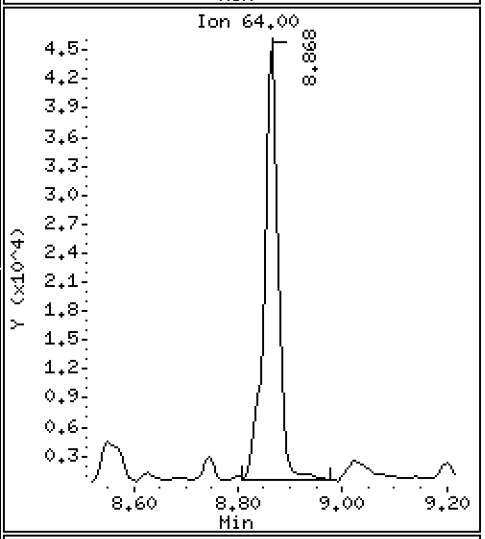
6 2-Chlorophenol

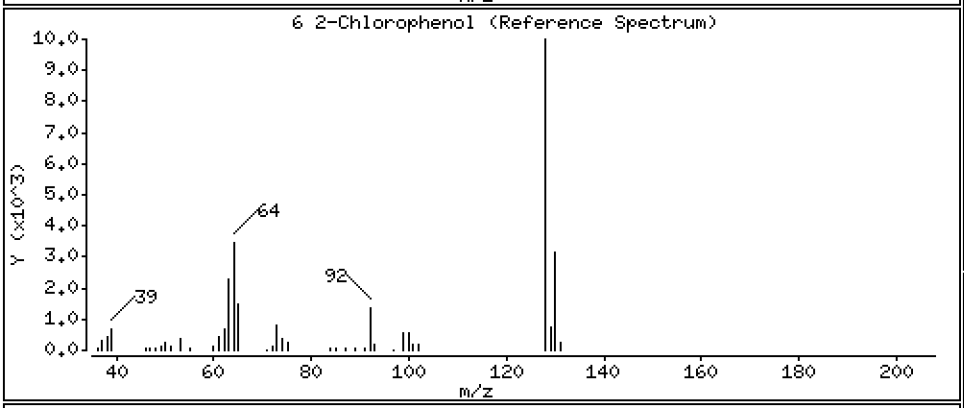
Concentration: 2.831 ug/mL

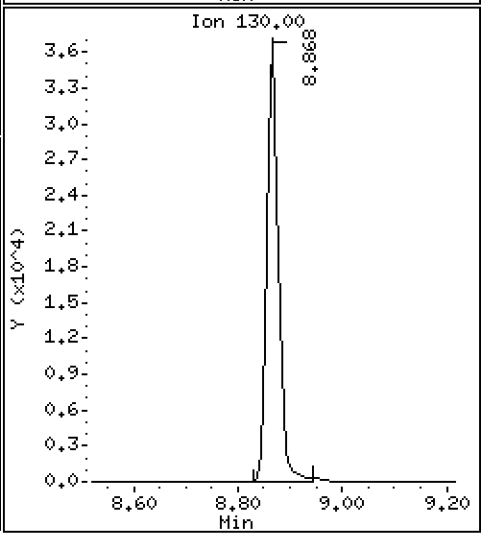


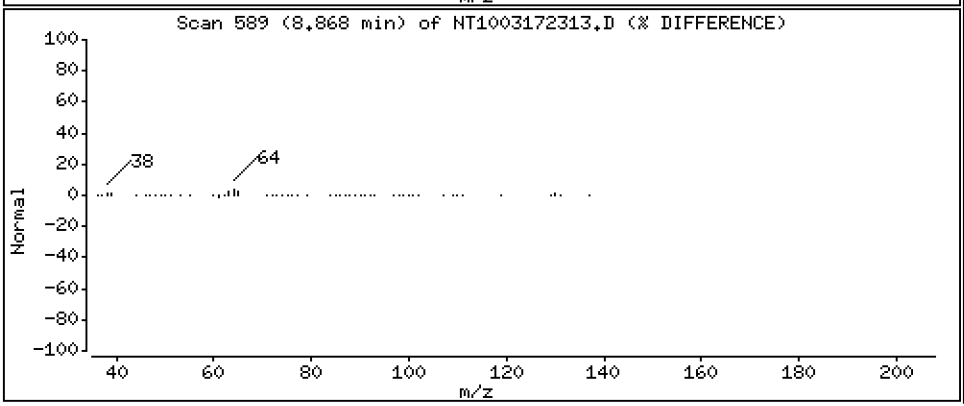












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

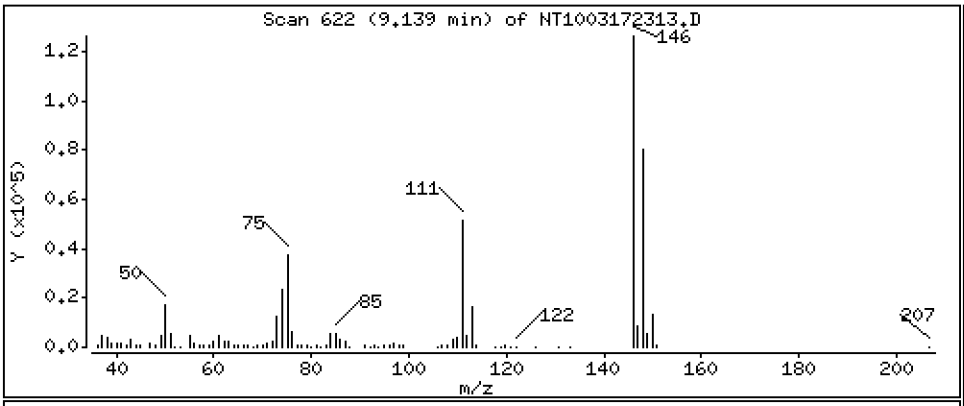
Operator: VTS

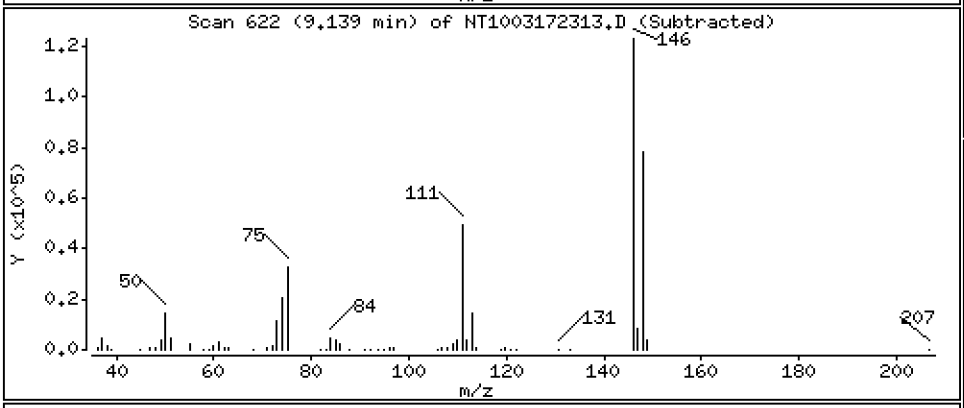
Column phase: ZB-5msi

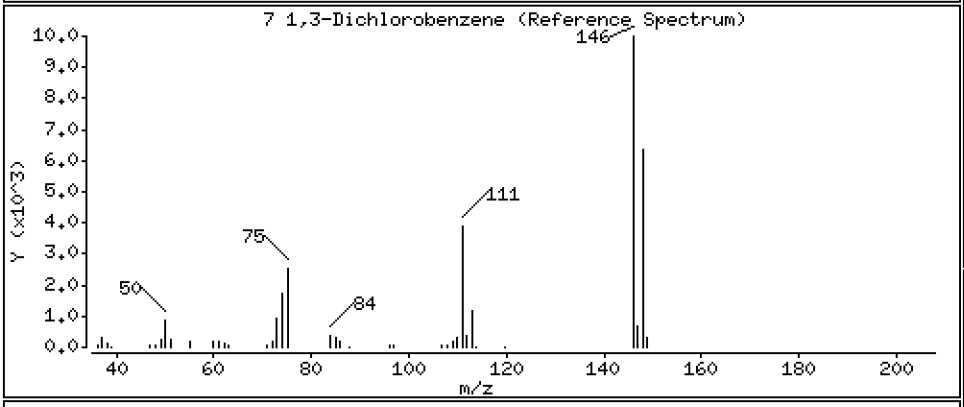
Column diameter: 0.25

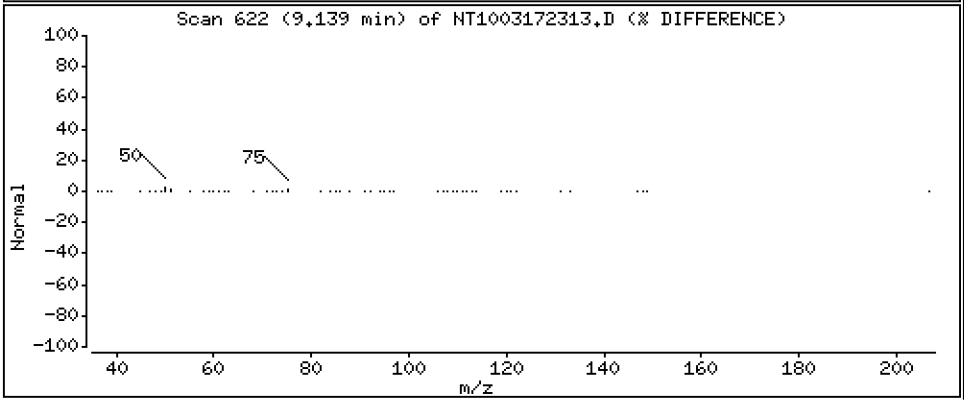
7 1,3-Dichlorobenzene

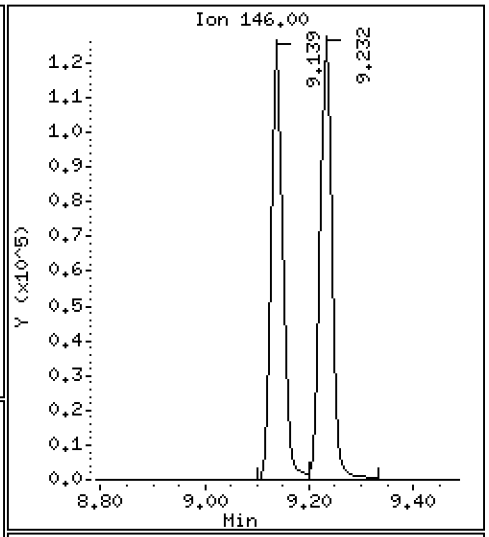
Concentration: 2.981 ug/mL

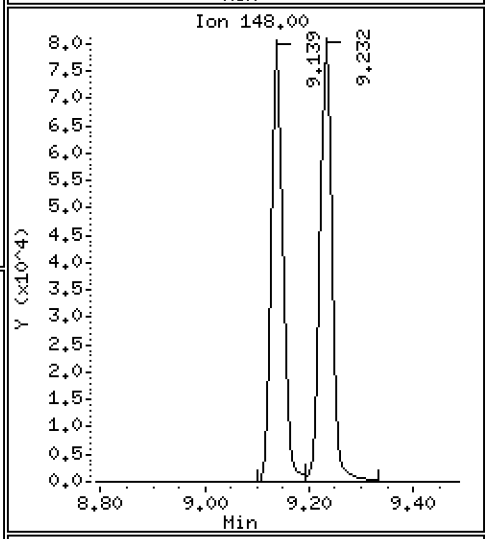


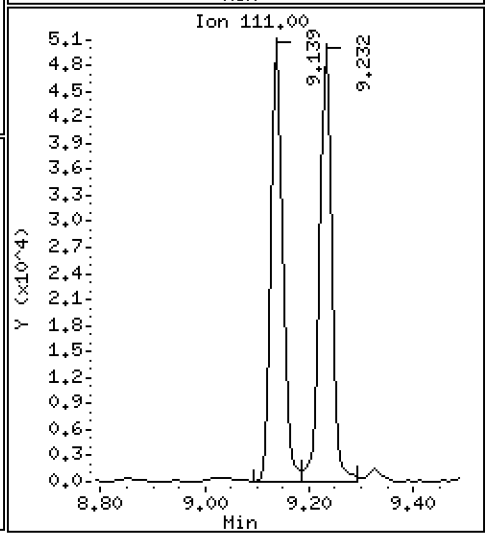












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

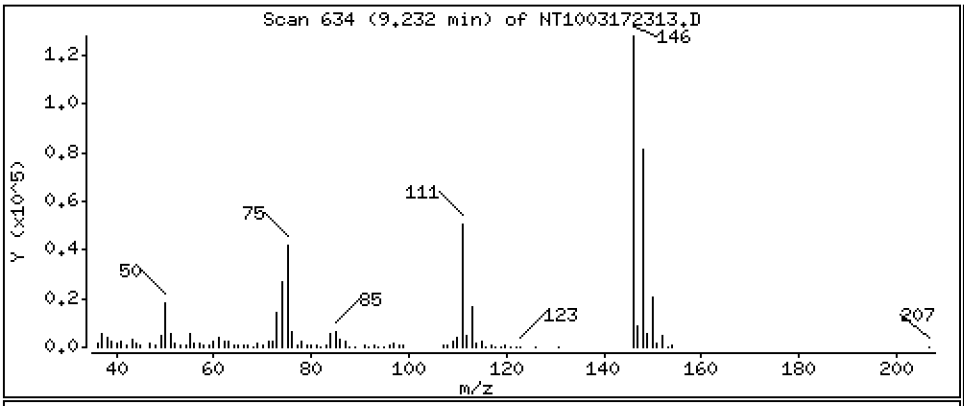
Operator: VTS

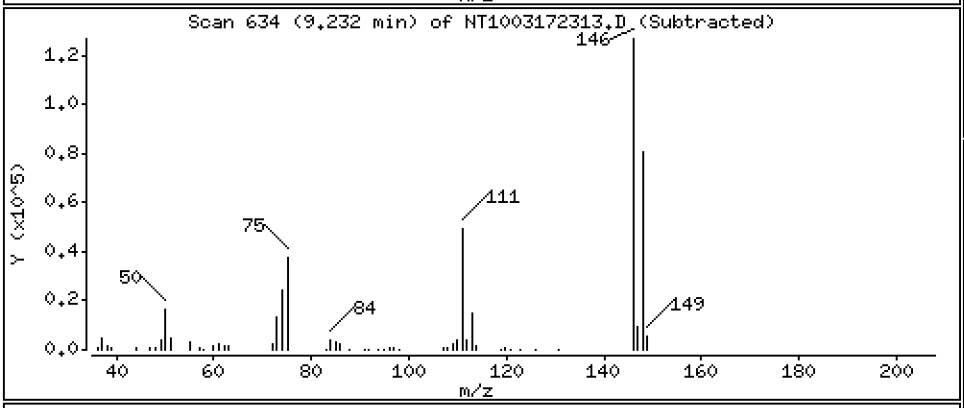
Column phase: ZB-5msi

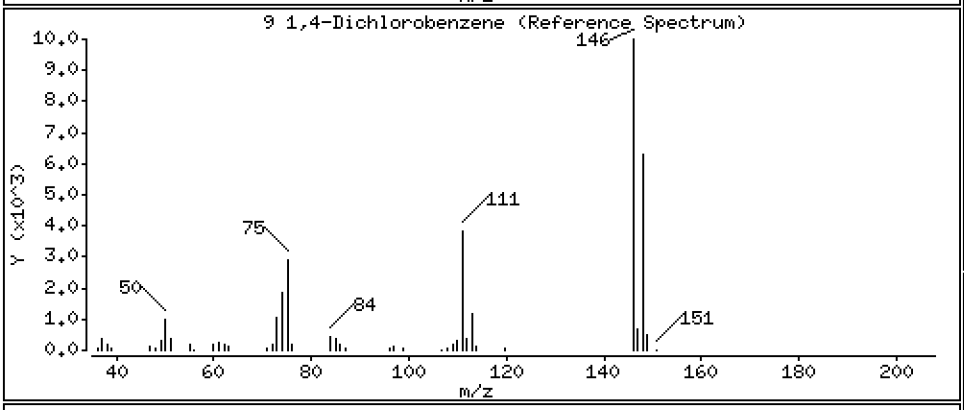
Column diameter: 0.25

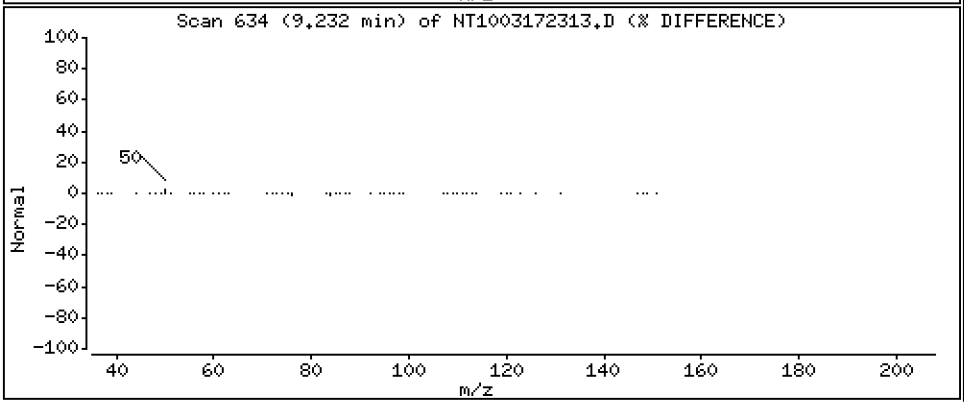
9 1,4-Dichlorobenzene

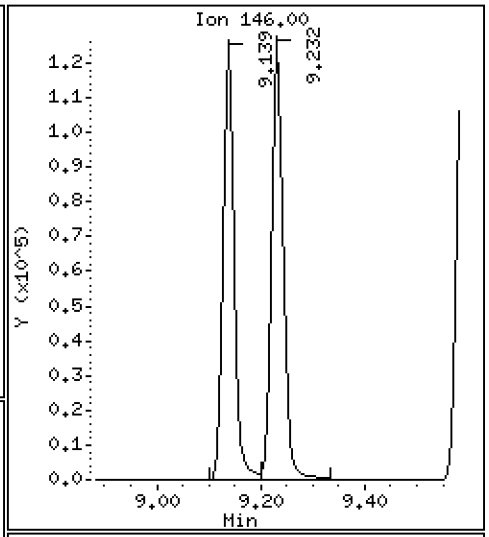
Concentration: 3.060 ug/mL

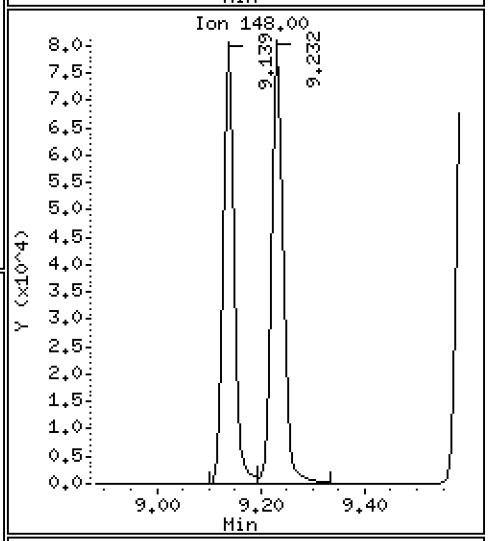


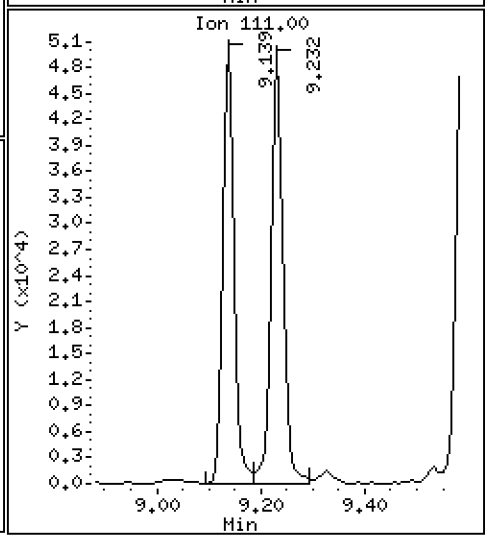












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

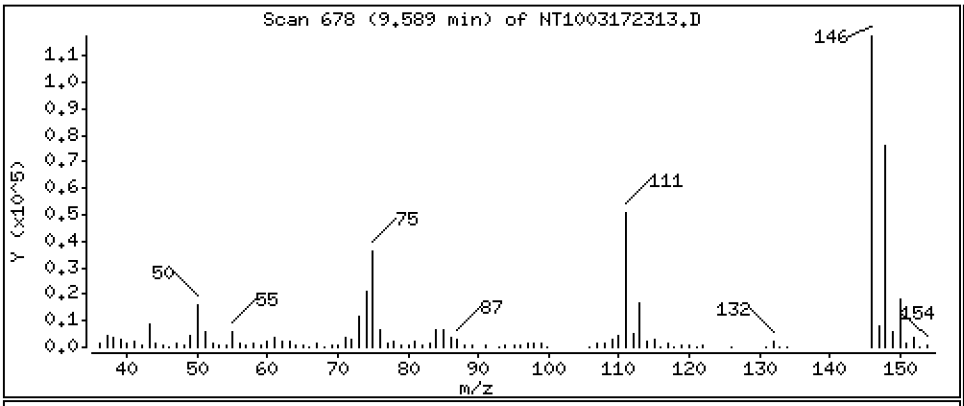
Operator: VTS

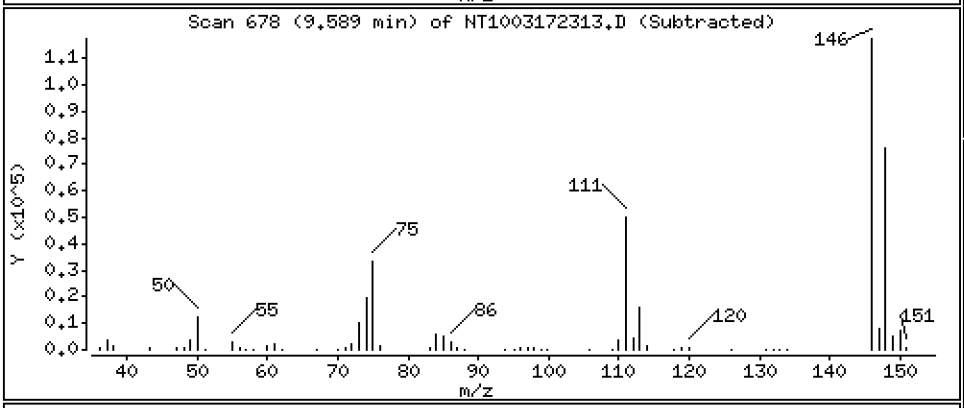
Column phase: ZB-5msi

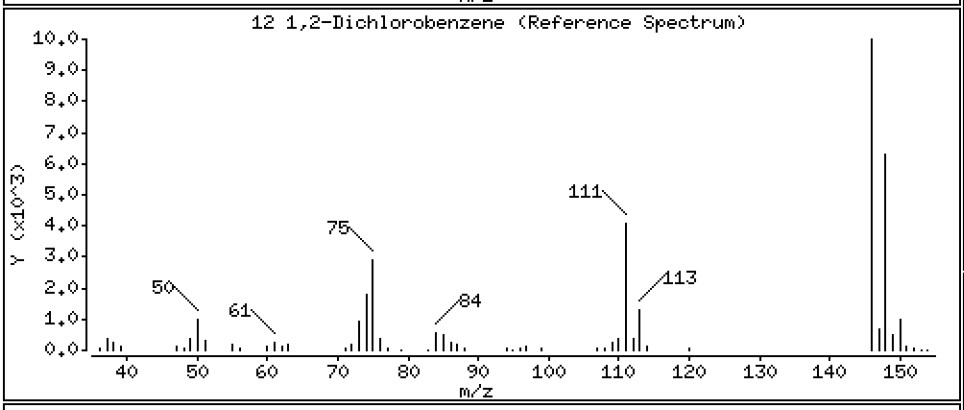
Column diameter: 0.25

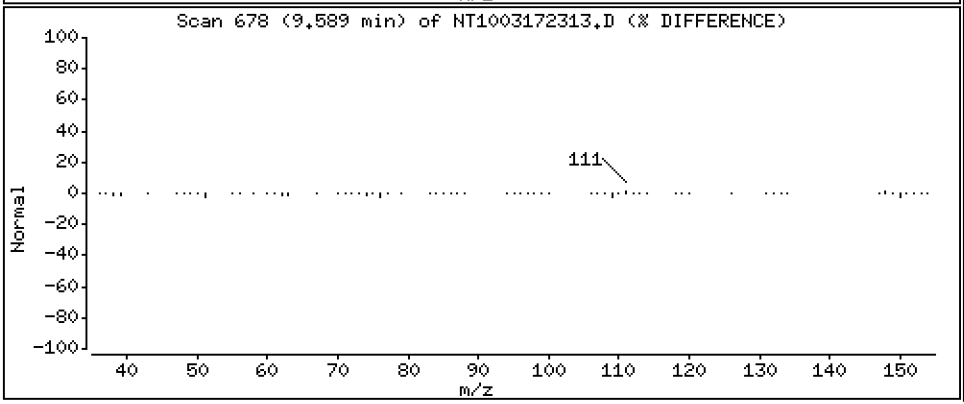
12 1,2-Dichlorobenzene

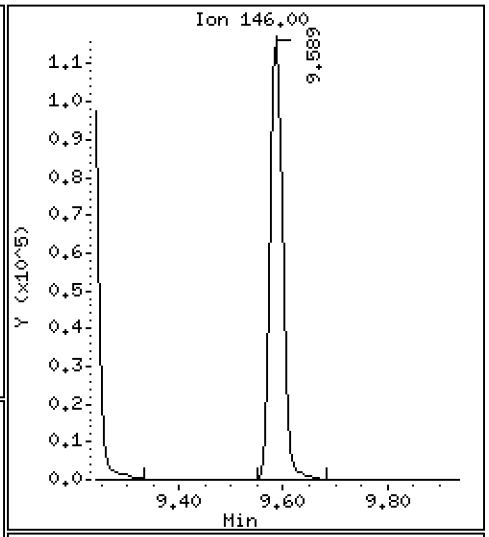
Concentration: 3.071 ug/mL

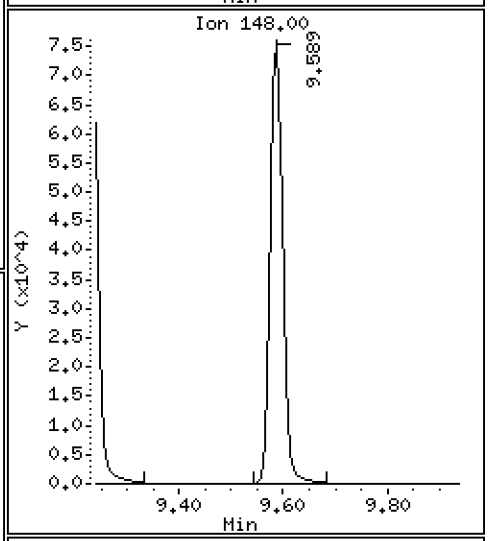


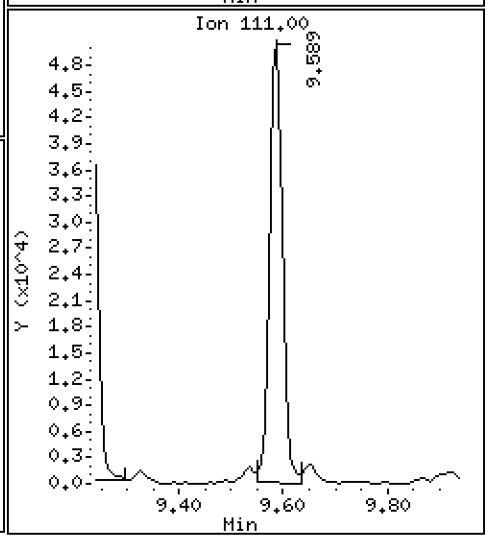












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

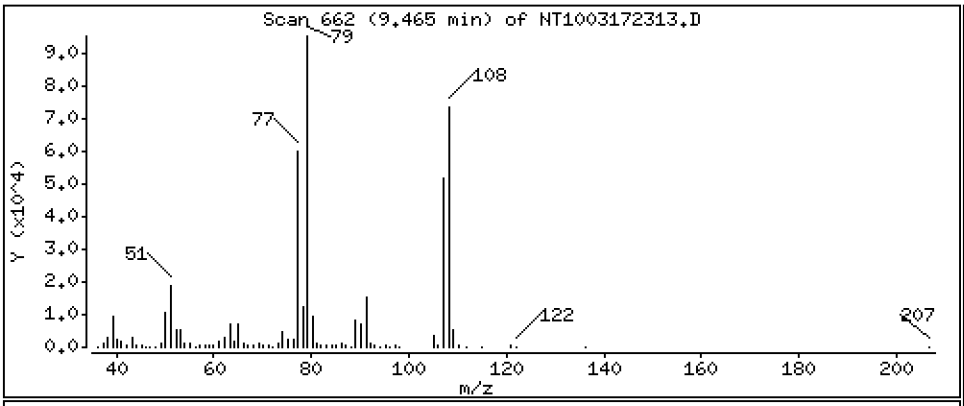
Operator: VTS

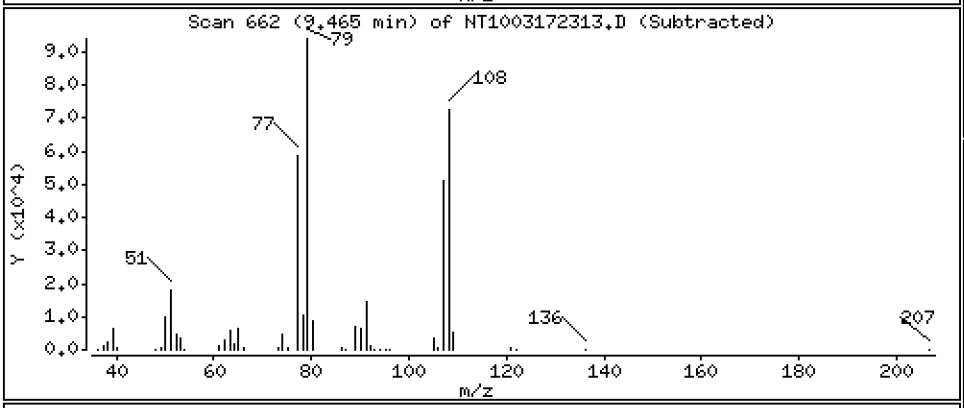
Column phase: ZB-5msi

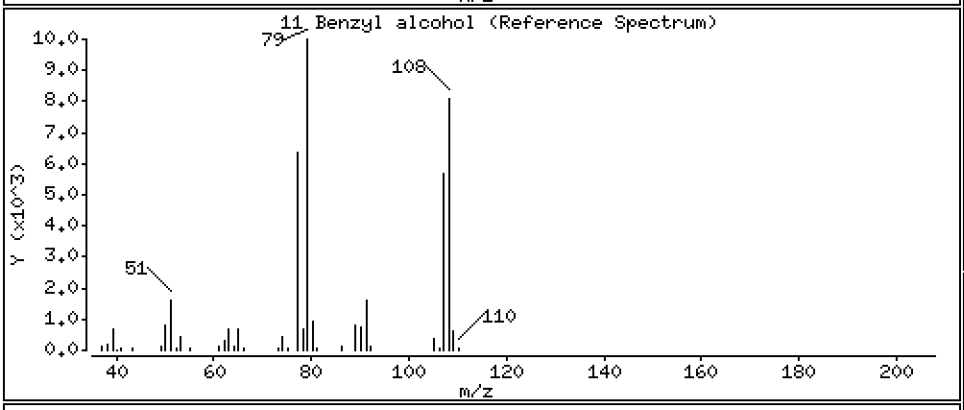
Column diameter: 0.25

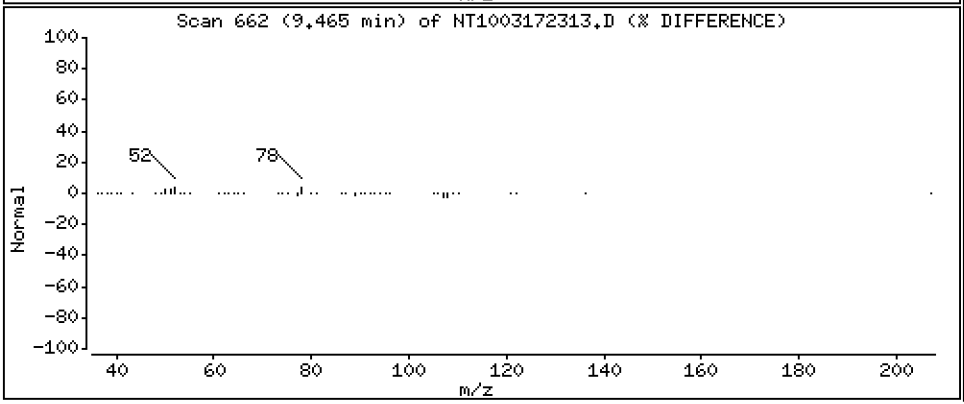
11 Benzyl alcohol

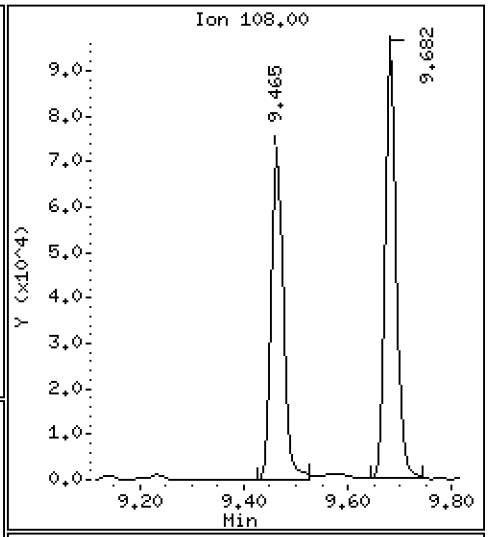
Concentration: 3.342 ug/mL

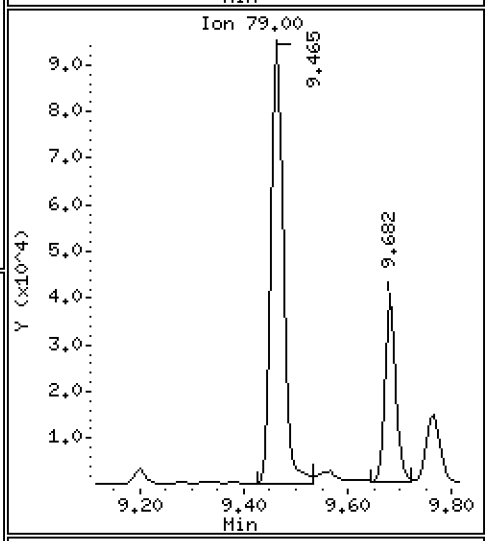


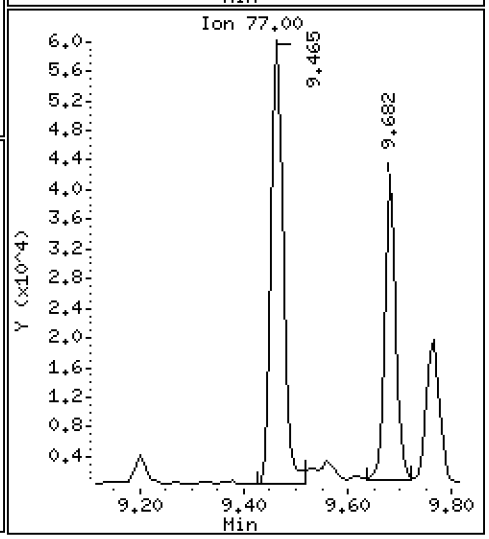












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

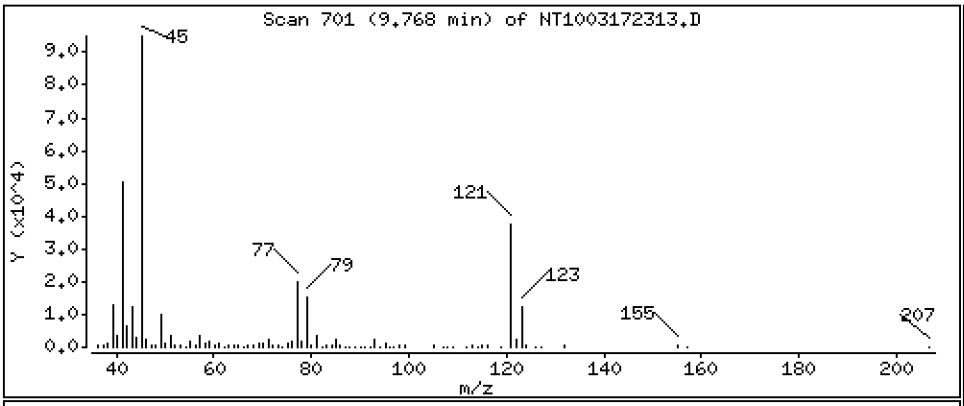
Operator: VTS

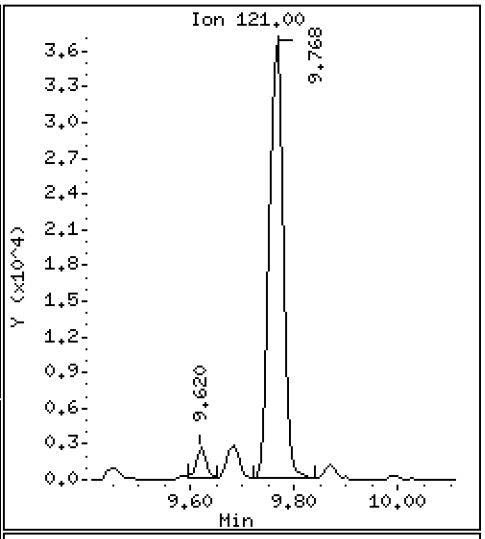
Column phase: ZB-5msi

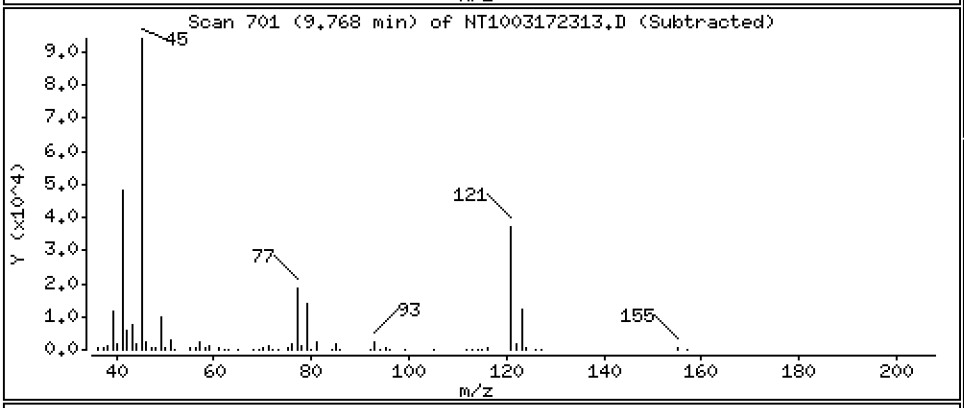
Column diameter: 0.25

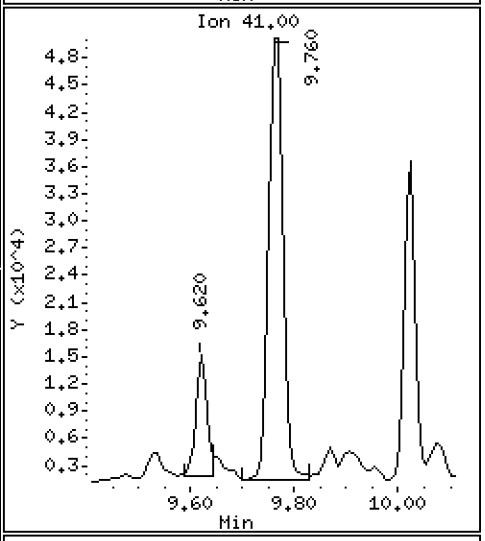
14 2,2'-oxybis(1-Chloropropane)

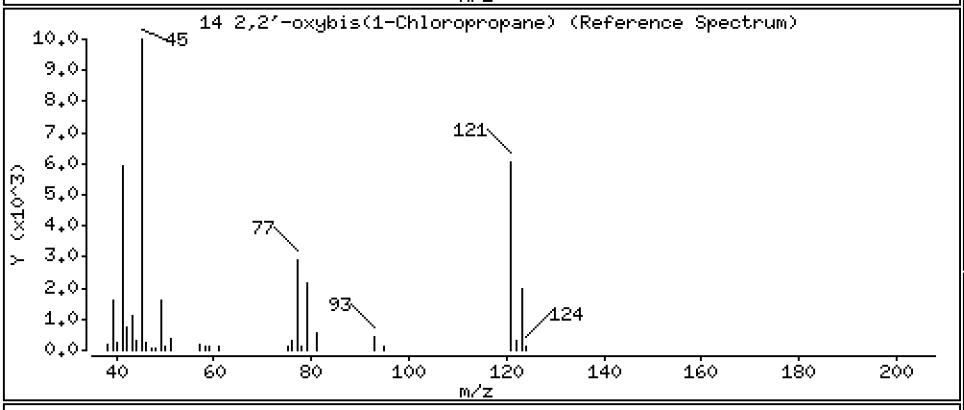
Concentration: 3.628 ug/mL

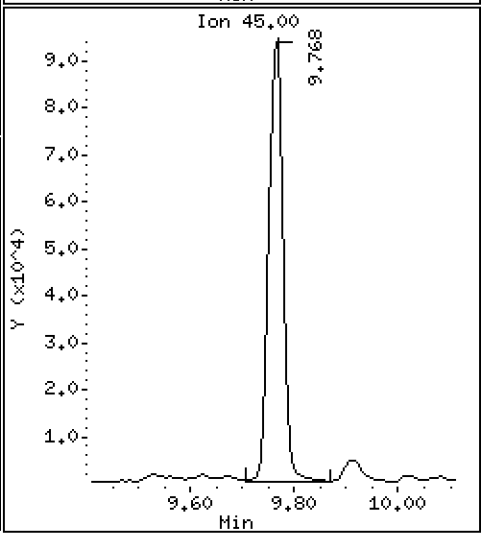


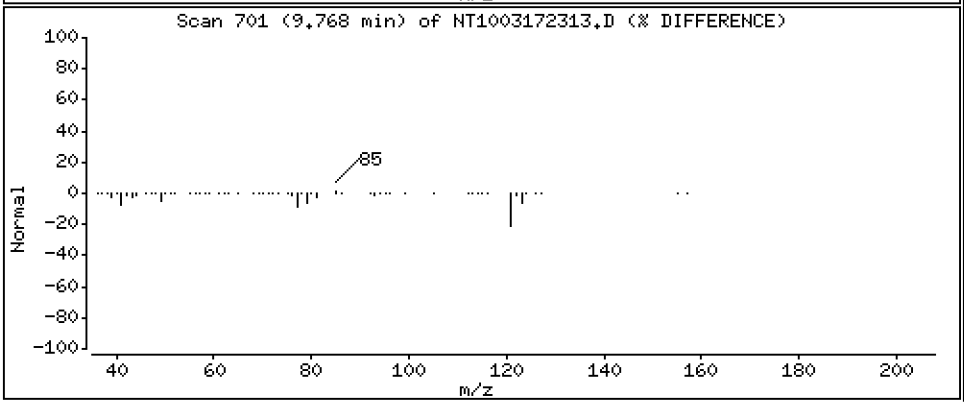












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

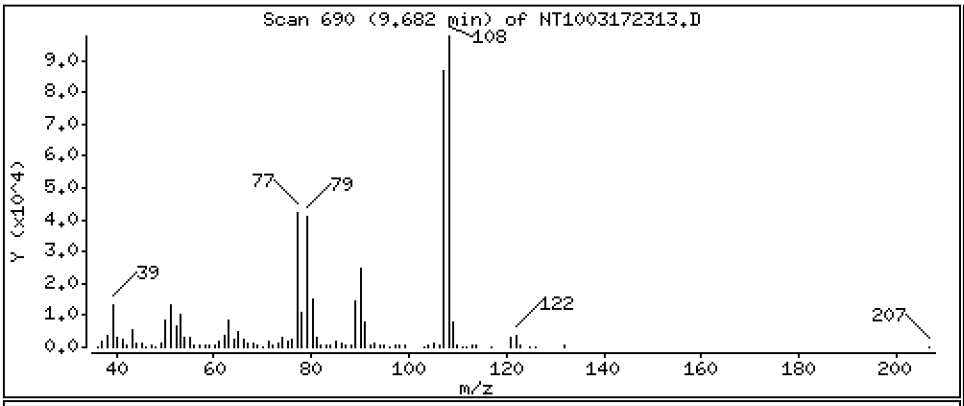
Operator: VTS

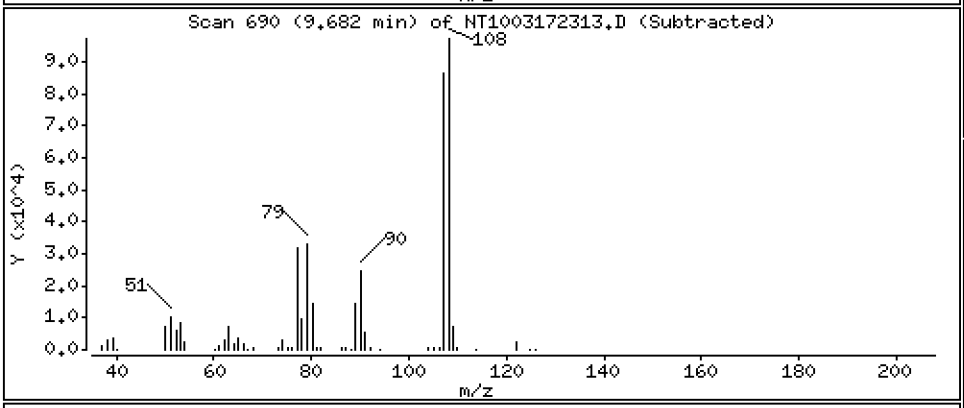
Column phase: ZB-5msi

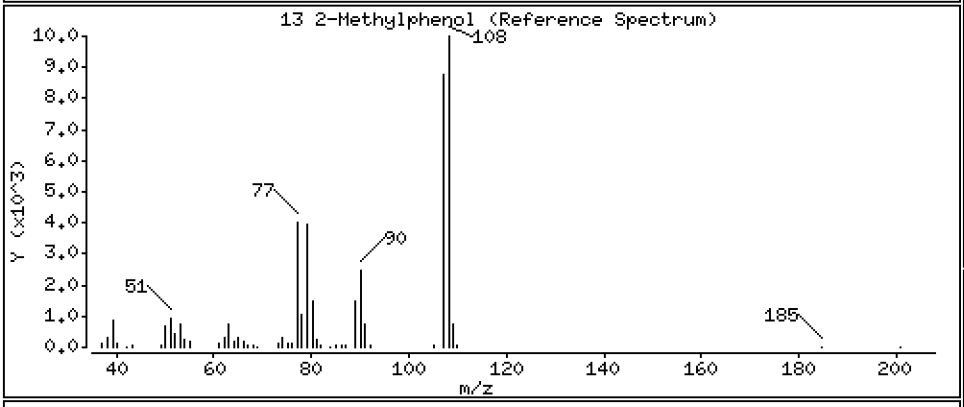
Column diameter: 0.25

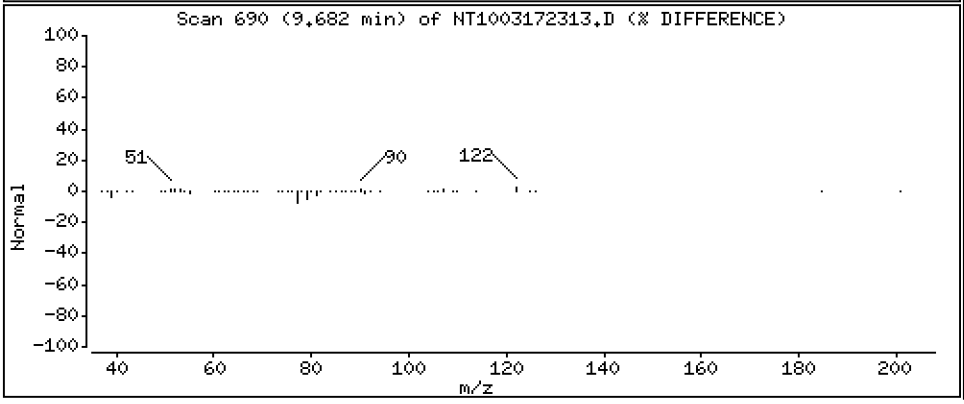
13 2-Methylphenol

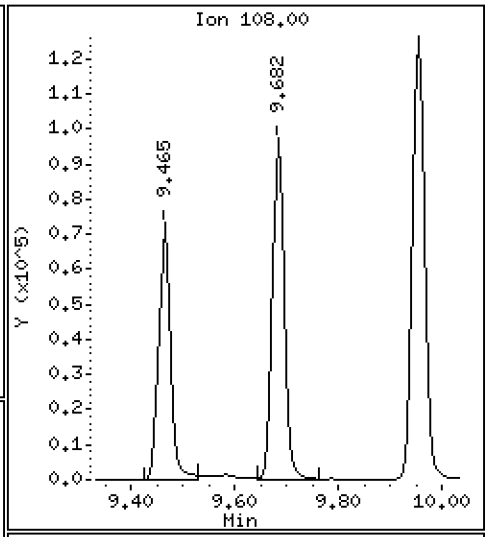
Concentration: 2.756 ug/mL

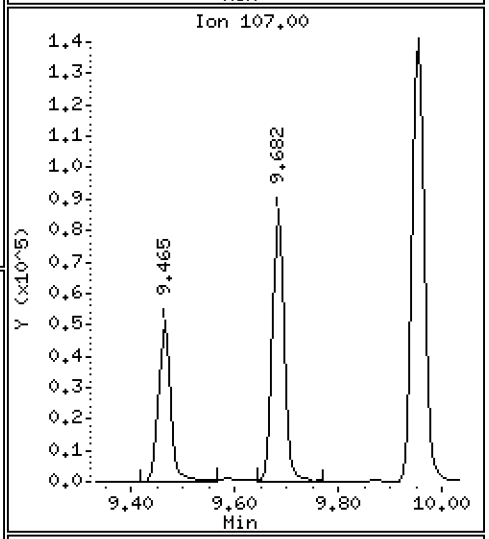


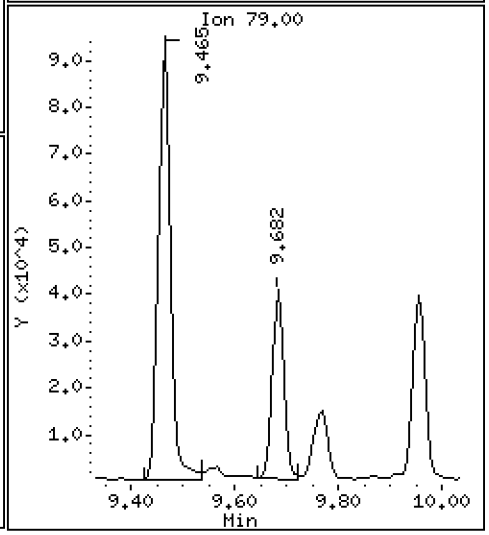












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

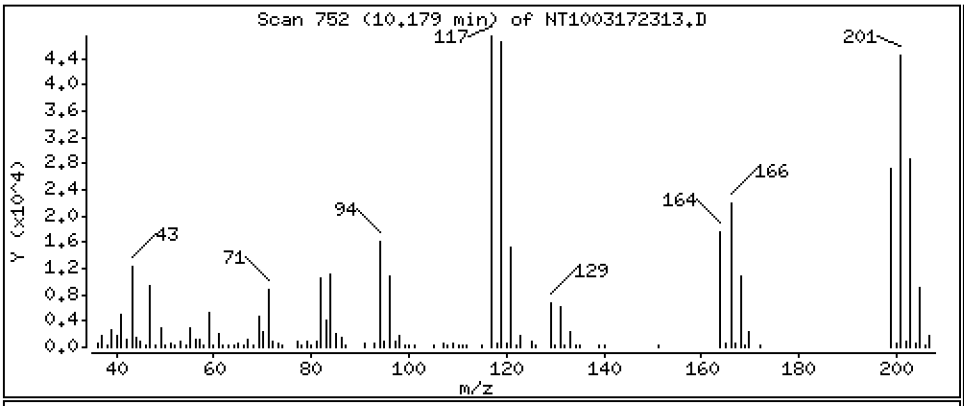
Operator: VTS

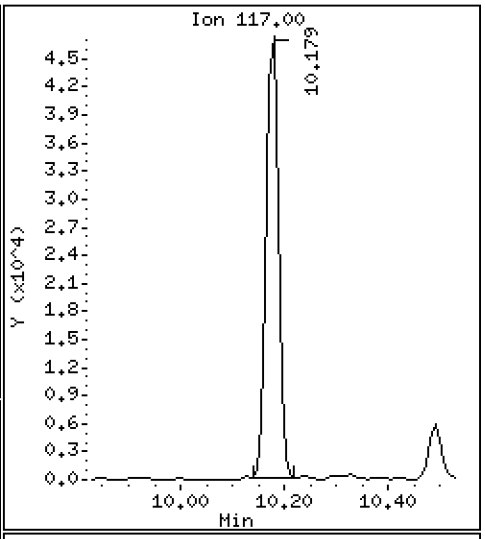
Column phase: ZB-5msi

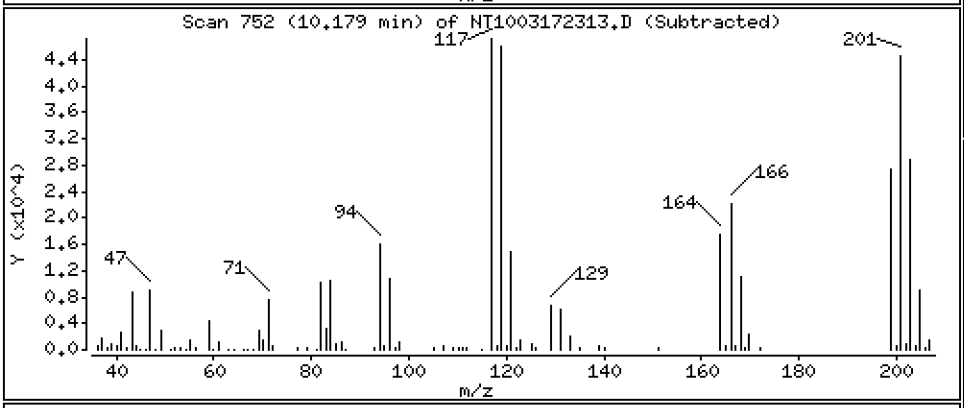
Column diameter: 0.25

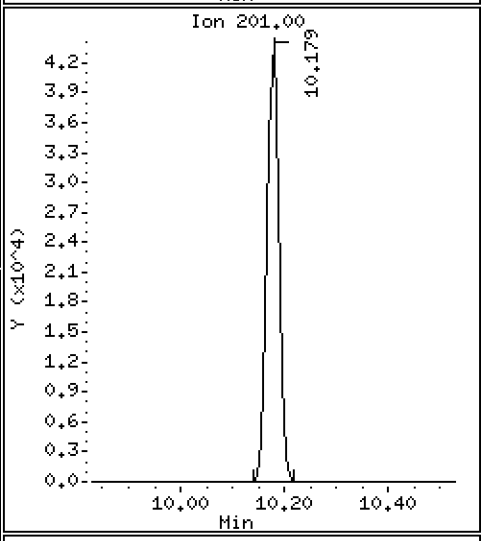
17 Hexachloroethane

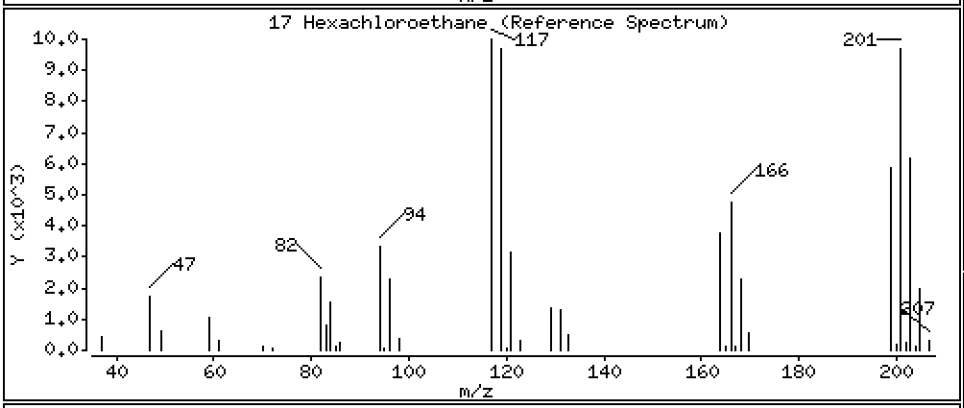
Concentration: 2.857 ug/mL

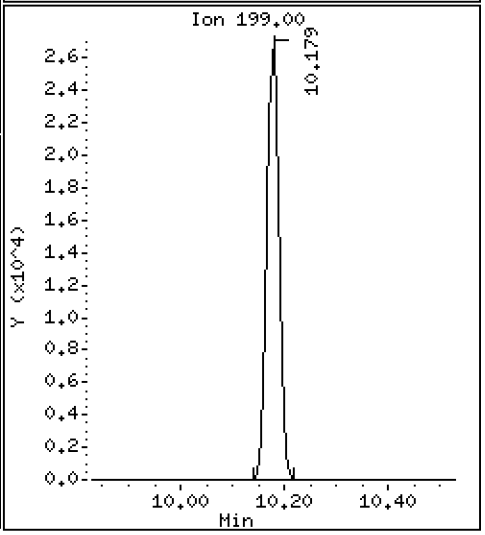


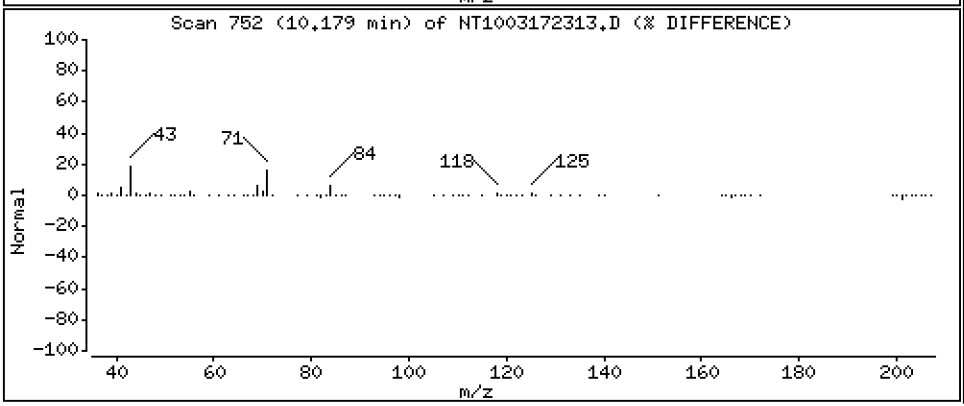












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

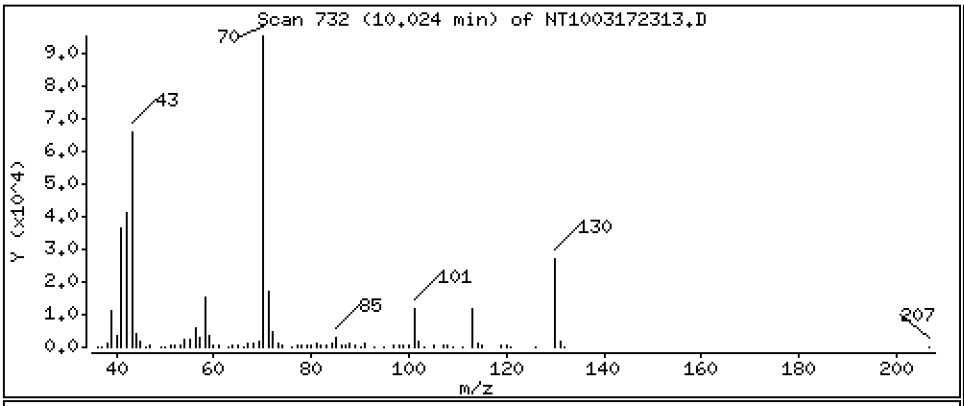
Operator: VTS

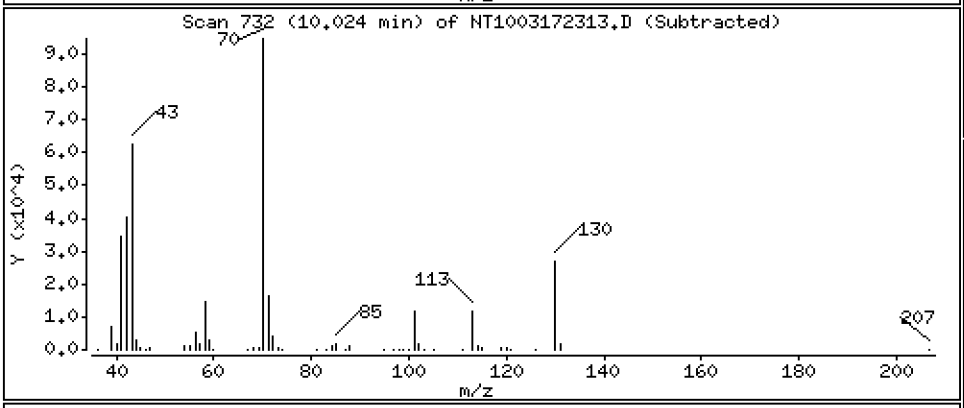
Column phase: ZB-5msi

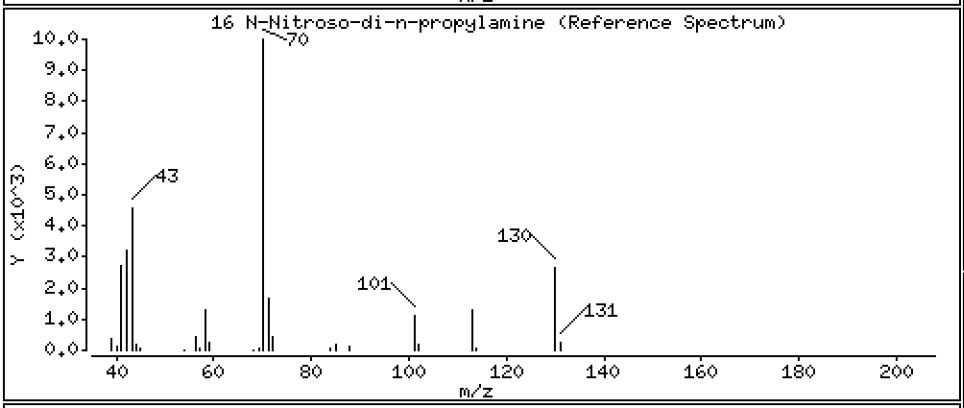
Column diameter: 0.25

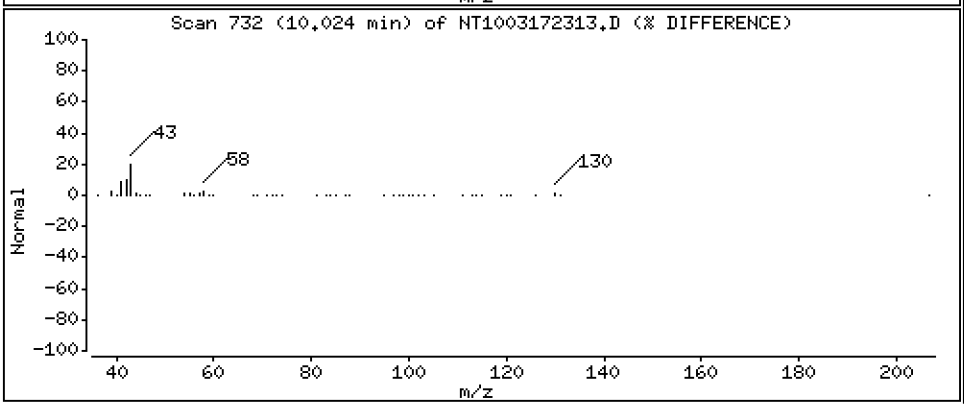
16 N-Nitroso-di-n-propylamine

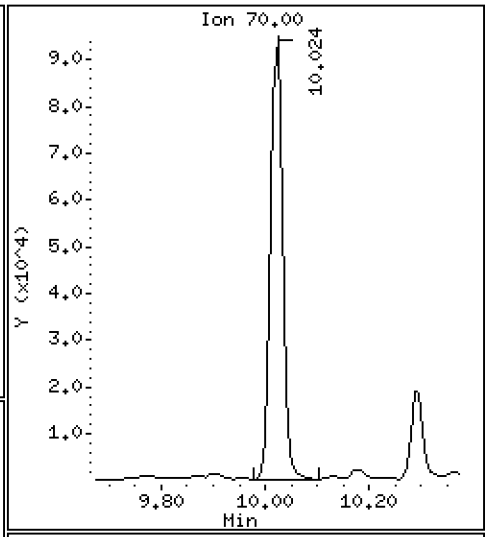
Concentration: 3.498 ug/mL

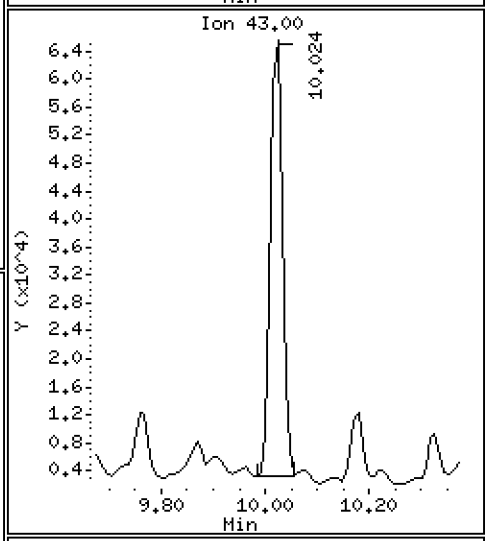


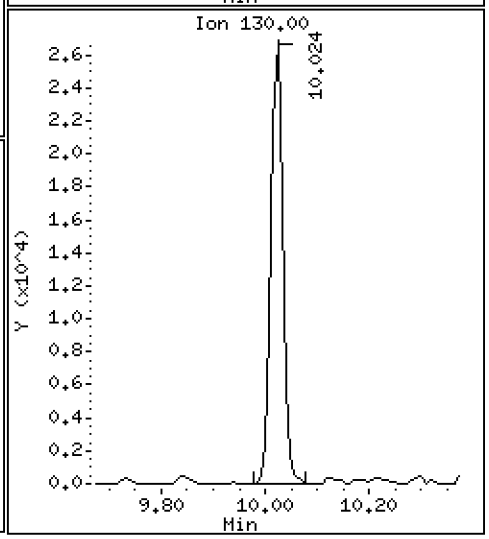












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

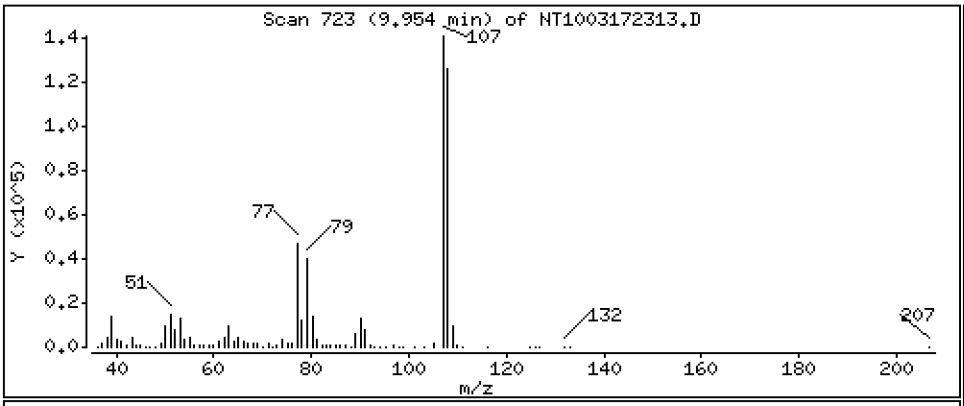
Operator: VTS

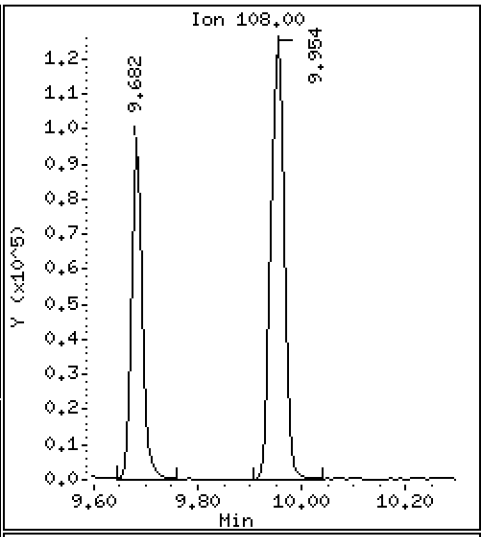
Column phase: ZB-5msi

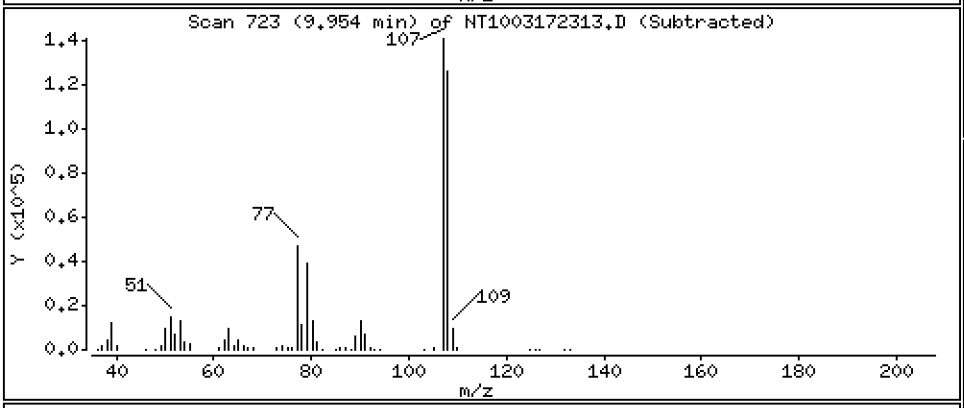
Column diameter: 0.25

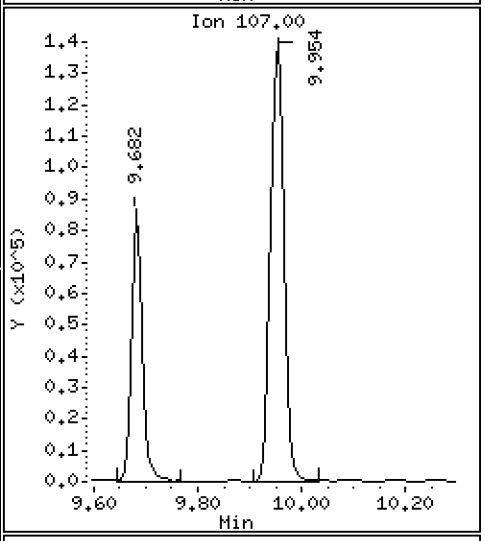
15 4-Methylphenol

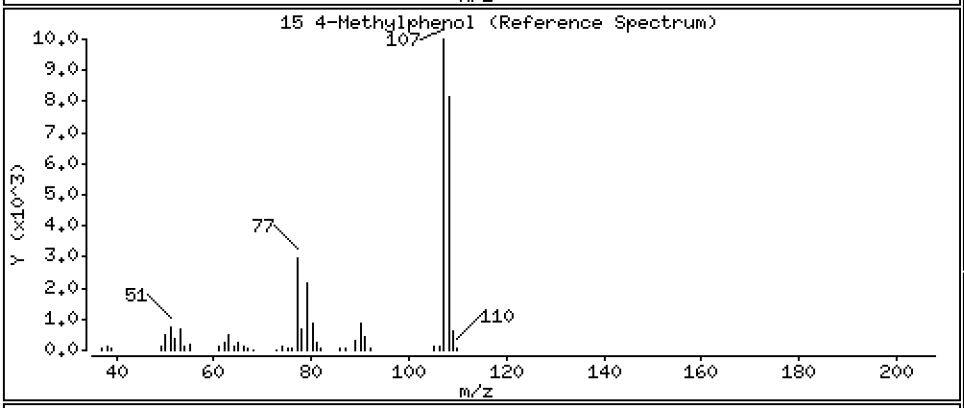
Concentration: 3.985 ug/mL

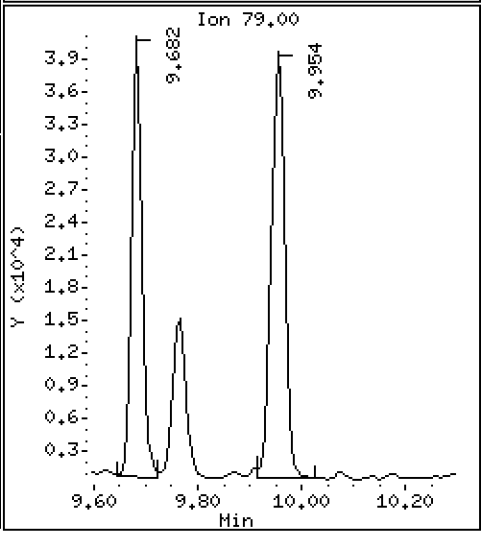


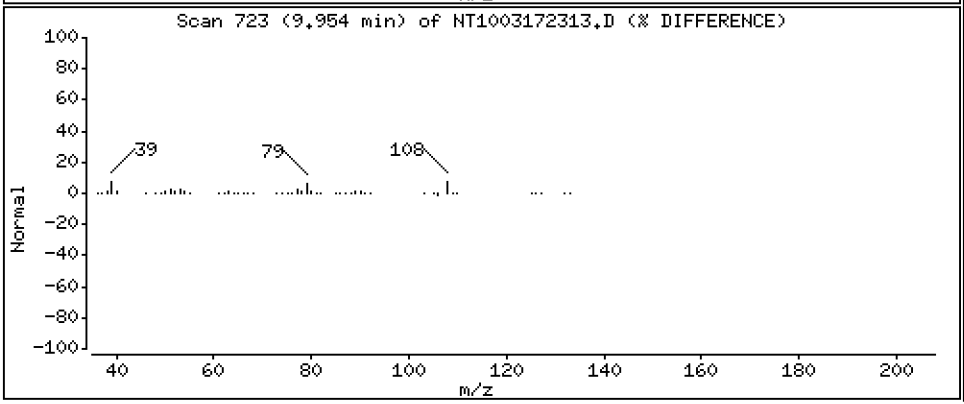












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

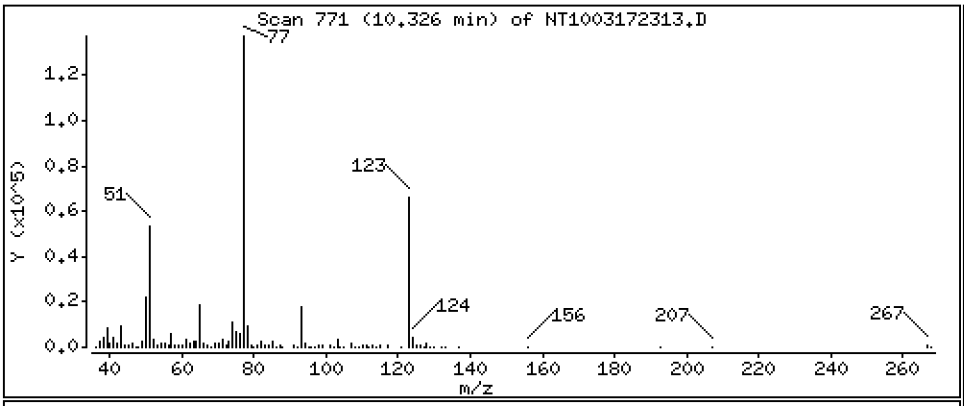
Operator: VTS

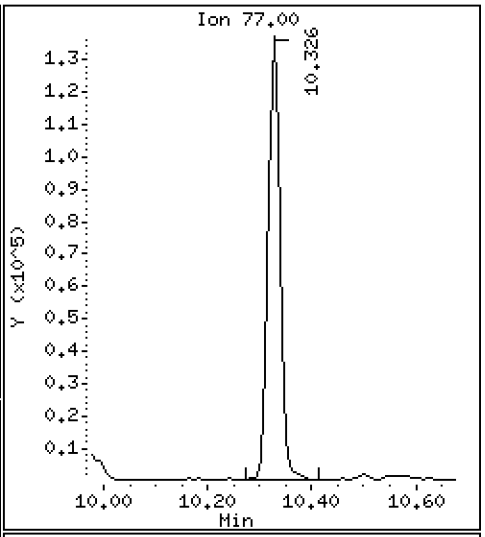
Column phase: ZB-5msi

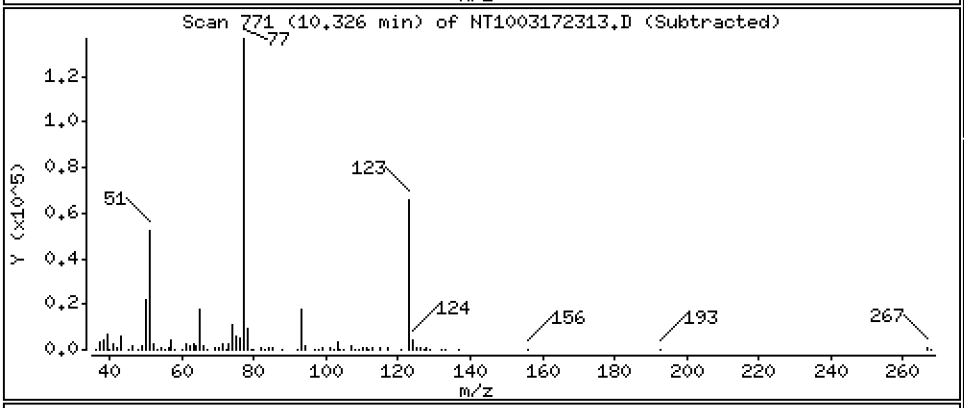
Column diameter: 0.25

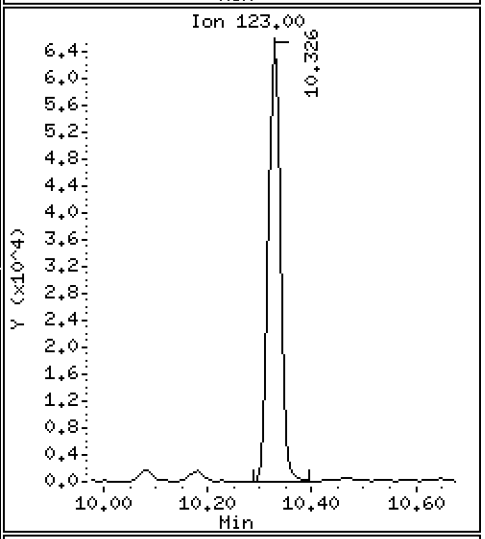
19 Nitrobenzene

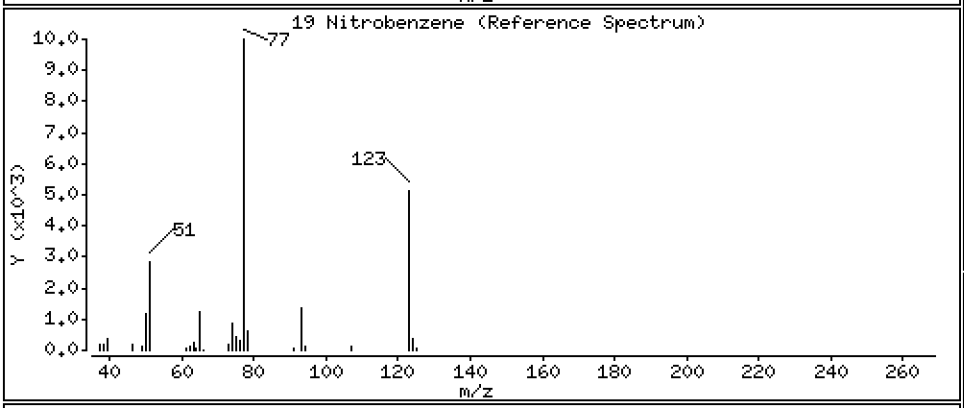
Concentration: 3.268 ug/mL

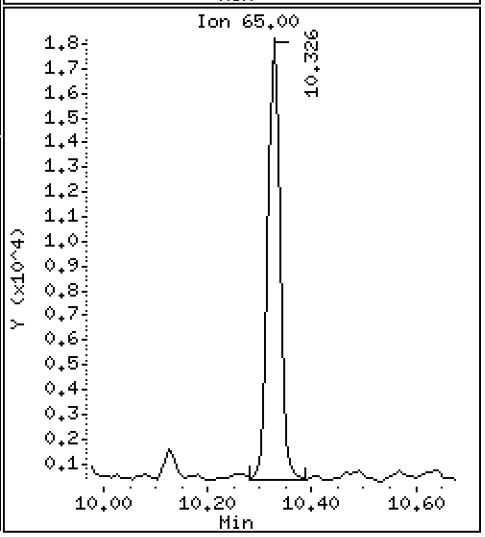


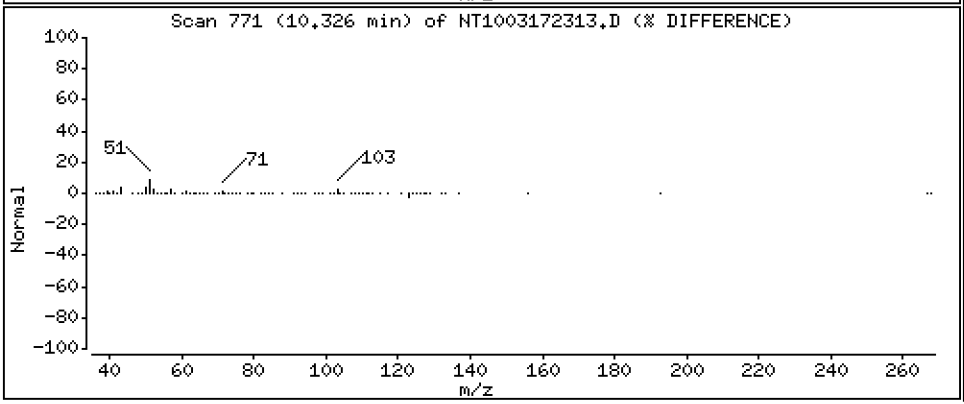












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

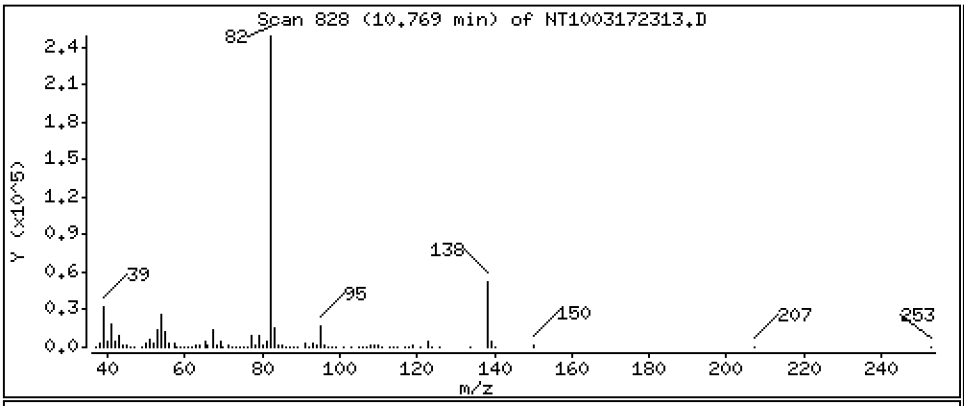
Operator: VTS

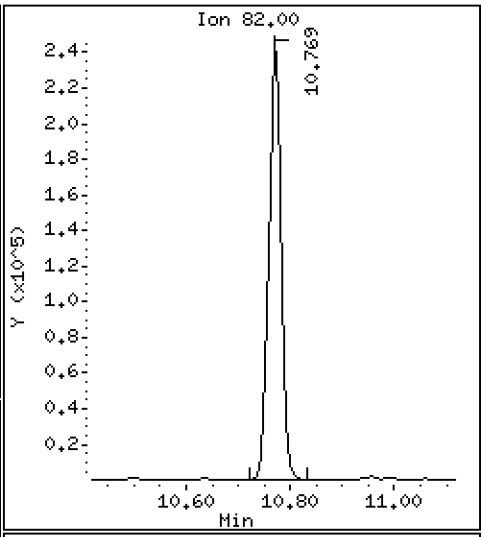
Column phase: ZB-5msi

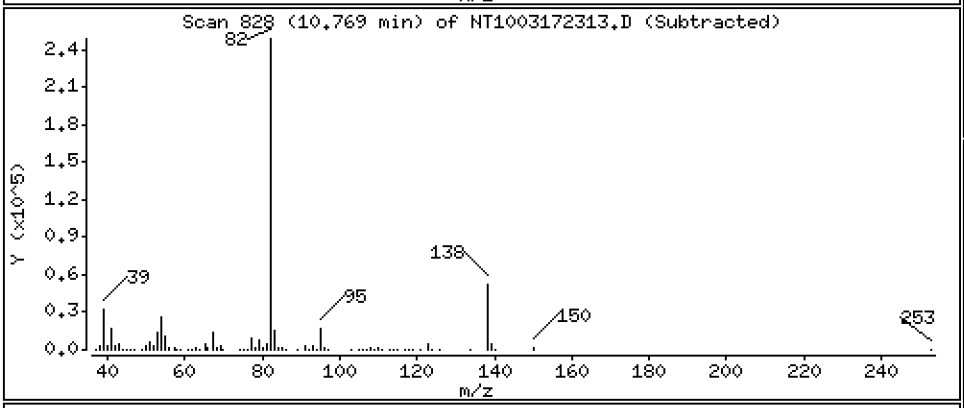
Column diameter: 0.25

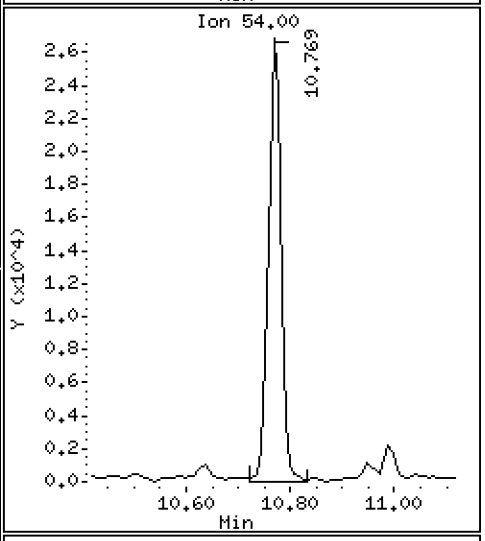
20 Isophorone

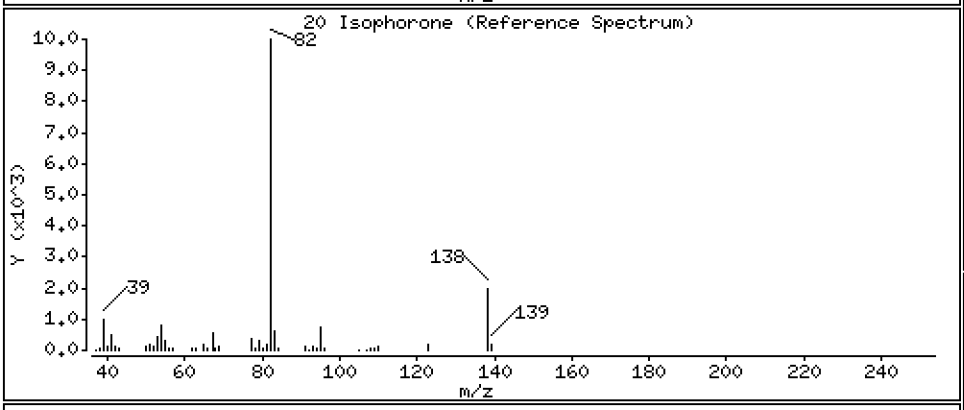
Concentration: 4.937 ug/mL

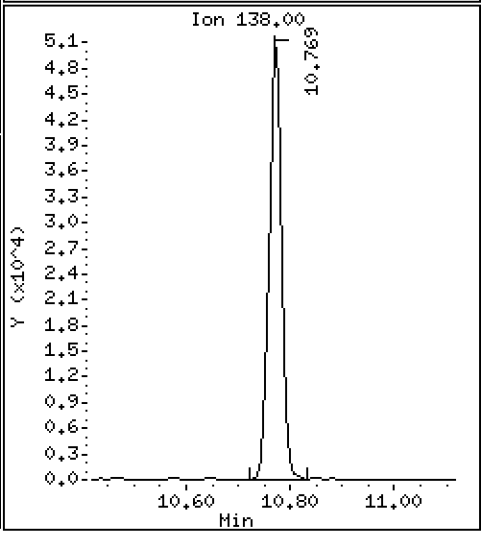


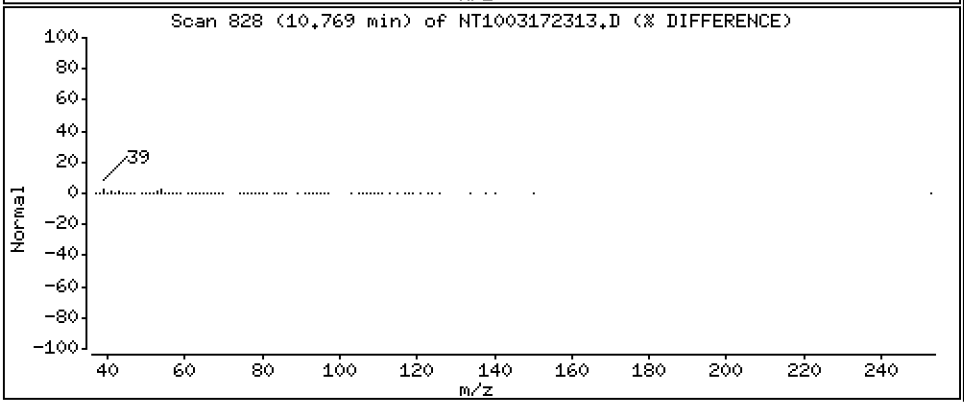












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

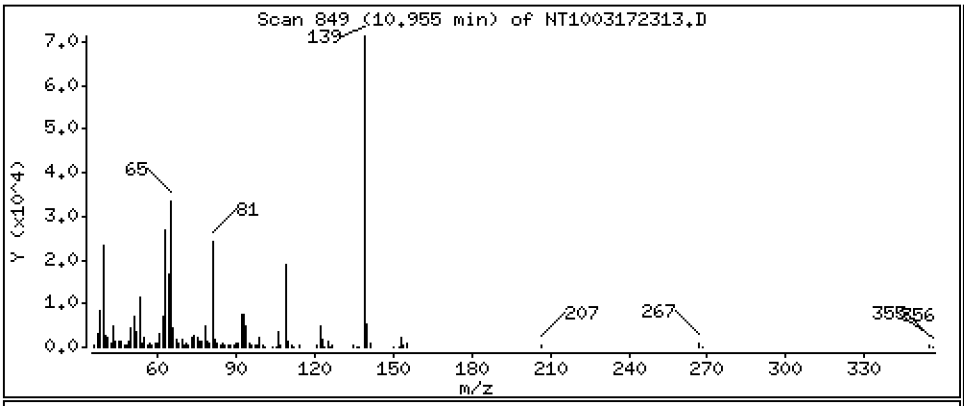
Operator: VTS

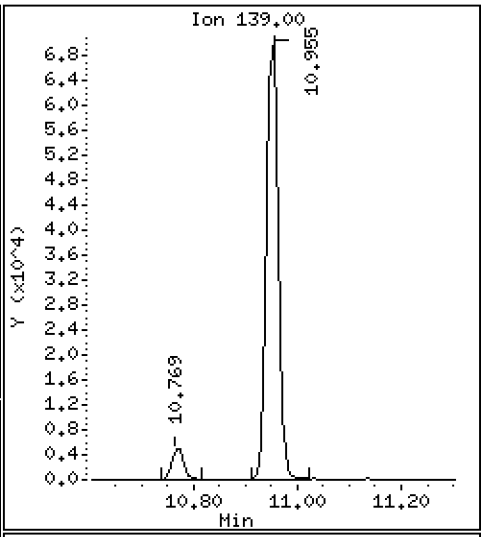
Column phase: ZB-5msi

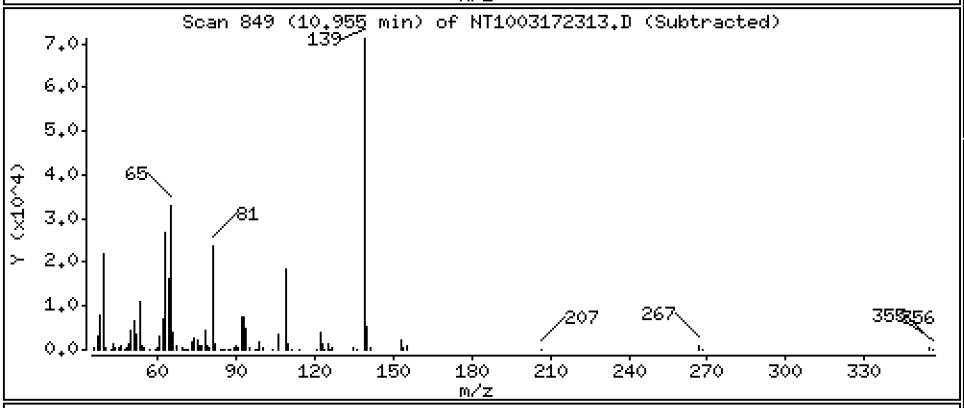
Column diameter: 0.25

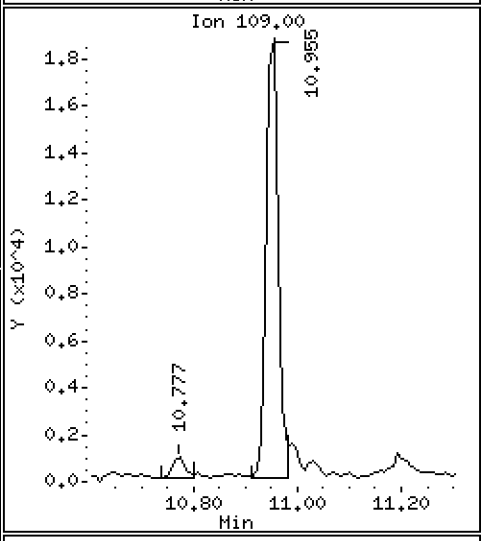
21 2-Nitrophenol

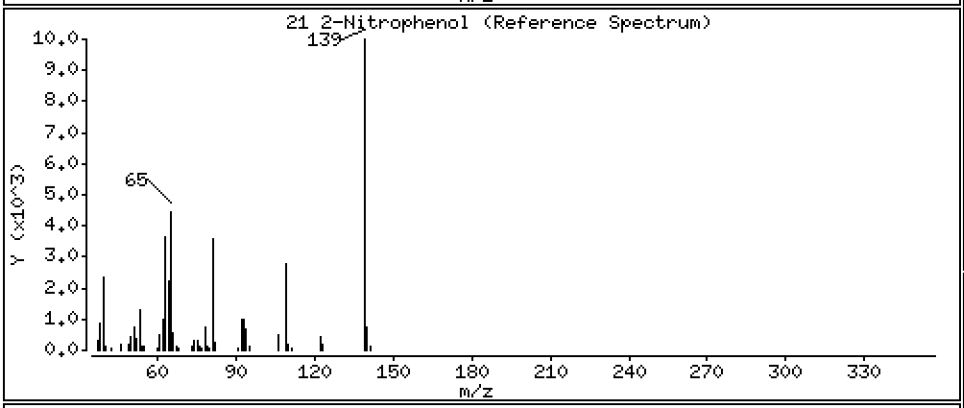
Concentration: 3.639 ug/mL

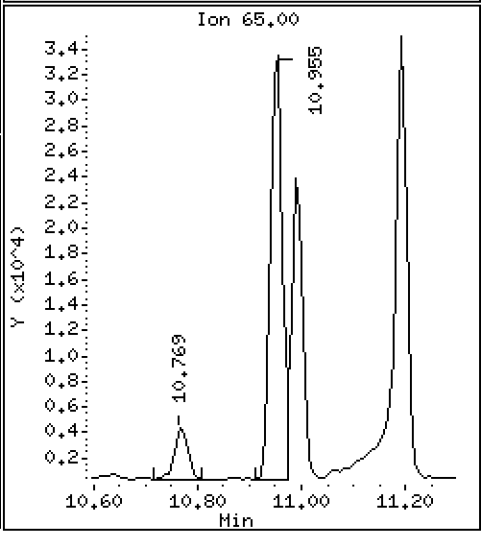


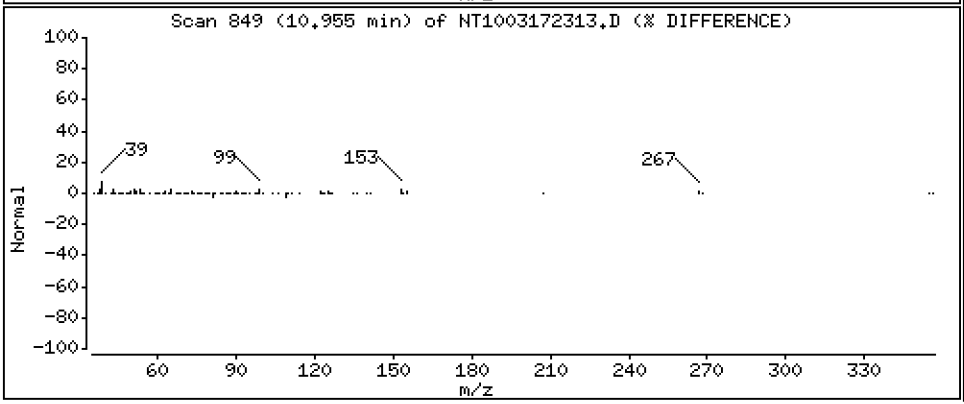












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

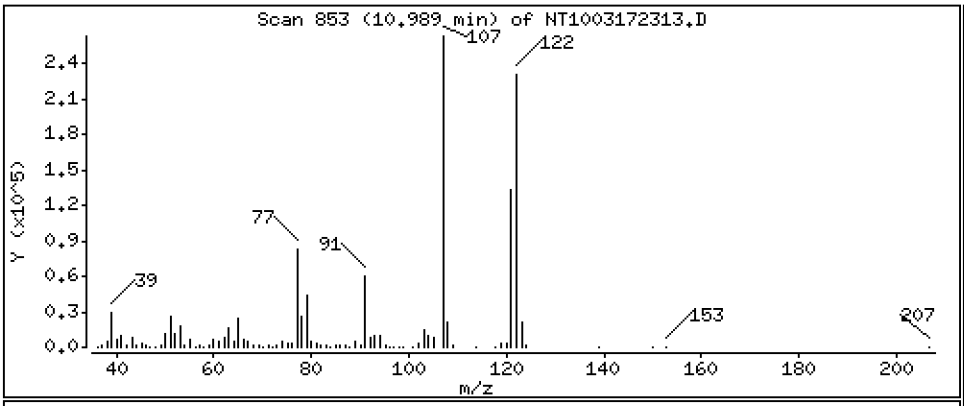
Operator: VTS

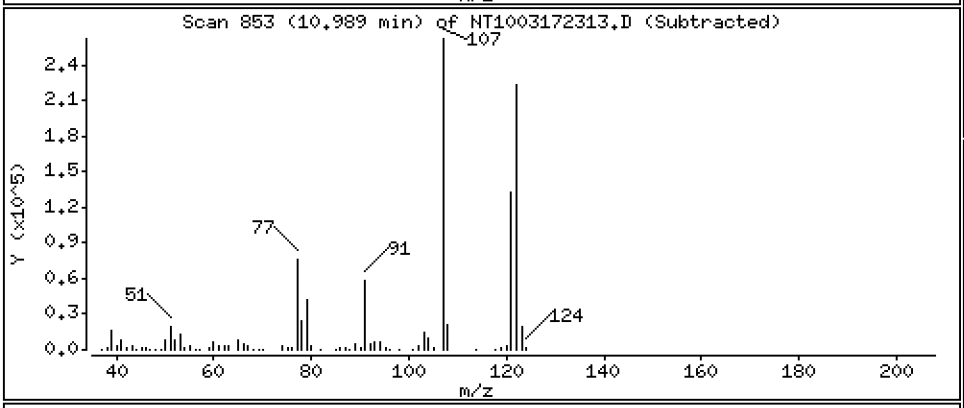
Column phase: ZB-5msi

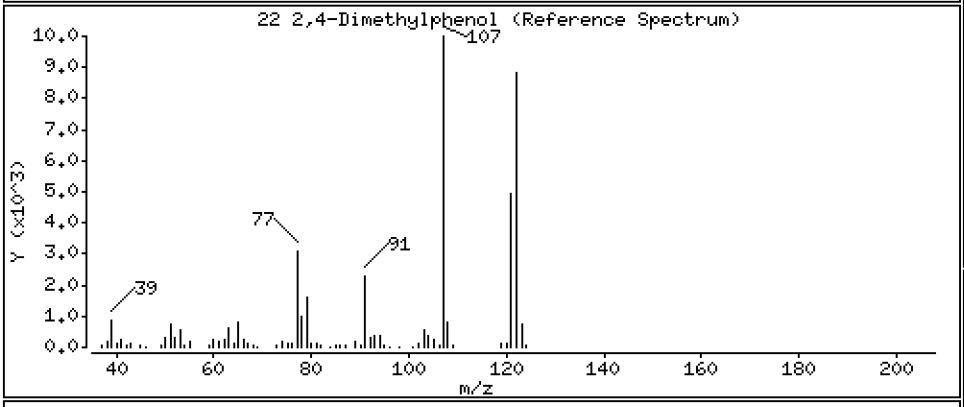
Column diameter: 0.25

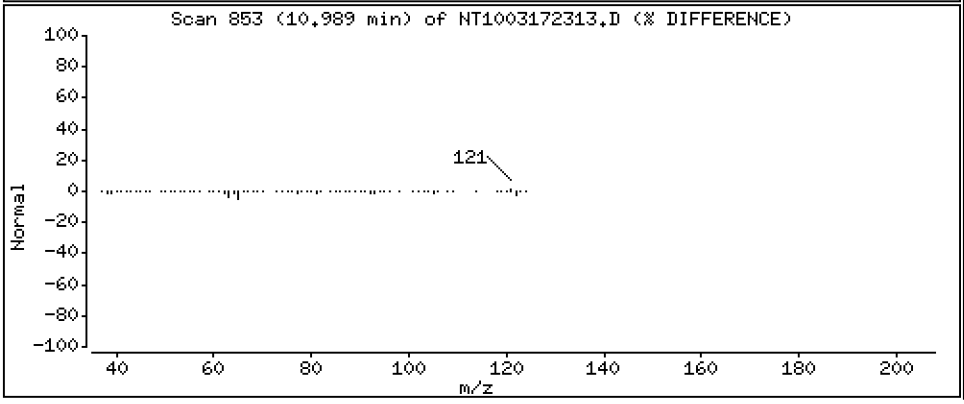
22 2,4-Dimethylphenol

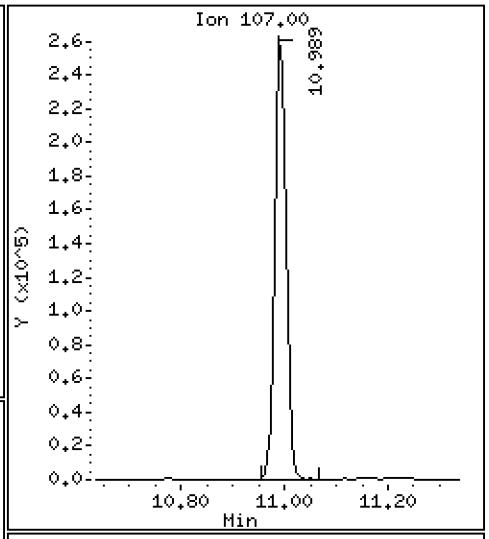
Concentration: 7.038 ug/mL

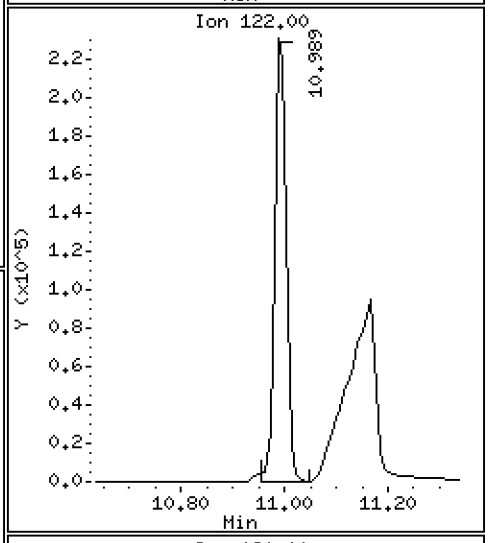


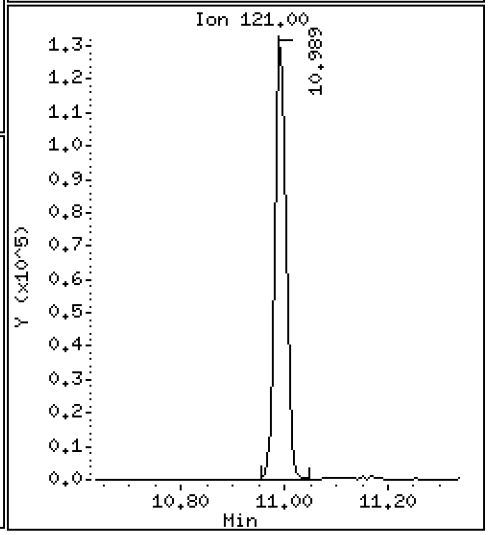












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172313.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

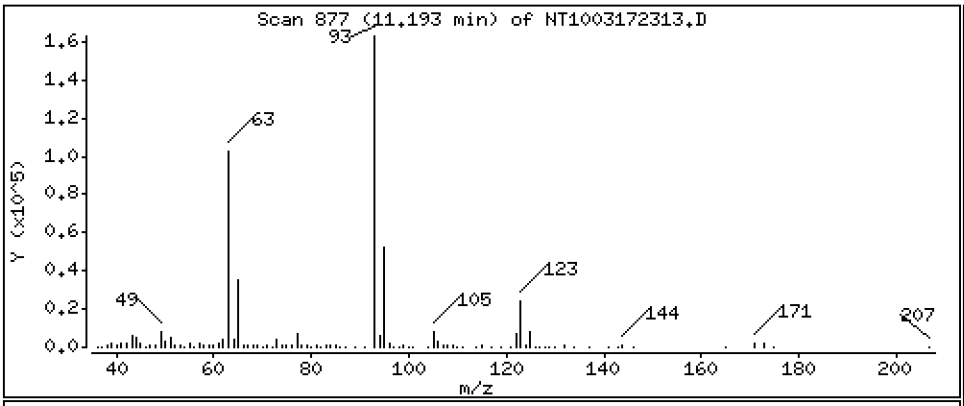
Operator: VTS

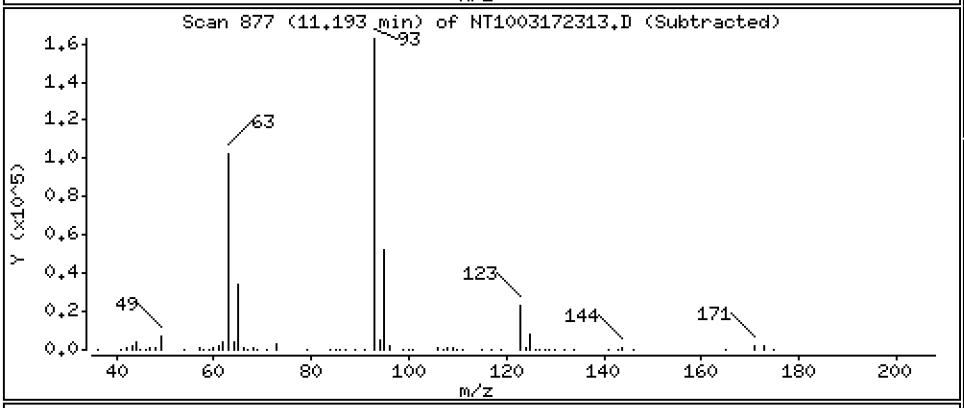
Column phase: ZB-5msi

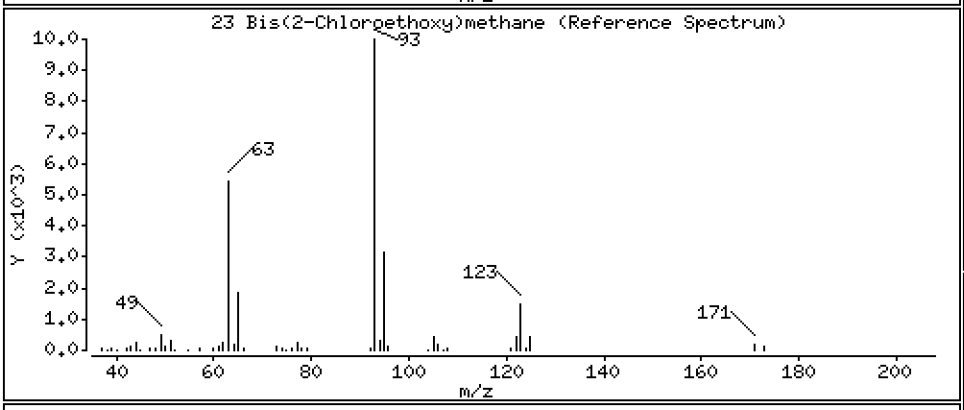
Column diameter: 0.25

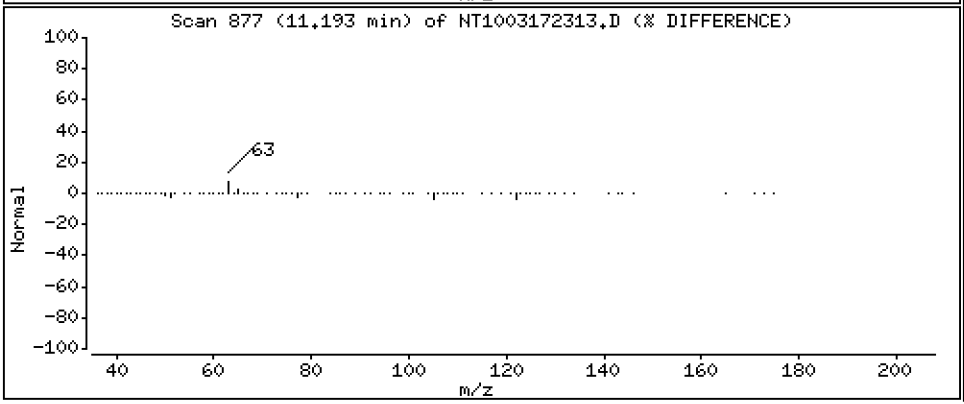
23 Bis(2-Chloroethoxy)methane

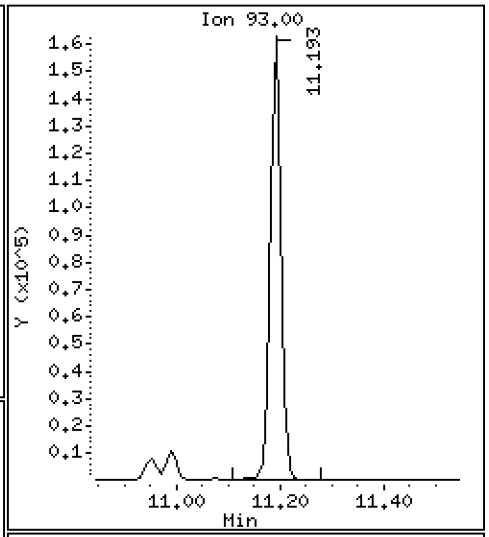
Concentration: 4.200 ug/mL

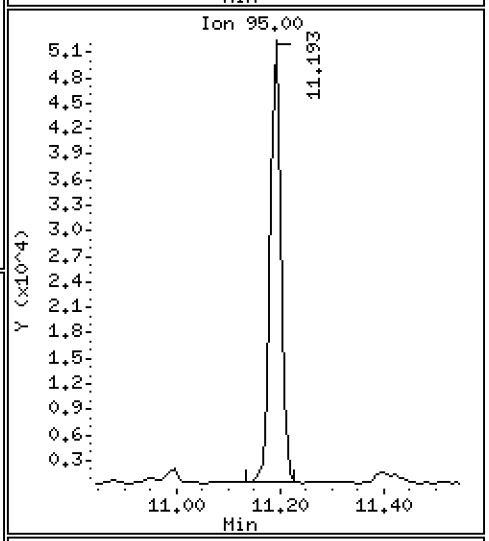


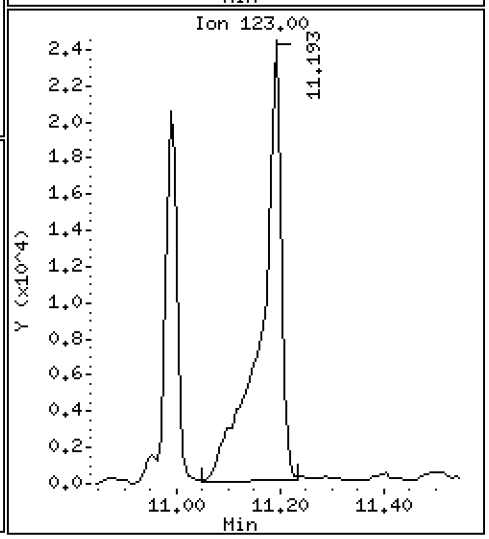












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

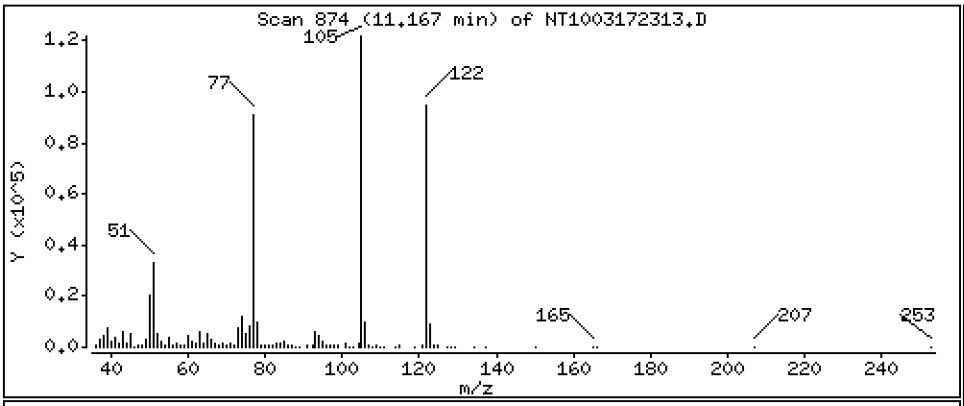
Operator: VTS

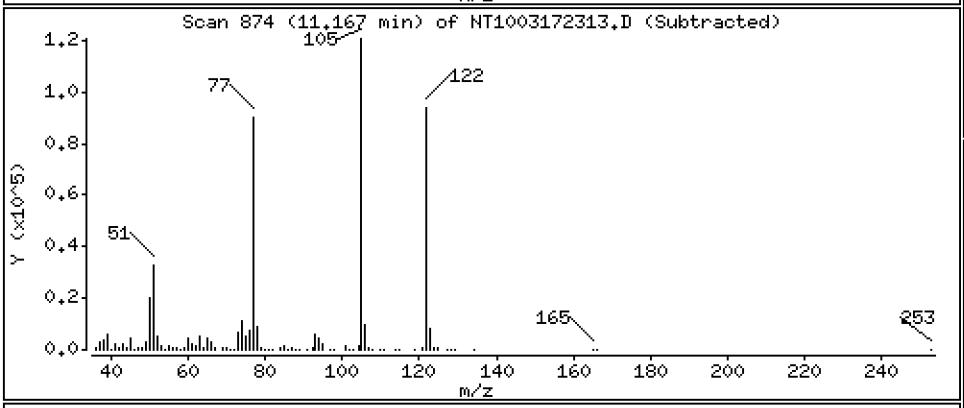
Column phase: ZB-5msi

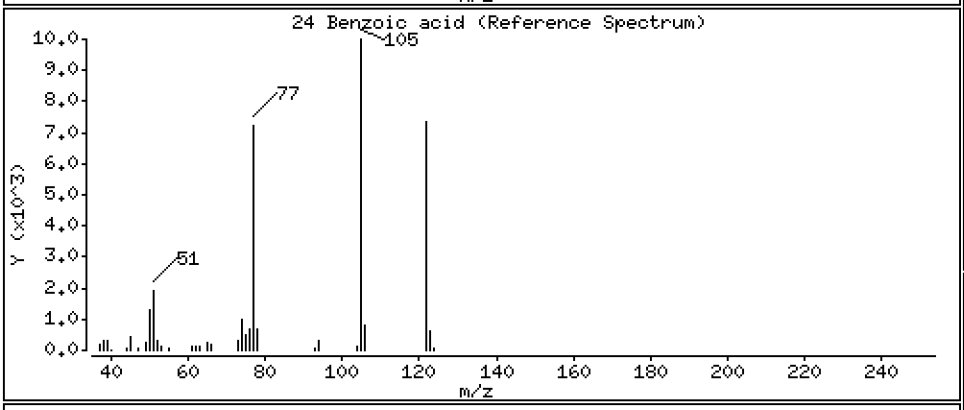
Column diameter: 0.25

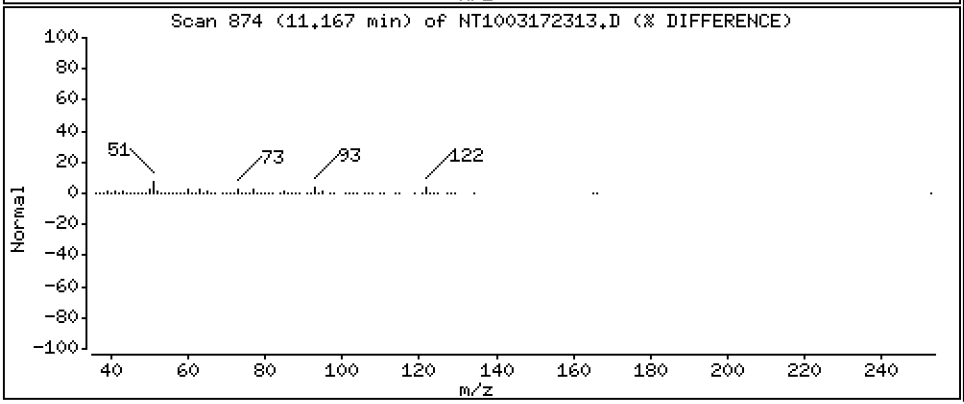
24 Benzoic acid

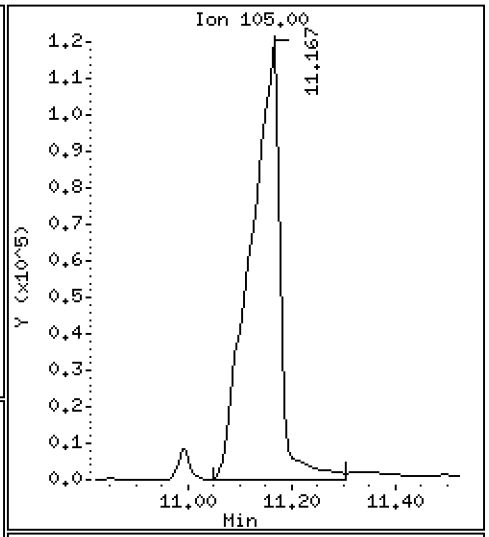
Concentration: 14.43 ug/mL

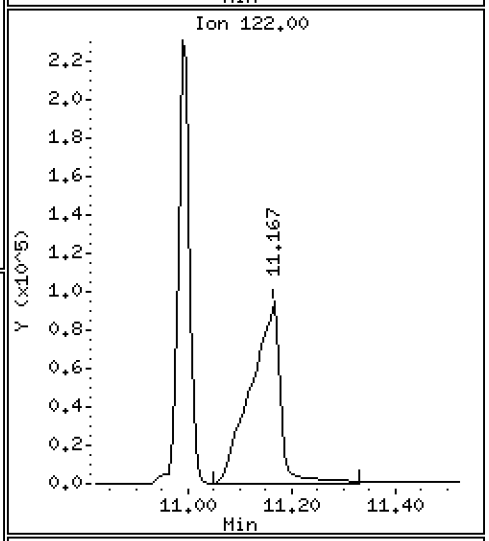


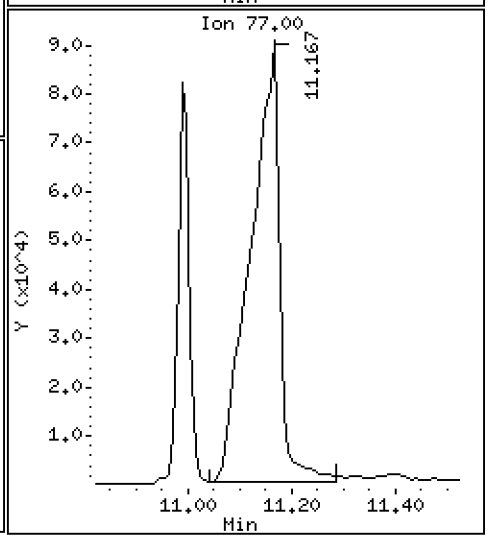












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

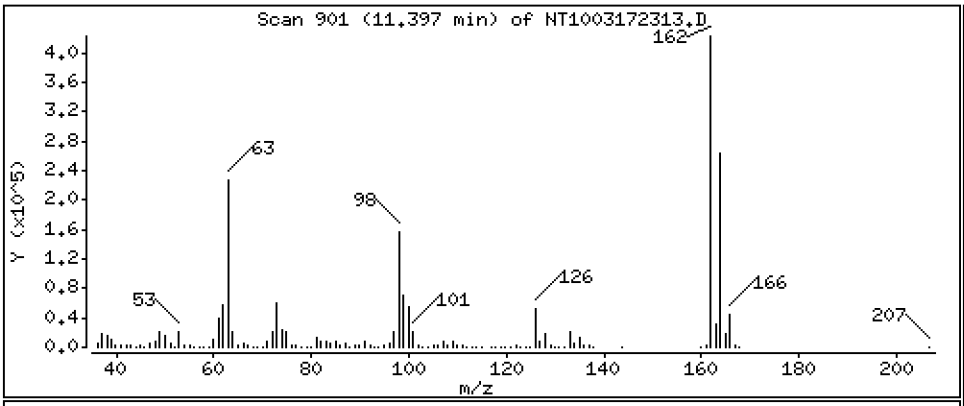
Operator: VTS

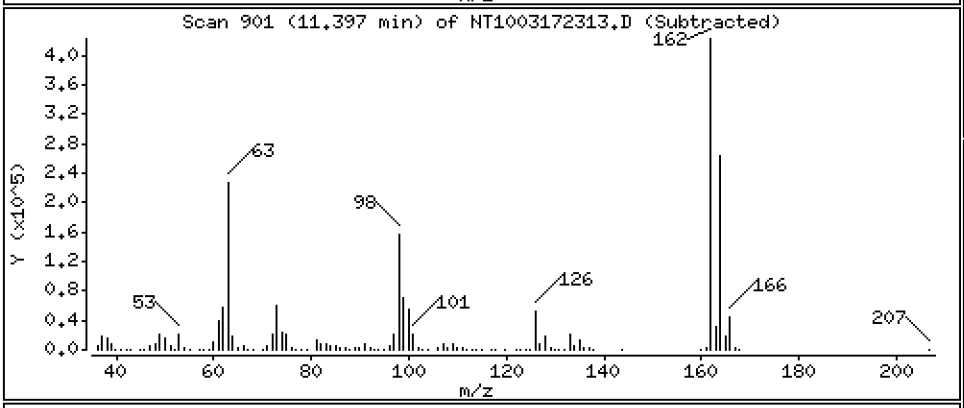
Column phase: ZB-5msi

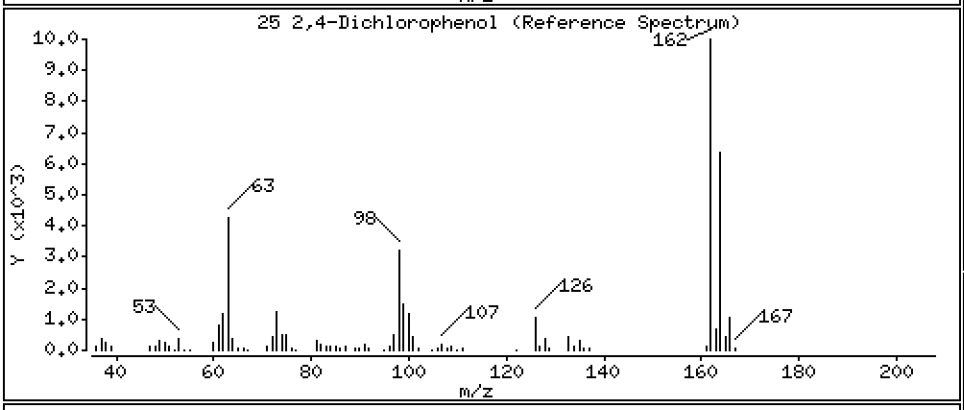
Column diameter: 0.25

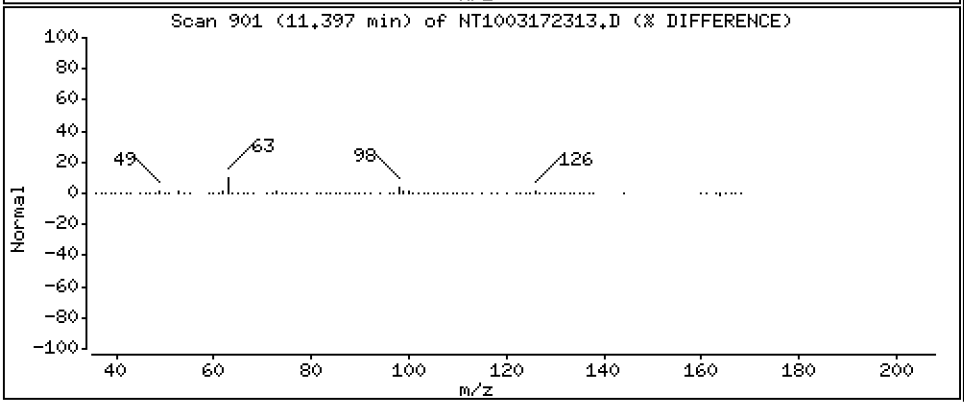
25 2,4-Dichlorophenol

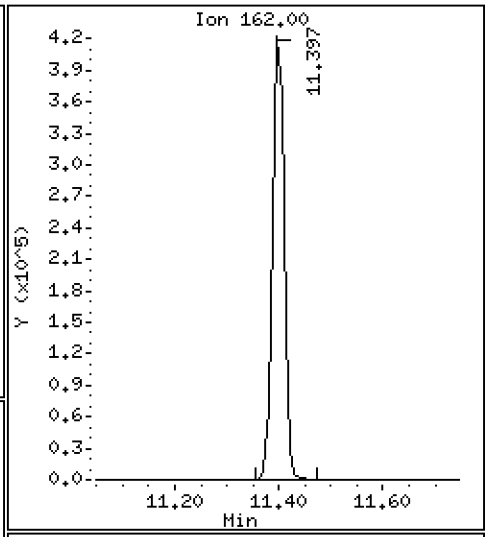
Concentration: 14.18 ug/mL

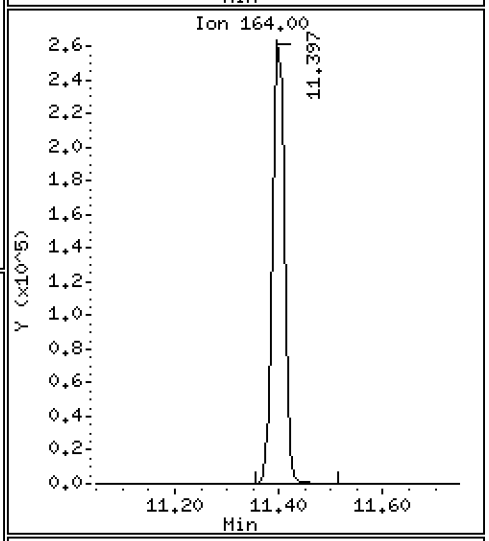


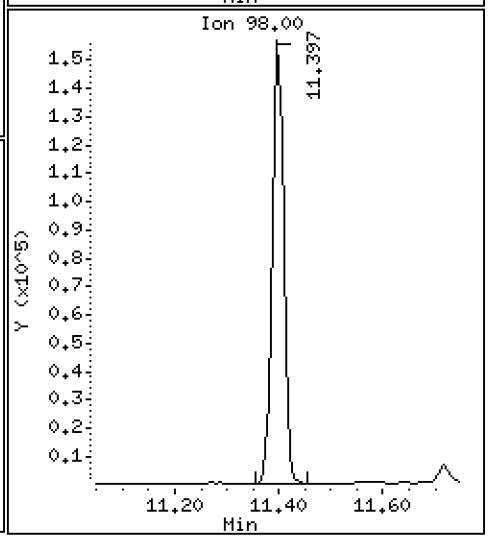












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

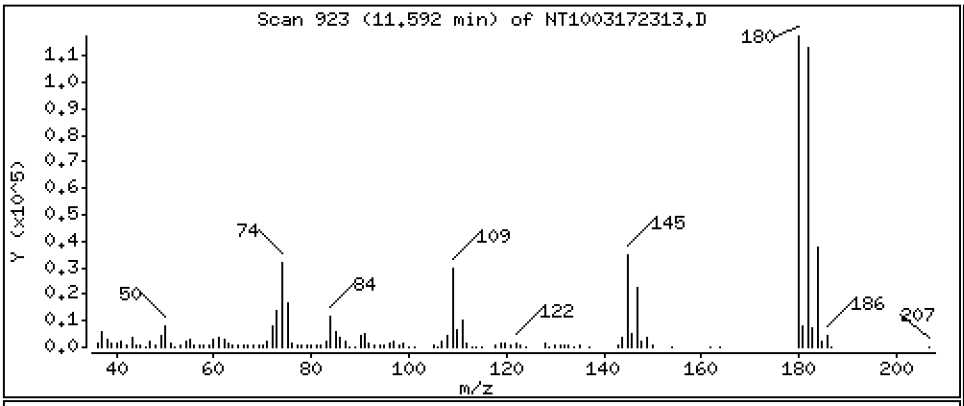
Operator: VTS

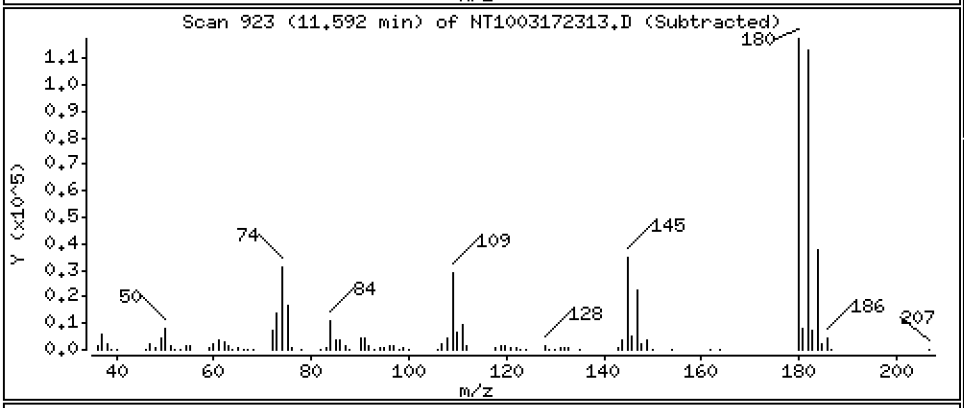
Column phase: ZB-5msi

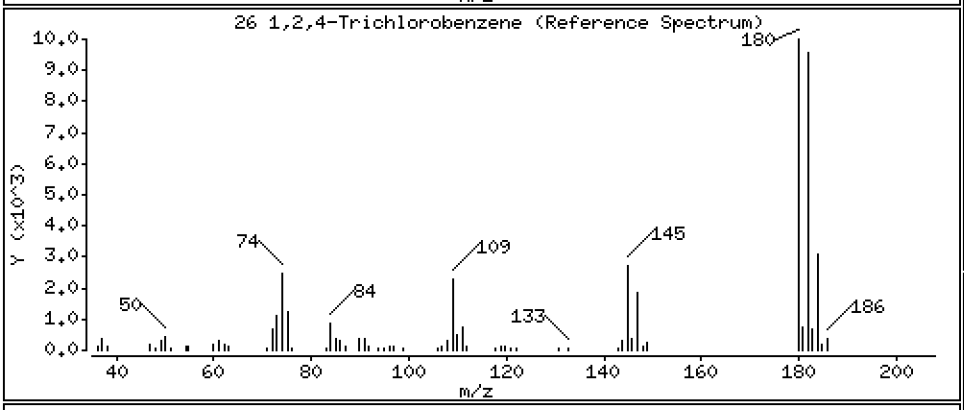
Column diameter: 0.25

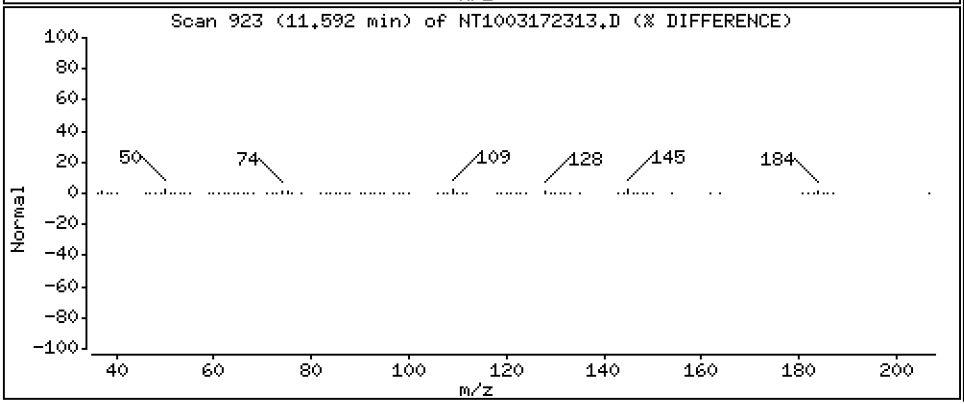
26 1,2,4-Trichlorobenzene

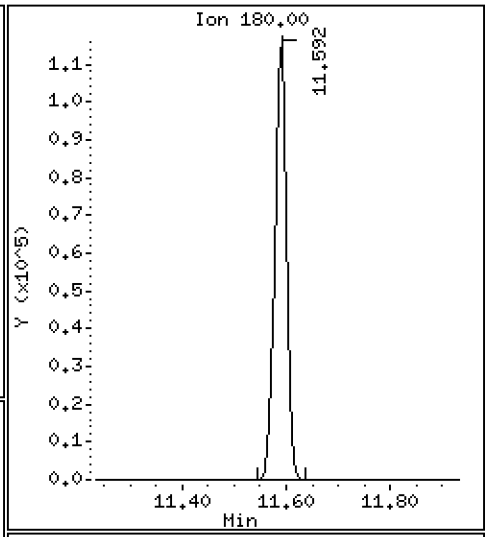
Concentration: 3.342 ug/mL

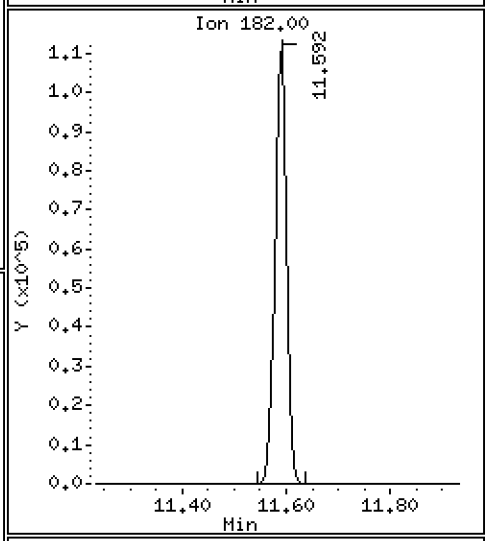


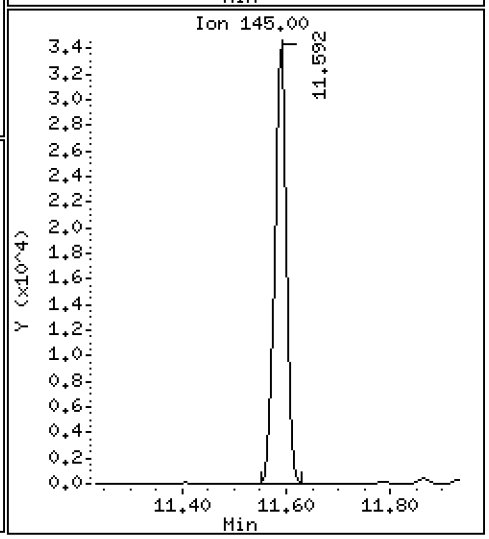












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

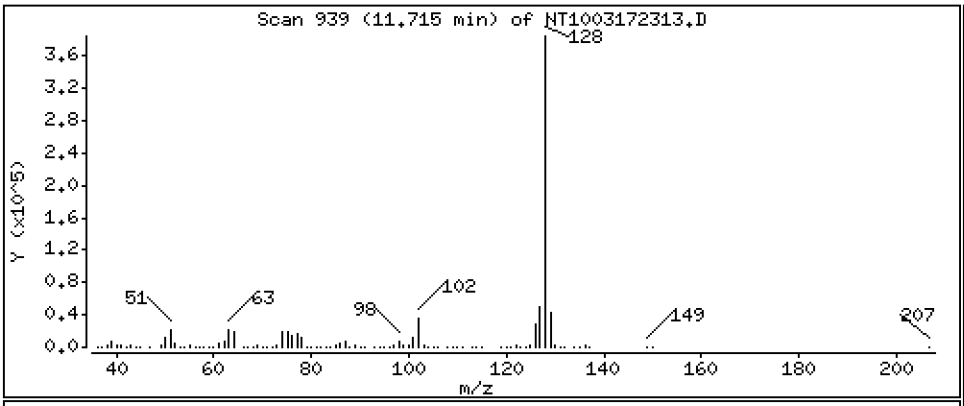
Operator: VTS

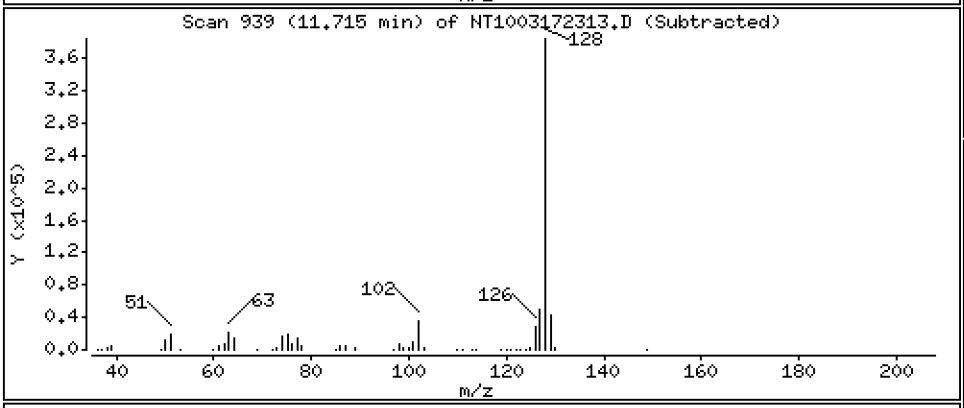
Column phase: ZB-5msi

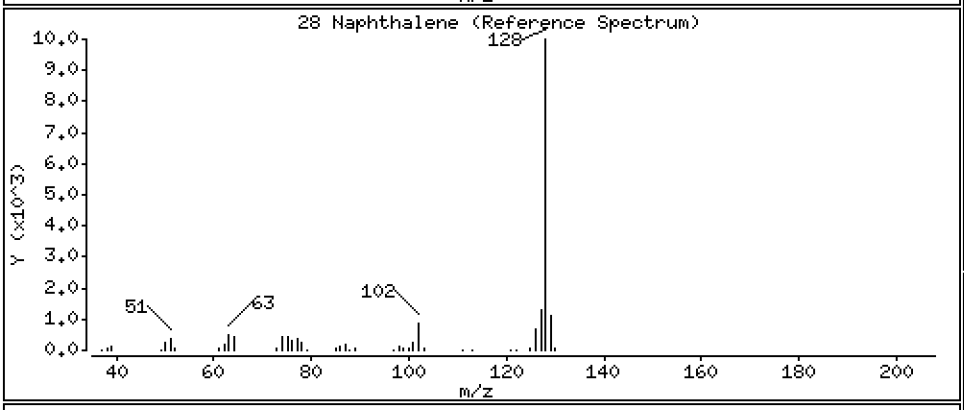
Column diameter: 0.25

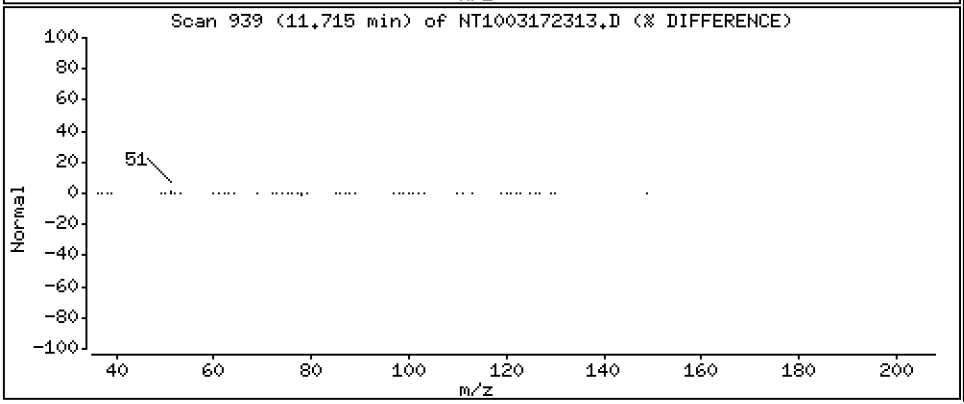
28 Naphthalene

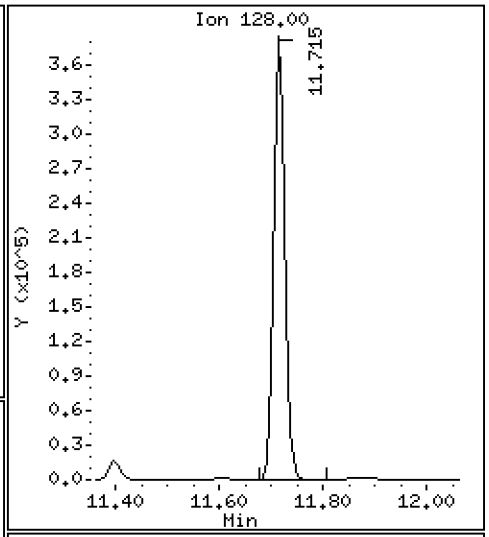
Concentration: 3.483 ug/mL

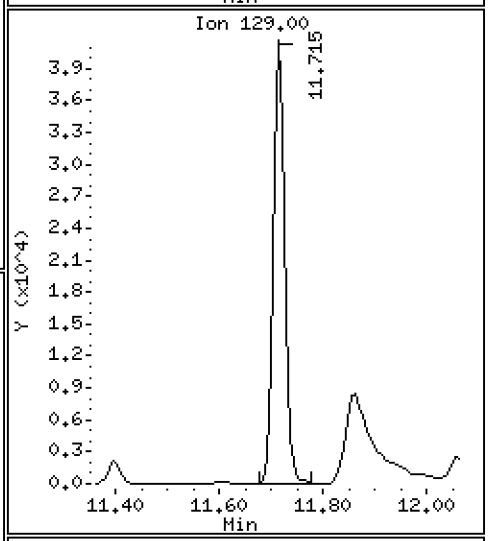


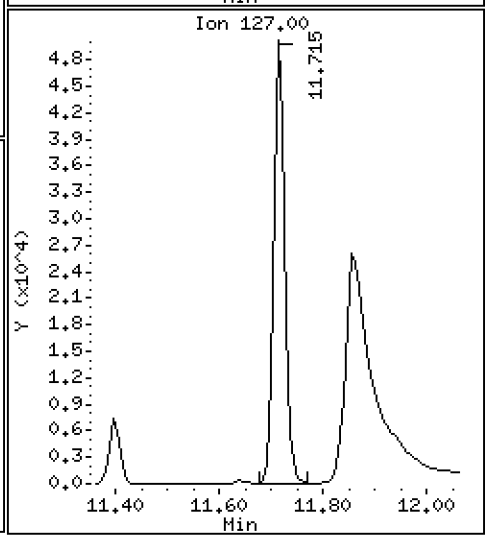












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

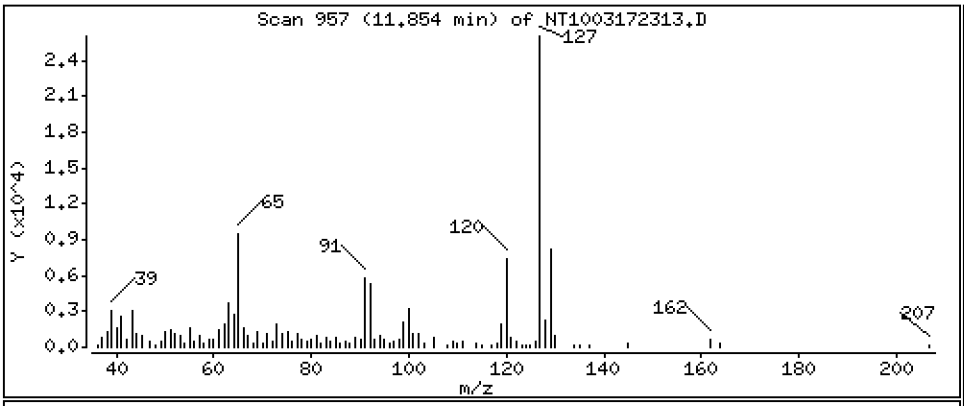
Operator: VTS

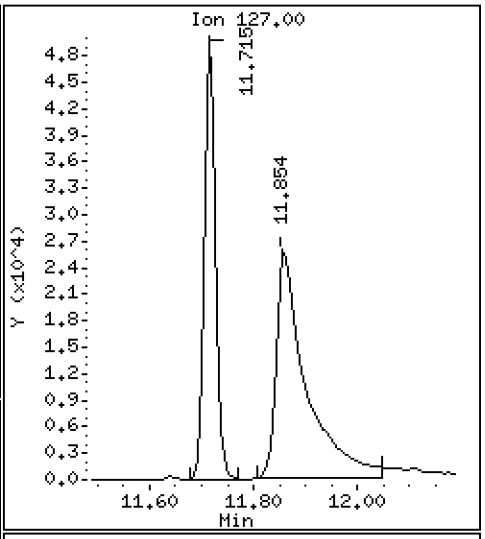
Column phase: ZB-5msi

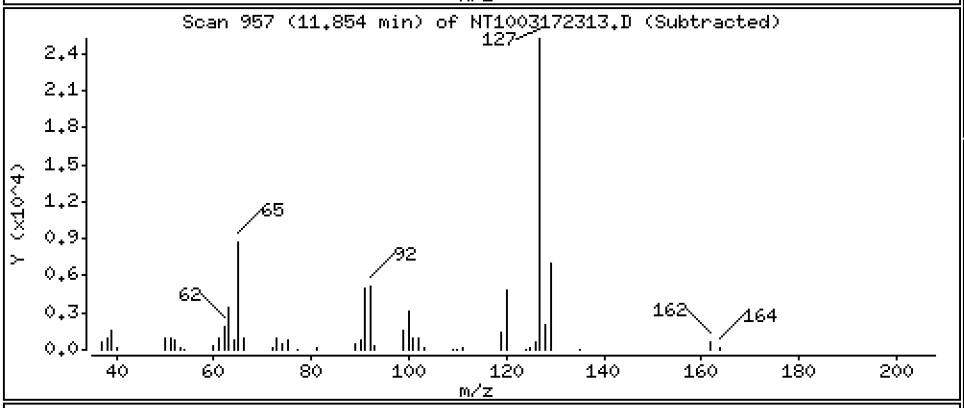
Column diameter: 0.25

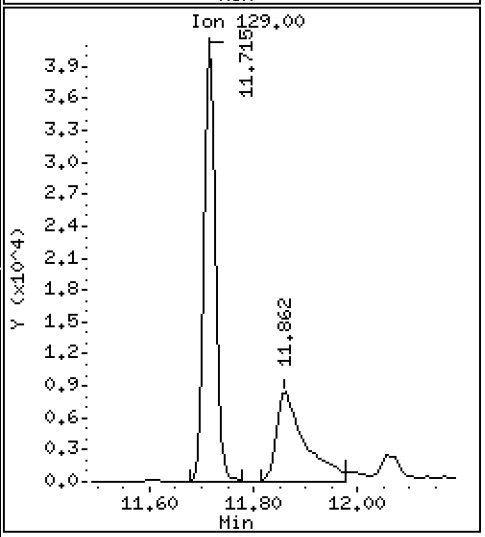
29 4-Chloroaniline

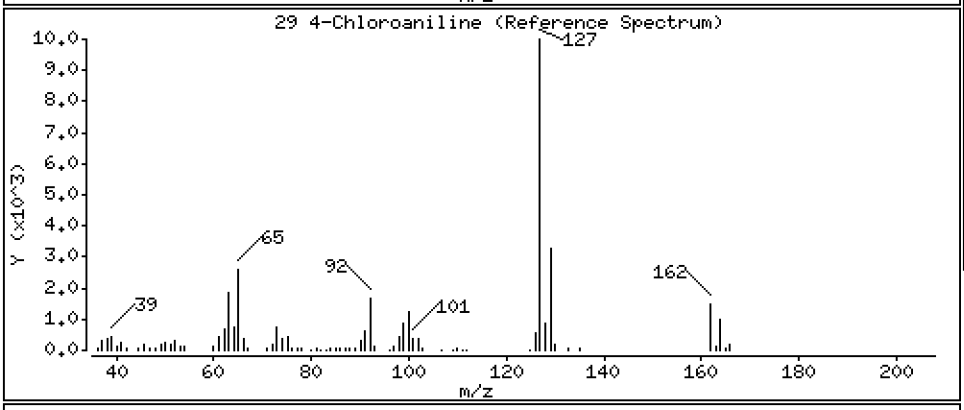
Concentration: 1.634 ug/mL

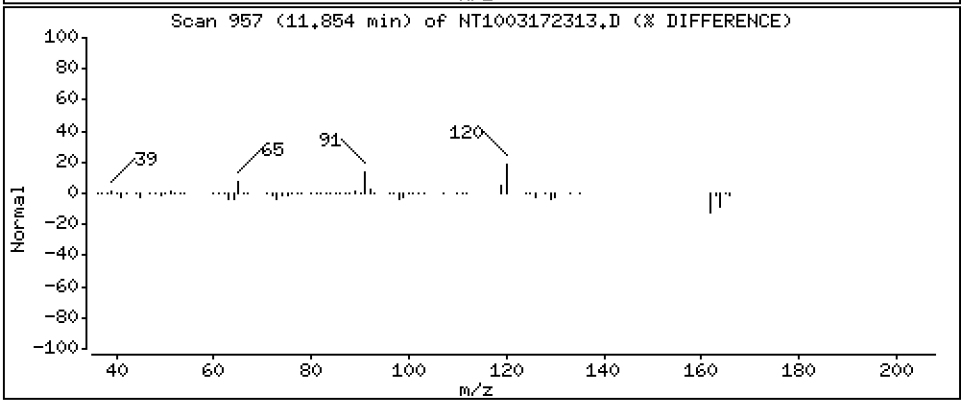












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

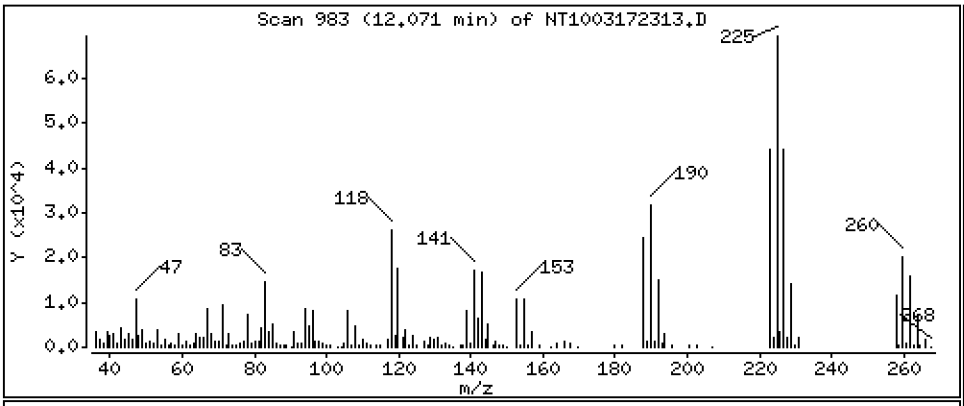
Operator: VTS

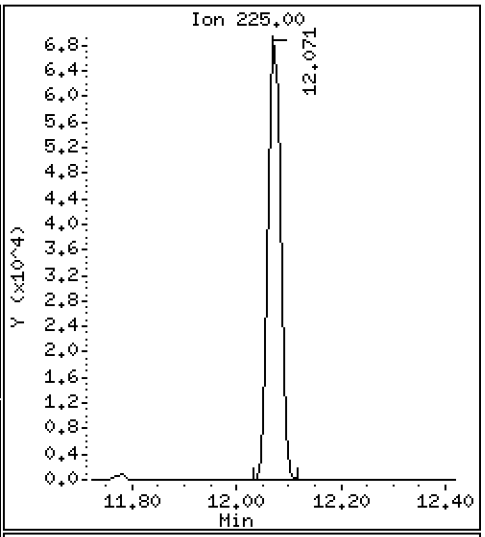
Column phase: ZB-5msi

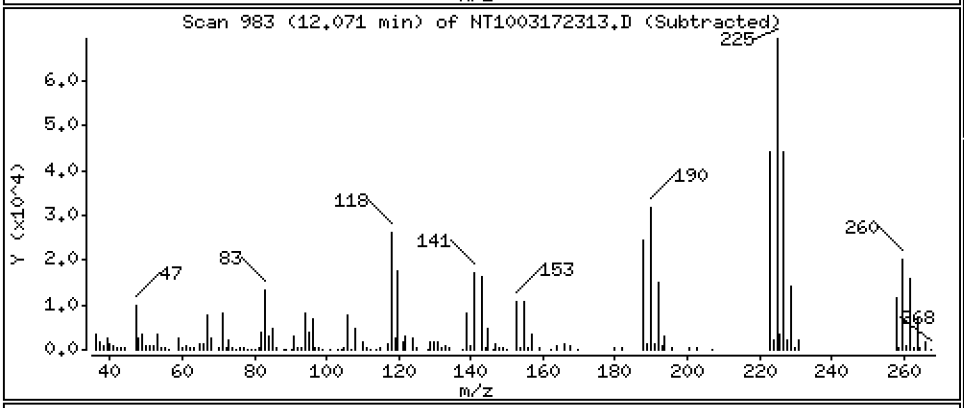
Column diameter: 0.25

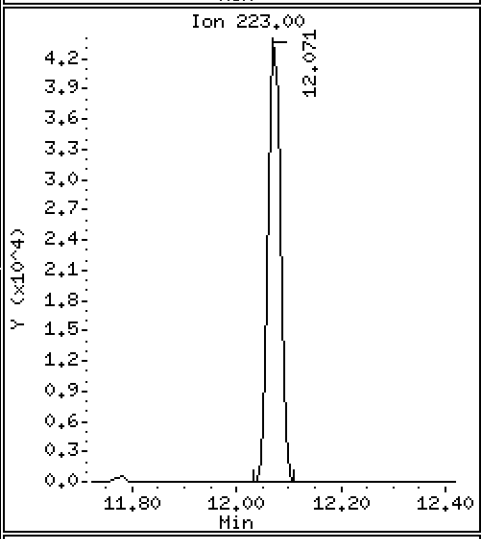
30 Hexachlorobutadiene

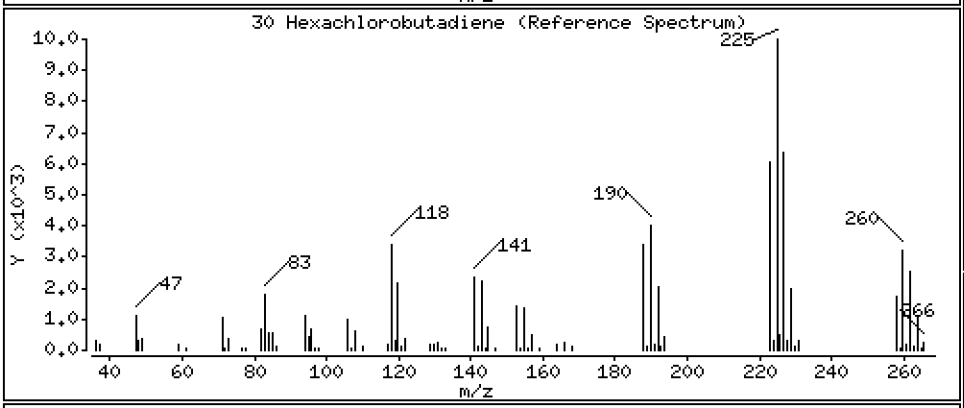
Concentration: 3.456 ug/mL

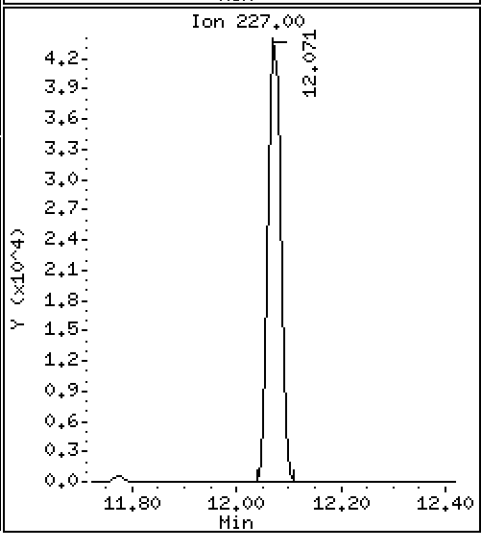


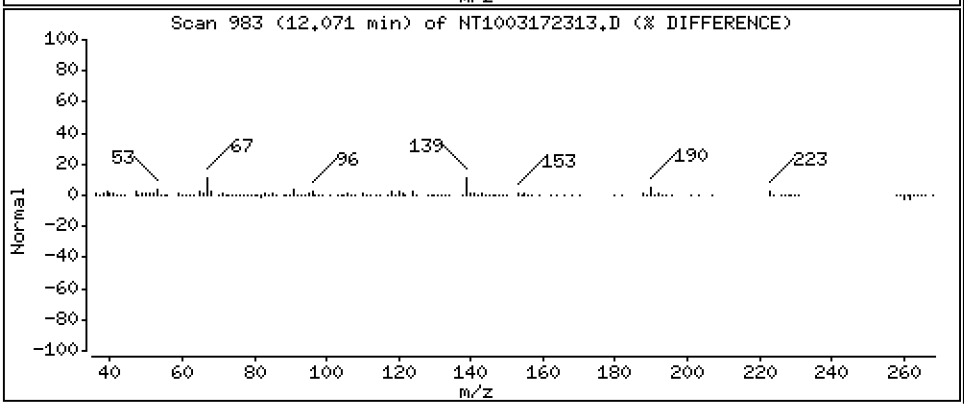












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172313.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

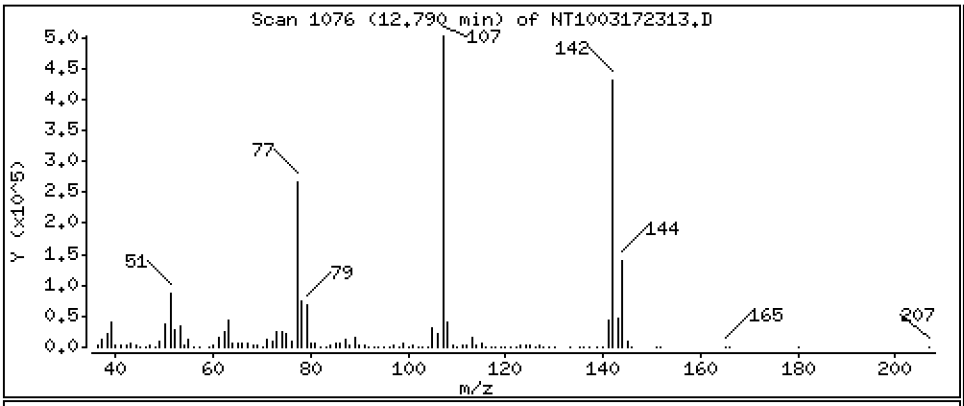
Operator: VTS

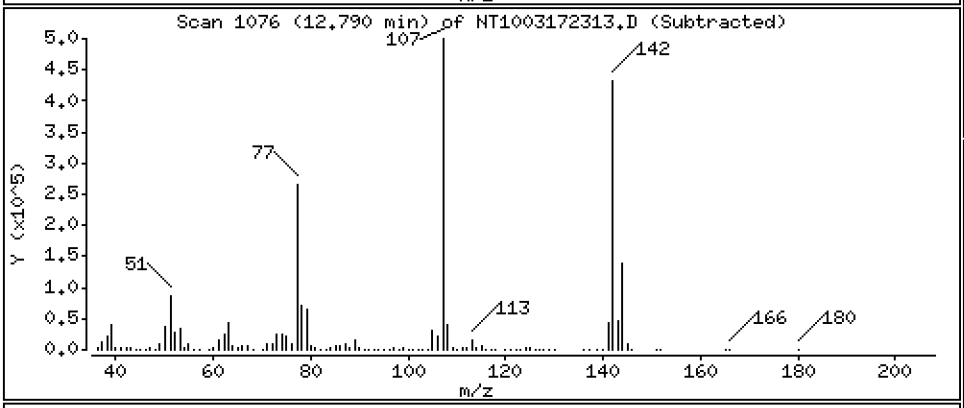
Column phase: ZB-5msi

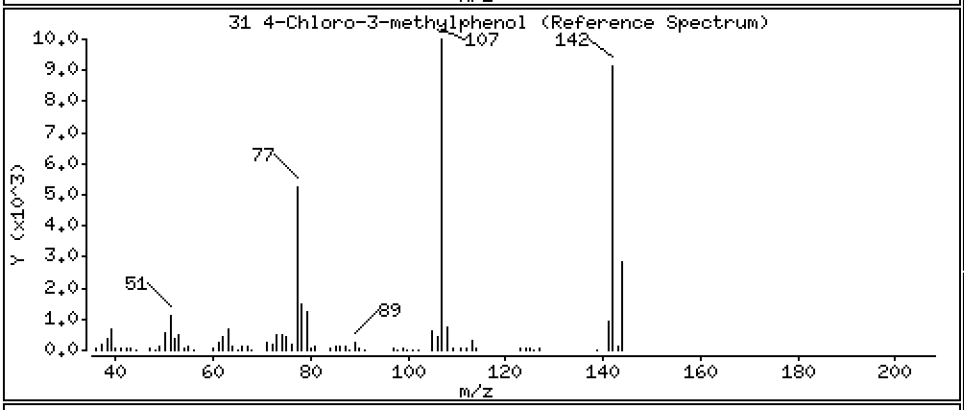
Column diameter: 0.25

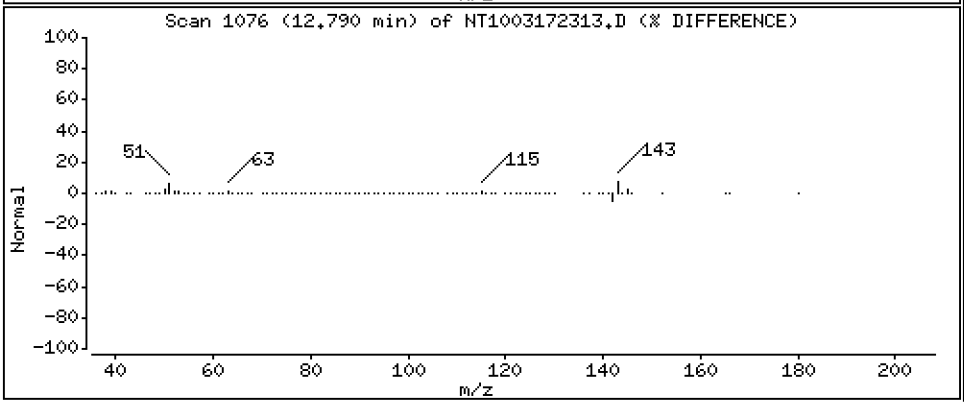
31 4-Chloro-3-methylphenol

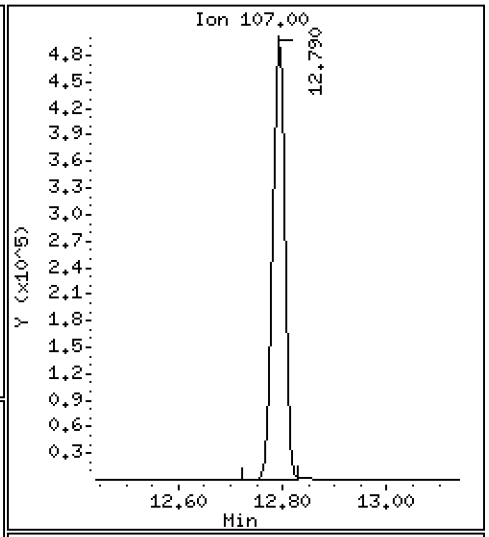
Concentration: 15.21 ug/mL

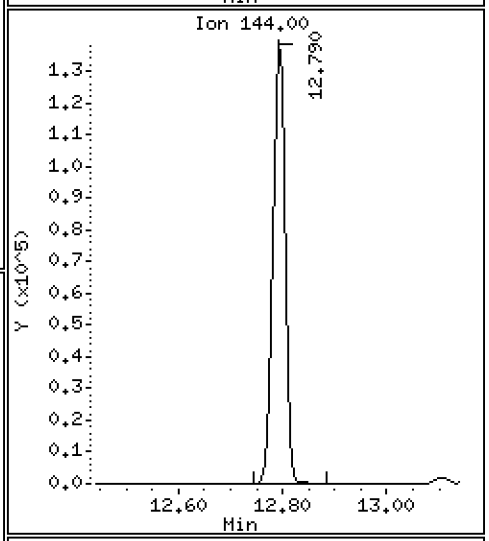


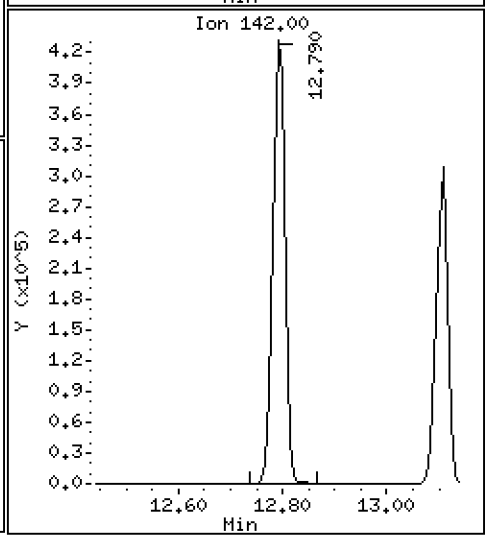












Date : 18-MAR-2023 02:03

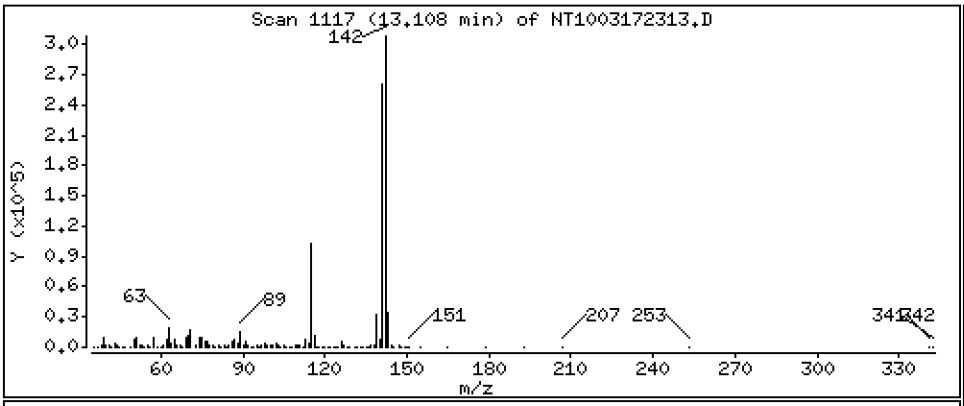
Client ID: Instrument: nt10.i

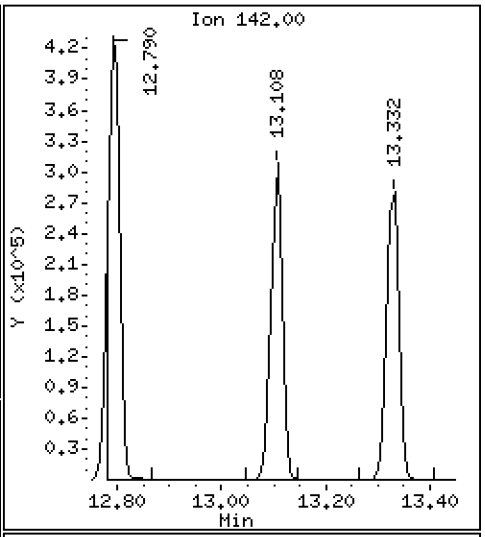
Sample Info: BLB0495-MS1

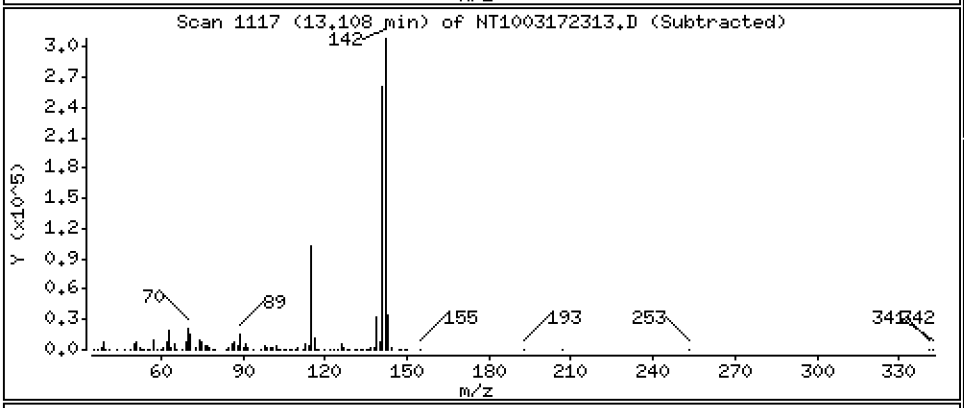
Operator: VTS

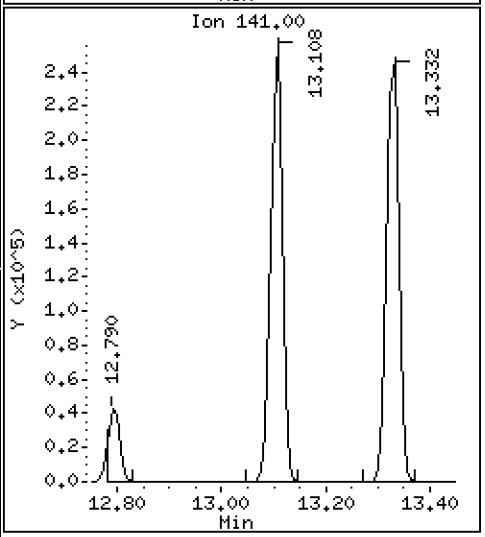
Column phase: ZB-5msi Column diameter: 0.25

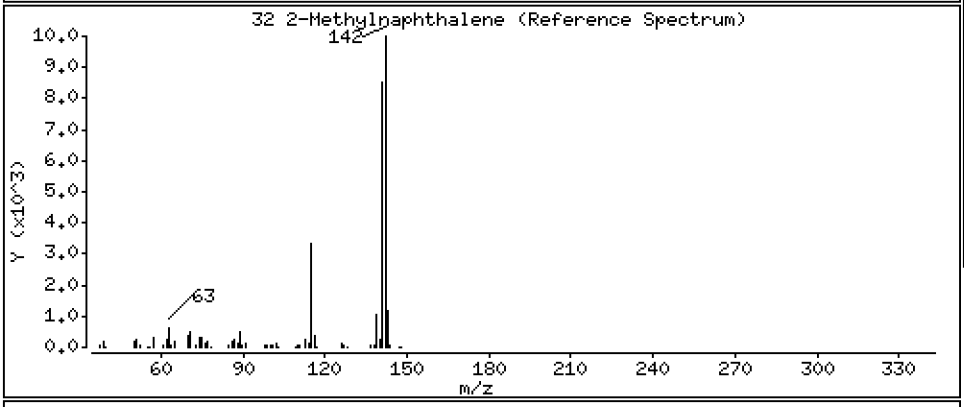
32 2-Methylnaphthalene Concentration: 3.742 ug/mL

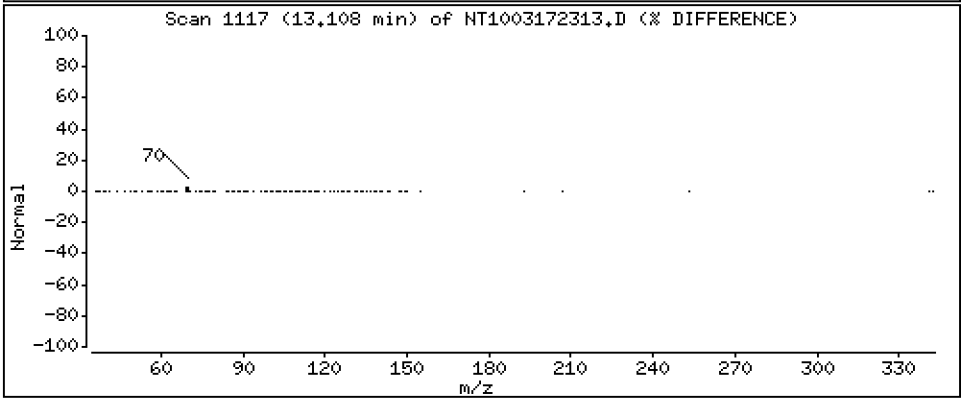












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

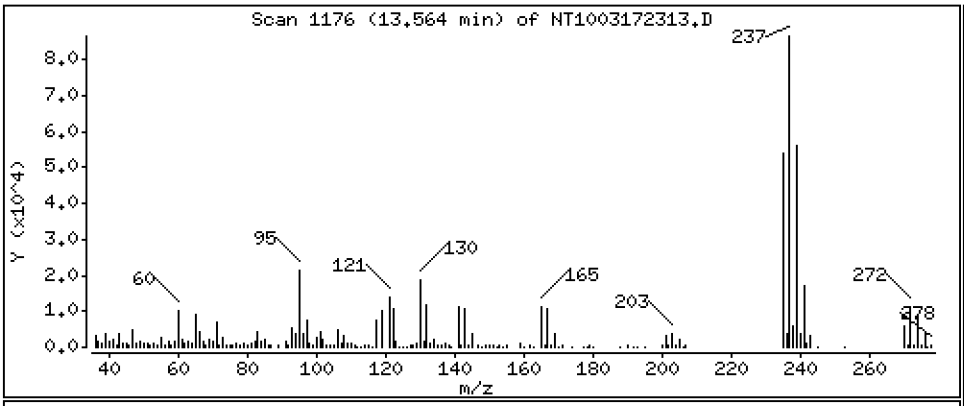
Operator: VTS

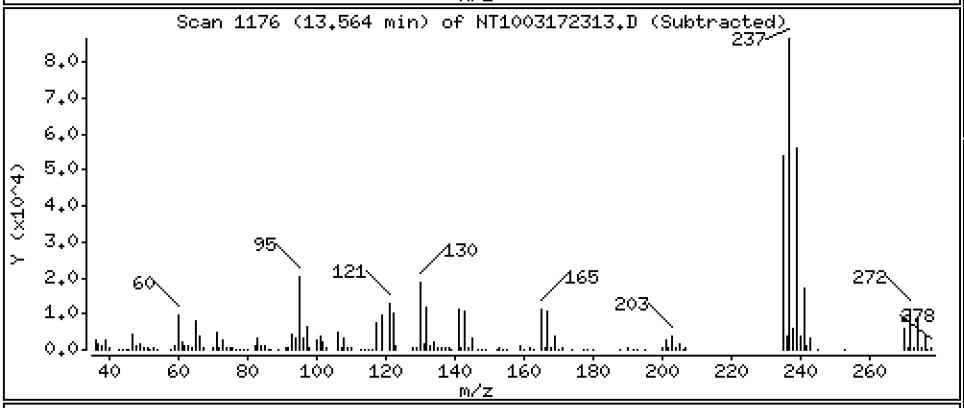
Column phase: ZB-5msi

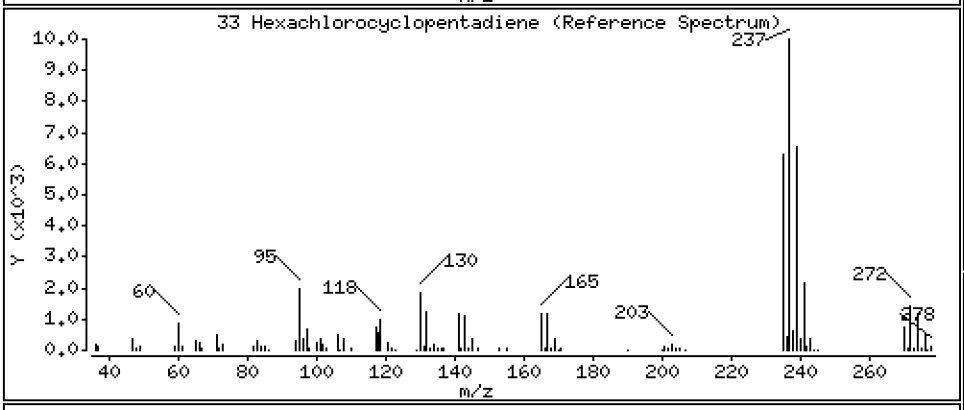
Column diameter: 0.25

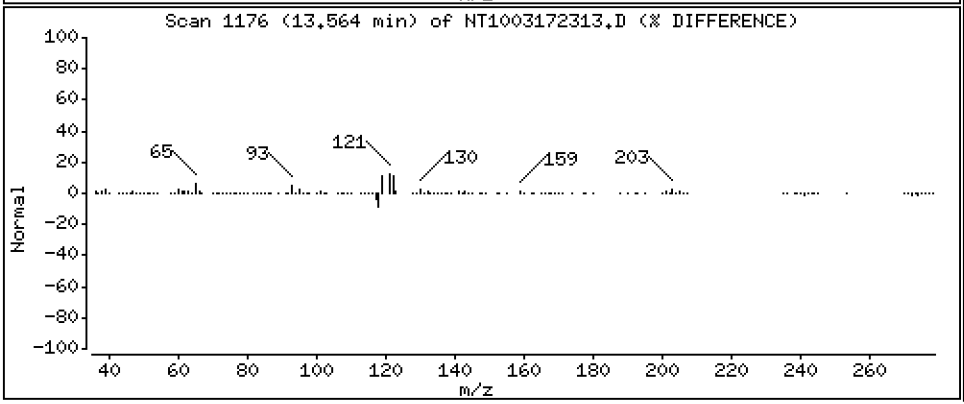
33 Hexachlorocyclopentadiene

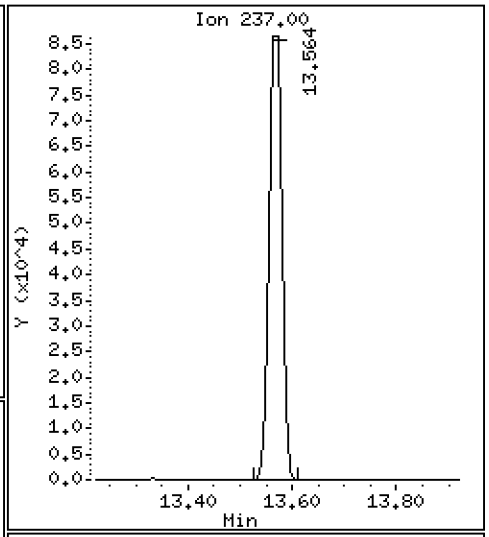
Concentration: 4.379 ug/mL

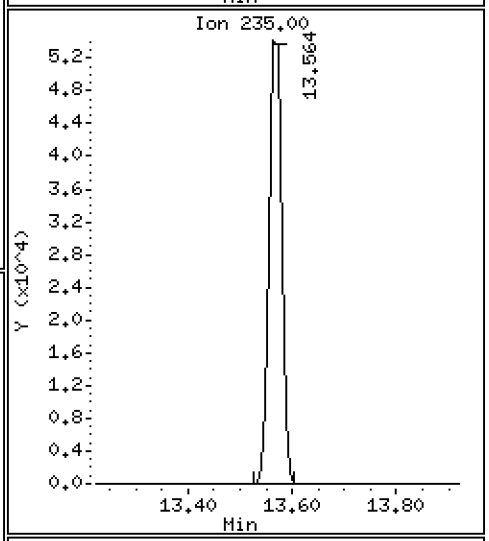


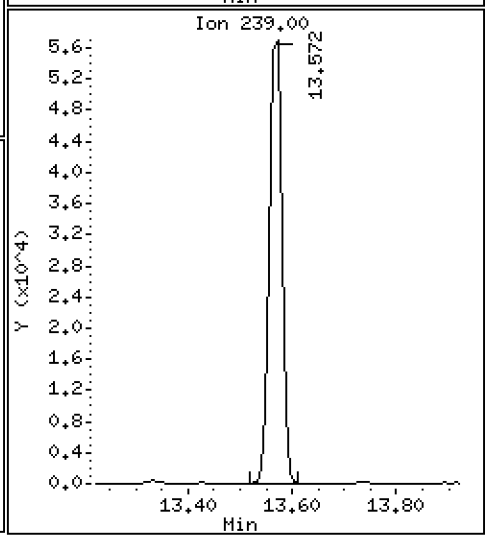












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

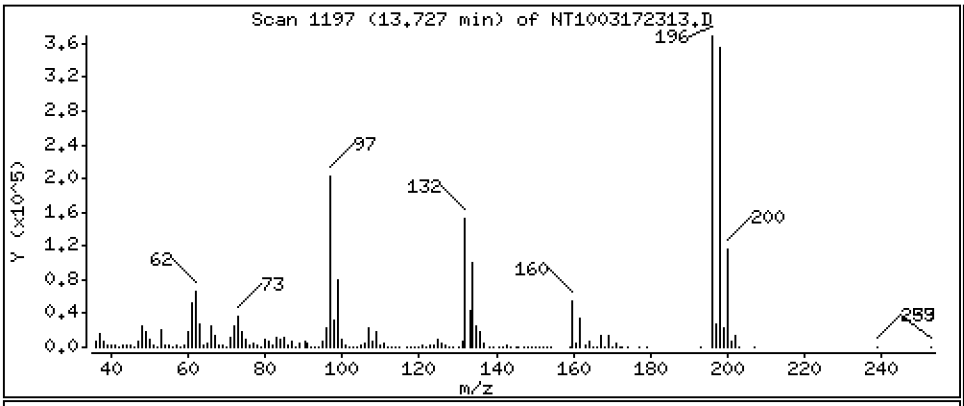
Operator: VTS

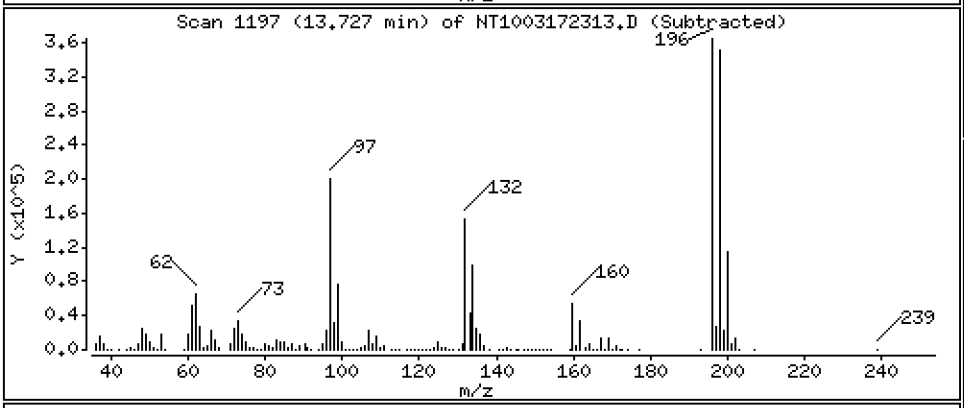
Column phase: ZB-5msi

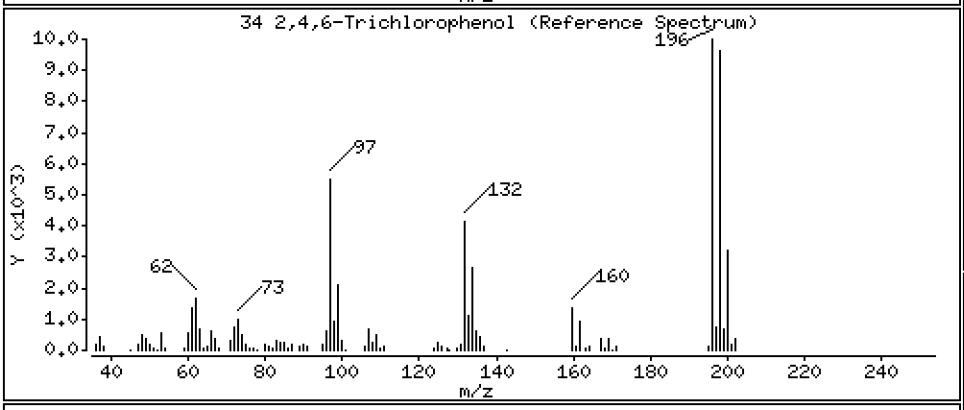
Column diameter: 0.25

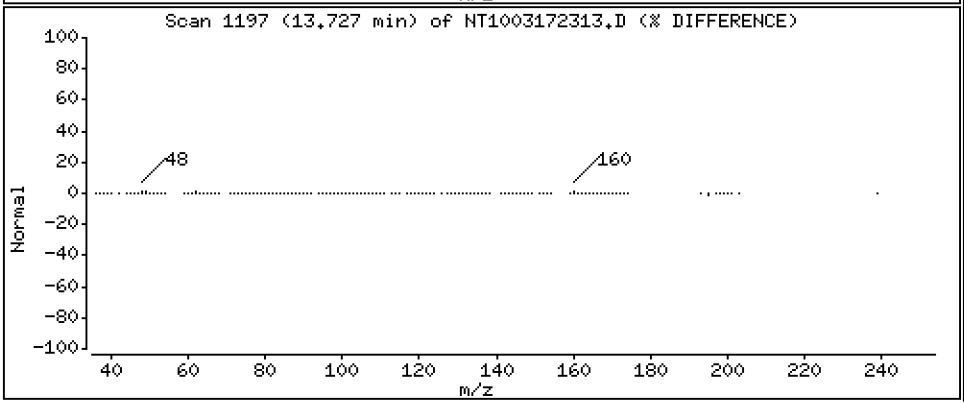
34 2,4,6-Trichlorophenol

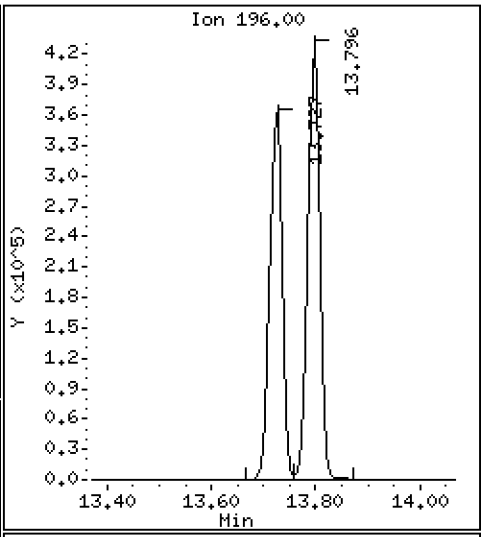
Concentration: 17.22 ug/mL

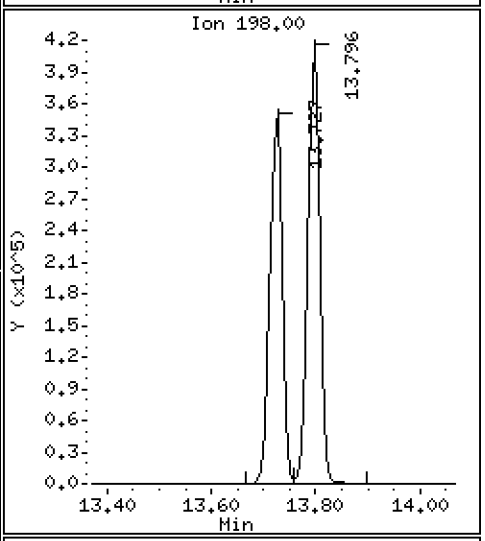


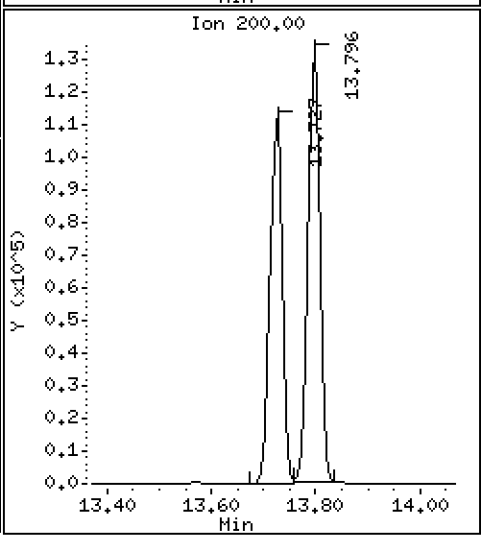












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

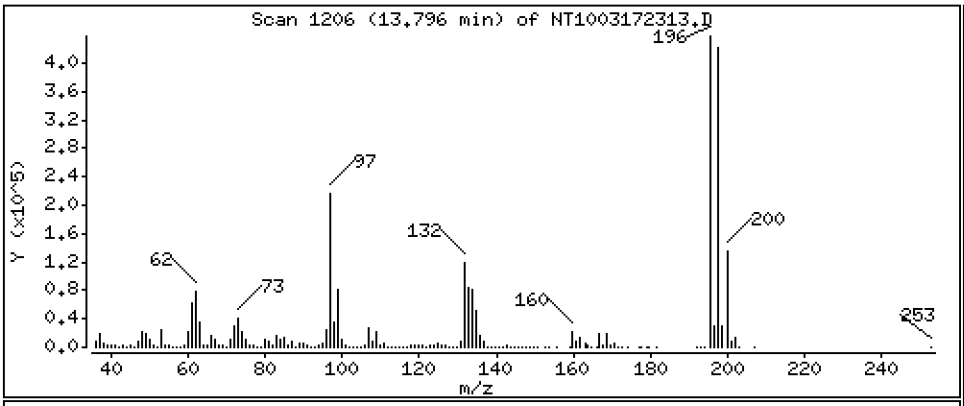
Operator: VTS

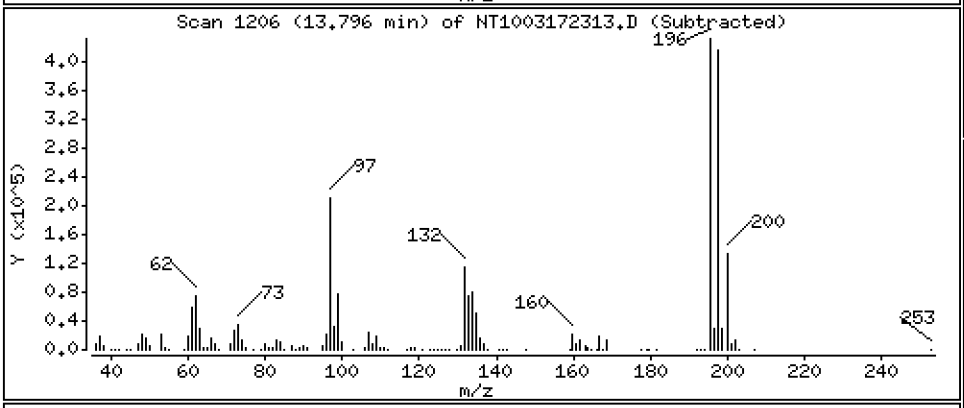
Column phase: ZB-5msi

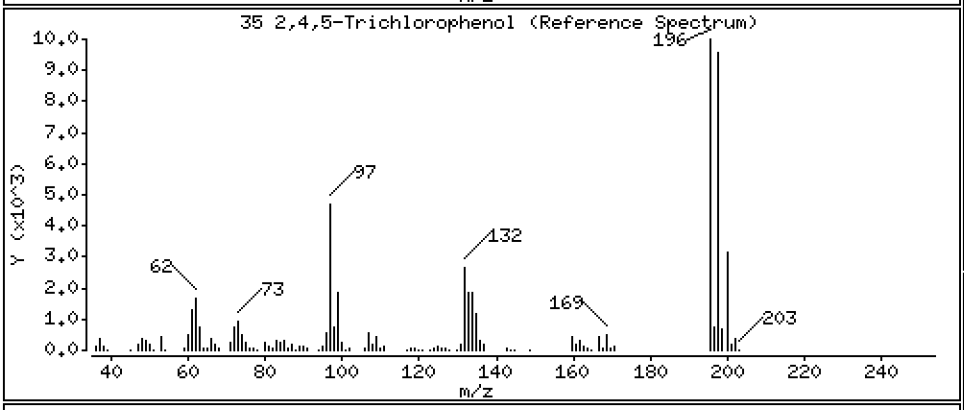
Column diameter: 0.25

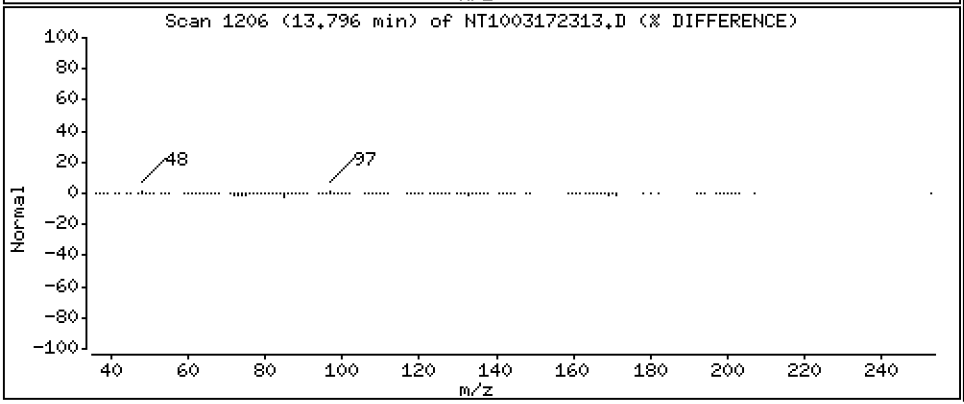
35 2,4,5-Trichlorophenol

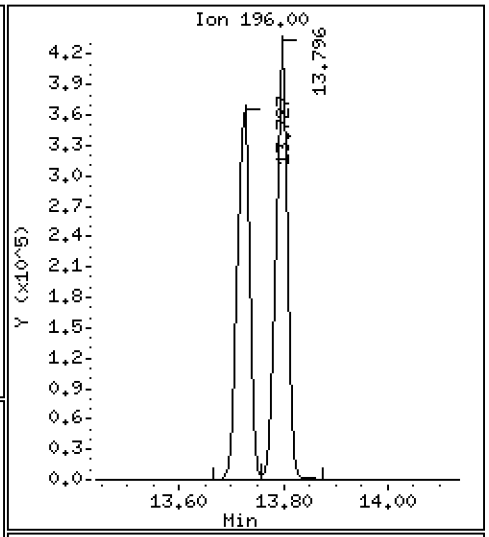
Concentration: 16.94 ug/mL

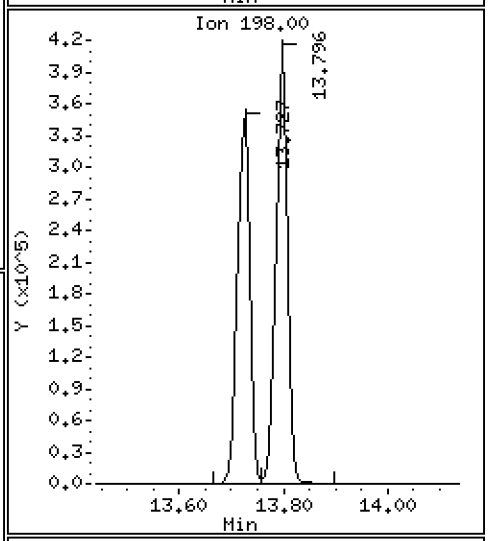


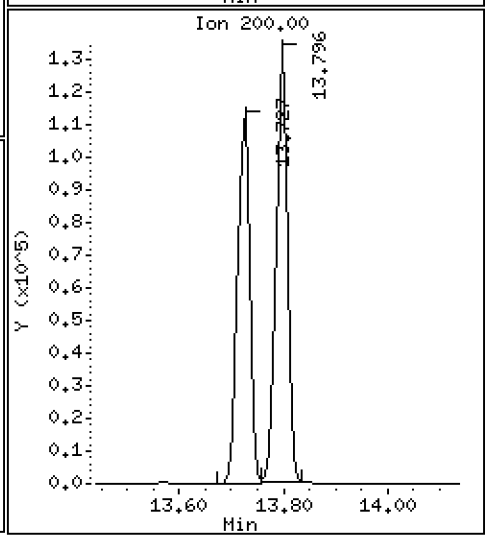












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

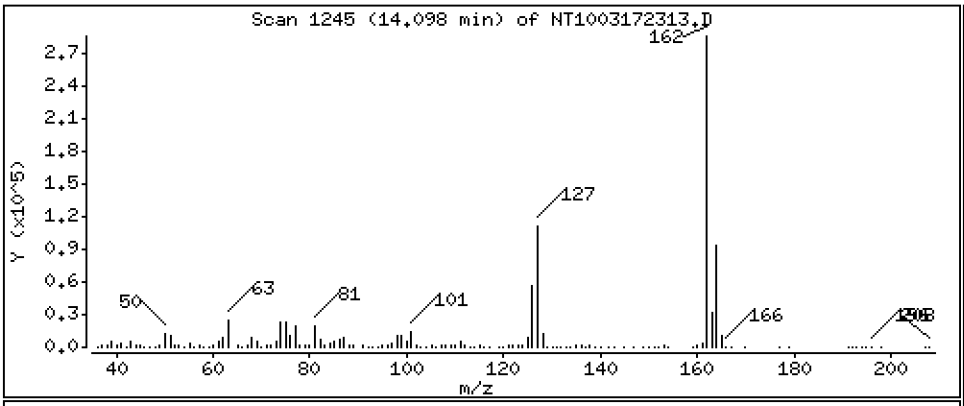
Operator: VTS

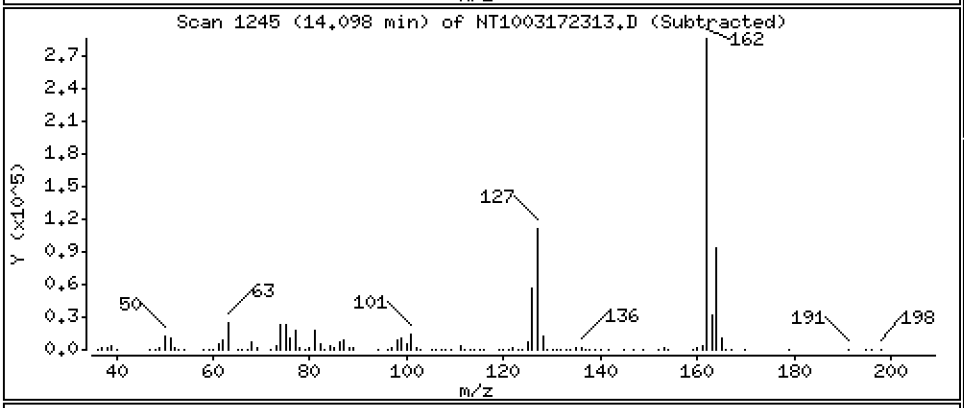
Column phase: ZB-5msi

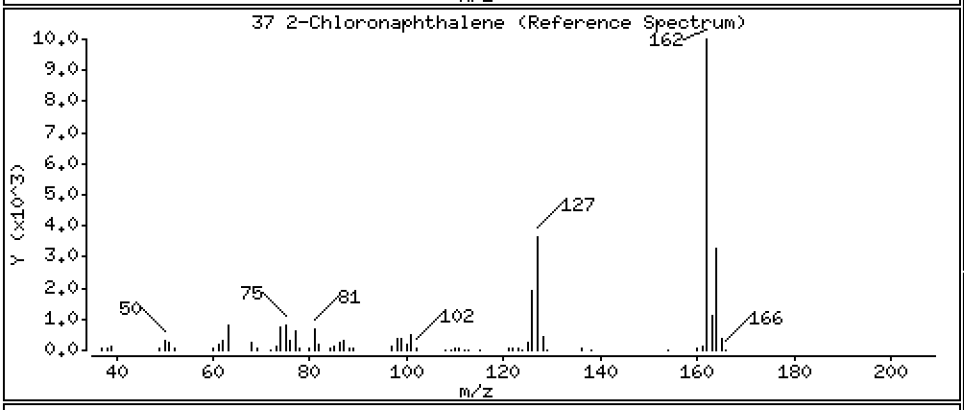
Column diameter: 0.25

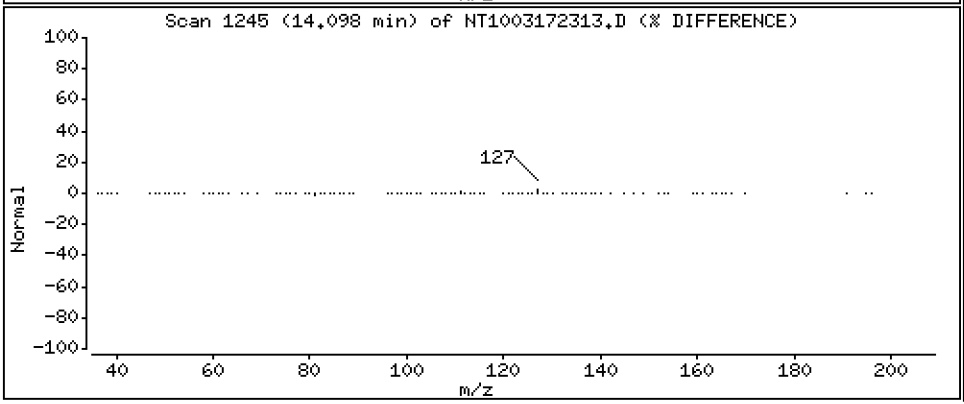
37 2-Chloronaphthalene

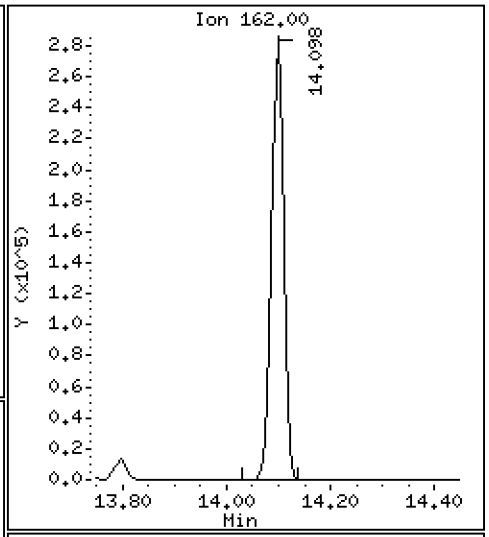
Concentration: 3.949 ug/mL

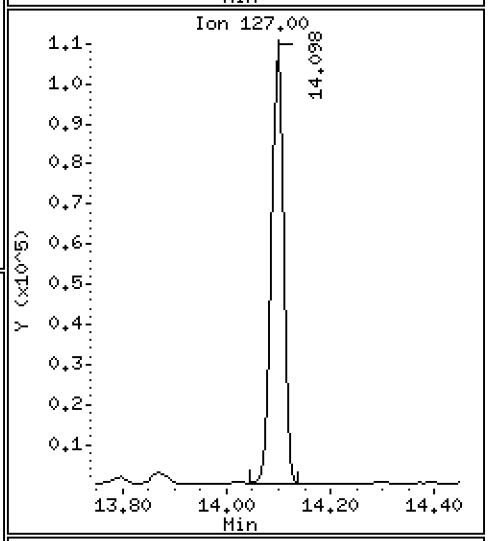


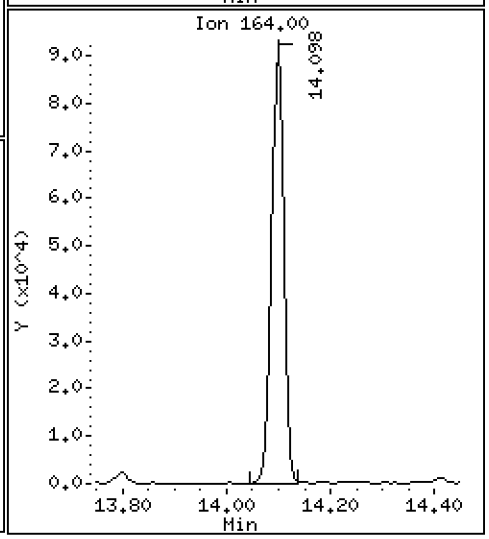












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

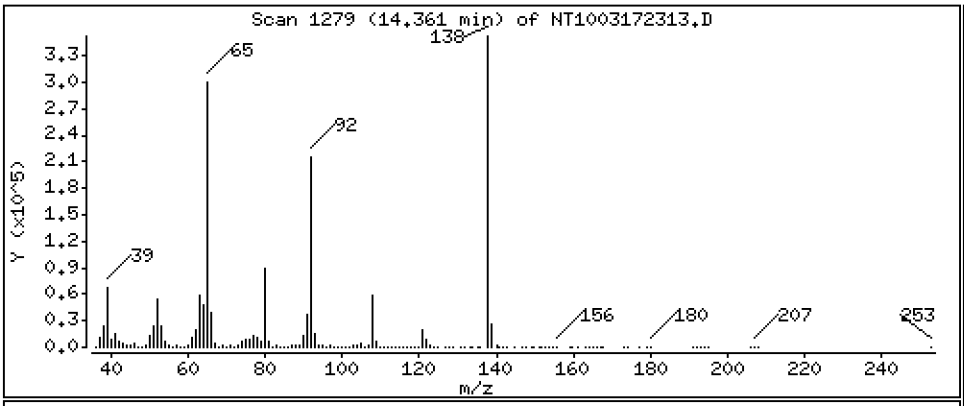
Operator: VTS

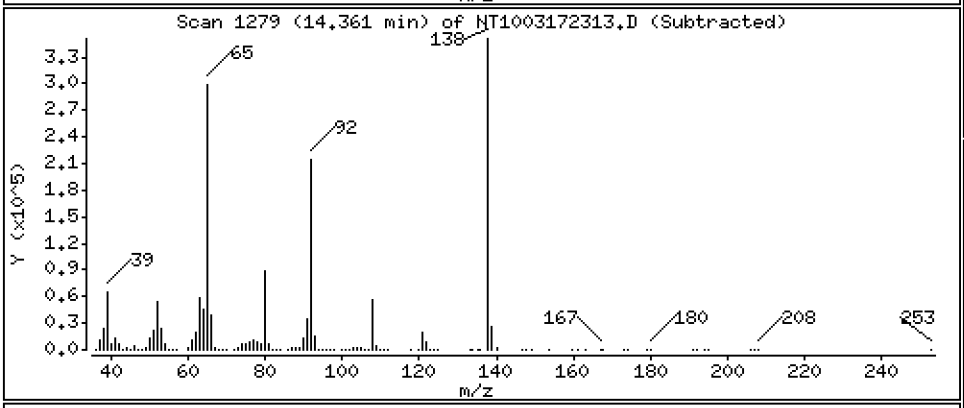
Column phase: ZB-5msi

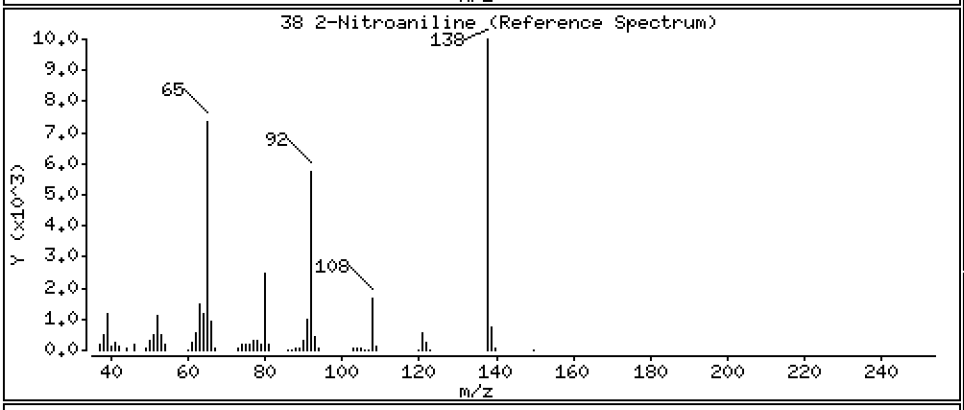
Column diameter: 0.25

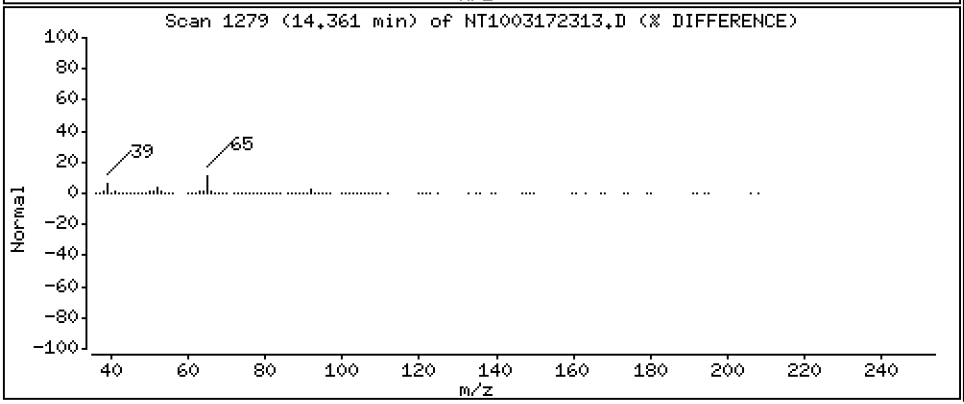
38 2-Nitroaniline

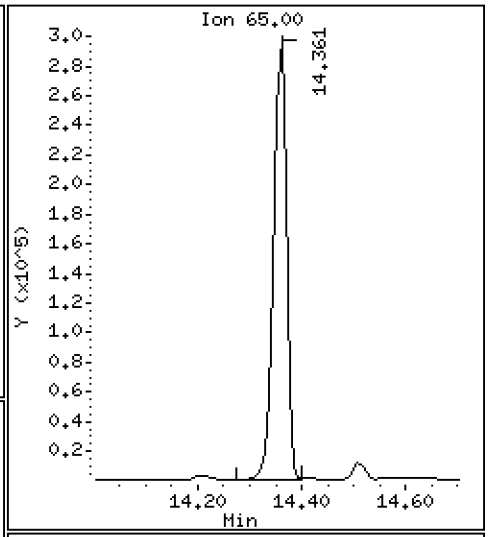
Concentration: 15.68 ug/mL

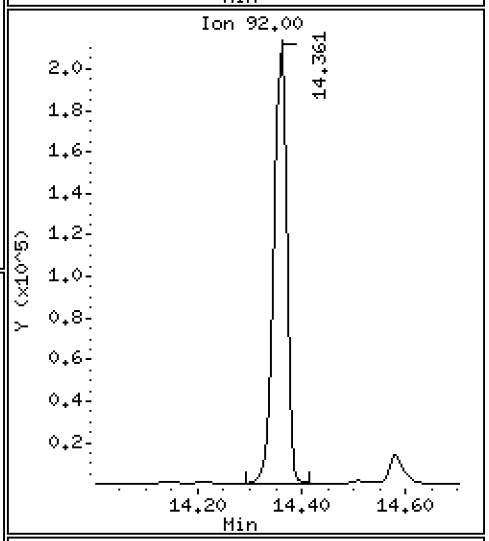


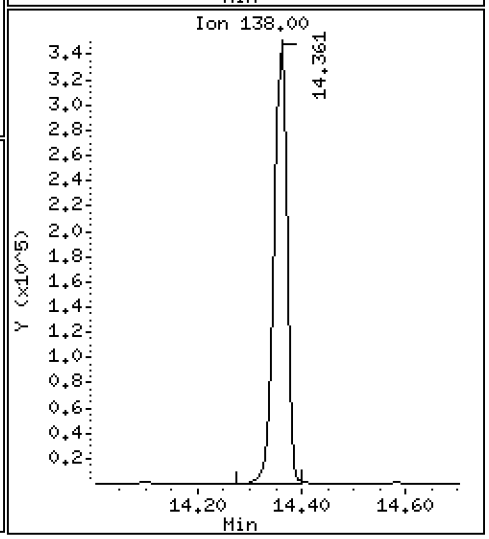












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

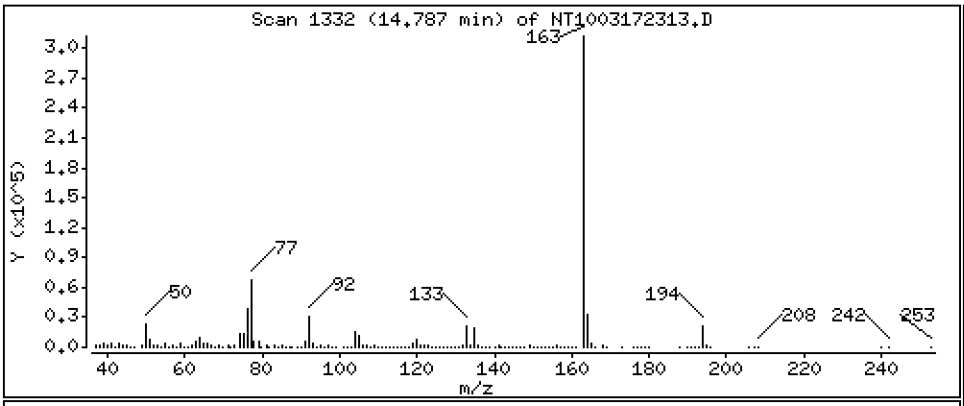
Operator: VTS

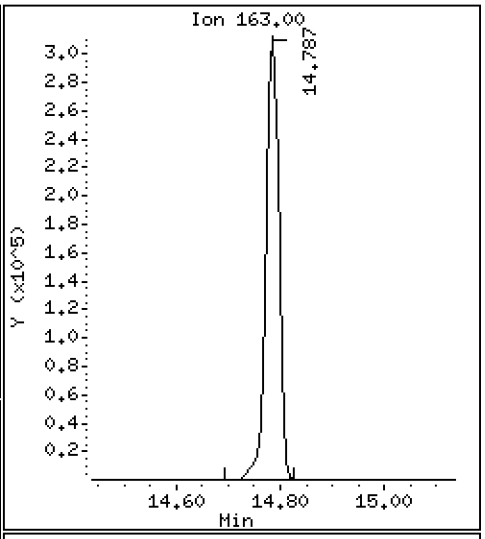
Column phase: ZB-5msi

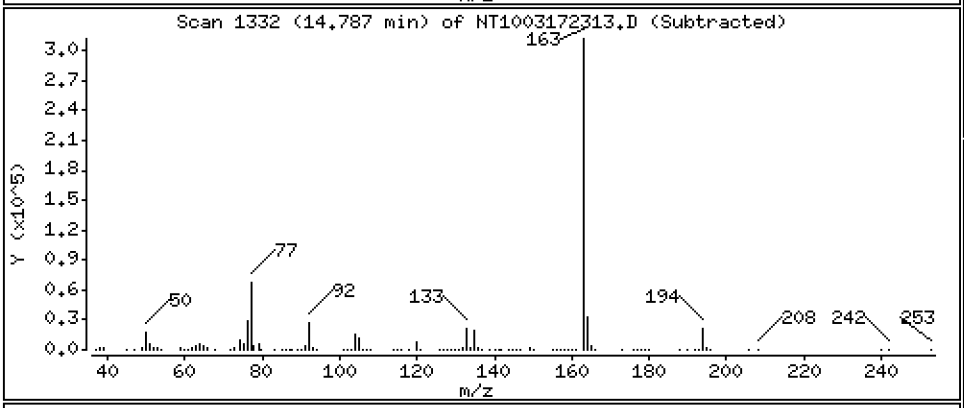
Column diameter: 0.25

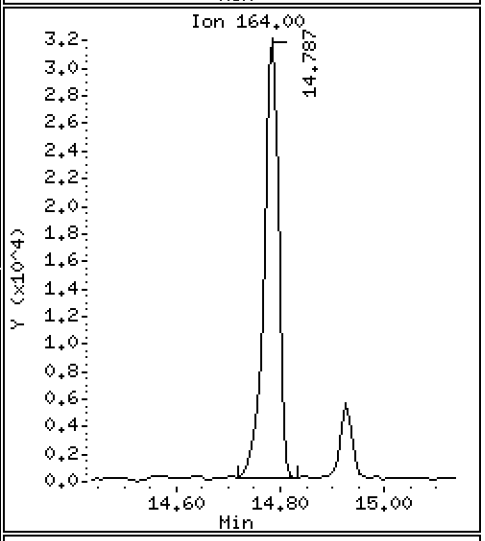
39 Dimethylphthalate

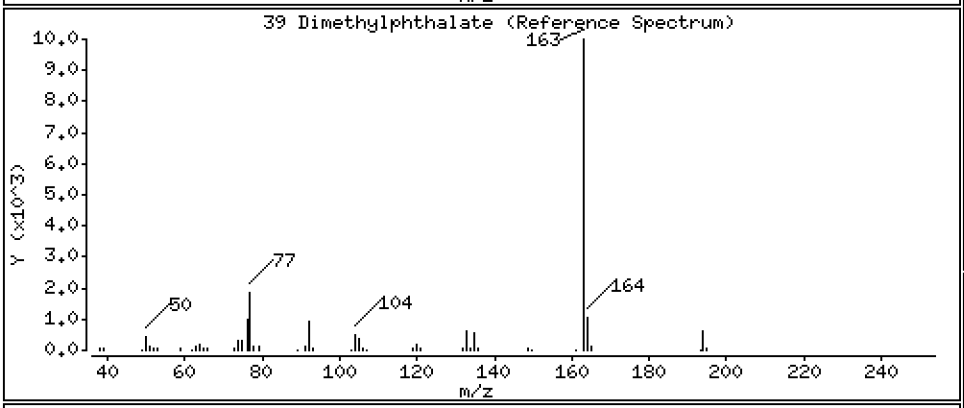
Concentration: 4.584 ug/mL

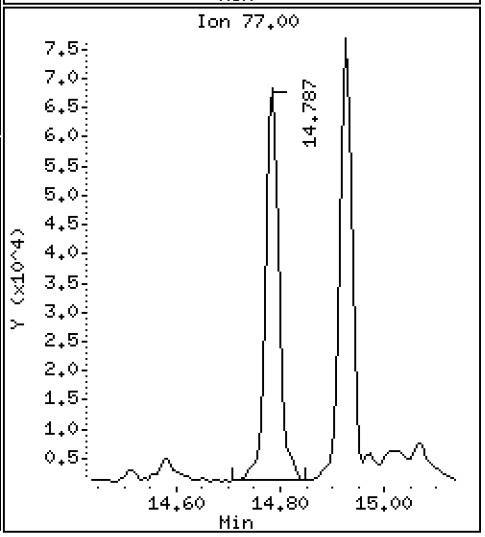


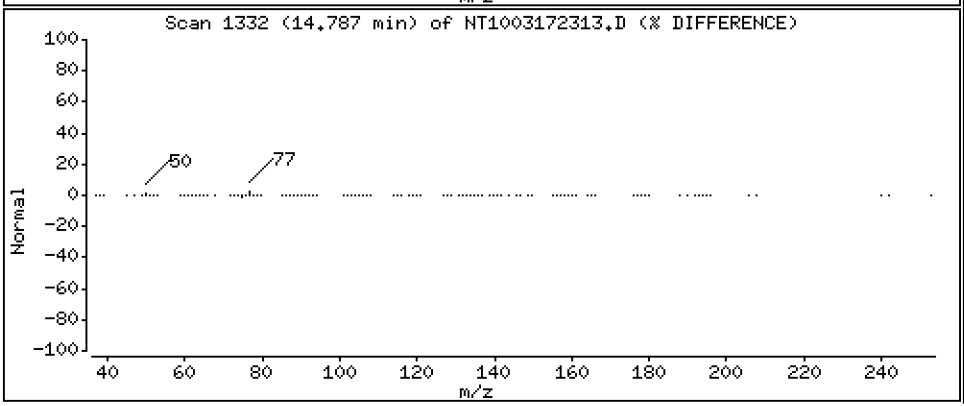












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

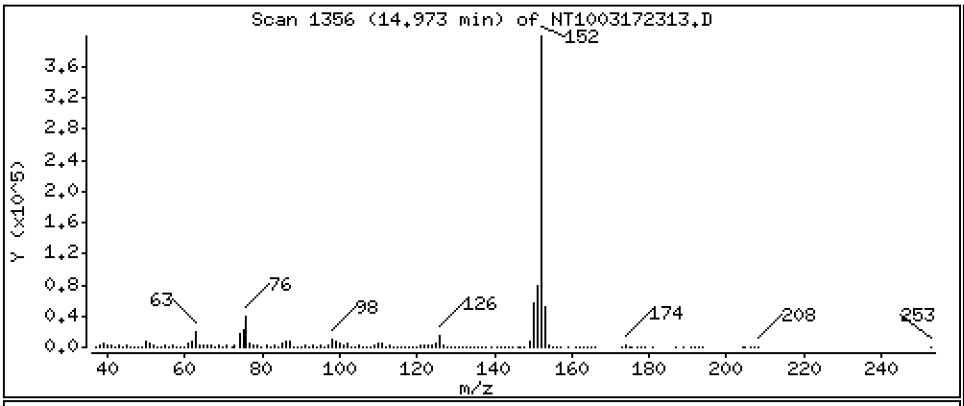
Operator: VTS

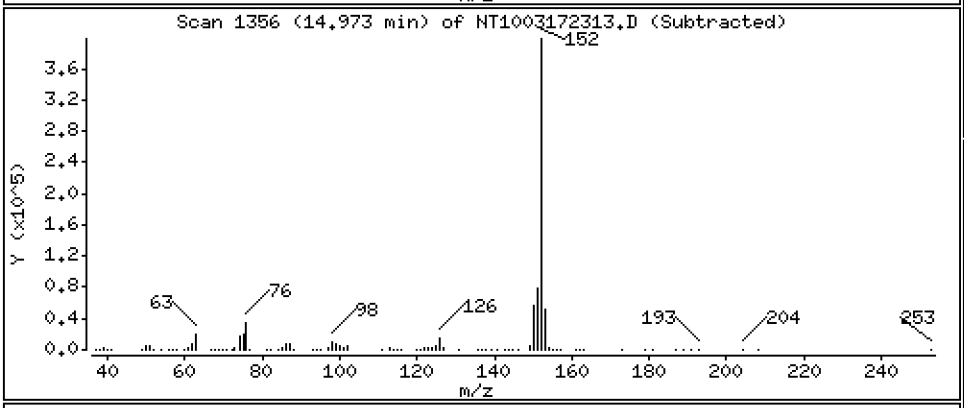
Column phase: ZB-5msi

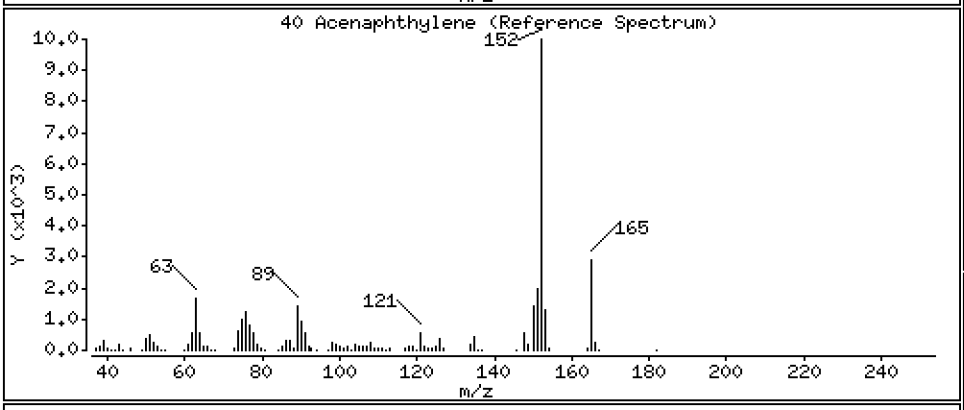
Column diameter: 0.25

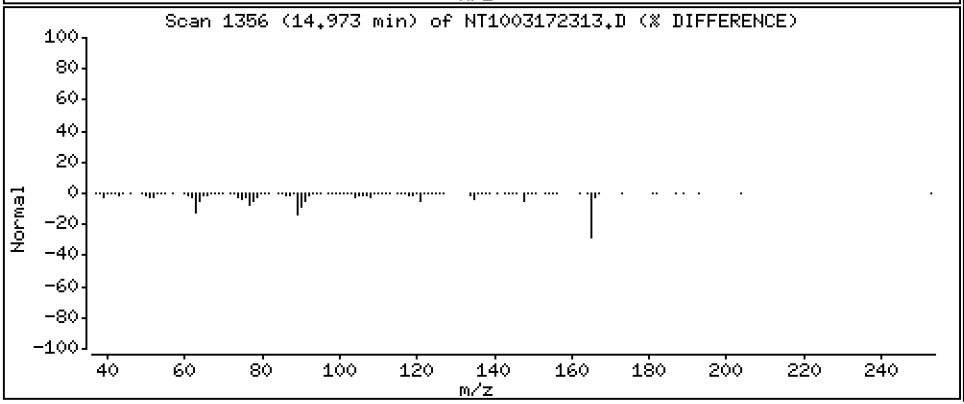
40 Acenaphthylene

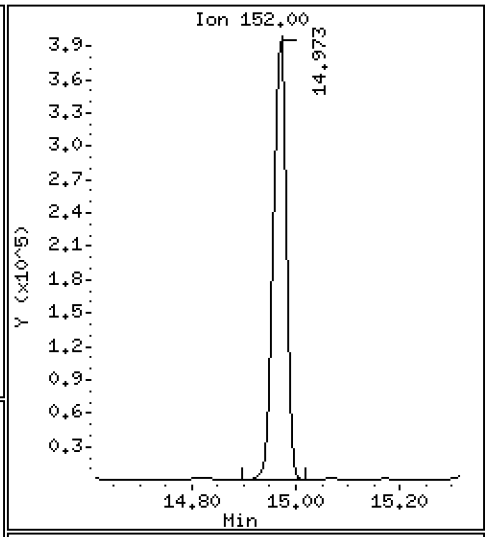
Concentration: 3.857 ug/mL

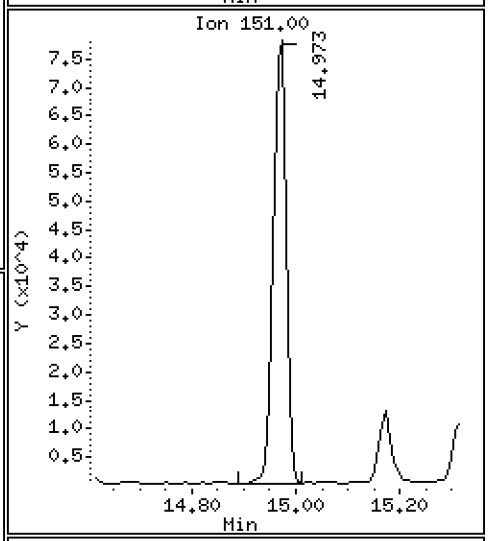


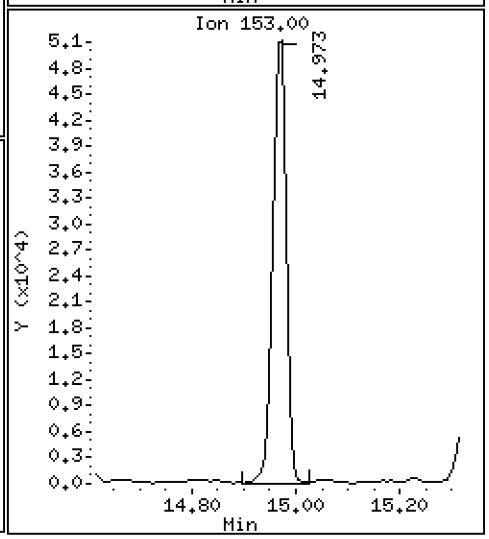












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

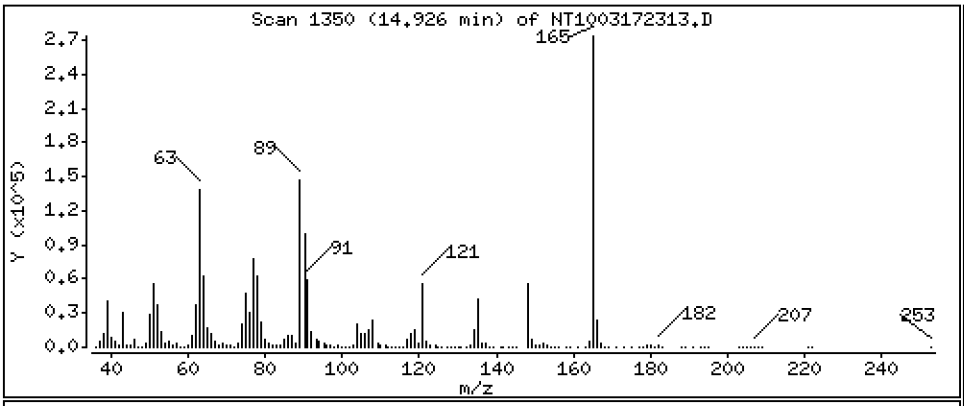
Operator: VTS

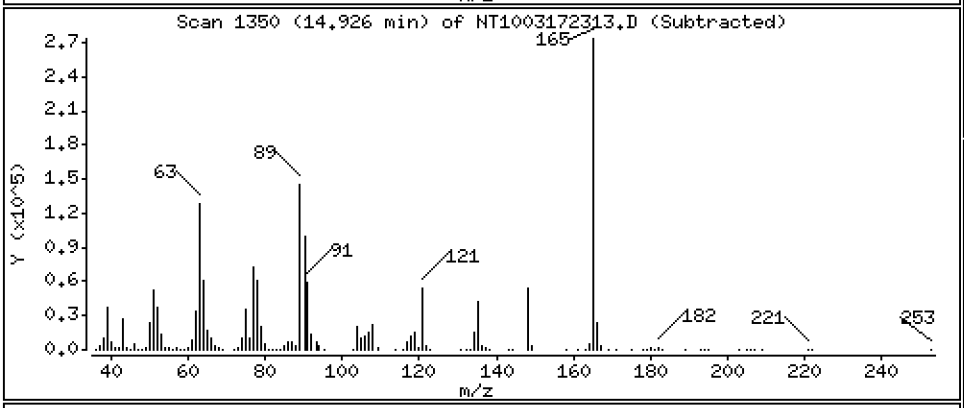
Column phase: ZB-5msi

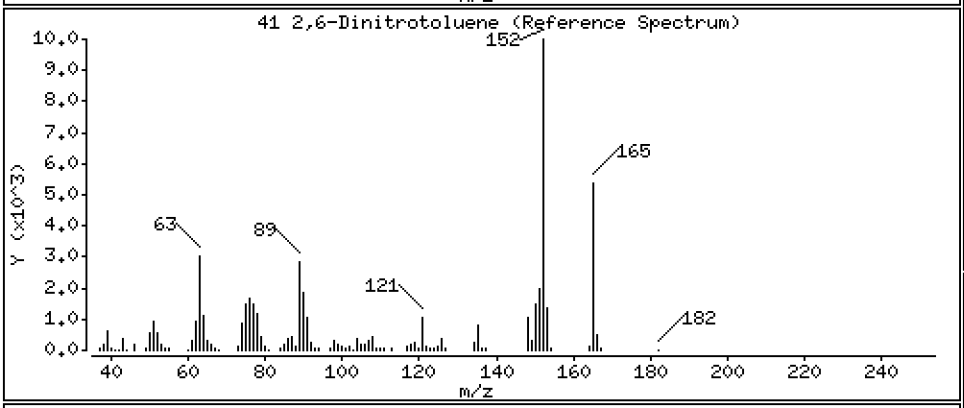
Column diameter: 0.25

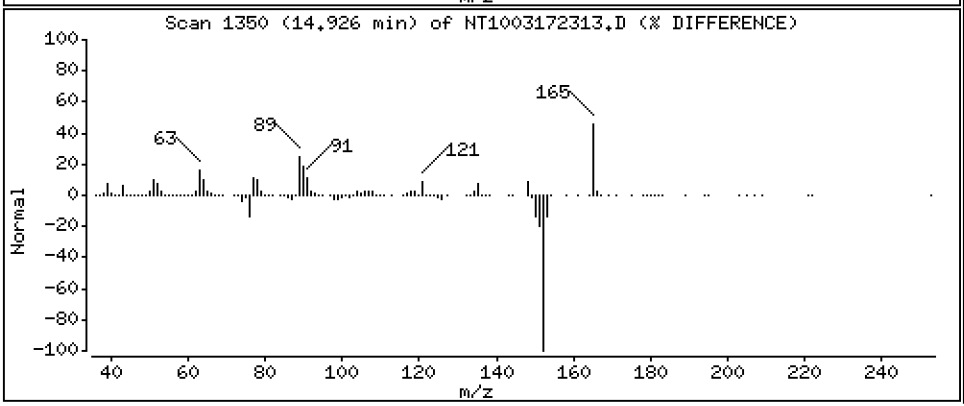
41 2,6-Dinitrotoluene

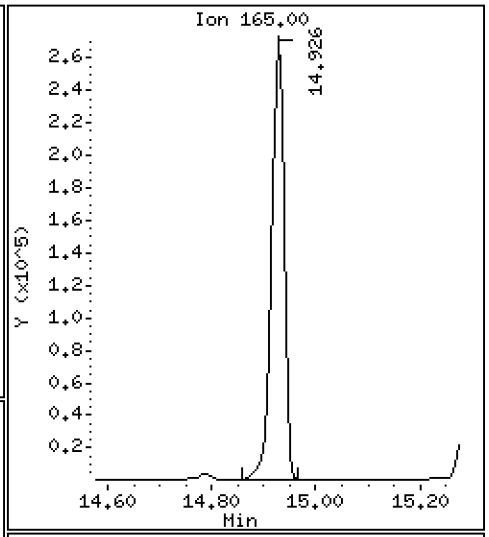
Concentration: 17.83 ug/mL

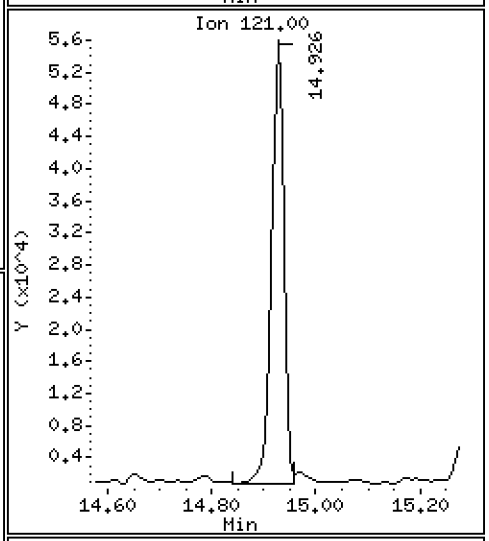


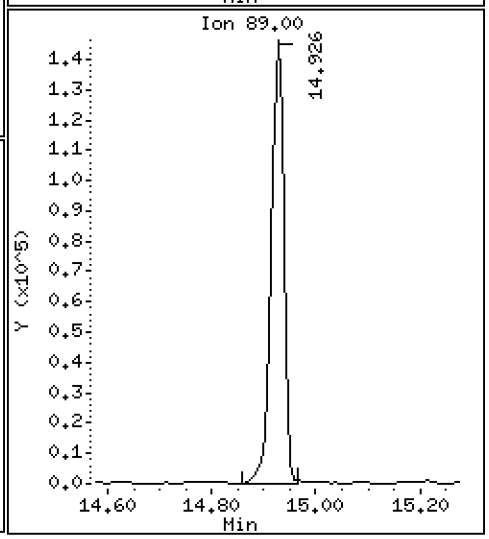












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

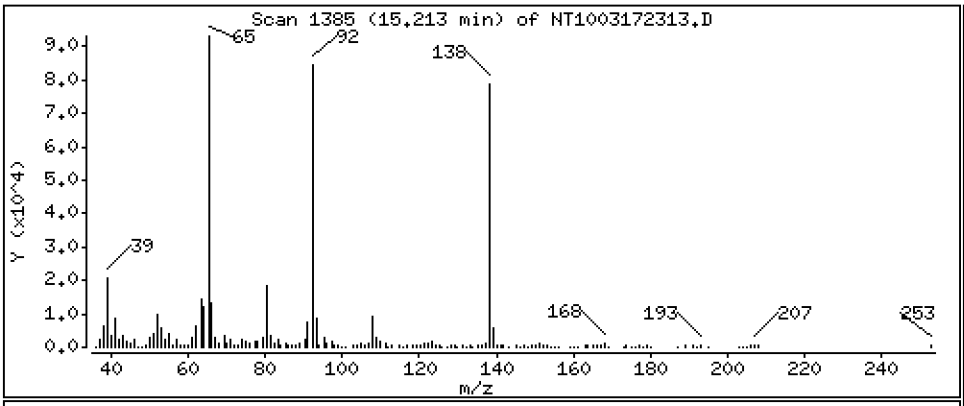
Operator: VTS

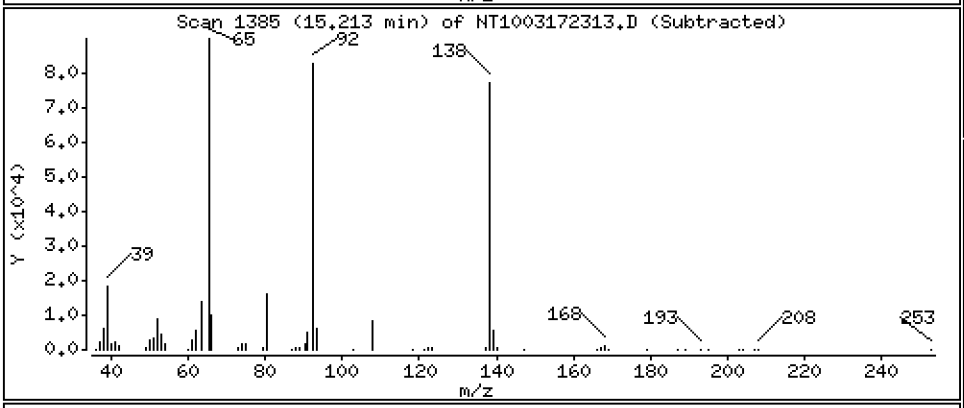
Column phase: ZB-5msi

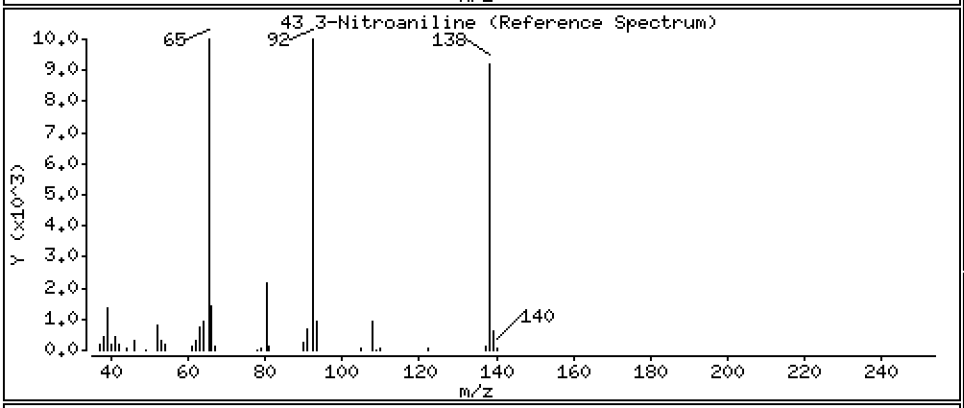
Column diameter: 0.25

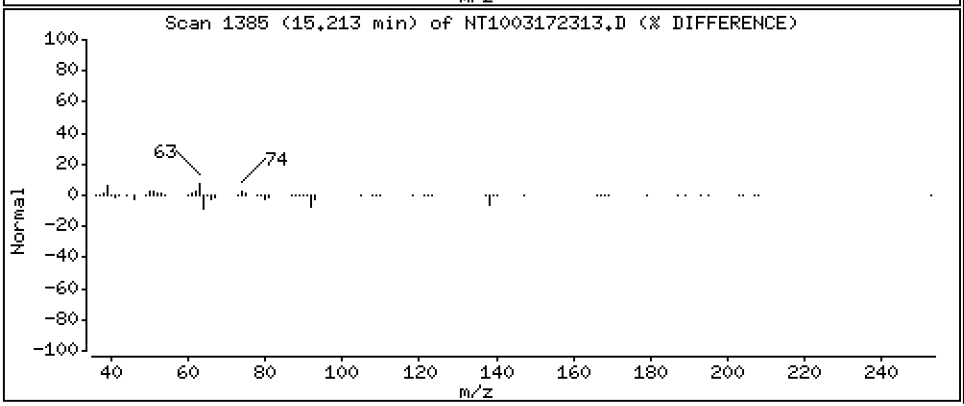
43 3-Nitroaniline

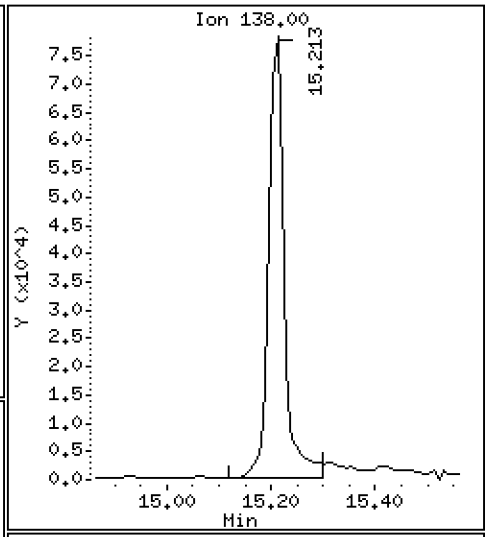
Concentration: 5.721 ug/mL

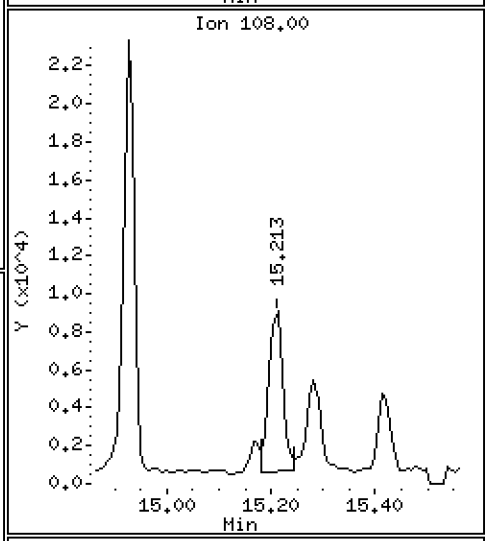


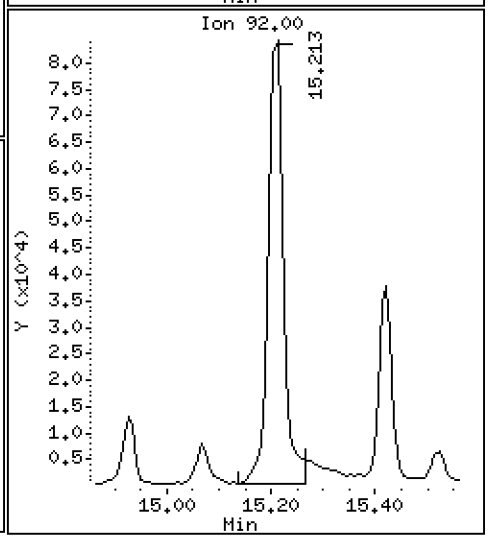












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

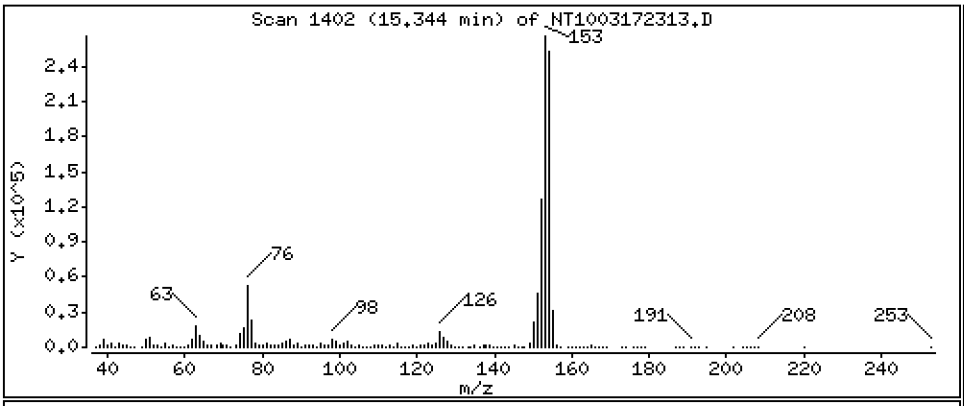
Operator: VTS

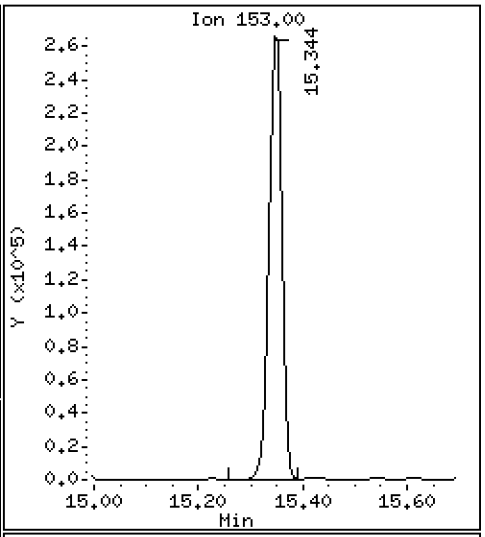
Column phase: ZB-5msi

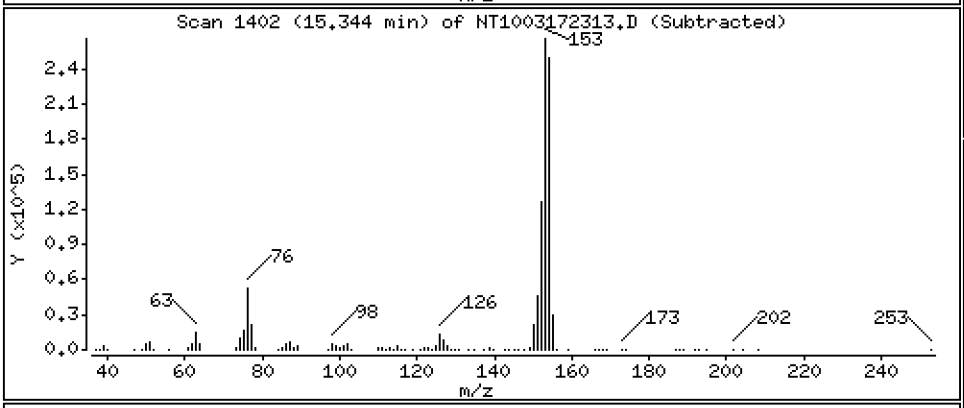
Column diameter: 0.25

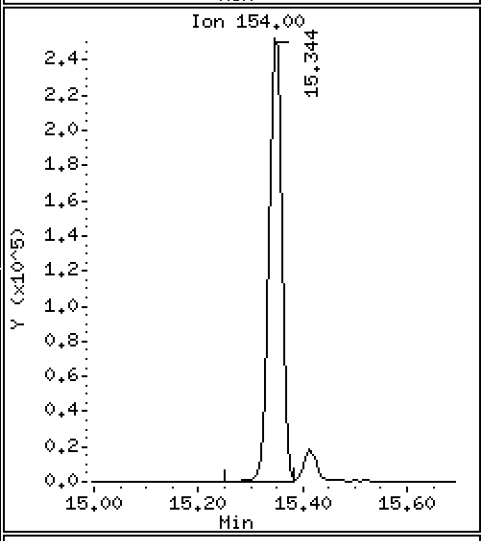
44 Acenaphthene

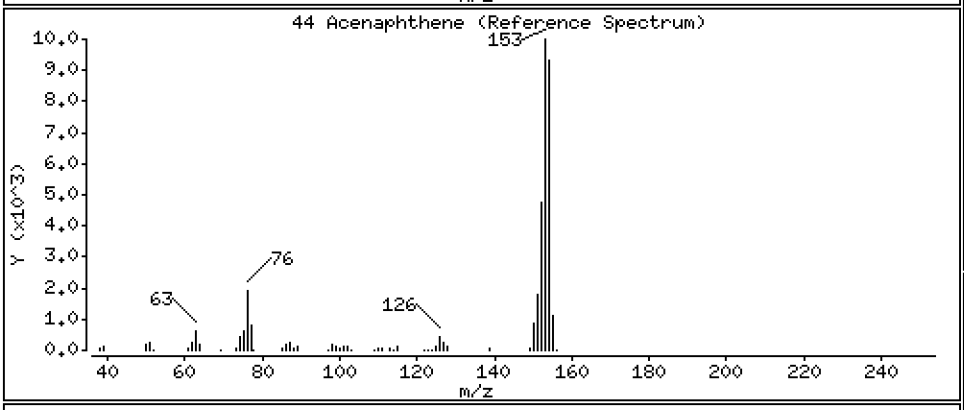
Concentration: 4.137 ug/mL

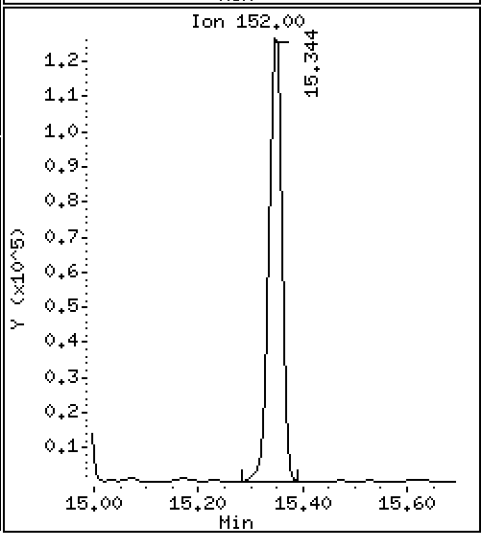


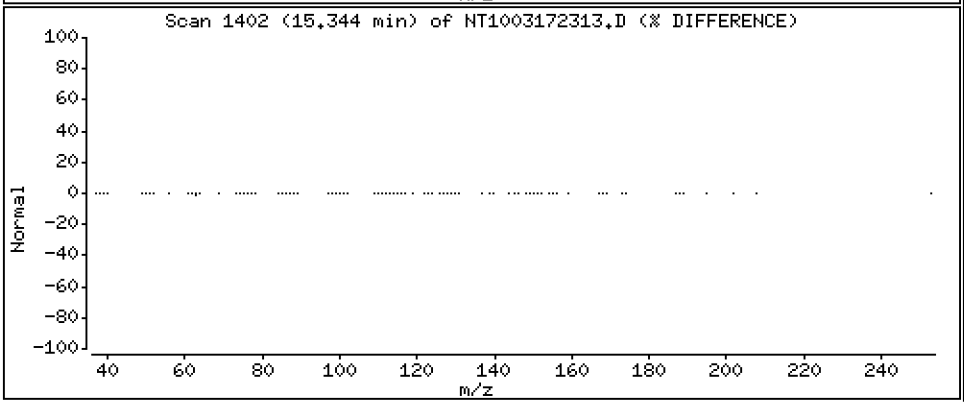












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

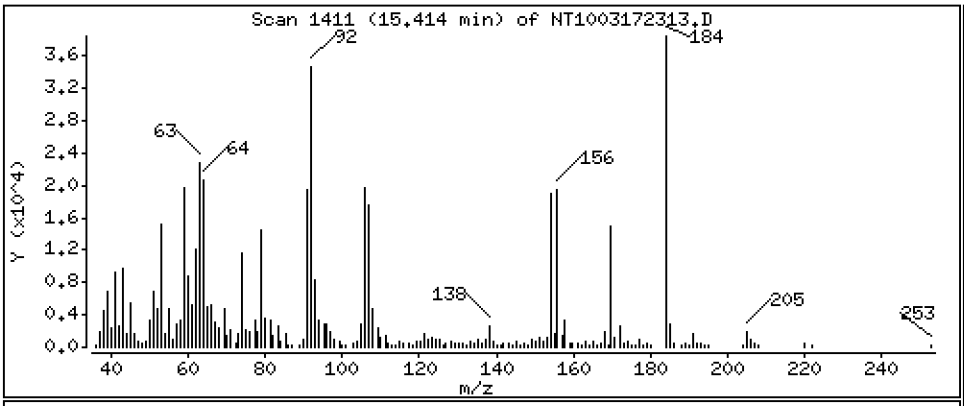
Operator: VTS

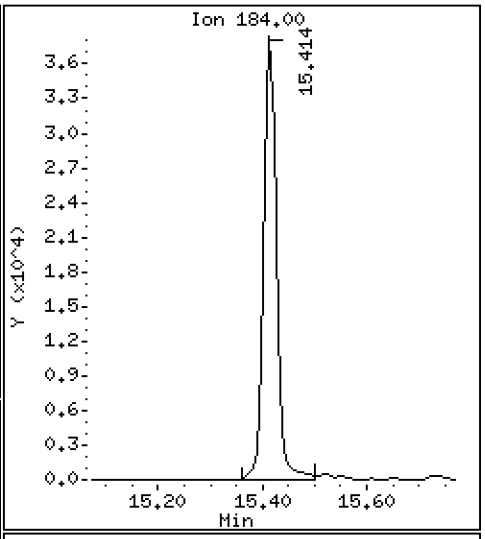
Column phase: ZB-5msi

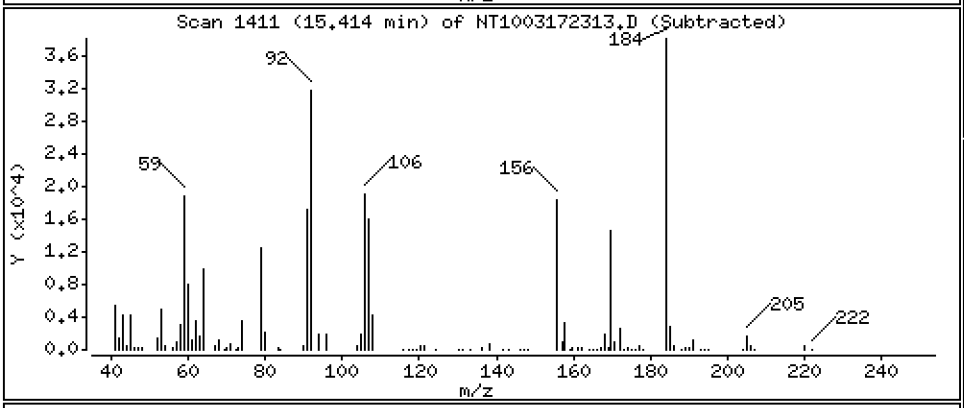
Column diameter: 0.25

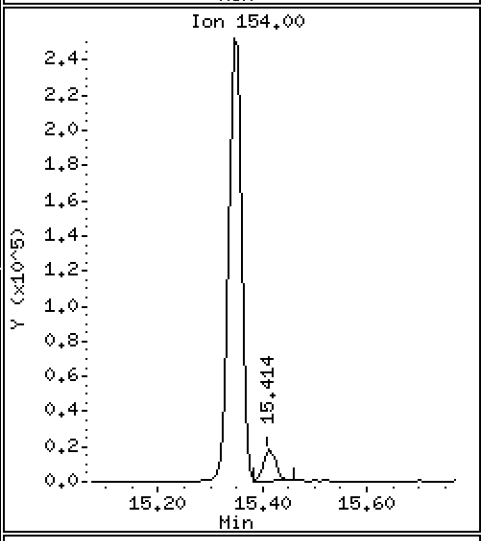
45 2,4-Dinitrophenol

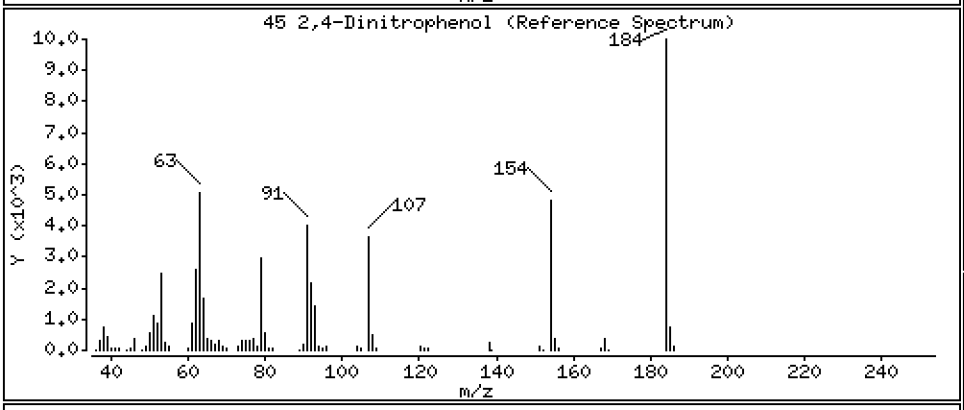
Concentration: 4.204 ug/mL

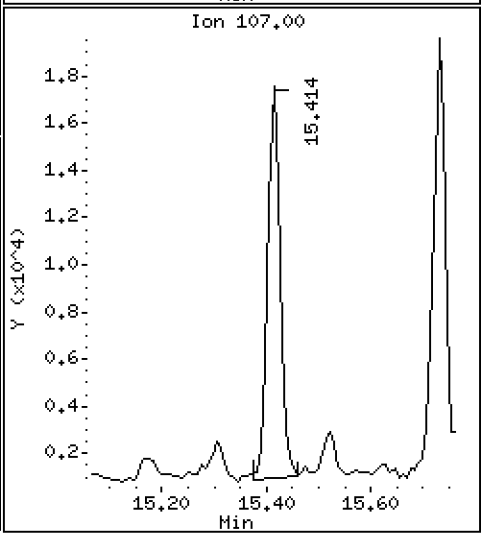


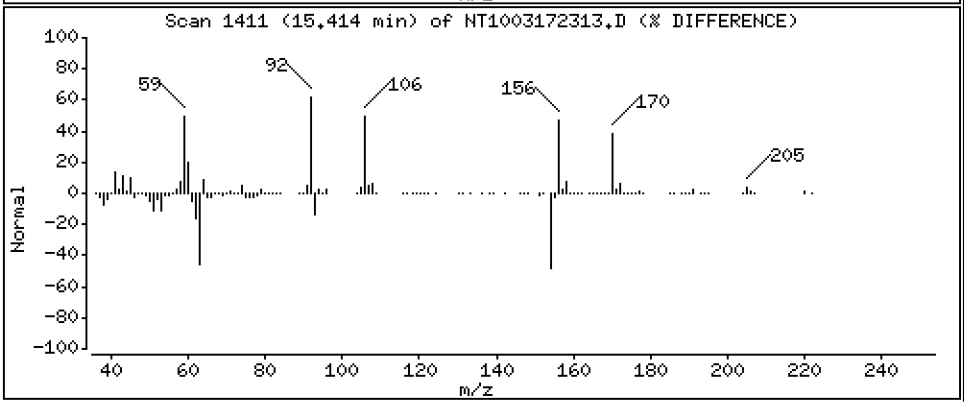












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

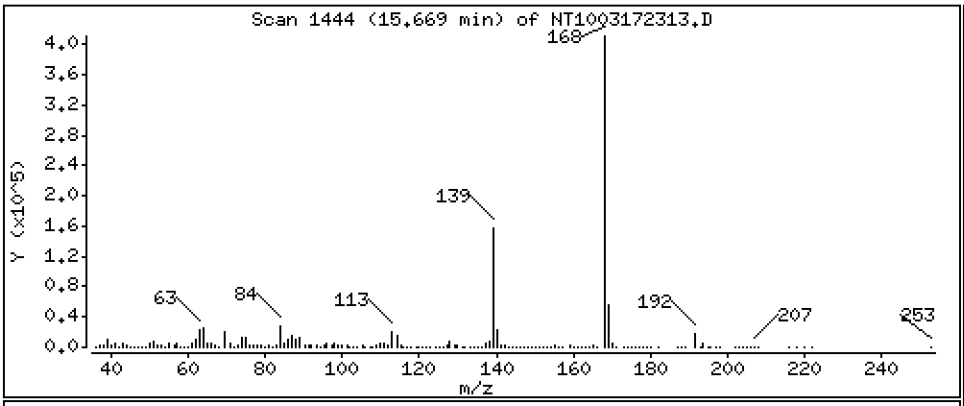
Operator: VTS

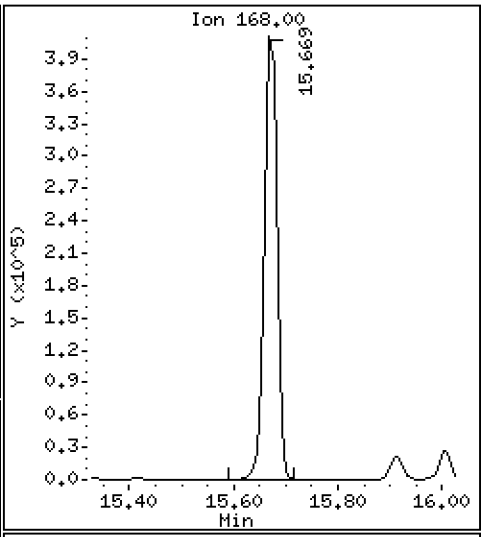
Column phase: ZB-5msi

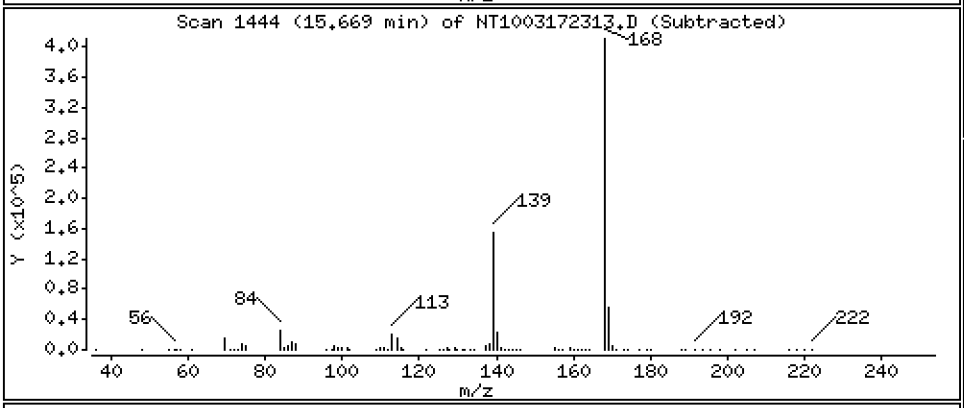
Column diameter: 0.25

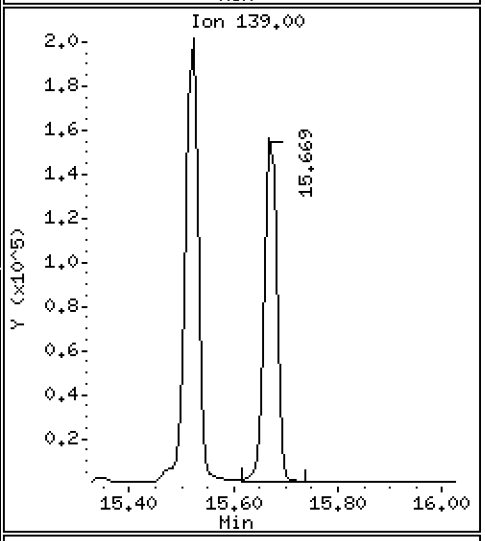
46 Dibenzofuran

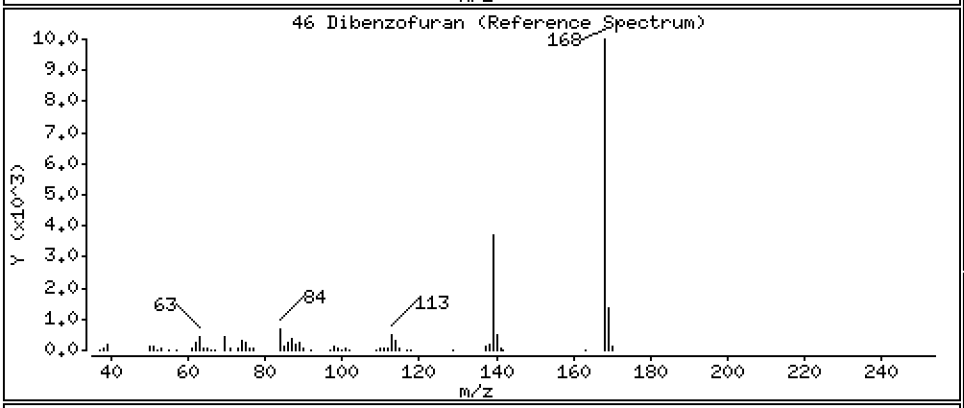
Concentration: 4.201 ug/mL

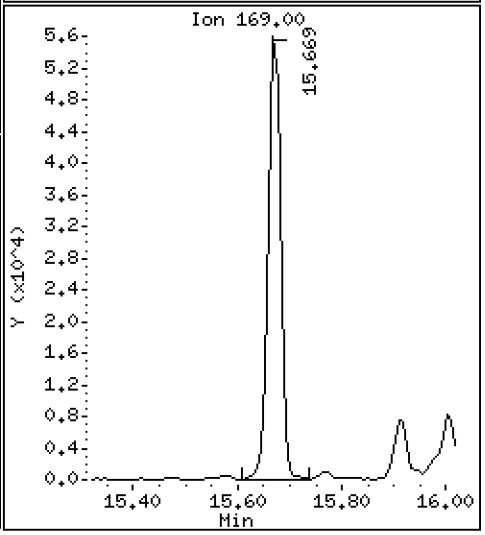


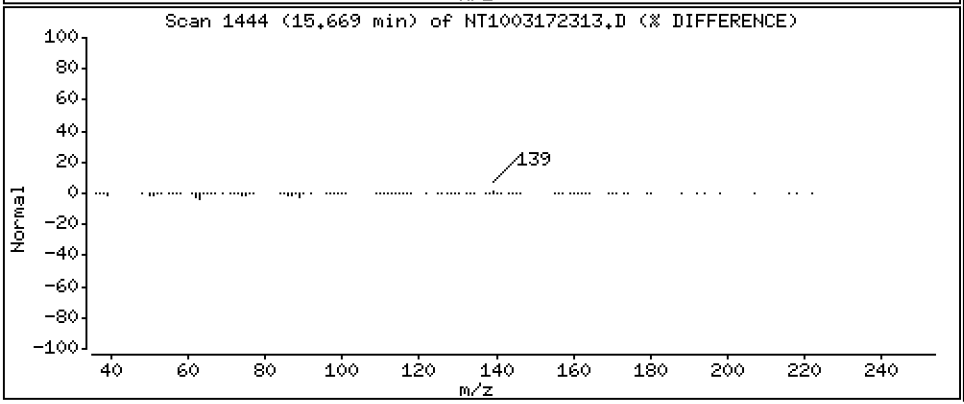












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172313.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

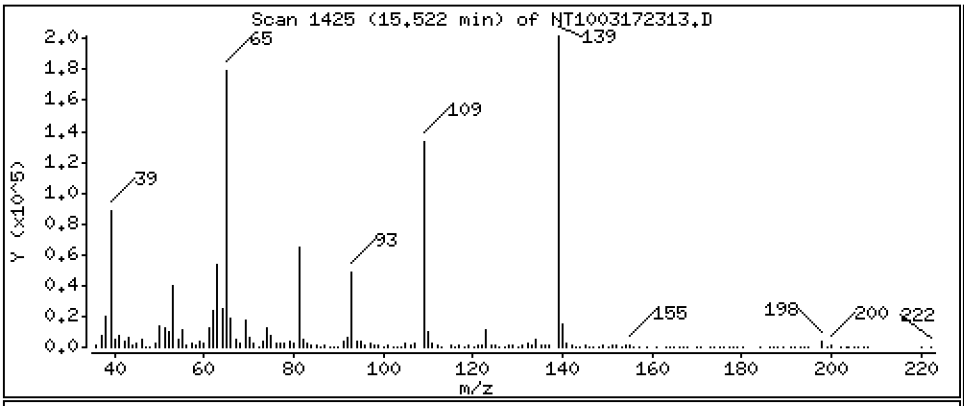
Operator: VTS

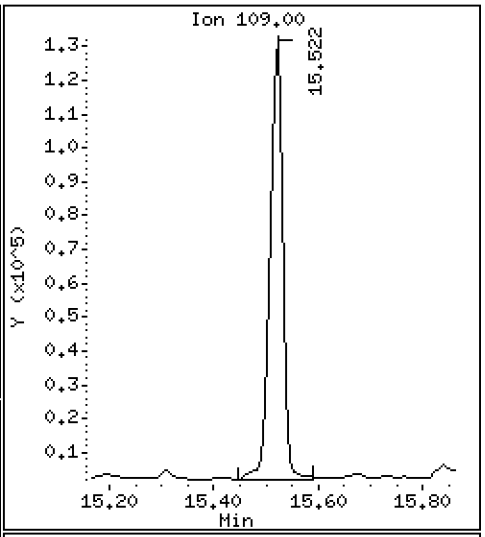
Column phase: ZB-5msi

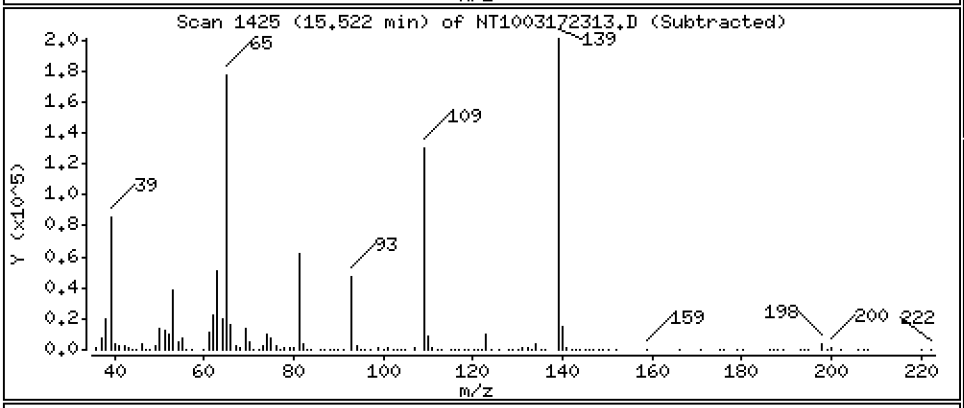
Column diameter: 0.25

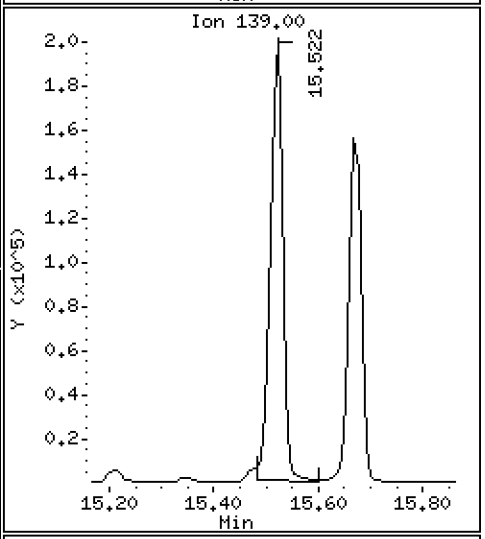
47 4-Nitrophenol

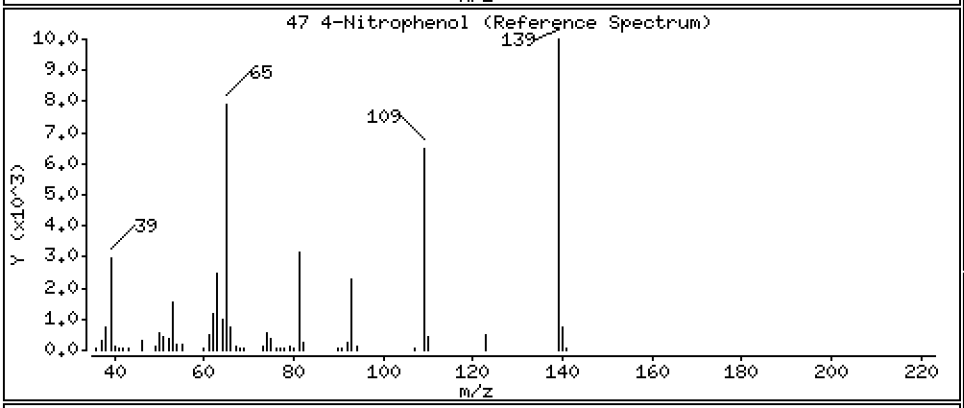
Concentration: 12.58 ug/mL

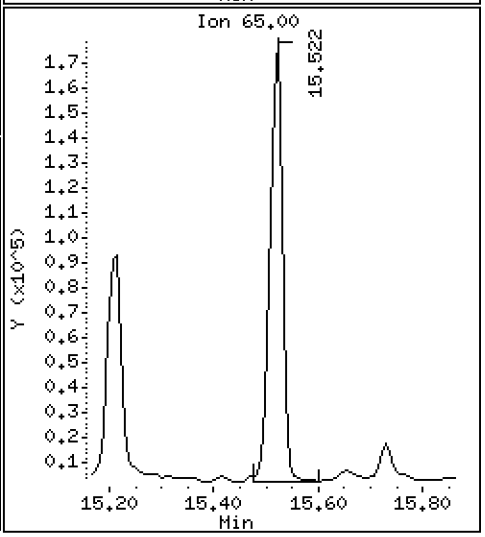


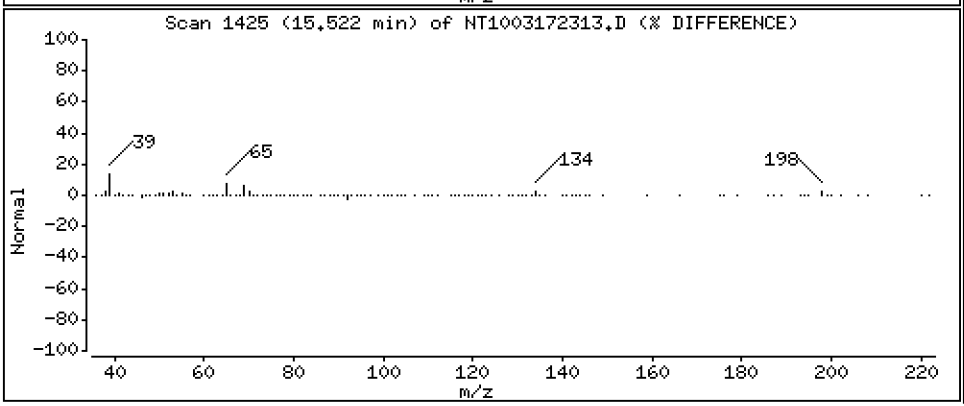












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

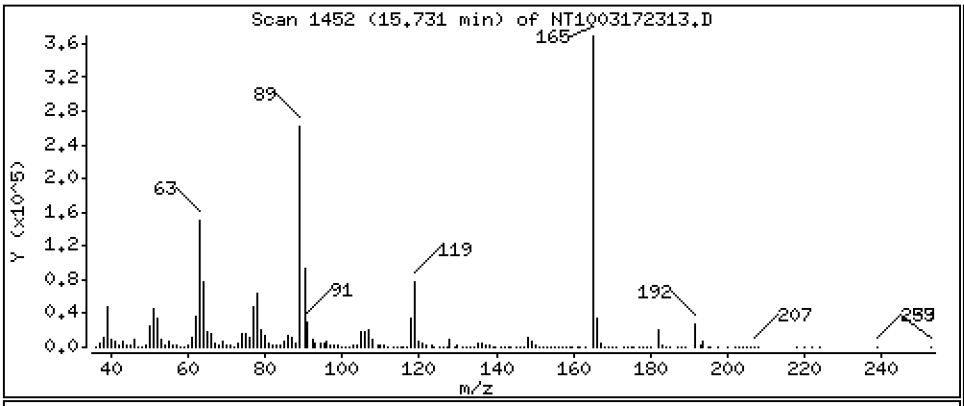
Operator: VTS

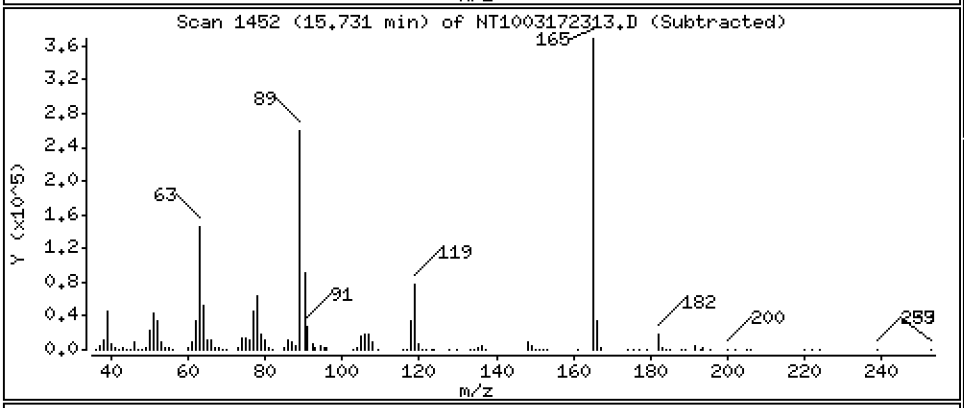
Column phase: ZB-5msi

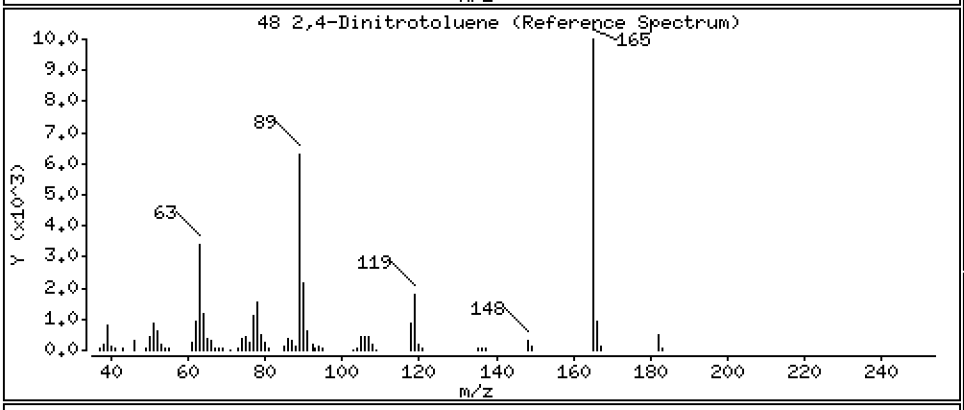
Column diameter: 0.25

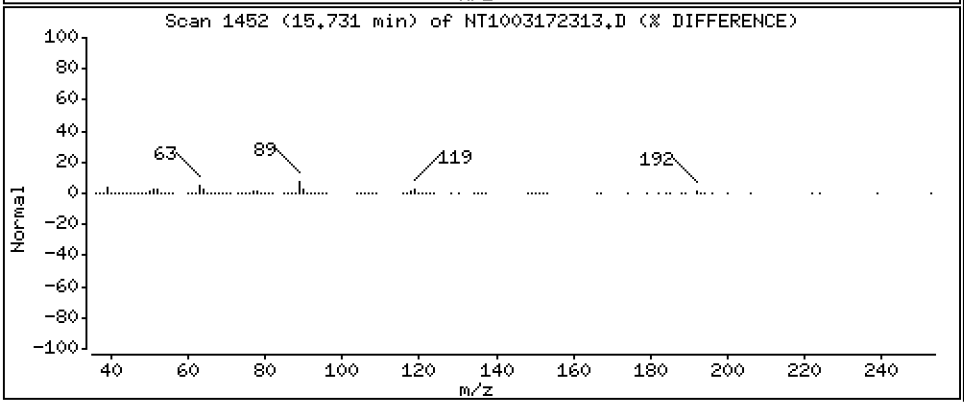
48 2,4-Dinitrotoluene

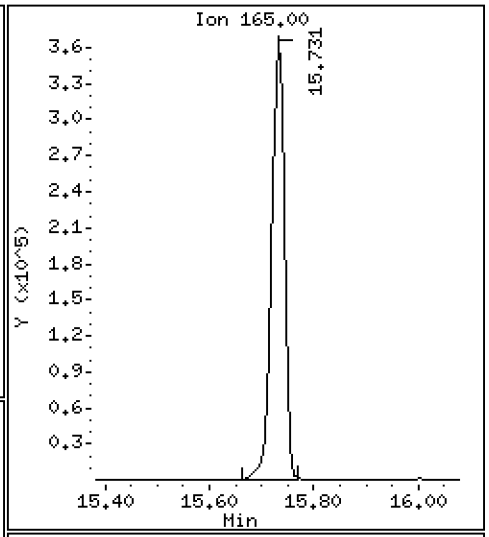
Concentration: 16.73 ug/mL

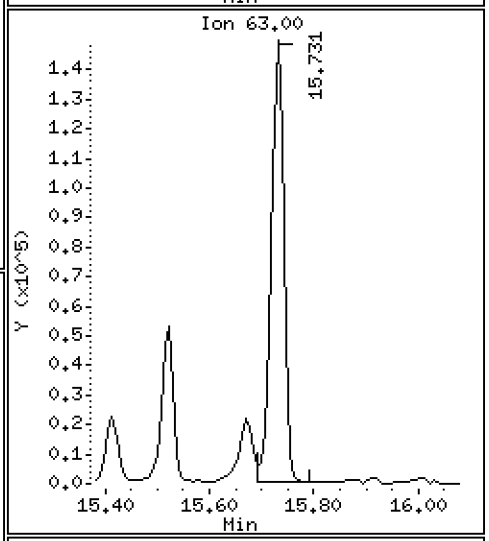


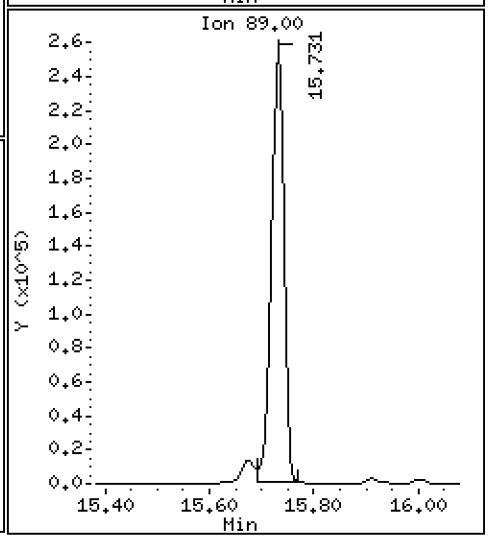












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

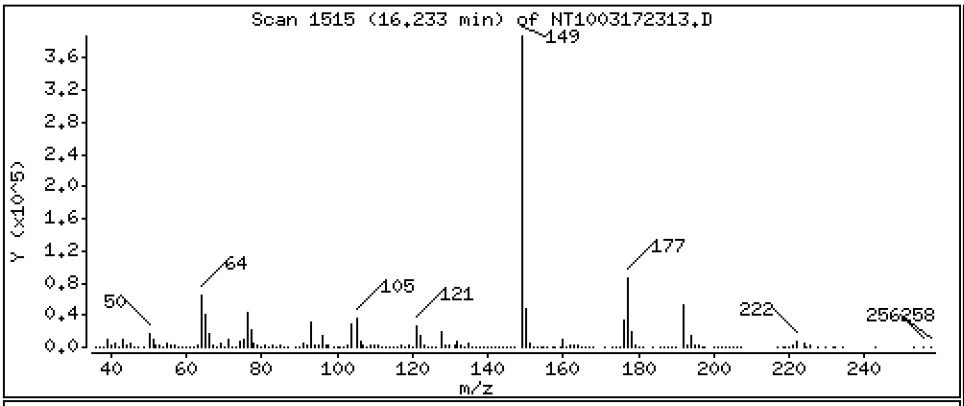
Operator: VTS

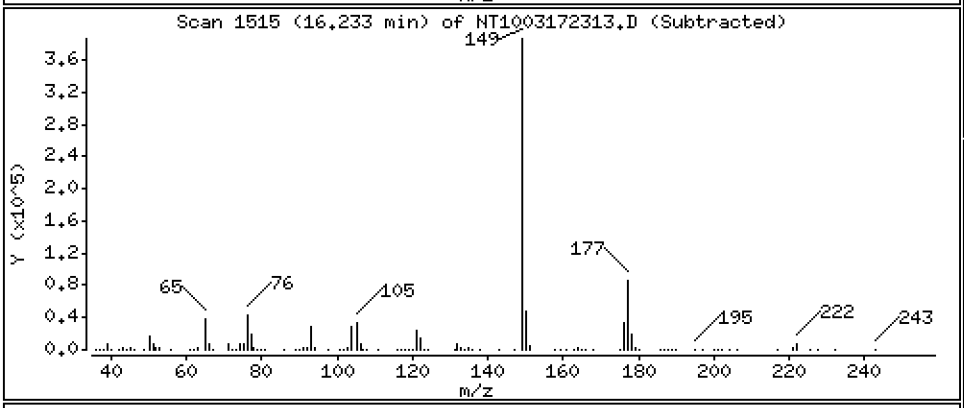
Column phase: ZB-5msi

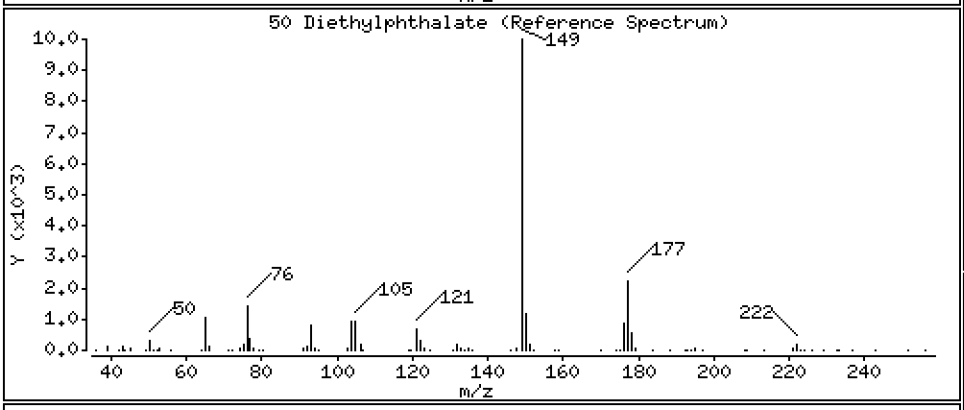
Column diameter: 0.25

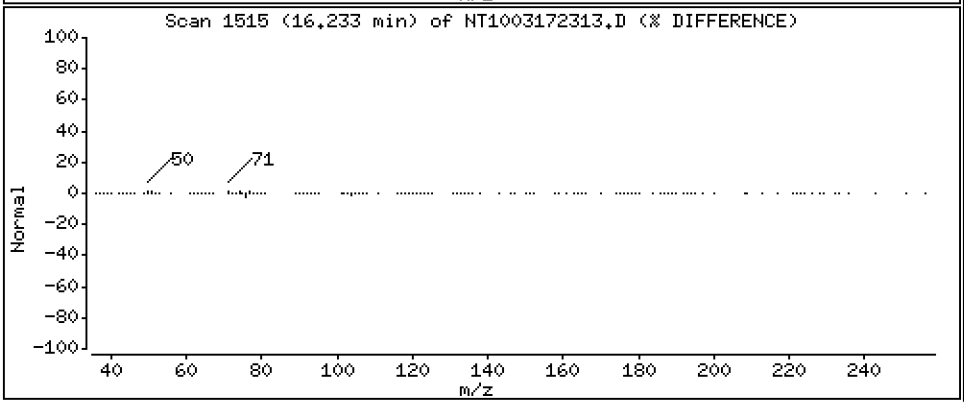
50 Diethylphthalate

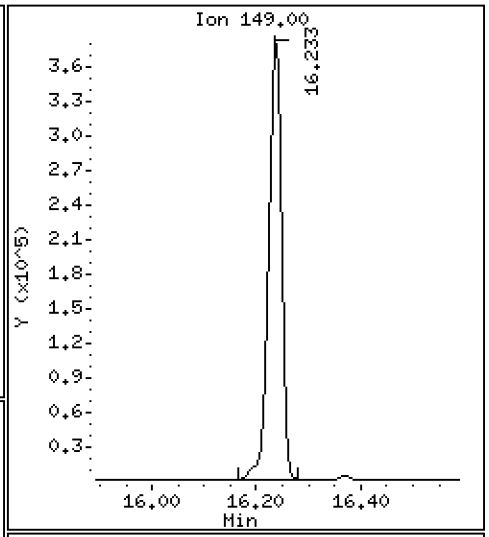
Concentration: 5.765 ug/mL

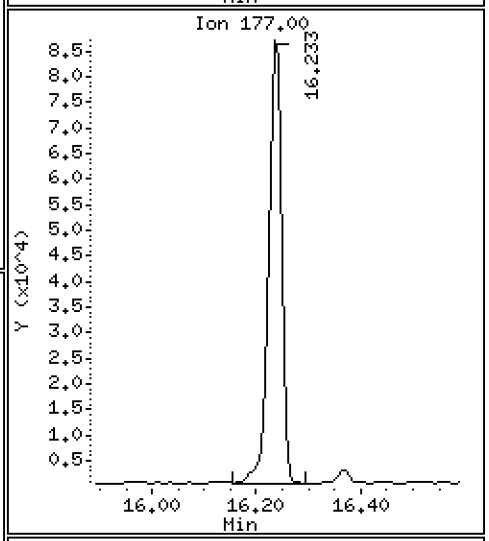


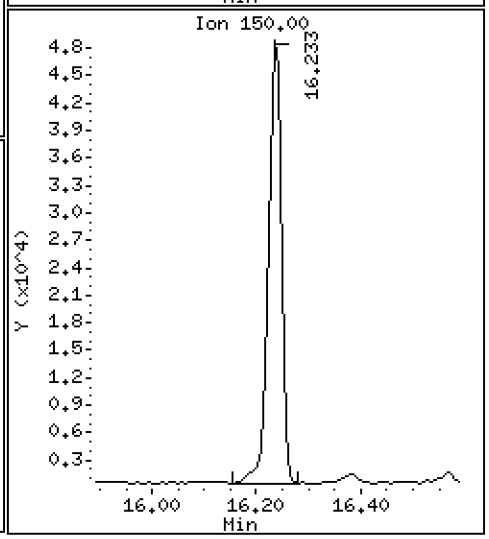












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

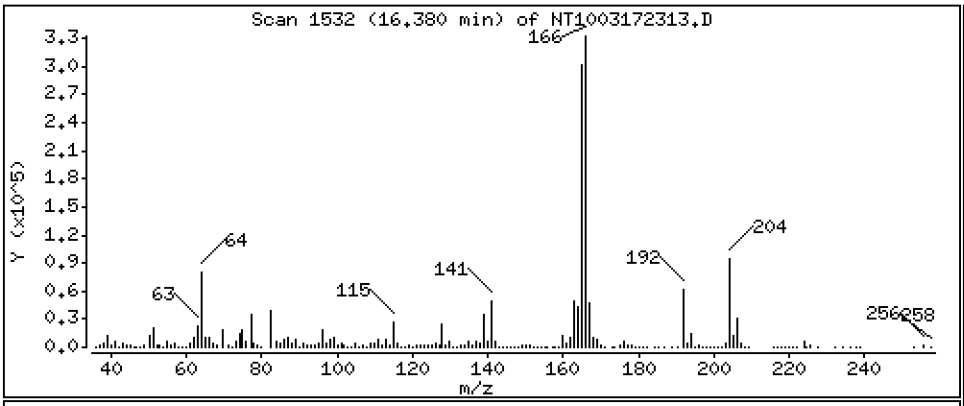
Operator: VTS

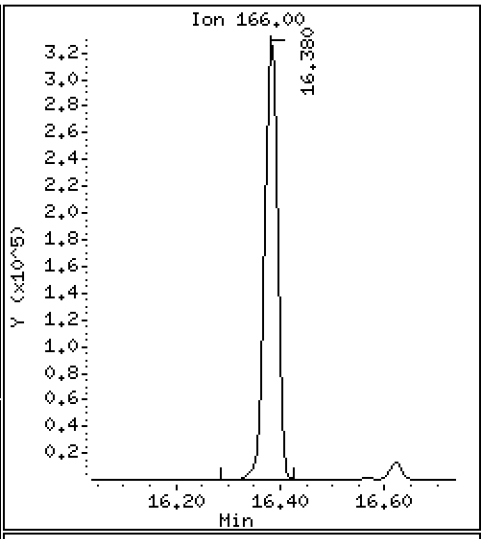
Column phase: ZB-5msi

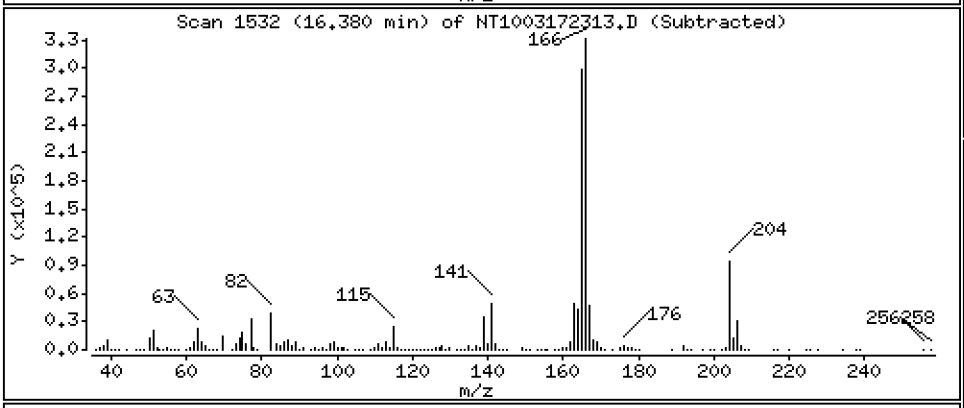
Column diameter: 0.25

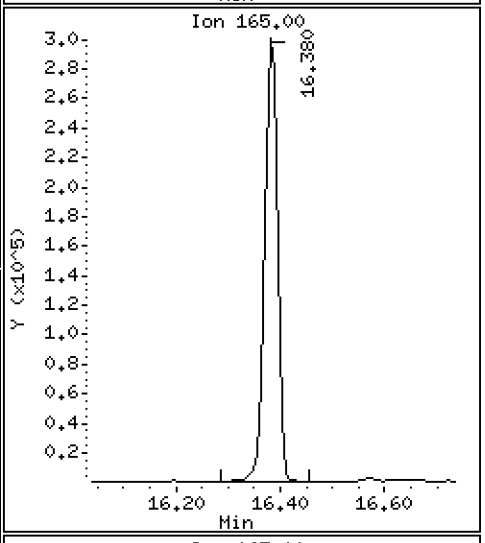
49 Fluorene

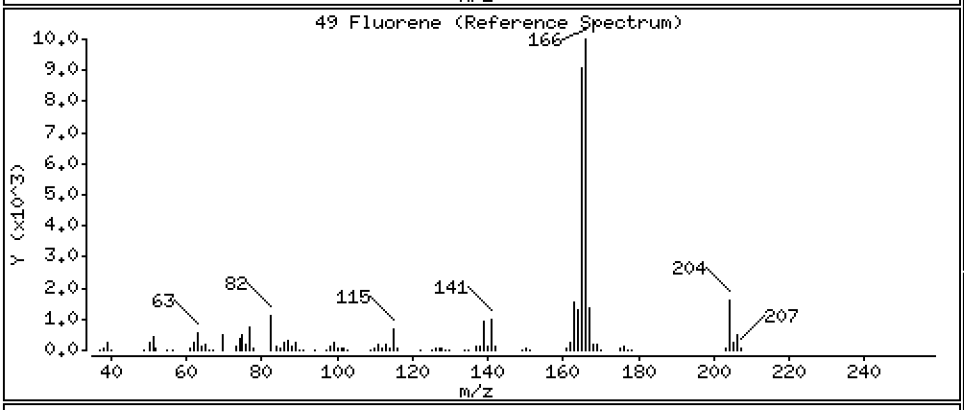
Concentration: 4.959 ug/mL

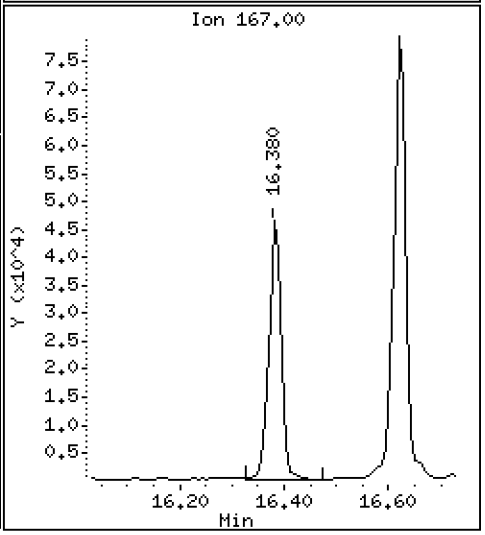


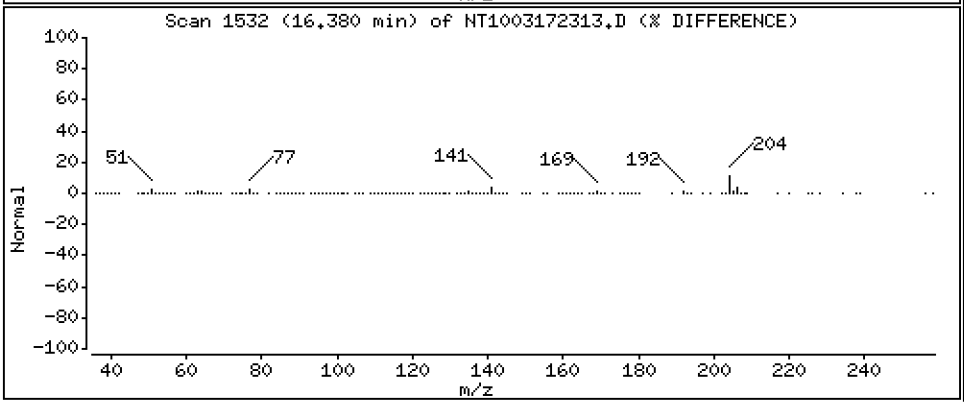












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

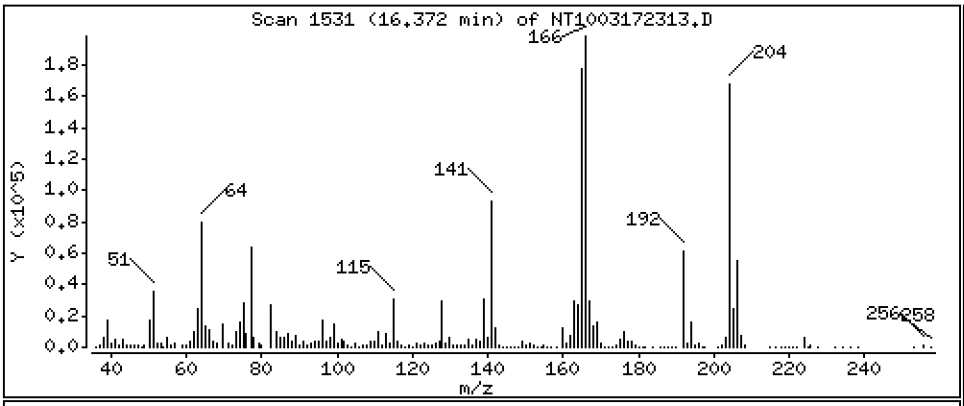
Operator: VTS

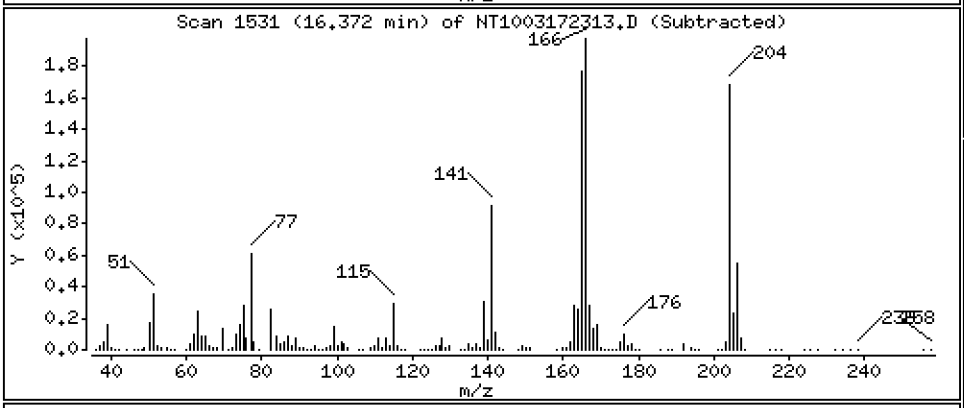
Column phase: ZB-5msi

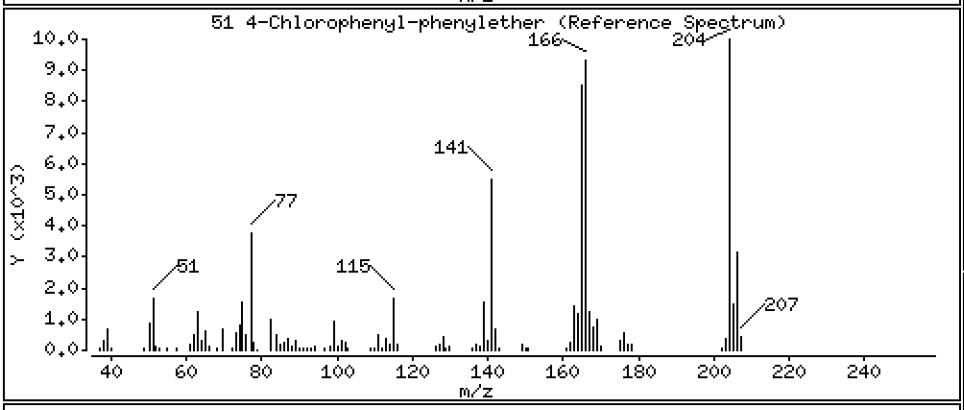
Column diameter: 0.25

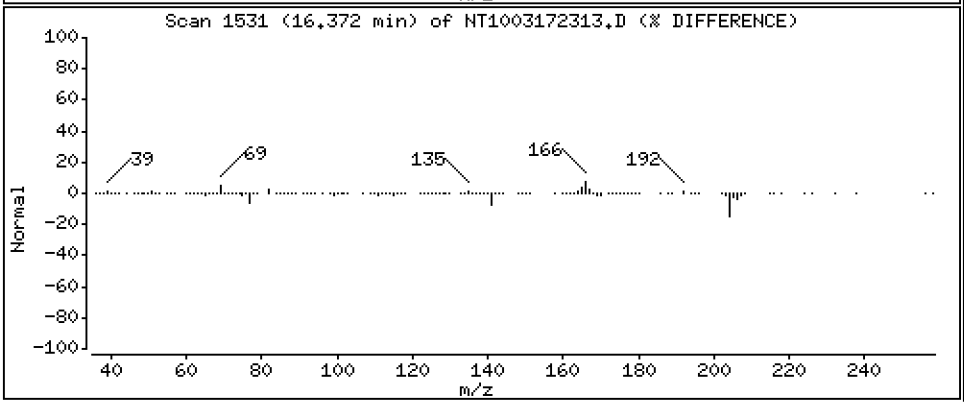
51 4-Chlorophenyl-phenylether

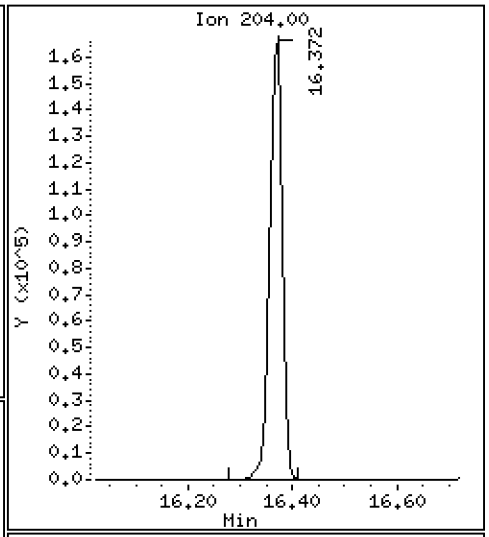
Concentration: 5.201 ug/mL

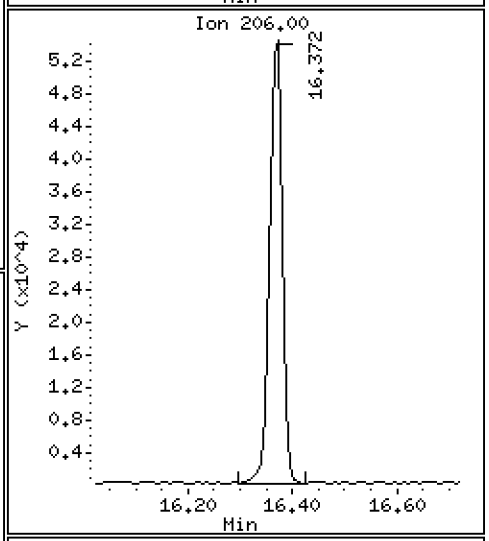


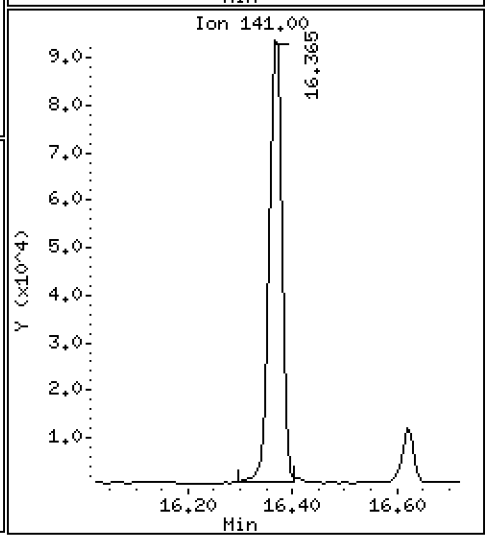












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

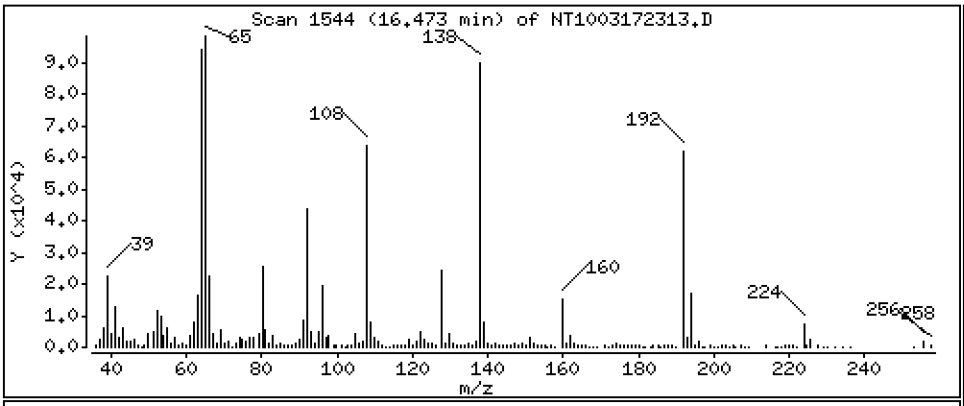
Operator: VTS

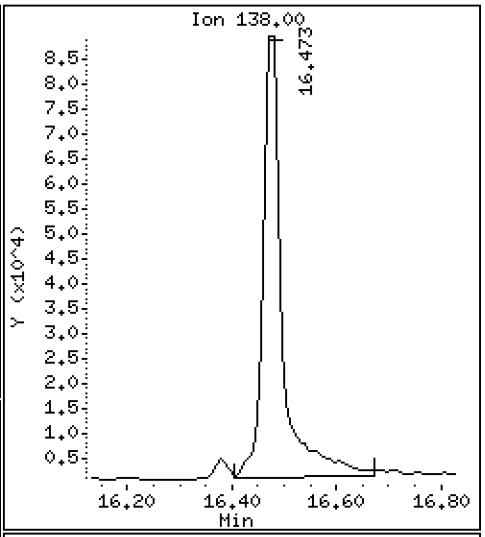
Column phase: ZB-5msi

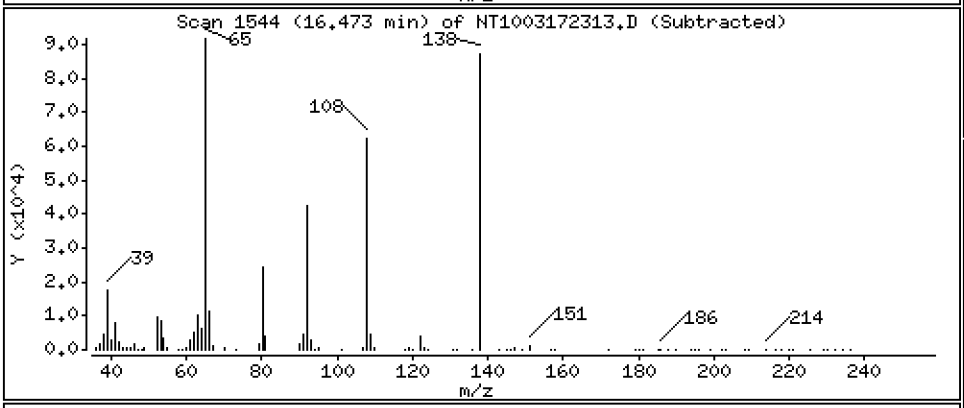
Column diameter: 0.25

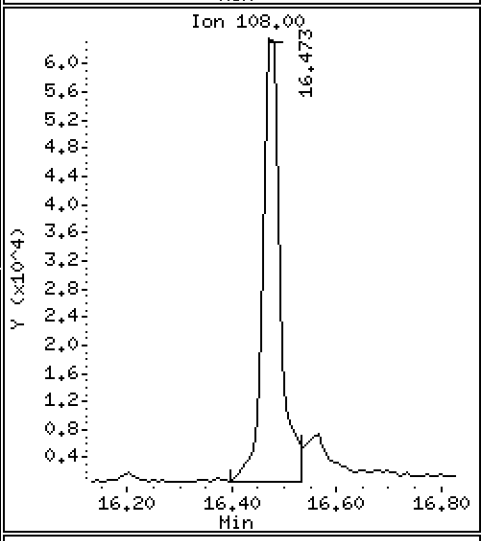
52 4-Nitroaniline

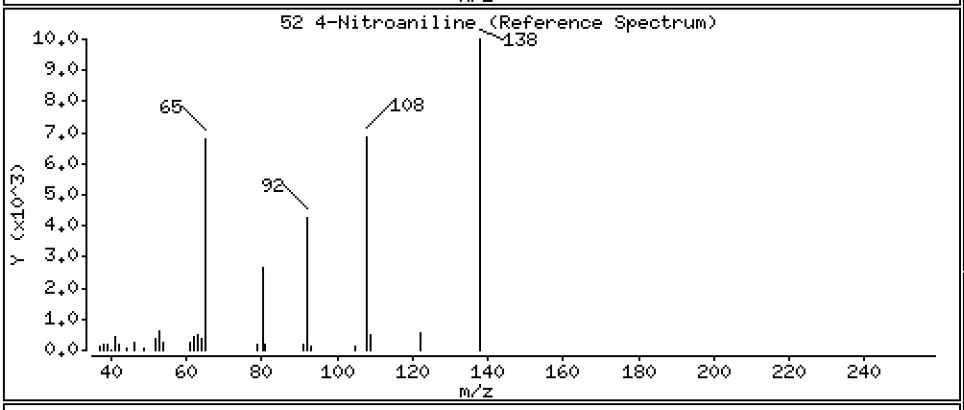
Concentration: 8.912 ug/mL

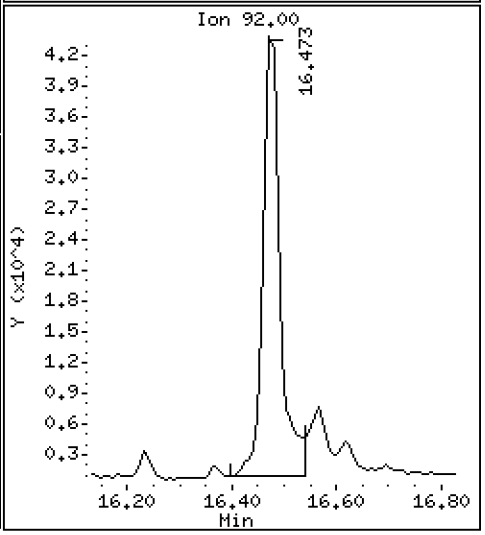


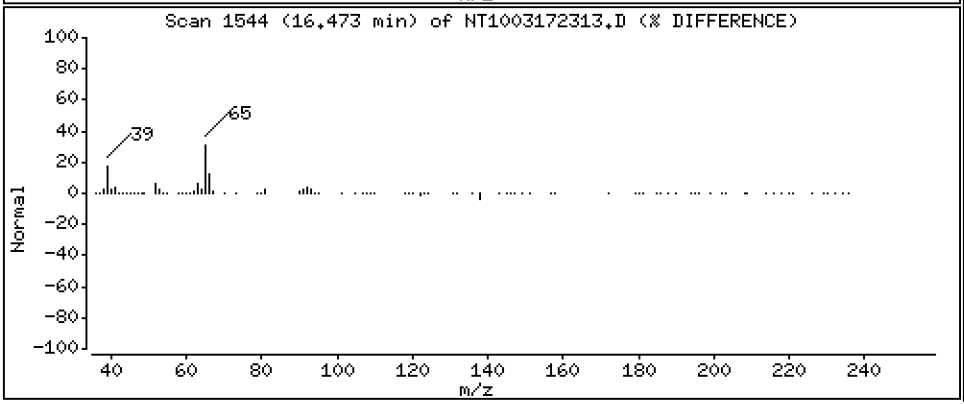












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

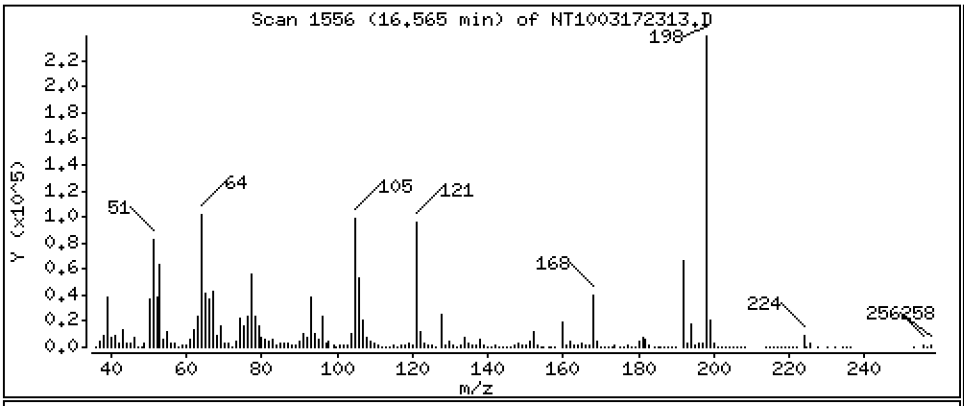
Operator: VTS

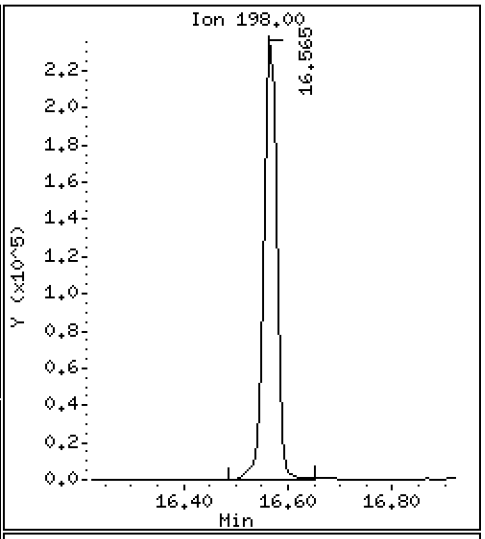
Column phase: ZB-5msi

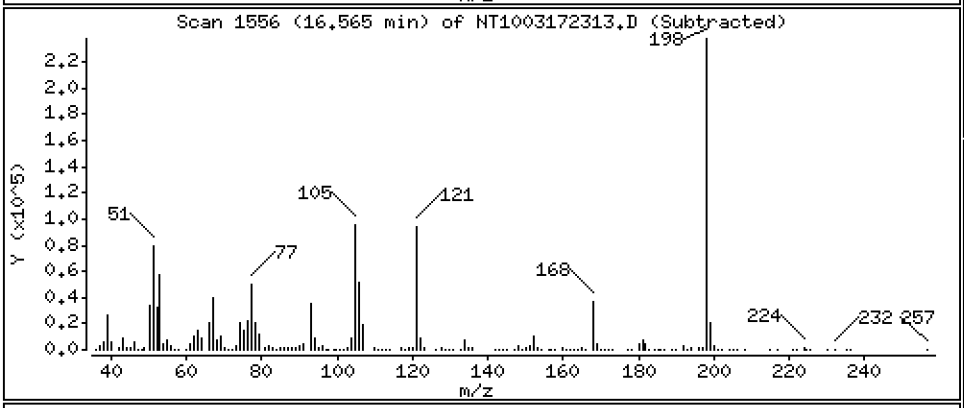
Column diameter: 0.25

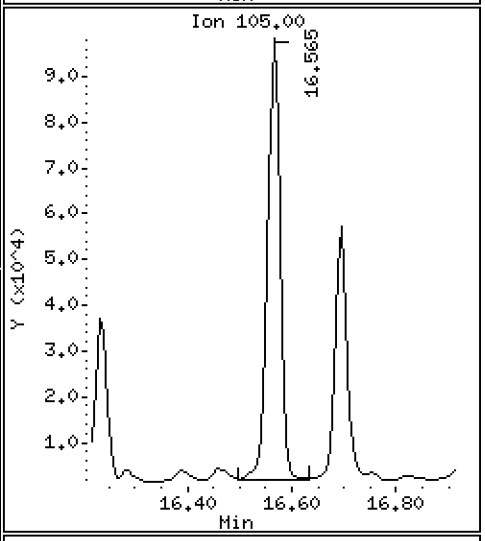
53 4,6-Dinitro-2-methylphenol

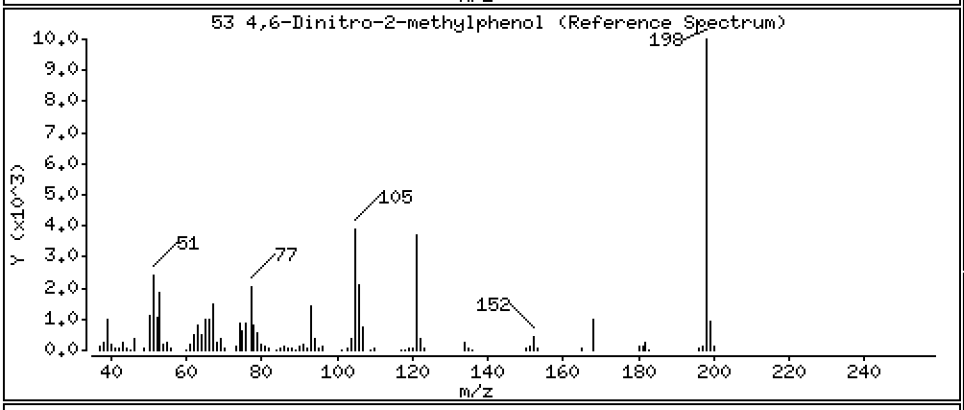
Concentration: 19.55 ug/mL

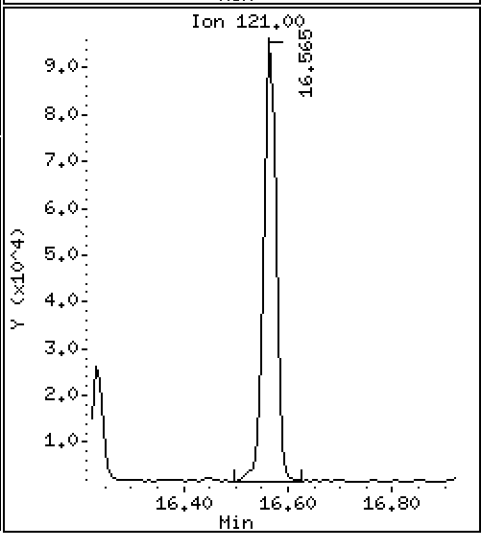


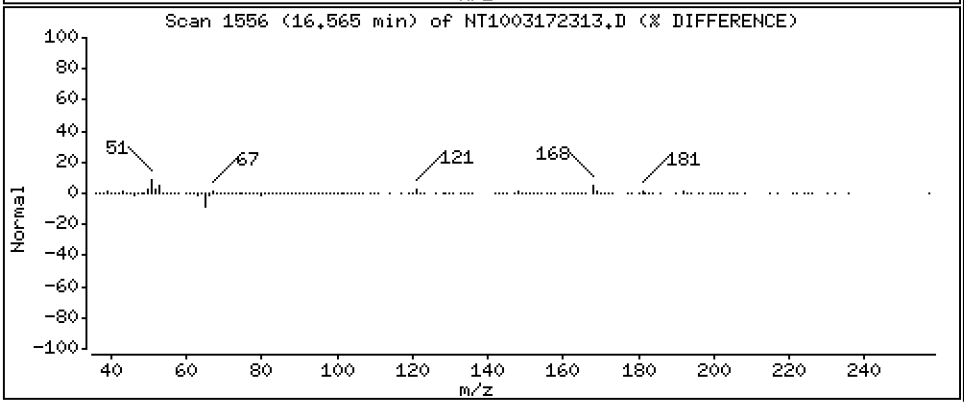












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172313.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

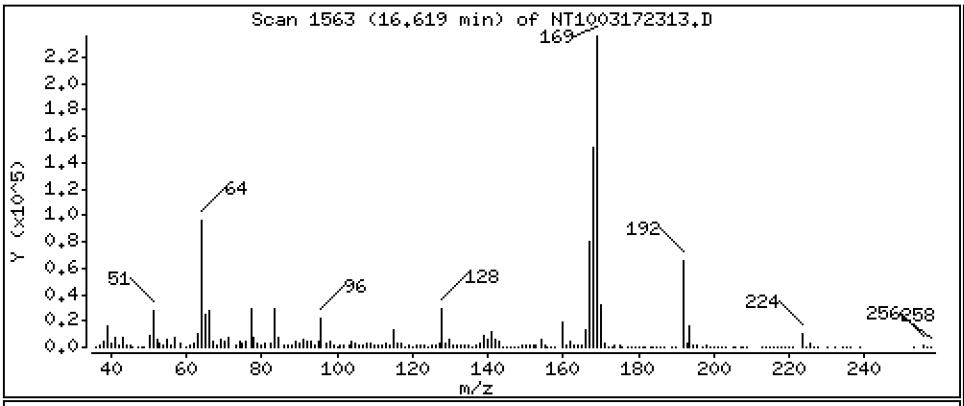
Operator: VTS

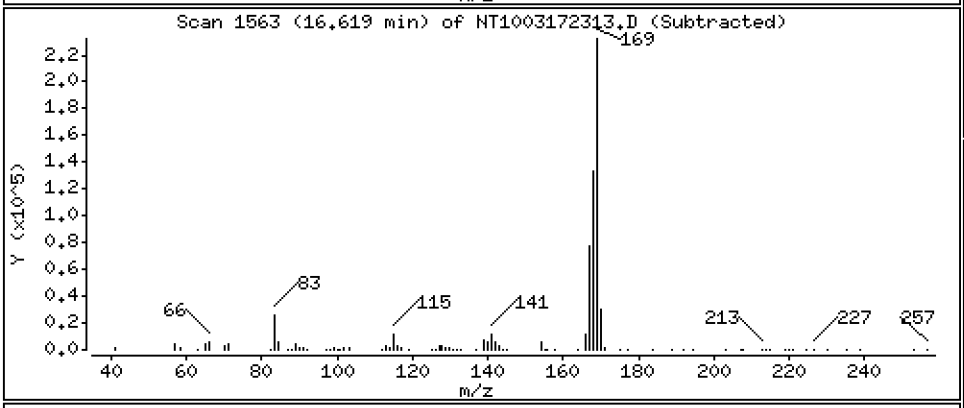
Column phase: ZB-5msi

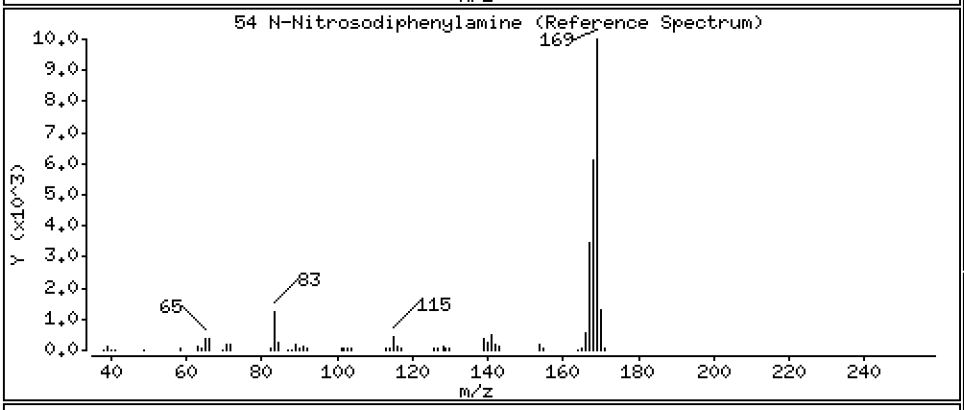
Column diameter: 0.25

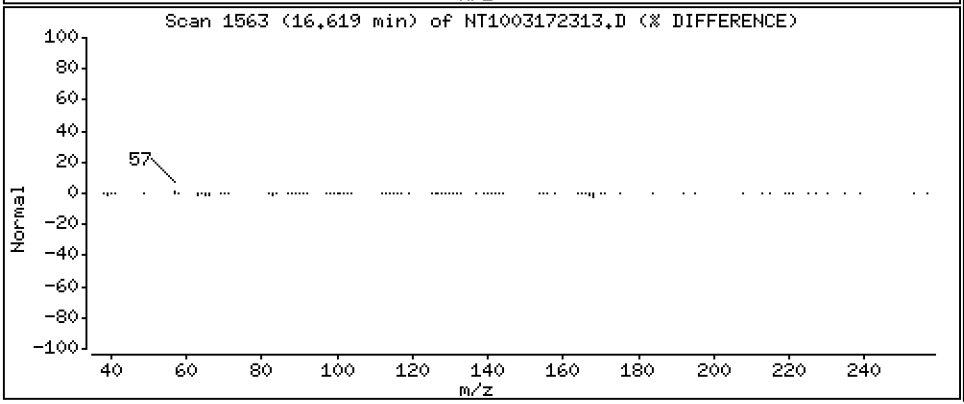
54 N-Nitrosodiphenylamine

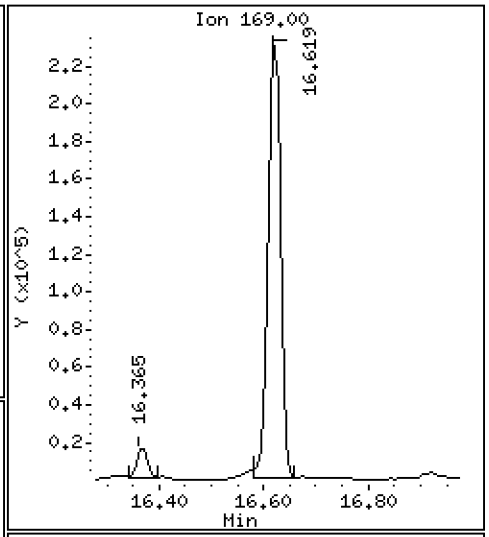
Concentration: 4.202 ug/mL

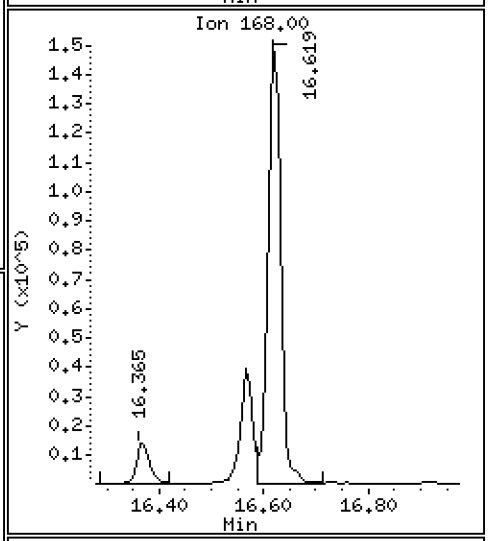


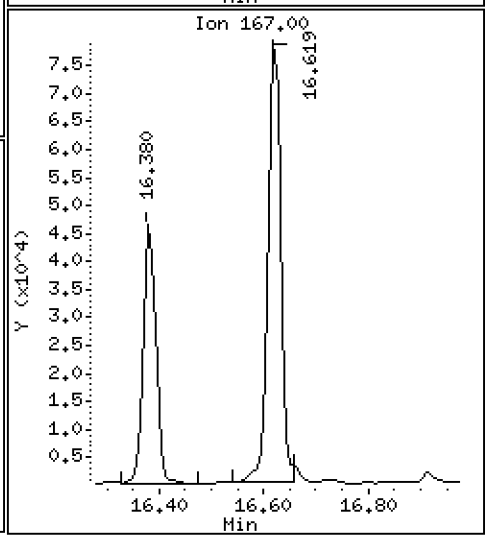












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

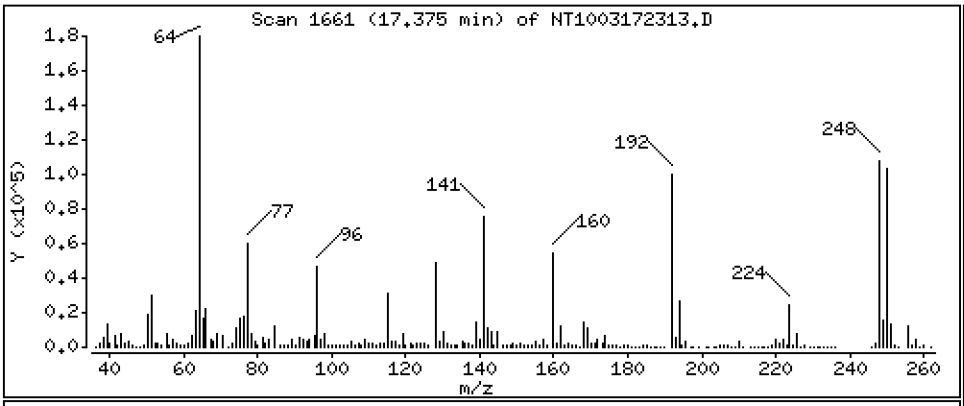
Operator: VTS

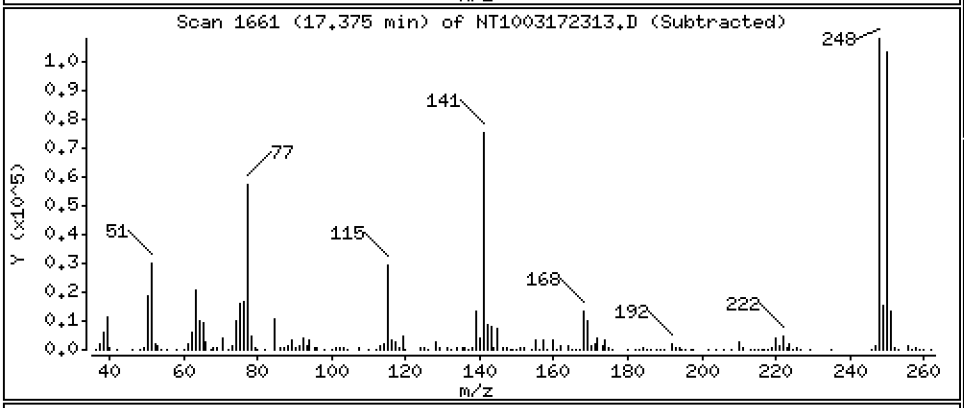
Column phase: ZB-5msi

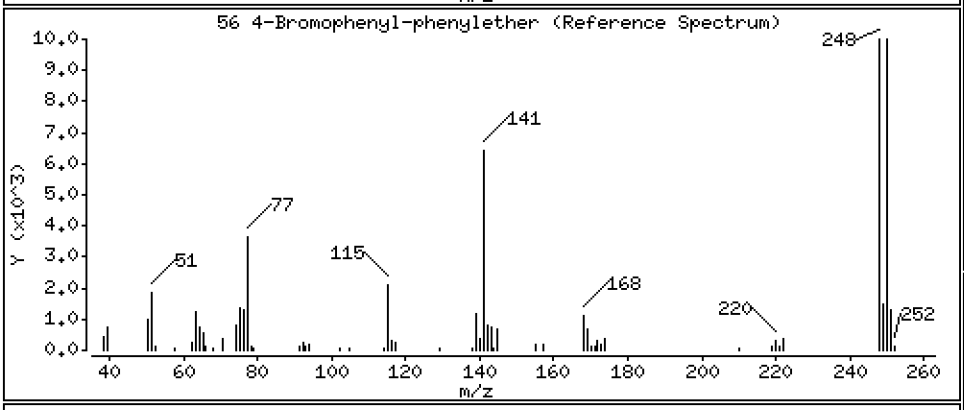
Column diameter: 0.25

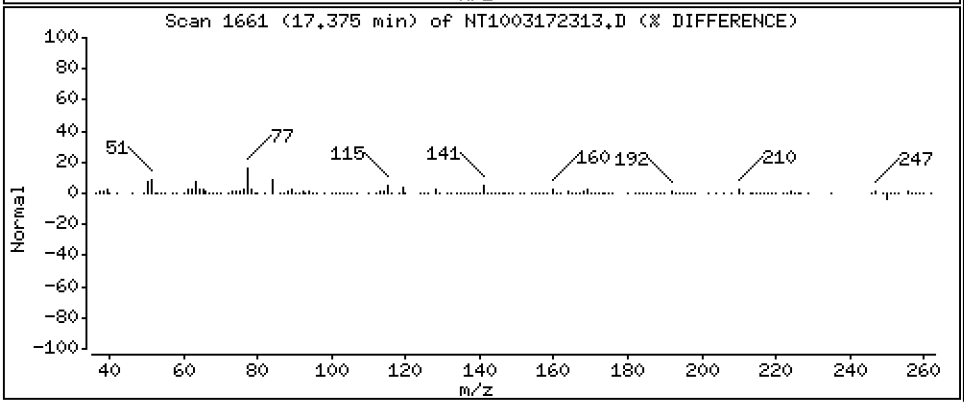
56 4-Bromophenyl-phenylether

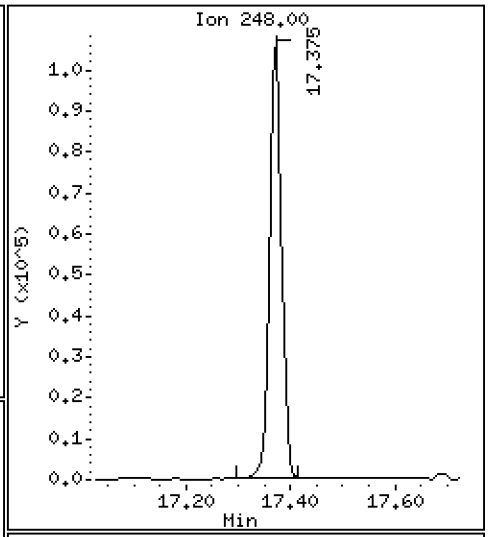
Concentration: 4.698 ug/mL

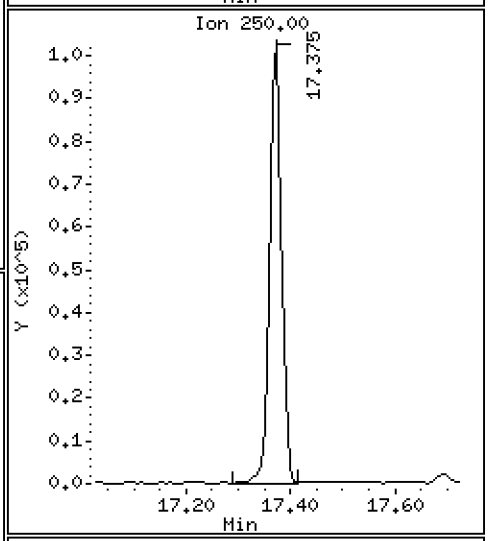


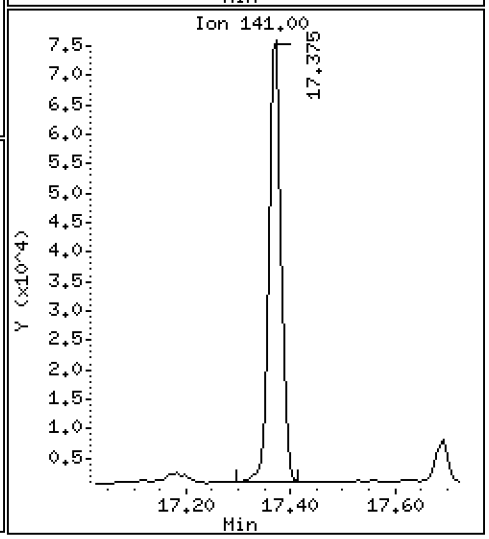












Date : 18-MAR-2023 02:03

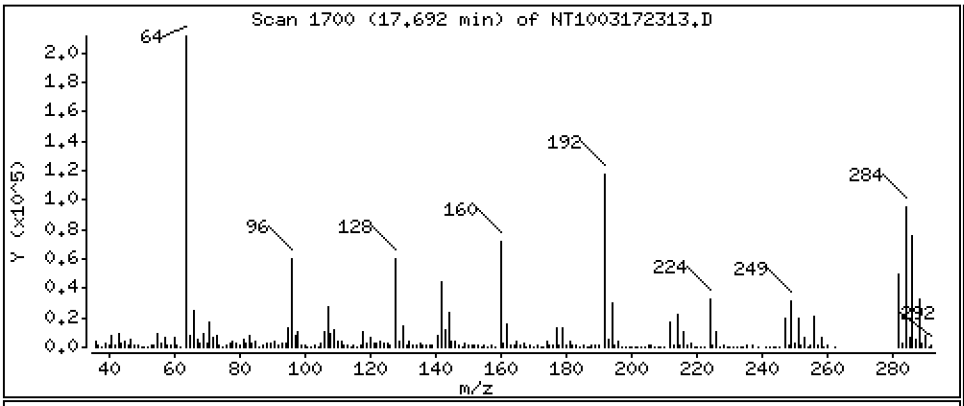
Client ID: Instrument: nt10.i

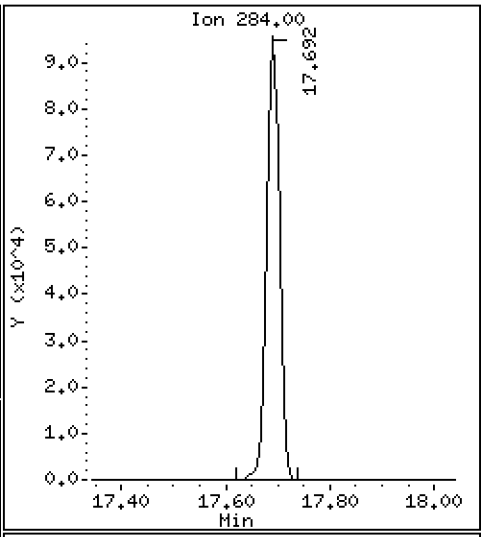
Sample Info: BLB0495-MS1

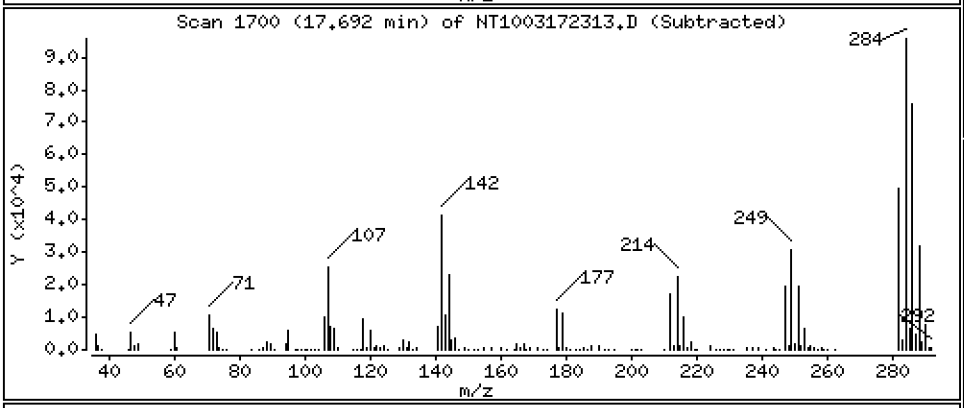
Operator: VTS

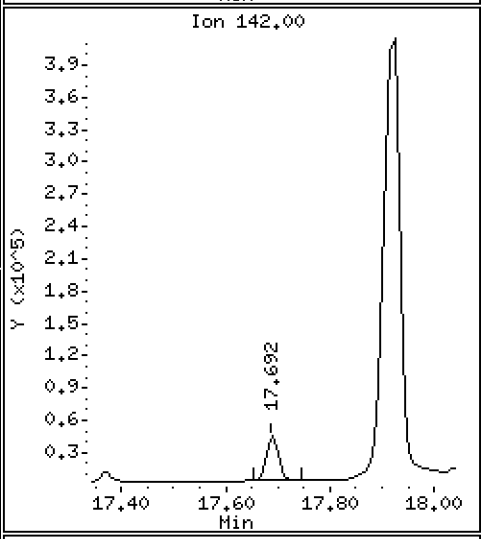
Column phase: ZB-5msi Column diameter: 0.25

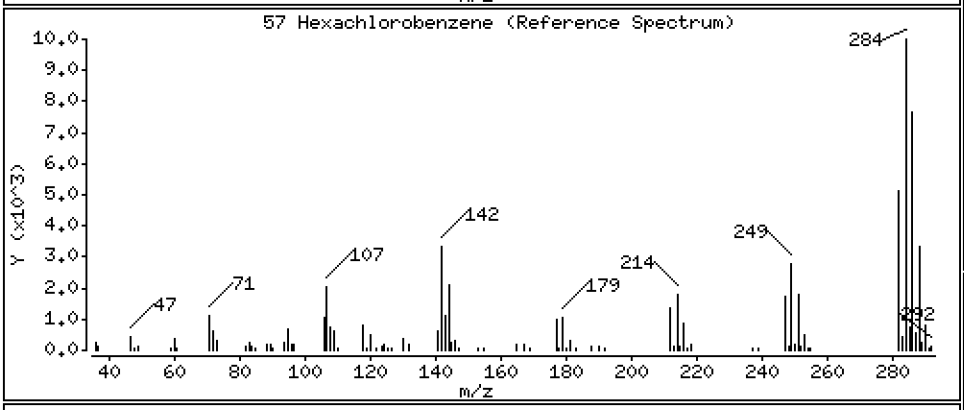
57 Hexachlorobenzene Concentration: 4.109 ug/mL

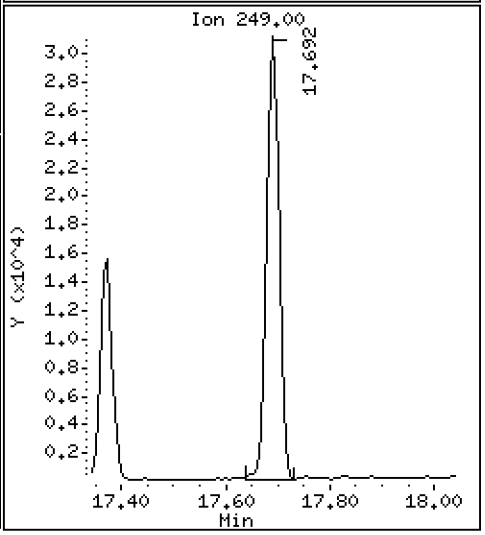


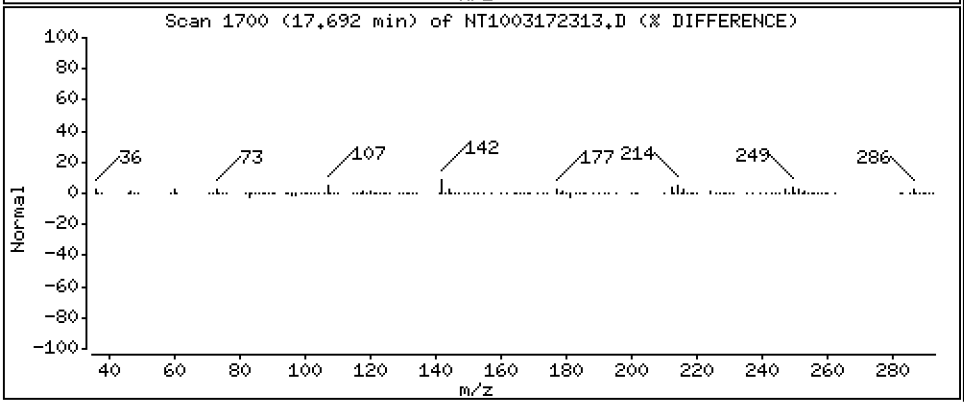












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

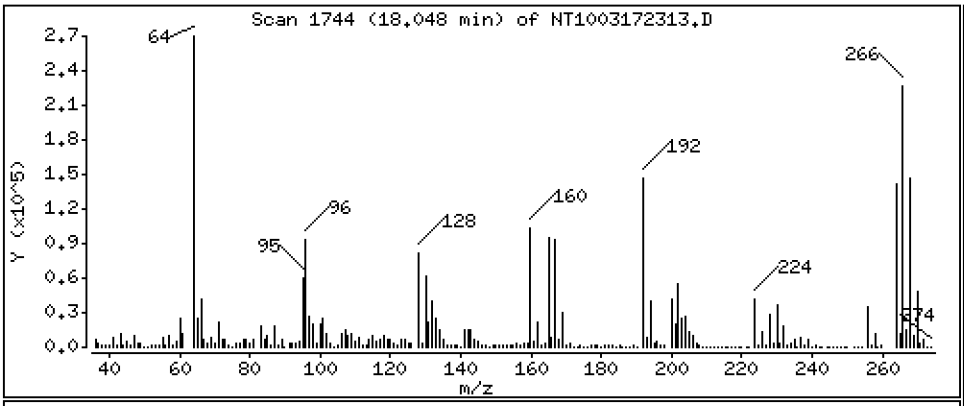
Operator: VTS

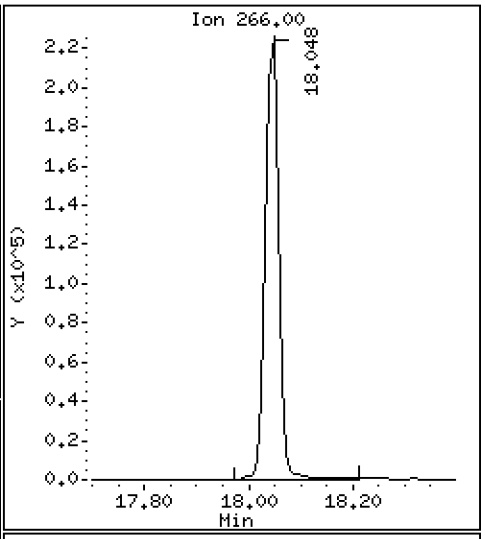
Column phase: ZB-5msi

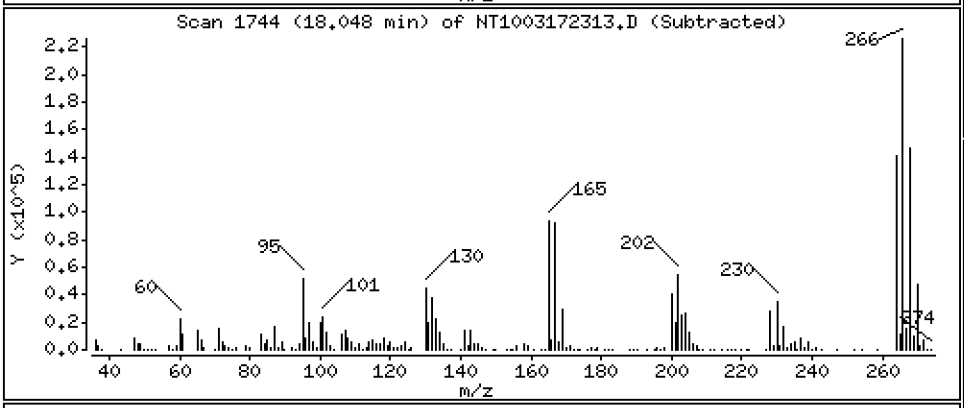
Column diameter: 0.25

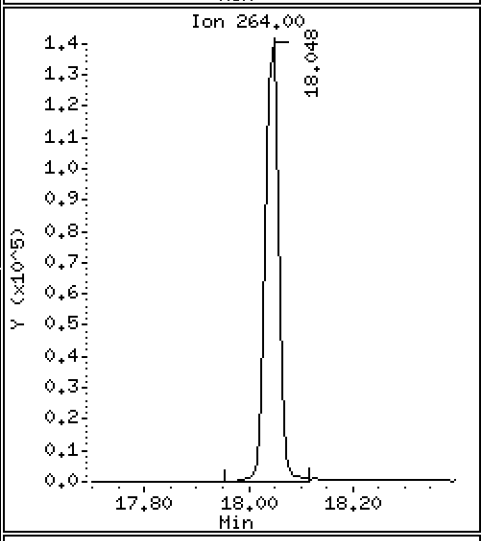
58 Pentachlorophenol

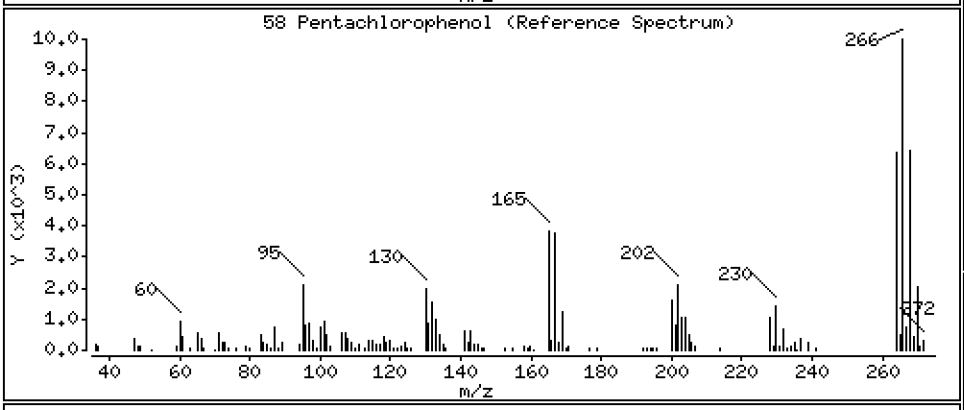
Concentration: 16.87 ug/mL

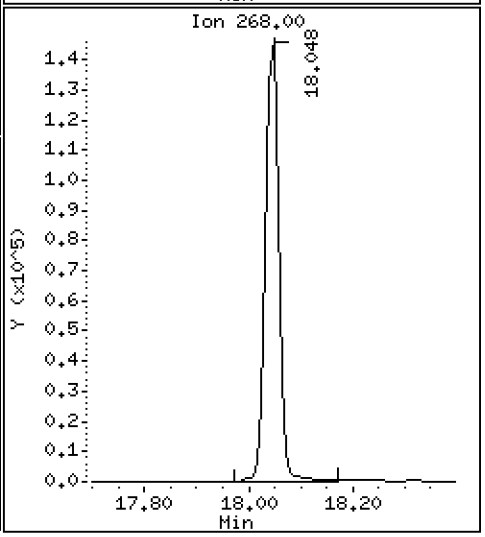


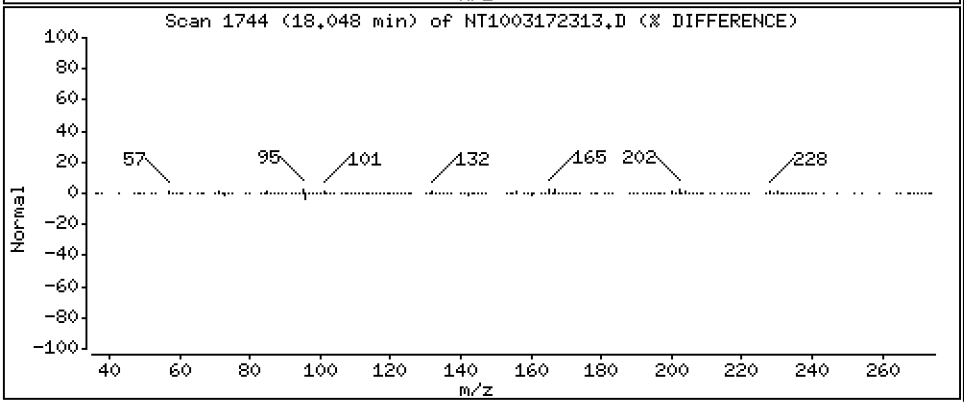












Date : 18-MAR-2023 02:03

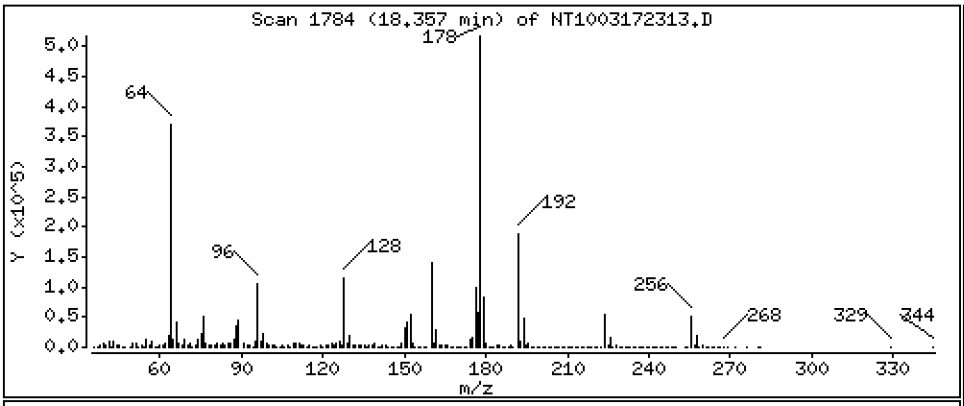
Client ID: Instrument: nt10.i

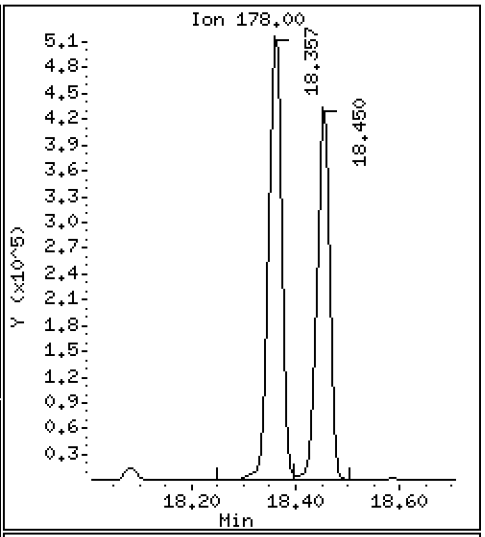
Sample Info: BLB0495-MS1

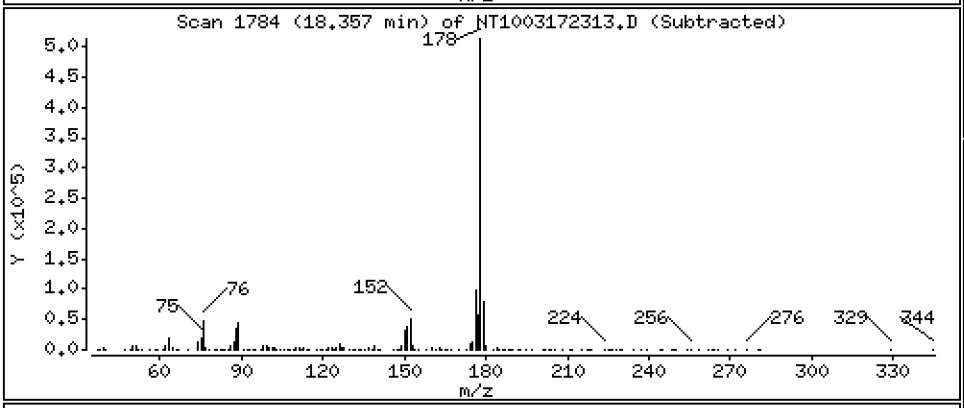
Operator: VTS

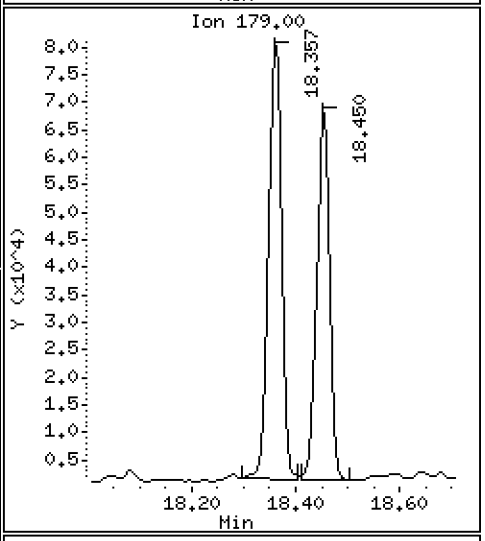
Column phase: ZB-5msi Column diameter: 0.25

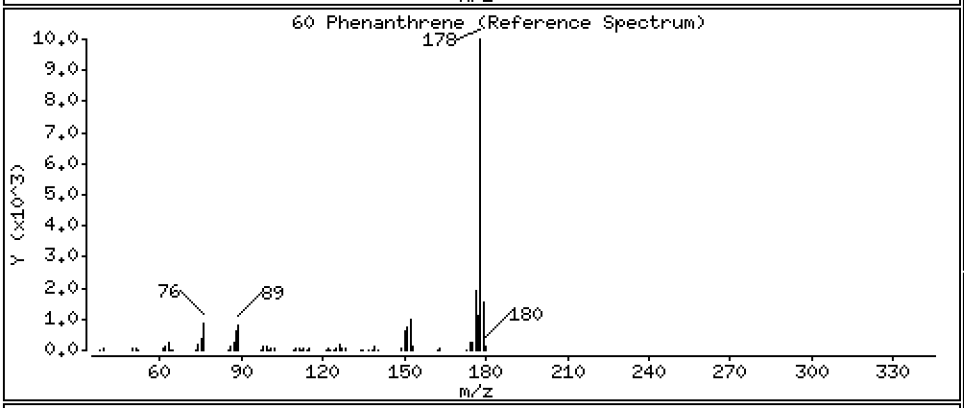
60 Phenanthrene Concentration: 4.950 ug/mL

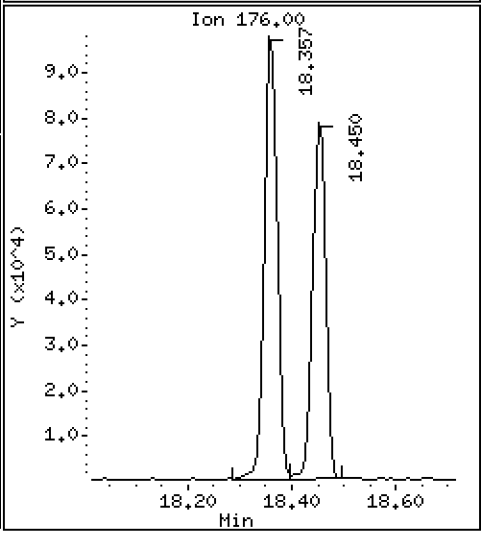


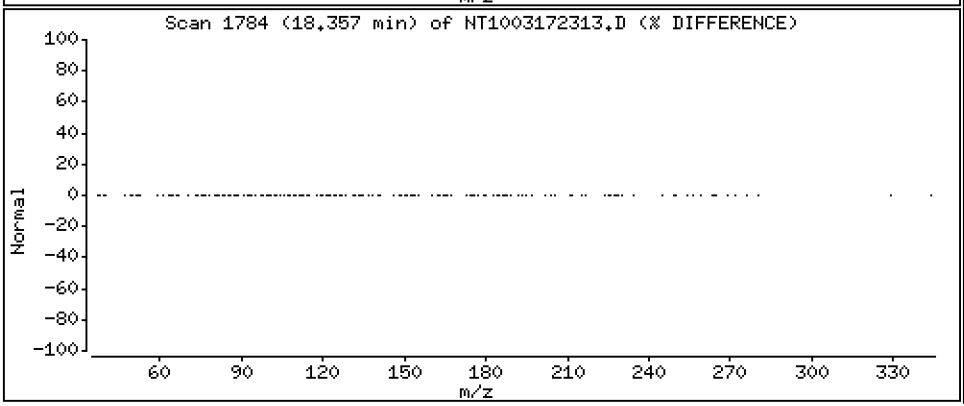












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

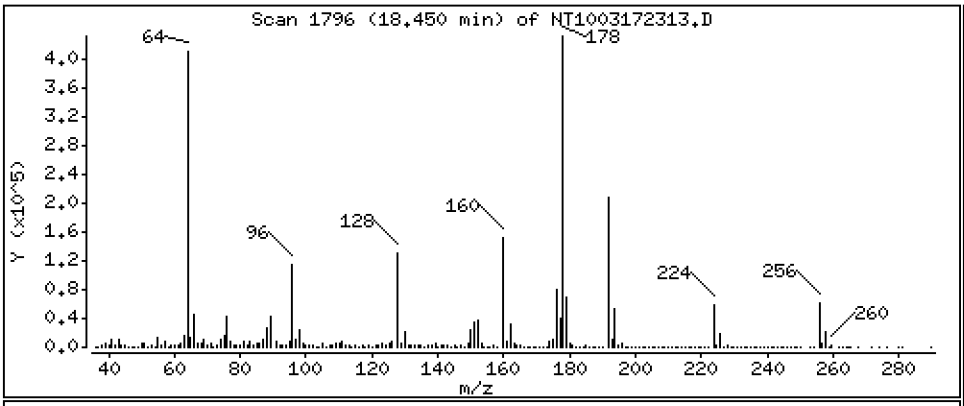
Operator: VTS

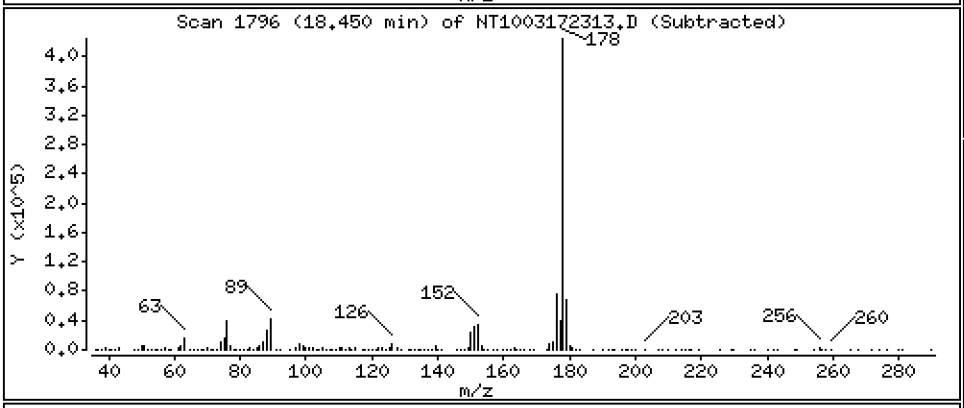
Column phase: ZB-5msi

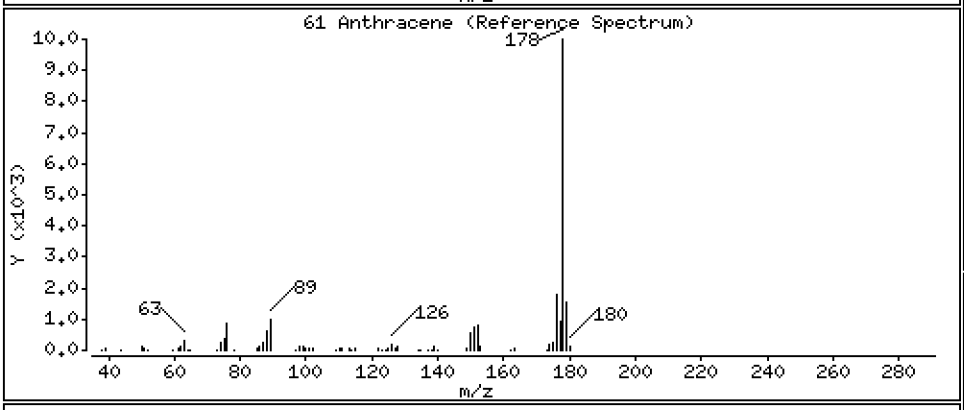
Column diameter: 0.25

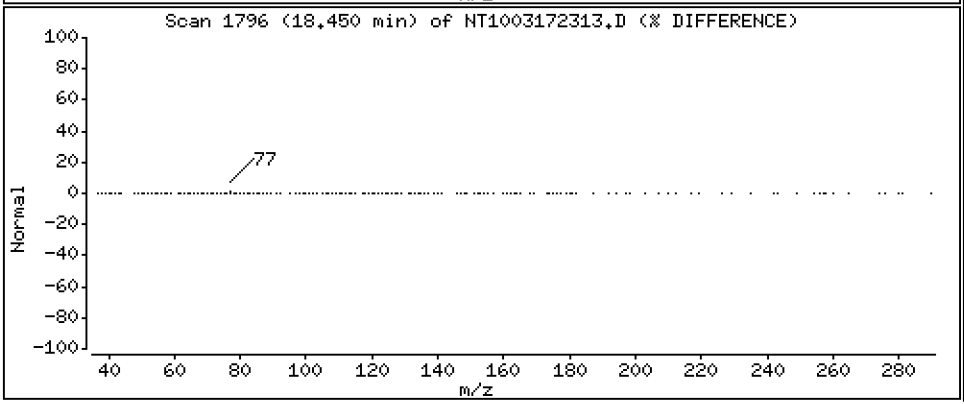
61 Anthracene

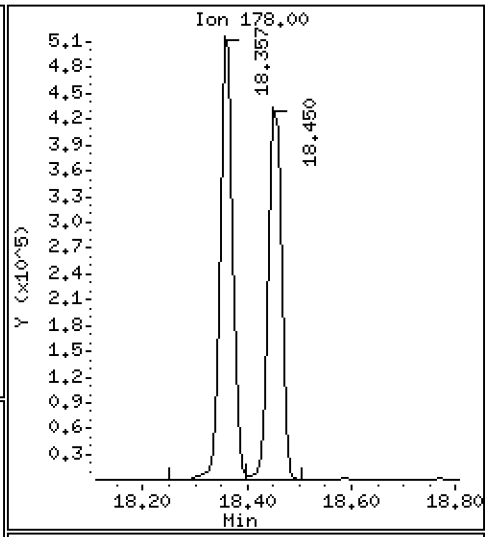
Concentration: 4.343 ug/mL

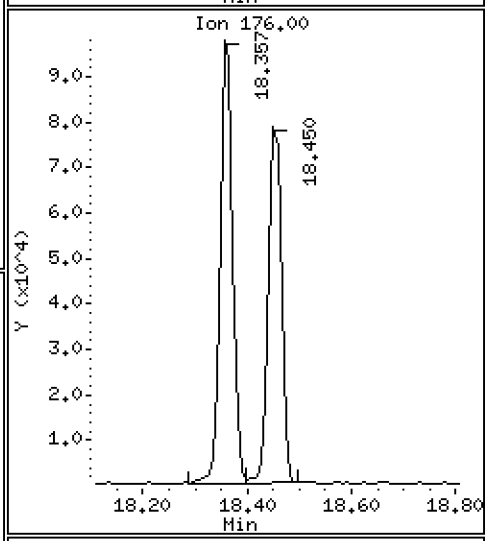


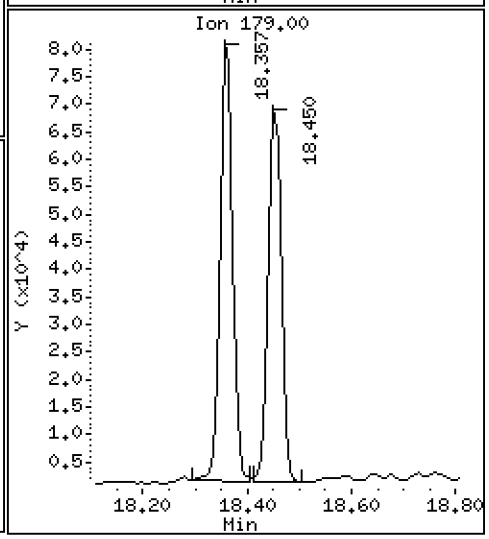












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

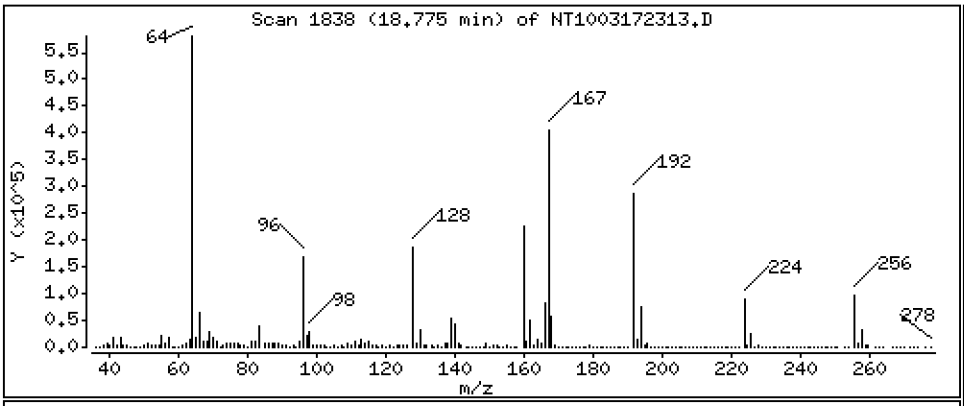
Operator: VTS

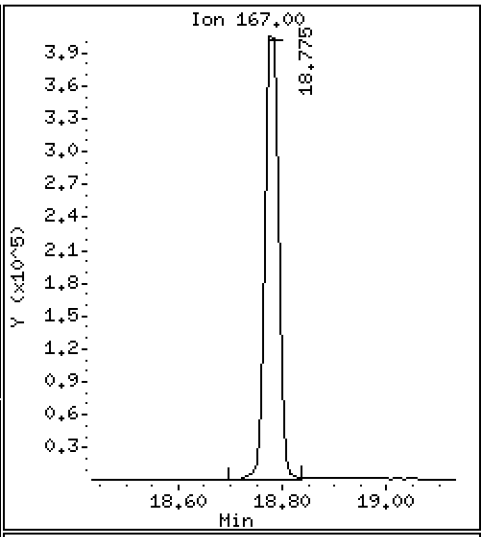
Column phase: ZB-5msi

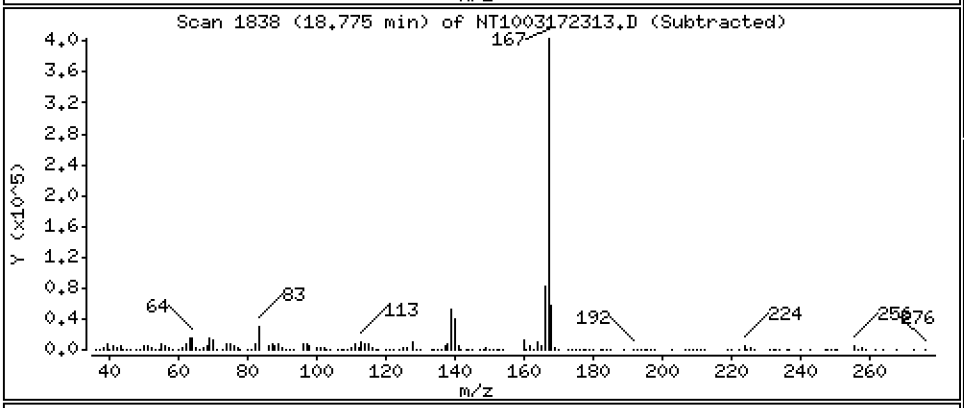
Column diameter: 0.25

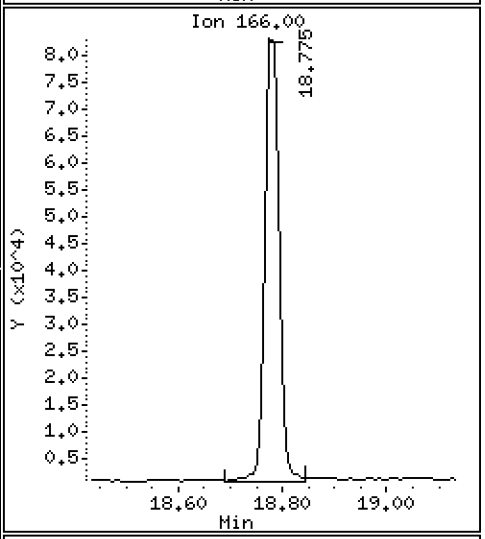
62 Carbazole

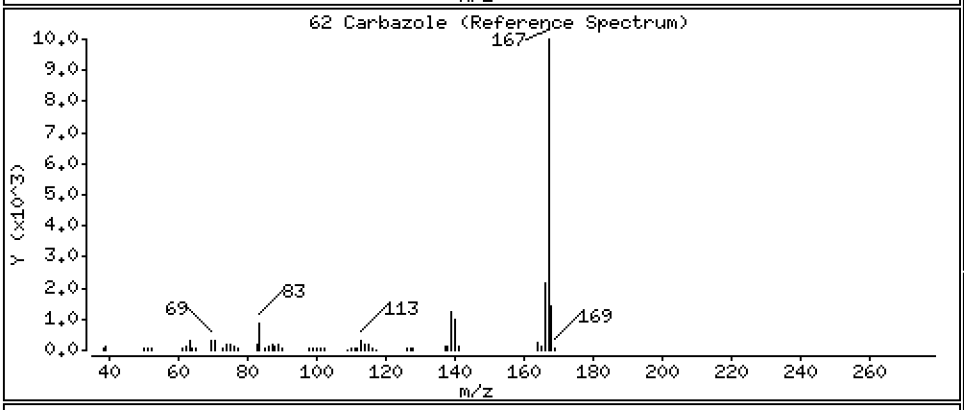
Concentration: 4.651 ug/mL

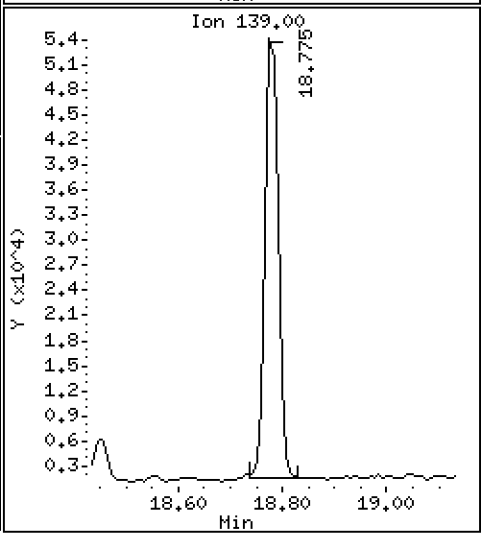


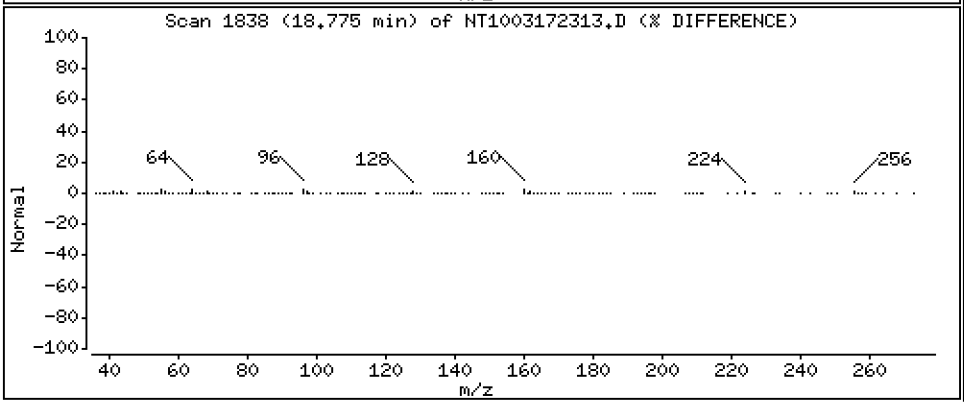












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172313.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

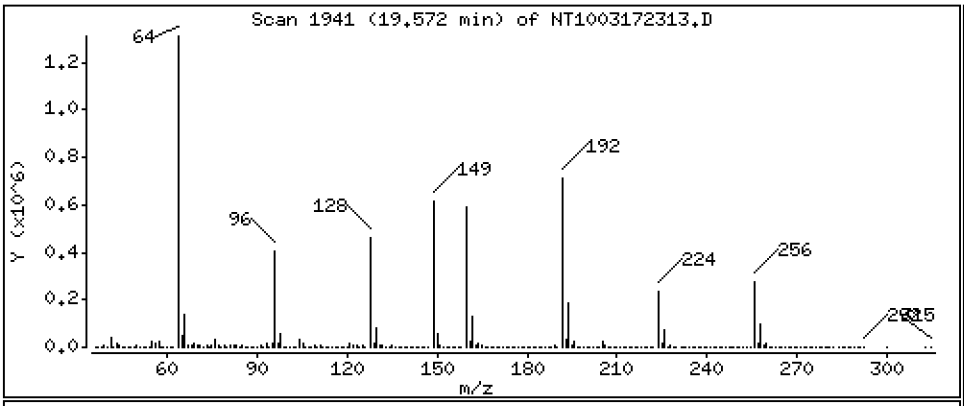
Operator: VTS

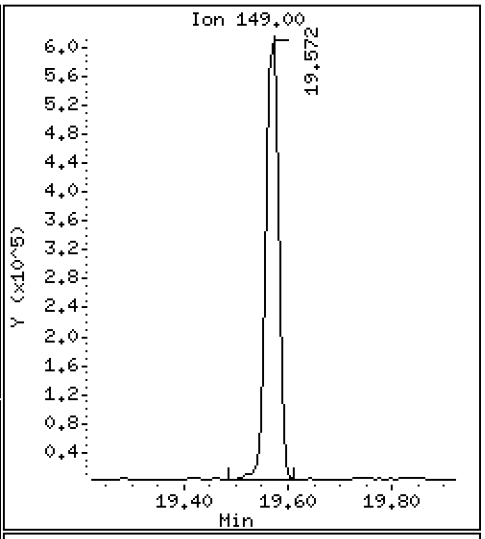
Column phase: ZB-5msi

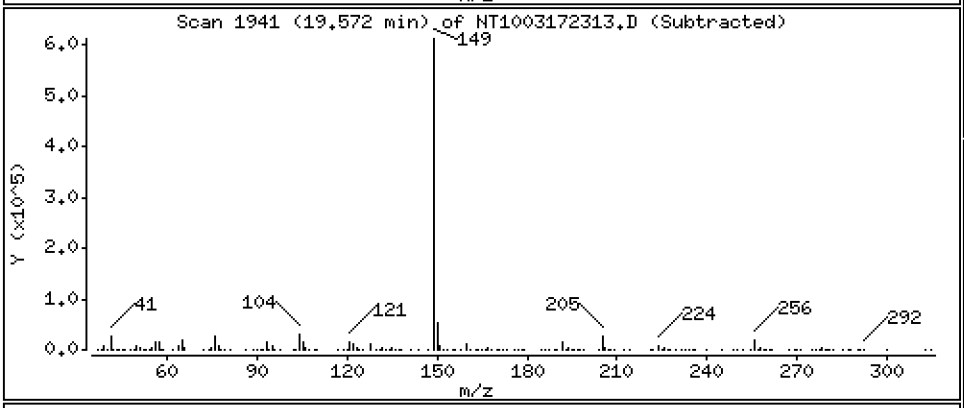
Column diameter: 0.25

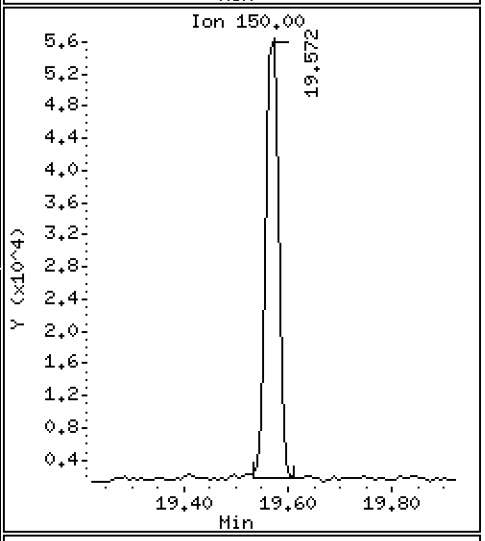
63 Di-n-butylphthalate

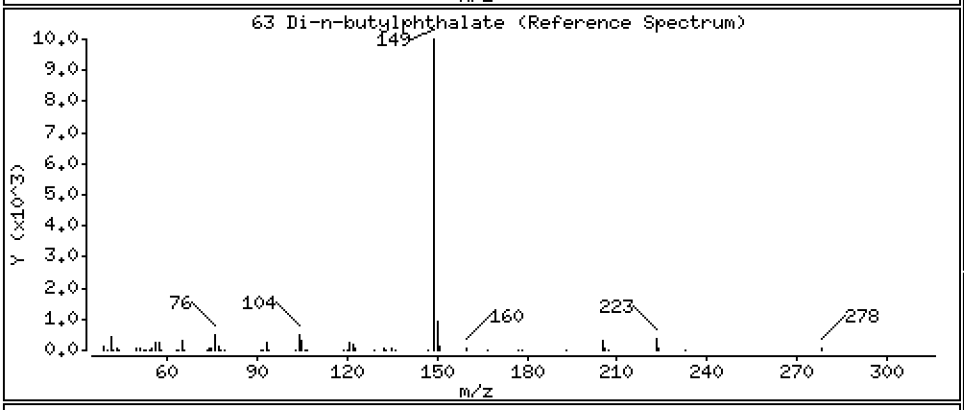
Concentration: 4.910 ug/mL

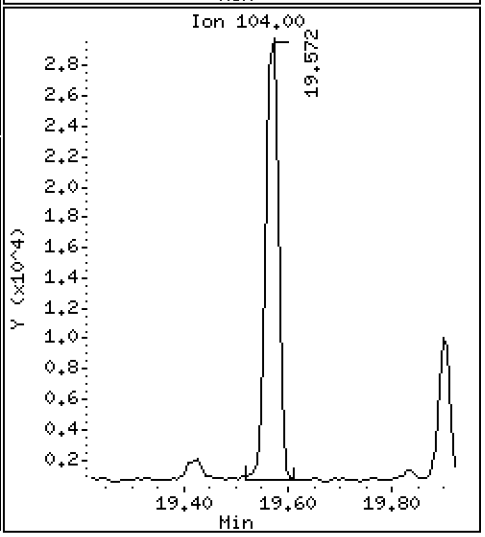


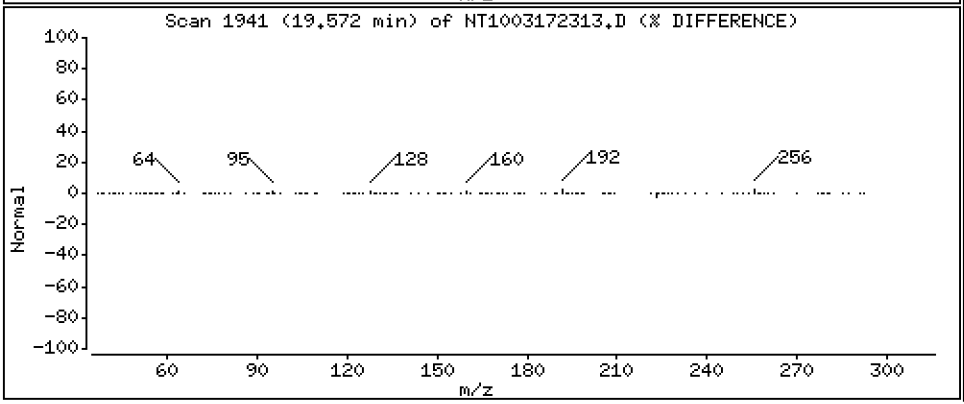












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

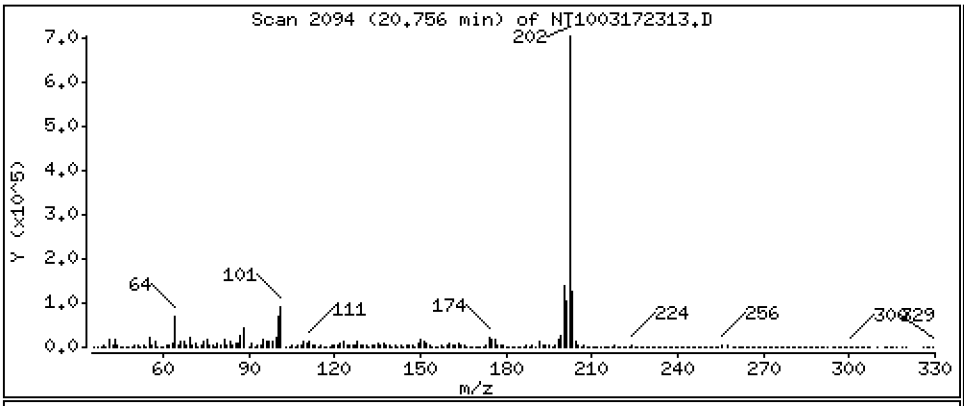
Operator: VTS

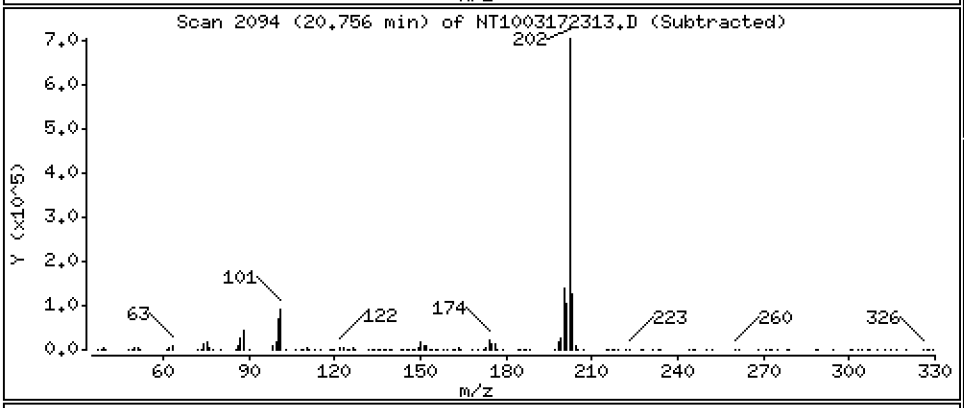
Column phase: ZB-5msi

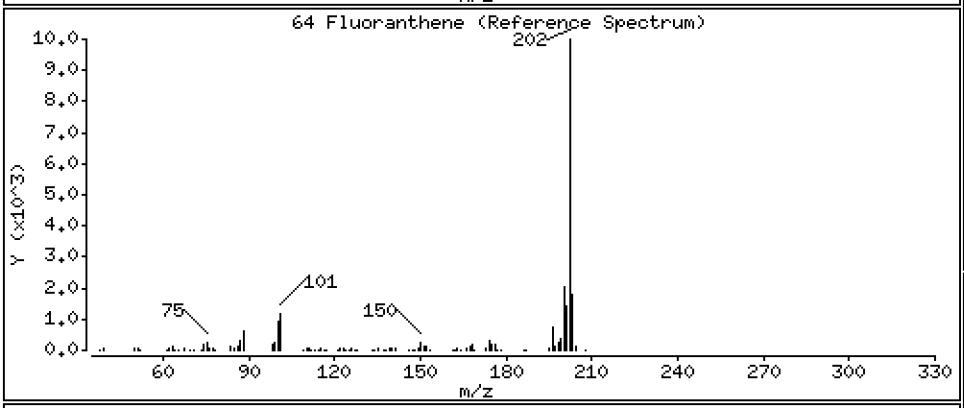
Column diameter: 0.25

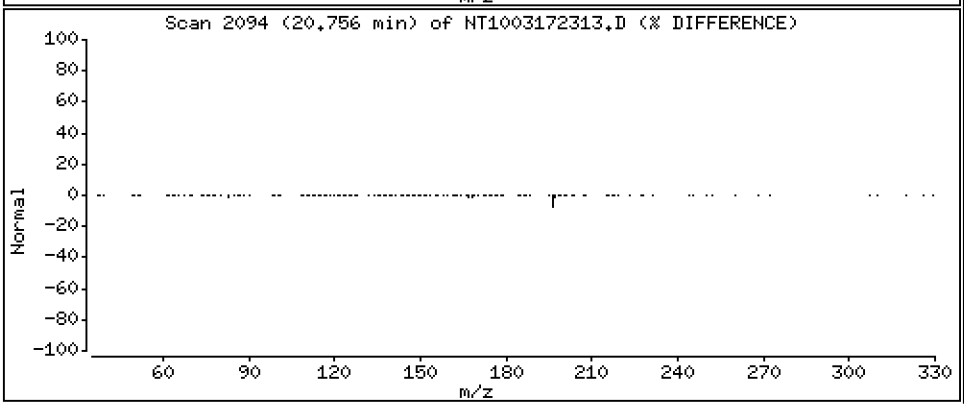
64 Fluoranthene

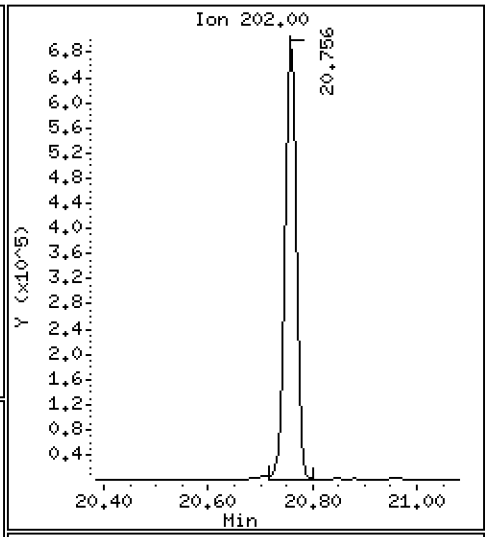
Concentration: 5.631 ug/mL

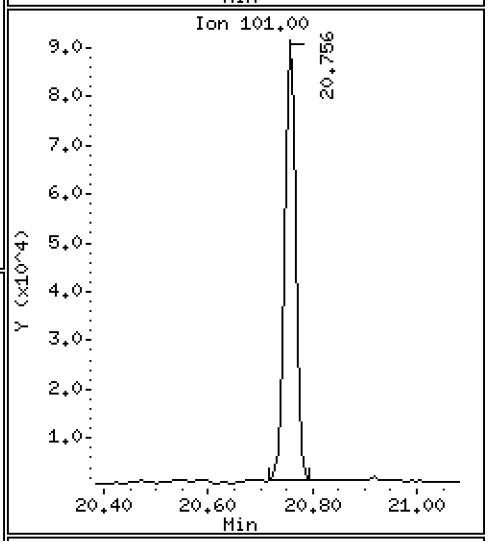


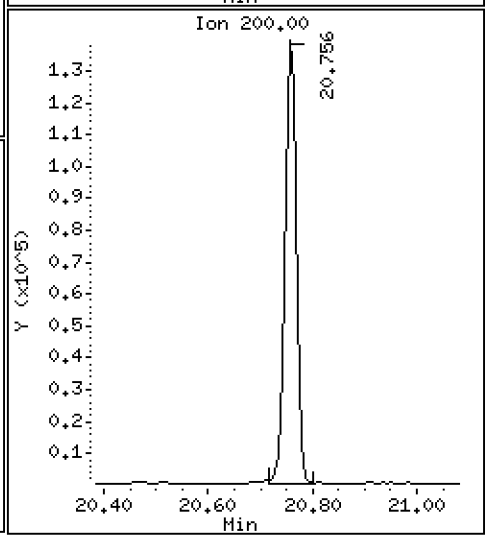












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

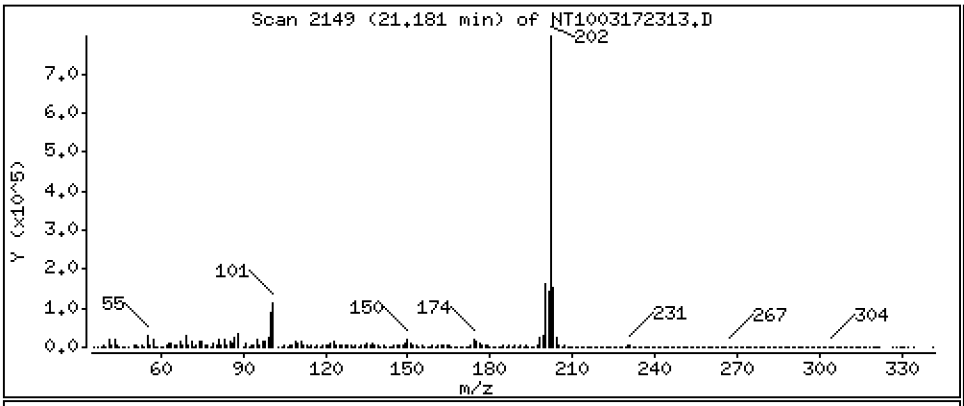
Operator: VTS

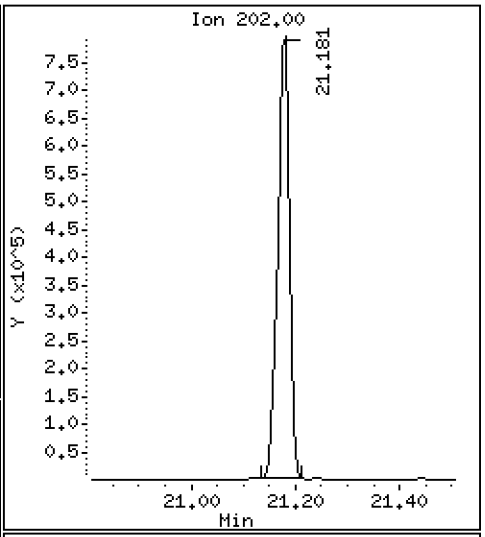
Column phase: ZB-5msi

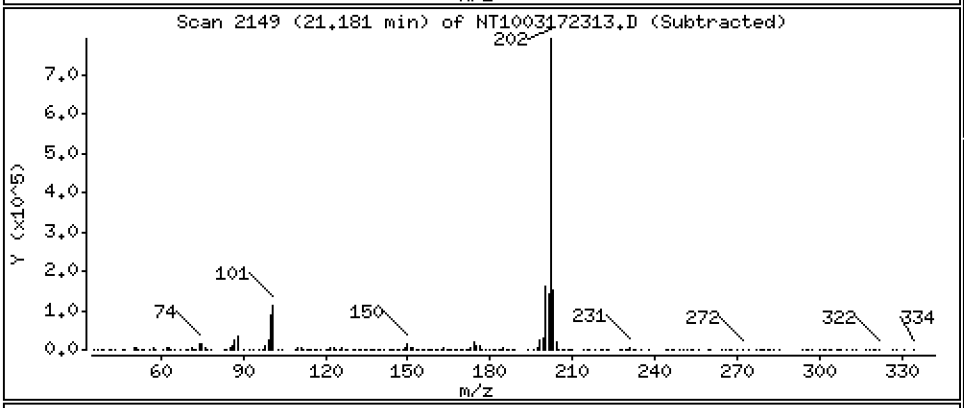
Column diameter: 0.25

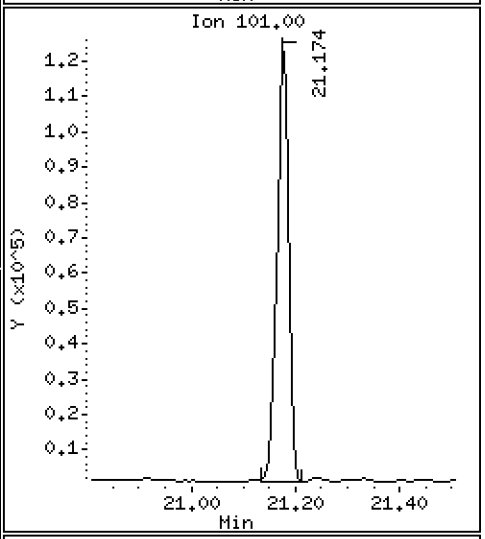
65 Pyrene

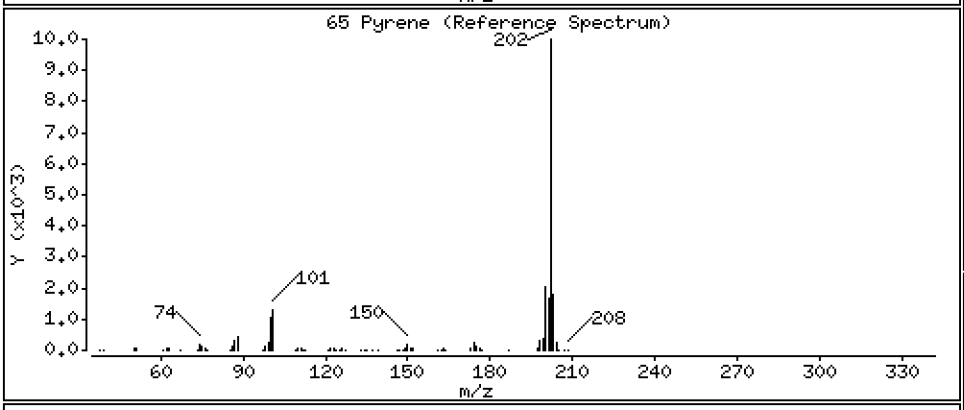
Concentration: 6.210 ug/mL

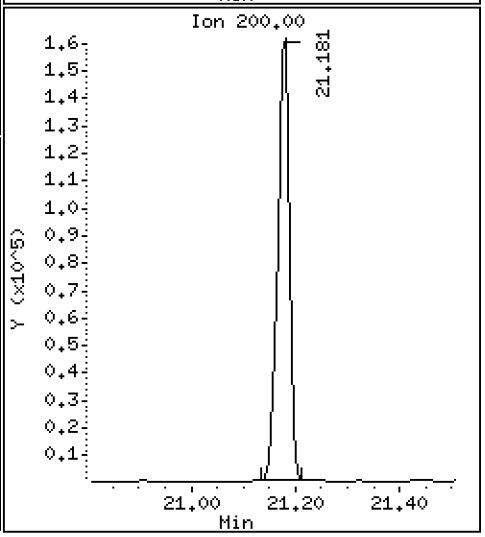


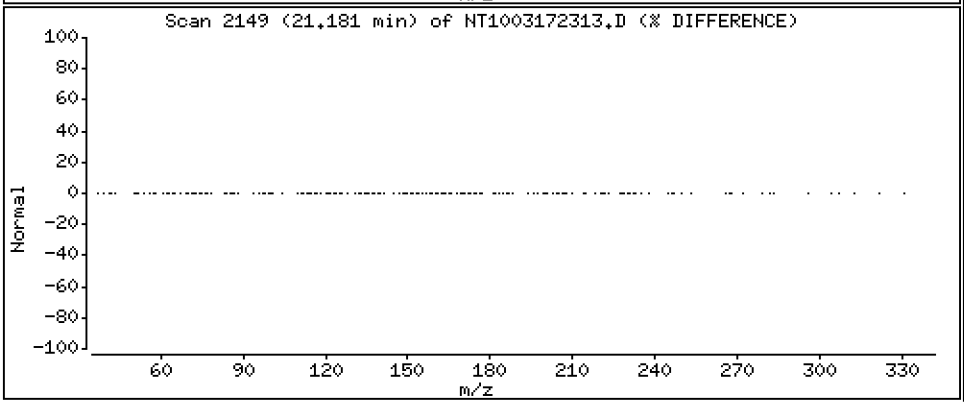












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

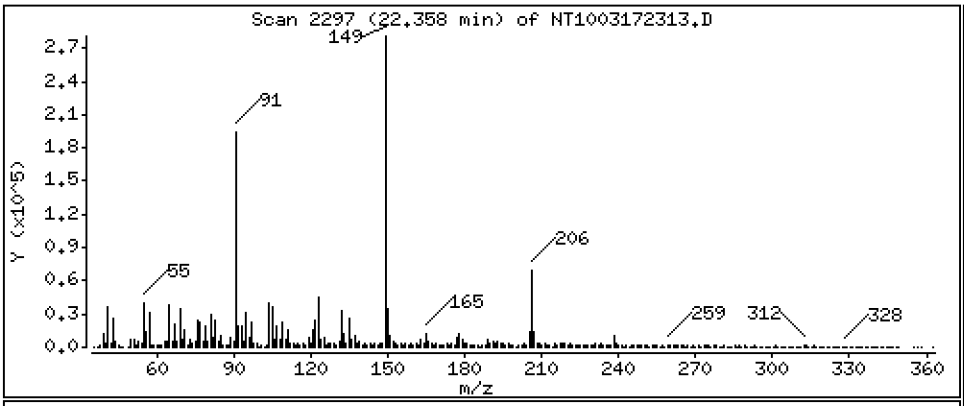
Operator: VTS

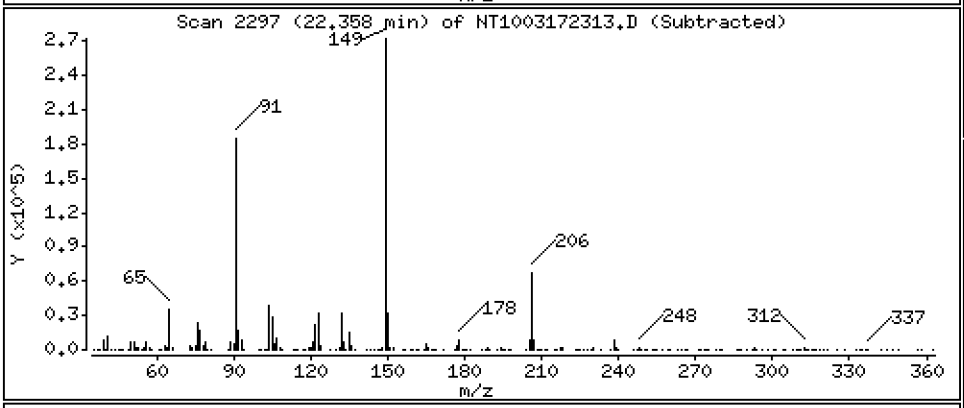
Column phase: ZB-5msi

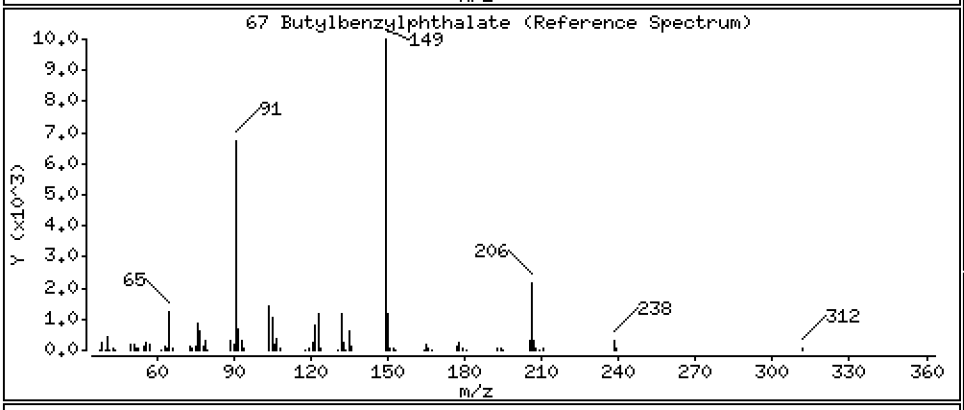
Column diameter: 0.25

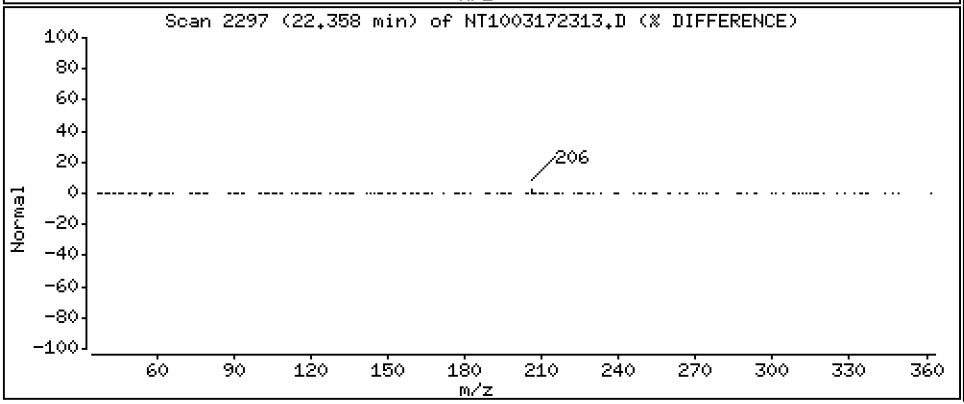
67 Butylbenzylphthalate

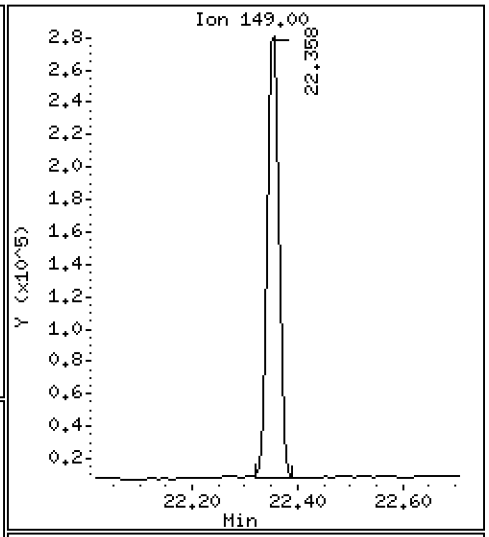
Concentration: 5.548 ug/mL

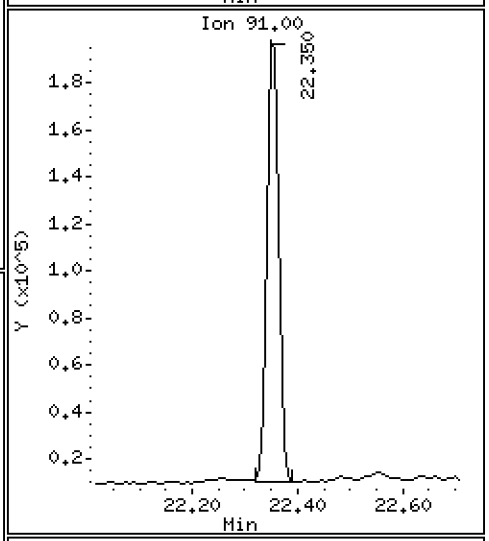


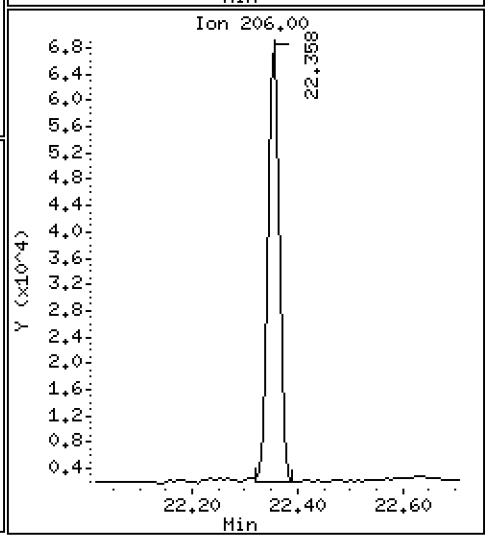












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

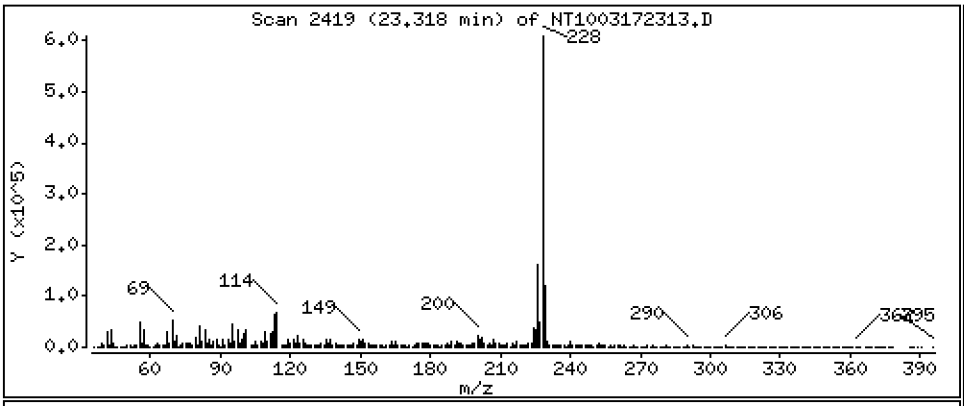
Operator: VTS

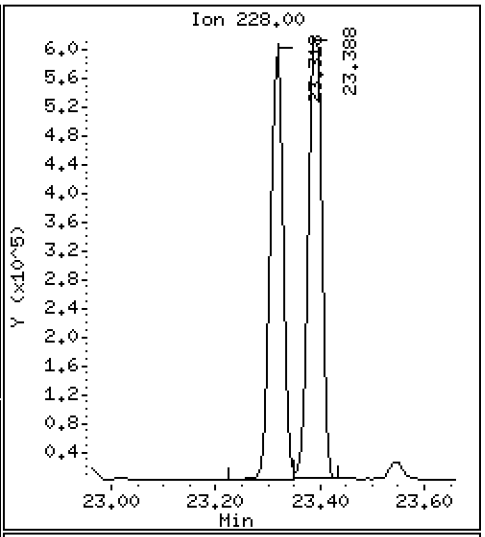
Column phase: ZB-5msi

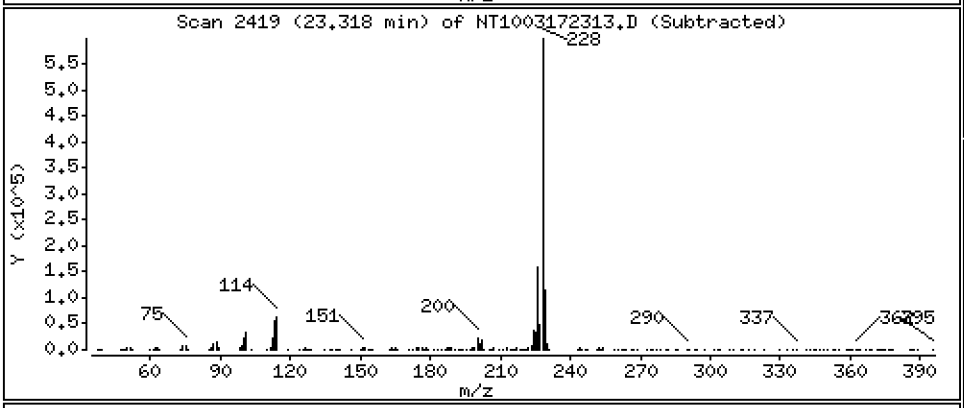
Column diameter: 0.25

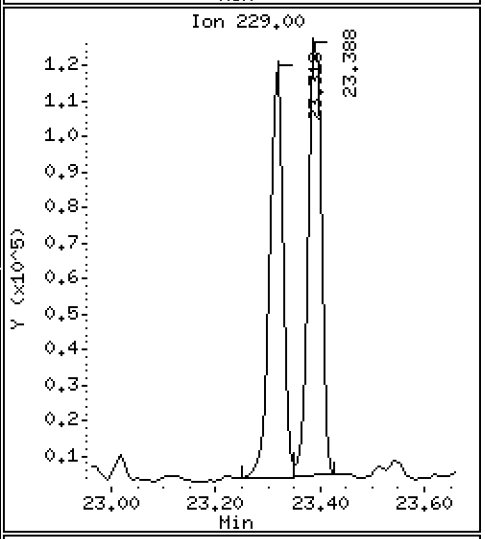
68 Benzo(a)anthracene

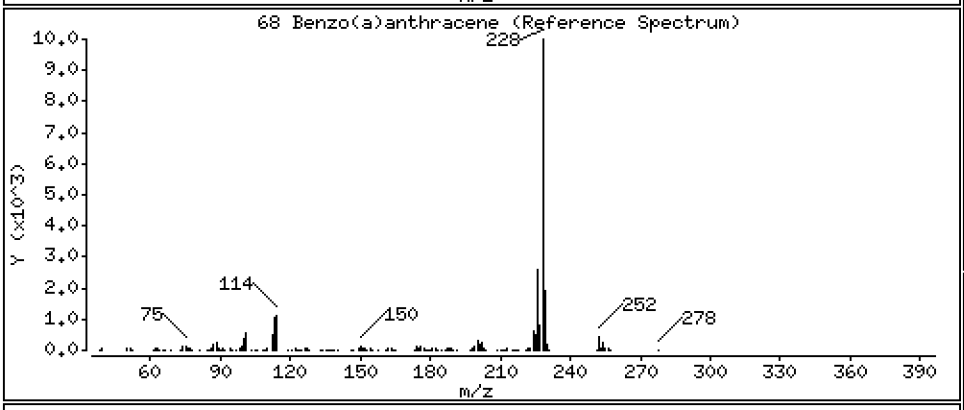
Concentration: 5.773 ug/mL

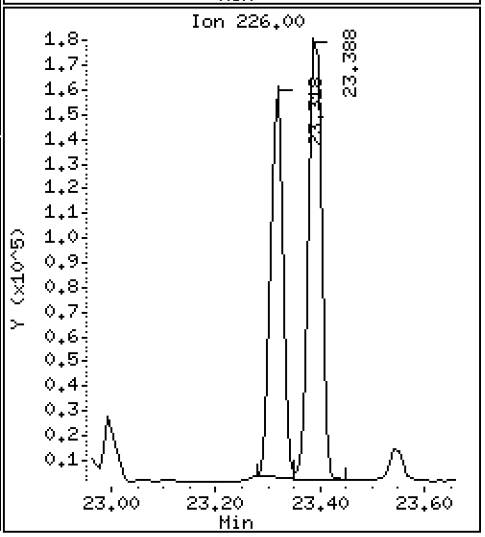


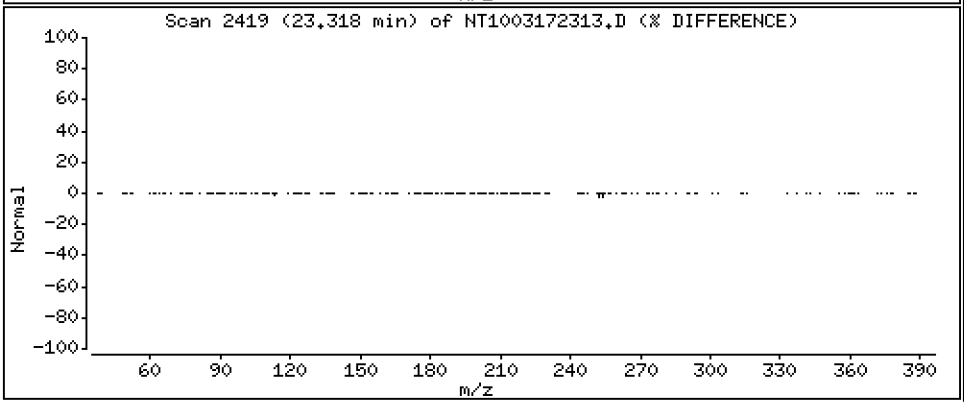












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

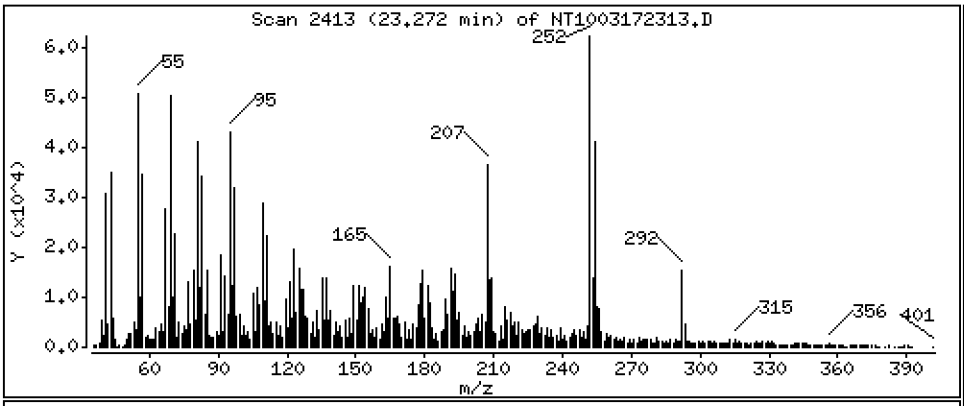
Operator: VTS

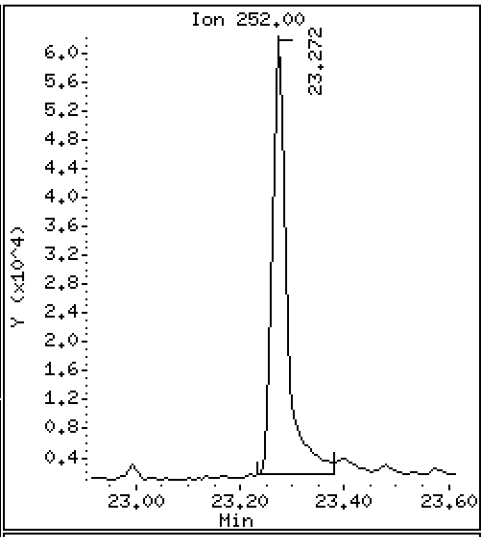
Column phase: ZB-5msi

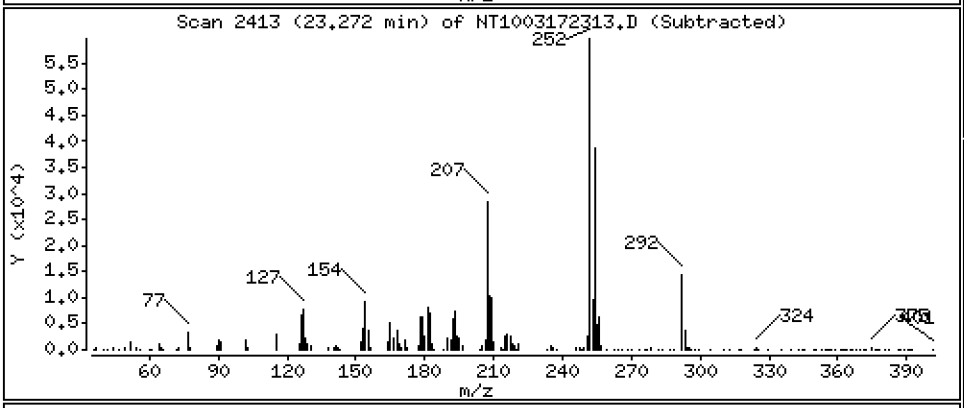
Column diameter: 0.25

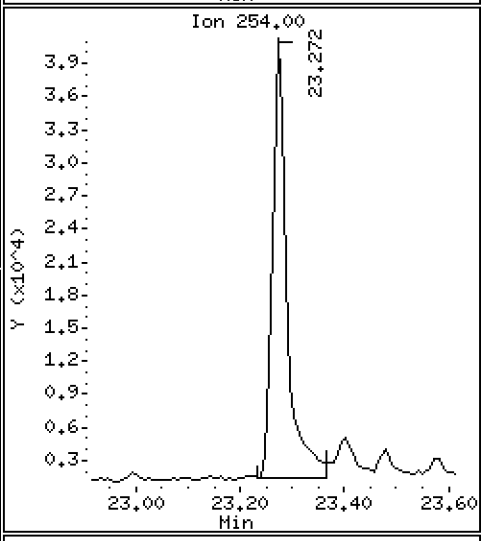
70 3,3'-Dichlorobenzidine

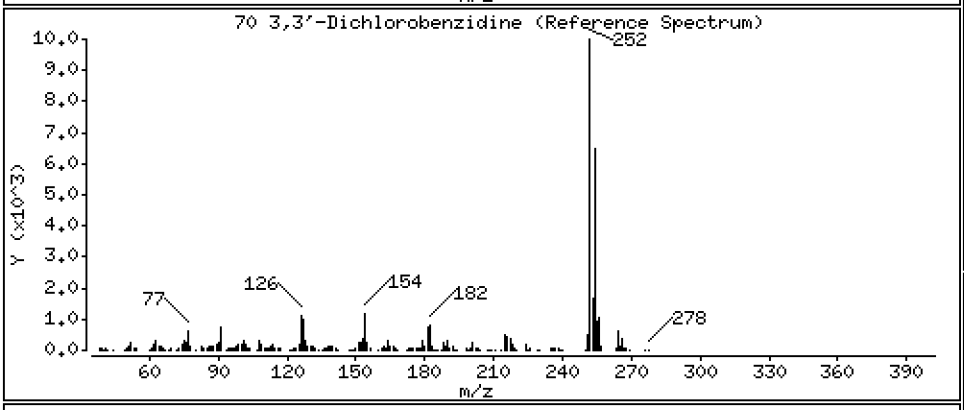
Concentration: 2.124 ug/mL

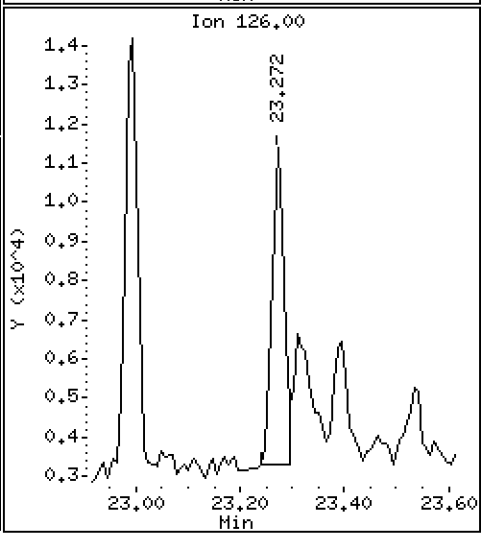


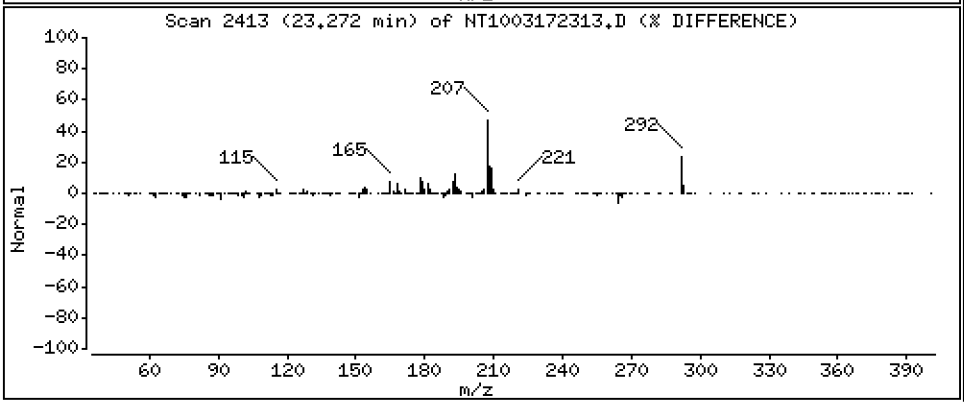












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

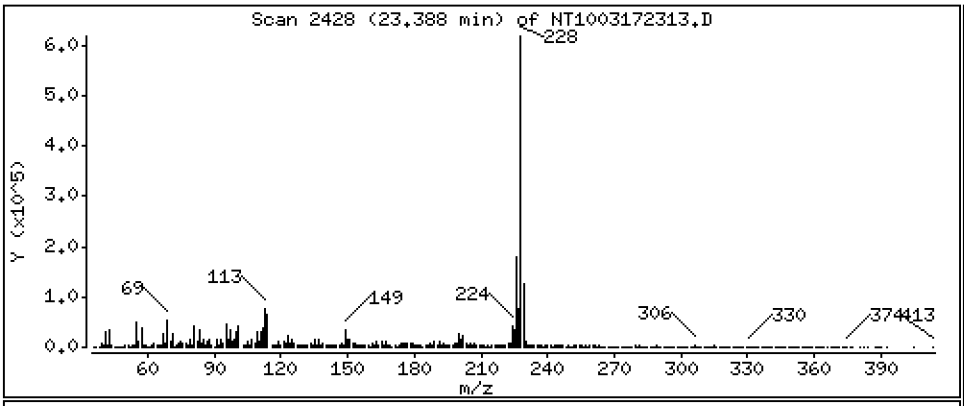
Operator: VTS

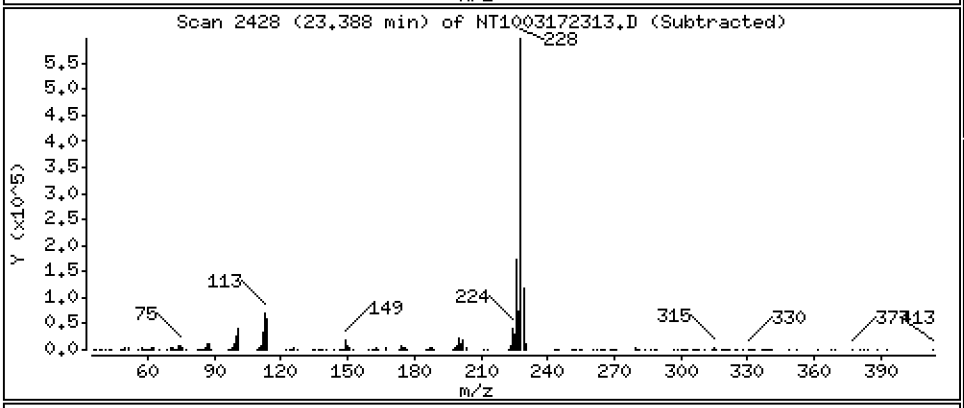
Column phase: ZB-5msi

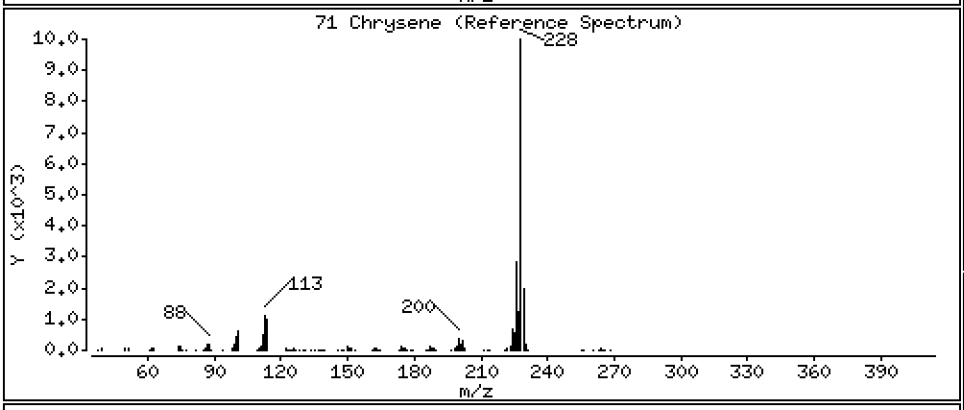
Column diameter: 0.25

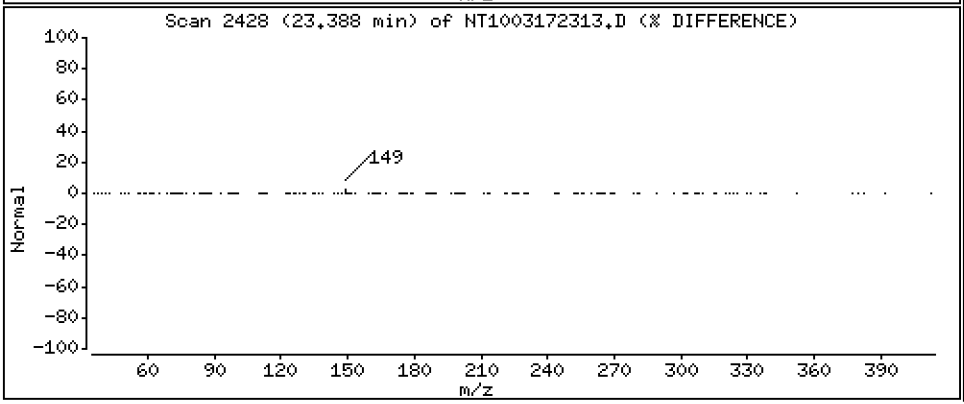
71 Chrysene

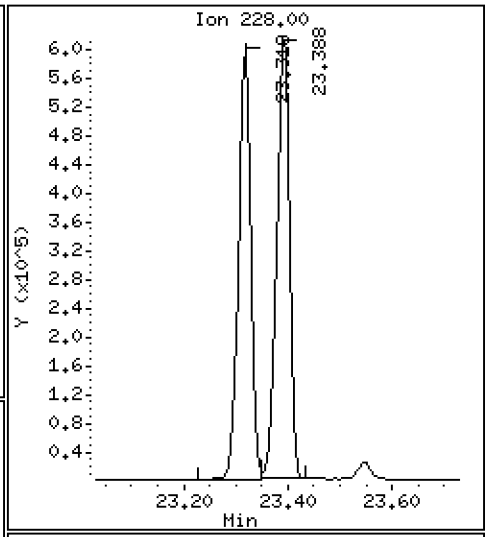
Concentration: 6.156 ug/mL

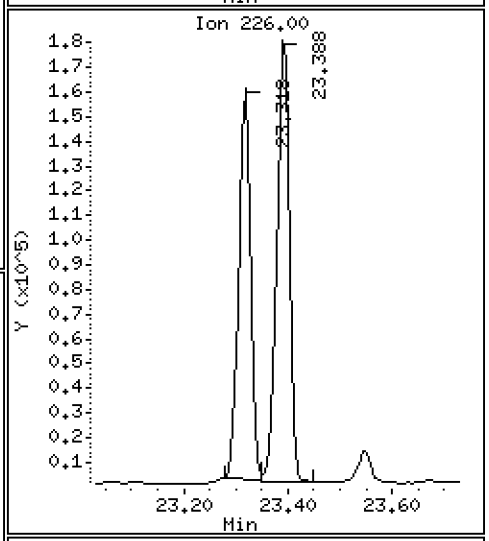


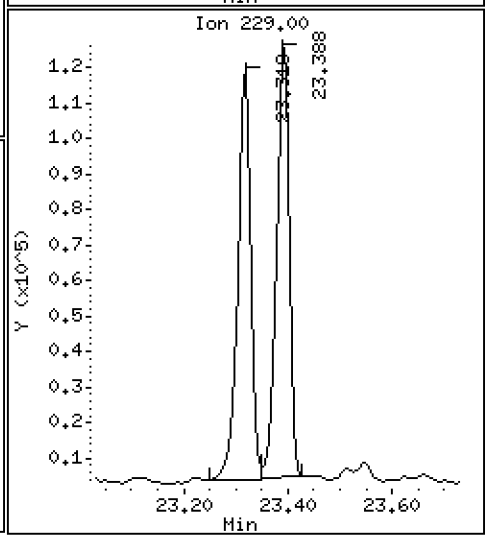












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172313.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

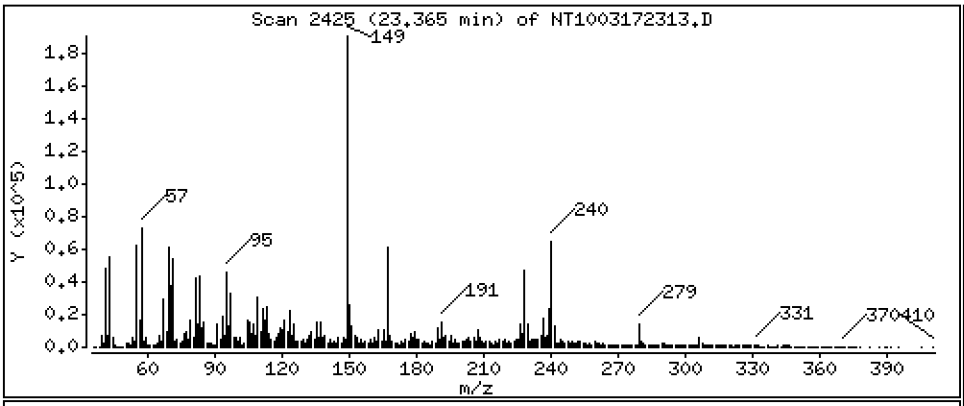
Operator: VTS

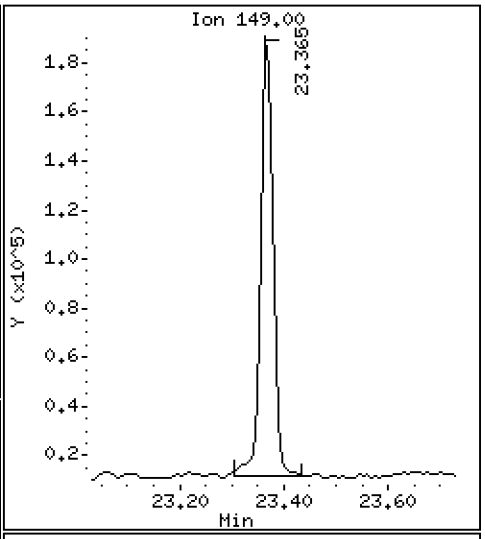
Column phase: ZB-5msi

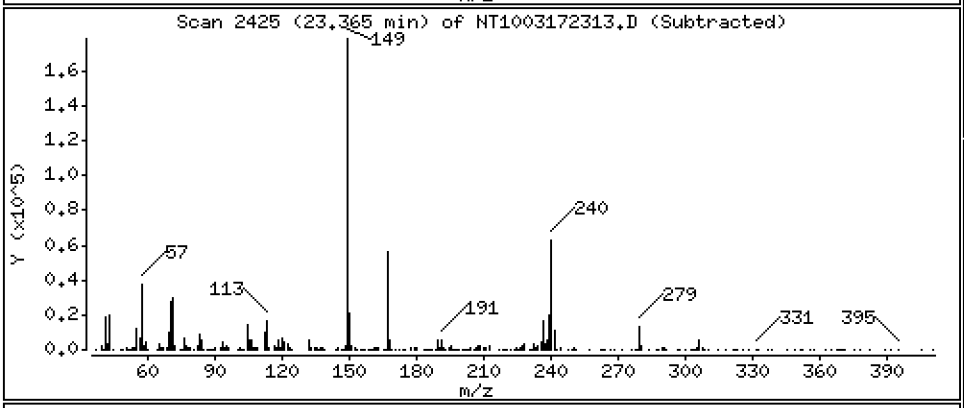
Column diameter: 0.25

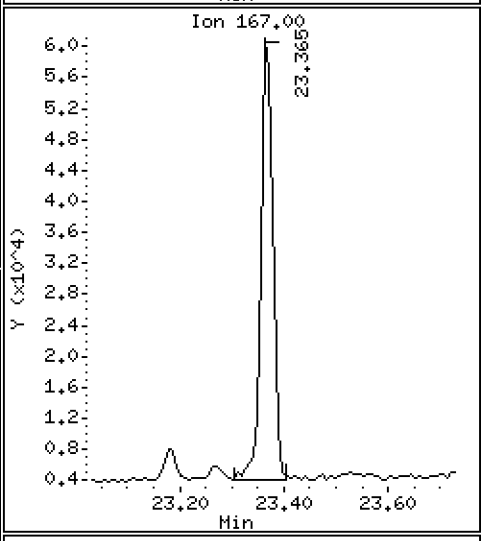
72 bis(2-Ethylhexyl)phthalate

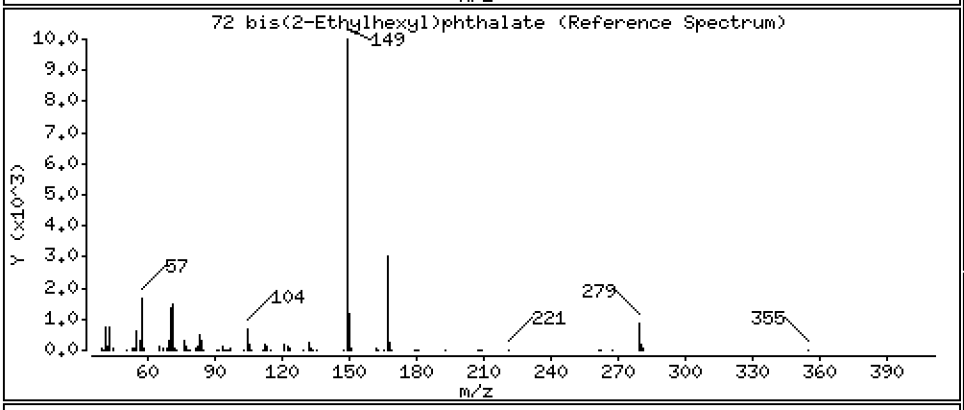
Concentration: 2.248 ug/mL

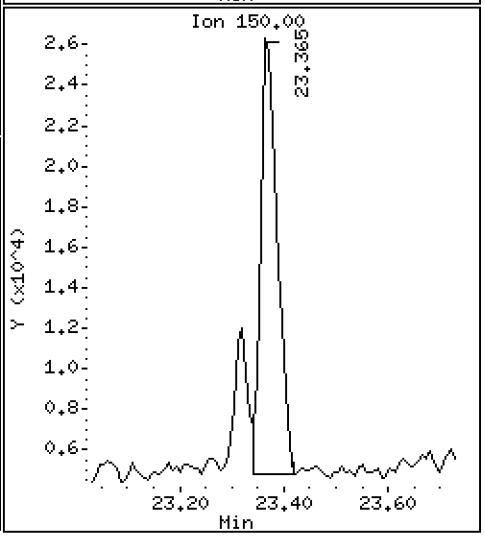


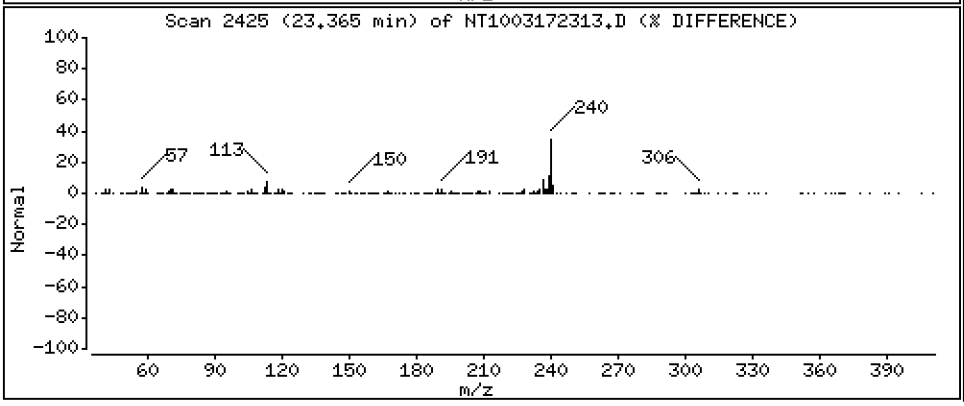












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

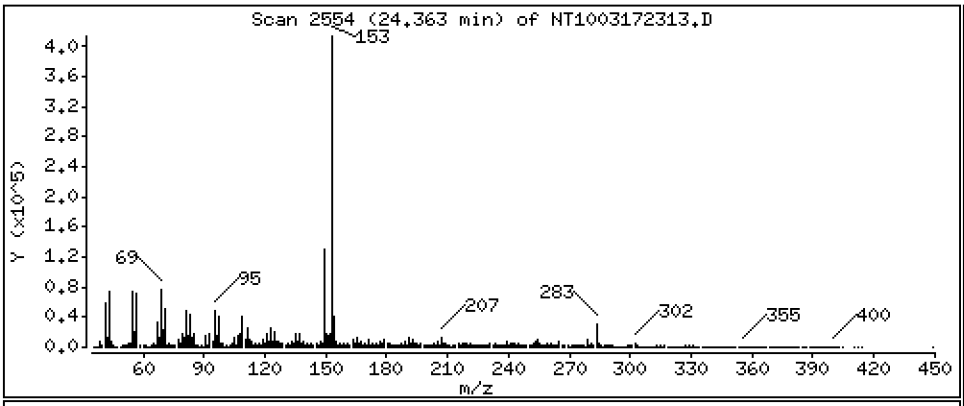
Operator: VTS

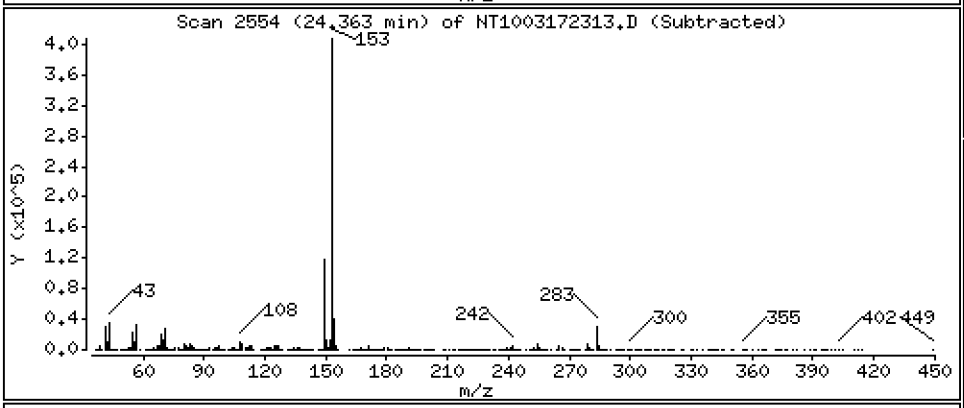
Column phase: ZB-5msi

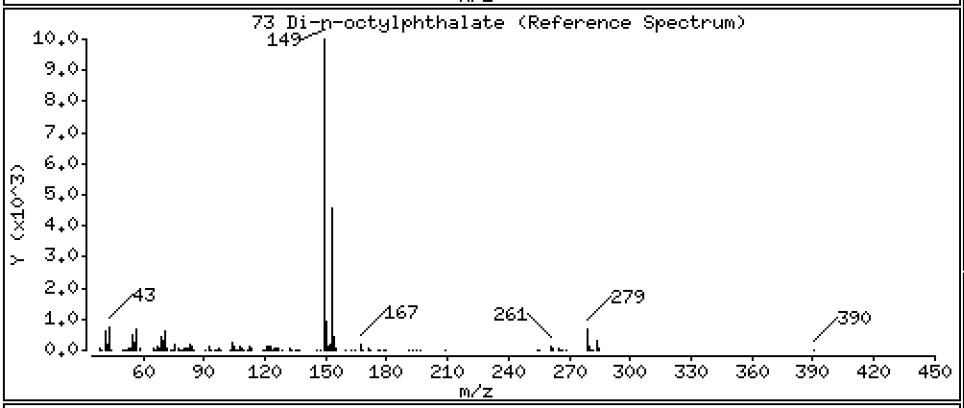
Column diameter: 0.25

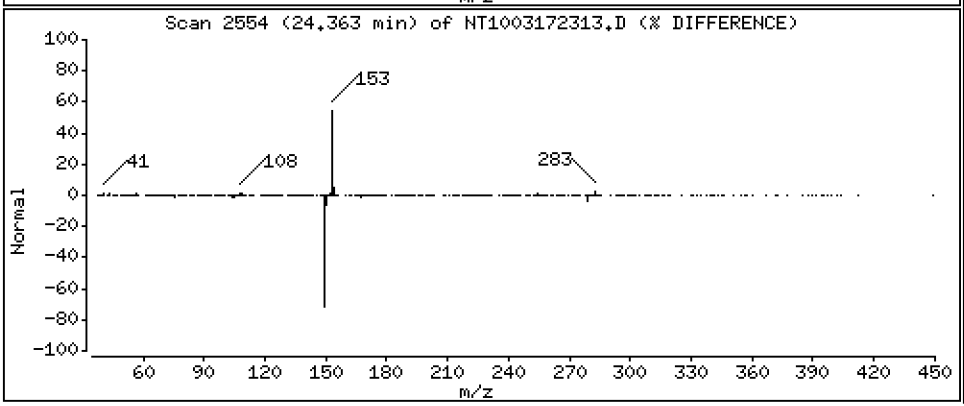
73 Di-n-octylphthalate

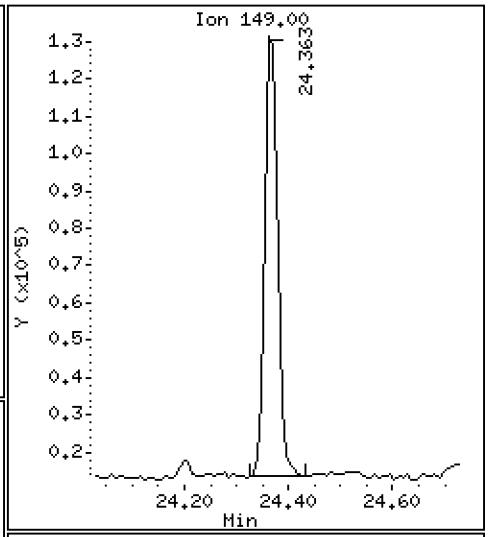
Concentration: 0.8610 ug/mL

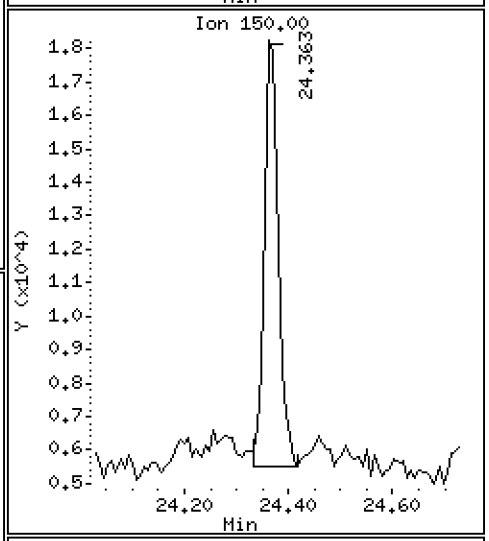


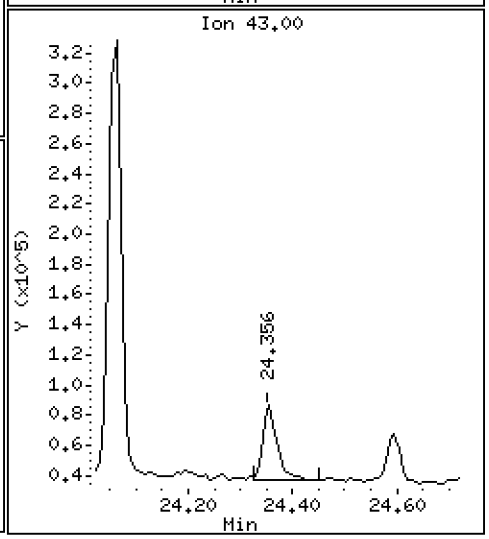












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

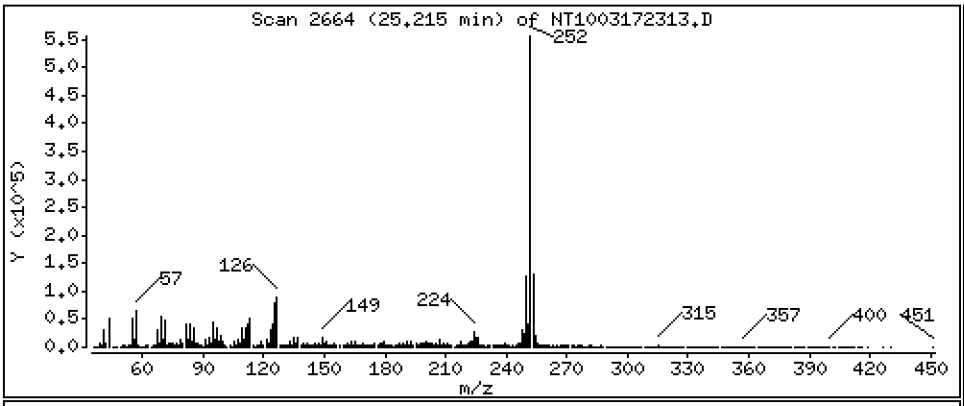
Operator: VTS

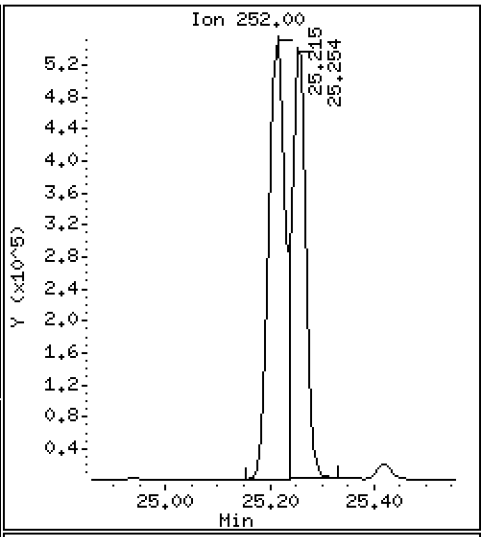
Column phase: ZB-5msi

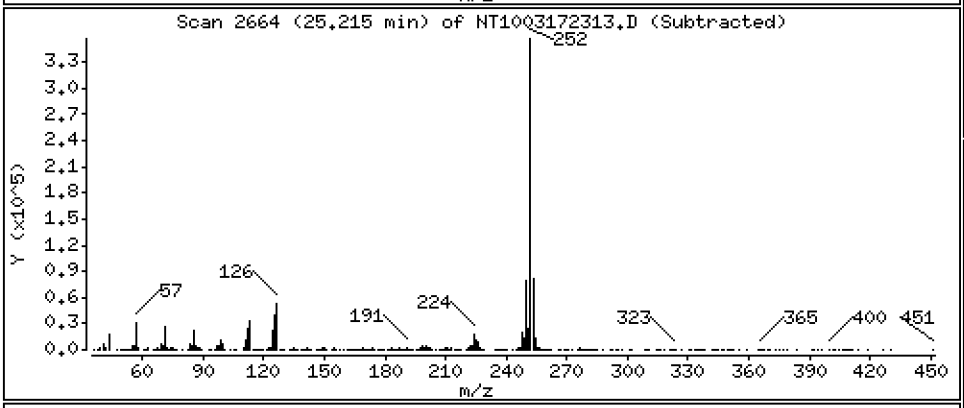
Column diameter: 0.25

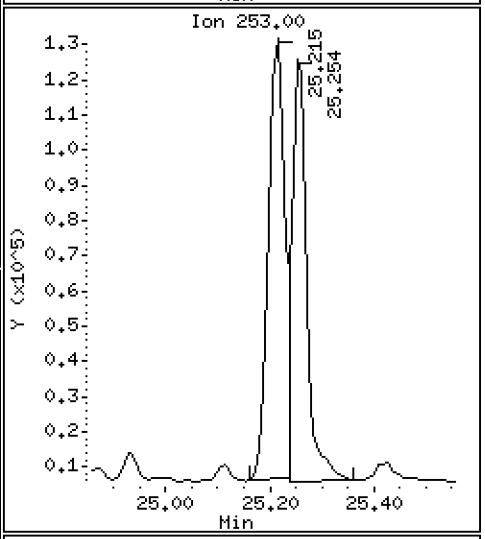
74 Benzo(b)fluoranthene

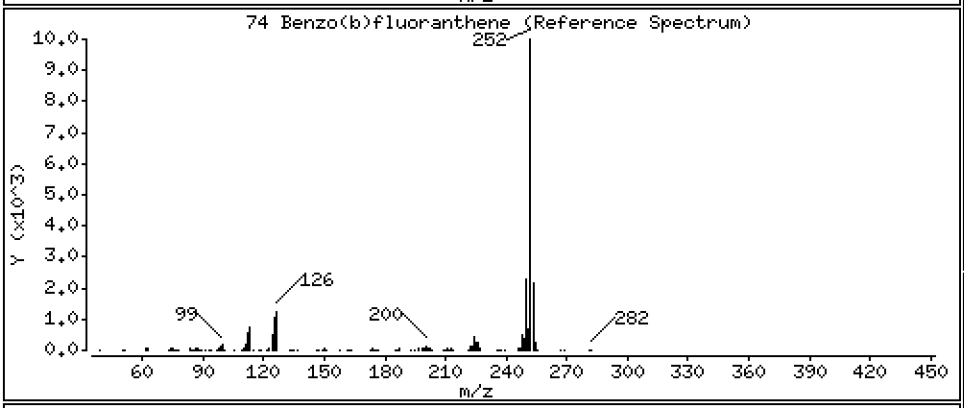
Concentration: 6.800 ug/mL

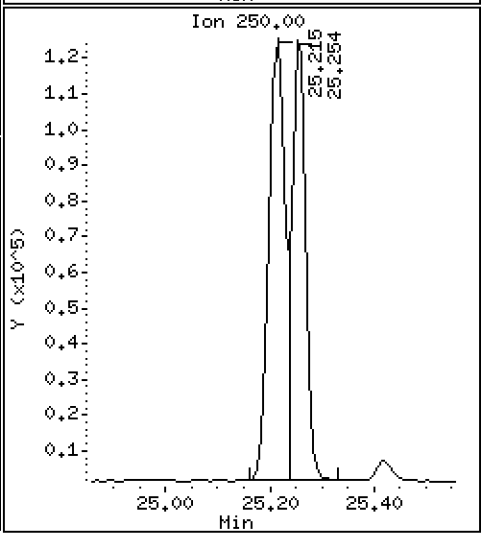


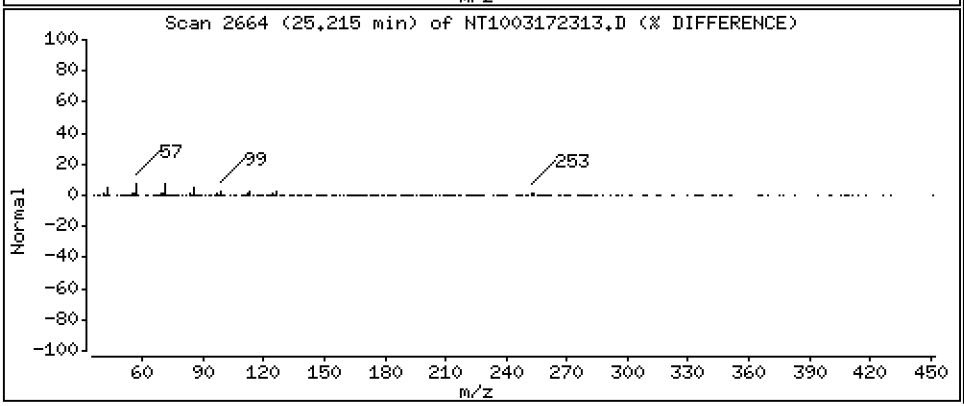












Date : 18-MAR-2023 02:03

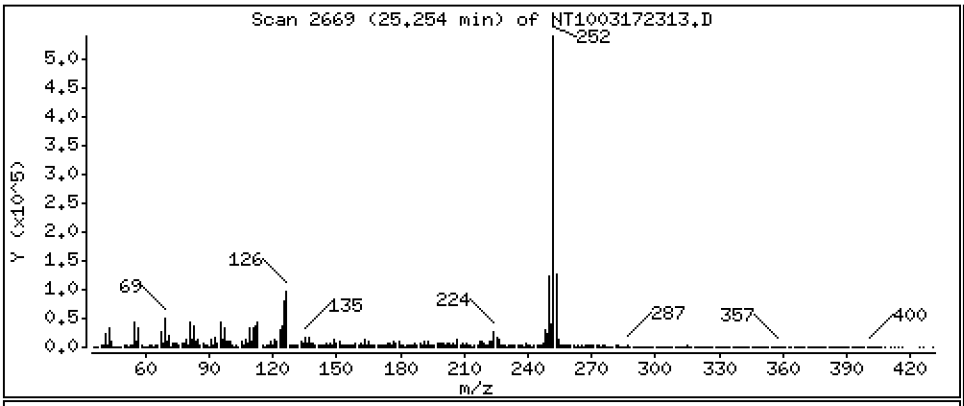
Client ID: Instrument: nt10.i

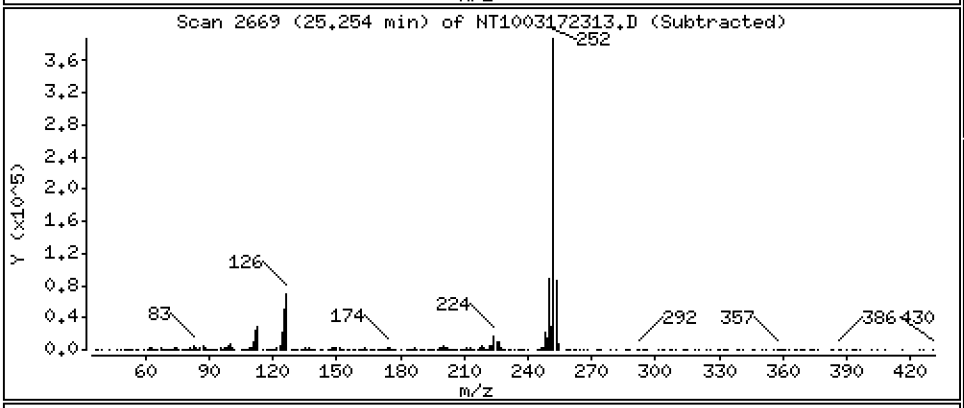
Sample Info: BLB0495-MS1

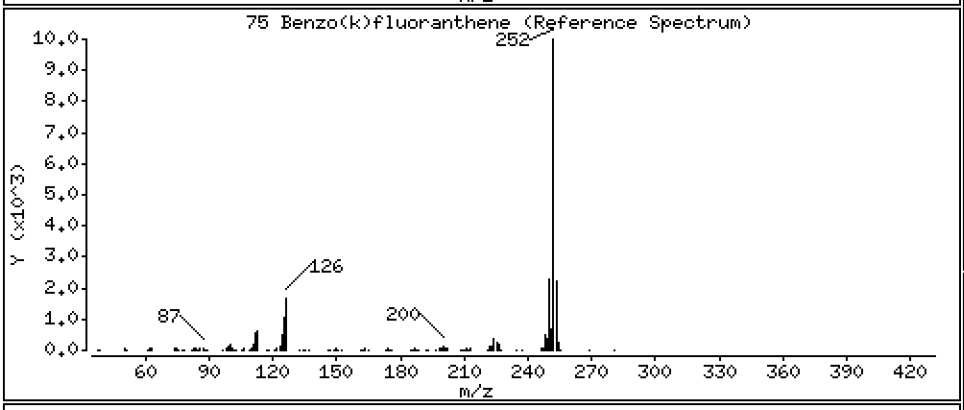
Operator: VTS

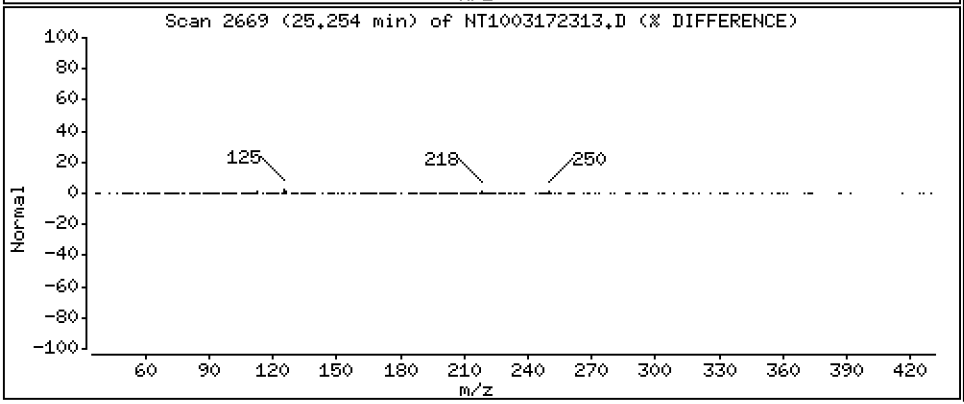
Column phase: ZB-5msi Column diameter: 0.25

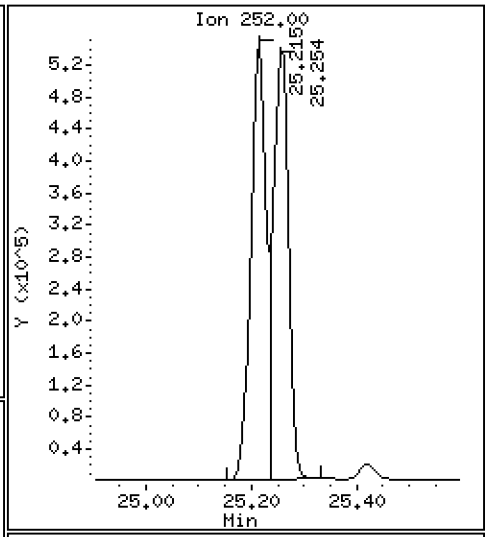
75 Benzo(k)fluoranthene Concentration: 5.817 ug/mL

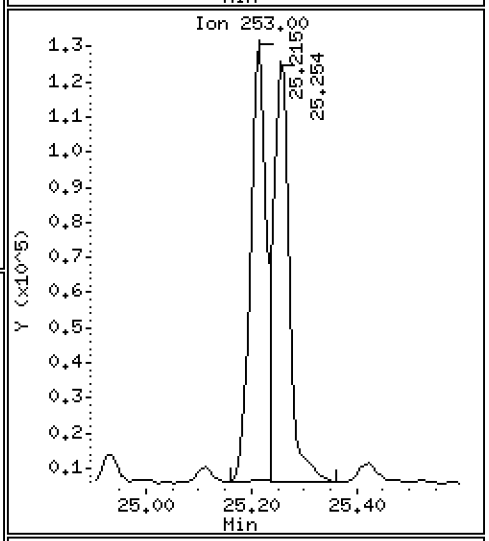


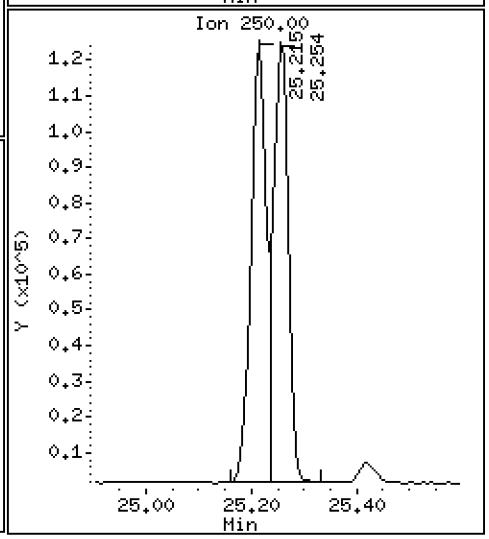












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

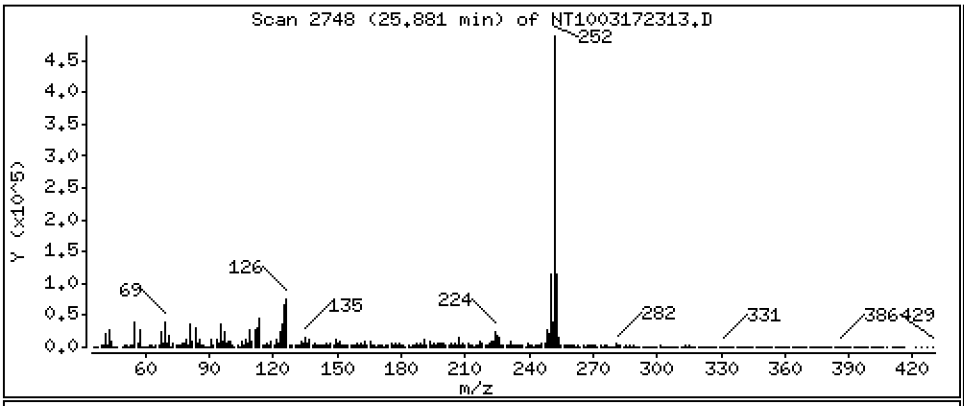
Operator: VTS

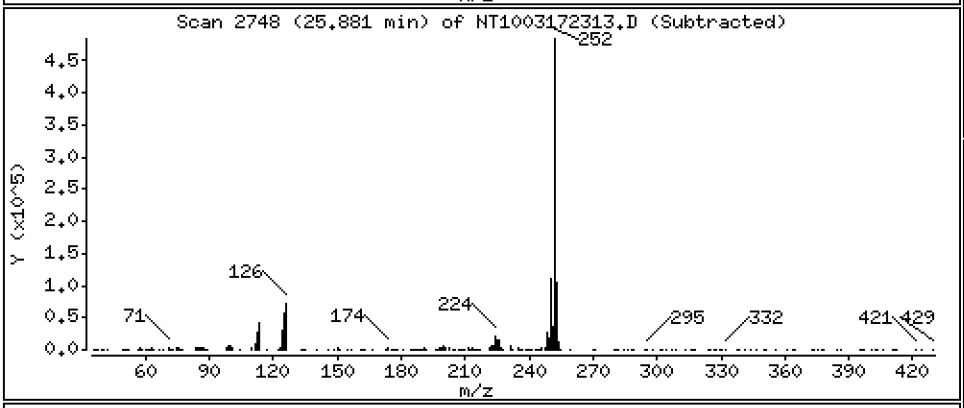
Column phase: ZB-5msi

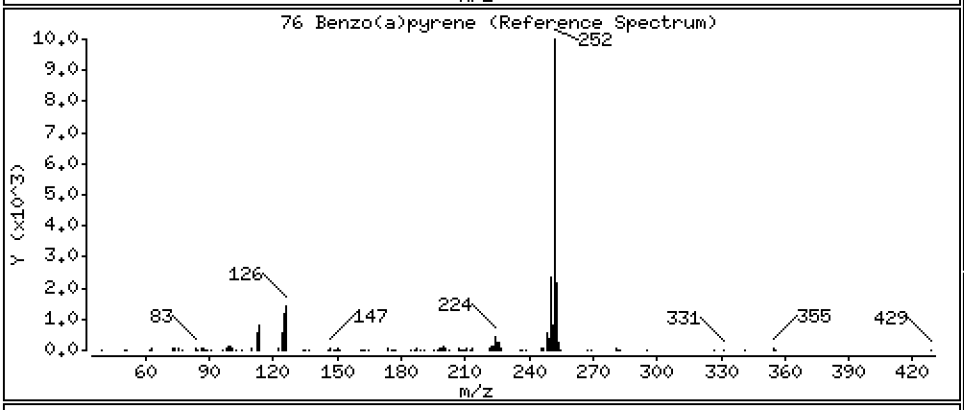
Column diameter: 0.25

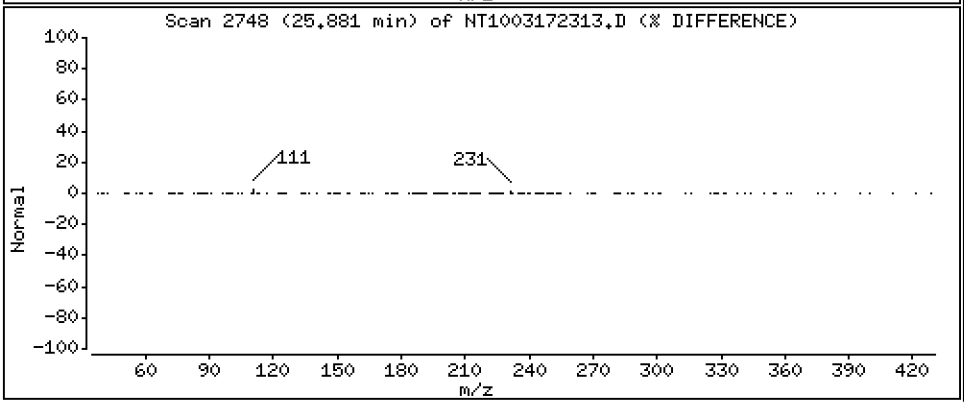
76 Benzo(a)pyrene

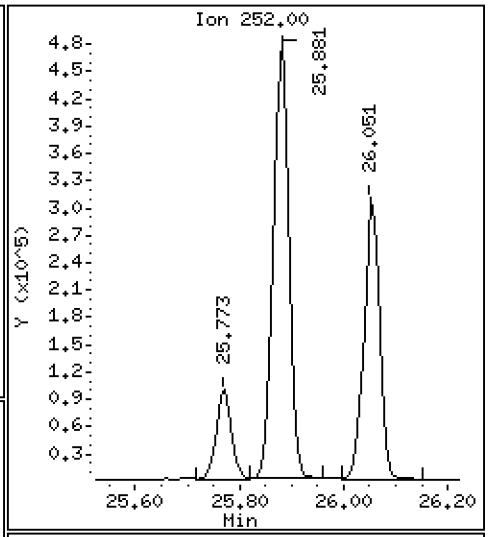
Concentration: 5.980 ug/mL

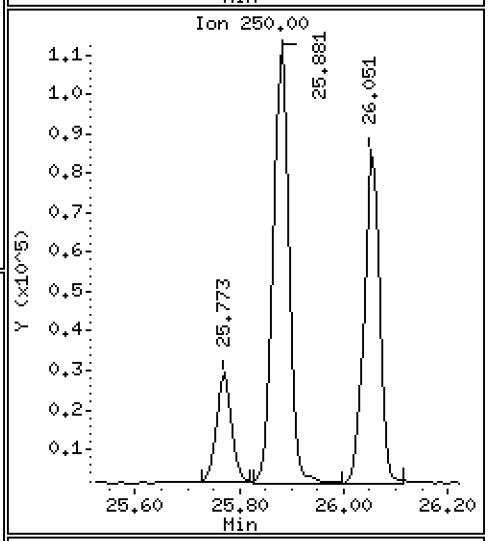


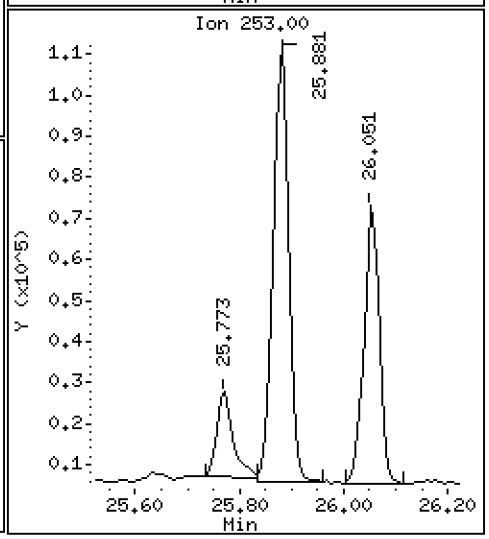












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

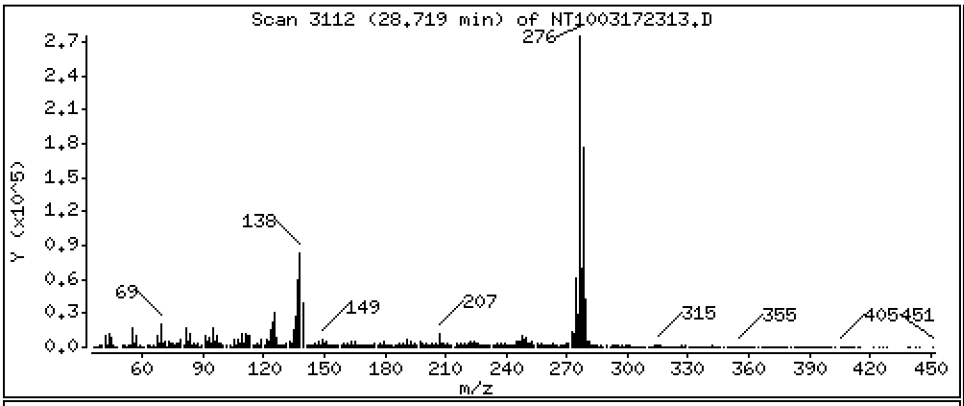
Operator: VTS

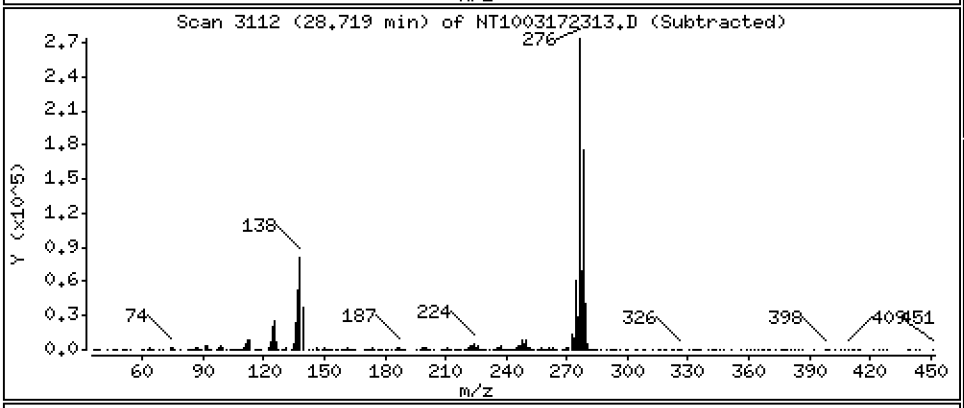
Column phase: ZB-5msi

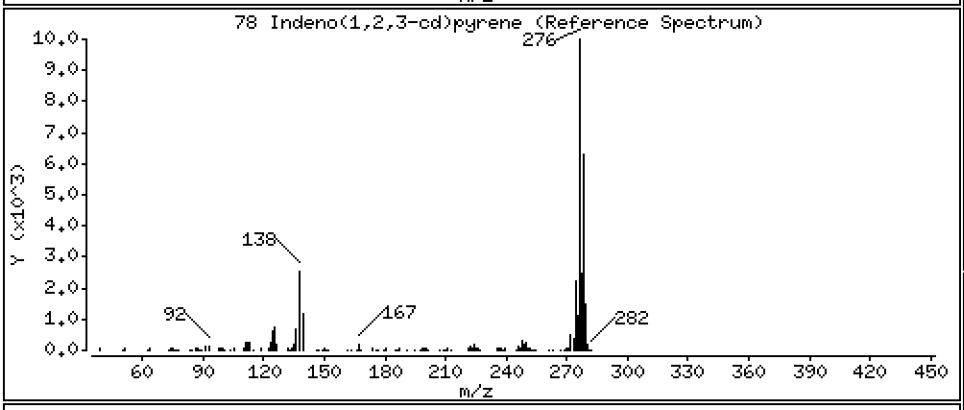
Column diameter: 0.25

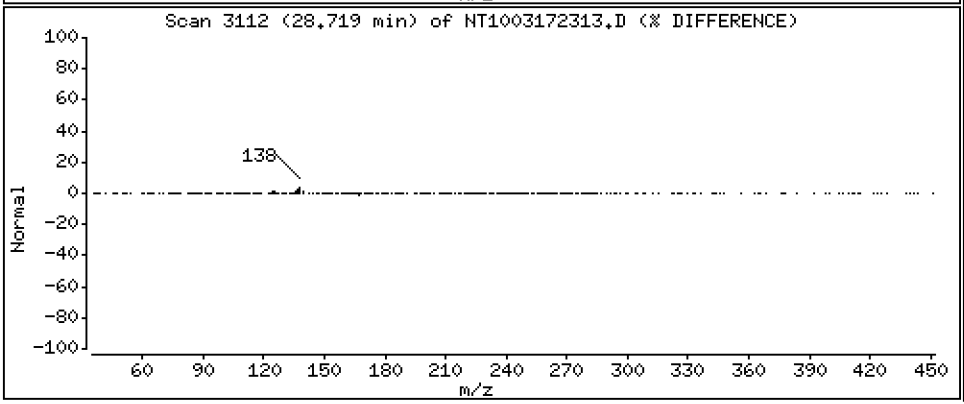
78 Indeno(1,2,3-cd)pyrene

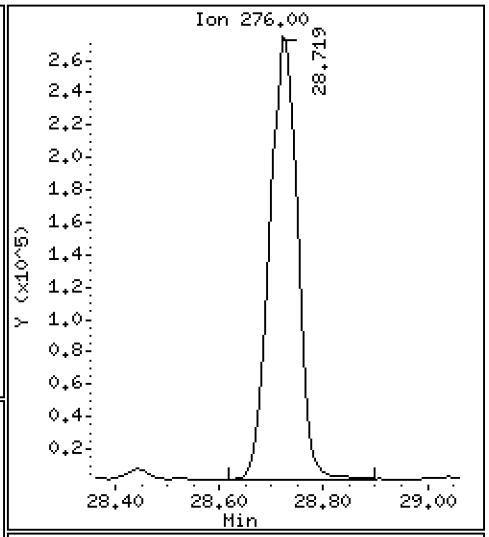
Concentration: 5.062 ug/mL

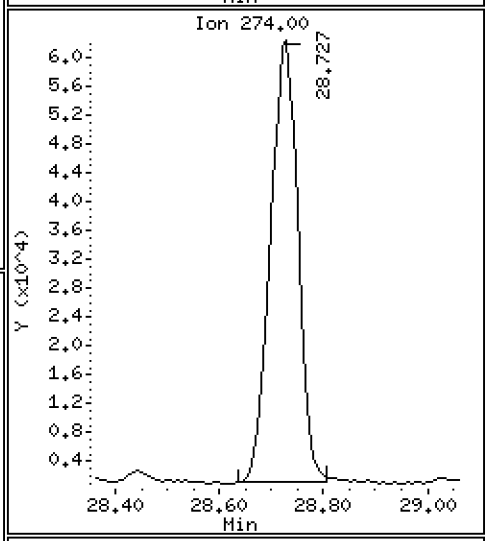


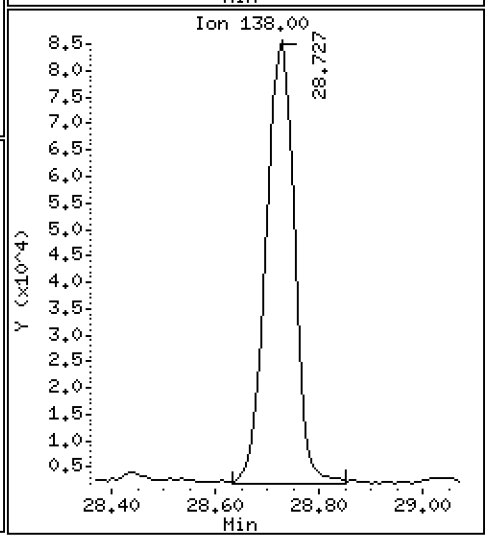












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

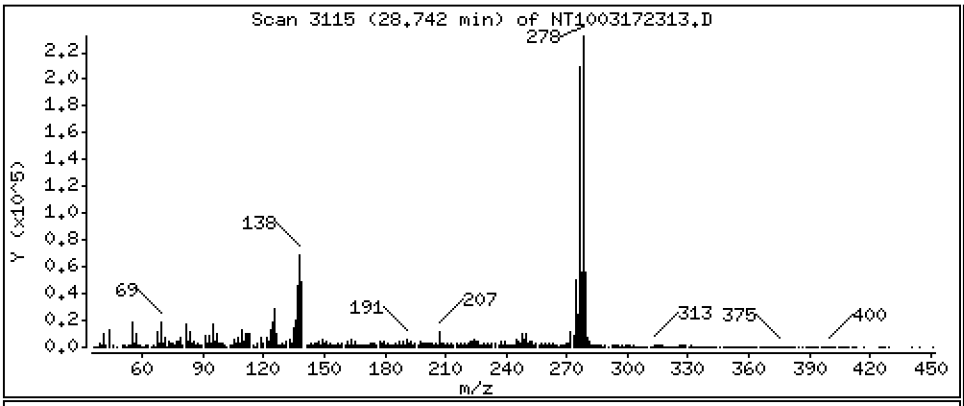
Operator: VTS

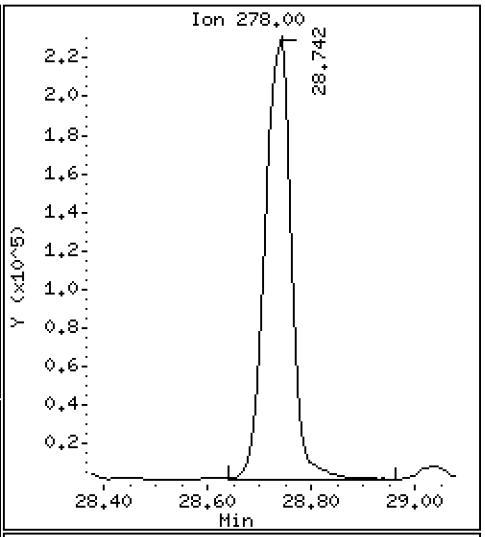
Column phase: ZB-5msi

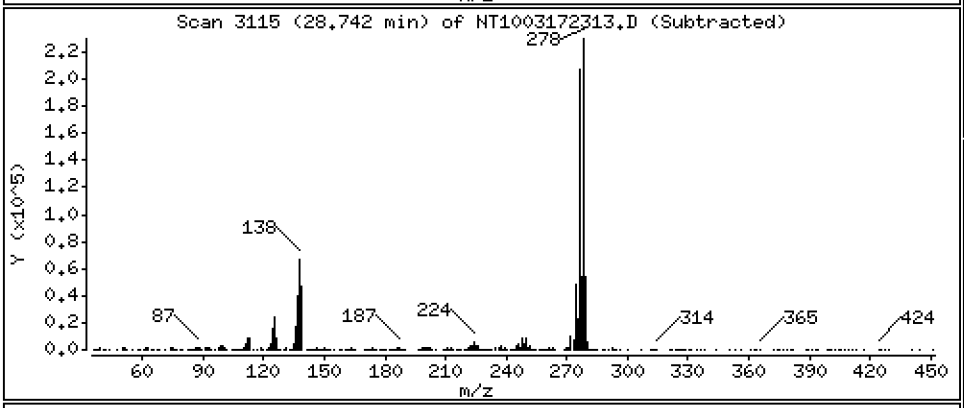
Column diameter: 0.25

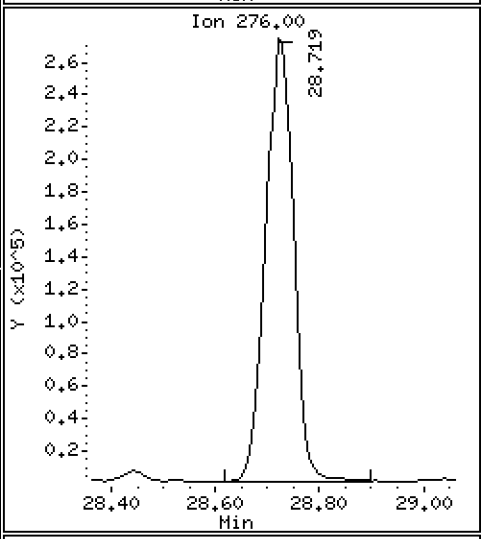
79 Dibenzo(a,h)anthracene

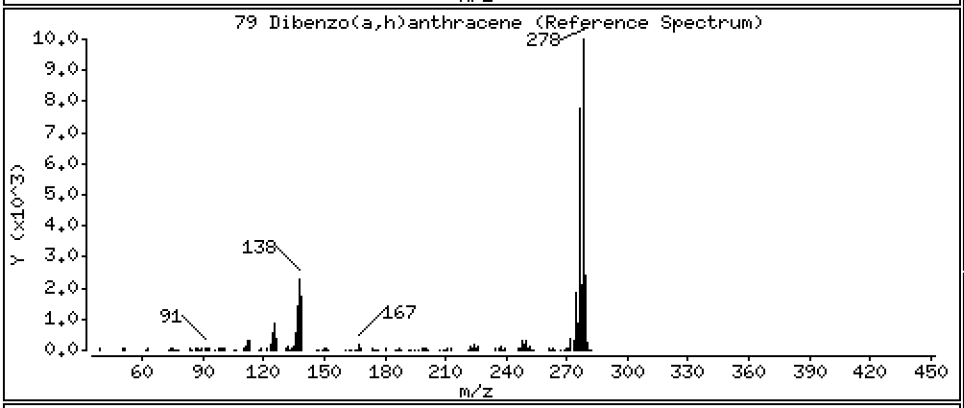
Concentration: 4.764 ug/mL

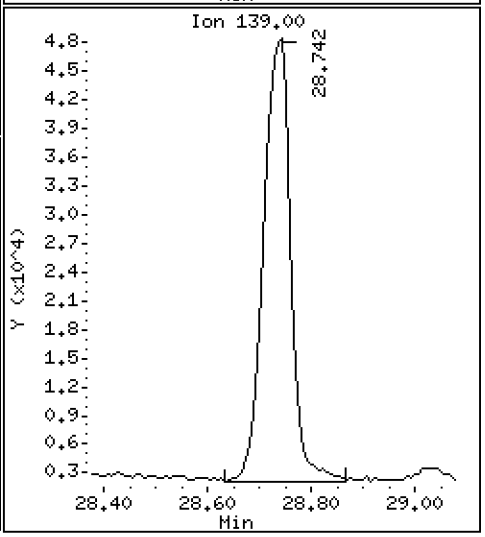


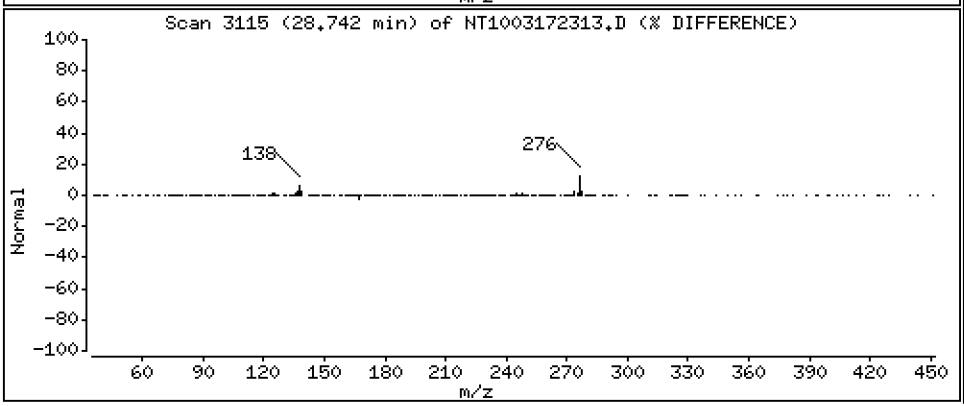












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

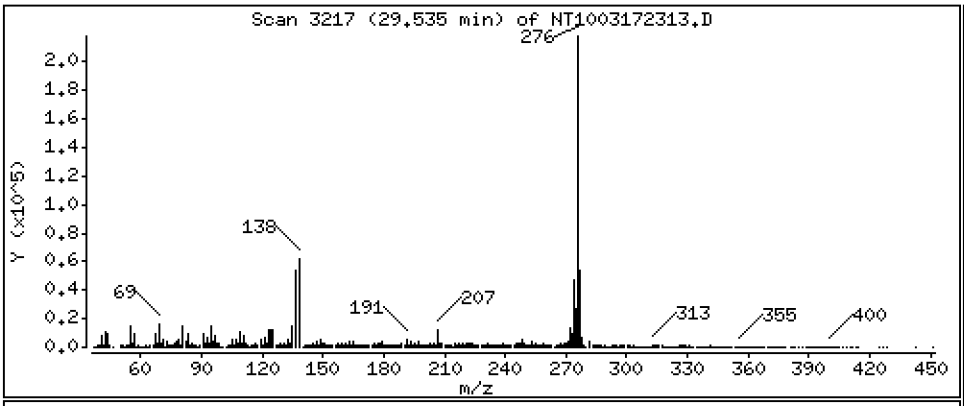
Operator: VTS

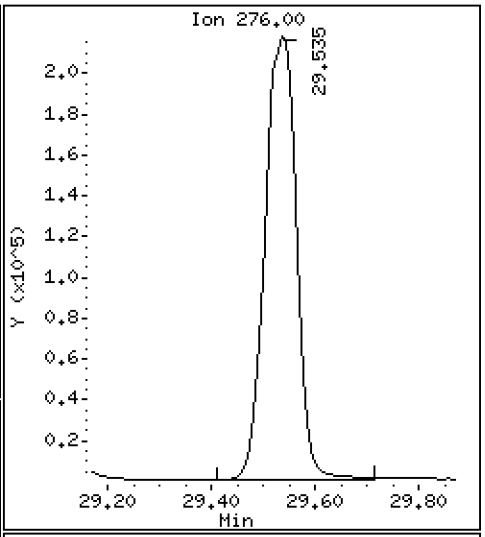
Column phase: ZB-5msi

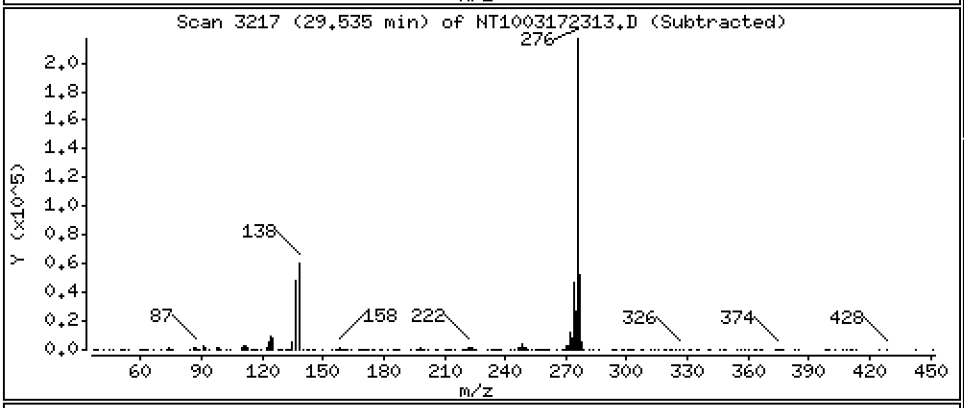
Column diameter: 0.25

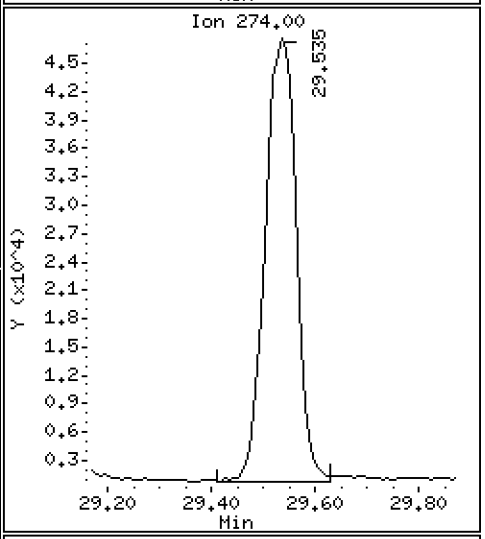
80 Benzo(g,h,i)perylene

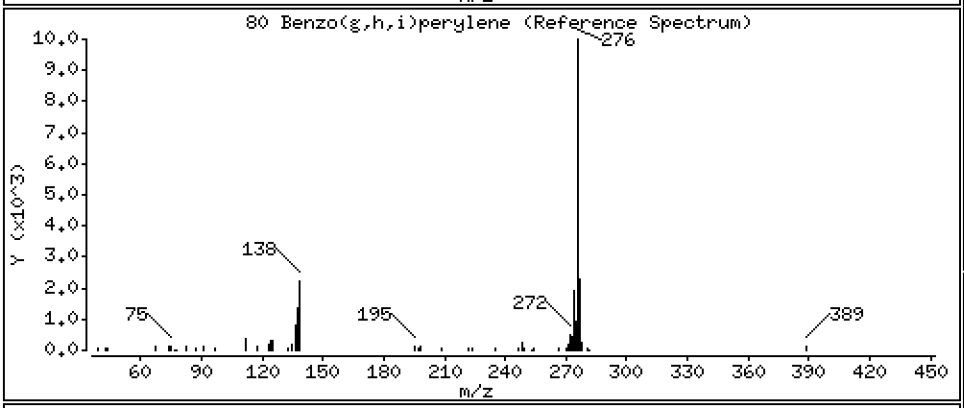
Concentration: 5.198 ug/mL

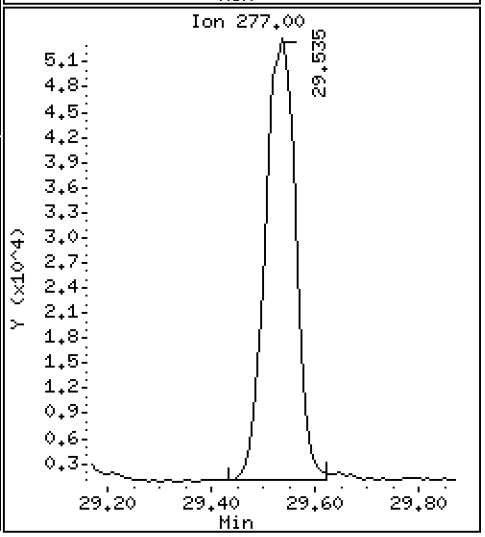


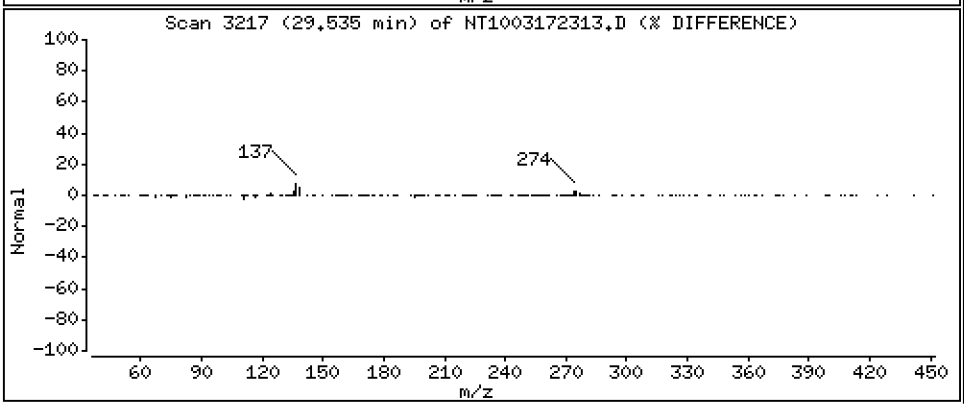












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

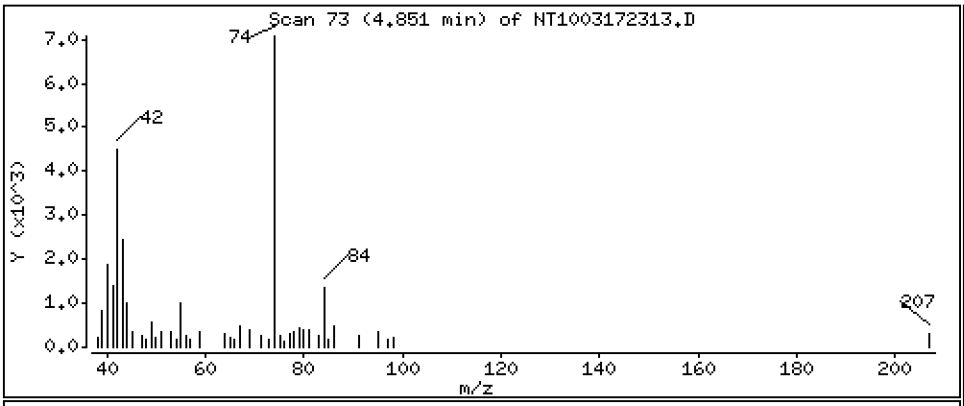
Operator: VTS

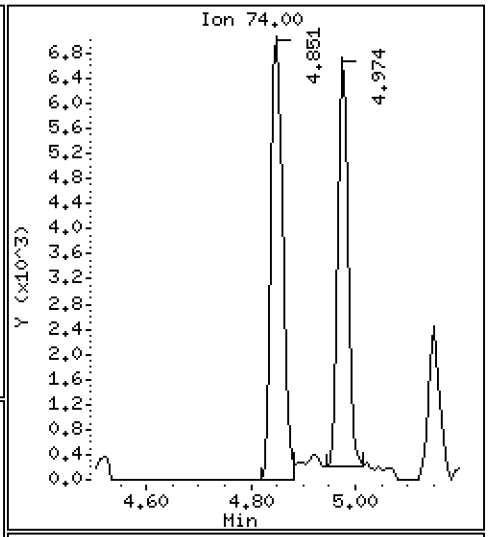
Column phase: ZB-5msi

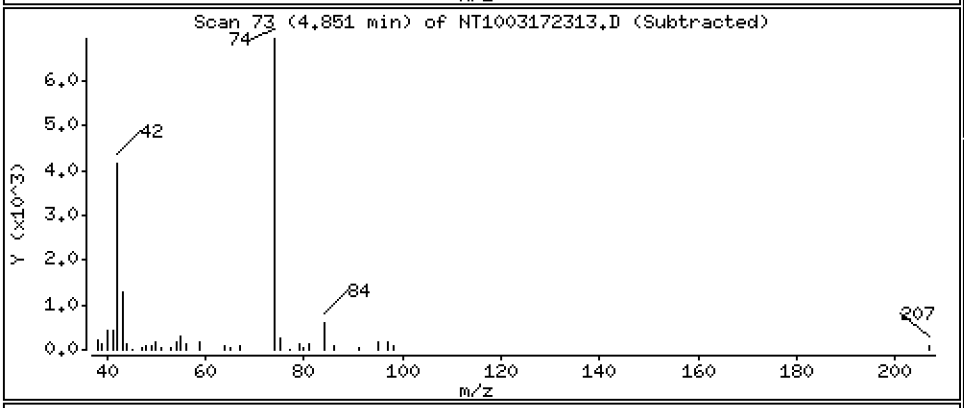
Column diameter: 0.25

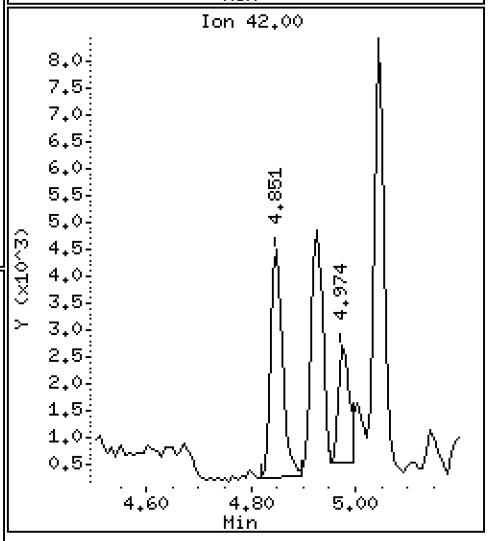
90 N-Nitrosodimethylamine

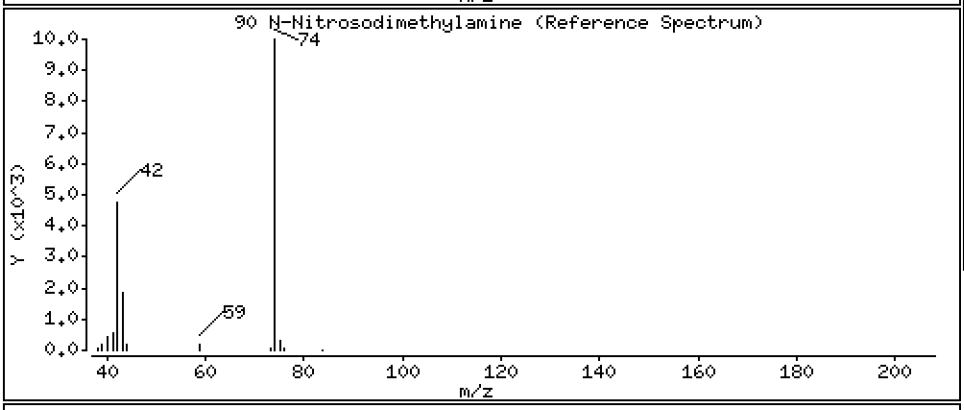
Concentration: 0.3156 ug/mL

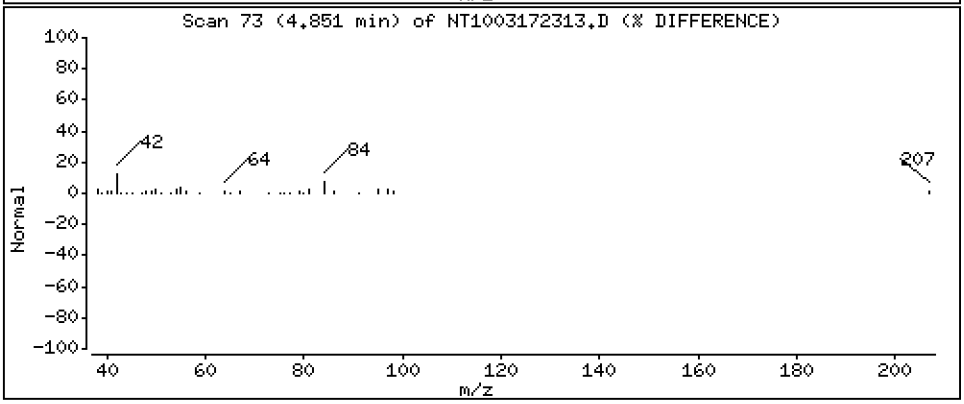












Date : 18-MAR-2023 02:03

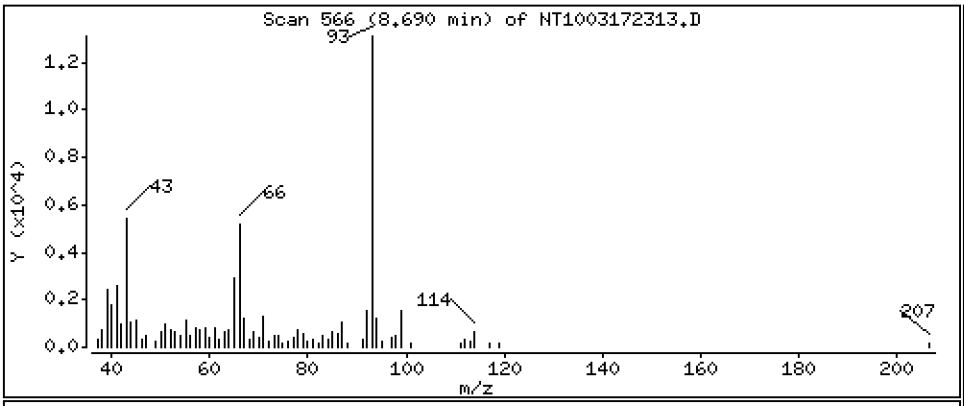
Client ID: Instrument: nt10.i

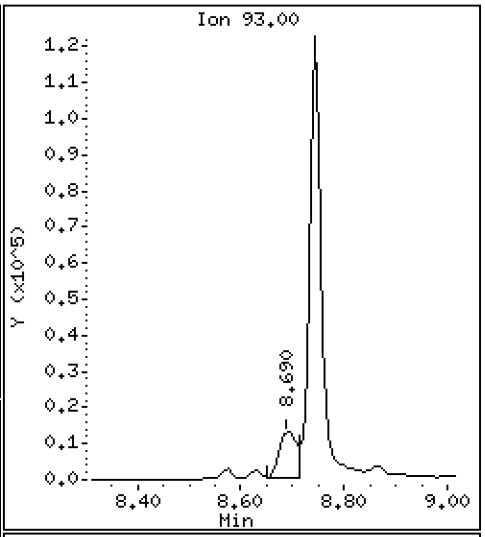
Sample Info: BLB0495-MS1

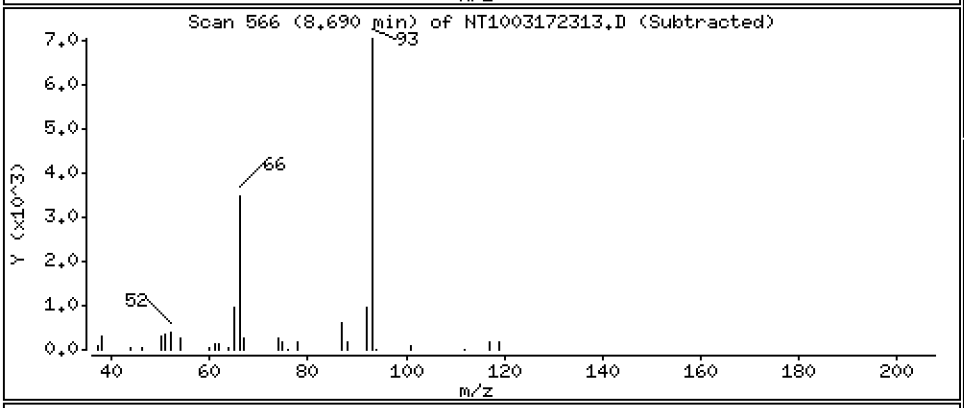
Operator: VTS

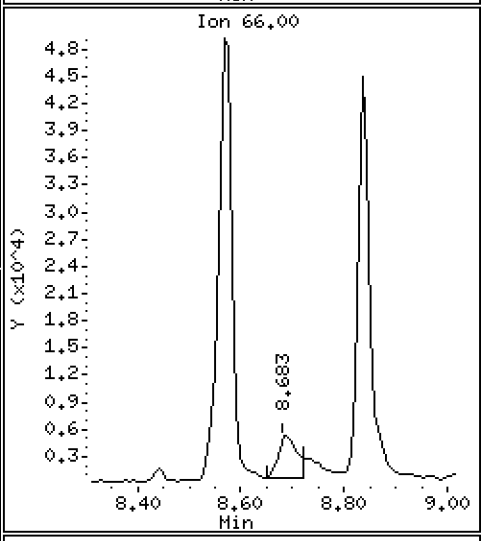
Column phase: ZB-5msi Column diameter: 0.25

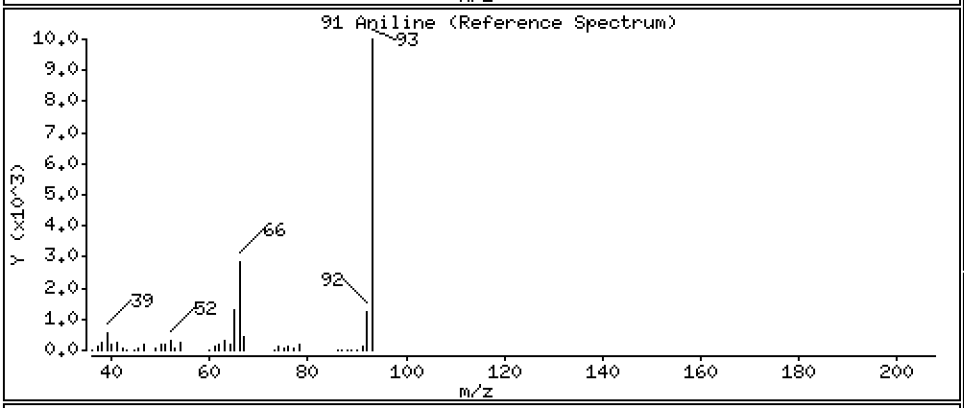
91 Aniline Concentration: 0.4310 ug/mL

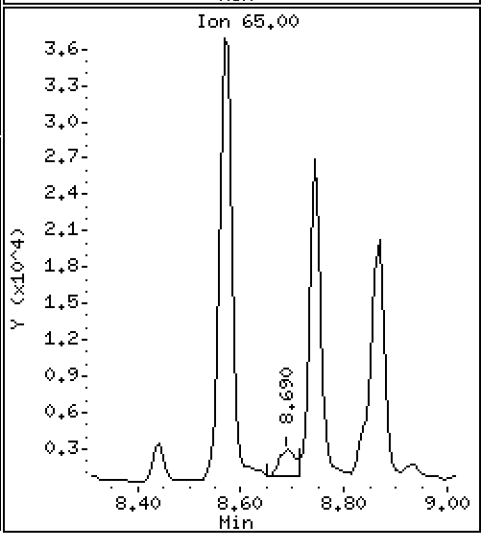


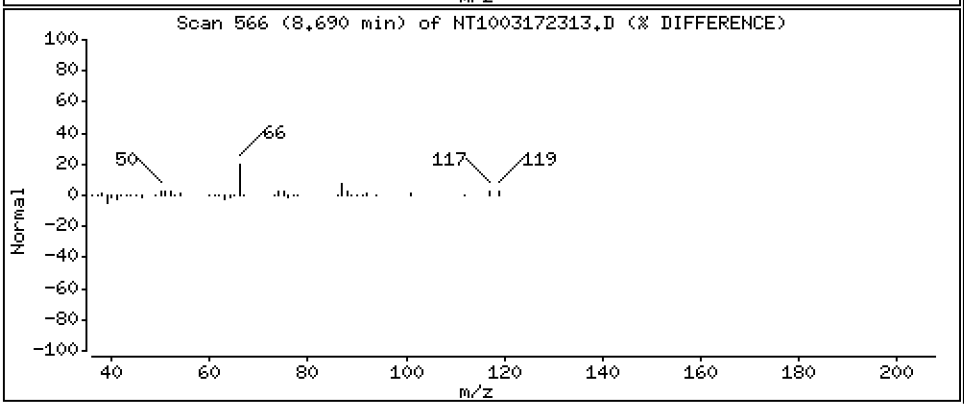












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

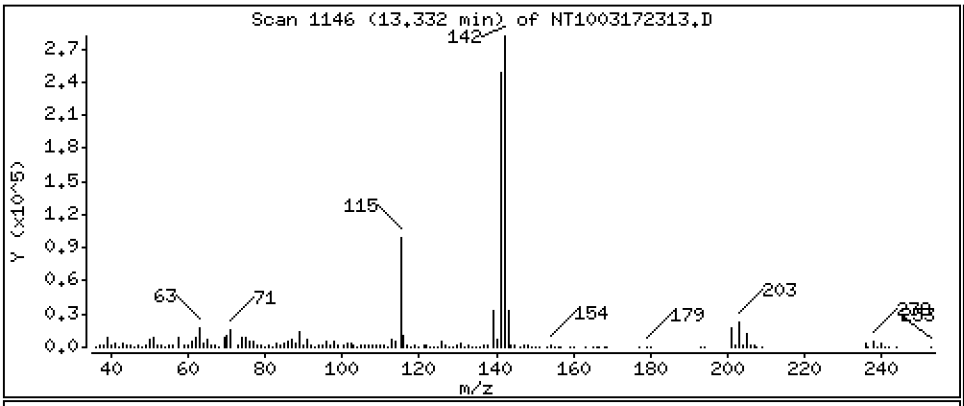
Operator: VTS

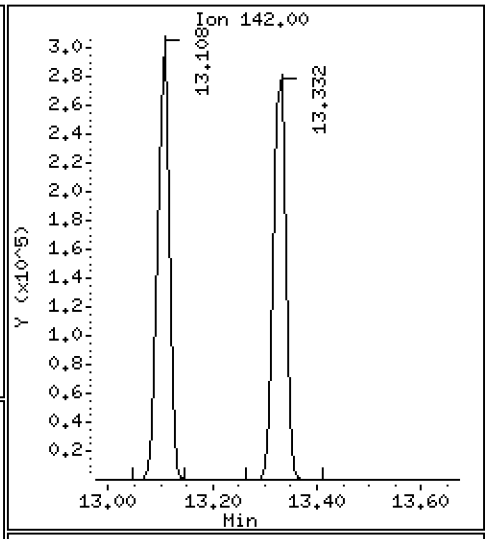
Column phase: ZB-5msi

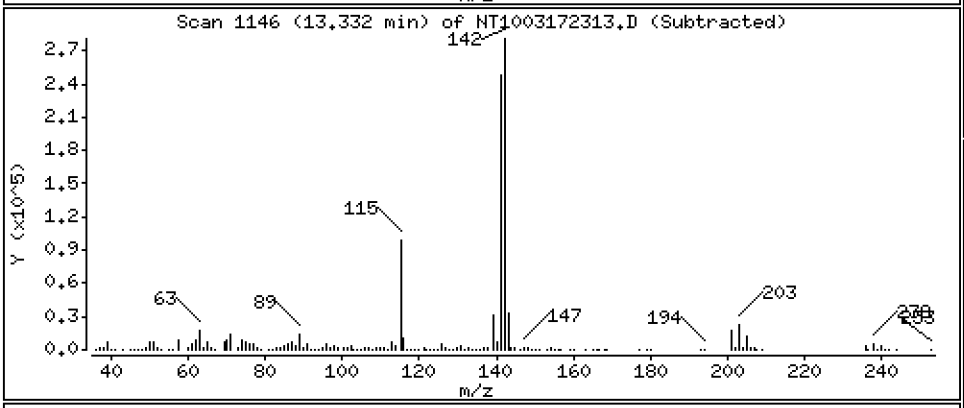
Column diameter: 0.25

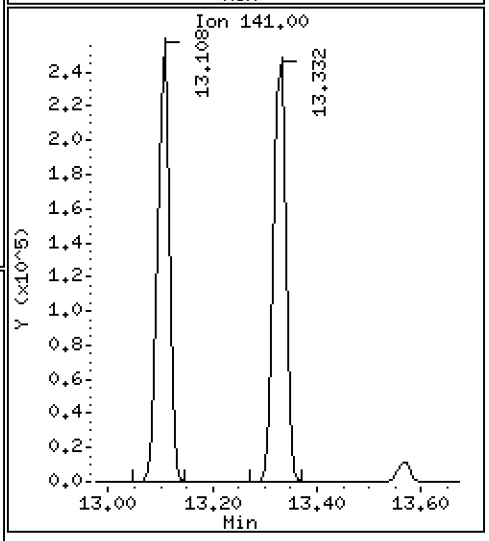
105 1-methylnaphthalene

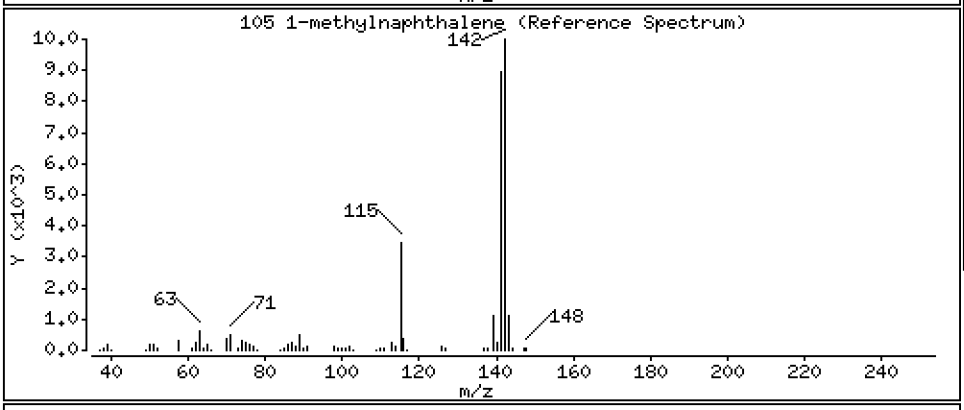
Concentration: 3.936 ug/mL

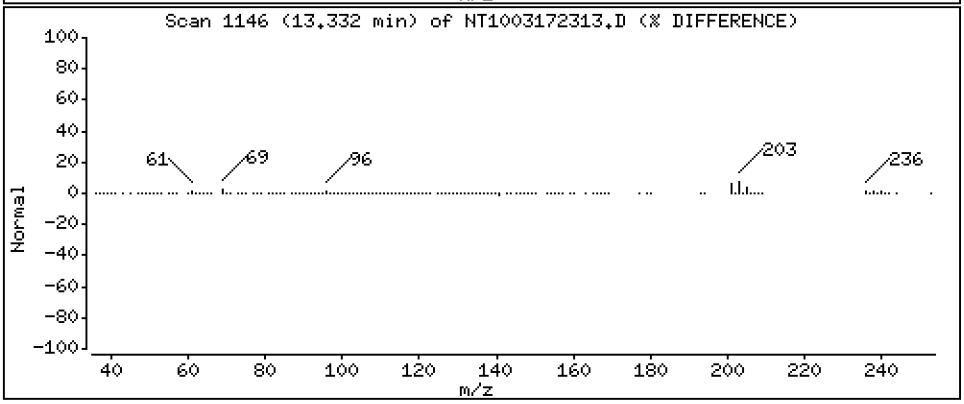












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

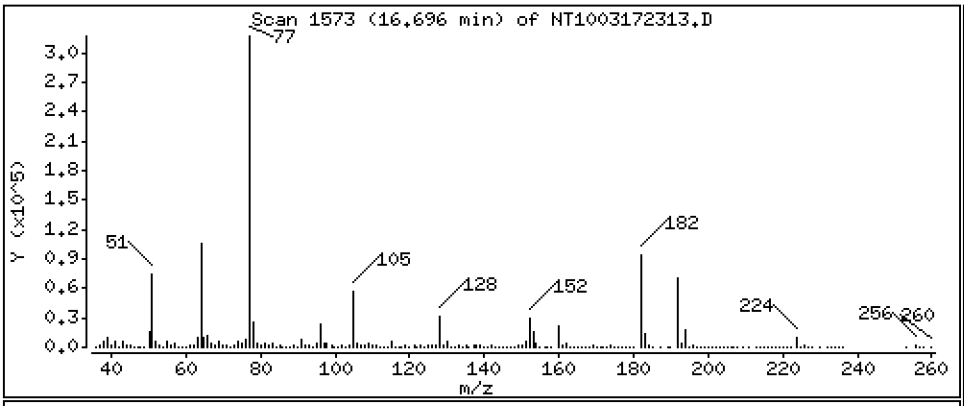
Operator: VTS

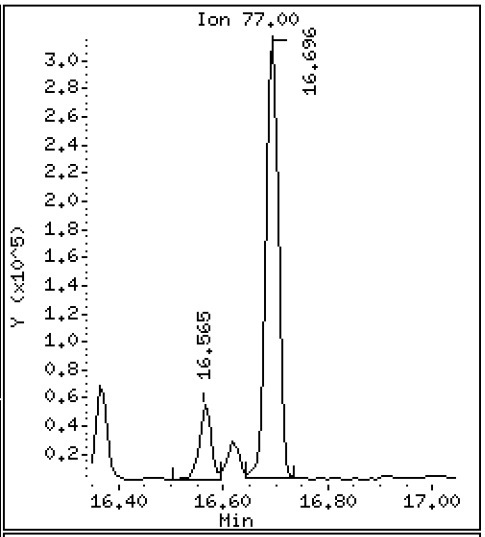
Column phase: ZB-5msi

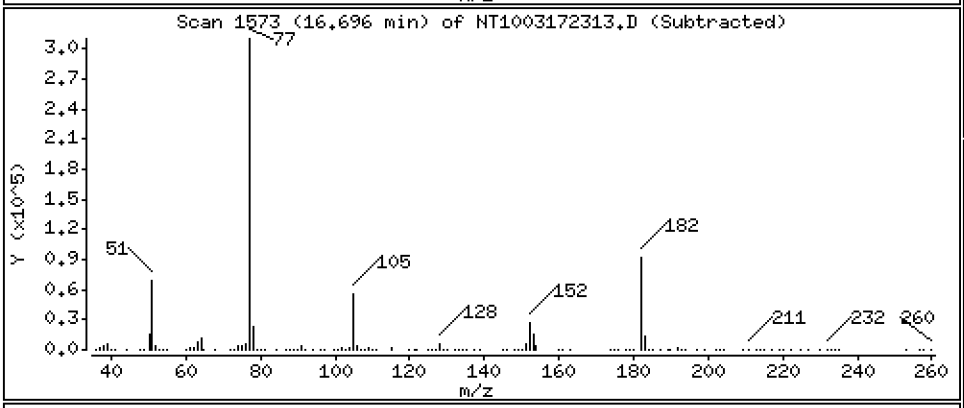
Column diameter: 0.25

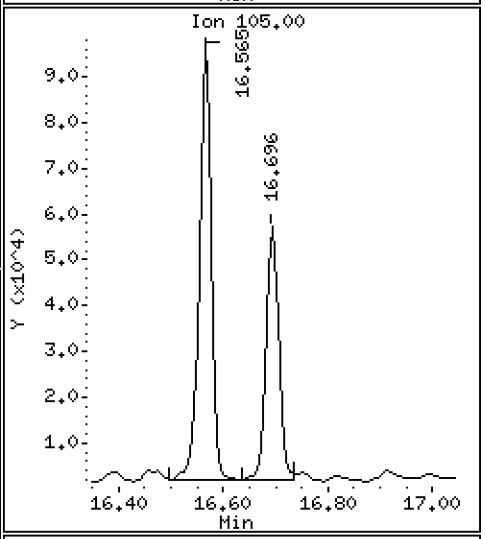
111 Azobenzene (1,2-DP-Hydrazine)

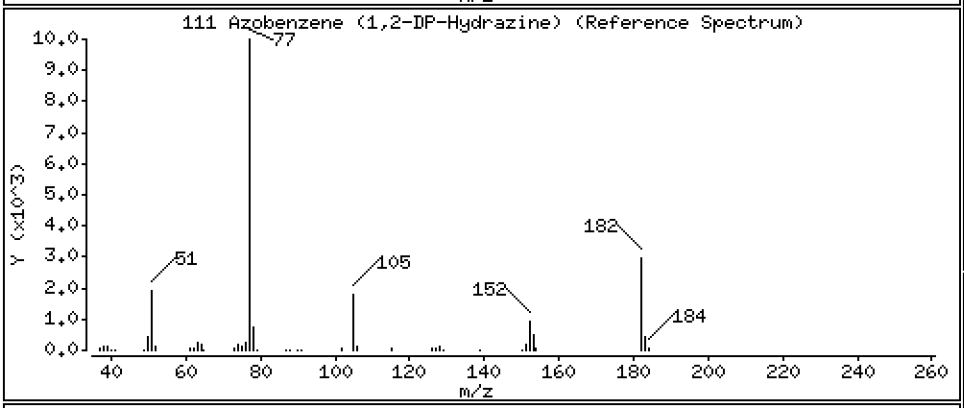
Concentration: 4.038 ug/mL

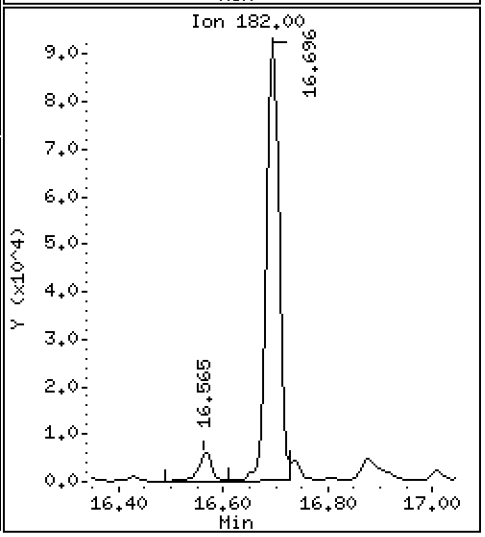


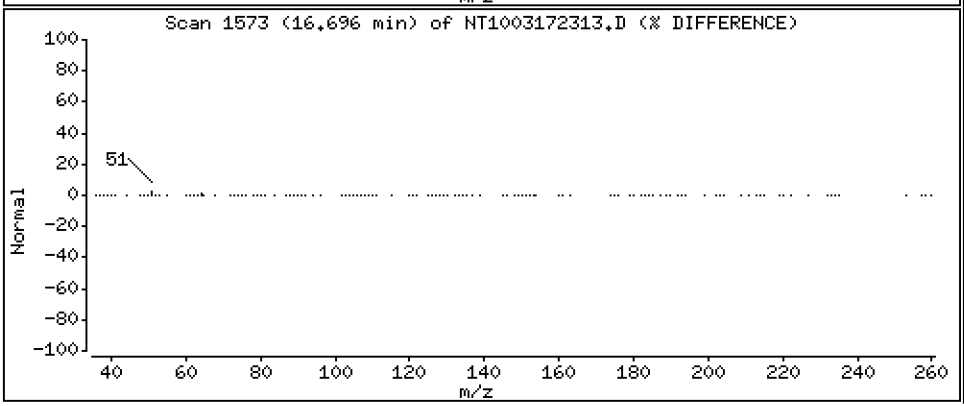












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

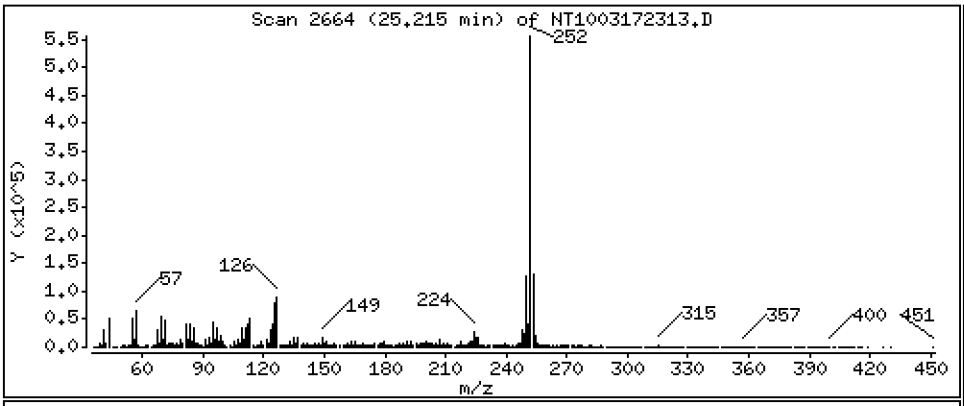
Operator: VTS

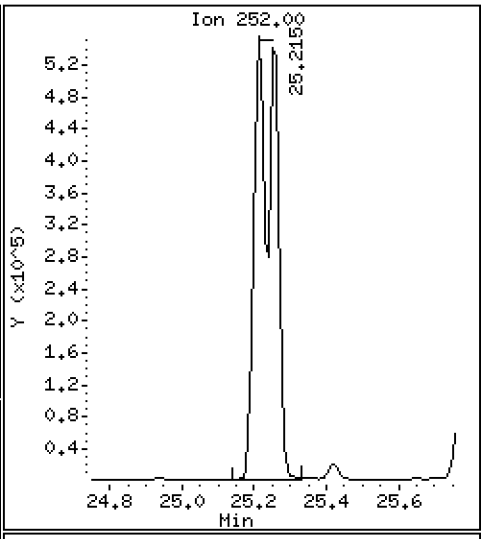
Column phase: ZB-5msi

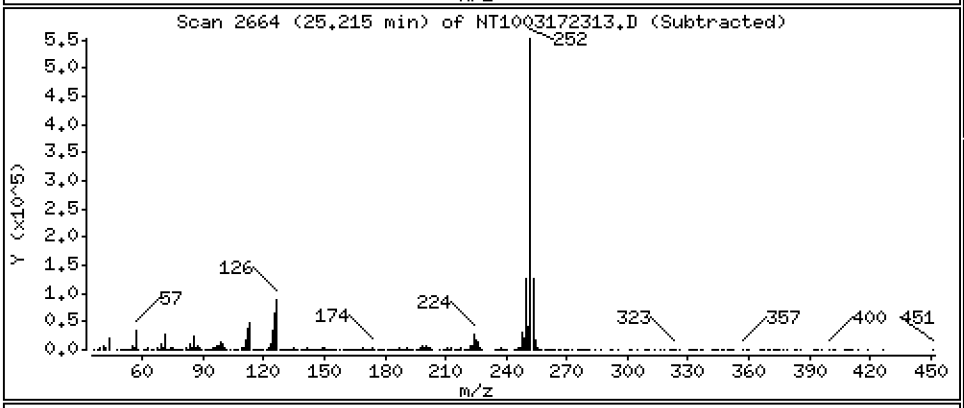
Column diameter: 0.25

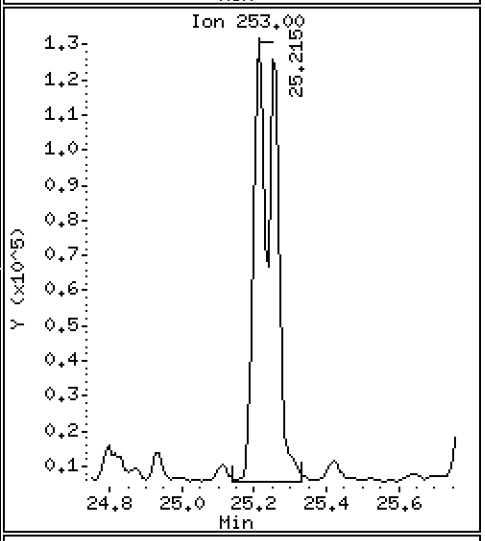
187 Total Benzofluoranthenes

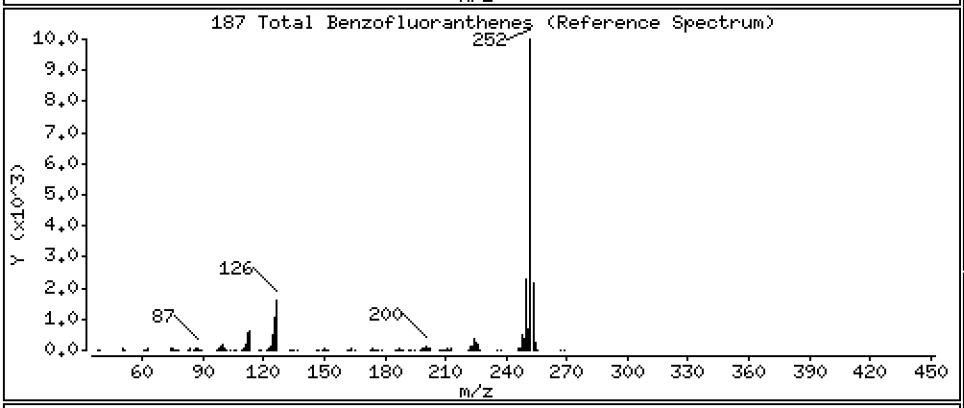
Concentration: 12.46 ug/mL

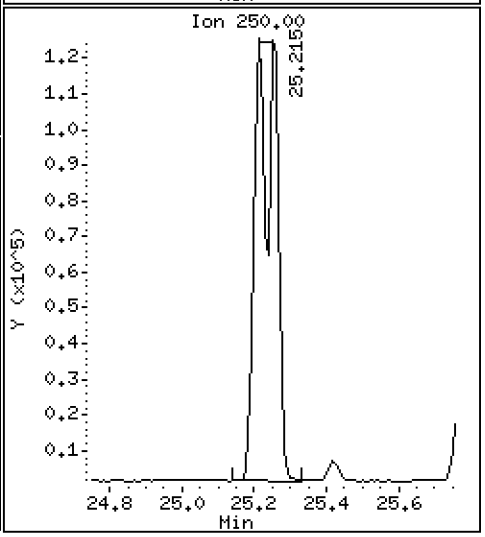


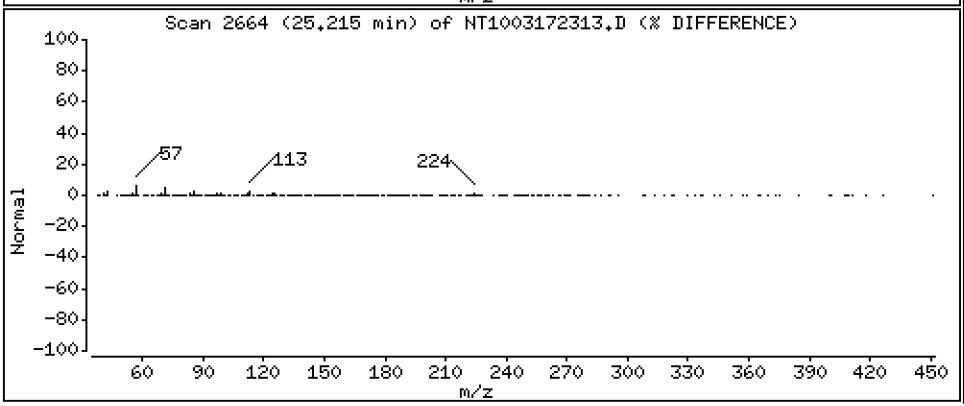












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172313.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS1

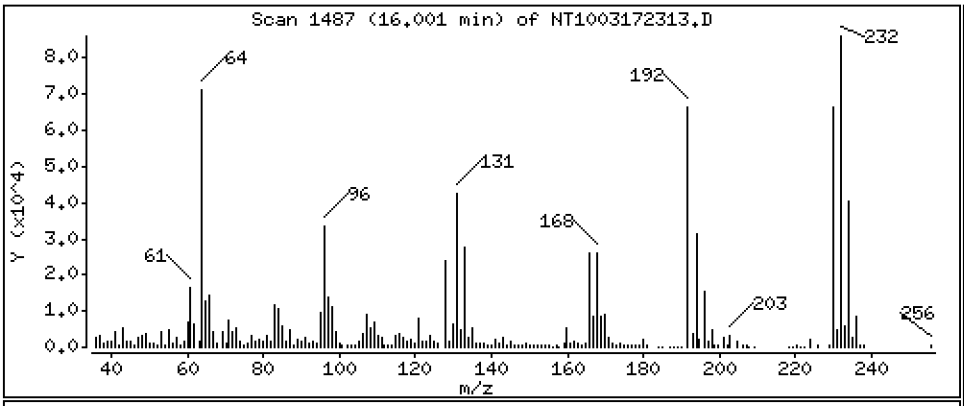
Operator: VTS

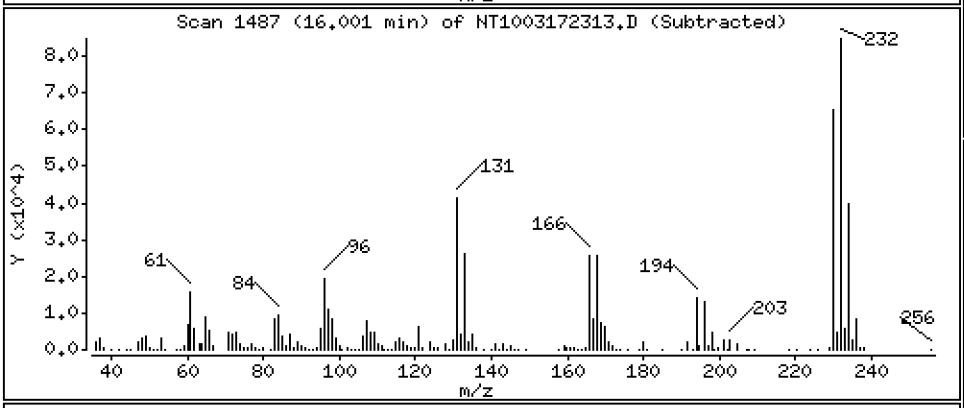
Column phase: ZB-5msi

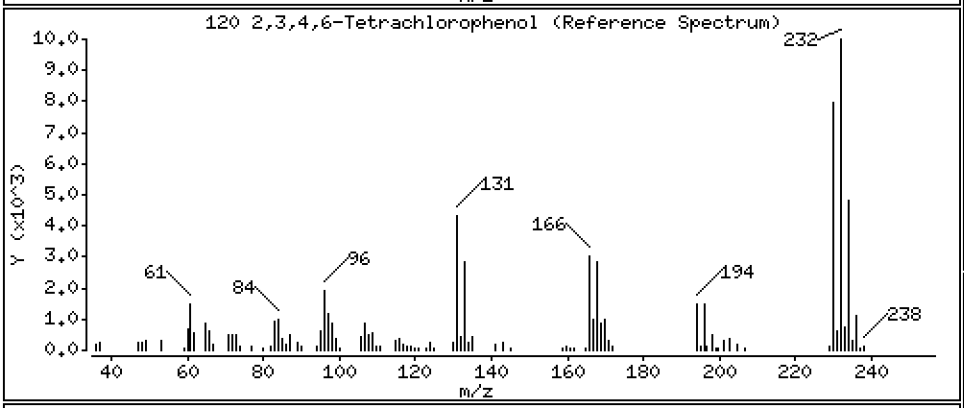
Column diameter: 0.25

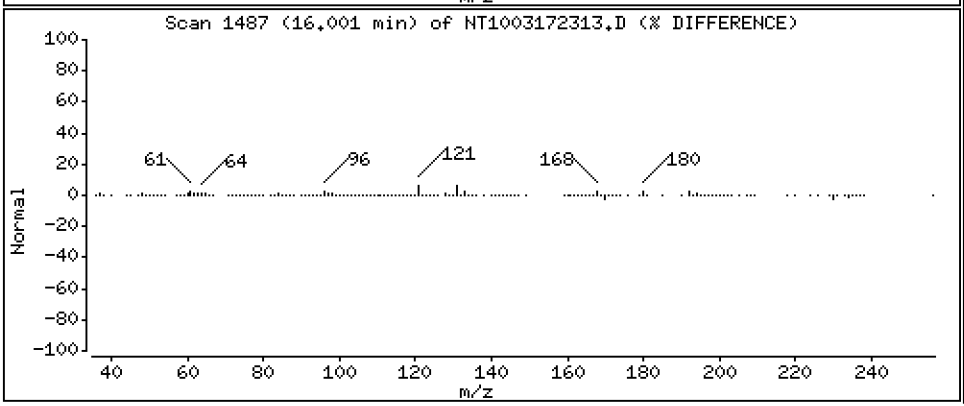
120 2,3,4,6-Tetrachlorophenol

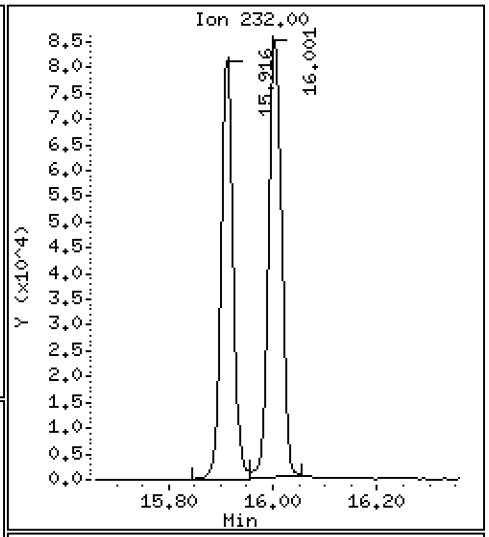
Concentration: 4.012 ug/mL

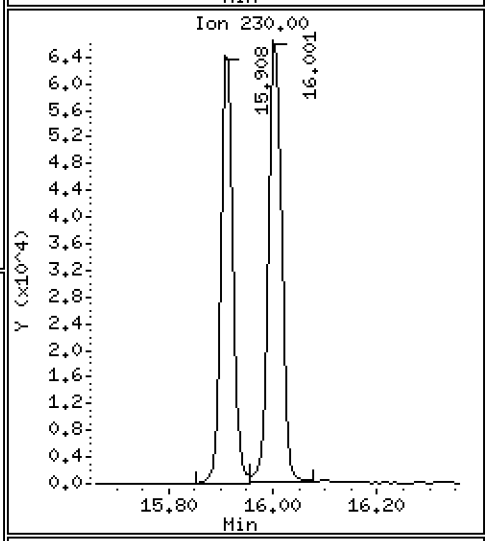


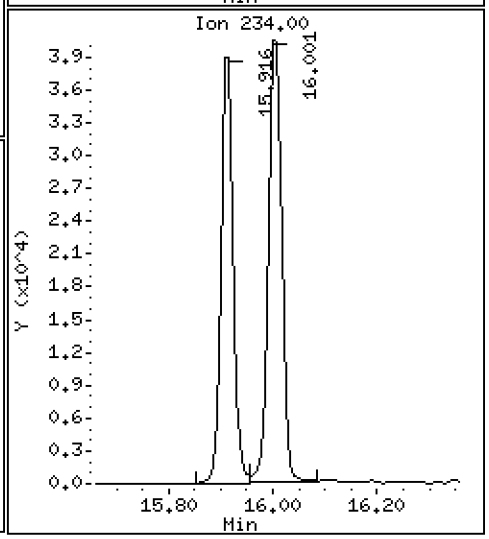












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230317.b\NT1003172313.D
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Inj Date : 18-MAR-2023 02:03
Operator : VTS Inst ID: nt10.i
Smp Info : BLB0495-MS1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230317.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.982	6.975	(0.759)	141912	2.69869	2.699
$	2 Phenol-d5	99	8.551	8.543	(0.929)	225103	3.26310	3.263
	3 Phenol	94	8.574	8.566	(0.932)	208147	2.90361	2.904
$	5 2-Chlorophenol-d4	132	8.837	8.837	(0.960)	270414	4.59047	4.590
	4 Bis(2-Chloroethyl)ether	93	8.744	8.744	(0.950)	188819	3.55140	3.551
	6 2-Chlorophenol	128	8.868	8.867	(0.964)	173681	2.83086	2.831
	7 1,3-Dichlorobenzene	146	9.138	9.138	(0.993)	193350	2.98092	2.981
*	8 1,4-Dichlorobenzene-d4	152	9.200	9.200	(1.000)	173887	4.00000	
	9 1,4-Dichlorobenzene	146	9.232	9.231	(1.003)	191749	3.06022	3.060
$	10 1,2-Dichlorobenzene-d4	152	9.557	9.557	(1.039)	126026	2.97900	2.979
	12 1,2-Dichlorobenzene	146	9.589	9.588	(1.042)	189404	3.07149	3.071
	11 Benzyl alcohol	108	9.464	9.464	(1.029)	112457	3.34226	3.342
	14 2,2'-oxybis(1-Chloropropane)	121	9.767	9.759	(1.062)	65704	3.62819	3.628
	13 2-Methylphenol	108	9.682	9.682	(1.052)	144031	2.75623	2.756
	17 Hexachloroethane	117	10.178	10.178	(1.106)	73437	2.85659	2.857
	16 N-Nitroso-di-n-propylamine	70	10.023	10.023	(1.089)	144343	3.49818	3.498
	15 4-Methylphenol	108	9.953	9.946	(1.082)	219397	3.98467	3.985
$	18 Nitrobenzene-d5	82	10.295	10.287	(0.882)	212129	3.30018	3.300
	19 Nitrobenzene	77	10.326	10.326	(0.884)	206130	3.26773	3.268
	20 Isophorone	82	10.768	10.768	(0.922)	398386	4.93684	4.937
	21 2-Nitrophenol	139	10.955	10.955	(0.938)	112037	3.63870	3.639
	22 2,4-Dimethylphenol	107	10.989	10.989	(0.941)	407793	7.03824	7.038
	23 Bis(2-Chloroethoxy)methane	93	11.192	11.192	(0.959)	226416	4.20039	4.200
	24 Benzoic acid	105	11.167	11.175	(0.956)	480037	14.4296	14.43
	25 2,4-Dichlorophenol	162	11.396	11.396	(0.976)	657267	14.1758	14.18
	26 1,2,4-Trichlorobenzene	180	11.591	11.583	(0.993)	181867	3.34155	3.342
*	27 Naphthalene-d8	136	11.676	11.676	(1.000)	636818	4.00000	
	28 Naphthalene	128	11.715	11.715	(1.003)	587576	3.48291	3.483
	29 4-Chloroaniline	127	11.854	11.838	(1.015)	107529	1.63383	1.634
	30 Hexachlorobutadiene	225	12.070	12.070	(1.034)	110225	3.45636	3.456
	31 4-Chloro-3-methylphenol	107	12.790	12.790	(1.095)	763216	15.2056	15.21
	32 2-Methylnaphthalene	142	13.107	13.099	(1.123)	455581	3.74207	3.742
	33 Hexachlorocyclopentadiene	237	13.564	13.571	(0.888)	139387	4.37880	4.379

		QUANT SIG					CONCENTRATIONS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	13.726	13.718	(0.898)	585446	17.2216	17.22
	35 2,4,5-Trichlorophenol	196	13.796	13.788	(0.903)	639820	16.9385	16.94
$	36 2-Fluorobiphenyl	172	13.881	13.881	(0.908)	519103	3.81532	3.815
	37 2-Chloronaphthalene	162	14.098	14.098	(0.923)	435015	3.94869	3.949
	38 2-Nitroaniline	65	14.361	14.353	(0.940)	485172	15.6780	15.68
	39 Dimethylphthalate	163	14.787	14.787	(0.968)	512167	4.58376	4.584
	40 Acenaphthylene	152	14.972	14.965	(0.980)	662184	3.85738	3.857
	41 2,6-Dinitrotoluene	165	14.926	14.926	(0.977)	430298	17.8270	17.83
*	42 Acenaphthene-d10	164	15.282	15.282	(1.000)	343951	4.00000	
	43 3-Nitroaniline	138	15.212	15.212	(0.995)	155850	5.72055	5.721
	44 Acenaphthene	153	15.344	15.344	(1.004)	438741	4.13701	4.137
	45 2,4-Dinitrophenol	184	15.413	15.421	(1.009)	61737	4.20414	4.204
	46 Dibenzofuran	168	15.668	15.676	(1.025)	656938	4.20062	4.201
	47 4-Nitrophenol	109	15.521	15.514	(1.016)	213799	12.5756	12.58
	48 2,4-Dinitrotoluene	165	15.730	15.730	(1.029)	594378	16.7257	16.73
	50 Diethylphthalate	149	16.233	16.240	(1.062)	632002	5.76490	5.765
	49 Fluorene	166	16.380	16.387	(1.072)	610103	4.95869	4.959
	51 4-Chlorophenyl-phenylether	204	16.372	16.372	(1.071)	304286	5.20076	5.201
	52 4-Nitroaniline	138	16.472	16.480	(1.078)	218798	8.91163	8.912
	53 4,6-Dinitro-2-methylphenol	198	16.565	16.572	(0.905)	387094	19.5541	19.55
	54 N-Nitrosodiphenylamine	169	16.619	16.626	(0.908)	360328	4.20240	4.202
$	55 2,4,6-Tribromophenol	330	16.919	16.919	(1.107)	107515	6.70245	6.702
	56 4-Bromophenyl-phenylether	248	17.374	17.374	(0.949)	168513	4.69787	4.698
	57 Hexachlorobenzene	284	17.691	17.691	(0.966)	154545	4.10939	4.109
	58 Pentachlorophenol	266	18.047	18.047	(0.986)	388068	16.8699	16.87
*	59 Phenanthrene-d10	188	18.311	18.310	(1.000)	641328	4.00000	
	60 Phenanthrene	178	18.357	18.357	(1.003)	865554	4.94952	4.950
	61 Anthracene	178	18.450	18.457	(1.008)	728561	4.34309	4.343
	62 Carbazole	167	18.775	18.782	(1.025)	699086	4.65063	4.651
	63 Di-n-butylphthalate	149	19.572	19.572	(1.069)	987308	4.91041	4.910
	64 Fluoranthene	202	20.755	20.732	(0.889)	1105747	5.63098	5.631
	65 Pyrene	202	21.181	21.158	(0.907)	1250997	6.21030	6.210
$	66 Terphenyl-d14	244	21.444	21.436	(0.918)	630143	4.16550	4.165
	67 Butylbenzylphthalate	149	22.358	22.358	(0.958)	406530	5.54817	5.548
	68 Benzo(a)anthracene	228	23.318	23.310	(0.999)	995844	5.77313	5.773
*	69 Chrysene-d12	240	23.349	23.341	(1.000)	488701	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.271	23.264	(0.997)	117348	2.12383	2.124
	71 Chrysene	228	23.388	23.380	(1.002)	1037479	6.15620	6.156
	72 bis(2-Ethylhexyl)phthalate	149	23.364	23.380	(0.959)	285247	2.24846	2.248
*	134 Di-n-octylphthalate-d4	153	24.355	24.363	(1.000)	866231	4.00000	
	73 Di-n-octylphthalate	149	24.363	24.378	(1.000)	195183	0.86103	0.8610
	74 Benzo(b)fluoranthene	252	25.215	25.207	(0.970)	1212868	6.80005	6.800
	75 Benzo(k)fluoranthene	252	25.253	25.253	(0.971)	1053616	5.81749	5.817(H)
	76 Benzo(a)pyrene	252	25.880	25.873	(0.996)	953614	5.98006	5.980
*	77 Perylene-d12	264	25.997	25.997	(1.000)	550243	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.719	28.711	(1.105)	1026904	5.06167	5.062
	79 Dibenzo(a,h)anthracene	278	28.742	28.726	(1.106)	802495	4.76444	4.764
	80 Benzo(g,h,i)perylene	276	29.534	29.519	(1.136)	912648	5.19807	5.198
	90 N-Nitrosodimethylamine	74	4.850	4.850	(0.527)	10588	0.31560	0.3156
	91 Aniline	93	8.690	8.659	(0.945)	31660	0.43103	0.4310
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	142	13.332	13.324	(1.142)	439005	3.93568	3.936
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.696	16.696	(1.093)	494473	4.03774	4.038

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.215	25.253	(0.970)	2146333	12.4633	12.46
120 2,3,4,6-Tetrachlorophenol	232	16.001	16.008	(1.047)	142494	4.01211	4.012

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172313.D
Lab Smp Id: BLB0495-MS1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230317.b\ABN.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:02
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	132765	66383	265530	173887	30.97
27 Naphthalene-d8	497947	248974	995894	636818	27.89
42 Acenaphthene-d10	271928	135964	543856	343951	26.49
59 Phenanthrene-d10	497390	248695	994780	641328	28.94
69 Chrysene-d12	391403	195702	782806	488701	24.86
134 Di-n-octylphthala	674651	337326	1349302	866231	28.40
77 Perylene-d12	408663	204332	817326	550243	34.64

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.20	8.70	9.70	9.20	0.00
27 Naphthalene-d8	11.68	11.18	12.18	11.68	0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	0.00
59 Phenanthrene-d10	18.31	17.81	18.81	18.31	0.00
69 Chrysene-d12	23.34	22.84	23.84	23.35	0.03
134 Di-n-octylphthala	24.36	23.86	24.86	24.36	-0.03
77 Perylene-d12	26.00	25.50	26.50	26.00	0.00

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

REVIEW SUMMARY FOR FILE - NT1003172313.D

Lab ID: BLB0495-MS1
nt10.i, 20230317.b\ABN.m,   18-MAR-2023 02:03

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1003172302.D

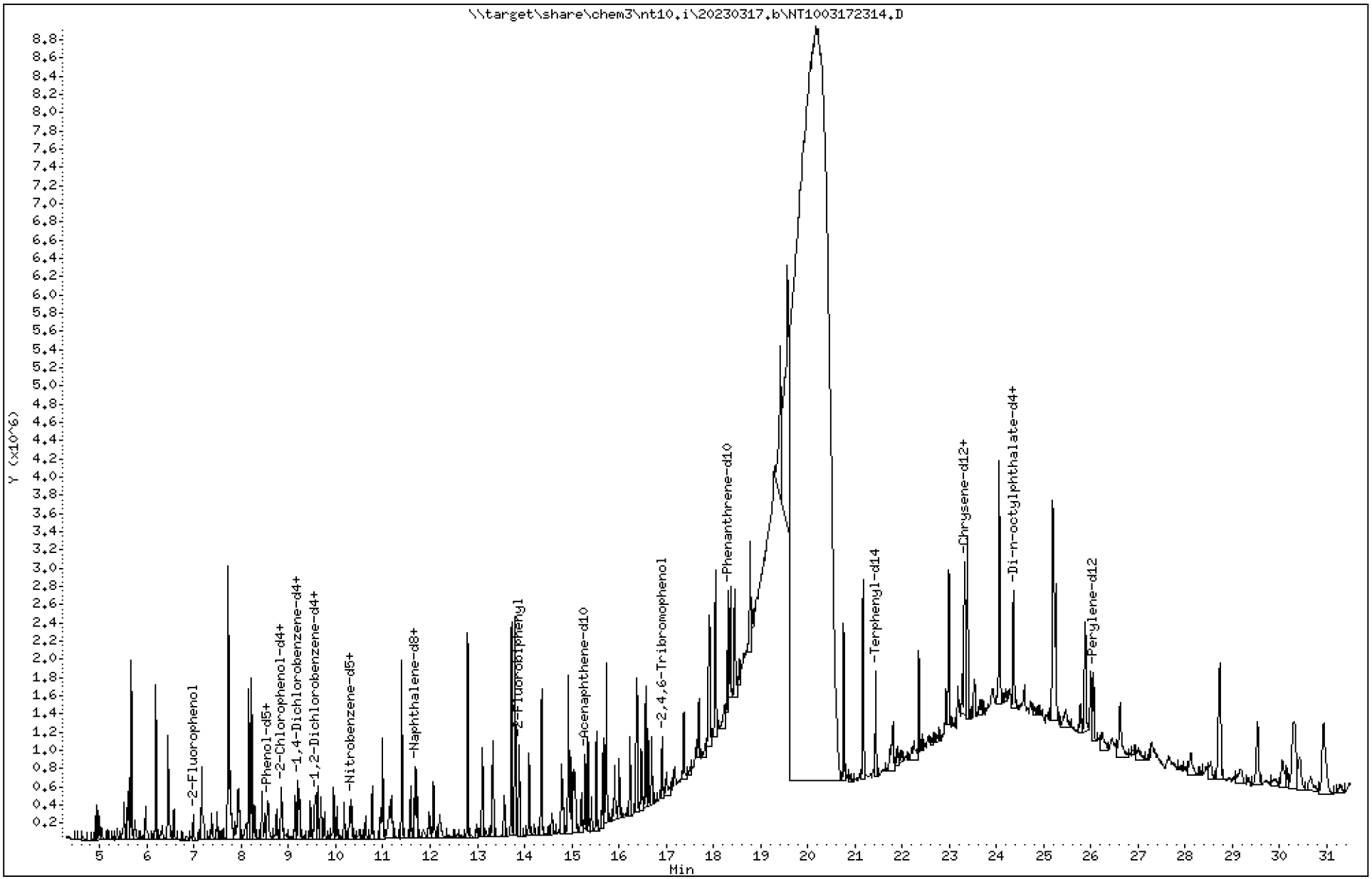
On Column LOD for nt10.i, 20230317.b\ABN.m, ICAL.sub = 0.0000

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

Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172314.D
Date : 18-MAR-2023 02:41
Client ID:
Sample Info: BLB0495-MSD1

Instrument: nt10.i
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

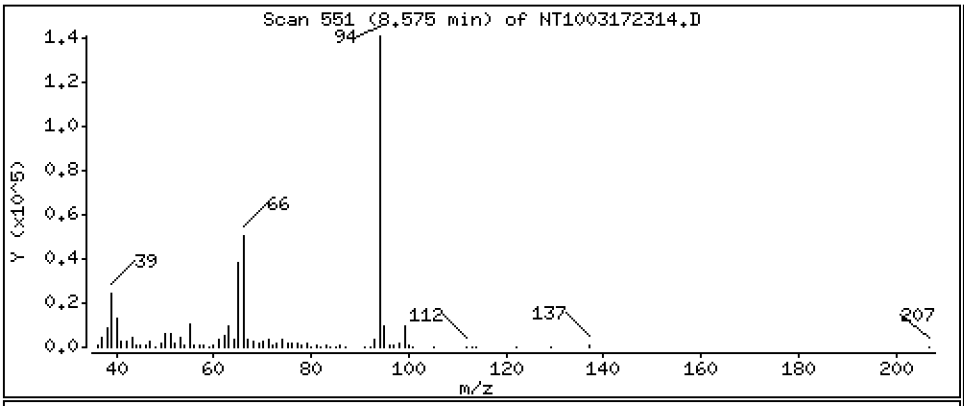
Operator: VTS

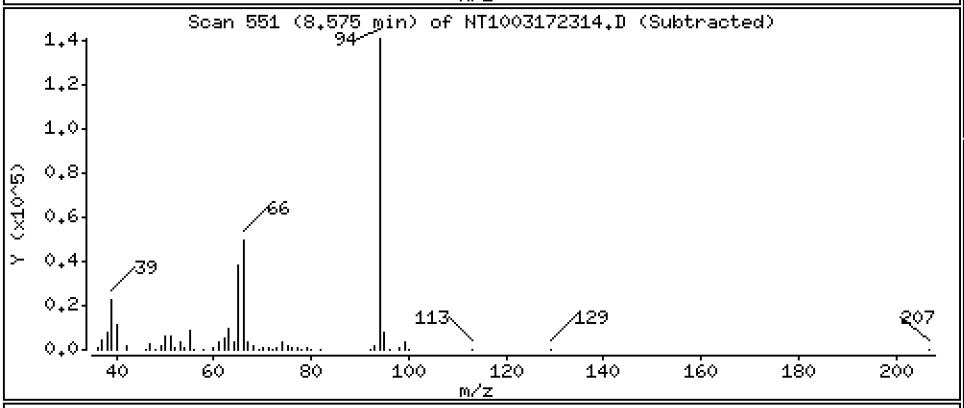
Column phase: ZB-5msi

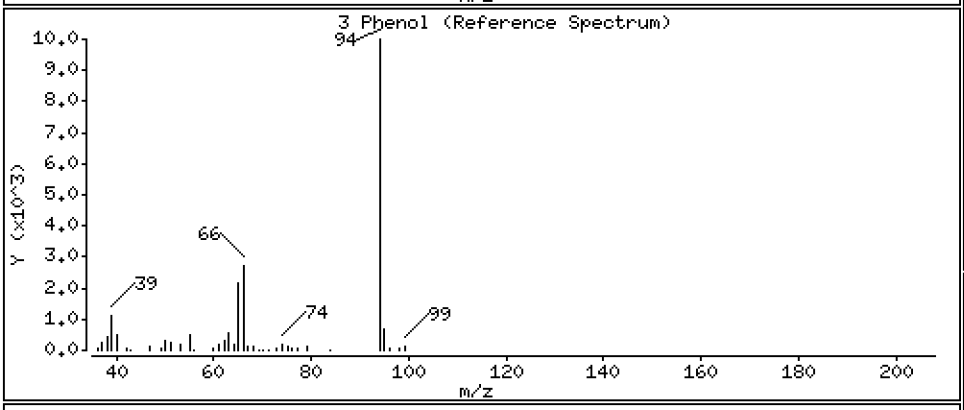
Column diameter: 0.25

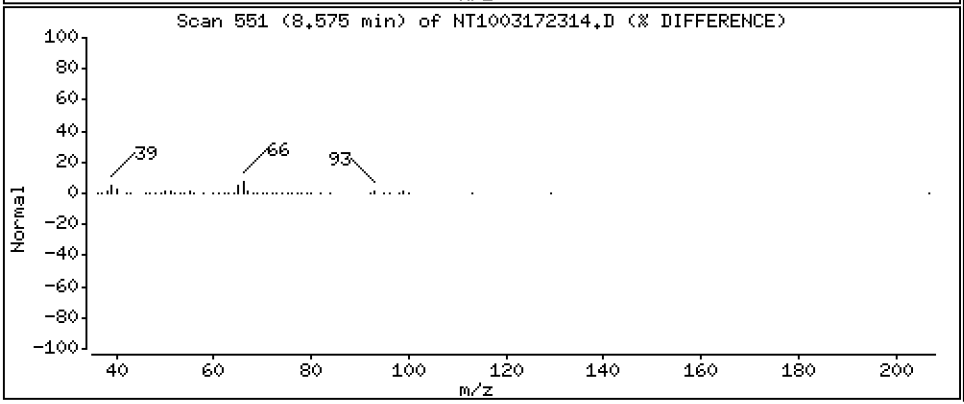
3 Phenol

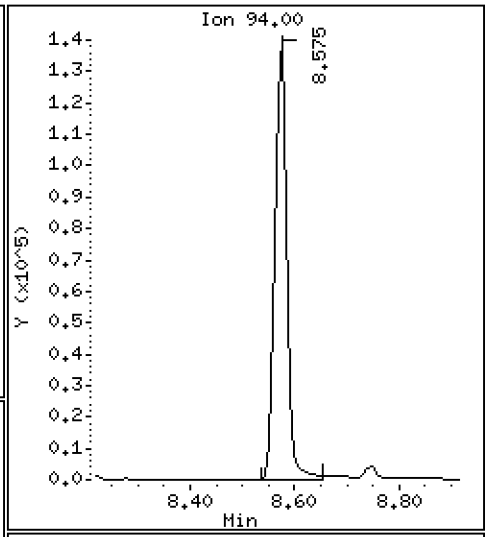
Concentration: 3.051 ug/mL

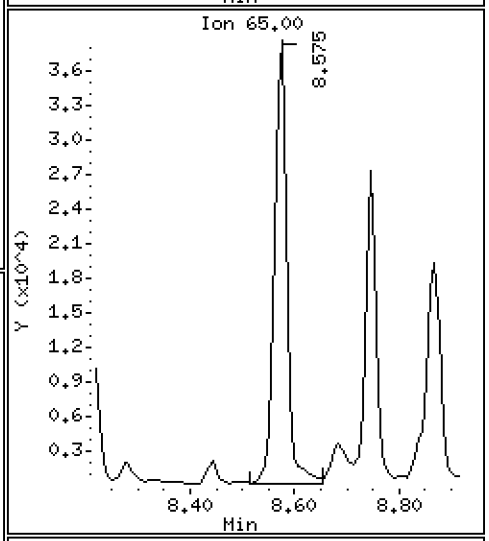


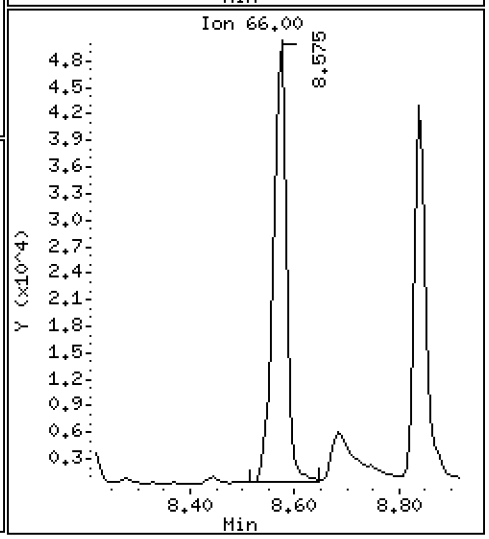












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

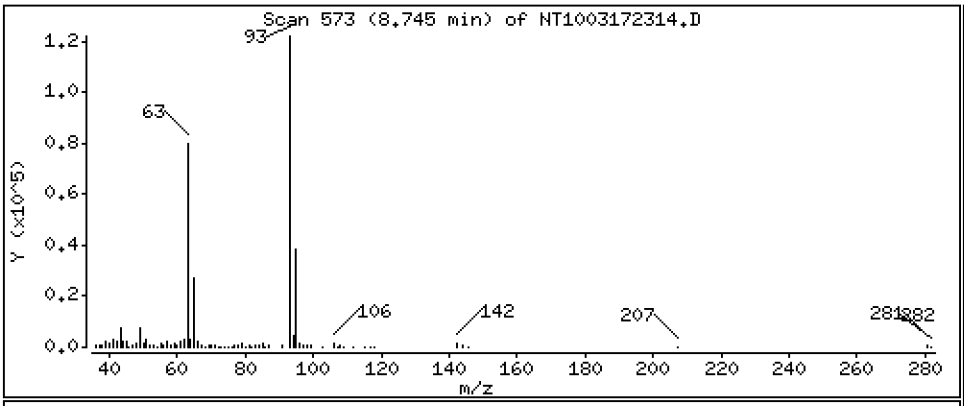
Operator: VTS

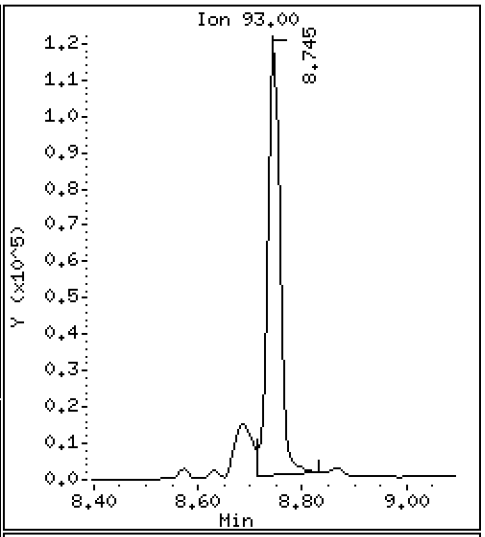
Column phase: ZB-5msi

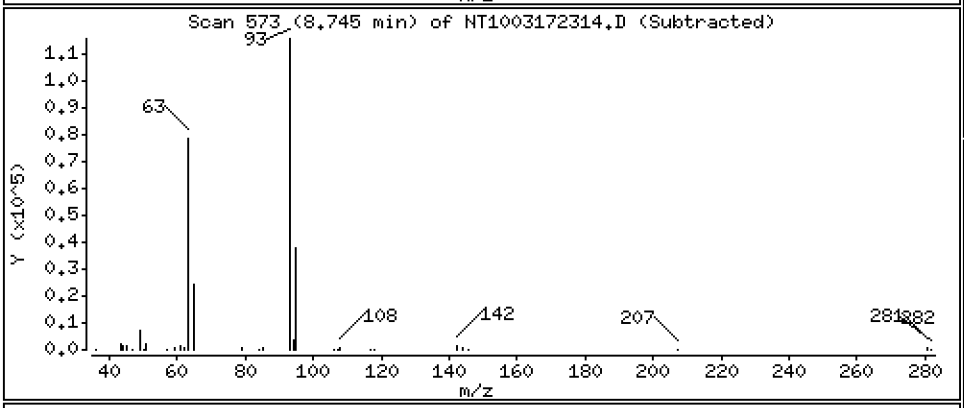
Column diameter: 0.25

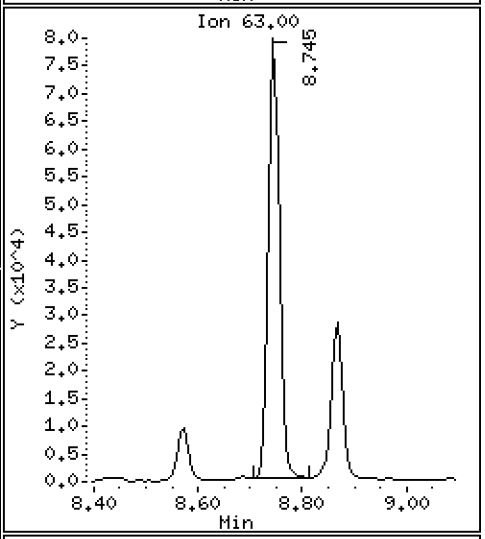
4 Bis(2-Chloroethyl)ether

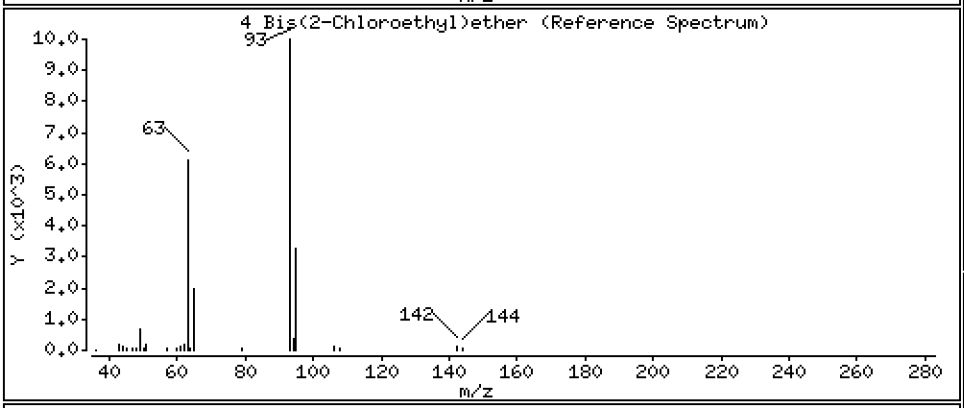
Concentration: 3.555 ug/mL

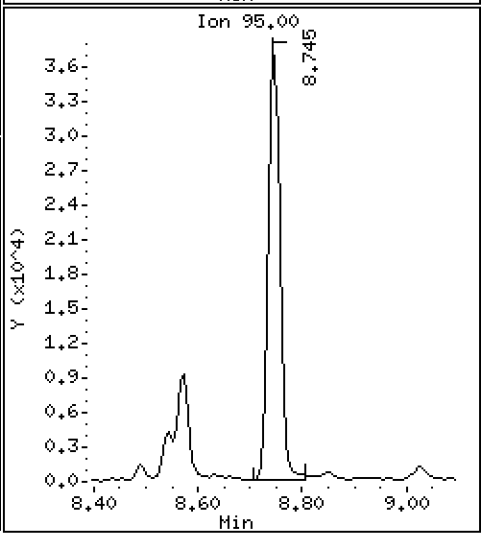


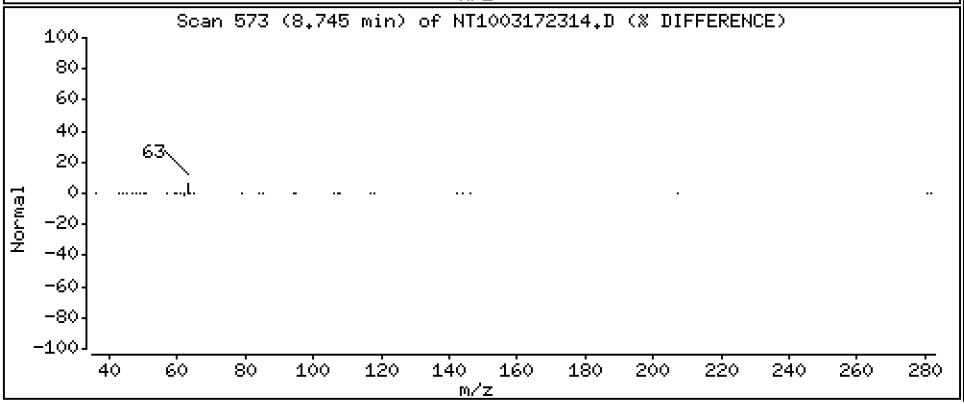












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

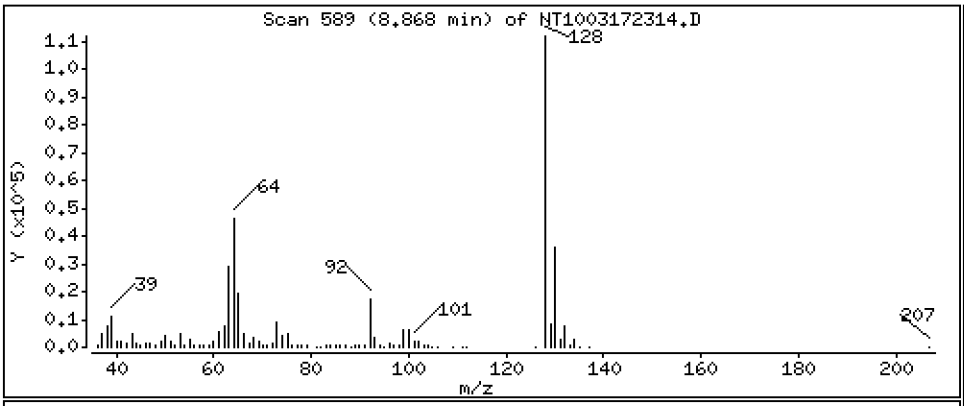
Operator: VTS

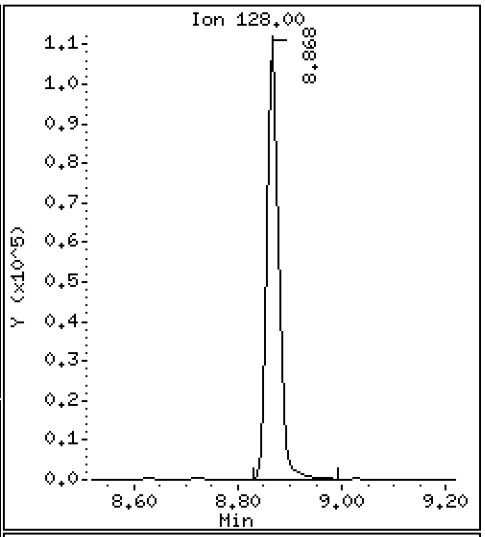
Column phase: ZB-5msi

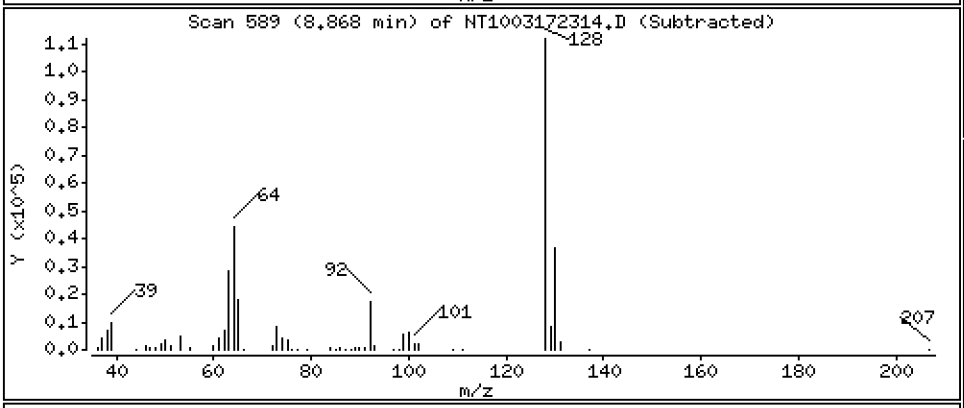
Column diameter: 0.25

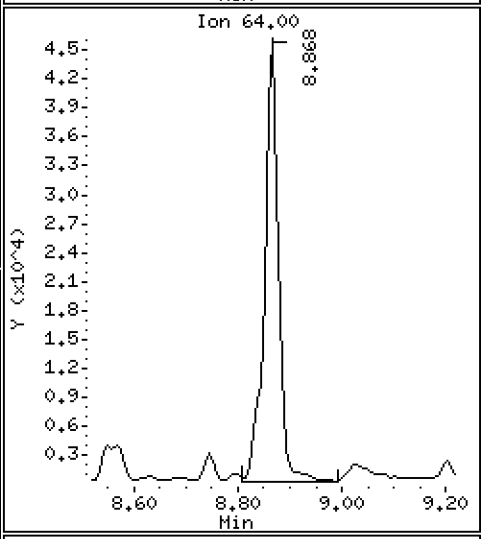
6 2-Chlorophenol

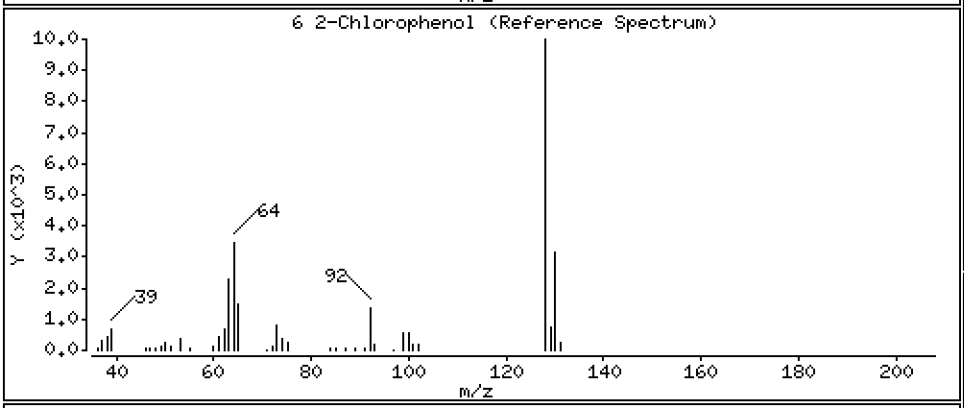
Concentration: 2.894 ug/mL

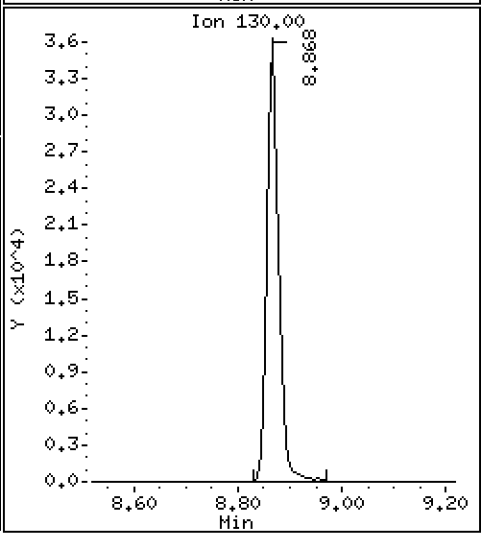


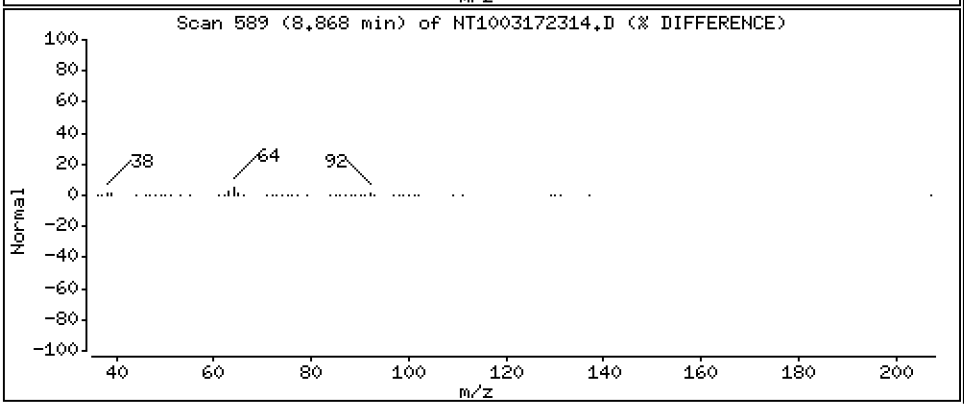












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

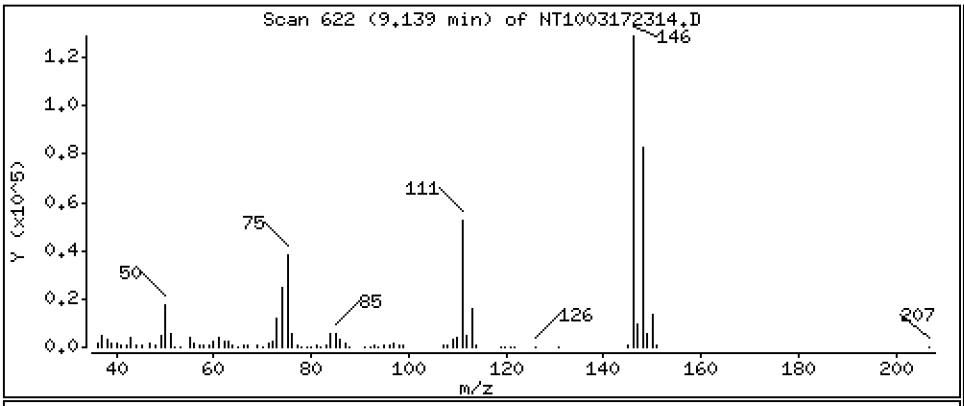
Operator: VTS

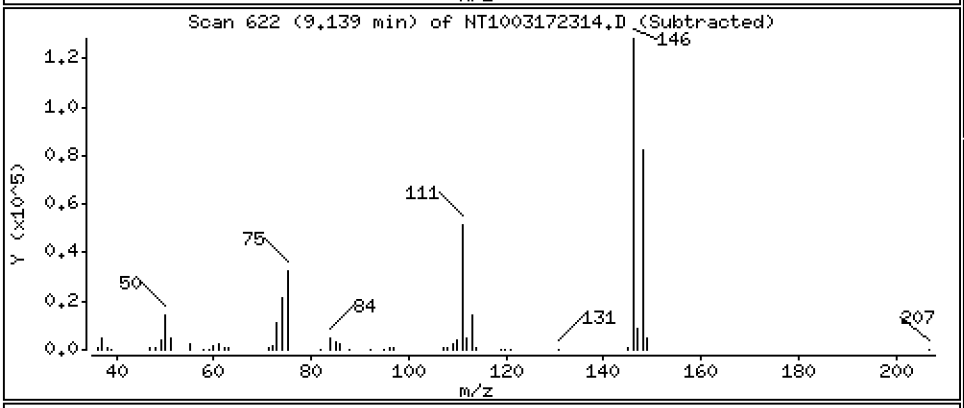
Column phase: ZB-5msi

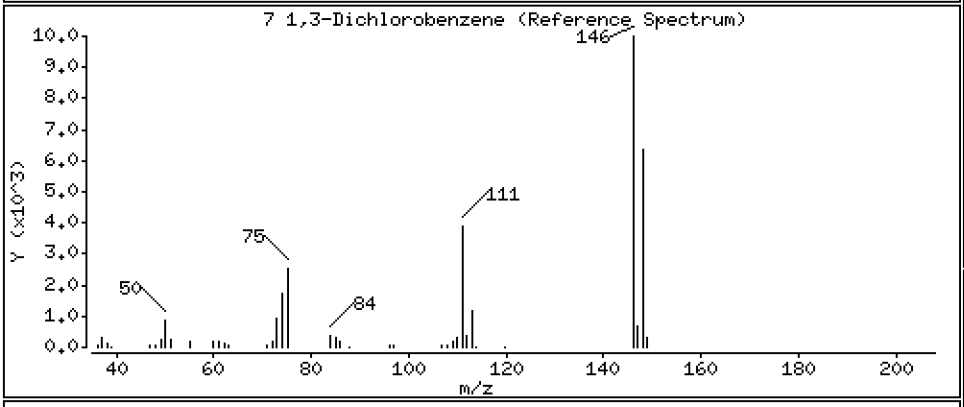
Column diameter: 0.25

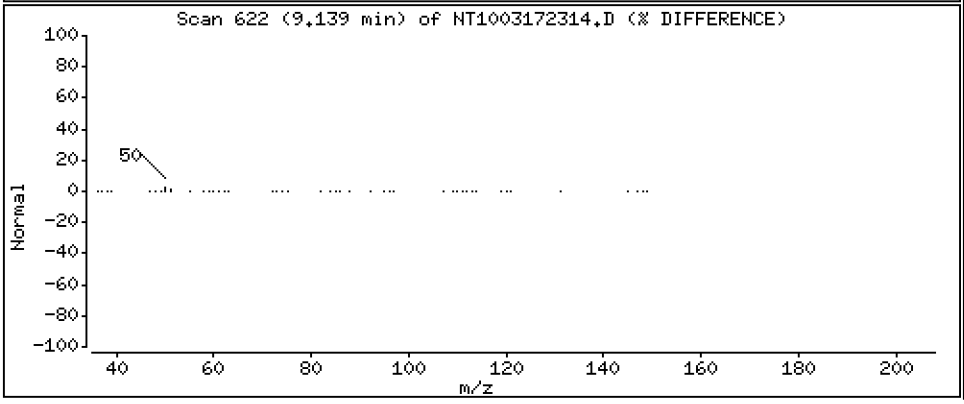
7 1,3-Dichlorobenzene

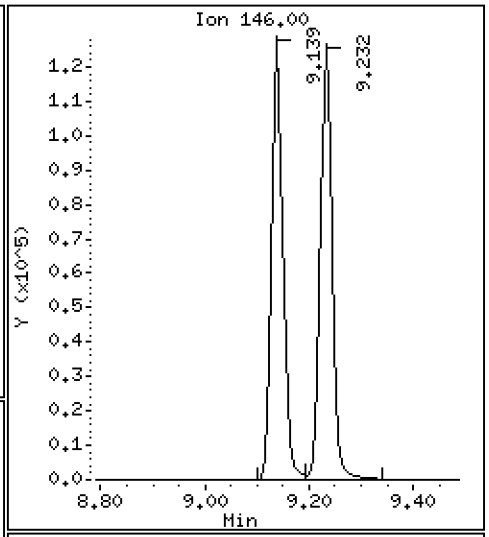
Concentration: 3.011 ug/mL

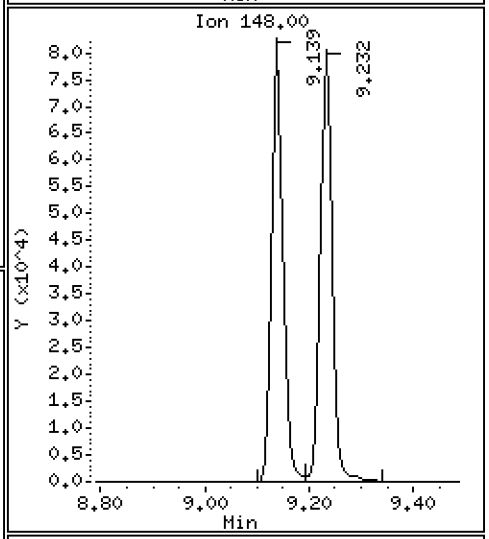


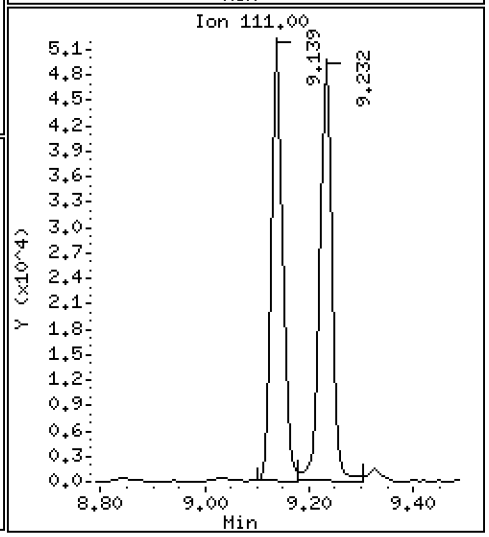












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

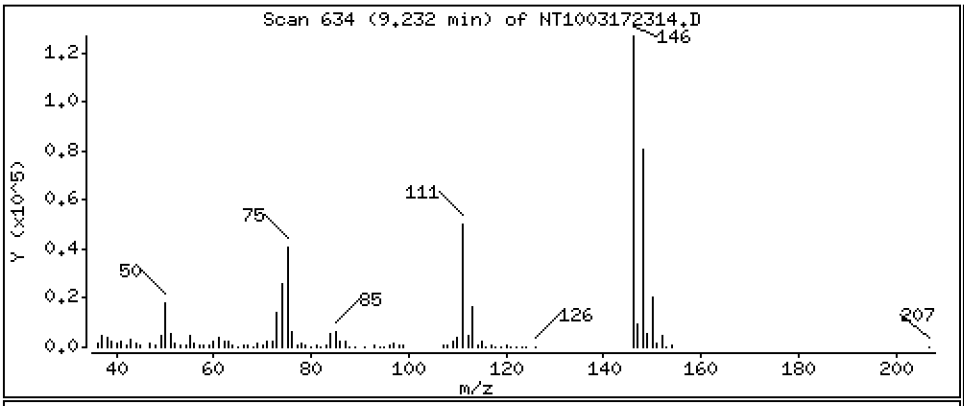
Operator: VTS

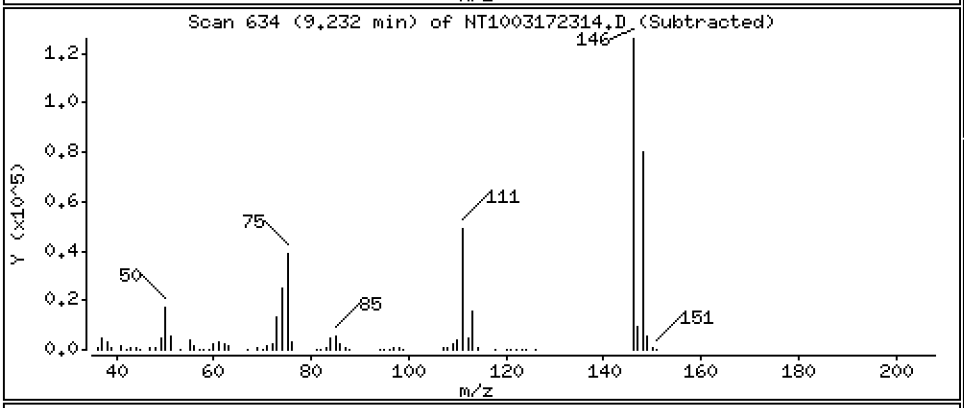
Column phase: ZB-5msi

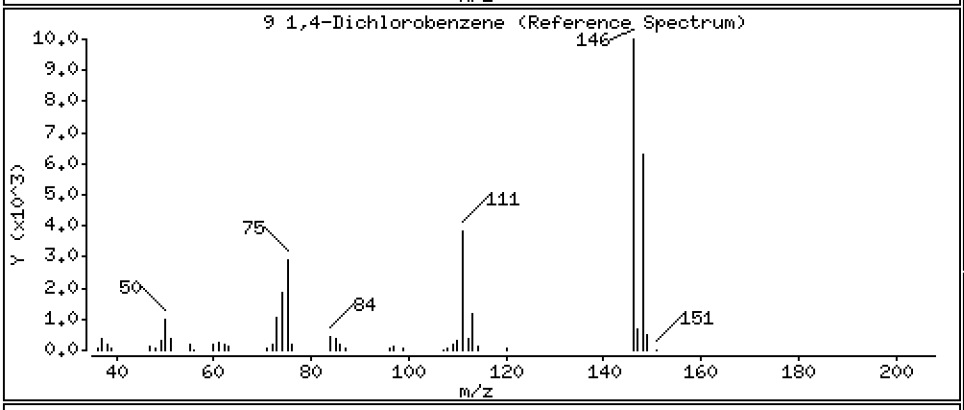
Column diameter: 0.25

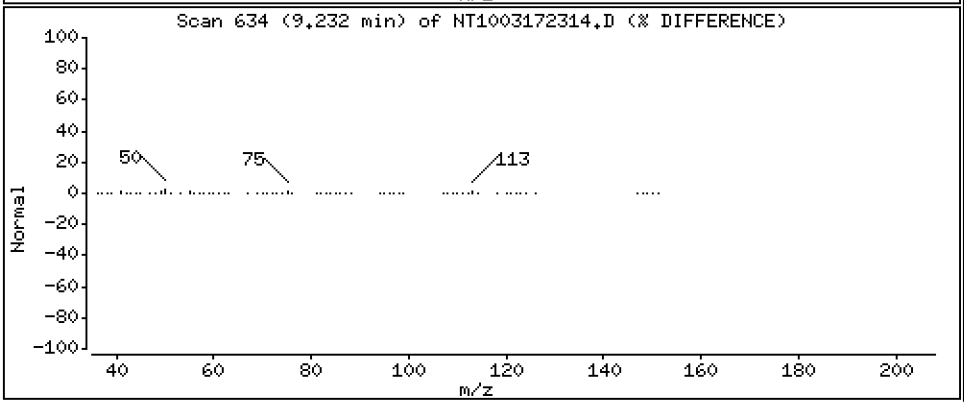
9 1,4-Dichlorobenzene

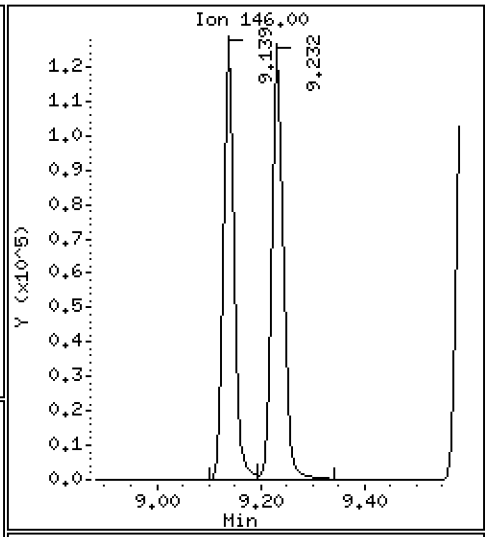
Concentration: 3.099 ug/mL

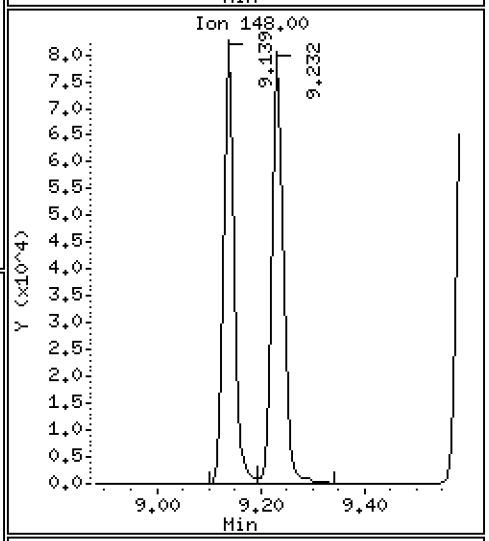


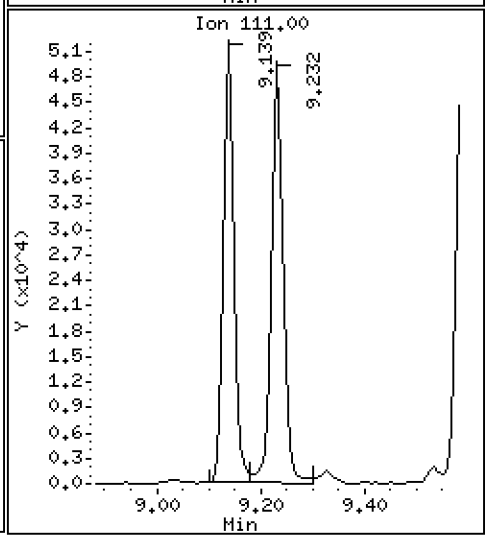












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

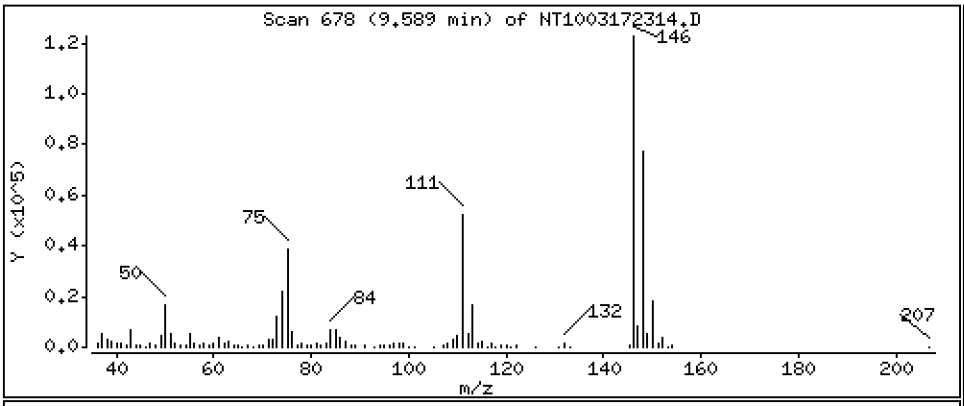
Operator: VTS

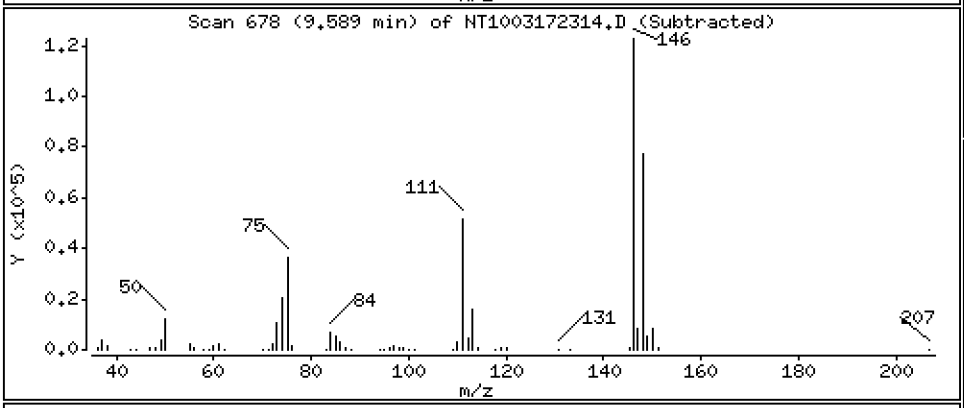
Column phase: ZB-5msi

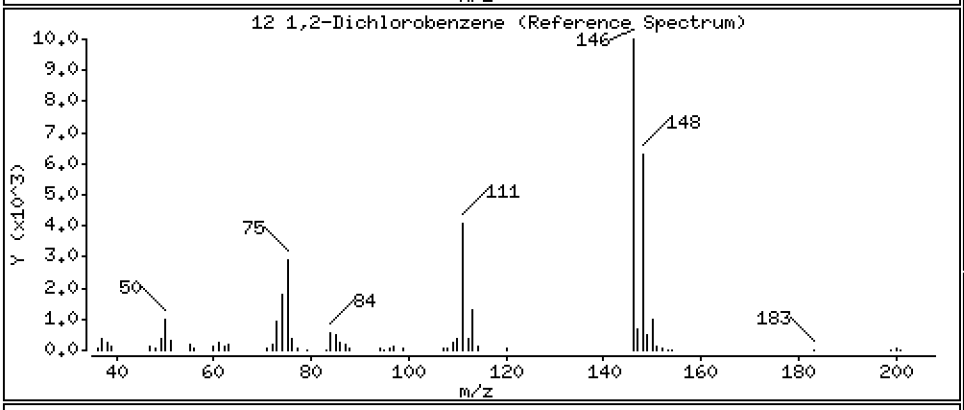
Column diameter: 0.25

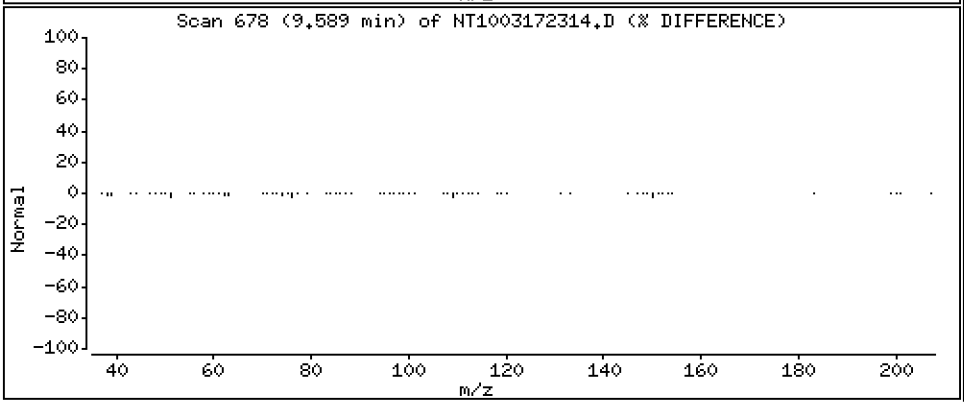
12 1,2-Dichlorobenzene

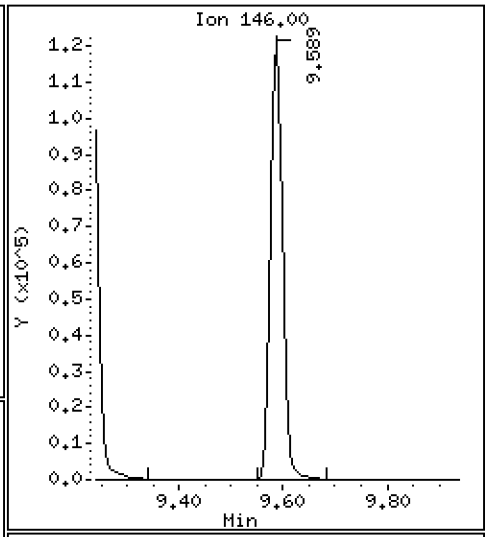
Concentration: 3.134 ug/mL

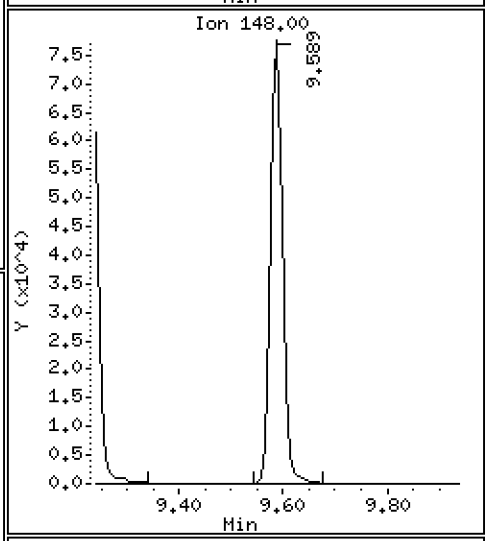


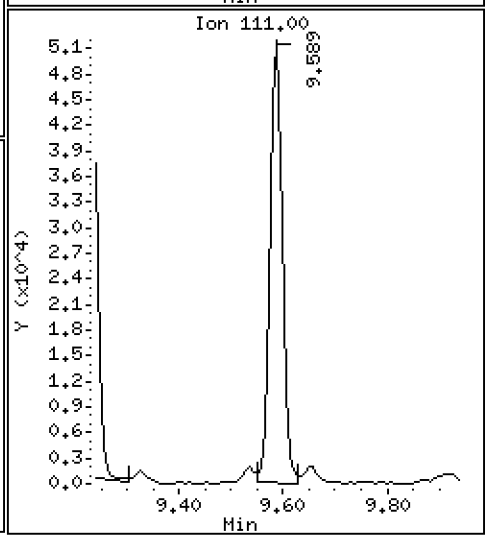












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

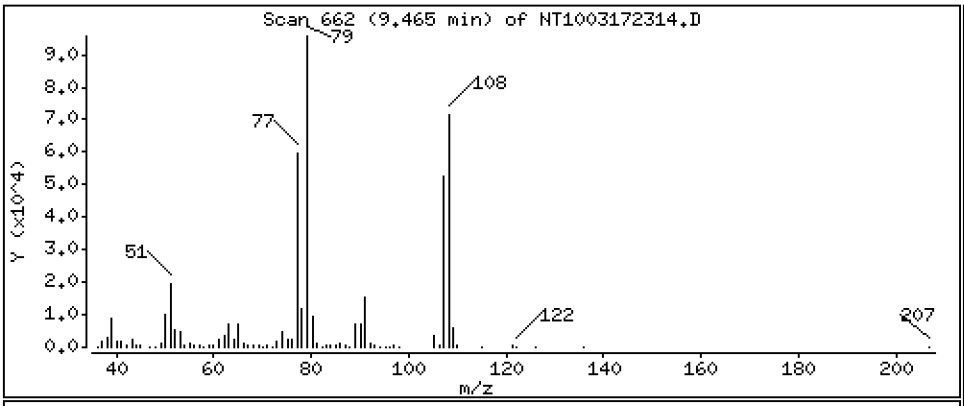
Operator: VTS

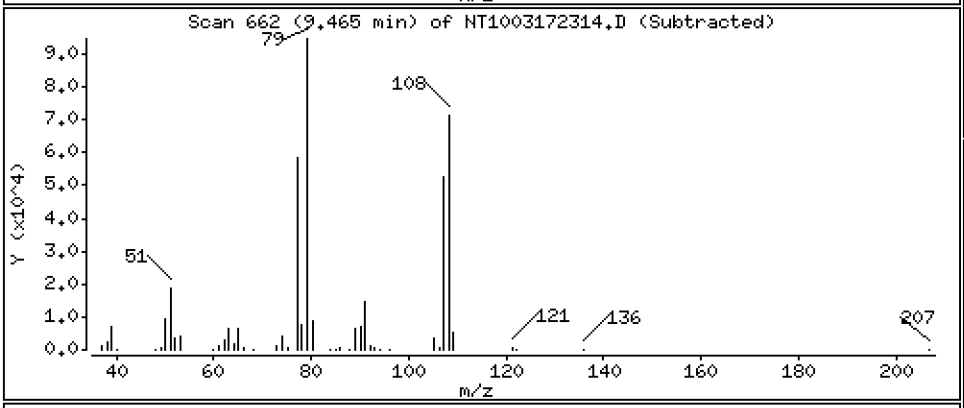
Column phase: ZB-5msi

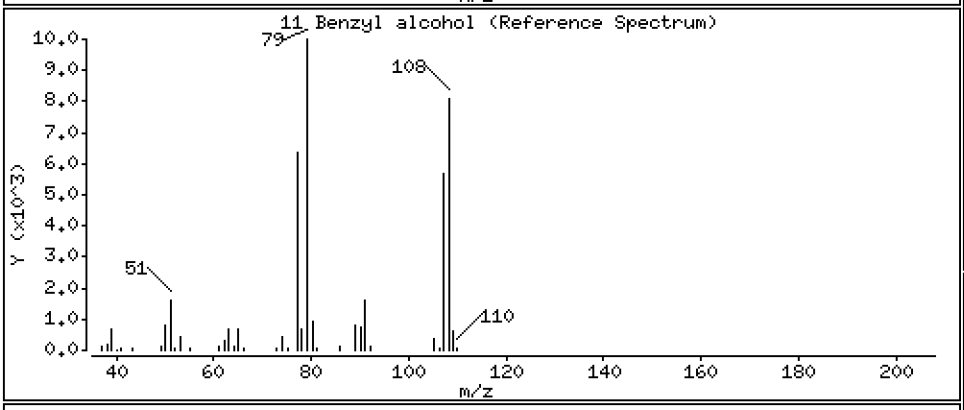
Column diameter: 0.25

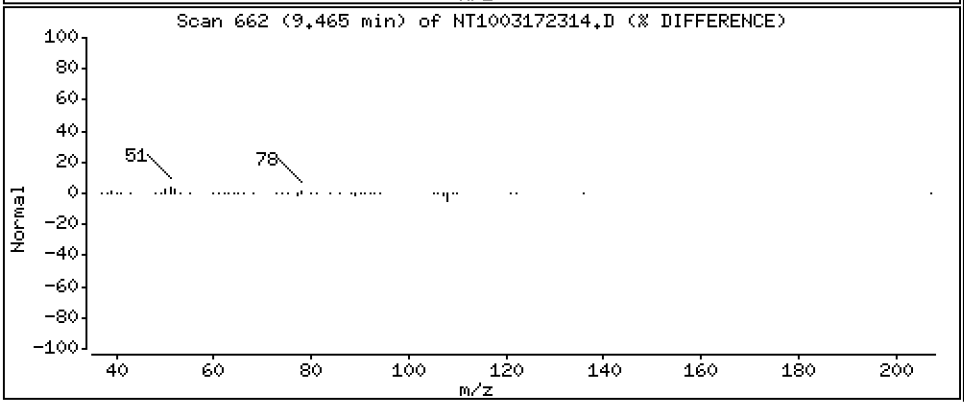
11 Benzyl alcohol

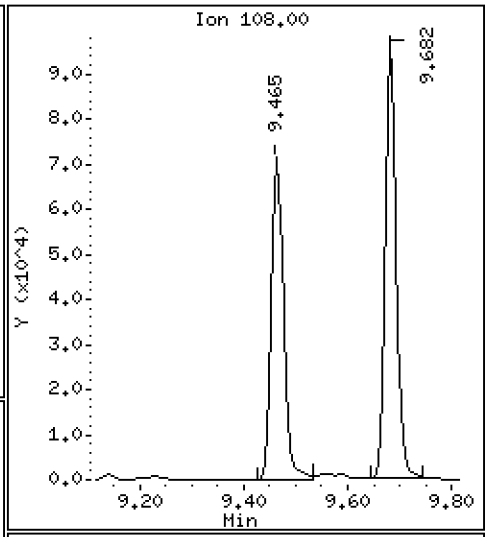
Concentration: 3.390 ug/mL

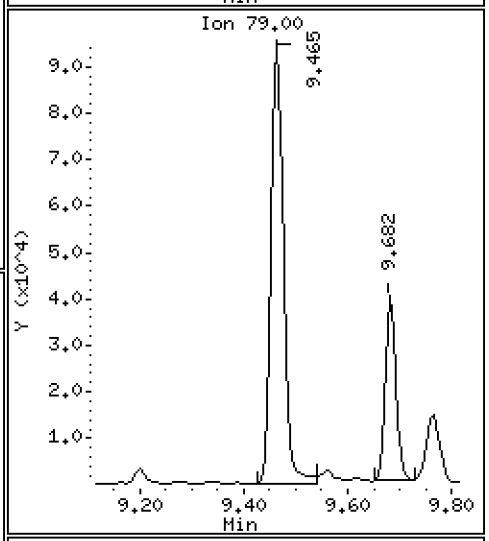


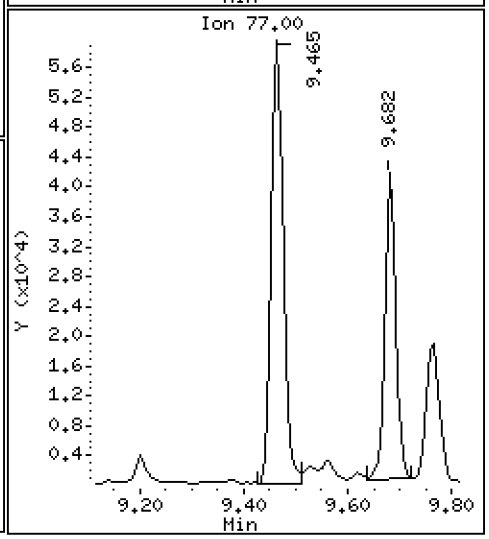












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

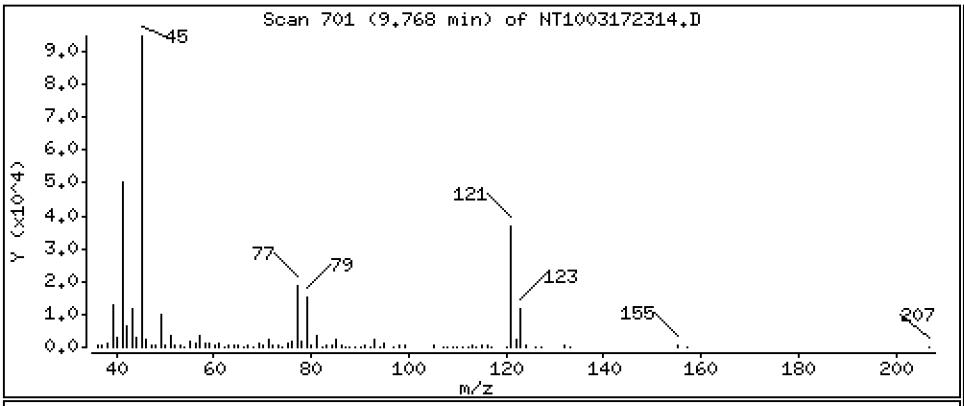
Operator: VTS

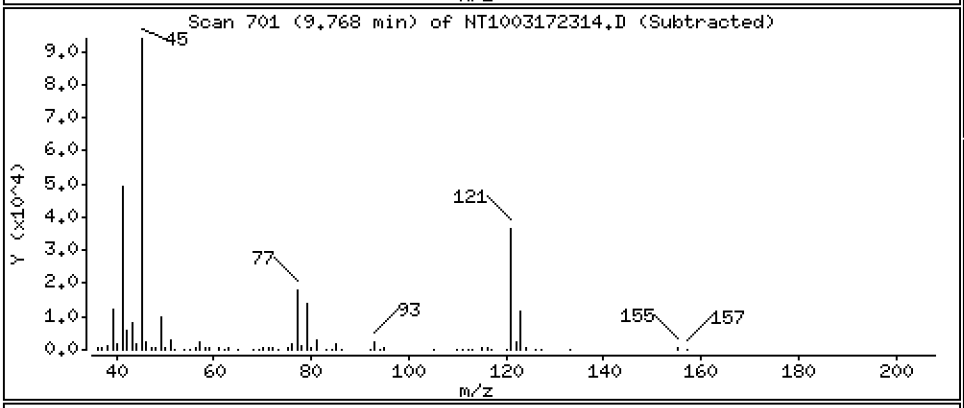
Column phase: ZB-5msi

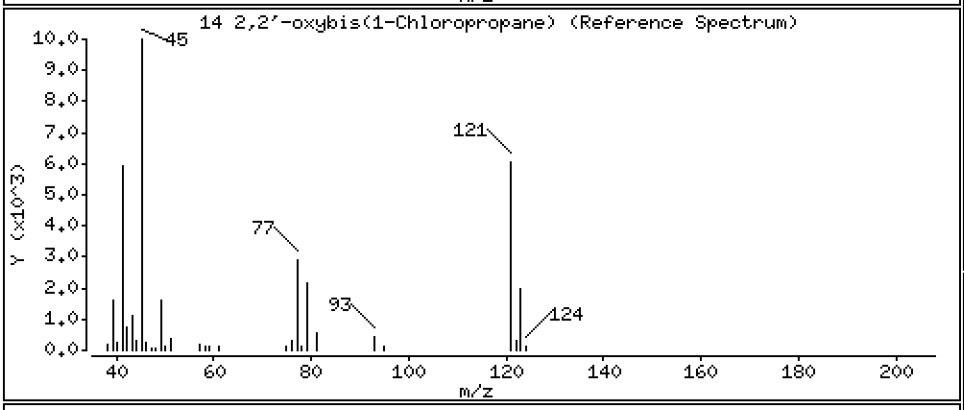
Column diameter: 0.25

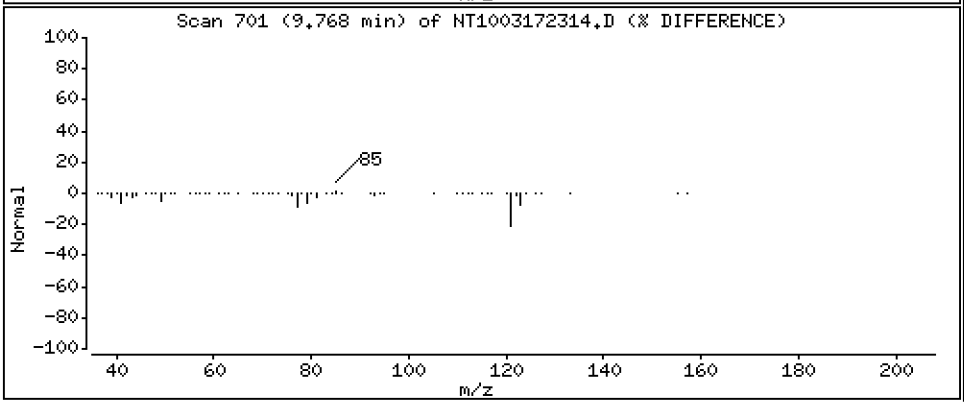
14 2,2'-oxybis(1-Chloropropane)

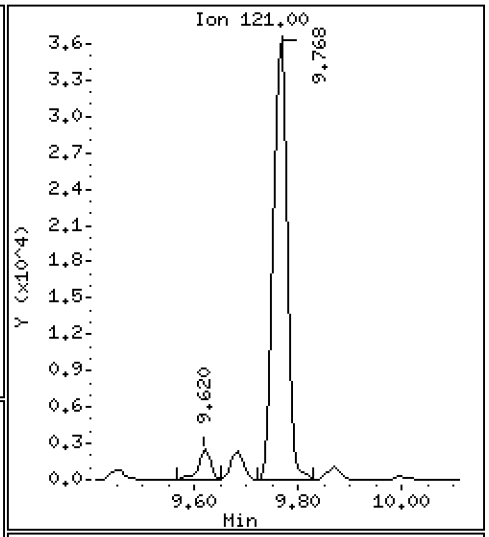
Concentration: 3.720 ug/mL

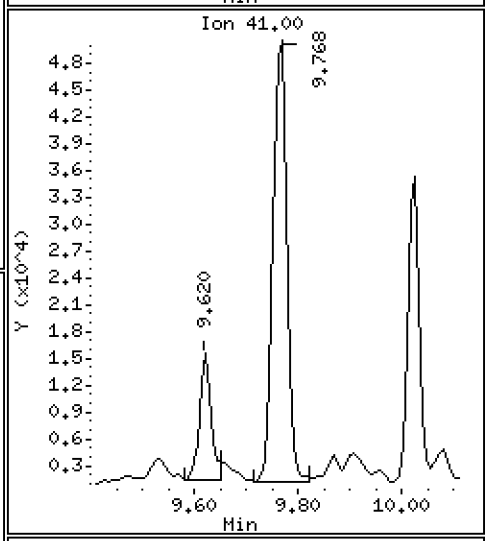


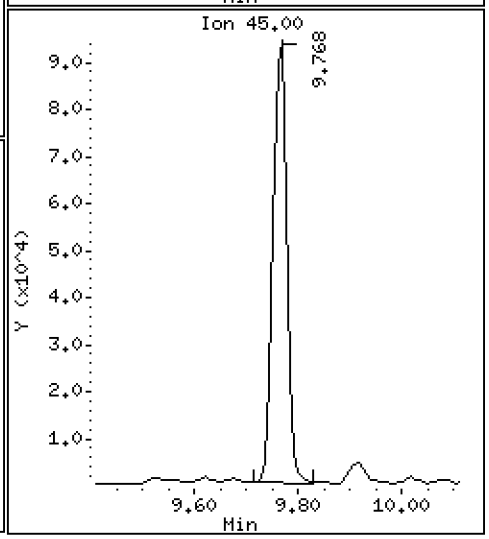












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

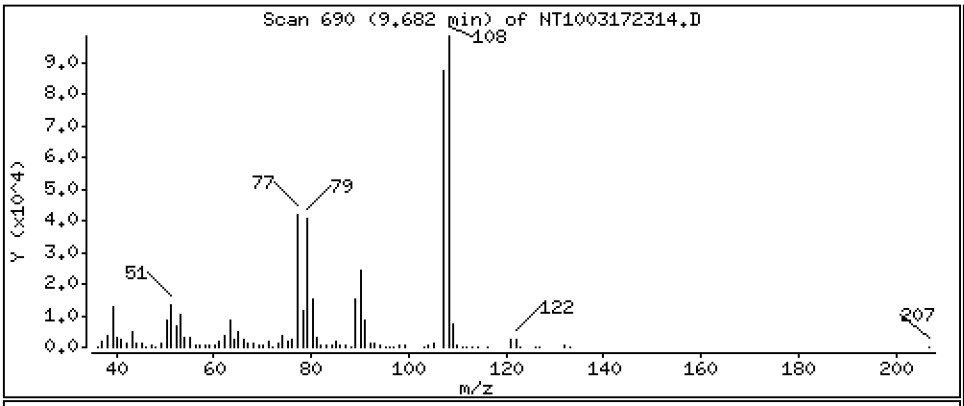
Operator: VTS

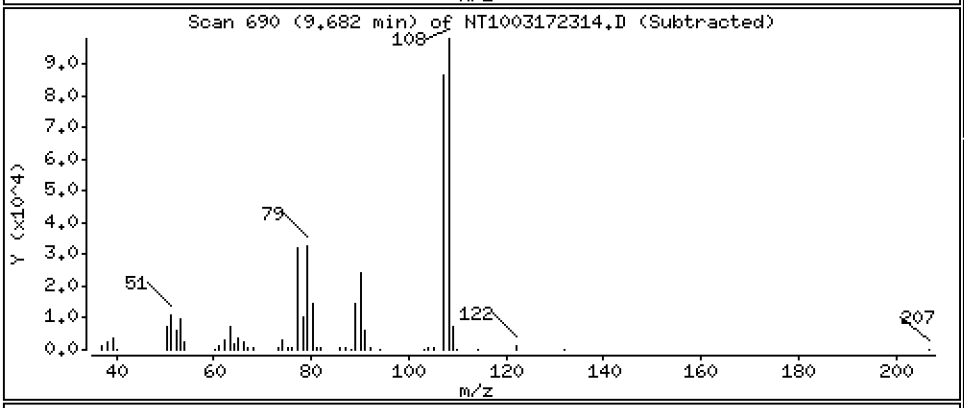
Column phase: ZB-5msi

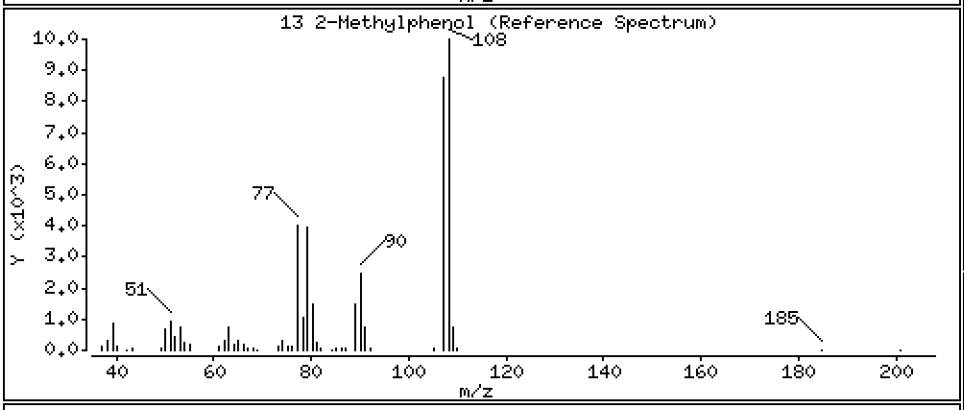
Column diameter: 0.25

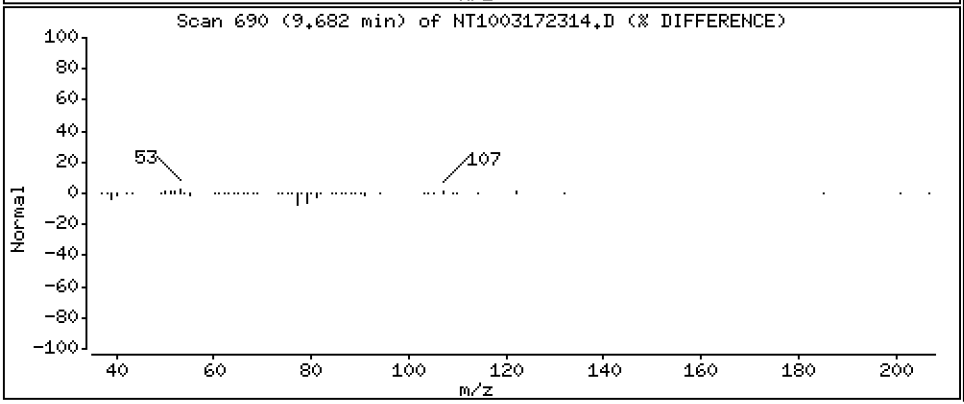
13 2-Methylphenol

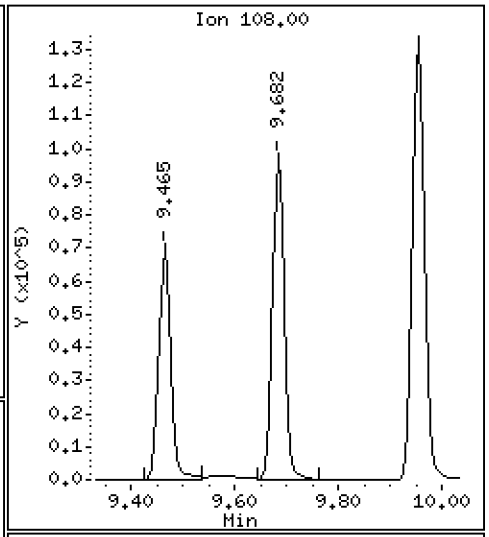
Concentration: 2.814 ug/mL

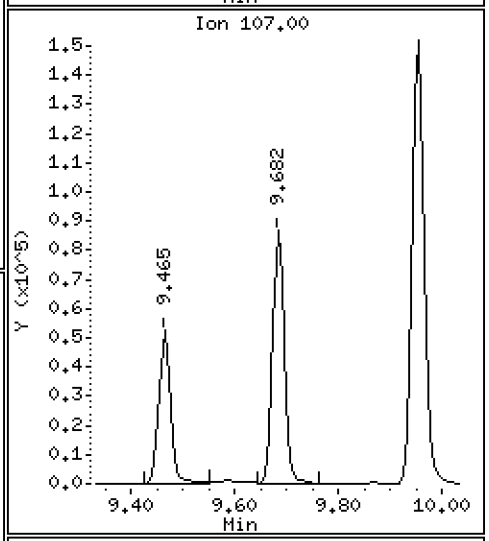


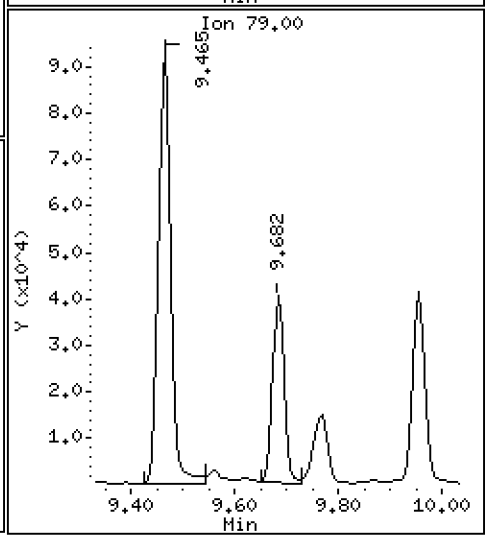












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

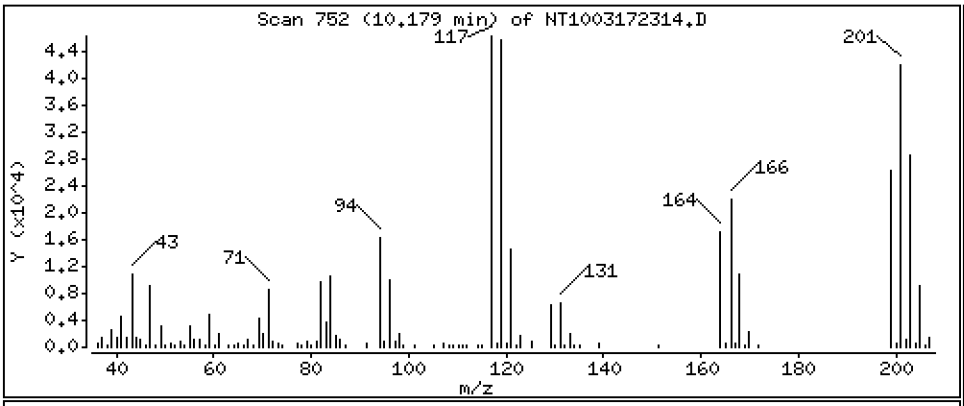
Operator: VTS

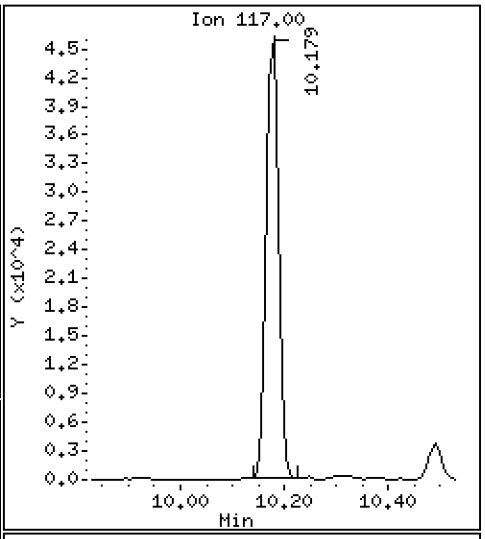
Column phase: ZB-5msi

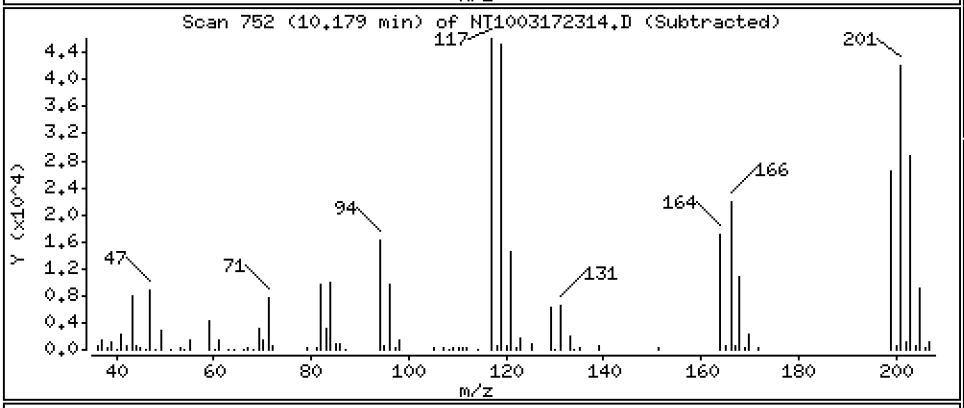
Column diameter: 0.25

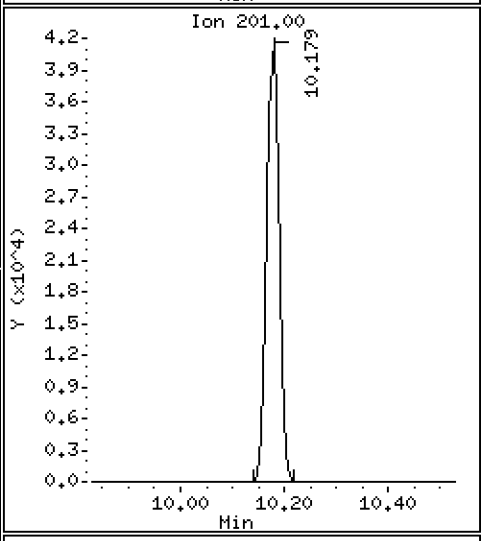
17 Hexachloroethane

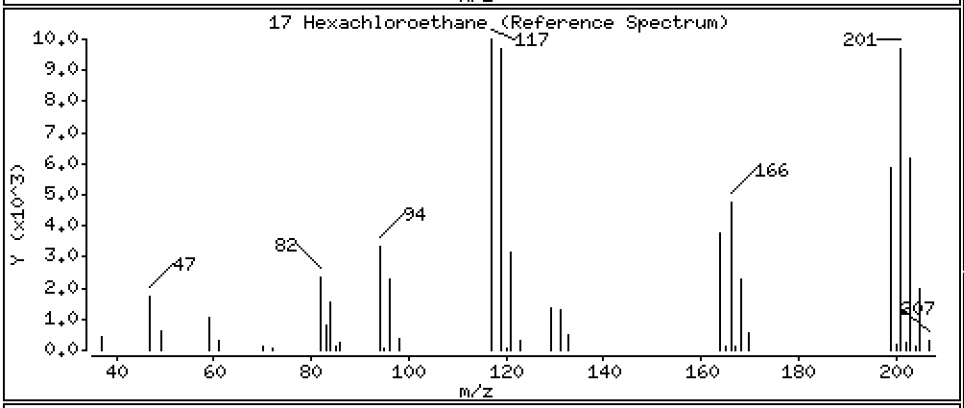
Concentration: 2.877 ug/mL

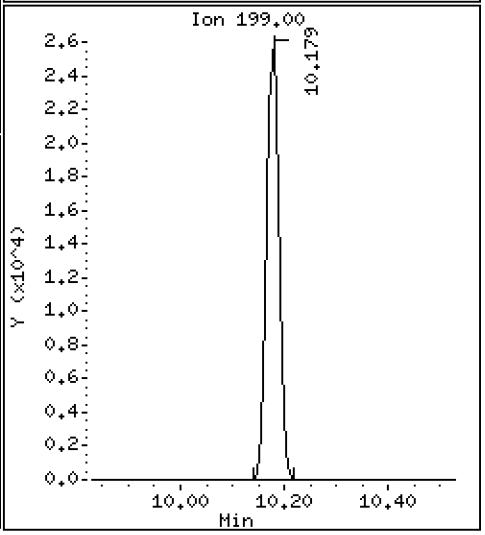


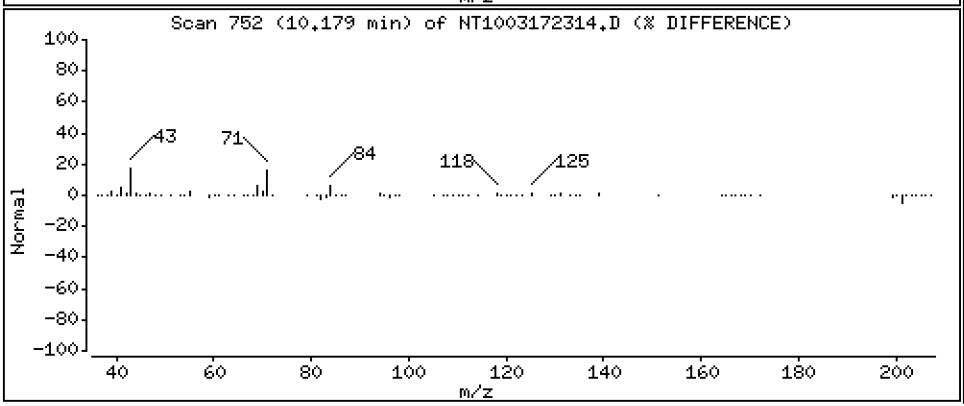












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

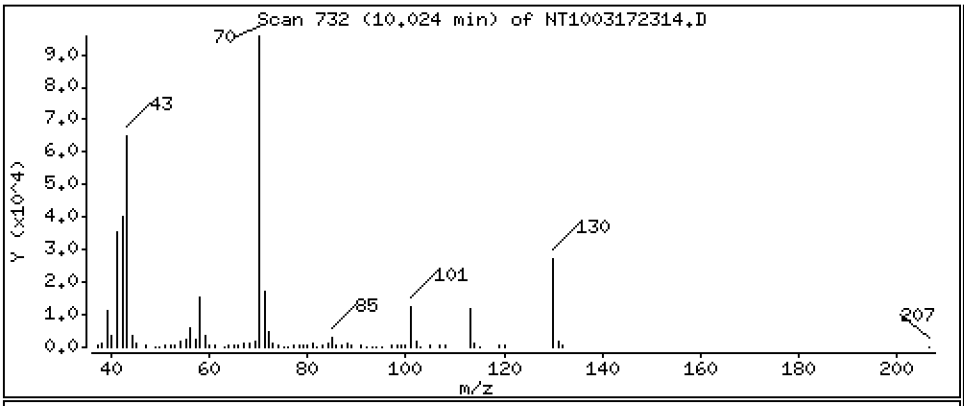
Operator: VTS

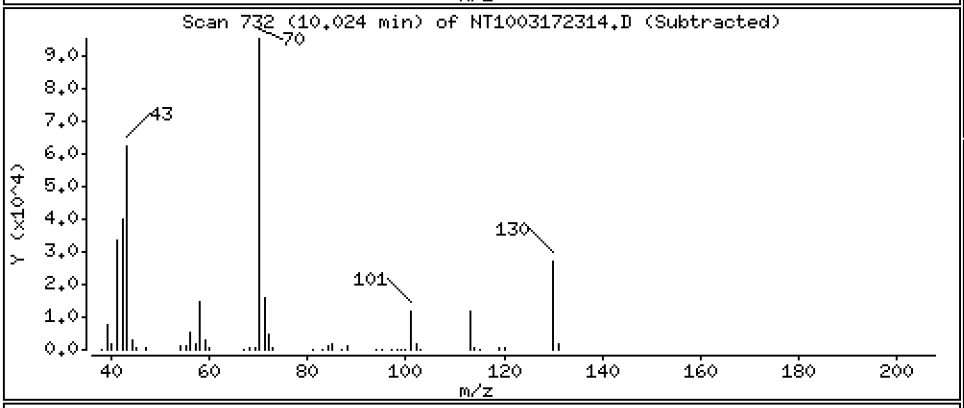
Column phase: ZB-5msi

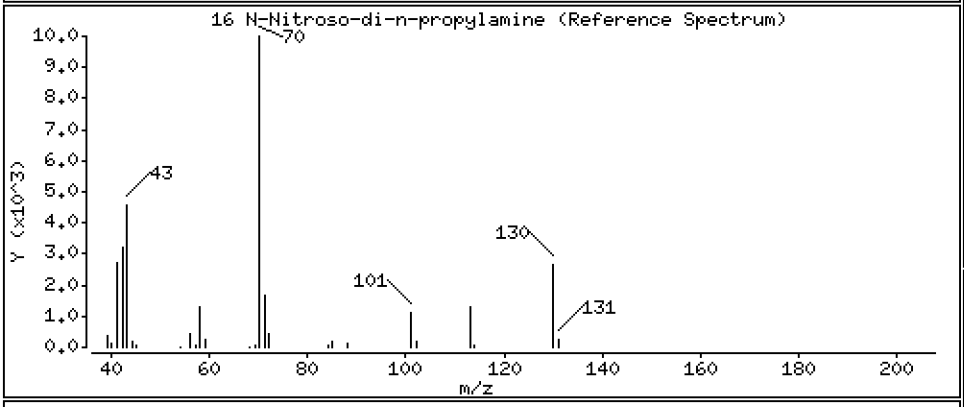
Column diameter: 0.25

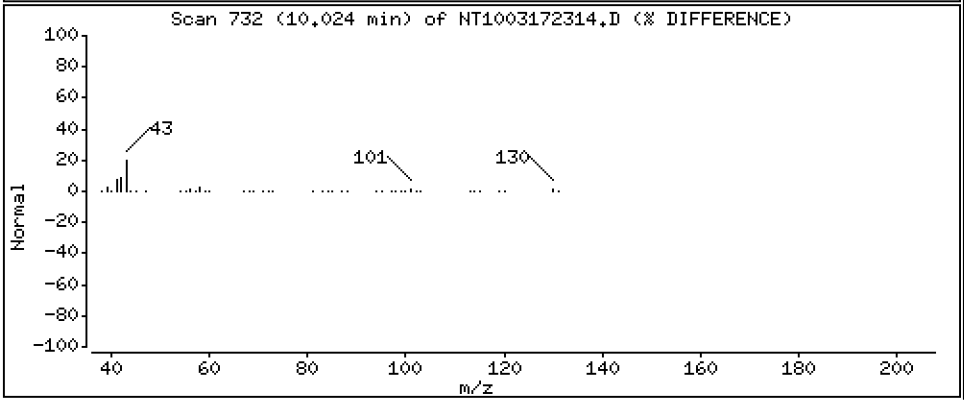
16 N-Nitroso-di-n-propylamine

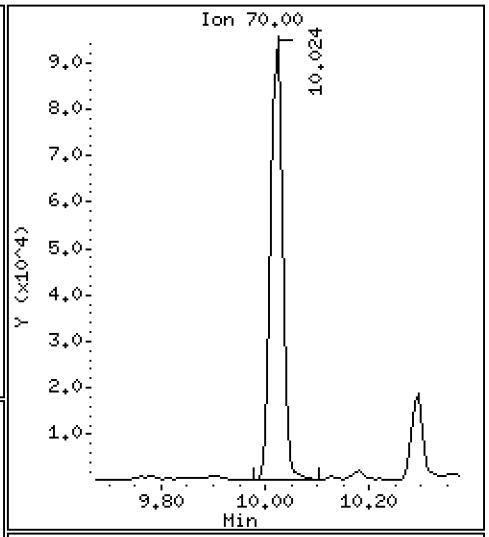
Concentration: 3.589 ug/mL

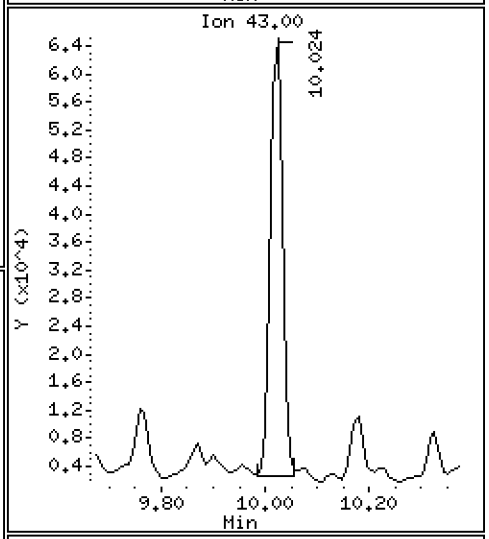


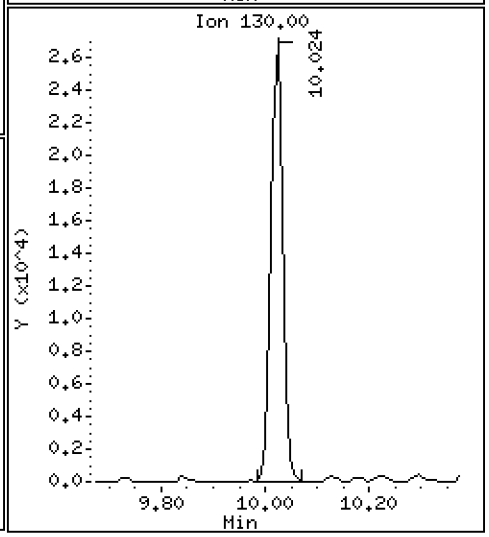












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

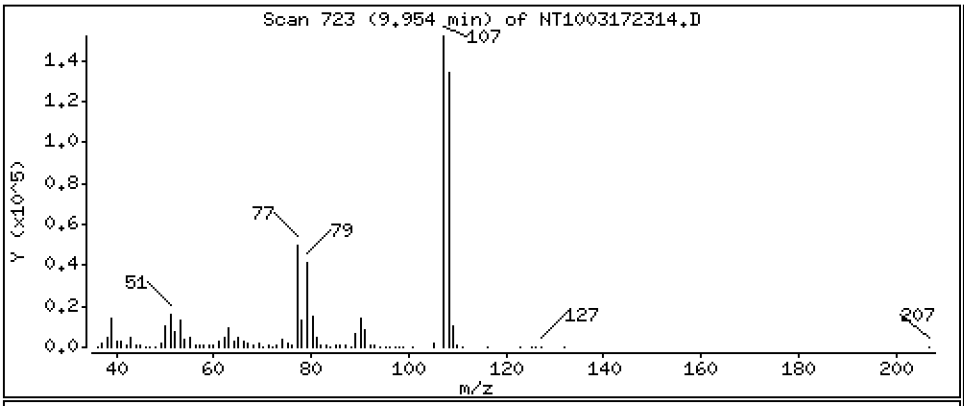
Operator: VTS

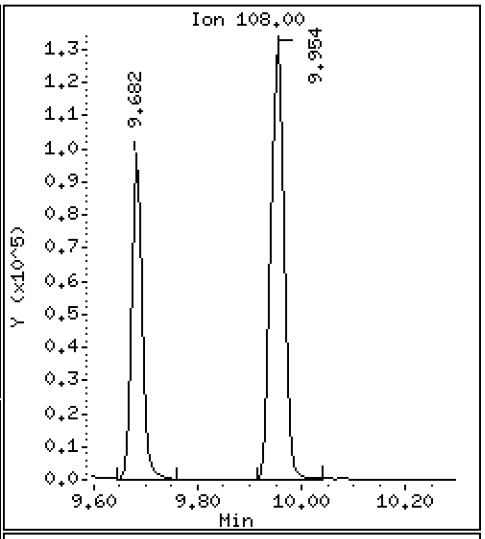
Column phase: ZB-5msi

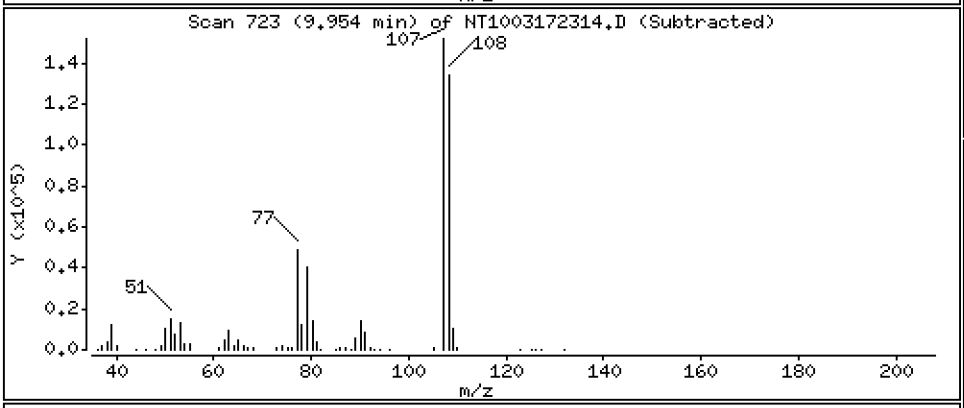
Column diameter: 0.25

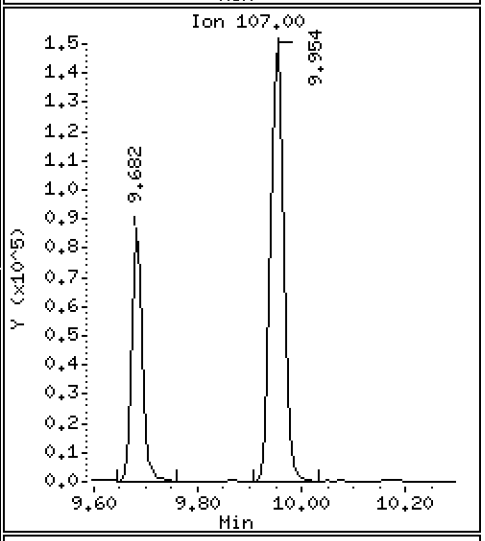
15 4-Methylphenol

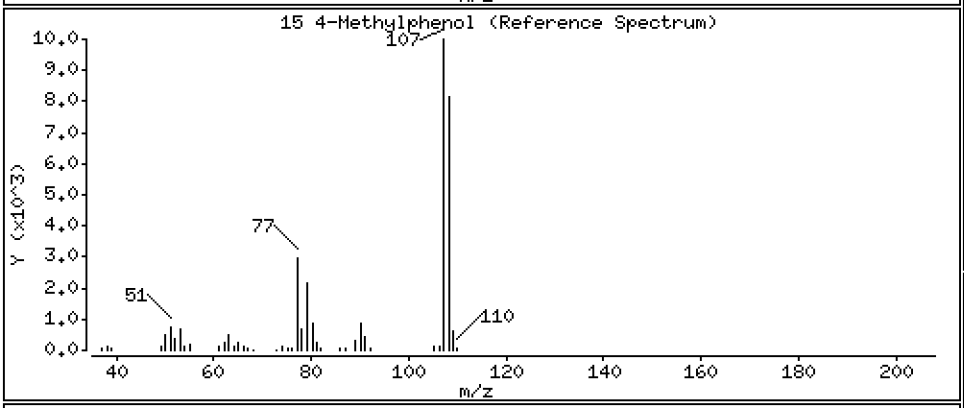
Concentration: 4.267 ug/mL

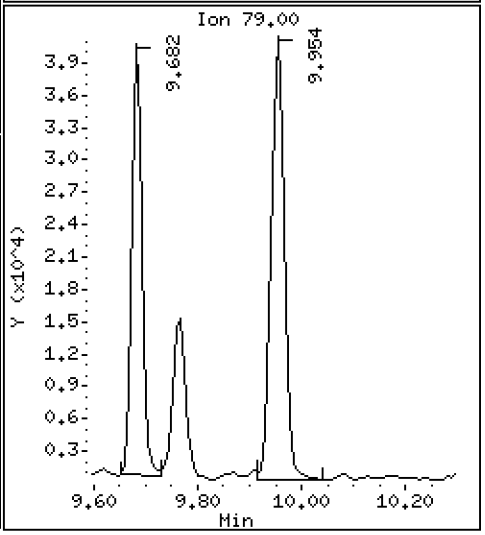


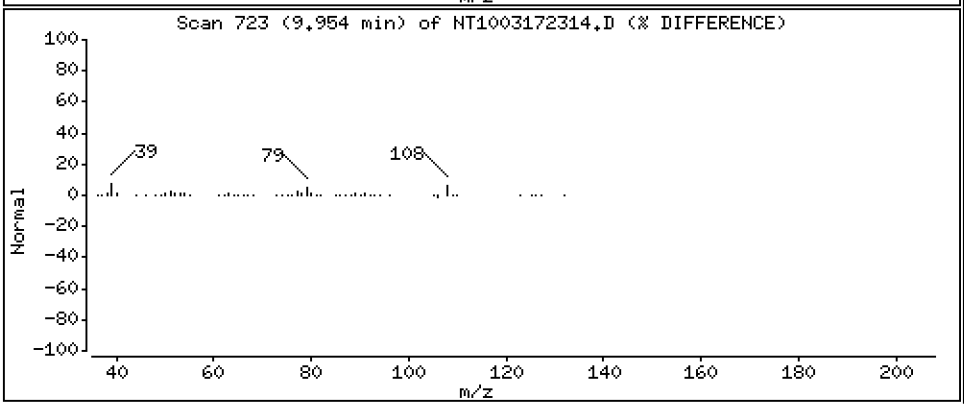












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

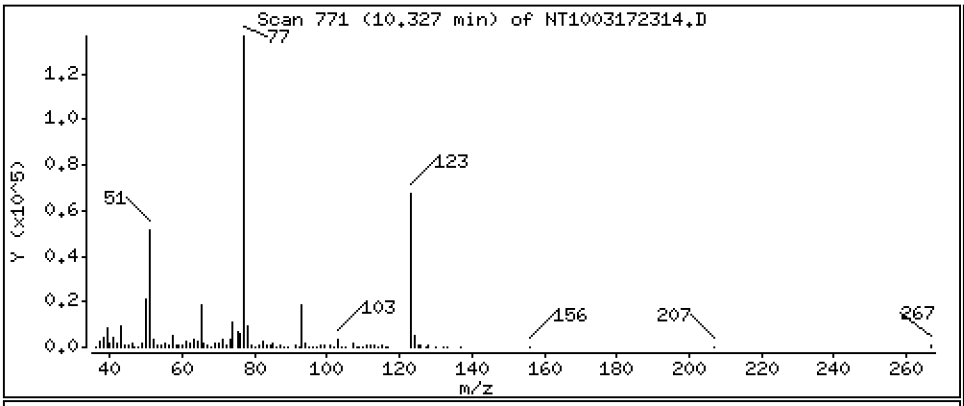
Operator: VTS

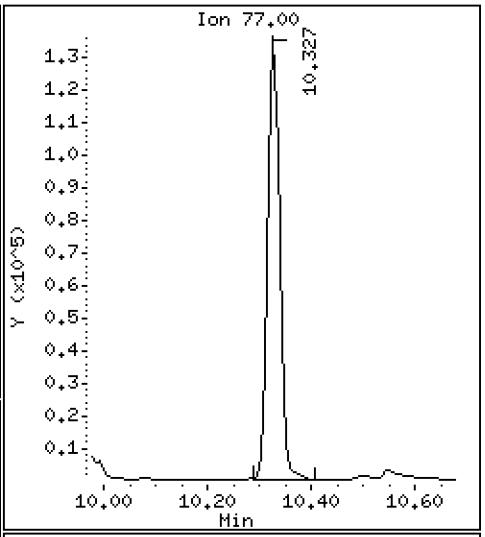
Column phase: ZB-5msi

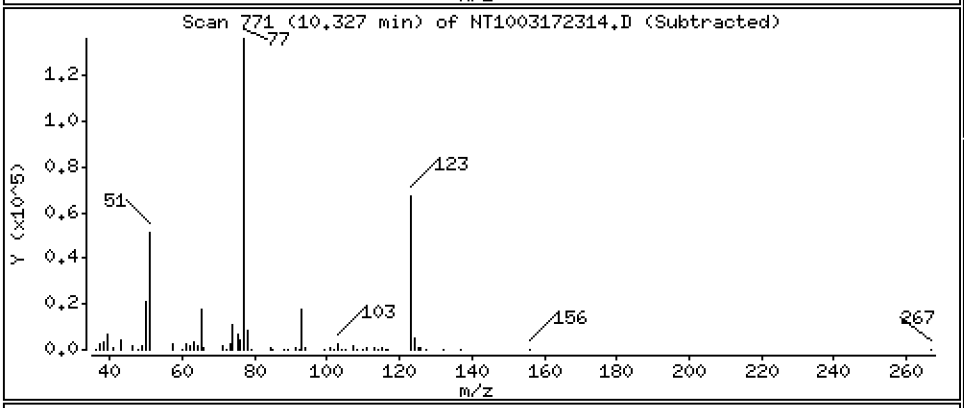
Column diameter: 0.25

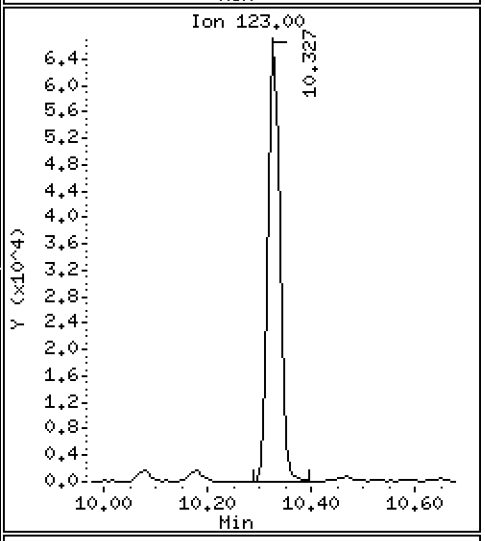
19 Nitrobenzene

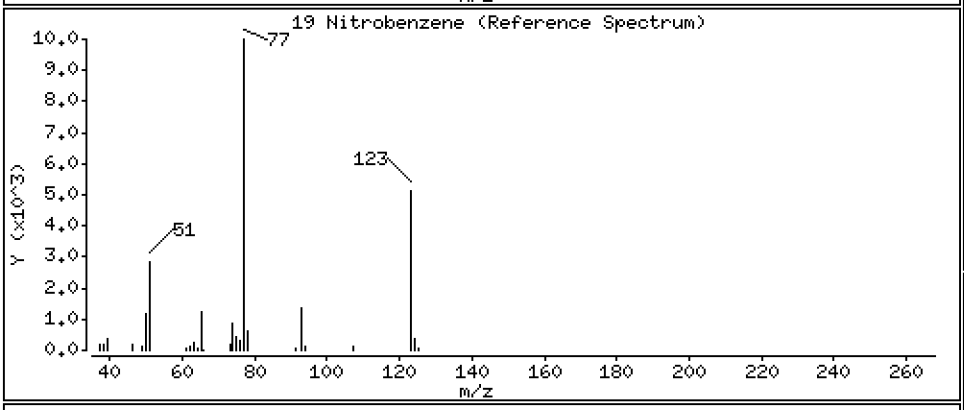
Concentration: 3.351 ug/mL

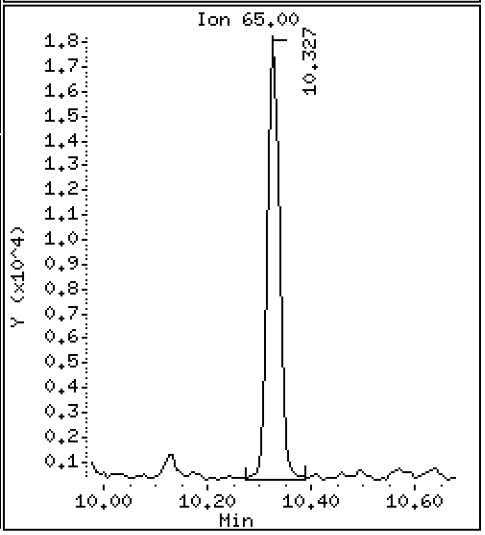


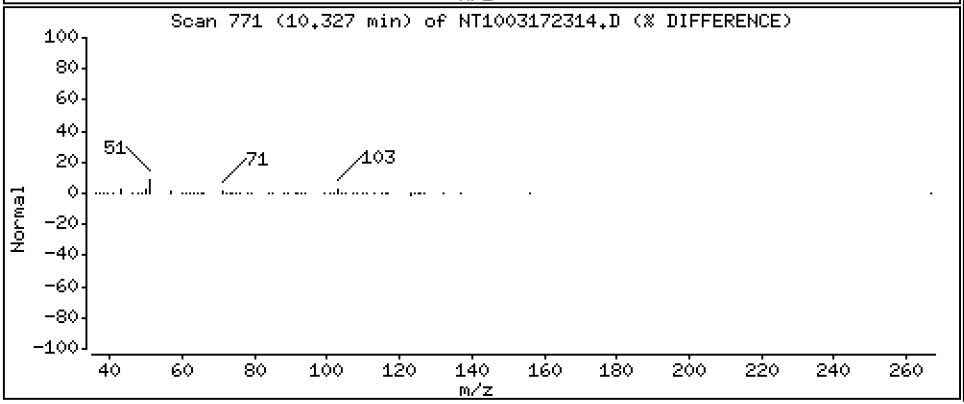












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

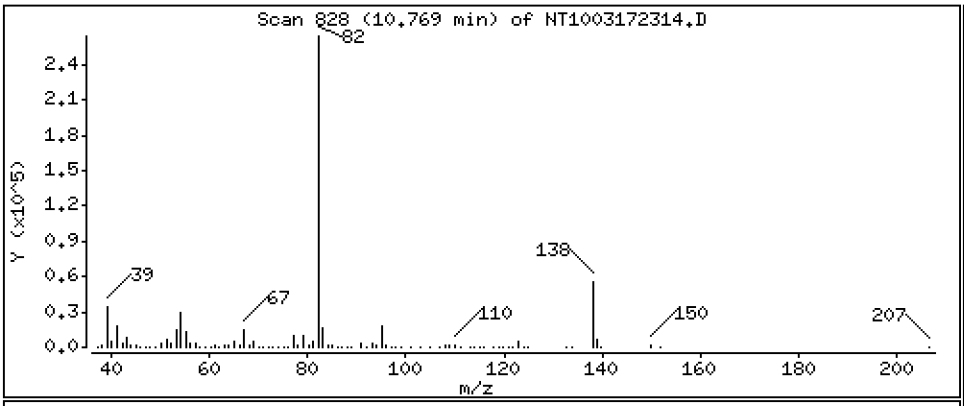
Operator: VTS

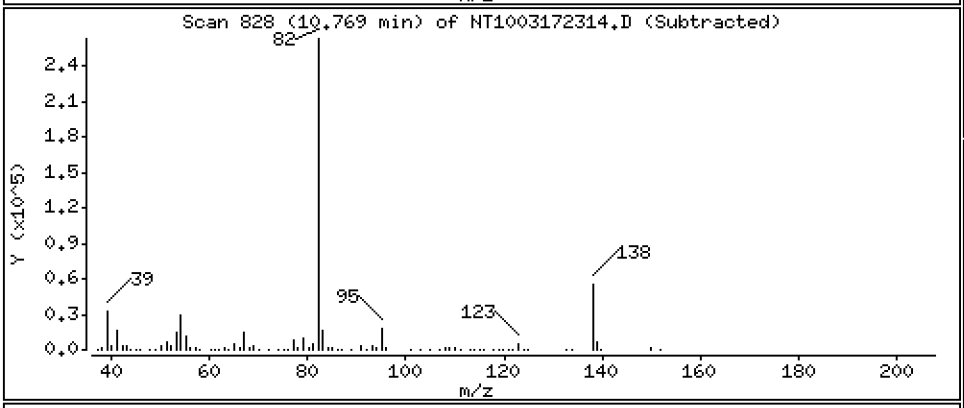
Column phase: ZB-5msi

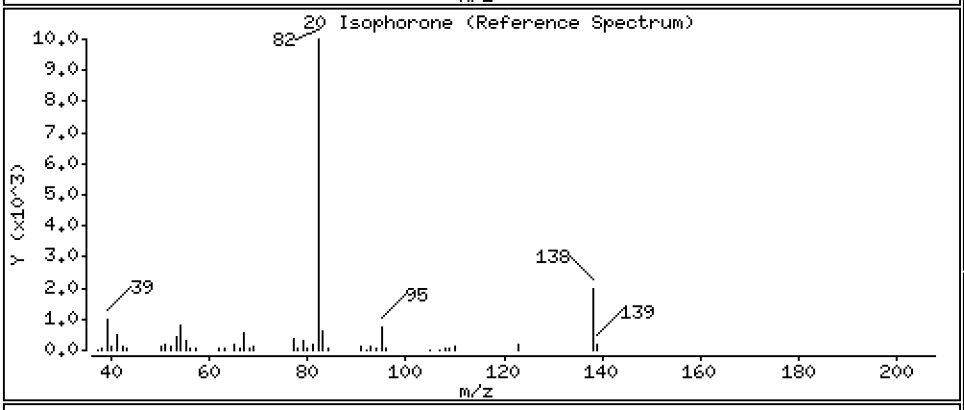
Column diameter: 0.25

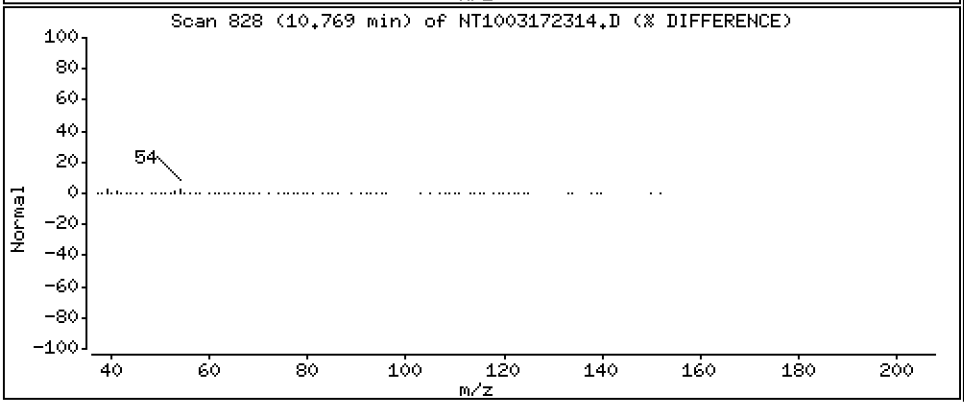
20 Isophorone

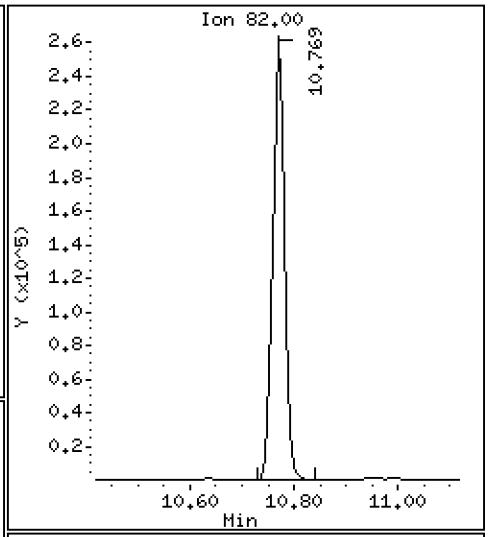
Concentration: 5.125 ug/mL

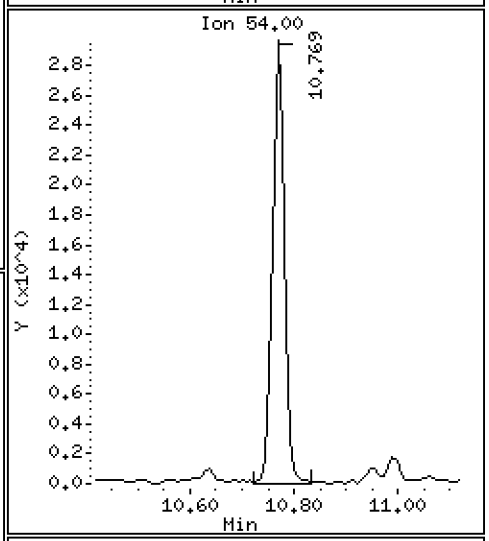


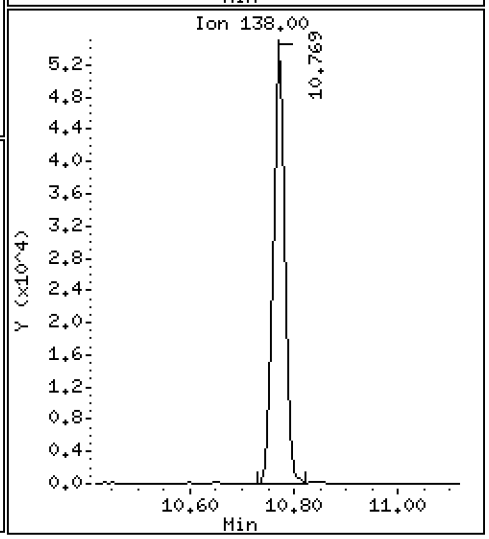












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

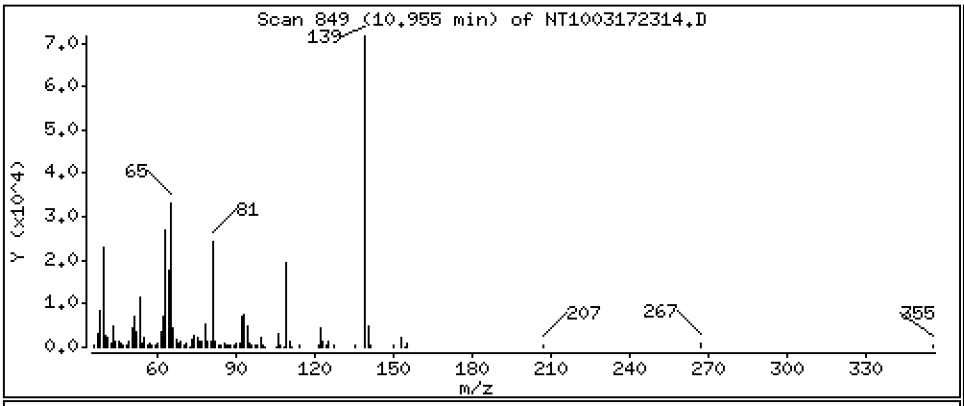
Operator: VTS

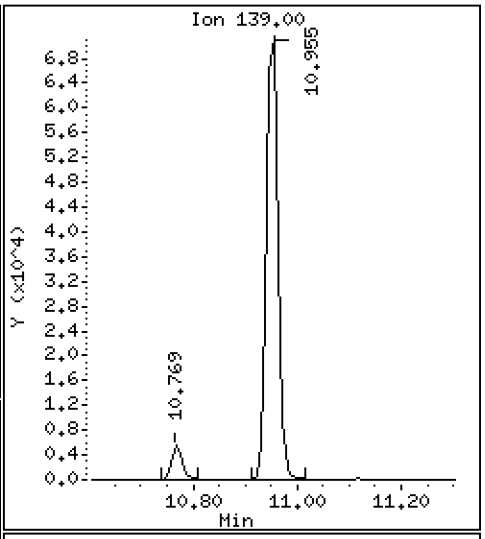
Column phase: ZB-5msi

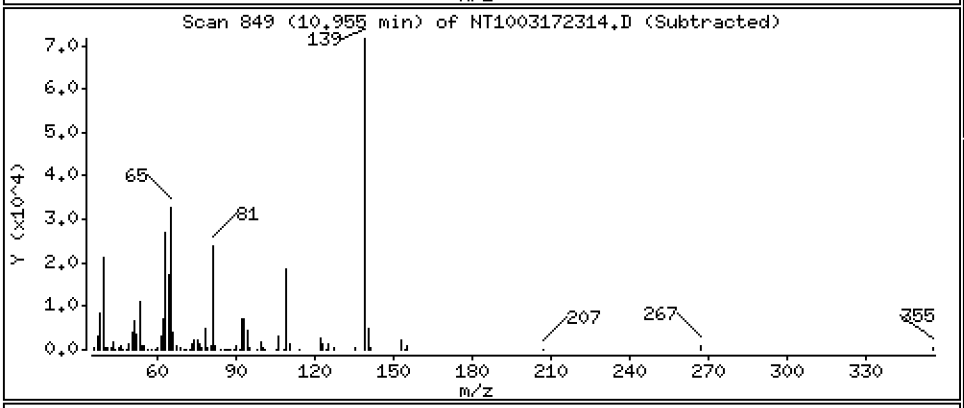
Column diameter: 0.25

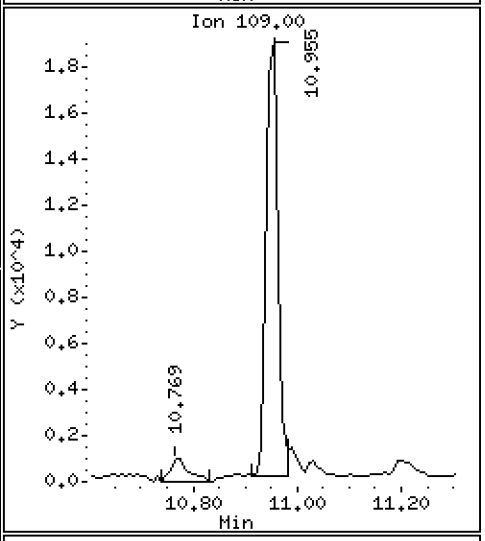
21 2-Nitrophenol

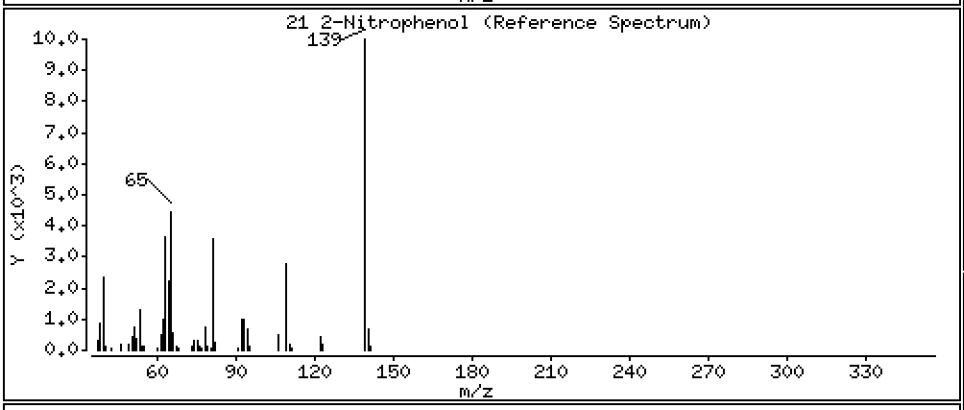
Concentration: 3.732 ug/mL

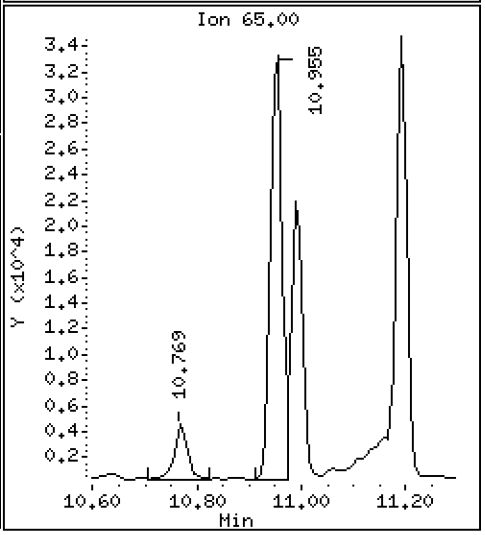


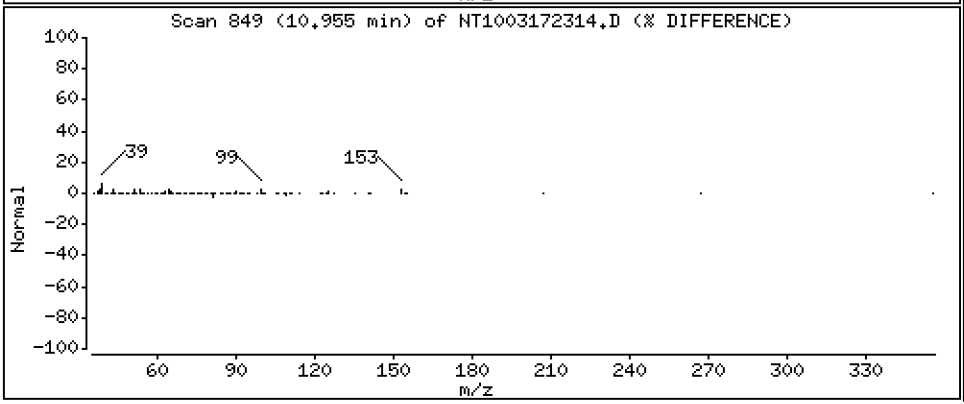












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

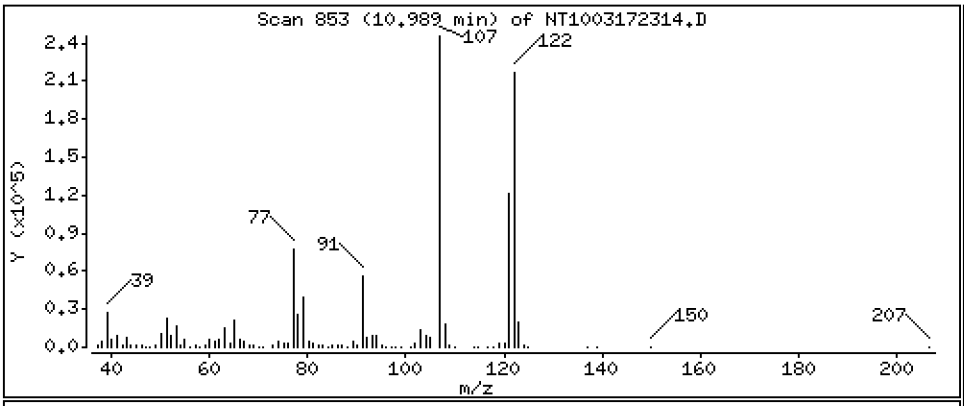
Operator: VTS

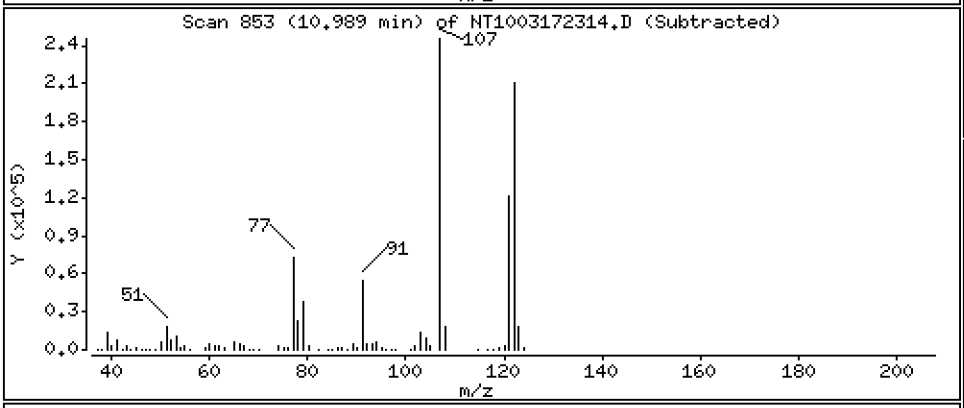
Column phase: ZB-5msi

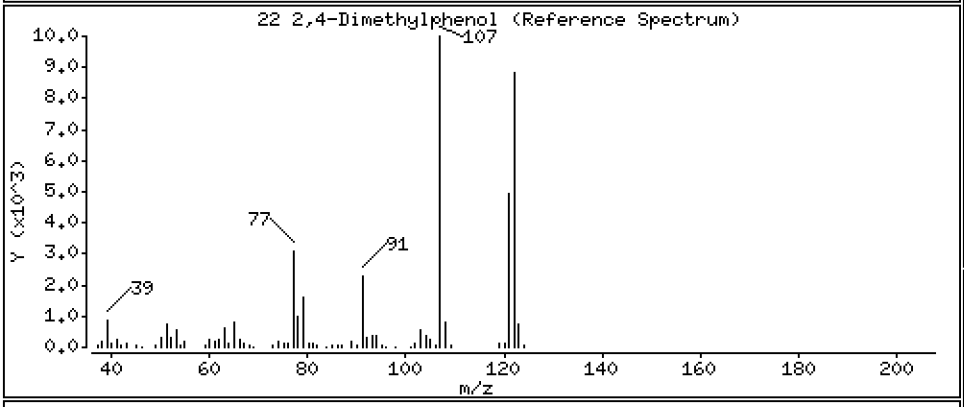
Column diameter: 0.25

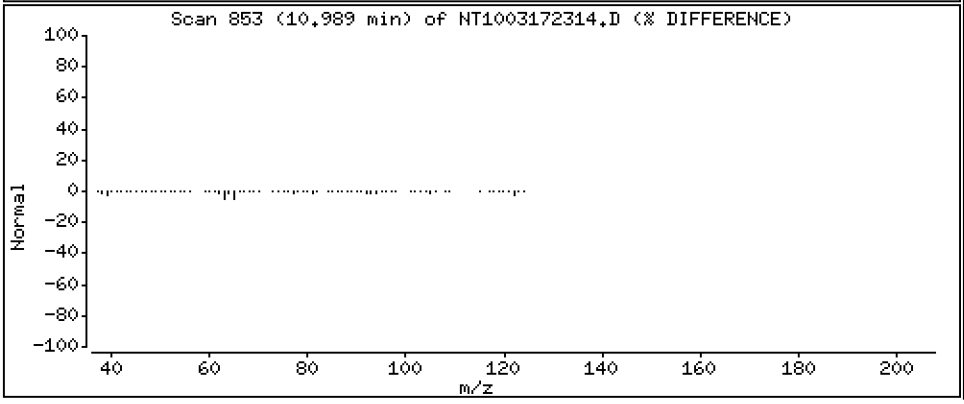
22 2,4-Dimethylphenol

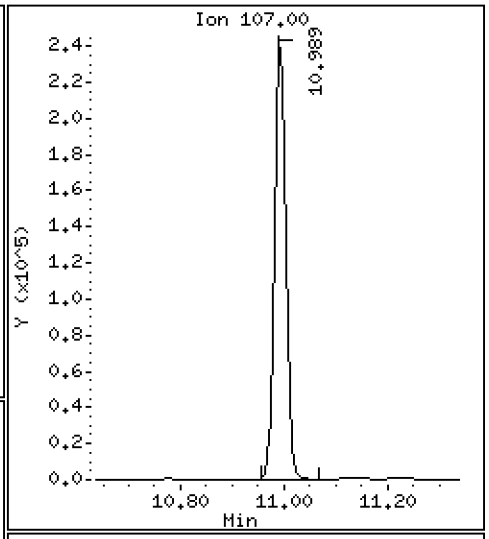
Concentration: 6.721 ug/mL

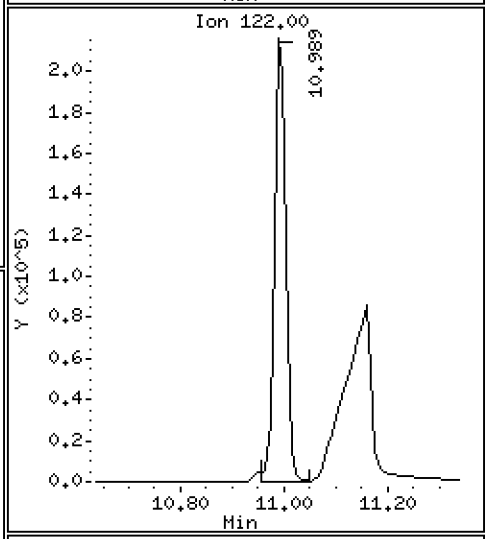


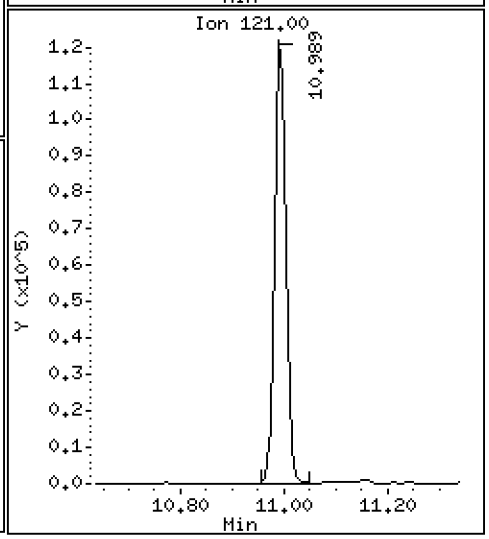












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172314.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

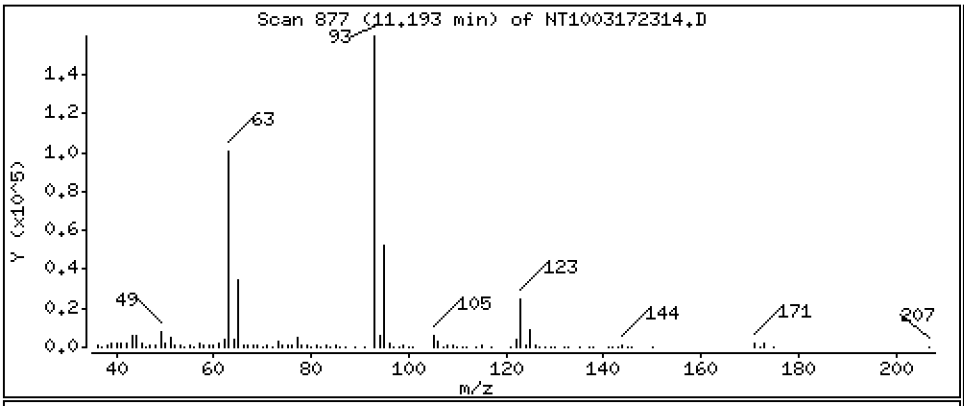
Operator: VTS

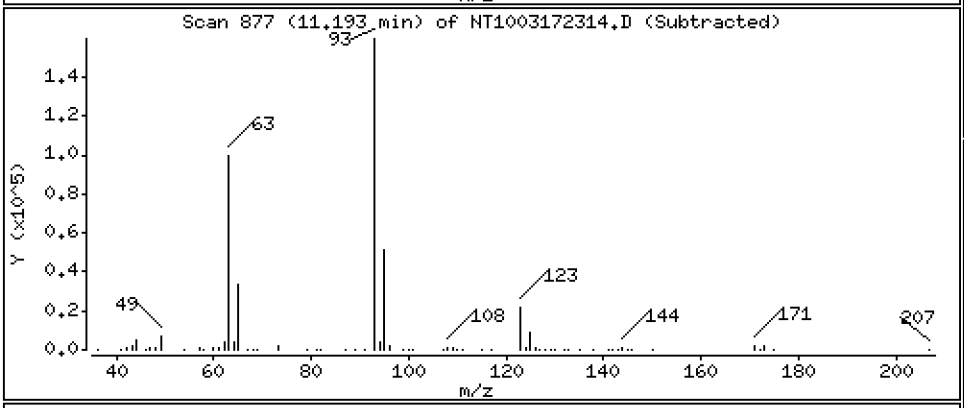
Column phase: ZB-5msi

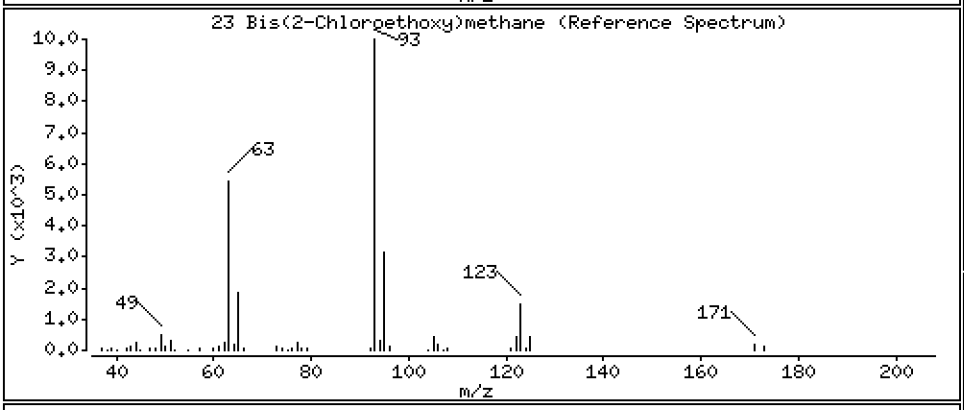
Column diameter: 0.25

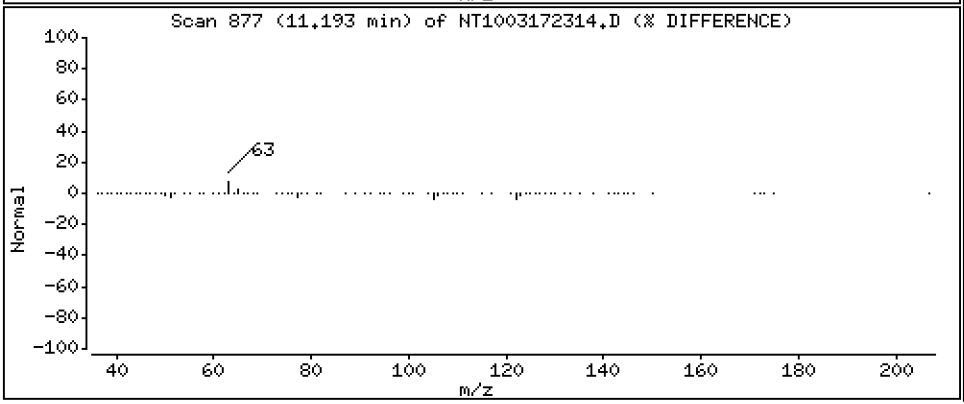
23 Bis(2-Chloroethoxy)methane

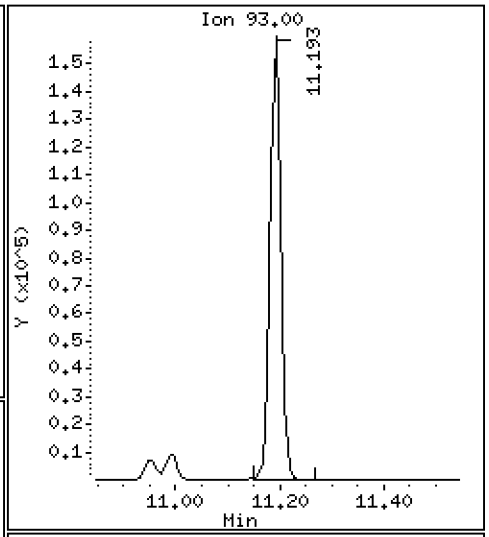
Concentration: 4.337 ug/mL

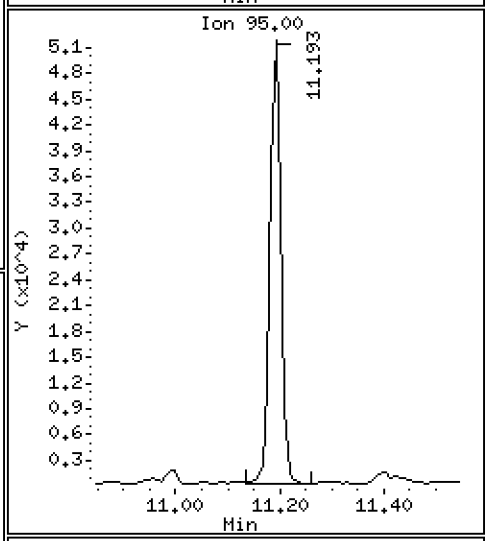


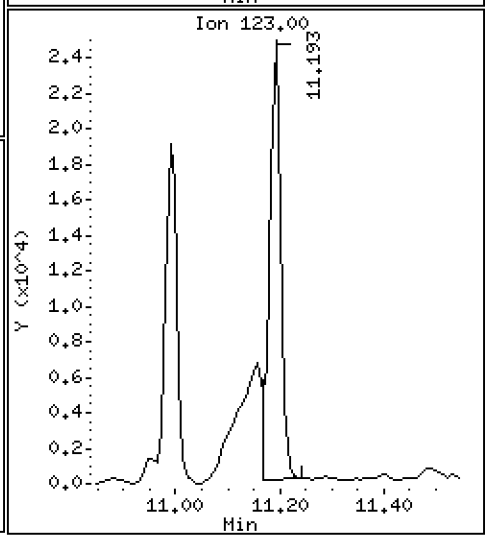












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

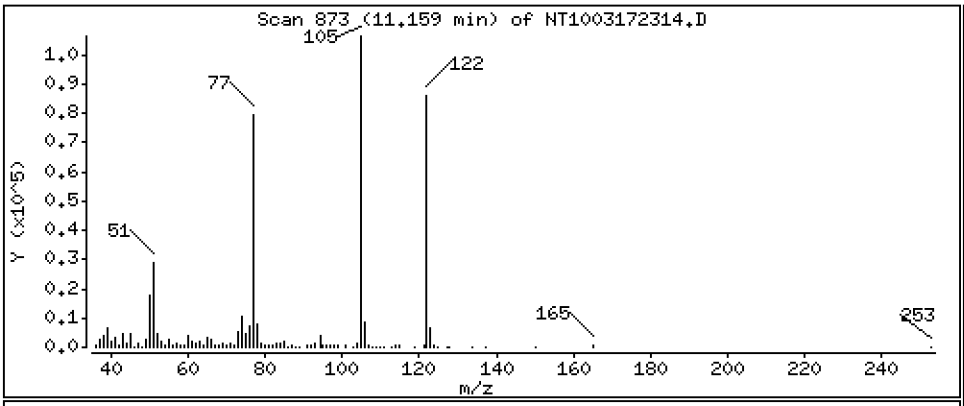
Operator: VTS

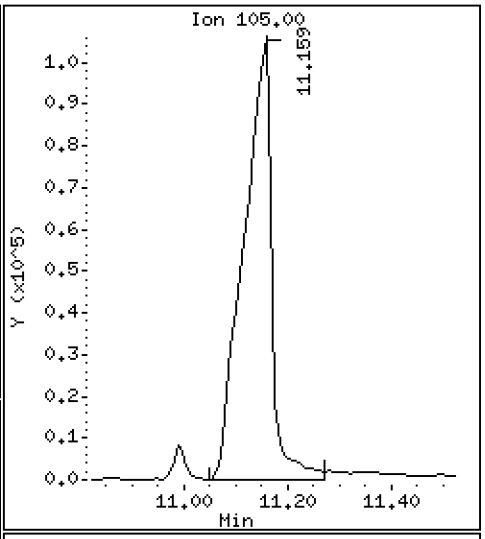
Column phase: ZB-5msi

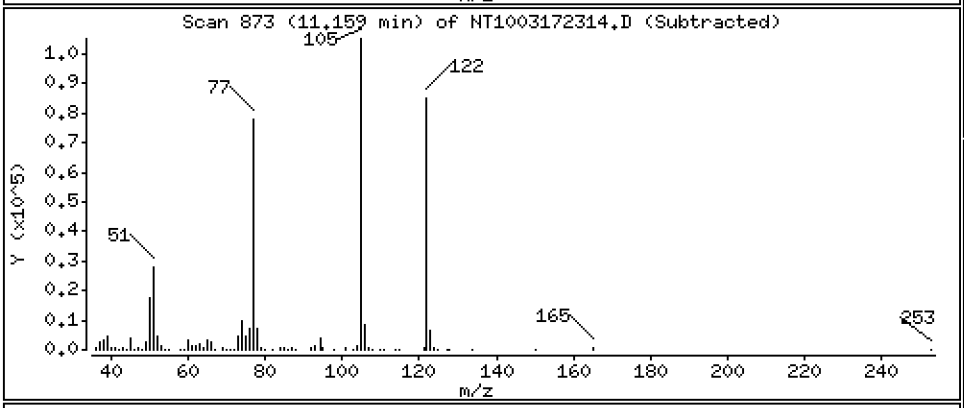
Column diameter: 0.25

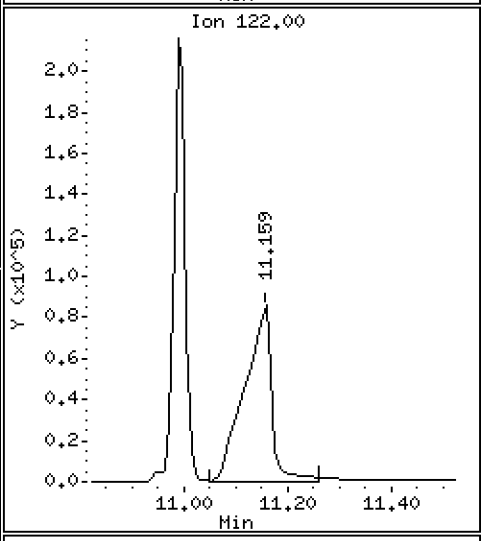
24 Benzoic acid

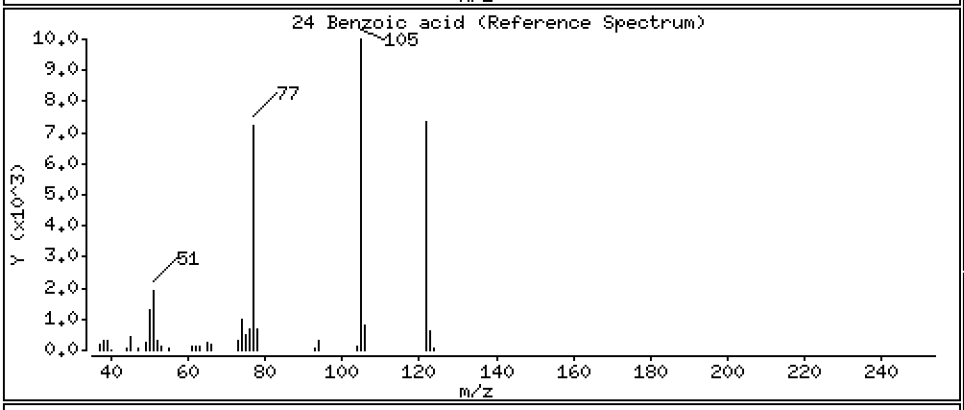
Concentration: 12.39 ug/mL

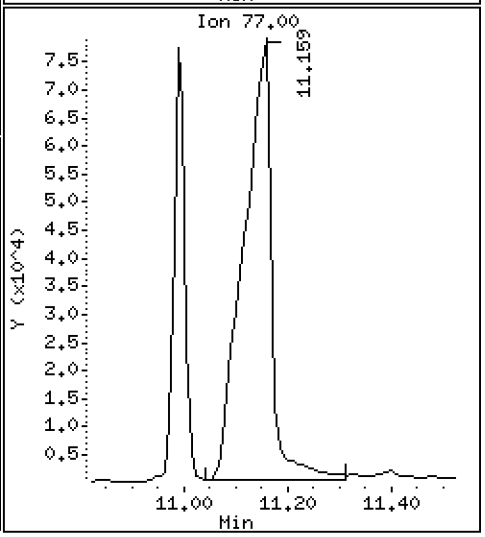


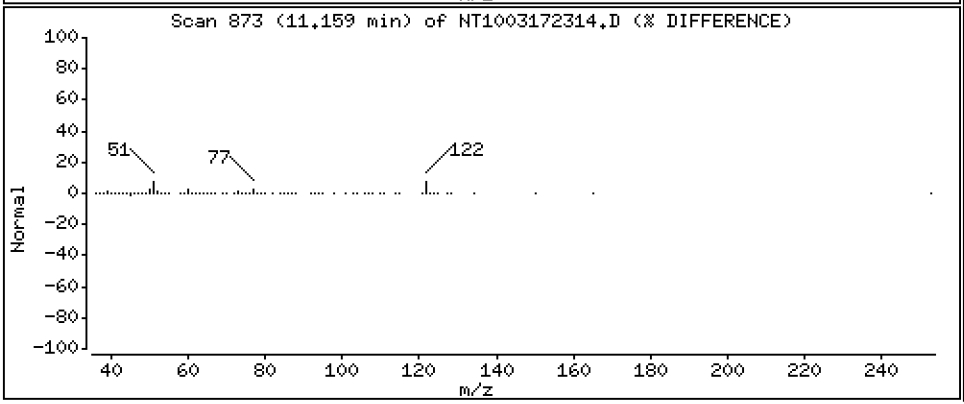












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

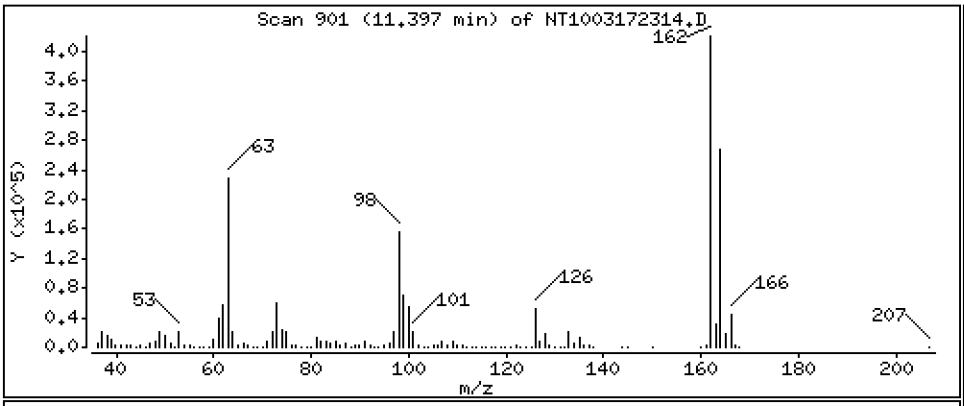
Operator: VTS

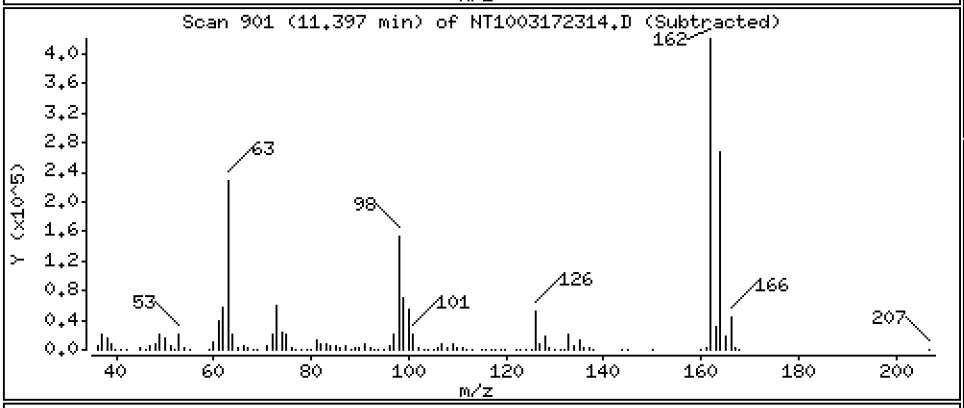
Column phase: ZB-5msi

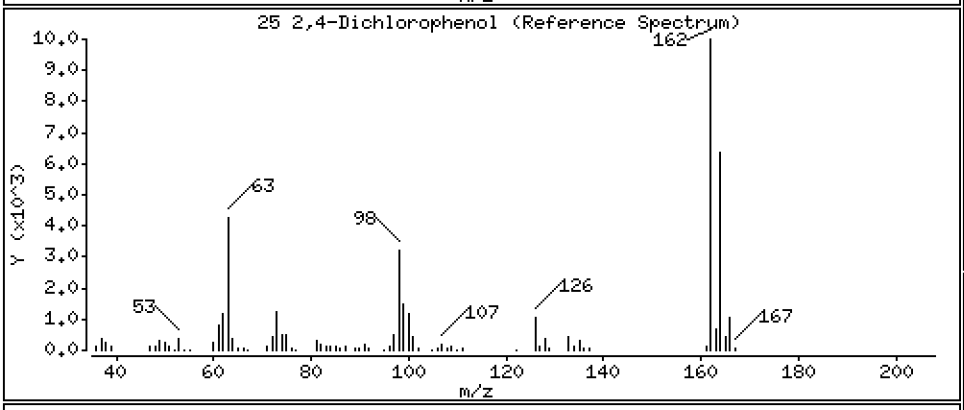
Column diameter: 0.25

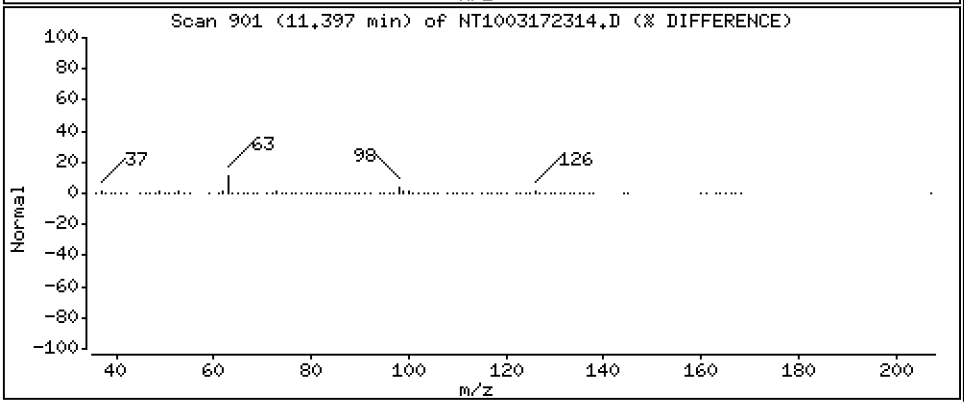
25 2,4-Dichlorophenol

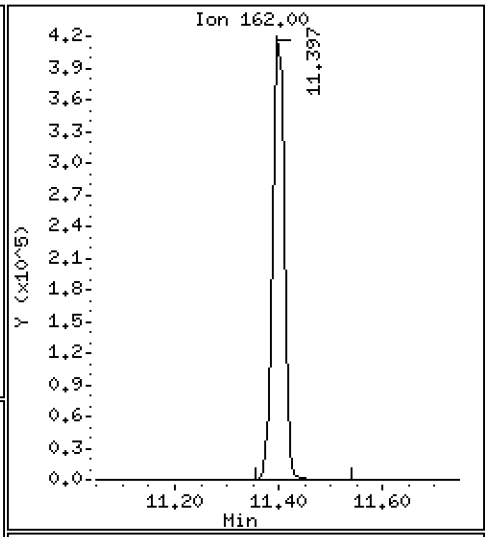
Concentration: 15.74 ug/mL

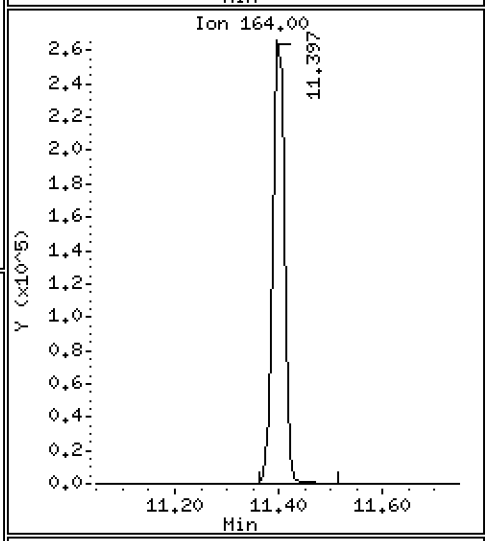


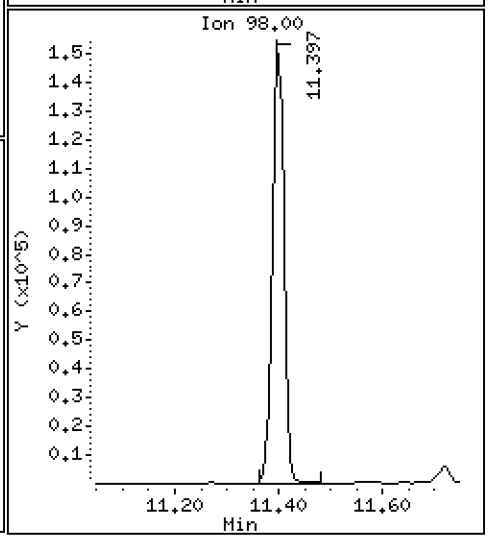












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

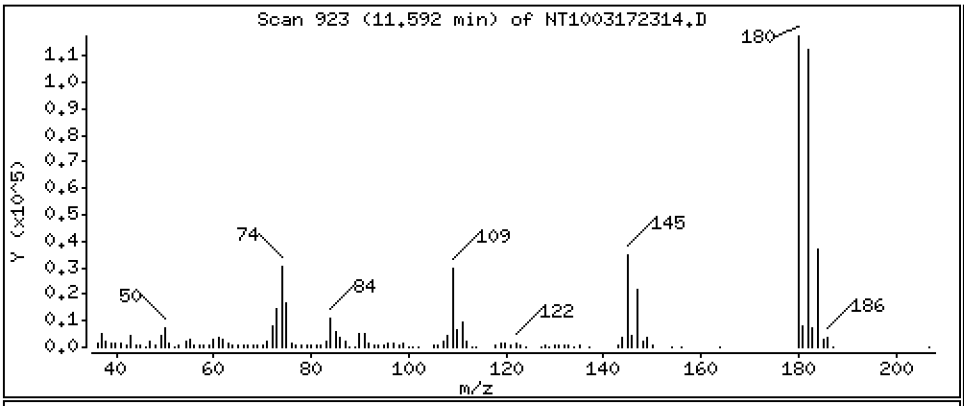
Operator: VTS

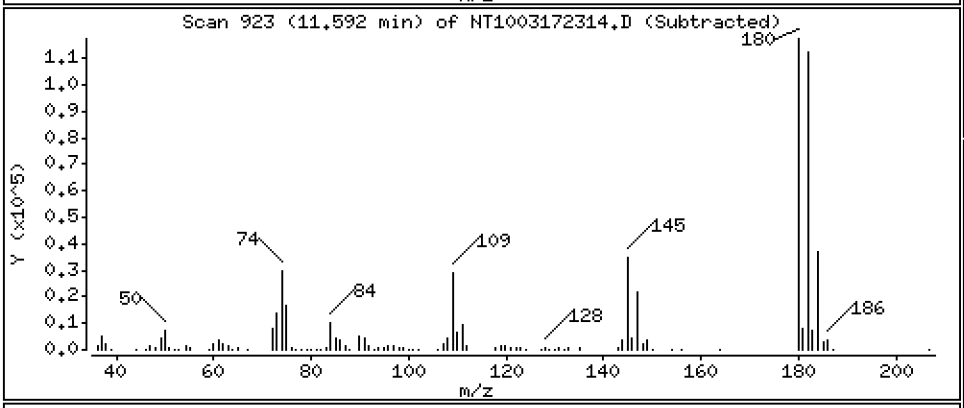
Column phase: ZB-5msi

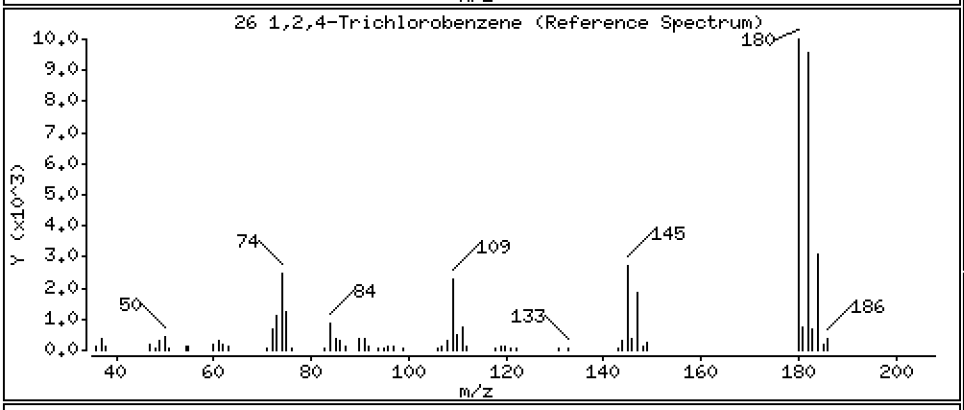
Column diameter: 0.25

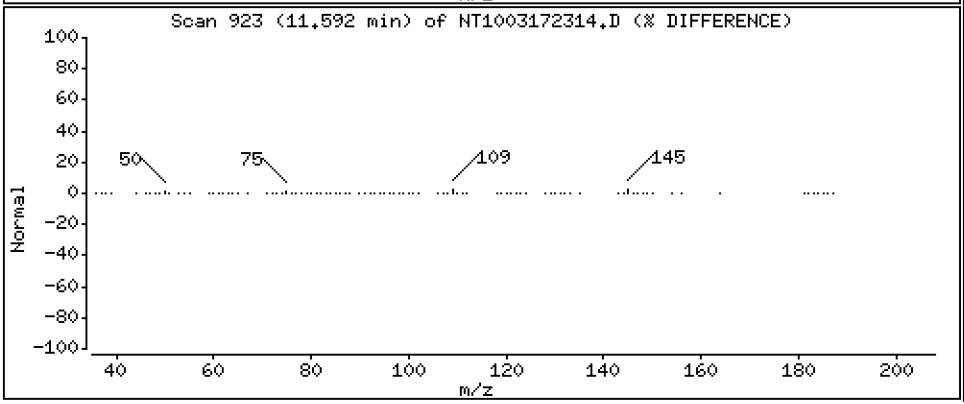
26 1,2,4-Trichlorobenzene

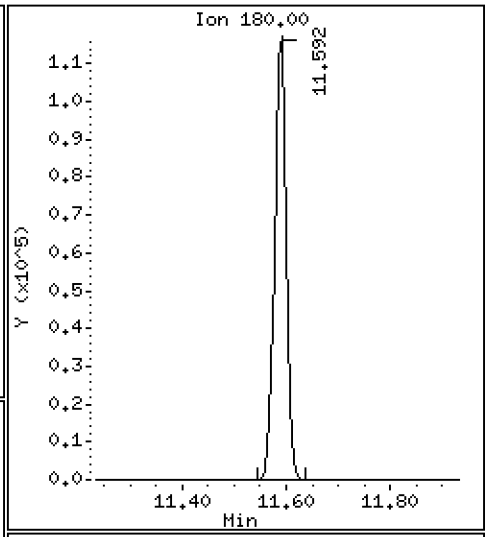
Concentration: 3.446 ug/mL

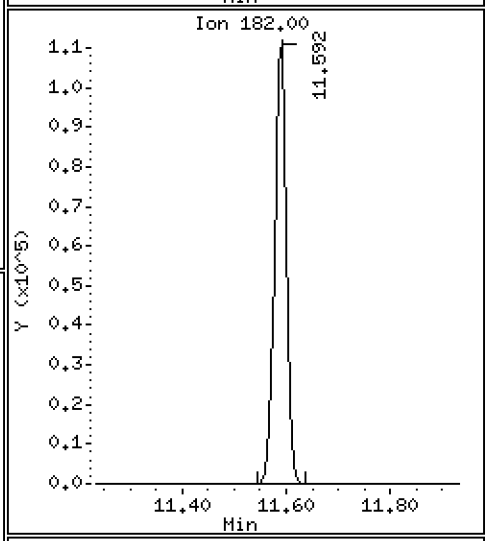


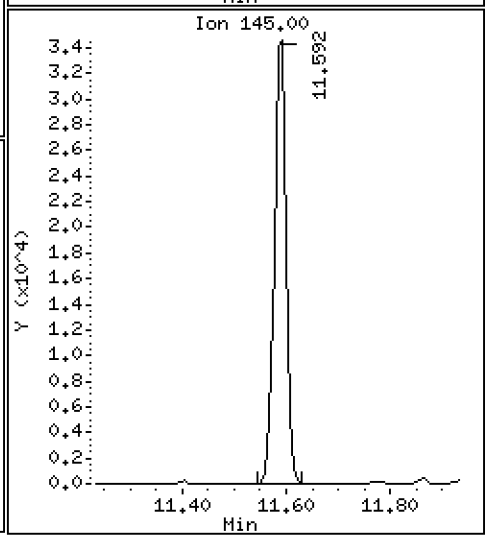












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

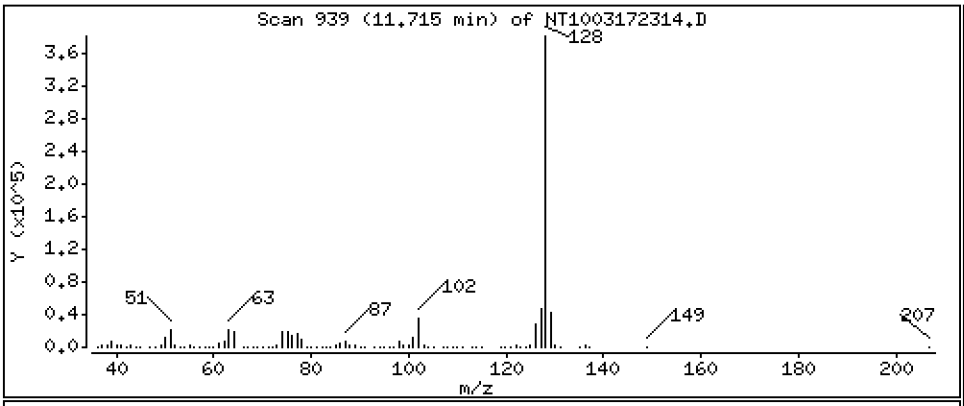
Operator: VTS

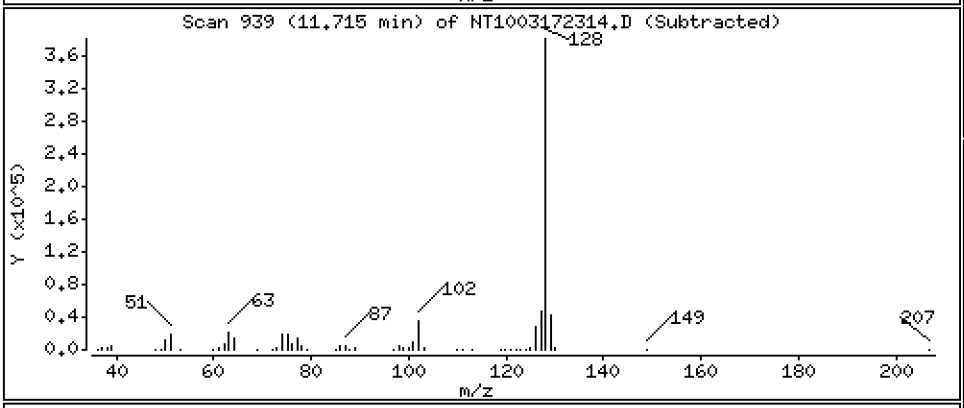
Column phase: ZB-5msi

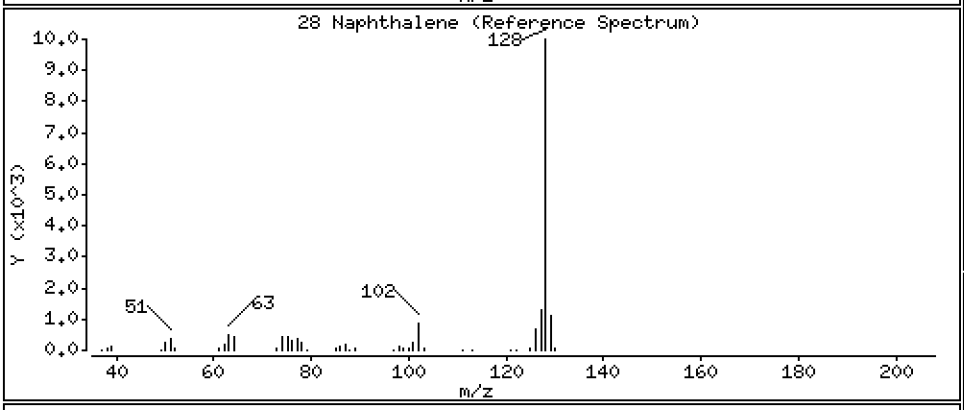
Column diameter: 0.25

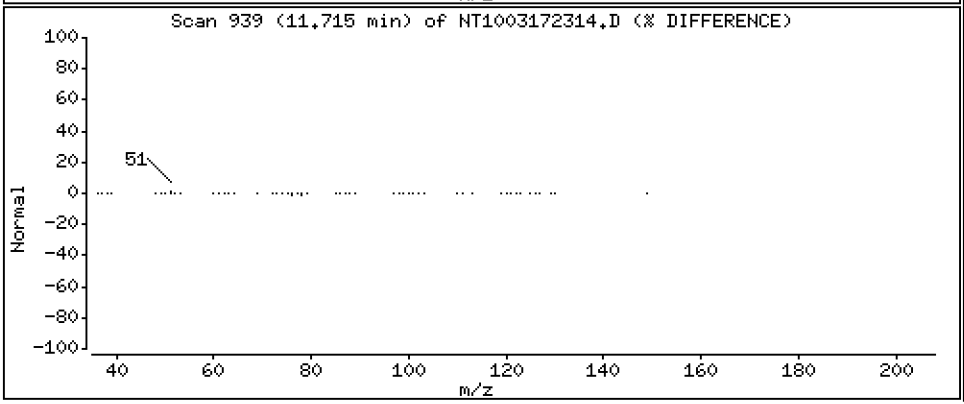
28 Naphthalene

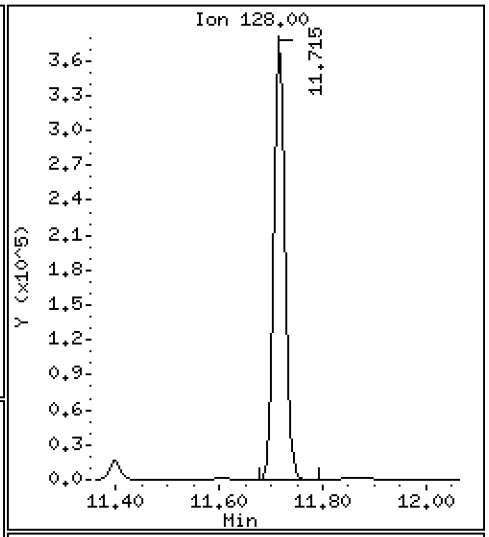
Concentration: 3.590 ug/mL

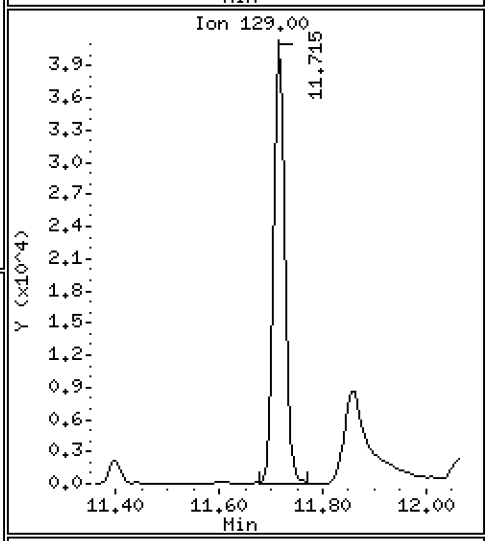


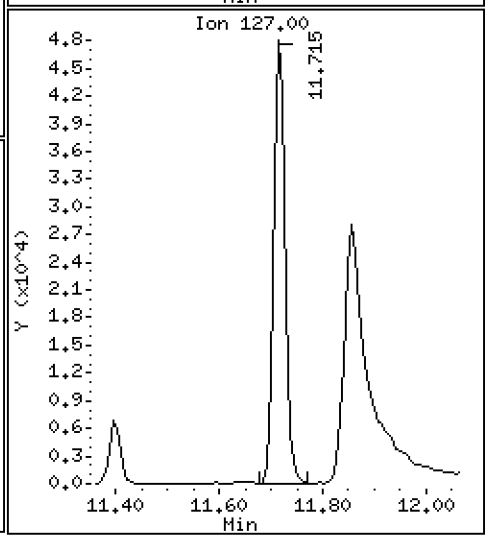












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

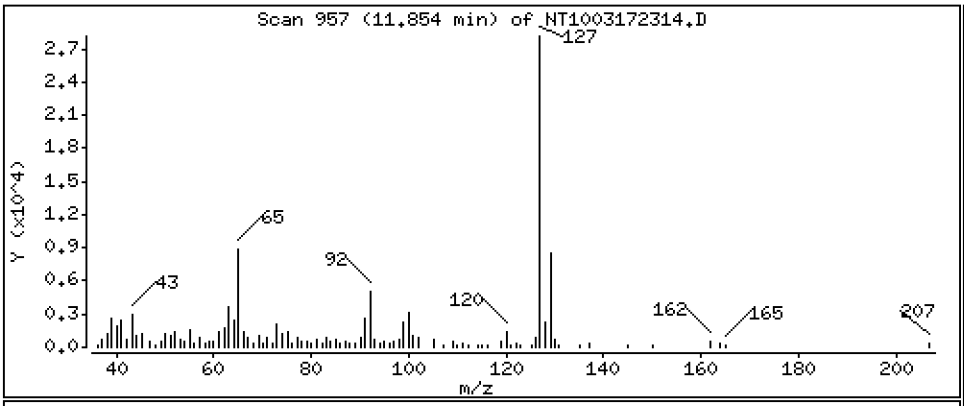
Operator: VTS

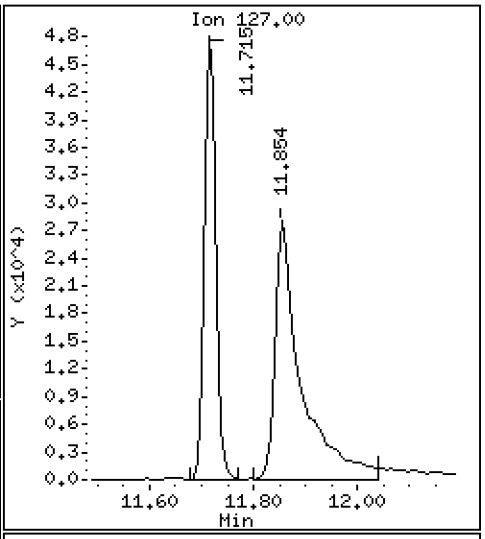
Column phase: ZB-5msi

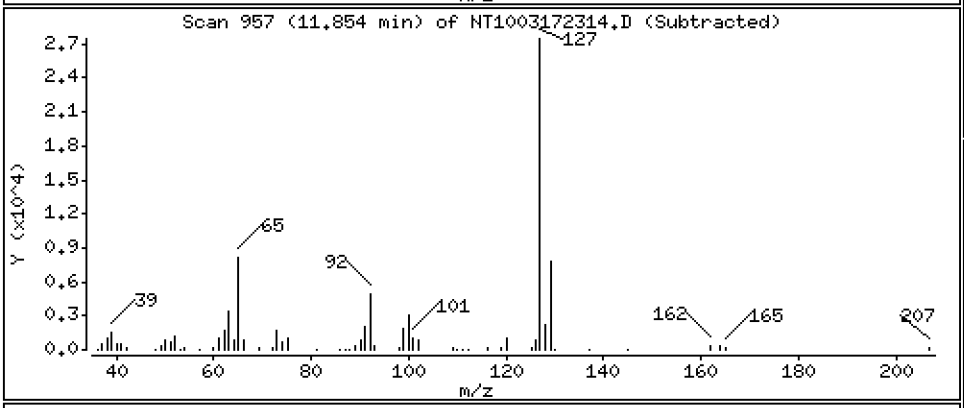
Column diameter: 0.25

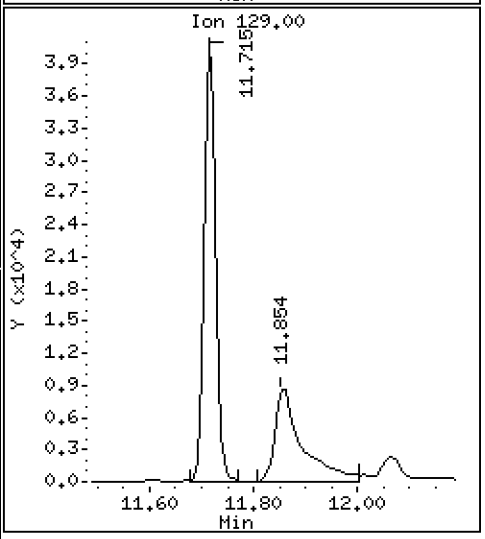
29 4-Chloroaniline

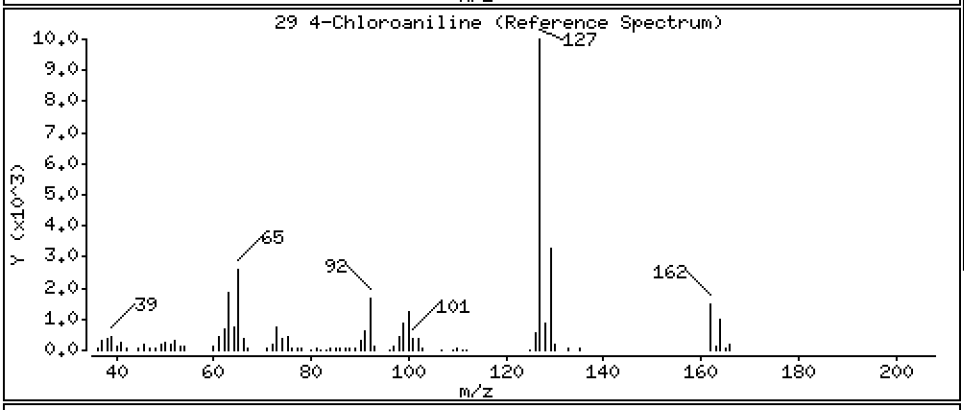
Concentration: 1.605 ug/mL

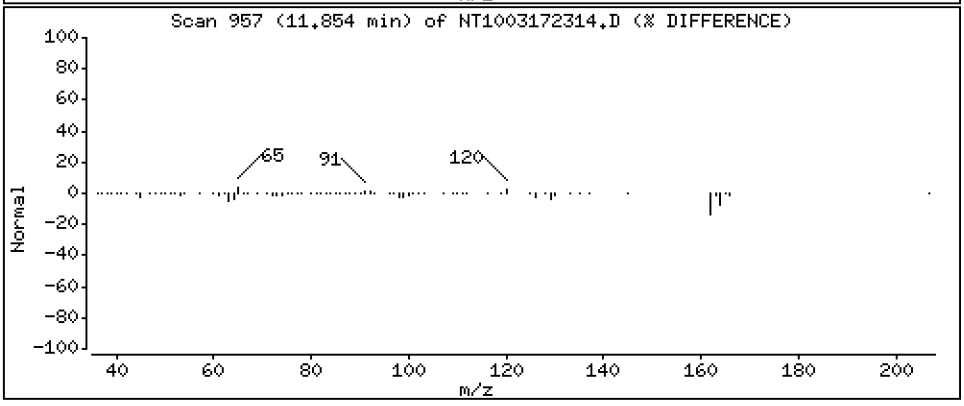












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

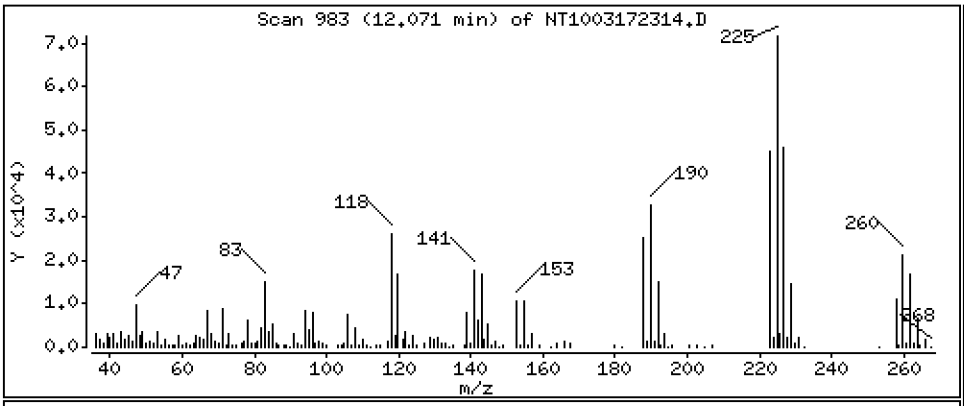
Operator: VTS

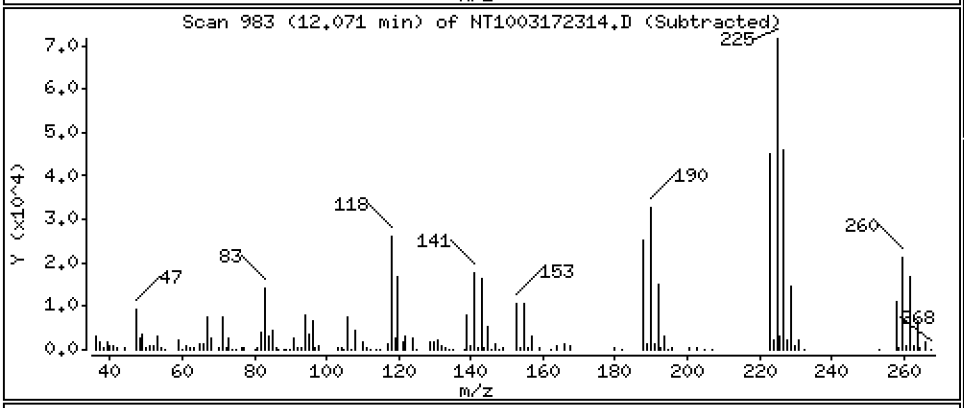
Column phase: ZB-5msi

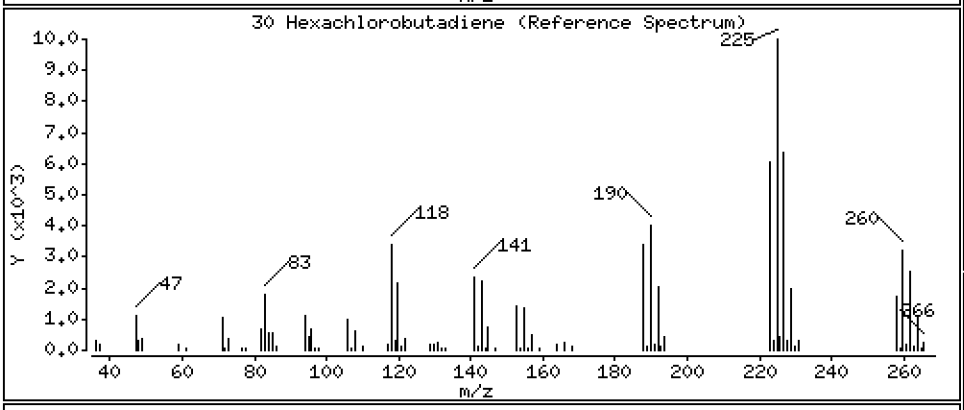
Column diameter: 0.25

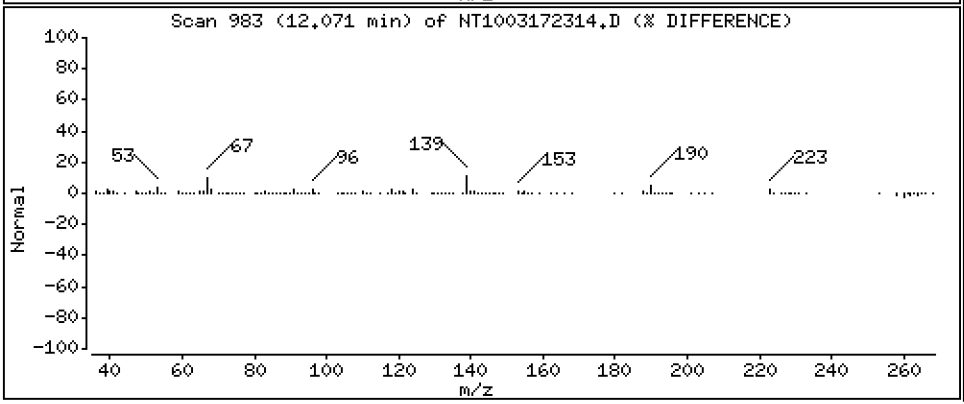
30 Hexachlorobutadiene

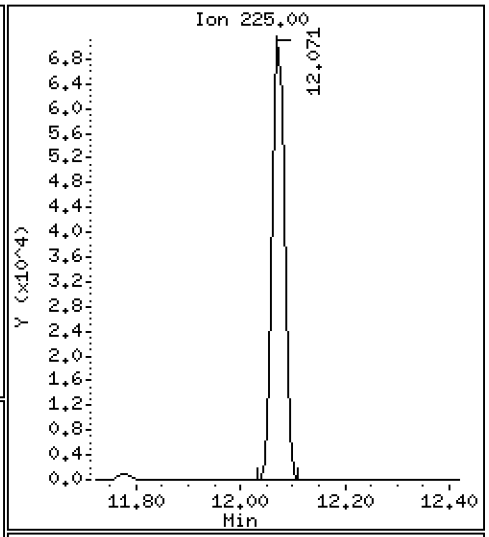
Concentration: 3.583 ug/mL

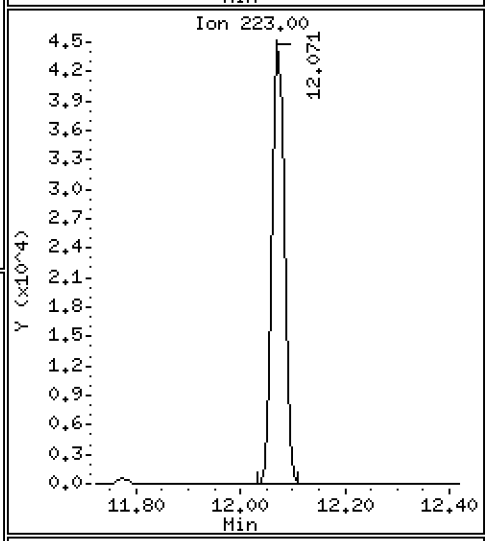


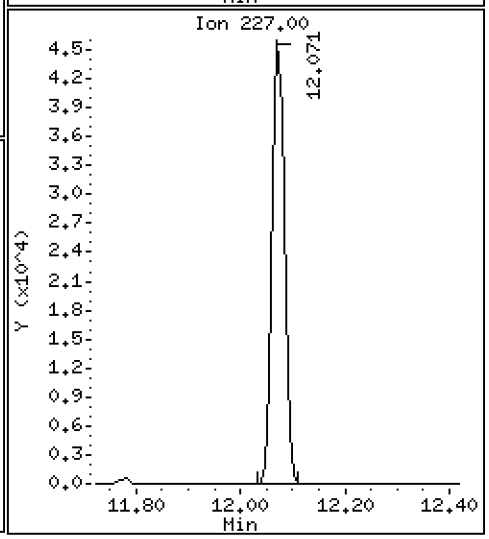












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172314.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

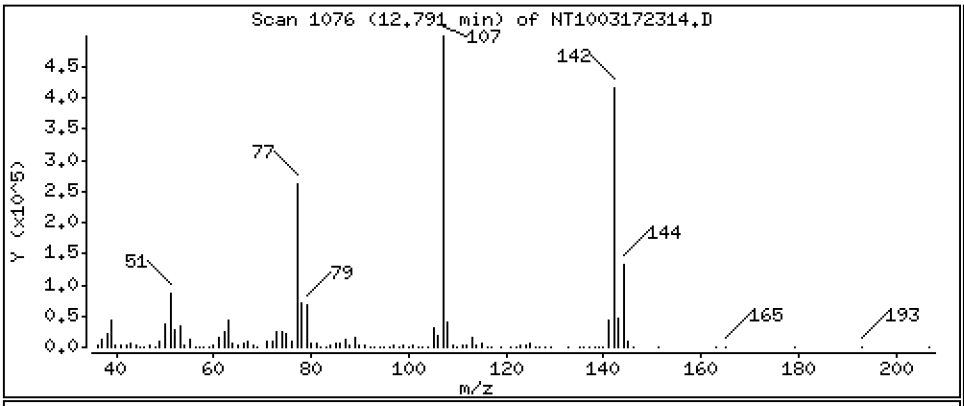
Operator: VTS

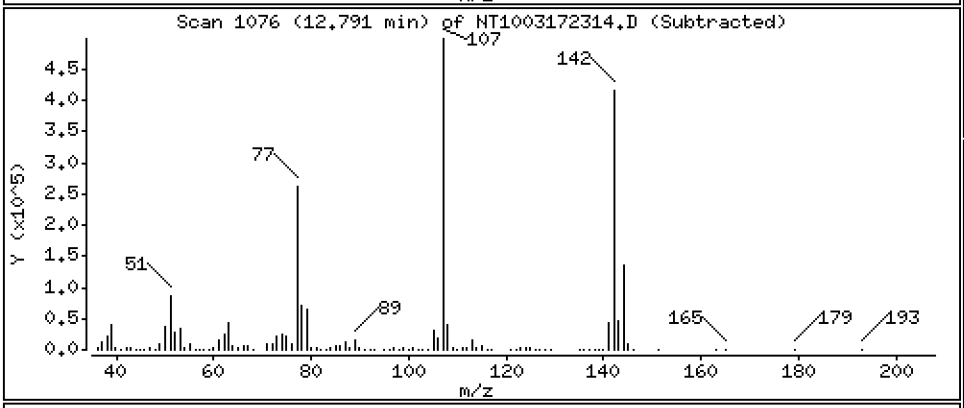
Column phase: ZB-5msi

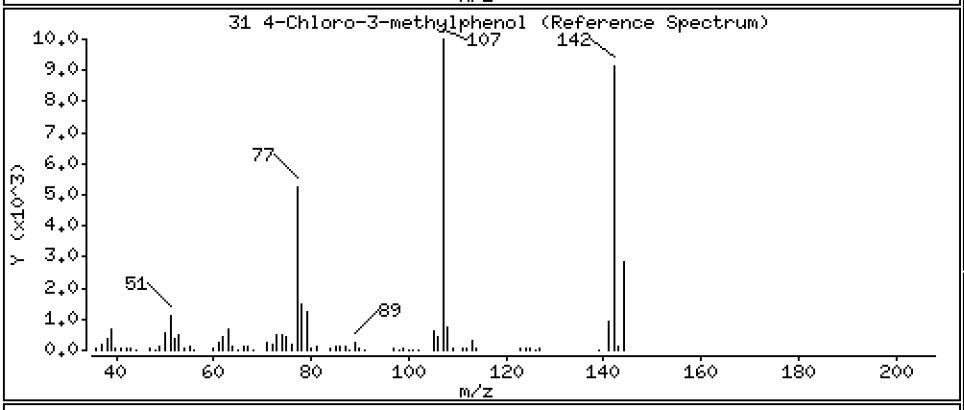
Column diameter: 0.25

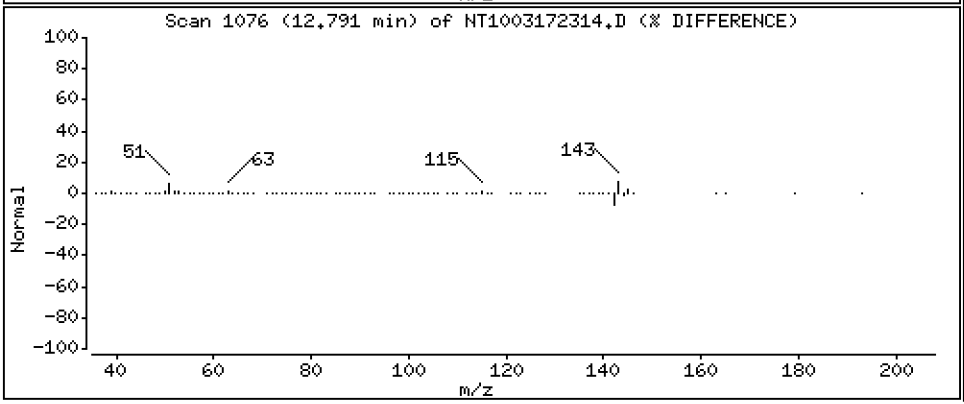
31 4-Chloro-3-methylphenol

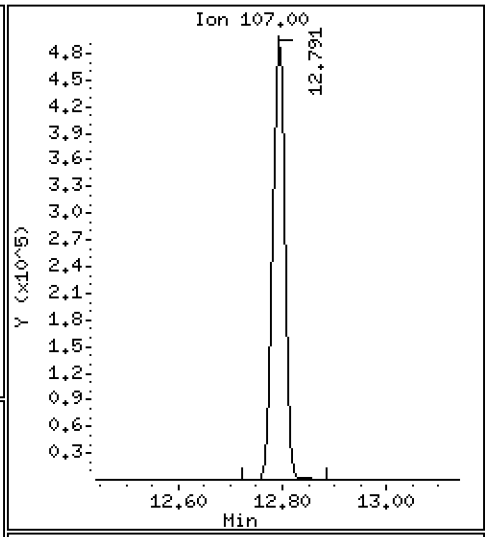
Concentration: 15.56 ug/mL

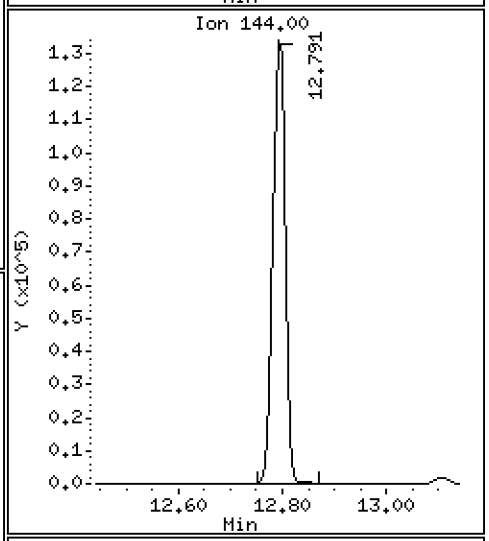


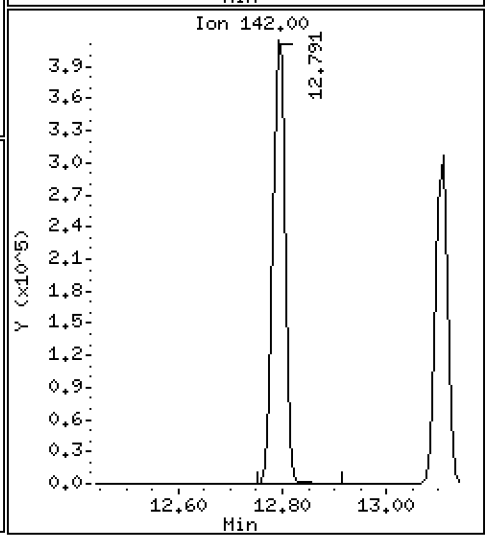












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

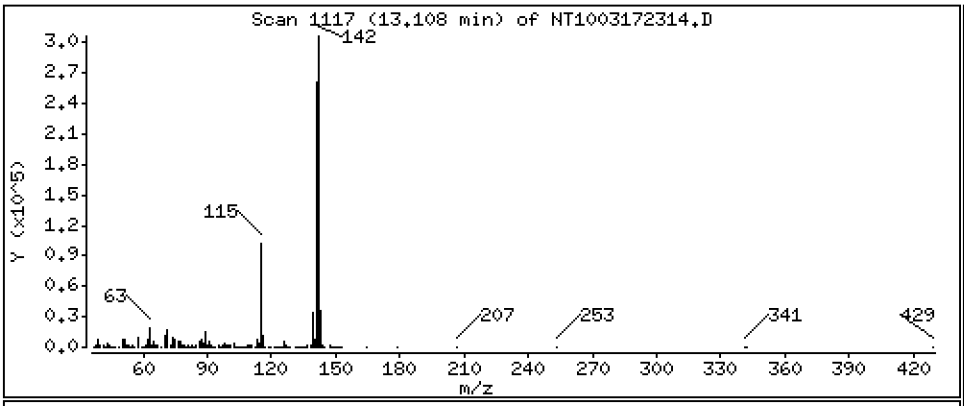
Operator: VTS

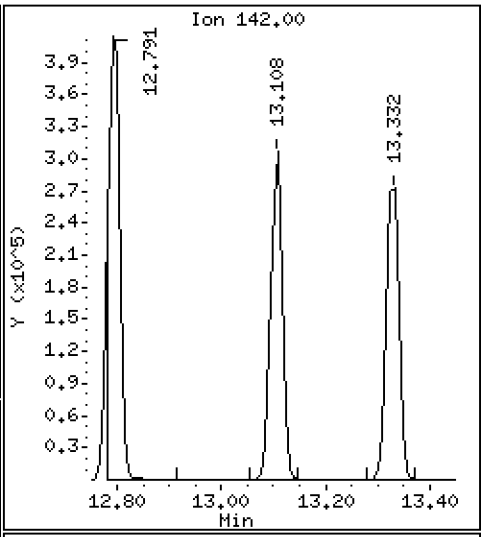
Column phase: ZB-5msi

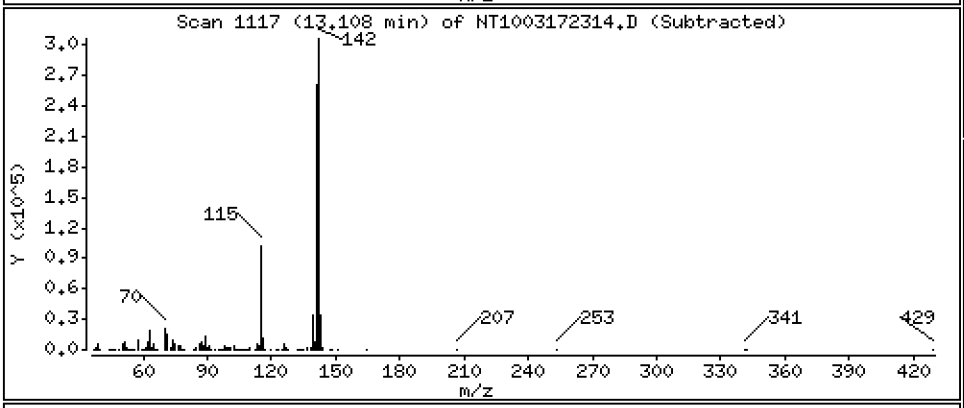
Column diameter: 0.25

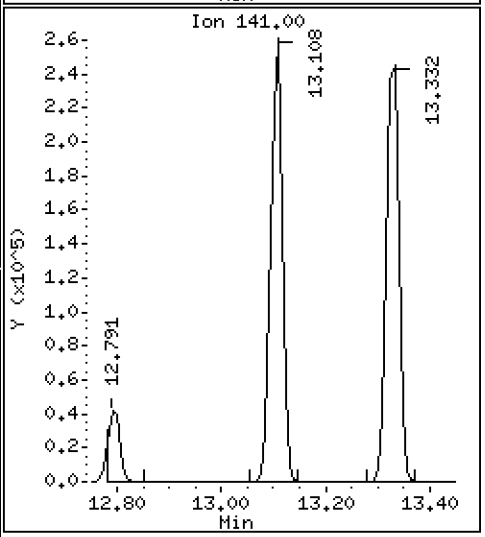
32 2-Methylnaphthalene

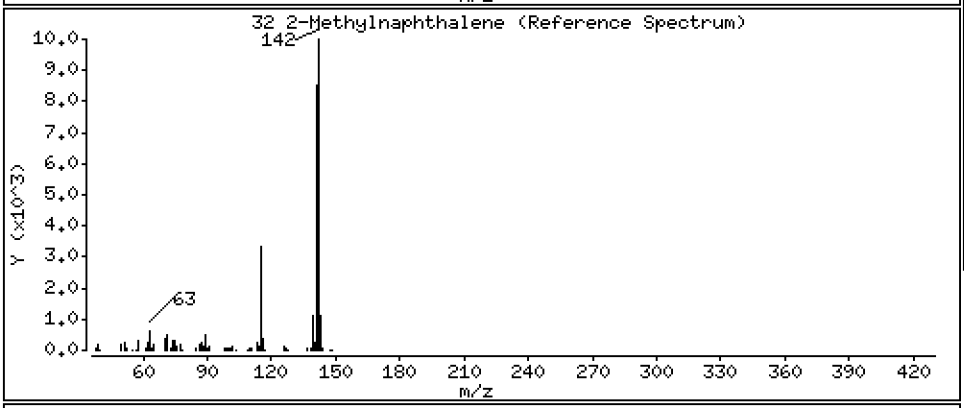
Concentration: 3.889 ug/mL

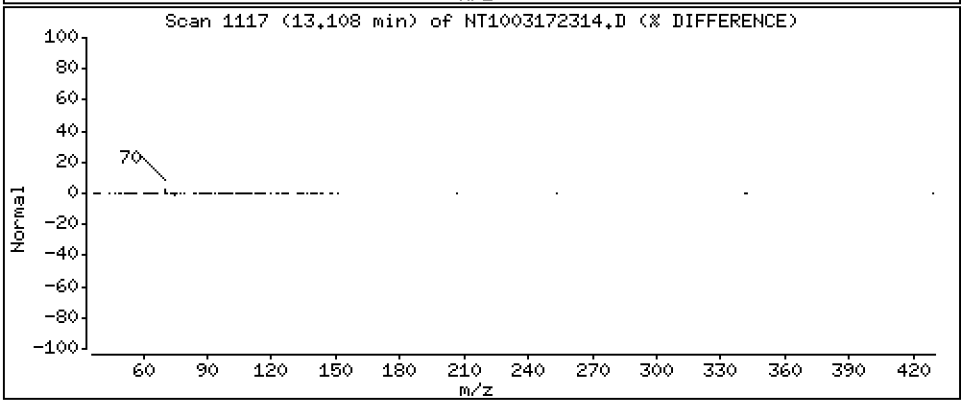












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172314.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

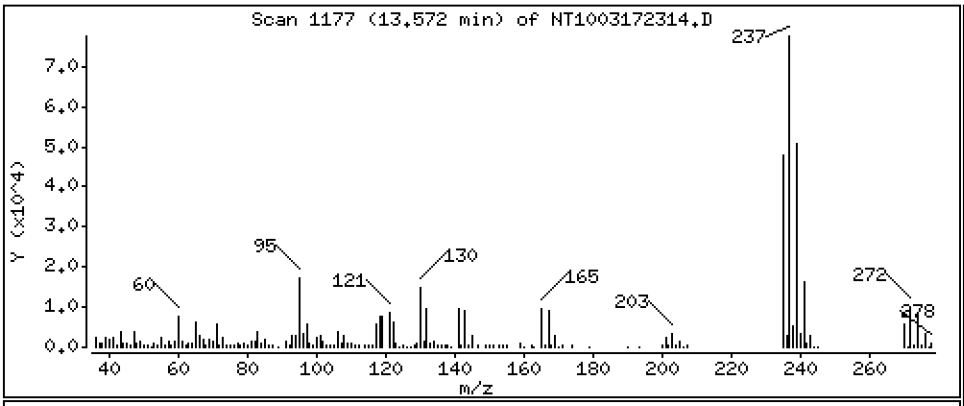
Operator: VTS

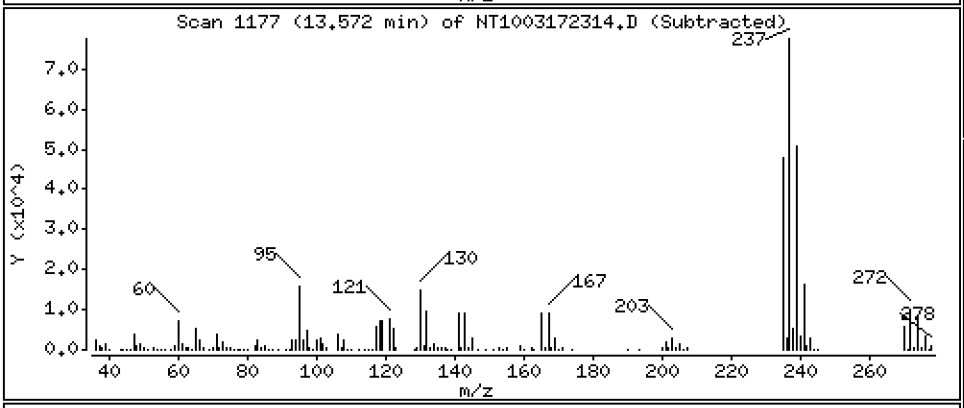
Column phase: ZB-5msi

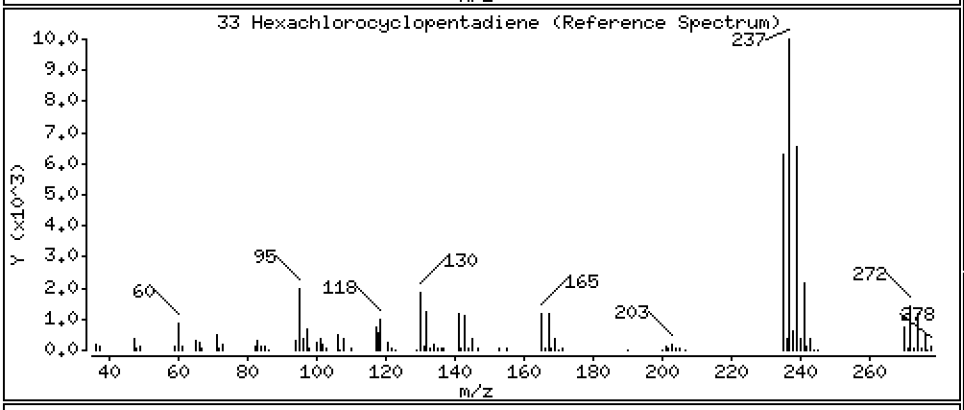
Column diameter: 0.25

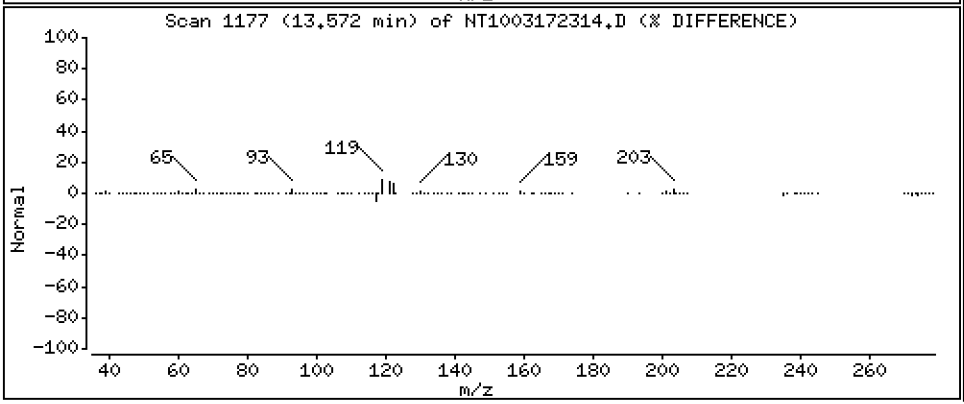
33 Hexachlorocyclopentadiene

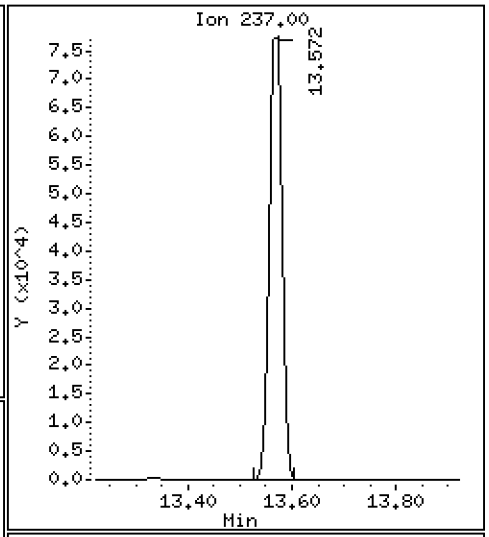
Concentration: 3.923 ug/mL

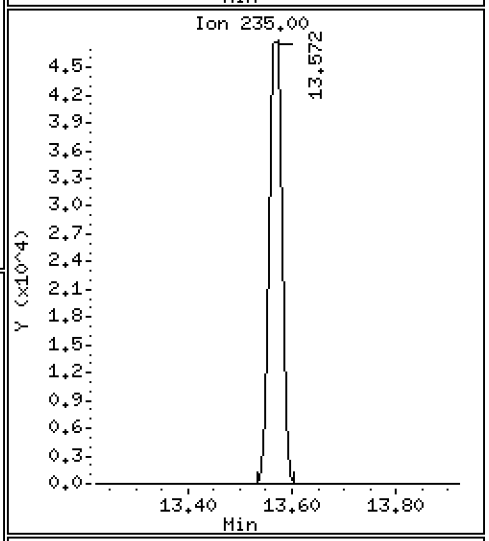


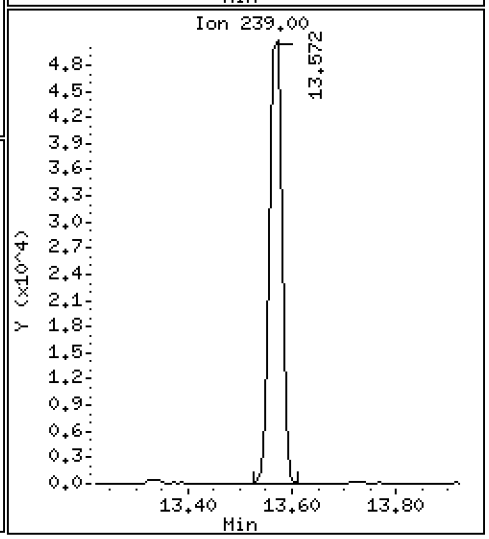












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

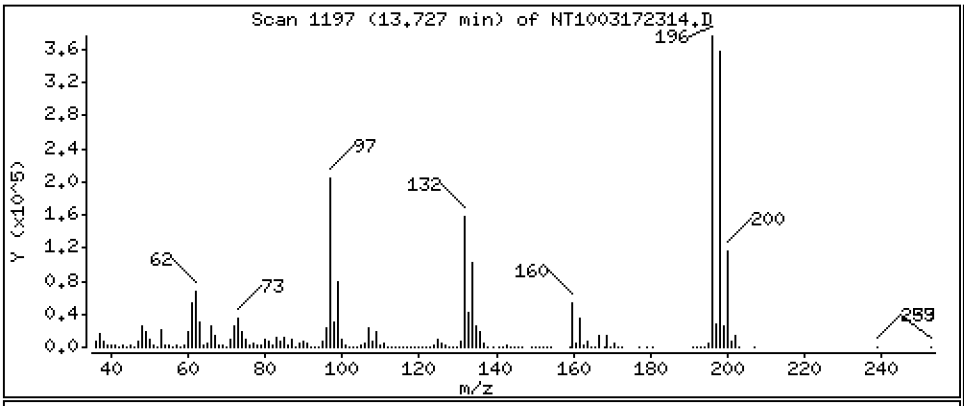
Operator: VTS

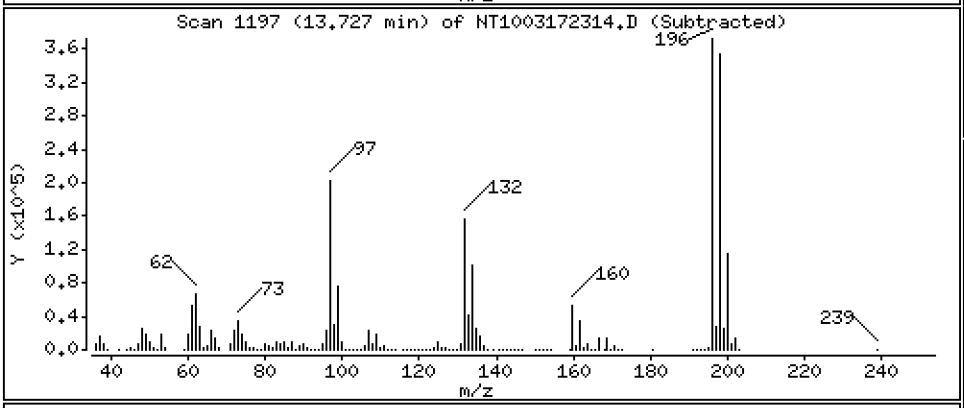
Column phase: ZB-5msi

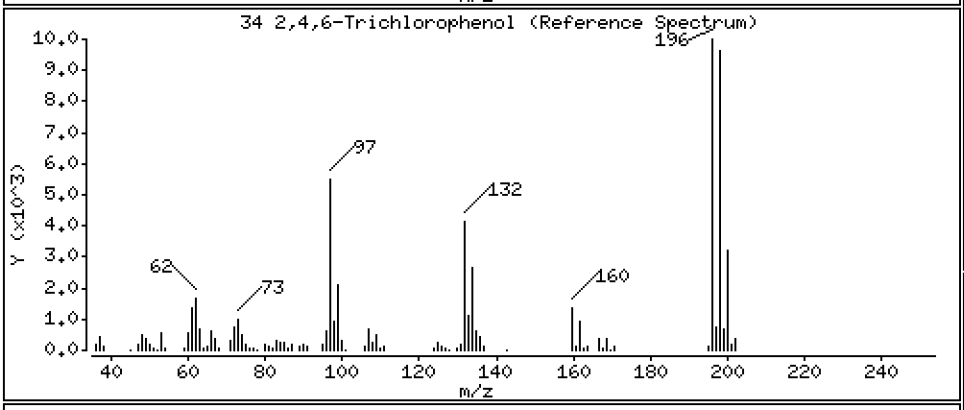
Column diameter: 0.25

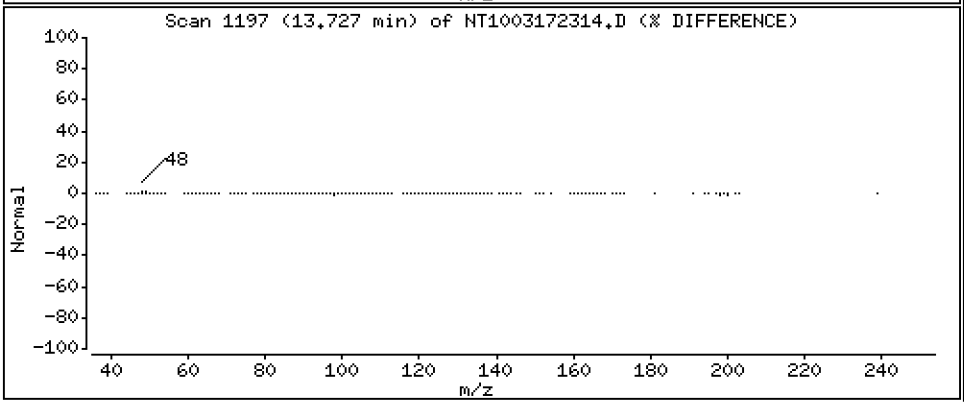
34 2,4,6-Trichlorophenol

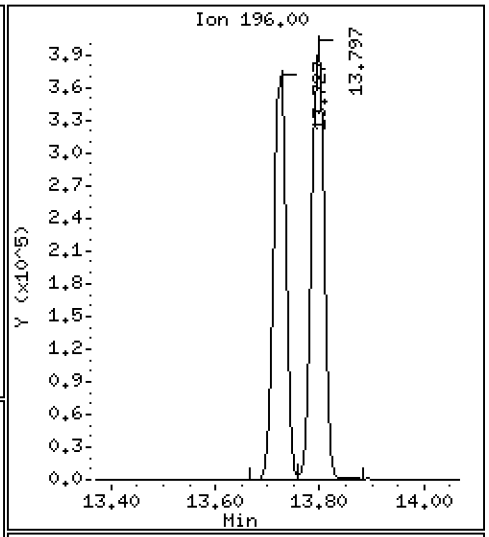
Concentration: 17.29 ug/mL

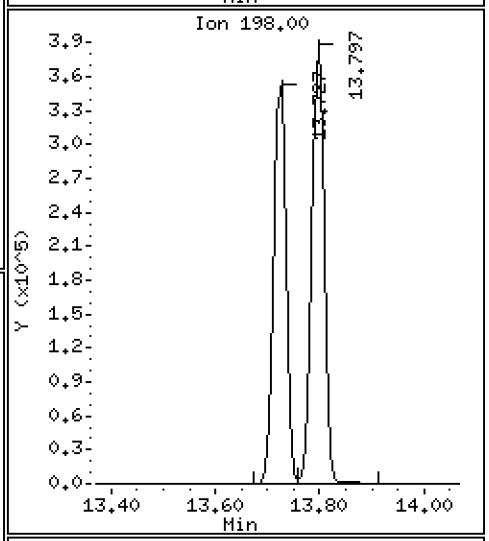


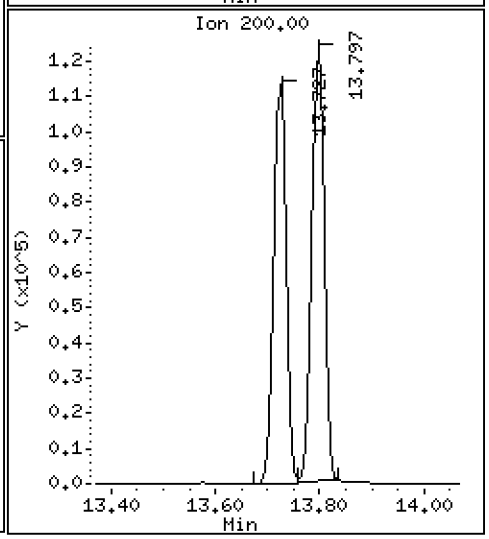












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

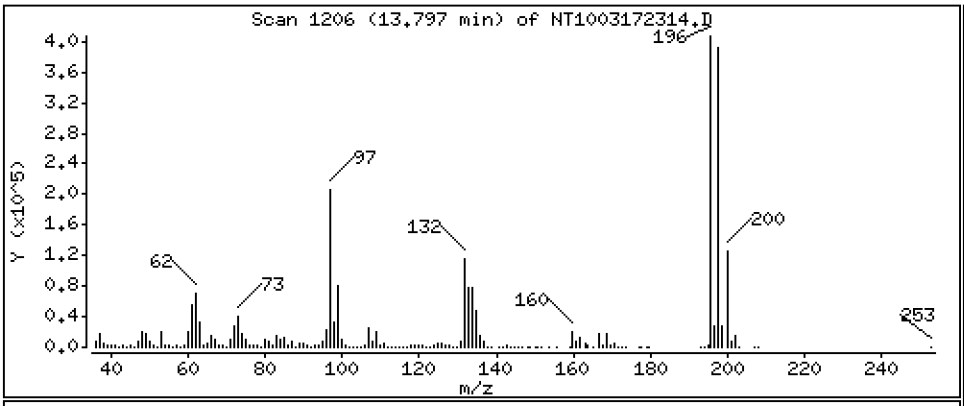
Operator: VTS

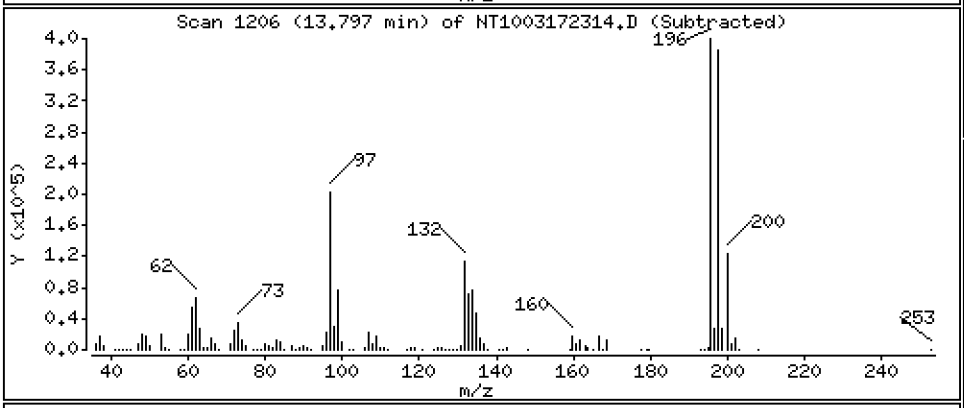
Column phase: ZB-5msi

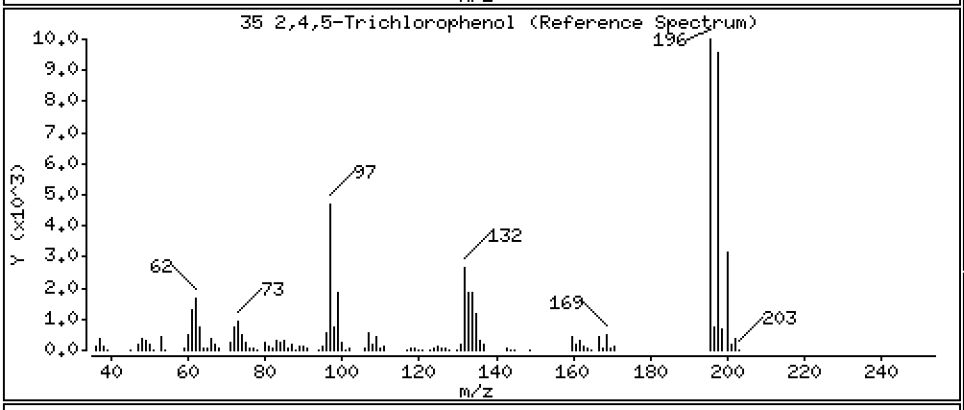
Column diameter: 0.25

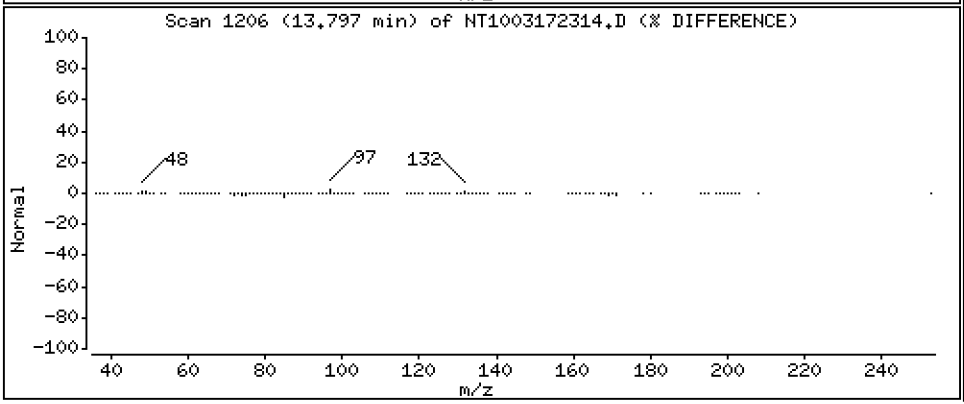
35 2,4,5-Trichlorophenol

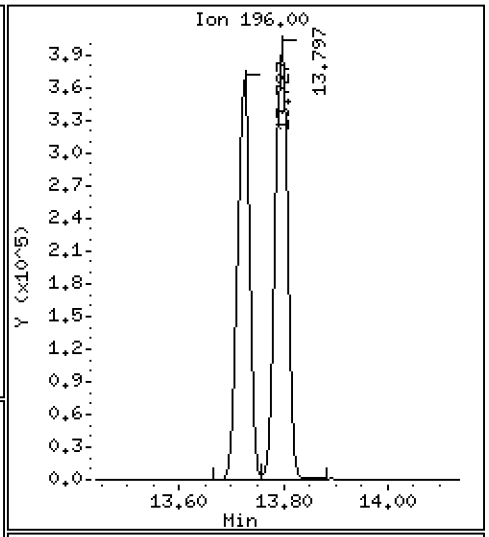
Concentration: 16.98 ug/mL

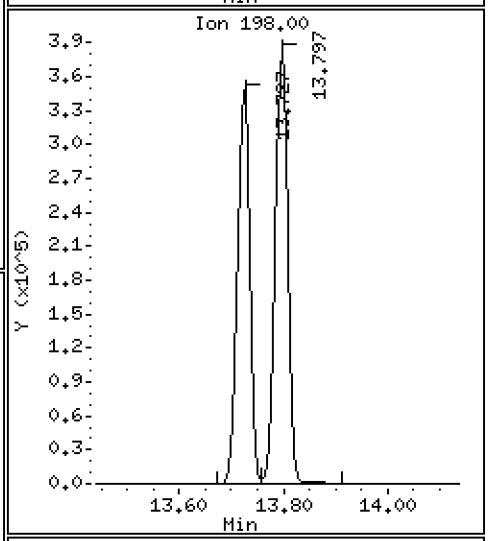


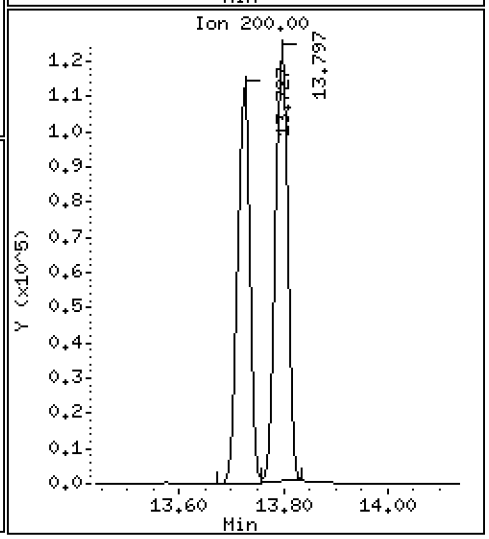












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

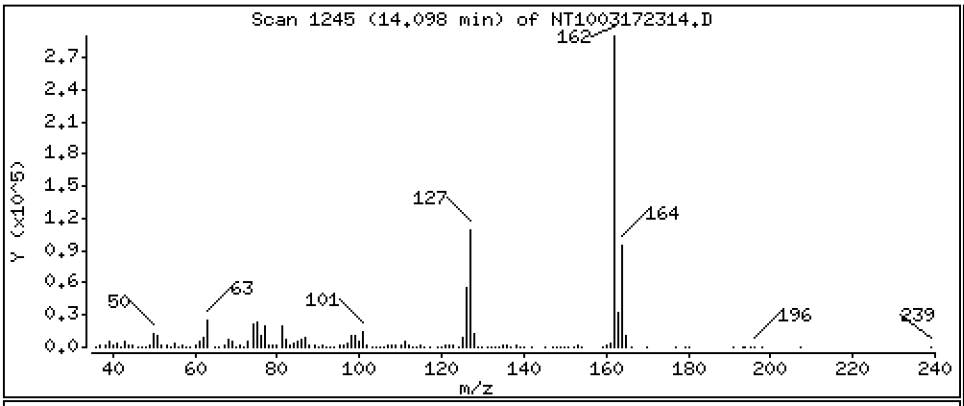
Operator: VTS

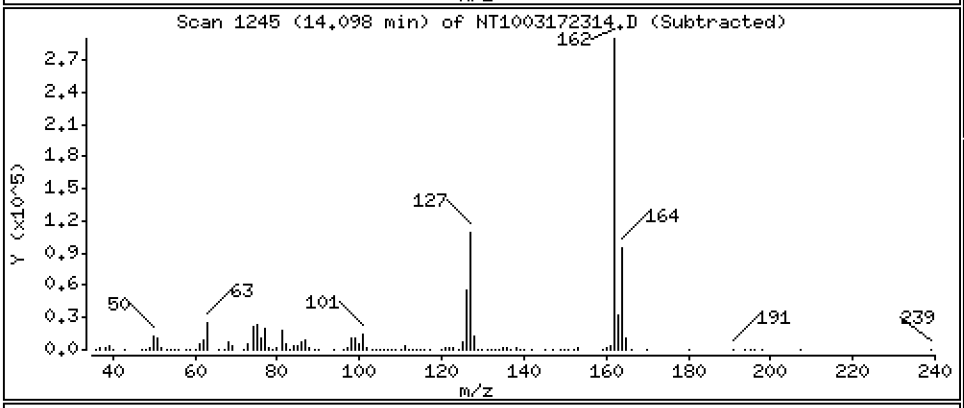
Column phase: ZB-5msi

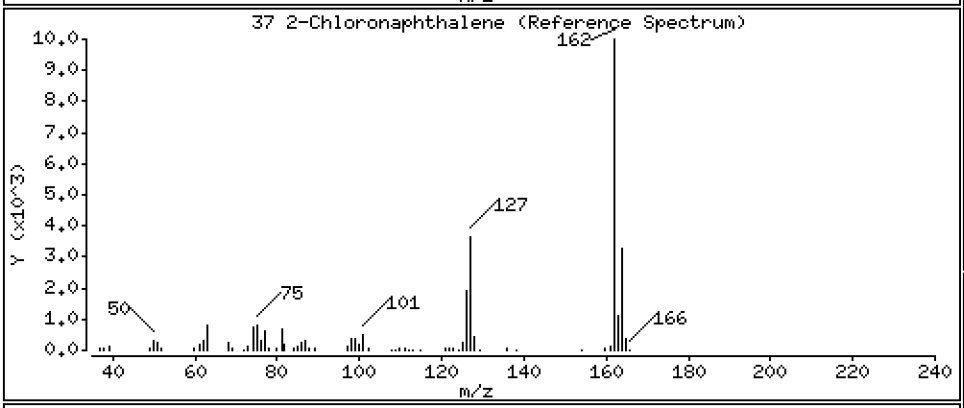
Column diameter: 0.25

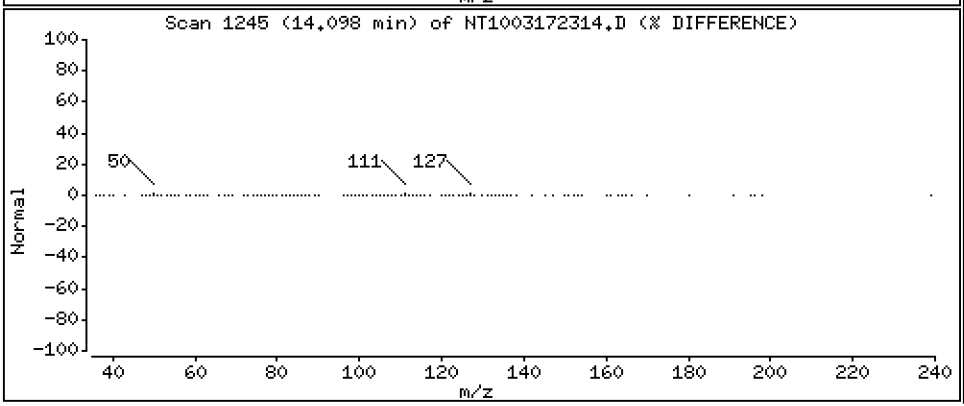
37 2-Chloronaphthalene

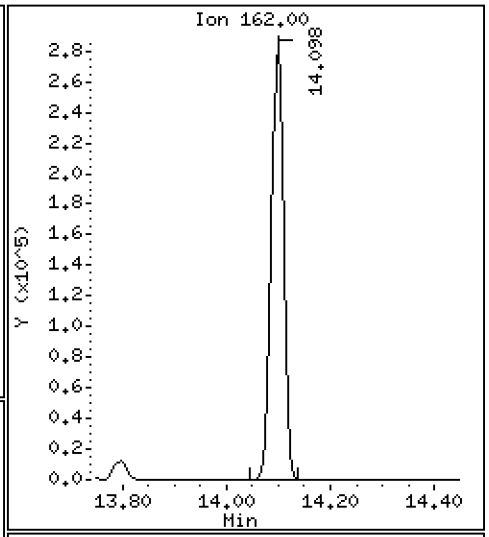
Concentration: 4.089 ug/mL

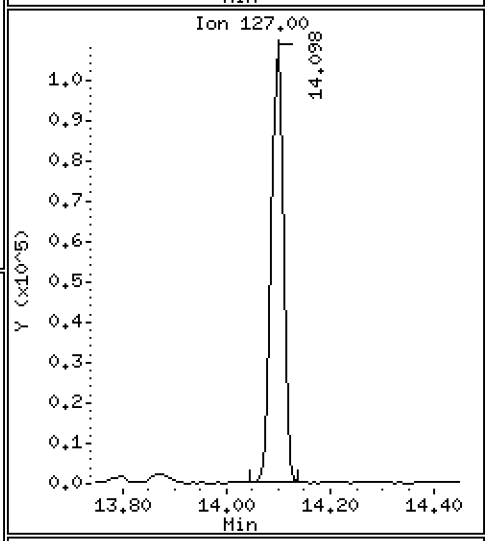


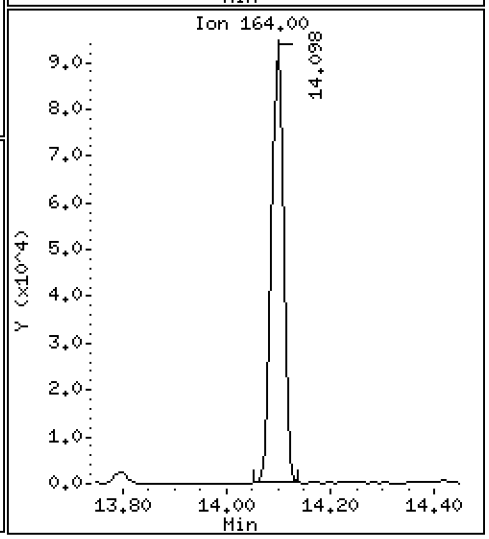












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

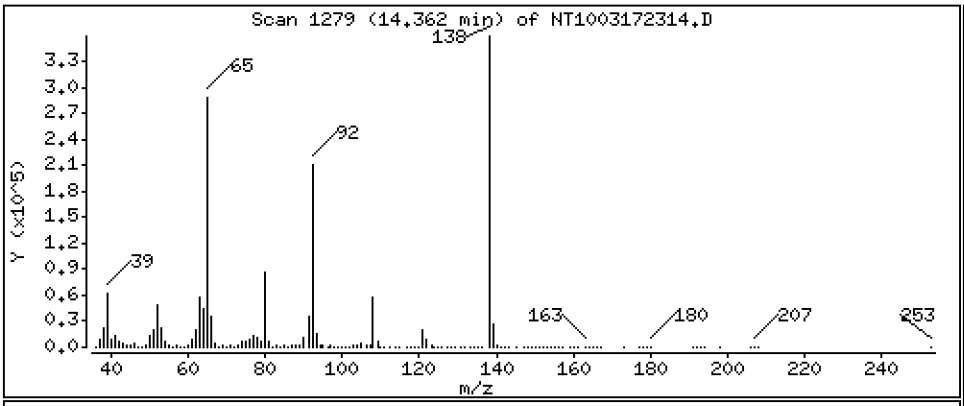
Operator: VTS

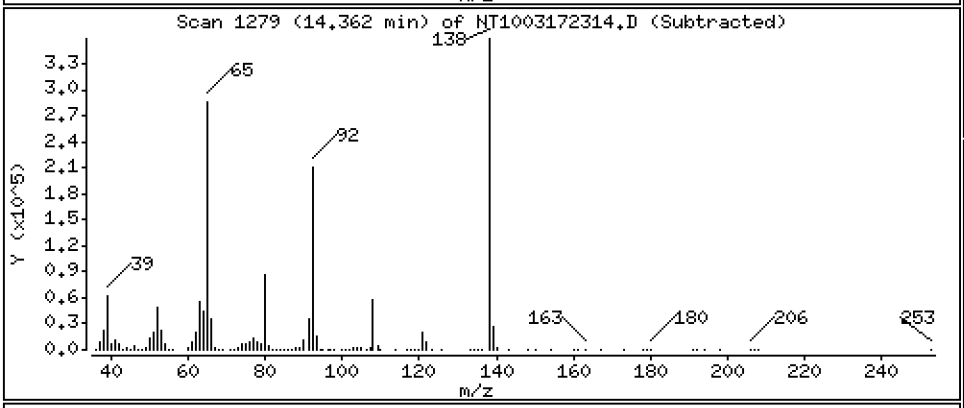
Column phase: ZB-5msi

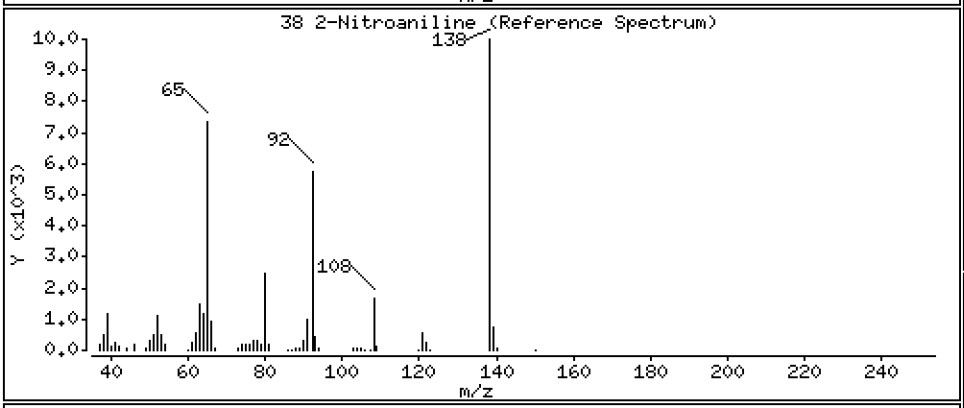
Column diameter: 0.25

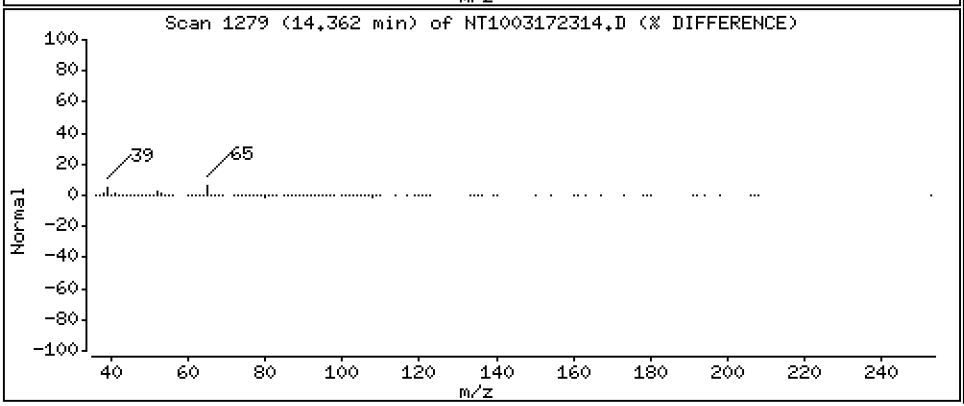
38 2-Nitroaniline

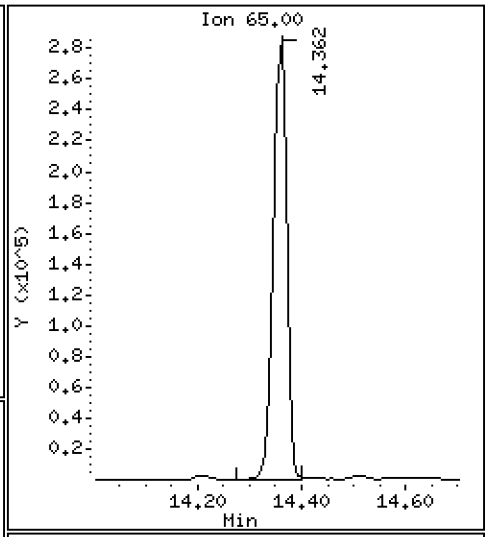
Concentration: 15.92 ug/mL

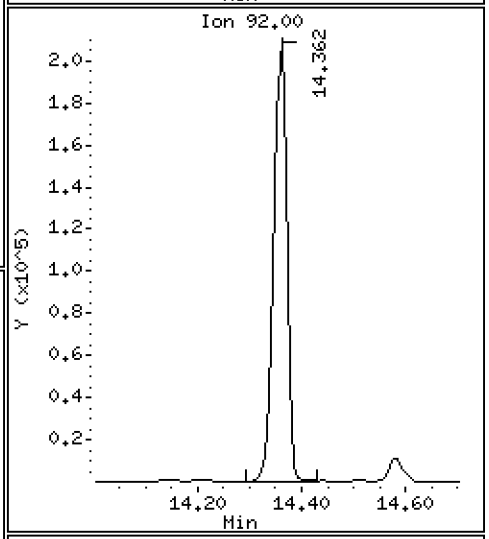


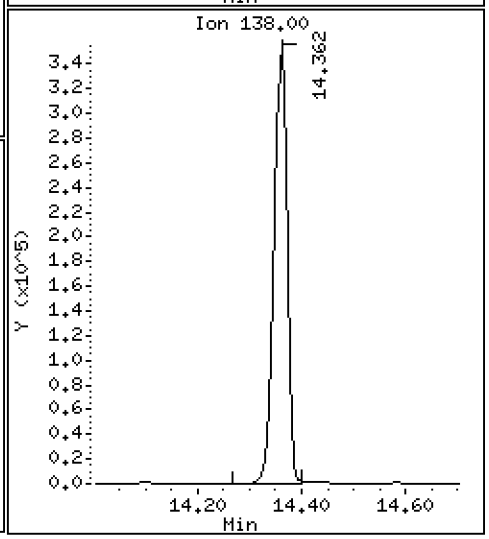












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172314.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

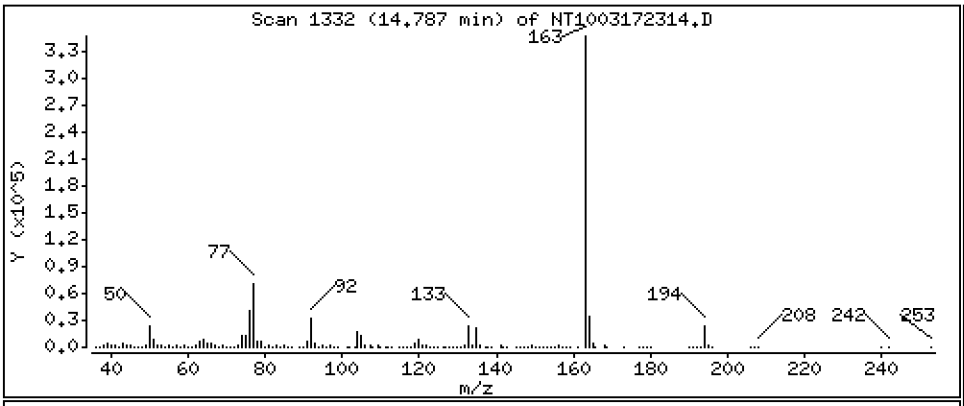
Operator: VTS

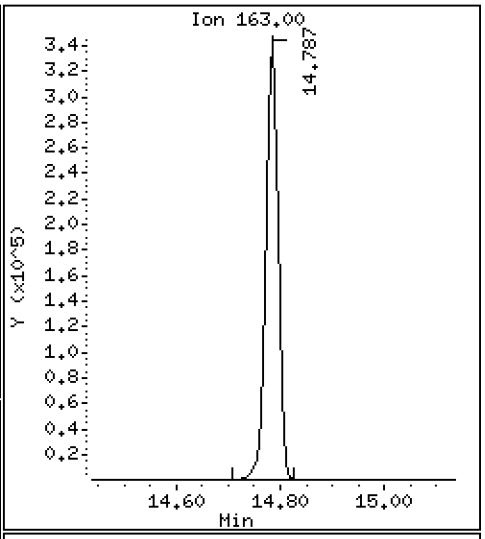
Column phase: ZB-5msi

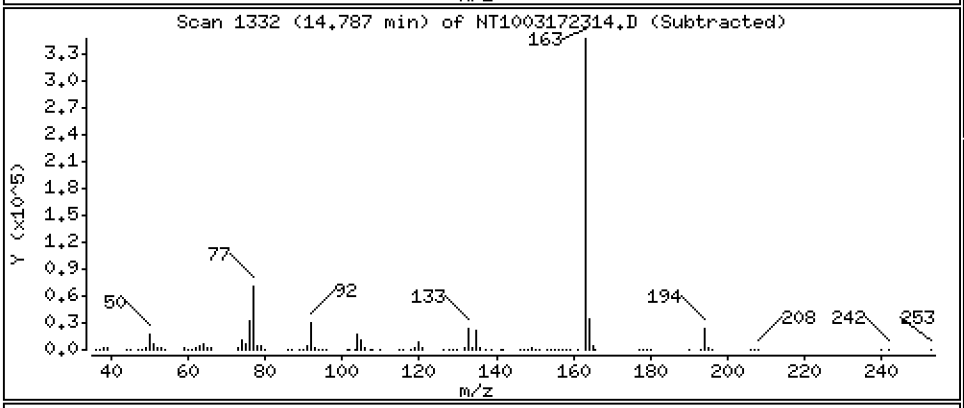
Column diameter: 0.25

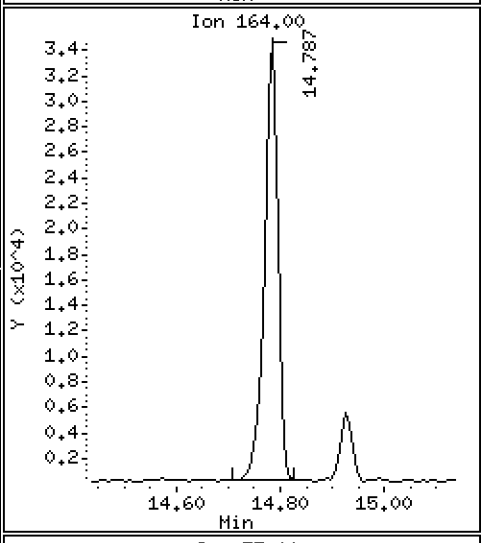
39 Dimethylphthalate

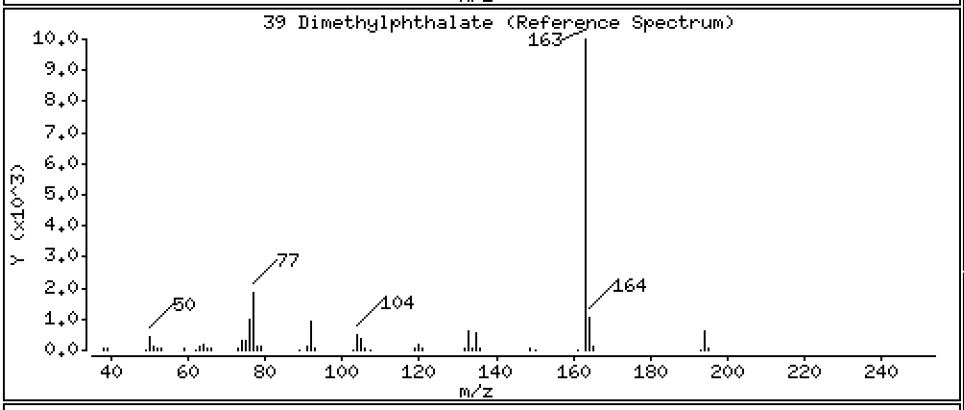
Concentration: 4.801 ug/mL

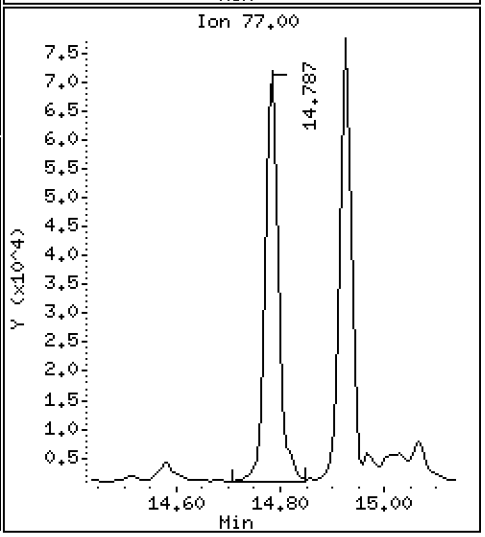


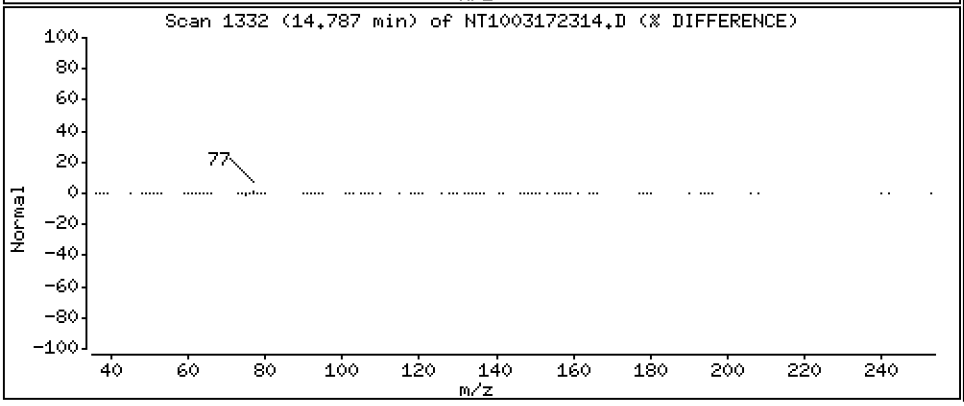












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

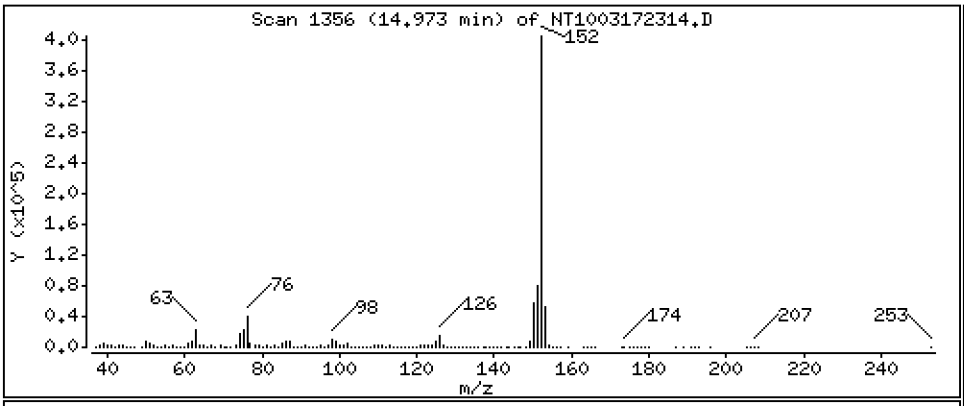
Operator: VTS

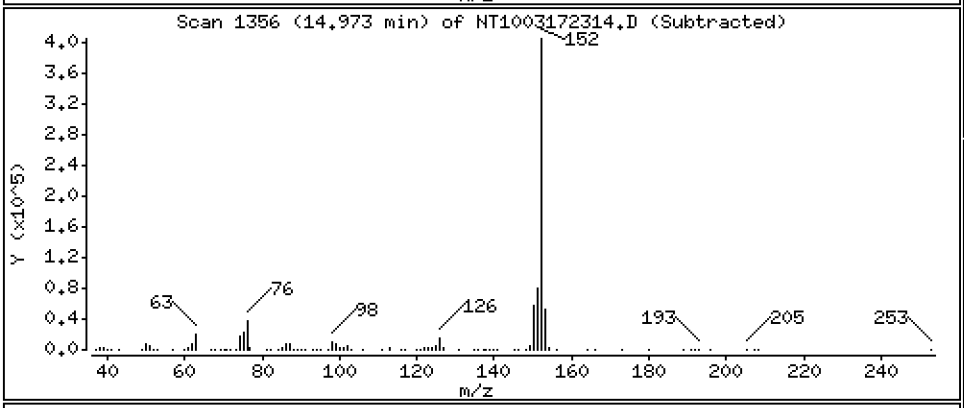
Column phase: ZB-5msi

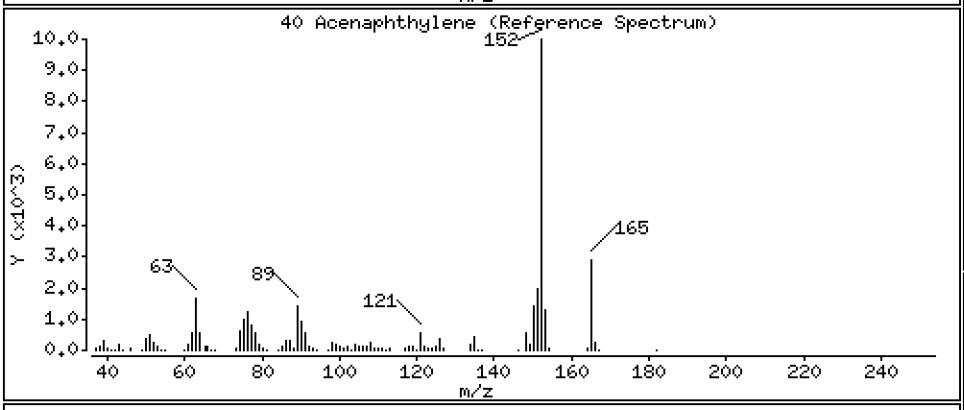
Column diameter: 0.25

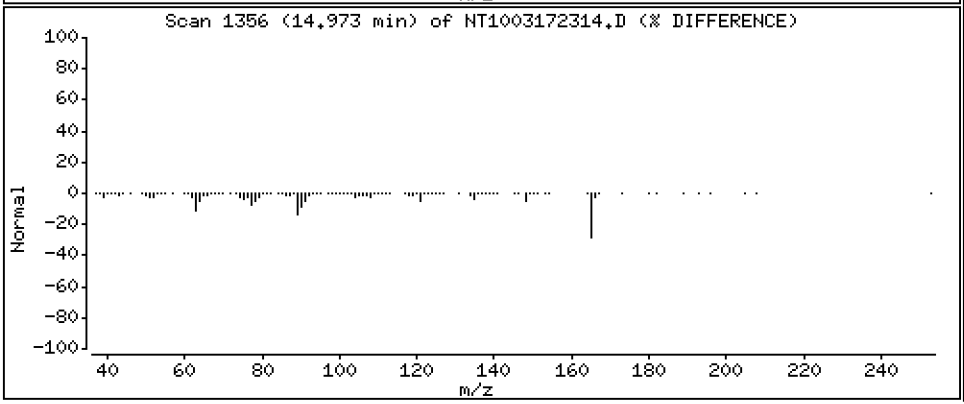
40 Acenaphthylene

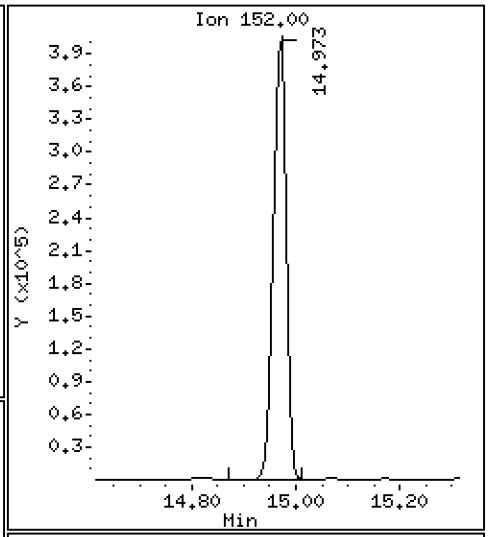
Concentration: 3.967 ug/mL

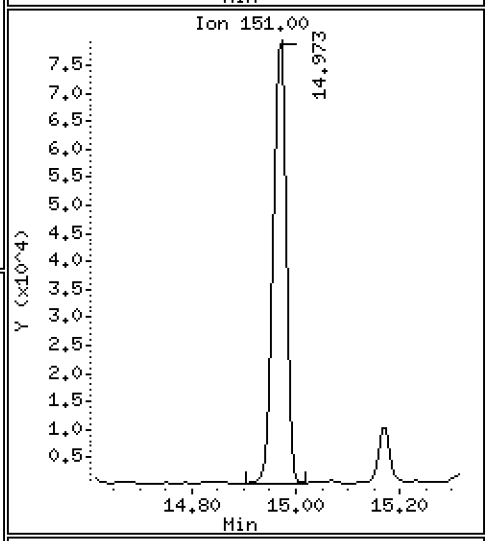


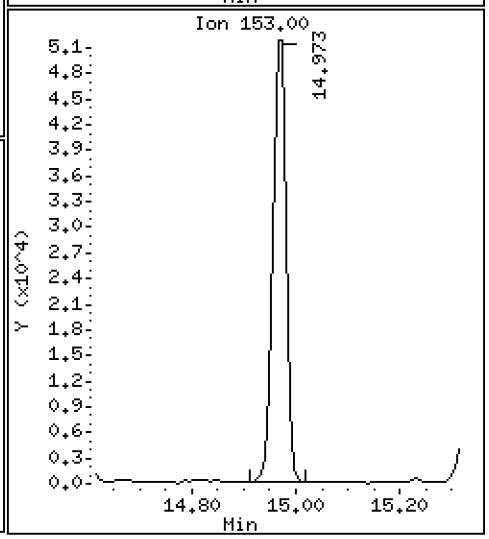












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

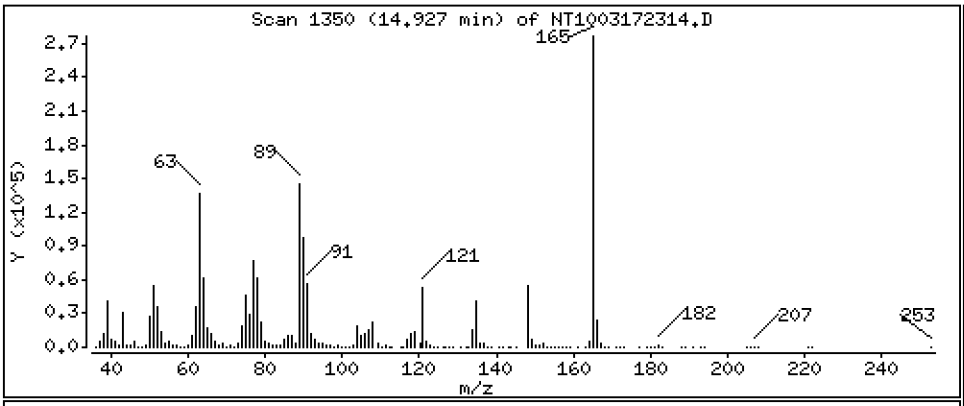
Operator: VTS

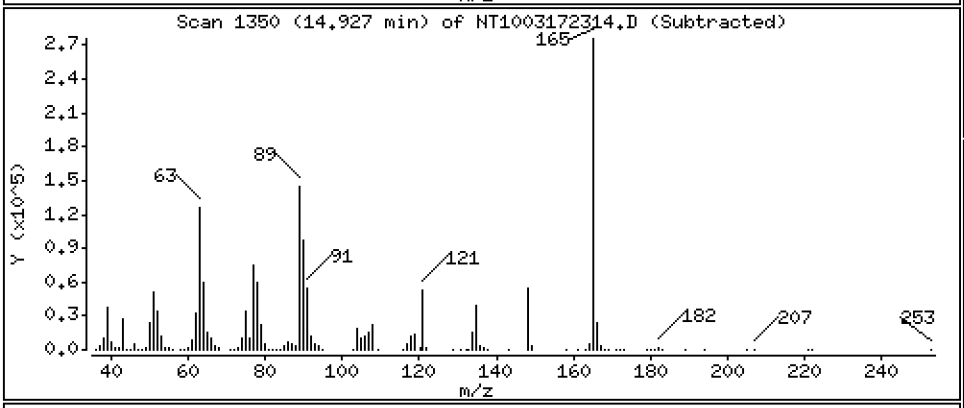
Column phase: ZB-5msi

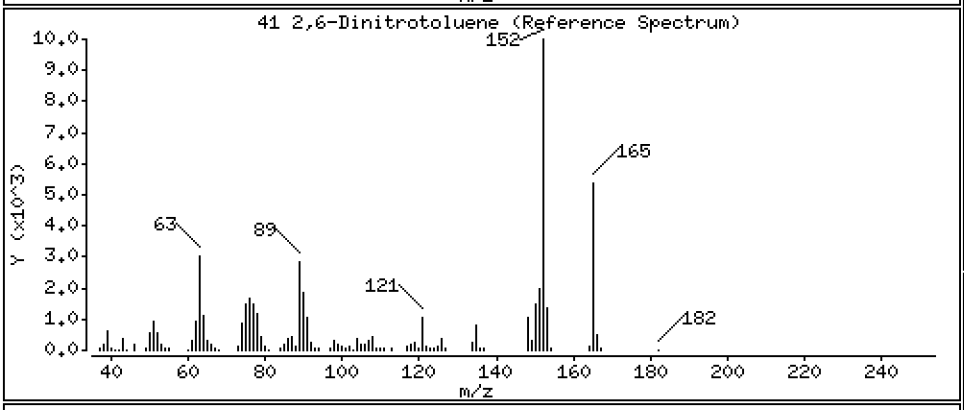
Column diameter: 0.25

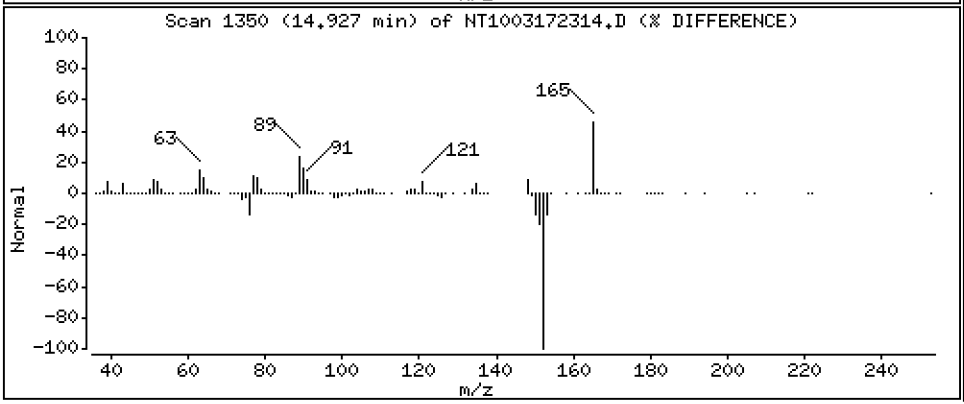
41 2,6-Dinitrotoluene

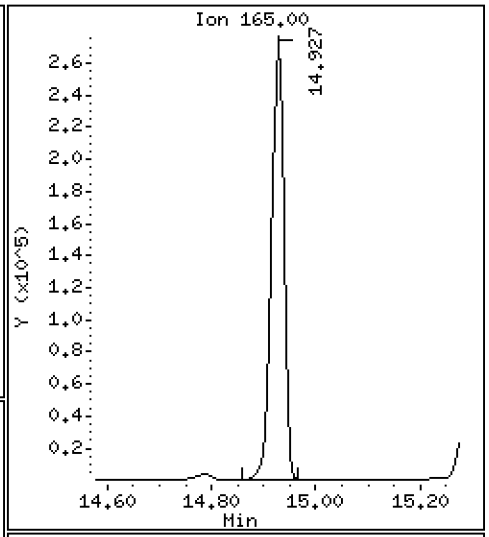
Concentration: 18.01 ug/mL

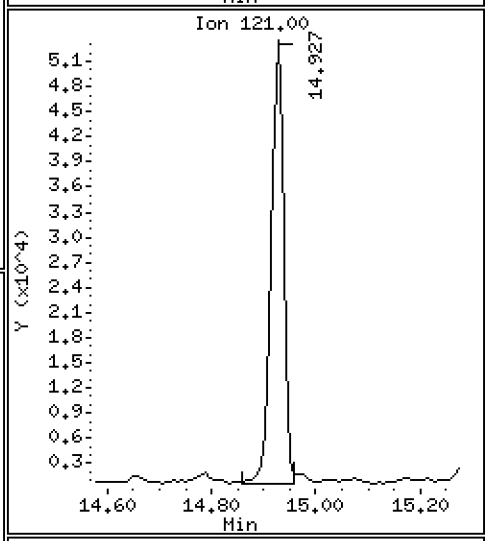


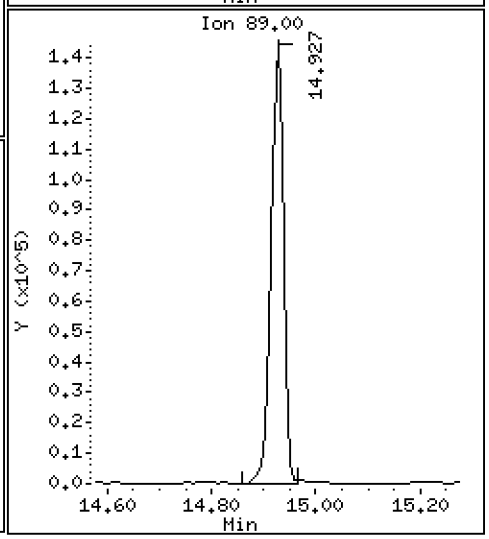












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

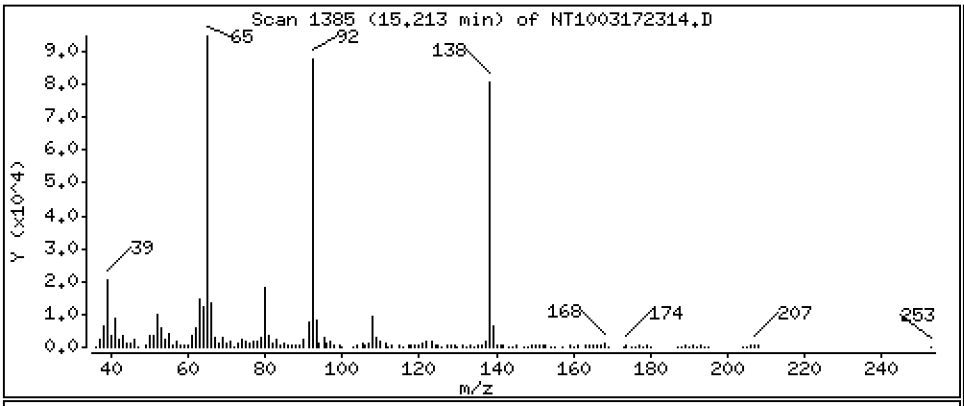
Operator: VTS

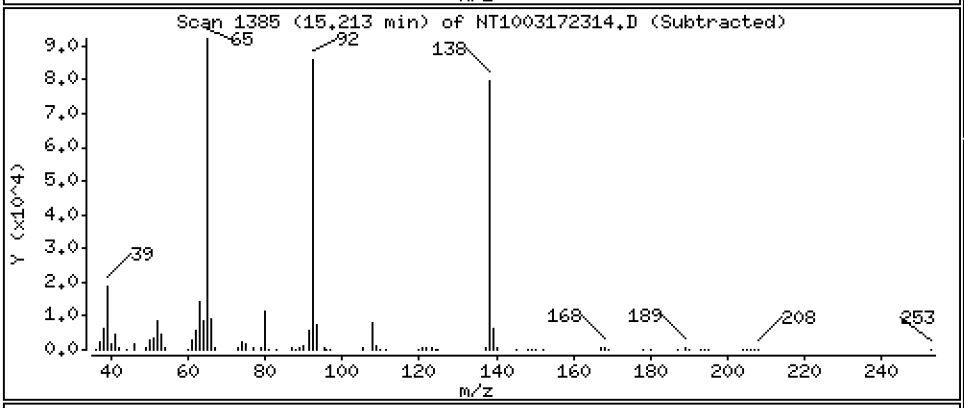
Column phase: ZB-5msi

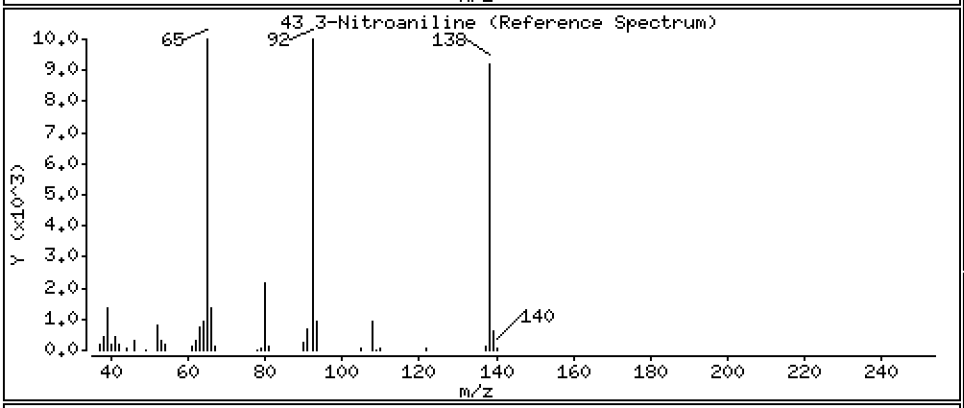
Column diameter: 0.25

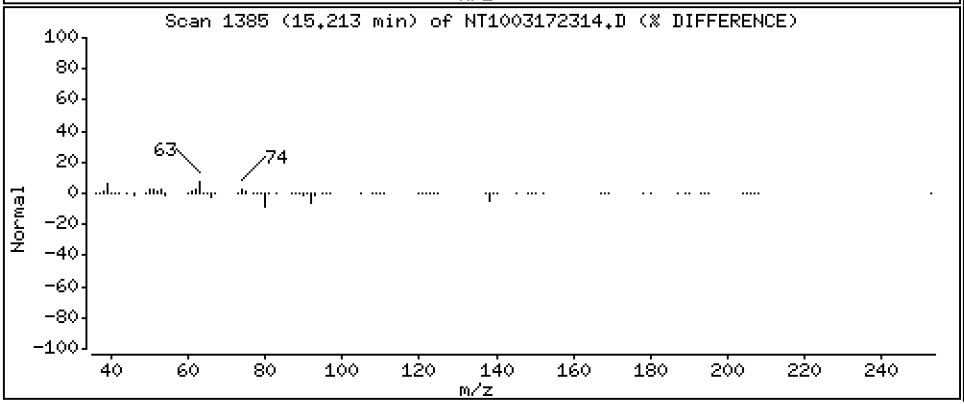
43 3-Nitroaniline

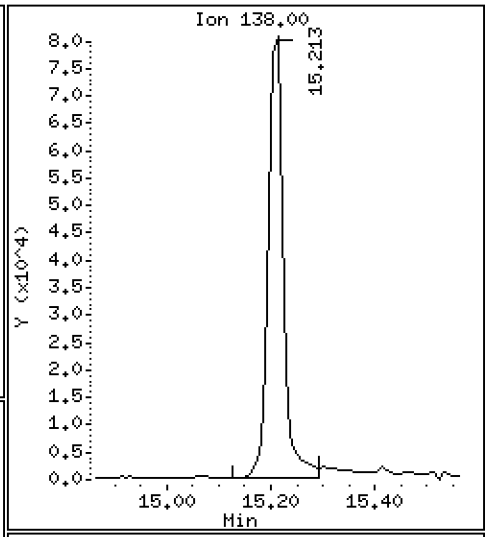
Concentration: 5.799 ug/mL

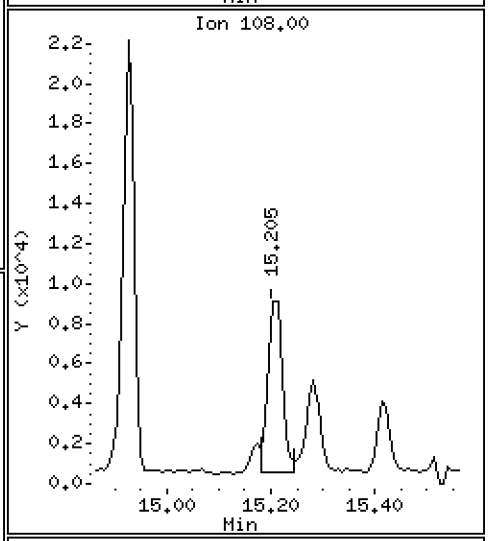


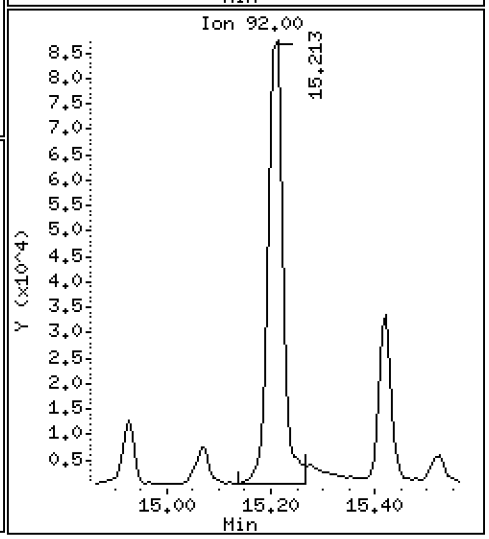












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

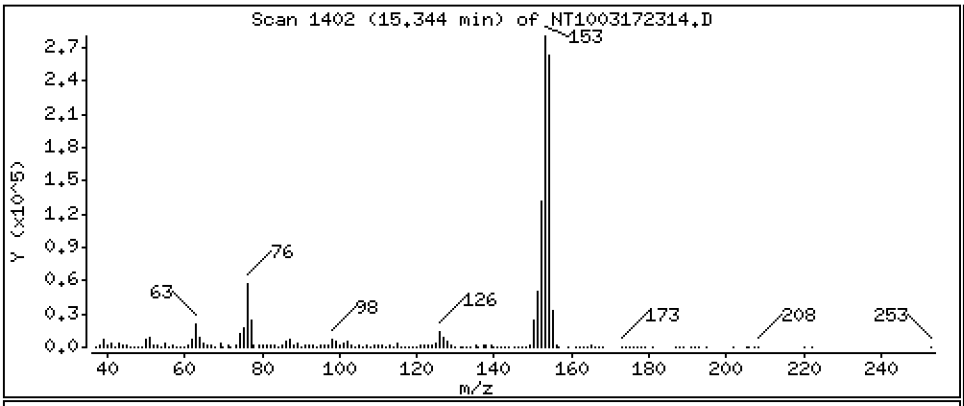
Operator: VTS

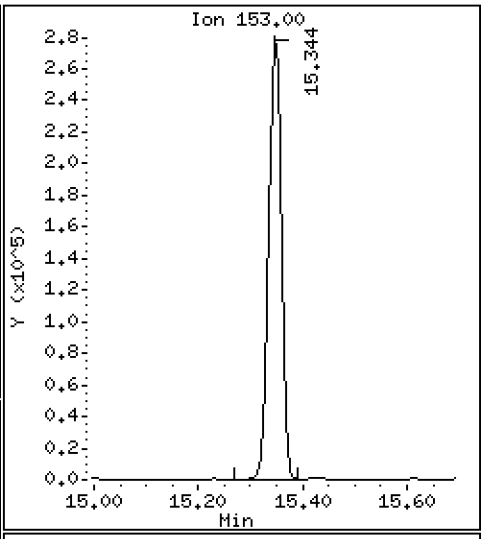
Column phase: ZB-5msi

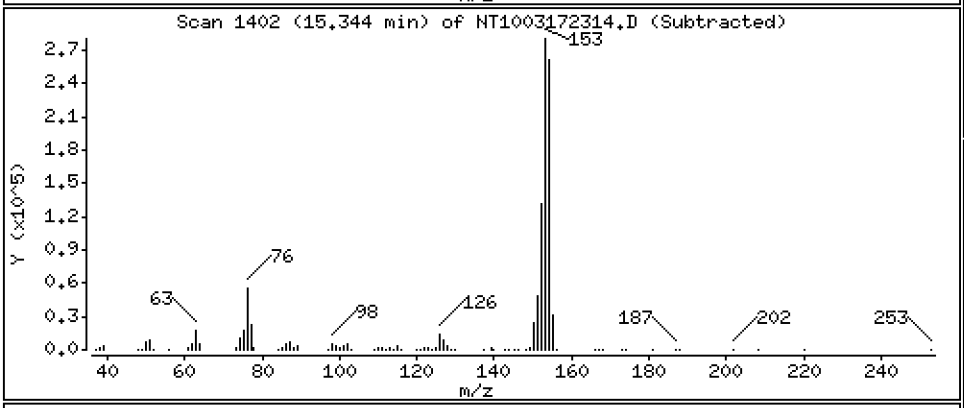
Column diameter: 0.25

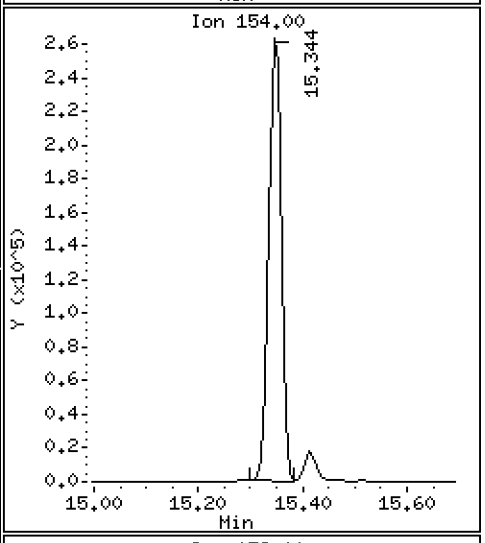
44 Acenaphthene

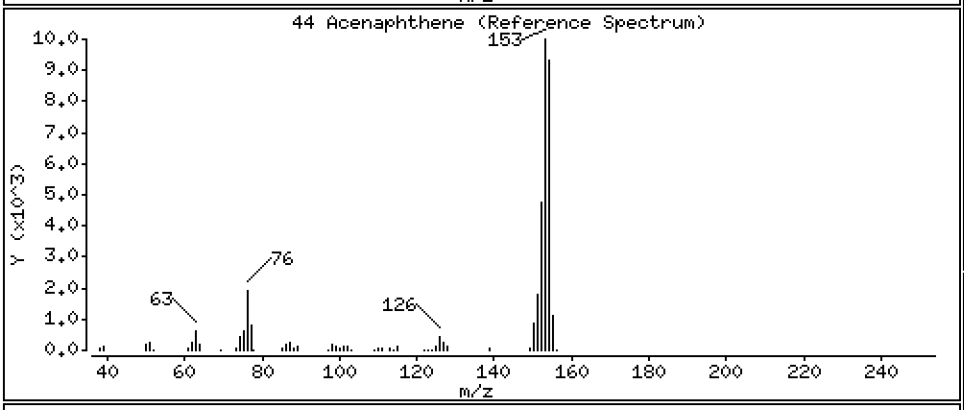
Concentration: 4.317 ug/mL

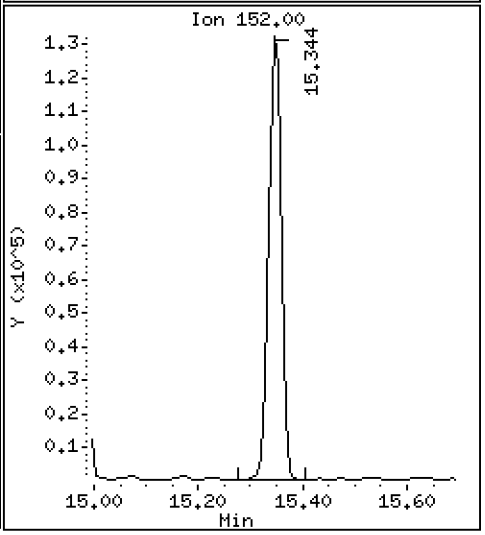


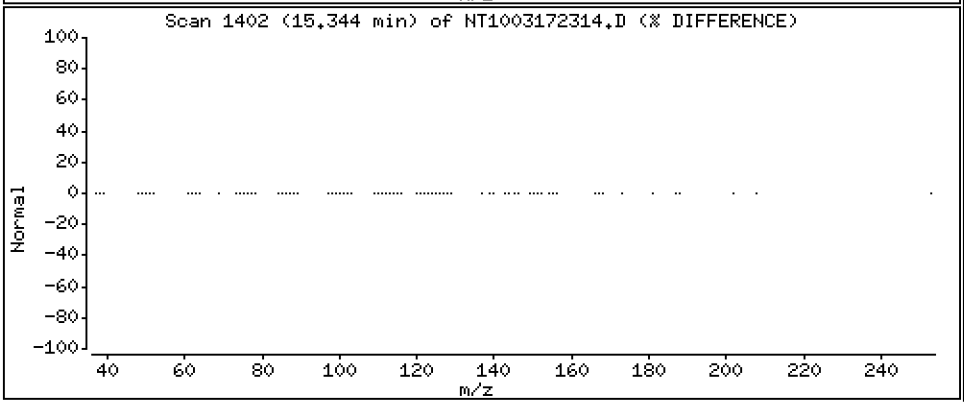












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

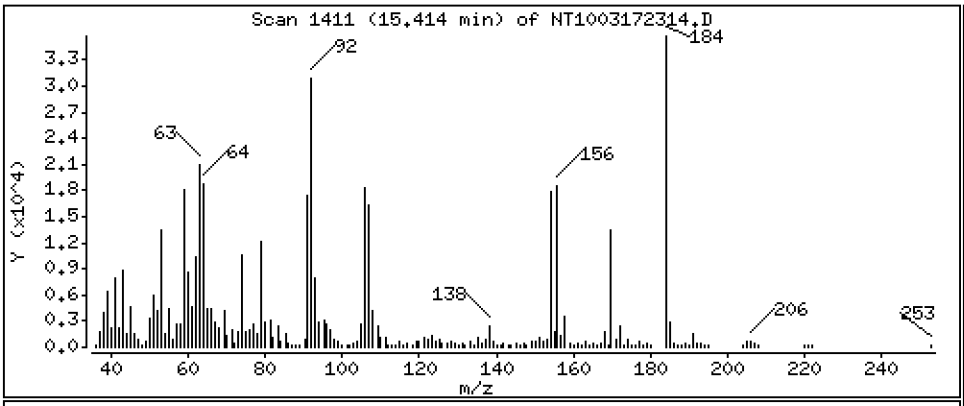
Operator: VTS

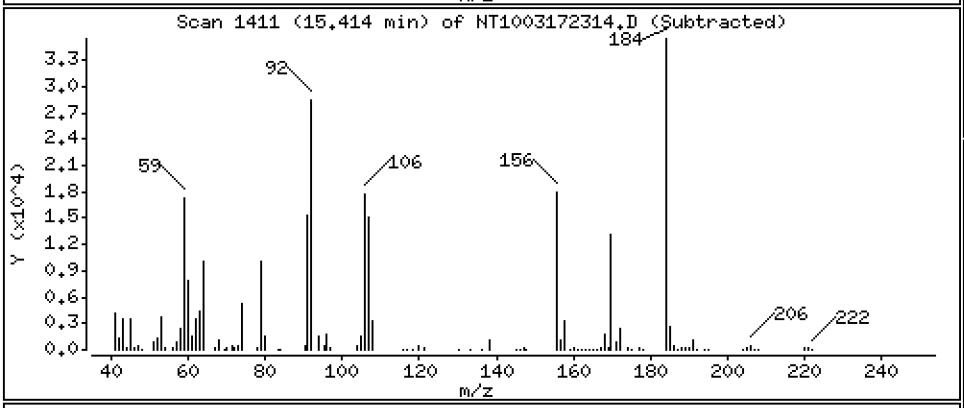
Column phase: ZB-5msi

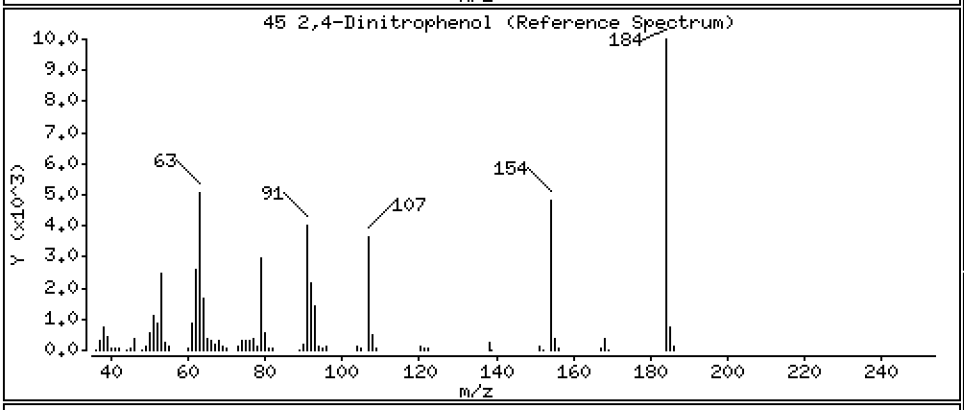
Column diameter: 0.25

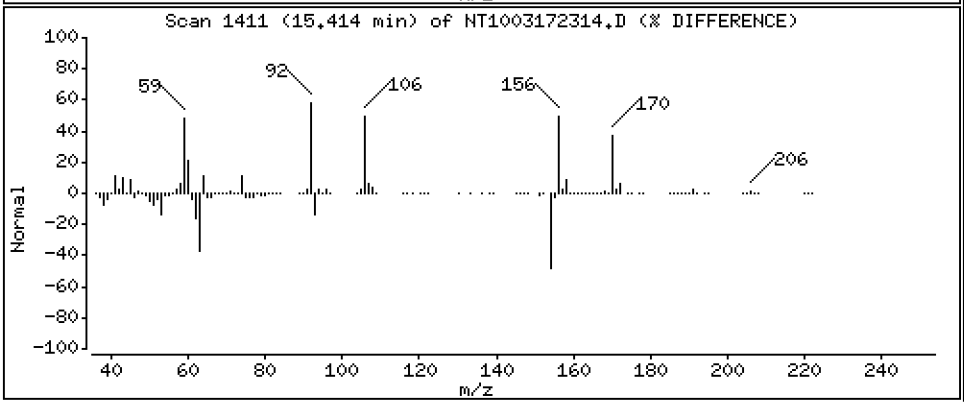
45 2,4-Dinitrophenol

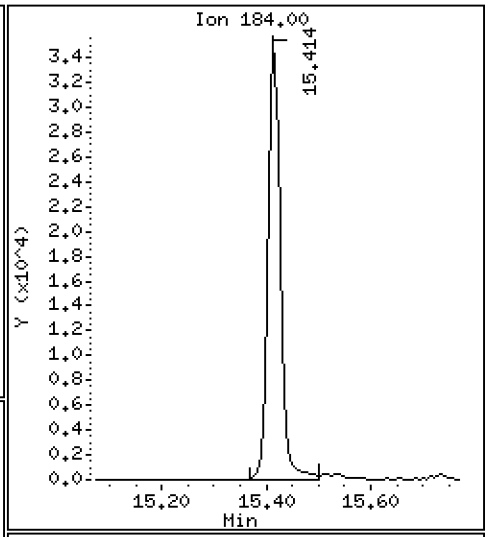
Concentration: 3.787 ug/mL

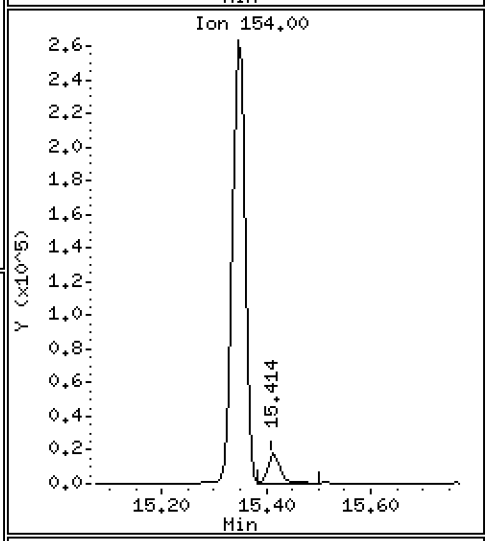


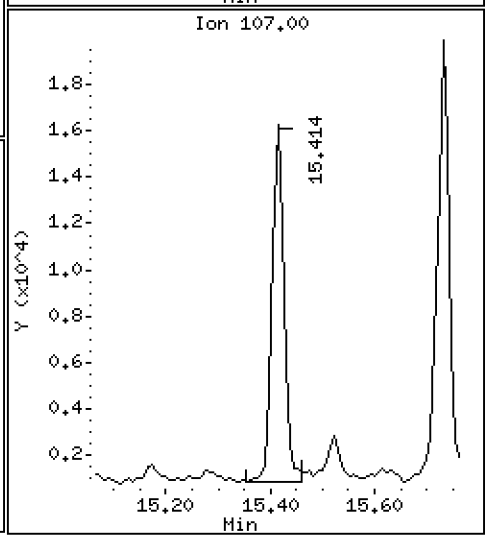












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

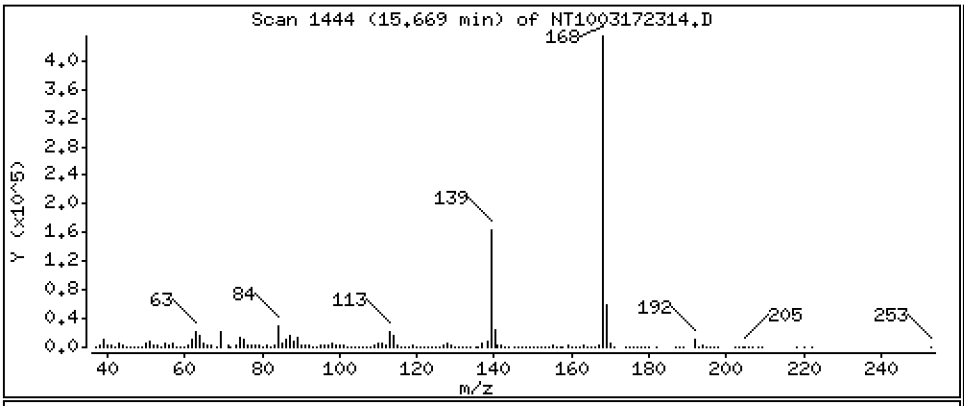
Operator: VTS

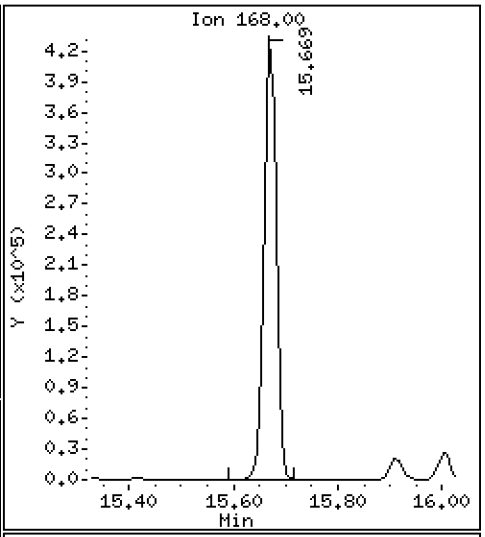
Column phase: ZB-5msi

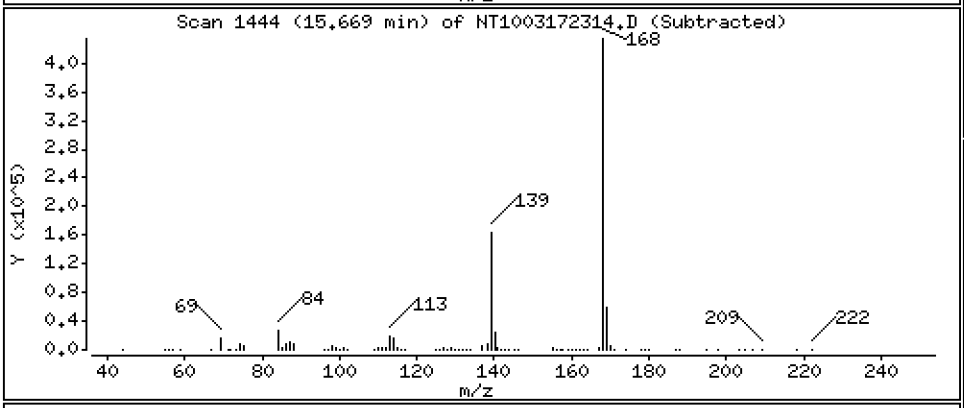
Column diameter: 0.25

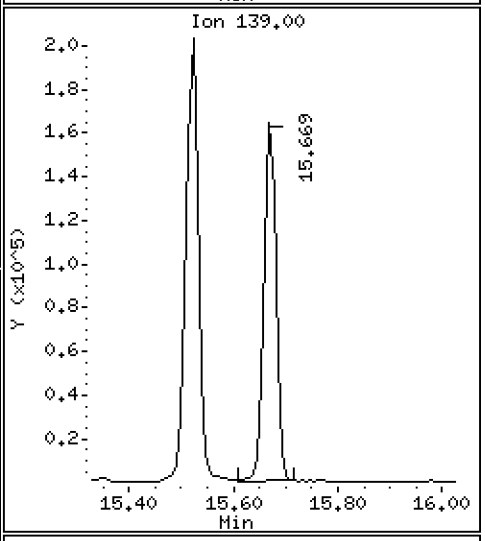
46 Dibenzofuran

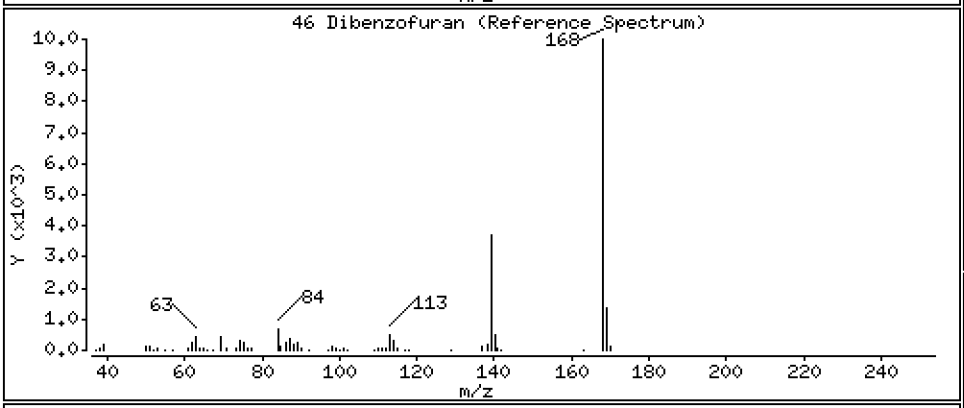
Concentration: 4.314 ug/mL

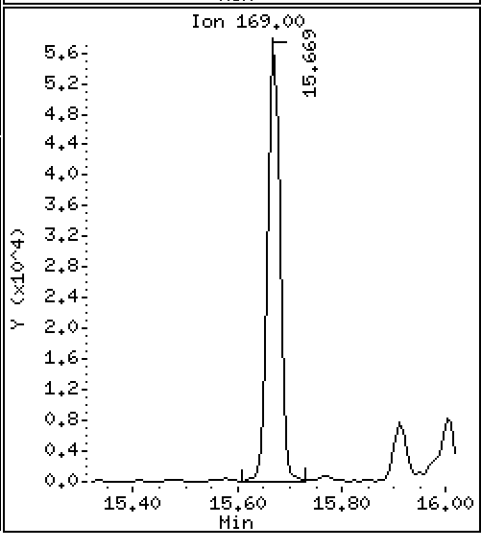


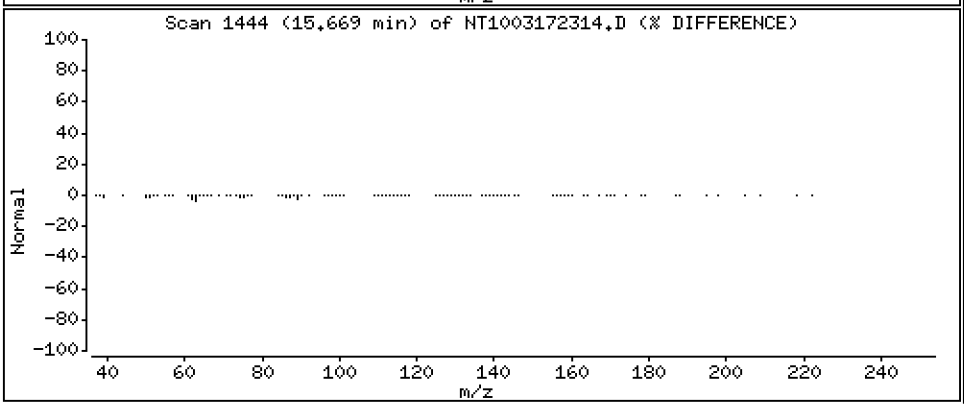












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172314.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

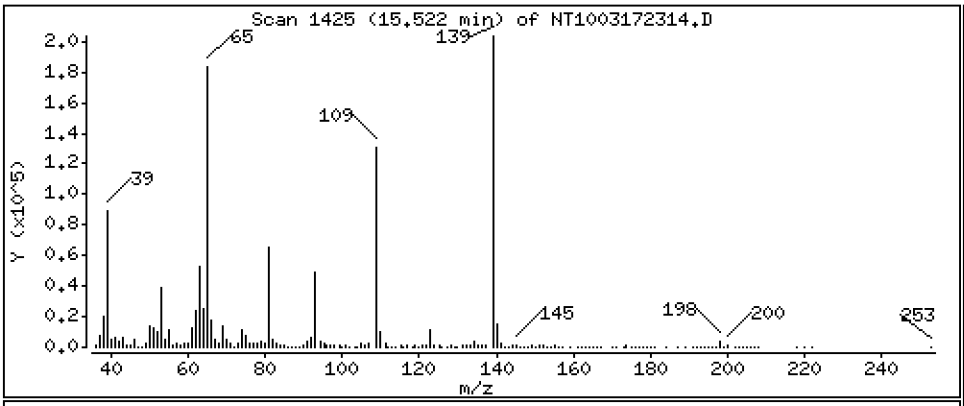
Operator: VTS

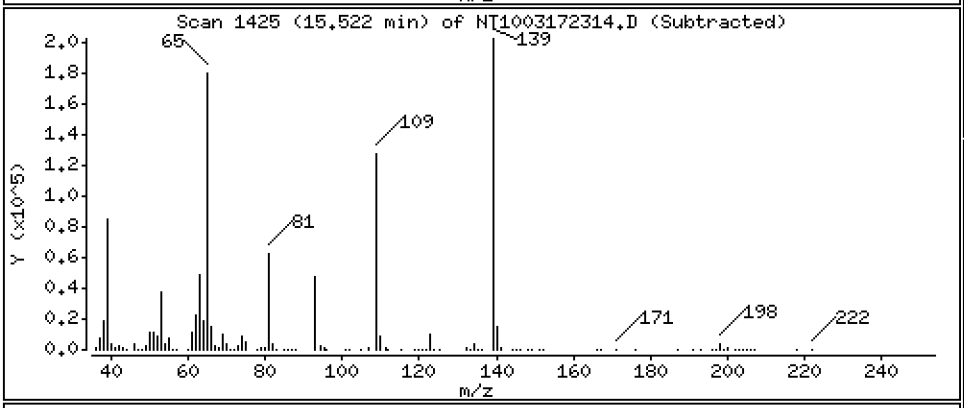
Column phase: ZB-5msi

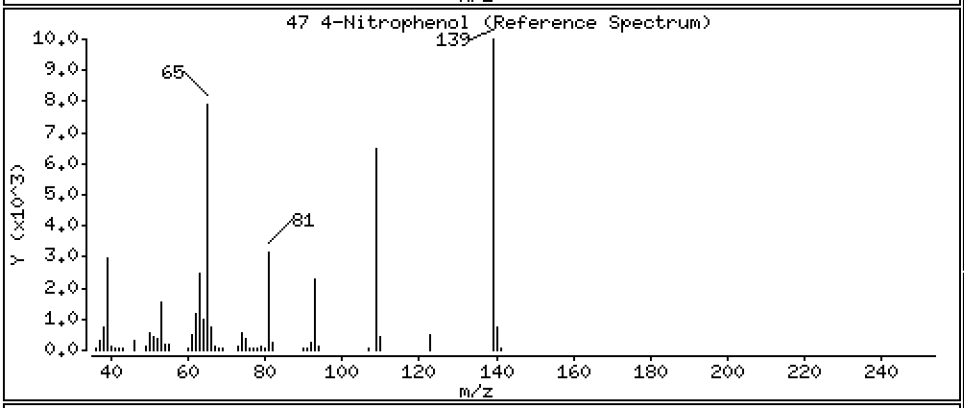
Column diameter: 0.25

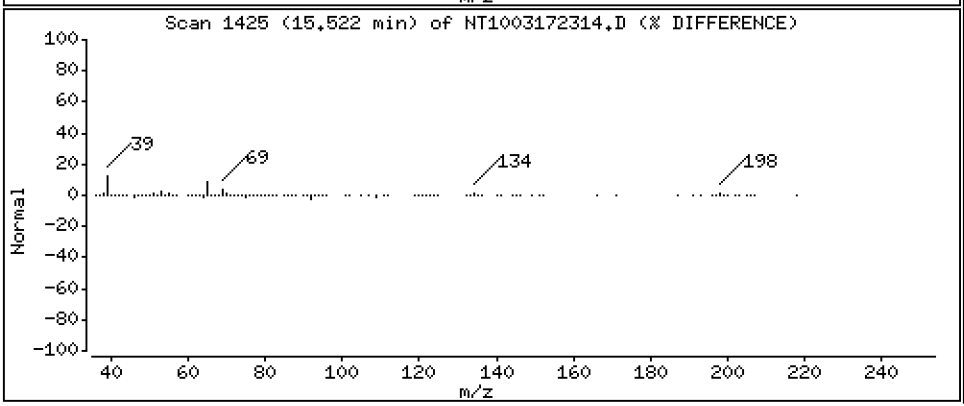
47 4-Nitrophenol

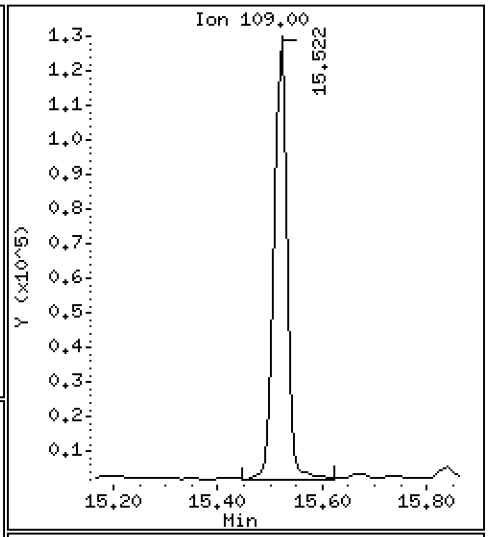
Concentration: 12.48 ug/mL

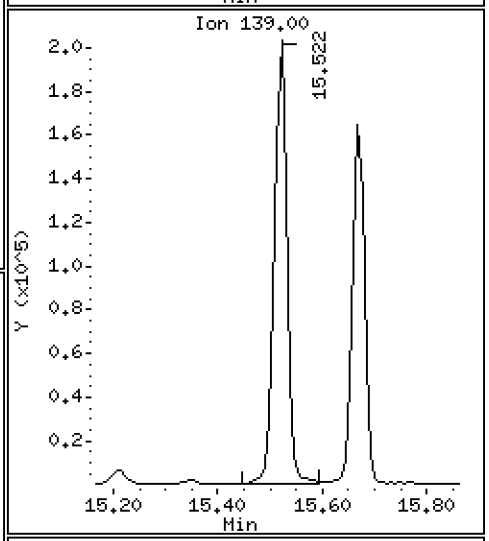


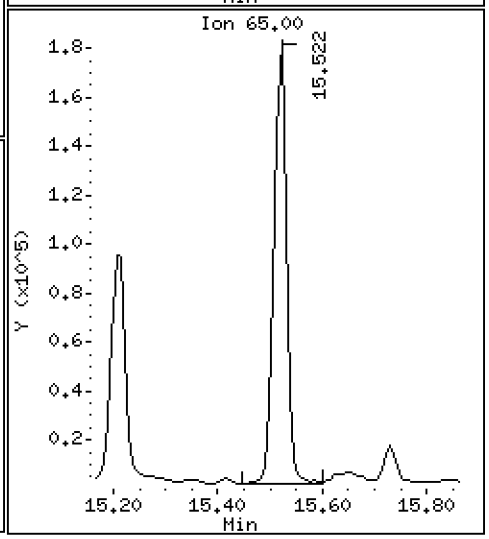












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

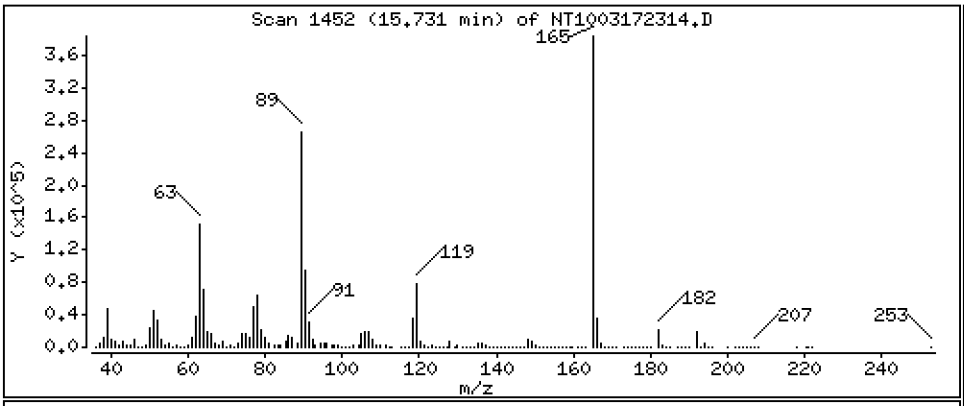
Operator: VTS

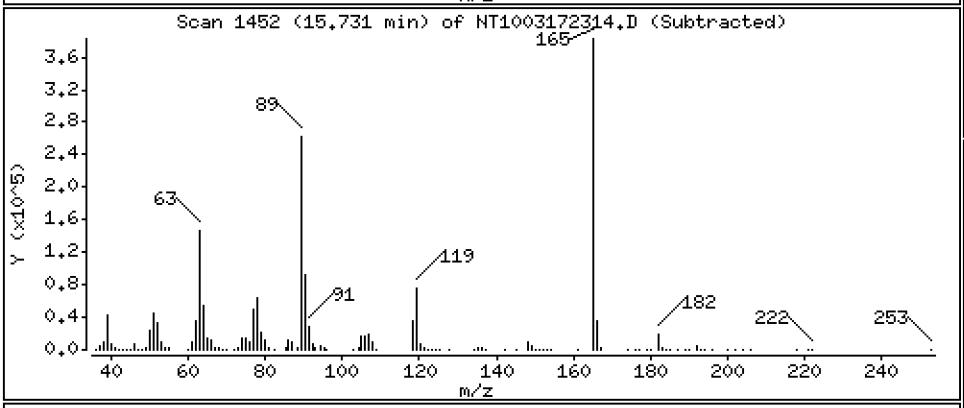
Column phase: ZB-5msi

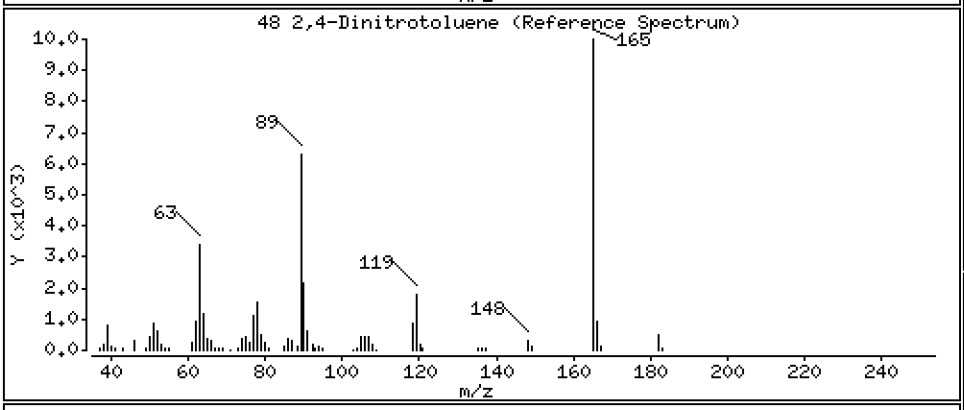
Column diameter: 0.25

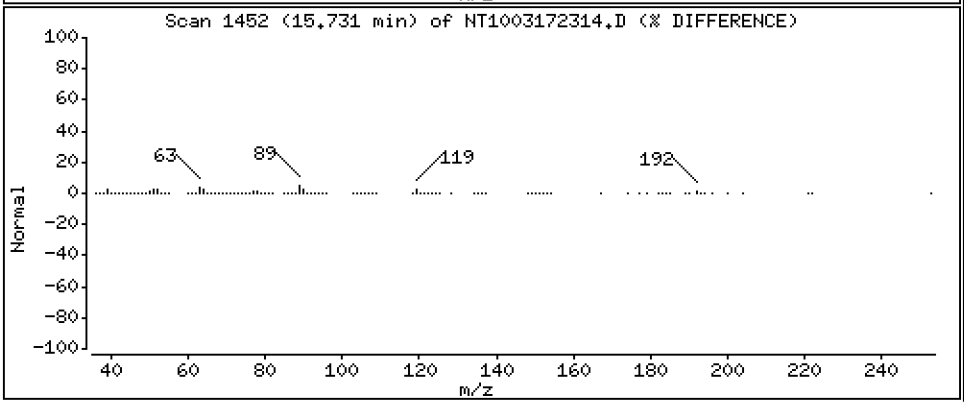
48 2,4-Dinitrotoluene

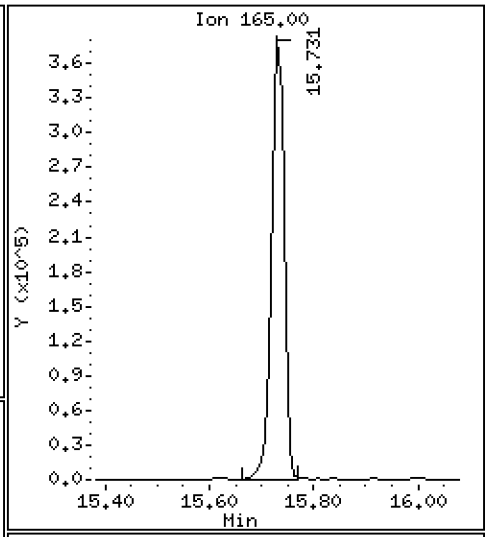
Concentration: 17.29 ug/mL

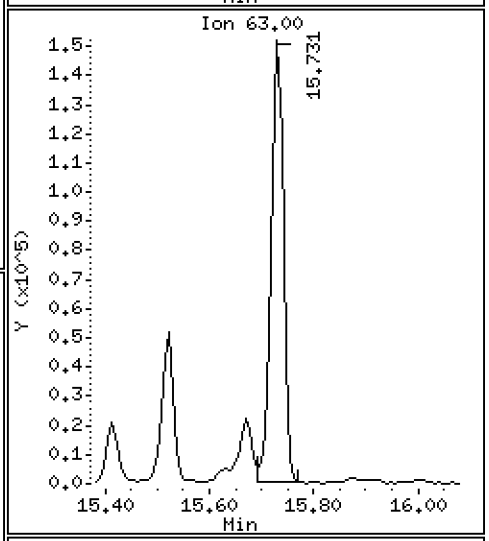


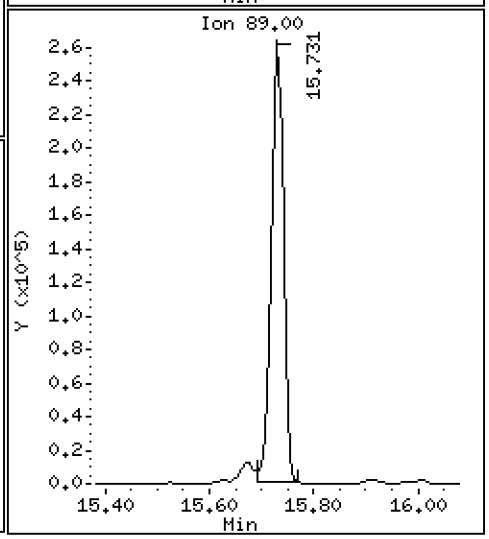












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

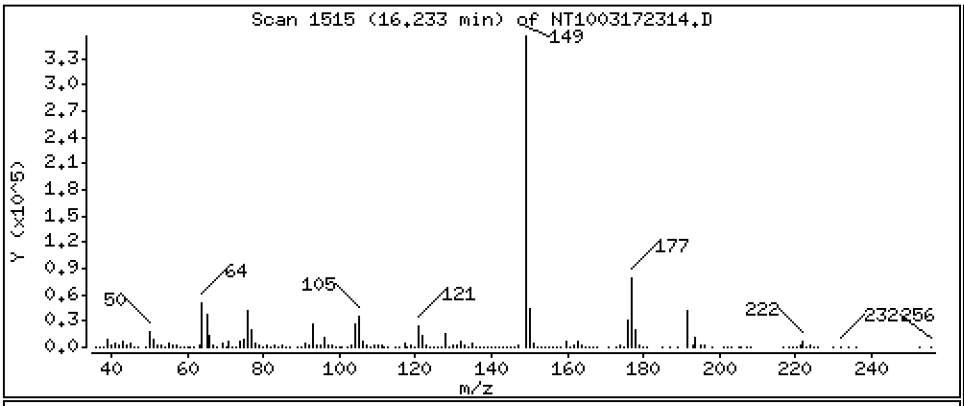
Operator: VTS

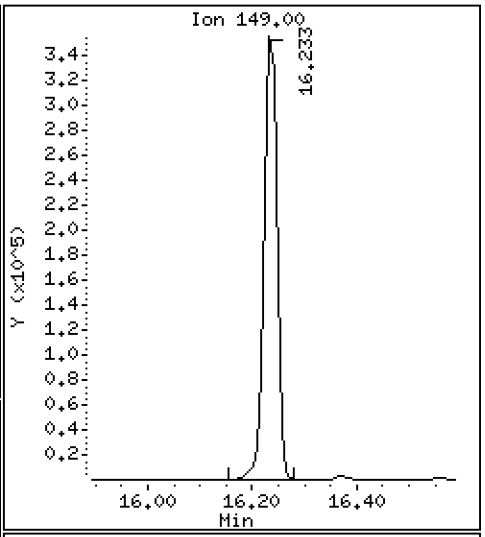
Column phase: ZB-5msi

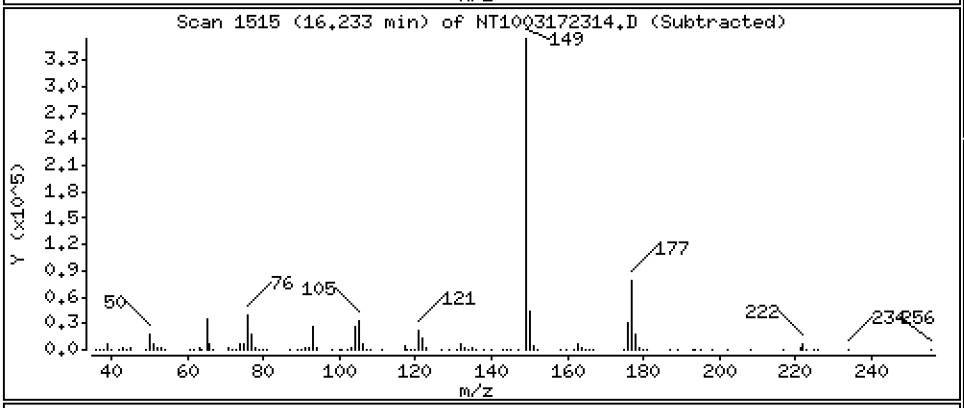
Column diameter: 0.25

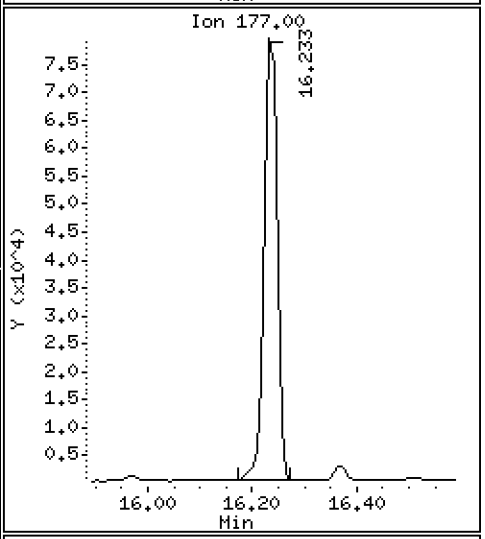
50 Diethylphthalate

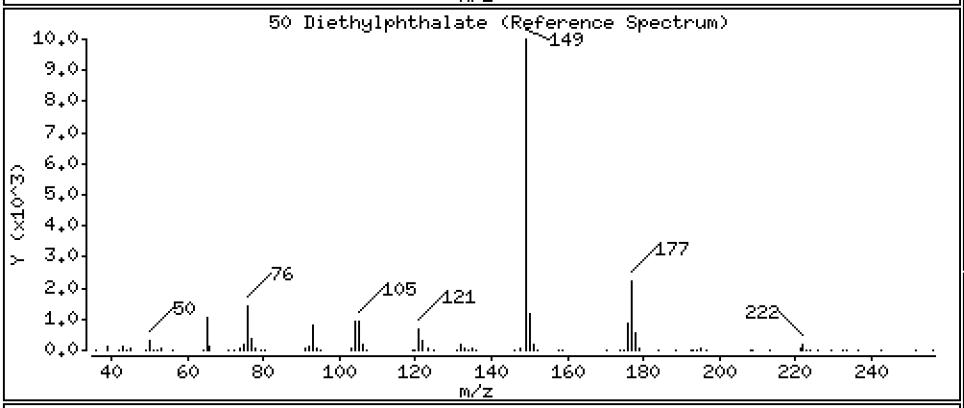
Concentration: 5.397 ug/mL

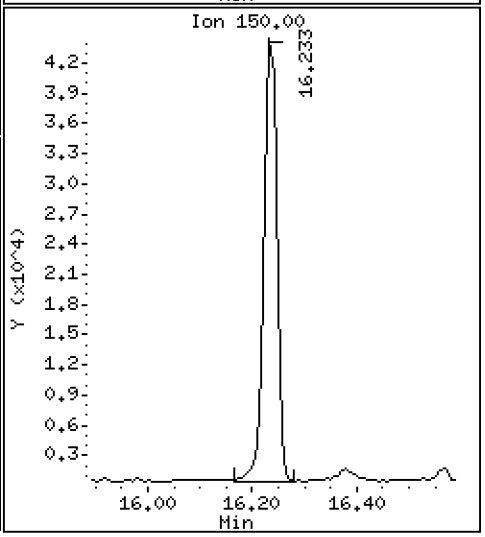


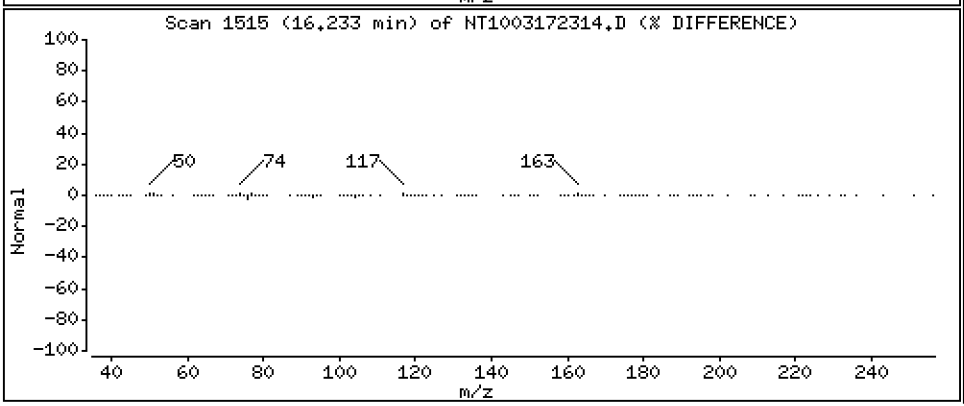












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

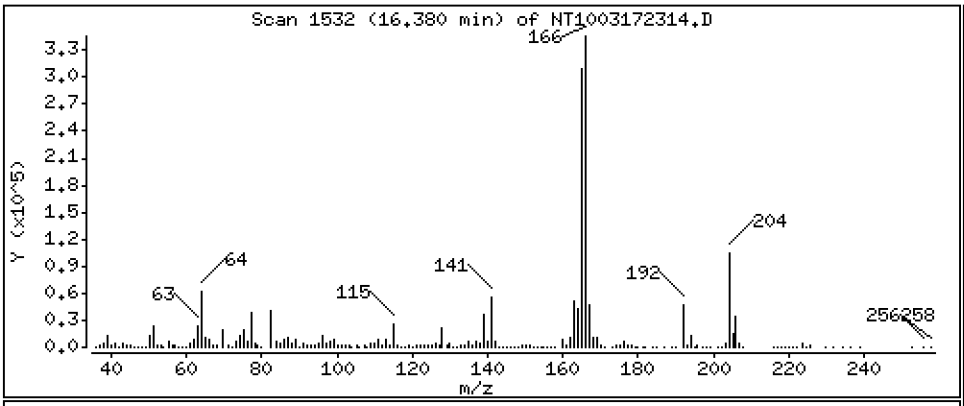
Operator: VTS

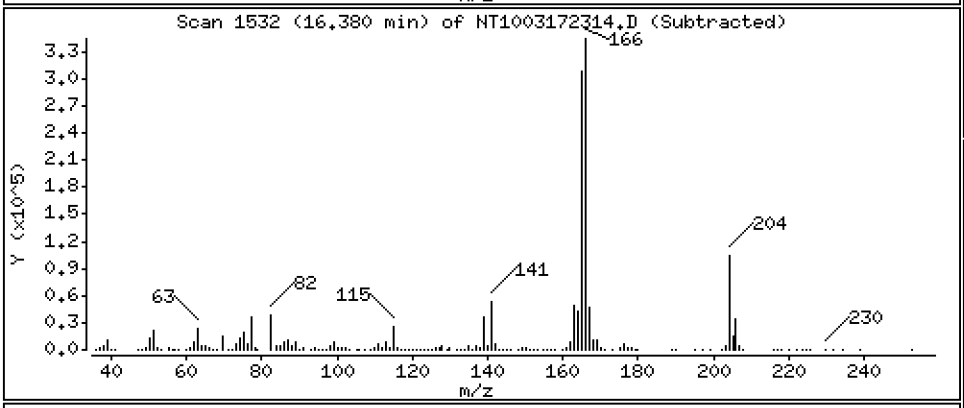
Column phase: ZB-5msi

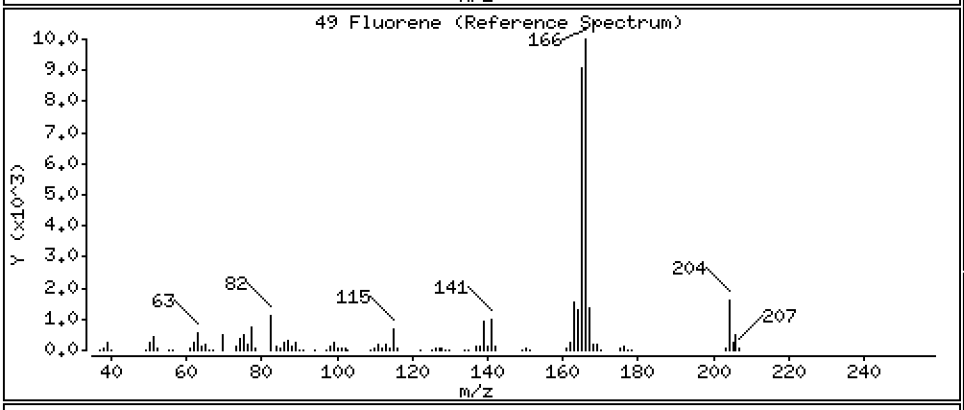
Column diameter: 0.25

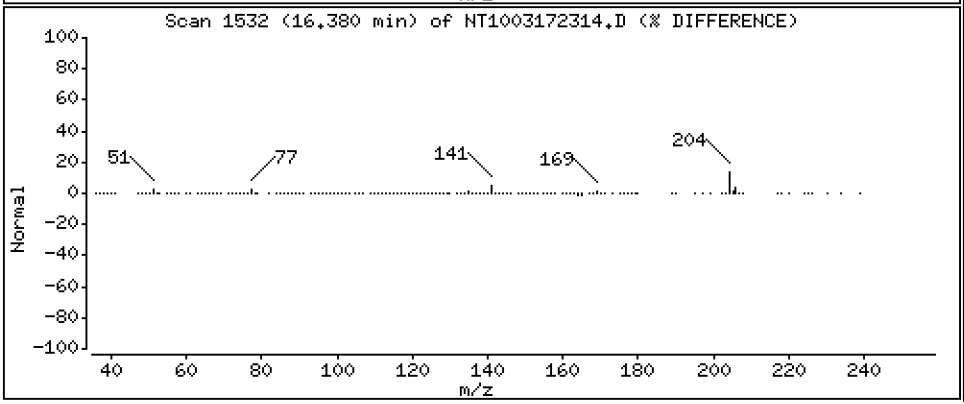
49 Fluorene

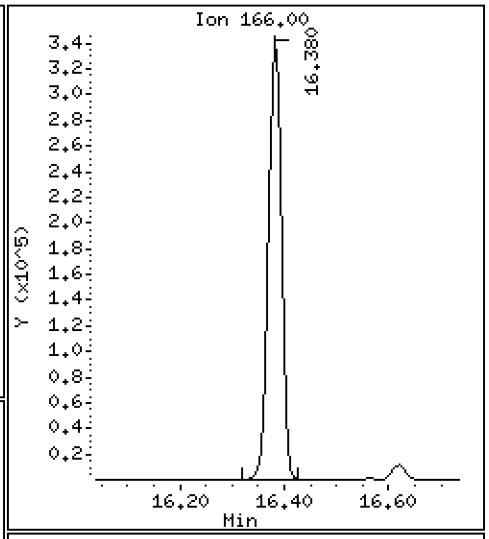
Concentration: 4.667 ug/mL

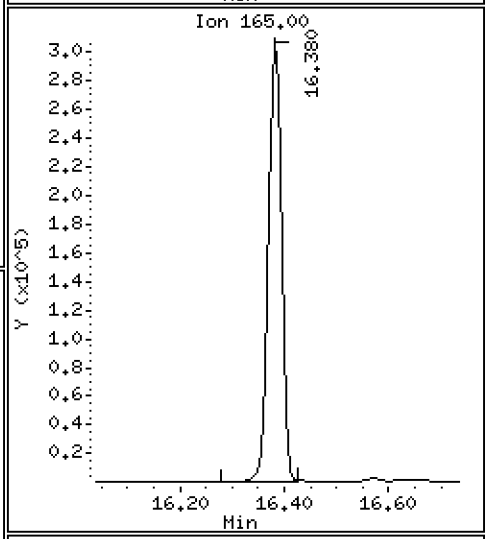


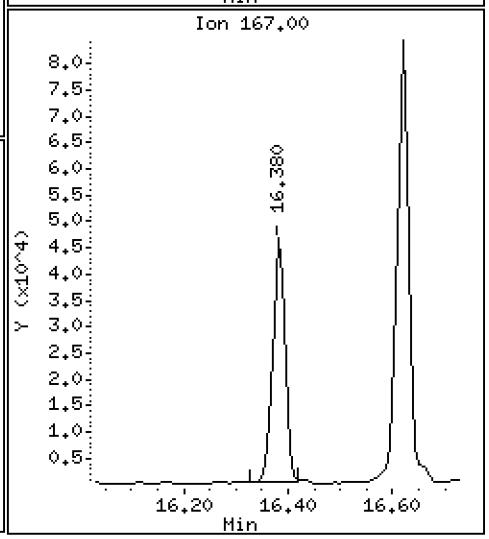












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

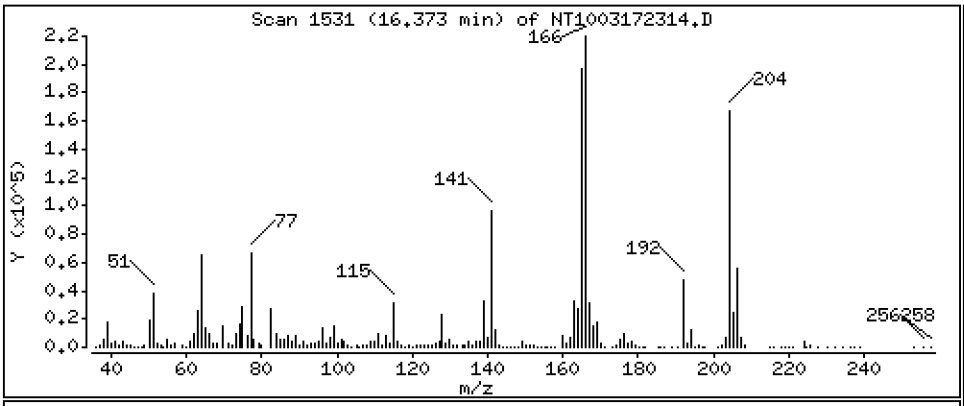
Operator: VTS

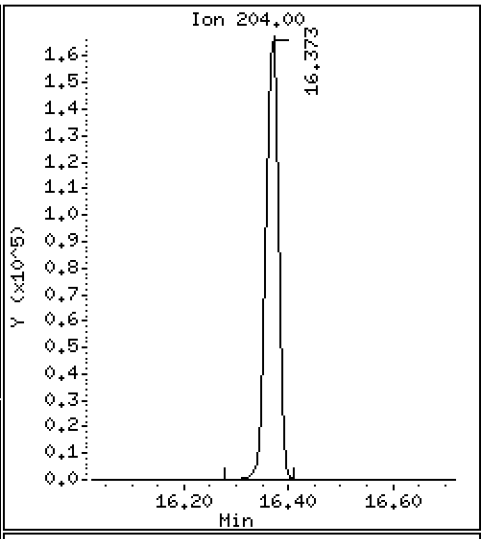
Column phase: ZB-5msi

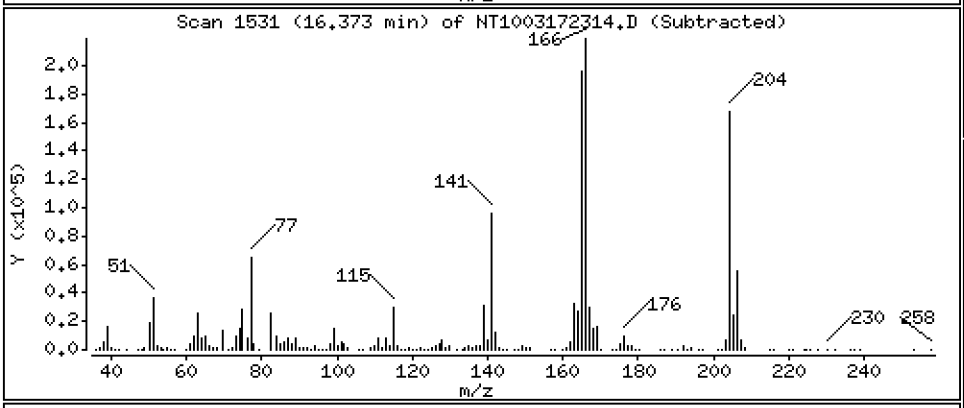
Column diameter: 0.25

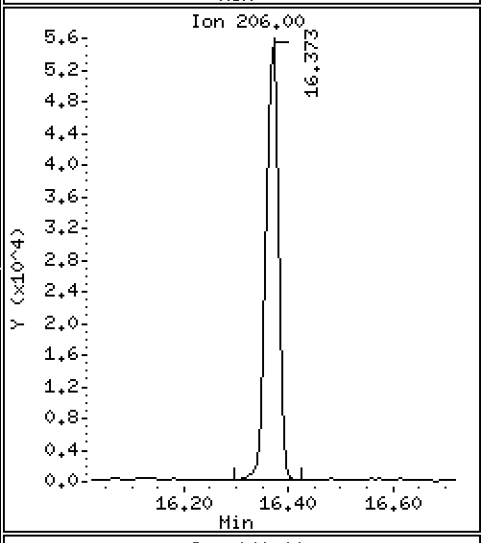
51 4-Chlorophenyl-phenylether

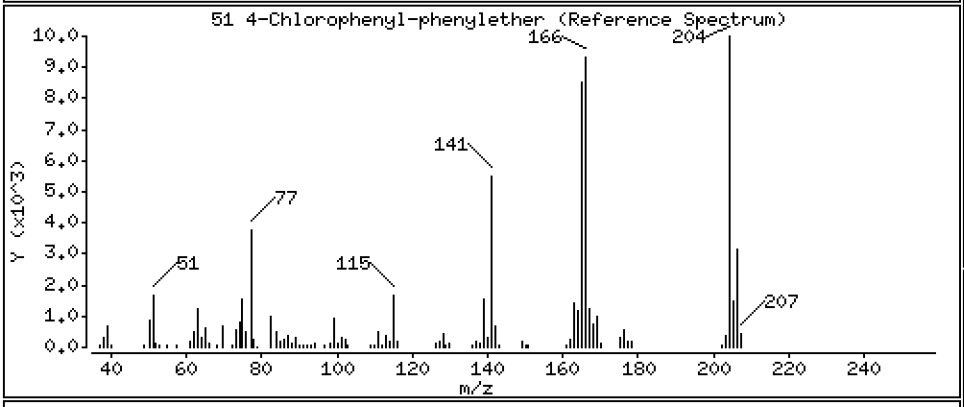
Concentration: 5.362 ug/mL

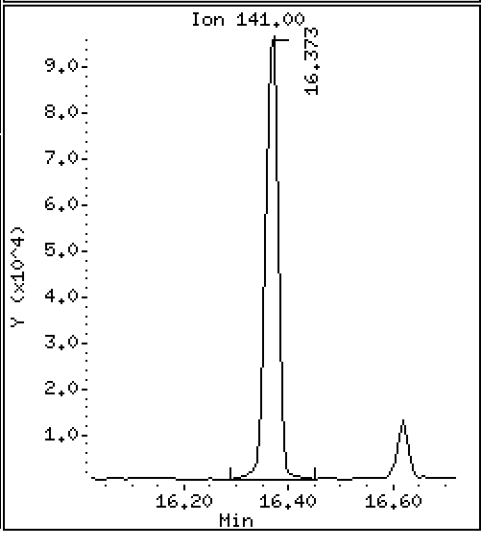


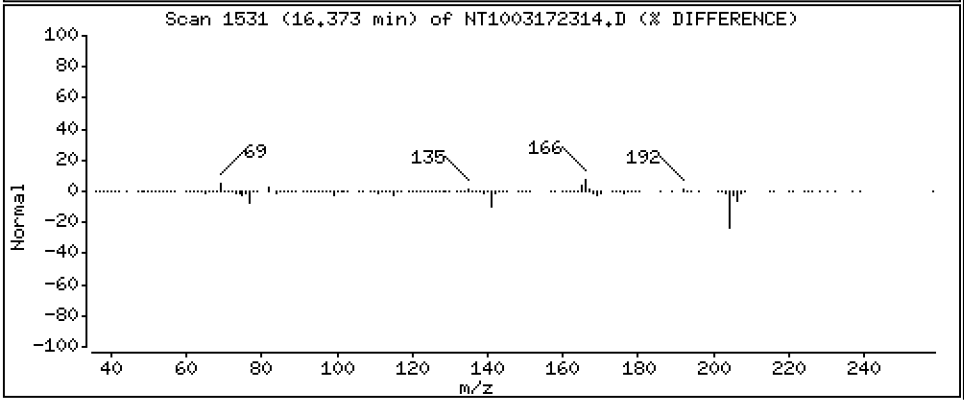












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

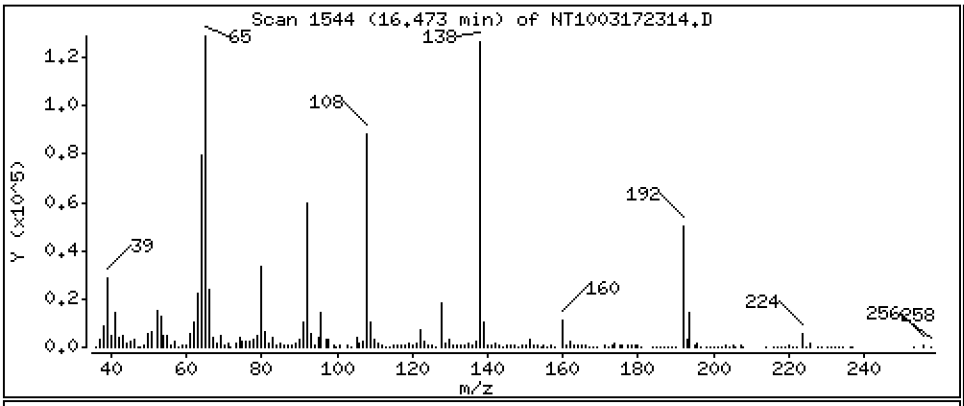
Operator: VTS

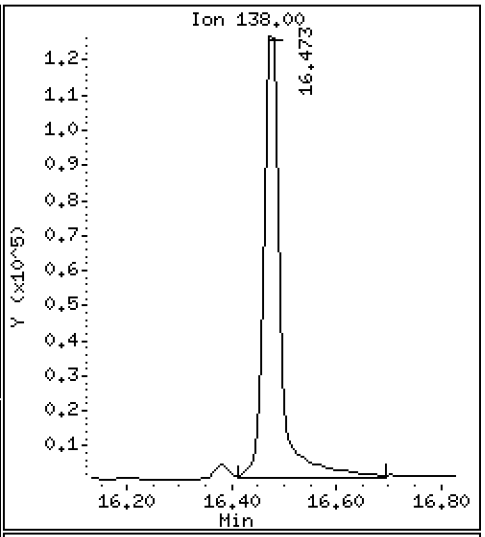
Column phase: ZB-5msi

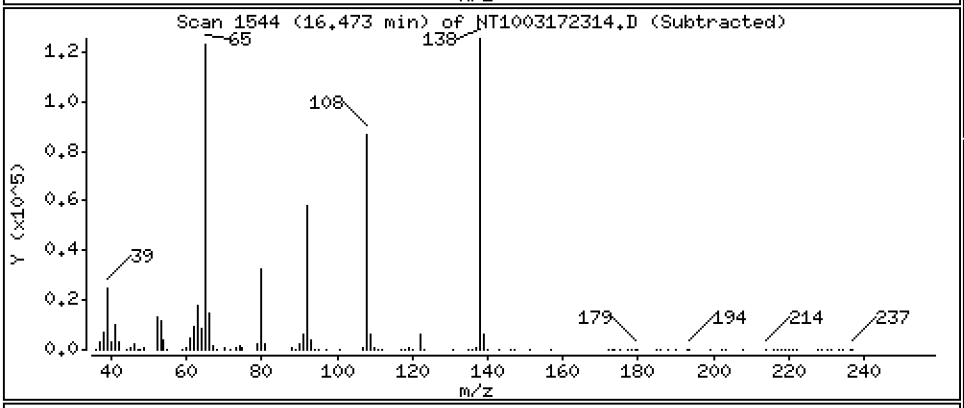
Column diameter: 0.25

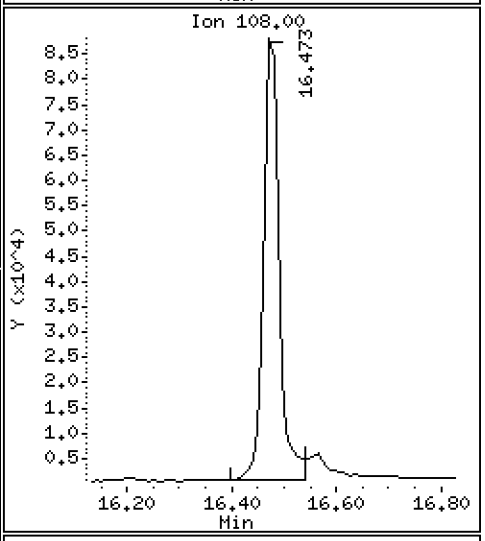
52 4-Nitroaniline

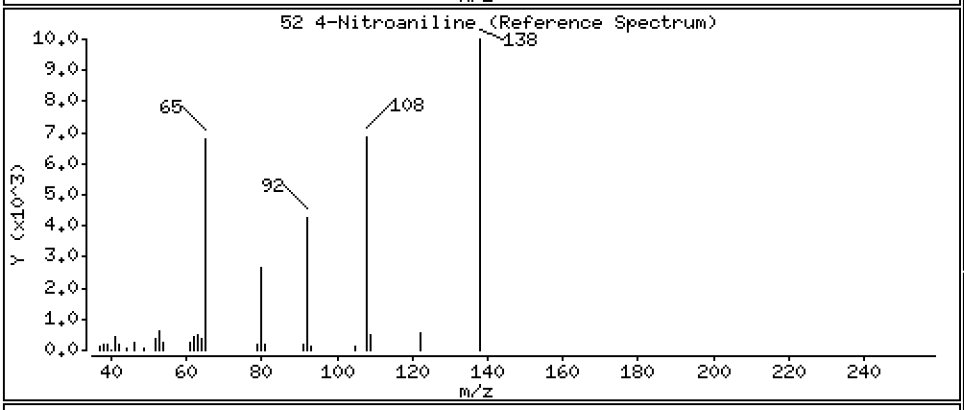
Concentration: 11.11 ug/mL

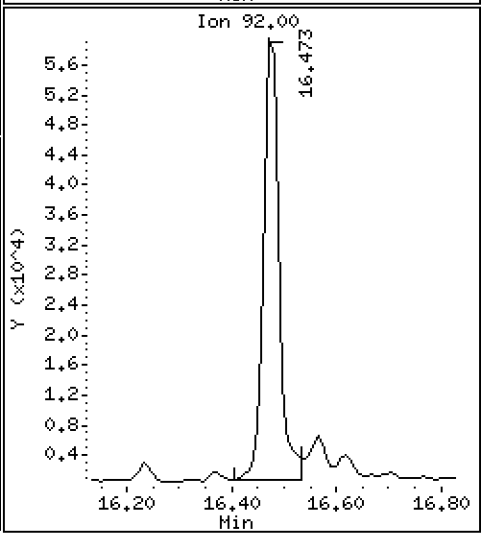


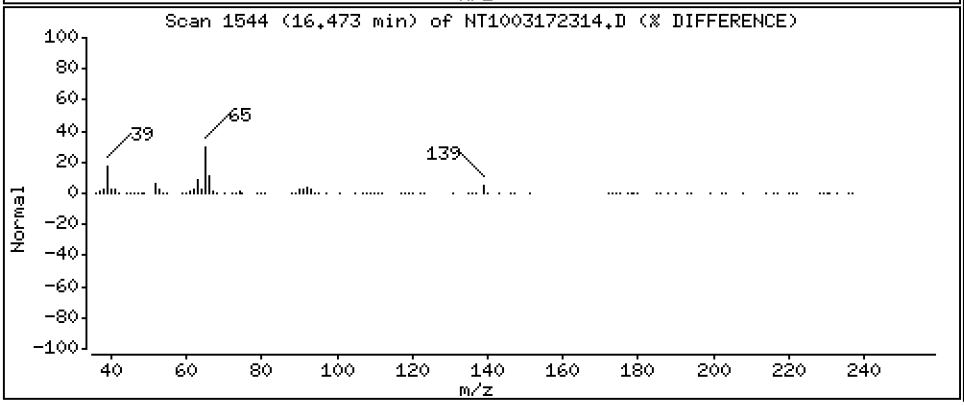












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

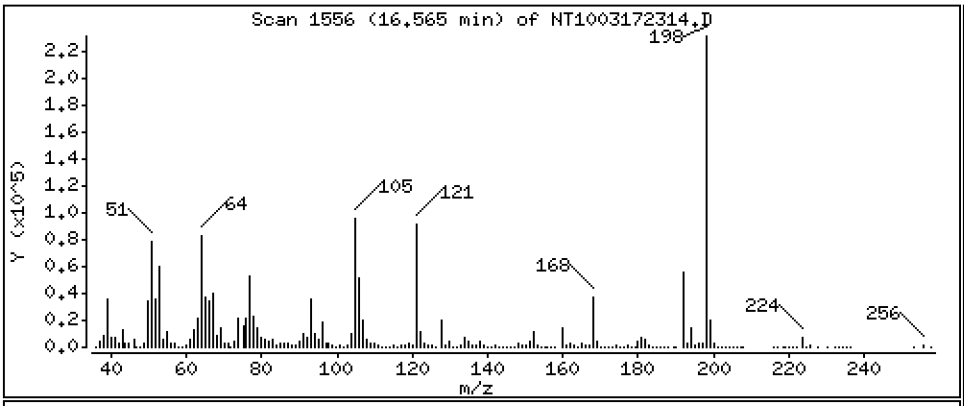
Operator: VTS

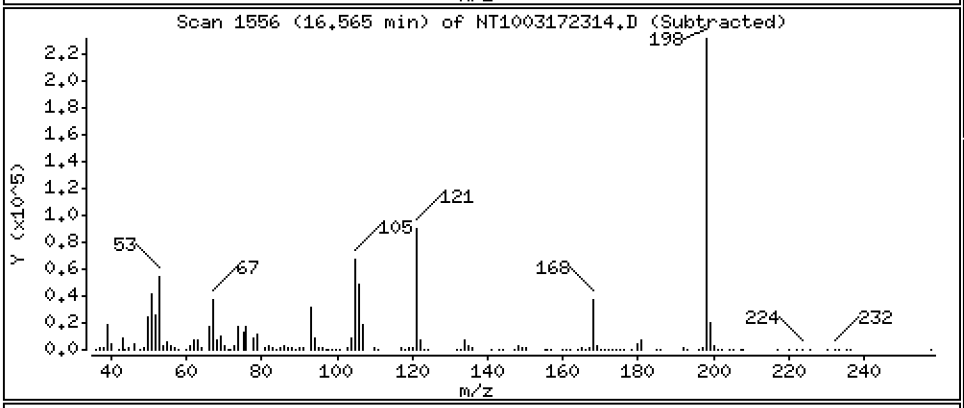
Column phase: ZB-5msi

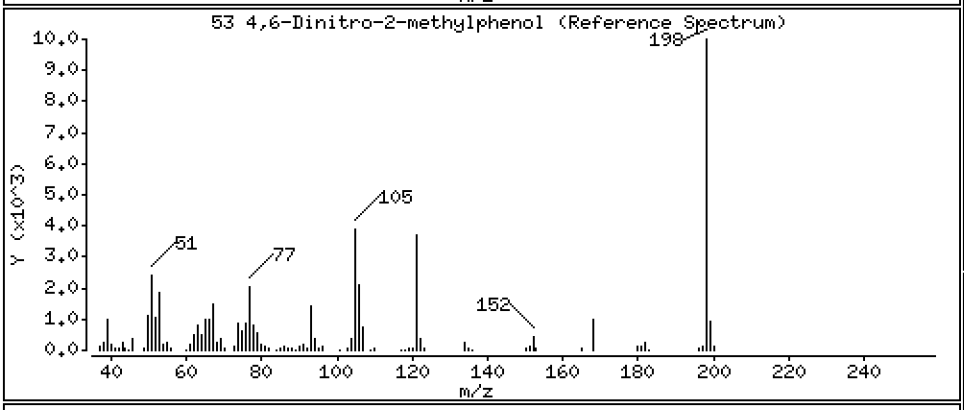
Column diameter: 0.25

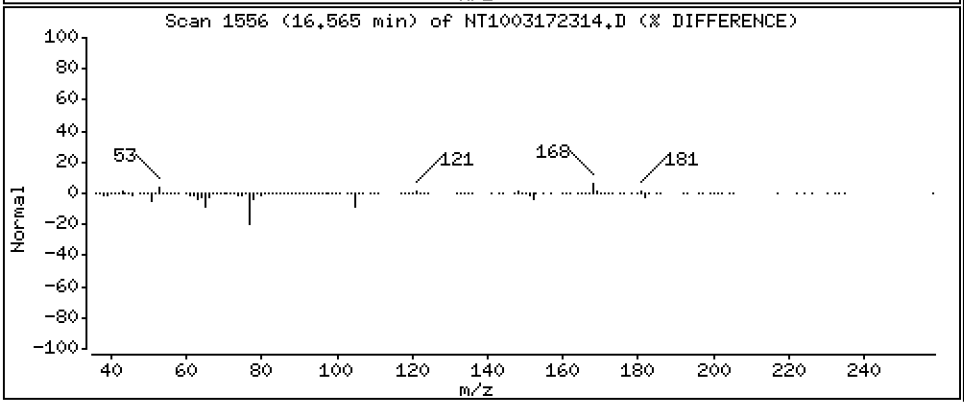
53 4,6-Dinitro-2-methylphenol

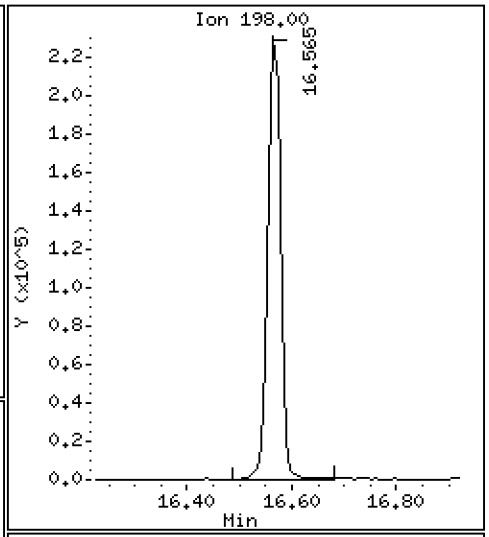
Concentration: 19.45 ug/mL

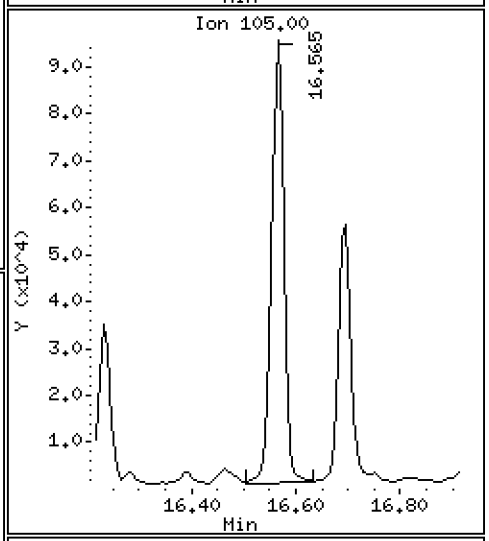


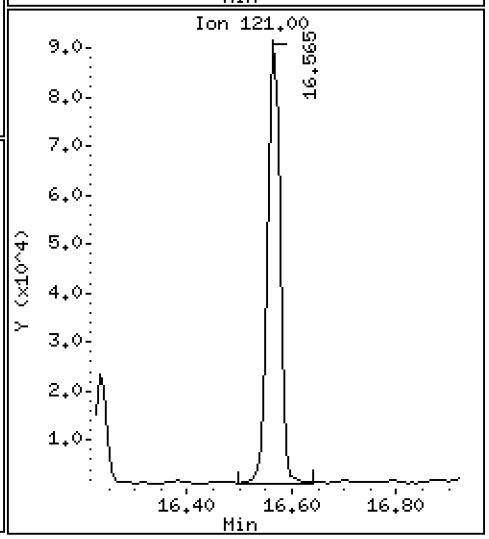












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172314.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

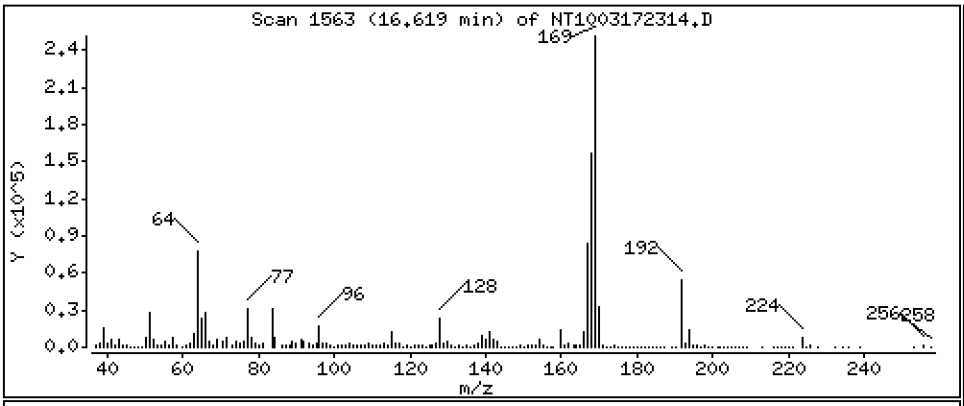
Operator: VTS

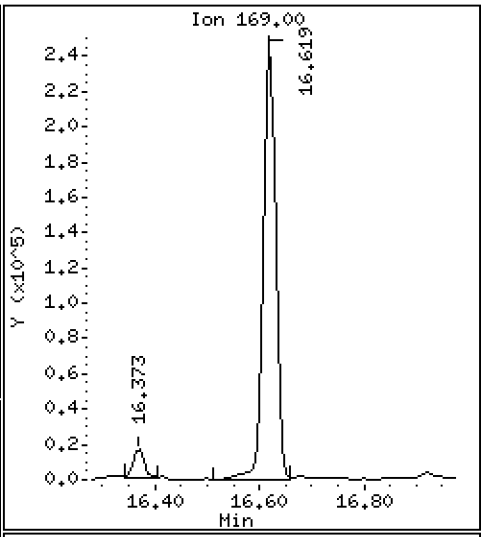
Column phase: ZB-5msi

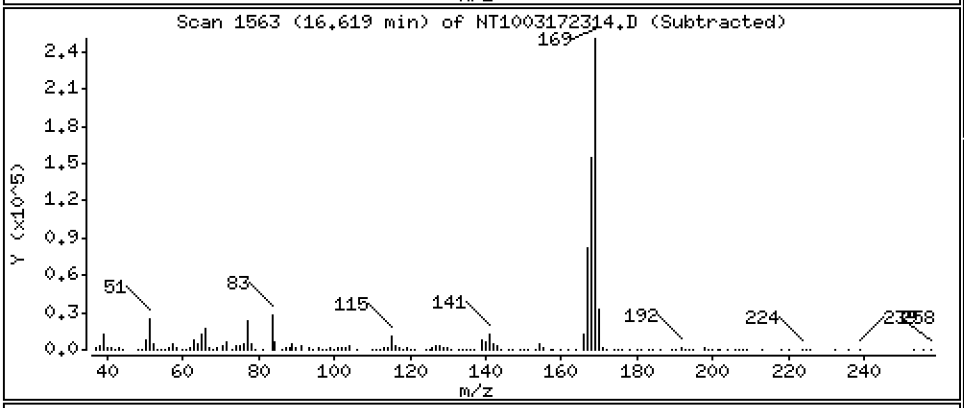
Column diameter: 0.25

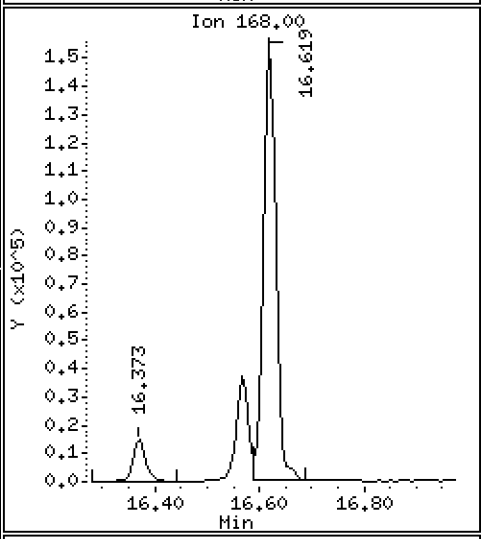
54 N-Nitrosodiphenylamine

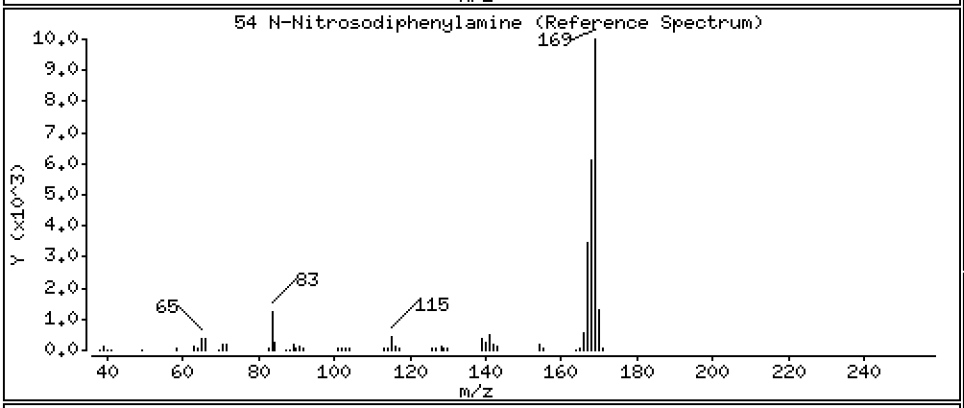
Concentration: 4.575 ug/mL

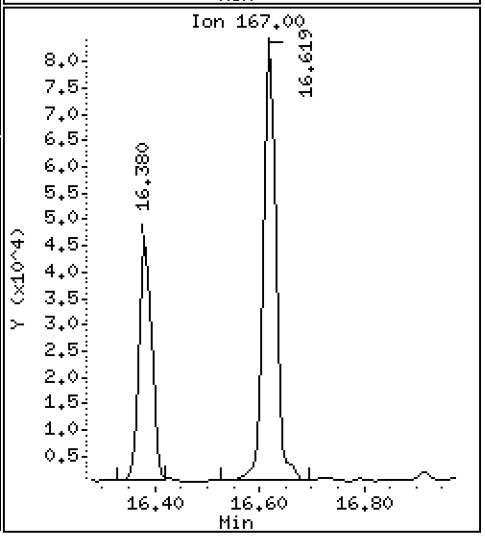


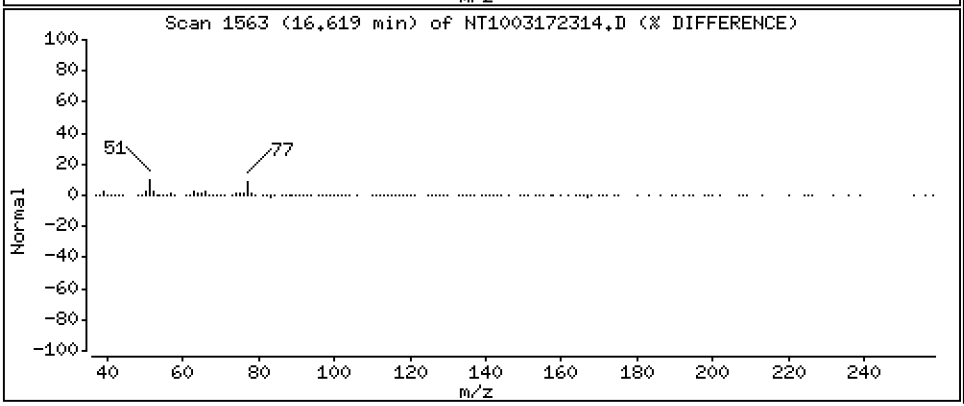












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

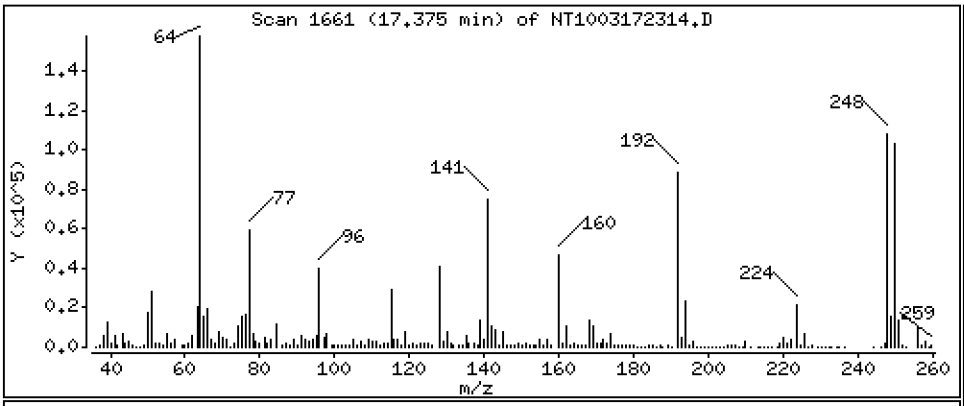
Operator: VTS

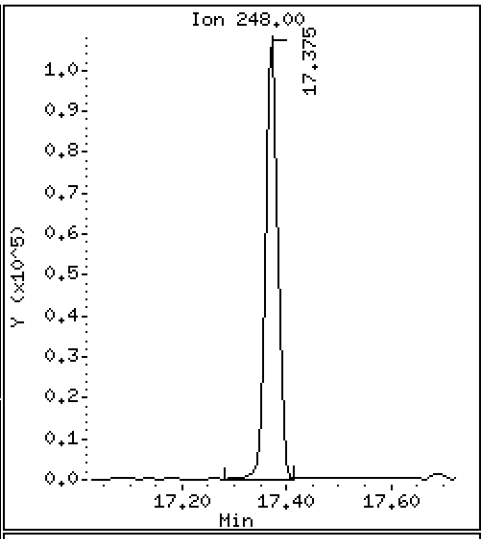
Column phase: ZB-5msi

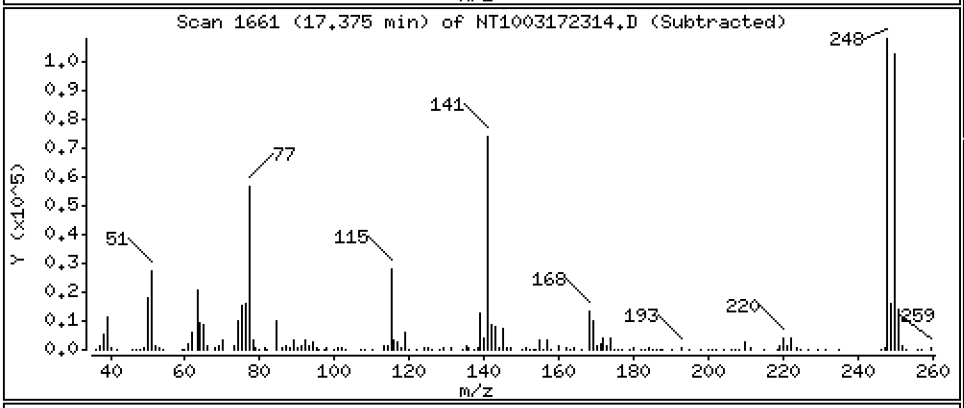
Column diameter: 0.25

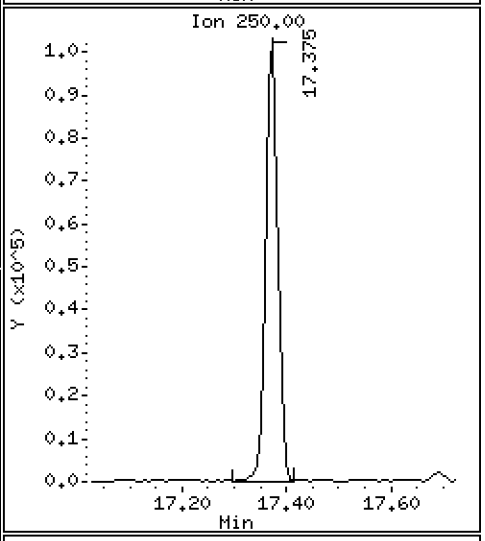
56 4-Bromophenyl-phenylether

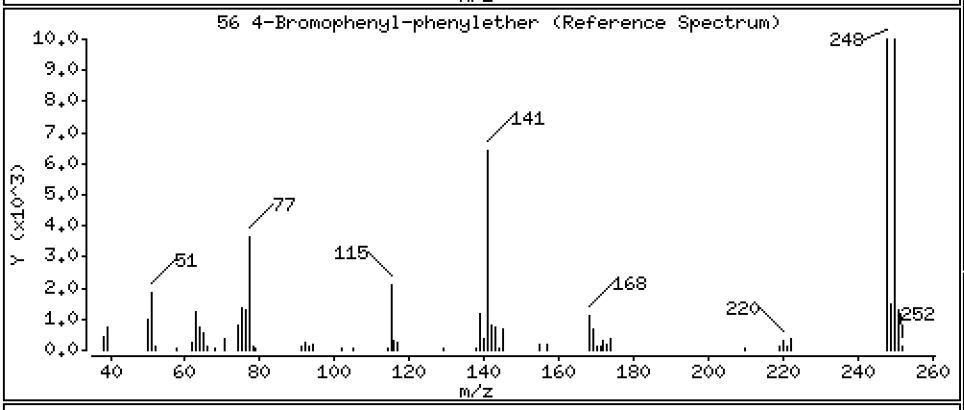
Concentration: 4.963 ug/mL

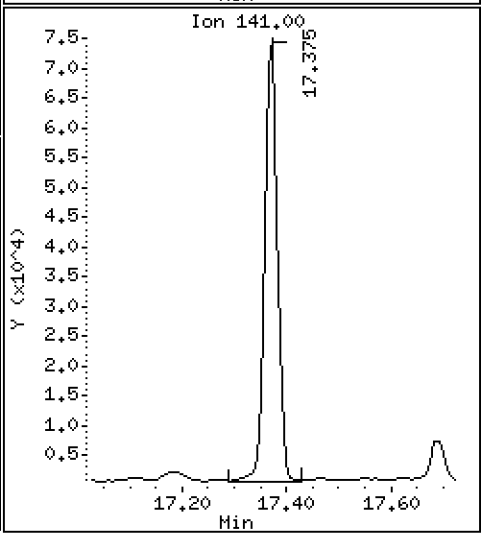


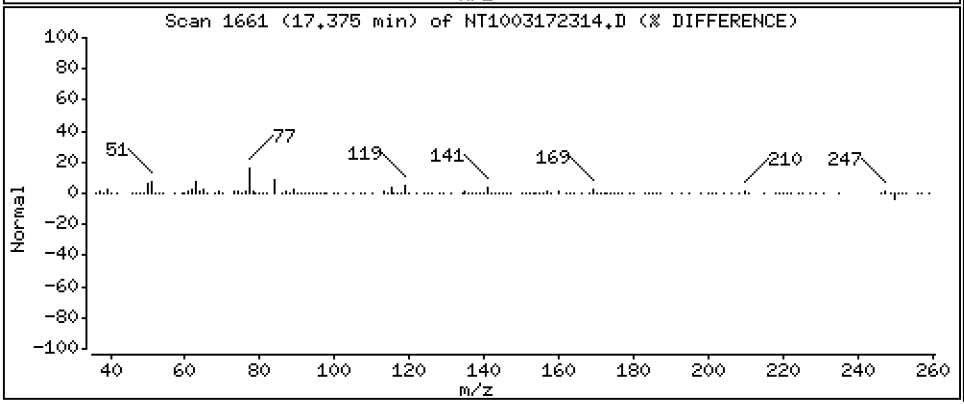












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

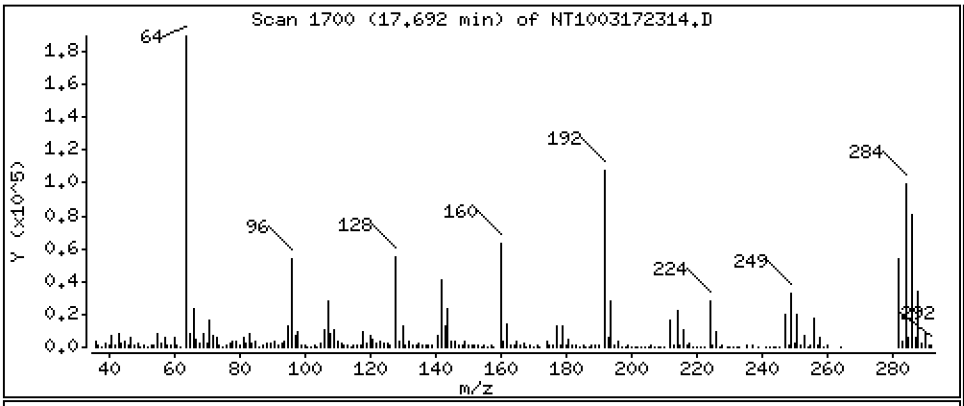
Operator: VTS

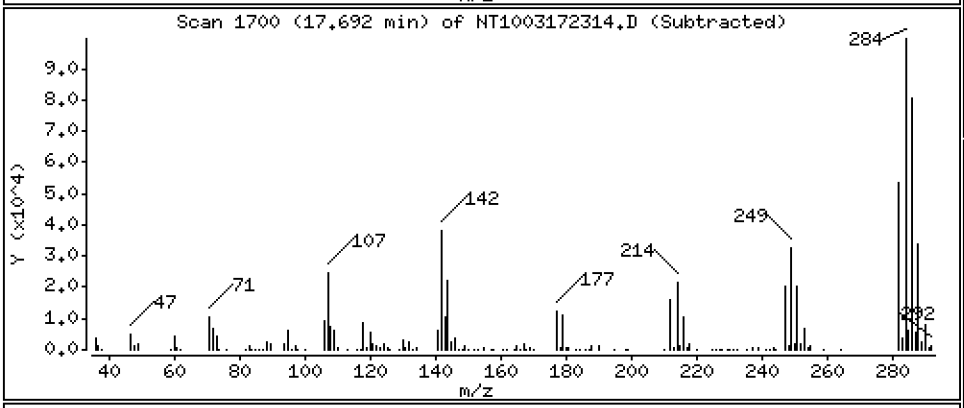
Column phase: ZB-5msi

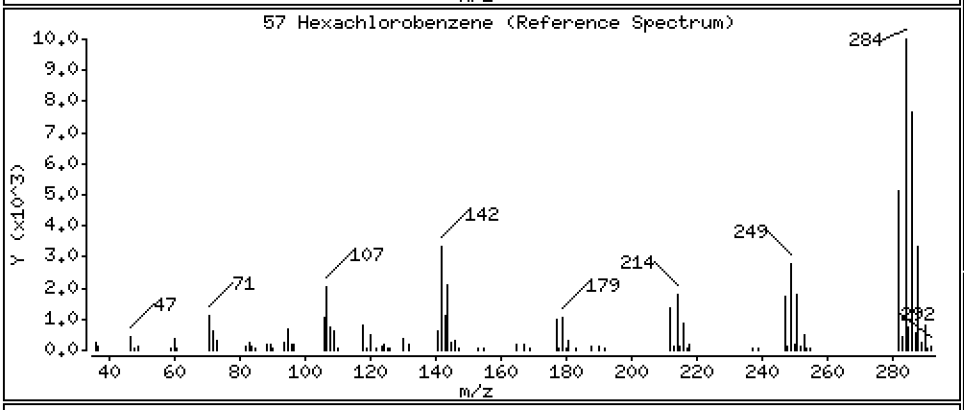
Column diameter: 0.25

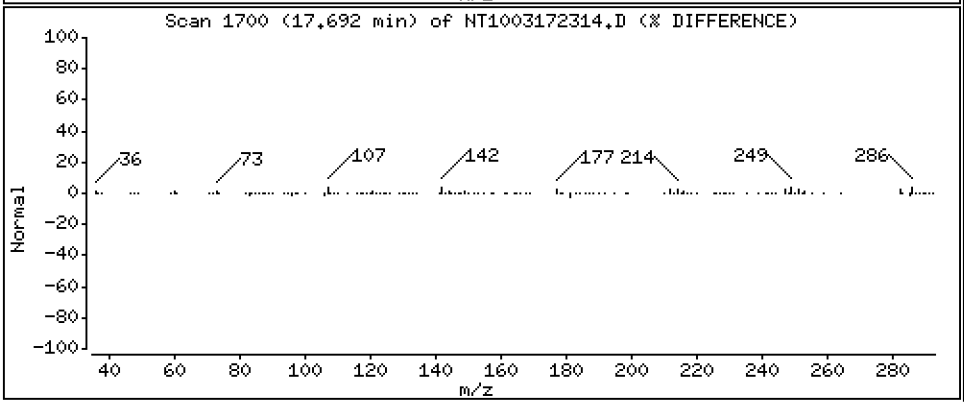
57 Hexachlorobenzene

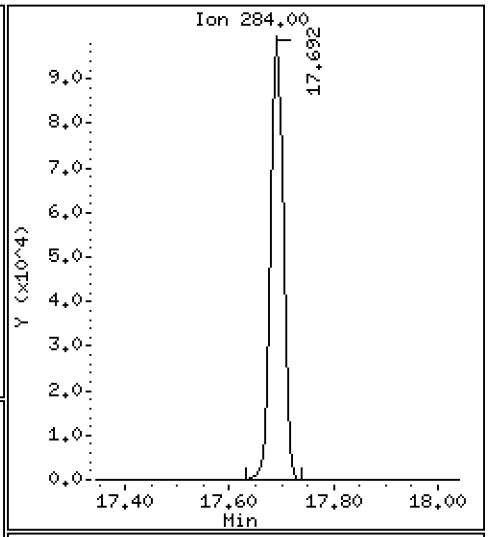
Concentration: 4.364 ug/mL

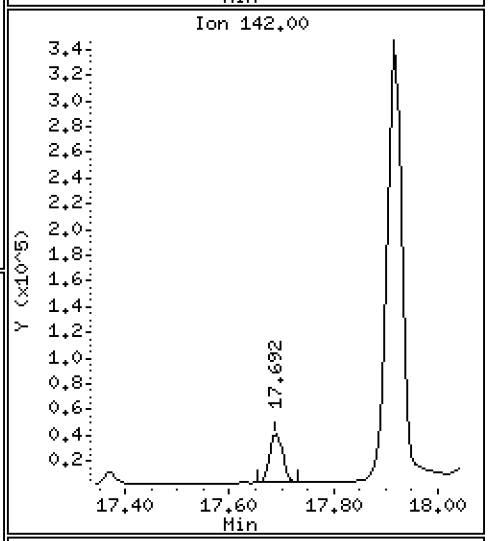


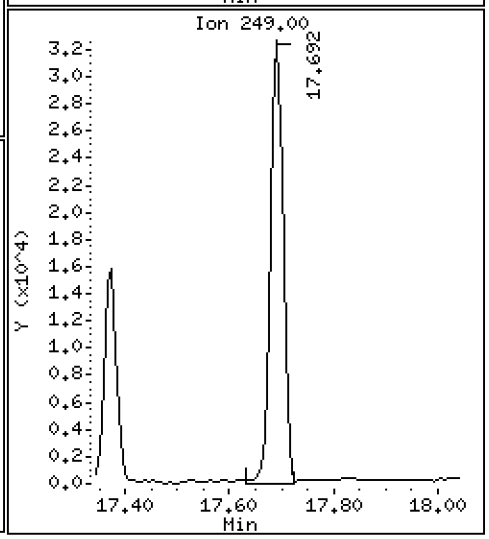












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

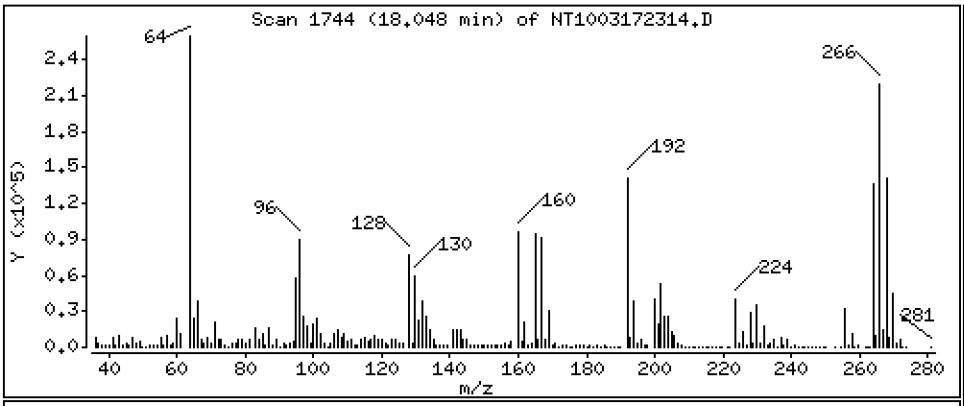
Operator: VTS

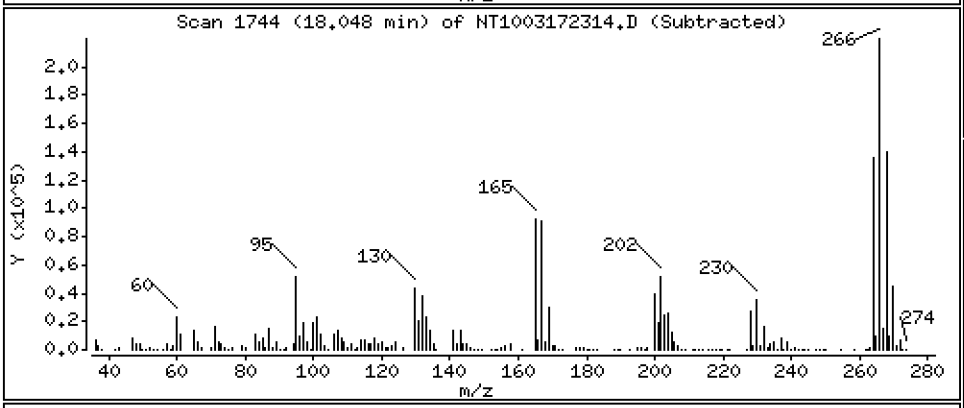
Column phase: ZB-5msi

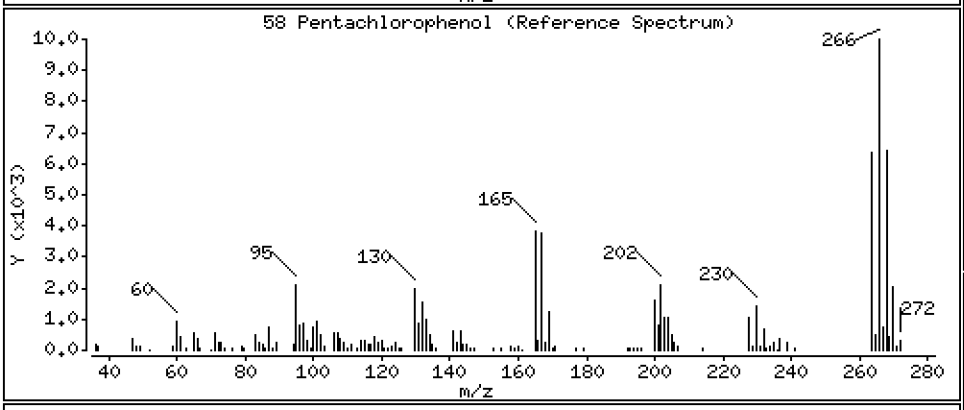
Column diameter: 0.25

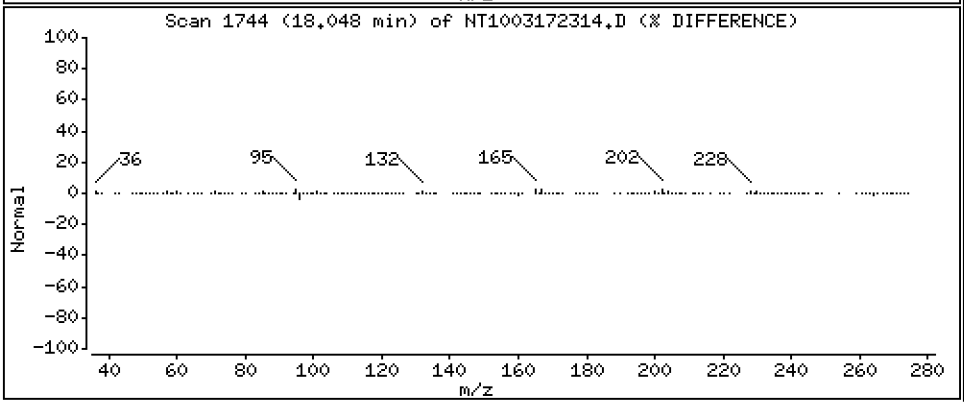
58 Pentachlorophenol

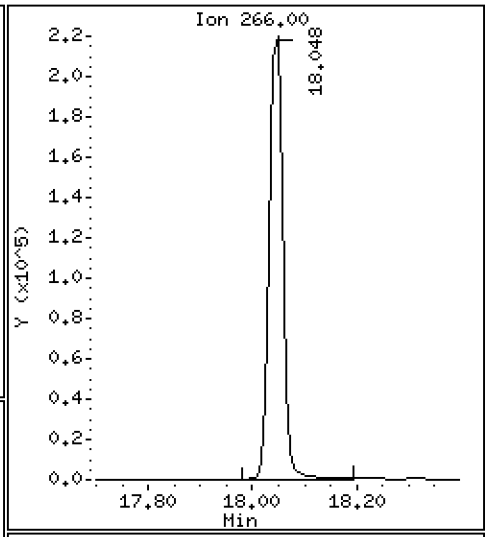
Concentration: 17.12 ug/mL

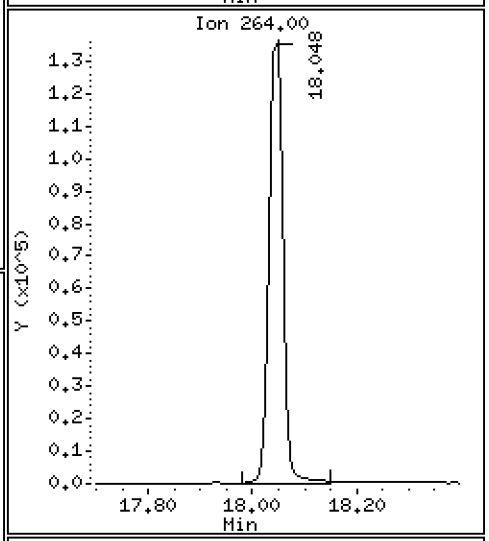


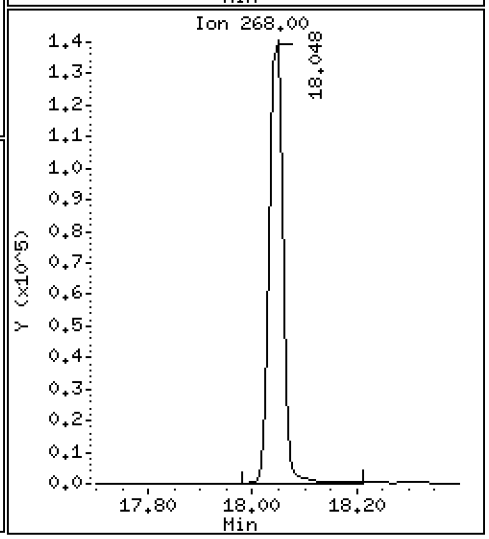












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

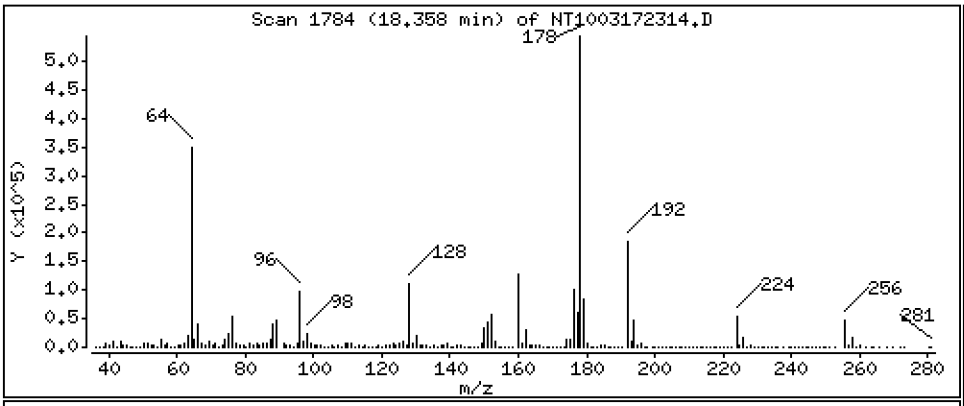
Operator: VTS

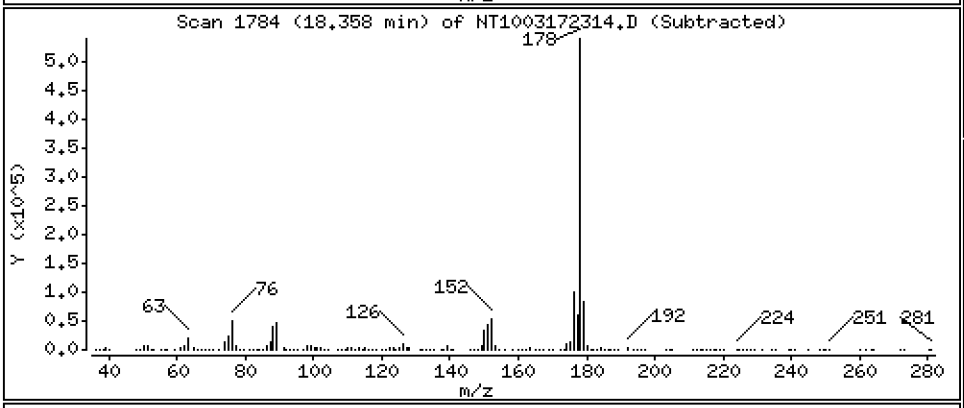
Column phase: ZB-5msi

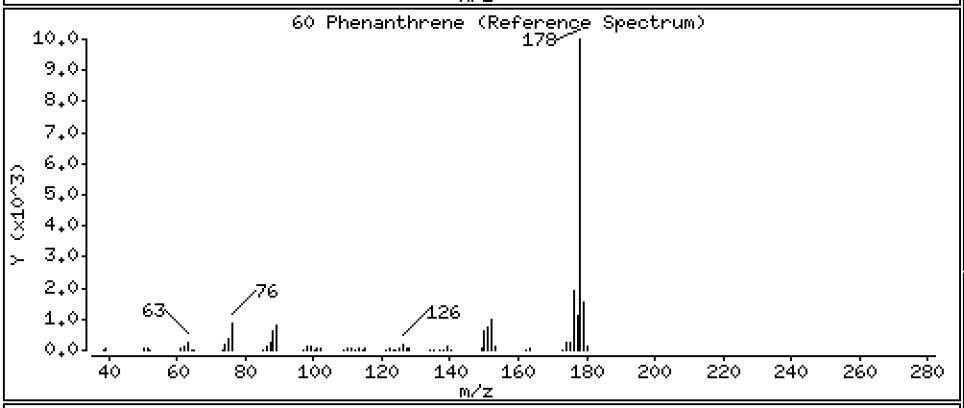
Column diameter: 0.25

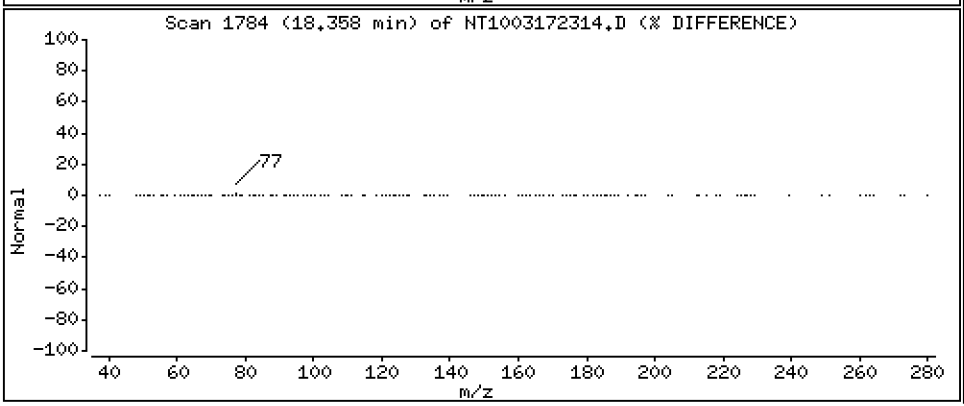
60 Phenanthrene

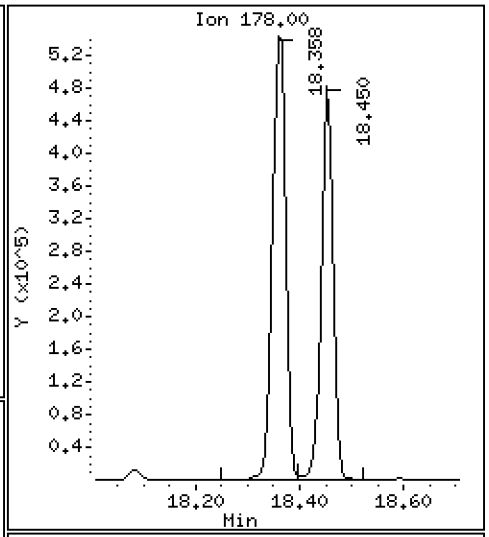
Concentration: 5.411 ug/mL

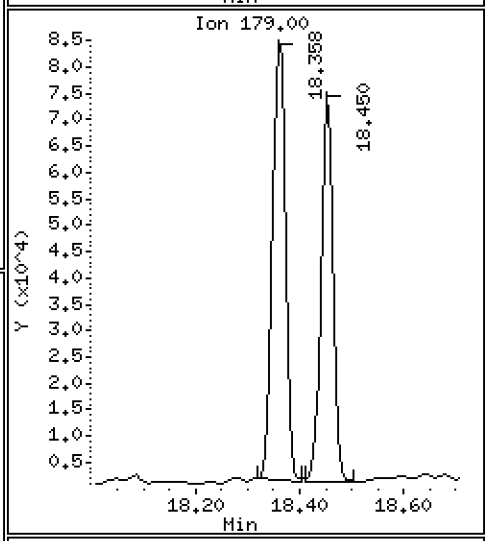


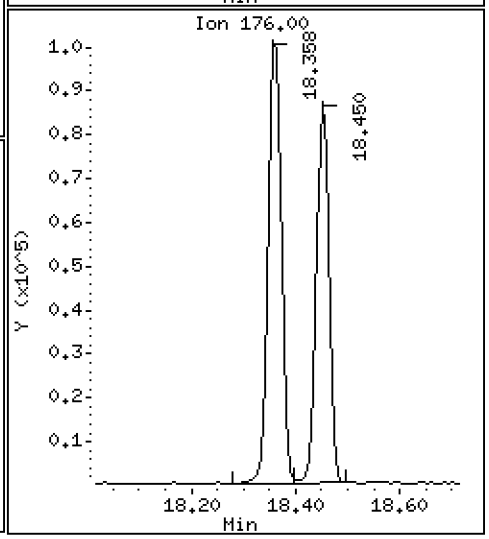












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

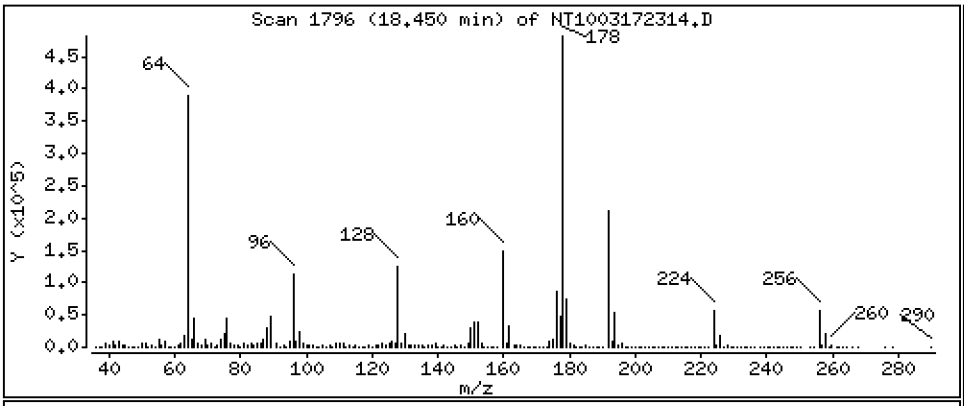
Operator: VTS

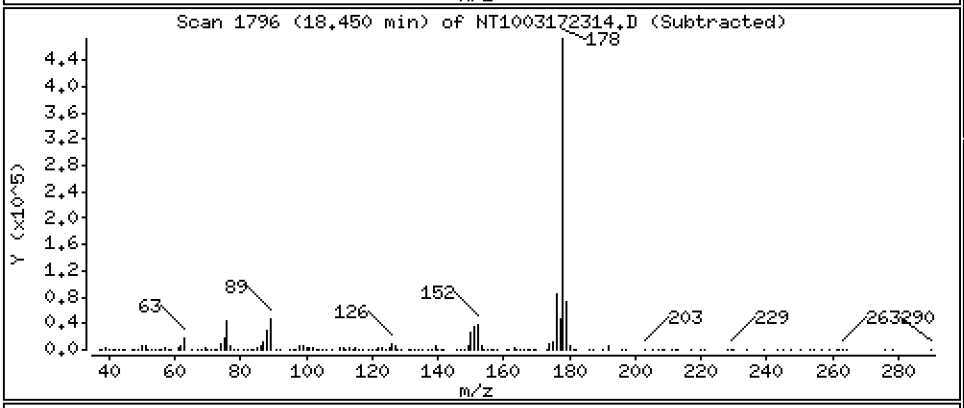
Column phase: ZB-5msi

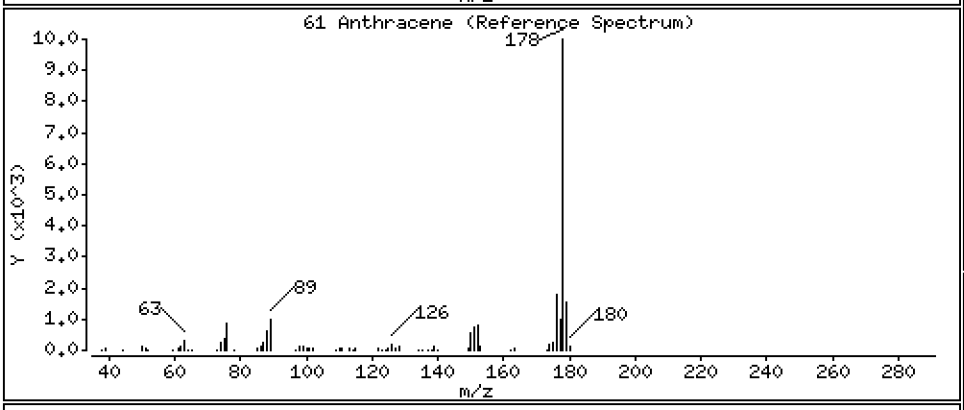
Column diameter: 0.25

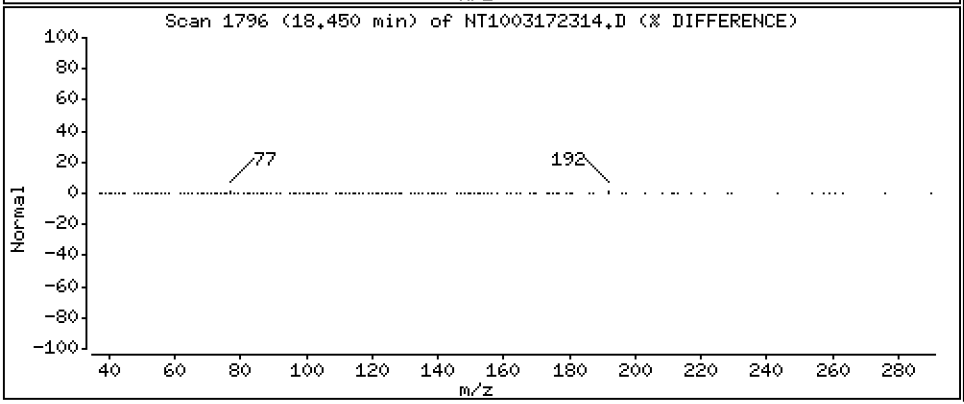
61 Anthracene

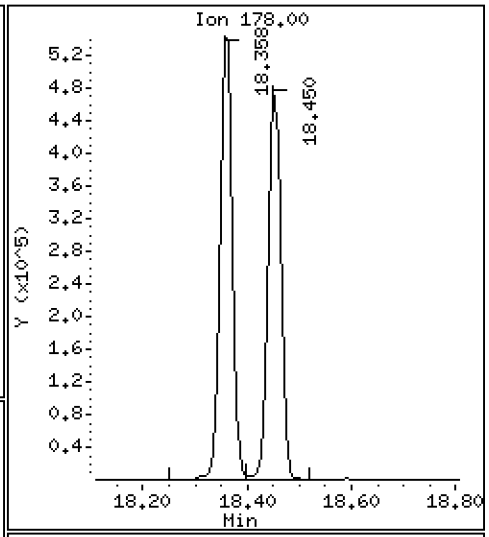
Concentration: 4.721 ug/mL

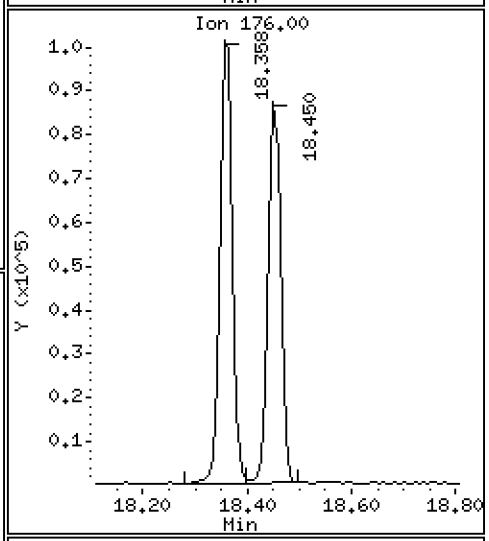


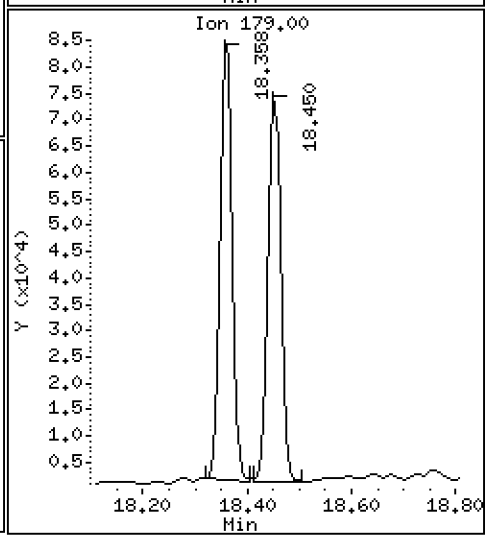












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

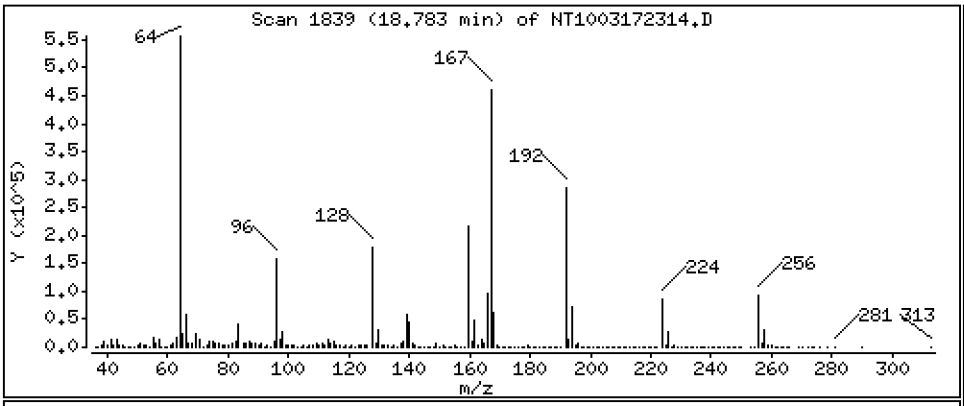
Operator: VTS

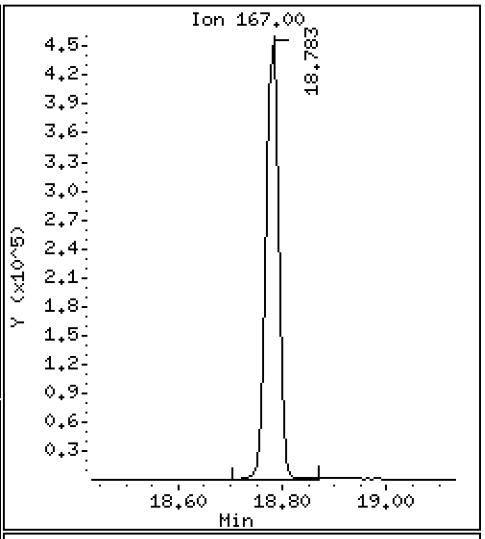
Column phase: ZB-5msi

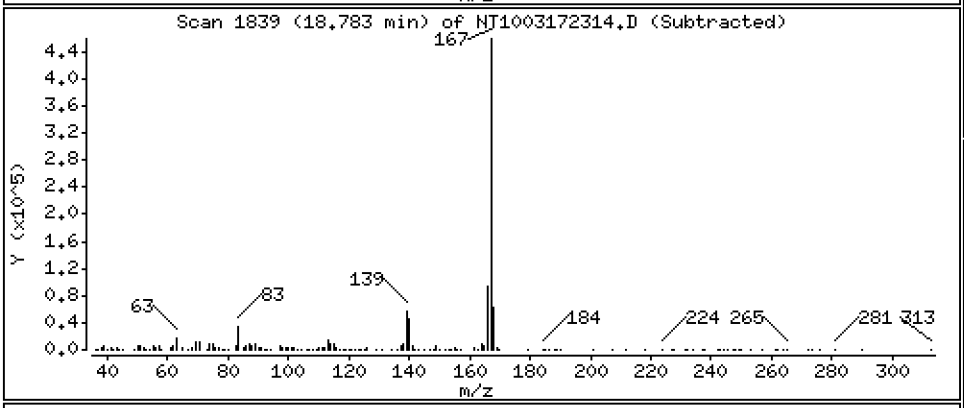
Column diameter: 0.25

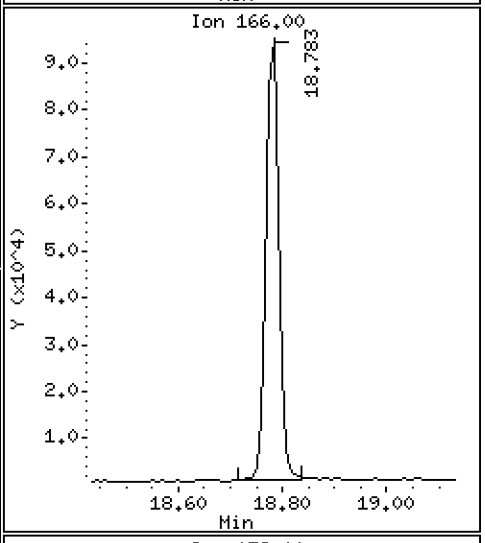
62 Carbazole

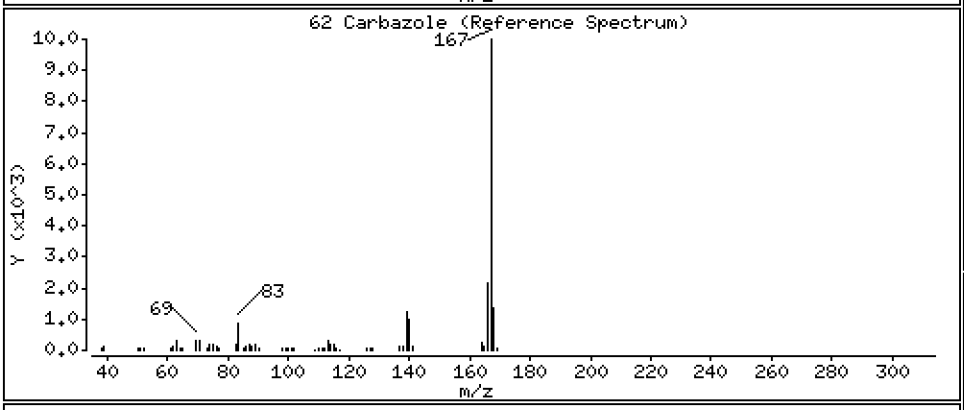
Concentration: 5.005 ug/mL

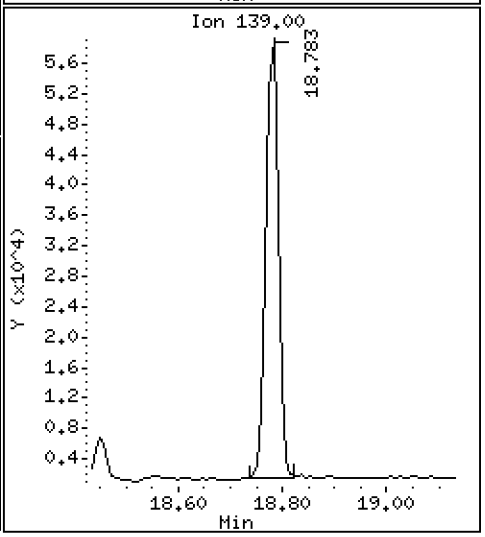


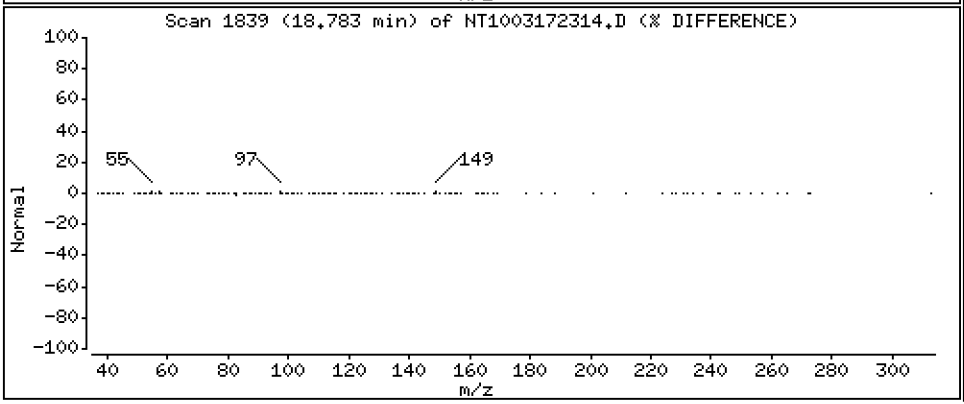












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172314.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

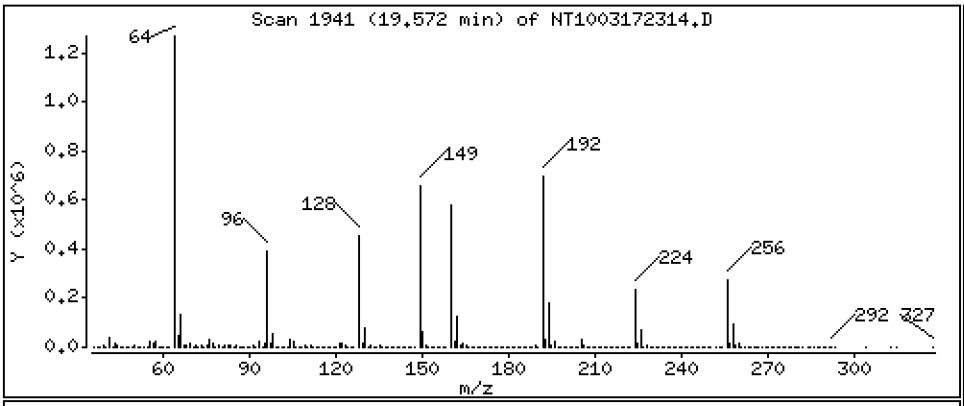
Operator: VTS

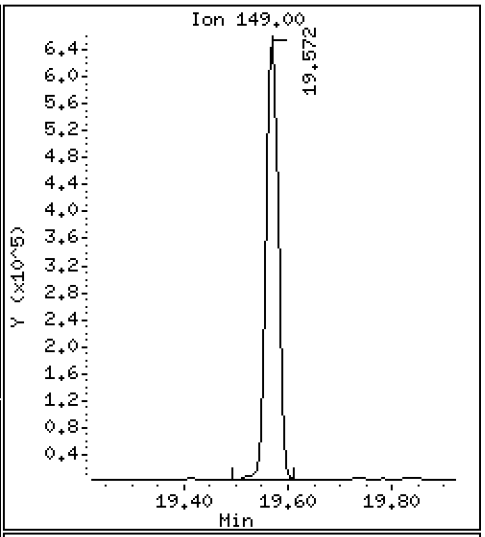
Column phase: ZB-5msi

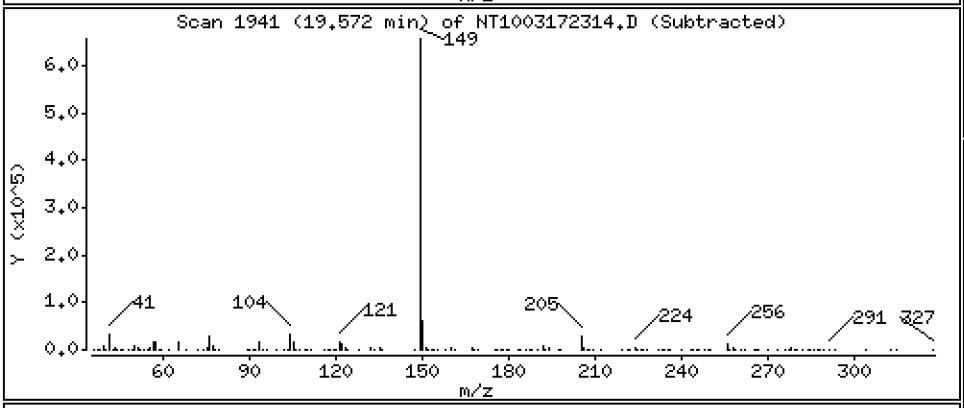
Column diameter: 0.25

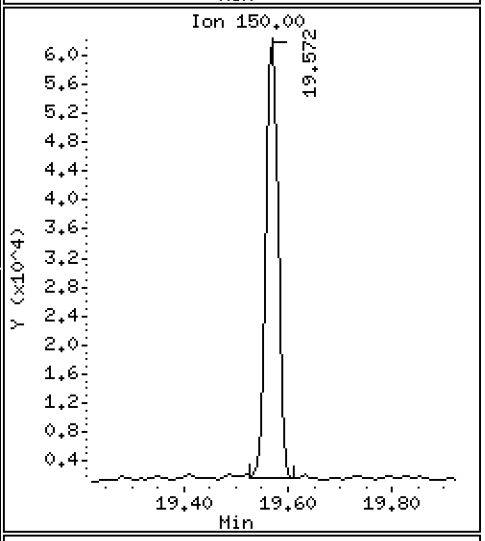
63 Di-n-butylphthalate

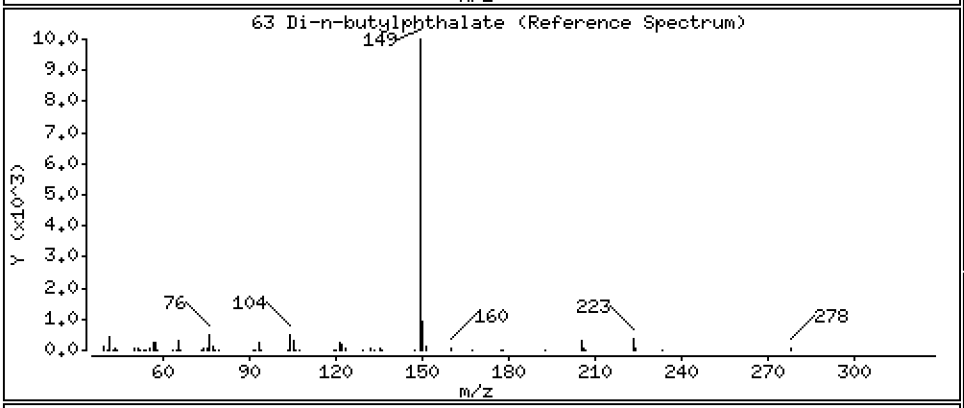
Concentration: 5.191 ug/mL

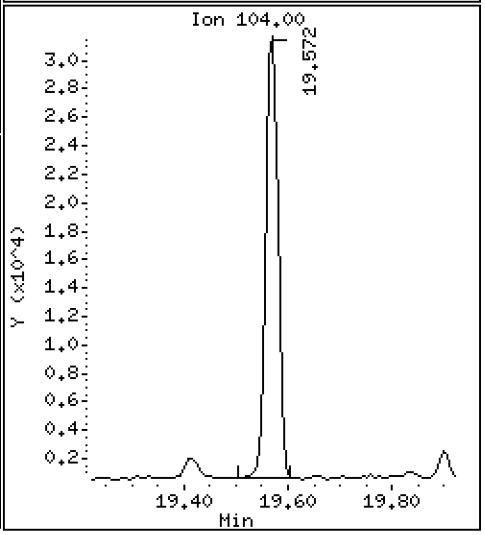


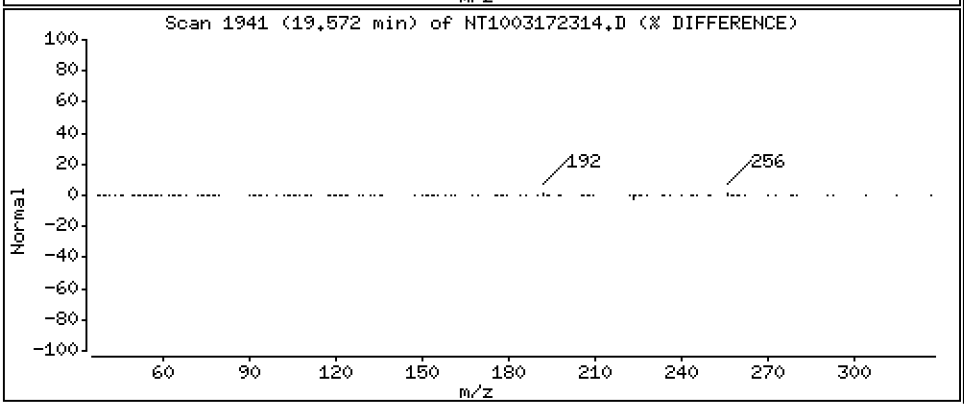












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

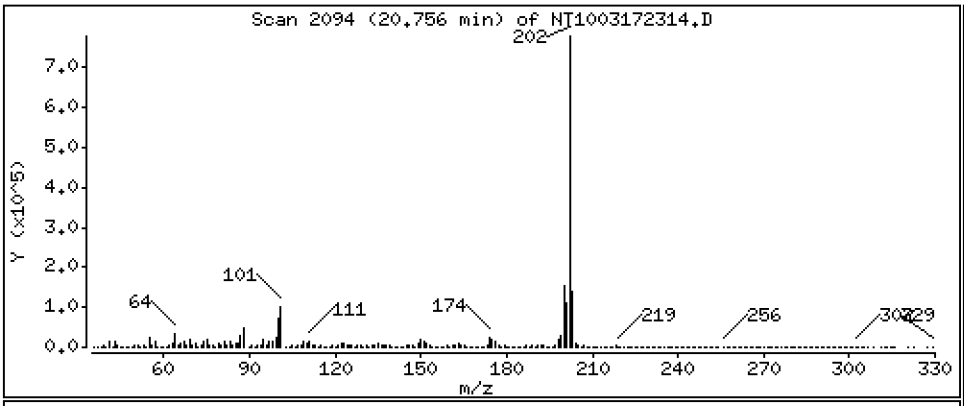
Operator: VTS

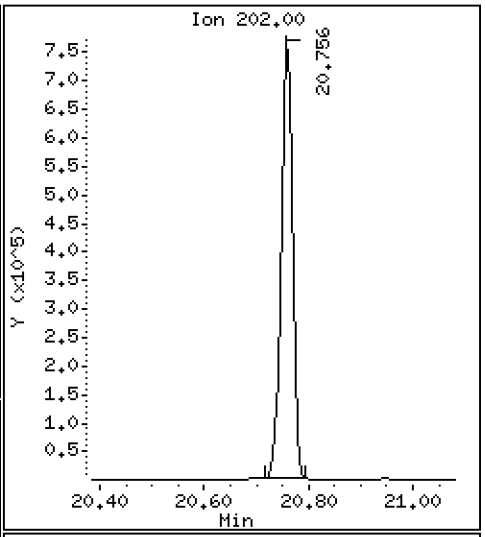
Column phase: ZB-5msi

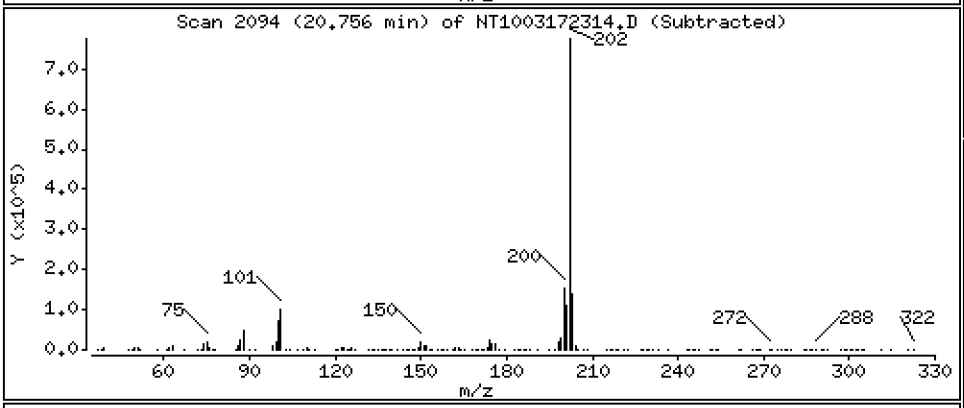
Column diameter: 0.25

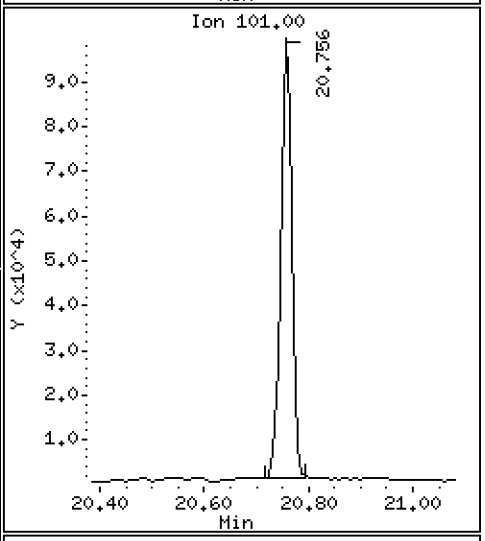
64 Fluoranthene

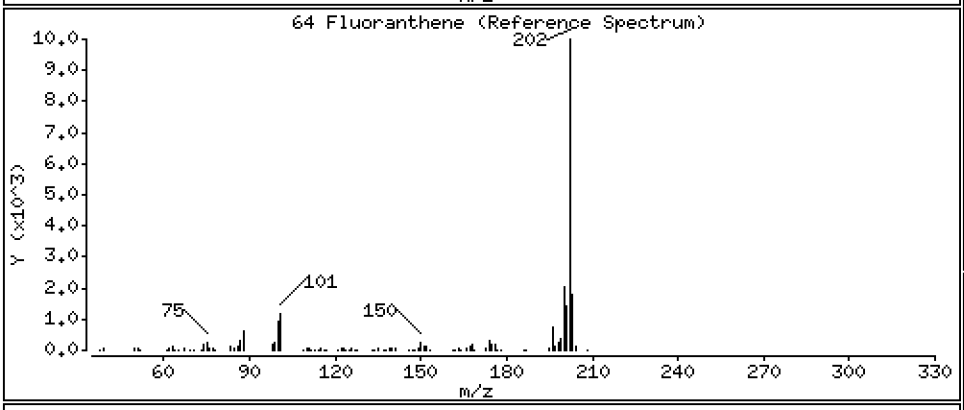
Concentration: 6.100 ug/mL

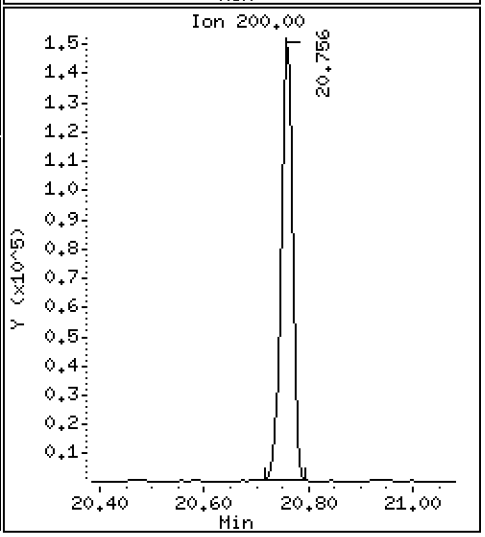


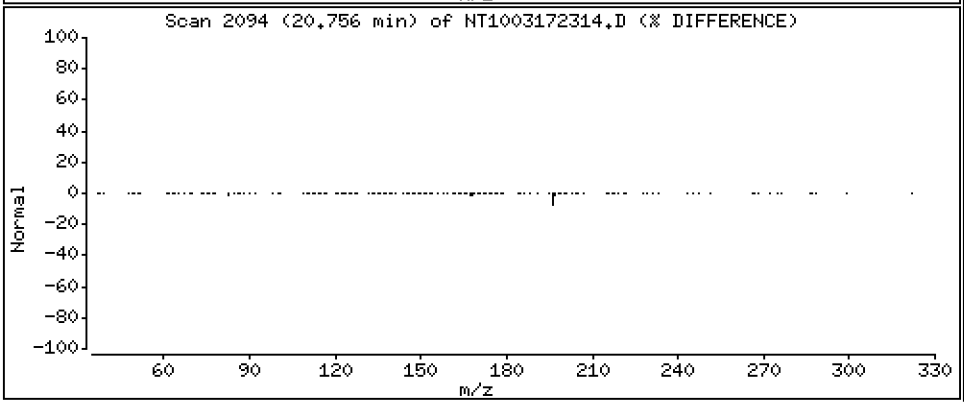












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

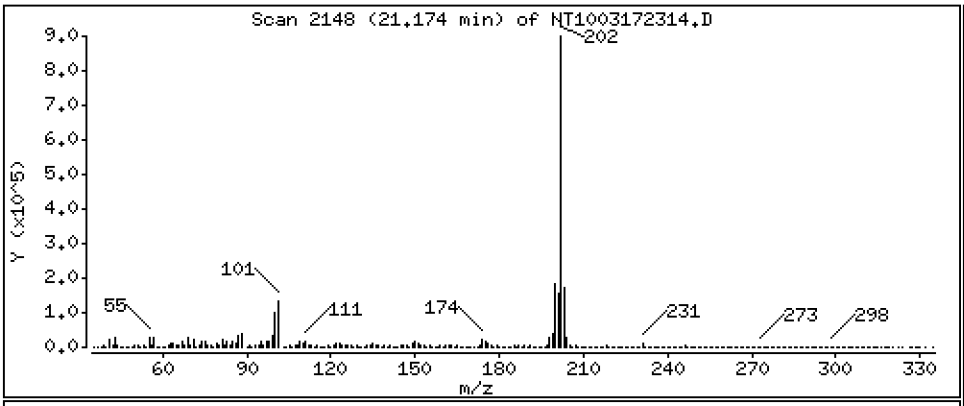
Operator: VTS

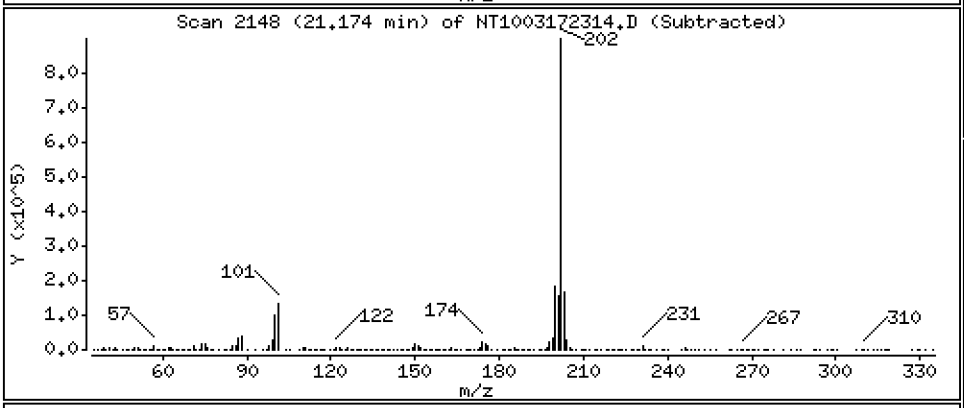
Column phase: ZB-5msi

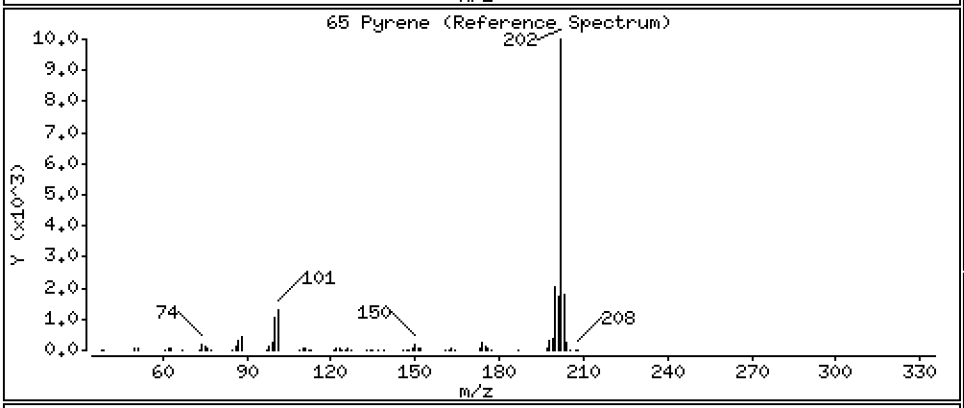
Column diameter: 0.25

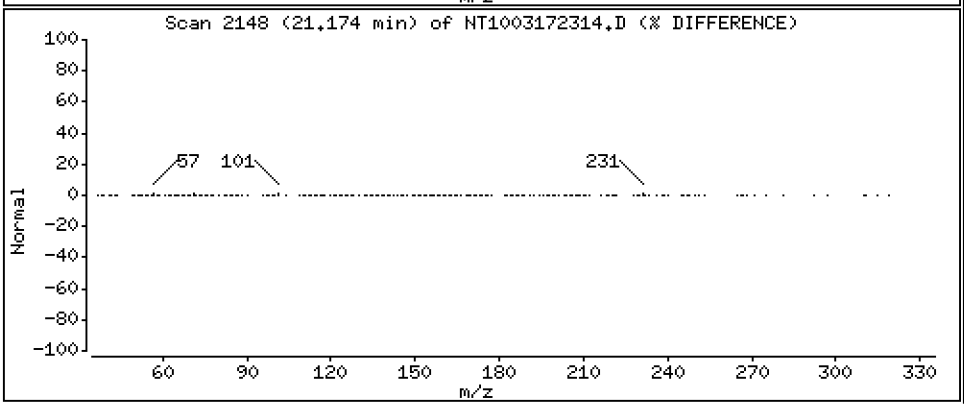
65 Pyrene

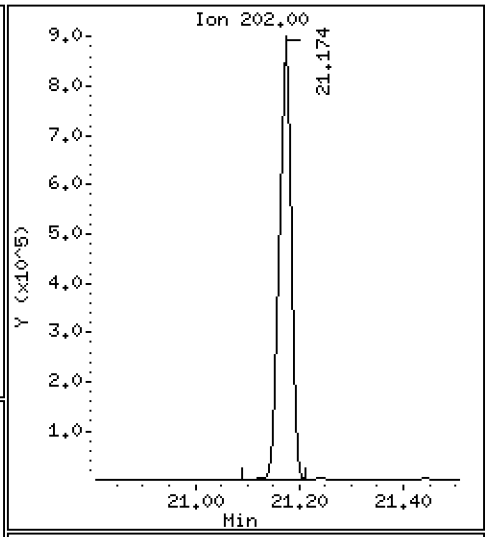
Concentration: 6.808 ug/mL

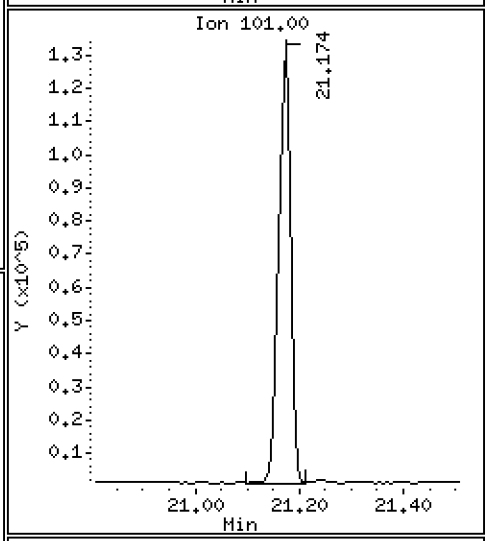


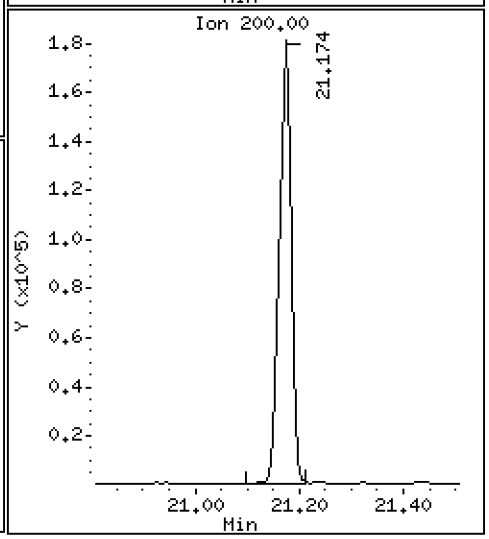












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

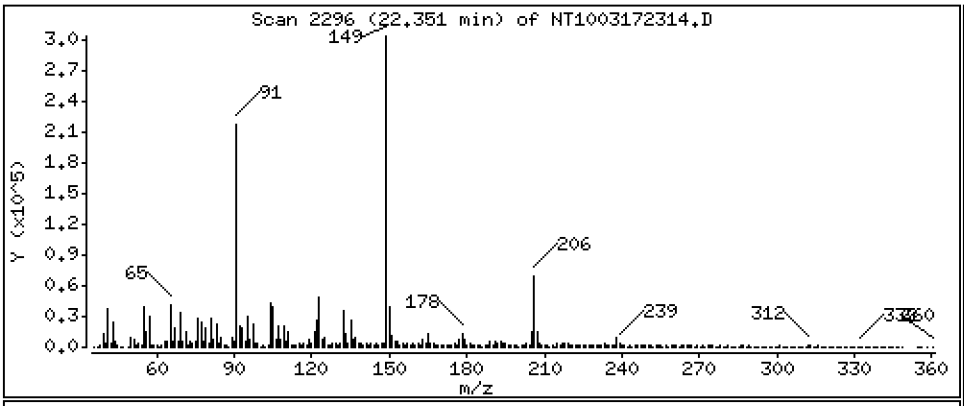
Operator: VTS

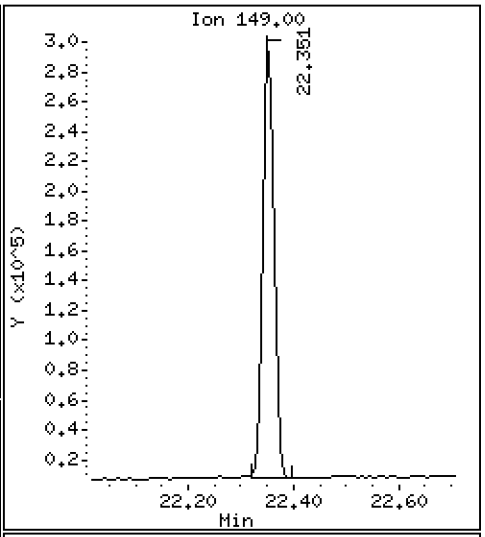
Column phase: ZB-5msi

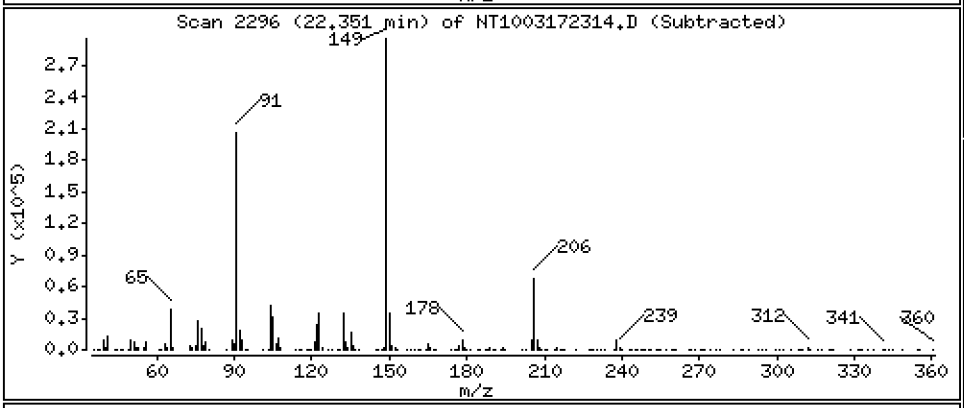
Column diameter: 0.25

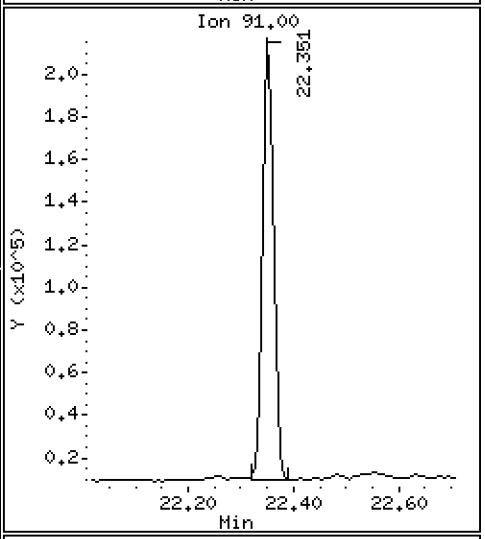
67 Butylbenzylphthalate

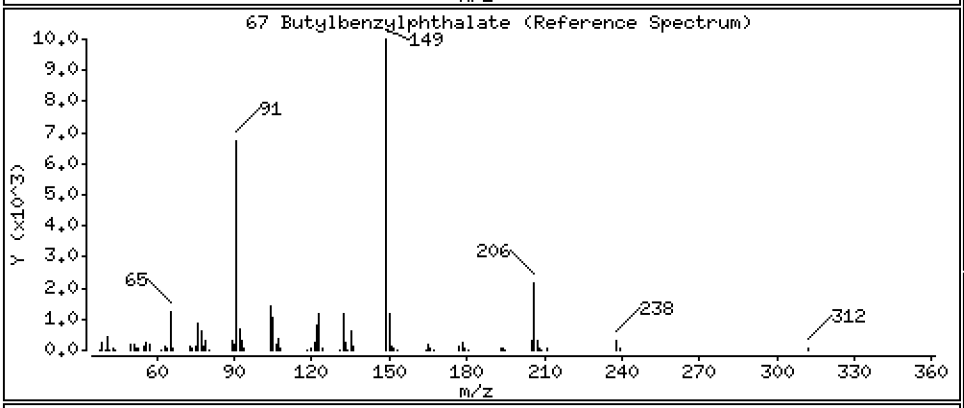
Concentration: 5.748 ug/mL

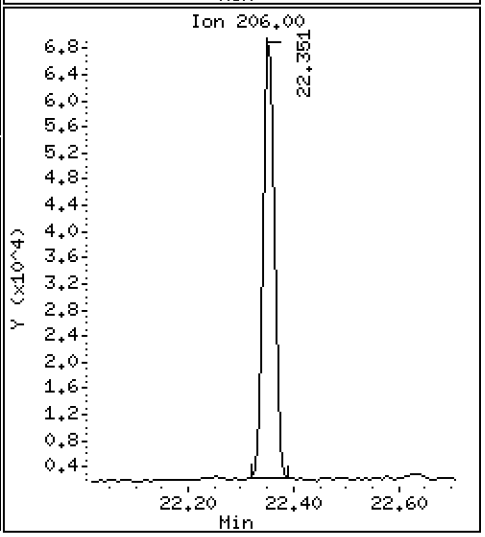


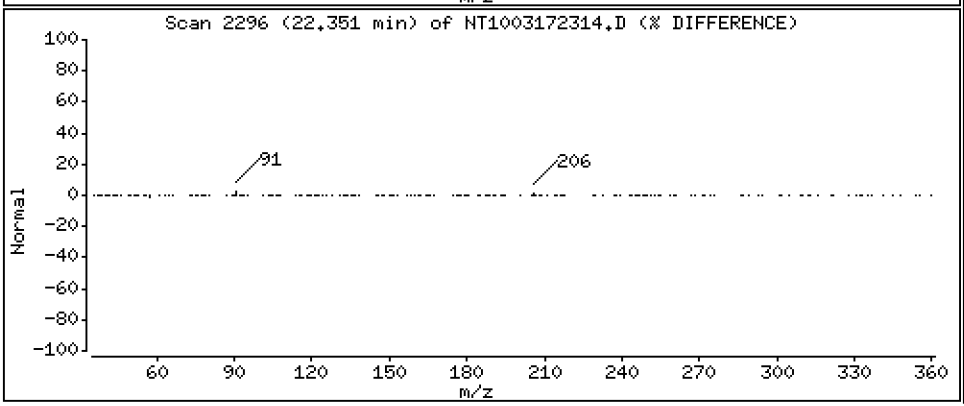












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

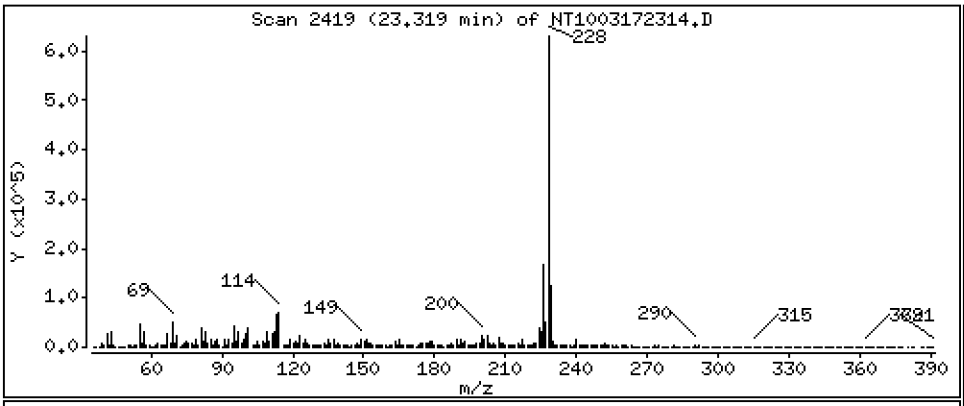
Operator: VTS

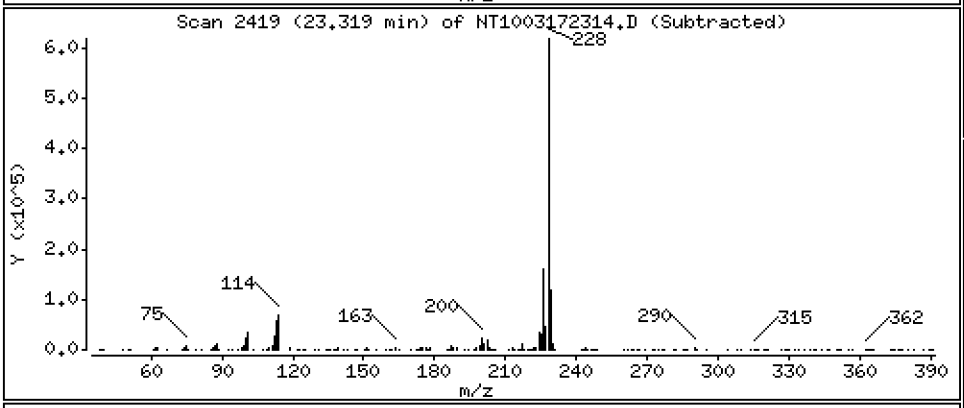
Column phase: ZB-5msi

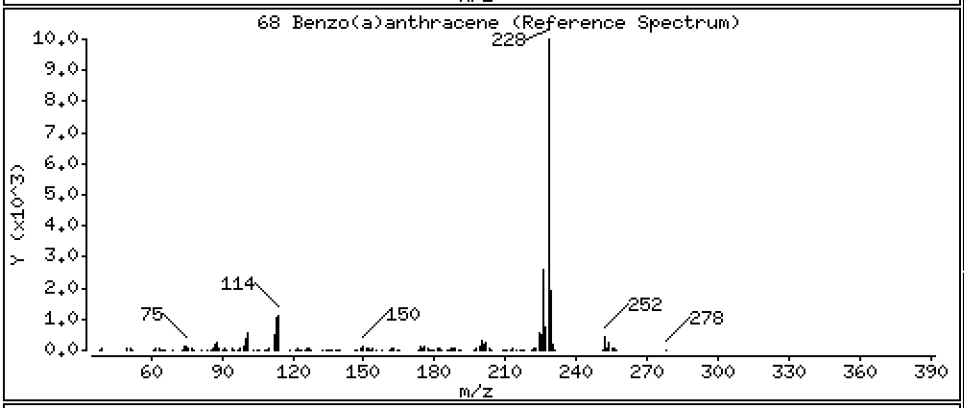
Column diameter: 0.25

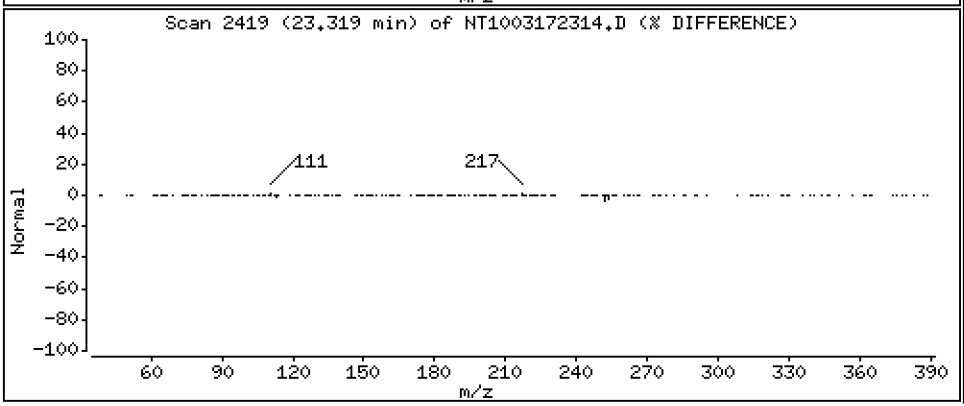
68 Benzo(a)anthracene

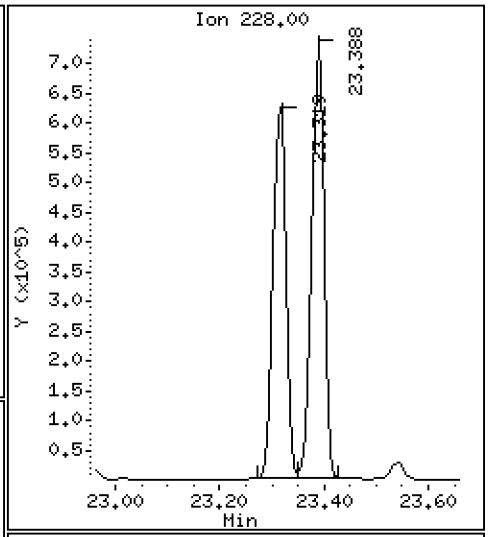
Concentration: 6.006 ug/mL

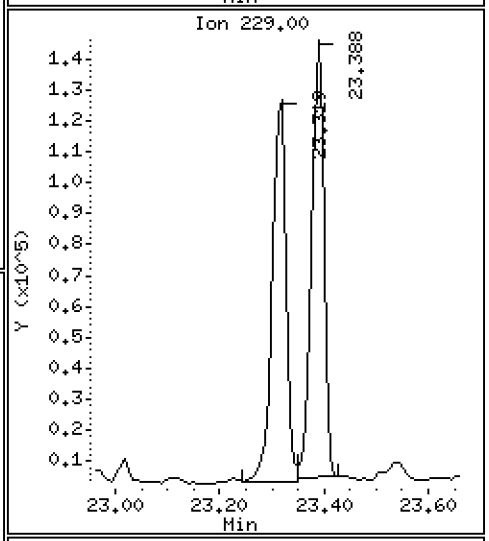


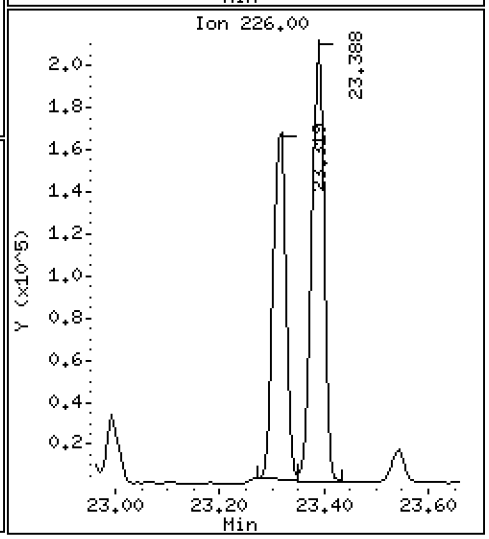












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

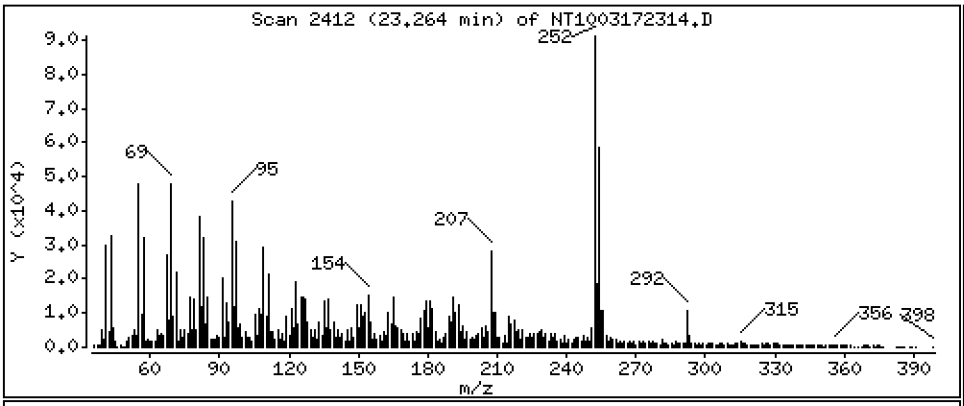
Operator: VTS

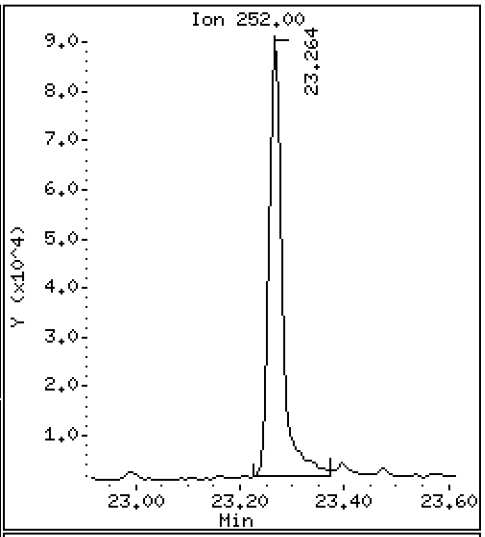
Column phase: ZB-5msi

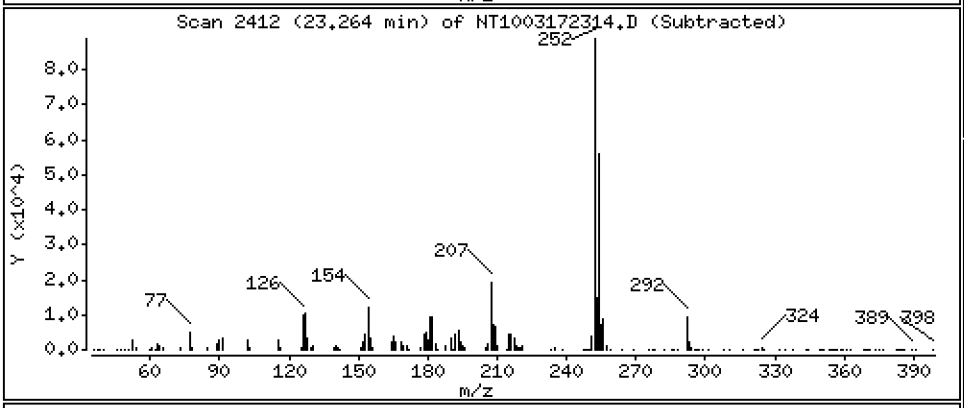
Column diameter: 0.25

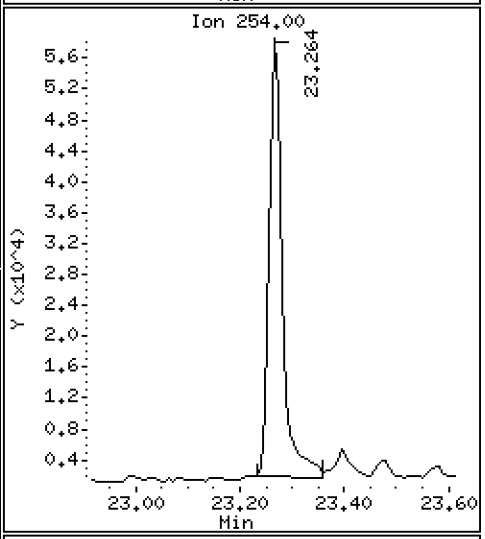
70 3,3'-Dichlorobenzidine

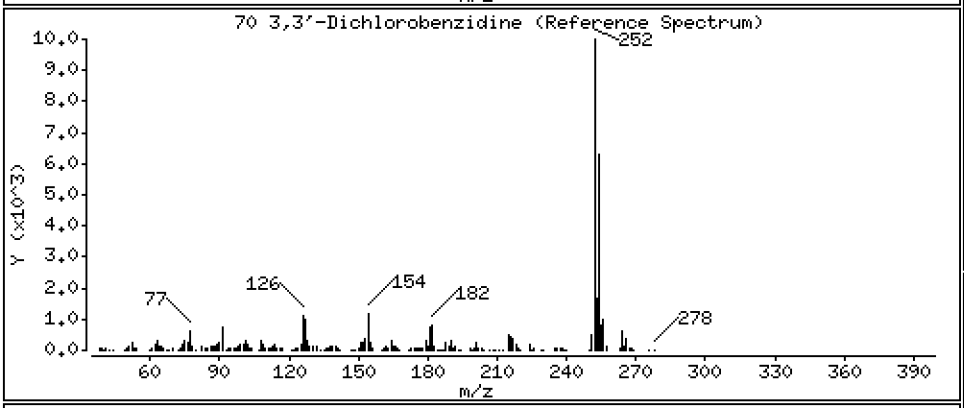
Concentration: 2.719 ug/mL

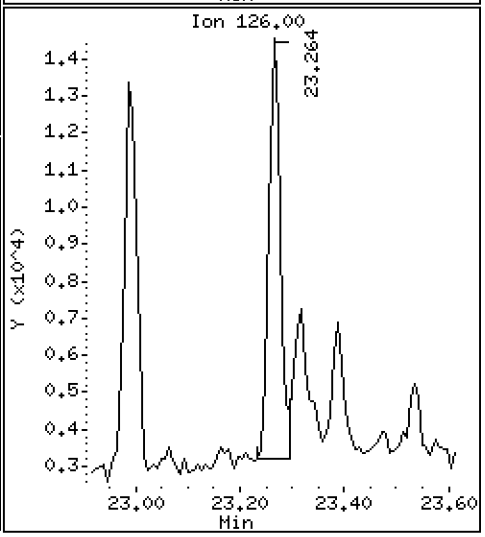


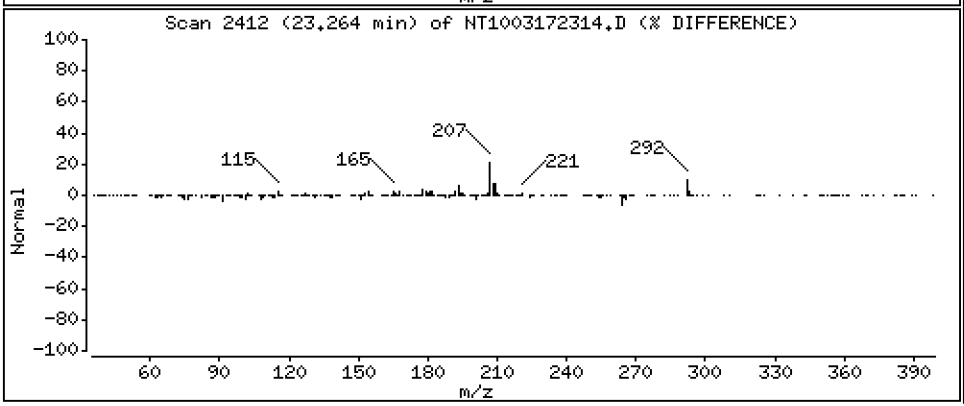












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

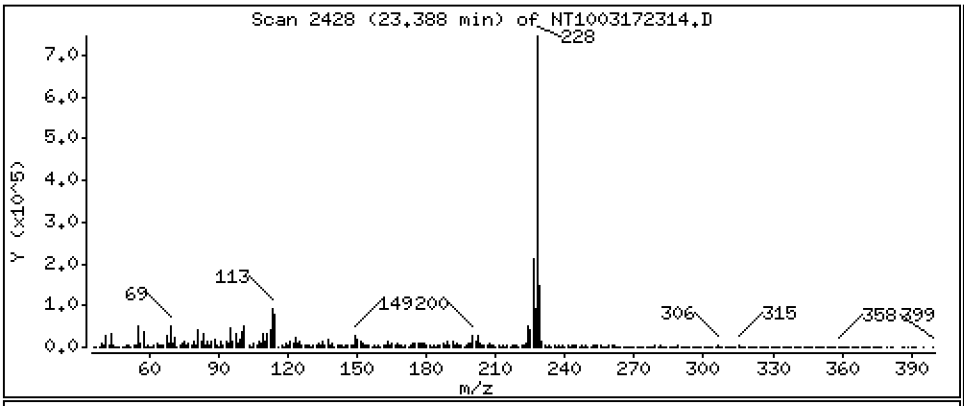
Operator: VTS

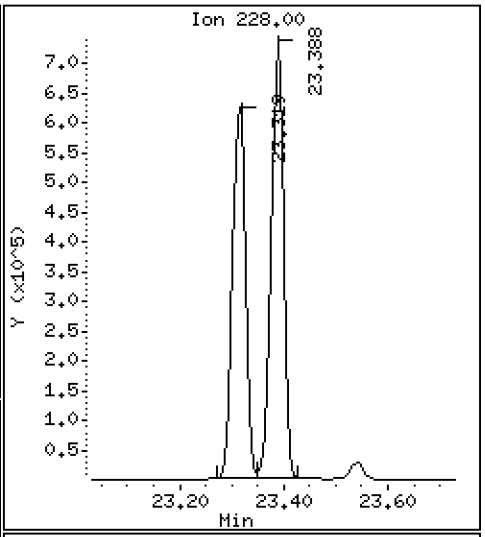
Column phase: ZB-5msi

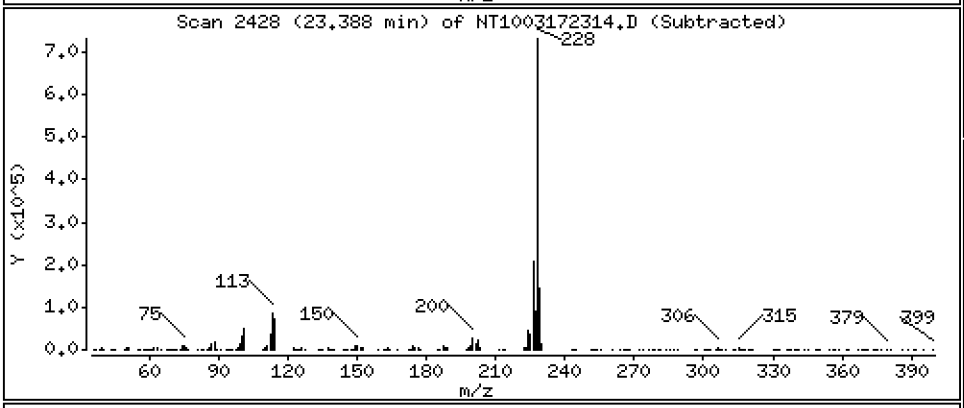
Column diameter: 0.25

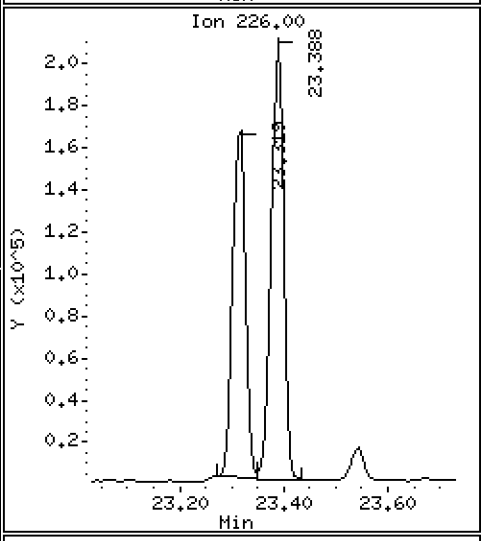
71 Chrysene

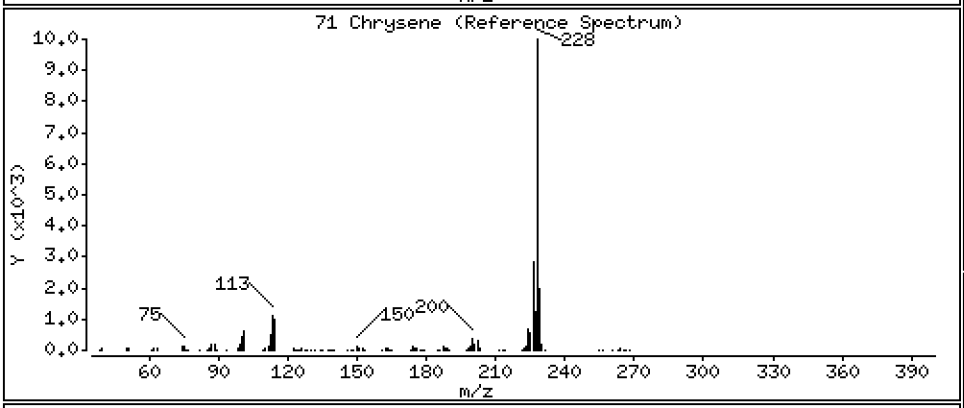
Concentration: 6.650 ug/mL

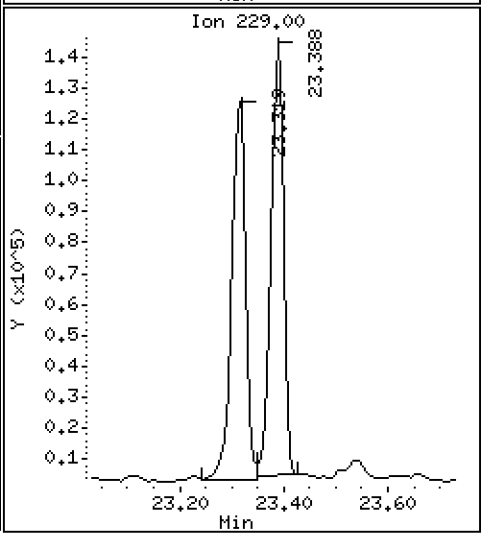


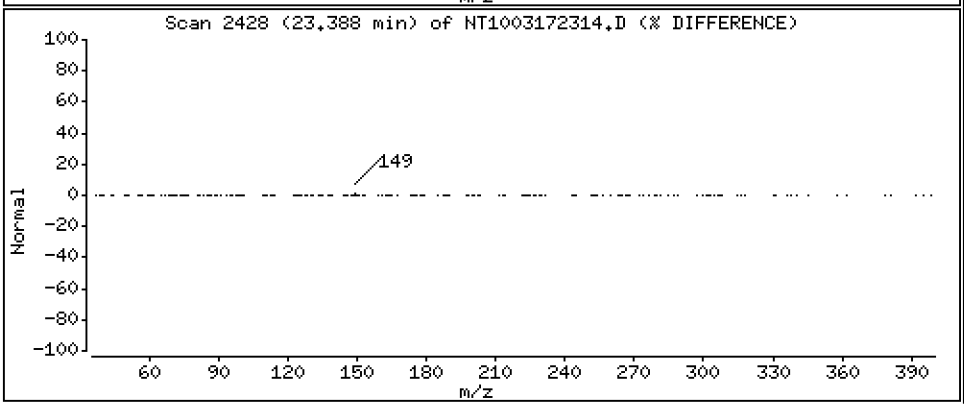












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172314.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

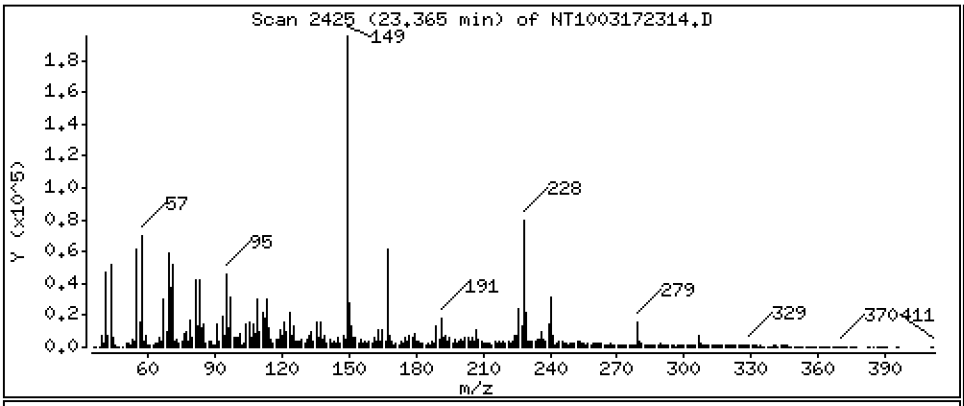
Operator: VTS

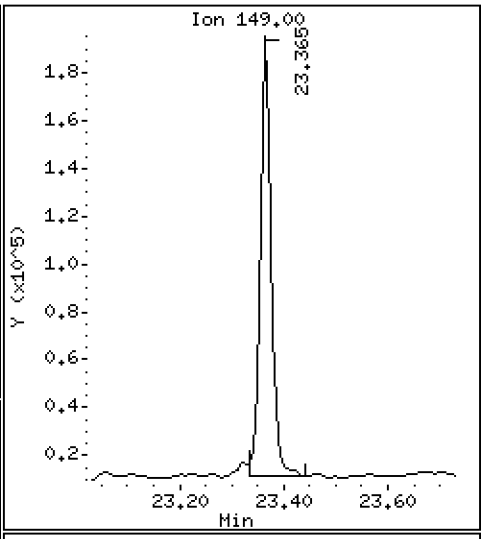
Column phase: ZB-5msi

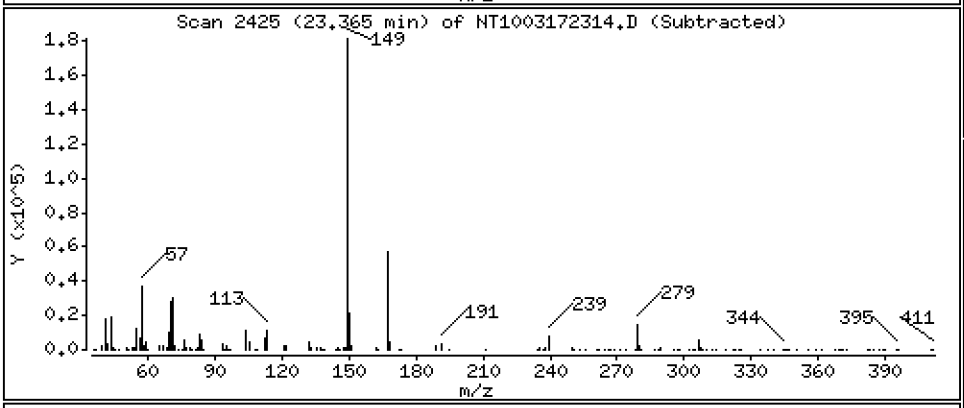
Column diameter: 0.25

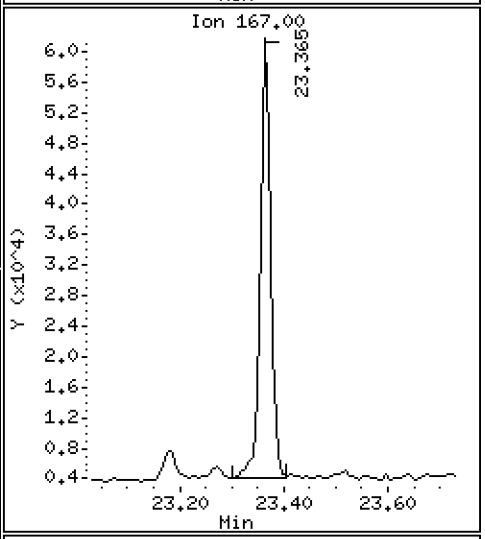
72 bis(2-Ethylhexyl)phthalate

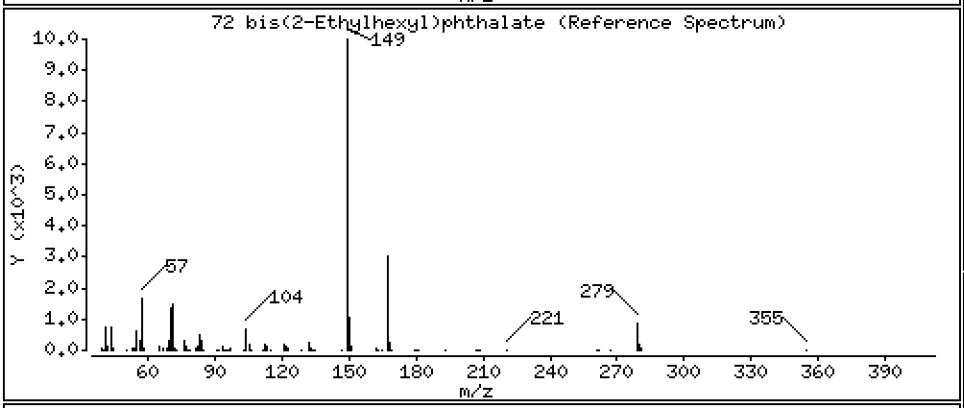
Concentration: 2.189 ug/mL

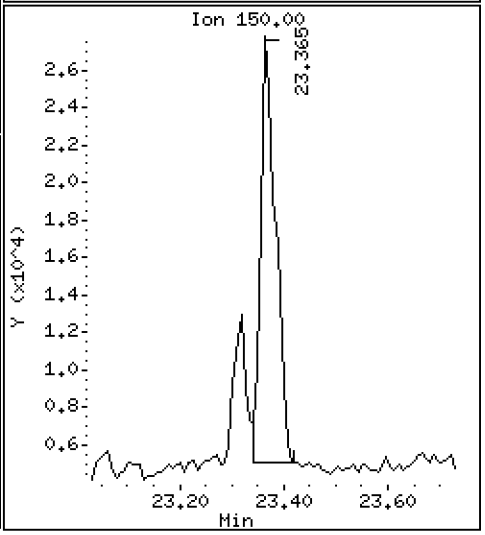


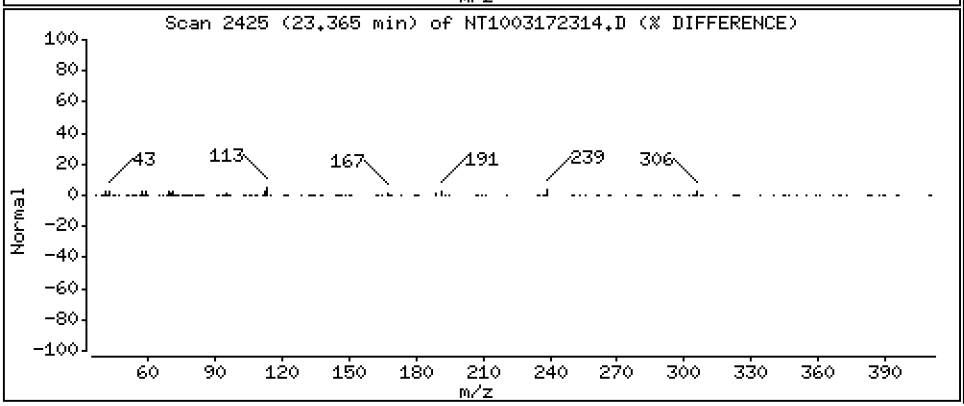












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

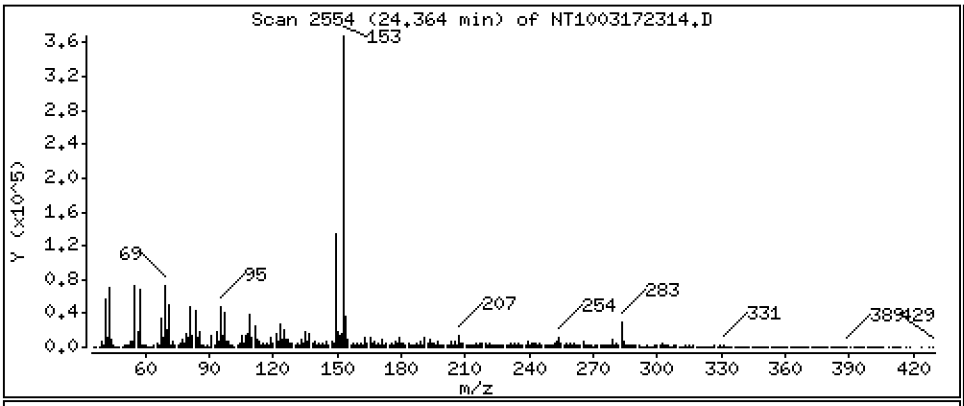
Operator: VTS

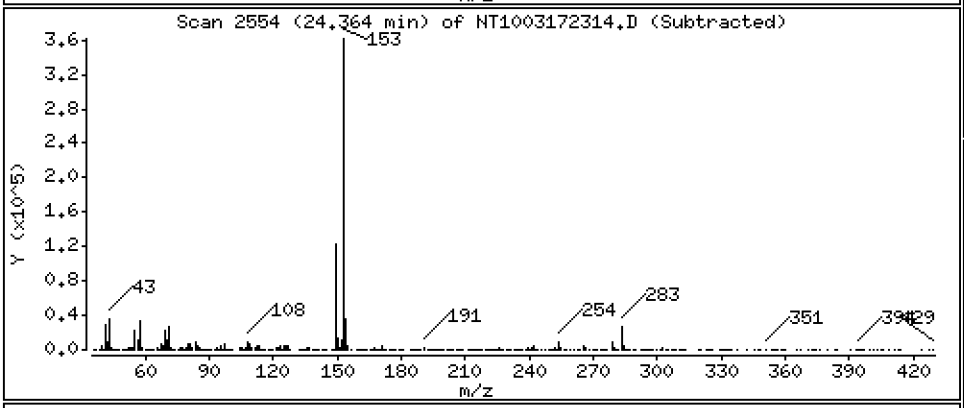
Column phase: ZB-5msi

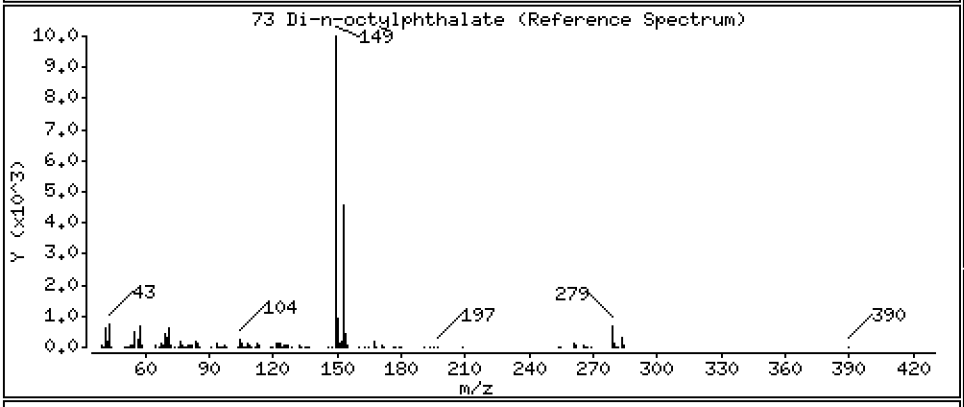
Column diameter: 0.25

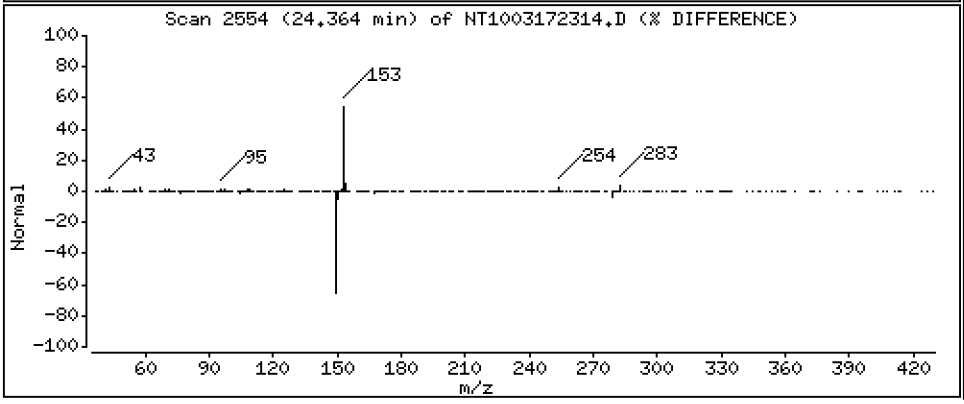
73 Di-n-octylphthalate

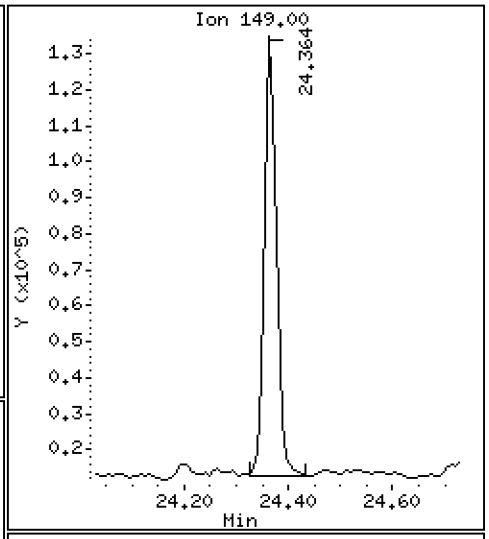
Concentration: 0.8707 ug/mL

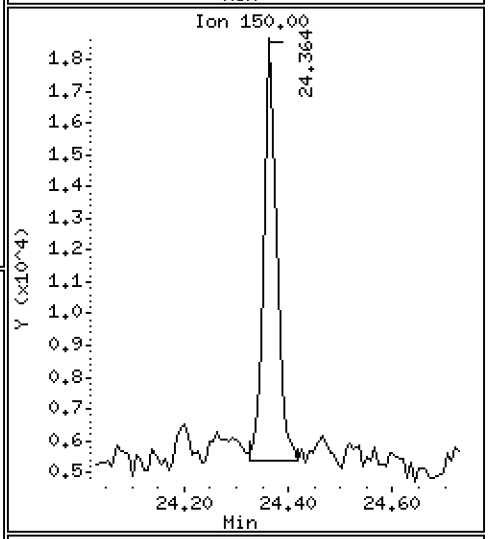


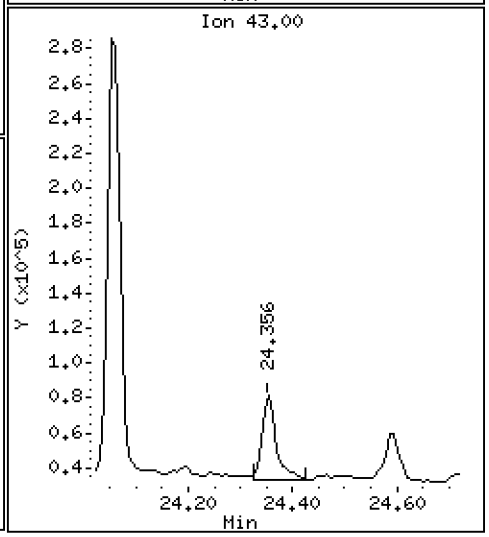












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

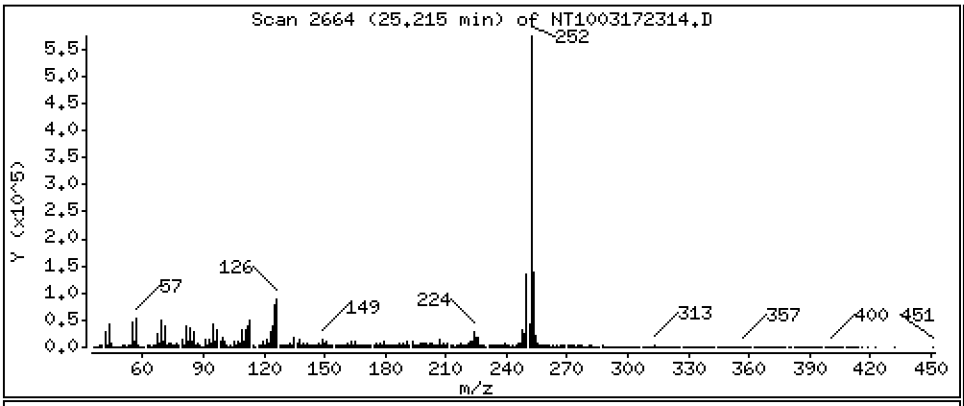
Operator: VTS

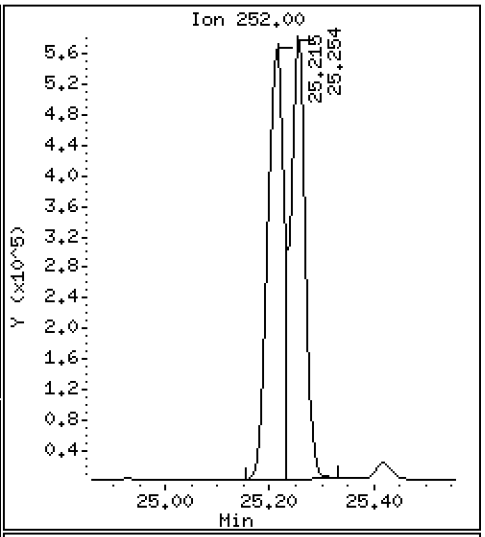
Column phase: ZB-5msi

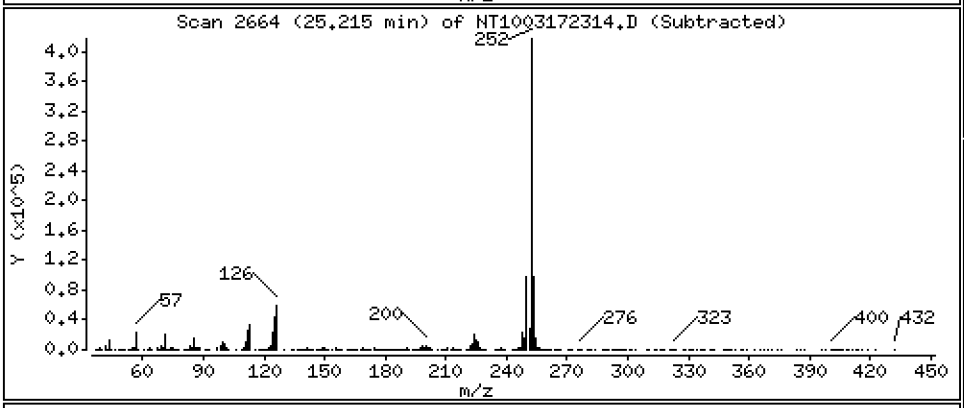
Column diameter: 0.25

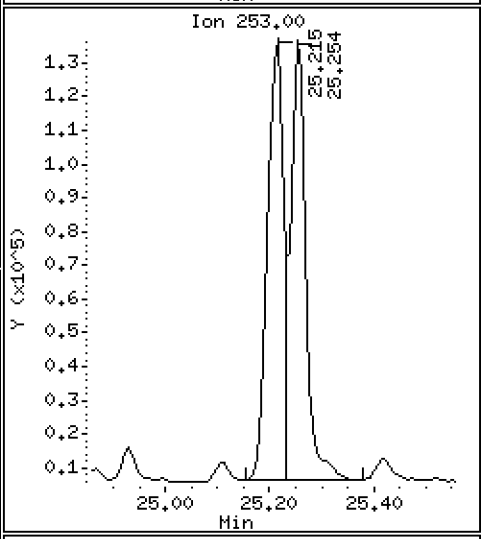
74 Benzo(b)fluoranthene

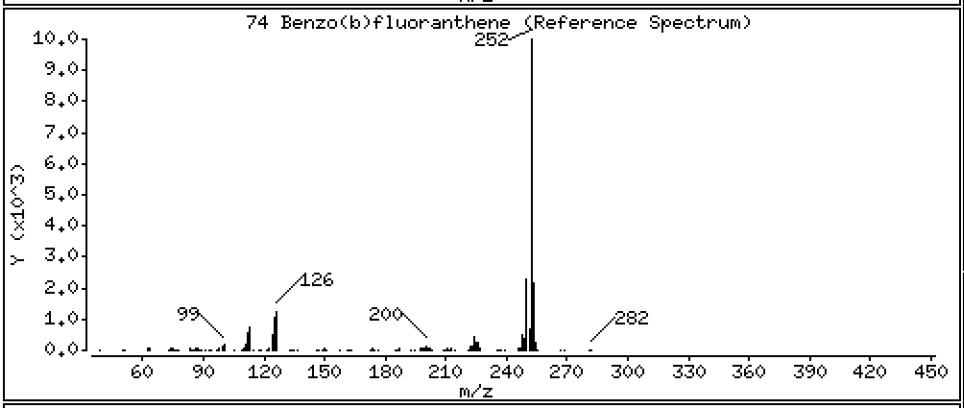
Concentration: 6.578 ug/mL

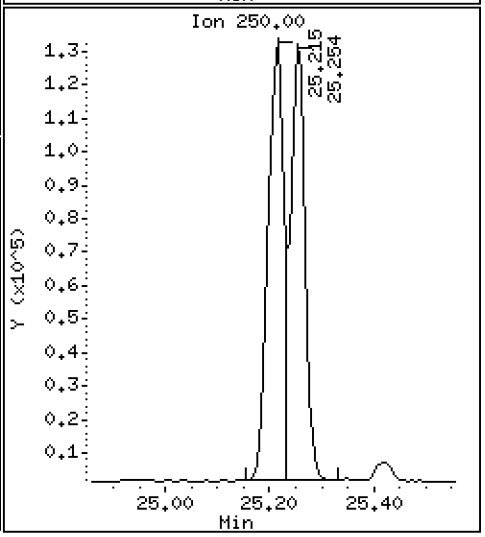


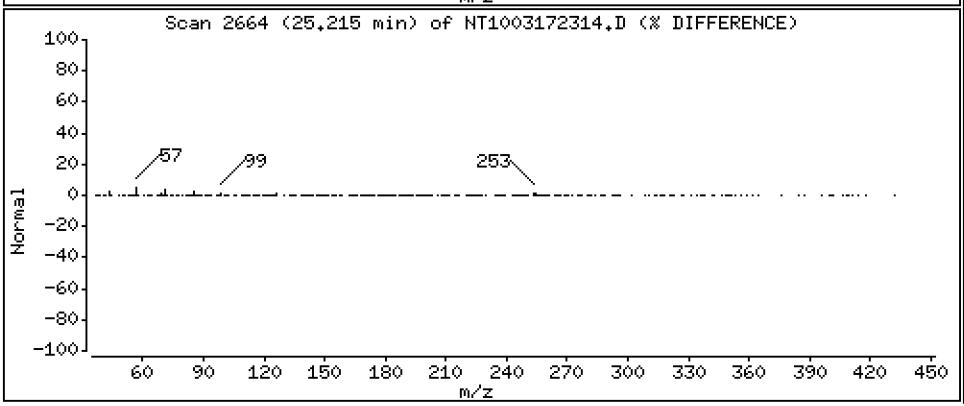












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

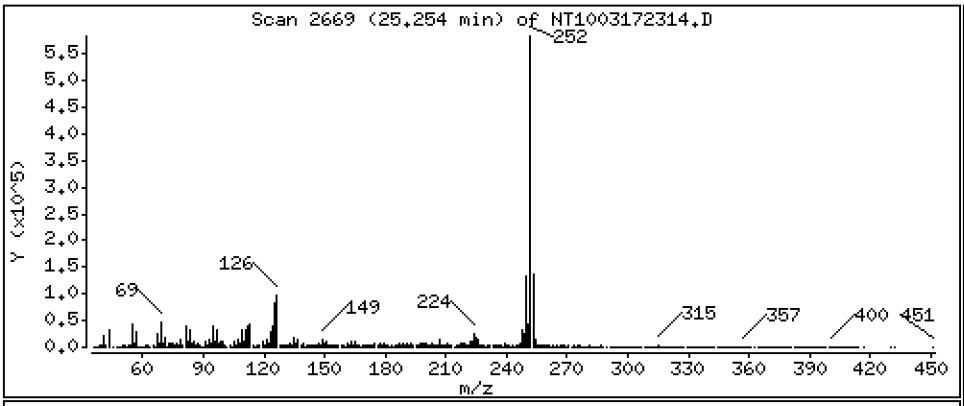
Operator: VTS

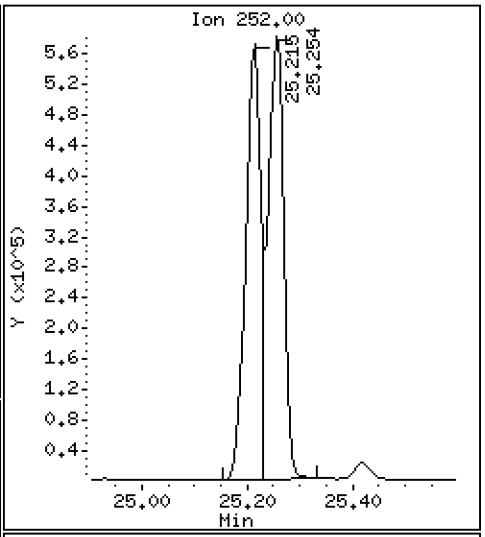
Column phase: ZB-5msi

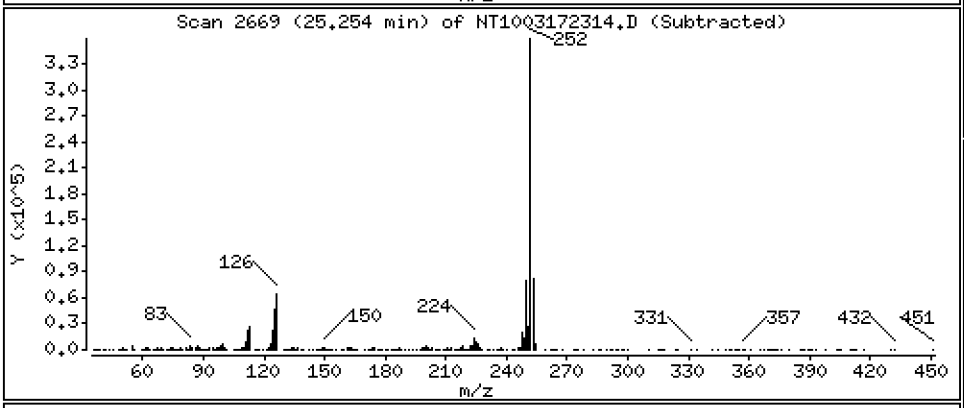
Column diameter: 0.25

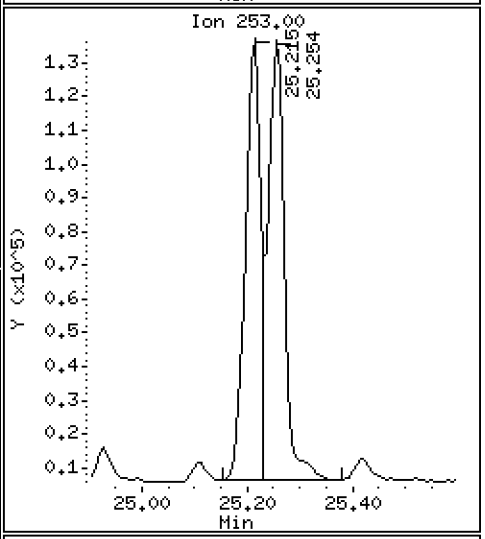
75 Benzo(k)fluoranthene

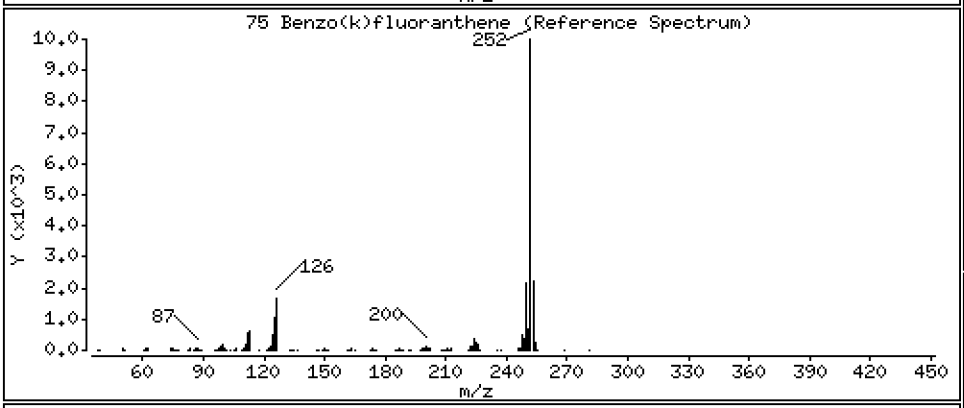
Concentration: 6.753 ug/mL

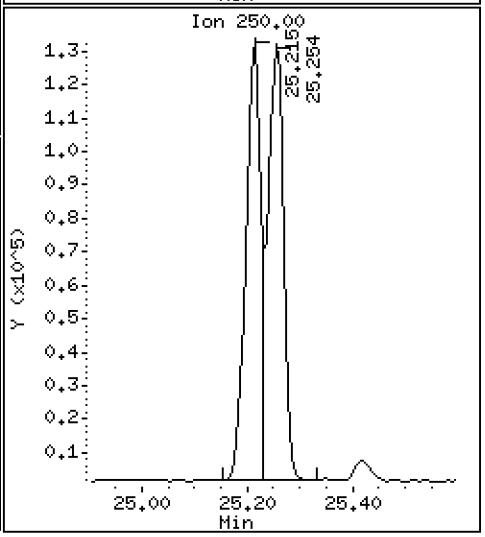


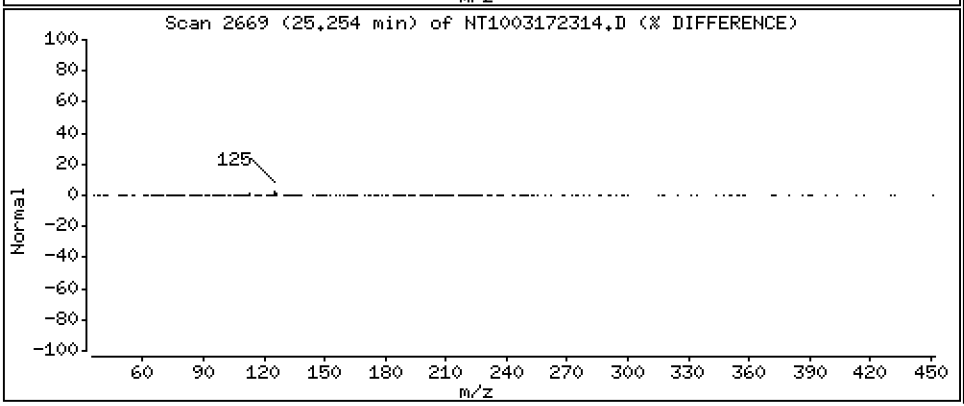












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

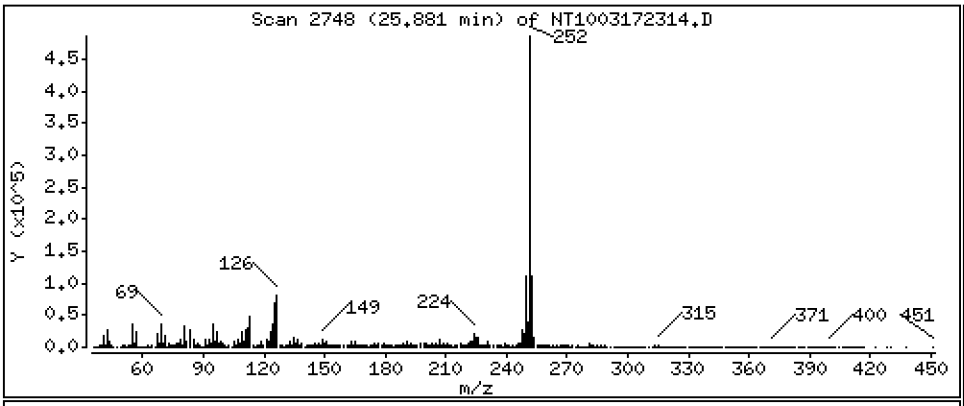
Operator: VTS

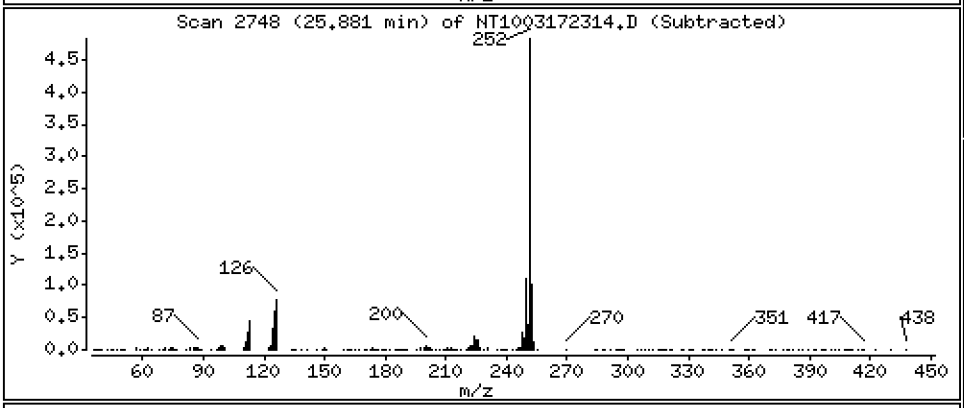
Column phase: ZB-5msi

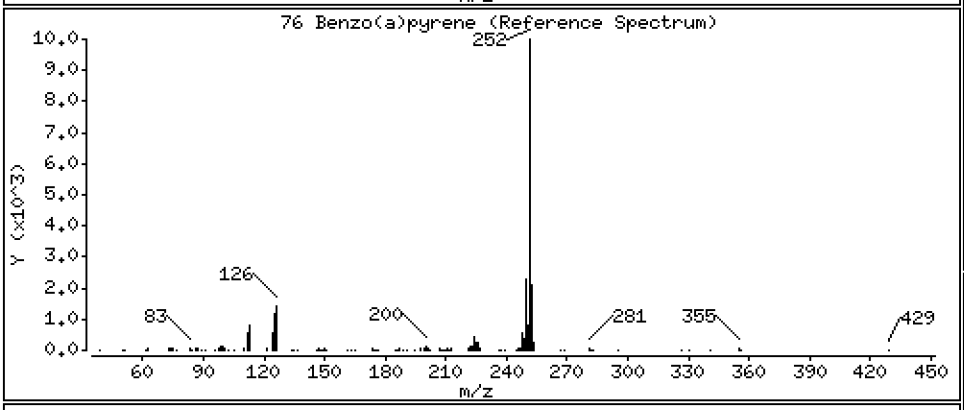
Column diameter: 0.25

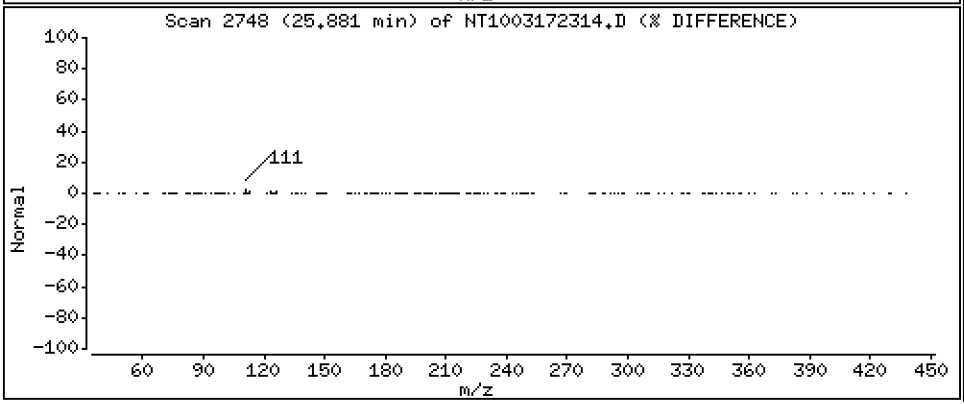
76 Benzo(a)pyrene

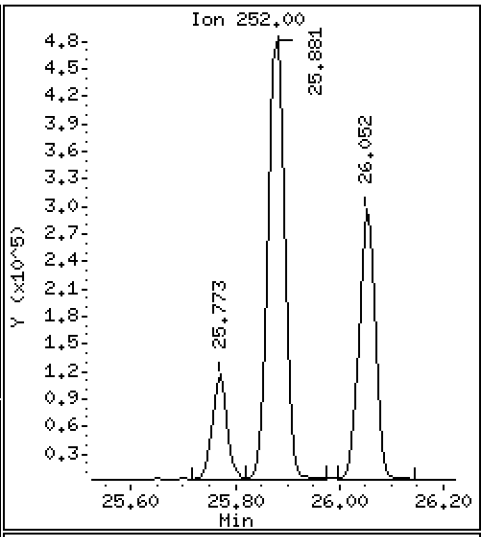
Concentration: 6.395 ug/mL

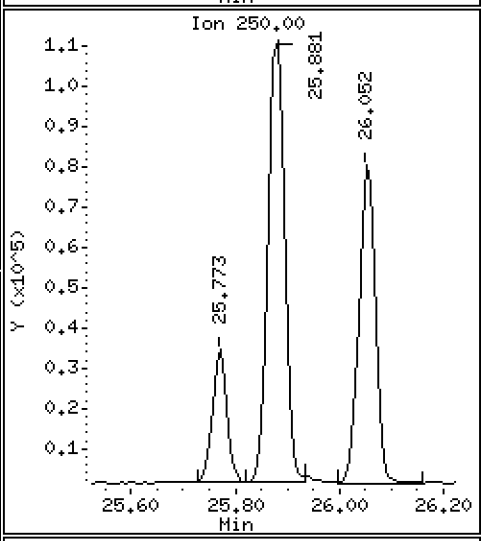


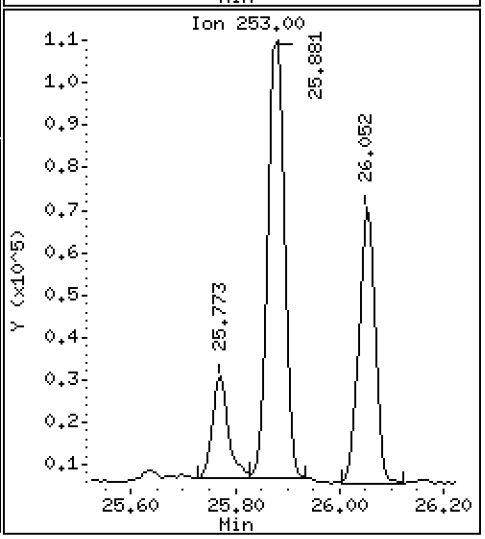












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

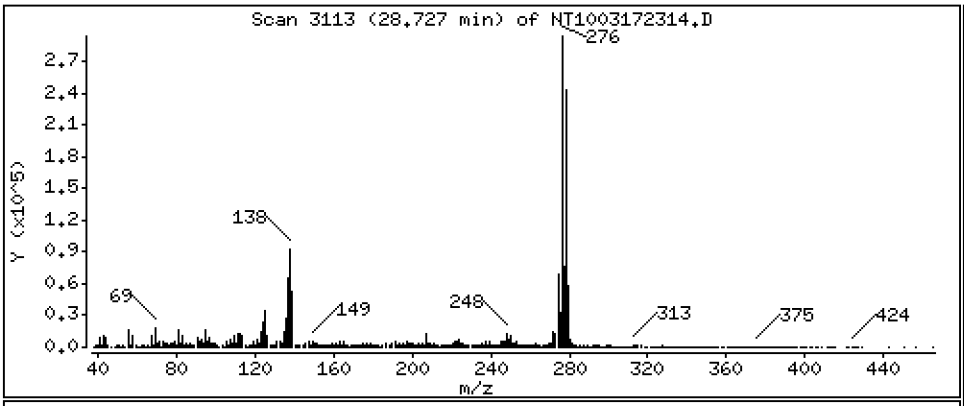
Operator: VTS

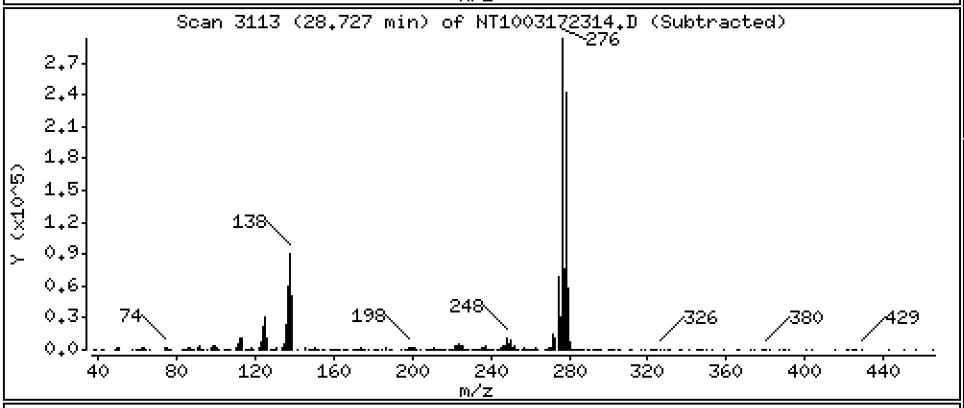
Column phase: ZB-5msi

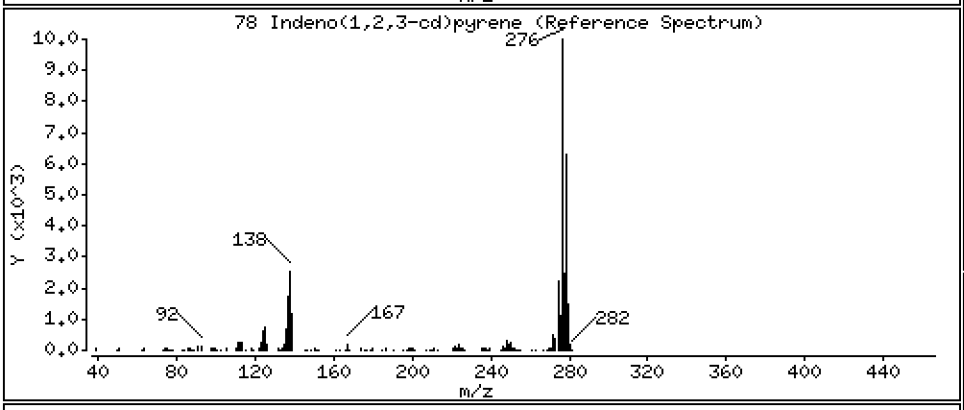
Column diameter: 0.25

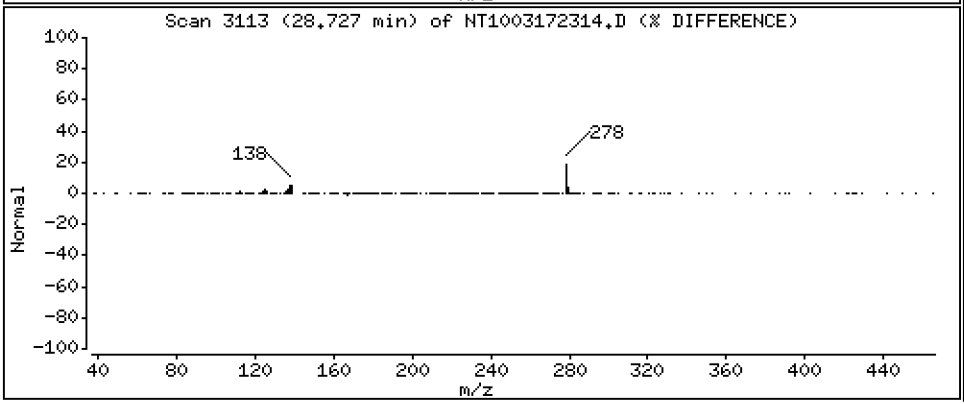
78 Indeno(1,2,3-cd)pyrene

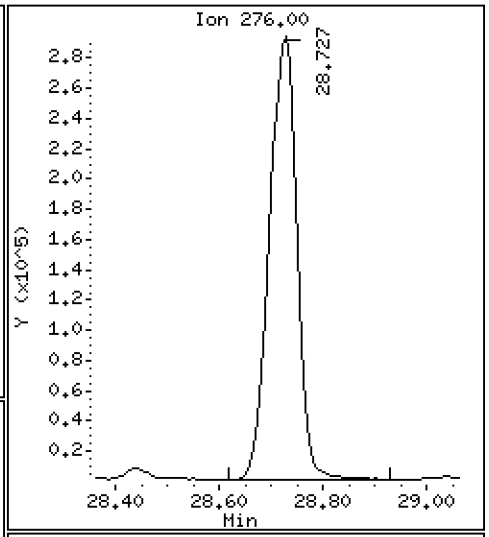
Concentration: 5.271 ug/mL

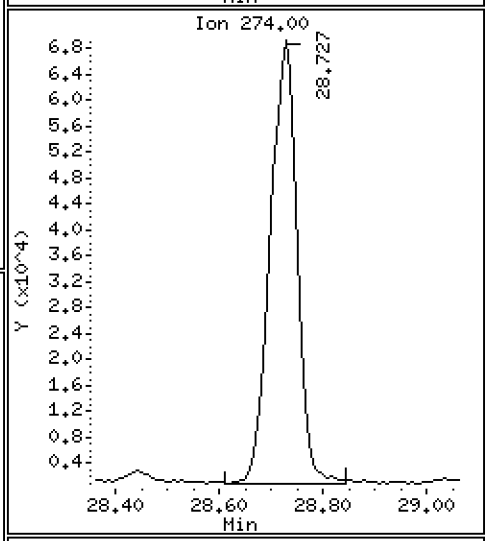


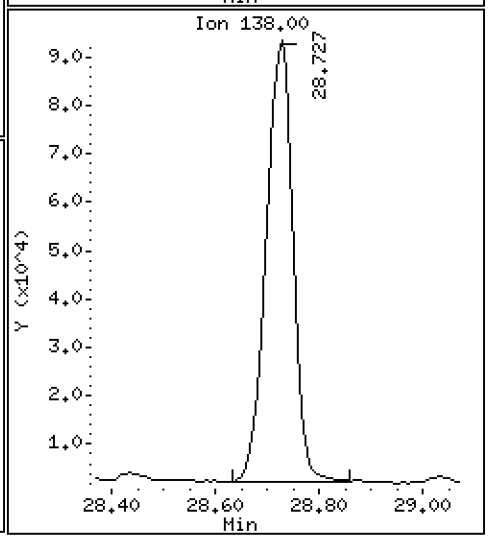












Date : 18-MAR-2023 02:41

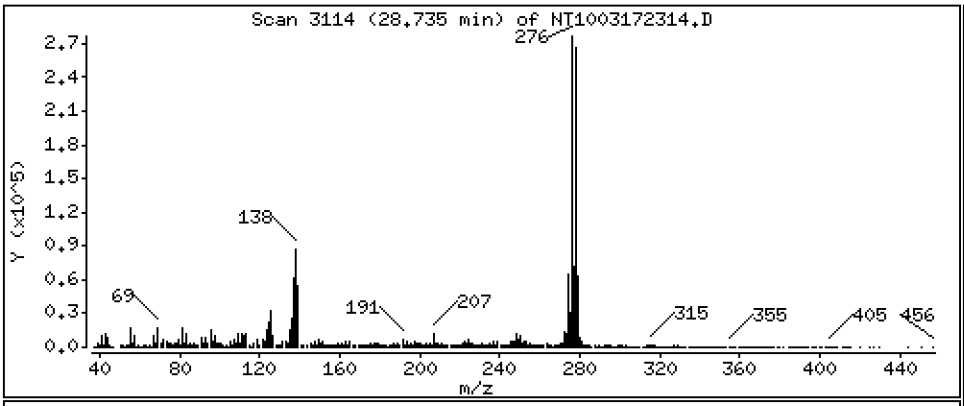
Client ID: Instrument: nt10.i

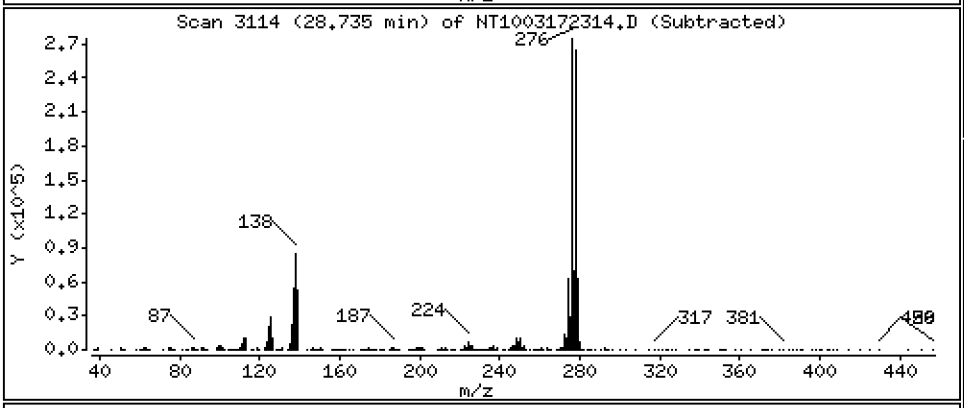
Sample Info: BLB0495-MSD1

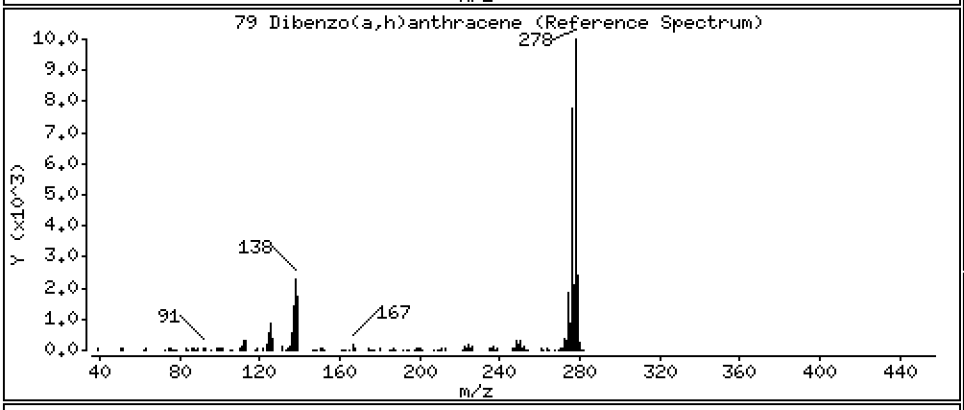
Operator: VTS

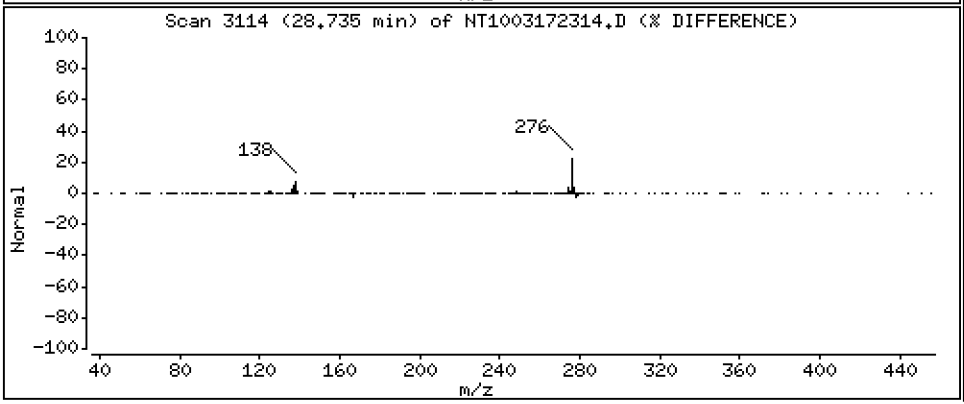
Column phase: ZB-5msi Column diameter: 0.25

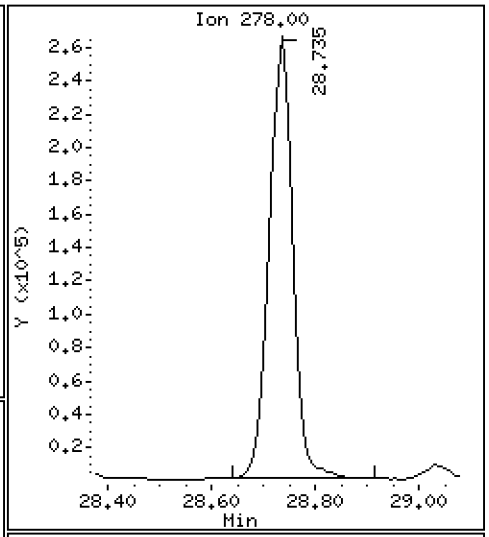
79 Dibenzo(a,h)anthracene Concentration: 4.876 ug/mL

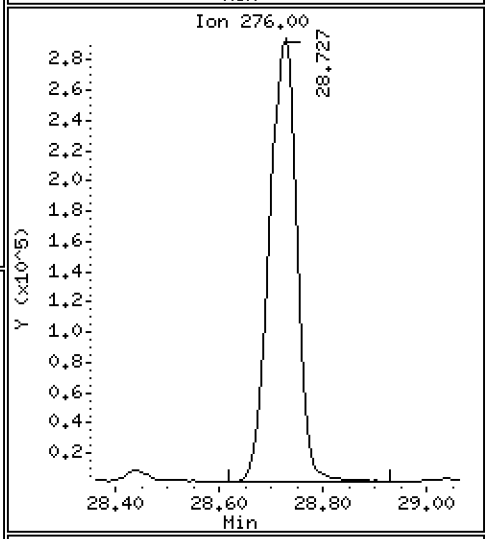


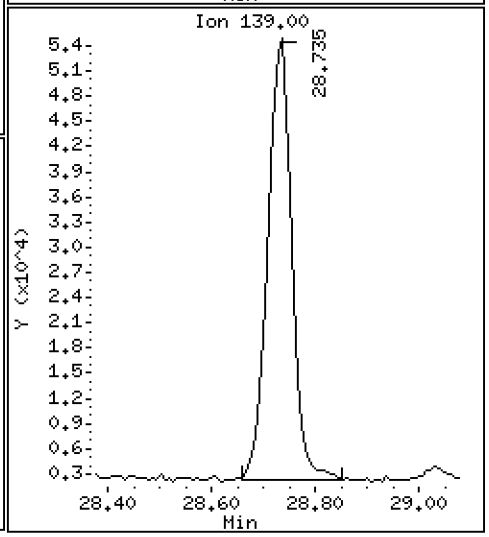












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172314.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

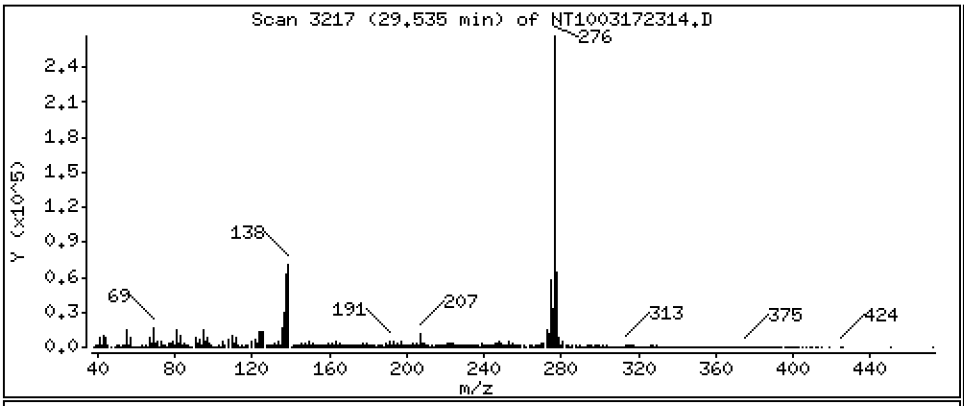
Operator: VTS

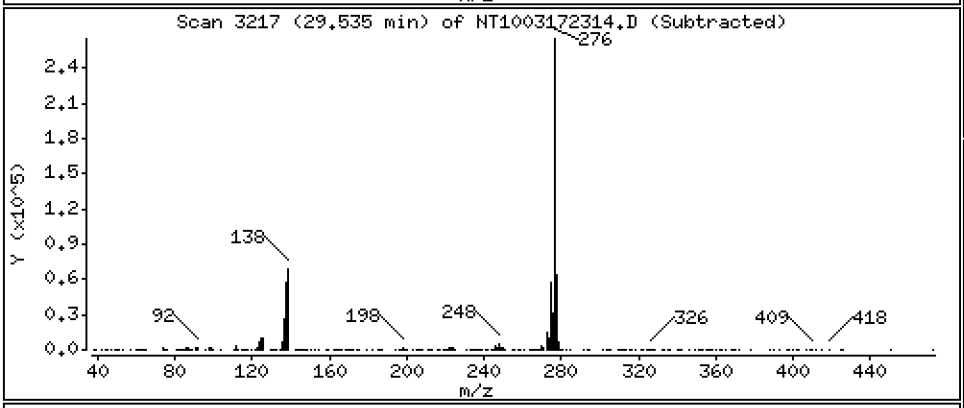
Column phase: ZB-5msi

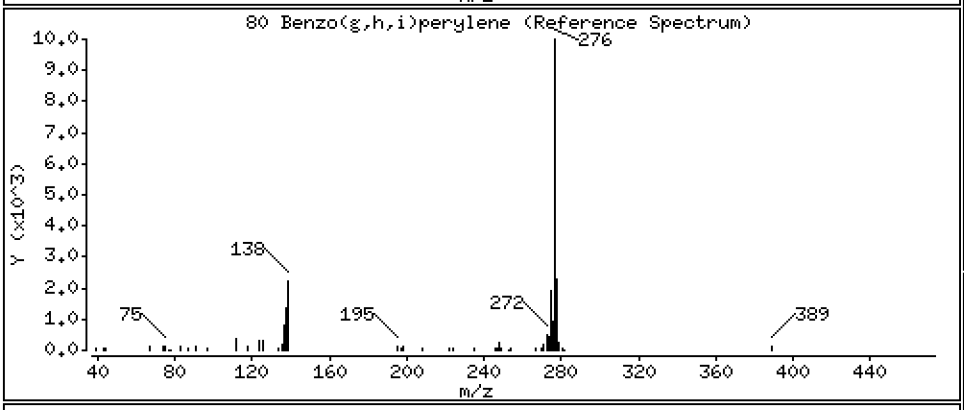
Column diameter: 0.25

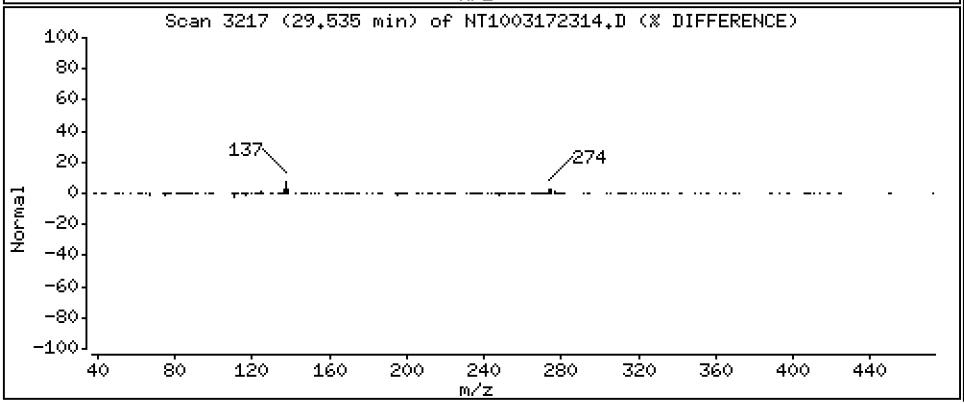
80 Benzo(g,h,i)perylene

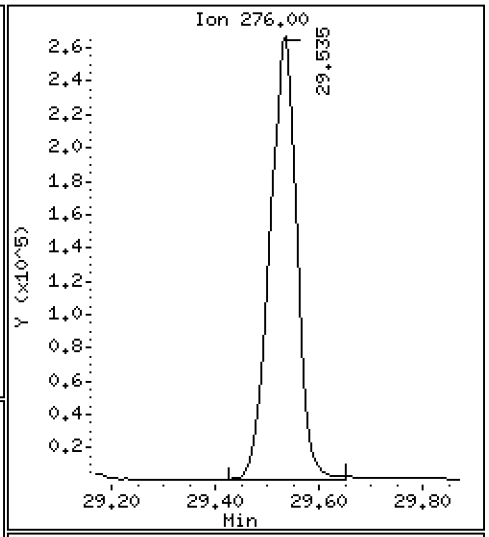
Concentration: 5.409 ug/mL

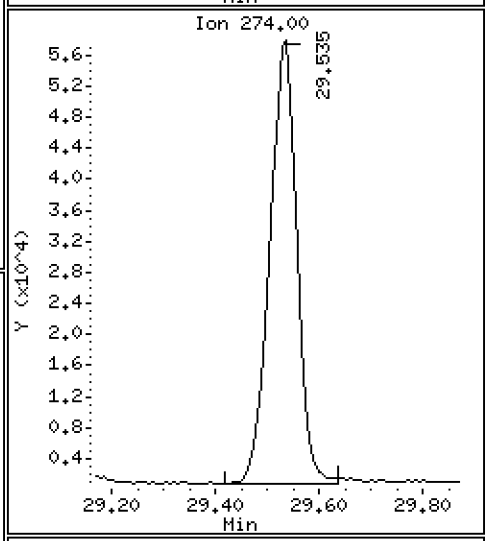


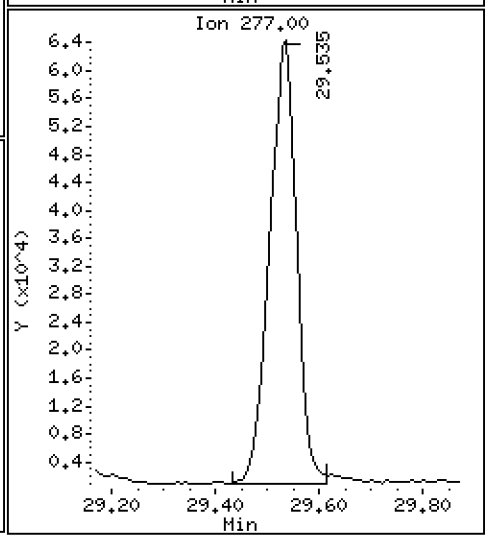












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

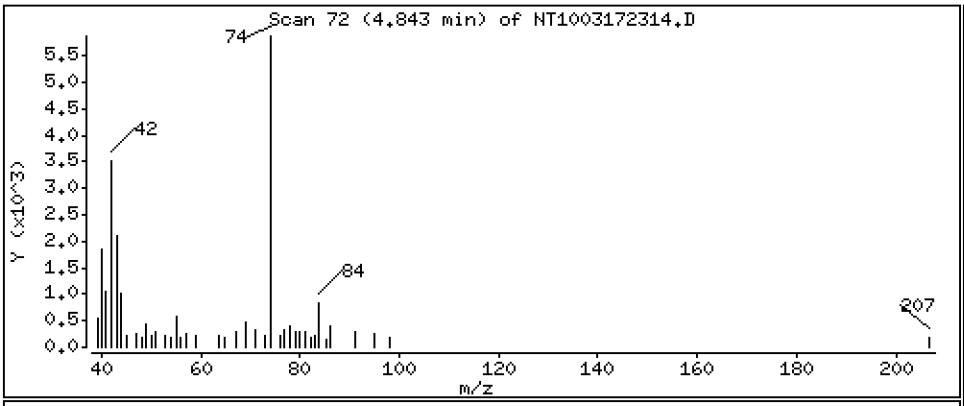
Operator: VTS

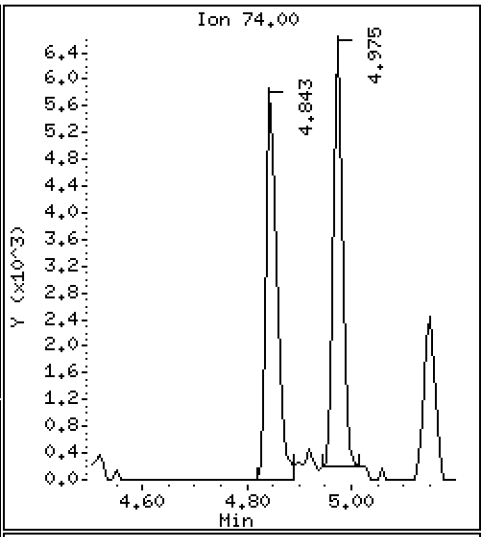
Column phase: ZB-5msi

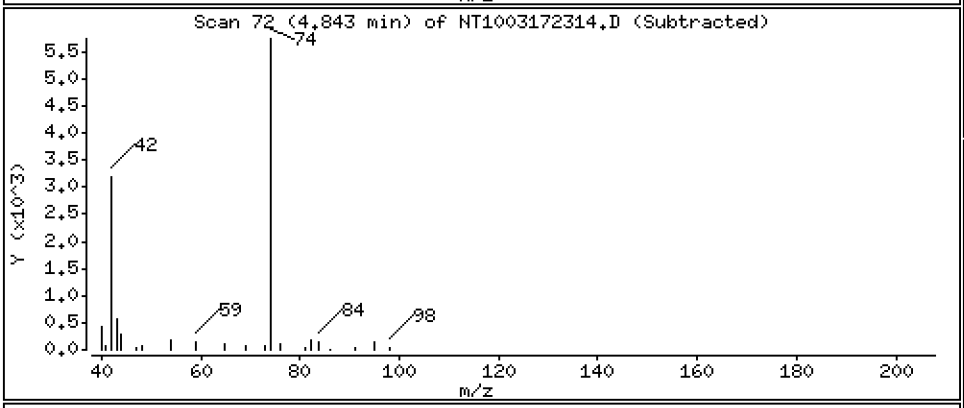
Column diameter: 0.25

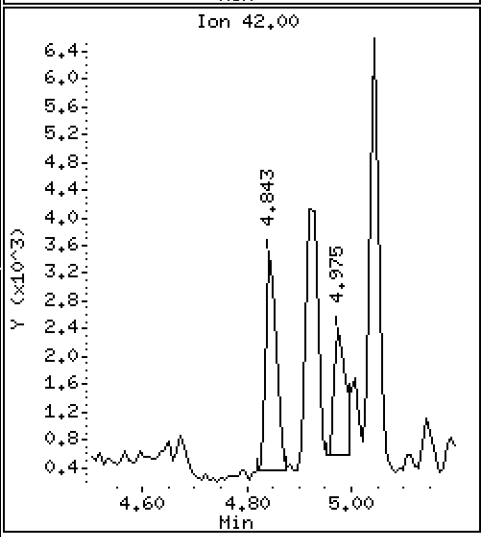
90 N-Nitrosodimethylamine

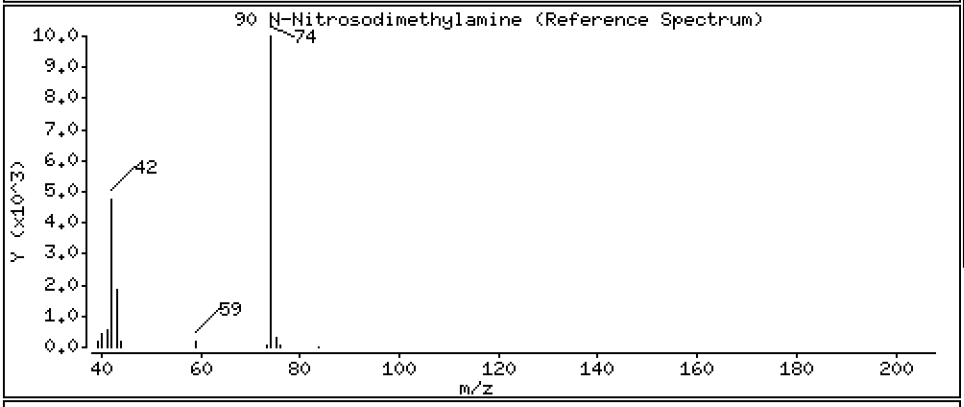
Concentration: 0.2504 ug/mL

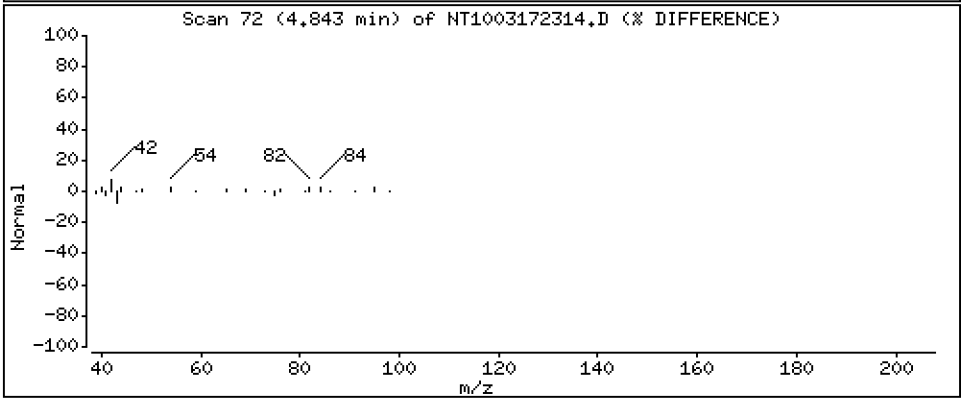












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172314.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

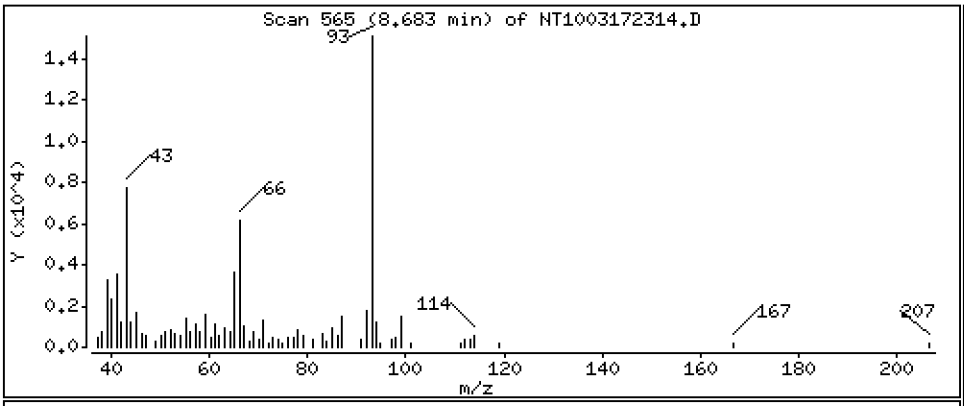
Operator: VTS

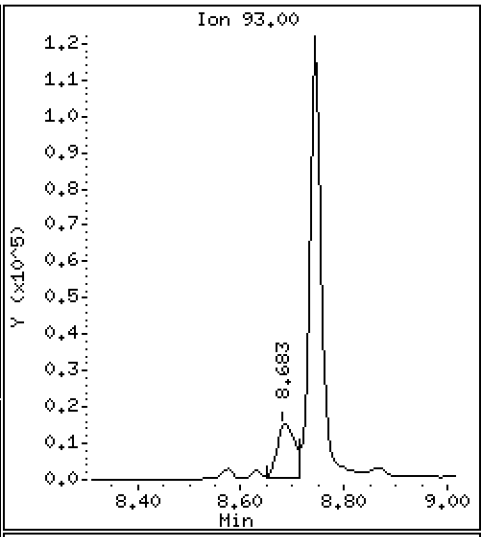
Column phase: ZB-5msi

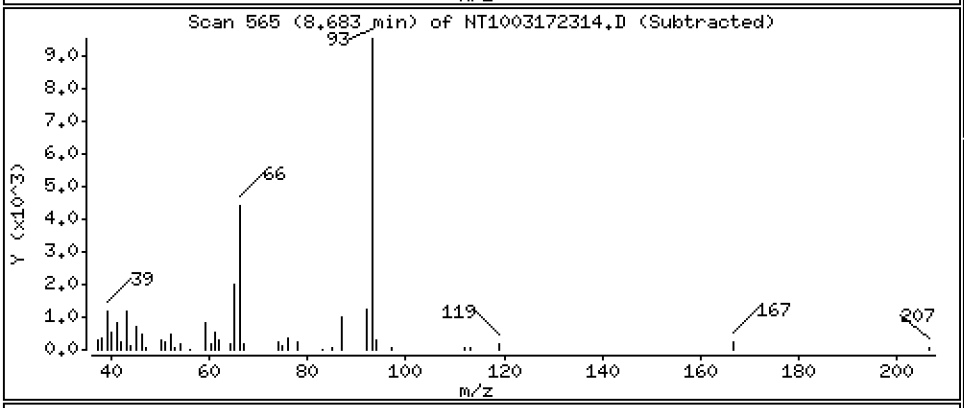
Column diameter: 0.25

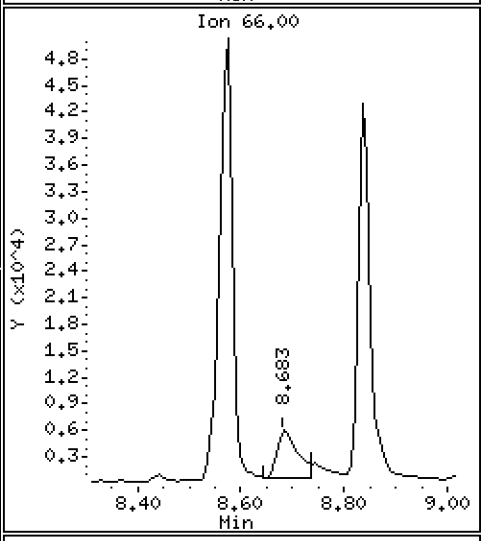
91 Aniline

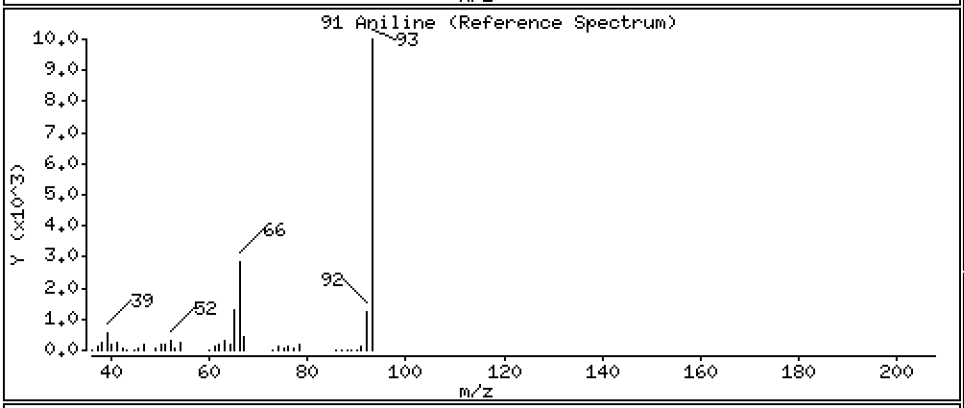
Concentration: 0.5072 ug/mL

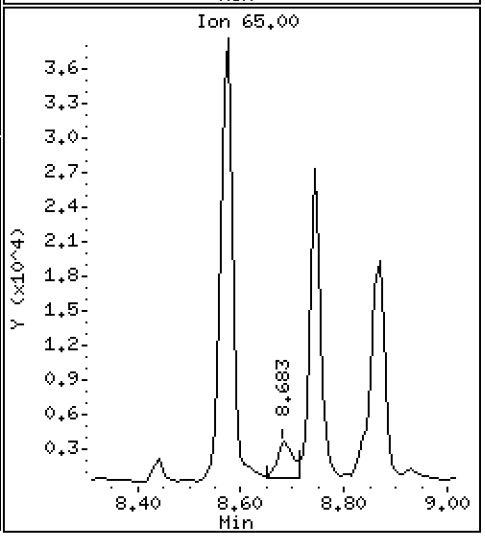


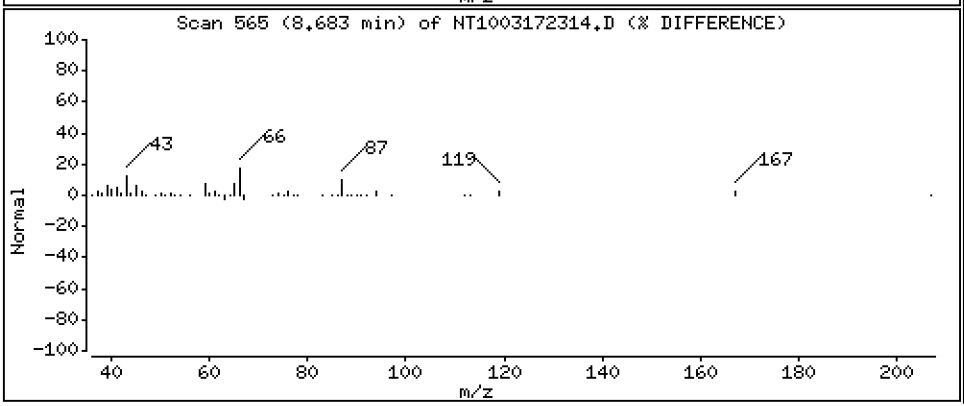












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

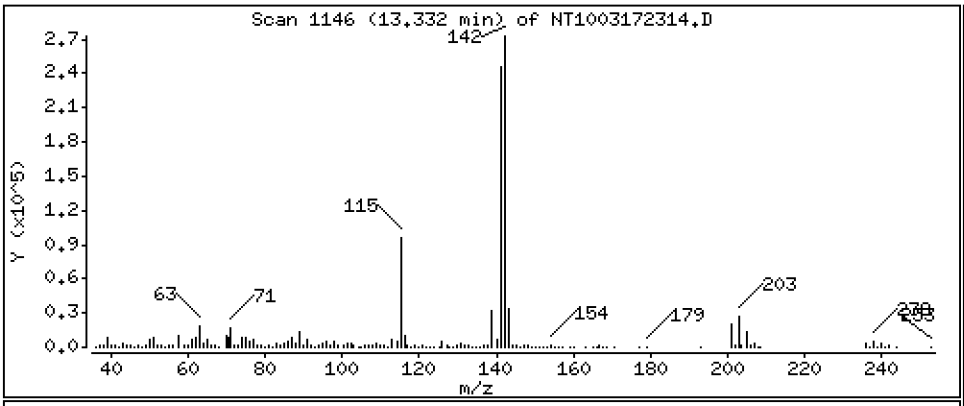
Operator: VTS

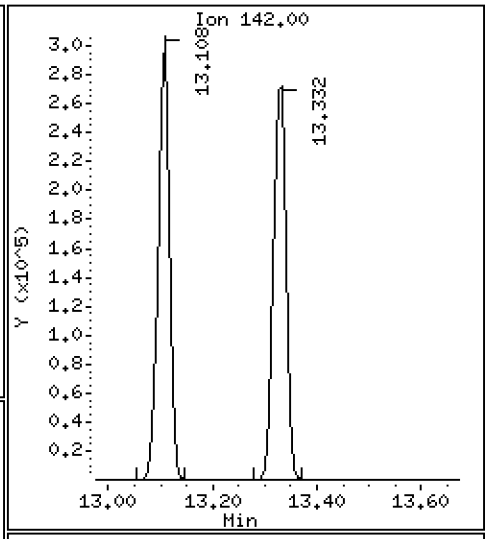
Column phase: ZB-5msi

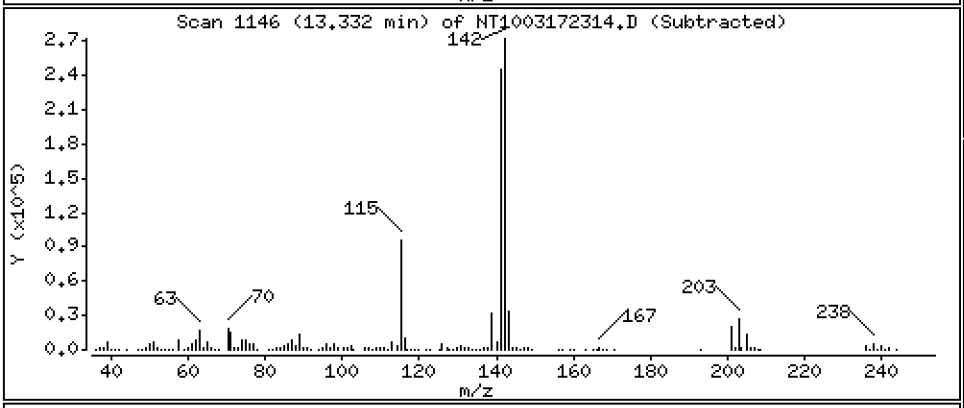
Column diameter: 0.25

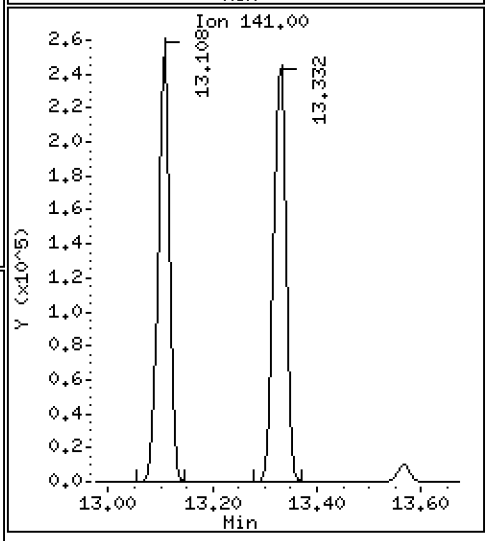
105 1-methylnaphthalene

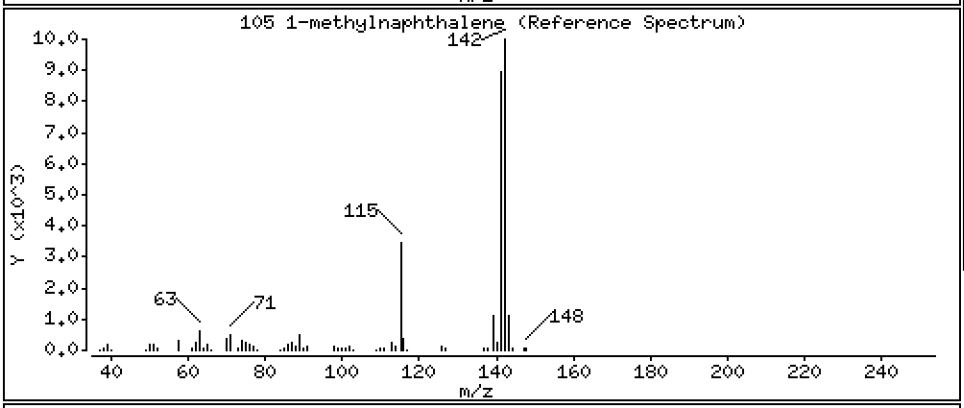
Concentration: 4.102 ug/mL

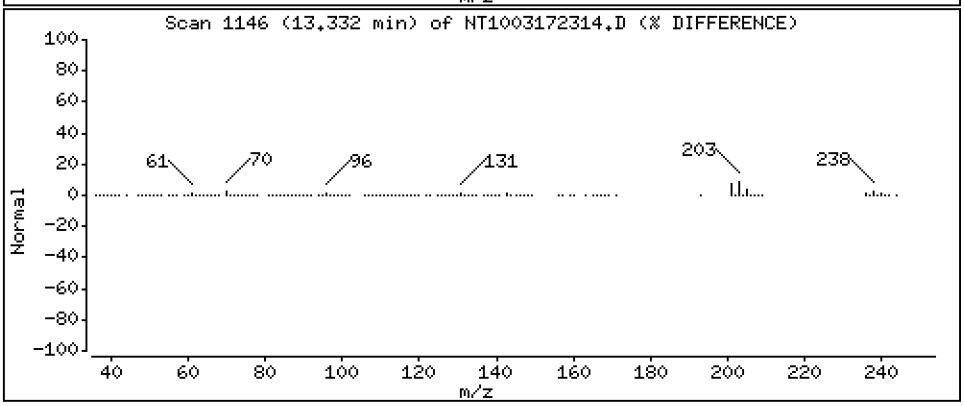












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

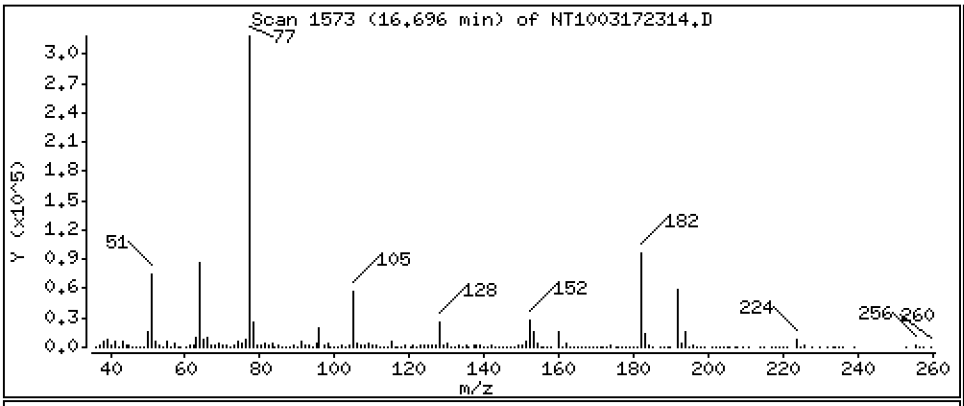
Operator: VTS

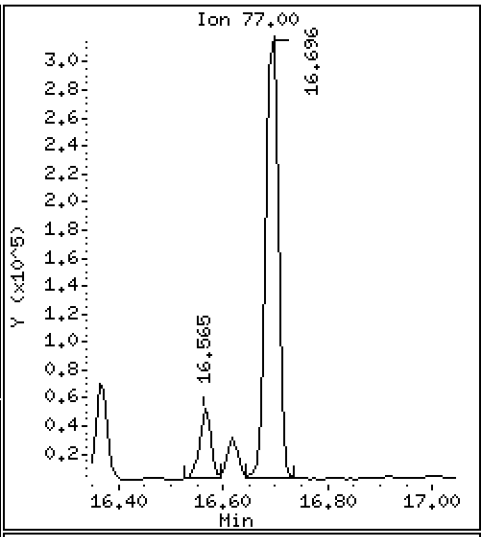
Column phase: ZB-5msi

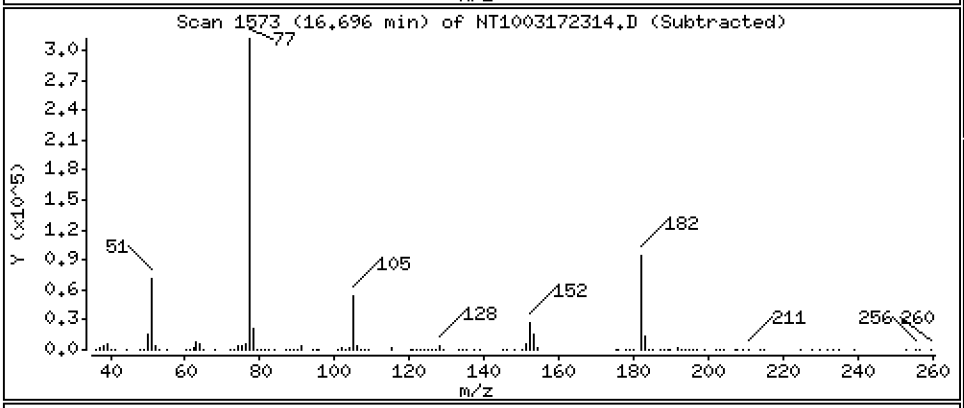
Column diameter: 0.25

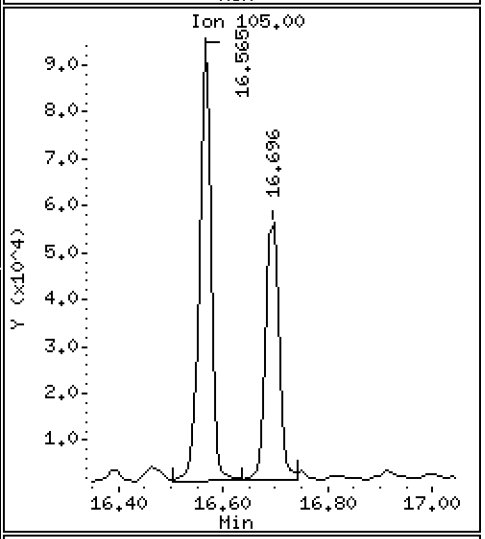
111 Azobenzene (1,2-DP-Hydrazine)

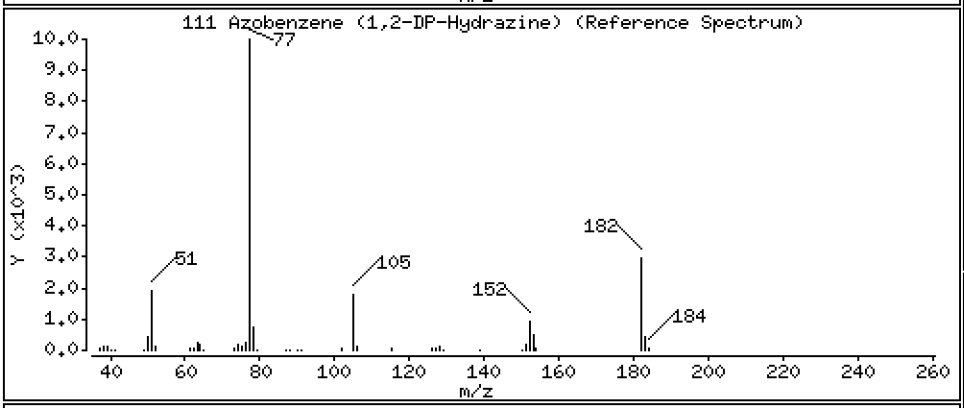
Concentration: 4.179 ug/mL

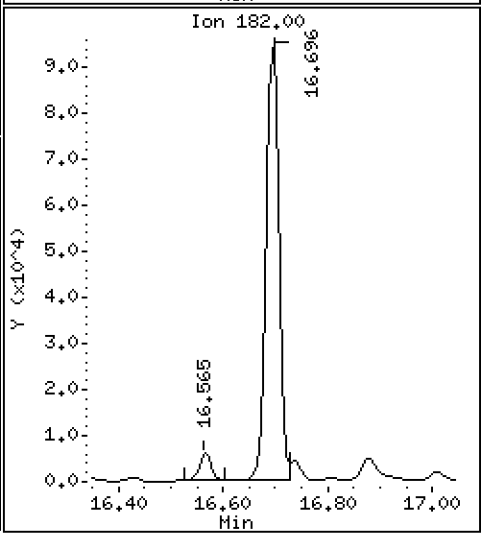


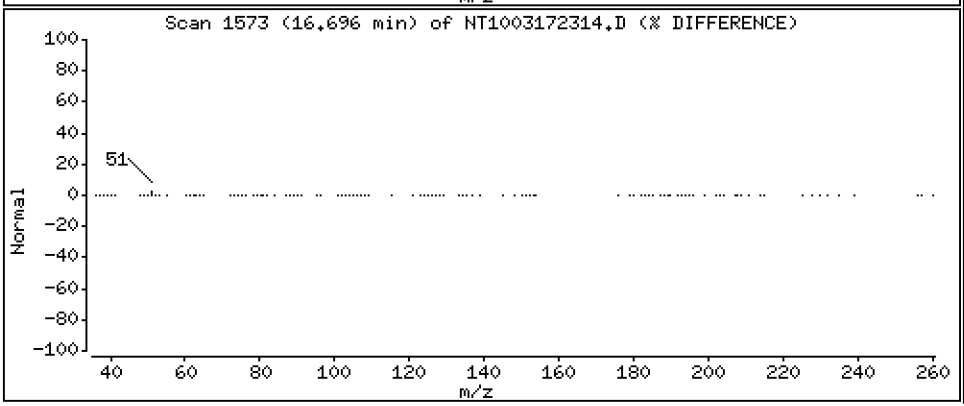












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

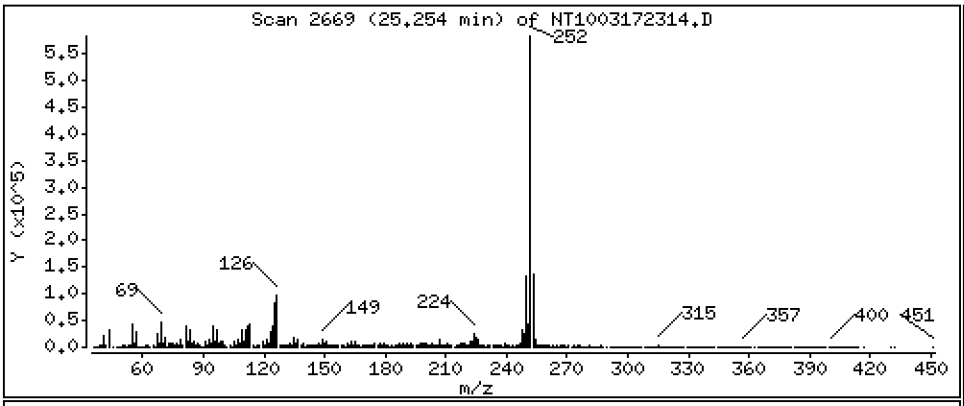
Operator: VTS

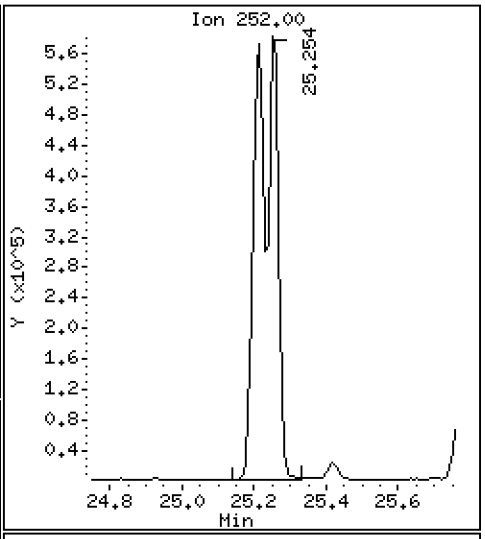
Column phase: ZB-5msi

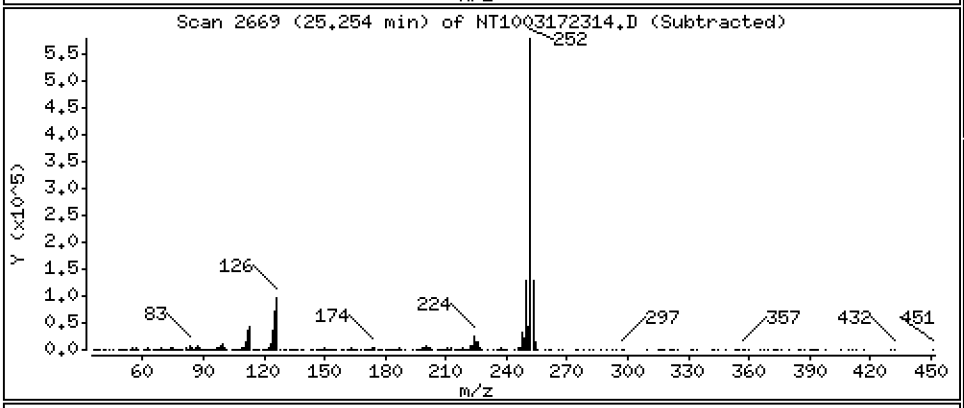
Column diameter: 0.25

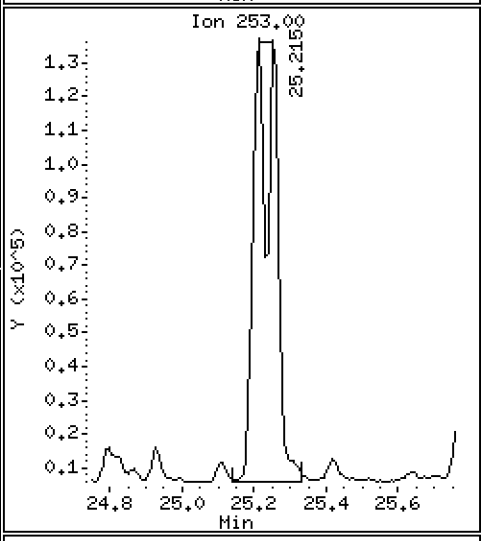
187 Total Benzofluoranthenes

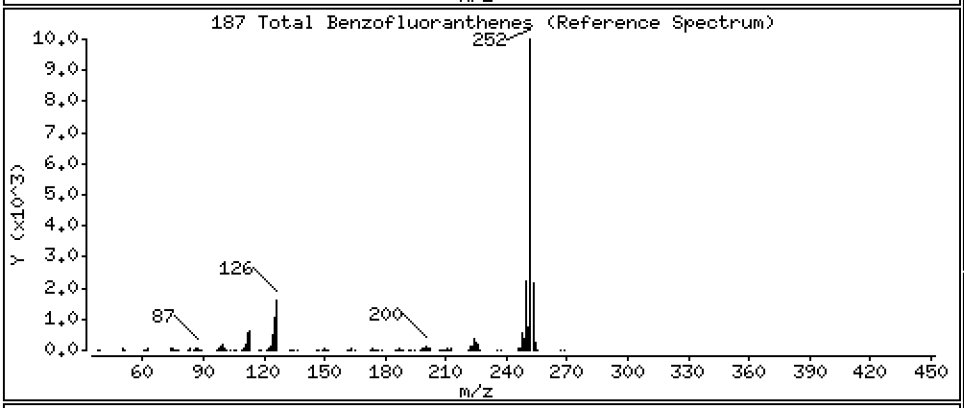
Concentration: 13.16 ug/mL

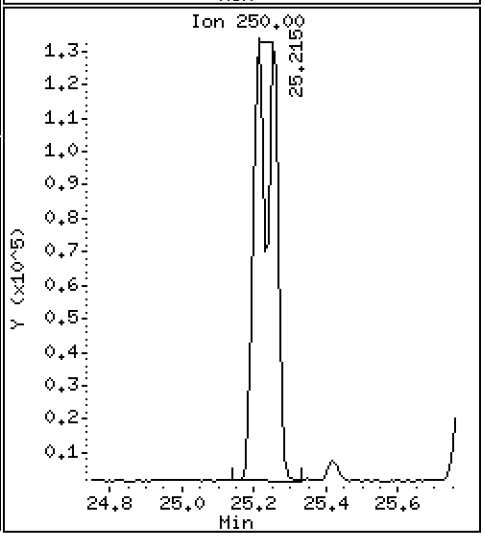


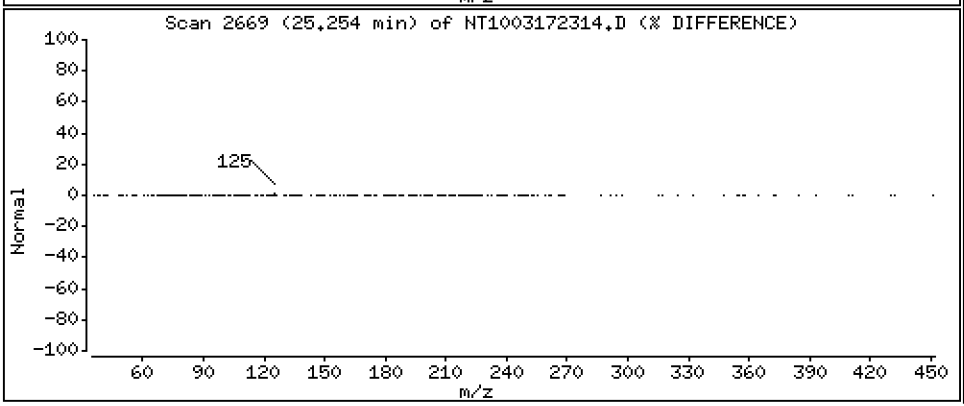












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172314.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD1

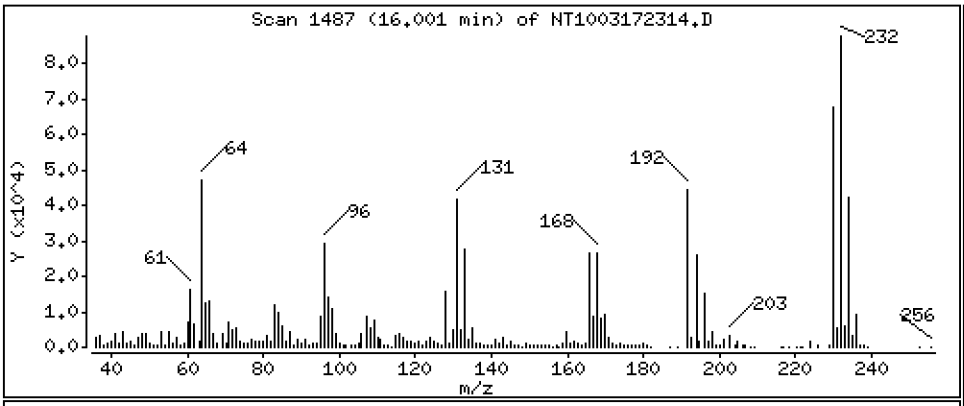
Operator: VTS

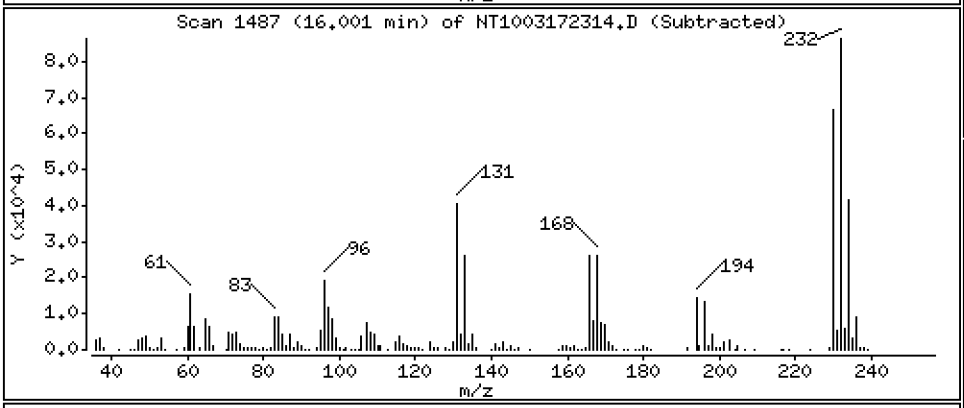
Column phase: ZB-5msi

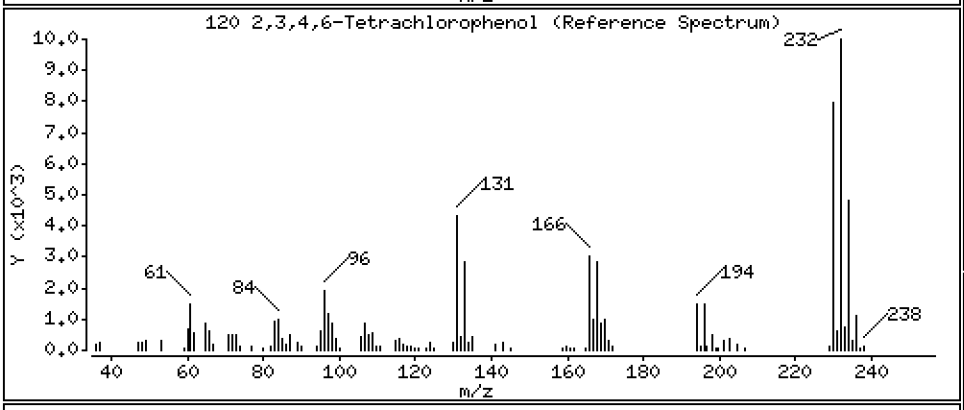
Column diameter: 0.25

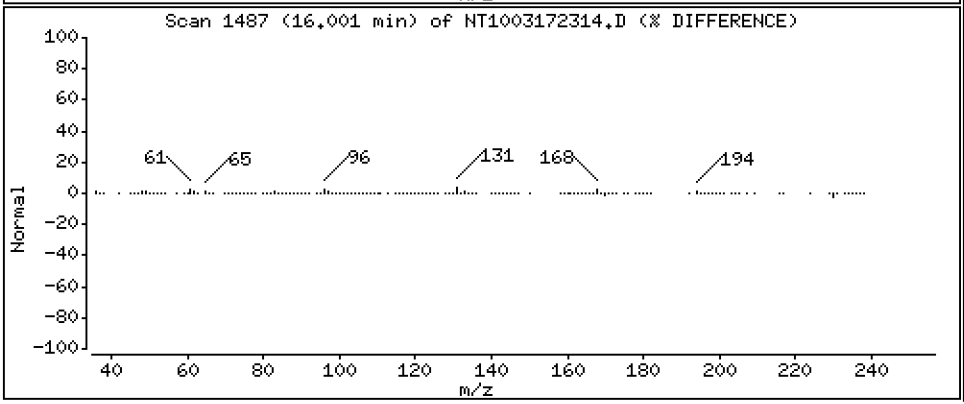
120 2,3,4,6-Tetrachlorophenol

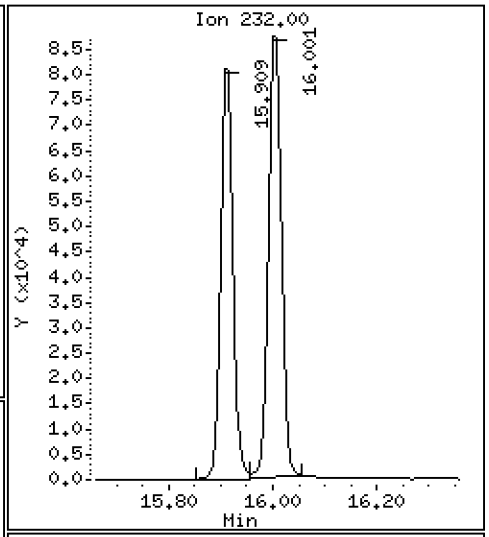
Concentration: 4.136 ug/mL

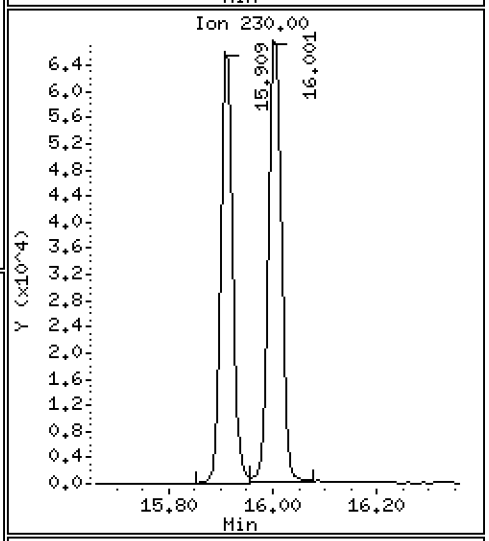


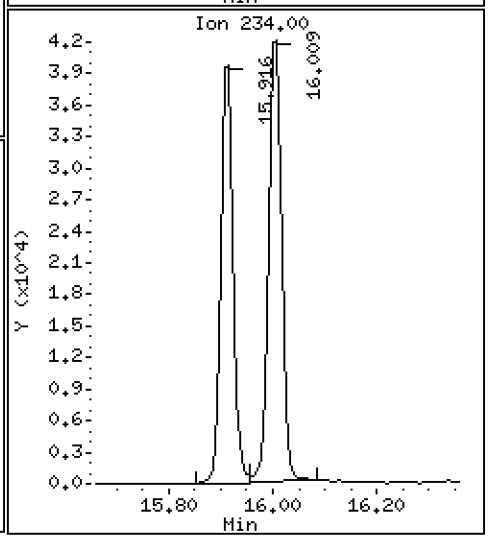












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230317.b\NT1003172314.D
Lab Smp Id: BLB0495-MSD1
Inj Date : 18-MAR-2023 02:41
Operator : VTS Inst ID: nt10.i
Smp Info : BLB0495-MSD1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230317.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.983	6.975	(0.759)	125938	2.46603	2.466
$	2 Phenol-d5	99	8.551	8.543	(0.929)	208392	3.11055	3.111
	3 Phenol	94	8.574	8.566	(0.932)	212397	3.05087	3.051
$	5 2-Chlorophenol-d4	132	8.837	8.837	(0.960)	263923	4.61330	4.613
	4 Bis(2-Chloroethyl)ether	93	8.744	8.744	(0.950)	183585	3.55548	3.555
	6 2-Chlorophenol	128	8.868	8.867	(0.964)	172435	2.89399	2.894
	7 1,3-Dichlorobenzene	146	9.139	9.138	(0.993)	189699	3.01147	3.011
*	8 1,4-Dichlorobenzene-d4	152	9.201	9.200	(1.000)	168873	4.00000	
	9 1,4-Dichlorobenzene	146	9.232	9.231	(1.003)	188597	3.09928	3.099
$	10 1,2-Dichlorobenzene-d4	152	9.558	9.557	(1.039)	122176	2.97374	2.974
	12 1,2-Dichlorobenzene	146	9.589	9.588	(1.042)	187661	3.13358	3.134
	11 Benzyl alcohol	108	9.465	9.464	(1.029)	110771	3.38990	3.390
	14 2,2'-oxybis(1-Chloropropane)	121	9.767	9.759	(1.062)	65431	3.72039	3.720
	13 2-Methylphenol	108	9.682	9.682	(1.052)	142790	2.81361	2.814
	17 Hexachloroethane	117	10.179	10.178	(1.106)	71818	2.87655	2.877
	16 N-Nitroso-di-n-propylamine	70	10.023	10.023	(1.089)	143814	3.58885	3.589
	15 4-Methylphenol	108	9.954	9.946	(1.082)	228162	4.26689	4.267
$	18 Nitrobenzene-d5	82	10.295	10.287	(0.882)	203089	3.25470	3.255
	19 Nitrobenzene	77	10.326	10.326	(0.884)	205225	3.35137	3.351
	20 Isophorone	82	10.768	10.768	(0.922)	401501	5.12529	5.125
	21 2-Nitrophenol	139	10.955	10.955	(0.938)	111561	3.73197	3.732
	22 2,4-Dimethylphenol	107	10.989	10.989	(0.941)	378003	6.72058	6.721
	23 Bis(2-Chloroethoxy)methane	93	11.193	11.192	(0.959)	226947	4.33705	4.337
	24 Benzoic acid	105	11.159	11.175	(0.956)	398124	12.3894	12.39
	25 2,4-Dichlorophenol	162	11.396	11.396	(0.976)	708251	15.7354	15.74
	26 1,2,4-Trichlorobenzene	180	11.591	11.583	(0.993)	182067	3.44598	3.446
*	27 Naphthalene-d8	136	11.676	11.676	(1.000)	618199	4.00000	
	28 Naphthalene	128	11.715	11.715	(1.003)	587908	3.58984	3.590
	29 4-Chloroaniline	127	11.854	11.838	(1.015)	102572	1.60546	1.605
	30 Hexachlorobutadiene	225	12.070	12.070	(1.034)	110935	3.58340	3.583
	31 4-Chloro-3-methylphenol	107	12.790	12.790	(1.095)	758174	15.5601	15.56
	32 2-Methylnaphthalene	142	13.107	13.099	(1.123)	459633	3.88906	3.889
	33 Hexachlorocyclopentadiene	237	13.572	13.571	(0.888)	122818	3.92270	3.923

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	13.726	13.718	(0.898)	578254	17.2940	17.29
35	2,4,5-Trichlorophenol	196	13.796	13.788	(0.903)	630855	16.9800	16.98
$ 36	2-Fluorobiphenyl	172	13.881	13.881	(0.908)	511348	3.82107	3.821
37	2-Chloronaphthalene	162	14.098	14.098	(0.923)	443079	4.08903	4.089
38	2-Nitroaniline	65	14.361	14.353	(0.940)	484503	15.9178	15.92
39	Dimethylphthalate	163	14.787	14.787	(0.968)	527578	4.80051	4.801
40	Acenaphthylene	152	14.973	14.965	(0.980)	669837	3.96711	3.967
41	2,6-Dinitrotoluene	165	14.926	14.926	(0.977)	427622	18.0119	18.01
* 42	Acenaphthene-d10	164	15.282	15.282	(1.000)	338303	4.00000	
43	3-Nitroaniline	138	15.212	15.212	(0.995)	155388	5.79881	5.799
44	Acenaphthene	153	15.344	15.344	(1.004)	450315	4.31704	4.317
45	2,4-Dinitrophenol	184	15.413	15.421	(1.009)	54650	3.78677	3.787
46	Dibenzofuran	168	15.669	15.676	(1.025)	663608	4.31412	4.314
47	4-Nitrophenol	109	15.522	15.514	(1.016)	208784	12.4849	12.48
48	2,4-Dinitrotoluene	165	15.730	15.730	(1.029)	603798	17.2898	17.29
50	Diethylphthalate	149	16.233	16.240	(1.062)	581972	5.39717	5.397
49	Fluorene	166	16.380	16.387	(1.072)	564825	4.66733	4.667
51	4-Chlorophenyl-phenylether	204	16.372	16.372	(1.071)	308541	5.36153	5.362
52	4-Nitroaniline	138	16.472	16.480	(1.078)	268250	11.1082	11.11
53	4,6-Dinitro-2-methylphenol	198	16.565	16.572	(0.905)	374843	19.4477	19.45
54	N-Nitrosodiphenylamine	169	16.619	16.626	(0.908)	381956	4.57466	4.575
$ 55	2,4,6-Tribromophenol	330	16.919	16.919	(1.107)	107798	6.83349	6.833
56	4-Bromophenyl-phenylether	248	17.374	17.374	(0.949)	173364	4.96333	4.963
57	Hexachlorobenzene	284	17.691	17.691	(0.966)	159819	4.36412	4.364
58	Pentachlorophenol	266	18.048	18.047	(0.986)	383694	17.1202	17.12
* 59	Phenanthrene-d10	188	18.311	18.310	(1.000)	624502	4.00000	
60	Phenanthrene	178	18.357	18.357	(1.003)	921484	5.41132	5.411
61	Anthracene	178	18.450	18.457	(1.008)	771160	4.72089	4.721
62	Carbazole	167	18.783	18.782	(1.026)	732661	5.00530	5.005
63	Di-n-butylphthalate	149	19.572	19.572	(1.069)	1015970	5.19068	5.191
64	Fluoranthene	202	20.756	20.732	(0.889)	1200366	6.09954	6.100
65	Pyrene	202	21.173	21.158	(0.907)	1374457	6.80836	6.808
$ 66	Terphenyl-d14	244	21.436	21.436	(0.918)	658919	4.34626	4.346
67	Butylbenzylphthalate	149	22.350	22.358	(0.958)	422703	5.74836	5.748
68	Benzo(a)anthracene	228	23.318	23.310	(0.999)	1038233	6.00579	6.006
* 69	Chrysene-d12	240	23.341	23.341	(1.000)	489765	4.00000	
70	3,3'-Dichlorobenzidine	252	23.264	23.264	(0.997)	150549	2.71881	2.719
71	Chrysene	228	23.388	23.380	(1.002)	1123153	6.65010	6.650
72	bis(2-Ethylhexyl)phthalate	149	23.364	23.380	(0.959)	268821	2.18948	2.189
* 134	Di-n-octylphthalate-d4	153	24.355	24.363	(1.000)	838372	4.00000	
73	Di-n-octylphthalate	149	24.363	24.378	(1.000)	191020	0.87066	0.8707
74	Benzo(b)fluoranthene	252	25.215	25.207	(0.970)	1190214	6.57795	6.578
75	Benzo(k)fluoranthene	252	25.253	25.253	(0.971)	1240814	6.75347	6.753(H)
76	Benzo(a)pyrene	252	25.881	25.873	(0.996)	1034478	6.39472	6.395
* 77	Perylene-d12	264	25.997	25.997	(1.000)	558197	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	28.727	28.711	(1.105)	1084878	5.27123	5.271
79	Dibenzo(a,h)anthracene	278	28.734	28.726	(1.105)	833212	4.87632	4.876
80	Benzo(g,h,i)perylene	276	29.534	29.519	(1.136)	963338	5.40859	5.409
90	N-Nitrosodimethylamine	74	4.843	4.850	(0.526)	8159	0.25042	0.2504
91	Aniline	93	8.682	8.659	(0.944)	36178	0.50716	0.5072
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	13.332	13.324	(1.142)	444145	4.10169	4.102
111	Azobenzene (1,2-DP-Hydrazine)	77	16.696	16.696	(1.093)	503350	4.17885	4.179

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.253	25.253	(0.971)	2299773	13.1640	13.16
120 2,3,4,6-Tetrachlorophenol	232	16.001	16.008	(1.047)	144606	4.13604	4.136

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172314.D
Lab Smp Id: BLB0495-MSD1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230317.b\ABN.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:02
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	132765	66383	265530	168873	27.20
27 Naphthalene-d8	497947	248974	995894	618199	24.15
42 Acenaphthene-d10	271928	135964	543856	338303	24.41
59 Phenanthrene-d10	497390	248695	994780	624502	25.56
69 Chrysene-d12	391403	195702	782806	489765	25.13
134 Di-n-octylphthala	674651	337326	1349302	838372	24.27
77 Perylene-d12	408663	204332	817326	558197	36.59

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.20	8.70	9.70	9.20	0.00
27 Naphthalene-d8	11.68	11.18	12.18	11.68	0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	0.00
59 Phenanthrene-d10	18.31	17.81	18.81	18.31	0.00
69 Chrysene-d12	23.34	22.84	23.84	23.34	0.00
134 Di-n-octylphthala	24.36	23.86	24.86	24.36	-0.03
77 Perylene-d12	26.00	25.50	26.50	26.00	0.00

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

REVIEW SUMMARY FOR FILE - NT1003172314.D

Lab ID: BLB0495-MSD1
nt10.i, 20230317.b\ABN.m,   18-MAR-2023 02:41

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1003172302.D

On Column LOD for nt10.i, 20230317.b\ABN.m, ICAL.sub = 0.0000

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

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E

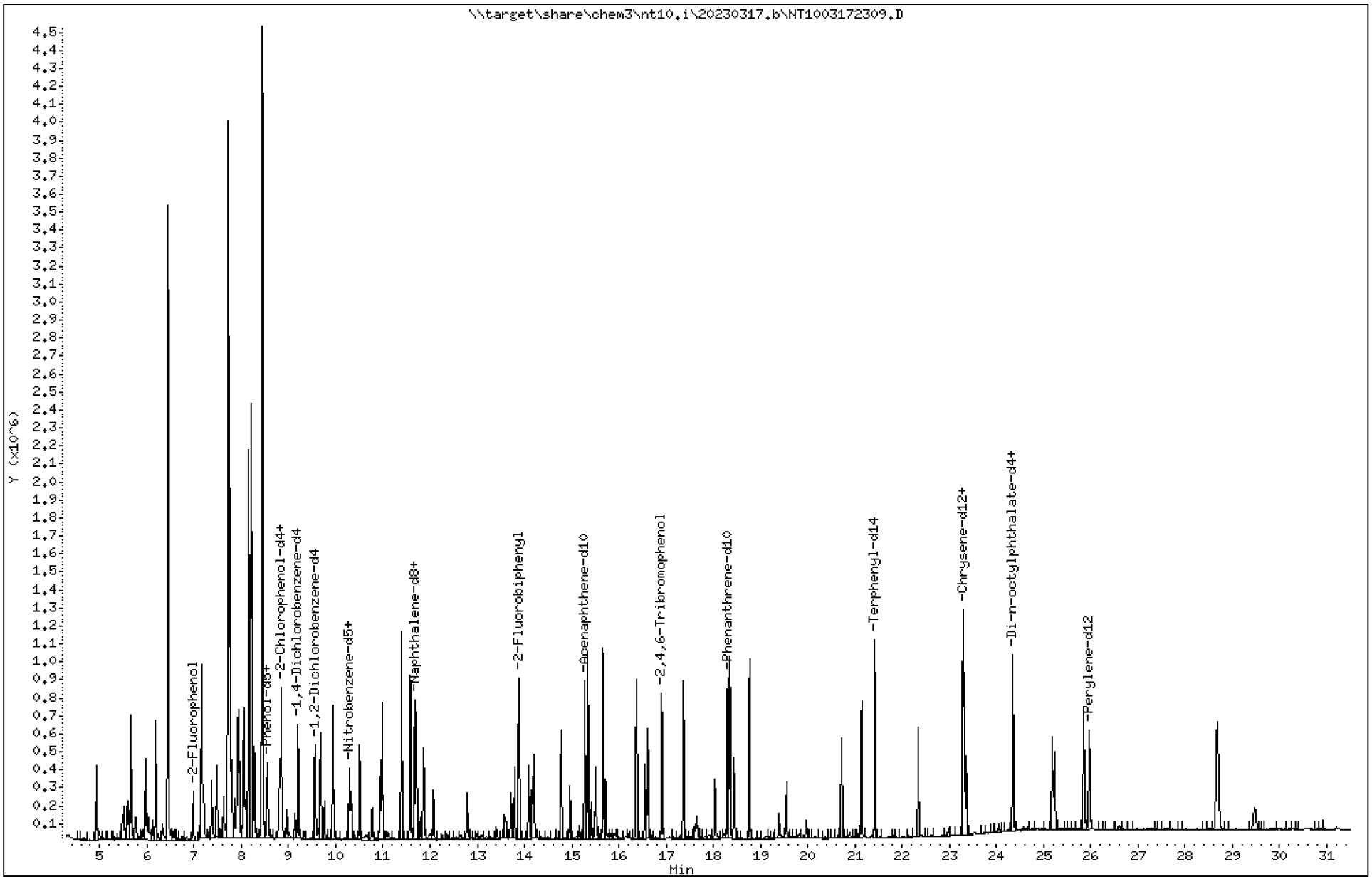
Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLB0495-SRM1
Batch: BLB0495
Initial/Final: 1 g / 1 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 03/17/2023 23:31
Standard ID: K003477
Expires: 01/31/2024
Standard Lot#: CRM 143 (LRAC8918)
Description: CRM 143 BNAs - Sandy Loam

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Phenol	2660.0	1250	43.9	200		46.8	26 - 174
4-Methylphenol	6617.0	4840	73.9	200		73.1	40 - 160
Naphthalene	4458.0	3540	42.4	200	B	79.5	25 - 175
Acenaphthylene	1948.0	1400	62.4	200		71.7	37 - 167
Dimethylphthalate	4537.0	3880	43.9	200		85.6	41 - 159
Acenaphthene	5489.0	4510	52.2	200		82.2	41 - 159
Dibenzofuran	6130.0	5040	141	200		82.2	45 - 155
Fluorene	3724.0	3100	146	200		83.2	44 - 156
Phenanthrene	5052.0	4060	87.2	200		80.5	46 - 154
Anthracene	2866.0	1990	71.9	200		69.5	42 - 158
Fluoranthene	2497.0	2110	60.9	200		84.6	39 - 161
Pyrene	2964.0	2670	56.8	200		90.2	38 - 162
Butylbenzylphthalate	3511.0	3430	94.1	200		97.6	36 - 164
Benzo(a)anthracene	5751.0	4990	59.6	200		86.8	49 - 151
Chrysene	1477.0	1190	60.6	200		80.8	45 - 155
bis(2-Ethylhexyl)phthalate	2905.0	704	54.6	500	*	24.2 *	26 - 174
Benzofluoranthenes, Total	6534.0	5010	100	400		76.7	40 - 160
Benzo(a)pyrene	5902.0	4390	42.3	200		74.5	43 - 157
Indeno(1,2,3-cd)pyrene	3914.0	3350	147	200		85.6	22 - 178
Dibenzo(a,h)anthracene	3420.0	3070	172	200		89.8	37 - 163
Benzo(g,h,i)perylene	1380.0	1230	136	200		88.9	35 - 165

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172309.D
Date : 17-MAR-2023 23:31
Client ID:
Sample Info: BLB0495-SRM1

Instrument: nt10.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

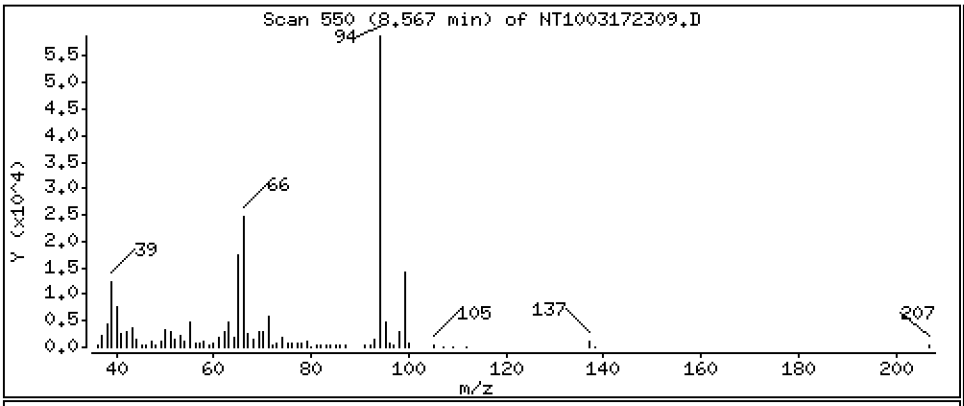
Operator: VTS

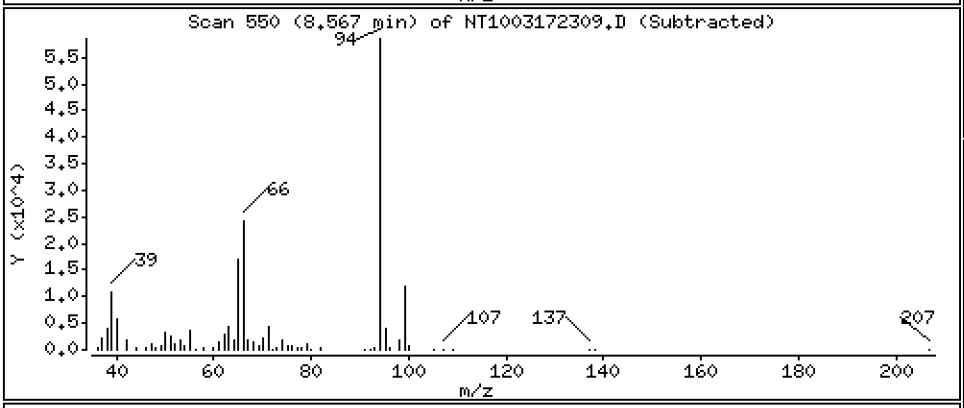
Column phase: ZB-5msi

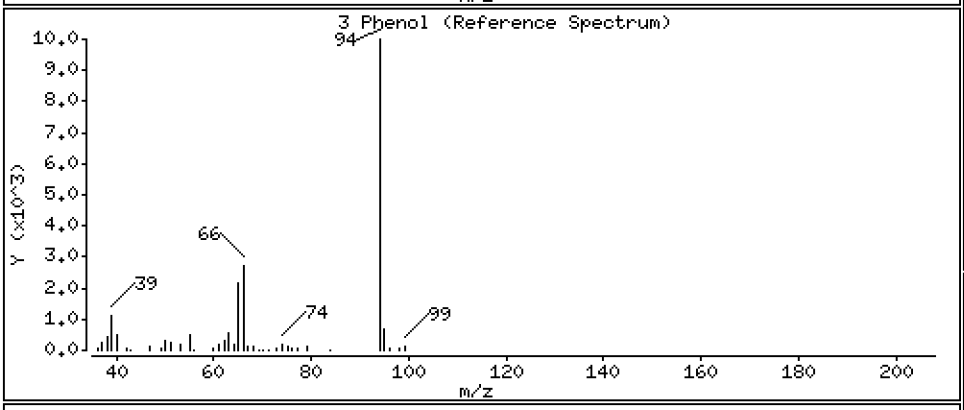
Column diameter: 0.25

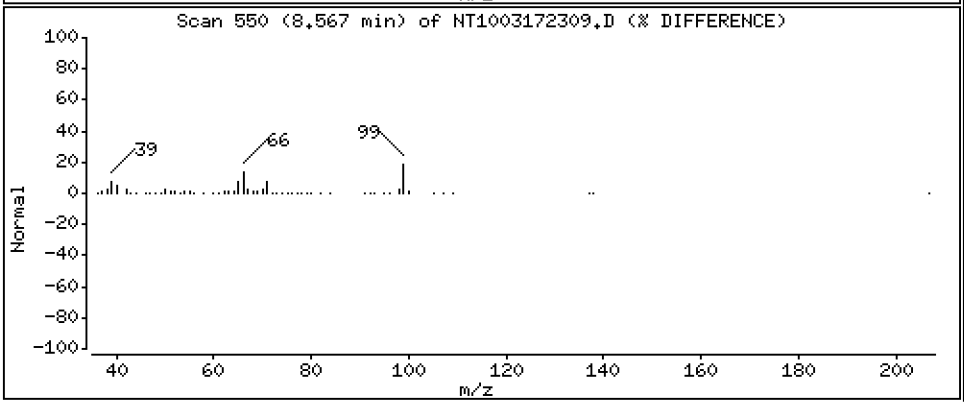
3 Phenol

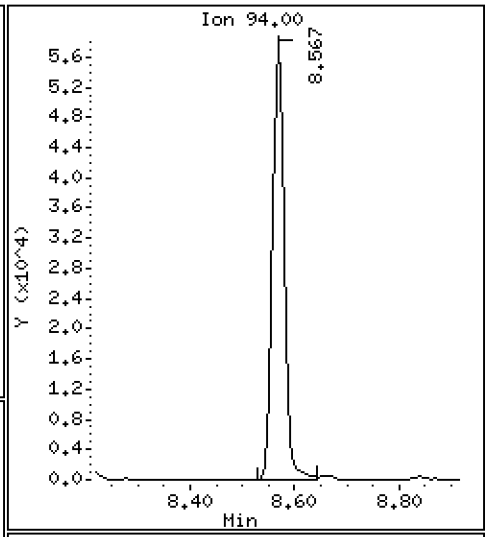
Concentration: 1.245 ug/mL

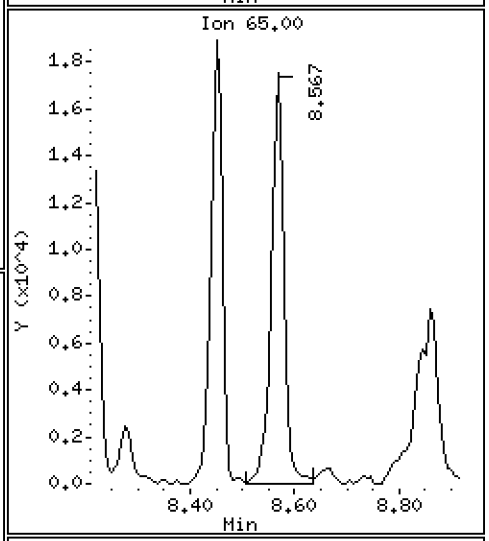


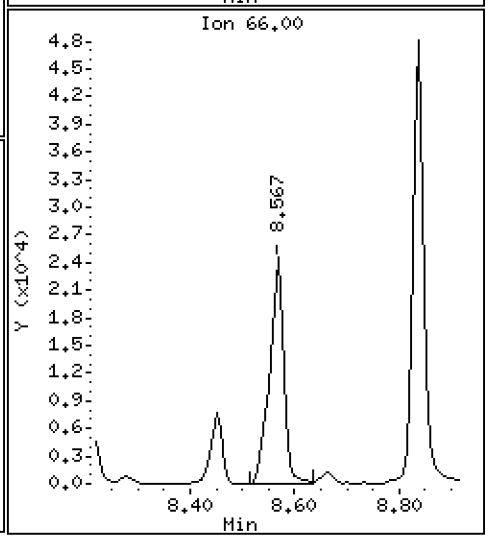












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172309.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

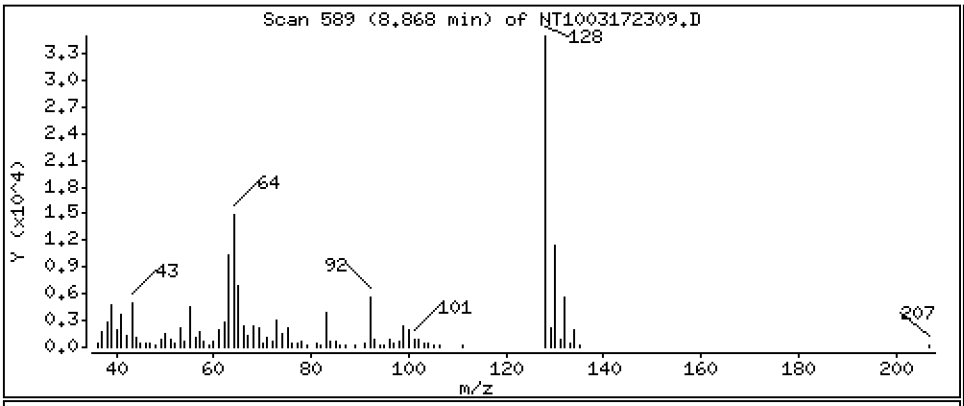
Operator: VTS

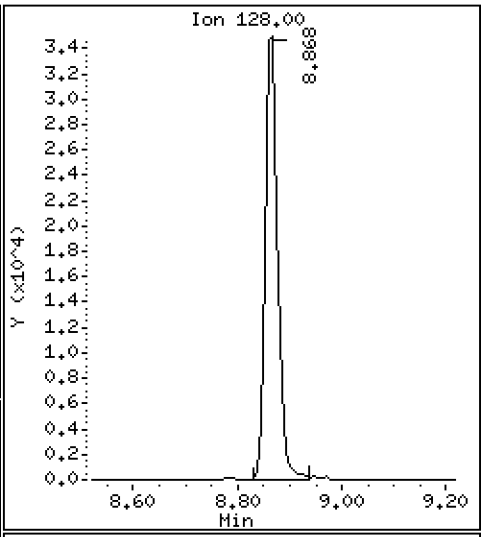
Column phase: ZB-5msi

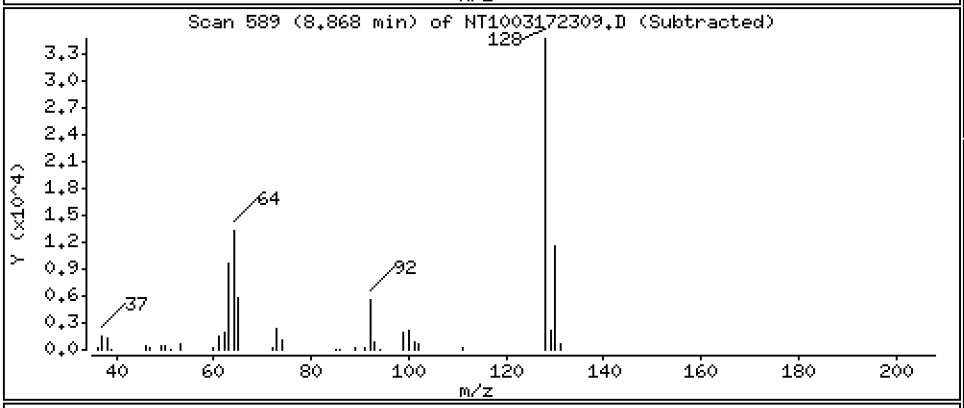
Column diameter: 0.25

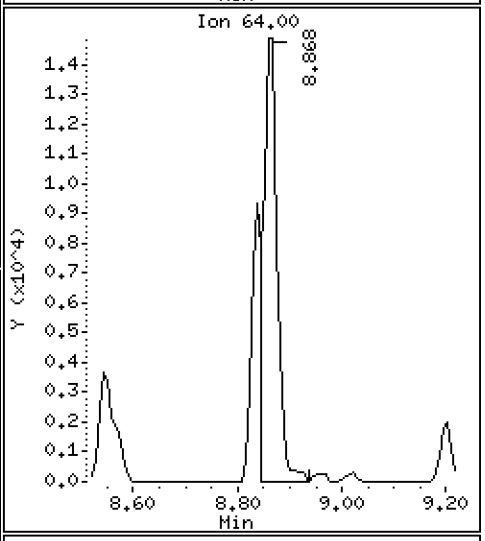
6 2-Chlorophenol

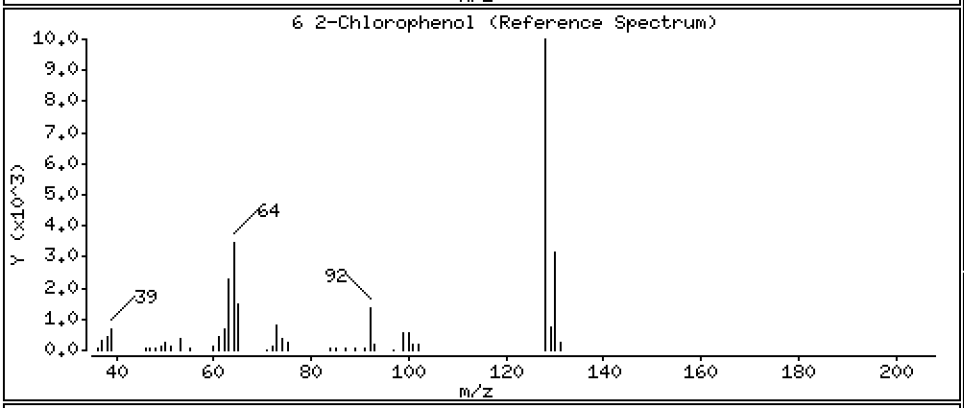
Concentration: 0.9816 ug/mL

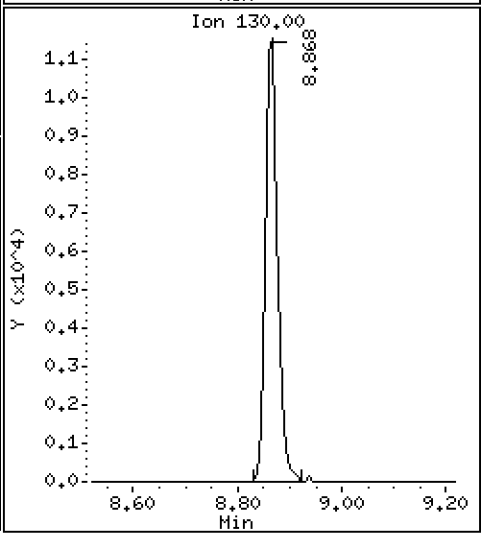


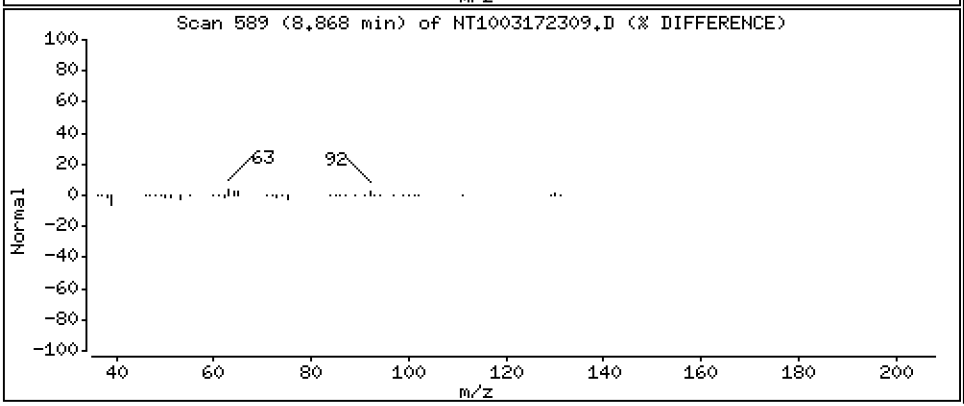












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

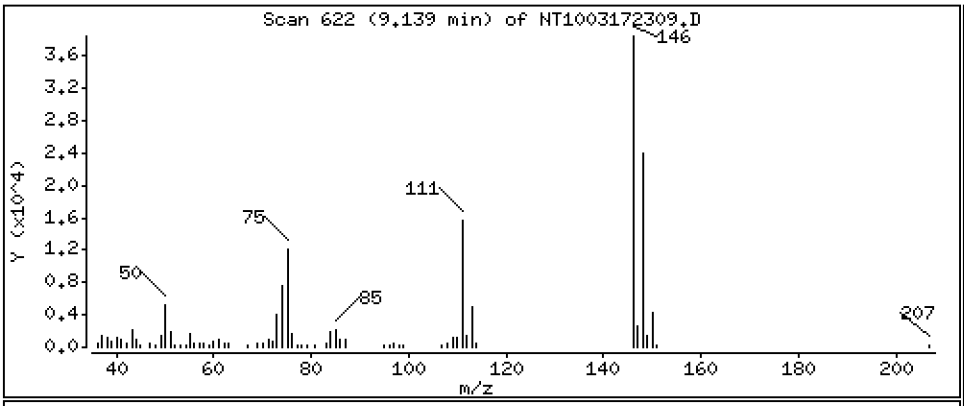
Operator: VTS

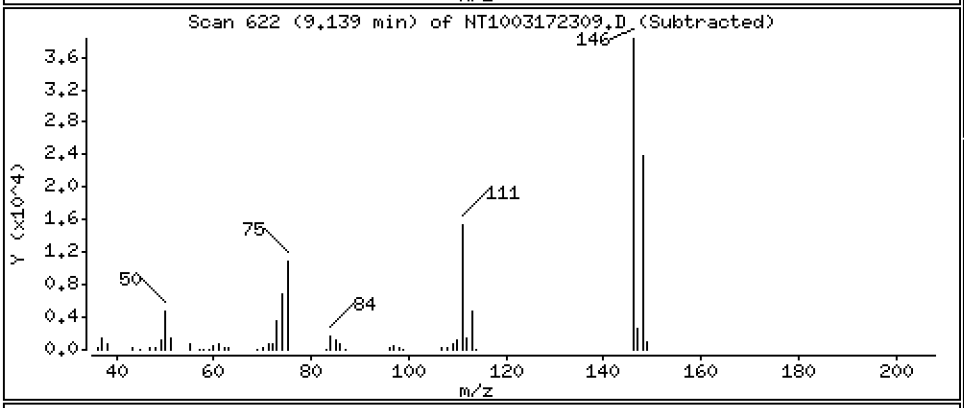
Column phase: ZB-5msi

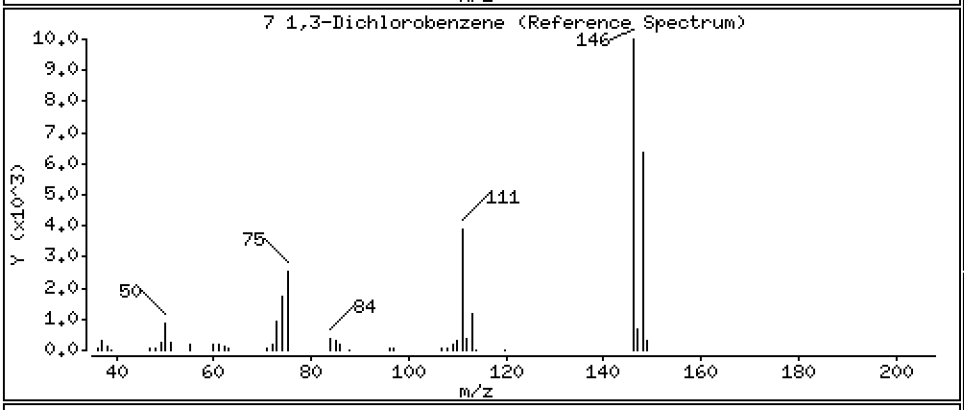
Column diameter: 0.25

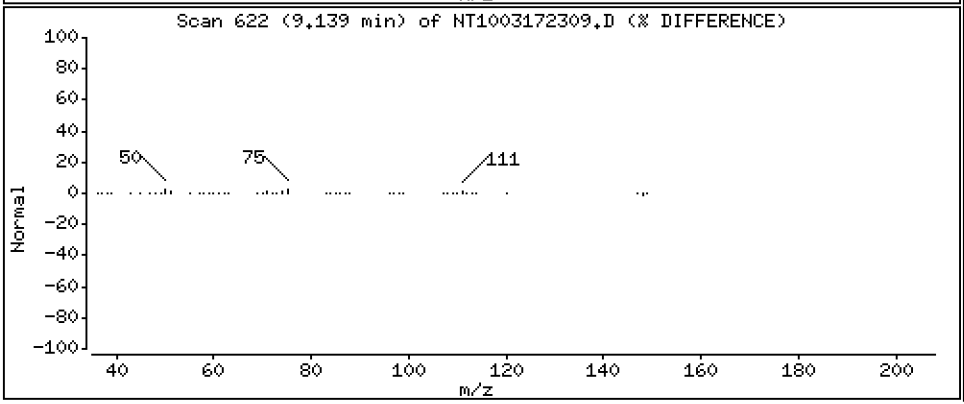
7 1,3-Dichlorobenzene

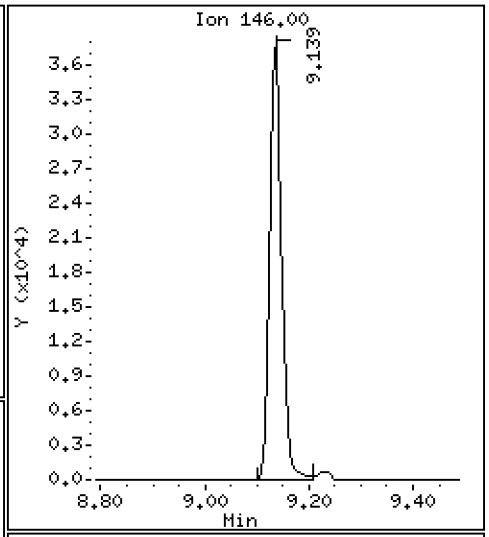
Concentration: 0.9687 ug/mL

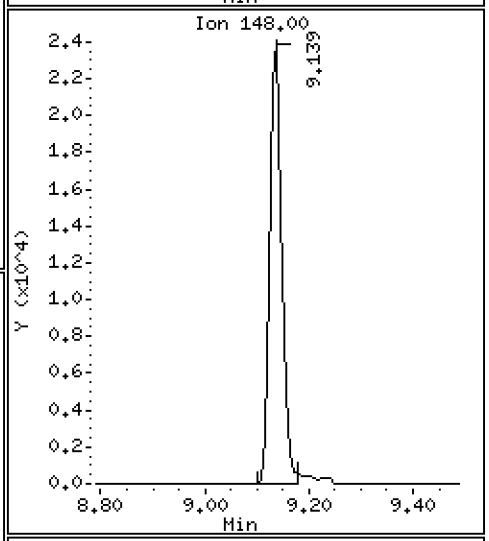


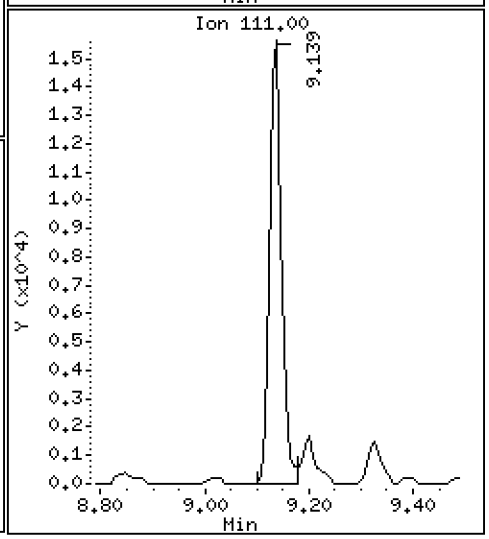












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

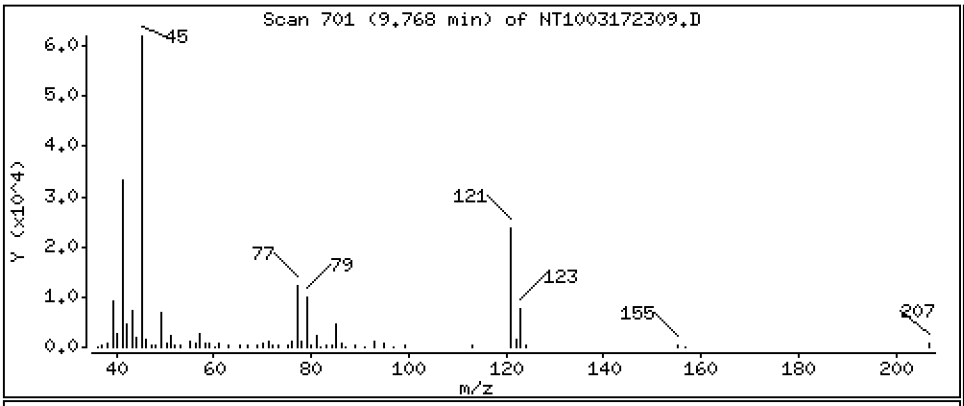
Operator: VTS

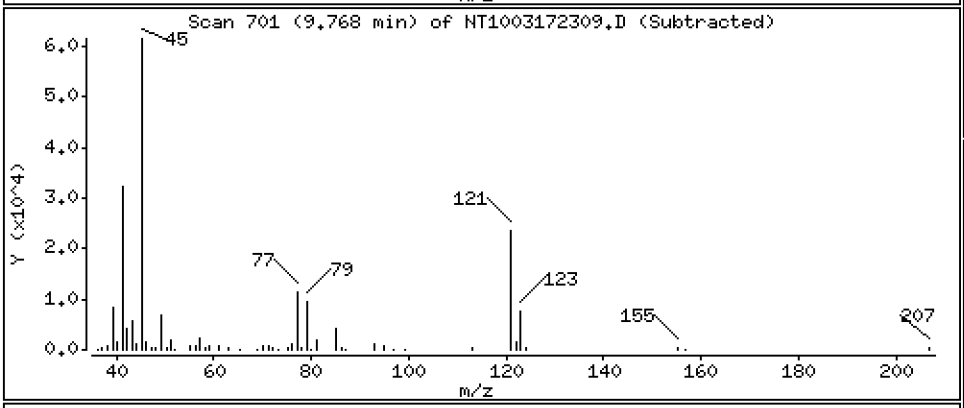
Column phase: ZB-5msi

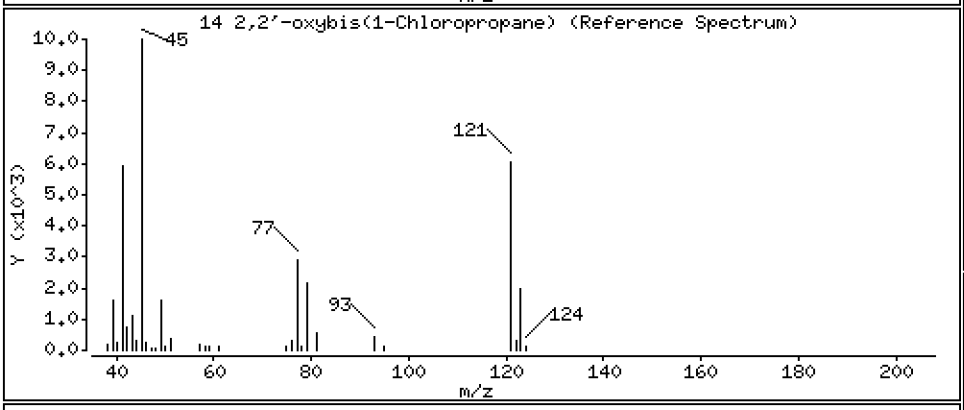
Column diameter: 0.25

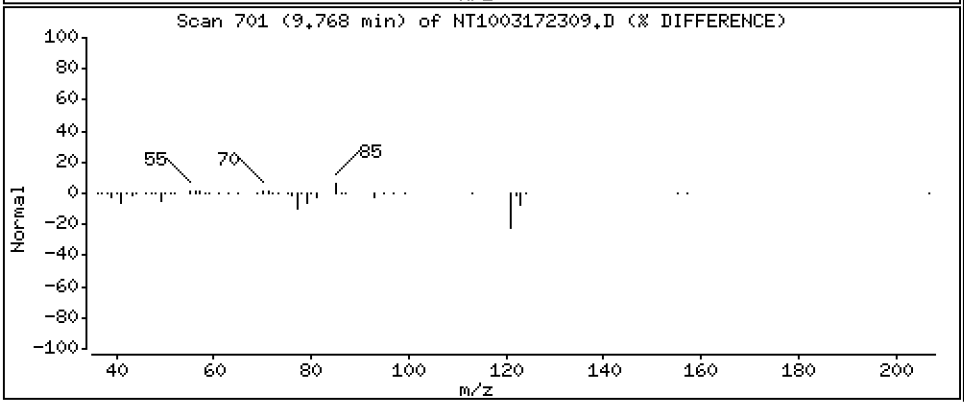
14 2,2'-oxybis(1-Chloropropane)

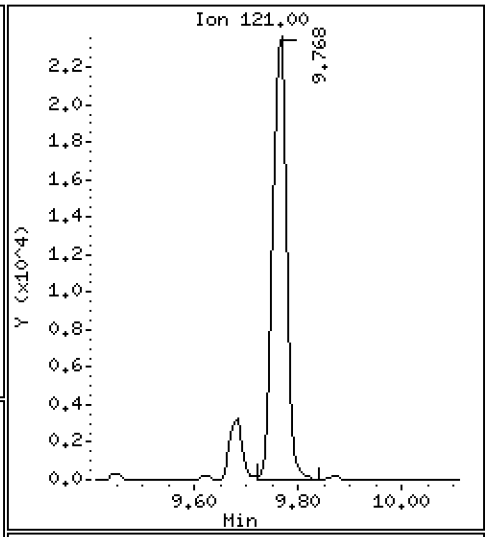
Concentration: 2.439 ug/mL

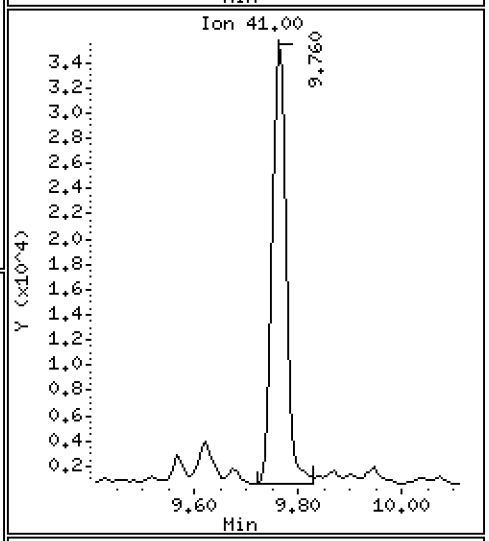


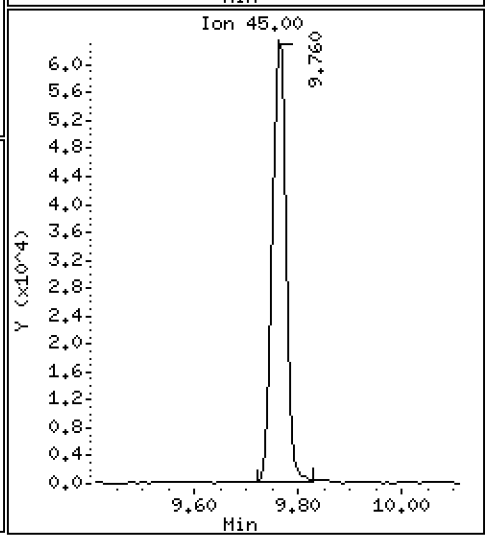












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

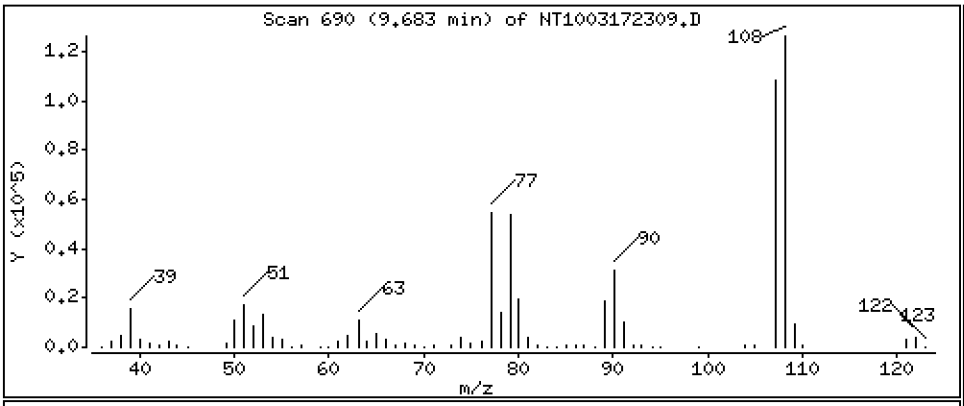
Operator: VTS

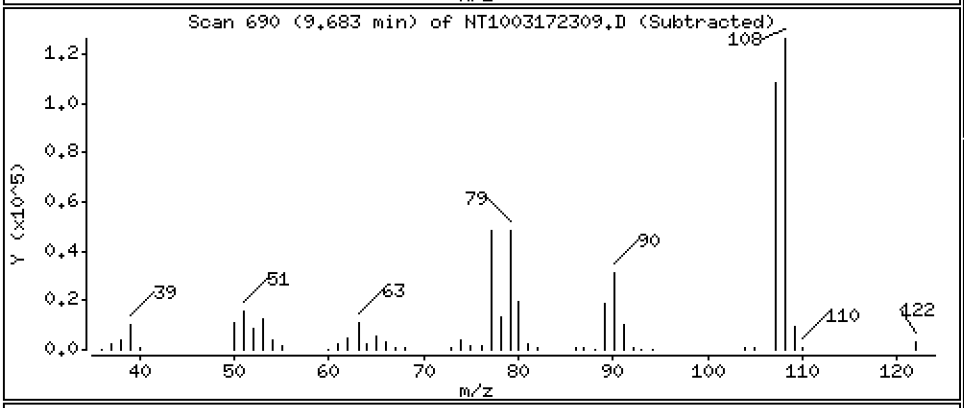
Column phase: ZB-5msi

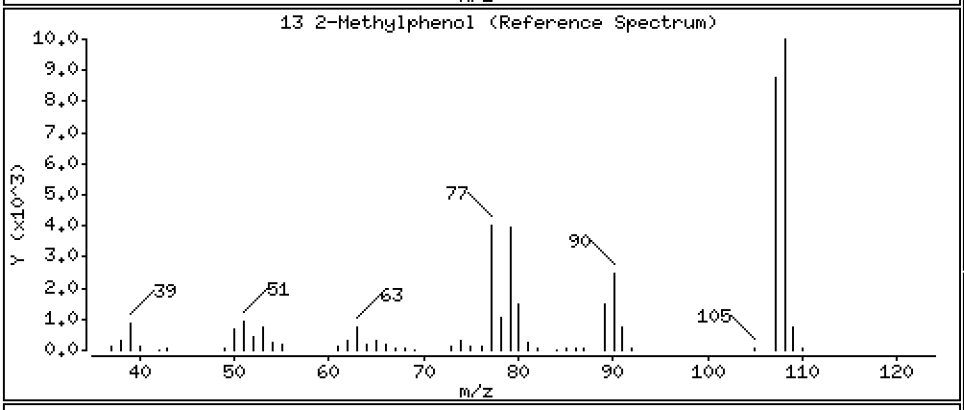
Column diameter: 0.25

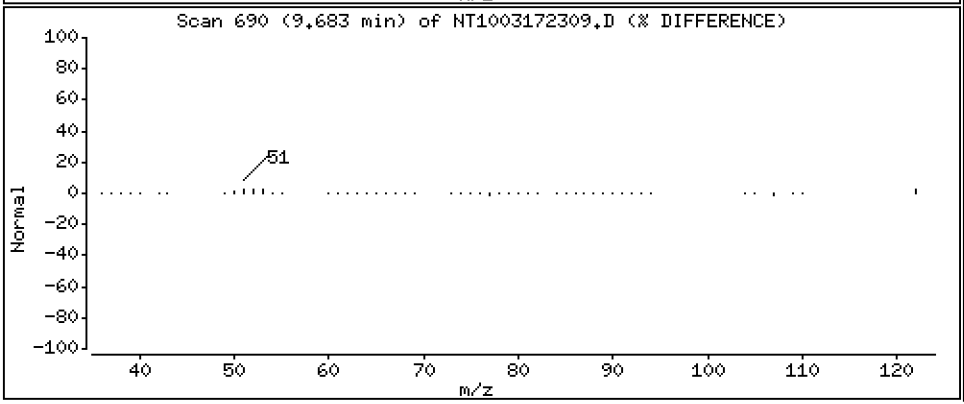
13 2-Methylphenol

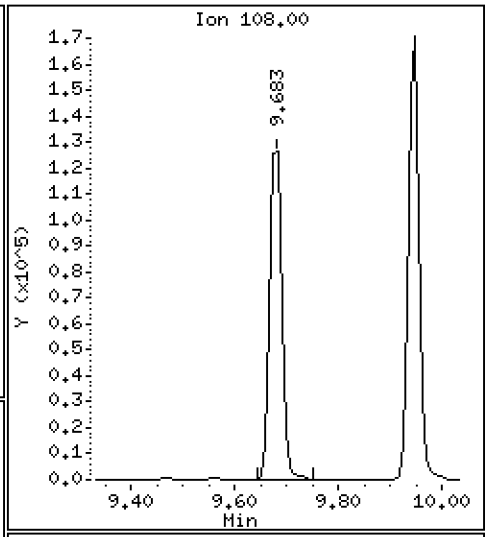
Concentration: 3.937 ug/mL

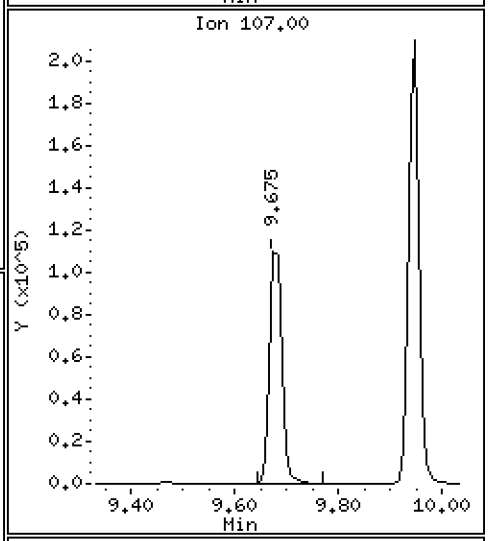


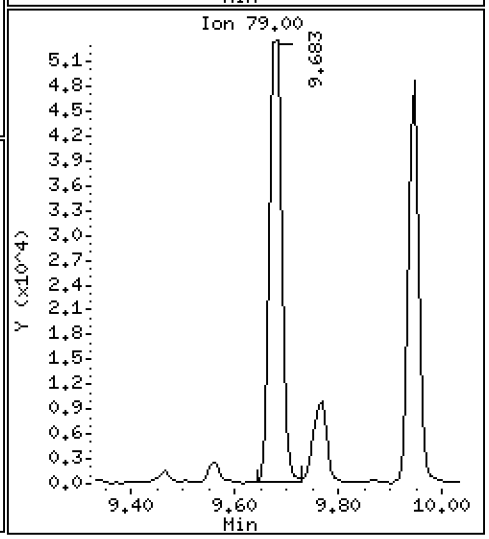












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

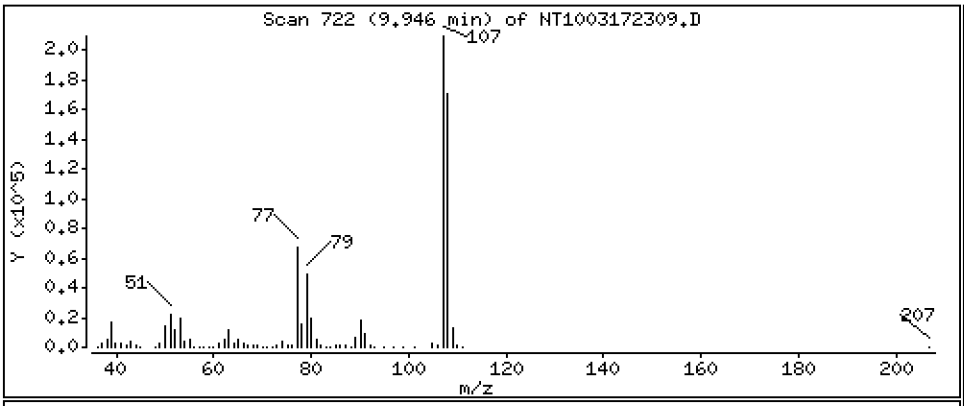
Operator: VTS

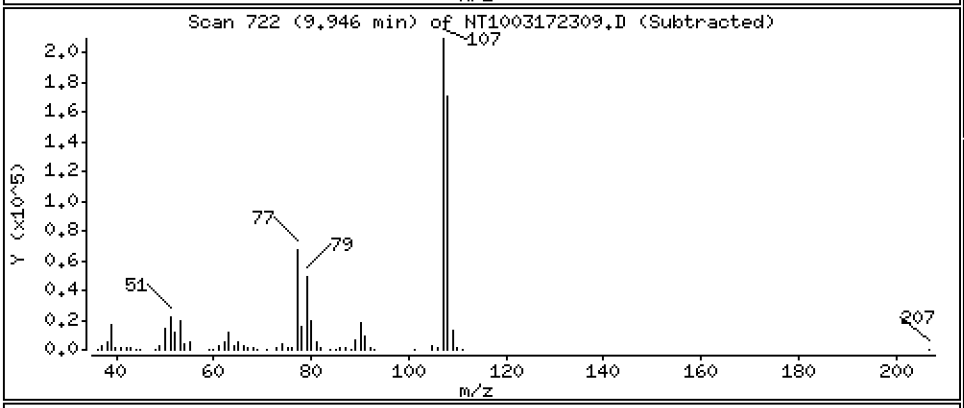
Column phase: ZB-5msi

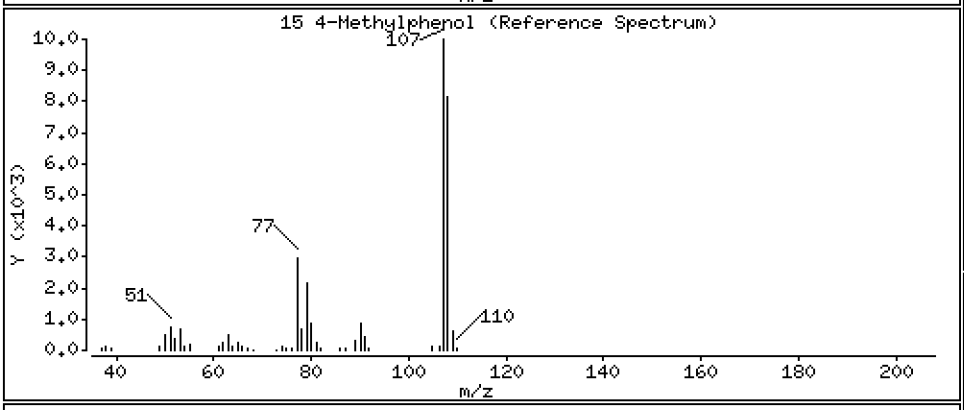
Column diameter: 0.25

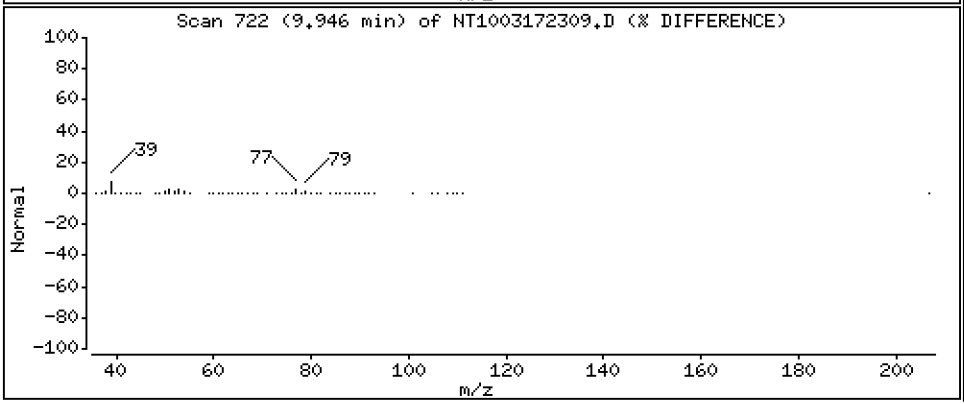
15 4-Methylphenol

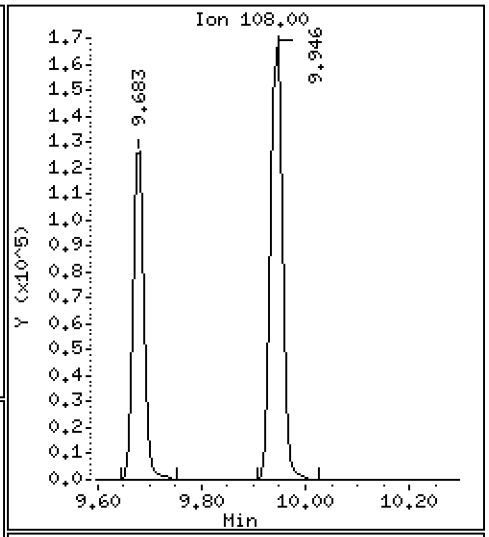
Concentration: 4.836 ug/mL

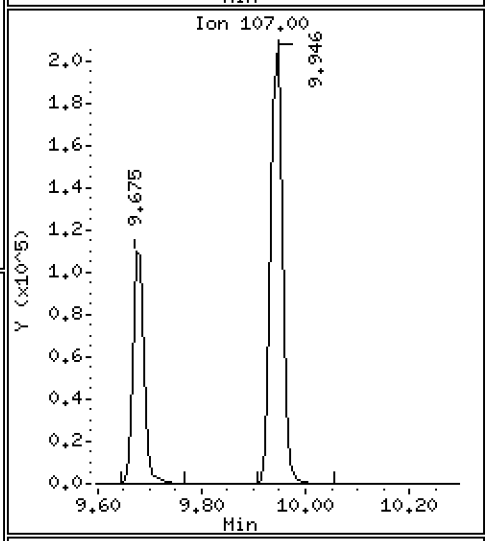


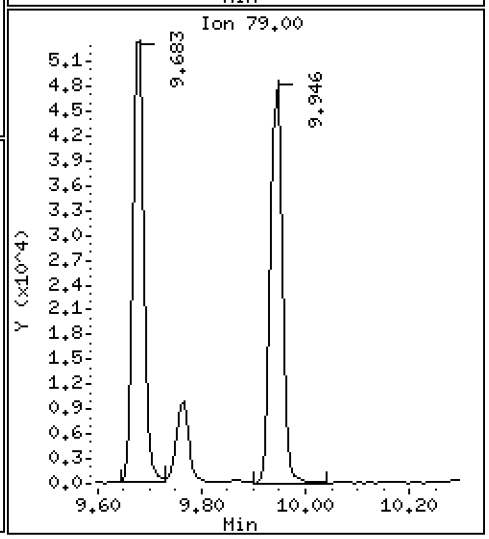












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

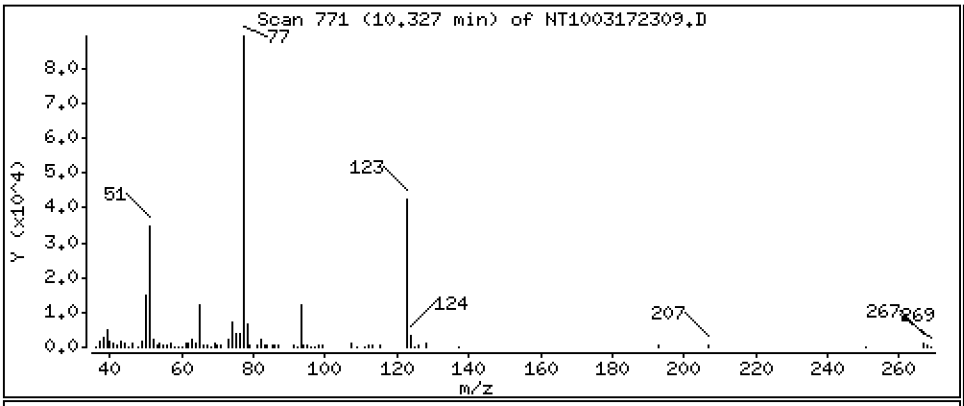
Operator: VTS

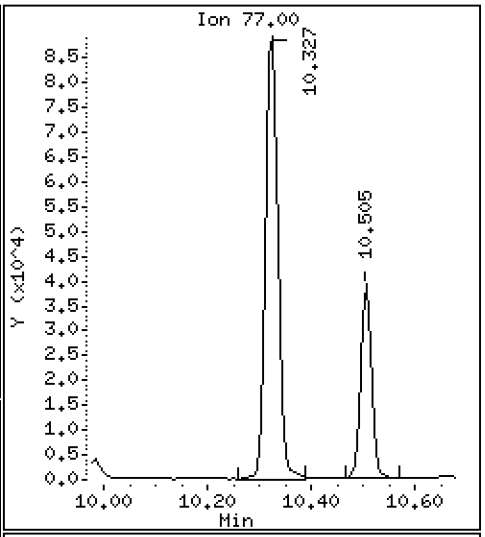
Column phase: ZB-5msi

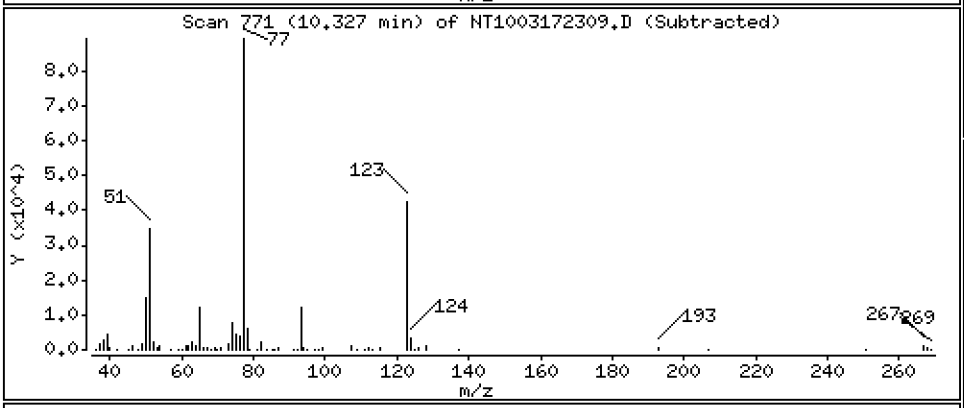
Column diameter: 0.25

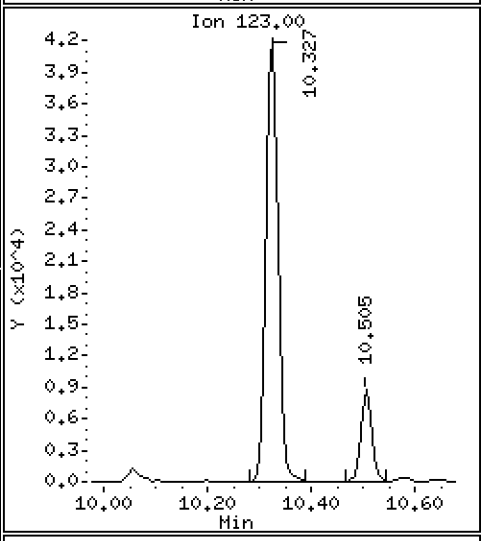
19 Nitrobenzene

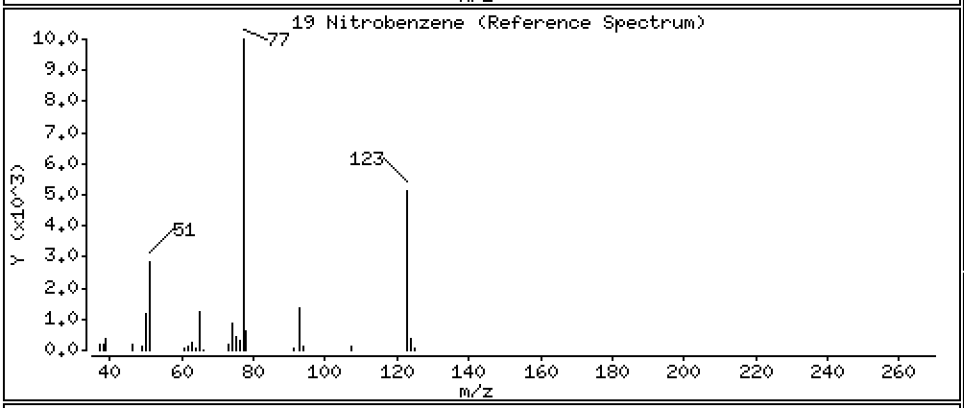
Concentration: 2.405 ug/mL

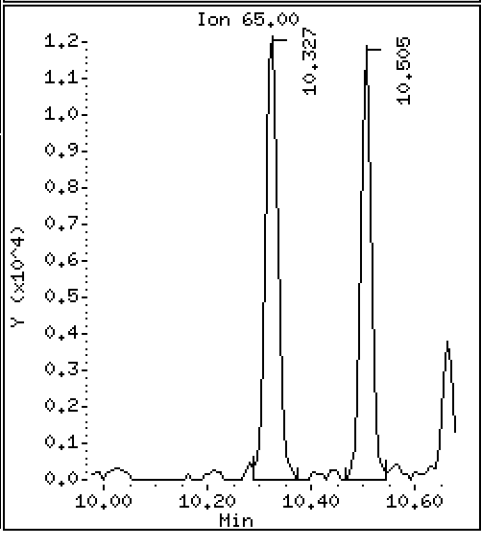


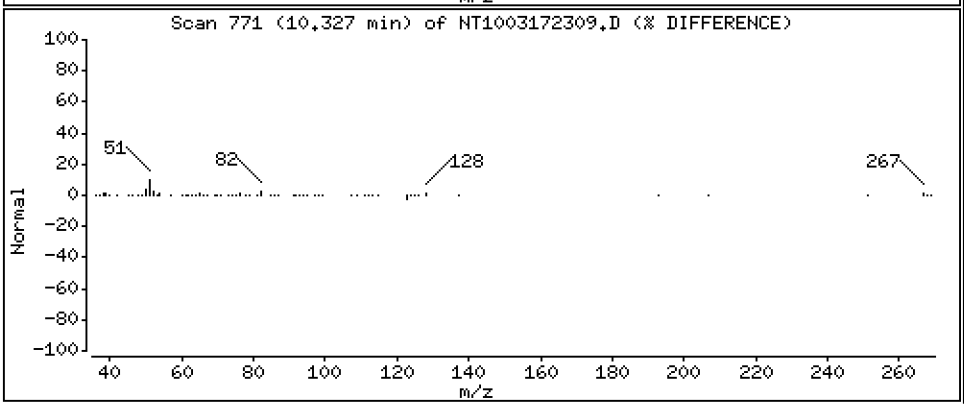












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

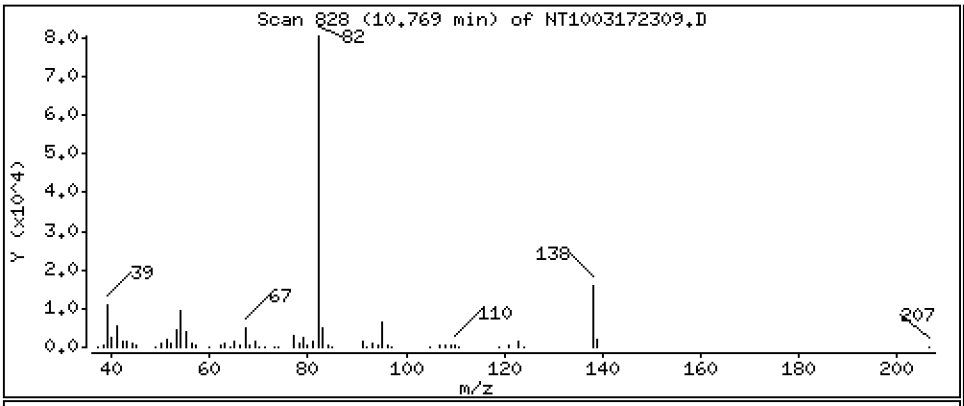
Operator: VTS

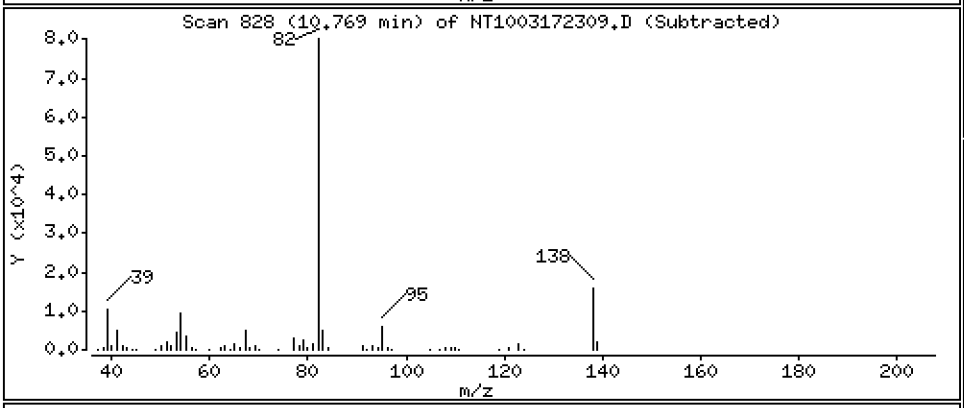
Column phase: ZB-5msi

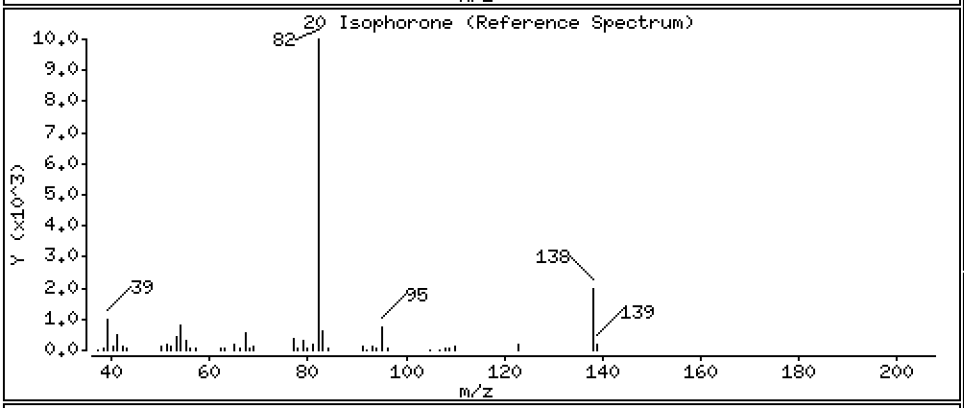
Column diameter: 0.25

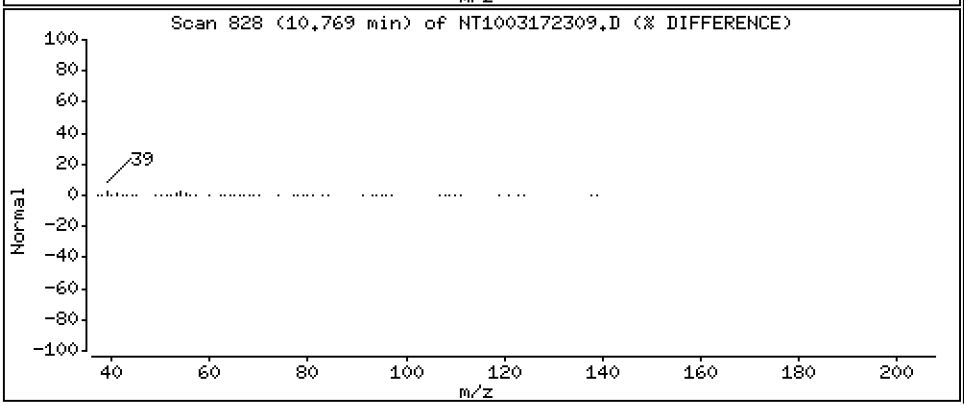
20 Isophorone

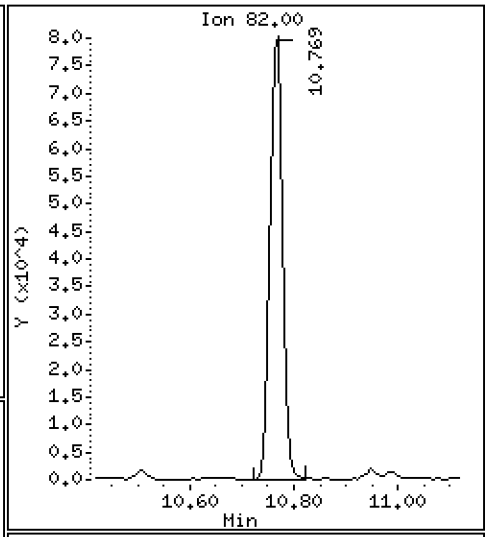
Concentration: 1.712 ug/mL

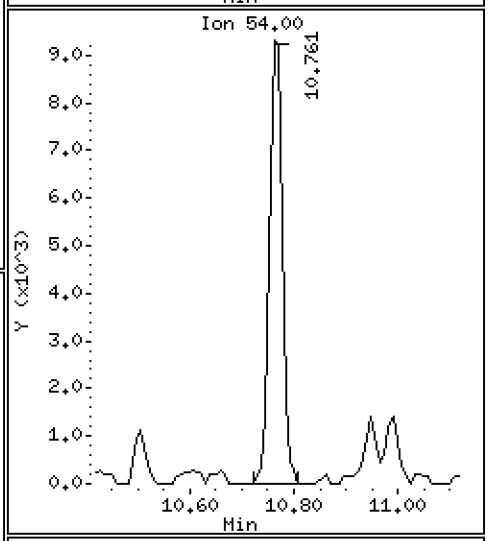


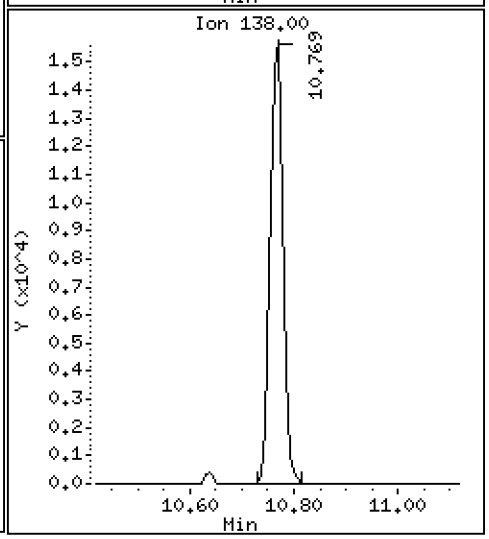












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

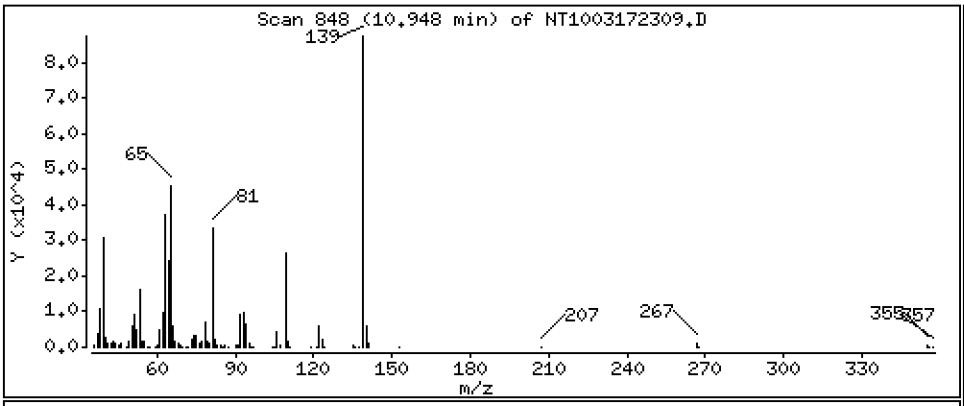
Operator: VTS

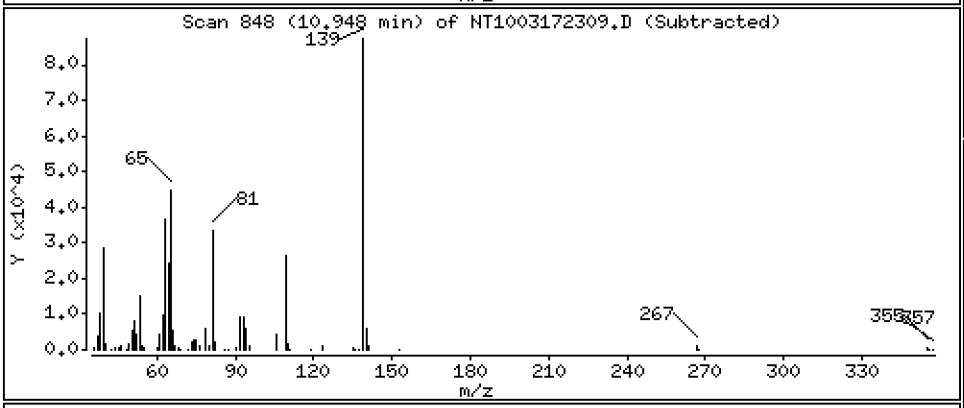
Column phase: ZB-5msi

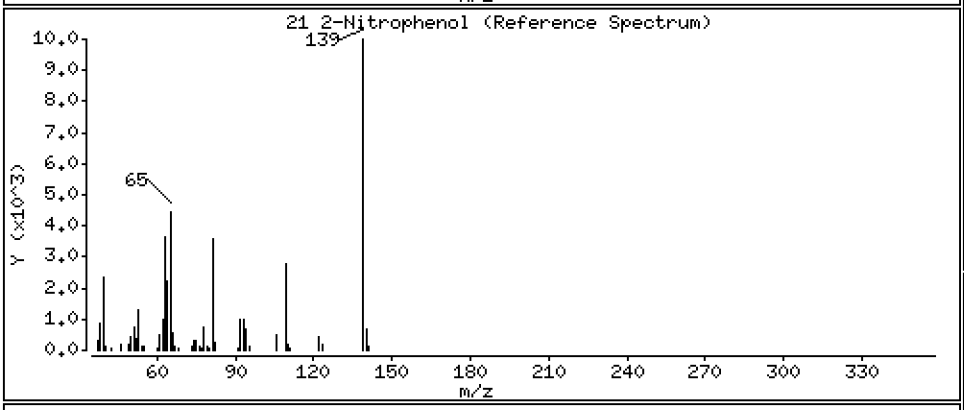
Column diameter: 0.25

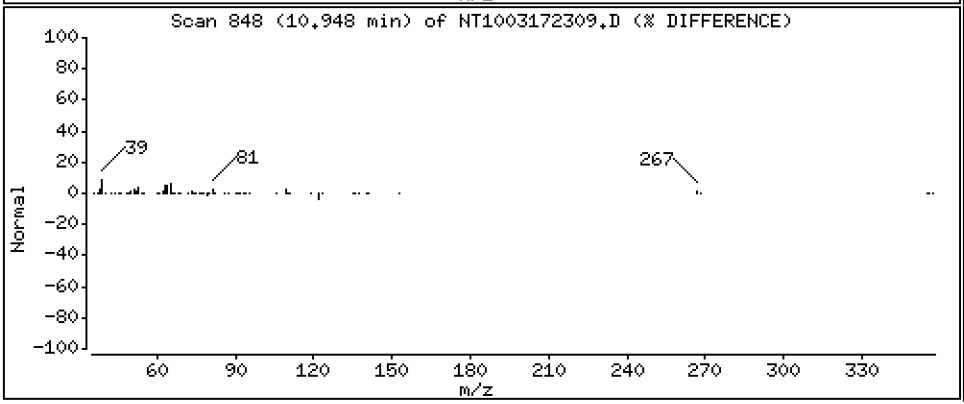
21 2-Nitrophenol

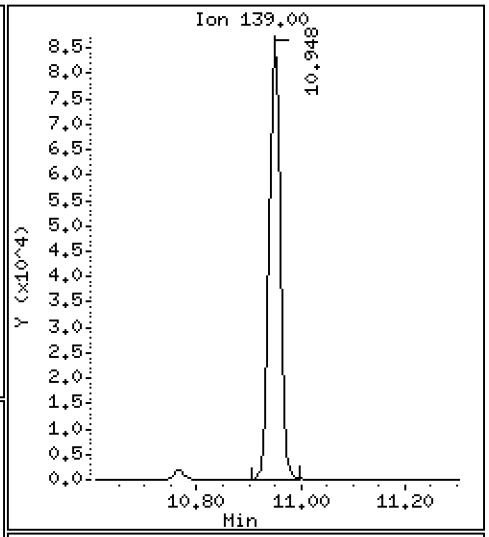
Concentration: 4.489 ug/mL

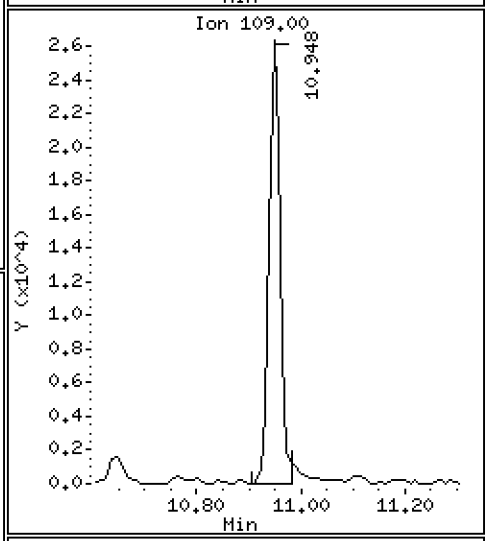


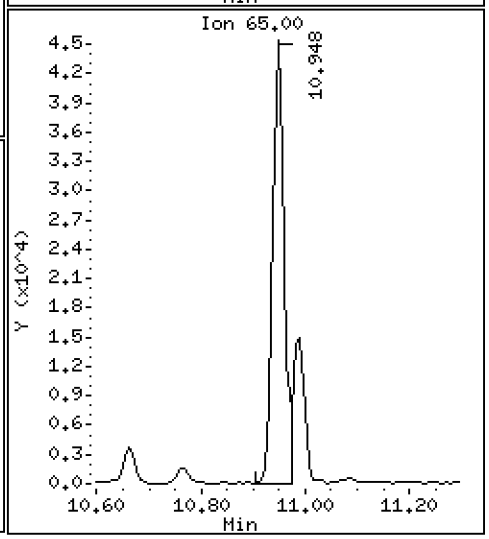












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

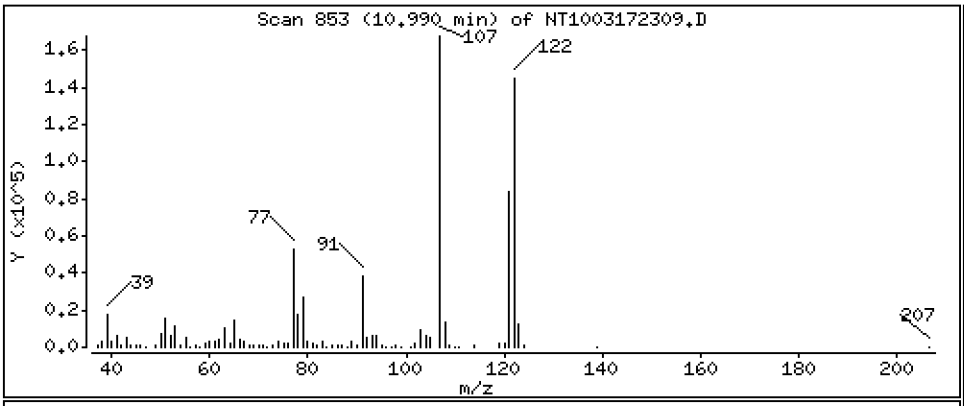
Operator: VTS

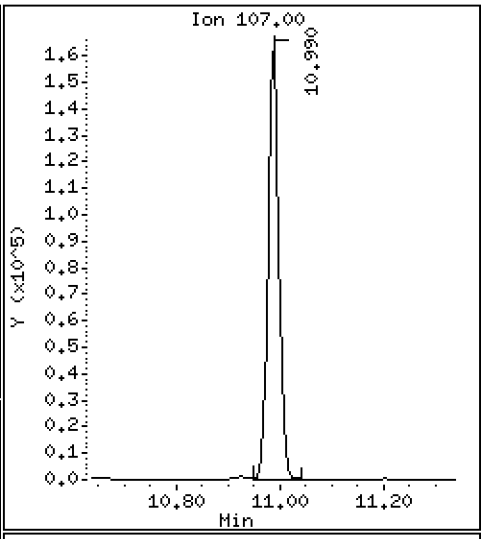
Column phase: ZB-5msi

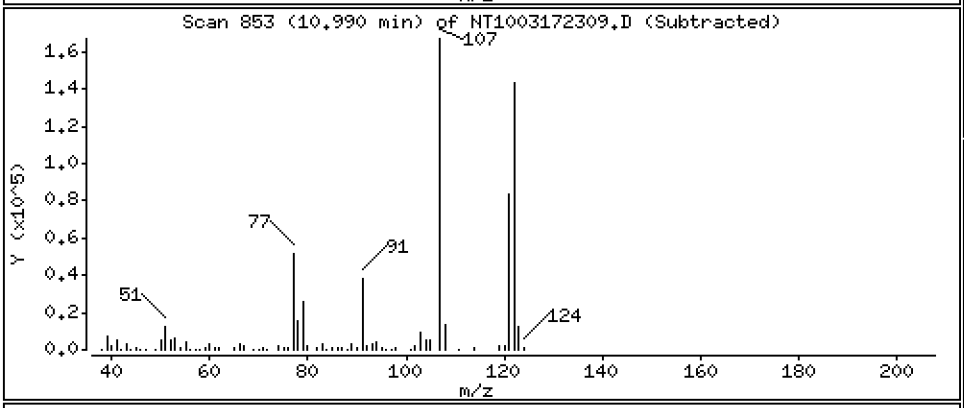
Column diameter: 0.25

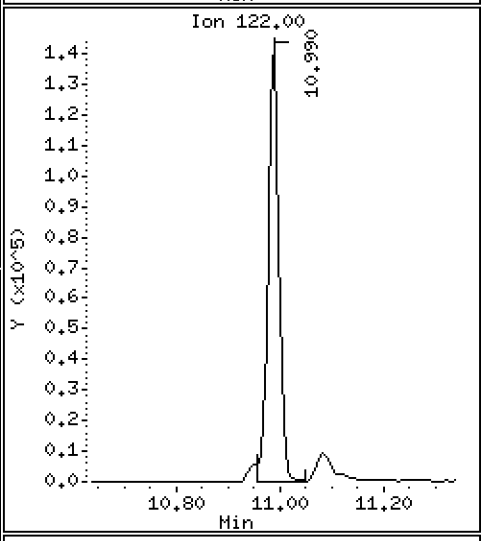
22 2,4-Dimethylphenol

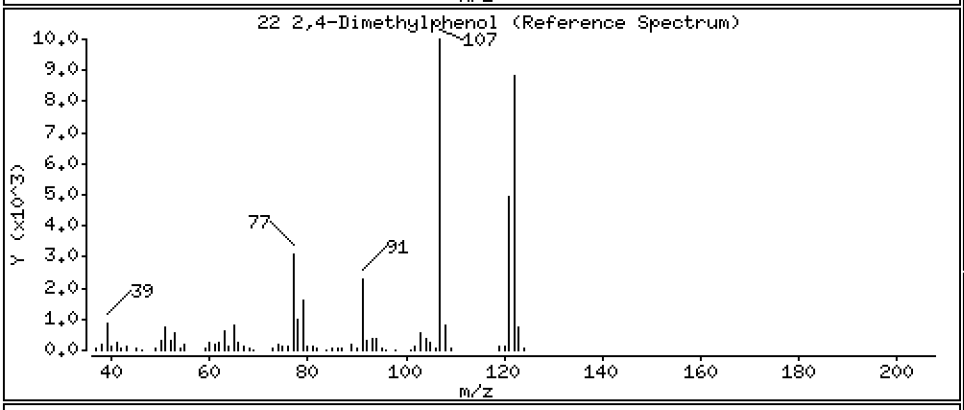
Concentration: 4.520 ug/mL

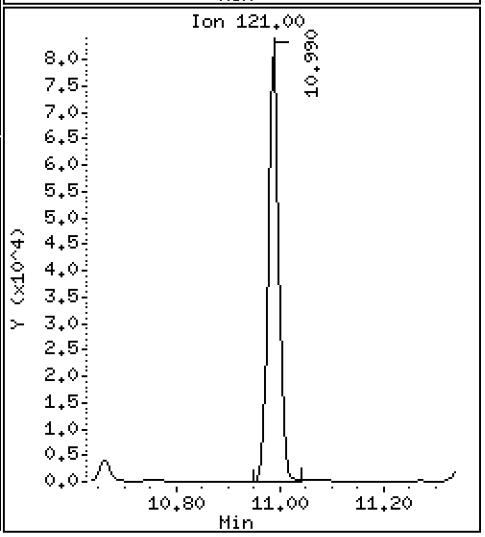


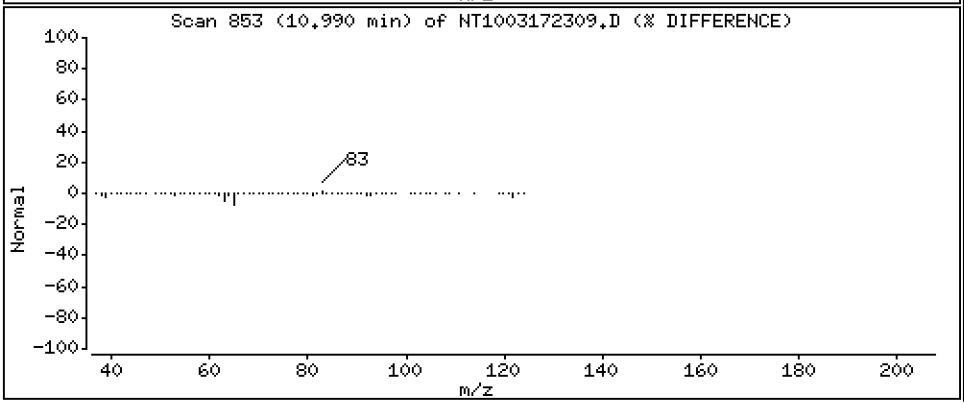












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

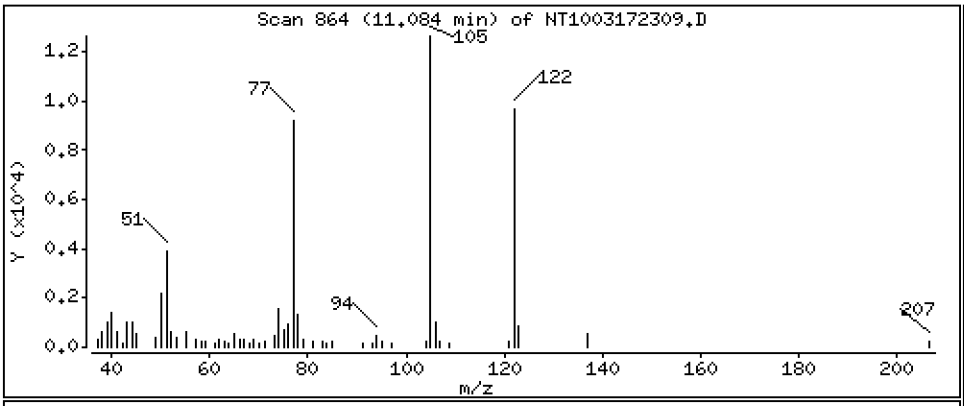
Operator: VTS

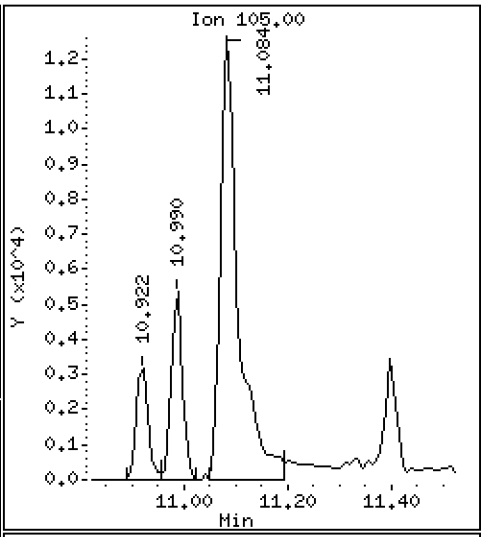
Column phase: ZB-5msi

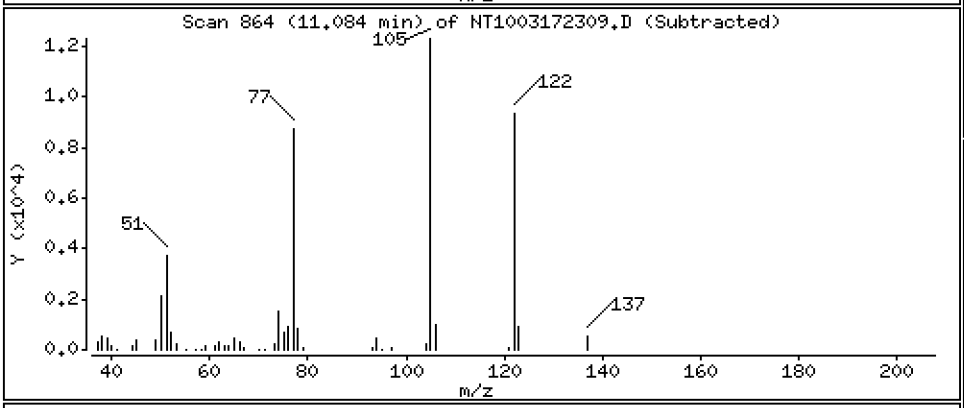
Column diameter: 0.25

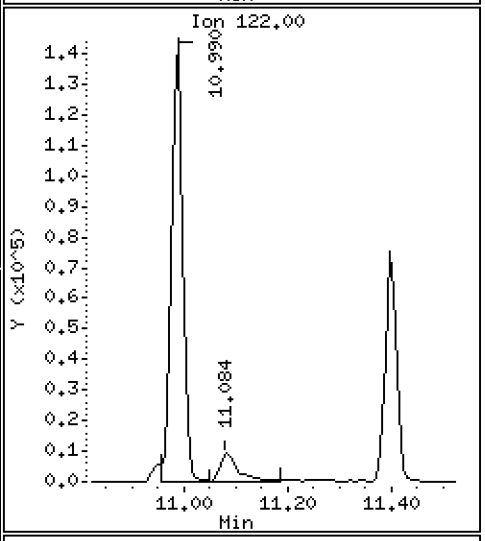
24 Benzoic acid

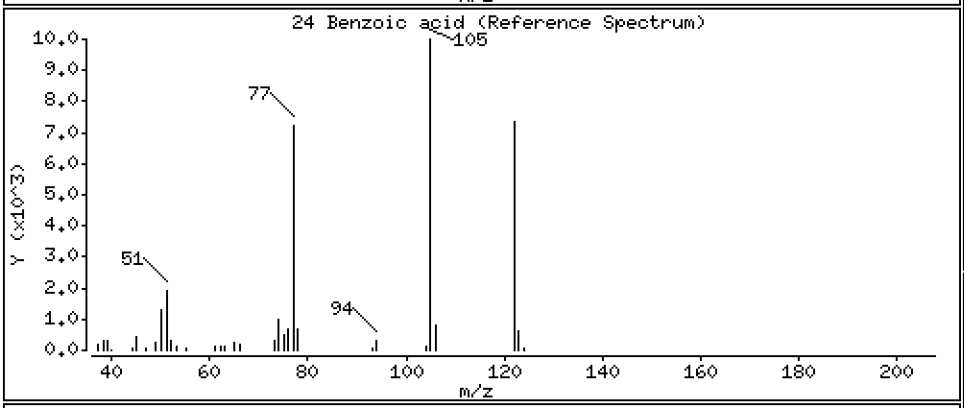
Concentration: 1.008 ug/mL

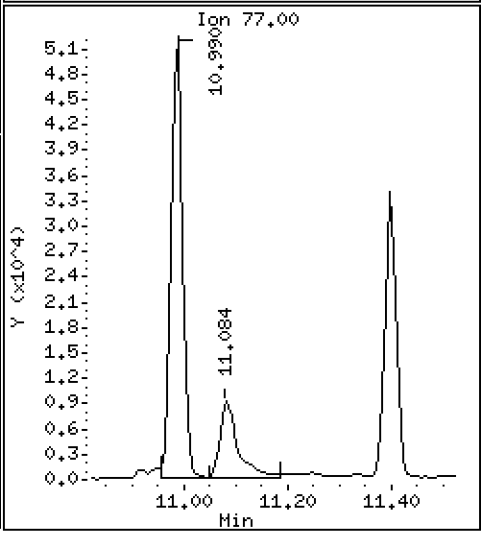


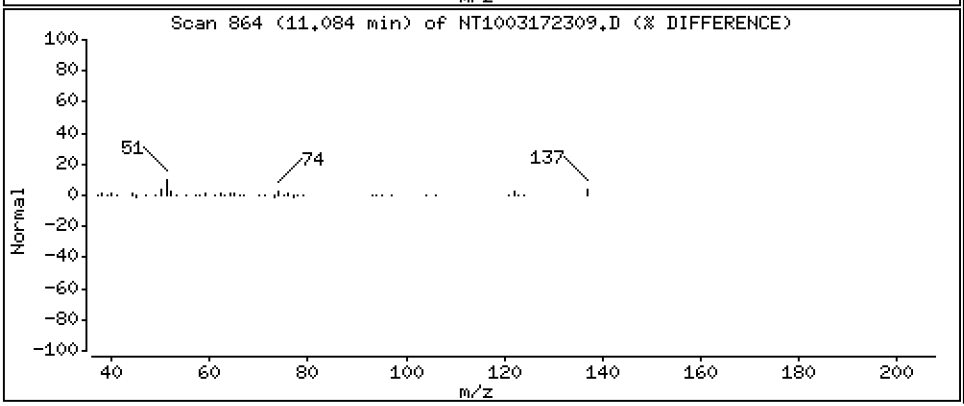












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

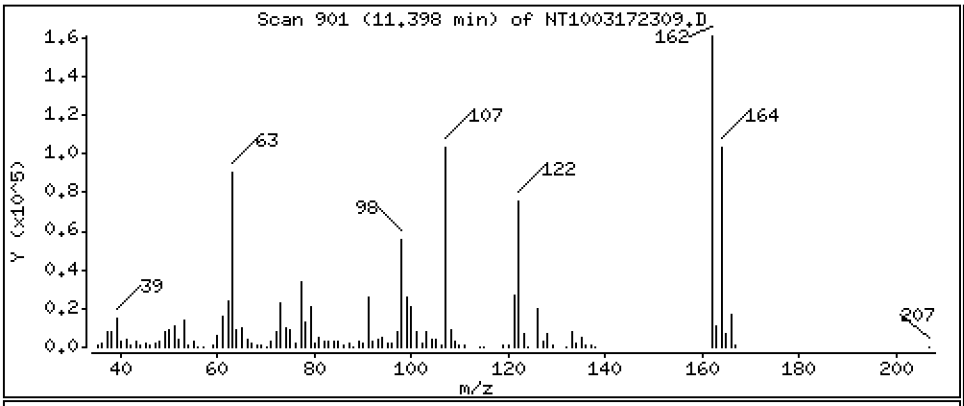
Operator: VTS

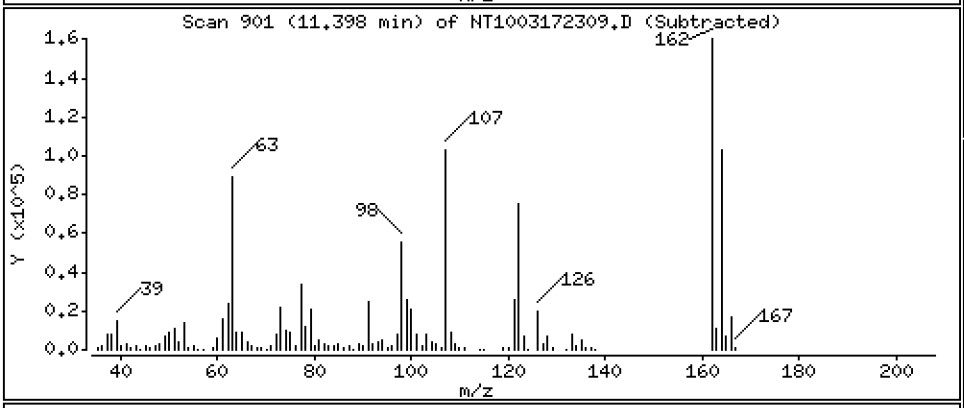
Column phase: ZB-5msi

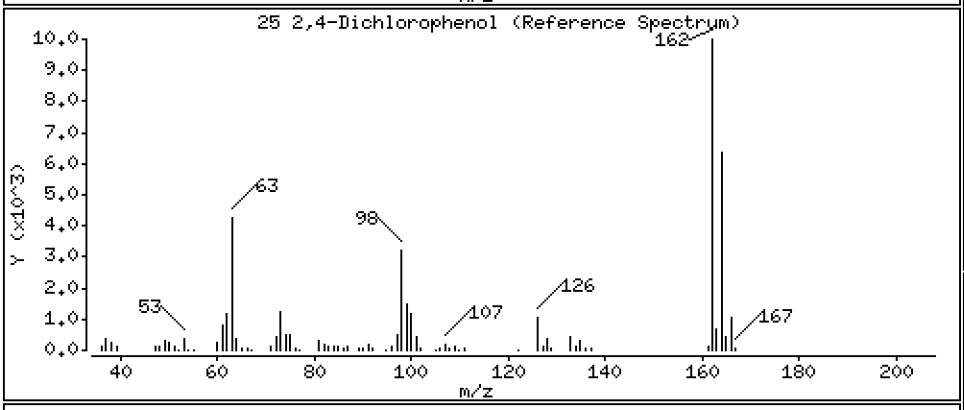
Column diameter: 0.25

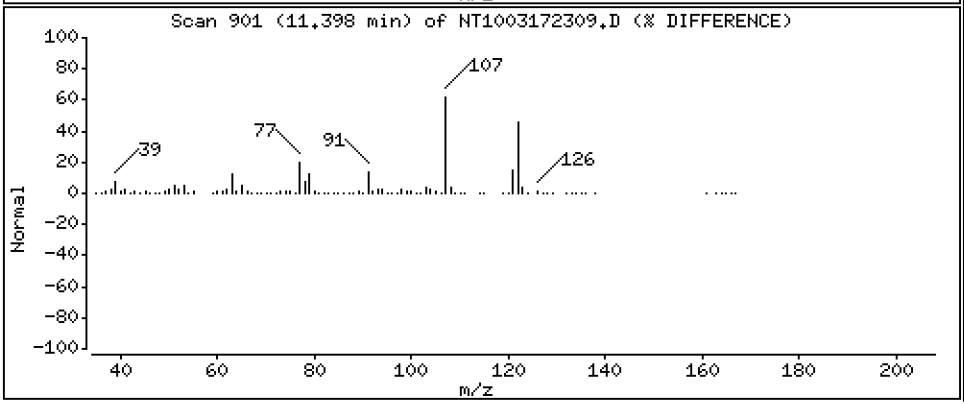
25 2,4-Dichlorophenol

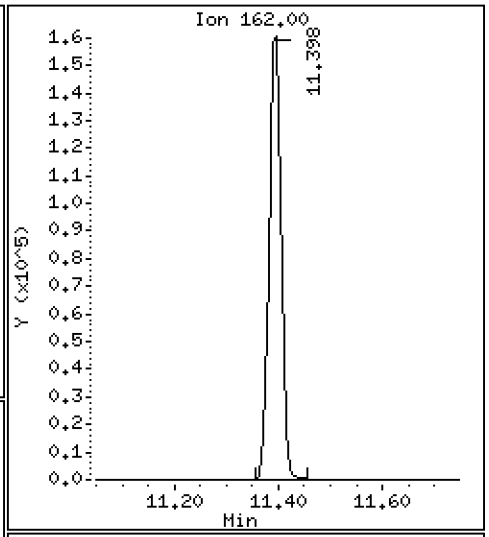
Concentration: 5.909 ug/mL

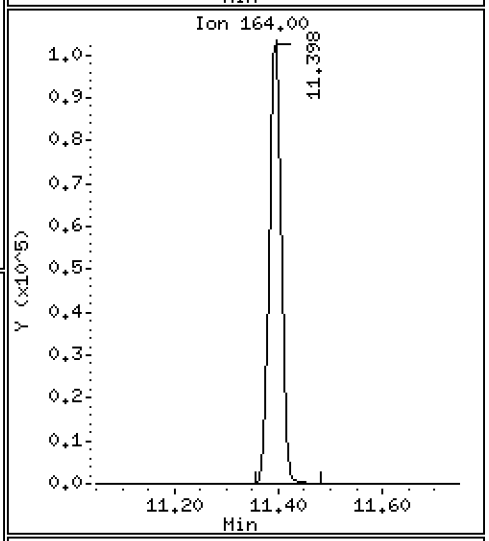


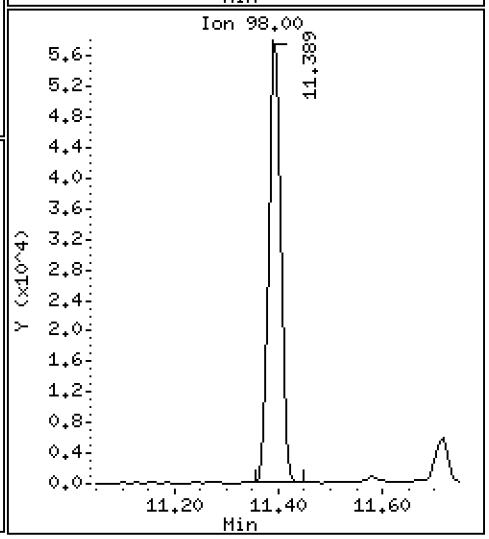












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

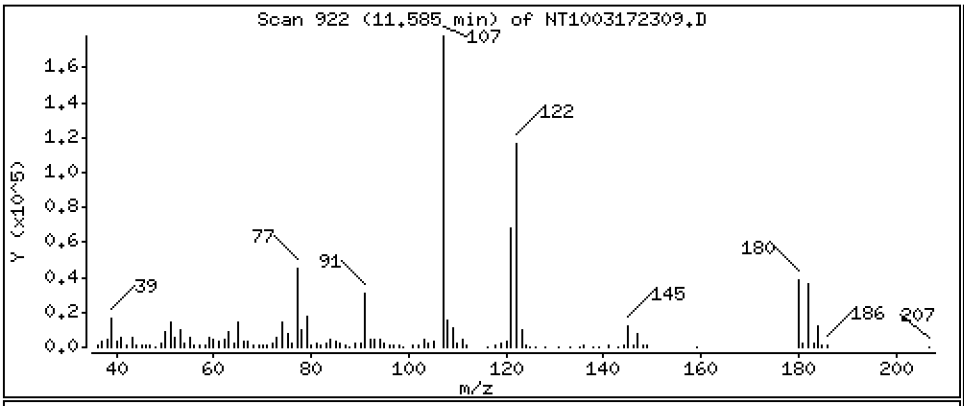
Operator: VTS

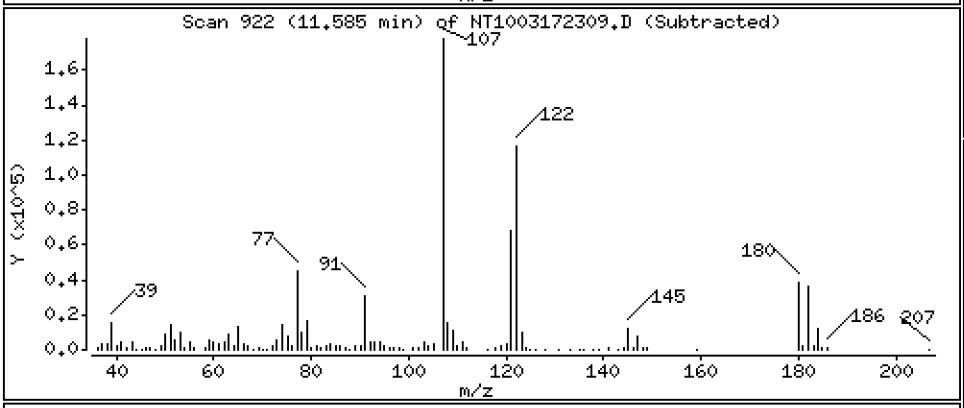
Column phase: ZB-5msi

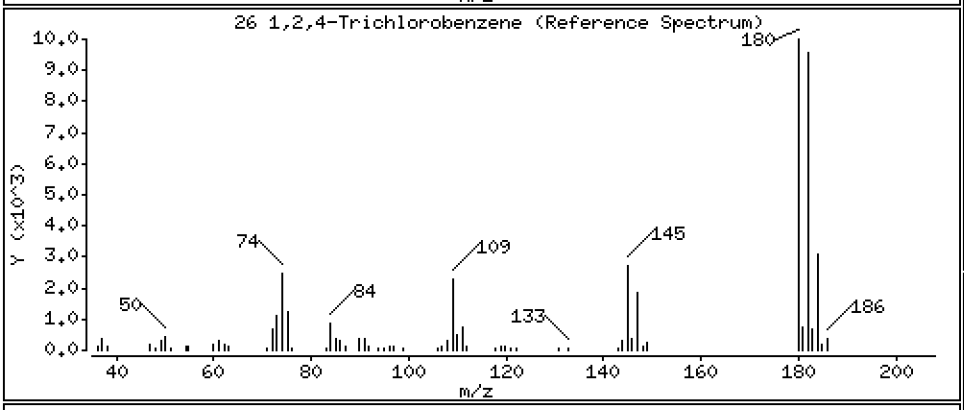
Column diameter: 0.25

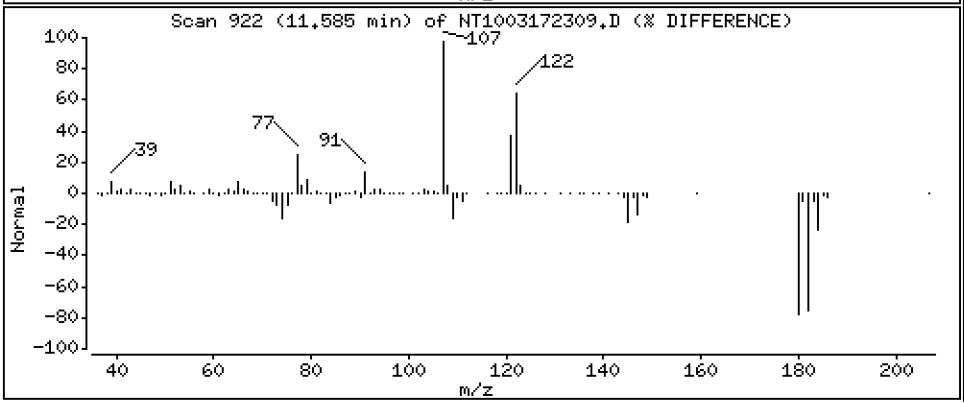
26 1,2,4-Trichlorobenzene

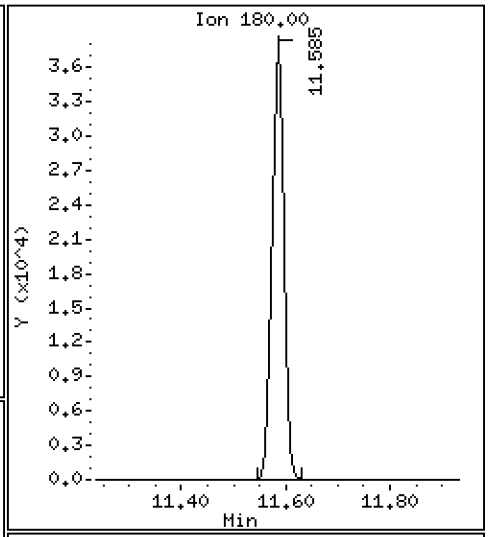
Concentration: 1.149 ug/mL

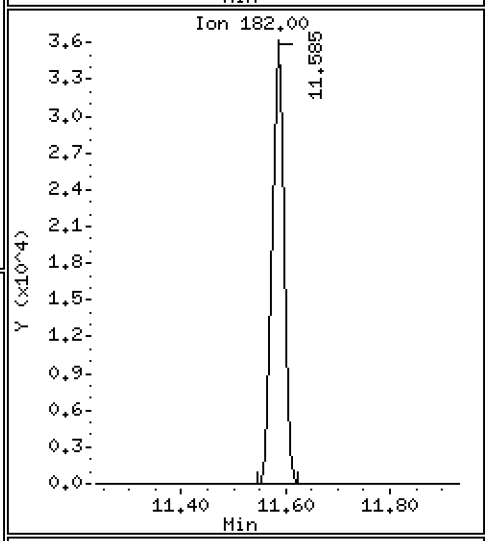


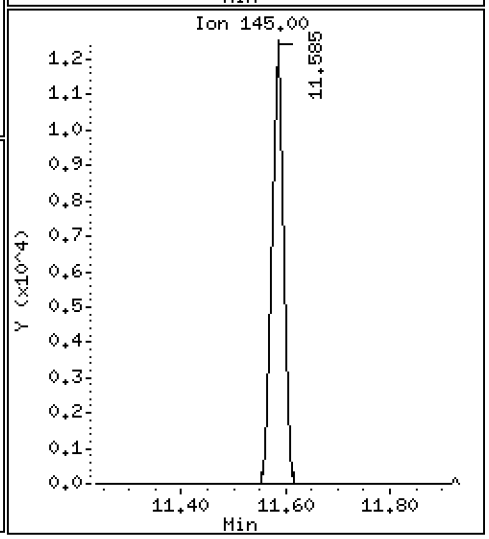












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

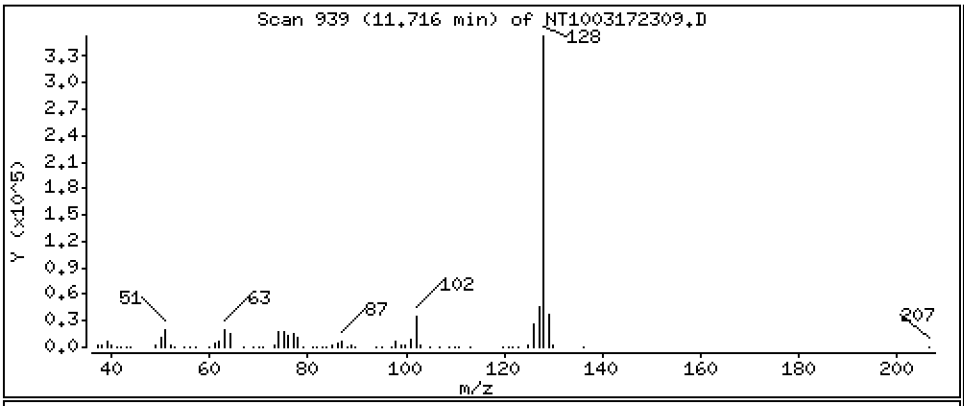
Operator: VTS

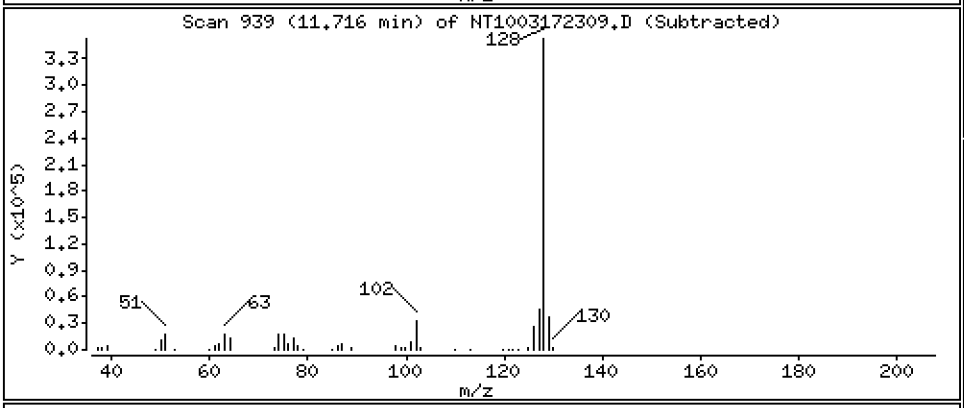
Column phase: ZB-5msi

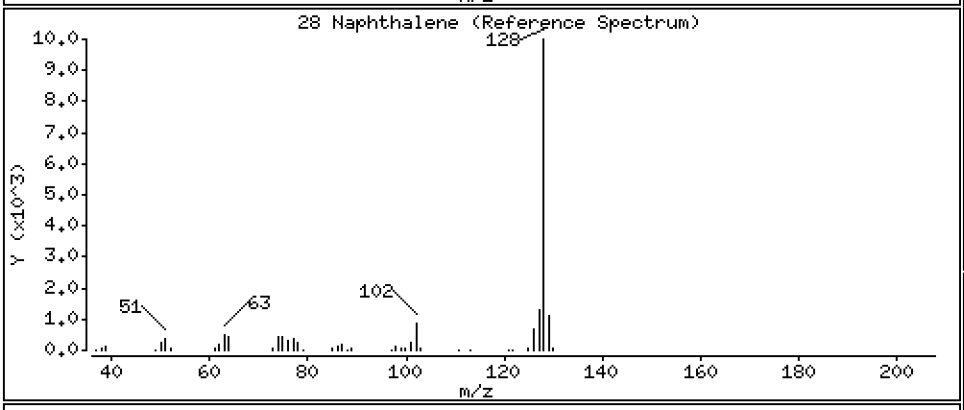
Column diameter: 0.25

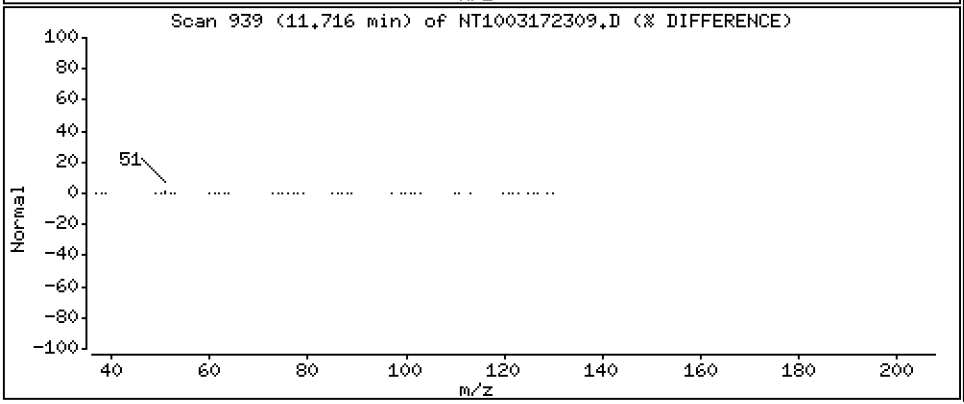
28 Naphthalene

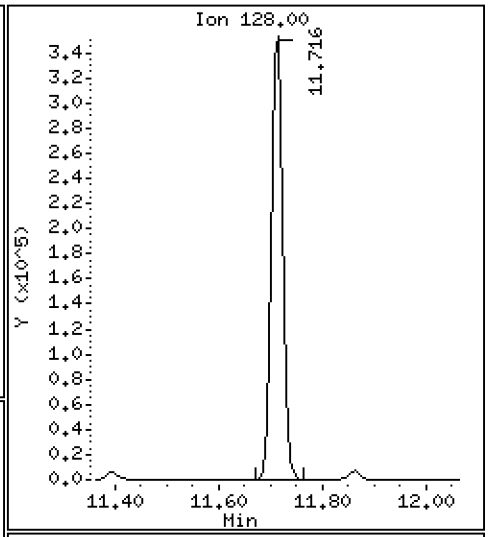
Concentration: 3.543 ug/mL

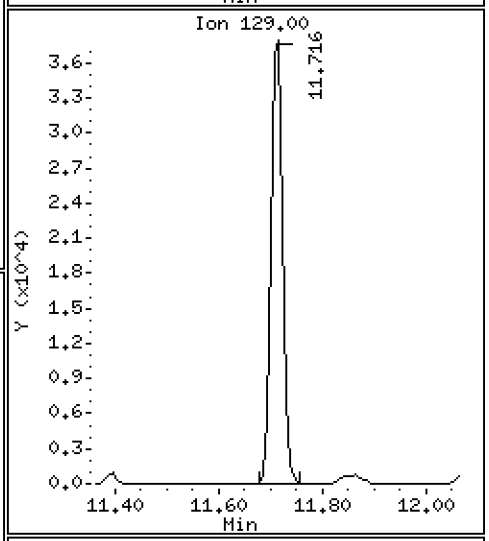


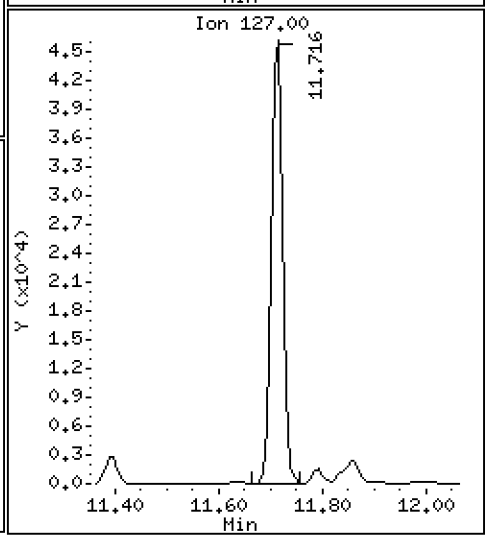












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

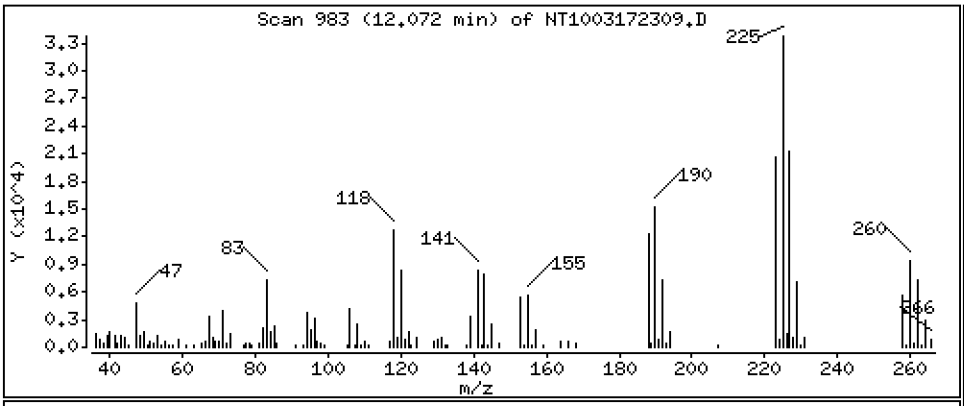
Operator: VTS

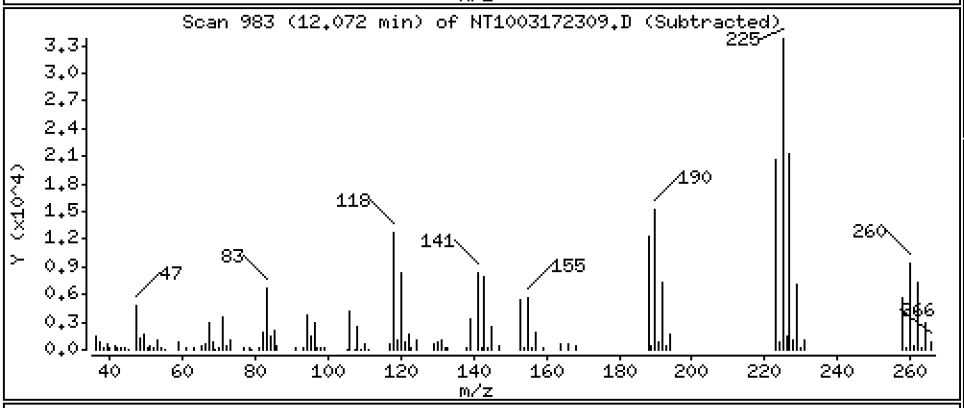
Column phase: ZB-5msi

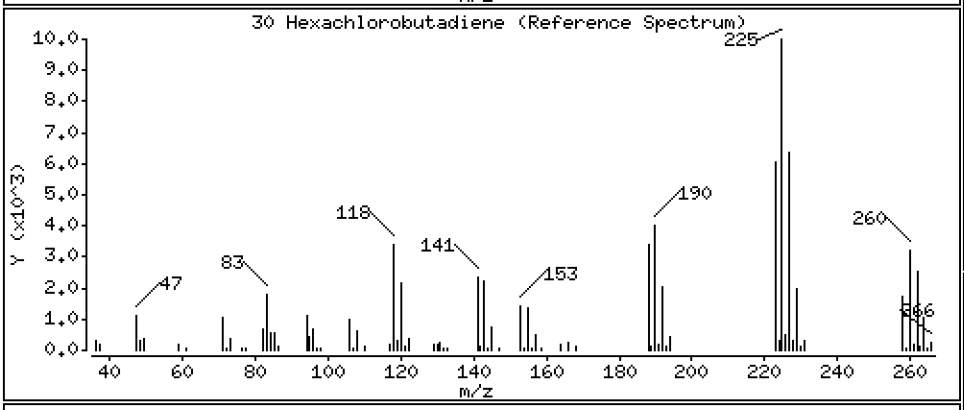
Column diameter: 0.25

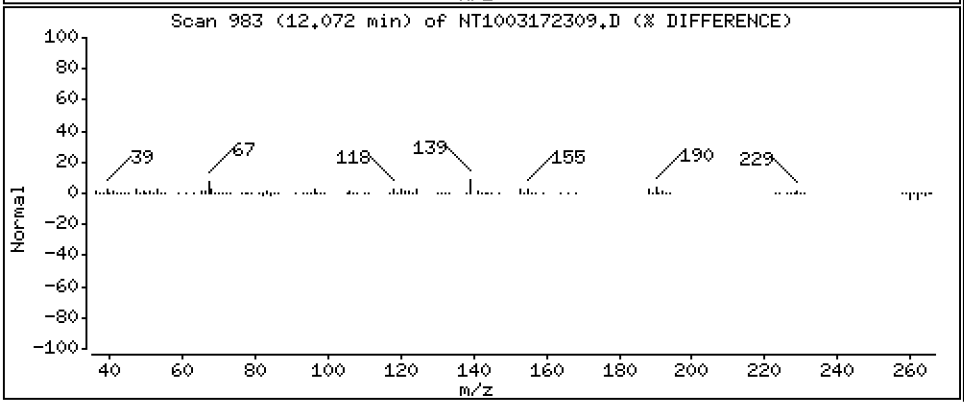
30 Hexachlorobutadiene

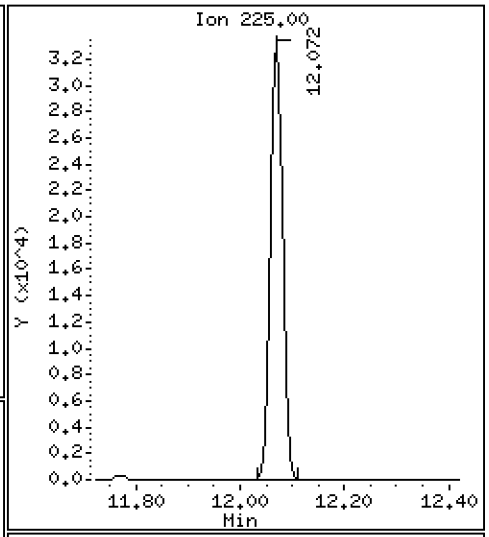
Concentration: 1.712 ug/mL

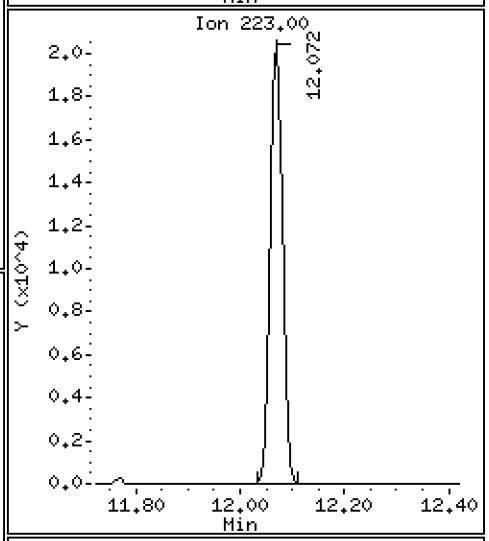


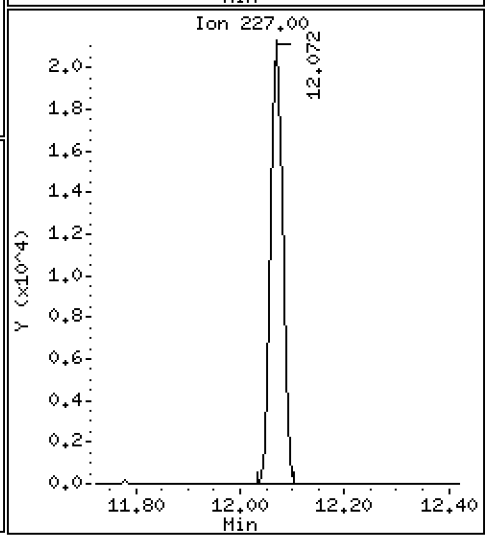












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

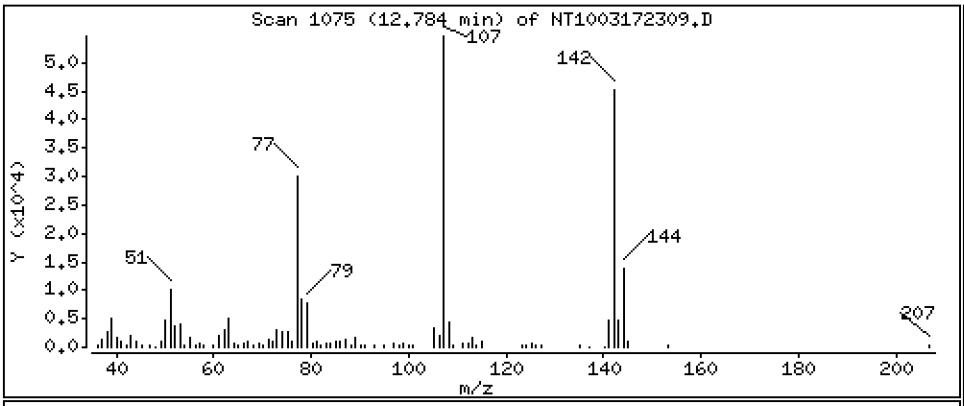
Operator: VTS

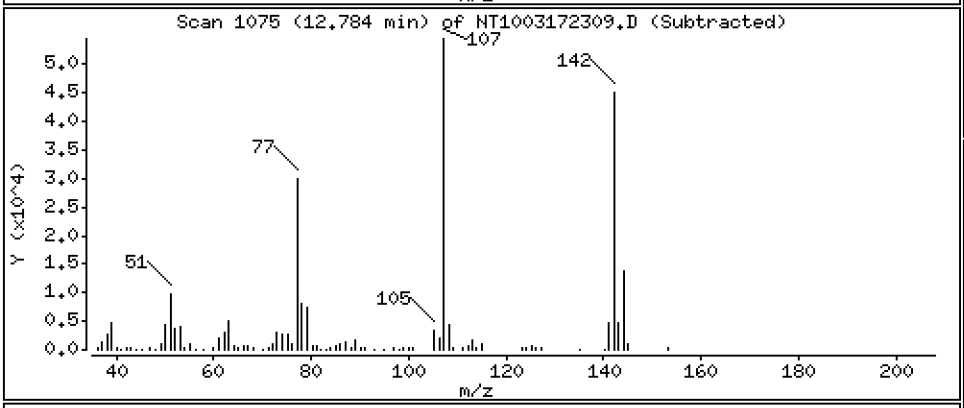
Column phase: ZB-5msi

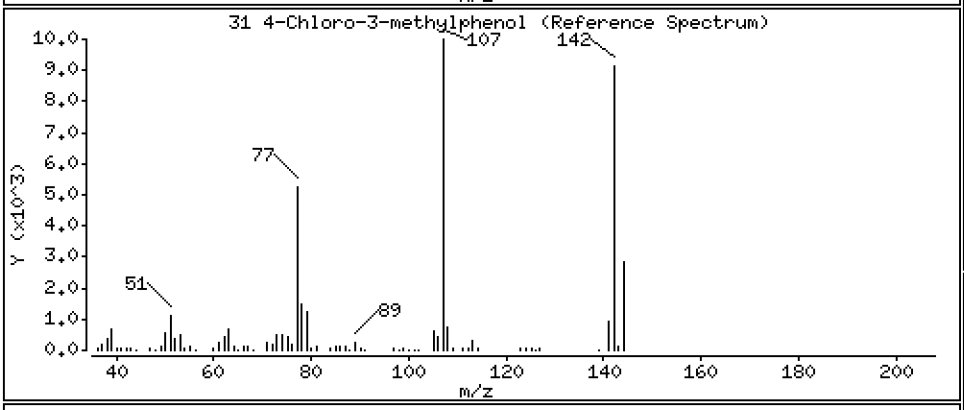
Column diameter: 0.25

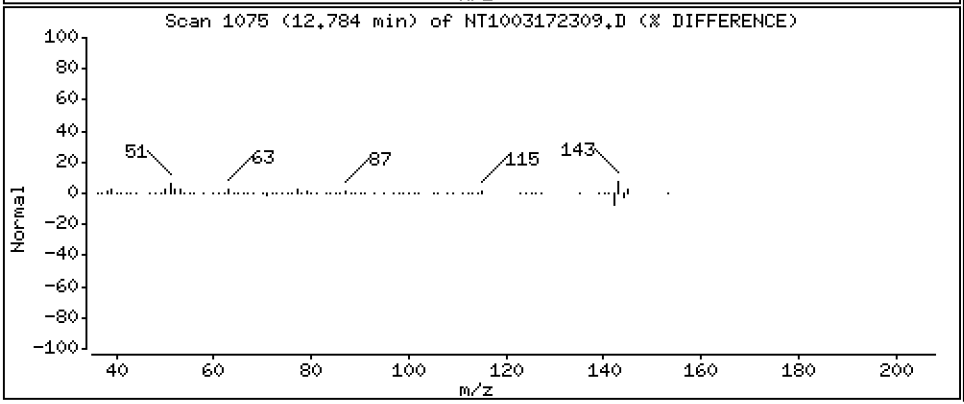
31 4-Chloro-3-methylphenol

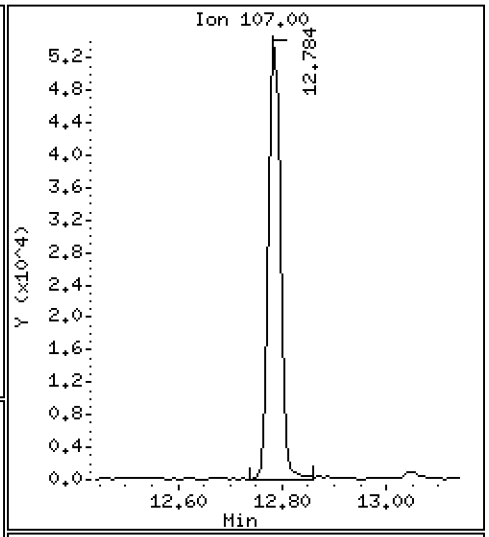
Concentration: 1.733 ug/mL

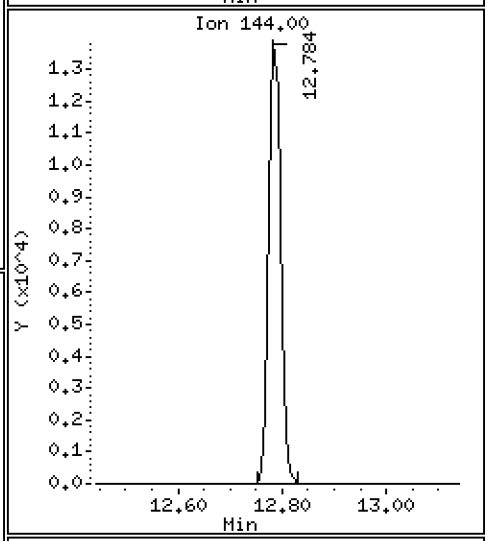


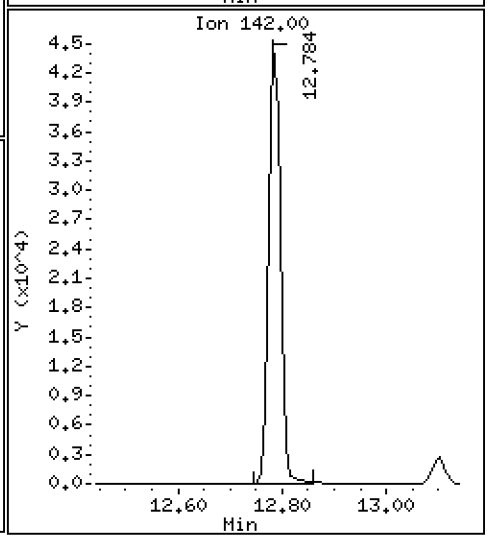












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172309.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

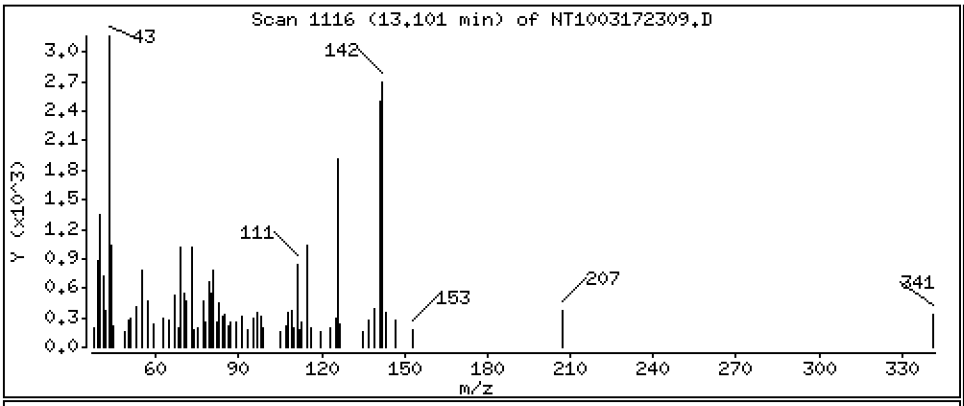
Operator: VTS

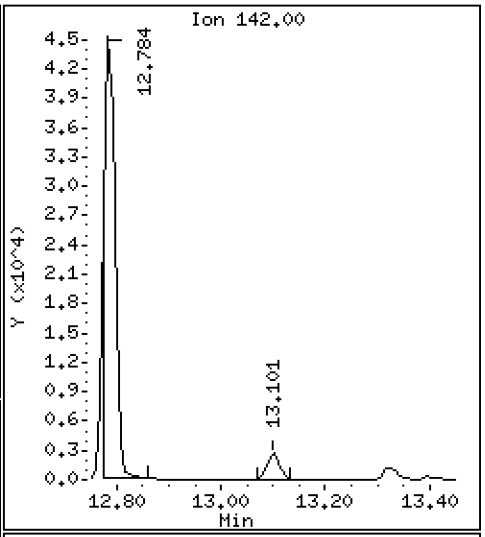
Column phase: ZB-5msi

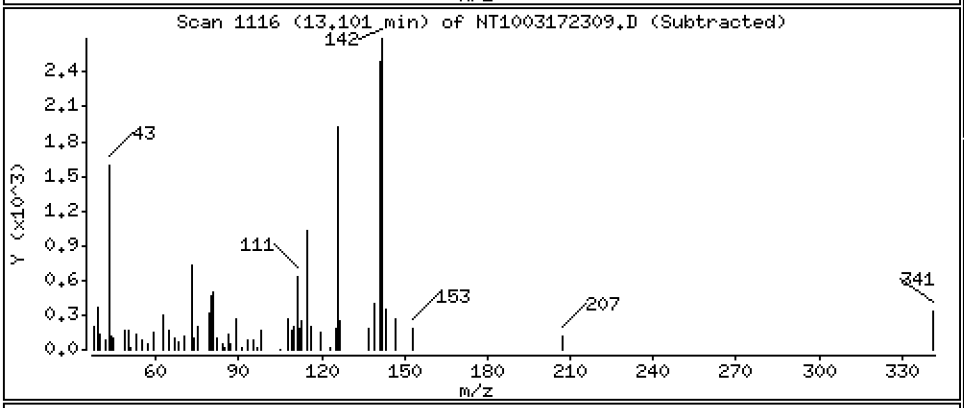
Column diameter: 0.25

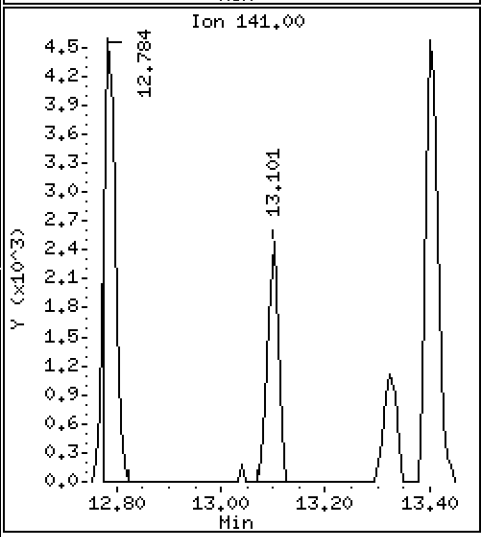
32 2-Methylnaphthalene

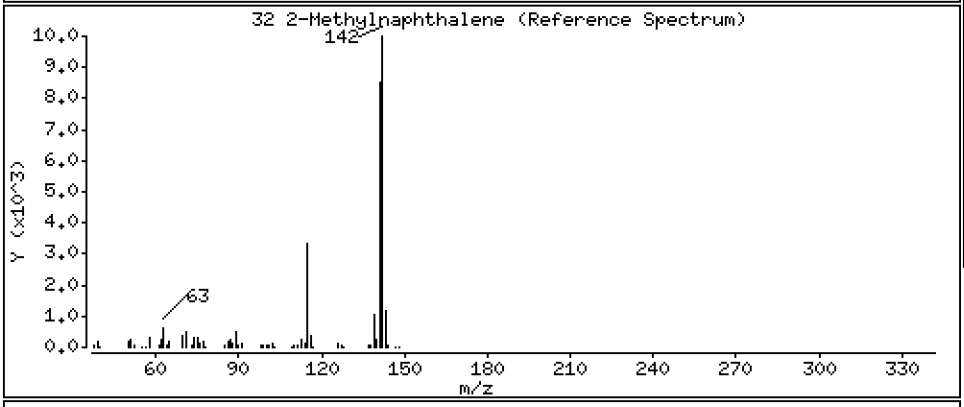
Concentration: 0.03659 ug/mL

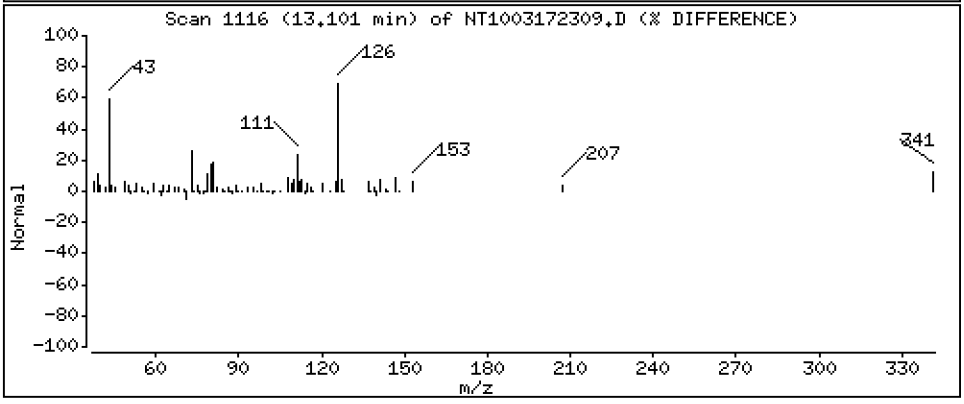












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

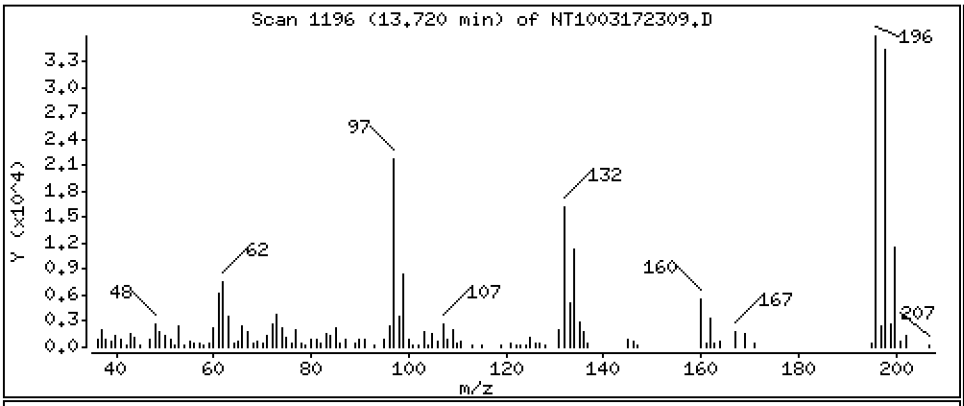
Operator: VTS

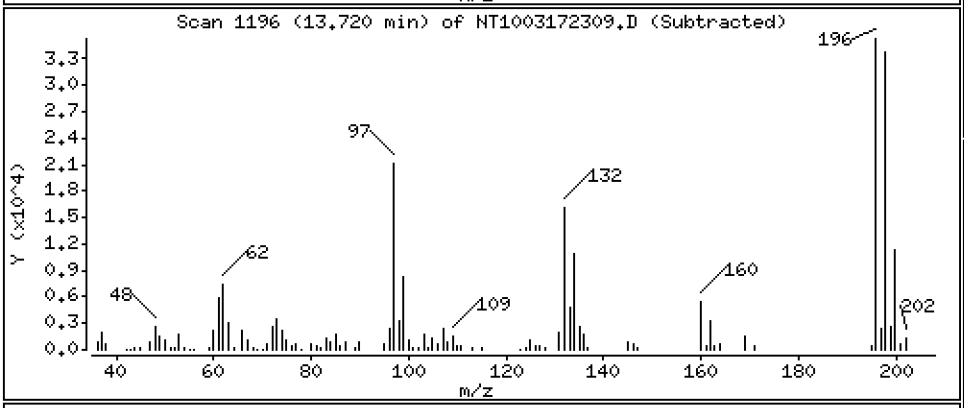
Column phase: ZB-5msi

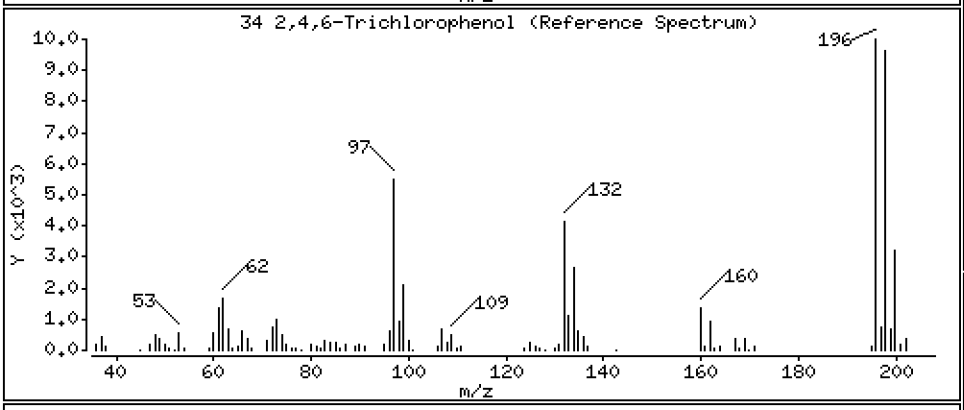
Column diameter: 0.25

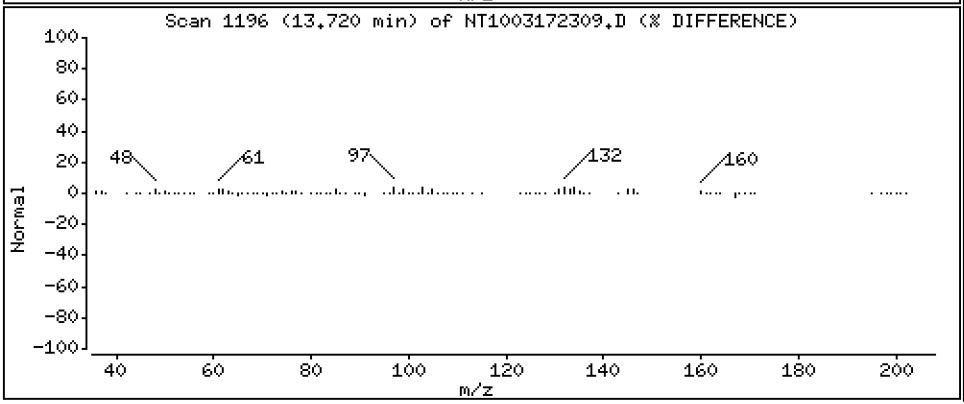
34 2,4,6-Trichlorophenol

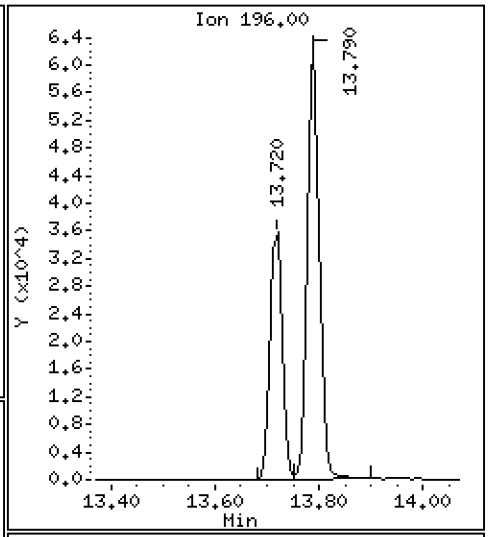
Concentration: 1.760 ug/mL

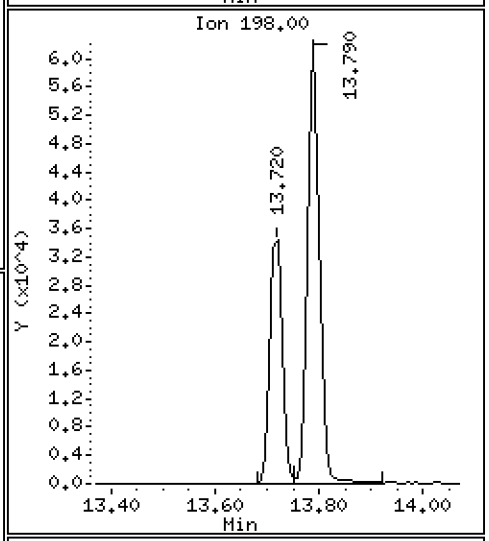


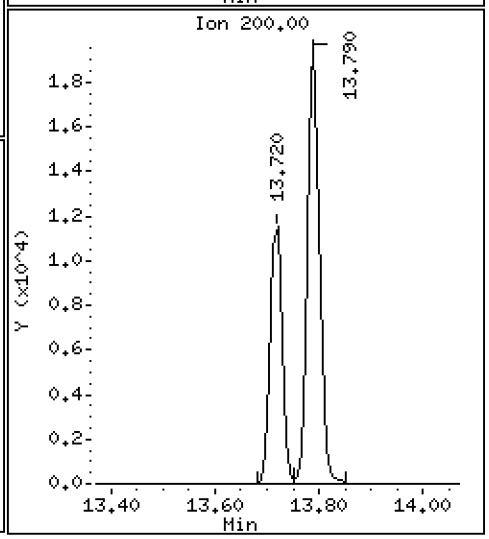












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172309.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

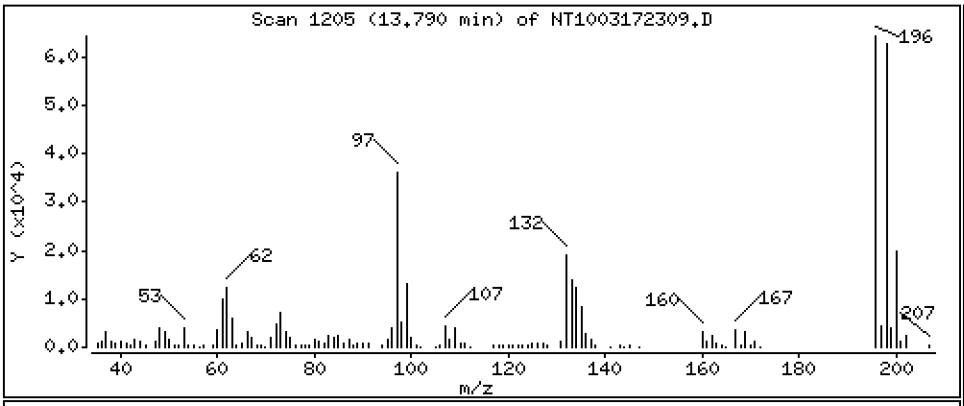
Operator: VTS

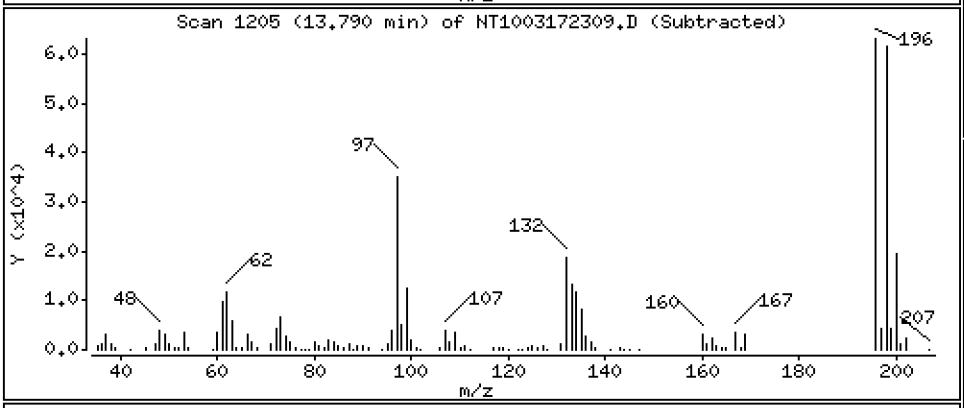
Column phase: ZB-5msi

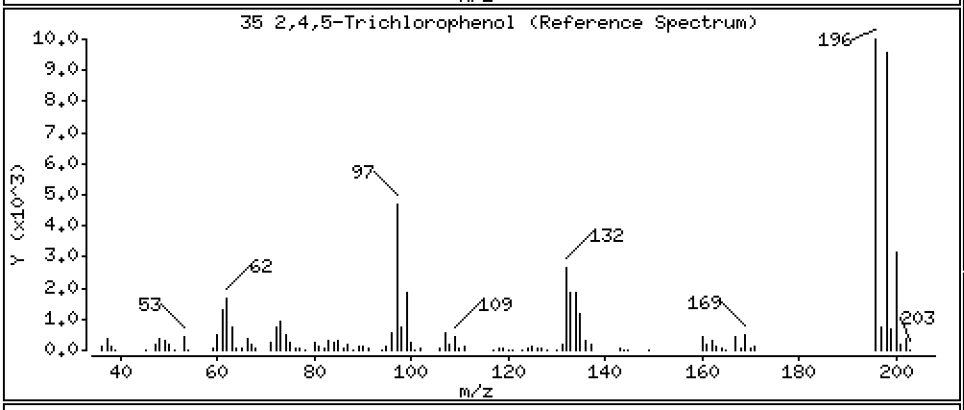
Column diameter: 0.25

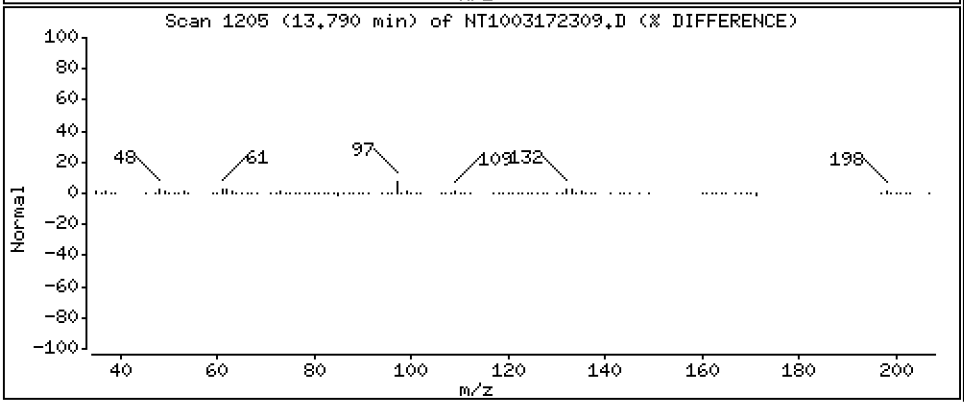
35 2,4,5-Trichlorophenol

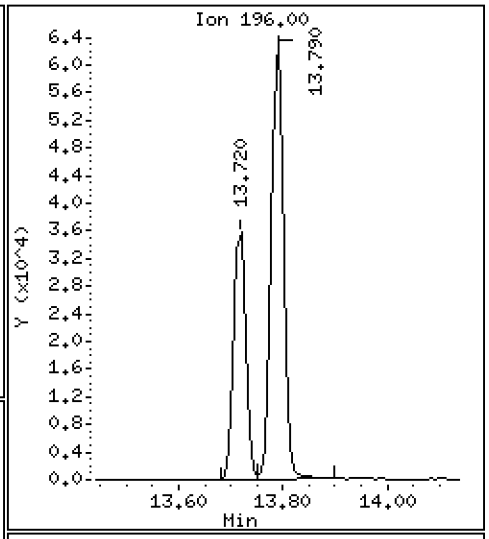
Concentration: 2.799 ug/mL

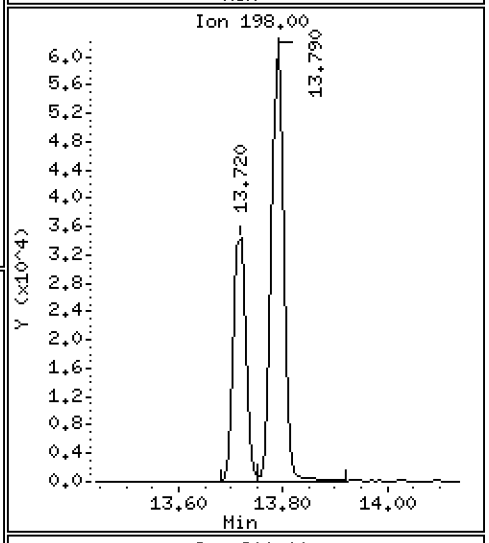


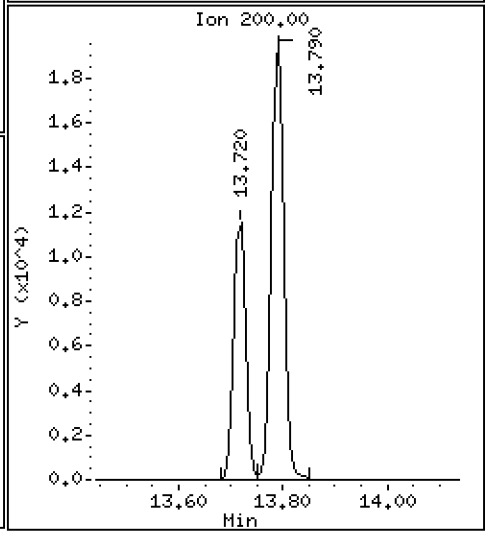












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

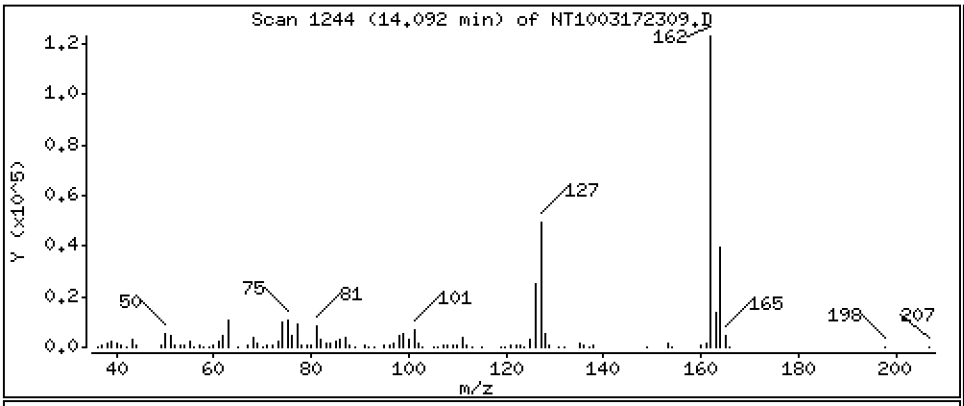
Operator: VTS

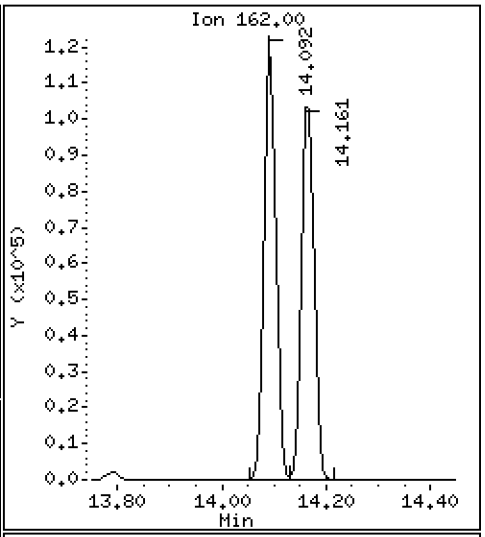
Column phase: ZB-5msi

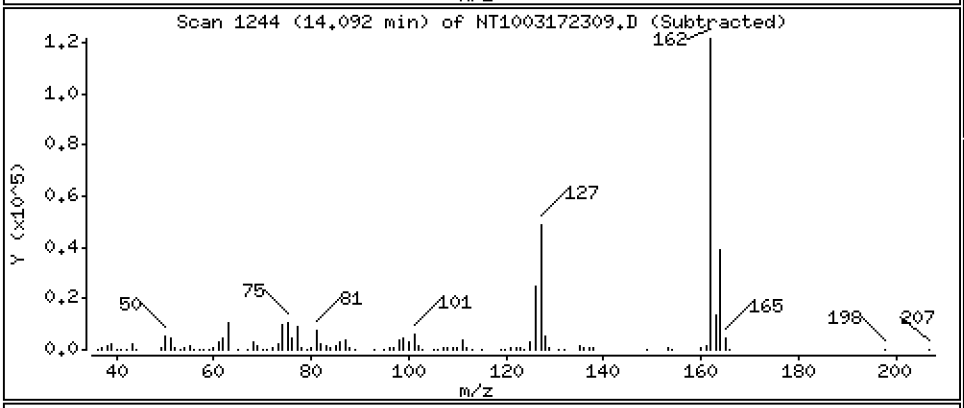
Column diameter: 0.25

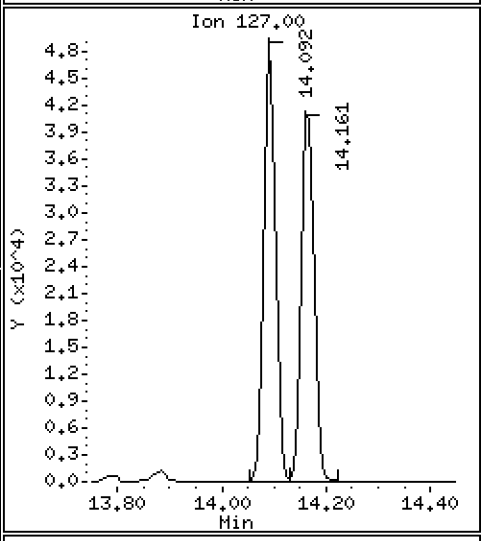
37 2-Chloronaphthalene

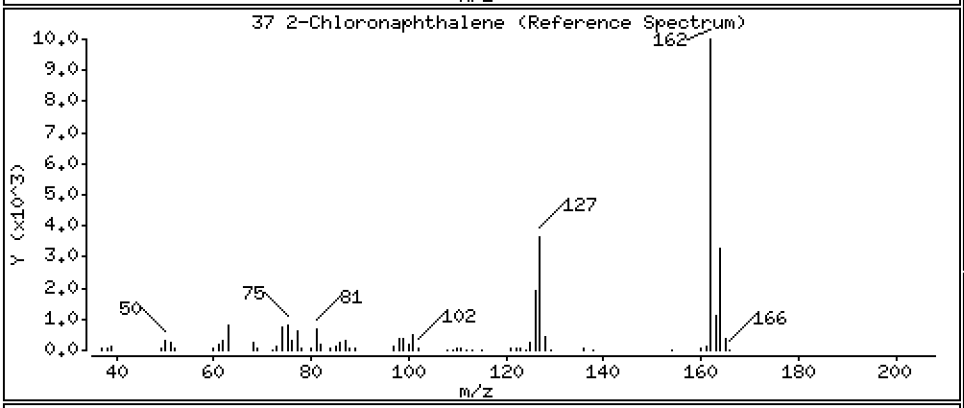
Concentration: 1.804 ug/mL

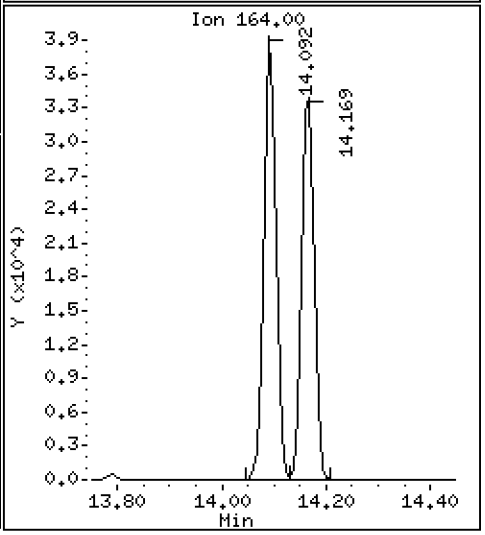


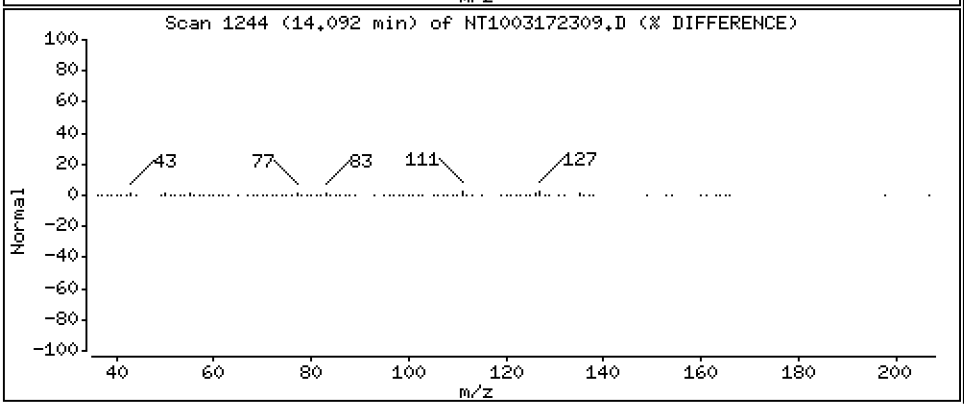












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

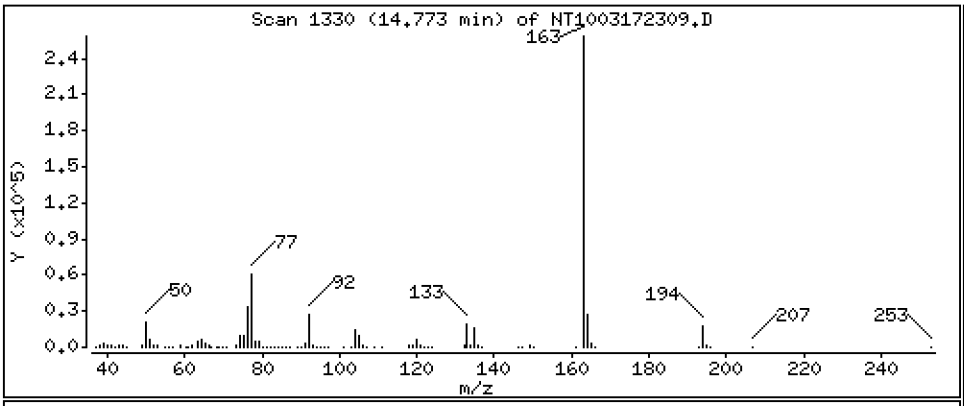
Operator: VTS

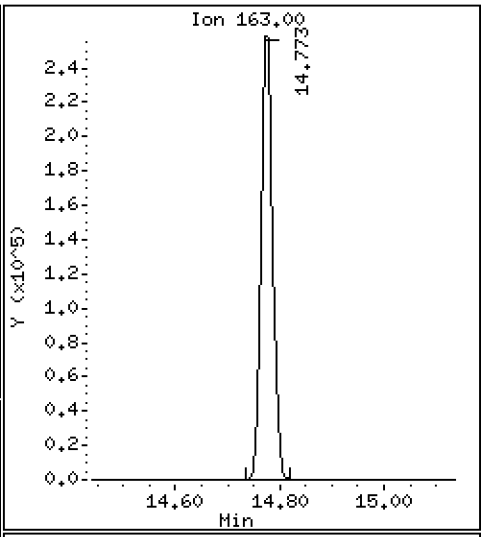
Column phase: ZB-5msi

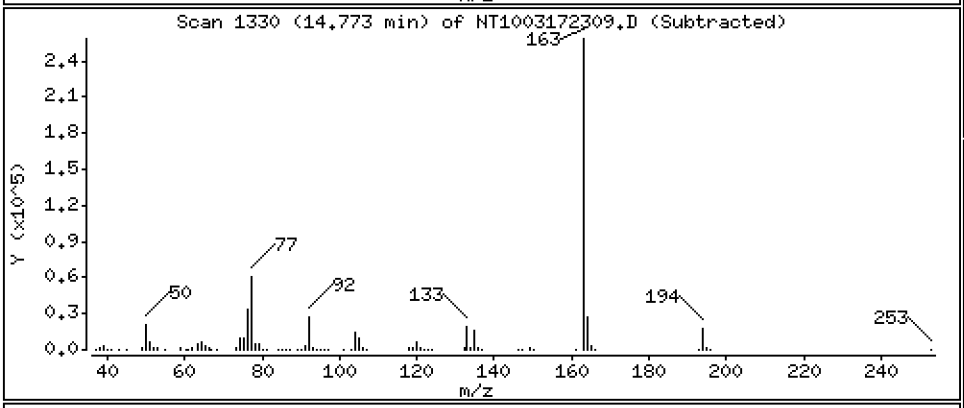
Column diameter: 0.25

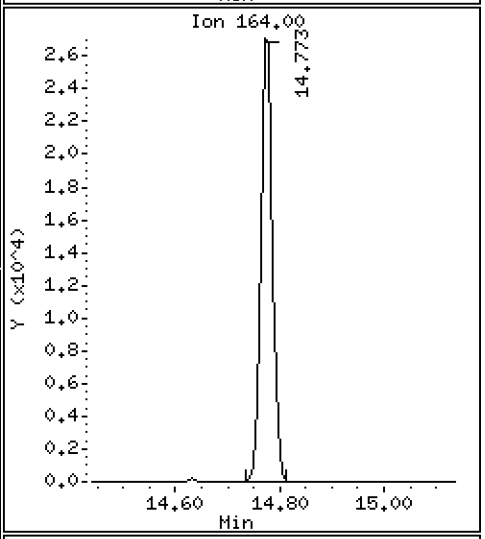
39 Dimethylphthalate

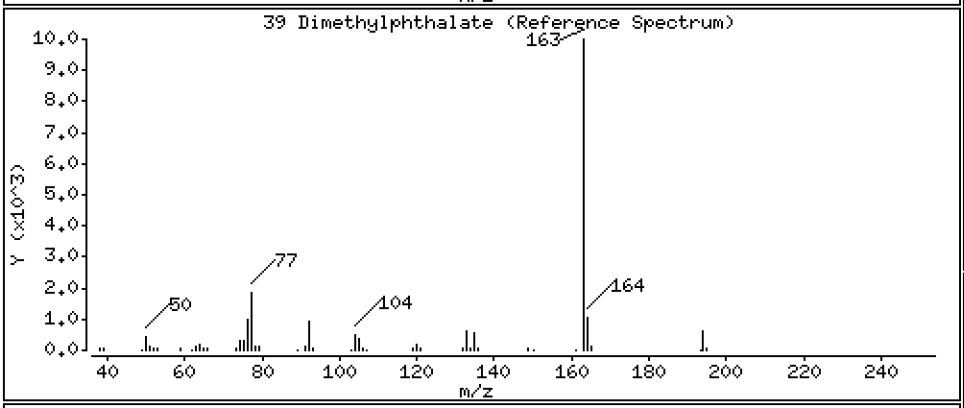
Concentration: 3.883 ug/mL

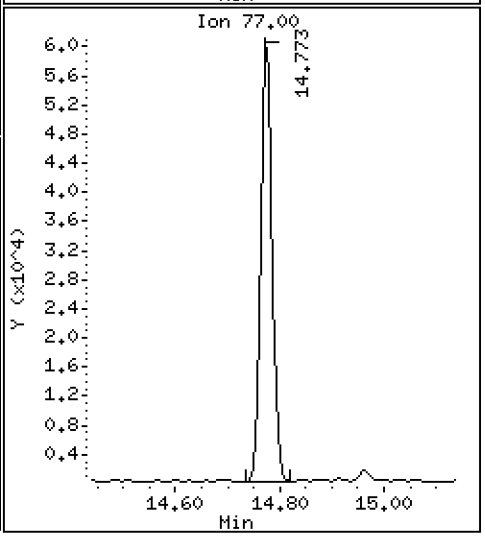


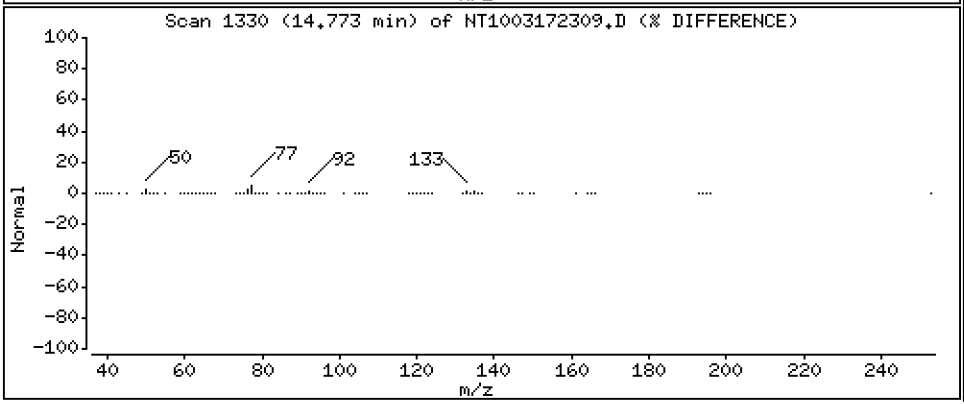












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

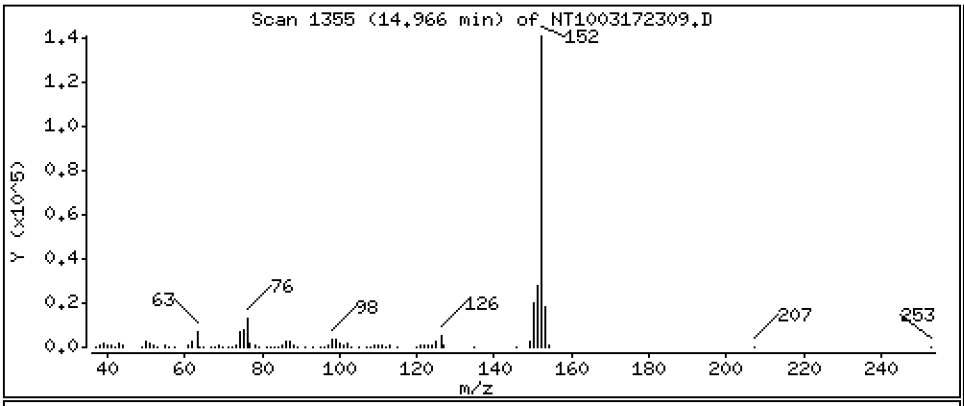
Operator: VTS

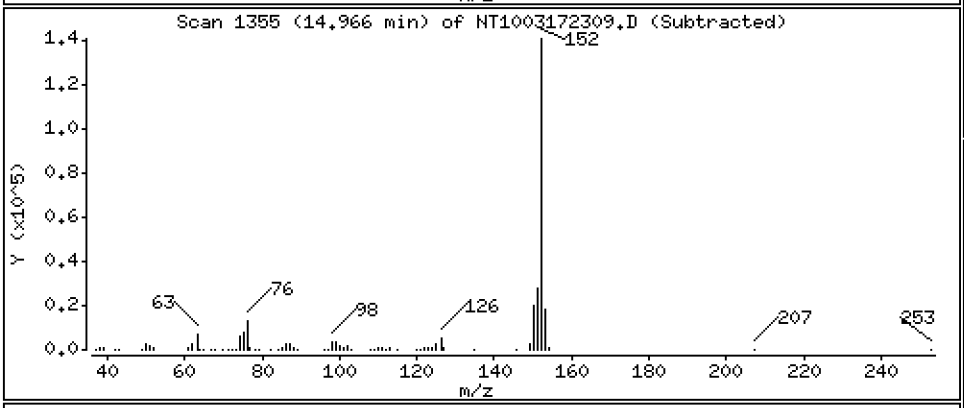
Column phase: ZB-5msi

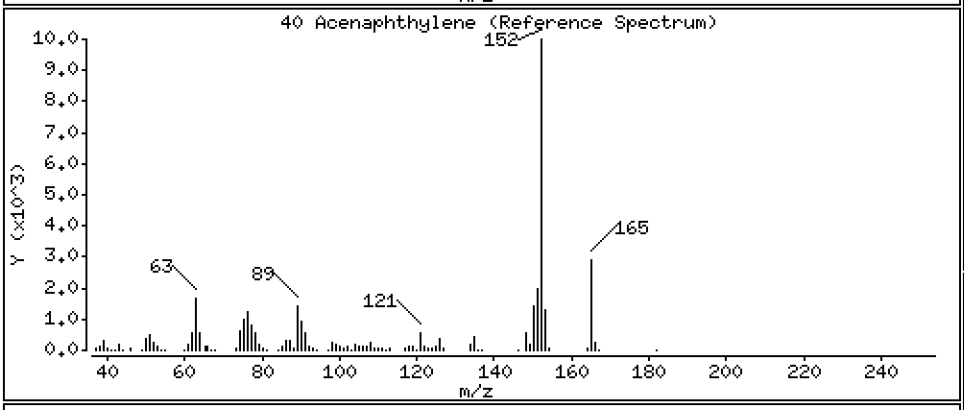
Column diameter: 0.25

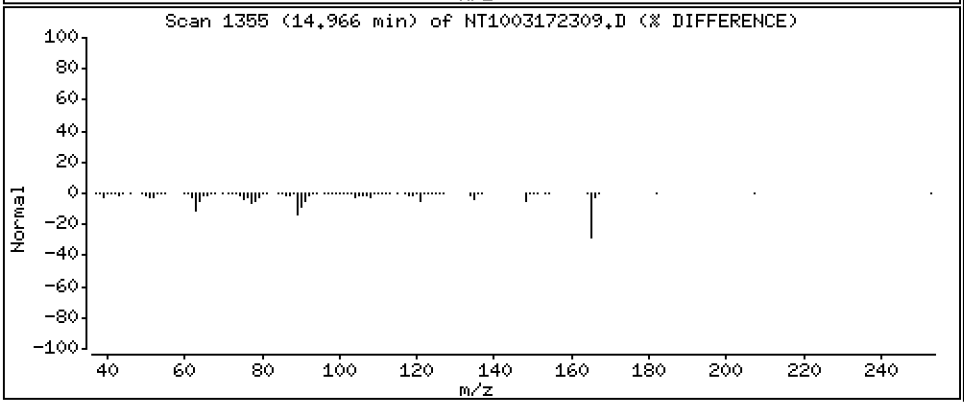
40 Acenaphthylene

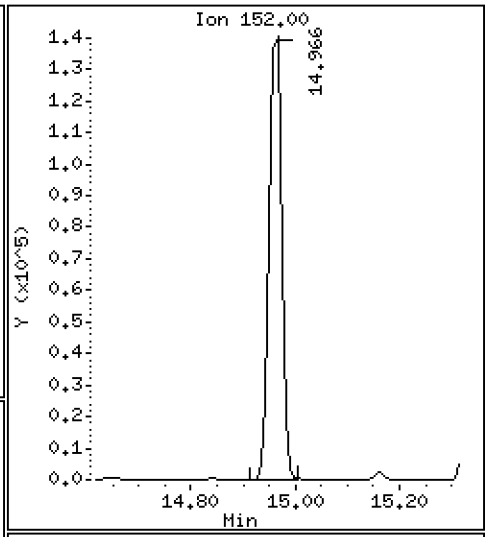
Concentration: 1.396 ug/mL

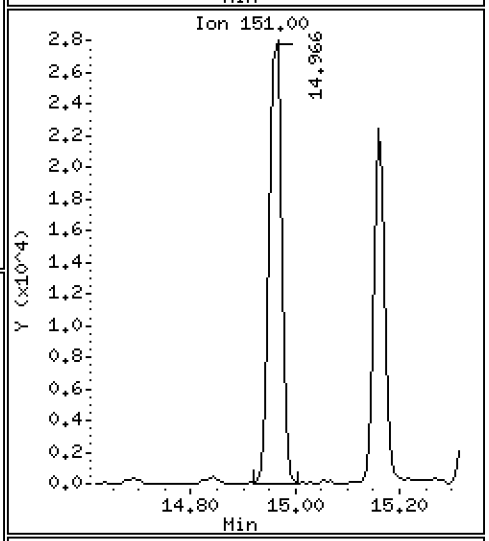


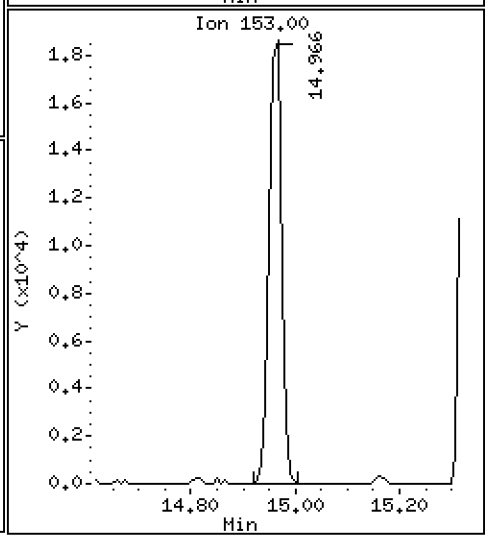












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172309.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

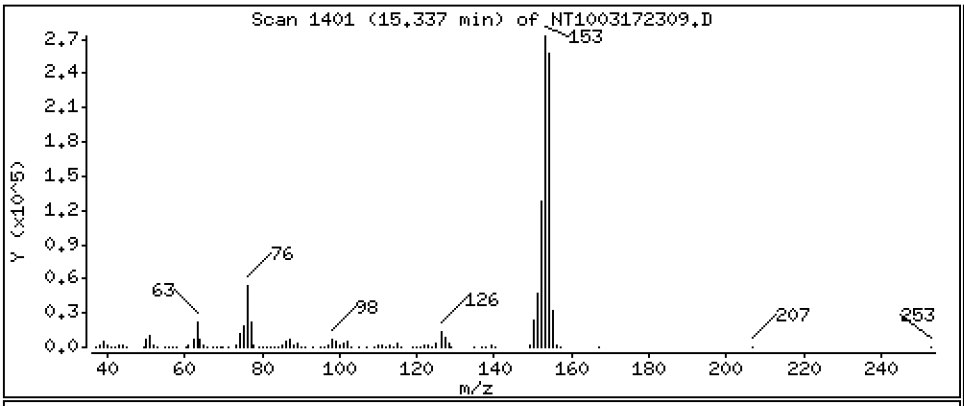
Operator: VTS

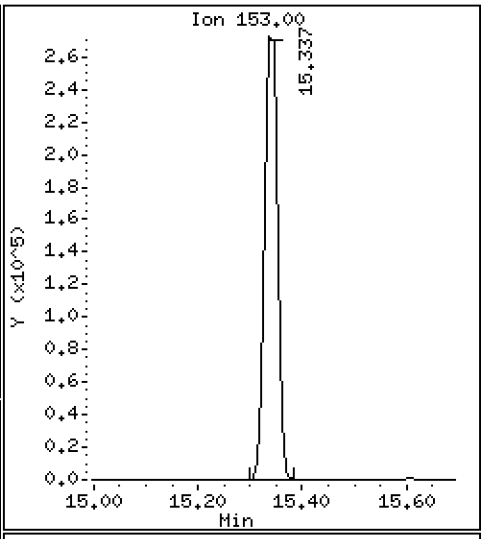
Column phase: ZB-5msi

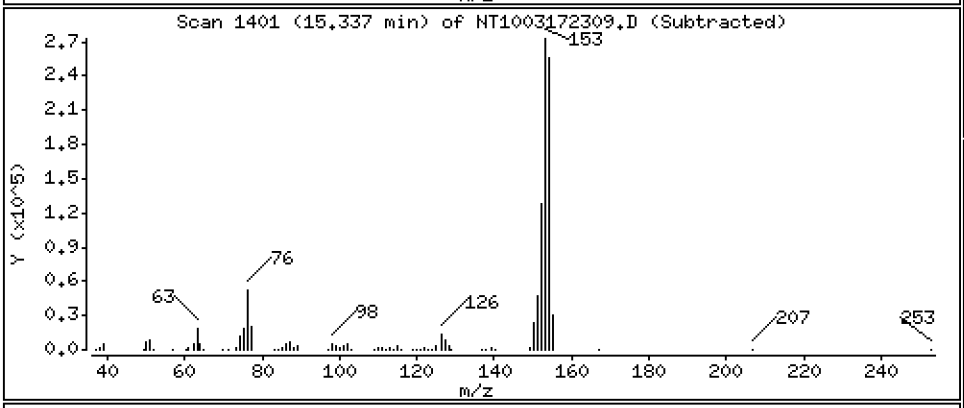
Column diameter: 0.25

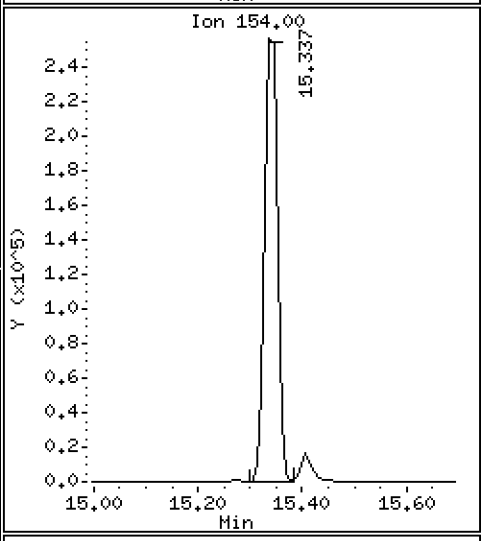
44 Acenaphthene

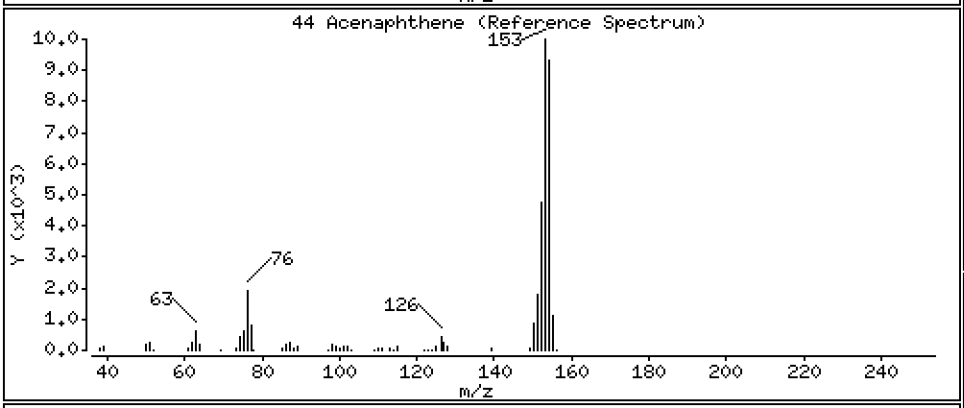
Concentration: 4.513 ug/mL

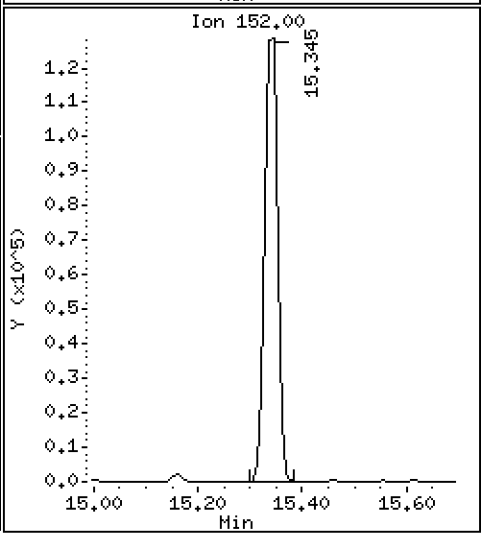


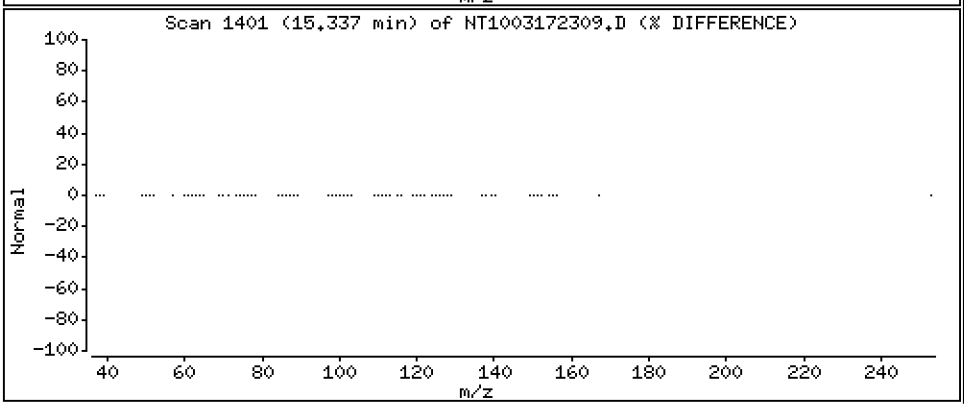












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172309.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

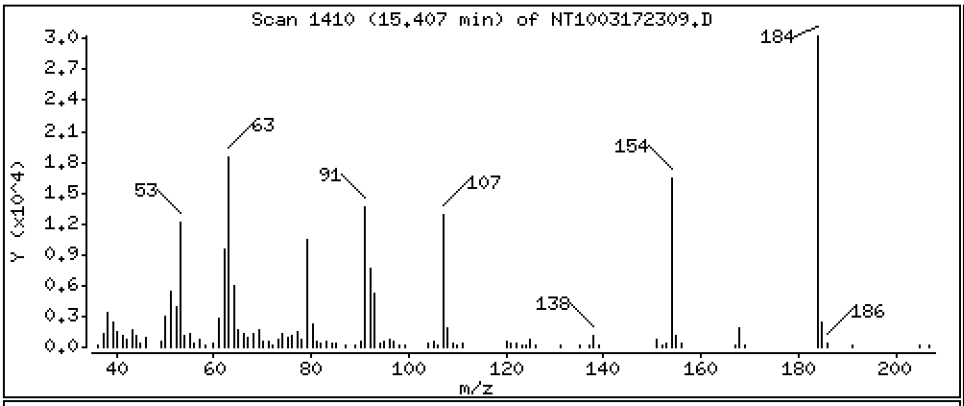
Operator: VTS

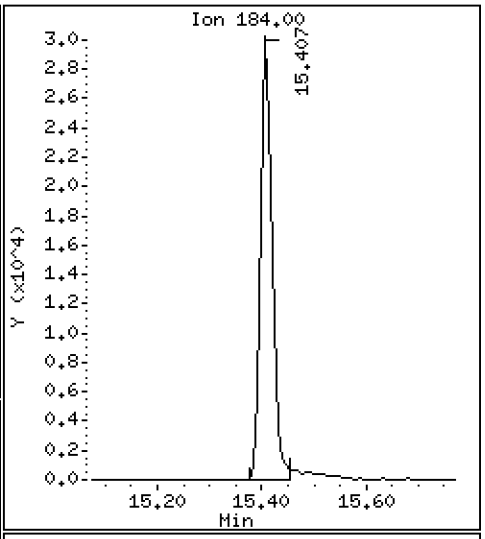
Column phase: ZB-5msi

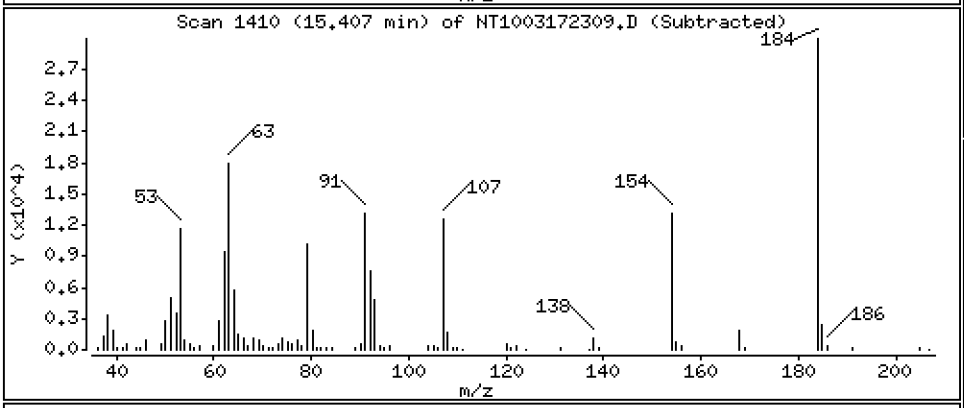
Column diameter: 0.25

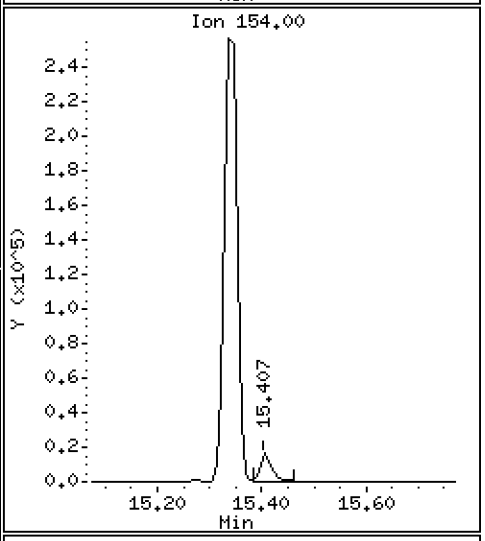
45 2,4-Dinitrophenol

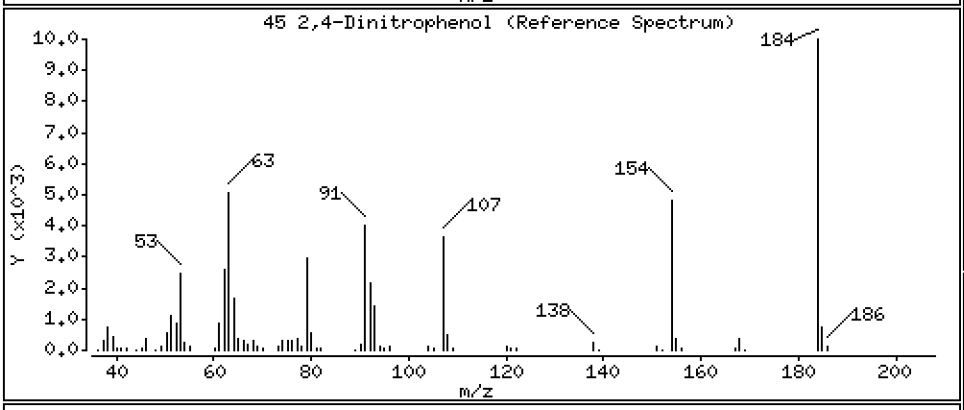
Concentration: 3.308 ug/mL

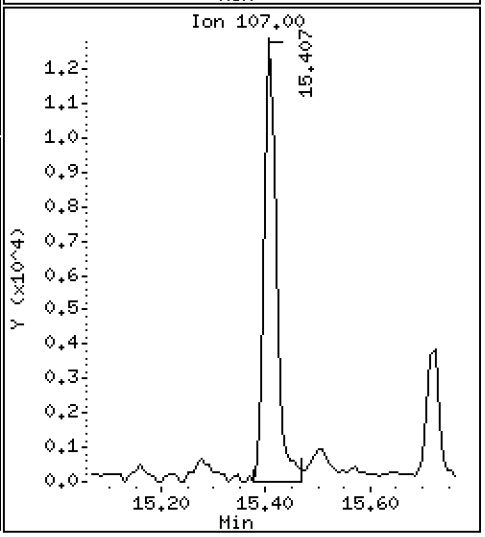


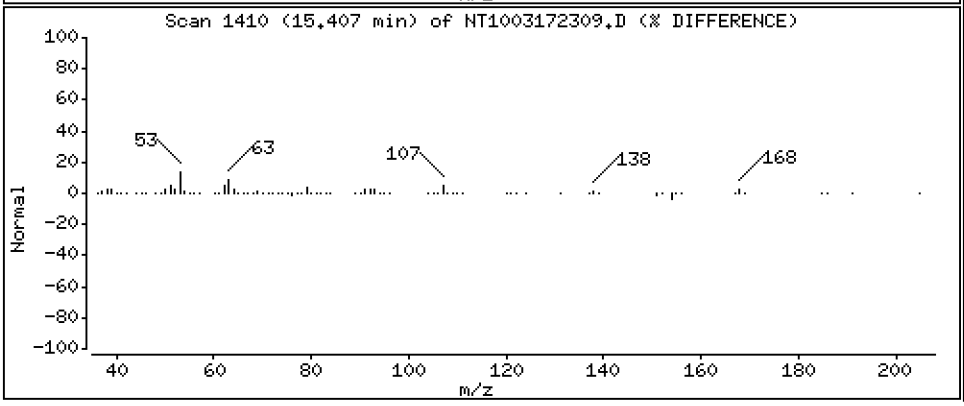












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

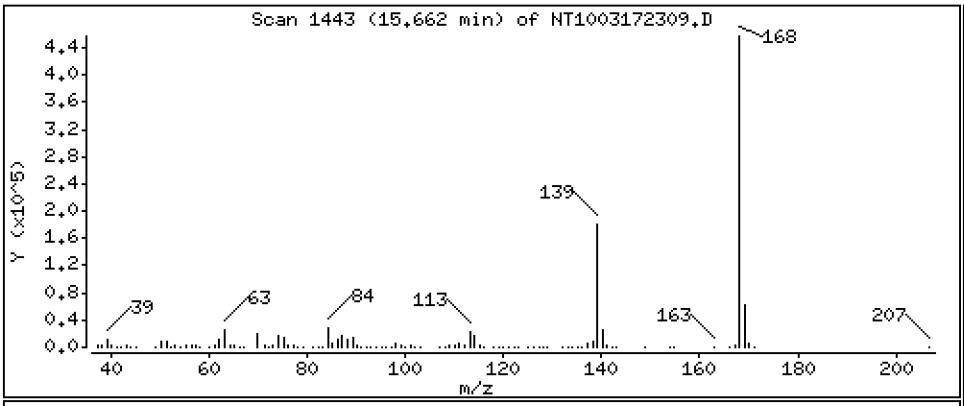
Operator: VTS

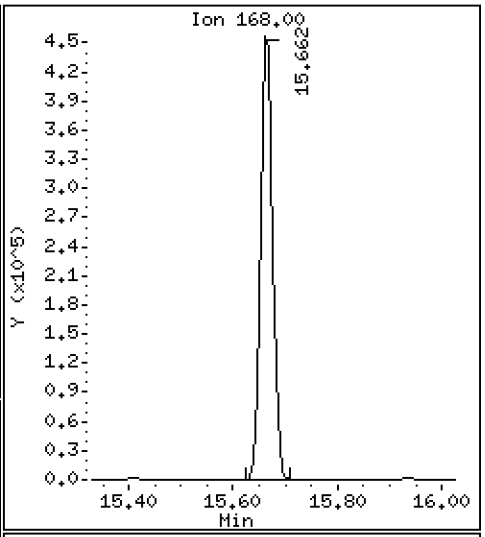
Column phase: ZB-5msi

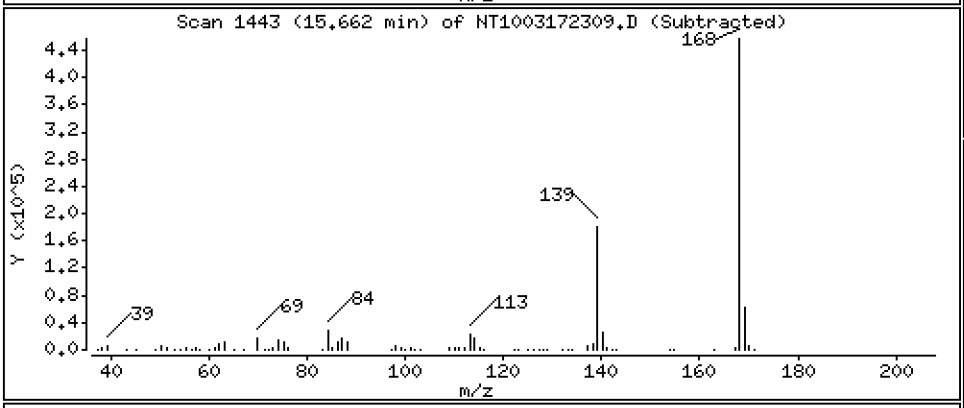
Column diameter: 0.25

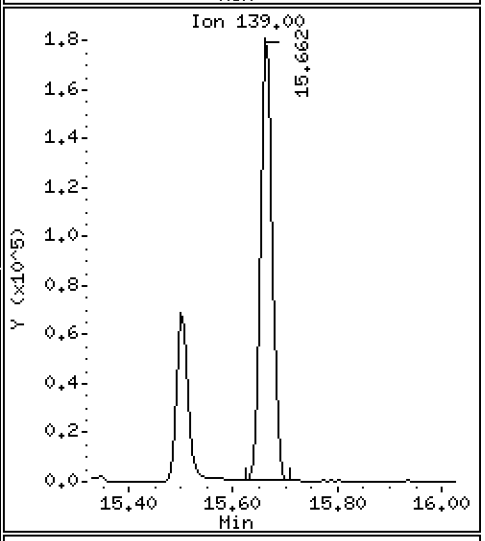
46 Dibenzofuran

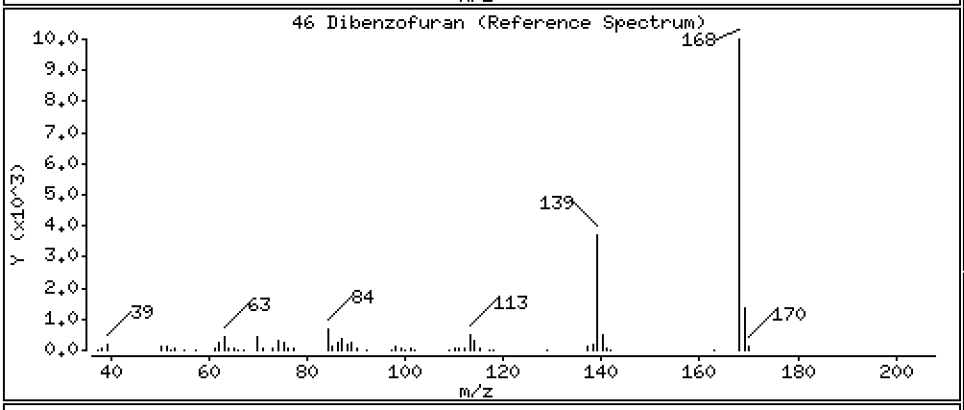
Concentration: 5.042 ug/mL

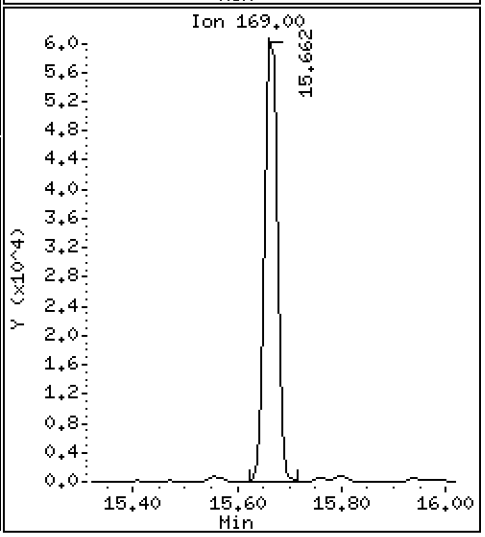


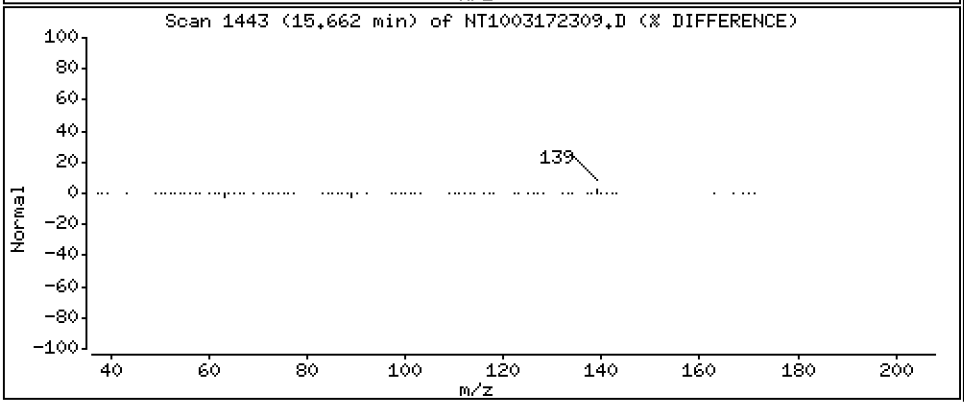












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

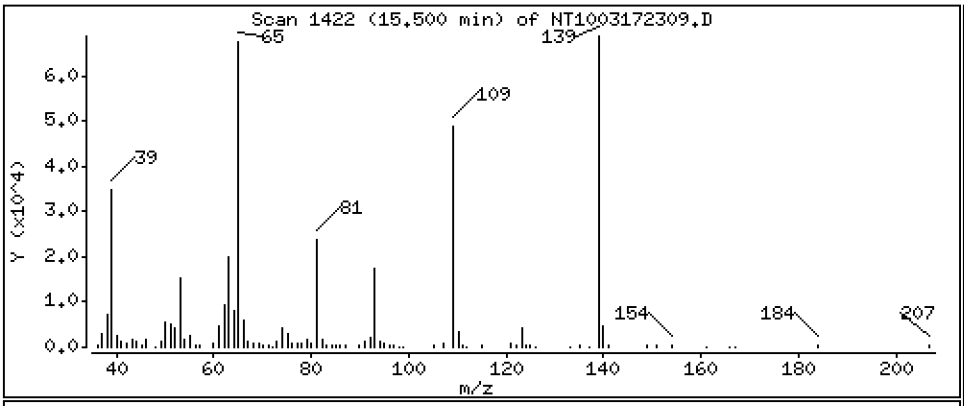
Operator: VTS

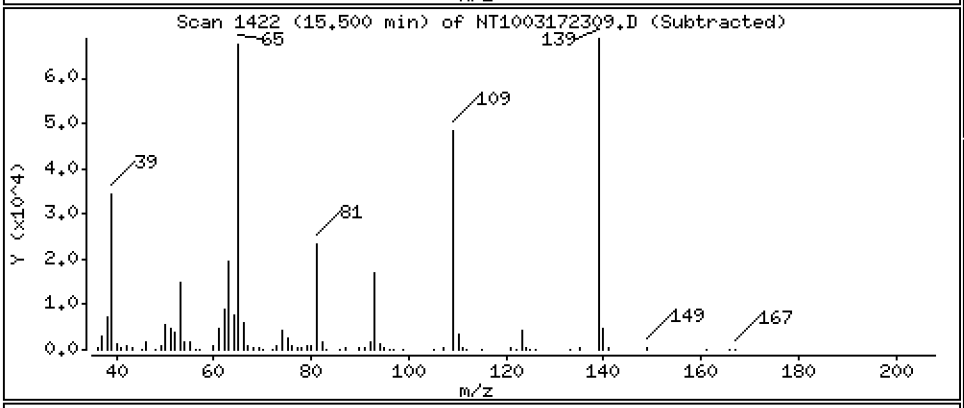
Column phase: ZB-5msi

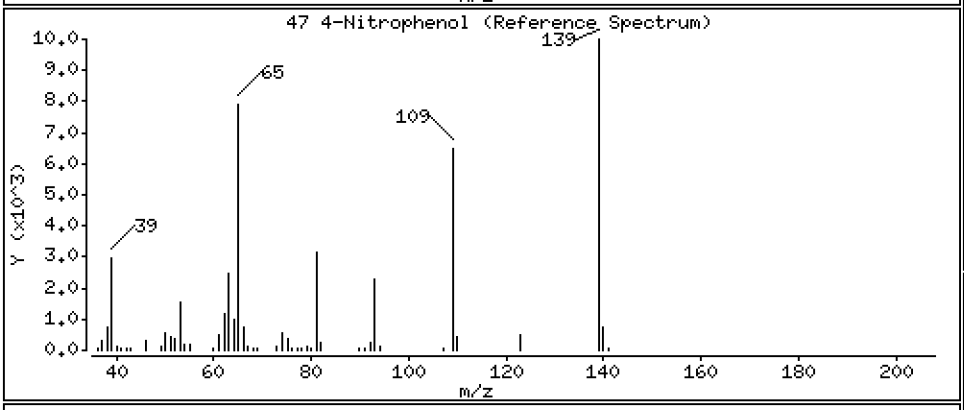
Column diameter: 0.25

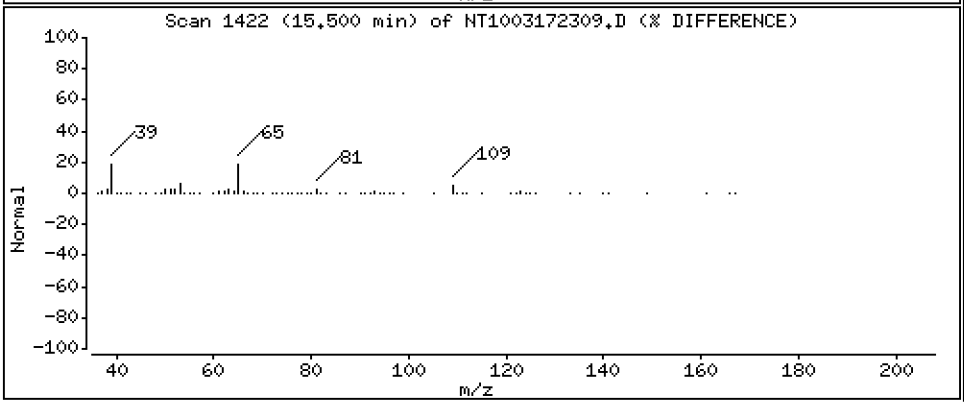
47 4-Nitrophenol

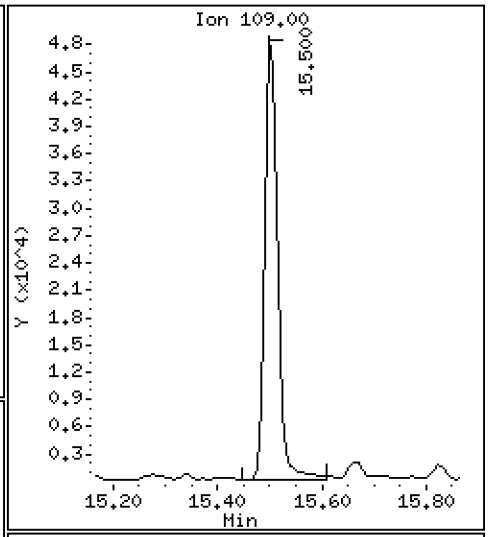
Concentration: 5.027 ug/mL

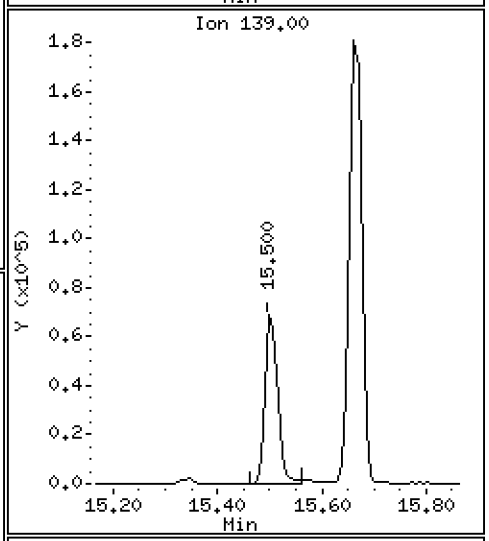


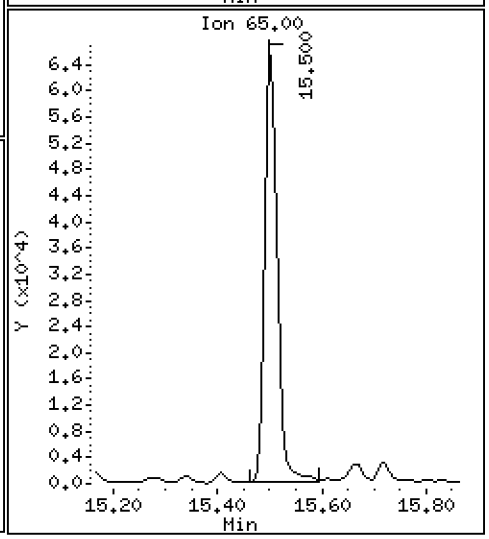












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

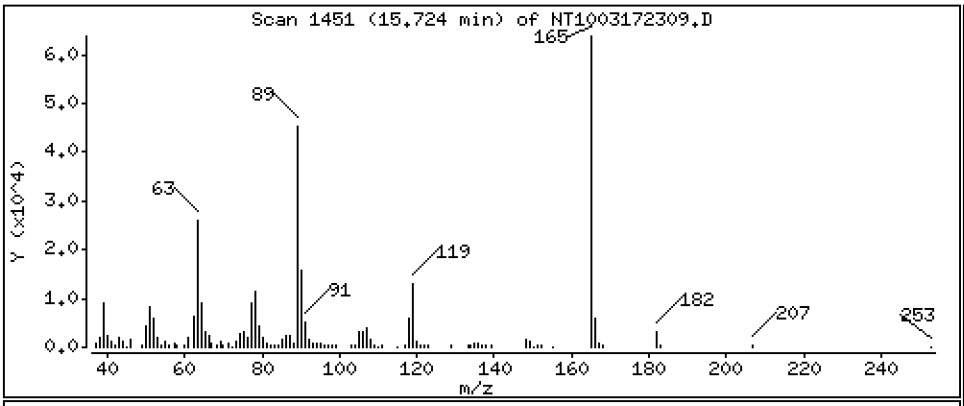
Operator: VTS

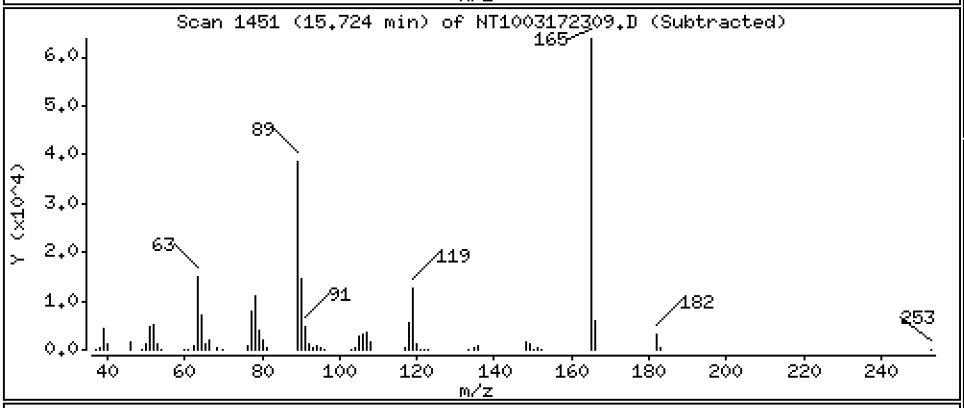
Column phase: ZB-5msi

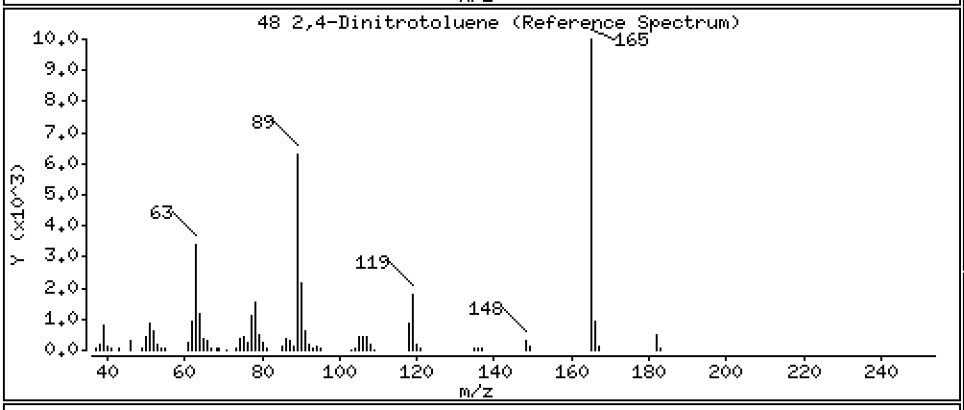
Column diameter: 0.25

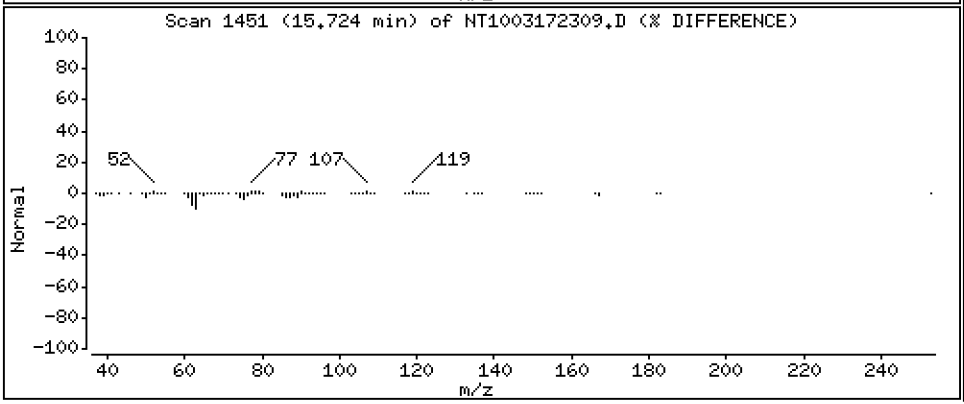
48 2,4-Dinitrotoluene

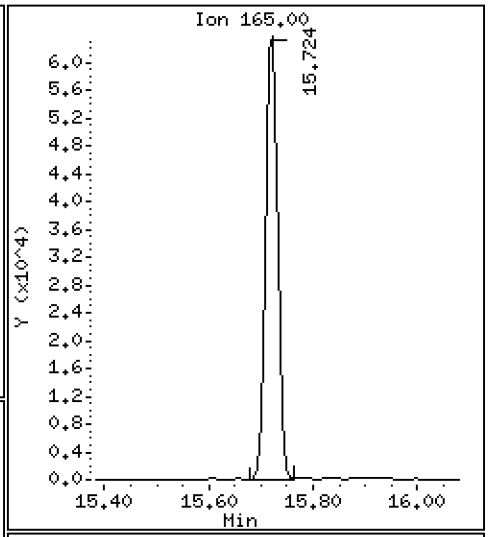
Concentration: 2.891 ug/mL

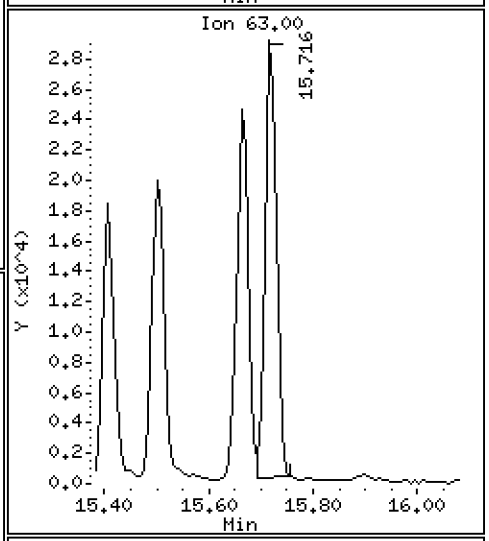


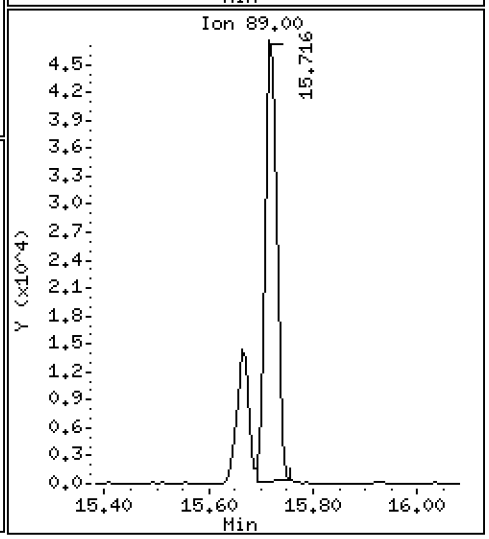












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

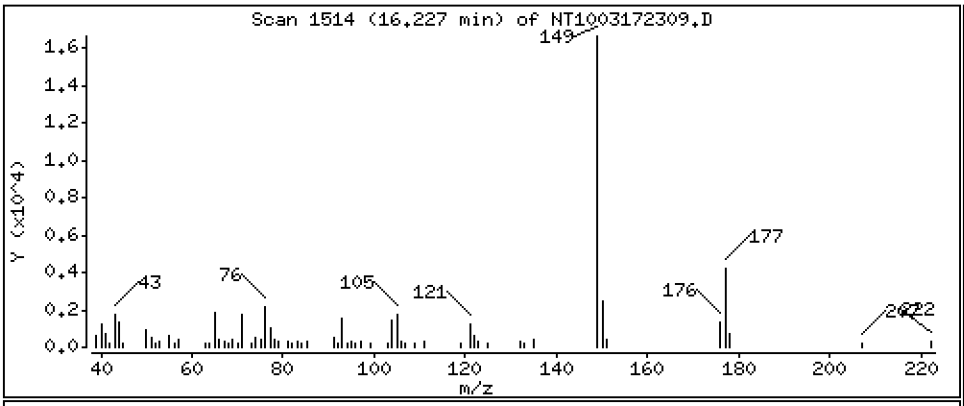
Operator: VTS

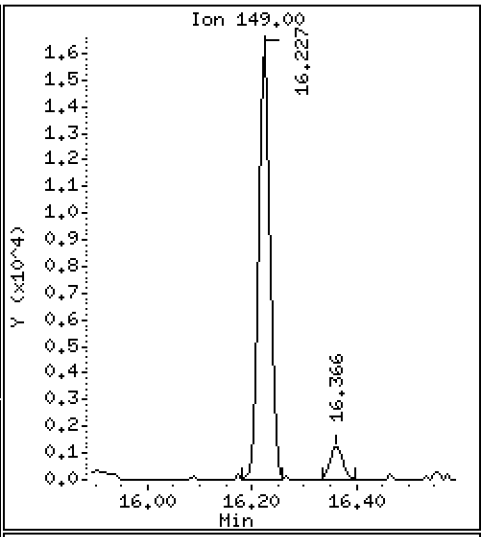
Column phase: ZB-5msi

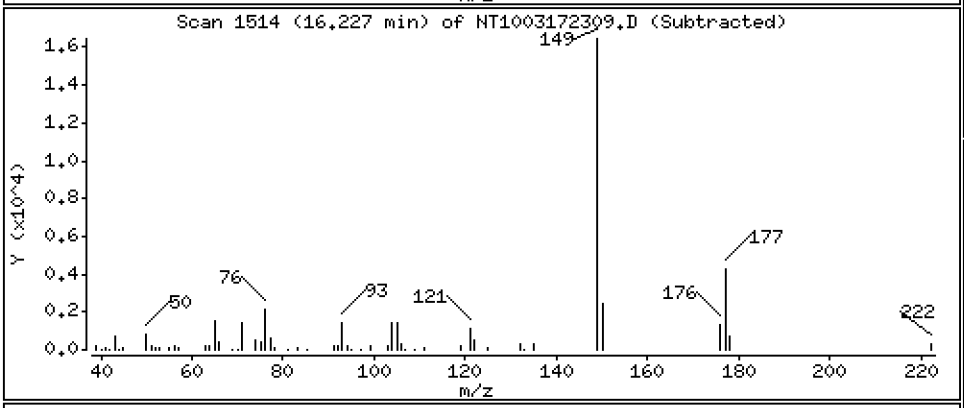
Column diameter: 0.25

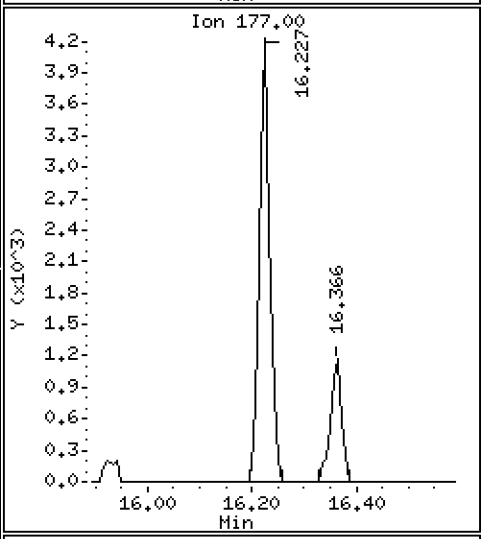
50 Diethylphthalate

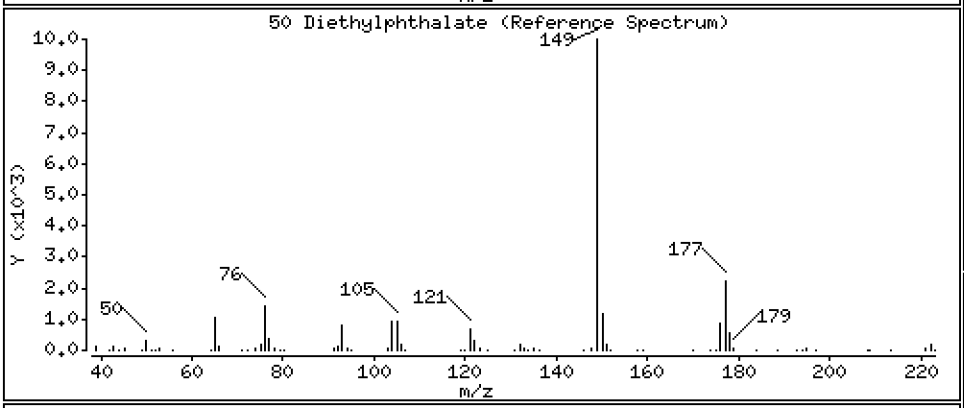
Concentration: 0.2407 ug/mL

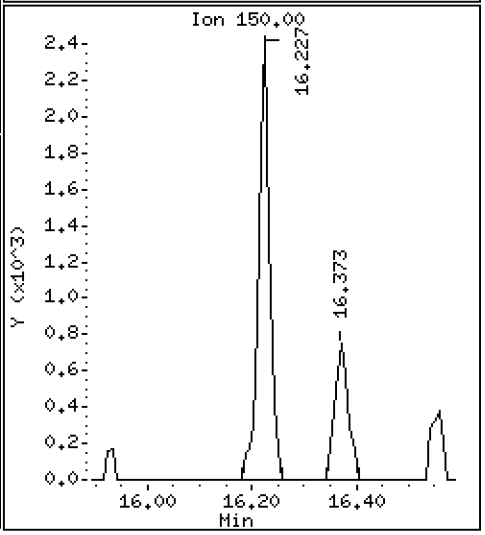


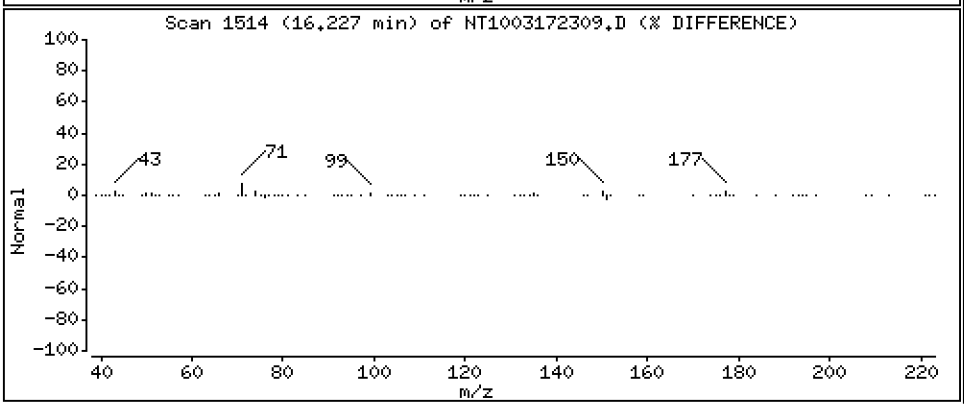












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

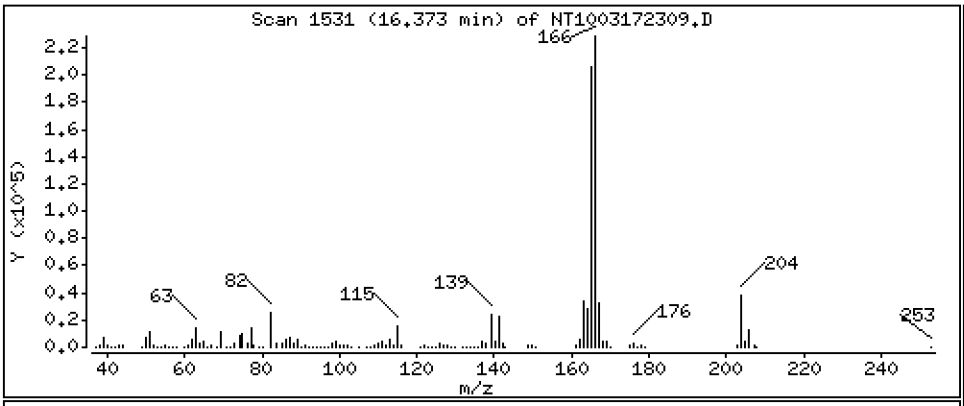
Operator: VTS

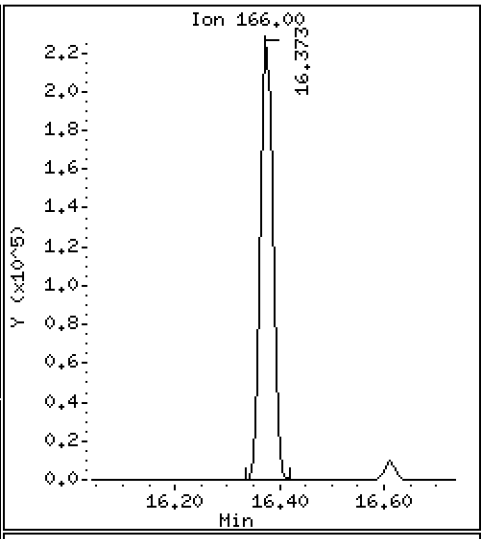
Column phase: ZB-5msi

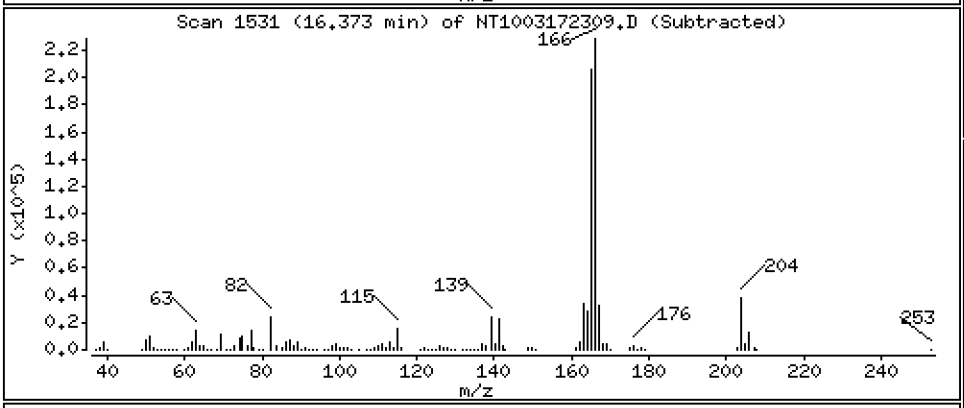
Column diameter: 0.25

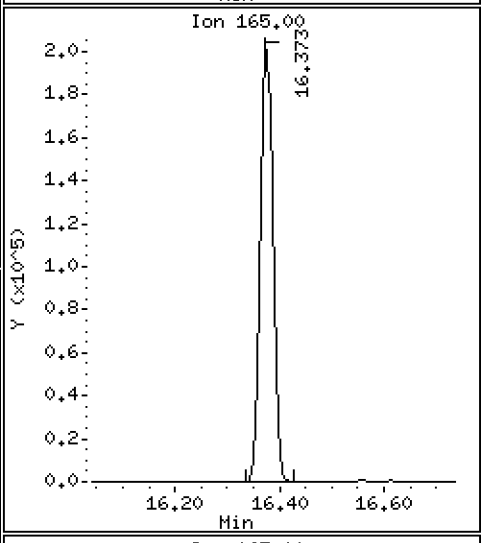
49 Fluorene

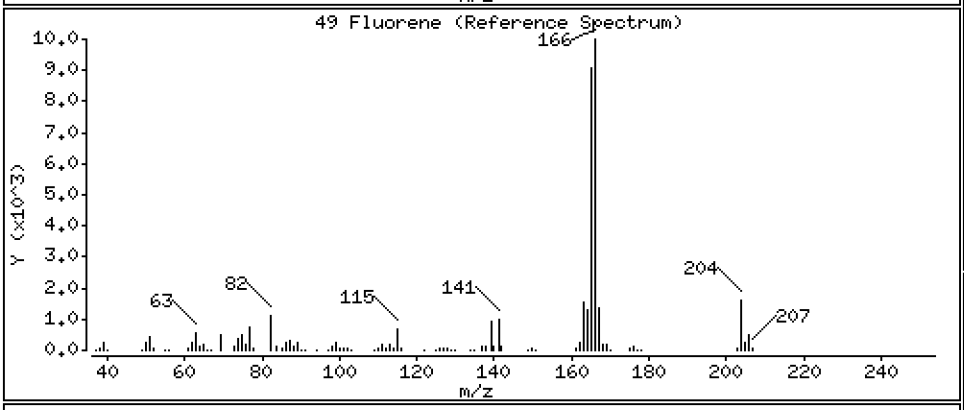
Concentration: 3.098 ug/mL

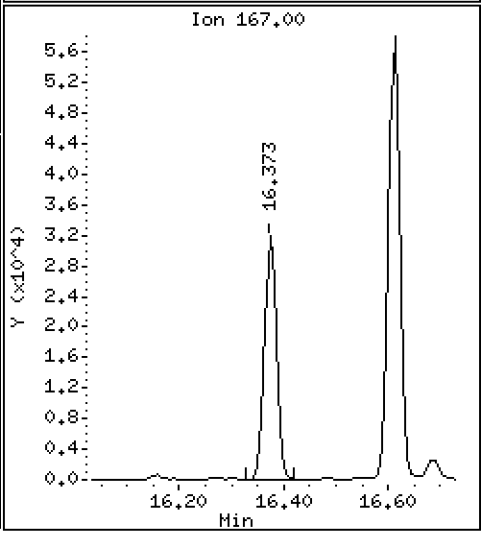


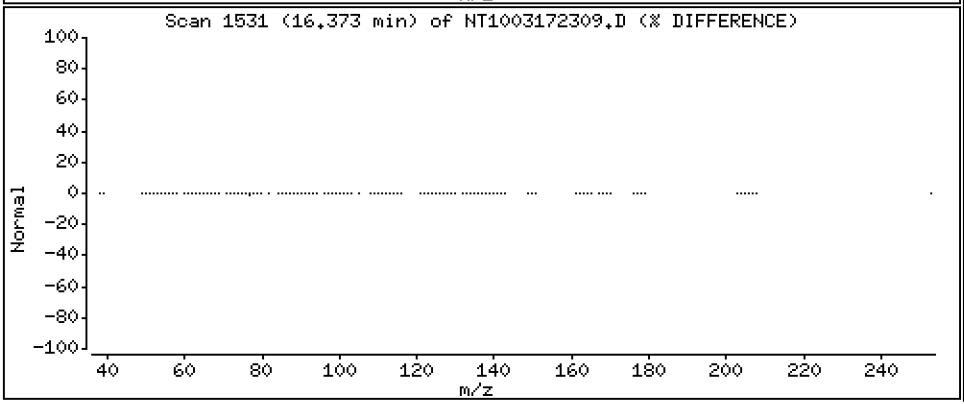












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

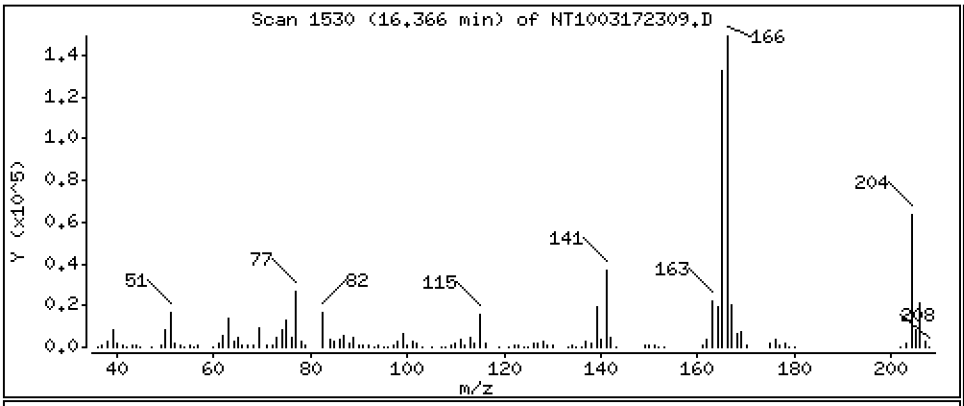
Operator: VTS

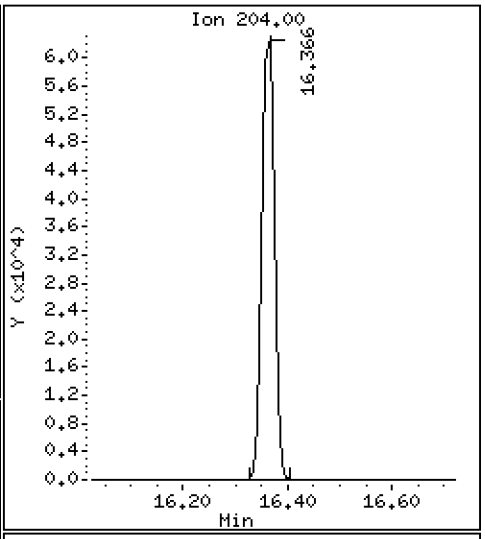
Column phase: ZB-5msi

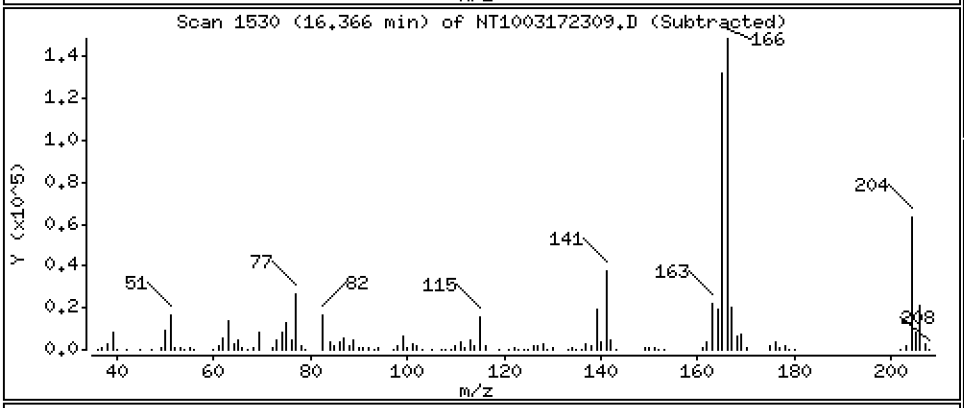
Column diameter: 0.25

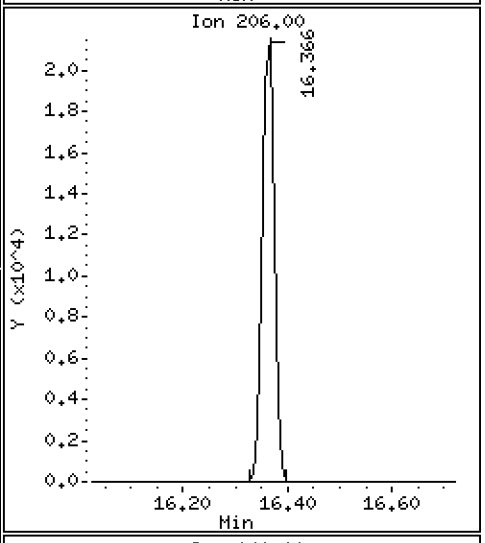
51 4-Chlorophenyl-phenylether

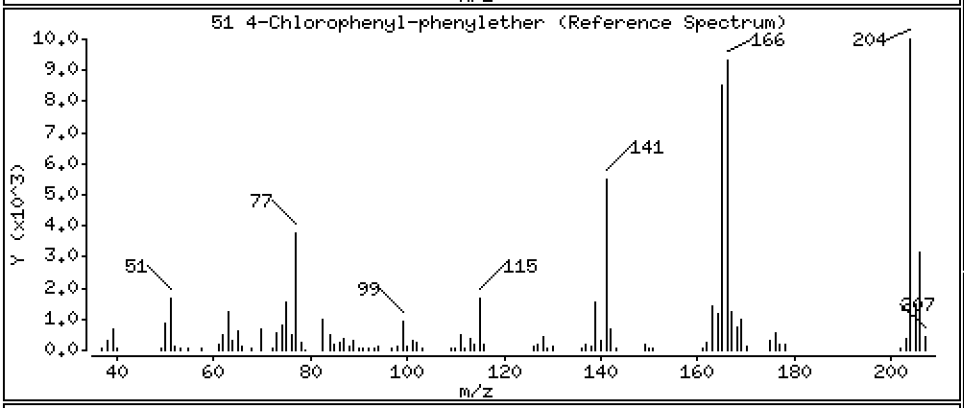
Concentration: 1.823 ug/mL

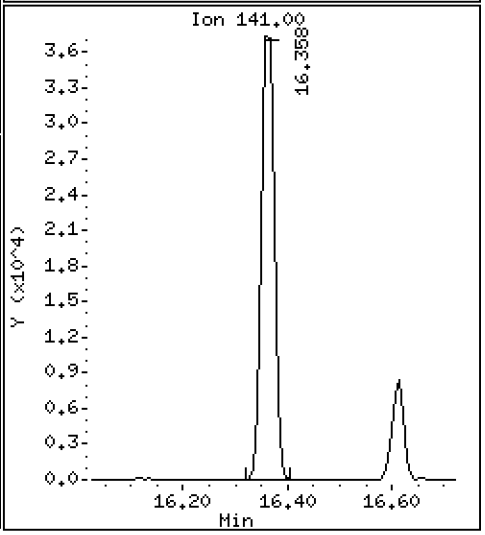


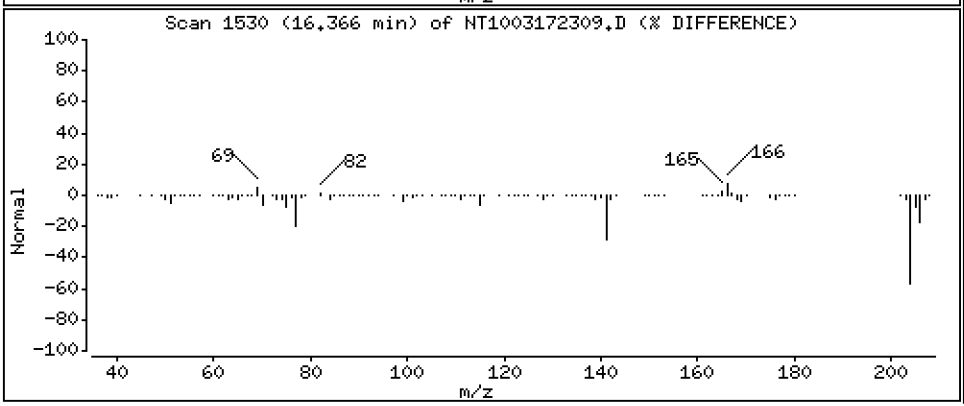












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172309.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

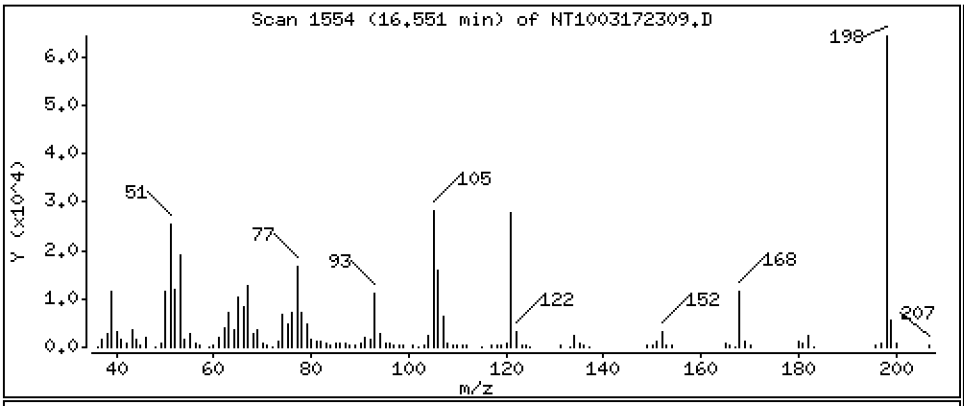
Operator: VTS

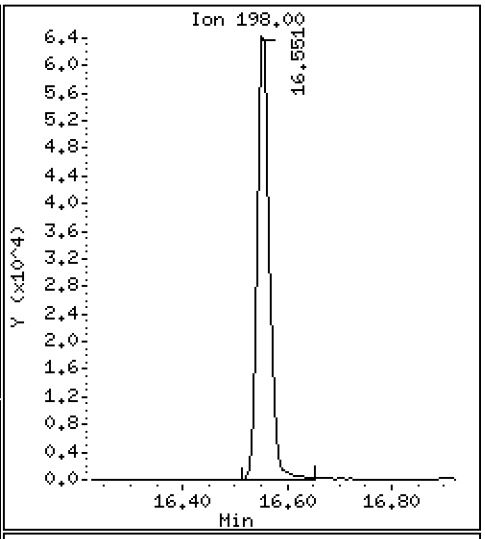
Column phase: ZB-5msi

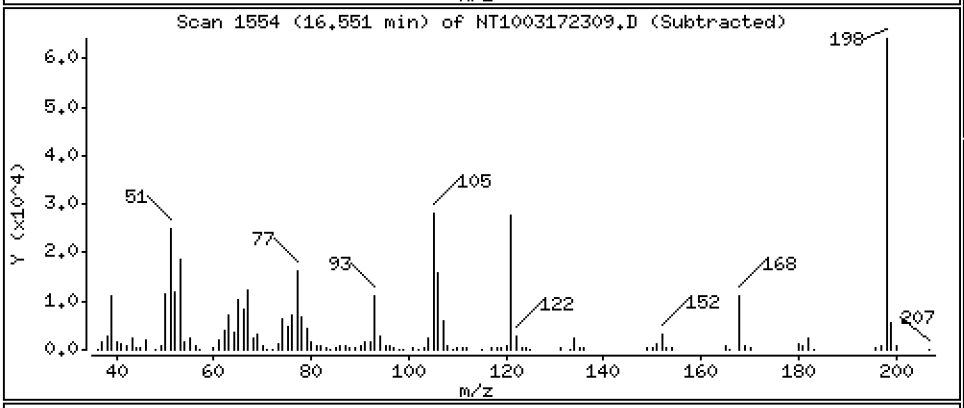
Column diameter: 0.25

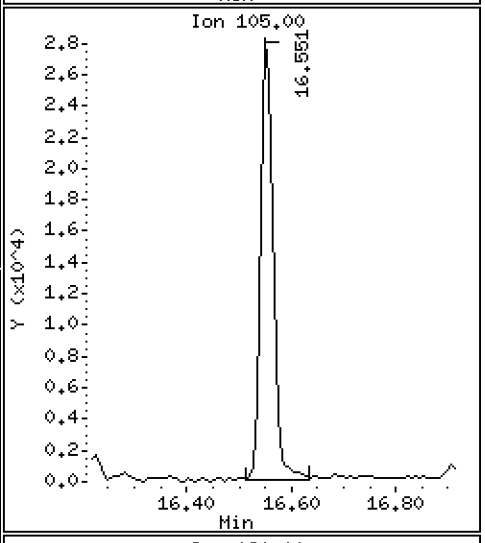
53 4,6-Dinitro-2-methylphenol

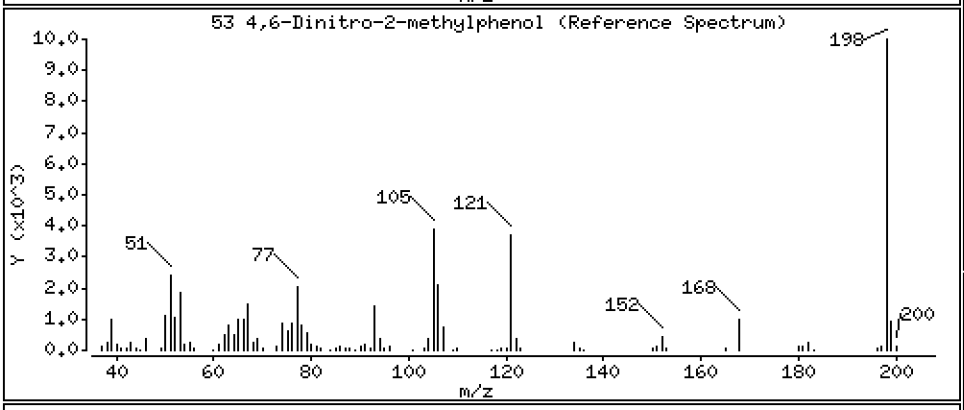
Concentration: 5.987 ug/mL

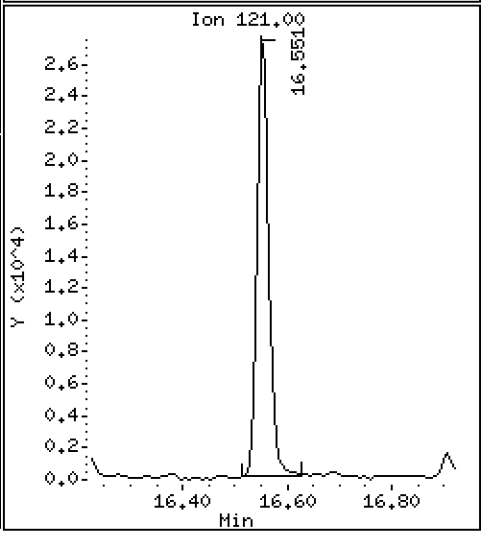


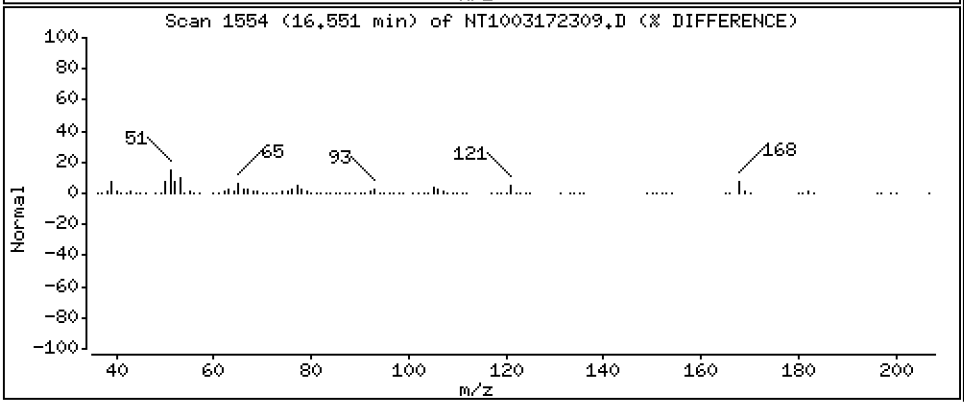












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

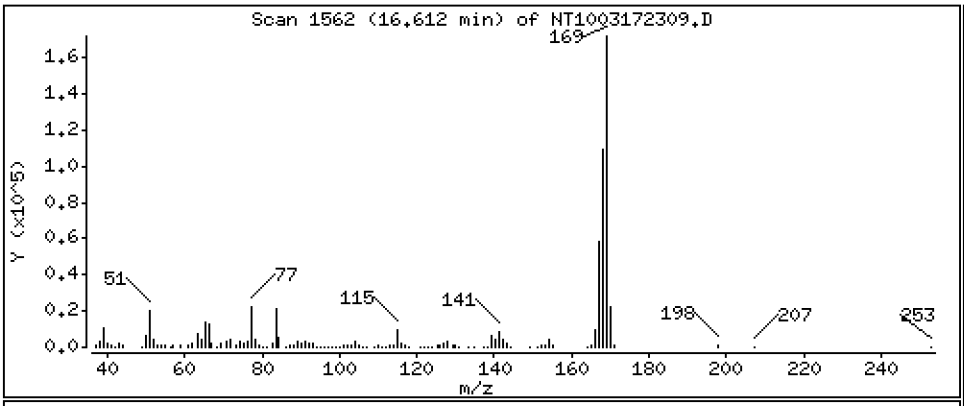
Operator: VTS

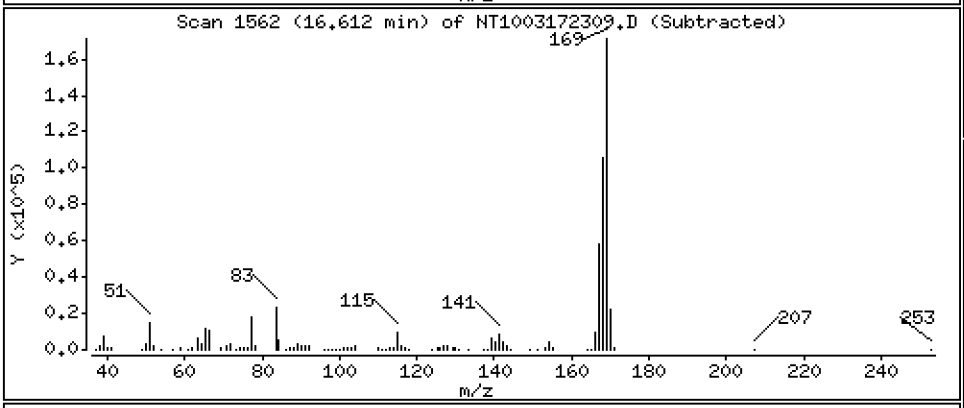
Column phase: ZB-5msi

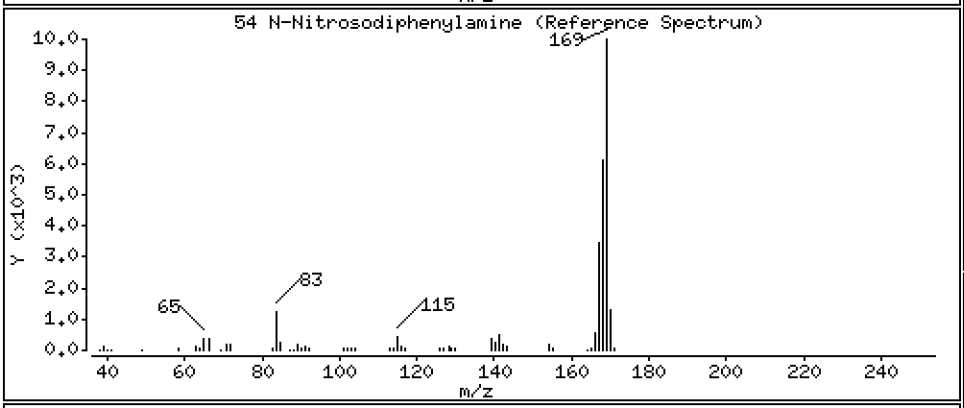
Column diameter: 0.25

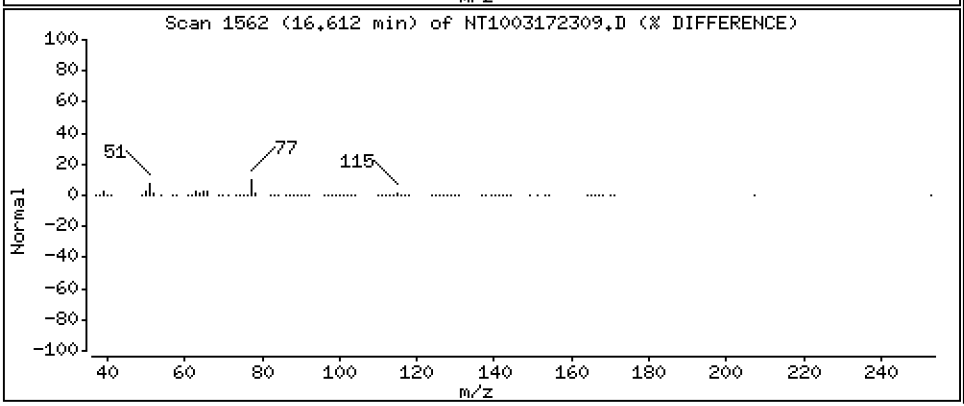
54 N-Nitrosodiphenylamine

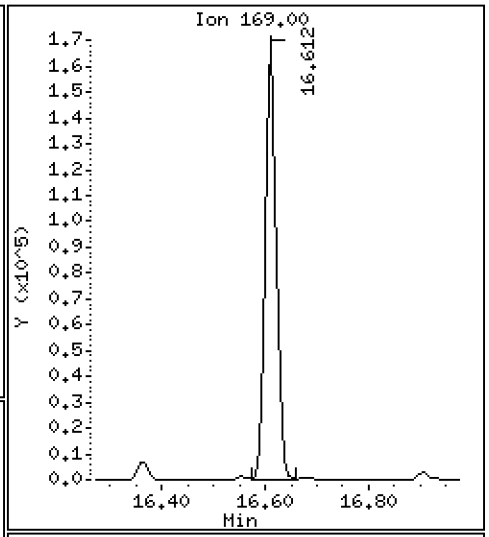
Concentration: 3.130 ug/mL

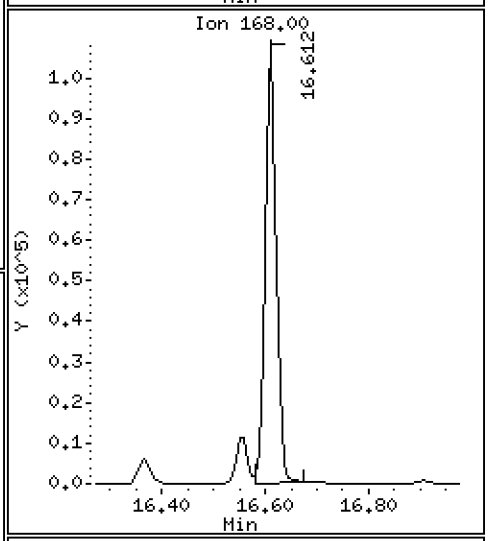


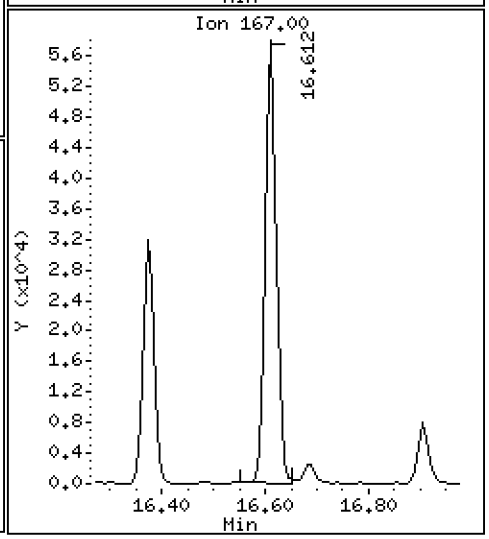












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

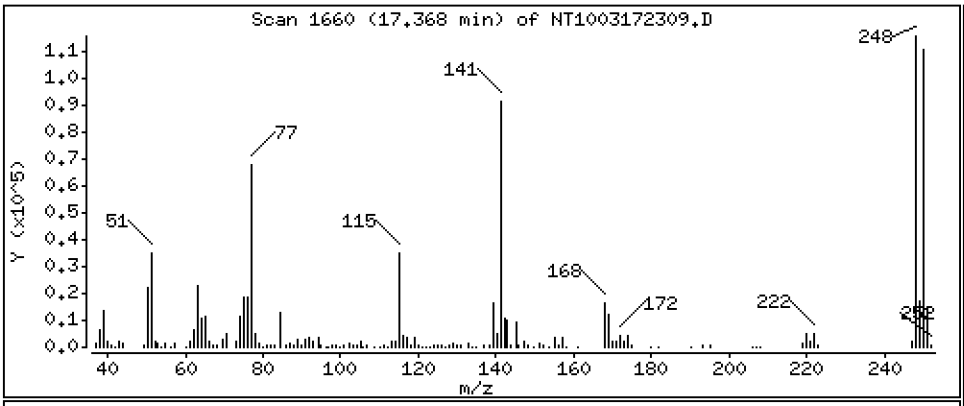
Operator: VTS

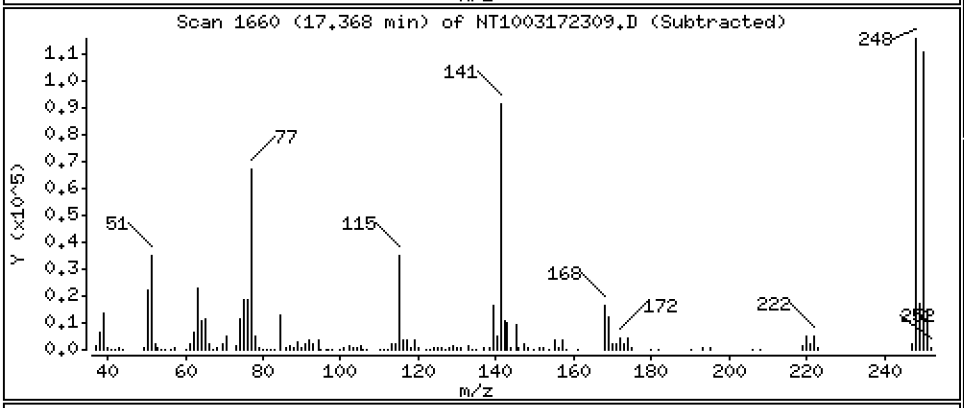
Column phase: ZB-5msi

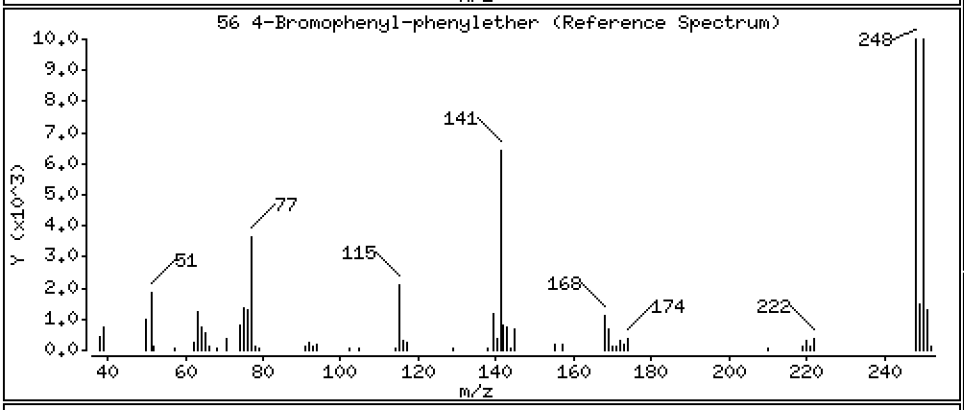
Column diameter: 0.25

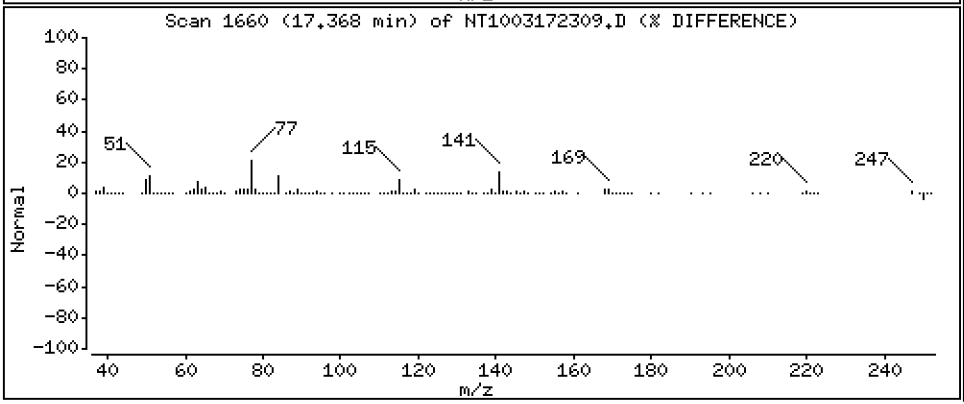
56 4-Bromophenyl-phenylether

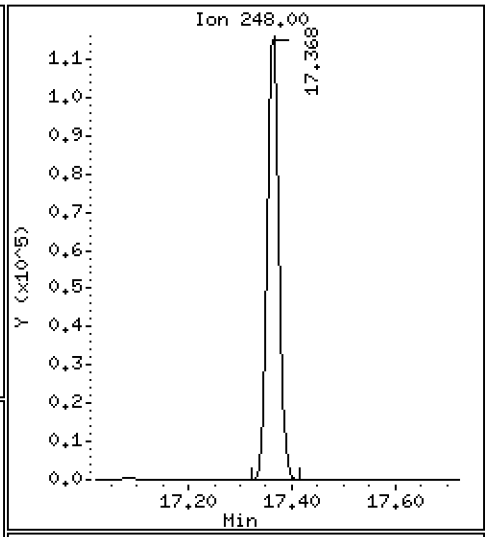
Concentration: 5.811 ug/mL

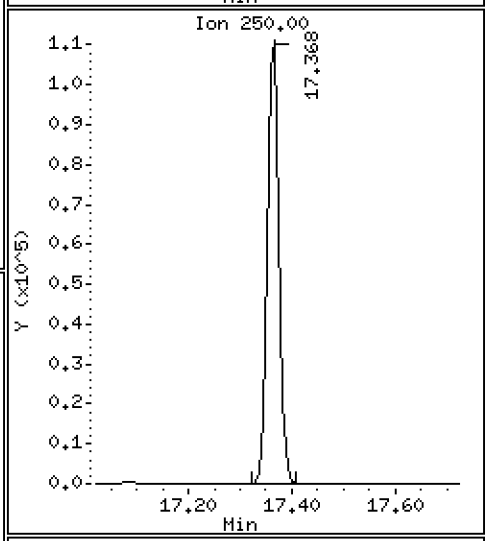


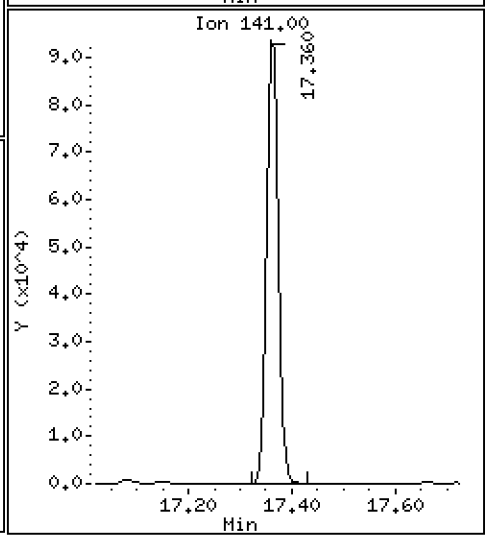












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

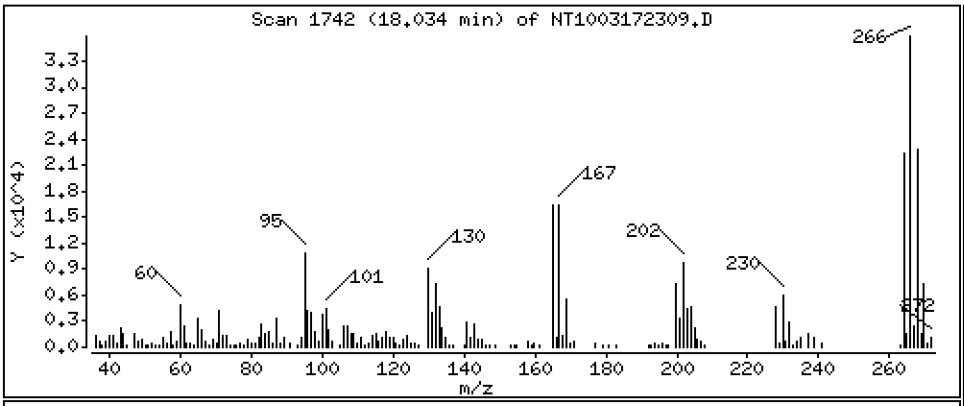
Operator: VTS

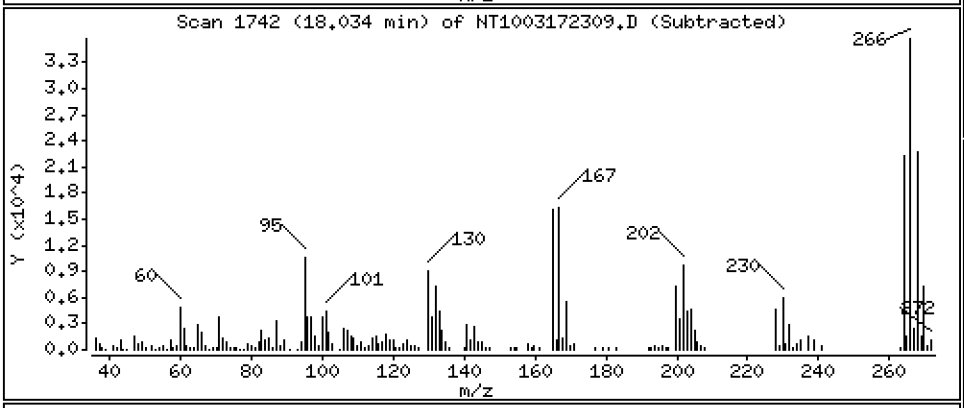
Column phase: ZB-5msi

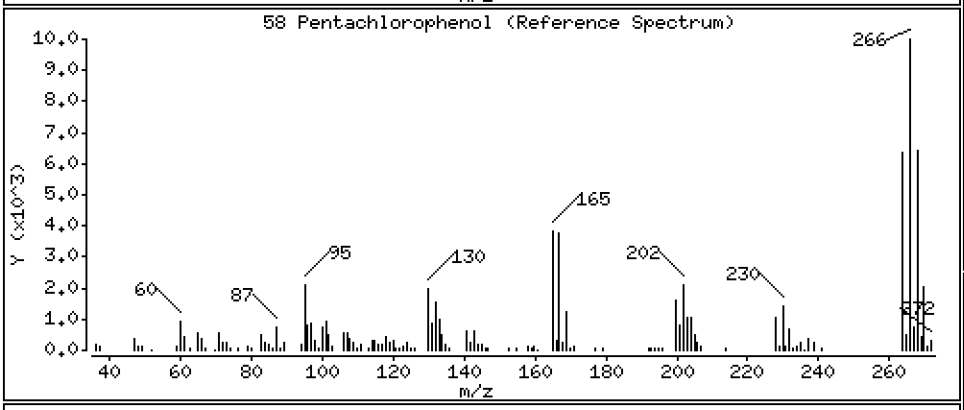
Column diameter: 0.25

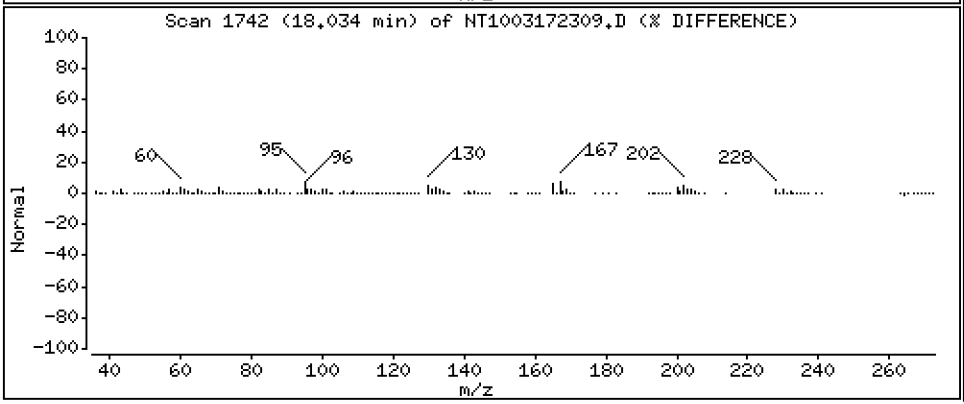
58 Pentachlorophenol

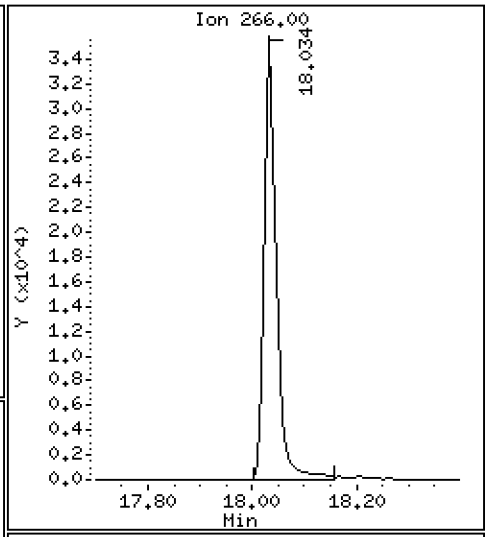
Concentration: 2.796 ug/mL

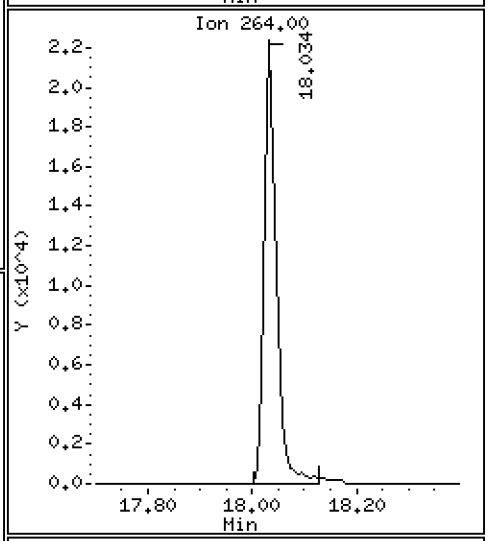


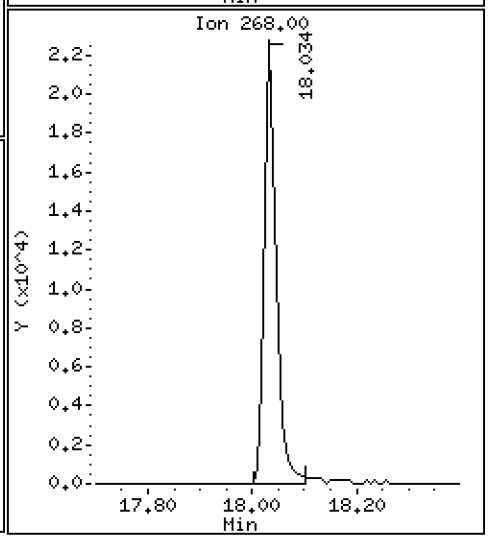












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

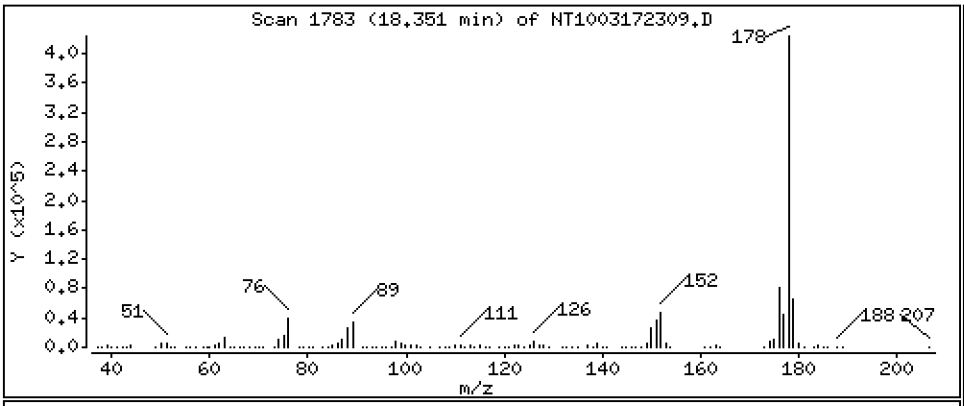
Operator: VTS

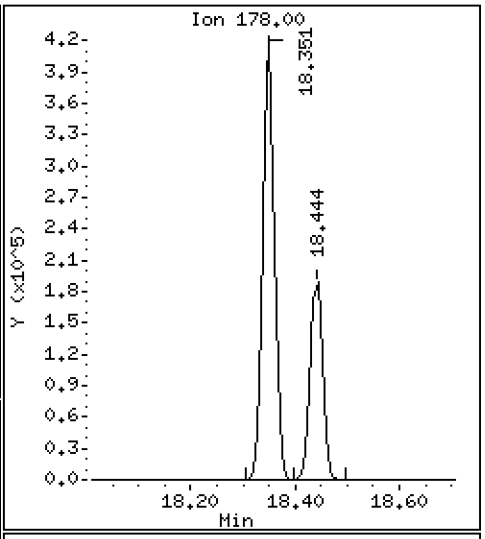
Column phase: ZB-5msi

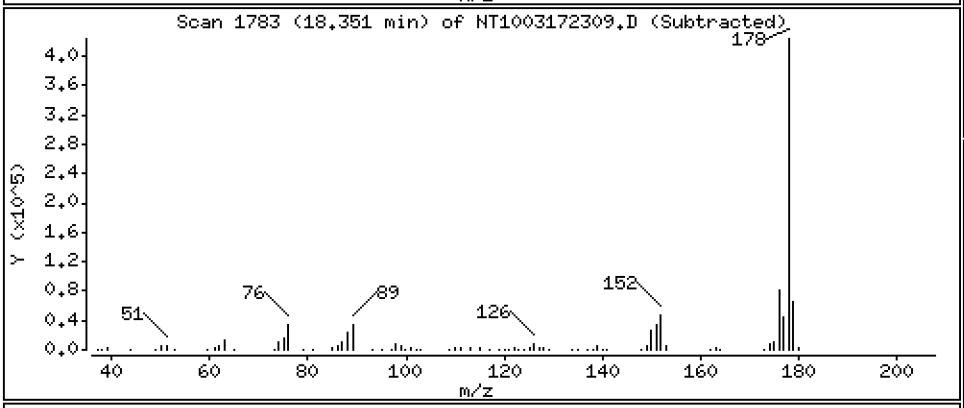
Column diameter: 0.25

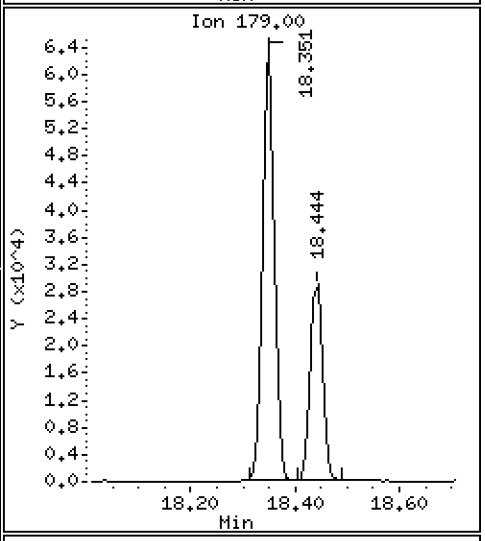
60 Phenanthrene

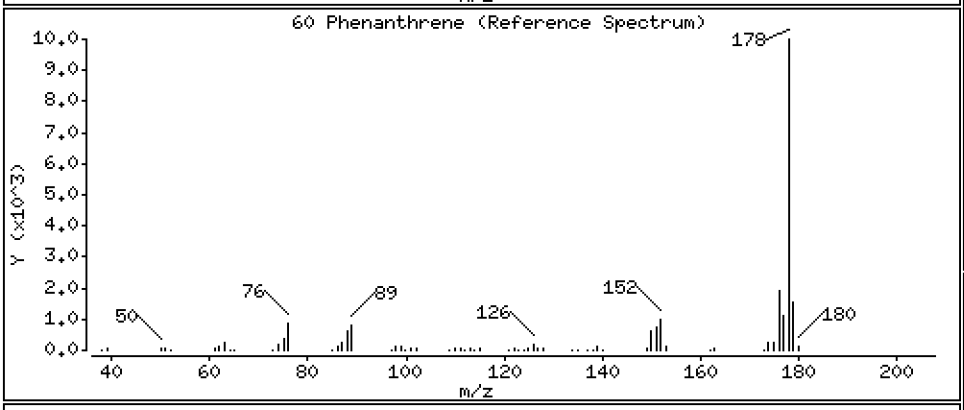
Concentration: 4.065 ug/mL

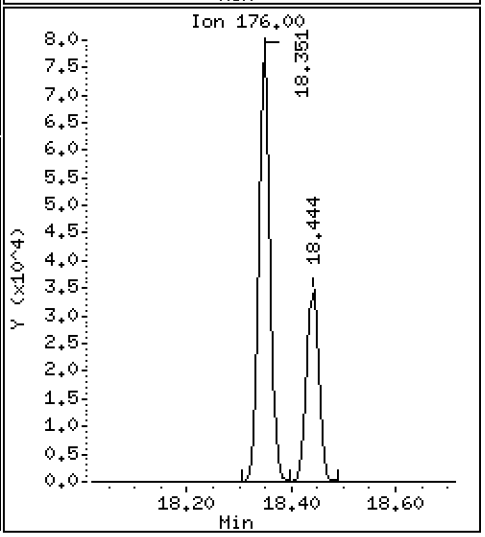


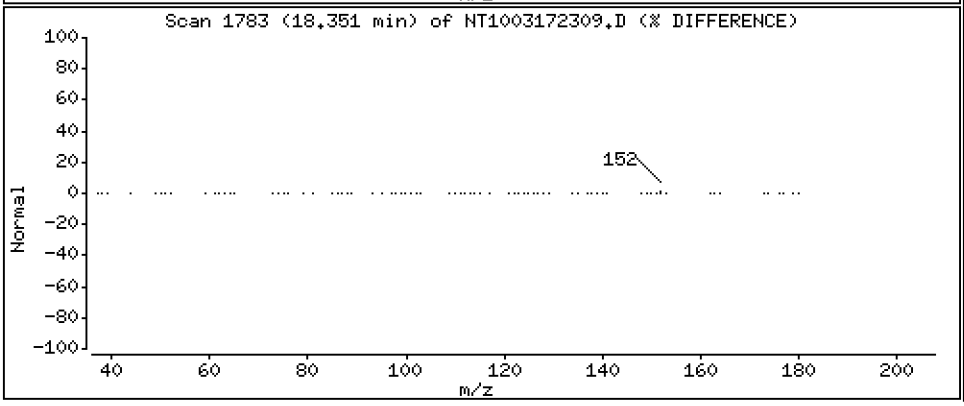












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

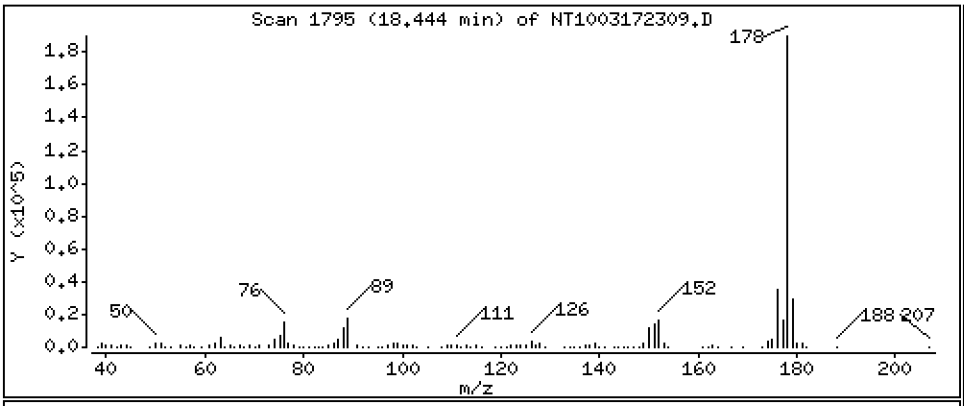
Operator: VTS

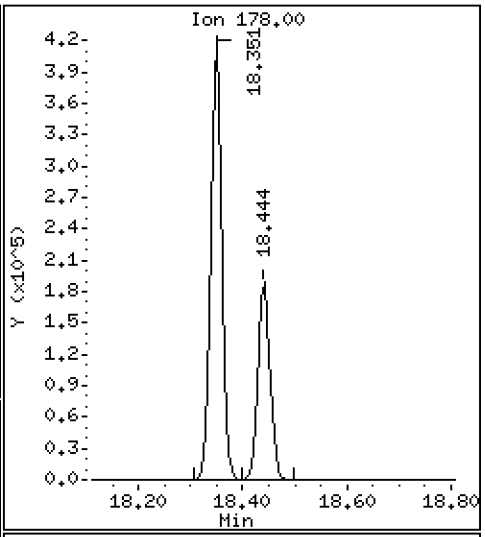
Column phase: ZB-5msi

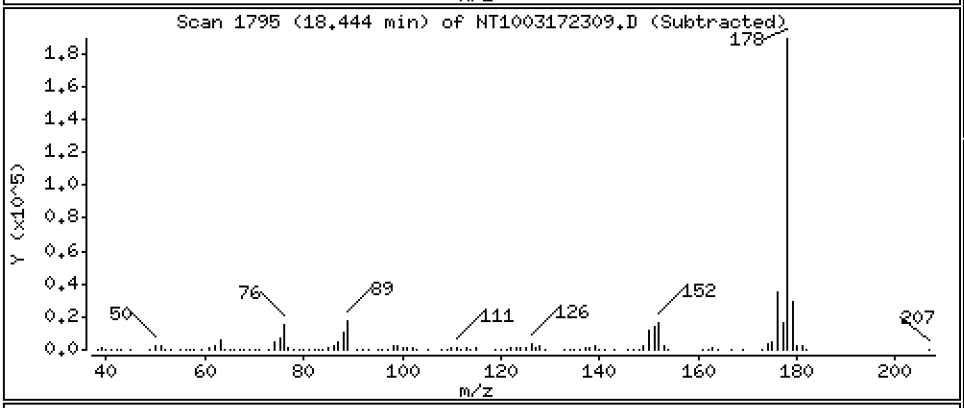
Column diameter: 0.25

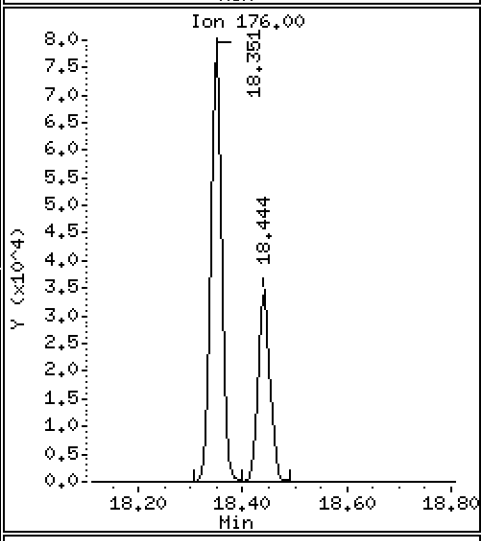
61 Anthracene

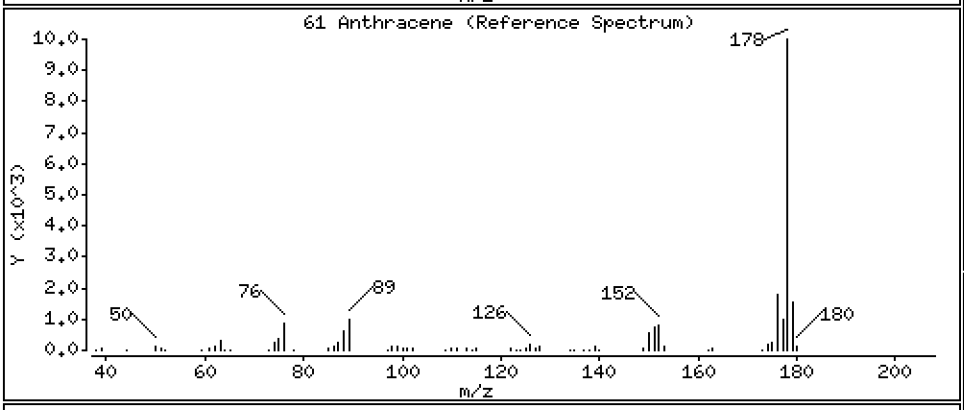
Concentration: 1.993 ug/mL

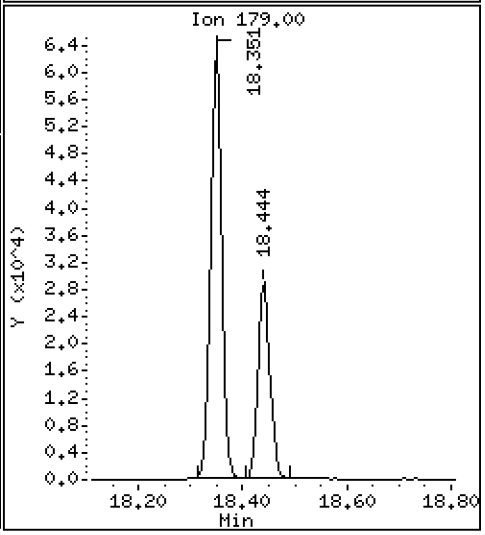


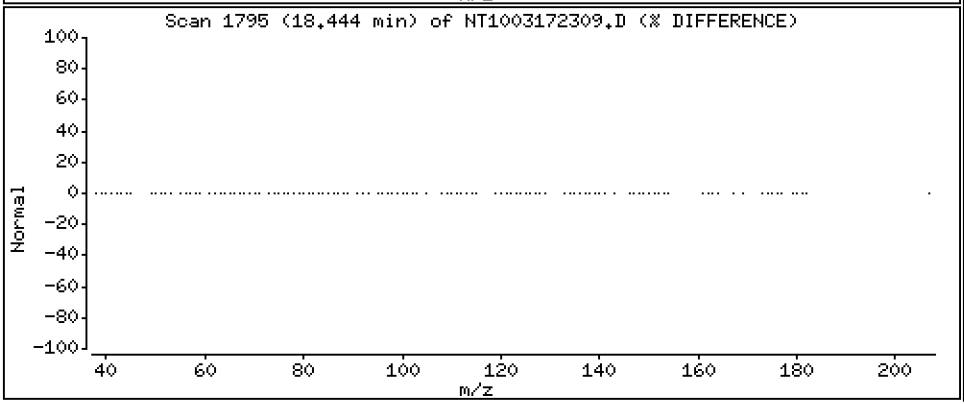












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

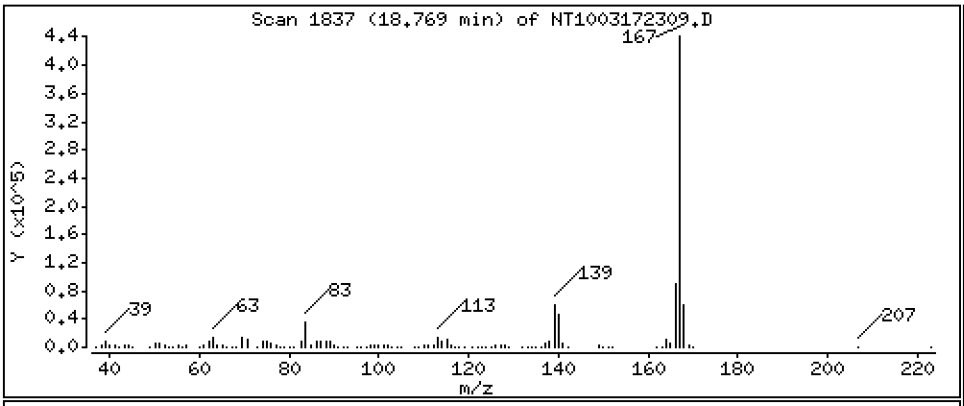
Operator: VTS

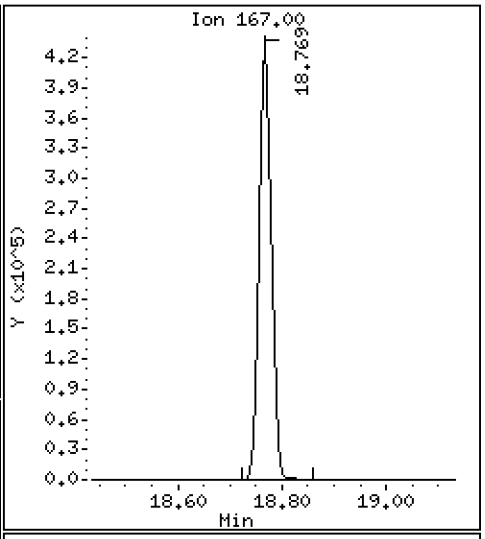
Column phase: ZB-5msi

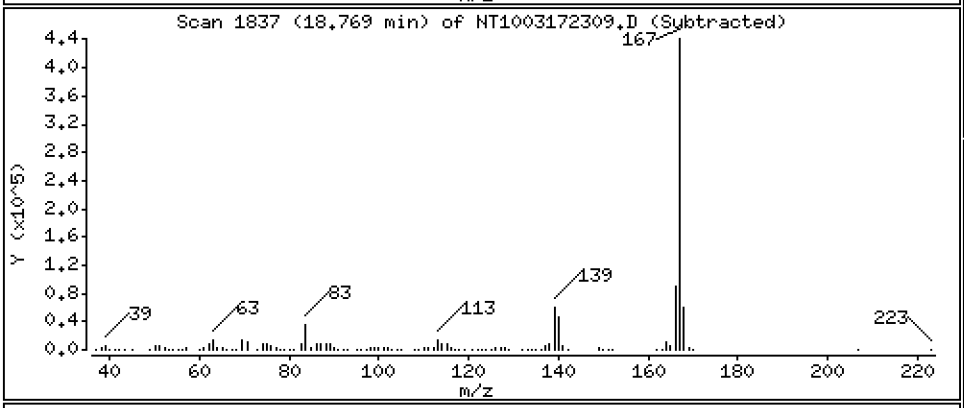
Column diameter: 0.25

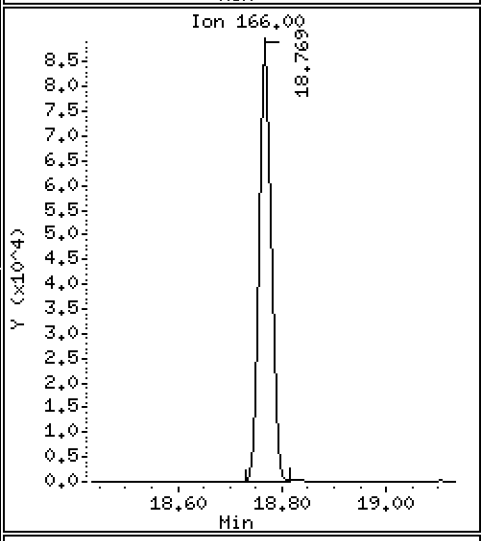
62 Carbazole

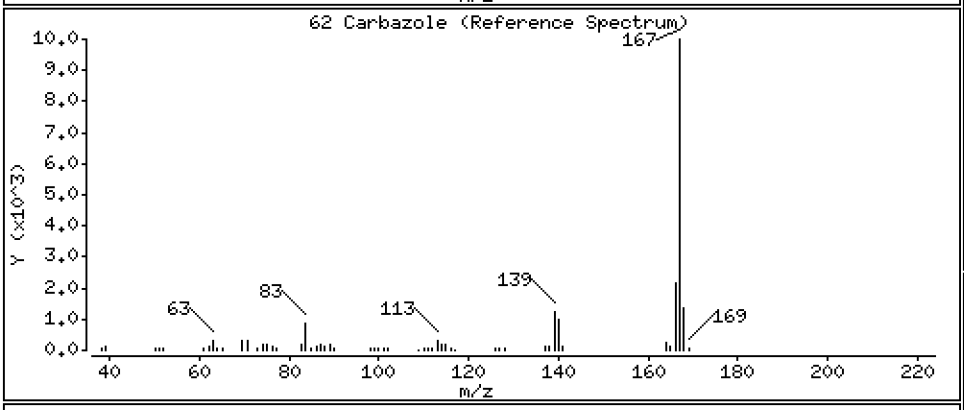
Concentration: 5.138 ug/mL

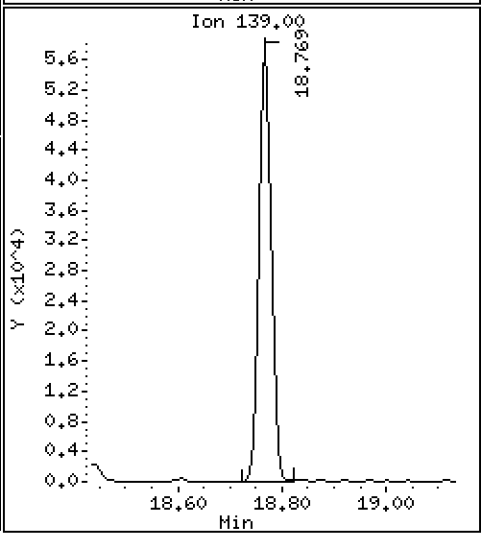


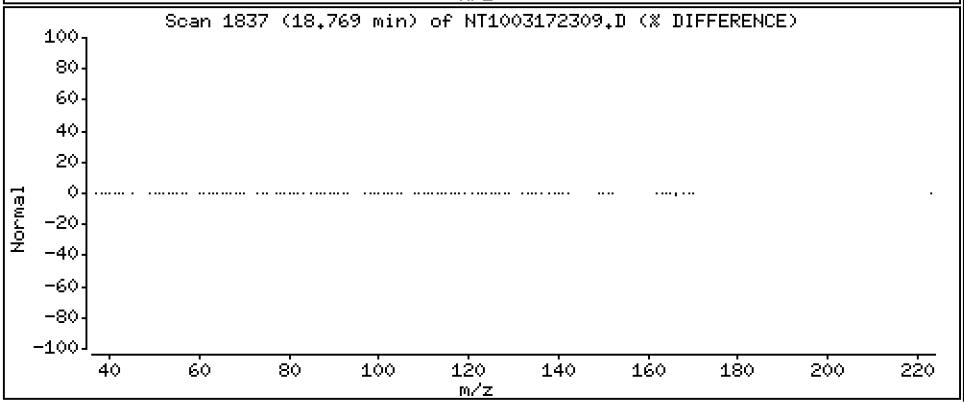












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172309.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

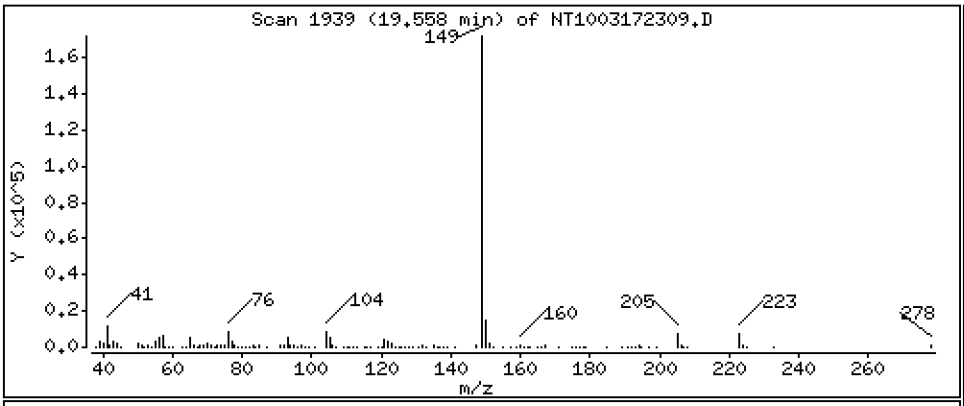
Operator: VTS

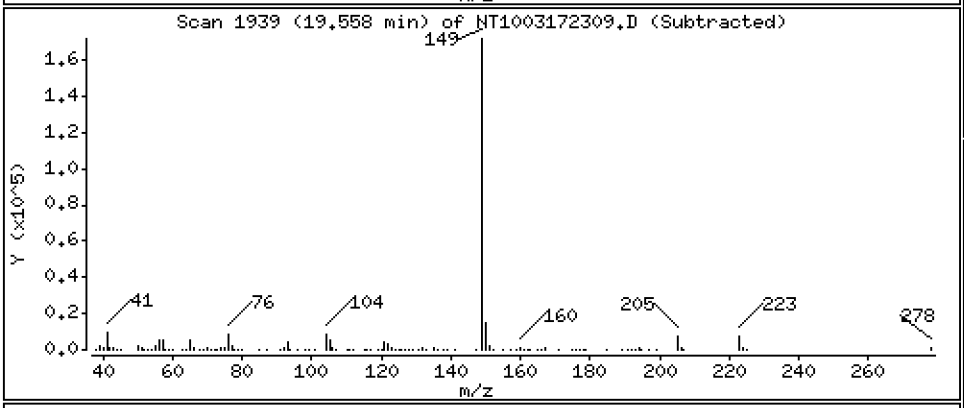
Column phase: ZB-5msi

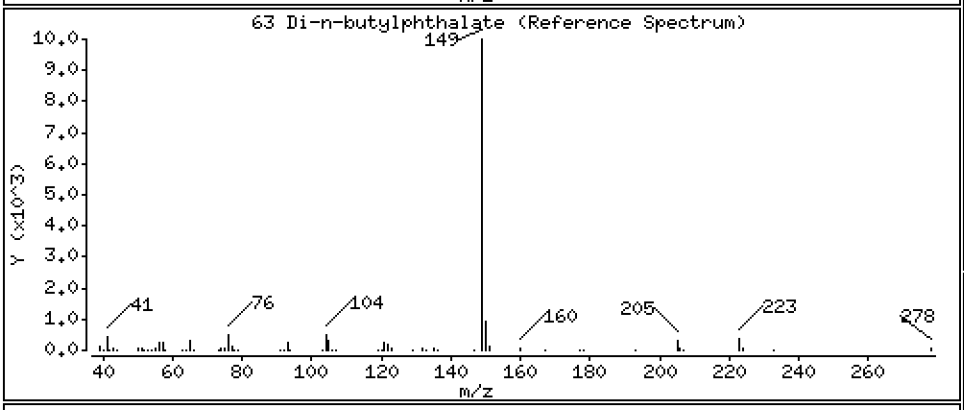
Column diameter: 0.25

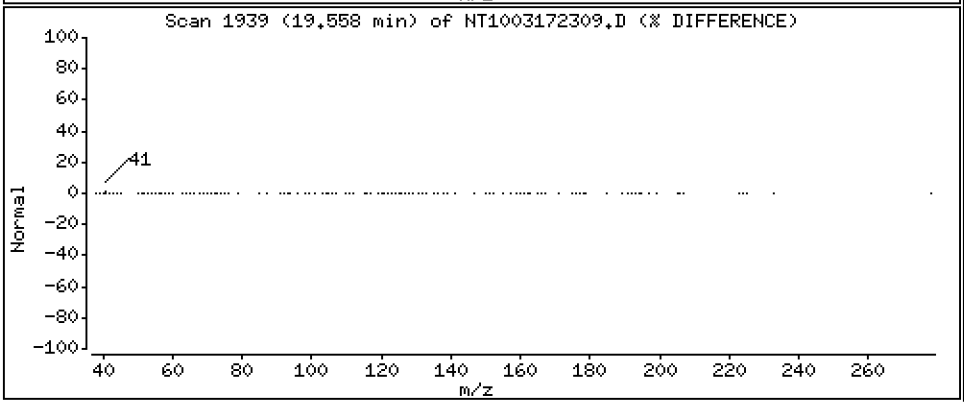
63 Di-n-butylphthalate

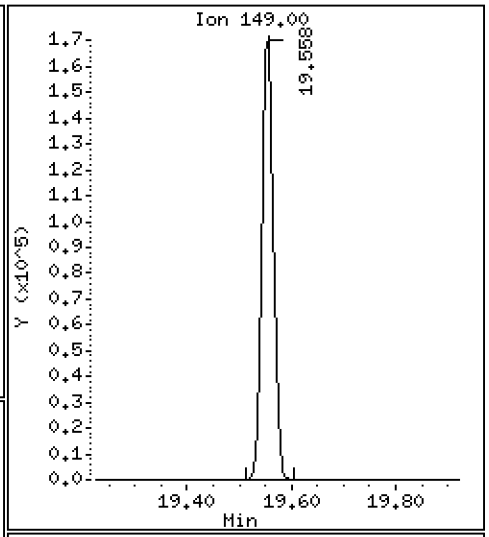
Concentration: 1.453 ug/mL

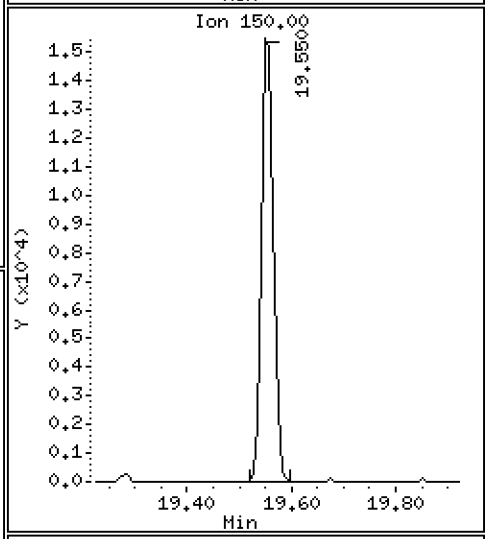


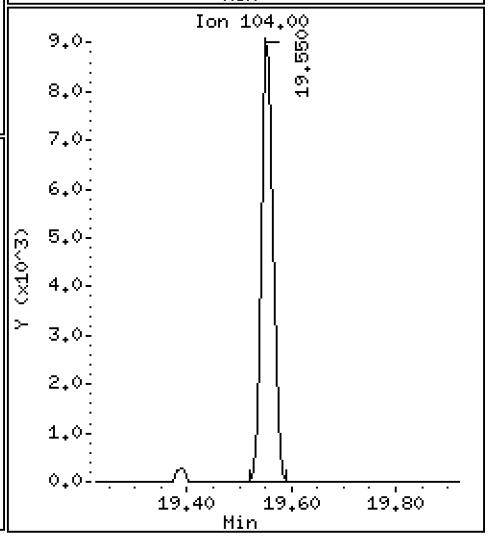












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

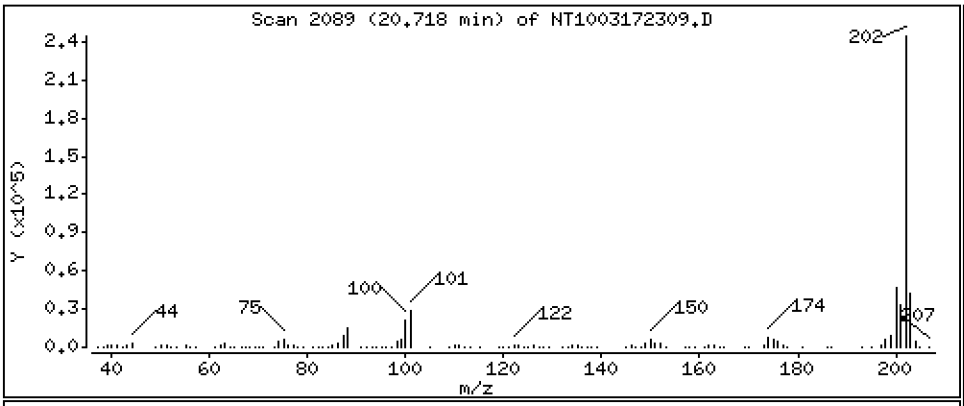
Operator: VTS

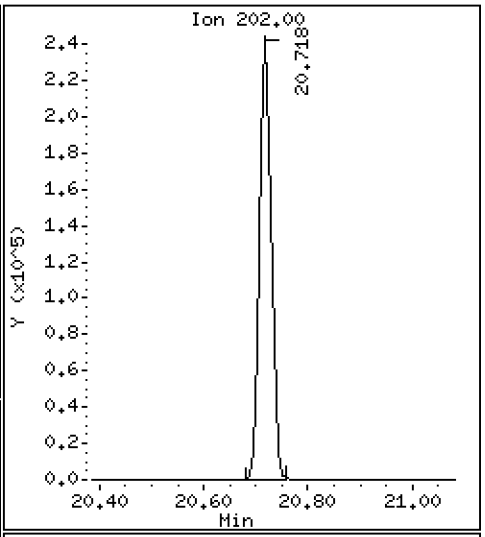
Column phase: ZB-5msi

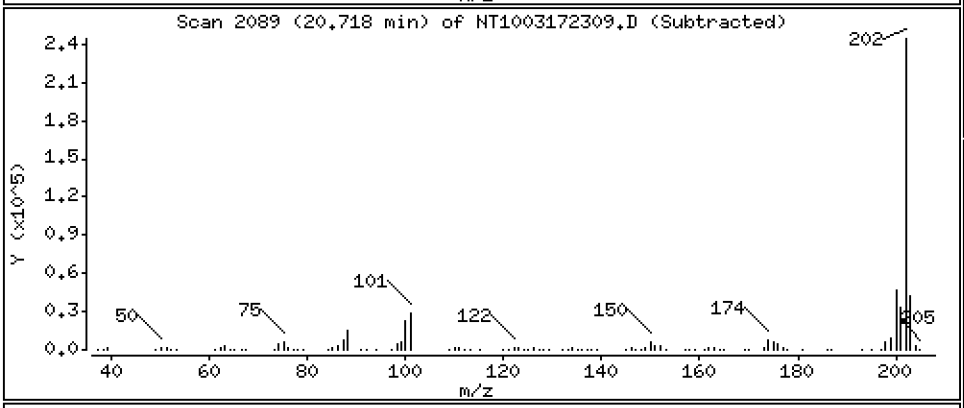
Column diameter: 0.25

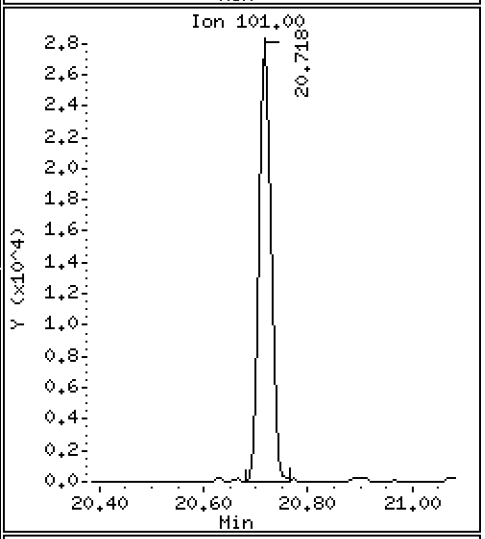
64 Fluoranthene

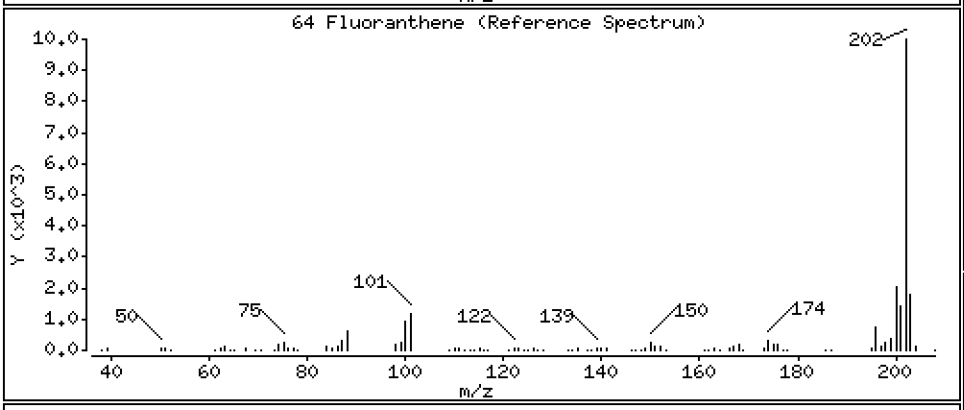
Concentration: 2.113 ug/mL

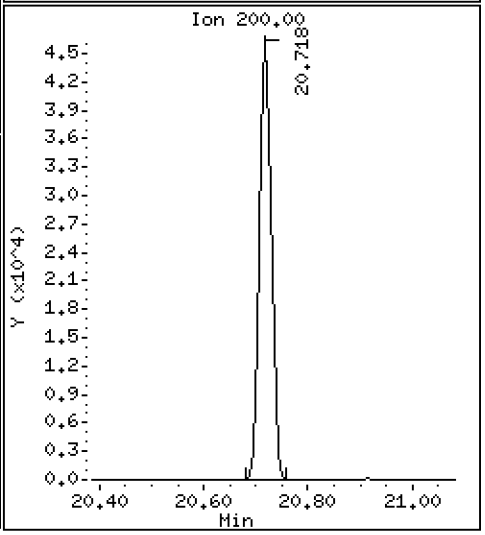


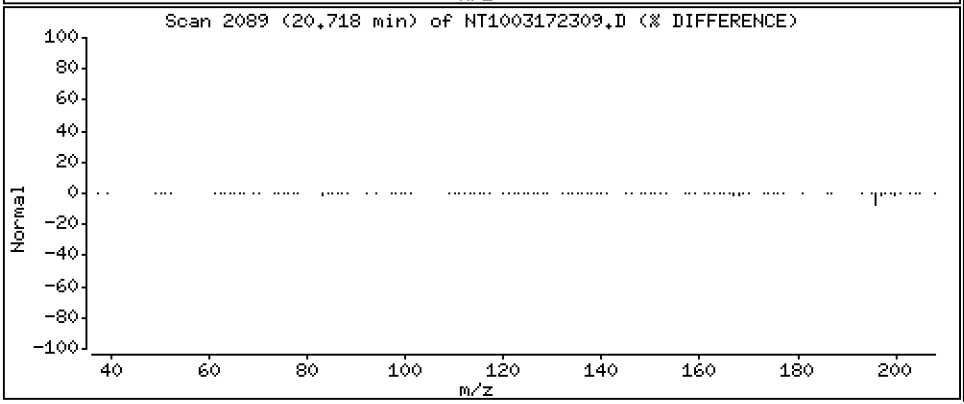












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

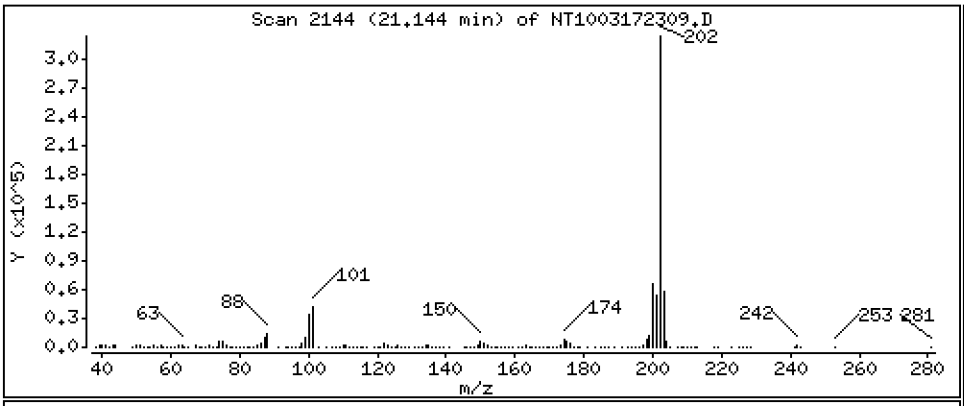
Operator: VTS

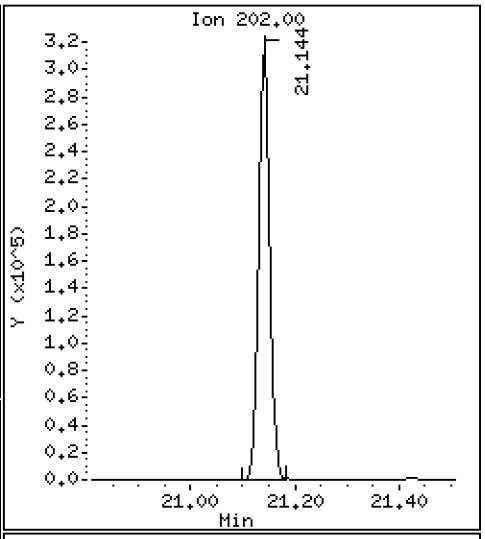
Column phase: ZB-5msi

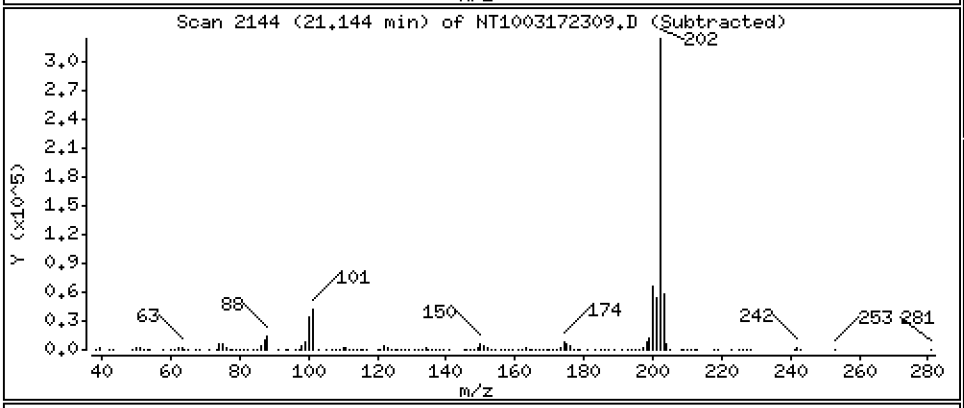
Column diameter: 0.25

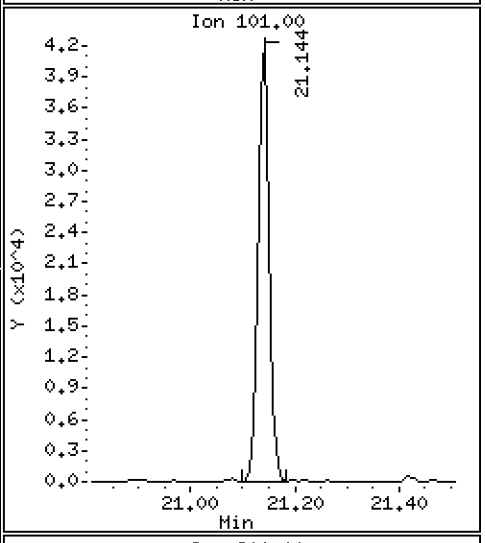
65 Pyrene

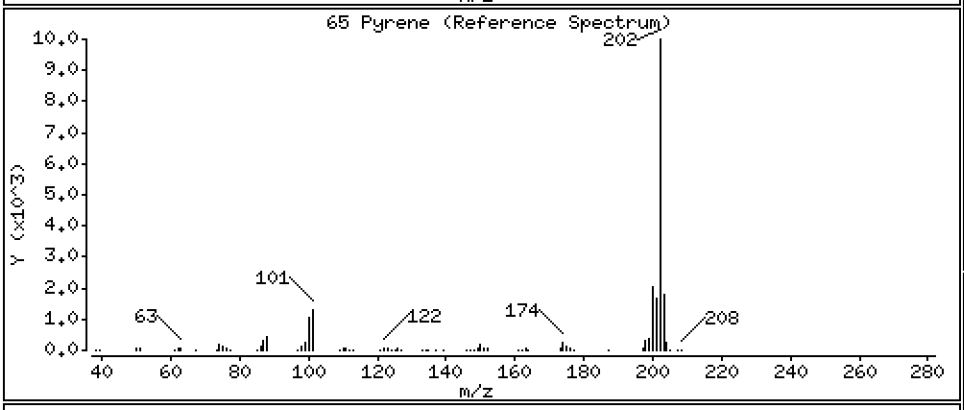
Concentration: 2.675 ug/mL

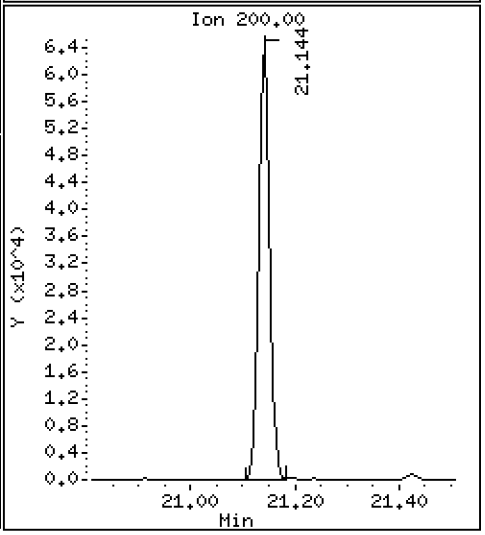


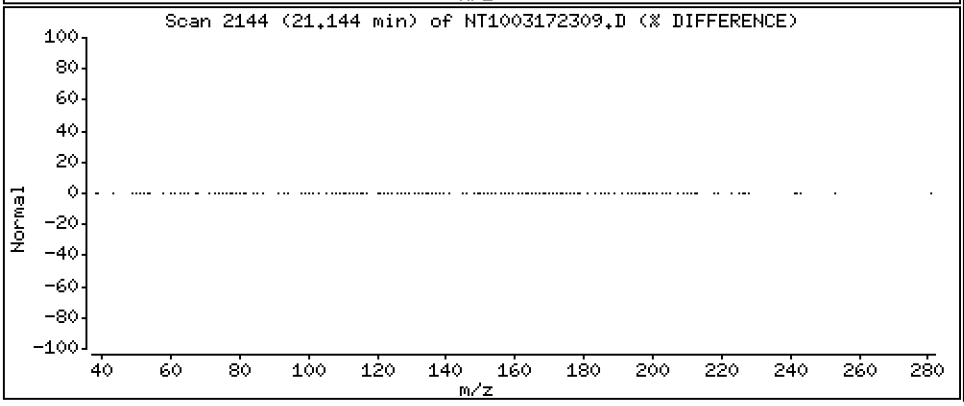












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

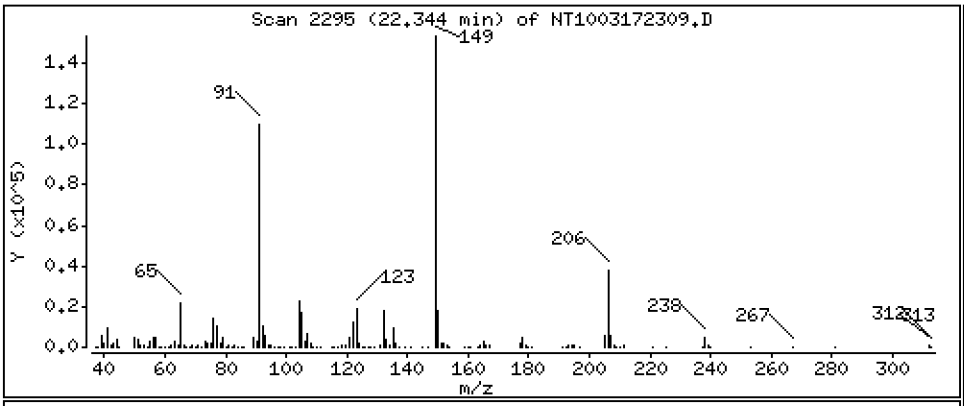
Operator: VTS

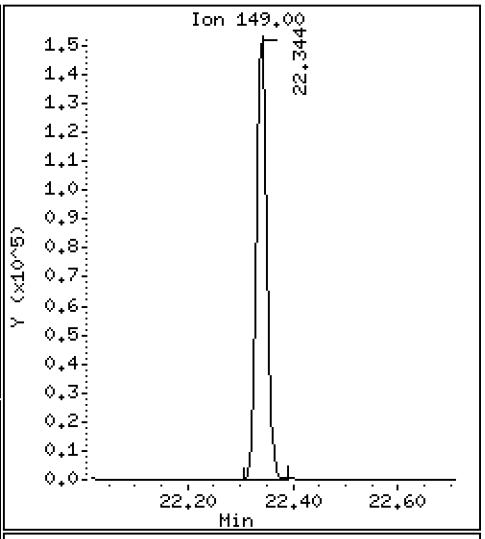
Column phase: ZB-5msi

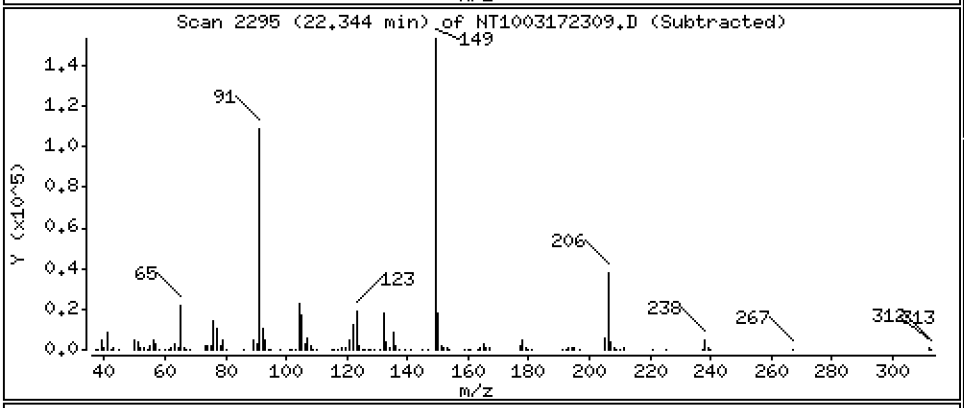
Column diameter: 0.25

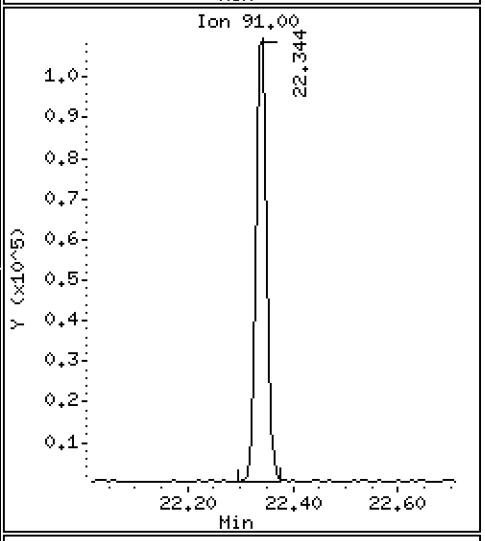
67 Butylbenzylphthalate

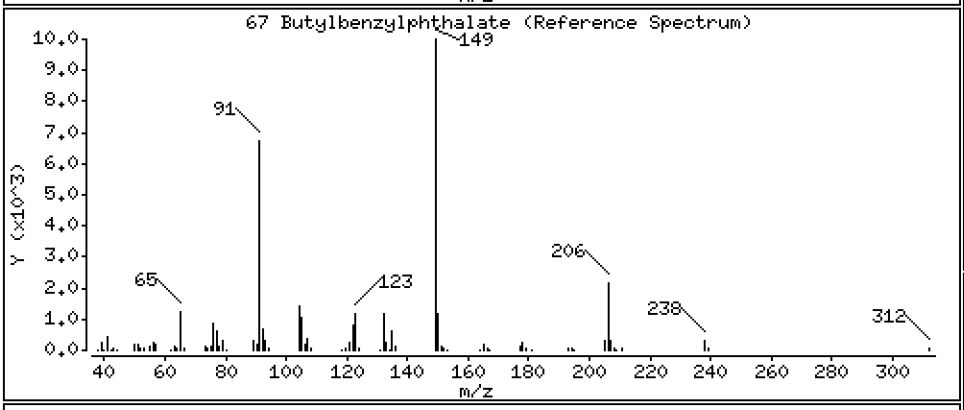
Concentration: 3.427 ug/mL

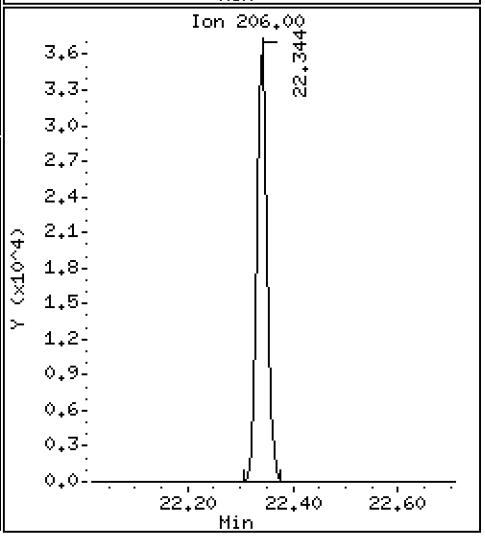


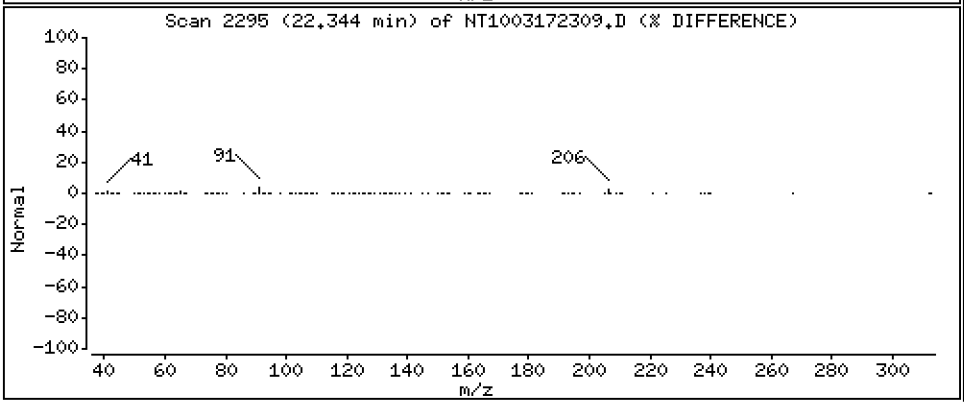












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

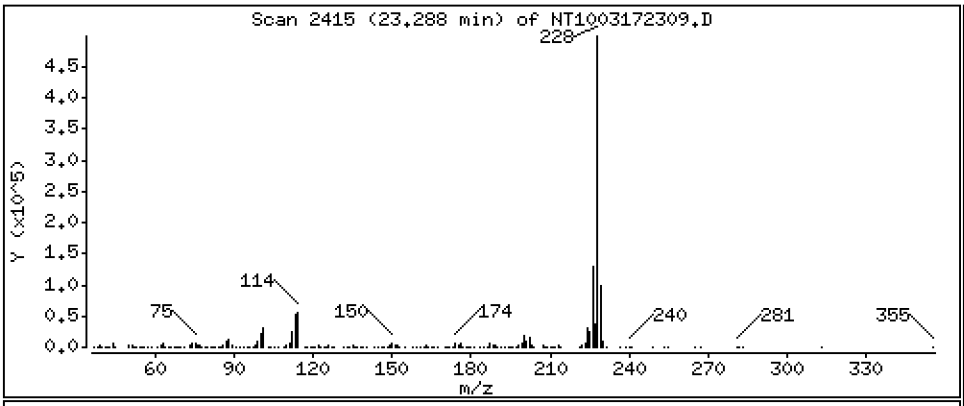
Operator: VTS

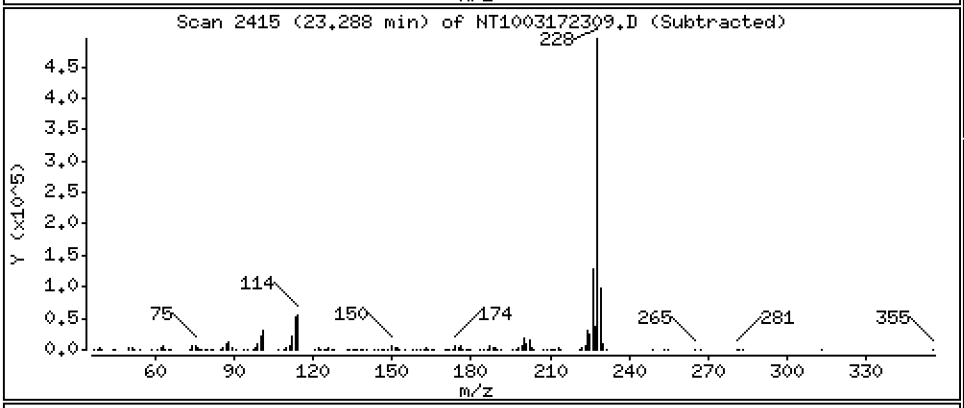
Column phase: ZB-5msi

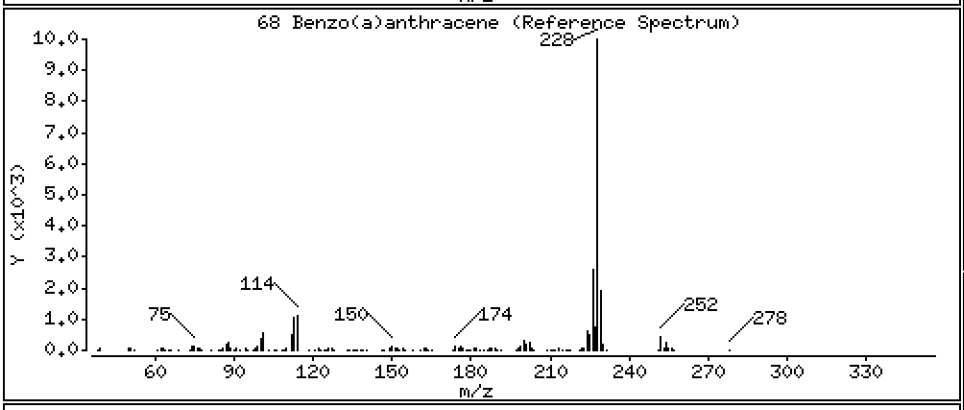
Column diameter: 0.25

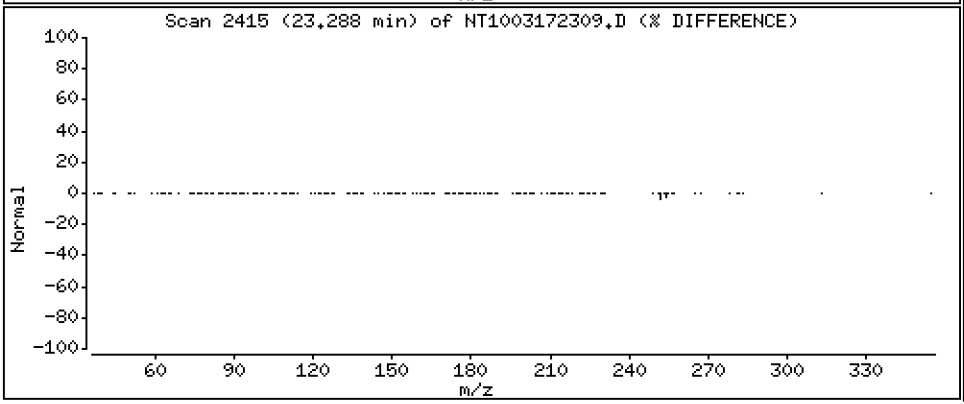
68 Benzo(a)anthracene

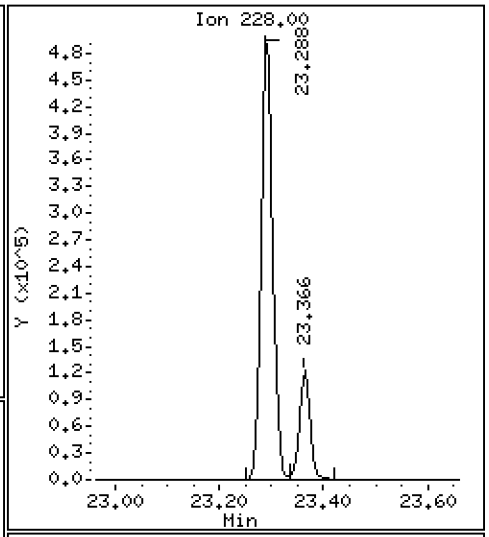
Concentration: 4.991 ug/mL

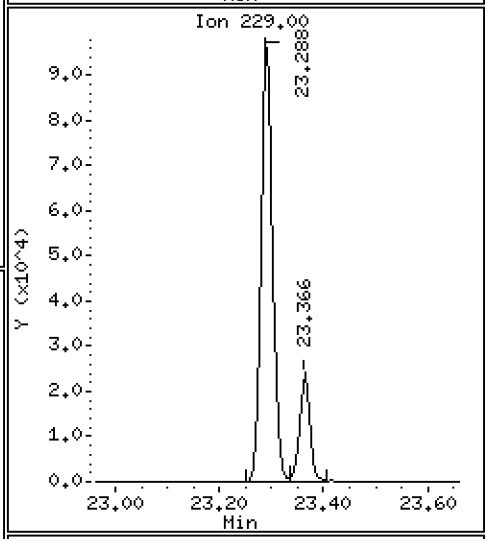


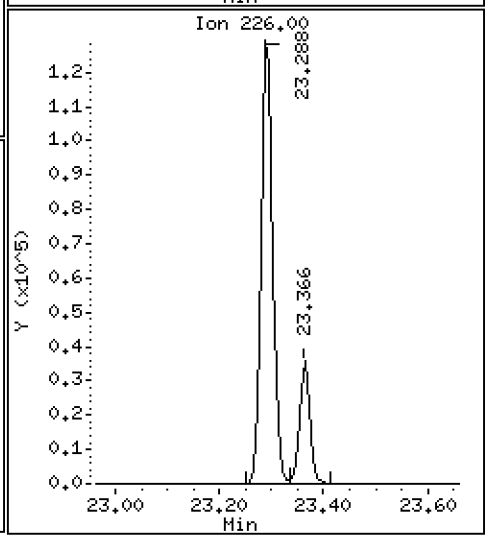












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

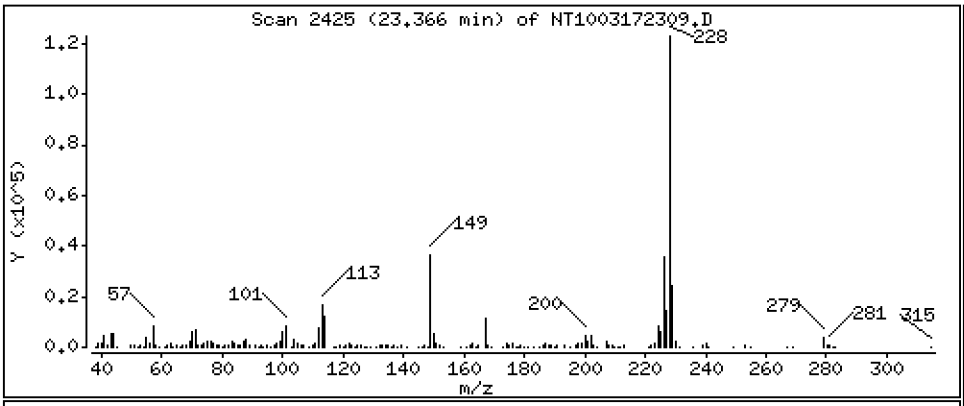
Operator: VTS

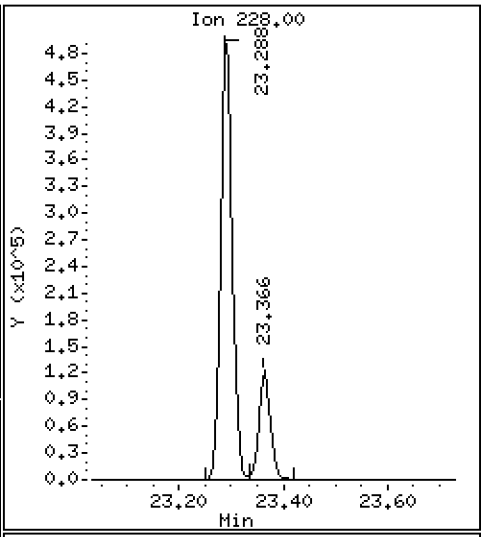
Column phase: ZB-5msi

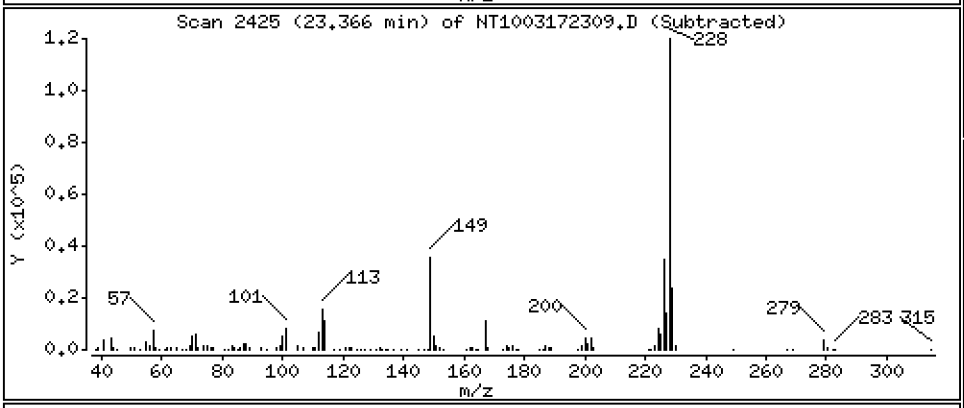
Column diameter: 0.25

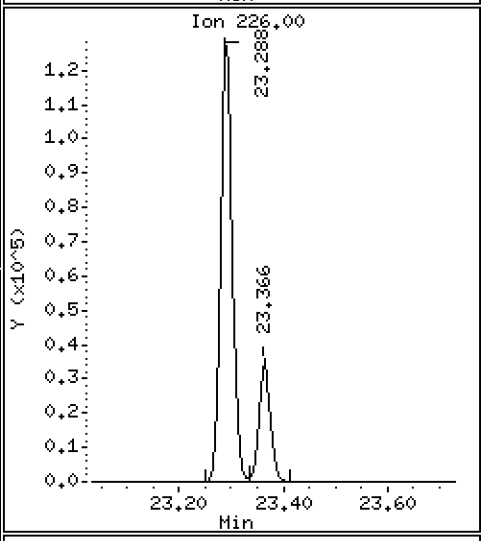
71 Chrysene

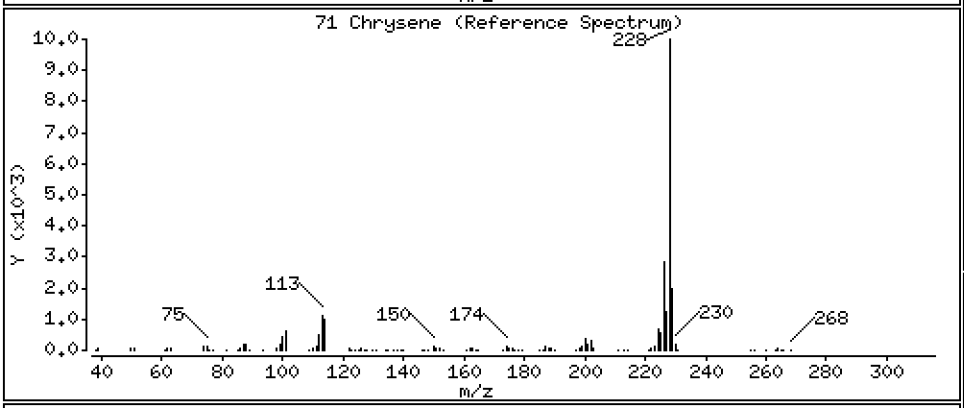
Concentration: 1.194 ug/mL

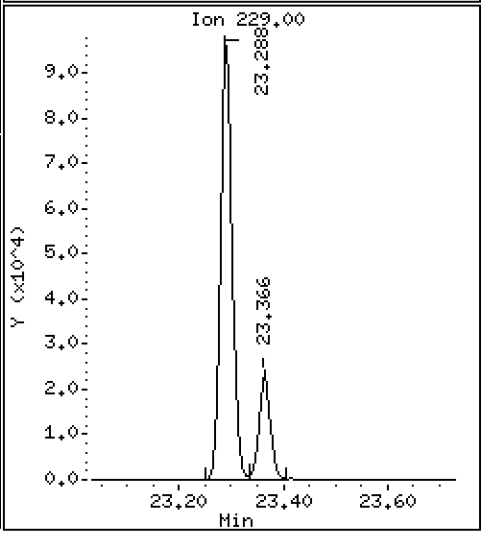


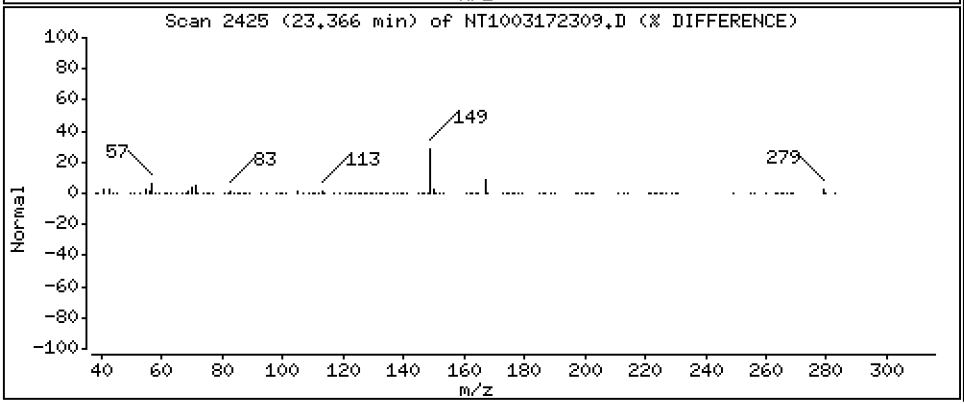












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

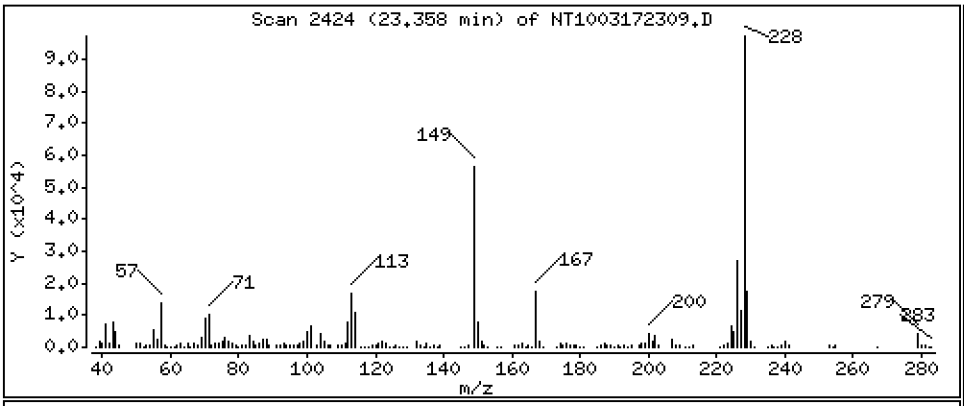
Operator: VTS

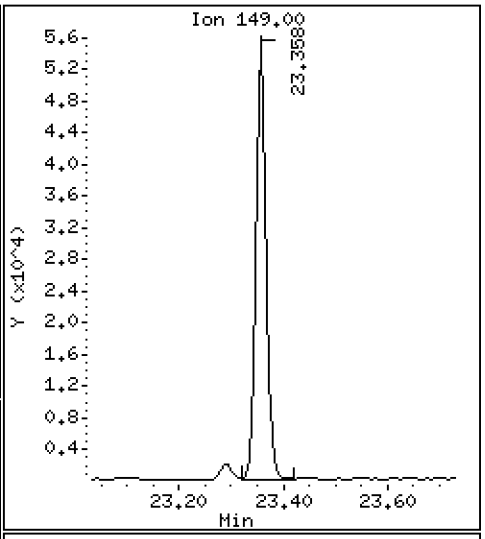
Column phase: ZB-5msi

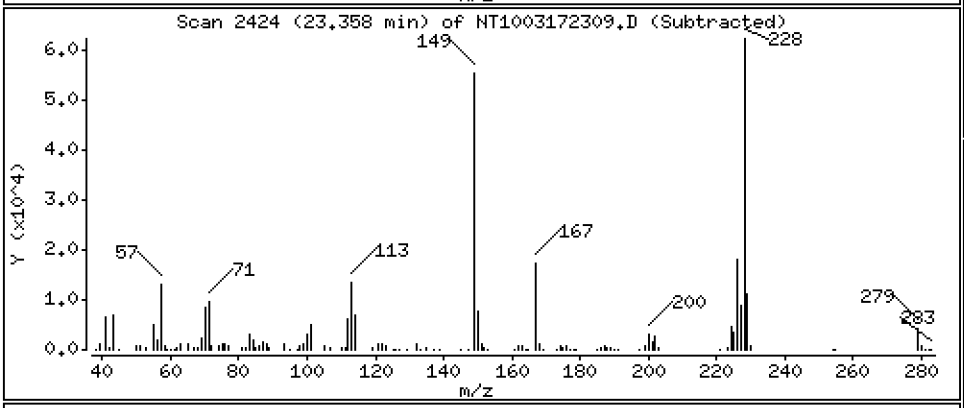
Column diameter: 0.25

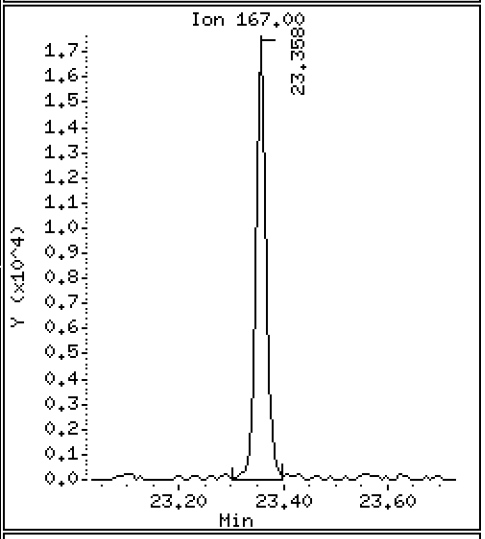
72 bis(2-Ethylhexyl)phthalate

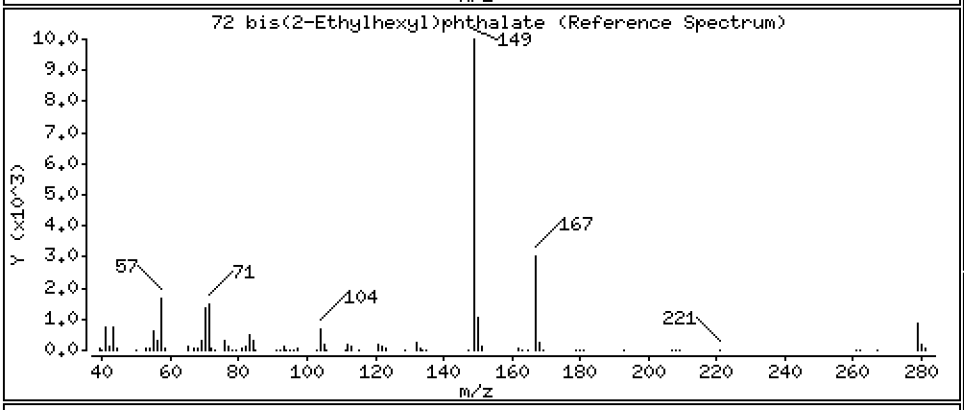
Concentration: 0.7042 ug/mL

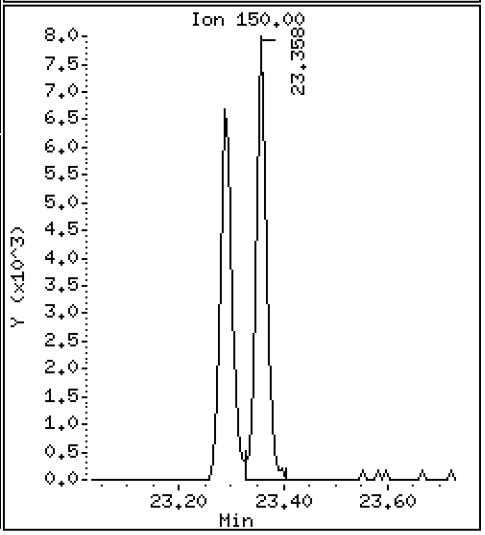


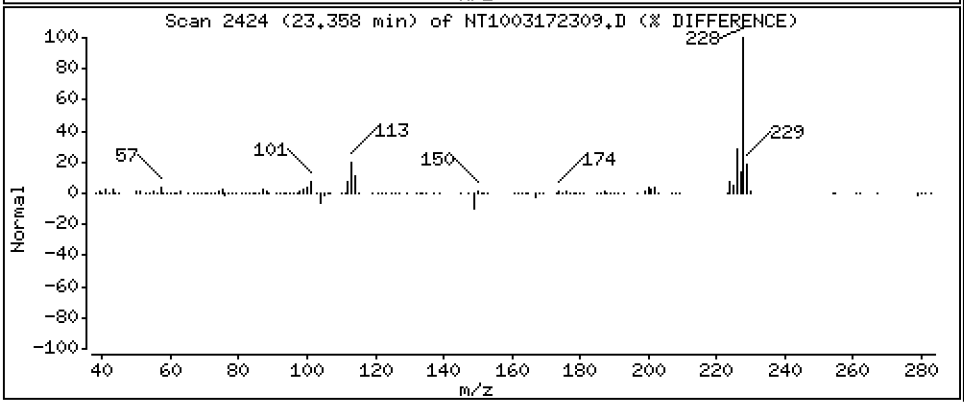












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172309.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

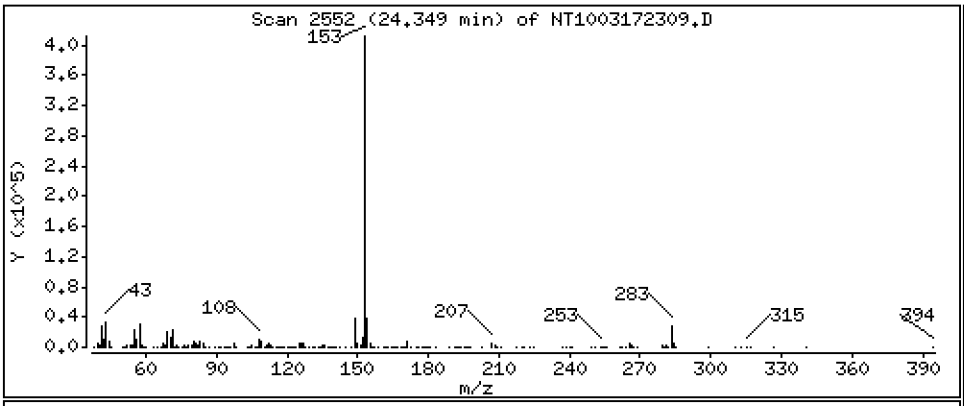
Operator: VTS

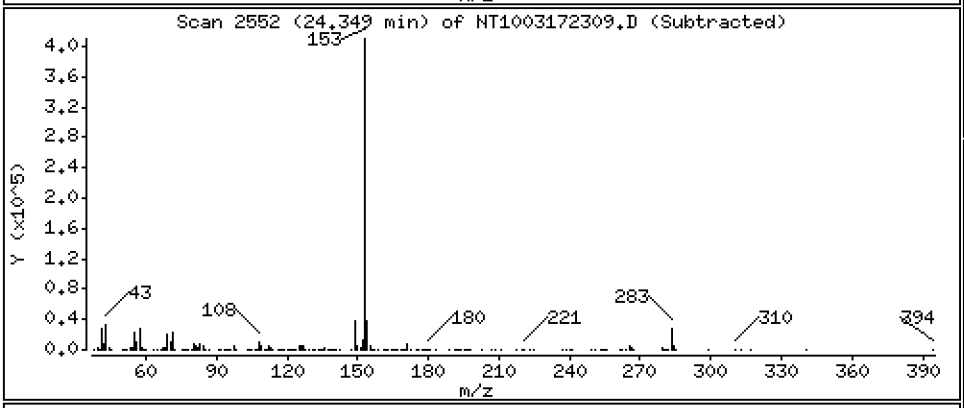
Column phase: ZB-5msi

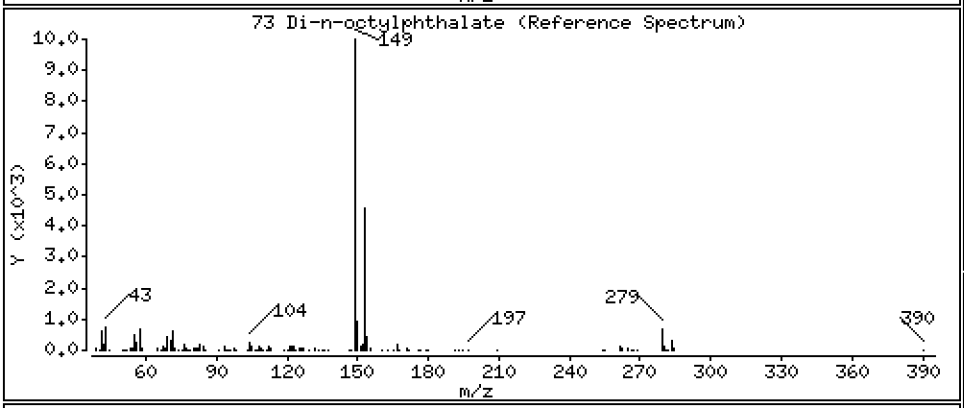
Column diameter: 0.25

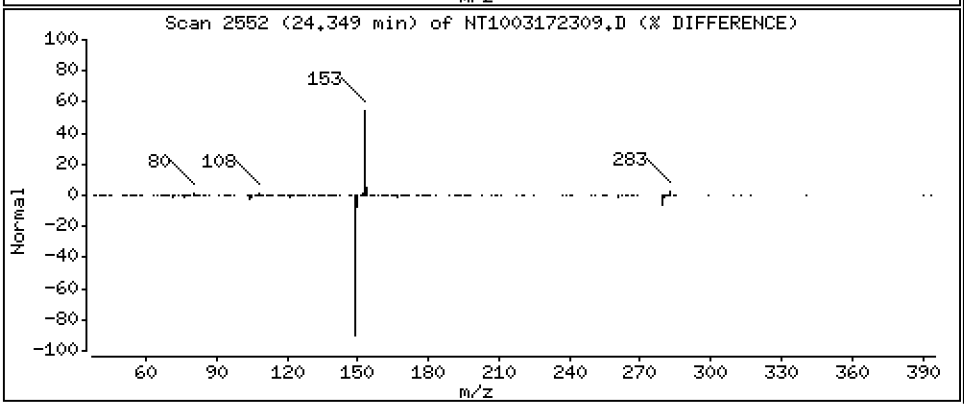
73 Di-n-octylphthalate

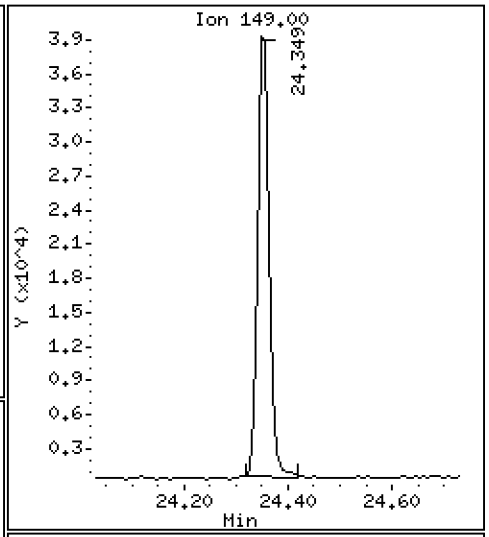
Concentration: 0.3257 ug/mL

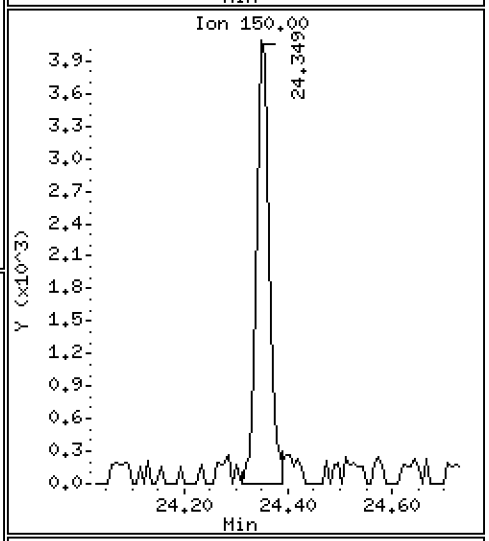


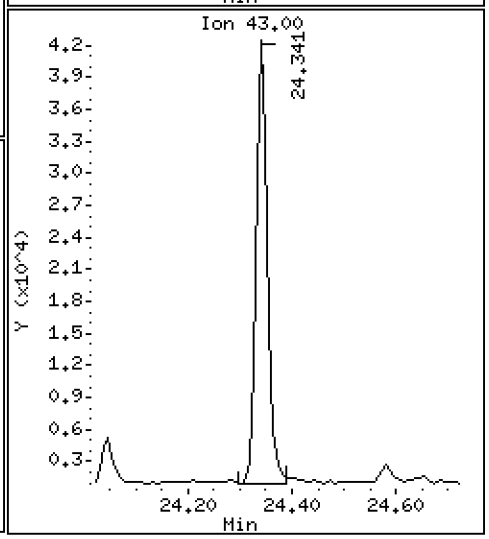












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

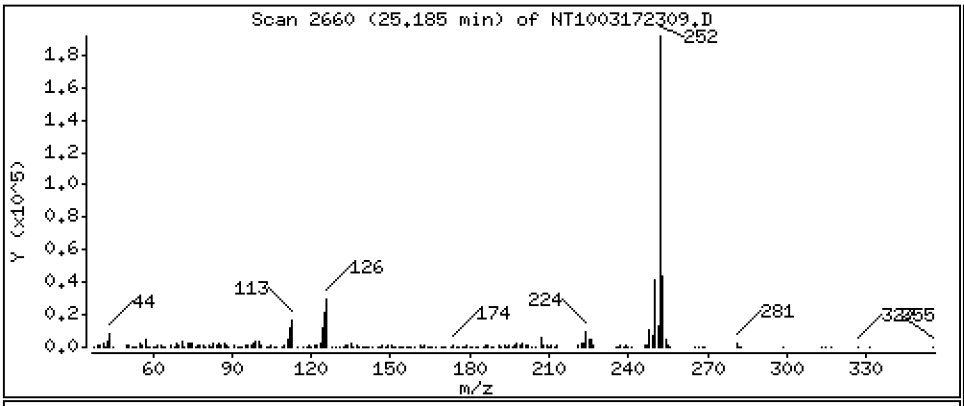
Operator: VTS

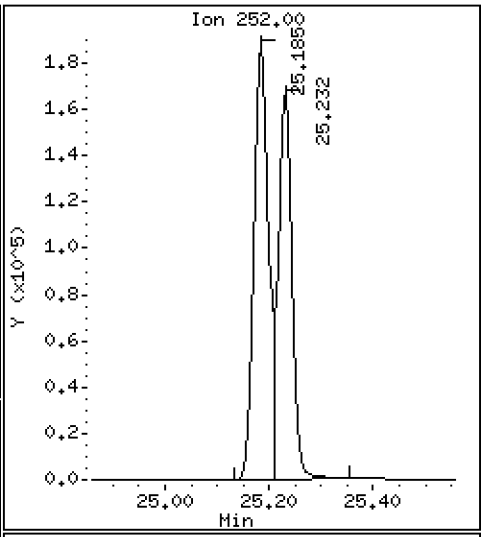
Column phase: ZB-5msi

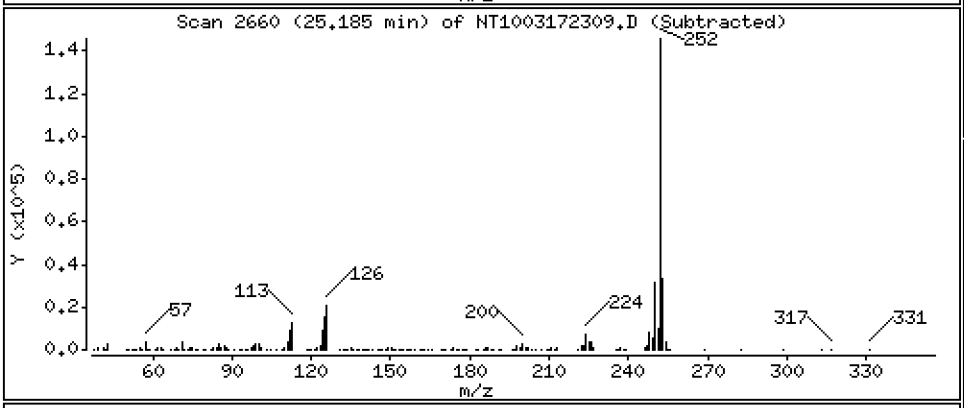
Column diameter: 0.25

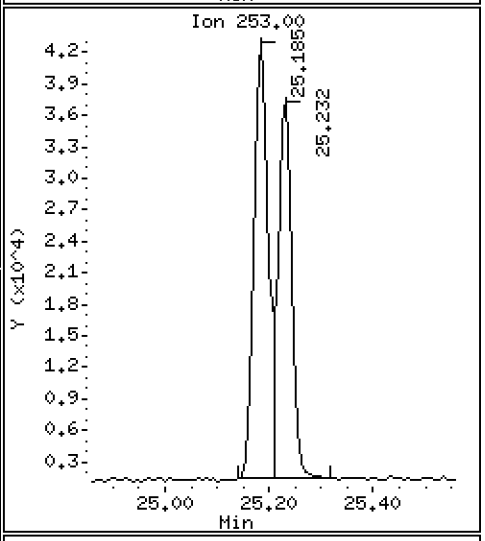
74 Benzo(b)fluoranthene

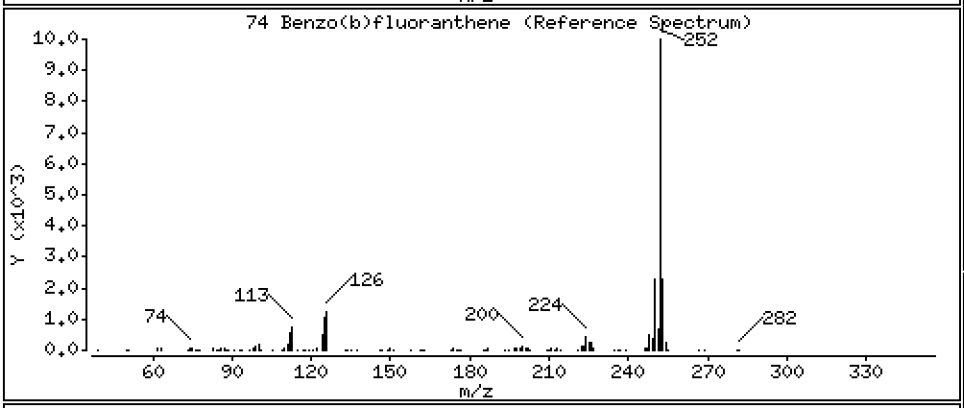
Concentration: 2.699 ug/mL

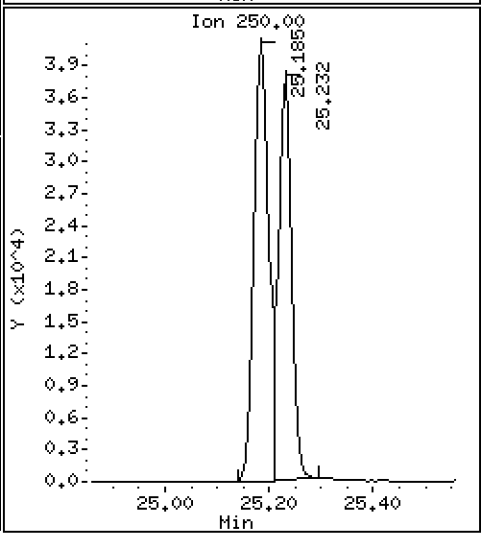


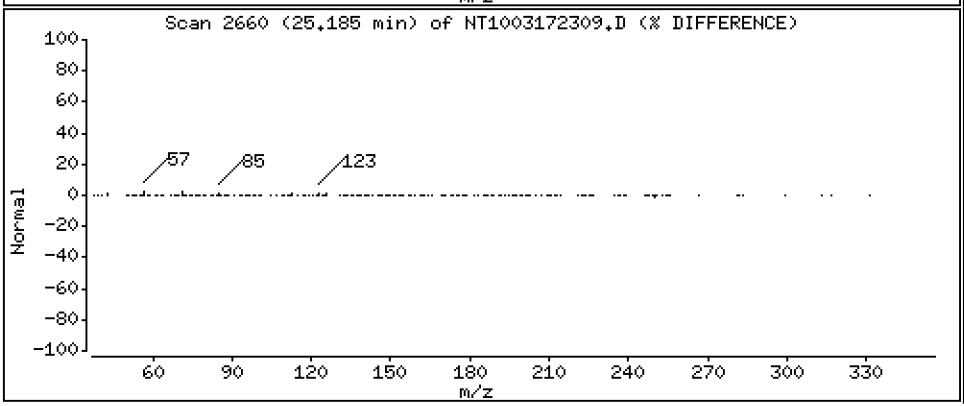












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

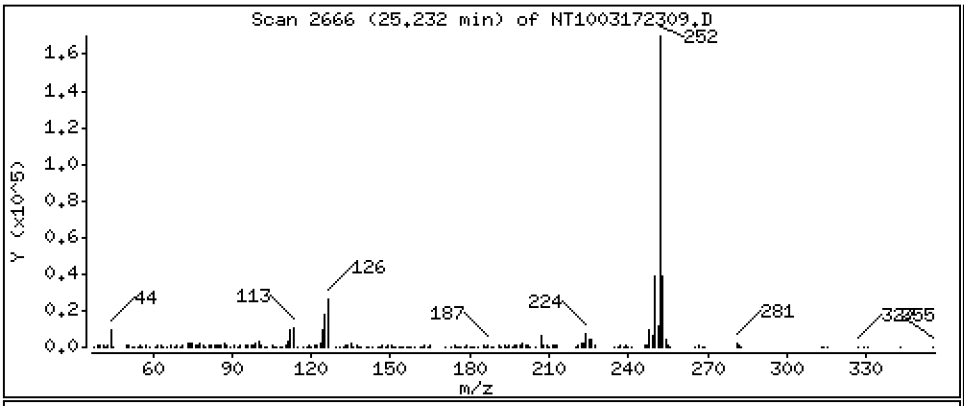
Operator: VTS

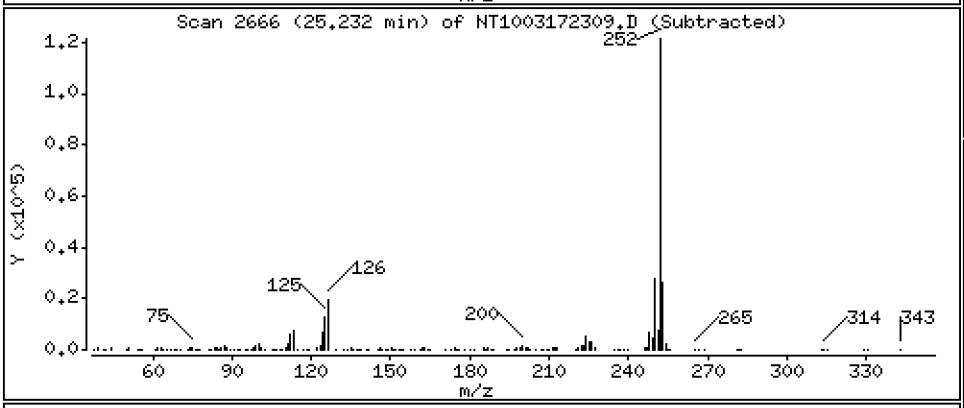
Column phase: ZB-5msi

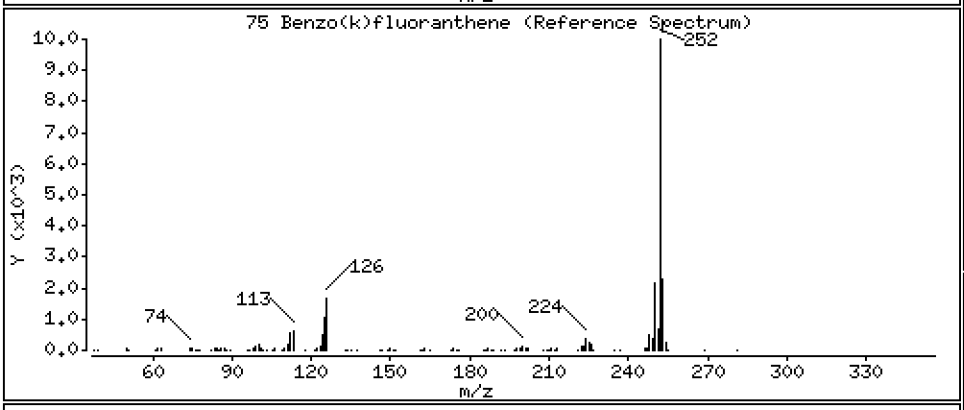
Column diameter: 0.25

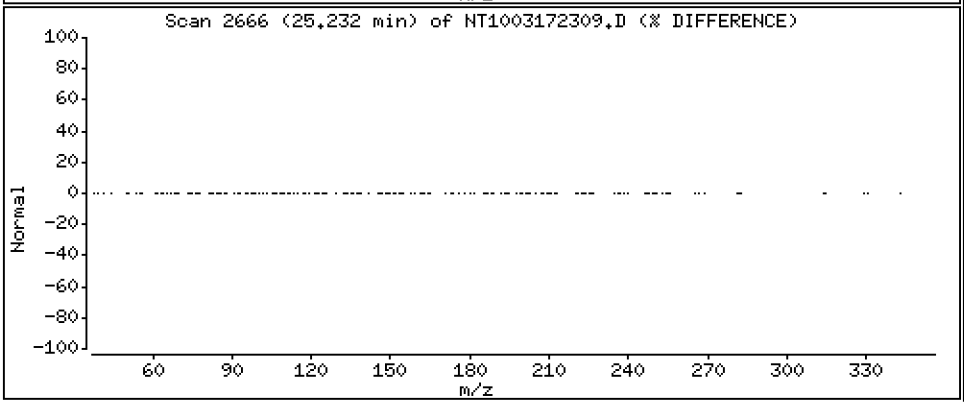
75 Benzo(k)fluoranthene

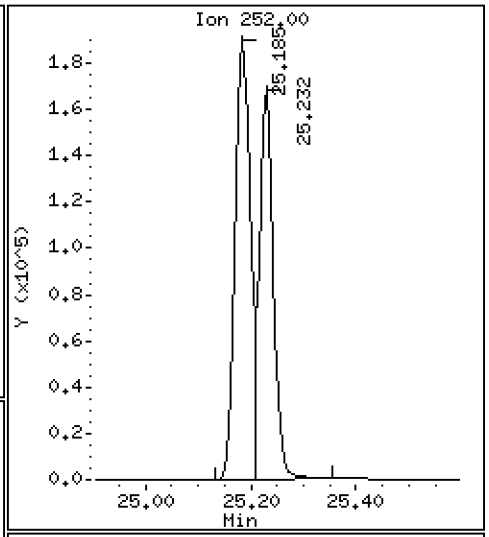
Concentration: 2.322 ug/mL

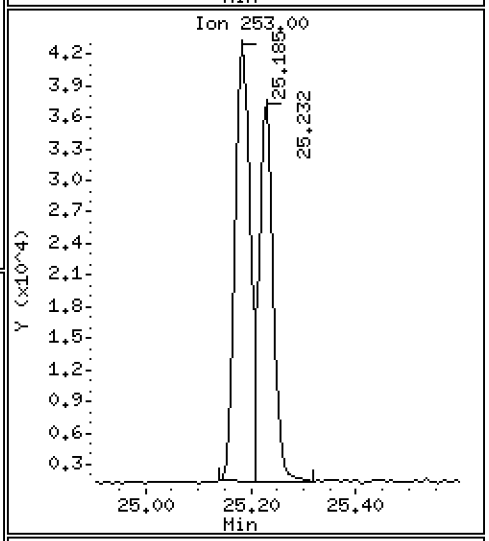


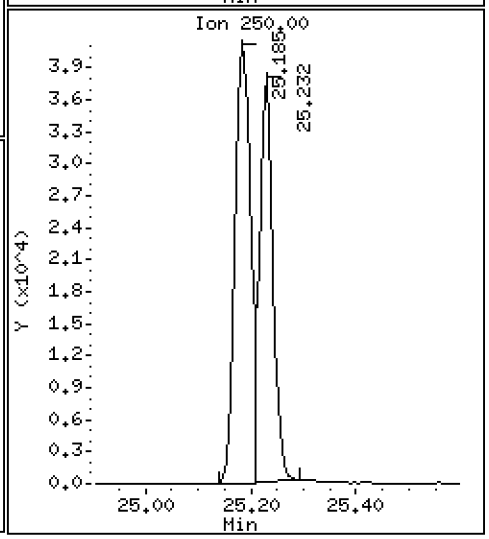












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

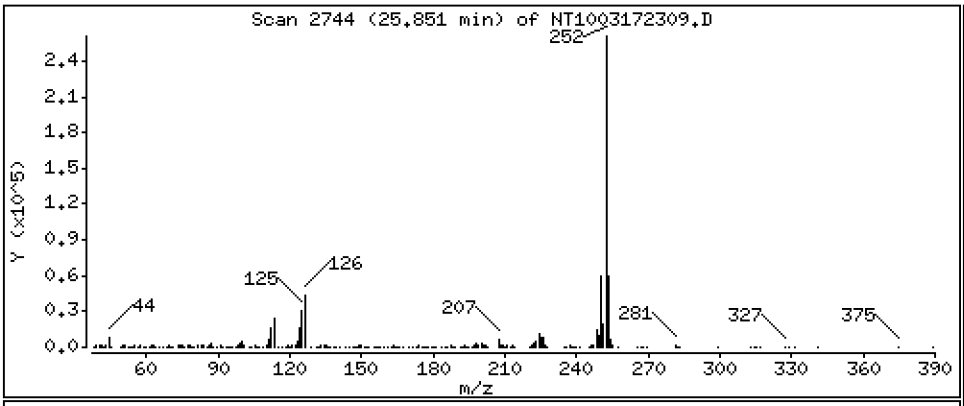
Operator: VTS

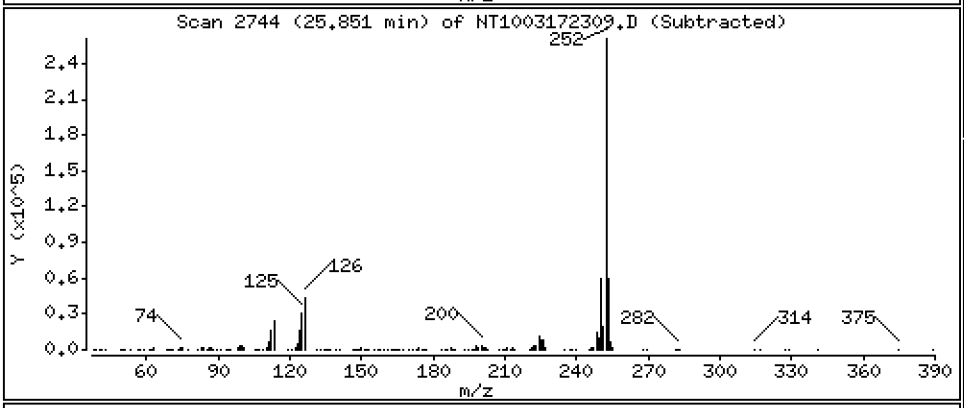
Column phase: ZB-5msi

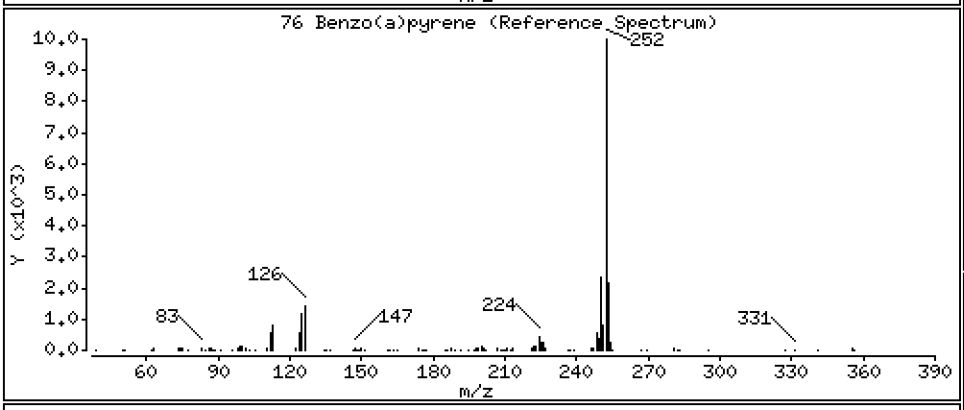
Column diameter: 0.25

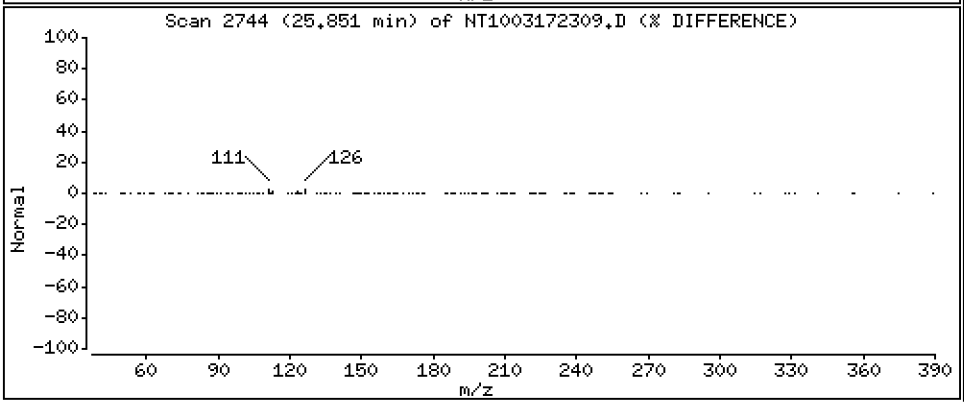
76 Benzo(a)pyrene

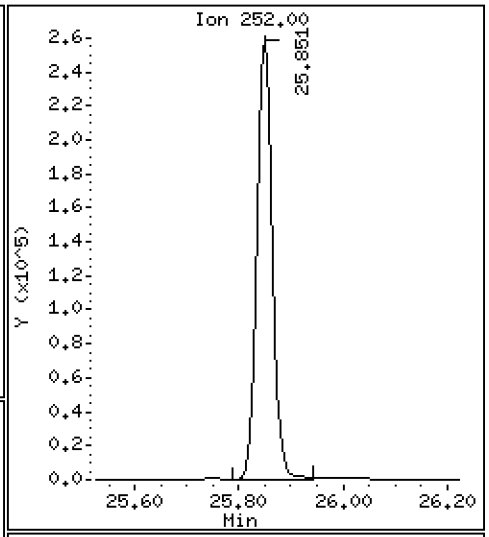
Concentration: 4.395 ug/mL

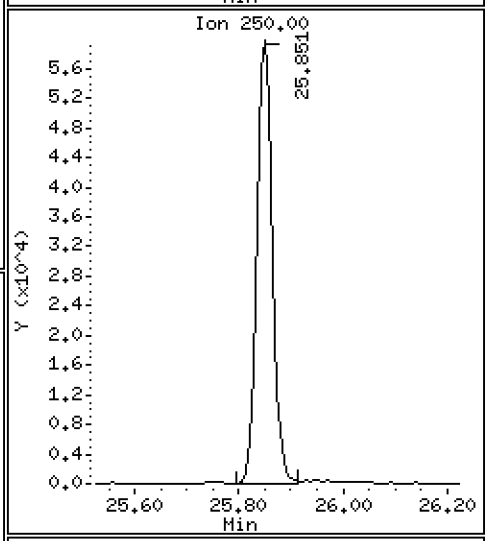


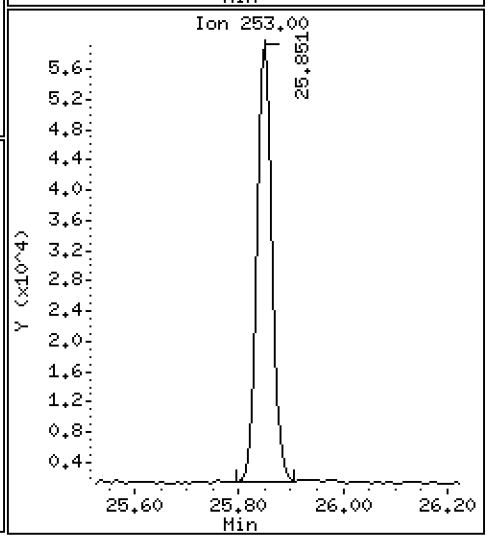












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

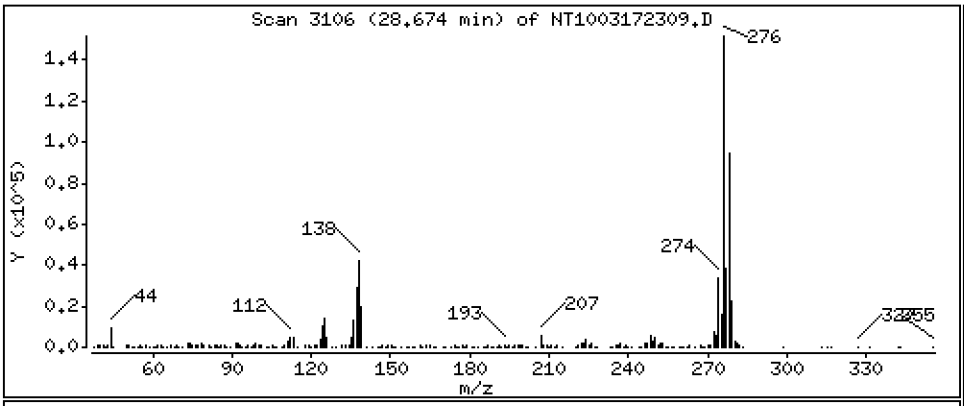
Operator: VTS

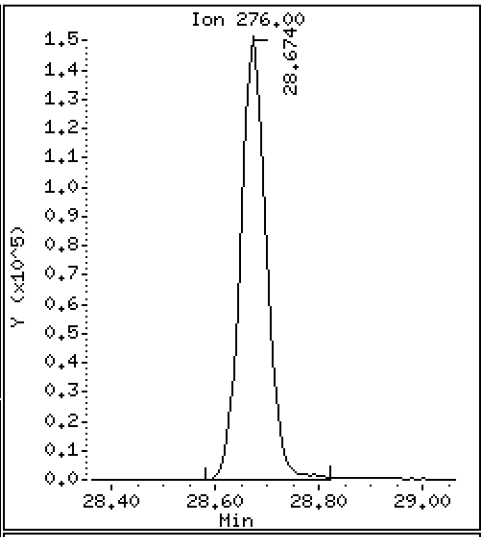
Column phase: ZB-5msi

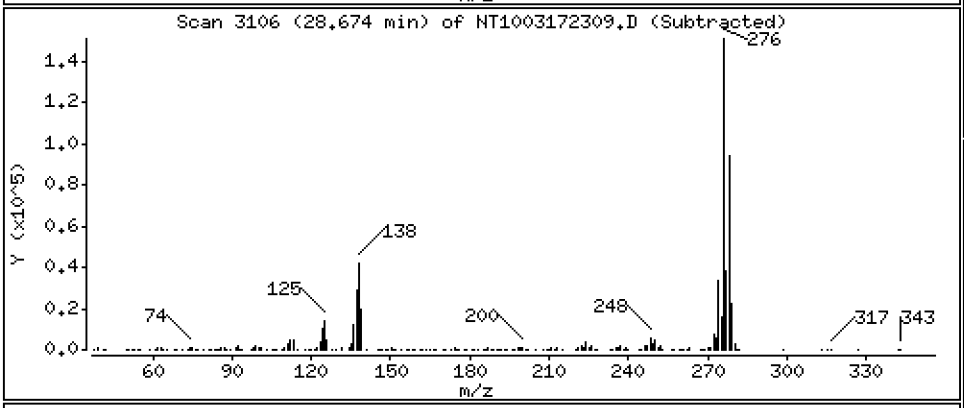
Column diameter: 0.25

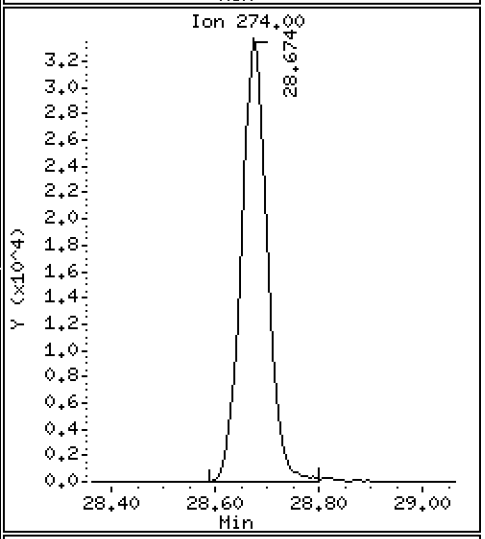
78 Indeno(1,2,3-cd)pyrene

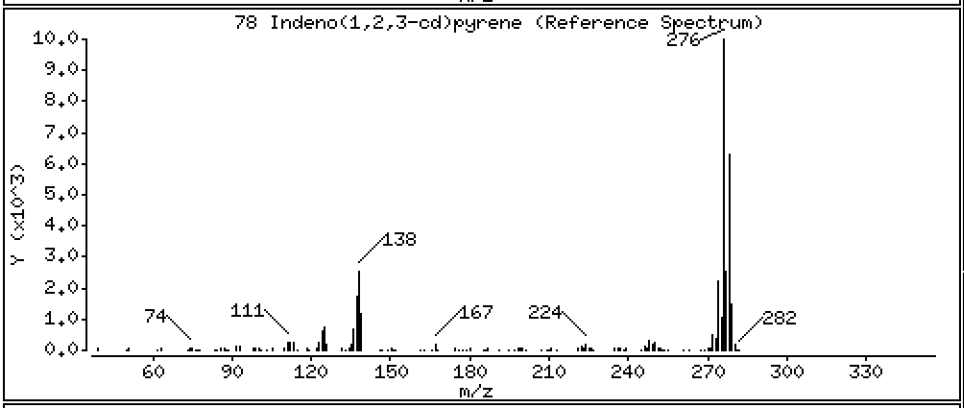
Concentration: 3.352 ug/mL

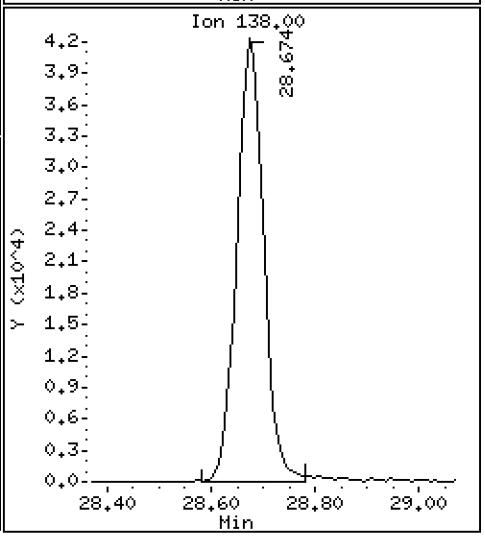


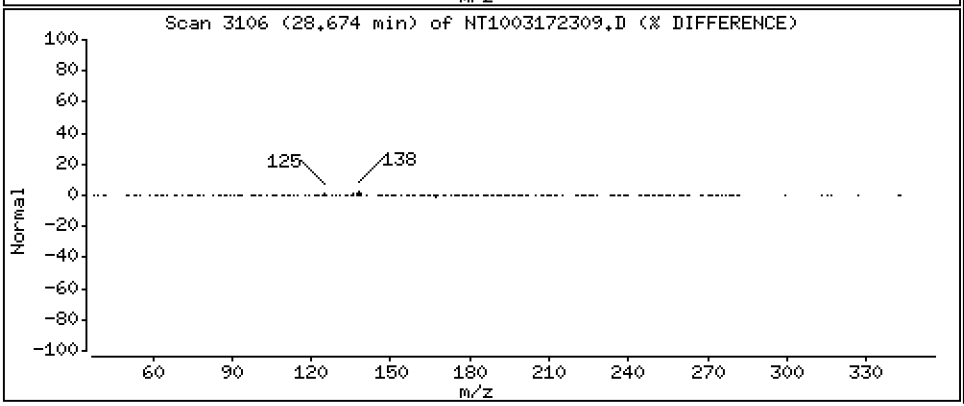












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

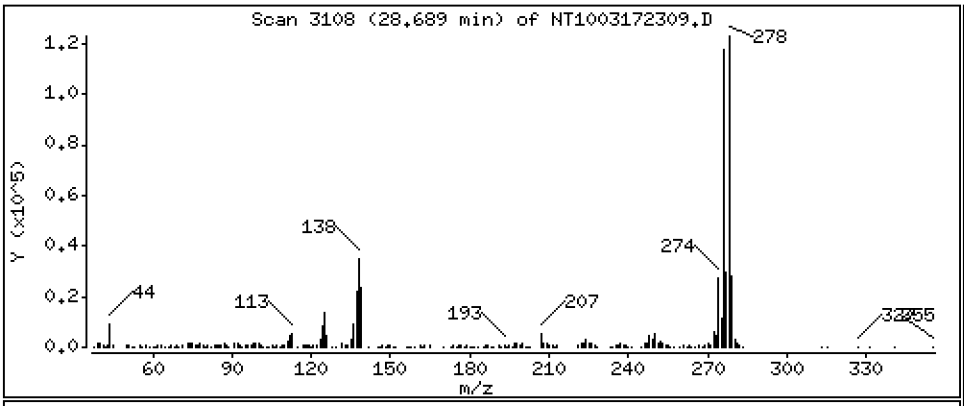
Operator: VTS

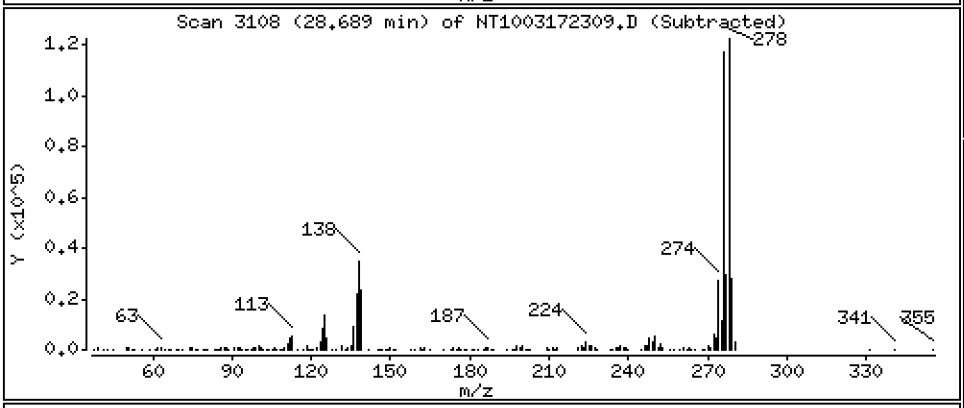
Column phase: ZB-5msi

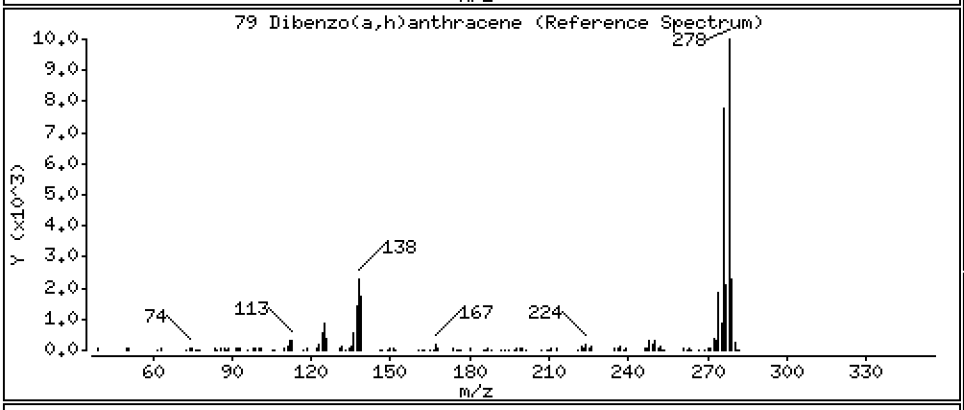
Column diameter: 0.25

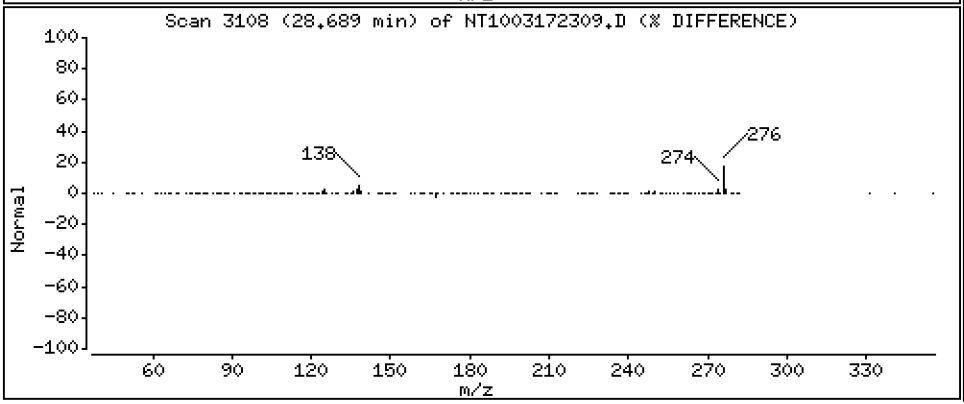
79 Dibenzo(a,h)anthracene

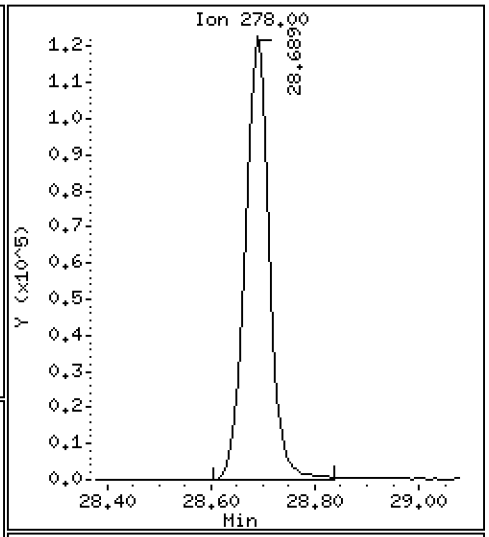
Concentration: 3.072 ug/mL

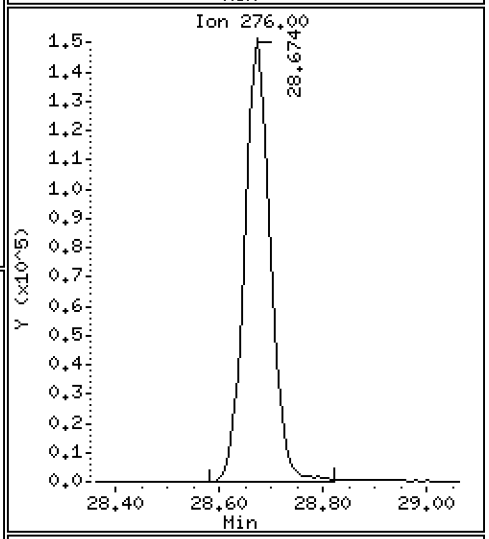


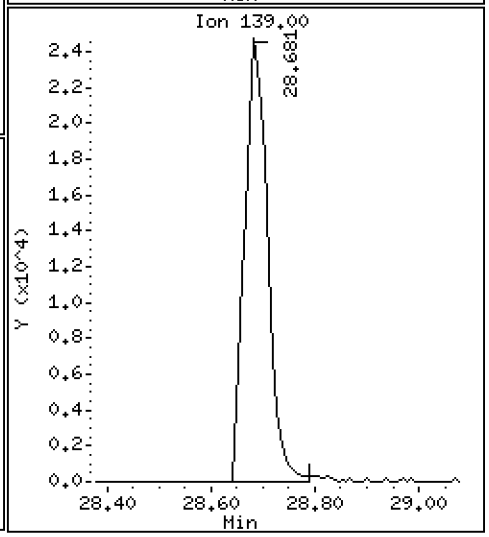












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

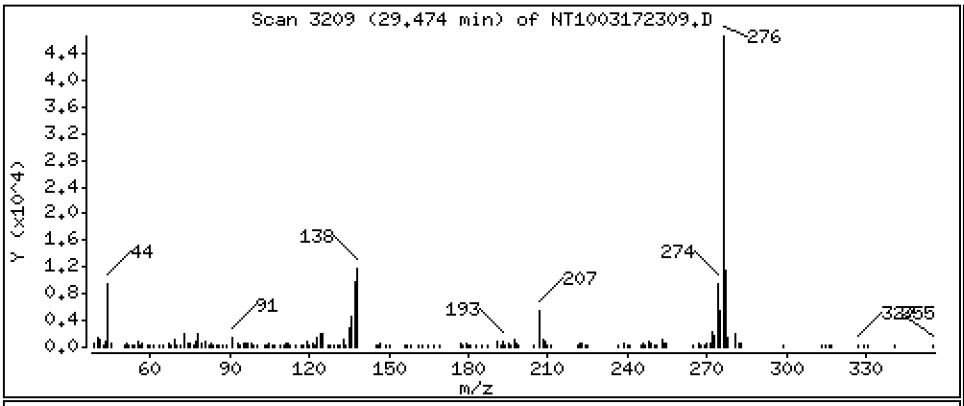
Operator: VTS

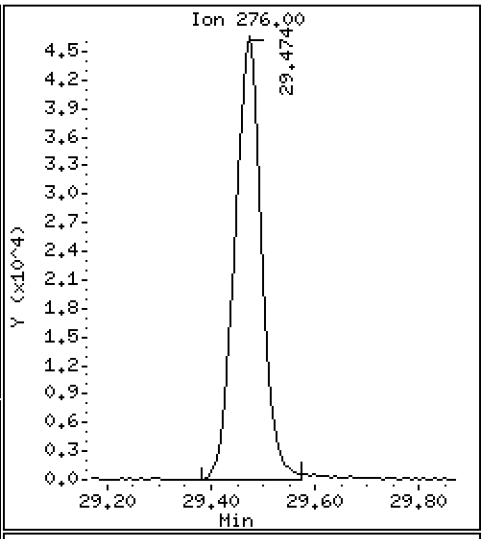
Column phase: ZB-5msi

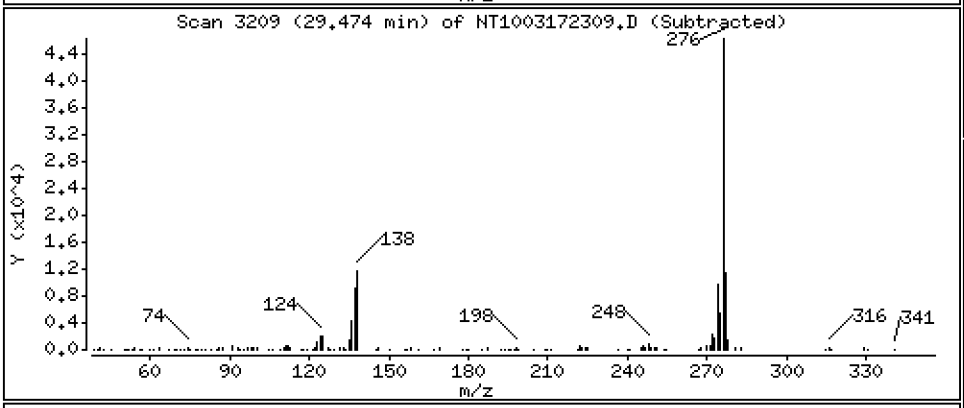
Column diameter: 0.25

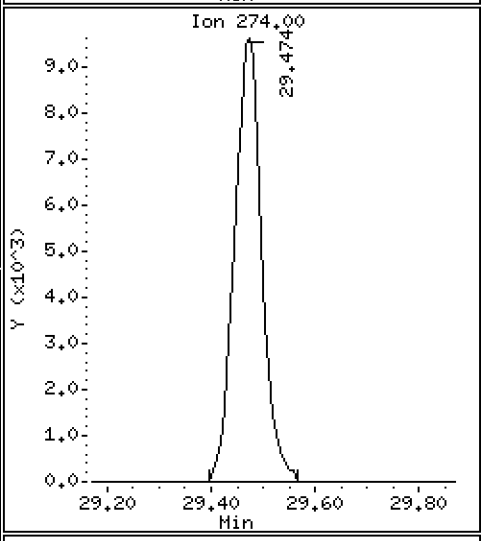
80 Benzo(g,h,i)perylene

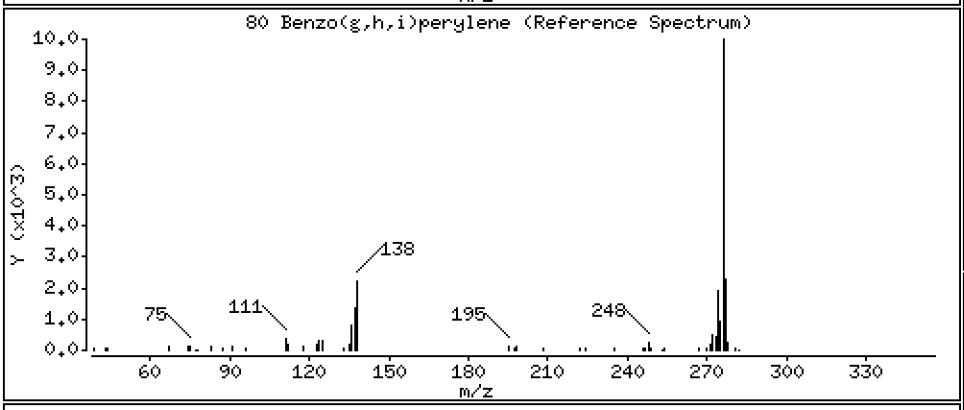
Concentration: 1.227 ug/mL

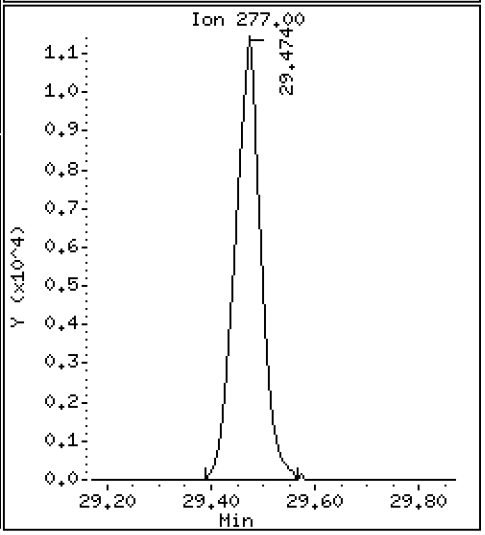


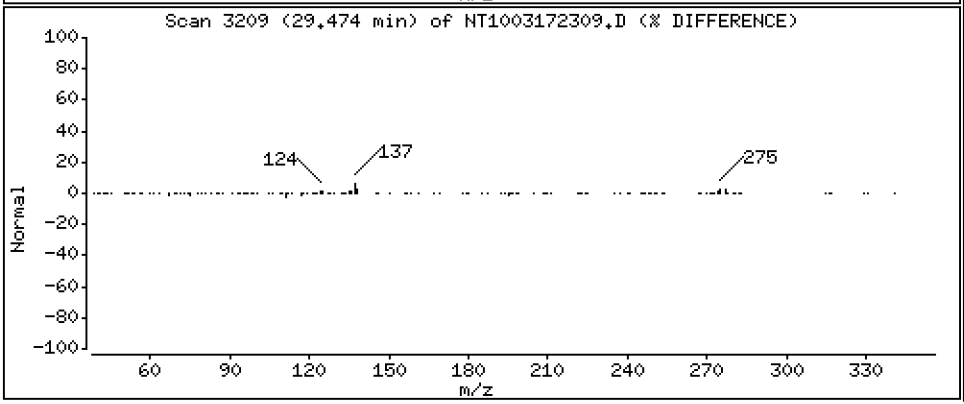












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172309.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM1

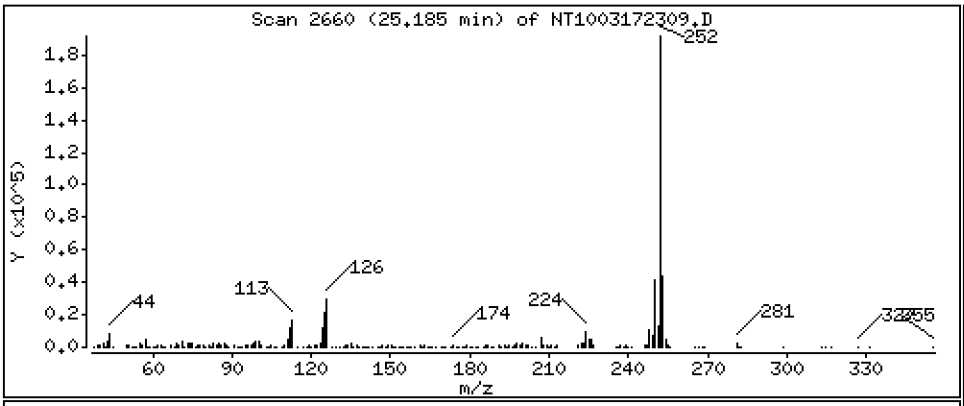
Operator: VTS

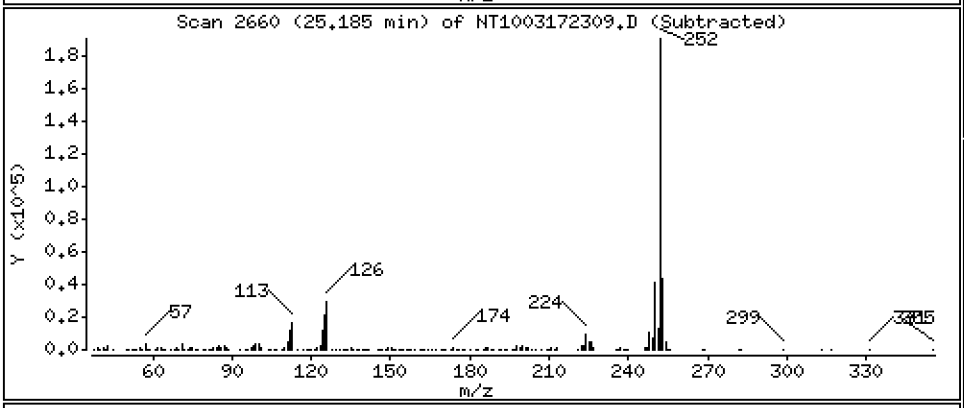
Column phase: ZB-5msi

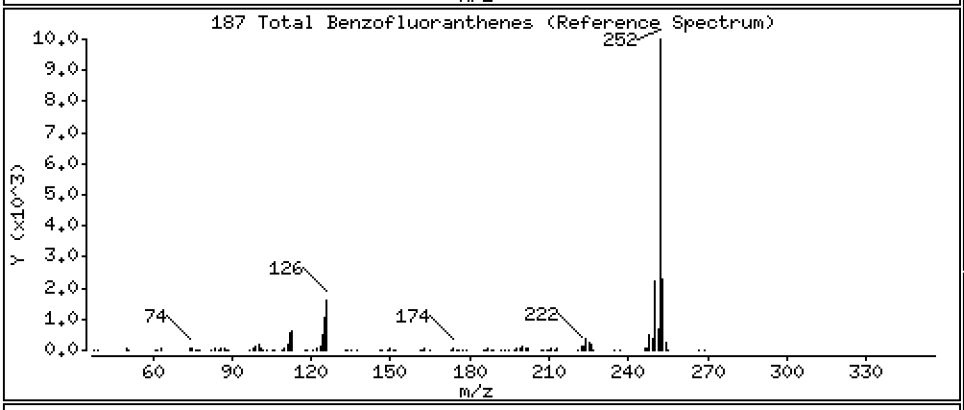
Column diameter: 0.25

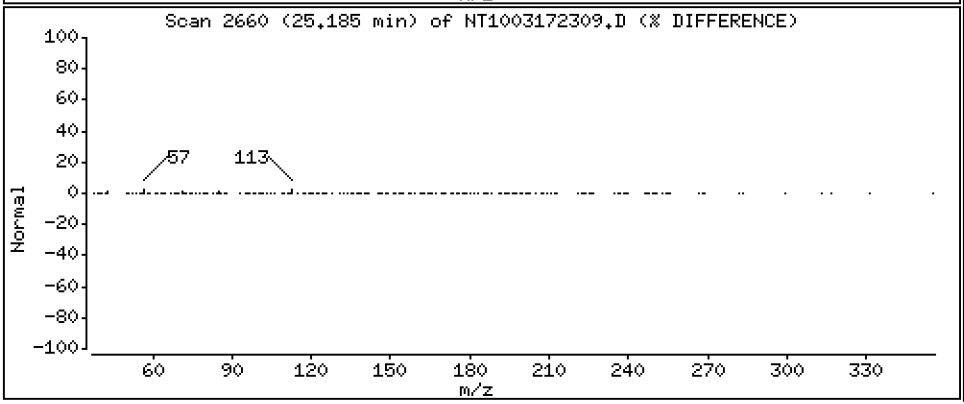
187 Total Benzofluoranthenes

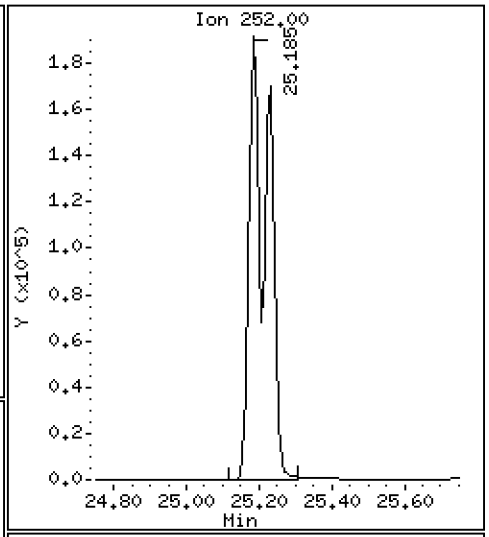
Concentration: 5.012 ug/mL

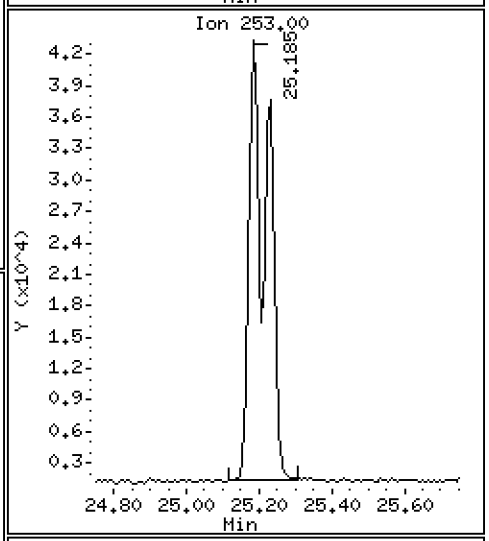


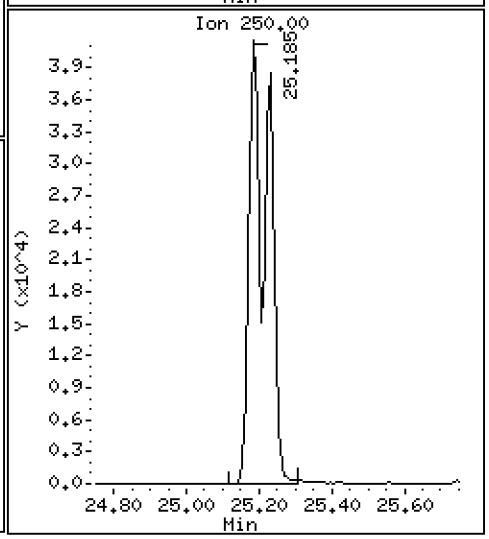












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230317.b\NT1003172309.D
Lab Smp Id: BLB0495-SRM1
Inj Date : 17-MAR-2023 23:31
Operator : VTS Inst ID: nt10.i
Smp Info : BLB0495-SRM1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230317.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.975	6.975	(0.758)	120285	2.38696	2.387
$	2 Phenol-d5	99	8.544	8.543	(0.929)	201512	3.04824	3.048
	3 Phenol	94	8.567	8.566	(0.931)	85544	1.24525	1.245
$	5 2-Chlorophenol-d4	132	8.837	8.837	(0.960)	272949	4.83512	4.835
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	8.868	8.867	(0.964)	57714	0.98162	0.9816
	7 1,3-Dichlorobenzene	146	9.139	9.138	(0.993)	60213	0.96871	0.9687
*	8 1,4-Dichlorobenzene-d4	152	9.201	9.200	(1.000)	166636	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.558	9.557	(1.039)	133771	3.29967	3.300
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	9.767	9.759	(1.062)	42320	2.43861	2.439(H)
	13 2-Methylphenol	108	9.682	9.682	(1.052)	197135	3.93660	3.937
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	9.946	9.946	(1.081)	255146	4.83558	4.836
$	18 Nitrobenzene-d5	82	10.287	10.287	(0.882)	215013	3.54593	3.546
	19 Nitrobenzene	77	10.326	10.326	(0.885)	143128	2.40524	2.405
	20 Isophorone	82	10.769	10.768	(0.923)	130305	1.71172	1.712
	21 2-Nitrophenol	139	10.947	10.955	(0.938)	130509	4.48892	4.489
	22 2,4-Dimethylphenol	107	10.990	10.989	(0.942)	247045	4.51989	4.520
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	11.083	11.175	(0.950)	30652	1.00797	1.008
	25 2,4-Dichlorophenol	162	11.397	11.396	(0.977)	258446	5.90883	5.909
	26 1,2,4-Trichlorobenzene	180	11.585	11.583	(0.993)	59017	1.14947	1.149
*	27 Naphthalene-d8	136	11.669	11.676	(1.000)	600742	4.00000	
	28 Naphthalene	128	11.716	11.715	(1.004)	563858	3.54304	3.543
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	12.071	12.070	(1.034)	51496	1.71175	1.712
	31 4-Chloro-3-methylphenol	107	12.783	12.790	(1.095)	82037	1.73258	1.733
	32 2-Methylnaphthalene	142	13.100	13.099	(1.123)	4202	0.03659	0.03659
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.720	13.718	(0.898)	55597	1.76029	1.760
	35	2,4,5-Trichlorophenol	196	13.789	13.788	(0.903)	98222	2.79881	2.799
$	36	2-Fluorobiphenyl	172	13.882	13.881	(0.909)	478298	3.78375	3.784
	37	2-Chloronaphthalene	162	14.091	14.098	(0.922)	184657	1.80410	1.804
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	14.772	14.787	(0.967)	403123	3.88324	3.883
	40	Acenaphthylene	152	14.966	14.965	(0.980)	222649	1.39599	1.396
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	15.275	15.282	(1.000)	319558	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	15.337	15.344	(1.004)	444667	4.51295	4.513
	45	2,4-Dinitrophenol	184	15.407	15.421	(1.009)	45049	3.30772	3.308
	46	Dibenzofuran	168	15.662	15.676	(1.025)	732576	5.04184	5.042
	47	4-Nitrophenol	109	15.499	15.514	(1.015)	79780	5.02671	5.027
	48	2,4-Dinitrotoluene	165	15.723	15.730	(1.029)	97632	2.89099	2.891
	50	Diethylphthalate	149	16.226	16.240	(1.062)	24517	0.24071	0.2407
	49	Fluorene	166	16.373	16.387	(1.072)	354119	3.09785	3.098
	51	4-Chlorophenyl-phenylether	204	16.365	16.372	(1.071)	99093	1.82295	1.823
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	16.550	16.572	(0.904)	104580	5.98741	5.987
	54	N-Nitrosodiphenylamine	169	16.612	16.626	(0.908)	240384	3.13022	3.130
$	55	2,4,6-Tribromophenol	330	16.905	16.919	(1.107)	89322	5.98759	5.988
	56	4-Bromophenyl-phenylether	248	17.368	17.374	(0.949)	186697	5.81133	5.811
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	18.033	18.047	(0.985)	55986	2.79554	2.796
*	59	Phenanthrene-d10	188	18.304	18.310	(1.000)	574394	4.00000	
	60	Phenanthrene	178	18.350	18.357	(1.003)	636664	4.06490	4.065
	61	Anthracene	178	18.443	18.457	(1.008)	299438	1.99302	1.993
	62	Carbazole	167	18.768	18.782	(1.025)	691770	5.13822	5.138
	63	Di-n-butylphthalate	149	19.557	19.572	(1.068)	262729	1.45346	1.453
	64	Fluoranthene	202	20.718	20.732	(0.888)	369617	2.11279	2.113
	65	Pyrene	202	21.143	21.158	(0.907)	479998	2.67468	2.675
$	66	Terphenyl-d14	244	21.422	21.436	(0.919)	588639	4.36771	4.368
	67	Butylbenzylphthalate	149	22.343	22.358	(0.958)	220546	3.42749	3.427
	68	Benzo(a)anthracene	228	23.288	23.310	(0.999)	767025	4.99122	4.991
*	69	Chrysene-d12	240	23.319	23.341	(1.000)	435378	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	23.365	23.380	(1.002)	179255	1.19394	1.194
	72	bis(2-Ethylhexyl)phthalate	149	23.358	23.380	(0.960)	75248	0.70420	0.7042
*	134	Di-n-octylphthalate-d4	153	24.341	24.363	(1.000)	730373	4.00000	
	73	Di-n-octylphthalate	149	24.349	24.378	(1.000)	62251	0.32569	0.3257
	74	Benzo(b)fluoranthene	252	25.185	25.207	(0.970)	380193	2.69890	2.699
	75	Benzo(k)fluoranthene	252	25.231	25.253	(0.971)	332100	2.32170	2.322(H)
	76	Benzo(a)pyrene	252	25.851	25.873	(0.995)	553489	4.39467	4.395
*	77	Perylene-d12	264	25.974	25.997	(1.000)	434581	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.673	28.711	(1.104)	537083	3.35189	3.352
	79	Dibenzo(a,h)anthracene	278	28.689	28.726	(1.104)	408657	3.07194	3.072
	80	Benzo(g,h,i)perylene	276	29.473	29.519	(1.135)	170090	1.22659	1.227
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	Compound Not Detected.					
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.185	25.253	(0.970)	681632	5.01151	5.012
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172309.D
Lab Smp Id: BLB0495-SRM1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230317.b\ABN.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:02
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	132765	66383	265530	166636	25.51
27 Naphthalene-d8	497947	248974	995894	600742	20.64
42 Acenaphthene-d10	271928	135964	543856	319558	17.52
59 Phenanthrene-d10	497390	248695	994780	574394	15.48
69 Chrysene-d12	391403	195702	782806	435378	11.24
134 Di-n-octylphthala	674651	337326	1349302	730373	8.26
77 Perylene-d12	408663	204332	817326	434581	6.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.20	8.70	9.70	9.20	0.00
27 Naphthalene-d8	11.68	11.18	12.18	11.67	-0.06
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	-0.04
59 Phenanthrene-d10	18.31	17.81	18.81	18.30	-0.04
69 Chrysene-d12	23.34	22.84	23.84	23.32	-0.09
134 Di-n-octylphthala	24.36	23.86	24.86	24.34	-0.09
77 Perylene-d12	26.00	25.50	26.50	25.97	-0.08

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

REVIEW SUMMARY FOR FILE - NT1003172309.D

Lab ID: BLB0495-SRM1
nt10.i, 20230317.b\ABN.m,   17-MAR-2023 23:31

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.950	0.957	-0.0074	Benzoic acid

RRT check based on Ccal File: NT1003172302.D

On Column LOD for nt10.i, 20230317.b\ABN.m, ICAL.sub = 0.0000

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

Analytical Resources, LLC
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E

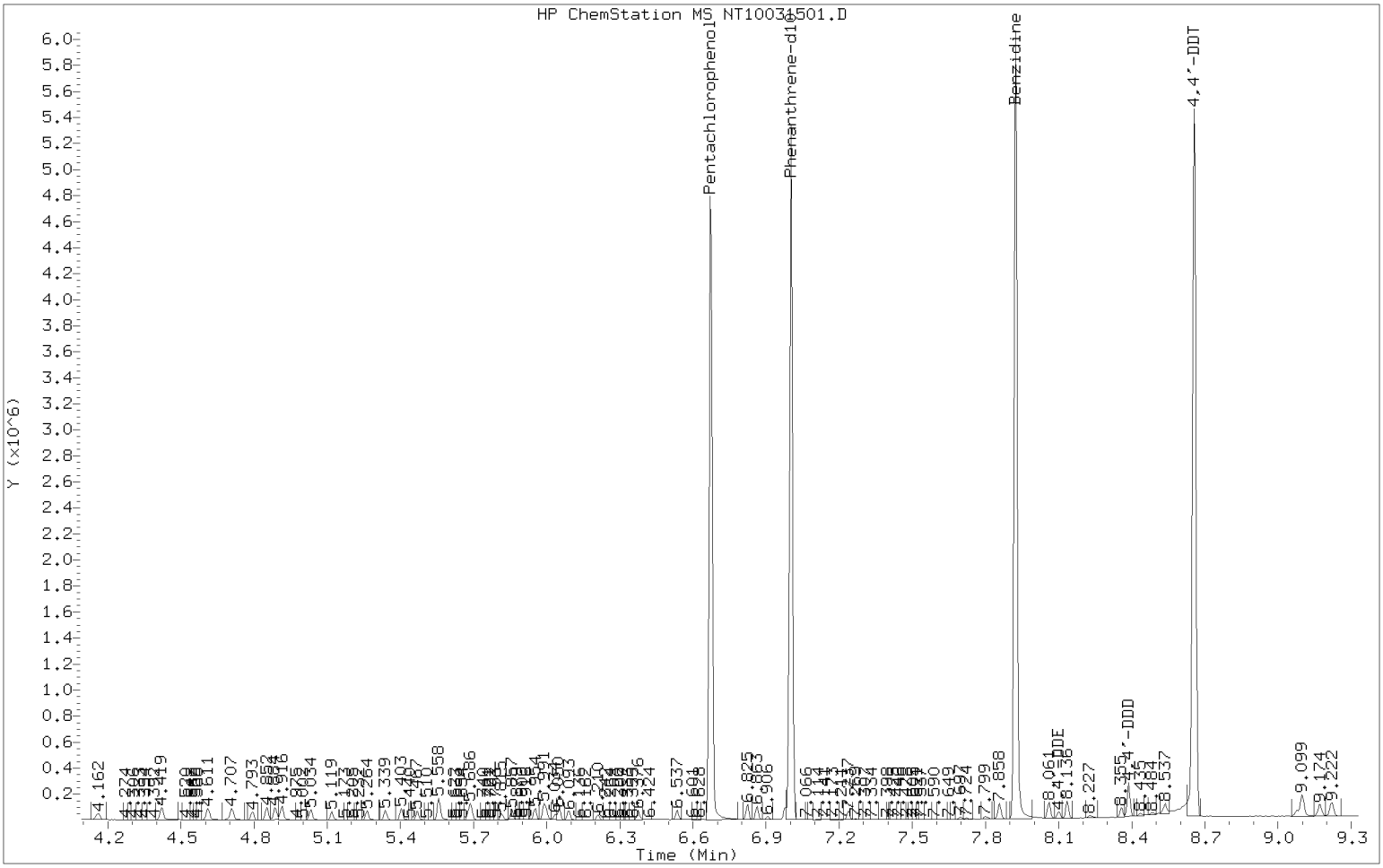
Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Lab File ID:	NT10031501.D	Injection Date:	03/15/23
Instrument ID:	NT10	Injection Time:	20:19
Sequence:	SLC0228	Lab Sample ID:	SLC0228-TUN1

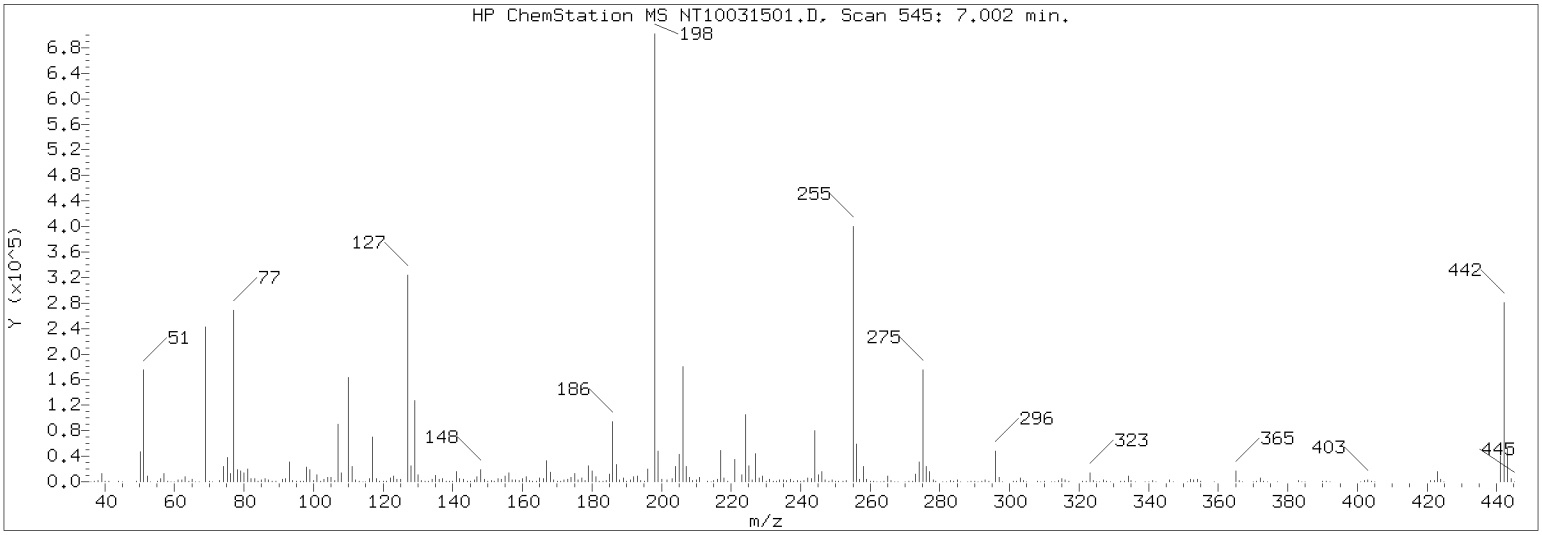
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	0.372	PASS
69	Less than 100% of 198	36.5	PASS
70	Less than 2% of 69	0.498	PASS
197	Less than 2% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.88	PASS
365	1 - 100% of 198	2.52	PASS
441	Less than 150% of 443	77.1	PASS
442	1 - 200% of 198	42.8	PASS
443	15 - 24% of 442	18.5	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Base peak, 100% relative abundance		

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLC0228-TUN1	NT10031501.D	03/15/2023	20:19
Cal Standard	SLC0228-CAL7	NT10031502.D	03/15/2023	20:34
Cal Standard	SLC0228-CAL6	NT10031503.D	03/15/2023	21:12
Cal Standard	SLC0228-CAL5	NT10031504.D	03/15/2023	21:50
Cal Standard	SLC0228-CAL4	NT10031505.D	03/15/2023	22:28
Cal Standard	SLC0228-CAL3	NT10031506.D	03/15/2023	23:06
Cal Standard	SLC0228-CAL2	NT10031507.D	03/15/2023	23:44
Cal Standard	SLC0228-CAL1	NT10031508.D	03/16/2023	0:22
Secondary Cal Check	SLC0228-SCV1	NT10031511.D	03/16/2023	2:16
Initial Cal Blank	SLC0228-ICB1	NT10031512.D	03/16/2023	2:54

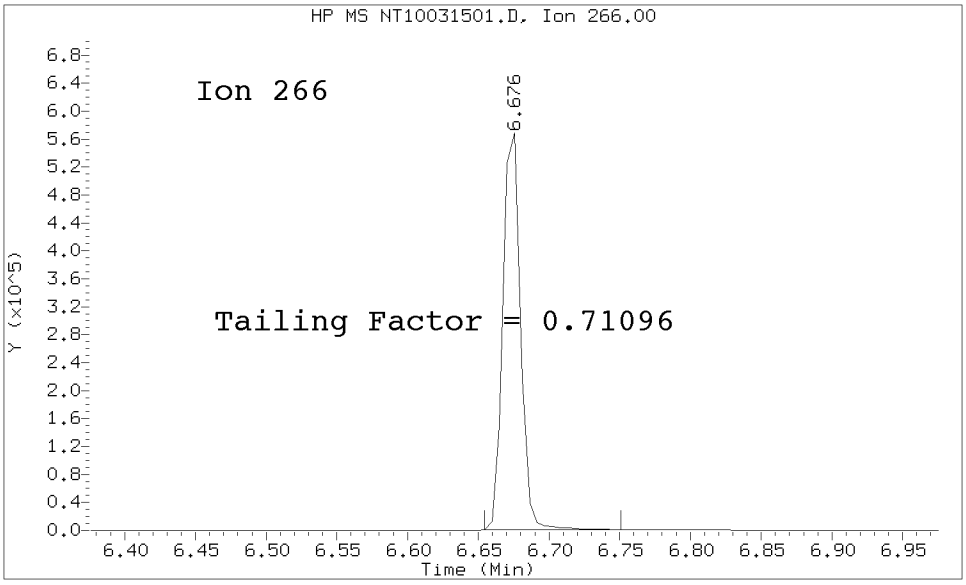
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230315.b/NT10031501.D/NT10031501.D
Method Used: \20230315.b\DFTPP8270E.m Inst: nt10
Injection Date: 15-MAR-2023 20:19 Operator: JGR
Sample Info: SLC0228-TUN1 SLC0228-TUN1
Report Date: 03/16/2023 12:23



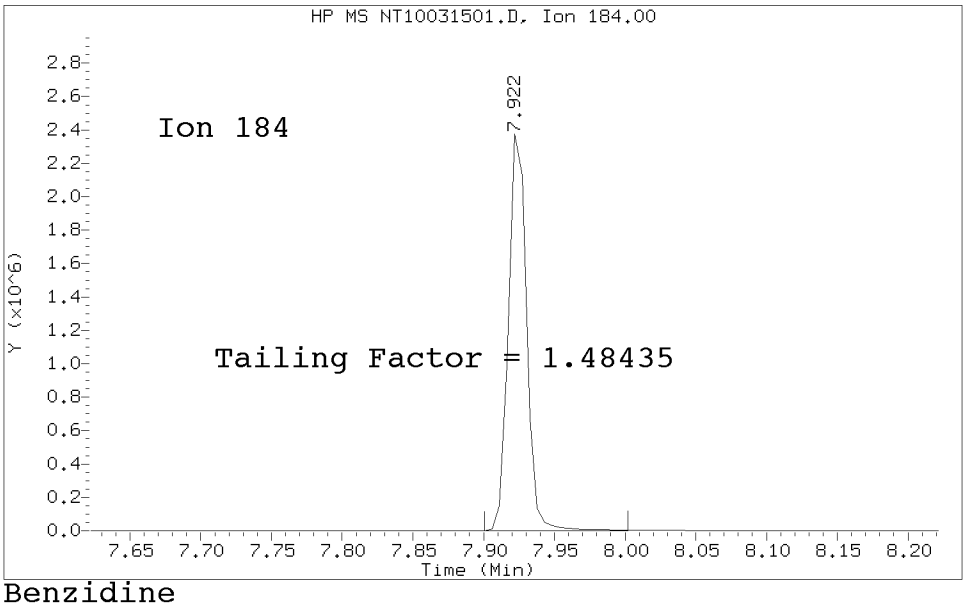


Datafile Analyzed: /20230315.b/NT10031501.D/NT10031501.D
Method Used: \20230315.b\DFTPP8270E.m\sw846ddt.m Inst: nt10
Injection Date: 15-MAR-2023 20:19 Operator: JGR
Sample Info: SEQ-TUN1
Report Date: 03/16/2023 12:23



Pentachlorophenol
==========
Exp. RT = 6.676
Found RT = 6.676

Tail Factor = 0.711 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 7.922
Found RT = 7.922

Tail Factor = 1.484 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.7109557	2.000	PASS
Benzidine	1.4843493	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	962640			N/A
4,4-DDE	5158	0.5	20.0	PASS
4,4-DDD	41277	4.1	20.0	PASS
4,4-DDD + DDE	46435	4.6	20.0	PASS

Tuning Sample, nt10.i/20230315.b/NT10031501.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.14 (0.37)
69	Mass 69 relative abundance	36.50
70	Less than 2.00% of mass 69	0.18 (0.50)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.88
365	1.00 - 100.00% of mass 198	2.52
441	Less than 150.00% of mass 443	6.11 (77.09)
442	Less than 200.00% of mass 198	42.80
443	15.00 - 24.00% of mass 442	7.92 (18.52)

Data File: NT10031501.D
Spectrum: Avg. Scans 544-546 (7.00), Background Scan 536
Location of Maximum: 198.00
Number of points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	226	124.00	3185	207.00	17112	293.00	2318
37.00	575	125.00	2909	208.00	4722	294.00	588
38.00	1820	127.00	243264	209.00	1586	295.00	171
39.00	10159	128.00	18696	210.00	2002	296.00	36168
40.00	405	129.00	96304	211.00	5093	297.00	5056
41.00	312	130.00	8257	213.00	371	298.00	351
42.00	59	131.00	1626	214.00	74	301.00	422
45.00	283	132.00	820	215.00	1549	302.00	552
49.00	910	133.00	415	216.00	2822	303.00	4130
50.00	35800	134.00	2800	217.00	36520	304.00	1107
51.00	136000	135.00	7704	218.00	4515	305.00	126
52.00	7201	136.00	3195	219.00	360	308.00	532
53.00	294	137.00	3970	221.00	25672	309.00	330
55.00	668	138.00	948	222.00	2863	310.00	461
56.00	4206	139.00	563	223.00	8094	312.00	63
57.00	9877	140.00	1193	224.00	76160	313.00	360
58.00	478	141.00	12476	225.00	18680	314.00	1762
59.00	106	142.00	3876	226.00	2197	315.00	4011
60.00	125	143.00	2757	227.00	32752	316.00	2200
61.00	1897	144.00	726	228.00	4949	317.00	416
62.00	2103	145.00	710	229.00	6725	321.00	1068
63.00	6654	146.00	2200	230.00	933	322.00	491
64.00	895	147.00	6157	231.00	2854	323.00	10541
65.00	3279	148.00	13642	232.00	574	324.00	1817
66.00	188	149.00	2992	233.00	660	325.00	178
67.00	249	150.00	753	234.00	2022	326.00	218
68.00	704	151.00	1678	235.00	2475	327.00	2103
69.00	189184	152.00	893	236.00	1621	328.00	1092
70.00	943	153.00	4091	237.00	2803	329.00	211
71.00	156	154.00	3154	238.00	375	332.00	739
73.00	1307	155.00	6743	239.00	1387	333.00	975
74.00	18768	156.00	10344	240.00	943	334.00	6536
75.00	30000	157.00	2091	241.00	1718	335.00	1733
76.00	10364	158.00	2204	242.00	4096	336.00	201
77.00	207552	159.00	1689	243.00	3931	339.00	148
78.00	14246	160.00	3864	244.00	58560	340.00	135
79.00	13356	161.00	5891	245.00	7760	341.00	1142
80.00	10539	162.00	1637	246.00	11941	342.00	277
81.00	15173	163.00	475	247.00	2526	346.00	2192
82.00	3906	164.00	608	248.00	602	347.00	346
83.00	3545	165.00	4507	249.00	2169	351.00	182
84.00	178	166.00	3807	250.00	370	352.00	3059
85.00	2559	167.00	24880	251.00	462	353.00	1950
86.00	4226	168.00	11639	252.00	590	354.00	3010
87.00	1998	169.00	2046	253.00	1331	355.00	569
88.00	783	170.00	776	255.00	296384	359.00	242
89.00	418	171.00	1036	256.00	43272	365.00	13085
91.00	3237	172.00	2248	257.00	3394	366.00	1813
92.00	3764	173.00	2906	258.00	18176	367.00	150

93.00	24104	174.00	5113	259.00	2926	370.00	291
94.00	1672	175.00	9851	260.00	520	371.00	690
95.00	503	176.00	2588	261.00	479	372.00	4605
96.00	1130	177.00	4756	262.00	60	373.00	1002
97.00	380	178.00	1657	263.00	151	374.00	50
98.00	17936	179.00	18424	264.00	377	377.00	67
99.00	14658	180.00	12975	265.00	6992	383.00	1157
100.00	1303	181.00	6000	266.00	984	384.00	328
101.00	8724	182.00	963	267.00	105	385.00	50
102.00	480	183.00	493	268.00	248	390.00	595
103.00	2859	184.00	1456	270.00	285	391.00	401
104.00	5461	185.00	9317	271.00	631	392.00	204
105.00	5056	186.00	70384	272.00	750	401.00	211
106.00	1781	187.00	20112	273.00	8749	402.00	1564
107.00	67936	188.00	2185	274.00	23296	403.00	2292
108.00	10471	189.00	4453	275.00	129008	404.00	796
109.00	595	190.00	772	276.00	17320	405.00	237
110.00	122760	191.00	2090	277.00	11470	421.00	1827
111.00	18400	192.00	5915	278.00	2005	422.00	1658
112.00	2357	193.00	6863	279.00	468	423.00	12304
113.00	756	194.00	1470	281.00	147	424.00	2795
114.00	128	195.00	841	282.00	368	425.00	263
115.00	298	196.00	14341	283.00	1453	441.00	31664
116.00	3871	198.00	518272	284.00	874	442.00	221824
117.00	54088	199.00	35680	285.00	2012	443.00	41072
118.00	3919	200.00	2830	286.00	333	444.00	3778
119.00	531	201.00	2302	288.00	146	445.00	177
120.00	920	203.00	3657	289.00	446		
121.00	362	204.00	18200	290.00	444		
122.00	4396	205.00	31664	291.00	199		
123.00	6778	206.00	132736	292.00	486		

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00046	Instrument:	NT10
Calibration Date:	03/15/2023	Column (1):	ZB-5MSi

Calibration Comments: 625.1/8270E ICAL

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Phenol	0.2	1.622083	0.5	1.744385	1	1.738913	2.5	1.741727	5	1.626447	10	1.548455
4-Methylphenol	0.2	1.143833	0.5	1.244	1	1.307883	2.5	1.374404	5	1.286966	10	1.25011
Naphthalene	0.2	1.114243	0.5	1.09175	1	1.076291	2.5	1.085156	5	1.039419	10	1.030535
2-Methylnaphthalene	0.2	0.7568101	0.5	0.7669962	1	0.7731469	2.5	0.7905566	5	0.7700416	10	0.7603408
Acenaphthylene	0.2	1.914149	0.5	2.075865	1	2.064925	2.5	2.101795	5	1.969132	10	1.984368
Dimethylphthalate	0.2	1.323382	0.5	1.369259	1	1.345764	2.5	1.337994	5	1.267312	10	1.259852
Acenaphthene	0.2	1.282509	0.5	1.261686	1	1.254791	2.5	1.256369	5	1.196404	10	1.205595
Dibenzofuran	0.2	1.836794	0.5	1.892326	1	1.842035	2.5	1.892208	5	1.79473	10	1.763428
Fluorene	0.2	1.406055	0.5	1.451029	1	1.476714	2.5	1.500425	5	1.400817	10	1.414686
Phenanthrene	0.2	1.132198	0.5	1.106313	1	1.120881	2.5	1.127028	5	1.051992	10	1.053617
Anthracene	0.2	0.9557141	0.5	1.01224	1	1.065265	2.5	1.115342	5	1.052956	10	1.080994
Fluoranthene	0.2	1.36328	0.5	1.520561	1	1.561968	2.5	1.693508	5	1.749137	10	1.631866
Pyrene	0.2	1.456041	0.5	1.609441	1	1.630818	2.5	1.727629	5	1.739198	10	1.667931
Butylbenzylphthalate	0.2	0.3340669	0.5	0.4333599	1	0.4863695	2.5	0.5550659	5	0.5940761	10	0.626307
Benzo(a)anthracene	0.2	1.366436	0.5	1.427814	1	1.430217	2.5	1.485547	5	1.41212	10	1.389236
Chrysene	0.2	1.359447	0.5	1.429869	1	1.401334	2.5	1.407173	5	1.374198	10	1.361188
bis(2-Ethylhexyl)phthalate	0.2	0.3420314	0.5	0.4459806	1	0.5288449	2.5	0.5865203	5	0.5882303	10	0.5899108
Benzofluoranthenes, Total	0.4	1.195721	1	1.245168	2	1.253078	5	1.280546	10	1.251547	20	1.288474
Benzo(a)pyrene	0.2	0.9927352	0.5	1.101345	1	1.122317	2.5	1.22032	5	1.206385	10	1.233412
Indeno(1,2,3-cd)pyrene	0.2	1.121524	0.5	1.32292	1	1.409944	2.5	1.590272	5	1.628941	10	1.583568
Dibenzo(a,h)anthracene	0.2	0.9256101	0.5	1.109076	1	1.176882	2.5	1.320958	5	1.350104	10	1.305995
Benzo(g,h,i)perylene	0.2	0.9796118	0.5	1.132402	1	1.201964	2.5	1.357402	5	1.42789	10	1.366327
2-Fluorophenol	0.3	1.17021	0.75	1.261679	1.5	1.266774	3.75	1.303968	7.5	1.210352	15	1.167768
Phenol-d5	0.3	1.485429	0.75	1.590369	1.5	1.618326	3.75	1.691404	7.5	1.609716	15	1.575522
2-Chlorophenol-d4	0.3	1.261338	0.75	1.355292	1.5	1.384443	3.75	1.420173	7.5	1.374898	15	1.357401
1,2-Dichlorobenzene-d4	0.2	0.9420816	0.5	0.9800826	1	1.025212	2.5	1.023568	5	0.9490201	10	0.9543478
Nitrobenzene-d5	0.2	0.3650764	0.5	0.3986882	1	0.4101461	2.5	0.4261085	5	0.4187027	10	0.4110496

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00046	Instrument:	NT10
Calibration Date:	03/15/2023	Column (1):	ZB-5MSi

Calibration Comments: 625.1/8270E ICAL

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
2-Fluorobiphenyl	0.2	1.623527	0.5	1.630708	1	1.616933	2.5	1.625878	5	1.553266	10	1.544261
2,4,6-Tribromophenol	0.3	9.930622E-02	0.75	0.135101	1.5	0.1514052	3.75	0.1764476	7.5	0.177783	15	0.1895637
p-Terphenyl-d14	0.2	1.184567	0.5	1.243423	1	1.268525	2.5	1.295244	5	1.260569	10	1.21091

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00046	Instrument:	NT10
Calibration Date:	03/15/2023	Column (1):	ZB-5MSi

Calibration Comments: 625.1/8270E ICAL

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Phenol	20	1.521085										
4-Methylphenol	20	1.258843										
Naphthalene	20	0.9802185										
2-Methylnaphthalene	20	0.7350977										
Acenaphthylene	20	1.864621										
Dimethylphthalate	20	1.192451										
Acenaphthene	20	1.176068										
Dibenzofuran	20	1.709758										
Fluorene	20	1.366348										
Phenanthrene	20	1.042964										
Anthracene	20	1.041424										
Fluoranthene	20	1.730564										
Pyrene	20	1.710349										
Butylbenzylphthalate	20	0.6757807										
Benzo(a)anthracene	20	1.371766										
Chrysene	20	1.322435										
bis(2-Ethylhexyl)phthalate	20	0.5927596										
Benzofluoranthenes, Total	40	1.248781										
Benzo(a)pyrene	20	1.238145										
Indeno(1,2,3-cd)pyrene	20	1.666622										
Dibenzo(a,h)anthracene	20	1.382416										
Benzo(g,h,i)perylene	20	1.468793										
2-Fluorophenol	30	1.086771										
Phenol-d5	30	1.537369										
2-Chlorophenol-d4	30	1.332016										
1,2-Dichlorobenzene-d4	20	0.937777										
Nitrobenzene-d5	20	0.3964415										

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00046	Instrument:	NT10
Calibration Date:	03/15/2023	Column (1):	ZB-5MSi

Calibration Comments: 625.1/8270E ICAL

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2-Fluorobiphenyl	20	1.481453										
2,4,6-Tribromophenol	30	0.1805241										
p-Terphenyl-d14	20	1.204127										

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00046	Instrument:	NT10
Calibration Date:	03/15/2023	Column (1):	ZB-5MSi

Calibration Comments: 625.1/8270E ICAL

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Phenol	1.649014	5.7			RSD (15)	
4-Methylphenol	1.266577	5.6			RSD (15)	
Naphthalene	1.059659	4.3			RSD (15)	
2-Methylnaphthalene	0.7647129	2.2			RSD (15)	
Acenaphthylene	1.996408	4.4			RSD (15)	
Dimethylphthalate	1.299431	4.8			RSD (15)	
Acenaphthene	1.233346	3.2			RSD (15)	
Dibenzofuran	1.818754	3.7			RSD (15)	
Fluorene	1.430868	3.3			RSD (15)	
Phenanthrene	1.090713	3.6			RSD (15)	
Anthracene	1.046276	4.9			RSD (15)	
Fluoranthene	1.607269	8.5			RSD (15)	
Pyrene	1.648772	5.9			RSD (15)	
Butylbenzylphthalate	0.5292894	22.5		0.9997	QCOD (0.99)	
Benzo(a)anthracene	1.411877	2.9			RSD (15)	
Chrysene	1.379378	2.6			RSD (15)	
bis(2-Ethylhexyl)phthalate	0.5248968	18.5		0.9999	QCOD (0.99)	
Benzofluoranthenes, Total	1.251902	2.4			RSD (15)	
Benzo(a)pyrene	1.159237	7.9			RSD (15)	
Indeno(1,2,3-cd)pyrene	1.474827	13.5			RSD (15)	
Dibenzo(a,h)anthracene	1.224434	13.4			RSD (15)	
Benzo(g,h,i)perylene	1.276341	13.9			RSD (15)	
2-Fluorophenol	1.209646	6.2			RSD (15)	
Phenol-d5	1.586876	4.1			RSD (15)	
2-Chlorophenol-d4	1.35508	3.7			RSD (15)	
1,2-Dichlorobenzene-d4	0.9731556	3.9			RSD (15)	
Nitrobenzene-d5	0.4037447	4.9			RSD (15)	
2-Fluorobiphenyl	1.582289	3.6			RSD (15)	
2,4,6-Tribromophenol	0.1585901	20.3		0.9993	QCOD (0.99)	
p-Terphenyl-d14	1.238195	3.2			RSD (15)	

ANALYSIS SEQUENCE

SLC0228

Instrument ID: NT10
Calibration ID: GC00046
MS EM Level: 1271 EV

GCMS Description: Agilent 5975/MS http://bi
GCMS Column ID: L002830

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0228-TUN1	MS Tune	QC		1	K004775		03/15/2023 20:19	NT10031501.D	JGR	
SLC0228-CAL7	CAL 20	QC		2	K011111	K010831	03/15/2023 20:34	NT10031502.D	VTS	
SLC0228-CAL6	CAL 10	QC		3	K011110	K010831	03/15/2023 21:12	NT10031503.D	VTS	
SLC0228-CAL5	CAL 5	QC		4	K011109	K010831	03/15/2023 21:50	NT10031504.D	VTS	
SLC0228-CAL4	CAL 2.5	QC		5	K011108	K010831	03/15/2023 22:28	NT10031505.D	VTS	
SLC0228-CAL3	CAL 1.0	QC		6	K011107	K010831	03/15/2023 23:06	NT10031506.D	VTS	
SLC0228-CAL2	CAL 0.5	QC		7	K011106	K010831	03/15/2023 23:44	NT10031507.D	VTS	
SLC0228-CAL1	CAL 0.2	QC		8	K011105	K010831	03/16/2023 00:22	NT10031508.D	VTS	
SLC0228-SCV1	SCV 5.0	QC		9	L002833	K010831	03/16/2023 02:16	NT10031511.D	VTS	
SLC0228-ICB1	Initial Cal Blank	QC		10	K005156	K010831	03/16/2023 02:54	NT10031512.D	VTS	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230315.b

	Time	Filename	LabID	ClientId	DF																			
1	2019	NT10031501.D	SLC0228-TUN1		1	|NO ISTDS FOUND||																		
2	2034	NT10031502.D	SLC0228-CAL7		1	| 9.30	177375	||11.78	659656	||15.38	352987	||18.42	587447	||23.46	356463	||26.19	404994	||24.49	617041	|				
3	2112	NT10031503.D	SLC0228-CAL6		1	| 9.30	174984	||11.78	633941	||15.38	344087	||18.42	605930	||23.46	437116	||26.18	463440	||24.48	674085	|				
4	2150	NT10031504.D	SLC0228-CAL5		1	| 9.30	171542	||11.78	624466	||15.38	337226	||18.42	572849	||23.45	347068	||26.18	421549	||24.48	500317	|				
5	2228	NT10031505.D	SLC0228-CAL4		1	| 9.30	158570	||11.78	582079	||15.38	306729	||18.42	522311	||23.45	356282	||26.18	420725	||24.48	471925	|				
6	2306	NT10031506.D	SLC0228-CAL3		1	| 9.29	172257	||11.78	625894	||15.38	330997	||18.42	568685	||23.45	426836	||26.18	489106	||24.48	555437	|				
7	2344	NT10031507.D	SLC0228-CAL2		1	| 9.30	176328	||11.78	638835	||15.38	333617	||18.42	594262	||23.45	428263	||26.18	479116	||24.48	530893	|				
8	0022	NT10031508.D	SLC0228-CAL1		1	| 9.29	173382	||11.77	622719	||15.38	323444	||18.42	582036	||23.45	443504	||26.18	490725	||24.48	540769	|				
9	0100	NT10031509.D	SEQ-SIM2		1	| 9.29	175576	||11.78	624440	||15.38	329518	||18.42	581173	||23.45	424576	||26.18	472151	||24.48	491201	|				
10	0138	NT10031510.D	SEQ-SIM1		1	| 9.30	172228	||11.77	609518	||15.38	313933	||18.42	564567	||23.45	413842	||26.18	461161	||24.48	469814	|				
11	0216	NT10031511.D	SLC0228-SCV1		1	| 9.30	154809	||11.78	570882	||15.38	303490	||18.42	533431	||23.46	435381	||26.19	494648	||24.49	660827	|				
12	0254	NT10031512.D	SLC0228-ICB1		1	| 9.30	173115	||11.78	625865	||15.38	328712	||18.42	592693	||23.45	442208	||26.18	499804	||24.48	526309	|				

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230315.b

Instrument: nt10.i Date: 15-MAR-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
2019	NT10031501.D	SLC0228-TUN1	1	NO MANUAL INTEGRATION
2034	NT10031502.D	SLC0228-CAL7	1	Benzoic acid,
2112	NT10031503.D	SLC0228-CAL6	1	2,2'-oxybis(1-Chloropropane),
2150	NT10031504.D	SLC0228-CAL5	1	2,2'-oxybis(1-Chloropropane),
2228	NT10031505.D	SLC0228-CAL4	1	2,2'-oxybis(1-Chloropropane),
2306	NT10031506.D	SLC0228-CAL3	1	2,2'-oxybis(1-Chloropropane),
2344	NT10031507.D	SLC0228-CAL2	1	2,2'-oxybis(1-Chloropropane), Benzoic acid,
0022	NT10031508.D	SLC0228-CAL1	1	2,2'-oxybis(1-Chloropropane), 1,2-Dichlorobenzene-d4,
0100	NT10031509.D	SEQ-SIM2	1	NO MANUAL INTEGRATION
0138	NT10031510.D	SEQ-SIM1	1	NO MANUAL INTEGRATION
0216	NT10031511.D	SLC0228-SCV1	1	NO MANUAL INTEGRATION
0254	NT10031512.D	SLC0228-ICB1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 16-Mar-2023 13:06

NT10031501.D	Data Locked	van, 16-Mar-2023 13:06
NT10031502.D	Data Locked	van, 16-Mar-2023 13:06
NT10031503.D	Data Locked	van, 16-Mar-2023 13:06
NT10031504.D	Data Locked	van, 16-Mar-2023 13:06
NT10031505.D	Data Locked	van, 16-Mar-2023 13:06
NT10031506.D	Data Locked	van, 16-Mar-2023 13:06
NT10031507.D	Data Locked	van, 16-Mar-2023 13:06
NT10031508.D	Data Locked	van, 16-Mar-2023 13:06
NT10031509.D	Data Locked	van, 16-Mar-2023 13:06
NT10031510.D	Data Locked	van, 16-Mar-2023 13:06
NT10031511.D	Data Locked	van, 16-Mar-2023 13:06
NT10031512.D	Data Locked	van, 16-Mar-2023 13:06

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INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 20:34
End Cal Date : 16-MAR-2023 00:22
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Last Edit : 16-Mar-2023 10:24 van

Calibration File Names:
Level 1: \\target\share\chem3\nt10.i\20230315.b\NT10031508.D
Level 2: \\target\share\chem3\nt10.i\20230315.b\NT10031507.D
Level 3: \\target\share\chem3\nt10.i\20230315.b\NT10031506.D
Level 4: \\target\share\chem3\nt10.i\20230315.b\NT10031505.D
Level 5: \\target\share\chem3\nt10.i\20230315.b\NT10031504.D
Level 6: \\target\share\chem3\nt10.i\20230315.b\NT10031503.D
Level 7: \\target\share\chem3\nt10.i\20230315.b\NT10031502.D

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	20.0000 Level 7											
186 Carbaryl	#####	#####	#####	#####	#####	#####						
	#####						AVRG		0.000e+000		0.000e+000	<-
179 n-Decane	#####	#####	#####	#####	#####	#####						
	#####						AVRG		0.000e+000		0.000e+000	<-
180 n-Octadecane	#####	#####	#####	#####	#####	#####						
	#####						AVRG		0.000e+000		0.000e+000	<-
169 4-tert-Butylphenol	#####	#####	#####	#####	#####	#####						
	#####						AVRG		0.000e+000		0.000e+000	

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	20.0000 Level 7										
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
177 p-Benzoquinone	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
168 Pentachlorobenzene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
145 4,4'-DDE	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
146 4,4'-DDD	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
147 4,4'-DDT	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
148 Dieldrin	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
149 TCMX	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
150 DCBP	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
142 1,2-Dibromo-3-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
135 2,3,5,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
136 2,3,4,5-tetrachlorophenol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
133 Butylatedhydroxytoluene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
132 3,6-Dimethylphenanthrene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
131 1-Methylphenanthrene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
130 Dibenzothiophene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
129 1-Methylfluorene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
128 N-Hexadecane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
127 2-Isopropylnaphthalene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
126 N-Tetradecane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
144 alpha-Terpineol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
125 Safrole	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
124 3,4-Dimethylphenol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
123 Acetophenone	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
122 Furfuraldehyde	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
120 2,3,4,6-Tetrachlorophenol	3113	11604	26430	82842	169344	374893						
	832943						QUAD	0.000e+000	2.48576	-0.15608	0.99970	
178 2-Benzyl-4-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
117 Butyl Diphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
116 Dibutyl Phenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
111 Azobenzene (1,2-DP-Hydrazine)	1.36599	1.46769	1.42898	1.48330	1.43111	1.39920						
	1.39306						AVRG		1.42419		2.92872	
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
109 3,4,5-Trichloroguaiacol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
181 3,4,6-Trichloroguaiacol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
108 4,5,6-Trichloroguaiacol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
184 3,4-Dichloroguaiacol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
107 4,5-Dichloroguaiacol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
182 4,6-Dichloroguaiacol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
185 4-Chloroguaiacol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
105 1-methylnaphthalene	0.70080	0.71097	0.71031	0.71759	0.70593	0.69611						
	0.66277						AVRG		0.70064		2.58648	
151 1,2,4,5-Tetrachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	20.0000 Level 7										
156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
158 Ethion	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
159 4-Nonylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
160 Tetraethyl Tin	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
161 1,2,3-Trichloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
162 1,2,3,4-Tetrachloronapthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
163 1,2,3,5,8-Pentachloronaphthal	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
164 1,2,3,4,6,7-Hexachloronaphtha	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
165 1,2,3,4,5,6,7-Heptachloronaph	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
166 Octachloronaphthalene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
167 2,2',4,4',5-Pentabromobipheny	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
3 Phenol	1.62208 / 1.52108	1.74439	1.73891	1.74173	1.62645	1.54845	AVRG		1.64901		5.72558
4 Bis(2-Chloroethyl)ether	1.27683 / 1.12492	1.24672	1.27324	1.27820	1.20197	1.15937	AVRG		1.22304		5.07805

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 20:34
End Cal Date : 16-MAR-2023 00:22
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Last Edit : 16-Mar-2023 10:24 van

Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
6 2-Chlorophenol	1.31836	1.41731	1.42385	1.43622	1.37595	1.46817					
	1.43943						AVRG		1.41133		3.51032
7 1,3-Dichlorobenzene	1.56095	1.60573	1.54200	1.54039	1.43756	1.41097					
	1.34684						AVRG		1.49206		6.30691
9 1,4-Dichlorobenzene	1.48239	1.47806	1.50605	1.46974	1.41044	1.40120					
	1.34165						AVRG		1.44136		4.05847
11 Benzyl alcohol	0.61725	0.73191	0.78594	0.84185	0.81966	0.81121					
	0.81015						AVRG		0.77400		9.98909
12 1,2-Dichlorobenzene	1.45921	1.48260	1.47819	1.46666	1.37638	1.35694					
	1.30961						AVRG		1.41851		4.90685
13 2-Methylphenol	1.09919	1.21769	1.25424	1.27936	1.21240	1.18086					
	1.17082						AVRG		1.20208		4.92825
14 2,2'-oxybis(1-Chloropropane)	0.43522	0.42661	0.43105	0.42276	0.39592	0.39745					
	0.40701						AVRG		0.41658		3.89547

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 20:34
End Cal Date : 16-MAR-2023 00:22
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Last Edit : 16-Mar-2023 10:24 van

Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
15 4-Methylphenol	1.14383	1.24400	1.30788	1.37440	1.28697	1.25011					
	1.25884						AVRG		1.26658		5.55066
16 N-Nitroso-di-n-propylamine	0.88706	0.94832	0.97868	1.00698	0.96681	0.92156					
	0.93481						AVRG		0.94917		4.15918
17 Hexachloroethane	0.58022	0.59004	0.60326	0.60841	0.58693	0.58291					
	0.58784						AVRG		0.59137		1.77557
19 Nitrobenzene	0.38078	0.40475	0.41137	0.41334	0.39831	0.38702					
	0.37799						AVRG		0.39622		3.65024
20 Isophorone	0.43358	0.46625	0.48978	0.51777	0.50778	0.56780					
	0.56515						AVRG		0.50687		9.71300
21 2-Nitrophenol	+++++	0.13597	0.15387	0.18600	0.19598	0.19551					
	0.19693						AVRG		0.17738		14.69885
22 2,4-Dimethylphenol	0.34977	0.37592	0.37563	0.37929	0.35984	0.35410					
	0.33882						AVRG		0.36191		4.26888

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Quant Method : ISTD
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Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Last Edit : 16-Mar-2023 10:24 van

Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
23 Bis(2-Chloroethoxy)methane	0.34150	0.35424	0.35450	0.35426	0.32695	0.32213					
	0.31648						AVRG		0.33858		4.89393
24 Benzoic acid	+++++	22417	66707	255448	660270	1448000					
	3461038						QUAD	0.000e+000	4.94987	-0.21794	0.99939
25 2,4-Dichlorophenol	0.23282	0.27832	0.29083	0.34192	0.30456	0.30206					
	0.28812						AVRG		0.29123		11.26110
26 1,2,4-Trichlorobenzene	0.36331	0.36162	0.35565	0.34701	0.33055	0.32721					
	0.30769						AVRG		0.34186		6.06312
28 Naphthalene	1.11424	1.09175	1.07629	1.08516	1.03942	1.03054					
	0.98022						AVRG		1.05966		4.30817
29 4-Chloroaniline	0.37193	0.41433	0.41901	0.42776	0.42475	0.42130					
	0.41465						AVRG		0.41339		4.58016
30 Hexachlorobutadiene	0.20420	0.20378	0.20957	0.20328	0.19562	0.19813					
	0.18759						AVRG		0.20031		3.58980

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Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Last Edit : 16-Mar-2023 10:24 van

Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
31 4-Chloro-3-methylphenol	+++++	0.29534	0.30559	0.32408	0.32488	0.32531					
	0.31645						AVRG		0.31527		3.91891
32 2-Methylnaphthalene	0.75681	0.76700	0.77315	0.79056	0.77004	0.76034					
	0.73510						AVRG		0.76471		2.22131
33 Hexachlorocyclopentadiene	+++++	0.32165	0.33383	0.38329	0.38506	0.39494					
	0.40240						AVRG		0.37020		9.13748
34 2,4,6-Trichlorophenol	+++++	0.34057	0.37275	0.40914	0.40785	0.42738					
	0.41440						AVRG		0.39535		8.19371
35 2,4,5-Trichlorophenol	+++++	0.39438	0.41480	0.45747	0.45138	0.46294					
	0.45473						AVRG		0.43928		6.35086
37 2-Chloronaphthalene	1.31831	1.32063	1.30168	1.33284	1.25800	1.22443					
	1.21247						AVRG		1.28119		3.83736
38 2-Nitroaniline	+++++	0.31701	0.34135	0.38455	0.37858	0.37163					
	0.36621						AVRG		0.35989		7.15743

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Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Last Edit : 16-Mar-2023 10:24 van

Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
39 Dimethylphthalate	1.32338	1.36926	1.34576	1.33799	1.26731	1.25985					
	1.19245						AVRG		1.29943		4.77776
40 Acenaphthylene	1.91415	2.07587	2.06493	2.10180	1.96913	1.98437					
	1.86462						AVRG		1.99641		4.43977
41 2,6-Dinitrotoluene	+++++	0.24183	0.26775	0.29467	0.29272	0.29827					
	0.28900						AVRG		0.28071		7.79723
43 3-Nitroaniline	+++++	0.28085	0.30392	0.33270	0.32419	0.33426					
	0.32509						AVRG		0.31683		6.52864
44 Acenaphthene	1.28251	1.26169	1.25479	1.25637	1.19640	1.20560					
	1.17607						AVRG		1.23335		3.24756
45 2,4-Dinitrophenol	+++++	6815	25006	95470	266923	674586					
	1465989						QUAD	0.000e+000	5.90362	-0.26772	0.99767
46 Dibenzofuran	1.83679	1.89233	1.84203	1.89221	1.79473	1.76343					
	1.70976						AVRG		1.81875		3.70158

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	20.0000 Level 7										
47 4-Nitrophenol	+++++	10811	26972	72524	160601	346416					
	684596						QUAD	0.000e+000	5.01739	0.06496	0.99964
48 2,4-Dinitrotoluene	7302	27229	61485	155514	337620	723393					
	1405429						QUAD	0.000e+000	2.35401	0.03800	0.99969
49 Fluorene	1.40605	1.45103	1.47671	1.50043	1.40082	1.41469					
	1.36635						AVRG		1.43087		3.28917
50 Diethylphthalate	1.20144	1.24989	1.30138	1.31975	1.24786	1.27783					
	1.32643						AVRG		1.27494		3.52654
51 4-Chlorophenyl-phenylether	0.69799	0.68992	0.68629	0.69085	0.66721	0.67242					
	0.65828						AVRG		0.68042		2.13873
52 4-Nitroaniline	+++++	0.27470	0.28009	0.23607	0.29239	0.32686					
	0.30307						AVRG		0.28553		10.68771
53 4,6-Dinitro-2-methylphenol	+++++	16474	45458	137459	335578	794181					
	1560214						QUAD	0.000e+000	8.27405	-0.28973	0.99917

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Last Edit : 16-Mar-2023 10:24 van

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	20.0000 Level 7										
54 N-Nitrosodiphenylamine	0.52887	0.55193	0.55561	0.56260	0.51812	0.51180					
	0.51457						AVRG		0.53479		4.00425
56 4-Bromophenyl-phenylether	0.19782	0.21343	0.22682	0.23565	0.23145	0.23263					
	0.22827						AVRG		0.22372		6.02001
57 Hexachlorobenzene	0.24985	0.23051	0.24765	0.24355	0.22752	0.22384					
	0.21902						AVRG		0.23456		5.24539
58 Pentachlorophenol	+++++	11460	28829	82114	191672	452371					
	885410						QUAD	0.000e+000	7.20876	-0.39477	0.99931
60 Phenanthrene	1.13220	1.10631	1.12088	1.12703	1.05199	1.05362					
	1.04296						AVRG		1.09071		3.61900
61 Anthracene	0.95571	1.01224	1.06526	1.11534	1.05296	1.08099					
	1.04142						AVRG		1.04628		4.89905
62 Carbazole	0.88933	0.95562	0.99664	0.98309	0.89914	0.95168					
	0.88743						AVRG		0.93756		4.84977

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
63 Di-n-butylphthalate	22443	69653	154356	388084	843782	1947970					
	3613228						QUAD	0.000e+000	0.79314	0.00278	0.99940
64 Fluoranthene	1.36328	1.52056	1.56197	1.69351	1.74914	1.63187					
	1.73056						AVRG		1.60727		8.51839
65 Pyrene	1.45604	1.60944	1.63082	1.72763	1.73920	1.66793					
	1.71035						AVRG		1.64877		5.94096
67 Butylbenzylphthalate	7408	23199	51900	123600	257731	684422					
	1204454						QUAD	0.000e+000	1.72914	-0.07421	0.99990
68 Benzo(a)anthracene	1.36644	1.42781	1.43022	1.48555	1.41212	1.38924					
	1.37177						AVRG		1.41188		2.92087
70 3,3'-Dichlorobenzidine	+++++	0.41680	0.45352	0.46701	0.40921	0.46337					
	0.50355						AVRG		0.45224		7.71340
71 Chrysene	1.35945	1.42987	1.40133	1.40717	1.37420	1.36119					
	1.32243						AVRG		1.37938		2.61415

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	20.0000 Level 7										
72 bis(2-Ethylhexyl)phthalate	9248	29596	73435	172996	367877	994125					
	1828785						QUAD	0.000e+000	1.70957	-0.00774	0.99996
73 Di-n-octylphthalate	1.13505	1.06235	1.05217	1.05751	1.02687	1.01350					
	0.97997						AVRG		1.04677		4.63862
74 Benzo(b)fluoranthene	1.17883	1.29968	1.27339	1.34308	1.32964	1.39410					
	1.25750						AVRG		1.29660		5.33463
75 Benzo(k)fluoranthene	1.32608	1.27815	1.33166	1.33571	1.27907	1.30669					
	1.35881						AVRG		1.31660		2.28881
187 Total Benzofluoranthenes	1.19572	1.24517	1.25308	1.28055	1.25155	1.28847					
	1.24878						AVRG		1.25190		2.38989
76 Benzo(a)pyrene	0.99274	1.10134	1.12232	1.22032	1.20639	1.23341					
	1.23814						AVRG		1.15924		7.88419
78 Indeno(1,2,3-cd)pyrene	1.12152	1.32292	1.40994	1.59027	1.62894	1.58357					
	1.66662						AVRG		1.47483		13.49853

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
79 Dibenzo(a,h)anthracene	0.92561	1.10908	1.17688	1.32096	1.35010	1.30600					
	1.38242						AVRG		1.22443		13.40261
80 Benzo(g,h,i)perylene	0.97961	1.13240	1.20196	1.35740	1.42789	1.36633					
	1.46879						AVRG		1.27634		13.90451
90 N-Nitrosodimethylamine	0.77338	0.85958	0.80600	0.83443	0.77037	0.71258					
	0.64576						AVRG		0.77173		9.49214
91 Aniline	1.71731	1.77469	1.73024	1.75620	1.67046	1.59418					
	1.58456						AVRG		1.68966		4.49435
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
93 Benzidine	+++++	0.58897	0.67279	0.70566	0.65150	0.69961					
	0.64270						AVRG		0.66021		6.50918
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
97 Caffeine	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
98 Retene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
99 Perylene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
100 3-beta-Coprostanol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
101 Cholesterol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
102 beta-Sitosterol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
103 Pyridine	1.12693 / 1.00113	1.33308	1.27029	1.29268	1.21465	1.05774	AVRG		1.18522		10.61953	

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
188 2,6-Dichlorophenol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
189 N-Nitrosomethylethylamine	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
$ 1 2-Fluorophenol	1.17021 / 1.08677	1.26168	1.26677	1.30397	1.21035	1.16777	AVRG		1.20965		6.15640	
$ 137 d8-1,4-Dioxane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
$ 2 Phenol-d5	1.48543 / 1.53737	1.59037	1.61833	1.69140	1.60972	1.57552	AVRG		1.58688		4.09370	
$ 5 2-Chlorophenol-d4	1.26134 / 1.33202	1.35529	1.38444	1.42017	1.37490	1.35740	AVRG		1.35508		3.66724	
$ 10 1,2-Dichlorobenzene-d4	0.94208 / 0.93778	0.98008	1.02521	1.02357	0.94902	0.95435	AVRG		0.97316		3.85694	

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
$ 18 Nitrobenzene-d5	0.36508	0.39869	0.41015	0.42611	0.41870	0.41105					
	0.39644						AVRG		0.40374		4.94574
$ 36 2-Fluorobiphenyl	1.62353	1.63071	1.61693	1.62588	1.55327	1.54426					
	1.48145						AVRG		1.58229		3.61230
$ 55 2,4,6-Tribromophenol	2409	8451	18793	50739	112412	244599					
	477920						QUAD	0.000e+000	5.31174	0.15583	0.99955
$ 66 Terphenyl-d14	1.18457	1.24342	1.26852	1.29524	1.26057	1.21091					
	1.20413						AVRG		1.23819		3.21084
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 20:34
End Cal Date : 16-MAR-2023 00:22
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Last Edit : 16-Mar-2023 10:24 van

Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
$ 88 Dibenz(a,h)anthracene-d14	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 89 Diphenyl-d10	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 95 D10-1-methylnaphthalene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 20:34
End Cal Date : 16-MAR-2023 00:22
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Last Edit : 16-Mar-2023 10:24 van

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230315.b
Inst ID: nt10.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	NT10031502	NT10031503	NT10031504	NT10031505	NT10031506	NT10031507	NT10031508
INJ.DATE:	15-MAR-2023	15-MAR-2023	15-MAR-2023	15-MAR-2023	15-MAR-2023	15-MAR-2023	16-MAR-2023
INJ.TIME:	20:34	21:12	21:50	22:28	23:06	23:44	00:22

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	7.068	7.068	7.068	7.068	7.068	7.068	7.068	7.068	4.068-10.068	7.068	0.000
186 Carbaryl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.785	15.785-21.785	+++++	+++++
179 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.645	5.645-11.645	+++++	+++++
180 n-Octadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.455	14.455-20.455	+++++	+++++
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.696	17.696-23.696	+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.219	16.219-22.219	+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.949	19.949-25.949	+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.196	16.196-22.196	+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.503	17.503-23.503	+++++	+++++
177 p-Benzoquinone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.827	4.827-10.827	+++++	+++++
168 Pentachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.842	12.842-18.842	+++++	+++++
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.212	44.212-50.212	+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.746	44.746-50.746	+++++	+++++
147 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.216	45.216-51.216	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230315.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
148 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.281	44.281-50.281	+++++	+++++
149 TCMX	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.387	40.387-46.387	+++++	+++++
150 DCBP	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.989	47.989-53.989	+++++	+++++
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	67.733	64.733-70.733	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.067	62.067-68.067	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.917	46.917-52.917	+++++	+++++
135 2,3,5,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.383	13.383-19.383	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.317	36.317-42.317	+++++	+++++
$ 137 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.445	0.000-5.445	+++++	+++++
* 134 Di-n-octylphthalate-d4	24.488	24.479	24.480	24.480	24.479	24.480	24.480	24.480	21.480-27.480	24.481	0.003
133 Butylatedhydroxytoluen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.571	12.571-18.571	+++++	+++++
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.450	62.450-68.450	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	64.400	61.400-67.400	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	62.100	59.100-65.100	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.912	51.912-57.912	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.212	51.212-57.212	+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	57.650	54.650-60.650	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.750	53.750-59.750	+++++	+++++
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.447	8.447-14.447	+++++	+++++
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.166	49.166-55.166	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230315.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.617	47.617-53.617	+++++	+++++
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.252	7.252-13.252	+++++	+++++
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.467	40.467-46.467	+++++	+++++
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.697	0.000-5.697	+++++	+++++
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.500	51.500-57.500	+++++	+++++
120 2,3,4,6-Tetrachlorophe	16.110	16.101	16.102	16.103	16.109	16.102	16.103	16.103	13.103-19.103	16.104	0.004
178 2-Benzyl-4-Chloropheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.963	15.963-21.963	+++++	+++++
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.069	44.069-50.069	+++++	+++++
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.215	18.215-24.215	+++++	+++++
117 Butyl Diphenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.761	13.761-19.761	+++++	+++++
116 Dibutyl Phenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.747	15.747-21.747	+++++	+++++
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.923	13.923-19.923	+++++	+++++
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.950	45.950-51.950	+++++	+++++
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.341	11.341-17.341	+++++	+++++
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.085	11.085-17.085	+++++	+++++
111 Azobenzene (1,2-DP-Hyd	16.805	16.796	16.797	16.790	16.797	16.797	16.790	16.790	13.790-19.790	16.796	0.005
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.140	14.140-20.140	+++++	+++++
109 3,4,5-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.070	12.070-18.070	+++++	+++++
181 3,4,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.232	12.232-18.232	+++++	+++++
108 4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.374	13.374-19.374	+++++	+++++
184 3,4-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.120	10.120-16.120	+++++	+++++
107 4,5-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.096	11.096-17.096	+++++	+++++
182 4,6-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.096	11.096-17.096	+++++	+++++
185 4-Chloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.735	8.735-14.735	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230315.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.243	6.243-12.243	+++++	+++++
	105 1-methylnaphthalene	13.433	13.432	13.433	13.426	13.432	13.425	13.426	13.426	10.426-16.426	13.430	0.004
	151 1,2,4,5-Tetrachloroben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.499	8.499-14.499	+++++	+++++
	152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.943	27.943-33.943	+++++	+++++
	153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.642	24.642-30.642	+++++	+++++
	154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.953	22.953-28.953	+++++	+++++
	155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.750	24.750-30.750	+++++	+++++
	156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.464	23.464-29.464	+++++	+++++
	157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.099	24.099-30.099	+++++	+++++
	158 Ethion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.513	21.513-27.513	+++++	+++++
	159 4-Nonylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.132	22.132-28.132	+++++	+++++
	160 Tetraethyl Tin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.528	16.528-22.528	+++++	+++++
	161 1,2,3-Trichloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	36.246	33.246-39.246	+++++	+++++
	162 1,2,3,4-Tetrachloronap	+++++	+++++	+++++	+++++	+++++	+++++	+++++	37.506	34.506-40.506	+++++	+++++
	163 1,2,3,5,8-Pentachloron	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.893	35.893-41.893	+++++	+++++
	164 1,2,3,4,6,7-Hexachloro	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.681	36.681-42.681	+++++	+++++
	165 1,2,3,4,5,6,7-Heptachl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	41.123	38.123-44.123	+++++	+++++
	166 Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.253	39.253-45.253	+++++	+++++
	167 2,2',4,4',5-Pentabromo	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.033	39.033-45.033	+++++	+++++
$	2 Phenol-d5	8.652	8.644	8.637	8.629	8.636	8.637	8.637	8.637	5.637-11.637	8.639	0.007
	3 Phenol	8.675	8.659	8.660	8.660	8.652	8.660	8.652	8.652	5.652-11.652	8.660	0.008
	4 Bis(2-Chloroethyl)ethe	8.845	8.845	8.837	8.838	8.837	8.837	8.838	8.838	5.838-11.838	8.840	0.004
$	5 2-Chlorophenol-d4	8.938	8.937	8.930	8.930	8.930	8.930	8.930	8.930	5.930-11.930	8.932	0.004

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230315.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	6 2-Chlorophenol	8.969	8.961	8.961	8.961	8.961	8.961	8.961	8.961	5.961-11.961	8.962	0.003
	7 1,3-Dichlorobenzene	9.240	9.239	9.232	9.232	9.239	9.232	9.232	9.232	6.232-12.232	9.235	0.004
*	8 1,4-Dichlorobenzene-d4	9.302	9.301	9.302	9.302	9.294	9.302	9.294	9.294	6.294-12.294	9.299	0.004
	9 1,4-Dichlorobenzene	9.333	9.332	9.325	9.325	9.325	9.333	9.325	9.325	6.325-12.325	9.328	0.004
$	10 1,2-Dichlorobenzene-d4	9.666	9.658	9.659	9.659	9.658	9.659	9.659	9.659	6.659-12.659	9.660	0.003
	11 Benzyl alcohol	9.565	9.557	9.558	9.558	9.557	9.558	9.558	9.558	6.558-12.558	9.559	0.003
	12 1,2-Dichlorobenzene	9.690	9.689	9.682	9.682	9.682	9.682	9.682	9.682	6.682-12.682	9.684	0.004
	13 2-Methylphenol	9.775	9.775	9.775	9.775	9.767	9.767	9.767	9.767	6.767-12.767	9.772	0.004
	14 2,2'-oxybis(1-Chloropr	9.861	9.860	9.860	9.861	9.860	9.853	9.861	9.861	6.861-12.861	9.859	0.003
	15 4-Methylphenol	10.047	10.039	10.039	10.031	10.031	10.031	10.031	10.031	7.031-13.031	10.036	0.006
	16 N-Nitroso-di-n-propyla	10.132	10.124	10.117	10.117	10.109	10.117	10.109	10.109	7.109-13.109	10.118	0.008
	17 Hexachloroethane	10.280	10.279	10.272	10.272	10.272	10.272	10.272	10.272	7.272-13.272	10.274	0.004
$	18 Nitrobenzene-d5	10.396	10.388	10.388	10.388	10.388	10.388	10.388	10.388	7.388-13.388	10.389	0.003
	19 Nitrobenzene	10.435	10.427	10.427	10.419	10.419	10.419	10.419	10.419	7.419-13.419	10.424	0.006
	20 Isophorone	10.885	10.869	10.862	10.862	10.861	10.862	10.862	10.862	7.862-13.862	10.866	0.009
	21 2-Nitrophenol	11.057	11.047	11.047	11.048	11.047	11.047	11.048	11.048	8.048-14.048	11.049	0.003
	22 2,4-Dimethylphenol	11.091	11.089	11.081	11.082	11.081	11.081	11.082	11.082	8.082-14.082	11.084	0.004
	23 Bis(2-Chloroethoxy)met	11.294	11.285	11.285	11.286	11.285	11.285	11.286	11.286	8.286-14.286	11.286	0.003
	24 Benzoic acid	11.413	11.327	11.276	11.226	11.183	11.166	+++++	11.166	8.166-14.166	11.265	0.094
	25 2,4-Dichlorophenol	11.506	11.497	11.497	11.489	11.488	11.489	11.489	11.489	8.489-14.489	11.494	0.007
	26 1,2,4-Trichlorobenzene	11.693	11.692	11.685	11.685	11.684	11.685	11.685	11.685	8.685-14.685	11.687	0.004
*	27 Naphthalene-d8	11.778	11.777	11.777	11.778	11.777	11.777	11.770	11.770	8.770-14.770	11.776	0.003
	28 Naphthalene	11.824	11.815	11.816	11.817	11.816	11.816	11.817	11.817	8.817-14.817	11.817	0.003
	29 4-Chloroaniline	11.948	11.939	11.939	11.940	11.939	11.939	11.940	11.940	8.940-14.940	11.941	0.003

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230315.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	30 Hexachlorobutadiene	12.172	12.171	12.171	12.172	12.171	12.171	12.172	12.172	9.172-15.172	12.171	0.001
	31 4-Chloro-3-methylpheno	12.892	12.883	12.875	12.876	12.875	12.883	12.876	12.876	9.876-15.876	12.880	0.006
	32 2-Methylnaphthalene	13.209	13.208	13.200	13.201	13.200	13.208	13.201	13.201	10.201-16.201	13.204	0.004
	33 Hexachlorocyclopentadi	13.673	13.665	13.665	13.666	13.665	13.673	13.666	13.666	10.666-16.666	13.667	0.004
	34 2,4,6-Trichlorophenol	13.828	13.819	13.820	13.820	13.819	13.820	13.820	13.820	10.820-16.820	13.821	0.003
	35 2,4,5-Trichlorophenol	13.898	13.889	13.889	13.890	13.889	13.889	13.890	13.890	10.890-16.890	13.891	0.003
$	36 2-Fluorobiphenyl	13.991	13.982	13.982	13.983	13.982	13.982	13.975	13.975	10.975-16.975	13.982	0.004
	37 2-Chloronaphthalene	14.207	14.198	14.199	14.200	14.199	14.199	14.192	14.192	11.192-17.192	14.199	0.004
	38 2-Nitroaniline	14.470	14.454	14.454	14.447	14.454	14.446	14.447	14.447	11.447-17.447	14.453	0.008
	39 Dimethylphthalate	14.888	14.880	14.880	14.873	14.872	14.880	14.873	14.873	11.873-17.873	14.878	0.006
	40 Acenaphthylene	15.074	15.073	15.066	15.067	15.073	15.066	15.067	15.067	12.067-18.067	15.069	0.004
	41 2,6-Dinitrotoluene	15.036	15.027	15.019	15.020	15.019	15.019	15.012	15.012	12.012-18.012	15.022	0.007
*	42 Acenaphthene-d10	15.384	15.383	15.383	15.384	15.383	15.383	15.384	15.384	12.384-18.384	15.383	0.001
	43 3-Nitroaniline	15.322	15.313	15.306	15.299	15.298	15.298	15.299	15.299	12.299-18.299	15.305	0.009
	44 Acenaphthene	15.453	15.452	15.445	15.446	15.452	15.452	15.446	15.446	12.446-18.446	15.449	0.004
	45 2,4-Dinitrophenol	15.538	15.522	15.514	15.515	15.514	15.514	15.515	15.515	12.515-18.515	15.519	0.009
	46 Dibenzofuran	15.778	15.777	15.769	15.770	15.769	15.769	15.770	15.770	12.770-18.770	15.772	0.004
	47 4-Nitrophenol	15.623	15.607	15.599	15.600	15.599	15.599	15.592	15.592	12.592-18.592	15.603	0.010
	48 2,4-Dinitrotoluene	15.840	15.831	15.824	15.824	15.823	15.824	15.817	15.817	12.817-18.817	15.826	0.007
	49 Fluorene	16.489	16.488	16.488	16.481	16.488	16.488	16.481	16.481	13.481-19.481	16.486	0.003
	50 Diethylphthalate	16.342	16.333	16.326	16.327	16.326	16.326	16.319	16.319	13.319-19.319	16.329	0.007
	51 4-Chlorophenyl-phenyle	16.474	16.473	16.465	16.466	16.473	16.473	16.466	16.466	13.466-19.466	16.470	0.004
	52 4-Nitroaniline	16.605	16.588	16.573	16.566	16.565	16.565	16.566	16.566	13.566-19.566	16.576	0.015
	53 4,6-Dinitro-2-methylph	16.690	16.673	16.666	16.659	16.658	16.666	16.659	16.659	13.659-19.659	16.667	0.011

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230315.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	54 N-Nitrosodiphenylamine	16.728	16.719	16.720	16.720	16.719	16.720	16.713	16.713	13.713-19.713	16.720	0.004
$	55 2,4,6-Tribromophenol	17.029	17.020	17.020	17.021	17.020	17.020	17.021	17.021	14.021-20.021	17.022	0.003
	56 4-Bromophenyl-phenylet	17.476	17.475	17.475	17.476	17.475	17.475	17.476	17.476	14.476-20.476	17.476	0.001
	57 Hexachlorobenzene	17.801	17.800	17.792	17.793	17.800	17.792	17.793	17.793	14.793-20.793	17.796	0.004
	58 Pentachlorophenol	18.157	18.148	18.149	18.149	18.148	18.149	18.149	18.149	15.149-21.149	18.150	0.003
*	59 Phenanthrene-d10	18.420	18.419	18.419	18.420	18.419	18.419	18.420	18.420	15.420-21.420	18.420	0.001
	60 Phenanthrene	18.474	18.473	18.466	18.467	18.466	18.466	18.467	18.467	15.467-21.467	18.468	0.004
	61 Anthracene	18.567	18.566	18.559	18.559	18.558	18.559	18.559	18.559	15.559-21.559	18.561	0.004
	62 Carbazole	18.892	18.883	18.884	18.884	18.883	18.884	18.884	18.884	15.884-21.884	18.885	0.003
	63 Di-n-butylphthalate	19.666	19.665	19.665	19.666	19.665	19.665	19.666	19.666	16.666-22.666	19.665	0.001
	64 Fluoranthene	20.850	20.841	20.841	20.842	20.841	20.841	20.842	20.842	17.842-23.842	20.842	0.003
	65 Pyrene	21.275	21.266	21.267	21.267	21.266	21.267	21.267	21.267	18.267-24.267	21.268	0.003
$	66 Terphenyl-d14	21.546	21.545	21.537	21.546	21.545	21.545	21.538	21.538	18.538-24.538	21.543	0.004
	67 Butylbenzylphthalate	22.467	22.458	22.459	22.460	22.459	22.459	22.460	22.460	19.460-25.460	22.460	0.003
	68 Benzo(a)anthracene	23.427	23.426	23.419	23.420	23.419	23.427	23.420	23.420	20.420-26.420	23.423	0.004
*	69 Chrysene-d12	23.458	23.457	23.450	23.451	23.450	23.450	23.451	23.451	20.451-26.451	23.452	0.004
	70 3,3'-Dichlorobenzidine	23.389	23.380	23.372	23.373	23.372	23.372	23.373	23.373	20.373-26.373	23.376	0.006
	71 Chrysene	23.505	23.504	23.496	23.497	23.496	23.496	23.489	23.489	20.489-26.489	23.498	0.005
	72 bis(2-Ethylhexyl)phtha	23.482	23.481	23.473	23.482	23.481	23.481	23.474	23.474	20.474-26.474	23.479	0.004
	73 Di-n-octylphthalate	24.496	24.495	24.495	24.496	24.487	24.487	24.488	24.488	21.488-27.488	24.492	0.004
	74 Benzo(b)fluoranthene	25.378	25.377	25.370	25.371	25.370	25.370	25.363	25.363	22.363-28.363	25.371	0.005
	75 Benzo(k)fluoranthene	25.433	25.424	25.416	25.417	25.416	25.409	25.409	25.409	22.409-28.409	25.418	0.008
	187 Total Benzofluoranthen	25.433	25.424	25.416	25.371	25.416	25.409	25.409	25.409	22.409-28.409	25.411	0.020
	76 Benzo(a)pyrene	26.075	26.066	26.059	26.060	26.059	26.059	26.052	26.052	23.052-29.052	26.061	0.007

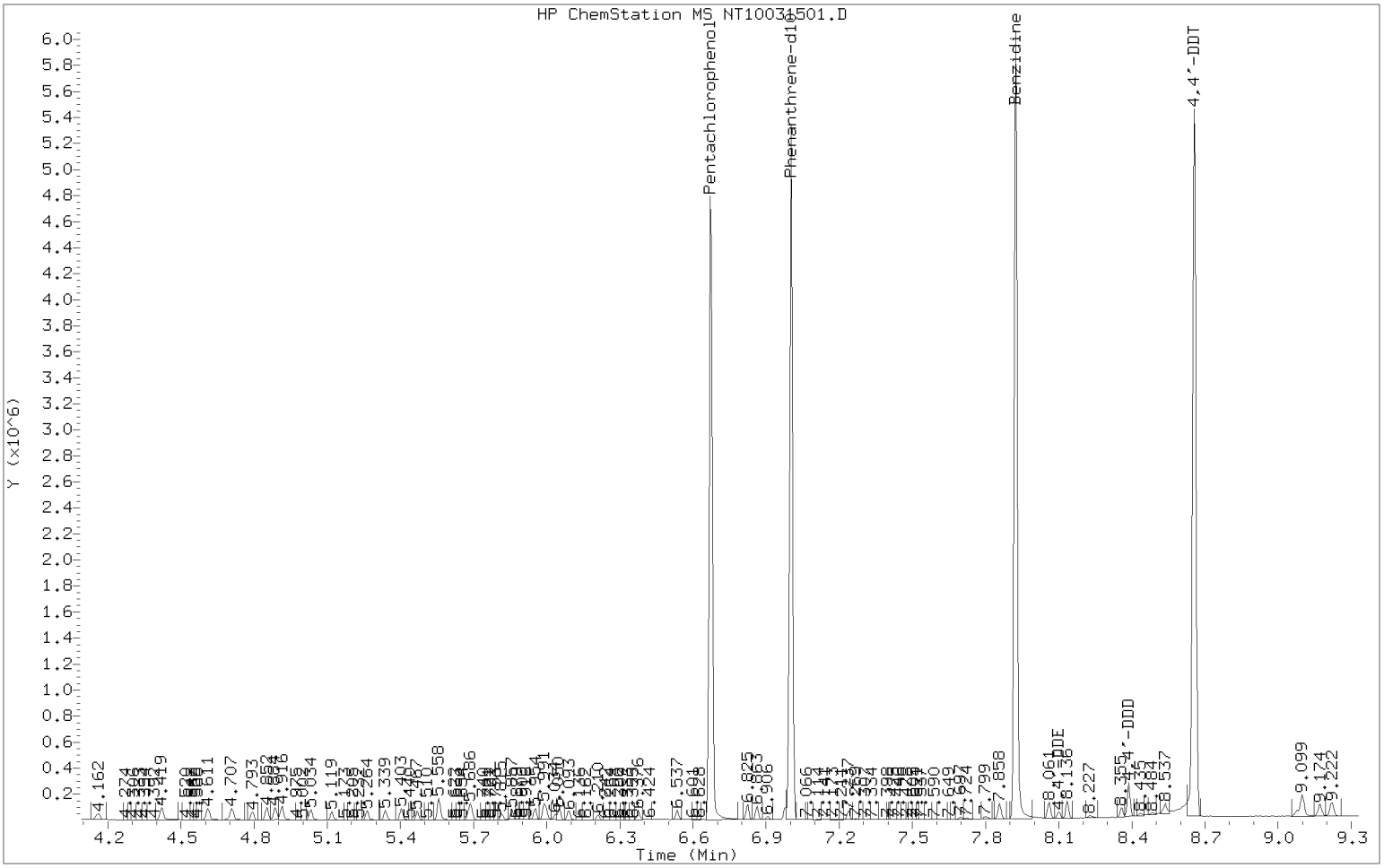
ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

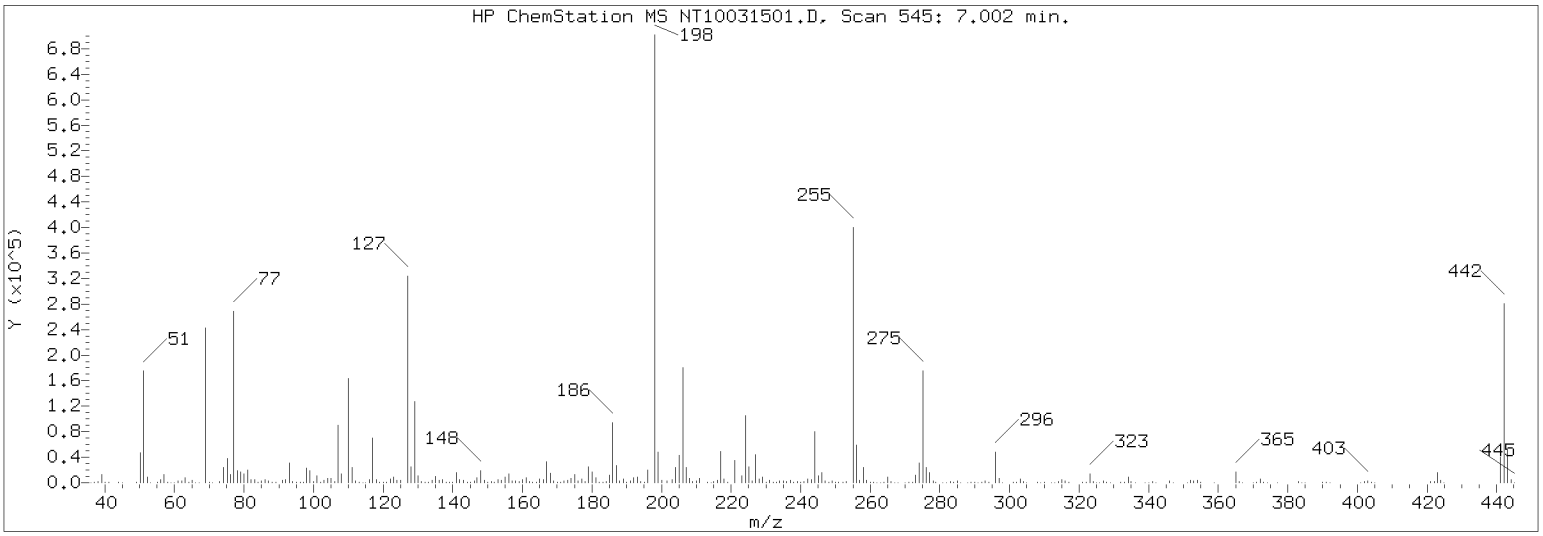
Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230315.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
*	77 Perylene-d12	26.191	26.183	26.183	26.184	26.183	26.183	26.184	26.184	23.184-29.184	26.184	0.003
	78 Indeno(1,2,3-cd)pyrene	29.037	29.020	29.005	28.998	29.005	28.997	28.990	28.990	25.990-31.990	29.008	0.016
	79 Dibenzo(a,h)anthracene	29.052	29.028	29.021	29.021	29.013	29.013	29.006	29.006	26.006-32.006	29.022	0.015
	80 Benzo(g,h,i)perylene	29.884	29.859	29.836	29.837	29.836	29.828	29.821	29.821	26.821-32.821	29.843	0.021
$	85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	51.633	48.633-54.633	+++++	+++++
$	86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	63.533	60.533-66.533	+++++	+++++
$	87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	60.273	57.273-63.273	+++++	+++++
$	88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	78.600	75.600-81.600	+++++	+++++
$	89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.841	47.841-53.841	+++++	+++++
	90 N-Nitrosodimethylamine	4.952	4.936	4.928	4.928	4.936	4.936	4.936	4.936	1.936-7.936	4.936	0.008
	91 Aniline	8.768	8.760	8.752	8.753	8.752	8.752	8.753	8.753	5.753-11.753	8.756	0.006
	92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.160	53.160-59.160	+++++	+++++
	93 Benzidine	21.074	21.073	21.065	21.066	21.073	21.073	21.066	21.066	18.066-24.066	21.070	0.004
$	95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.075	49.075-55.075	+++++	+++++
	96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.250	46.250-52.250	+++++	+++++
	97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	61.202	58.202-64.202	+++++	+++++
	98 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.787	15.787-21.787	+++++	+++++
	99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.361	21.361-27.361	+++++	+++++
	100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.411	22.411-28.411	+++++	+++++
	101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.023	23.023-29.023	+++++	+++++
	102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	79.550	76.550-82.550	+++++	+++++
	103 Pyridine	4.952	4.951	4.951	4.959	4.974	4.982	4.998	4.998	1.998-7.998	4.967	0.018
	188 2,6-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.874	8.874-14.874	+++++	+++++
	189 N-Nitrosomethylethylam	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.818	2.818-8.818	+++++	+++++

DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230315.b/NT10031501.D/NT10031501.D
Method Used: \20230315.b\DFTPP8270E.m Inst: nt10
Injection Date: 15-MAR-2023 20:19 Operator: JGR
Sample Info: SLC0228-TUN1 SLC0228-TUN1
Report Date: 03/16/2023 12:23





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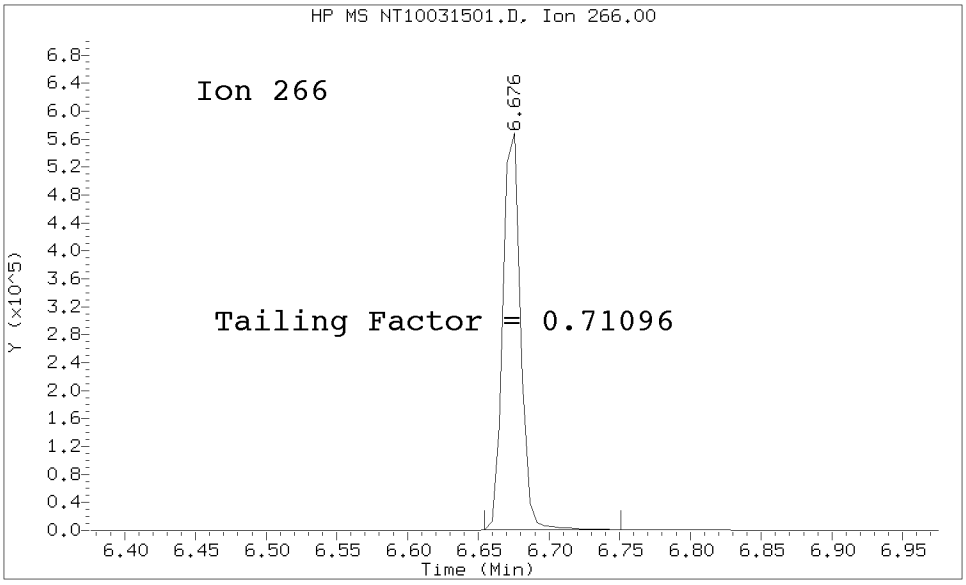
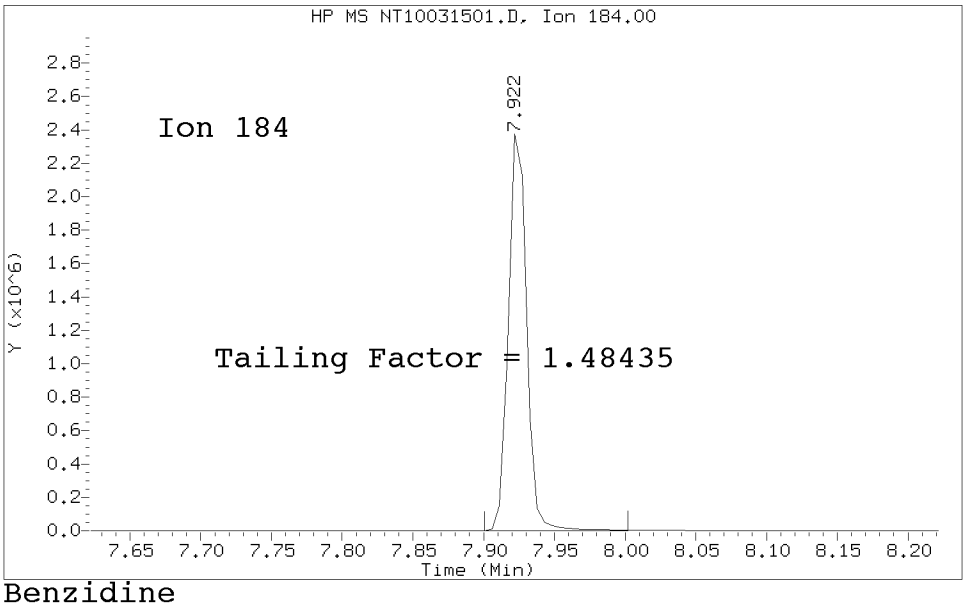
Method Used: \20230315.b\DFTPP8270E.m\sw846ddt.m Inst: nt10
Injection Date: 15-MAR-2023 20:19 Operator: JGR
Sample Info: SEQ-TUN1
Report Date: 03/16/2023 12:23



Pentachlorophenol
==========
 Exp. RT = 6.676
Found RT = 6.676

Tail Factor = 0.711 Maximum Allowed = 2.0



Benzidine
==========
 Exp. RT = 7.922
Found RT = 7.922

Tail Factor = 1.484 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.7109557	2.000	PASS
Benzidine	1.4843493	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	962640			N/A
4,4-DDE	5158	0.5	20.0	PASS
4,4-DDD	41277	4.1	20.0	PASS
4,4-DDD + DDE	46435	4.6	20.0	PASS

Tuning Sample, nt10.i/20230315.b/NT10031501.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.14 (0.37)
69	Mass 69 relative abundance	36.50
70	Less than 2.00% of mass 69	0.18 (0.50)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.88
365	1.00 - 100.00% of mass 198	2.52
441	Less than 150.00% of mass 443	6.11 (77.09)
442	Less than 200.00% of mass 198	42.80
443	15.00 - 24.00% of mass 442	7.92 (18.52)

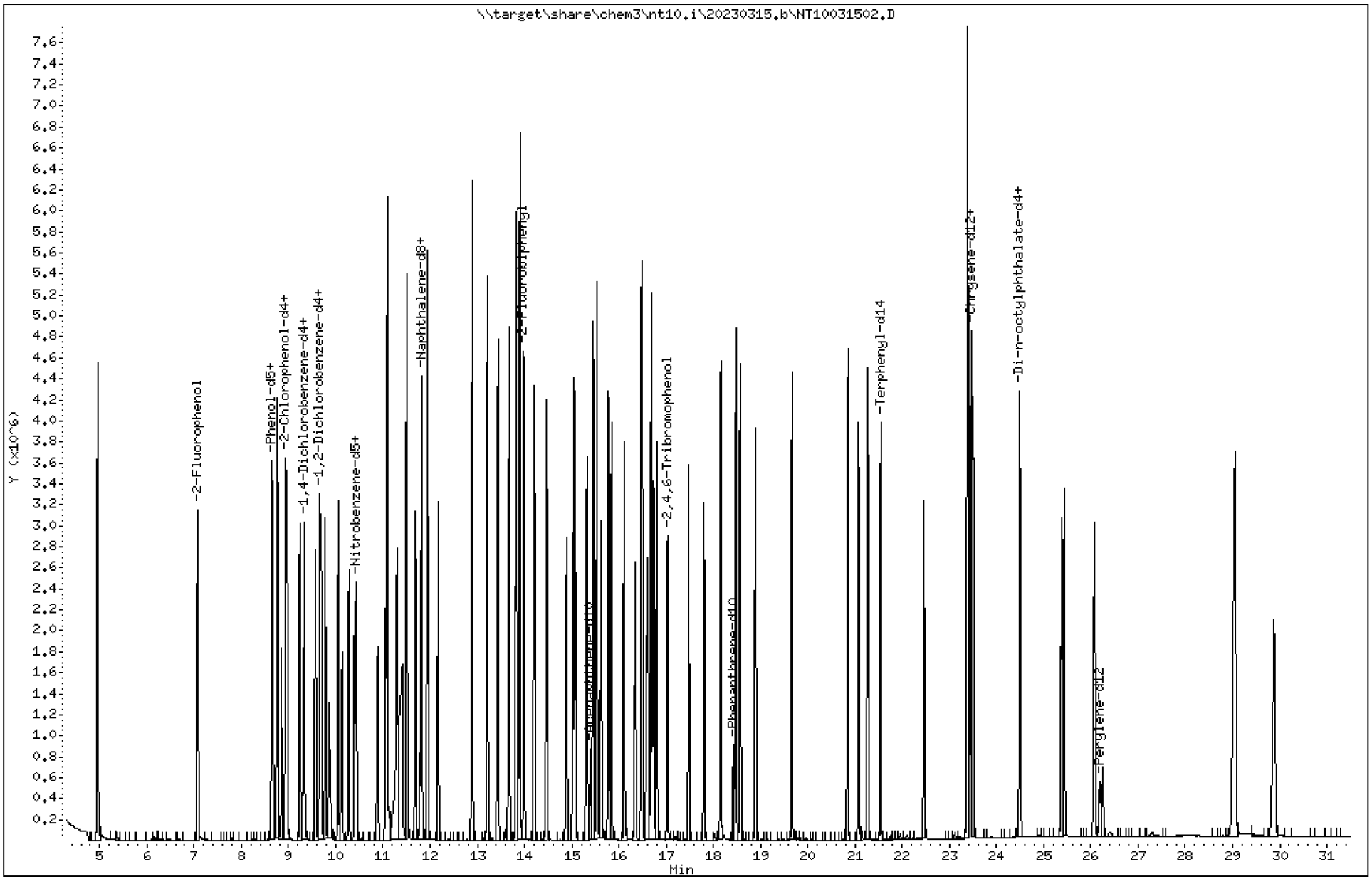
Data File: NT10031501.D
Spectrum: Avg. Scans 544-546 (7.00), Background Scan 536
Location of Maximum: 198.00
Number of points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	226	124.00	3185	207.00	17112	293.00	2318
37.00	575	125.00	2909	208.00	4722	294.00	588
38.00	1820	127.00	243264	209.00	1586	295.00	171
39.00	10159	128.00	18696	210.00	2002	296.00	36168
40.00	405	129.00	96304	211.00	5093	297.00	5056
41.00	312	130.00	8257	213.00	371	298.00	351
42.00	59	131.00	1626	214.00	74	301.00	422
45.00	283	132.00	820	215.00	1549	302.00	552
49.00	910	133.00	415	216.00	2822	303.00	4130
50.00	35800	134.00	2800	217.00	36520	304.00	1107
51.00	136000	135.00	7704	218.00	4515	305.00	126
52.00	7201	136.00	3195	219.00	360	308.00	532
53.00	294	137.00	3970	221.00	25672	309.00	330
55.00	668	138.00	948	222.00	2863	310.00	461
56.00	4206	139.00	563	223.00	8094	312.00	63
57.00	9877	140.00	1193	224.00	76160	313.00	360
58.00	478	141.00	12476	225.00	18680	314.00	1762
59.00	106	142.00	3876	226.00	2197	315.00	4011
60.00	125	143.00	2757	227.00	32752	316.00	2200
61.00	1897	144.00	726	228.00	4949	317.00	416
62.00	2103	145.00	710	229.00	6725	321.00	1068
63.00	6654	146.00	2200	230.00	933	322.00	491
64.00	895	147.00	6157	231.00	2854	323.00	10541
65.00	3279	148.00	13642	232.00	574	324.00	1817
66.00	188	149.00	2992	233.00	660	325.00	178
67.00	249	150.00	753	234.00	2022	326.00	218
68.00	704	151.00	1678	235.00	2475	327.00	2103
69.00	189184	152.00	893	236.00	1621	328.00	1092
70.00	943	153.00	4091	237.00	2803	329.00	211
71.00	156	154.00	3154	238.00	375	332.00	739
73.00	1307	155.00	6743	239.00	1387	333.00	975
74.00	18768	156.00	10344	240.00	943	334.00	6536
75.00	30000	157.00	2091	241.00	1718	335.00	1733
76.00	10364	158.00	2204	242.00	4096	336.00	201
77.00	207552	159.00	1689	243.00	3931	339.00	148
78.00	14246	160.00	3864	244.00	58560	340.00	135
79.00	13356	161.00	5891	245.00	7760	341.00	1142
80.00	10539	162.00	1637	246.00	11941	342.00	277
81.00	15173	163.00	475	247.00	2526	346.00	2192
82.00	3906	164.00	608	248.00	602	347.00	346
83.00	3545	165.00	4507	249.00	2169	351.00	182
84.00	178	166.00	3807	250.00	370	352.00	3059
85.00	2559	167.00	24880	251.00	462	353.00	1950
86.00	4226	168.00	11639	252.00	590	354.00	3010
87.00	1998	169.00	2046	253.00	1331	355.00	569
88.00	783	170.00	776	255.00	296384	359.00	242
89.00	418	171.00	1036	256.00	43272	365.00	13085
91.00	3237	172.00	2248	257.00	3394	366.00	1813
92.00	3764	173.00	2906	258.00	18176	367.00	150

93.00	24104	174.00	5113	259.00	2926	370.00	291
94.00	1672	175.00	9851	260.00	520	371.00	690
95.00	503	176.00	2588	261.00	479	372.00	4605
96.00	1130	177.00	4756	262.00	60	373.00	1002
97.00	380	178.00	1657	263.00	151	374.00	50
98.00	17936	179.00	18424	264.00	377	377.00	67
99.00	14658	180.00	12975	265.00	6992	383.00	1157
100.00	1303	181.00	6000	266.00	984	384.00	328
101.00	8724	182.00	963	267.00	105	385.00	50
102.00	480	183.00	493	268.00	248	390.00	595
103.00	2859	184.00	1456	270.00	285	391.00	401
104.00	5461	185.00	9317	271.00	631	392.00	204
105.00	5056	186.00	70384	272.00	750	401.00	211
106.00	1781	187.00	20112	273.00	8749	402.00	1564
107.00	67936	188.00	2185	274.00	23296	403.00	2292
108.00	10471	189.00	4453	275.00	129008	404.00	796
109.00	595	190.00	772	276.00	17320	405.00	237
110.00	122760	191.00	2090	277.00	11470	421.00	1827
111.00	18400	192.00	5915	278.00	2005	422.00	1658
112.00	2357	193.00	6863	279.00	468	423.00	12304
113.00	756	194.00	1470	281.00	147	424.00	2795
114.00	128	195.00	841	282.00	368	425.00	263
115.00	298	196.00	14341	283.00	1453	441.00	31664
116.00	3871	198.00	518272	284.00	874	442.00	221824
117.00	54088	199.00	35680	285.00	2012	443.00	41072
118.00	3919	200.00	2830	286.00	333	444.00	3778
119.00	531	201.00	2302	288.00	146	445.00	177
120.00	920	203.00	3657	289.00	446		
121.00	362	204.00	18200	290.00	444		
122.00	4396	205.00	31664	291.00	199		
123.00	6778	206.00	132736	292.00	486		

Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031502.D
Date : 15-MAR-2023 20:34
Client ID:
Sample Info: SLC0228-CAL7

Instrument: nt10.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Inj Date : 15-MAR-2023 20:34
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0228-CAL7
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 2 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.068	7.068	(0.760)	1445745	30.0000	26.95
$	2 Phenol-d5	99	8.652	8.636	(0.930)	2045181	30.0000	29.06
	3 Phenol	94	8.675	8.652	(0.933)	1349012	20.0000	18.45
$	5 2-Chlorophenol-d4	132	8.937	8.930	(0.961)	1771997	30.0000	29.49
	4 Bis(2-Chloroethyl)ether	93	8.845	8.837	(0.951)	997663	20.0000	18.40
	6 2-Chlorophenol	128	8.968	8.961	(0.964)	1276591	20.0000	20.40
	7 1,3-Dichlorobenzene	146	9.239	9.231	(0.993)	1194475	20.0000	18.05
*	8 1,4-Dichlorobenzene-d4	152	9.301	9.293	(1.000)	177375	4.00000	
	9 1,4-Dichlorobenzene	146	9.332	9.325	(1.003)	1189876	20.0000	18.62
$	10 1,2-Dichlorobenzene-d4	152	9.666	9.658	(1.039)	831691	20.0000	19.27
	12 1,2-Dichlorobenzene	146	9.689	9.682	(1.042)	1161461	20.0000	18.46
	11 Benzyl alcohol	108	9.565	9.557	(1.028)	718505	20.0000	20.93
	14 2,2'-oxybis(1-Chloropropane)	121	9.860	9.860	(1.060)	360967	20.0000	19.54
	13 2-Methylphenol	108	9.775	9.767	(1.051)	1038369	20.0000	19.48
	17 Hexachloroethane	117	10.279	10.271	(1.105)	521340	20.0000	19.88
	16 N-Nitroso-di-n-propylamine	70	10.132	10.108	(1.089)	829060	20.0000	19.70
	15 4-Methylphenol	108	10.046	10.031	(1.080)	1116436	20.0000	19.88
$	18 Nitrobenzene-d5	82	10.396	10.388	(0.883)	1307575	20.0000	19.64
	19 Nitrobenzene	77	10.434	10.419	(0.886)	1246701	20.0000	19.08
	20 Isophorone	82	10.884	10.861	(0.924)	1864039	20.0000	22.30
	21 2-Nitrophenol	139	11.056	11.048	(0.939)	649545	20.0000	19.99
	22 2,4-Dimethylphenol	107	11.090	11.082	(0.942)	2235062	40.0000	37.24
	23 Bis(2-Chloroethoxy)methane	93	11.294	11.285	(0.959)	1043843	20.0000	18.69
	24 Benzoic acid	105	11.413	11.166	(0.969)	3461038	80.0000	79.88(M)
	25 2,4-Dichlorophenol	162	11.506	11.489	(0.977)	1900569	40.0000	39.57
	26 1,2,4-Trichlorobenzene	180	11.693	11.685	(0.993)	1014837	20.0000	18.00
*	27 Naphthalene-d8	136	11.778	11.770	(1.000)	659656	4.00000	
	28 Naphthalene	128	11.824	11.816	(1.004)	3233035	20.0000	18.50
	29 4-Chloroaniline	127	11.947	11.940	(1.014)	2735281	40.0000	40.12
	30 Hexachlorobutadiene	225	12.172	12.172	(1.033)	618722	20.0000	18.73
	31 4-Chloro-3-methylphenol	107	12.891	12.876	(1.095)	2087503	40.0000	40.15
	32 2-Methylnaphthalene	142	13.209	13.201	(1.121)	2424558	20.0000	19.23
	33 Hexachlorocyclopentadiene	237	13.673	13.665	(0.889)	1420413	40.0000	43.48

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.828	13.820	(0.899)	1462769	40.0000	41.93
	35	2,4,5-Trichlorophenol	196	13.897	13.890	(0.903)	1605152	40.0000	41.41
$	36	2-Fluorobiphenyl	172	13.990	13.975	(0.909)	2614669	20.0000	18.73
	37	2-Chloronaphthalene	162	14.207	14.191	(0.924)	2139935	20.0000	18.93
	38	2-Nitroaniline	65	14.470	14.447	(0.941)	1292686	40.0000	40.70
	39	Dimethylphthalate	163	14.888	14.873	(0.968)	2104599	20.0000	18.35
	40	Acenaphthylene	152	15.074	15.066	(0.980)	3290934	20.0000	18.68
	41	2,6-Dinitrotoluene	165	15.035	15.012	(0.977)	1020135	40.0000	41.18
*	42	Acenaphthene-d10	164	15.383	15.383	(1.000)	352987	4.00000	
	43	3-Nitroaniline	138	15.321	15.298	(0.996)	1147538	40.0000	41.04
	44	Acenaphthene	153	15.453	15.445	(1.005)	2075684	20.0000	19.07
	45	2,4-Dinitrophenol	184	15.538	15.515	(1.010)	1465989	80.0000	79.60
	46	Dibenzofuran	168	15.777	15.770	(1.026)	3017611	20.0000	18.80
	47	4-Nitrophenol	109	15.623	15.592	(1.016)	684596	40.0000	39.90
	48	2,4-Dinitrotoluene	165	15.839	15.817	(1.030)	1405429	40.0000	39.90
	50	Diethylphthalate	149	16.342	16.319	(1.062)	2341062	20.0000	20.81
	49	Fluorene	166	16.489	16.481	(1.072)	2411516	20.0000	19.10
	51	4-Chlorophenyl-phenylether	204	16.473	16.466	(1.071)	1161824	20.0000	19.35
	52	4-Nitroaniline	138	16.604	16.566	(1.079)	1069800	40.0000	42.46
	53	4,6-Dinitro-2-methylphenol	198	16.689	16.658	(0.906)	1560214	80.0000	79.73
	54	N-Nitrosodiphenylamine	169	16.728	16.712	(0.908)	1511403	20.0000	19.24
$	55	2,4,6-Tribromophenol	330	17.028	17.021	(1.107)	477920	30.0000	29.91
	56	4-Bromophenyl-phenylether	248	17.476	17.476	(0.949)	670470	20.0000	20.41
	57	Hexachlorobenzene	284	17.800	17.793	(0.966)	643302	20.0000	18.67
	58	Pentachlorophenol	266	18.157	18.149	(0.986)	885410	40.0000	39.87
*	59	Phenanthrene-d10	188	18.420	18.420	(1.000)	587447	4.00000	
	60	Phenanthrene	178	18.474	18.466	(1.003)	3063430	20.0000	19.12
	61	Anthracene	178	18.567	18.559	(1.008)	3058907	20.0000	19.91
	62	Carbazole	167	18.892	18.884	(1.026)	2606590	20.0000	18.93
	63	Di-n-butylphthalate	149	19.665	19.666	(1.068)	3613228	20.0000	19.93
	64	Fluoranthene	202	20.849	20.841	(0.889)	3084411	20.0000	21.53
	65	Pyrene	202	21.275	21.267	(0.907)	3048380	20.0000	20.75
$	66	Terphenyl-d14	244	21.545	21.538	(0.918)	2146134	20.0000	19.45
	67	Butylbenzylphthalate	149	22.467	22.460	(0.958)	1204454	20.0000	19.98
	68	Benzo(a)anthracene	228	23.427	23.419	(0.999)	2444920	20.0000	19.43
*	69	Chrysene-d12	240	23.458	23.450	(1.000)	356463	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.388	23.373	(0.997)	2692461	60.0000	66.81
	71	Chrysene	228	23.504	23.489	(1.002)	2356995	20.0000	19.17
	72	bis(2-Ethylhexyl)phthalate	149	23.481	23.474	(0.959)	1828785	20.0000	20.00
*	134	Di-n-octylphthalate-d4	153	24.488	24.480	(1.000)	617041	4.00000	
	73	Di-n-octylphthalate	149	24.495	24.488	(1.000)	3023393	20.0000	18.72
	74	Benzo(b)fluoranthene	252	25.378	25.362	(0.969)	2546409	20.0000	19.40
	75	Benzo(k)fluoranthene	252	25.432	25.409	(0.971)	2751549	20.0000	20.64
	76	Benzo(a)pyrene	252	26.075	26.052	(0.996)	2507206	20.0000	21.36
*	77	Perylene-d12	264	26.191	26.183	(1.000)	404994	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	29.036	28.990	(1.109)	3374860	20.0000	22.60
	79	Dibenzo(a,h)anthracene	278	29.052	29.005	(1.109)	2799351	20.0000	22.58
	80	Benzo(g,h,i)perylene	276	29.883	29.821	(1.141)	2974262	20.0000	23.02
	90	N-Nitrosodimethylamine	74	4.951	4.936	(0.532)	1145410	40.0000	33.47
	91	Aniline	93	8.767	8.752	(0.943)	2810605	40.0000	37.51
	93	Benzidine	184	21.073	21.066	(0.898)	2290972	40.0000	38.94
	103	Pyridine	79	4.951	4.997	(0.532)	1775759	40.0000	33.79
	105	1-methylnaphthalene	142	13.433	13.425	(1.141)	2185994	20.0000	18.92
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.805	16.789	(1.092)	2458654	20.0000	19.56

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.432	25.409	(0.971)	5057487	40.0000	39.90
120 2,3,4,6-Tetrachlorophenol	232	16.110	16.103	(1.047)	832943	20.0000	19.99

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031502.D
Lab Smp Id: SLC0228-CAL7
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 21:50
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	171542	85771	343084	177375	3.40
27 Naphthalene-d8	624466	312233	1248932	659656	5.64
42 Acenaphthene-d10	337226	168613	674452	352987	4.67
59 Phenanthrene-d10	572849	286425	1145698	587447	2.55
69 Chrysene-d12	347068	173534	694136	356463	2.71
134 Di-n-octylphthala	500317	250159	1000634	617041	23.33
77 Perylene-d12	421549	210775	843098	404994	-3.93

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	0.01
42 Acenaphthene-d10	15.38	14.88	15.88	15.38	0.01
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.46	0.04
134 Di-n-octylphthala	24.48	23.98	24.98	24.49	0.03
77 Perylene-d12	26.18	25.68	26.68	26.19	0.03

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

REVIEW SUMMARY FOR FILE - NT10031502.D

Lab ID: SLC0228-CAL7
nt10.i, 20230315.b\ABN.m,   15-MAR-2023 20:34

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.969	0.000	0.9690	Benzoic acid
0.532	0.538	-0.0054	Pyridine

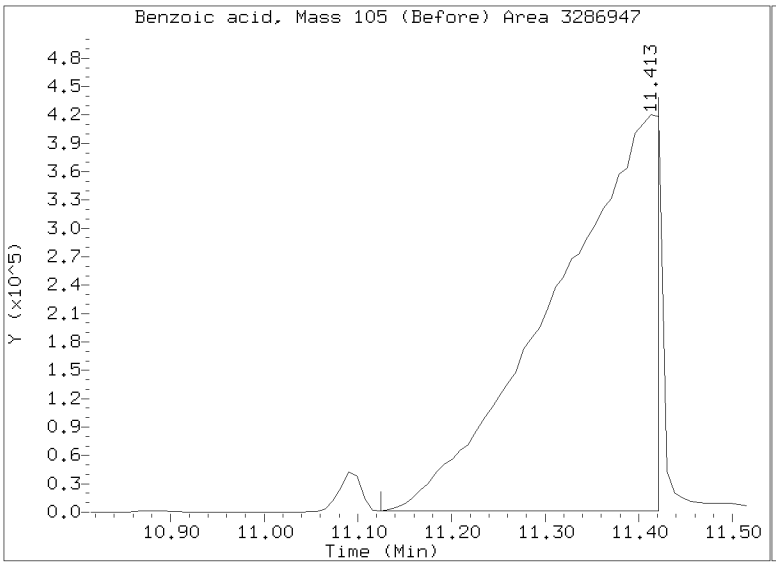
RRT check based on Ccal File: NT10031508.D

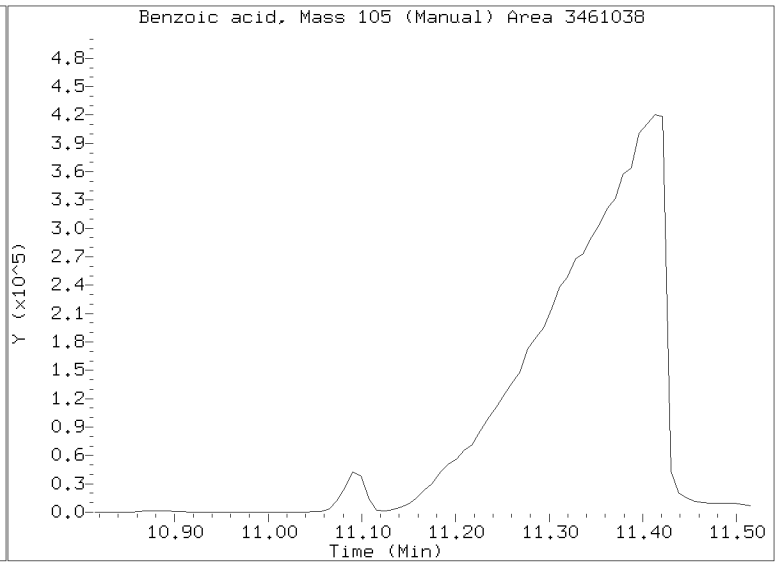
On Column LOD for nt10.i, 20230315.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230315.b/NT10031502.D
Injection Date: 15-MAR-2023 20:34
Lab ID:SLC0228-CAL7 Client ID:
Report Date: 03/16/2023 12:20





Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031503.D

Date : 15-MAR-2023 21:12

Client ID:

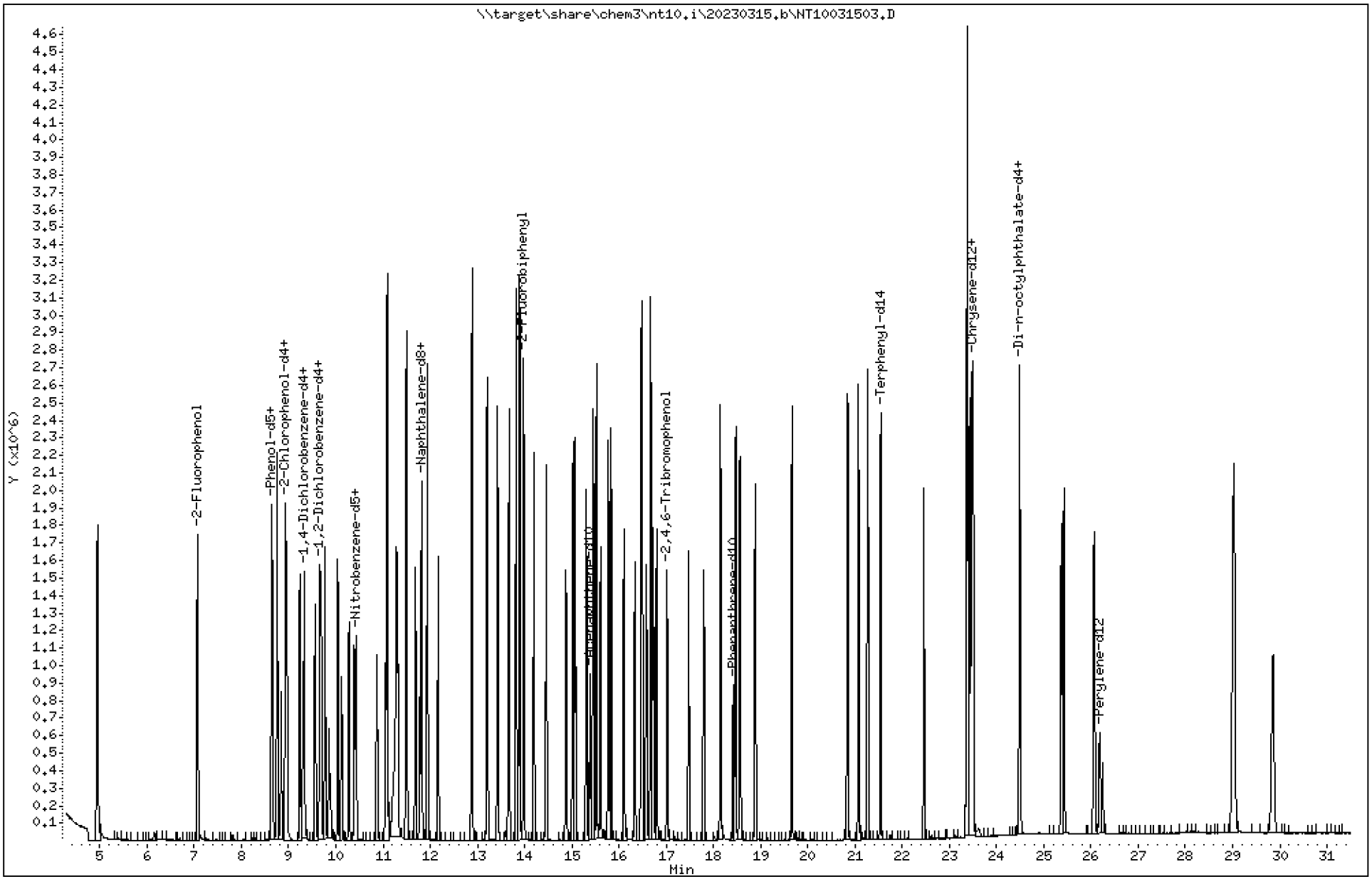
Instrument: nt10.i

Sample Info: SLC0228-CAL6

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230315.b\NT10031503.D
Lab Smp Id: SLC0228-CAL6
Inj Date : 15-MAR-2023 21:12
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0228-CAL6
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 3 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.067	7.068	(0.760)	766278	15.0000	14.48
$	2 Phenol-d5	99	8.643	8.636	(0.929)	1033842	15.0000	14.89
	3 Phenol	94	8.659	8.652	(0.931)	677387	10.0000	9.390
$	5 2-Chlorophenol-d4	132	8.937	8.930	(0.961)	890713	15.0000	15.03
	4 Bis(2-Chloroethyl)ether	93	8.844	8.837	(0.951)	507177	10.0000	9.479
	6 2-Chlorophenol	128	8.960	8.961	(0.963)	642264	10.0000	10.40
	7 1,3-Dichlorobenzene	146	9.239	9.231	(0.993)	617243	10.0000	9.457
*	8 1,4-Dichlorobenzene-d4	152	9.301	9.293	(1.000)	174984	4.00000	
	9 1,4-Dichlorobenzene	146	9.332	9.325	(1.003)	612971	10.0000	9.721
$	10 1,2-Dichlorobenzene-d4	152	9.658	9.658	(1.038)	417489	10.0000	9.807
	12 1,2-Dichlorobenzene	146	9.689	9.682	(1.042)	593607	10.0000	9.566
	11 Benzyl alcohol	108	9.557	9.557	(1.028)	354873	10.0000	10.48
	14 2,2'-oxybis(1-Chloropropane)	121	9.860	9.860	(1.060)	173870	10.0000	9.541(M)
	13 2-Methylphenol	108	9.774	9.767	(1.051)	516580	10.0000	9.823
	17 Hexachloroethane	117	10.279	10.271	(1.105)	255000	10.0000	9.857
	16 N-Nitroso-di-n-propylamine	70	10.124	10.108	(1.088)	403145	10.0000	9.709
	15 4-Methylphenol	108	10.038	10.031	(1.079)	546873	10.0000	9.870
$	18 Nitrobenzene-d5	82	10.387	10.388	(0.882)	651453	10.0000	10.18
	19 Nitrobenzene	77	10.426	10.419	(0.885)	613375	10.0000	9.768
	20 Isophorone	82	10.868	10.861	(0.923)	899885	10.0000	11.20
	21 2-Nitrophenol	139	11.046	11.048	(0.938)	309860	10.0000	10.04
	22 2,4-Dimethylphenol	107	11.089	11.082	(0.942)	1122389	20.0000	19.46
	23 Bis(2-Chloroethoxy)methane	93	11.284	11.285	(0.958)	510533	10.0000	9.514
	24 Benzoic acid	105	11.327	11.166	(0.962)	1448000	40.0000	40.68
	25 2,4-Dichlorophenol	162	11.496	11.489	(0.976)	957443	20.0000	20.74
	26 1,2,4-Trichlorobenzene	180	11.691	11.685	(0.993)	518573	10.0000	9.571
*	27 Naphthalene-d8	136	11.776	11.770	(1.000)	633941	4.00000	
	28 Naphthalene	128	11.815	11.816	(1.003)	1633246	10.0000	9.725
	29 4-Chloroaniline	127	11.939	11.940	(1.014)	1335407	20.0000	20.38
	30 Hexachlorobutadiene	225	12.170	12.172	(1.033)	314014	10.0000	9.891
	31 4-Chloro-3-methylphenol	107	12.882	12.876	(1.094)	1031139	20.0000	20.64
	32 2-Methylnaphthalene	142	13.207	13.201	(1.122)	1205028	10.0000	9.943
	33 Hexachlorocyclopentadiene	237	13.664	13.665	(0.888)	679471	20.0000	21.34

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34 2,4,6-Trichlorophenol	196	13.819	13.820	(0.898)	735280	20.0000	21.62
	35 2,4,5-Trichlorophenol	196	13.888	13.890	(0.903)	796463	20.0000	21.08
$	36 2-Fluorobiphenyl	172	13.981	13.975	(0.909)	1328400	10.0000	9.760
	37 2-Chloronaphthalene	162	14.198	14.191	(0.923)	1053277	10.0000	9.557
	38 2-Nitroaniline	65	14.453	14.447	(0.940)	639357	20.0000	20.65
	39 Dimethylphthalate	163	14.879	14.873	(0.967)	1083747	10.0000	9.695
	40 Acenaphthylene	152	15.073	15.066	(0.980)	1706988	10.0000	9.940
	41 2,6-Dinitrotoluene	165	15.026	15.012	(0.977)	513157	20.0000	21.25
*	42 Acenaphthene-d10	164	15.382	15.383	(1.000)	344087	4.00000	
	43 3-Nitroaniline	138	15.313	15.298	(0.995)	575069	20.0000	21.10
	44 Acenaphthene	153	15.452	15.445	(1.005)	1037074	10.0000	9.775
	45 2,4-Dinitrophenol	184	15.521	15.515	(1.009)	674586	40.0000	42.18
	46 Dibenzofuran	168	15.776	15.770	(1.026)	1516932	10.0000	9.696
	47 4-Nitrophenol	109	15.606	15.592	(1.015)	346416	20.0000	20.47
	48 2,4-Dinitrotoluene	165	15.830	15.817	(1.029)	723393	20.0000	20.47
	50 Diethylphthalate	149	16.333	16.319	(1.062)	1099214	10.0000	10.02
	49 Fluorene	166	16.487	16.481	(1.072)	1216938	10.0000	9.887
	51 4-Chlorophenyl-phenylether	204	16.472	16.466	(1.071)	578431	10.0000	9.882
	52 4-Nitroaniline	138	16.588	16.566	(1.078)	562336	20.0000	22.89
	53 4,6-Dinitro-2-methylphenol	198	16.673	16.658	(0.905)	794181	40.0000	41.39
	54 N-Nitrosodiphenylamine	169	16.719	16.712	(0.908)	775287	10.0000	9.570
$	55 2,4,6-Tribromophenol	330	17.020	17.021	(1.106)	244599	15.0000	15.42
	56 4-Bromophenyl-phenylether	248	17.474	17.476	(0.949)	352401	10.0000	10.40
	57 Hexachlorobenzene	284	17.799	17.793	(0.966)	339084	10.0000	9.543
	58 Pentachlorophenol	266	18.148	18.149	(0.985)	452371	20.0000	20.65
*	59 Phenanthrene-d10	188	18.418	18.420	(1.000)	605930	4.00000	
	60 Phenanthrene	178	18.473	18.466	(1.003)	1596045	10.0000	9.660
	61 Anthracene	178	18.565	18.559	(1.008)	1637517	10.0000	10.33
	62 Carbazole	167	18.883	18.884	(1.025)	1441624	10.0000	10.15
	63 Di-n-butylphthalate	149	19.664	19.666	(1.068)	1947970	10.0000	10.31
	64 Fluoranthene	202	20.840	20.841	(0.888)	1783287	10.0000	10.15
	65 Pyrene	202	21.266	21.267	(0.907)	1822698	10.0000	10.12
$	66 Terphenyl-d14	244	21.544	21.538	(0.918)	1323270	10.0000	9.780
	67 Butylbenzylphthalate	149	22.458	22.460	(0.957)	684422	10.0000	10.10
	68 Benzo(a)anthracene	228	23.426	23.419	(0.999)	1518143	10.0000	9.840
*	69 Chrysene-d12	240	23.457	23.450	(1.000)	437116	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.379	23.373	(0.997)	1519096	30.0000	30.74
	71 Chrysene	228	23.503	23.489	(1.002)	1487493	10.0000	9.868
	72 bis(2-Ethylhexyl)phthalate	149	23.480	23.474	(0.959)	994125	10.0000	10.02
*	134 Di-n-octylphthalate-d4	153	24.479	24.480	(1.000)	674085	4.00000	
	73 Di-n-octylphthalate	149	24.494	24.488	(1.001)	1707970	10.0000	9.682
	74 Benzo(b)fluoranthene	252	25.377	25.362	(0.969)	1615210	10.0000	10.75
	75 Benzo(k)fluoranthene	252	25.423	25.409	(0.971)	1513928	10.0000	9.925
	76 Benzo(a)pyrene	252	26.066	26.052	(0.996)	1429031	10.0000	10.64
*	77 Perylene-d12	264	26.182	26.183	(1.000)	463440	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	29.020	28.990	(1.108)	1834722	10.0000	10.74
	79 Dibenzo(a,h)anthracene	278	29.027	29.005	(1.109)	1513126	10.0000	10.67
	80 Benzo(g,h,i)perylene	276	29.859	29.821	(1.140)	1583026	10.0000	10.71
	90 N-Nitrosodimethylamine	74	4.935	4.936	(0.531)	623452	20.0000	18.47
	91 Aniline	93	8.759	8.752	(0.942)	1394783	20.0000	18.87
	93 Benzidine	184	21.072	21.066	(0.898)	1529058	20.0000	21.19
	103 Pyridine	79	4.951	4.997	(0.532)	925439	20.0000	17.85
	105 1-methylnaphthalene	142	13.432	13.425	(1.141)	1103224	10.0000	9.935
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.796	16.789	(1.092)	1203614	10.0000	9.825

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.423	25.409	(0.971)	2985651	20.0000	20.58
120 2,3,4,6-Tetrachlorophenol	232	16.101	16.103	(1.047)	374893	10.0000	10.09

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031503.D
Lab Smp Id: SLC0228-CAL6
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 21:50
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	171542	85771	343084	174984	2.01
27 Naphthalene-d8	624466	312233	1248932	633941	1.52
42 Acenaphthene-d10	337226	168613	674452	344087	2.03
59 Phenanthrene-d10	572849	286425	1145698	605930	5.77
69 Chrysene-d12	347068	173534	694136	437116	25.95
134 Di-n-octylphthala	500317	250159	1000634	674085	34.73
77 Perylene-d12	421549	210775	843098	463440	9.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	-0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	-0.00
42 Acenaphthene-d10	15.38	14.88	15.88	15.38	-0.00
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	-0.00
69 Chrysene-d12	23.45	22.95	23.95	23.46	0.03
134 Di-n-octylphthala	24.48	23.98	24.98	24.48	-0.00
77 Perylene-d12	26.18	25.68	26.68	26.18	-0.00

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

REVIEW SUMMARY FOR FILE - NT10031503.D

Lab ID: SLC0228-CAL6
nt10.i, 20230315.b\ABN.m,   15-MAR-2023 21:12

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.962	0.000	0.9618	Benzoic acid
0.532	0.538	-0.0054	Pyridine

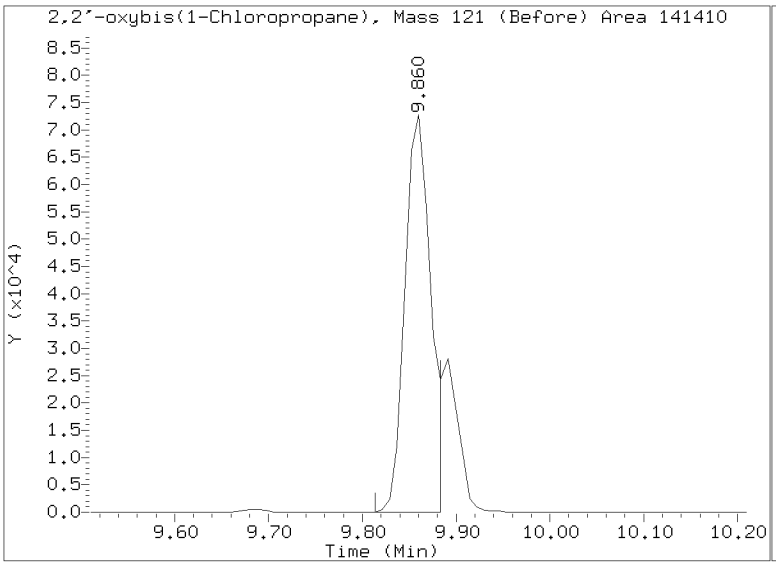
RRT check based on Ccal File: NT10031508.D

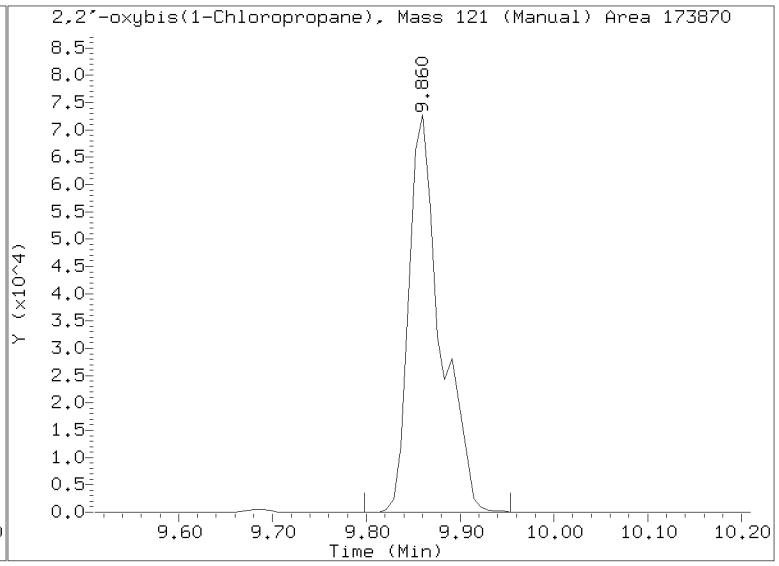
On Column LOD for nt10.i, 20230315.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

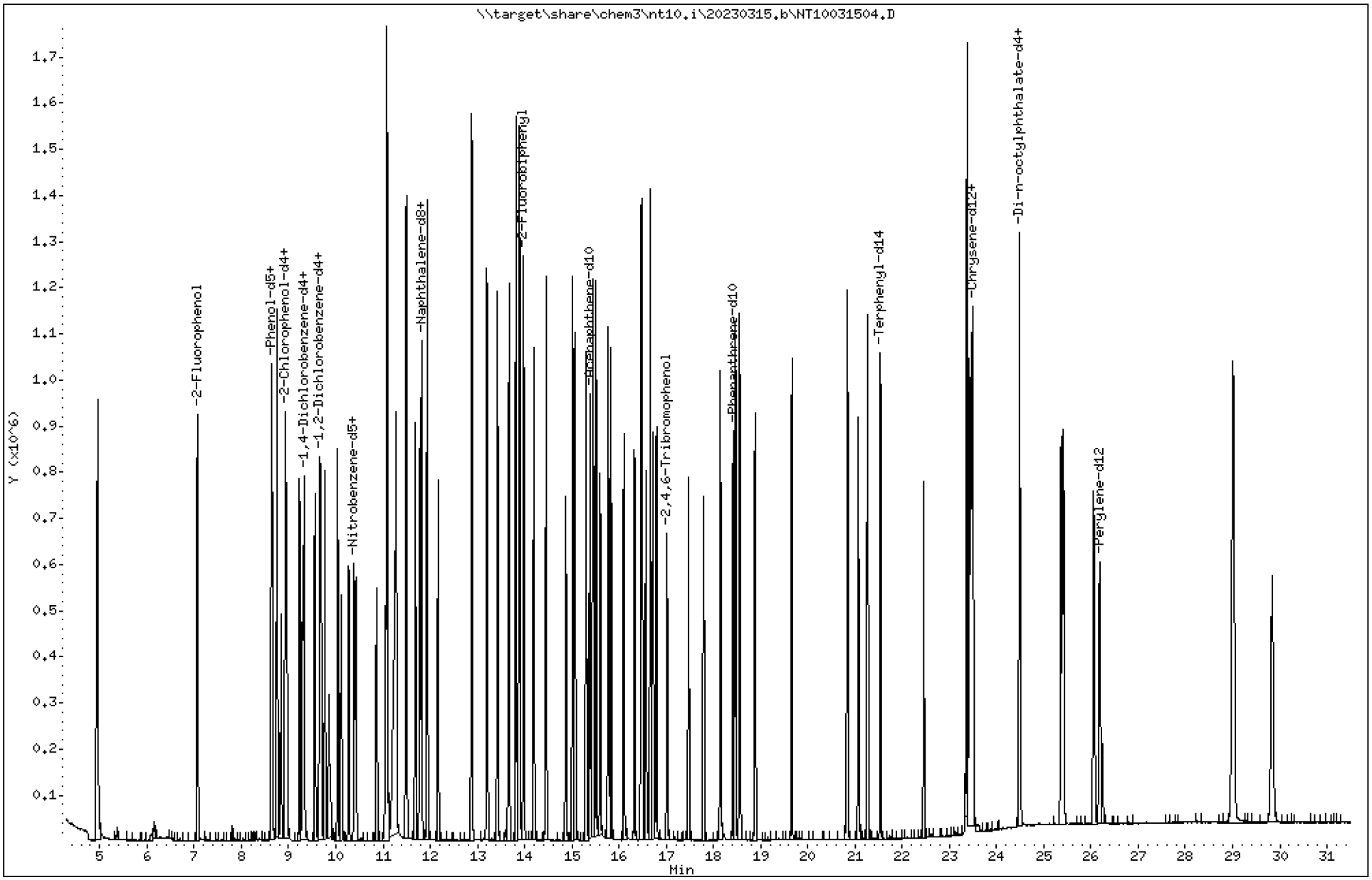
Datafile: //target/share/chem3/nt10.i/20230315.b/NT10031503.D
Injection Date: 15-MAR-2023 21:12
Lab ID:SLC0228-CAL6 Client ID:
Report Date: 03/16/2023 12:20





Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031504.D
Date : 15-MAR-2023 21:50
Client ID:
Sample Info: SLC0228-CAL5

Instrument: nt10.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230315.b\NT10031504.D
Lab Smp Id: SLC0228-CAL5
Inj Date : 15-MAR-2023 21:50
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0228-CAL5
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 4 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.068	7.068	(0.760)	389299	7.50000	7.504
$	2 Phenol-d5	99	8.636	8.636	(0.928)	517751	7.50000	7.608
	3 Phenol	94	8.659	8.652	(0.931)	348755	5.00000	4.932
$	5 2-Chlorophenol-d4	132	8.930	8.930	(0.960)	442224	7.50000	7.610
	4 Bis(2-Chloroethyl)ether	93	8.837	8.837	(0.950)	257735	5.00000	4.914
	6 2-Chlorophenol	128	8.960	8.961	(0.963)	295042	5.00000	4.875
	7 1,3-Dichlorobenzene	146	9.231	9.231	(0.992)	308253	5.00000	4.817
*	8 1,4-Dichlorobenzene-d4	152	9.301	9.293	(1.000)	171542	4.00000	
	9 1,4-Dichlorobenzene	146	9.324	9.325	(1.002)	302437	5.00000	4.893
$	10 1,2-Dichlorobenzene-d4	152	9.658	9.658	(1.038)	203496	5.00000	4.876
	12 1,2-Dichlorobenzene	146	9.681	9.682	(1.041)	295133	5.00000	4.851
	11 Benzyl alcohol	108	9.557	9.557	(1.028)	175758	5.00000	5.295
	14 2,2'-oxybis(1-Chloropropane)	121	9.860	9.860	(1.060)	84897	5.00000	4.752(M)
	13 2-Methylphenol	108	9.775	9.767	(1.051)	259972	5.00000	5.043
	17 Hexachloroethane	117	10.271	10.271	(1.104)	125853	5.00000	4.962
	16 N-Nitroso-di-n-propylamine	70	10.116	10.108	(1.088)	207311	5.00000	5.093
	15 4-Methylphenol	108	10.038	10.031	(1.079)	275961	5.00000	5.080
$	18 Nitrobenzene-d5	82	10.388	10.388	(0.882)	326832	5.00000	5.185
	19 Nitrobenzene	77	10.426	10.419	(0.885)	310914	5.00000	5.026
	20 Isophorone	82	10.861	10.861	(0.922)	396361	5.00000	5.009
	21 2-Nitrophenol	139	11.047	11.048	(0.938)	152976	5.00000	5.059
	22 2,4-Dimethylphenol	107	11.081	11.082	(0.941)	561764	10.0000	9.887
	23 Bis(2-Chloroethoxy)methane	93	11.284	11.285	(0.958)	255208	5.00000	4.828
	24 Benzoic acid	105	11.276	11.166	(0.957)	660270	20.0000	19.96
	25 2,4-Dichlorophenol	162	11.497	11.489	(0.976)	475467	10.0000	10.46
	26 1,2,4-Trichlorobenzene	180	11.684	11.685	(0.992)	258021	5.00000	4.835
*	27 Naphthalene-d8	136	11.777	11.770	(1.000)	624466	4.00000	
	28 Naphthalene	128	11.815	11.816	(1.003)	811352	5.00000	4.904
	29 4-Chloroaniline	127	11.939	11.940	(1.014)	663111	10.0000	10.27
	30 Hexachlorobutadiene	225	12.171	12.172	(1.033)	152701	5.00000	4.883
	31 4-Chloro-3-methylphenol	107	12.875	12.876	(1.093)	507195	10.0000	10.30
	32 2-Methylnaphthalene	142	13.200	13.201	(1.121)	601081	5.00000	5.035
	33 Hexachlorocyclopentadiene	237	13.664	13.665	(0.888)	324634	10.0000	10.40

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.819	13.820	(0.898)	343842	10.0000	10.32
	35	2,4,5-Trichlorophenol	196	13.889	13.890	(0.903)	380542	10.0000	10.28
$	36	2-Fluorobiphenyl	172	13.982	13.975	(0.909)	654752	5.00000	4.908
	37	2-Chloronaphthalene	162	14.198	14.191	(0.923)	530286	5.00000	4.909
	38	2-Nitroaniline	65	14.454	14.447	(0.940)	319171	10.0000	10.52
	39	Dimethylphthalate	163	14.879	14.873	(0.967)	534213	5.00000	4.876
	40	Acenaphthylene	152	15.065	15.066	(0.979)	830053	5.00000	4.932
	41	2,6-Dinitrotoluene	165	15.019	15.012	(0.976)	246779	10.0000	10.43
*	42	Acenaphthene-d10	164	15.382	15.383	(1.000)	337226	4.00000	
	43	3-Nitroaniline	138	15.305	15.298	(0.995)	273315	10.0000	10.23
	44	Acenaphthene	153	15.444	15.445	(1.004)	504323	5.00000	4.850
	45	2,4-Dinitrophenol	184	15.514	15.515	(1.009)	266923	20.0000	18.02
	46	Dibenzofuran	168	15.769	15.770	(1.025)	756537	5.00000	4.934
	47	4-Nitrophenol	109	15.599	15.592	(1.014)	160601	10.0000	9.617
	48	2,4-Dinitrotoluene	165	15.823	15.817	(1.029)	337620	10.0000	9.579
	50	Diethylphthalate	149	16.326	16.319	(1.061)	526014	5.00000	4.894
	49	Fluorene	166	16.488	16.481	(1.072)	590490	5.00000	4.895
	51	4-Chlorophenyl-phenylether	204	16.465	16.466	(1.070)	281249	5.00000	4.903
	52	4-Nitroaniline	138	16.573	16.566	(1.077)	246501	10.0000	10.24
	53	4,6-Dinitro-2-methylphenol	198	16.665	16.658	(0.905)	335578	20.0000	18.99
	54	N-Nitrosodiphenylamine	169	16.719	16.712	(0.908)	371008	5.00000	4.844
$	55	2,4,6-Tribromophenol	330	17.020	17.021	(1.106)	112412	7.50000	7.152
	56	4-Bromophenyl-phenylether	248	17.475	17.476	(0.949)	165732	5.00000	5.173
	57	Hexachlorobenzene	284	17.792	17.793	(0.966)	162915	5.00000	4.850
	58	Pentachlorophenol	266	18.148	18.149	(0.985)	191672	10.0000	9.471
*	59	Phenanthrene-d10	188	18.419	18.420	(1.000)	572849	4.00000	
	60	Phenanthrene	178	18.465	18.466	(1.003)	753291	5.00000	4.822
	61	Anthracene	178	18.558	18.559	(1.008)	753981	5.00000	5.032
	62	Carbazole	167	18.883	18.884	(1.025)	643836	5.00000	4.795
	63	Di-n-butylphthalate	149	19.664	19.666	(1.068)	843782	5.00000	4.697
	64	Fluoranthene	202	20.840	20.841	(0.889)	758837	5.00000	5.441
	65	Pyrene	202	21.266	21.267	(0.907)	754525	5.00000	5.274
$	66	Terphenyl-d14	244	21.537	21.538	(0.918)	546879	5.00000	5.090
	67	Butylbenzylphthalate	149	22.458	22.460	(0.958)	257731	5.00000	4.972
	68	Benzo(a)anthracene	228	23.418	23.419	(0.999)	612627	5.00000	5.001
*	69	Chrysene-d12	240	23.449	23.450	(1.000)	347068	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.372	23.373	(0.997)	532591	15.0000	13.57
	71	Chrysene	228	23.496	23.489	(1.002)	596175	5.00000	4.981
	72	bis(2-Ethylhexyl)phthalate	149	23.473	23.474	(0.959)	367877	5.00000	5.011
*	134	Di-n-octylphthalate-d4	153	24.479	24.480	(1.000)	500317	4.00000	
	73	Di-n-octylphthalate	149	24.495	24.488	(1.001)	642200	5.00000	4.905
	74	Benzo(b)fluoranthene	252	25.369	25.362	(0.969)	700635	5.00000	5.127(H)
	75	Benzo(k)fluoranthene	252	25.416	25.409	(0.971)	673988	5.00000	4.857
	76	Benzo(a)pyrene	252	26.058	26.052	(0.995)	635688	5.00000	5.203
*	77	Perylene-d12	264	26.182	26.183	(1.000)	421549	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	29.004	28.990	(1.108)	858348	5.00000	5.522
	79	Dibenzo(a,h)anthracene	278	29.020	29.005	(1.108)	711419	5.00000	5.513
	80	Benzo(g,h,i)perylene	276	29.836	29.821	(1.140)	752407	5.00000	5.594
	90	N-Nitrosodimethylamine	74	4.928	4.936	(0.530)	330376	10.0000	9.982
	91	Aniline	93	8.752	8.752	(0.941)	716385	10.0000	9.886
	93	Benzidine	184	21.065	21.066	(0.898)	565285	10.0000	9.868
	103	Pyridine	79	4.951	4.997	(0.532)	520909	10.0000	10.25
	105	1-methylnaphthalene	142	13.432	13.425	(1.141)	551037	5.00000	5.038
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.796	16.789	(1.092)	603260	5.00000	5.024

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.416	25.409	(0.971)	1318971	10.0000	9.997
120 2,3,4,6-Tetrachlorophenol	232	16.101	16.103	(1.047)	169344	5.00000	4.836

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031504.D
Lab Smp Id: SLC0228-CAL5
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 21:50
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	171542	85771	343084	171542	0.00
27 Naphthalene-d8	624466	312233	1248932	624466	0.00
42 Acenaphthene-d10	337226	168613	674452	337226	0.00
59 Phenanthrene-d10	572849	286425	1145698	572849	0.00
69 Chrysene-d12	347068	173534	694136	347068	0.00
134 Di-n-octylphthala	500317	250159	1000634	500317	0.00
77 Perylene-d12	421549	210775	843098	421549	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	0.00
42 Acenaphthene-d10	15.38	14.88	15.88	15.38	0.00
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.45	0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.48	0.00
77 Perylene-d12	26.18	25.68	26.68	26.18	0.00

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

REVIEW SUMMARY FOR FILE - NT10031504.D

Lab ID: SLC0228-CAL5
nt10.i, 20230315.b\ABN.m,   15-MAR-2023 21:50

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.000	0.9575	Benzoic acid
0.532	0.538	-0.0054	Pyridine

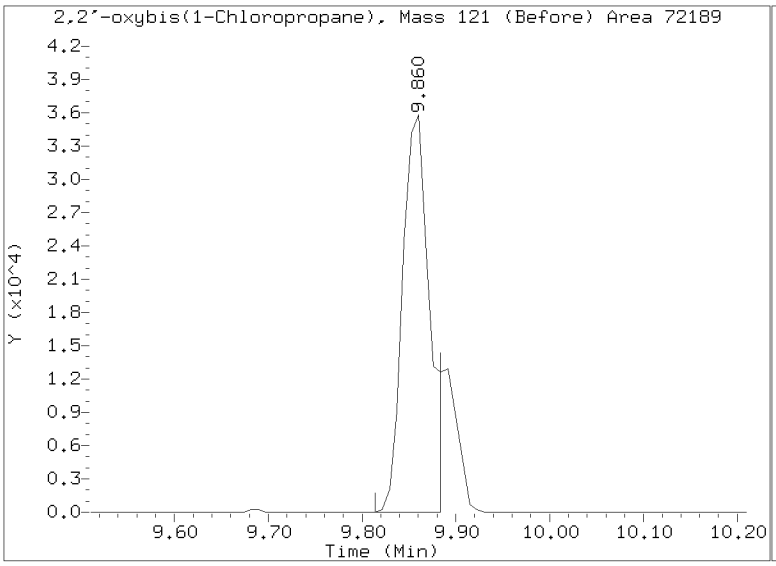
RRT check based on Ccal File: NT10031508.D

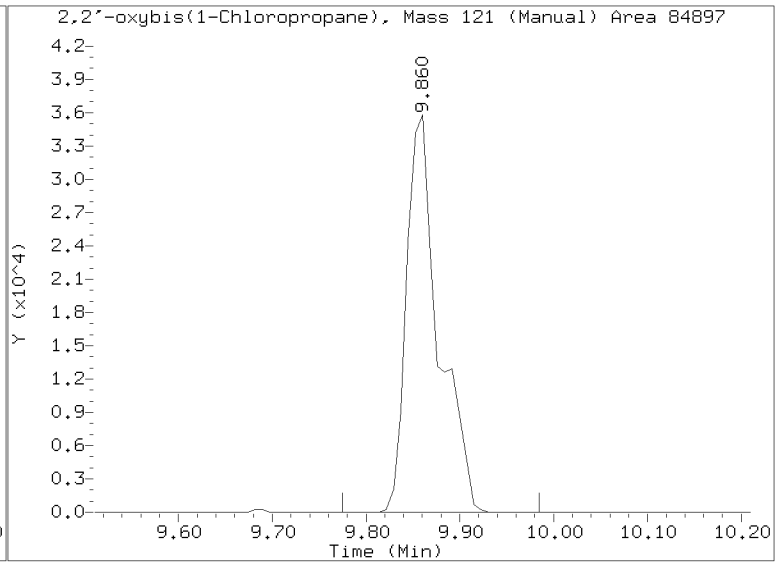
On Column LOD for nt10.i, 20230315.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230315.b/NT10031504.D
Injection Date: 15-MAR-2023 21:50
Lab ID:SLC0228-CAL5 Client ID:
Report Date: 03/16/2023 12:20





Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031505.D

Date : 15-MAR-2023 22:28

Client ID:

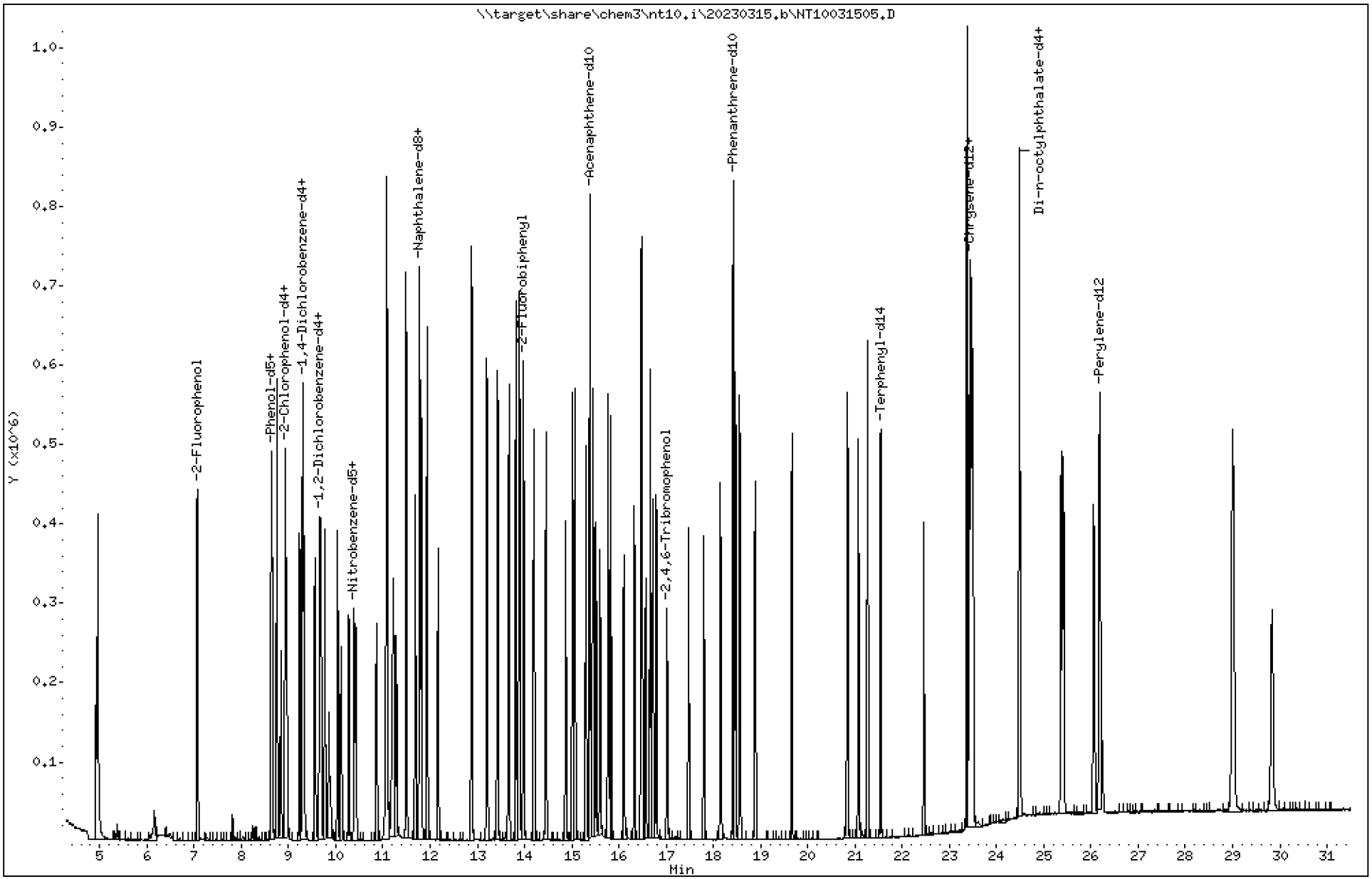
Instrument: nt10.i

Sample Info: SLC0228-CAL4

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230315.b\NT10031505.D
Lab Smp Id: SLC0228-CAL4
Inj Date : 15-MAR-2023 22:28
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0228-CAL4
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.068	7.068	(0.760)	193847	3.75000	4.042
$	2 Phenol-d5	99	8.628	8.636	(0.928)	251443	3.75000	3.997
	3 Phenol	94	8.659	8.652	(0.931)	172616	2.50000	2.641
$	5 2-Chlorophenol-d4	132	8.930	8.930	(0.960)	211122	3.75000	3.930
	4 Bis(2-Chloroethyl)ether	93	8.837	8.837	(0.950)	126678	2.50000	2.613
	6 2-Chlorophenol	128	8.961	8.961	(0.963)	142338	2.50000	2.544
	7 1,3-Dichlorobenzene	146	9.231	9.231	(0.992)	152662	2.50000	2.581
*	8 1,4-Dichlorobenzene-d4	152	9.301	9.293	(1.000)	158570	4.00000	
	9 1,4-Dichlorobenzene	146	9.325	9.325	(1.002)	145660	2.50000	2.549
$	10 1,2-Dichlorobenzene-d4	152	9.658	9.658	(1.038)	101442	2.50000	2.630
	12 1,2-Dichlorobenzene	146	9.682	9.682	(1.041)	145355	2.50000	2.585
	11 Benzyl alcohol	108	9.557	9.557	(1.028)	83433	2.50000	2.719
	14 2,2'-oxybis(1-Chloropropane)	121	9.860	9.860	(1.060)	41898	2.50000	2.537(M)
	13 2-Methylphenol	108	9.775	9.767	(1.051)	126793	2.50000	2.661
	17 Hexachloroethane	117	10.271	10.271	(1.104)	60297	2.50000	2.572
	16 N-Nitroso-di-n-propylamine	70	10.116	10.108	(1.088)	99798	2.50000	2.652
	15 4-Methylphenol	108	10.031	10.031	(1.078)	136212	2.50000	2.713
$	18 Nitrobenzene-d5	82	10.388	10.388	(0.882)	155018	2.50000	2.638
	19 Nitrobenzene	77	10.419	10.419	(0.885)	150373	2.50000	2.608
	20 Isophorone	82	10.861	10.861	(0.922)	188366	2.50000	2.554
	21 2-Nitrophenol	139	11.048	11.048	(0.938)	67668	2.50000	2.408
	22 2,4-Dimethylphenol	107	11.082	11.082	(0.941)	275973	5.00000	5.211
	23 Bis(2-Chloroethoxy)methane	93	11.285	11.285	(0.958)	128878	2.50000	2.616
	24 Benzoic acid	105	11.226	11.166	(0.953)	255448	10.0000	8.521
	25 2,4-Dichlorophenol	162	11.489	11.489	(0.975)	248784	5.00000	5.870
	26 1,2,4-Trichlorobenzene	180	11.685	11.685	(0.992)	126241	2.50000	2.538
*	27 Naphthalene-d8	136	11.778	11.770	(1.000)	582079	4.00000	
	28 Naphthalene	128	11.816	11.816	(1.003)	394779	2.50000	2.560
	29 4-Chloroaniline	127	11.940	11.940	(1.014)	311237	5.00000	5.174
	30 Hexachlorobutadiene	225	12.172	12.172	(1.033)	73952	2.50000	2.537
	31 4-Chloro-3-methylphenol	107	12.876	12.876	(1.093)	235798	5.00000	5.140
	32 2-Methylnaphthalene	142	13.201	13.201	(1.121)	287604	2.50000	2.584
	33 Hexachlorocyclopentadiene	237	13.665	13.665	(0.888)	146958	5.00000	5.177

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.820	13.820	(0.898)	156867	5.00000	5.174
	35	2,4,5-Trichlorophenol	196	13.890	13.890	(0.903)	175400	5.00000	5.207
$	36	2-Fluorobiphenyl	172	13.983	13.975	(0.909)	311690	2.50000	2.569
	37	2-Chloronaphthalene	162	14.199	14.191	(0.923)	255513	2.50000	2.601
	38	2-Nitroaniline	65	14.447	14.447	(0.939)	147440	5.00000	5.343
	39	Dimethylphthalate	163	14.873	14.873	(0.967)	256501	2.50000	2.574
	40	Acenaphthylene	152	15.066	15.066	(0.979)	402926	2.50000	2.632
	41	2,6-Dinitrotoluene	165	15.020	15.012	(0.976)	112979	5.00000	5.249
*	42	Acenaphthene-d10	164	15.383	15.383	(1.000)	306729	4.00000	
	43	3-Nitroaniline	138	15.298	15.298	(0.994)	127560	5.00000	5.250
	44	Acenaphthene	153	15.445	15.445	(1.004)	240853	2.50000	2.547
	45	2,4-Dinitrophenol	184	15.515	15.515	(1.009)	95470	10.0000	7.246
	46	Dibenzofuran	168	15.770	15.770	(1.025)	362747	2.50000	2.601
	47	4-Nitrophenol	109	15.600	15.592	(1.014)	72524	5.00000	4.760
	48	2,4-Dinitrotoluene	165	15.824	15.817	(1.029)	155514	5.00000	4.813
	50	Diethylphthalate	149	16.326	16.319	(1.061)	253004	2.50000	2.588
	49	Fluorene	166	16.481	16.481	(1.071)	287640	2.50000	2.622
	51	4-Chlorophenyl-phenylether	204	16.466	16.466	(1.070)	132439	2.50000	2.538
	52	4-Nitroaniline	138	16.566	16.566	(1.077)	90510	5.00000	4.134
	53	4,6-Dinitro-2-methylphenol	198	16.658	16.658	(0.904)	137459	10.0000	8.630
	54	N-Nitrosodiphenylamine	169	16.720	16.712	(0.908)	183659	2.50000	2.630
$	55	2,4,6-Tribromophenol	330	17.021	17.021	(1.106)	50739	3.75000	3.532
	56	4-Bromophenyl-phenylether	248	17.476	17.476	(0.949)	76926	2.50000	2.633
	57	Hexachlorobenzene	284	17.793	17.793	(0.966)	79507	2.50000	2.596
	58	Pentachlorophenol	266	18.149	18.149	(0.985)	82114	5.00000	4.494
*	59	Phenanthrene-d10	188	18.420	18.420	(1.000)	522311	4.00000	
	60	Phenanthrene	178	18.466	18.466	(1.003)	367912	2.50000	2.583
	61	Anthracene	178	18.559	18.559	(1.008)	364097	2.50000	2.665
	62	Carbazole	167	18.884	18.884	(1.025)	320923	2.50000	2.621
	63	Di-n-butylphthalate	149	19.665	19.666	(1.068)	388084	2.50000	2.363
	64	Fluoranthene	202	20.841	20.841	(0.889)	377104	2.50000	2.634
	65	Pyrene	202	21.267	21.267	(0.907)	384702	2.50000	2.620
$	66	Terphenyl-d14	244	21.545	21.538	(0.919)	288420	2.50000	2.615
	67	Butylbenzylphthalate	149	22.459	22.460	(0.958)	123600	2.50000	2.364
	68	Benzo(a)anthracene	228	23.419	23.419	(0.999)	330796	2.50000	2.630
*	69	Chrysene-d12	240	23.450	23.450	(1.000)	356282	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.373	23.373	(0.997)	311978	7.50000	7.745
	71	Chrysene	228	23.497	23.489	(1.002)	313344	2.50000	2.550
	72	bis(2-Ethylhexyl)phthalate	149	23.481	23.474	(0.959)	172996	2.50000	2.503
*	134	Di-n-octylphthalate-d4	153	24.480	24.480	(1.000)	471925	4.00000	
	73	Di-n-octylphthalate	149	24.495	24.488	(1.001)	311915	2.50000	2.526
	74	Benzo(b)fluoranthene	252	25.370	25.362	(0.969)	353167	2.50000	2.590(H)
	75	Benzo(k)fluoranthene	252	25.417	25.409	(0.971)	351229	2.50000	2.536
	76	Benzo(a)pyrene	252	26.059	26.052	(0.995)	320887	2.50000	2.632
*	77	Perylene-d12	264	26.183	26.183	(1.000)	420725	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.998	28.990	(1.107)	418167	2.50000	2.696
	79	Dibenzo(a,h)anthracene	278	29.021	29.005	(1.108)	347350	2.50000	2.697
	80	Benzo(g,h,i)perylene	276	29.836	29.821	(1.140)	356933	2.50000	2.659
	90	N-Nitrosodimethylamine	74	4.928	4.936	(0.530)	165395	5.00000	5.406
	91	Aniline	93	8.752	8.752	(0.941)	348101	5.00000	5.197
	93	Benzidine	184	21.066	21.066	(0.898)	314268	5.00000	5.344
	103	Pyridine	79	4.959	4.997	(0.533)	256226	5.00000	5.453
	105	1-methylnaphthalene	142	13.425	13.425	(1.140)	261060	2.50000	2.560
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.789	16.789	(1.091)	284356	2.50000	2.604

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.370	25.409	(0.969)	673447	5.00000	5.114
120 2,3,4,6-Tetrachlorophenol	232	16.102	16.103	(1.047)	82842	2.50000	2.640

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031505.D
Lab Smp Id: SLC0228-CAL4
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 21:50
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	171542	85771	343084	158570	-7.56
27 Naphthalene-d8	624466	312233	1248932	582079	-6.79
42 Acenaphthene-d10	337226	168613	674452	306729	-9.04
59 Phenanthrene-d10	572849	286425	1145698	522311	-8.82
69 Chrysene-d12	347068	173534	694136	356282	2.65
134 Di-n-octylphthala	500317	250159	1000634	471925	-5.67
77 Perylene-d12	421549	210775	843098	420725	-0.20

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	0.01
42 Acenaphthene-d10	15.38	14.88	15.88	15.38	0.01
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.45	0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.48	0.00
77 Perylene-d12	26.18	25.68	26.68	26.18	0.00

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

REVIEW SUMMARY FOR FILE - NT10031505.D

Lab ID: SLC0228-CAL4
nt10.i, 20230315.b\ABN.m,   15-MAR-2023 22:28

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.953	0.000	0.9532	Benzoic acid

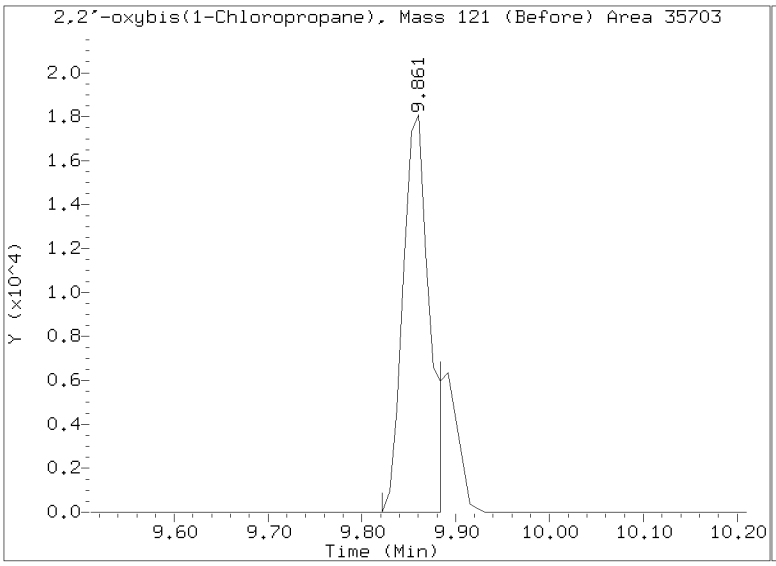
RRT check based on Ccal File: NT10031508.D

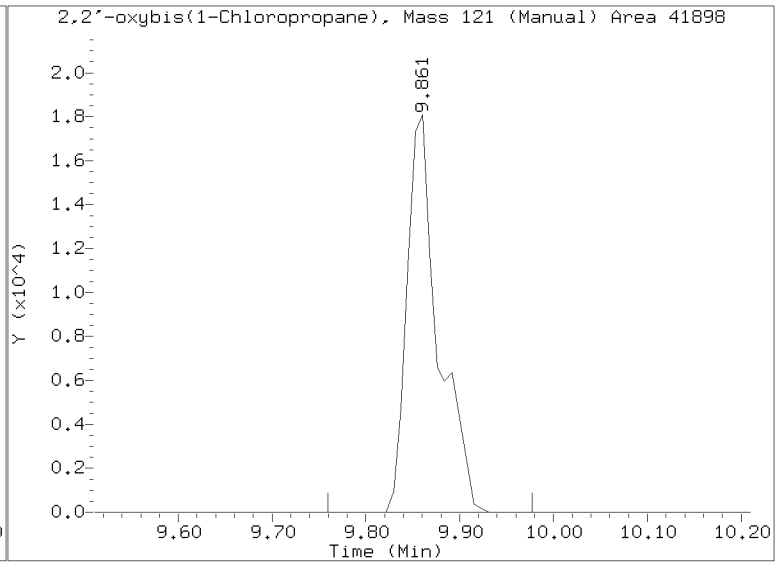
On Column LOD for nt10.i, 20230315.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230315.b/NT10031505.D
Injection Date: 15-MAR-2023 22:28
Lab ID:SLC0228-CAL4 Client ID:
Report Date: 03/16/2023 12:20





Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031506.D

Page 1

Date : 15-MAR-2023 23:06

Client ID:

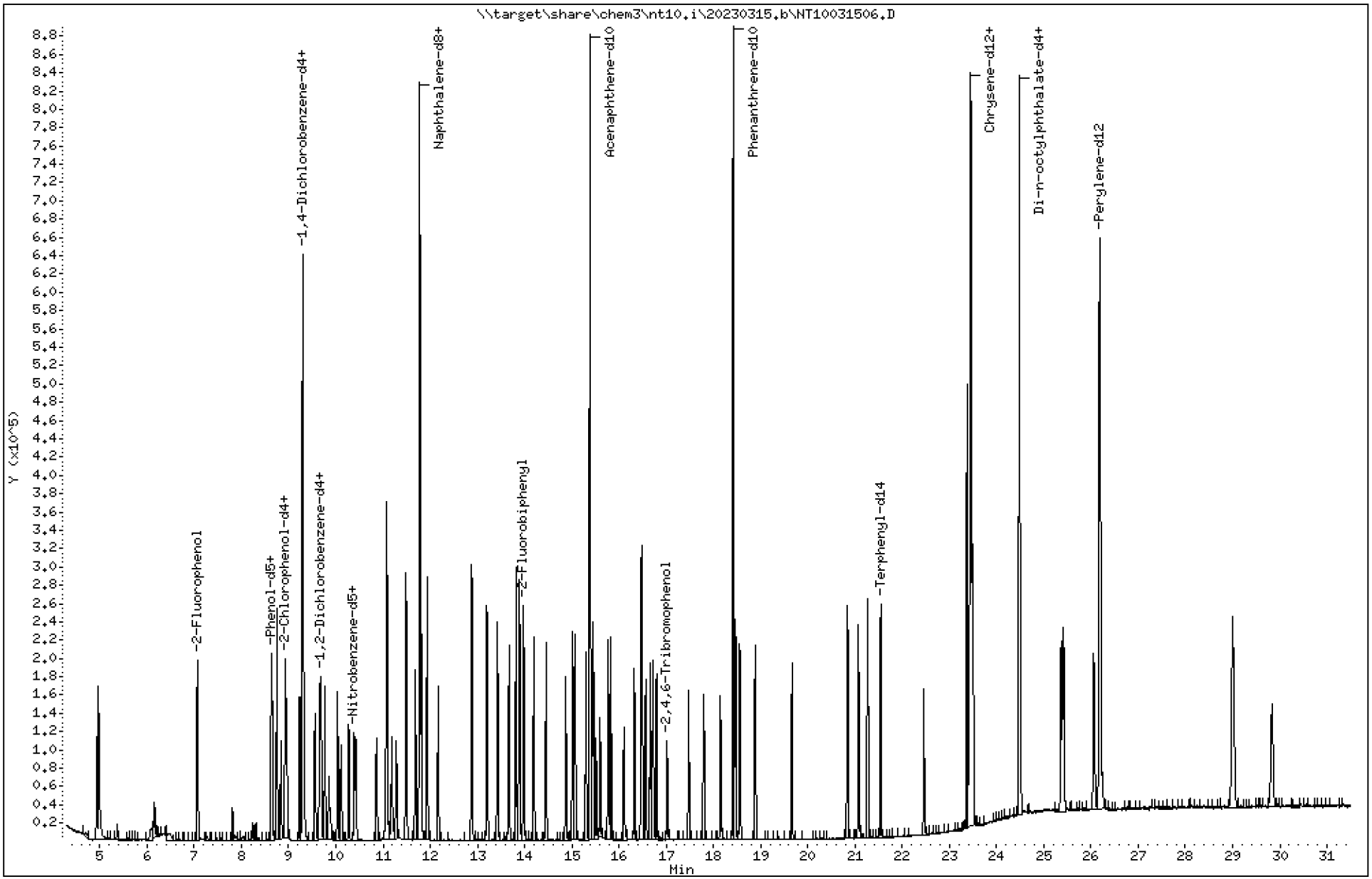
Instrument: nt10.i

Sample Info: SLC0228-CAL3

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230315.b\NT10031506.D
Lab Smp Id: SLC0228-CAL3
Inj Date : 15-MAR-2023 23:06
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0228-CAL3
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.067	7.068	(0.761)	81829	1.50000	1.571
$	2 Phenol-d5	99	8.636	8.636	(0.929)	104538	1.50000	1.530
	3 Phenol	94	8.651	8.652	(0.931)	74885	1.00000	1.055
$	5 2-Chlorophenol-d4	132	8.929	8.930	(0.961)	89430	1.50000	1.533
	4 Bis(2-Chloroethyl)ether	93	8.837	8.837	(0.951)	54831	1.00000	1.041
	6 2-Chlorophenol	128	8.960	8.961	(0.964)	61317	1.00000	1.009
	7 1,3-Dichlorobenzene	146	9.239	9.231	(0.994)	66405	1.00000	1.033
*	8 1,4-Dichlorobenzene-d4	152	9.293	9.293	(1.000)	172257	4.00000	
	9 1,4-Dichlorobenzene	146	9.324	9.325	(1.003)	64857	1.00000	1.045
$	10 1,2-Dichlorobenzene-d4	152	9.658	9.658	(1.039)	44150	1.00000	1.053
	12 1,2-Dichlorobenzene	146	9.681	9.682	(1.042)	63657	1.00000	1.042
	11 Benzyl alcohol	108	9.557	9.557	(1.028)	33846	1.00000	1.015
	14 2,2'-oxybis(1-Chloropropane)	121	9.860	9.860	(1.061)	18563	1.00000	1.035(M)
	13 2-Methylphenol	108	9.767	9.767	(1.051)	54013	1.00000	1.043
	17 Hexachloroethane	117	10.271	10.271	(1.105)	25979	1.00000	1.020
	16 N-Nitroso-di-n-propylamine	70	10.108	10.108	(1.088)	42146	1.00000	1.031
	15 4-Methylphenol	108	10.031	10.031	(1.079)	56323	1.00000	1.033
$	18 Nitrobenzene-d5	82	10.388	10.388	(0.882)	64177	1.00000	1.016
	19 Nitrobenzene	77	10.419	10.419	(0.885)	64368	1.00000	1.038
	20 Isophorone	82	10.861	10.861	(0.922)	76637	1.00000	0.9663
	21 2-Nitrophenol	139	11.047	11.048	(0.938)	24076	1.00000	0.7981
	22 2,4-Dimethylphenol	107	11.081	11.082	(0.941)	117551	2.00000	2.064
	23 Bis(2-Chloroethoxy)methane	93	11.284	11.285	(0.958)	55470	1.00000	1.047
	24 Benzoic acid	105	11.182	11.166	(0.950)	66707	4.00000	2.100(H)
	25 2,4-Dichlorophenol	162	11.488	11.489	(0.975)	91015	2.00000	1.997
	26 1,2,4-Trichlorobenzene	180	11.684	11.685	(0.992)	55650	1.00000	1.040
*	27 Naphthalene-d8	136	11.777	11.770	(1.000)	625894	4.00000	
	28 Naphthalene	128	11.815	11.816	(1.003)	168411	1.00000	1.016
	29 4-Chloroaniline	127	11.939	11.940	(1.014)	131129	2.00000	2.027
	30 Hexachlorobutadiene	225	12.171	12.172	(1.033)	32792	1.00000	1.046
	31 4-Chloro-3-methylphenol	107	12.875	12.876	(1.093)	95632	2.00000	1.939
	32 2-Methylnaphthalene	142	13.200	13.201	(1.121)	120977	1.00000	1.011
	33 Hexachlorocyclopentadiene	237	13.664	13.665	(0.888)	55248	2.00000	1.804

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
34	2,4,6-Trichlorophenol	196	13.819	13.820	(0.898)	61689	2.00000	1.886
35	2,4,5-Trichlorophenol	196	13.889	13.890	(0.903)	68648	2.00000	1.889
$ 36	2-Fluorobiphenyl	172	13.981	13.975	(0.909)	133800	1.00000	1.022
37	2-Chloronaphthalene	162	14.198	14.191	(0.923)	107713	1.00000	1.016
38	2-Nitroaniline	65	14.454	14.447	(0.940)	56493	2.00000	1.897
39	Dimethylphthalate	163	14.872	14.873	(0.967)	111361	1.00000	1.036
40	Acenaphthylene	152	15.073	15.066	(0.980)	170871	1.00000	1.034
41	2,6-Dinitrotoluene	165	15.019	15.012	(0.976)	44313	2.00000	1.908
* 42	Acenaphthene-d10	164	15.382	15.383	(1.000)	330997	4.00000	
43	3-Nitroaniline	138	15.297	15.298	(0.994)	50298	2.00000	1.918
44	Acenaphthene	153	15.452	15.445	(1.005)	103833	1.00000	1.017
45	2,4-Dinitrophenol	184	15.514	15.515	(1.009)	25006	4.00000	1.778
46	Dibenzofuran	168	15.769	15.770	(1.025)	152427	1.00000	1.013
47	4-Nitrophenol	109	15.599	15.592	(1.014)	26972	2.00000	1.637
48	2,4-Dinitrotoluene	165	15.823	15.817	(1.029)	61485	2.00000	1.754
50	Diethylphthalate	149	16.325	16.319	(1.061)	107688	1.00000	1.021
49	Fluorene	166	16.488	16.481	(1.072)	122197	1.00000	1.032
51	4-Chlorophenyl-phenylether	204	16.472	16.466	(1.071)	56790	1.00000	1.009
52	4-Nitroaniline	138	16.565	16.566	(1.077)	46355	2.00000	1.962
53	4,6-Dinitro-2-methylphenol	198	16.657	16.658	(0.904)	45458	4.00000	2.638
54	N-Nitrosodiphenylamine	169	16.719	16.712	(0.908)	78992	1.00000	1.039
$ 55	2,4,6-Tribromophenol	330	17.020	17.021	(1.106)	18793	1.50000	1.208
56	4-Bromophenyl-phenylether	248	17.475	17.476	(0.949)	32247	1.00000	1.014
57	Hexachlorobenzene	284	17.799	17.793	(0.966)	35208	1.00000	1.056
58	Pentachlorophenol	266	18.148	18.149	(0.985)	28829	2.00000	1.458
* 59	Phenanthrene-d10	188	18.419	18.420	(1.000)	568685	4.00000	
60	Phenanthrene	178	18.465	18.466	(1.003)	159357	1.00000	1.028
61	Anthracene	178	18.558	18.559	(1.008)	151450	1.00000	1.018
62	Carbazole	167	18.883	18.884	(1.025)	141694	1.00000	1.063
63	Di-n-butylphthalate	149	19.664	19.666	(1.068)	154356	1.00000	0.8619
64	Fluoranthene	202	20.840	20.841	(0.889)	166676	1.00000	0.9718
65	Pyrene	202	21.266	21.267	(0.907)	174023	1.00000	0.9891
$ 66	Terphenyl-d14	244	21.544	21.538	(0.919)	135363	1.00000	1.024
67	Butylbenzylphthalate	149	22.458	22.460	(0.958)	51900	1.00000	0.8366
68	Benzo(a)anthracene	228	23.418	23.419	(0.999)	152617	1.00000	1.013
* 69	Chrysene-d12	240	23.449	23.450	(1.000)	426836	4.00000	
70	3,3'-Dichlorobenzidine	252	23.372	23.373	(0.997)	145183	3.00000	3.008
71	Chrysene	228	23.496	23.489	(1.002)	149535	1.00000	1.016
72	bis(2-Ethylhexyl)phthalate	149	23.480	23.474	(0.959)	73435	1.00000	0.9036
* 134	Di-n-octylphthalate-d4	153	24.479	24.480	(1.000)	555437	4.00000	
73	Di-n-octylphthalate	149	24.487	24.488	(1.000)	146103	1.00000	1.005
74	Benzo(b)fluoranthene	252	25.369	25.362	(0.969)	155706	1.00000	0.9821(H)
75	Benzo(k)fluoranthene	252	25.416	25.409	(0.971)	162831	1.00000	1.011
76	Benzo(a)pyrene	252	26.058	26.052	(0.995)	137233	1.00000	0.9682
* 77	Perylene-d12	264	26.182	26.183	(1.000)	489106	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.004	28.990	(1.108)	172403	1.00000	0.9560
79	Dibenzo(a,h)anthracene	278	29.012	29.005	(1.108)	143905	1.00000	0.9612
80	Benzo(g,h,i)perylene	276	29.835	29.821	(1.140)	146972	1.00000	0.9417
90	N-Nitrosodimethylamine	74	4.935	4.936	(0.531)	69420	2.00000	2.089
91	Aniline	93	8.752	8.752	(0.942)	149023	2.00000	2.048
93	Benzidine	184	21.072	21.066	(0.899)	143586	2.00000	2.038
103	Pyridine	79	4.974	4.997	(0.535)	109408	2.00000	2.144
105	1-methylnaphthalene	142	13.432	13.425	(1.141)	111144	1.00000	1.014
111	Azobenzene (1,2-DP-Hydrazine)	77	16.796	16.789	(1.092)	118247	1.00000	1.003

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.416	25.409	(0.971)	306444	2.00000	2.002
120 2,3,4,6-Tetrachlorophenol	232	16.109	16.103	(1.047)	26430	1.00000	0.7900

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031506.D
Lab Smp Id: SLC0228-CAL3
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 21:50
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	171542	85771	343084	172257	0.42
27 Naphthalene-d8	624466	312233	1248932	625894	0.23
42 Acenaphthene-d10	337226	168613	674452	330997	-1.85
59 Phenanthrene-d10	572849	286425	1145698	568685	-0.73
69 Chrysene-d12	347068	173534	694136	426836	22.98
134 Di-n-octylphthala	500317	250159	1000634	555437	11.02
77 Perylene-d12	421549	210775	843098	489106	16.03

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.29	-0.09
27 Naphthalene-d8	11.78	11.28	12.28	11.78	-0.00
42 Acenaphthene-d10	15.38	14.88	15.88	15.38	-0.00
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	-0.00
69 Chrysene-d12	23.45	22.95	23.95	23.45	-0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.48	-0.00
77 Perylene-d12	26.18	25.68	26.68	26.18	-0.00

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

REVIEW SUMMARY FOR FILE - NT10031506.D

Lab ID: SLC0228-CAL3
nt10.i, 20230315.b\ABN.m,   15-MAR-2023 23:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.950	0.000	0.9496	Benzoic acid

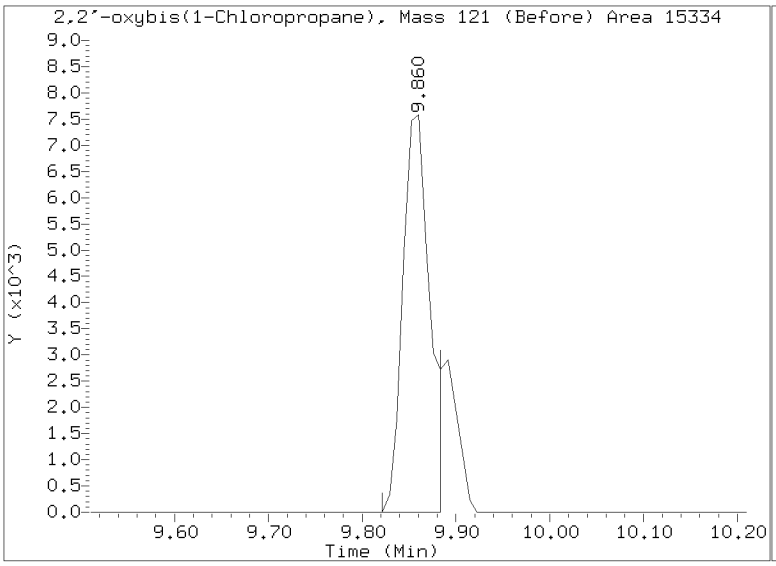
RRT check based on Ccal File: NT10031508.D

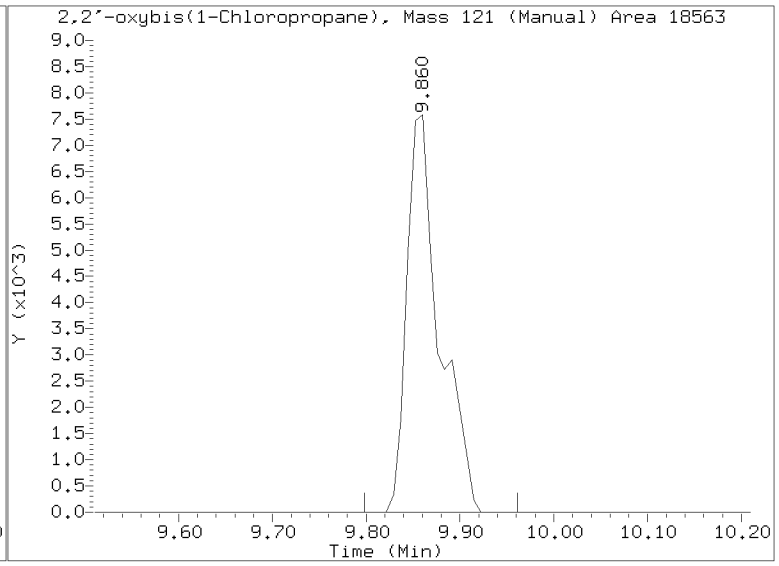
On Column LOD for nt10.i, 20230315.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230315.b/NT10031506.D
Injection Date: 15-MAR-2023 23:06
Lab ID:SLC0228-CAL3 Client ID:
Report Date: 03/16/2023 12:20





Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031507.D

Page 1

Date : 15-MAR-2023 23:44

Client ID:

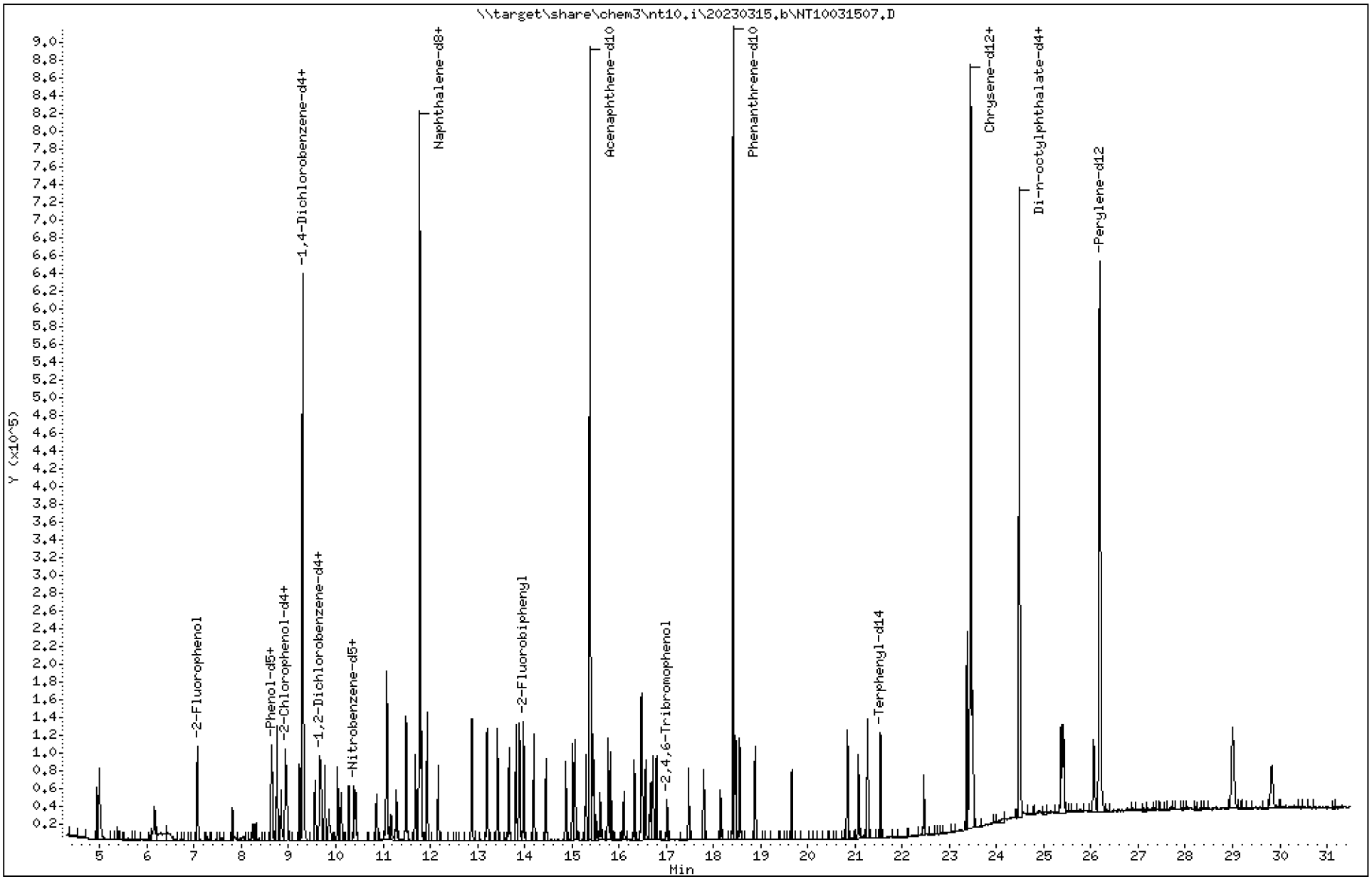
Instrument: nt10.i

Sample Info: SLC0228-CAL2

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230315.b\NT10031507.D
Lab Smp Id: SLC0228-CAL2
Inj Date : 15-MAR-2023 23:44
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0228-CAL2
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 7 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.068	7.068	(0.760)	41713	0.75000	0.7823
$	2 Phenol-d5	99	8.636	8.636	(0.928)	52580	0.75000	0.7517
	3 Phenol	94	8.659	8.652	(0.931)	38448	0.50000	0.5289
$	5 2-Chlorophenol-d4	132	8.930	8.930	(0.960)	44808	0.75000	0.7501
	4 Bis(2-Chloroethyl)ether	93	8.837	8.837	(0.950)	27479	0.50000	0.5097
	6 2-Chlorophenol	128	8.960	8.961	(0.963)	31239	0.50000	0.5021
	7 1,3-Dichlorobenzene	146	9.231	9.231	(0.992)	35392	0.50000	0.5381
*	8 1,4-Dichlorobenzene-d4	152	9.301	9.293	(1.000)	176328	4.00000	
	9 1,4-Dichlorobenzene	146	9.332	9.325	(1.003)	32578	0.50000	0.5127
$	10 1,2-Dichlorobenzene-d4	152	9.658	9.658	(1.038)	21602	0.50000	0.5036
	12 1,2-Dichlorobenzene	146	9.681	9.682	(1.041)	32678	0.50000	0.5226
	11 Benzyl alcohol	108	9.557	9.557	(1.028)	16132	0.50000	0.4728
	14 2,2'-oxybis(1-Chloropropane)	121	9.852	9.860	(1.059)	9403	0.50000	0.5120(M)
	13 2-Methylphenol	108	9.767	9.767	(1.050)	26839	0.50000	0.5065
	17 Hexachloroethane	117	10.271	10.271	(1.104)	13005	0.50000	0.4989
	16 N-Nitroso-di-n-propylamine	70	10.116	10.108	(1.088)	20902	0.50000	0.4996
	15 4-Methylphenol	108	10.031	10.031	(1.078)	27419	0.50000	0.4911
$	18 Nitrobenzene-d5	82	10.388	10.388	(0.882)	31837	0.50000	0.4937
	19 Nitrobenzene	77	10.419	10.419	(0.885)	32321	0.50000	0.5108
	20 Isophorone	82	10.861	10.861	(0.922)	37232	0.50000	0.4599
	21 2-Nitrophenol	139	11.047	11.048	(0.938)	10858	0.50000	0.3528
	22 2,4-Dimethylphenol	107	11.081	11.082	(0.941)	60037	1.00000	1.033
	23 Bis(2-Chloroethoxy)methane	93	11.284	11.285	(0.958)	28288	0.50000	0.5231
	24 Benzoic acid	105	11.166	11.166	(0.948)	22417	2.00000	0.6937(MH)
	25 2,4-Dichlorophenol	162	11.488	11.489	(0.975)	44450	1.00000	0.9557
	26 1,2,4-Trichlorobenzene	180	11.684	11.685	(0.992)	28877	0.50000	0.5289
*	27 Naphthalene-d8	136	11.777	11.770	(1.000)	638835	4.00000	
	28 Naphthalene	128	11.815	11.816	(1.003)	87181	0.50000	0.5151
	29 4-Chloroaniline	127	11.939	11.940	(1.014)	66172	1.00000	1.002
	30 Hexachlorobutadiene	225	12.171	12.172	(1.033)	16273	0.50000	0.5087
	31 4-Chloro-3-methylphenol	107	12.883	12.876	(1.094)	47168	1.00000	0.9368
	32 2-Methylnaphthalene	142	13.208	13.201	(1.122)	61248	0.50000	0.5015
	33 Hexachlorocyclopentadiene	237	13.672	13.665	(0.889)	26827	1.00000	0.8689

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.819	13.820	(0.898)	28405	1.00000	0.8614
	35	2,4,5-Trichlorophenol	196	13.889	13.890	(0.903)	32893	1.00000	0.8978
$	36	2-Fluorobiphenyl	172	13.982	13.975	(0.909)	68004	0.50000	0.5153
	37	2-Chloronaphthalene	162	14.198	14.191	(0.923)	55073	0.50000	0.5154
	38	2-Nitroaniline	65	14.446	14.447	(0.939)	26440	1.00000	0.8809
	39	Dimethylphthalate	163	14.879	14.873	(0.967)	57101	0.50000	0.5269
	40	Acenaphthylene	152	15.065	15.066	(0.979)	86568	0.50000	0.5199
	41	2,6-Dinitrotoluene	165	15.019	15.012	(0.976)	20170	1.00000	0.8615
*	42	Acenaphthene-d10	164	15.382	15.383	(1.000)	333617	4.00000	
	43	3-Nitroaniline	138	15.297	15.298	(0.994)	23424	1.00000	0.8864
	44	Acenaphthene	153	15.452	15.445	(1.005)	52615	0.50000	0.5115
	45	2,4-Dinitrophenol	184	15.514	15.515	(1.009)	6815	2.00000	0.4819
	46	Dibenzofuran	168	15.769	15.770	(1.025)	78914	0.50000	0.5202
	47	4-Nitrophenol	109	15.599	15.592	(1.014)	10811	1.00000	0.6506
	48	2,4-Dinitrotoluene	165	15.823	15.817	(1.029)	27229	1.00000	0.7695
	50	Diethylphthalate	149	16.326	16.319	(1.061)	52123	0.50000	0.4902
	49	Fluorene	166	16.488	16.481	(1.072)	60511	0.50000	0.5070
	51	4-Chlorophenyl-phenylether	204	16.472	16.466	(1.071)	28771	0.50000	0.5070
	52	4-Nitroaniline	138	16.565	16.566	(1.077)	22911	1.00000	0.9621
	53	4,6-Dinitro-2-methylphenol	198	16.665	16.658	(0.905)	16474	2.00000	0.9166
	54	N-Nitrosodiphenylamine	169	16.719	16.712	(0.908)	40999	0.50000	0.5160
$	55	2,4,6-Tribromophenol	330	17.020	17.021	(1.106)	8451	0.75000	0.5386
	56	4-Bromophenyl-phenylether	248	17.475	17.476	(0.949)	15854	0.50000	0.4770
	57	Hexachlorobenzene	284	17.792	17.793	(0.966)	17123	0.50000	0.4914
	58	Pentachlorophenol	266	18.148	18.149	(0.985)	11460	1.00000	0.5555
*	59	Phenanthrene-d10	188	18.419	18.420	(1.000)	594262	4.00000	
	60	Phenanthrene	178	18.465	18.466	(1.003)	82180	0.50000	0.5072
	61	Anthracene	178	18.558	18.559	(1.008)	75192	0.50000	0.4837
	62	Carbazole	167	18.883	18.884	(1.025)	70986	0.50000	0.5096
	63	Di-n-butylphthalate	149	19.664	19.666	(1.068)	69653	0.50000	0.3720
	64	Fluoranthene	202	20.840	20.841	(0.889)	81400	0.50000	0.4730
	65	Pyrene	202	21.266	21.267	(0.907)	86158	0.50000	0.4881
$	66	Terphenyl-d14	244	21.545	21.538	(0.919)	66564	0.50000	0.5021
	67	Butylbenzylphthalate	149	22.458	22.460	(0.958)	23199	0.50000	0.3738
	68	Benzo(a)anthracene	228	23.426	23.419	(0.999)	76435	0.50000	0.5056
*	69	Chrysene-d12	240	23.449	23.450	(1.000)	428263	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.372	23.373	(0.997)	66937	1.50000	1.382
	71	Chrysene	228	23.496	23.489	(1.002)	76545	0.50000	0.5183
	72	bis(2-Ethylhexyl)phthalate	149	23.480	23.474	(0.959)	29596	0.50000	0.3811
*	134	Di-n-octylphthalate-d4	153	24.479	24.480	(1.000)	530893	4.00000	
	73	Di-n-octylphthalate	149	24.487	24.488	(1.000)	70499	0.50000	0.5074
	74	Benzo(b)fluoranthene	252	25.369	25.362	(0.969)	77837	0.50000	0.5012(H)
	75	Benzo(k)fluoranthene	252	25.408	25.409	(0.970)	76548	0.50000	0.4854
	76	Benzo(a)pyrene	252	26.059	26.052	(0.995)	65959	0.50000	0.4750
*	77	Perylene-d12	264	26.182	26.183	(1.000)	479116	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.997	28.990	(1.107)	79229	0.50000	0.4485
	79	Dibenzo(a,h)anthracene	278	29.012	29.005	(1.108)	66422	0.50000	0.4529
	80	Benzo(g,h,i)perylene	276	29.828	29.821	(1.139)	67819	0.50000	0.4436
	90	N-Nitrosodimethylamine	74	4.936	4.936	(0.531)	37892	1.00000	1.114
	91	Aniline	93	8.752	8.752	(0.941)	78232	1.00000	1.050
	93	Benzidine	184	21.073	21.066	(0.899)	63059	1.00000	0.8921
	103	Pyridine	79	4.982	4.997	(0.536)	58765	1.00000	1.125
	105	1-methylnaphthalene	142	13.424	13.425	(1.140)	56774	0.50000	0.5074
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.796	16.789	(1.092)	61206	0.50000	0.5153

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.408	25.409	(0.970)	149145	1.00000	0.9946
120 2,3,4,6-Tetrachlorophenol	232	16.101	16.103	(1.047)	11604	0.50000	0.3451

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031507.D
Lab Smp Id: SLC0228-CAL2
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 21:50
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	171542	85771	343084	176328	2.79
27 Naphthalene-d8	624466	312233	1248932	638835	2.30
42 Acenaphthene-d10	337226	168613	674452	333617	-1.07
59 Phenanthrene-d10	572849	286425	1145698	594262	3.74
69 Chrysene-d12	347068	173534	694136	428263	23.39
134 Di-n-octylphthala	500317	250159	1000634	530893	6.11
77 Perylene-d12	421549	210775	843098	479116	13.66

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	0.00
42 Acenaphthene-d10	15.38	14.88	15.88	15.38	0.00
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.45	0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.48	0.00
77 Perylene-d12	26.18	25.68	26.68	26.18	0.00

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

REVIEW SUMMARY FOR FILE - NT10031507.D

Lab ID: SLC0228-CAL2
nt10.i, 20230315.b\ABN.m,   15-MAR-2023 23:44

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.948	0.000	0.9481	Benzoic acid

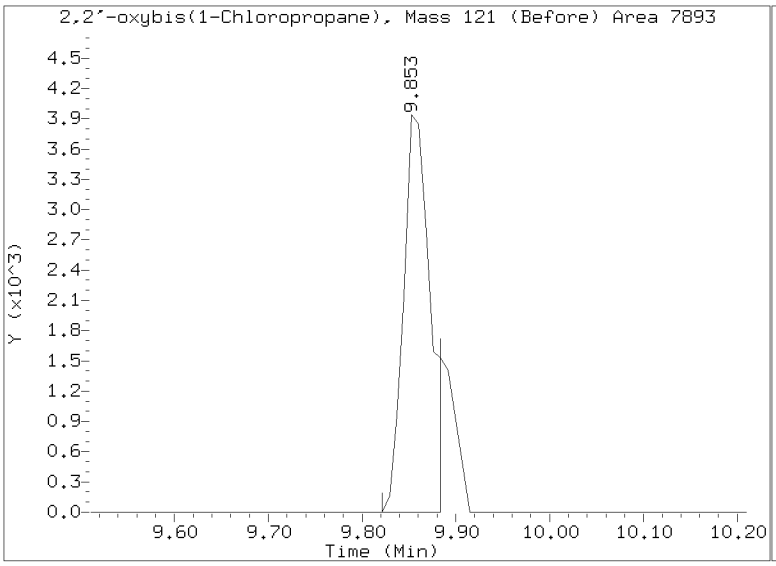
RRT check based on Ccal File: NT10031508.D

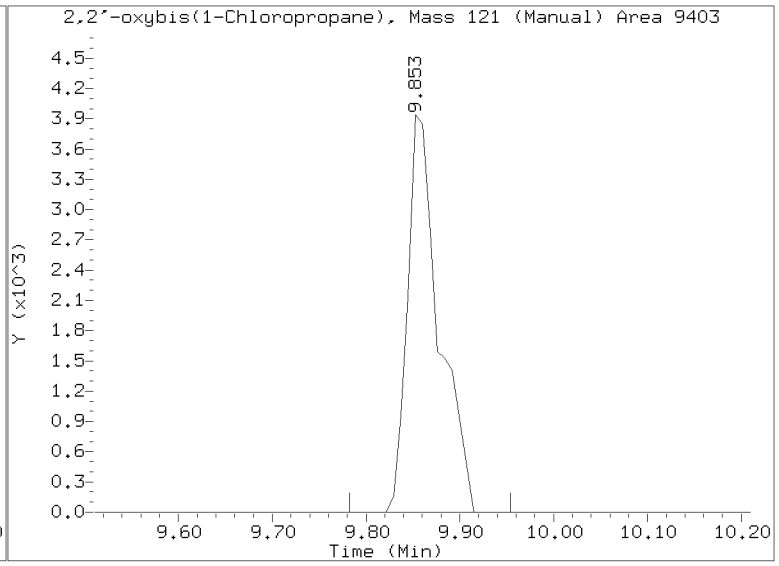
On Column LOD for nt10.i, 20230315.b\ABN.m, ICAL.sub = 0.0000

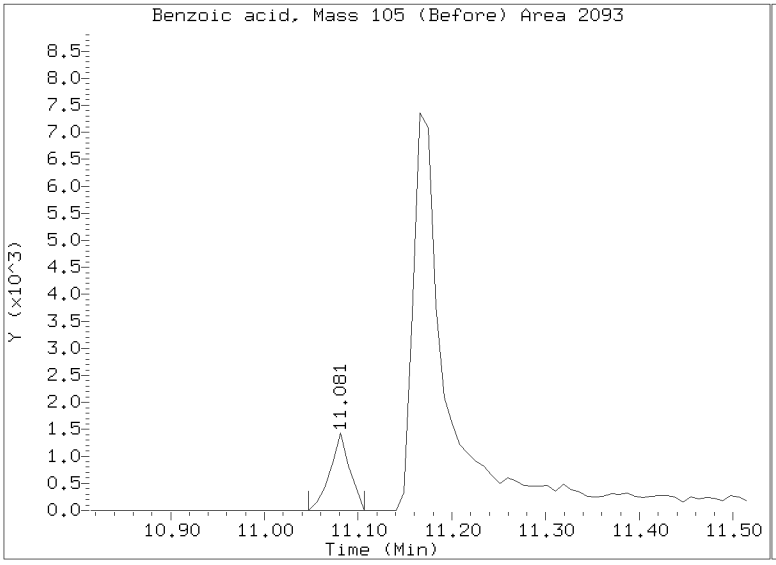
* Only compounds listed in the work order have been verified by the analyst *

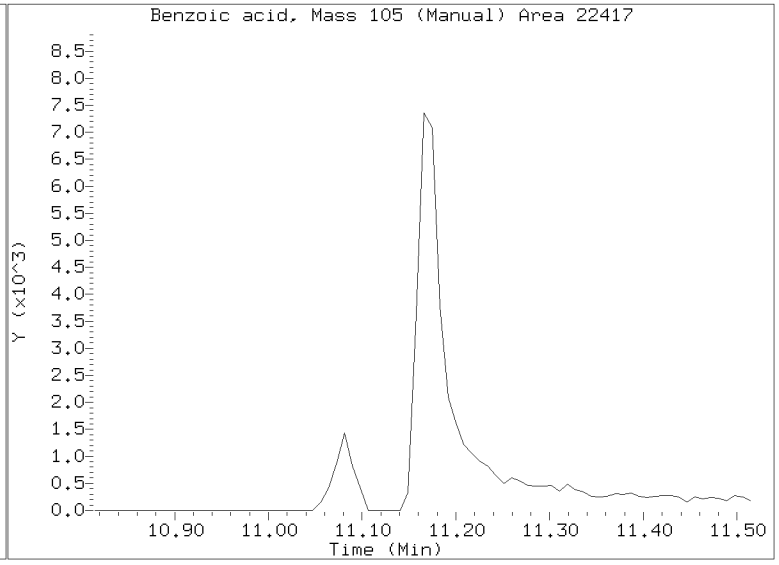
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230315.b/NT10031507.D
Injection Date: 15-MAR-2023 23:44
Lab ID:SLC0228-CAL2 Client ID:
Report Date: 03/16/2023 12:20









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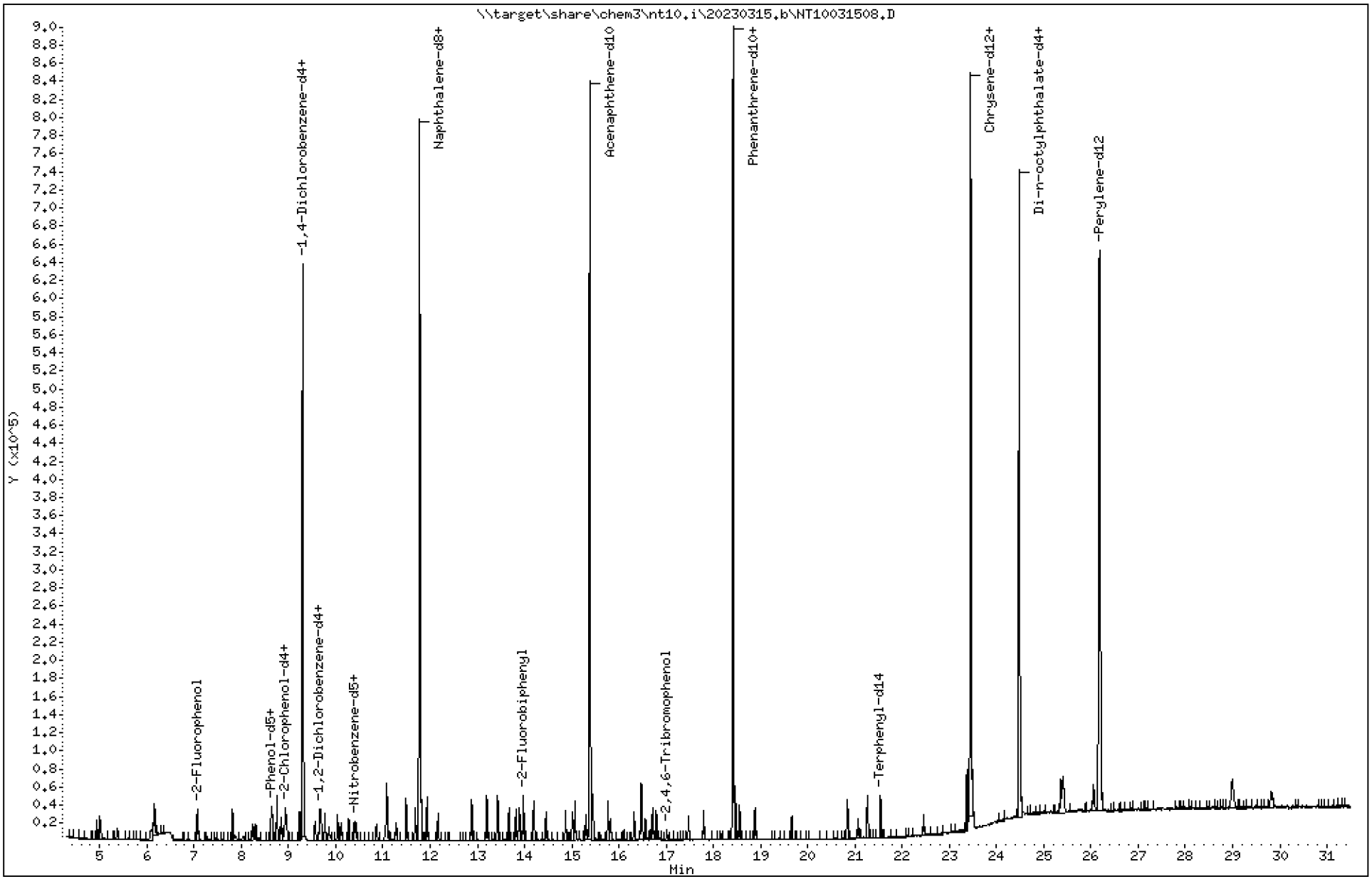
Date : 16-MAR-2023 00:22
Client ID:
Sample Info: SLC0228-CAL1

Instrument: nt10.i
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230315.b\NT10031508.D
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Inj Date : 16-MAR-2023 00:22
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0228-CAL1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.068	7.068	(0.761)	15217	0.30000	0.2902
$	2 Phenol-d5	99	8.636	8.636	(0.929)	19316	0.30000	0.2808
	3 Phenol	94	8.652	8.652	(0.931)	14062	0.20000	0.1967
$	5 2-Chlorophenol-d4	132	8.930	8.930	(0.961)	16402	0.30000	0.2792
	4 Bis(2-Chloroethyl)ether	93	8.837	8.837	(0.951)	11069	0.20000	0.2088
	6 2-Chlorophenol	128	8.961	8.961	(0.964)	11429	0.20000	0.1868
	7 1,3-Dichlorobenzene	146	9.231	9.231	(0.993)	13532	0.20000	0.2092
*	8 1,4-Dichlorobenzene-d4	152	9.293	9.293	(1.000)	173382	4.00000	
	9 1,4-Dichlorobenzene	146	9.325	9.325	(1.003)	12851	0.20000	0.2057
$	10 1,2-Dichlorobenzene-d4	152	9.658	9.658	(1.039)	8167	0.20000	0.1936(M)
	12 1,2-Dichlorobenzene	146	9.682	9.682	(1.042)	12650	0.20000	0.2057
	11 Benzyl alcohol	108	9.557	9.557	(1.028)	5351	0.20000	0.1595
	14 2,2'-oxybis(1-Chloropropane)	121	9.860	9.860	(1.061)	3773	0.20000	0.2090(M)
	13 2-Methylphenol	108	9.767	9.767	(1.051)	9529	0.20000	0.1829
	17 Hexachloroethane	117	10.271	10.271	(1.105)	5030	0.20000	0.1962
	16 N-Nitroso-di-n-propylamine	70	10.108	10.108	(1.088)	7690	0.20000	0.1869
	15 4-Methylphenol	108	10.031	10.031	(1.079)	9916	0.20000	0.1806
$	18 Nitrobenzene-d5	82	10.388	10.388	(0.883)	11367	0.20000	0.1808
	19 Nitrobenzene	77	10.419	10.419	(0.885)	11856	0.20000	0.1922
	20 Isophorone	82	10.861	10.861	(0.923)	13500	0.20000	0.1711
	21 2-Nitrophenol	139	11.048	11.048	(0.939)	3314	0.20000	0.1105
	22 2,4-Dimethylphenol	107	11.082	11.082	(0.942)	21781	0.40000	0.3844
	23 Bis(2-Chloroethoxy)methane	93	11.285	11.285	(0.959)	10633	0.20000	0.2017
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	11.489	11.489	(0.976)	14498	0.40000	0.3198
	26 1,2,4-Trichlorobenzene	180	11.685	11.685	(0.993)	11312	0.20000	0.2125
*	27 Naphthalene-d8	136	11.770	11.770	(1.000)	622719	4.00000	
	28 Naphthalene	128	11.816	11.816	(1.004)	34693	0.20000	0.2103
	29 4-Chloroaniline	127	11.940	11.940	(1.014)	23161	0.40000	0.3599
	30 Hexachlorobutadiene	225	12.172	12.172	(1.034)	6358	0.20000	0.2039
	31 4-Chloro-3-methylphenol	107	12.876	12.876	(1.094)	15112	0.40000	0.3079
	32 2-Methylnaphthalene	142	13.201	13.201	(1.122)	23564	0.20000	0.1979
	33 Hexachlorocyclopentadiene	237	13.665	13.665	(0.888)	8871	0.40000	0.2963

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
34	2,4,6-Trichlorophenol	196	13.820	13.820	(0.898)	8113	0.40000	0.2538
35	2,4,5-Trichlorophenol	196	13.890	13.890	(0.903)	10952	0.40000	0.3083
$ 36	2-Fluorobiphenyl	172	13.975	13.975	(0.908)	26256	0.20000	0.2052
37	2-Chloronaphthalene	162	14.191	14.191	(0.923)	21320	0.20000	0.2058
38	2-Nitroaniline	65	14.447	14.447	(0.939)	7997	0.40000	0.2748
39	Dimethylphthalate	163	14.873	14.873	(0.967)	21402	0.20000	0.2037
40	Acenaphthylene	152	15.066	15.066	(0.979)	30956	0.20000	0.1918
41	2,6-Dinitrotoluene	165	15.012	15.012	(0.976)	6371	0.40000	0.2807
* 42	Acenaphthene-d10	164	15.383	15.383	(1.000)	323444	4.00000	
43	3-Nitroaniline	138	15.298	15.298	(0.994)	6696	0.40000	0.2614
44	Acenaphthene	153	15.445	15.445	(1.004)	20741	0.20000	0.2080
45	2,4-Dinitrophenol	184	15.515	15.515	(1.009)	447	0.80000	0.03263
46	Dibenzofuran	168	15.770	15.770	(1.025)	29705	0.20000	0.2020
47	4-Nitrophenol	109	15.592	15.592	(1.014)	2336	0.40000	0.1450
48	2,4-Dinitrotoluene	165	15.816	15.817	(1.028)	7302	0.40000	0.2127
50	Diethylphthalate	149	16.319	16.319	(1.061)	19430	0.20000	0.1885
49	Fluorene	166	16.481	16.481	(1.071)	22739	0.20000	0.1965
51	4-Chlorophenyl-phenylether	204	16.466	16.466	(1.070)	11288	0.20000	0.2052
52	4-Nitroaniline	138	16.566	16.566	(1.077)	6775	0.40000	0.2934
53	4,6-Dinitro-2-methylphenol	198	16.658	16.658	(0.904)	3116	0.80000	0.1772
54	N-Nitrosodiphenylamine	169	16.712	16.712	(0.907)	15391	0.20000	0.1978
$ 55	2,4,6-Tribromophenol	330	17.021	17.021	(1.106)	2409	0.30000	0.1583
56	4-Bromophenyl-phenylether	248	17.476	17.476	(0.949)	5757	0.20000	0.1768
57	Hexachlorobenzene	284	17.793	17.793	(0.966)	7271	0.20000	0.2130
58	Pentachlorophenol	266	18.149	18.149	(0.985)	2441	0.40000	0.1209
* 59	Phenanthrene-d10	188	18.420	18.420	(1.000)	582036	4.00000	
60	Phenanthrene	178	18.466	18.466	(1.003)	32949	0.20000	0.2076
61	Anthracene	178	18.559	18.559	(1.008)	27813	0.20000	0.1827
62	Carbazole	167	18.884	18.884	(1.025)	25881	0.20000	0.1897
63	Di-n-butylphthalate	149	19.665	19.666	(1.068)	22443	0.20000	0.1223
64	Fluoranthene	202	20.841	20.841	(0.889)	30231	0.20000	0.1696
65	Pyrene	202	21.267	21.267	(0.907)	32288	0.20000	0.1766
$ 66	Terphenyl-d14	244	21.538	21.538	(0.918)	26268	0.20000	0.1913
67	Butylbenzylphthalate	149	22.459	22.460	(0.958)	7408	0.20000	0.1154
68	Benzo(a)anthracene	228	23.419	23.419	(0.999)	30301	0.20000	0.1936
* 69	Chrysene-d12	240	23.450	23.450	(1.000)	443504	4.00000	
70	3,3'-Dichlorobenzidine	252	23.373	23.373	(0.997)	21879	0.60000	0.4363
71	Chrysene	228	23.489	23.489	(1.002)	30146	0.20000	0.1971
72	bis(2-Ethylhexyl)phthalate	149	23.473	23.474	(0.959)	9248	0.20000	0.1169
* 134	Di-n-octylphthalate-d4	153	24.480	24.480	(1.000)	540769	4.00000	
73	Di-n-octylphthalate	149	24.488	24.488	(1.000)	30690	0.20000	0.2169
74	Benzo(b)fluoranthene	252	25.362	25.362	(0.969)	28924	0.20000	0.1818(H)
75	Benzo(k)fluoranthene	252	25.409	25.409	(0.970)	32537	0.20000	0.2014
76	Benzo(a)pyrene	252	26.052	26.052	(0.995)	24358	0.20000	0.1713
* 77	Perylene-d12	264	26.183	26.183	(1.000)	490725	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	28.990	28.990	(1.107)	27518	0.20000	0.1521
79	Dibenzo(a,h)anthracene	278	29.005	29.005	(1.108)	22711	0.20000	0.1512
80	Benzo(g,h,i)perylene	276	29.821	29.821	(1.139)	24036	0.20000	0.1535
90	N-Nitrosodimethylamine	74	4.936	4.936	(0.531)	13409	0.40000	0.4009
91	Aniline	93	8.752	8.752	(0.942)	29775	0.40000	0.4065
93	Benzidine	184	21.066	21.066	(0.898)	16630	0.40000	0.2272
103	Pyridine	79	4.997	4.997	(0.538)	19539	0.40000	0.3803
105	1-methylnaphthalene	142	13.425	13.425	(1.141)	21820	0.20000	0.2000
111	Azobenzene (1,2-DP-Hydrazine)	77	16.789	16.789	(1.091)	22091	0.20000	0.1918

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.409	25.409	(0.970)	58677	0.40000	0.3820
120 2,3,4,6-Tetrachlorophenol	232	16.102	16.103	(1.047)	3113	0.20000	0.09564

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031508.D
Lab Smp Id: SLC0228-CAL1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 21:50
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	171542	85771	343084	173382	1.07
27 Naphthalene-d8	624466	312233	1248932	622719	-0.28
42 Acenaphthene-d10	337226	168613	674452	323444	-4.09
59 Phenanthrene-d10	572849	286425	1145698	582036	1.60
69 Chrysene-d12	347068	173534	694136	443504	27.79
134 Di-n-octylphthala	500317	250159	1000634	540769	8.09
77 Perylene-d12	421549	210775	843098	490725	16.41

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.29	-0.08
27 Naphthalene-d8	11.78	11.28	12.28	11.77	-0.06
42 Acenaphthene-d10	15.38	14.88	15.88	15.38	0.01
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.45	0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.48	0.00
77 Perylene-d12	26.18	25.68	26.68	26.18	0.00

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

REVIEW SUMMARY FOR FILE - NT10031508.D

Lab ID: SLC0228-CAL1
nt10.i, 20230315.b\ABN.m,   16-MAR-2023 00:22

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

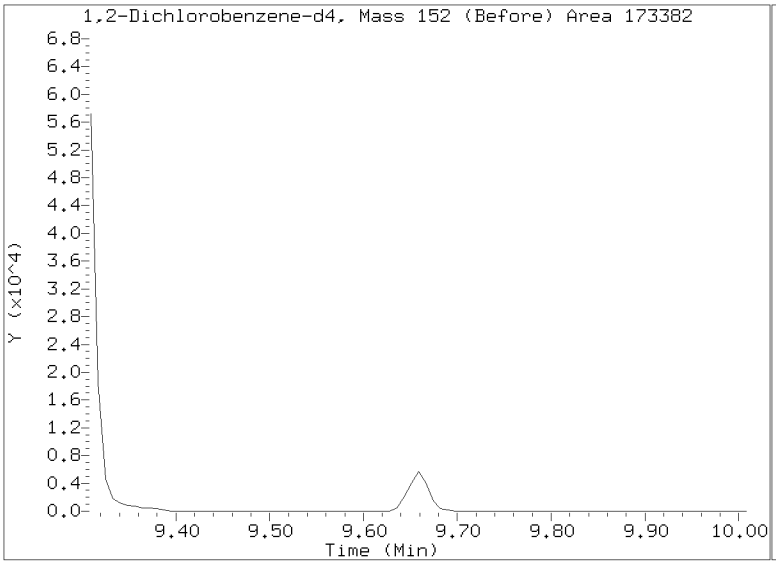
RRT check based on Ccal File: NT10031508.D

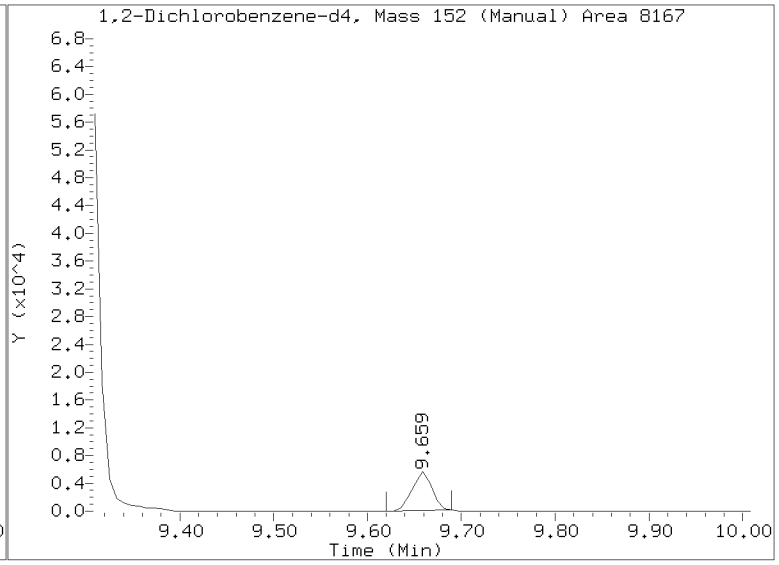
On Column LOD for nt10.i, 20230315.b\ABN.m, ICAL.sub = 0.0000

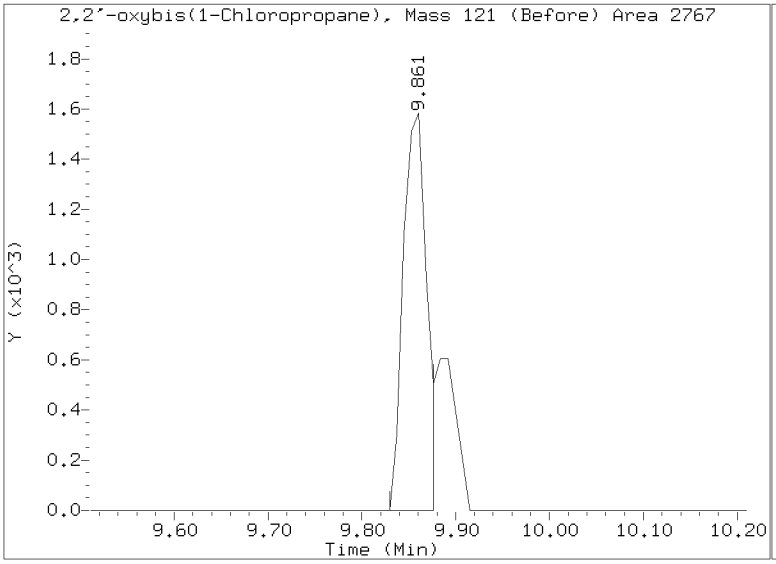
* Only compounds listed in the work order have been verified by the analyst *

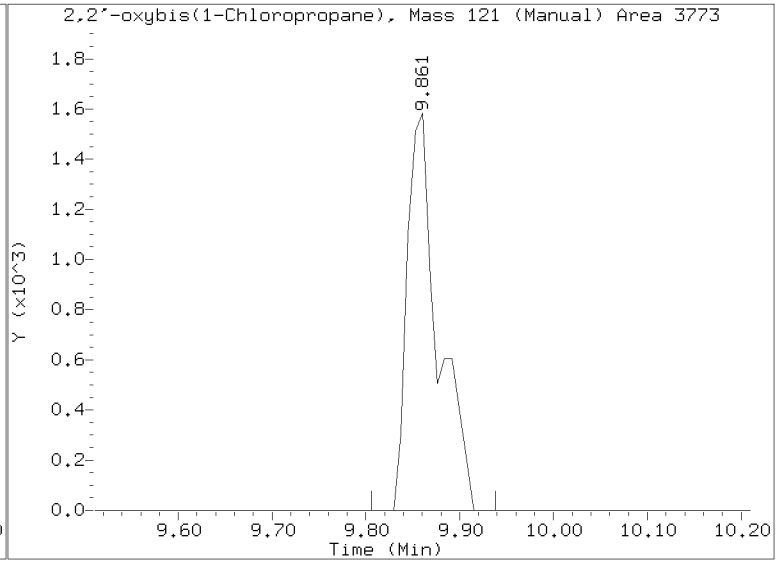
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230315.b/NT10031508.D
Injection Date: 16-MAR-2023 00:22
Lab ID:SLC0228-CAL1 Client ID:
Report Date: 03/16/2023 12:20









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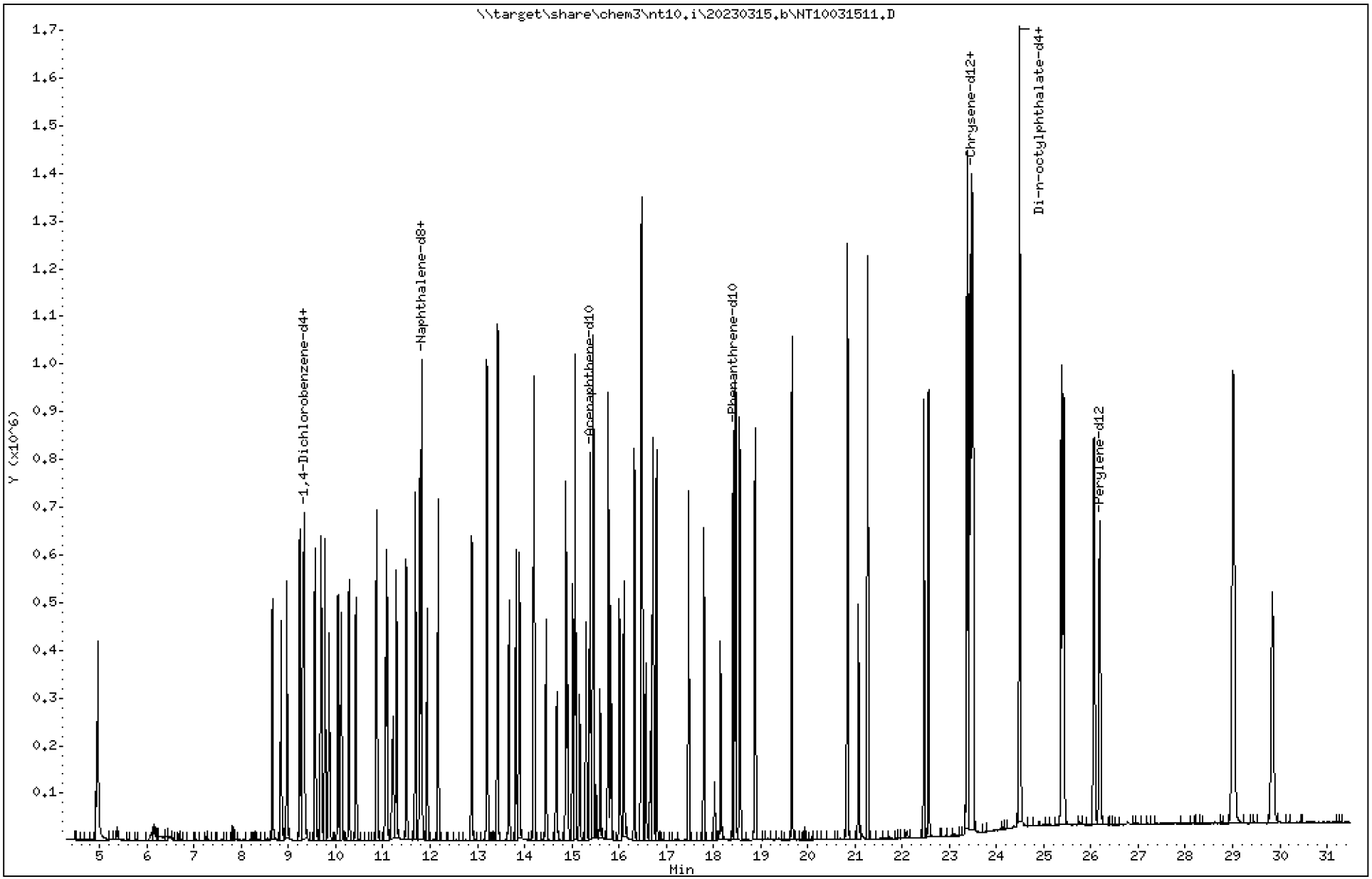
Date : 16-MAR-2023 02:16
Client ID:
Sample Info: SLC0228-SCV1

Column phase: ZB-5msi

Instrument: nt10.i

Operator: VTS
Column diameter: 0.25



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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

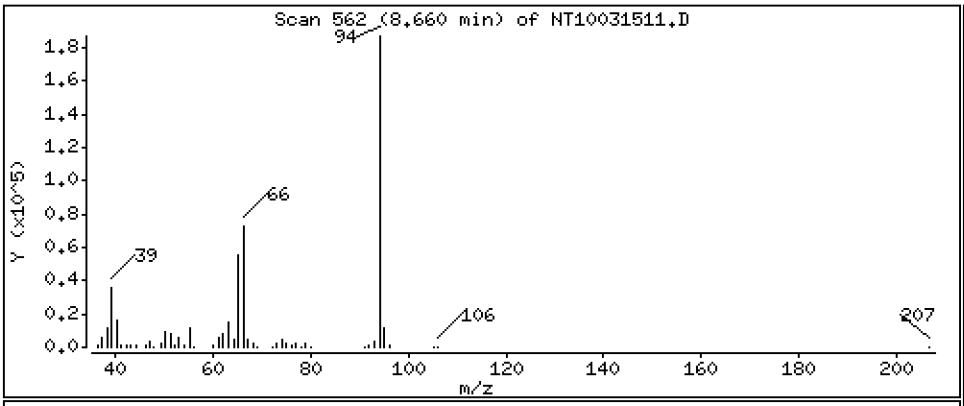
Operator: VTS

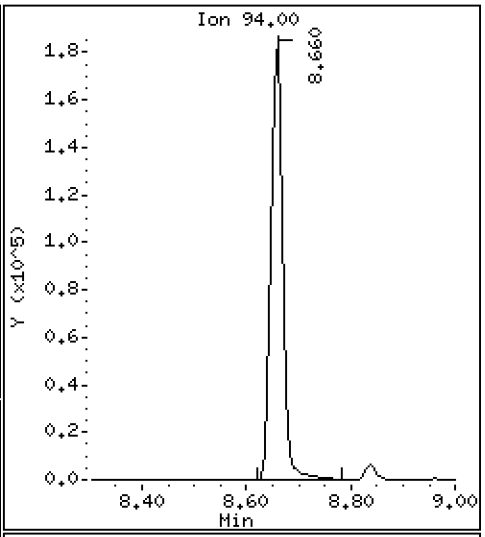
Column phase: ZB-5msi

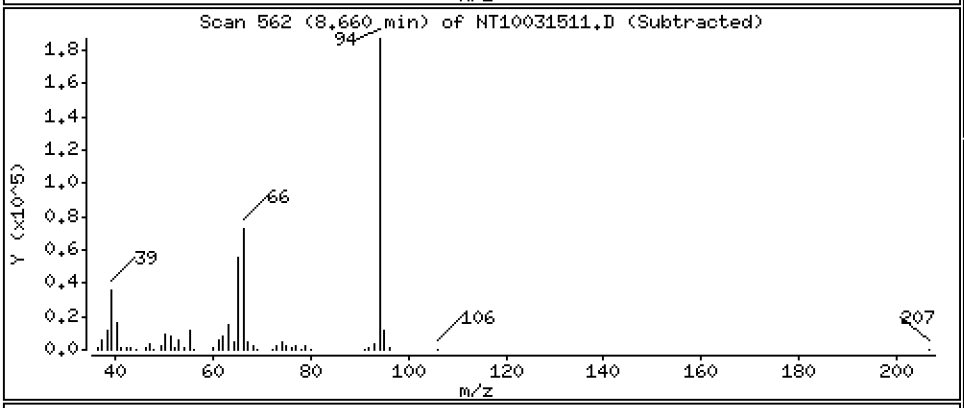
Column diameter: 0.25

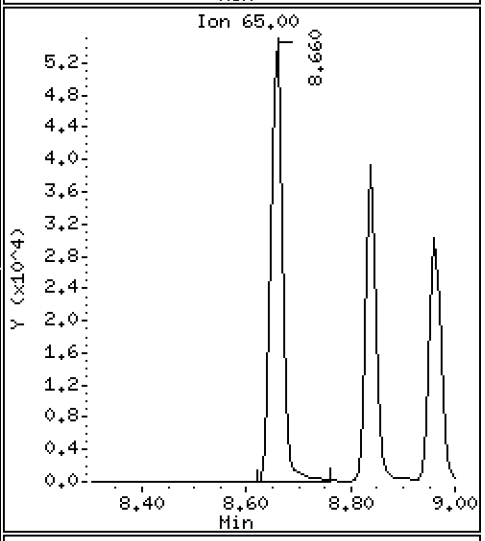
3 Phenol

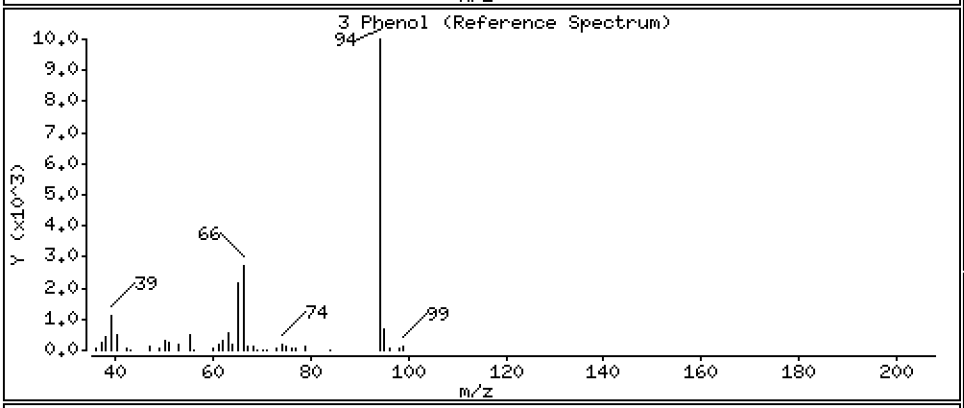
Concentration: 4.412 ug/mL

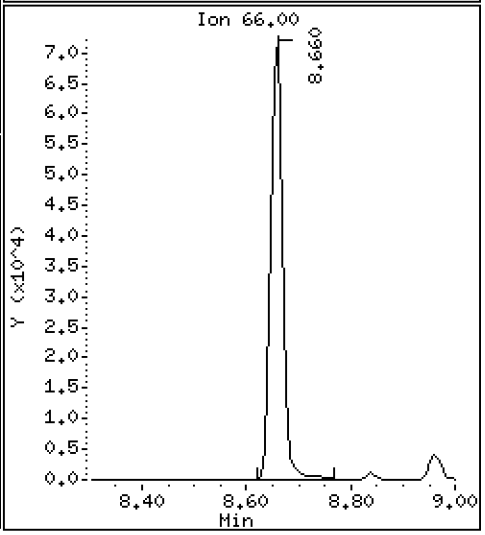


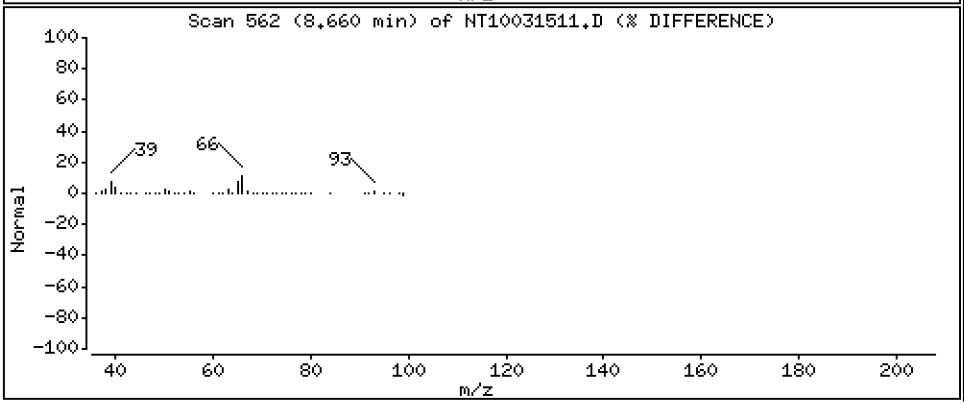












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

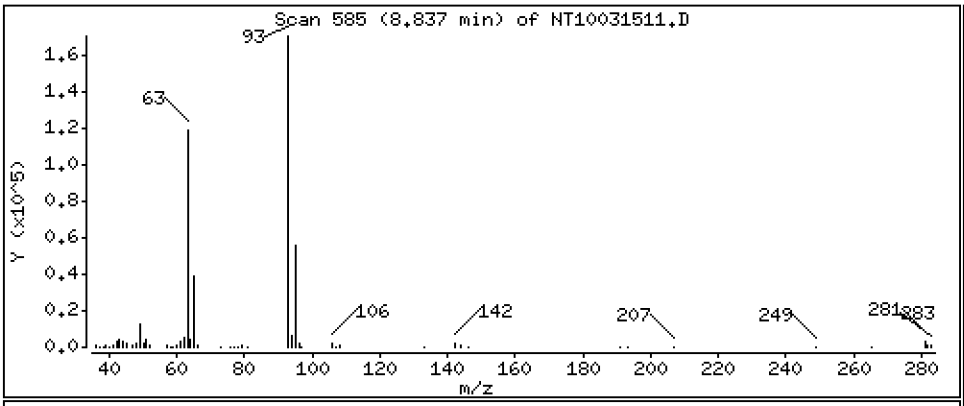
Operator: VTS

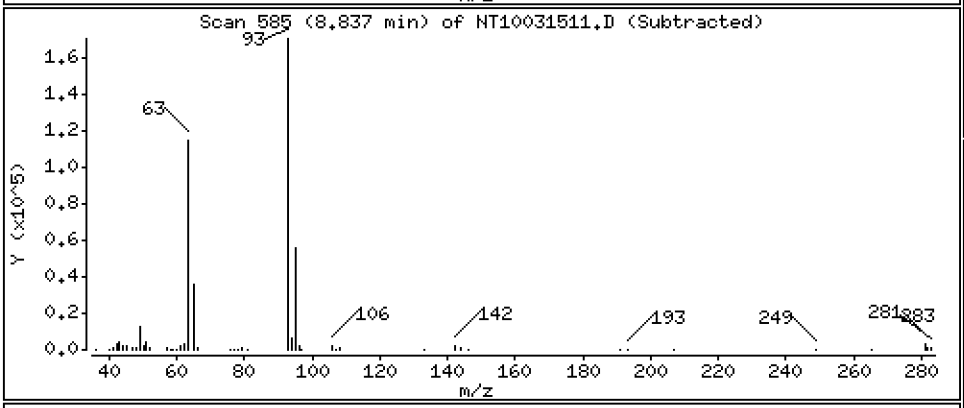
Column phase: ZB-5msi

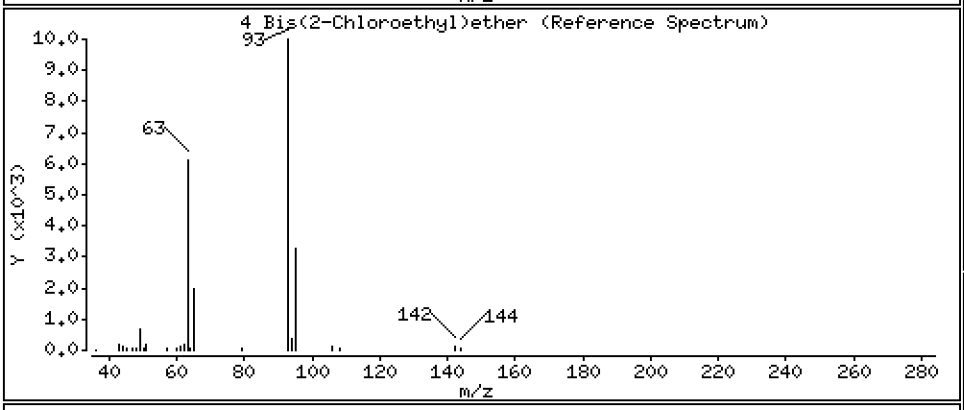
Column diameter: 0.25

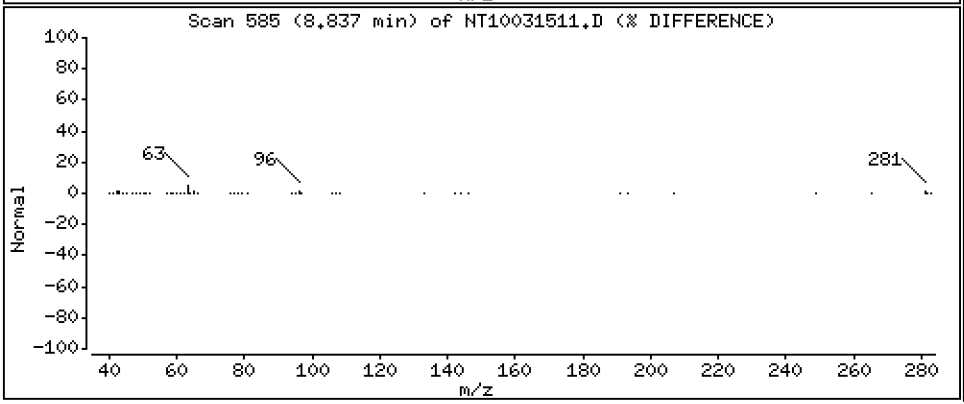
4 Bis(2-Chloroethyl)ether

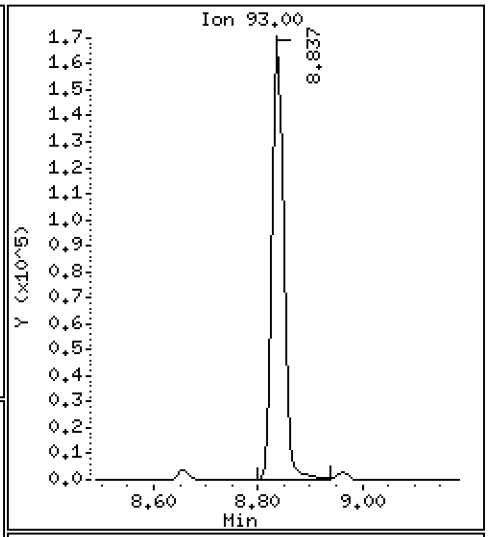
Concentration: 5.258 ug/mL

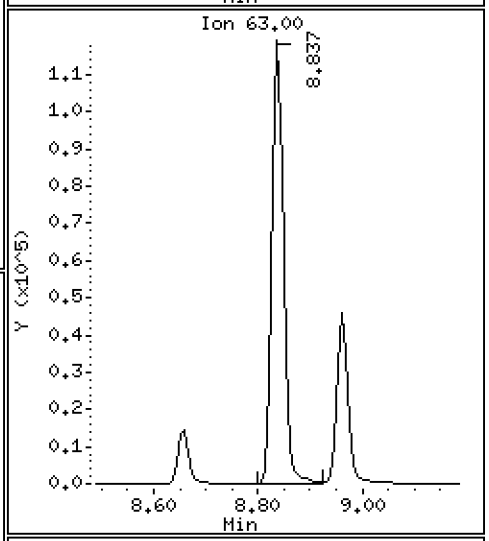


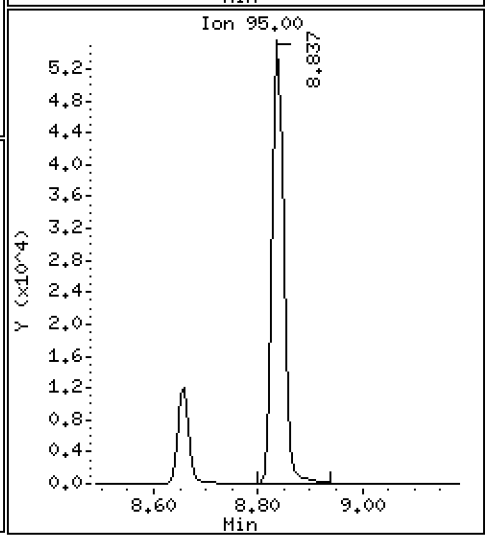












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

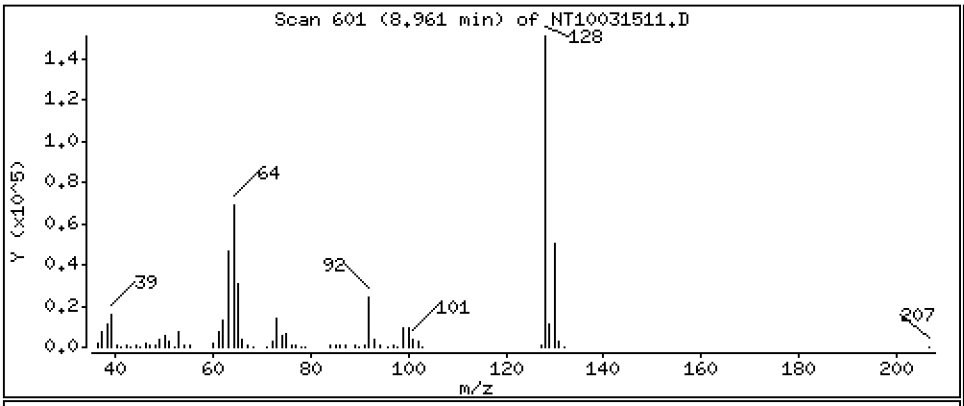
Operator: VTS

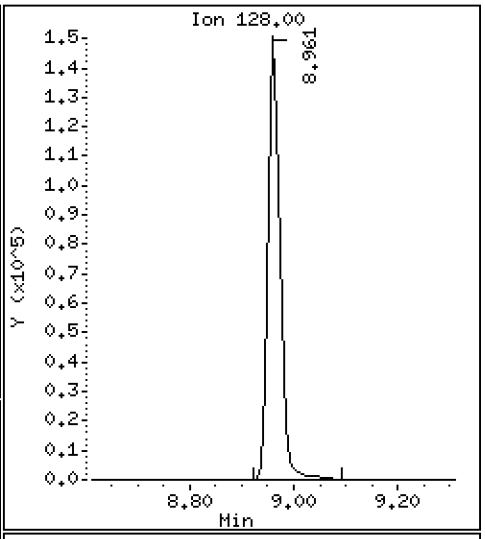
Column phase: ZB-5msi

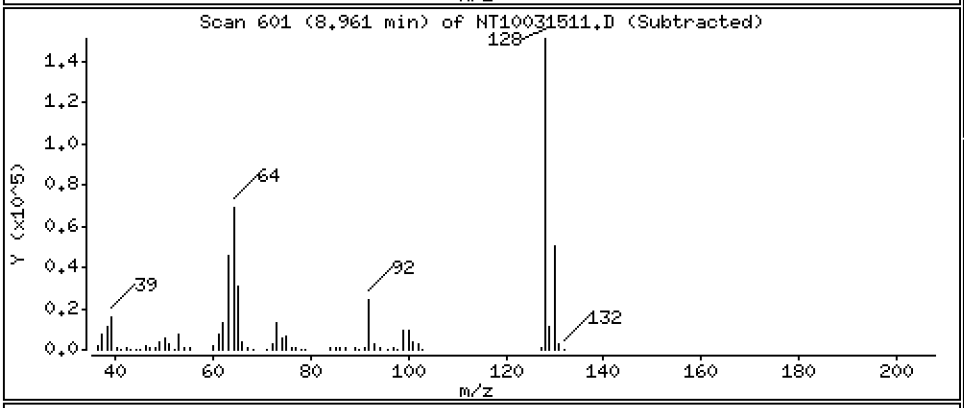
Column diameter: 0.25

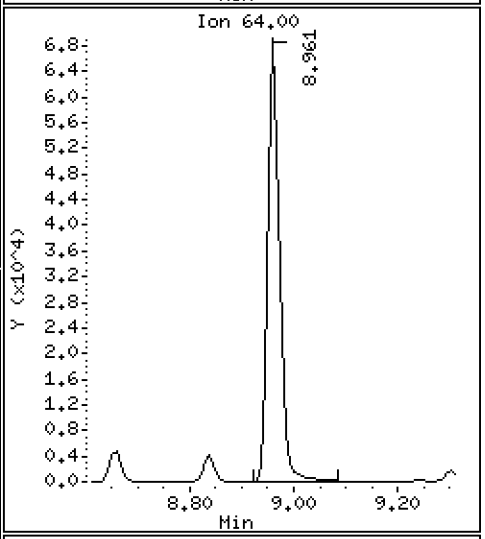
6 2-Chlorophenol

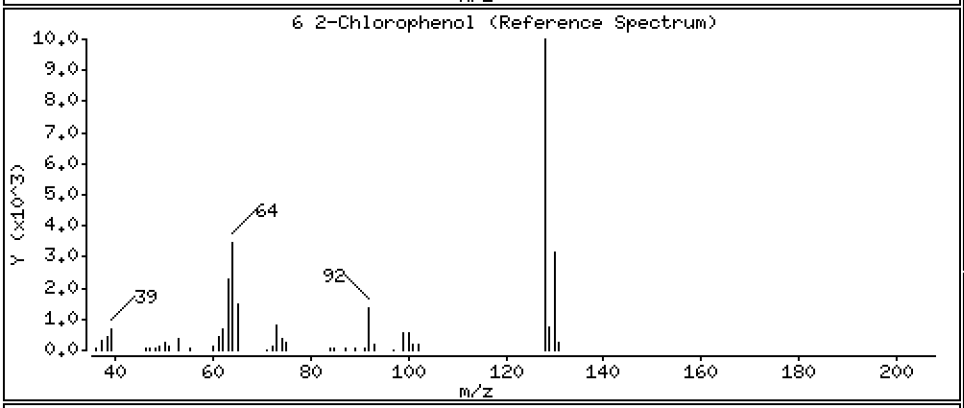
Concentration: 4.277 ug/mL

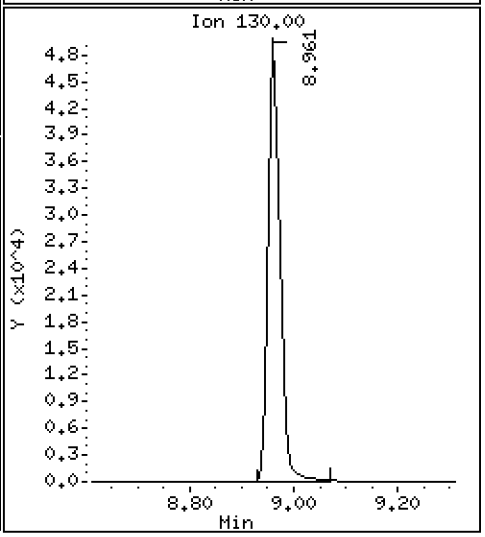


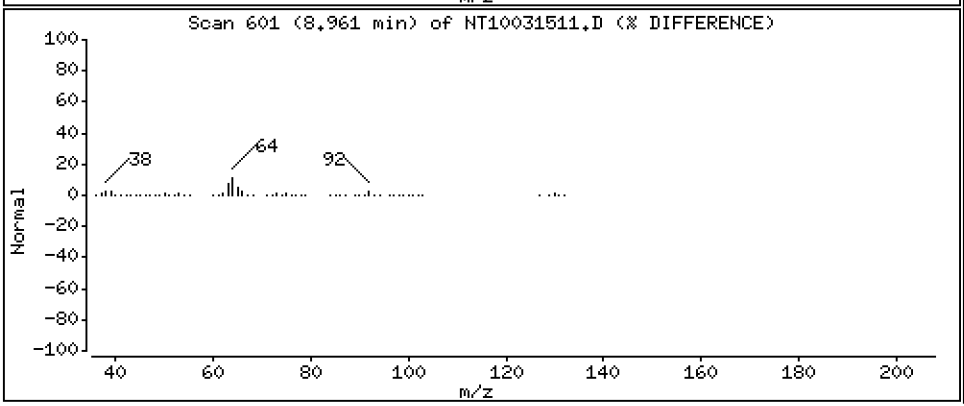












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

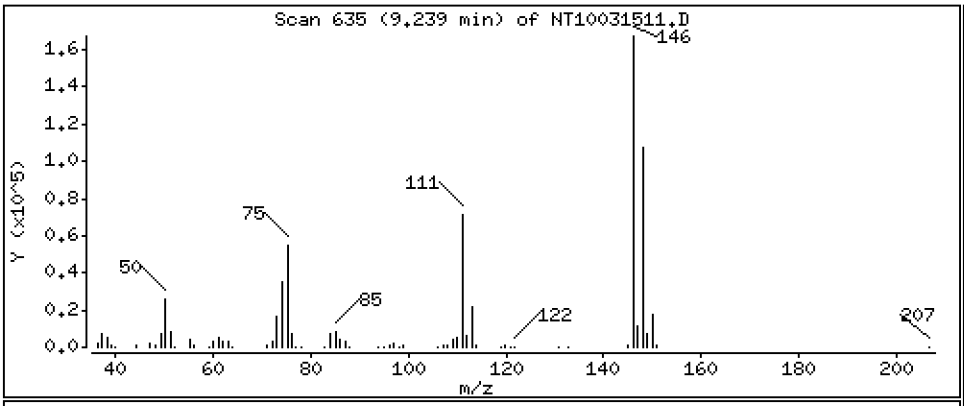
Operator: VTS

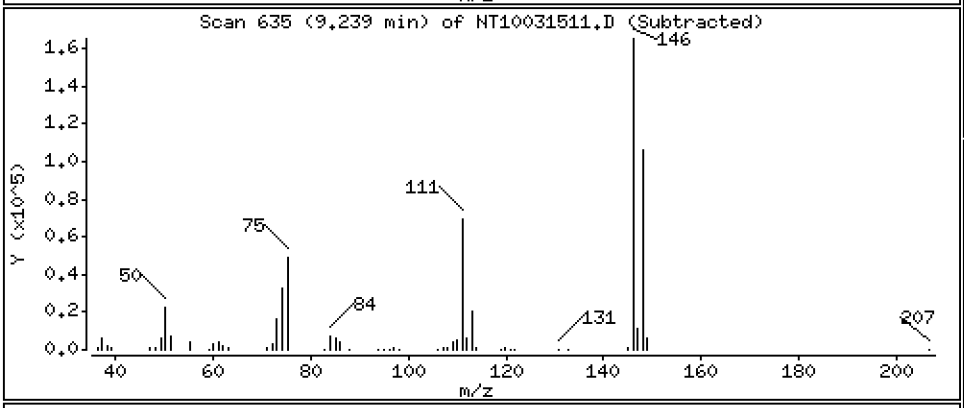
Column phase: ZB-5msi

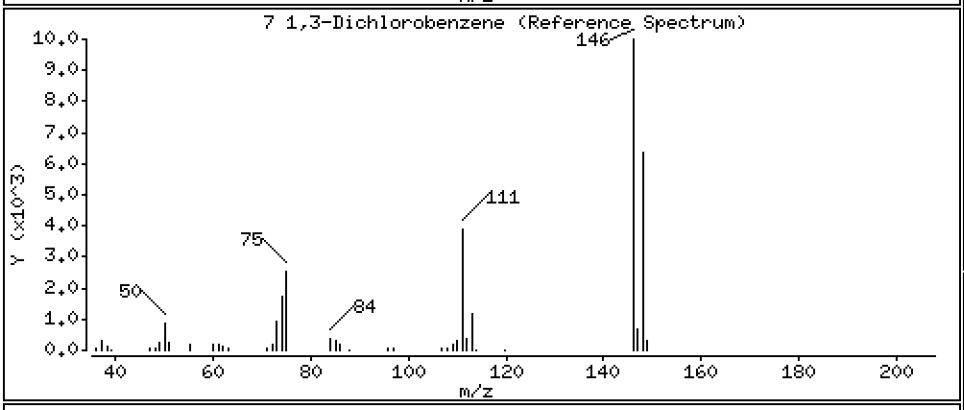
Column diameter: 0.25

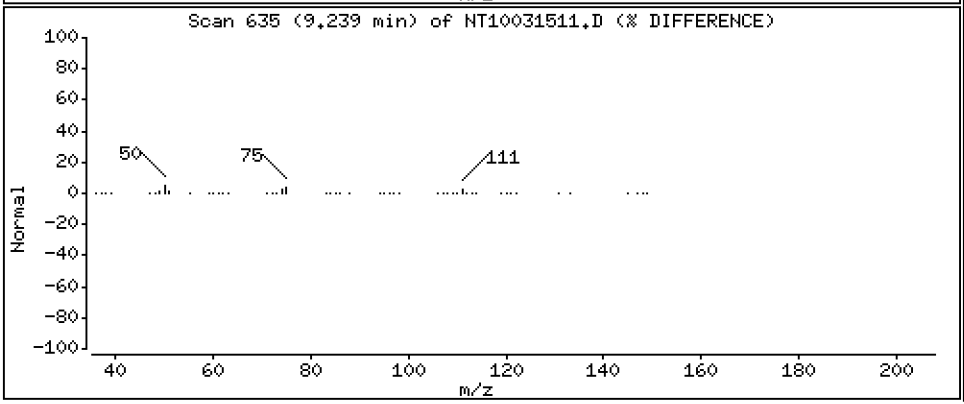
7 1,3-Dichlorobenzene

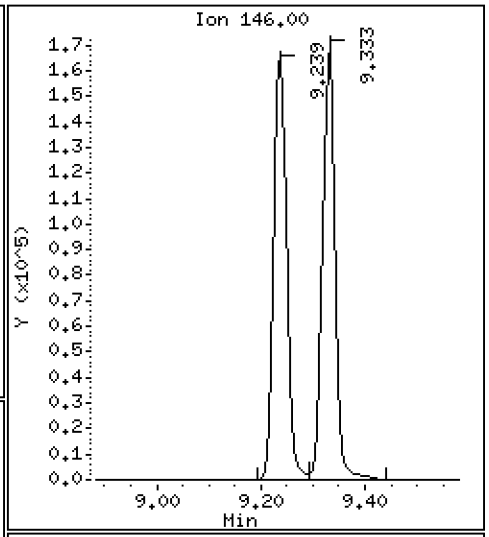
Concentration: 4.772 ug/mL

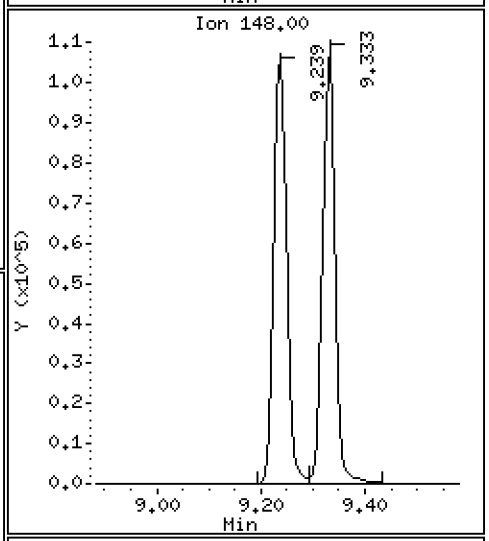


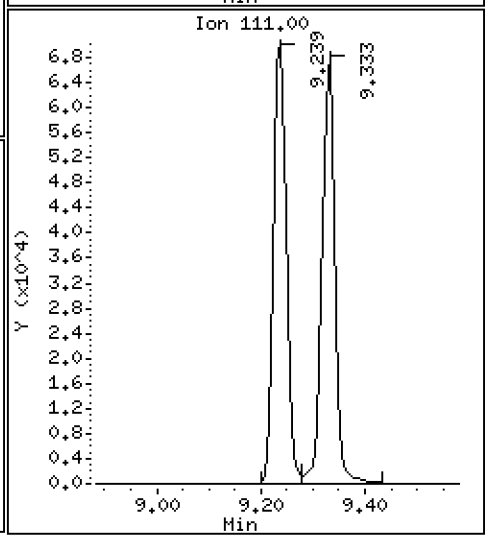












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

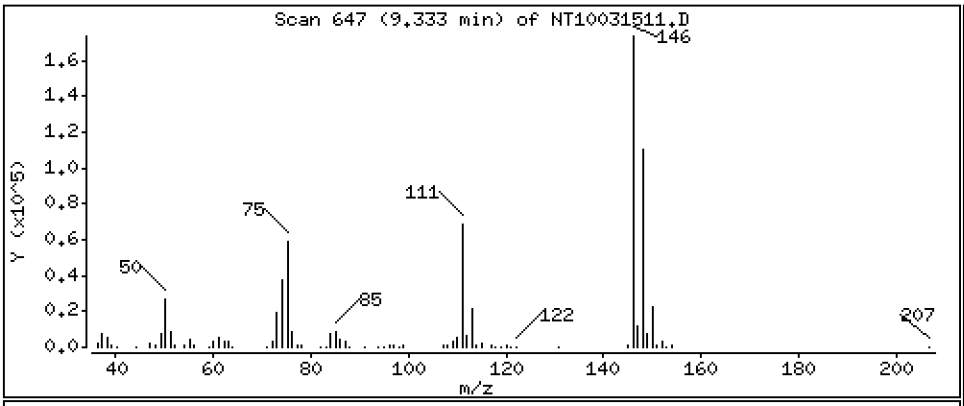
Operator: VTS

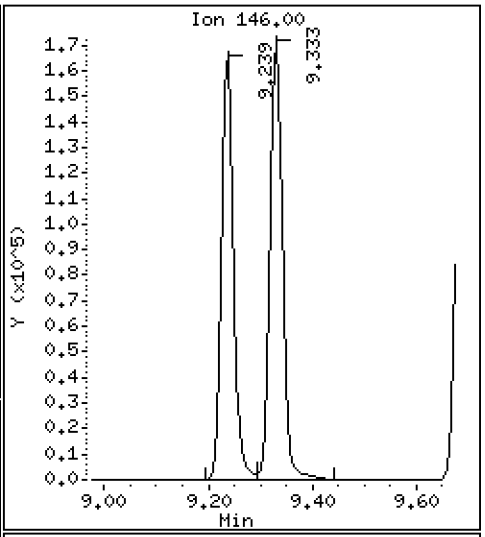
Column phase: ZB-5msi

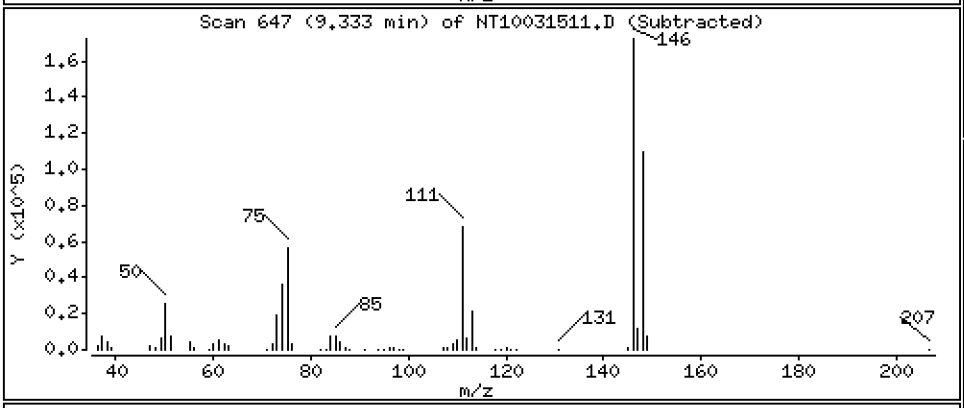
Column diameter: 0.25

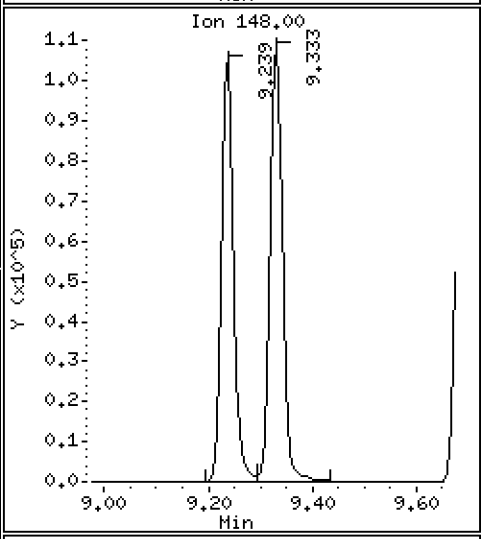
9 1,4-Dichlorobenzene

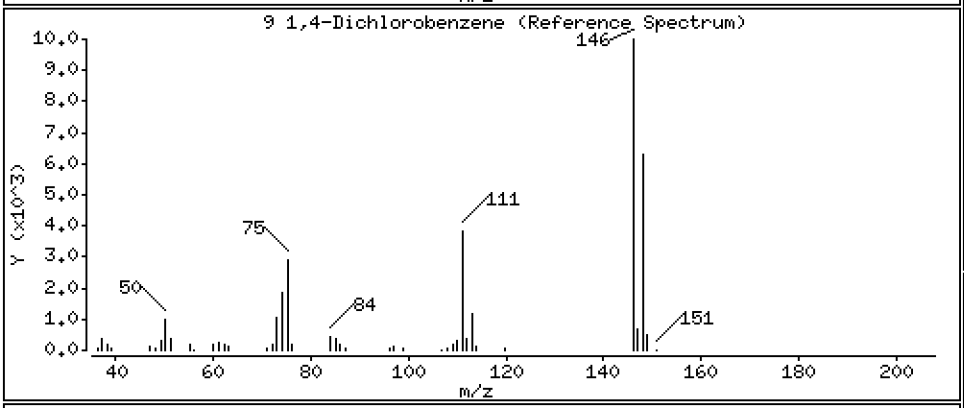
Concentration: 4.913 ug/mL

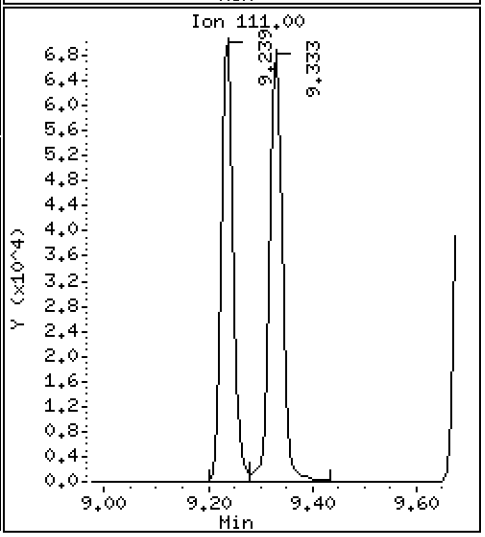


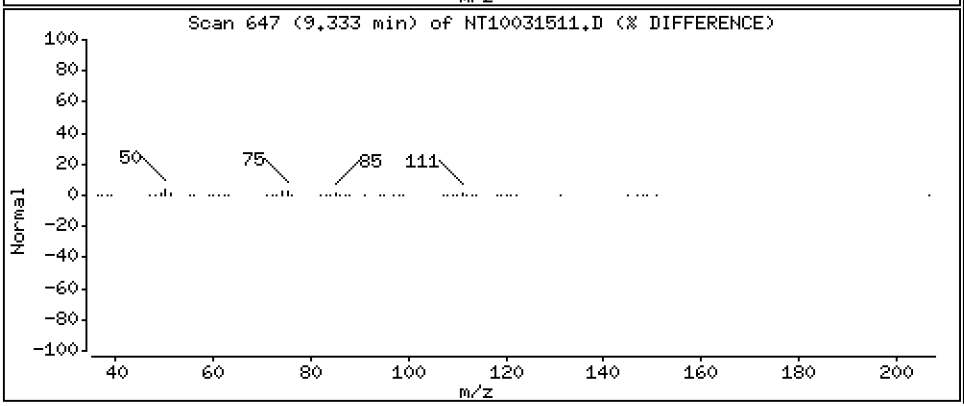












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

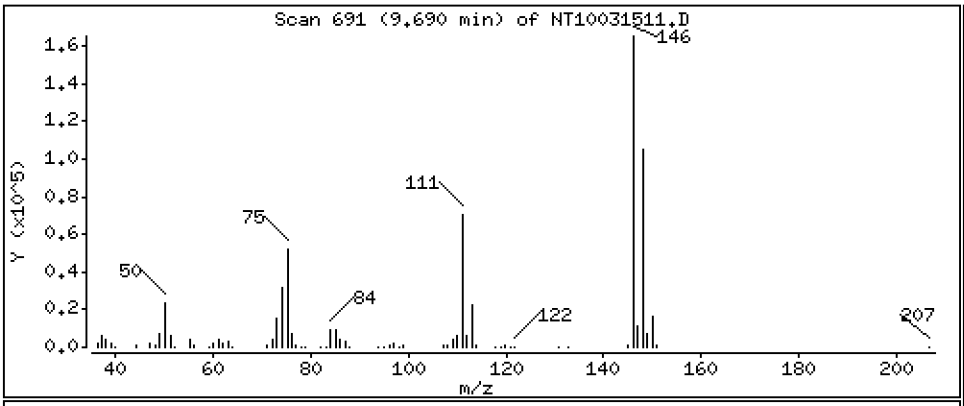
Operator: VTS

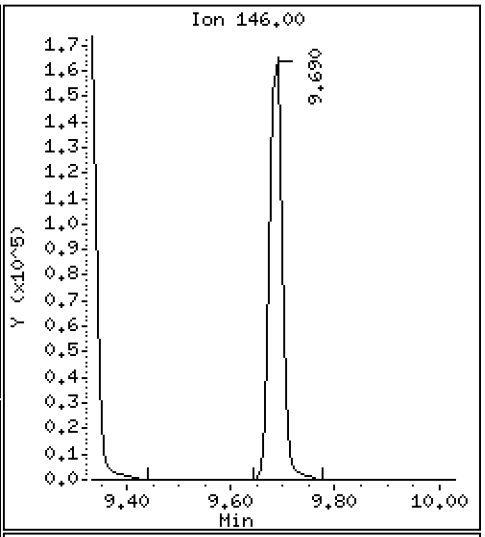
Column phase: ZB-5msi

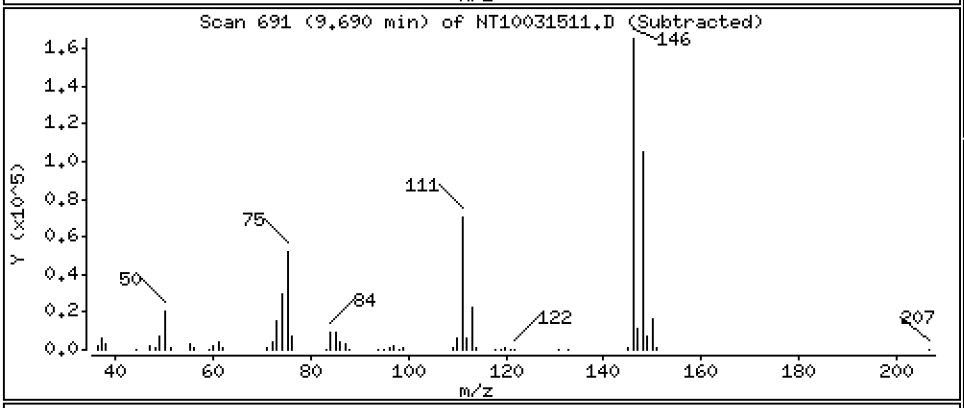
Column diameter: 0.25

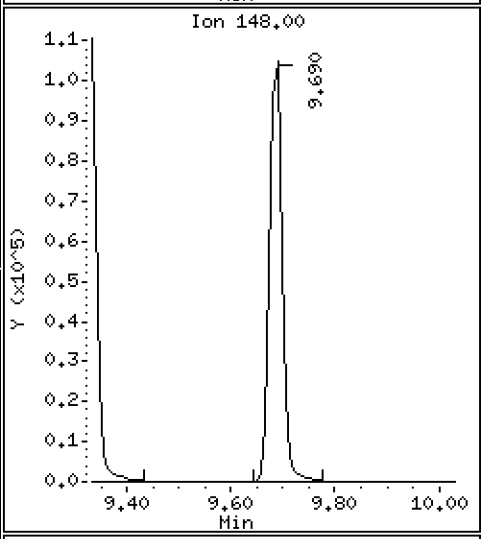
12 1,2-Dichlorobenzene

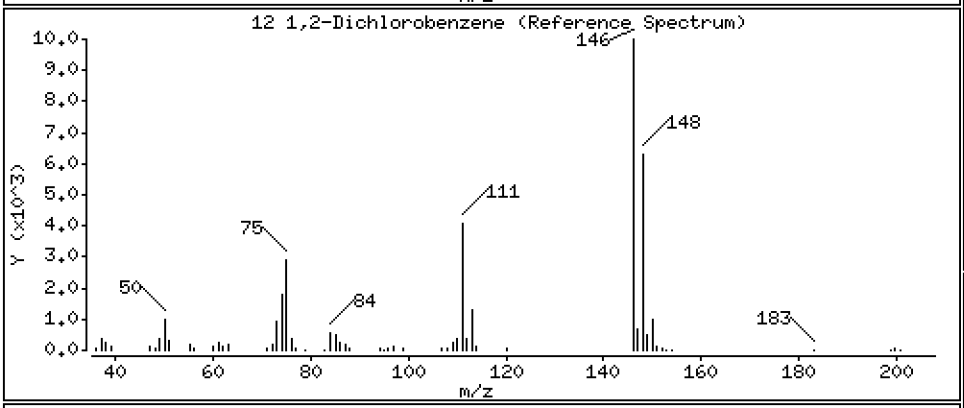
Concentration: 4.882 ug/mL

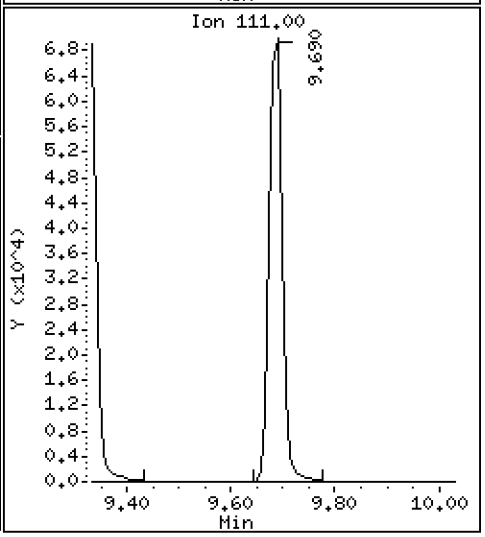


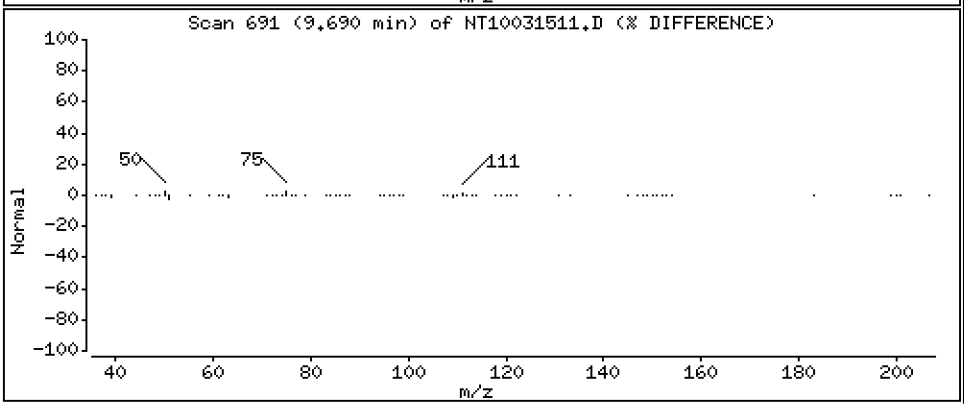












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

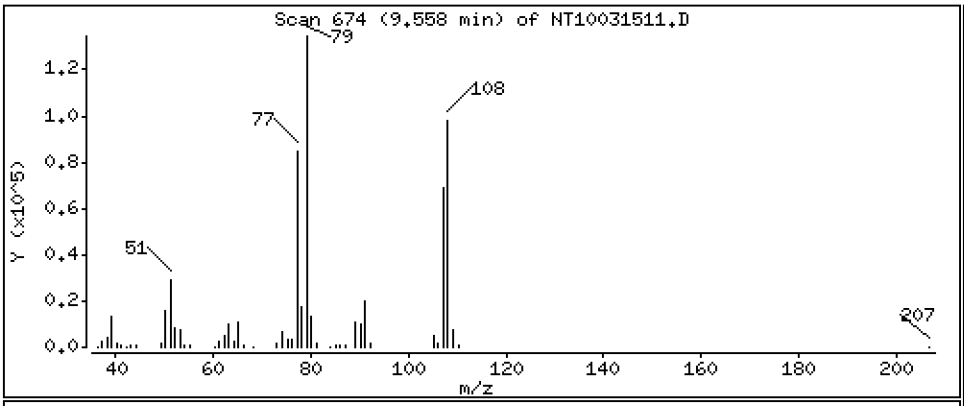
Operator: VTS

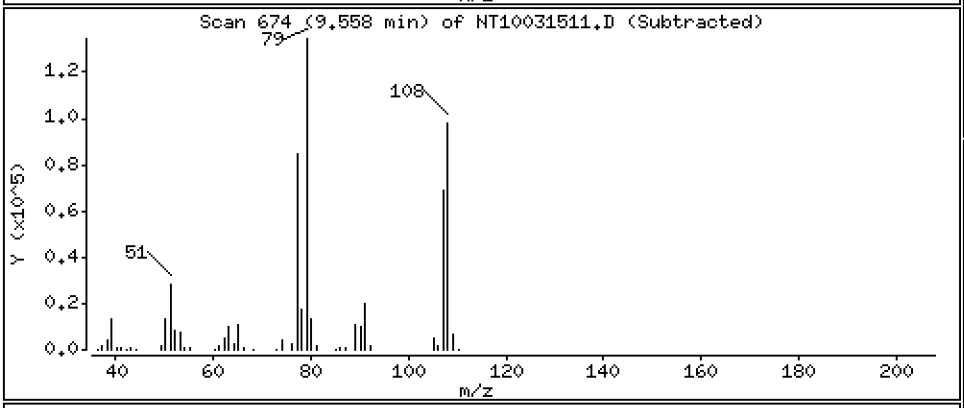
Column phase: ZB-5msi

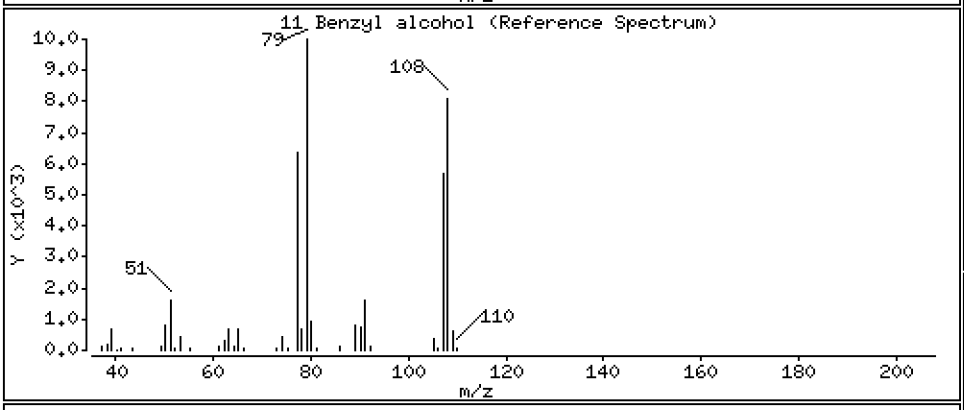
Column diameter: 0.25

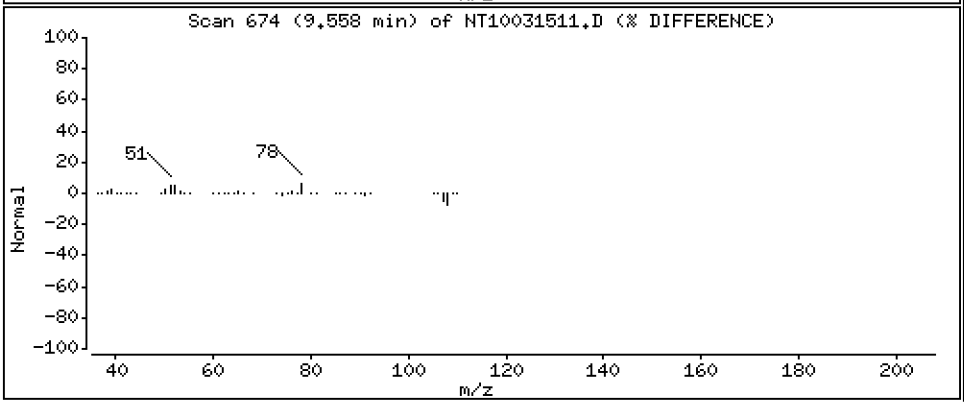
11 Benzyl alcohol

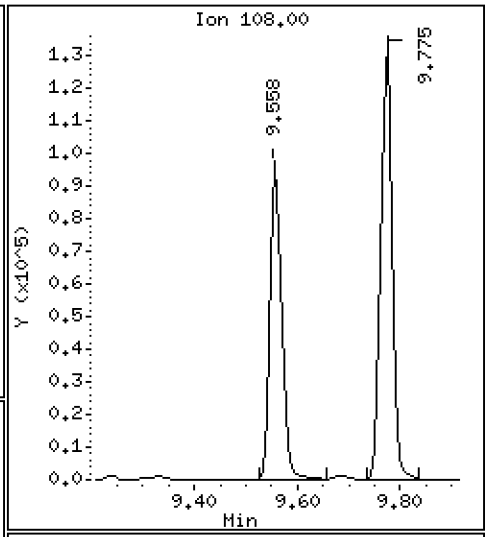
Concentration: 4.927 ug/mL

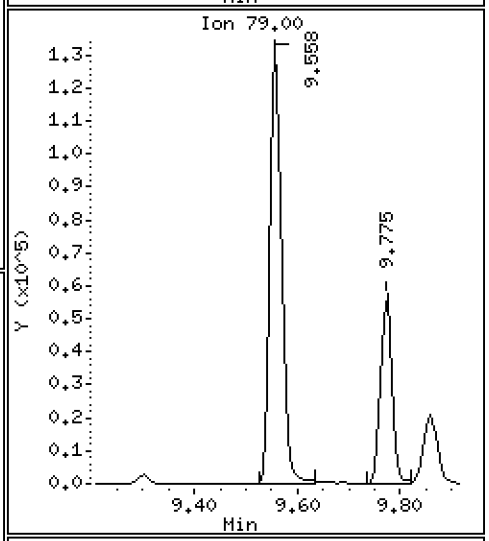


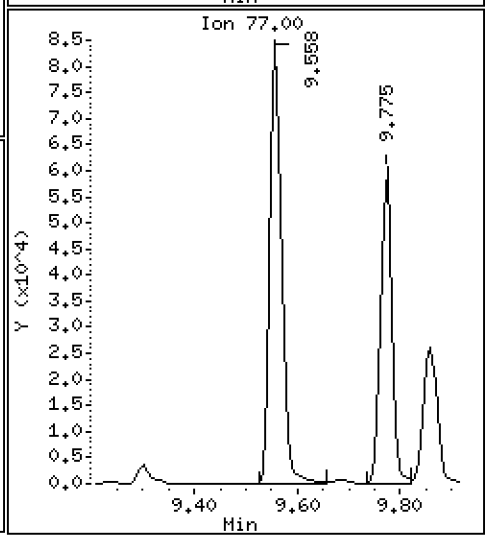












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

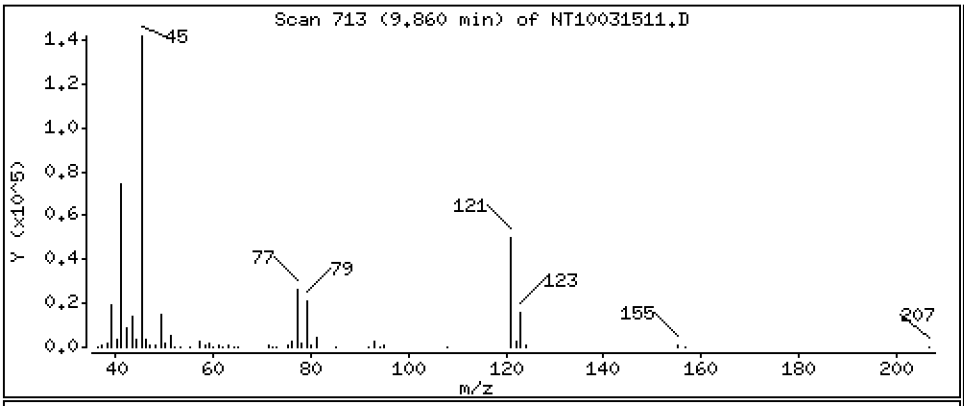
Operator: VTS

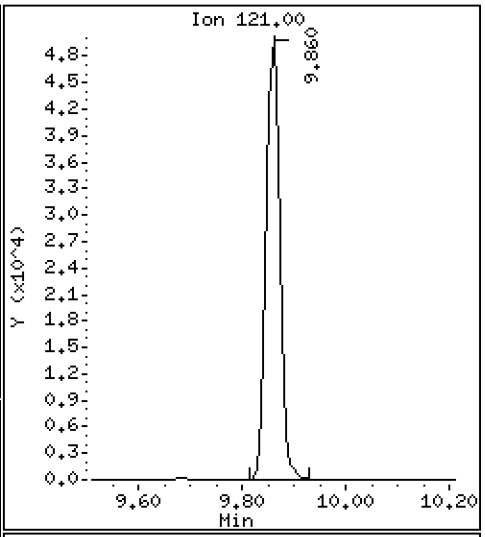
Column phase: ZB-5msi

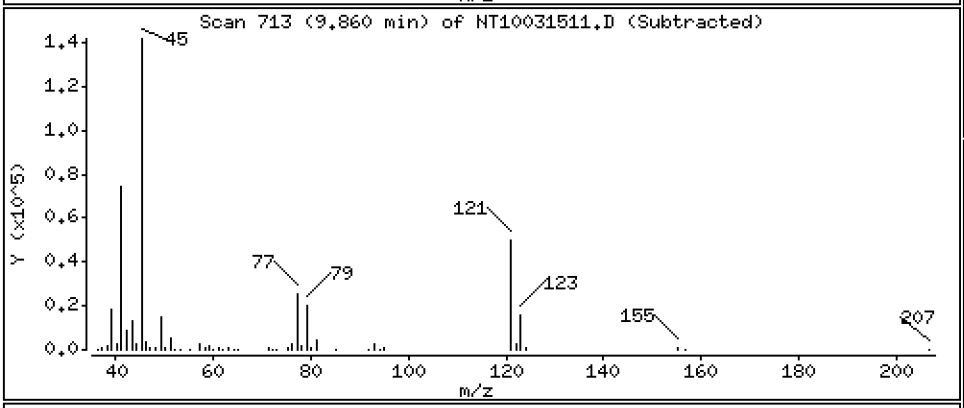
Column diameter: 0.25

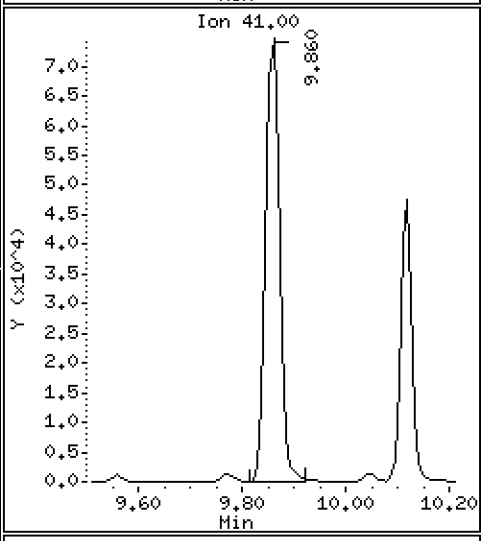
14 2,2'-oxybis(1-Chloropropane)

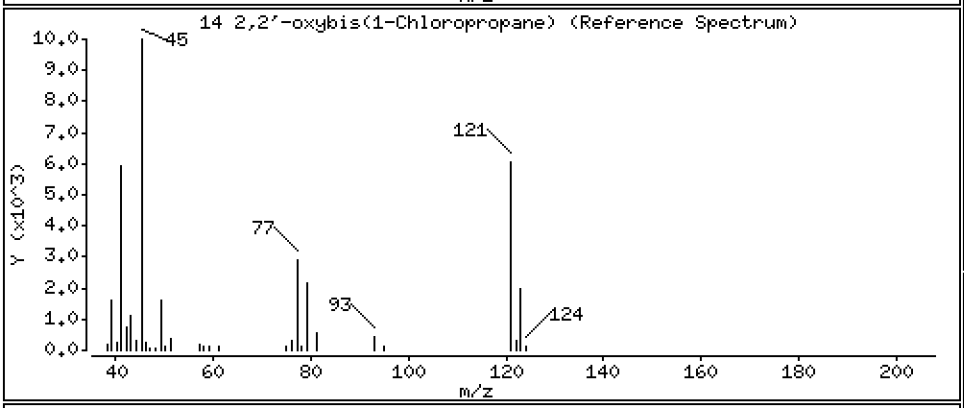
Concentration: 6.214 ug/mL

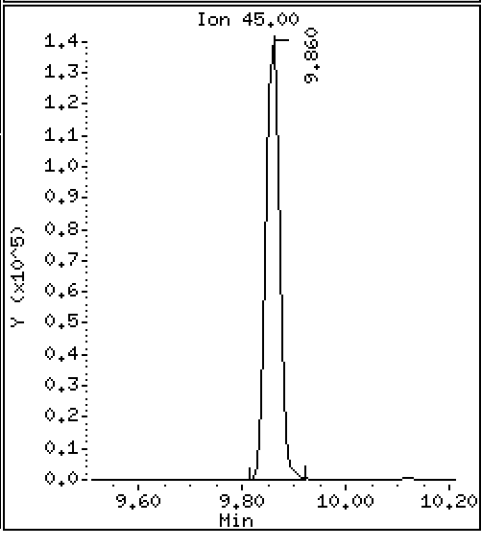


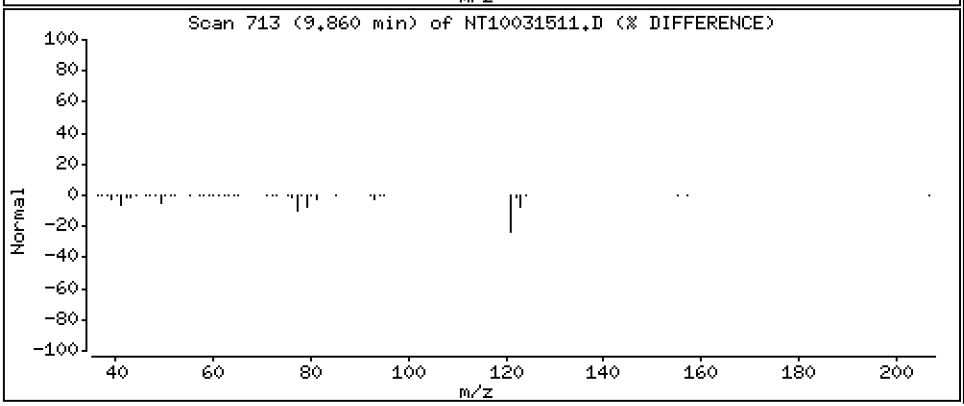












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

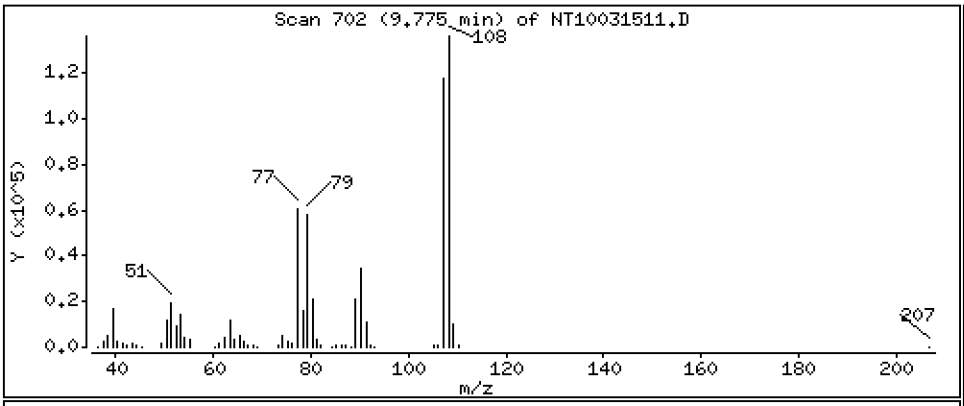
Operator: VTS

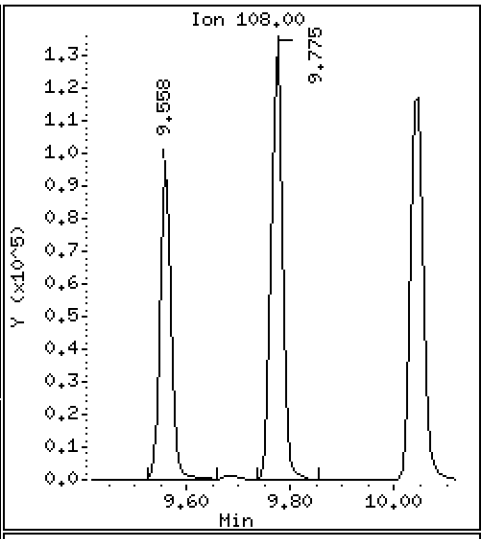
Column phase: ZB-5msi

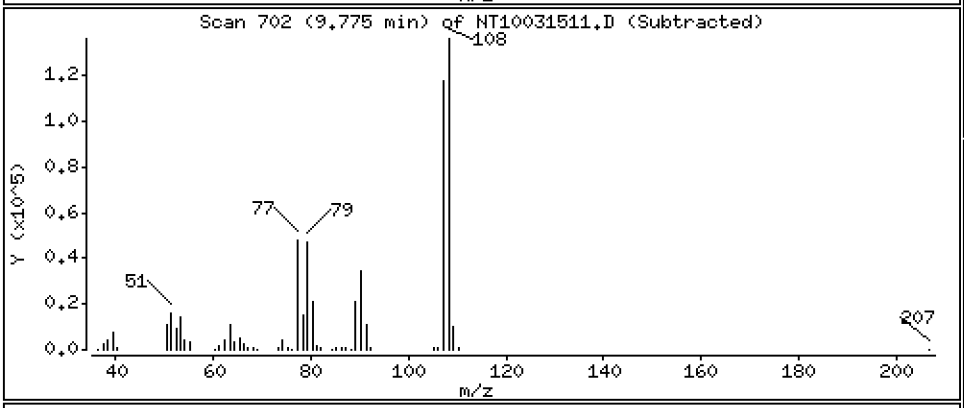
Column diameter: 0.25

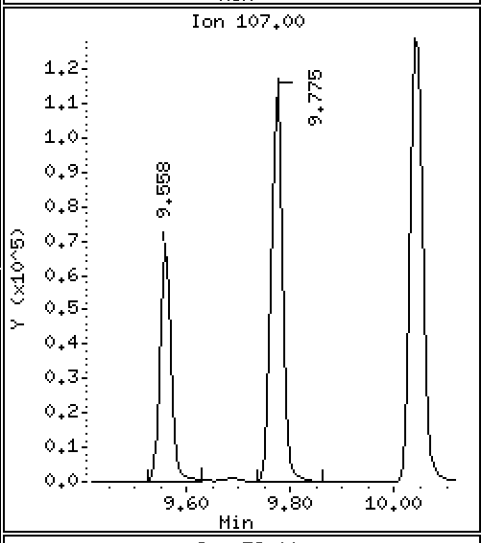
13 2-Methylphenol

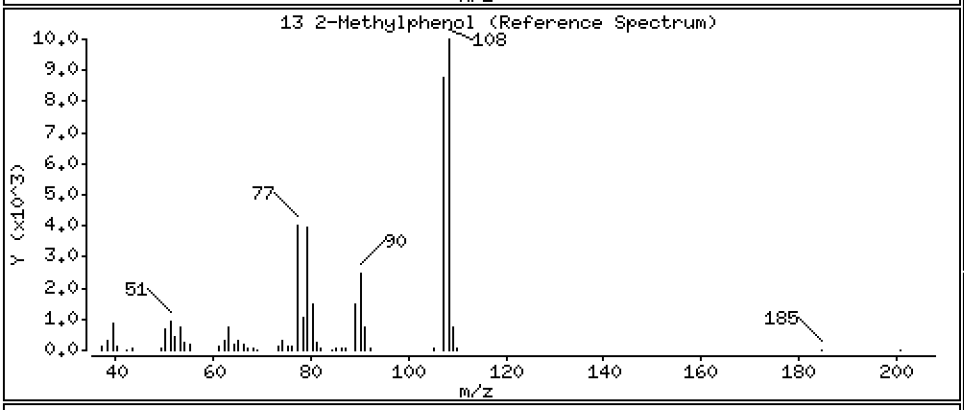
Concentration: 4.215 ug/mL

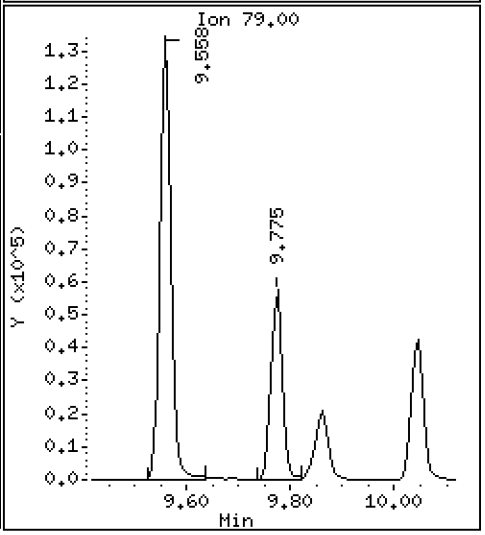


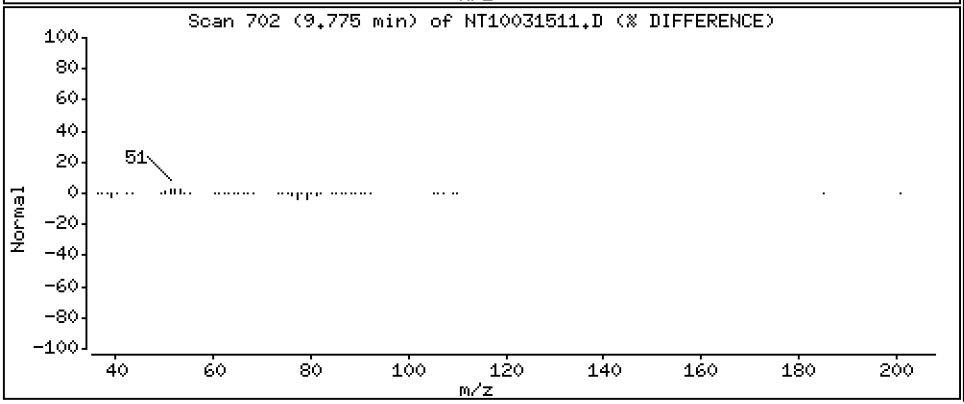












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

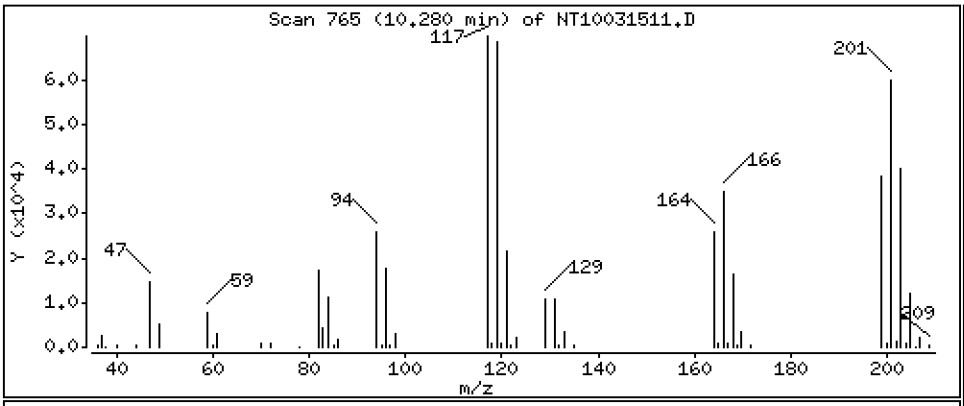
Operator: VTS

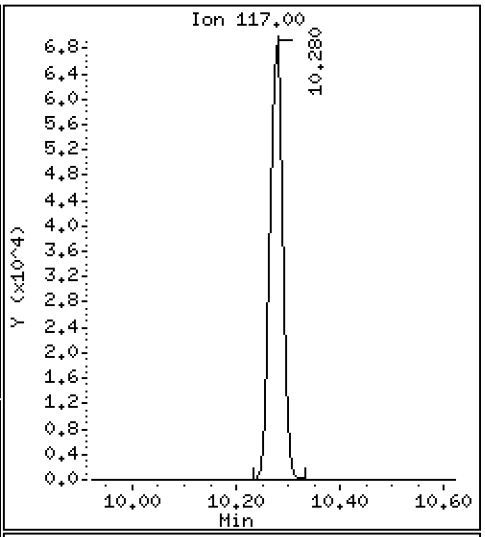
Column phase: ZB-5msi

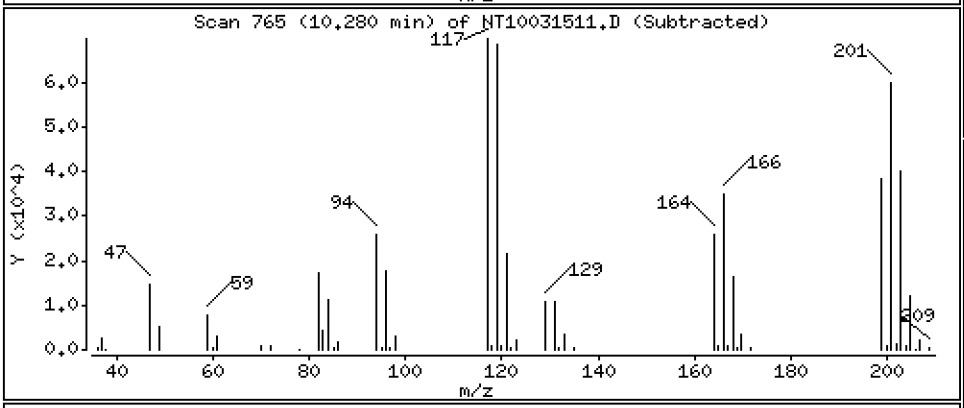
Column diameter: 0.25

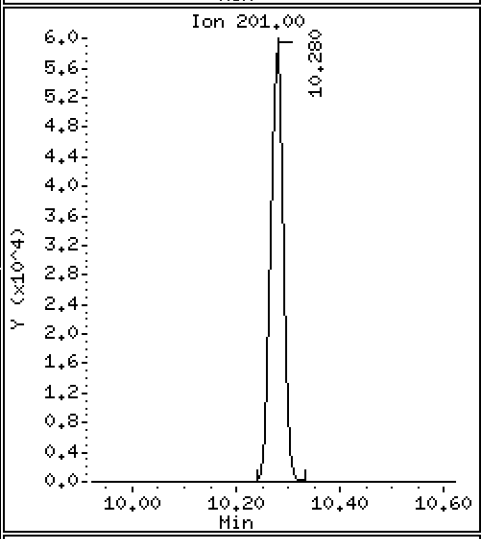
17 Hexachloroethane

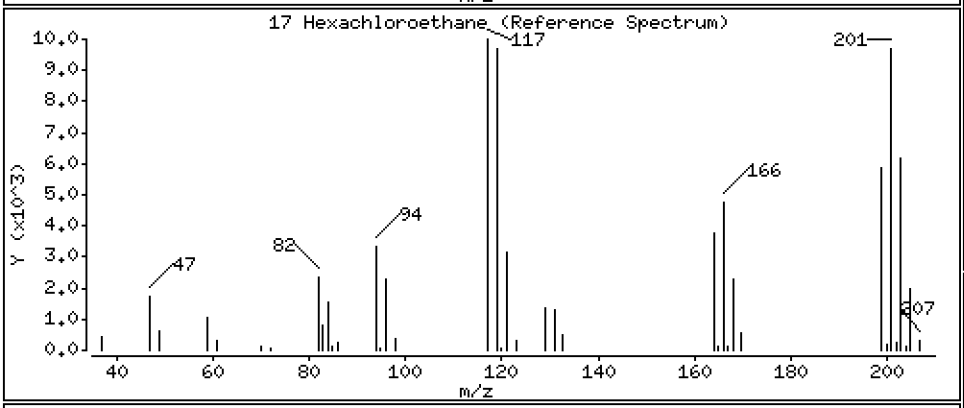
Concentration: 5.003 ug/mL

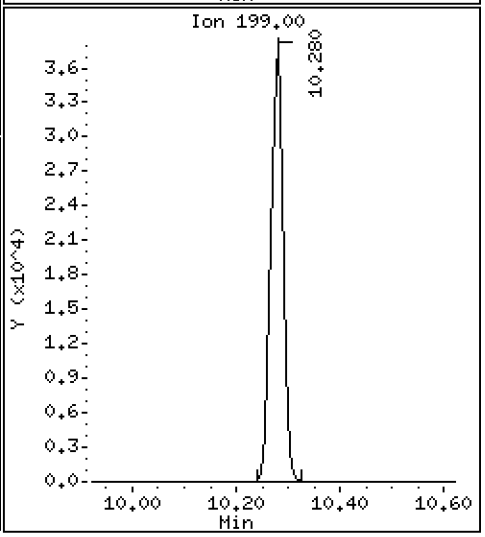


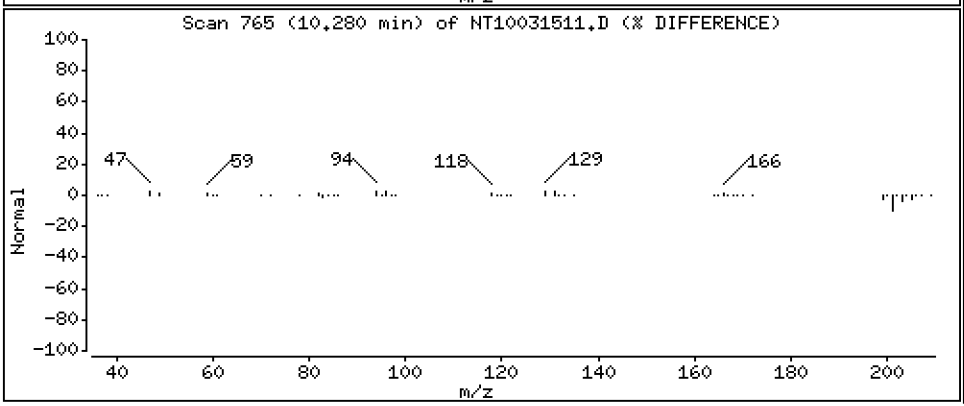












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

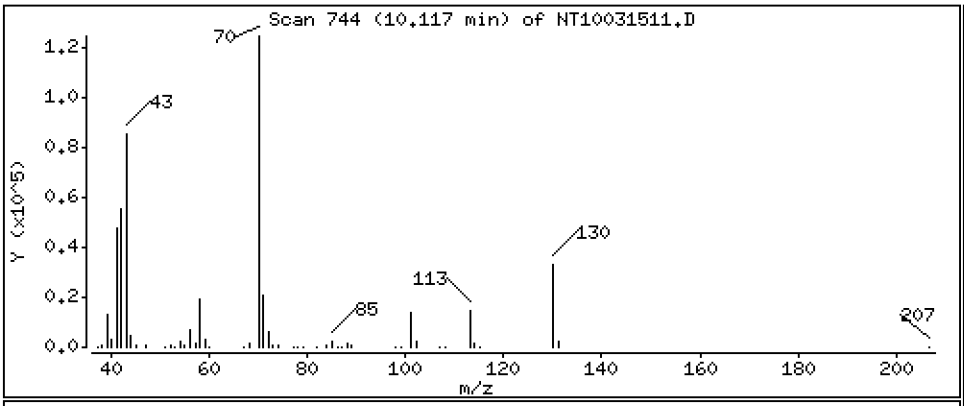
Operator: VTS

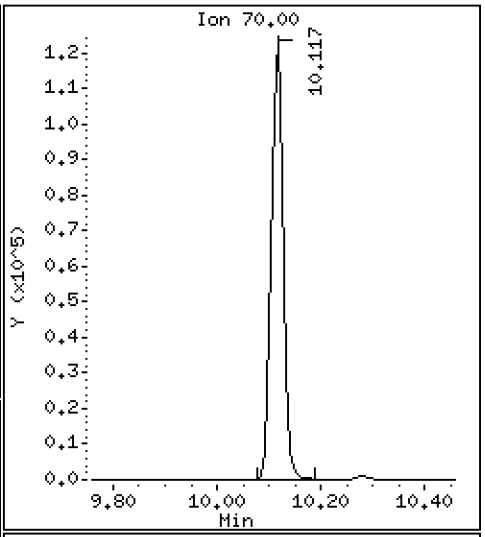
Column phase: ZB-5msi

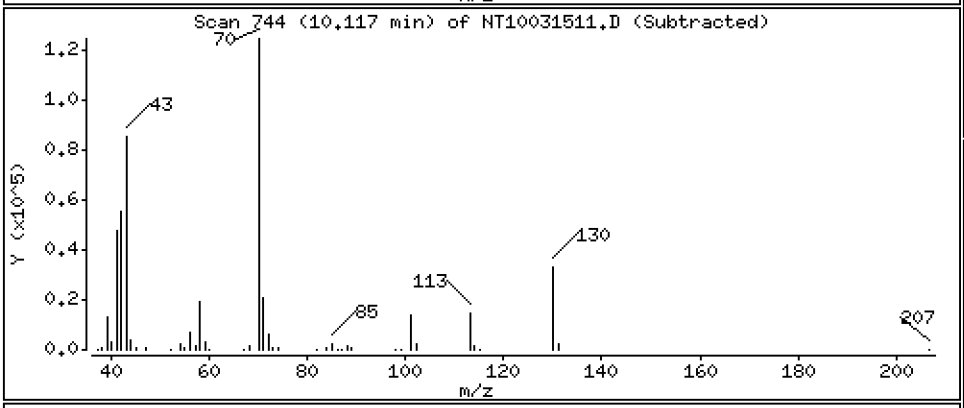
Column diameter: 0.25

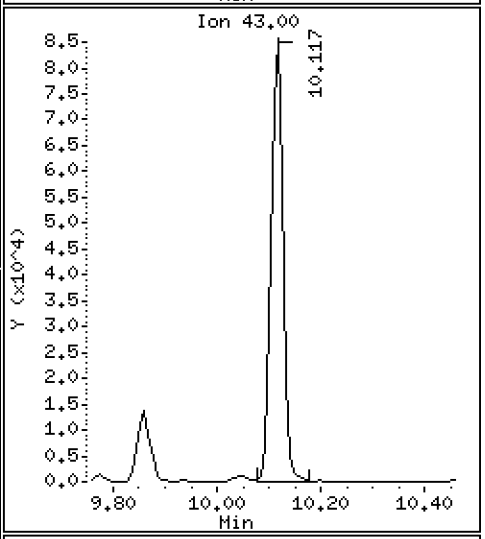
16 N-Nitroso-di-n-propylamine

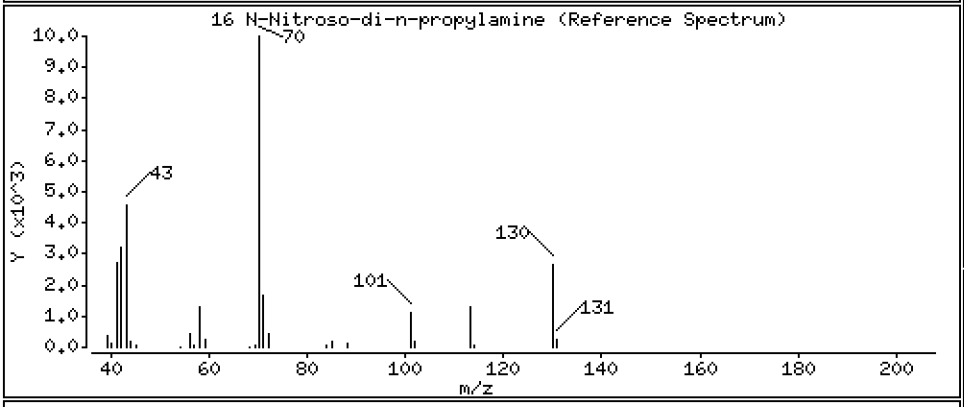
Concentration: 5.179 ug/mL

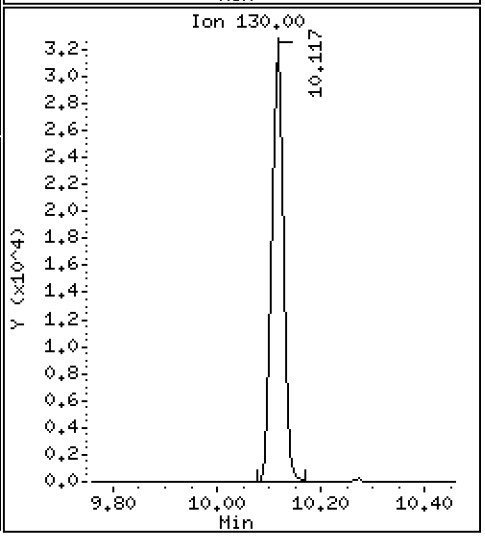


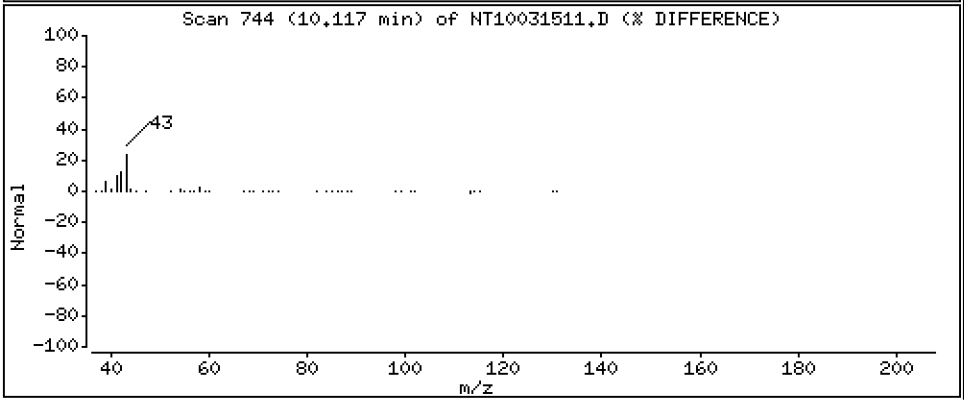












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

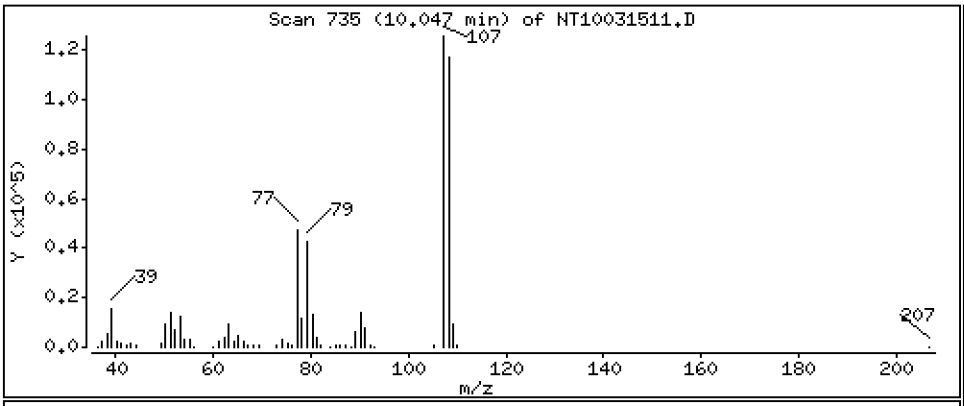
Operator: VTS

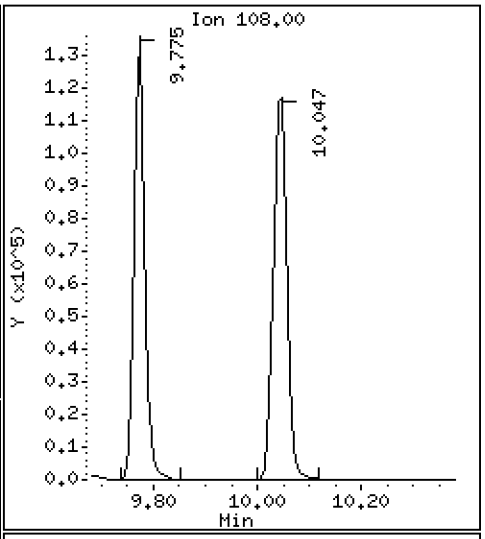
Column phase: ZB-5msi

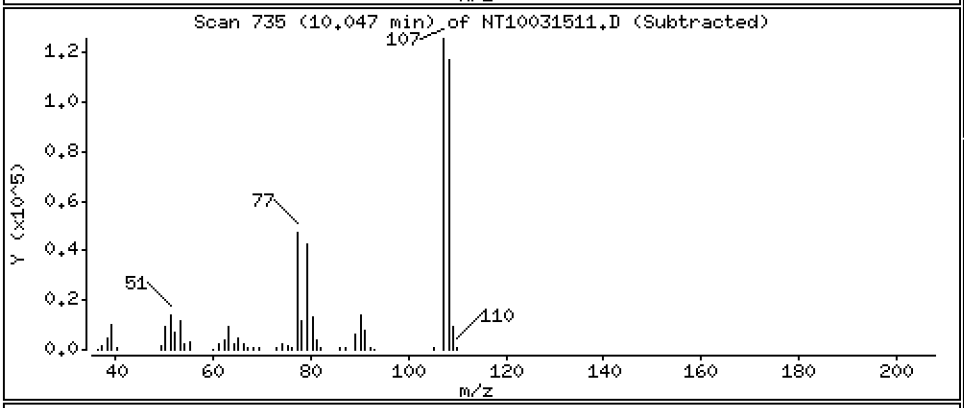
Column diameter: 0.25

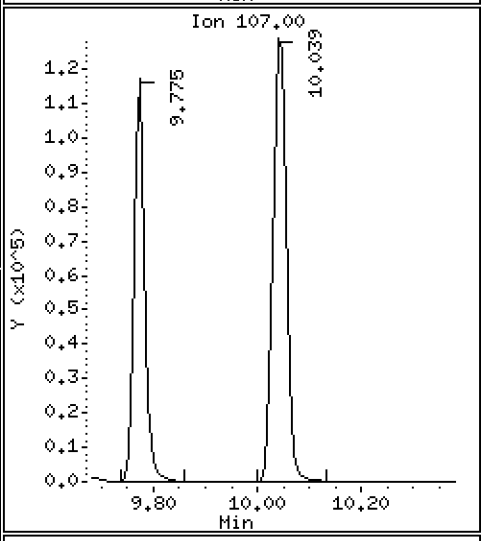
15 4-Methylphenol

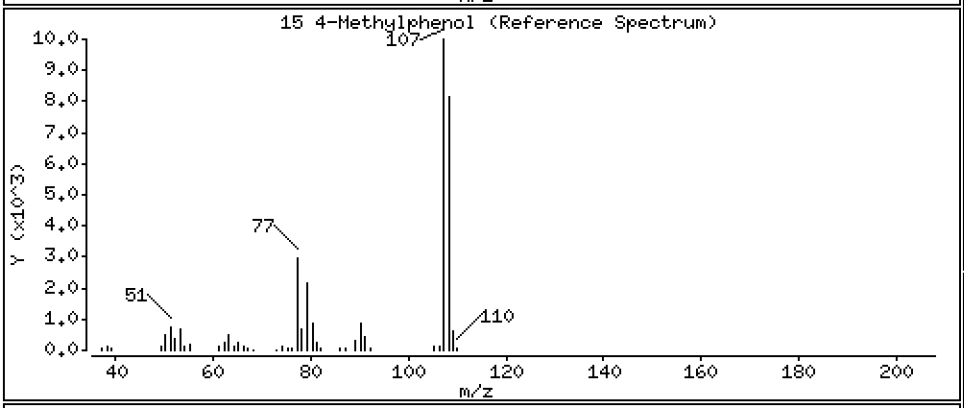
Concentration: 4.365 ug/mL

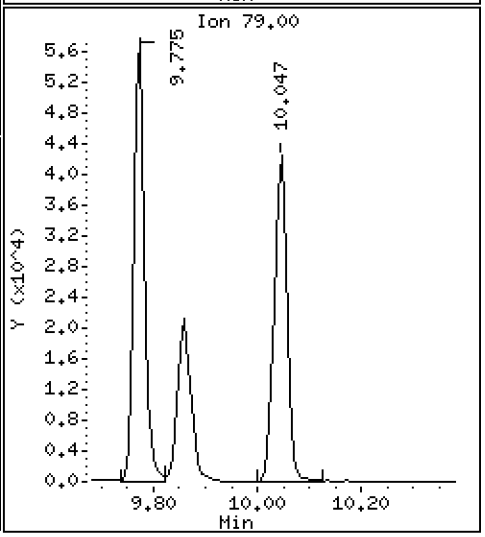


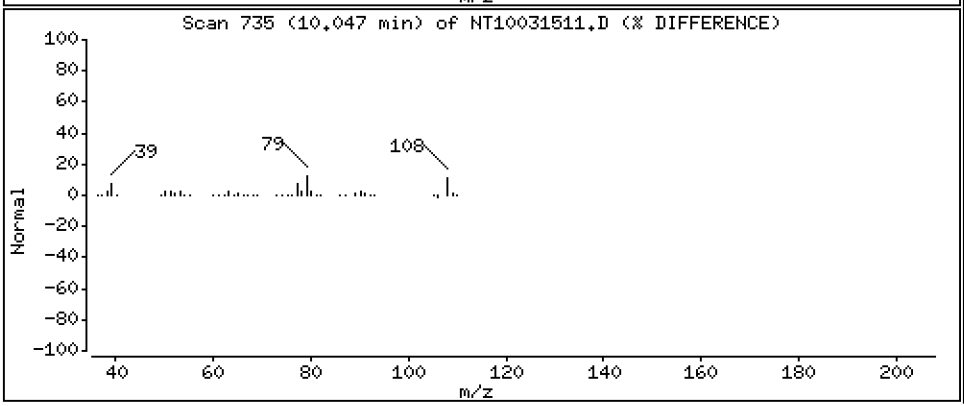












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

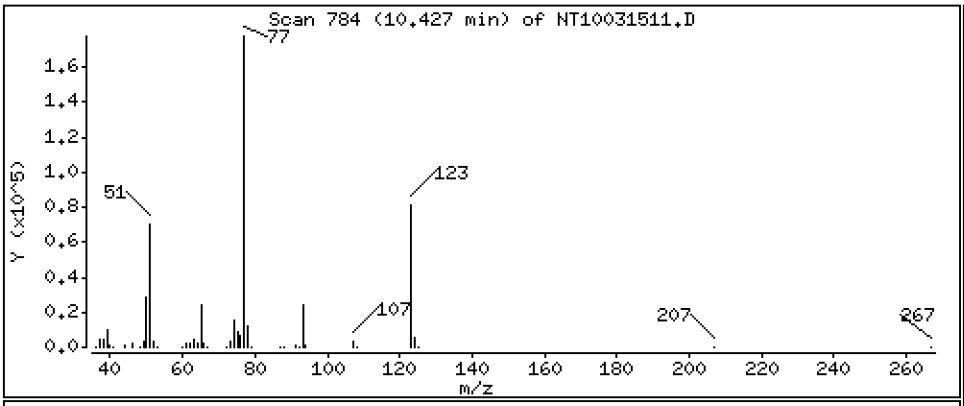
Operator: VTS

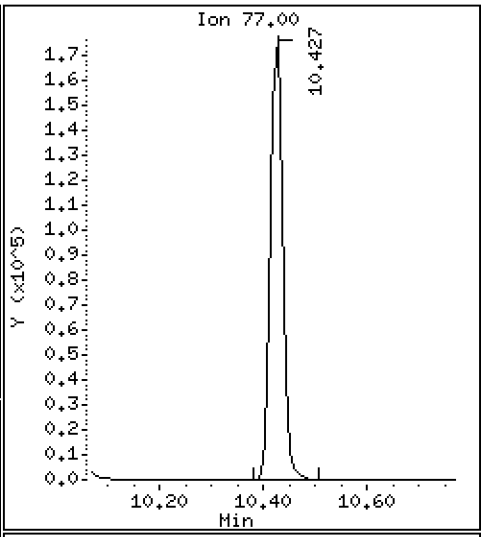
Column phase: ZB-5msi

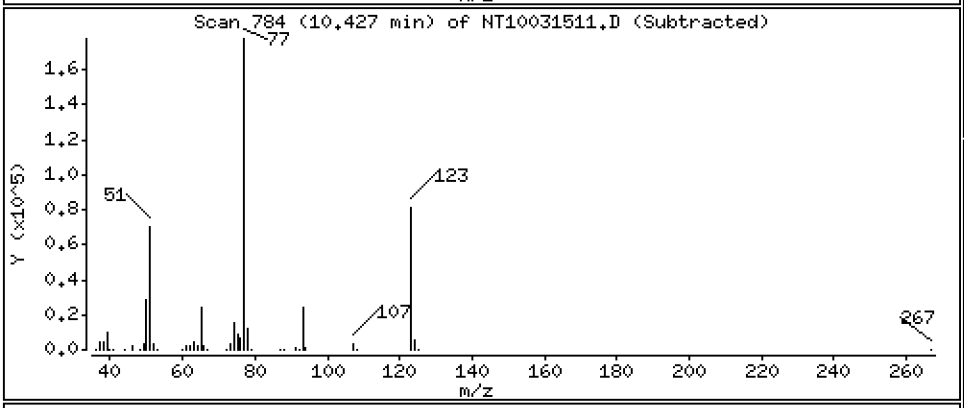
Column diameter: 0.25

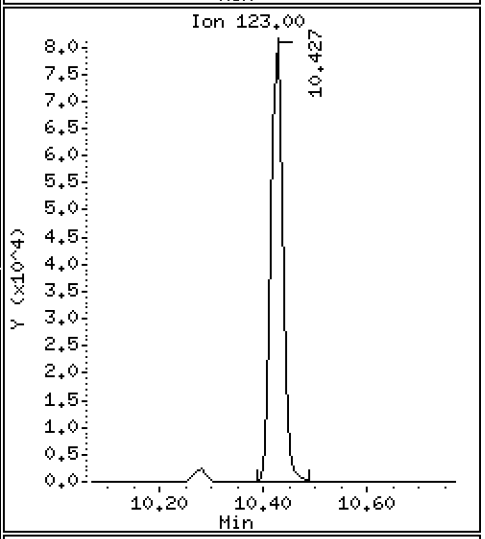
19 Nitrobenzene

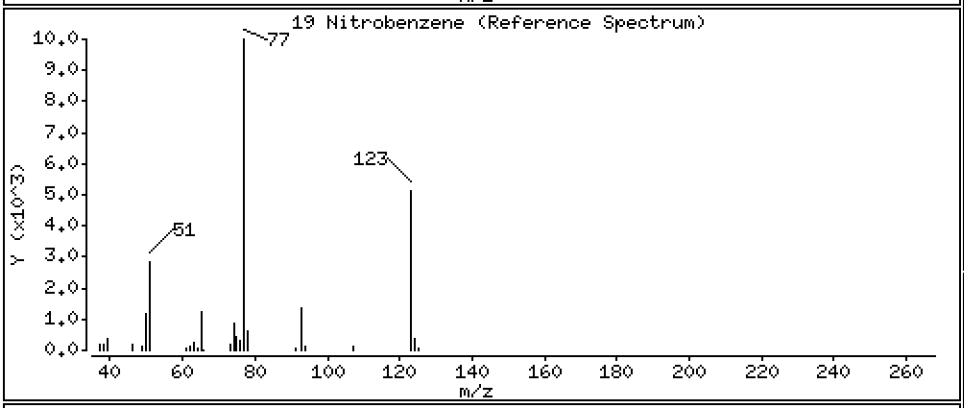
Concentration: 4.858 ug/mL

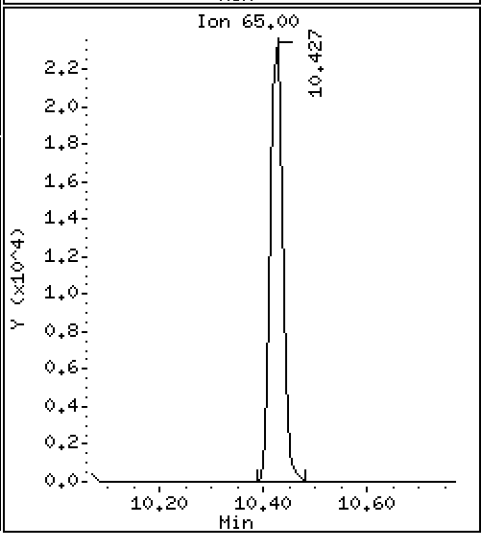


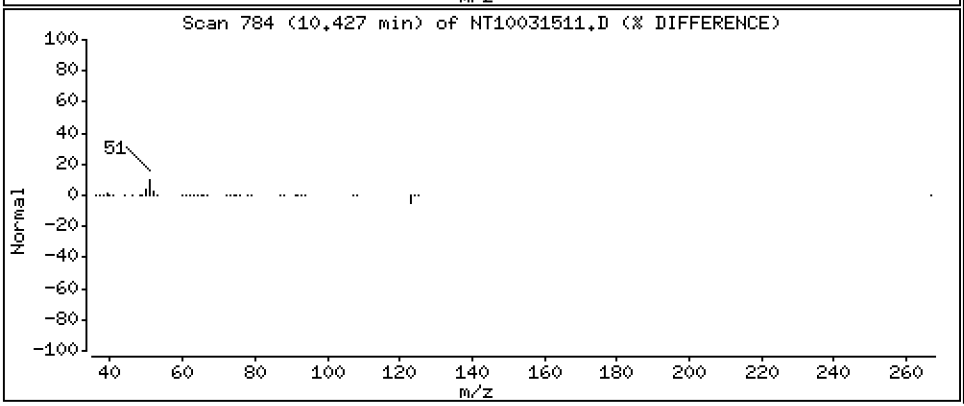












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

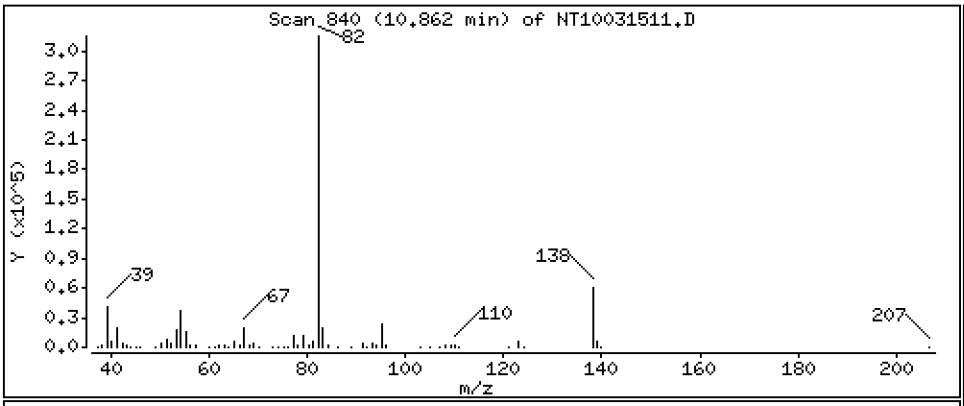
Operator: VTS

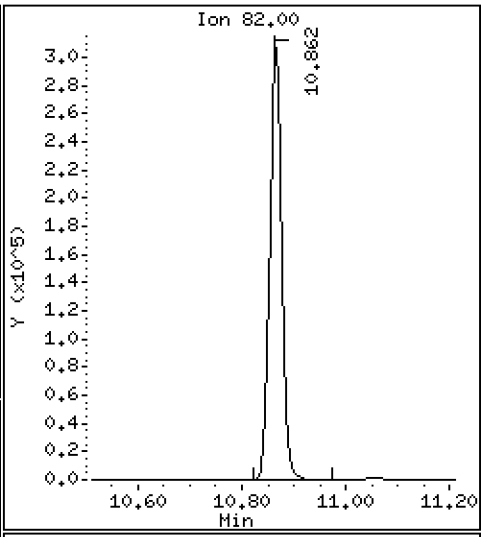
Column phase: ZB-5msi

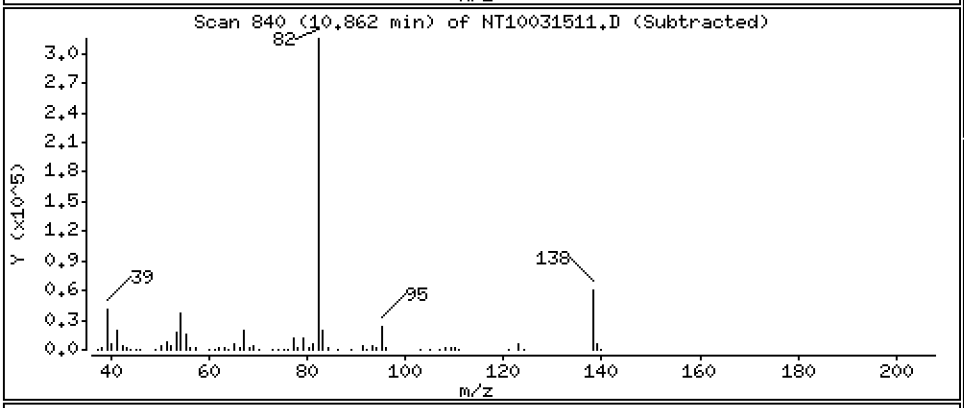
Column diameter: 0.25

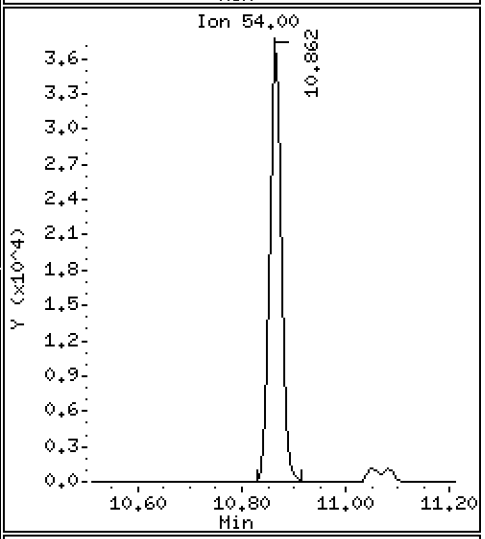
20 Isophorone

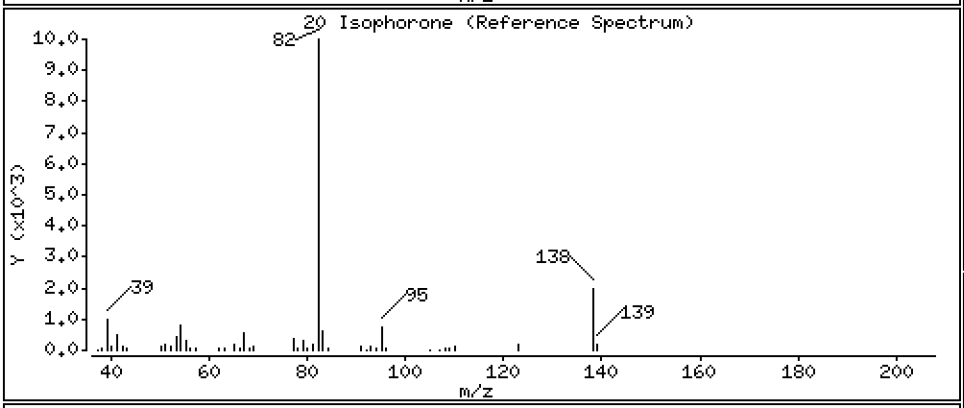
Concentration: 7.696 ug/mL

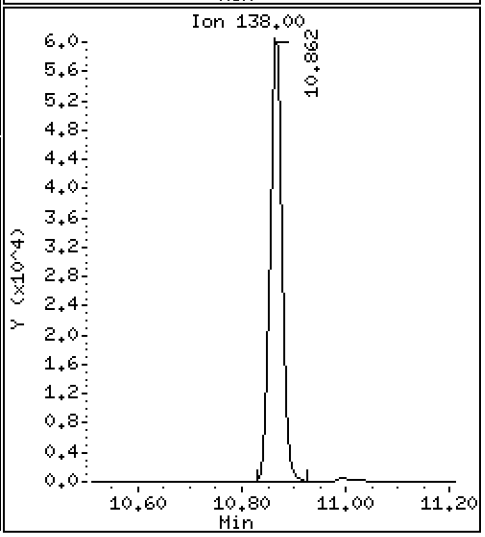


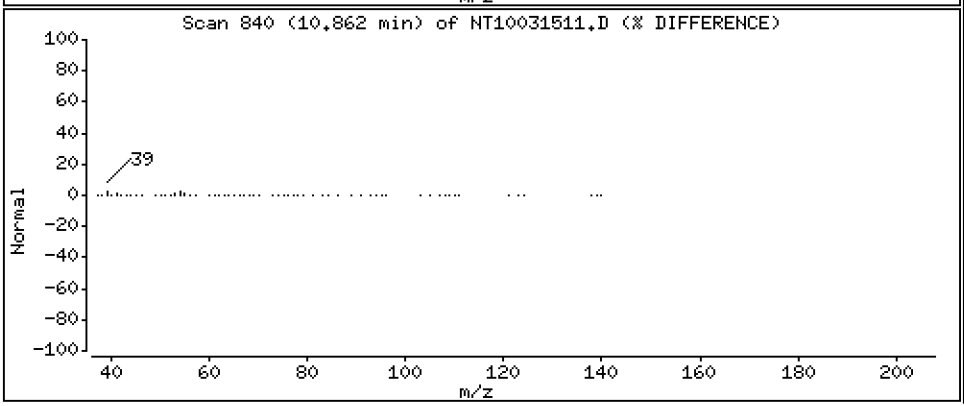












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

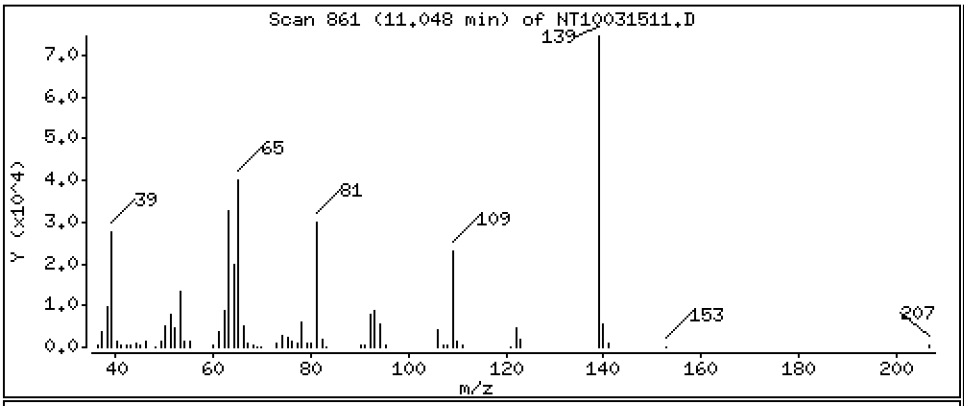
Operator: VTS

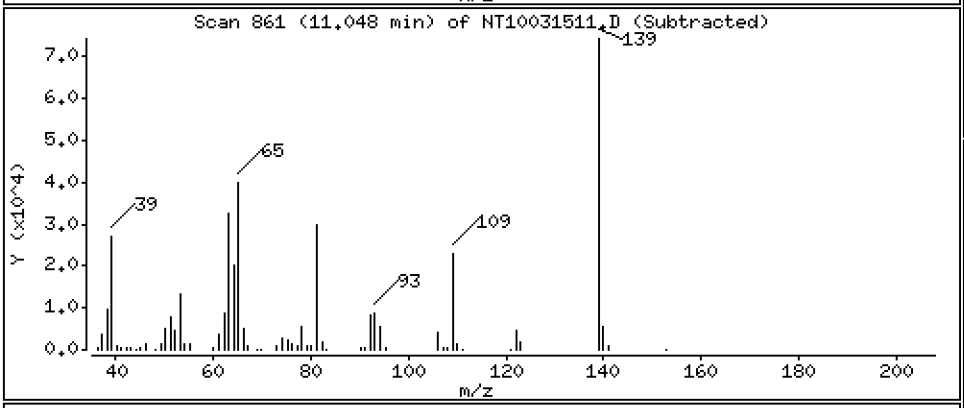
Column phase: ZB-5msi

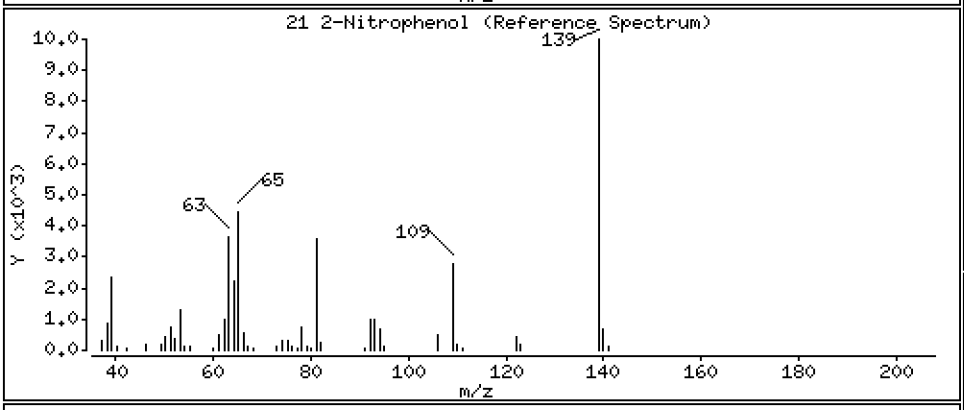
Column diameter: 0.25

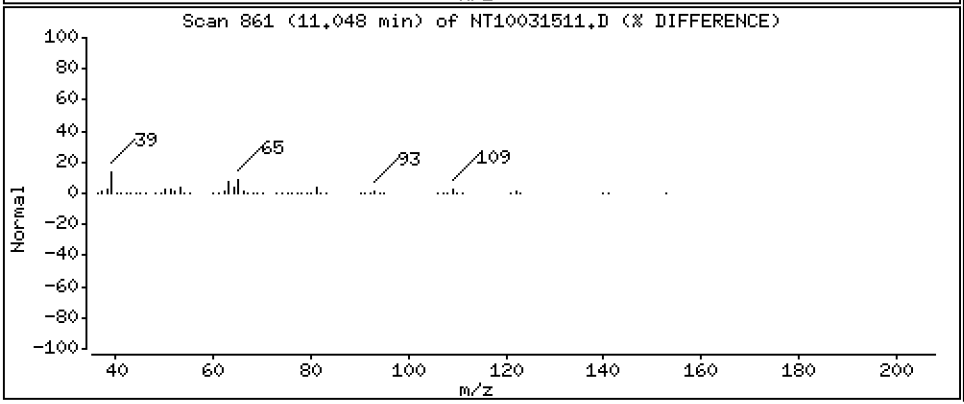
21 2-Nitrophenol

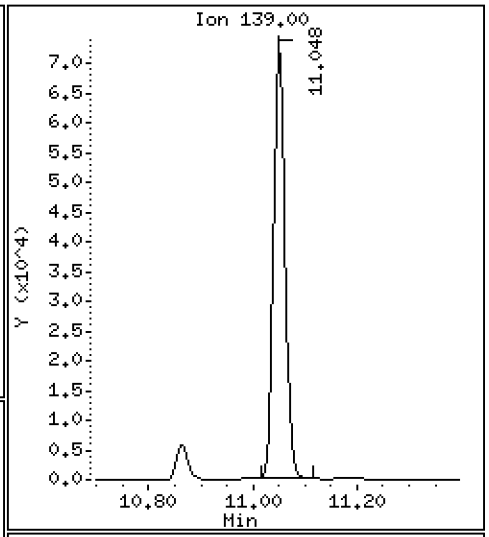
Concentration: 3.995 ug/mL

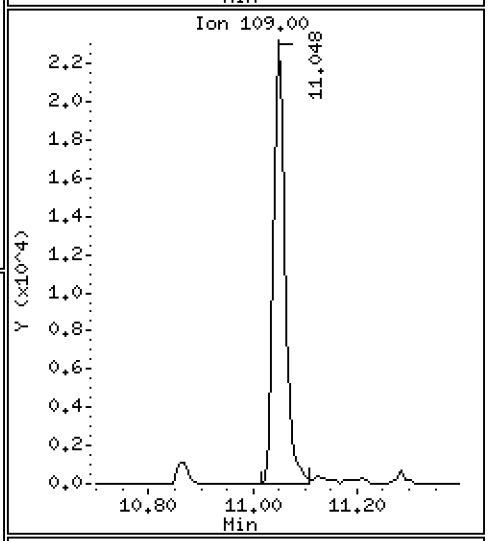


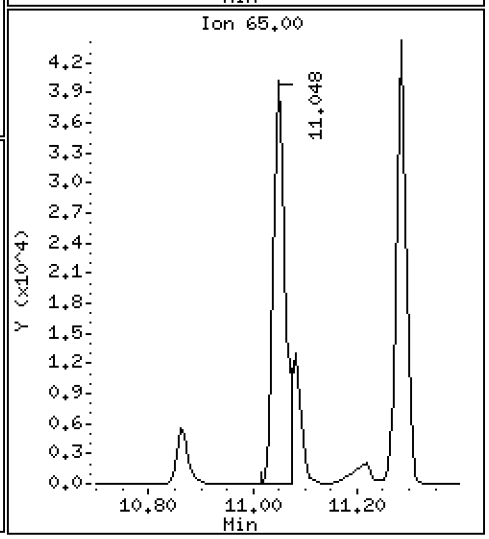












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

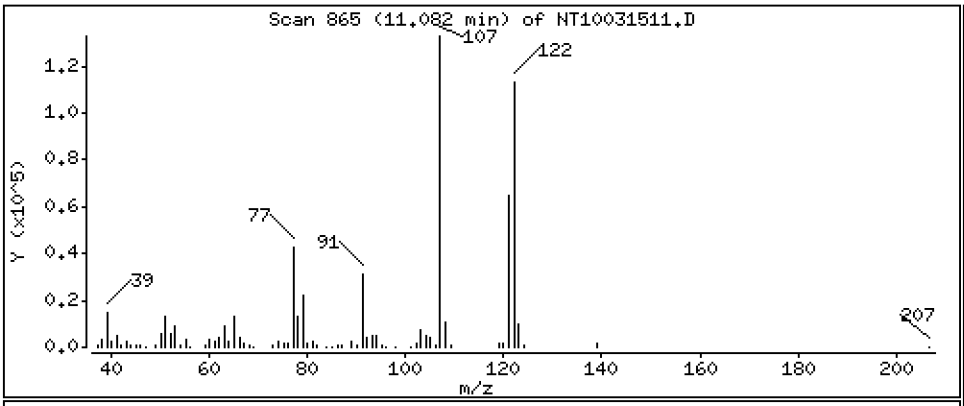
Operator: VTS

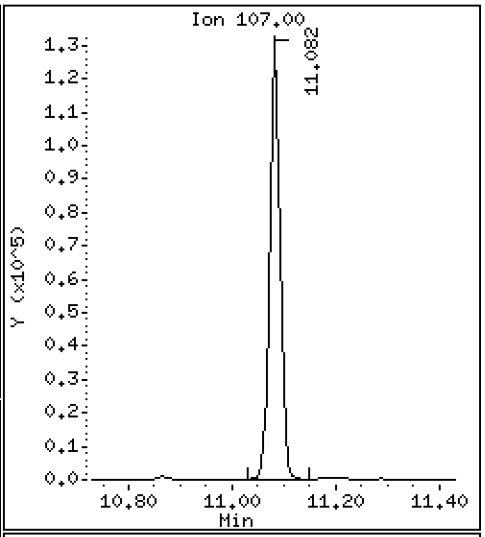
Column phase: ZB-5msi

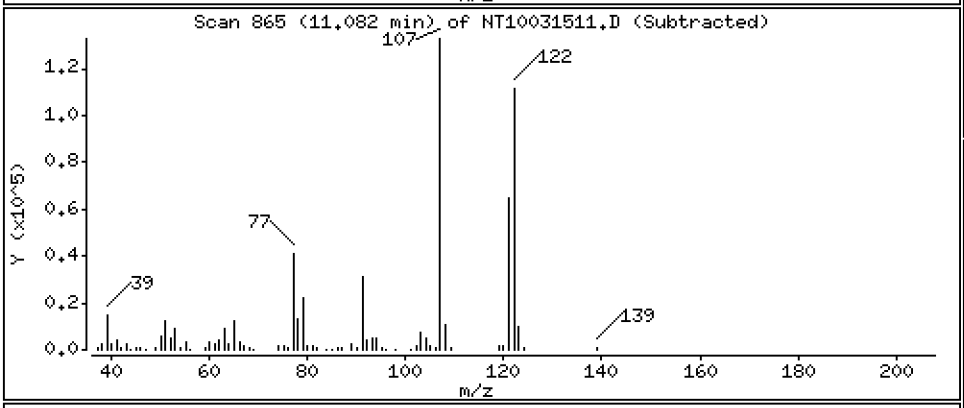
Column diameter: 0.25

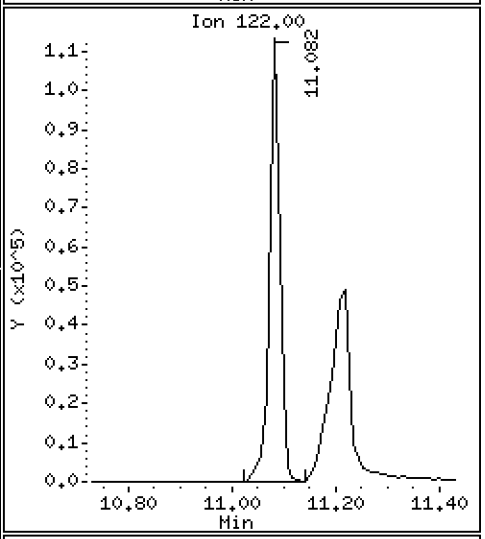
22 2,4-Dimethylphenol

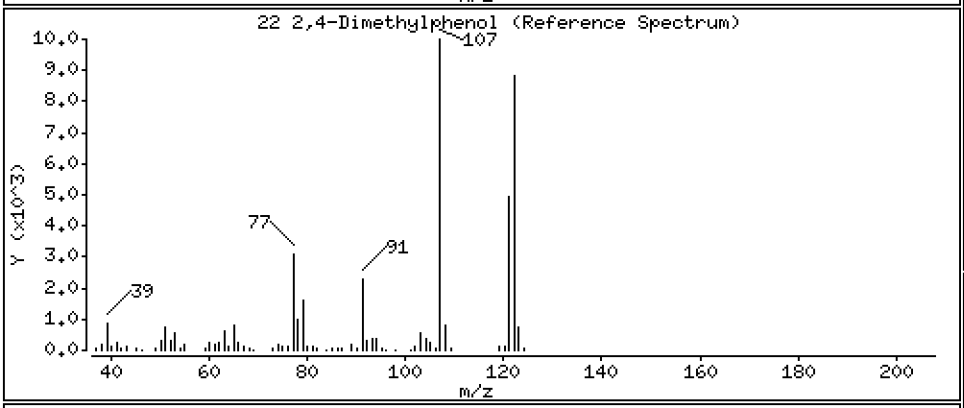
Concentration: 3.632 ug/mL

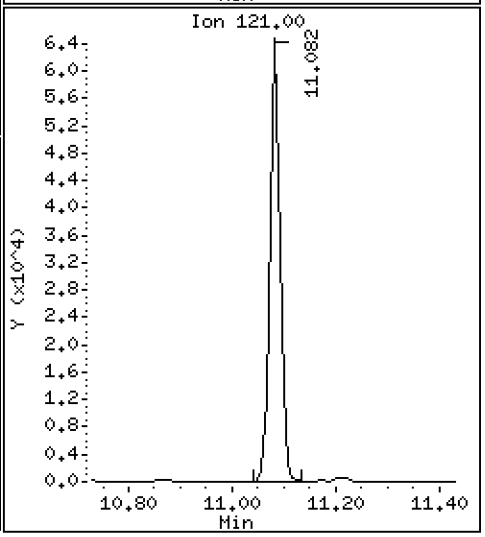


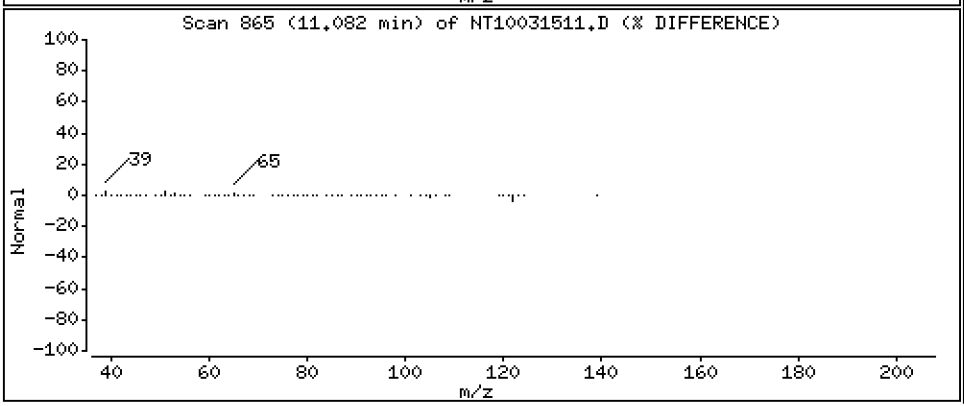












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

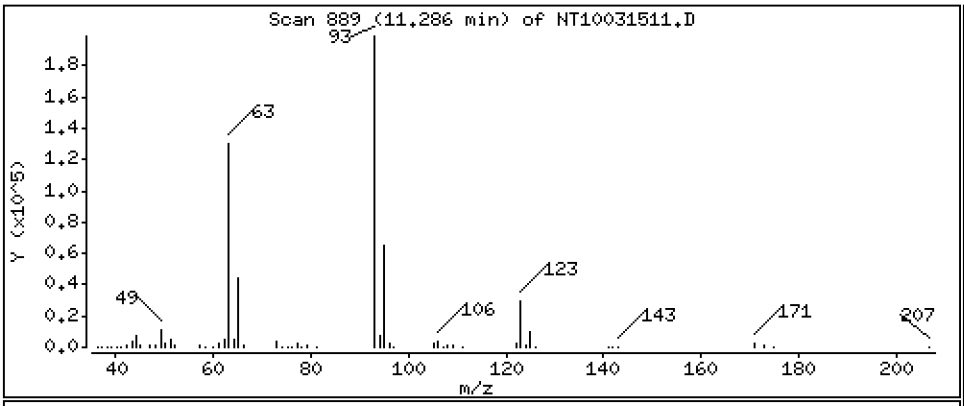
Operator: VTS

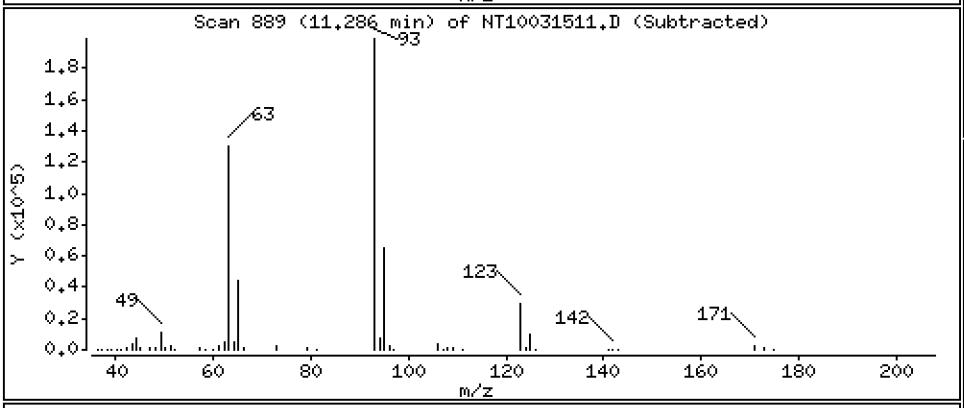
Column phase: ZB-5msi

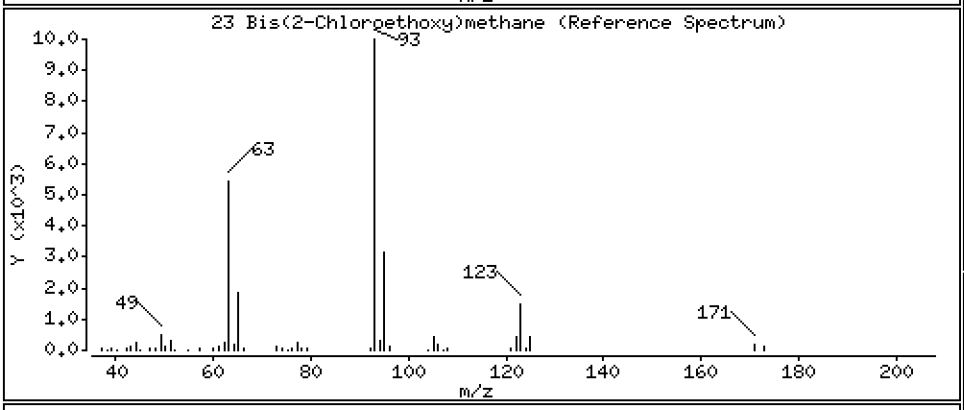
Column diameter: 0.25

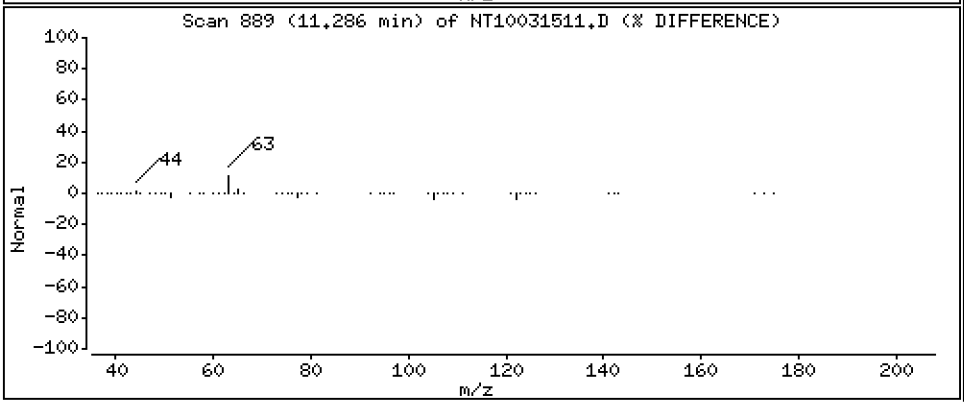
23 Bis(2-Chloroethoxy)methane

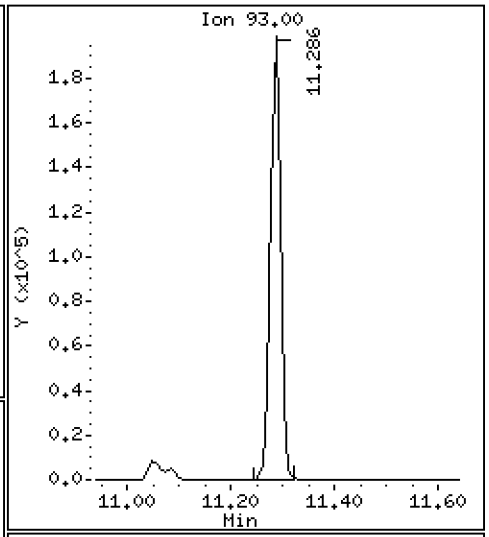
Concentration: 5.654 ug/mL

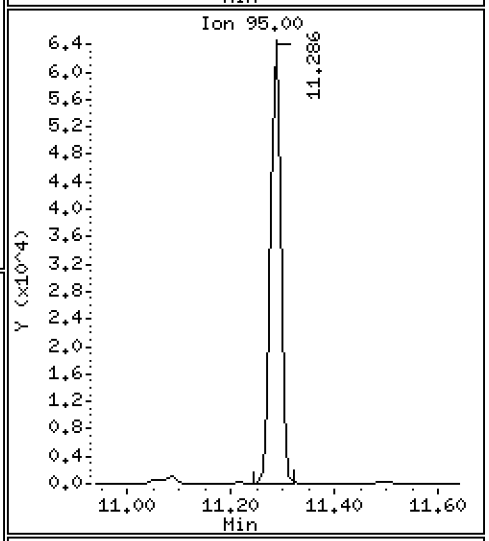


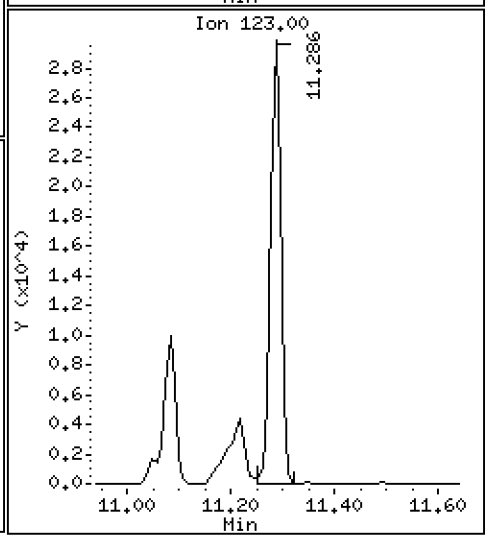












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

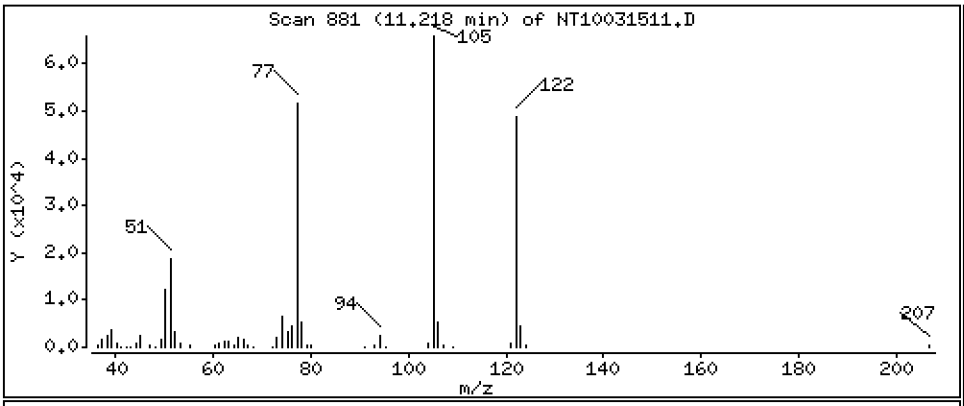
Operator: VTS

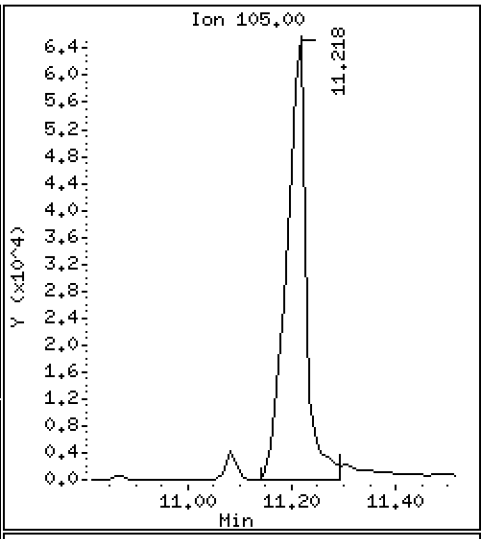
Column phase: ZB-5msi

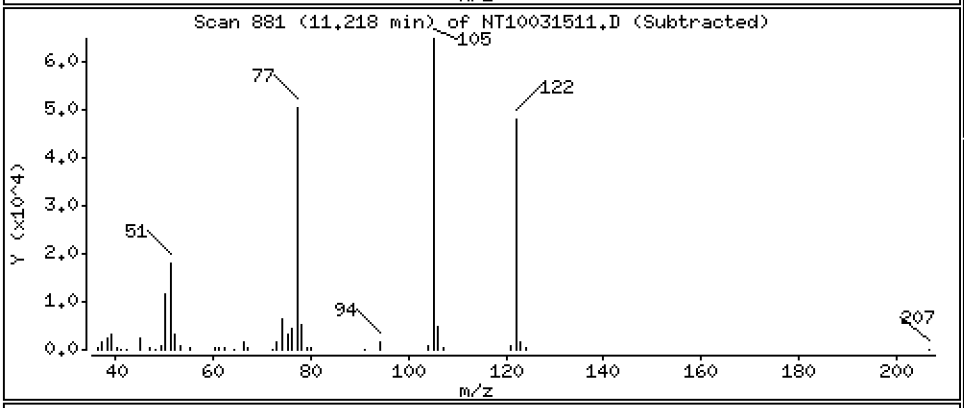
Column diameter: 0.25

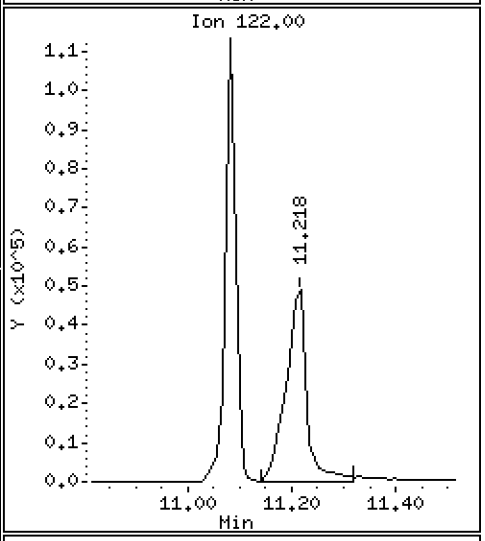
24 Benzoic acid

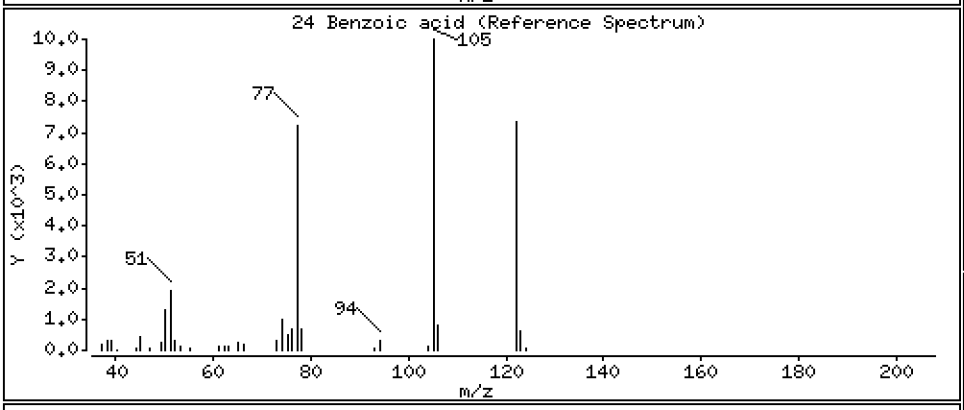
Concentration: 5.952 ug/mL

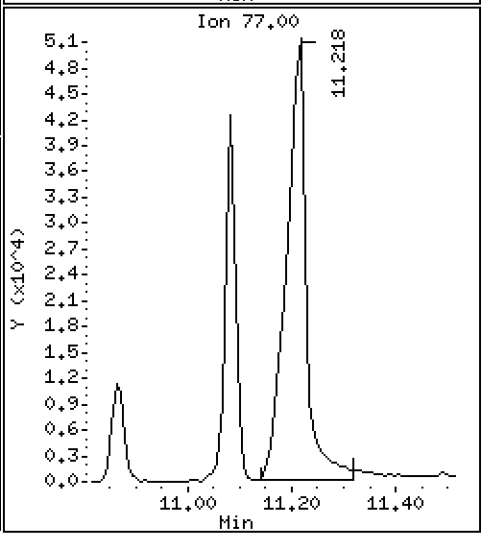


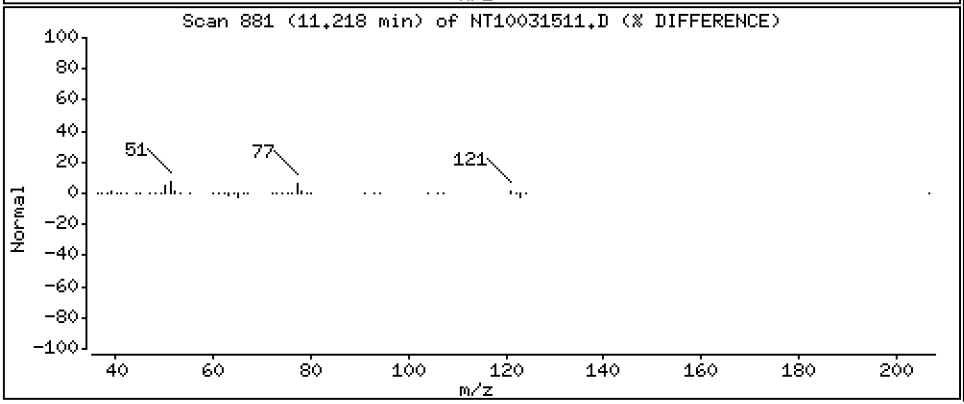












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

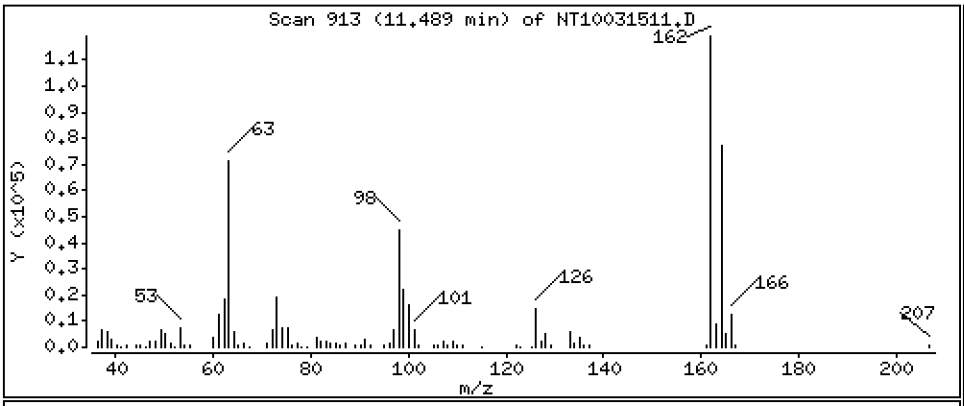
Operator: VTS

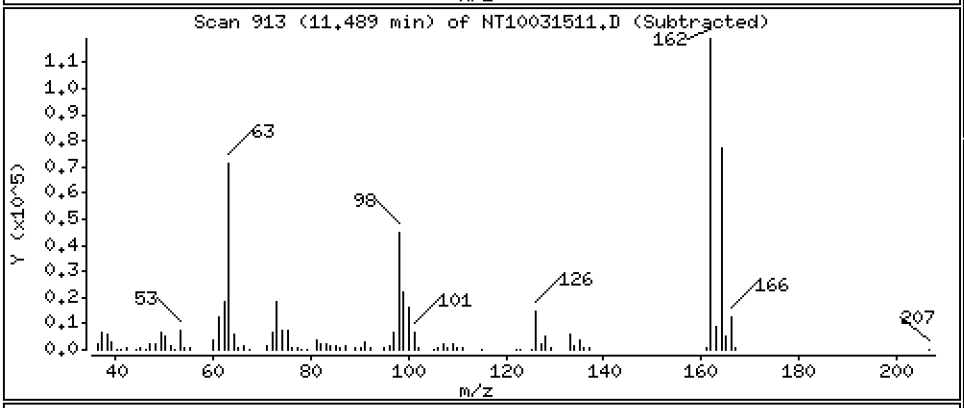
Column phase: ZB-5msi

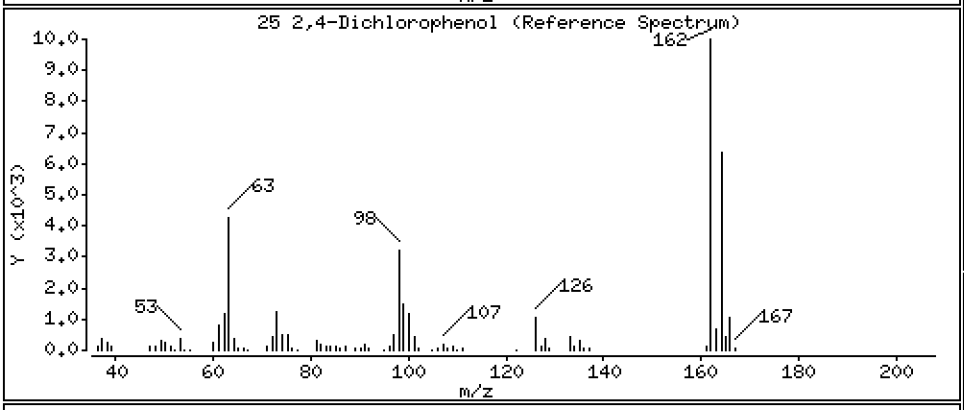
Column diameter: 0.25

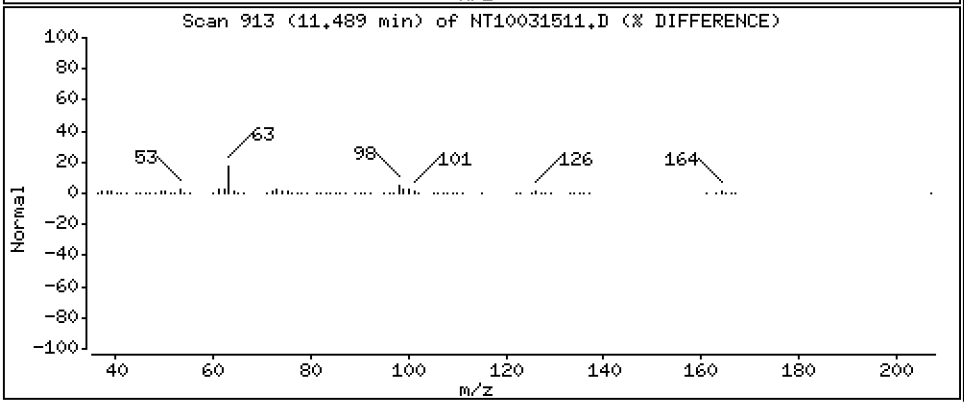
25 2,4-Dichlorophenol

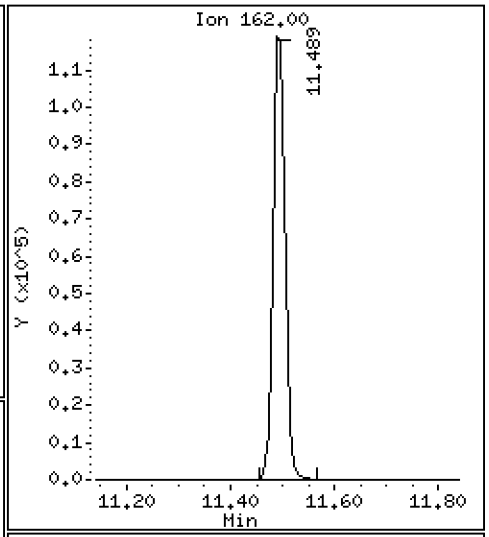
Concentration: 4.703 ug/mL

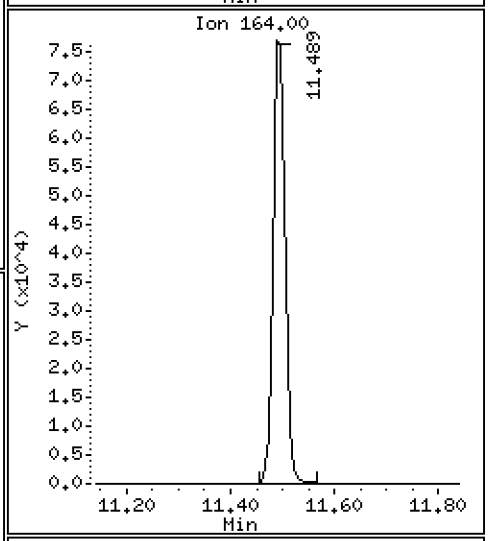


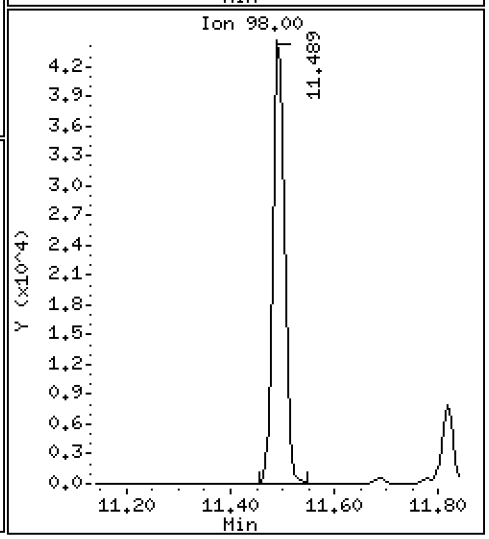












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

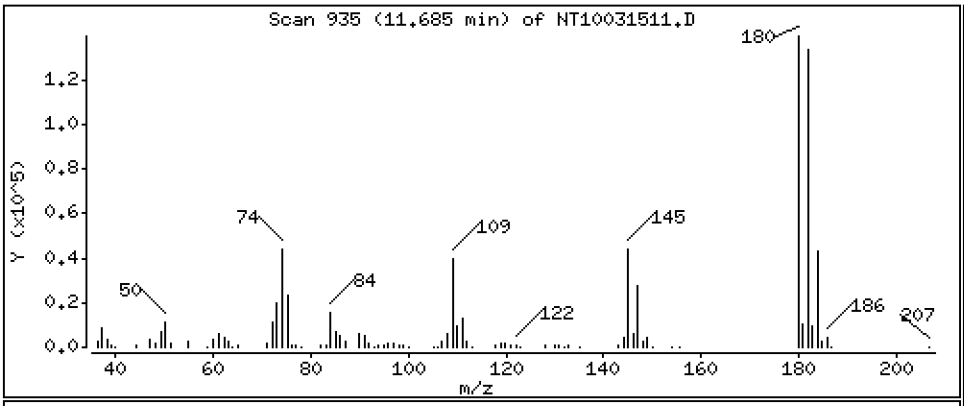
Operator: VTS

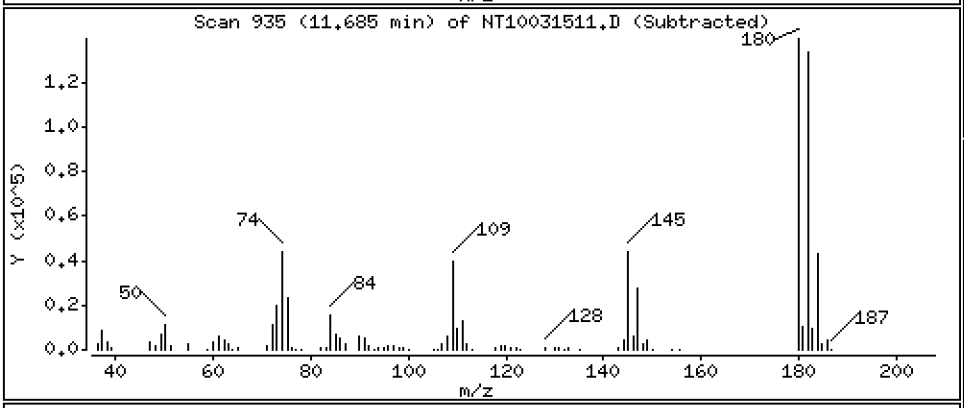
Column phase: ZB-5msi

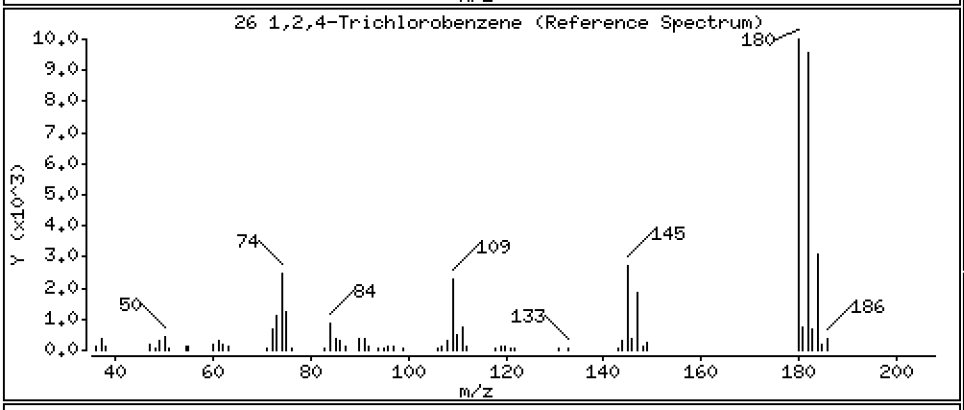
Column diameter: 0.25

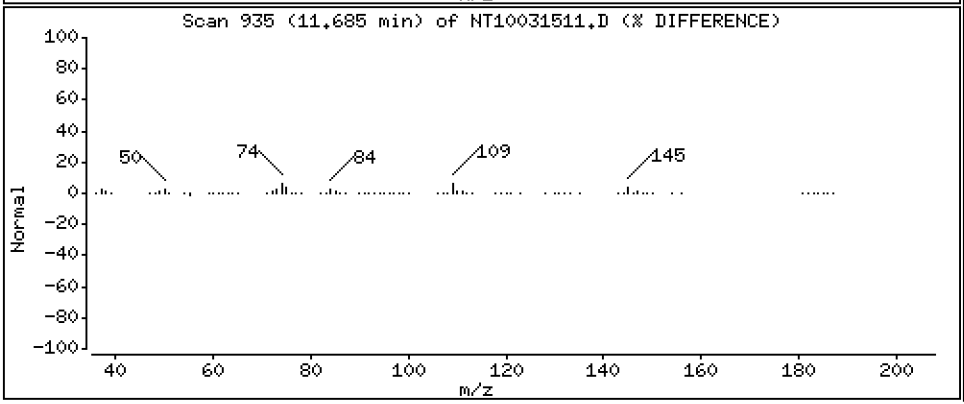
26 1,2,4-Trichlorobenzene

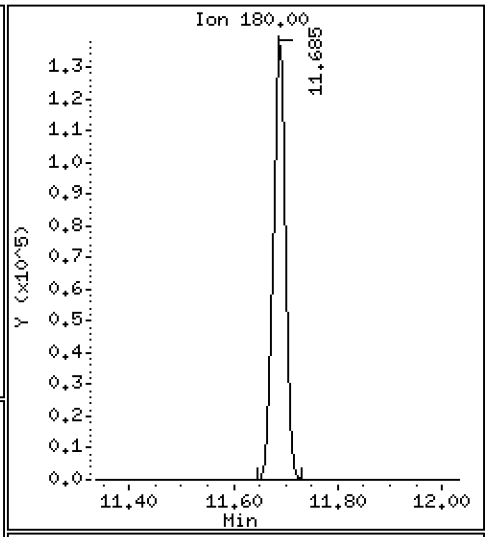
Concentration: 4.554 ug/mL

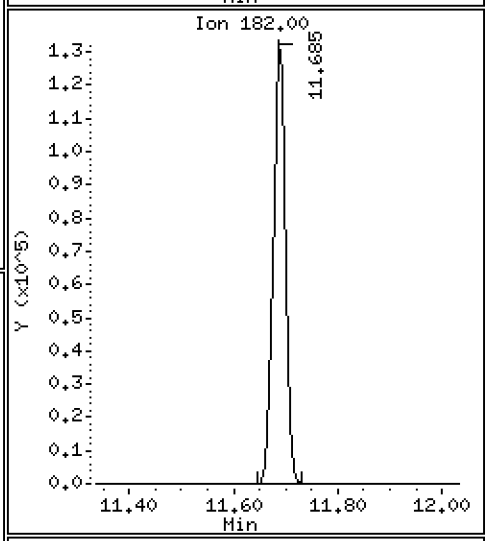


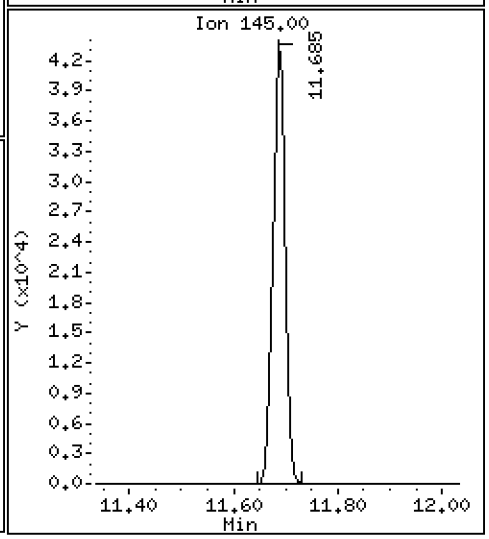












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

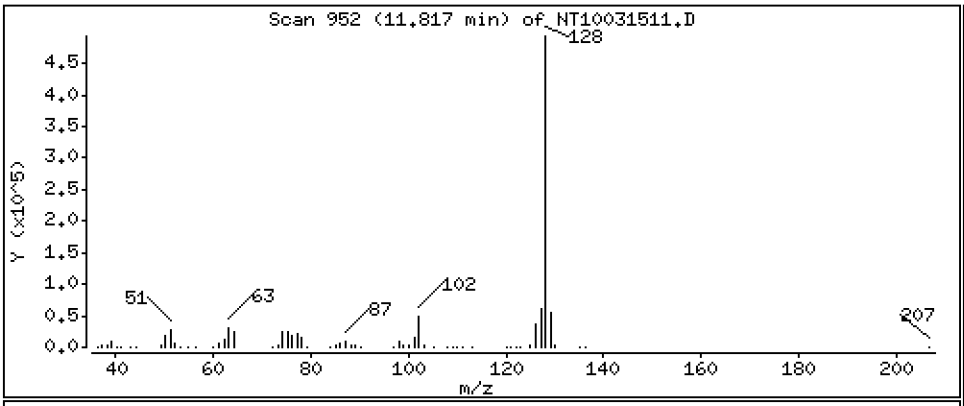
Operator: VTS

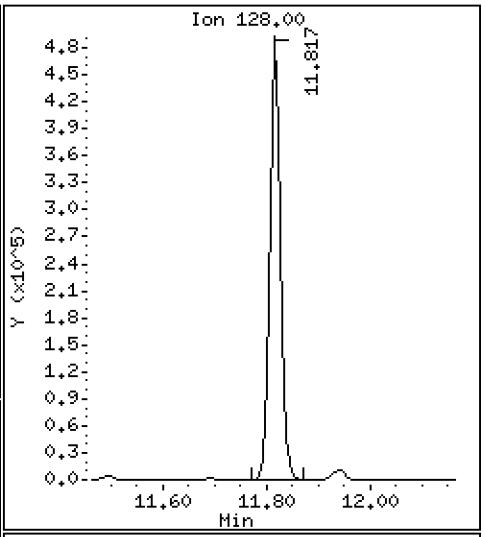
Column phase: ZB-5msi

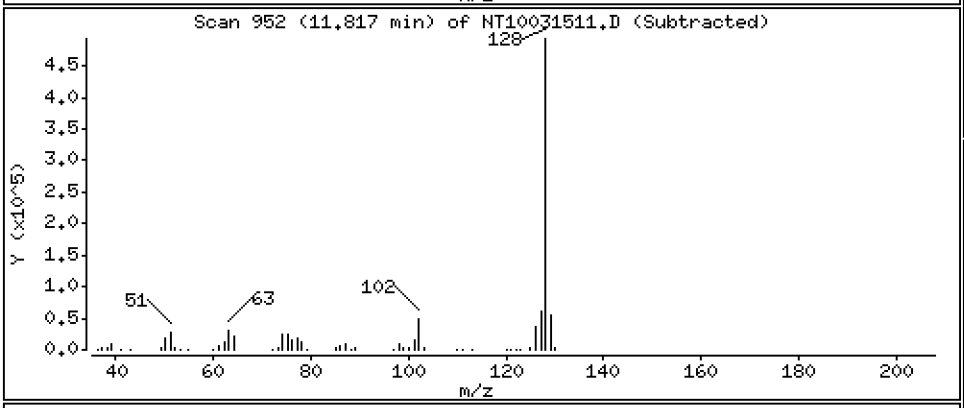
Column diameter: 0.25

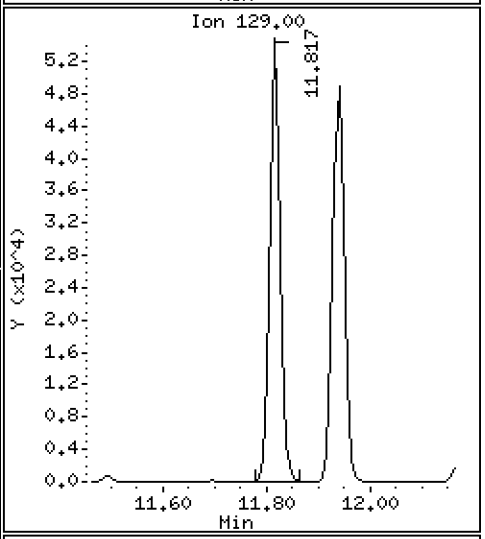
28 Naphthalene

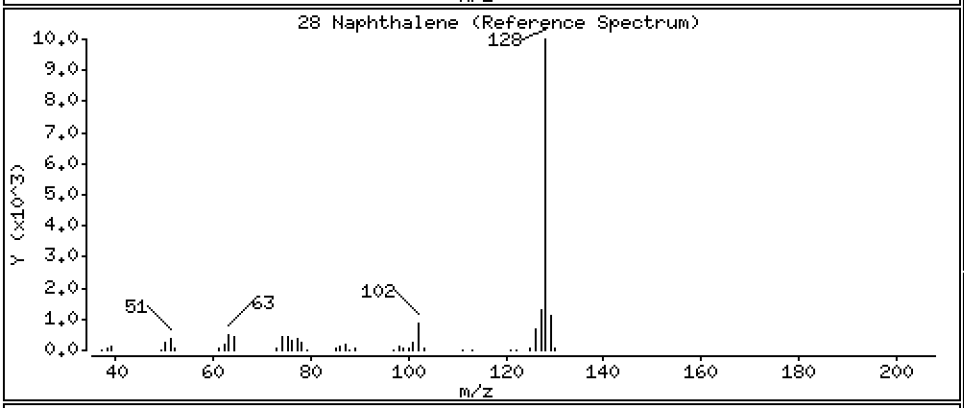
Concentration: 4.717 ug/mL

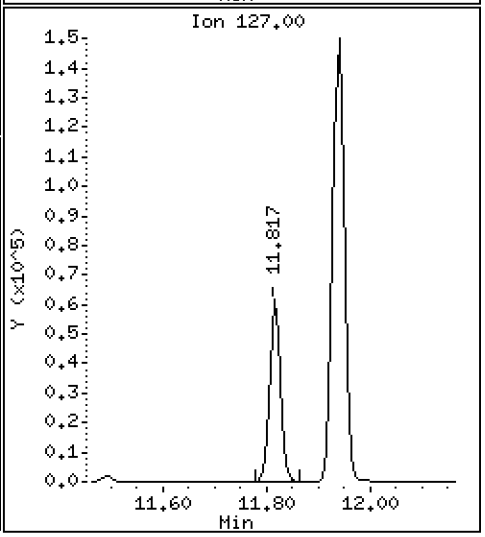


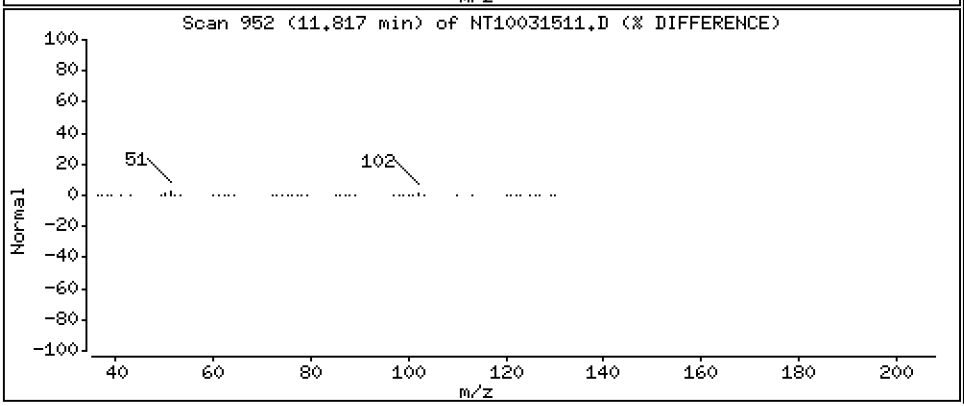












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

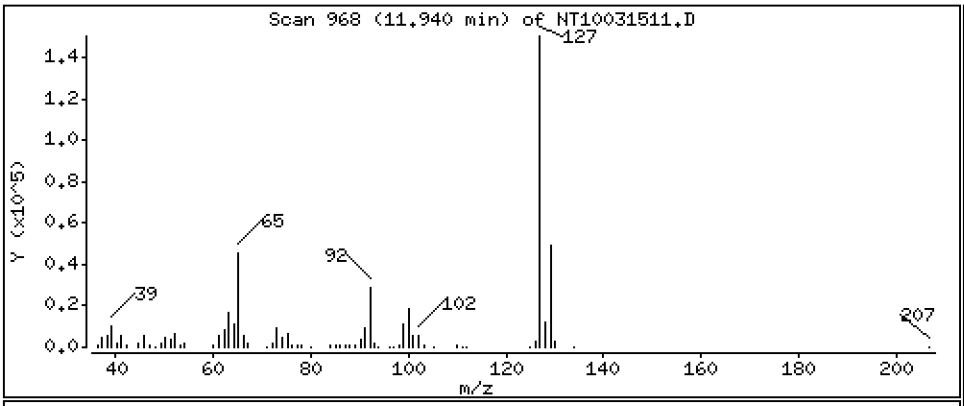
Operator: VTS

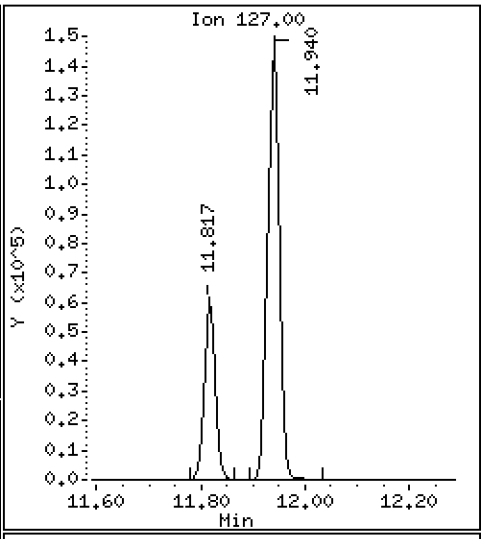
Column phase: ZB-5msi

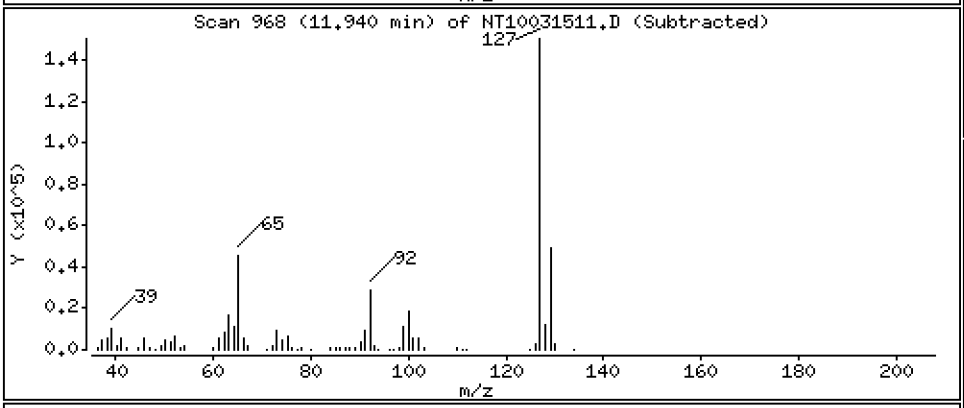
Column diameter: 0.25

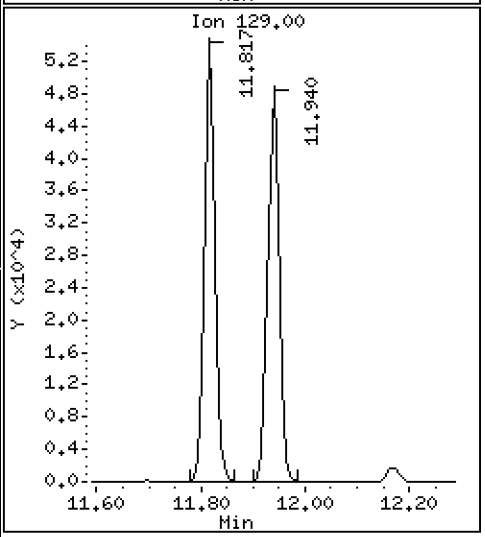
29 4-Chloroaniline

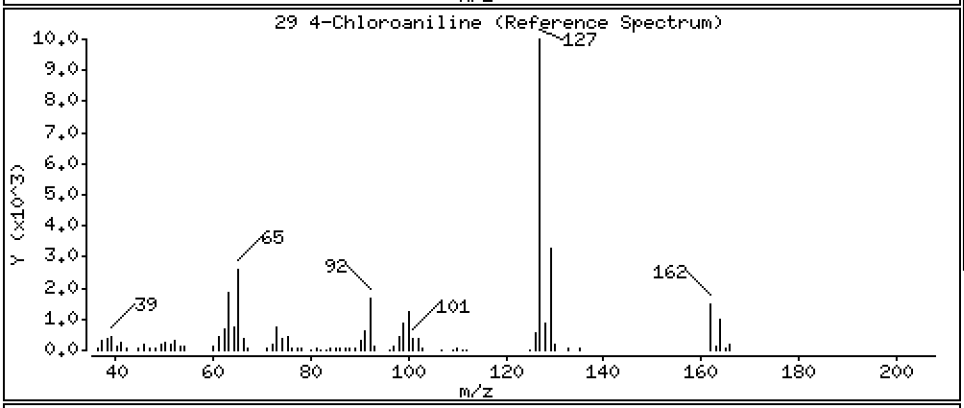
Concentration: 3.787 ug/mL

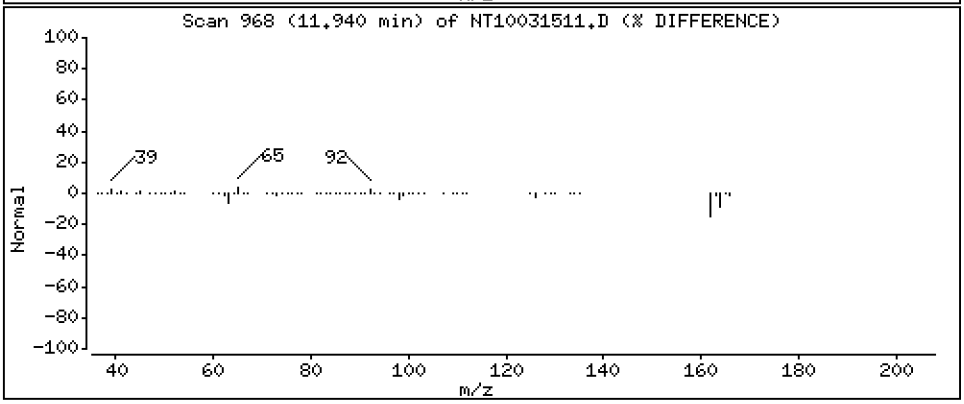












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

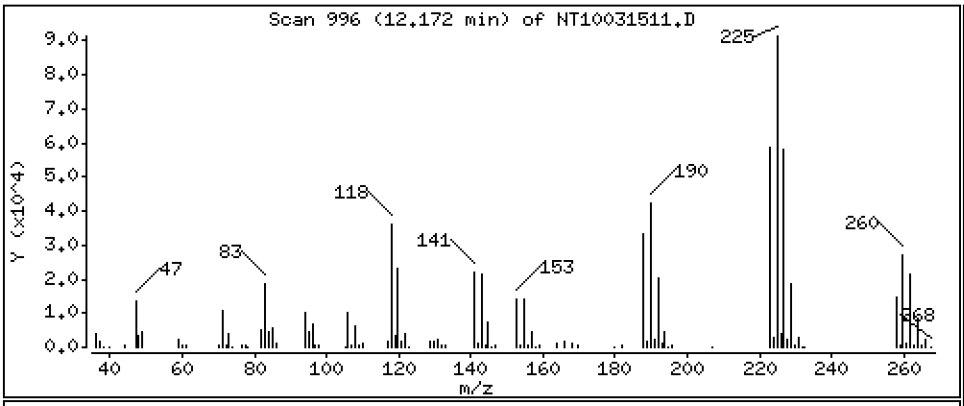
Operator: VTS

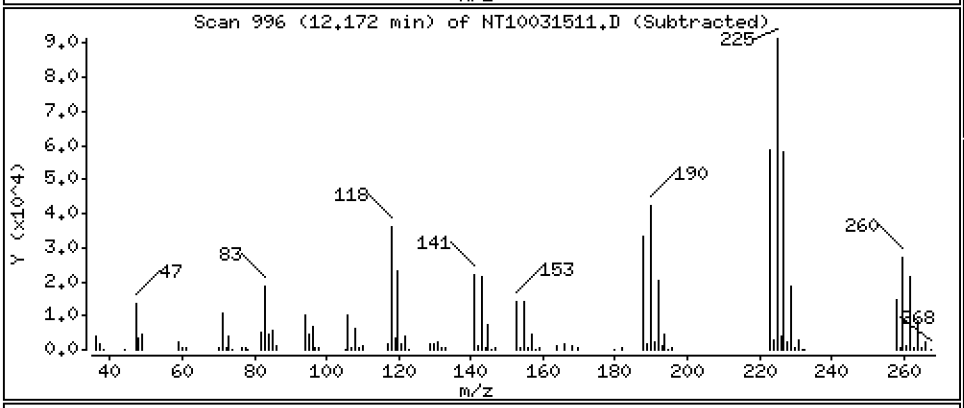
Column phase: ZB-5msi

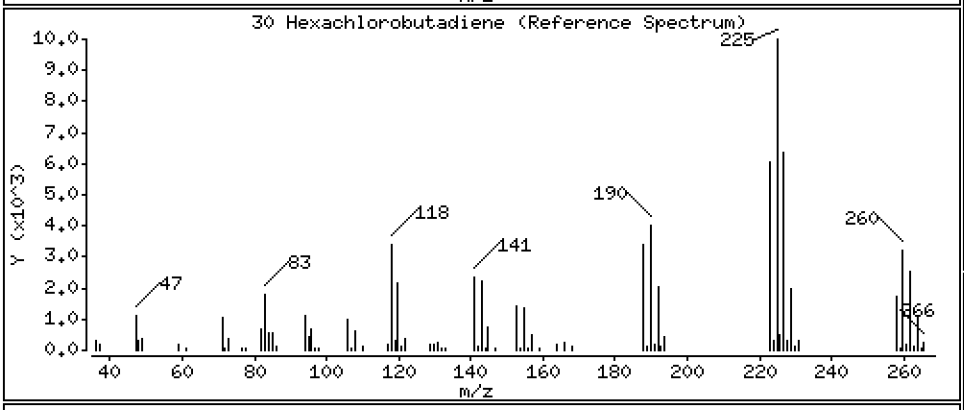
Column diameter: 0.25

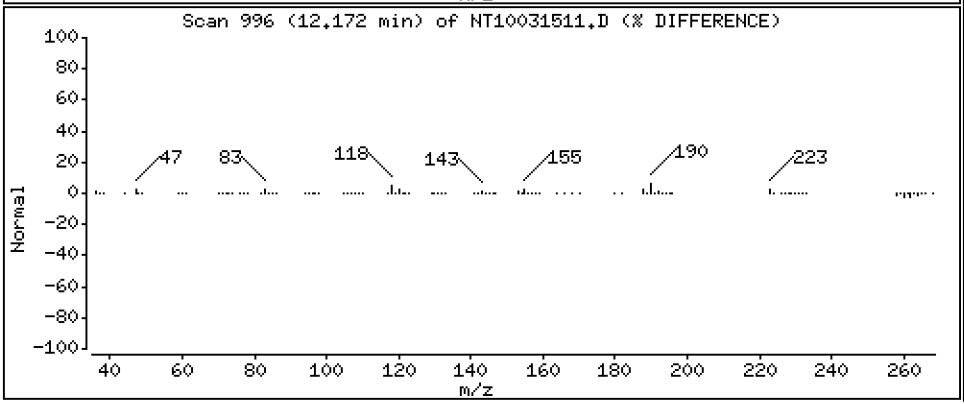
30 Hexachlorobutadiene

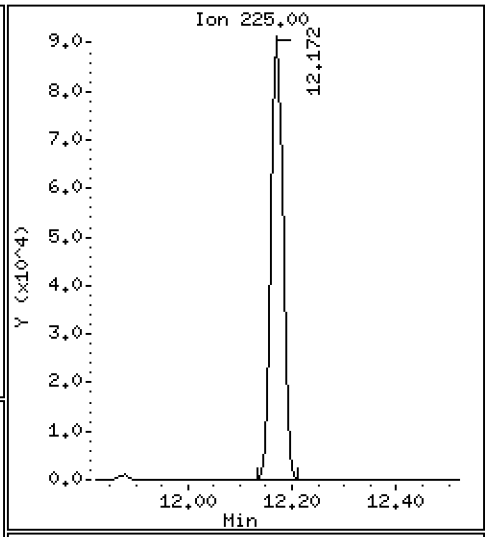
Concentration: 4.834 ug/mL

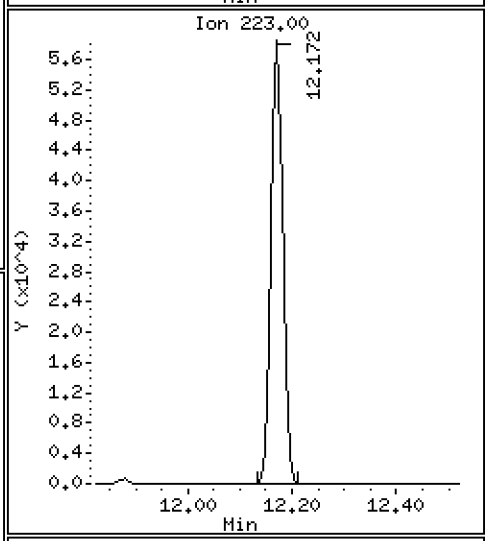


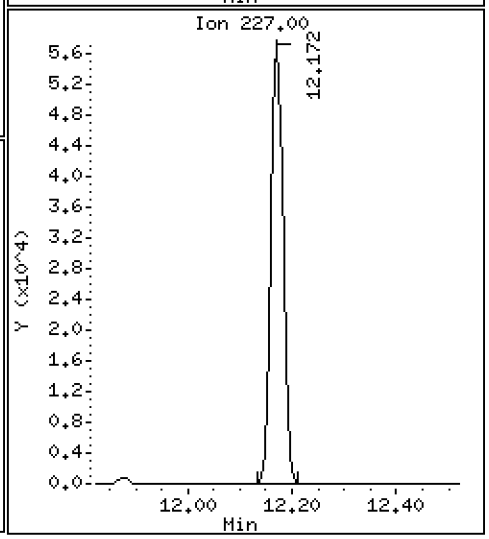












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

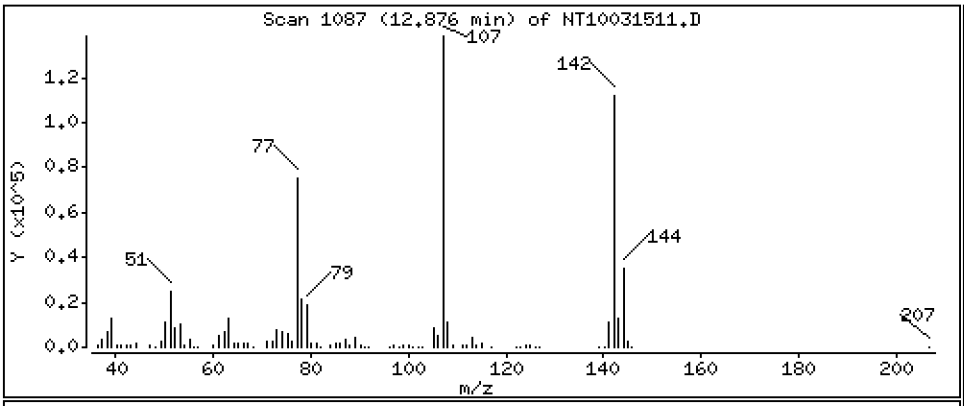
Operator: VTS

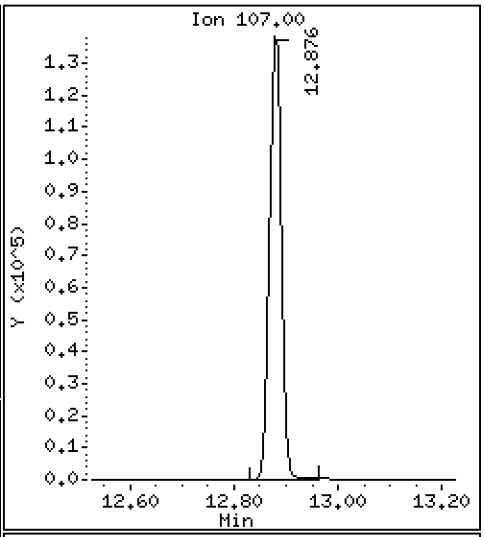
Column phase: ZB-5msi

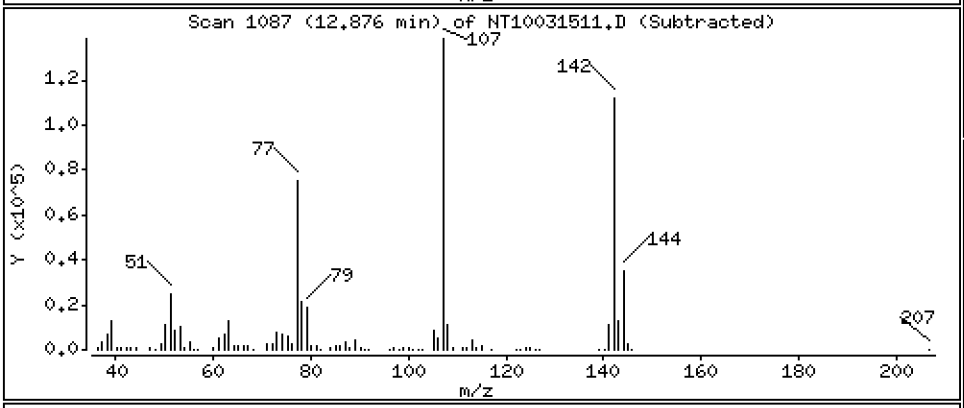
Column diameter: 0.25

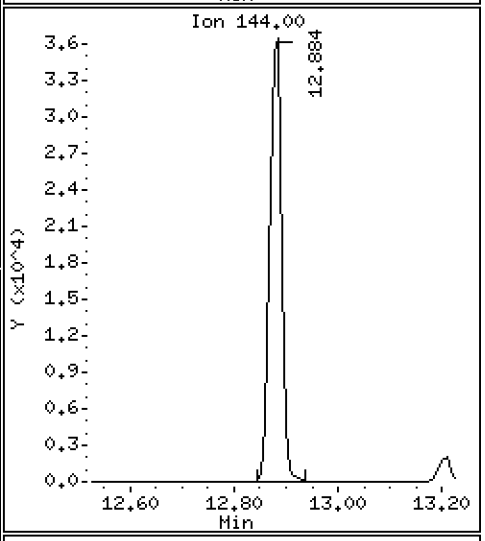
31 4-Chloro-3-methylphenol

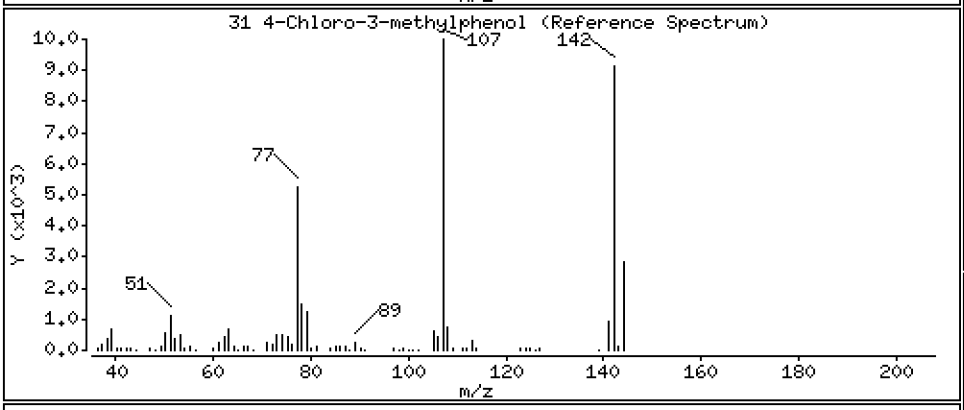
Concentration: 4.640 ug/mL

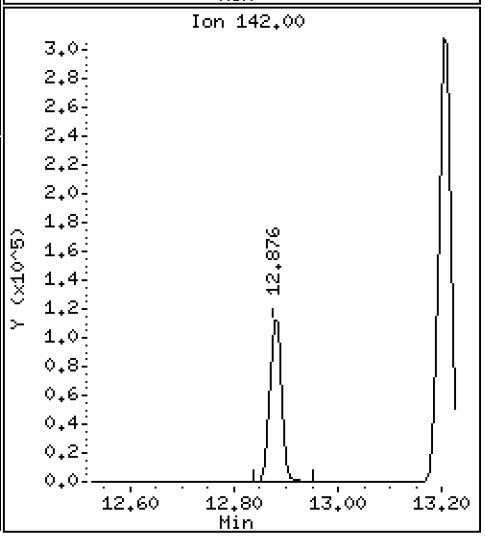


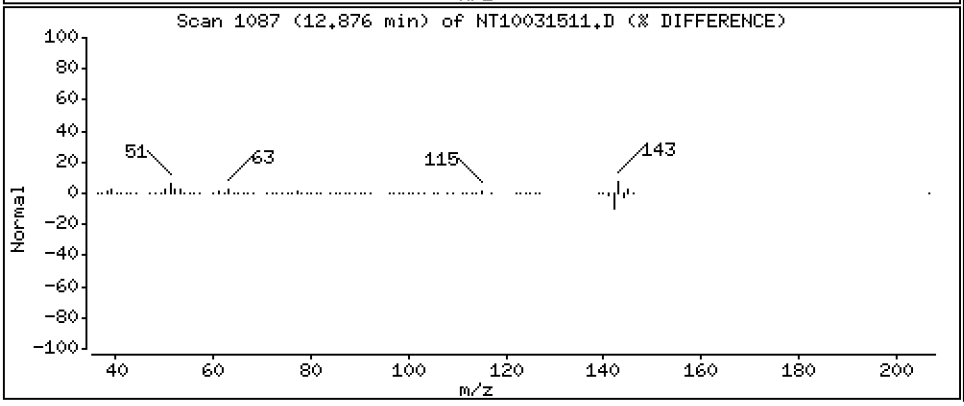












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

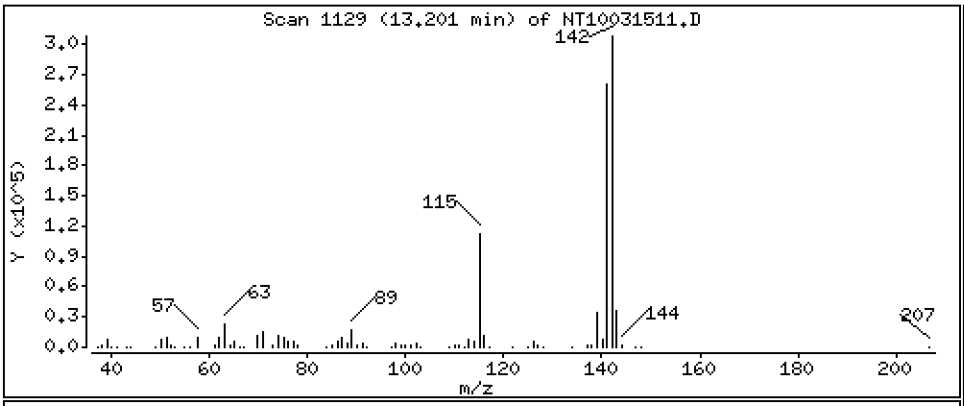
Operator: VTS

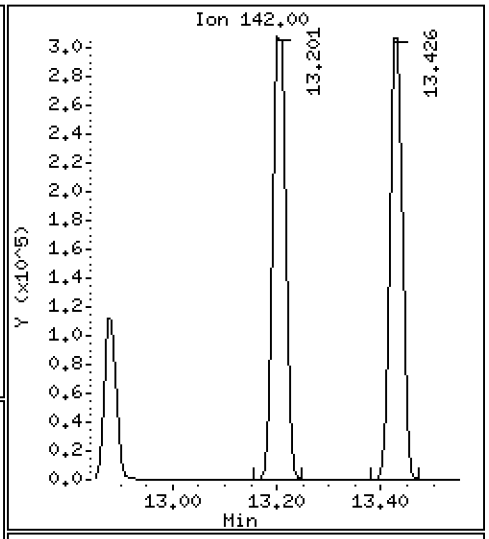
Column phase: ZB-5msi

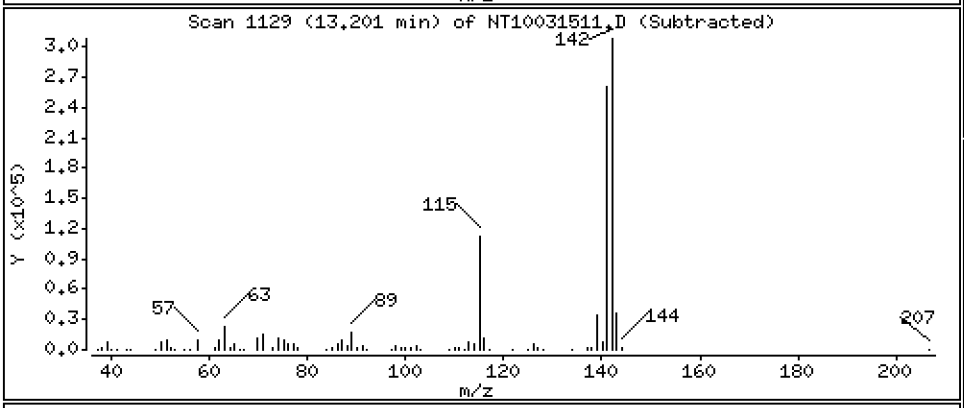
Column diameter: 0.25

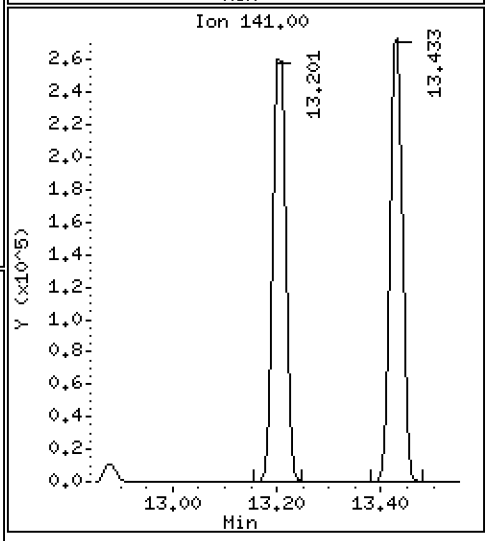
32 2-Methylnaphthalene

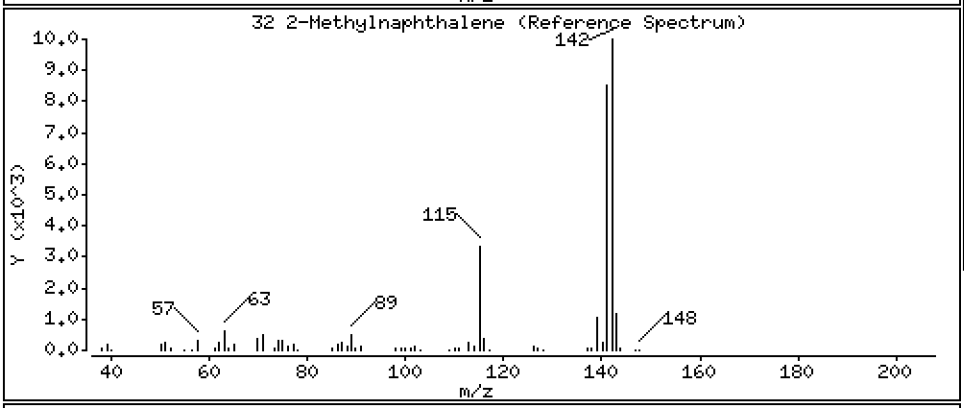
Concentration: 4.596 ug/mL

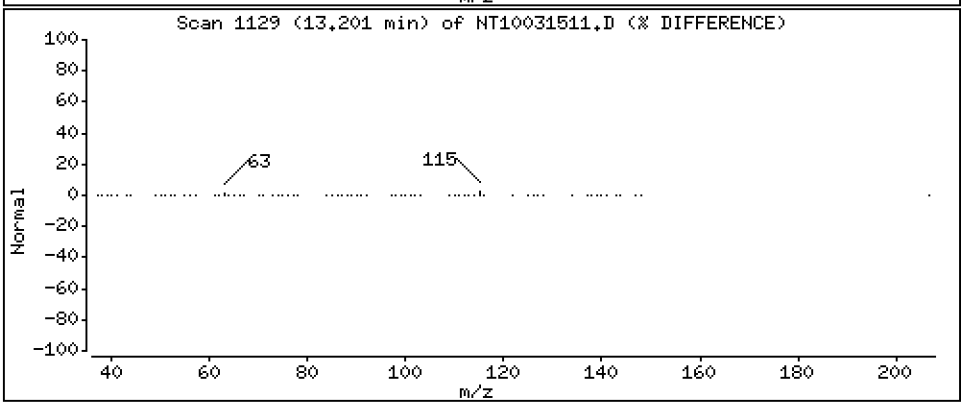












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

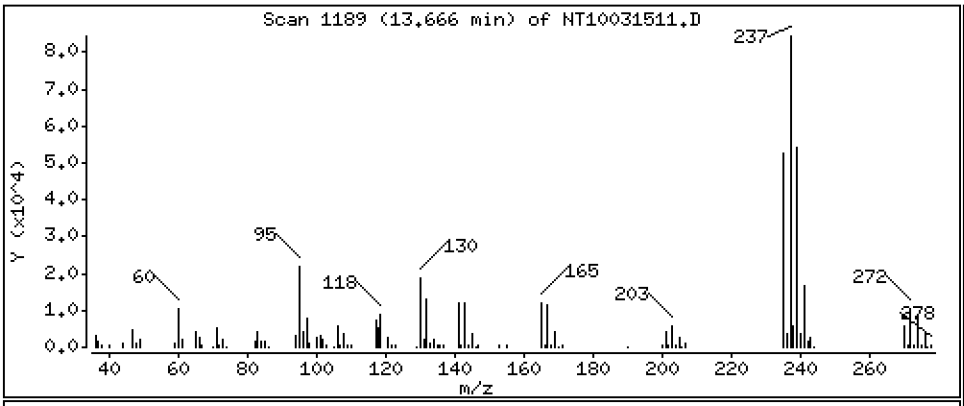
Operator: VTS

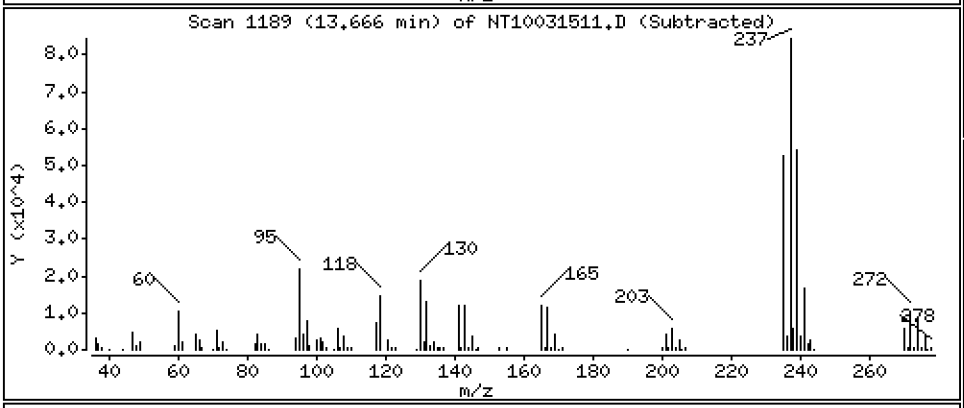
Column phase: ZB-5msi

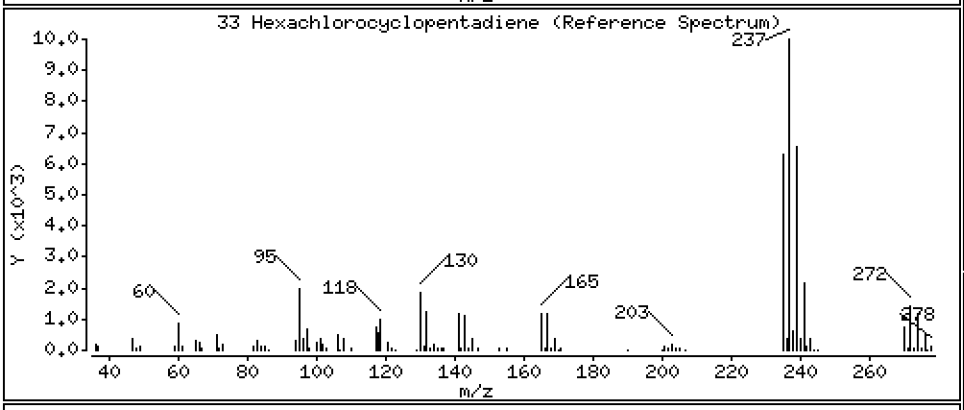
Column diameter: 0.25

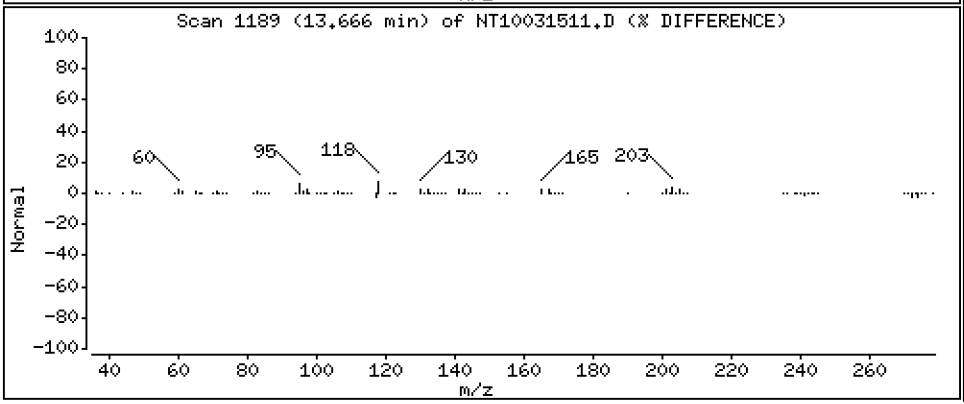
33 Hexachlorocyclopentadiene

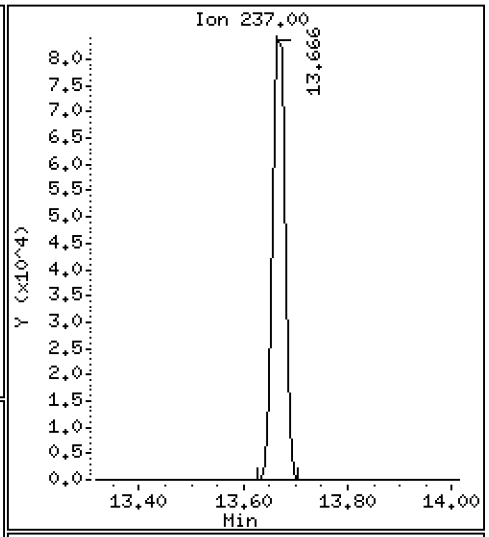
Concentration: 4.729 ug/mL

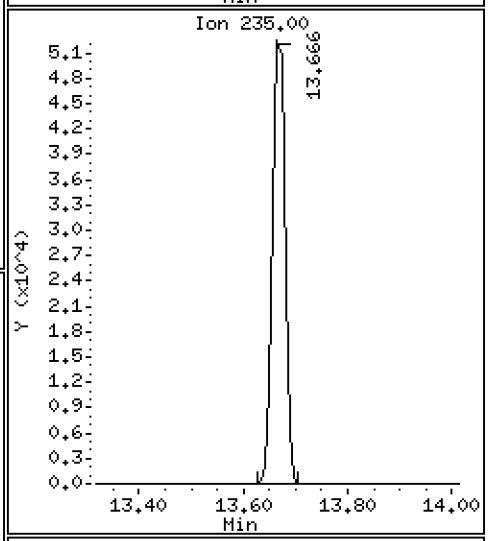


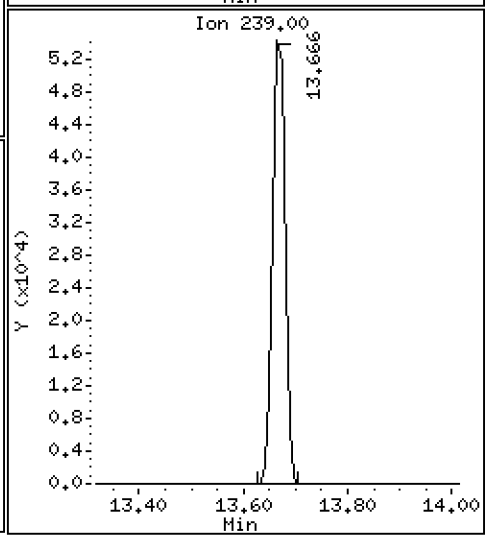












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

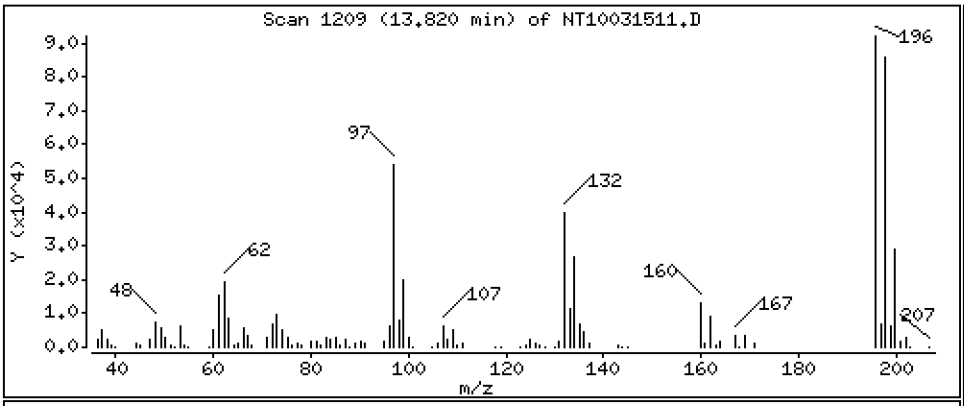
Operator: VTS

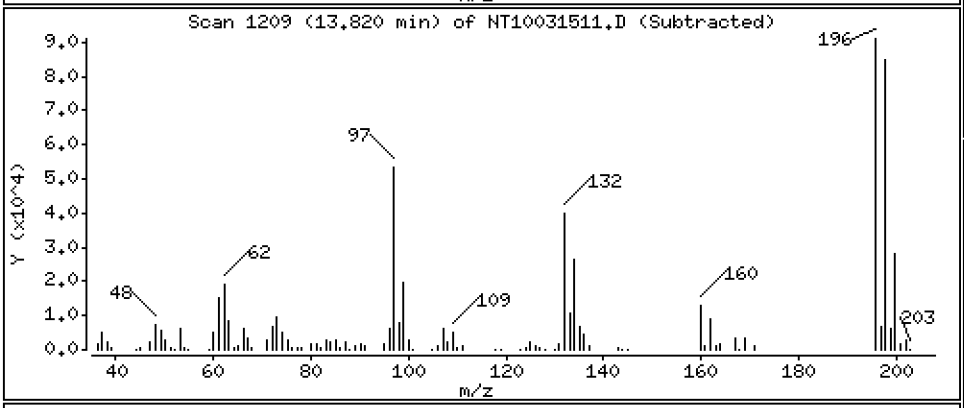
Column phase: ZB-5msi

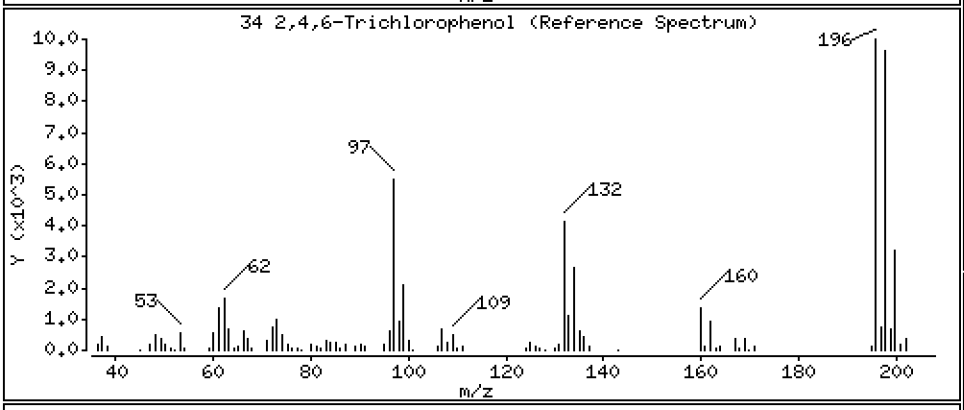
Column diameter: 0.25

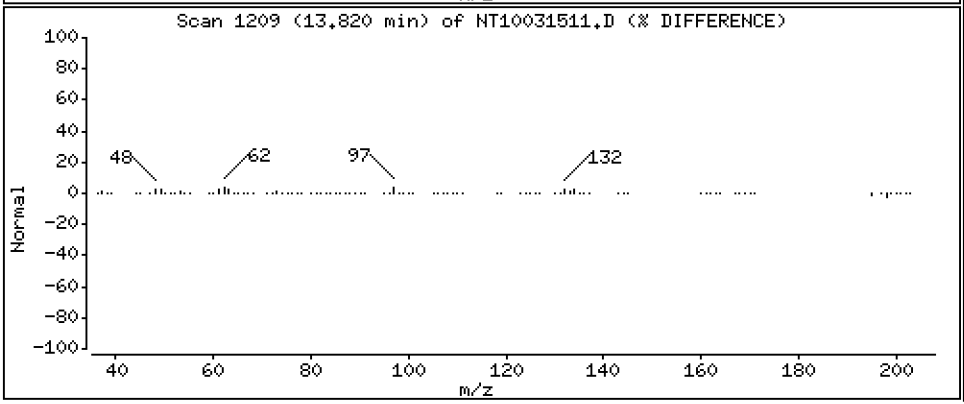
34 2,4,6-Trichlorophenol

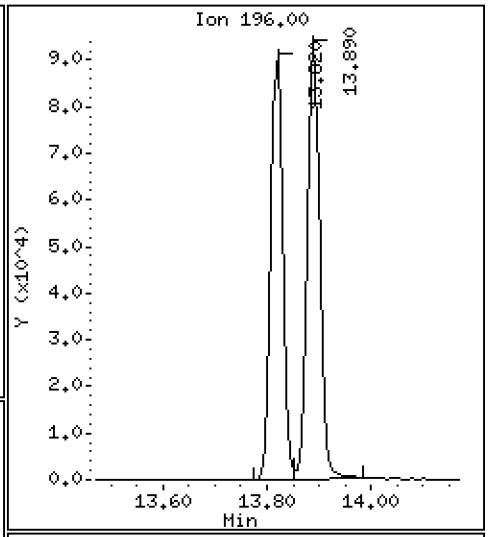
Concentration: 4.596 ug/mL

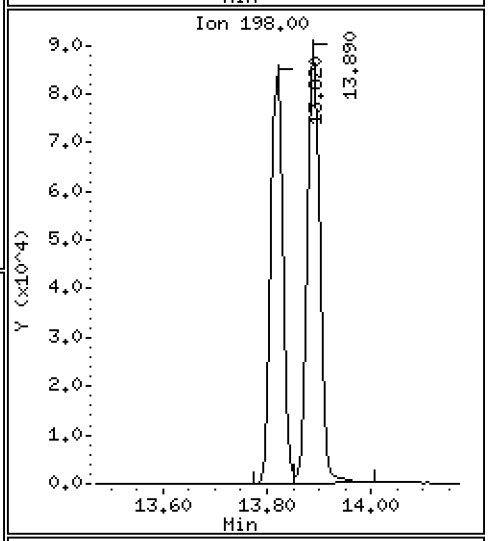


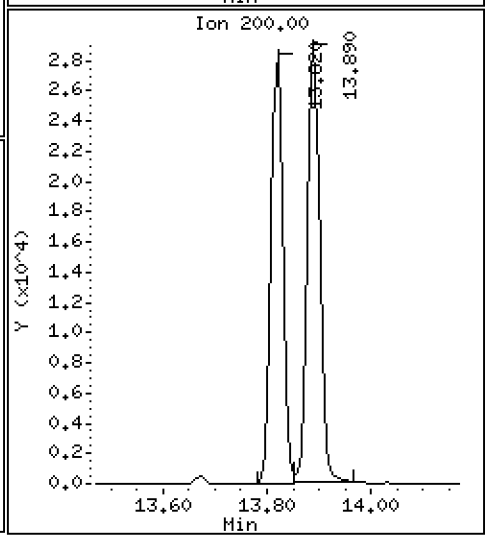












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

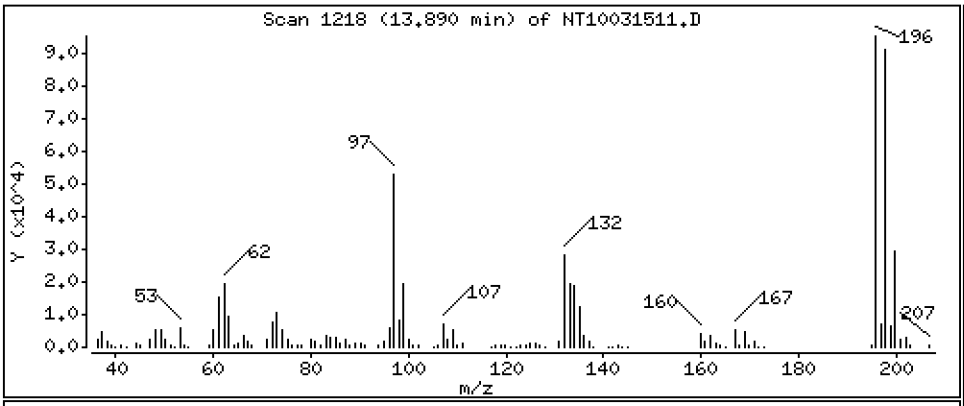
Operator: VTS

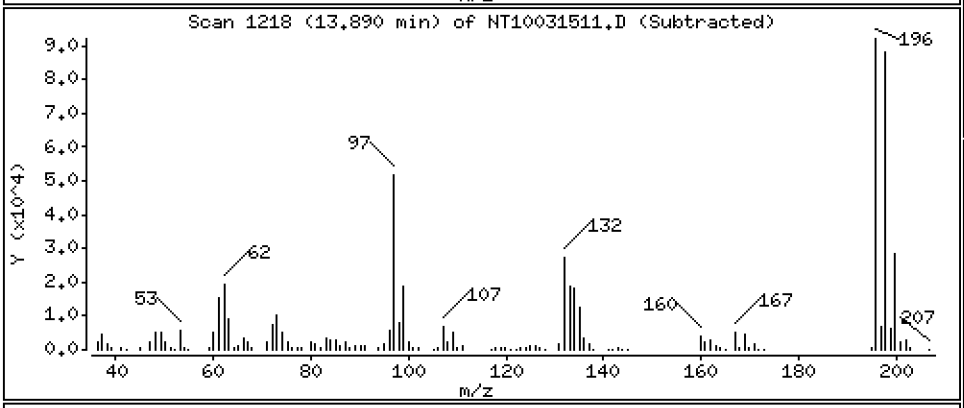
Column phase: ZB-5msi

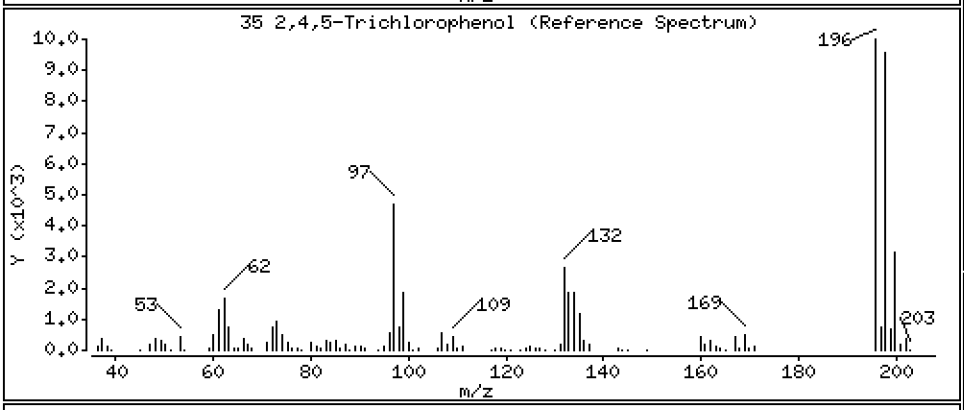
Column diameter: 0.25

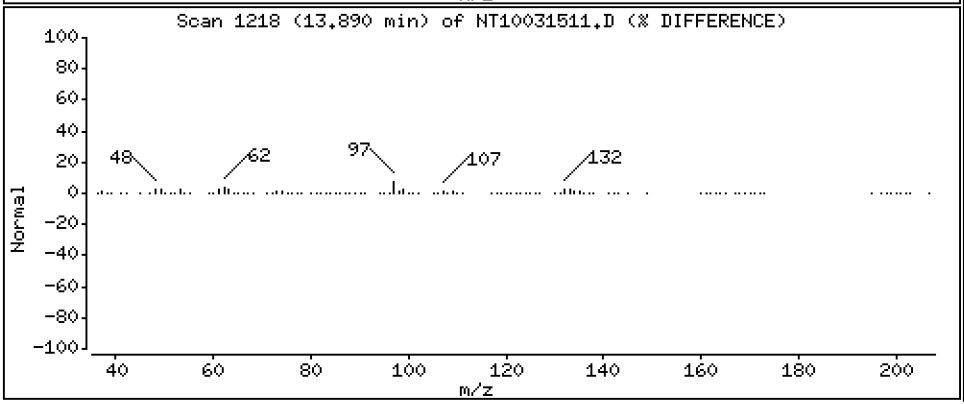
35 2,4,5-Trichlorophenol

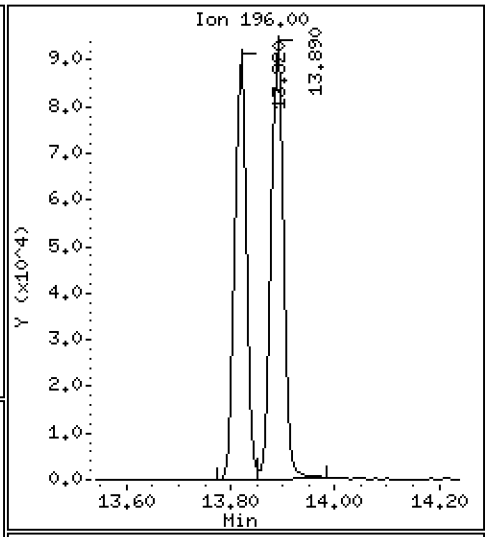
Concentration: 4.409 ug/mL

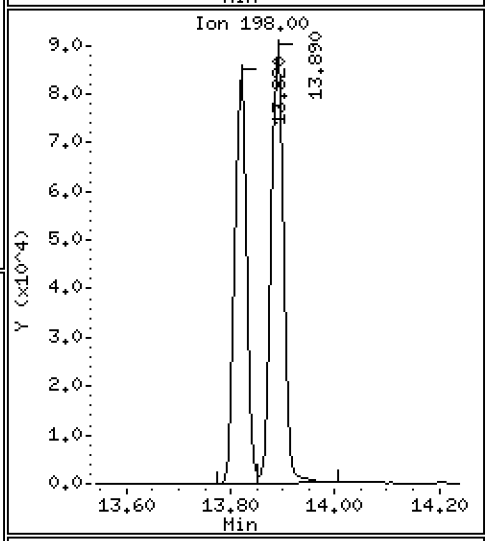


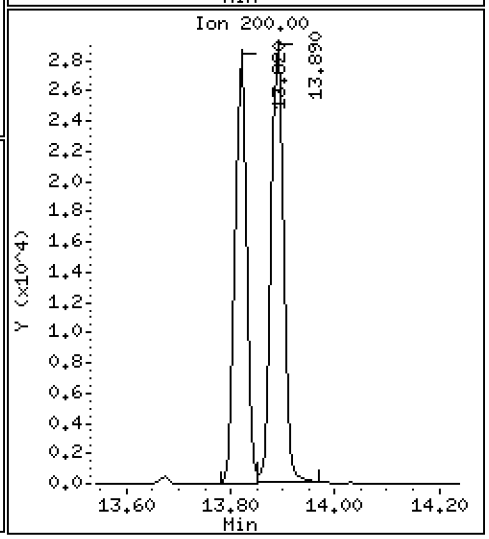












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

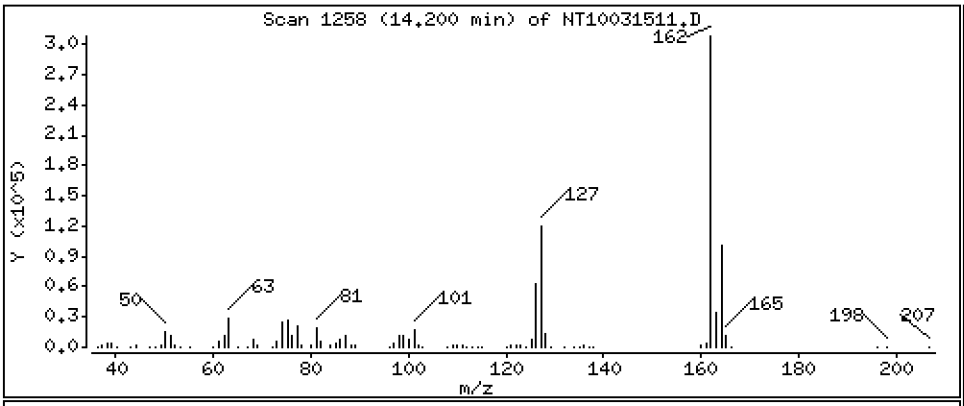
Operator: VTS

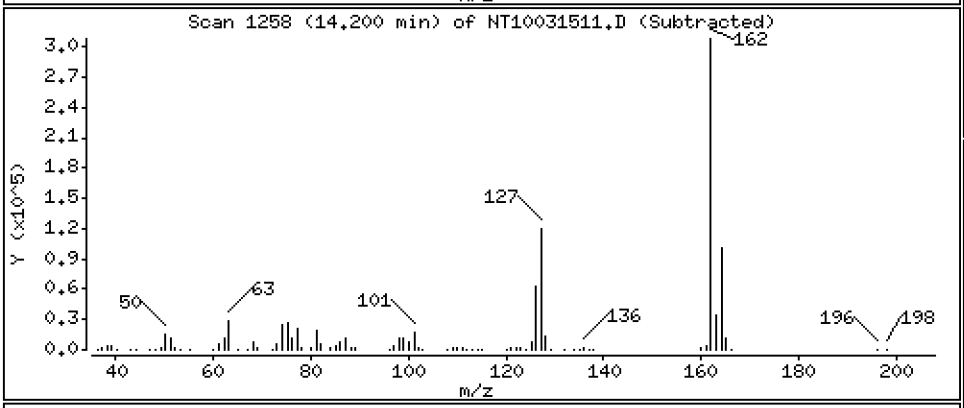
Column phase: ZB-5msi

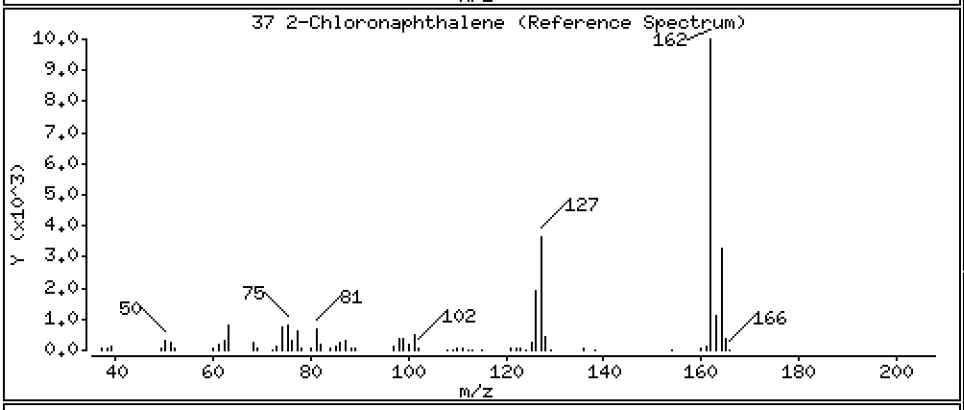
Column diameter: 0.25

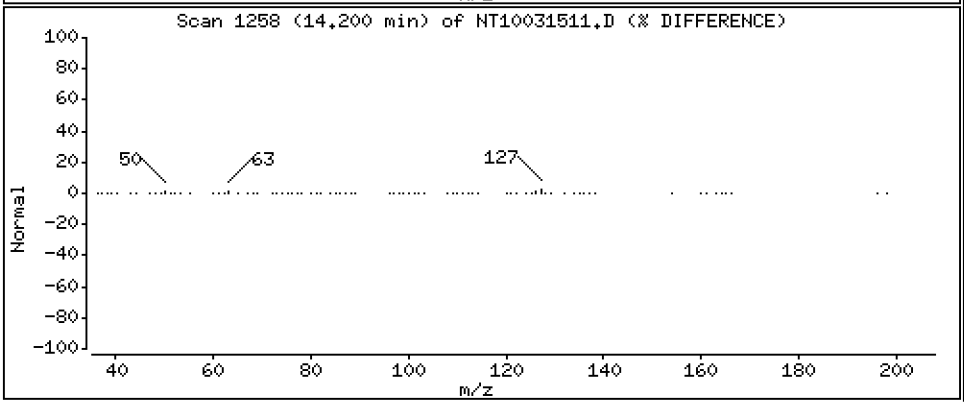
37 2-Chloronaphthalene

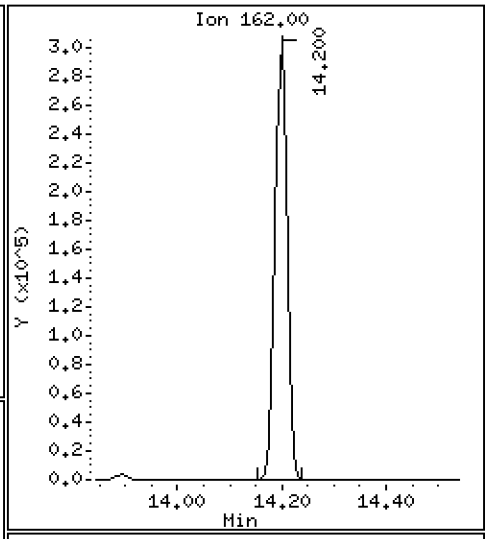
Concentration: 4.796 ug/mL

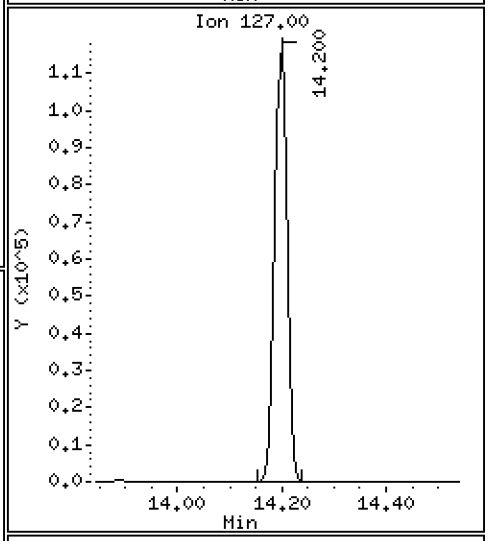


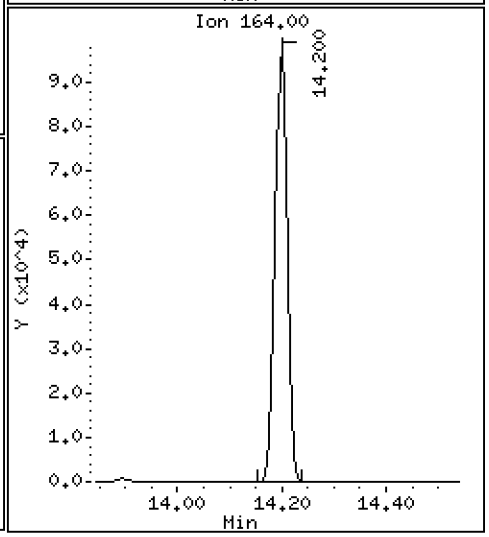












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

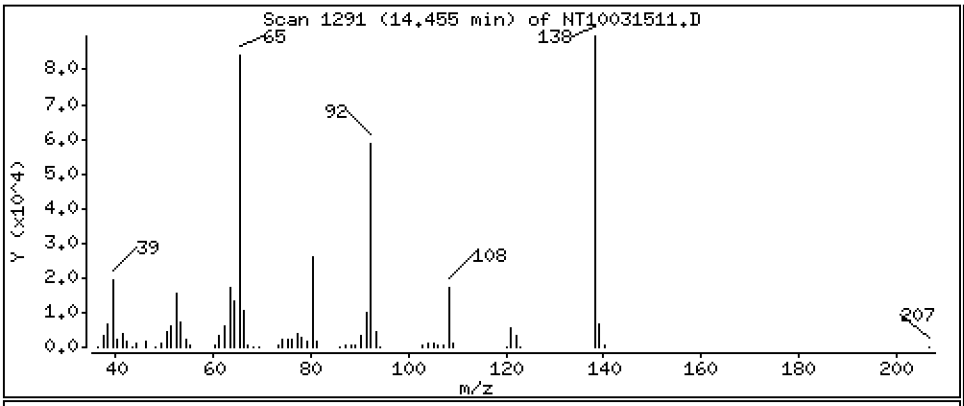
Operator: VTS

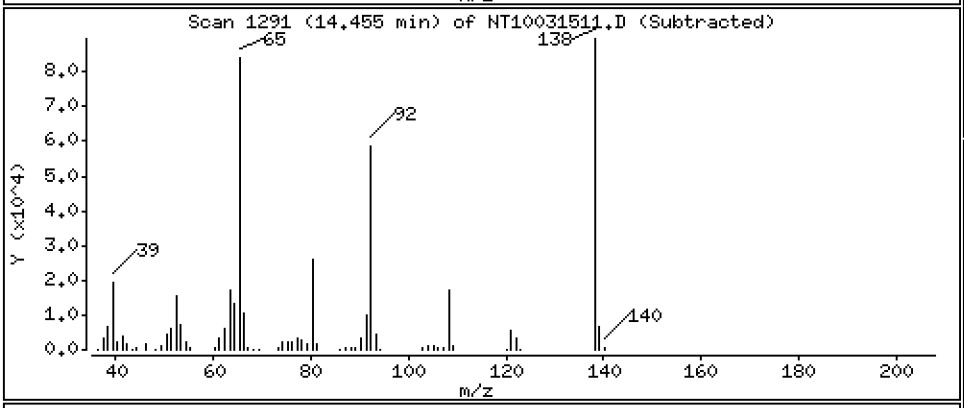
Column phase: ZB-5msi

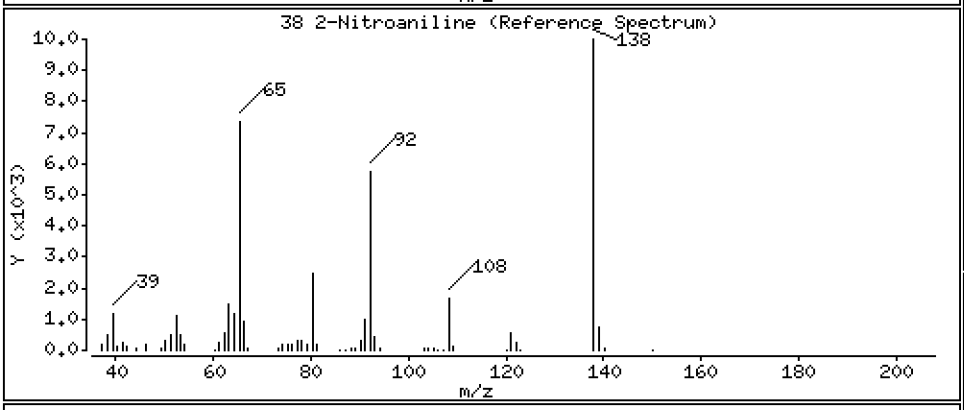
Column diameter: 0.25

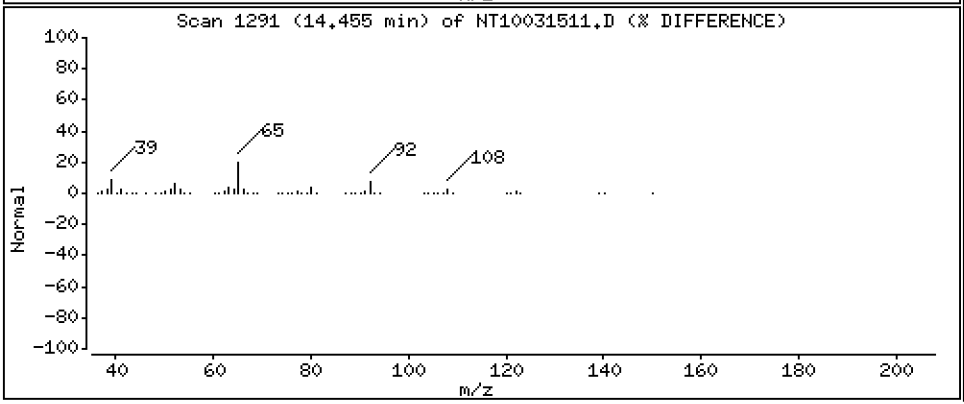
38 2-Nitroaniline

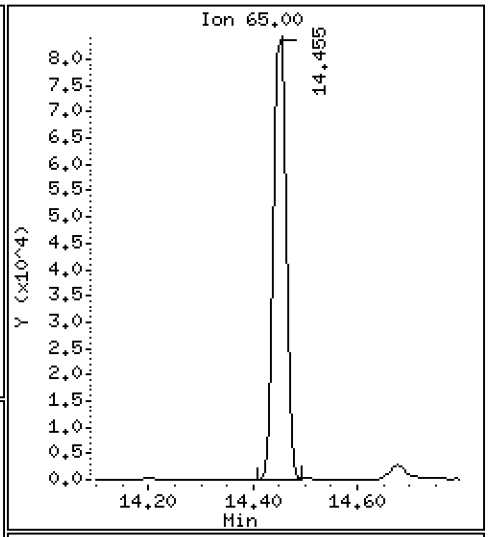
Concentration: 4.911 ug/mL

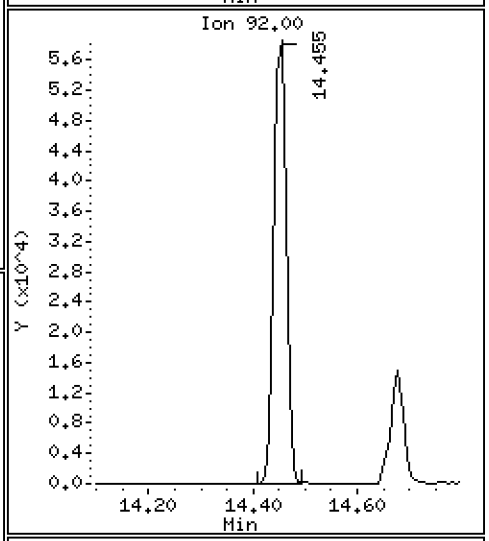


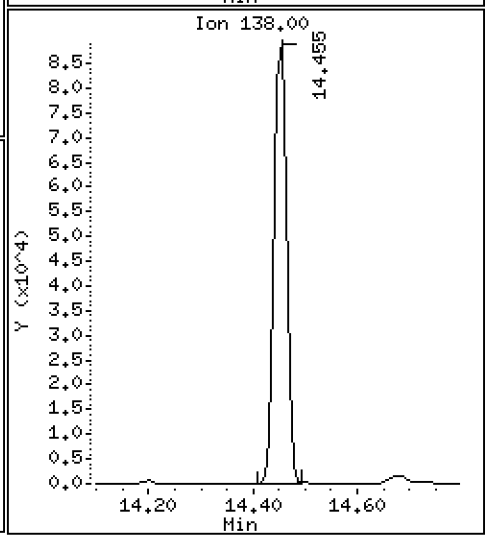












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

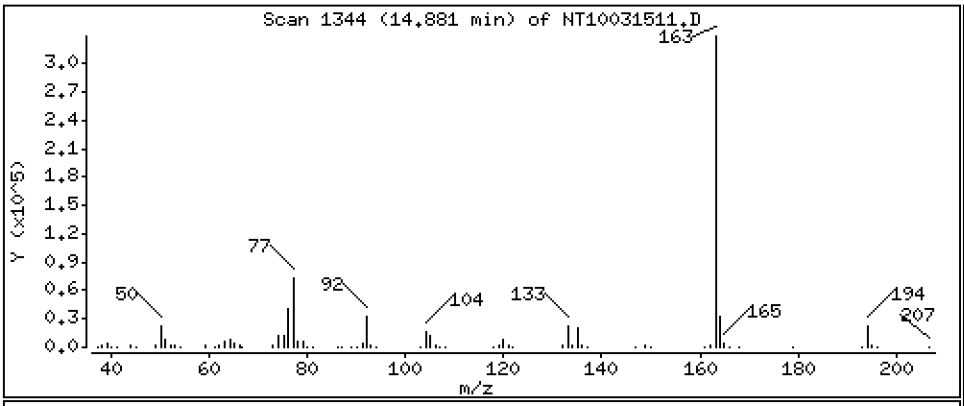
Operator: VTS

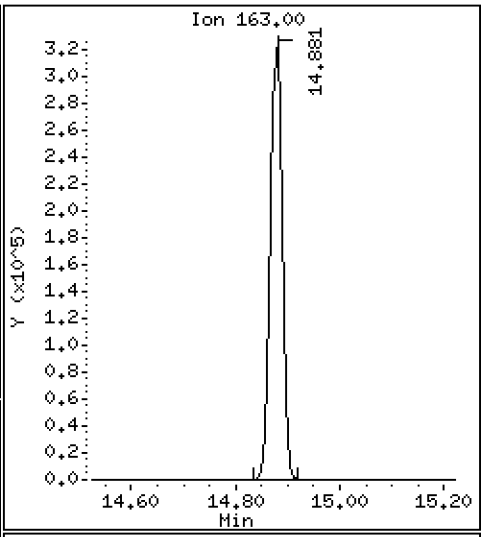
Column phase: ZB-5msi

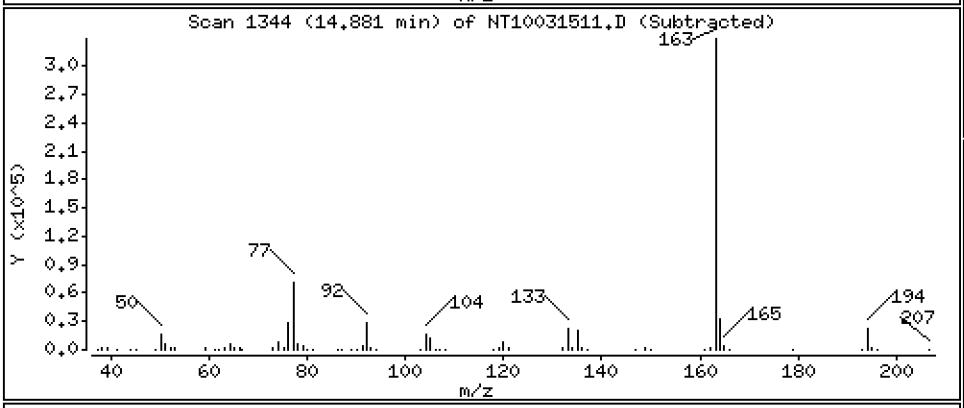
Column diameter: 0.25

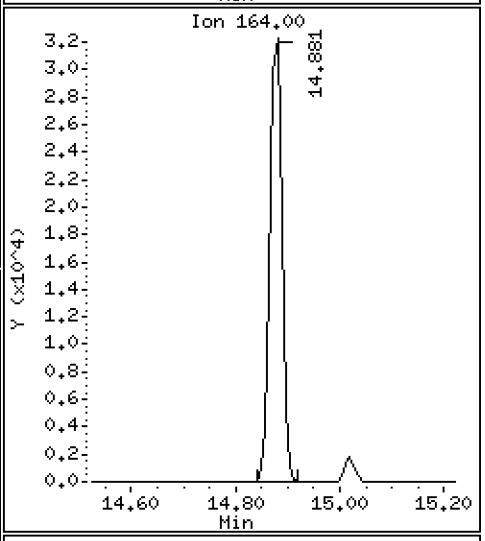
39 Dimethylphthalate

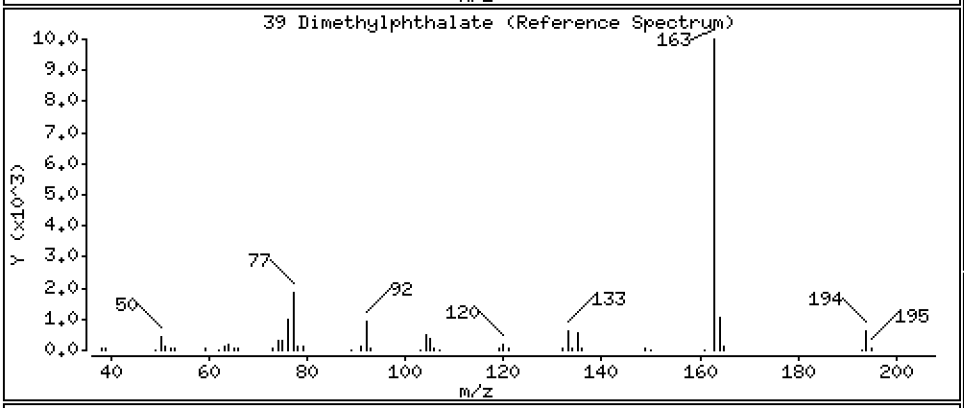
Concentration: 4.937 ug/mL

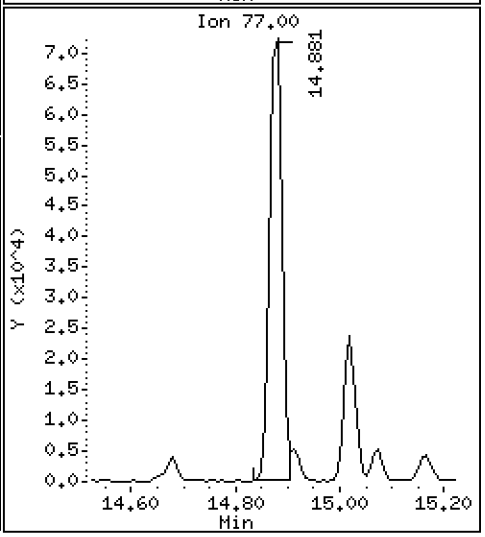


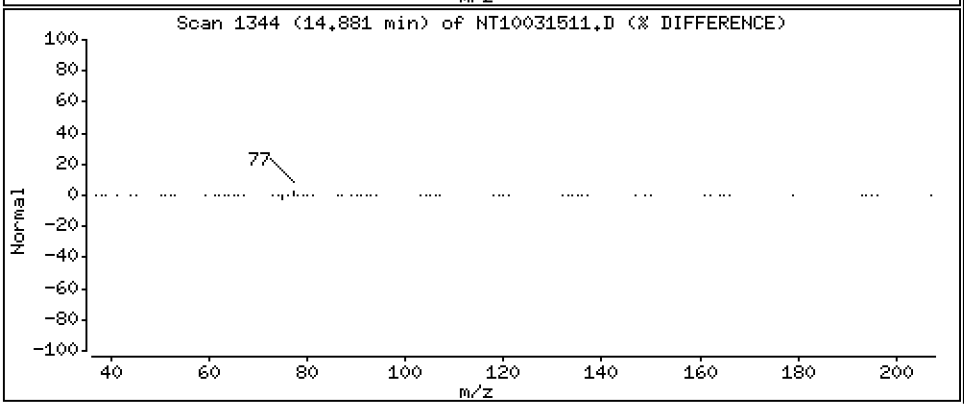












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

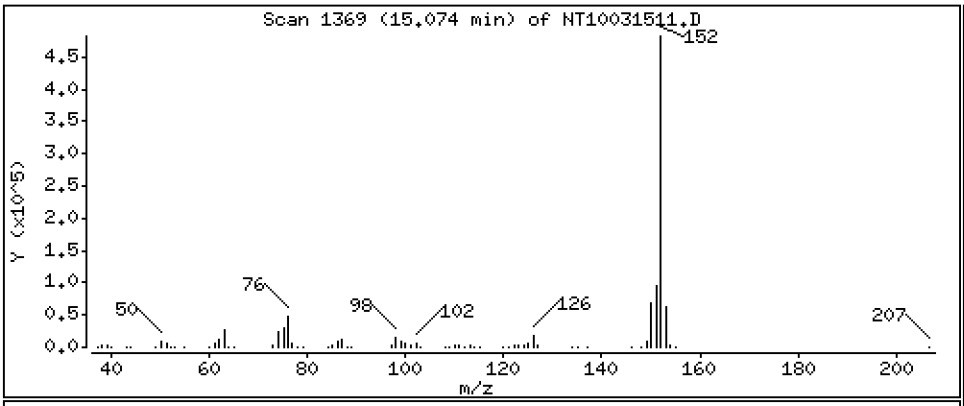
Operator: VTS

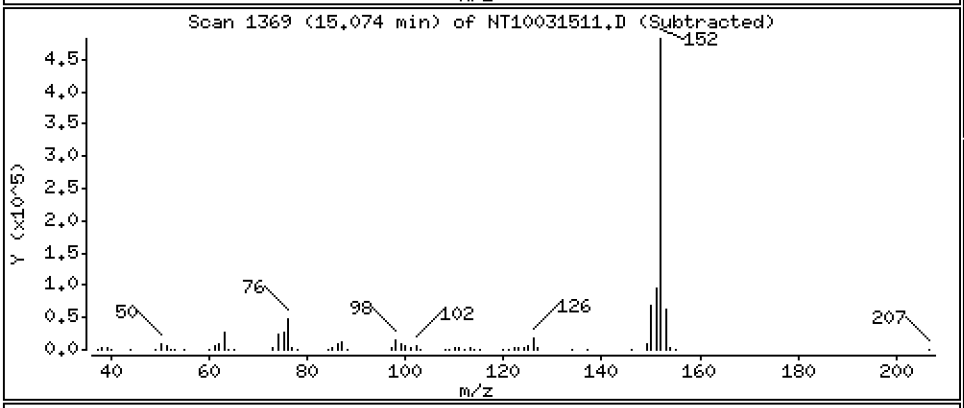
Column phase: ZB-5msi

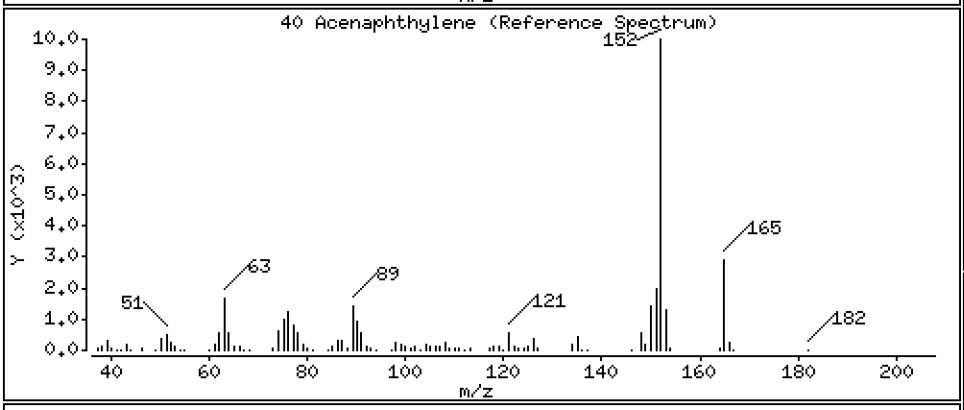
Column diameter: 0.25

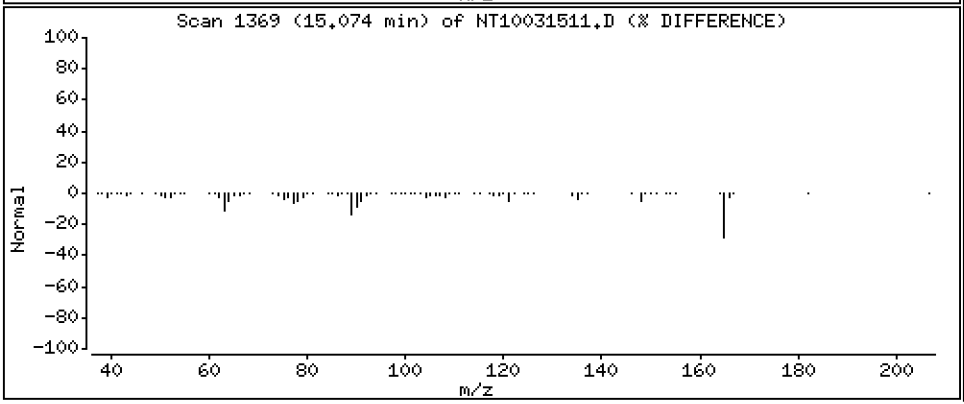
40 Acenaphthylene

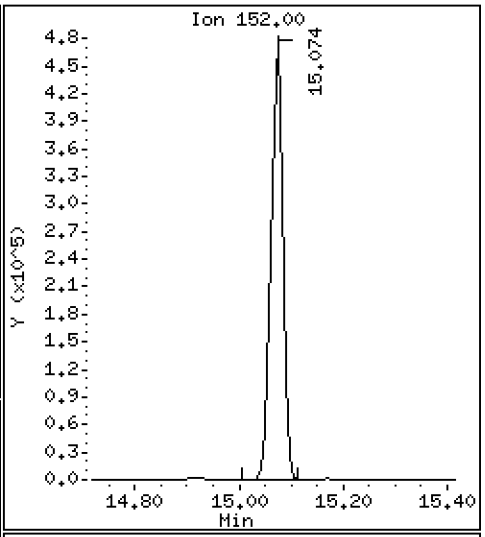
Concentration: 4.805 ug/mL

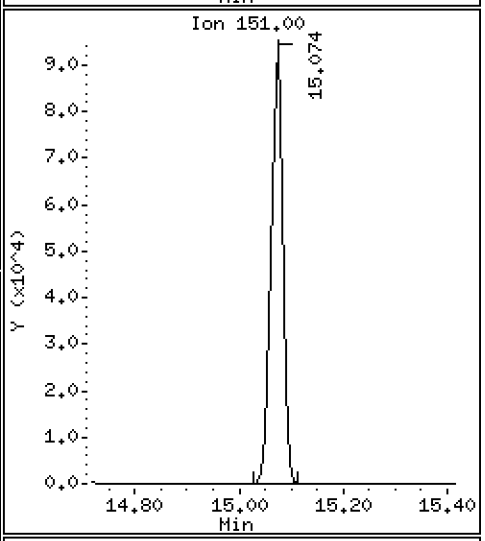


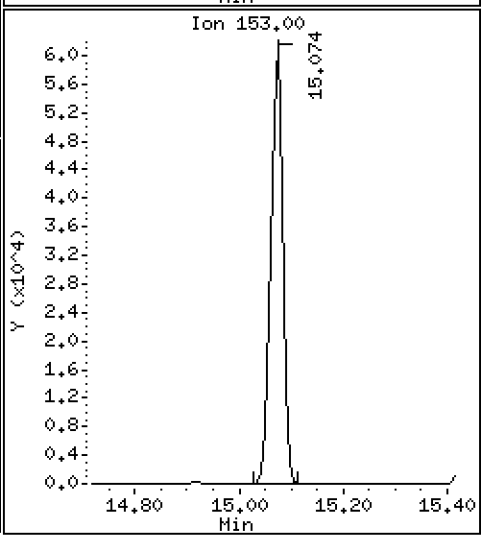












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

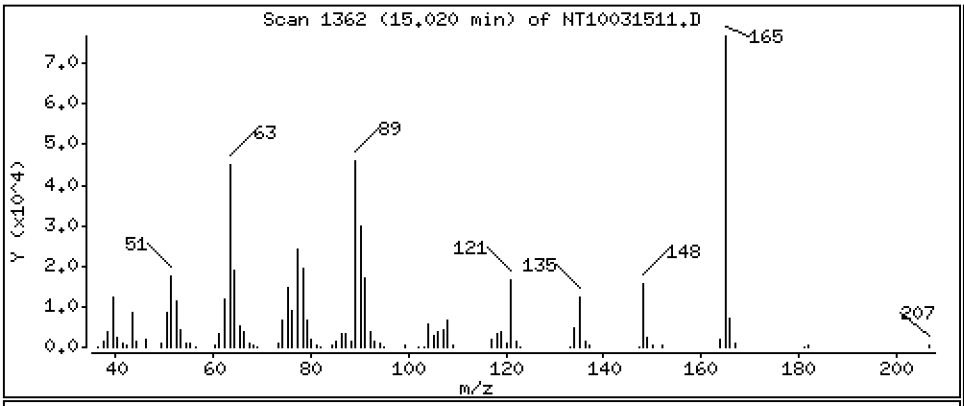
Operator: VTS

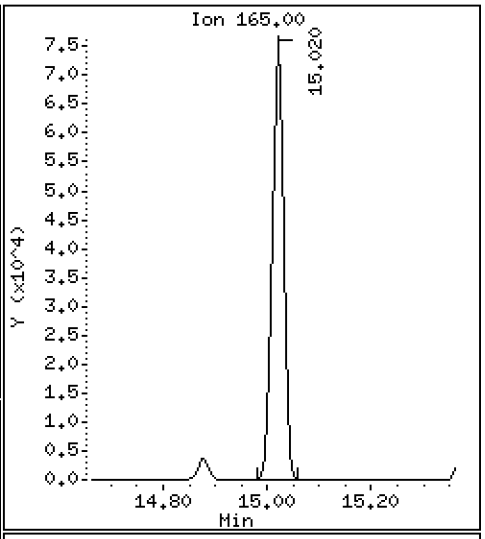
Column phase: ZB-5msi

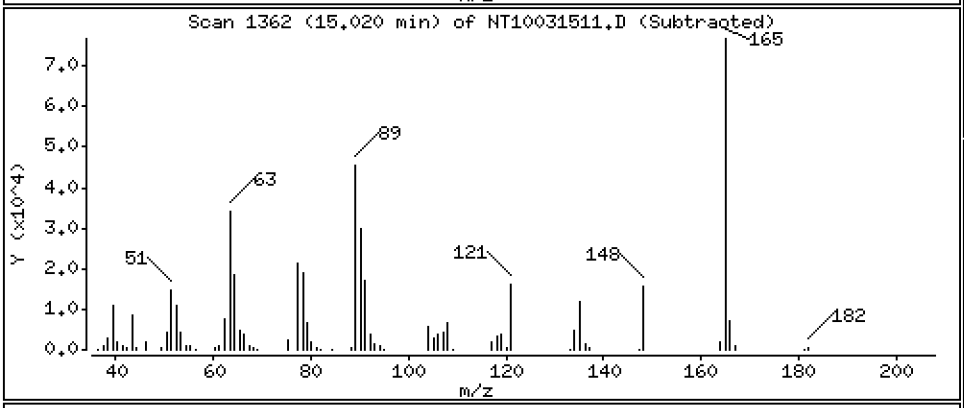
Column diameter: 0.25

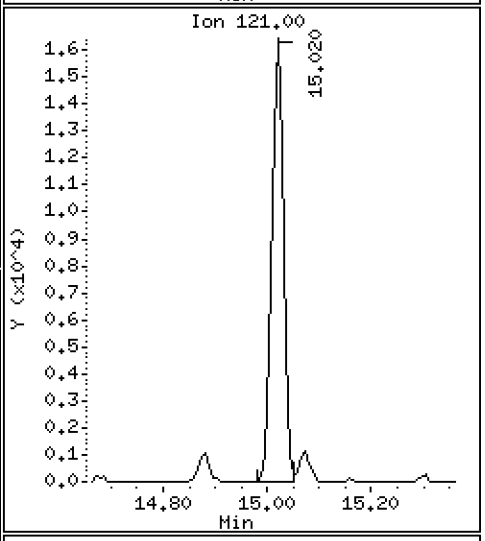
41 2,6-Dinitrotoluene

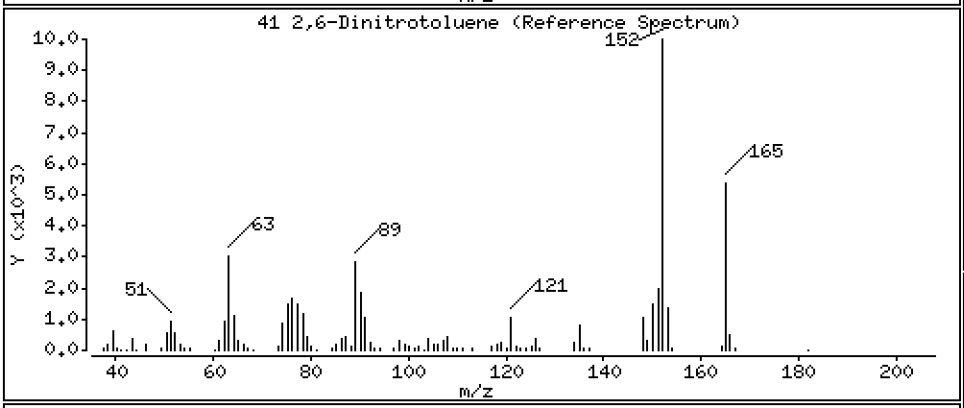
Concentration: 5.298 ug/mL

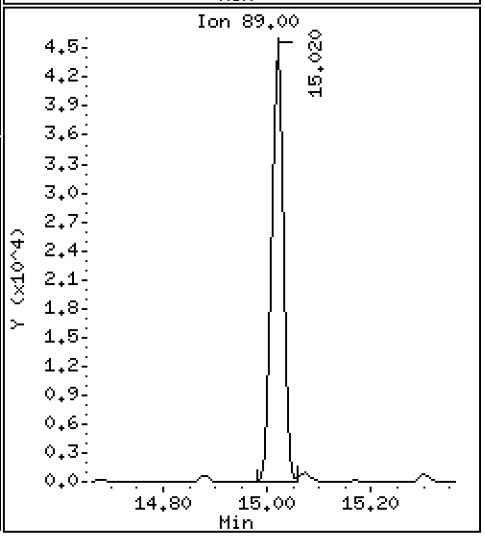


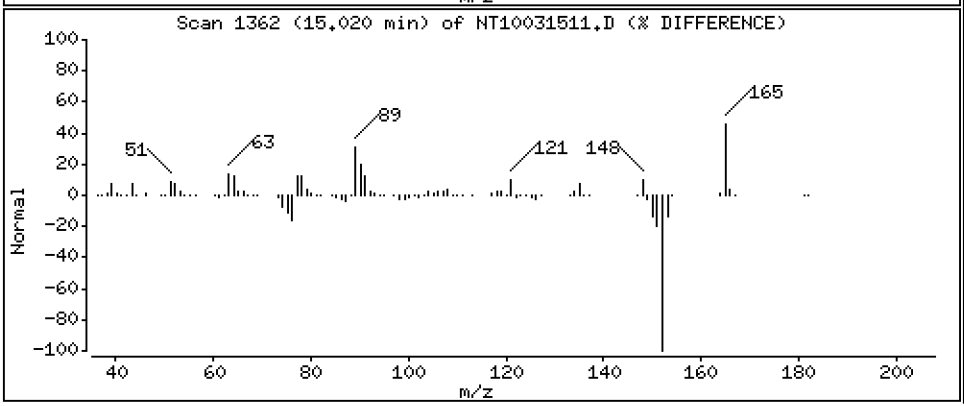












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

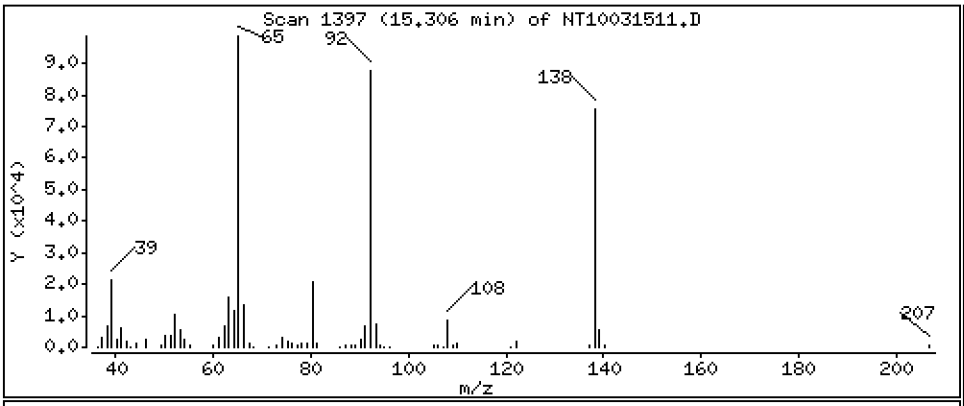
Operator: VTS

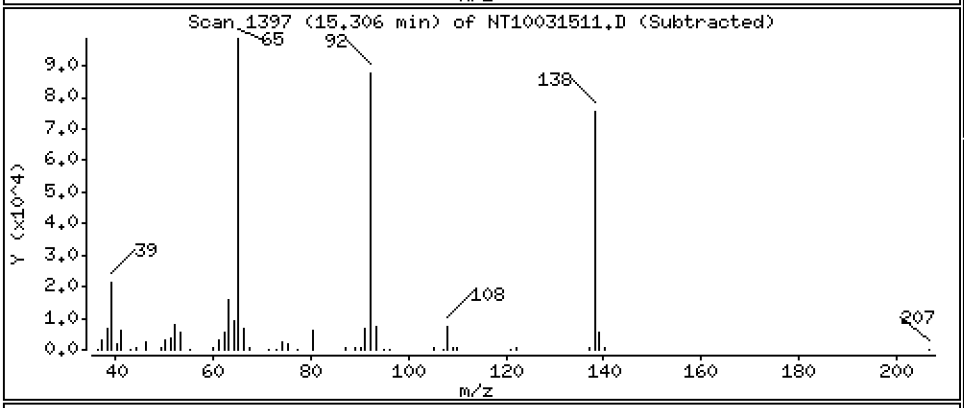
Column phase: ZB-5msi

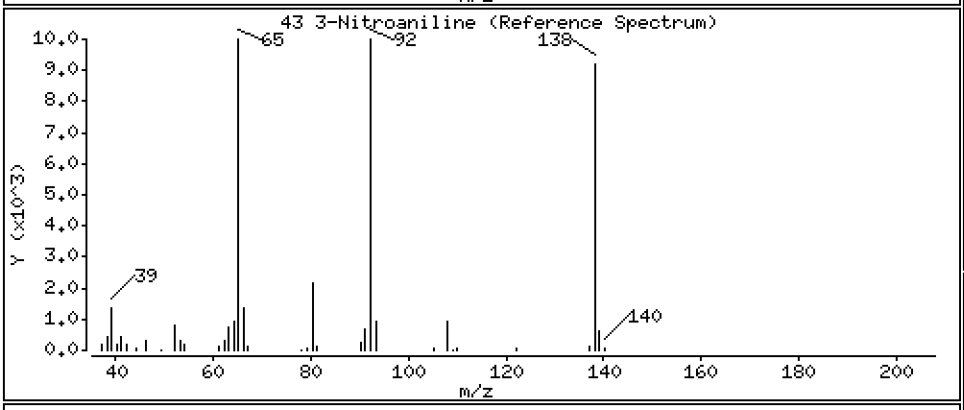
Column diameter: 0.25

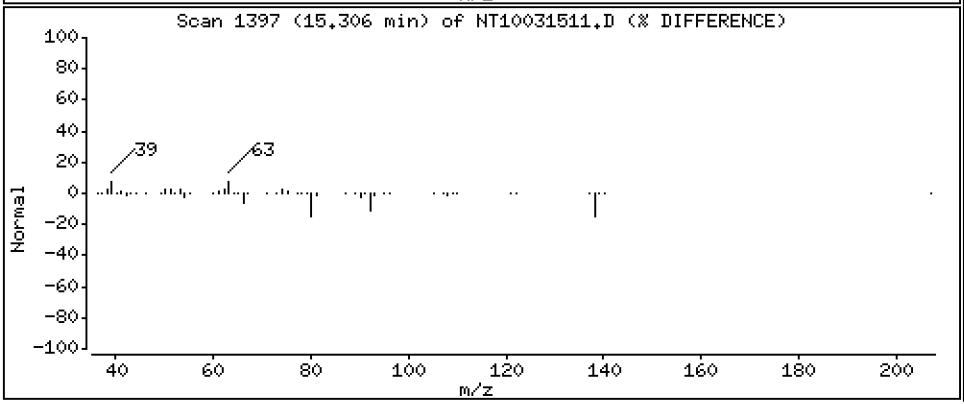
43 3-Nitroaniline

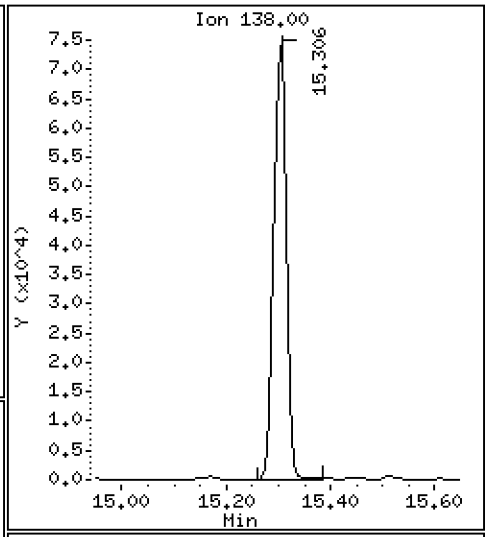
Concentration: 5.014 ug/mL

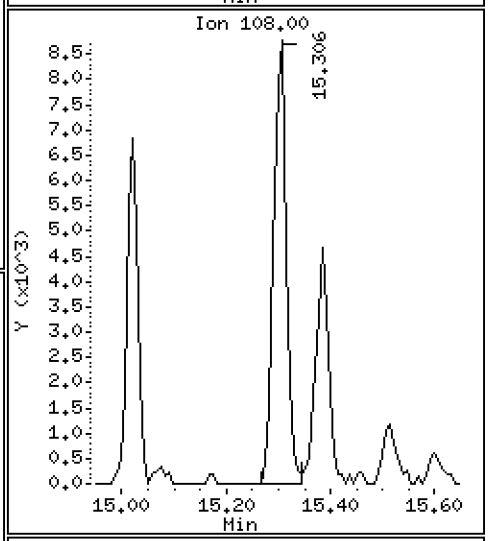


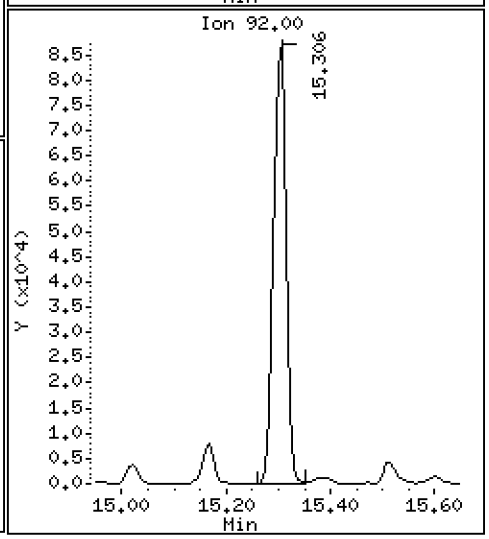












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

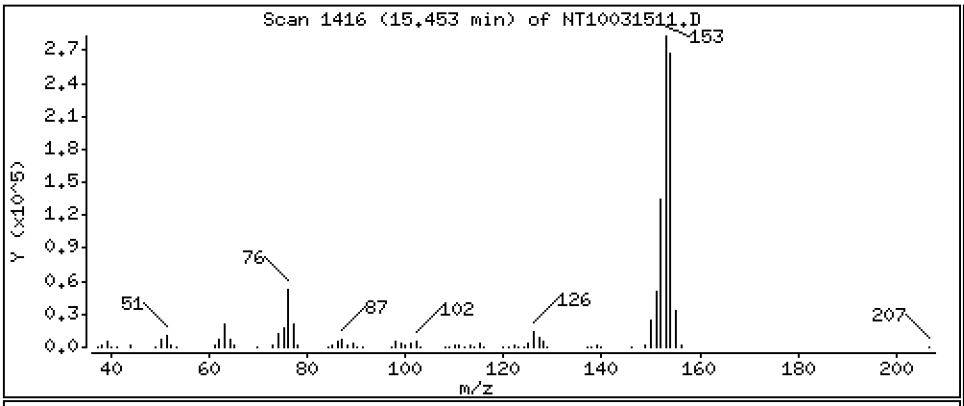
Operator: VTS

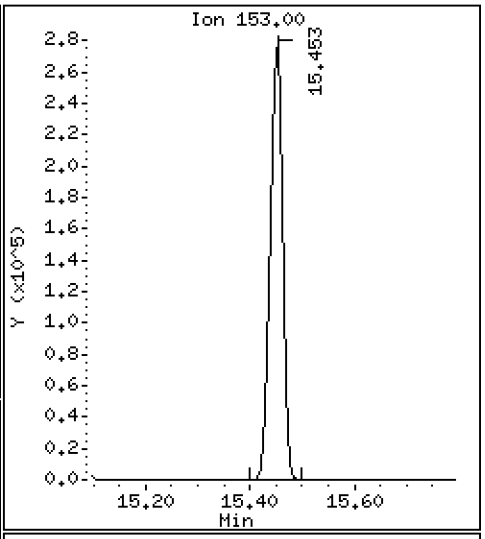
Column phase: ZB-5msi

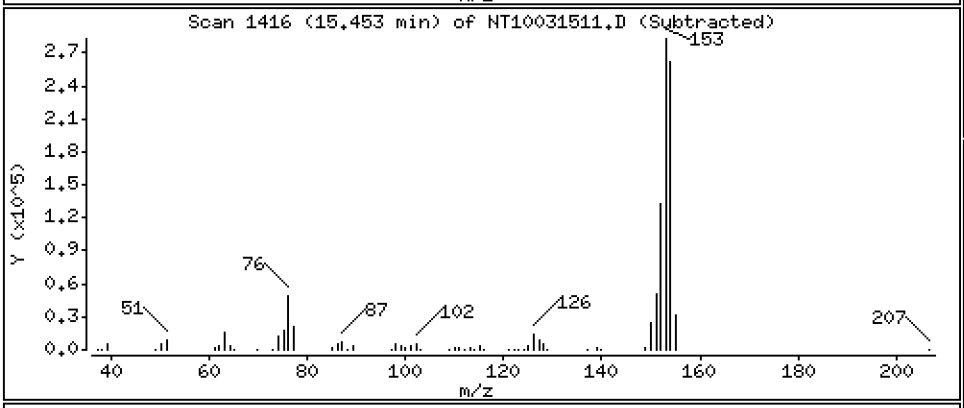
Column diameter: 0.25

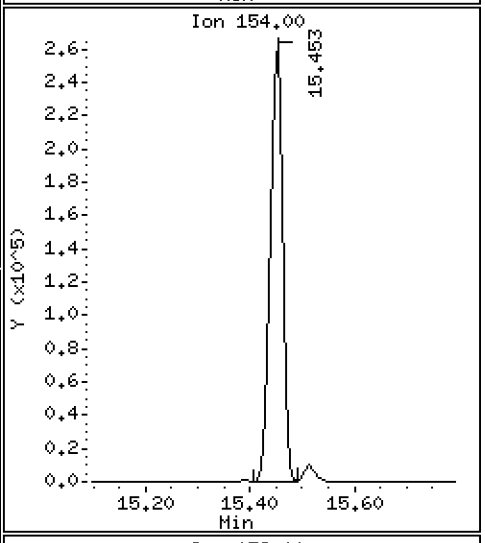
44 Acenaphthene

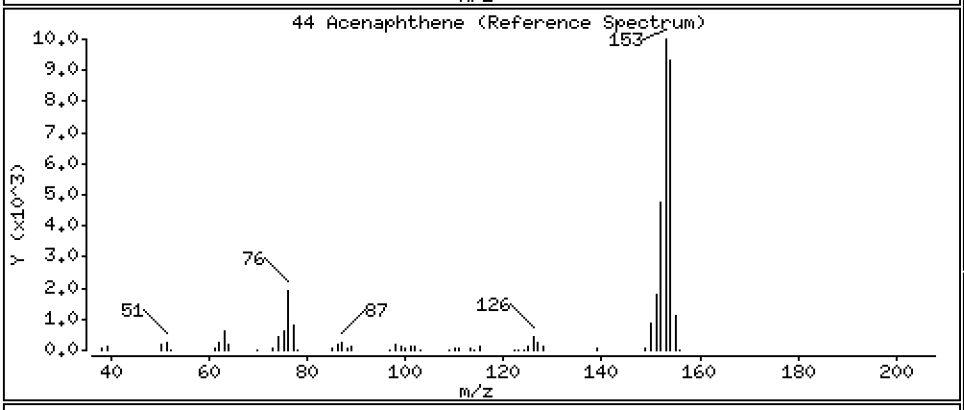
Concentration: 4.776 ug/mL

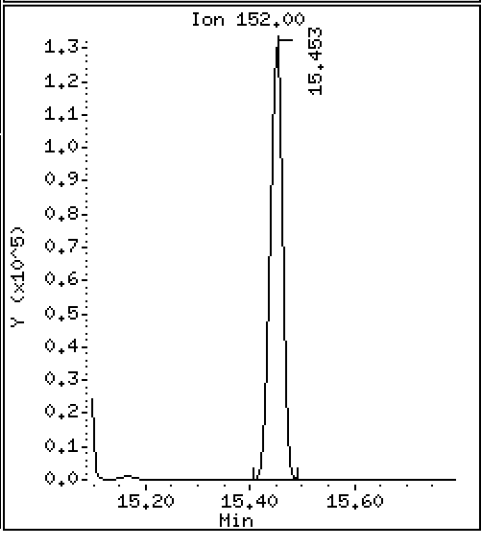


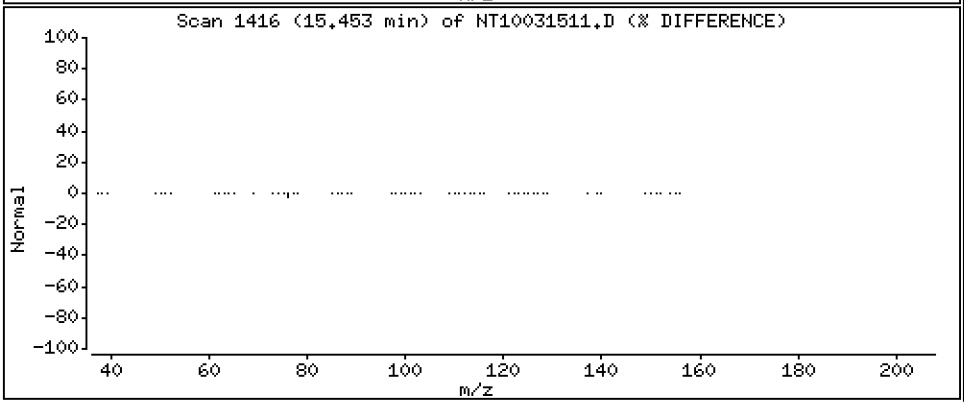












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

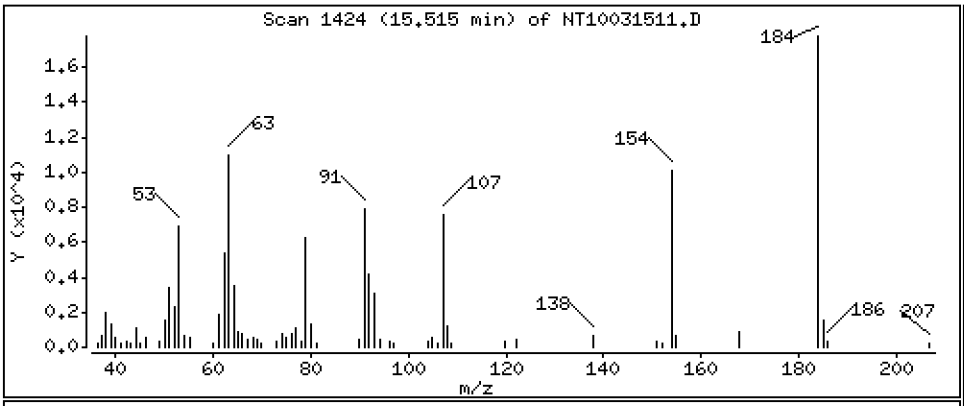
Operator: VTS

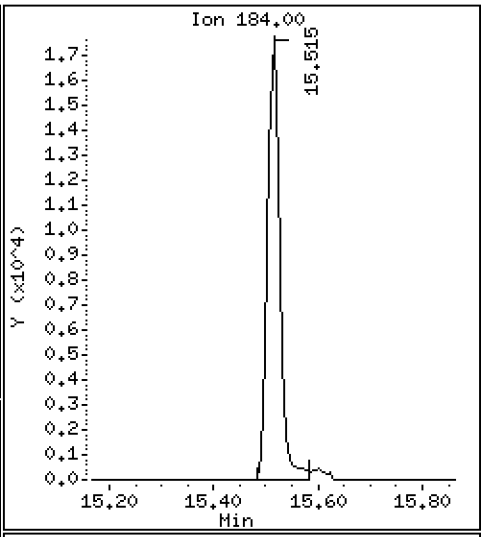
Column phase: ZB-5msi

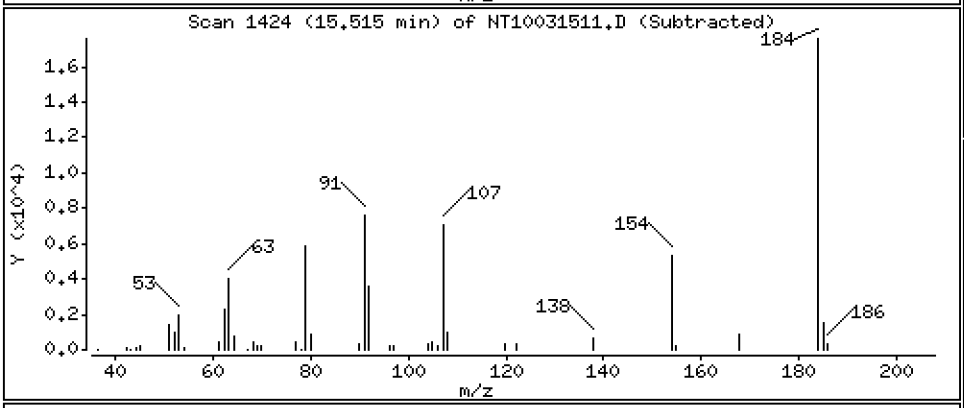
Column diameter: 0.25

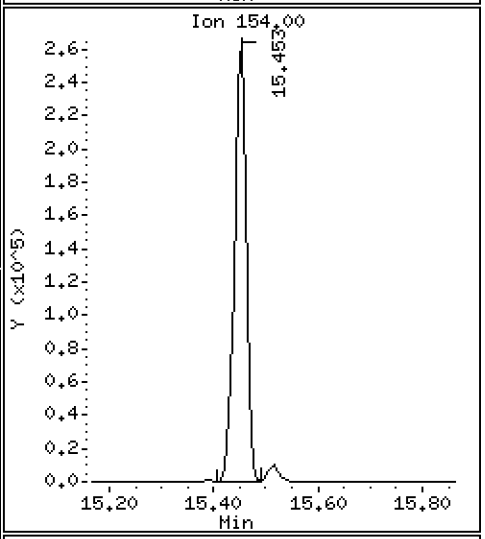
45 2,4-Dinitrophenol

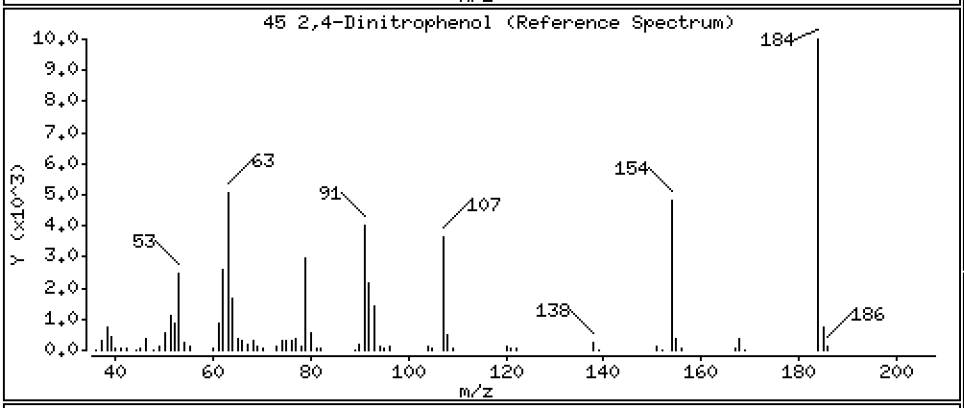
Concentration: 2.124 ug/mL

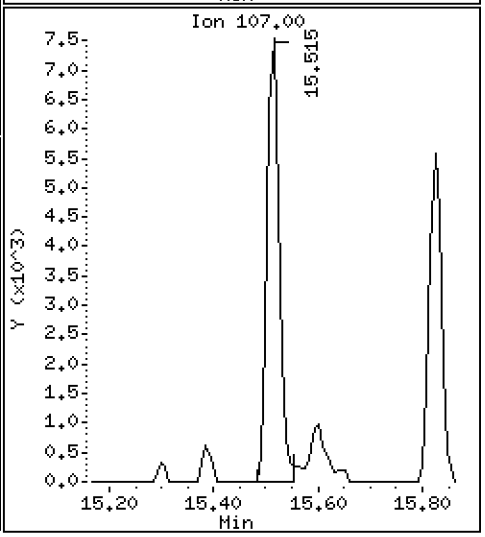


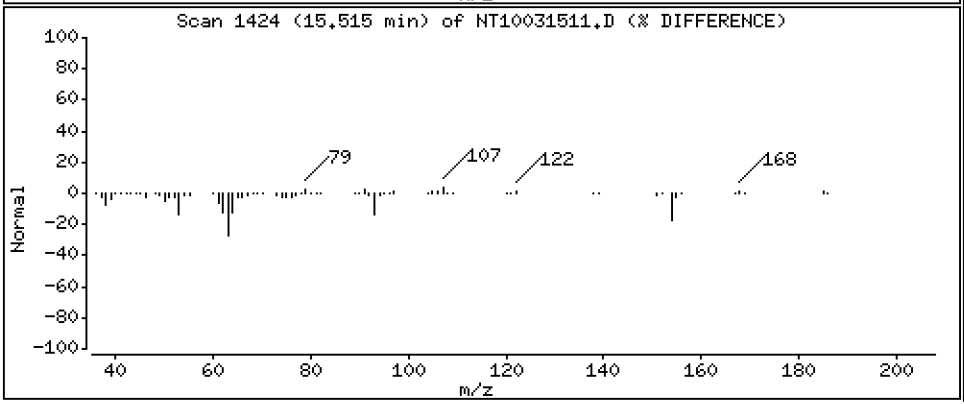












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

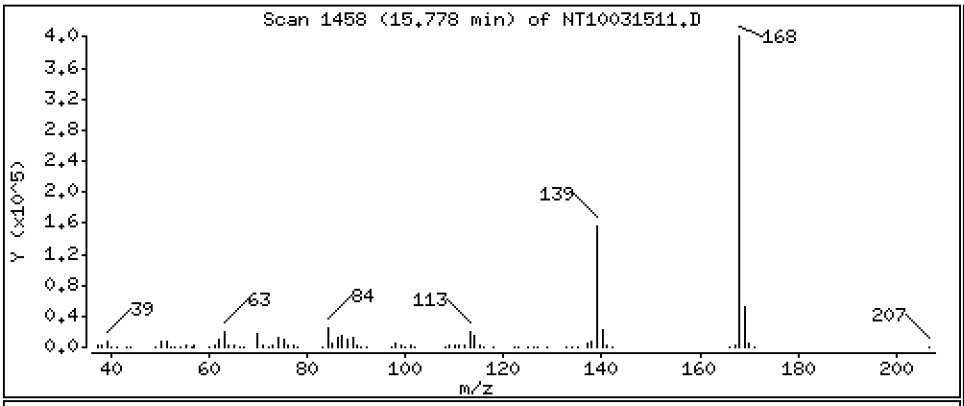
Operator: VTS

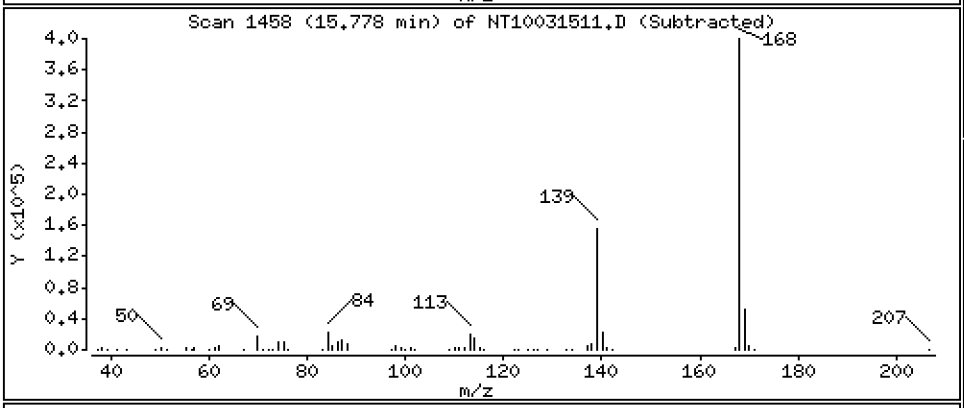
Column phase: ZB-5msi

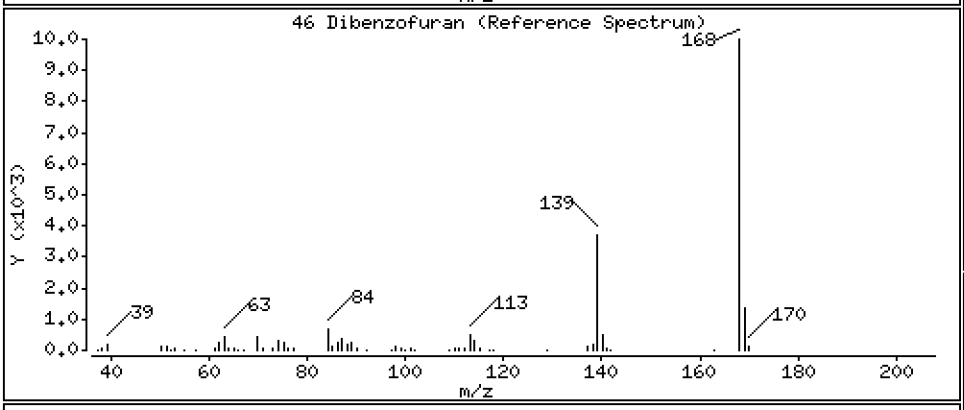
Column diameter: 0.25

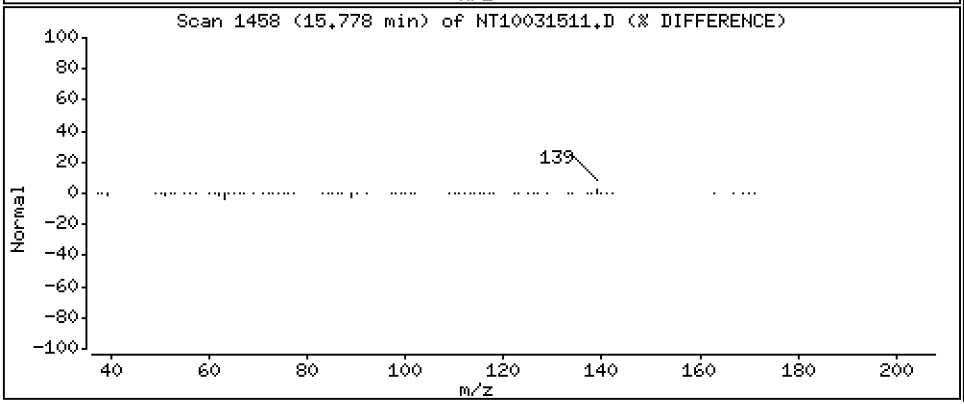
46 Dibenzofuran

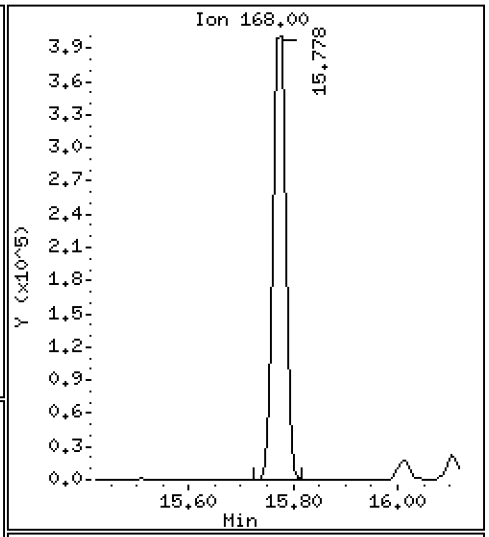
Concentration: 4.648 ug/mL

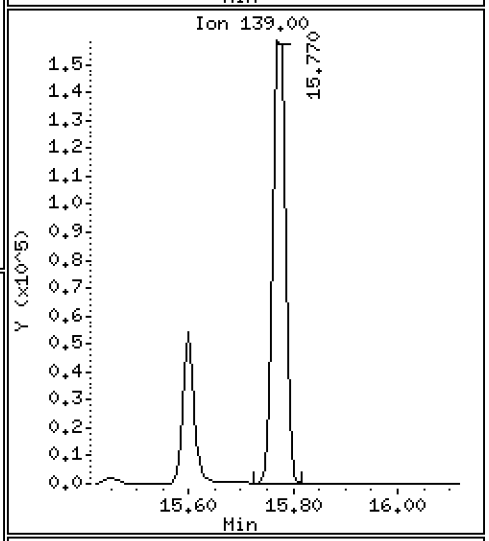


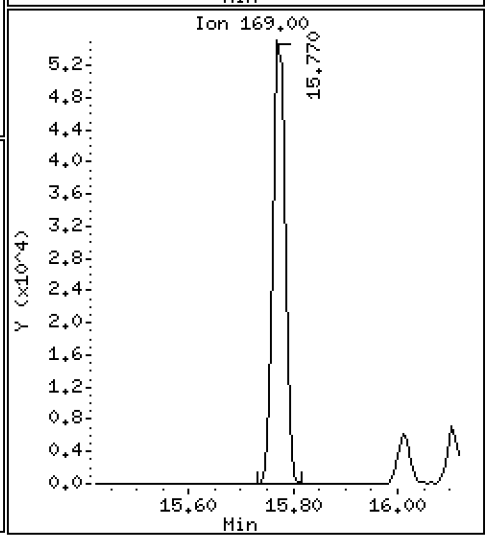












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

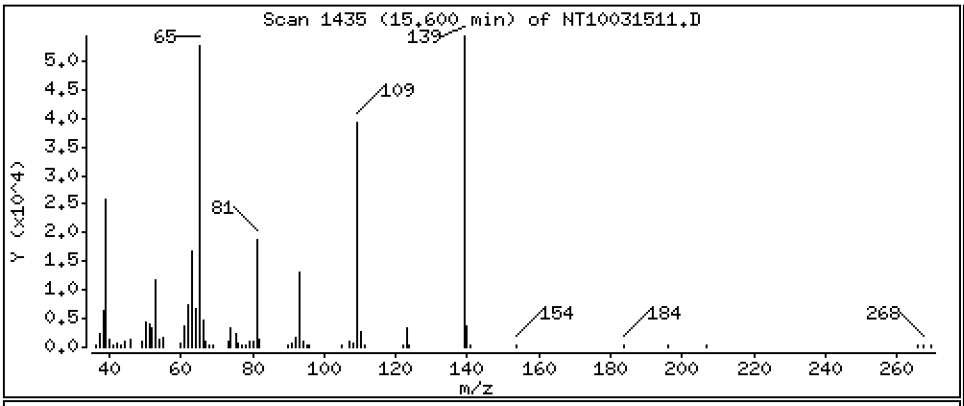
Operator: VTS

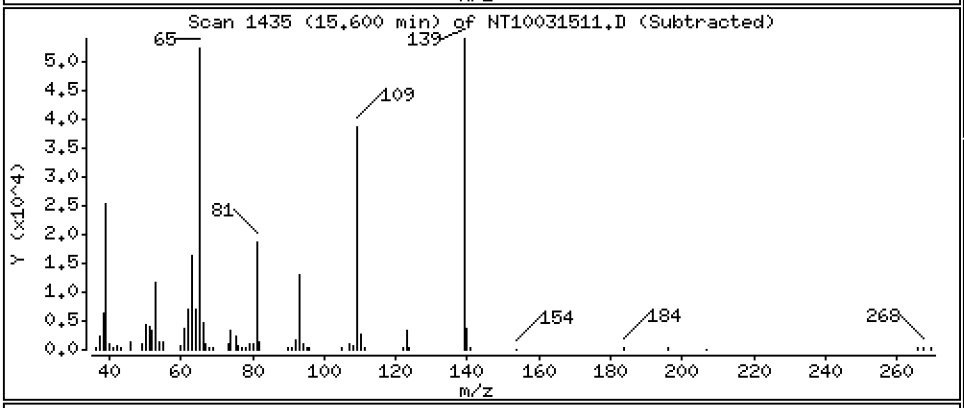
Column phase: ZB-5msi

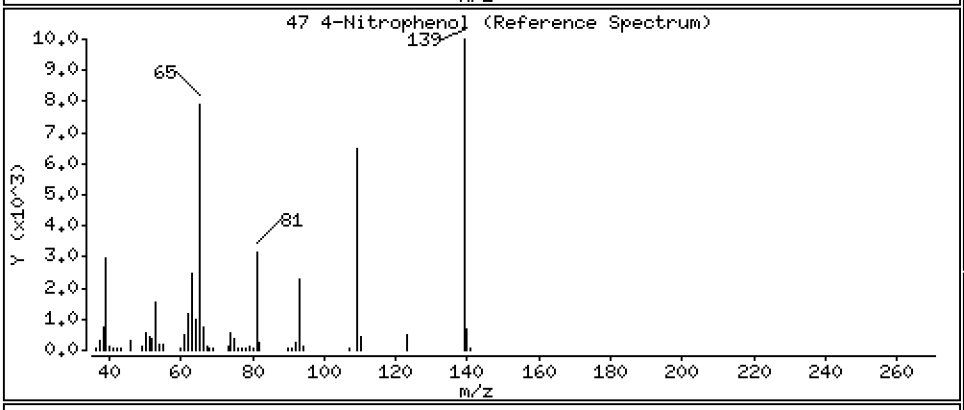
Column diameter: 0.25

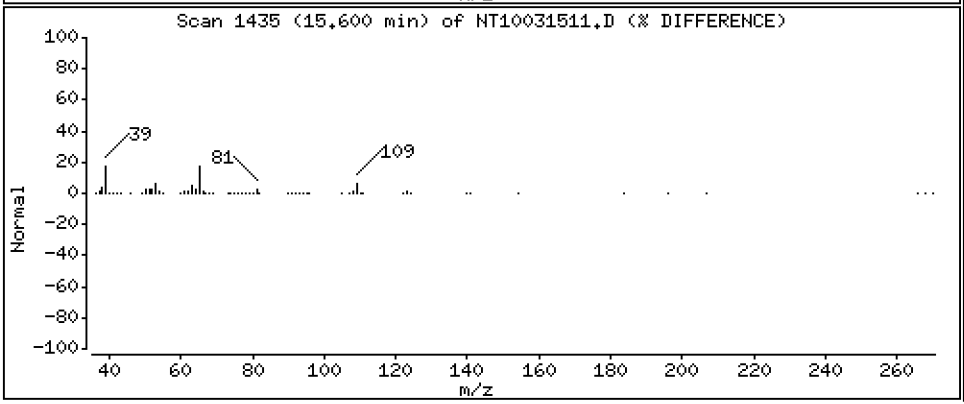
47 4-Nitrophenol

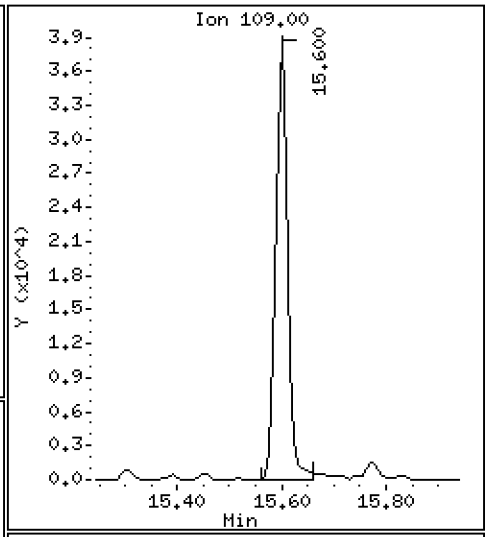
Concentration: 3.966 ug/mL

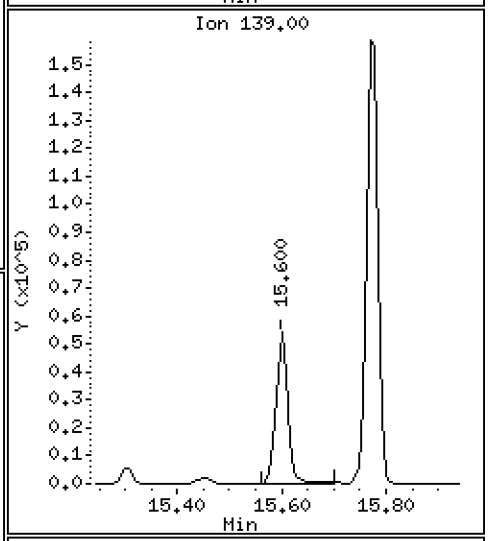


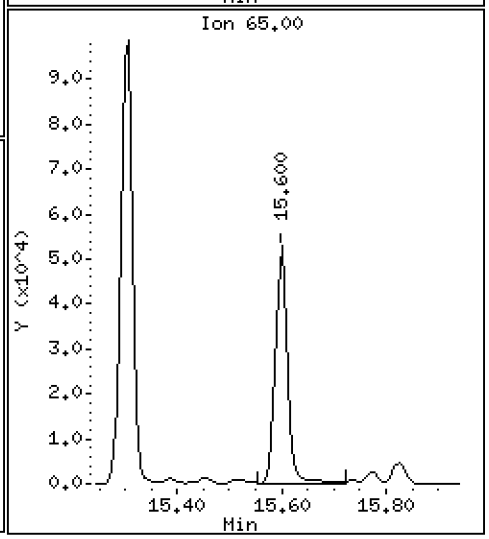












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

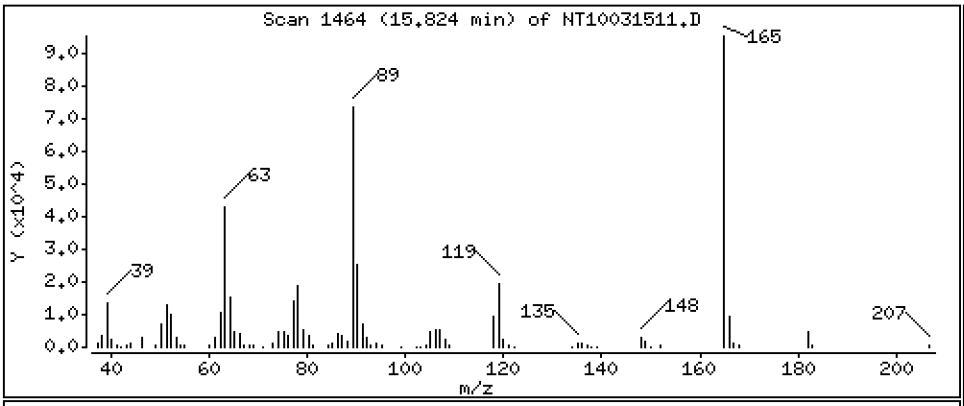
Operator: VTS

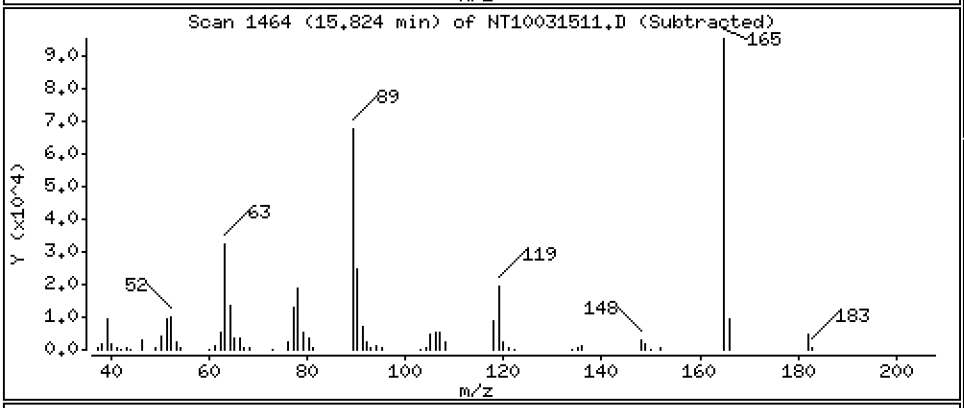
Column phase: ZB-5msi

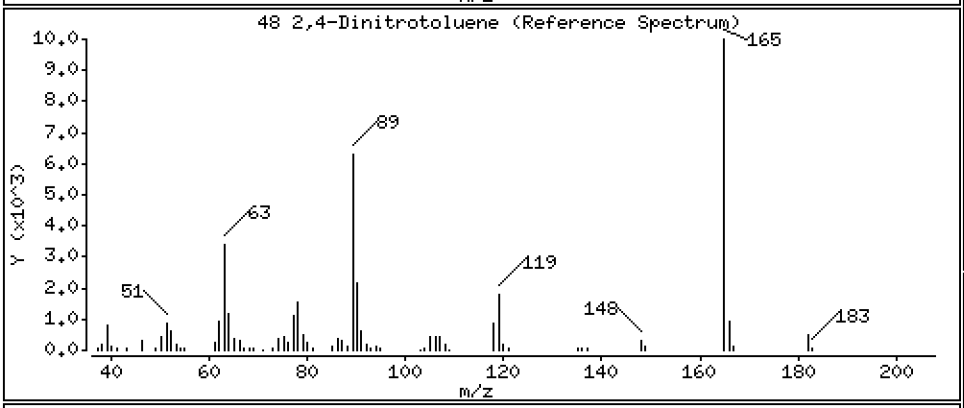
Column diameter: 0.25

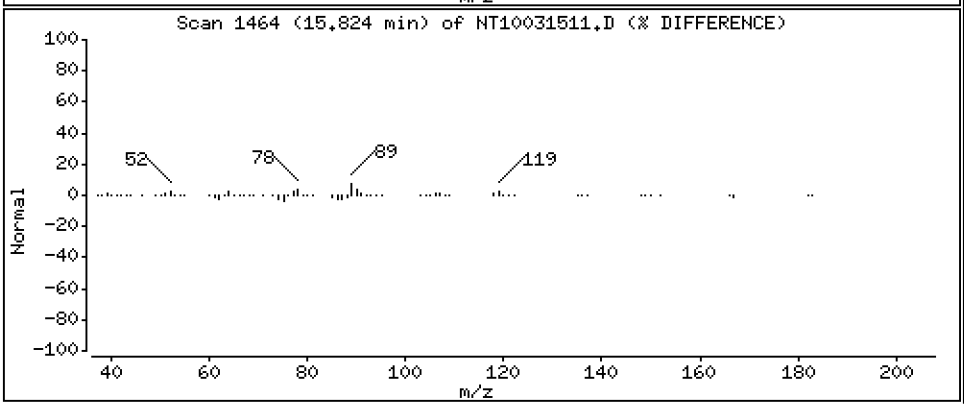
48 2,4-Dinitrotoluene

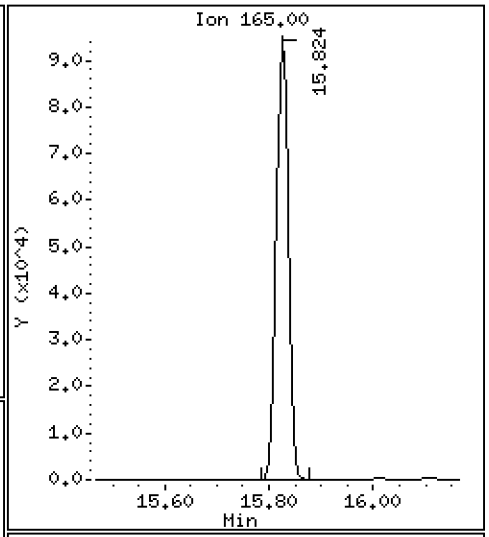
Concentration: 4.510 ug/mL

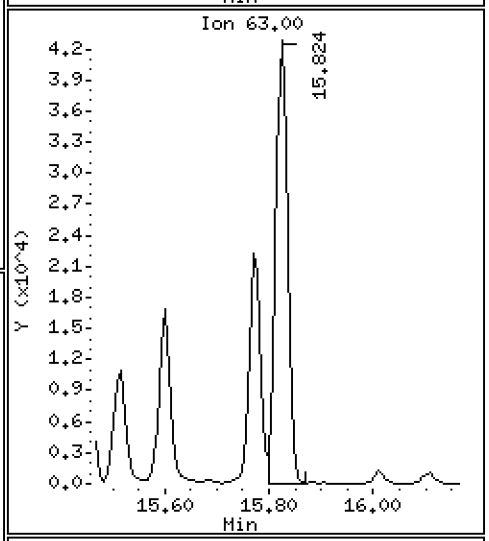


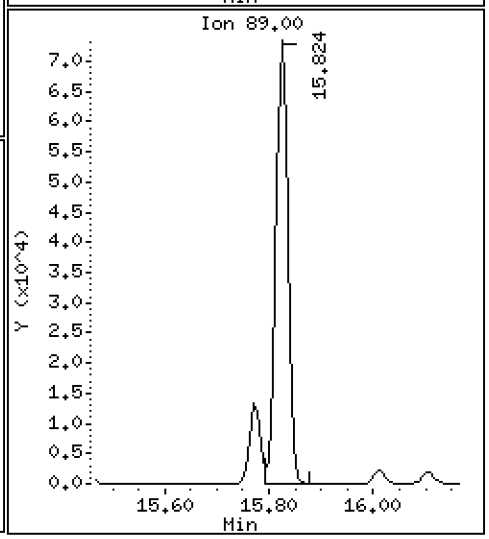












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

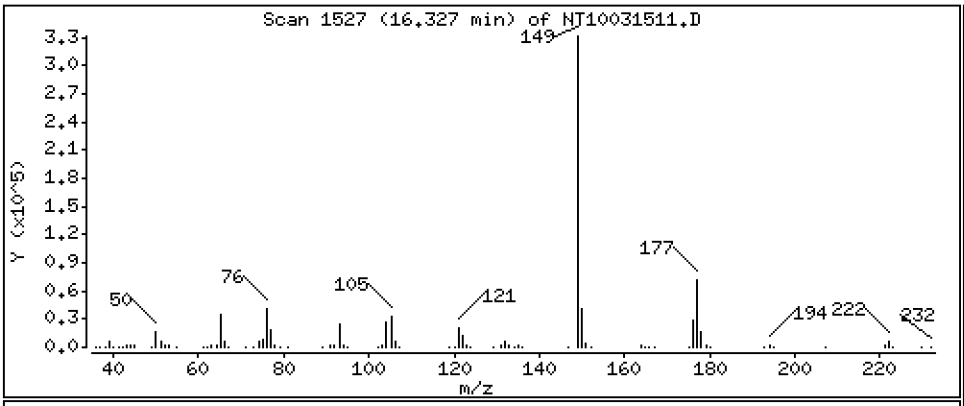
Operator: VTS

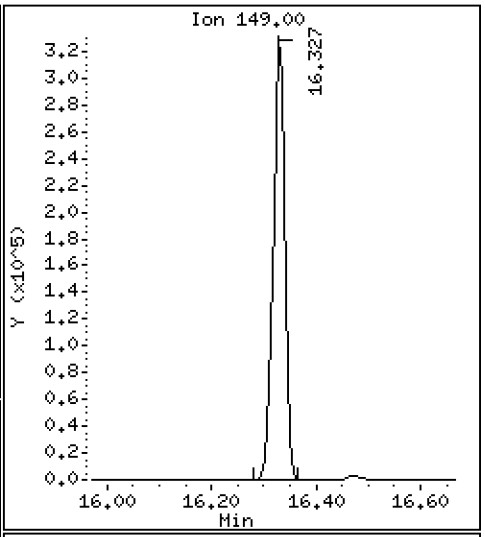
Column phase: ZB-5msi

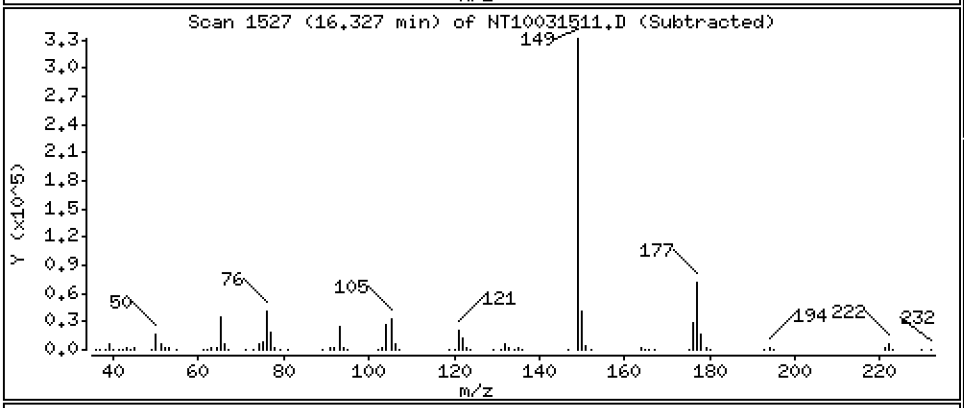
Column diameter: 0.25

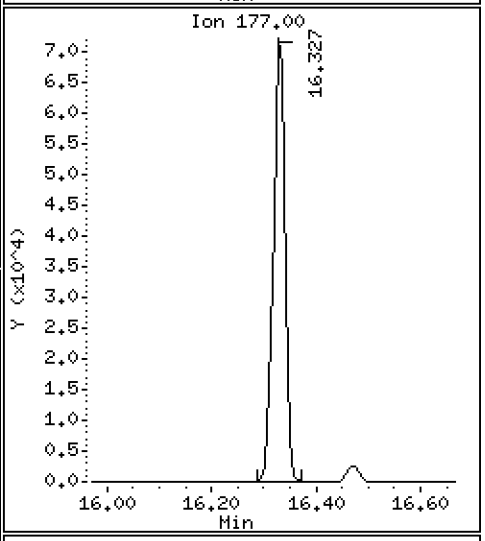
50 Diethylphthalate

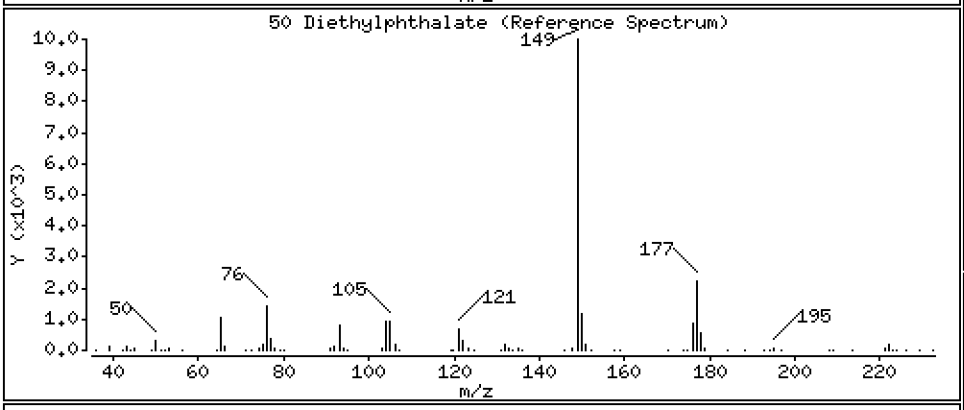
Concentration: 5.209 ug/mL

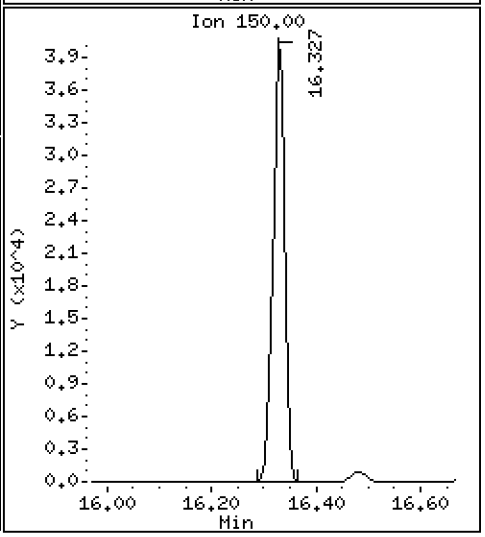


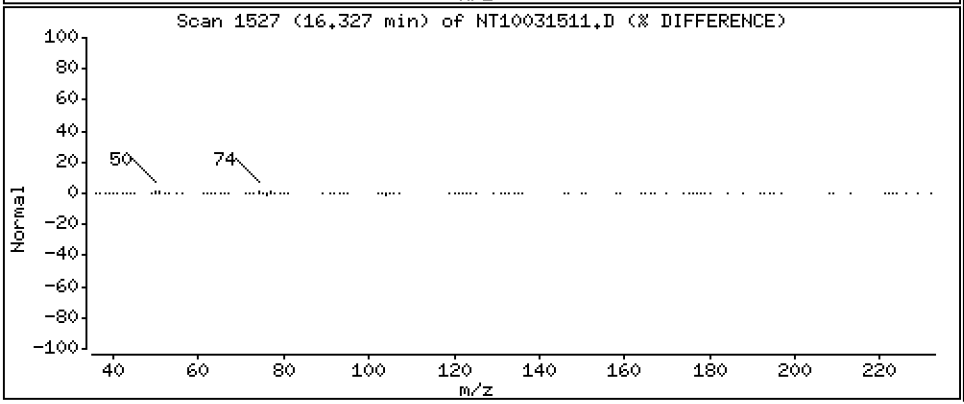












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

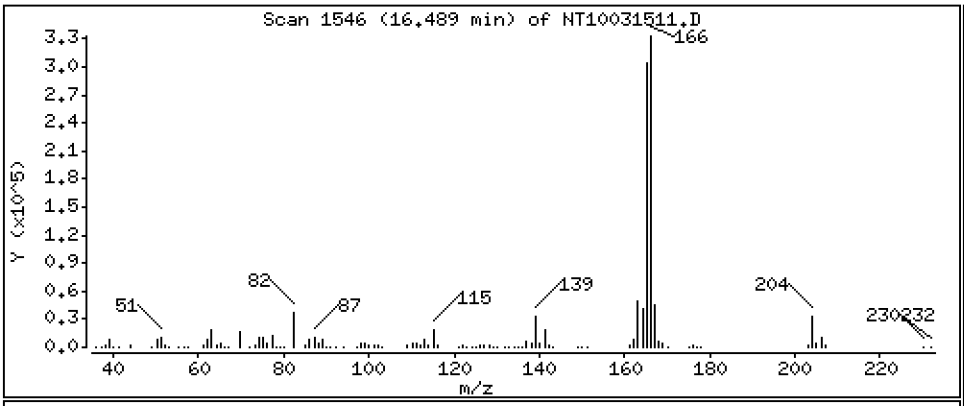
Operator: VTS

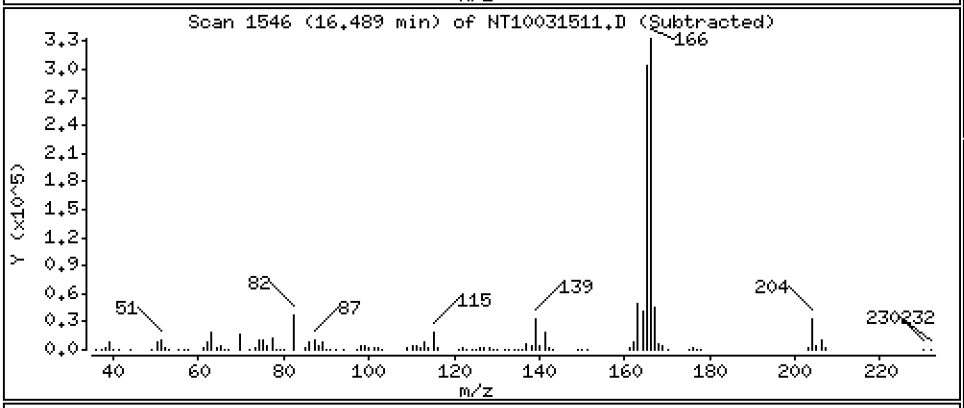
Column phase: ZB-5msi

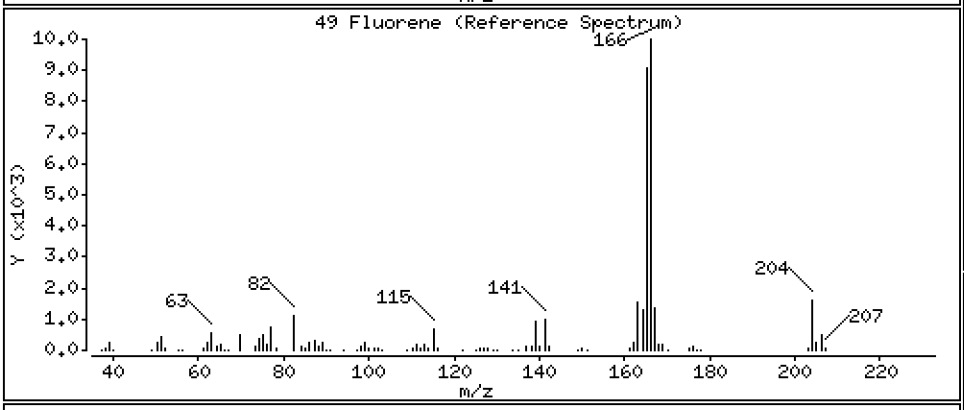
Column diameter: 0.25

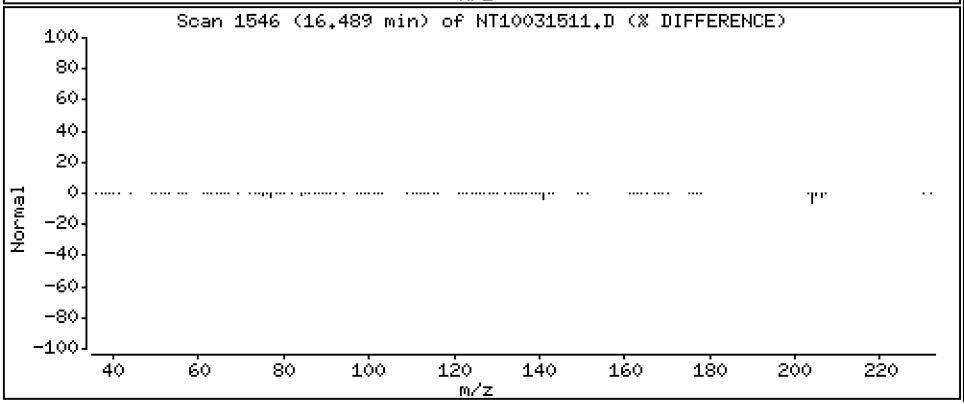
49 Fluorene

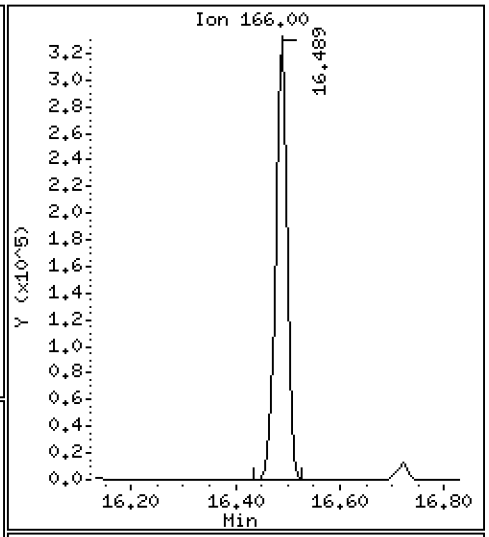
Concentration: 4.708 ug/mL

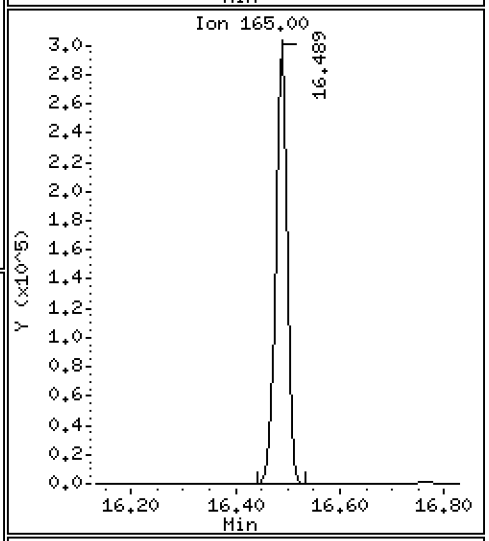


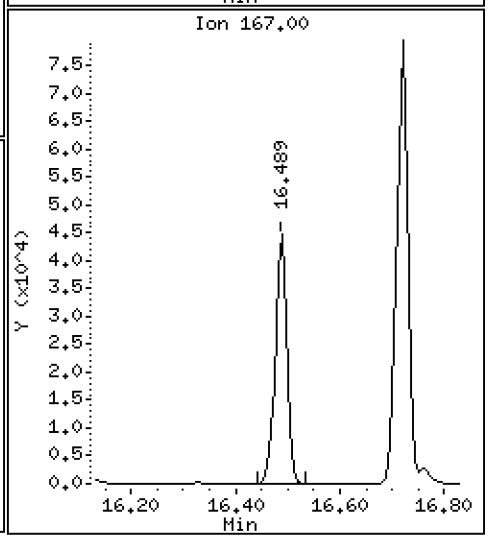












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

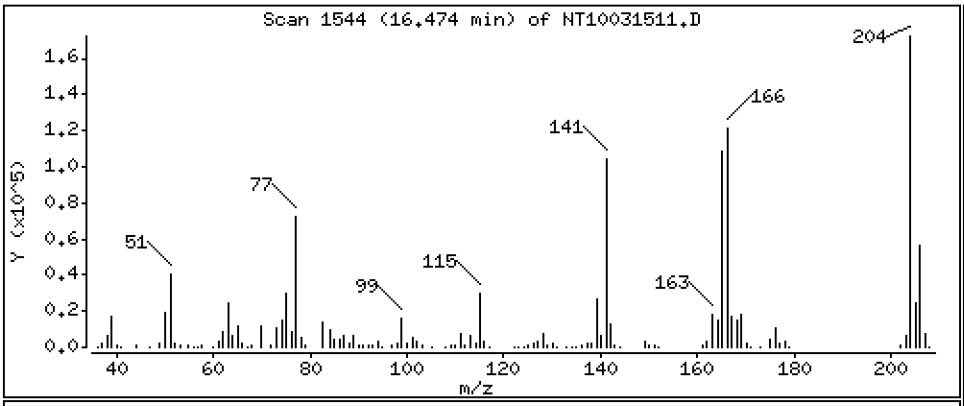
Operator: VTS

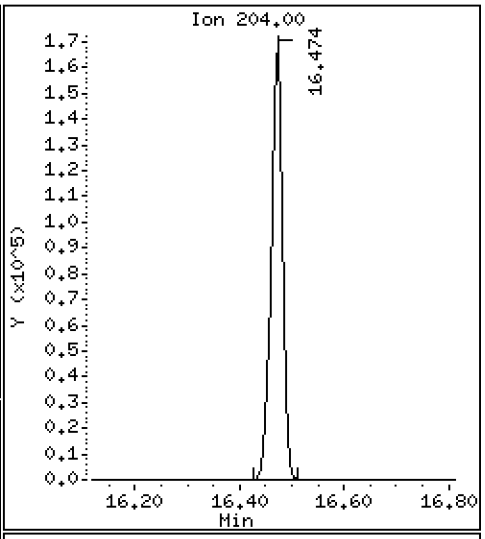
Column phase: ZB-5msi

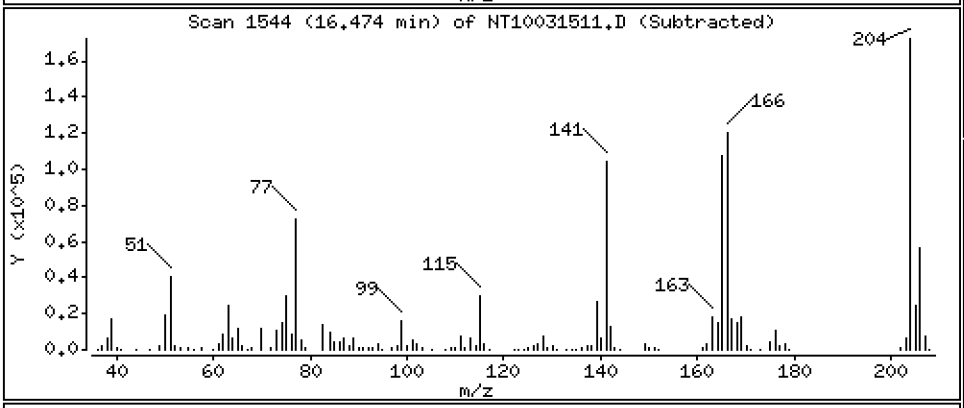
Column diameter: 0.25

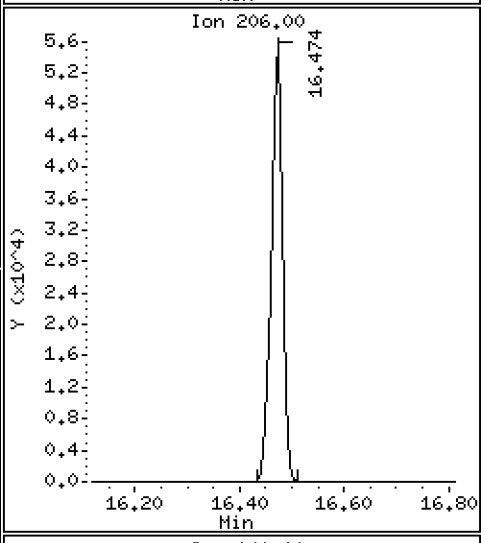
51 4-Chlorophenyl-phenylether

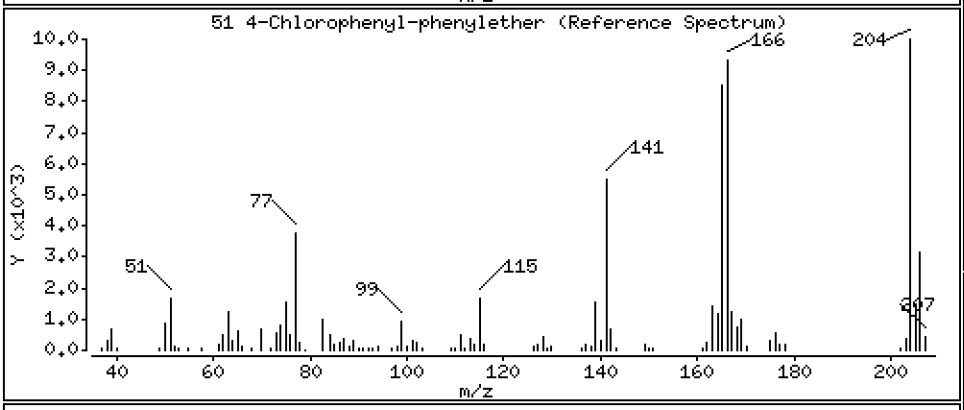
Concentration: 4.993 ug/mL

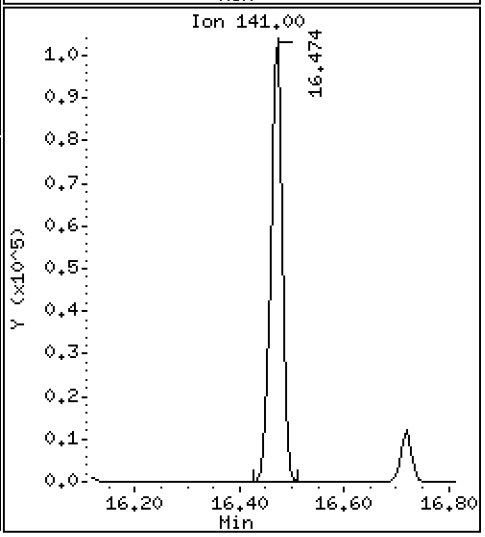


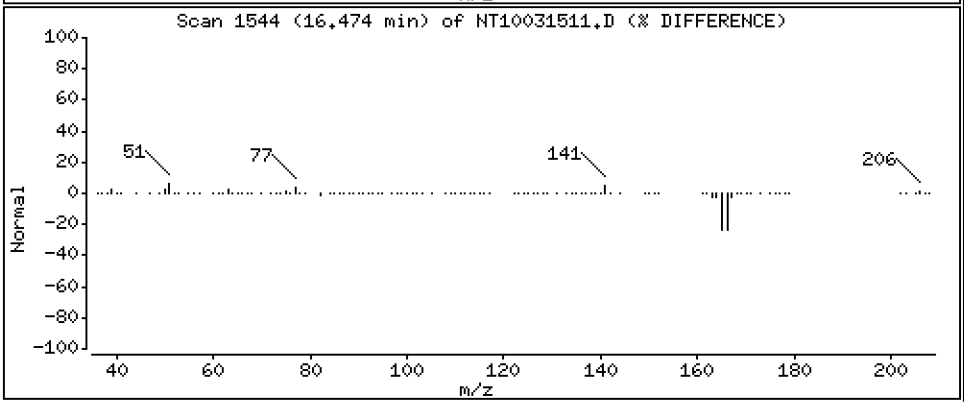












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

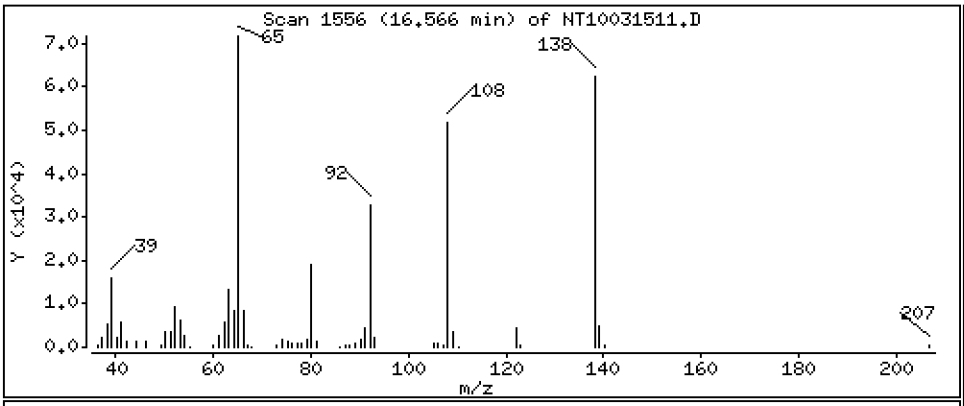
Operator: VTS

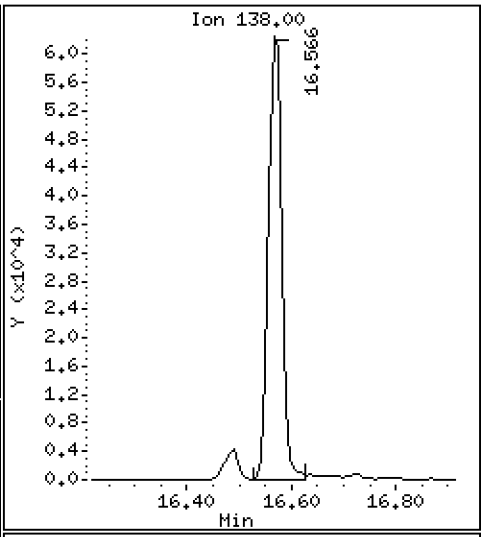
Column phase: ZB-5msi

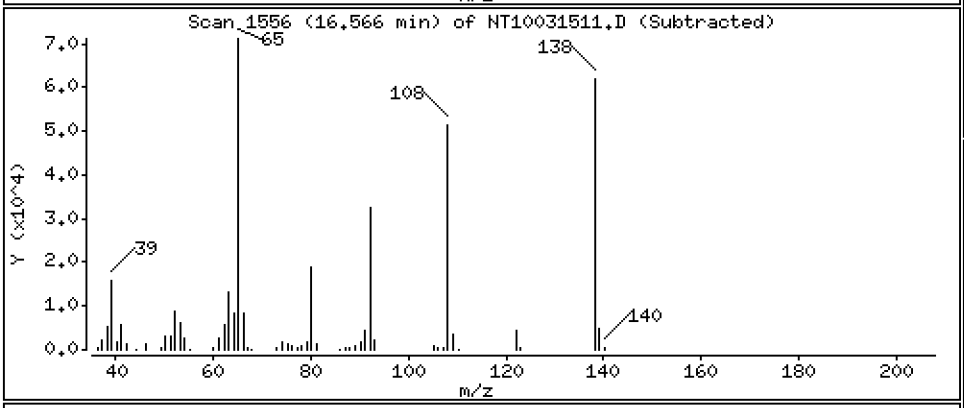
Column diameter: 0.25

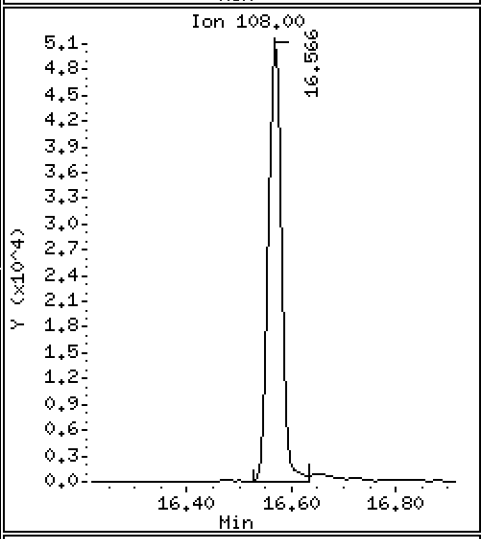
52 4-Nitroaniline

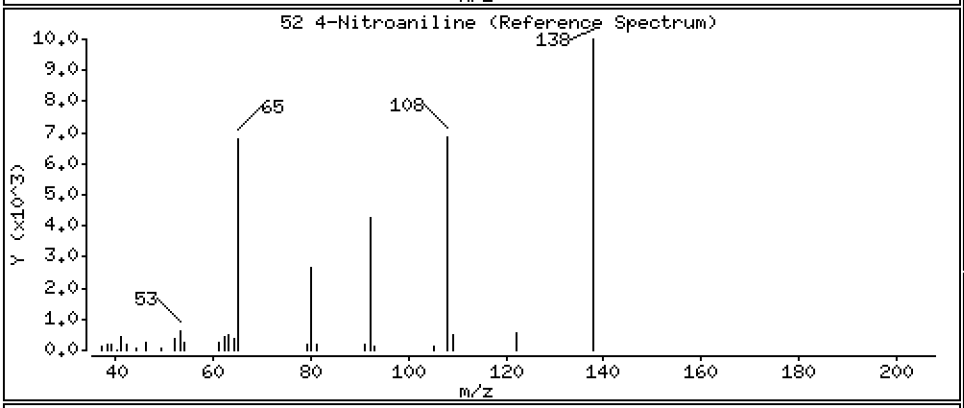
Concentration: 4.925 ug/mL

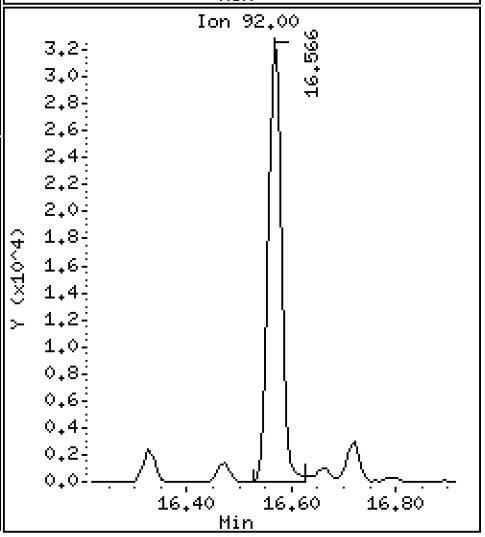


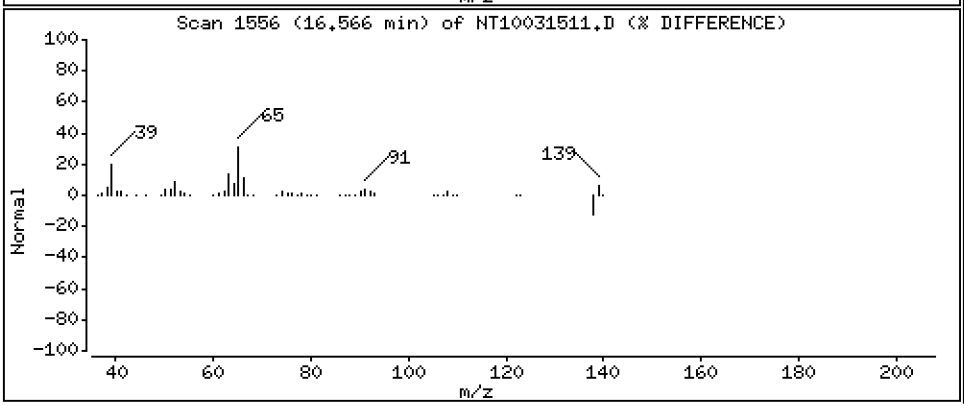












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

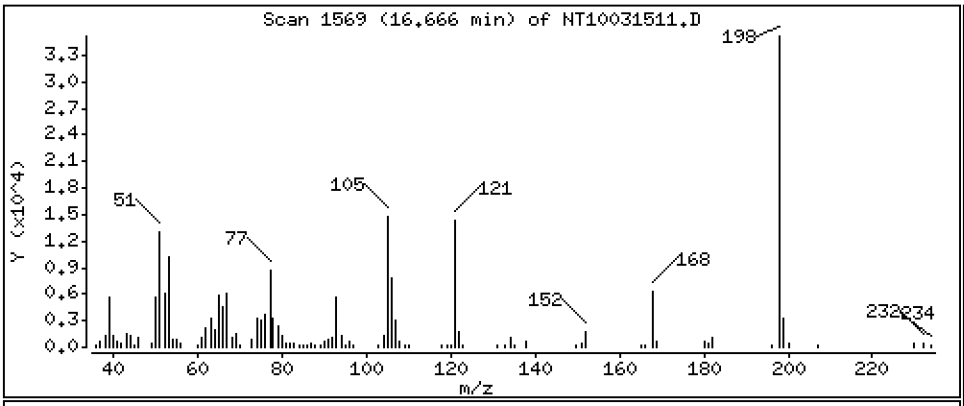
Operator: VTS

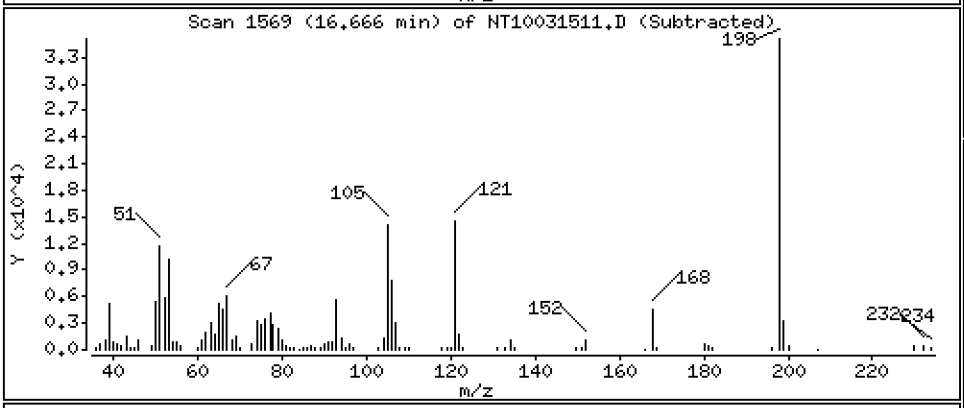
Column phase: ZB-5msi

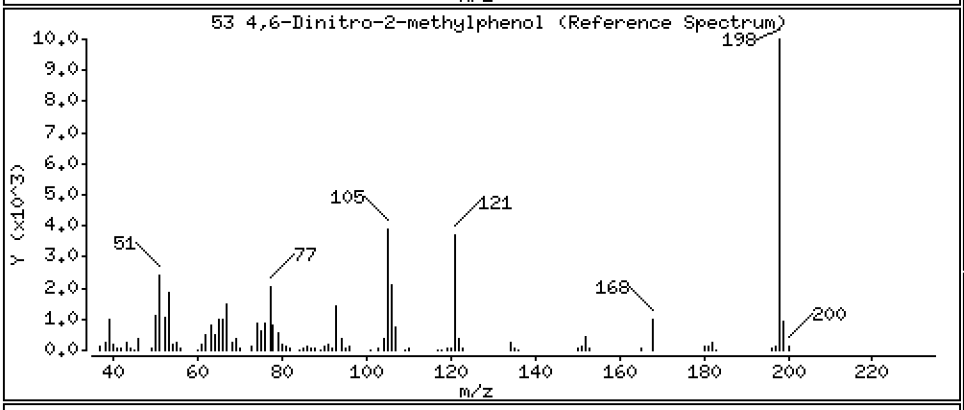
Column diameter: 0.25

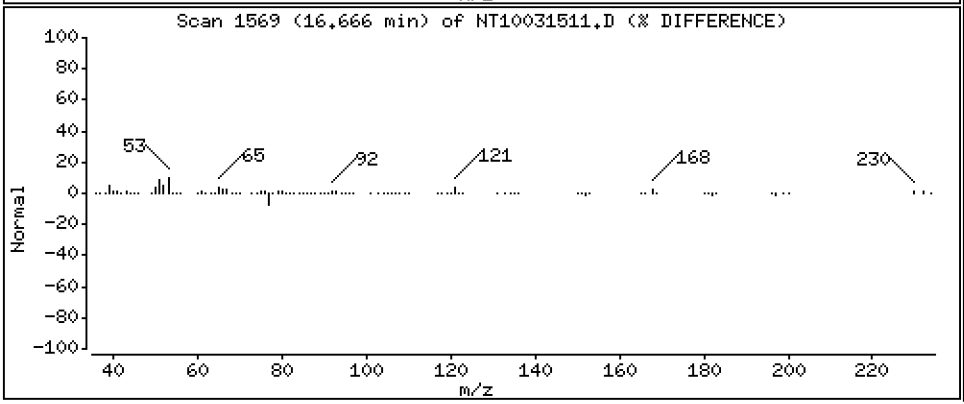
53 4,6-Dinitro-2-methylphenol

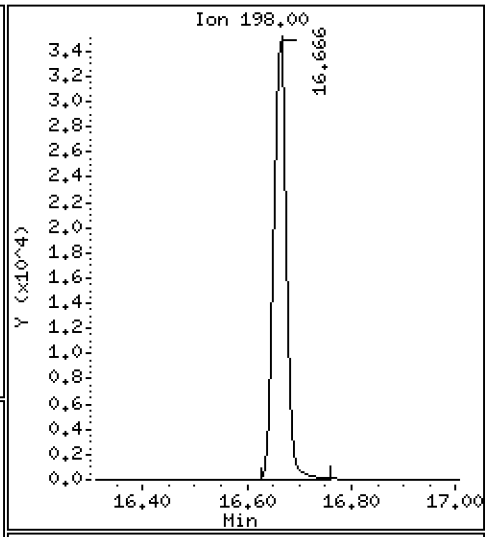
Concentration: 3.515 ug/mL

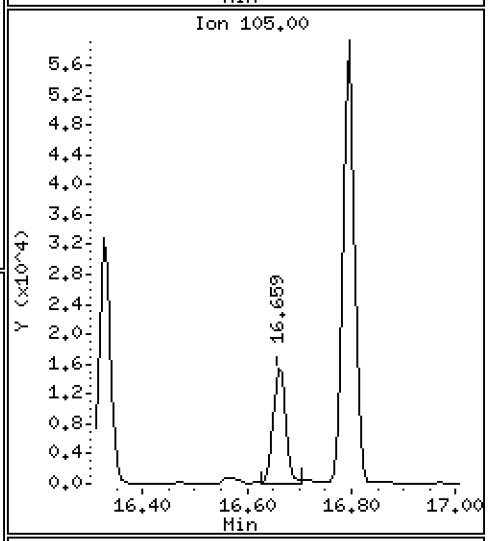


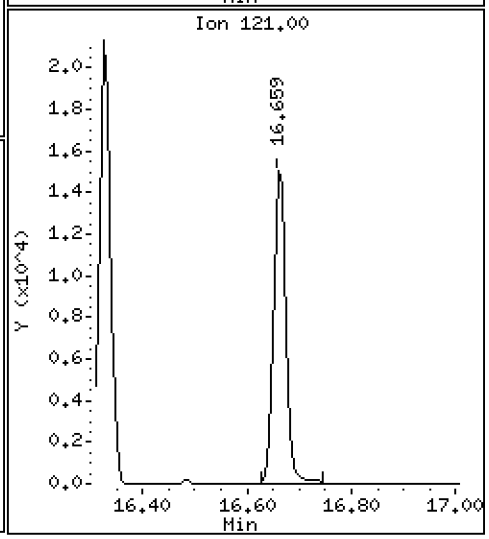












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

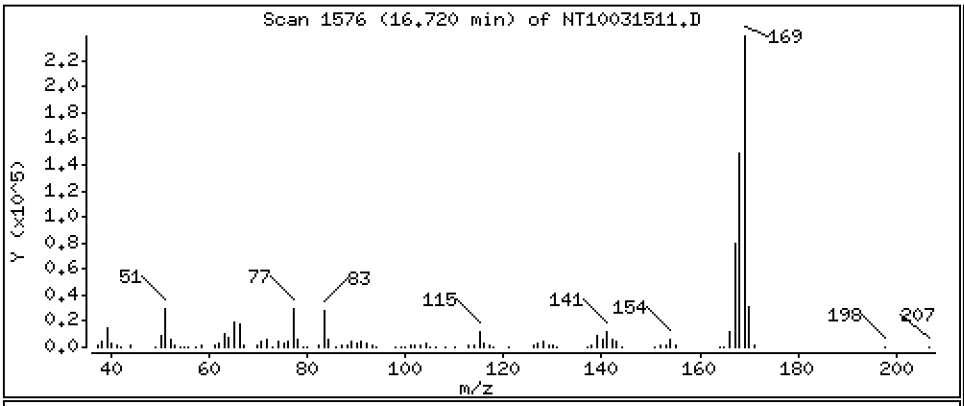
Operator: VTS

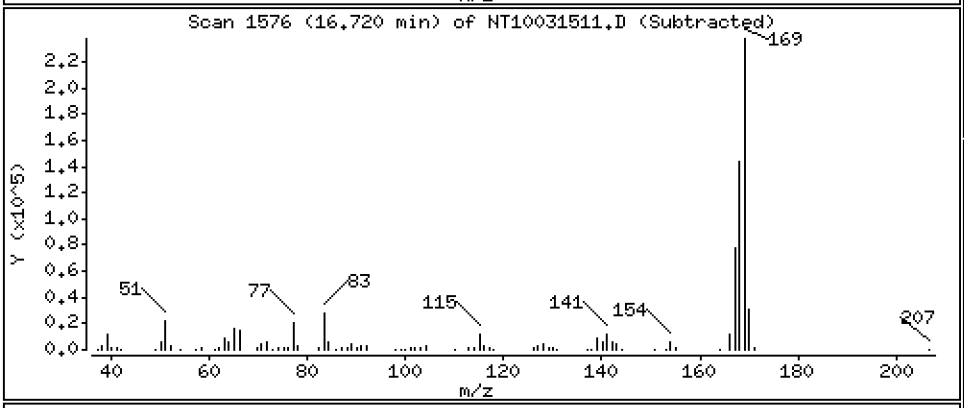
Column phase: ZB-5msi

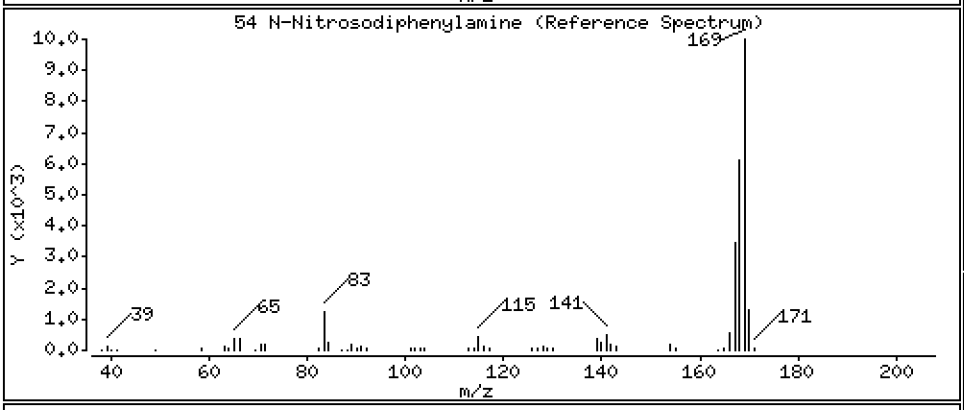
Column diameter: 0.25

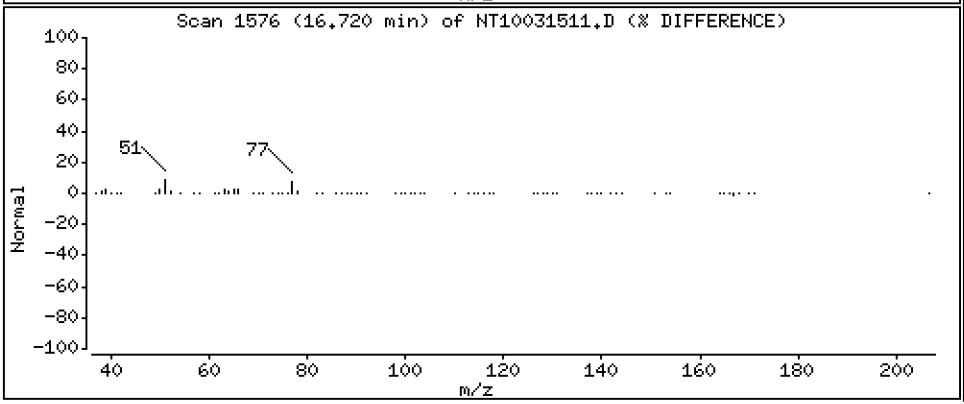
54 N-Nitrosodiphenylamine

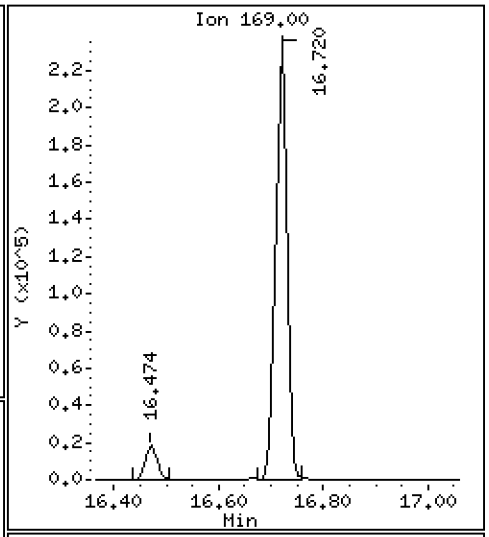
Concentration: 4.802 ug/mL

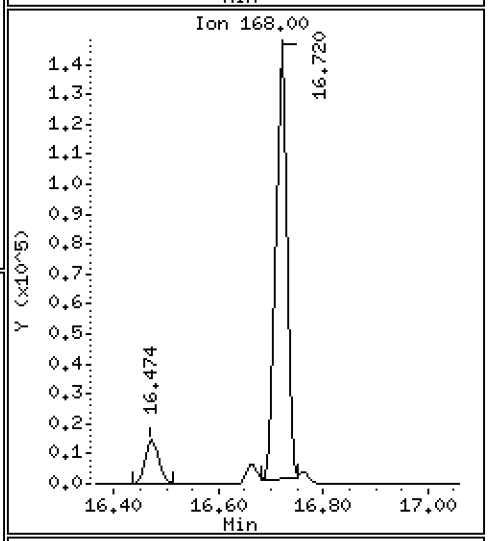


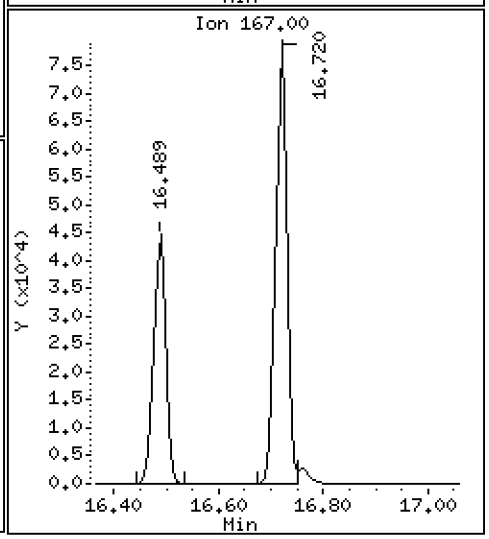












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

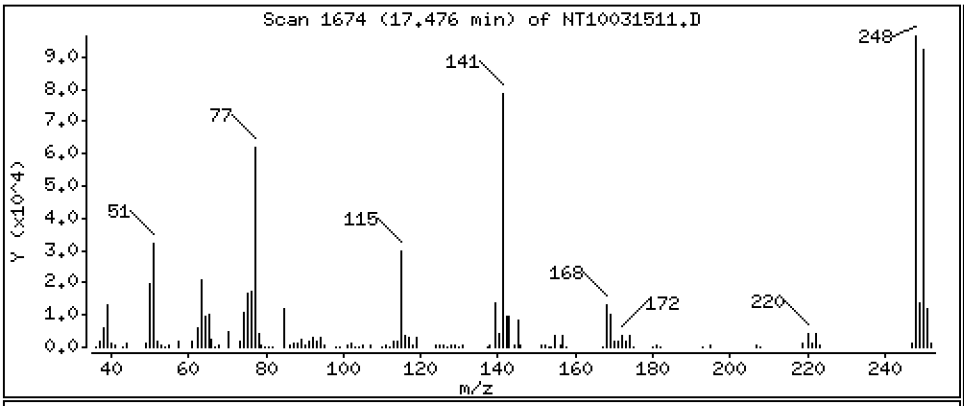
Operator: VTS

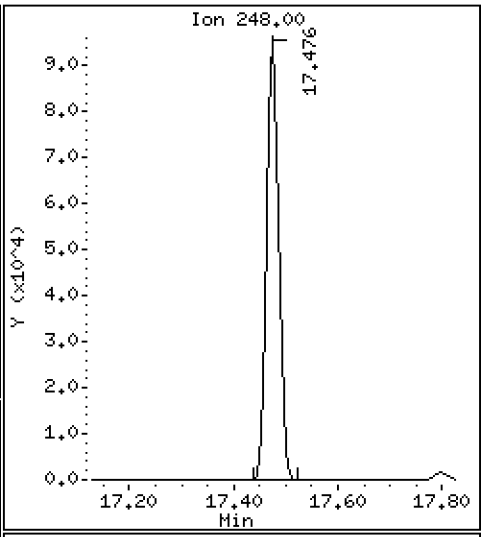
Column phase: ZB-5msi

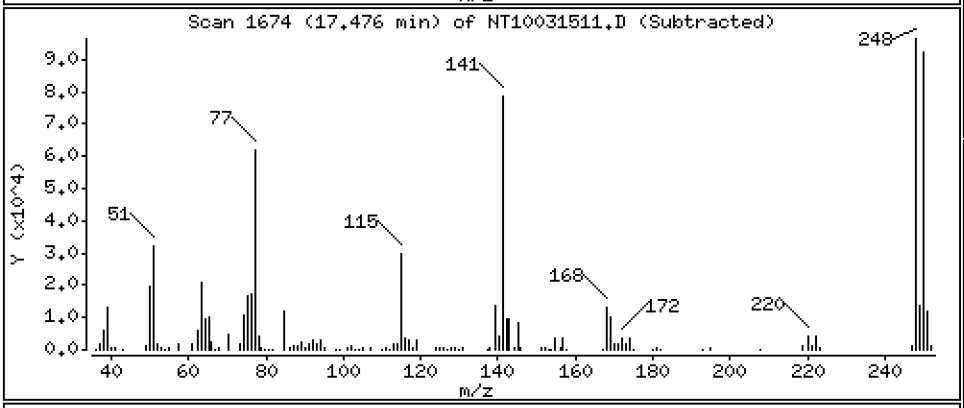
Column diameter: 0.25

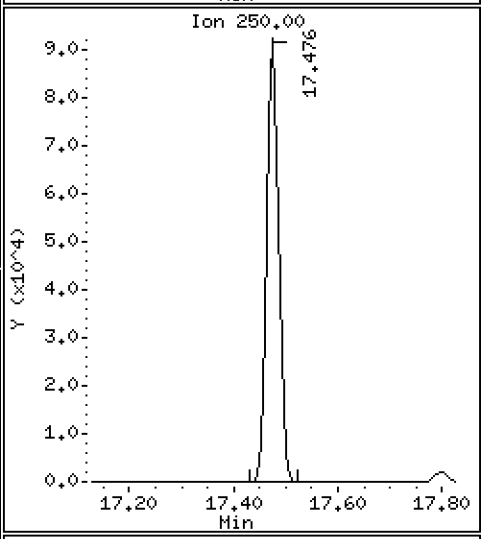
56 4-Bromophenyl-phenylether

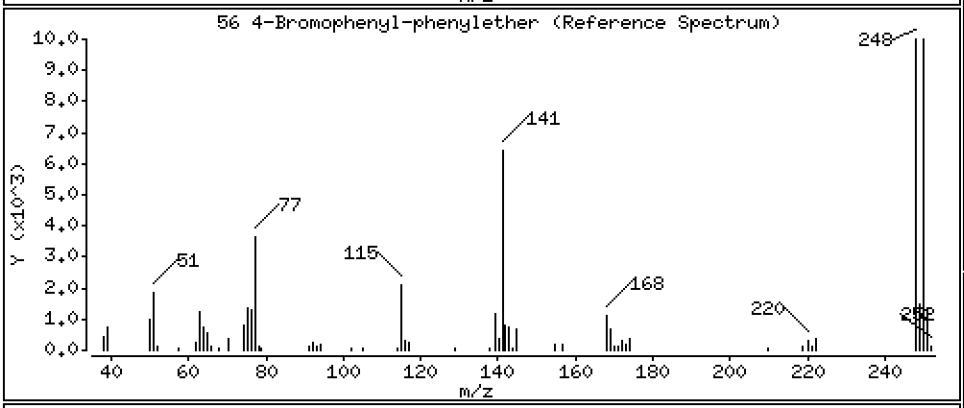
Concentration: 5.060 ug/mL

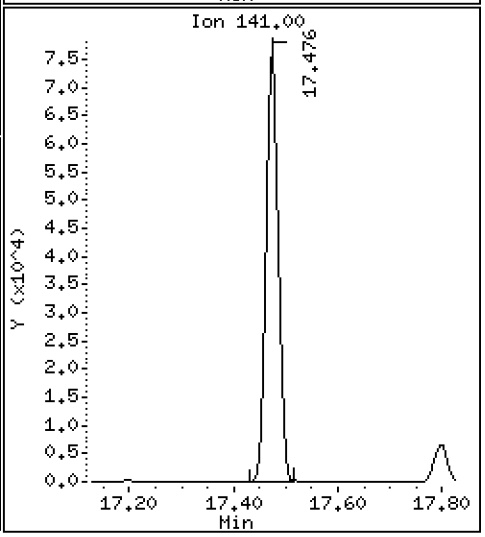


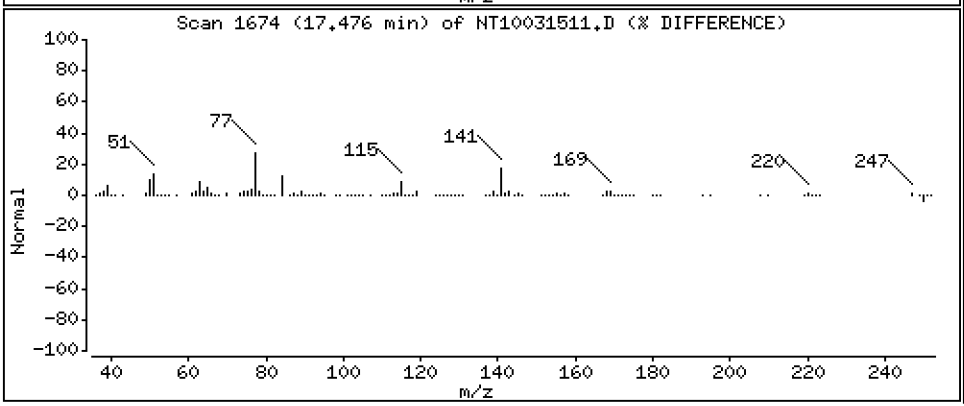












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

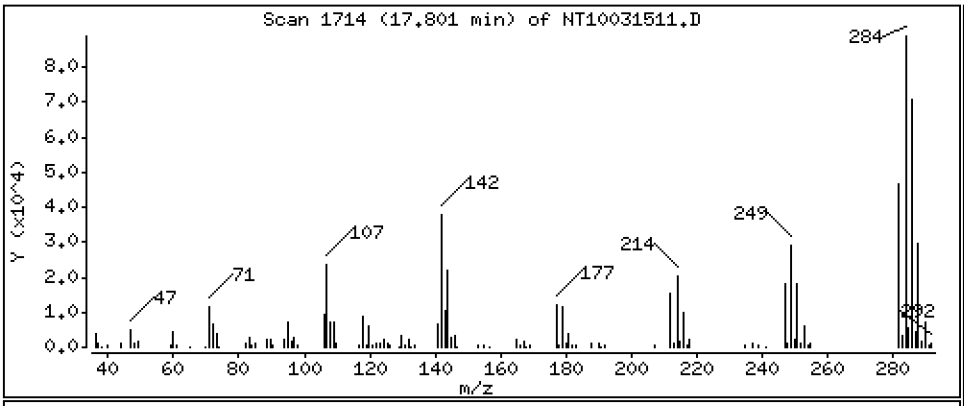
Operator: VTS

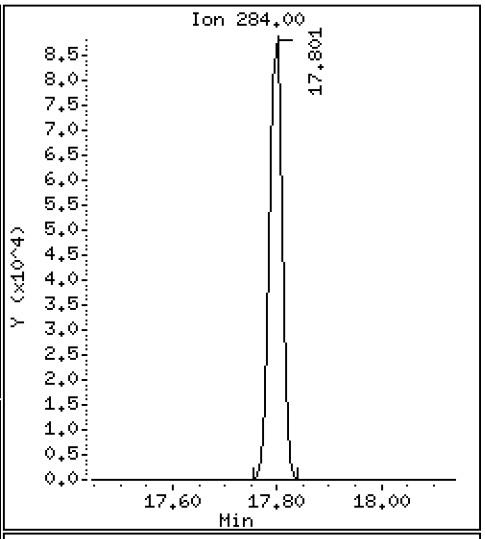
Column phase: ZB-5msi

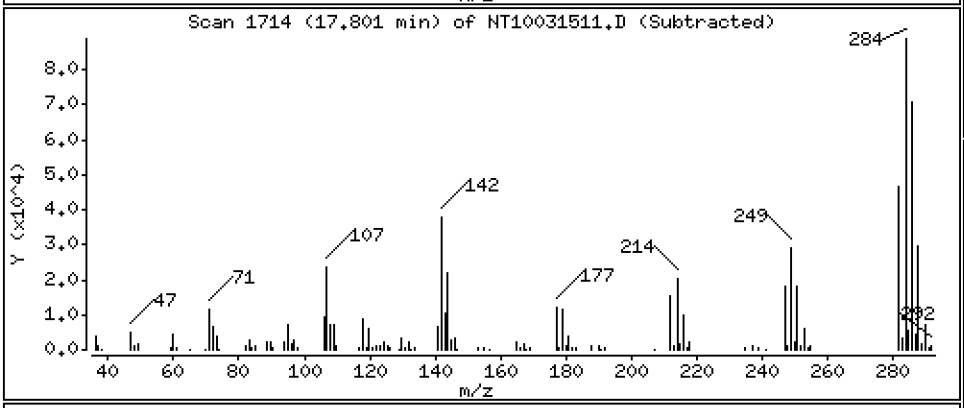
Column diameter: 0.25

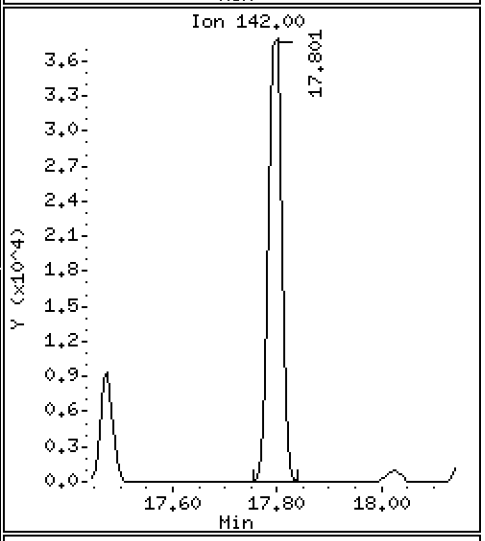
57 Hexachlorobenzene

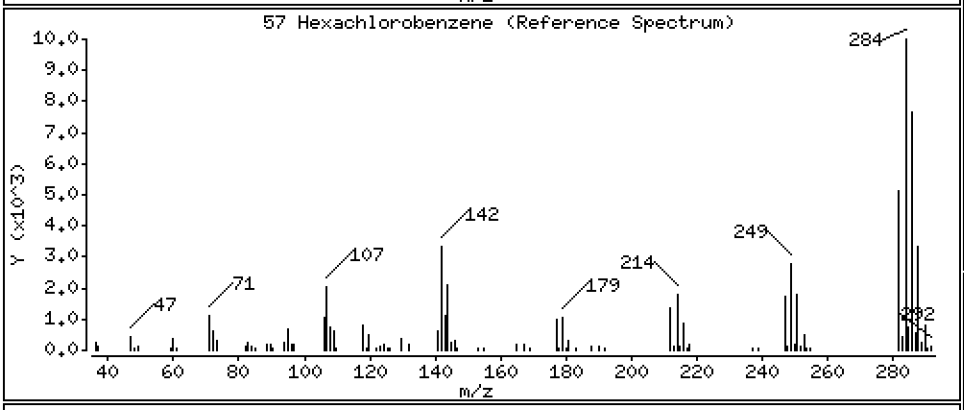
Concentration: 4.596 ug/mL

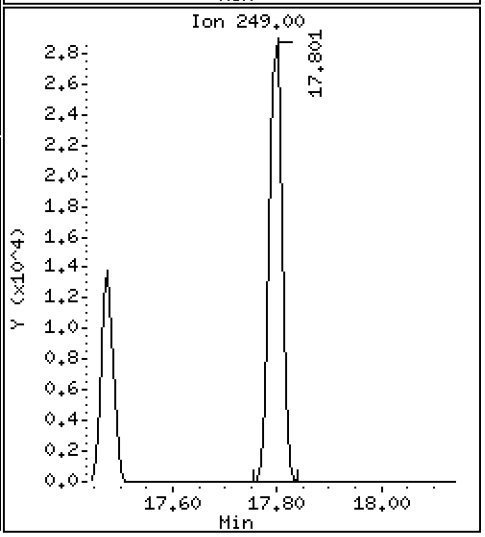


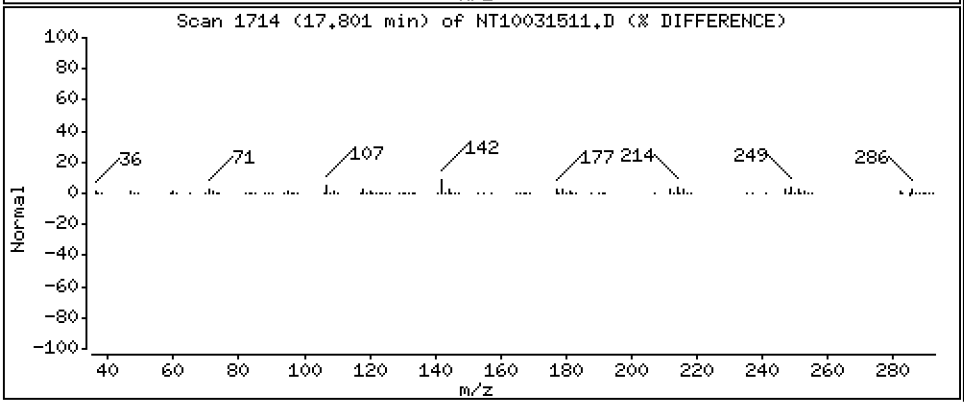












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

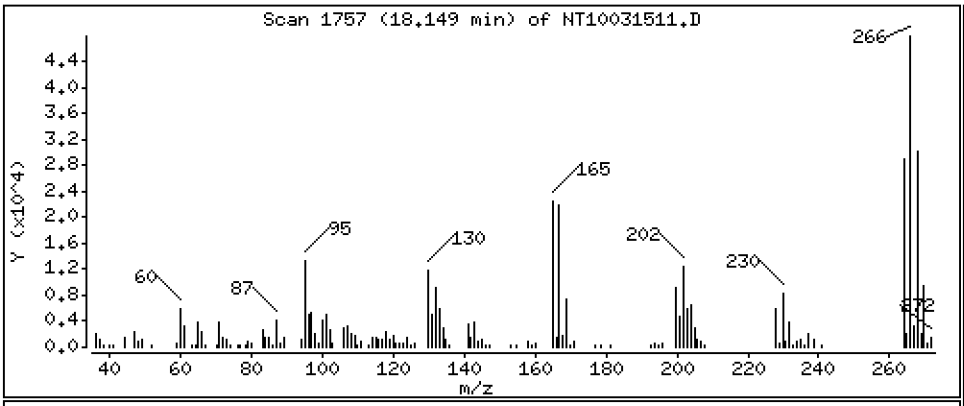
Operator: VTS

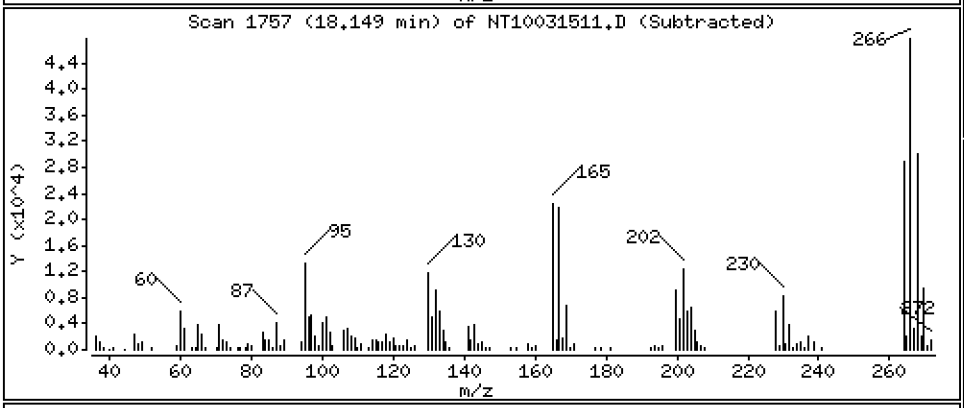
Column phase: ZB-5msi

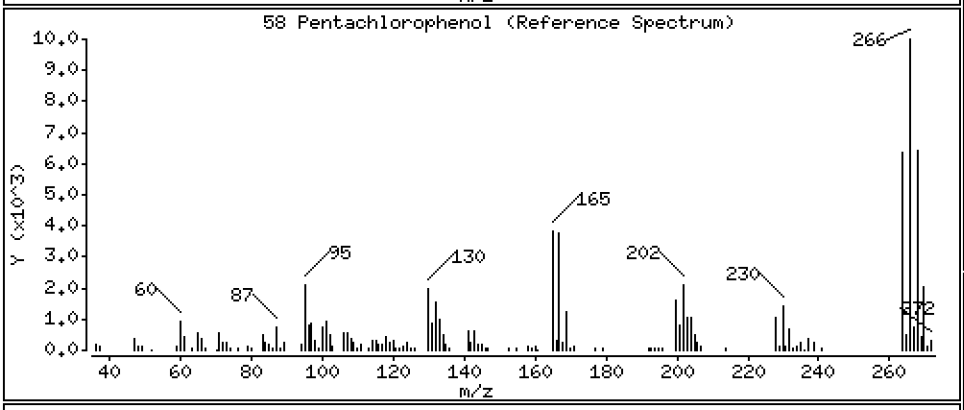
Column diameter: 0.25

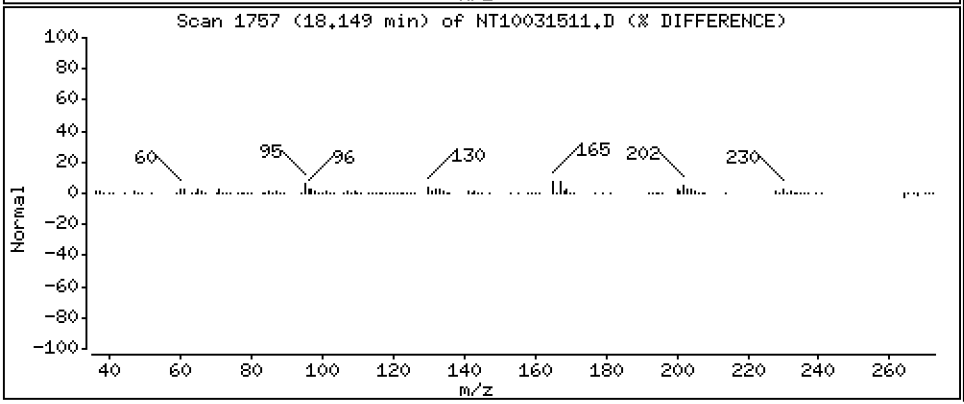
58 Pentachlorophenol

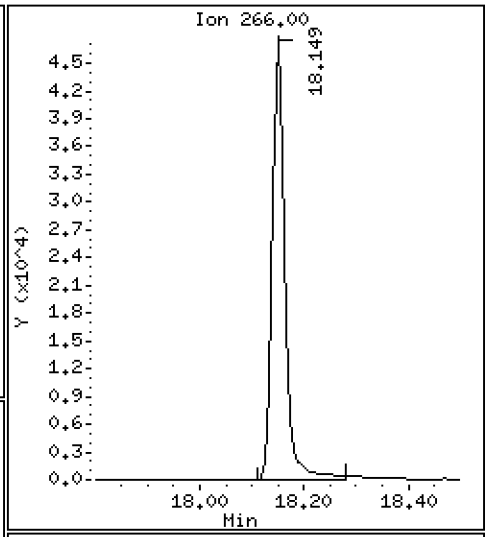
Concentration: 4.057 ug/mL

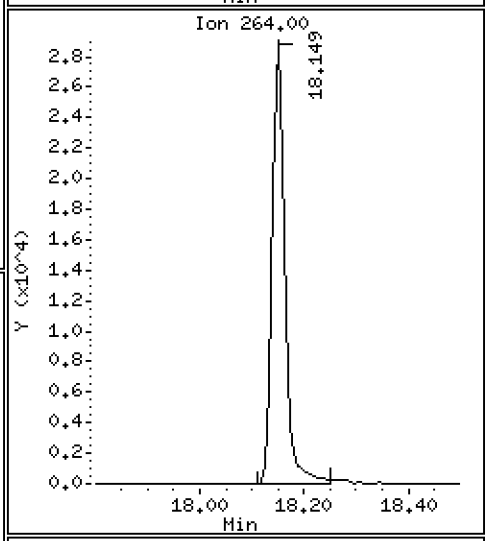


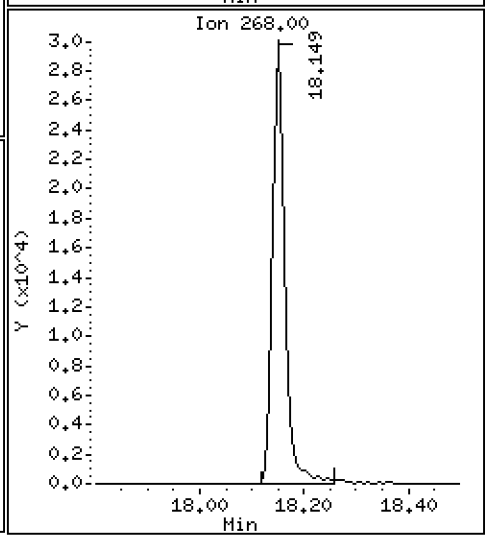












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

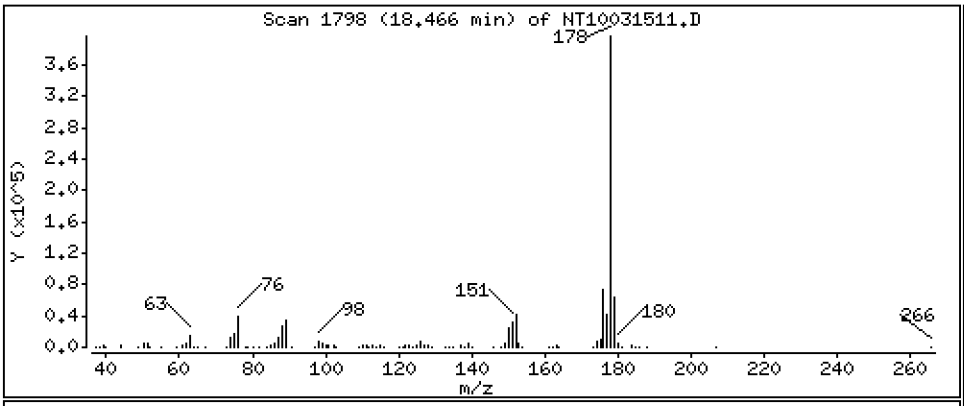
Operator: VTS

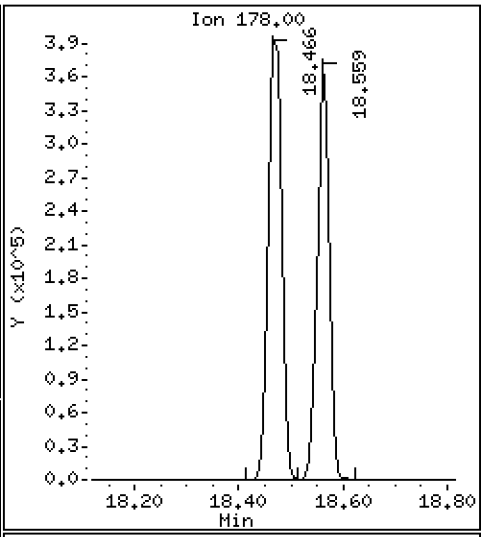
Column phase: ZB-5msi

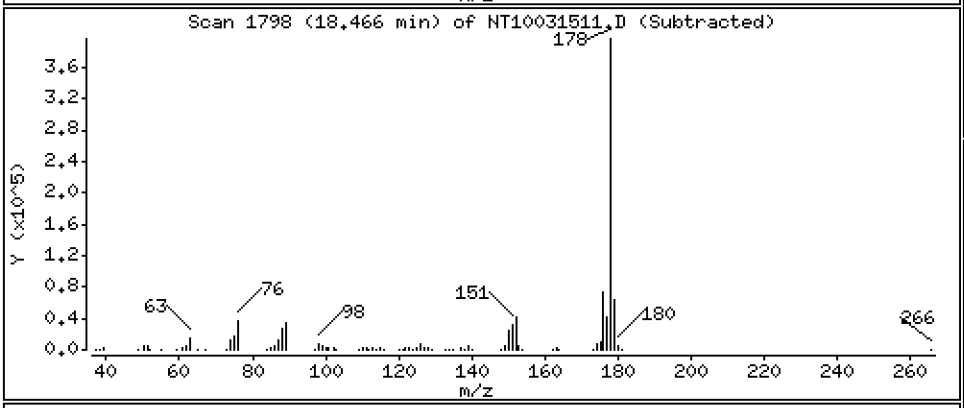
Column diameter: 0.25

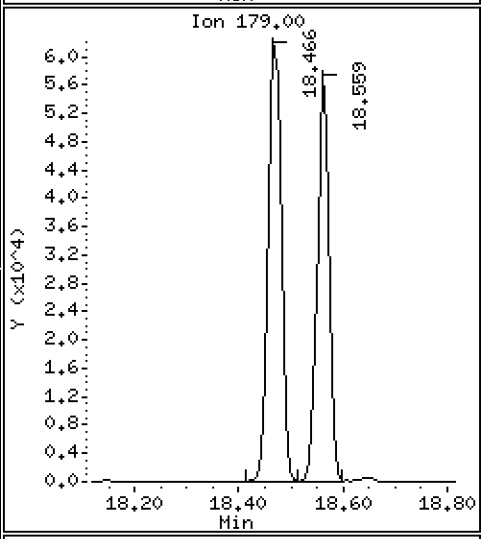
60 Phenanthrene

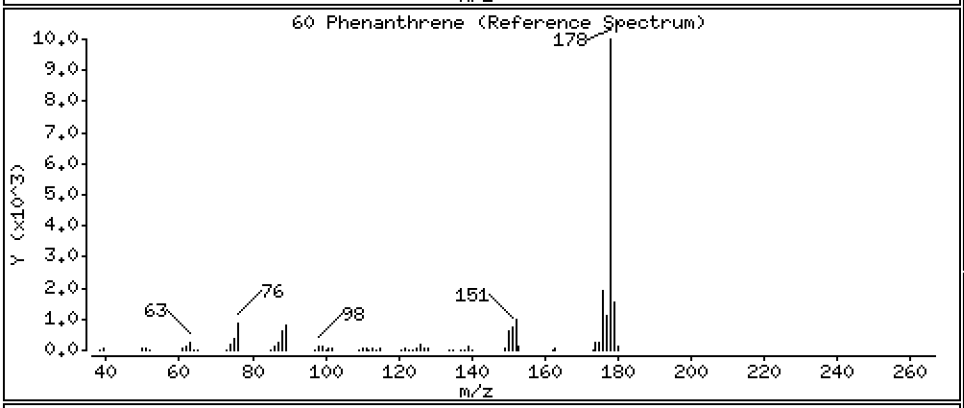
Concentration: 4.602 ug/mL

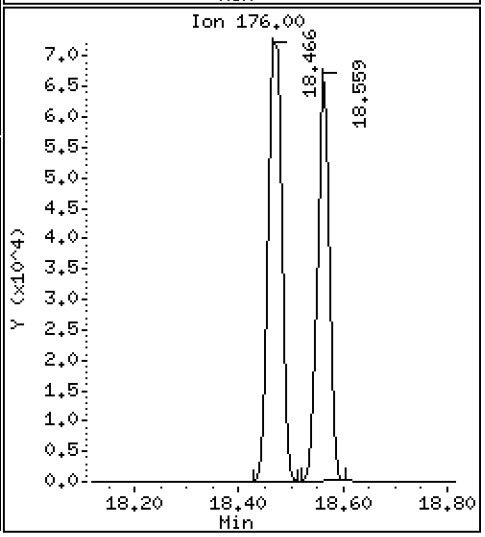


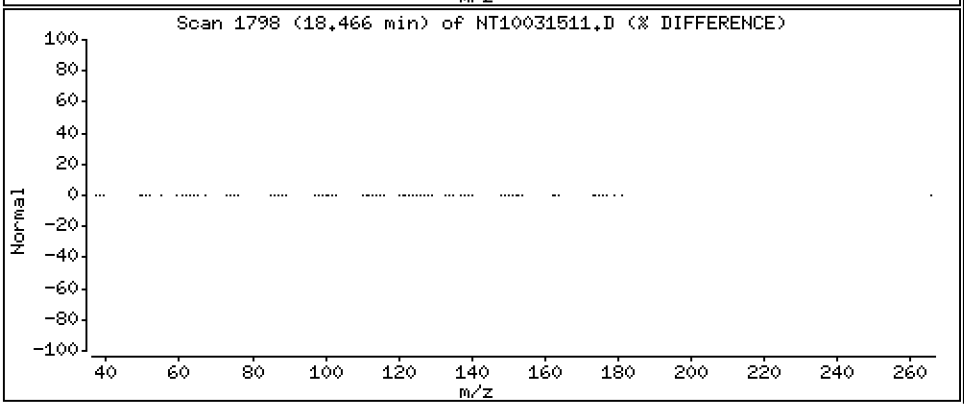












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

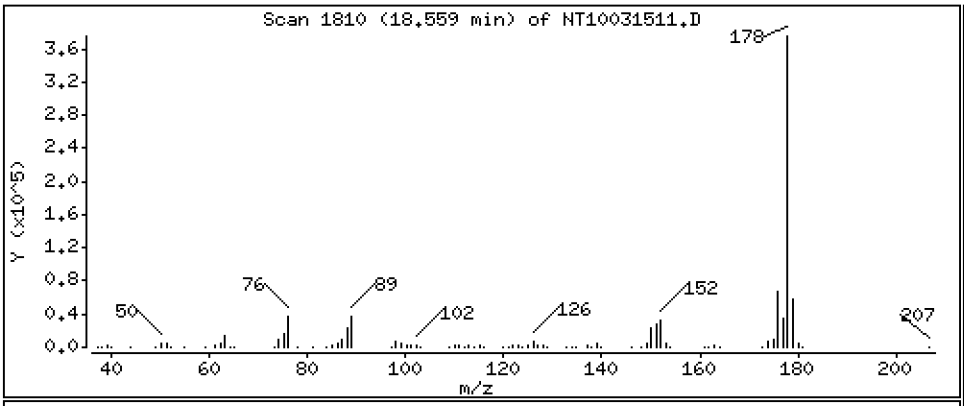
Operator: VTS

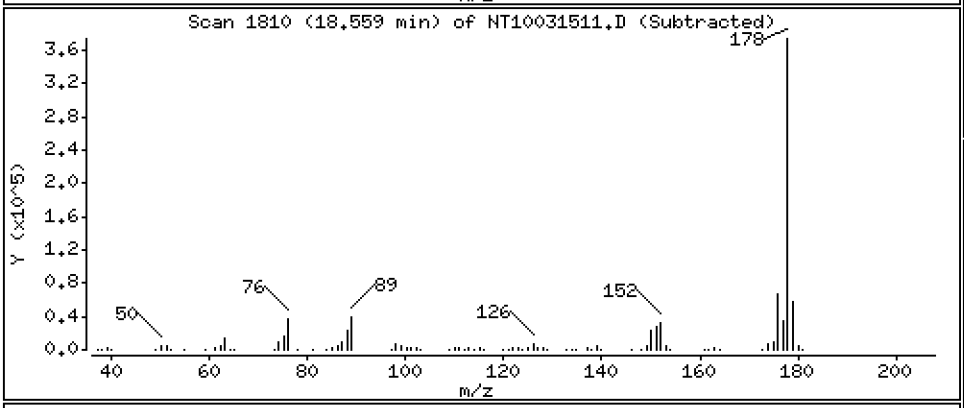
Column phase: ZB-5msi

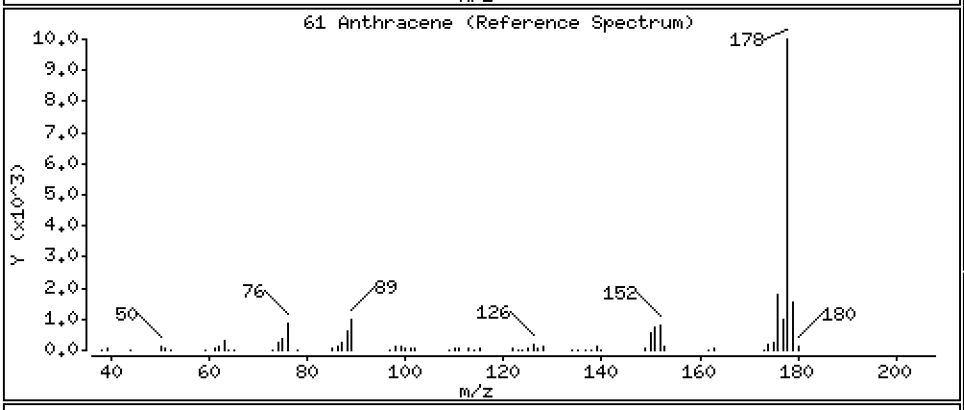
Column diameter: 0.25

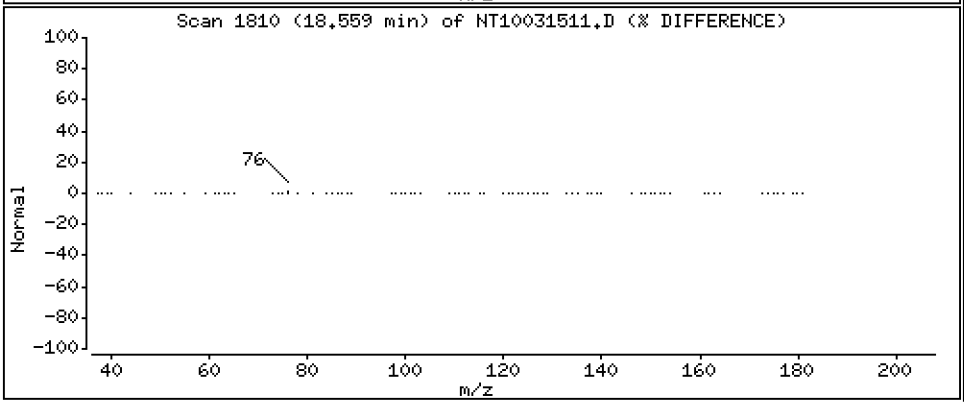
61 Anthracene

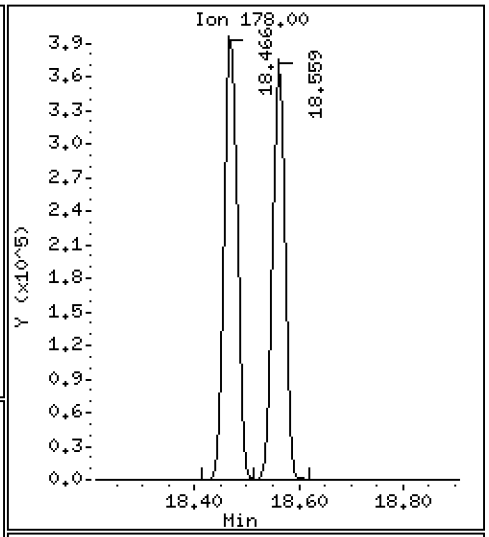
Concentration: 4.167 ug/mL

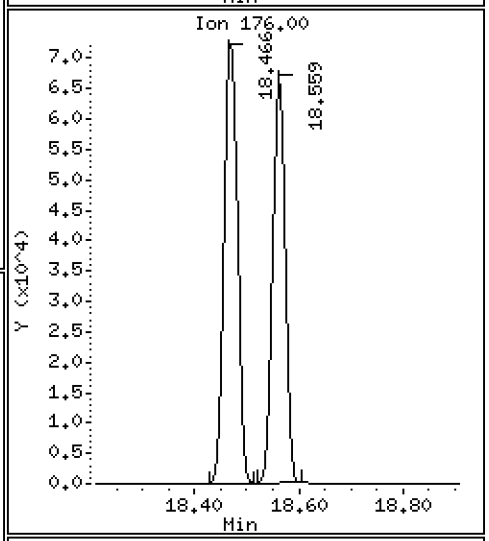


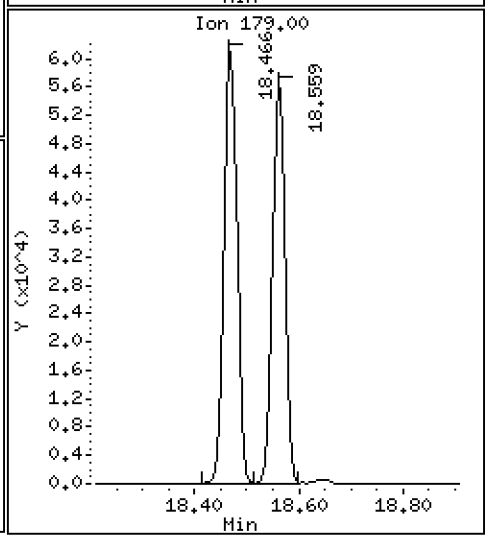












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

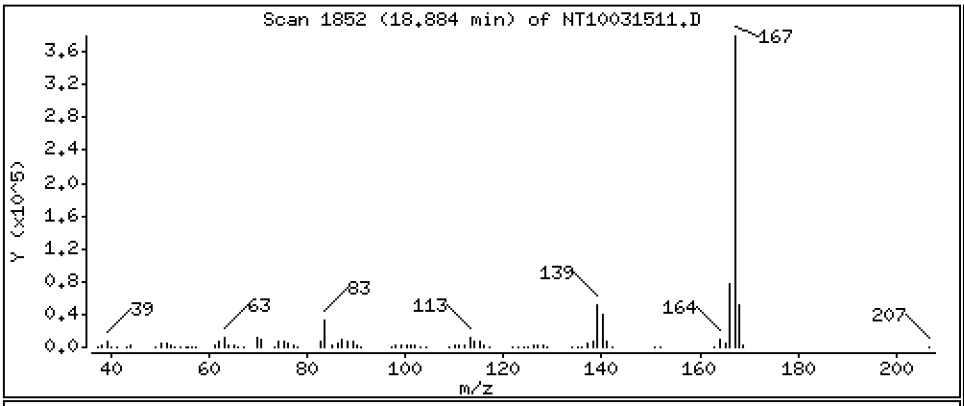
Operator: VTS

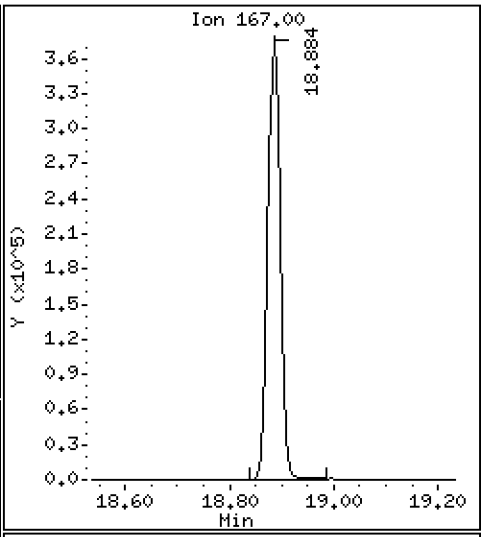
Column phase: ZB-5msi

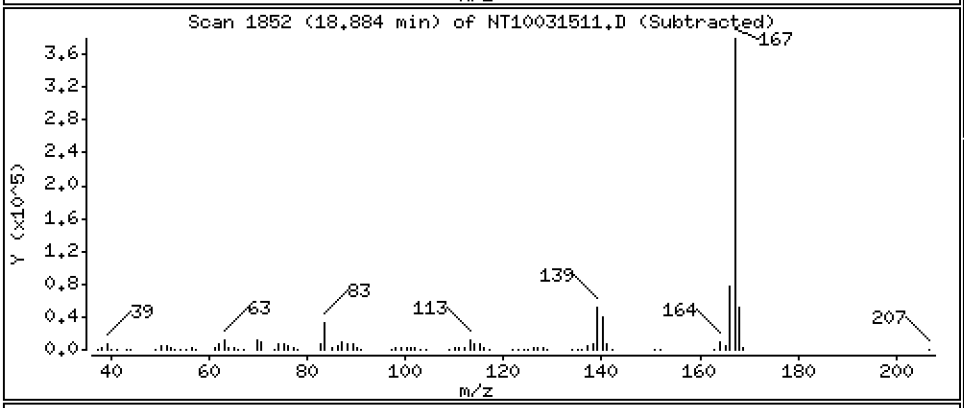
Column diameter: 0.25

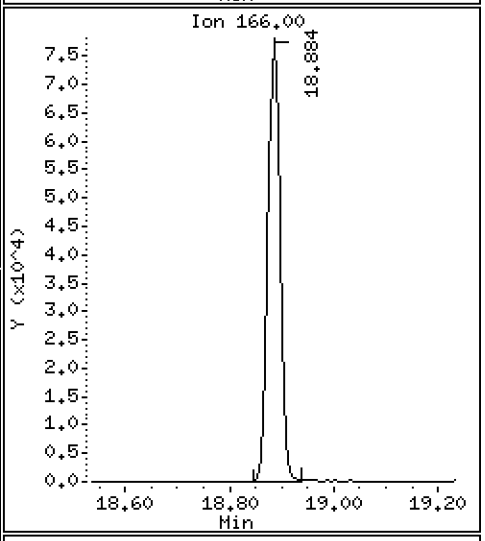
62 Carbazole

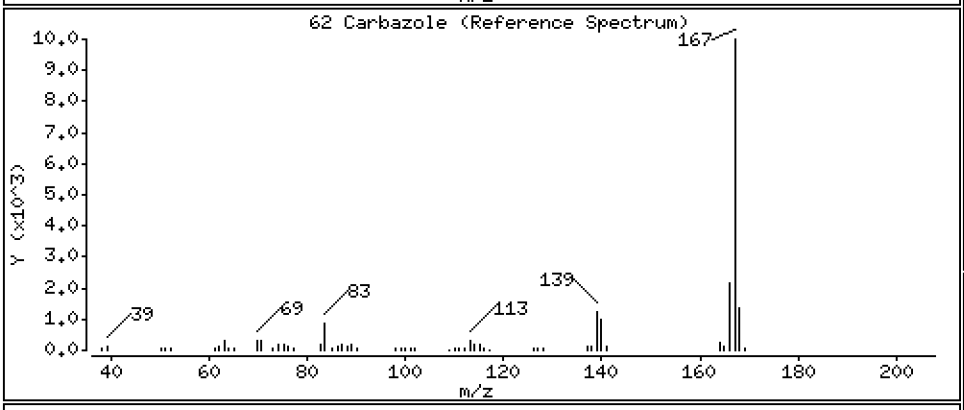
Concentration: 4.730 ug/mL

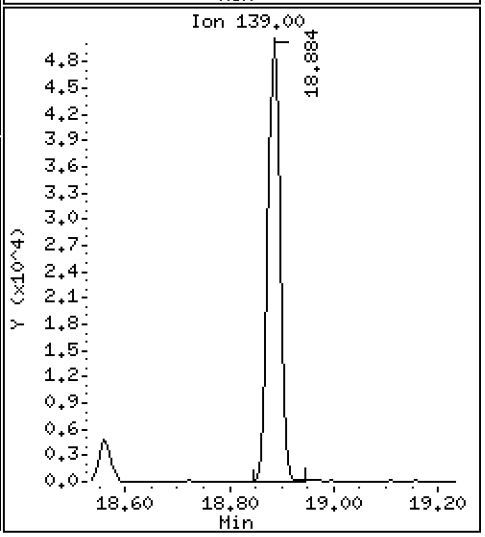


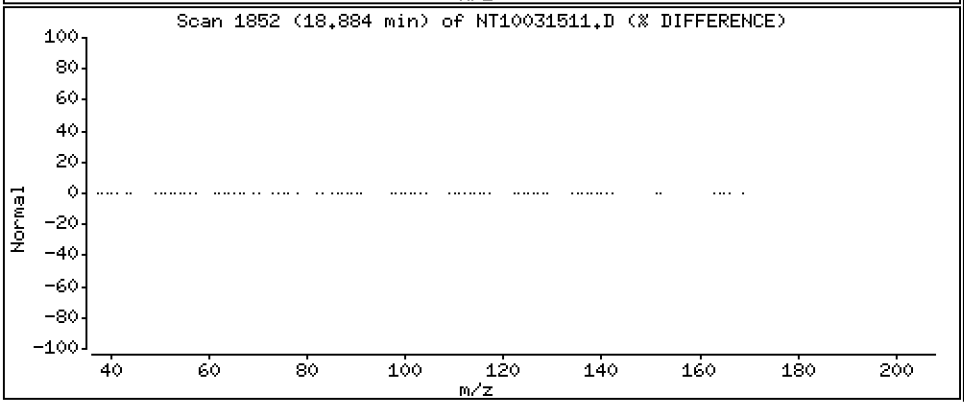












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

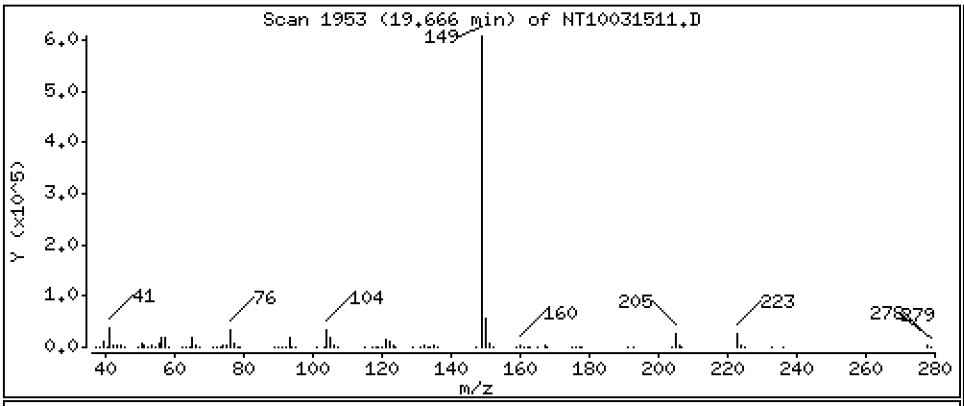
Operator: VTS

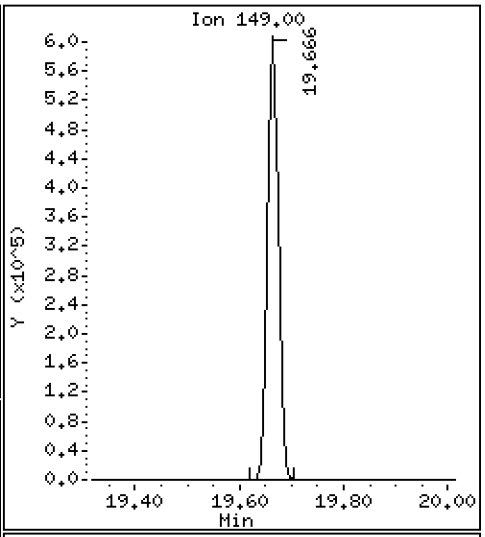
Column phase: ZB-5msi

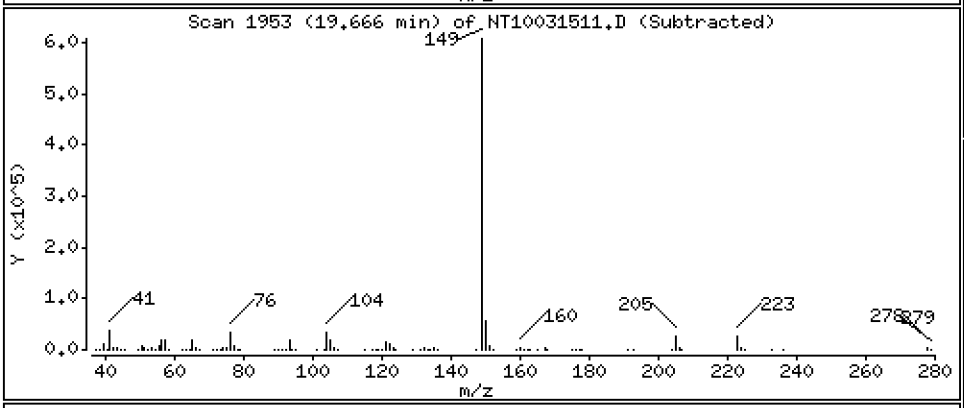
Column diameter: 0.25

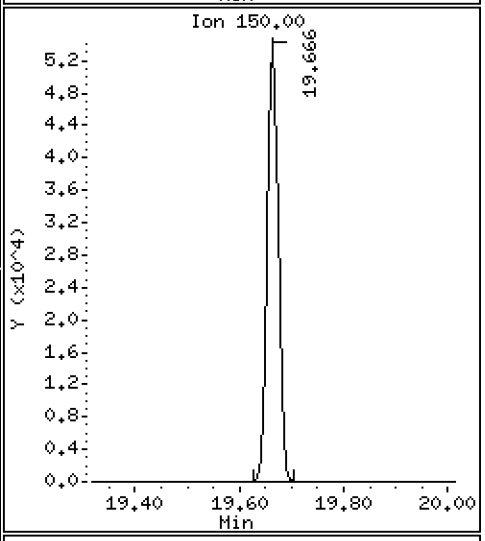
63 Di-n-butylphthalate

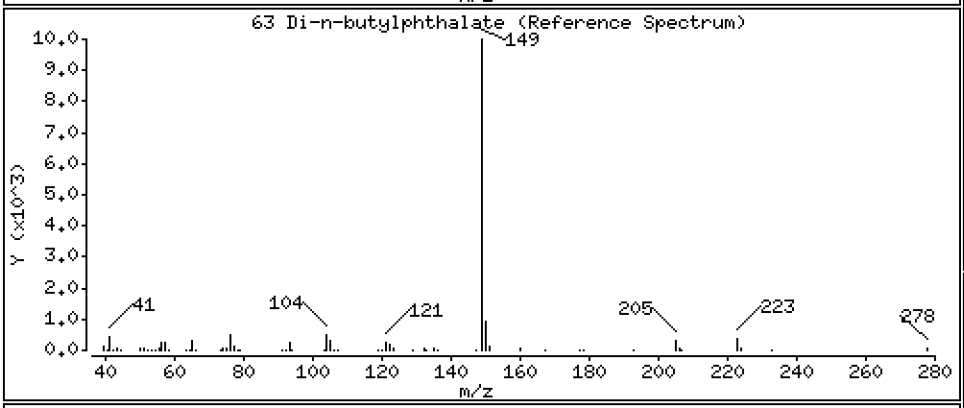
Concentration: 4.967 ug/mL

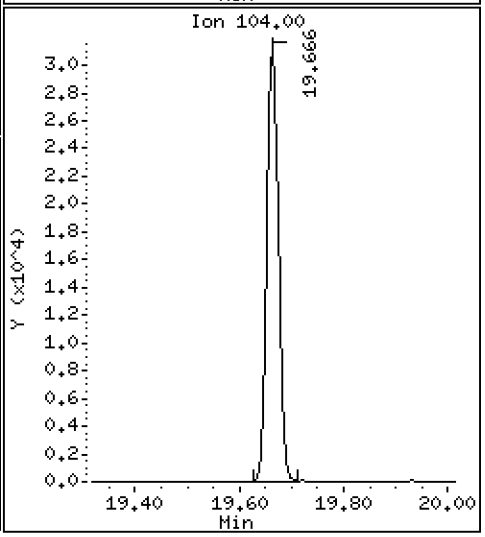


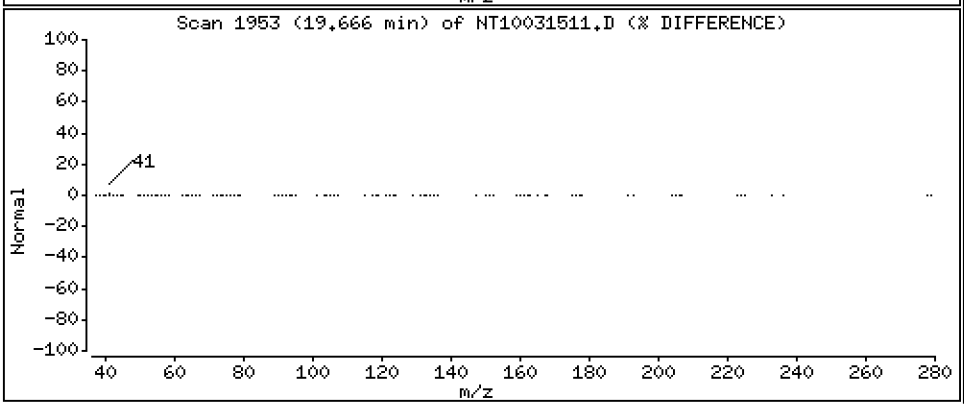












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

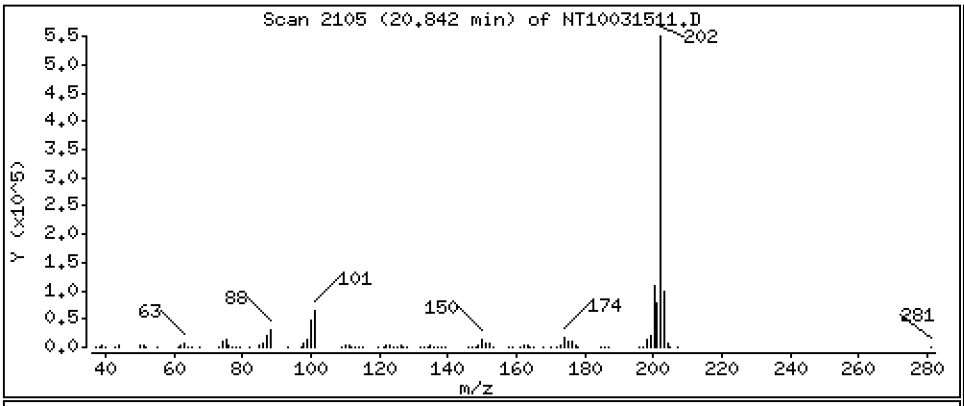
Operator: VTS

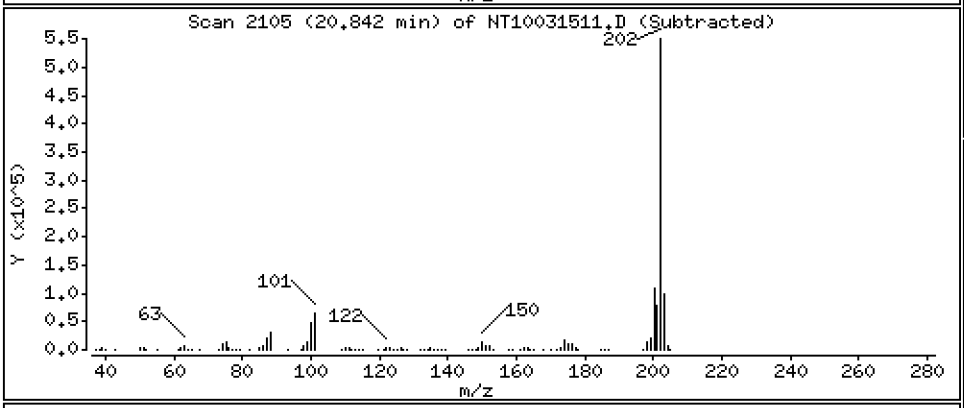
Column phase: ZB-5msi

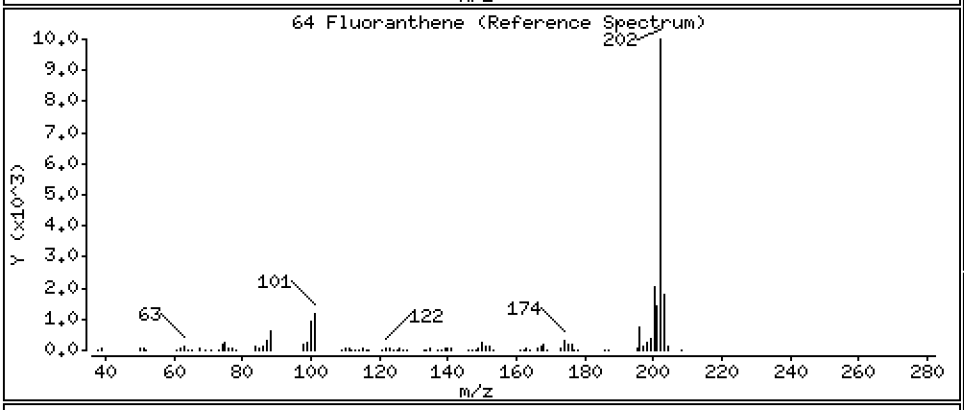
Column diameter: 0.25

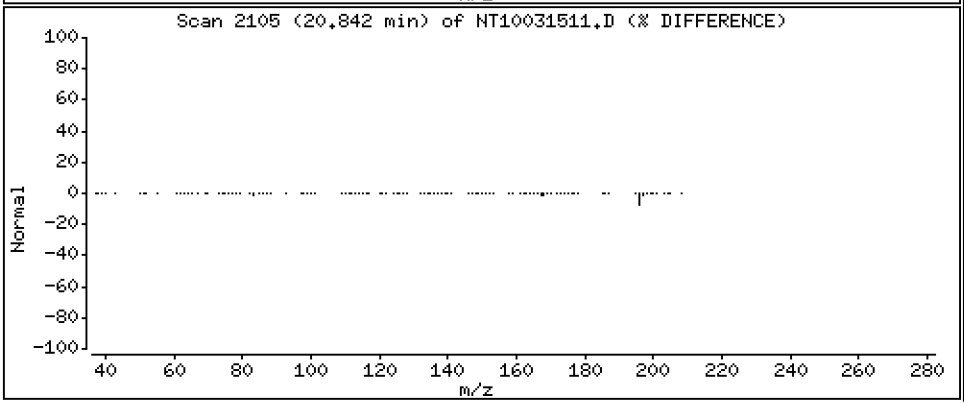
64 Fluoranthene

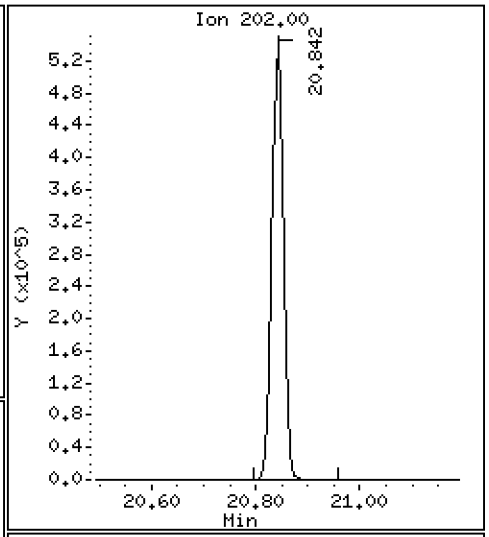
Concentration: 4.472 ug/mL

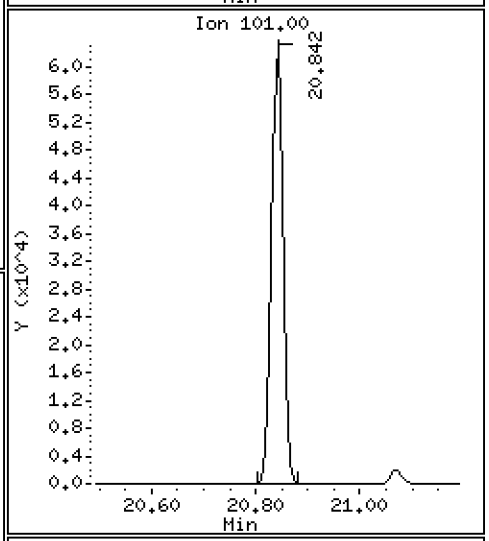


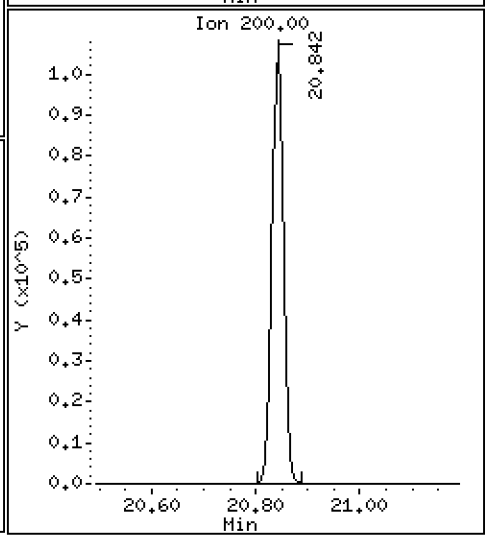












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

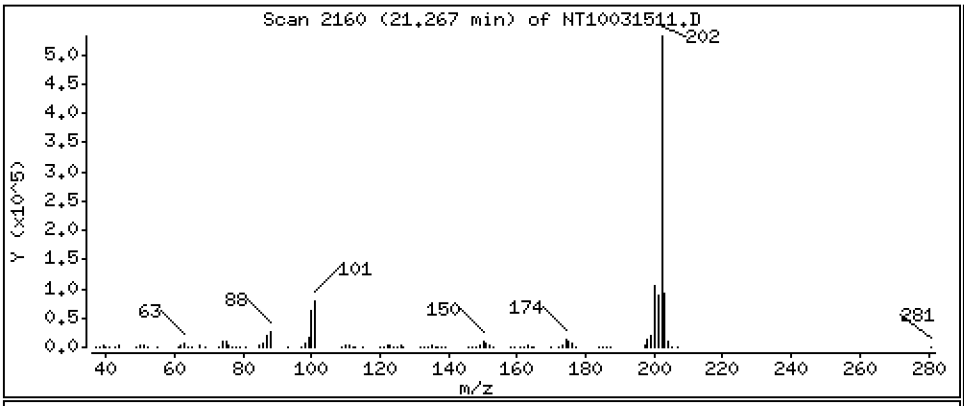
Operator: VTS

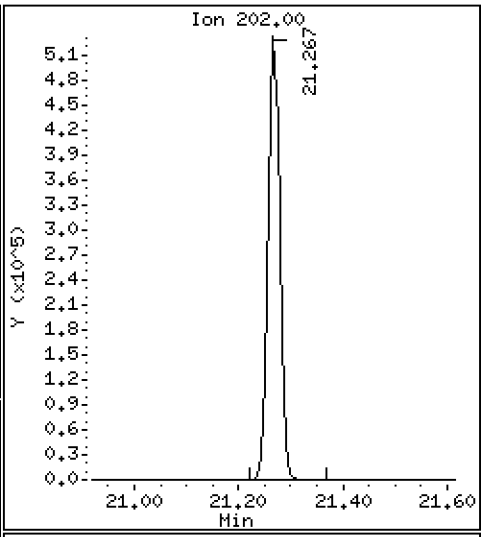
Column phase: ZB-5msi

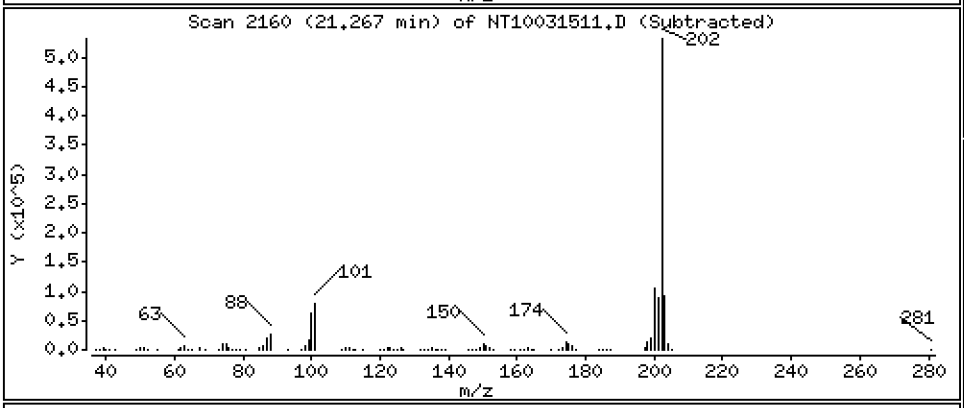
Column diameter: 0.25

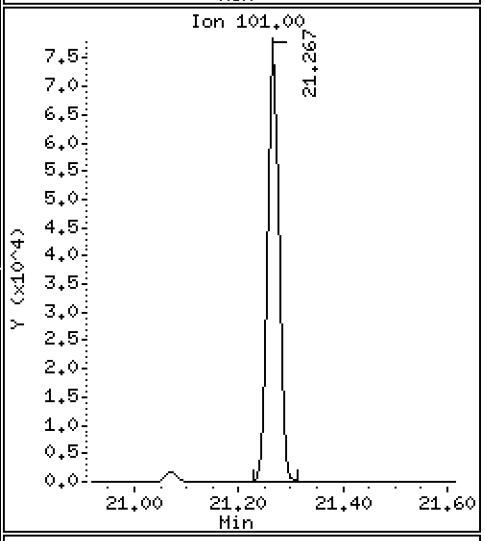
65 Pyrene

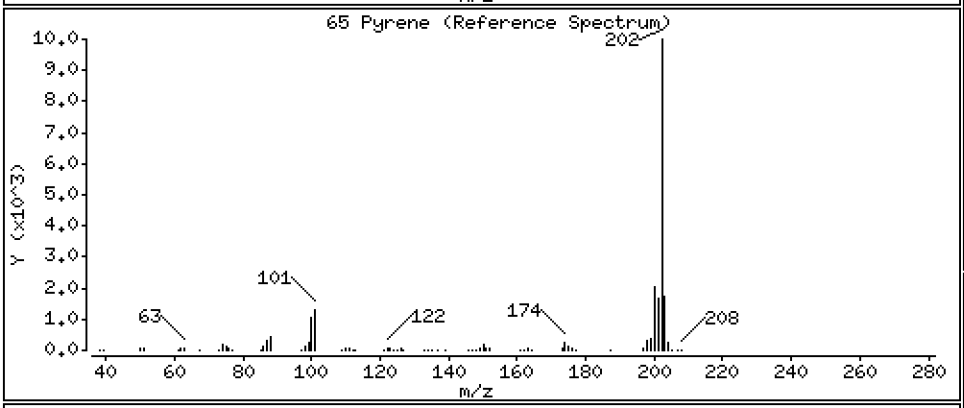
Concentration: 4.339 ug/mL

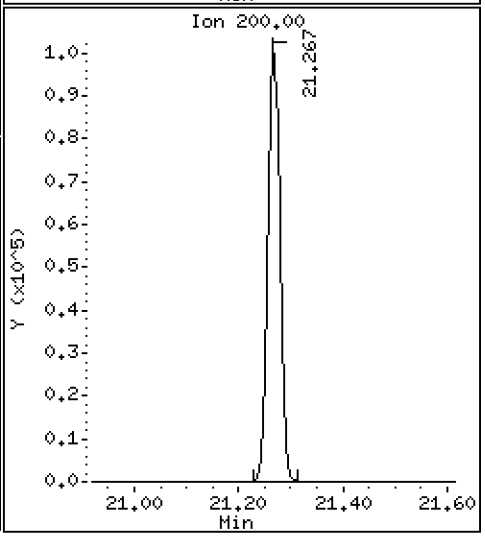


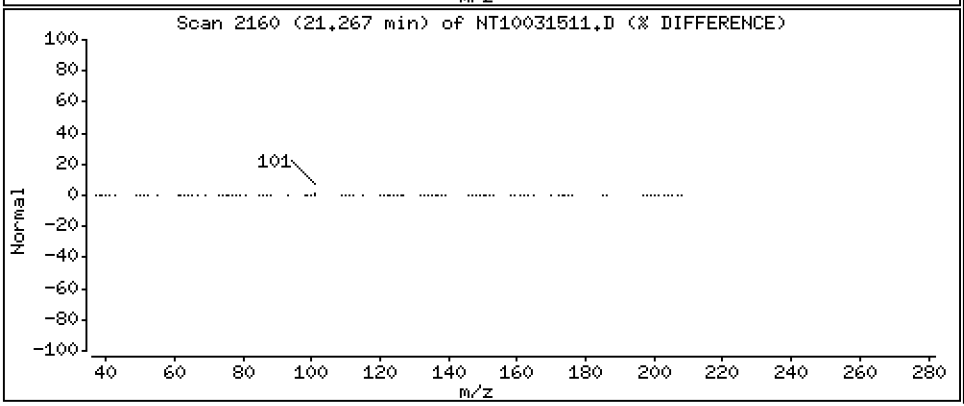












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

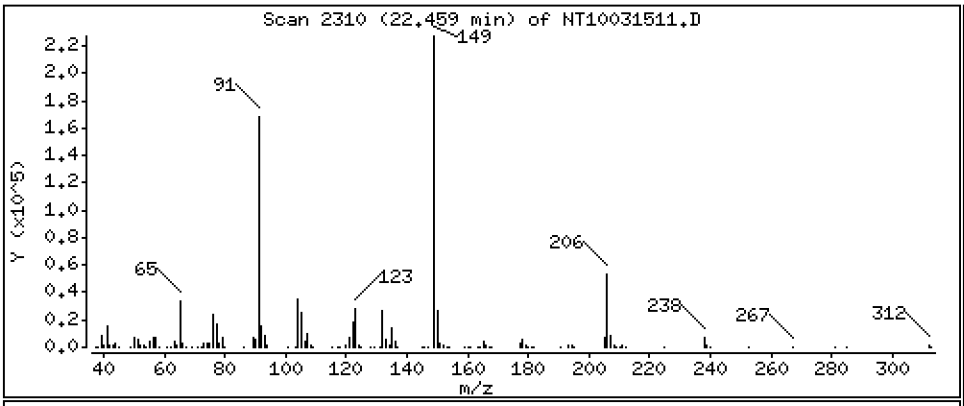
Operator: VTS

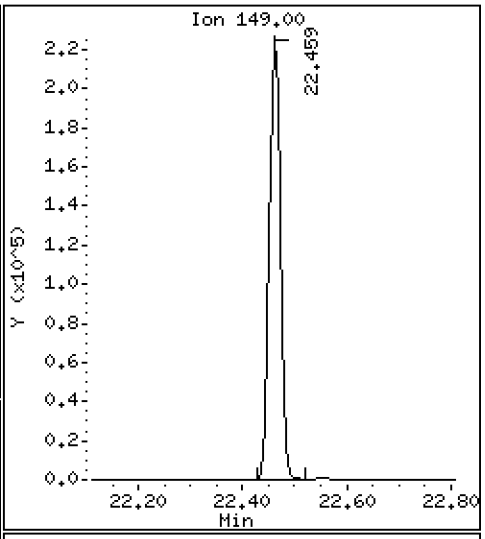
Column phase: ZB-5msi

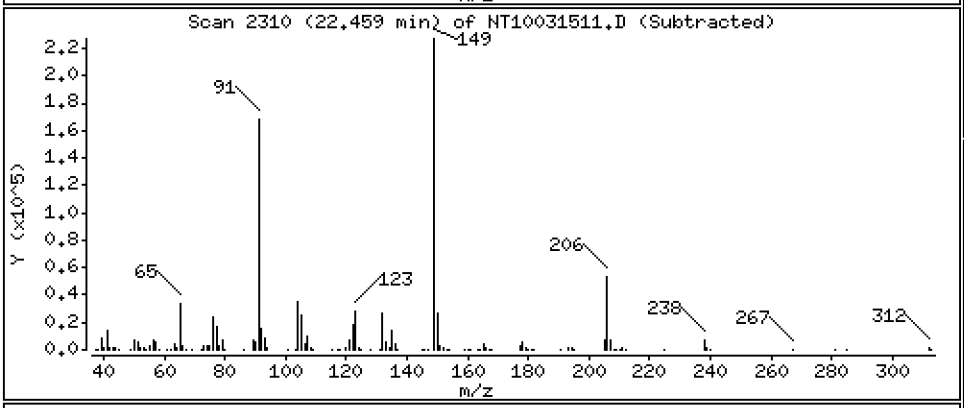
Column diameter: 0.25

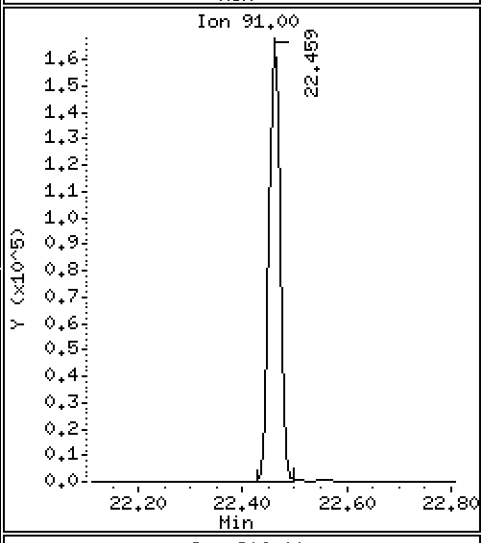
67 Butylbenzylphthalate

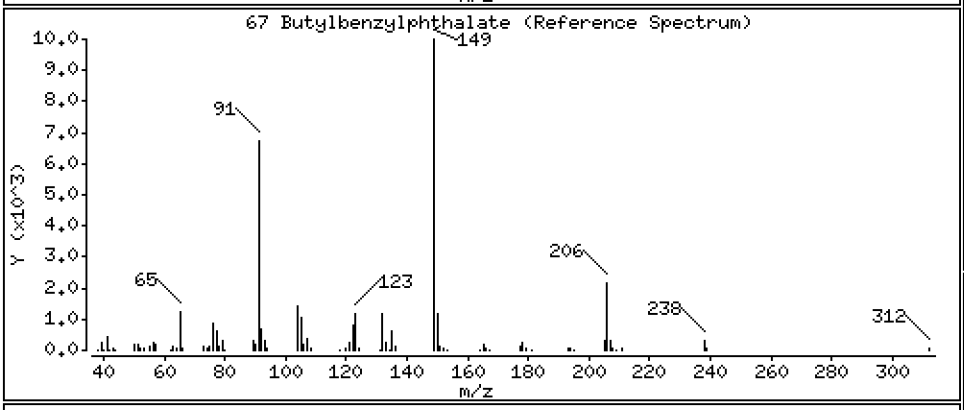
Concentration: 4.834 ug/mL

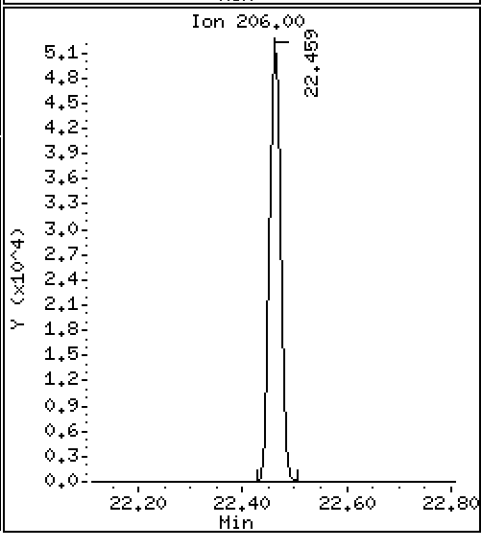


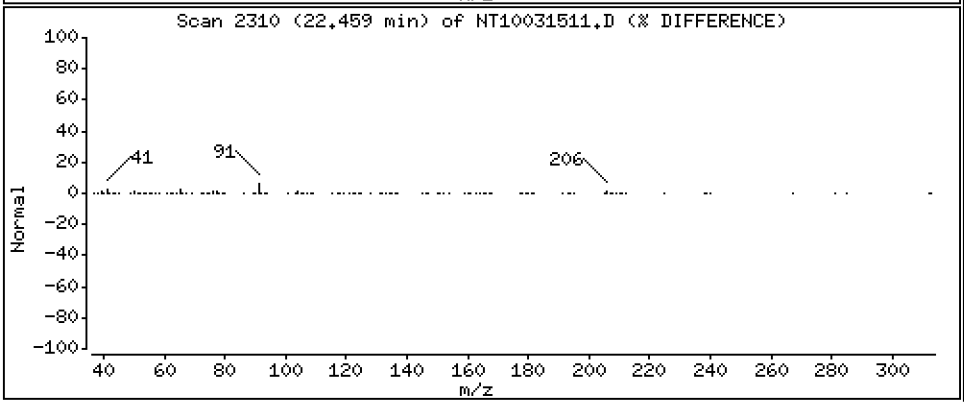












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

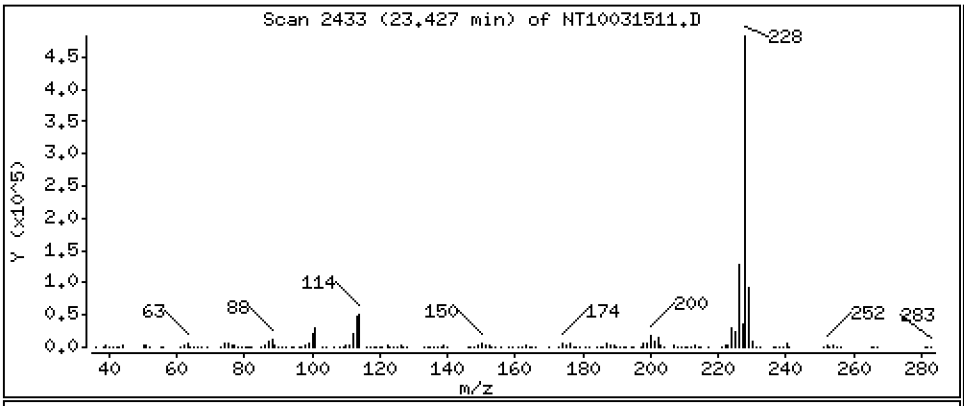
Operator: VTS

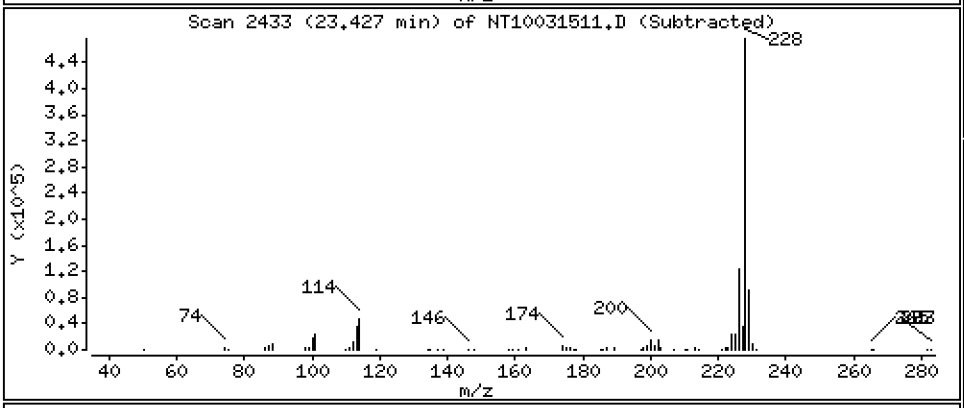
Column phase: ZB-5msi

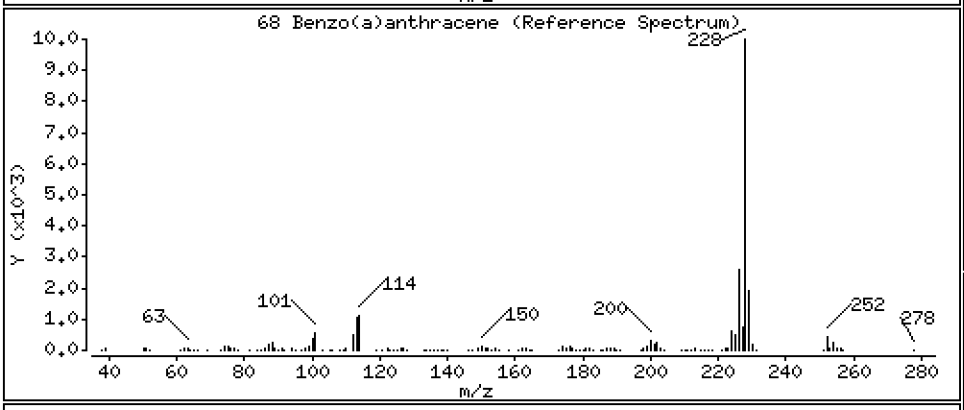
Column diameter: 0.25

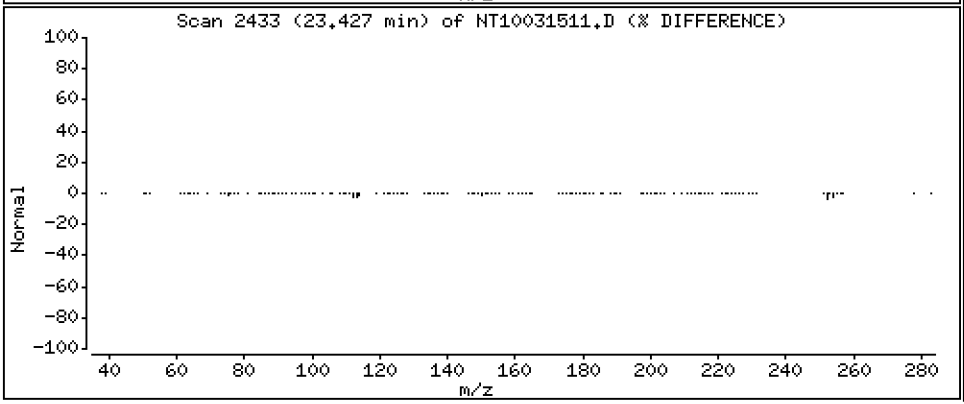
68 Benzo(a)anthracene

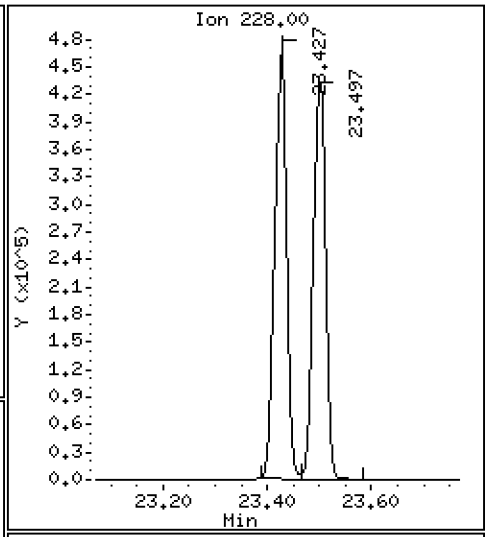
Concentration: 4.647 ug/mL

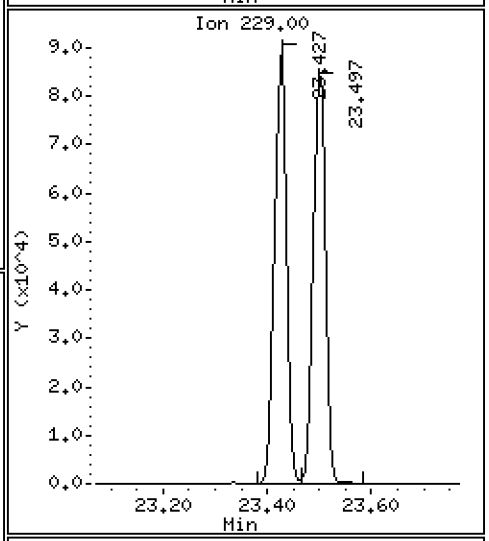


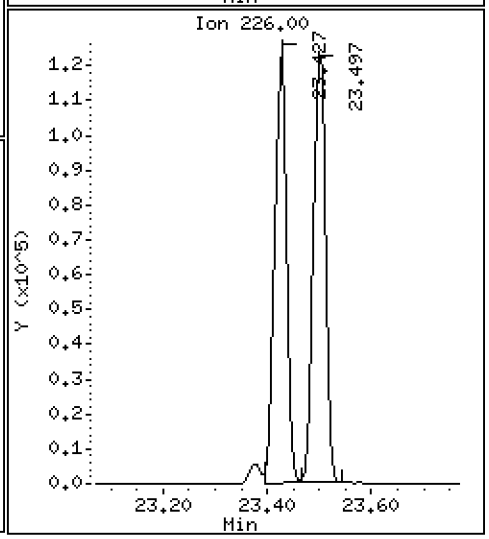












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

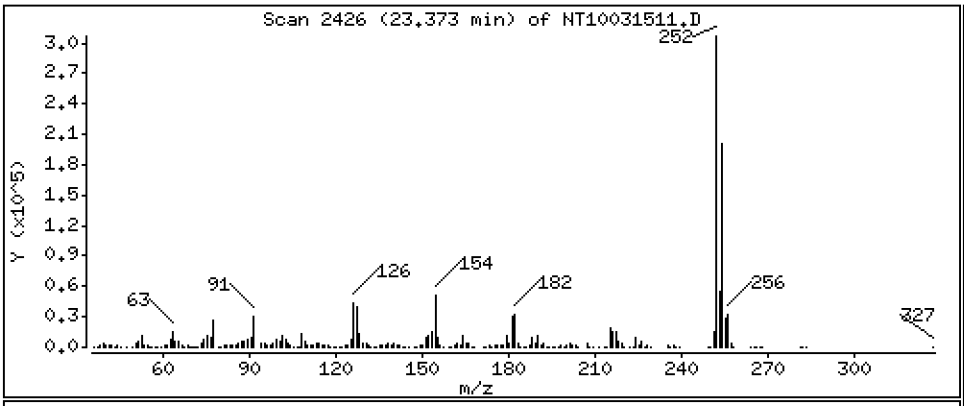
Operator: VTS

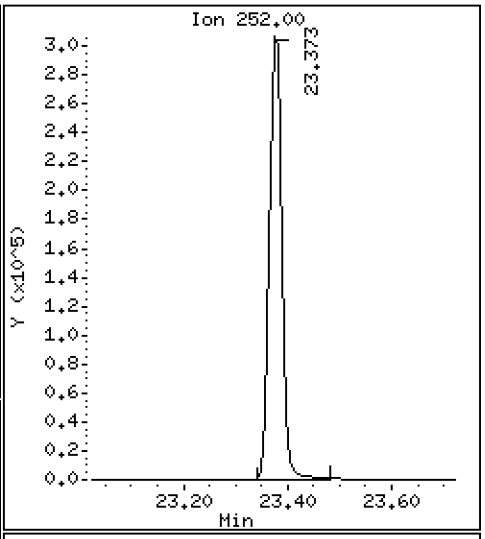
Column phase: ZB-5msi

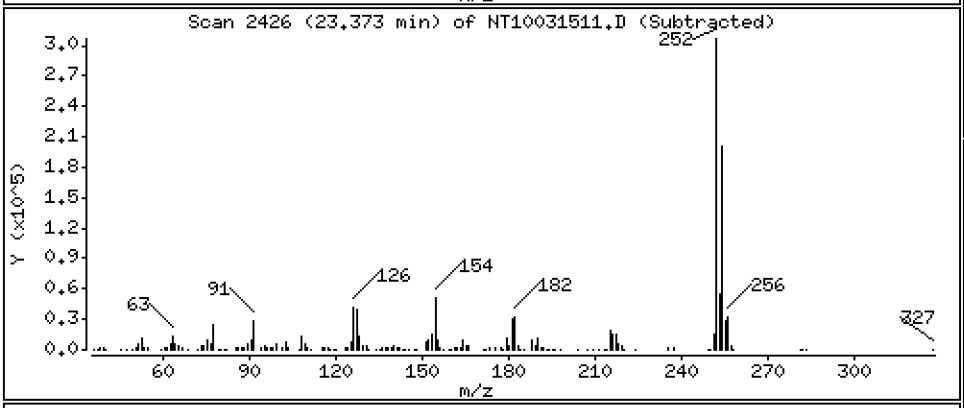
Column diameter: 0.25

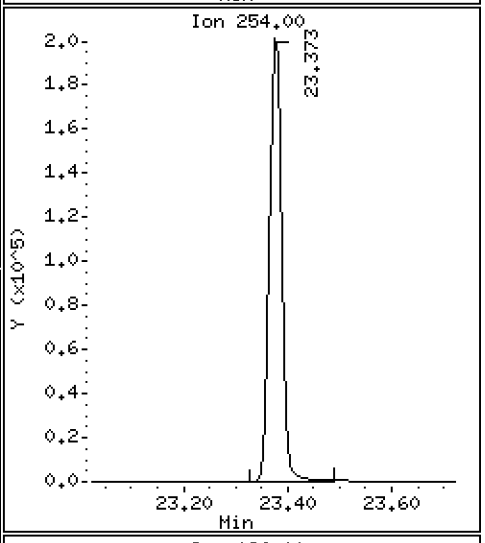
70 3,3'-Dichlorobenzidine

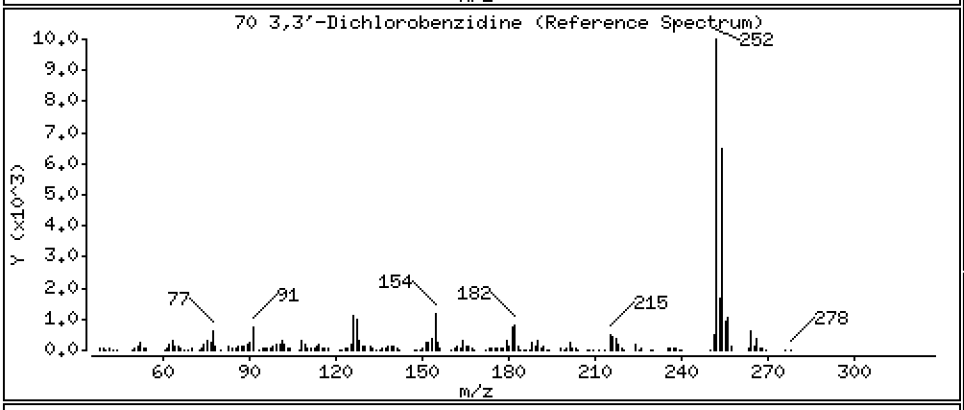
Concentration: 9.817 ug/mL

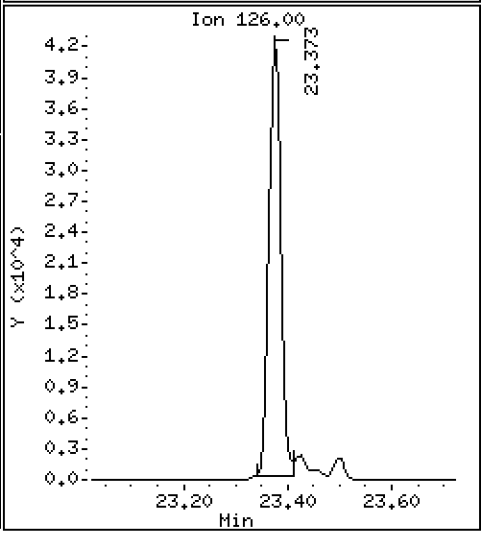


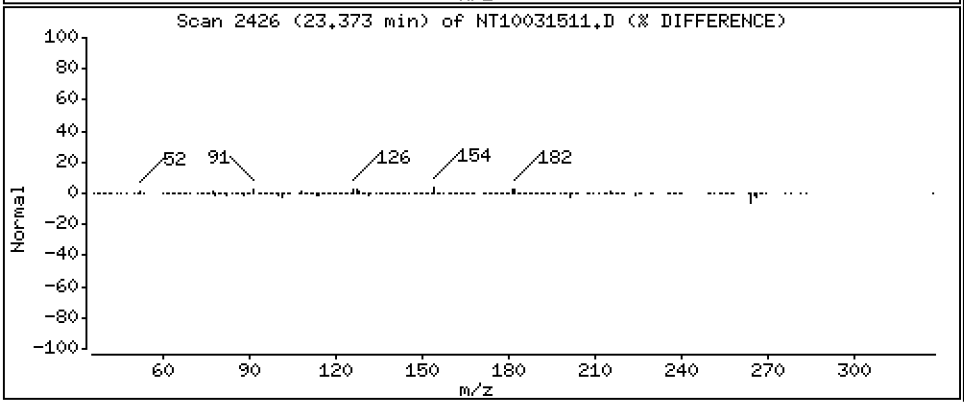












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

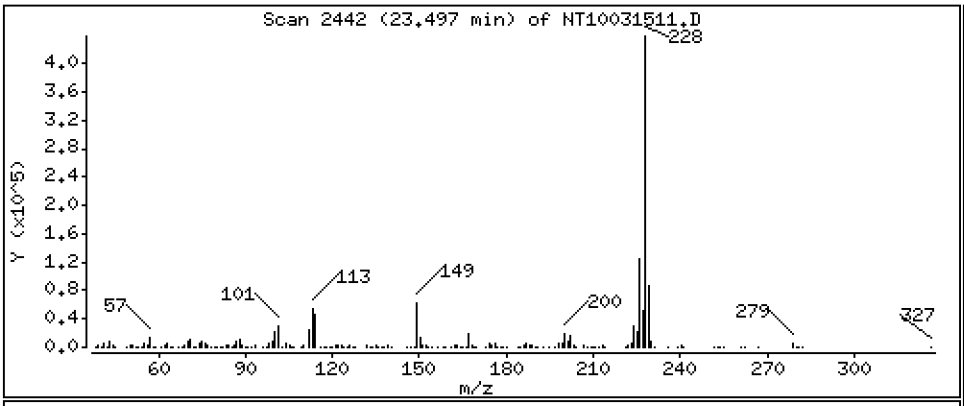
Operator: VTS

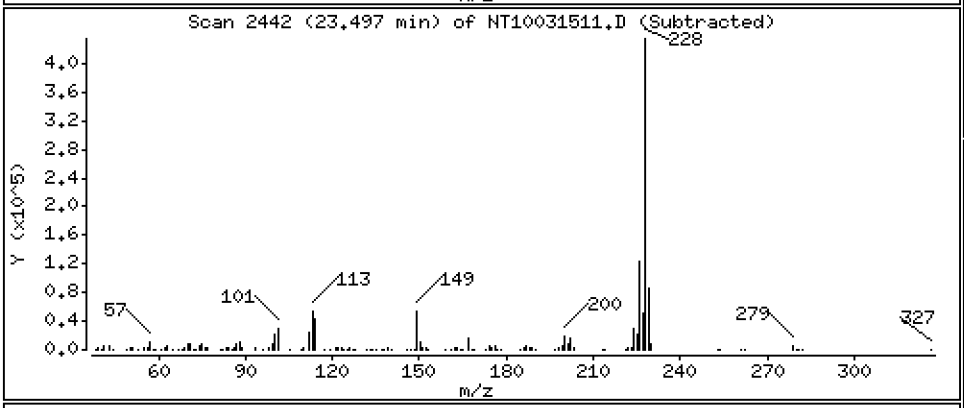
Column phase: ZB-5msi

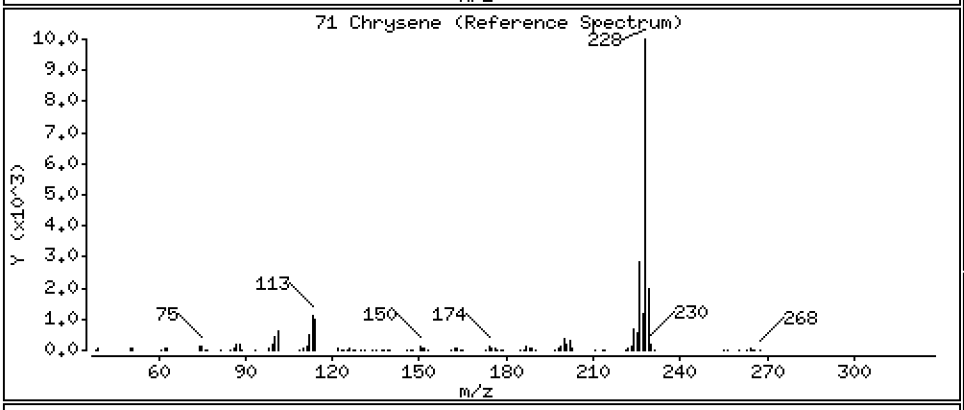
Column diameter: 0.25

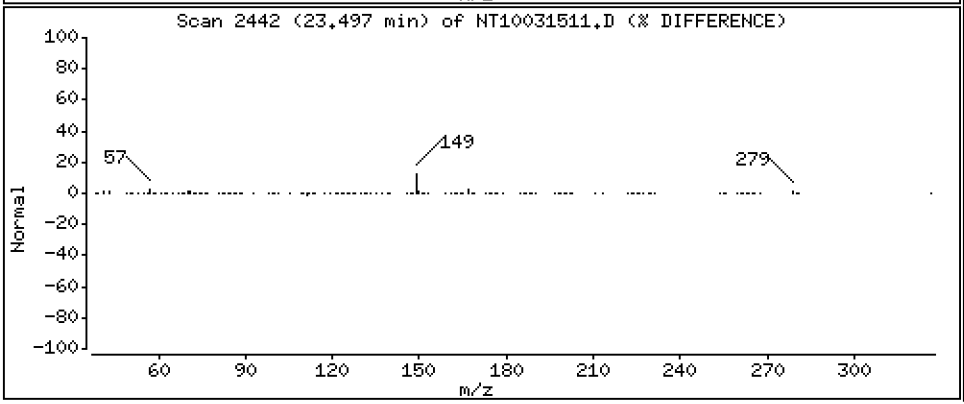
71 Chrysene

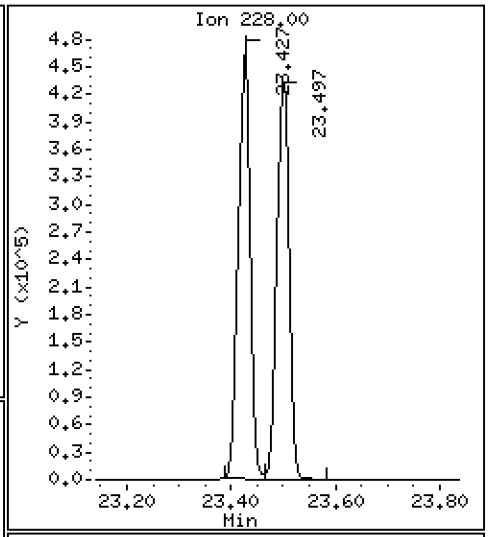
Concentration: 4.510 ug/mL

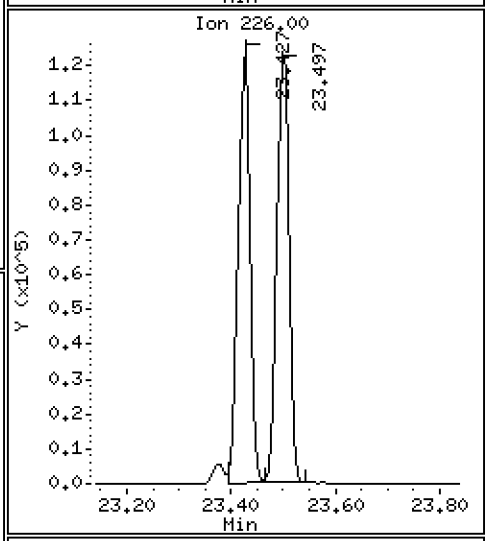


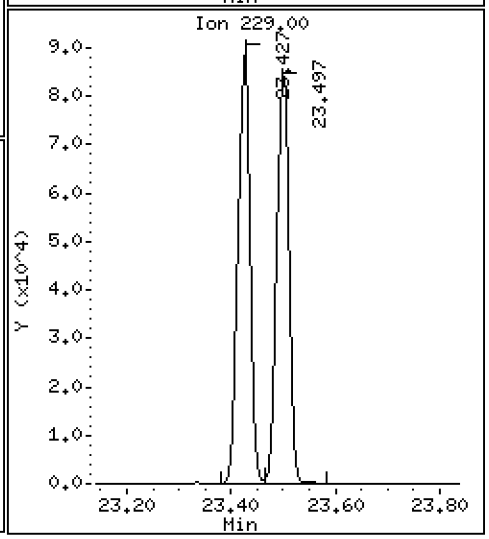












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

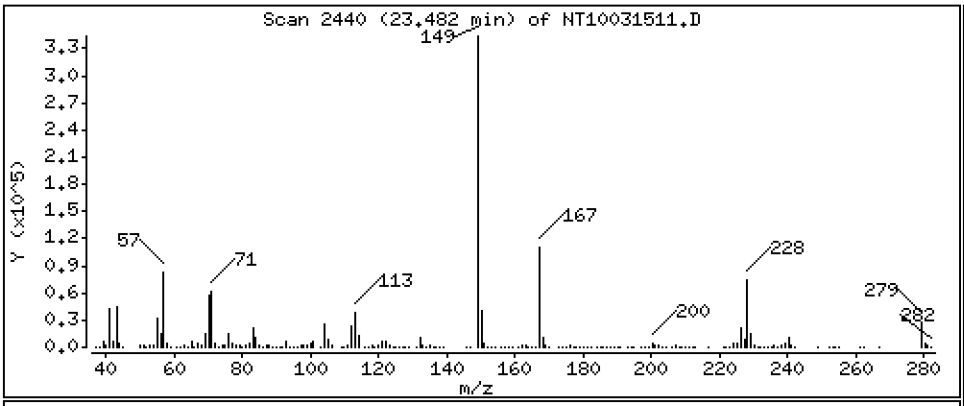
Operator: VTS

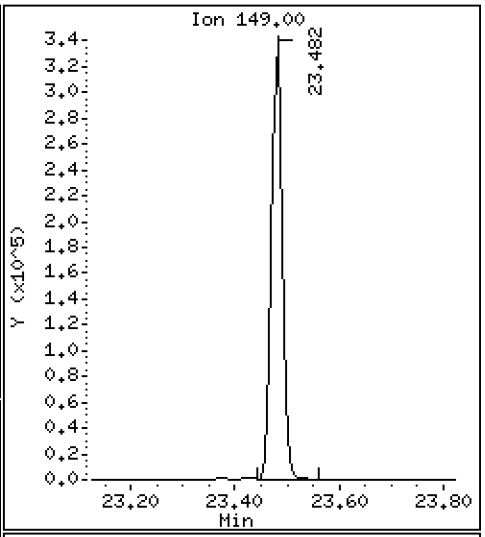
Column phase: ZB-5msi

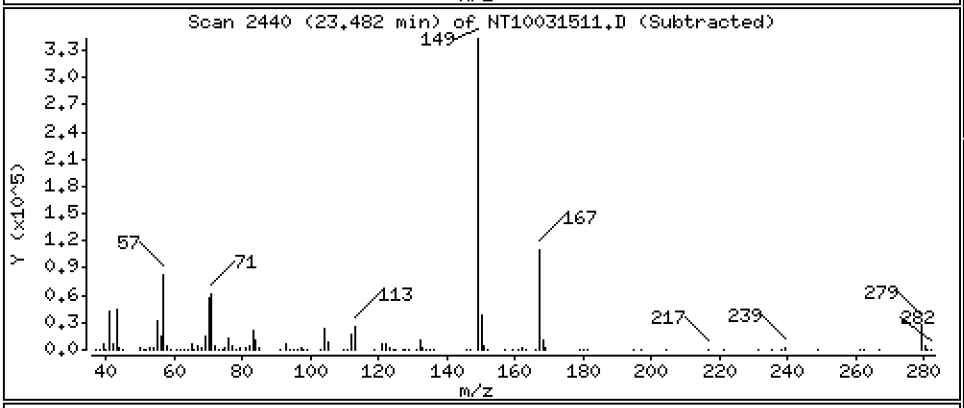
Column diameter: 0.25

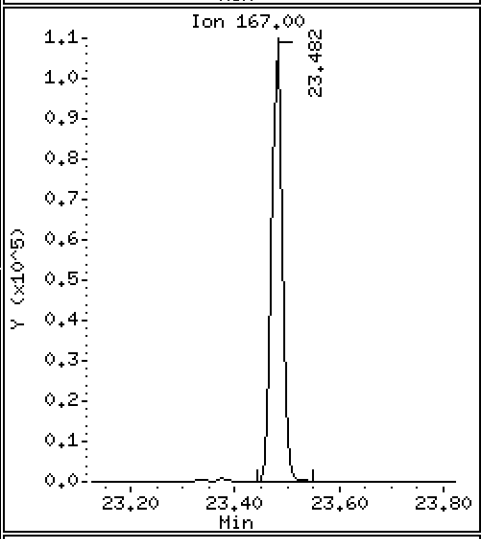
72 bis(2-Ethylhexyl)phthalate

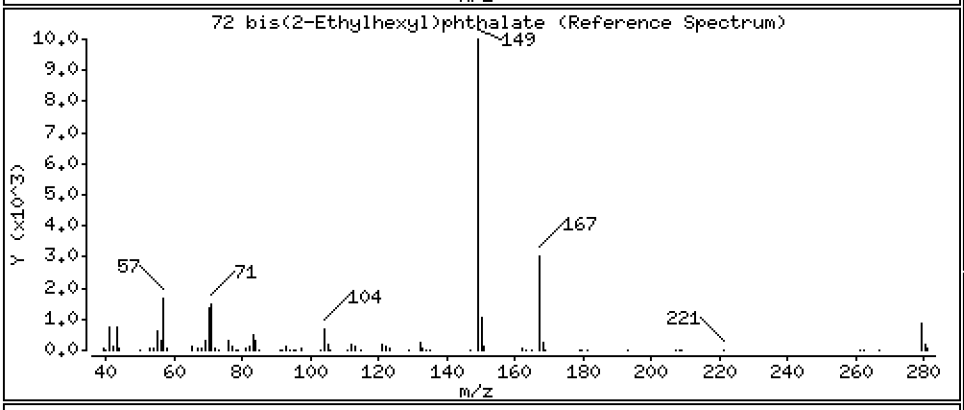
Concentration: 4.680 ug/mL

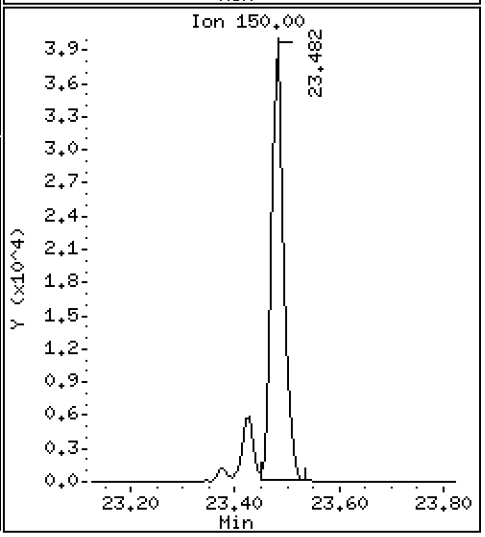


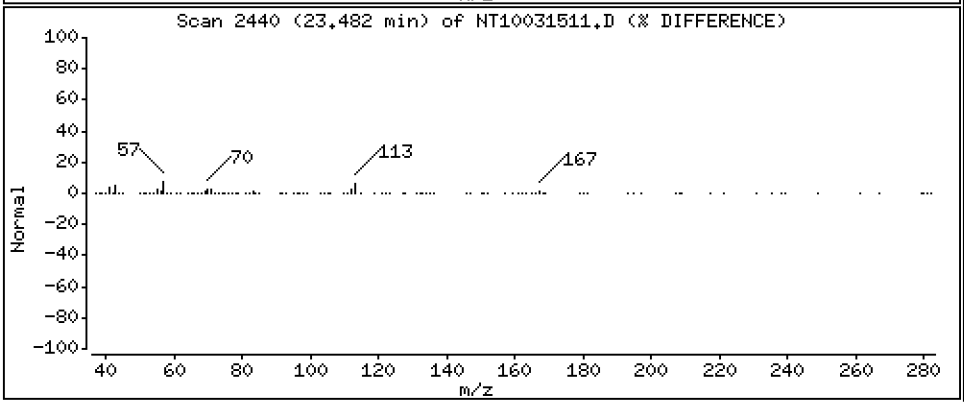












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

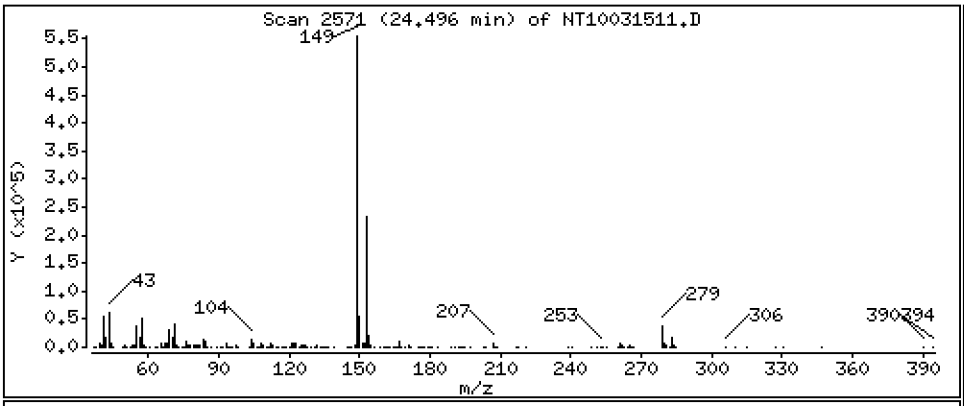
Operator: VTS

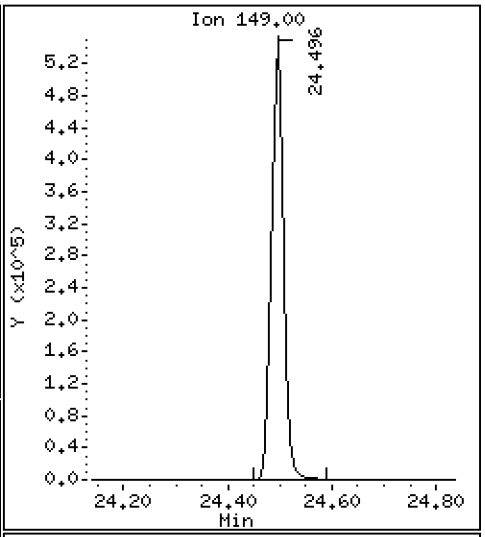
Column phase: ZB-5msi

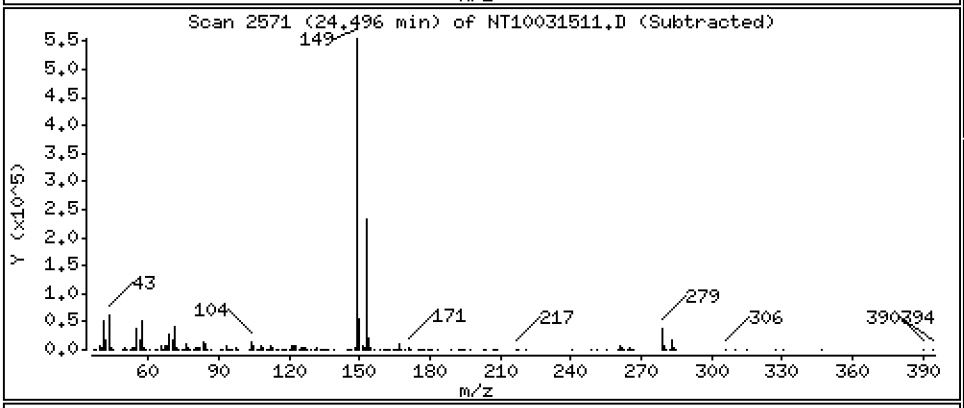
Column diameter: 0.25

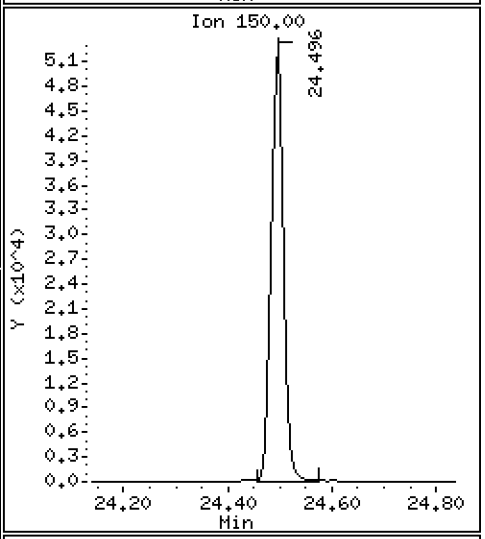
73 Di-n-octylphthalate

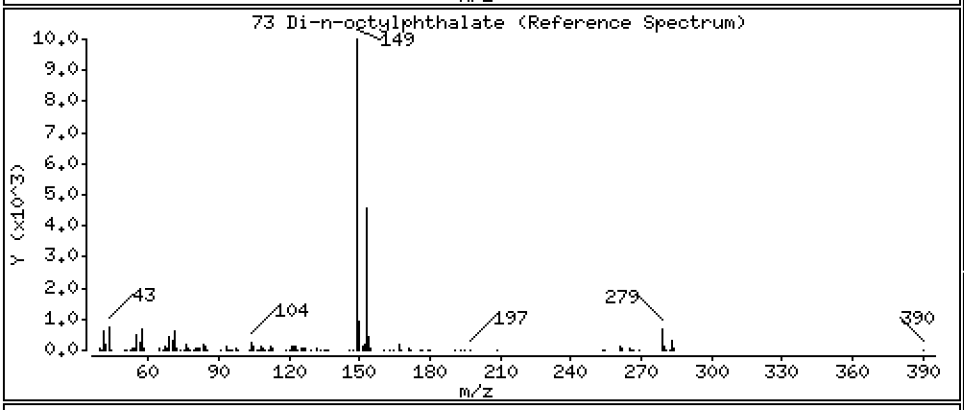
Concentration: 4.947 ug/mL

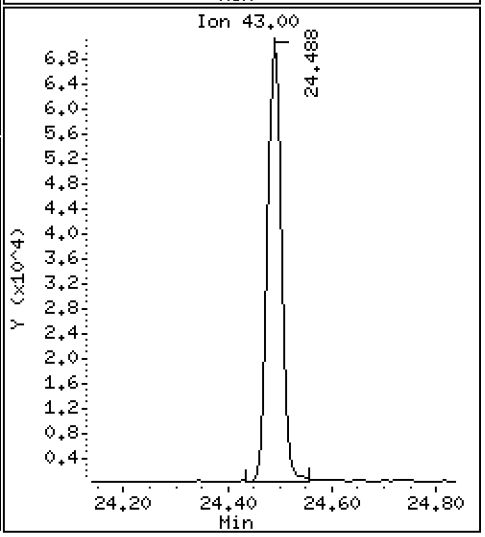


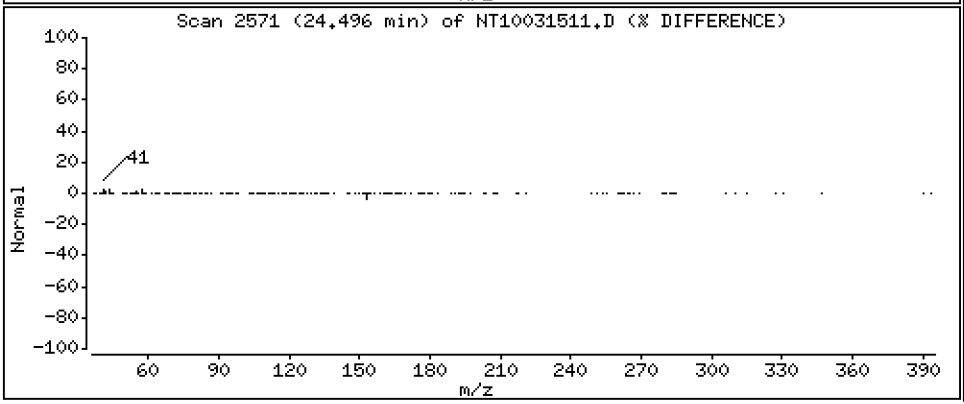












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

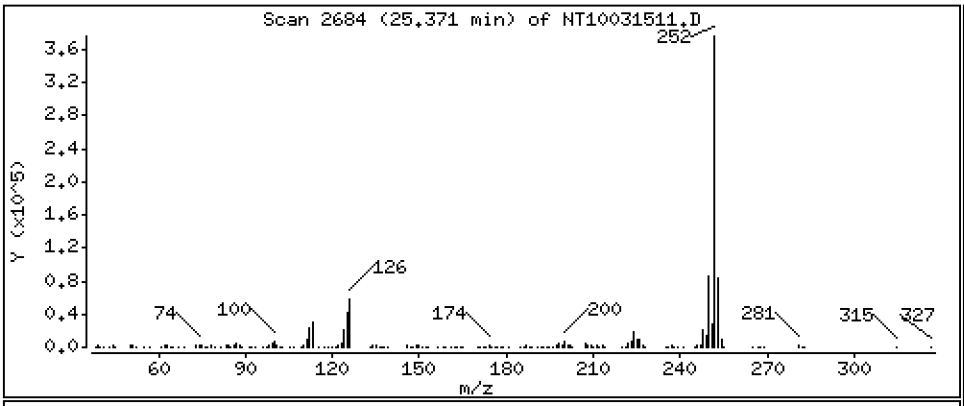
Operator: VTS

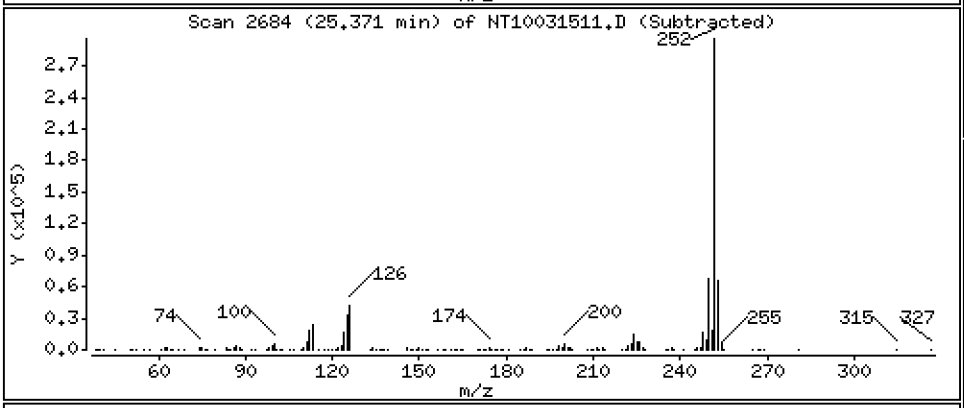
Column phase: ZB-5msi

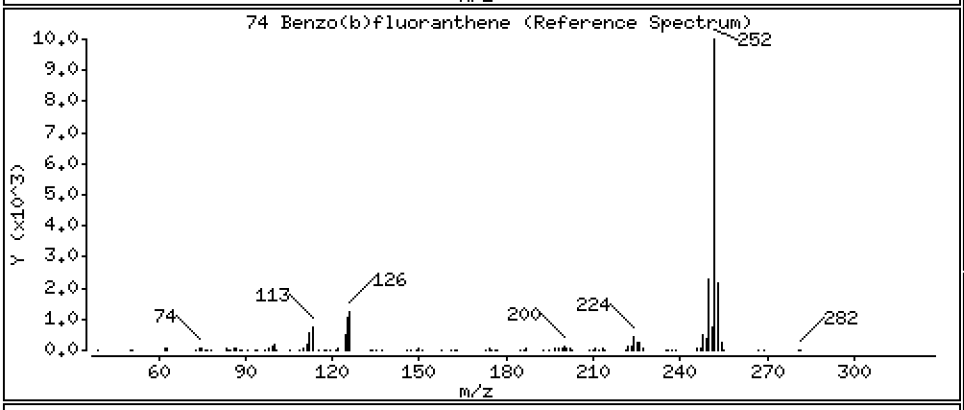
Column diameter: 0.25

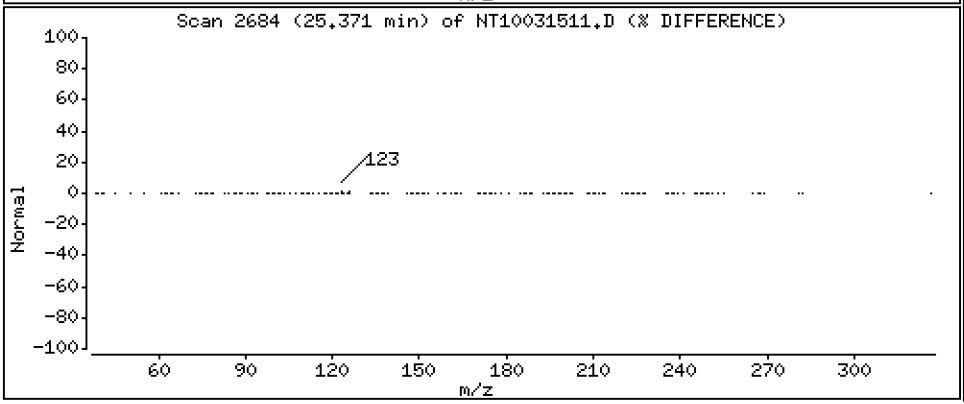
74 Benzo(b)fluoranthene

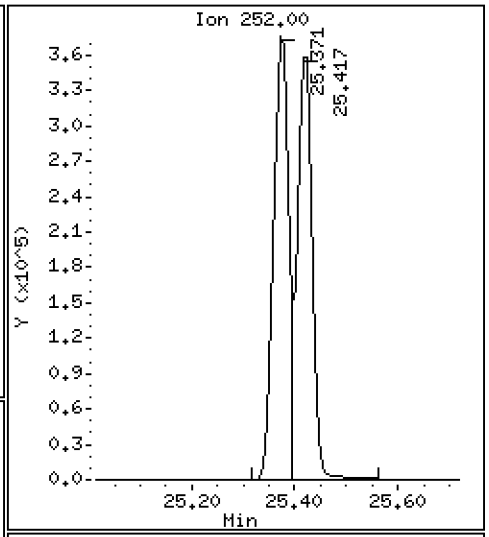
Concentration: 4.602 ug/mL

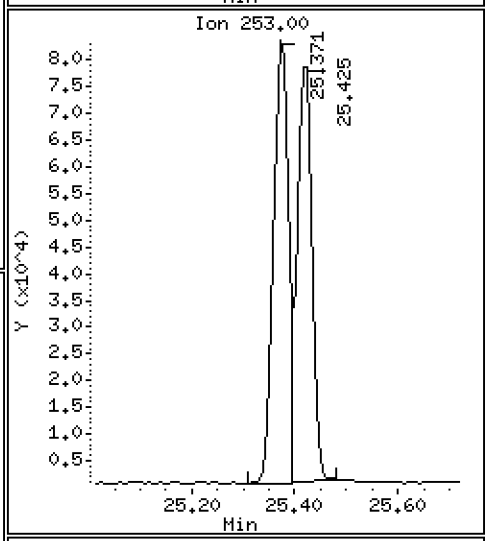


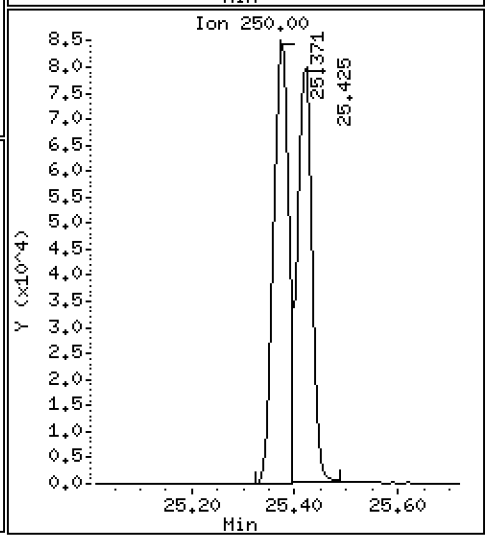












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

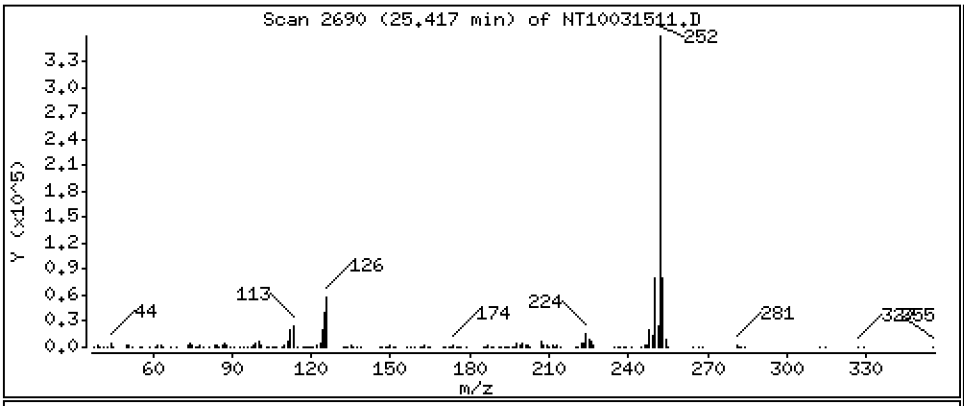
Operator: VTS

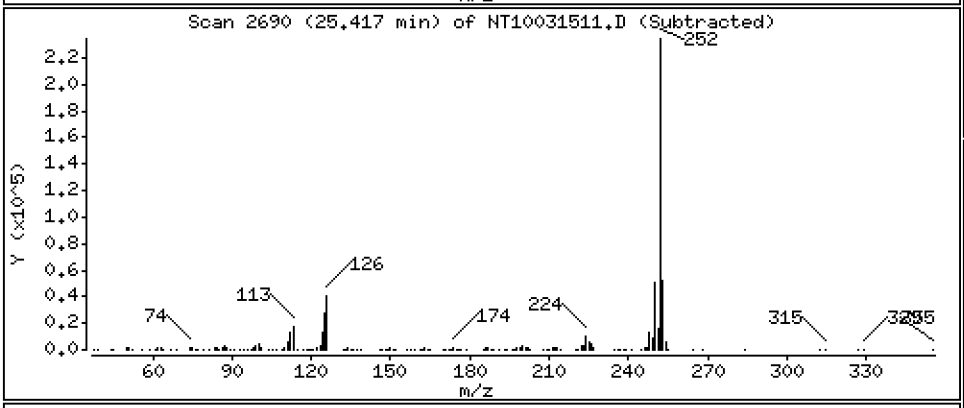
Column phase: ZB-5msi

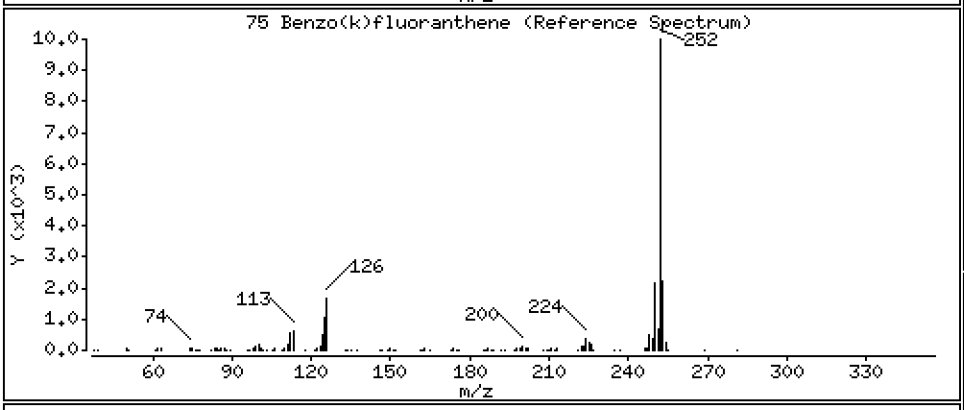
Column diameter: 0.25

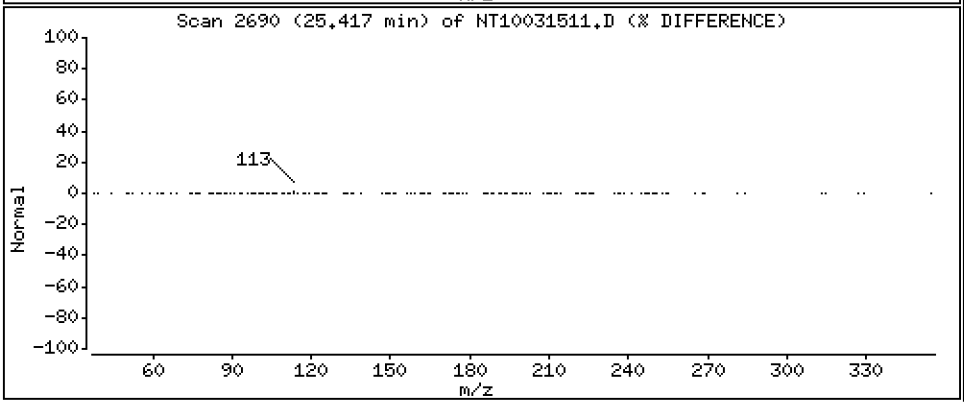
75 Benzo(k)fluoranthene

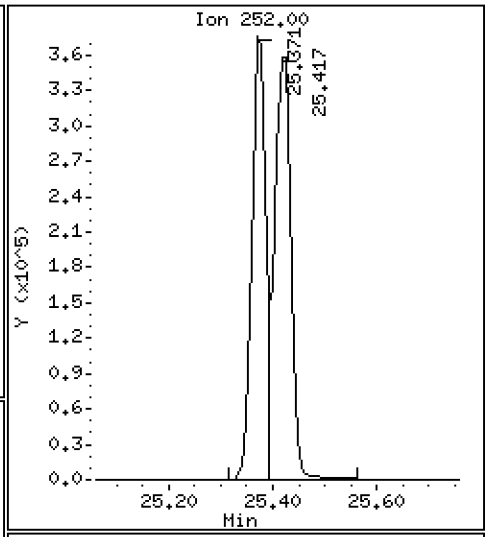
Concentration: 4.898 ug/mL

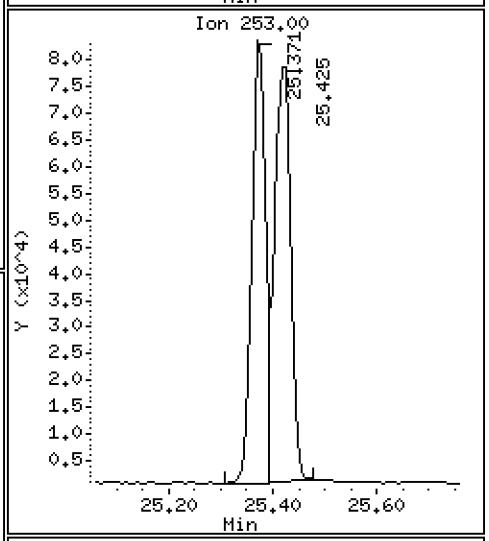


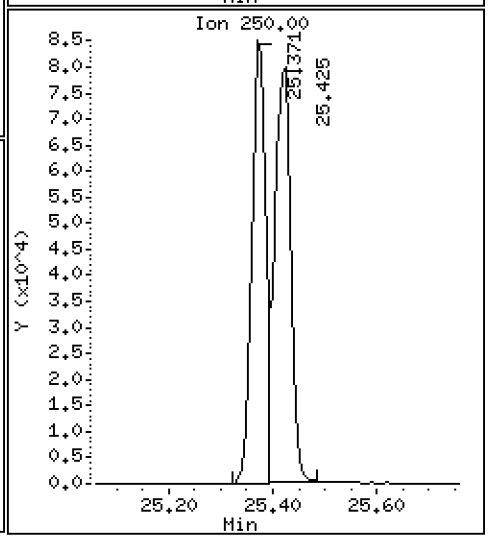












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

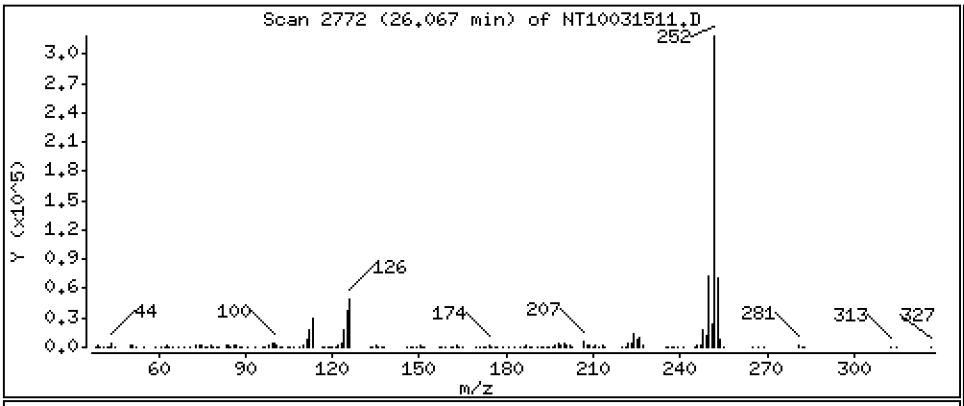
Operator: VTS

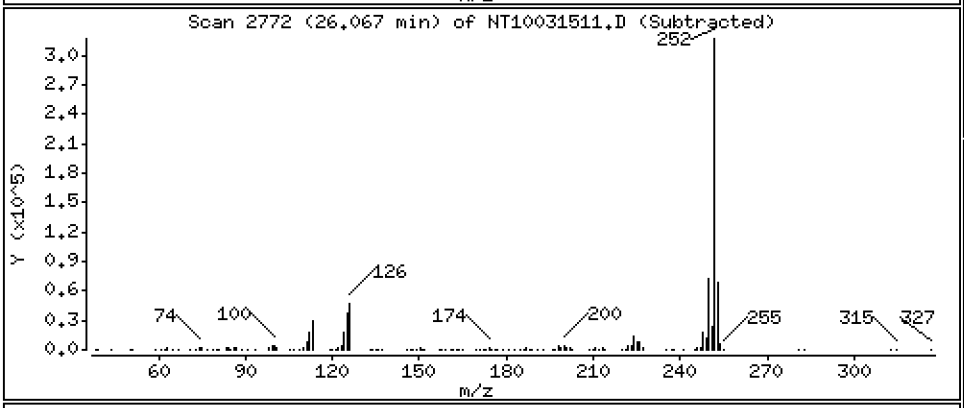
Column phase: ZB-5msi

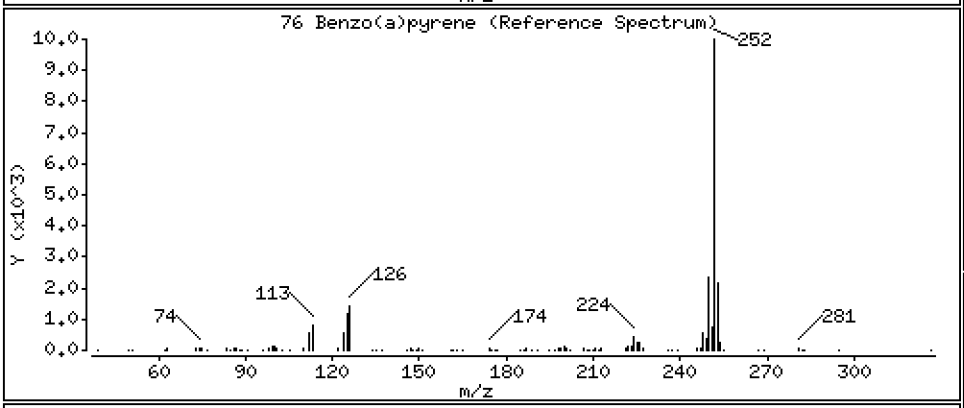
Column diameter: 0.25

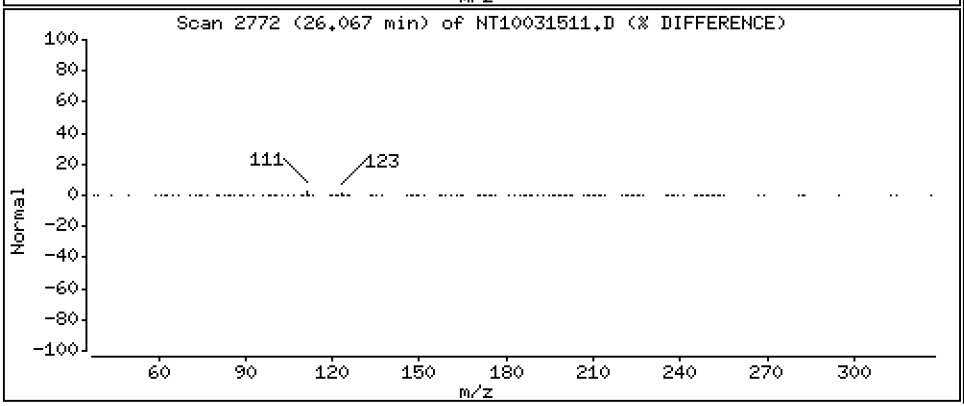
76 Benzo(a)pyrene

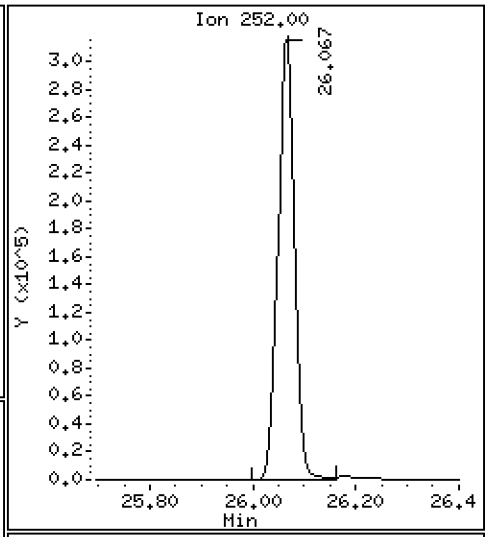
Concentration: 4.873 ug/mL

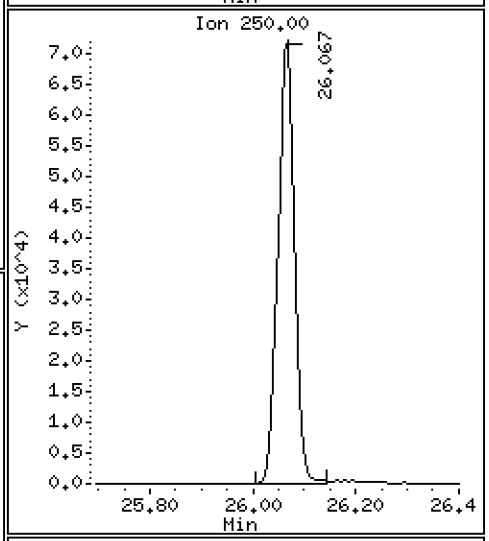


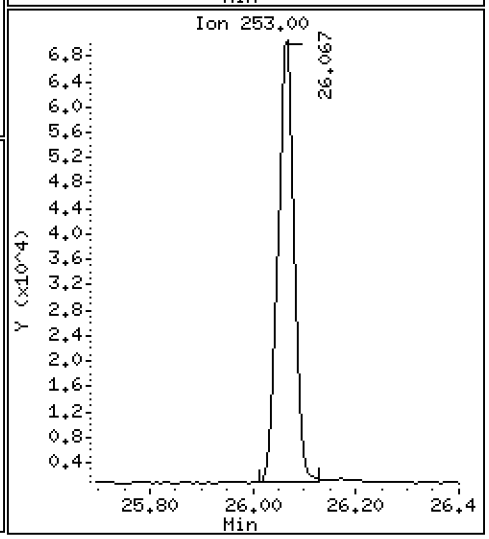












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

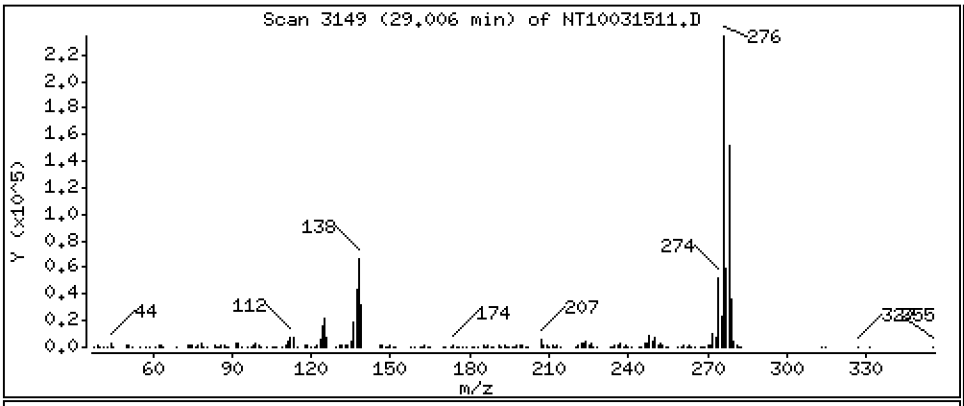
Operator: VTS

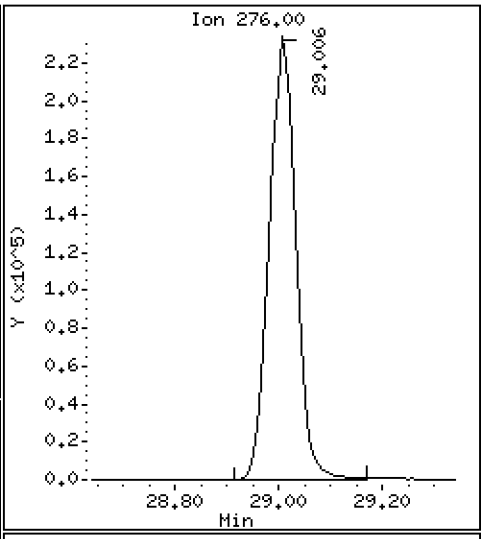
Column phase: ZB-5msi

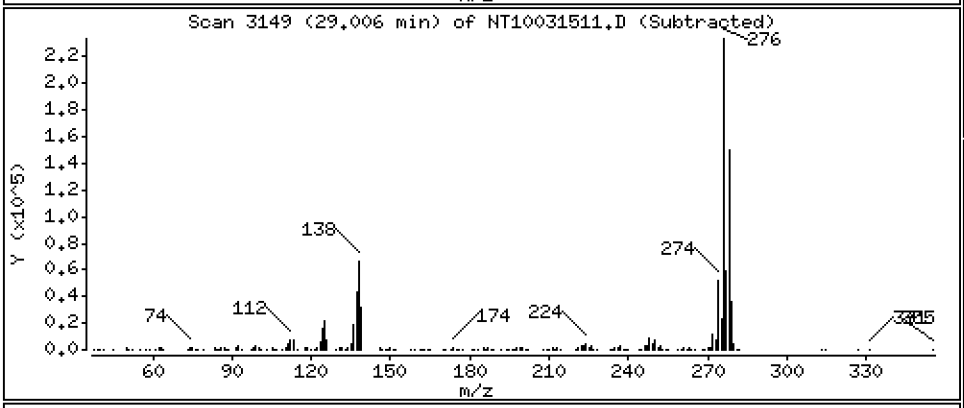
Column diameter: 0.25

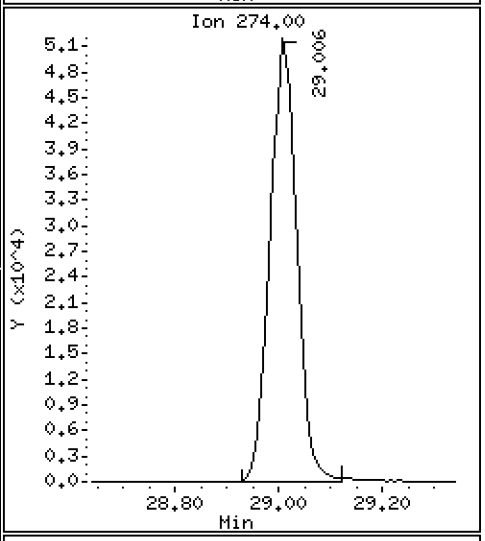
78 Indeno(1,2,3-cd)pyrene

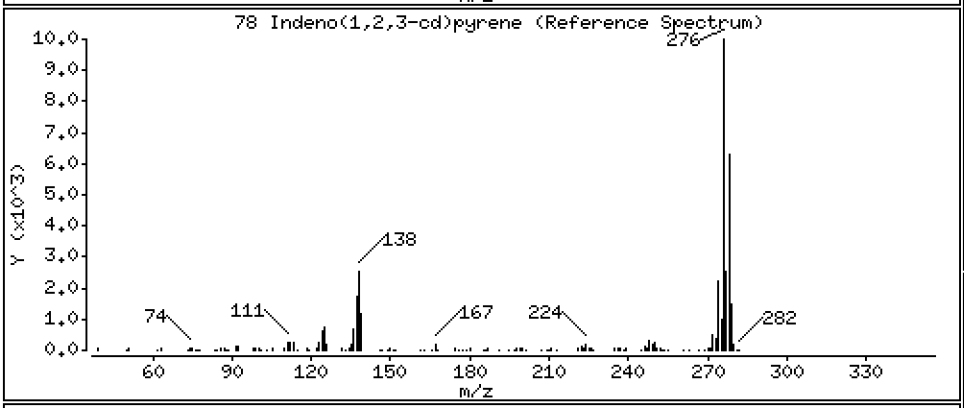
Concentration: 4.577 ug/mL

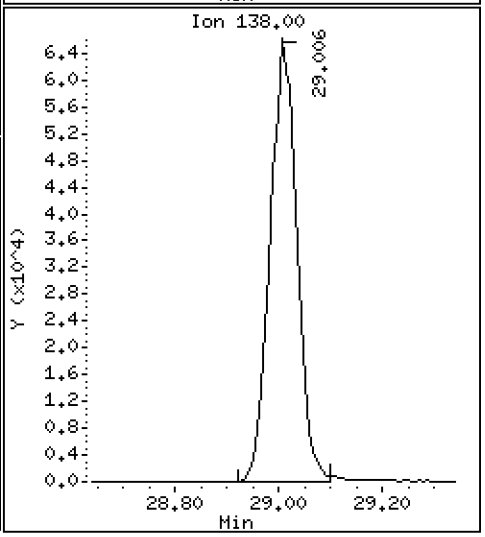


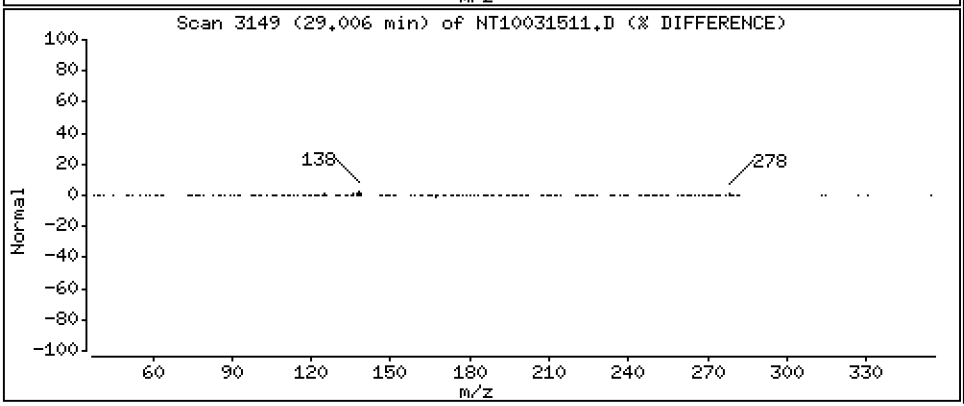












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

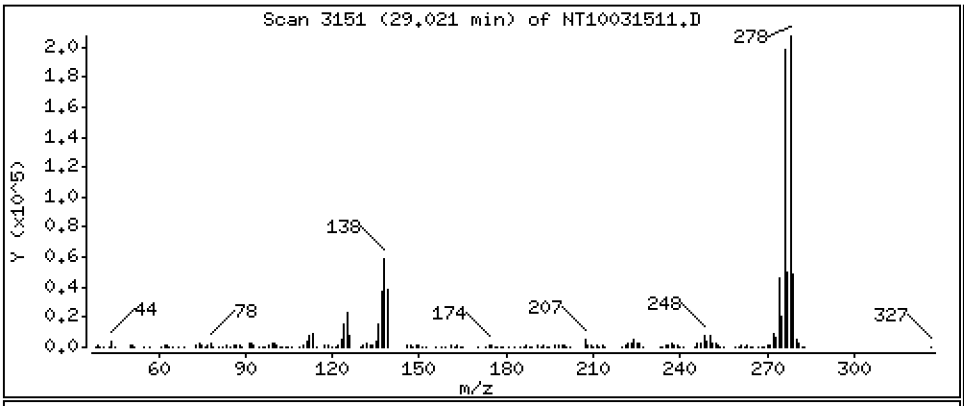
Operator: VTS

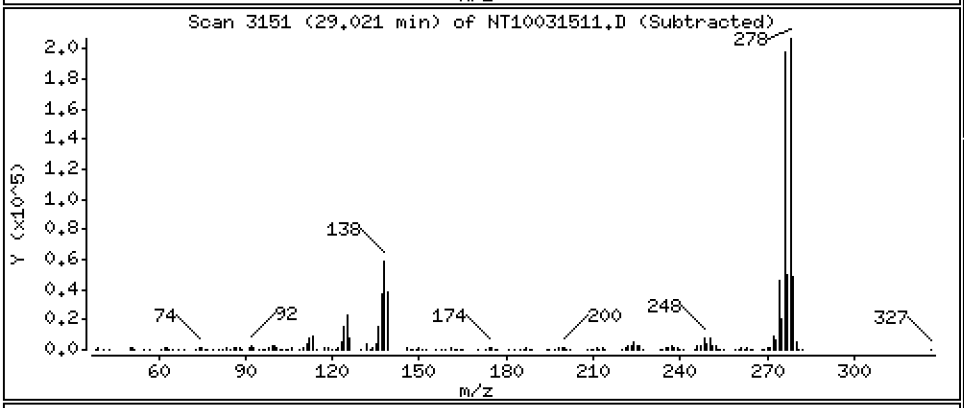
Column phase: ZB-5msi

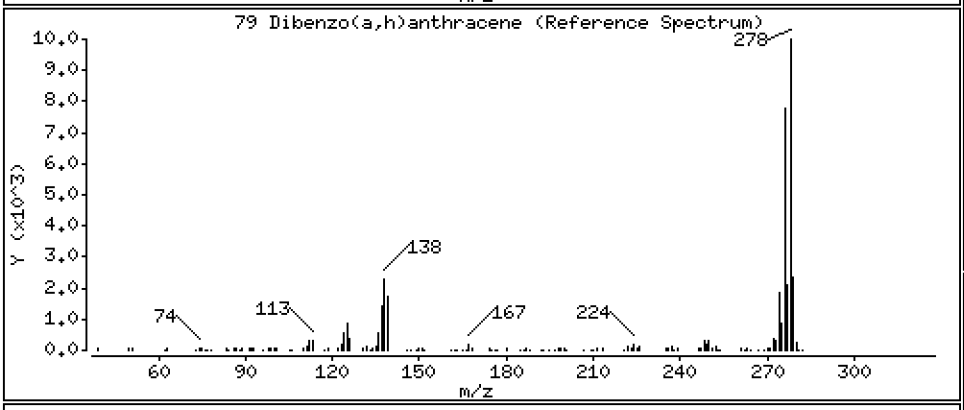
Column diameter: 0.25

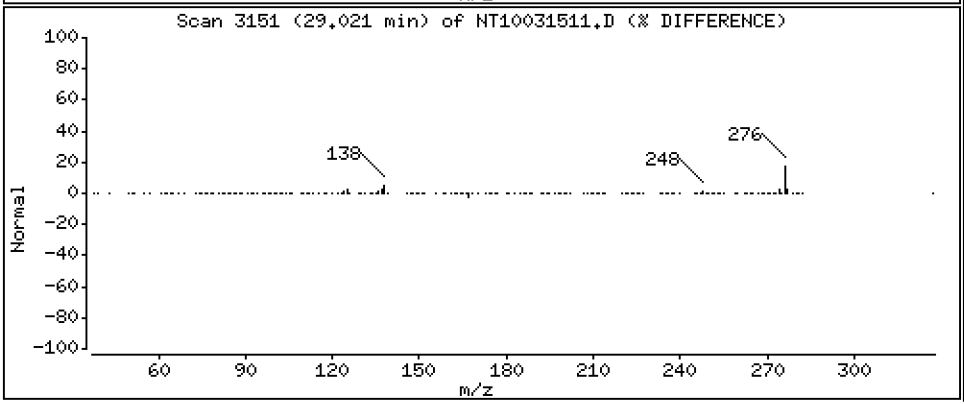
79 Dibenzo(a,h)anthracene

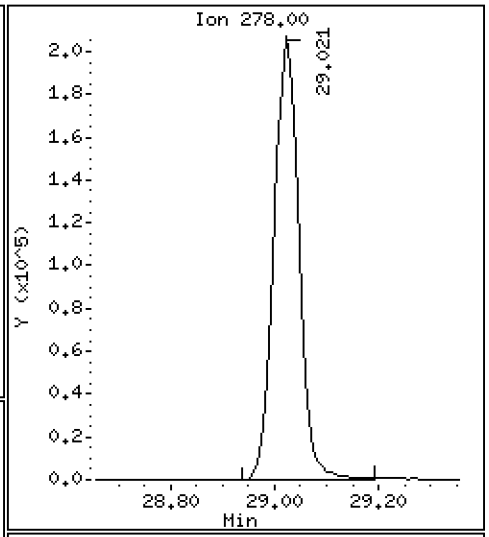
Concentration: 4.547 ug/mL

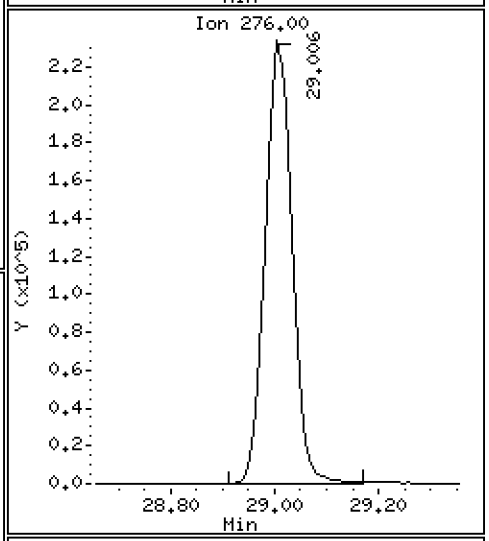


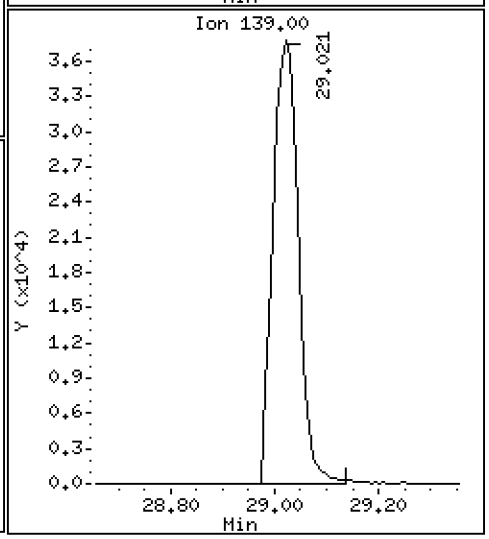












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

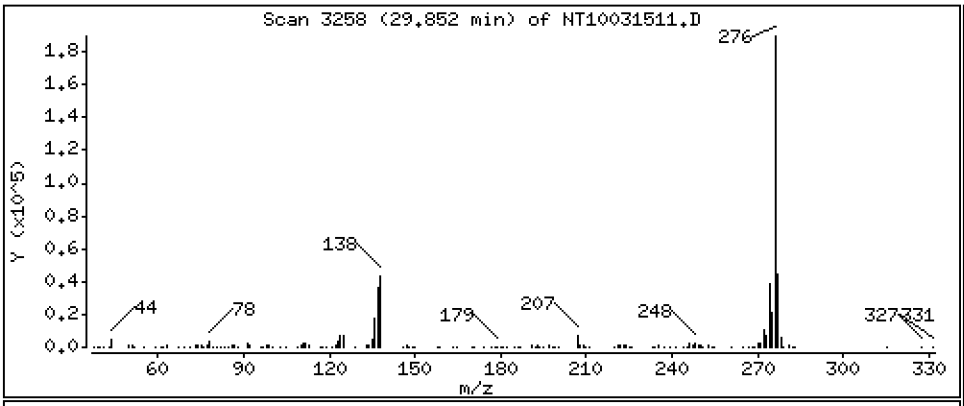
Operator: VTS

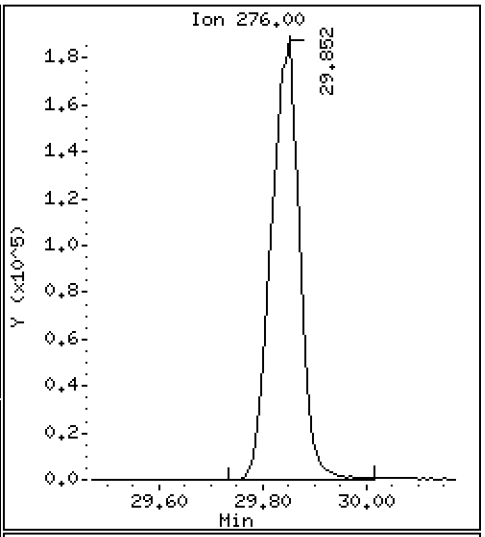
Column phase: ZB-5msi

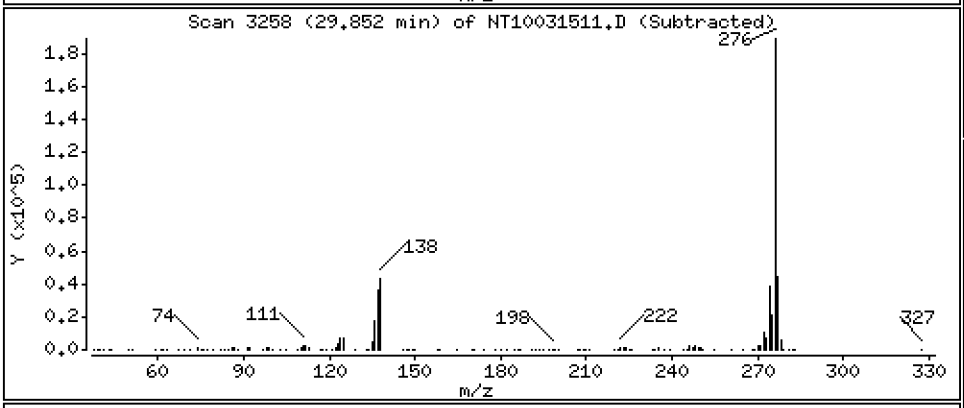
Column diameter: 0.25

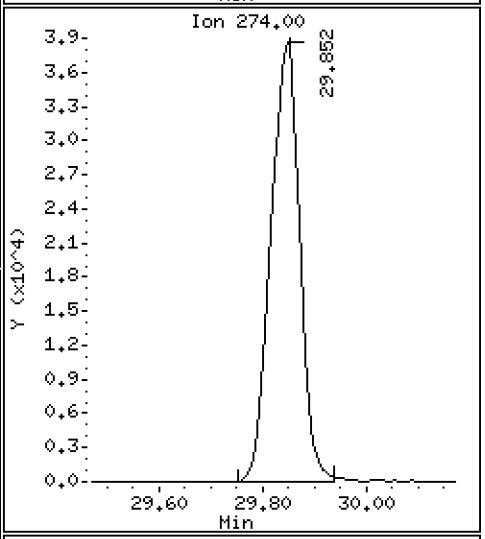
80 Benzo(g,h,i)perylene

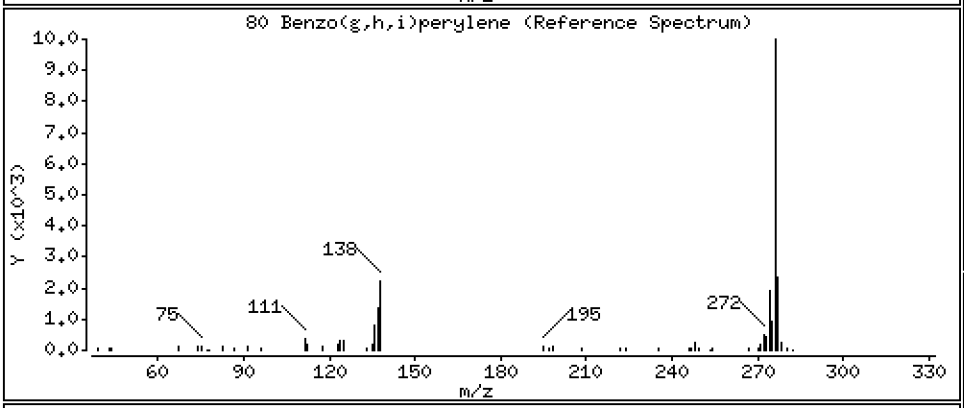
Concentration: 4.590 ug/mL

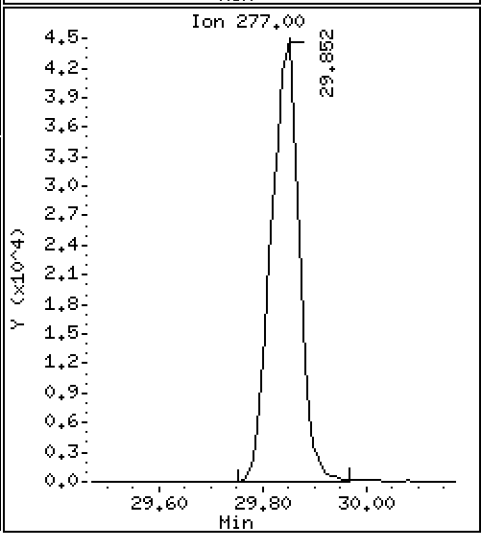


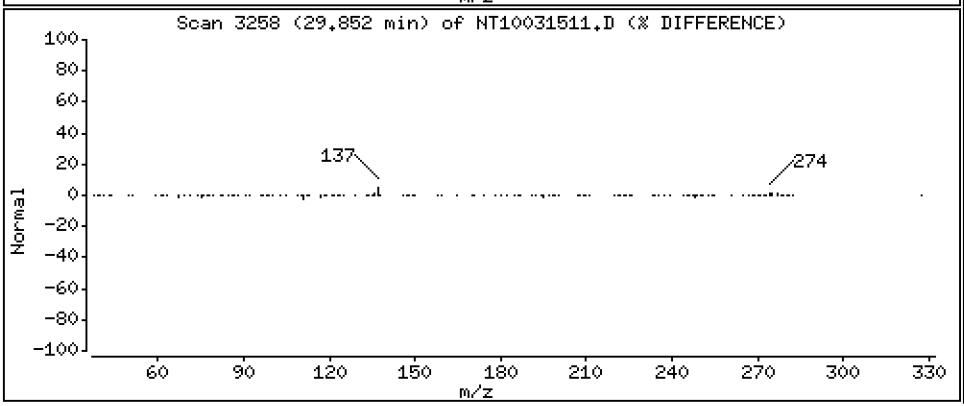












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

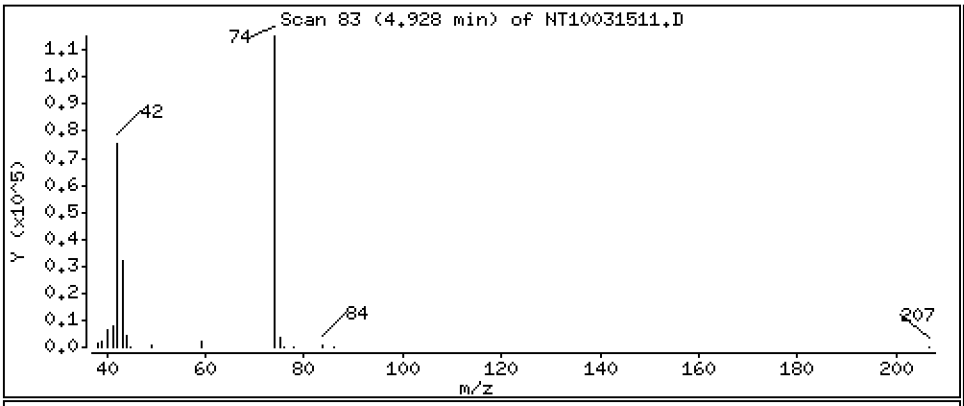
Operator: VTS

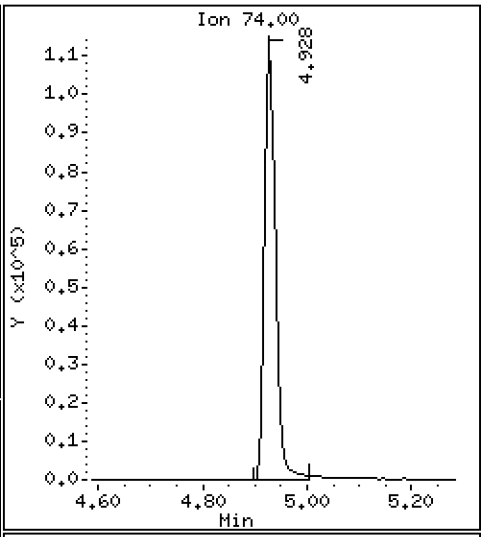
Column phase: ZB-5msi

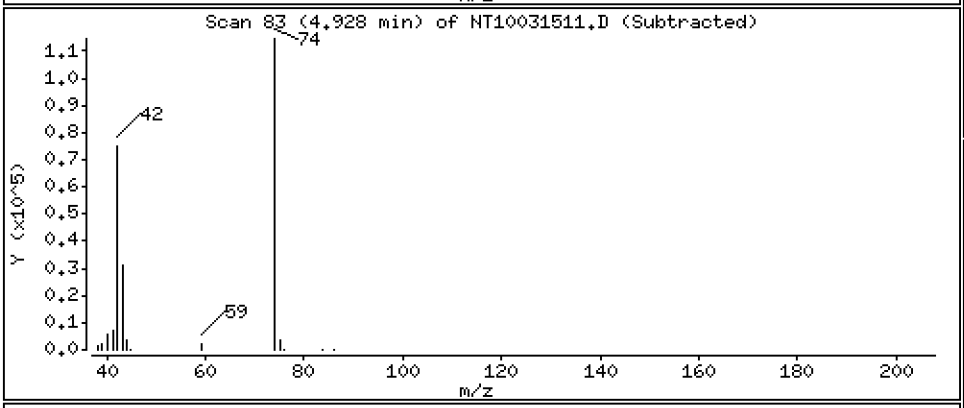
Column diameter: 0.25

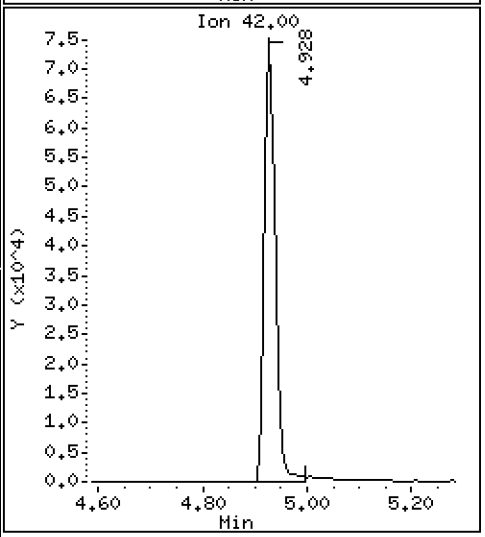
90 N-Nitrosodimethylamine

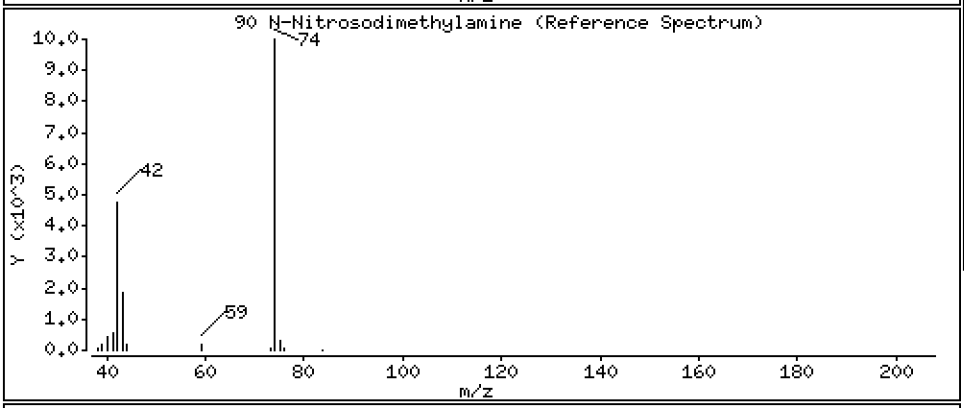
Concentration: 5.194 ug/mL

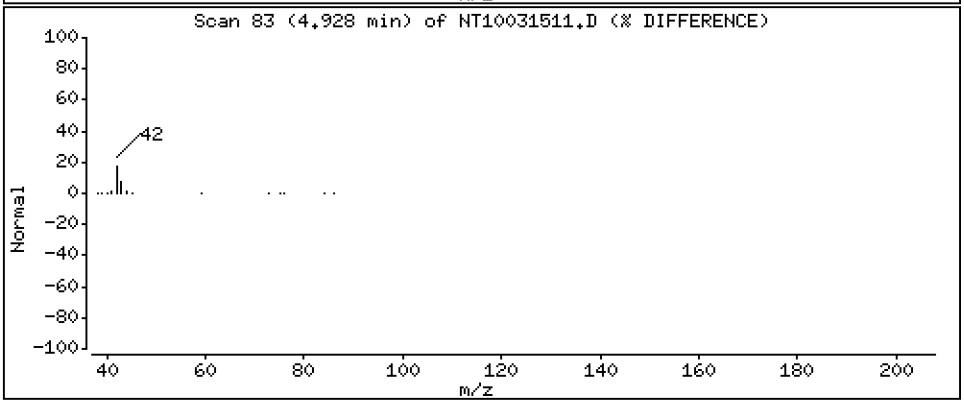












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

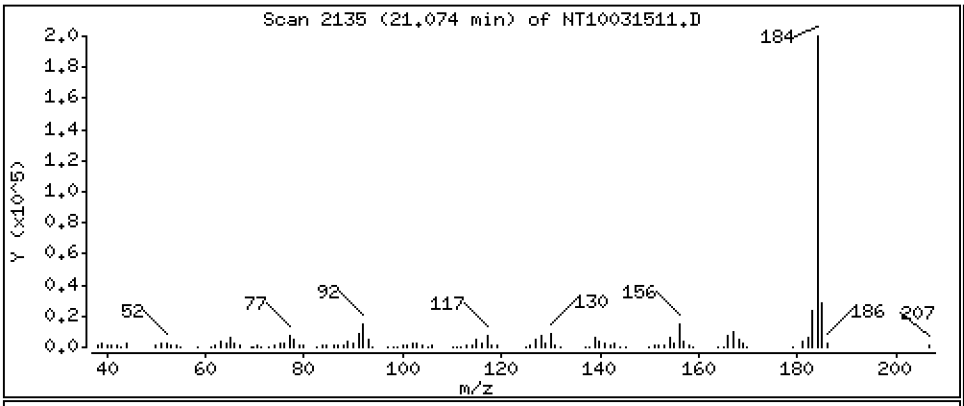
Operator: VTS

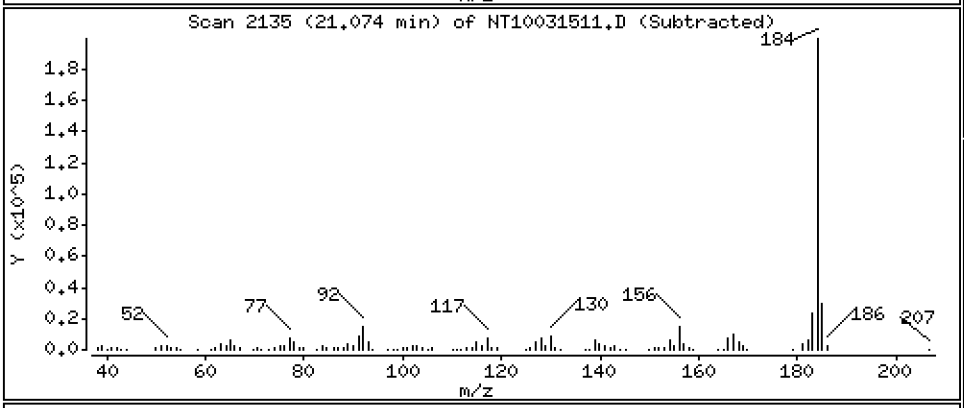
Column phase: ZB-5msi

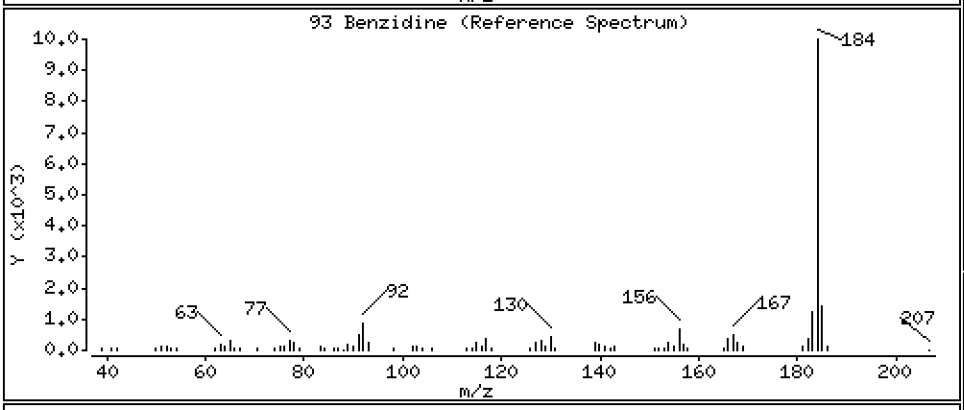
Column diameter: 0.25

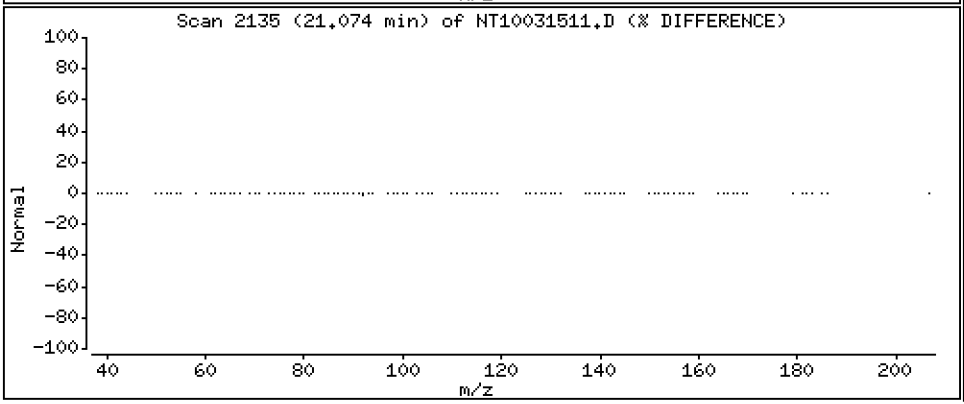
93 Benzidine

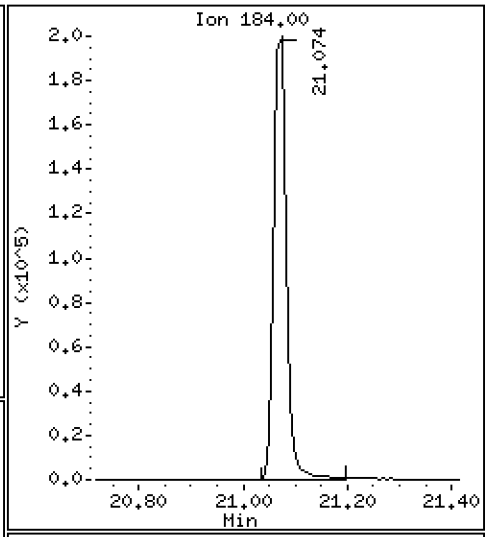
Concentration: 4.380 ug/mL

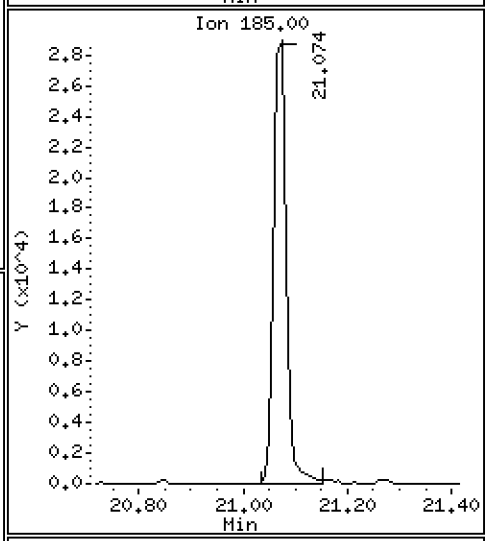


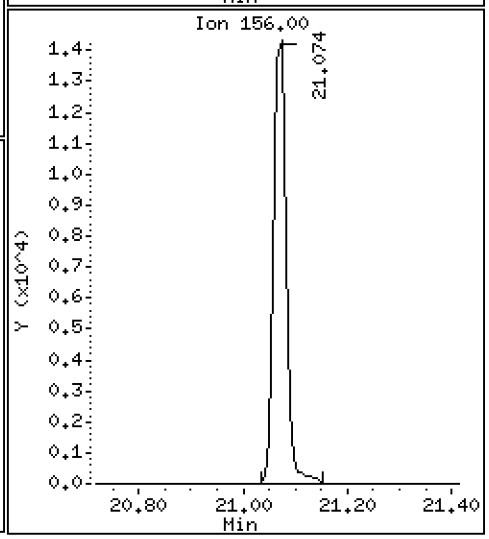












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

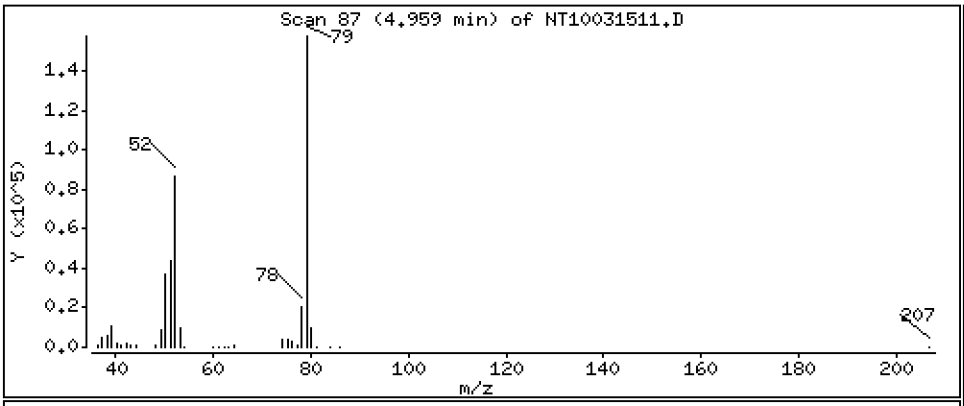
Operator: VTS

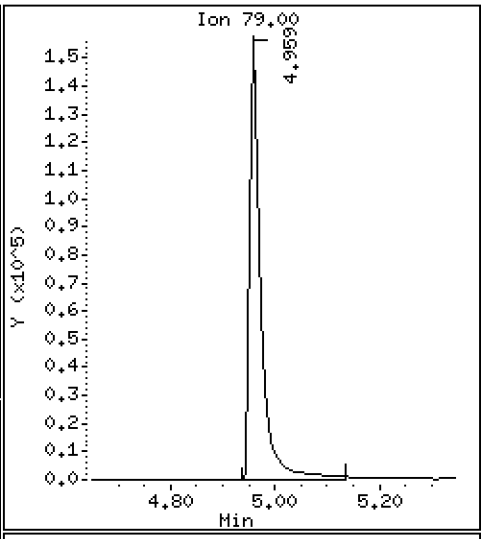
Column phase: ZB-5msi

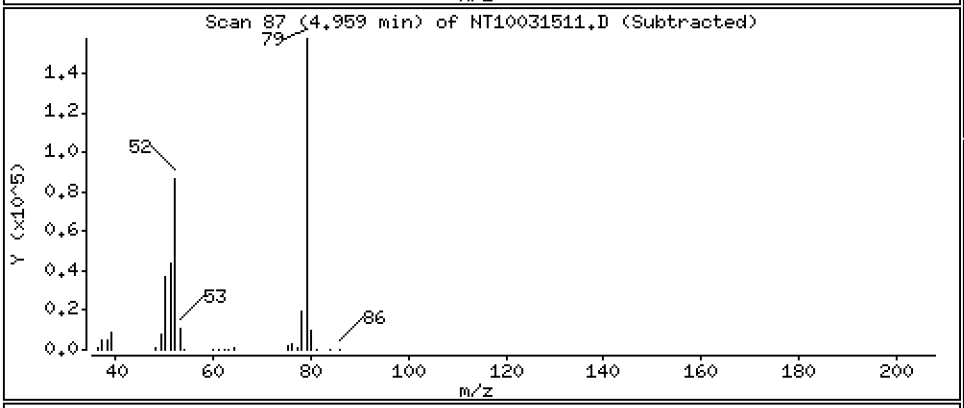
Column diameter: 0.25

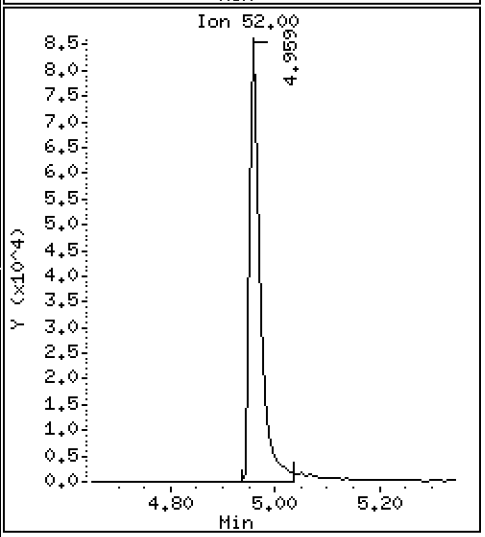
103 Pyridine

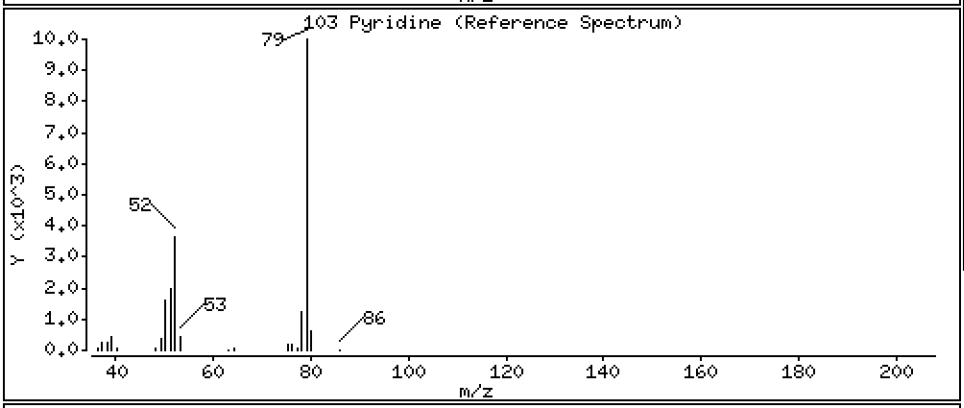
Concentration: 5.337 ug/mL

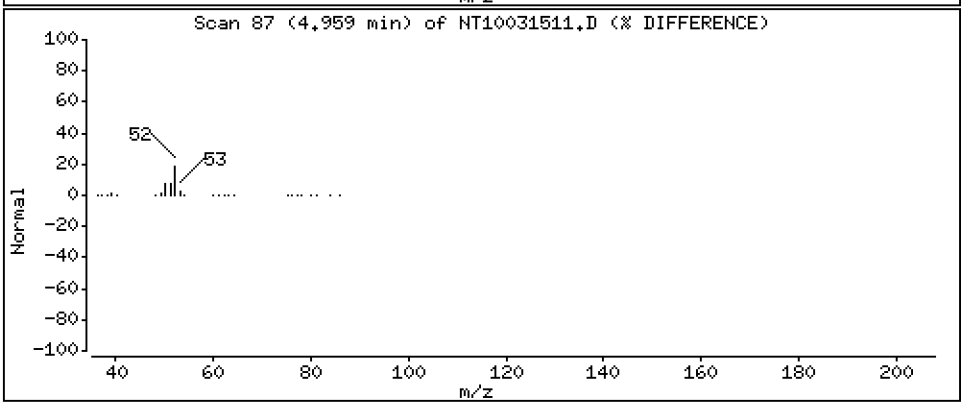












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

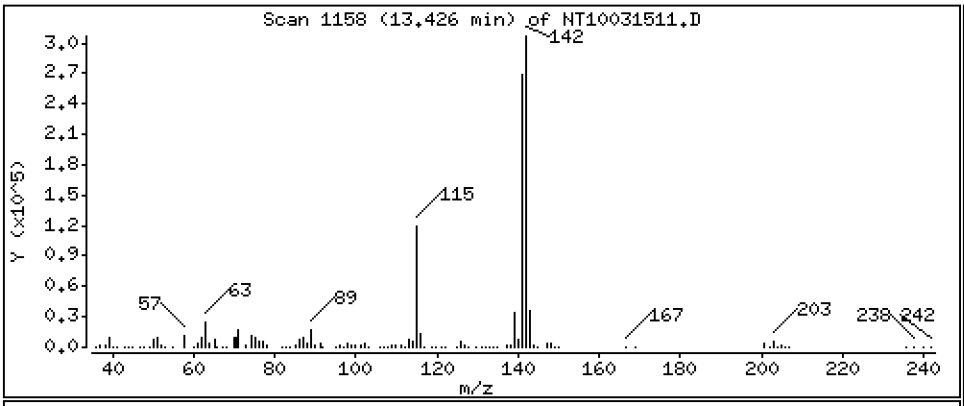
Operator: VTS

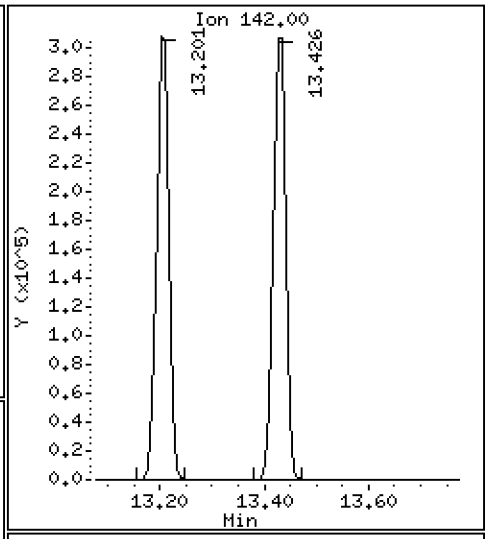
Column phase: ZB-5msi

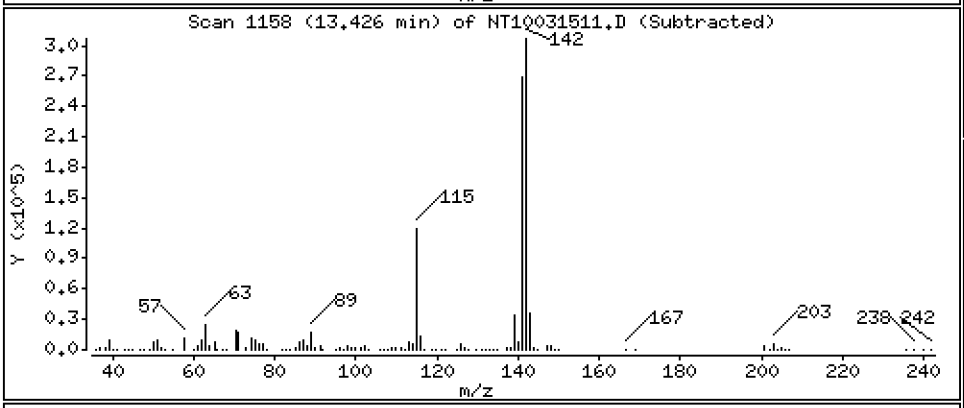
Column diameter: 0.25

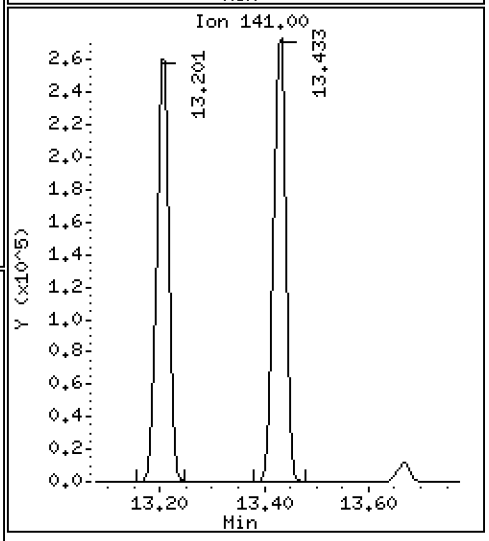
105 1-methylnaphthalene

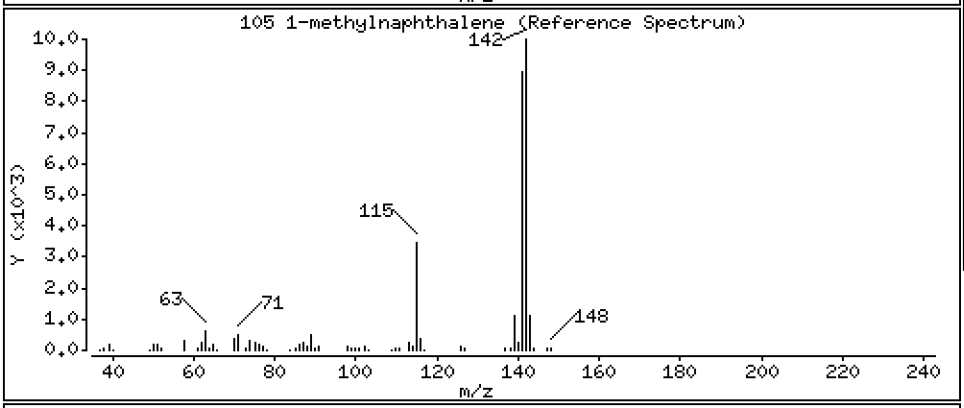
Concentration: 4.875 ug/mL

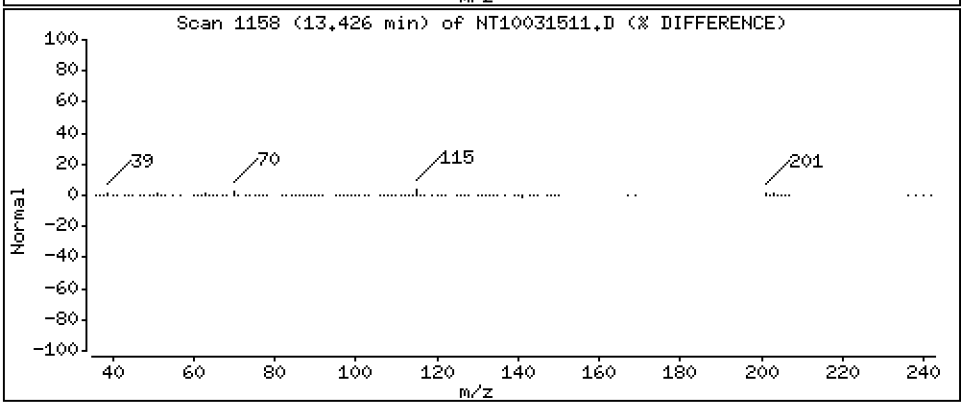












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

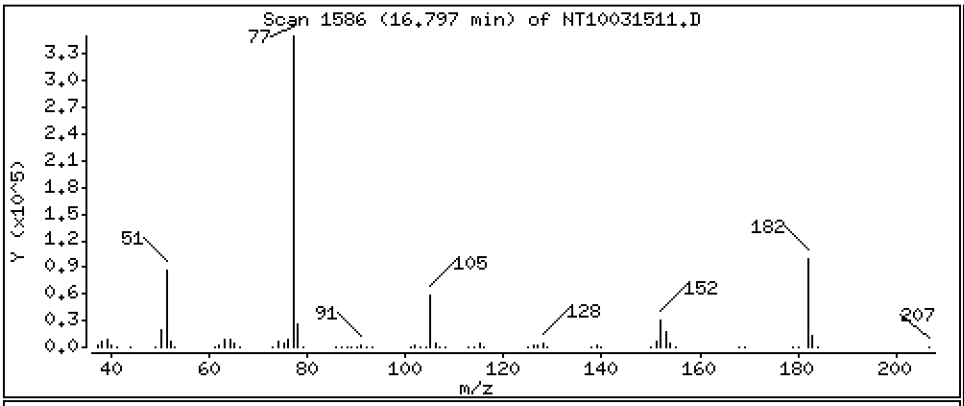
Operator: VTS

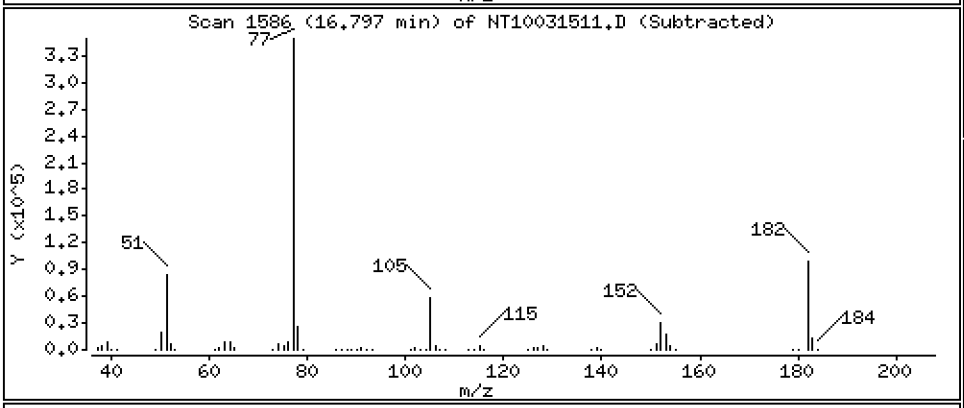
Column phase: ZB-5msi

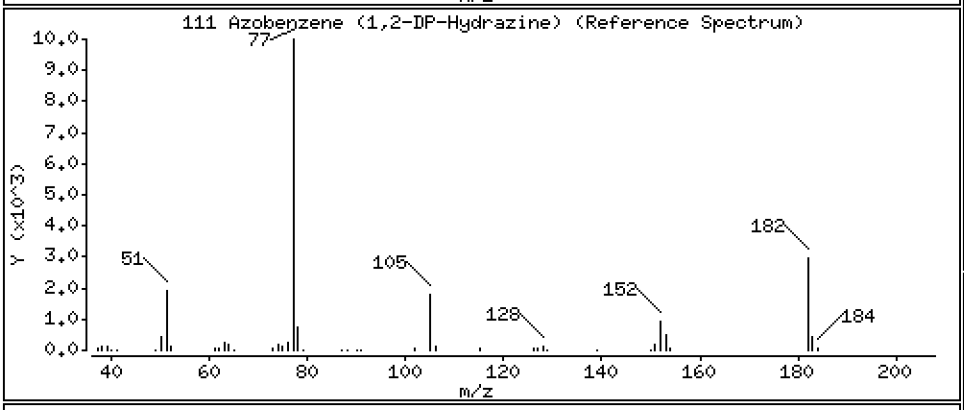
Column diameter: 0.25

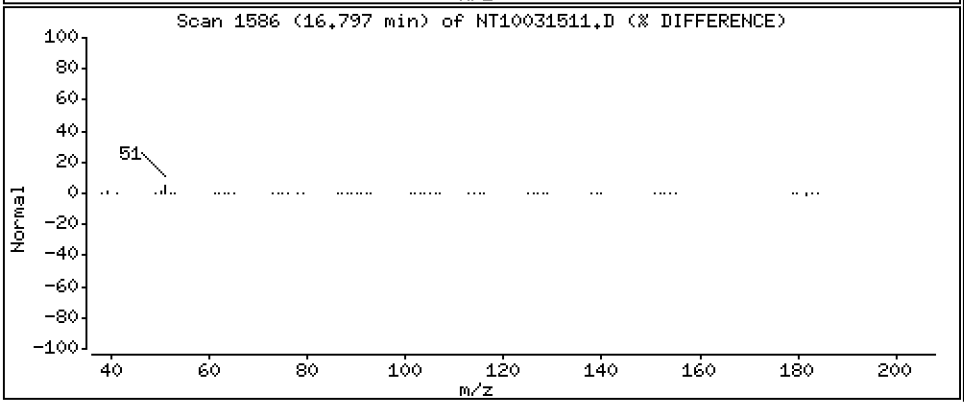
111 Azobenzene (1,2-DP-Hydrazine)

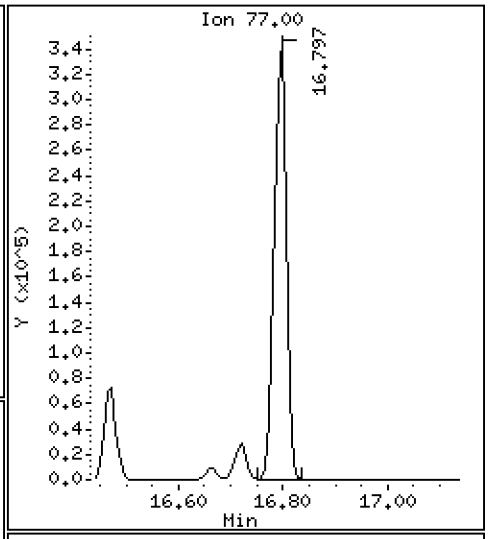
Concentration: 4.937 ug/mL

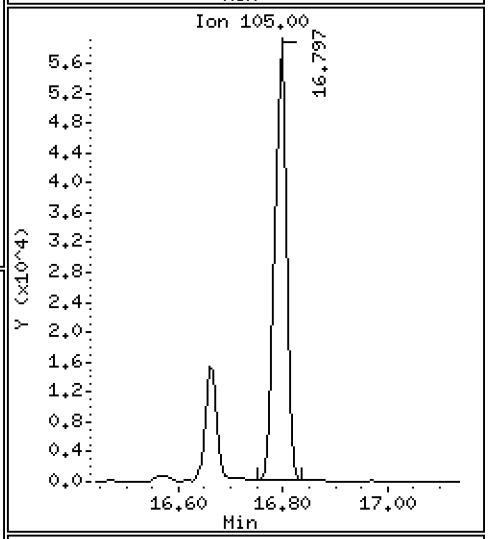


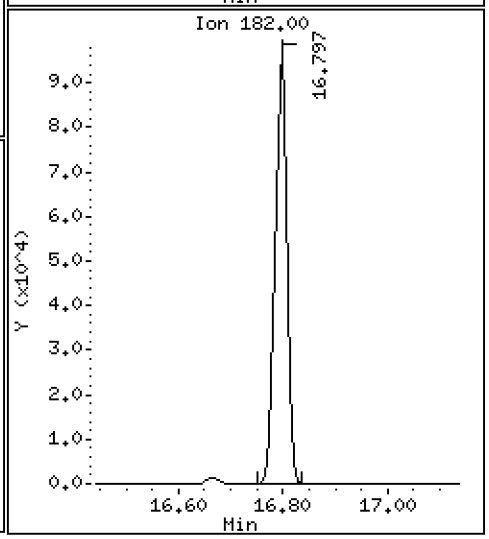












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

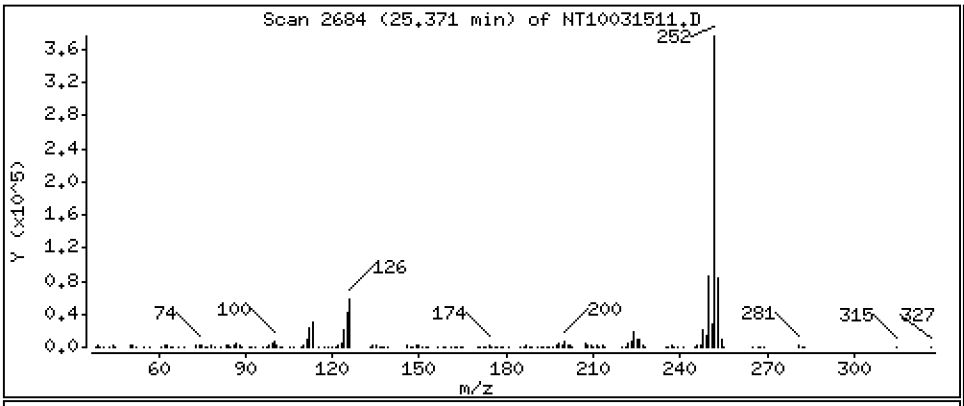
Operator: VTS

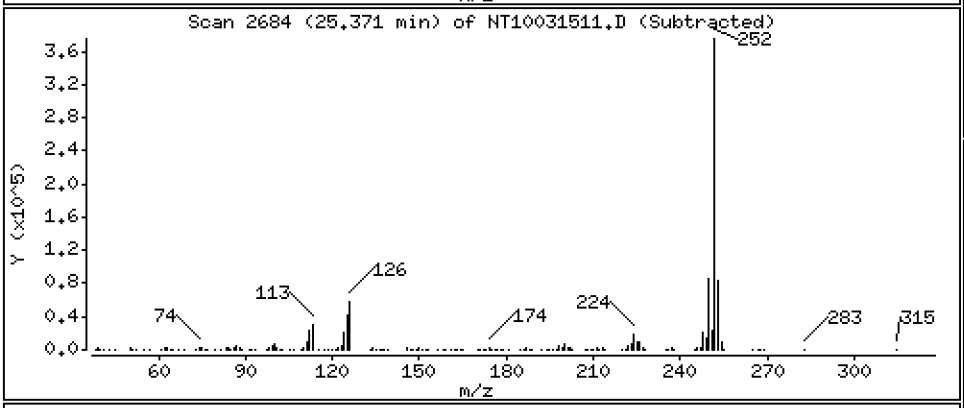
Column phase: ZB-5msi

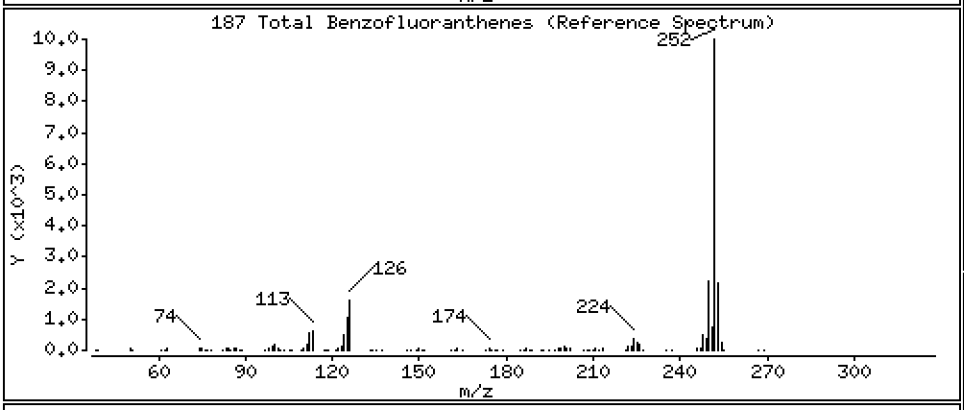
Column diameter: 0.25

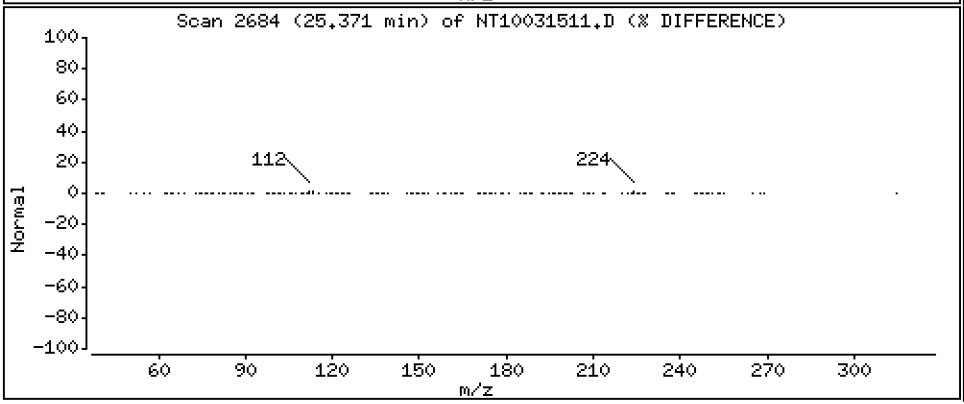
187 Total Benzofluoranthenes

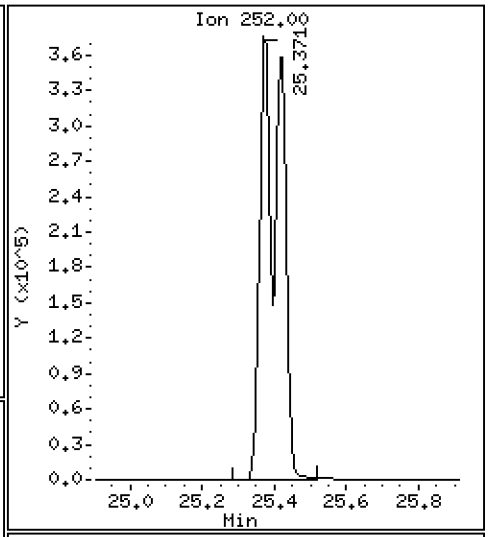
Concentration: 9.483 ug/mL

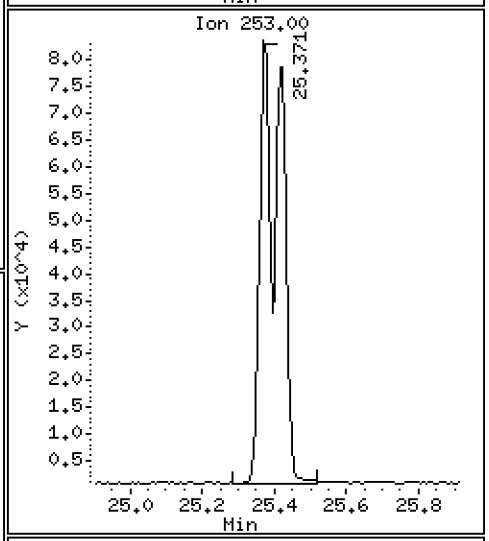


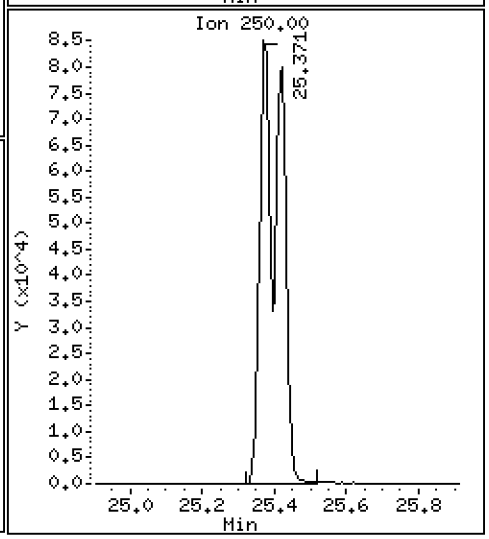












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

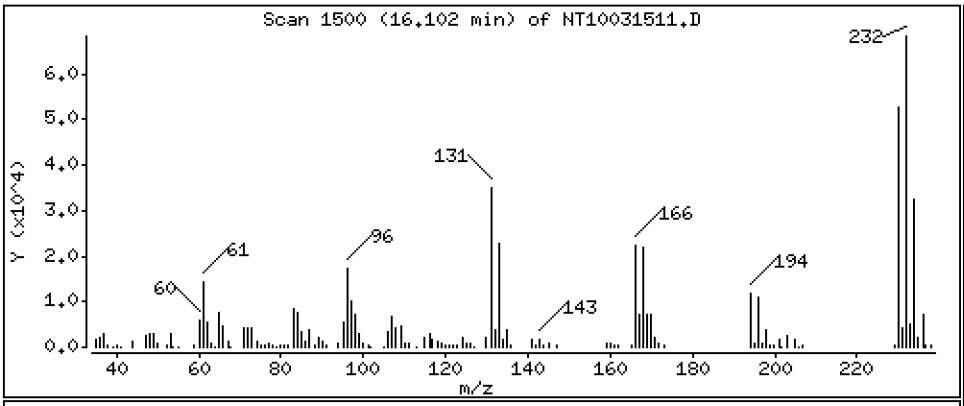
Operator: VTS

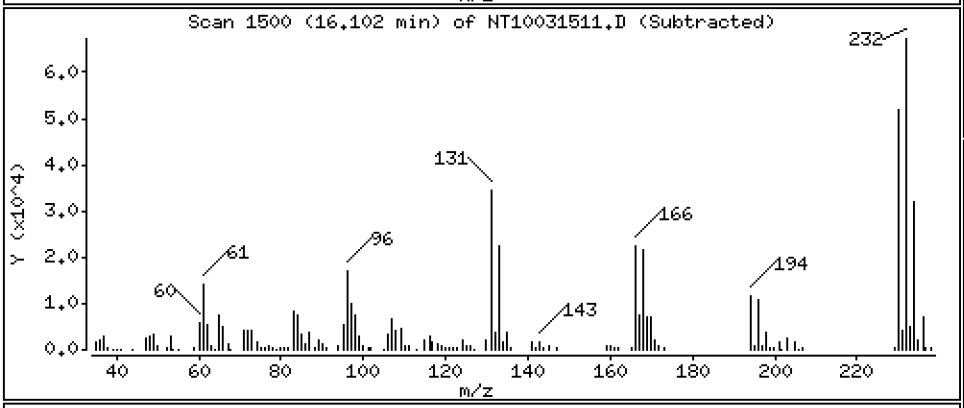
Column phase: ZB-5msi

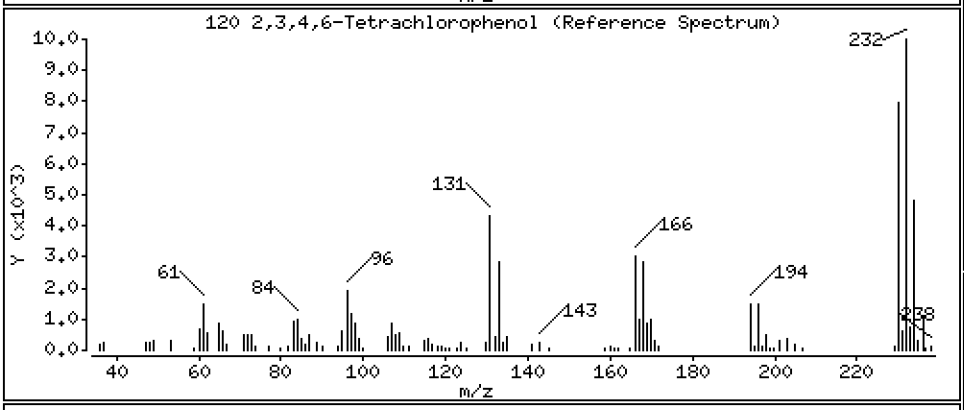
Column diameter: 0.25

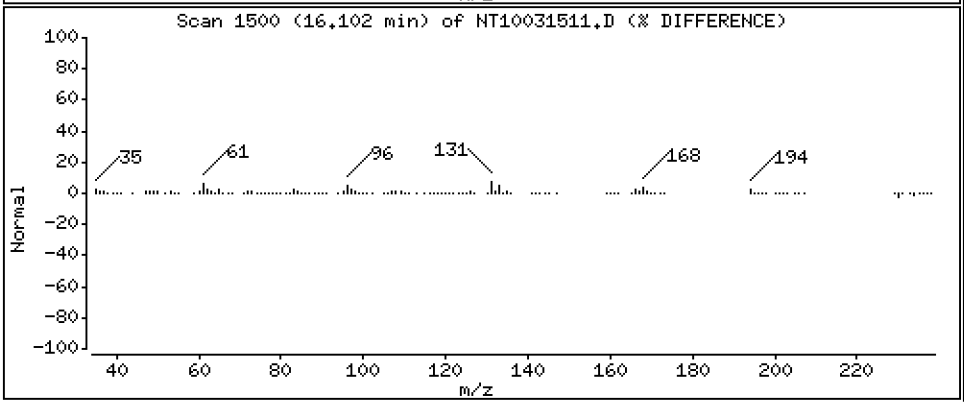
120 2,3,4,6-Tetrachlorophenol

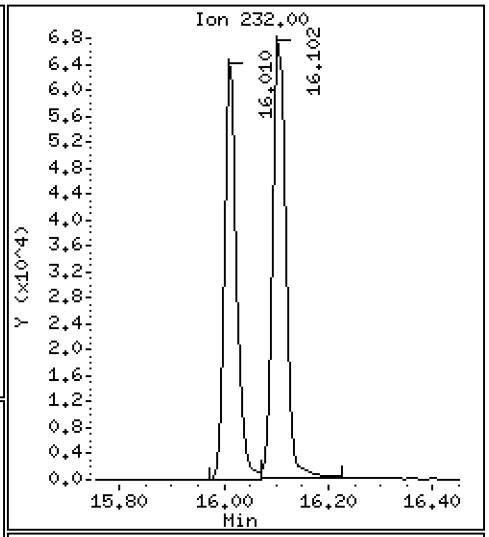
Concentration: 3.980 ug/mL

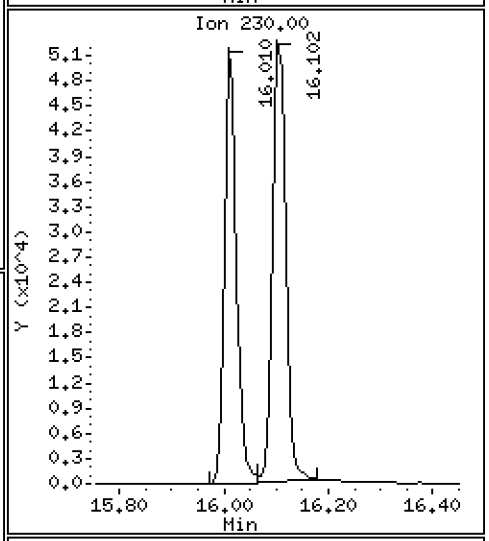


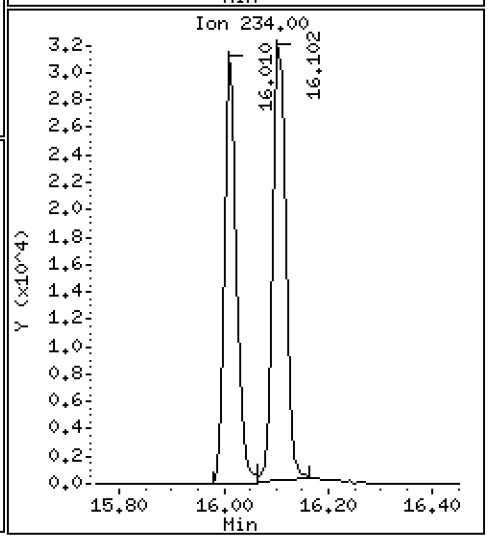












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230315.b\NT10031511.D
Lab Smp Id: SLC0228-SCV1
Inj Date : 16-MAR-2023 02:16
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0228-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$	1 2-Fluorophenol	112	Compound Not Detected.					
$	2 Phenol-d5	99	Compound Not Detected.					
	3 Phenol	94	8.659	8.652	(0.931)	281600	4.41237	4.412
$	5 2-Chlorophenol-d4	132	Compound Not Detected.					
	4 Bis(2-Chloroethyl)ether	93	8.837	8.837	(0.950)	248892	5.25818	5.258
	6 2-Chlorophenol	128	8.960	8.961	(0.963)	233608	4.27685	4.277
	7 1,3-Dichlorobenzene	146	9.239	9.231	(0.993)	275540	4.77157	4.772
*	8 1,4-Dichlorobenzene-d4	152	9.301	9.293	(1.000)	154809	4.00000	
	9 1,4-Dichlorobenzene	146	9.332	9.325	(1.003)	274051	4.91272	4.913
$	10 1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	9.689	9.682	(1.042)	268028	4.88215	4.882
	11 Benzyl alcohol	108	9.557	9.557	(1.028)	147597	4.92722	4.927
	14 2,2'-oxybis(1-Chloropropane)	121	9.860	9.860	(1.060)	100179	6.21363	6.214
	13 2-Methylphenol	108	9.775	9.767	(1.051)	196115	4.21542	4.215
	17 Hexachloroethane	117	10.279	10.271	(1.105)	114513	5.00332	5.003
	16 N-Nitroso-di-n-propylamine	70	10.116	10.108	(1.088)	190250	5.17896	5.179
	15 4-Methylphenol	108	10.046	10.031	(1.080)	213951	4.36462	4.365
$	18 Nitrobenzene-d5	82	Compound Not Detected.					
	19 Nitrobenzene	77	10.426	10.419	(0.885)	274714	4.85798	4.858
	20 Isophorone	82	10.861	10.861	(0.922)	556741	7.69604	7.696
	21 2-Nitrophenol	139	11.047	11.048	(0.938)	110302	3.99452	3.995
	22 2,4-Dimethylphenol	107	11.081	11.082	(0.941)	188638	3.63181	3.632
	23 Bis(2-Chloroethoxy)methane	93	11.285	11.285	(0.958)	273219	5.65409	5.654
	24 Benzoic acid	105	11.217	11.166	(0.952)	173961	5.95241	5.952
	25 2,4-Dichlorophenol	162	11.489	11.489	(0.975)	195480	4.70301	4.703
	26 1,2,4-Trichlorobenzene	180	11.685	11.685	(0.992)	222176	4.55366	4.554
*	27 Naphthalene-d8	136	11.777	11.770	(1.000)	570882	4.00000	
	28 Naphthalene	128	11.816	11.816	(1.003)	713318	4.71662	4.717
	29 4-Chloroaniline	127	11.940	11.940	(1.014)	223402	3.78650	3.787
	30 Hexachlorobutadiene	225	12.171	12.172	(1.033)	138198	4.83404	4.834
	31 4-Chloro-3-methylphenol	107	12.876	12.876	(1.093)	208794	4.64027	4.640
	32 2-Methylnaphthalene	142	13.201	13.201	(1.121)	501627	4.59617	4.596
	33 Hexachlorocyclopentadiene	237	13.665	13.665	(0.888)	132827	4.72902	4.729

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	13.820	13.820	(0.898)	137849	4.59559	4.596
35	2,4,5-Trichlorophenol	196	13.889	13.890	(0.903)	146935	4.40855	4.409
$ 36	2-Fluorobiphenyl	172	Compound Not Detected.					
37	2-Chloronaphthalene	162	14.199	14.191	(0.923)	466196	4.79589	4.796
38	2-Nitroaniline	65	14.454	14.447	(0.940)	134108	4.91137	4.911
39	Dimethylphthalate	163	14.880	14.873	(0.967)	486790	4.93747	4.937
40	Acenaphthylene	152	15.074	15.066	(0.980)	727839	4.80509	4.805
41	2,6-Dinitrotoluene	165	15.020	15.012	(0.976)	112840	5.29815	5.298
* 42	Acenaphthene-d10	164	15.383	15.383	(1.000)	303490	4.00000	
43	3-Nitroaniline	138	15.306	15.298	(0.995)	120530	5.01393	5.014
44	Acenaphthene	153	15.453	15.445	(1.005)	446914	4.77589	4.776
45	2,4-Dinitrophenol	184	15.515	15.515	(1.009)	27409	2.12395	2.124
46	Dibenzofuran	168	15.777	15.770	(1.026)	641379	4.64790	4.648
47	4-Nitrophenol	109	15.600	15.592	(1.014)	59816	3.96568	3.966
48	2,4-Dinitrotoluene	165	15.824	15.817	(1.029)	144262	4.51019	4.510
50	Diethylphthalate	149	16.326	16.319	(1.061)	503887	5.20905	5.209
49	Fluorene	166	16.489	16.481	(1.072)	511113	4.70796	4.708
51	4-Chlorophenyl-phenylether	204	16.473	16.466	(1.071)	257762	4.99294	4.993
52	4-Nitroaniline	138	16.566	16.566	(1.077)	106701	4.92532	4.925
53	4,6-Dinitro-2-methylphenol	198	16.666	16.658	(0.905)	56867	3.51509	3.515
54	N-Nitrosodiphenylamine	169	16.720	16.712	(0.908)	342454	4.80180	4.802
$ 55	2,4,6-Tribromophenol	330	Compound Not Detected.					
56	4-Bromophenyl-phenylether	248	17.475	17.476	(0.949)	150956	5.05964	5.060
57	Hexachlorobenzene	284	17.800	17.793	(0.966)	143751	4.59553	4.596
58	Pentachlorophenol	266	18.149	18.149	(0.985)	75635	4.05676	4.057
* 59	Phenanthrene-d10	188	18.420	18.420	(1.000)	533431	4.00000	
60	Phenanthrene	178	18.466	18.466	(1.003)	669357	4.60181	4.602
61	Anthracene	178	18.559	18.559	(1.008)	581438	4.16715	4.167
62	Carbazole	167	18.884	18.884	(1.025)	591382	4.72989	4.730
63	Di-n-butylphthalate	149	19.665	19.666	(1.068)	830680	4.96738	4.967
64	Fluoranthene	202	20.841	20.841	(0.888)	782432	4.47248	4.472
65	Pyrene	202	21.267	21.267	(0.907)	778668	4.33892	4.339
$ 66	Terphenyl-d14	244	Compound Not Detected.					
67	Butylbenzylphthalate	149	22.459	22.460	(0.957)	314007	4.83397	4.834
68	Benzo(a)anthracene	228	23.427	23.419	(0.999)	714166	4.64722	4.647
* 69	Chrysene-d12	240	23.458	23.450	(1.000)	435381	4.00000	
70	3,3'-Dichlorobenzidine	252	23.373	23.373	(0.996)	483256	9.81738	9.817
71	Chrysene	228	23.497	23.489	(1.002)	677151	4.51017	4.510
72	bis(2-Ethylhexyl)phthalate	149	23.481	23.474	(0.959)	453669	4.67998	4.680
* 134	Di-n-octylphthalate-d4	153	24.487	24.480	(1.000)	660827	4.00000	
73	Di-n-octylphthalate	149	24.495	24.488	(1.000)	855562	4.94734	4.947
74	Benzo(b)fluoranthene	252	25.370	25.362	(0.969)	737887	4.60200	4.602(H)
75	Benzo(k)fluoranthene	252	25.416	25.409	(0.970)	797521	4.89839	4.898
76	Benzo(a)pyrene	252	26.067	26.052	(0.995)	698616	4.87338	4.873
* 77	Perylene-d12	264	26.191	26.183	(1.000)	494648	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.005	28.990	(1.107)	834672	4.57655	4.577
79	Dibenzo(a,h)anthracene	278	29.021	29.005	(1.108)	688433	4.54663	4.547
80	Benzo(g,h,i)perylene	276	29.852	29.821	(1.140)	724463	4.59000	4.590
90	N-Nitrosodimethylamine	74	4.928	4.936	(0.530)	155126	5.19378	5.194
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	21.073	21.066	(0.898)	314737	4.37985	4.380
103	Pyridine	79	4.959	4.997	(0.533)	244801	5.33678	5.337
105	1-methylnaphthalene	142	13.425	13.425	(1.140)	487498	4.87520	4.875
111	Azobenzene (1,2-DP-Hydrazine)	77	16.797	16.789	(1.092)	533524	4.93744	4.937

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.370	25.409	(0.969)	1468165	9.48349	9.483
120 2,3,4,6-Tetrachlorophenol	232	16.102	16.103	(1.047)	124685	3.97959	3.980

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031511.D
Lab Smp Id: SLC0228-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 21:50
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	171542	85771	343084	154809	-9.75
27 Naphthalene-d8	624466	312233	1248932	570882	-8.58
42 Acenaphthene-d10	337226	168613	674452	303490	-10.00
59 Phenanthrene-d10	572849	286425	1145698	533431	-6.88
69 Chrysene-d12	347068	173534	694136	435381	25.45
134 Di-n-octylphthala	500317	250159	1000634	660827	32.08
77 Perylene-d12	421549	210775	843098	494648	17.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	-0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	0.01
42 Acenaphthene-d10	15.38	14.88	15.88	15.38	0.00
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.46	0.04
134 Di-n-octylphthala	24.48	23.98	24.98	24.49	0.03
77 Perylene-d12	26.18	25.68	26.68	26.19	0.03

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

REVIEW SUMMARY FOR FILE - NT10031511.D

Lab ID: SLC0228-SCV1
nt10.i, 20230315.b\ABN.m,   16-MAR-2023 02:16

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.000	0.9524	Benzoic acid

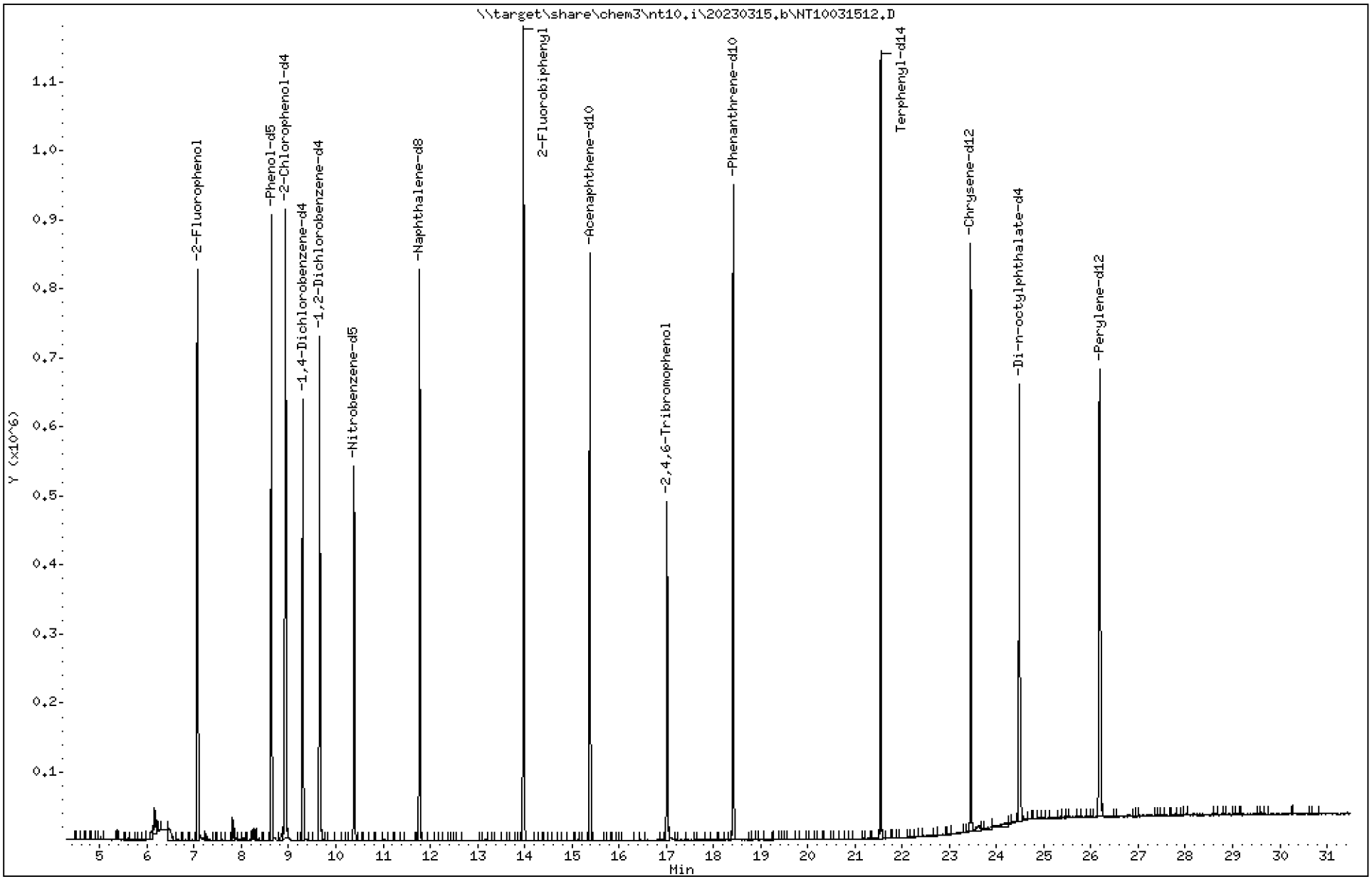
RRT check based on Ccal File: NT10031508.D

On Column LOD for nt10.i, 20230315.b\ABN.m, ICAL.sub = 0.0000

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

Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031512.D
Date : 16-MAR-2023 02:54
Client ID:
Sample Info: SLC0228-ICB1

Instrument: nt10.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230315.b\NT10031512.D
Lab Smp Id: SLC0228-ICB1
Inj Date : 16-MAR-2023 02:54
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0228-ICB1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	7.067	7.068	(0.760)	362536	6.92497	6.925
$ 2	Phenol-d5	99	8.636	8.636	(0.928)	477145	6.94756	6.948
3	Phenol	94	Compound Not Detected.					
$ 5	2-Chlorophenol-d4	132	8.929	8.930	(0.960)	416453	7.10111	7.101
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	9.301	9.293	(1.000)	173115	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	9.658	9.658	(1.038)	194128	4.60926	4.609
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					
$ 18	Nitrobenzene-d5	82	10.387	10.388	(0.882)	294159	4.65645	4.656
19	Nitrobenzene	77	Compound Not Detected.					
20	Isophorone	82	Compound Not Detected.					
21	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	Compound Not Detected.					
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.776	11.770	(1.000)	625865	4.00000	
28	Naphthalene	128	Compound Not Detected.					
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
32	2-Methylnaphthalene	142	Compound Not Detected.					
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.981	13.975	(0.909)	615156	4.73090	4.731
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
	40	Acenaphthylene	152	Compound Not Detected.					
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	15.382	15.383	(1.000)	328712	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	Compound Not Detected.					
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	Compound Not Detected.					
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	Compound Not Detected.					
	49	Fluorene	166	Compound Not Detected.					
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	17.020	17.021	(1.106)	85879	5.59351	5.594
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.419	18.420	(1.000)	592693	4.00000	
	60	Phenanthrene	178	Compound Not Detected.					
	61	Anthracene	178	Compound Not Detected.					
	62	Carbazole	167	Compound Not Detected.					
	63	Di-n-butylphthalate	149	Compound Not Detected.					
	64	Fluoranthene	202	Compound Not Detected.					
	65	Pyrene	202	Compound Not Detected.					
$	66	Terphenyl-d14	244	21.544	21.538	(0.919)	627405	4.58345	4.583
	67	Butylbenzylphthalate	149	Compound Not Detected.					
	68	Benzo(a)anthracene	228	Compound Not Detected.					
*	69	Chrysene-d12	240	23.449	23.450	(1.000)	442208	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	Compound Not Detected.					
	72	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
*	134	Di-n-octylphthalate-d4	153	24.479	24.480	(1.000)	526309	4.00000	
	73	Di-n-octylphthalate	149	Compound Not Detected.					
	74	Benzo(b)fluoranthene	252	Compound Not Detected.					
	75	Benzo(k)fluoranthene	252	Compound Not Detected.					
	76	Benzo(a)pyrene	252	Compound Not Detected.					
*	77	Perylene-d12	264	26.182	26.183	(1.000)	499804	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	Compound Not Detected.					
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031512.D
Lab Smp Id: SLC0228-ICB1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 21:50
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	171542	85771	343084	173115	0.92
27 Naphthalene-d8	624466	312233	1248932	625865	0.22
42 Acenaphthene-d10	337226	168613	674452	328712	-2.52
59 Phenanthrene-d10	572849	286425	1145698	592693	3.46
69 Chrysene-d12	347068	173534	694136	442208	27.41
134 Di-n-octylphthala	500317	250159	1000634	526309	5.20
77 Perylene-d12	421549	210775	843098	499804	18.56

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	-0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	-0.00
42 Acenaphthene-d10	15.38	14.88	15.88	15.38	-0.00
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	-0.00
69 Chrysene-d12	23.45	22.95	23.95	23.45	-0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.48	-0.00
77 Perylene-d12	26.18	25.68	26.68	26.18	-0.00

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

REVIEW SUMMARY FOR FILE - NT10031512.D

Lab ID: SLC0228-ICB1
nt10.i, 20230315.b\ABN.m,   16-MAR-2023 02:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT10031508.D

On Column LOD for nt10.i, 20230315.b\ABN.m, ICAL.sub = 0.0000

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

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00046
Laboratory ID: SLC0228-SCV1
Sequence: SLC0228
Sequence Name: SCV 5.0
Standard ID: L002833

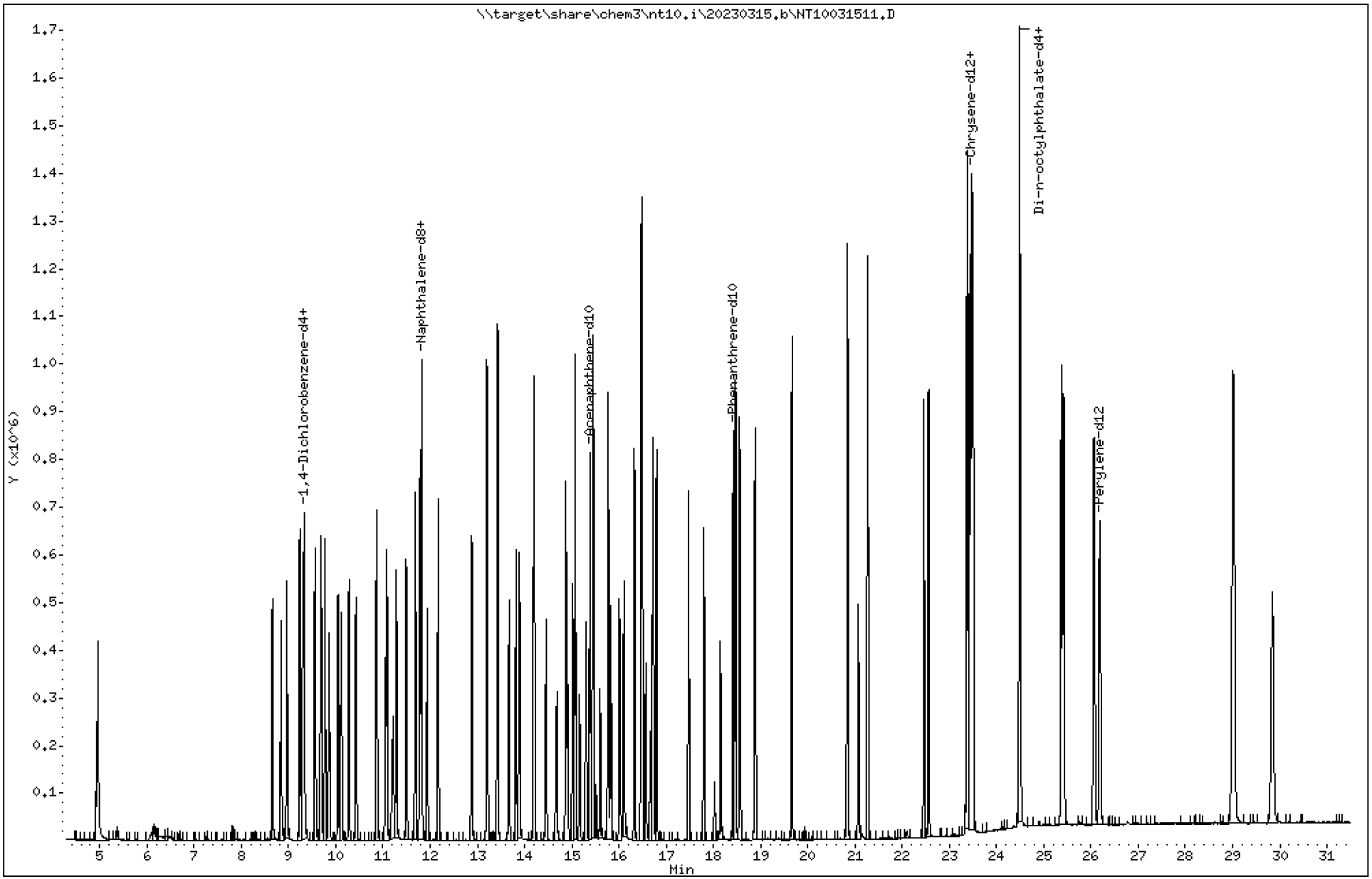
ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.4	-11.8	20.00
4-Methylphenol	5.0000	4.4	-12.7	20.00
Naphthalene	5.0000	4.7	-5.7	20.00
2-Methylnaphthalene	5.0000	4.6	-8.1	20.00
Acenaphthylene	5.0000	4.8	-3.9	20.00
Dimethylphthalate	5.0000	4.9	-1.3	20.00
Acenaphthene	5.0000	4.8	-4.5	20.00
Dibenzofuran	5.0000	4.6	-7.0	20.00
Fluorene	5.0000	4.7	-5.8	20.00
Phenanthrene	5.0000	4.6	-8.0	20.00
Anthracene	5.0000	4.2	-16.7	20.00
Fluoranthene	5.0000	4.5	-10.6	20.00
Pyrene	5.0000	4.3	-13.2	20.00
Butylbenzylphthalate	5.0000	4.8	-3.3	20.00
Benzo(a)anthracene	5.0000	4.6	-7.1	20.00
Chrysene	5.0000	4.5	-9.8	20.00
bis(2-Ethylhexyl)phthalate	5.0000	4.7	-6.4	20.00
Benzofluoranthenes, Total	10.000	9.5	-5.2	20.00
Benzo(a)pyrene	5.0000	4.9	-2.5	20.00
Indeno(1,2,3-cd)pyrene	5.0000	4.6	-8.5	20.00
Dibenzo(a,h)anthracene	5.0000	4.5	-9.1	20.00
Benzo(g,h,i)perylene	5.0000	4.6	-8.2	20.00

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D
Date : 16-MAR-2023 02:16
Client ID:
Sample Info: SLC0228-SCV1

Instrument: nt10.i
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

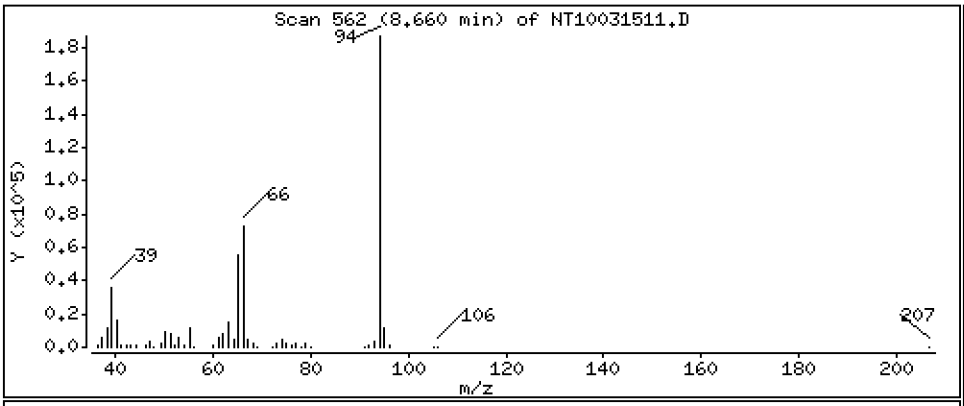
Operator: VTS

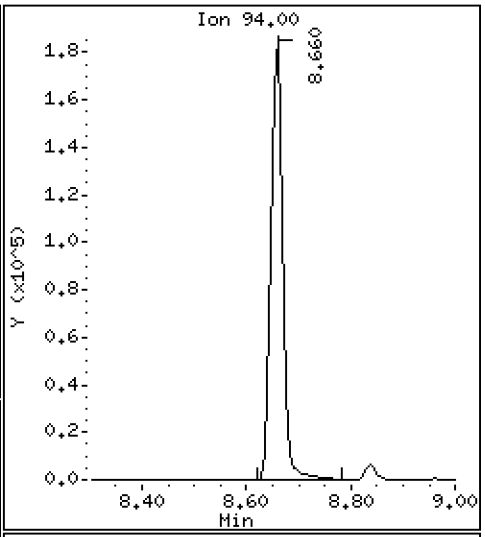
Column phase: ZB-5msi

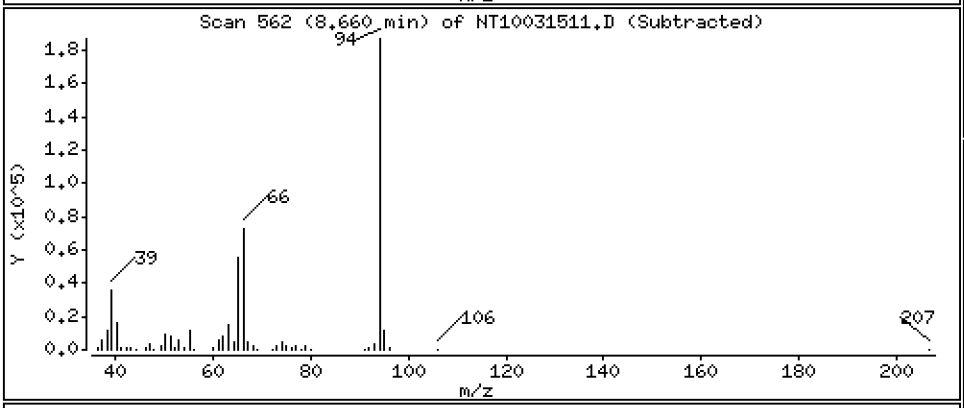
Column diameter: 0.25

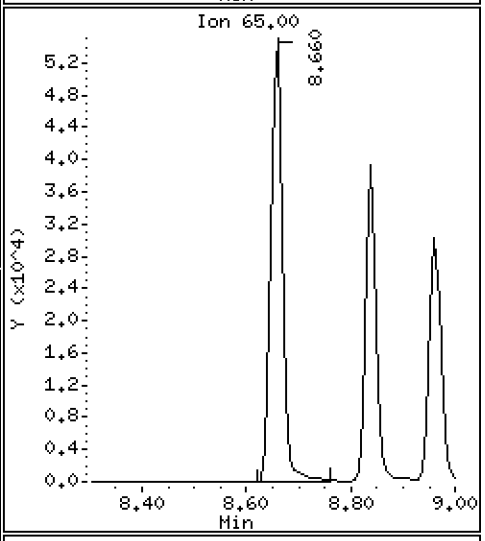
3 Phenol

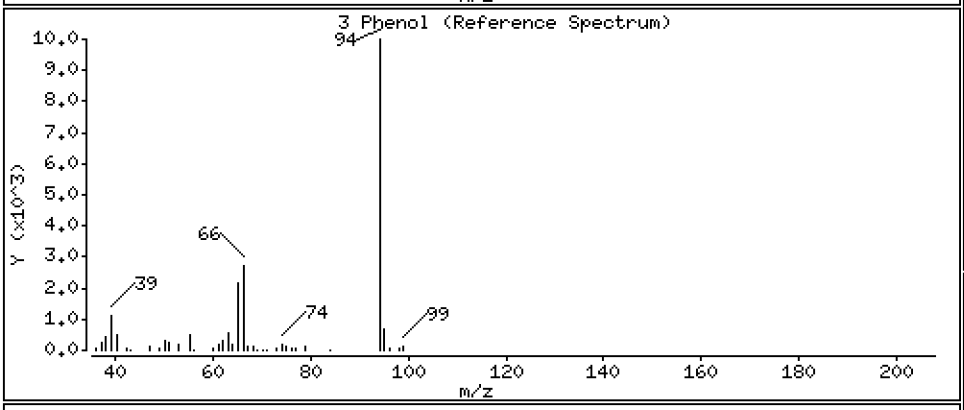
Concentration: 4.412 ug/mL

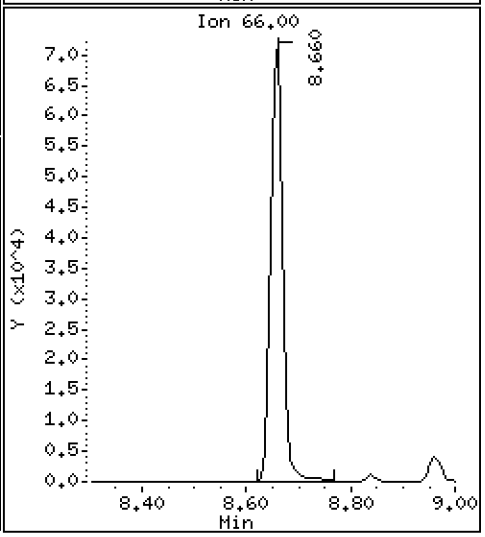


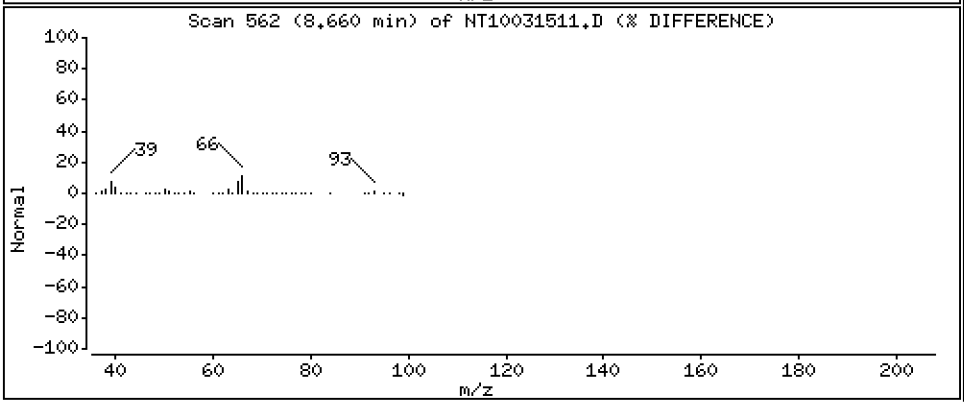












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

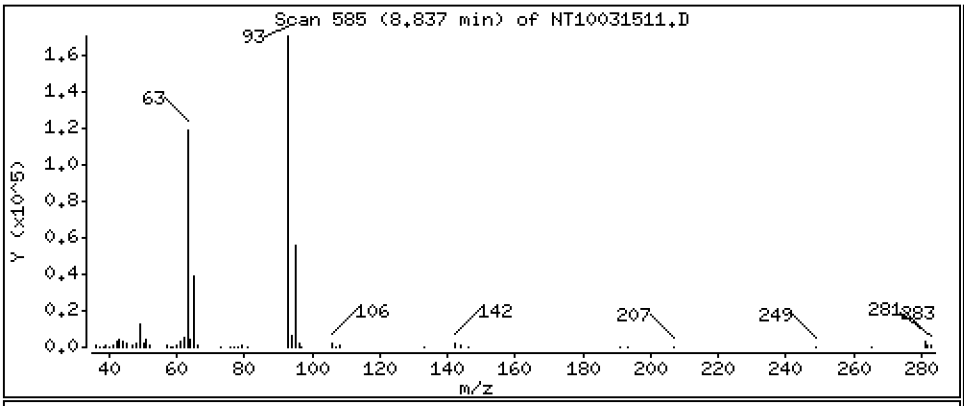
Operator: VTS

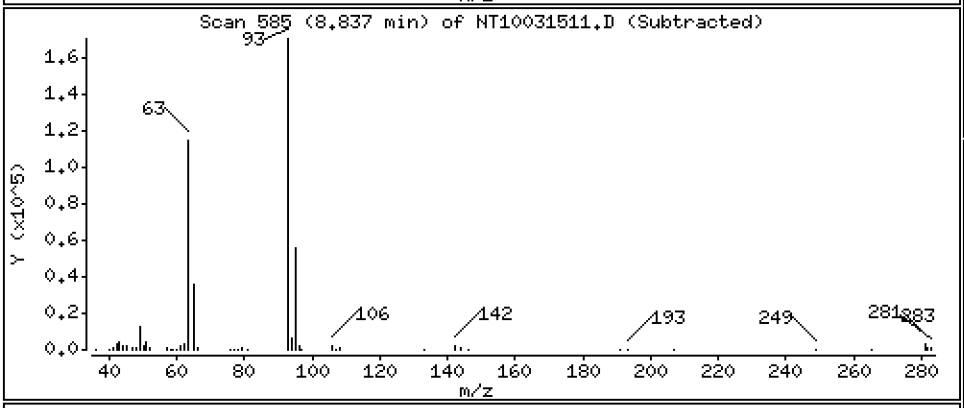
Column phase: ZB-5msi

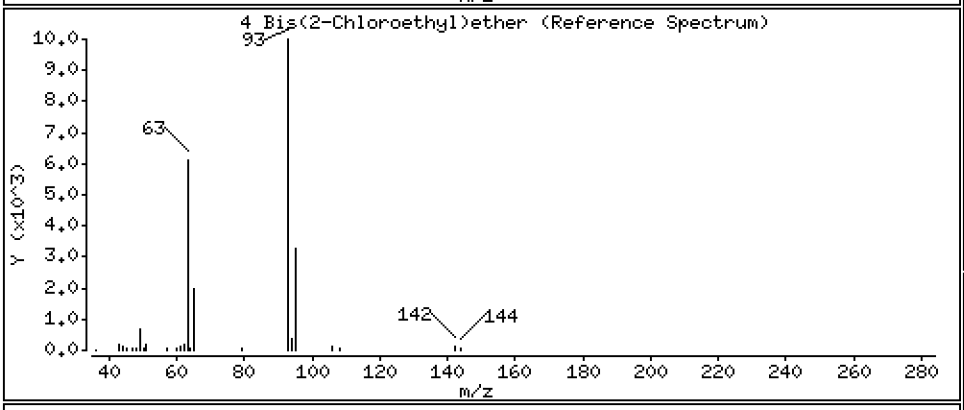
Column diameter: 0.25

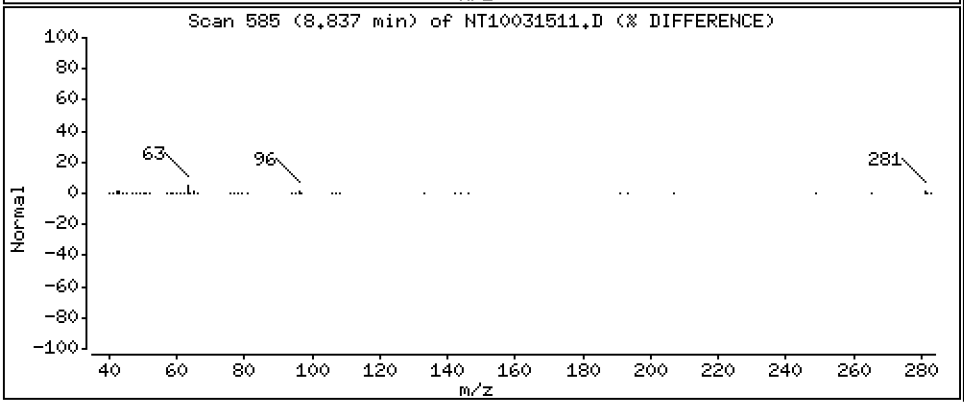
4 Bis(2-Chloroethyl)ether

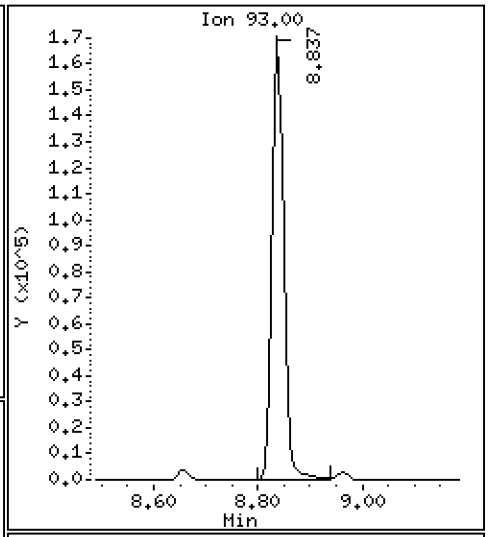
Concentration: 5.258 ug/mL

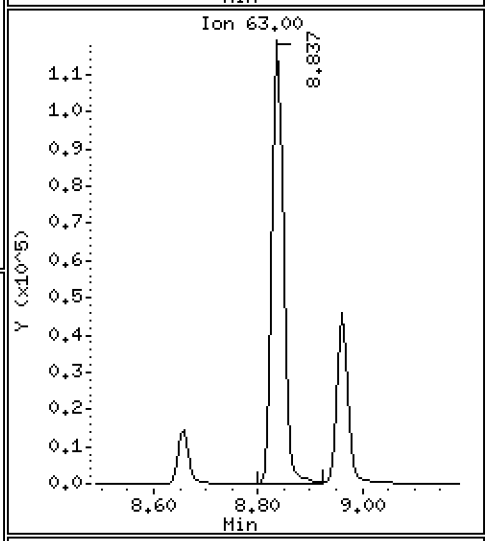


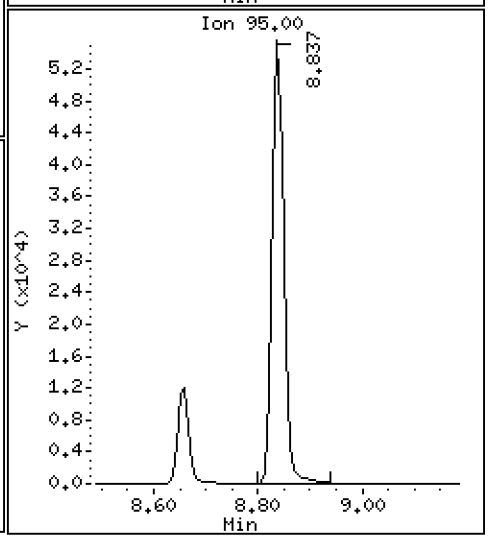












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

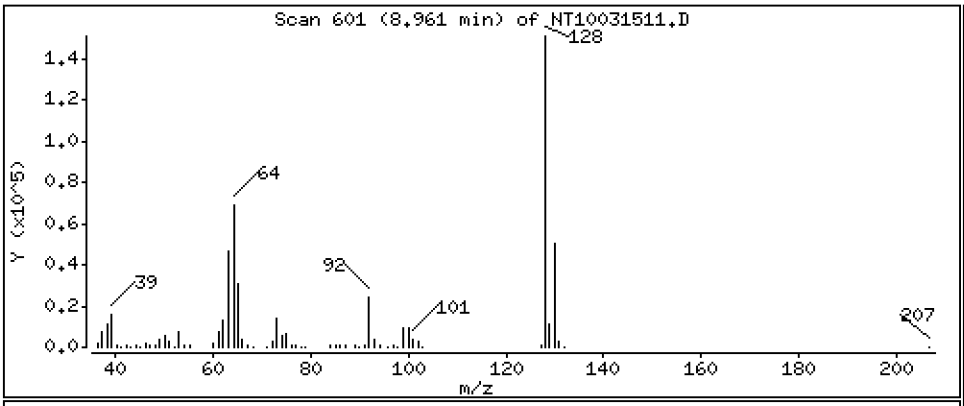
Operator: VTS

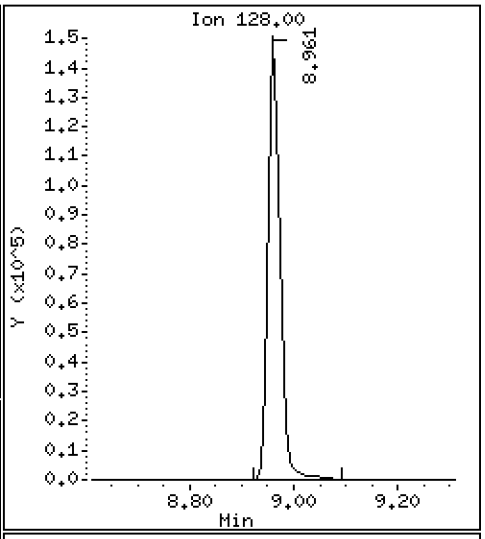
Column phase: ZB-5msi

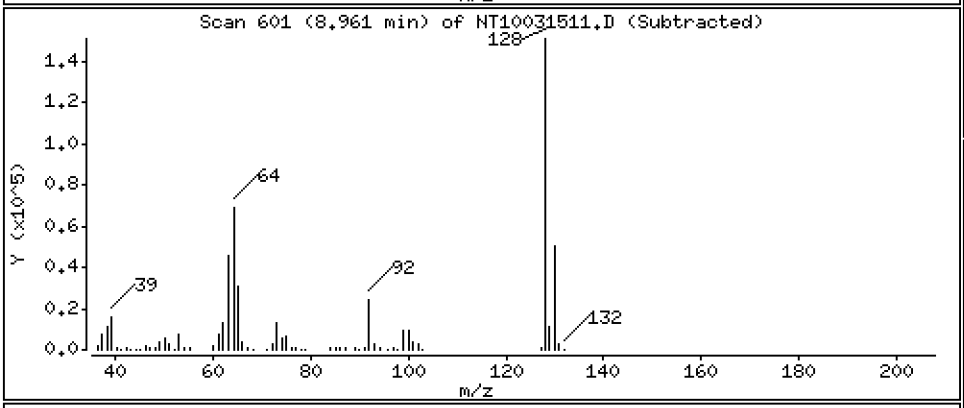
Column diameter: 0.25

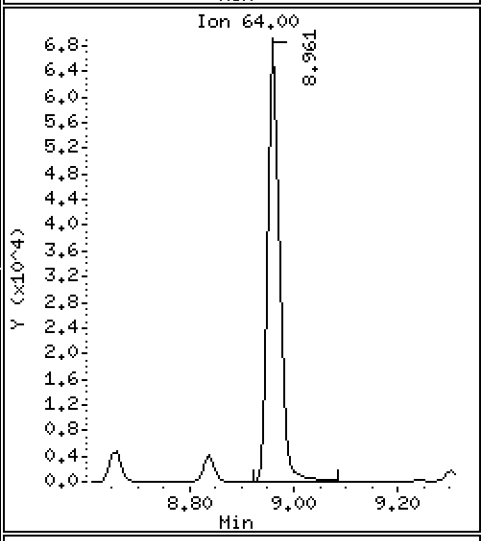
6 2-Chlorophenol

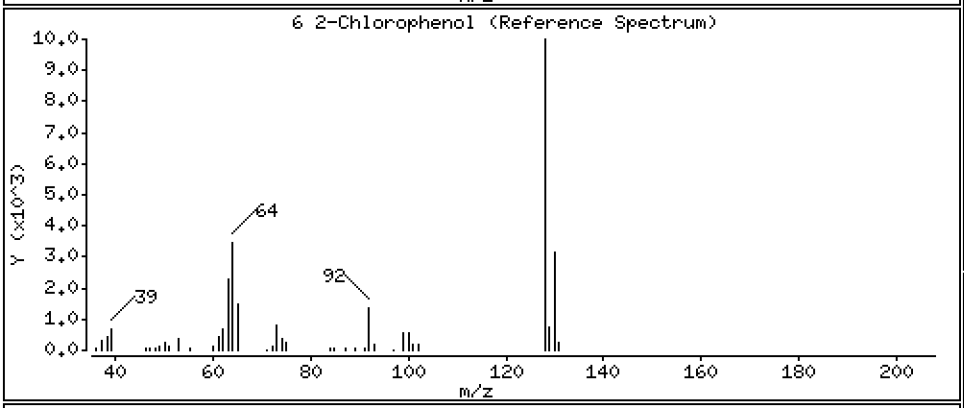
Concentration: 4.277 ug/mL

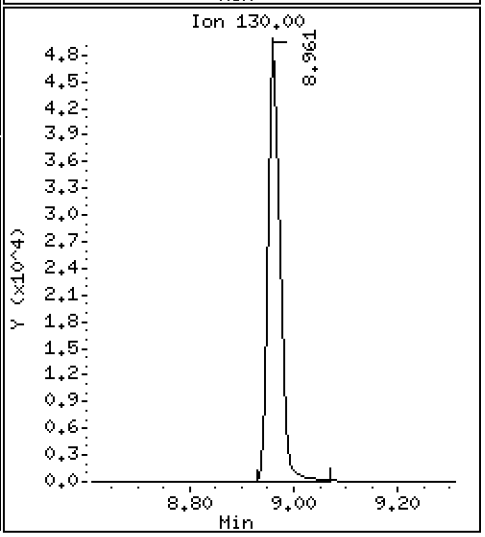


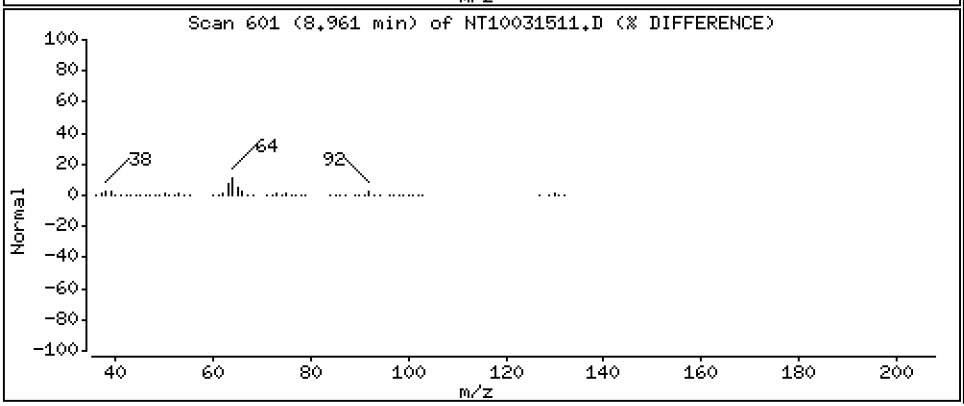












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

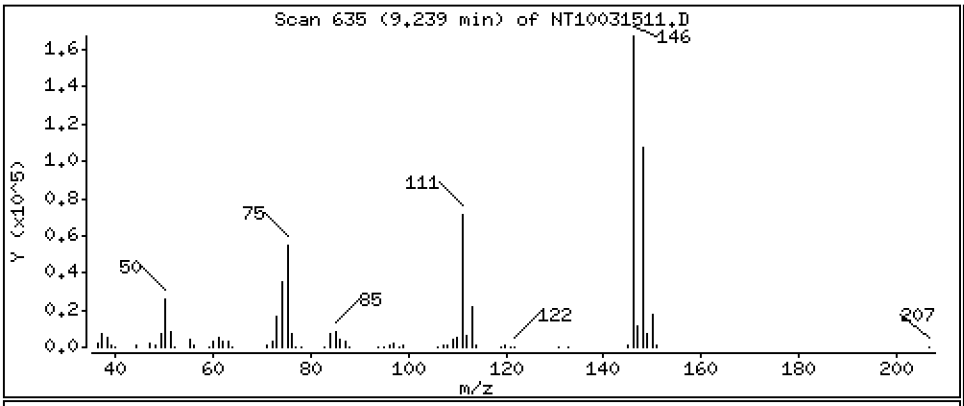
Operator: VTS

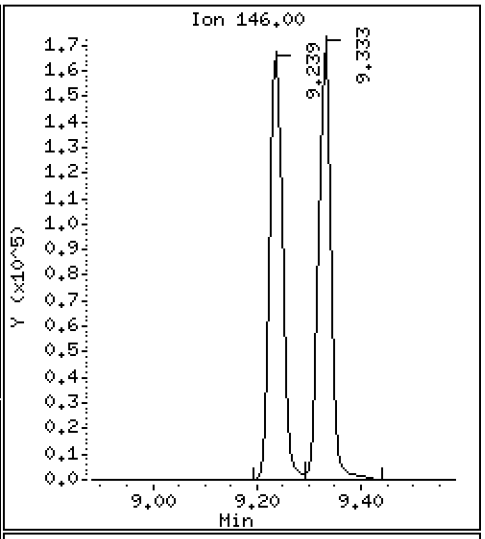
Column phase: ZB-5msi

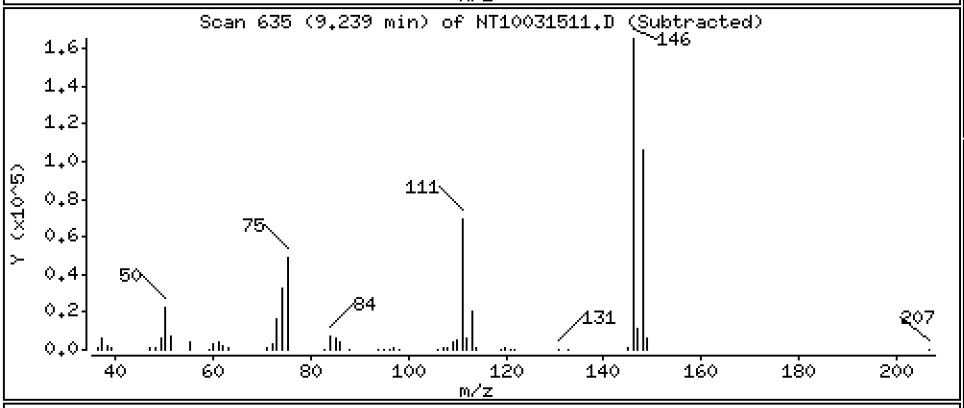
Column diameter: 0.25

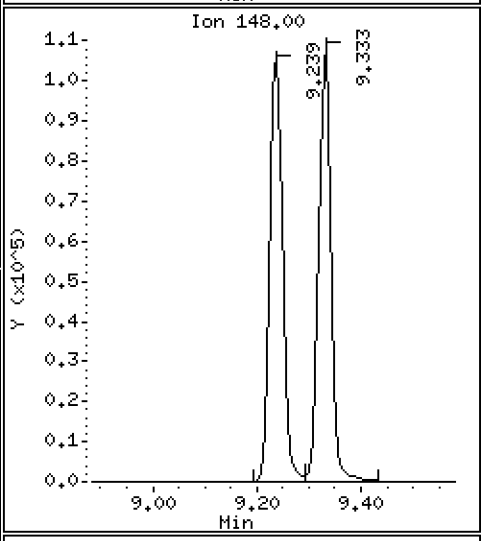
7 1,3-Dichlorobenzene

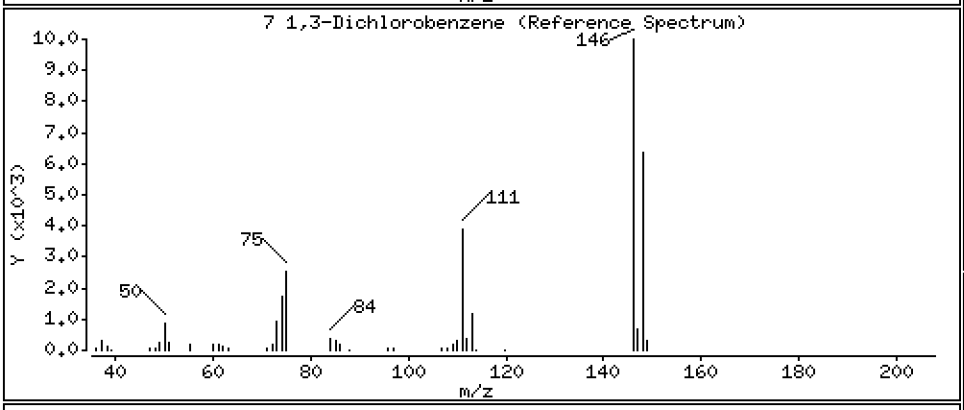
Concentration: 4.772 ug/mL

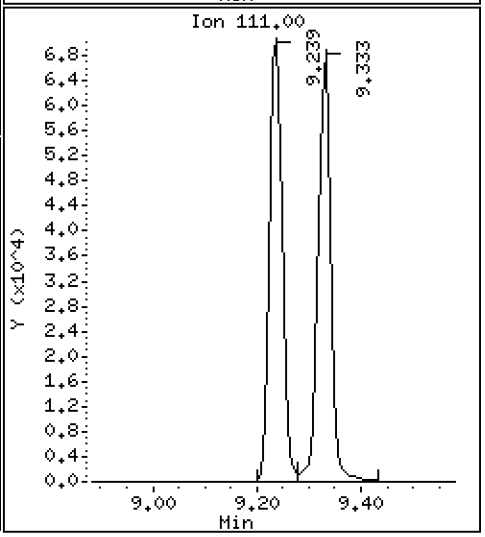


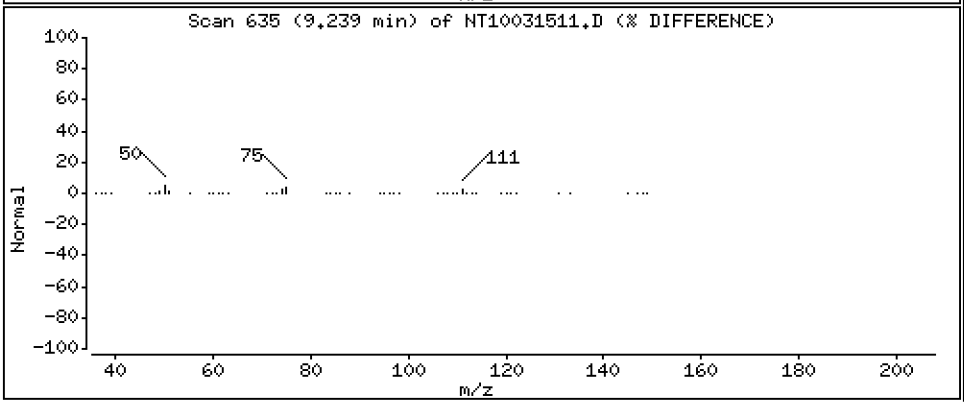












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

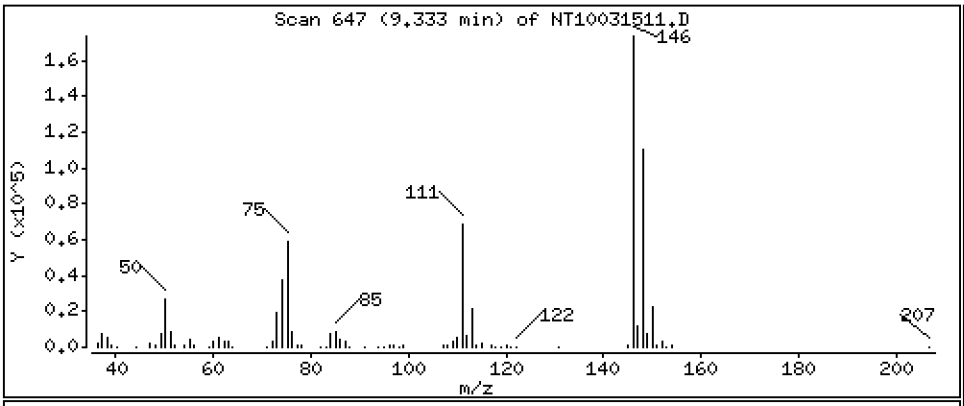
Operator: VTS

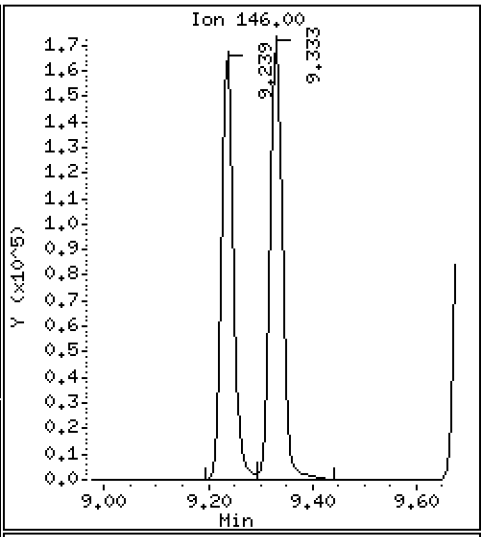
Column phase: ZB-5msi

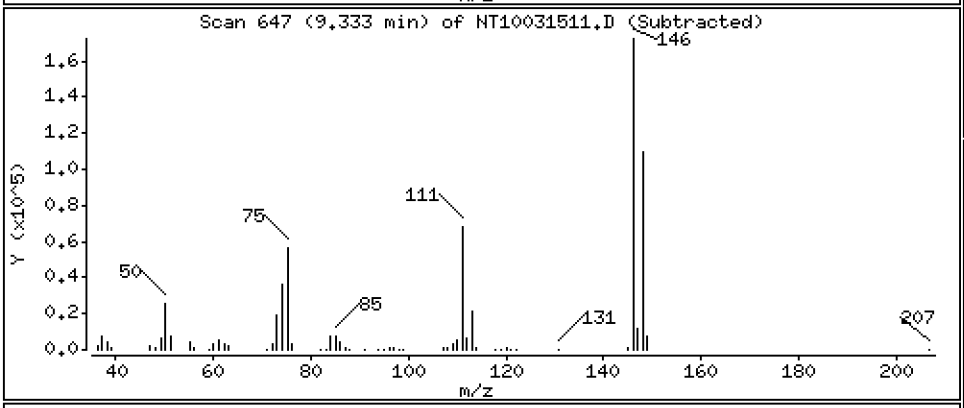
Column diameter: 0.25

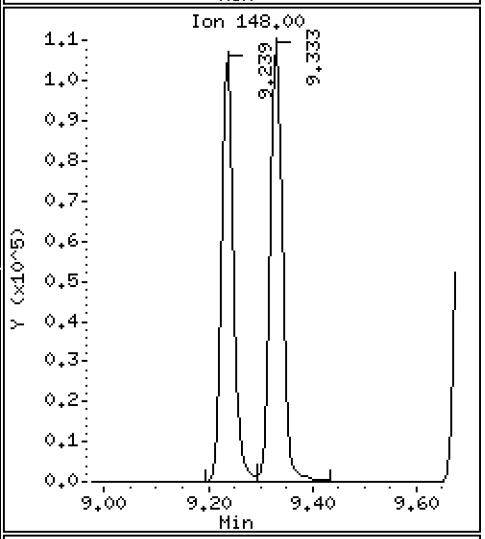
9 1,4-Dichlorobenzene

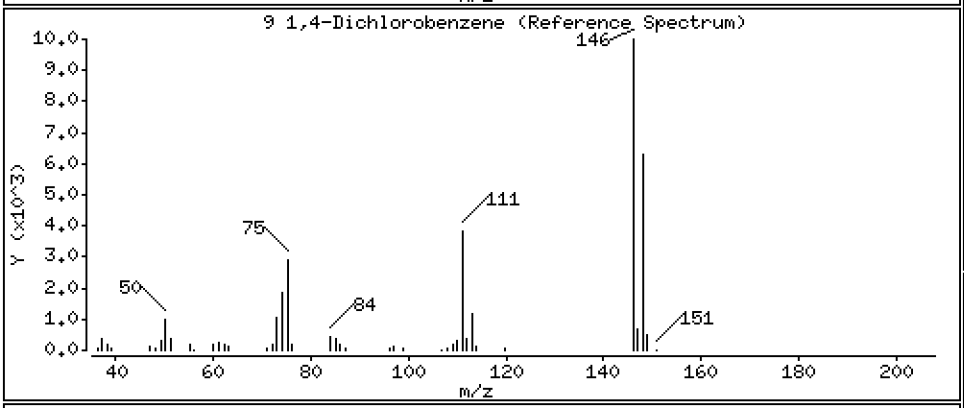
Concentration: 4.913 ug/mL

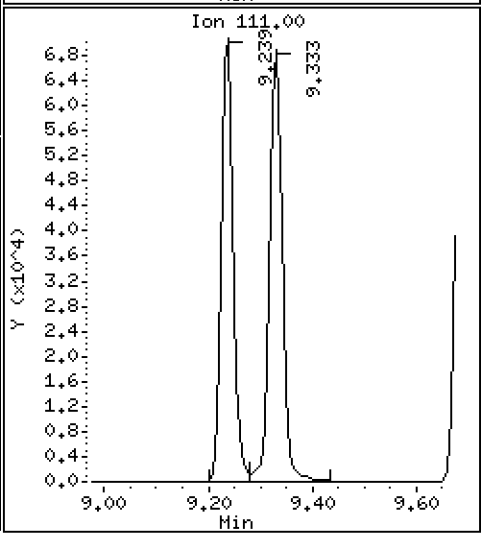


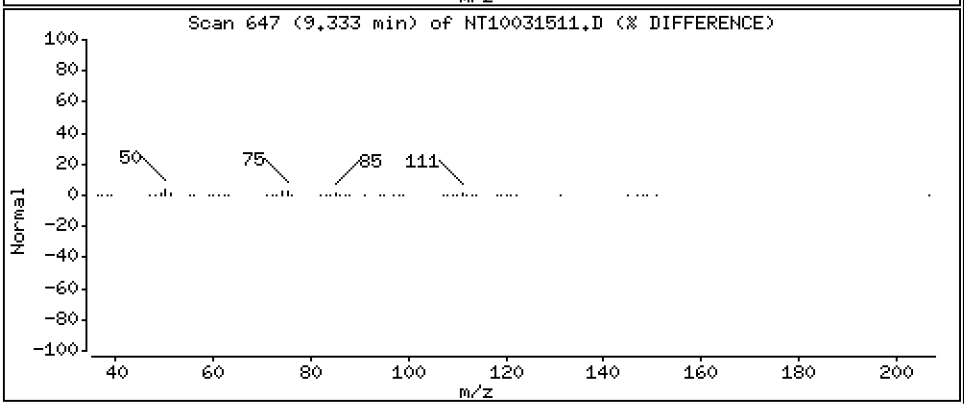












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

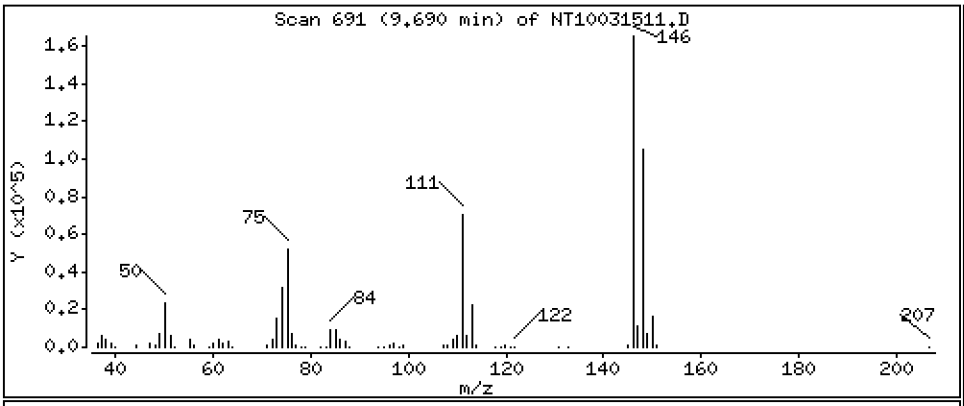
Operator: VTS

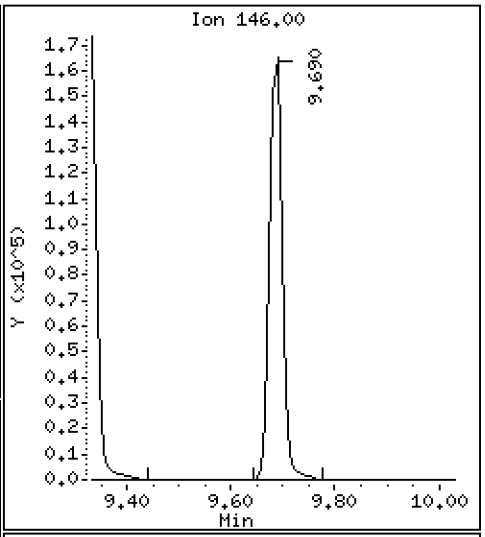
Column phase: ZB-5msi

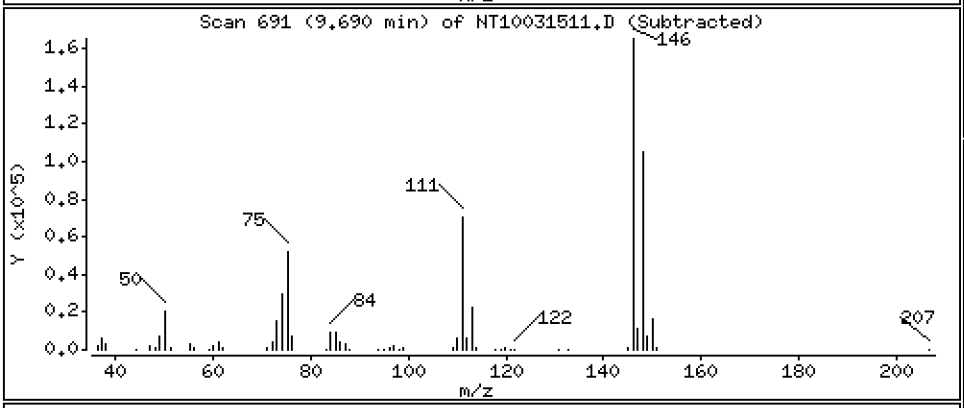
Column diameter: 0.25

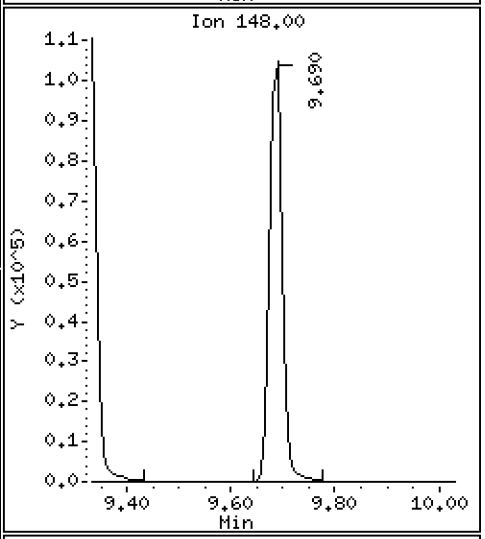
12 1,2-Dichlorobenzene

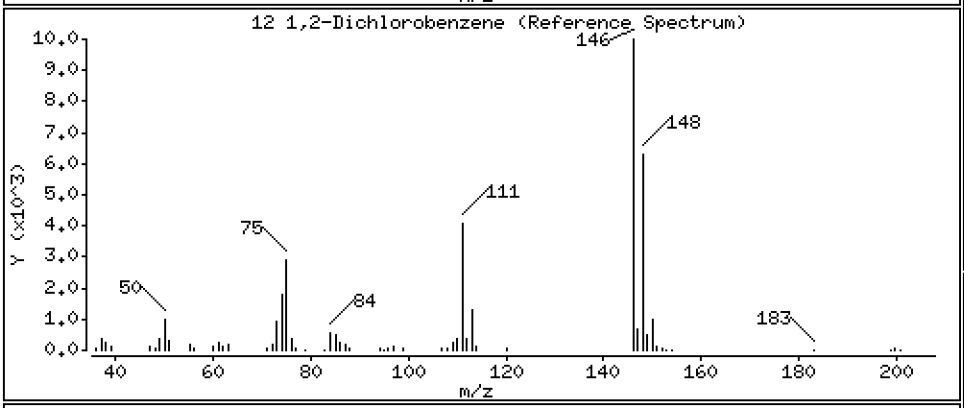
Concentration: 4.882 ug/mL

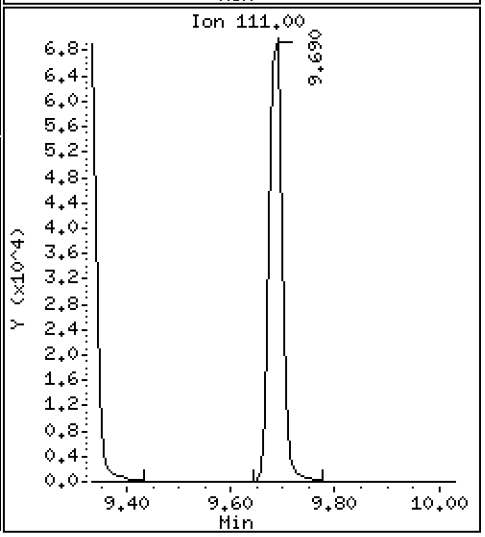


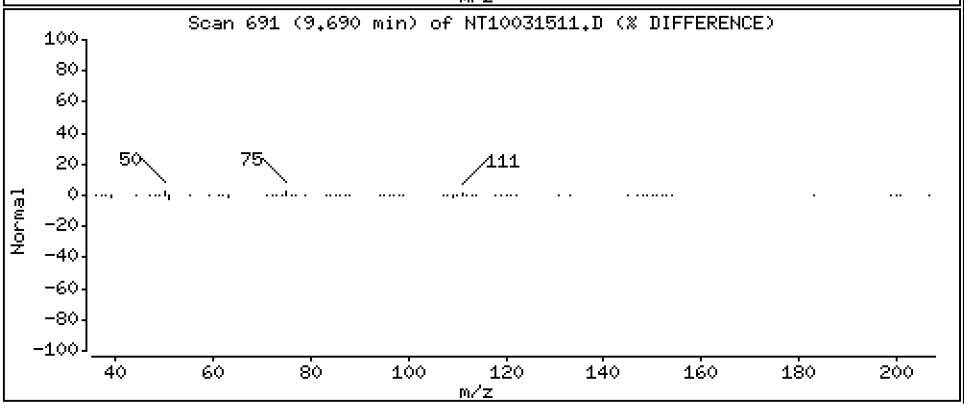












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

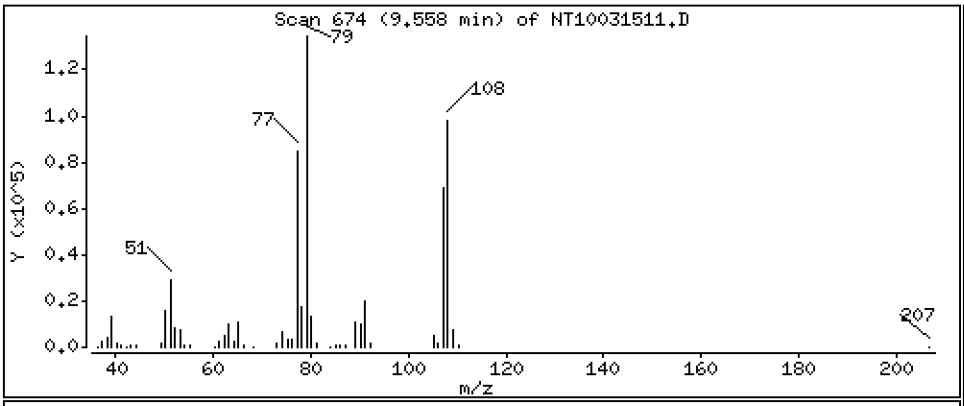
Operator: VTS

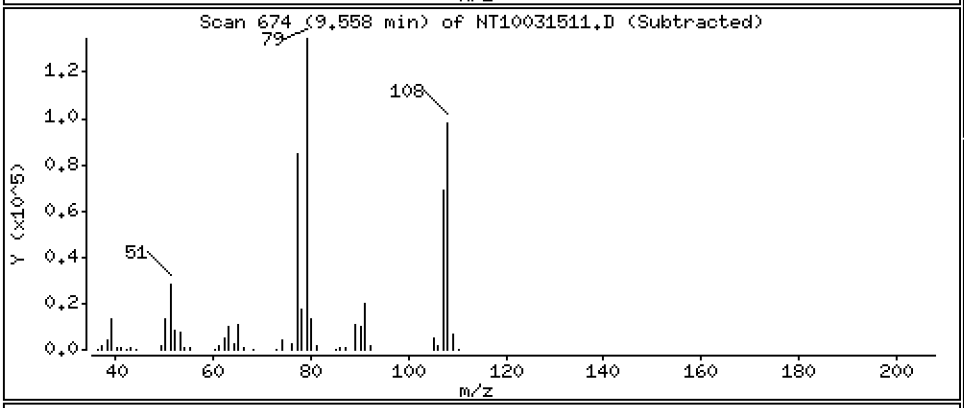
Column phase: ZB-5msi

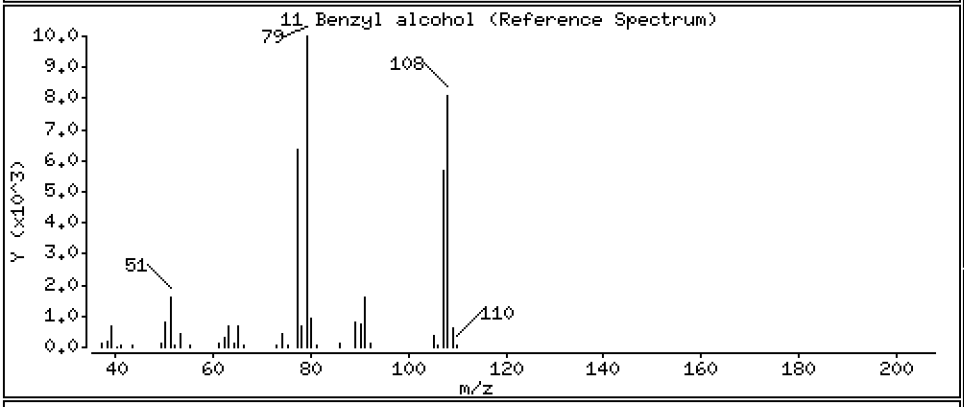
Column diameter: 0.25

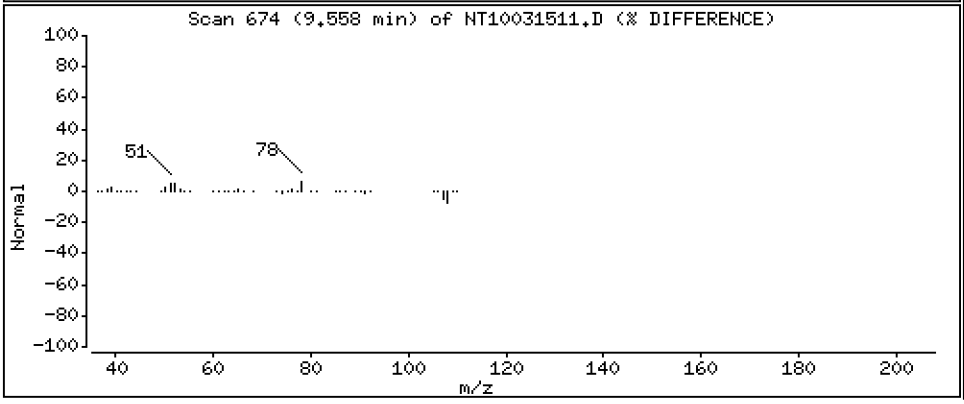
11 Benzyl alcohol

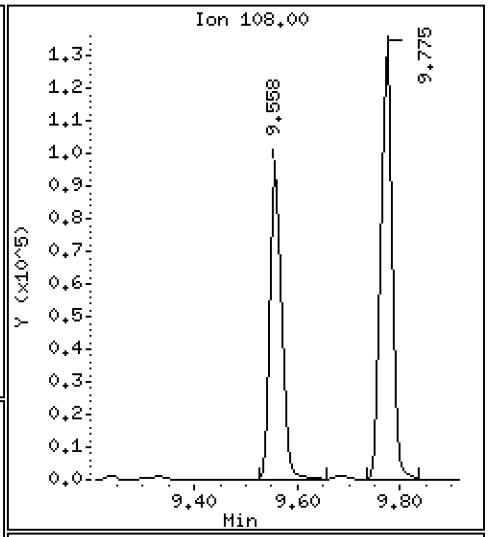
Concentration: 4.927 ug/mL

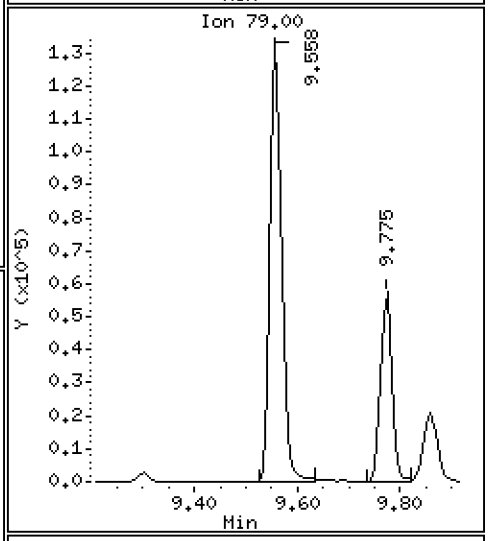


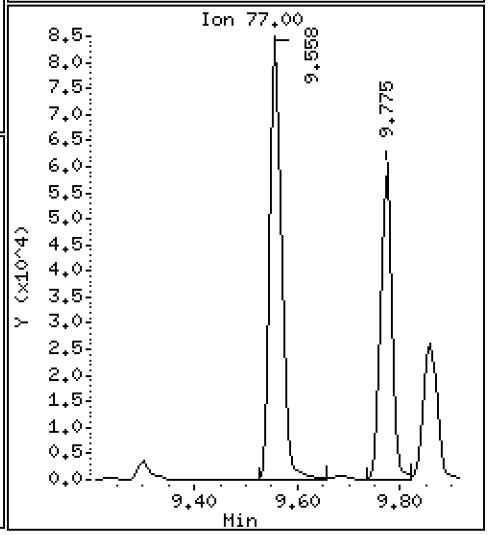












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

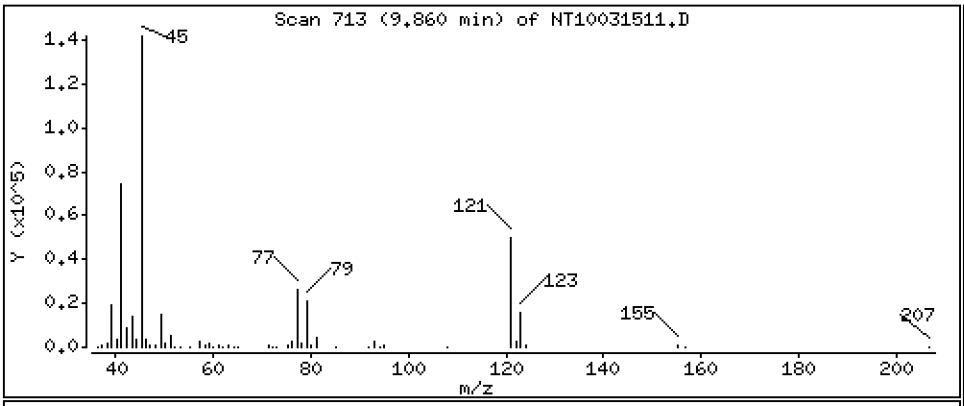
Operator: VTS

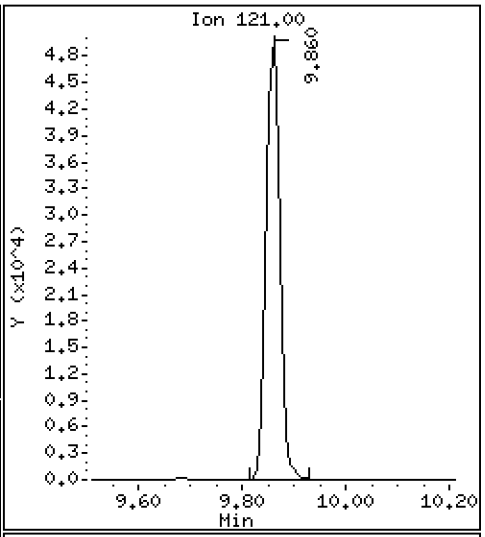
Column phase: ZB-5msi

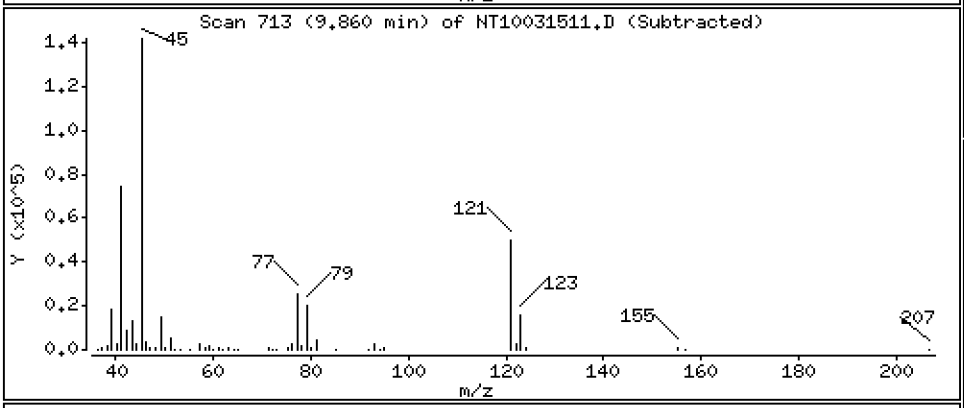
Column diameter: 0.25

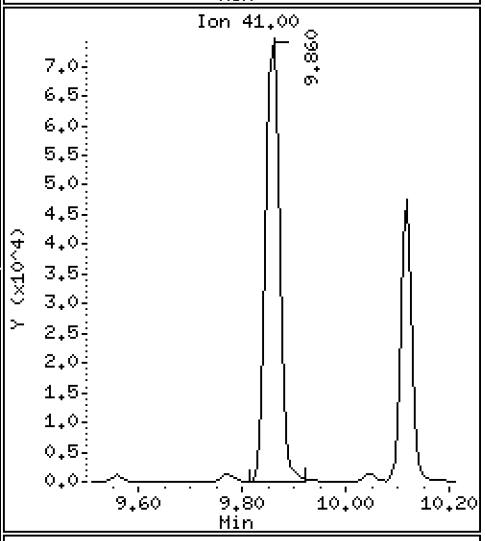
14 2,2'-oxybis(1-Chloropropane)

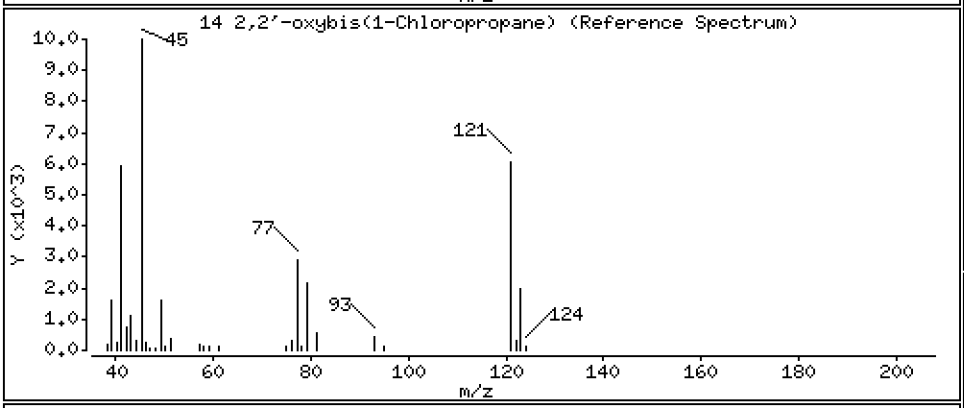
Concentration: 6.214 ug/mL

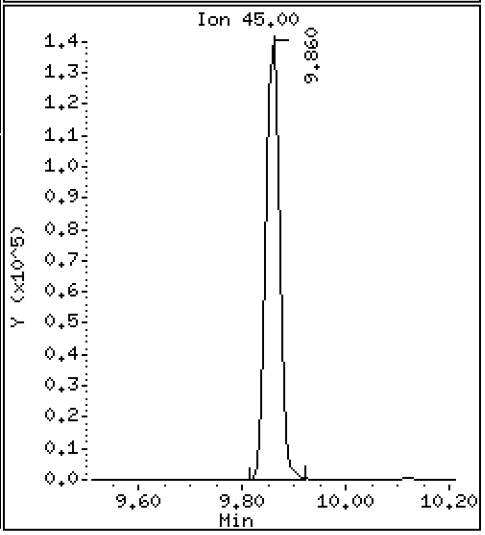


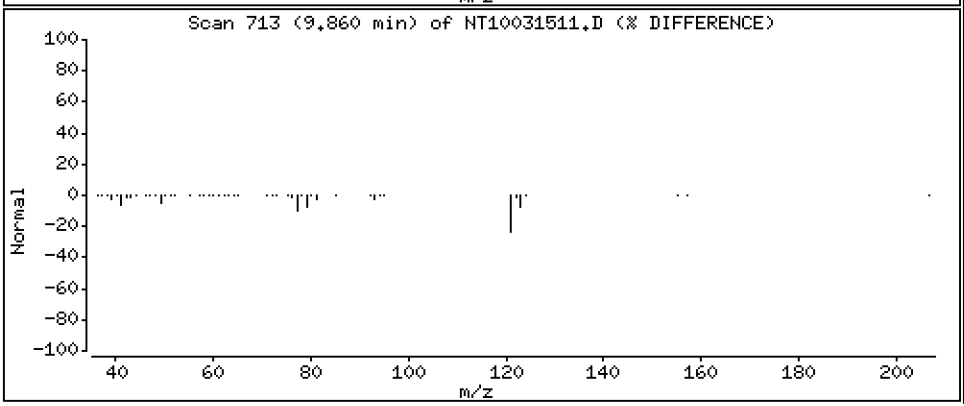












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

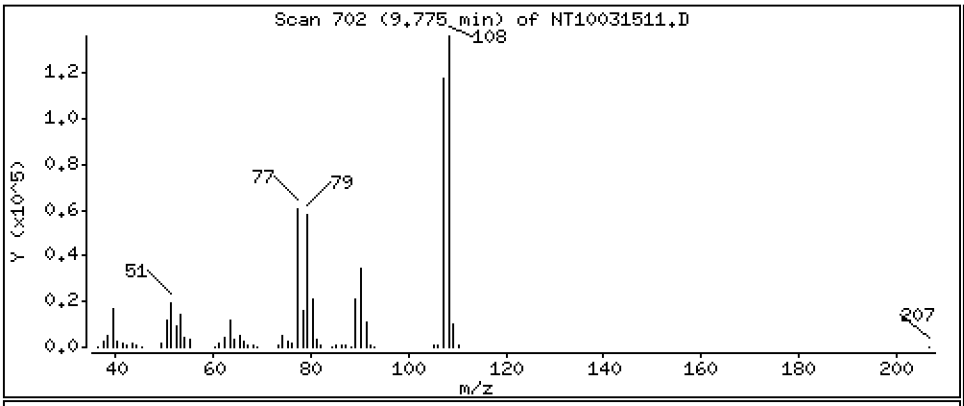
Operator: VTS

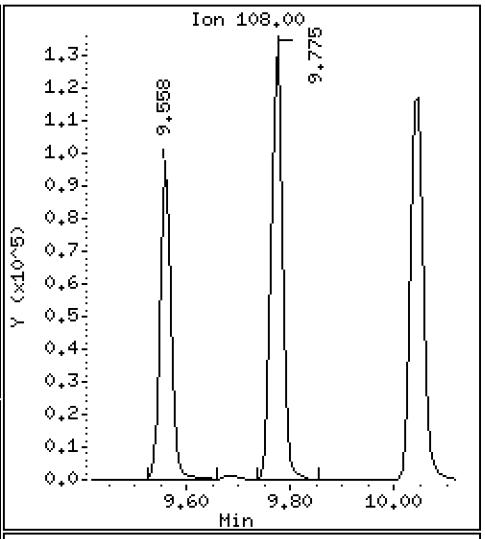
Column phase: ZB-5msi

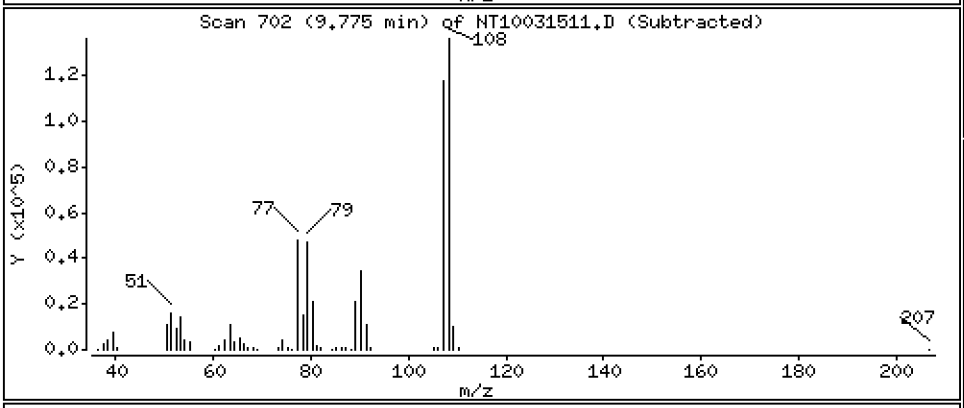
Column diameter: 0.25

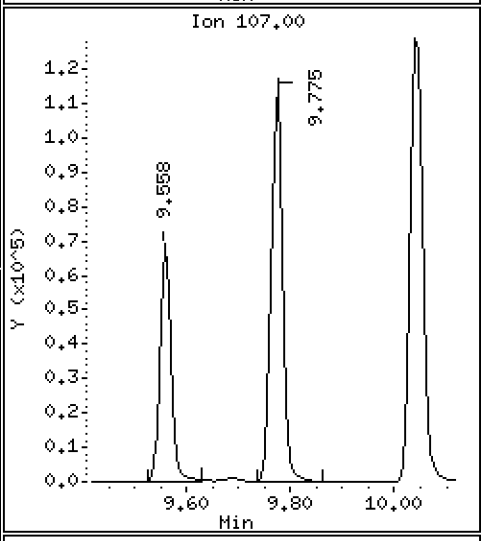
13 2-Methylphenol

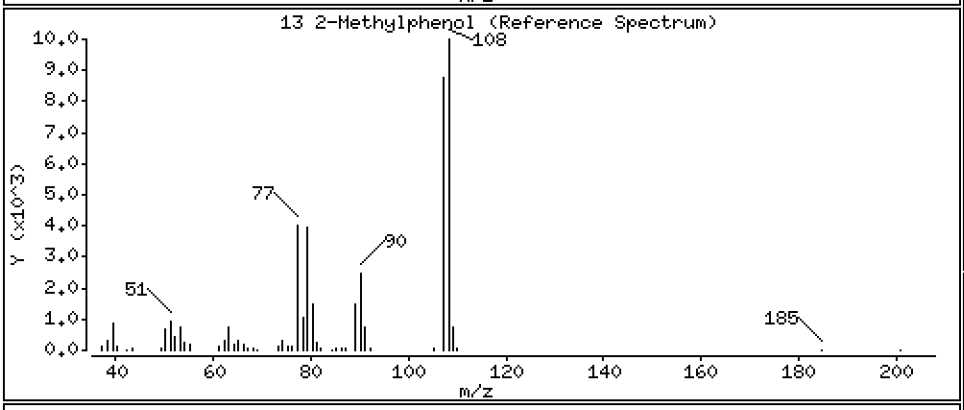
Concentration: 4.215 ug/mL

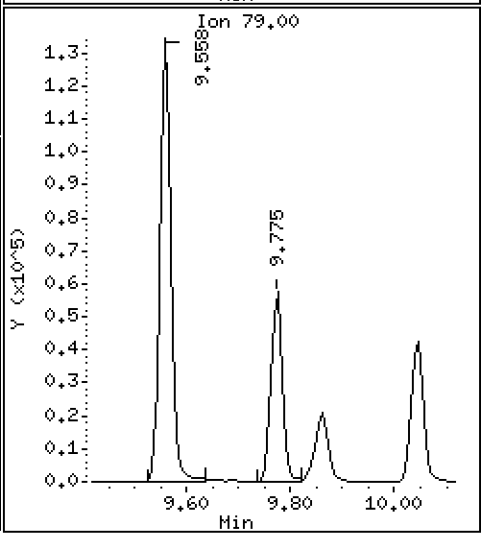


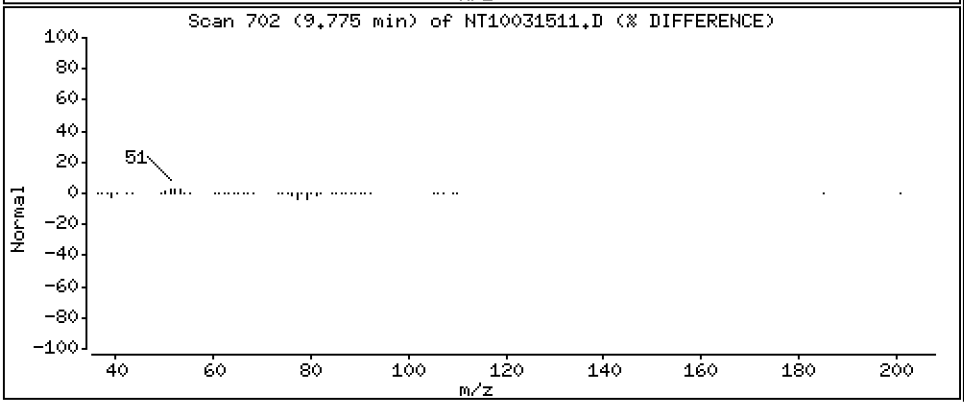












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

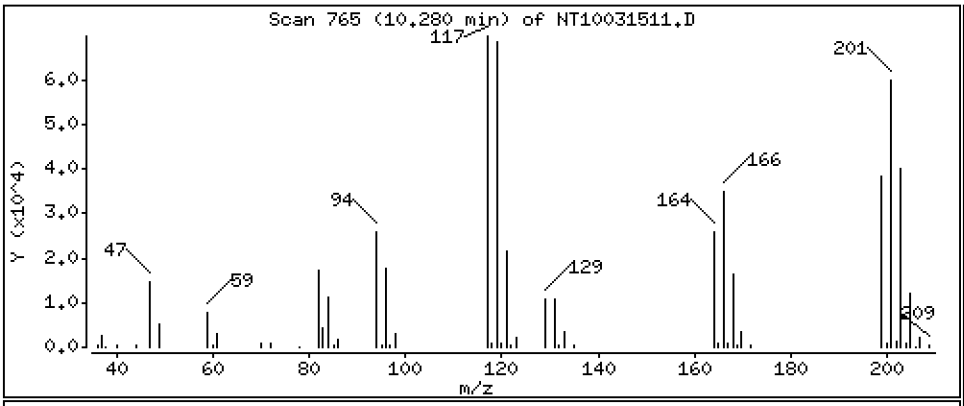
Operator: VTS

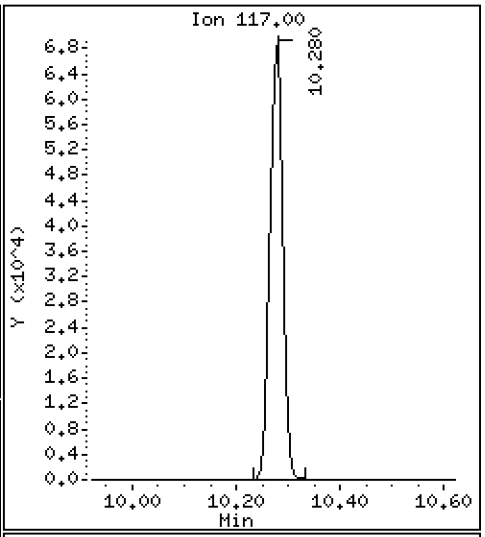
Column phase: ZB-5msi

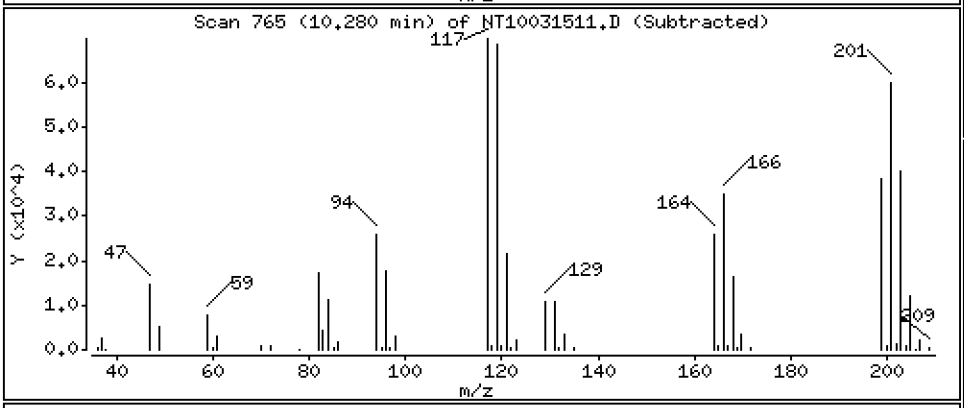
Column diameter: 0.25

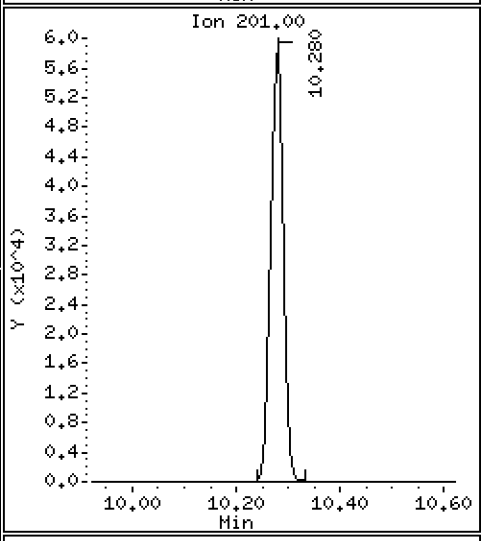
17 Hexachloroethane

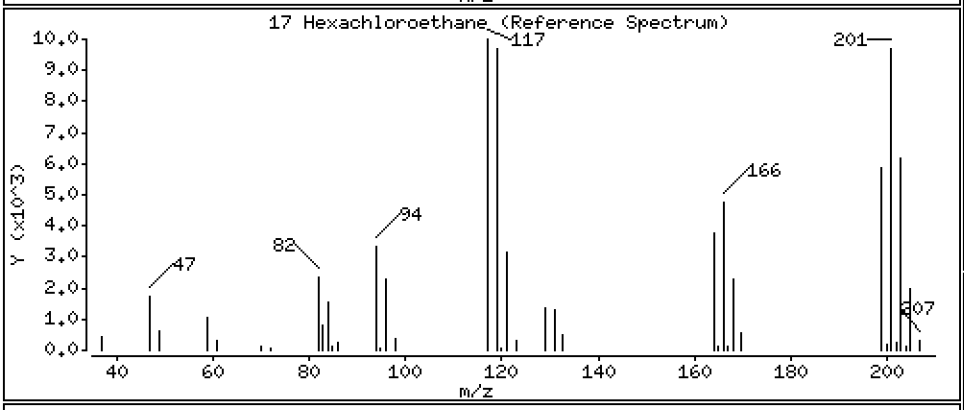
Concentration: 5.003 ug/mL

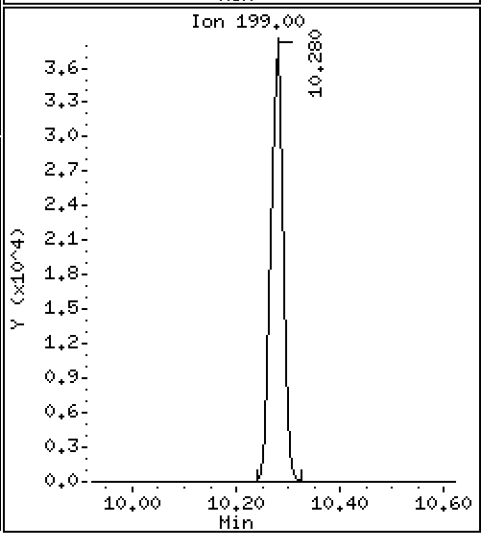


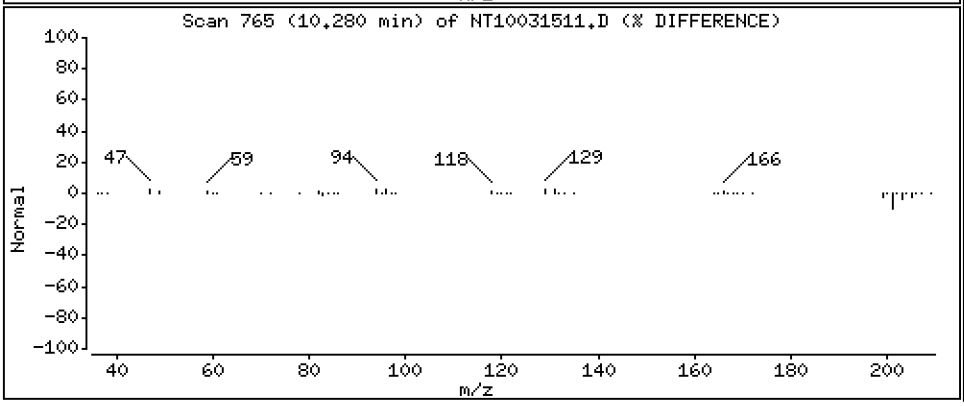












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

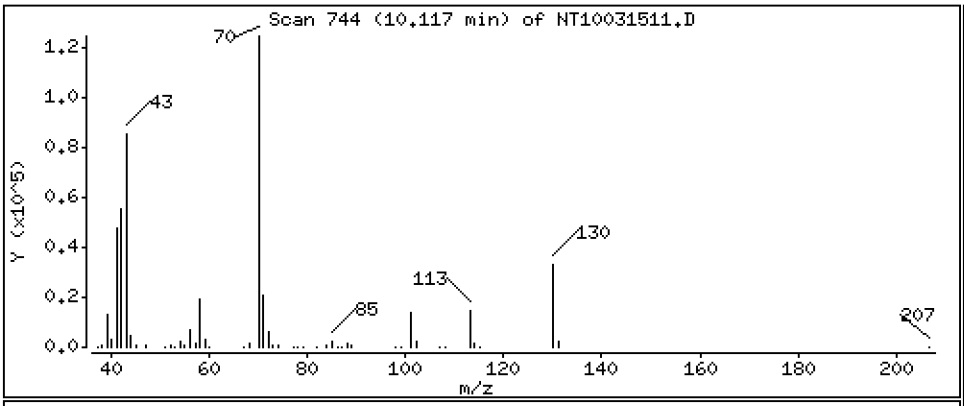
Operator: VTS

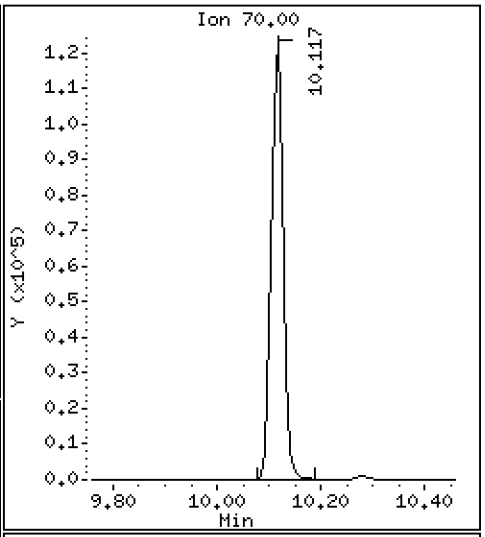
Column phase: ZB-5msi

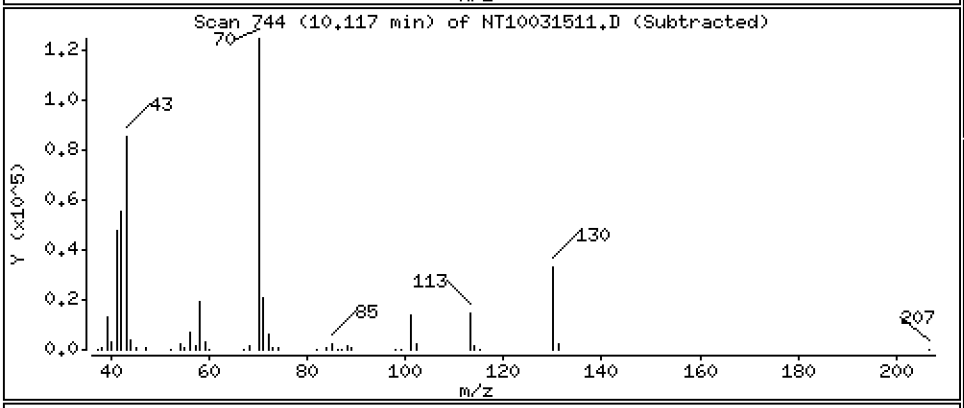
Column diameter: 0.25

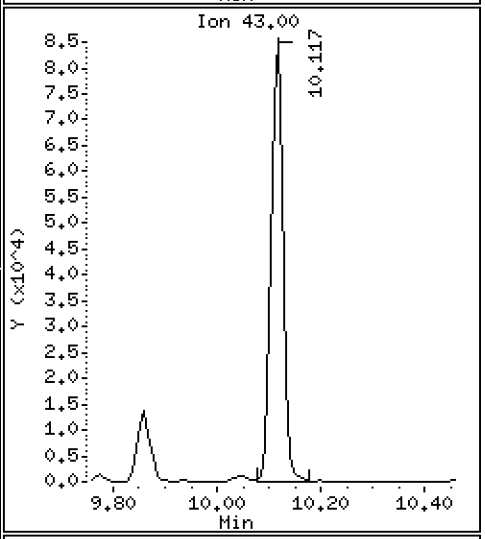
16 N-Nitroso-di-n-propylamine

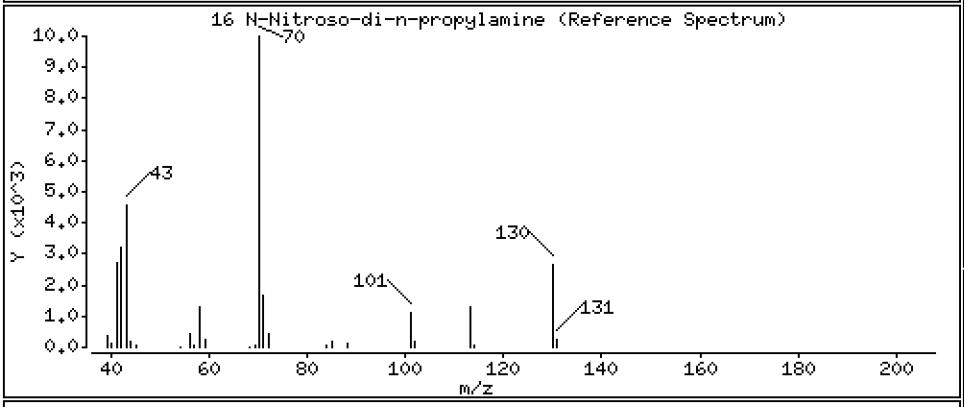
Concentration: 5.179 ug/mL

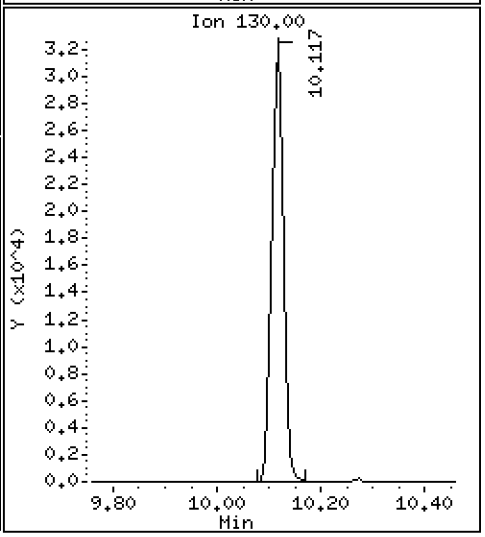


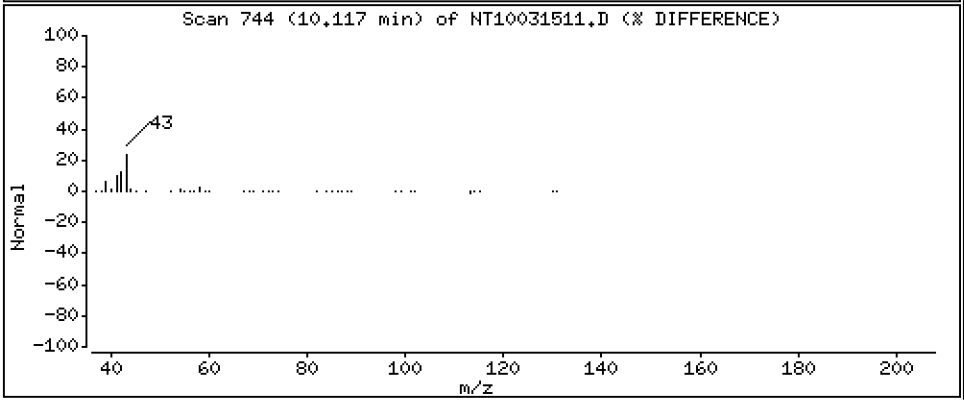












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

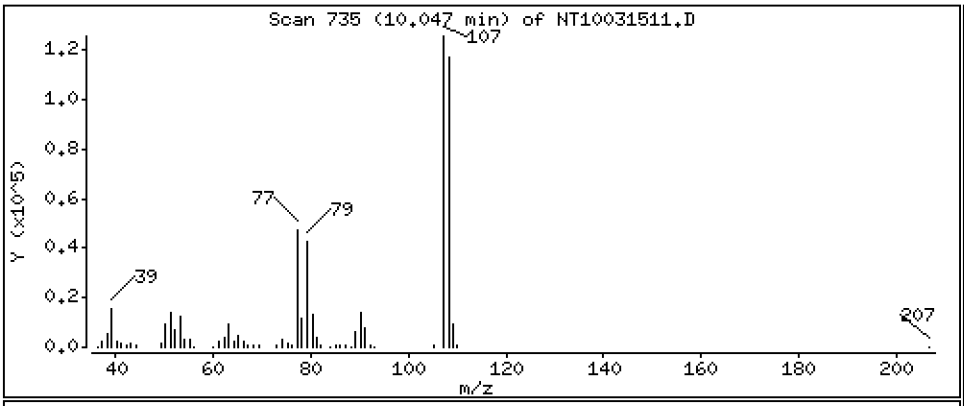
Operator: VTS

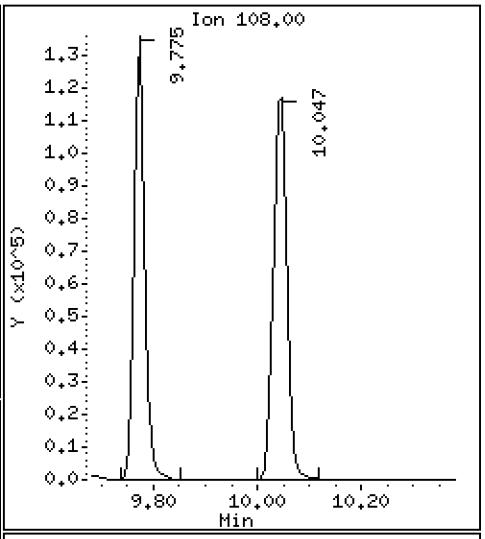
Column phase: ZB-5msi

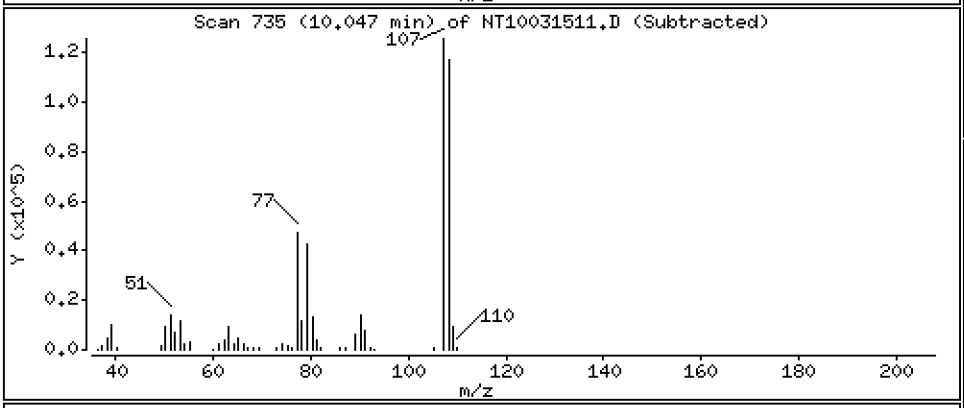
Column diameter: 0.25

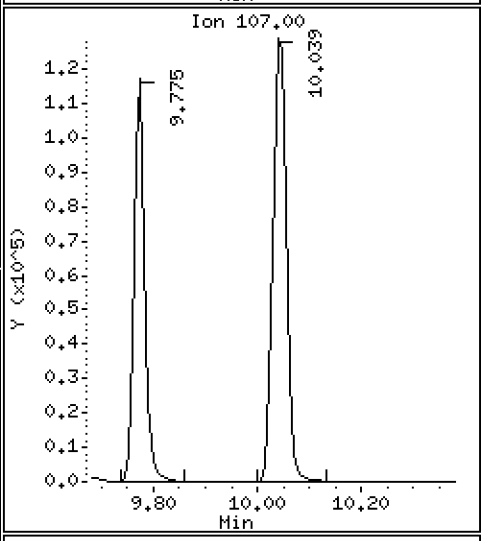
15 4-Methylphenol

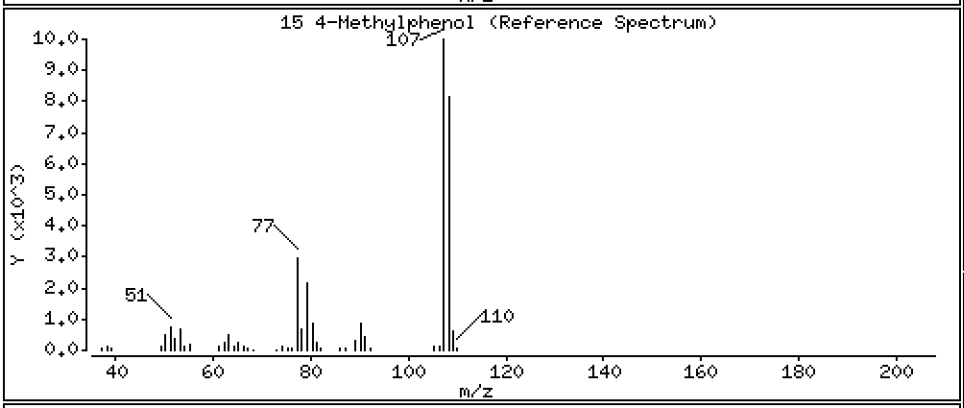
Concentration: 4.365 ug/mL

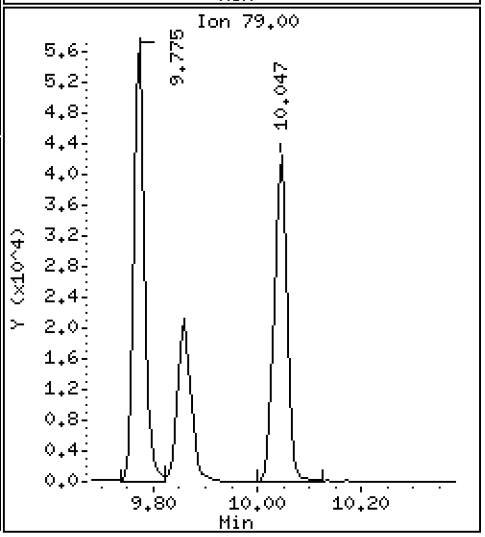


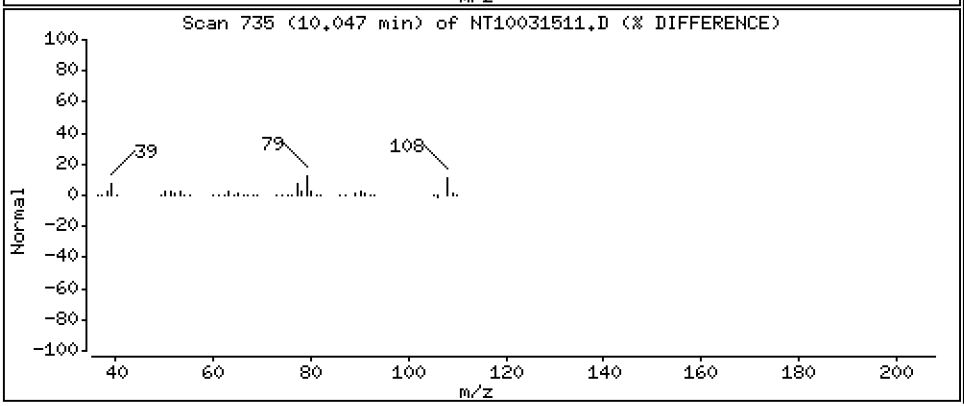












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

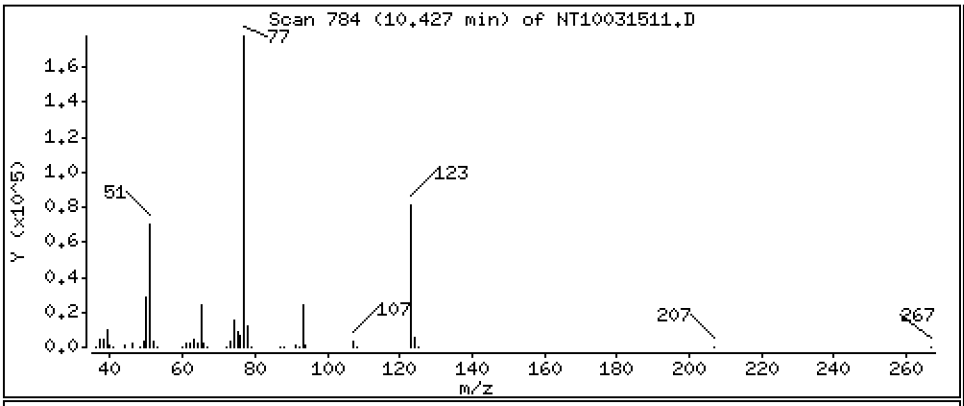
Operator: VTS

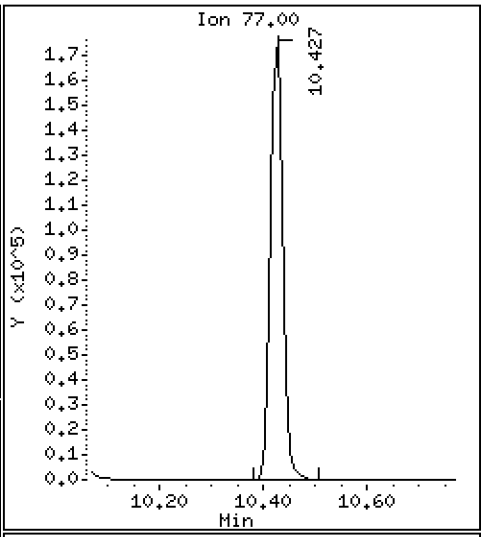
Column phase: ZB-5msi

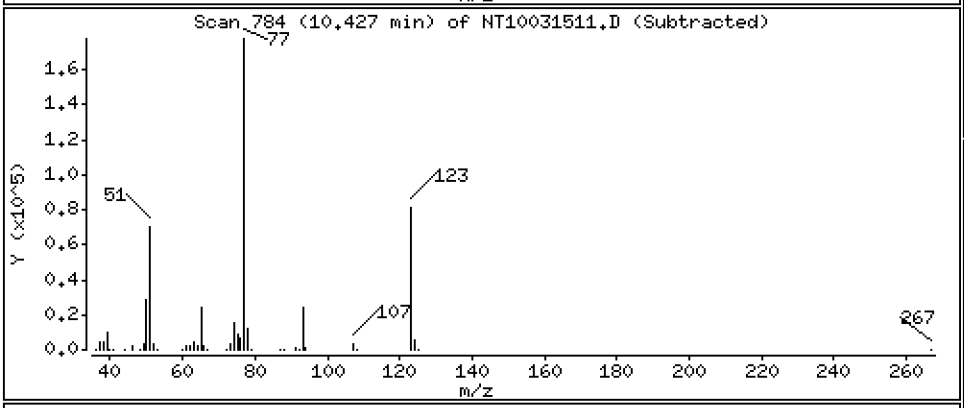
Column diameter: 0.25

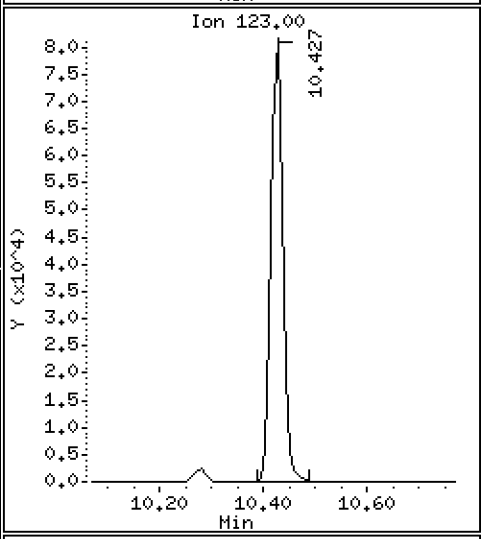
19 Nitrobenzene

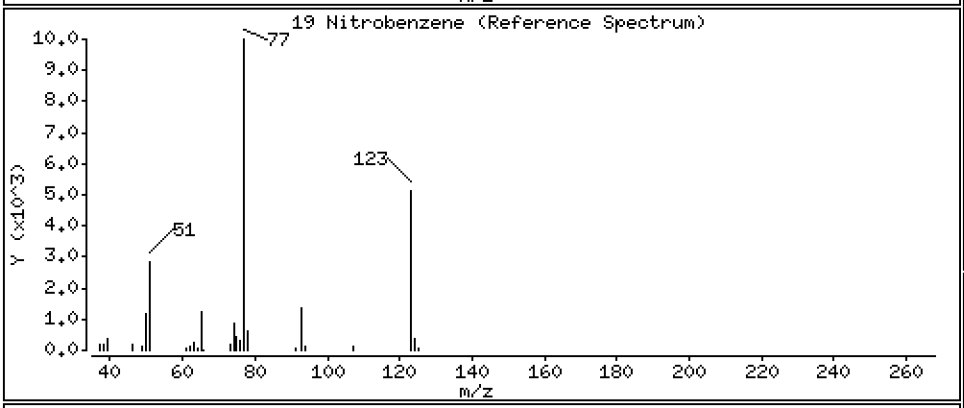
Concentration: 4.858 ug/mL

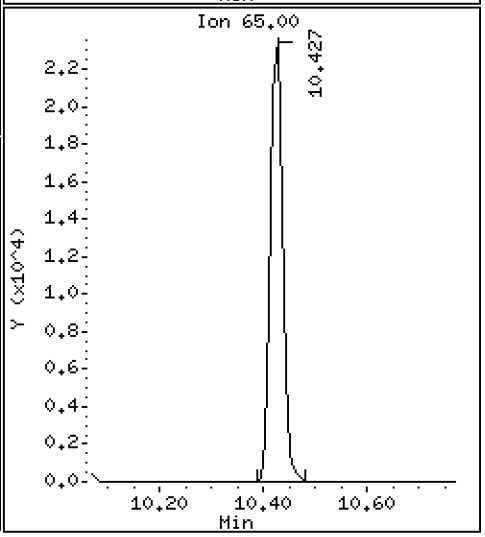


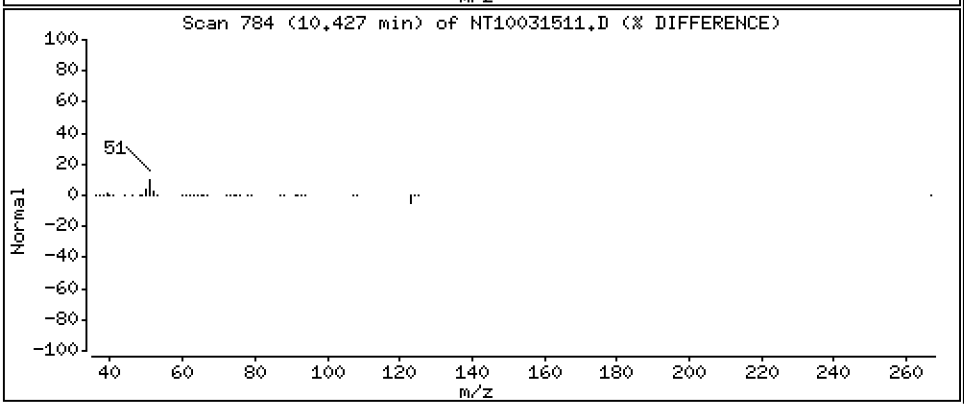












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

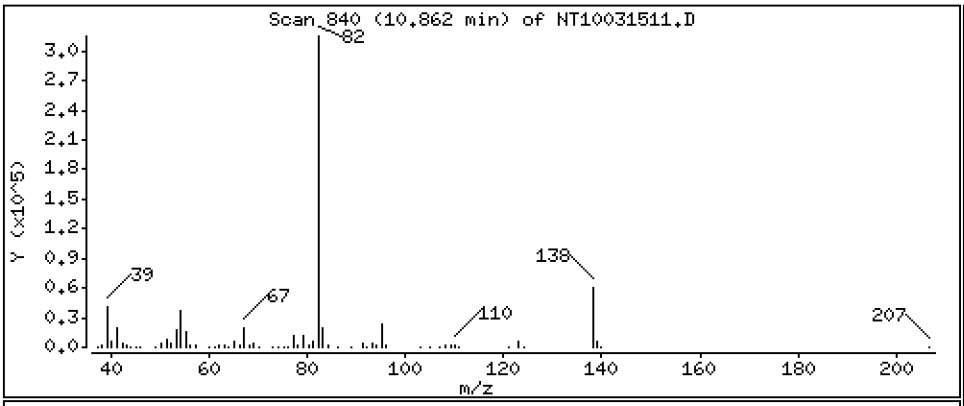
Operator: VTS

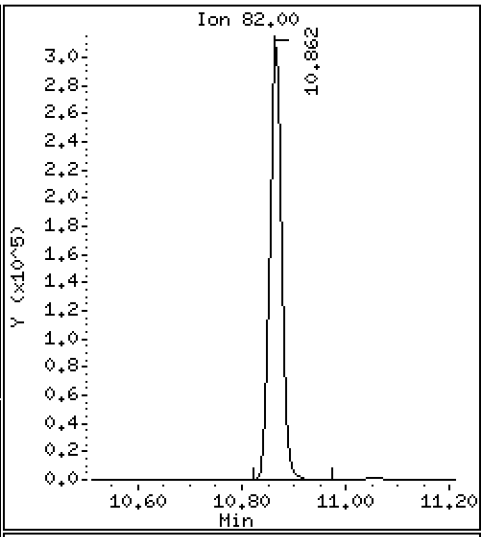
Column phase: ZB-5msi

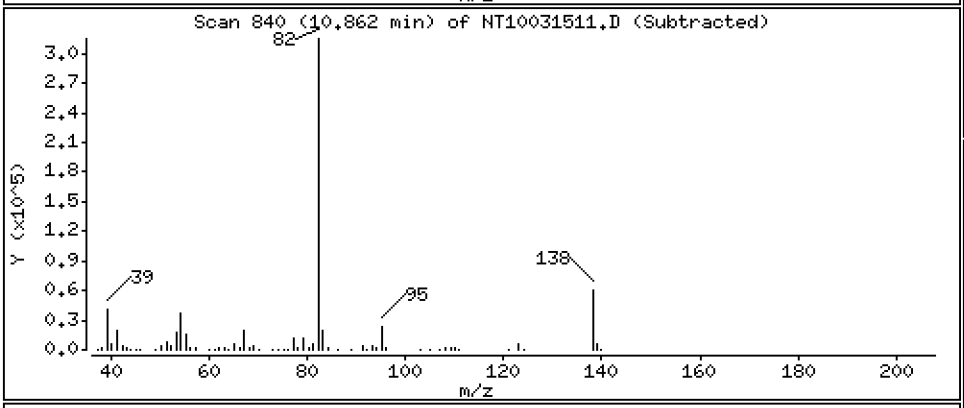
Column diameter: 0.25

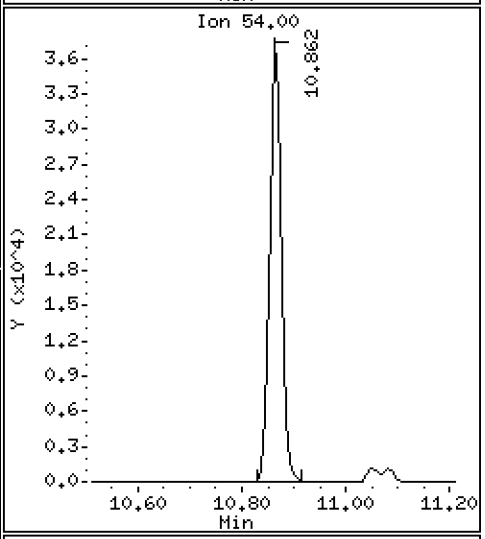
20 Isophorone

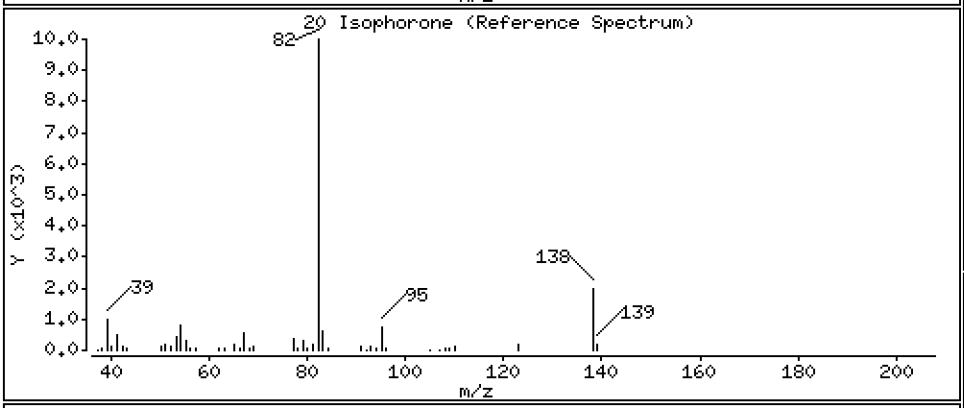
Concentration: 7.696 ug/mL

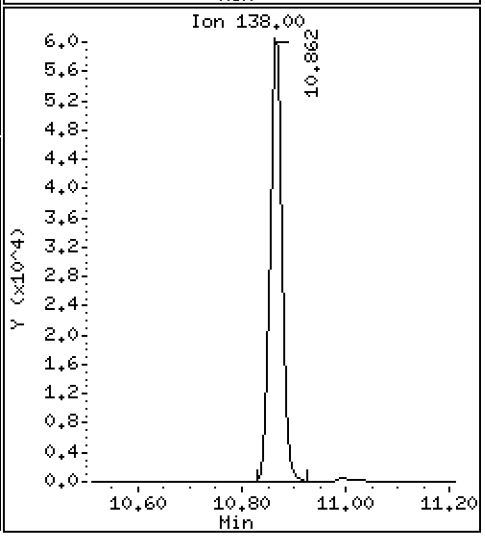


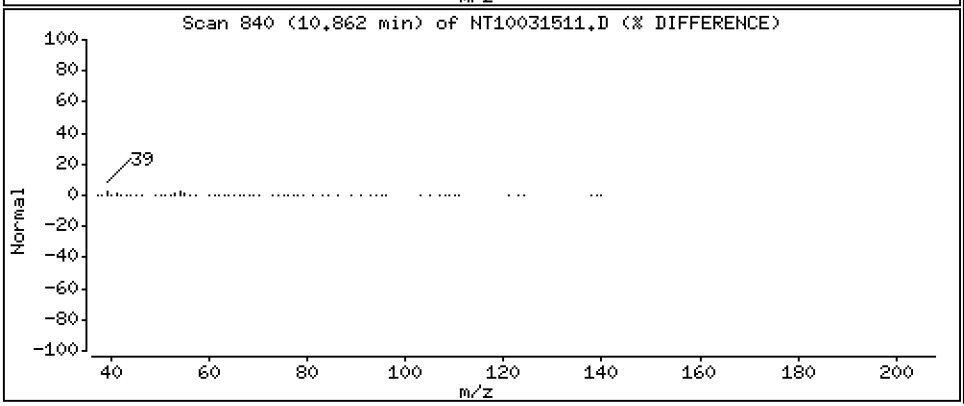












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

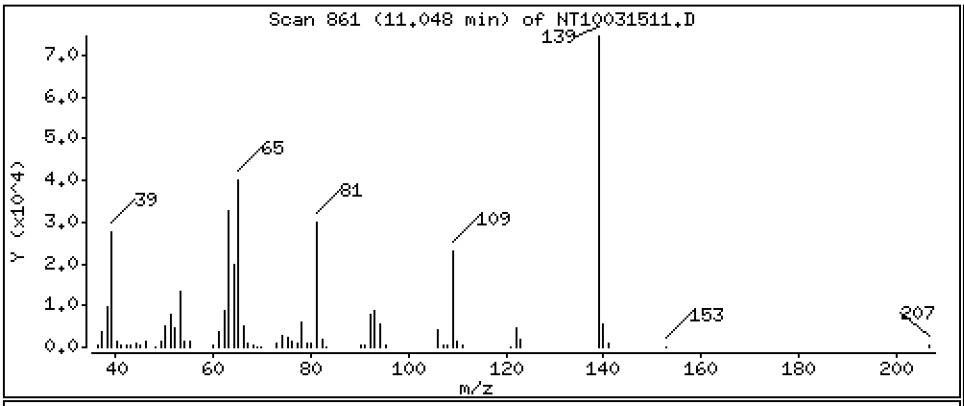
Operator: VTS

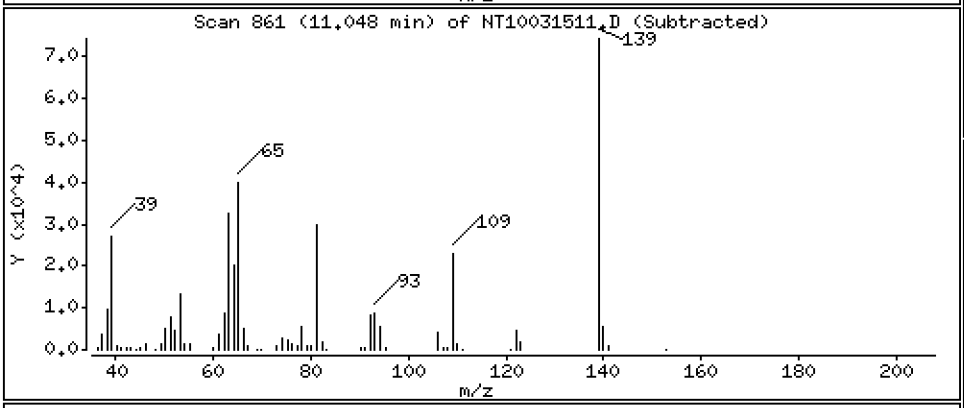
Column phase: ZB-5msi

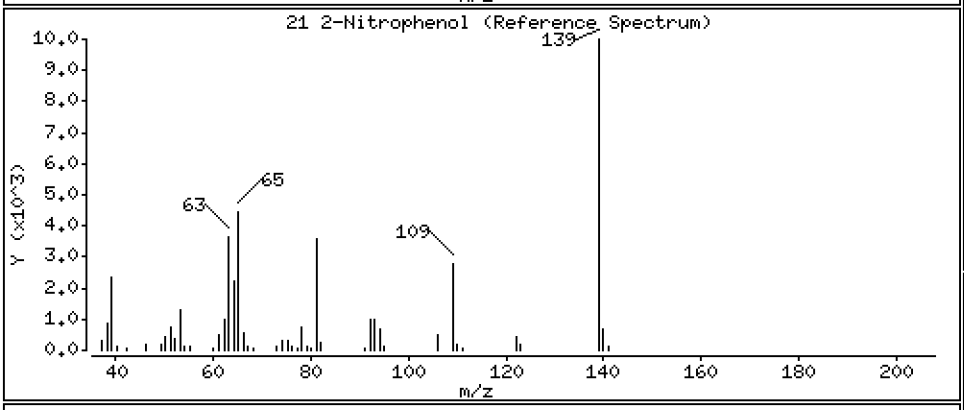
Column diameter: 0.25

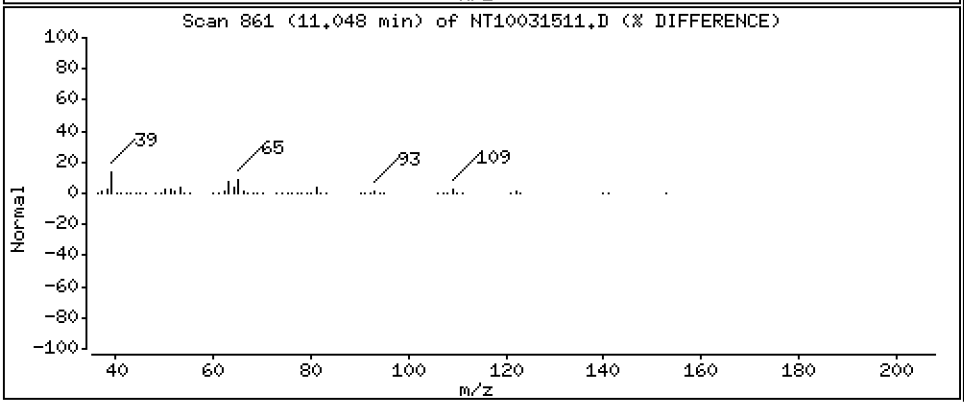
21 2-Nitrophenol

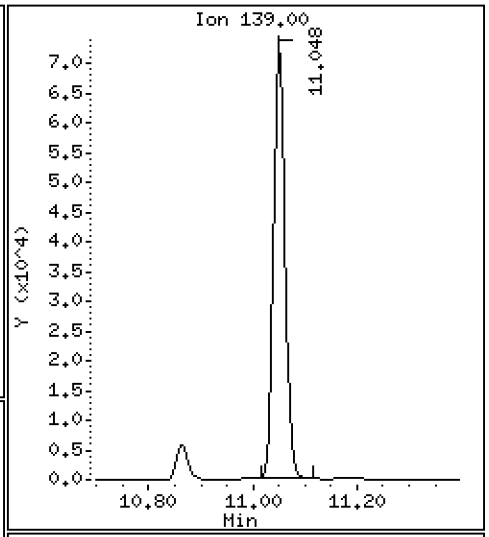
Concentration: 3.995 ug/mL

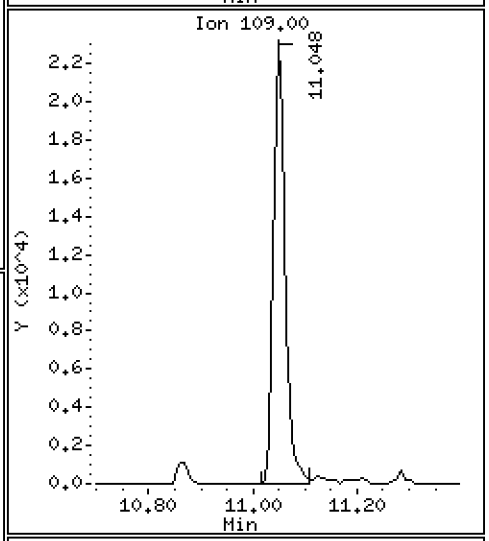


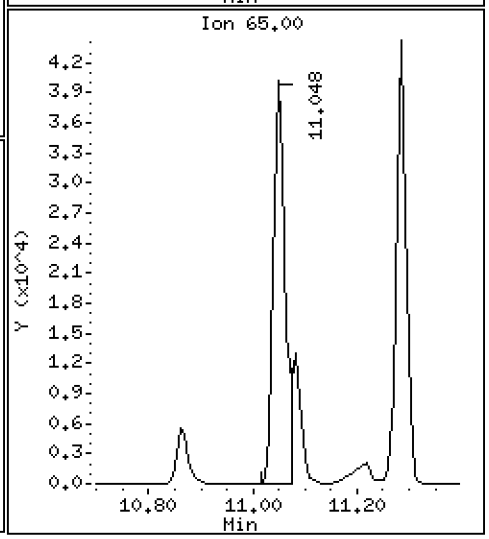












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

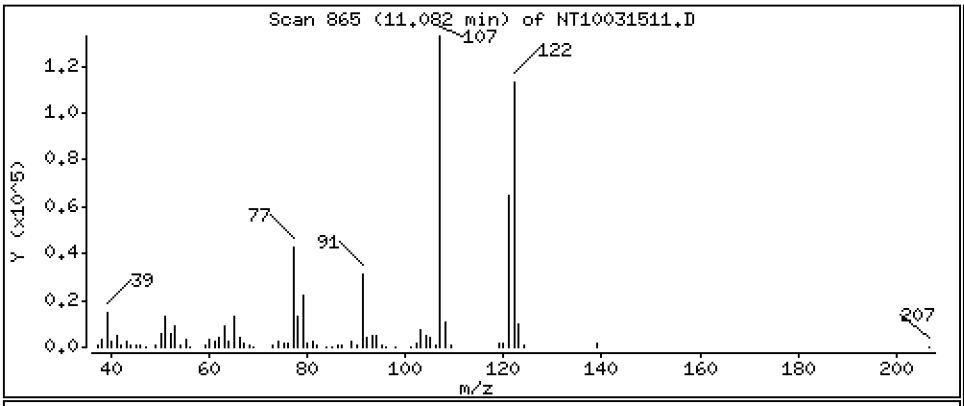
Operator: VTS

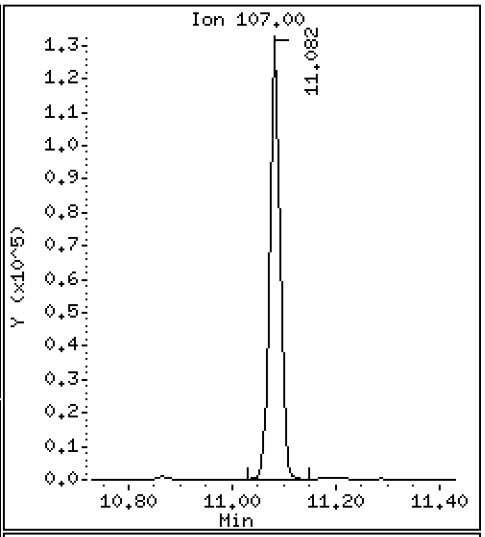
Column phase: ZB-5msi

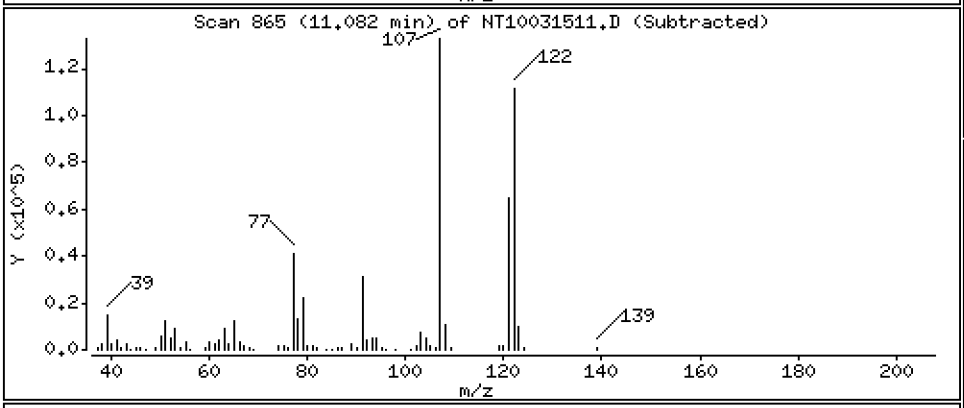
Column diameter: 0.25

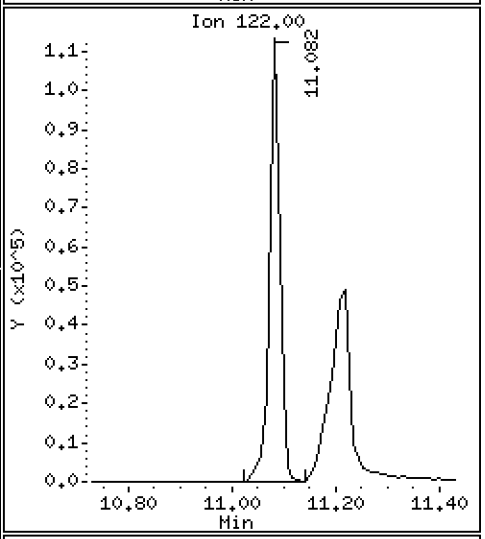
22 2,4-Dimethylphenol

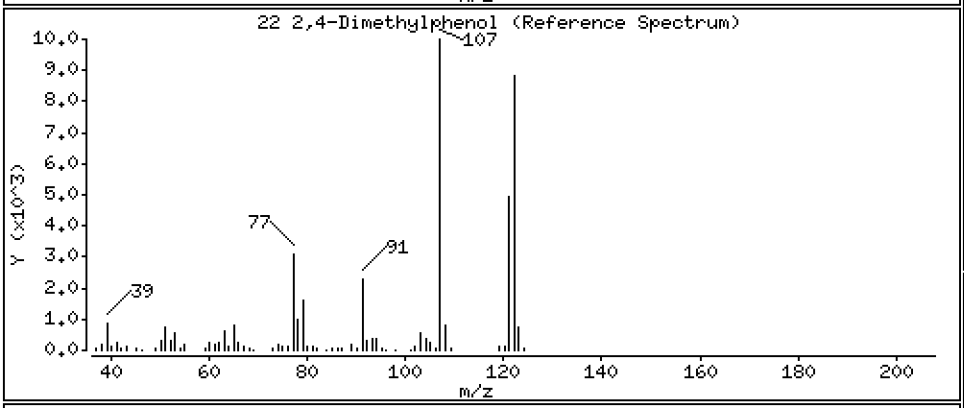
Concentration: 3.632 ug/mL

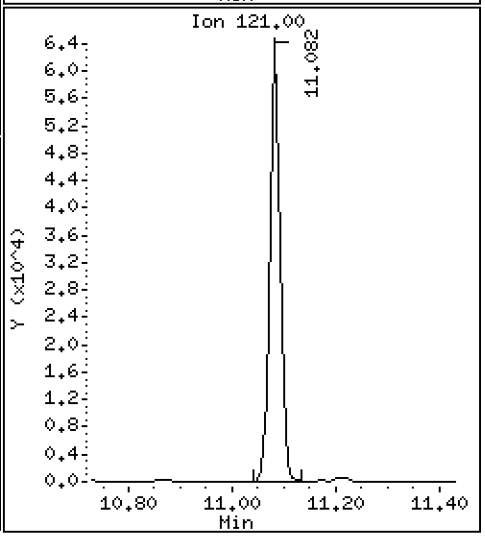


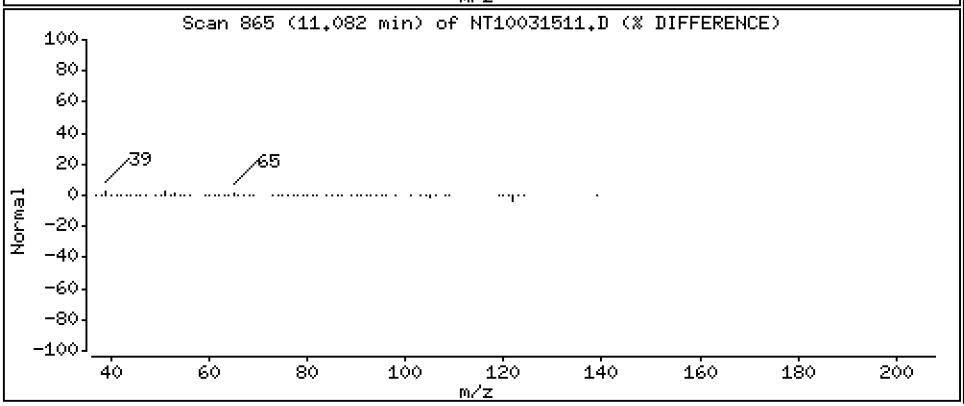












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

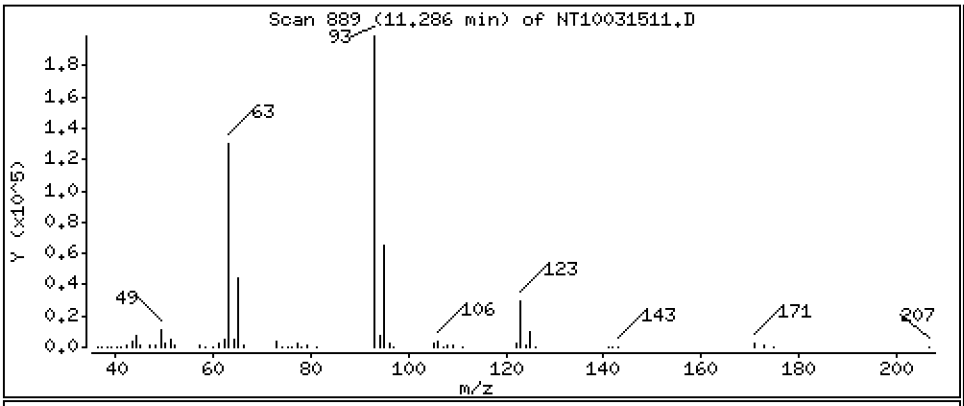
Operator: VTS

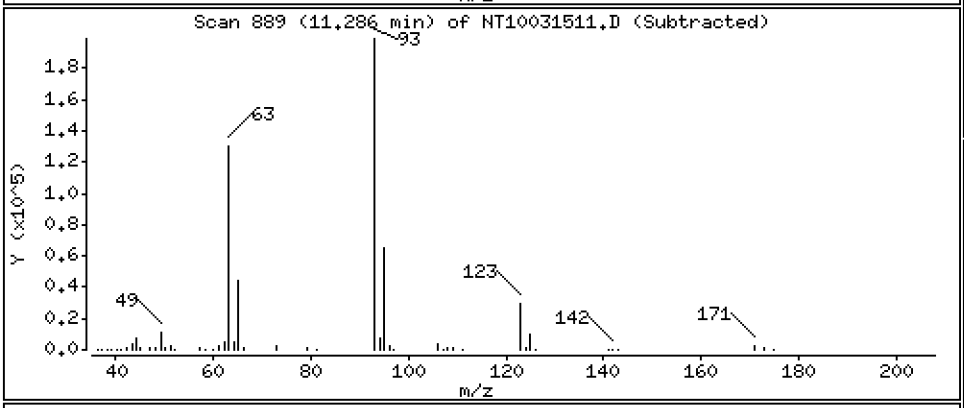
Column phase: ZB-5msi

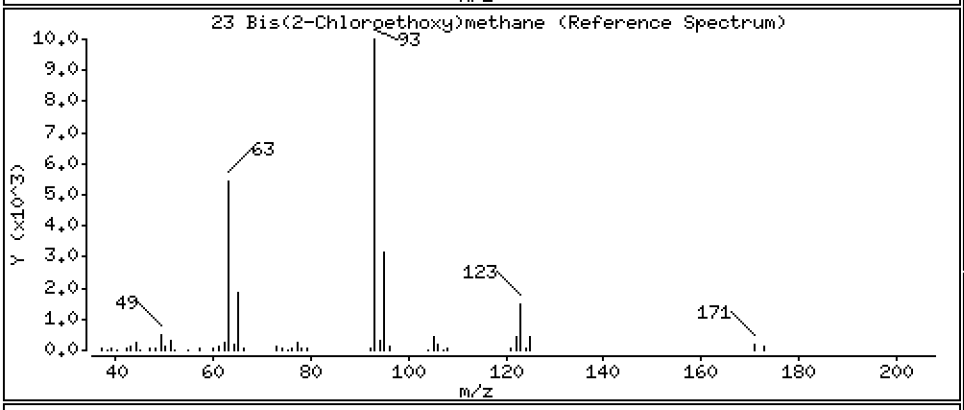
Column diameter: 0.25

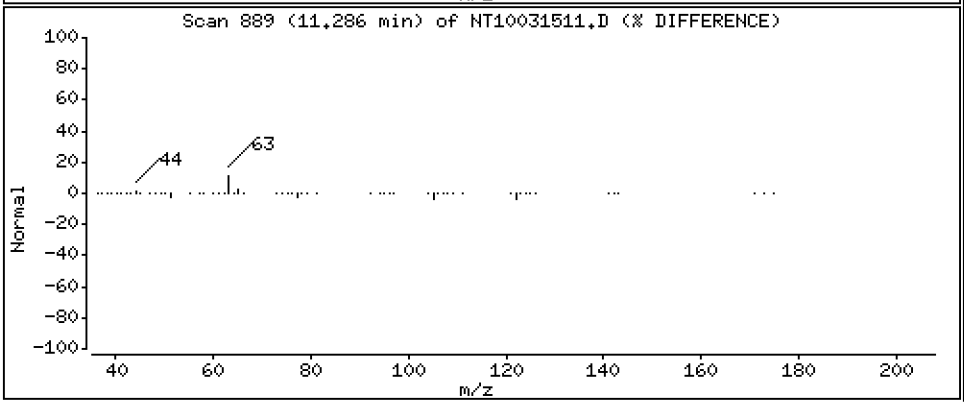
23 Bis(2-Chloroethoxy)methane

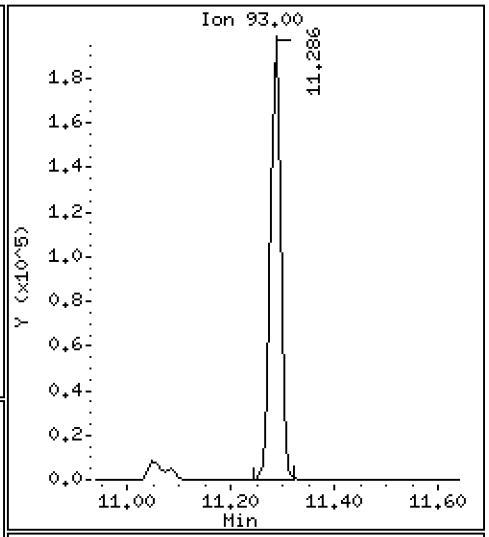
Concentration: 5.654 ug/mL

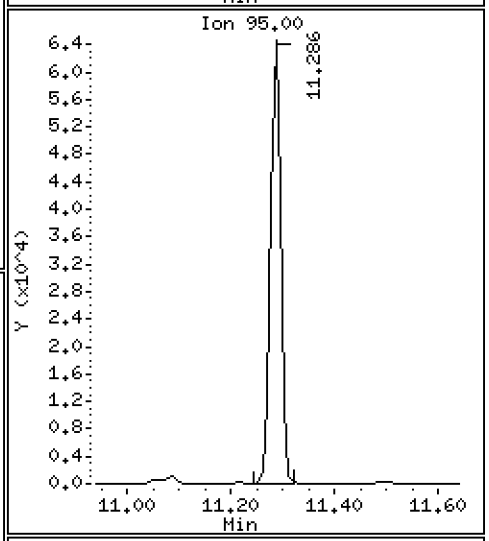


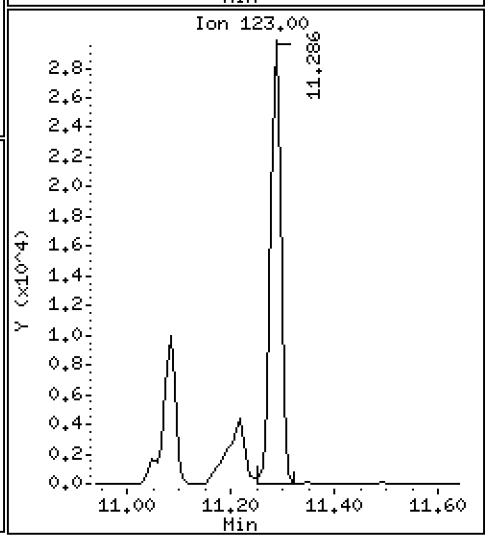












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

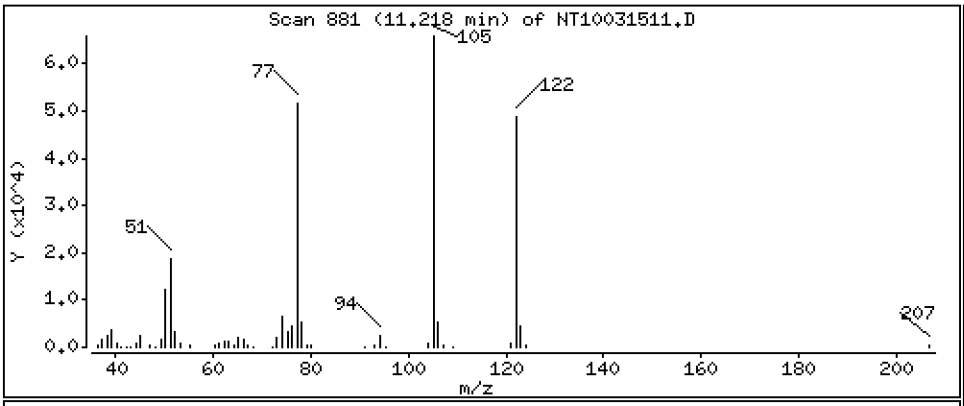
Operator: VTS

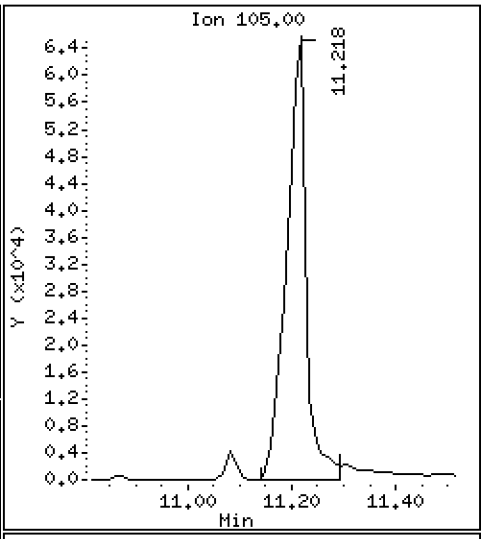
Column phase: ZB-5msi

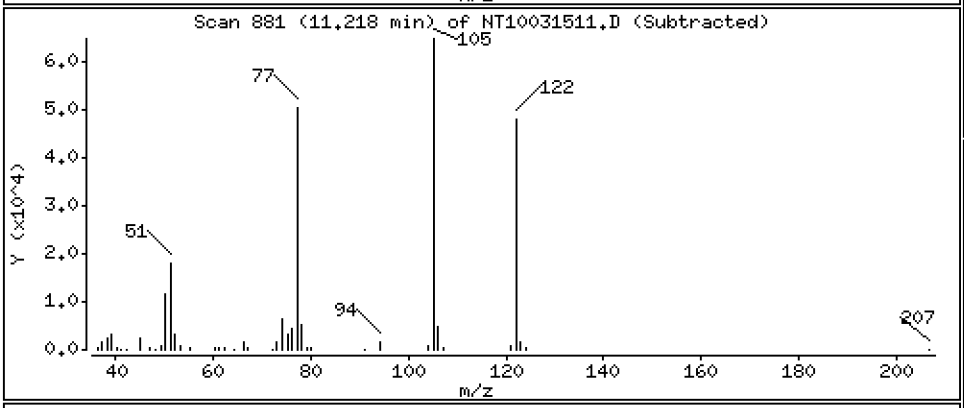
Column diameter: 0.25

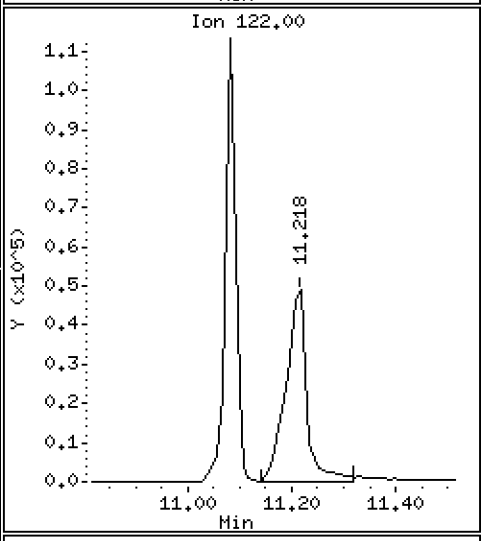
24 Benzoic acid

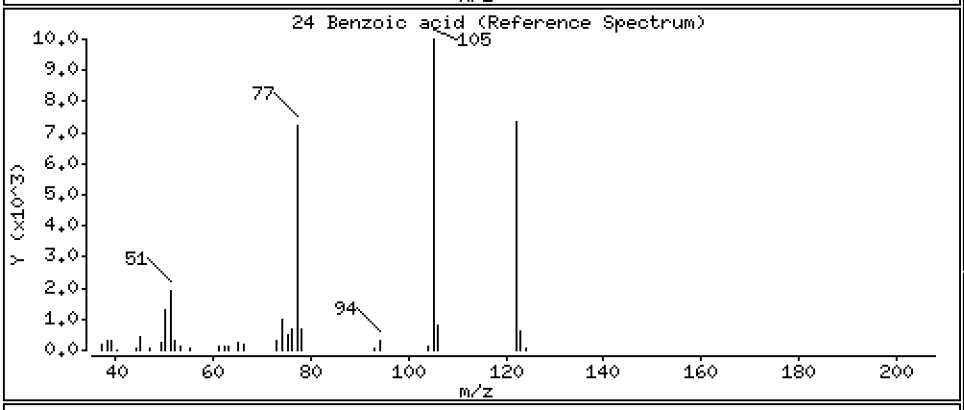
Concentration: 5.952 ug/mL

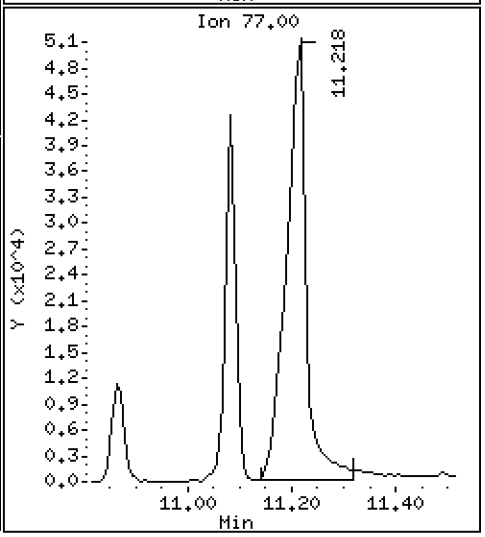


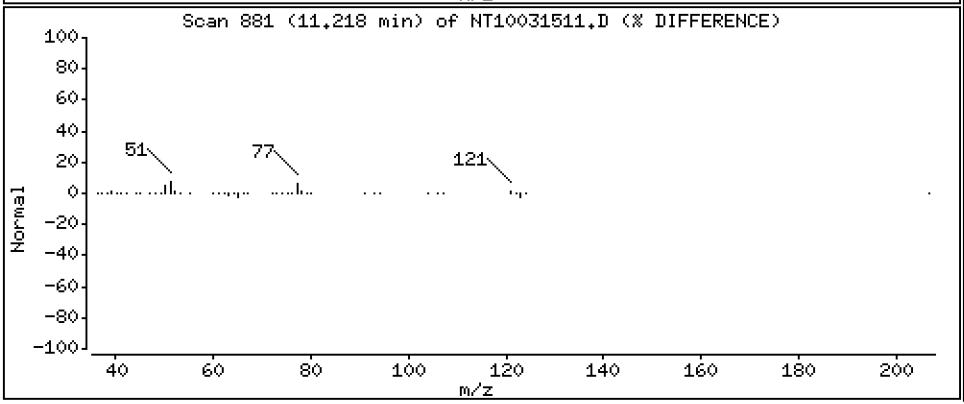












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

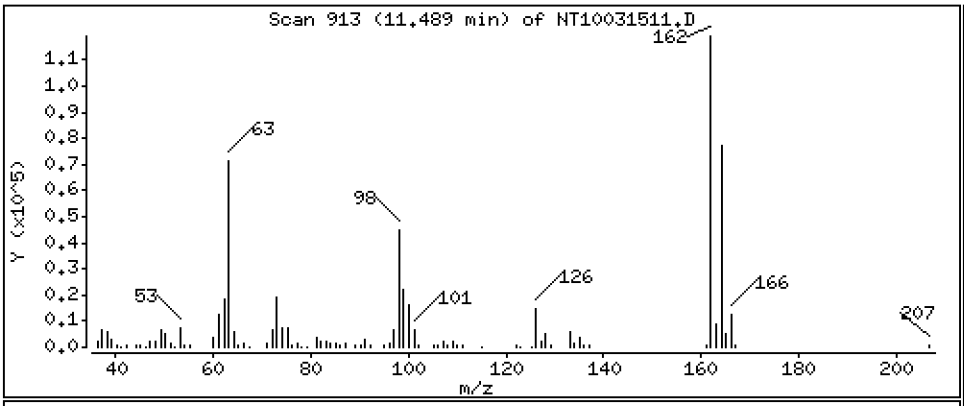
Operator: VTS

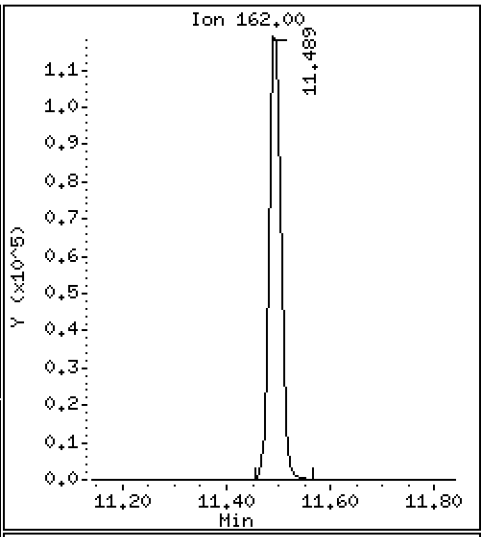
Column phase: ZB-5msi

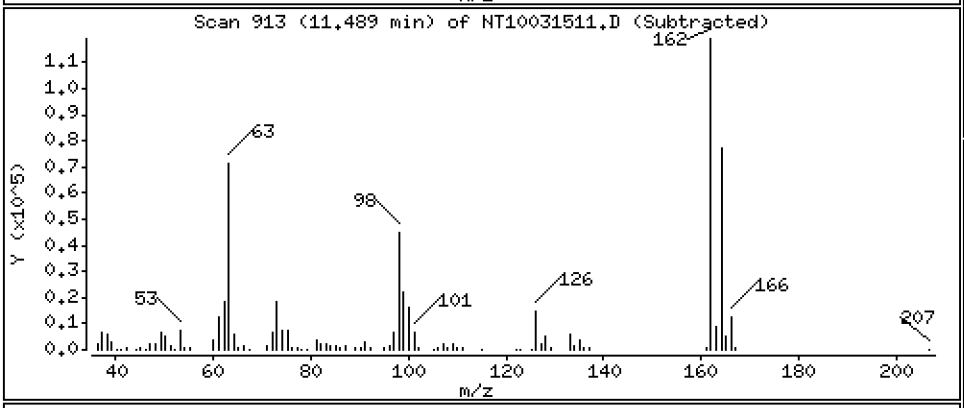
Column diameter: 0.25

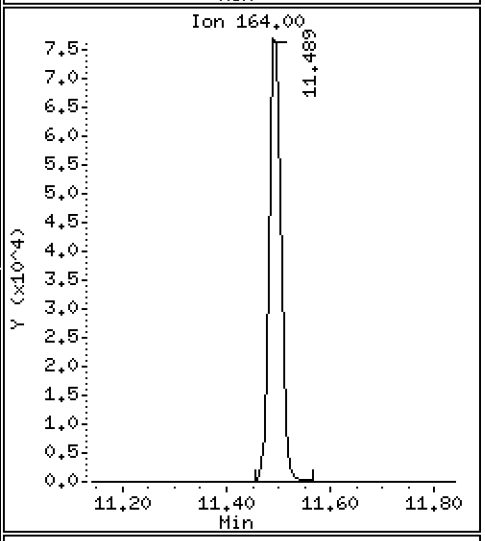
25 2,4-Dichlorophenol

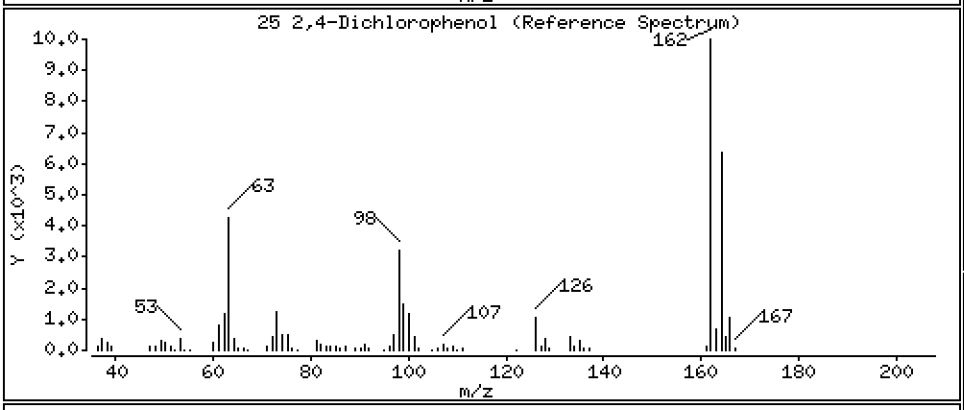
Concentration: 4.703 ug/mL

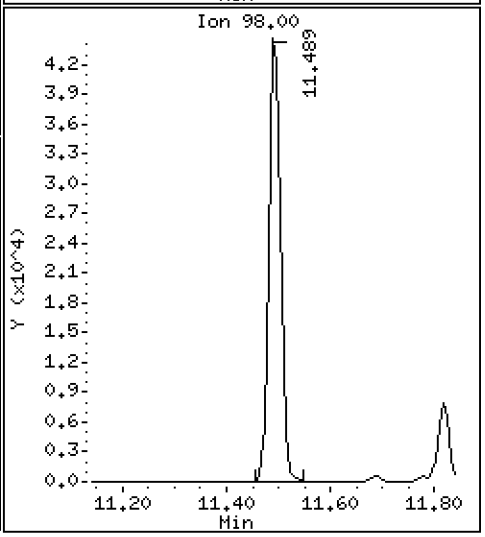


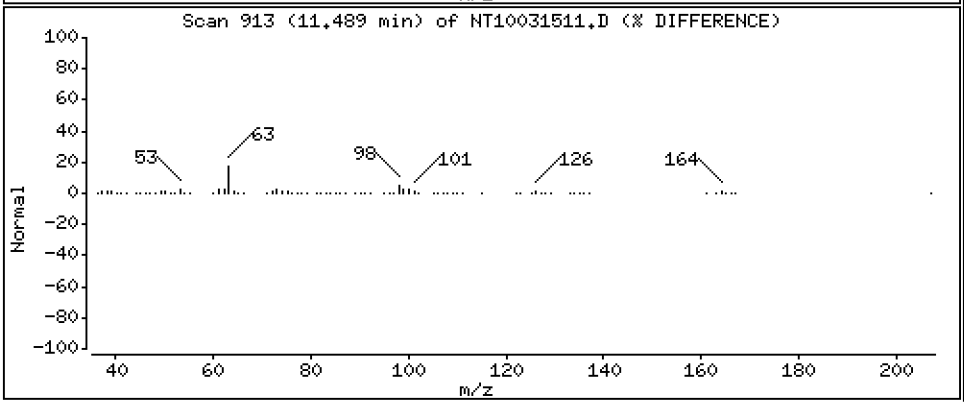












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

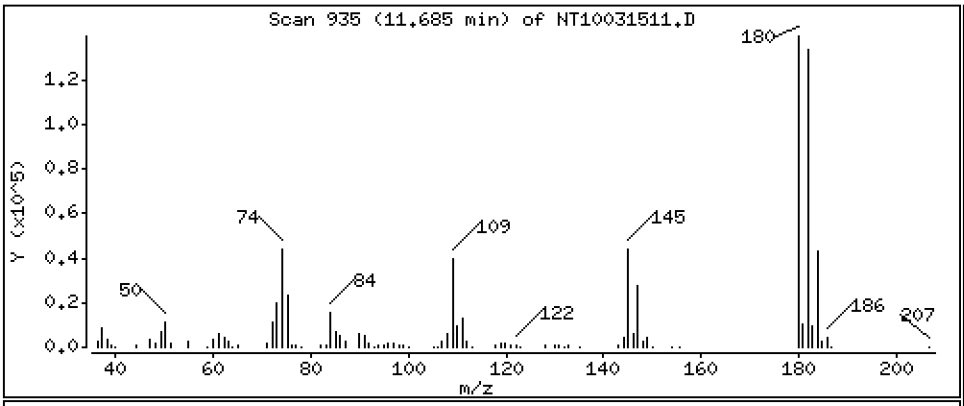
Operator: VTS

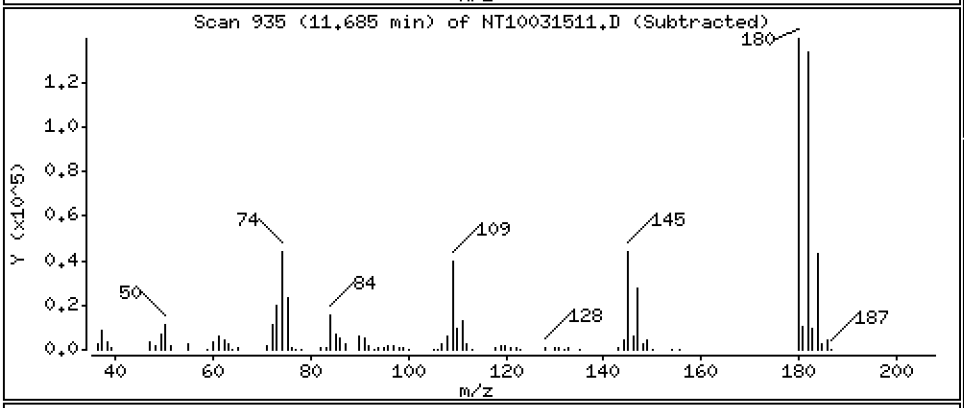
Column phase: ZB-5msi

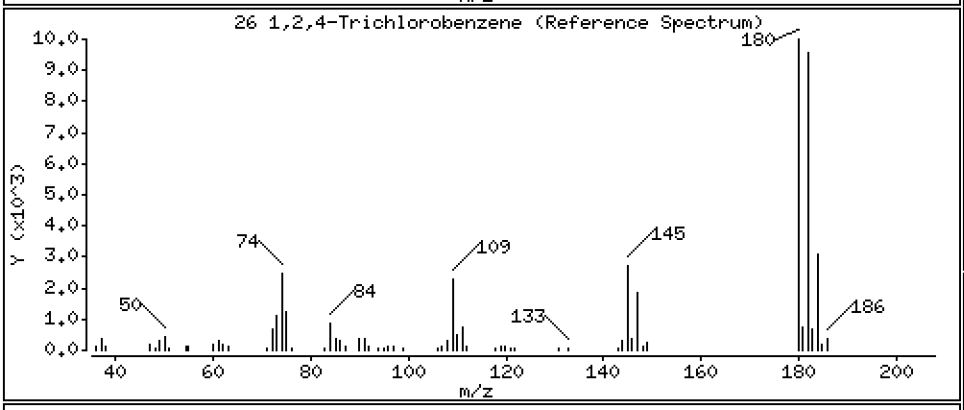
Column diameter: 0.25

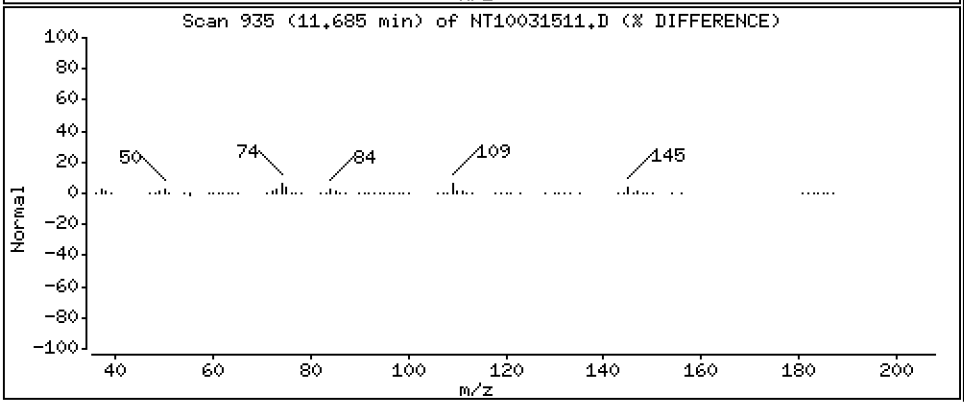
26 1,2,4-Trichlorobenzene

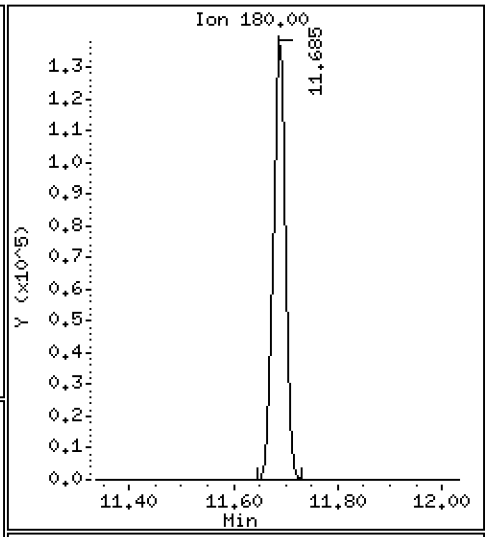
Concentration: 4.554 ug/mL

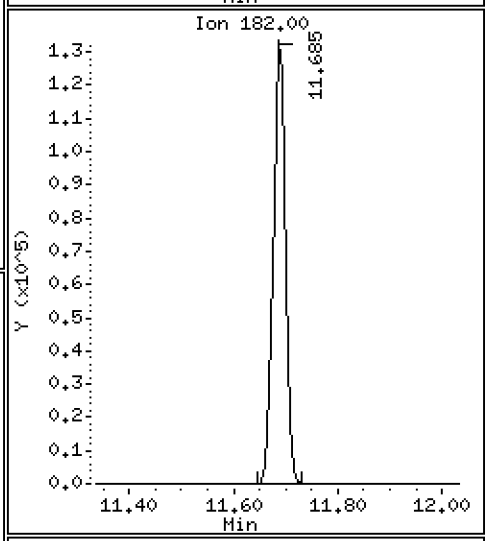


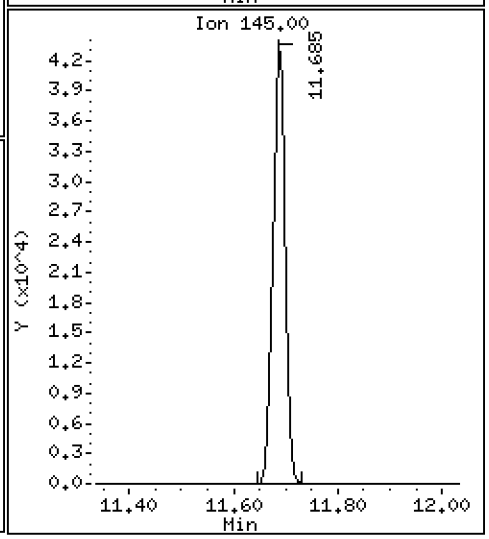












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

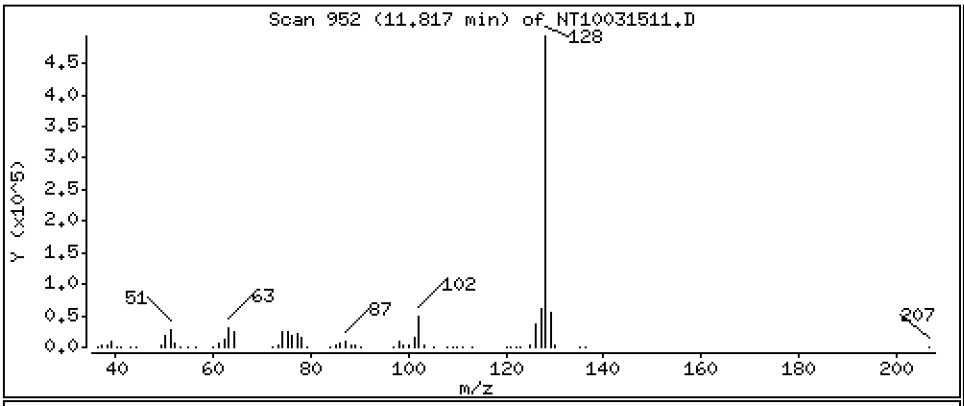
Operator: VTS

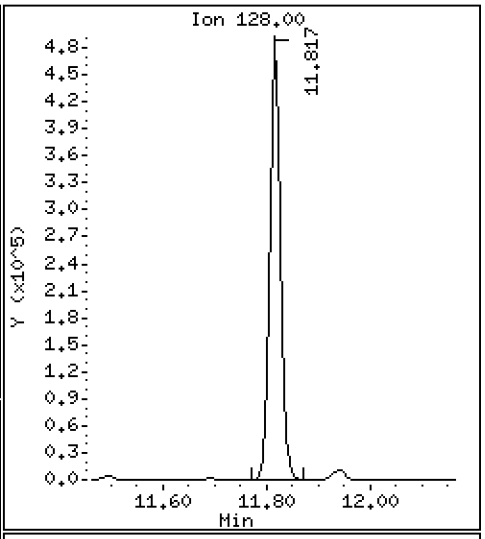
Column phase: ZB-5msi

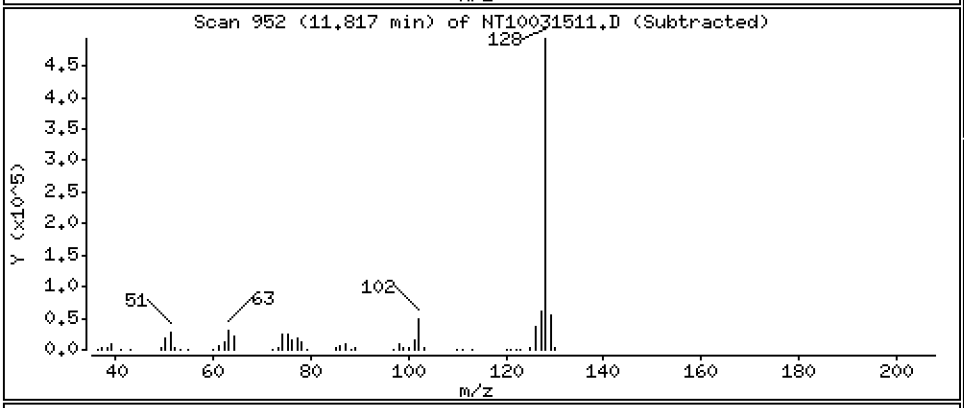
Column diameter: 0.25

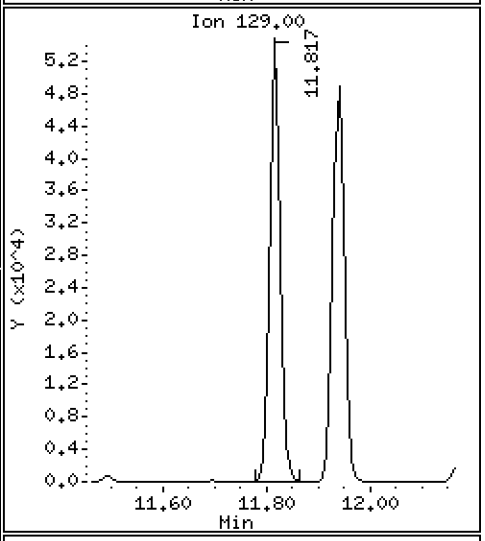
28 Naphthalene

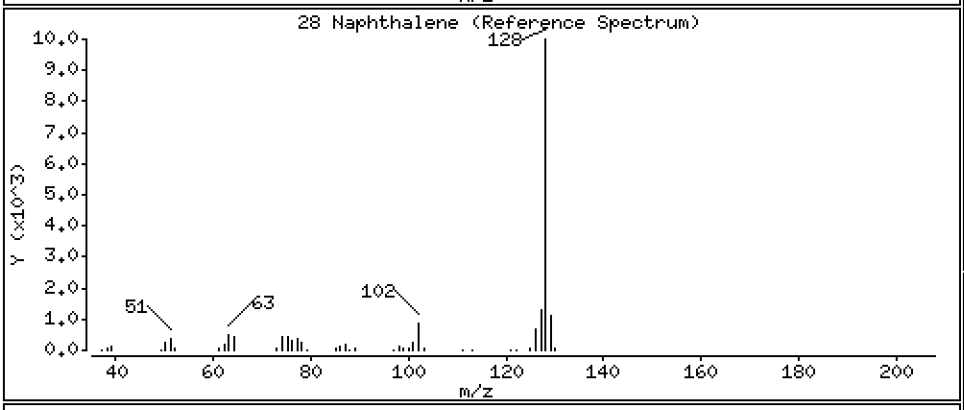
Concentration: 4.717 ug/mL

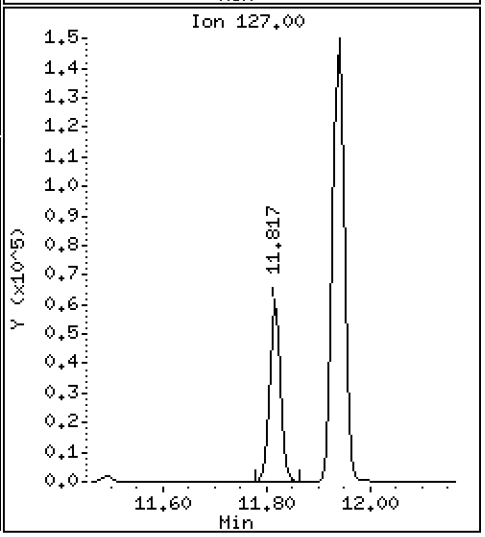


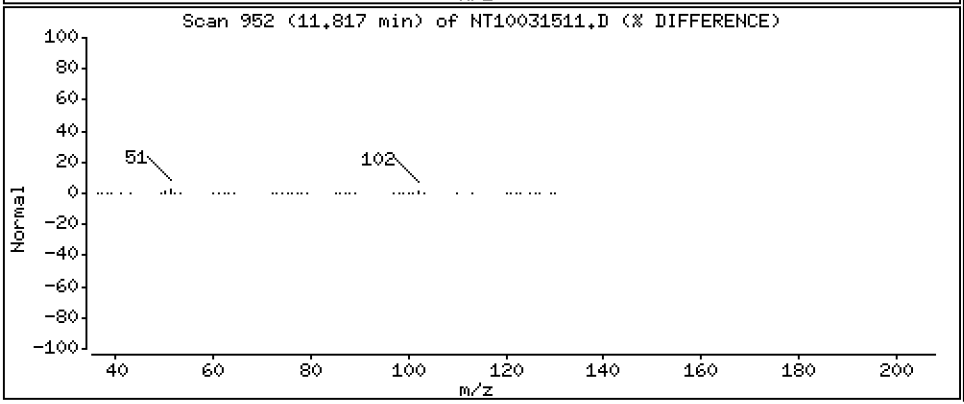












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

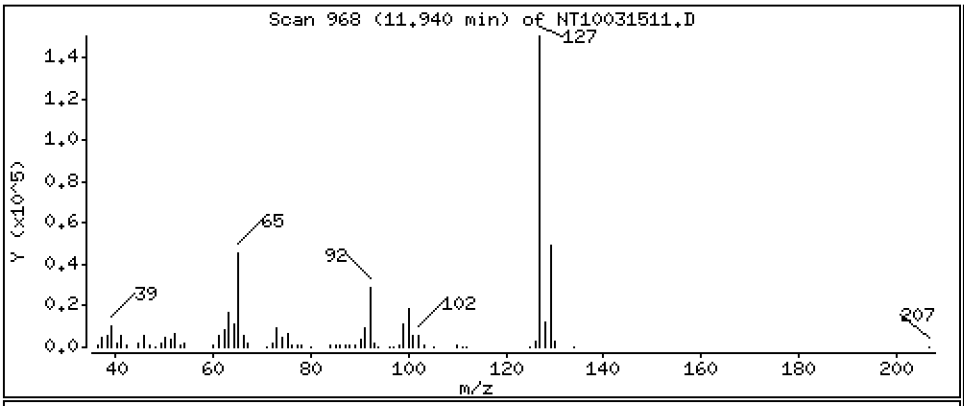
Operator: VTS

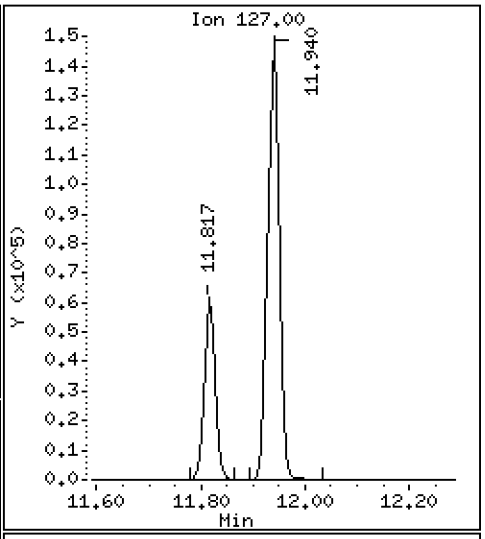
Column phase: ZB-5msi

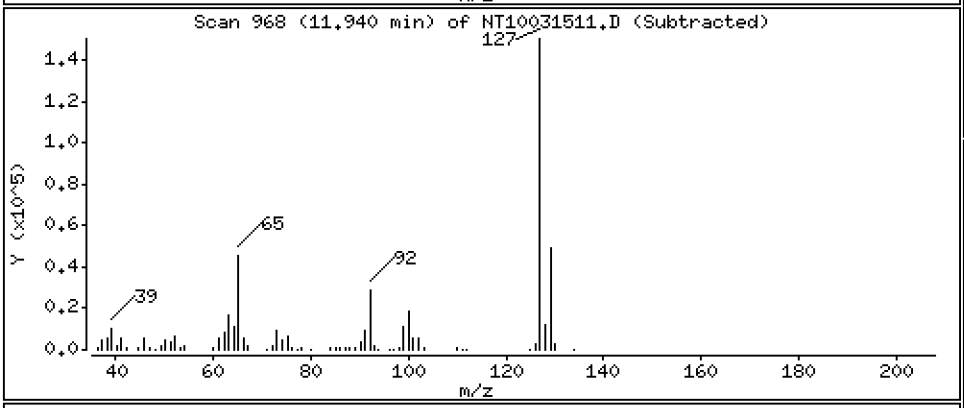
Column diameter: 0.25

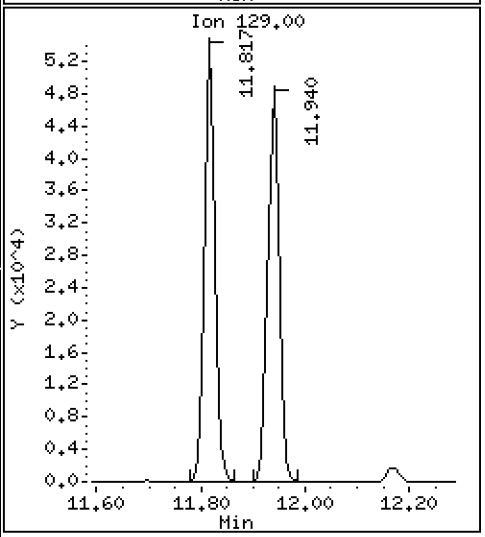
29 4-Chloroaniline

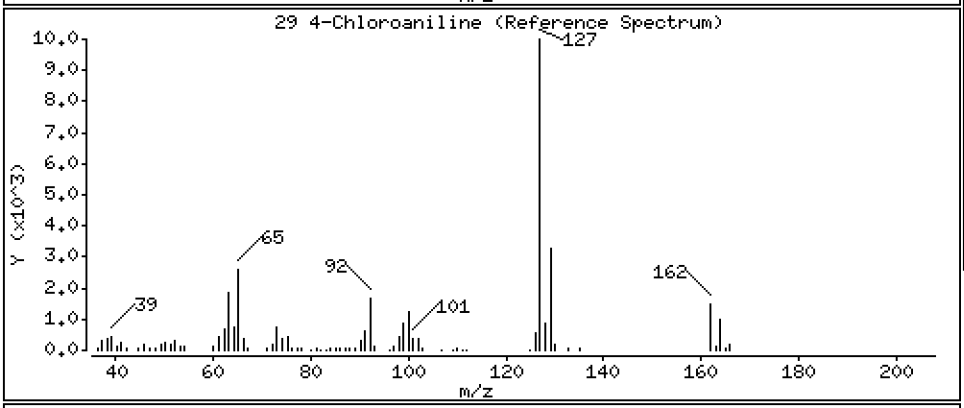
Concentration: 3.787 ug/mL

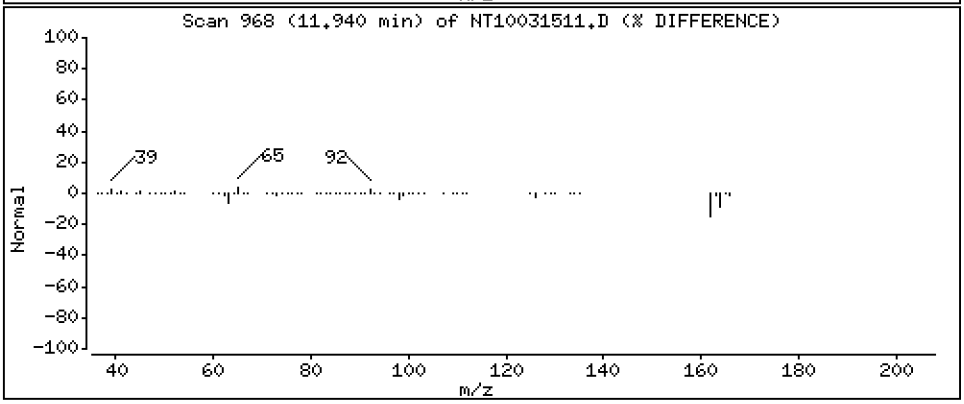












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

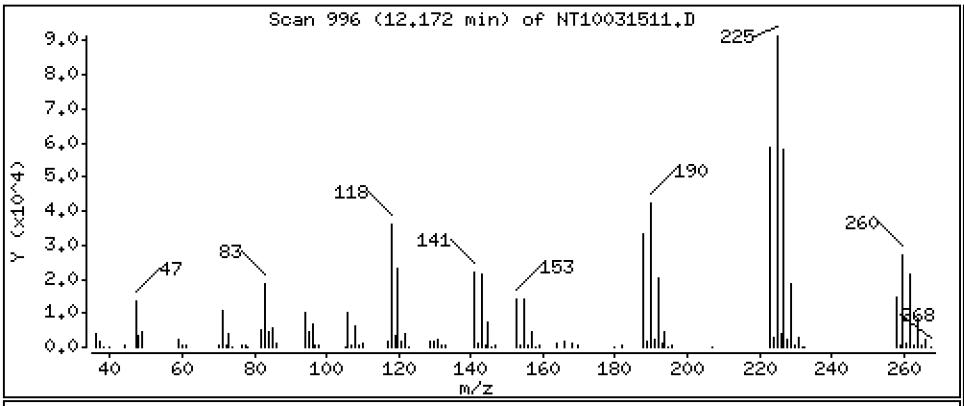
Operator: VTS

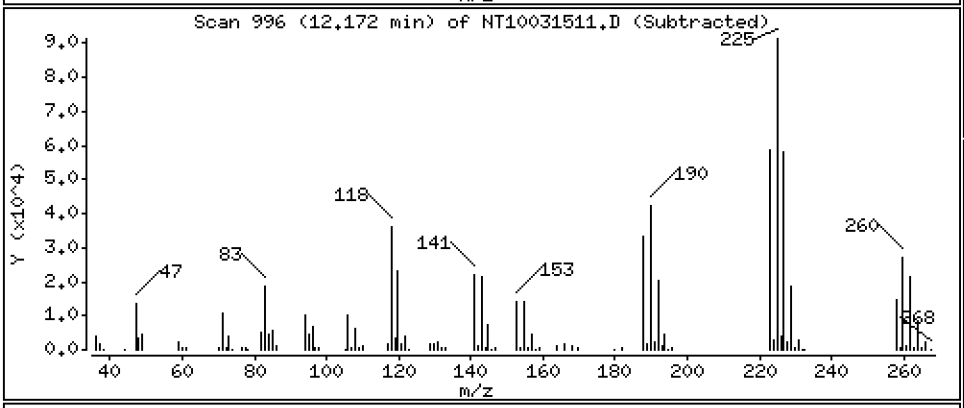
Column phase: ZB-5msi

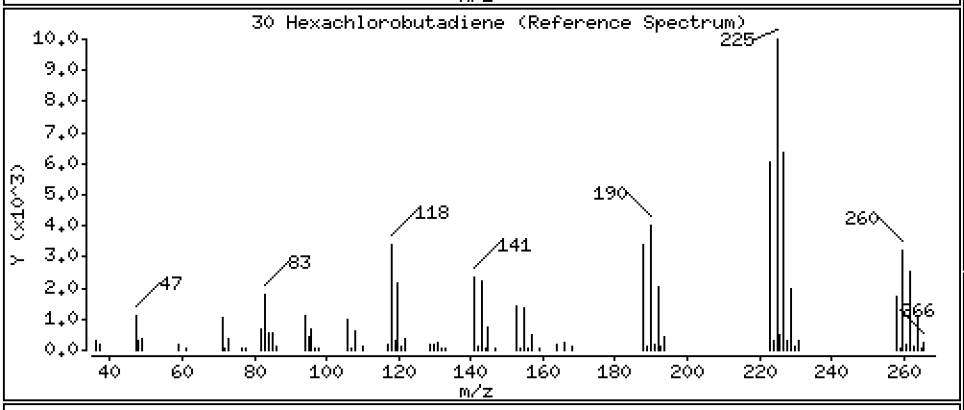
Column diameter: 0.25

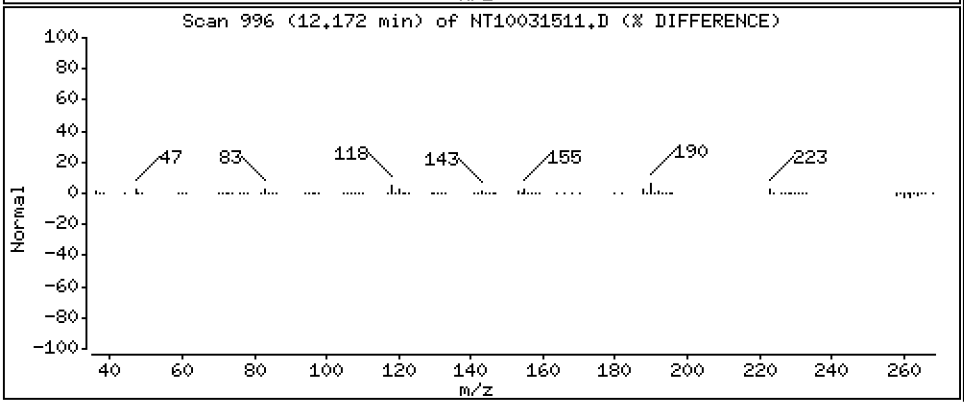
30 Hexachlorobutadiene

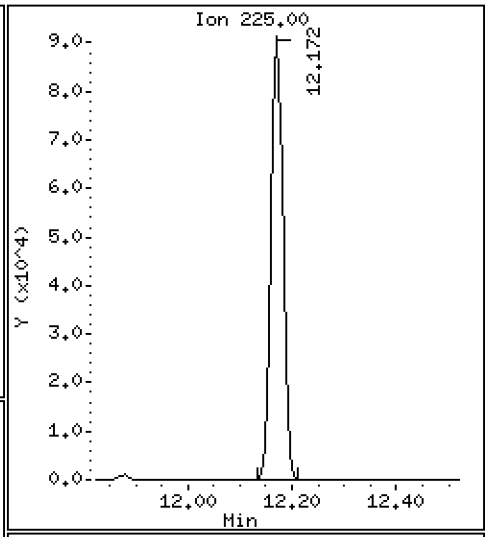
Concentration: 4.834 ug/mL

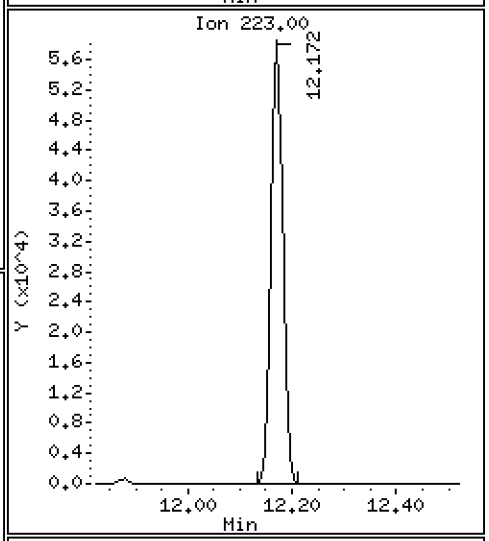


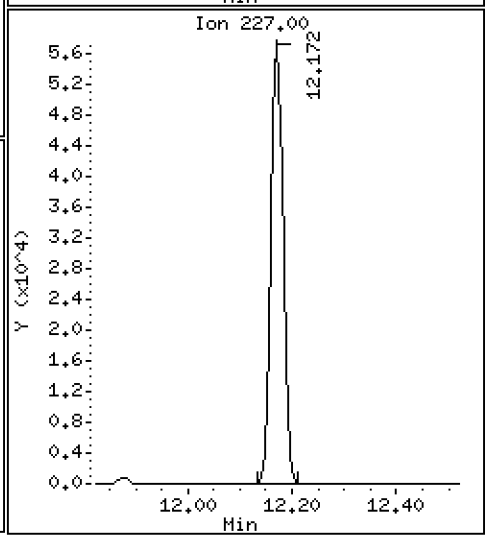












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

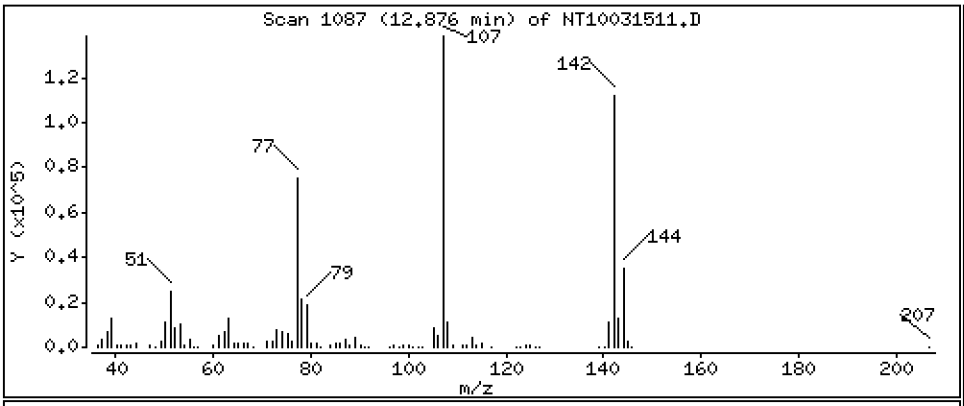
Operator: VTS

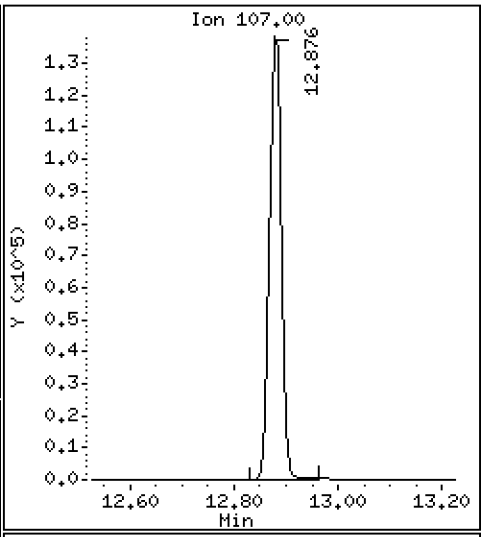
Column phase: ZB-5msi

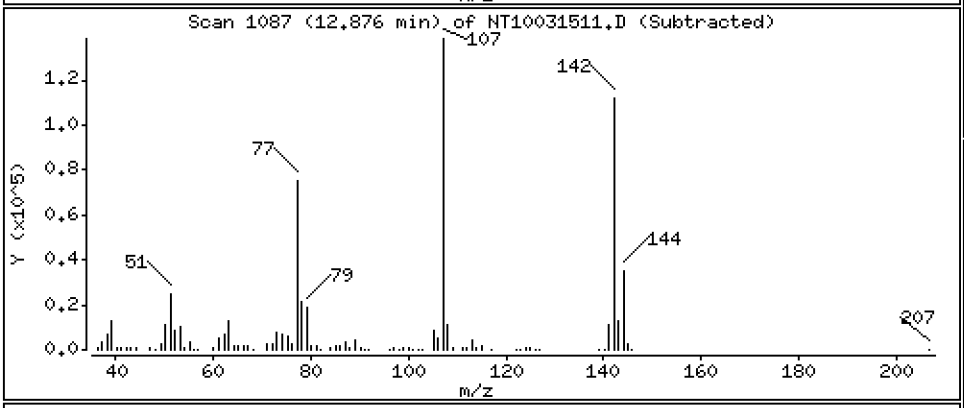
Column diameter: 0.25

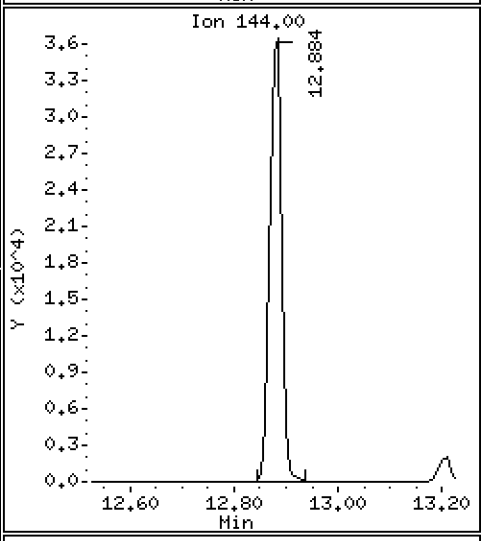
31 4-Chloro-3-methylphenol

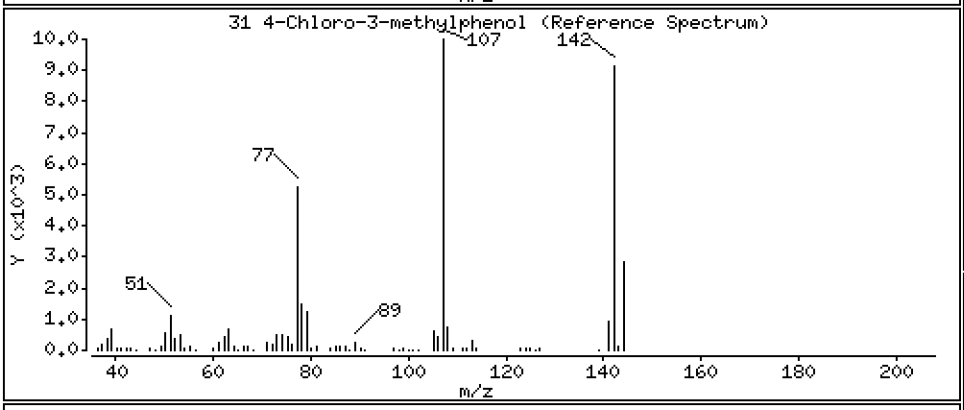
Concentration: 4.640 ug/mL

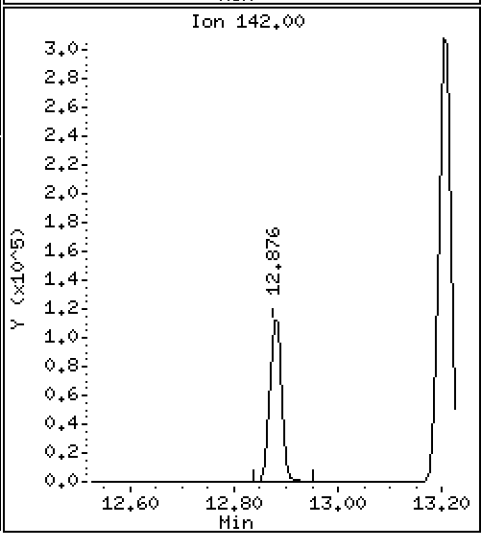


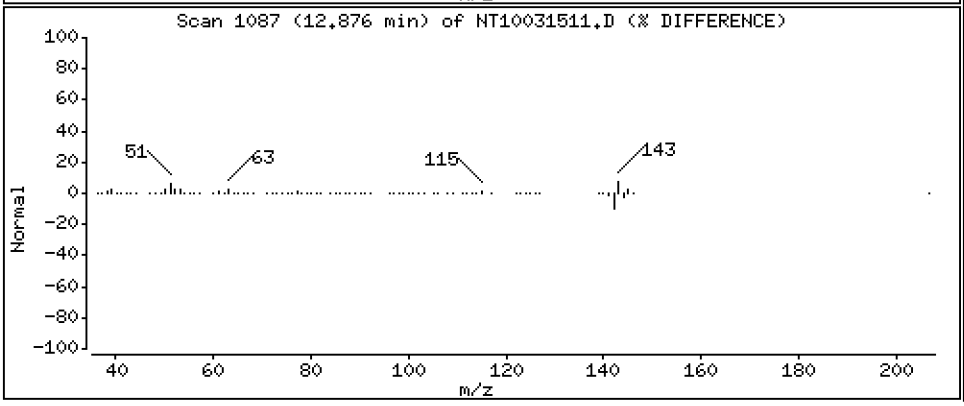












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

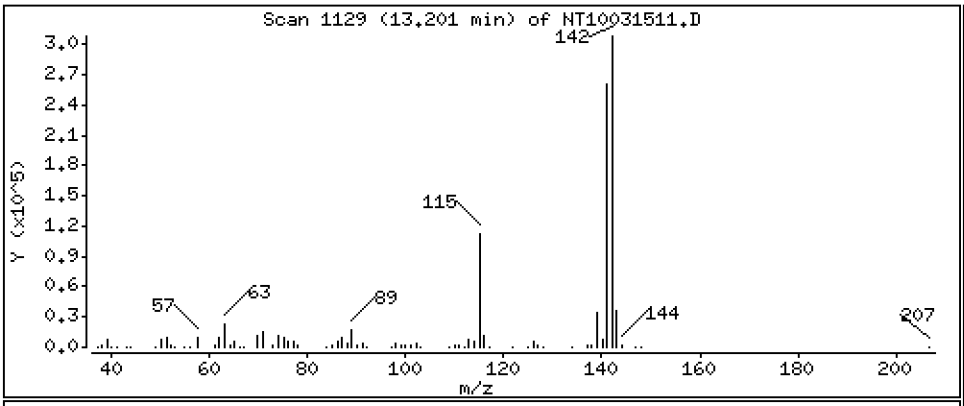
Operator: VTS

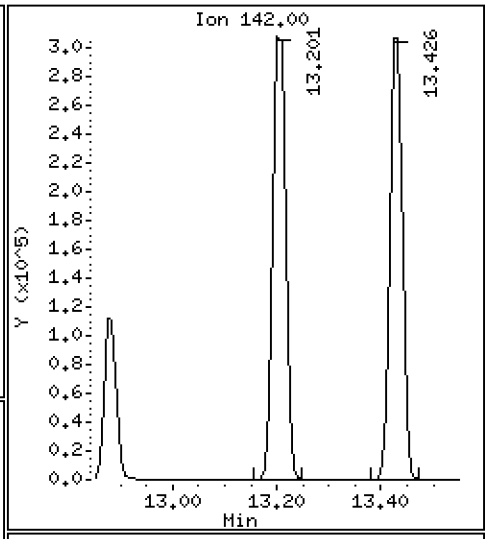
Column phase: ZB-5msi

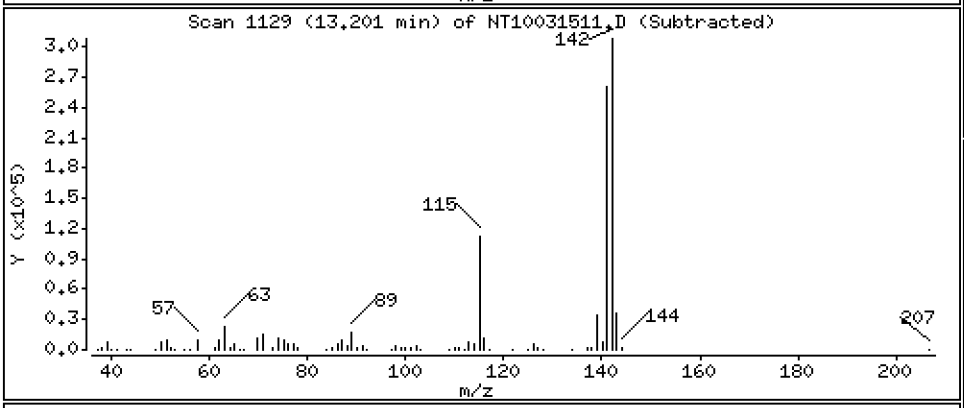
Column diameter: 0.25

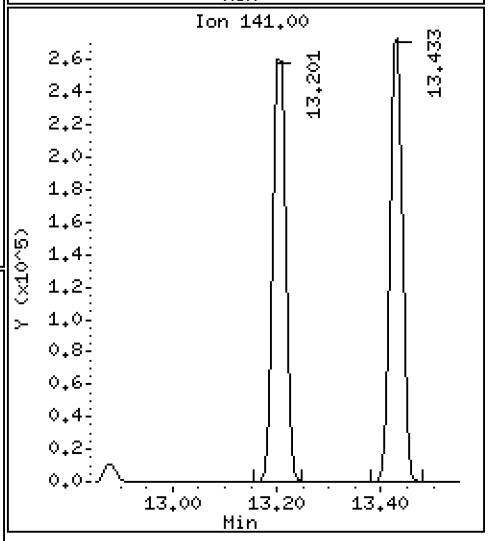
32 2-Methylnaphthalene

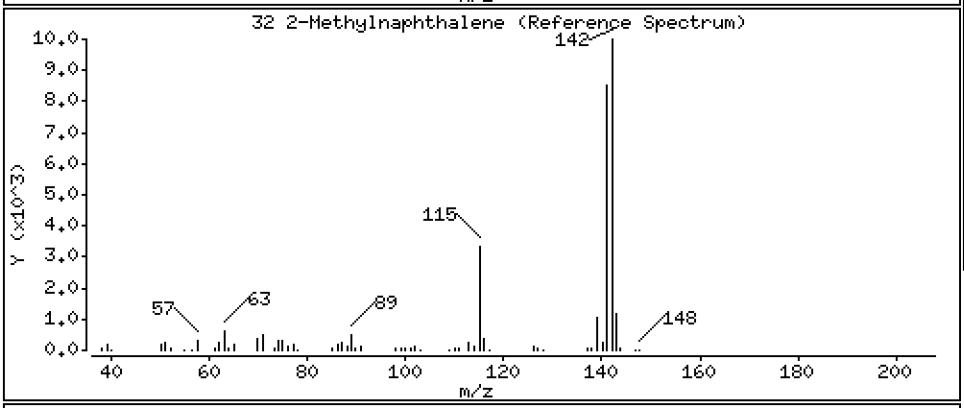
Concentration: 4.596 ug/mL

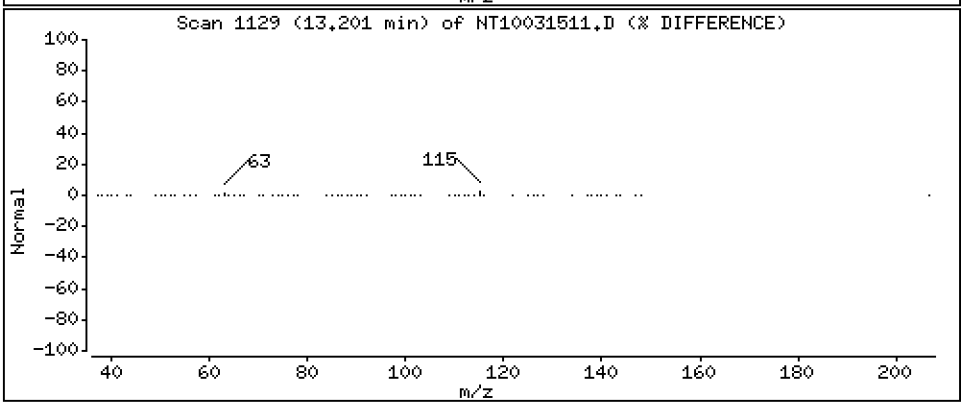












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

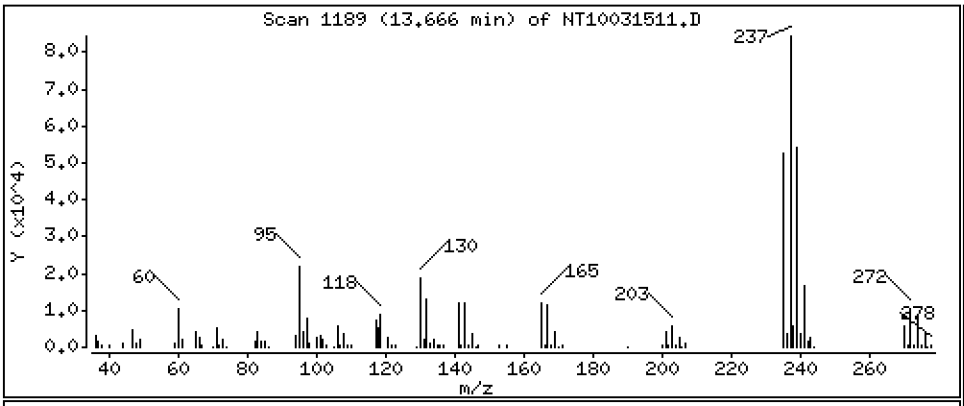
Operator: VTS

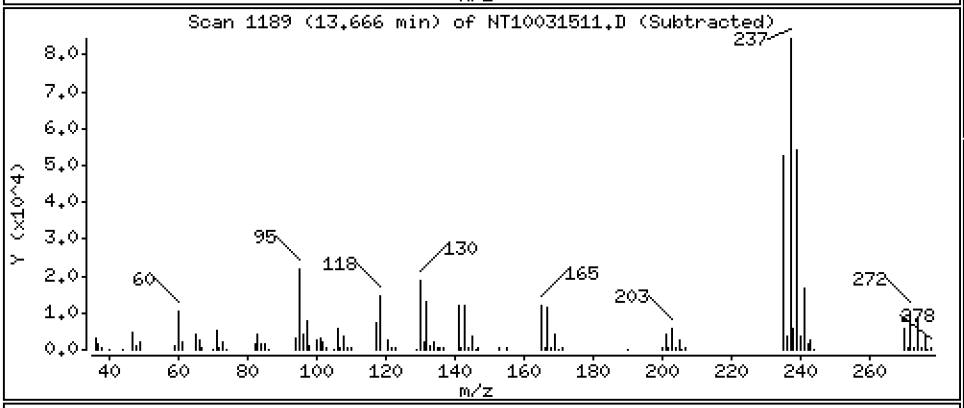
Column phase: ZB-5msi

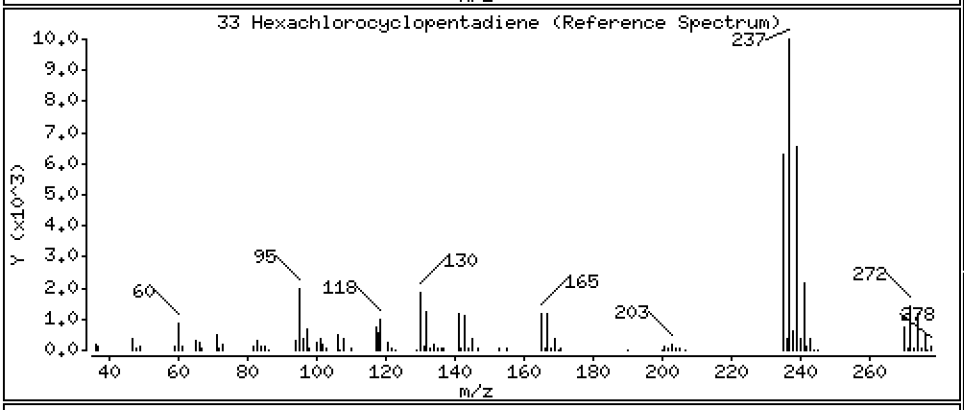
Column diameter: 0.25

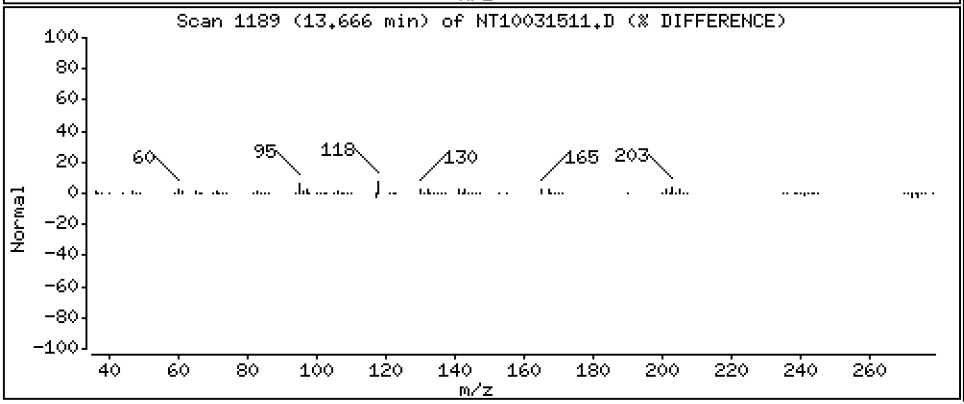
33 Hexachlorocyclopentadiene

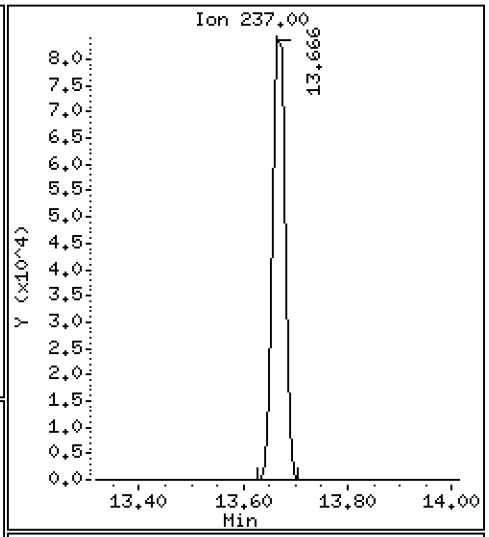
Concentration: 4.729 ug/mL

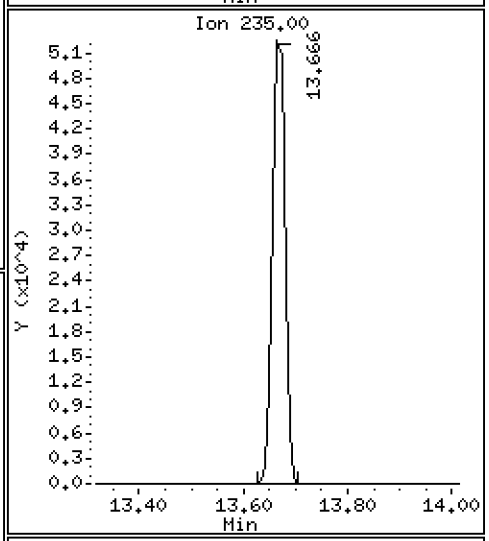


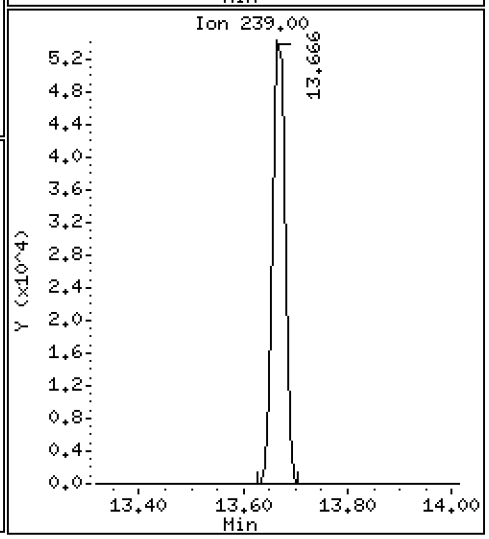












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

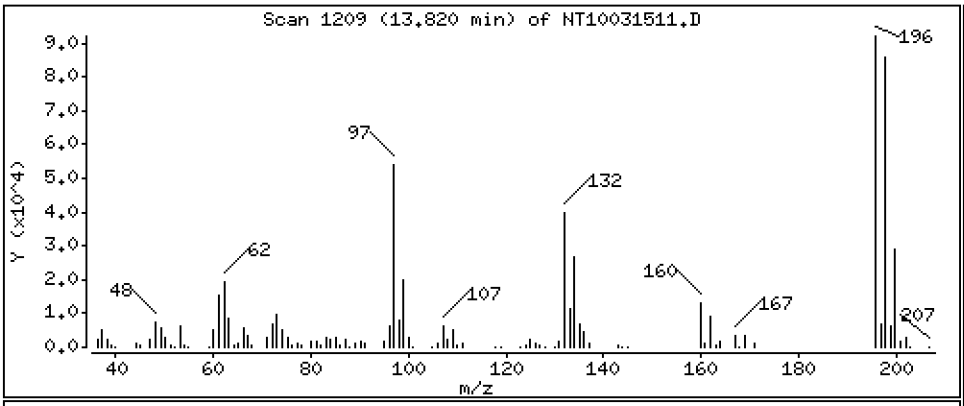
Operator: VTS

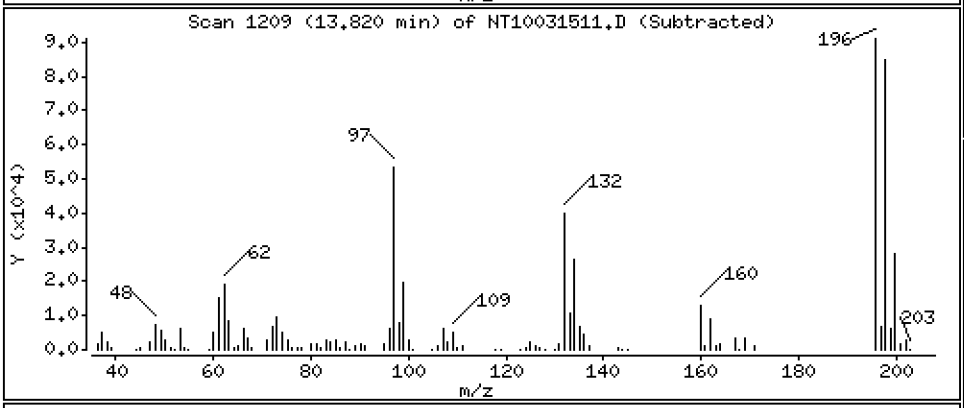
Column phase: ZB-5msi

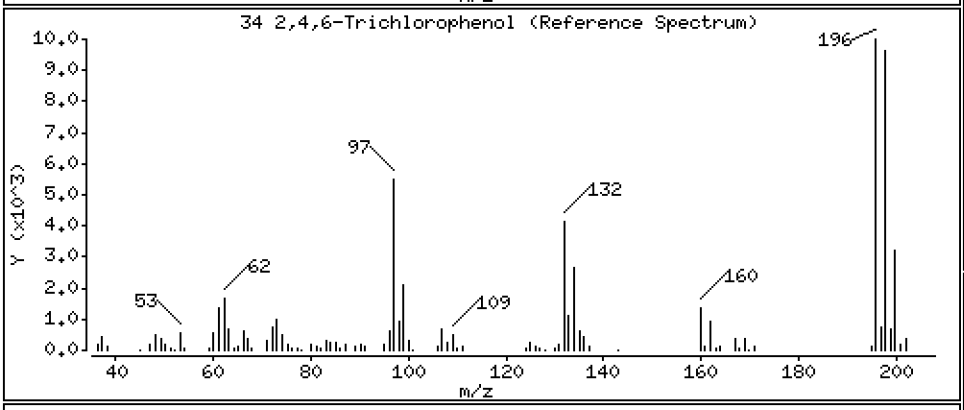
Column diameter: 0.25

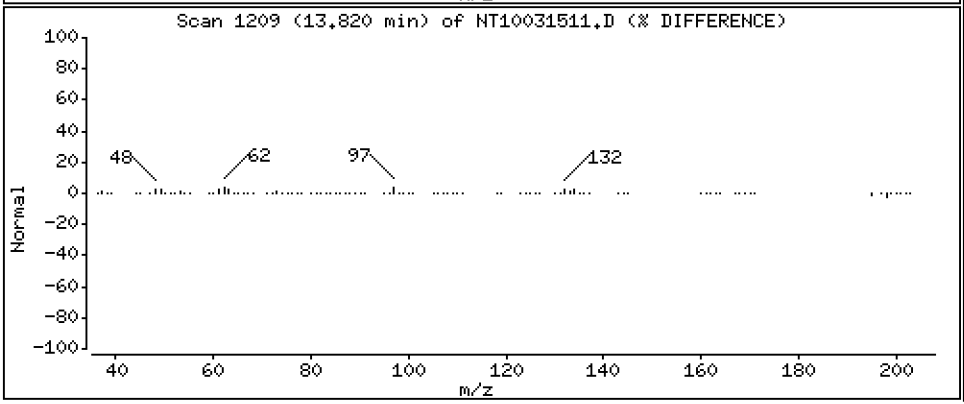
34 2,4,6-Trichlorophenol

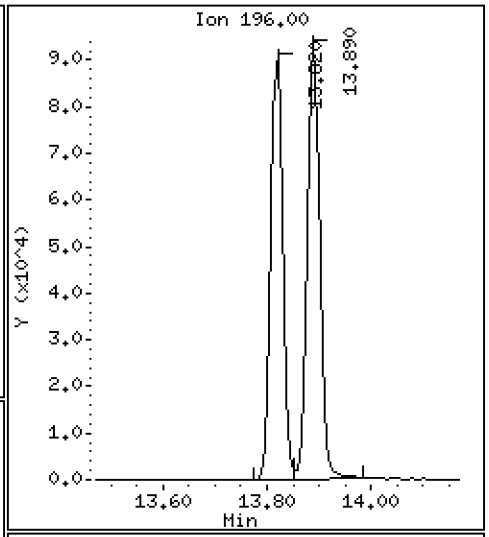
Concentration: 4.596 ug/mL

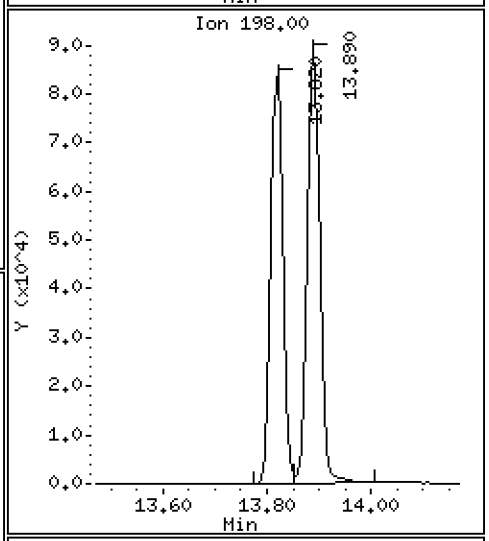


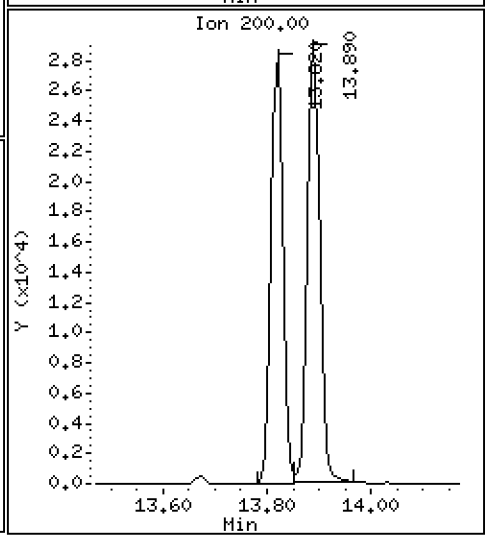












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

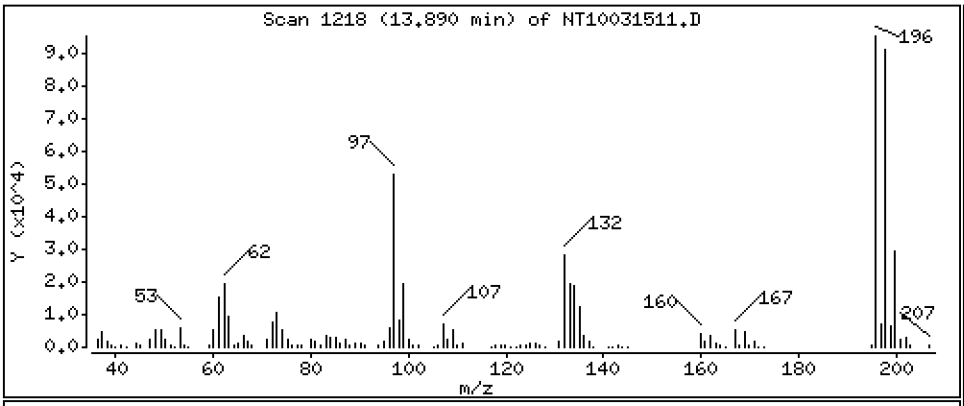
Operator: VTS

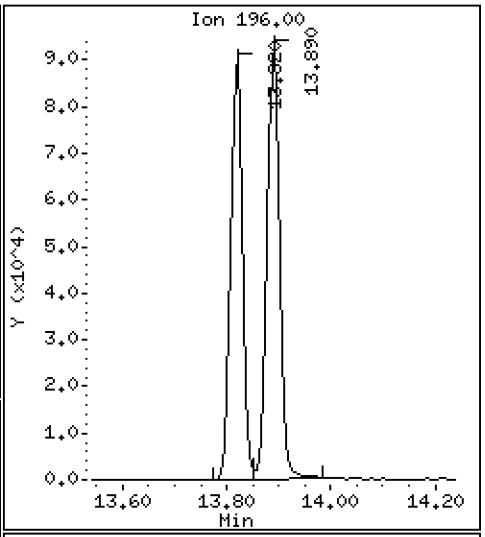
Column phase: ZB-5msi

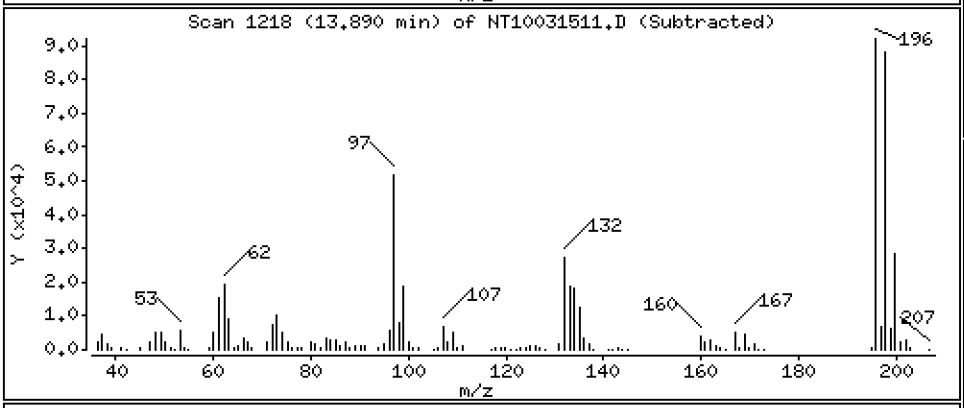
Column diameter: 0.25

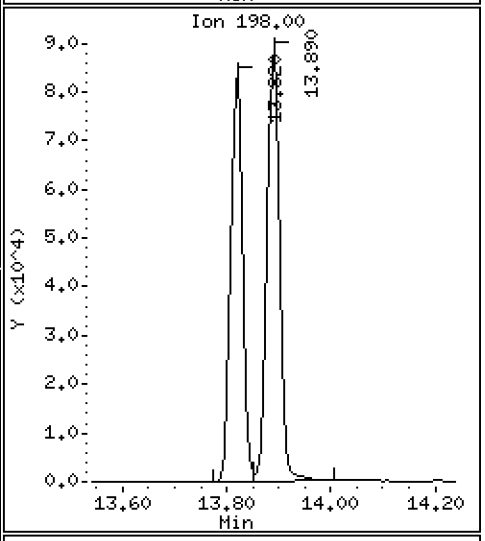
35 2,4,5-Trichlorophenol

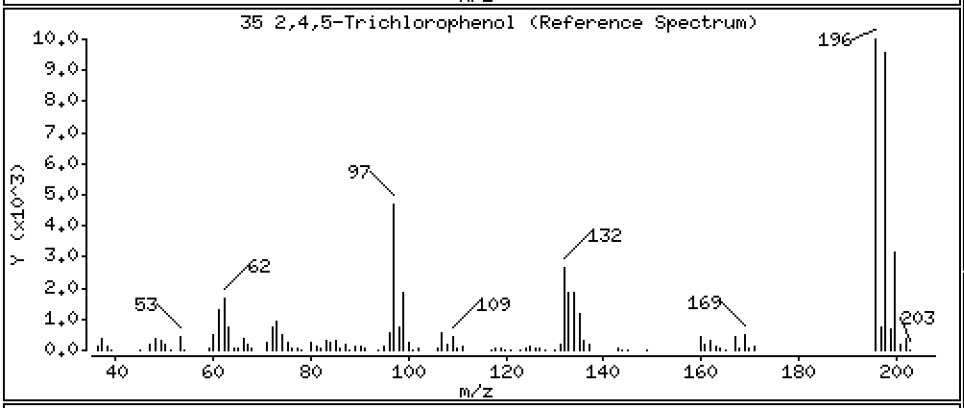
Concentration: 4.409 ug/mL

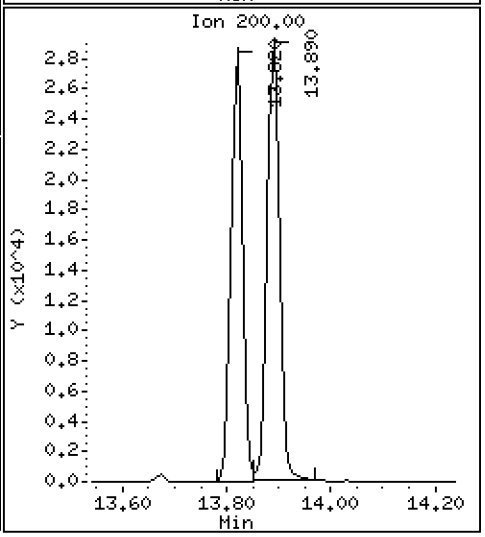


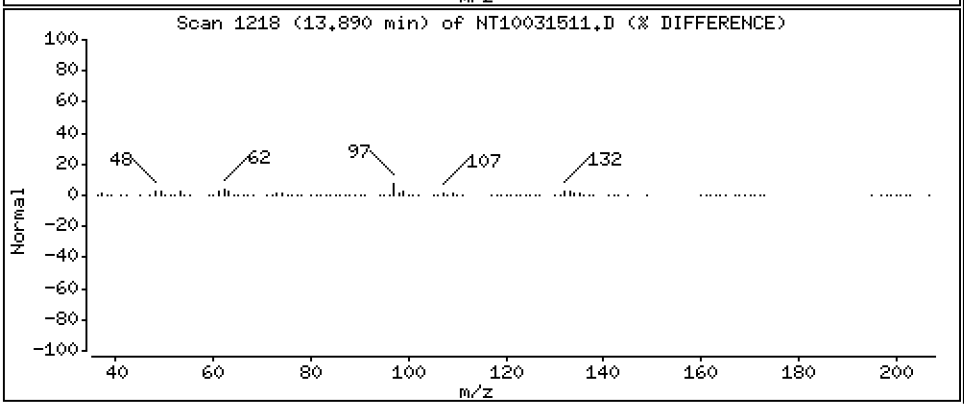












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

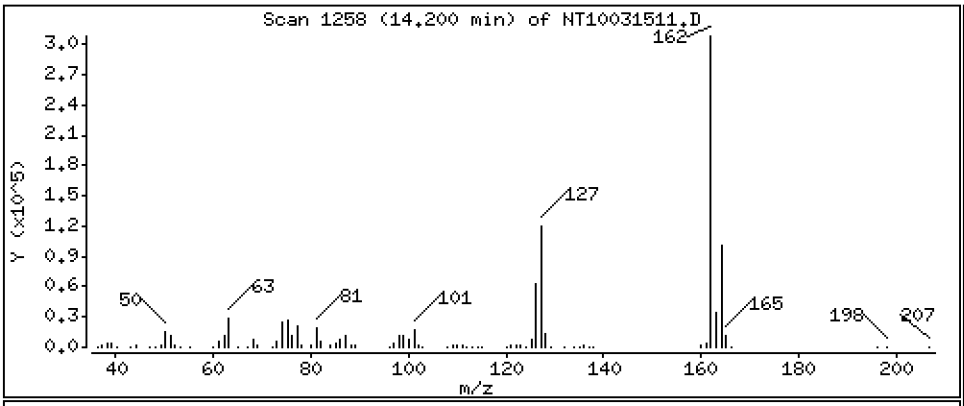
Operator: VTS

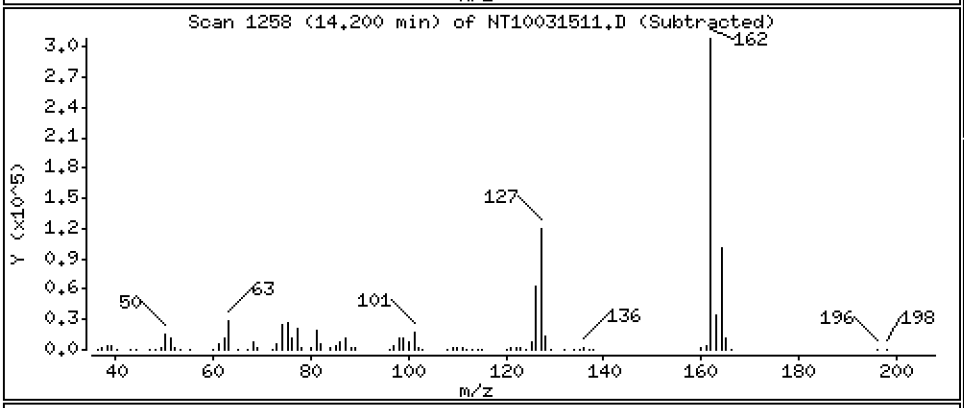
Column phase: ZB-5msi

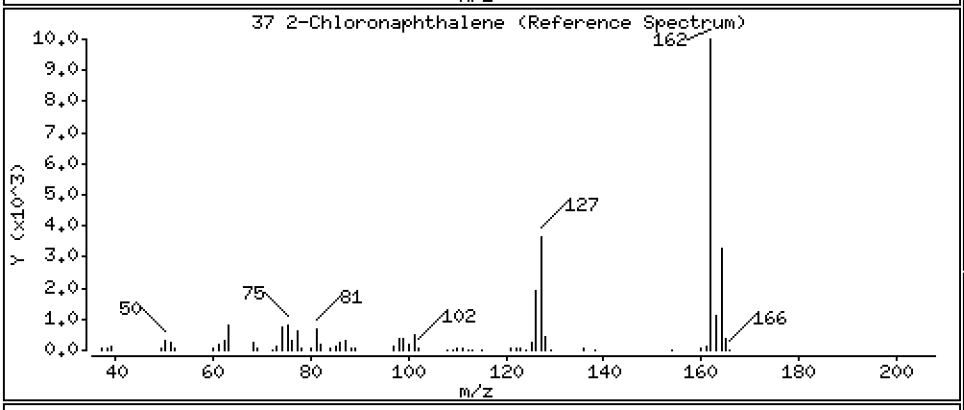
Column diameter: 0.25

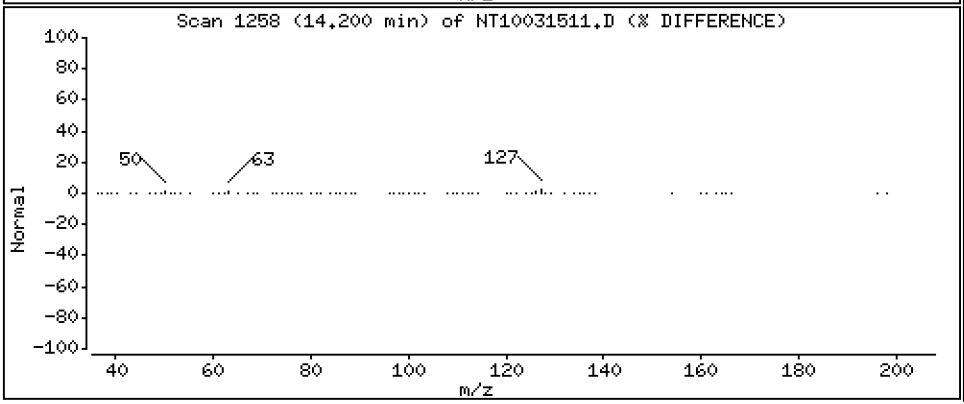
37 2-Chloronaphthalene

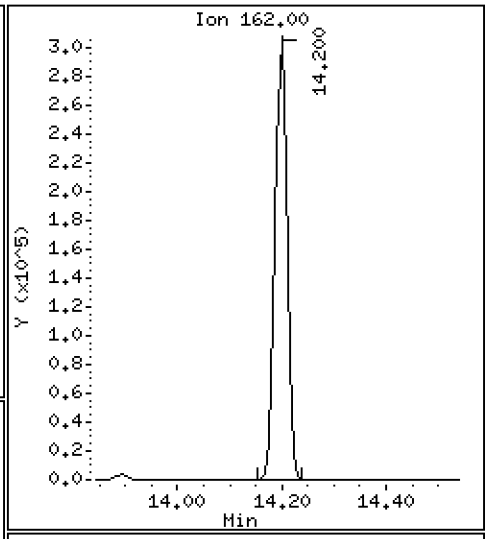
Concentration: 4.796 ug/mL

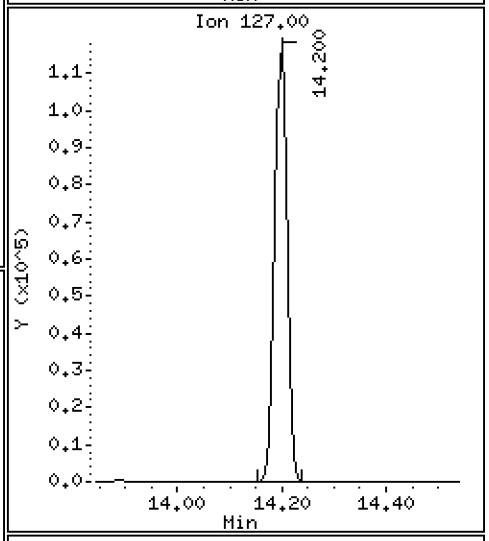


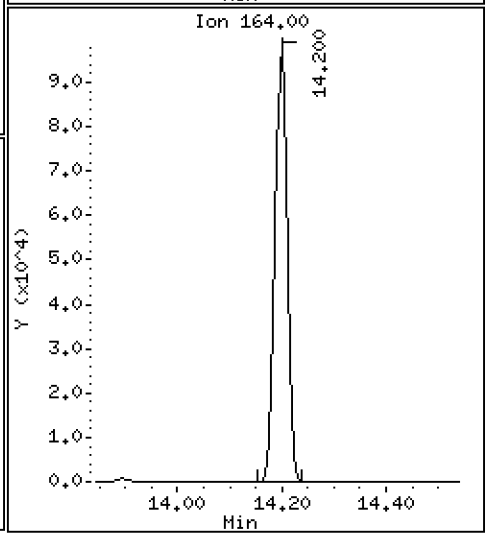












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

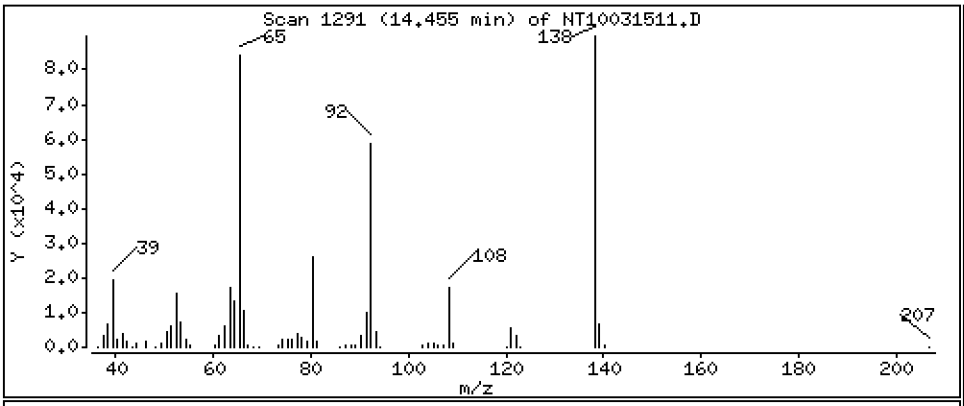
Operator: VTS

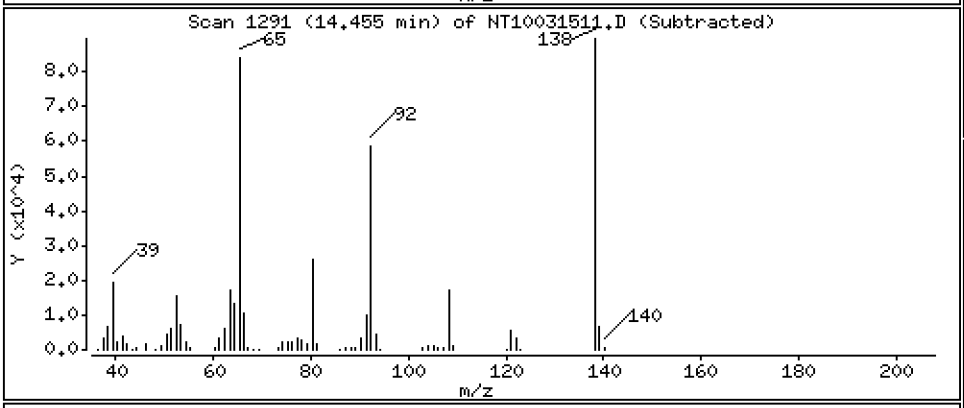
Column phase: ZB-5msi

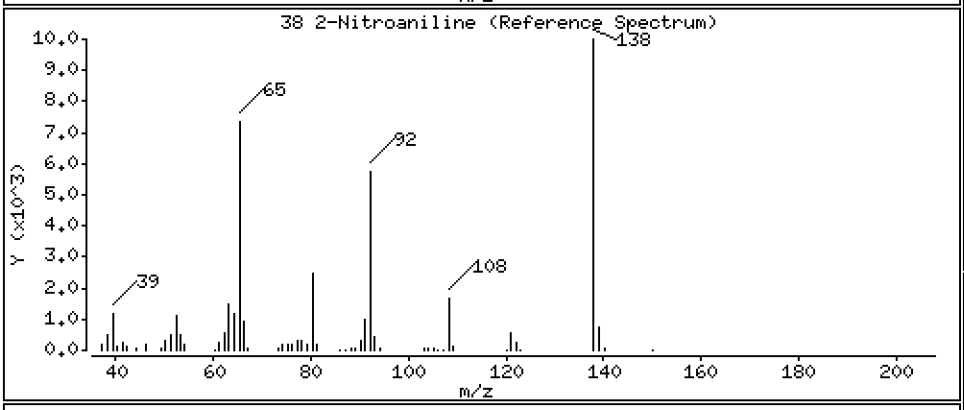
Column diameter: 0.25

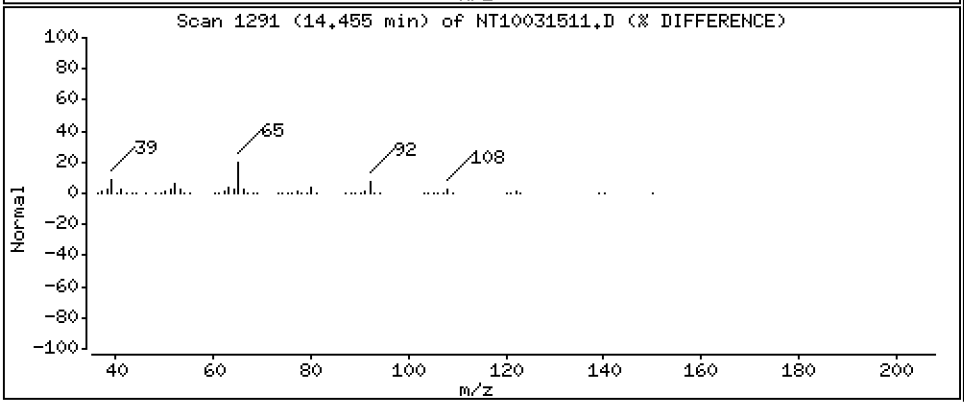
38 2-Nitroaniline

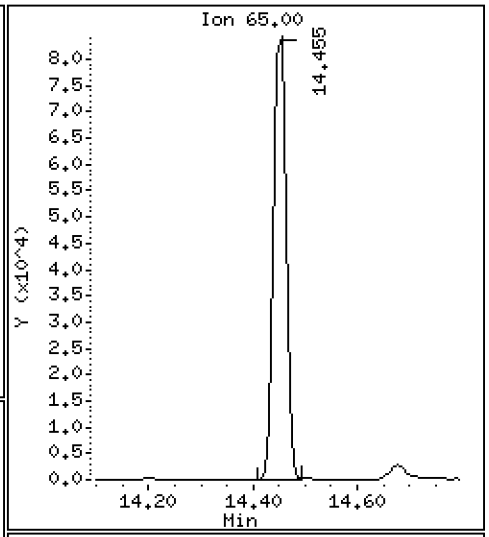
Concentration: 4.911 ug/mL

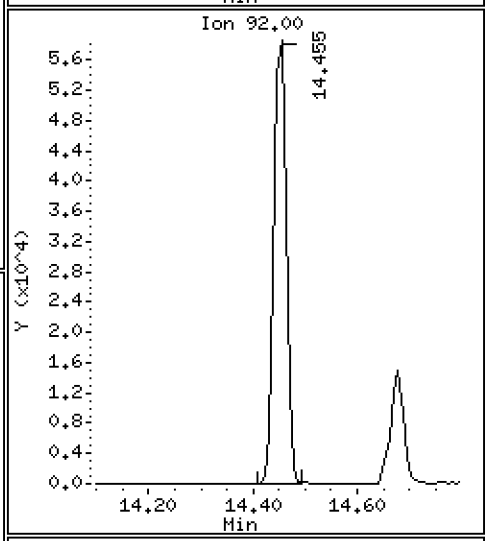


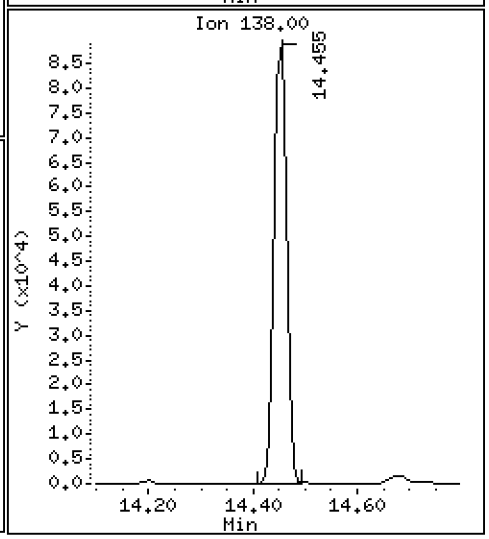












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

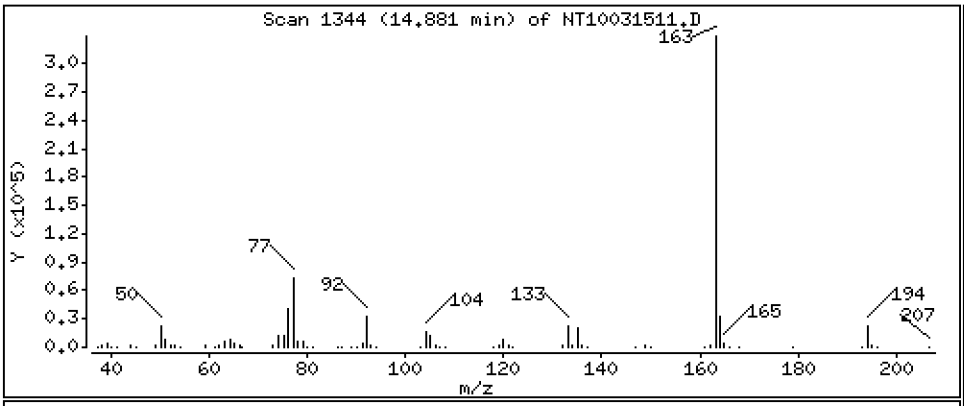
Operator: VTS

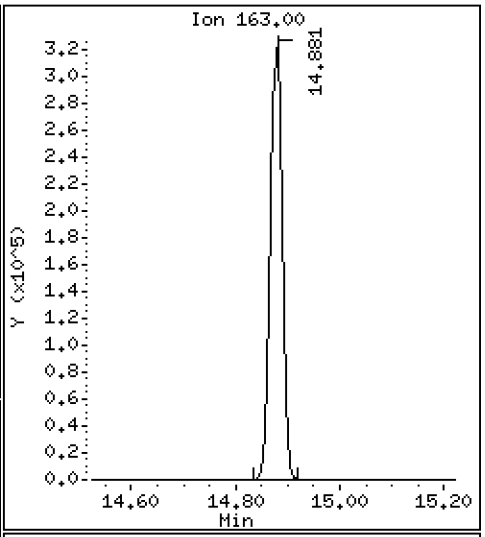
Column phase: ZB-5msi

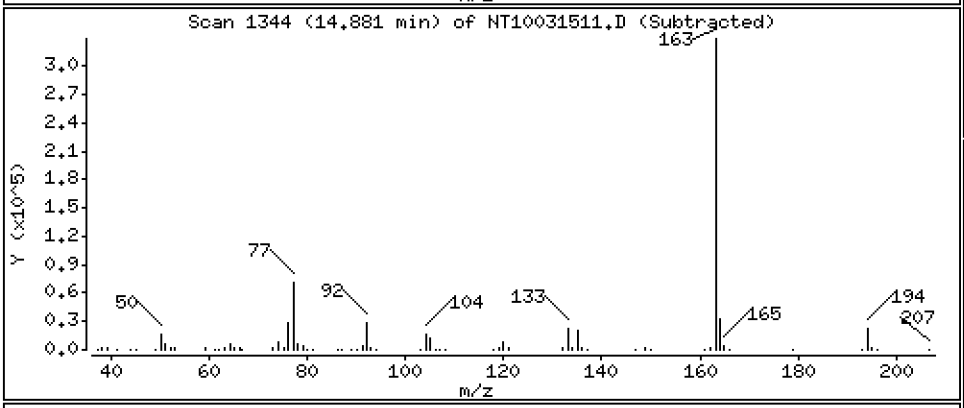
Column diameter: 0.25

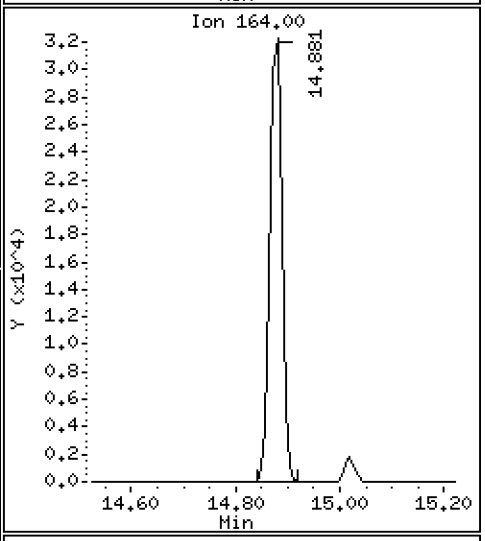
39 Dimethylphthalate

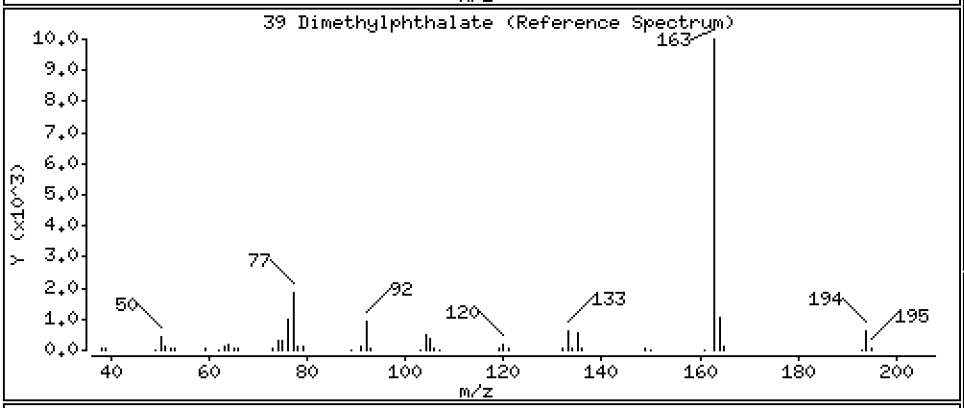
Concentration: 4.937 ug/mL

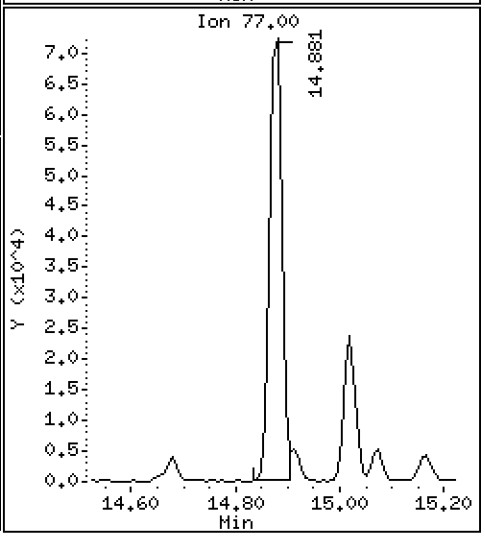


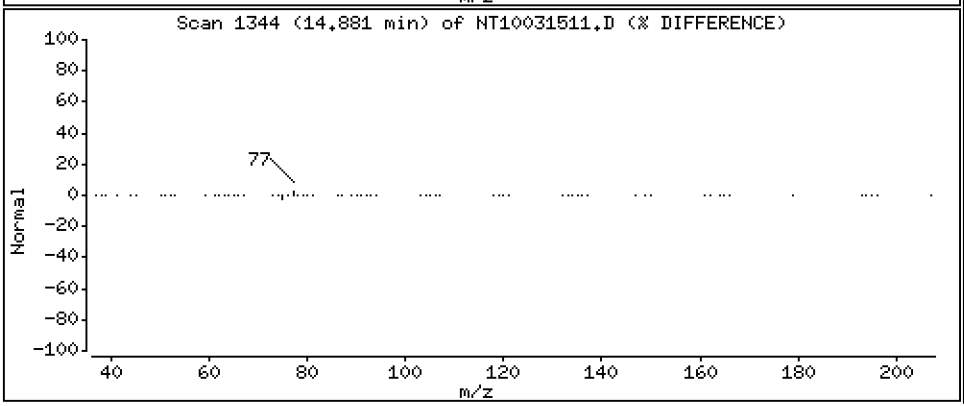












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

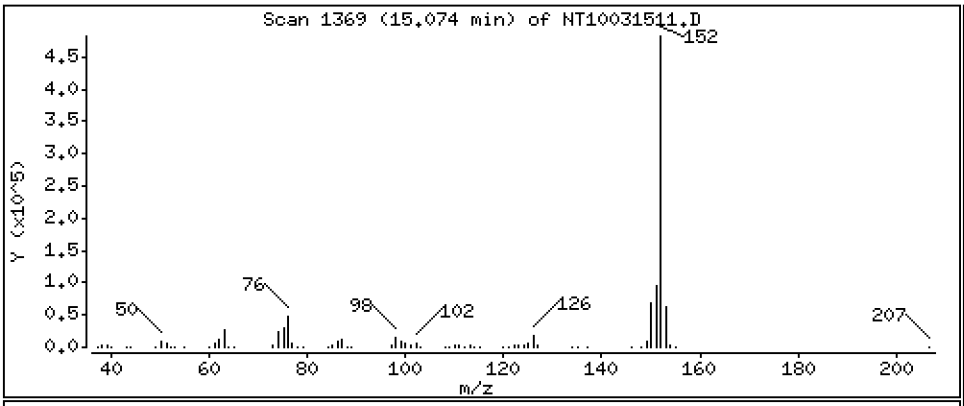
Operator: VTS

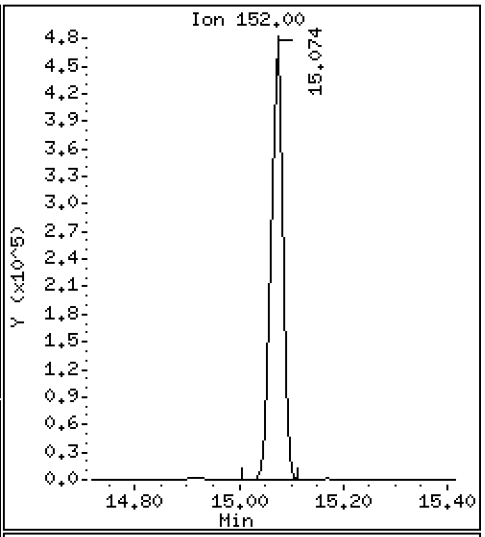
Column phase: ZB-5msi

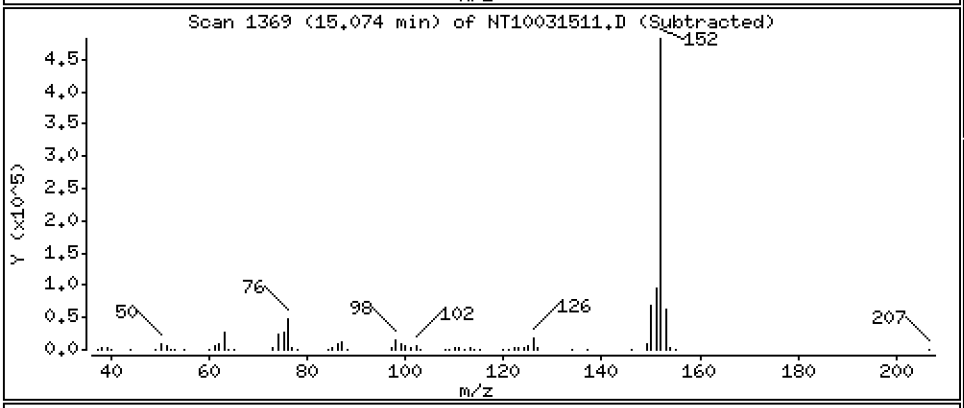
Column diameter: 0.25

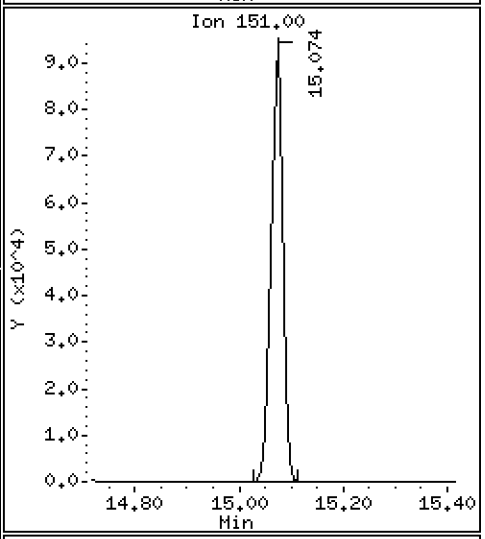
40 Acenaphthylene

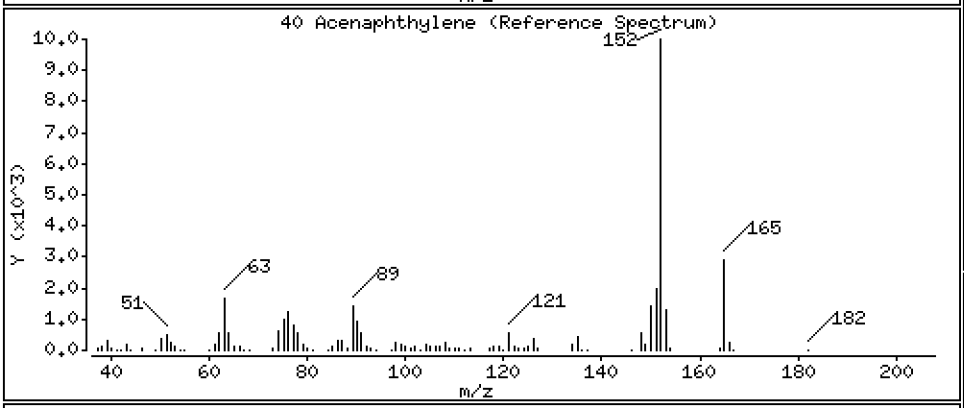
Concentration: 4.805 ug/mL

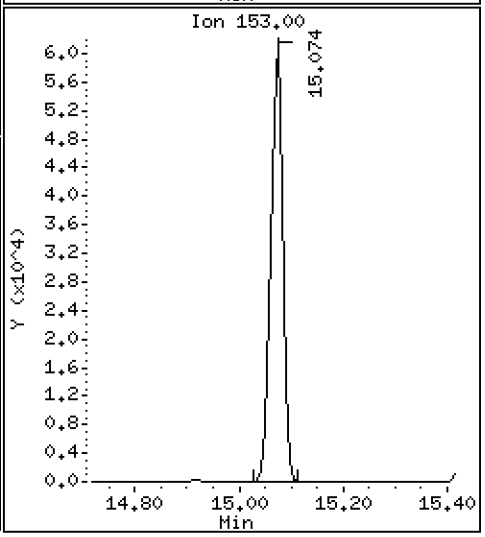


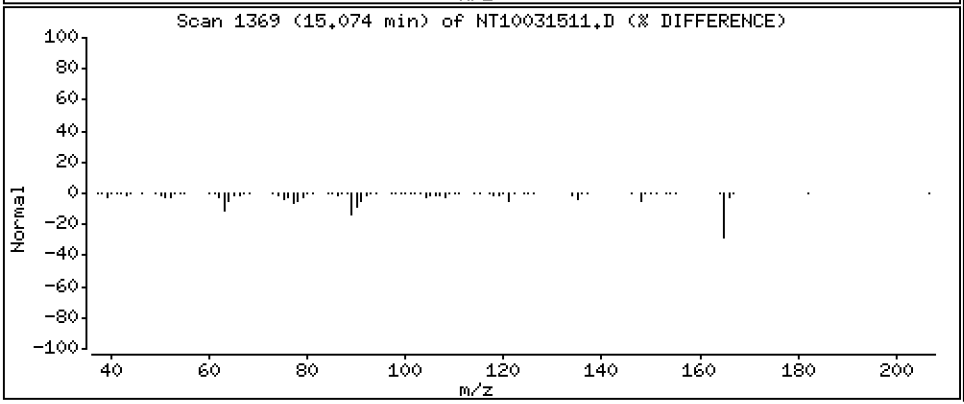












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

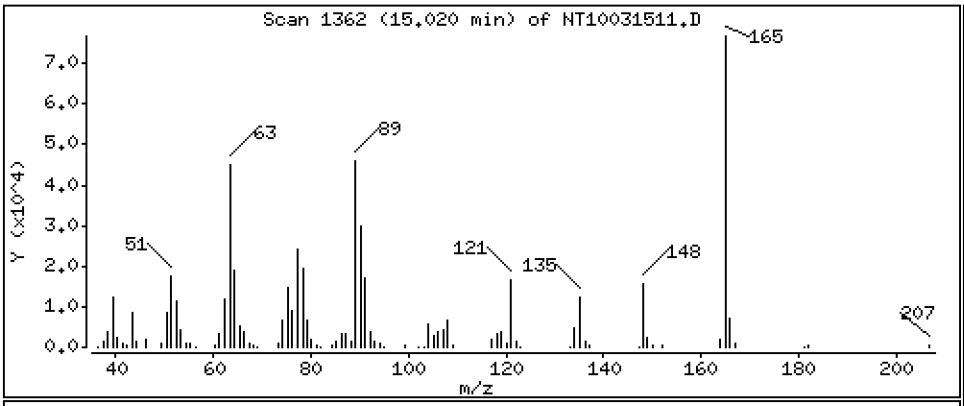
Operator: VTS

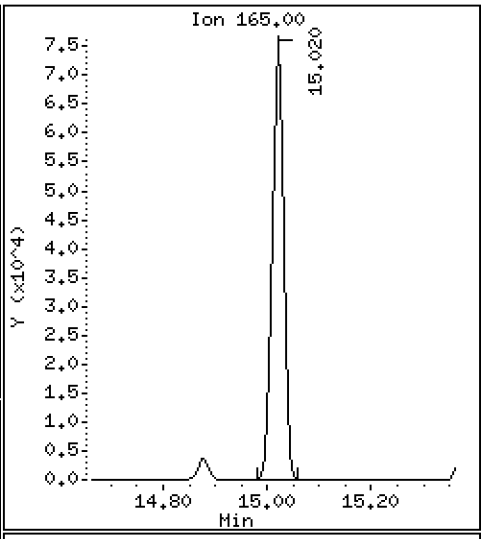
Column phase: ZB-5msi

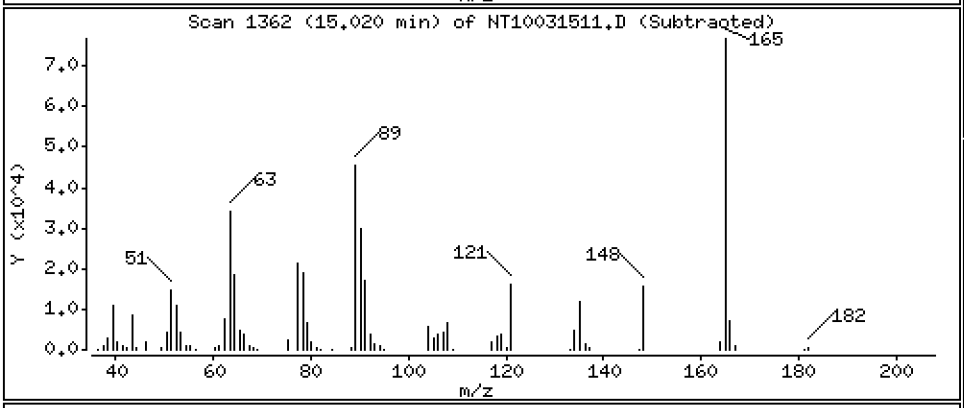
Column diameter: 0.25

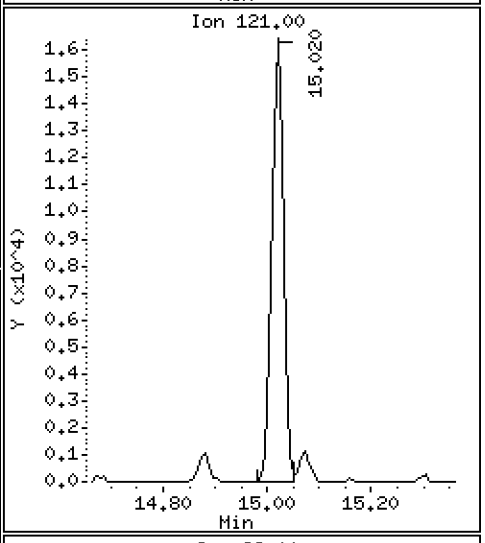
41 2,6-Dinitrotoluene

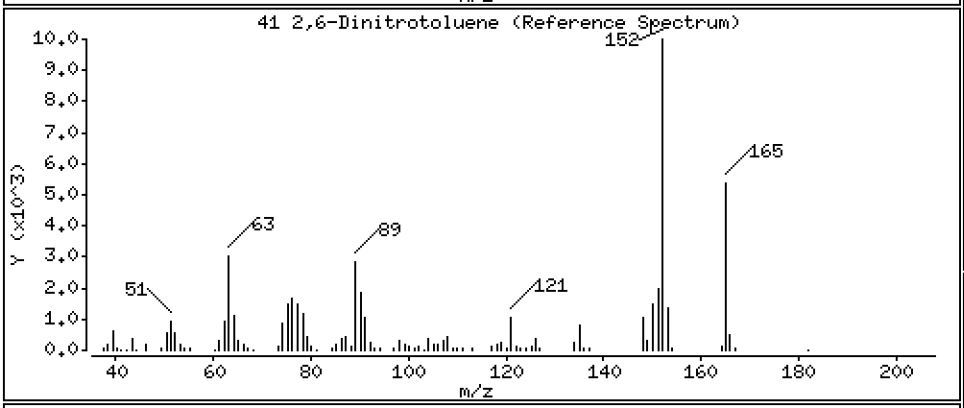
Concentration: 5.298 ug/mL

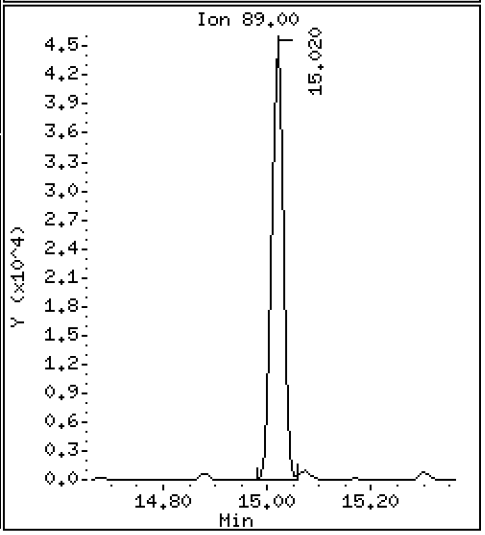


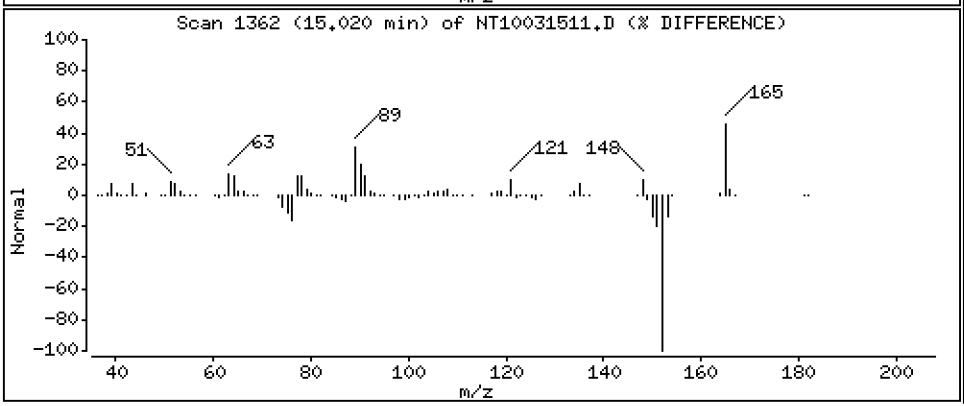












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

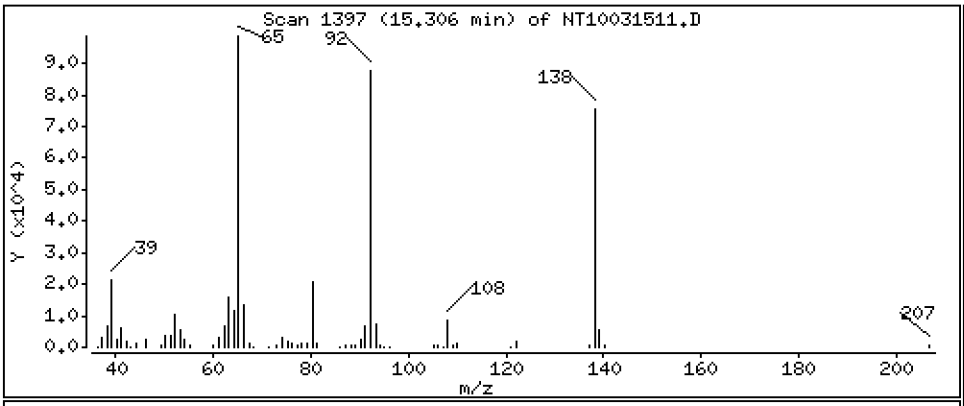
Operator: VTS

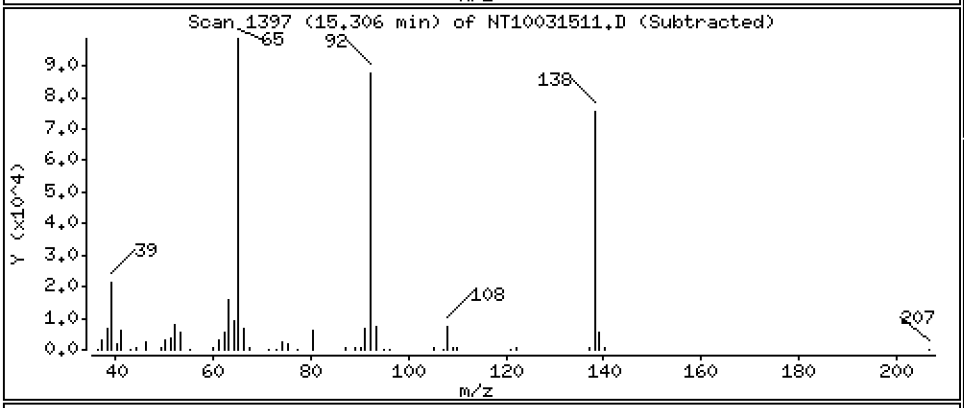
Column phase: ZB-5msi

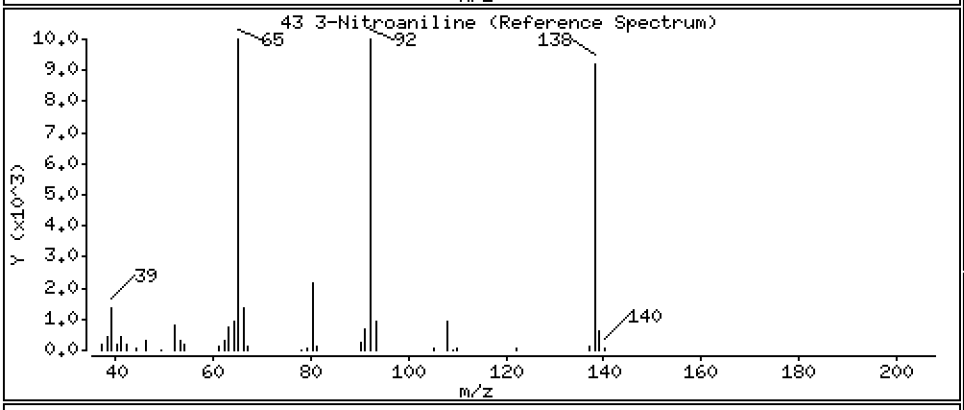
Column diameter: 0.25

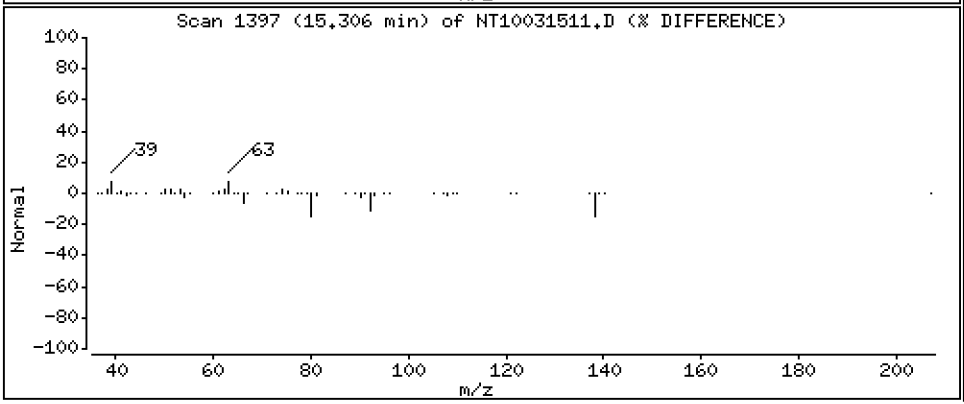
43 3-Nitroaniline

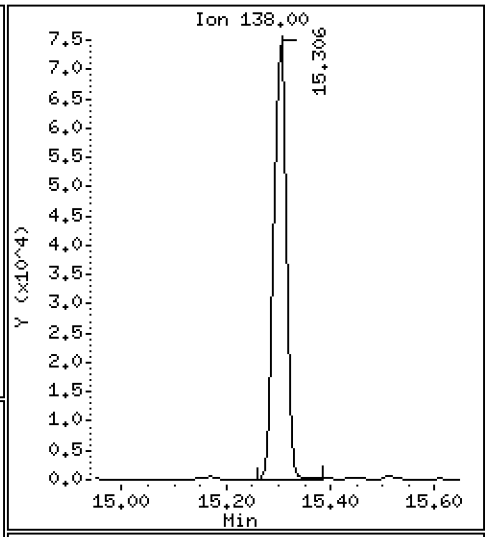
Concentration: 5.014 ug/mL

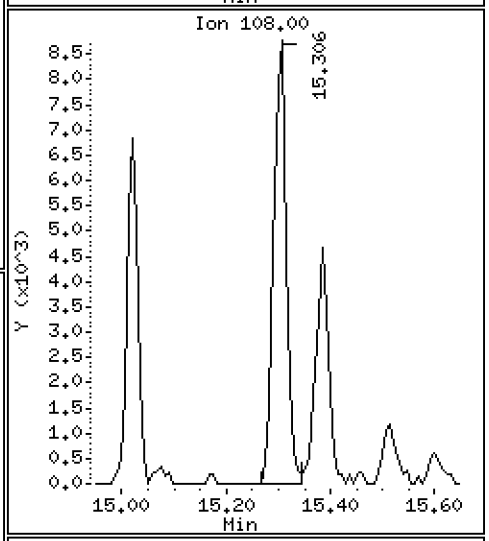


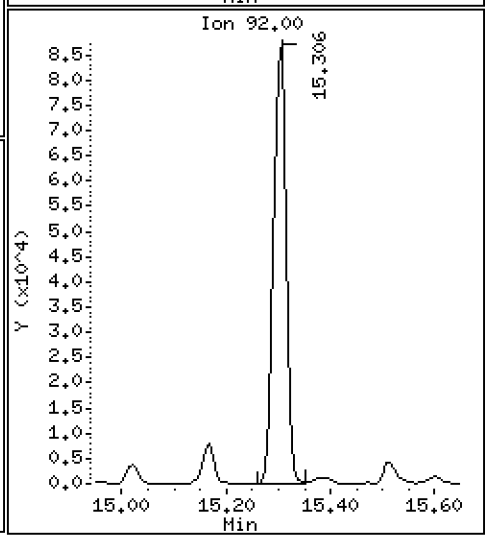












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

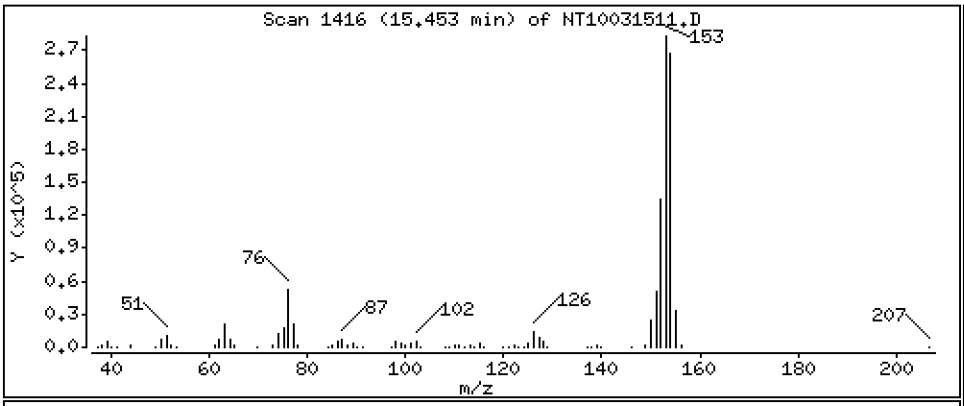
Operator: VTS

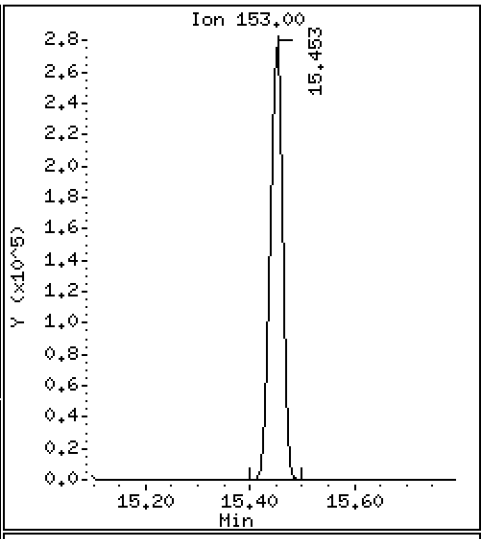
Column phase: ZB-5msi

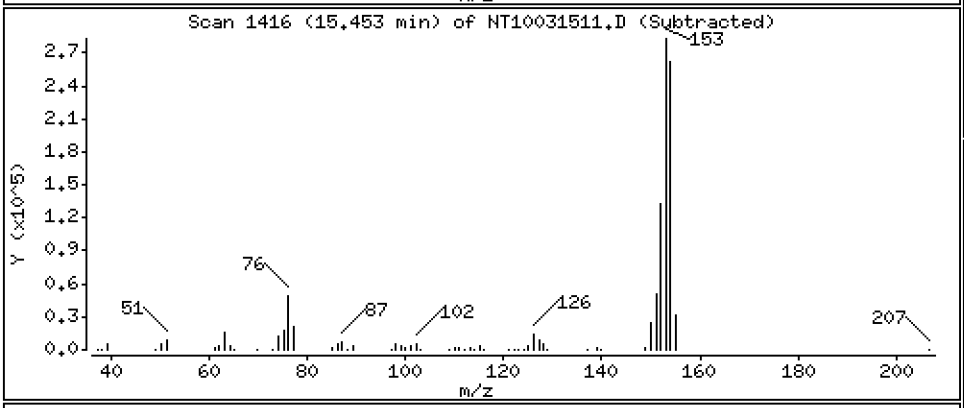
Column diameter: 0.25

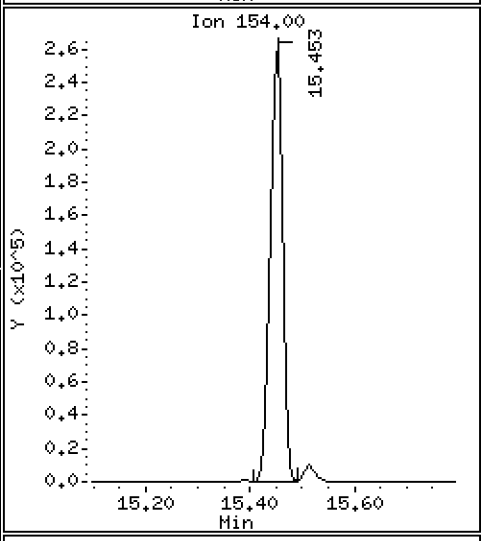
44 Acenaphthene

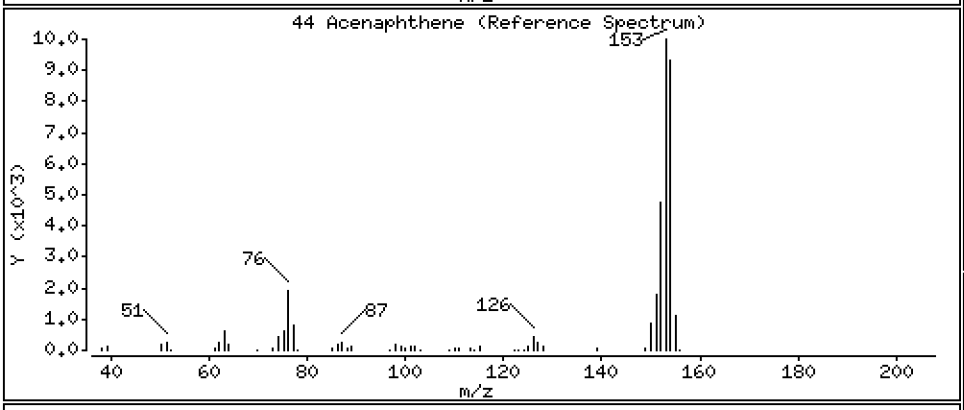
Concentration: 4.776 ug/mL

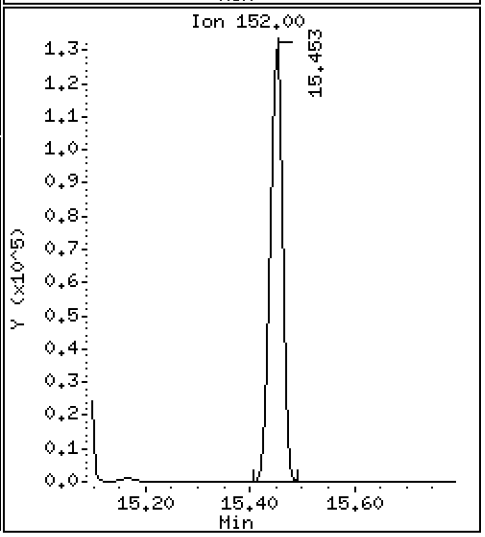


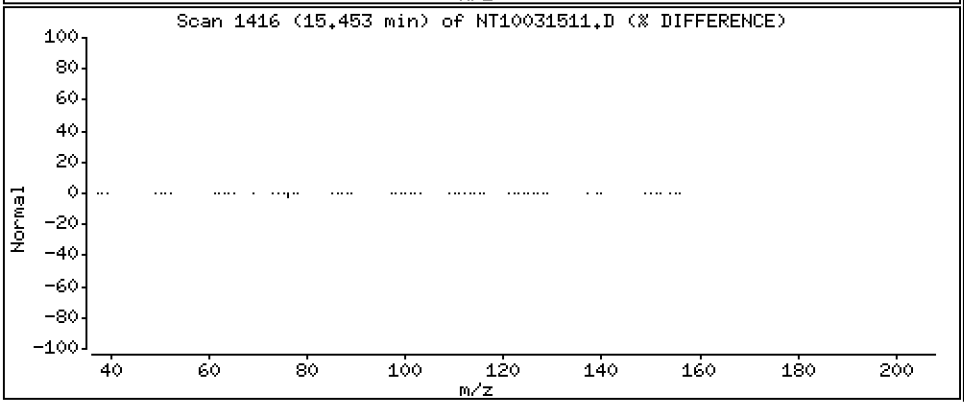












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

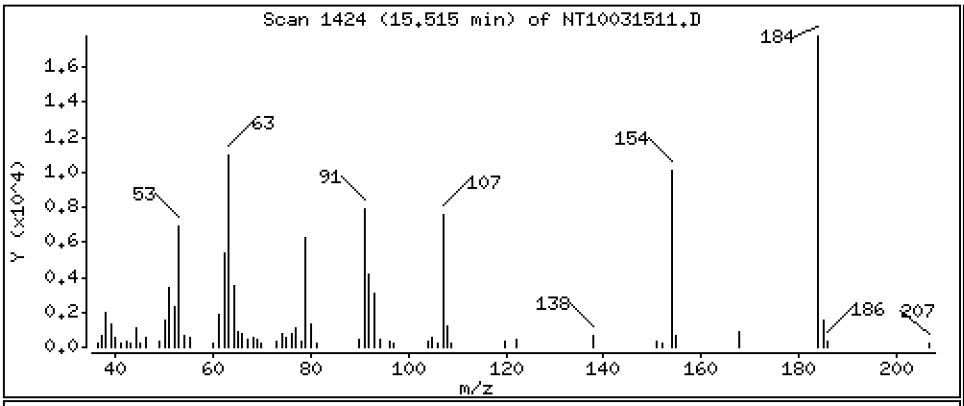
Operator: VTS

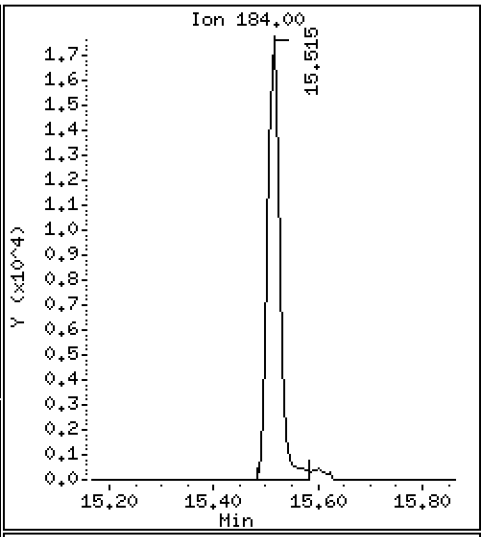
Column phase: ZB-5msi

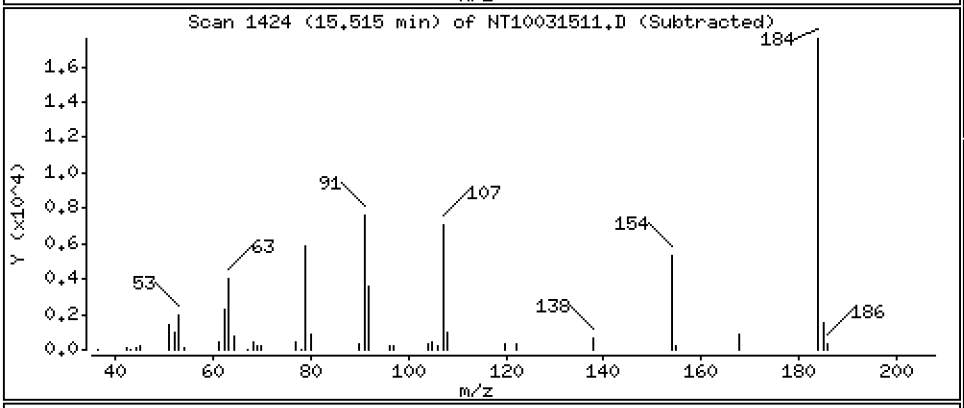
Column diameter: 0.25

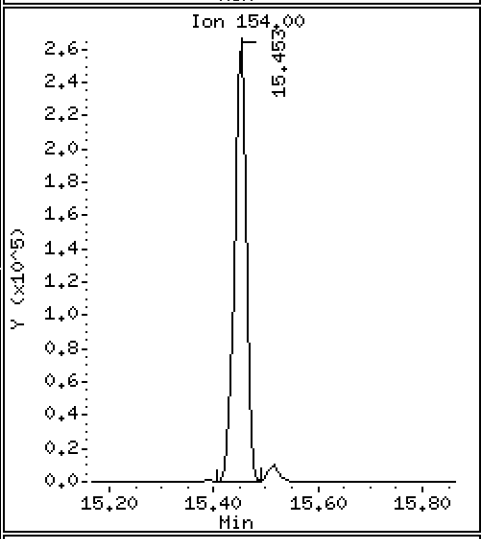
45 2,4-Dinitrophenol

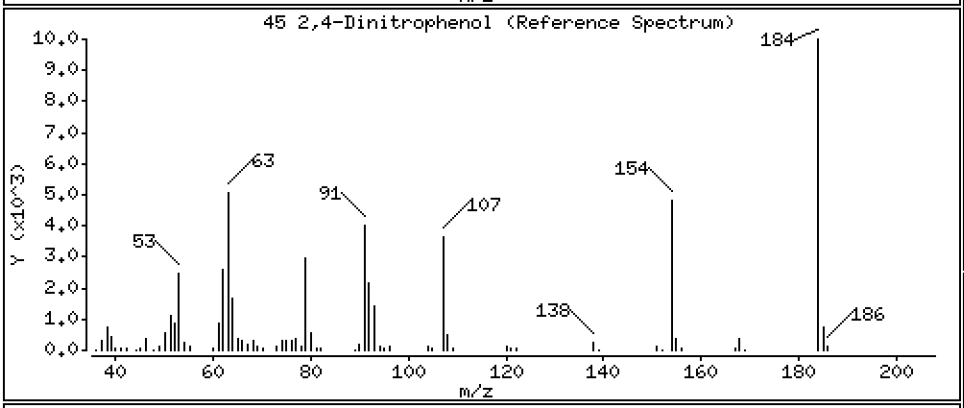
Concentration: 2.124 ug/mL

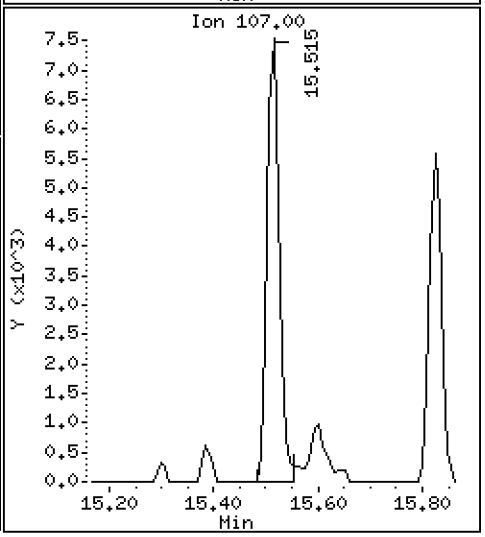


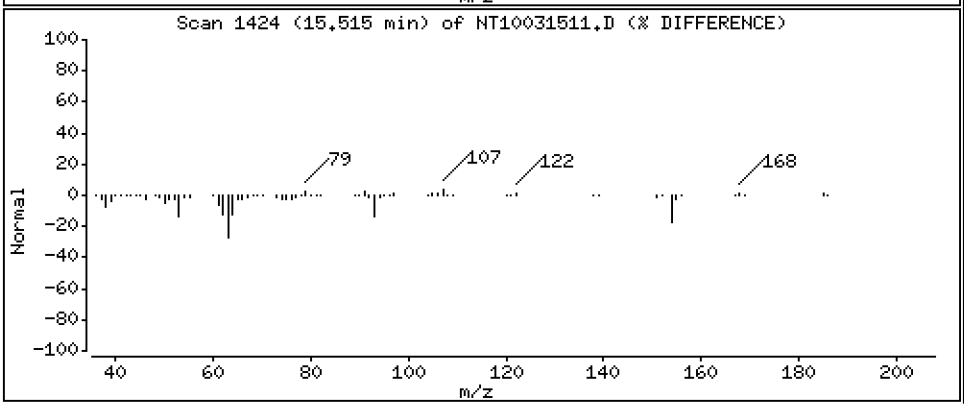












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

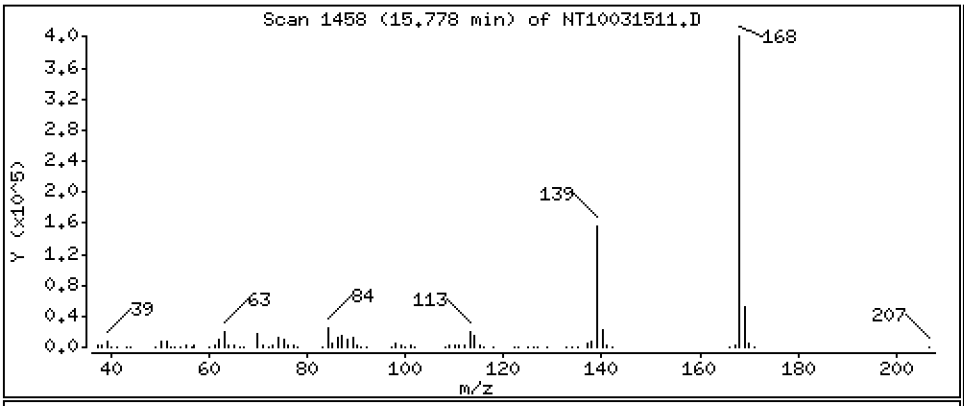
Operator: VTS

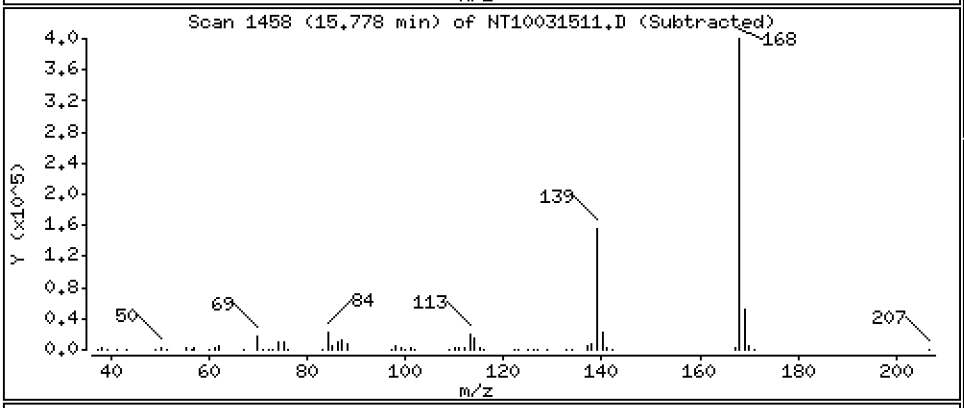
Column phase: ZB-5msi

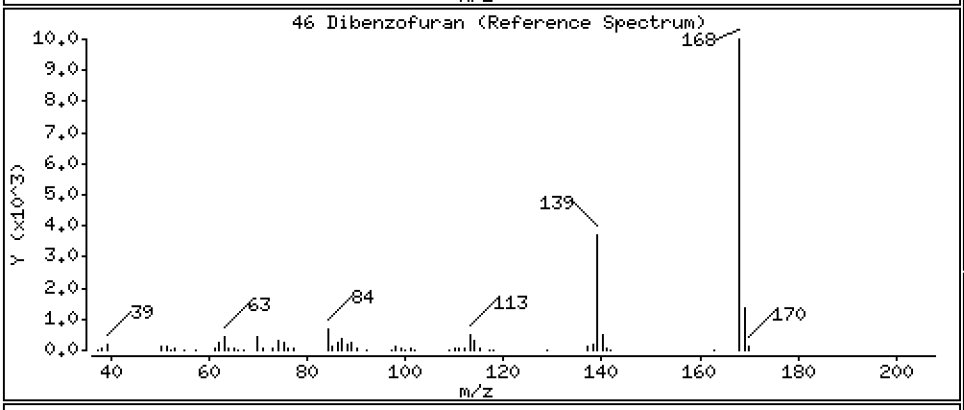
Column diameter: 0.25

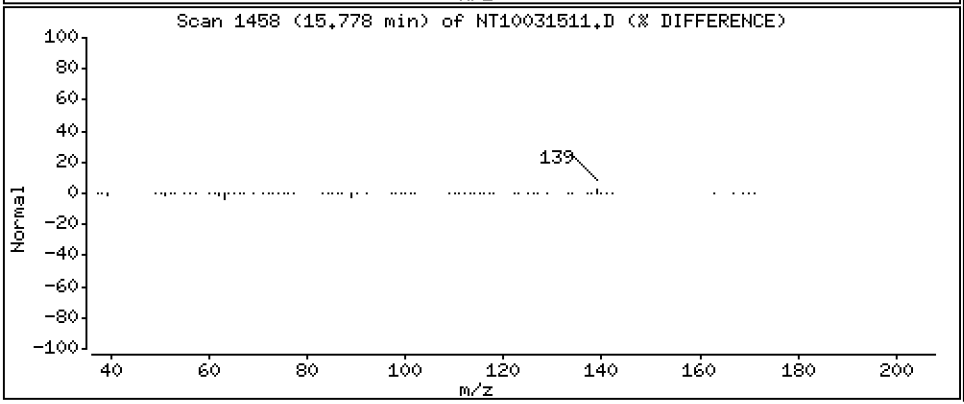
46 Dibenzofuran

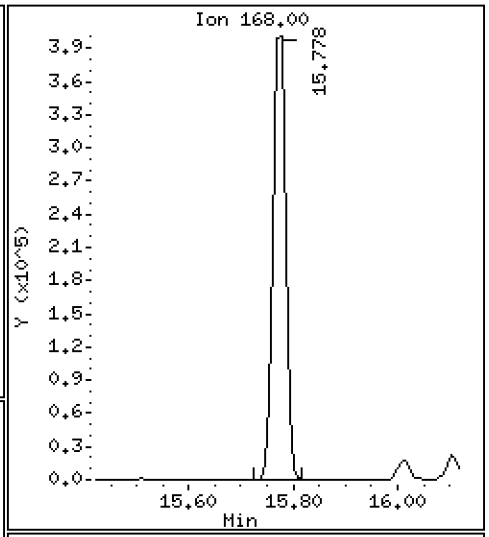
Concentration: 4.648 ug/mL

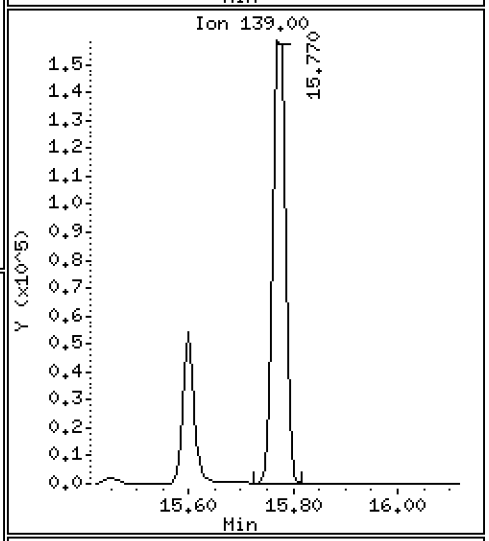


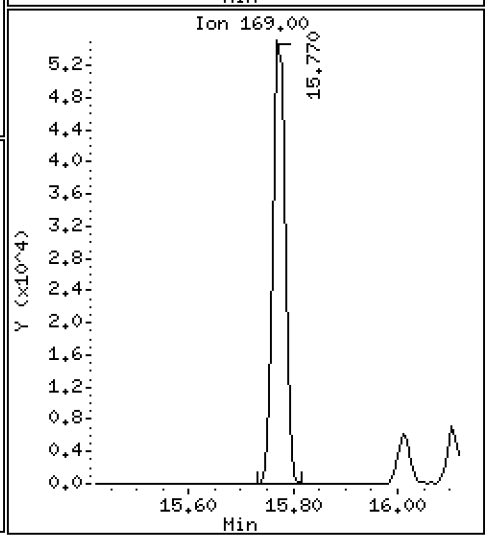












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

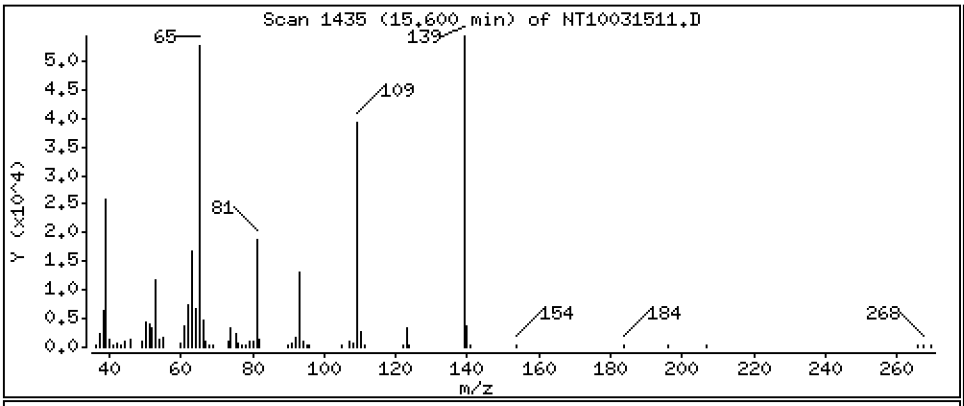
Operator: VTS

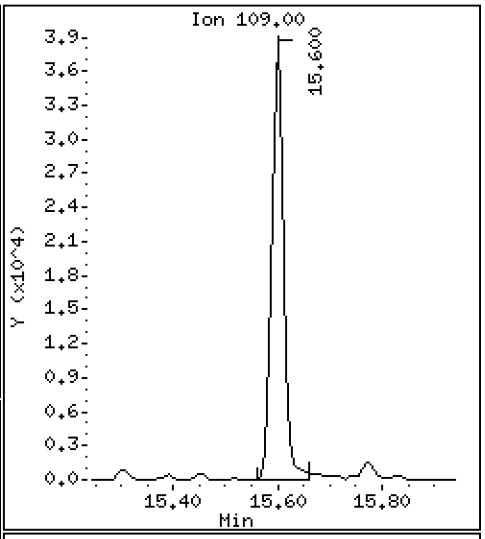
Column phase: ZB-5msi

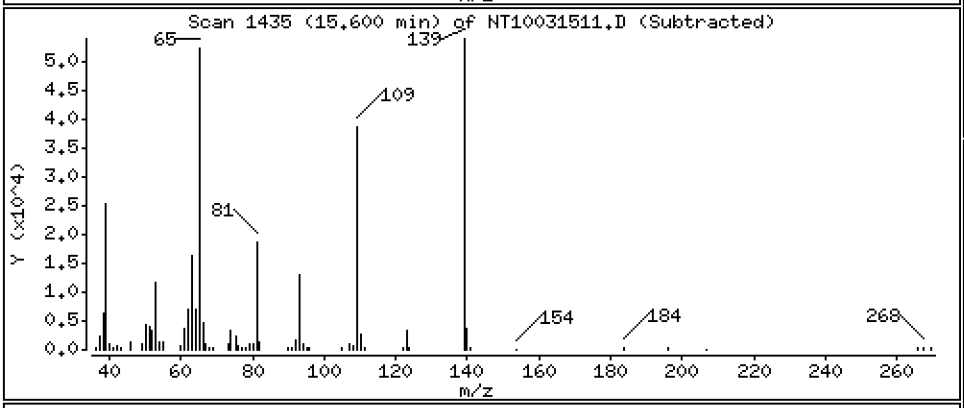
Column diameter: 0.25

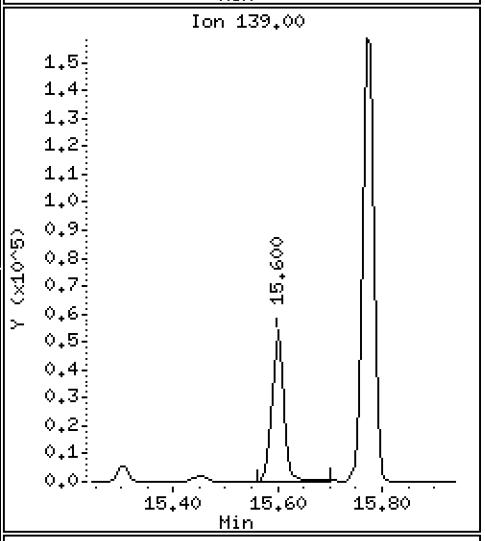
47 4-Nitrophenol

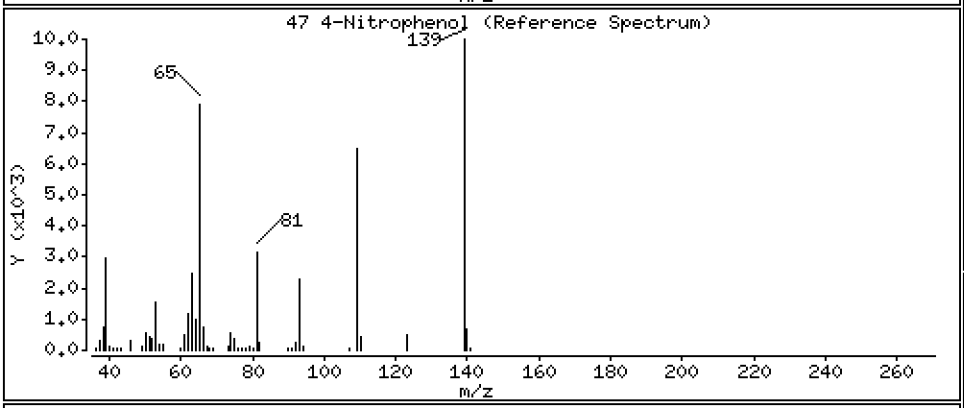
Concentration: 3.966 ug/mL

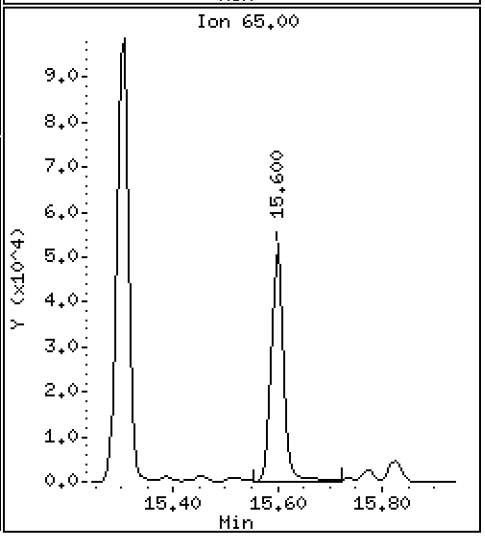


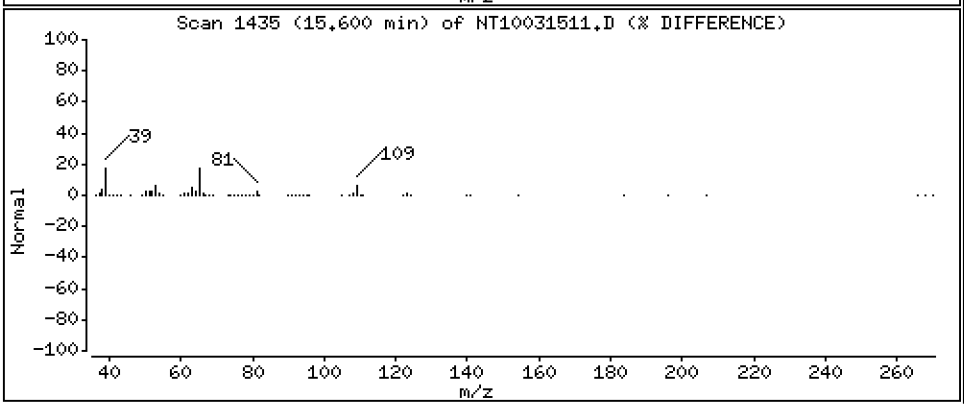












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

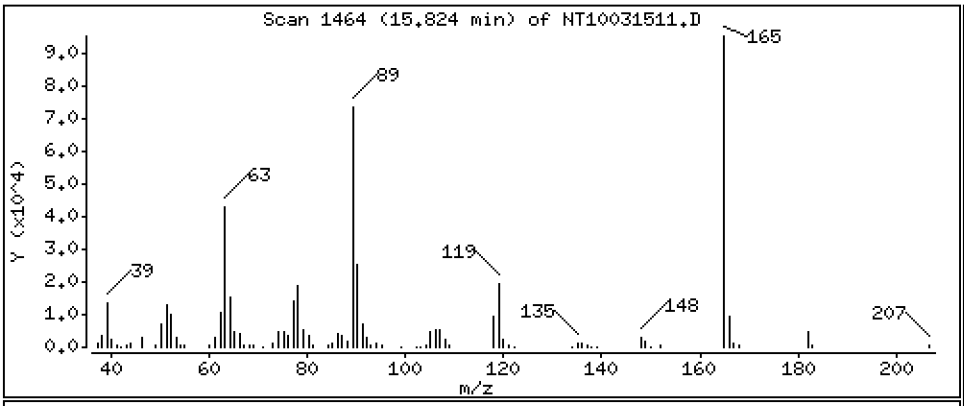
Operator: VTS

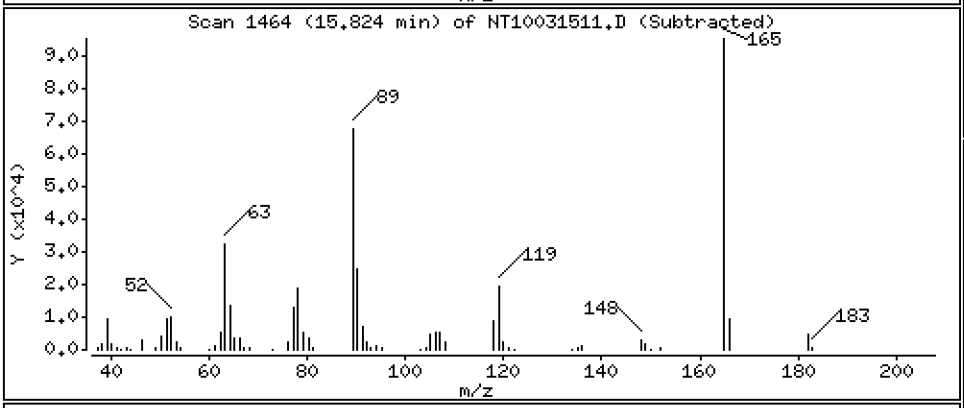
Column phase: ZB-5msi

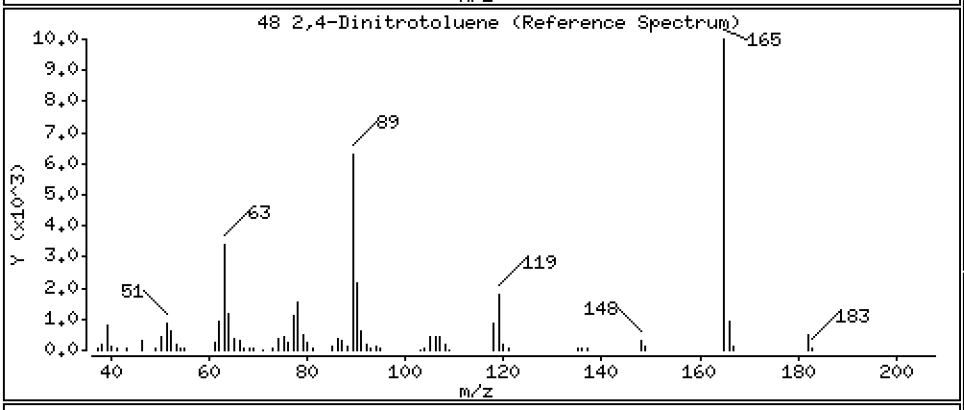
Column diameter: 0.25

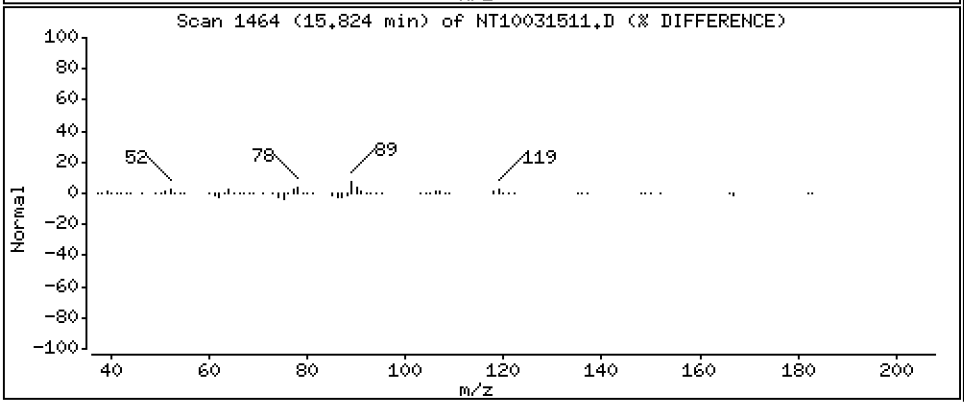
48 2,4-Dinitrotoluene

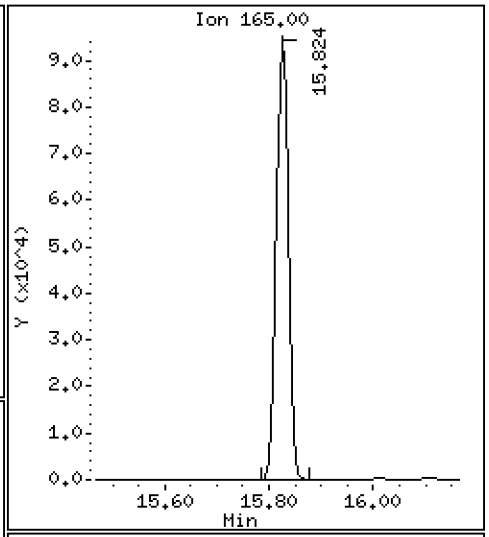
Concentration: 4.510 ug/mL

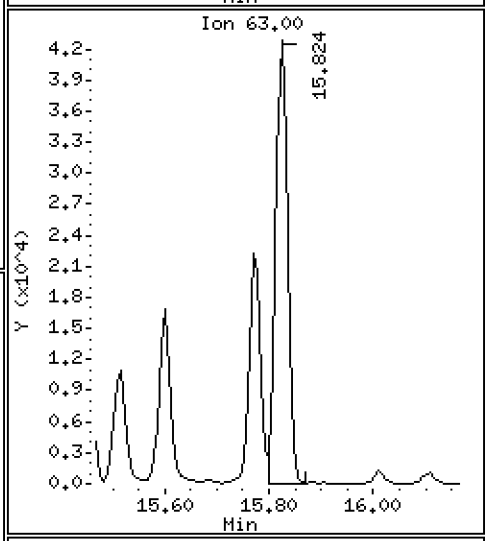


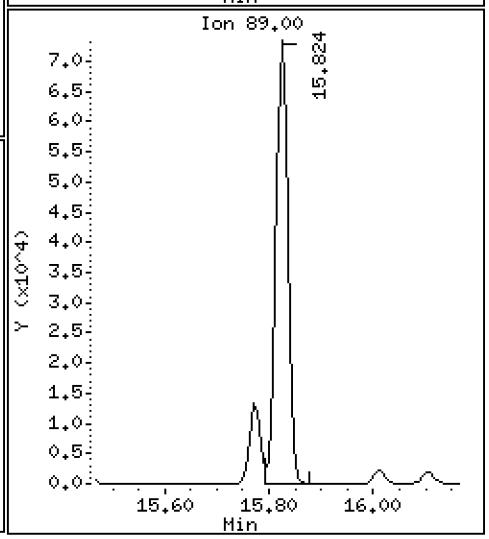












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

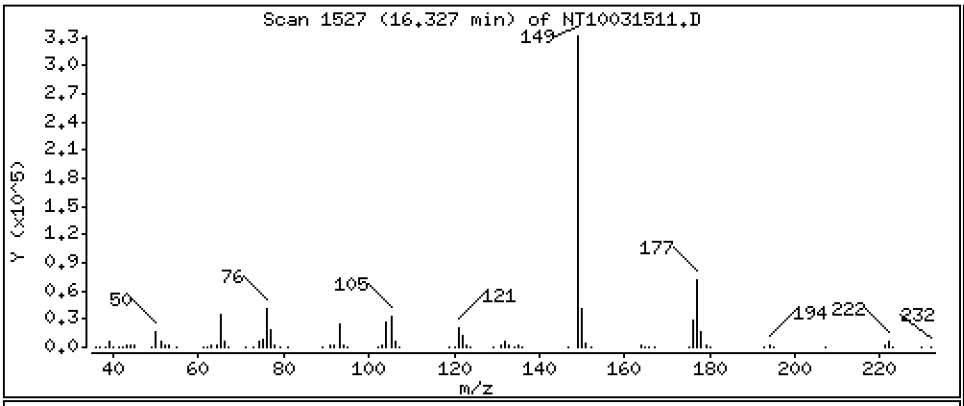
Operator: VTS

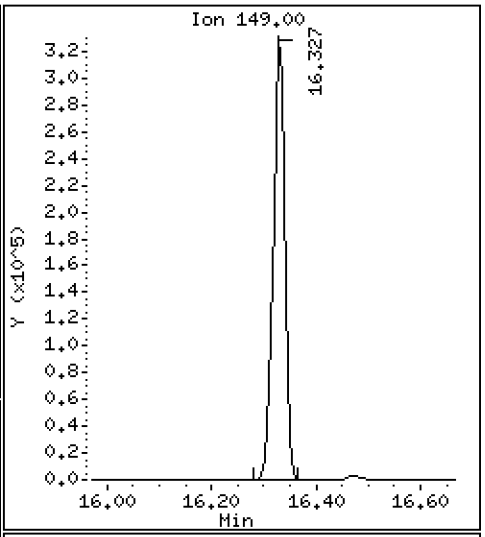
Column phase: ZB-5msi

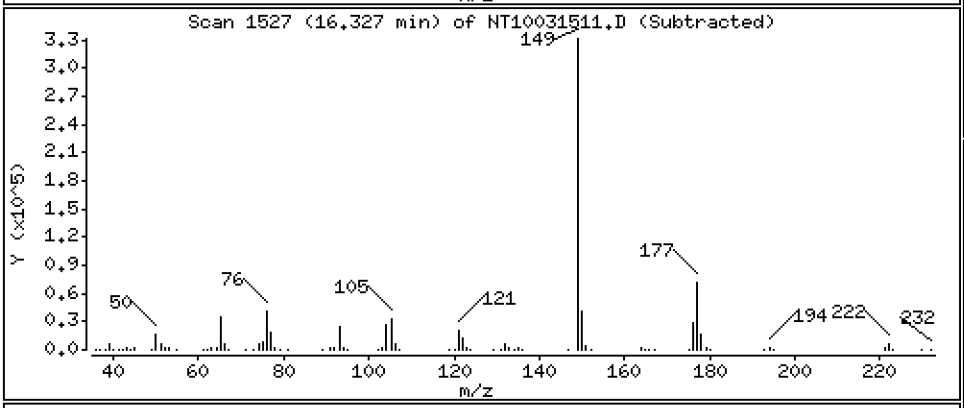
Column diameter: 0.25

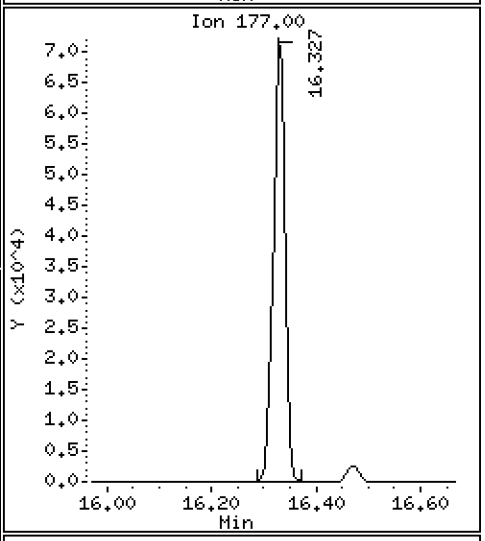
50 Diethylphthalate

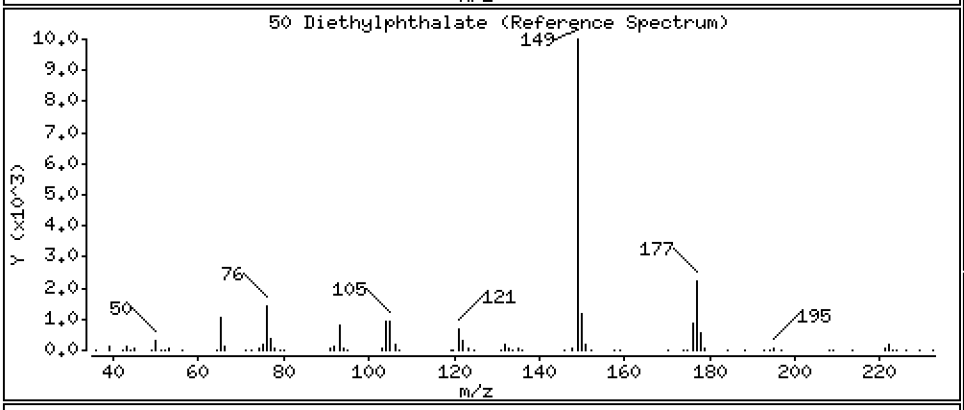
Concentration: 5.209 ug/mL

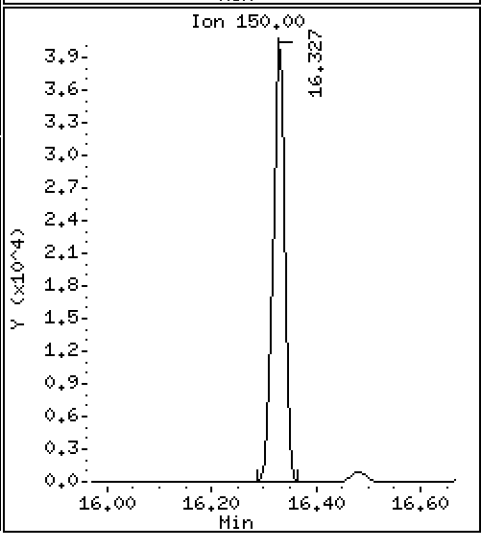


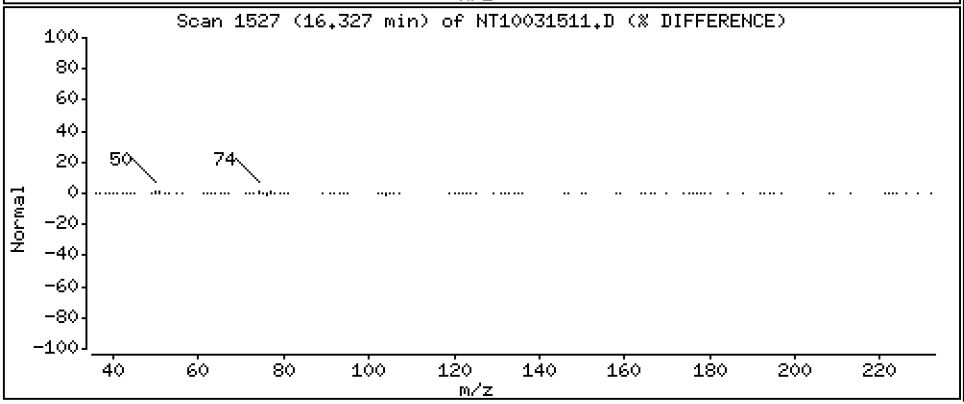












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

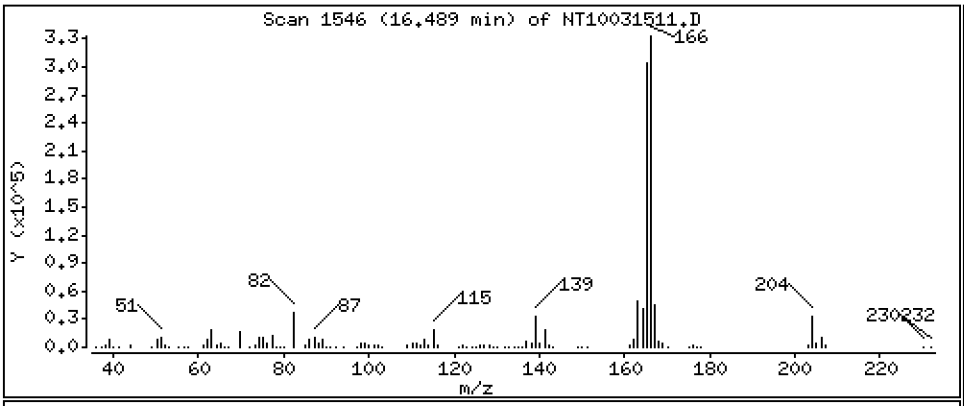
Operator: VTS

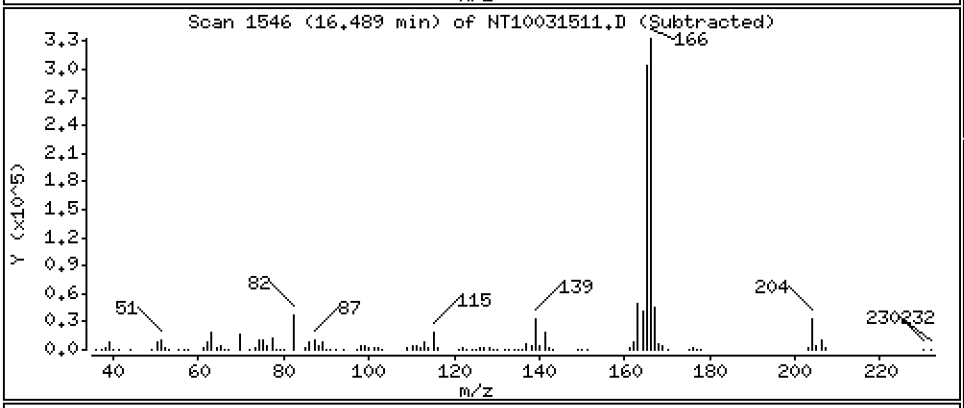
Column phase: ZB-5msi

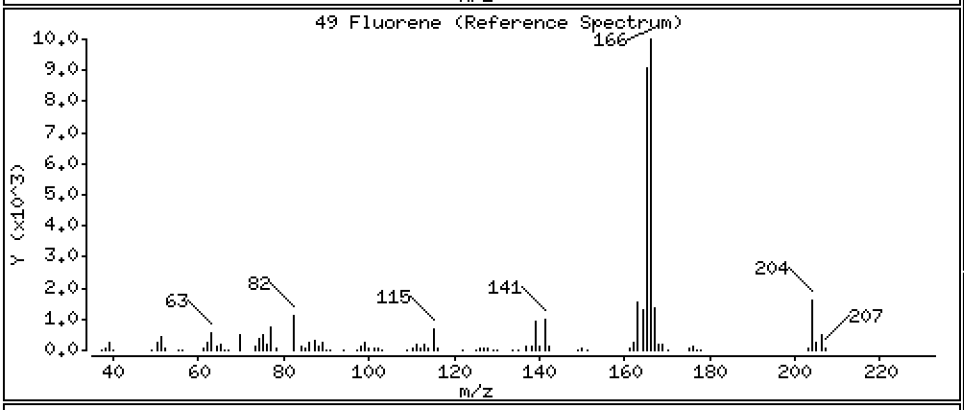
Column diameter: 0.25

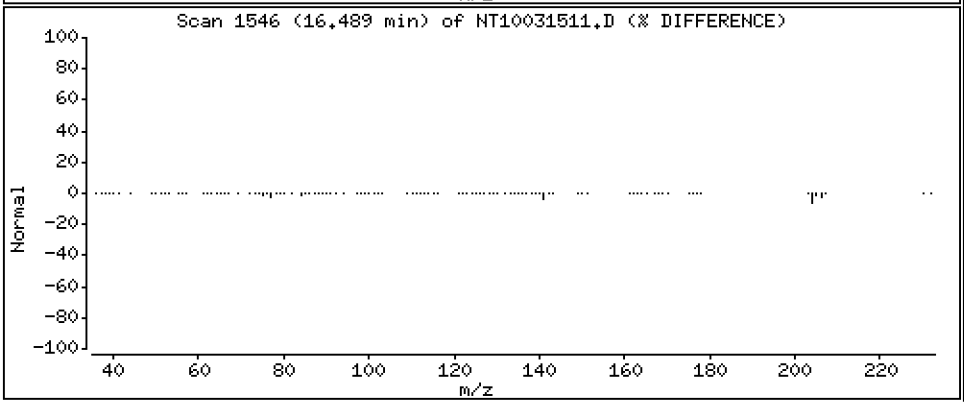
49 Fluorene

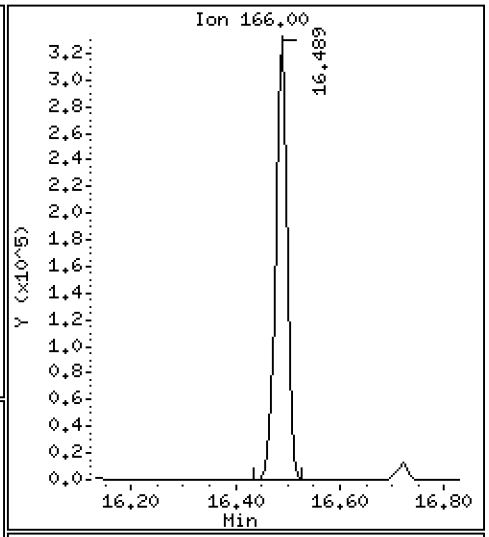
Concentration: 4.708 ug/mL

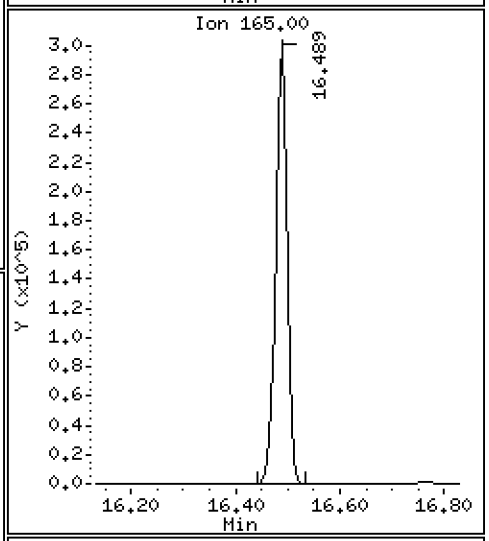


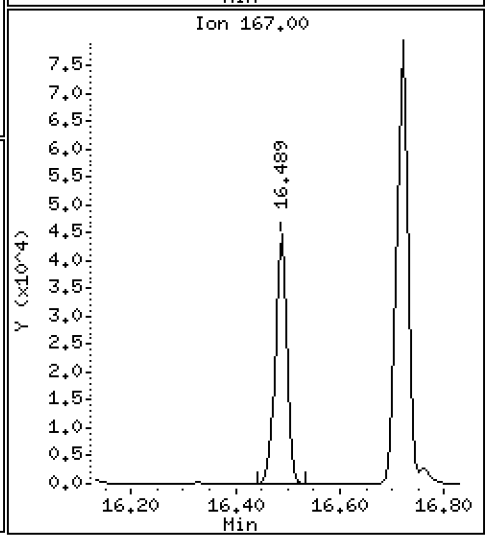












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

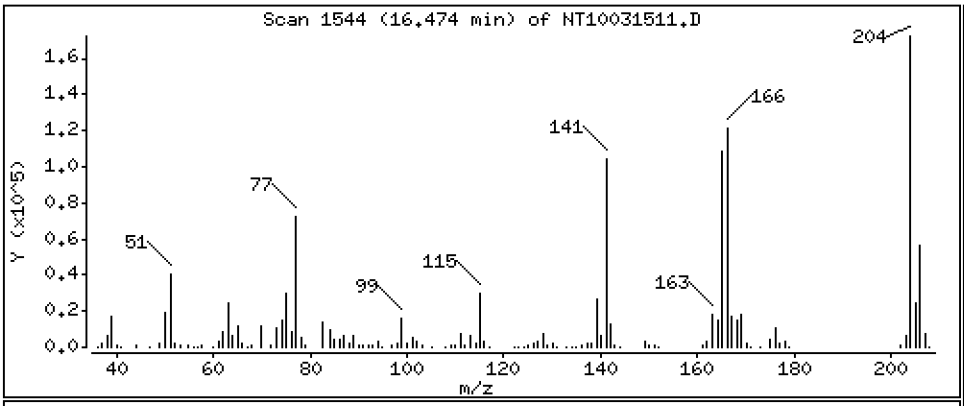
Operator: VTS

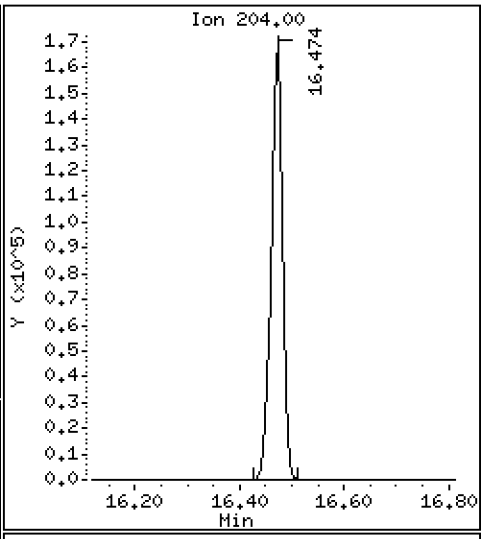
Column phase: ZB-5msi

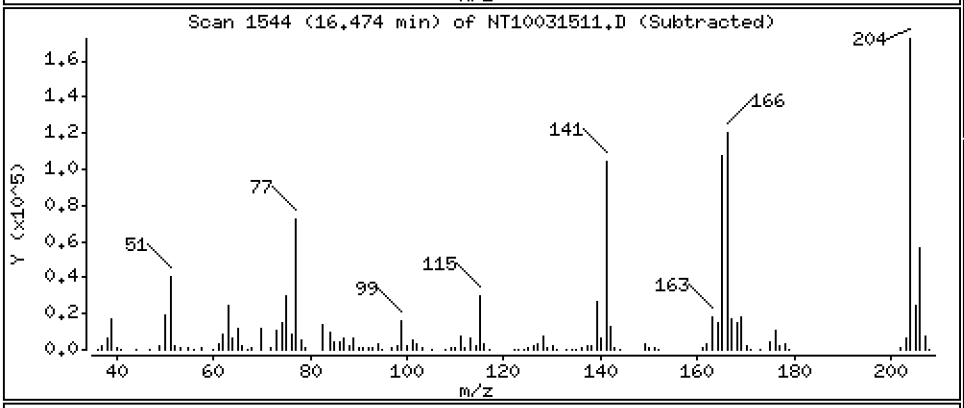
Column diameter: 0.25

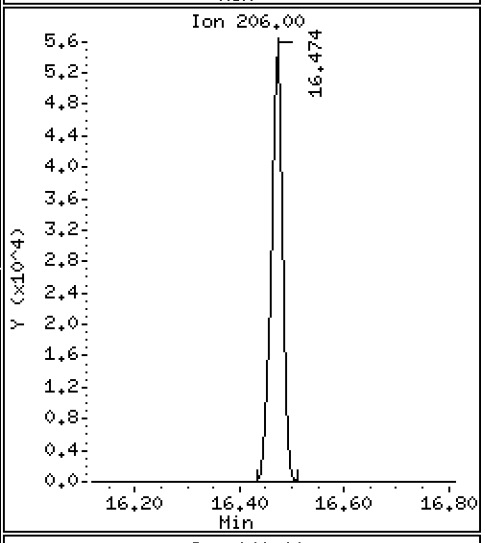
51 4-Chlorophenyl-phenylether

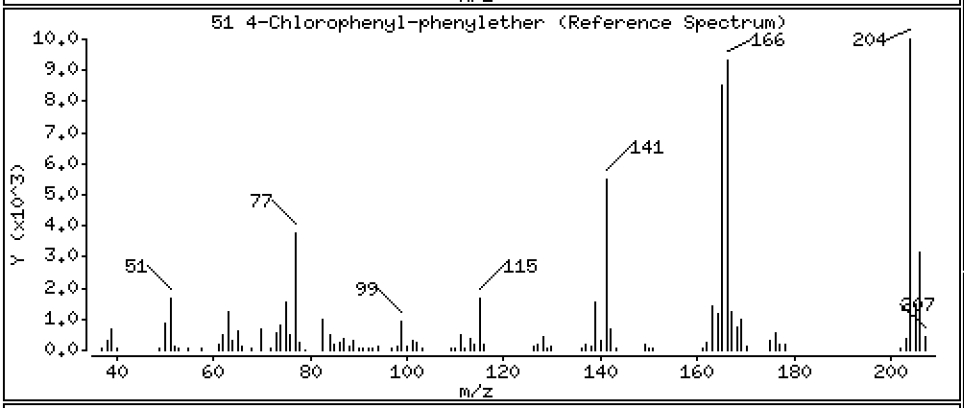
Concentration: 4.993 ug/mL

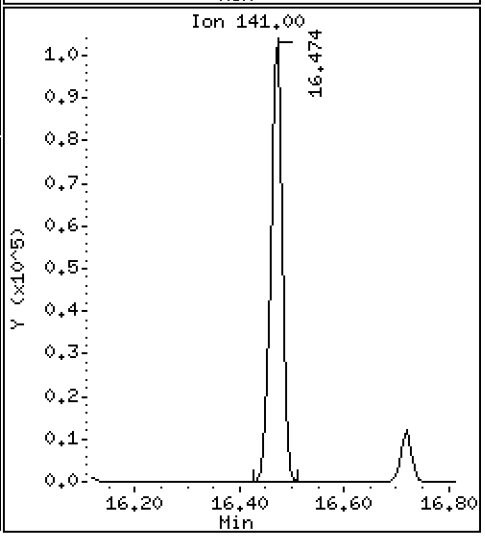


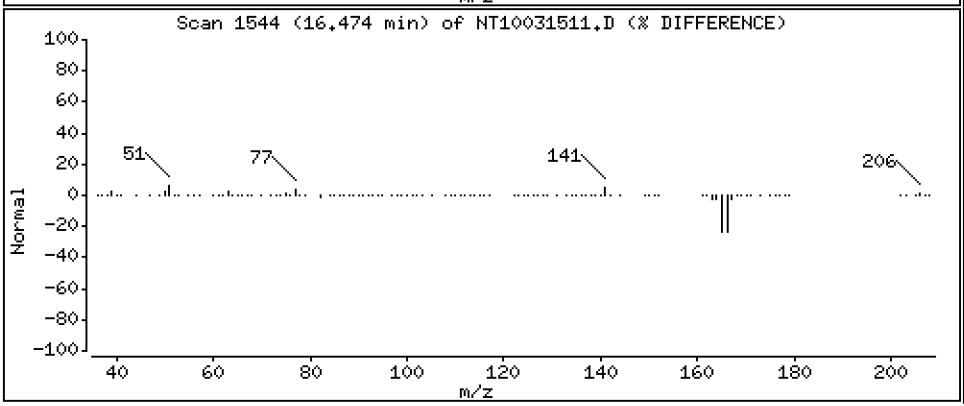












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

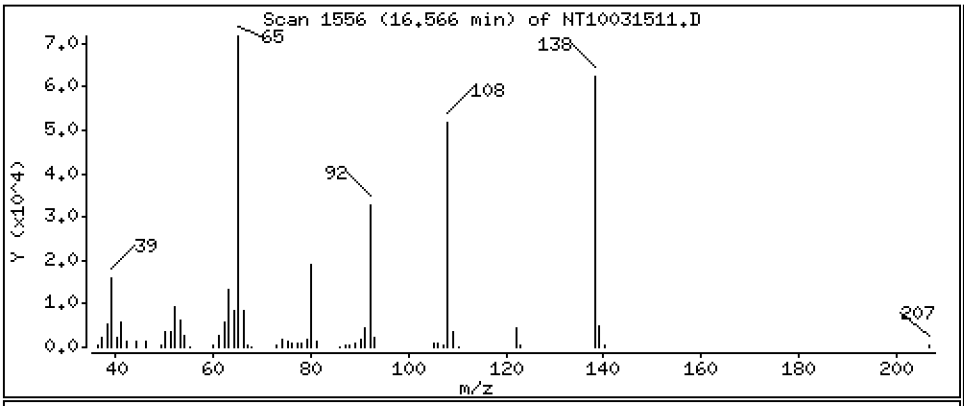
Operator: VTS

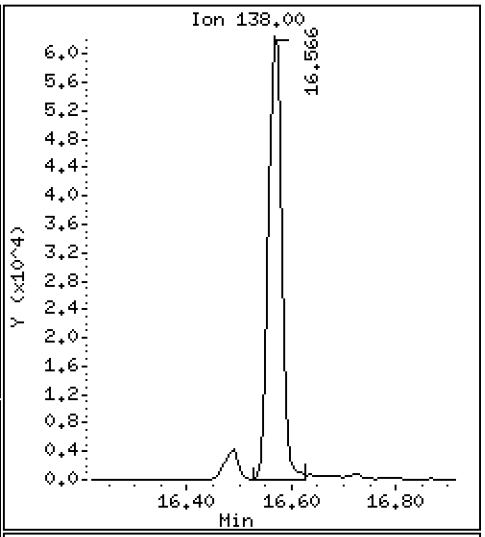
Column phase: ZB-5msi

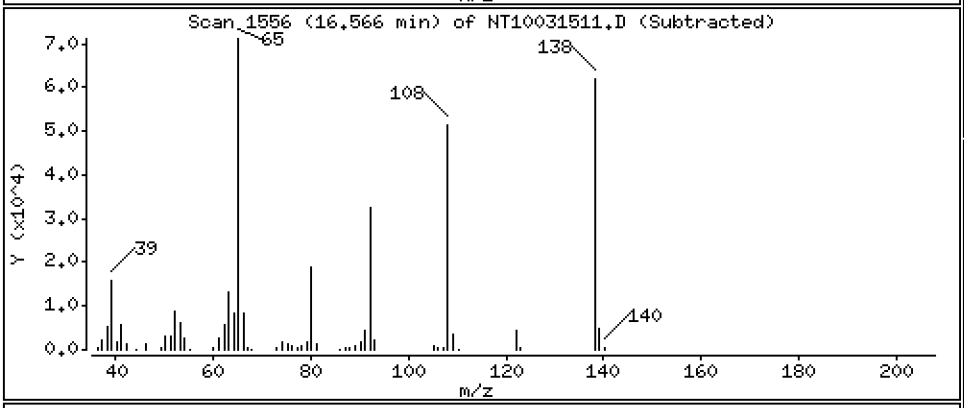
Column diameter: 0.25

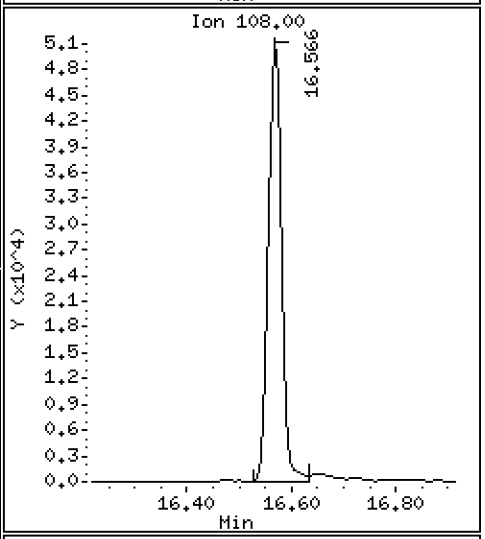
52 4-Nitroaniline

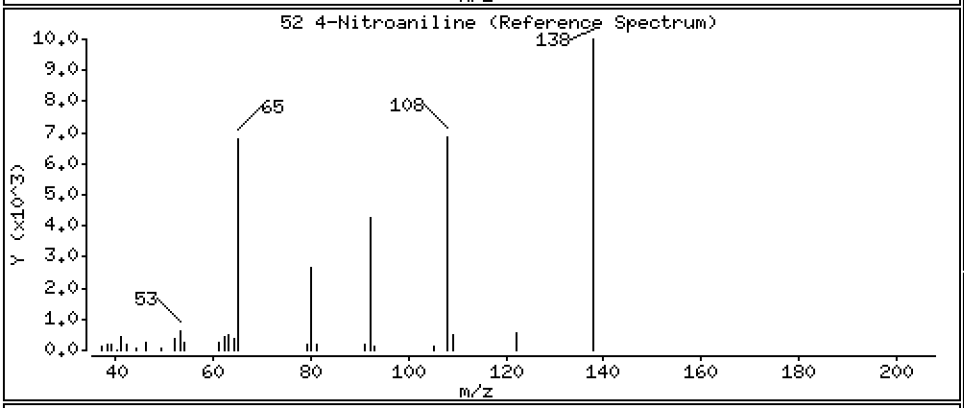
Concentration: 4.925 ug/mL

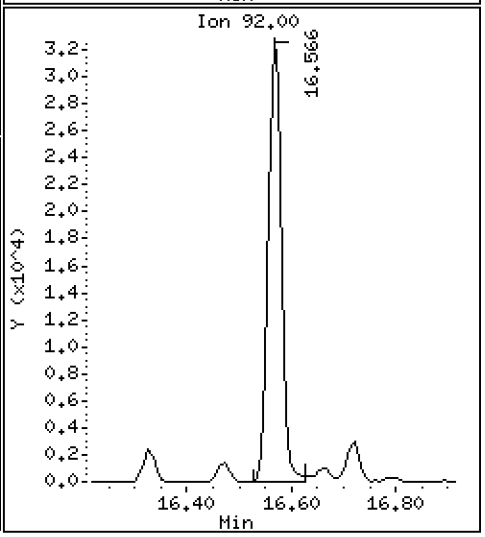


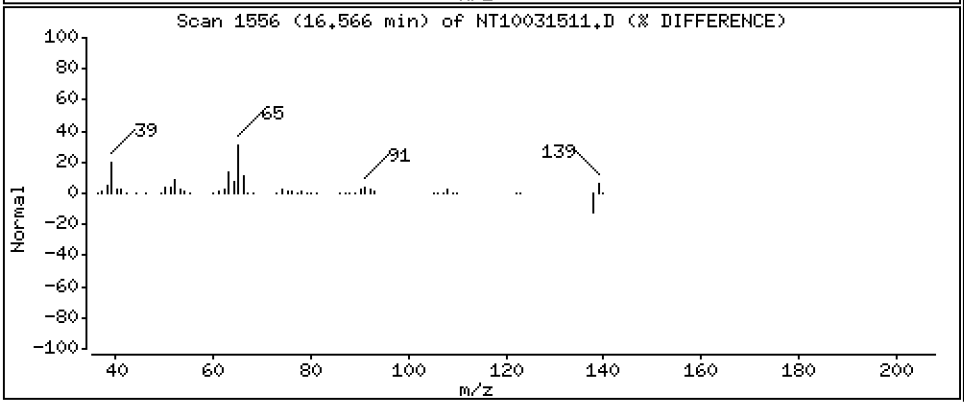












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

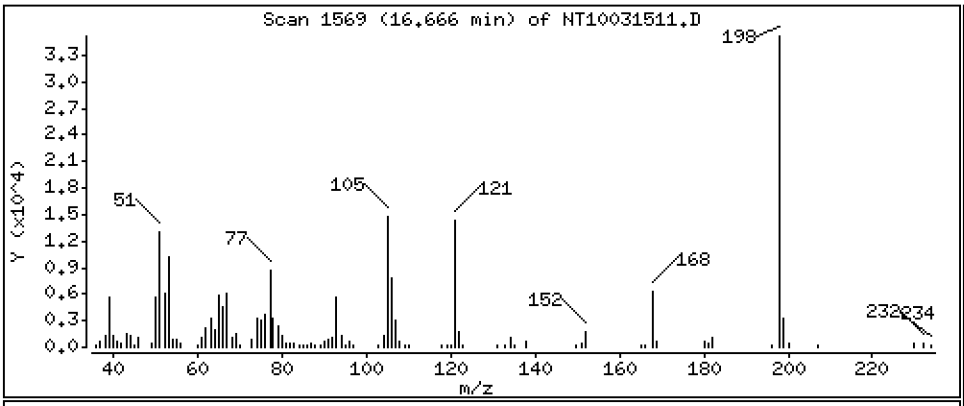
Operator: VTS

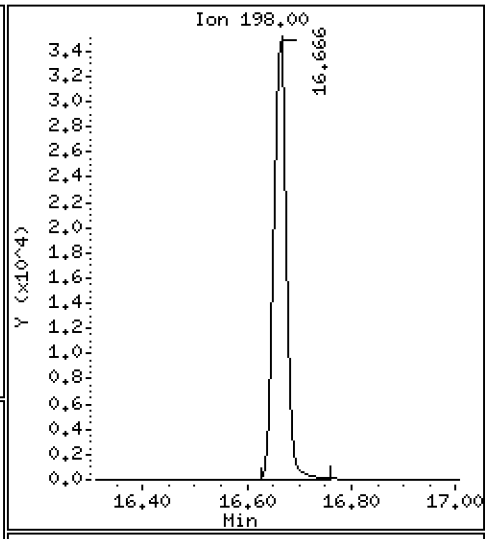
Column phase: ZB-5msi

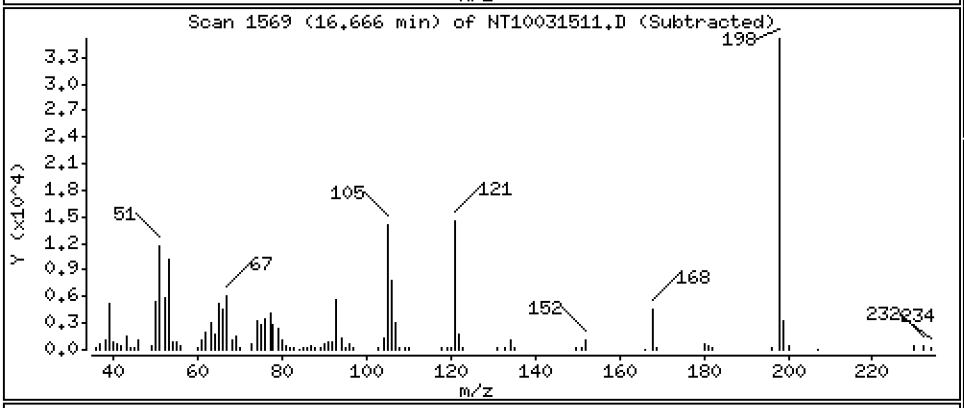
Column diameter: 0.25

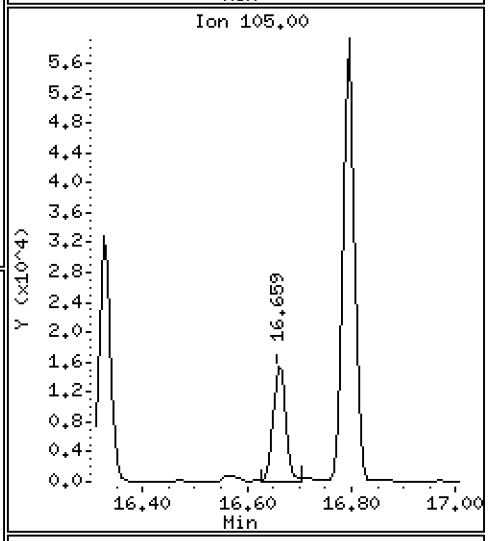
53 4,6-Dinitro-2-methylphenol

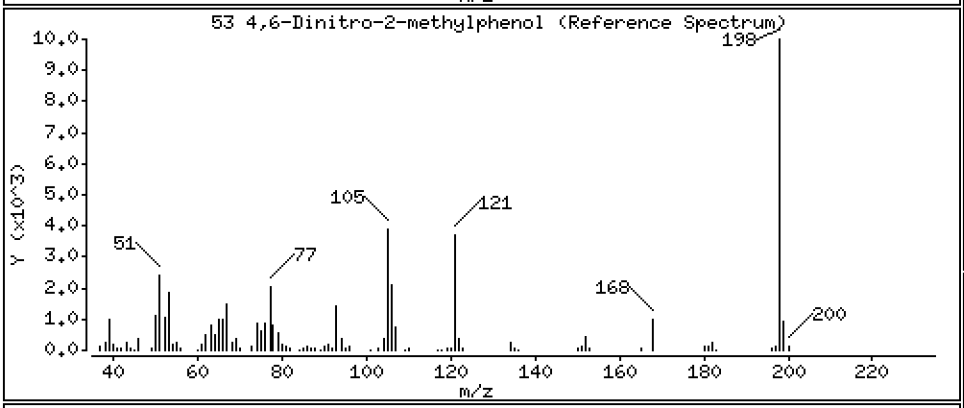
Concentration: 3.515 ug/mL

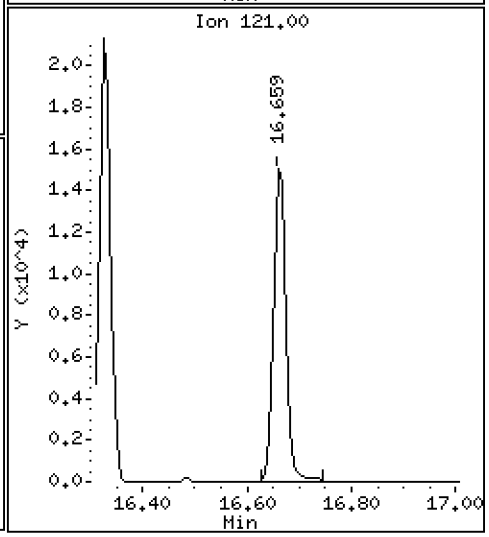


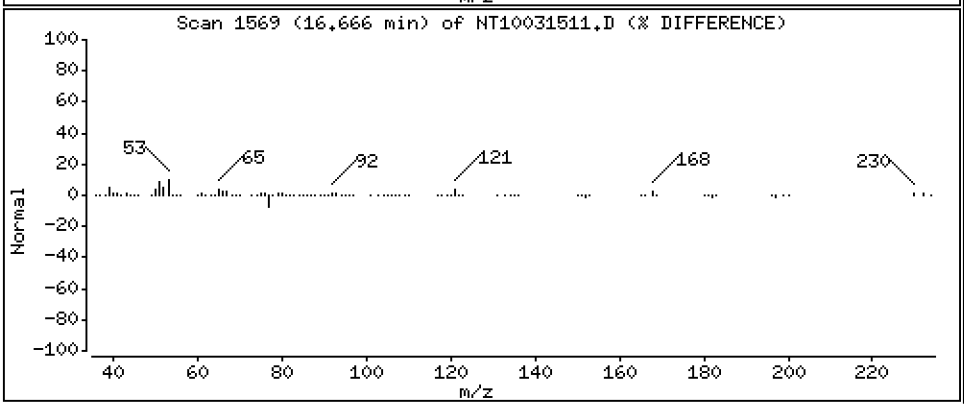












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

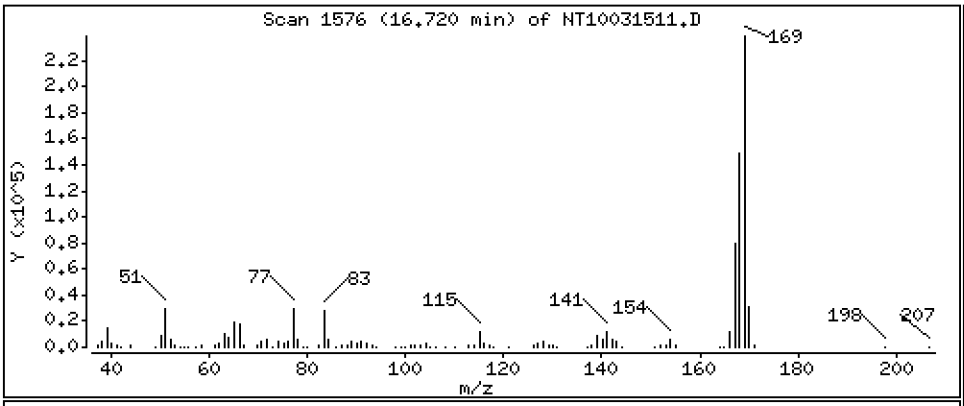
Operator: VTS

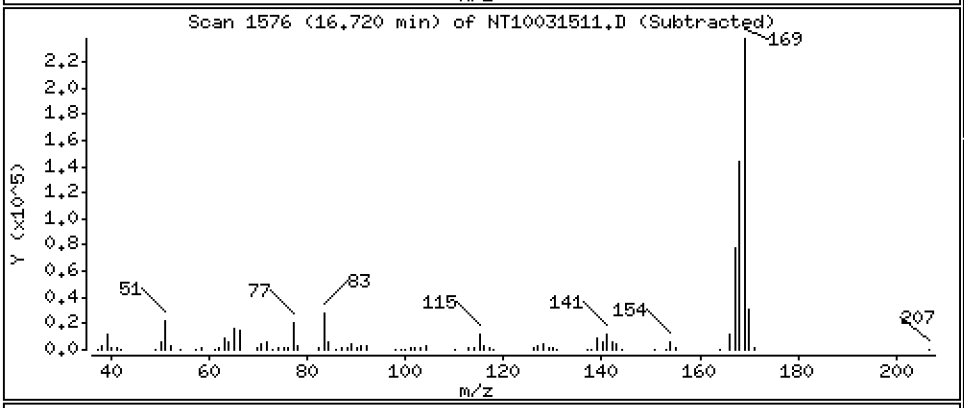
Column phase: ZB-5msi

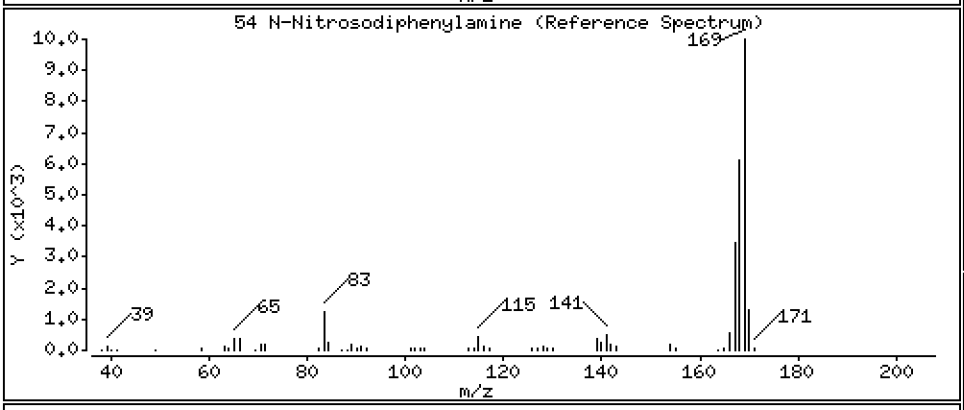
Column diameter: 0.25

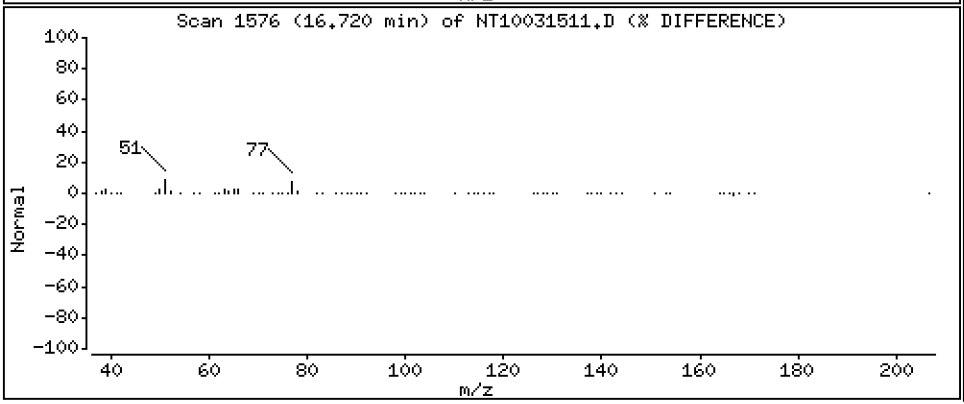
54 N-Nitrosodiphenylamine

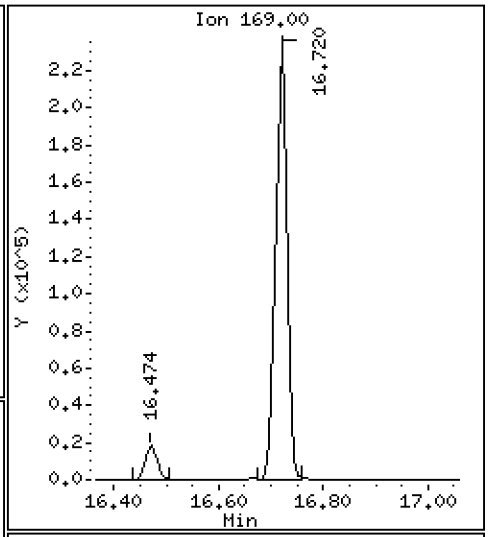
Concentration: 4.802 ug/mL

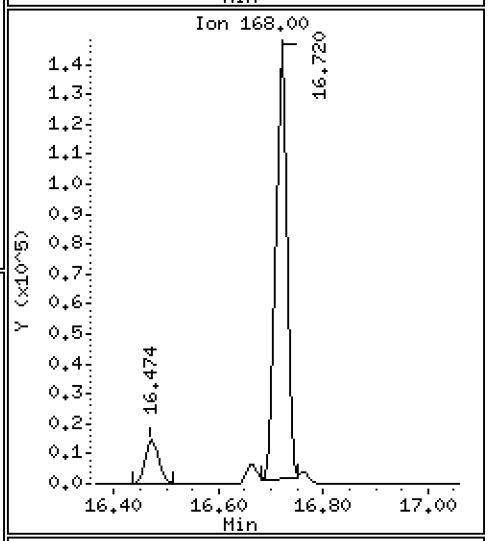


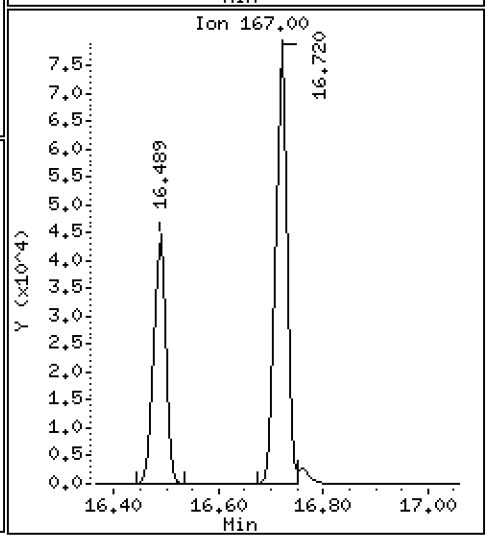












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

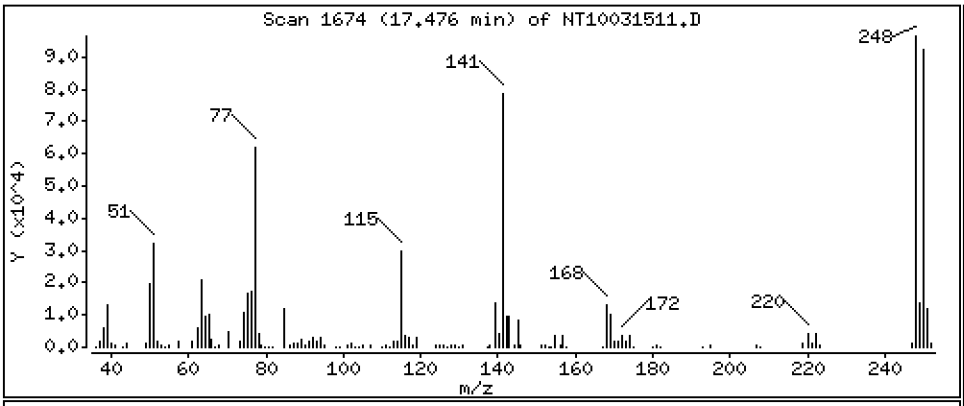
Operator: VTS

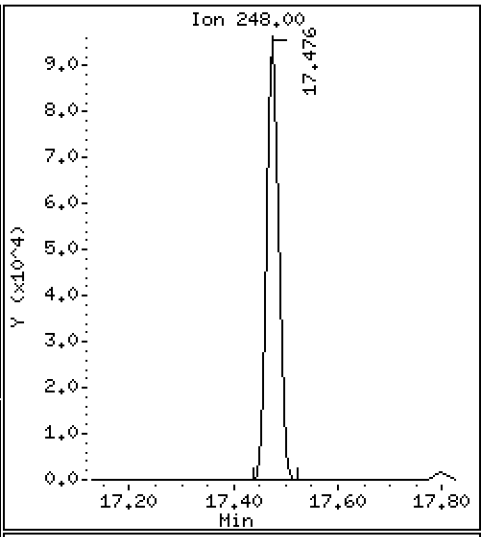
Column phase: ZB-5msi

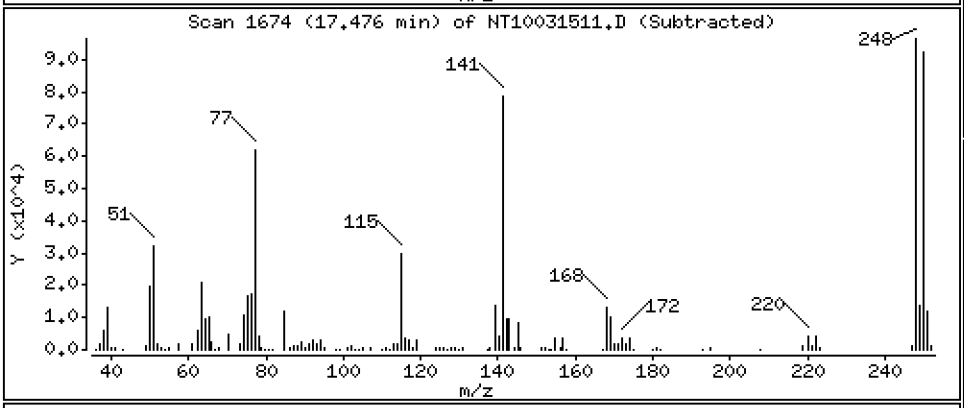
Column diameter: 0.25

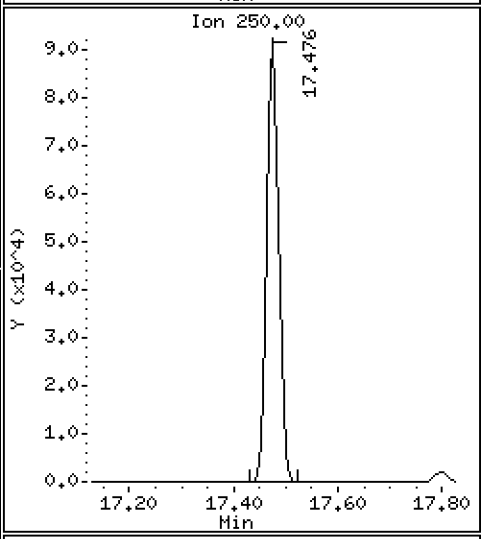
56 4-Bromophenyl-phenylether

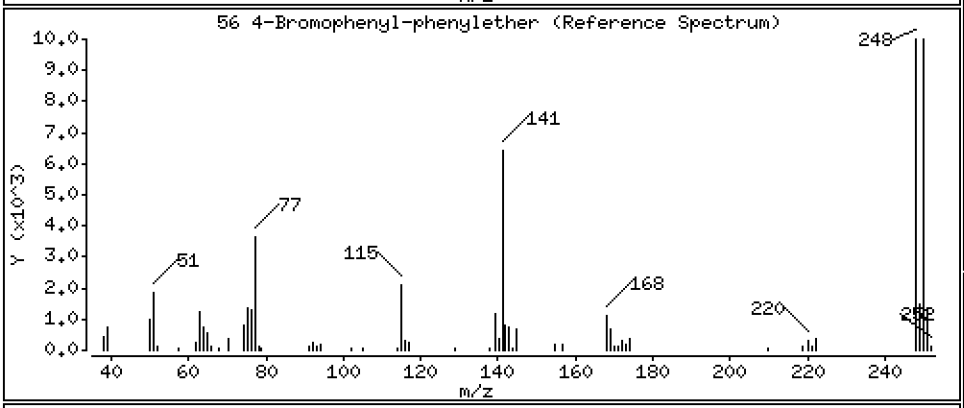
Concentration: 5.060 ug/mL

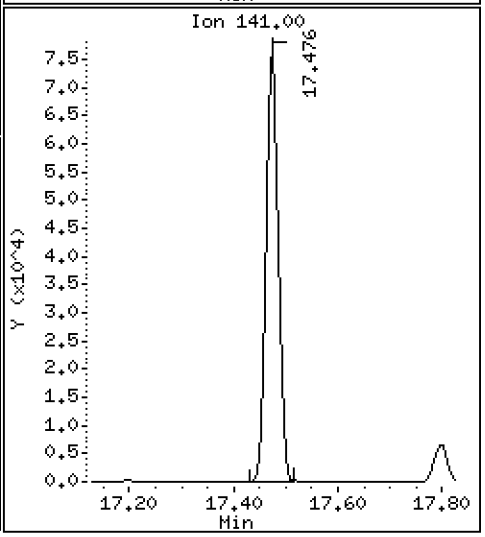


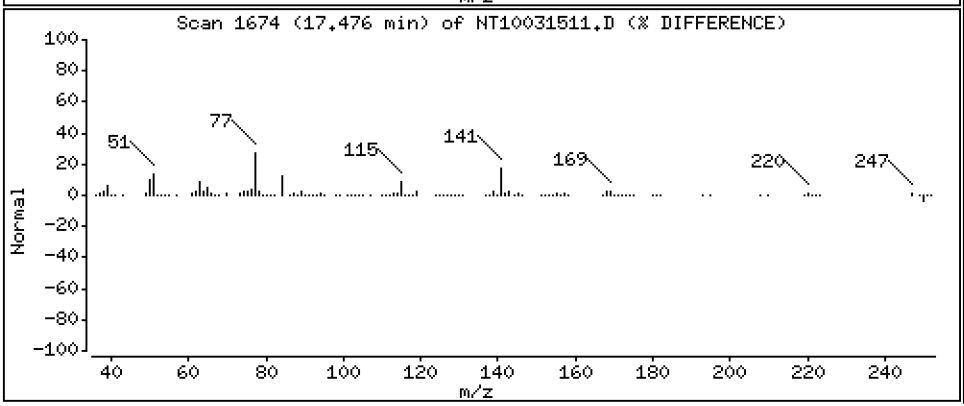












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

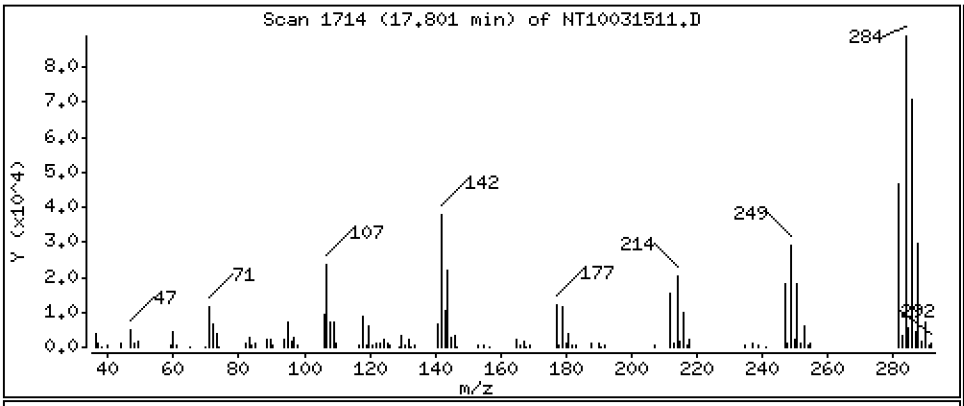
Operator: VTS

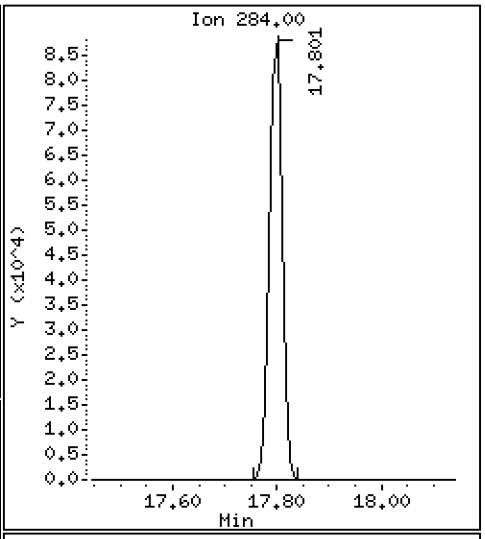
Column phase: ZB-5msi

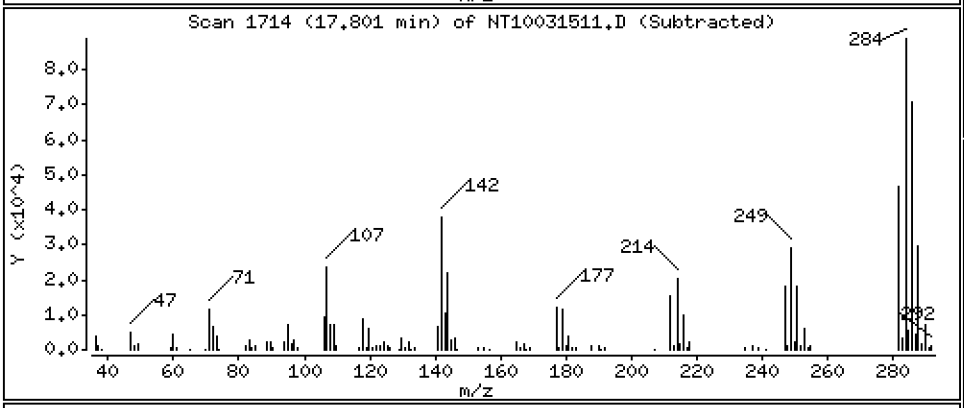
Column diameter: 0.25

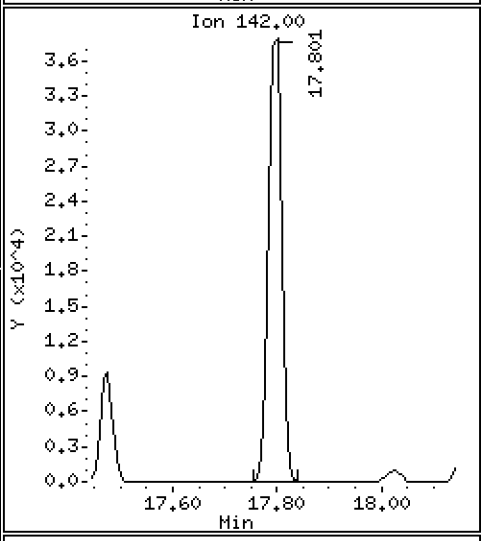
57 Hexachlorobenzene

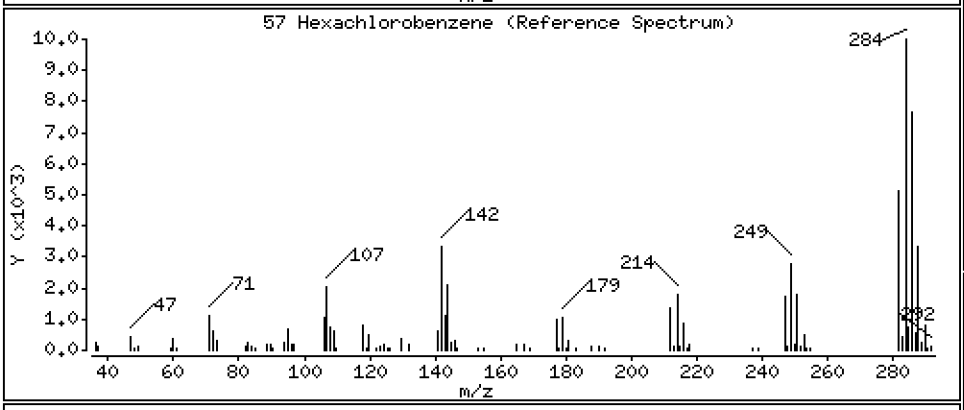
Concentration: 4.596 ug/mL

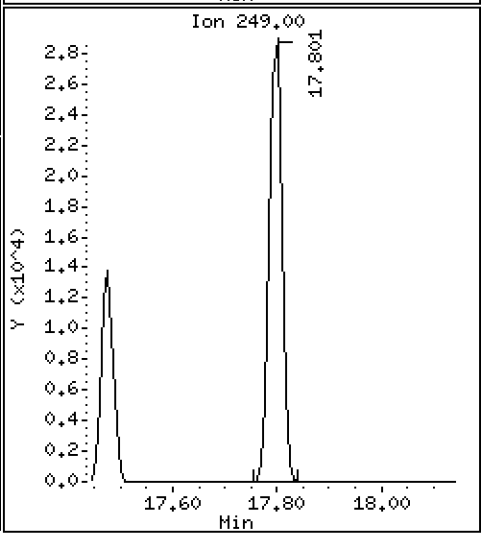


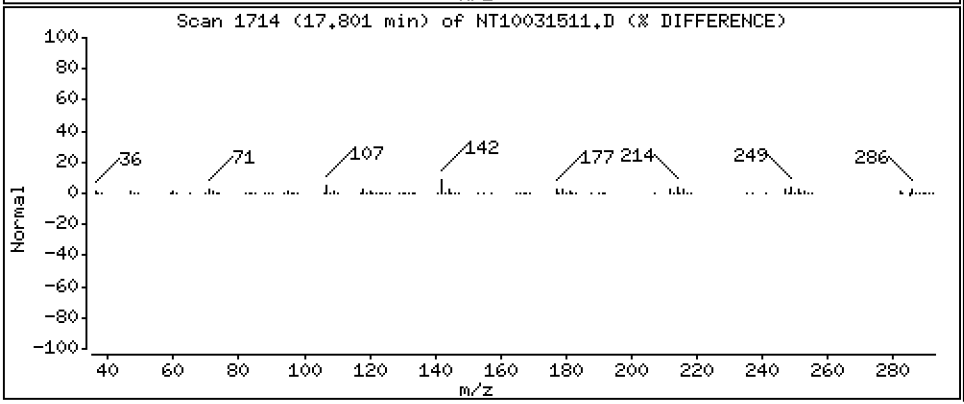












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

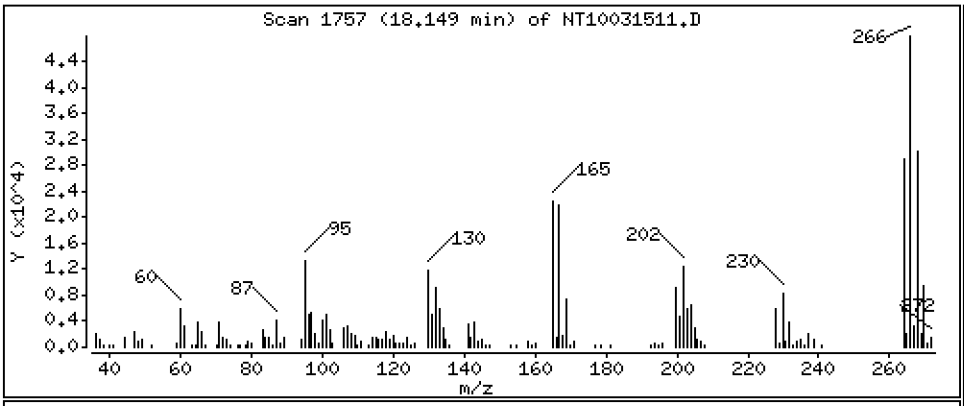
Operator: VTS

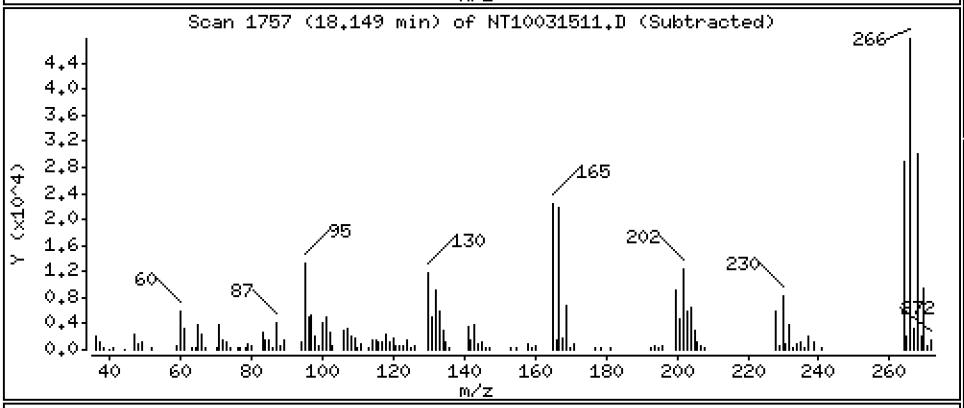
Column phase: ZB-5msi

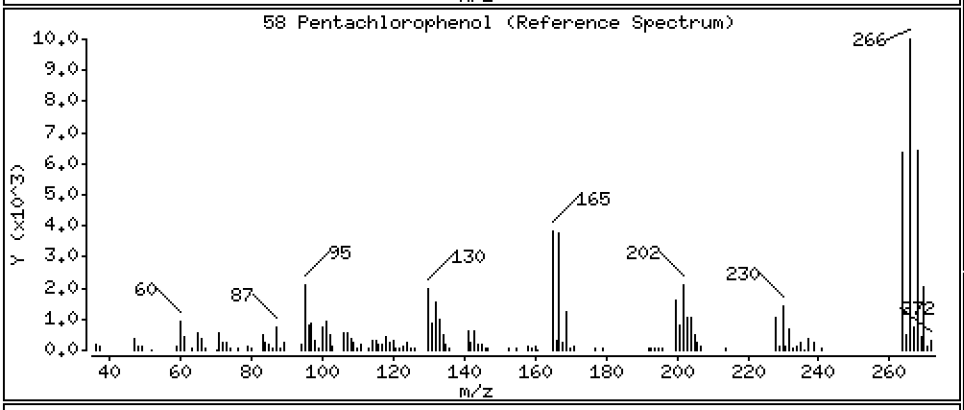
Column diameter: 0.25

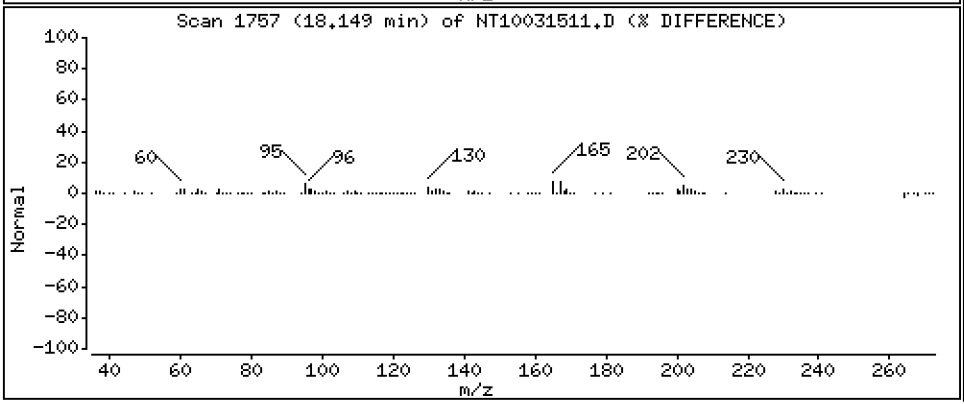
58 Pentachlorophenol

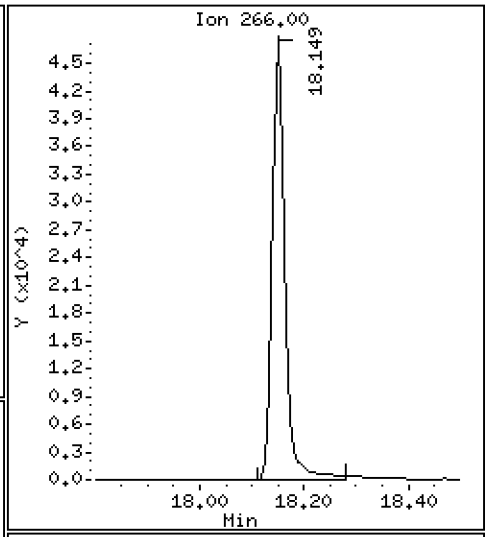
Concentration: 4.057 ug/mL

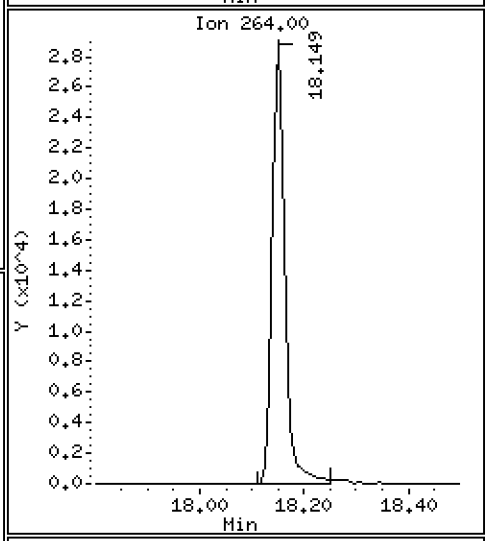


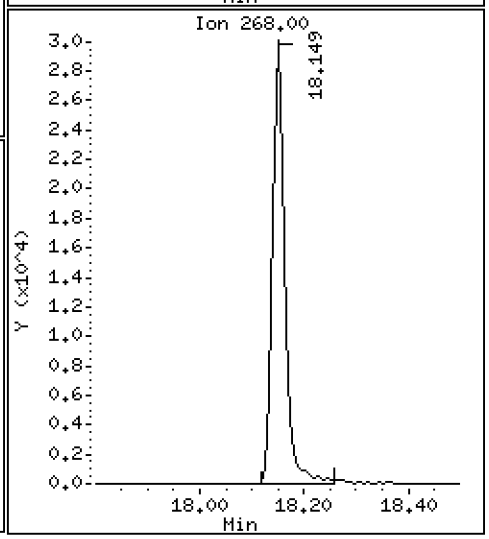












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

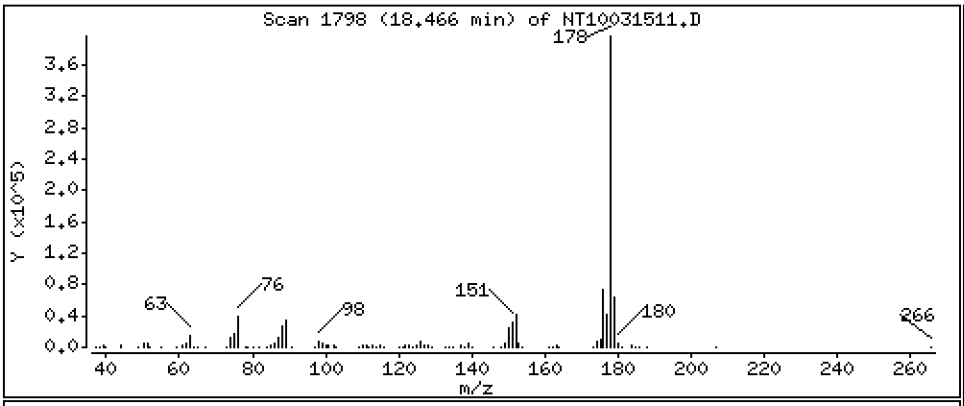
Operator: VTS

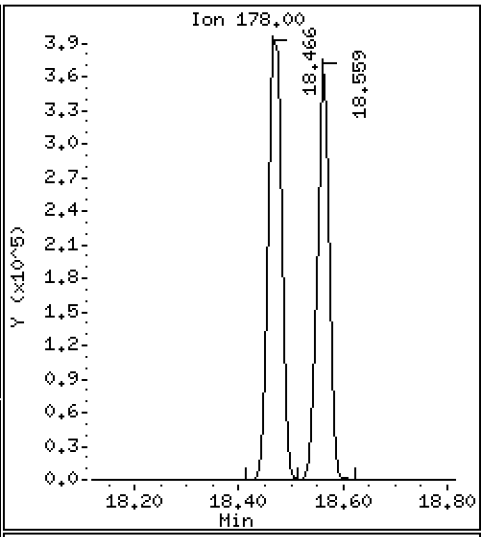
Column phase: ZB-5msi

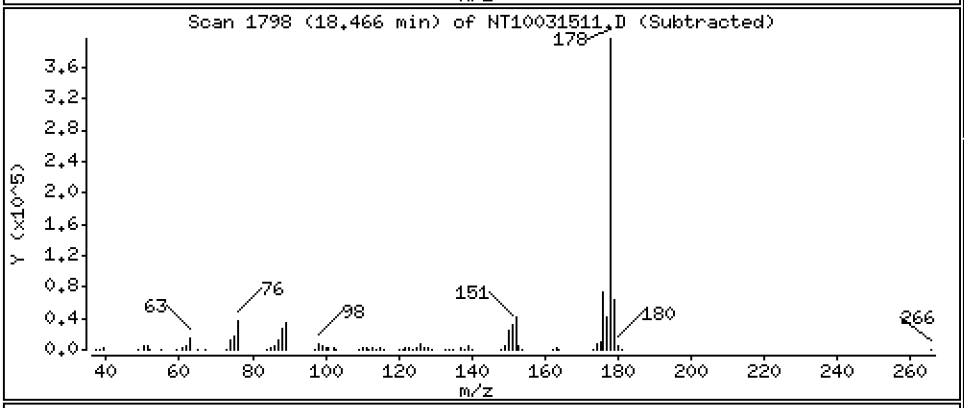
Column diameter: 0.25

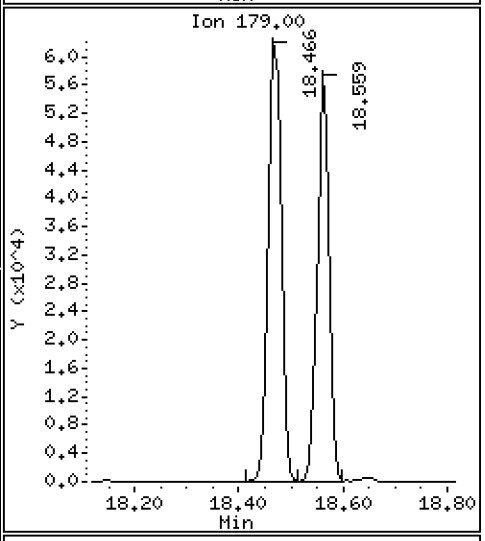
60 Phenanthrene

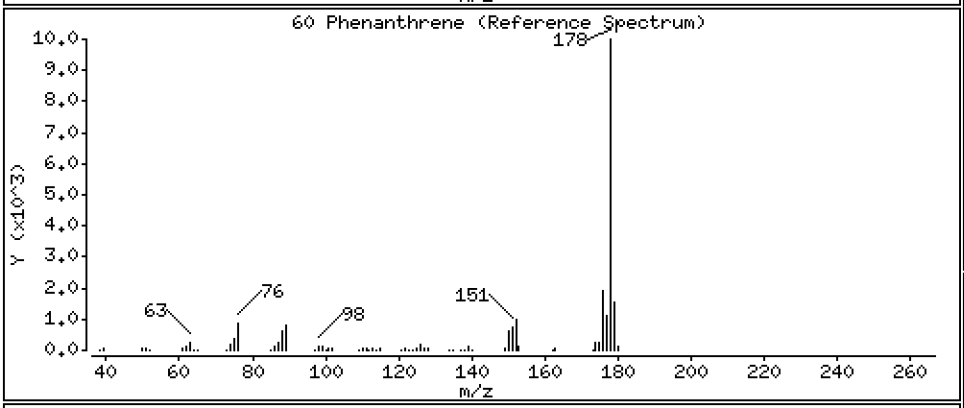
Concentration: 4.602 ug/mL

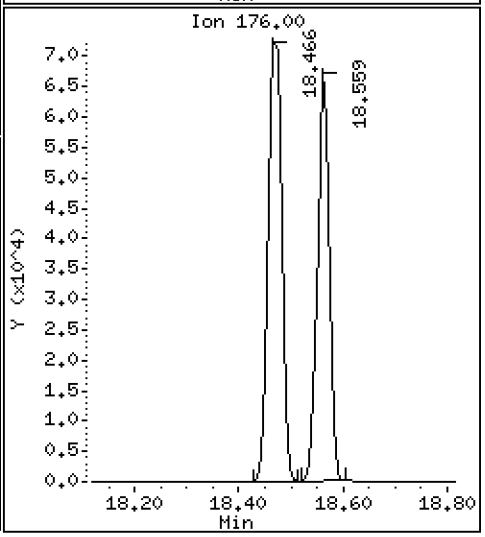


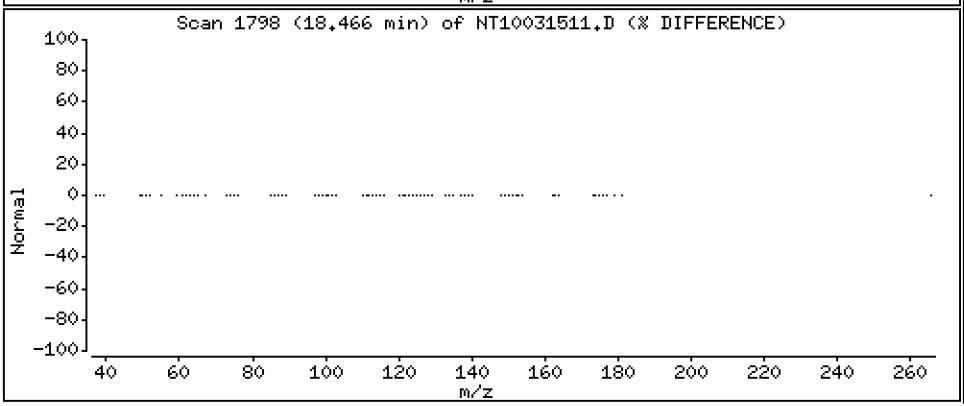












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

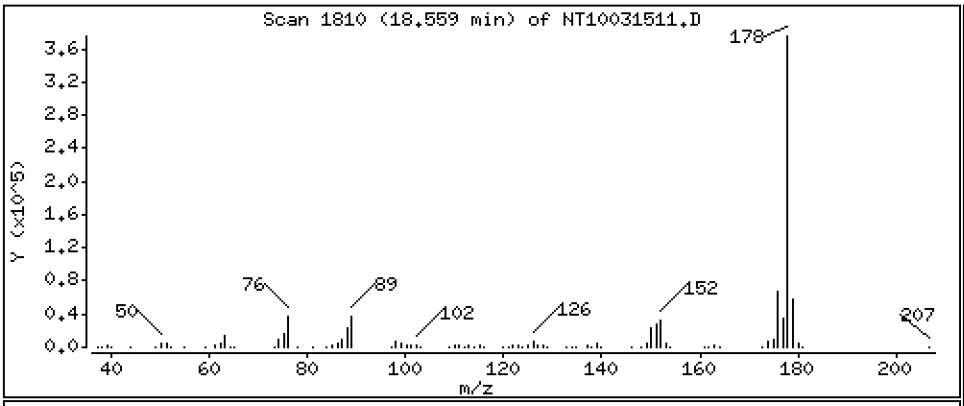
Operator: VTS

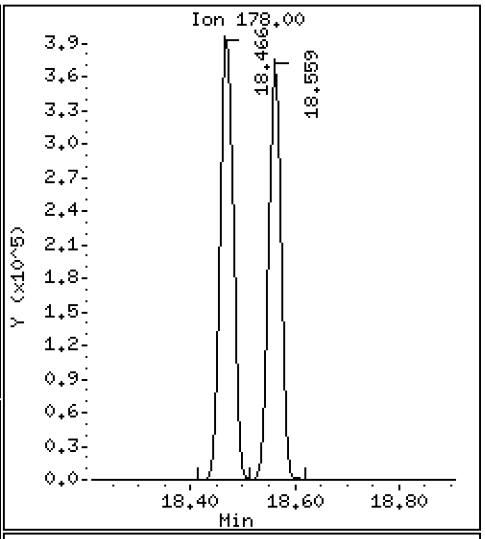
Column phase: ZB-5msi

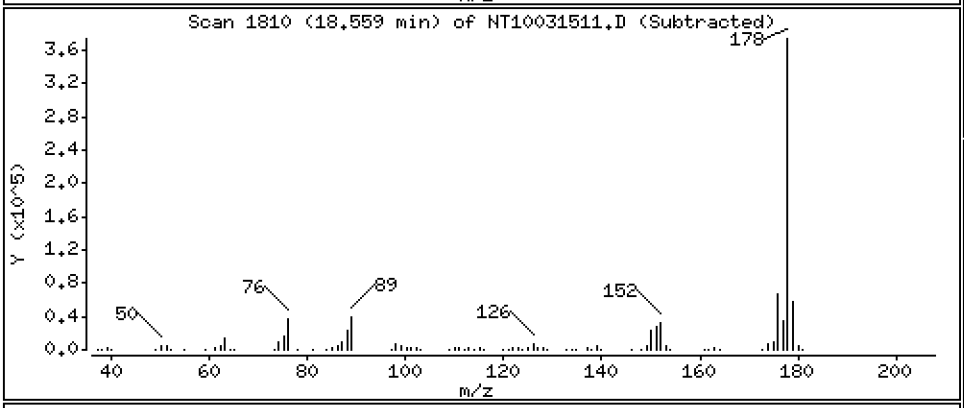
Column diameter: 0.25

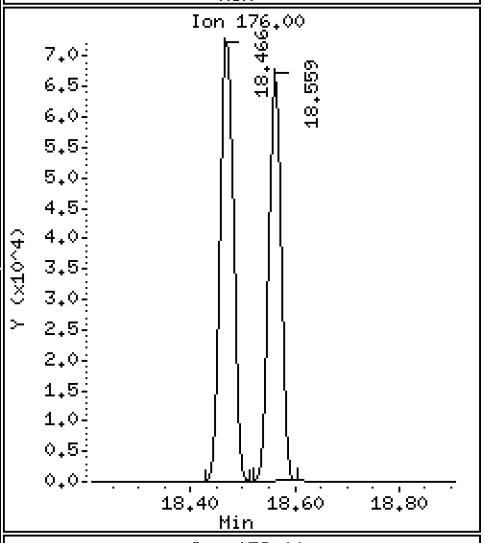
61 Anthracene

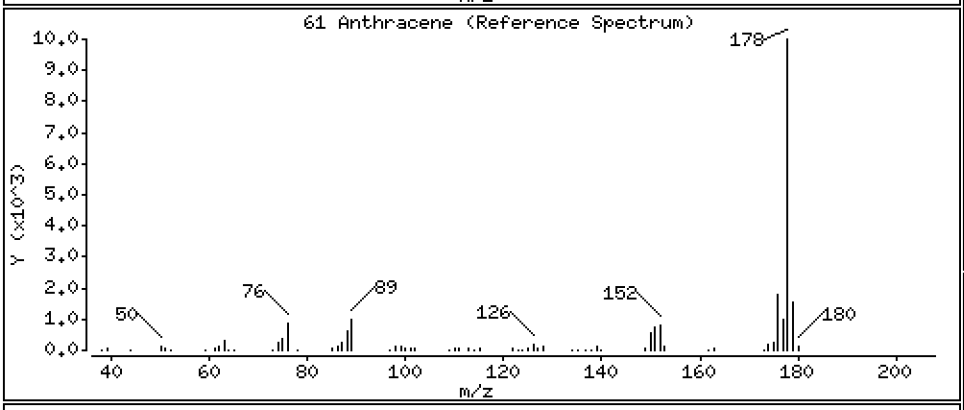
Concentration: 4.167 ug/mL

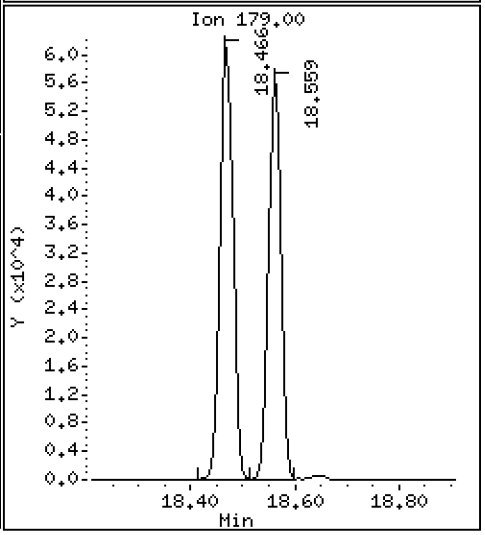


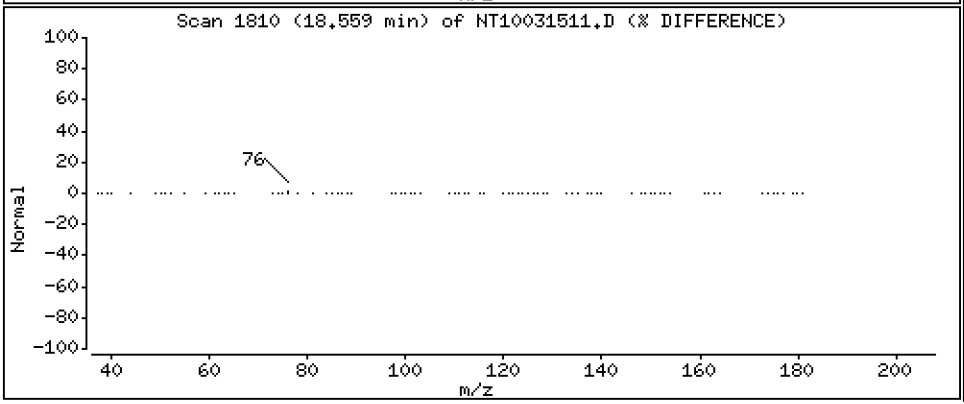












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

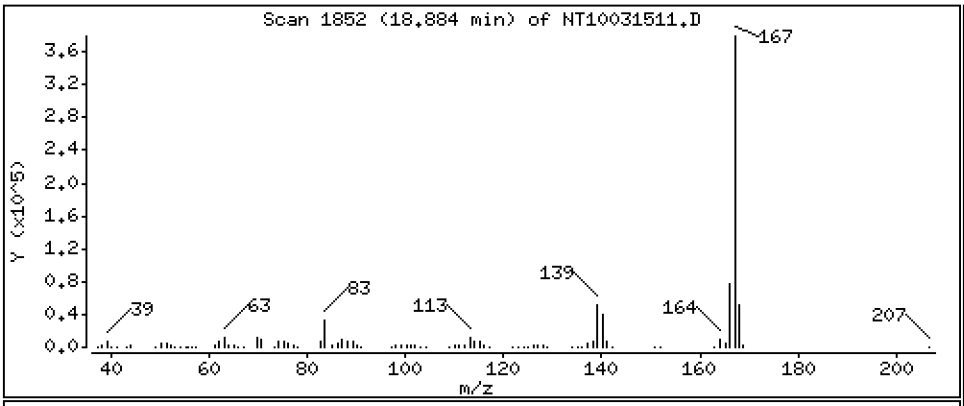
Operator: VTS

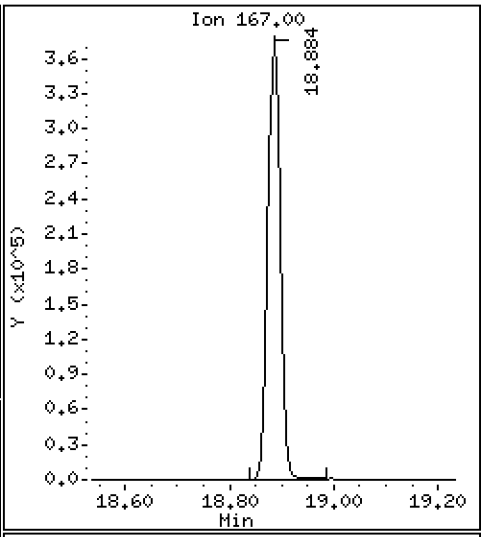
Column phase: ZB-5msi

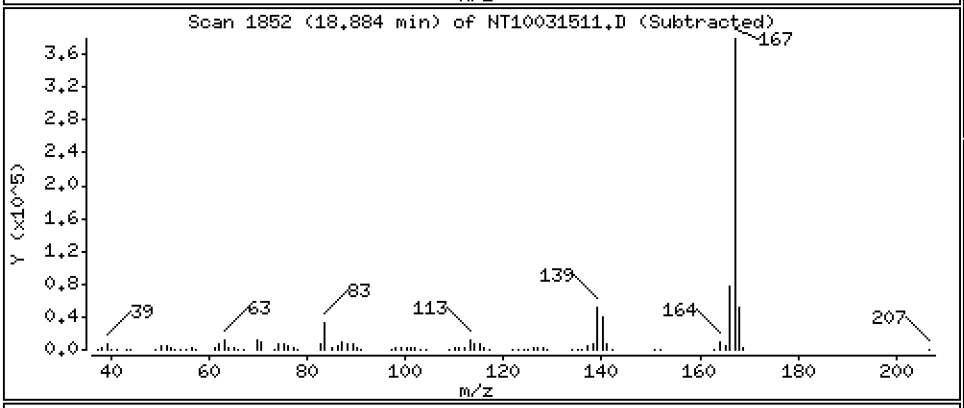
Column diameter: 0.25

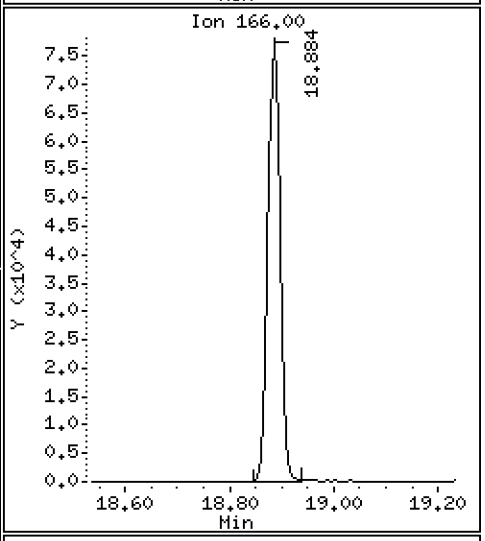
62 Carbazole

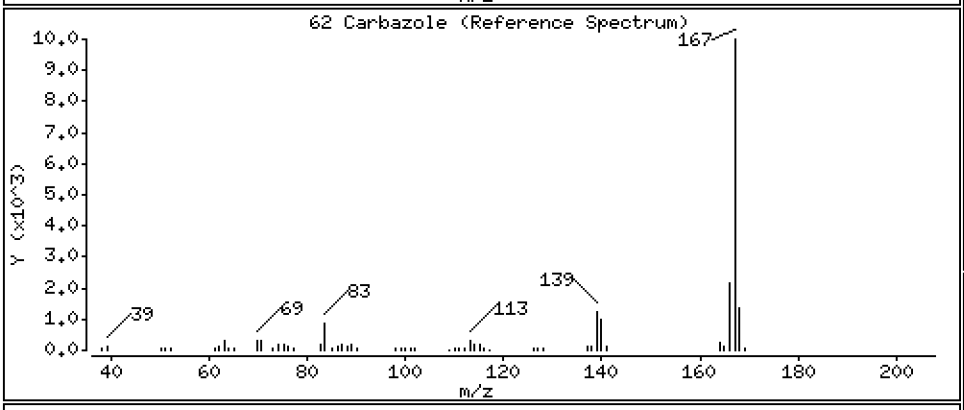
Concentration: 4.730 ug/mL

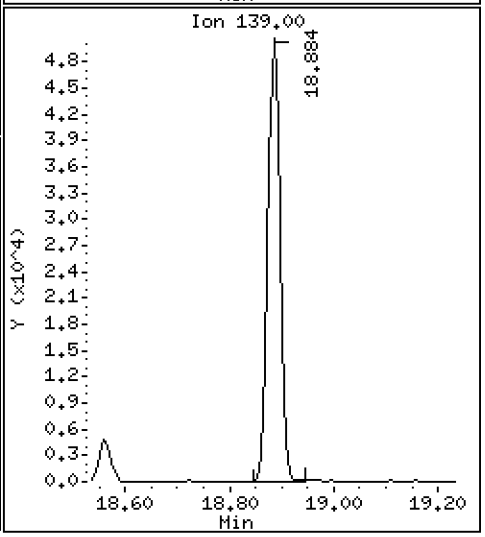


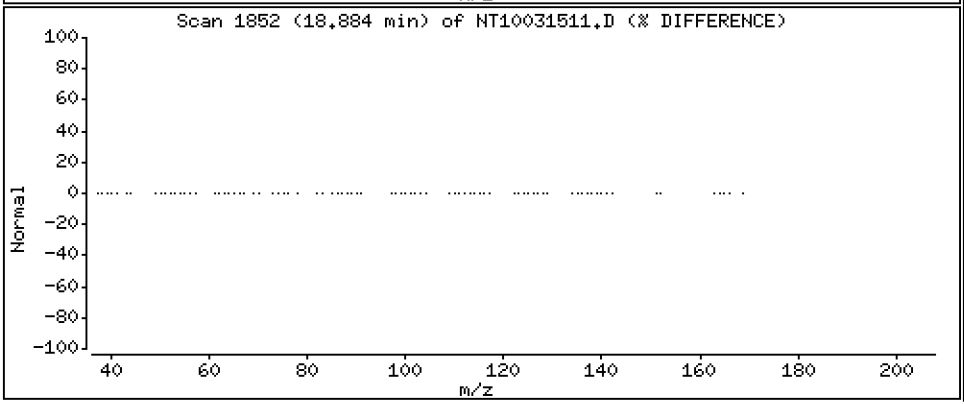












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

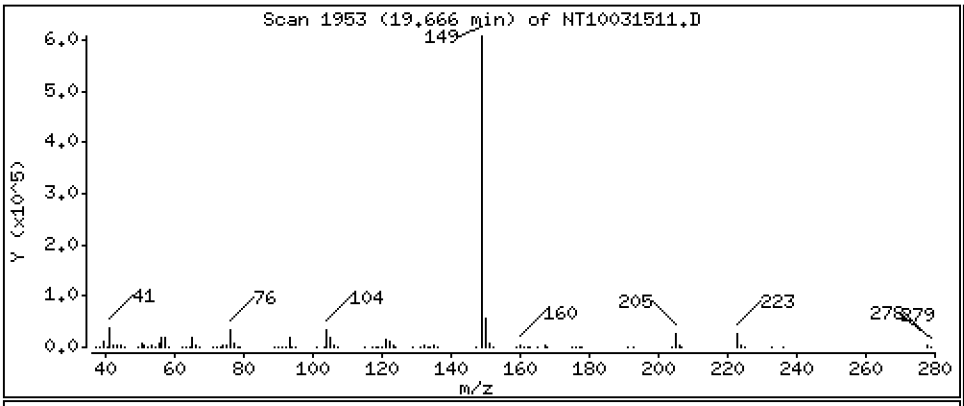
Operator: VTS

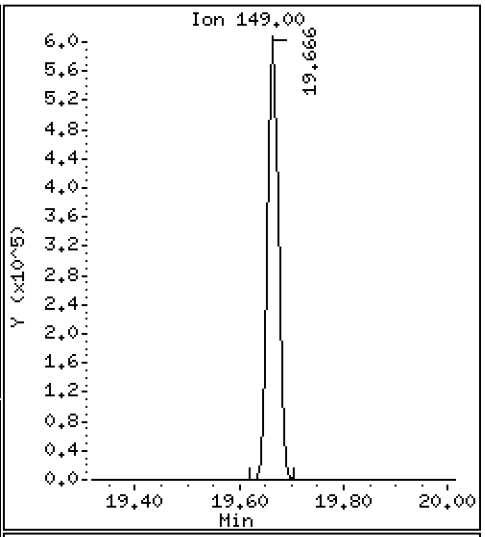
Column phase: ZB-5msi

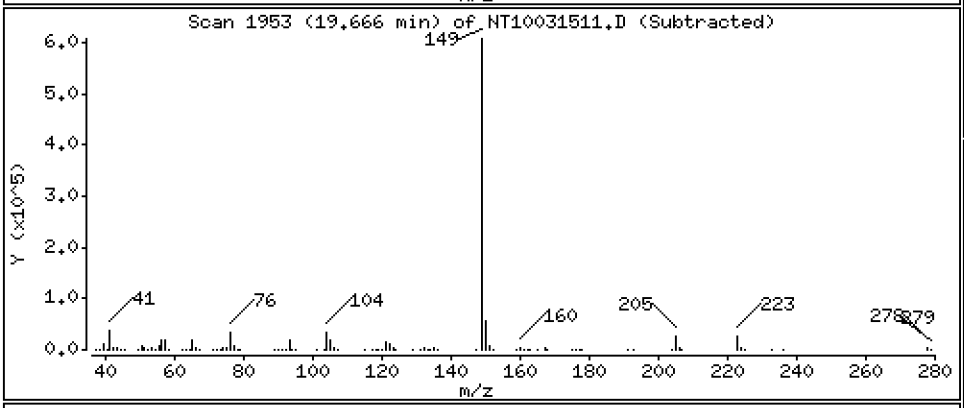
Column diameter: 0.25

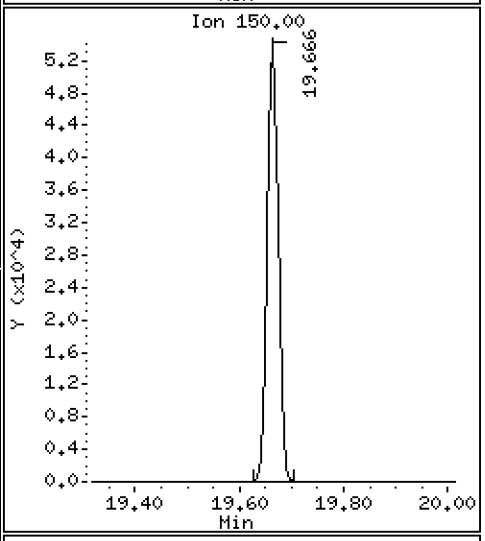
63 Di-n-butylphthalate

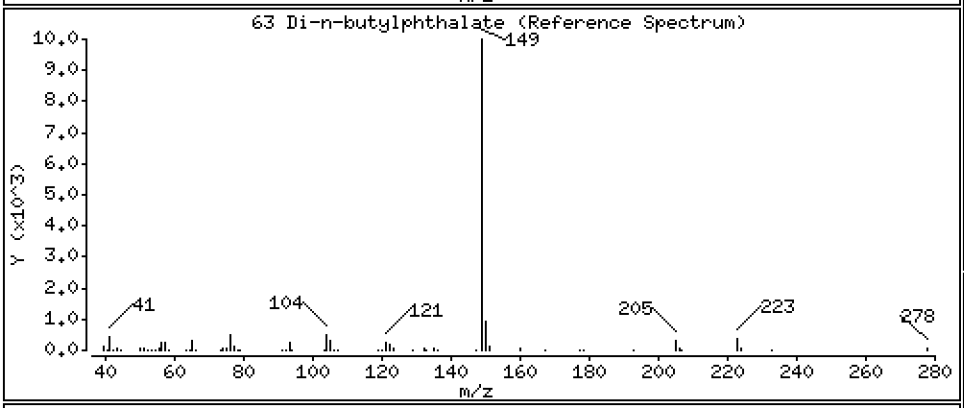
Concentration: 4.967 ug/mL

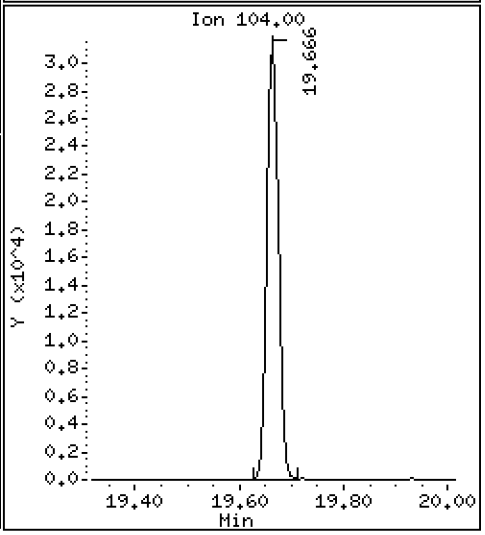


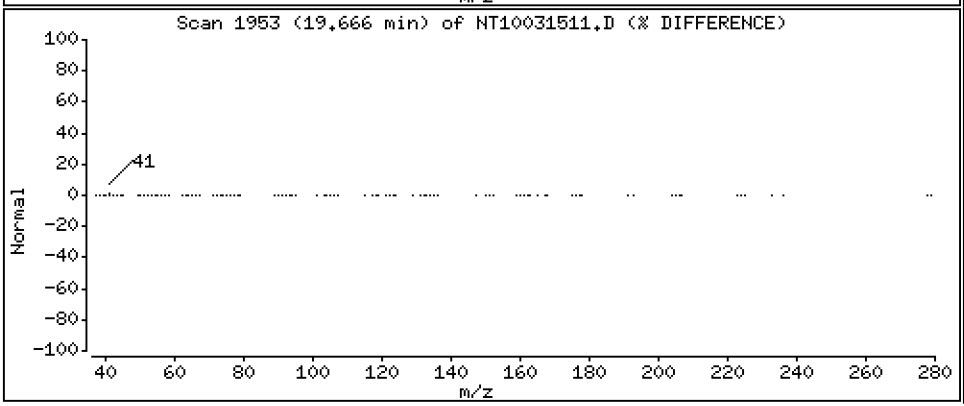












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

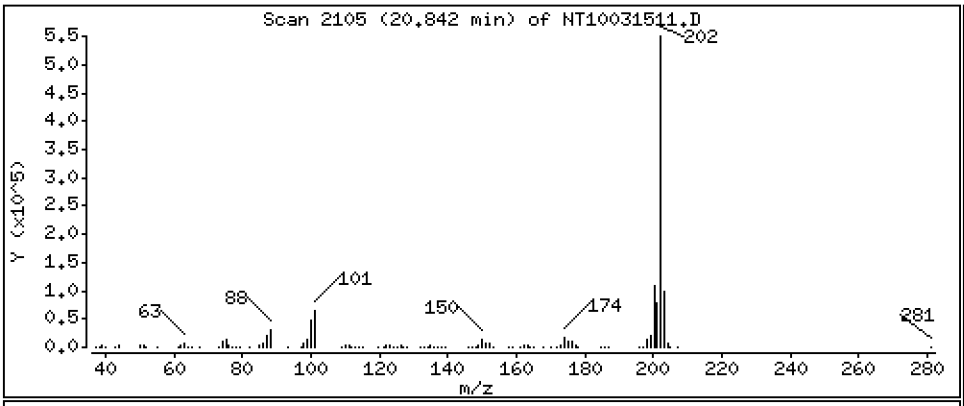
Operator: VTS

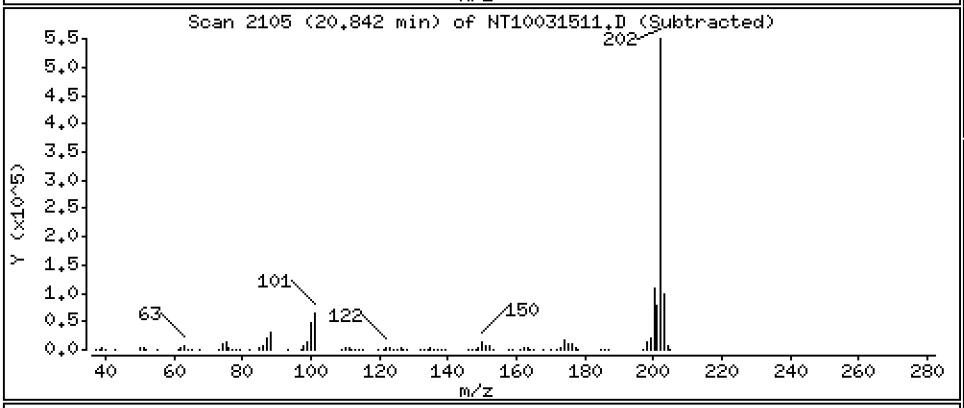
Column phase: ZB-5msi

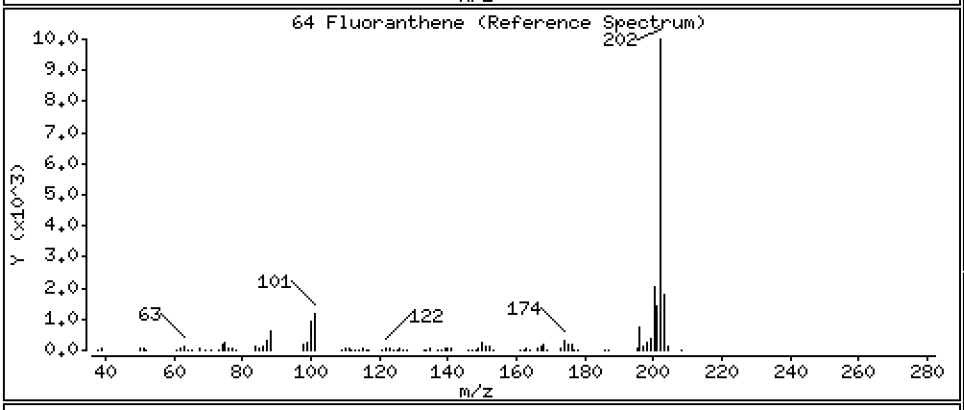
Column diameter: 0.25

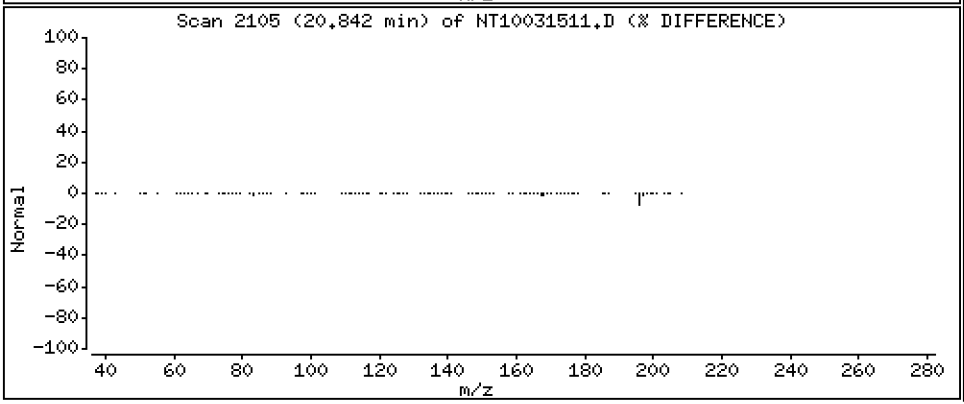
64 Fluoranthene

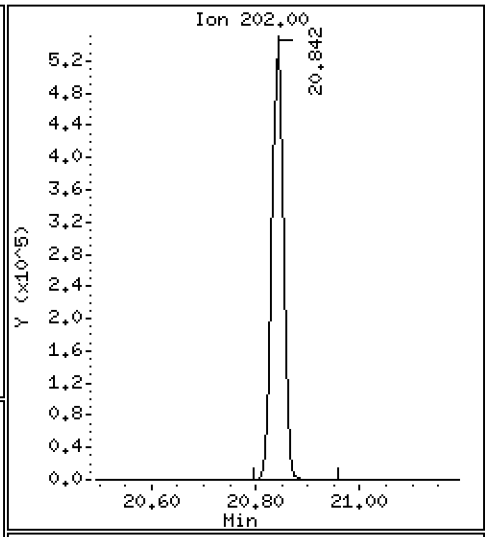
Concentration: 4.472 ug/mL

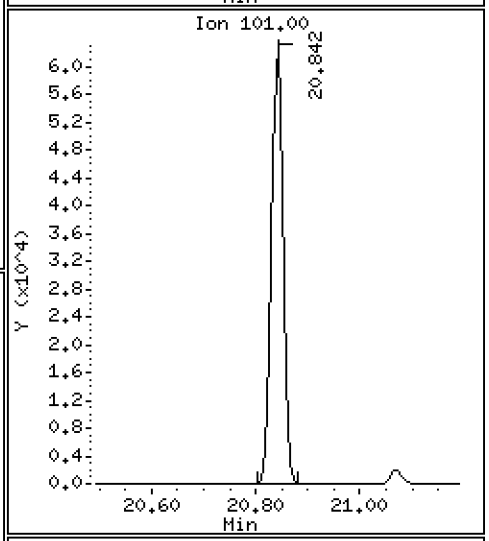


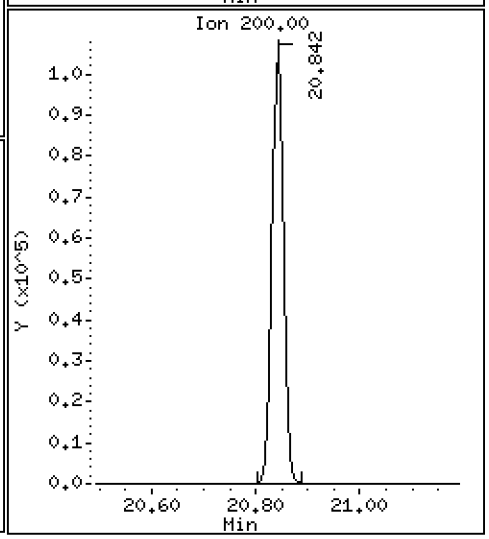












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

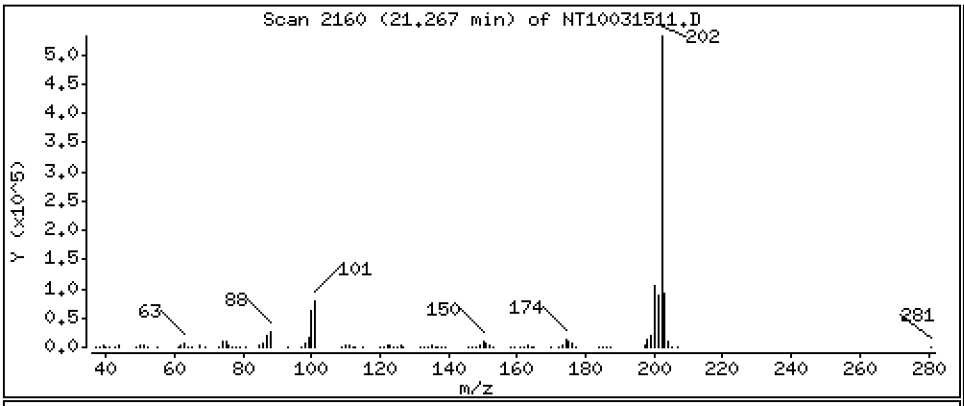
Operator: VTS

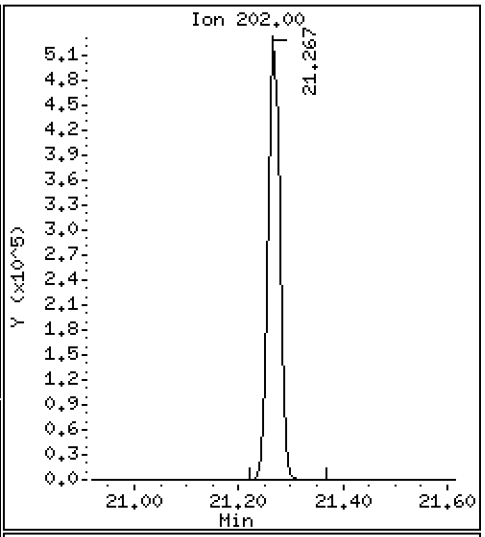
Column phase: ZB-5msi

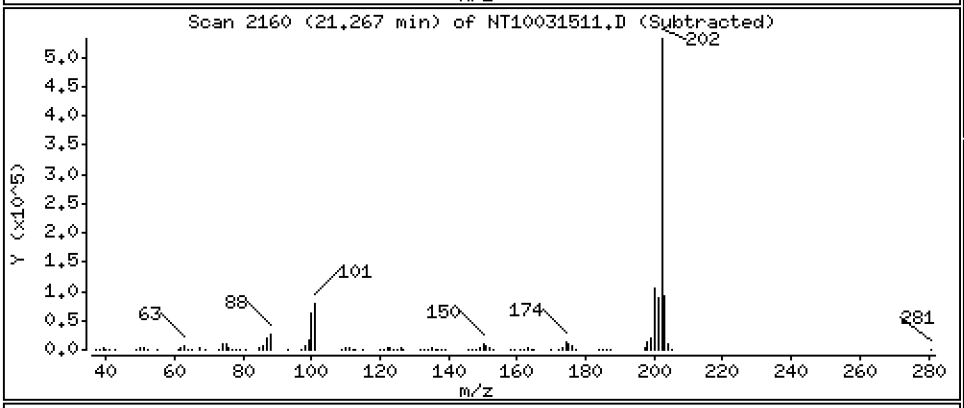
Column diameter: 0.25

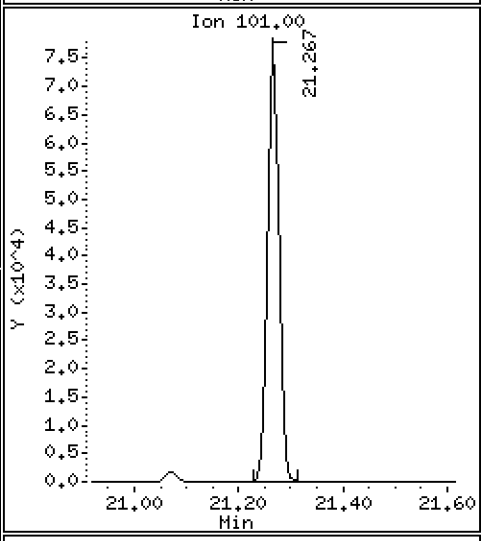
65 Pyrene

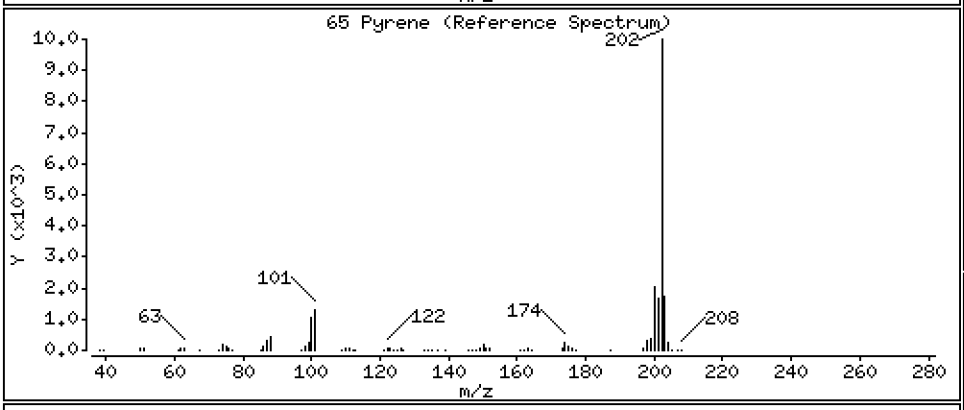
Concentration: 4.339 ug/mL

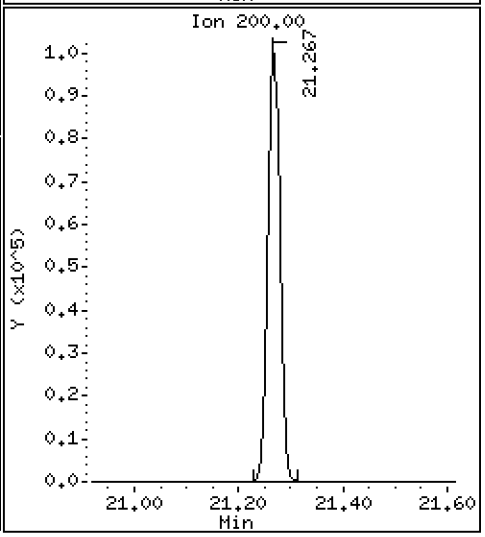


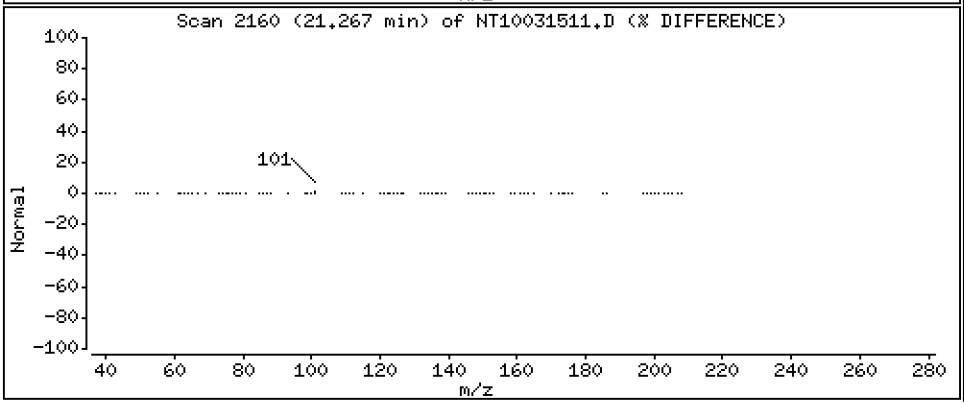












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

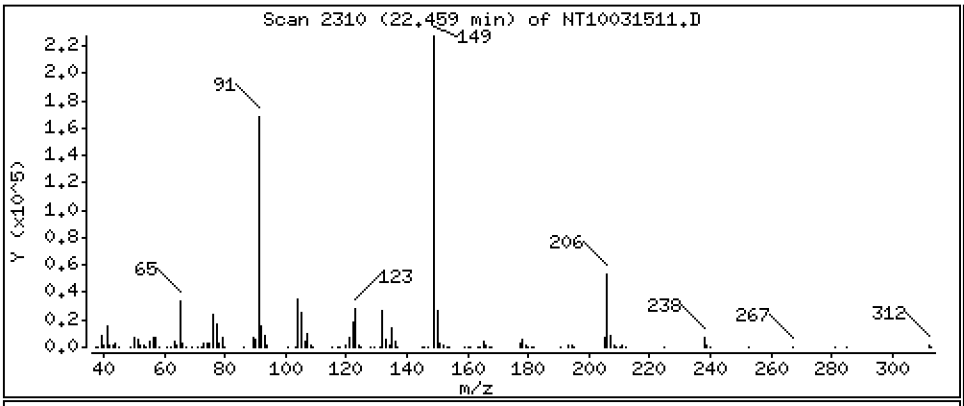
Operator: VTS

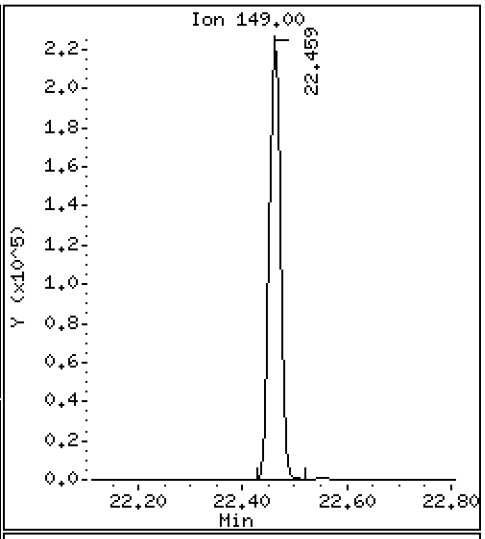
Column phase: ZB-5msi

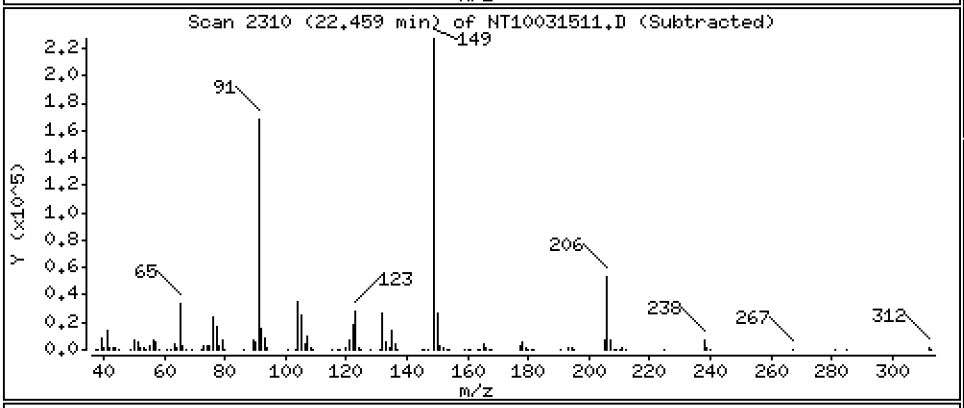
Column diameter: 0.25

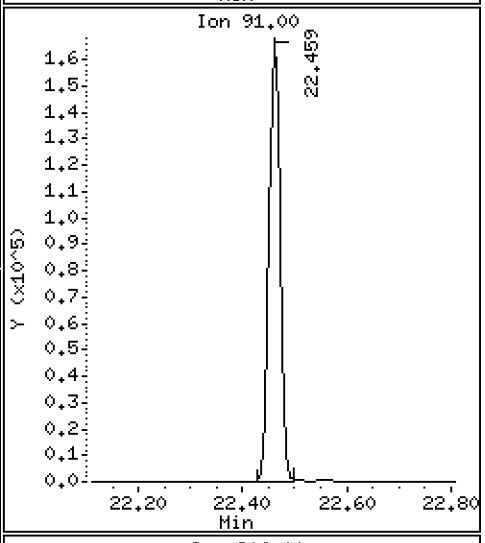
67 Butylbenzylphthalate

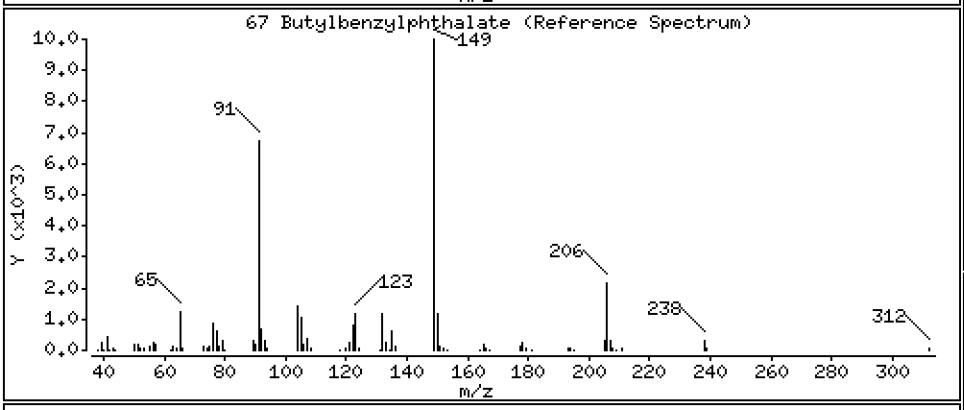
Concentration: 4.834 ug/mL

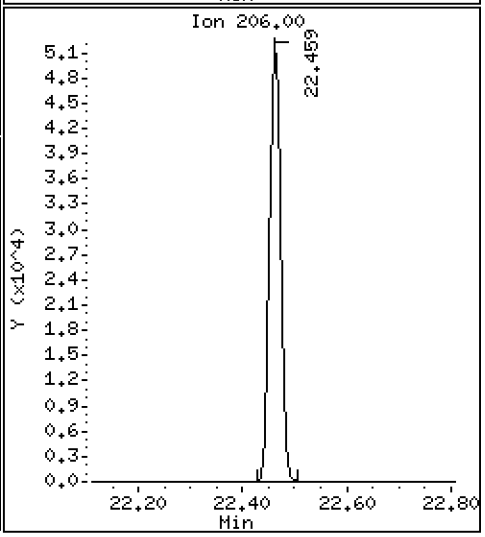


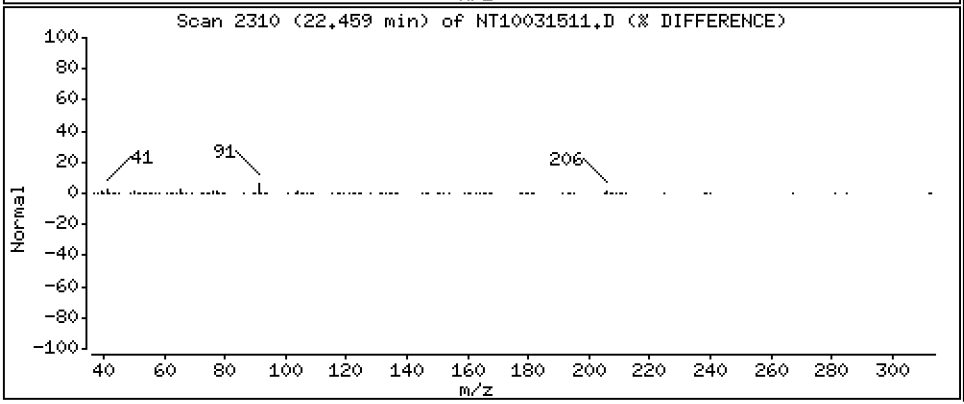












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

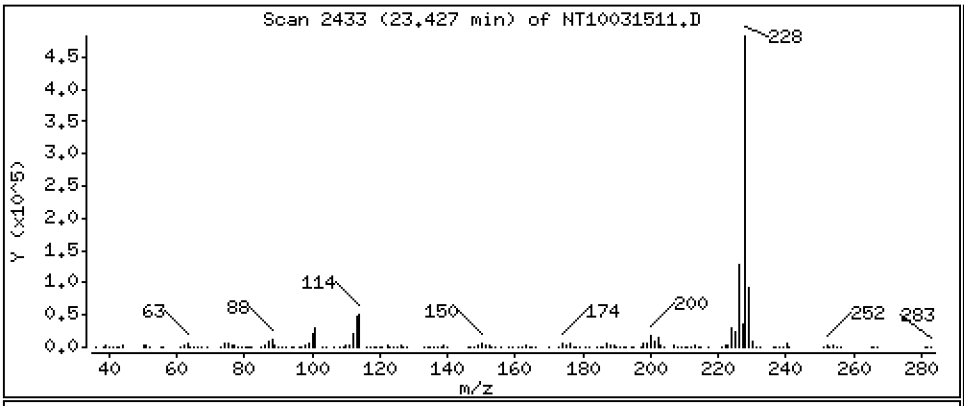
Operator: VTS

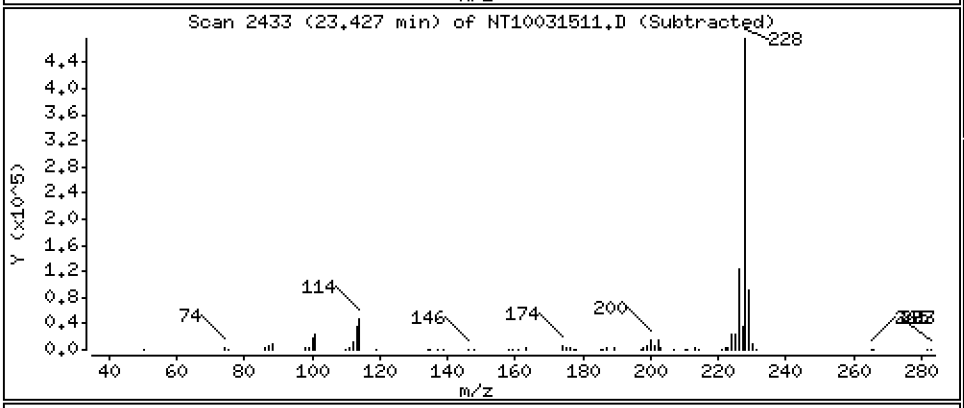
Column phase: ZB-5msi

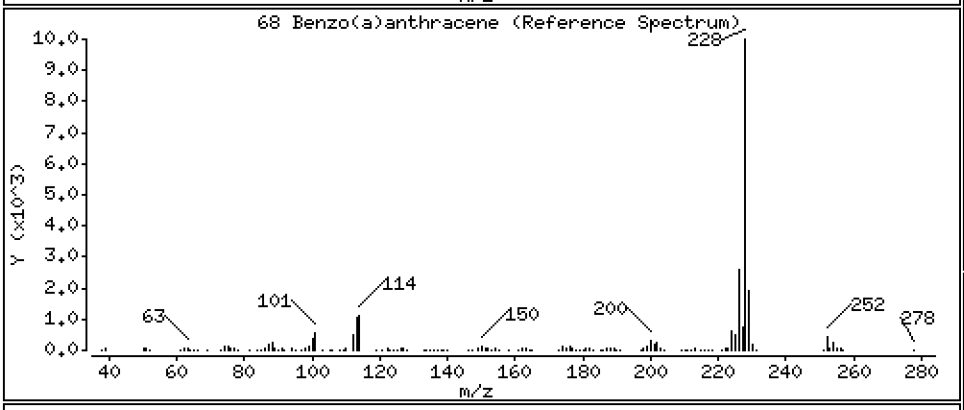
Column diameter: 0.25

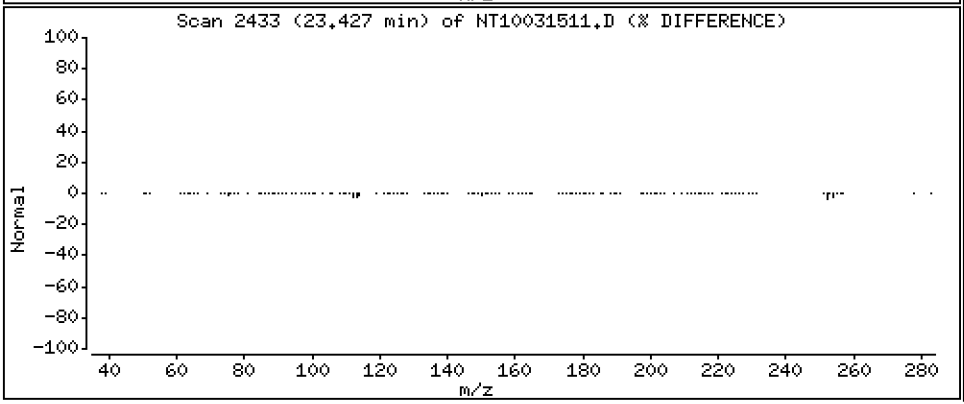
68 Benzo(a)anthracene

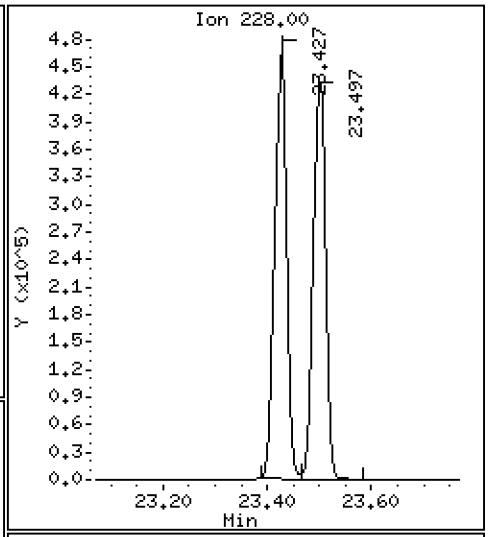
Concentration: 4.647 ug/mL

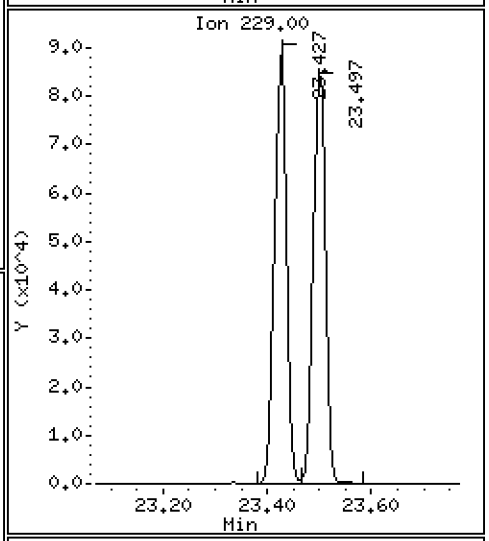


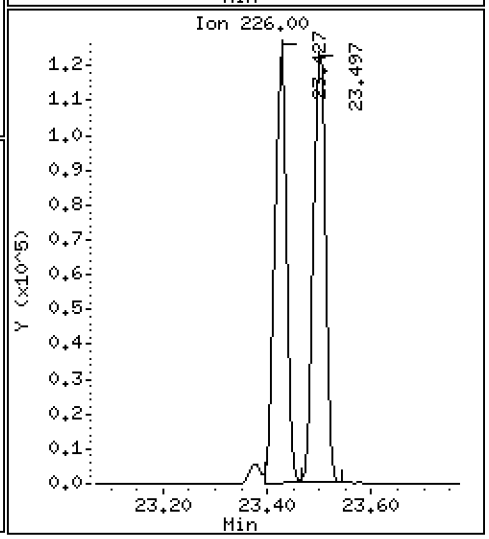












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

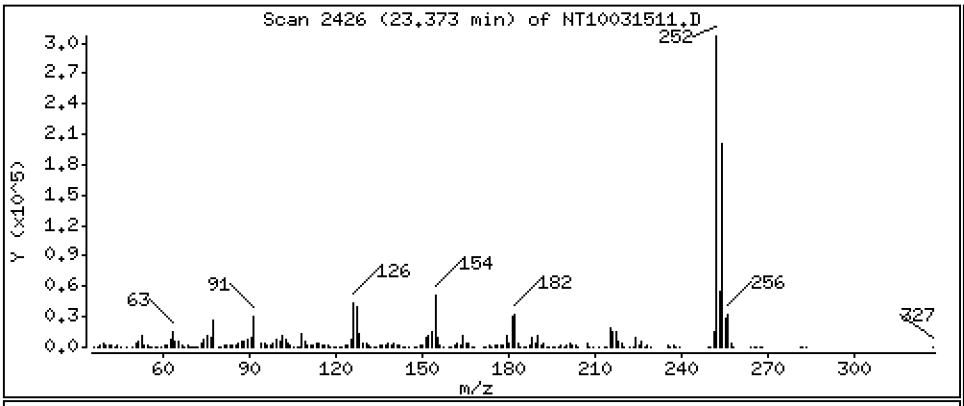
Operator: VTS

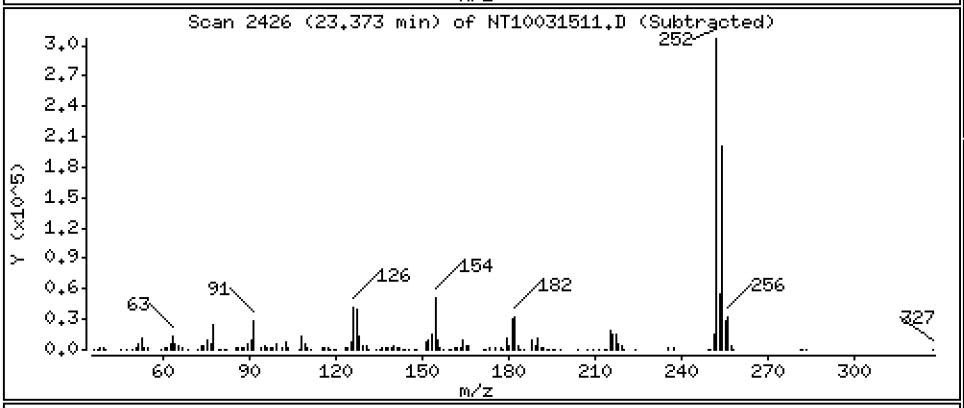
Column phase: ZB-5msi

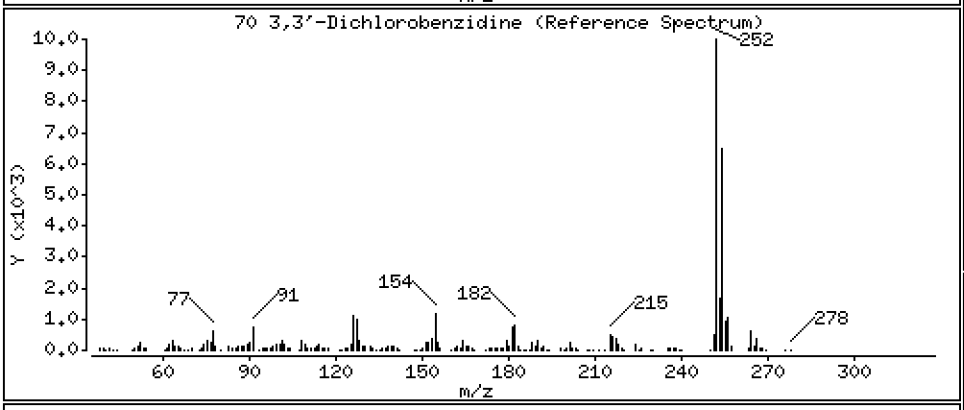
Column diameter: 0.25

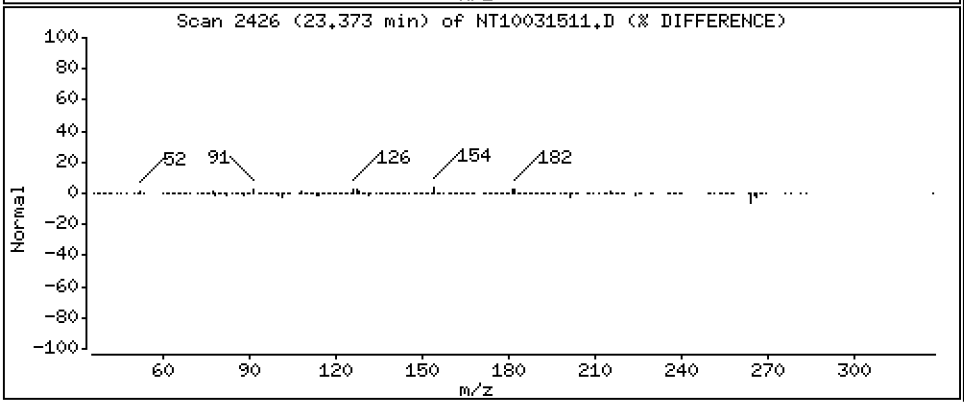
70 3,3'-Dichlorobenzidine

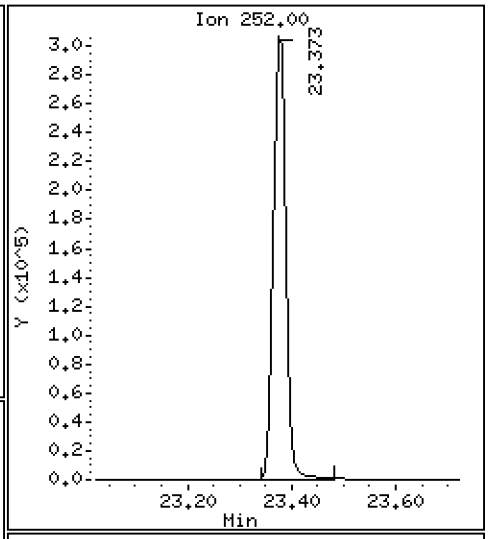
Concentration: 9.817 ug/mL

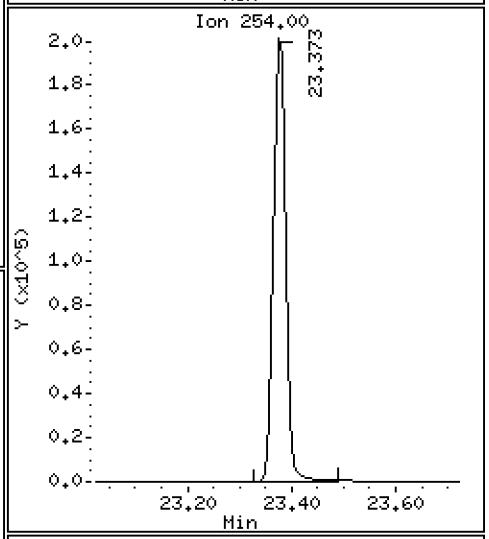


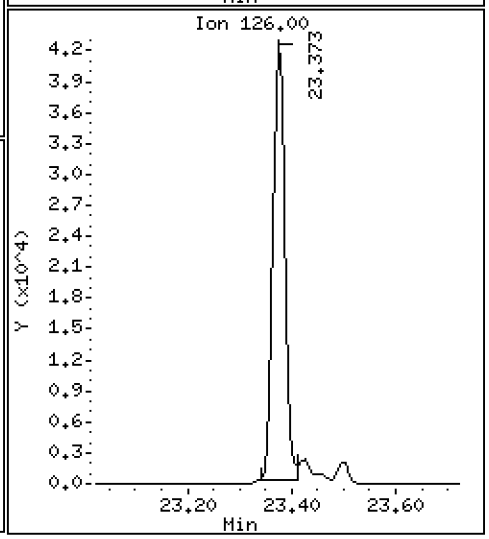












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

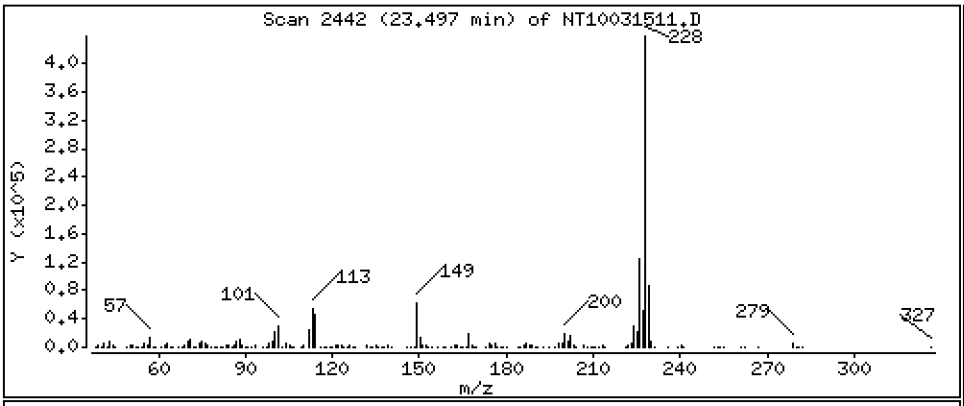
Operator: VTS

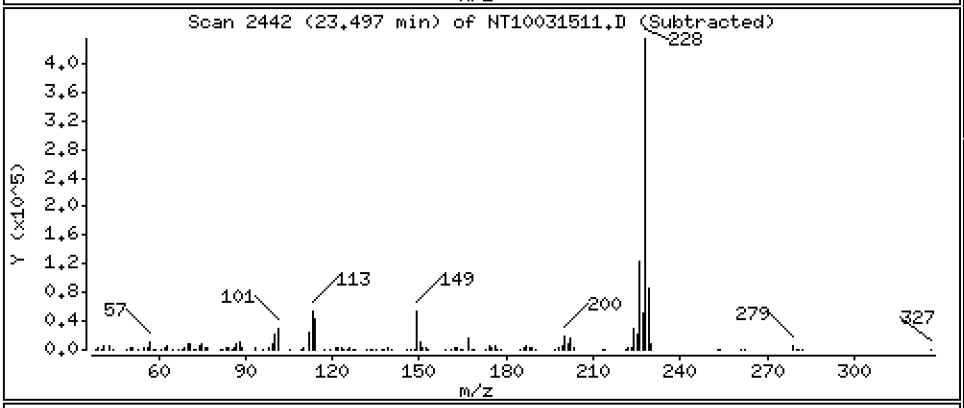
Column phase: ZB-5msi

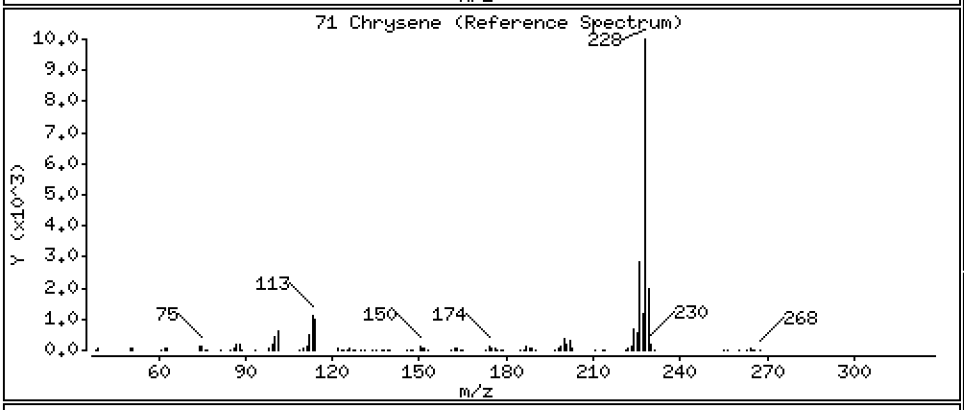
Column diameter: 0.25

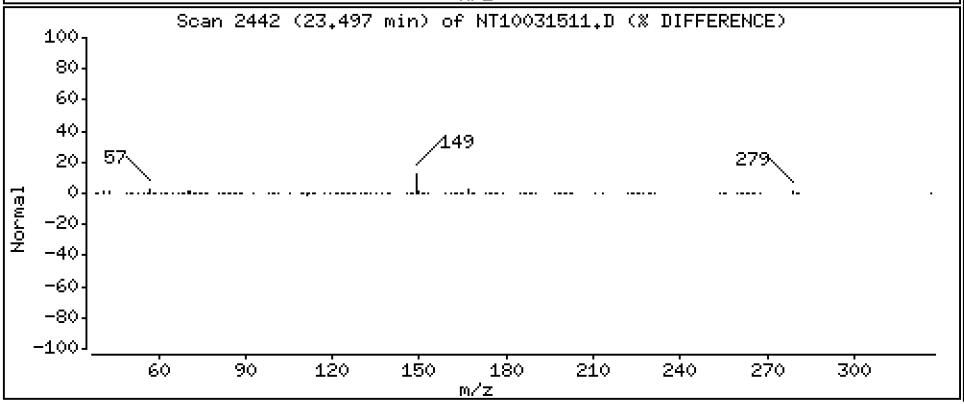
71 Chrysene

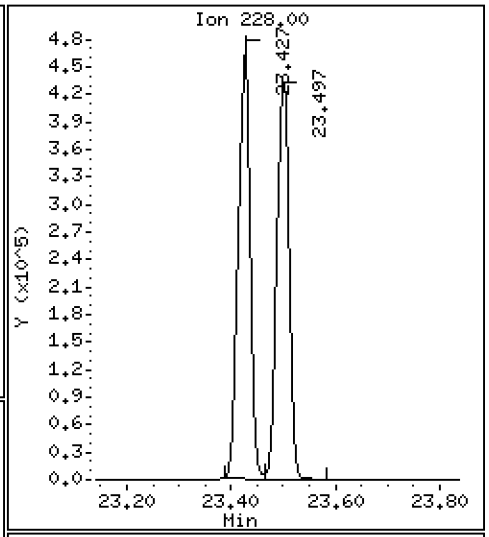
Concentration: 4.510 ug/mL

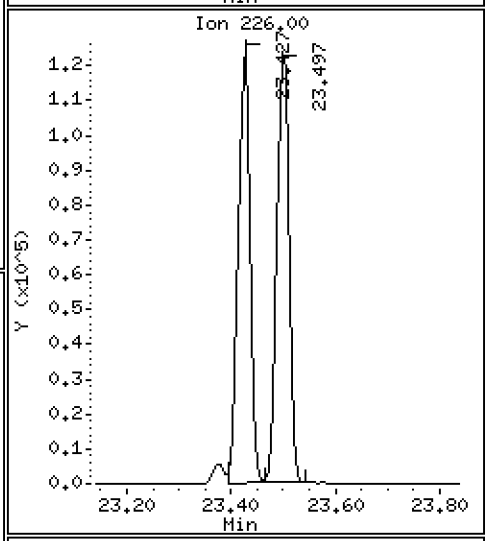


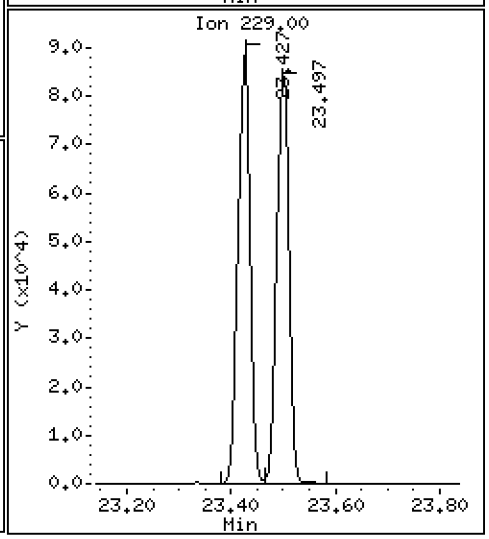












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

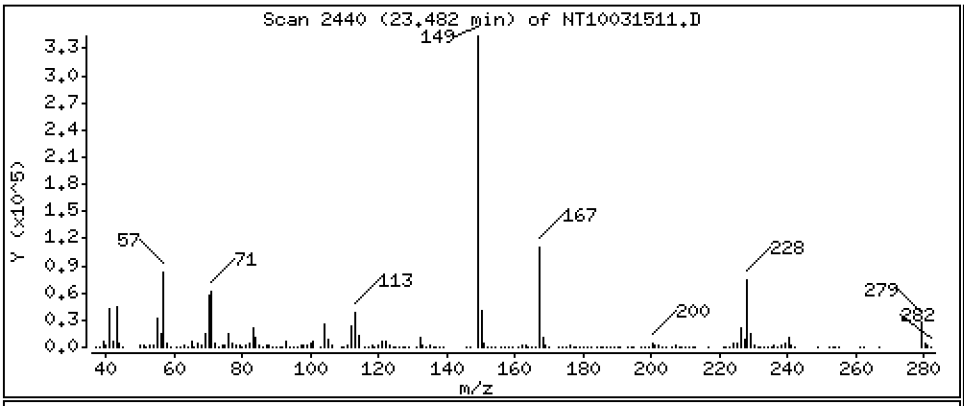
Operator: VTS

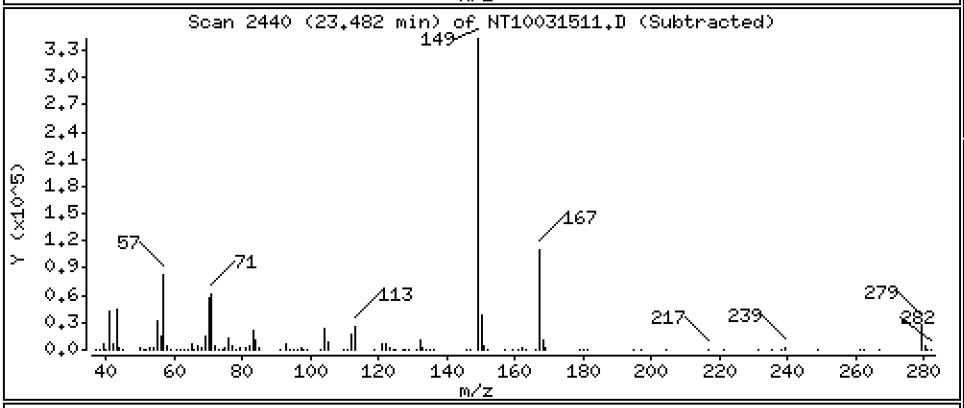
Column phase: ZB-5msi

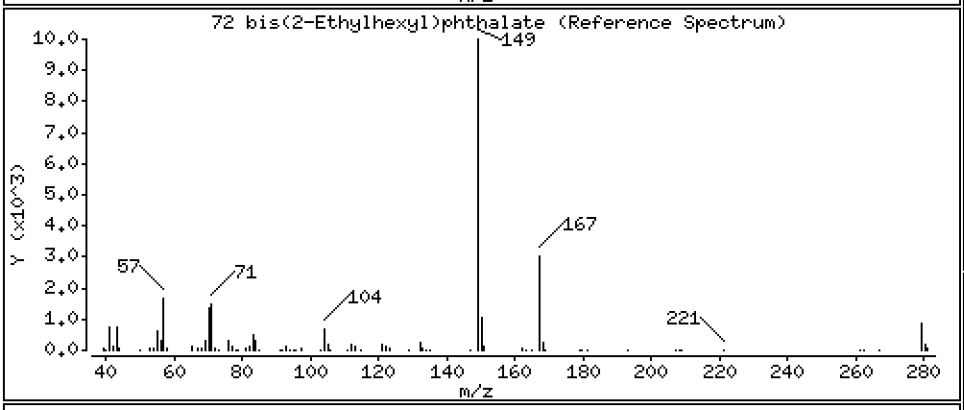
Column diameter: 0.25

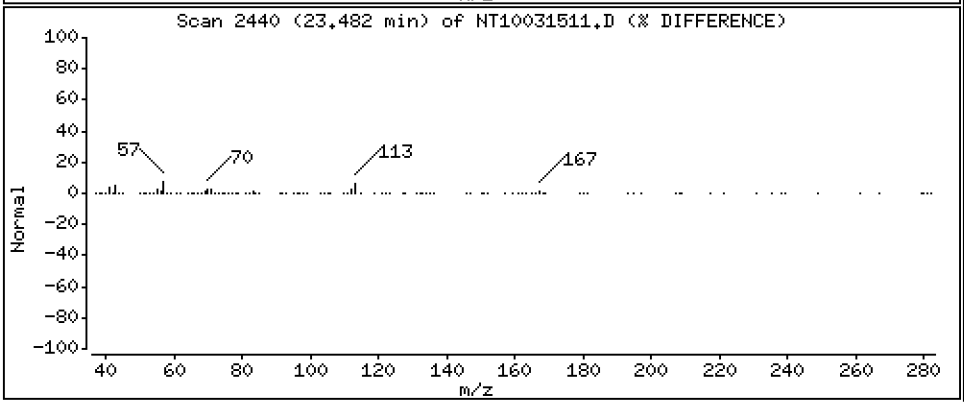
72 bis(2-Ethylhexyl)phthalate

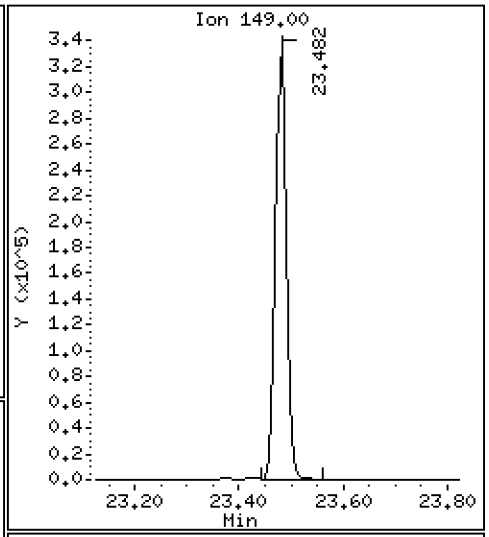
Concentration: 4.680 ug/mL

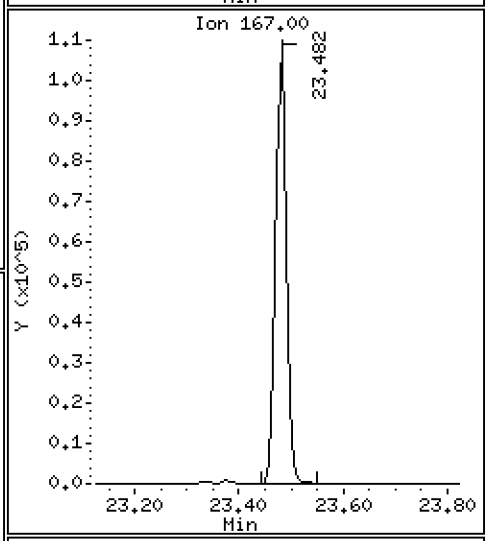


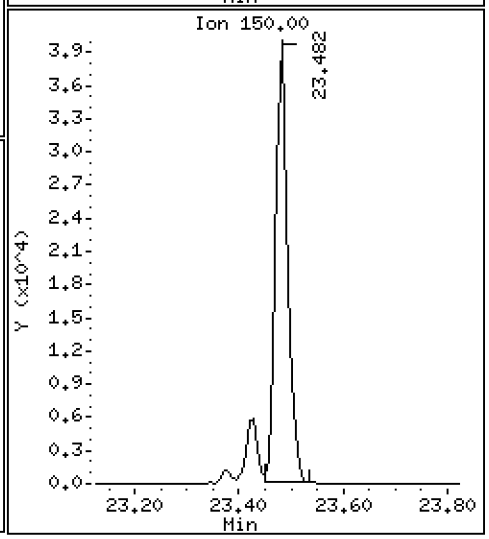












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

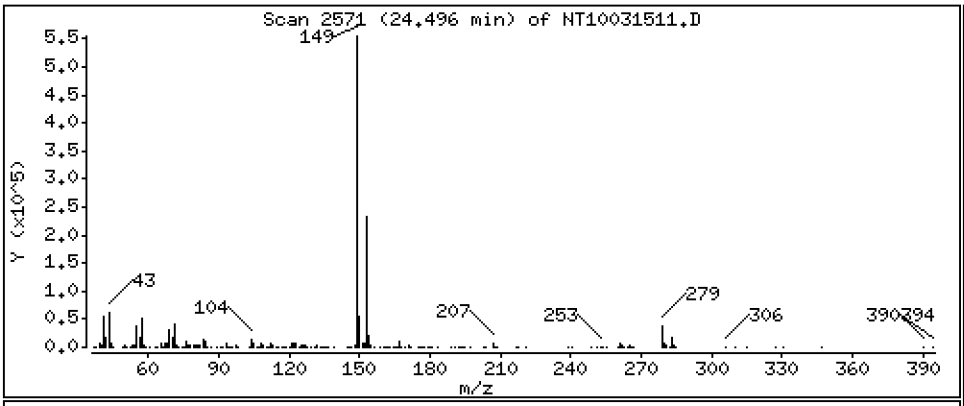
Operator: VTS

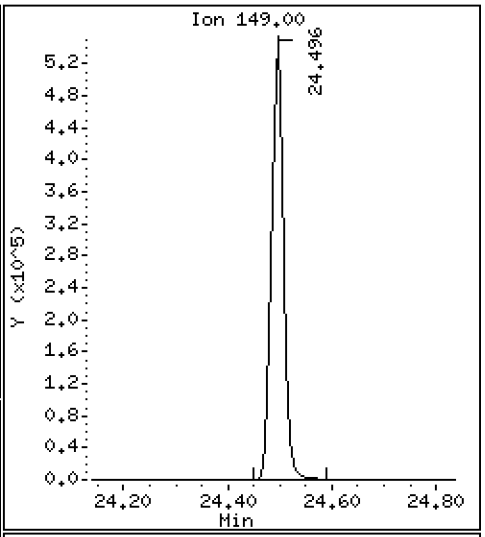
Column phase: ZB-5msi

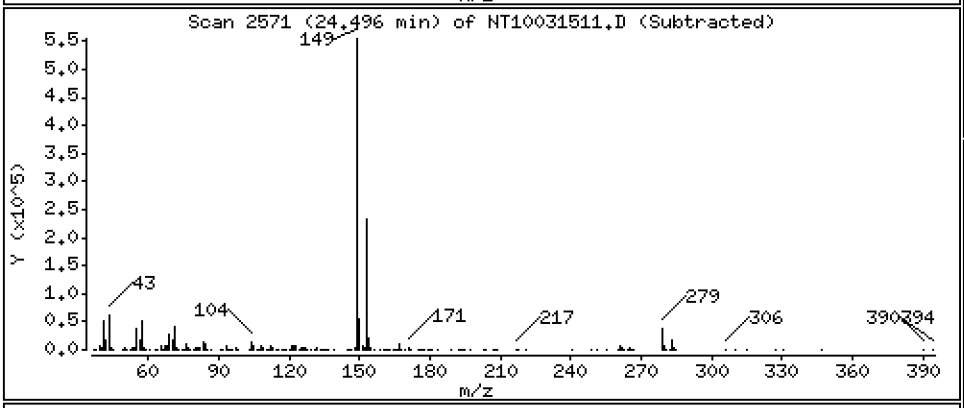
Column diameter: 0.25

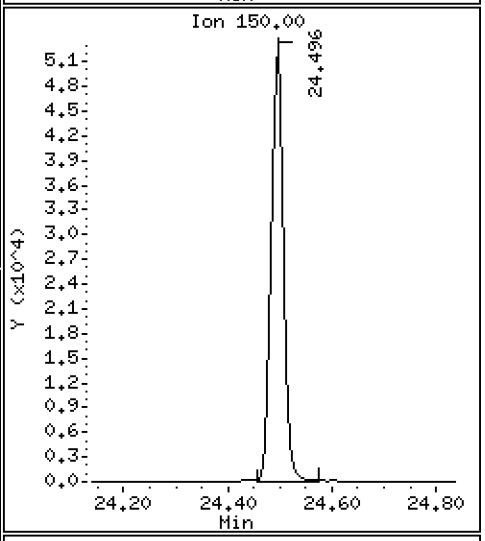
73 Di-n-octylphthalate

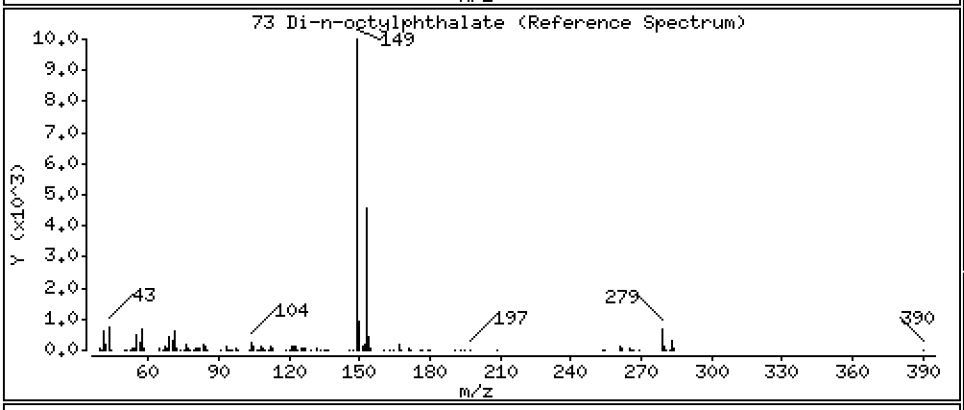
Concentration: 4.947 ug/mL

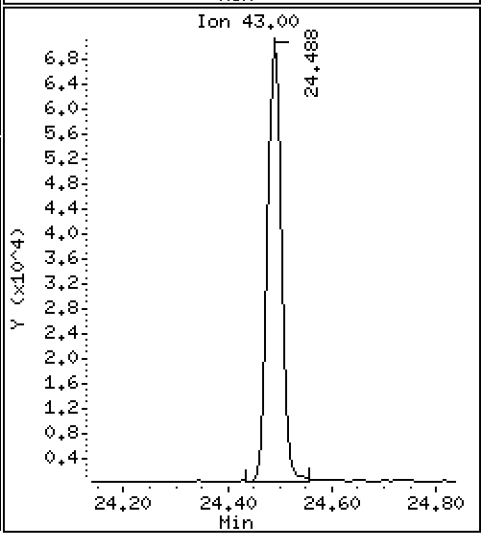


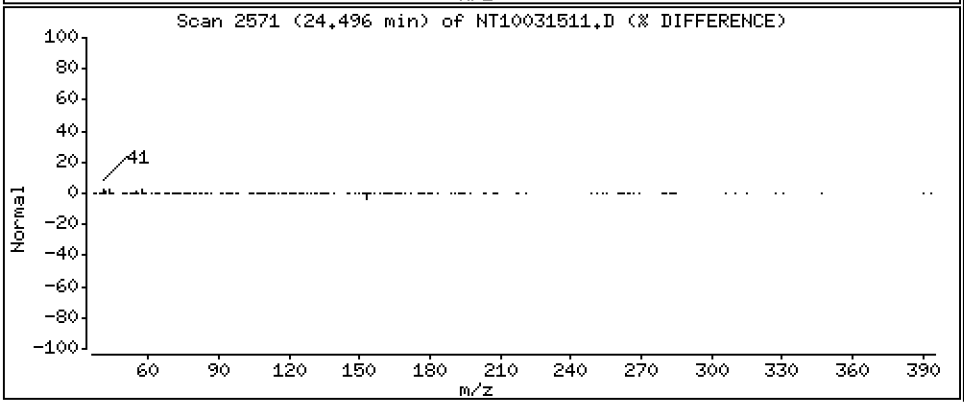












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

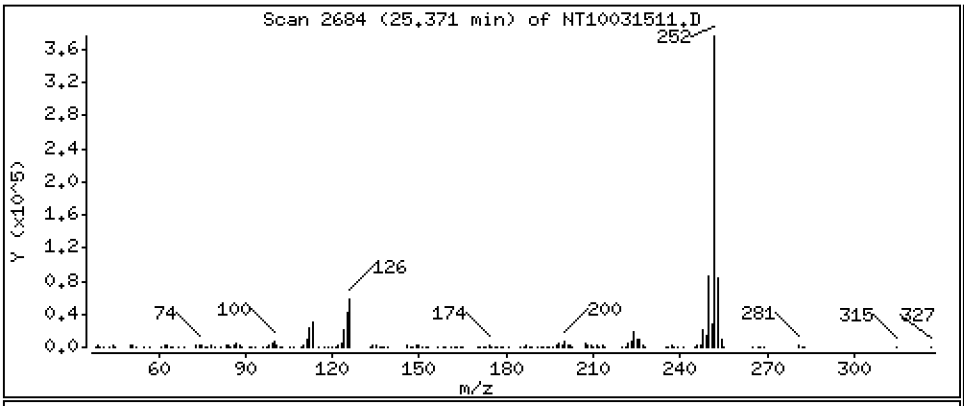
Operator: VTS

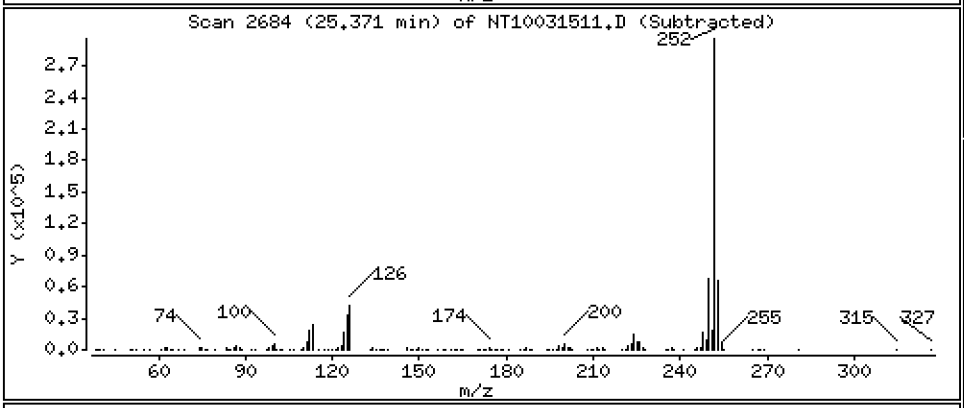
Column phase: ZB-5msi

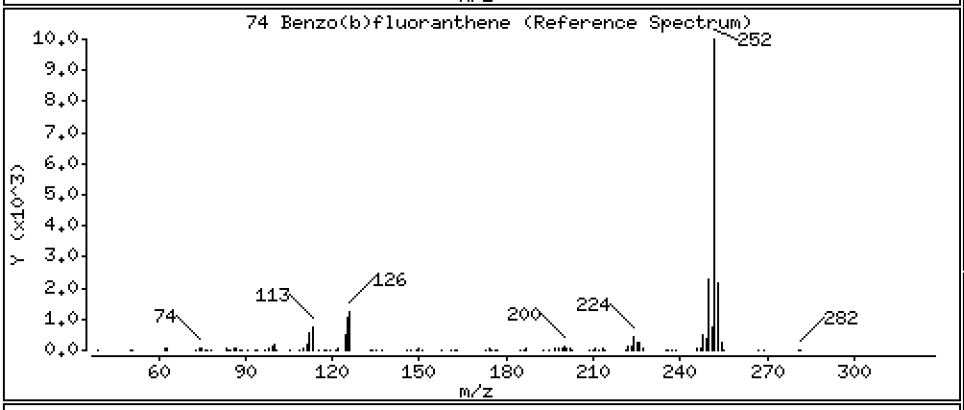
Column diameter: 0.25

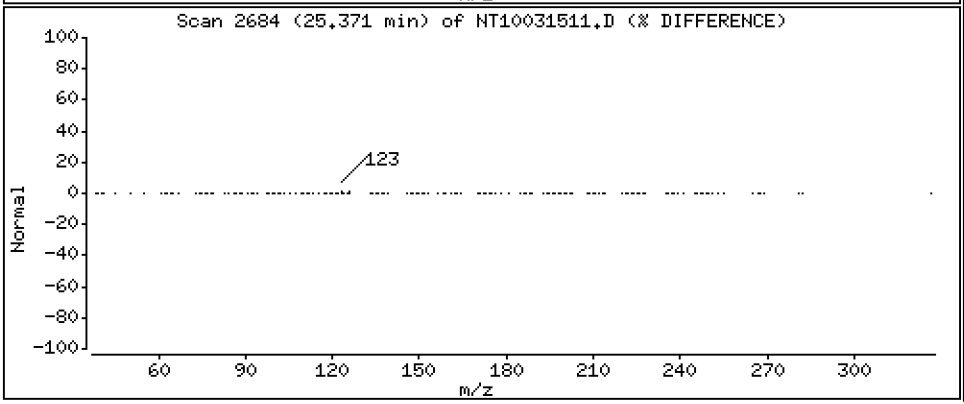
74 Benzo(b)fluoranthene

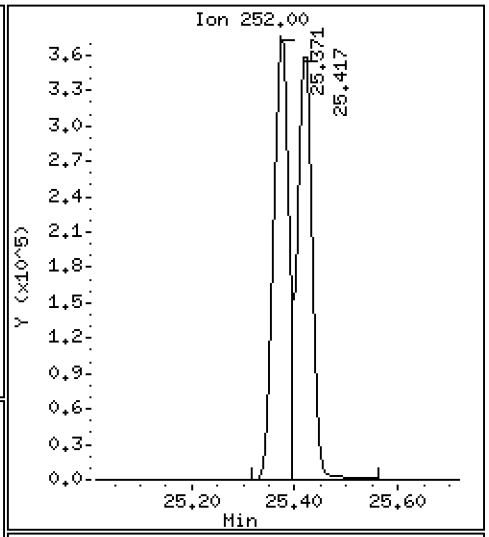
Concentration: 4.602 ug/mL

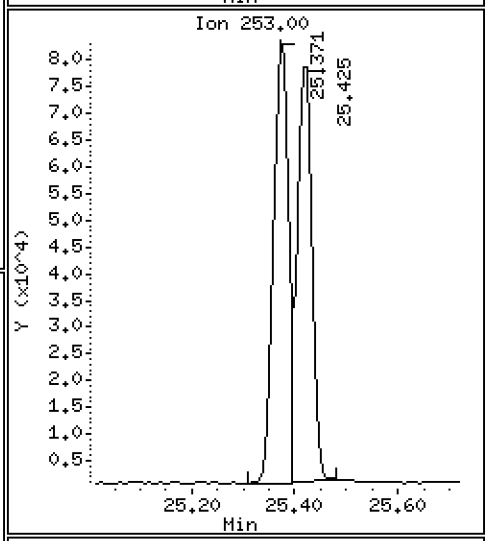


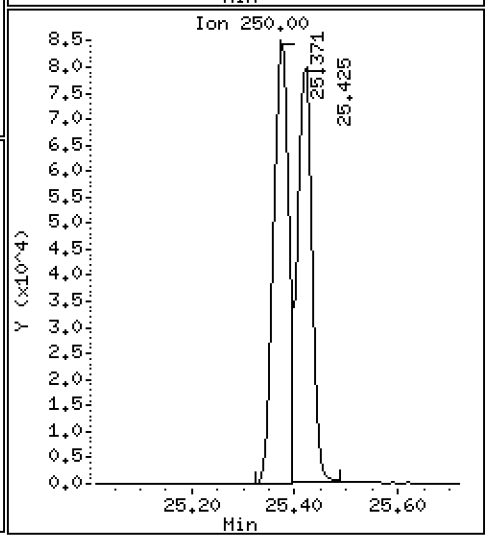












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

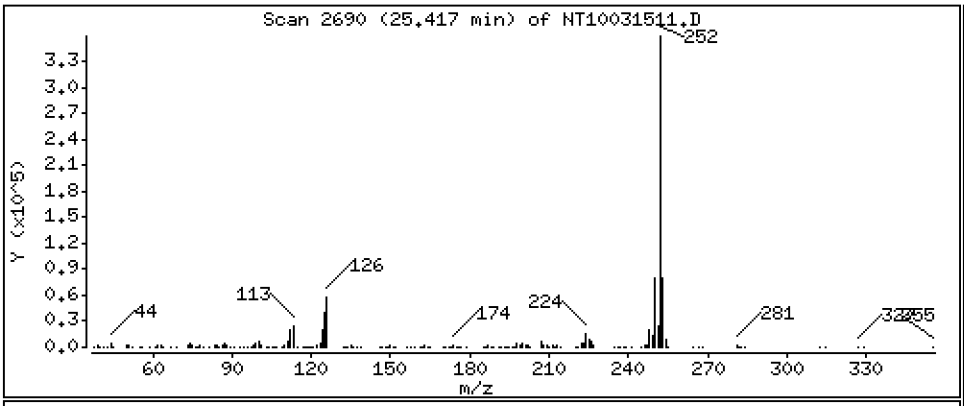
Operator: VTS

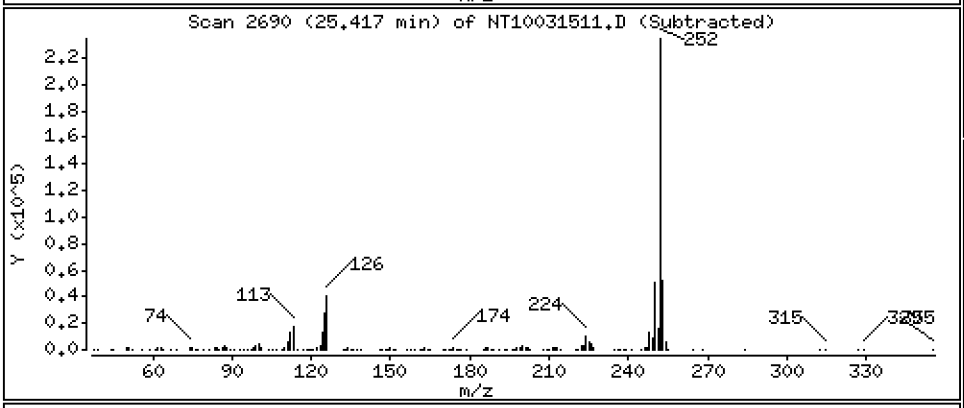
Column phase: ZB-5msi

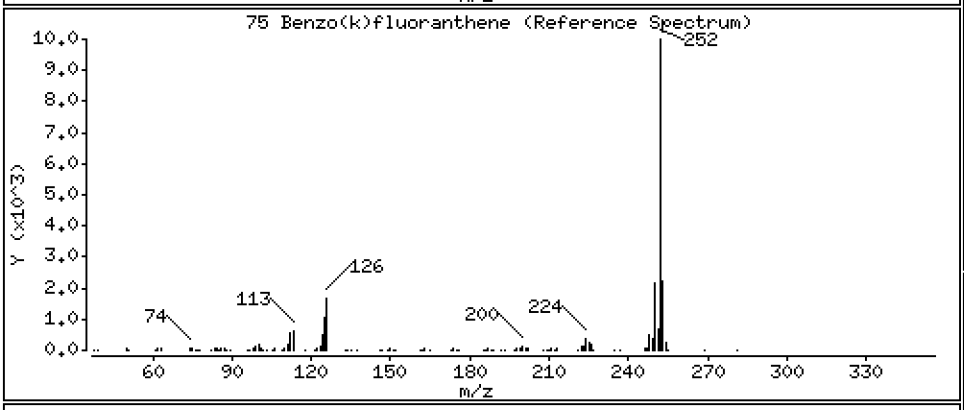
Column diameter: 0.25

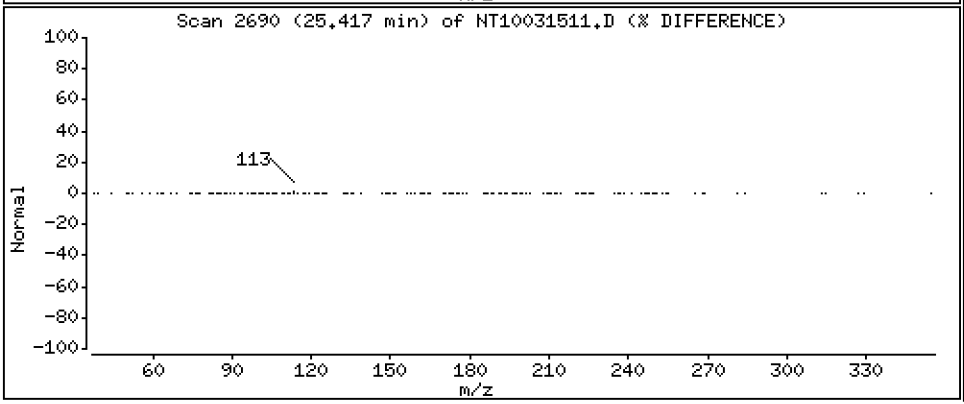
75 Benzo(k)fluoranthene

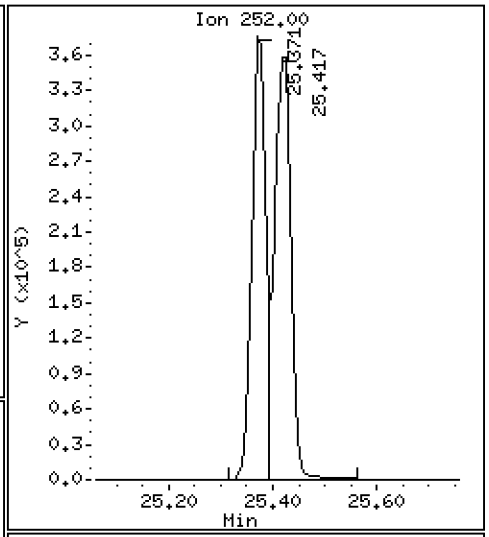
Concentration: 4.898 ug/mL

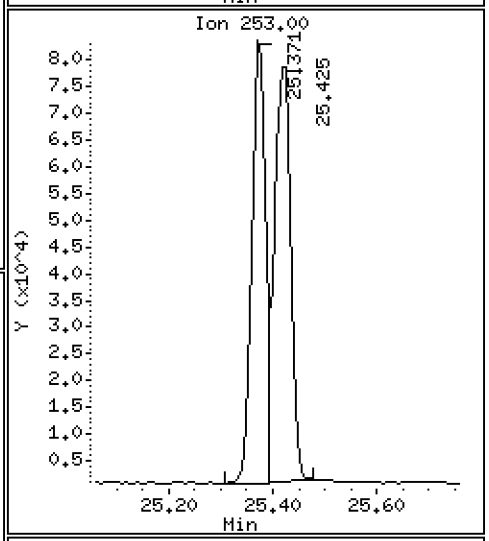


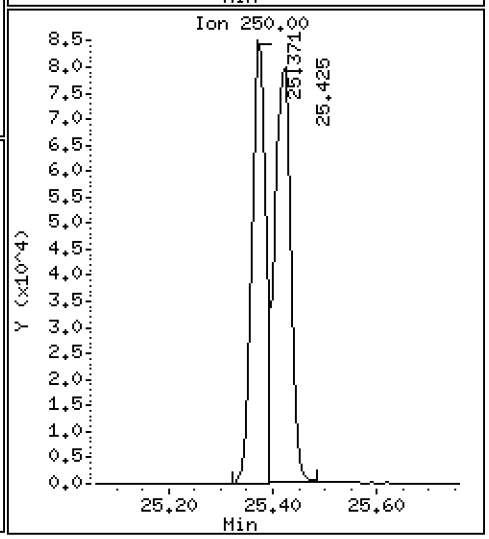












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

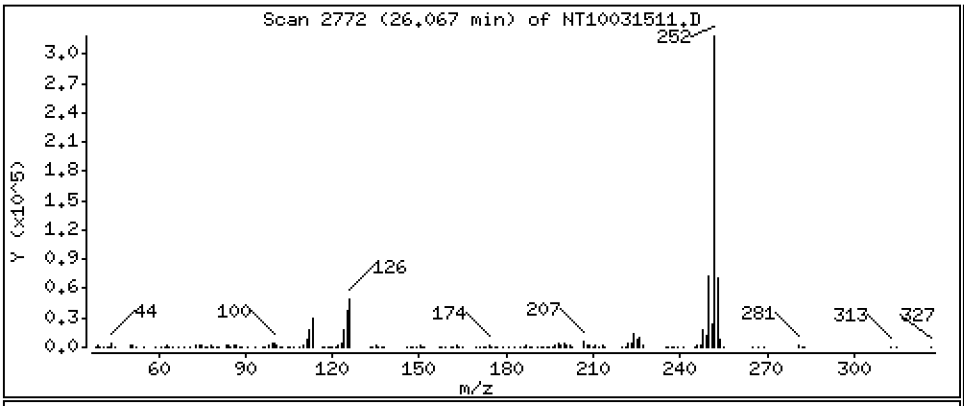
Operator: VTS

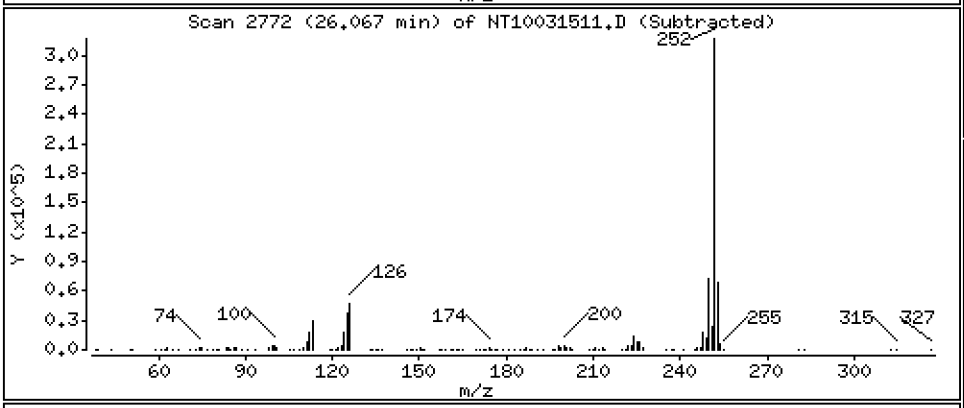
Column phase: ZB-5msi

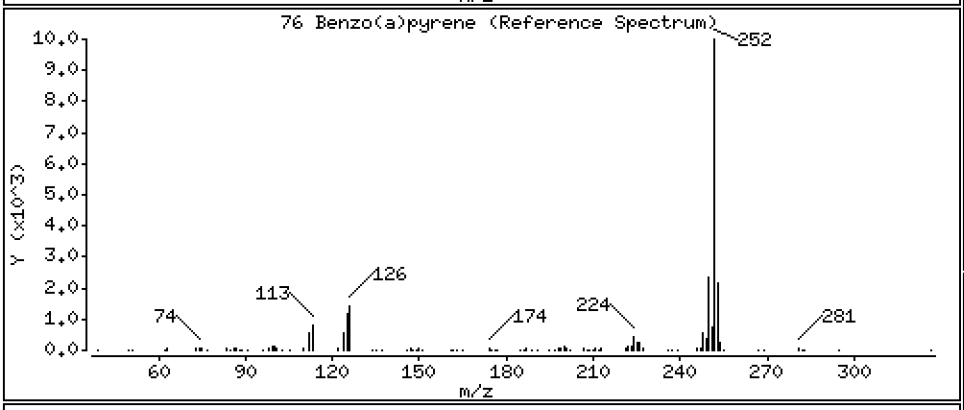
Column diameter: 0.25

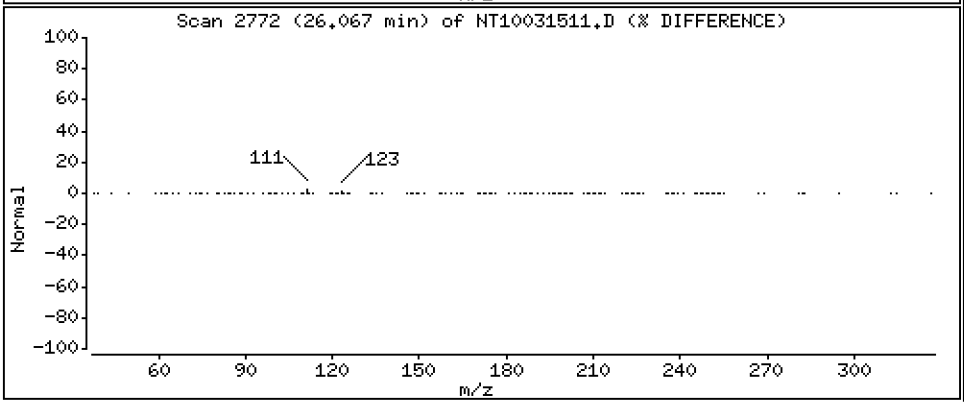
76 Benzo(a)pyrene

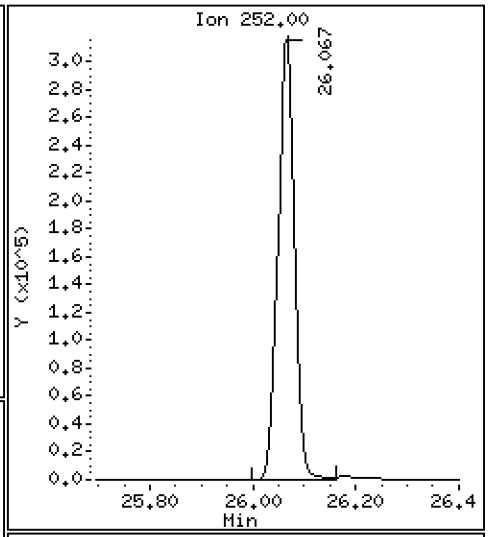
Concentration: 4.873 ug/mL

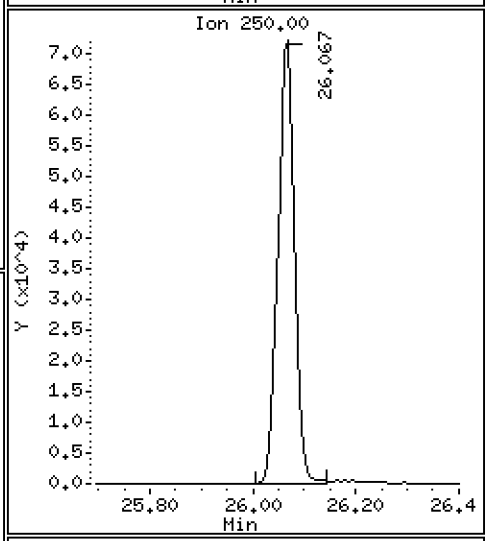


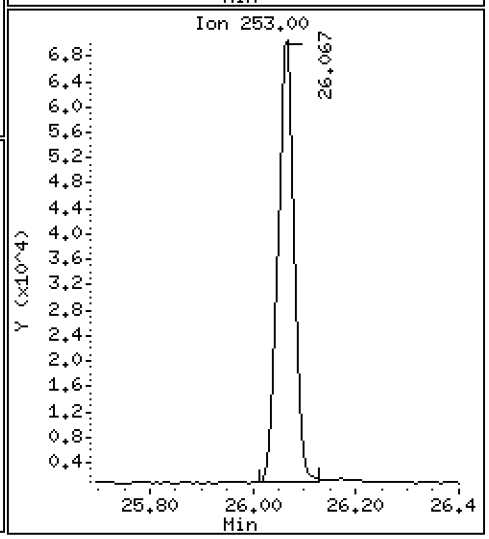












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

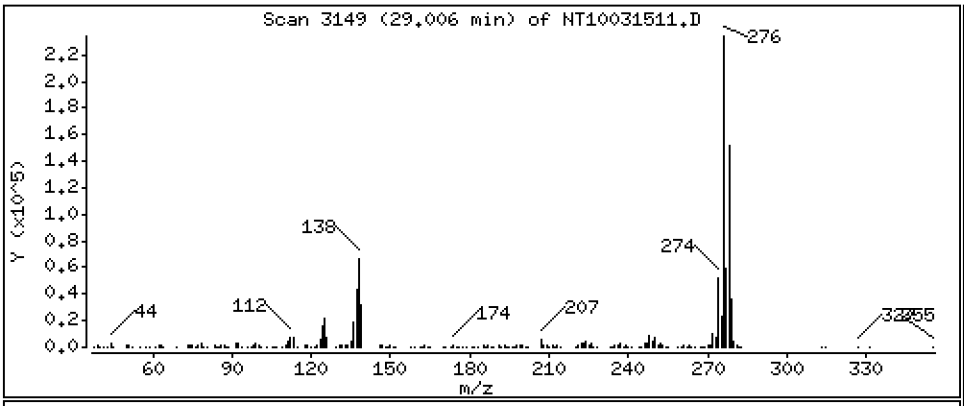
Operator: VTS

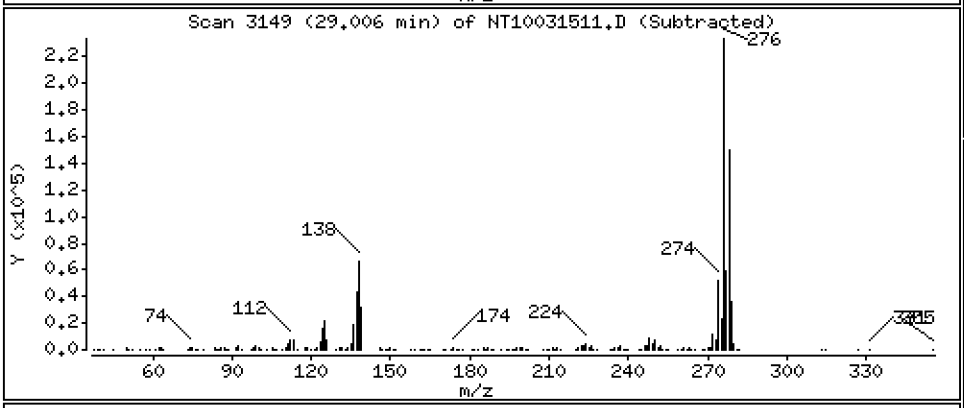
Column phase: ZB-5msi

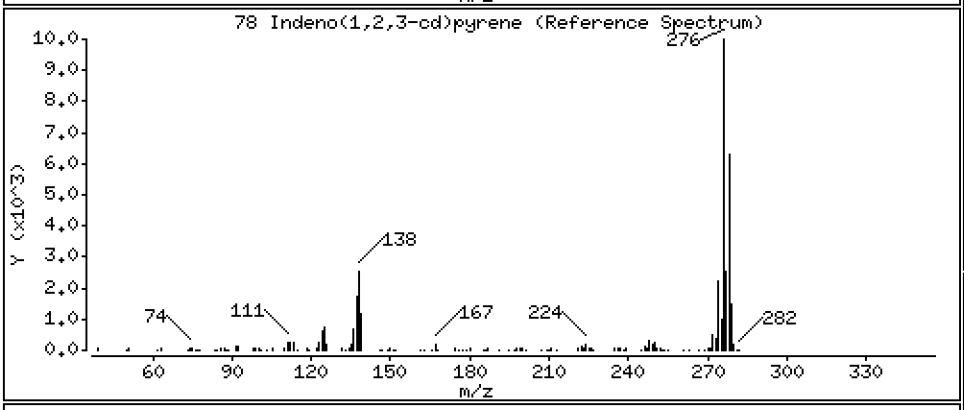
Column diameter: 0.25

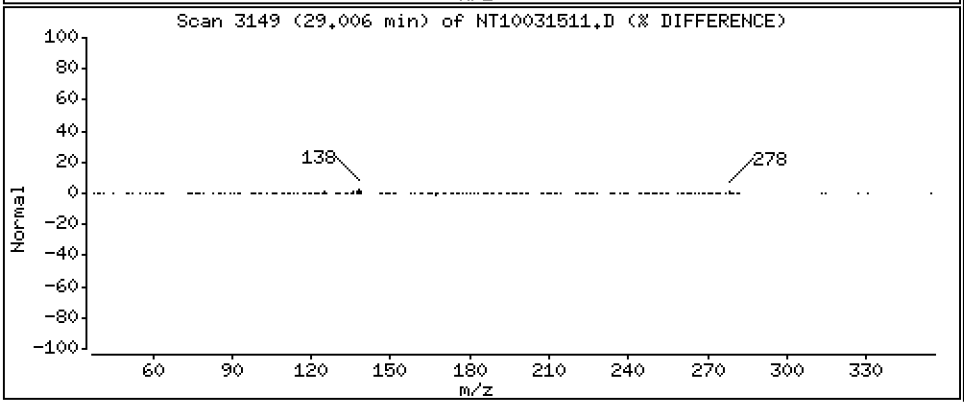
78 Indeno(1,2,3-cd)pyrene

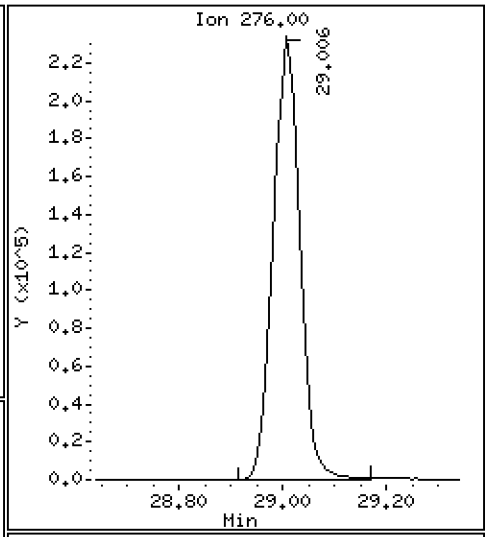
Concentration: 4.577 ug/mL

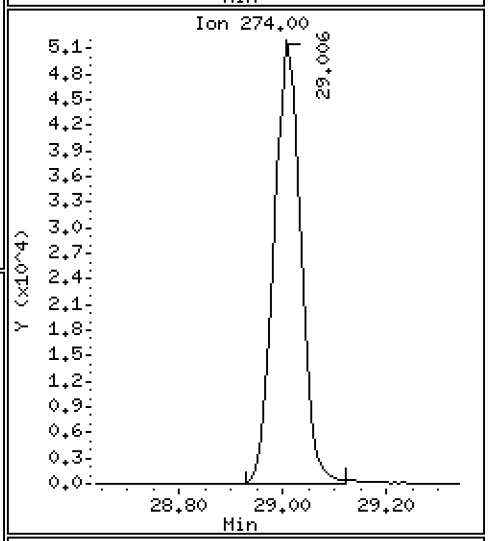


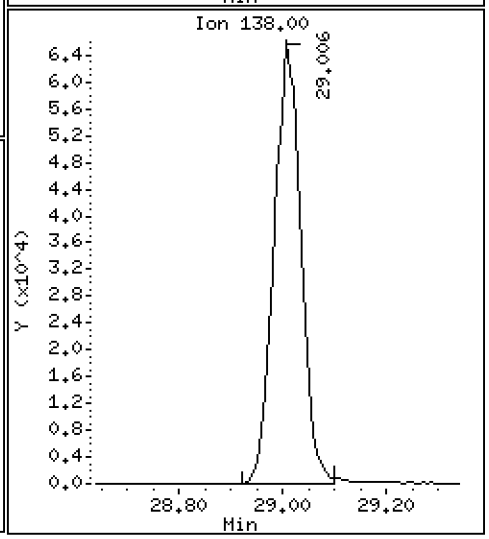












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

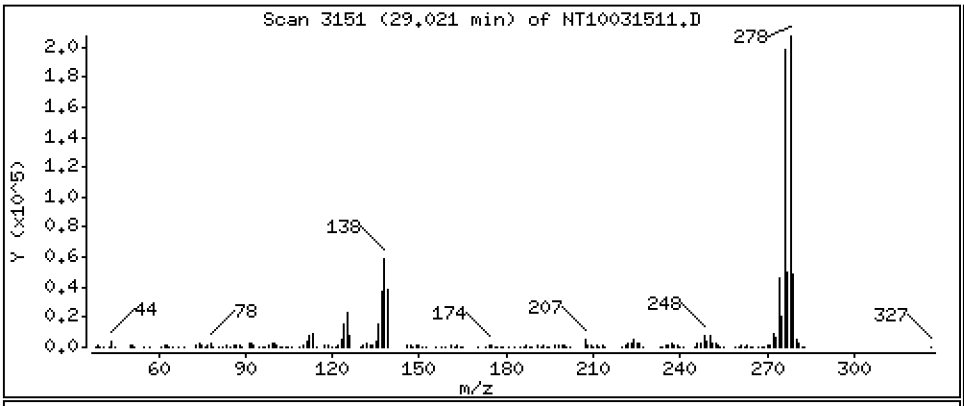
Operator: VTS

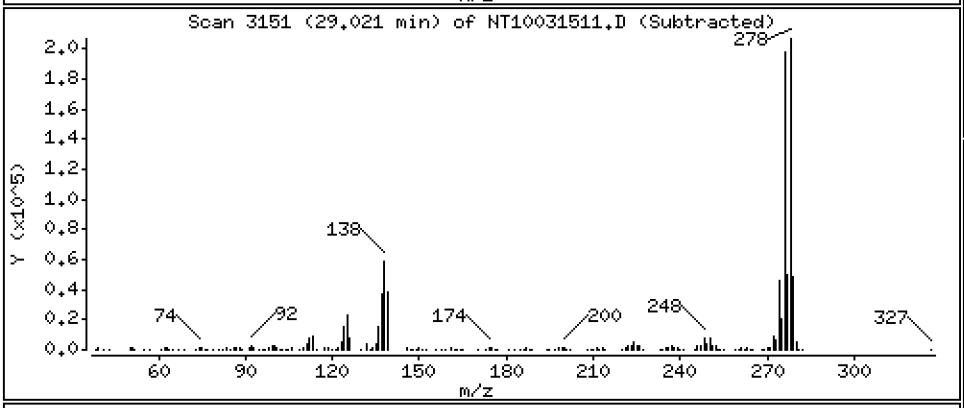
Column phase: ZB-5msi

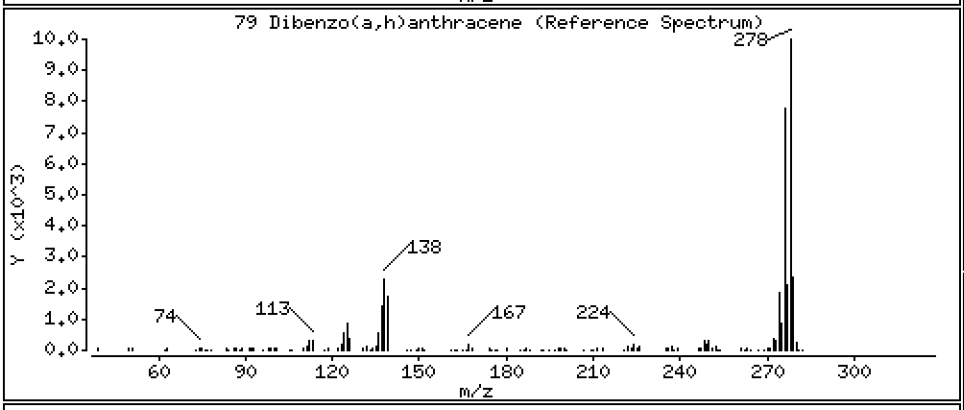
Column diameter: 0.25

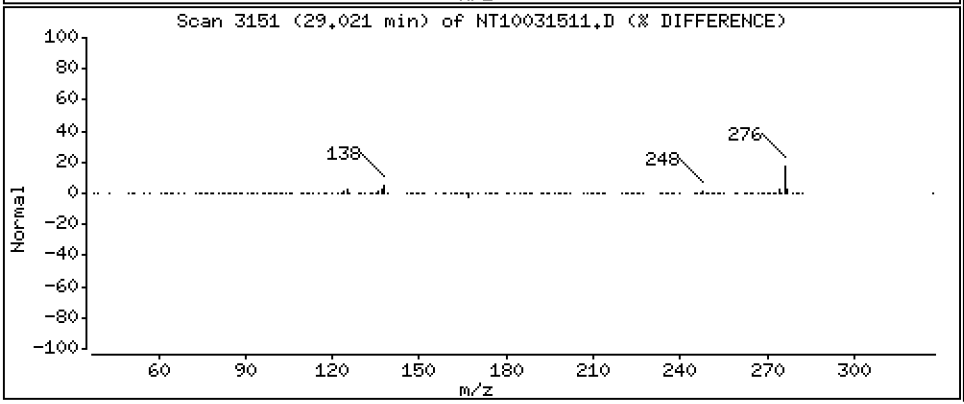
79 Dibenzo(a,h)anthracene

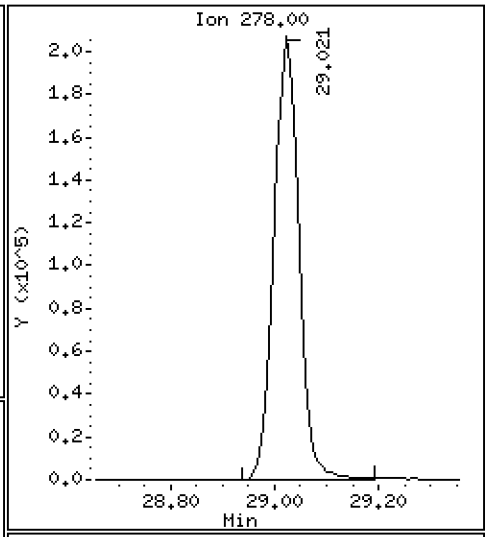
Concentration: 4.547 ug/mL

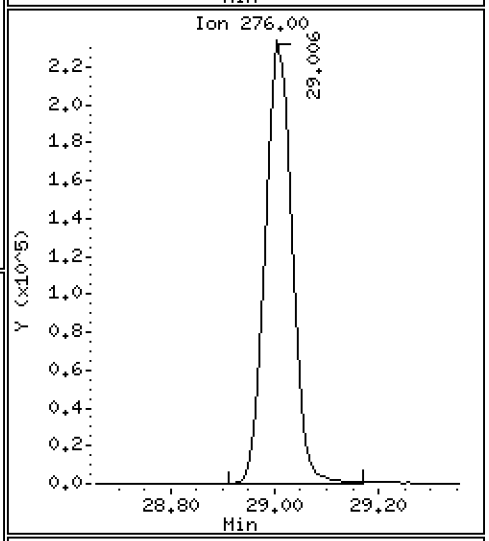


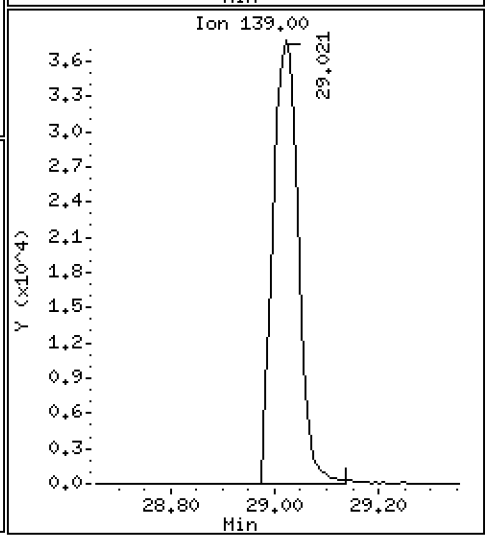












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

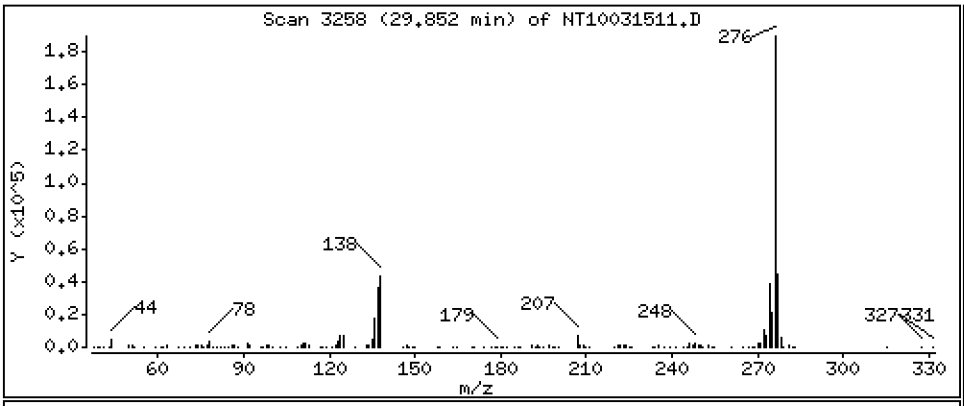
Operator: VTS

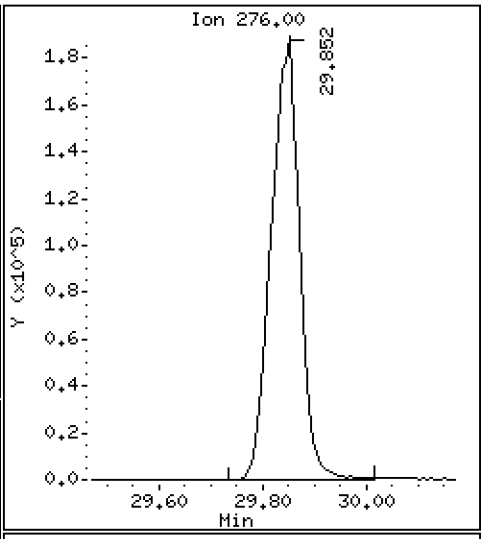
Column phase: ZB-5msi

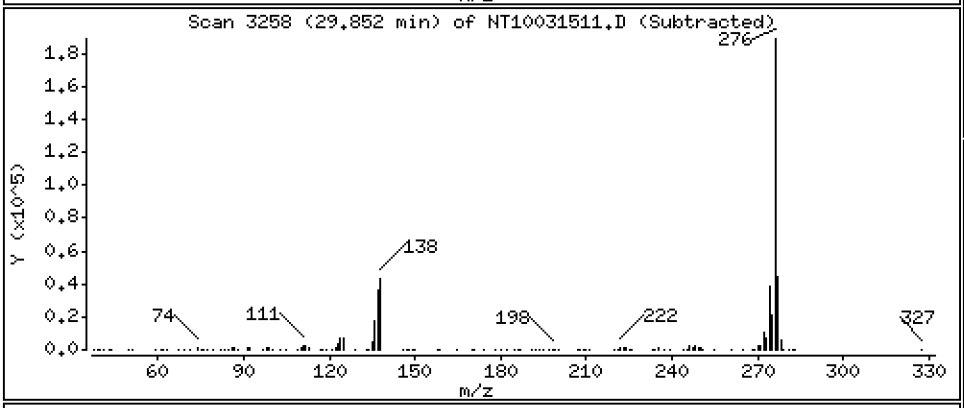
Column diameter: 0.25

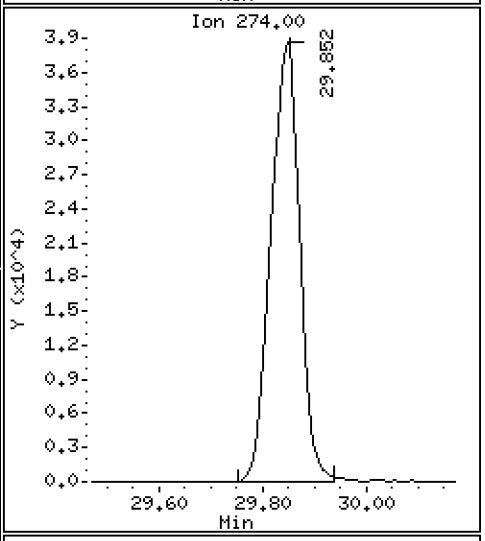
80 Benzo(g,h,i)perylene

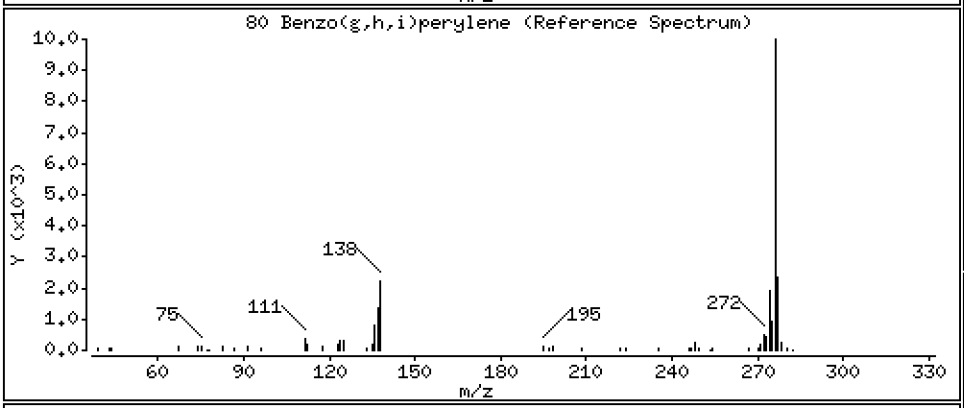
Concentration: 4.590 ug/mL

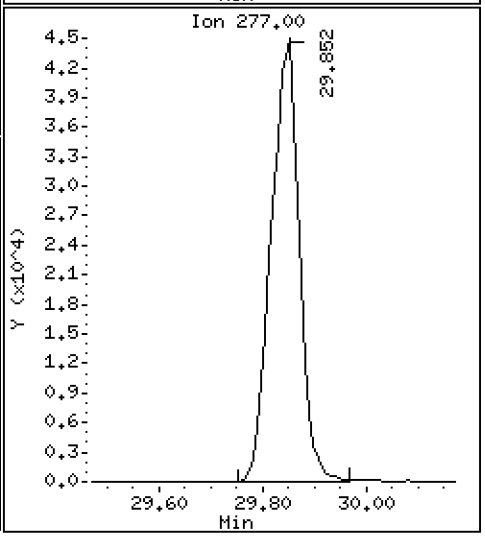


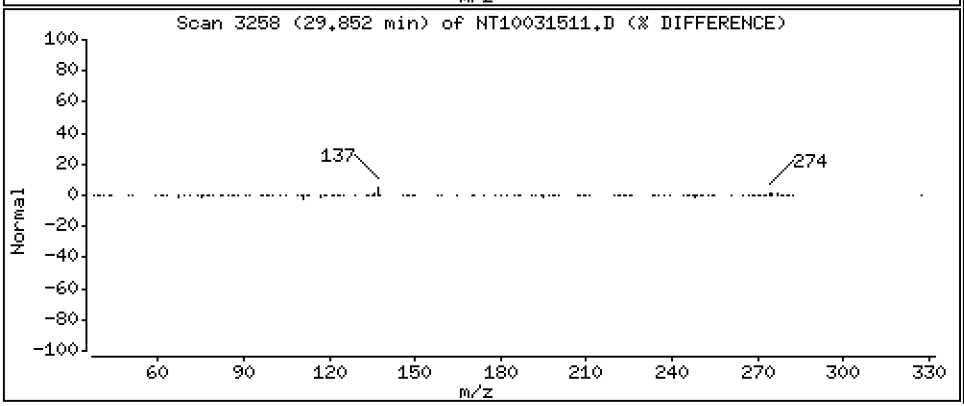












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

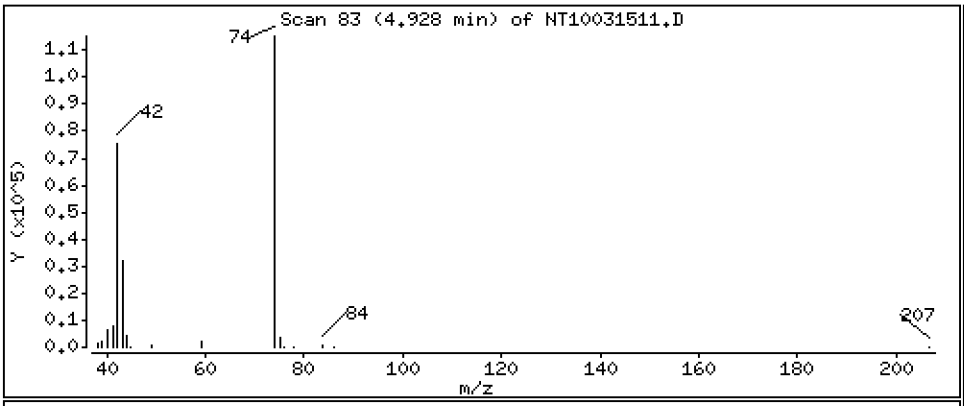
Operator: VTS

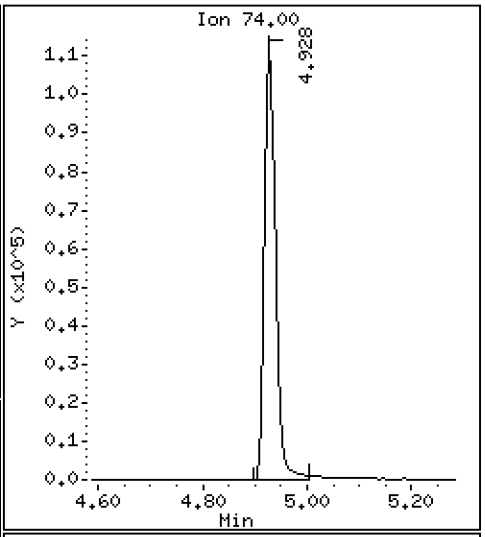
Column phase: ZB-5msi

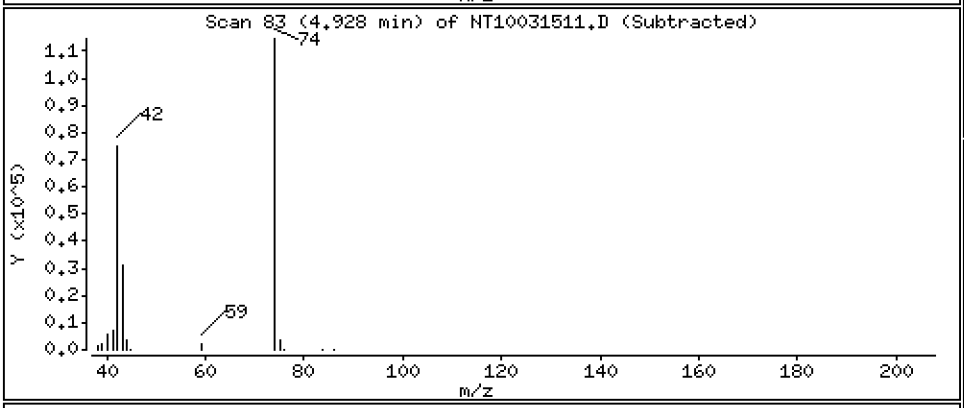
Column diameter: 0.25

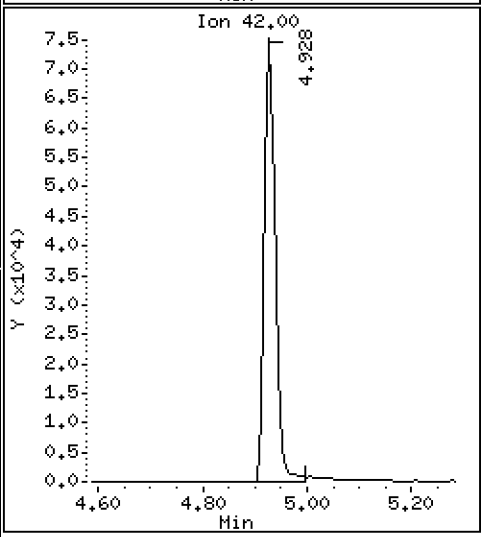
90 N-Nitrosodimethylamine

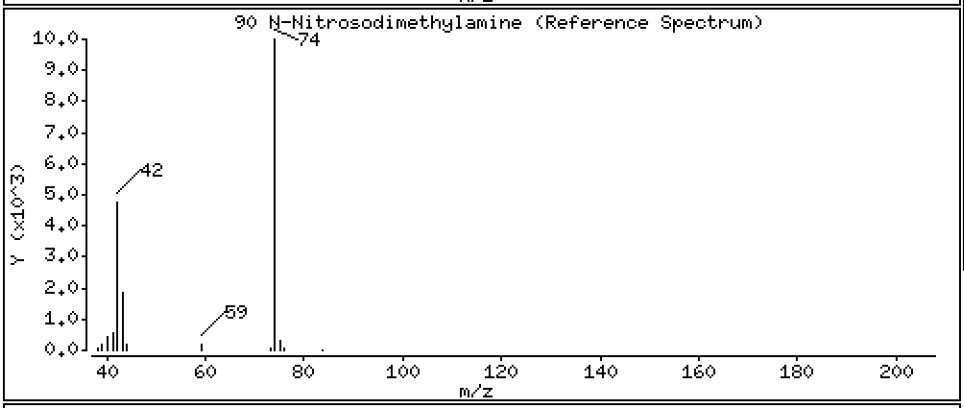
Concentration: 5.194 ug/mL

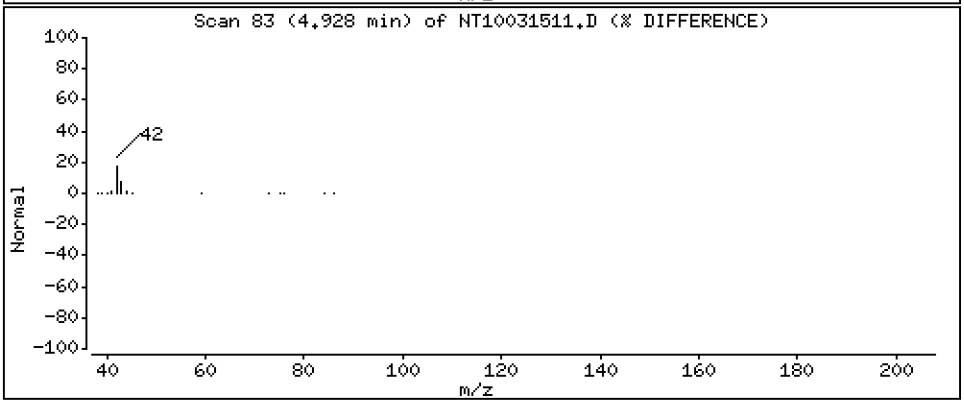












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

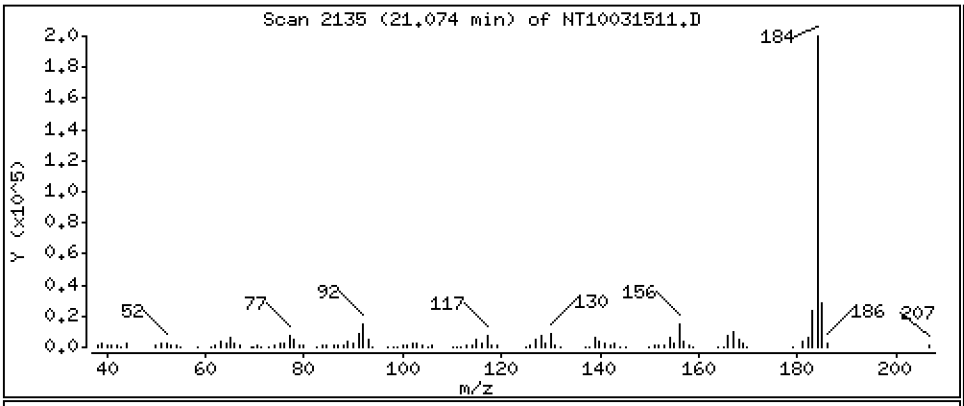
Operator: VTS

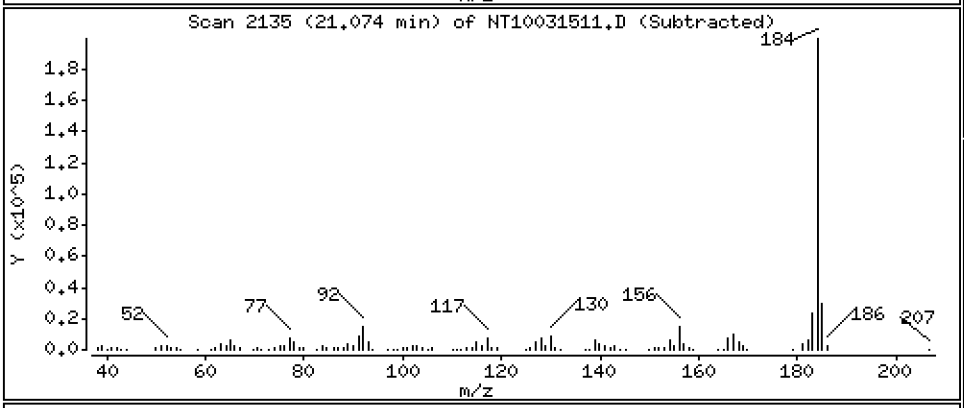
Column phase: ZB-5msi

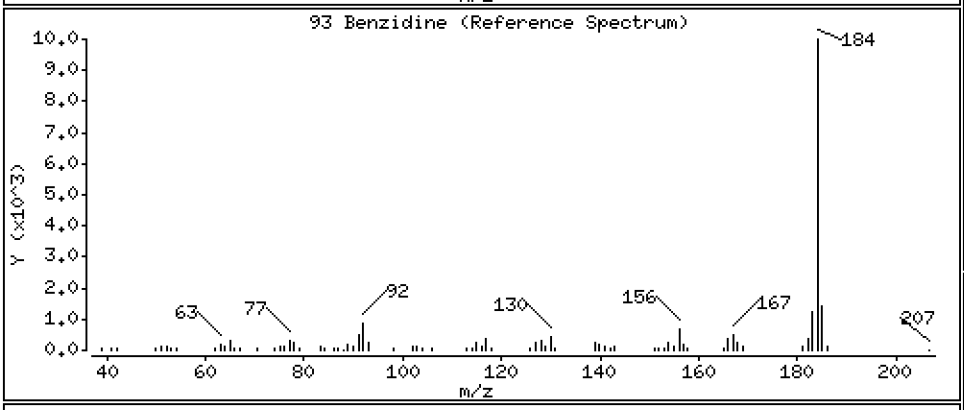
Column diameter: 0.25

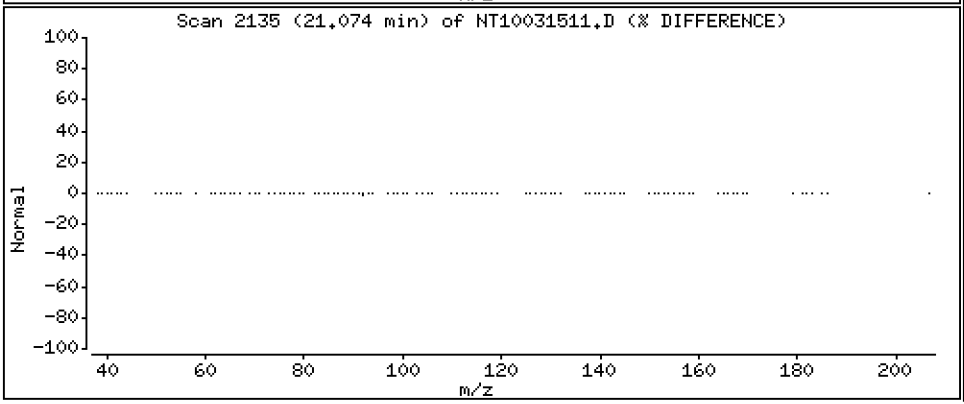
93 Benzidine

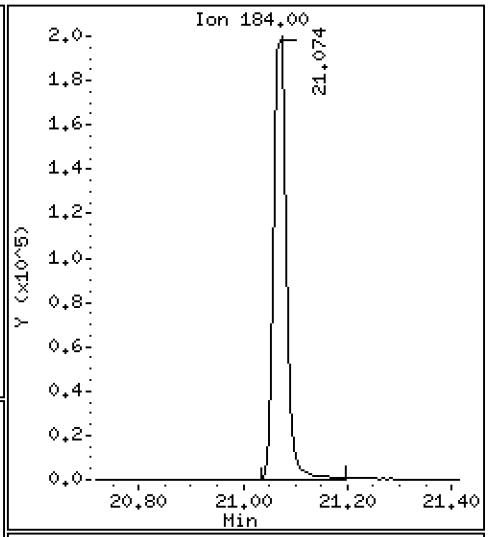
Concentration: 4.380 ug/mL

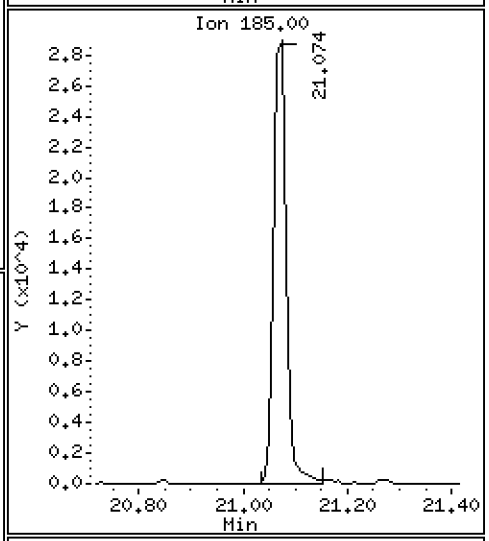


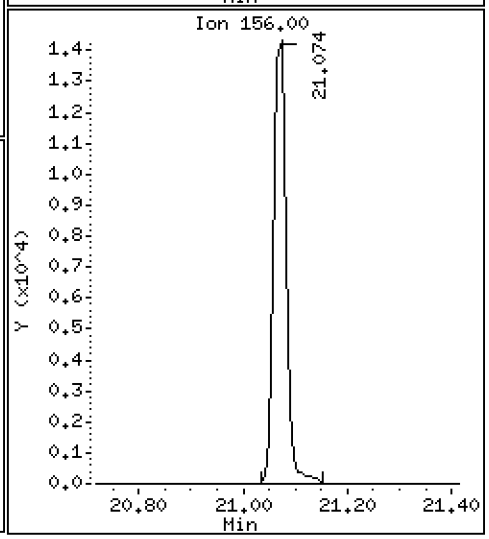












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

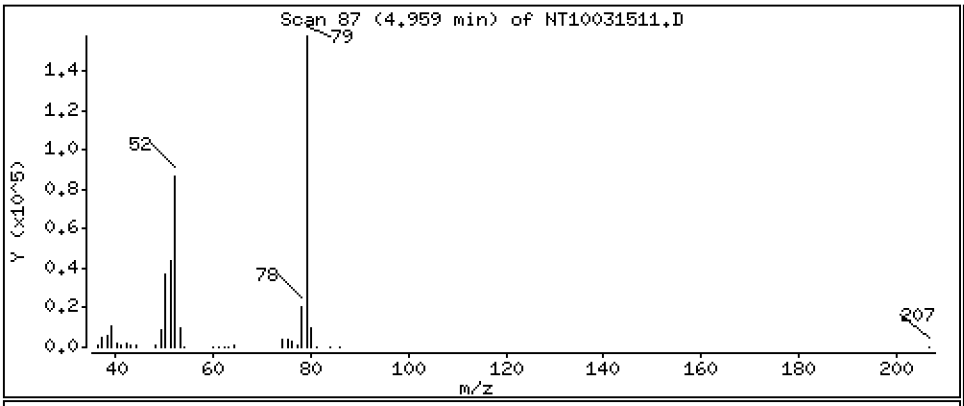
Operator: VTS

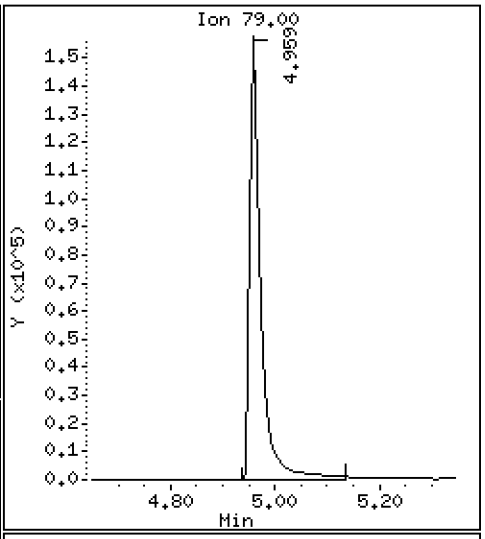
Column phase: ZB-5msi

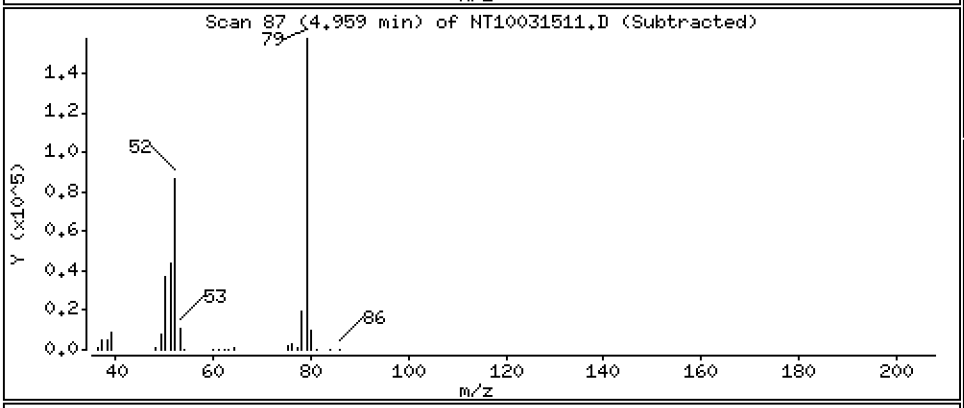
Column diameter: 0.25

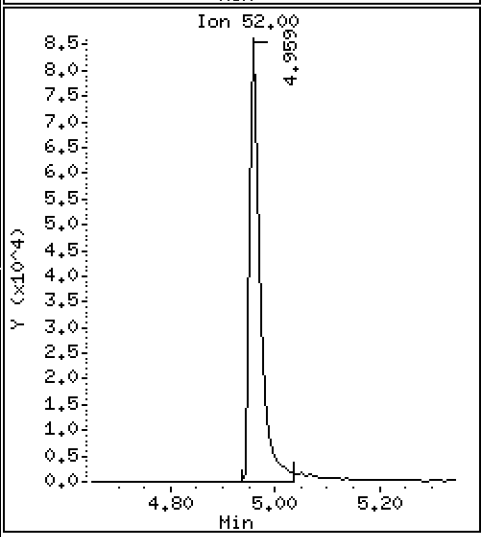
103 Pyridine

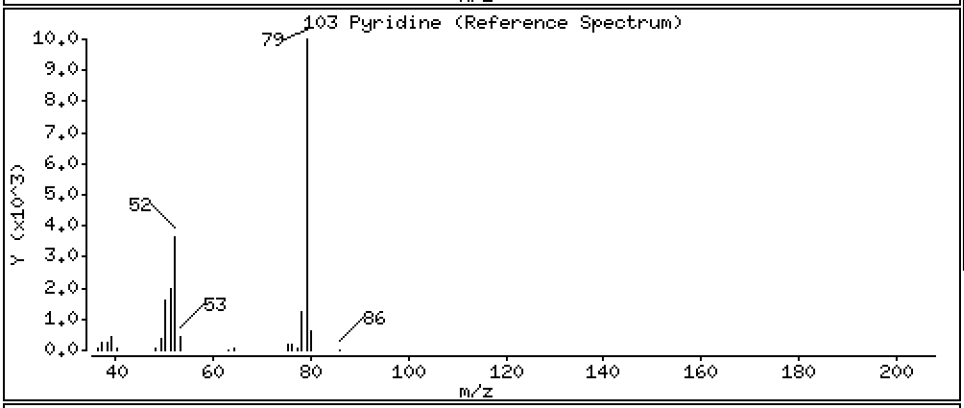
Concentration: 5.337 ug/mL

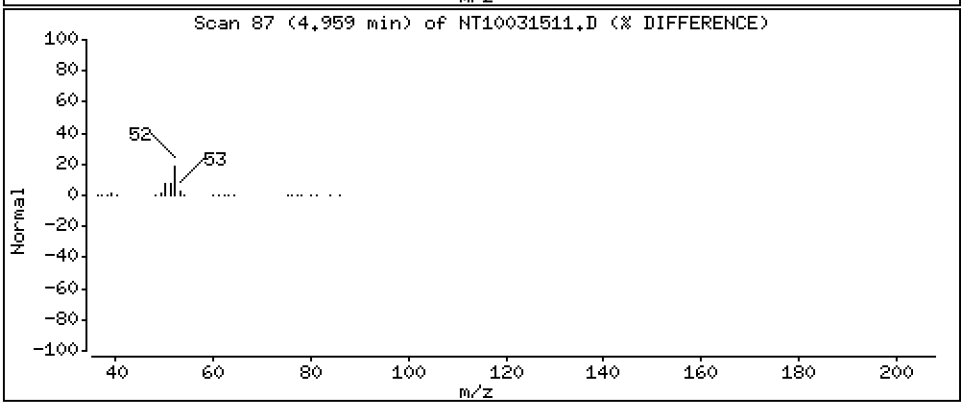












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

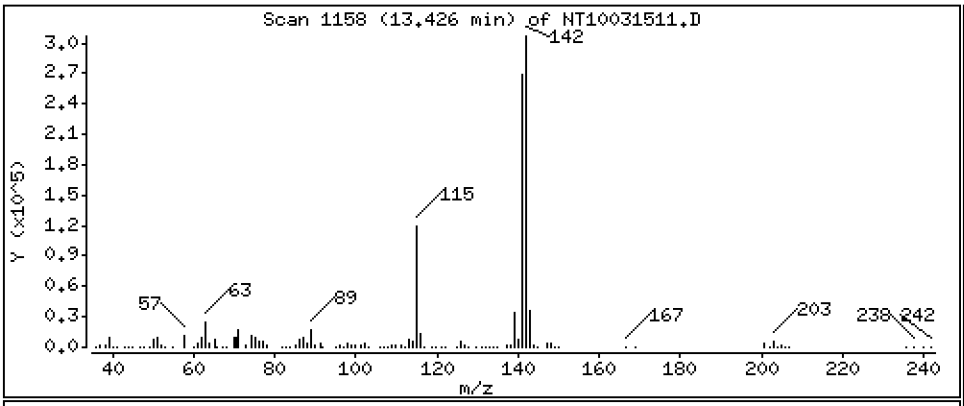
Operator: VTS

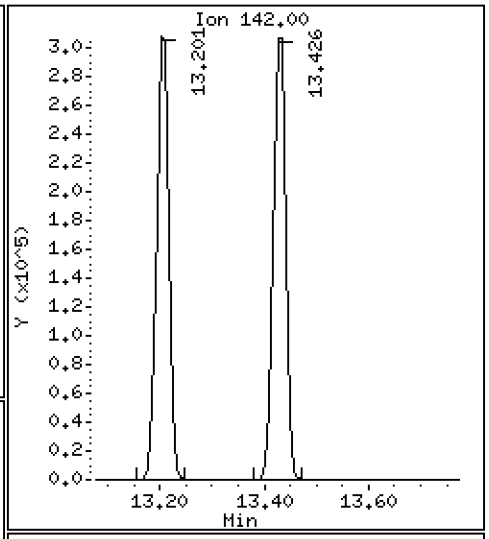
Column phase: ZB-5msi

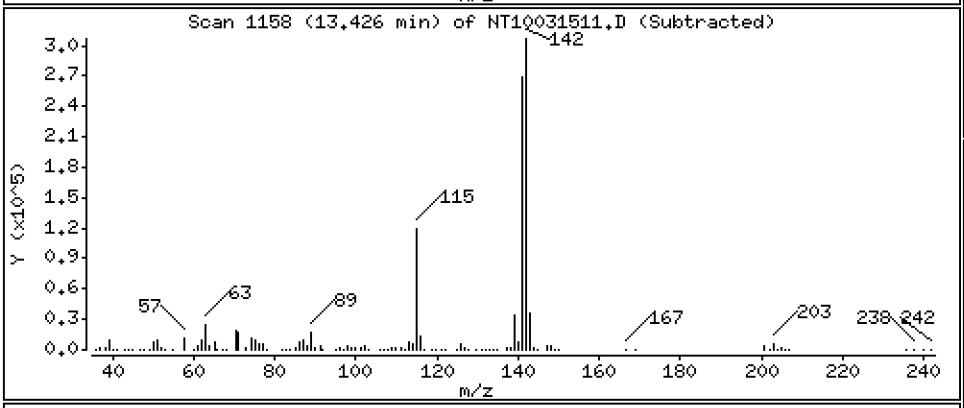
Column diameter: 0.25

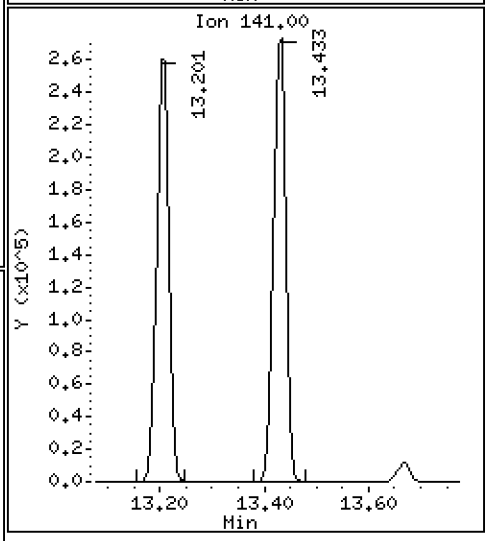
105 1-methylnaphthalene

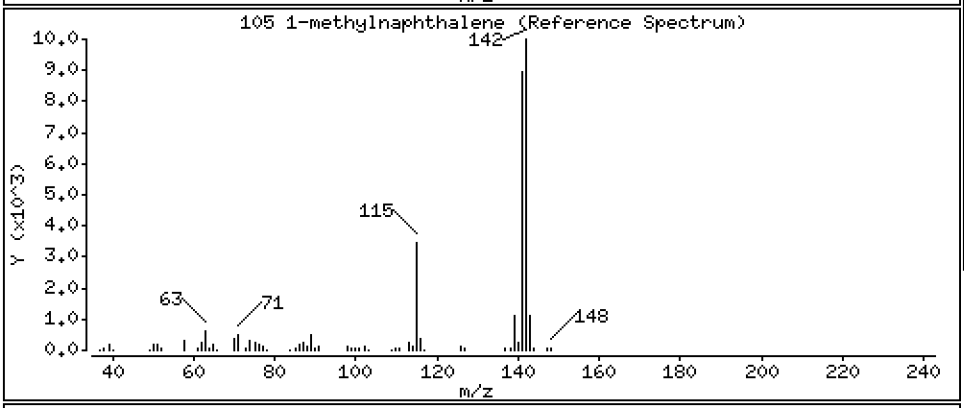
Concentration: 4.875 ug/mL

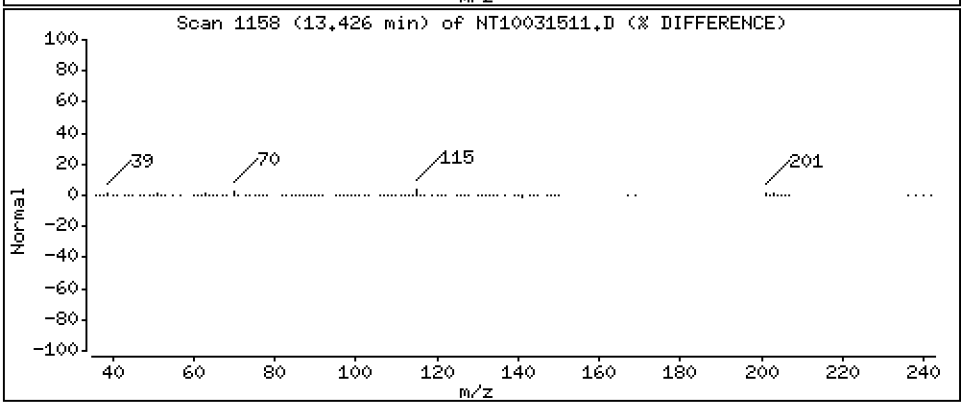












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

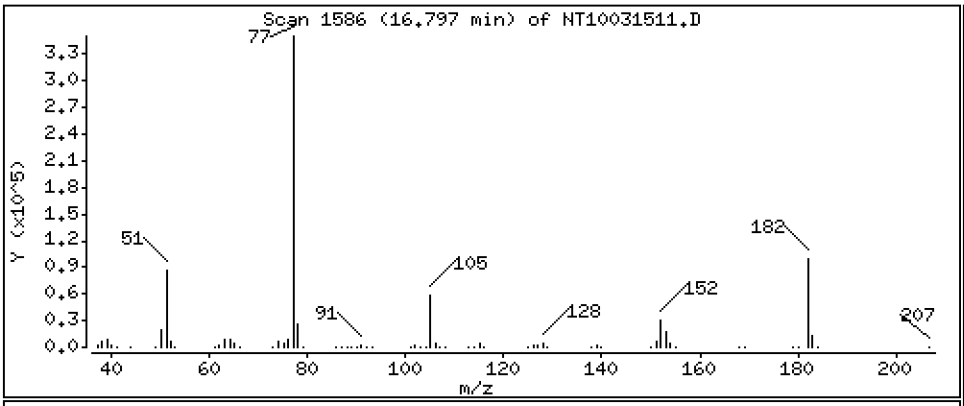
Operator: VTS

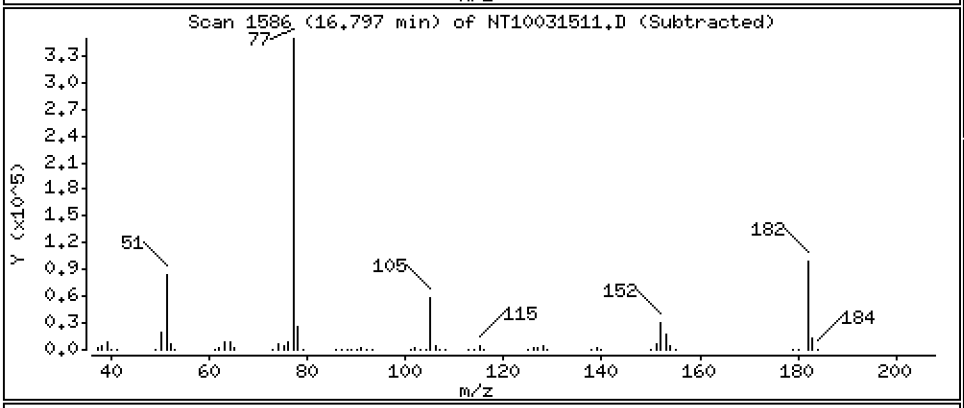
Column phase: ZB-5msi

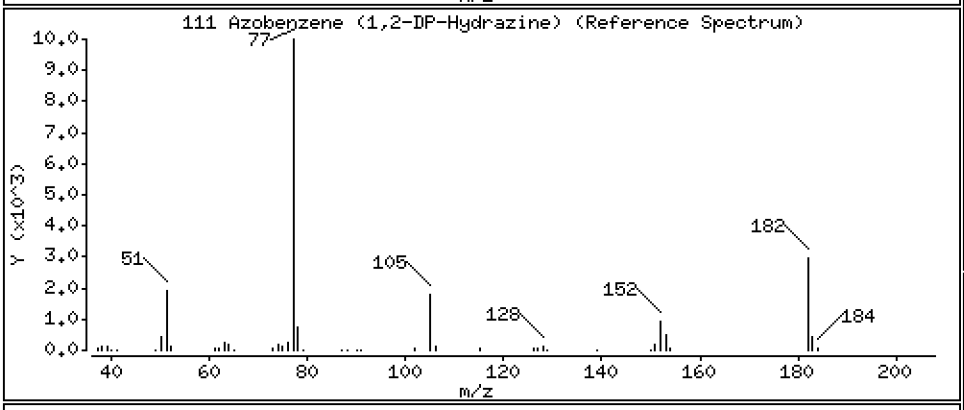
Column diameter: 0.25

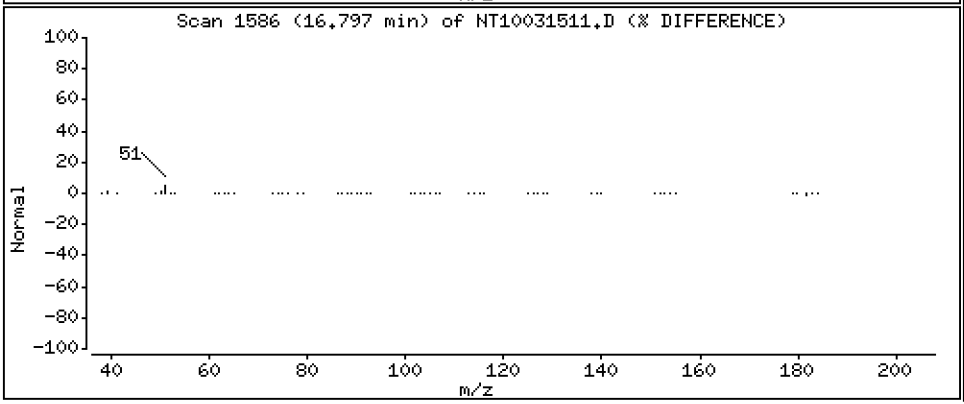
111 Azobenzene (1,2-DP-Hydrazine)

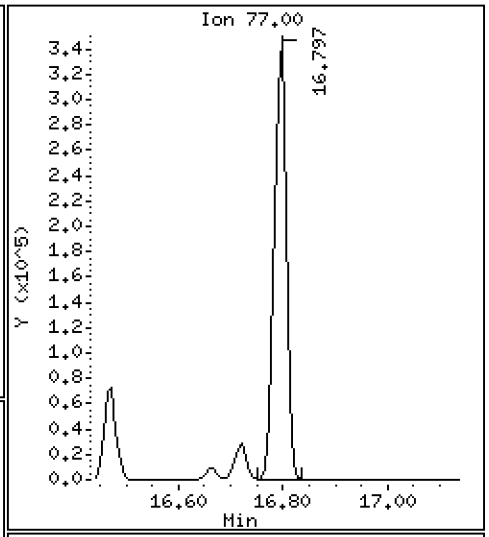
Concentration: 4.937 ug/mL

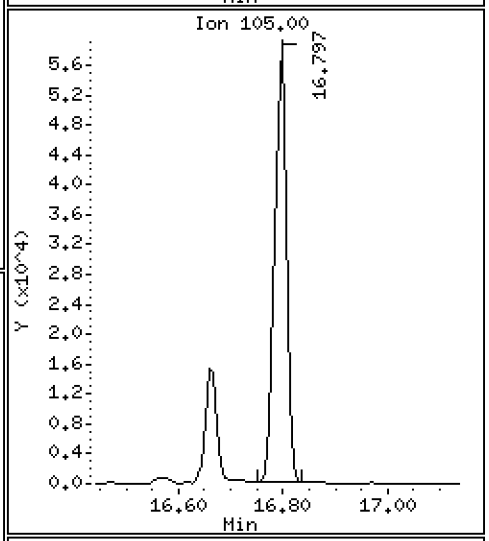


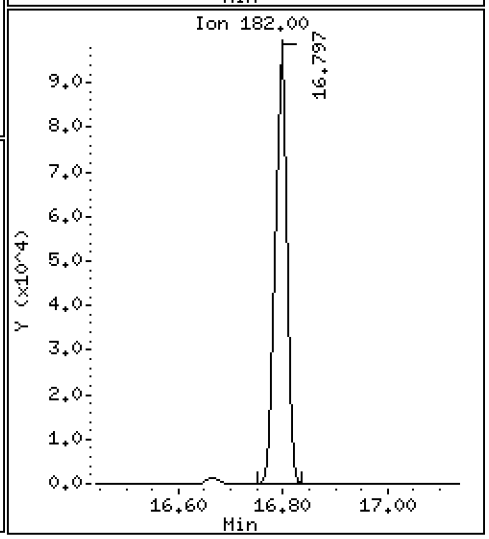












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

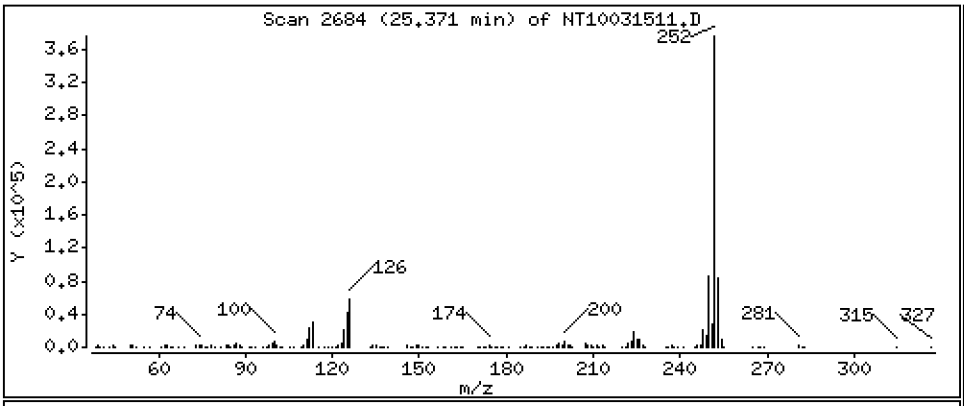
Operator: VTS

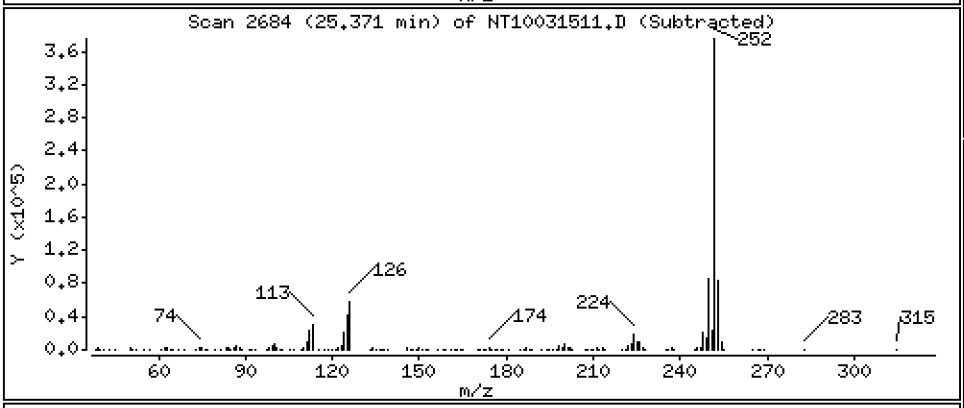
Column phase: ZB-5msi

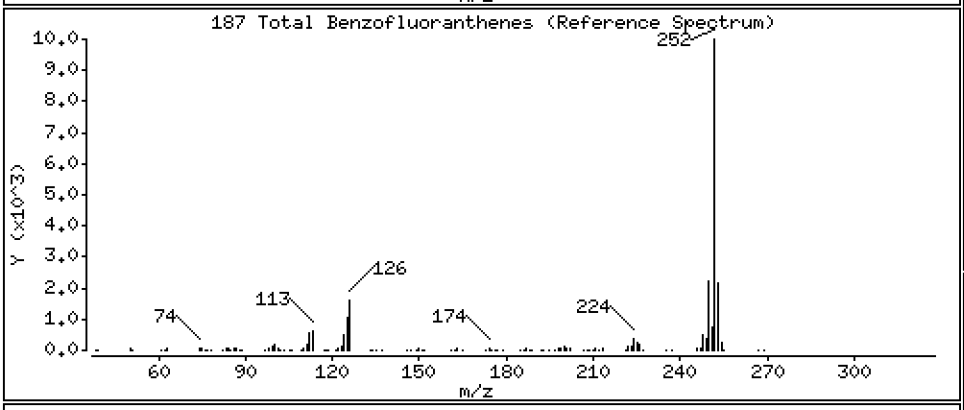
Column diameter: 0.25

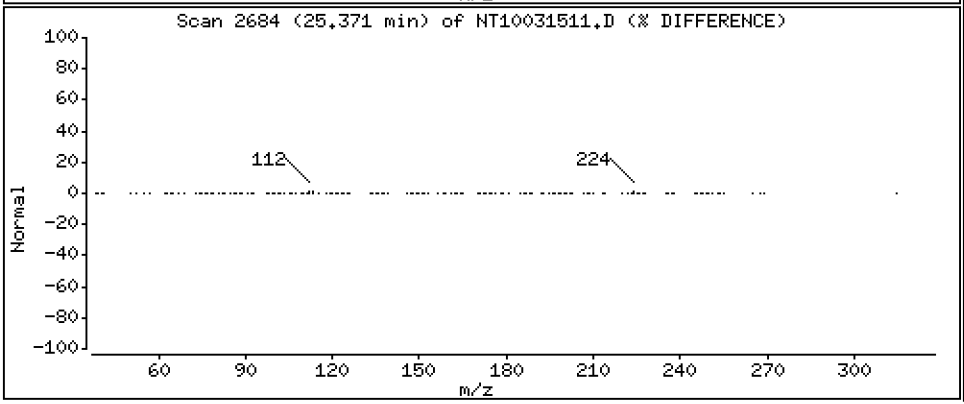
187 Total Benzofluoranthenes

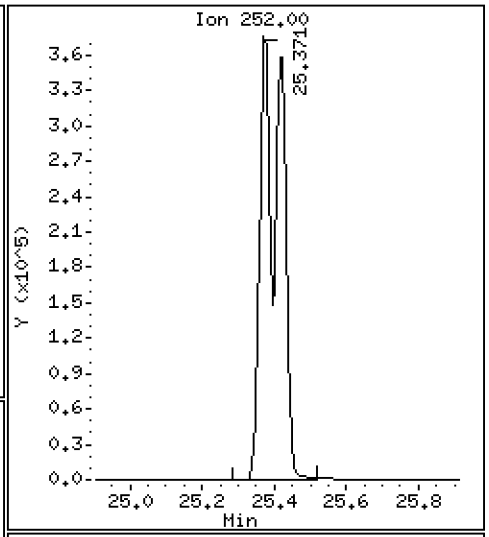
Concentration: 9.483 ug/mL

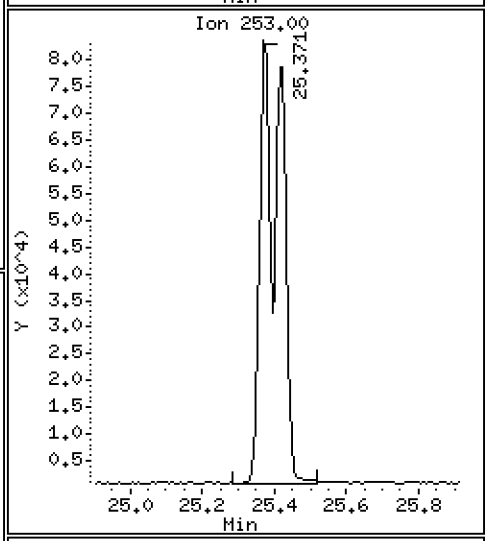


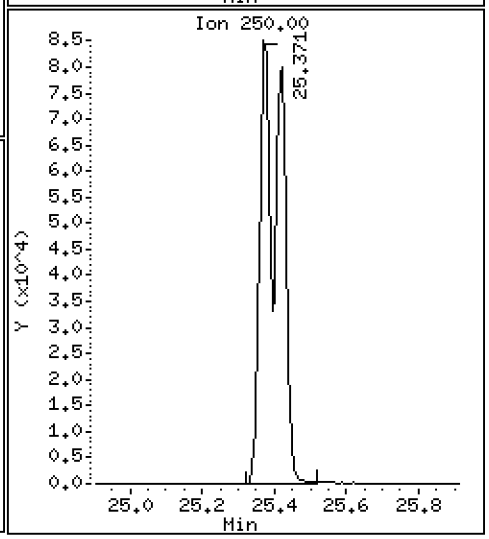












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

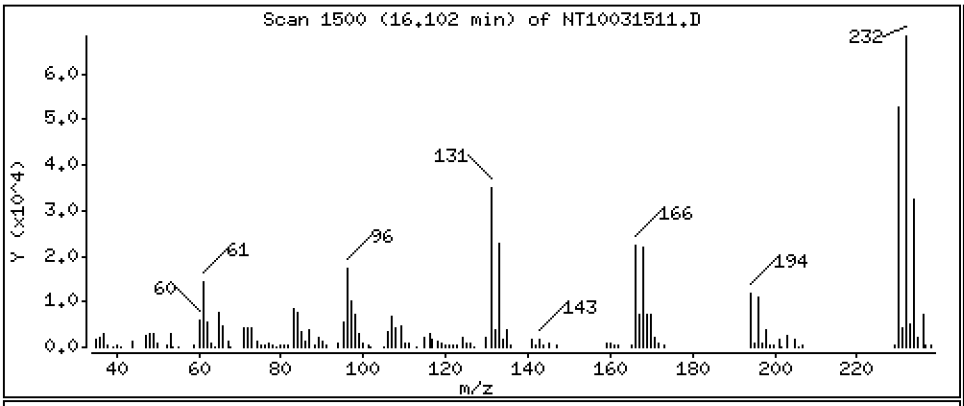
Operator: VTS

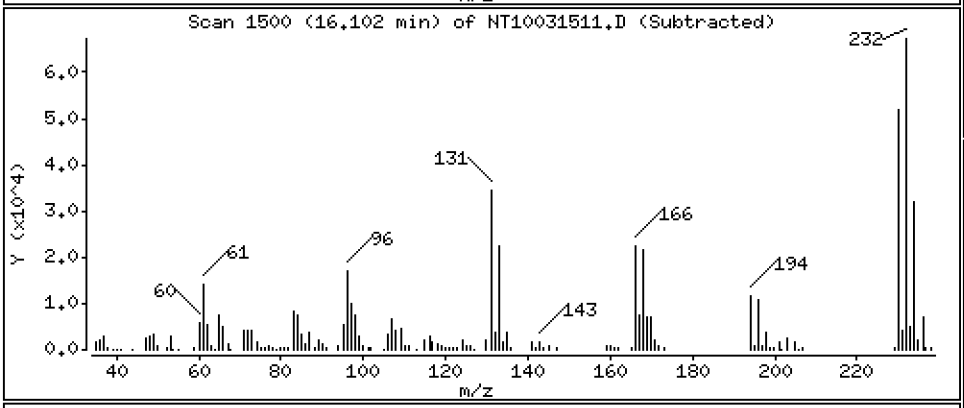
Column phase: ZB-5msi

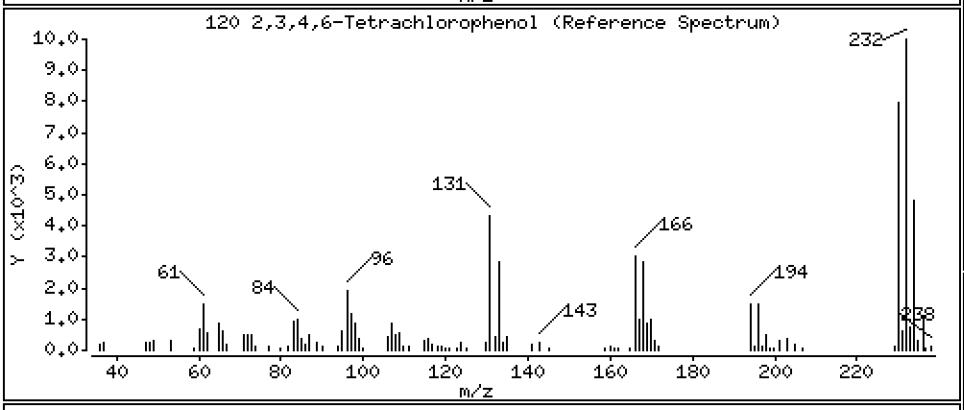
Column diameter: 0.25

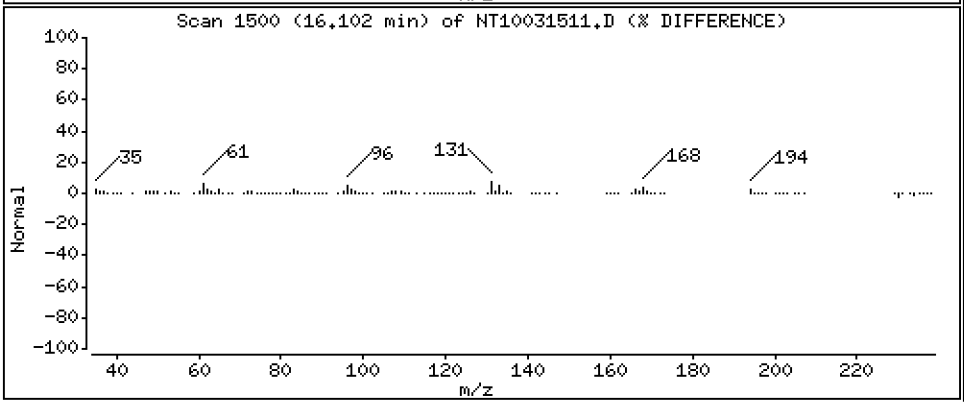
120 2,3,4,6-Tetrachlorophenol

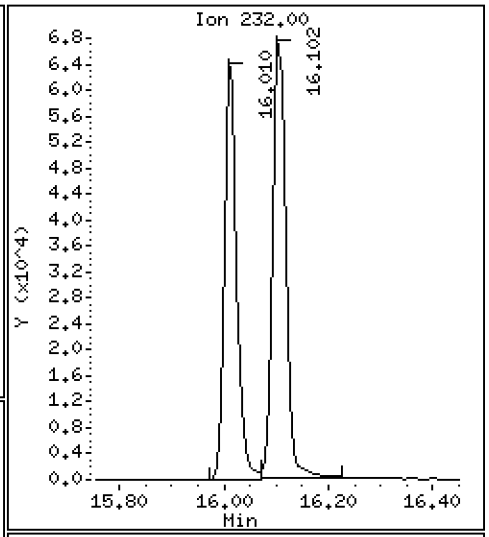
Concentration: 3.980 ug/mL

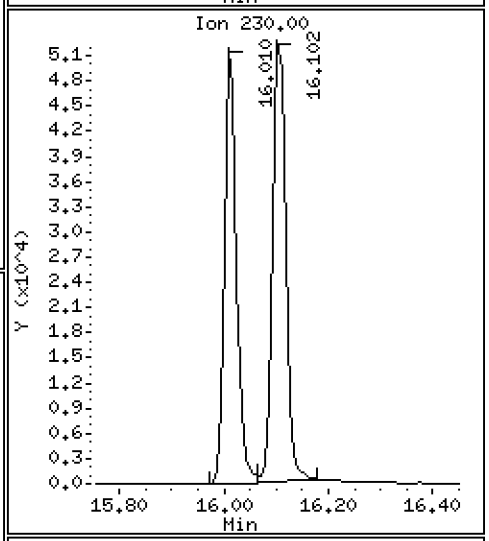


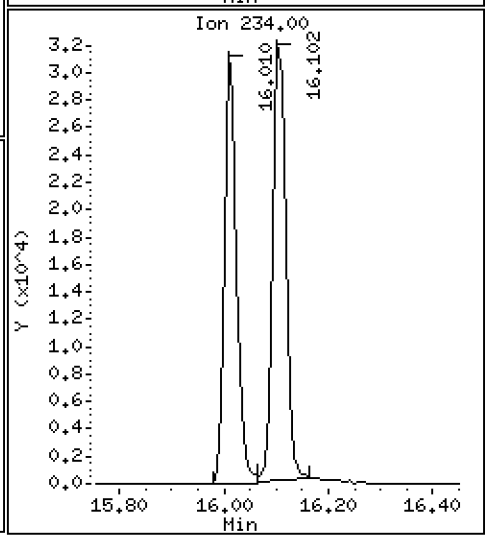












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230315.b\NT10031511.D
Lab Smp Id: SLC0228-SCV1
Inj Date : 16-MAR-2023 02:16
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0228-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$	1 2-Fluorophenol	112	Compound Not Detected.					
$	2 Phenol-d5	99	Compound Not Detected.					
	3 Phenol	94	8.659	8.652	(0.931)	281600	4.41237	4.412
$	5 2-Chlorophenol-d4	132	Compound Not Detected.					
	4 Bis(2-Chloroethyl)ether	93	8.837	8.837	(0.950)	248892	5.25818	5.258
	6 2-Chlorophenol	128	8.960	8.961	(0.963)	233608	4.27685	4.277
	7 1,3-Dichlorobenzene	146	9.239	9.231	(0.993)	275540	4.77157	4.772
*	8 1,4-Dichlorobenzene-d4	152	9.301	9.293	(1.000)	154809	4.00000	
	9 1,4-Dichlorobenzene	146	9.332	9.325	(1.003)	274051	4.91272	4.913
$	10 1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	9.689	9.682	(1.042)	268028	4.88215	4.882
	11 Benzyl alcohol	108	9.557	9.557	(1.028)	147597	4.92722	4.927
	14 2,2'-oxybis(1-Chloropropane)	121	9.860	9.860	(1.060)	100179	6.21363	6.214
	13 2-Methylphenol	108	9.775	9.767	(1.051)	196115	4.21542	4.215
	17 Hexachloroethane	117	10.279	10.271	(1.105)	114513	5.00332	5.003
	16 N-Nitroso-di-n-propylamine	70	10.116	10.108	(1.088)	190250	5.17896	5.179
	15 4-Methylphenol	108	10.046	10.031	(1.080)	213951	4.36462	4.365
$	18 Nitrobenzene-d5	82	Compound Not Detected.					
	19 Nitrobenzene	77	10.426	10.419	(0.885)	274714	4.85798	4.858
	20 Isophorone	82	10.861	10.861	(0.922)	556741	7.69604	7.696
	21 2-Nitrophenol	139	11.047	11.048	(0.938)	110302	3.99452	3.995
	22 2,4-Dimethylphenol	107	11.081	11.082	(0.941)	188638	3.63181	3.632
	23 Bis(2-Chloroethoxy)methane	93	11.285	11.285	(0.958)	273219	5.65409	5.654
	24 Benzoic acid	105	11.217	11.166	(0.952)	173961	5.95241	5.952
	25 2,4-Dichlorophenol	162	11.489	11.489	(0.975)	195480	4.70301	4.703
	26 1,2,4-Trichlorobenzene	180	11.685	11.685	(0.992)	222176	4.55366	4.554
*	27 Naphthalene-d8	136	11.777	11.770	(1.000)	570882	4.00000	
	28 Naphthalene	128	11.816	11.816	(1.003)	713318	4.71662	4.717
	29 4-Chloroaniline	127	11.940	11.940	(1.014)	223402	3.78650	3.787
	30 Hexachlorobutadiene	225	12.171	12.172	(1.033)	138198	4.83404	4.834
	31 4-Chloro-3-methylphenol	107	12.876	12.876	(1.093)	208794	4.64027	4.640
	32 2-Methylnaphthalene	142	13.201	13.201	(1.121)	501627	4.59617	4.596
	33 Hexachlorocyclopentadiene	237	13.665	13.665	(0.888)	132827	4.72902	4.729

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	13.820	13.820	(0.898)	137849	4.59559	4.596
35	2,4,5-Trichlorophenol	196	13.889	13.890	(0.903)	146935	4.40855	4.409
$ 36	2-Fluorobiphenyl	172	Compound Not Detected.					
37	2-Chloronaphthalene	162	14.199	14.191	(0.923)	466196	4.79589	4.796
38	2-Nitroaniline	65	14.454	14.447	(0.940)	134108	4.91137	4.911
39	Dimethylphthalate	163	14.880	14.873	(0.967)	486790	4.93747	4.937
40	Acenaphthylene	152	15.074	15.066	(0.980)	727839	4.80509	4.805
41	2,6-Dinitrotoluene	165	15.020	15.012	(0.976)	112840	5.29815	5.298
* 42	Acenaphthene-d10	164	15.383	15.383	(1.000)	303490	4.00000	
43	3-Nitroaniline	138	15.306	15.298	(0.995)	120530	5.01393	5.014
44	Acenaphthene	153	15.453	15.445	(1.005)	446914	4.77589	4.776
45	2,4-Dinitrophenol	184	15.515	15.515	(1.009)	27409	2.12395	2.124
46	Dibenzofuran	168	15.777	15.770	(1.026)	641379	4.64790	4.648
47	4-Nitrophenol	109	15.600	15.592	(1.014)	59816	3.96568	3.966
48	2,4-Dinitrotoluene	165	15.824	15.817	(1.029)	144262	4.51019	4.510
50	Diethylphthalate	149	16.326	16.319	(1.061)	503887	5.20905	5.209
49	Fluorene	166	16.489	16.481	(1.072)	511113	4.70796	4.708
51	4-Chlorophenyl-phenylether	204	16.473	16.466	(1.071)	257762	4.99294	4.993
52	4-Nitroaniline	138	16.566	16.566	(1.077)	106701	4.92532	4.925
53	4,6-Dinitro-2-methylphenol	198	16.666	16.658	(0.905)	56867	3.51509	3.515
54	N-Nitrosodiphenylamine	169	16.720	16.712	(0.908)	342454	4.80180	4.802
$ 55	2,4,6-Tribromophenol	330	Compound Not Detected.					
56	4-Bromophenyl-phenylether	248	17.475	17.476	(0.949)	150956	5.05964	5.060
57	Hexachlorobenzene	284	17.800	17.793	(0.966)	143751	4.59553	4.596
58	Pentachlorophenol	266	18.149	18.149	(0.985)	75635	4.05676	4.057
* 59	Phenanthrene-d10	188	18.420	18.420	(1.000)	533431	4.00000	
60	Phenanthrene	178	18.466	18.466	(1.003)	669357	4.60181	4.602
61	Anthracene	178	18.559	18.559	(1.008)	581438	4.16715	4.167
62	Carbazole	167	18.884	18.884	(1.025)	591382	4.72989	4.730
63	Di-n-butylphthalate	149	19.665	19.666	(1.068)	830680	4.96738	4.967
64	Fluoranthene	202	20.841	20.841	(0.888)	782432	4.47248	4.472
65	Pyrene	202	21.267	21.267	(0.907)	778668	4.33892	4.339
$ 66	Terphenyl-d14	244	Compound Not Detected.					
67	Butylbenzylphthalate	149	22.459	22.460	(0.957)	314007	4.83397	4.834
68	Benzo(a)anthracene	228	23.427	23.419	(0.999)	714166	4.64722	4.647
* 69	Chrysene-d12	240	23.458	23.450	(1.000)	435381	4.00000	
70	3,3'-Dichlorobenzidine	252	23.373	23.373	(0.996)	483256	9.81738	9.817
71	Chrysene	228	23.497	23.489	(1.002)	677151	4.51017	4.510
72	bis(2-Ethylhexyl)phthalate	149	23.481	23.474	(0.959)	453669	4.67998	4.680
* 134	Di-n-octylphthalate-d4	153	24.487	24.480	(1.000)	660827	4.00000	
73	Di-n-octylphthalate	149	24.495	24.488	(1.000)	855562	4.94734	4.947
74	Benzo(b)fluoranthene	252	25.370	25.362	(0.969)	737887	4.60200	4.602(H)
75	Benzo(k)fluoranthene	252	25.416	25.409	(0.970)	797521	4.89839	4.898
76	Benzo(a)pyrene	252	26.067	26.052	(0.995)	698616	4.87338	4.873
* 77	Perylene-d12	264	26.191	26.183	(1.000)	494648	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.005	28.990	(1.107)	834672	4.57655	4.577
79	Dibenzo(a,h)anthracene	278	29.021	29.005	(1.108)	688433	4.54663	4.547
80	Benzo(g,h,i)perylene	276	29.852	29.821	(1.140)	724463	4.59000	4.590
90	N-Nitrosodimethylamine	74	4.928	4.936	(0.530)	155126	5.19378	5.194
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	21.073	21.066	(0.898)	314737	4.37985	4.380
103	Pyridine	79	4.959	4.997	(0.533)	244801	5.33678	5.337
105	1-methylnaphthalene	142	13.425	13.425	(1.140)	487498	4.87520	4.875
111	Azobenzene (1,2-DP-Hydrazine)	77	16.797	16.789	(1.092)	533524	4.93744	4.937

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.370	25.409	(0.969)	1468165	9.48349	9.483
120 2,3,4,6-Tetrachlorophenol	232	16.102	16.103	(1.047)	124685	3.97959	3.980

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031511.D
Lab Smp Id: SLC0228-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 21:50
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	171542	85771	343084	154809	-9.75
27 Naphthalene-d8	624466	312233	1248932	570882	-8.58
42 Acenaphthene-d10	337226	168613	674452	303490	-10.00
59 Phenanthrene-d10	572849	286425	1145698	533431	-6.88
69 Chrysene-d12	347068	173534	694136	435381	25.45
134 Di-n-octylphthala	500317	250159	1000634	660827	32.08
77 Perylene-d12	421549	210775	843098	494648	17.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	-0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	0.01
42 Acenaphthene-d10	15.38	14.88	15.88	15.38	0.00
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.46	0.04
134 Di-n-octylphthala	24.48	23.98	24.98	24.49	0.03
77 Perylene-d12	26.18	25.68	26.68	26.19	0.03

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

REVIEW SUMMARY FOR FILE - NT10031511.D

Lab ID: SLC0228-SCV1
nt10.i, 20230315.b\ABN.m,   16-MAR-2023 02:16

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.000	0.9524	Benzoic acid

RRT check based on Ccal File: NT10031508.D

On Column LOD for nt10.i, 20230315.b\ABN.m, ICAL.sub = 0.0000

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

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00046
Laboratory ID: SLC0228-SCV1
Sequence: SLC0228
Standard ID: L002833

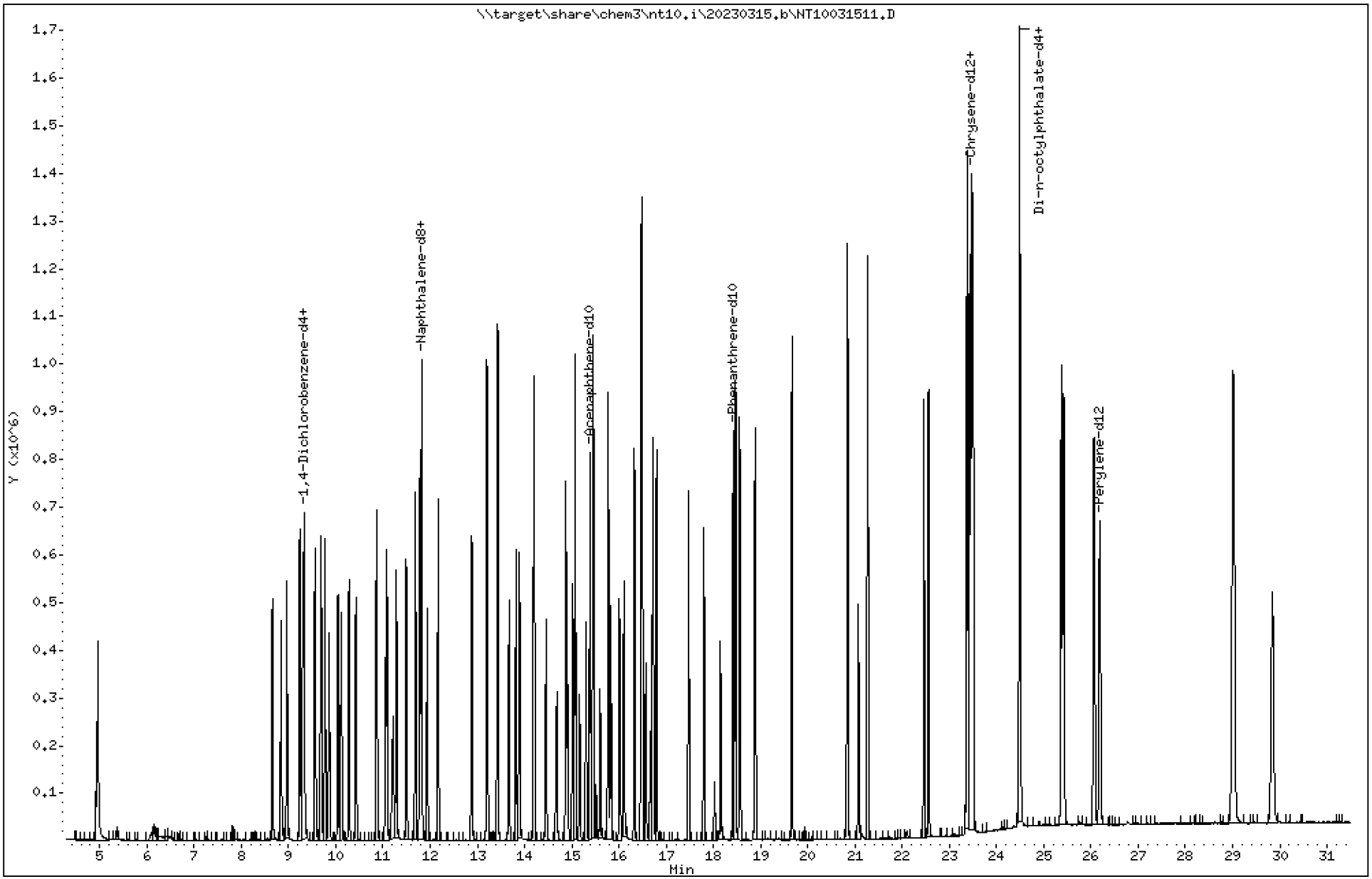
ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.4	-11.8	20.00
4-Methylphenol	5.0000	4.4	-12.7	20.00
Naphthalene	5.0000	4.7	-5.7	20.00
2-Methylnaphthalene	5.0000	4.6	-8.1	20.00
Acenaphthylene	5.0000	4.8	-3.9	20.00
Dimethylphthalate	5.0000	4.9	-1.3	20.00
Acenaphthene	5.0000	4.8	-4.5	20.00
Dibenzofuran	5.0000	4.6	-7.0	20.00
Fluorene	5.0000	4.7	-5.8	20.00
Phenanthrene	5.0000	4.6	-8.0	20.00
Anthracene	5.0000	4.2	-16.7	20.00
Fluoranthene	5.0000	4.5	-10.6	20.00
Pyrene	5.0000	4.3	-13.2	20.00
Butylbenzylphthalate	5.0000	4.8	-3.3	20.00
Benzo(a)anthracene	5.0000	4.6	-7.1	20.00
Chrysene	5.0000	4.5	-9.8	20.00
bis(2-Ethylhexyl)phthalate	5.0000	4.7	-6.4	20.00
Benzofluoranthenes, Total	10.000	9.5	-5.2	20.00
Benzo(a)pyrene	5.0000	4.9	-2.5	20.00
Indeno(1,2,3-cd)pyrene	5.0000	4.6	-8.5	20.00
Dibenzo(a,h)anthracene	5.0000	4.5	-9.1	20.00
Benzo(g,h,i)perylene	5.0000	4.6	-8.2	20.00

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D
Date : 16-MAR-2023 02:16
Client ID:
Sample Info: SLC0228-SCV1

Instrument: nt10.i
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

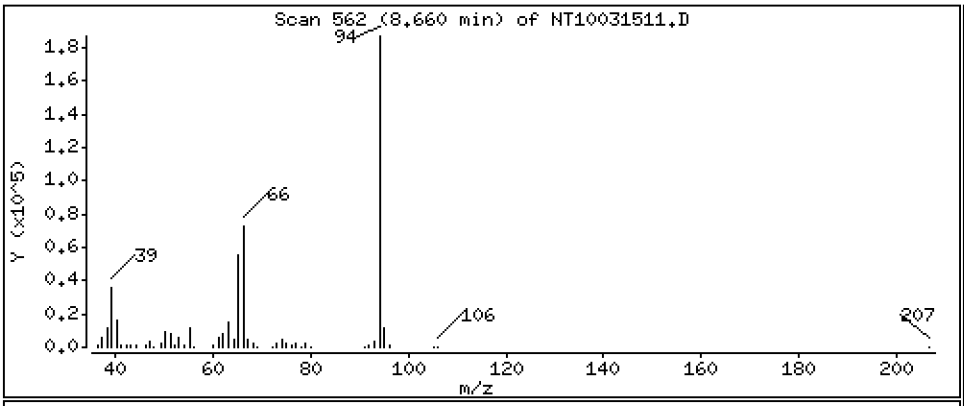
Operator: VTS

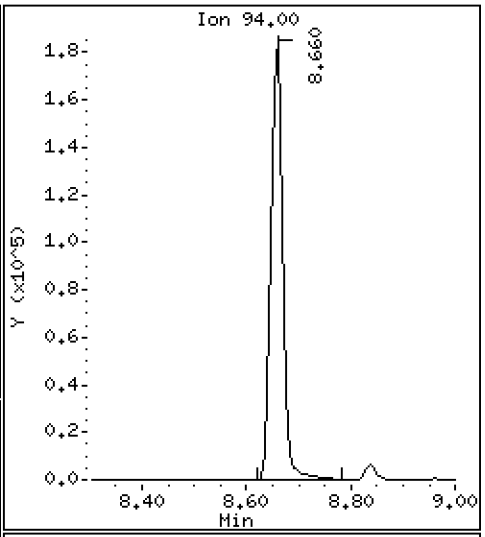
Column phase: ZB-5msi

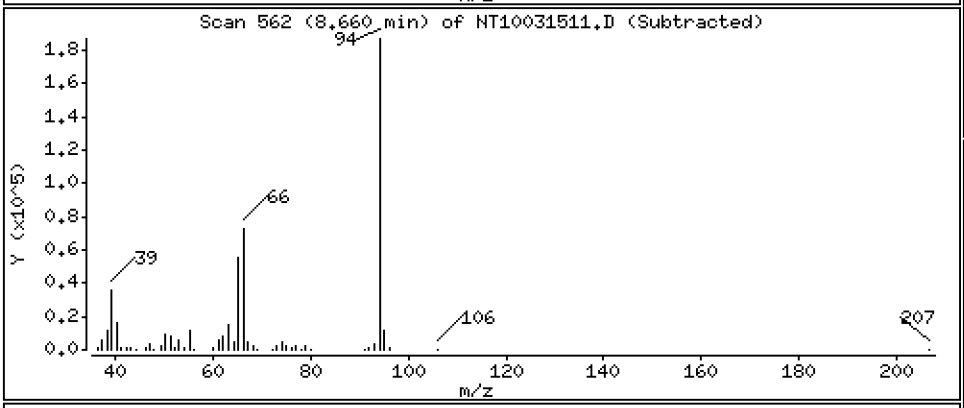
Column diameter: 0.25

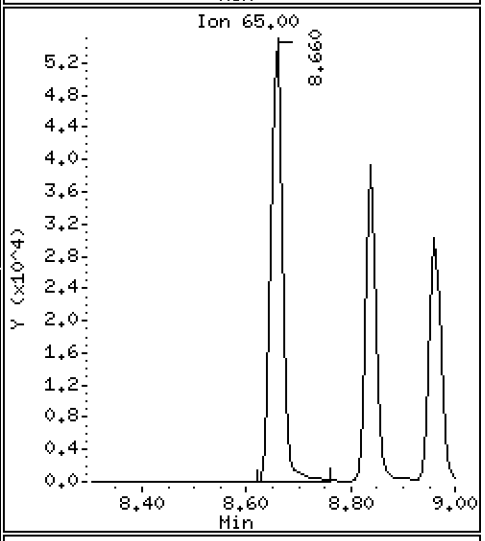
3 Phenol

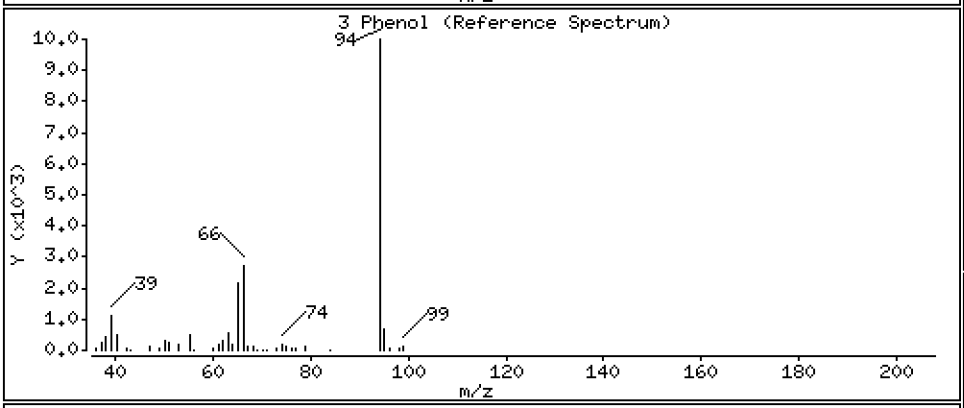
Concentration: 4.412 ug/mL

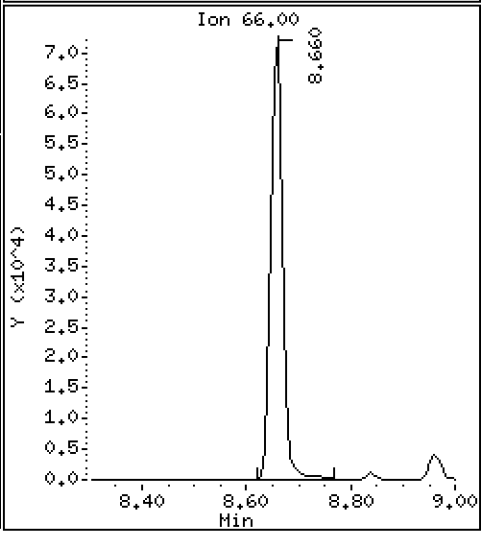


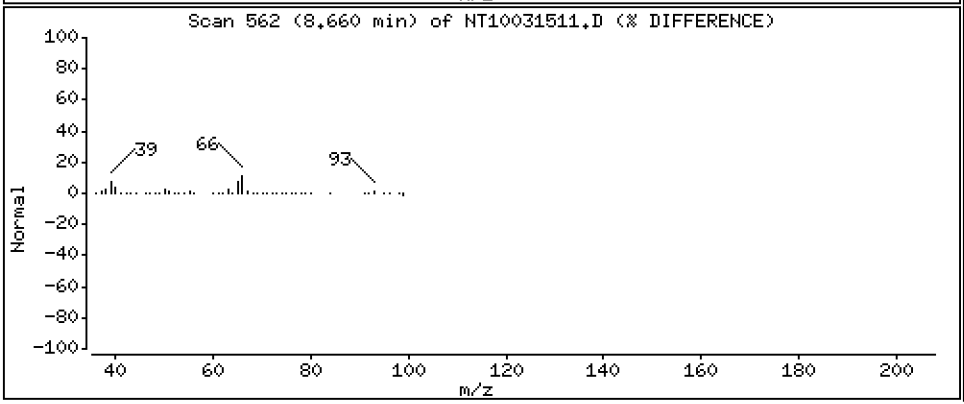












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

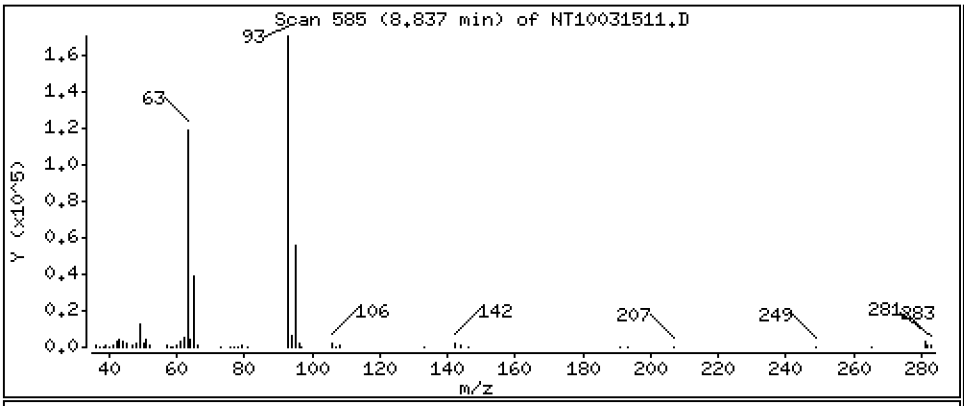
Operator: VTS

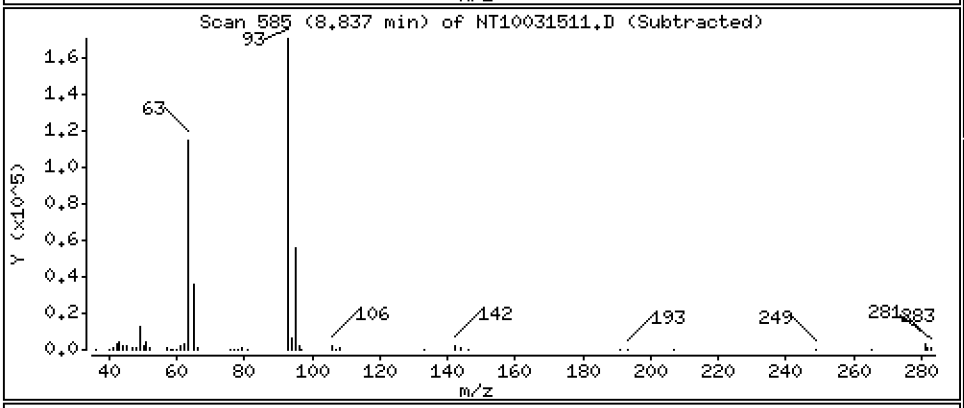
Column phase: ZB-5msi

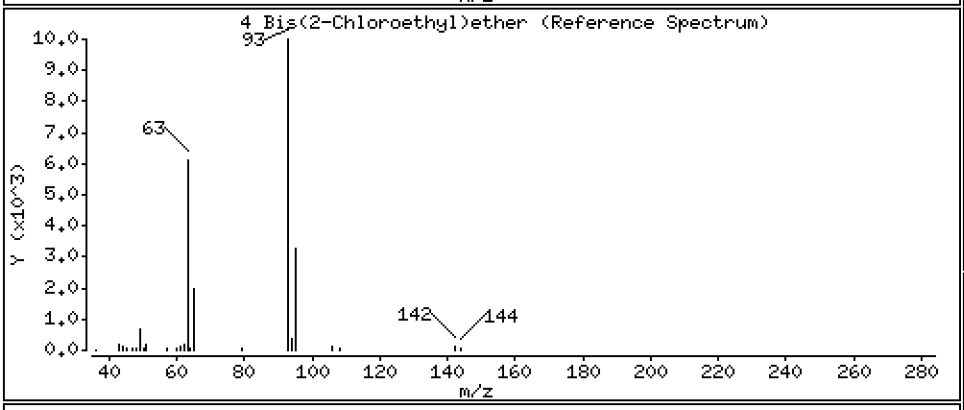
Column diameter: 0.25

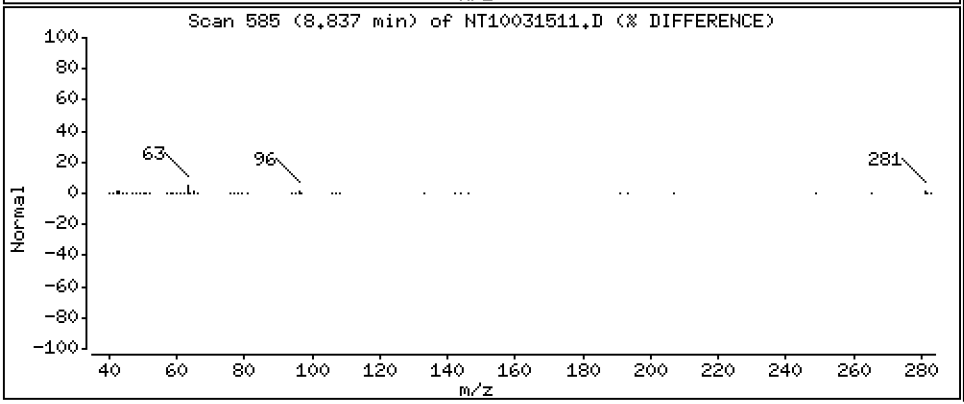
4 Bis(2-Chloroethyl)ether

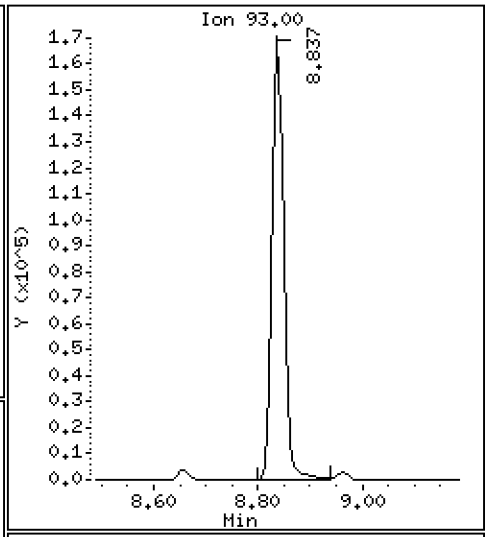
Concentration: 5.258 ug/mL

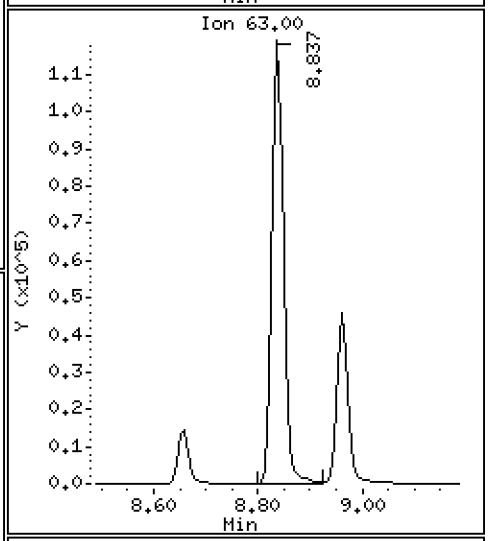


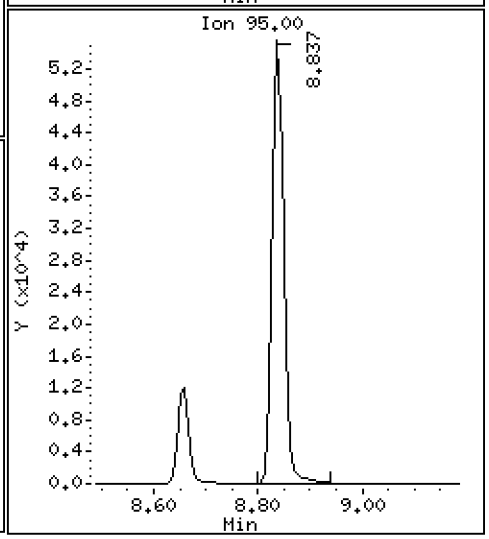












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

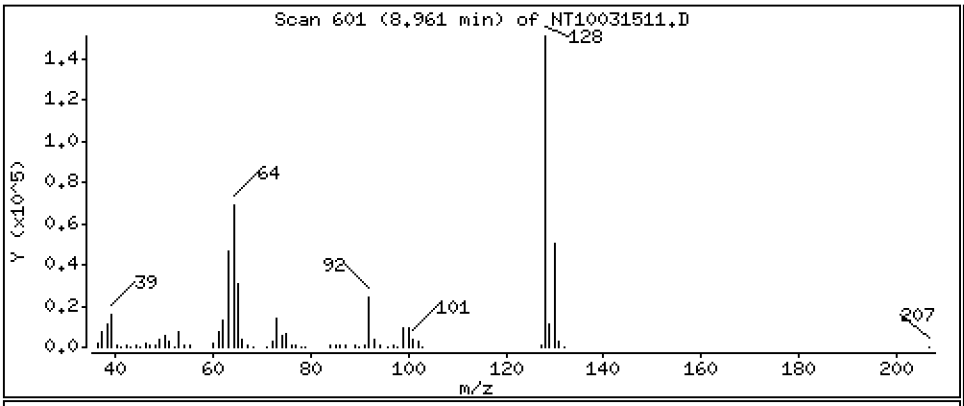
Operator: VTS

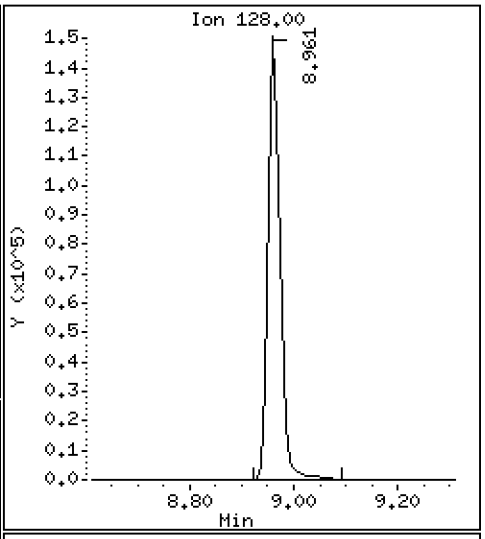
Column phase: ZB-5msi

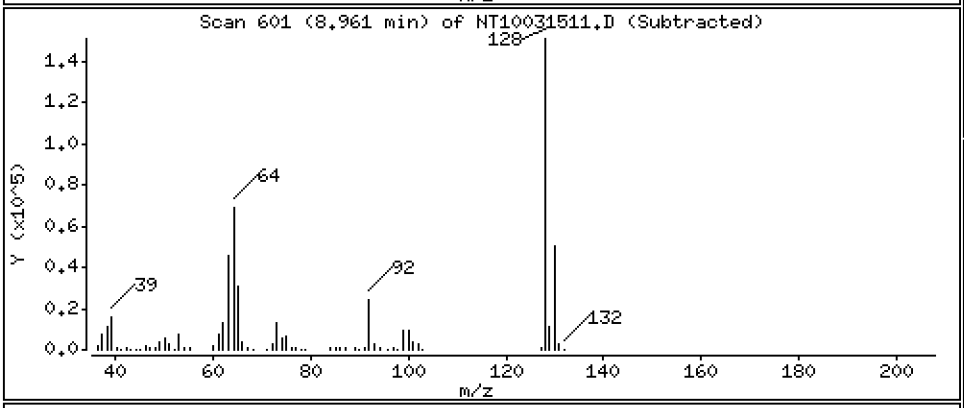
Column diameter: 0.25

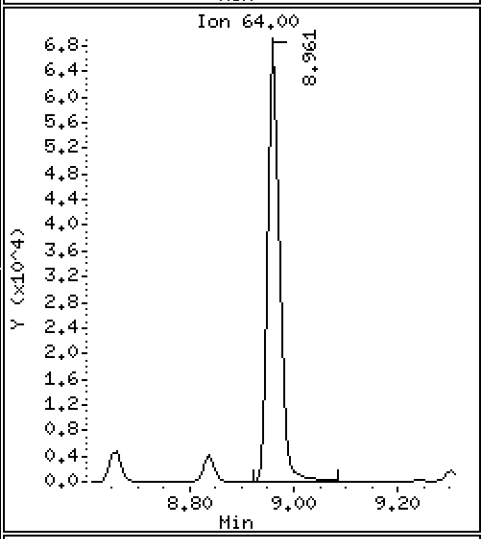
6 2-Chlorophenol

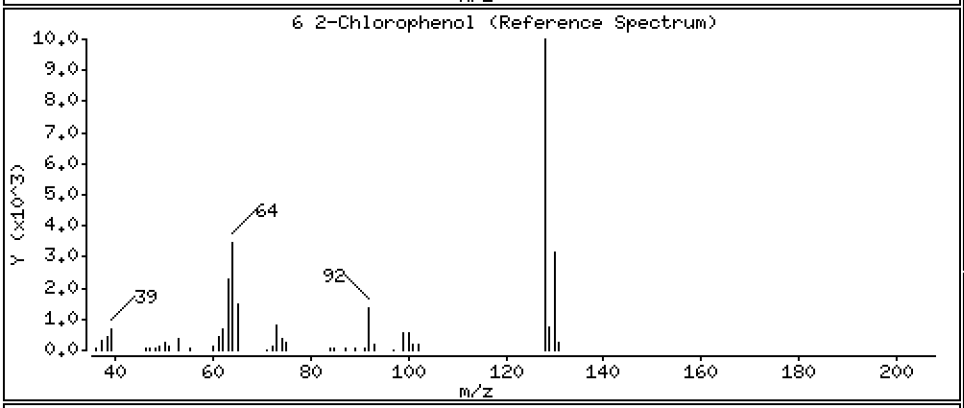
Concentration: 4.277 ug/mL

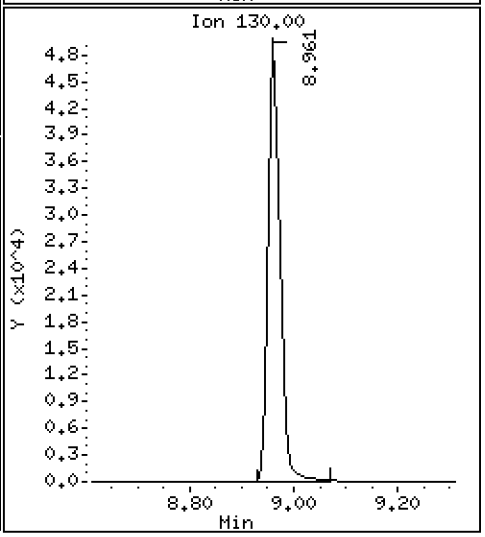


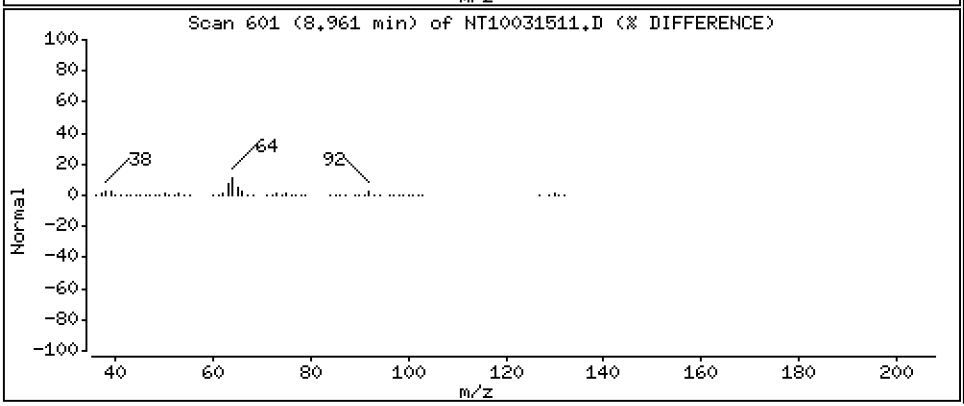












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

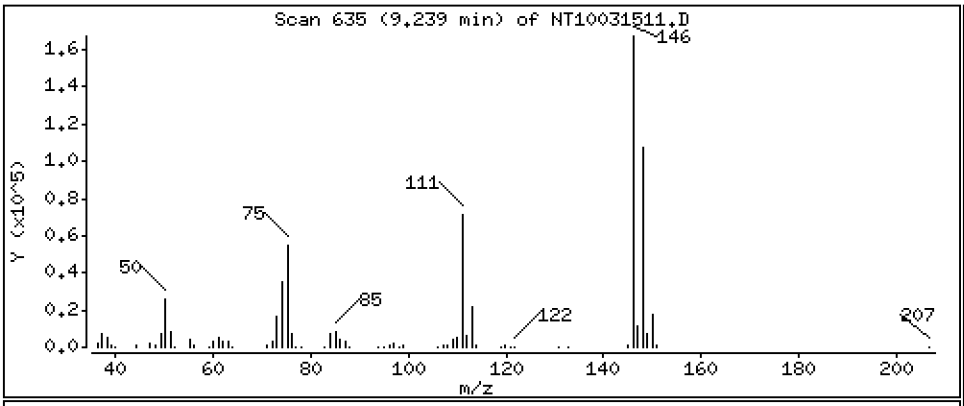
Operator: VTS

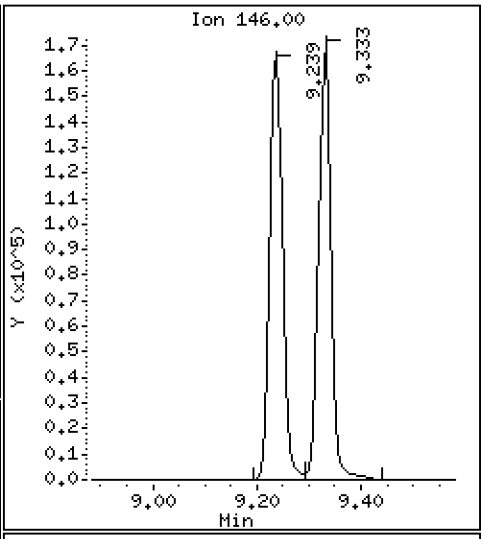
Column phase: ZB-5msi

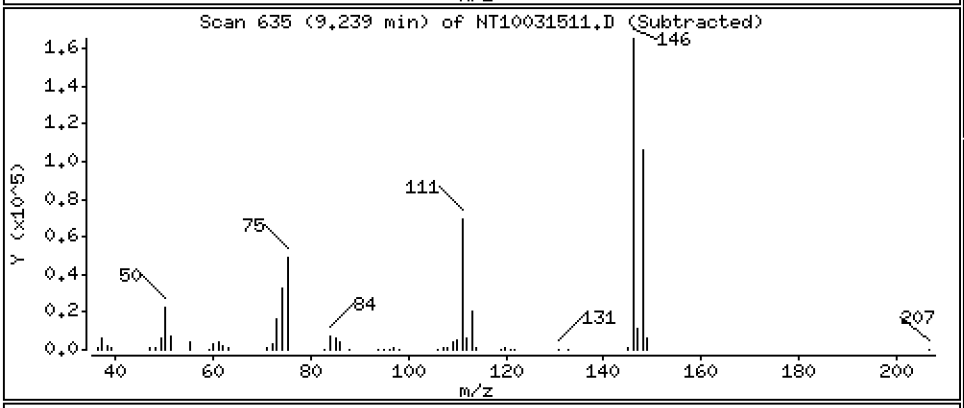
Column diameter: 0.25

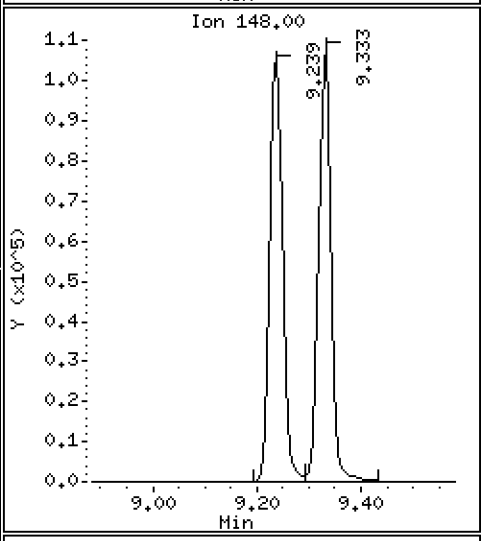
7 1,3-Dichlorobenzene

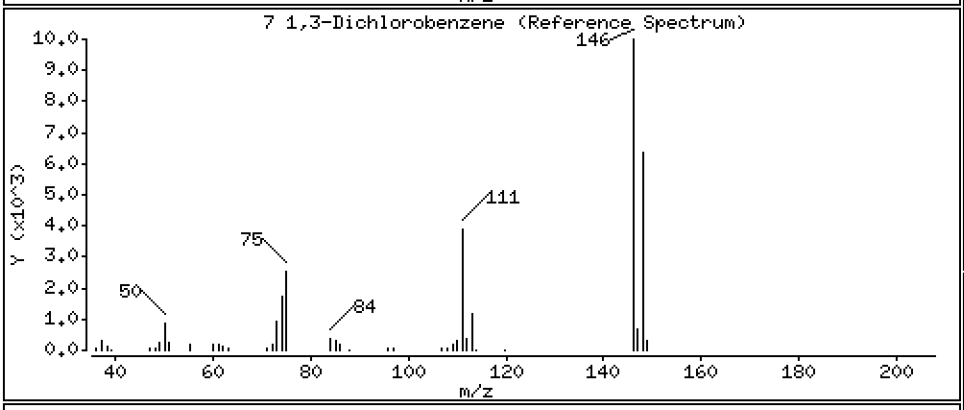
Concentration: 4.772 ug/mL

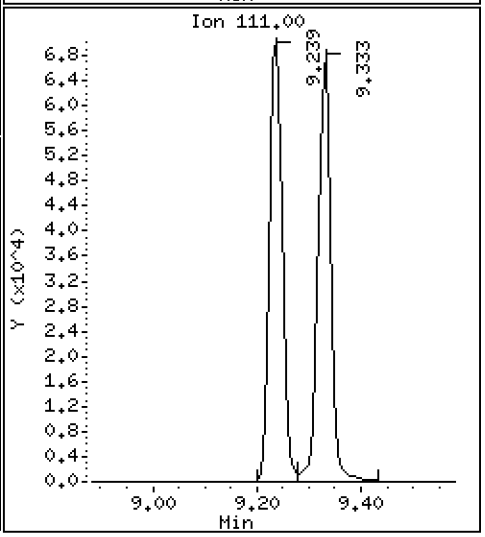


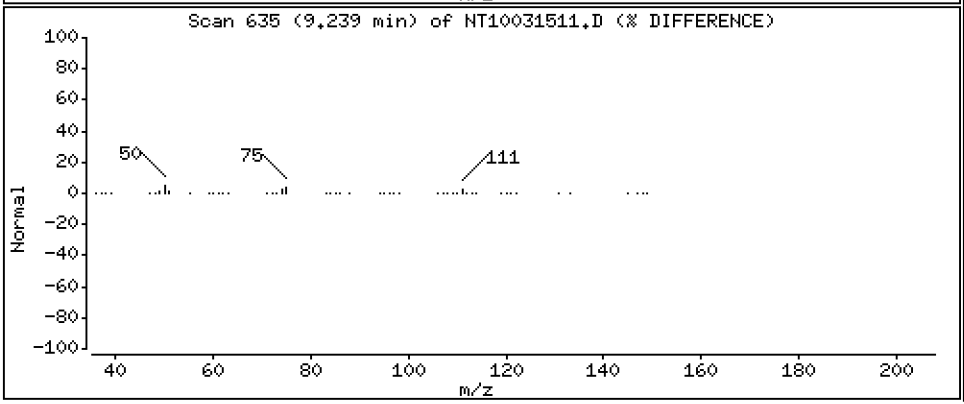












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

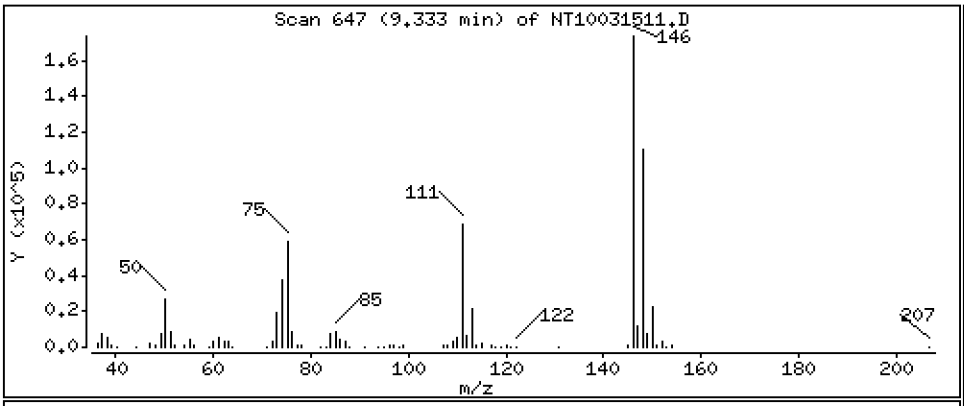
Operator: VTS

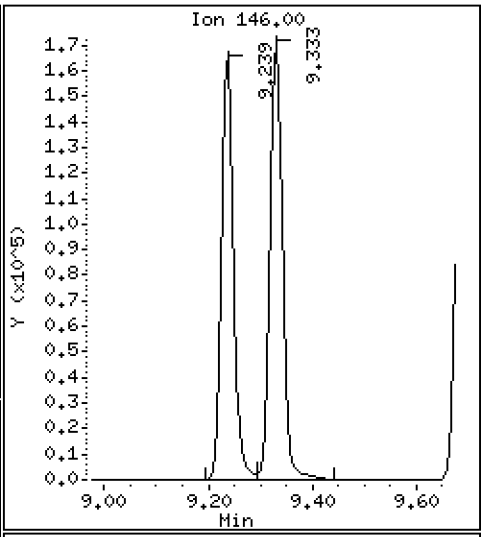
Column phase: ZB-5msi

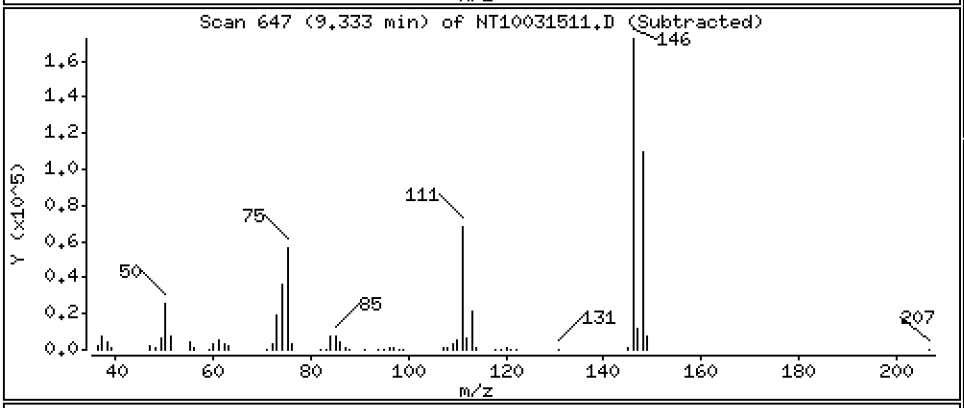
Column diameter: 0.25

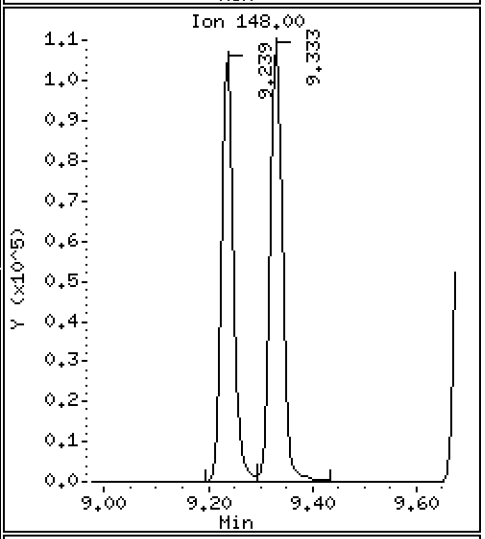
9 1,4-Dichlorobenzene

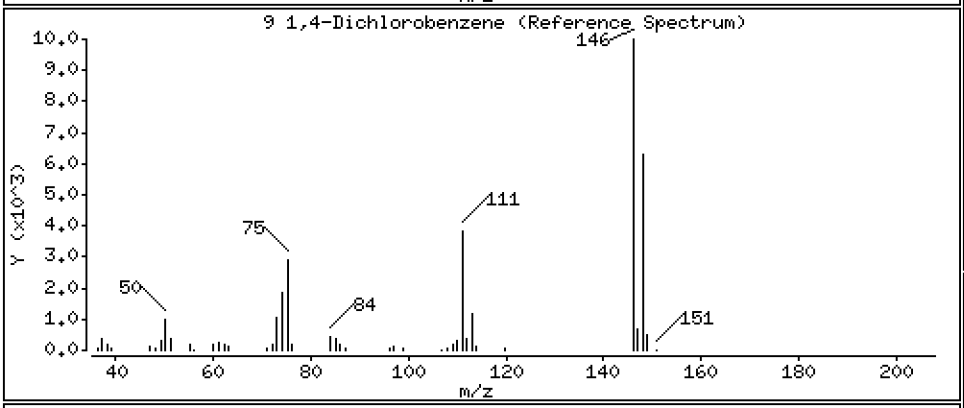
Concentration: 4.913 ug/mL

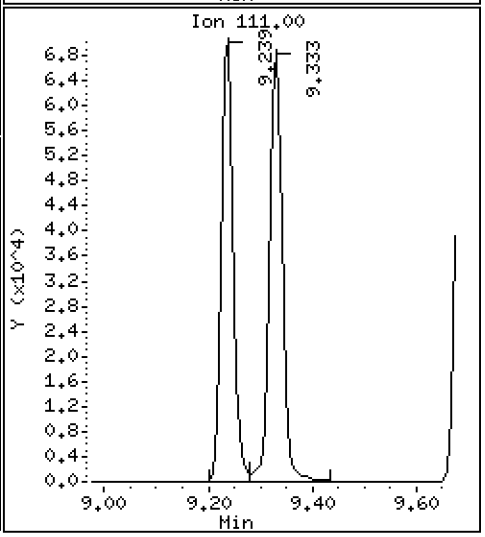


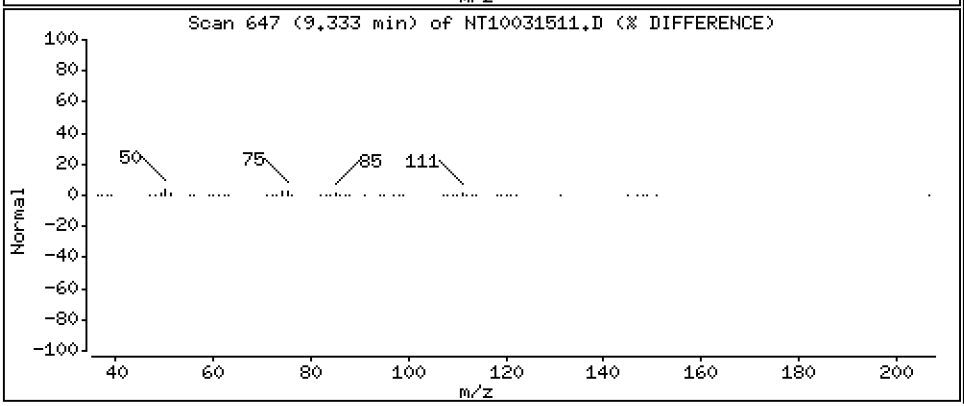












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

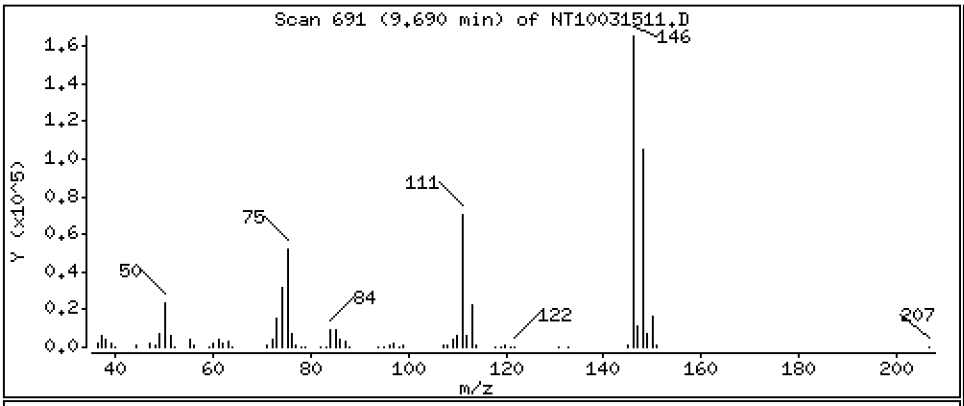
Operator: VTS

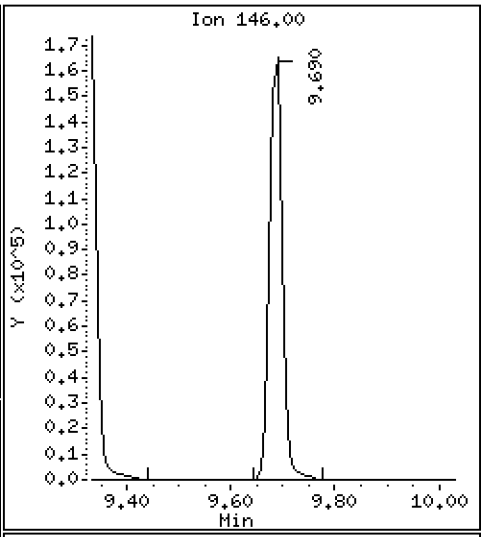
Column phase: ZB-5msi

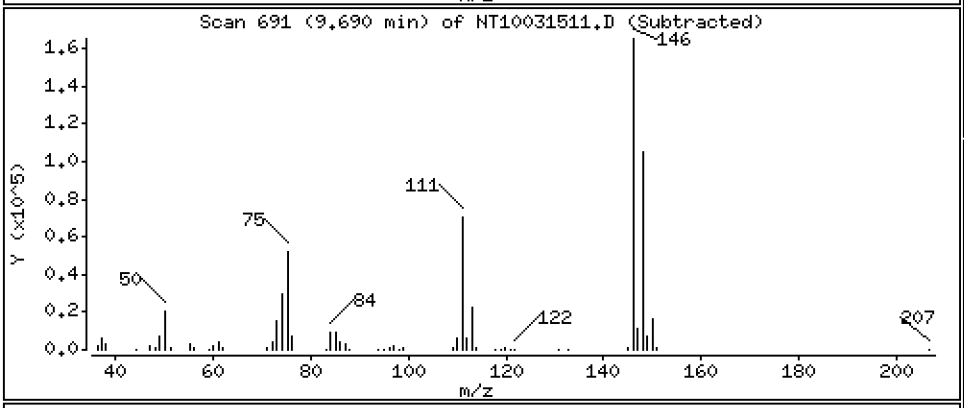
Column diameter: 0.25

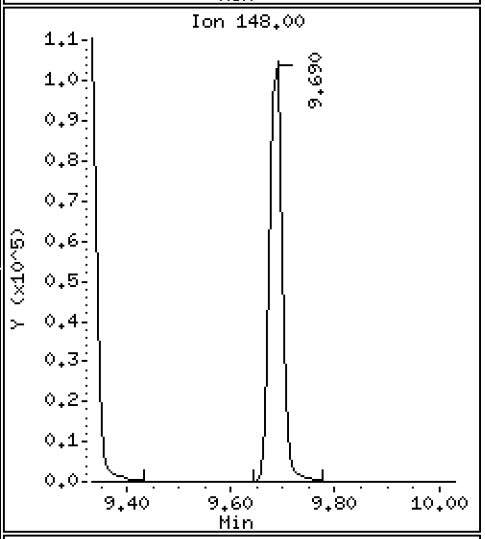
12 1,2-Dichlorobenzene

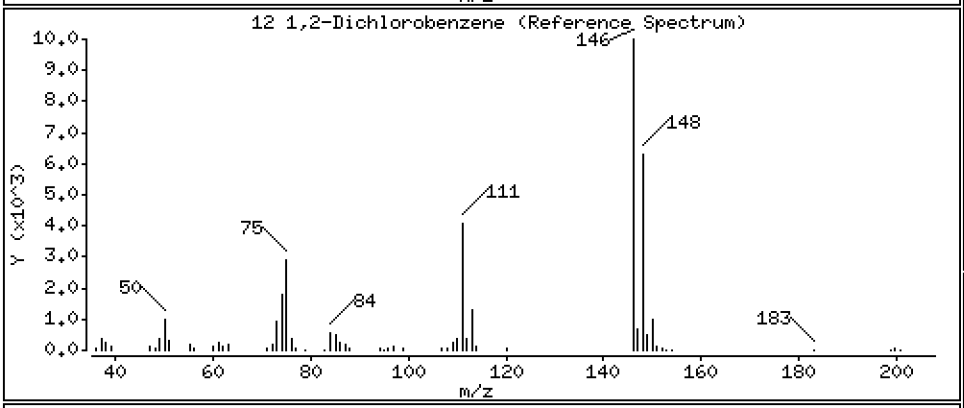
Concentration: 4.882 ug/mL

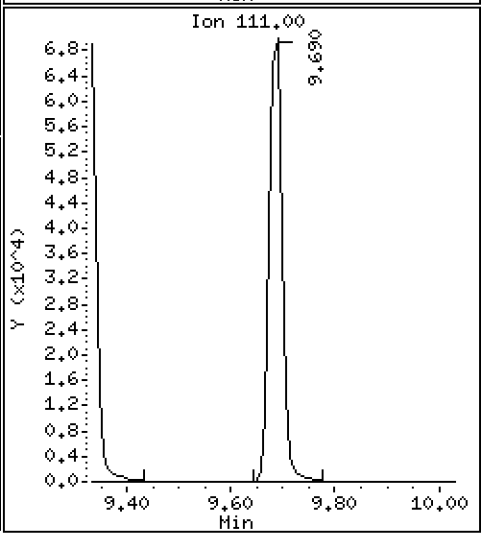


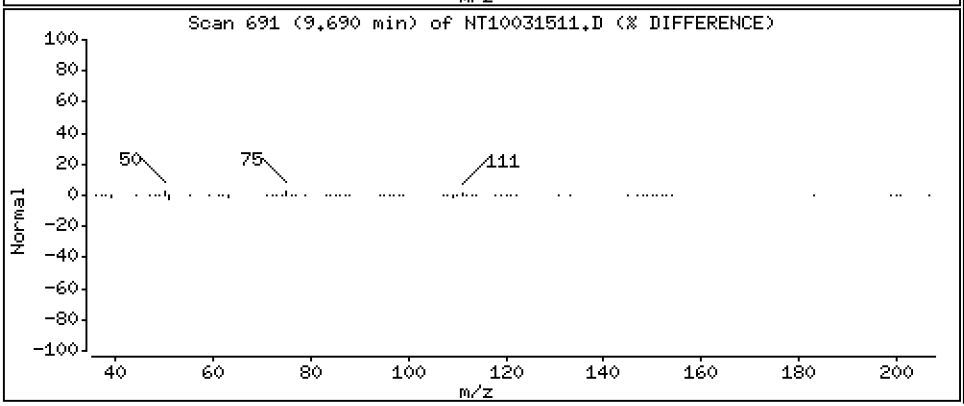












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

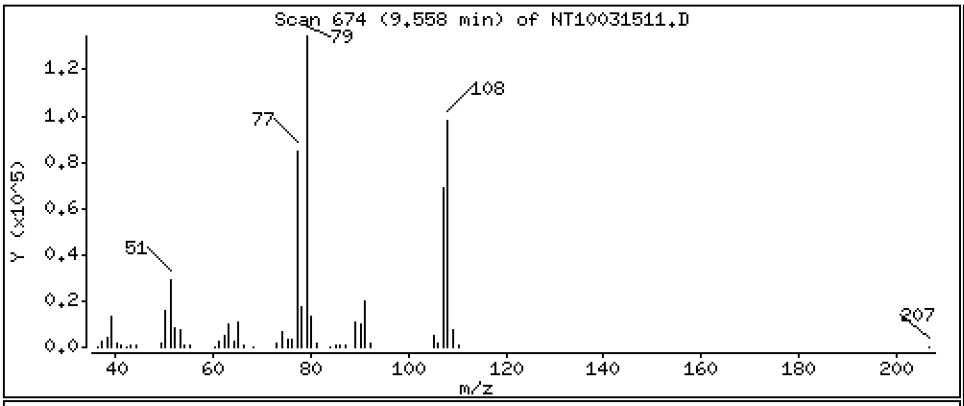
Operator: VTS

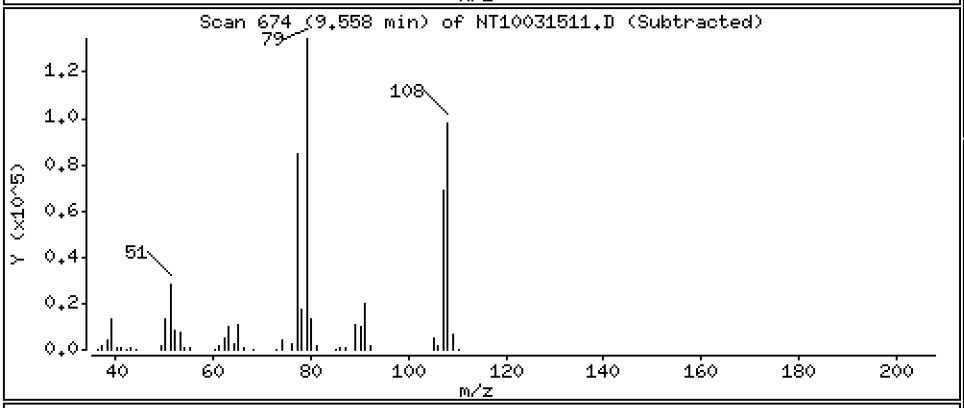
Column phase: ZB-5msi

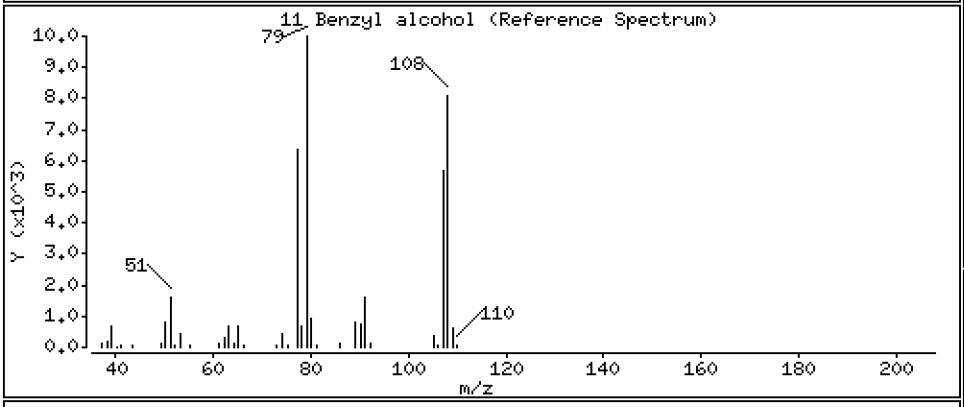
Column diameter: 0.25

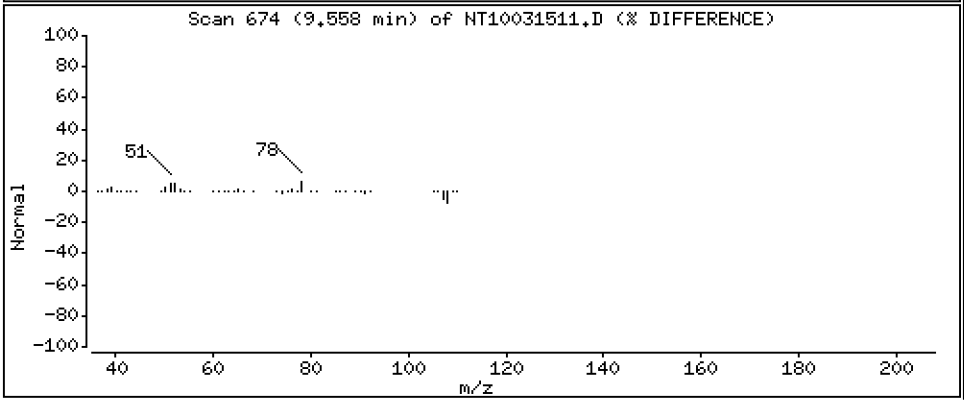
11 Benzyl alcohol

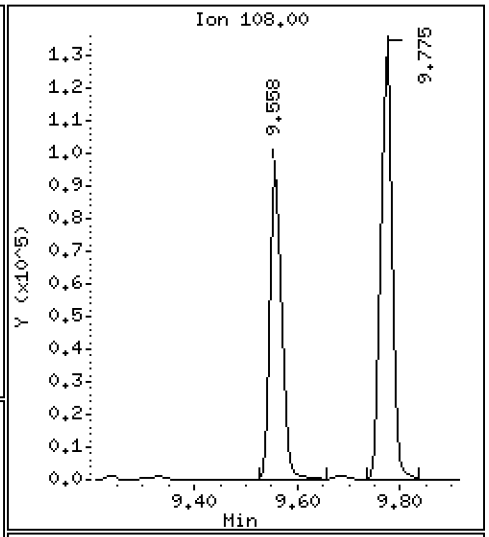
Concentration: 4.927 ug/mL

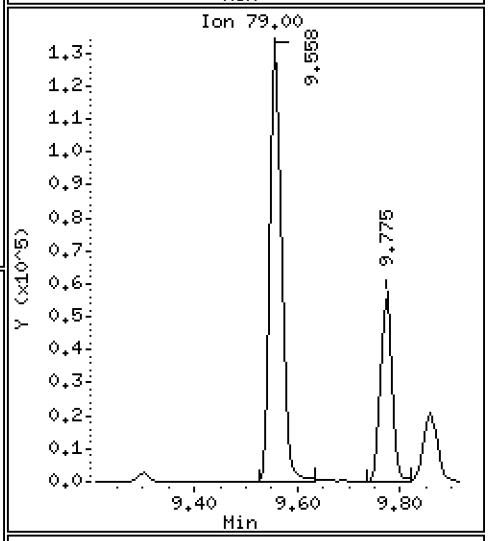


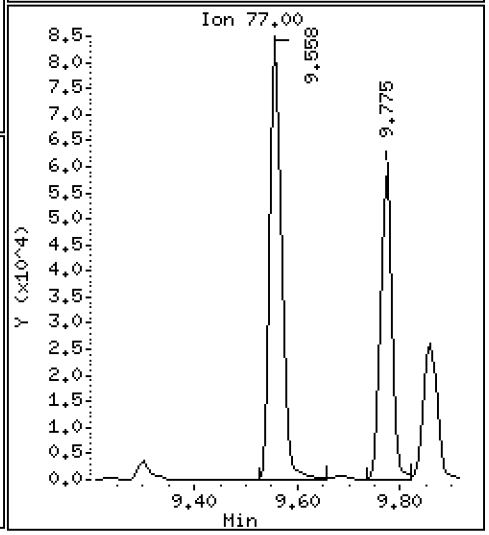












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

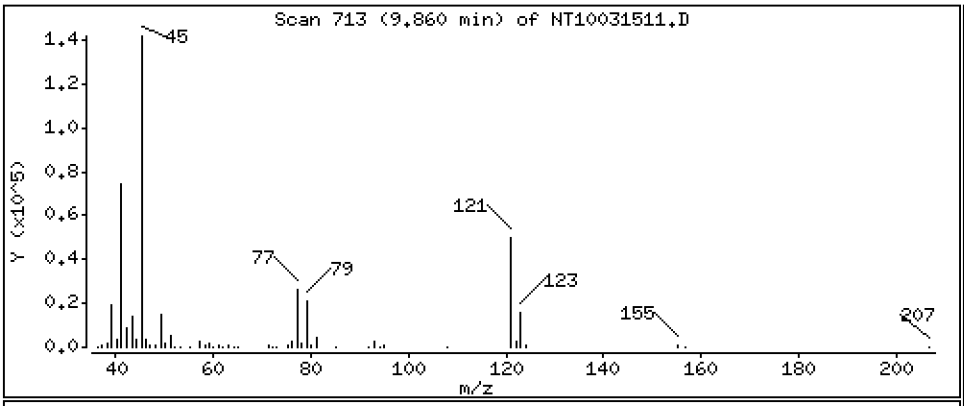
Operator: VTS

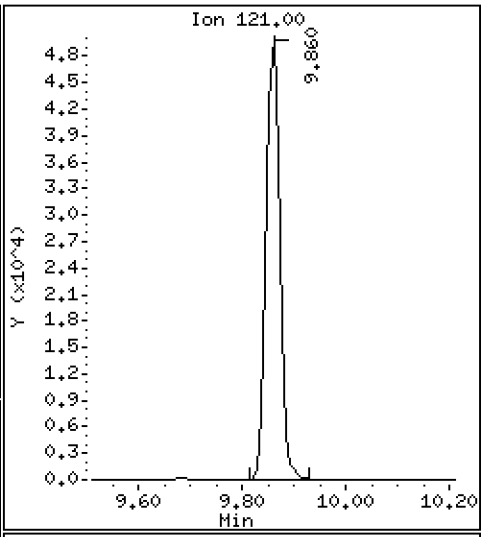
Column phase: ZB-5msi

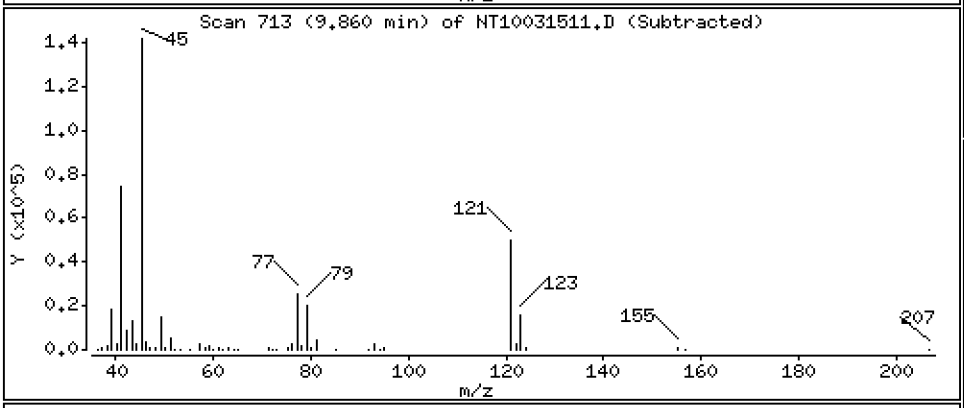
Column diameter: 0.25

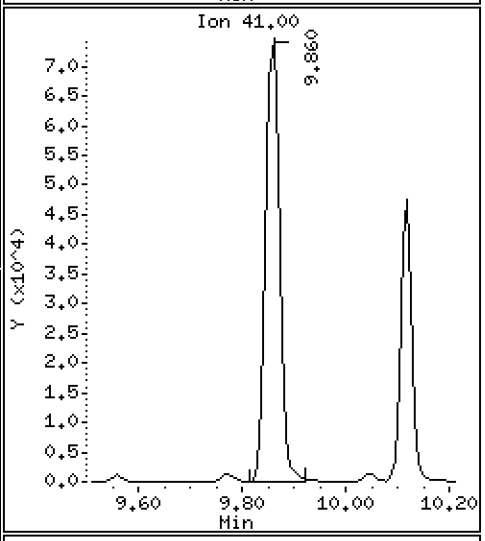
14 2,2'-oxybis(1-Chloropropane)

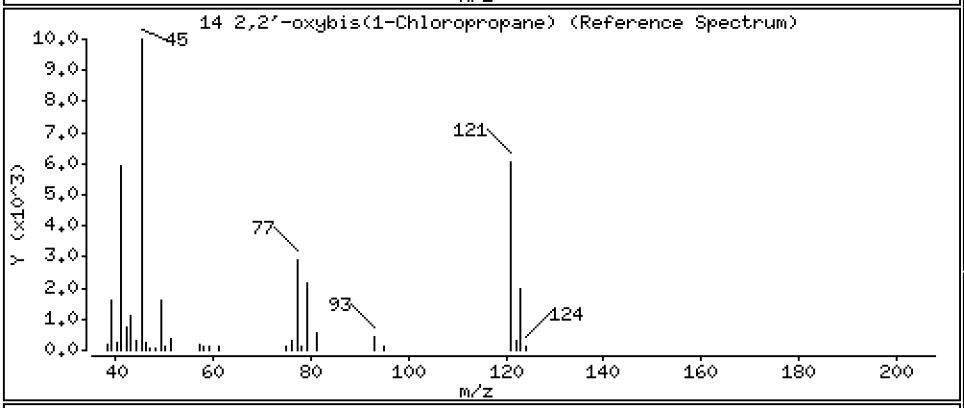
Concentration: 6.214 ug/mL

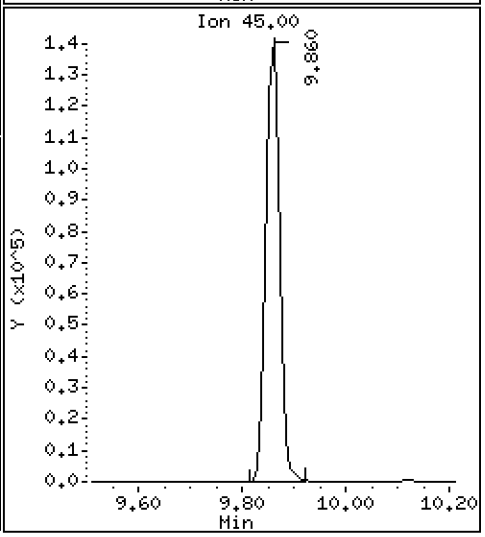


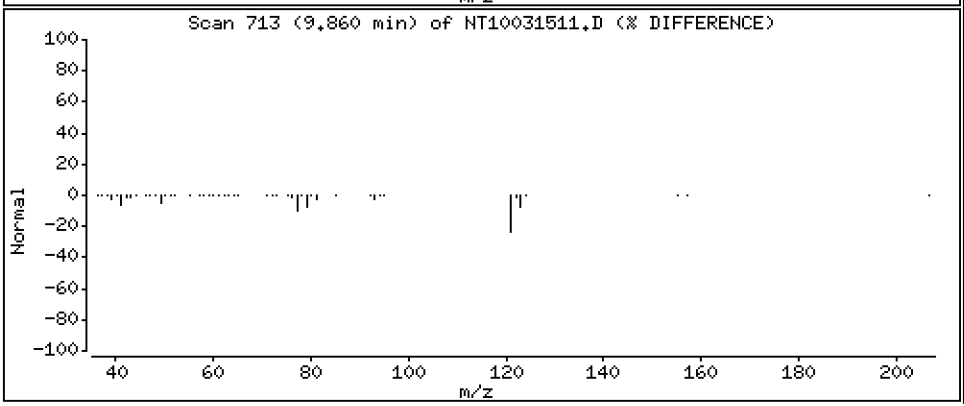












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

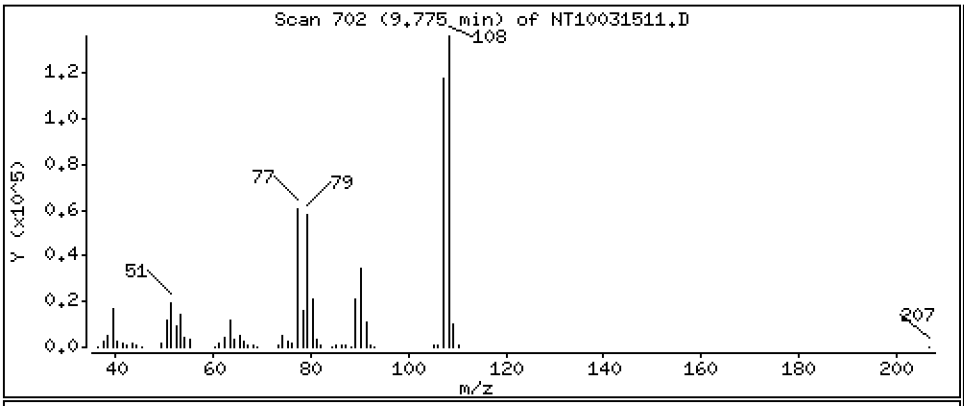
Operator: VTS

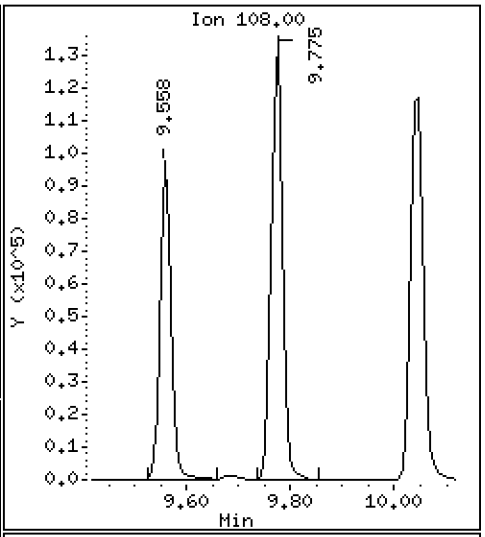
Column phase: ZB-5msi

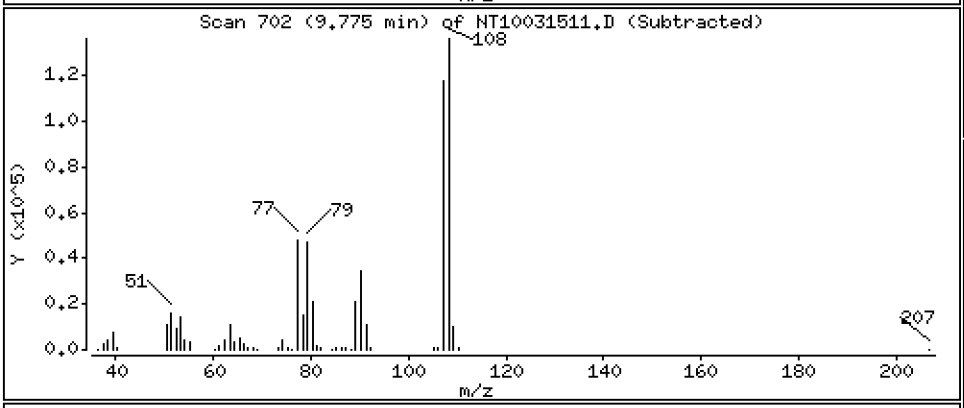
Column diameter: 0.25

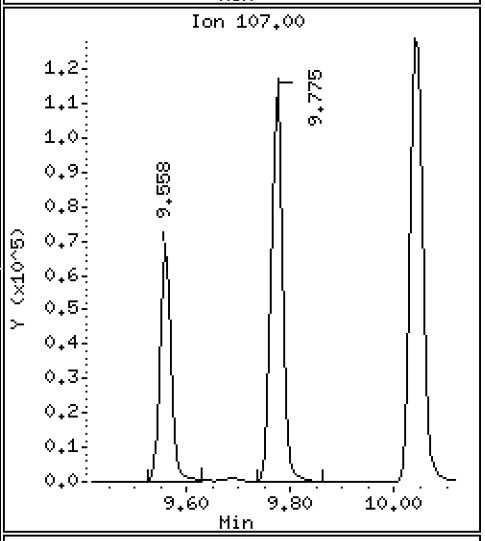
13 2-Methylphenol

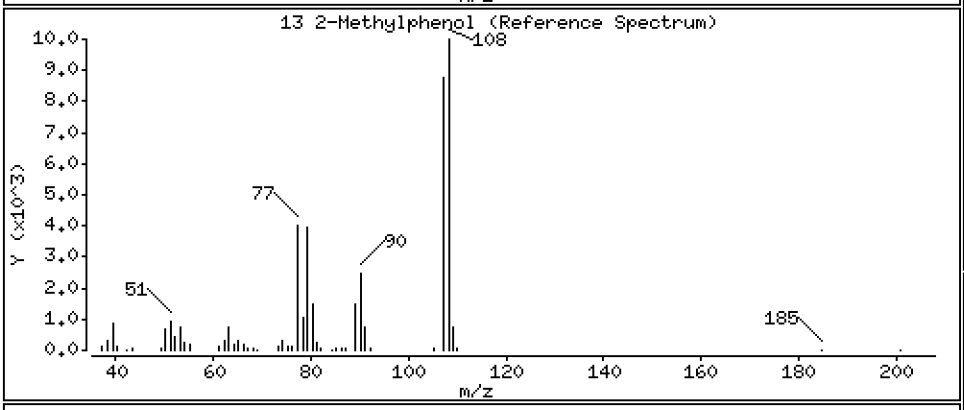
Concentration: 4.215 ug/mL

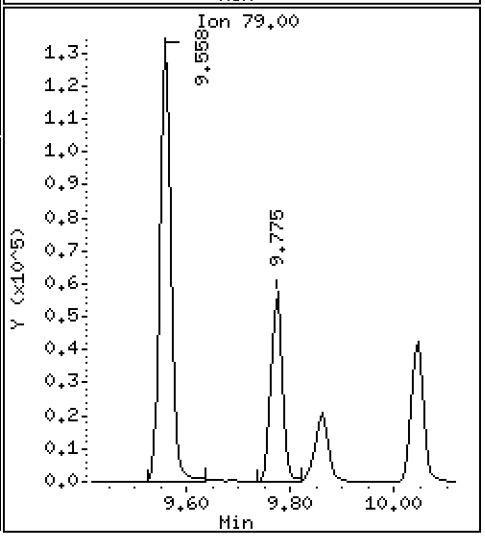


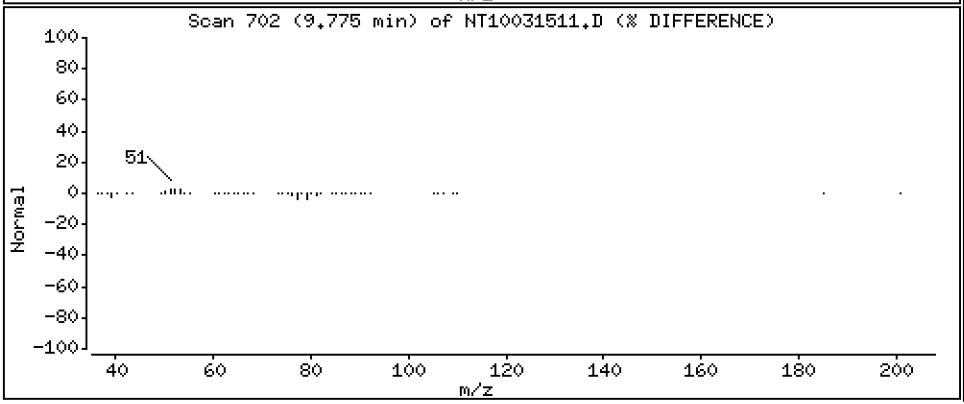












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

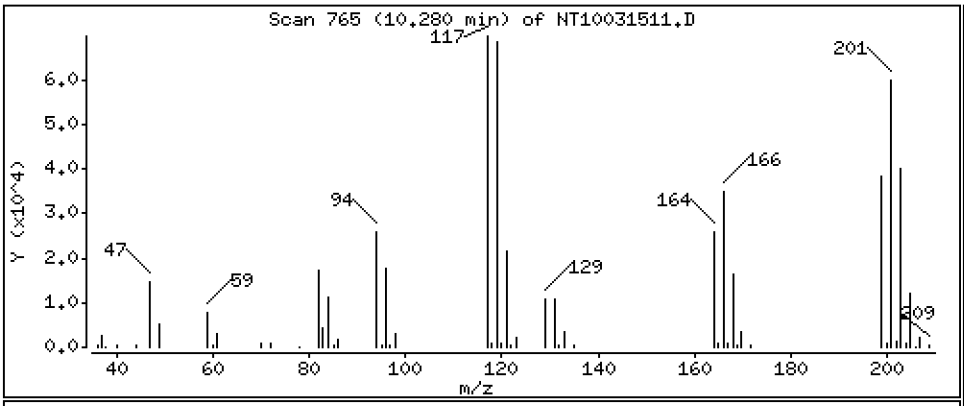
Operator: VTS

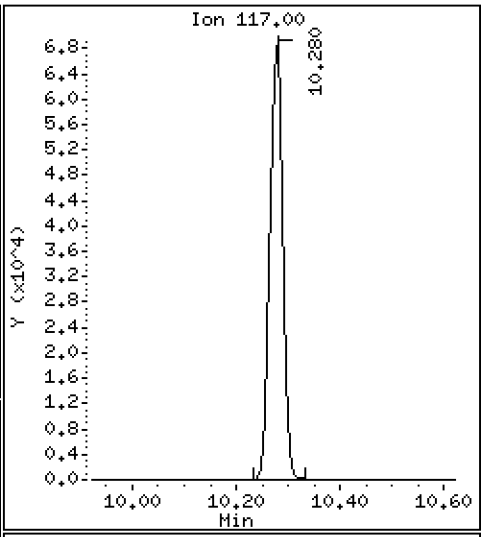
Column phase: ZB-5msi

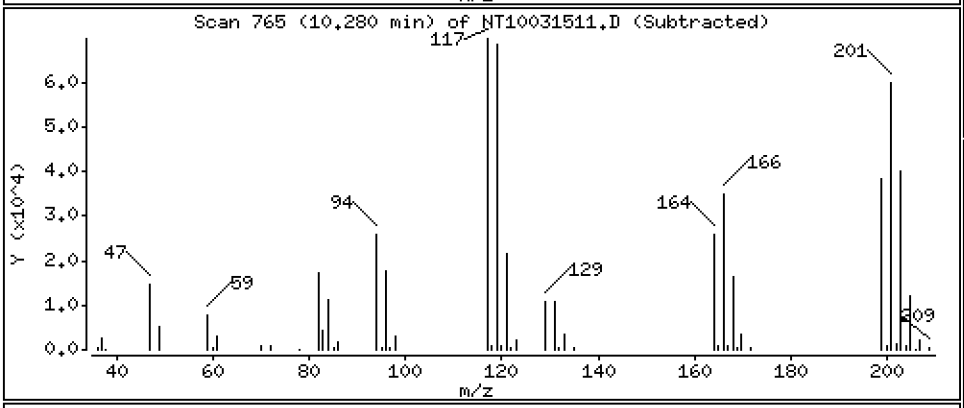
Column diameter: 0.25

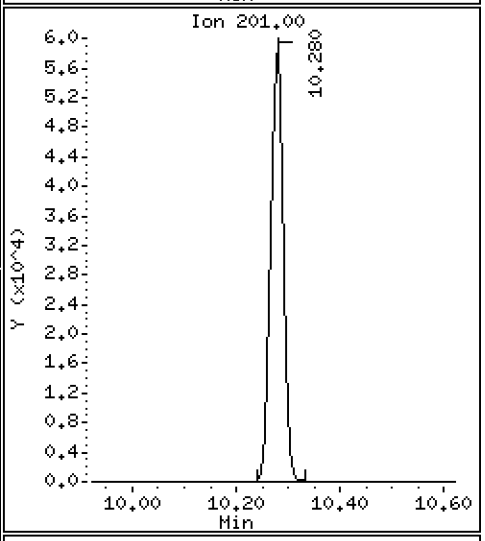
17 Hexachloroethane

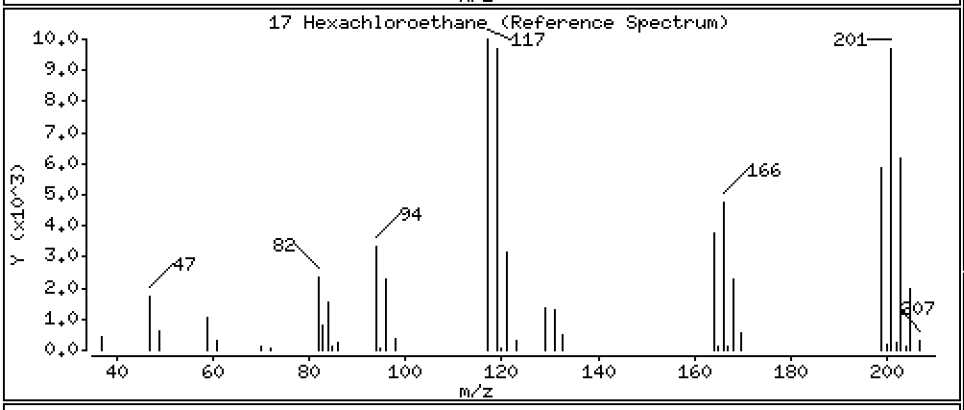
Concentration: 5.003 ug/mL

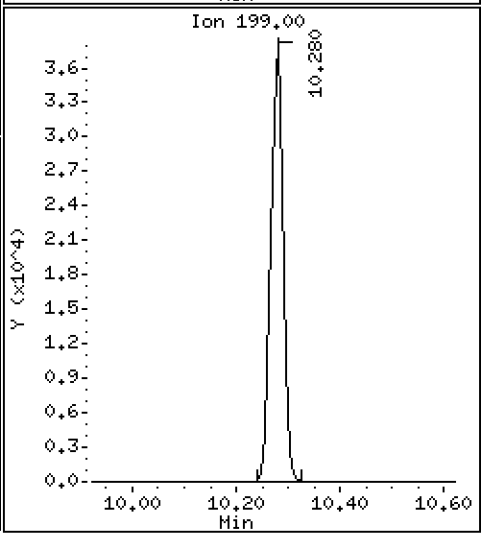


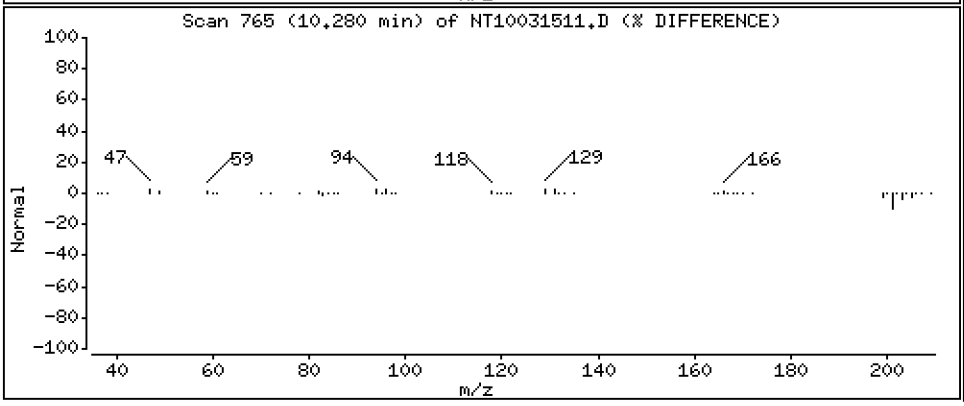












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

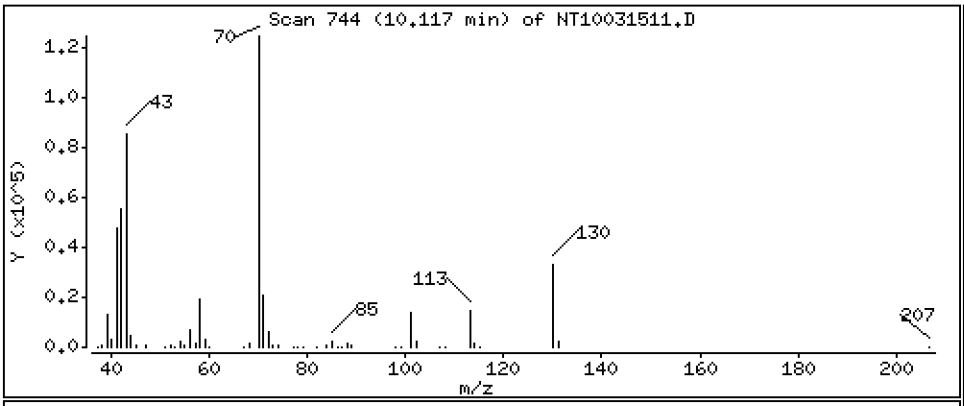
Operator: VTS

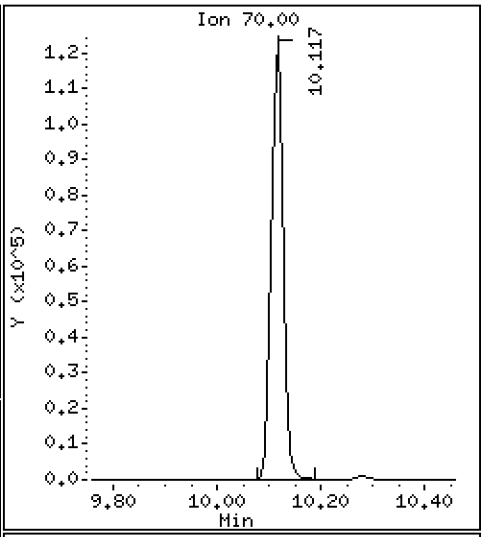
Column phase: ZB-5msi

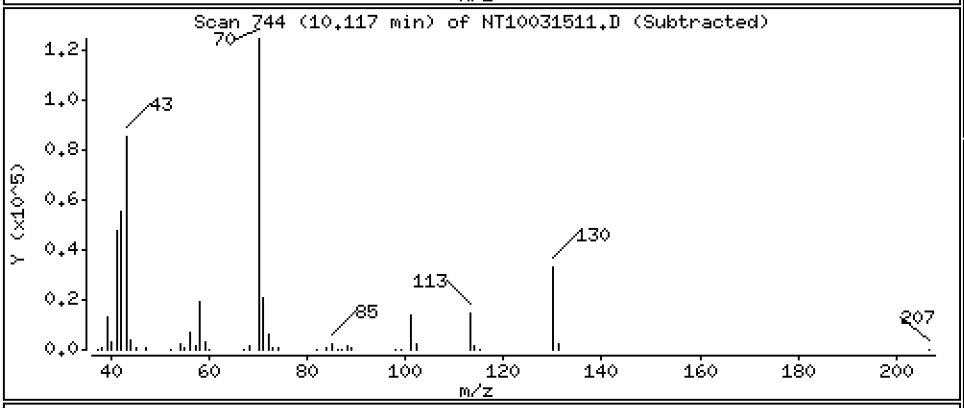
Column diameter: 0.25

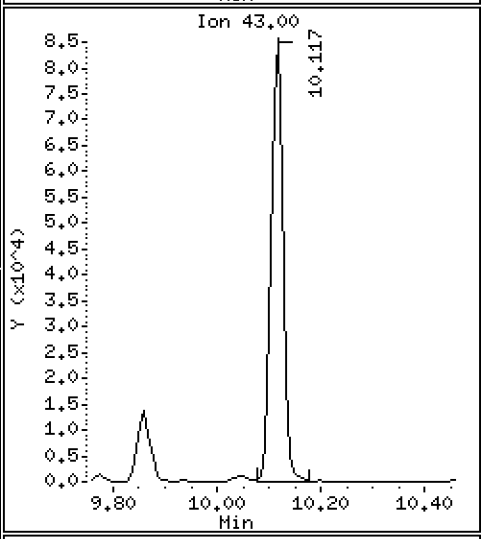
16 N-Nitroso-di-n-propylamine

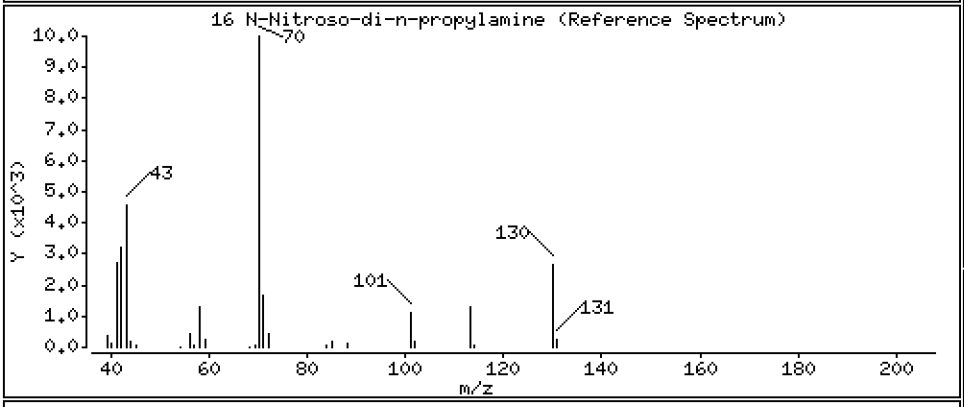
Concentration: 5.179 ug/mL

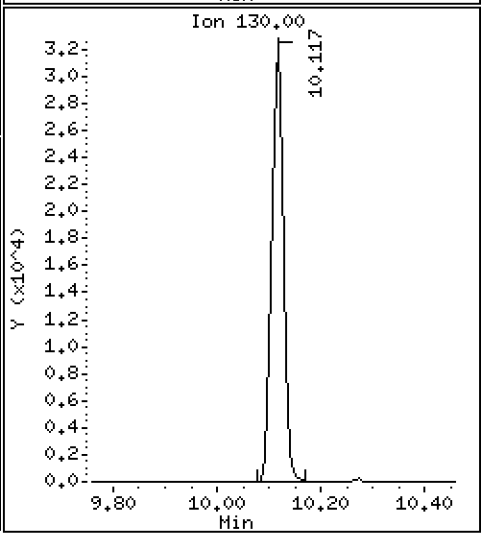


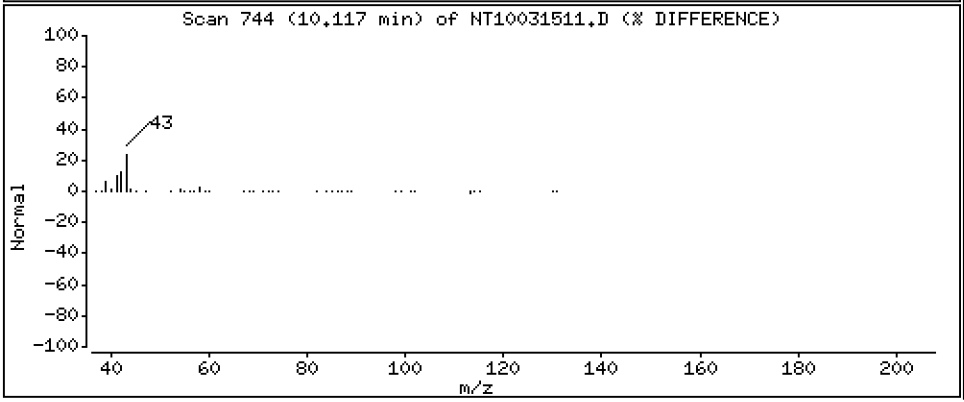












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

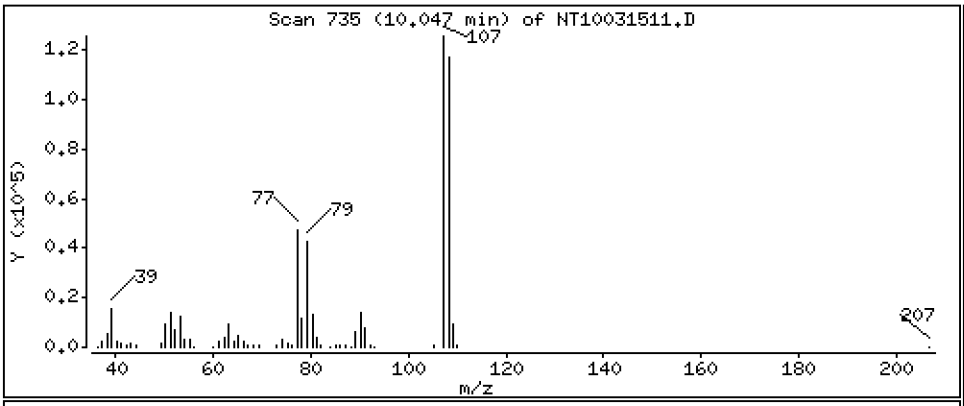
Operator: VTS

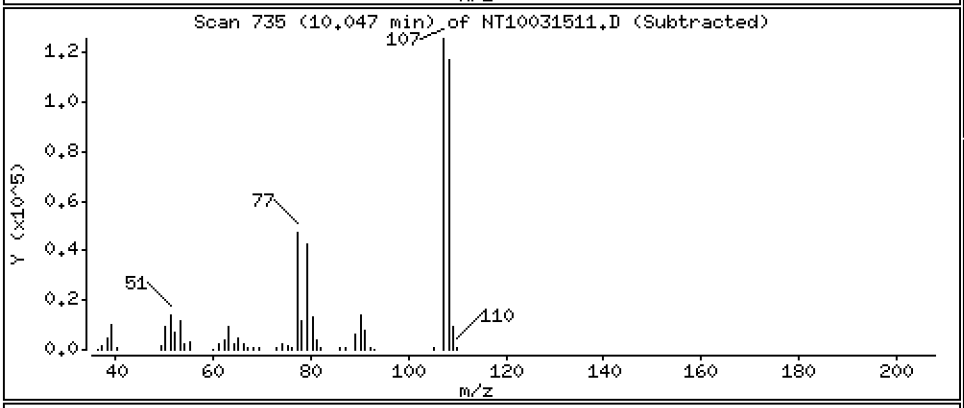
Column phase: ZB-5msi

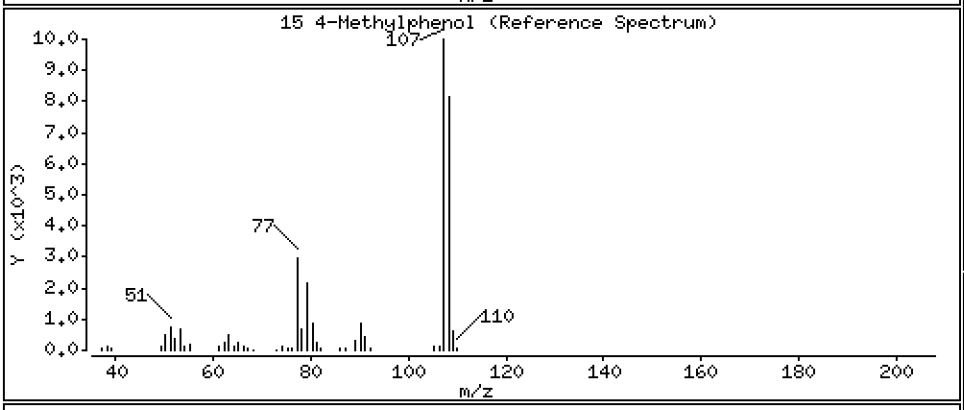
Column diameter: 0.25

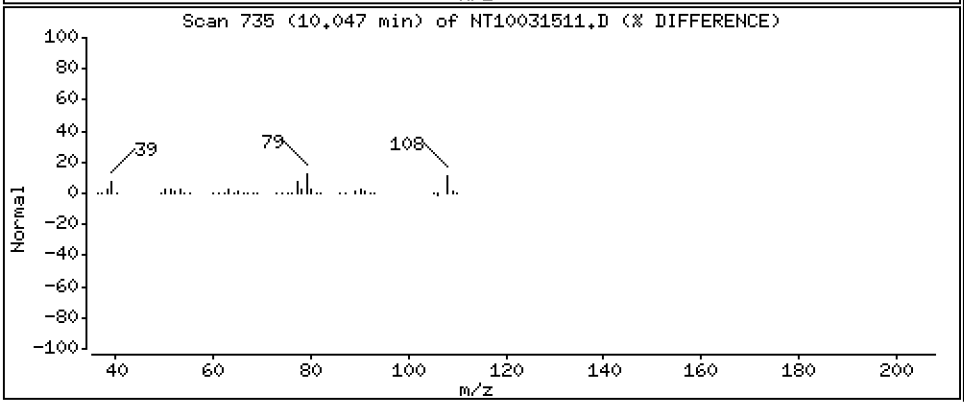
15 4-Methylphenol

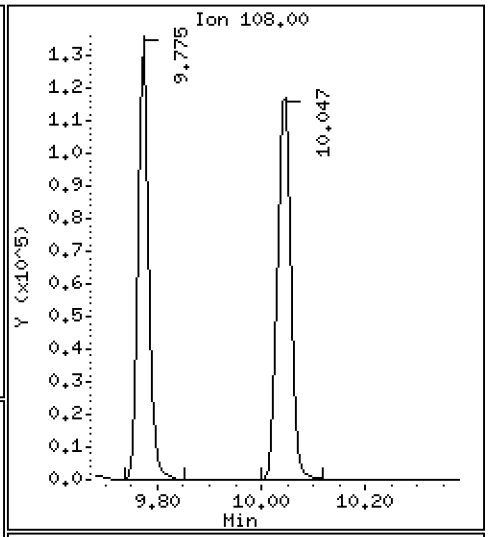
Concentration: 4.365 ug/mL

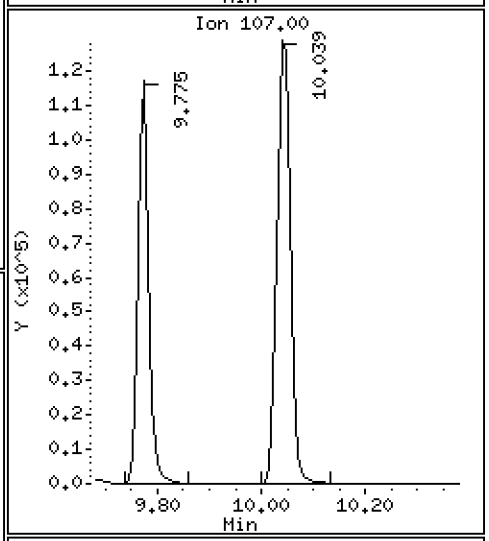


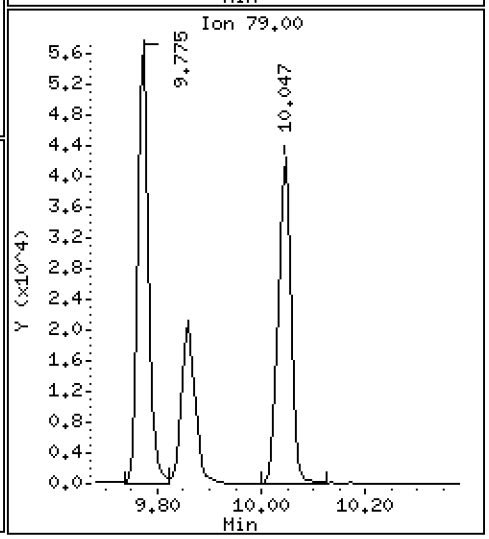












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

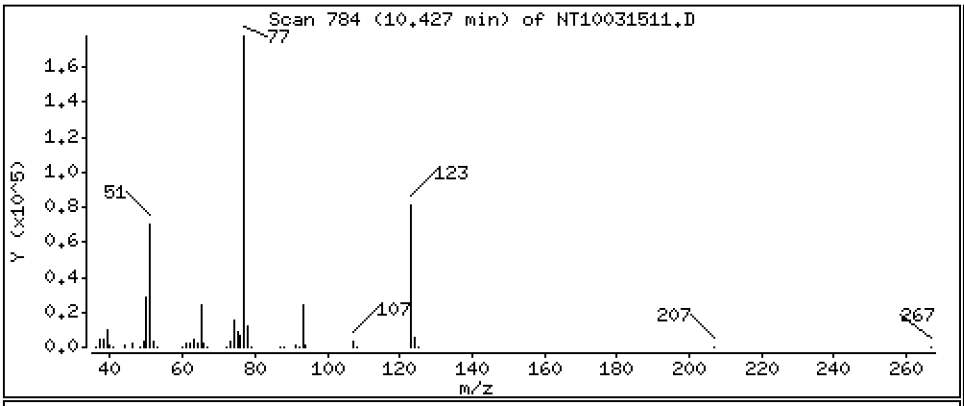
Operator: VTS

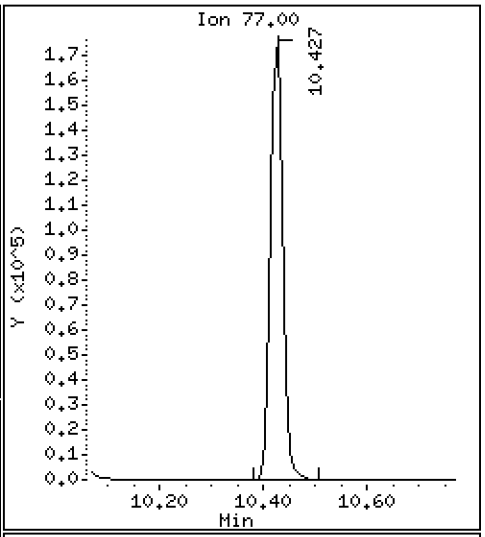
Column phase: ZB-5msi

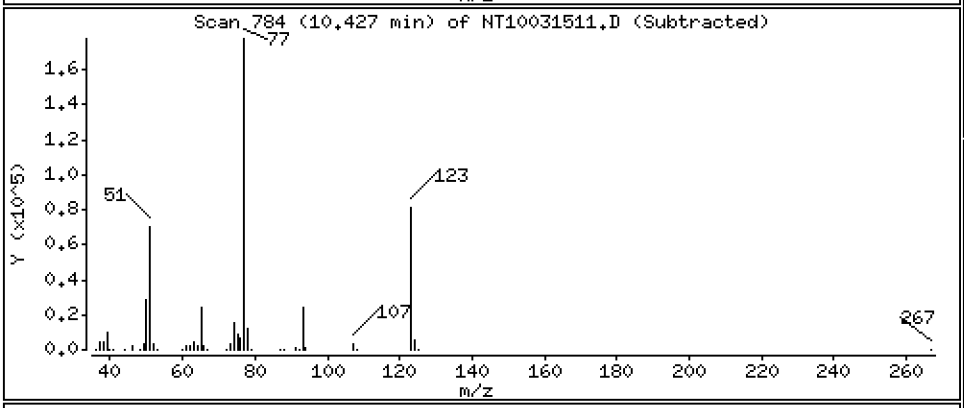
Column diameter: 0.25

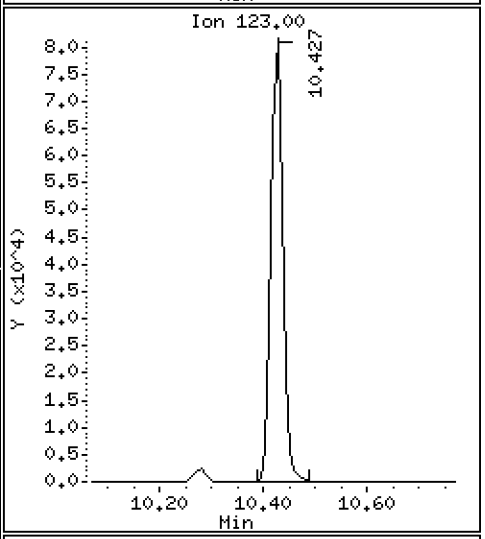
19 Nitrobenzene

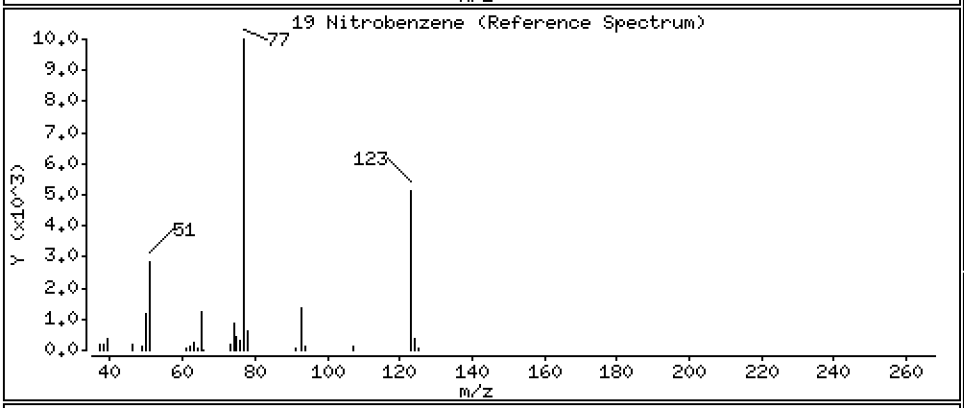
Concentration: 4.858 ug/mL

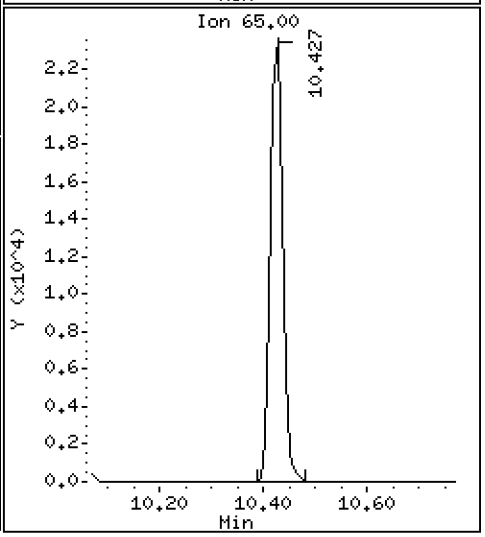


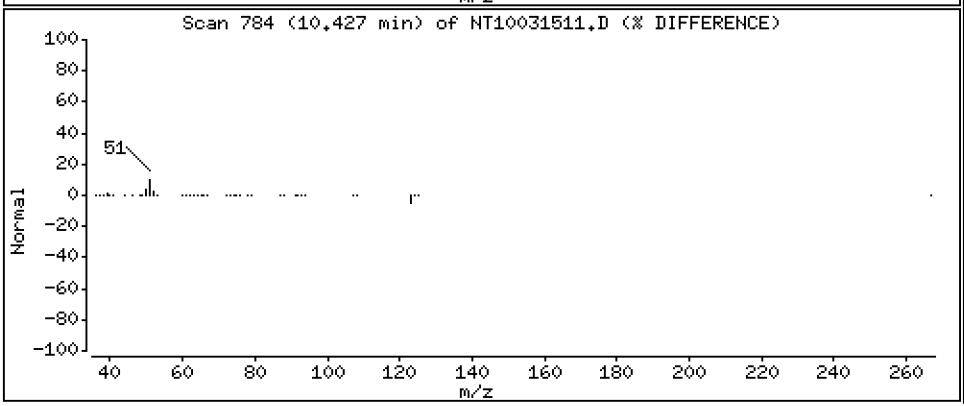












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

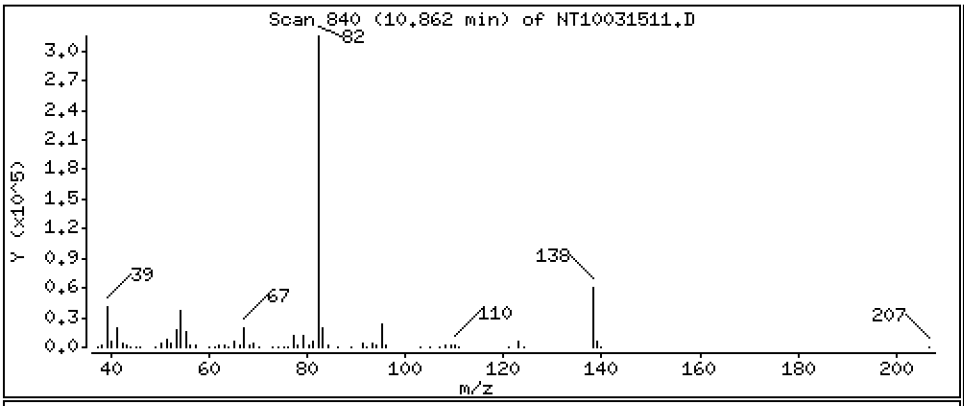
Operator: VTS

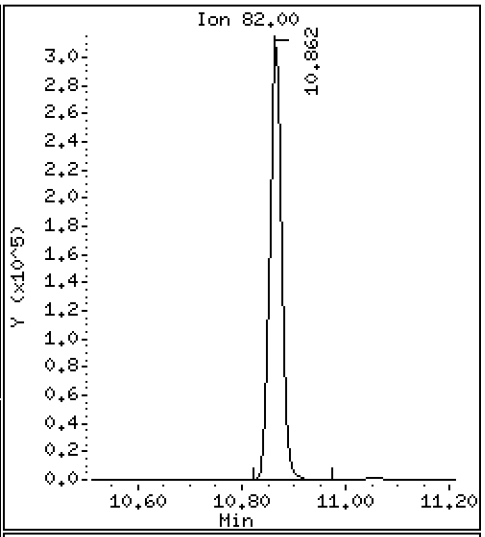
Column phase: ZB-5msi

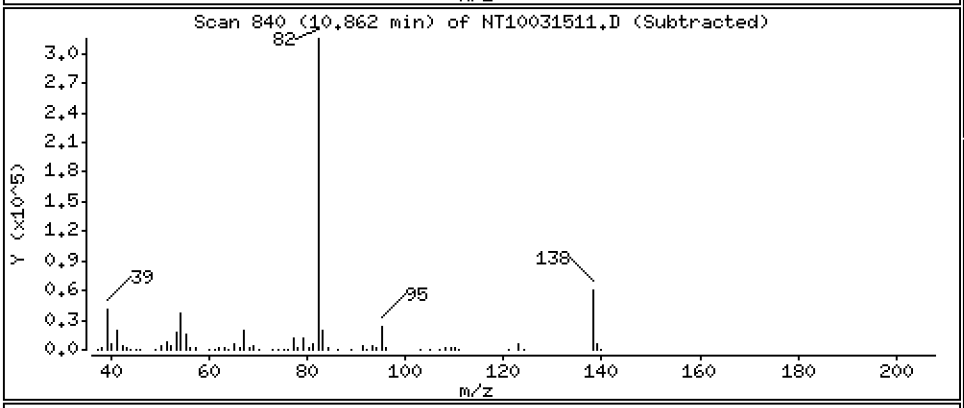
Column diameter: 0.25

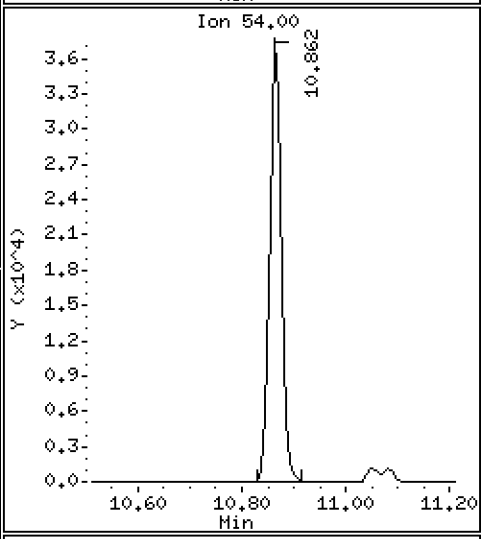
20 Isophorone

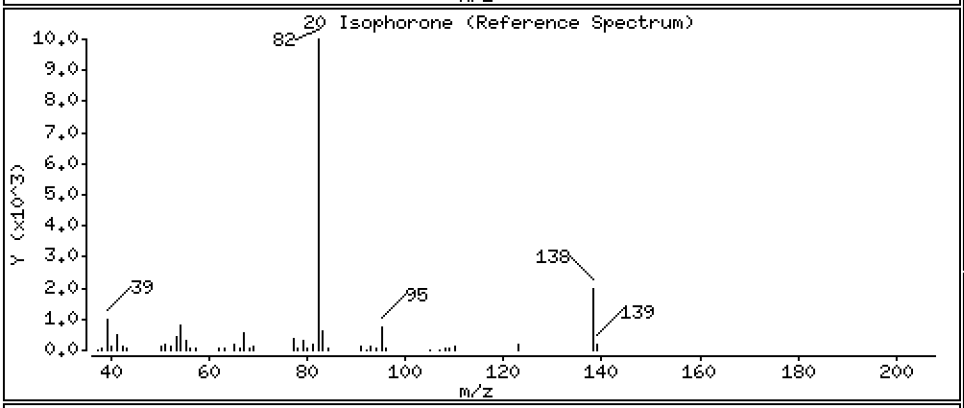
Concentration: 7.696 ug/mL

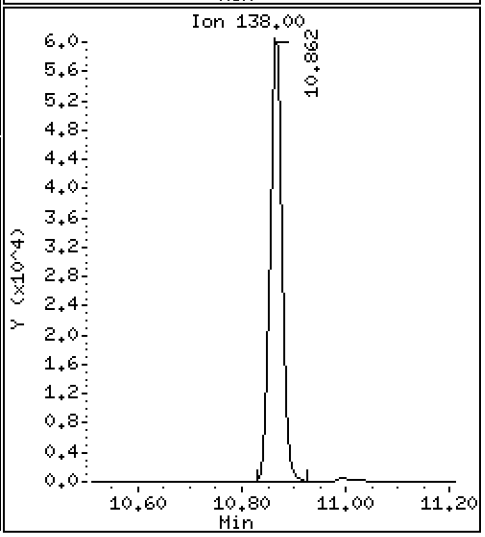


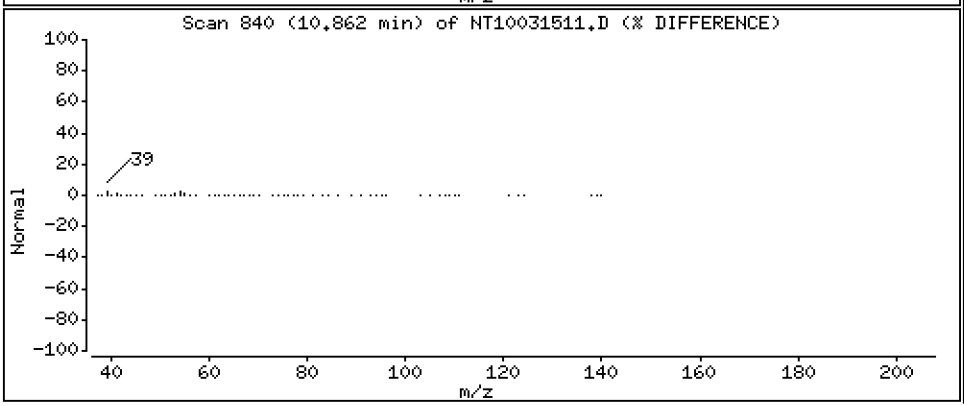












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

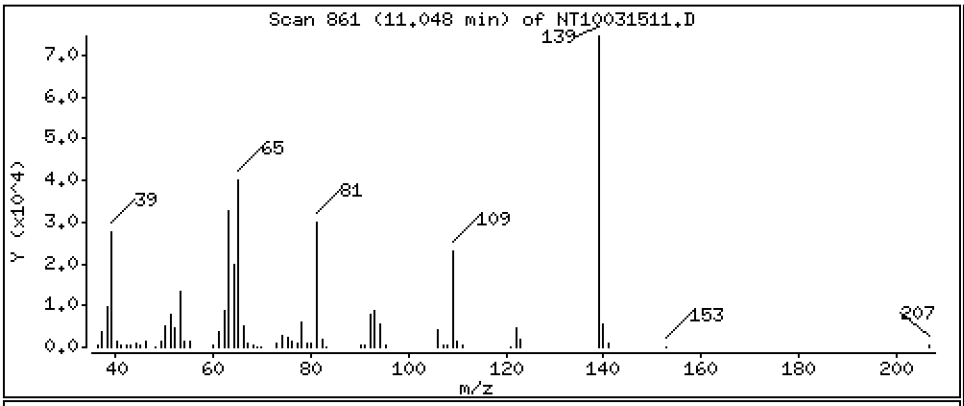
Operator: VTS

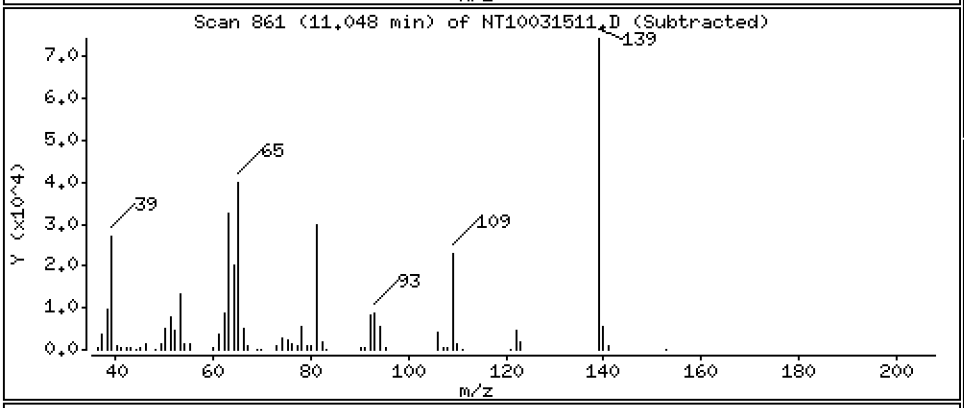
Column phase: ZB-5msi

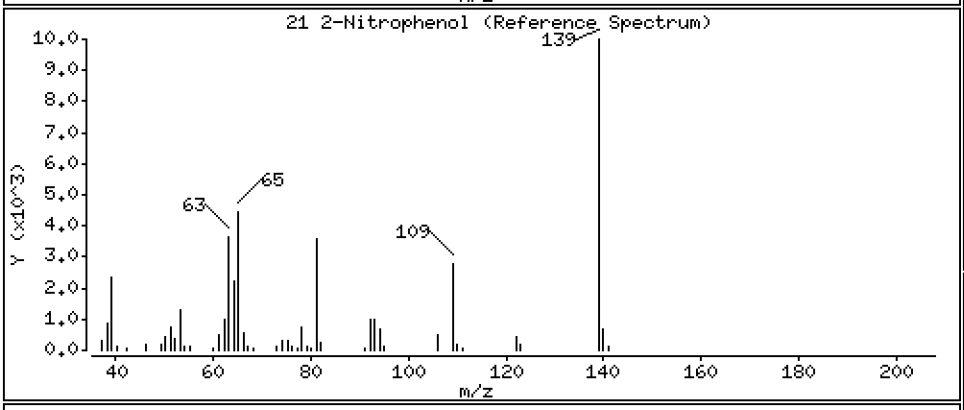
Column diameter: 0.25

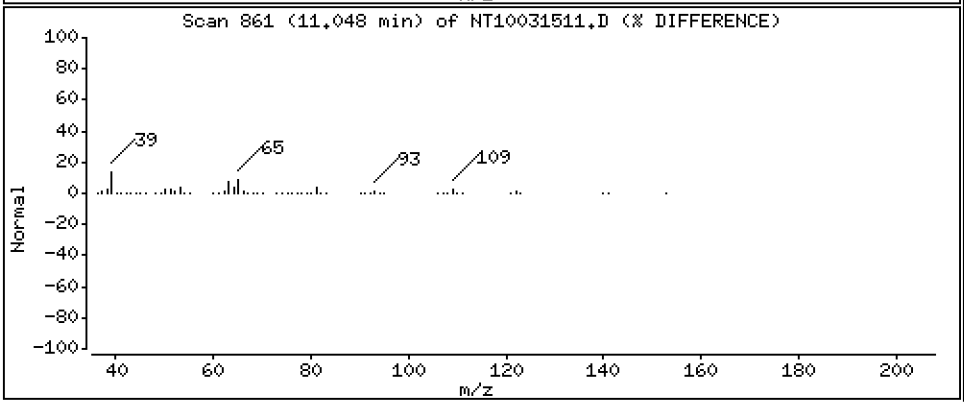
21 2-Nitrophenol

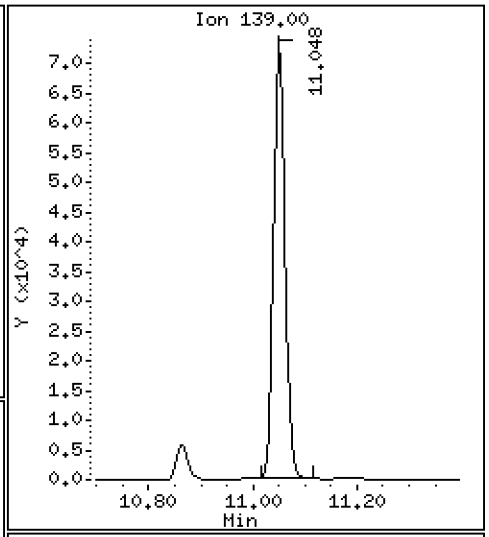
Concentration: 3.995 ug/mL

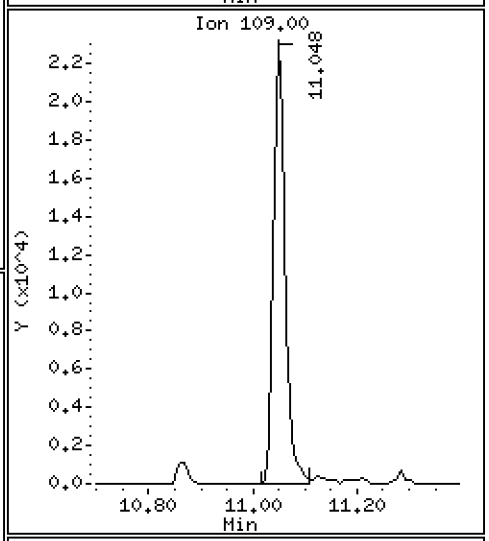


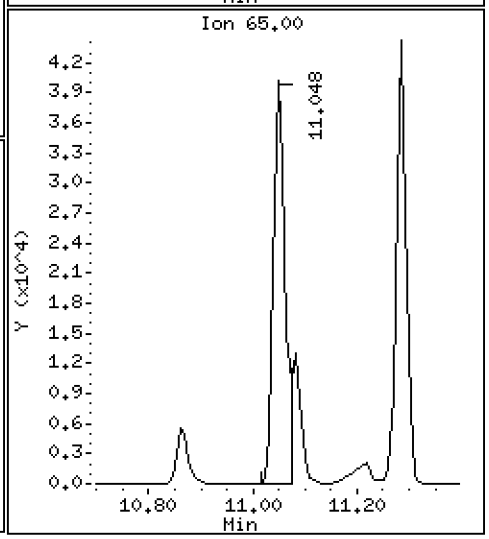












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

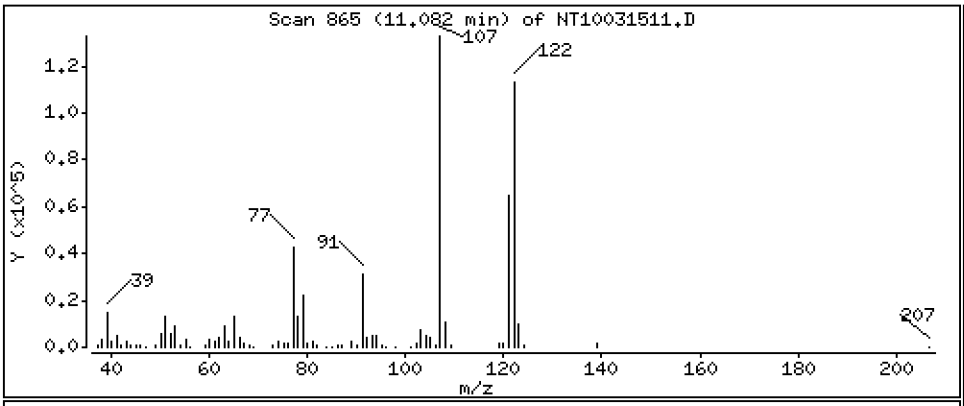
Operator: VTS

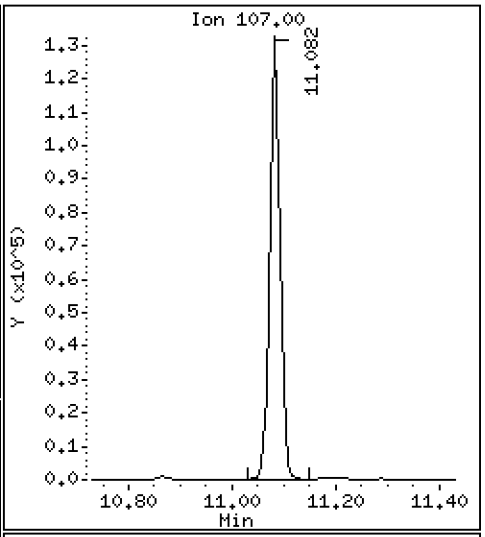
Column phase: ZB-5msi

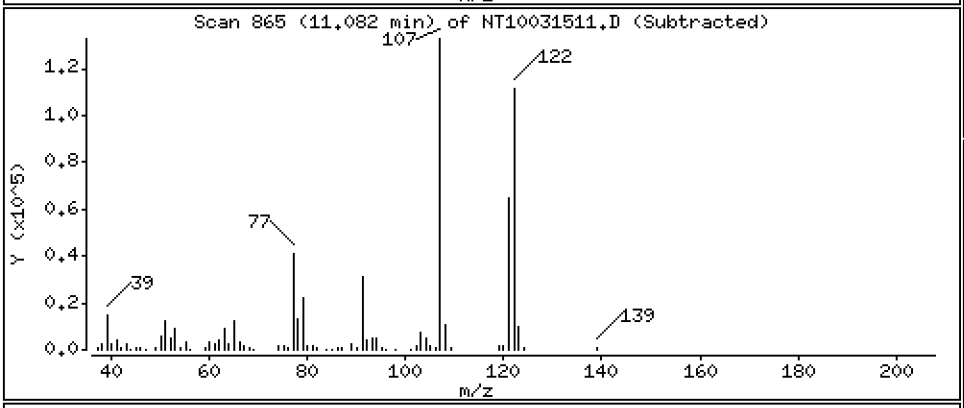
Column diameter: 0.25

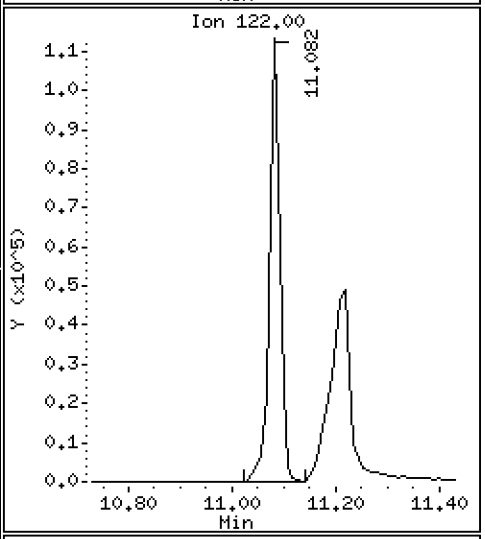
22 2,4-Dimethylphenol

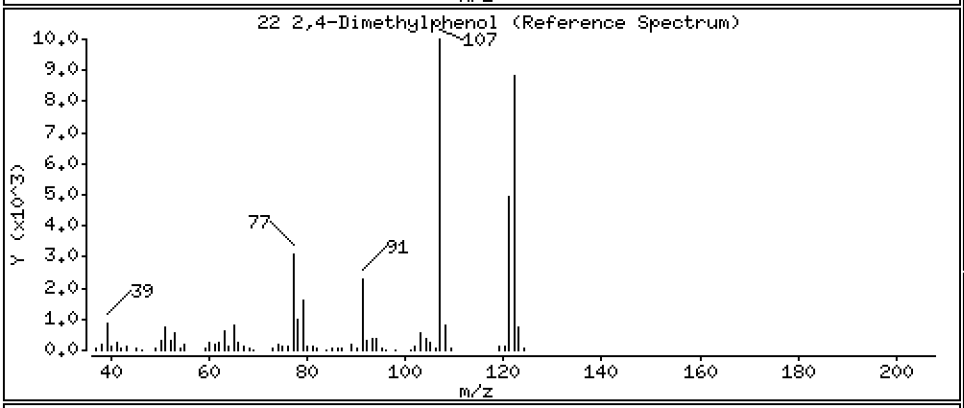
Concentration: 3.632 ug/mL

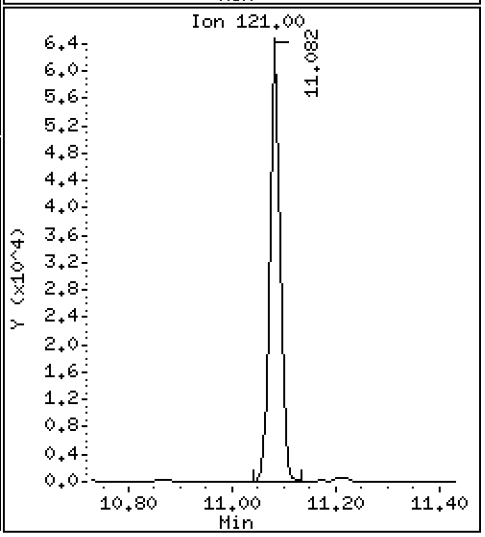


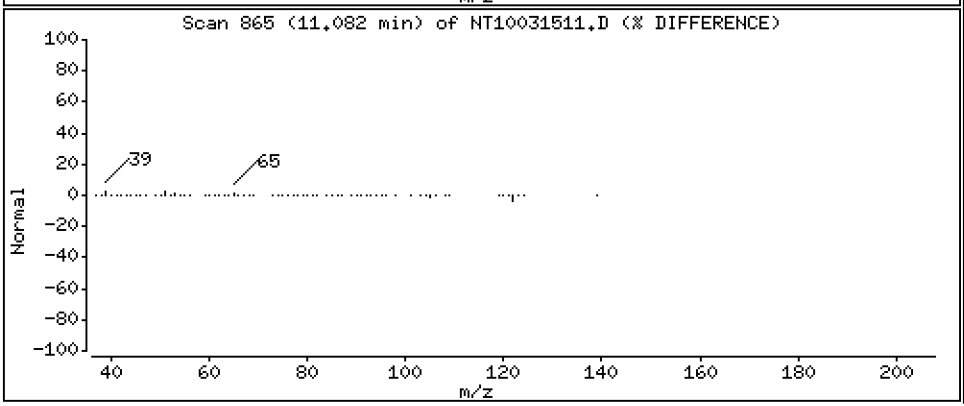












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

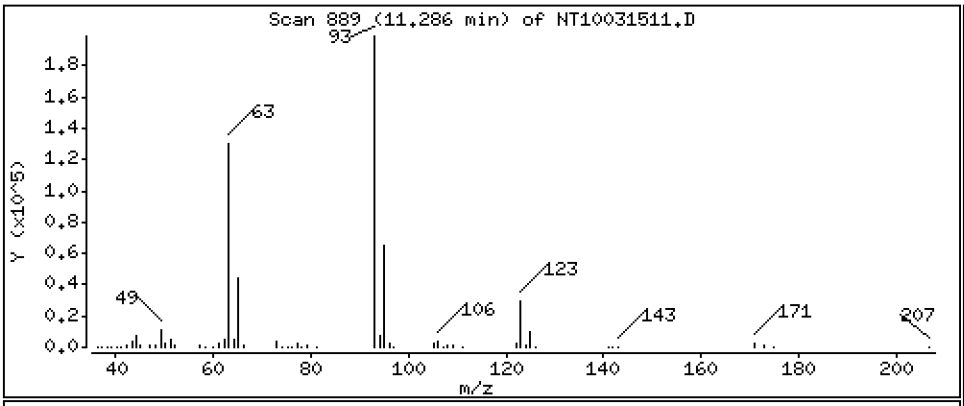
Operator: VTS

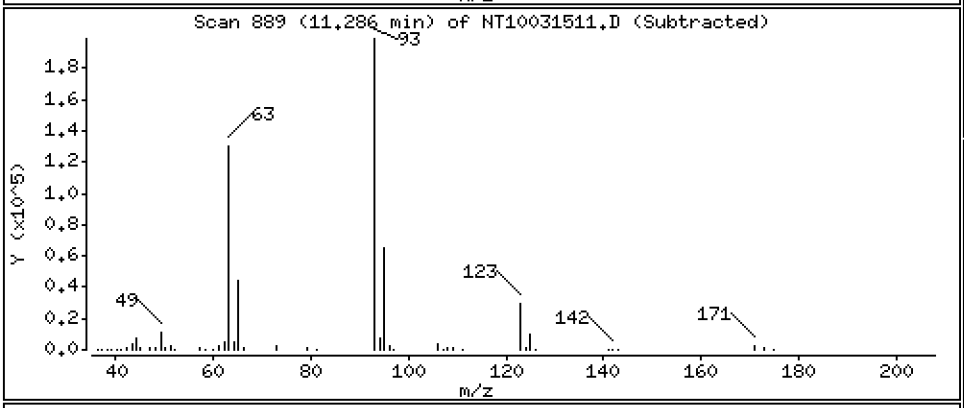
Column phase: ZB-5msi

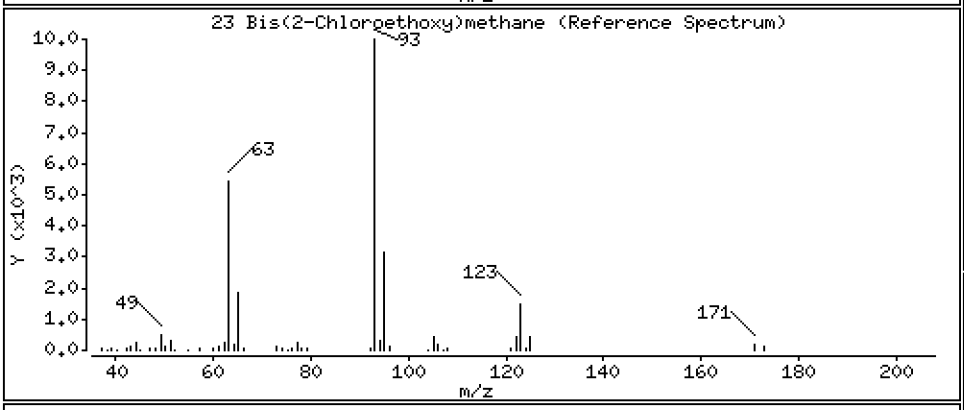
Column diameter: 0.25

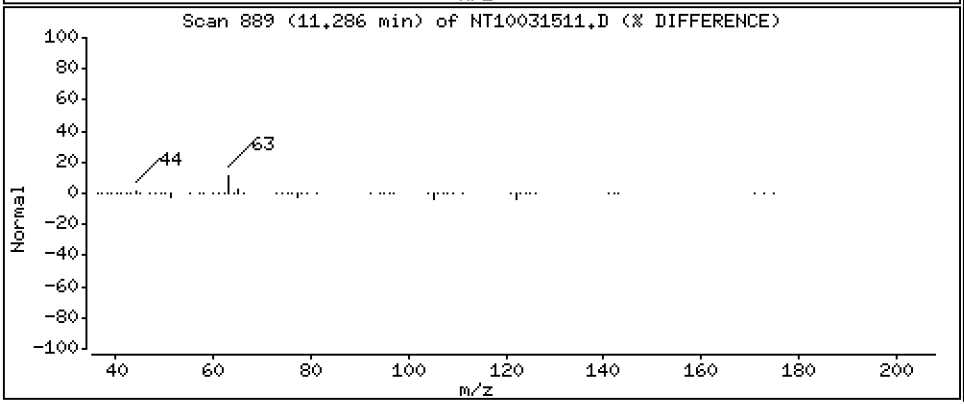
23 Bis(2-Chloroethoxy)methane

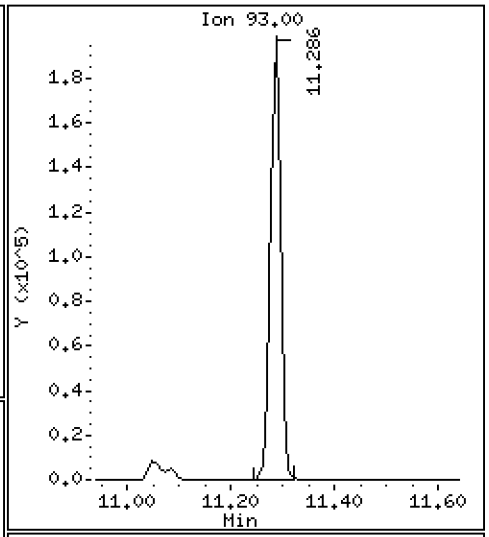
Concentration: 5.654 ug/mL

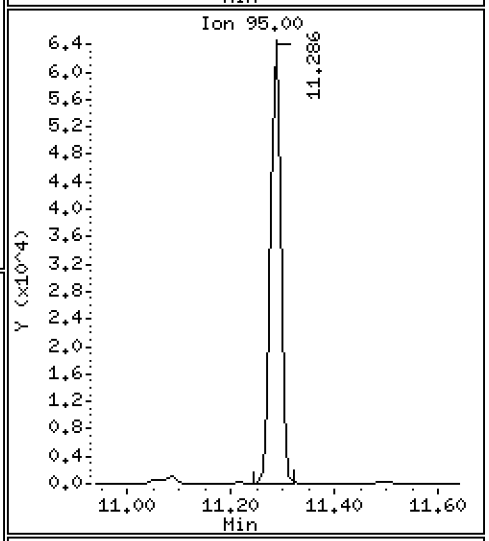


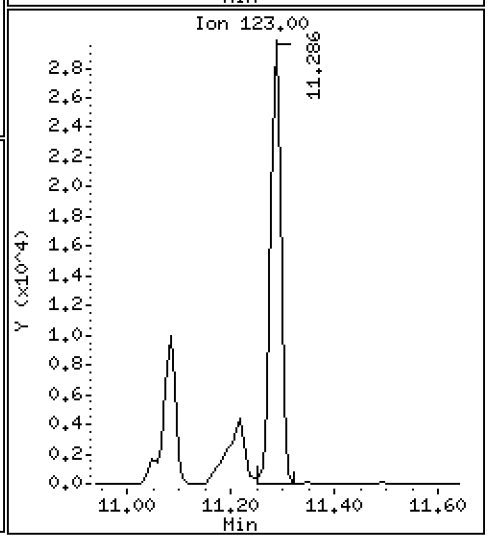












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

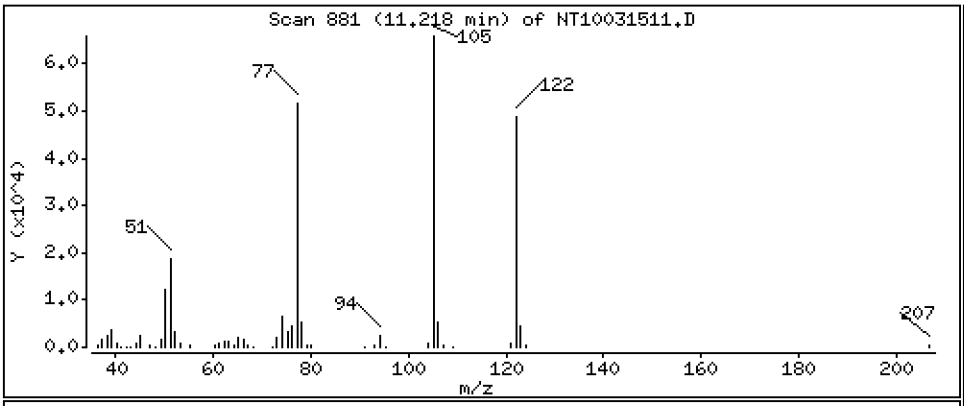
Operator: VTS

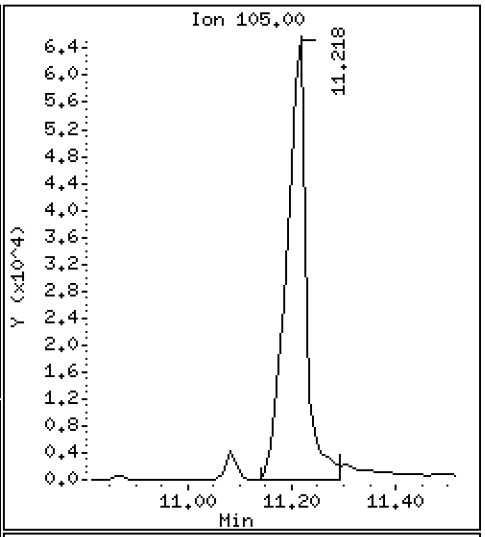
Column phase: ZB-5msi

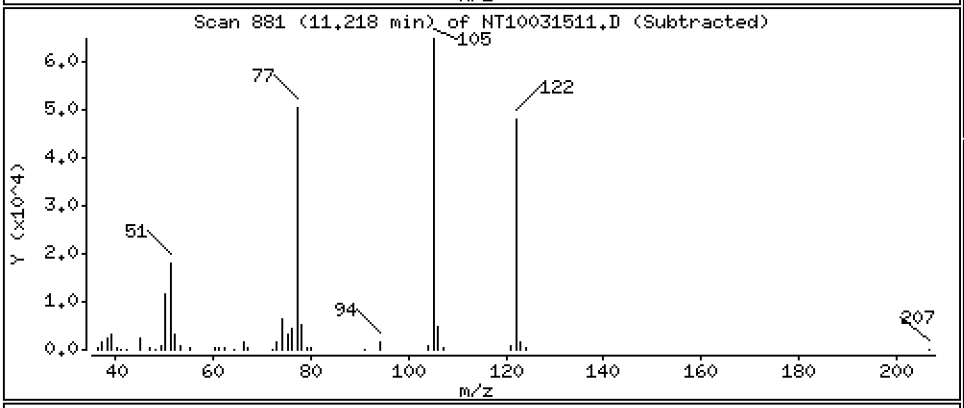
Column diameter: 0.25

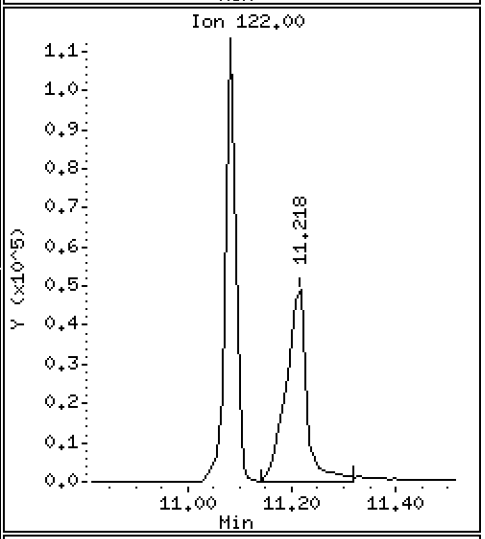
24 Benzoic acid

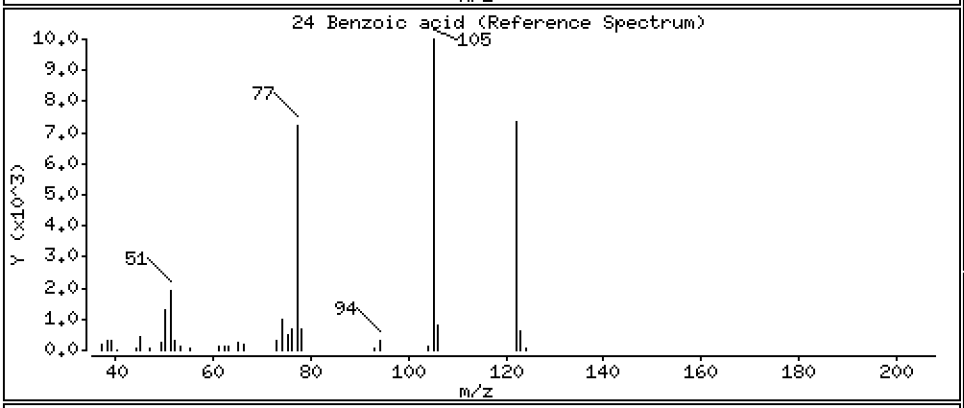
Concentration: 5.952 ug/mL

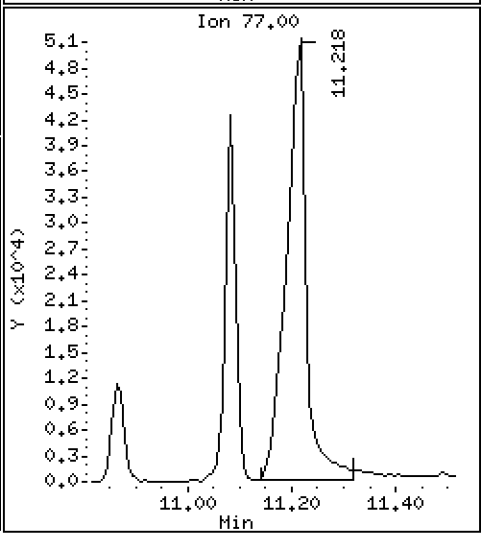


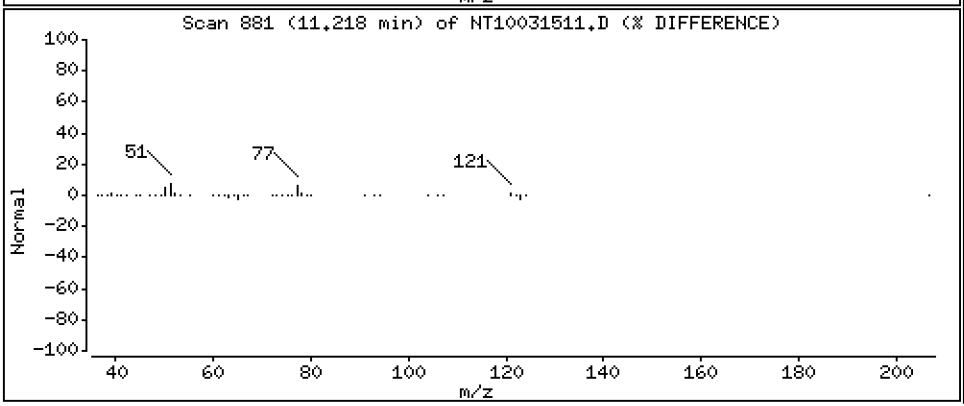












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

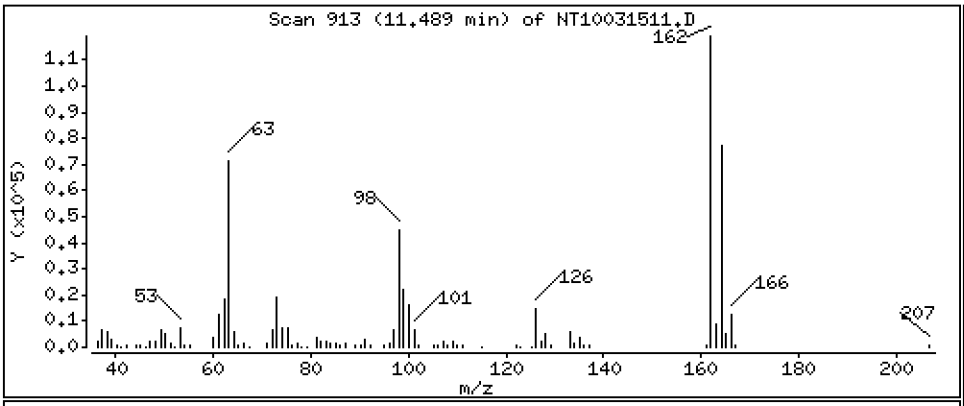
Operator: VTS

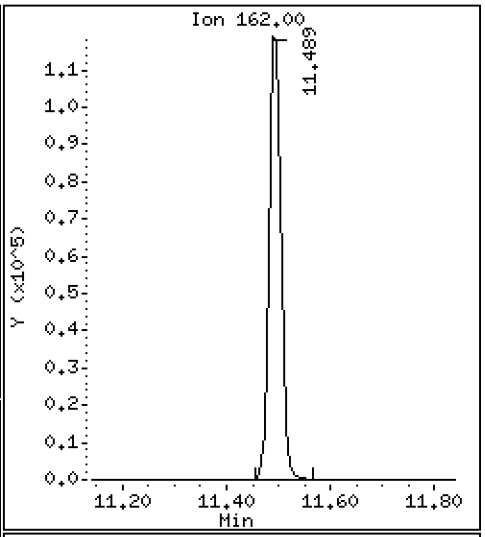
Column phase: ZB-5msi

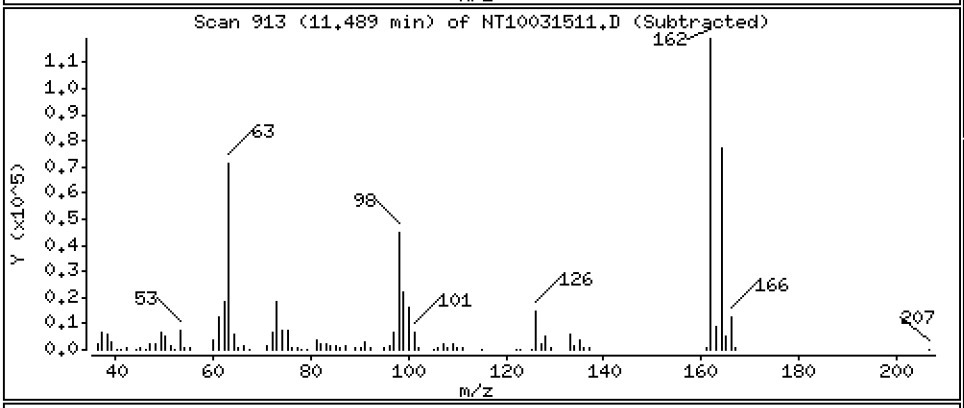
Column diameter: 0.25

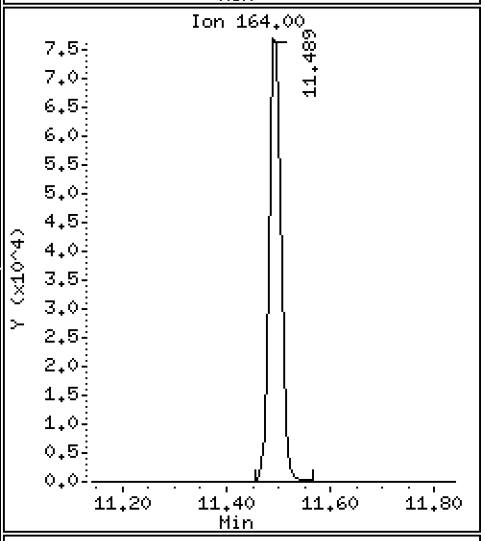
25 2,4-Dichlorophenol

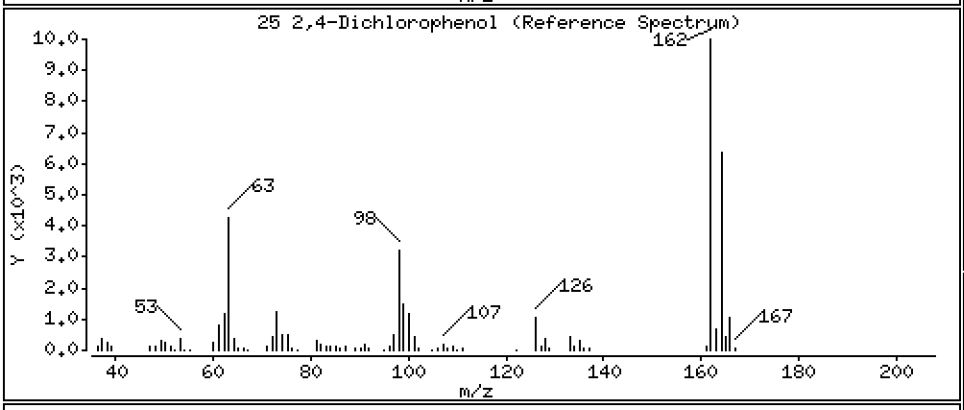
Concentration: 4.703 ug/mL

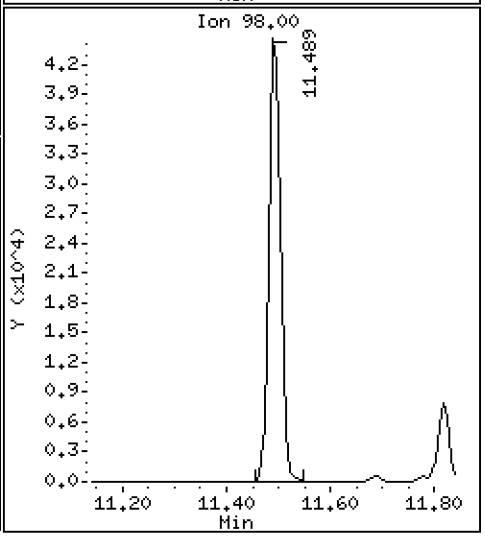


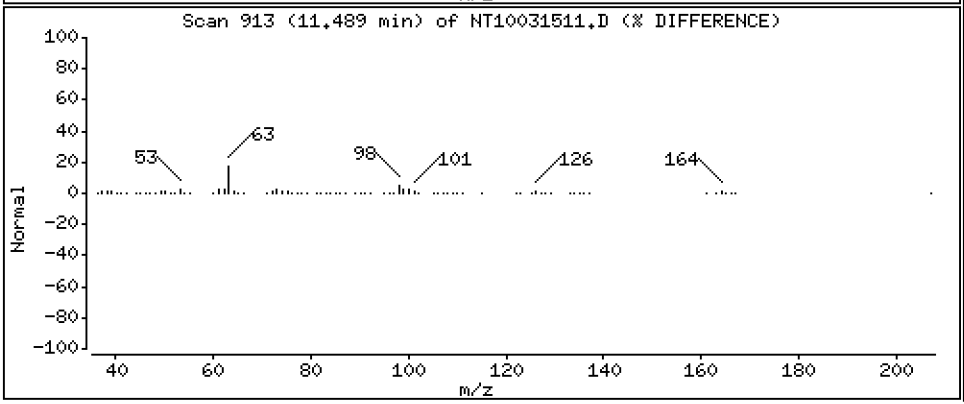












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

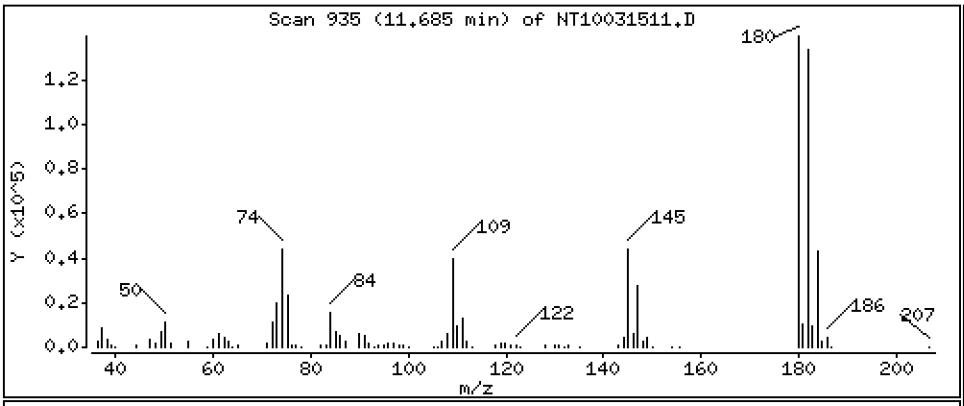
Operator: VTS

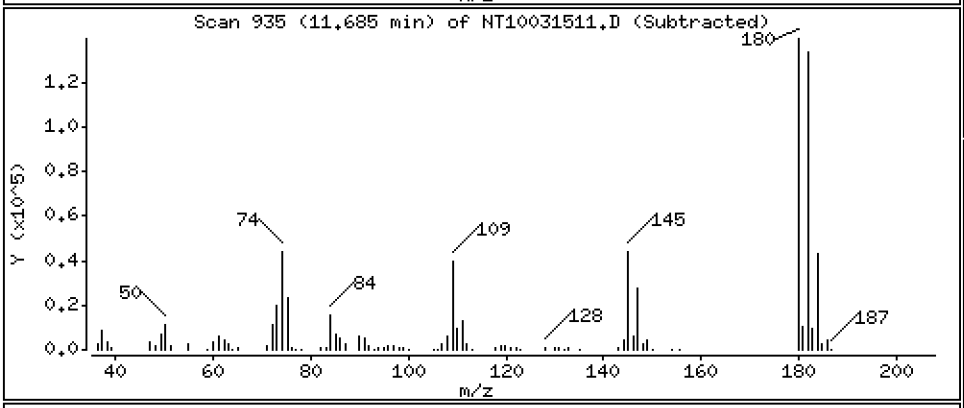
Column phase: ZB-5msi

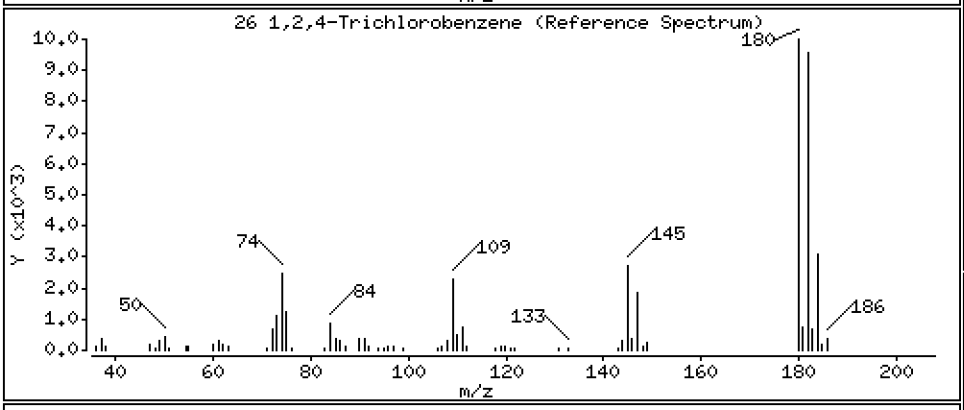
Column diameter: 0.25

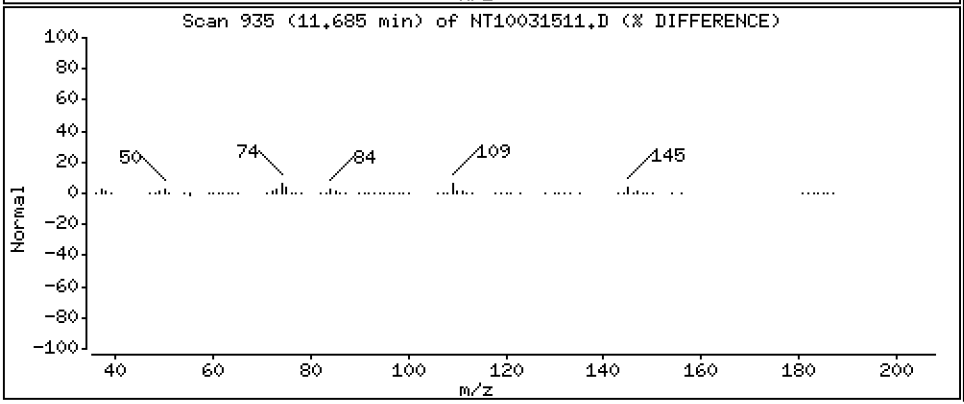
26 1,2,4-Trichlorobenzene

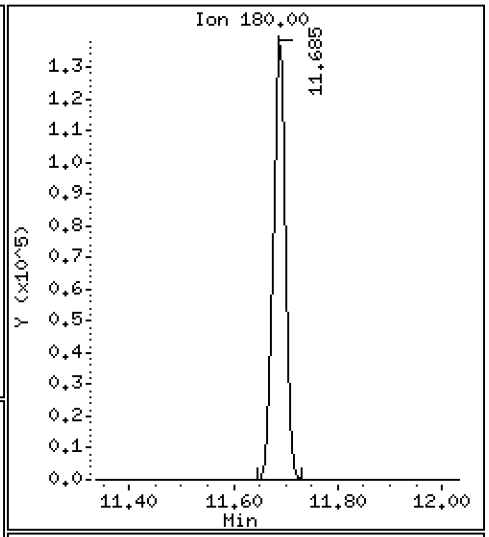
Concentration: 4.554 ug/mL

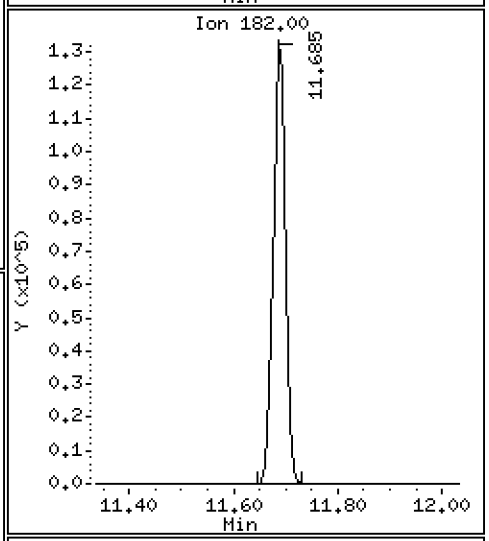


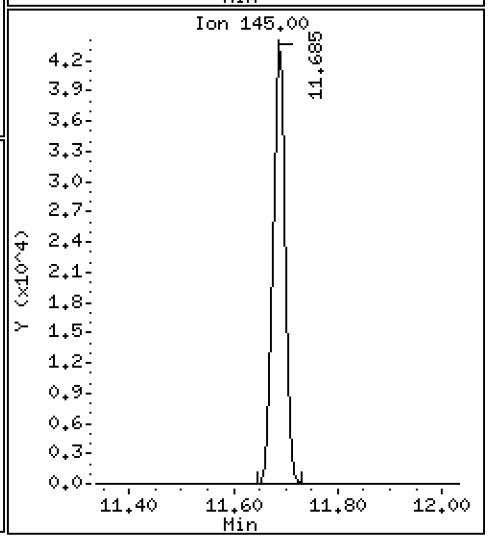












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

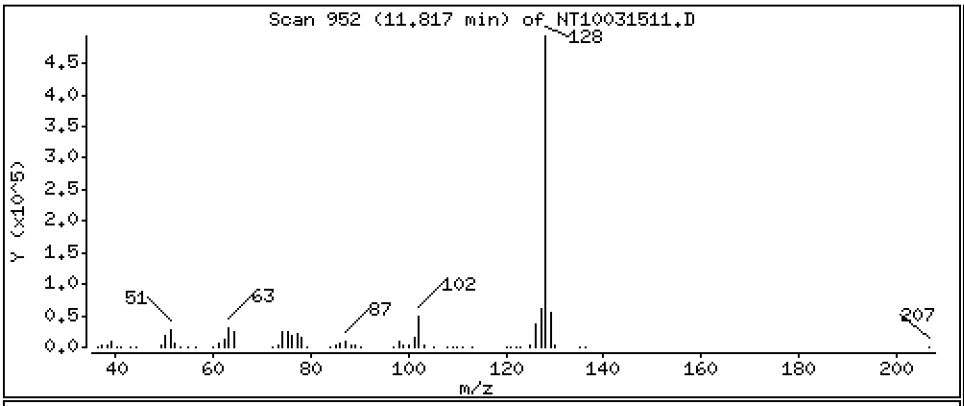
Operator: VTS

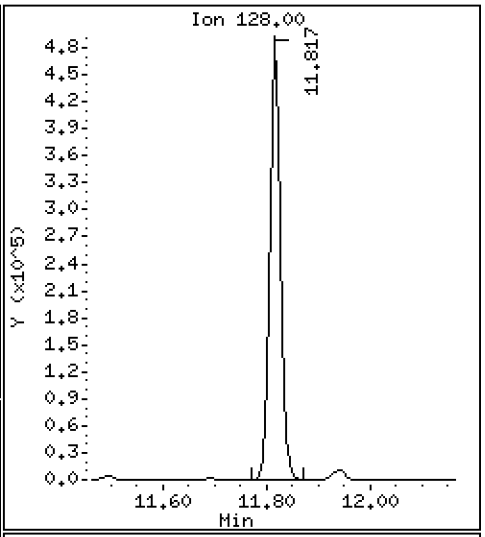
Column phase: ZB-5msi

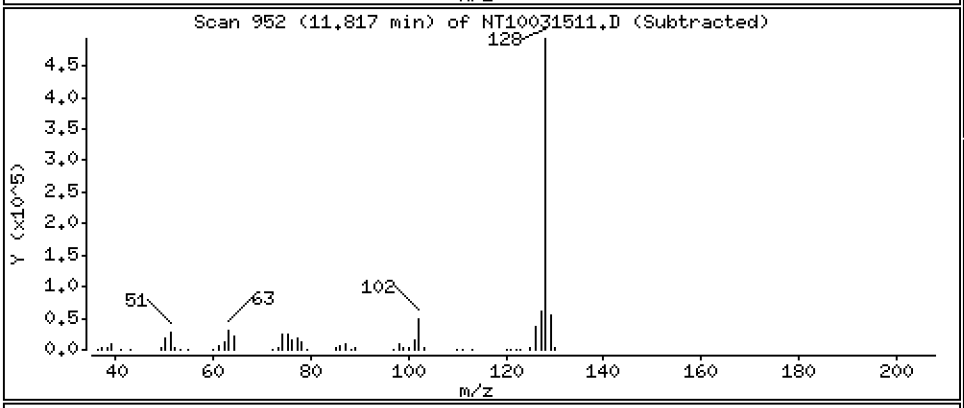
Column diameter: 0.25

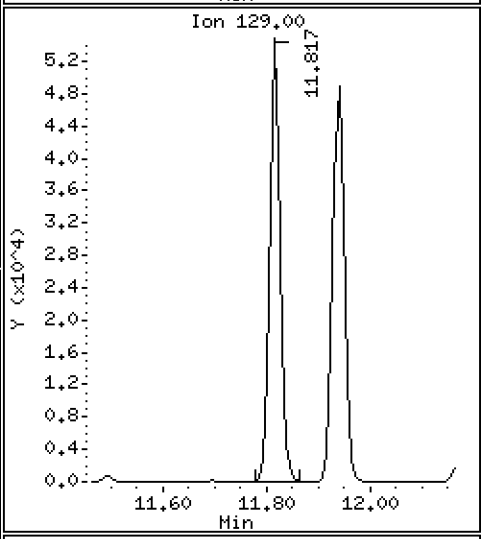
28 Naphthalene

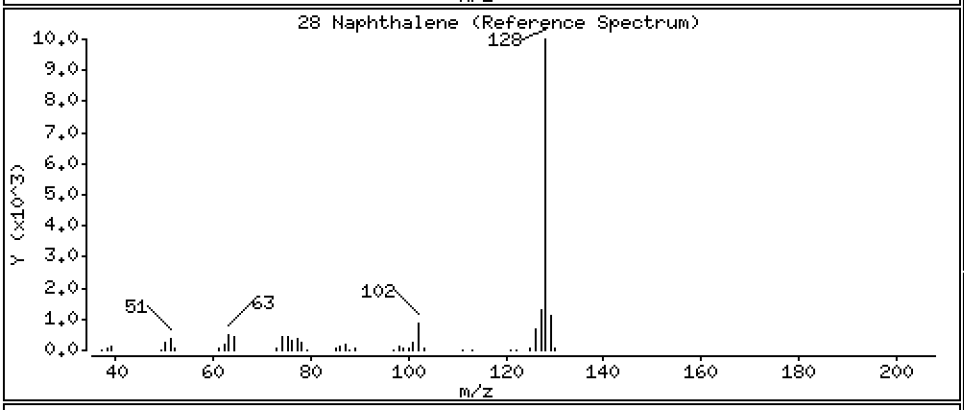
Concentration: 4.717 ug/mL

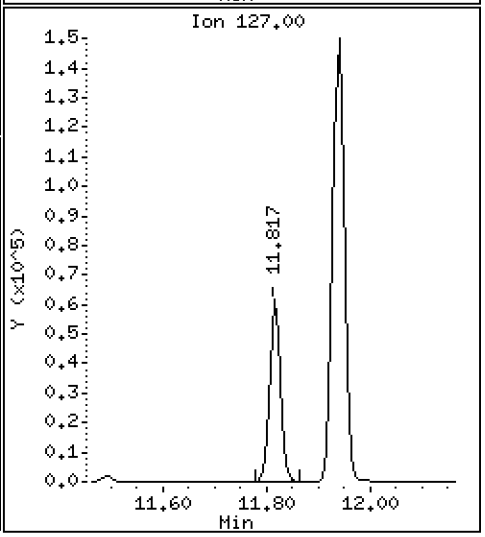


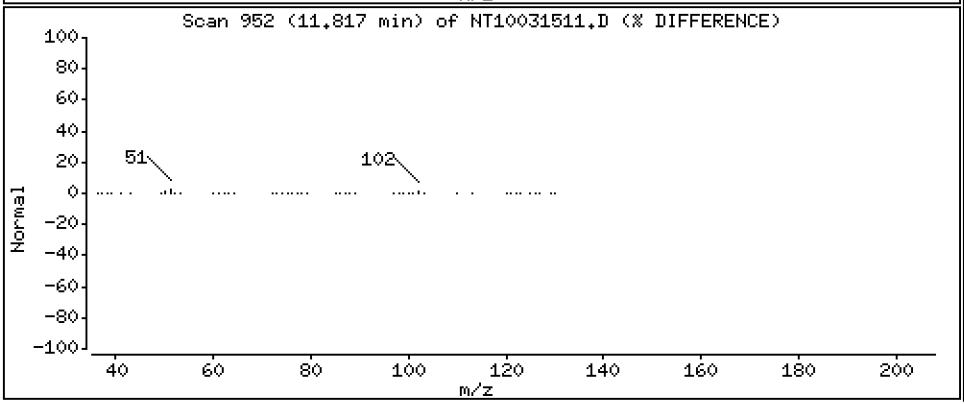












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

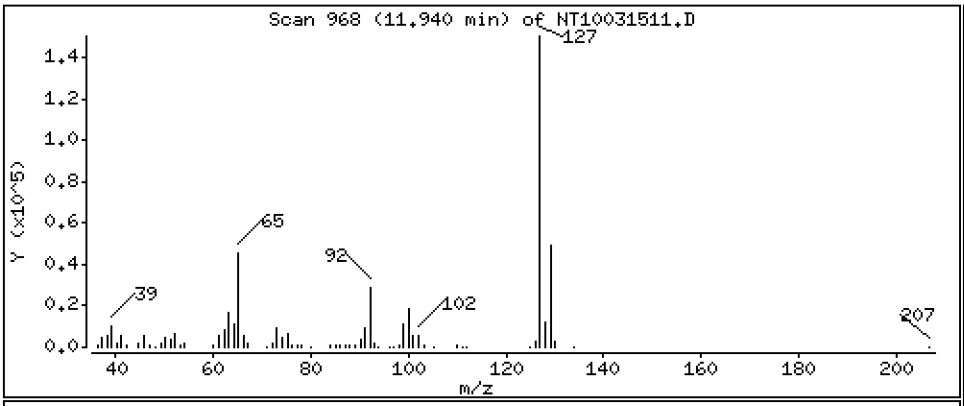
Operator: VTS

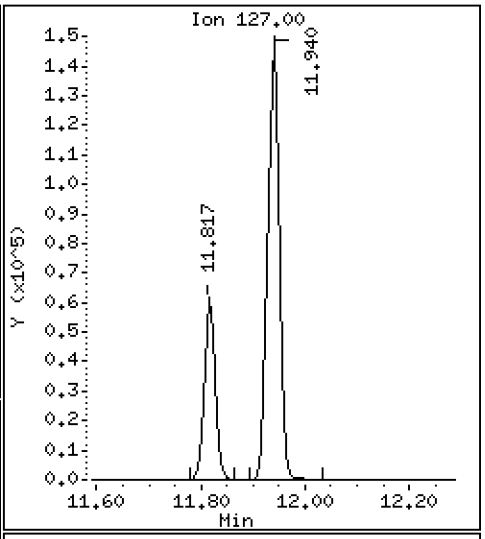
Column phase: ZB-5msi

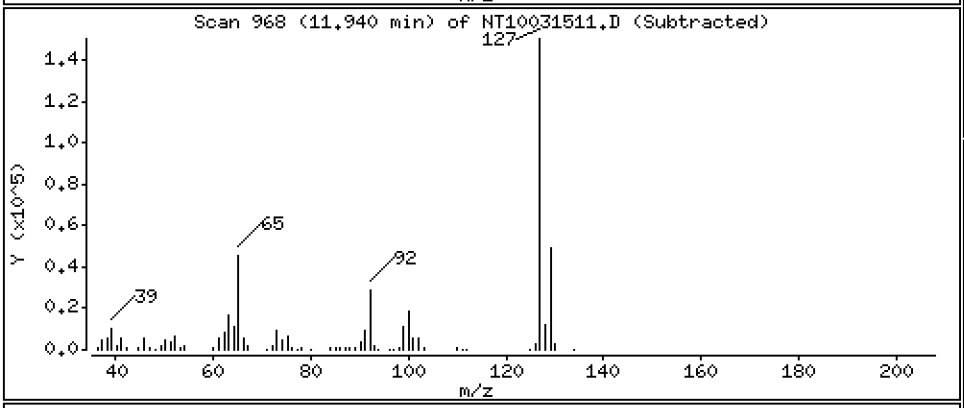
Column diameter: 0.25

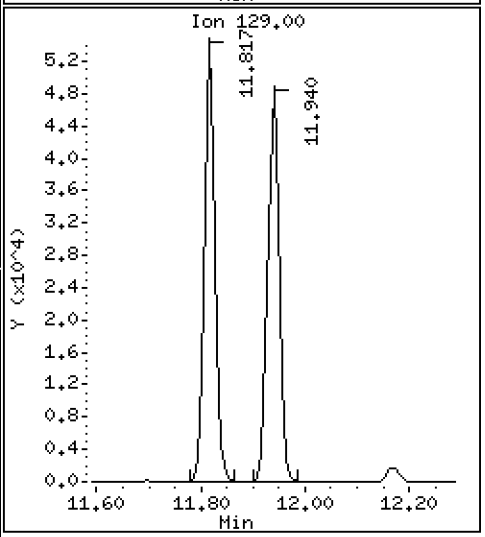
29 4-Chloroaniline

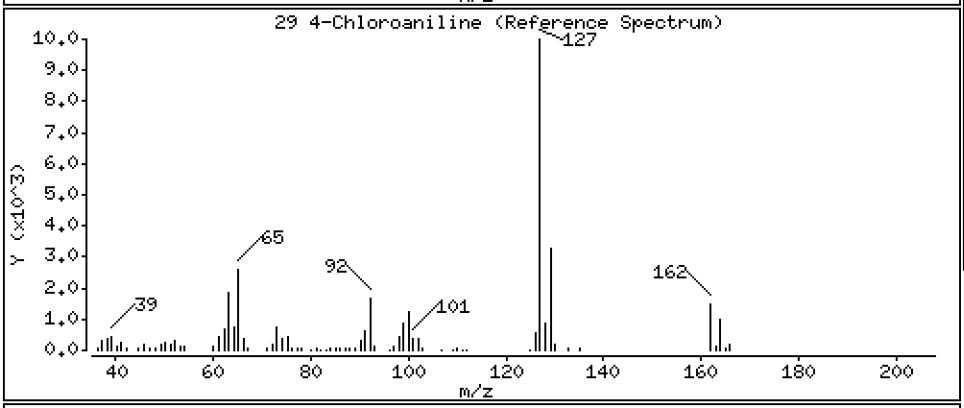
Concentration: 3.787 ug/mL

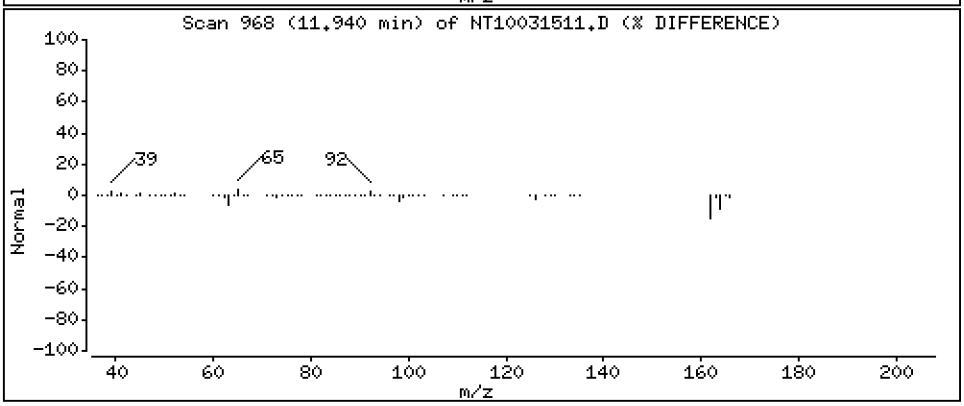












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

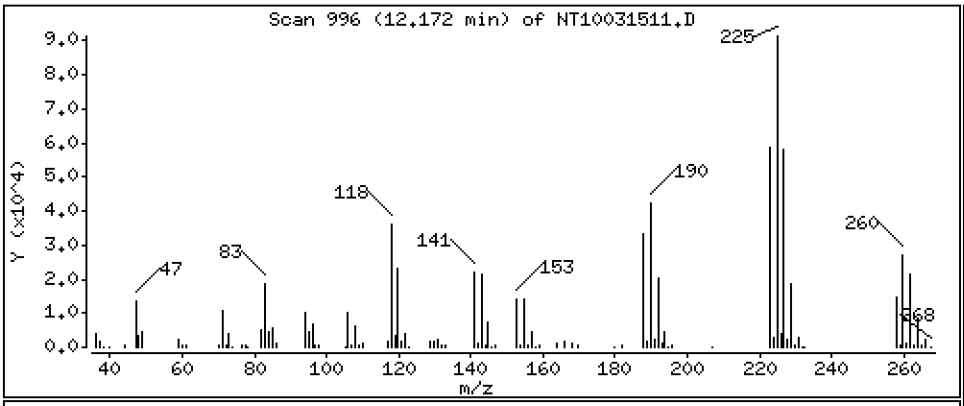
Operator: VTS

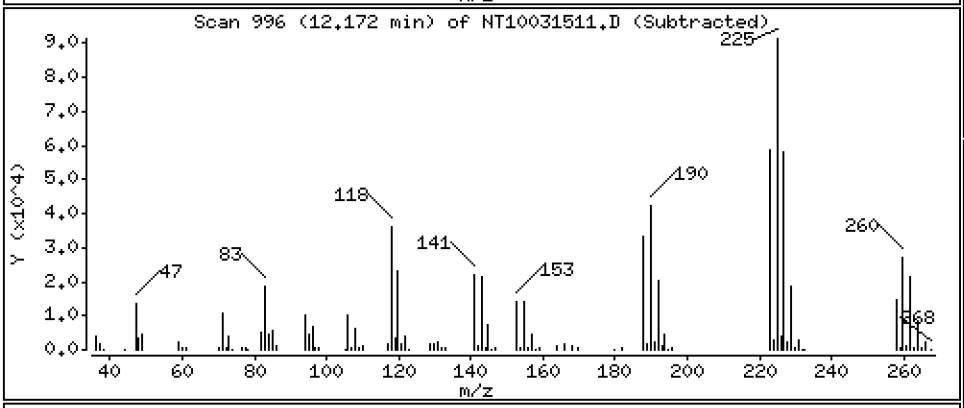
Column phase: ZB-5msi

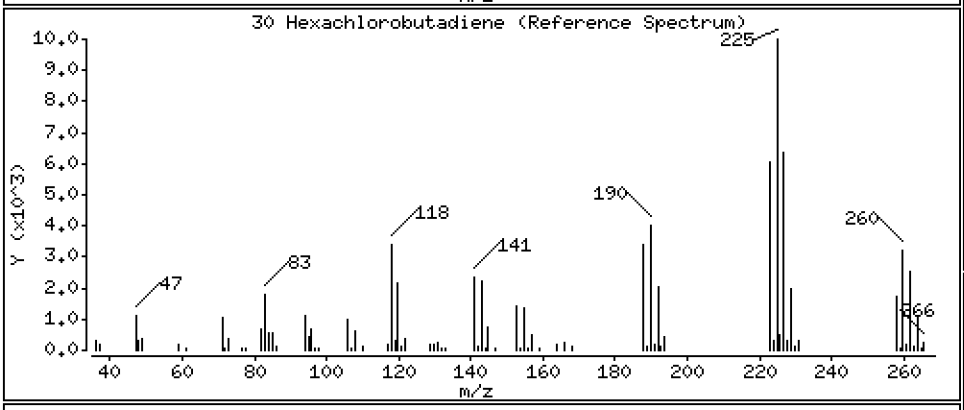
Column diameter: 0.25

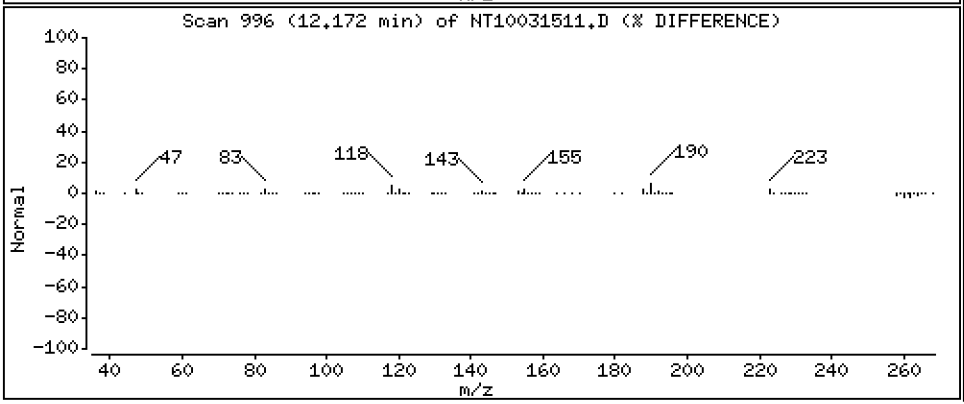
30 Hexachlorobutadiene

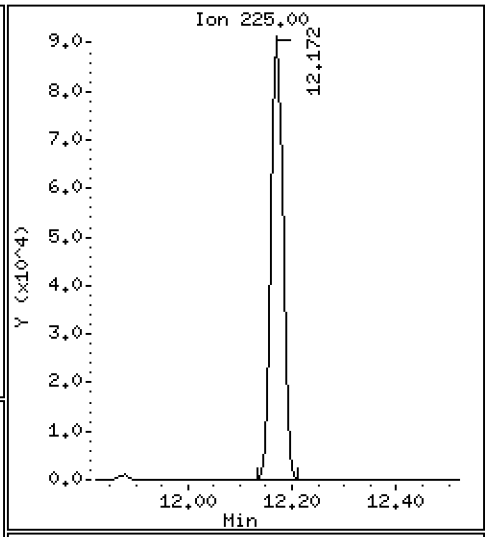
Concentration: 4.834 ug/mL

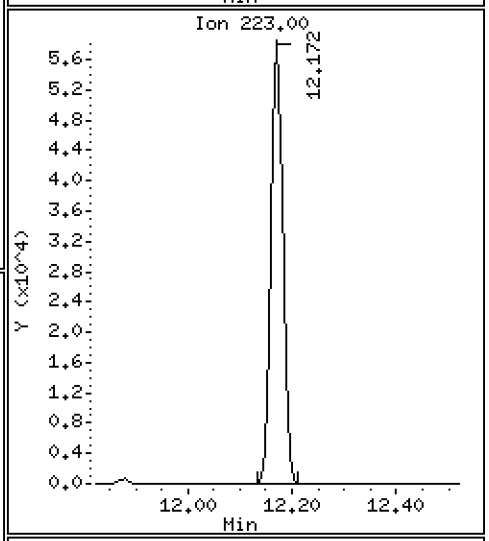


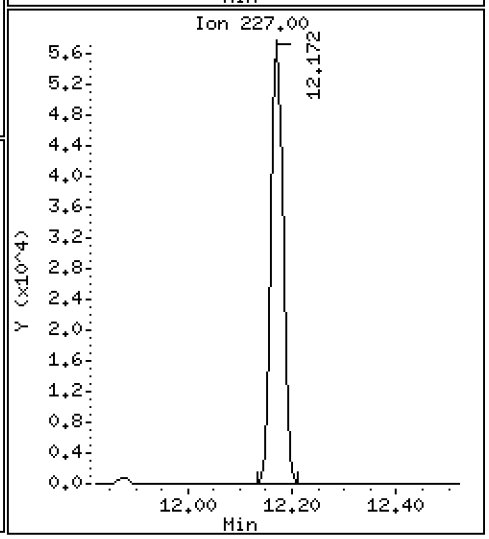












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

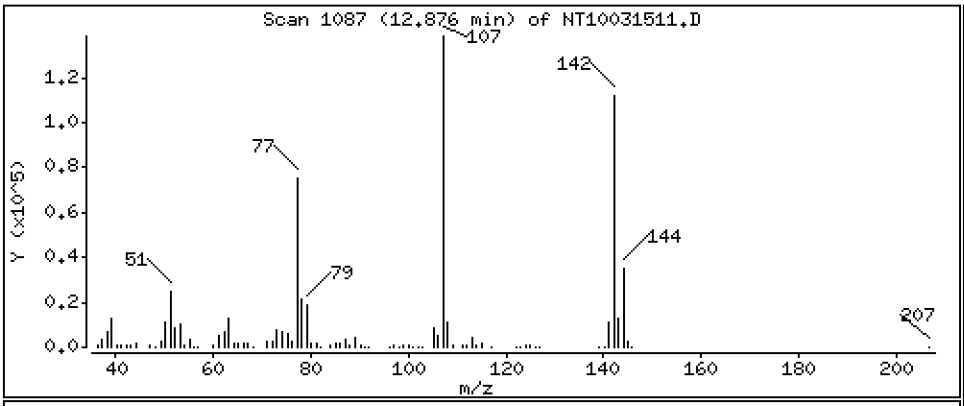
Operator: VTS

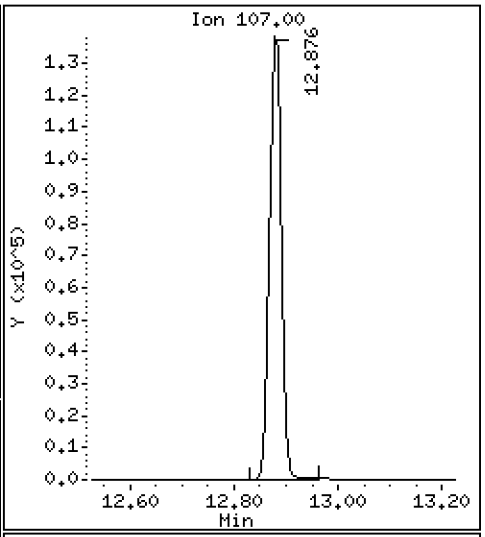
Column phase: ZB-5msi

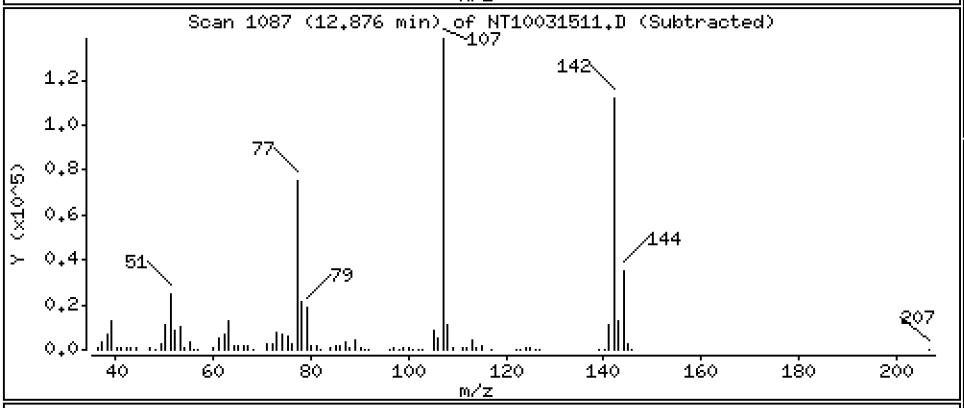
Column diameter: 0.25

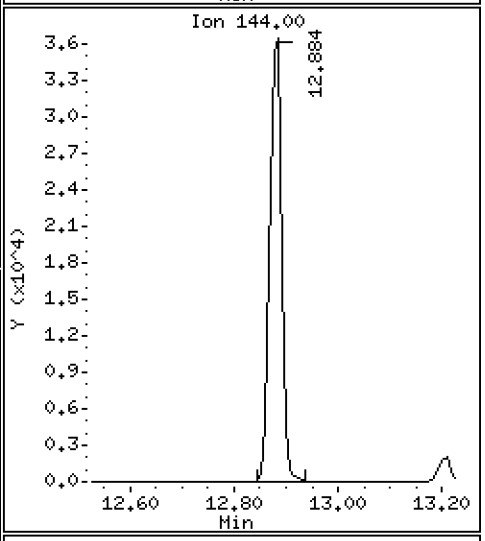
31 4-Chloro-3-methylphenol

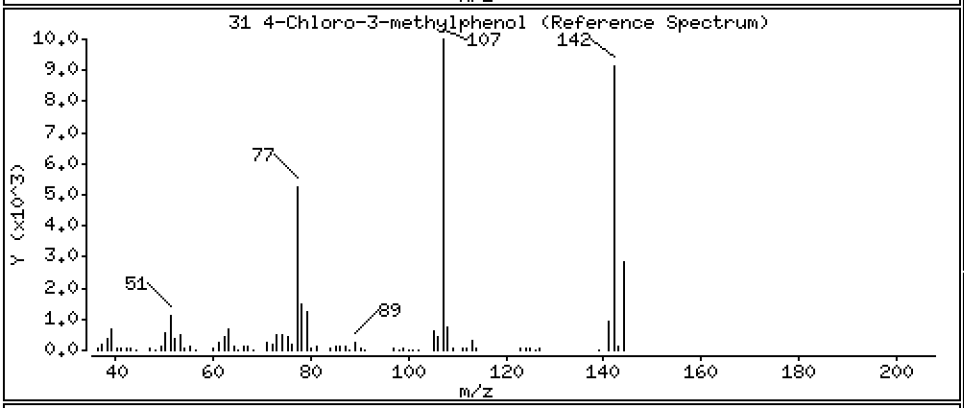
Concentration: 4.640 ug/mL

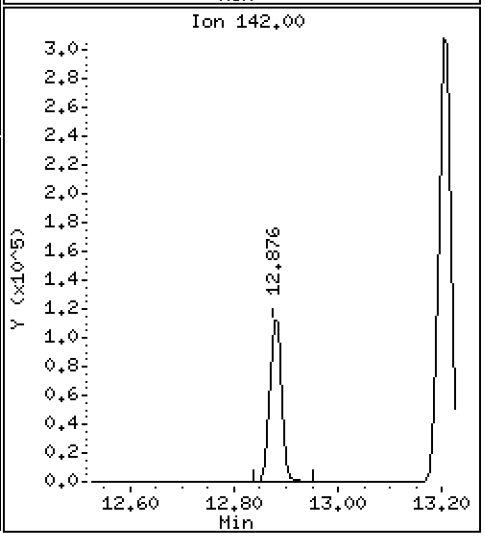


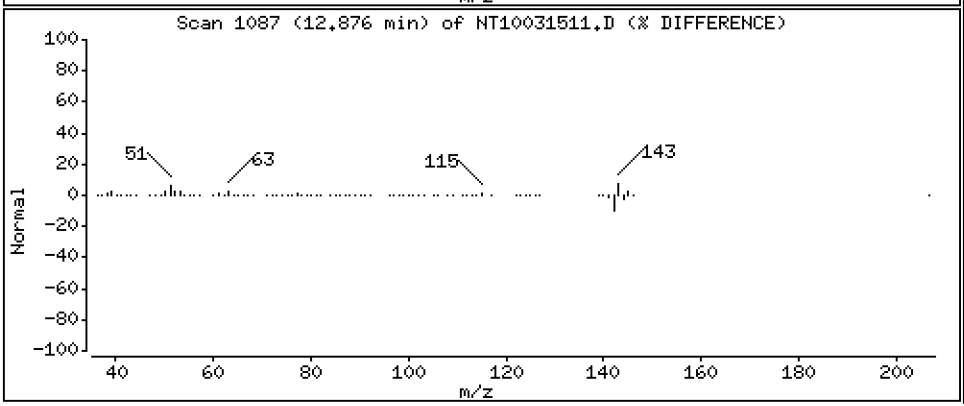












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

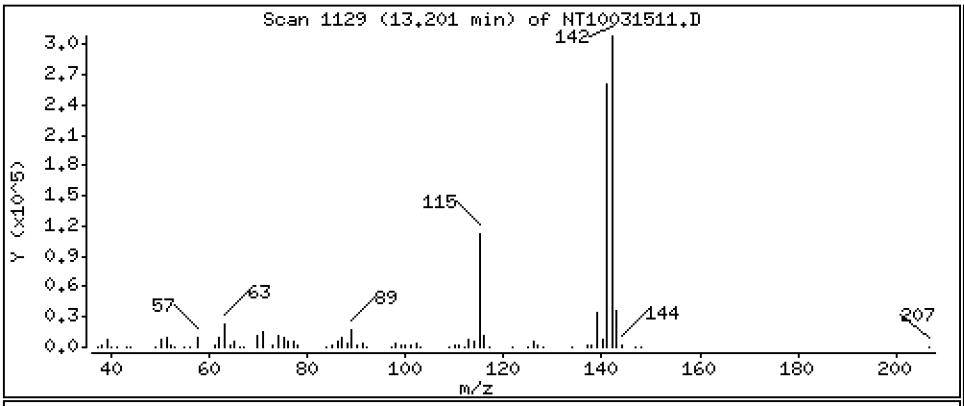
Operator: VTS

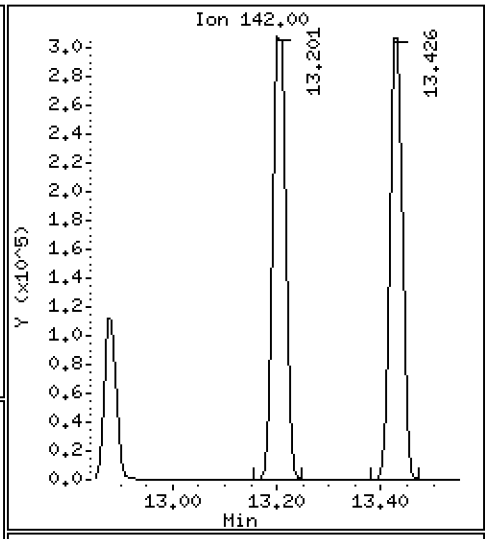
Column phase: ZB-5msi

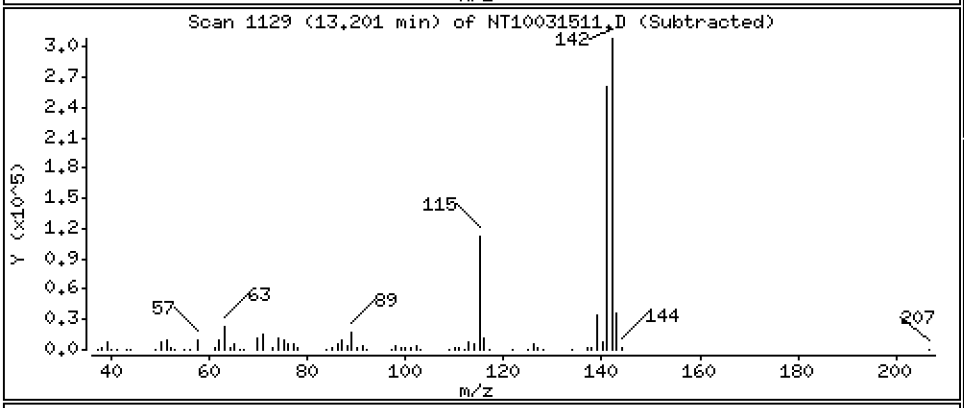
Column diameter: 0.25

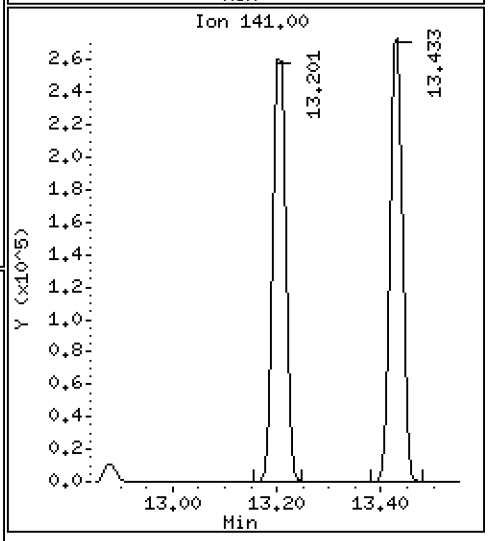
32 2-Methylnaphthalene

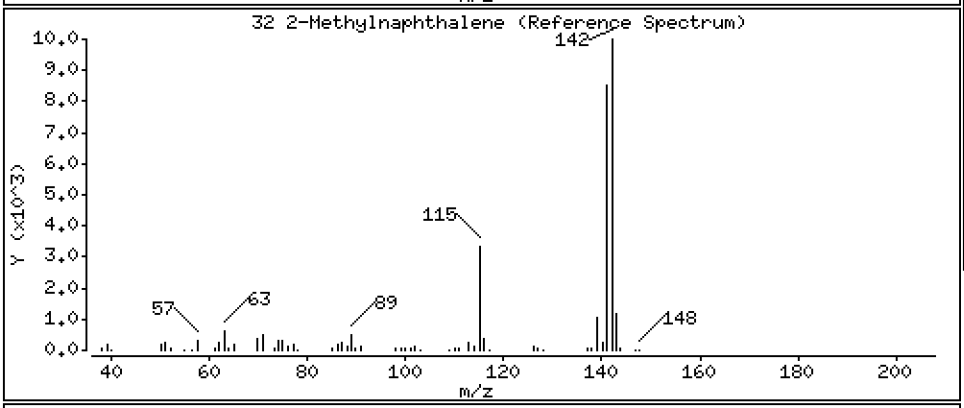
Concentration: 4.596 ug/mL

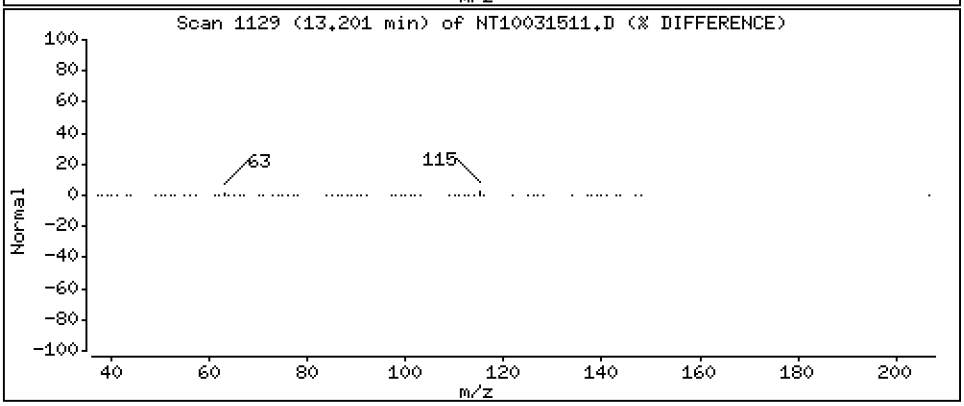












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

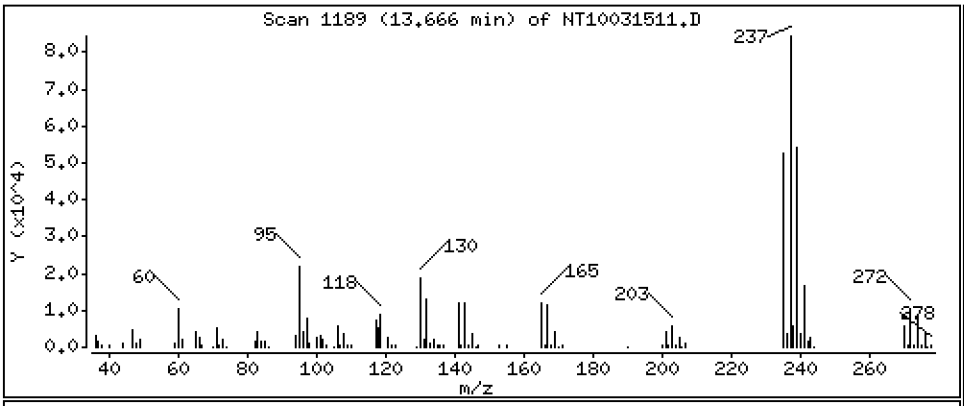
Operator: VTS

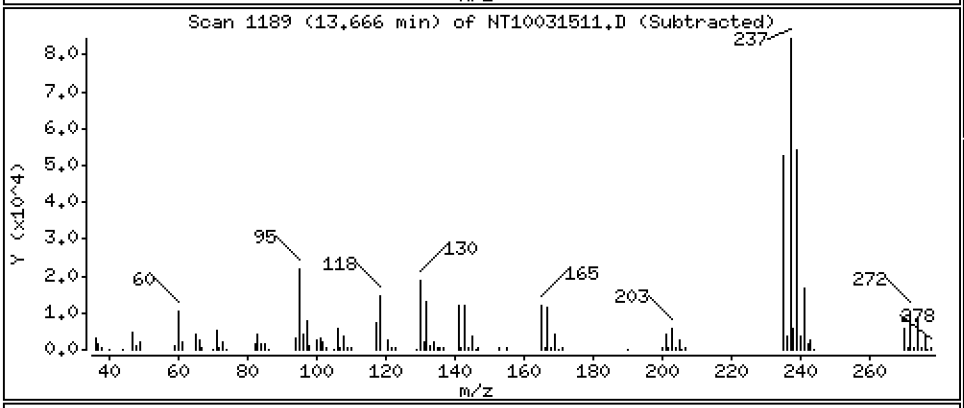
Column phase: ZB-5msi

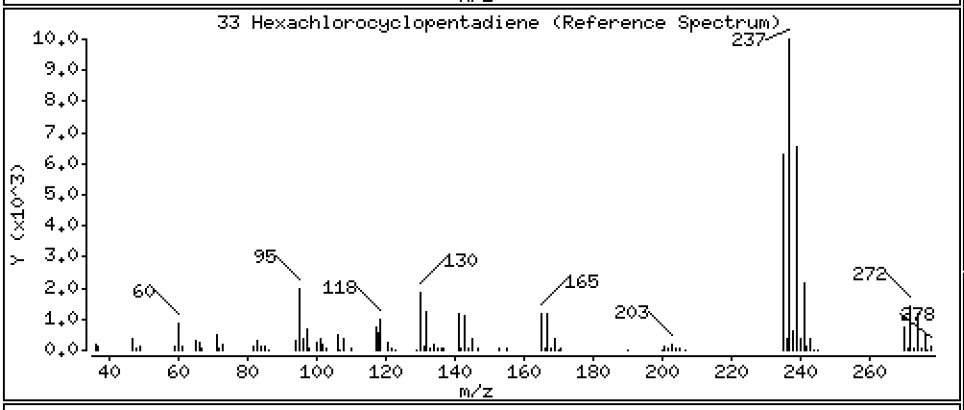
Column diameter: 0.25

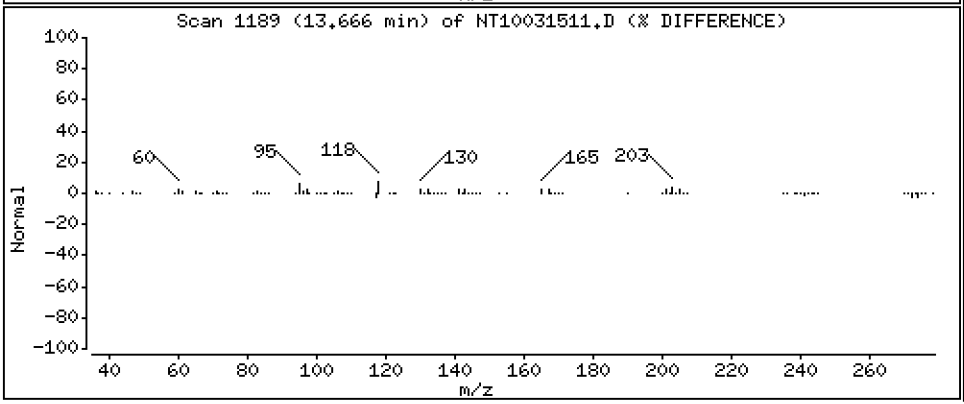
33 Hexachlorocyclopentadiene

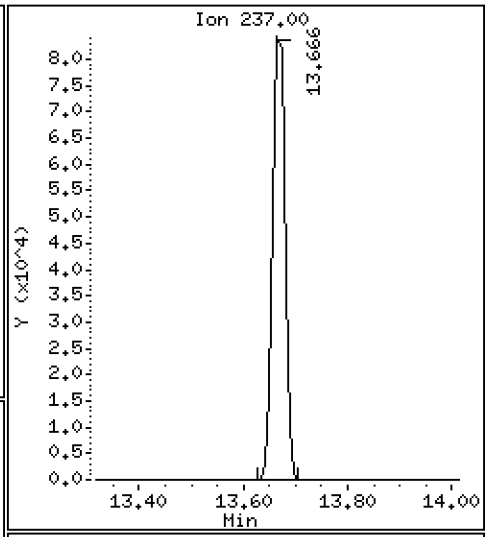
Concentration: 4.729 ug/mL

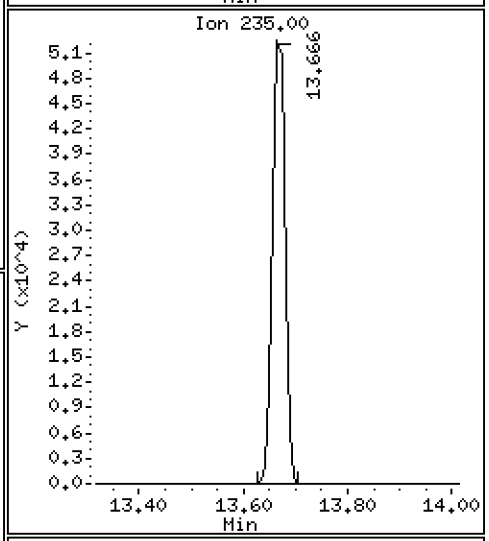


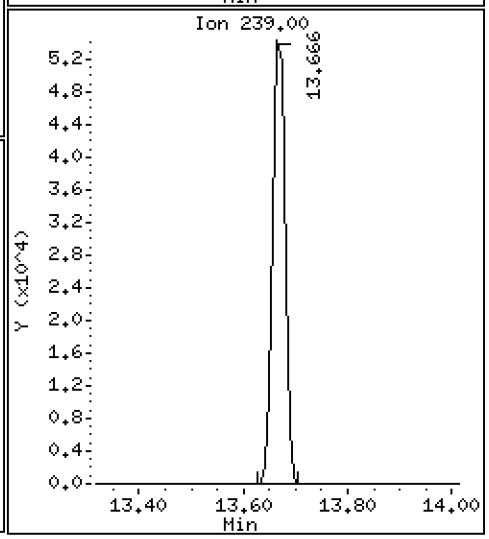












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

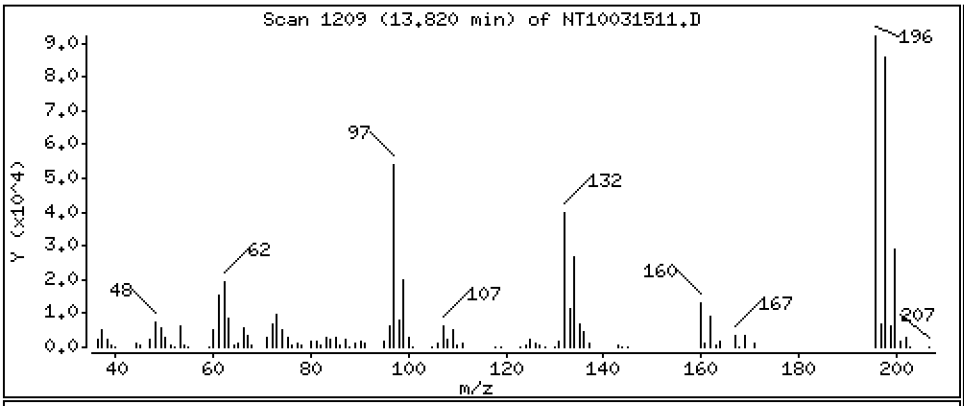
Operator: VTS

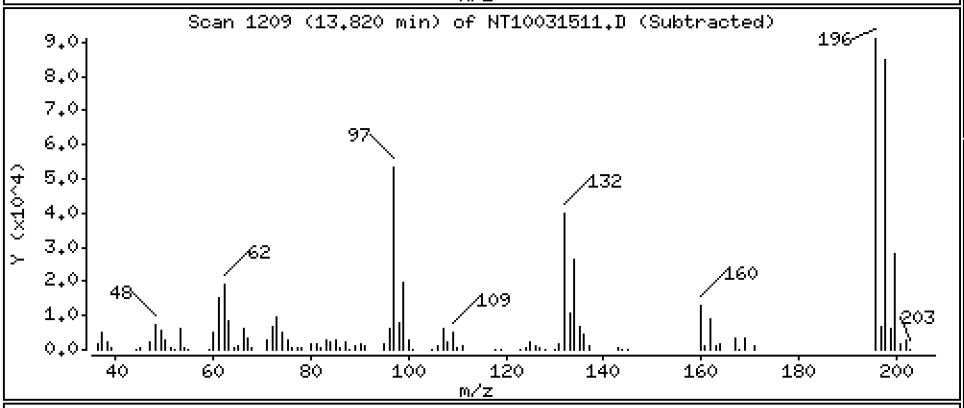
Column phase: ZB-5msi

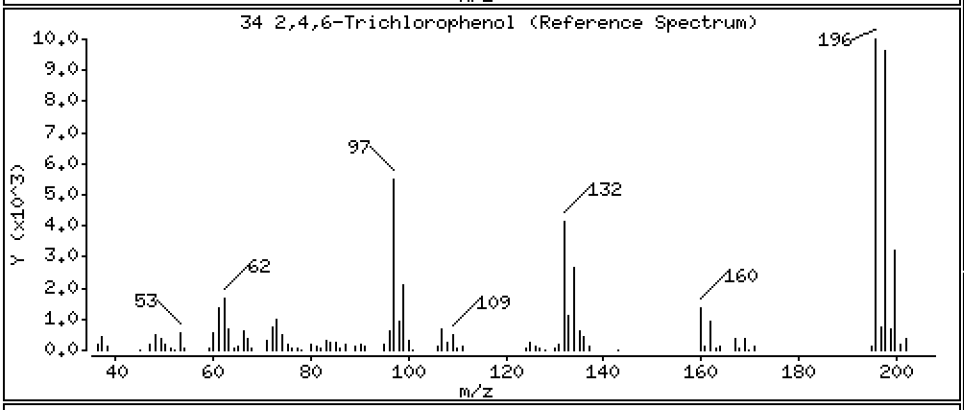
Column diameter: 0.25

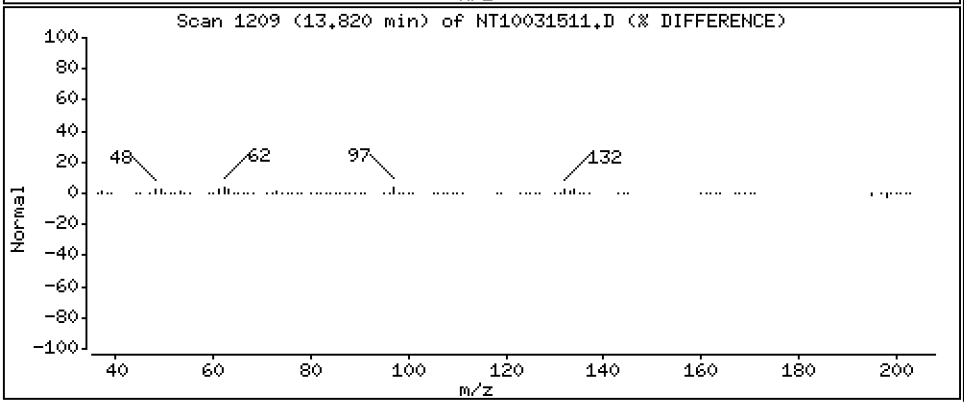
34 2,4,6-Trichlorophenol

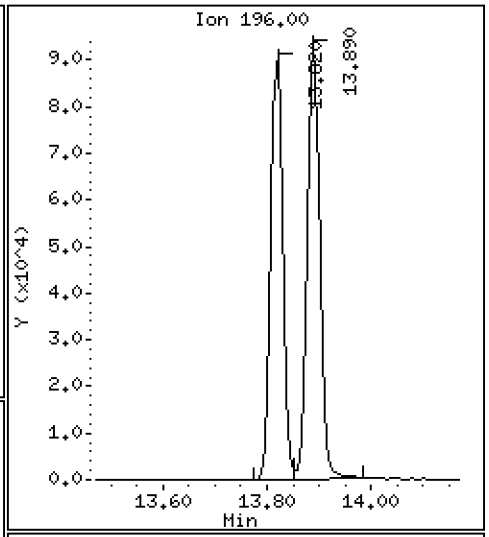
Concentration: 4.596 ug/mL

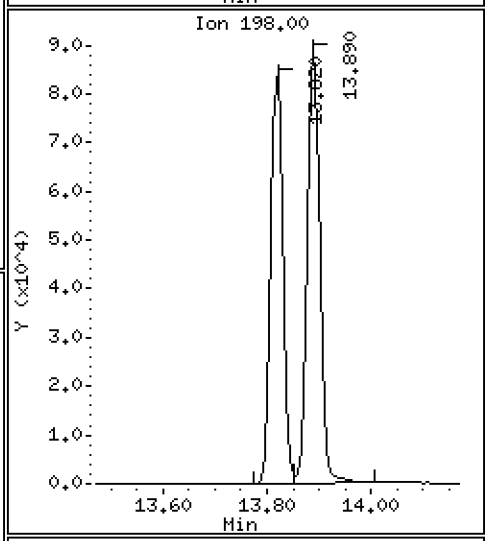


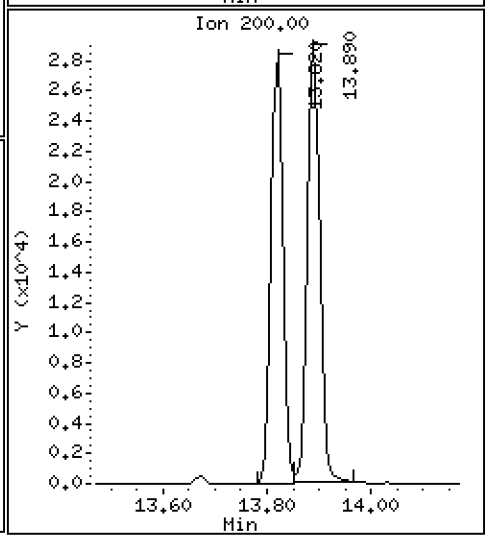












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

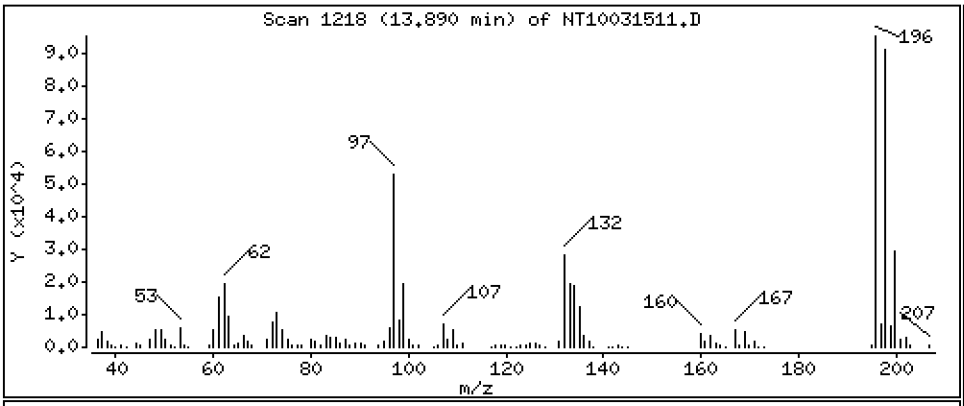
Operator: VTS

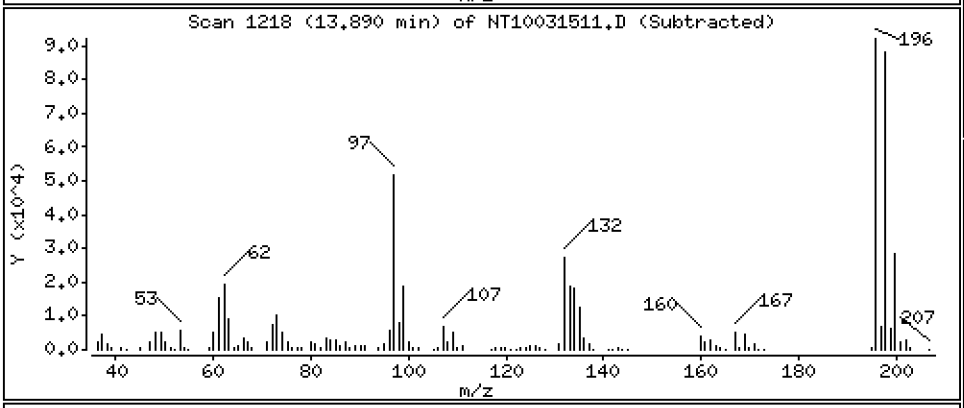
Column phase: ZB-5msi

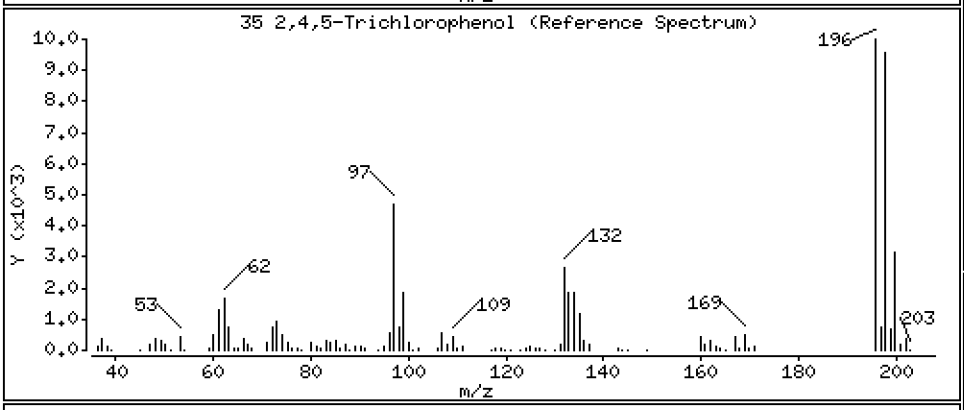
Column diameter: 0.25

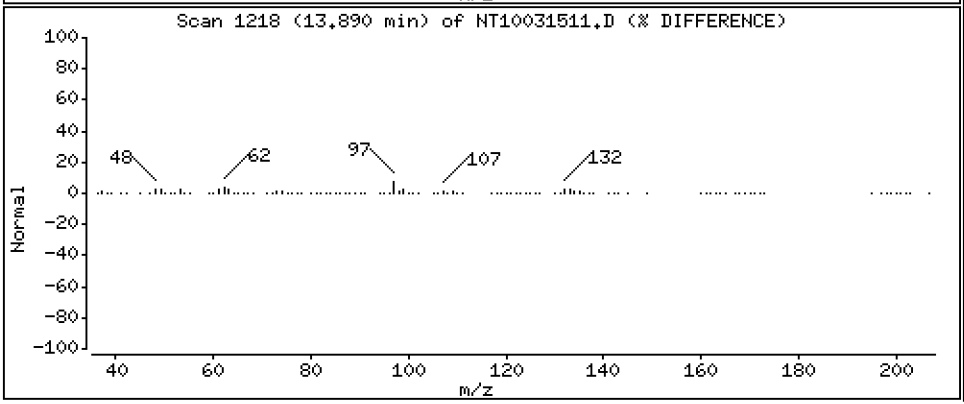
35 2,4,5-Trichlorophenol

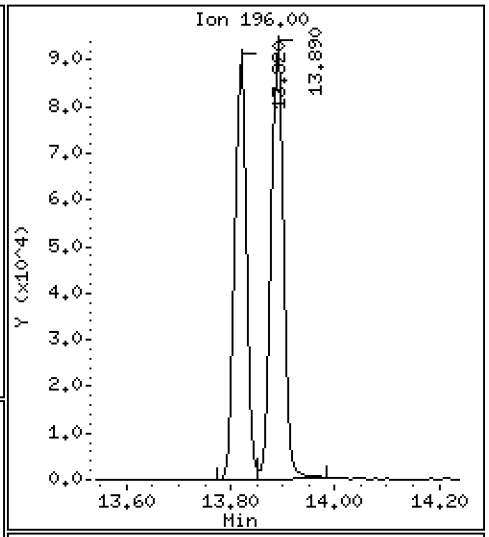
Concentration: 4.409 ug/mL

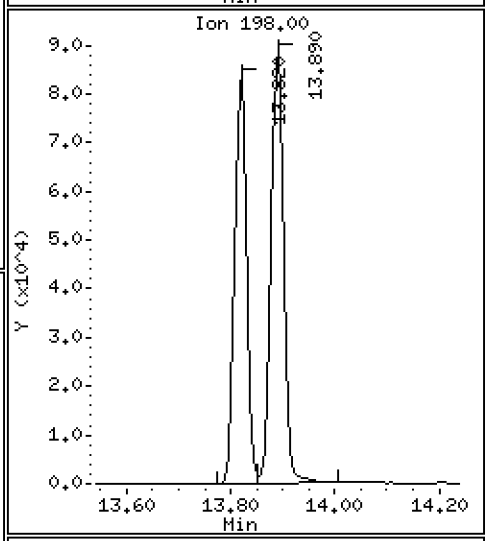


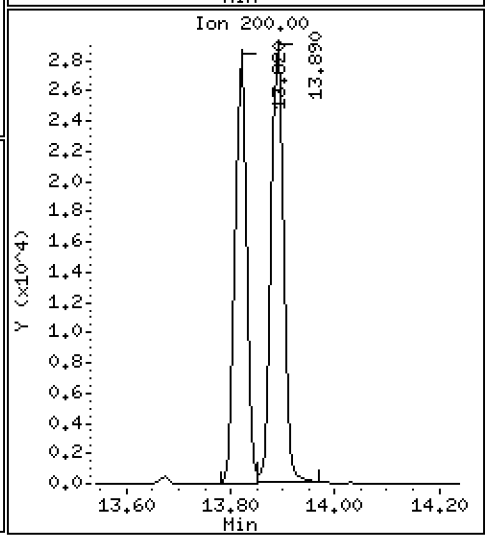












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

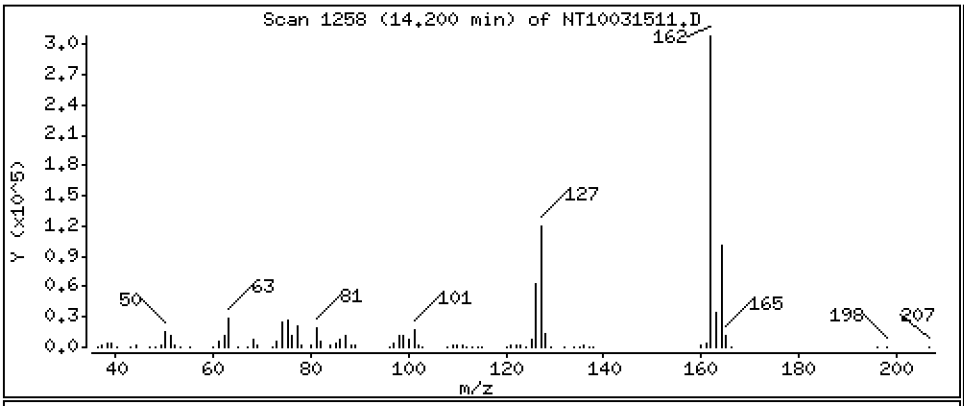
Operator: VTS

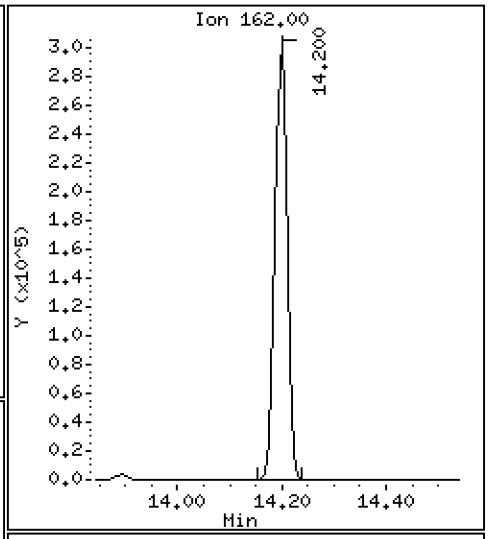
Column phase: ZB-5msi

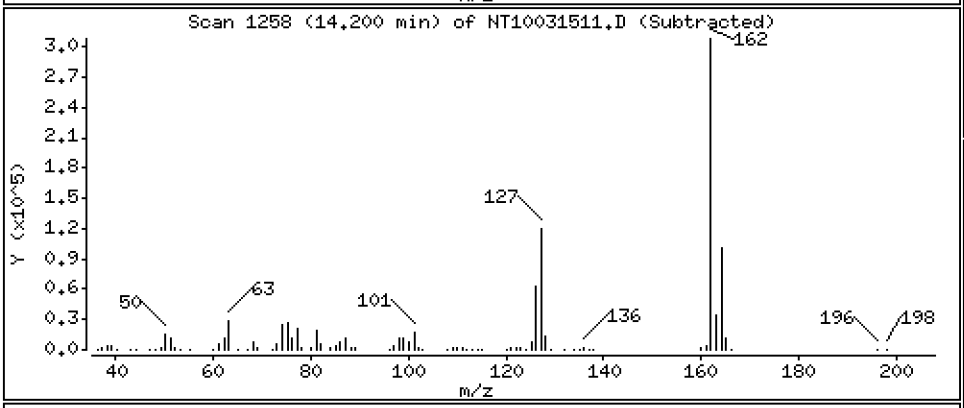
Column diameter: 0.25

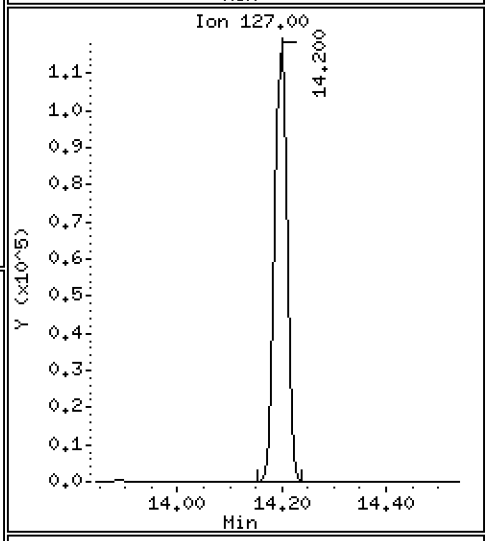
37 2-Chloronaphthalene

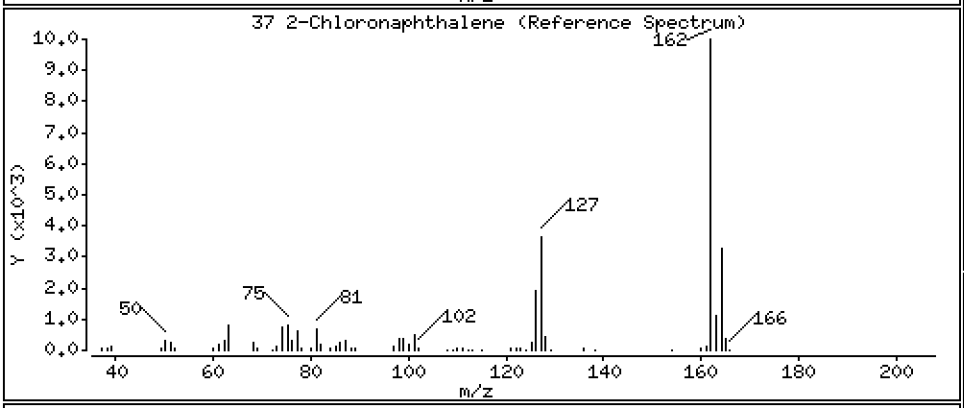
Concentration: 4.796 ug/mL

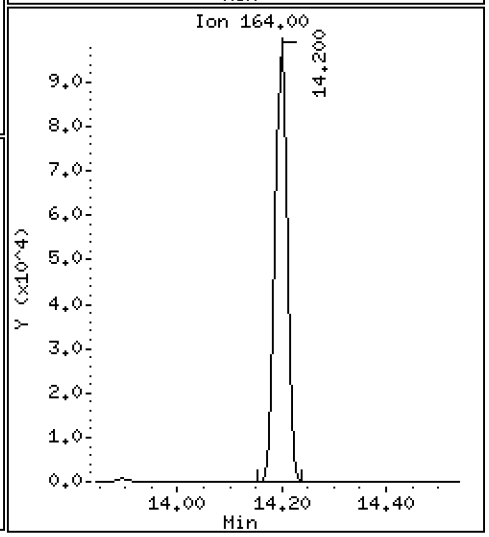


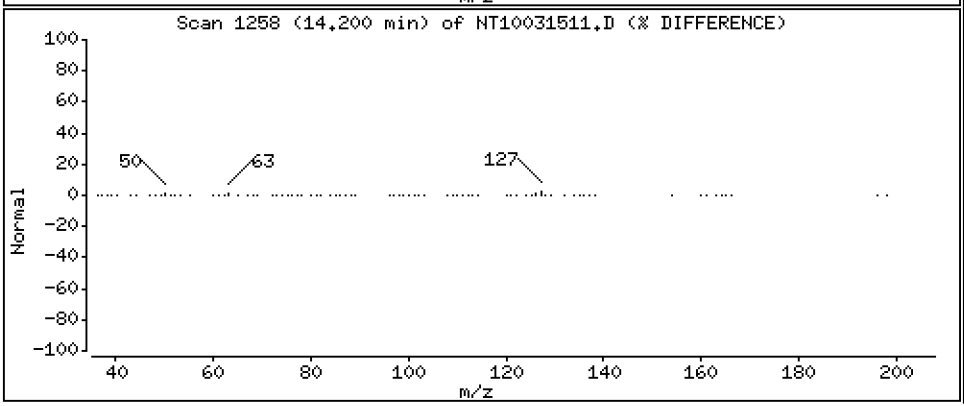












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

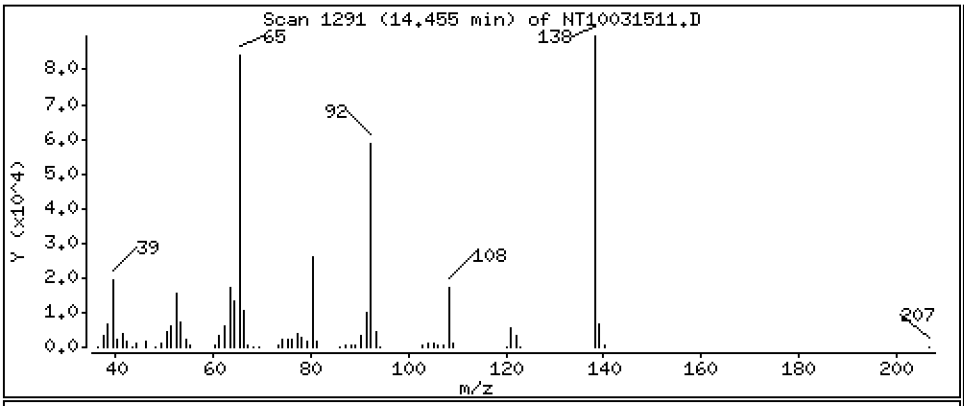
Operator: VTS

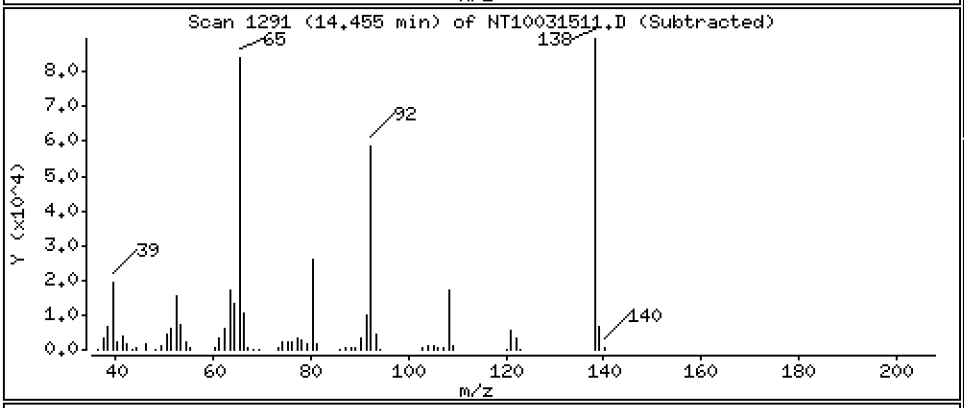
Column phase: ZB-5msi

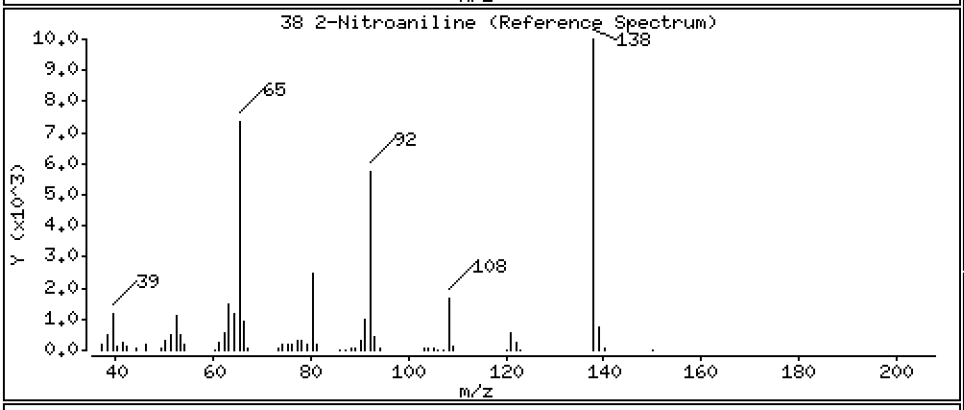
Column diameter: 0.25

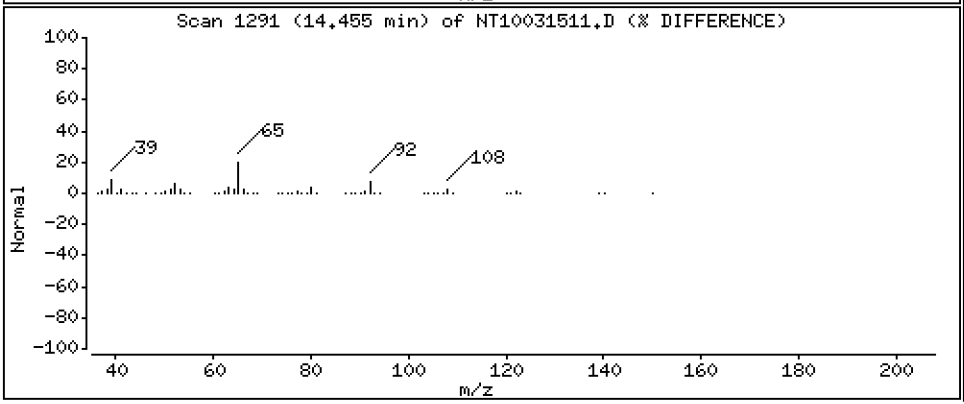
38 2-Nitroaniline

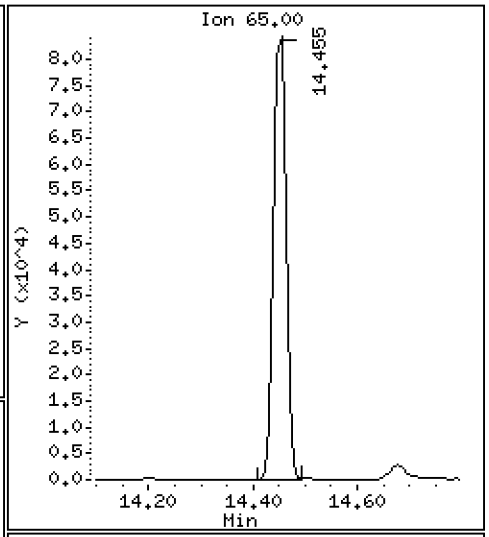
Concentration: 4.911 ug/mL

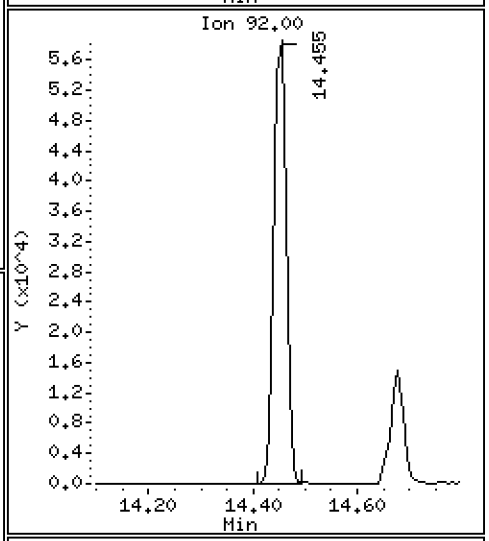


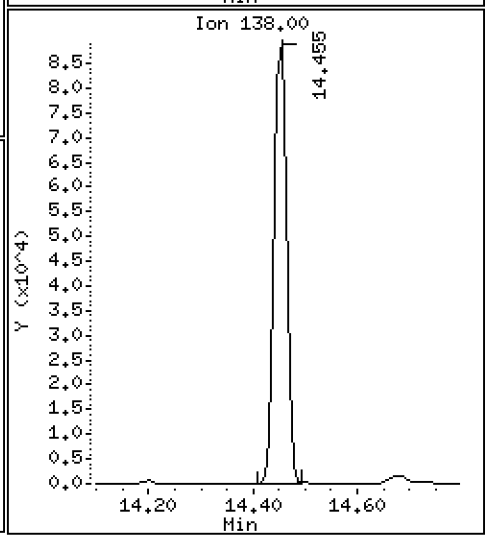












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

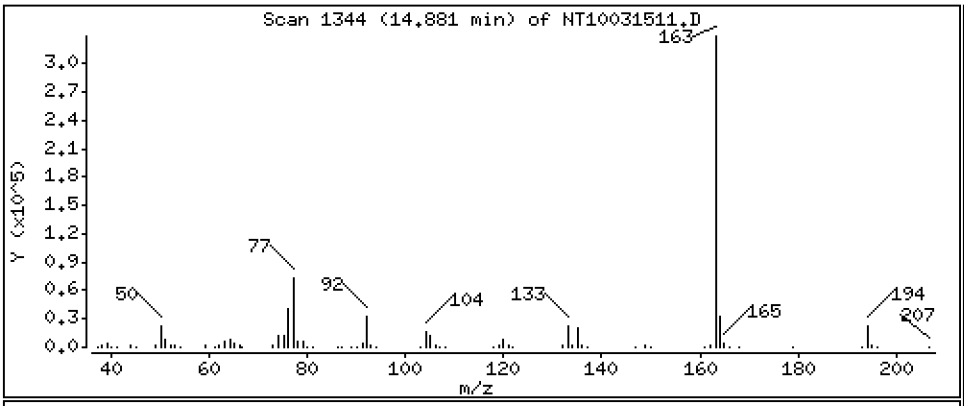
Operator: VTS

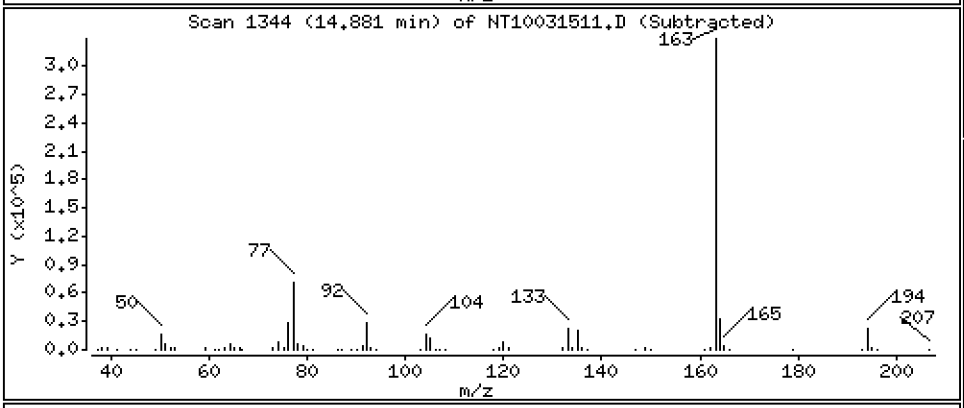
Column phase: ZB-5msi

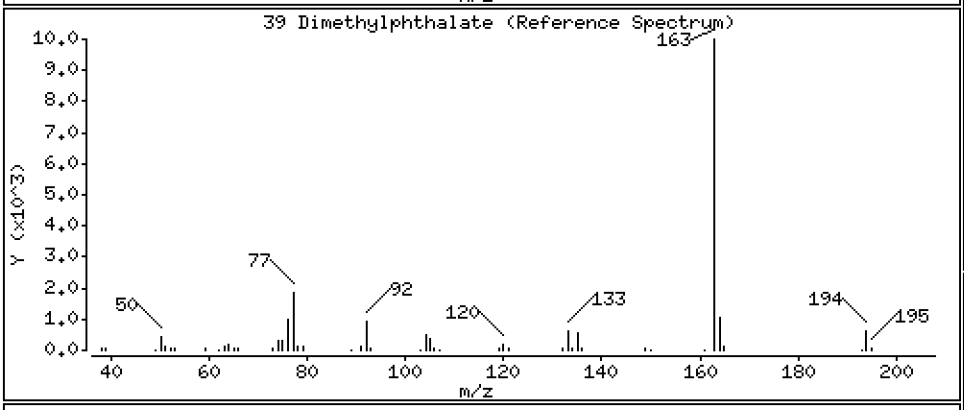
Column diameter: 0.25

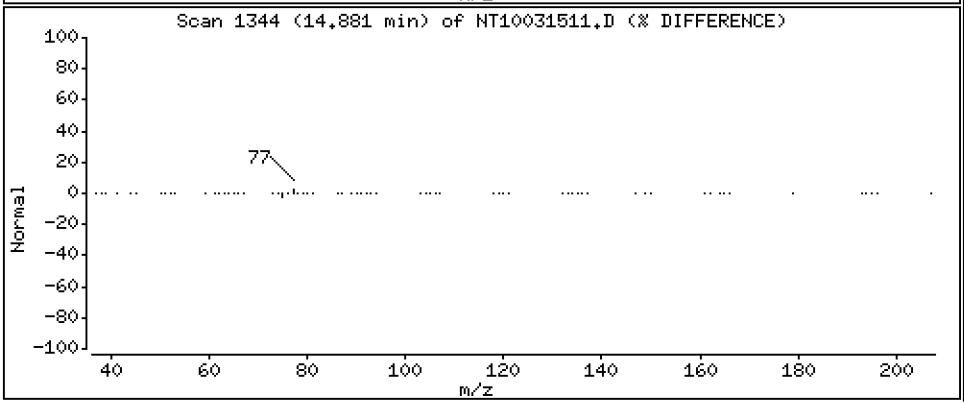
39 Dimethylphthalate

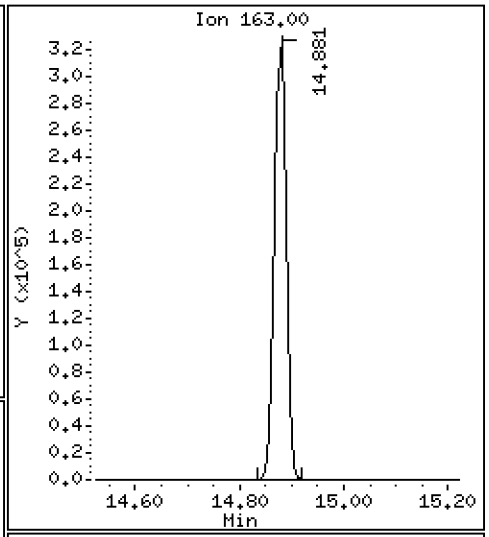
Concentration: 4.937 ug/mL

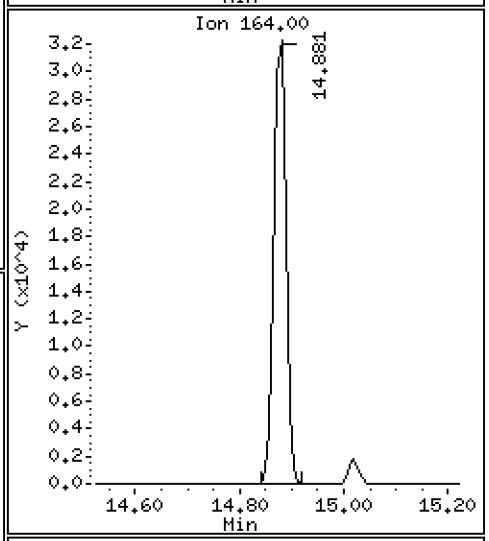


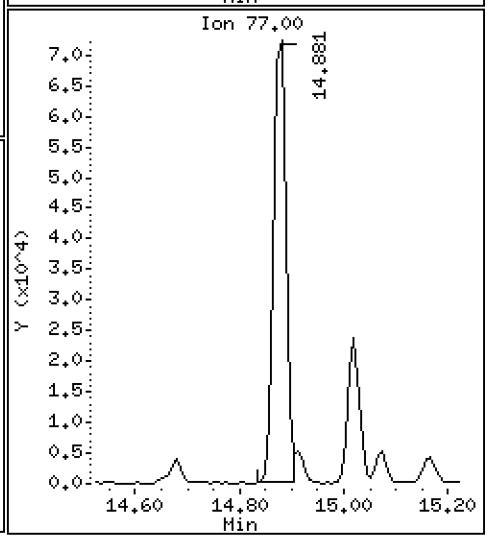












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

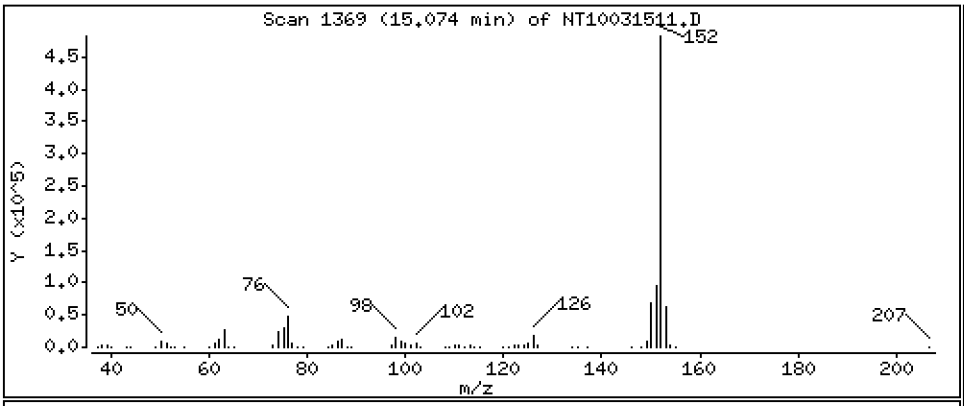
Operator: VTS

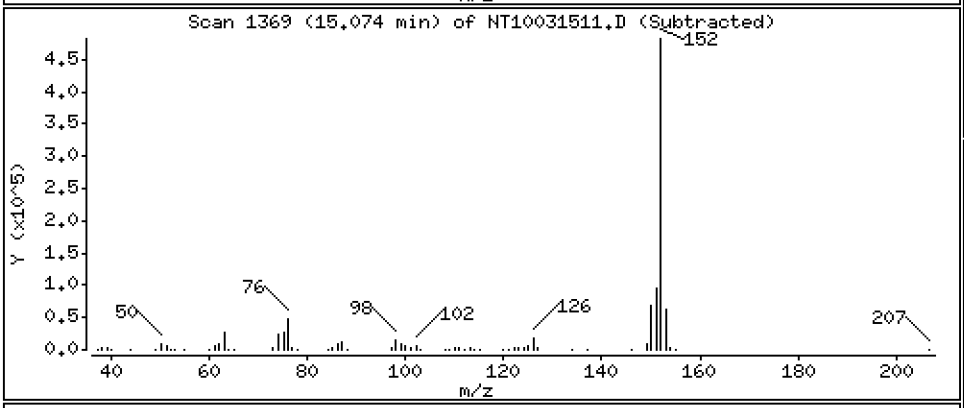
Column phase: ZB-5msi

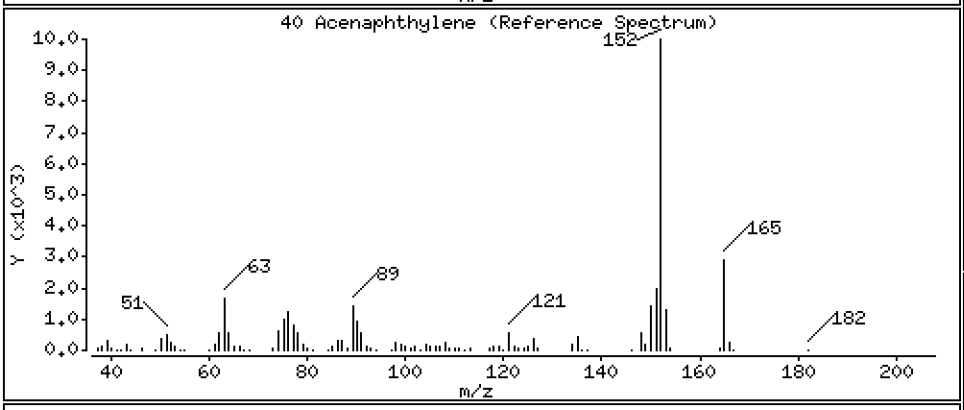
Column diameter: 0.25

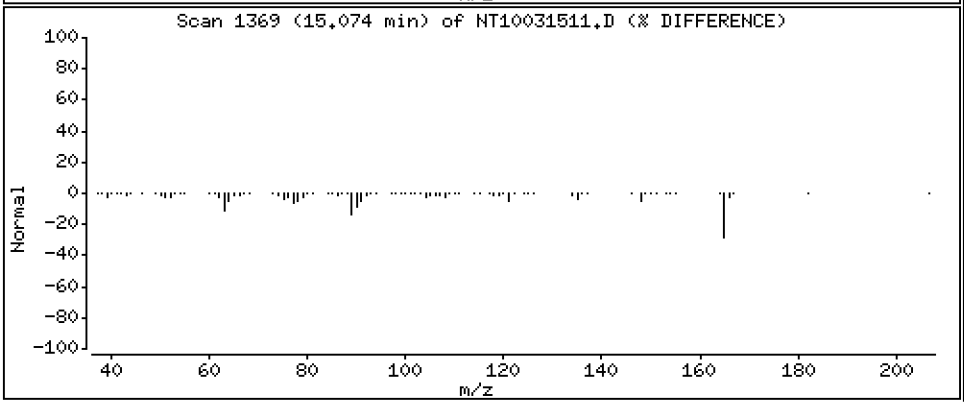
40 Acenaphthylene

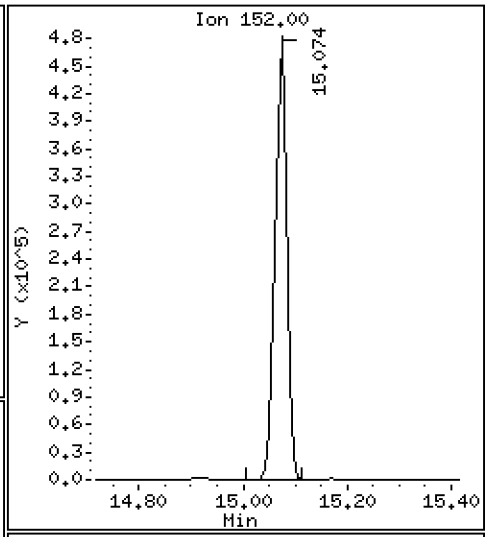
Concentration: 4.805 ug/mL

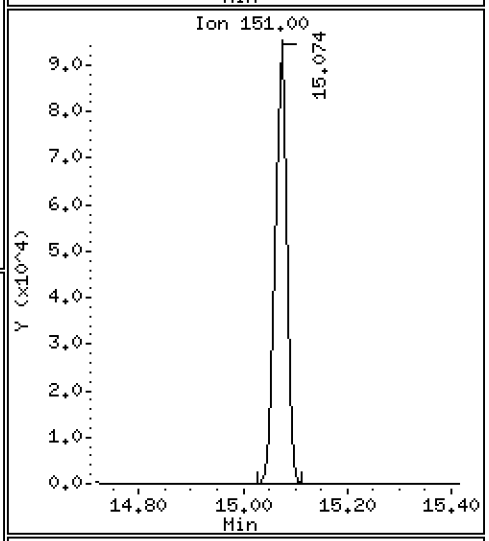


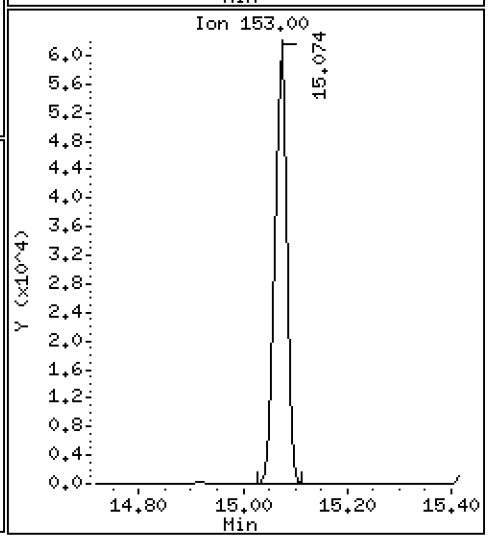












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

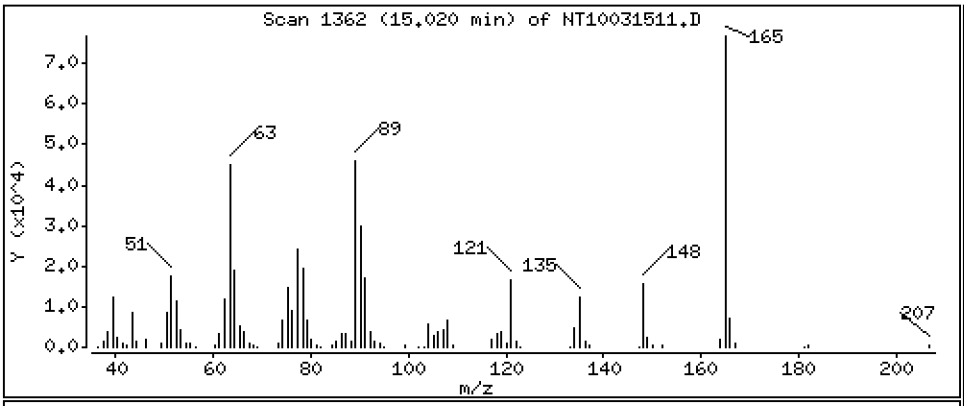
Operator: VTS

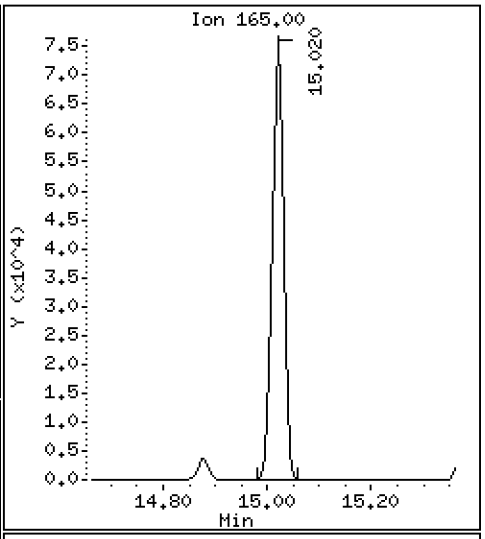
Column phase: ZB-5msi

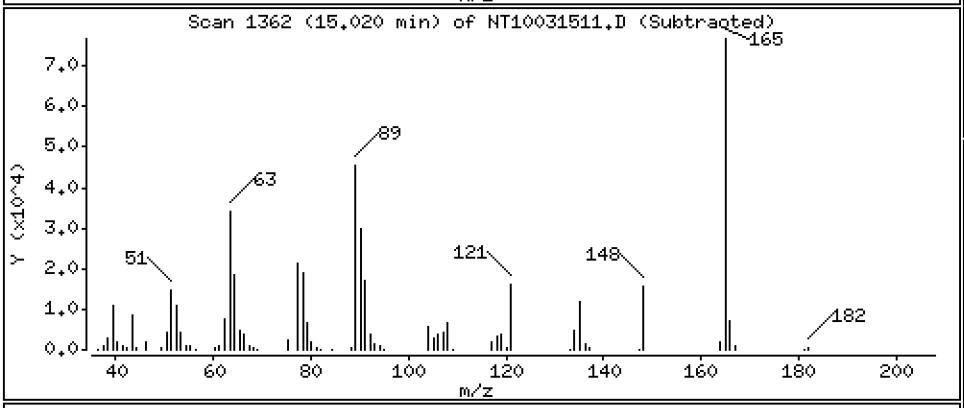
Column diameter: 0.25

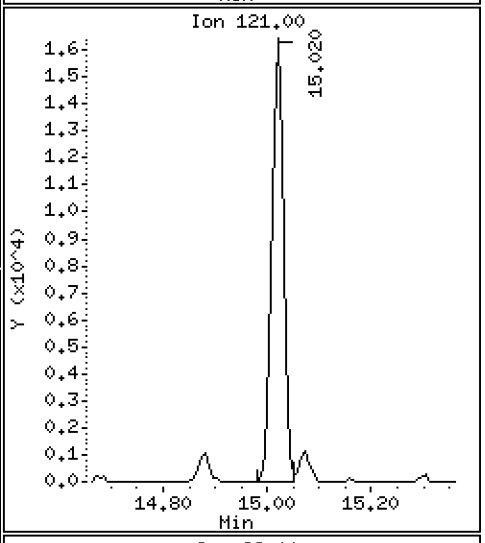
41 2,6-Dinitrotoluene

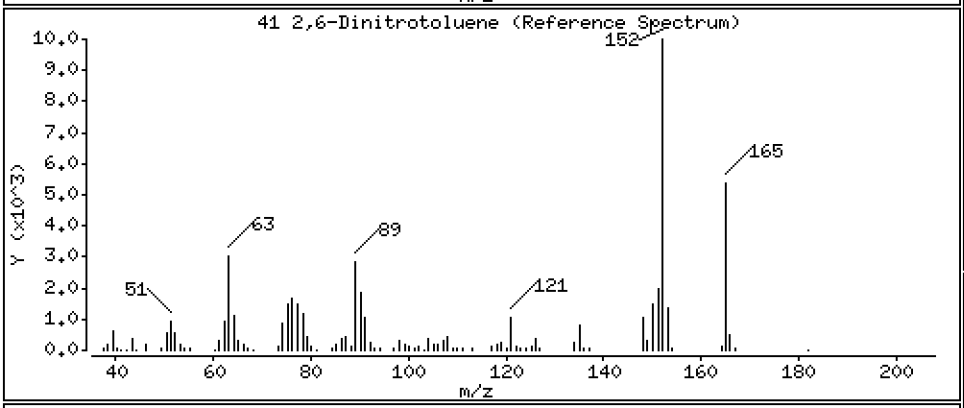
Concentration: 5.298 ug/mL

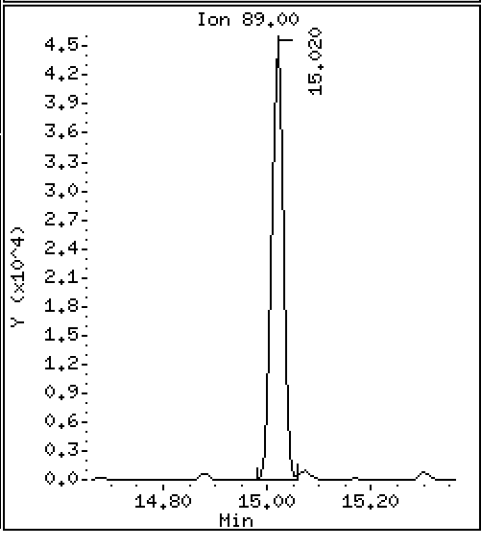


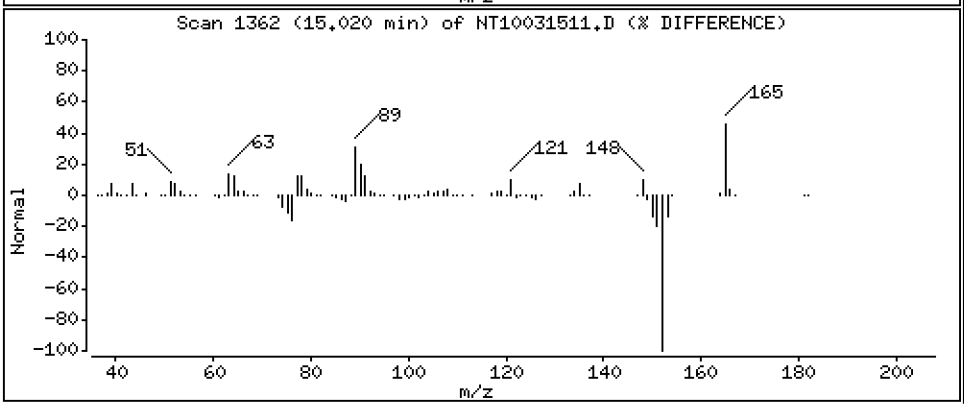












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

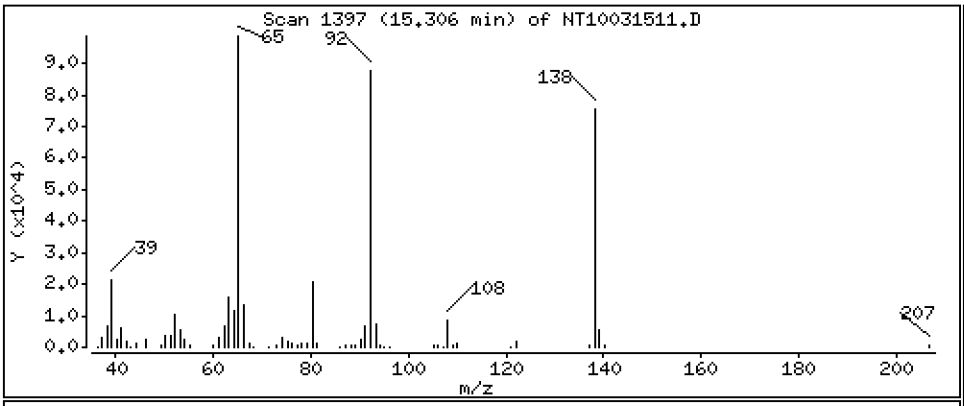
Operator: VTS

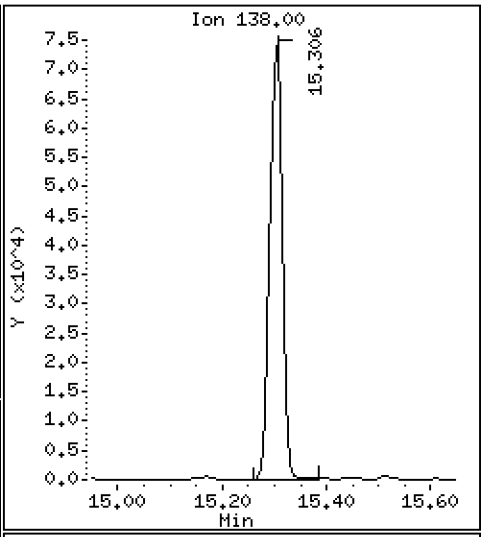
Column phase: ZB-5msi

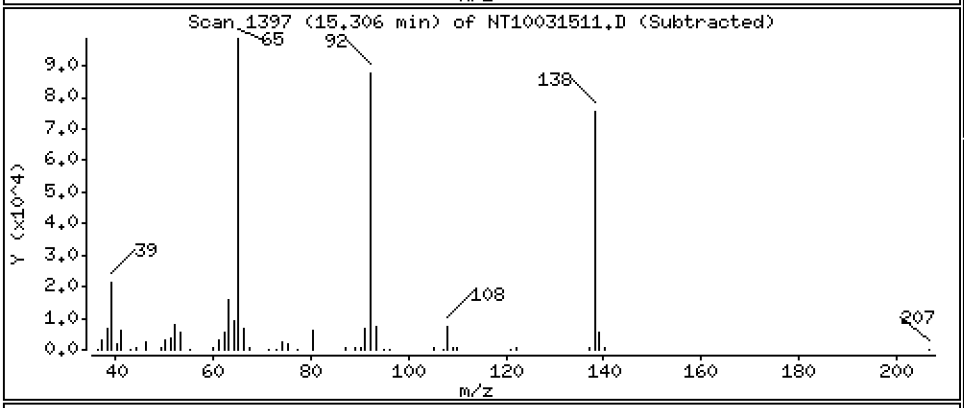
Column diameter: 0.25

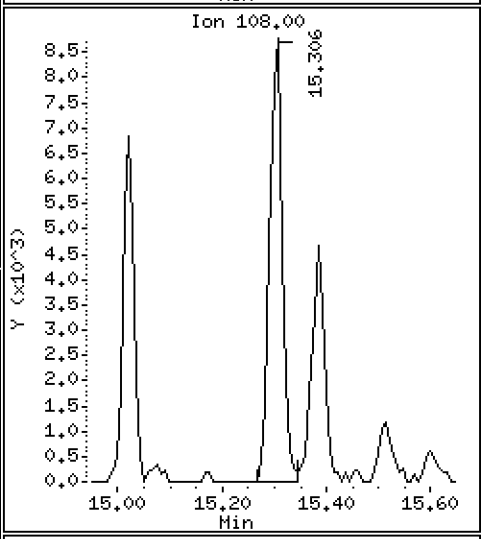
43 3-Nitroaniline

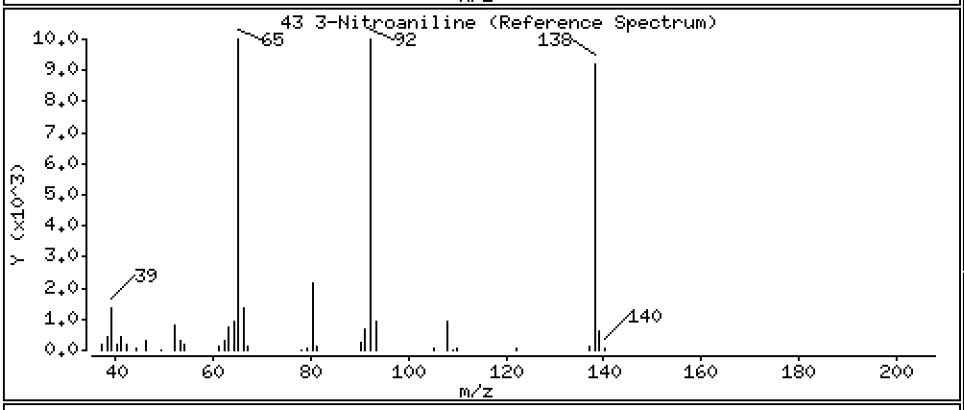
Concentration: 5.014 ug/mL

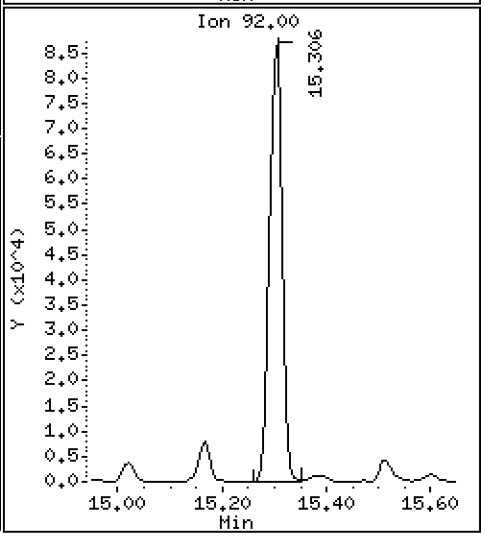


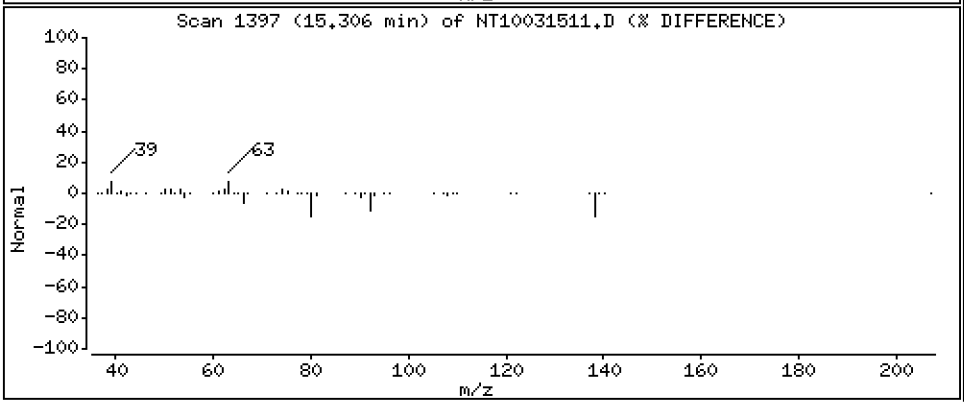












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

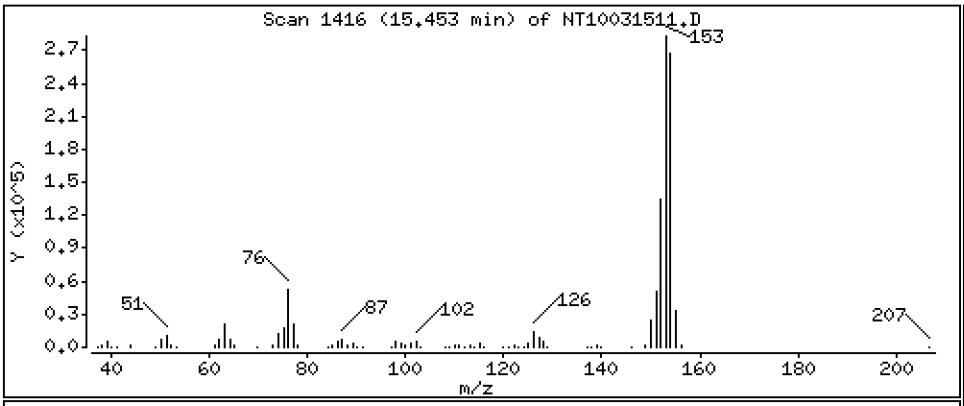
Operator: VTS

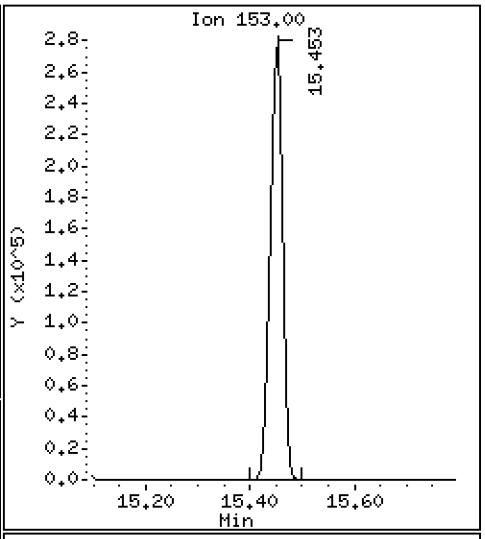
Column phase: ZB-5msi

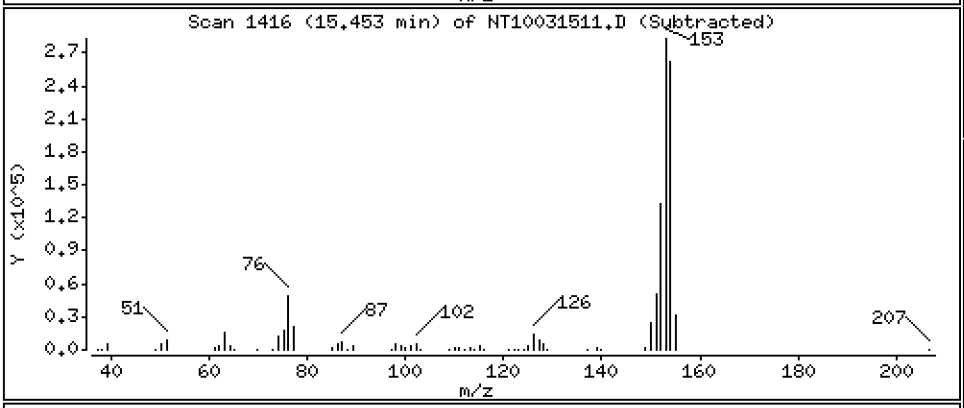
Column diameter: 0.25

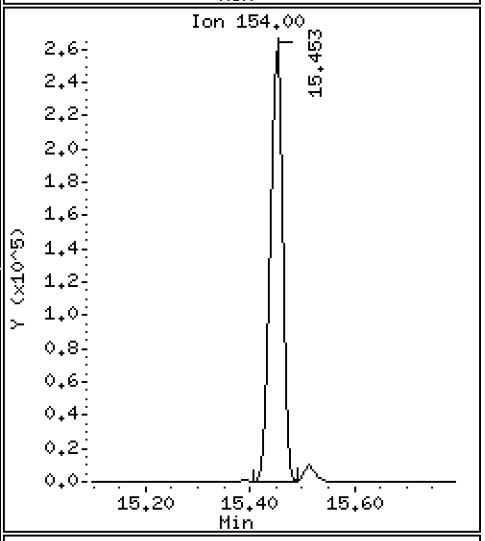
44 Acenaphthene

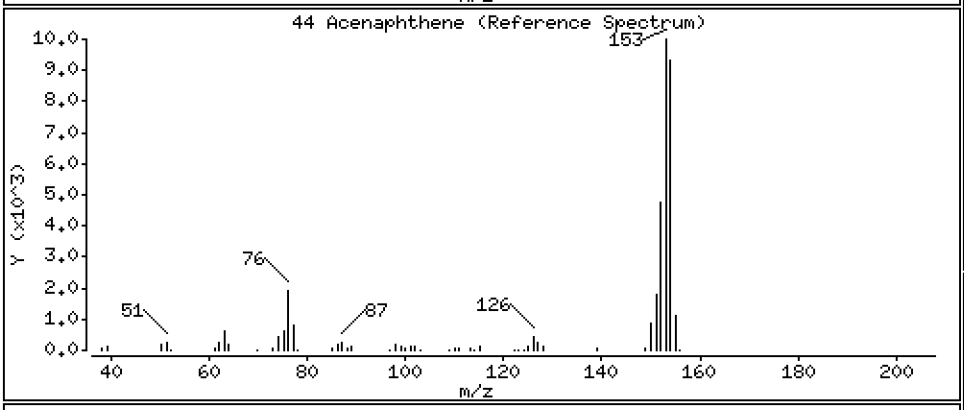
Concentration: 4.776 ug/mL

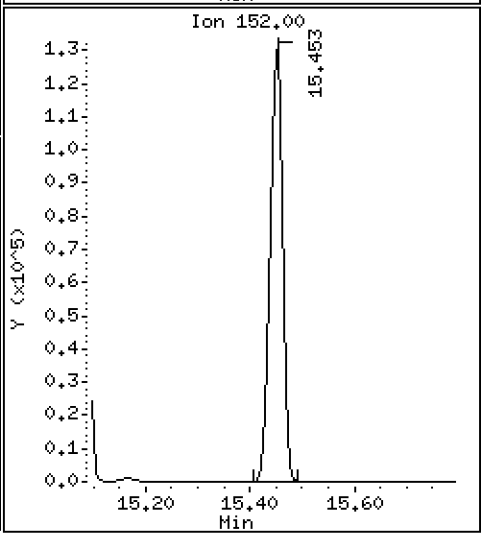


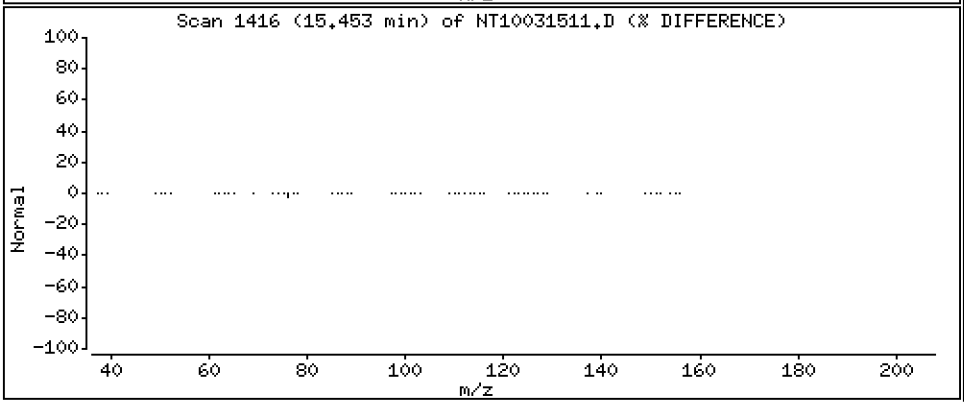












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

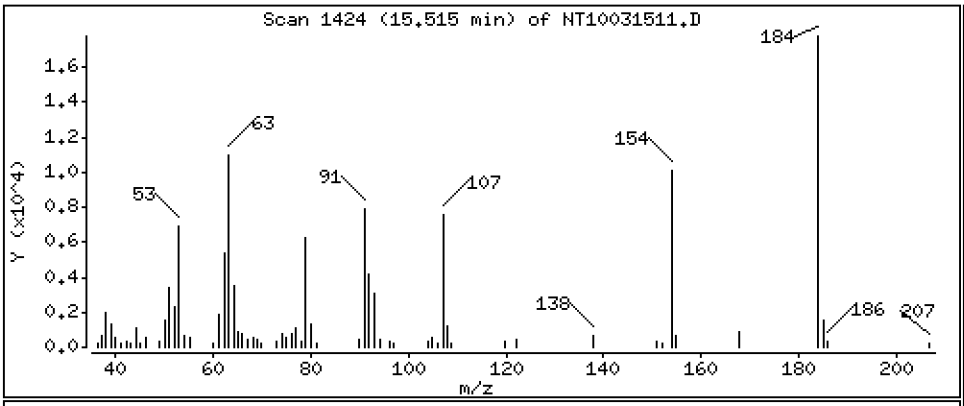
Operator: VTS

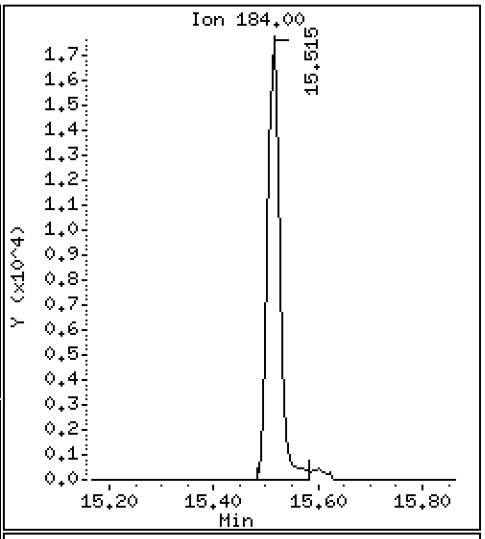
Column phase: ZB-5msi

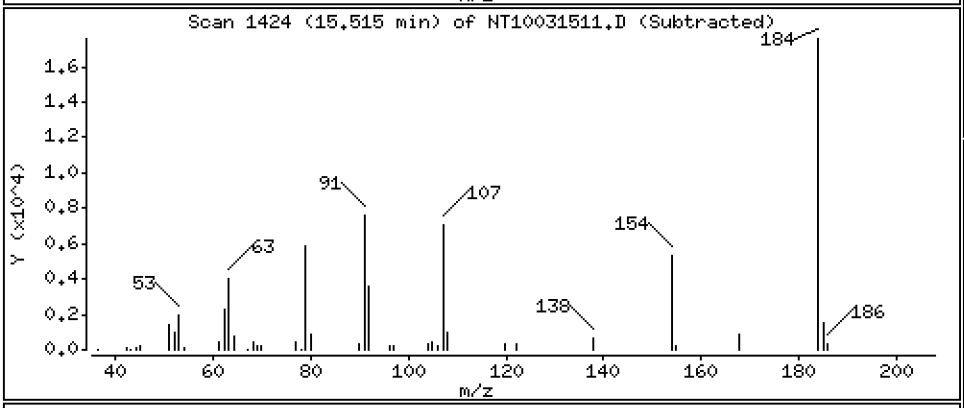
Column diameter: 0.25

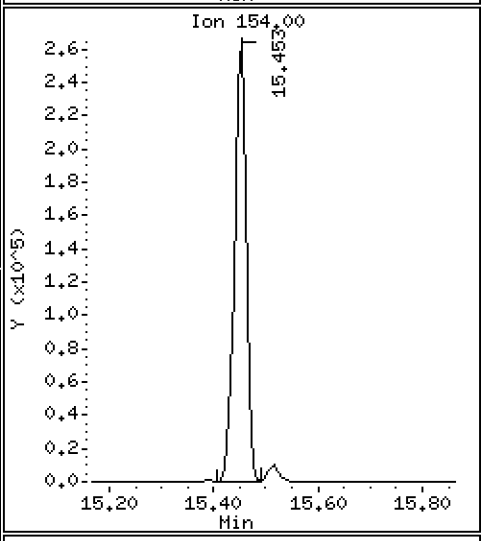
45 2,4-Dinitrophenol

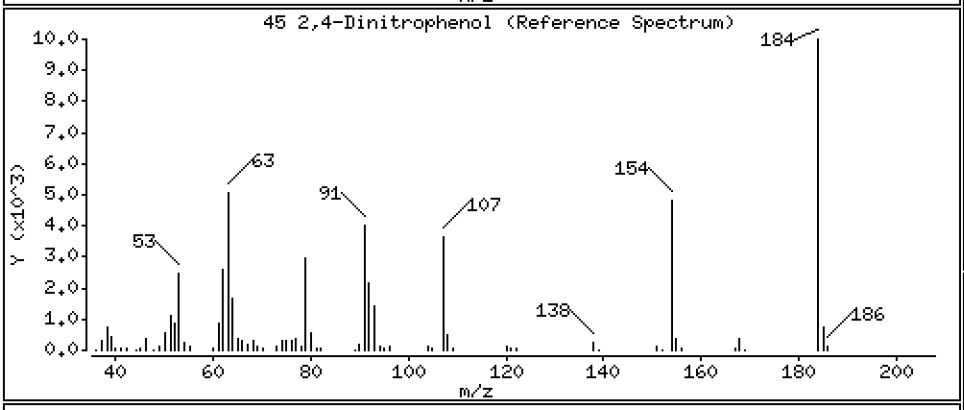
Concentration: 2.124 ug/mL

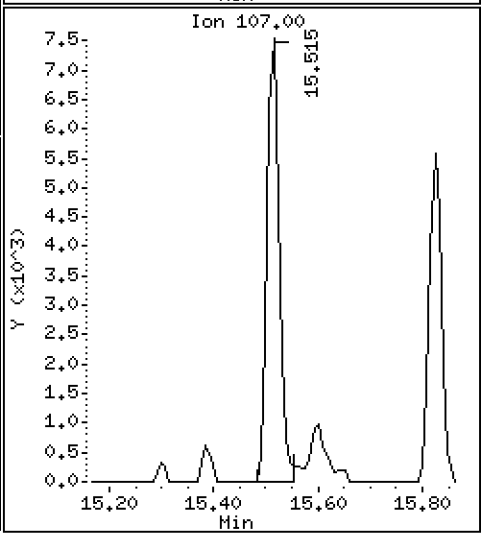


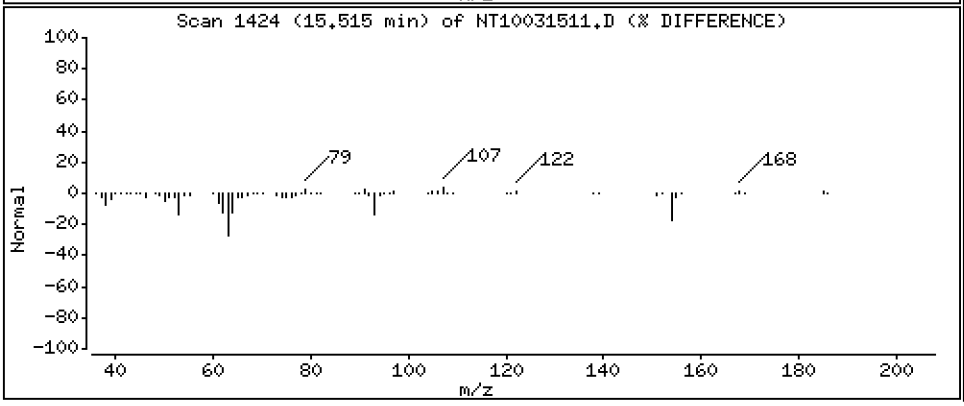












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

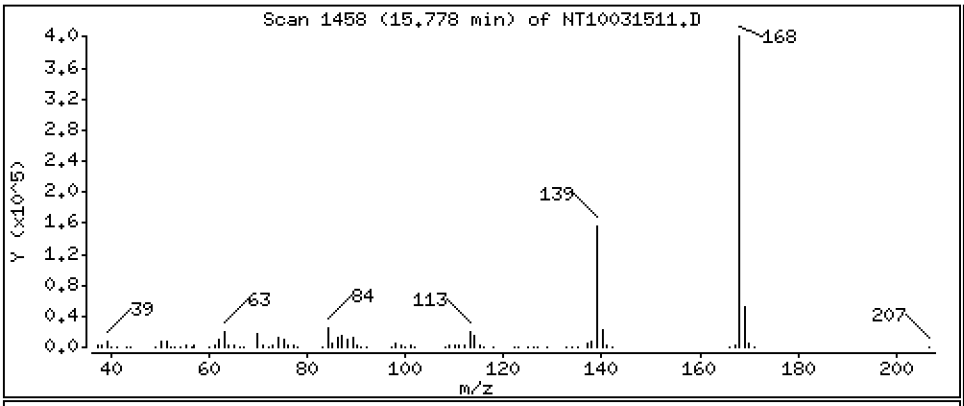
Operator: VTS

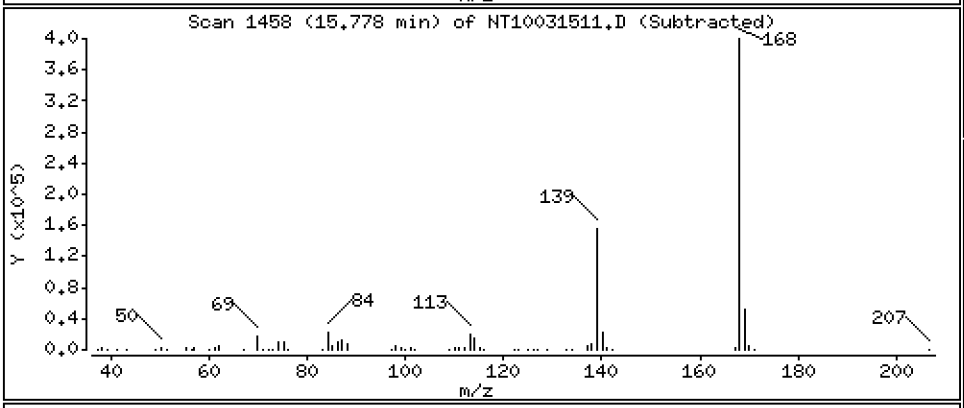
Column phase: ZB-5msi

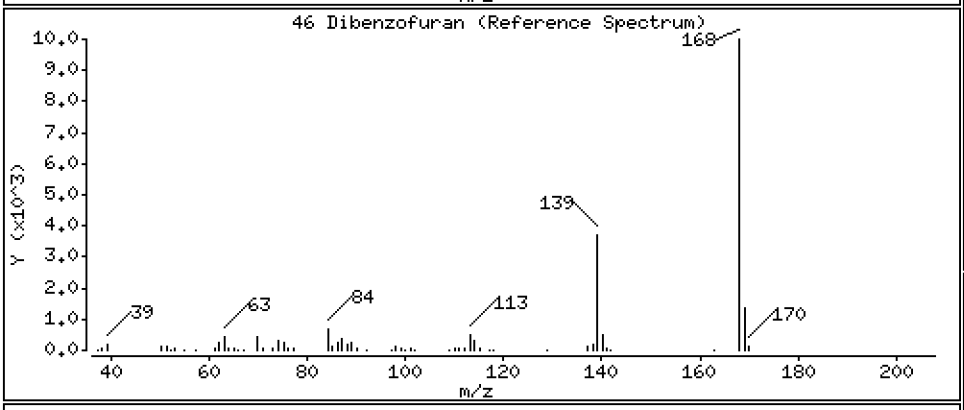
Column diameter: 0.25

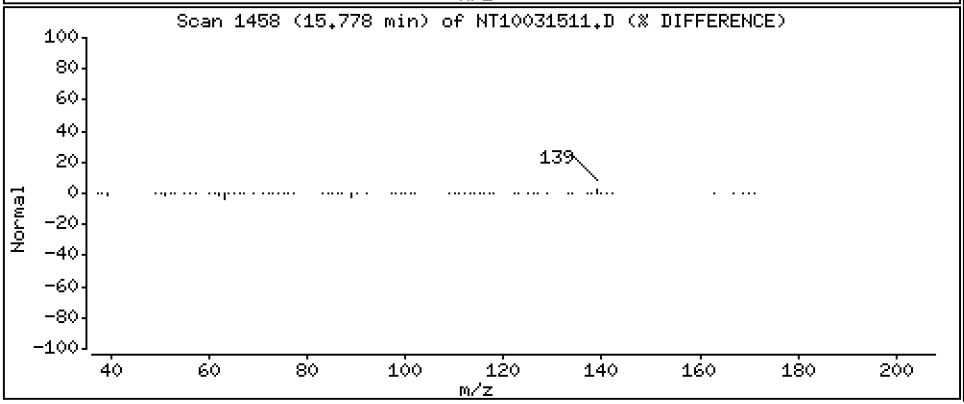
46 Dibenzofuran

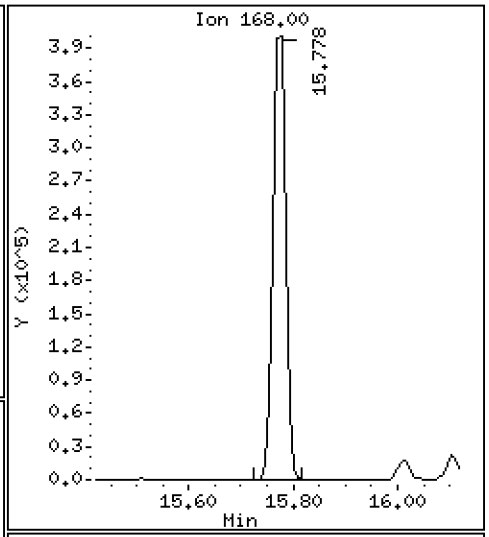
Concentration: 4.648 ug/mL

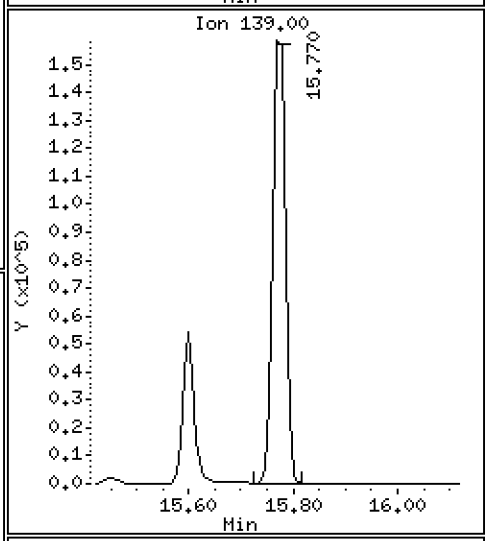


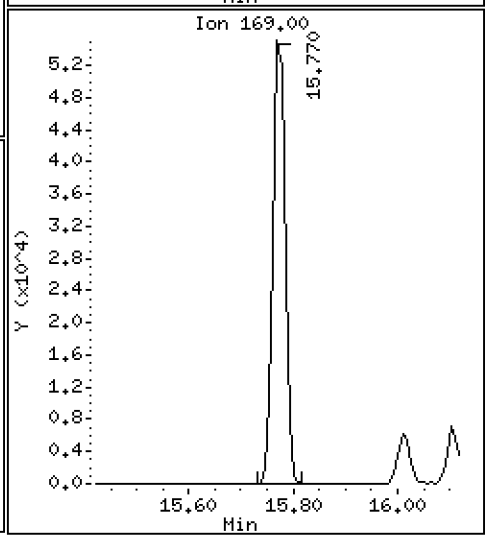












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

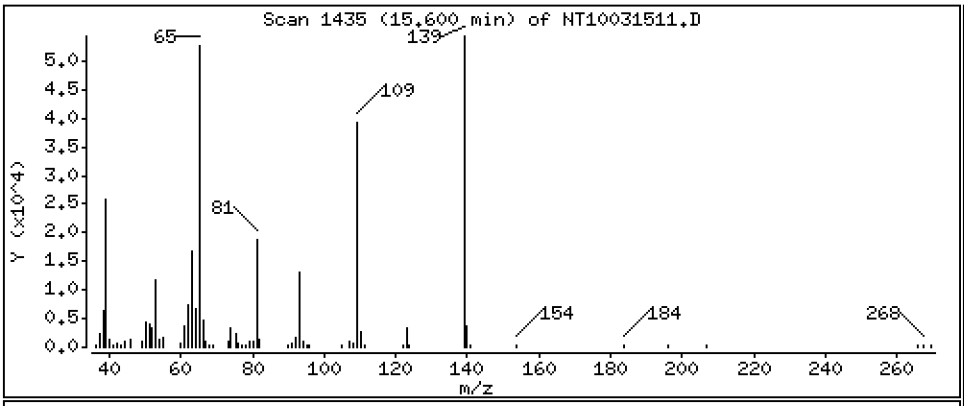
Operator: VTS

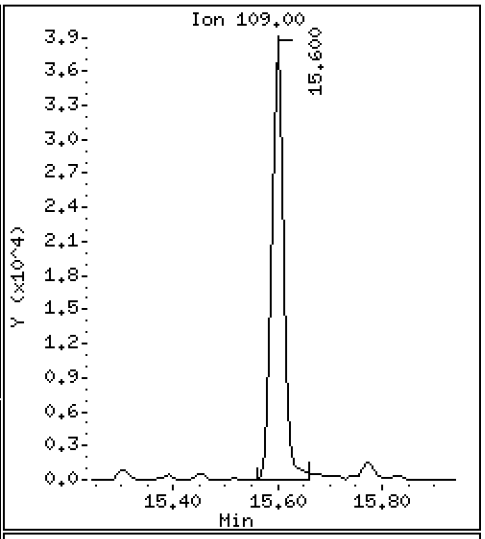
Column phase: ZB-5msi

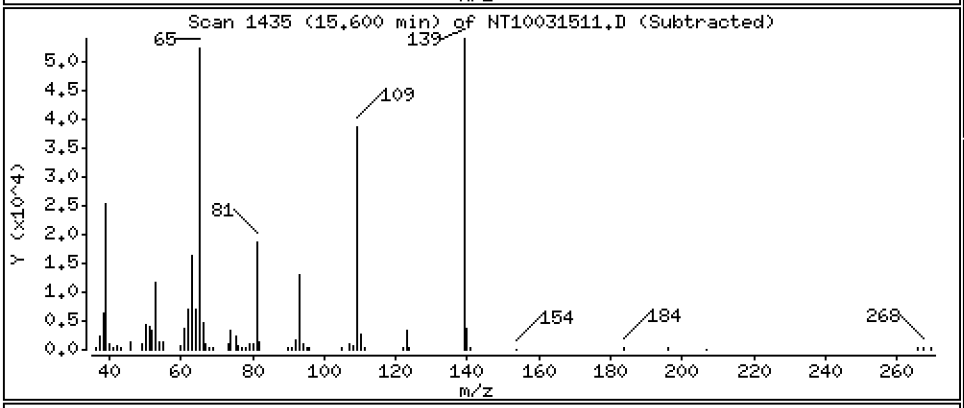
Column diameter: 0.25

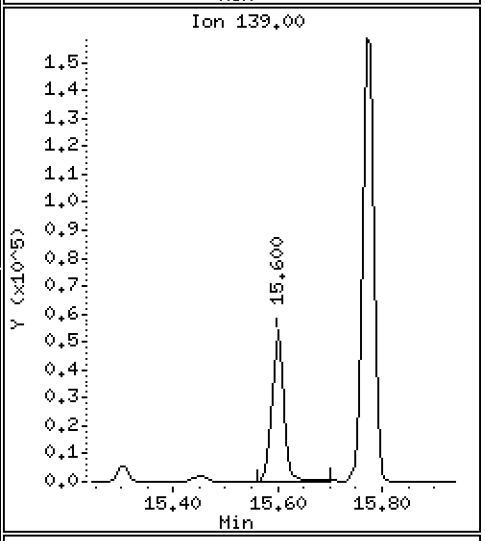
47 4-Nitrophenol

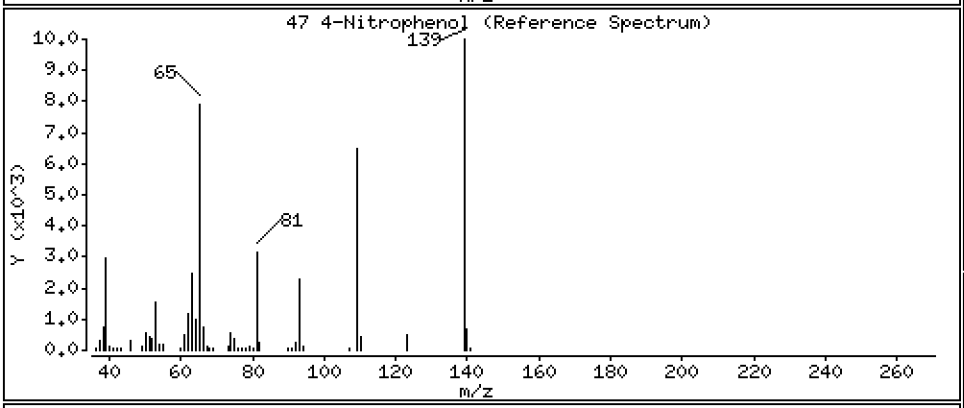
Concentration: 3.966 ug/mL

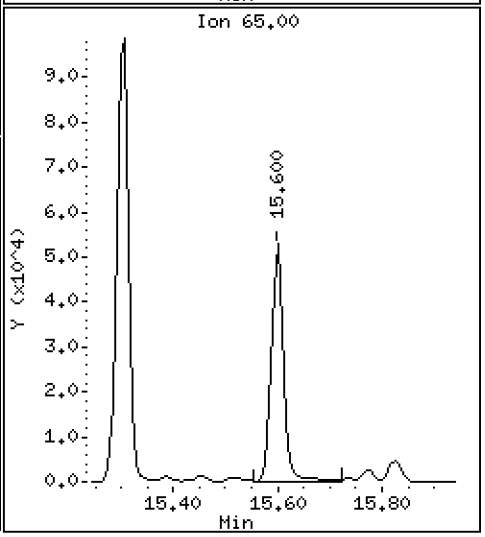


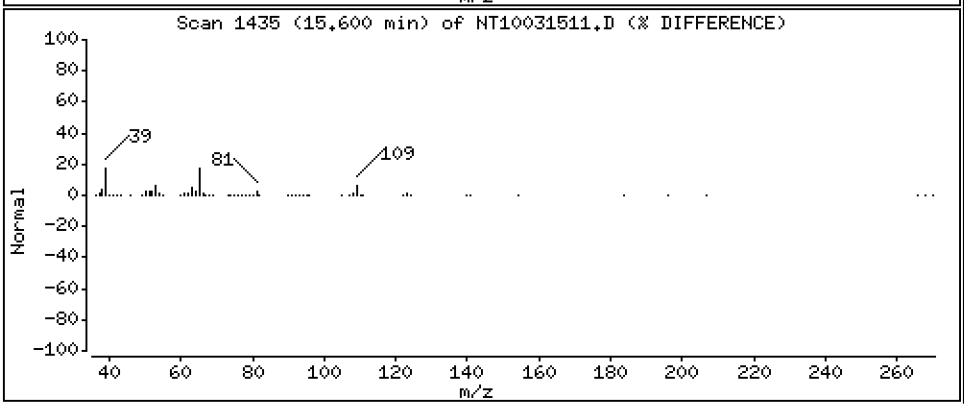












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

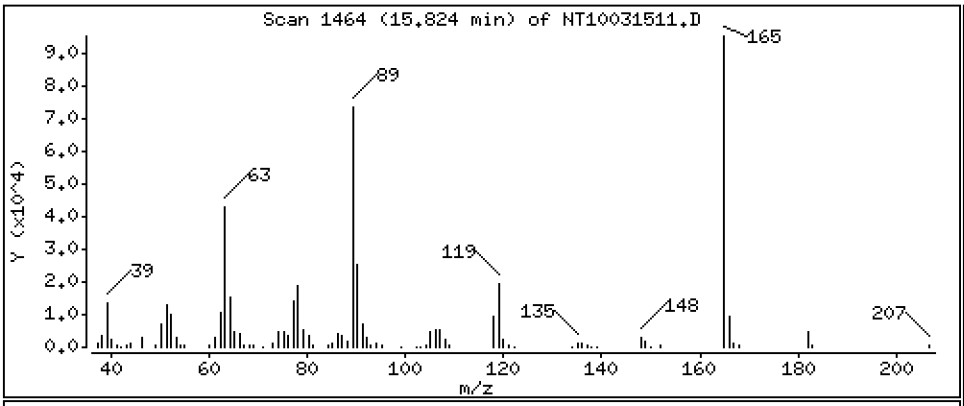
Operator: VTS

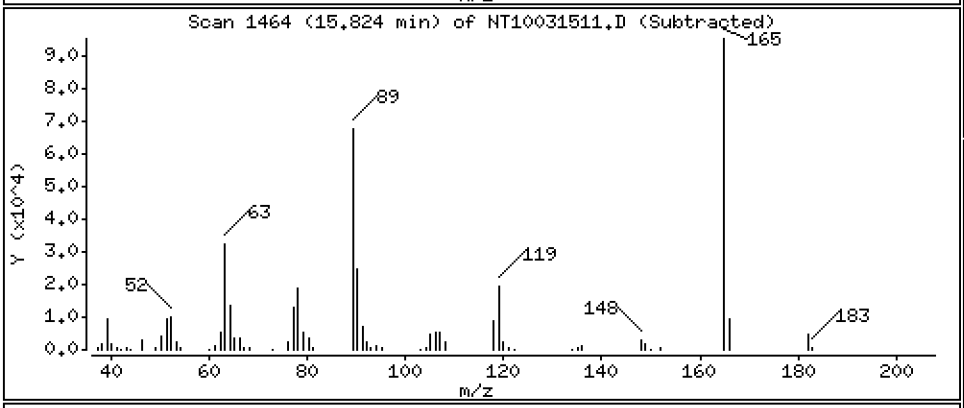
Column phase: ZB-5msi

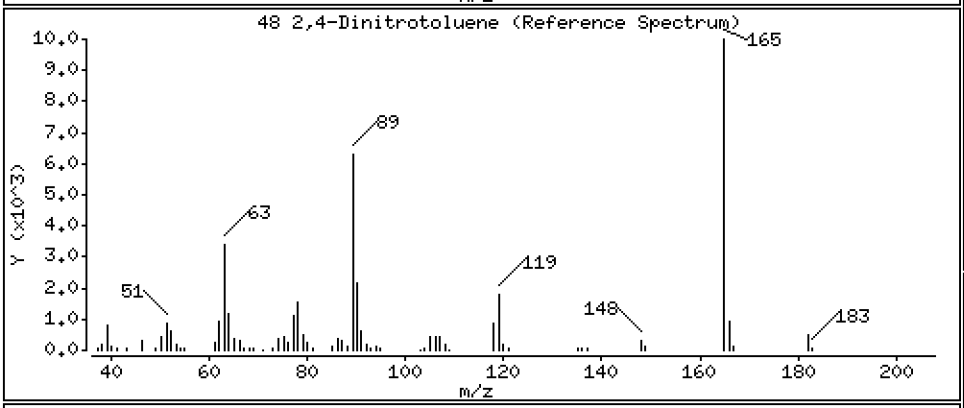
Column diameter: 0.25

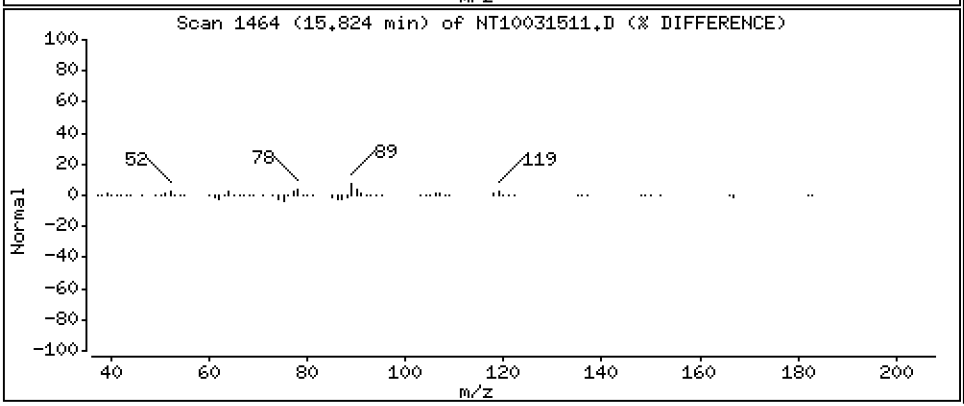
48 2,4-Dinitrotoluene

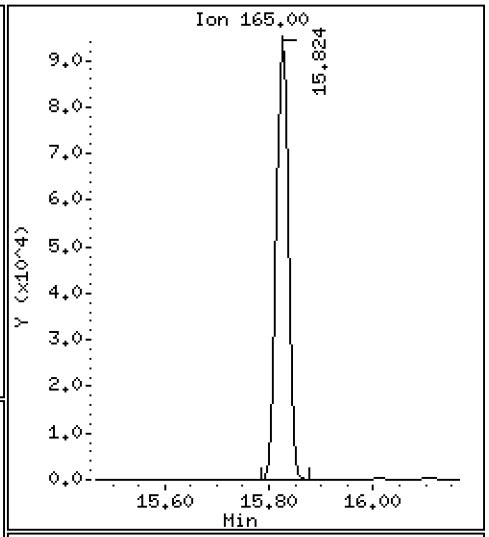
Concentration: 4.510 ug/mL

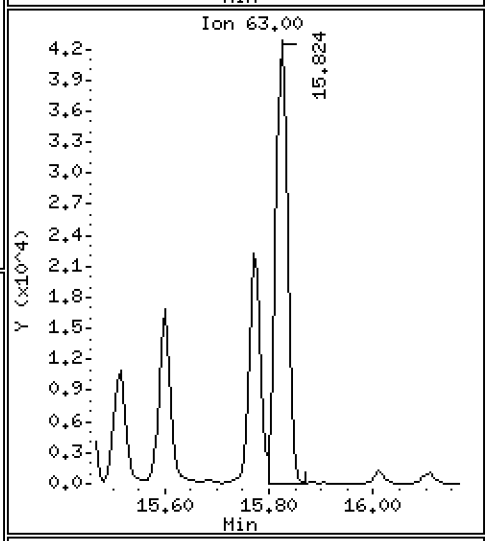


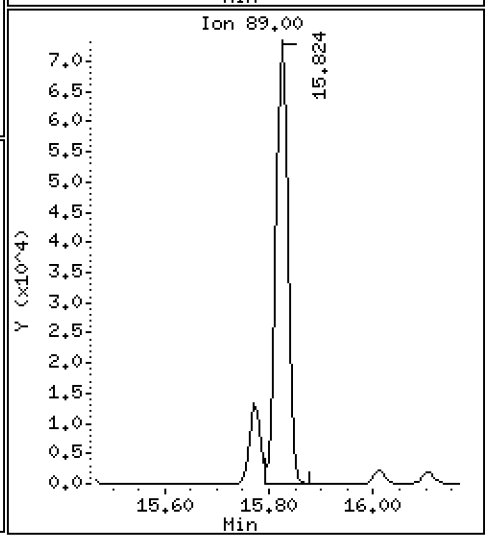












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

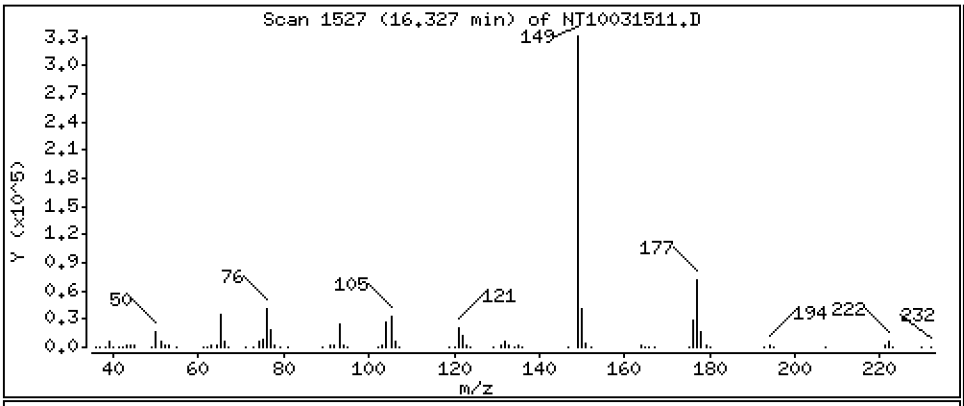
Operator: VTS

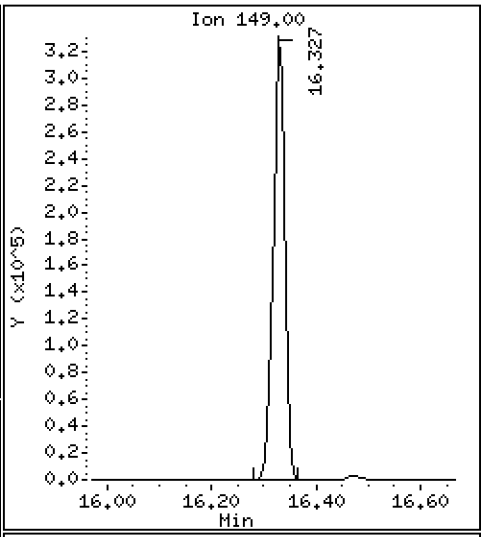
Column phase: ZB-5msi

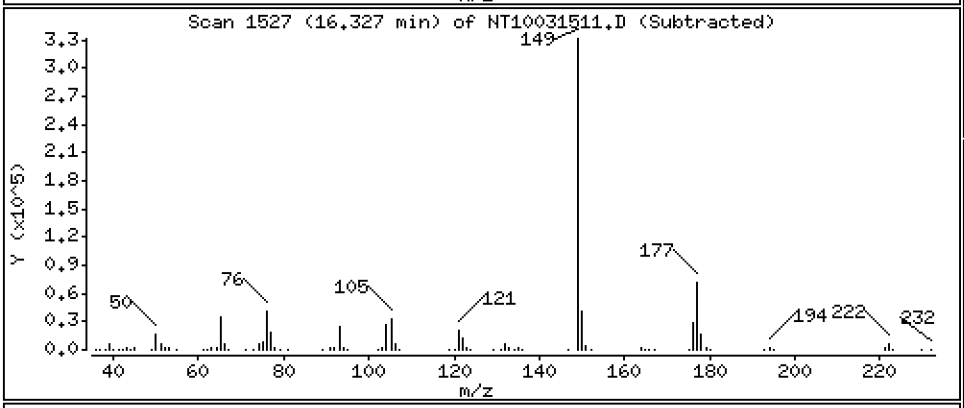
Column diameter: 0.25

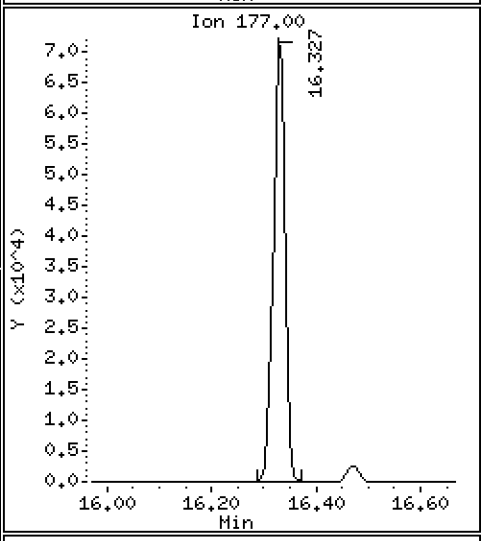
50 Diethylphthalate

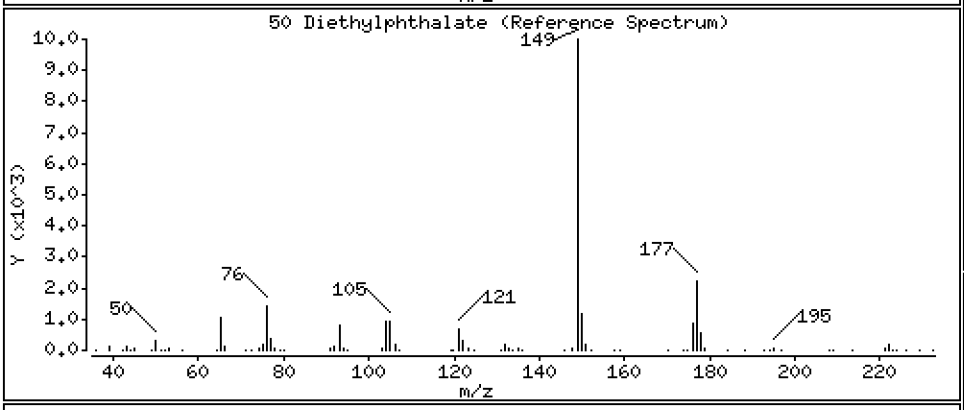
Concentration: 5.209 ug/mL

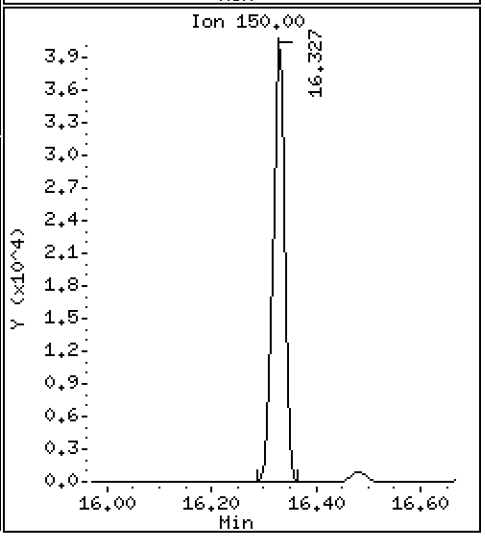


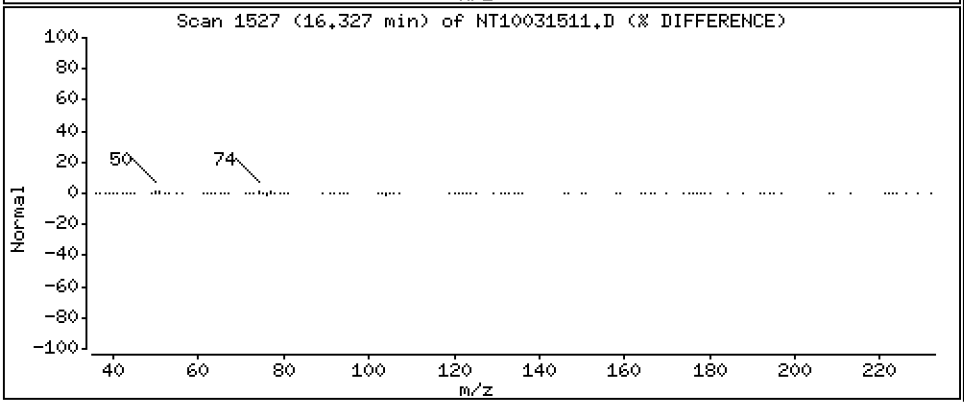












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

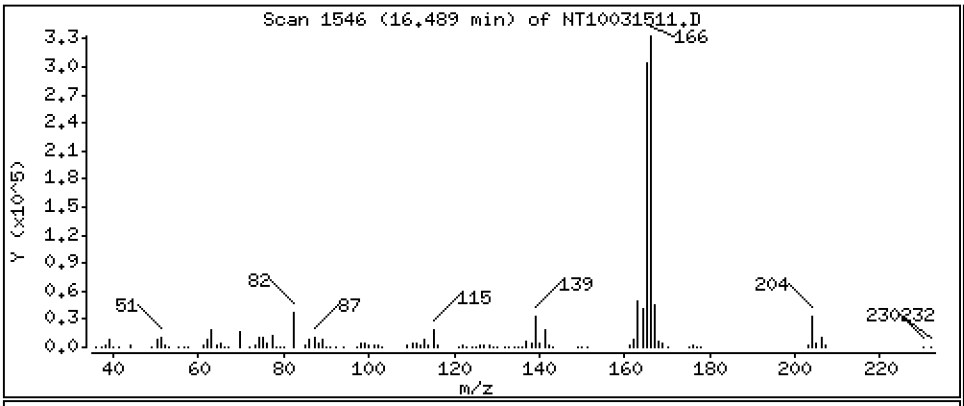
Operator: VTS

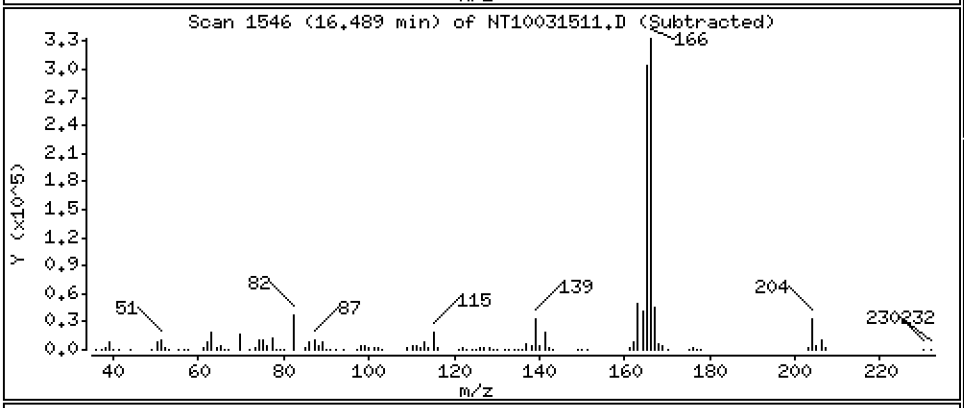
Column phase: ZB-5msi

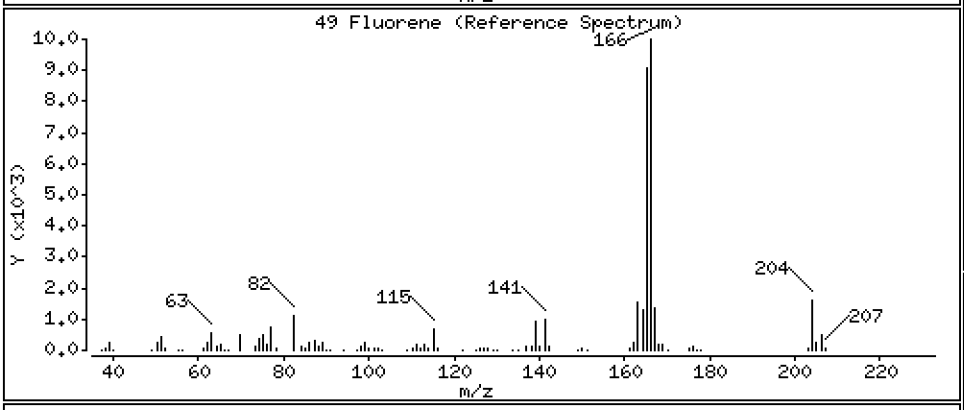
Column diameter: 0.25

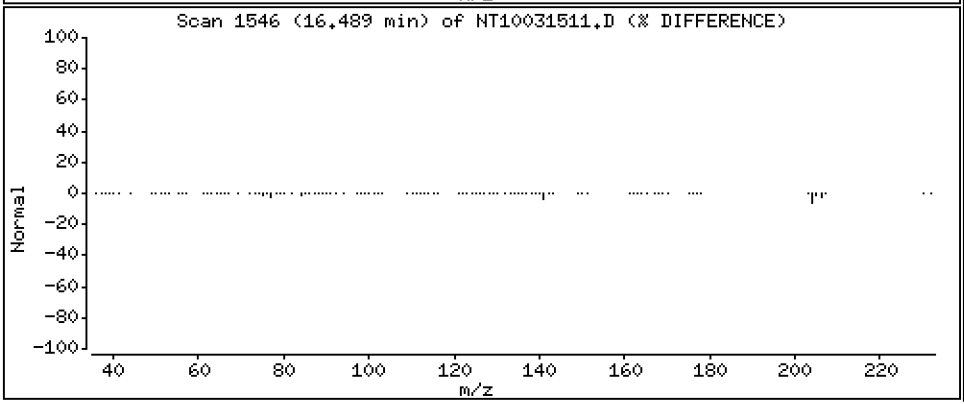
49 Fluorene

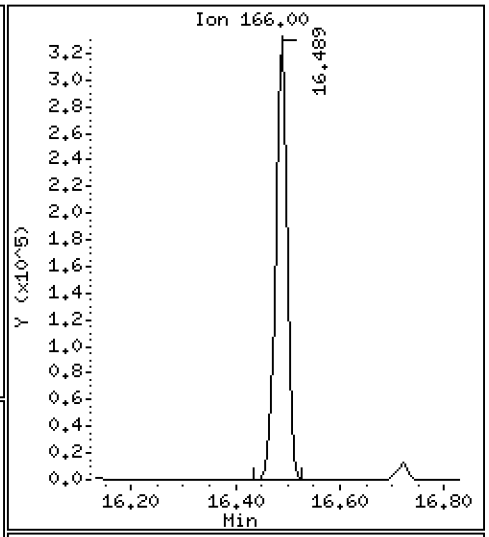
Concentration: 4.708 ug/mL

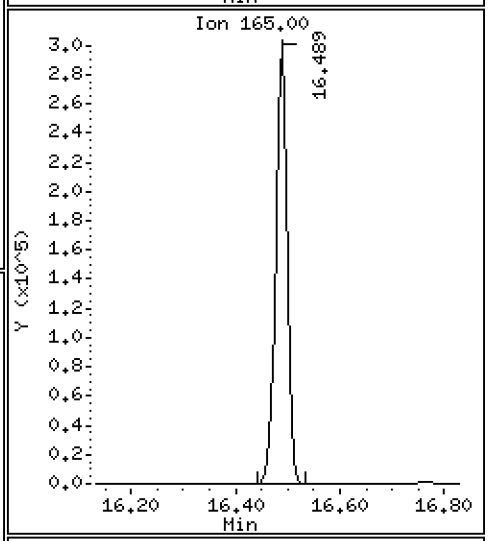


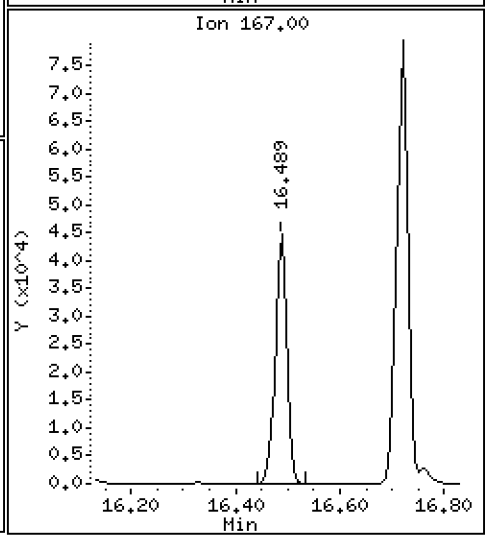












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

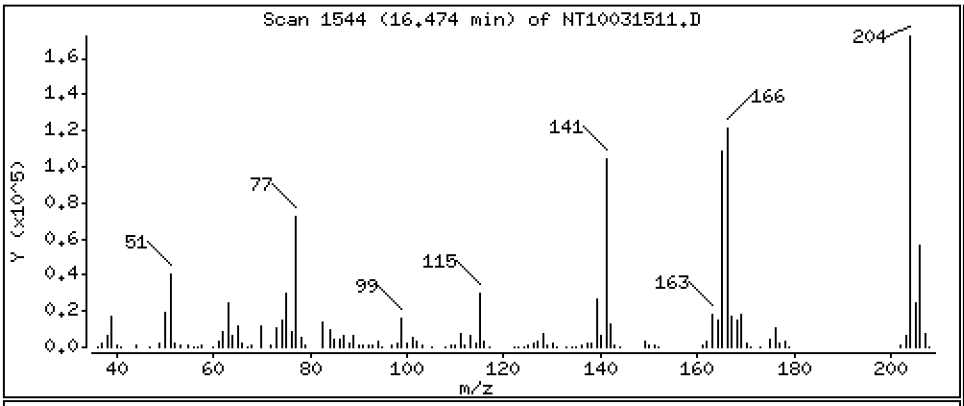
Operator: VTS

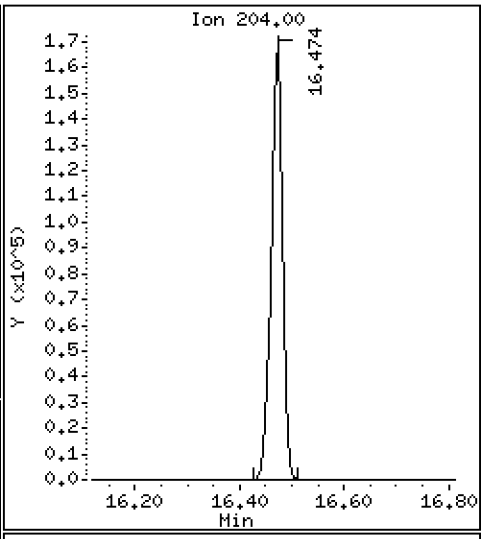
Column phase: ZB-5msi

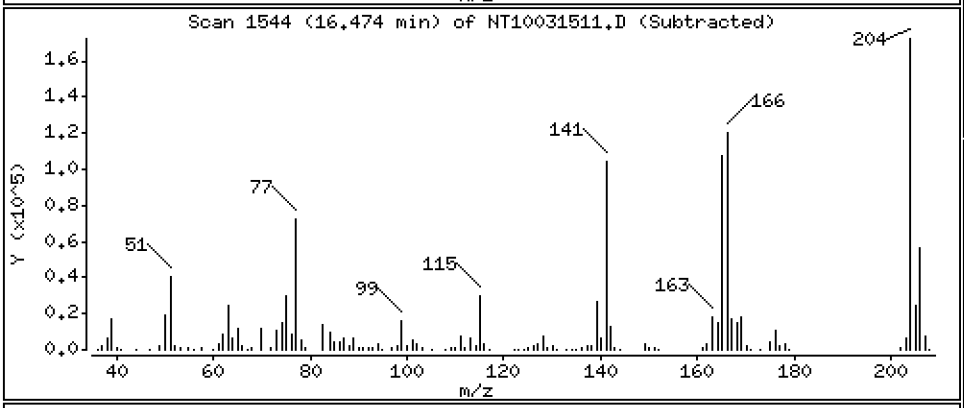
Column diameter: 0.25

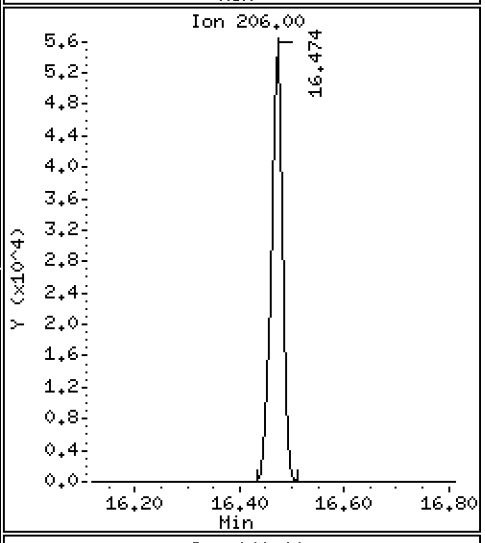
51 4-Chlorophenyl-phenylether

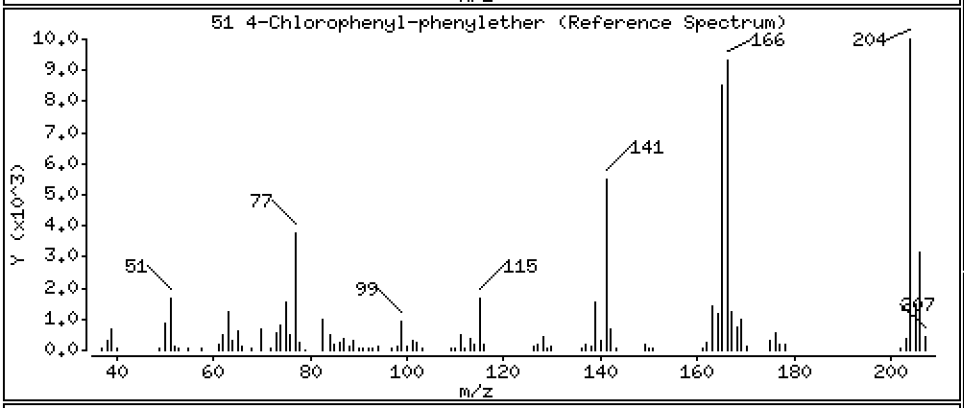
Concentration: 4.993 ug/mL

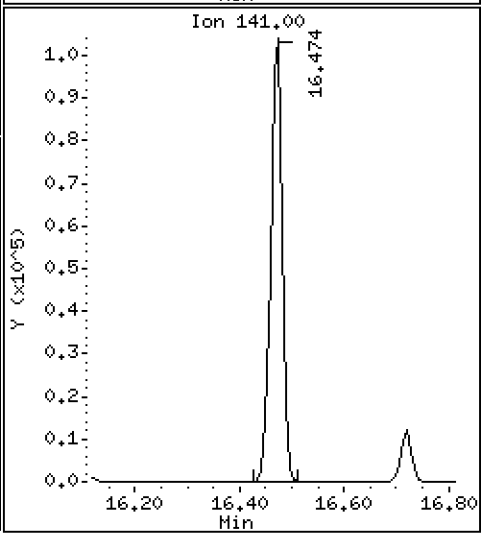


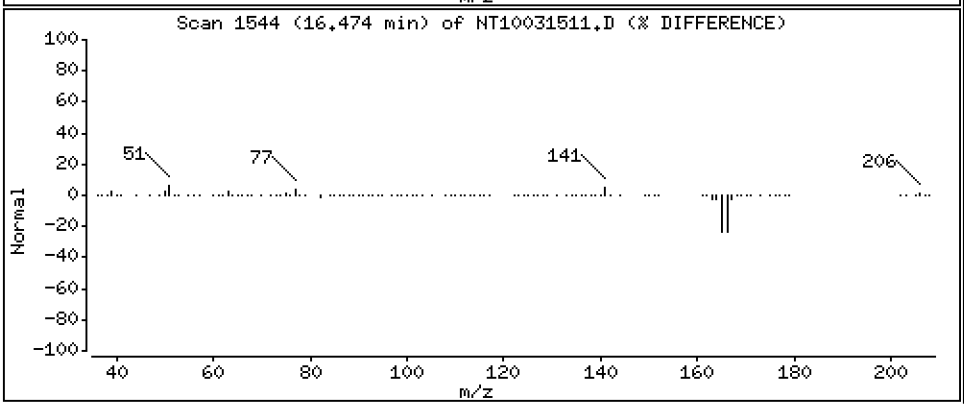












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

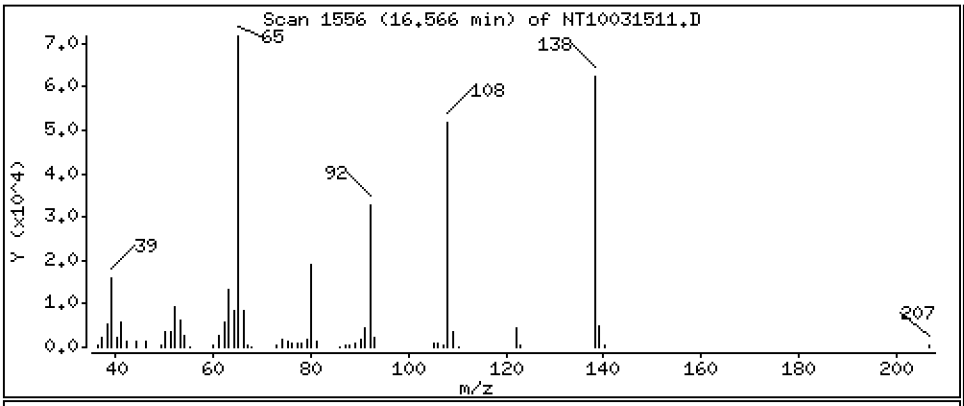
Operator: VTS

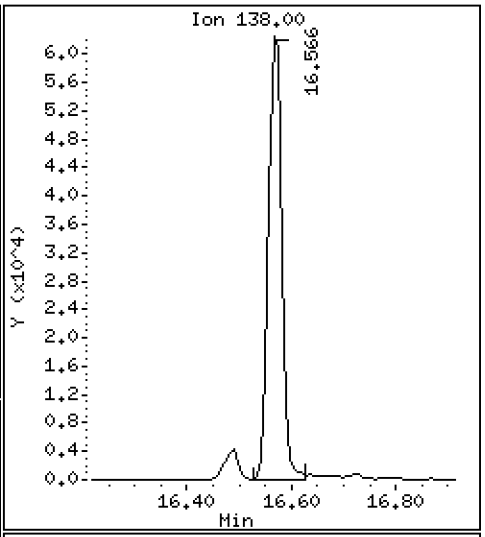
Column phase: ZB-5msi

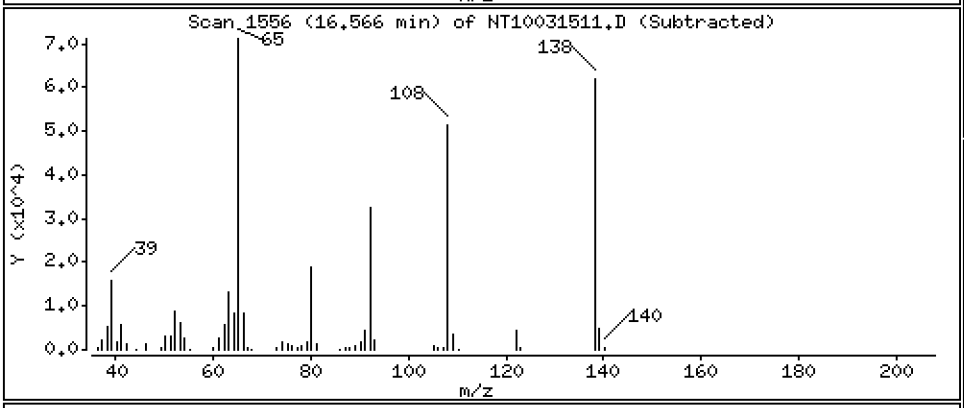
Column diameter: 0.25

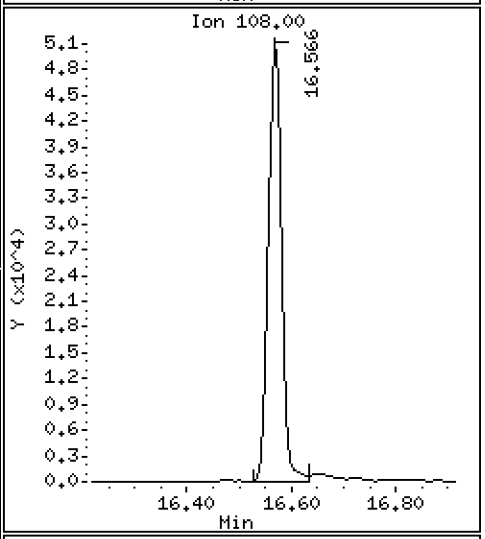
52 4-Nitroaniline

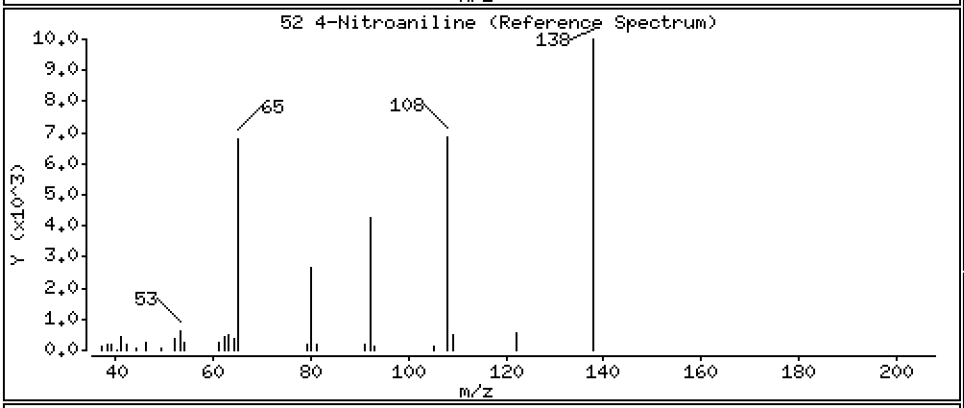
Concentration: 4.925 ug/mL

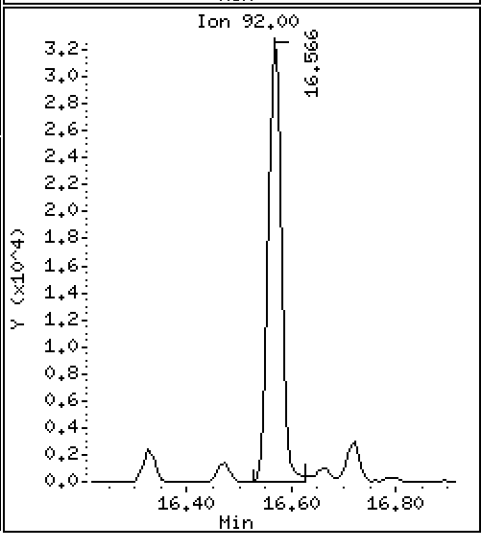


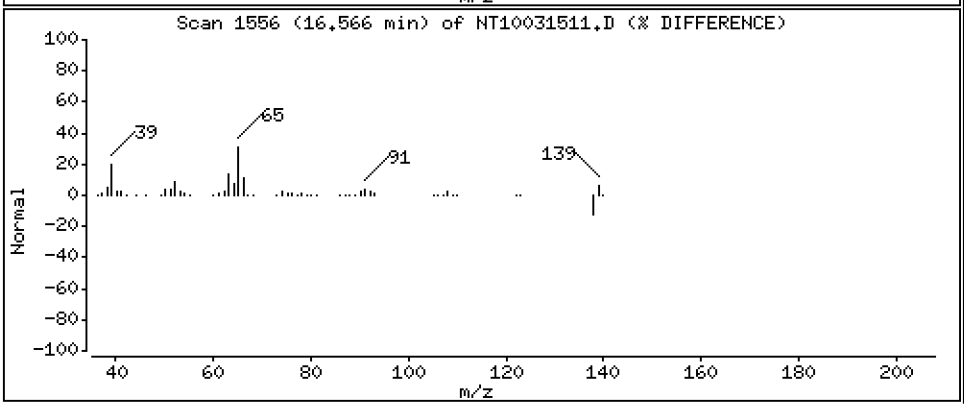












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

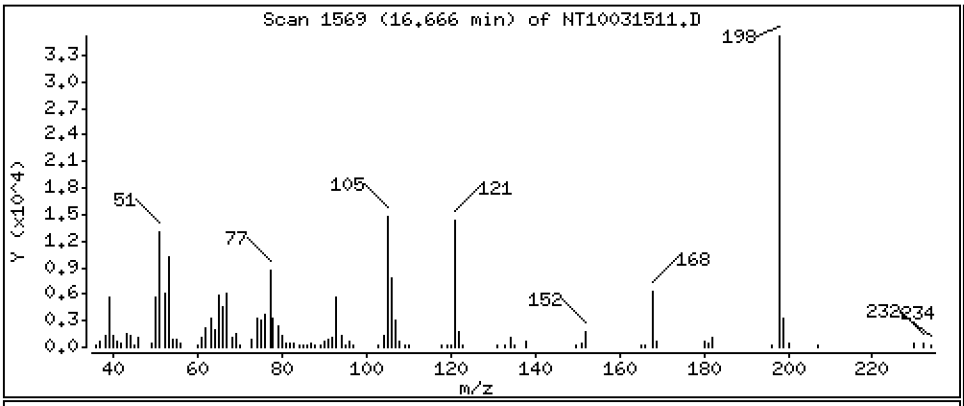
Operator: VTS

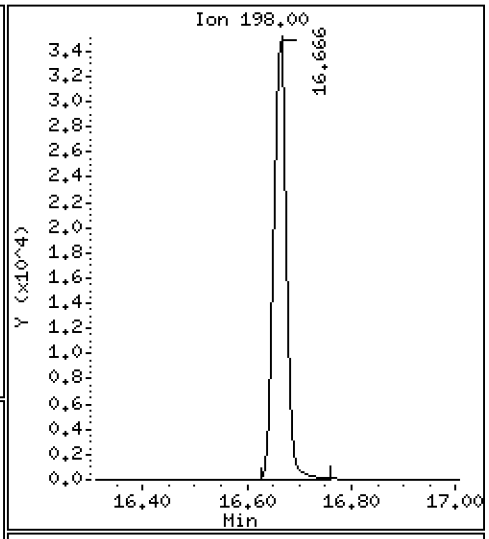
Column phase: ZB-5msi

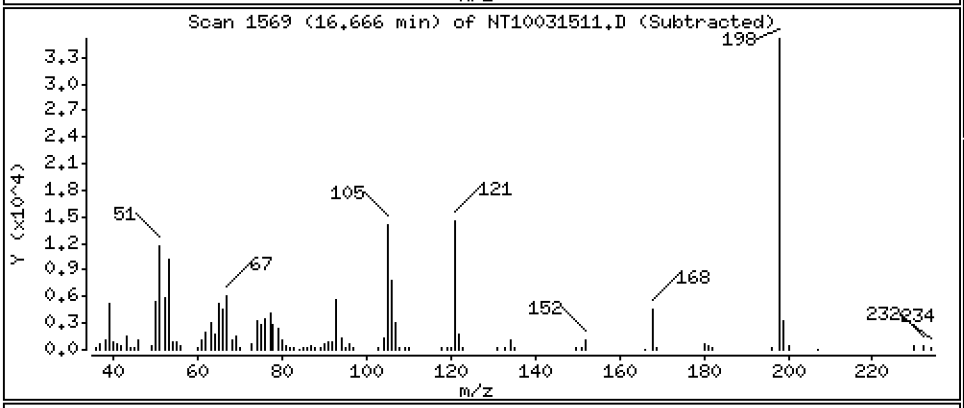
Column diameter: 0.25

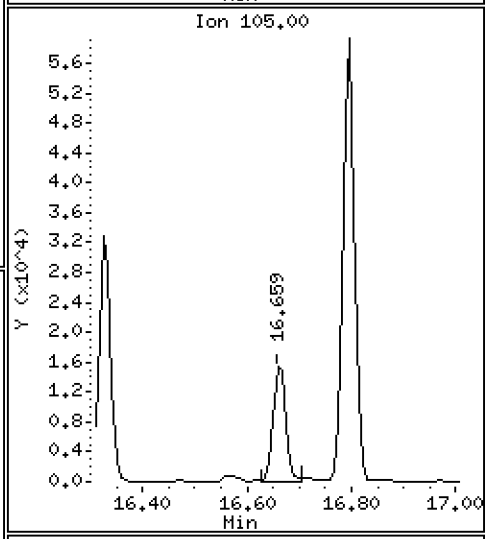
53 4,6-Dinitro-2-methylphenol

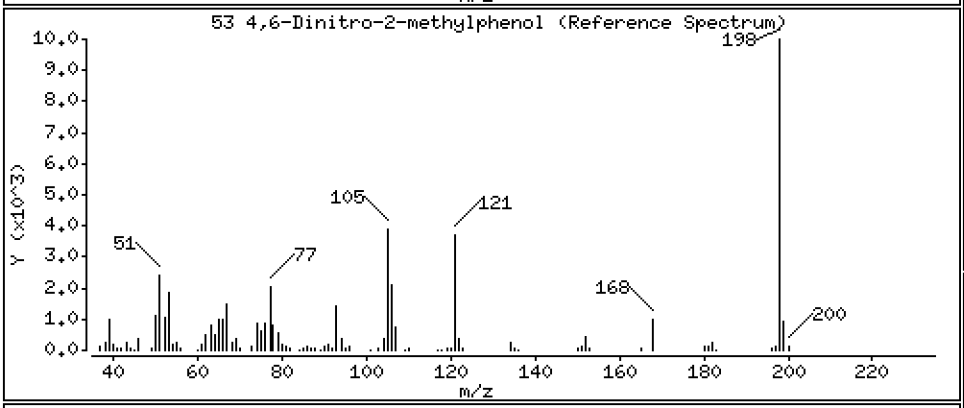
Concentration: 3.515 ug/mL

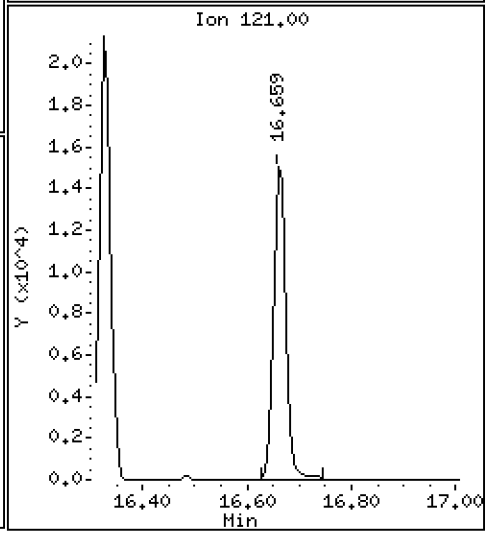


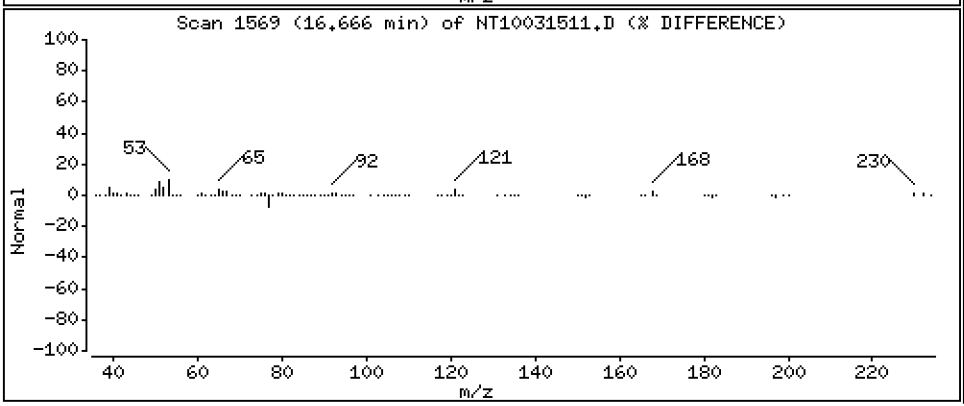












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

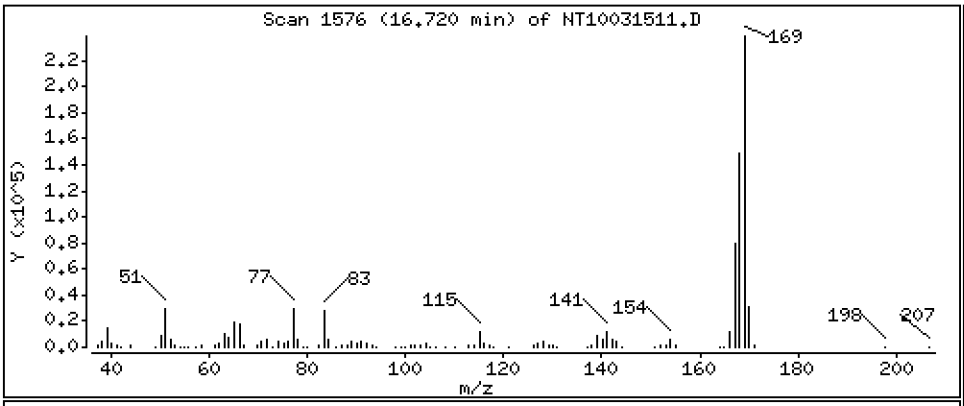
Operator: VTS

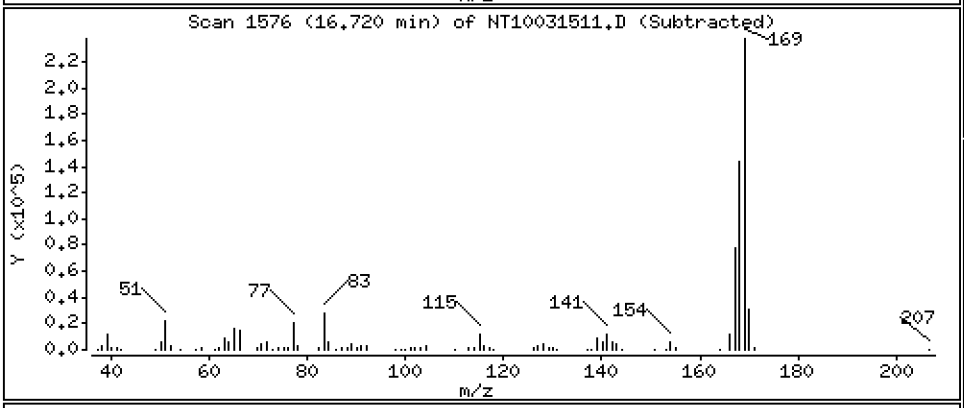
Column phase: ZB-5msi

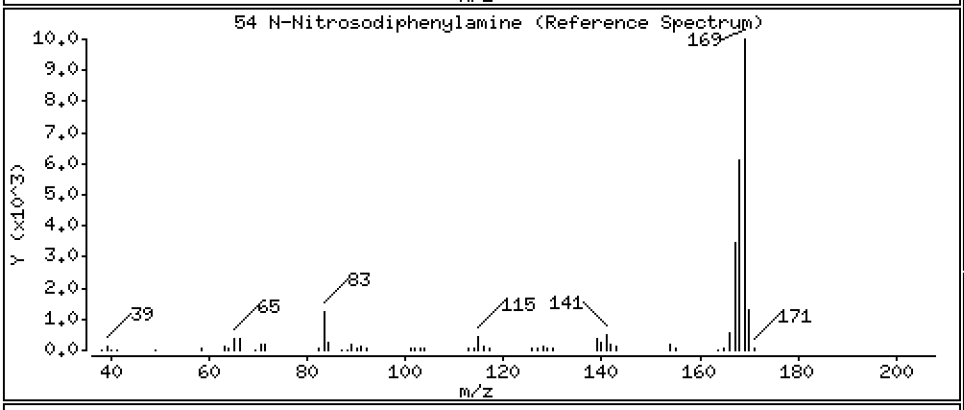
Column diameter: 0.25

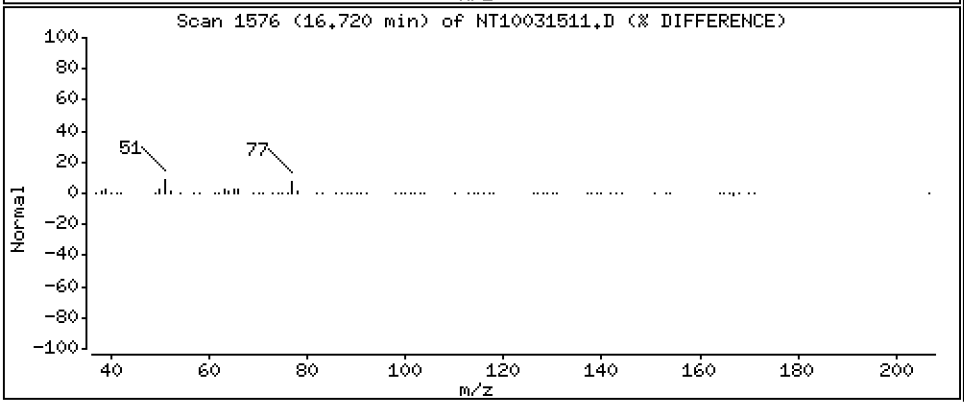
54 N-Nitrosodiphenylamine

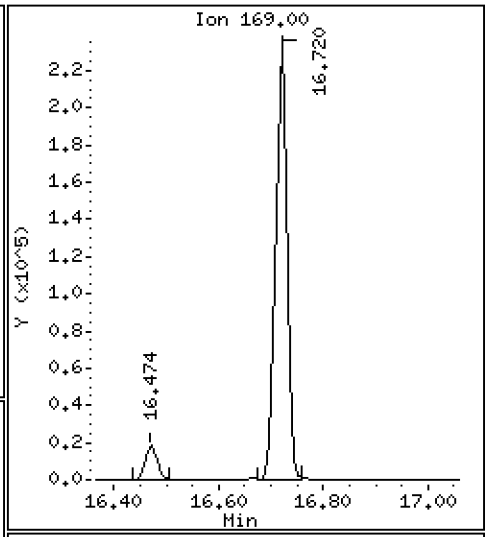
Concentration: 4.802 ug/mL

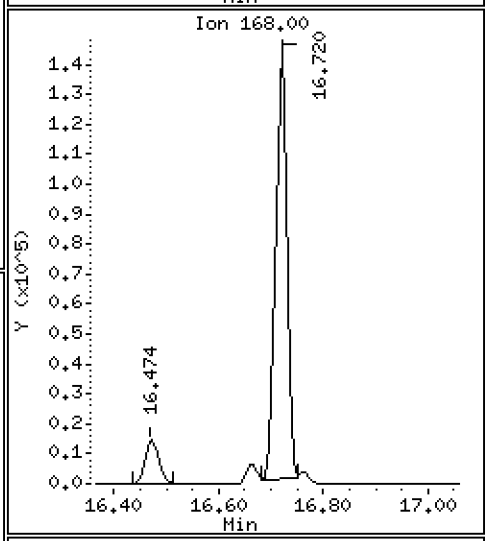


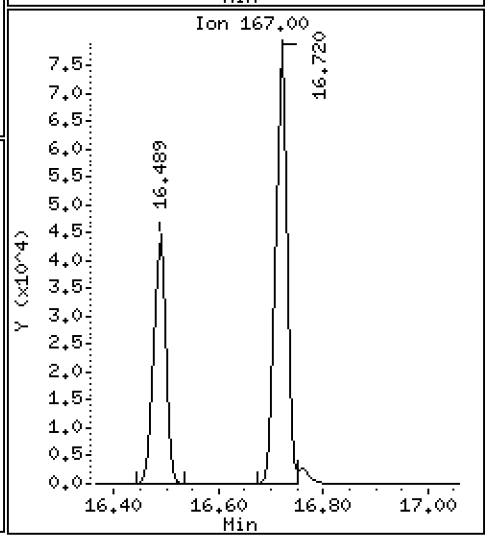












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

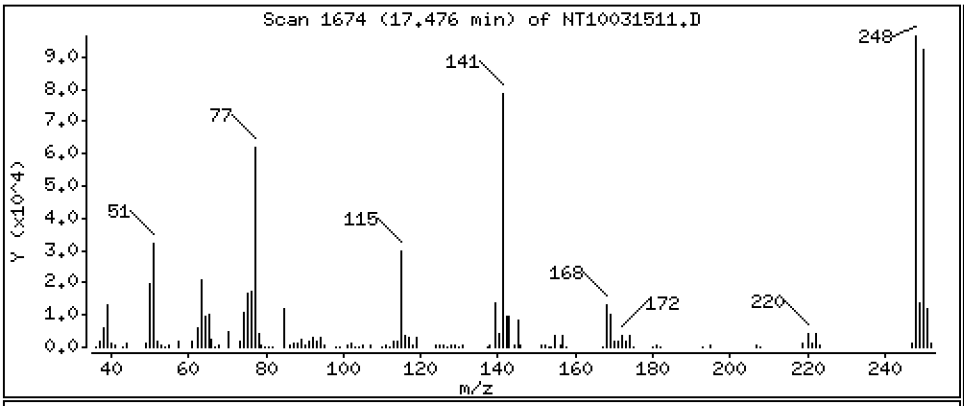
Operator: VTS

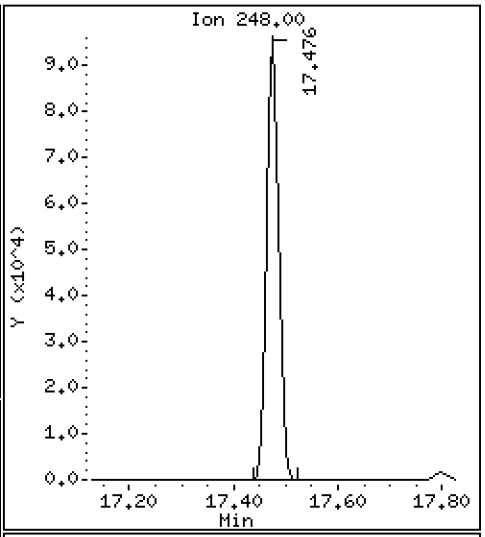
Column phase: ZB-5msi

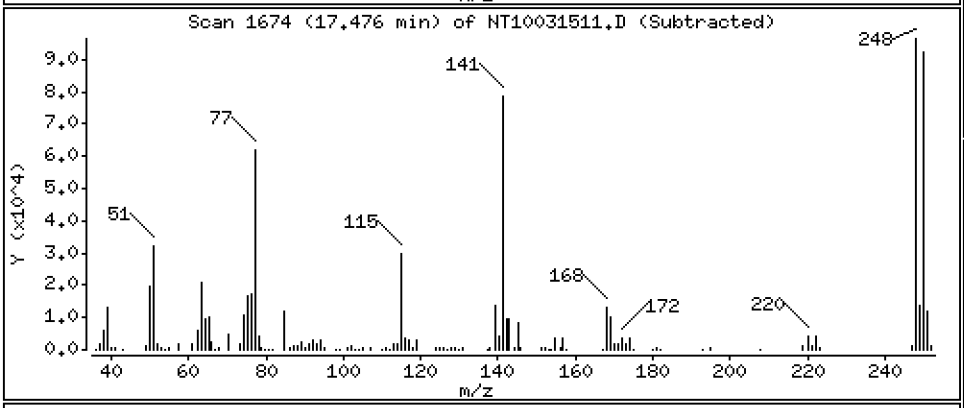
Column diameter: 0.25

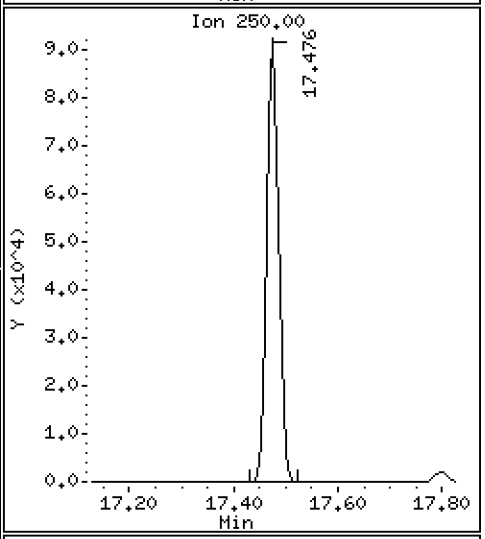
56 4-Bromophenyl-phenylether

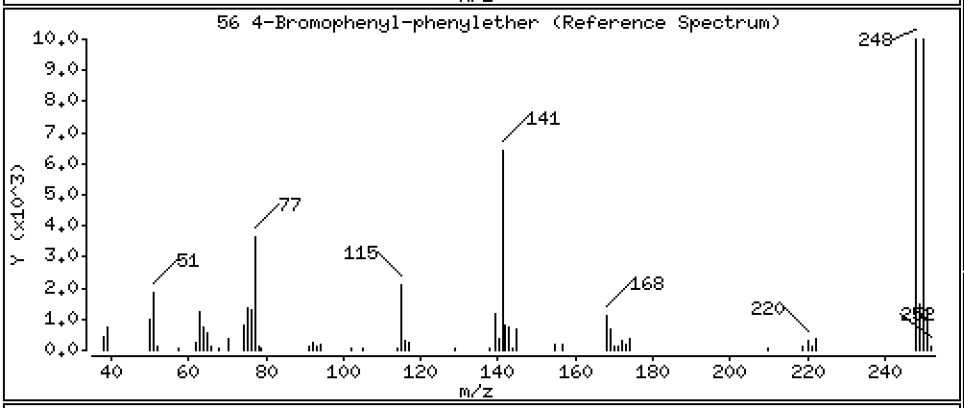
Concentration: 5.060 ug/mL

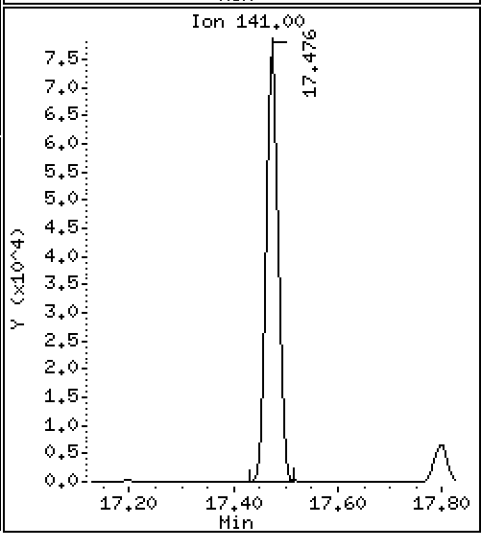


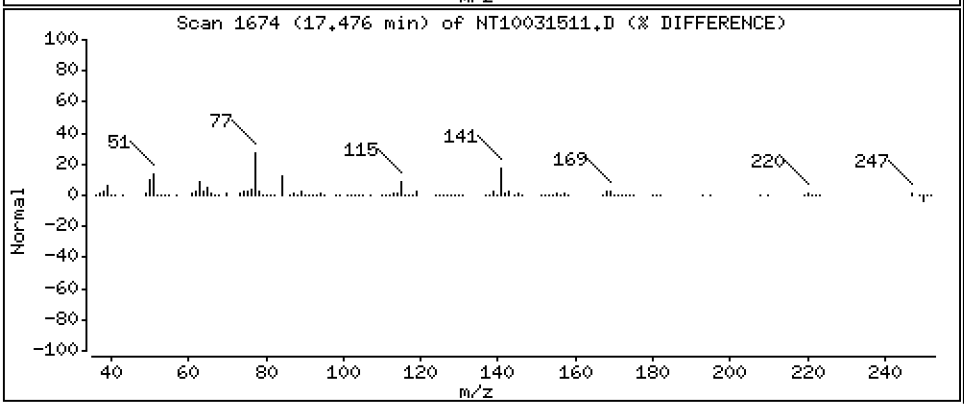












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

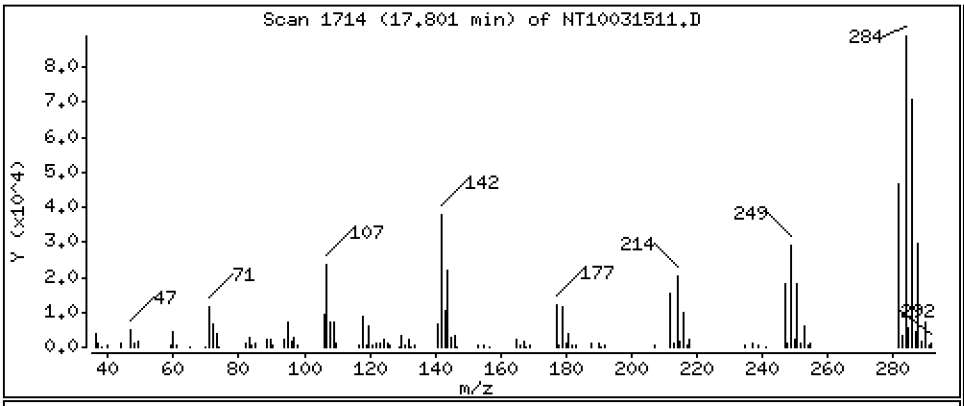
Operator: VTS

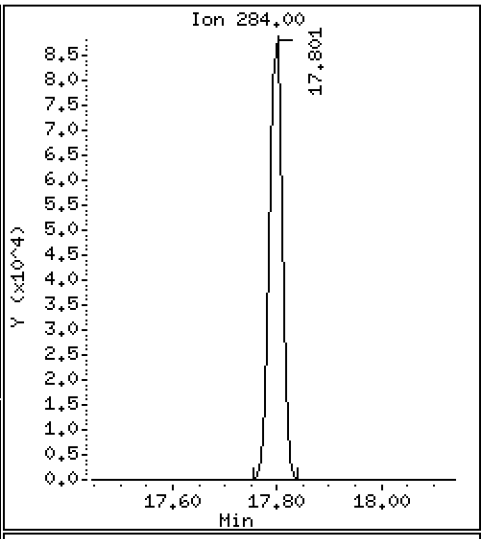
Column phase: ZB-5msi

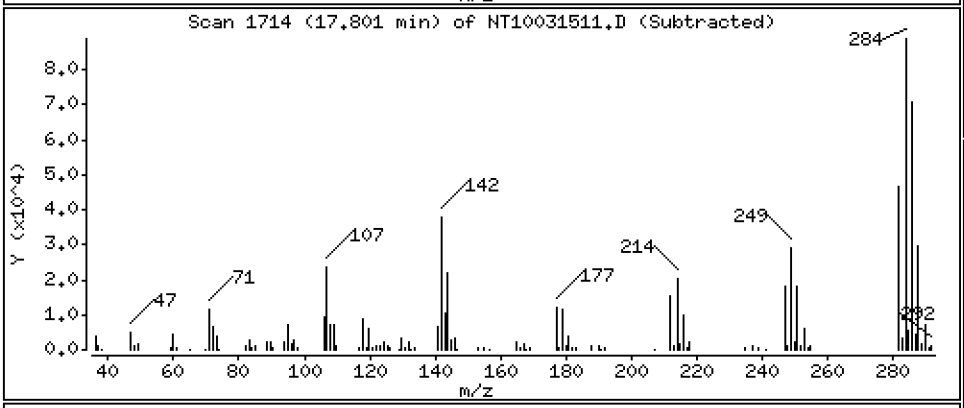
Column diameter: 0.25

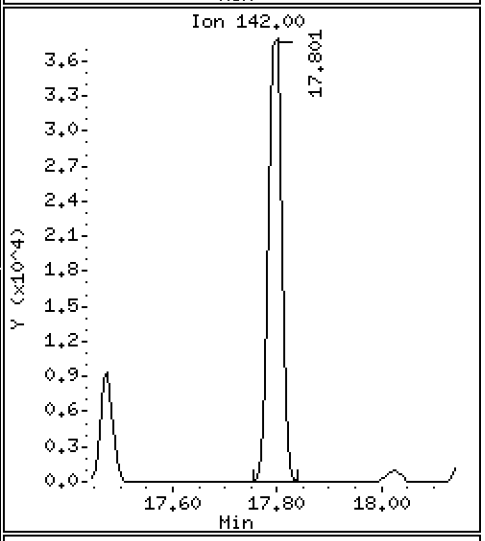
57 Hexachlorobenzene

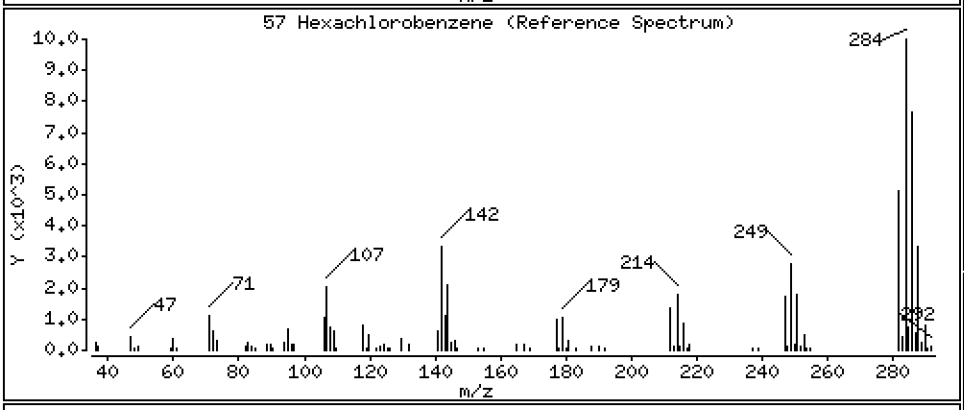
Concentration: 4.596 ug/mL

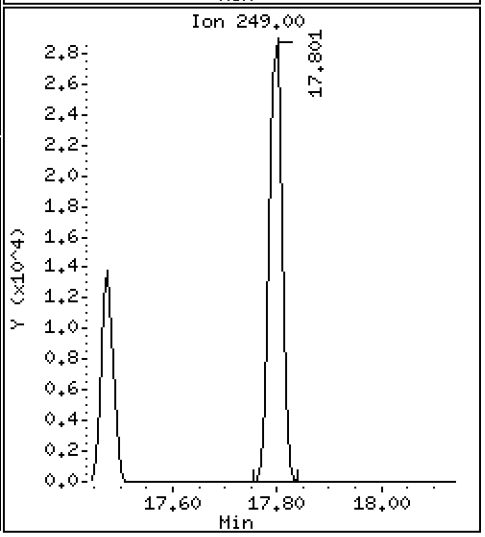


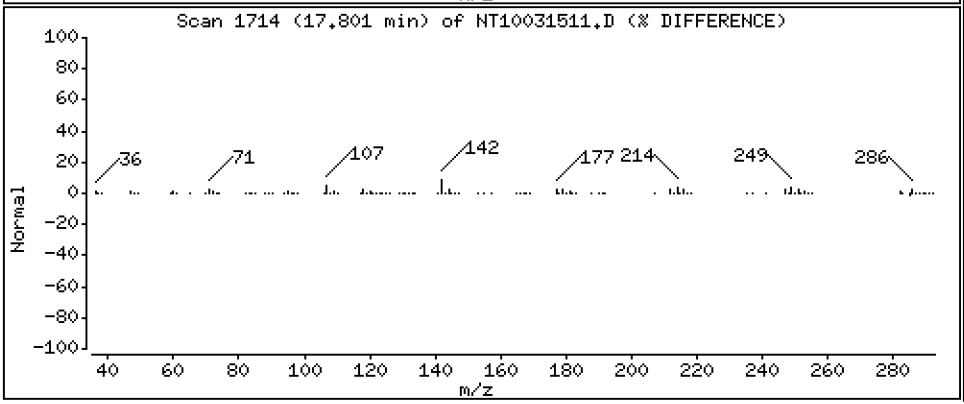












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

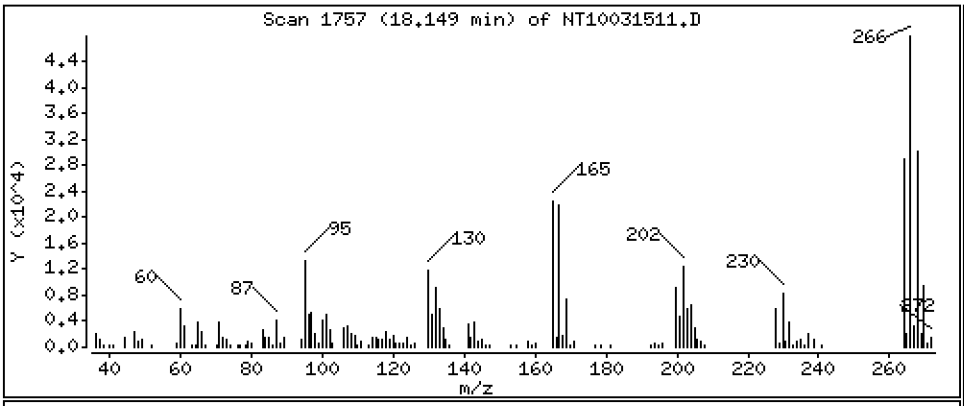
Operator: VTS

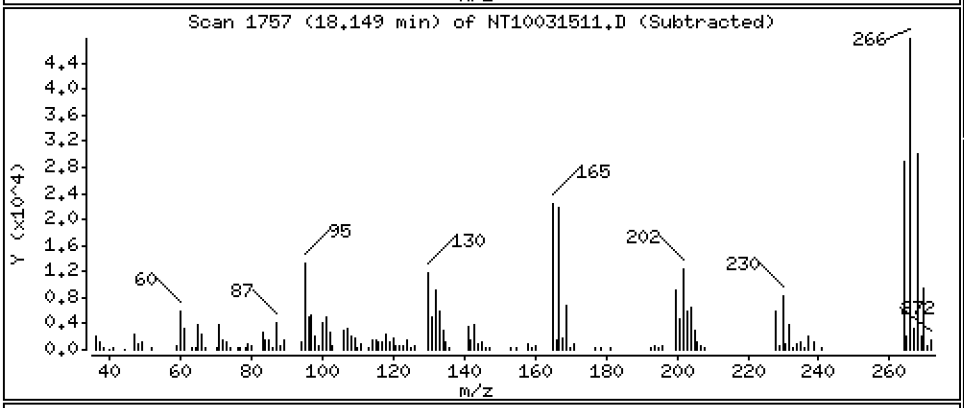
Column phase: ZB-5msi

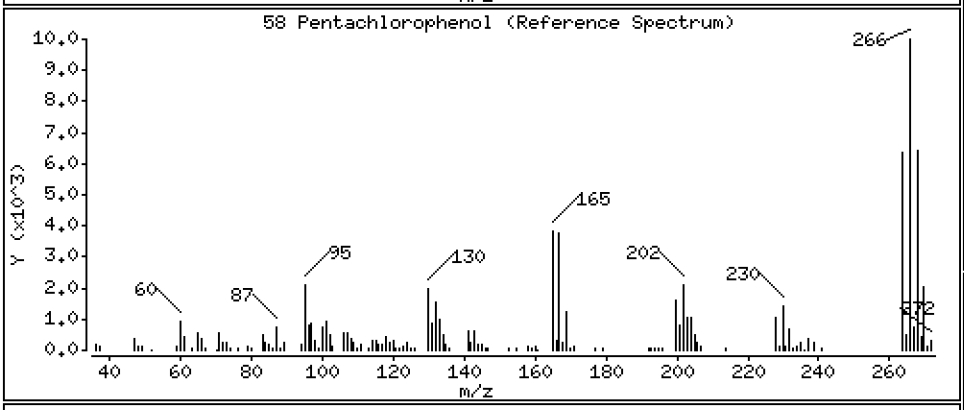
Column diameter: 0.25

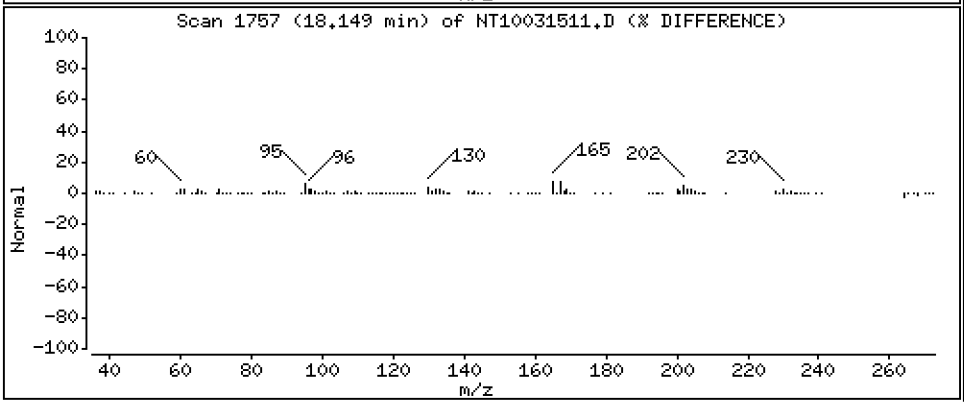
58 Pentachlorophenol

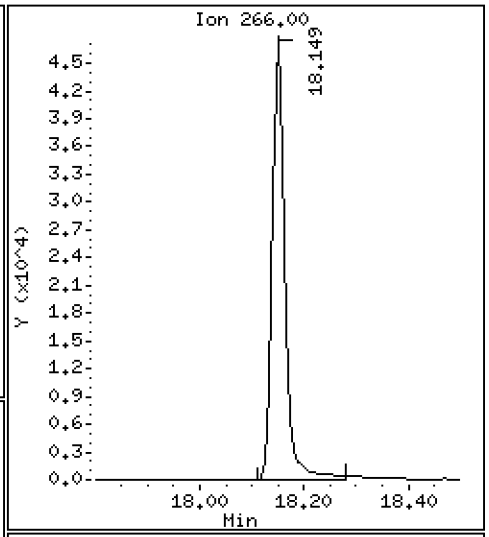
Concentration: 4.057 ug/mL

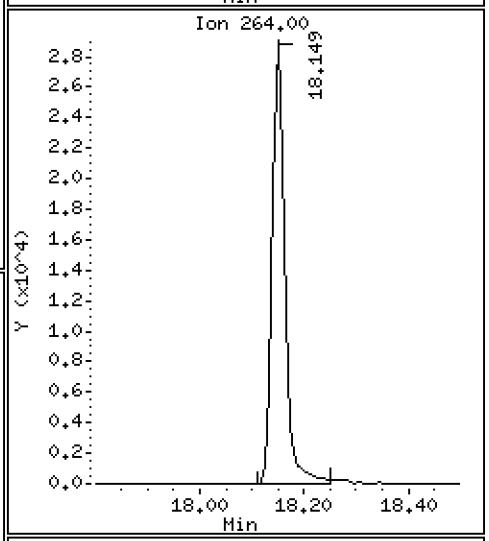


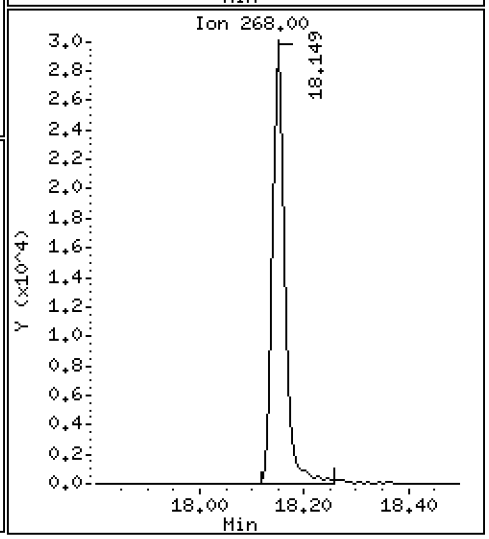












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

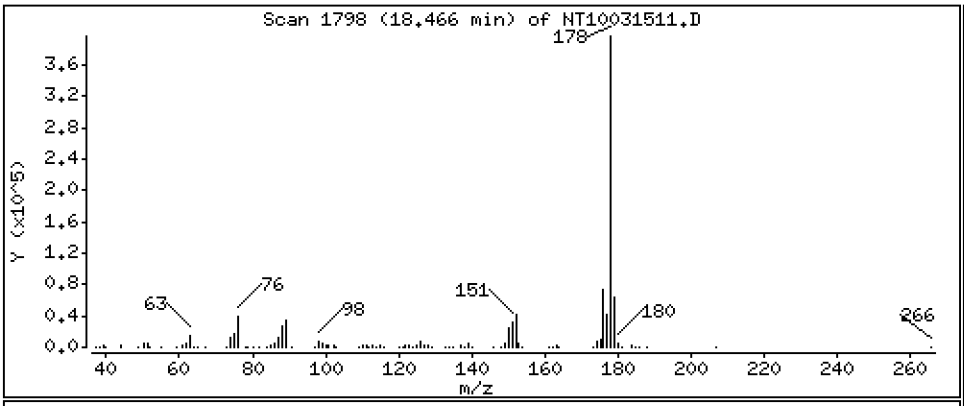
Operator: VTS

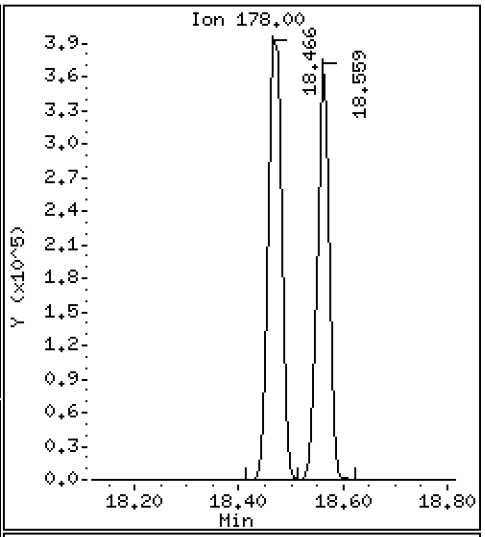
Column phase: ZB-5msi

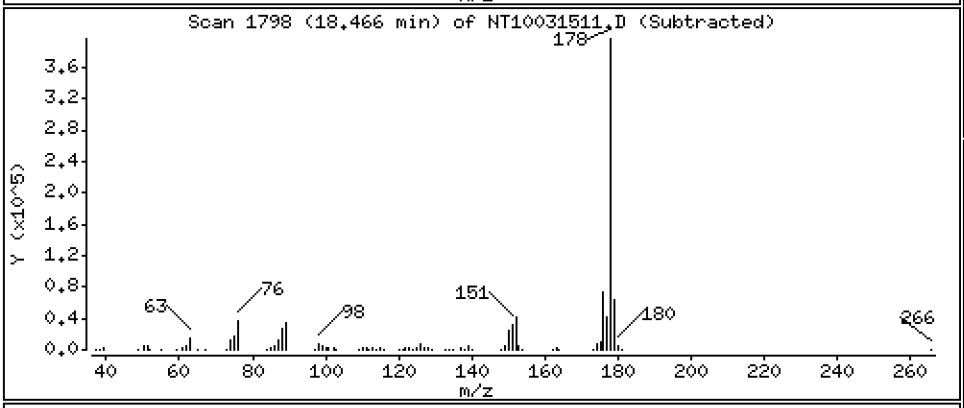
Column diameter: 0.25

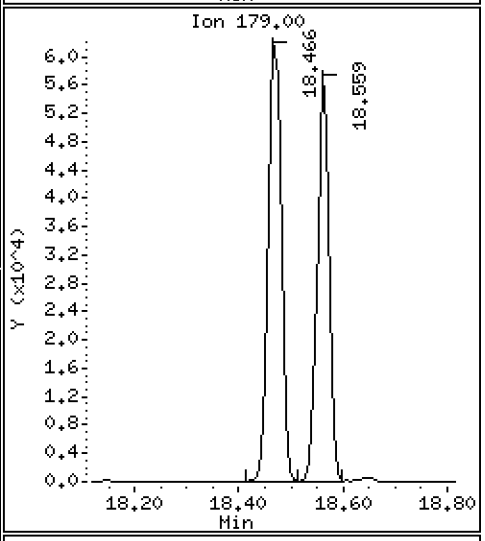
60 Phenanthrene

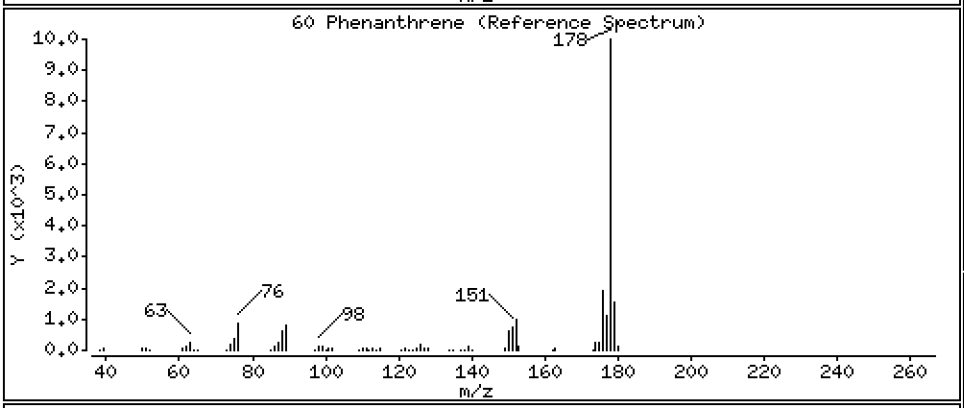
Concentration: 4.602 ug/mL

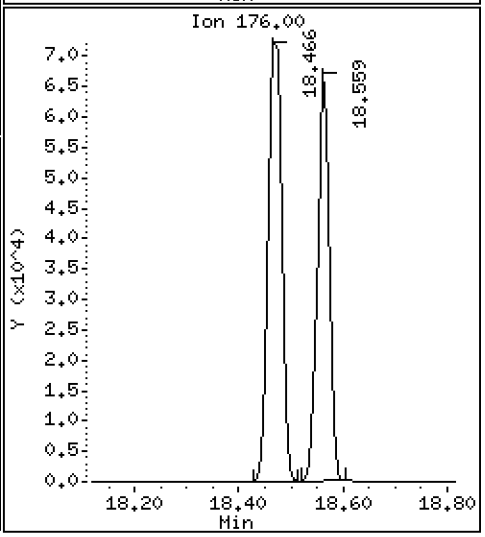


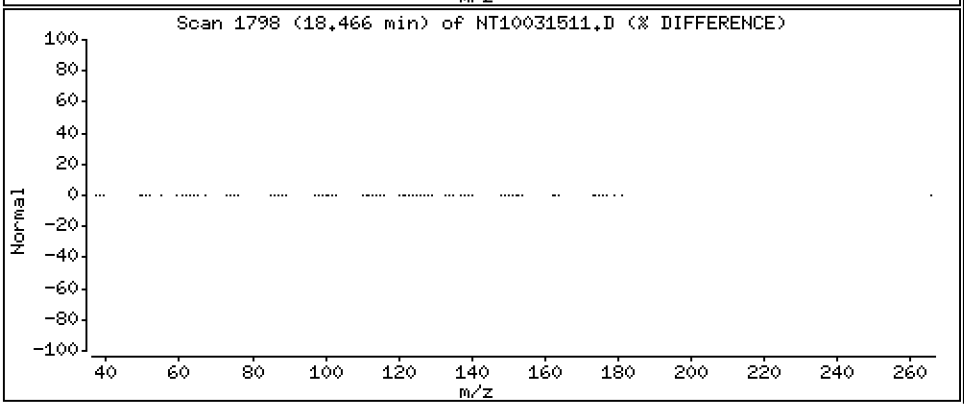












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

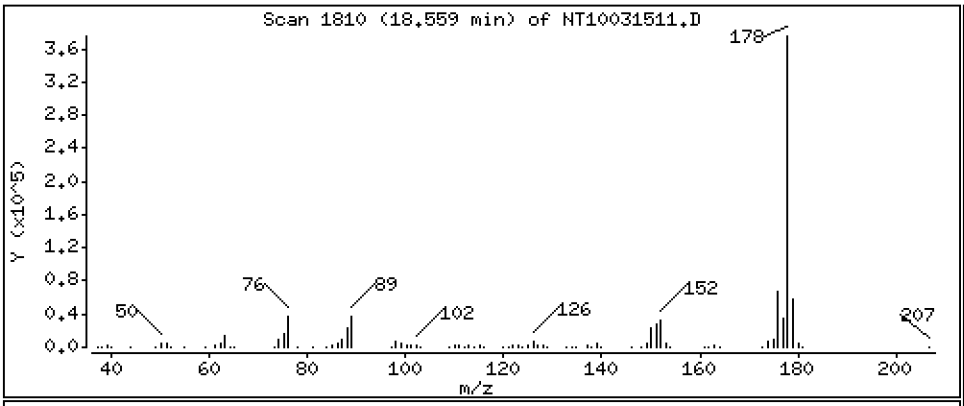
Operator: VTS

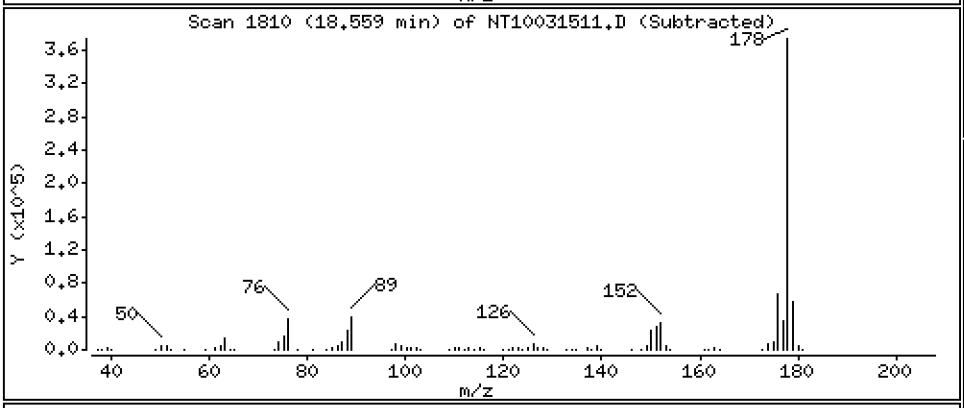
Column phase: ZB-5msi

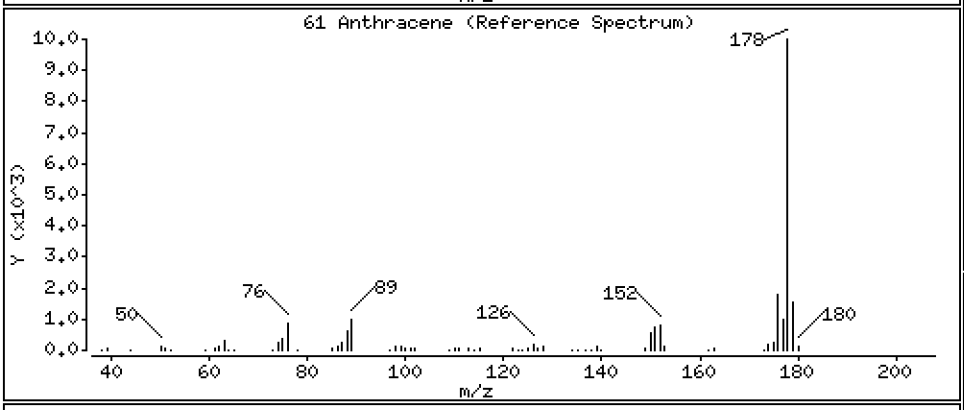
Column diameter: 0.25

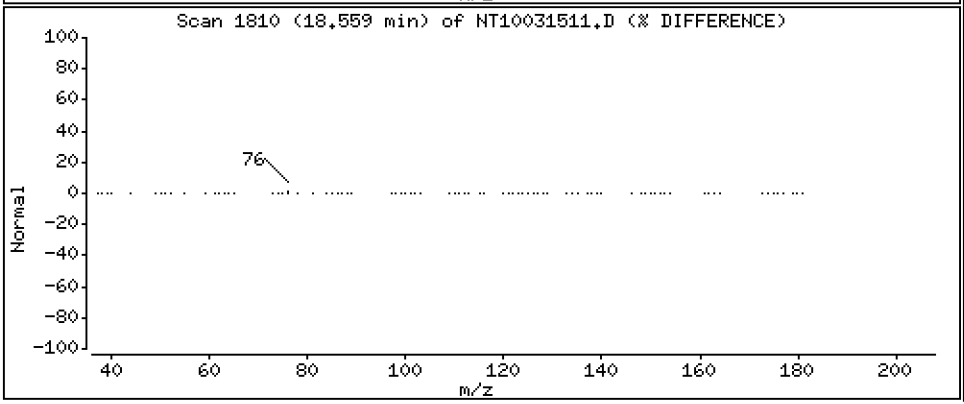
61 Anthracene

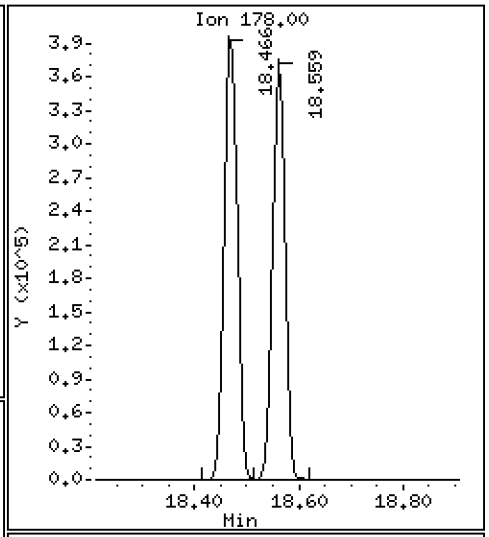
Concentration: 4.167 ug/mL

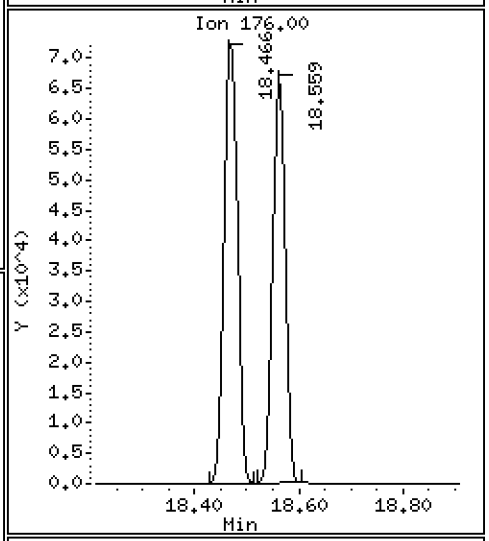


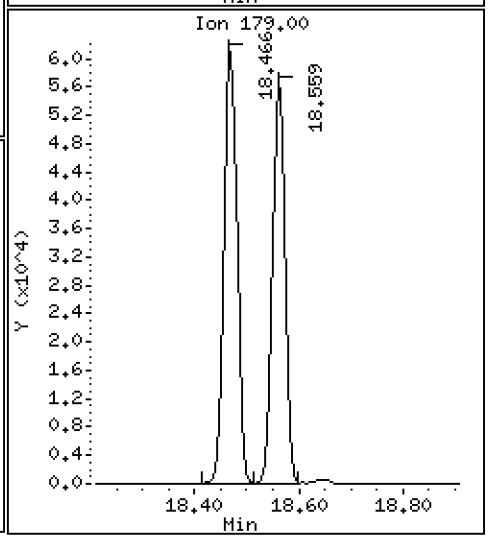












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

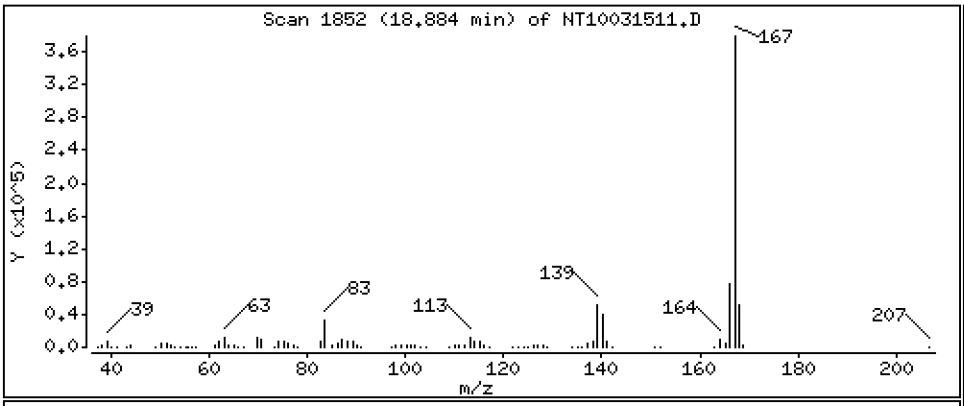
Operator: VTS

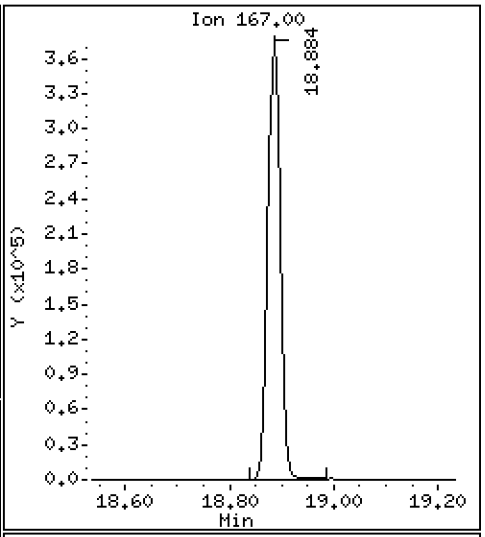
Column phase: ZB-5msi

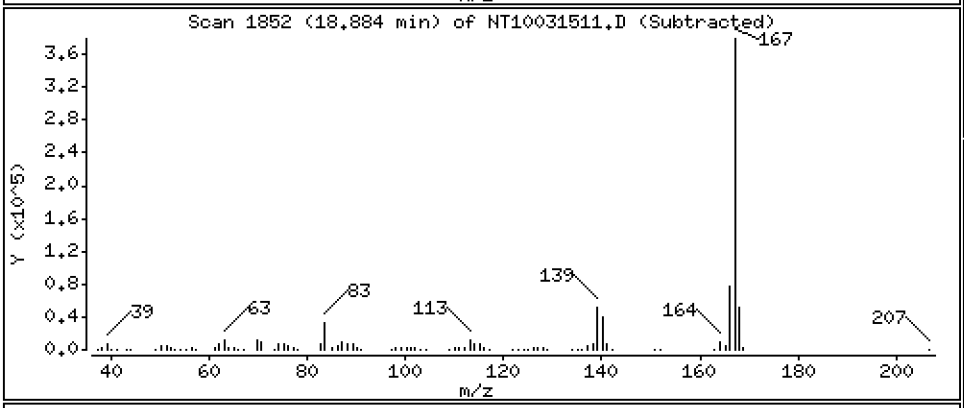
Column diameter: 0.25

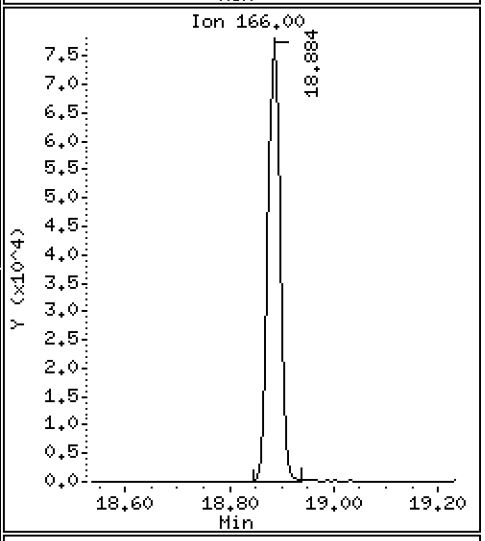
62 Carbazole

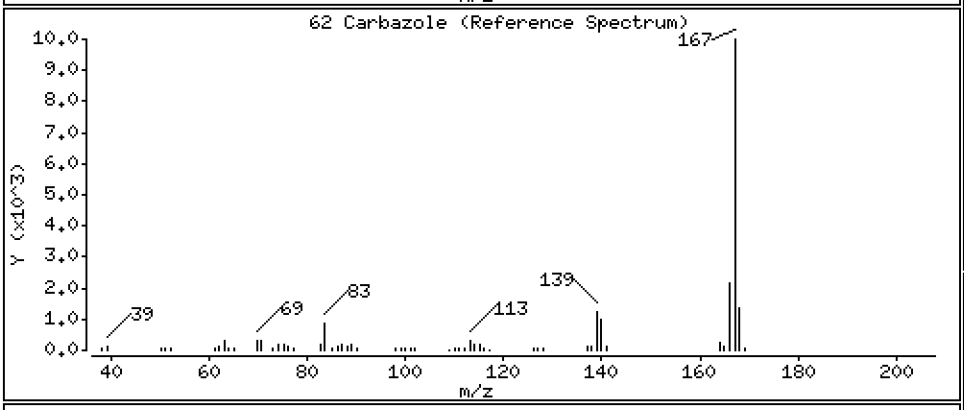
Concentration: 4.730 ug/mL

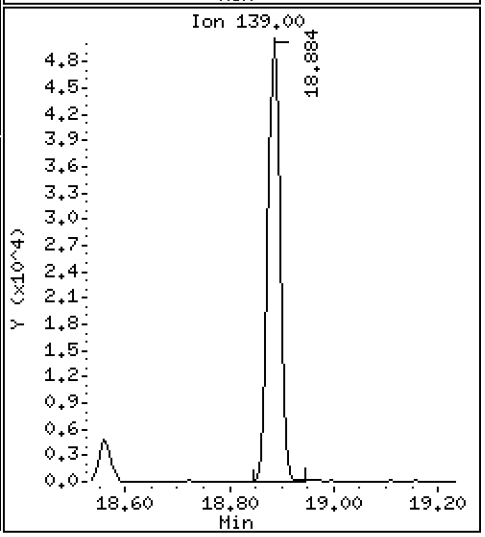


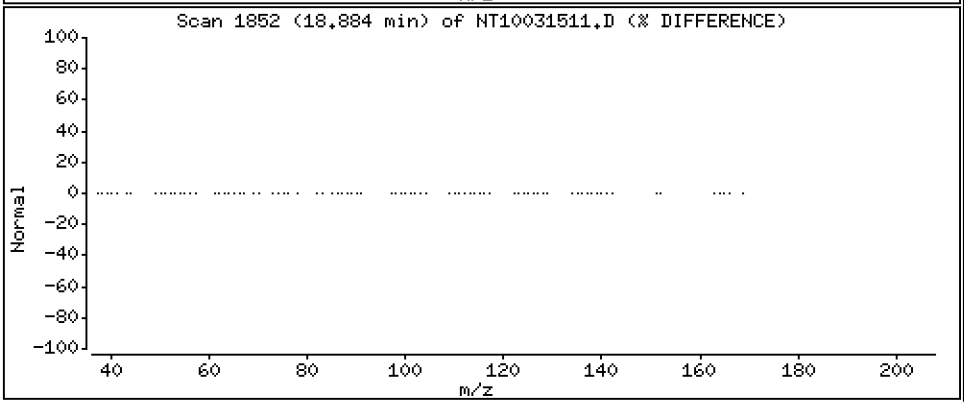












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

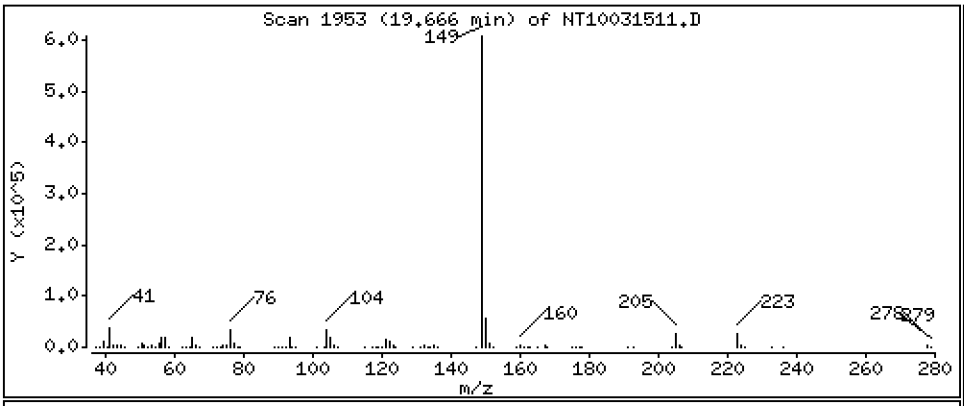
Operator: VTS

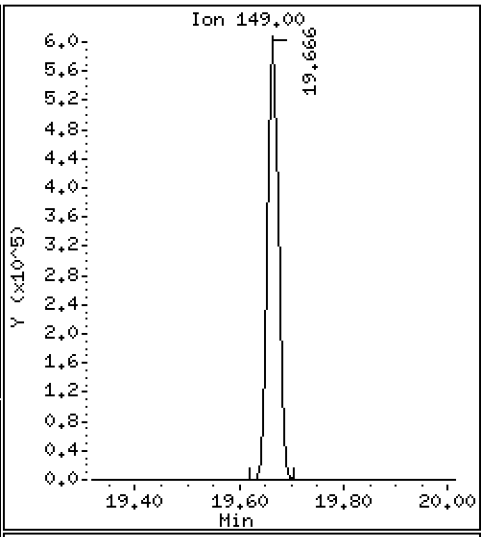
Column phase: ZB-5msi

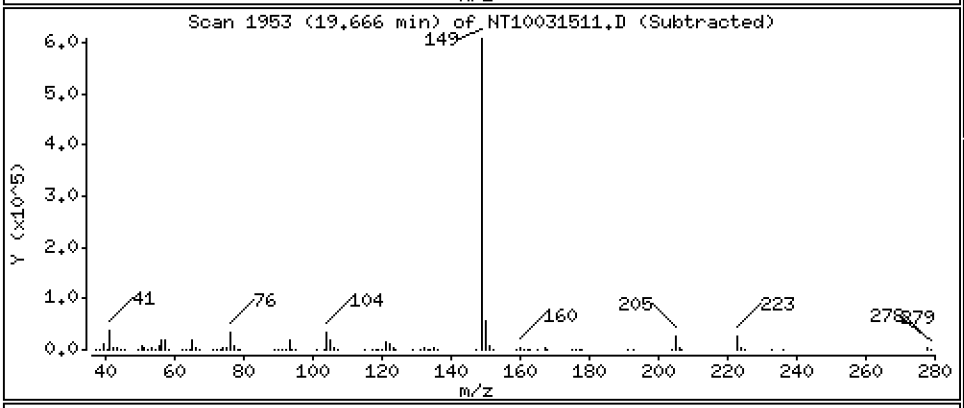
Column diameter: 0.25

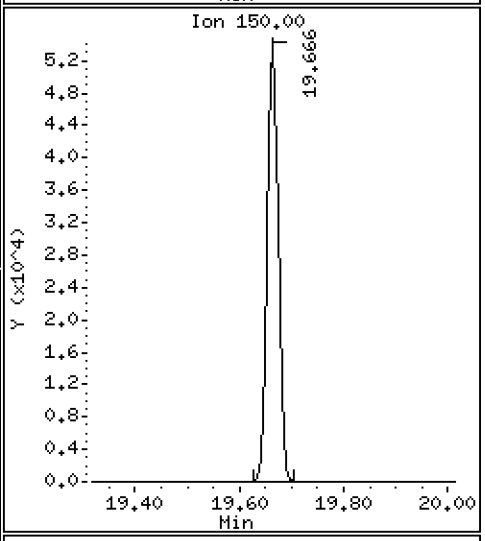
63 Di-n-butylphthalate

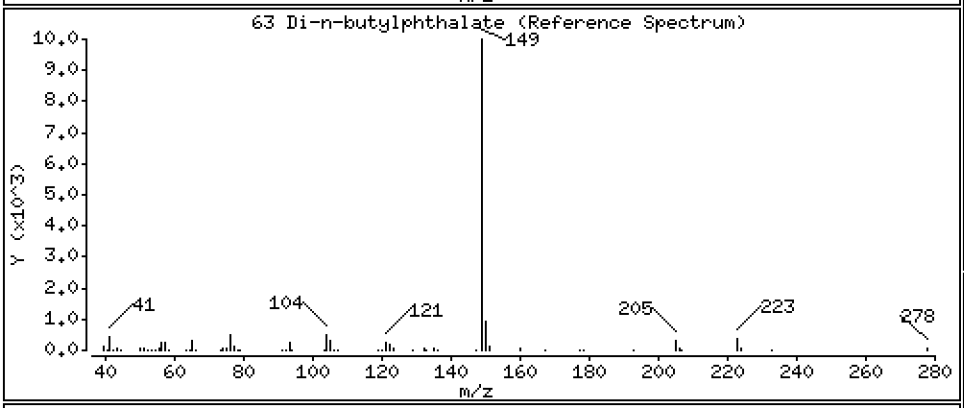
Concentration: 4.967 ug/mL

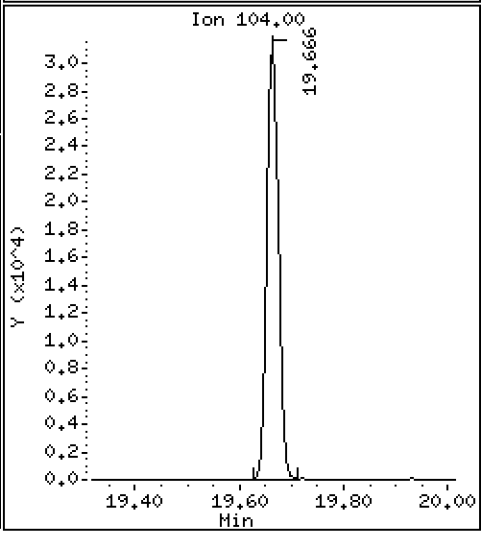


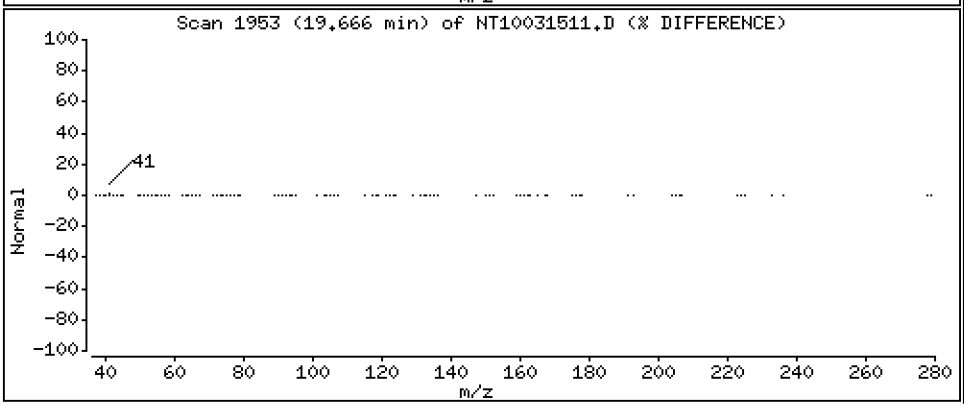












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

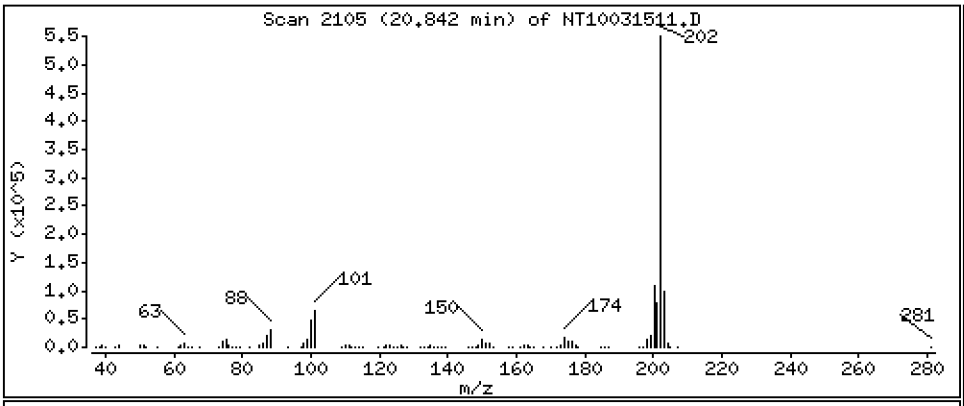
Operator: VTS

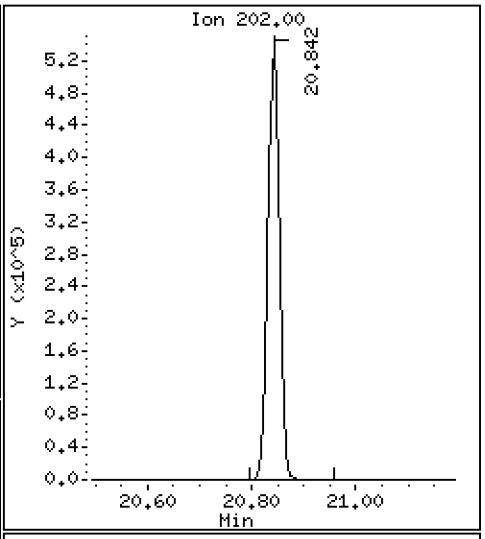
Column phase: ZB-5msi

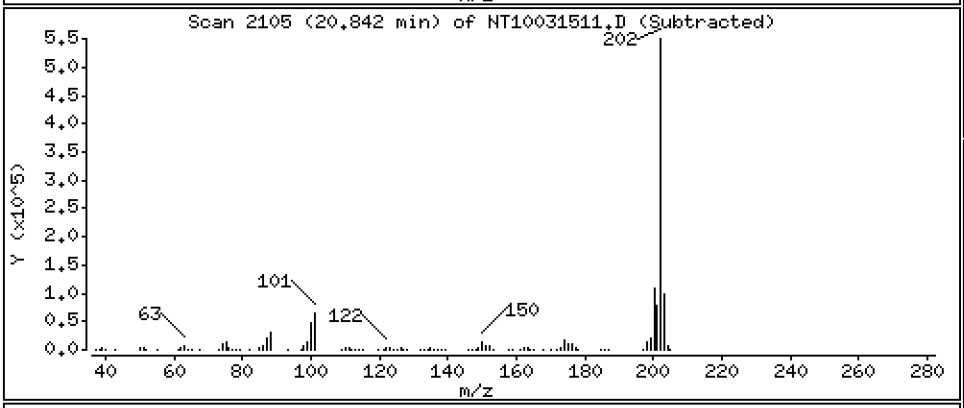
Column diameter: 0.25

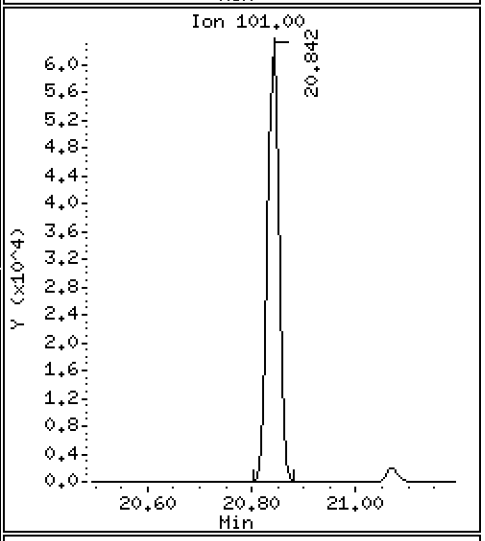
64 Fluoranthene

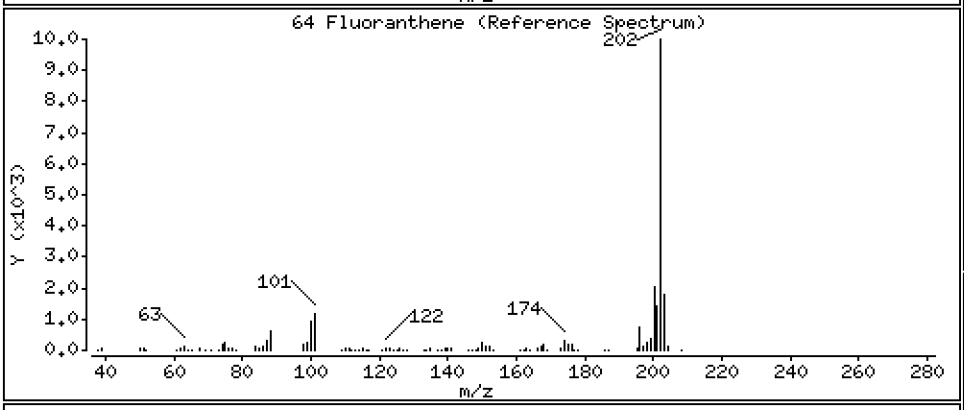
Concentration: 4.472 ug/mL

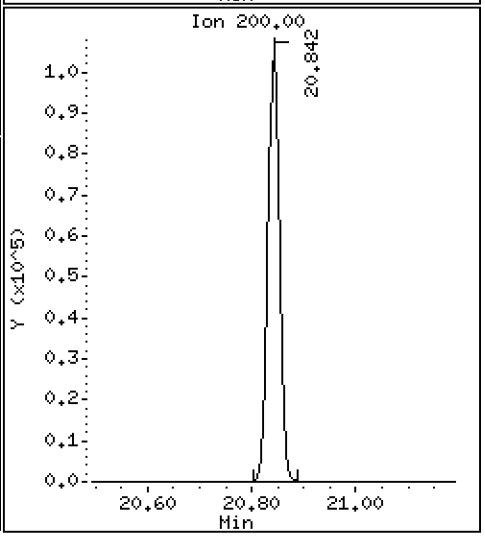


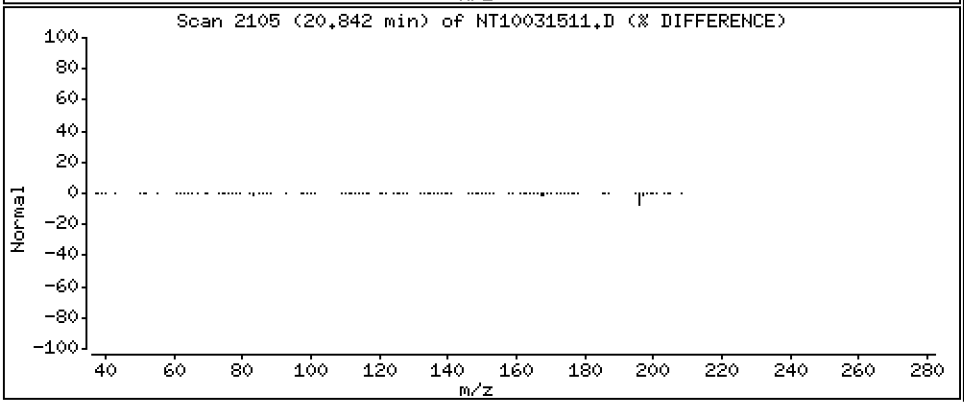












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

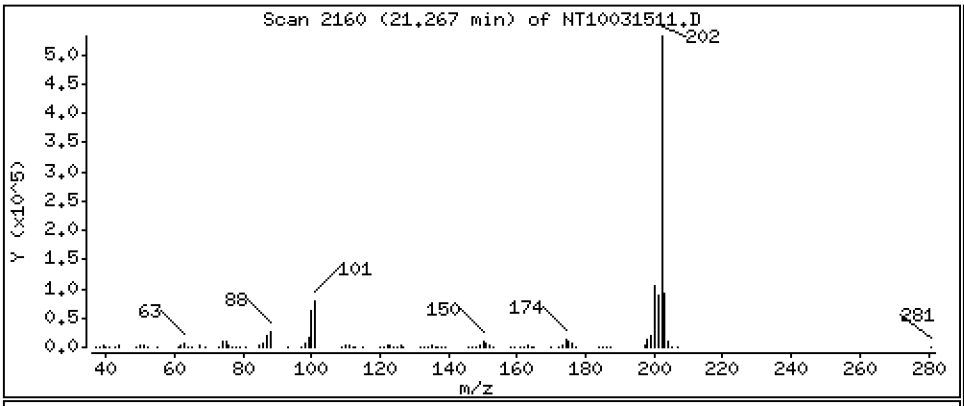
Operator: VTS

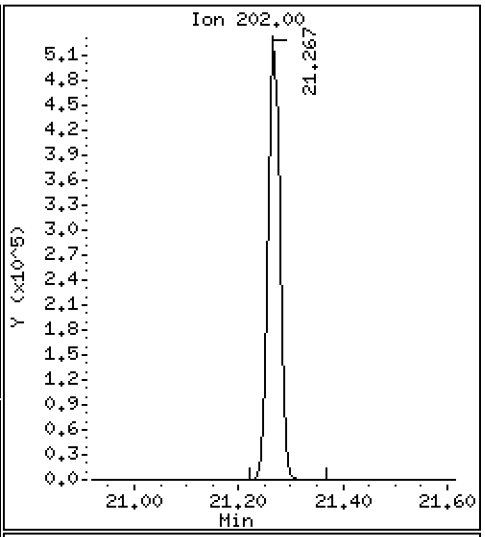
Column phase: ZB-5msi

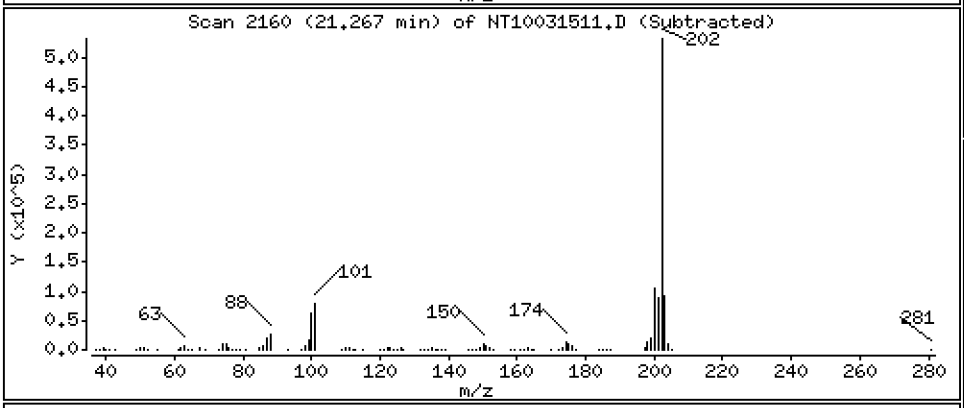
Column diameter: 0.25

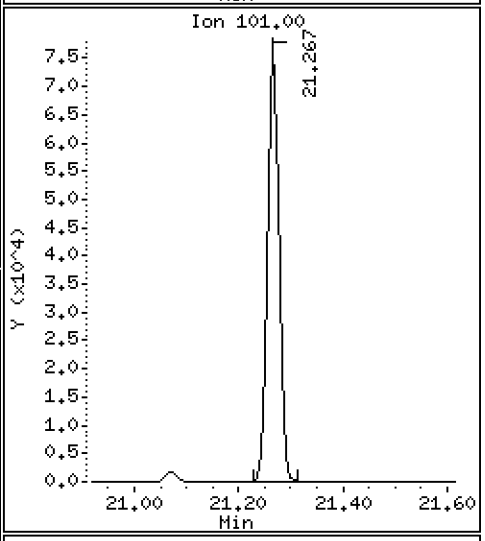
65 Pyrene

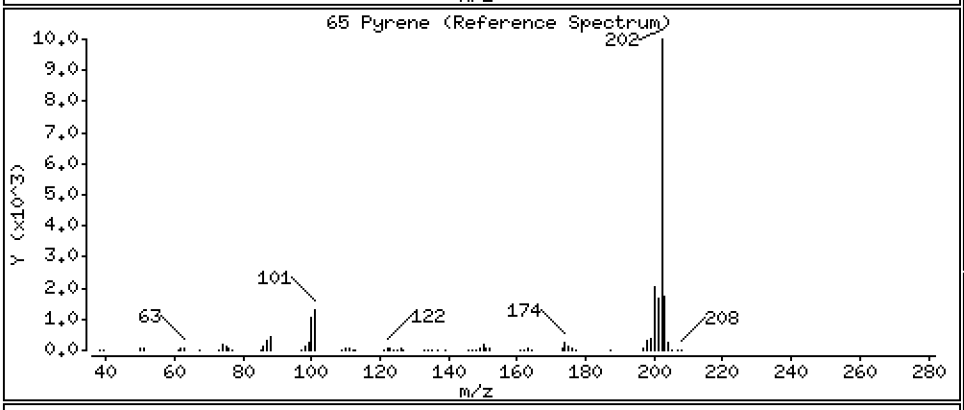
Concentration: 4.339 ug/mL

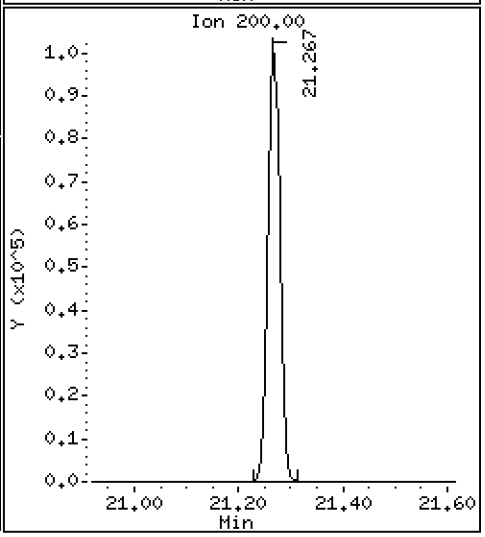


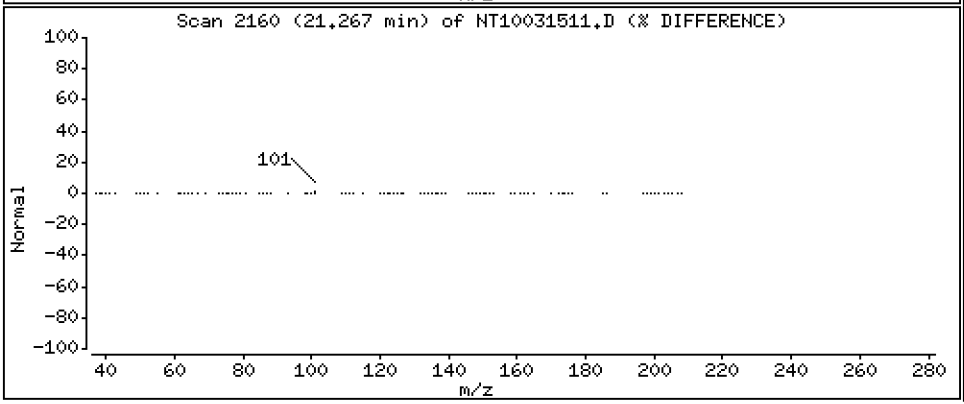












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

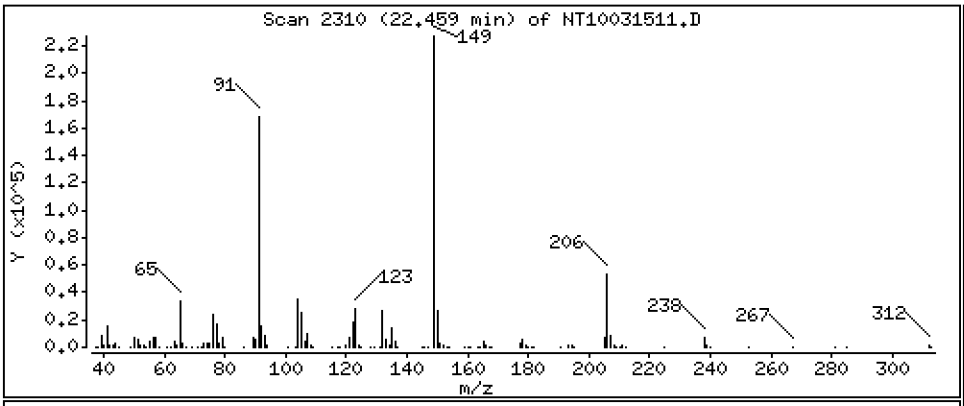
Operator: VTS

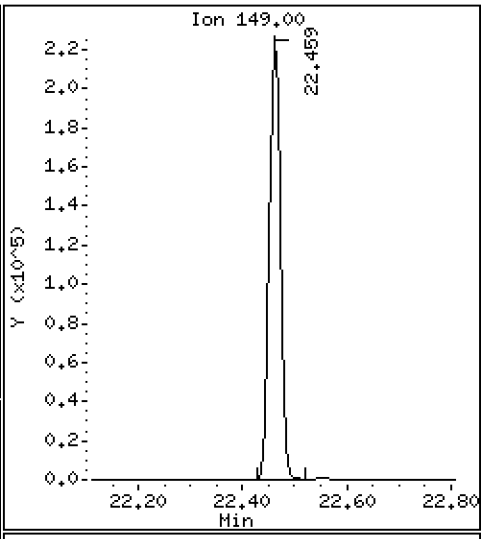
Column phase: ZB-5msi

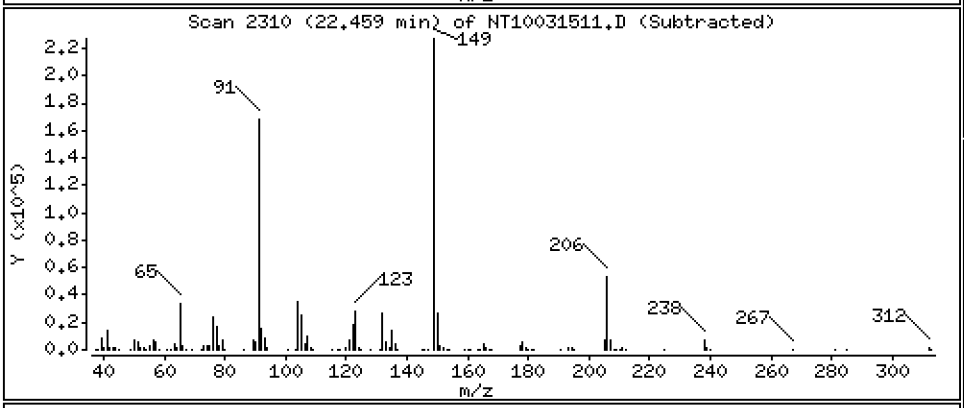
Column diameter: 0.25

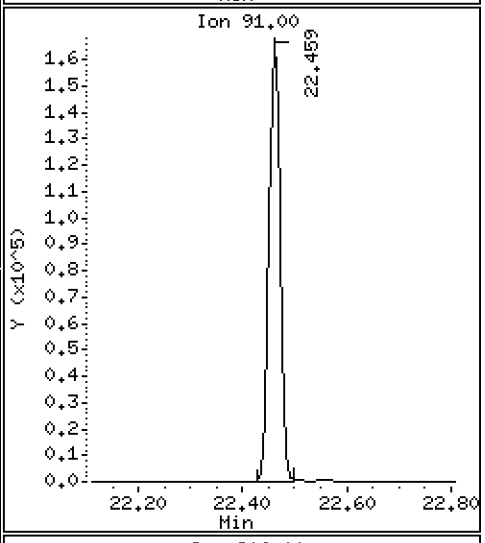
67 Butylbenzylphthalate

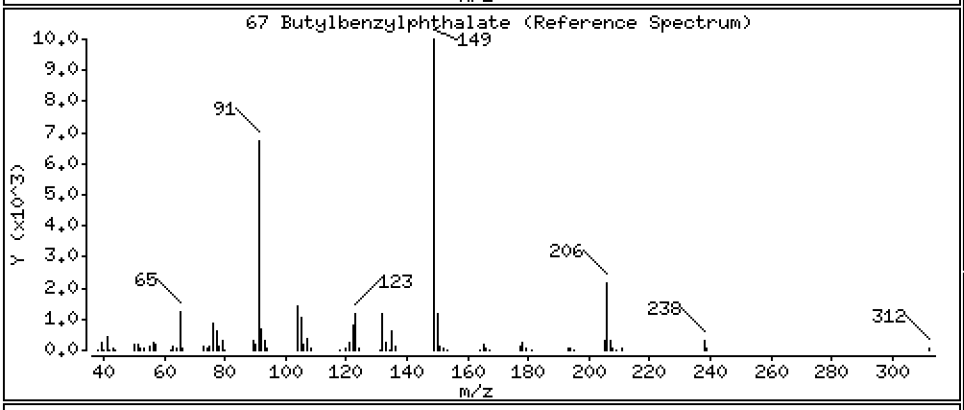
Concentration: 4.834 ug/mL

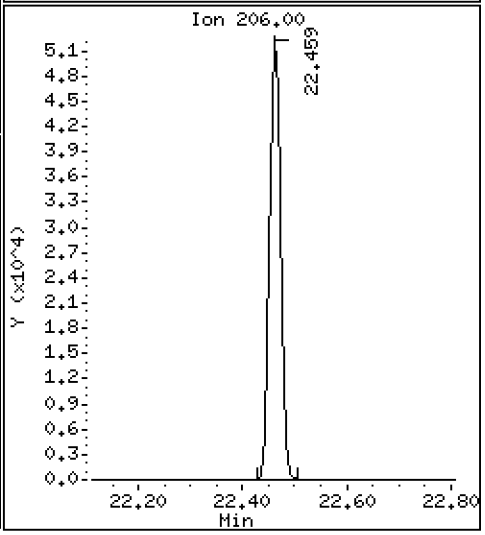


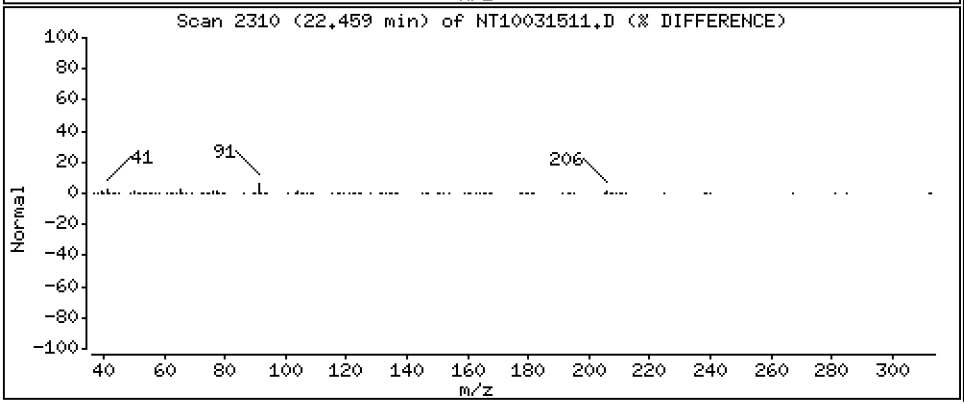












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

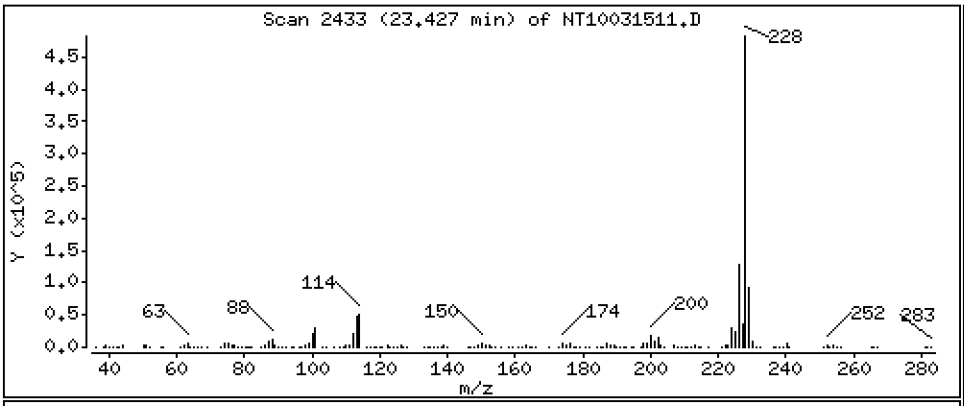
Operator: VTS

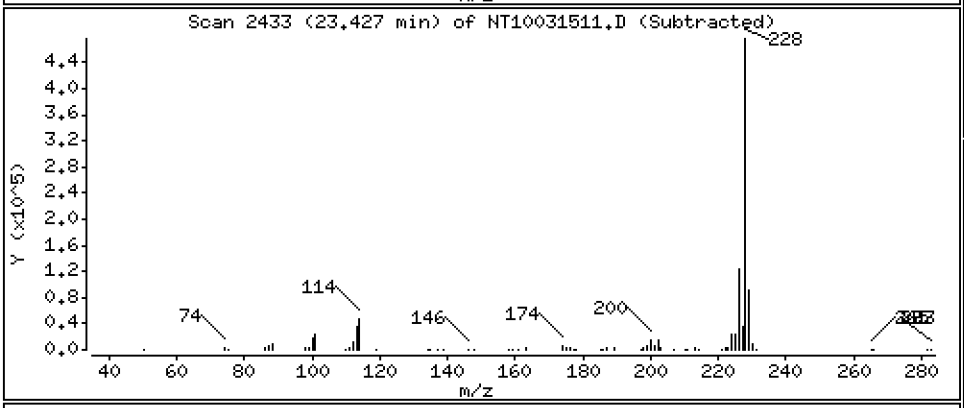
Column phase: ZB-5msi

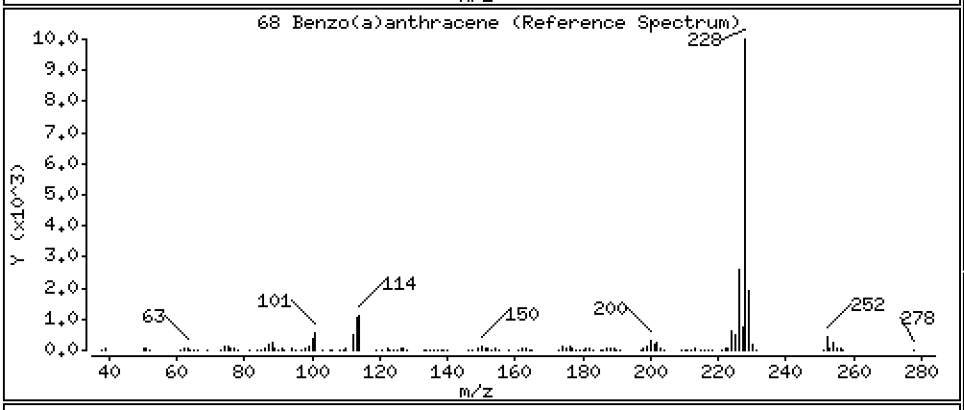
Column diameter: 0.25

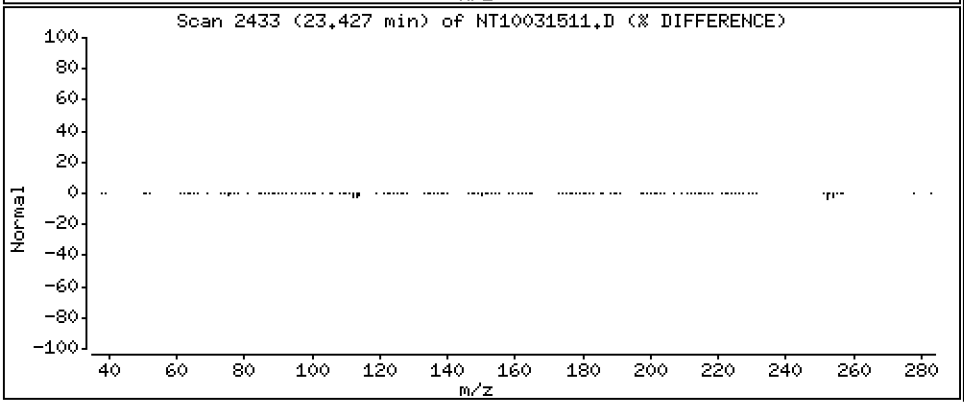
68 Benzo(a)anthracene

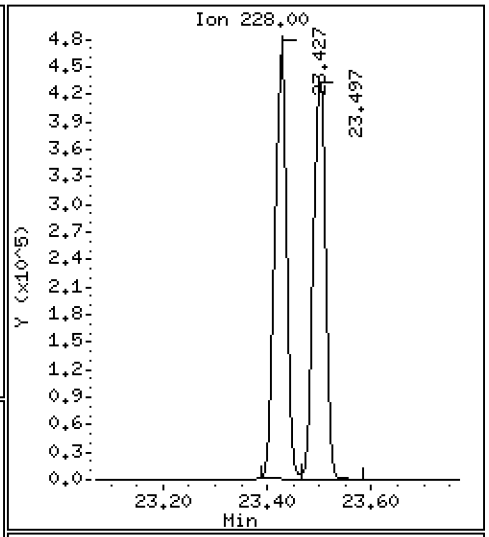
Concentration: 4.647 ug/mL

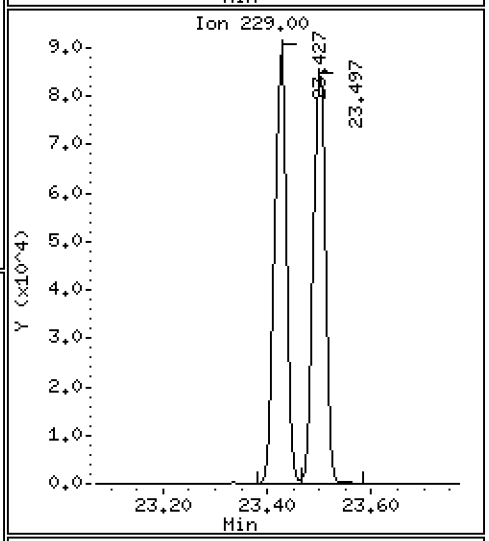


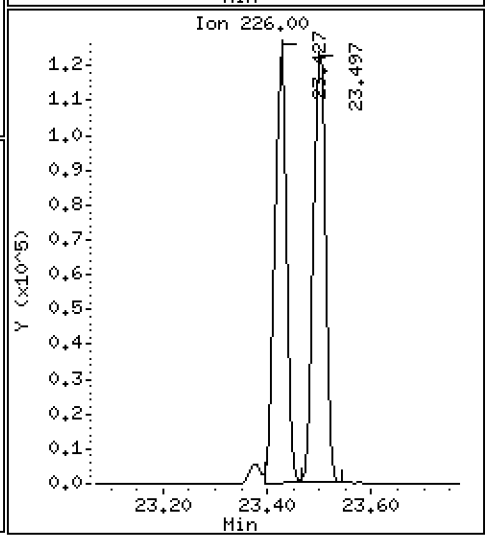












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

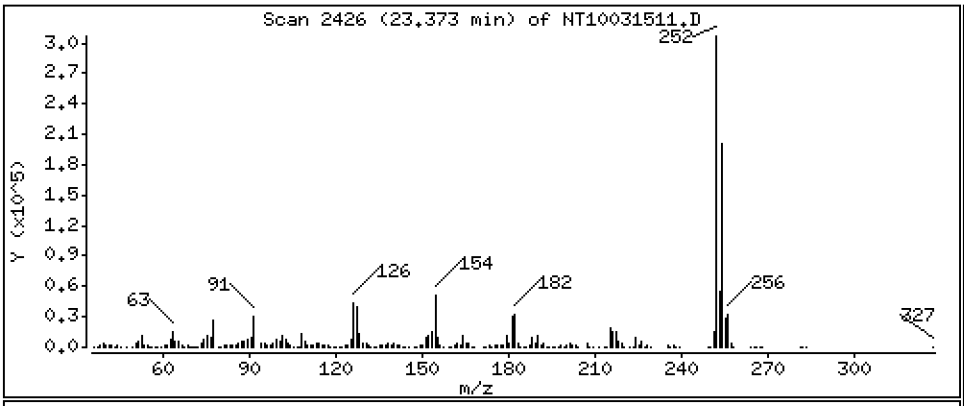
Operator: VTS

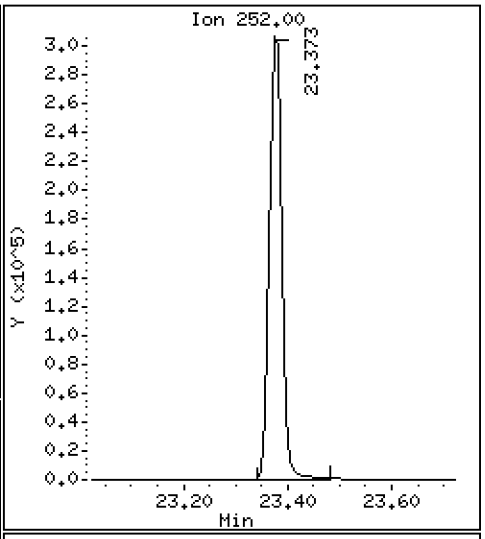
Column phase: ZB-5msi

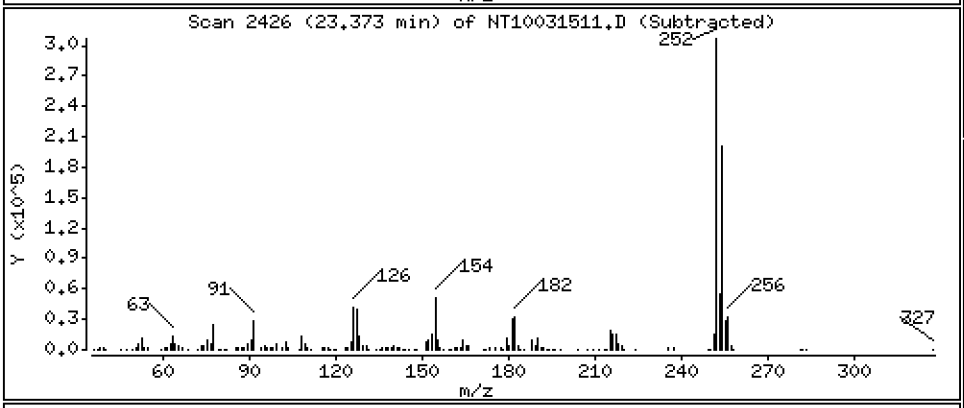
Column diameter: 0.25

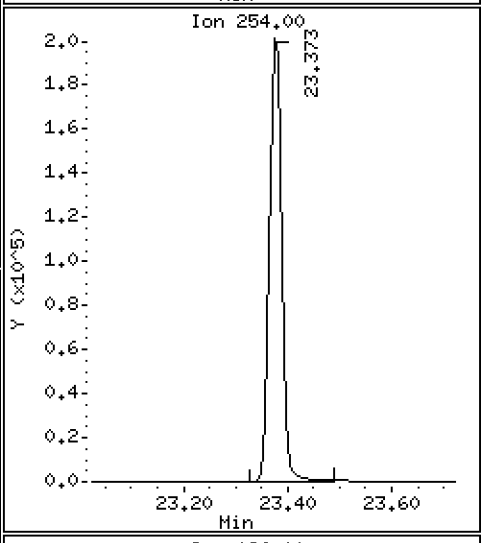
70 3,3'-Dichlorobenzidine

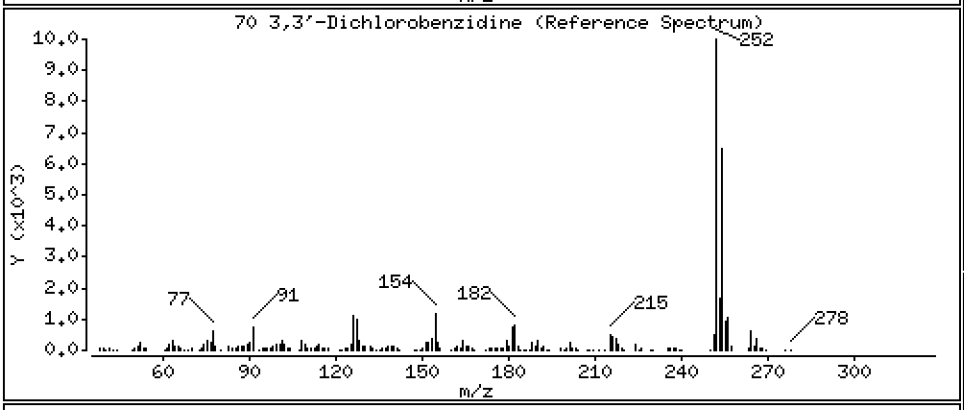
Concentration: 9.817 ug/mL

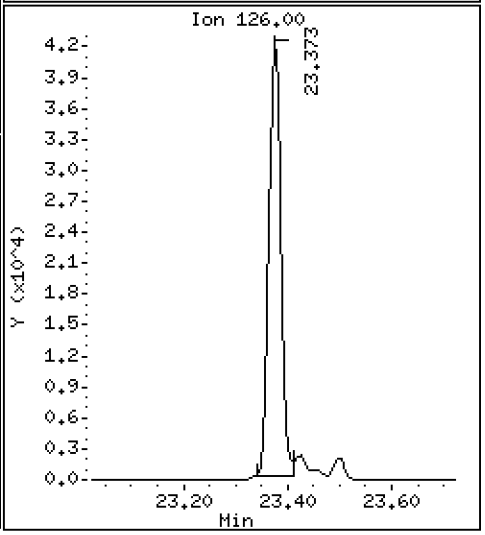


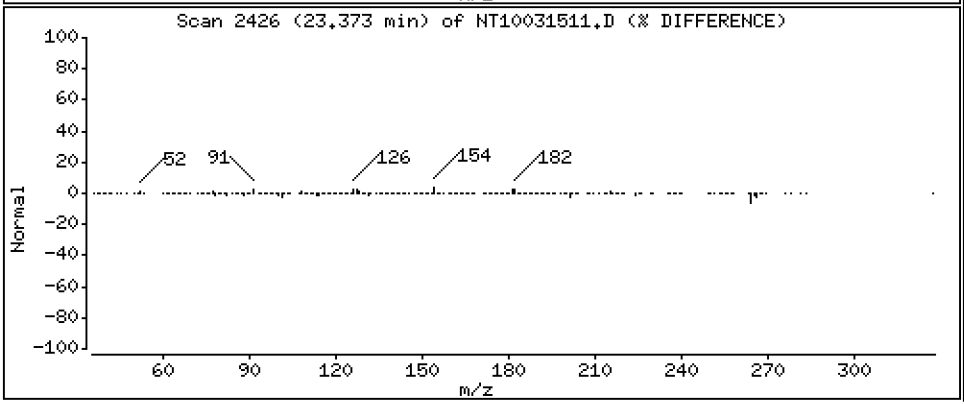












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

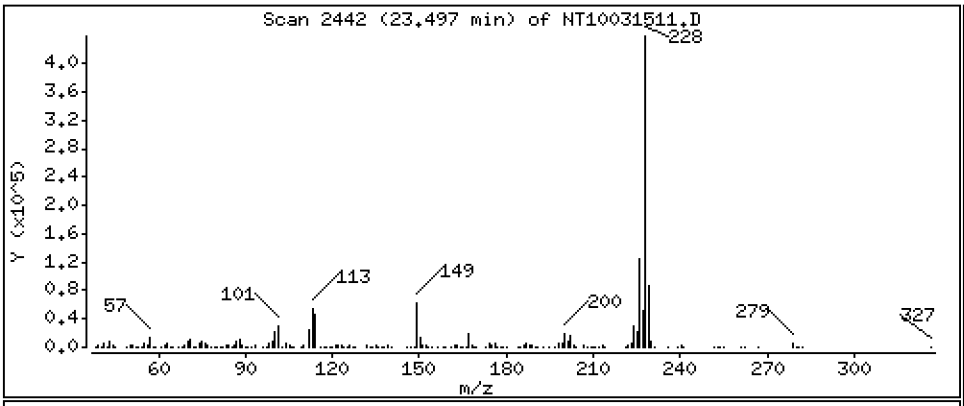
Operator: VTS

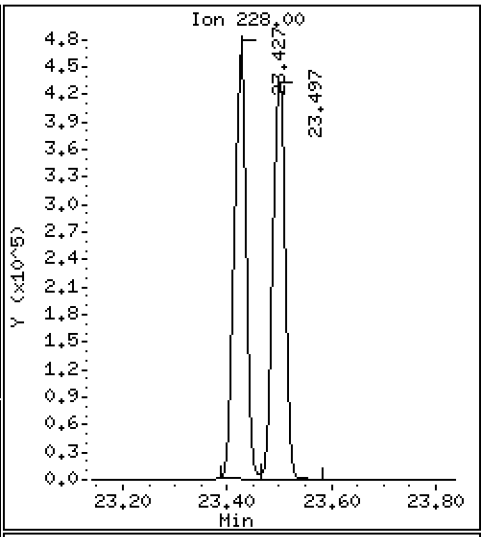
Column phase: ZB-5msi

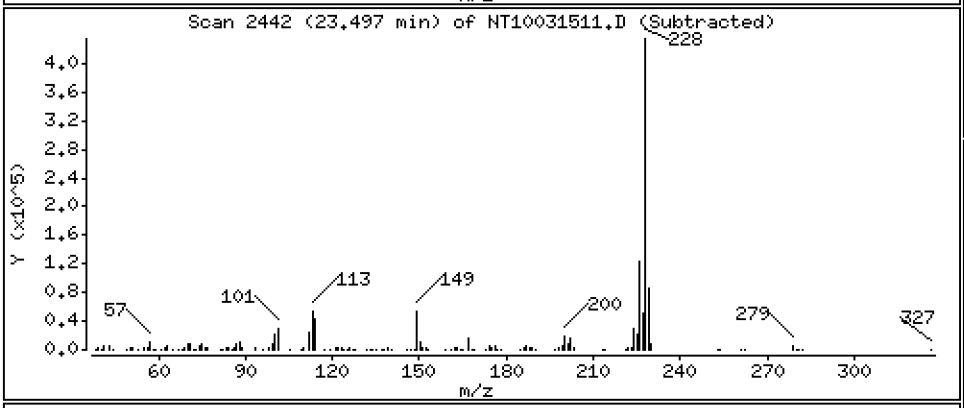
Column diameter: 0.25

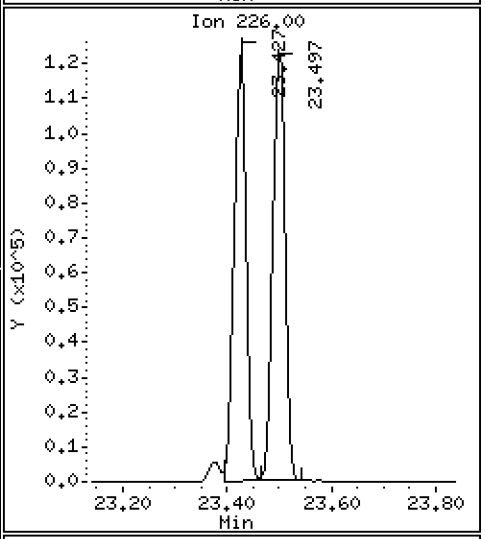
71 Chrysene

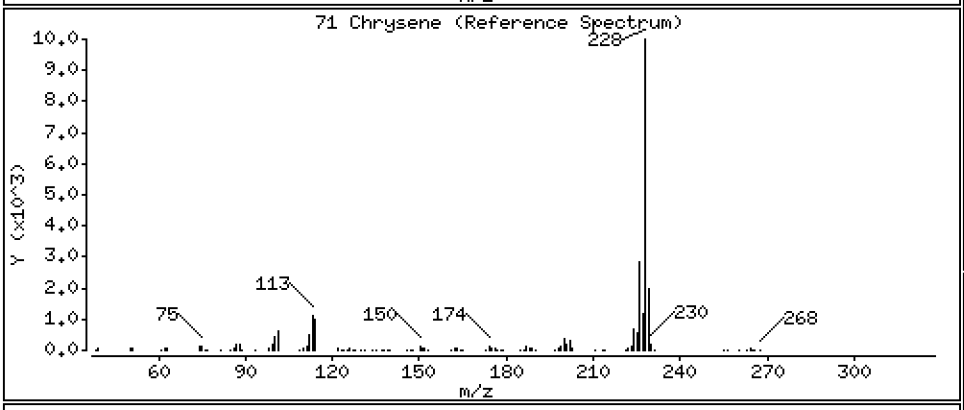
Concentration: 4.510 ug/mL

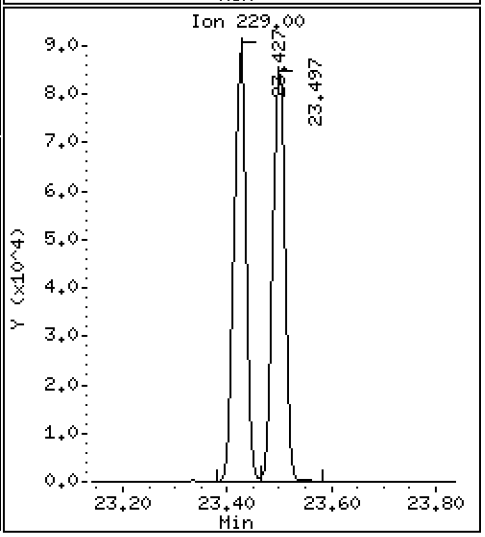


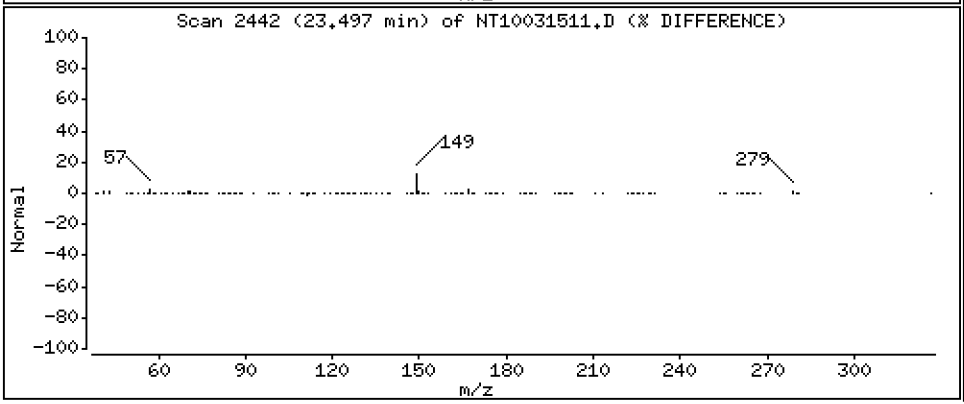












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

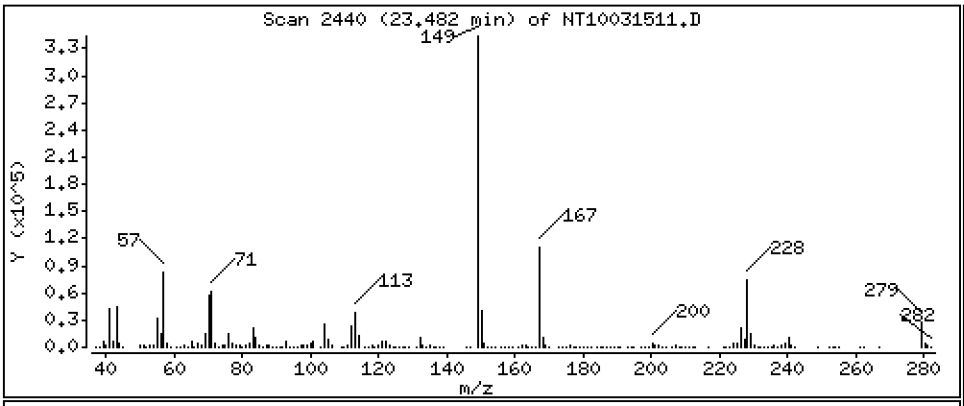
Operator: VTS

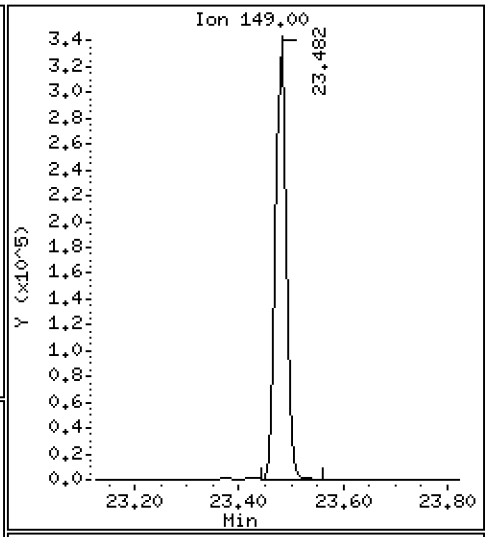
Column phase: ZB-5msi

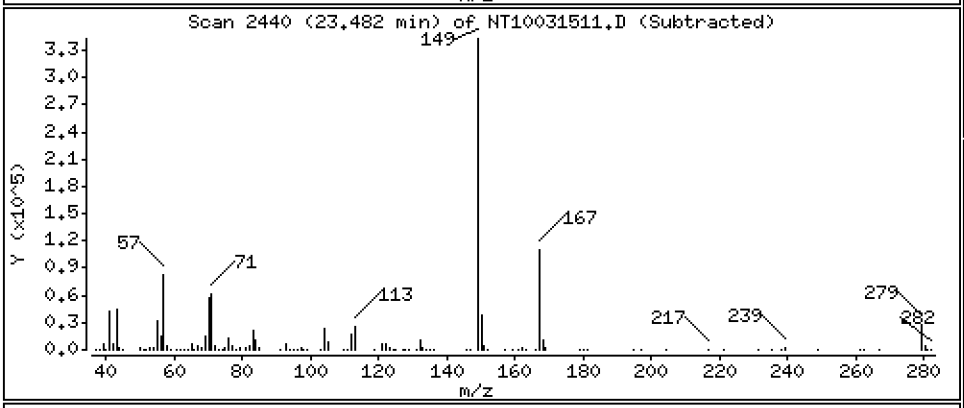
Column diameter: 0.25

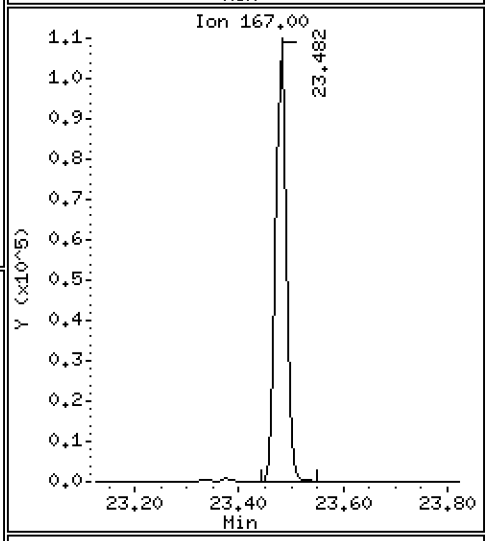
72 bis(2-Ethylhexyl)phthalate

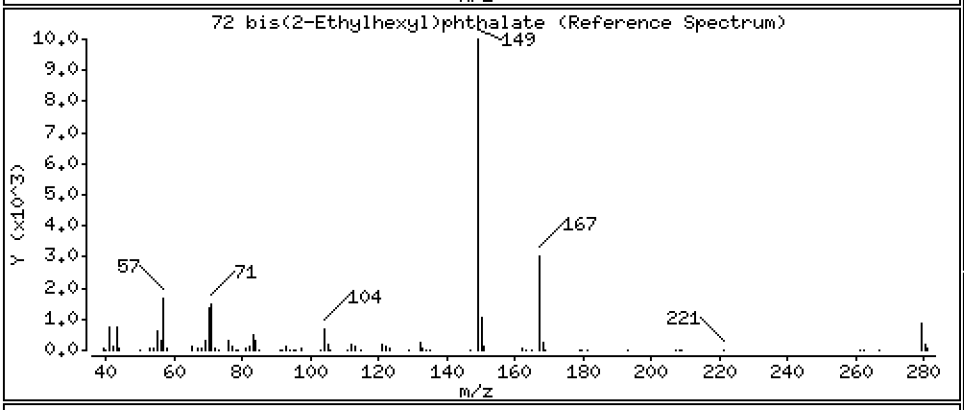
Concentration: 4.680 ug/mL

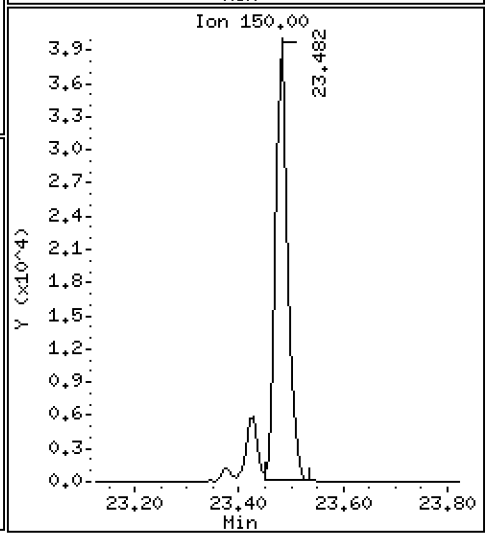


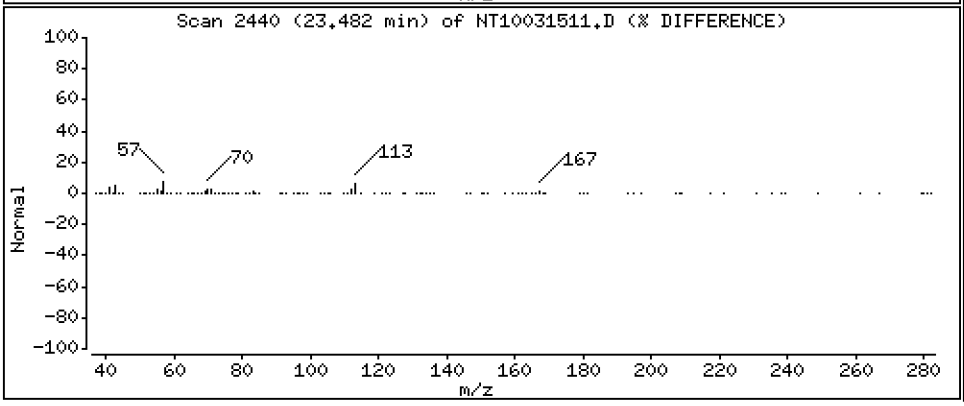












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

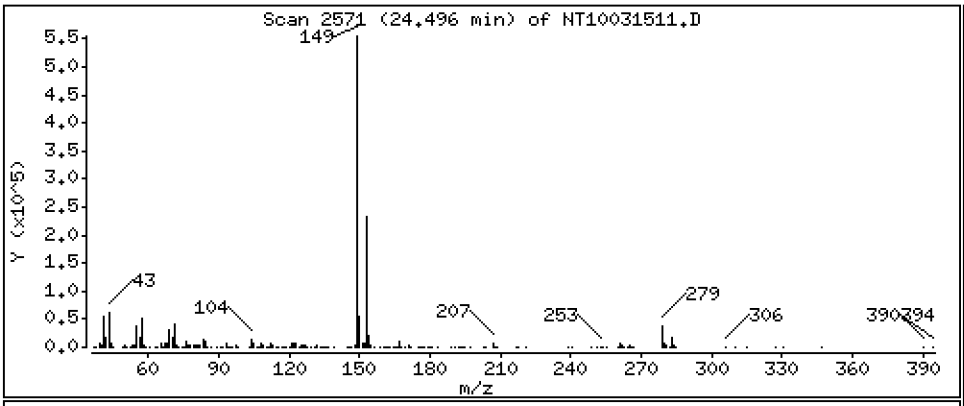
Operator: VTS

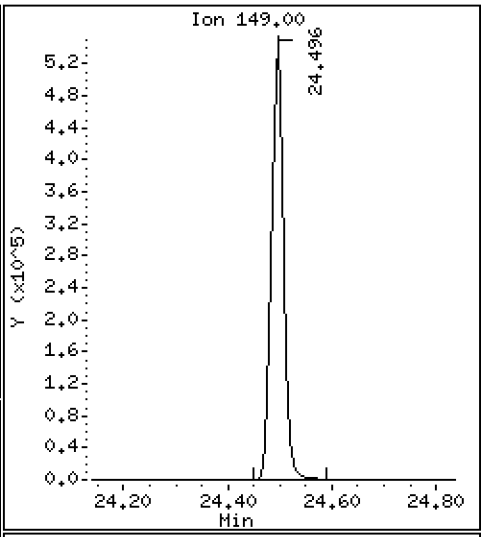
Column phase: ZB-5msi

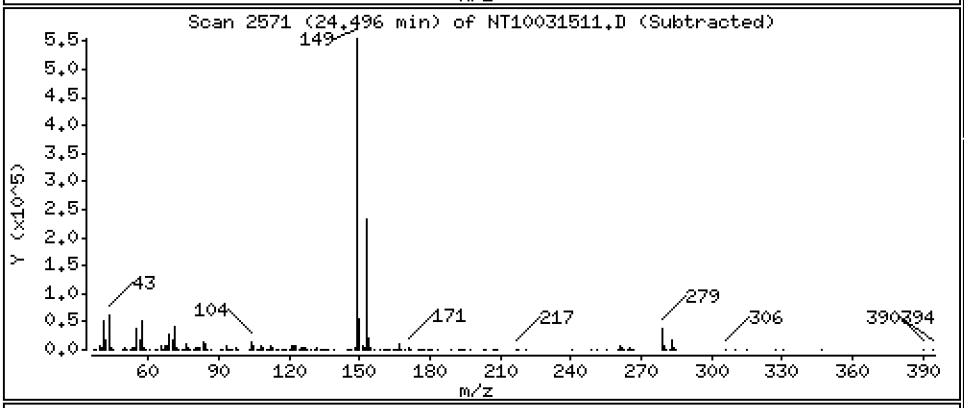
Column diameter: 0.25

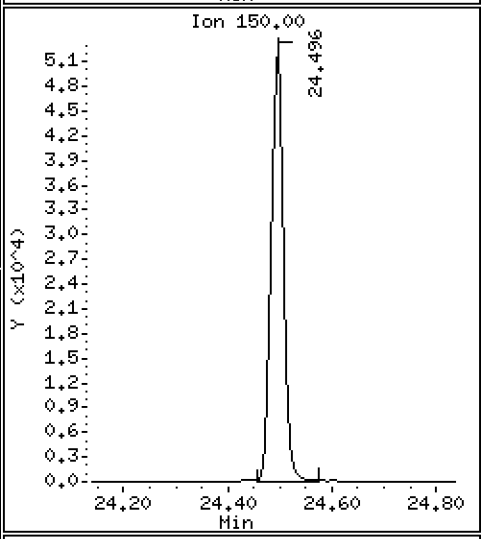
73 Di-n-octylphthalate

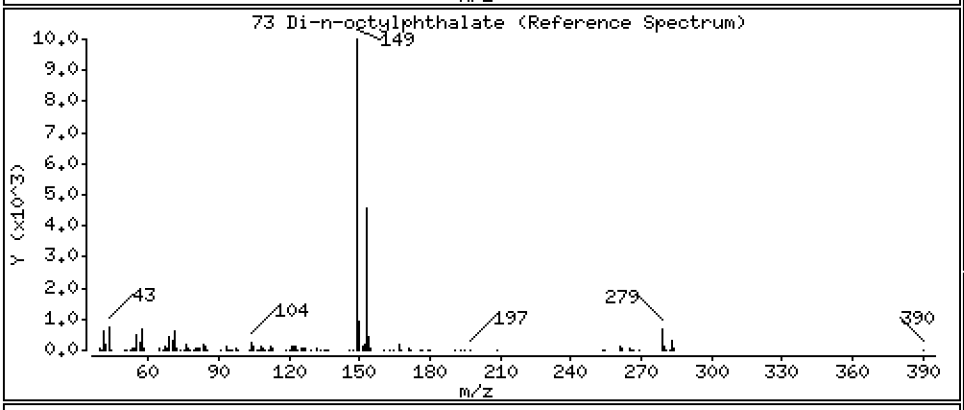
Concentration: 4.947 ug/mL

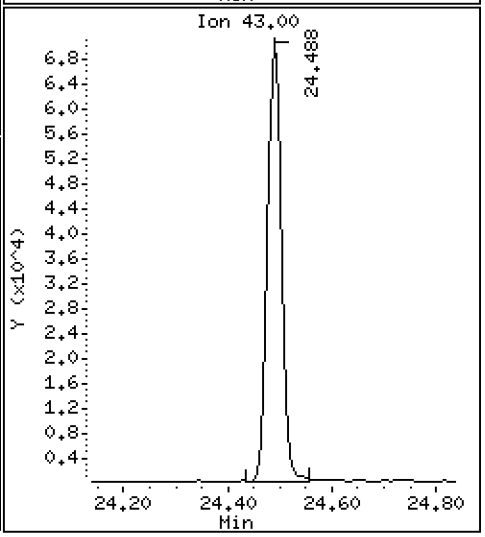


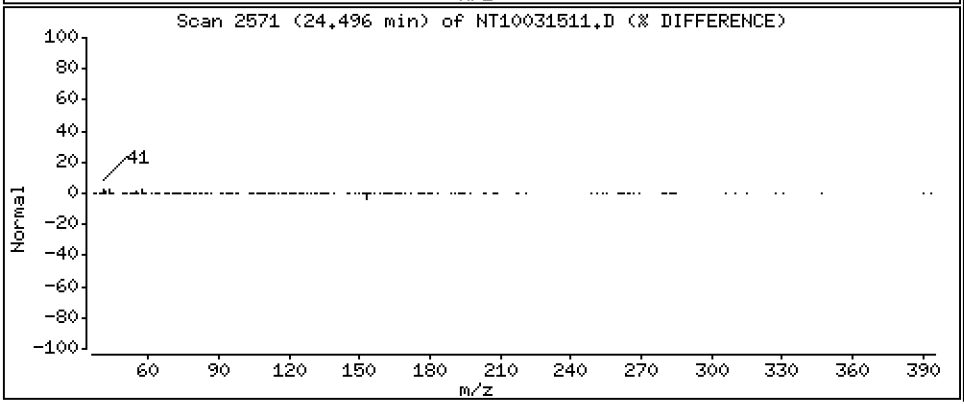












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

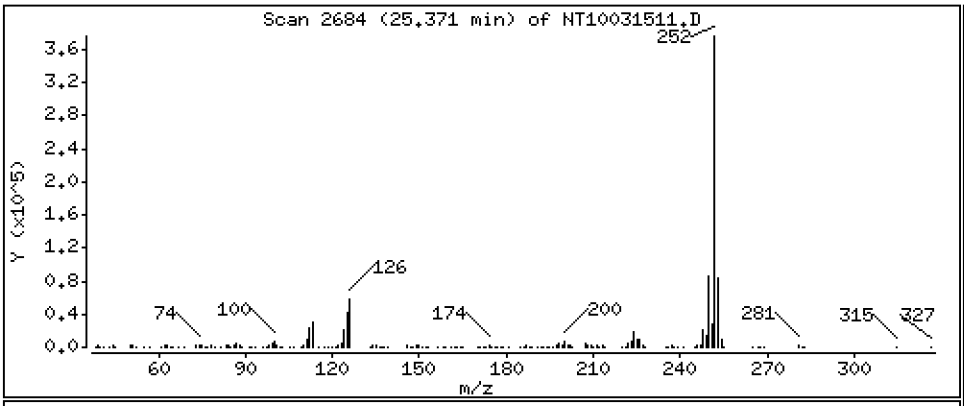
Operator: VTS

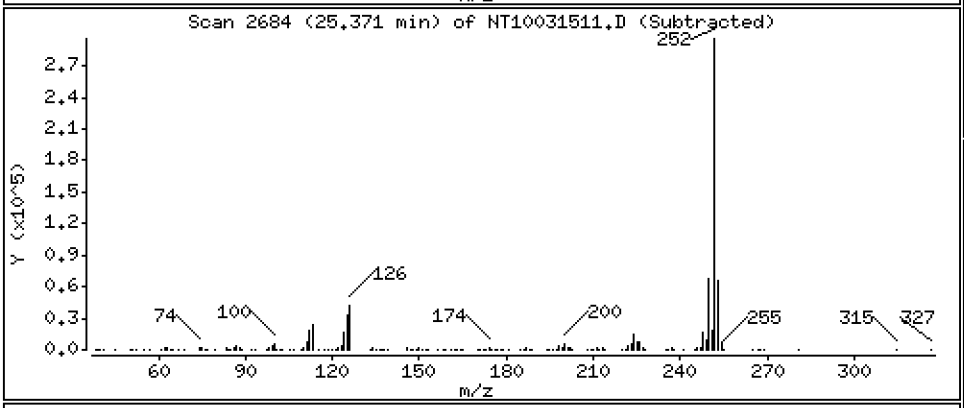
Column phase: ZB-5msi

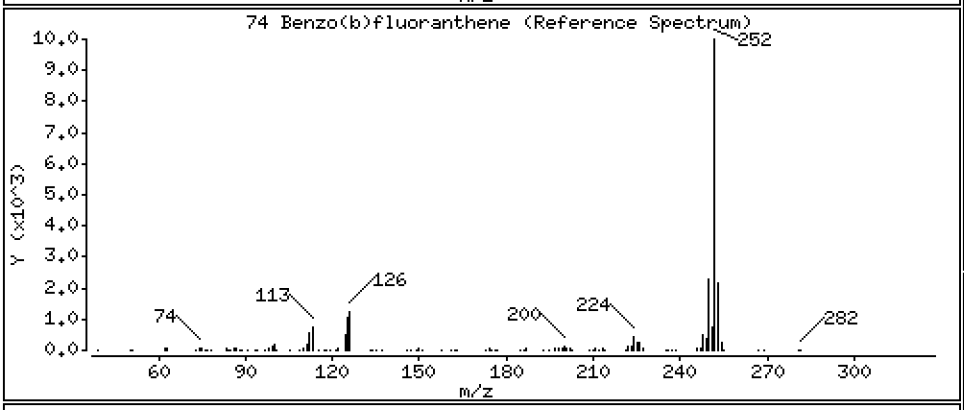
Column diameter: 0.25

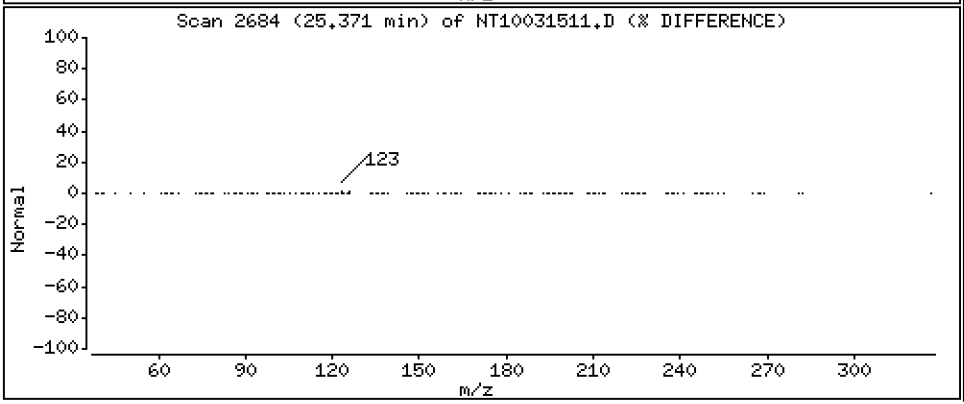
74 Benzo(b)fluoranthene

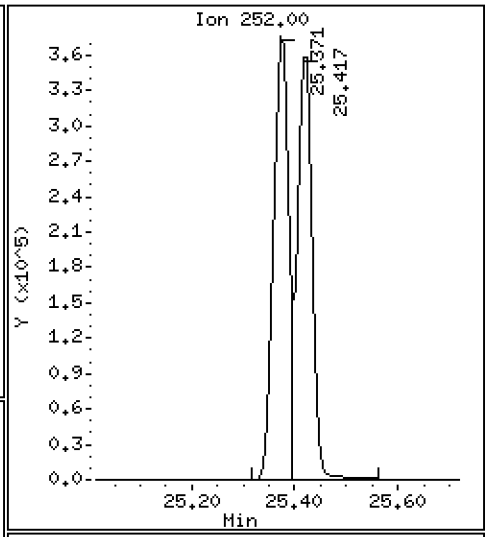
Concentration: 4.602 ug/mL

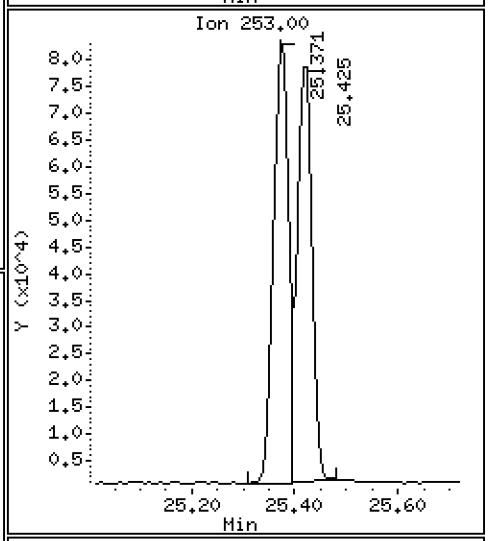


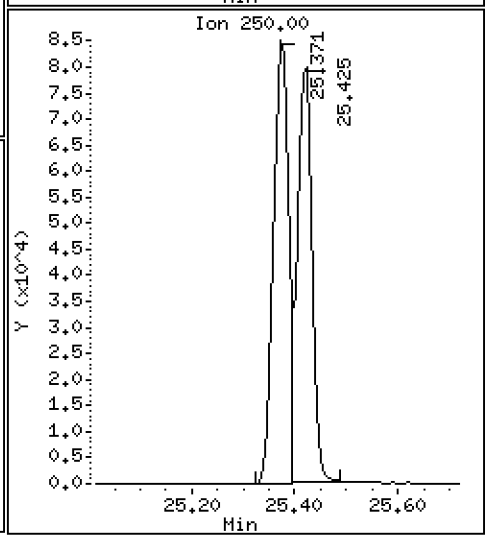












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

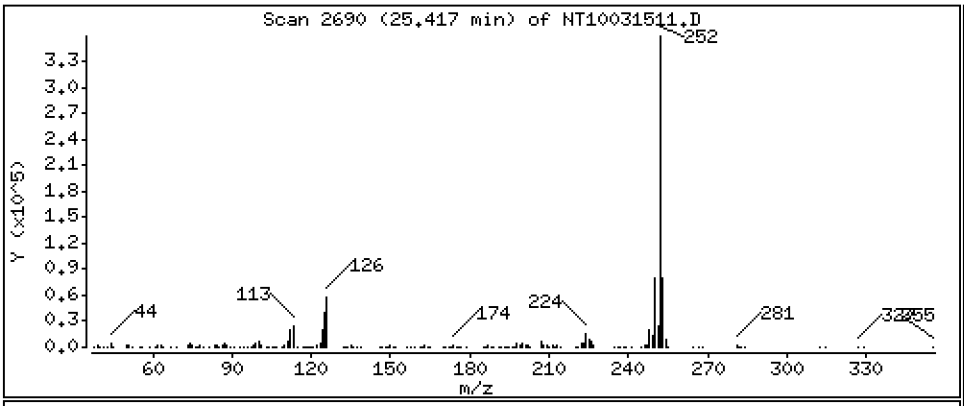
Operator: VTS

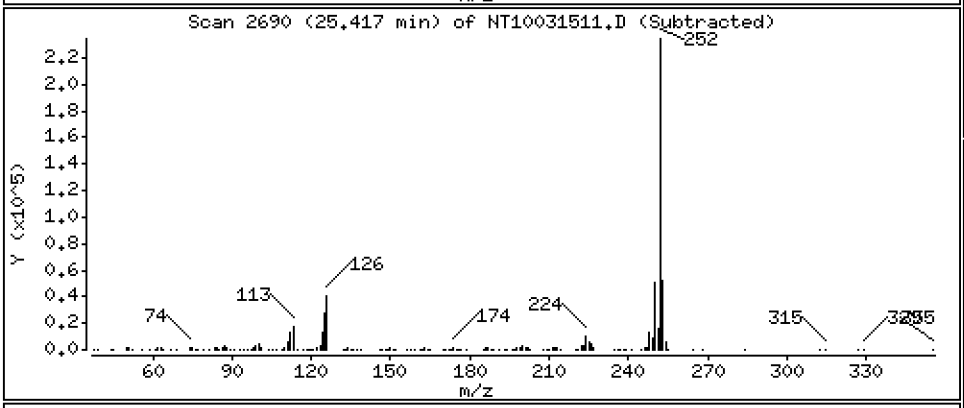
Column phase: ZB-5msi

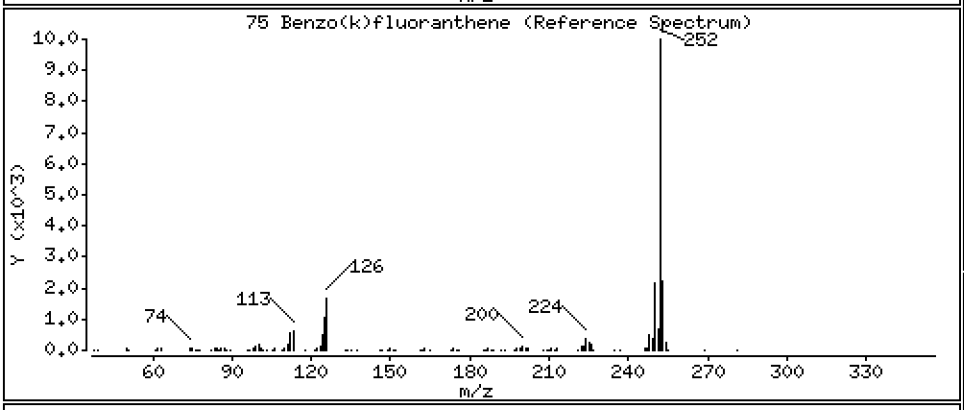
Column diameter: 0.25

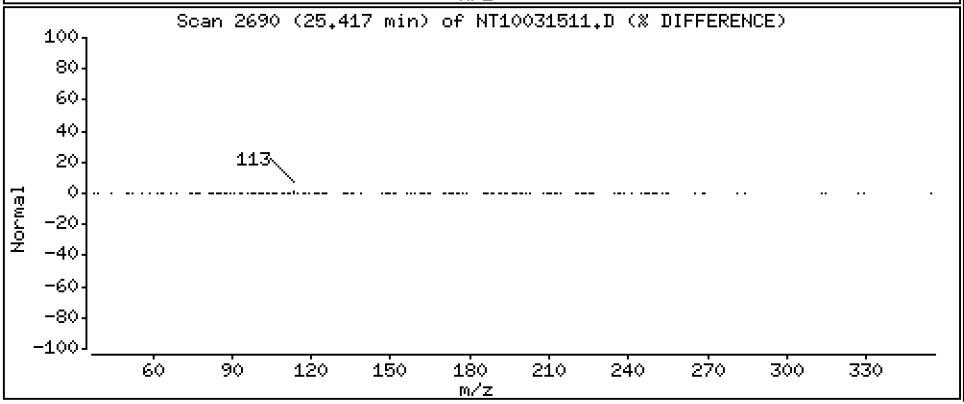
75 Benzo(k)fluoranthene

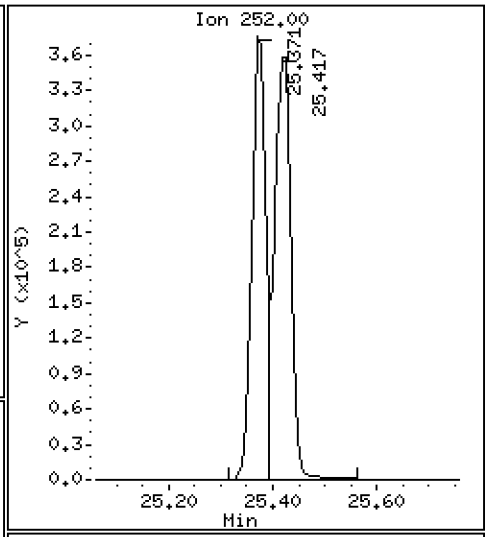
Concentration: 4.898 ug/mL

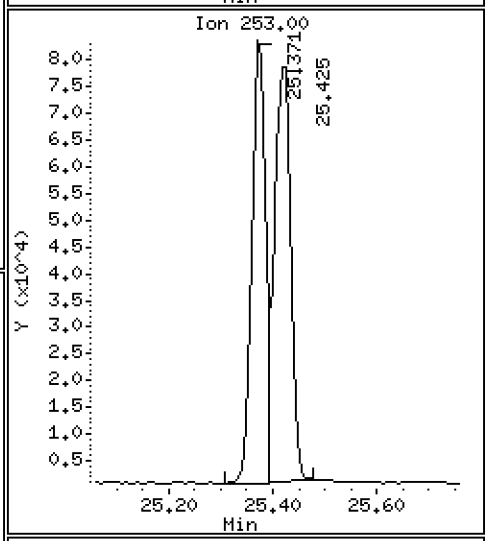


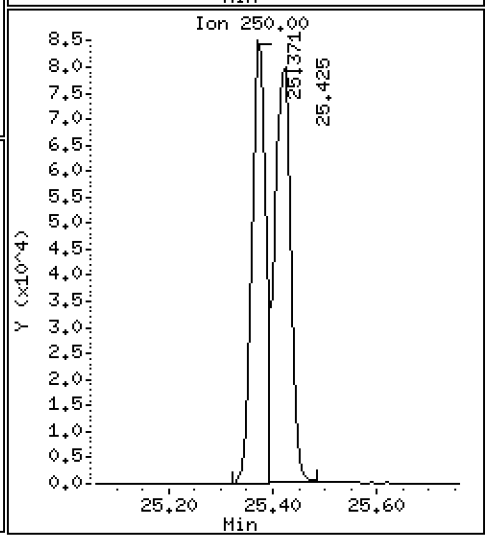












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

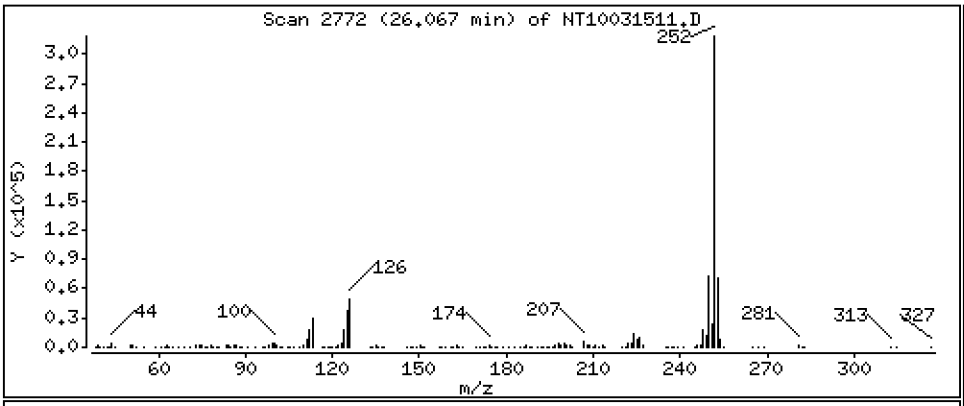
Operator: VTS

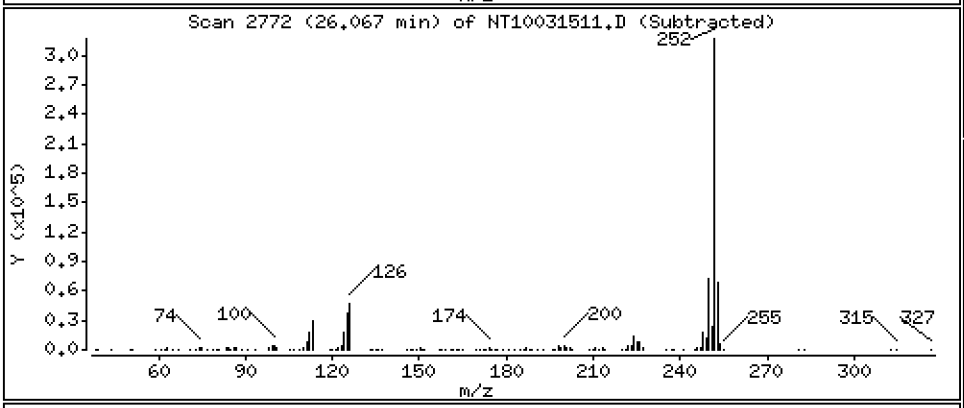
Column phase: ZB-5msi

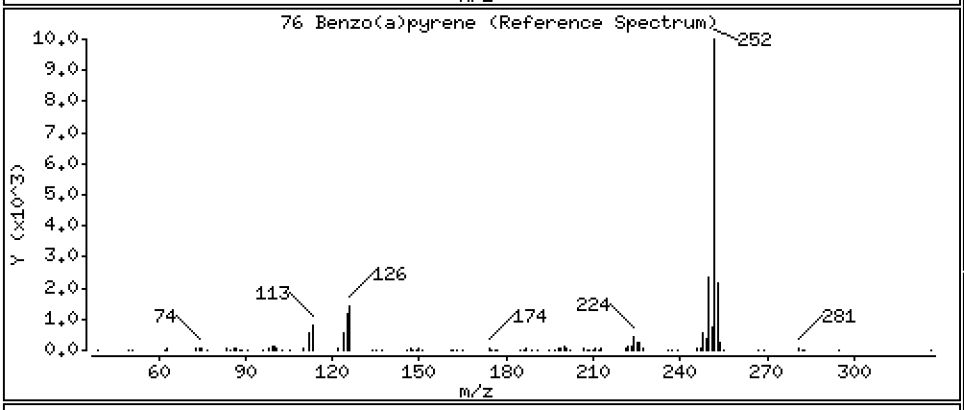
Column diameter: 0.25

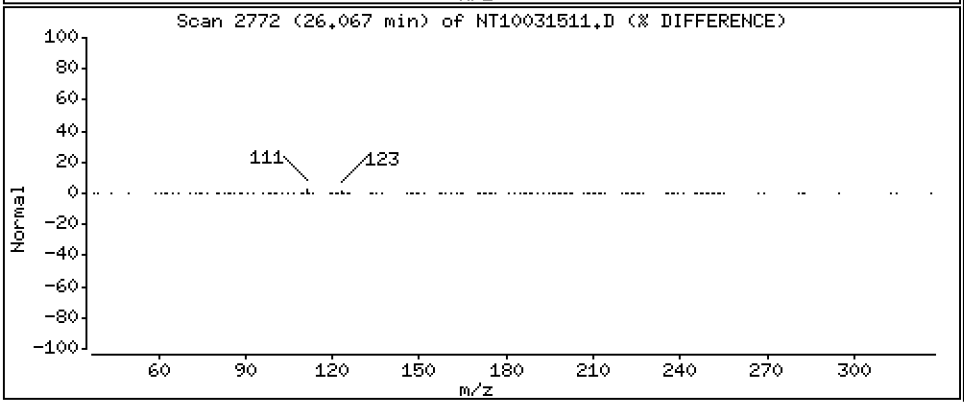
76 Benzo(a)pyrene

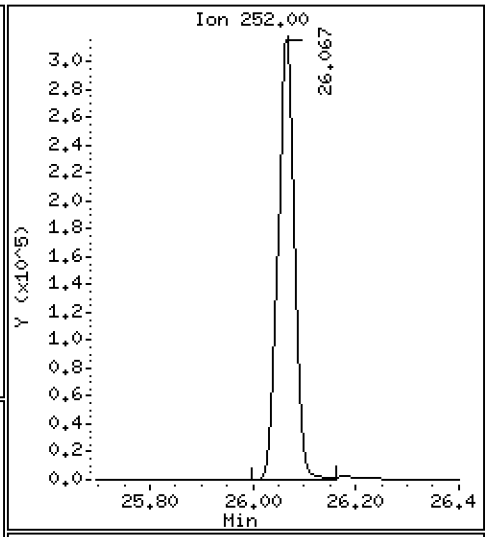
Concentration: 4.873 ug/mL

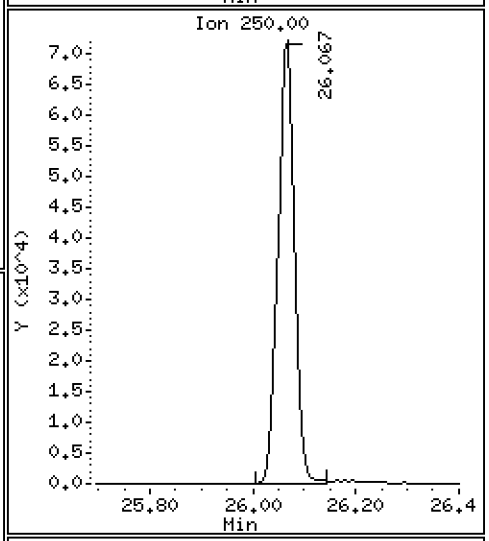


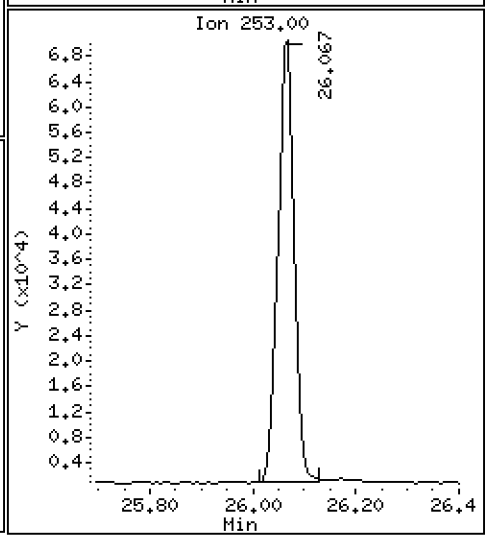












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

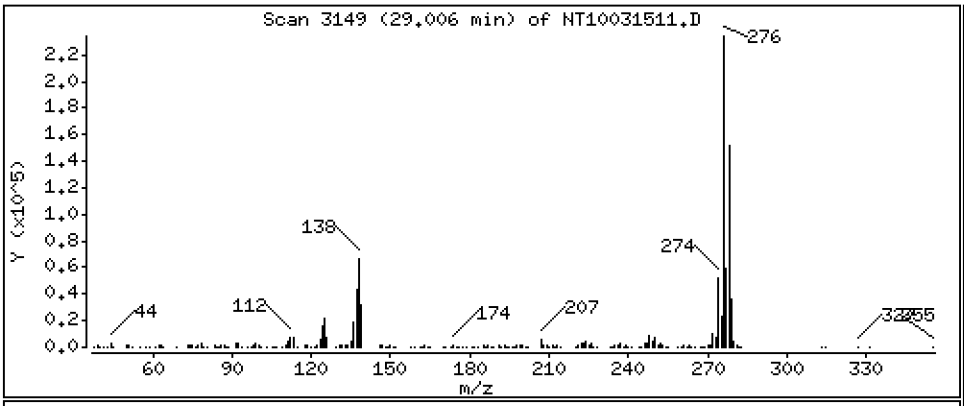
Operator: VTS

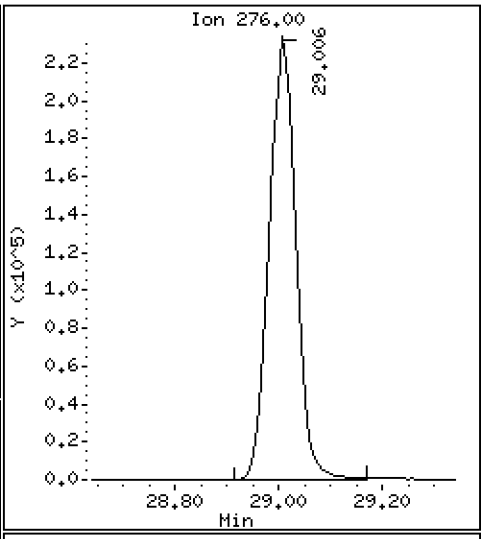
Column phase: ZB-5msi

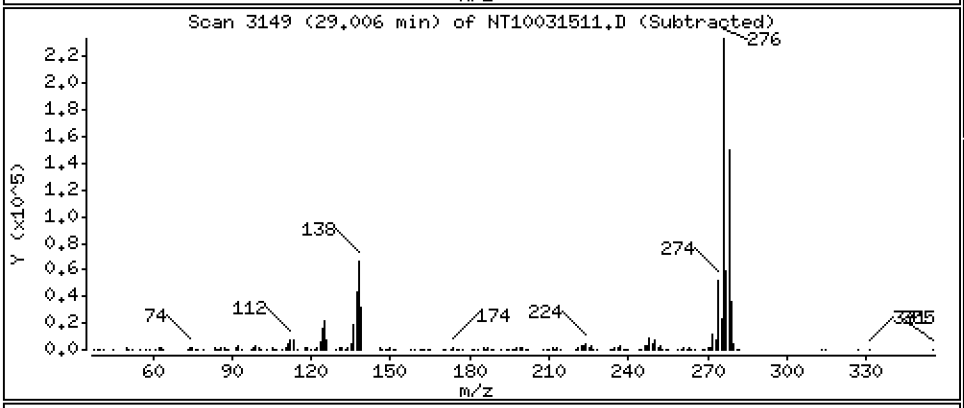
Column diameter: 0.25

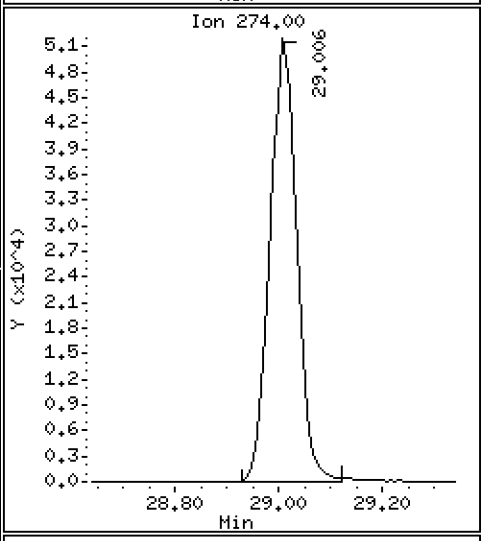
78 Indeno(1,2,3-cd)pyrene

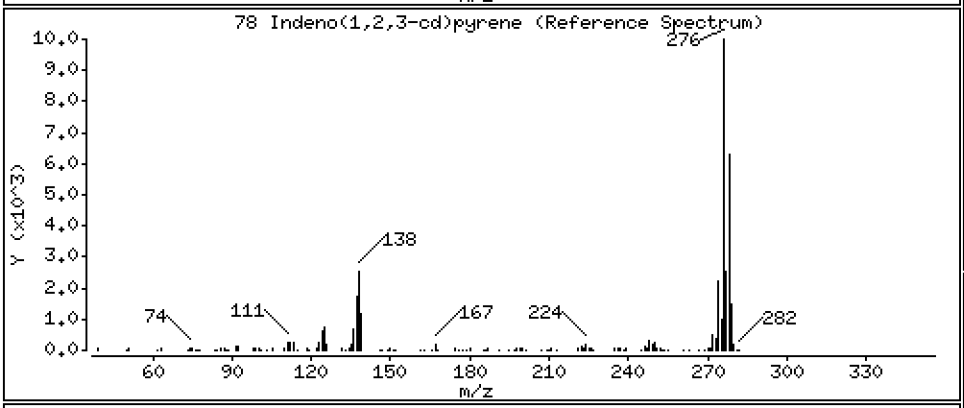
Concentration: 4.577 ug/mL

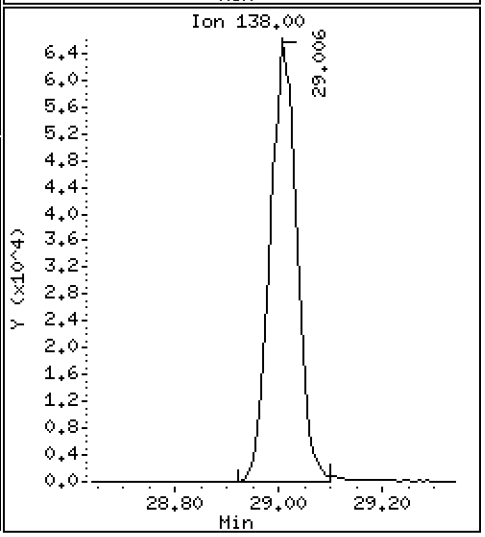


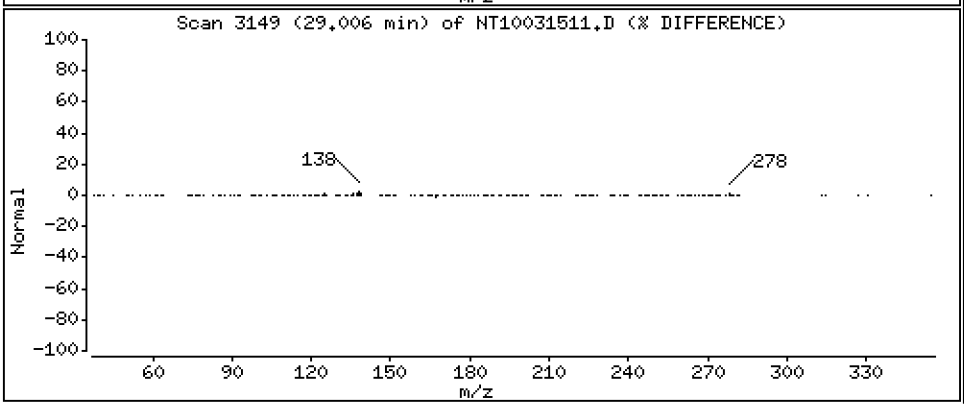












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

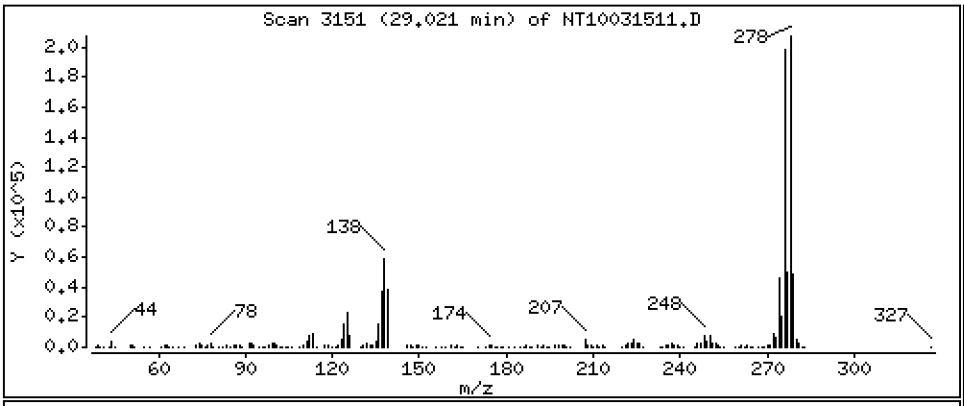
Operator: VTS

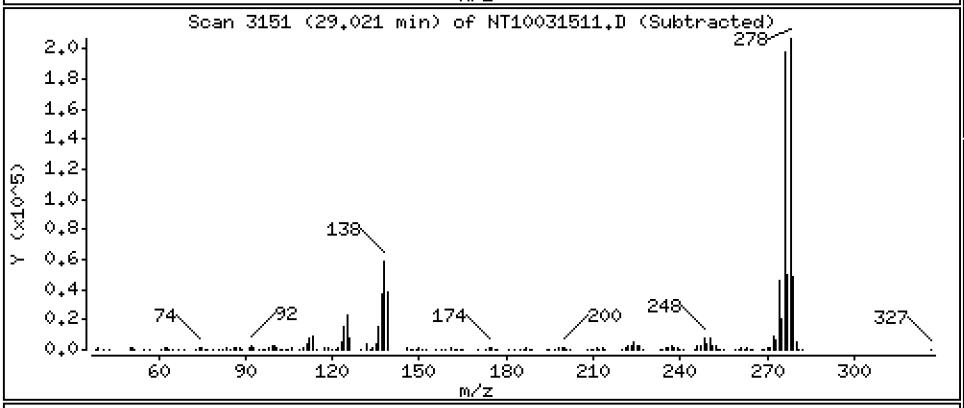
Column phase: ZB-5msi

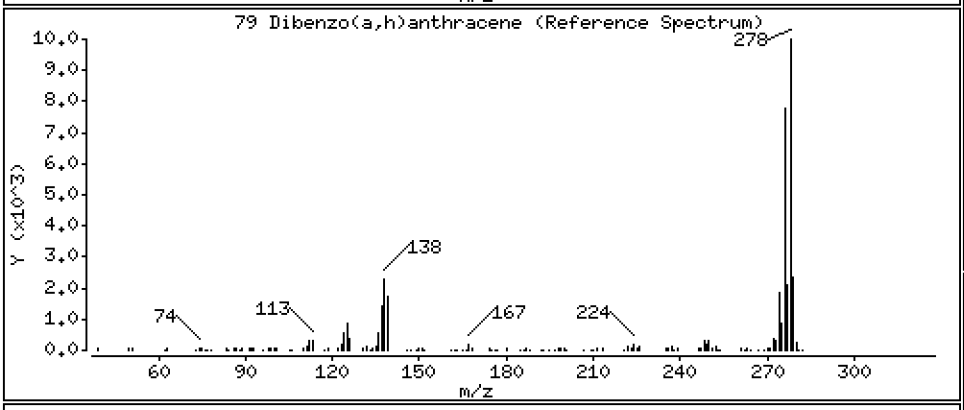
Column diameter: 0.25

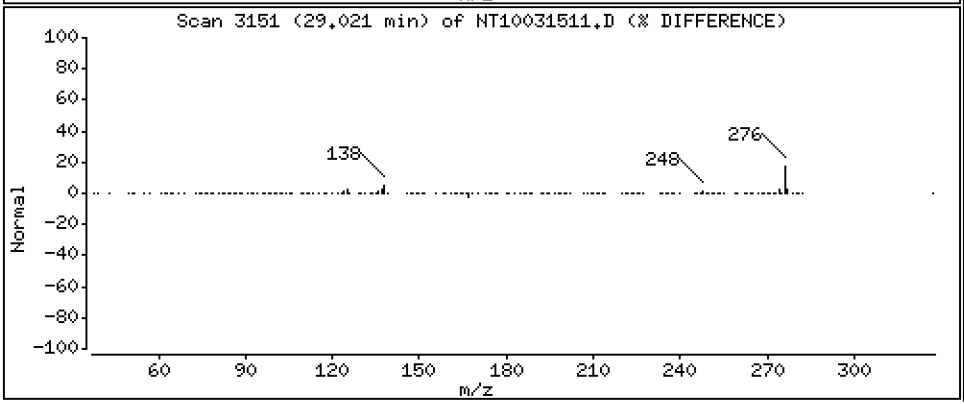
79 Dibenzo(a,h)anthracene

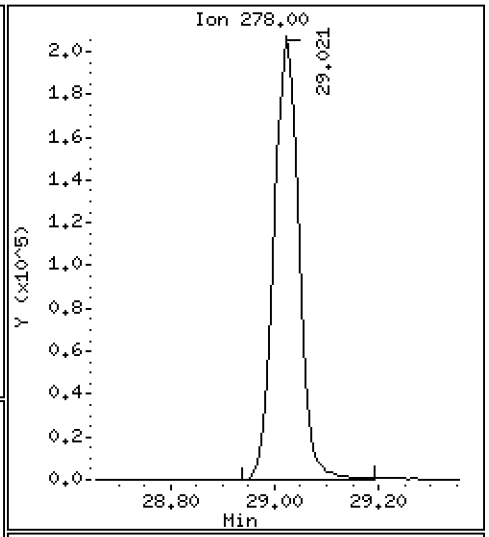
Concentration: 4.547 ug/mL

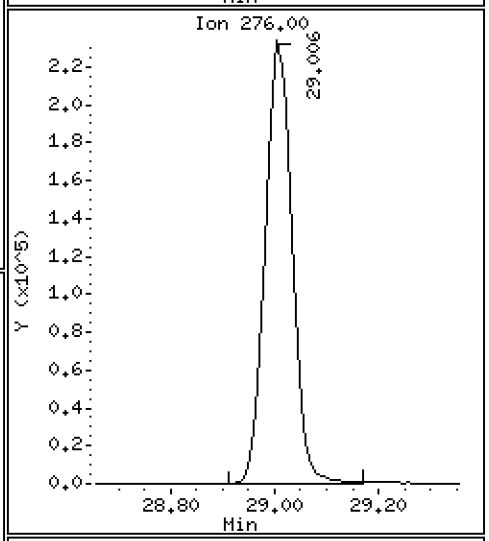


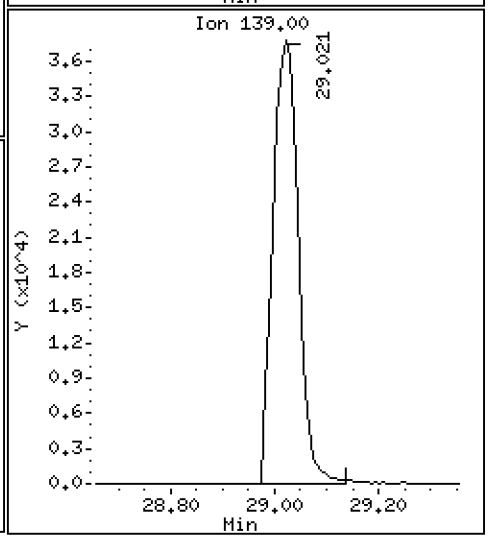












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

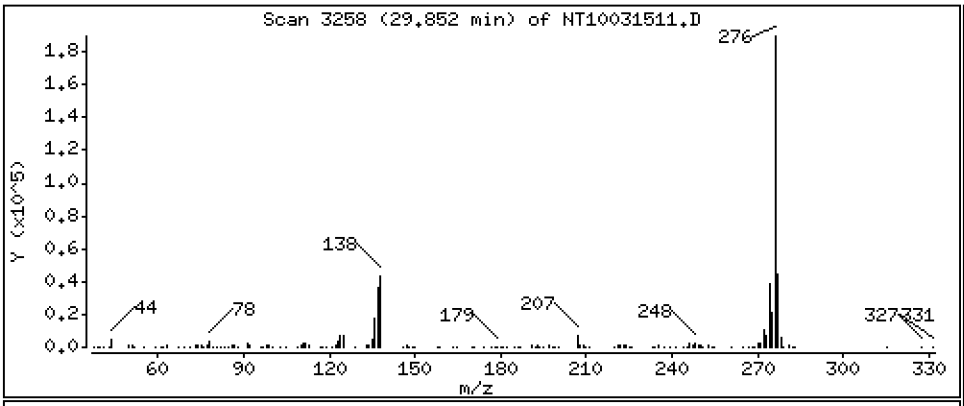
Operator: VTS

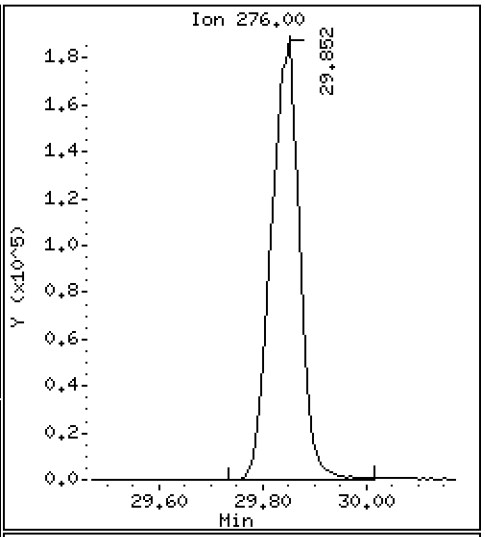
Column phase: ZB-5msi

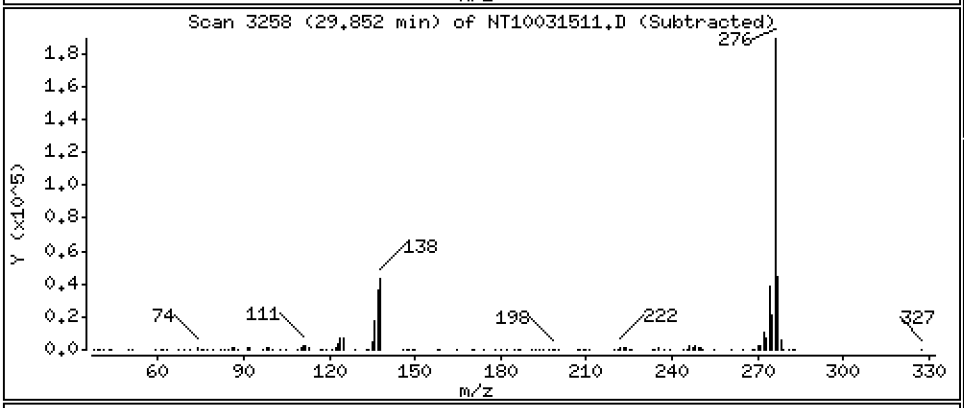
Column diameter: 0.25

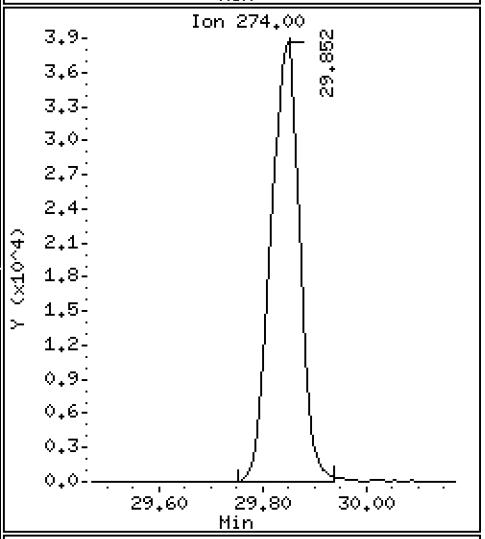
80 Benzo(g,h,i)perylene

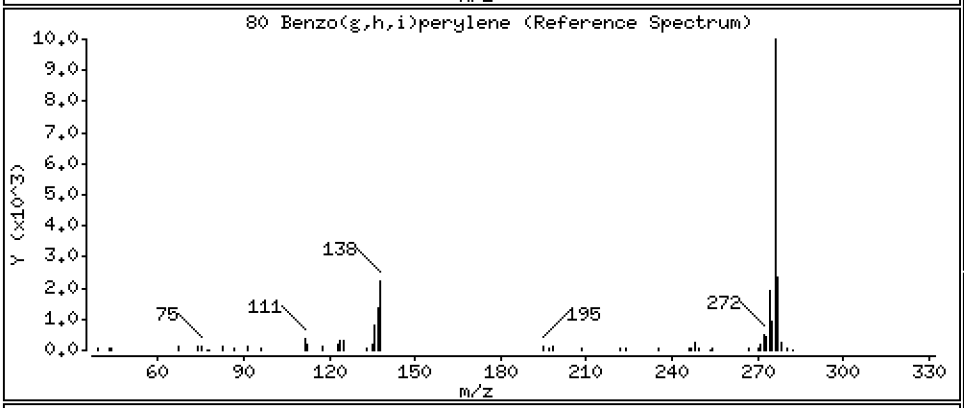
Concentration: 4.590 ug/mL

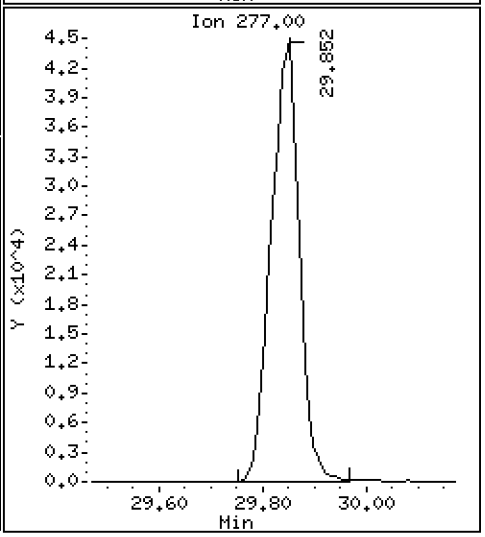


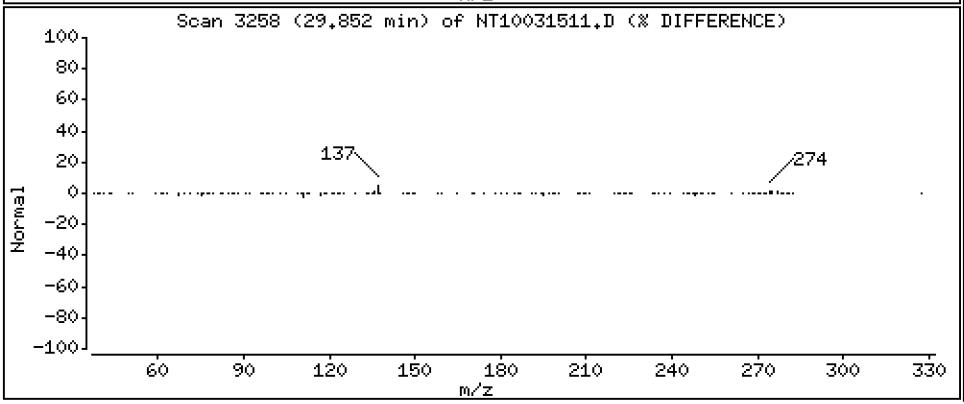












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

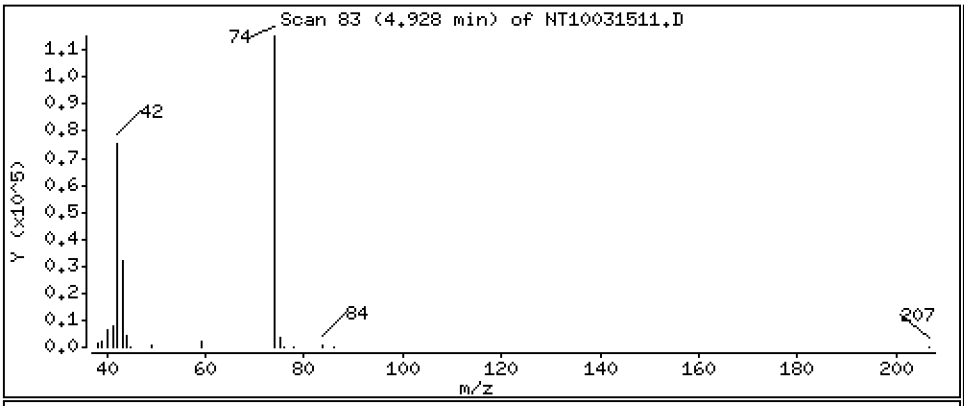
Operator: VTS

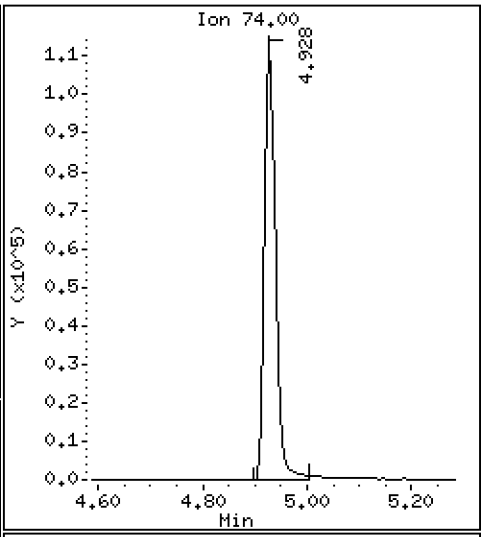
Column phase: ZB-5msi

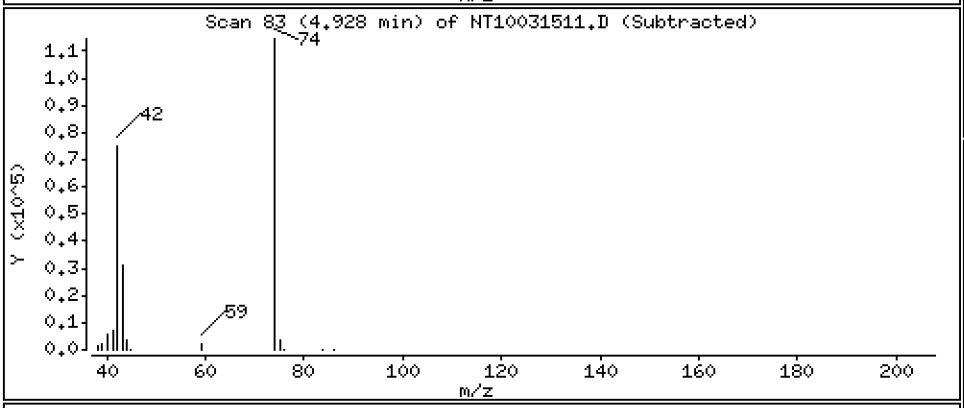
Column diameter: 0.25

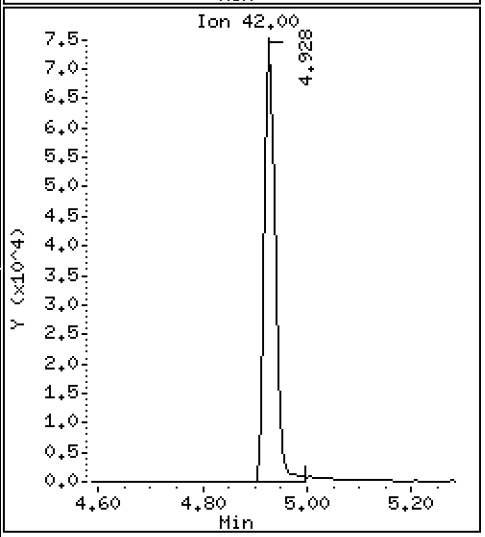
90 N-Nitrosodimethylamine

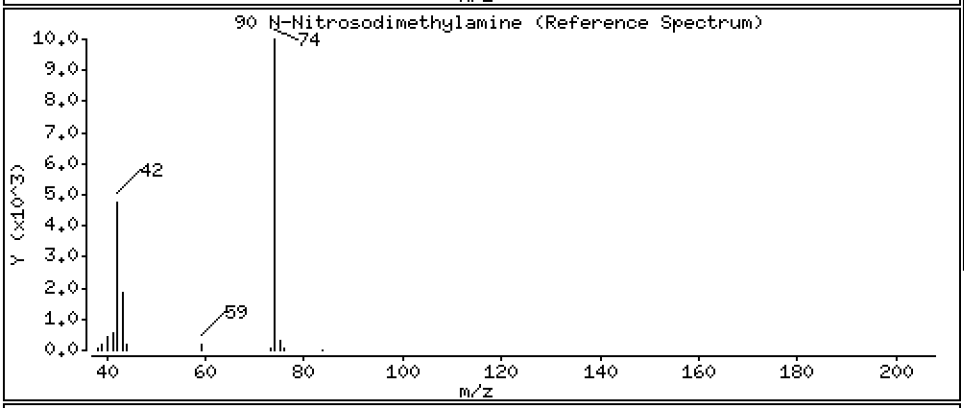
Concentration: 5.194 ug/mL

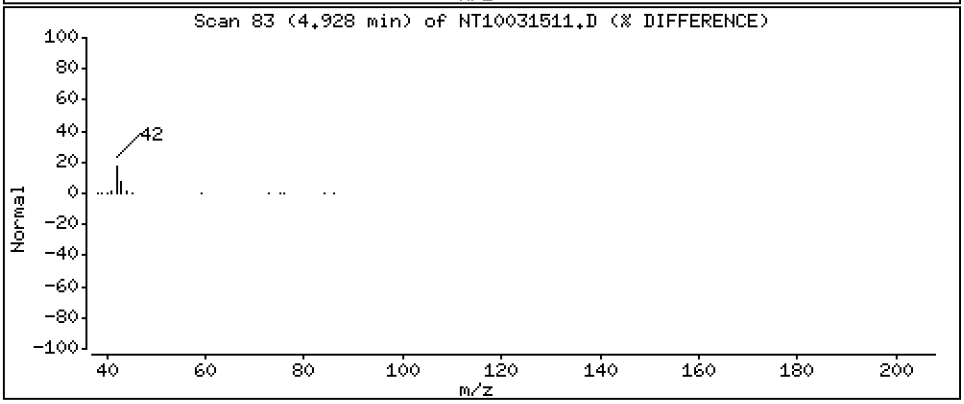












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

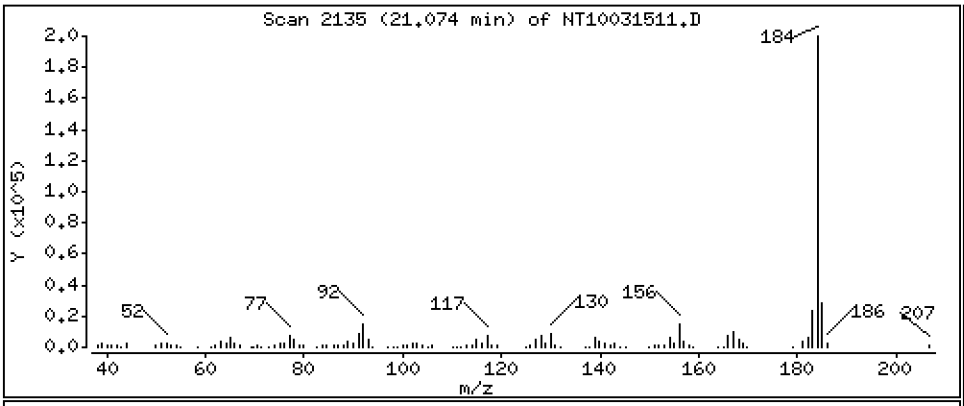
Operator: VTS

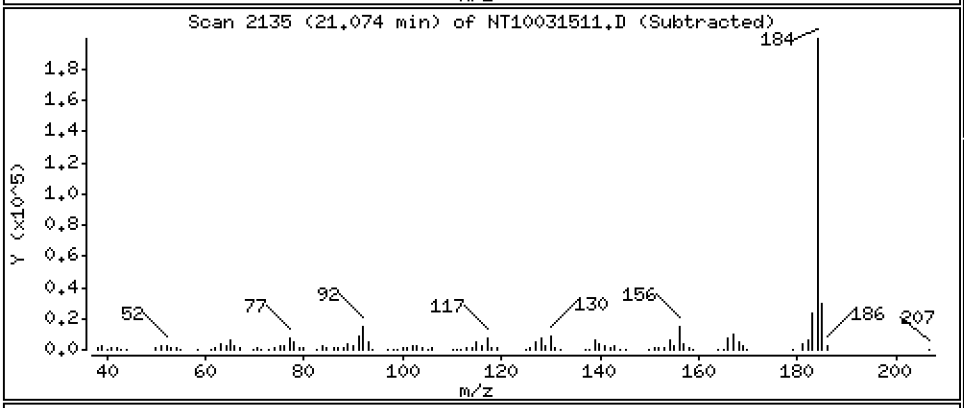
Column phase: ZB-5msi

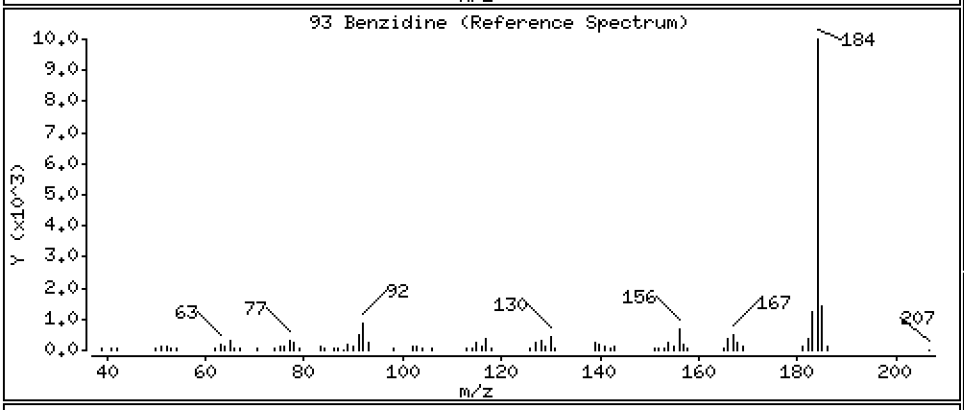
Column diameter: 0.25

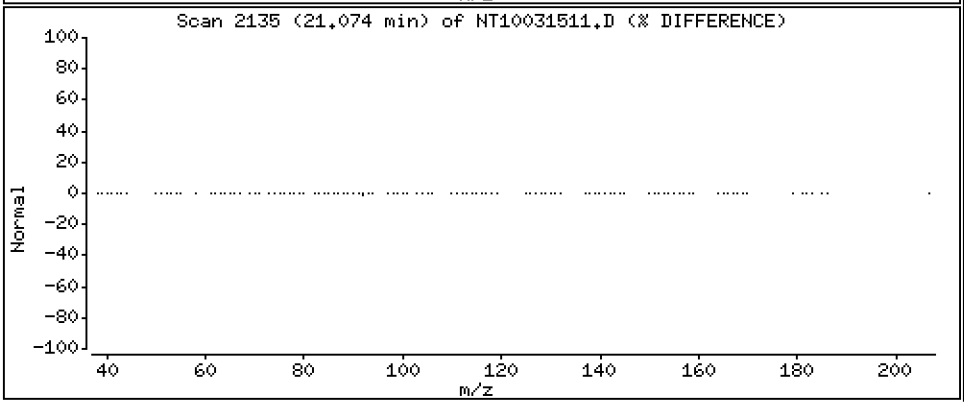
93 Benzidine

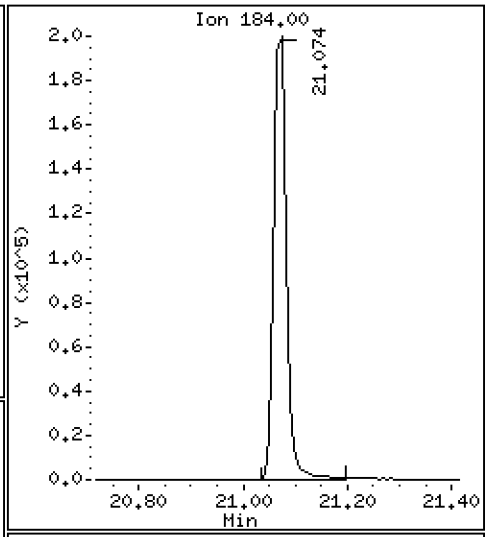
Concentration: 4.380 ug/mL

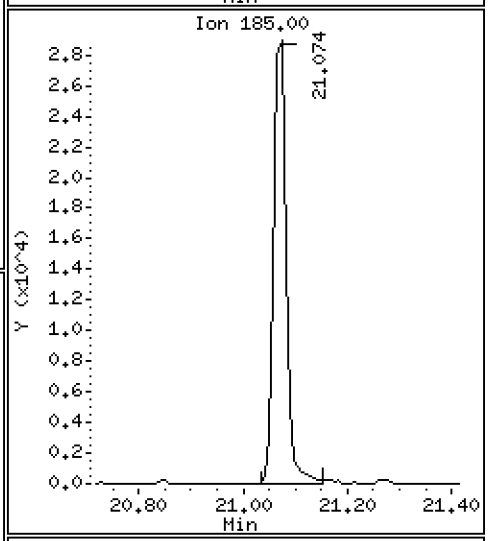


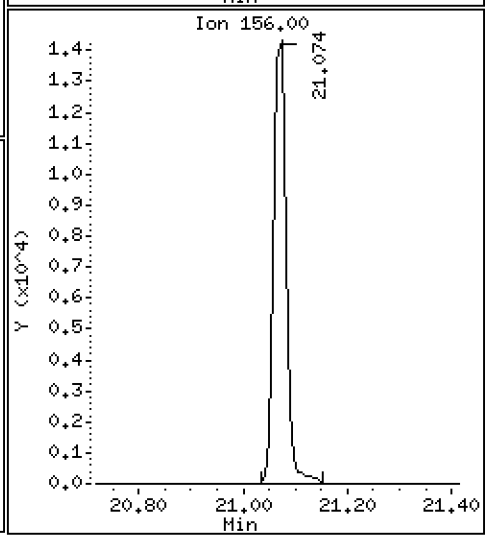












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

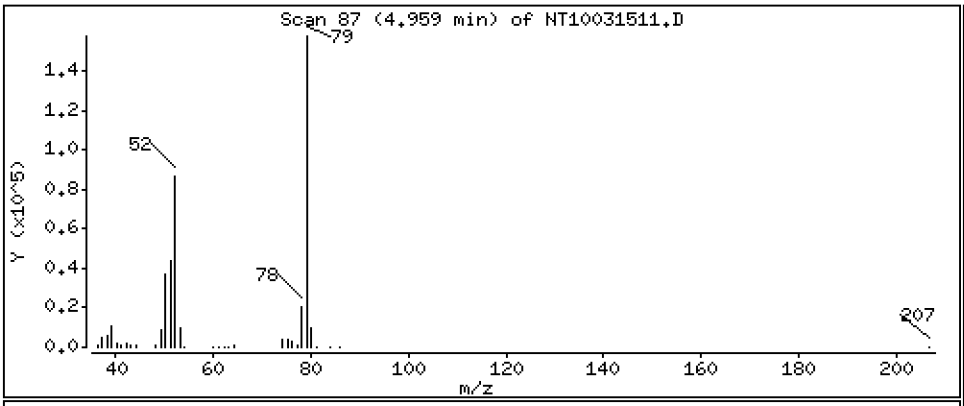
Operator: VTS

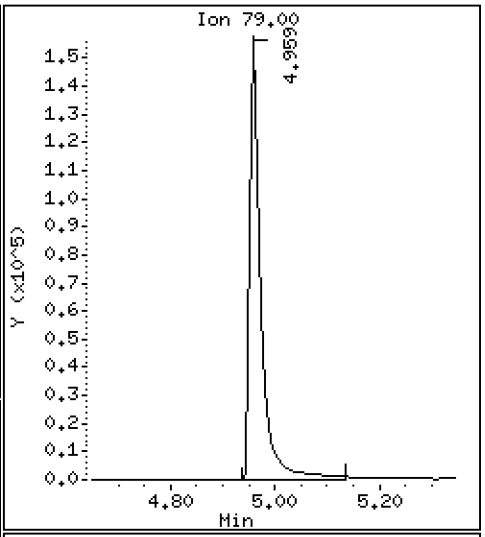
Column phase: ZB-5msi

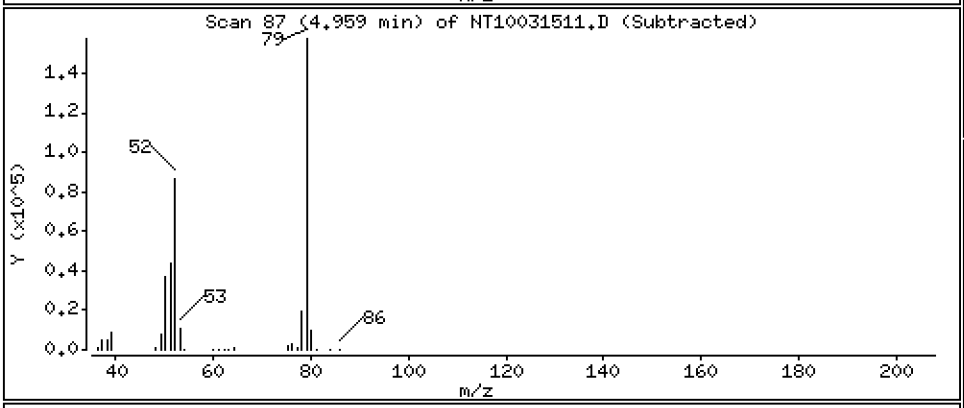
Column diameter: 0.25

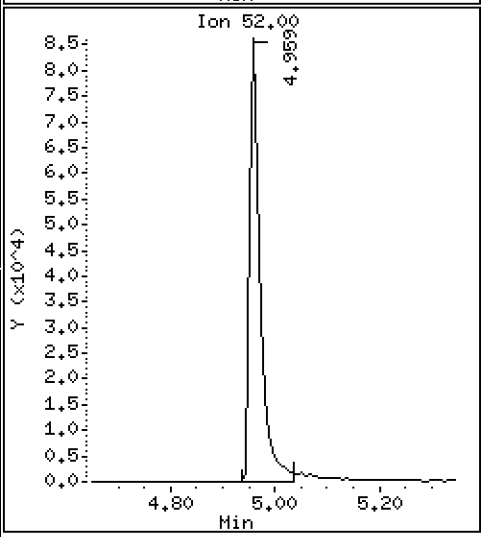
103 Pyridine

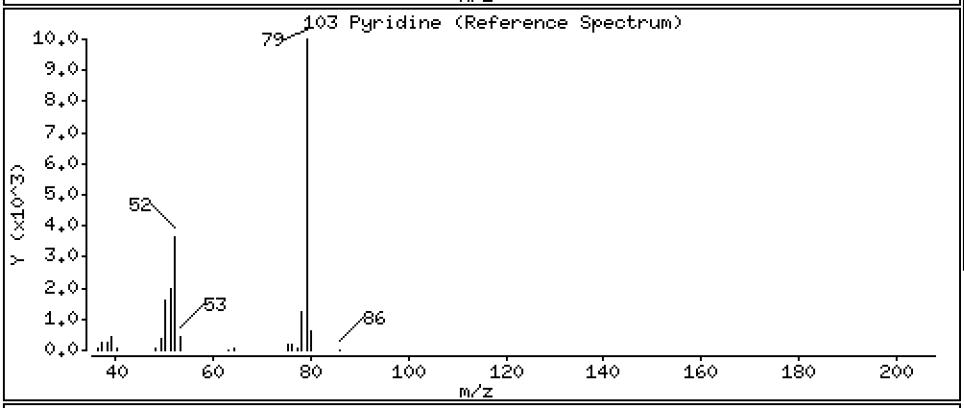
Concentration: 5.337 ug/mL

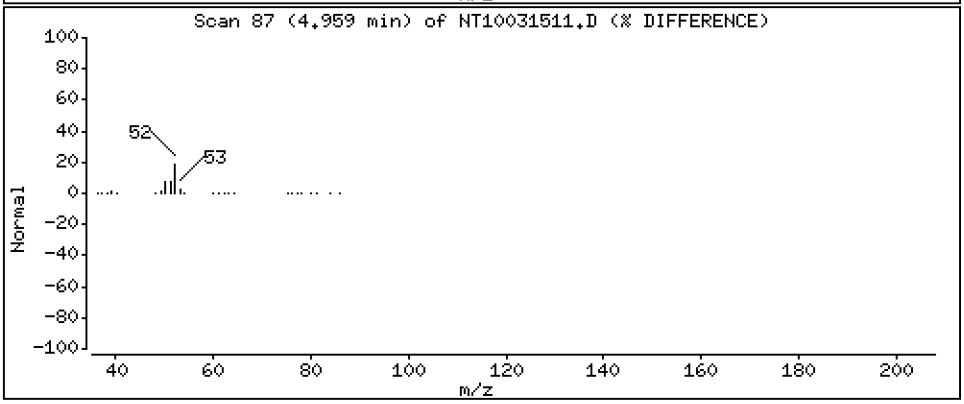












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

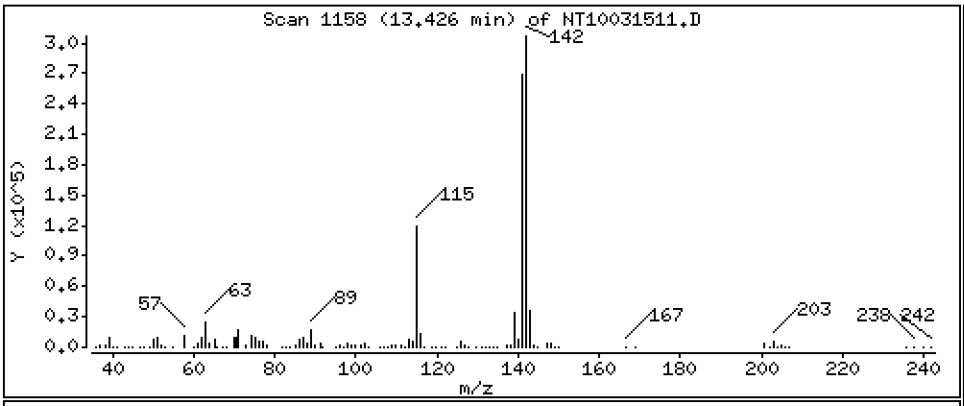
Operator: VTS

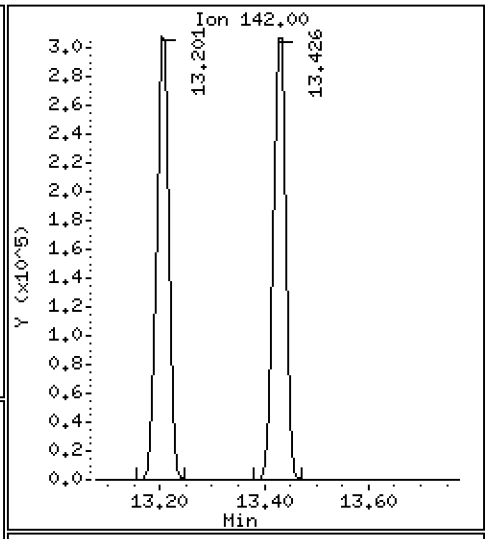
Column phase: ZB-5msi

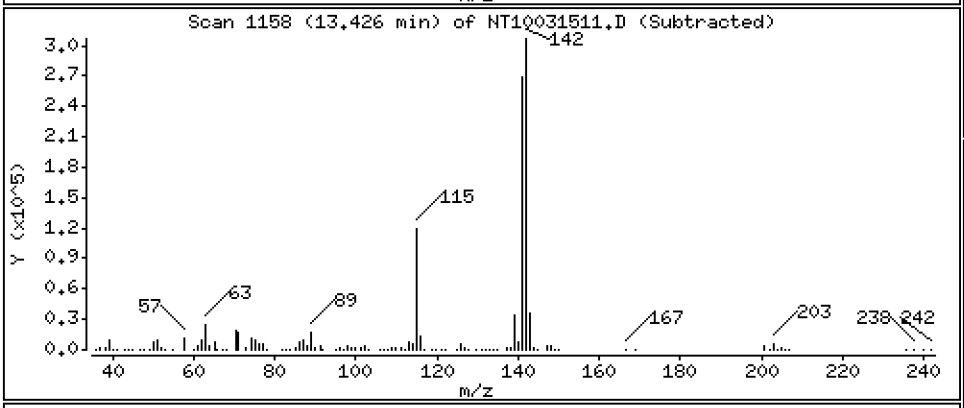
Column diameter: 0.25

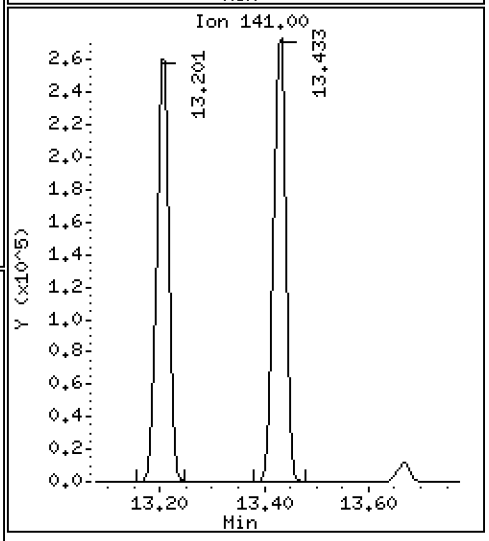
105 1-methylnaphthalene

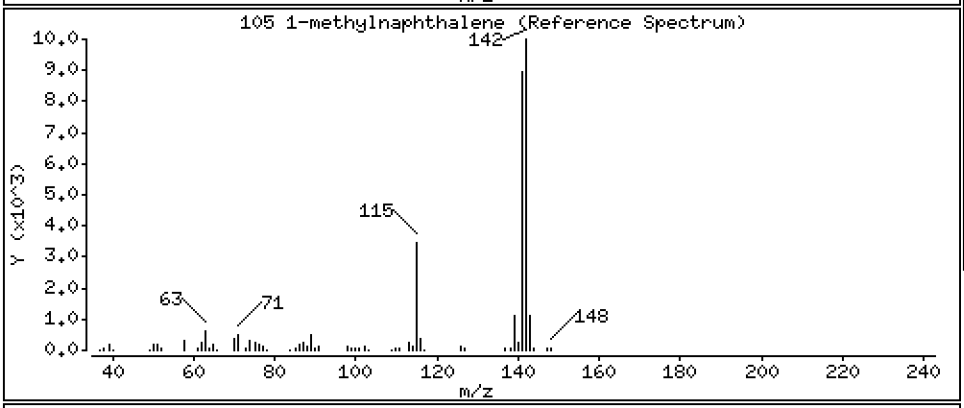
Concentration: 4.875 ug/mL

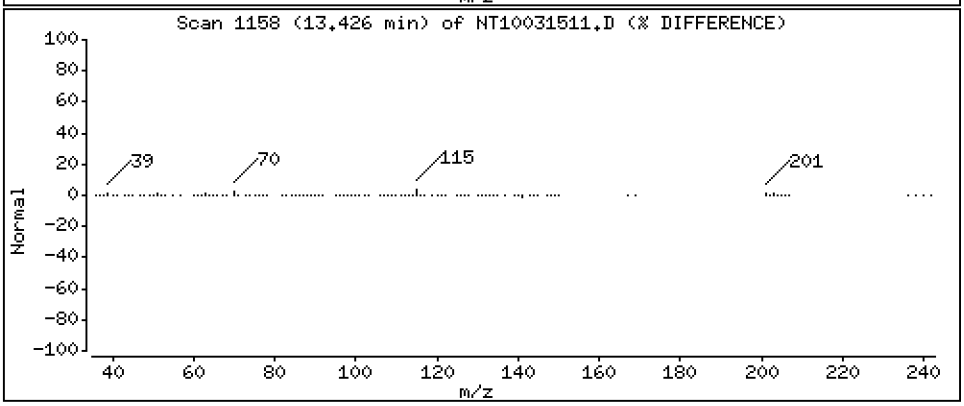












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

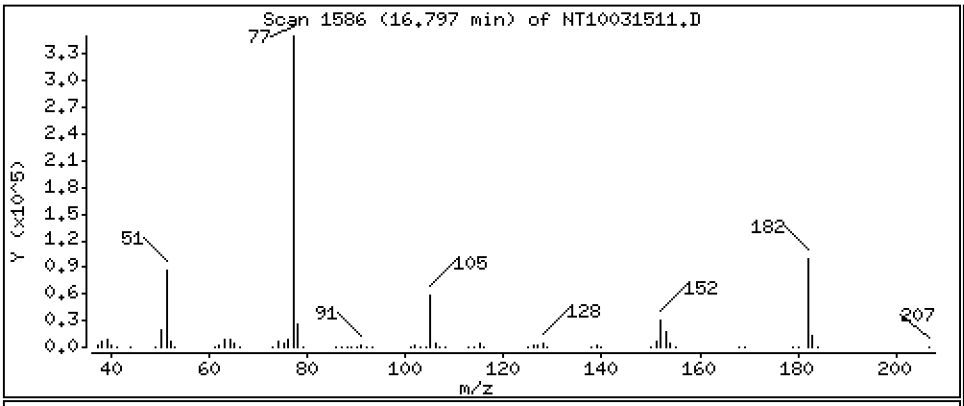
Operator: VTS

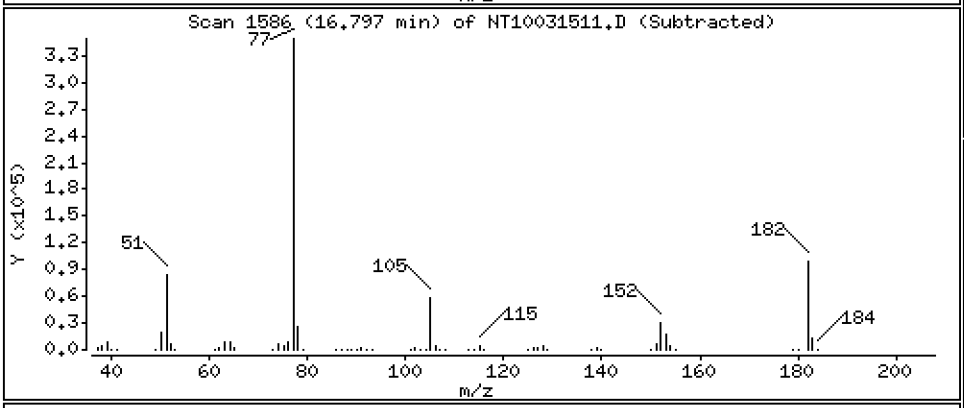
Column phase: ZB-5msi

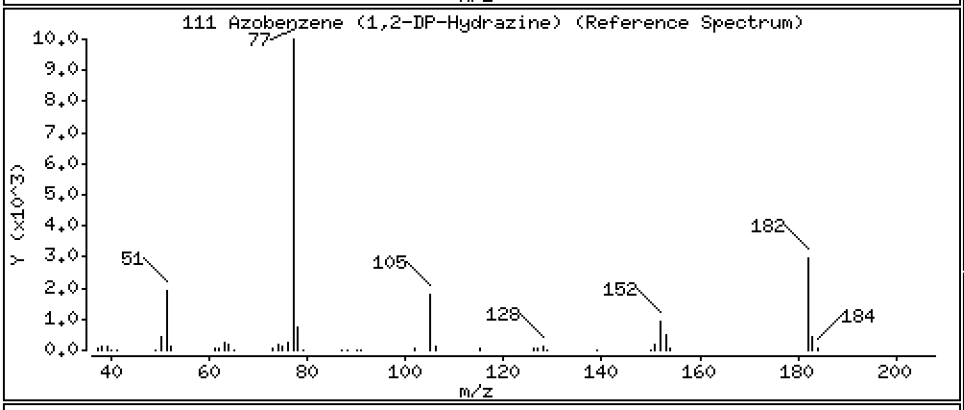
Column diameter: 0.25

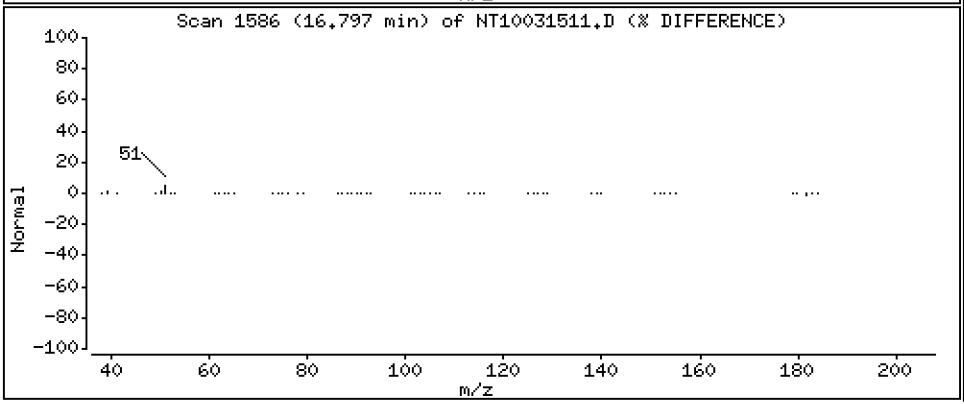
111 Azobenzene (1,2-DP-Hydrazine)

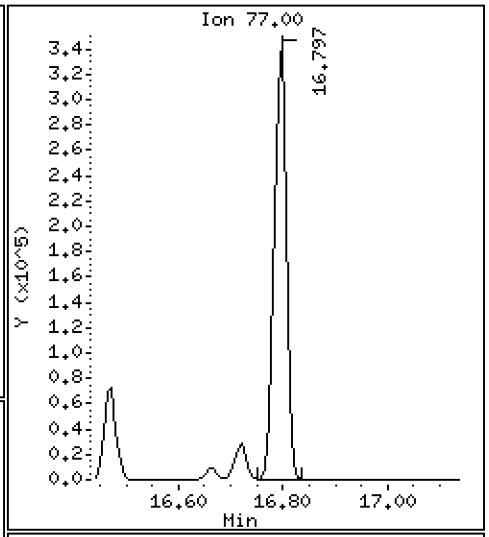
Concentration: 4.937 ug/mL

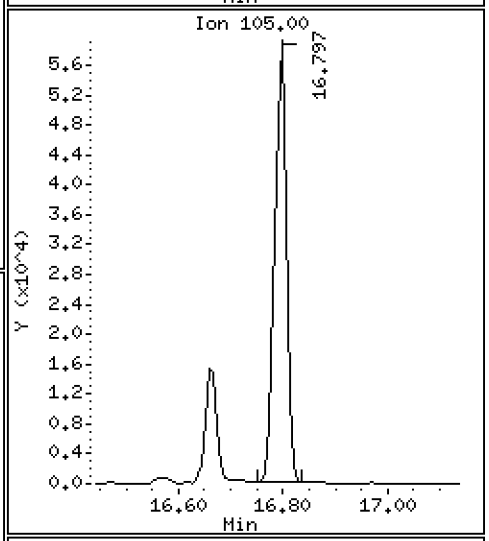


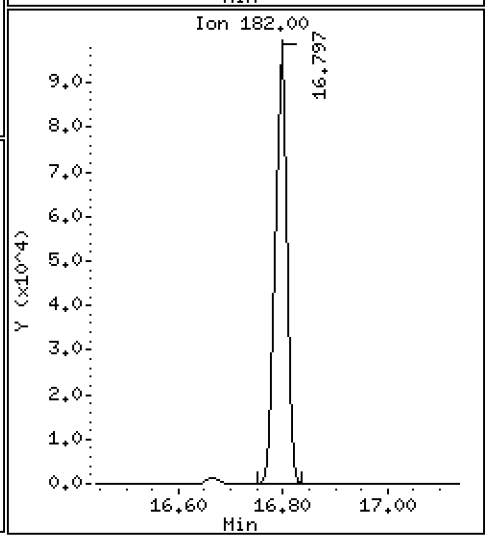












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

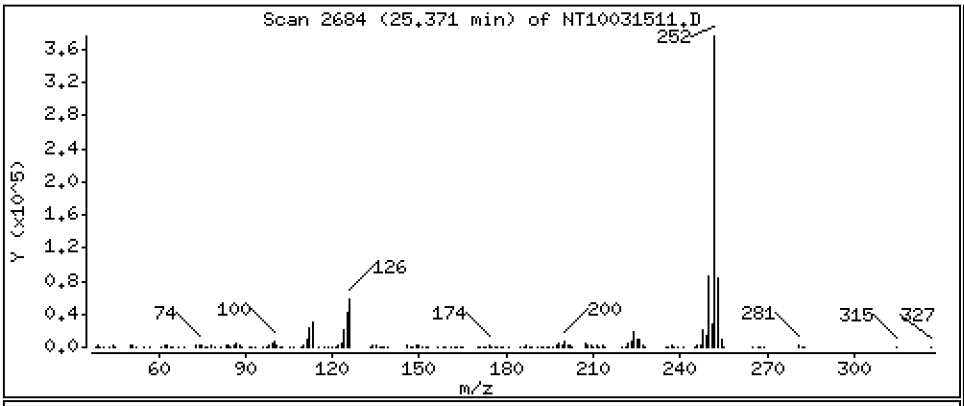
Operator: VTS

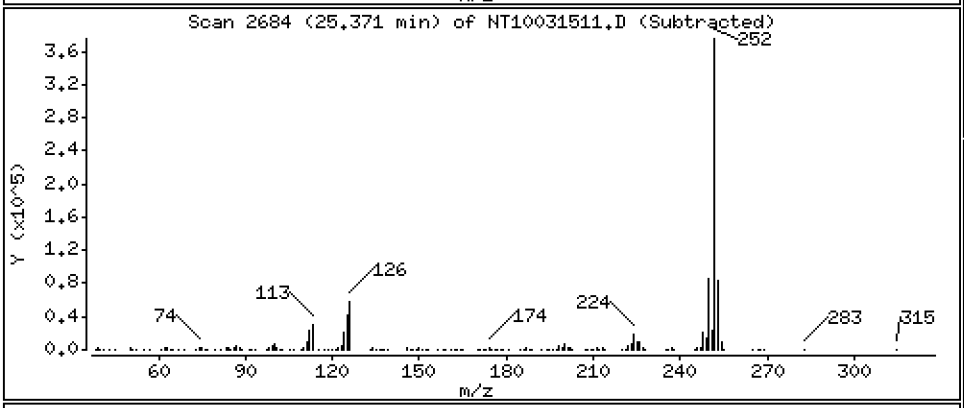
Column phase: ZB-5msi

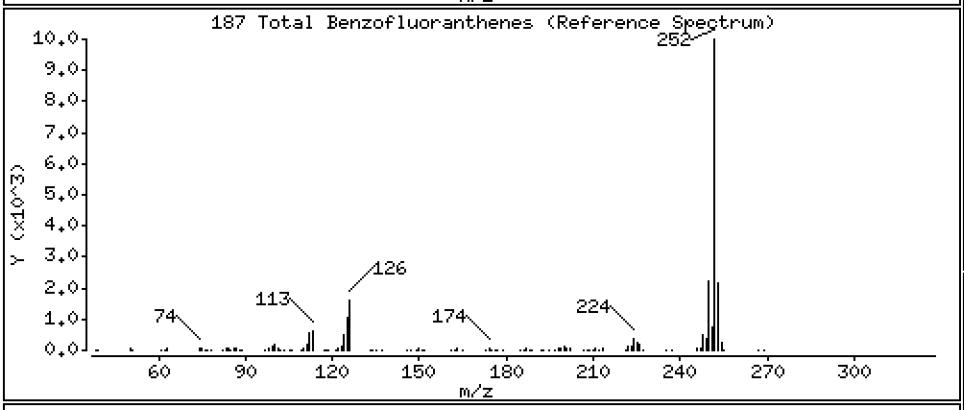
Column diameter: 0.25

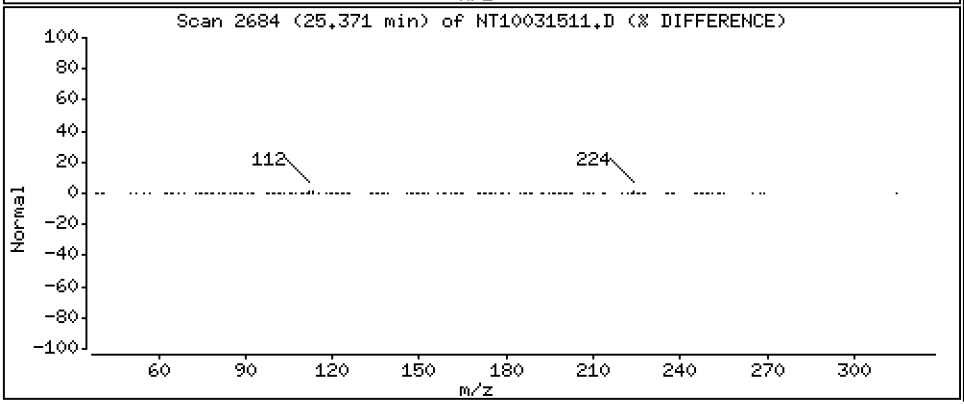
187 Total Benzofluoranthenes

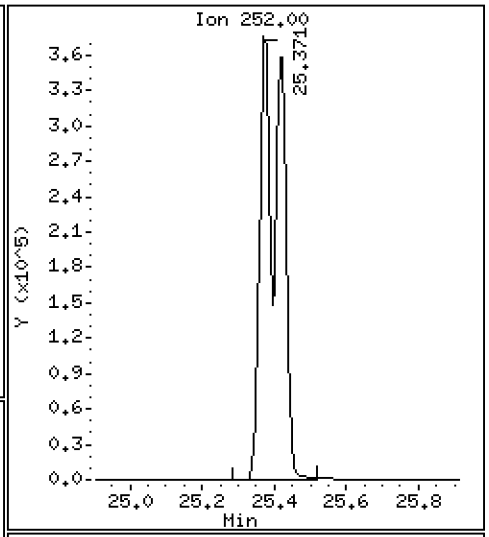
Concentration: 9.483 ug/mL

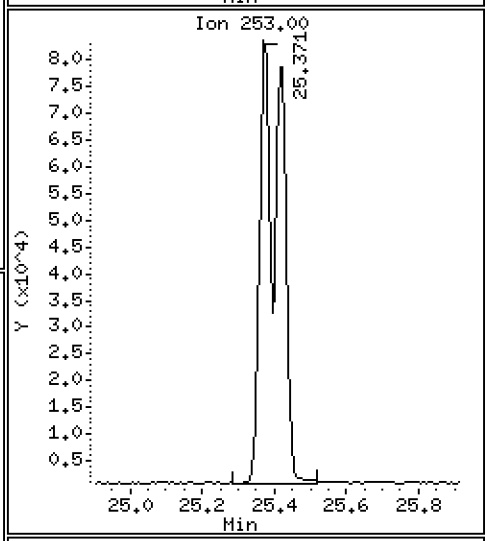


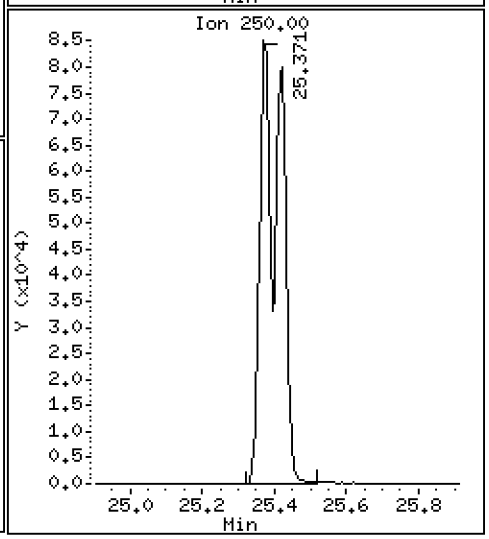












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

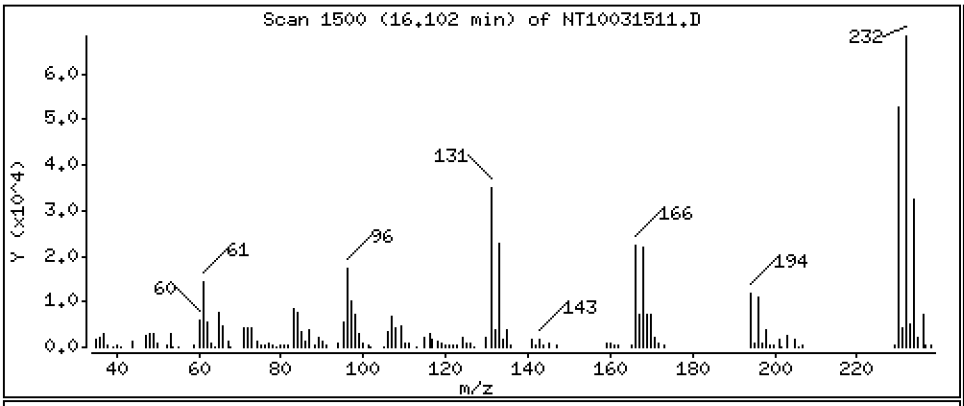
Operator: VTS

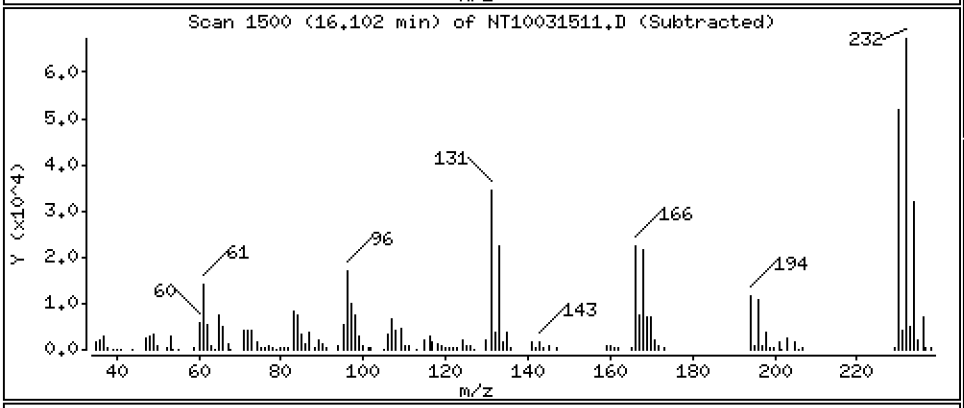
Column phase: ZB-5msi

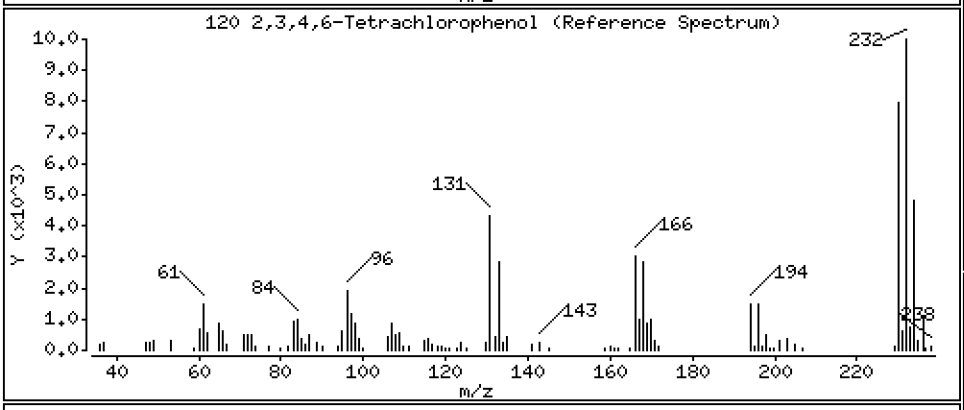
Column diameter: 0.25

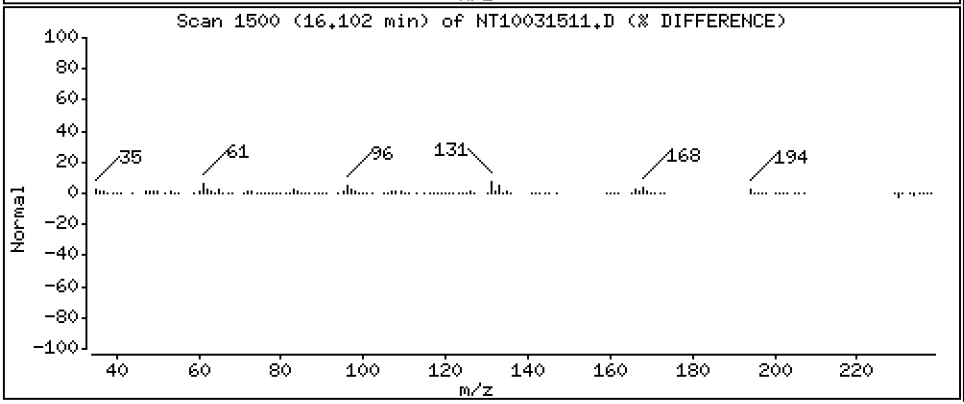
120 2,3,4,6-Tetrachlorophenol

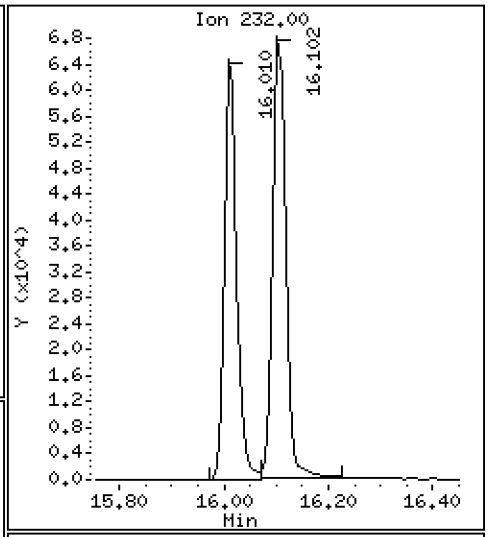
Concentration: 3.980 ug/mL

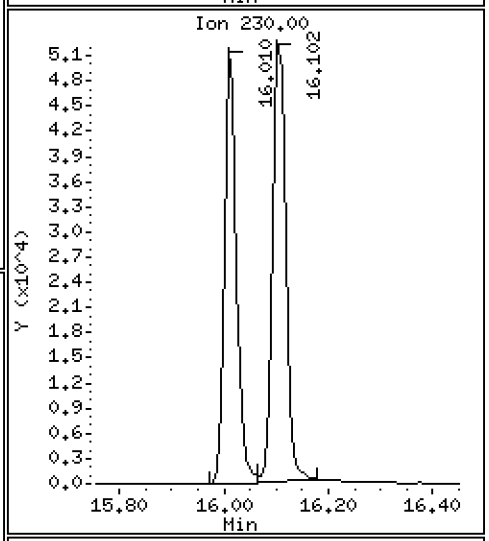


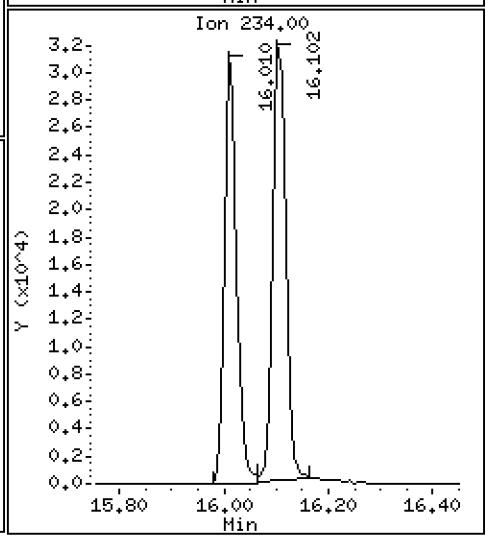












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230315.b\NT10031511.D
Lab Smp Id: SLC0228-SCV1
Inj Date : 16-MAR-2023 02:16
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0228-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	Compound Not Detected.					
$ 2	Phenol-d5	99	Compound Not Detected.					
3	Phenol	94	8.659	8.652	(0.931)	281600	4.41237	4.412
$ 5	2-Chlorophenol-d4	132	Compound Not Detected.					
4	Bis(2-Chloroethyl)ether	93	8.837	8.837	(0.950)	248892	5.25818	5.258
6	2-Chlorophenol	128	8.960	8.961	(0.963)	233608	4.27685	4.277
7	1,3-Dichlorobenzene	146	9.239	9.231	(0.993)	275540	4.77157	4.772
* 8	1,4-Dichlorobenzene-d4	152	9.301	9.293	(1.000)	154809	4.00000	
9	1,4-Dichlorobenzene	146	9.332	9.325	(1.003)	274051	4.91272	4.913
$ 10	1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	9.689	9.682	(1.042)	268028	4.88215	4.882
11	Benzyl alcohol	108	9.557	9.557	(1.028)	147597	4.92722	4.927
14	2,2'-oxybis(1-Chloropropane)	121	9.860	9.860	(1.060)	100179	6.21363	6.214
13	2-Methylphenol	108	9.775	9.767	(1.051)	196115	4.21542	4.215
17	Hexachloroethane	117	10.279	10.271	(1.105)	114513	5.00332	5.003
16	N-Nitroso-di-n-propylamine	70	10.116	10.108	(1.088)	190250	5.17896	5.179
15	4-Methylphenol	108	10.046	10.031	(1.080)	213951	4.36462	4.365
$ 18	Nitrobenzene-d5	82	Compound Not Detected.					
19	Nitrobenzene	77	10.426	10.419	(0.885)	274714	4.85798	4.858
20	Isophorone	82	10.861	10.861	(0.922)	556741	7.69604	7.696
21	2-Nitrophenol	139	11.047	11.048	(0.938)	110302	3.99452	3.995
22	2,4-Dimethylphenol	107	11.081	11.082	(0.941)	188638	3.63181	3.632
23	Bis(2-Chloroethoxy)methane	93	11.285	11.285	(0.958)	273219	5.65409	5.654
24	Benzoic acid	105	11.217	11.166	(0.952)	173961	5.95241	5.952
25	2,4-Dichlorophenol	162	11.489	11.489	(0.975)	195480	4.70301	4.703
26	1,2,4-Trichlorobenzene	180	11.685	11.685	(0.992)	222176	4.55366	4.554
* 27	Naphthalene-d8	136	11.777	11.770	(1.000)	570882	4.00000	
28	Naphthalene	128	11.816	11.816	(1.003)	713318	4.71662	4.717
29	4-Chloroaniline	127	11.940	11.940	(1.014)	223402	3.78650	3.787
30	Hexachlorobutadiene	225	12.171	12.172	(1.033)	138198	4.83404	4.834
31	4-Chloro-3-methylphenol	107	12.876	12.876	(1.093)	208794	4.64027	4.640
32	2-Methylnaphthalene	142	13.201	13.201	(1.121)	501627	4.59617	4.596
33	Hexachlorocyclopentadiene	237	13.665	13.665	(0.888)	132827	4.72902	4.729

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	13.820	13.820	(0.898)	137849	4.59559	4.596
35	2,4,5-Trichlorophenol	196	13.889	13.890	(0.903)	146935	4.40855	4.409
$ 36	2-Fluorobiphenyl	172	Compound Not Detected.					
37	2-Chloronaphthalene	162	14.199	14.191	(0.923)	466196	4.79589	4.796
38	2-Nitroaniline	65	14.454	14.447	(0.940)	134108	4.91137	4.911
39	Dimethylphthalate	163	14.880	14.873	(0.967)	486790	4.93747	4.937
40	Acenaphthylene	152	15.074	15.066	(0.980)	727839	4.80509	4.805
41	2,6-Dinitrotoluene	165	15.020	15.012	(0.976)	112840	5.29815	5.298
* 42	Acenaphthene-d10	164	15.383	15.383	(1.000)	303490	4.00000	
43	3-Nitroaniline	138	15.306	15.298	(0.995)	120530	5.01393	5.014
44	Acenaphthene	153	15.453	15.445	(1.005)	446914	4.77589	4.776
45	2,4-Dinitrophenol	184	15.515	15.515	(1.009)	27409	2.12395	2.124
46	Dibenzofuran	168	15.777	15.770	(1.026)	641379	4.64790	4.648
47	4-Nitrophenol	109	15.600	15.592	(1.014)	59816	3.96568	3.966
48	2,4-Dinitrotoluene	165	15.824	15.817	(1.029)	144262	4.51019	4.510
50	Diethylphthalate	149	16.326	16.319	(1.061)	503887	5.20905	5.209
49	Fluorene	166	16.489	16.481	(1.072)	511113	4.70796	4.708
51	4-Chlorophenyl-phenylether	204	16.473	16.466	(1.071)	257762	4.99294	4.993
52	4-Nitroaniline	138	16.566	16.566	(1.077)	106701	4.92532	4.925
53	4,6-Dinitro-2-methylphenol	198	16.666	16.658	(0.905)	56867	3.51509	3.515
54	N-Nitrosodiphenylamine	169	16.720	16.712	(0.908)	342454	4.80180	4.802
$ 55	2,4,6-Tribromophenol	330	Compound Not Detected.					
56	4-Bromophenyl-phenylether	248	17.475	17.476	(0.949)	150956	5.05964	5.060
57	Hexachlorobenzene	284	17.800	17.793	(0.966)	143751	4.59553	4.596
58	Pentachlorophenol	266	18.149	18.149	(0.985)	75635	4.05676	4.057
* 59	Phenanthrene-d10	188	18.420	18.420	(1.000)	533431	4.00000	
60	Phenanthrene	178	18.466	18.466	(1.003)	669357	4.60181	4.602
61	Anthracene	178	18.559	18.559	(1.008)	581438	4.16715	4.167
62	Carbazole	167	18.884	18.884	(1.025)	591382	4.72989	4.730
63	Di-n-butylphthalate	149	19.665	19.666	(1.068)	830680	4.96738	4.967
64	Fluoranthene	202	20.841	20.841	(0.888)	782432	4.47248	4.472
65	Pyrene	202	21.267	21.267	(0.907)	778668	4.33892	4.339
$ 66	Terphenyl-d14	244	Compound Not Detected.					
67	Butylbenzylphthalate	149	22.459	22.460	(0.957)	314007	4.83397	4.834
68	Benzo(a)anthracene	228	23.427	23.419	(0.999)	714166	4.64722	4.647
* 69	Chrysene-d12	240	23.458	23.450	(1.000)	435381	4.00000	
70	3,3'-Dichlorobenzidine	252	23.373	23.373	(0.996)	483256	9.81738	9.817
71	Chrysene	228	23.497	23.489	(1.002)	677151	4.51017	4.510
72	bis(2-Ethylhexyl)phthalate	149	23.481	23.474	(0.959)	453669	4.67998	4.680
* 134	Di-n-octylphthalate-d4	153	24.487	24.480	(1.000)	660827	4.00000	
73	Di-n-octylphthalate	149	24.495	24.488	(1.000)	855562	4.94734	4.947
74	Benzo(b)fluoranthene	252	25.370	25.362	(0.969)	737887	4.60200	4.602(H)
75	Benzo(k)fluoranthene	252	25.416	25.409	(0.970)	797521	4.89839	4.898
76	Benzo(a)pyrene	252	26.067	26.052	(0.995)	698616	4.87338	4.873
* 77	Perylene-d12	264	26.191	26.183	(1.000)	494648	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.005	28.990	(1.107)	834672	4.57655	4.577
79	Dibenzo(a,h)anthracene	278	29.021	29.005	(1.108)	688433	4.54663	4.547
80	Benzo(g,h,i)perylene	276	29.852	29.821	(1.140)	724463	4.59000	4.590
90	N-Nitrosodimethylamine	74	4.928	4.936	(0.530)	155126	5.19378	5.194
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	21.073	21.066	(0.898)	314737	4.37985	4.380
103	Pyridine	79	4.959	4.997	(0.533)	244801	5.33678	5.337
105	1-methylnaphthalene	142	13.425	13.425	(1.140)	487498	4.87520	4.875
111	Azobenzene (1,2-DP-Hydrazine)	77	16.797	16.789	(1.092)	533524	4.93744	4.937

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.370	25.409	(0.969)	1468165	9.48349	9.483
120 2,3,4,6-Tetrachlorophenol	232	16.102	16.103	(1.047)	124685	3.97959	3.980

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031511.D
Lab Smp Id: SLC0228-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 21:50
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	171542	85771	343084	154809	-9.75
27 Naphthalene-d8	624466	312233	1248932	570882	-8.58
42 Acenaphthene-d10	337226	168613	674452	303490	-10.00
59 Phenanthrene-d10	572849	286425	1145698	533431	-6.88
69 Chrysene-d12	347068	173534	694136	435381	25.45
134 Di-n-octylphthala	500317	250159	1000634	660827	32.08
77 Perylene-d12	421549	210775	843098	494648	17.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	-0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	0.01
42 Acenaphthene-d10	15.38	14.88	15.88	15.38	0.00
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.46	0.04
134 Di-n-octylphthala	24.48	23.98	24.98	24.49	0.03
77 Perylene-d12	26.18	25.68	26.68	26.19	0.03

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

REVIEW SUMMARY FOR FILE - NT10031511.D

Lab ID: SLC0228-SCV1
nt10.i, 20230315.b\ABN.m,   16-MAR-2023 02:16

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.000	0.9524	Benzoic acid

RRT check based on Ccal File: NT10031508.D

On Column LOD for nt10.i, 20230315.b\ABN.m, ICAL.sub = 0.0000

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

LOW-CONCENTRATION CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00046
Laboratory ID: SLC0473-LCV1
Sequence: SLC0473
Standard ID: K011105

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	0.20000	0.2	8.6	50.00
4-Methylphenol	0.20000	0.2	-6.7	50.00
Naphthalene	0.20000	0.2	8.6	50.00
2-Methylnaphthalene	0.20000	0.2	2.6	50.00
Acenaphthylene	0.20000	0.2	2.4	50.00
Dimethylphthalate	0.20000	0.2	0.9	50.00
Acenaphthene	0.20000	0.2	4.6	50.00
Dibenzofuran	0.20000	0.2	4.6	50.00
Fluorene	0.20000	0.2	8.7	50.00
Phenanthrene	0.20000	0.2	-0.2	50.00
Anthracene	0.20000	0.2	-4.6	50.00
Fluoranthene	0.20000	0.2	-5.7	50.00
Pyrene	0.20000	0.2	-7.4	50.00
Butylbenzylphthalate	0.20000	0.2	-16.6	50.00
Benzo(a)anthracene	0.20000	0.2	5.4	50.00
Chrysene	0.20000	0.2	5.2	50.00
bis(2-Ethylhexyl)phthalate	0.20000	0.1	-36.7	50.00
Benzofluoranthenes, Total	0.40000	0.4	1.1	50.00
Benzo(a)pyrene	0.20000	0.2	5.3	50.00
Indeno(1,2,3-cd)pyrene	0.20000	0.2	-10.0	50.00
Dibenzo(a,h)anthracene	0.20000	0.2	-6.0	50.00
Benzo(g,h,i)perylene	0.20000	0.2	-5.1	50.00
2-Fluorophenol	0.30000	0.308	2.7	50.00
Phenol-d5	0.30000	0.292	-2.5	50.00
2-Chlorophenol-d4	0.30000	0.294	-1.9	50.00
1,2-Dichlorobenzene-d4	0.20000	0.214	6.8	50.00
Nitrobenzene-d5	0.20000	0.200	0.2	50.00
2-Fluorobiphenyl	0.20000	0.202	0.8	50.00
2,4,6-Tribromophenol	0.30000	0.158	-47.4	50.00

LOW-CONCENTRATION CALIBRATION VERIFICATION
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00046
Laboratory ID: SLC0473-LCV1
Sequence: SLC0473
Standard ID: K011105

p-Terphenyl-d14	0.20000	0.193	-3.3	50.00

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Page 1

Date : 17-MAR-2023 20:19

Client ID:

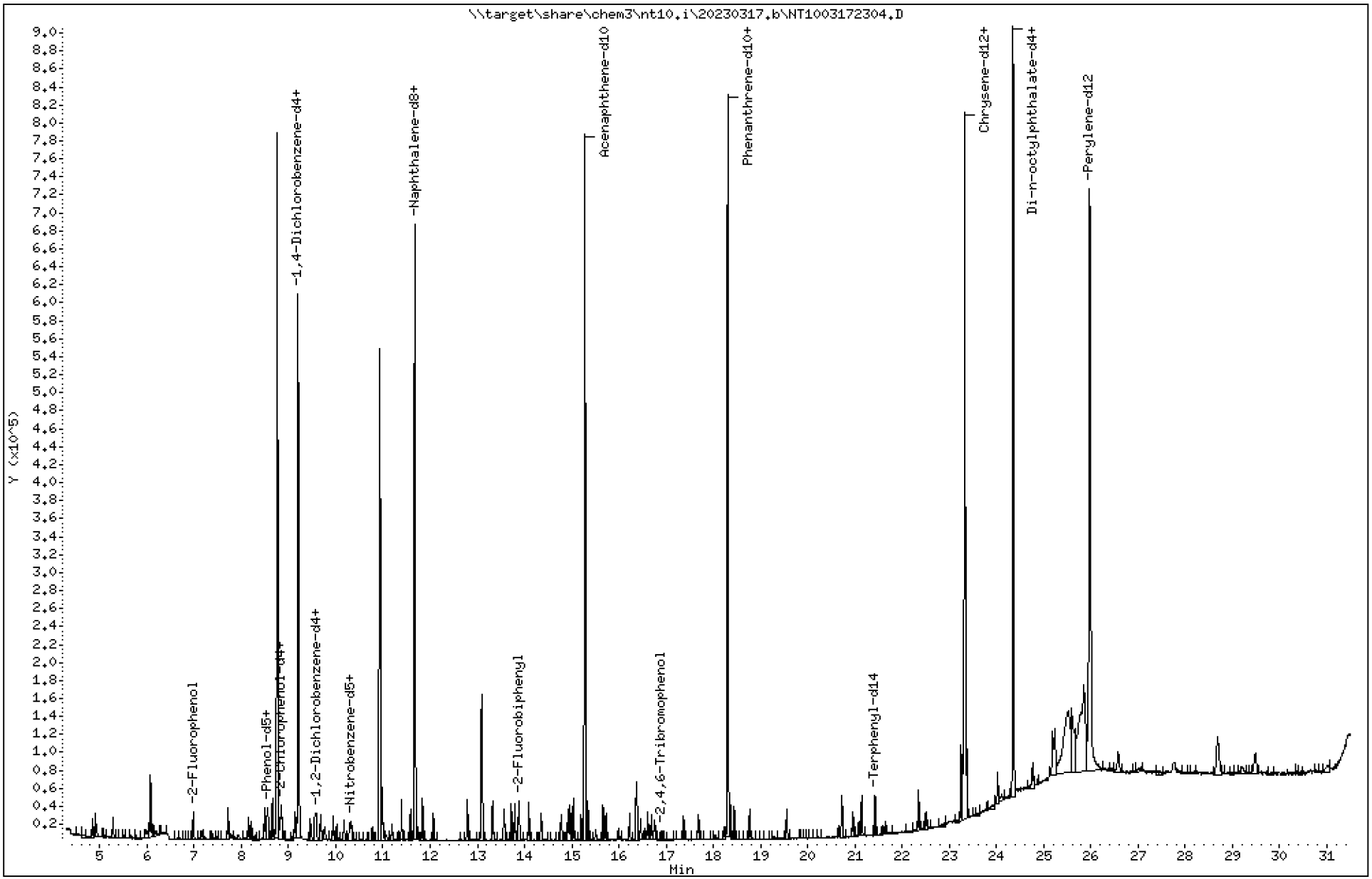
Instrument: nt10.i

Sample Info: SLC0473-LCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

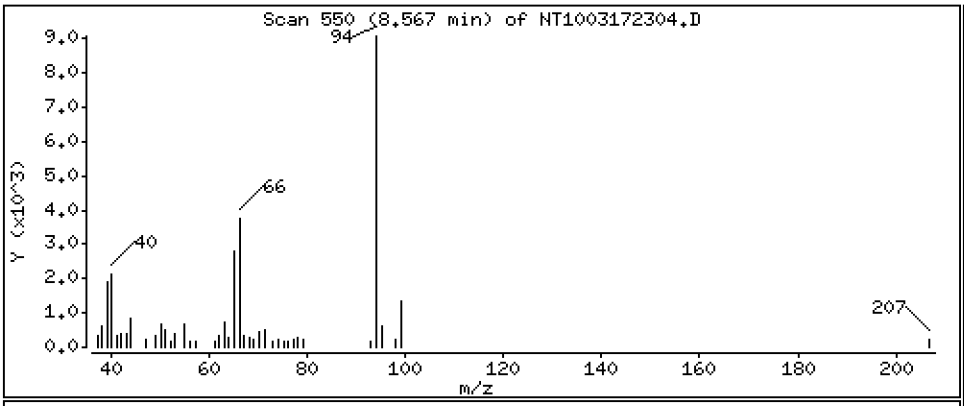
Operator: VTS

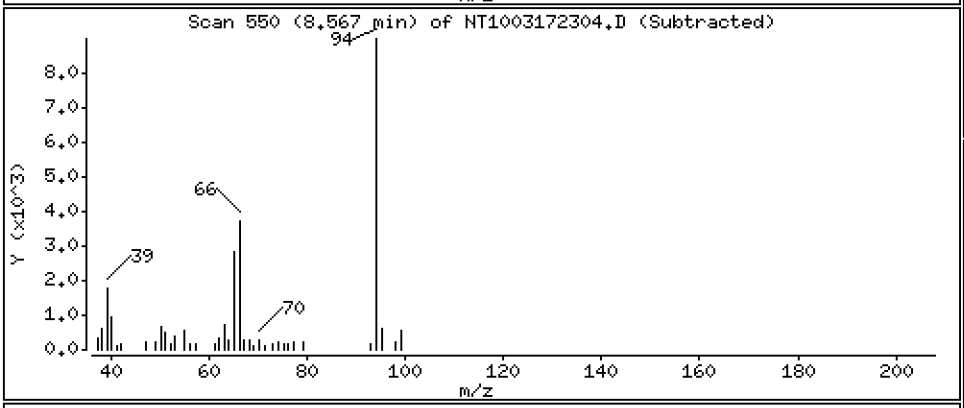
Column phase: ZB-5msi

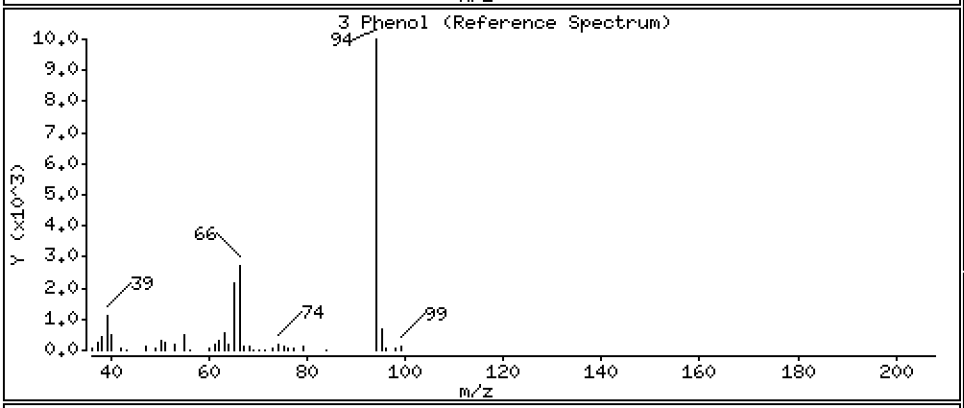
Column diameter: 0.25

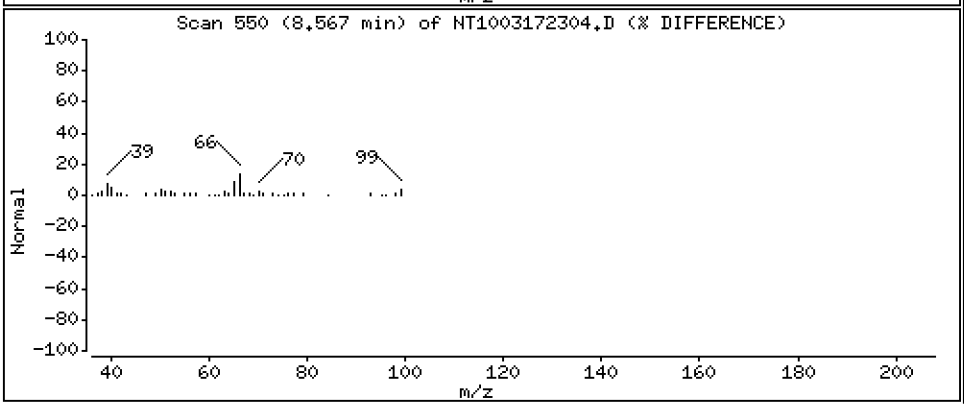
3 Phenol

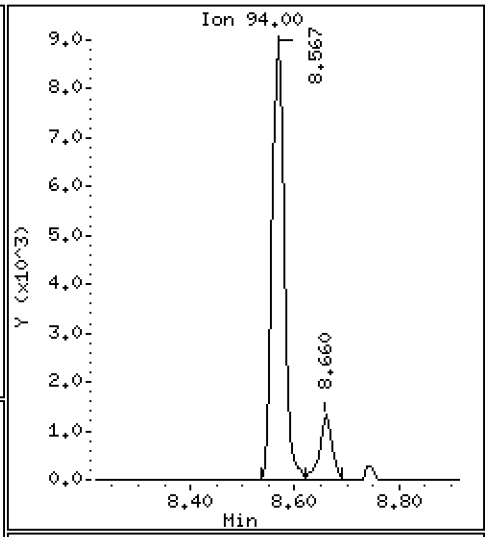
Concentration: 0.2173 ug/mL

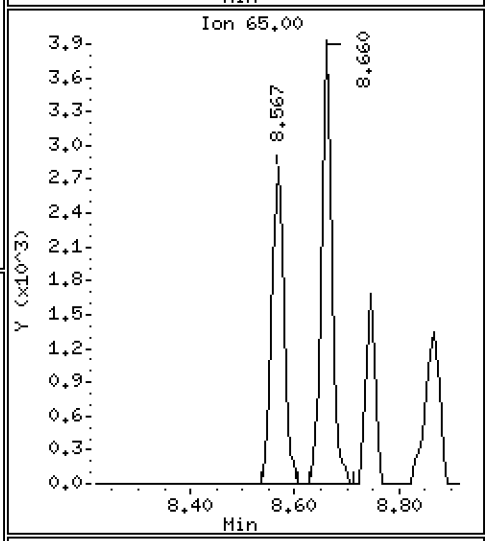


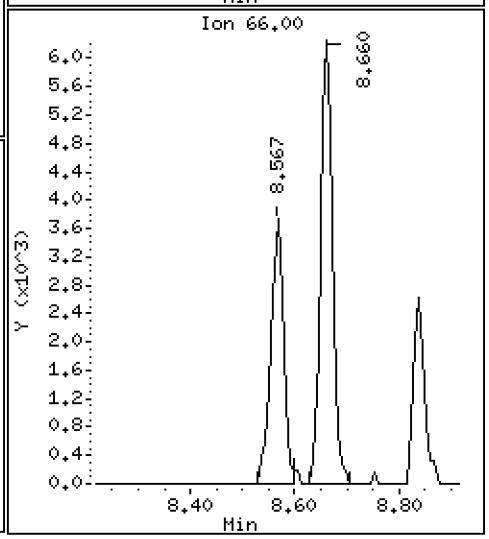












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

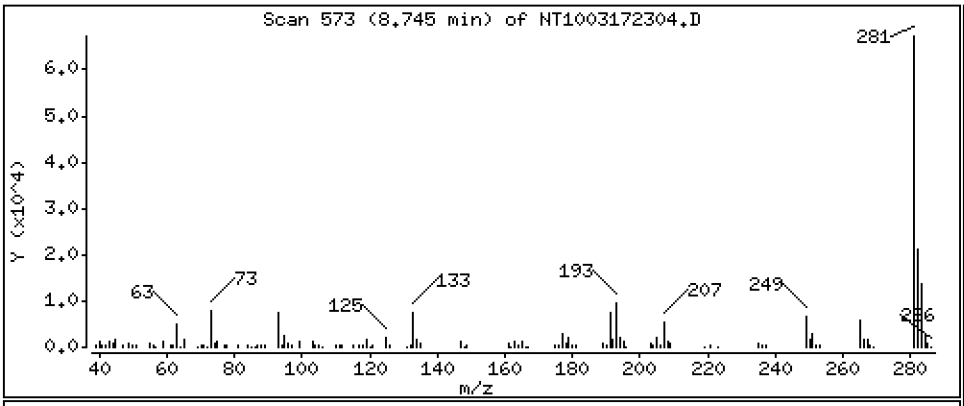
Operator: VTS

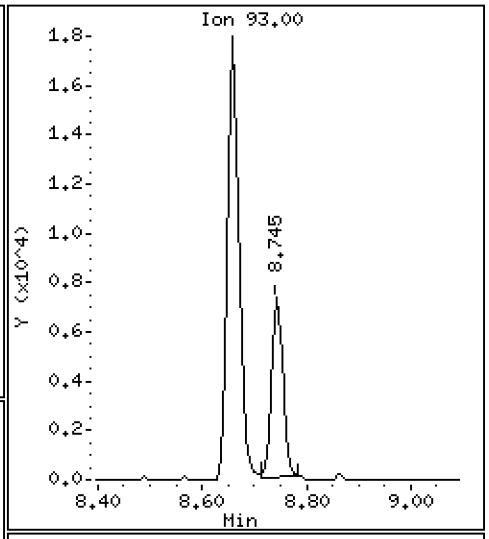
Column phase: ZB-5msi

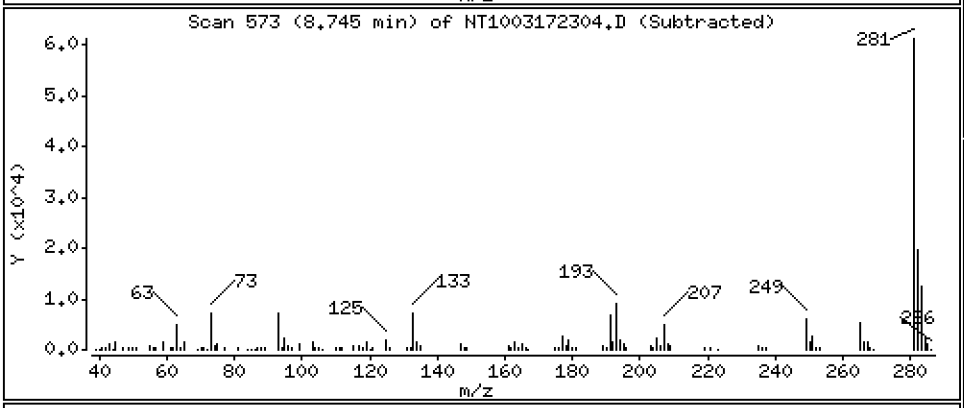
Column diameter: 0.25

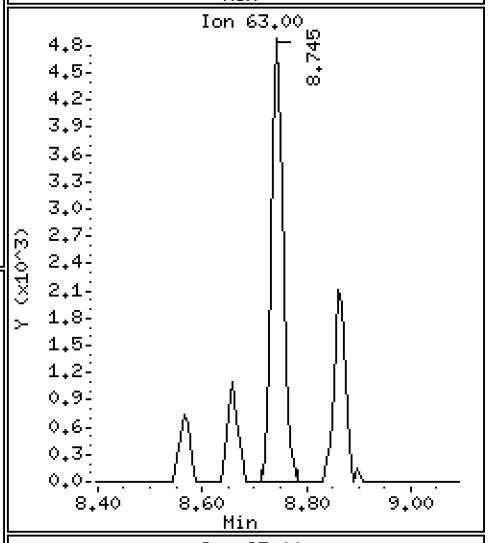
4 Bis(2-Chloroethyl)ether

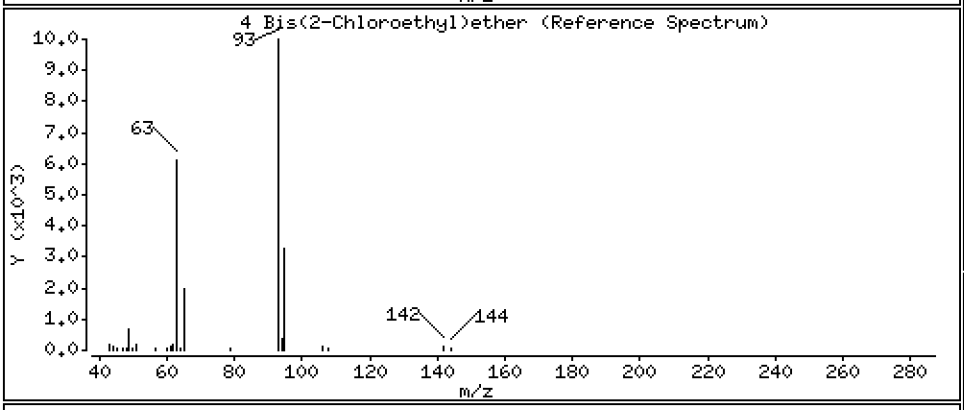
Concentration: 0.2176 ug/mL

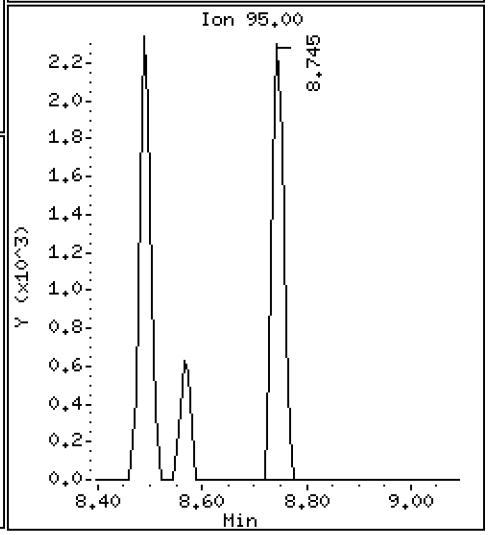


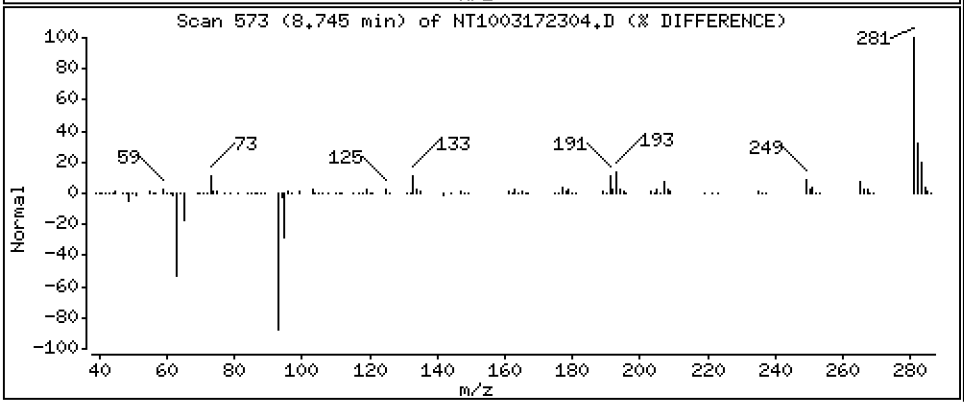












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

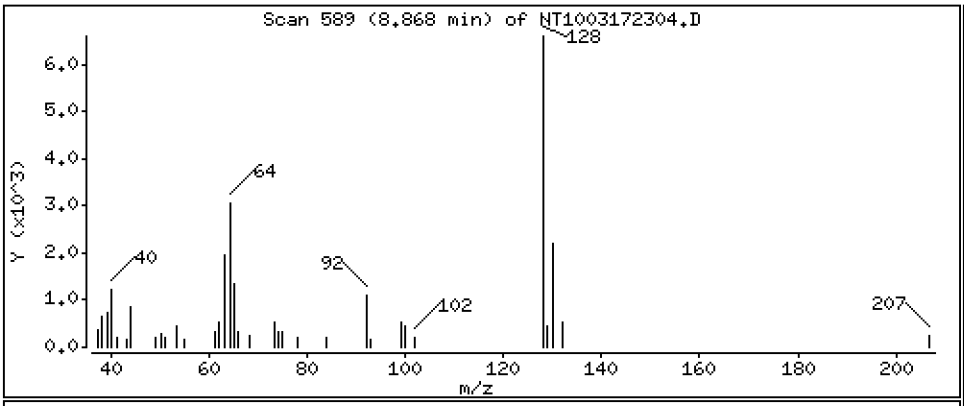
Operator: VTS

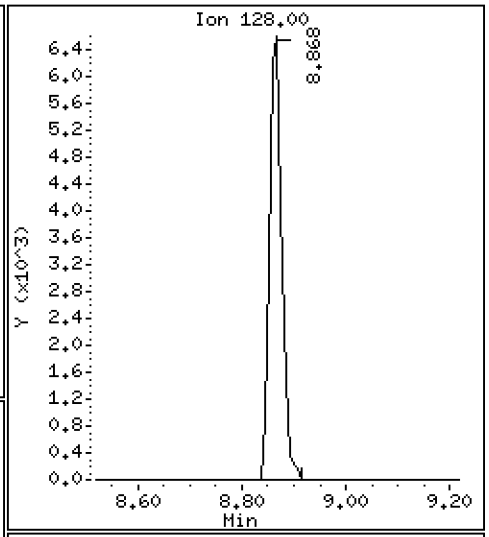
Column phase: ZB-5msi

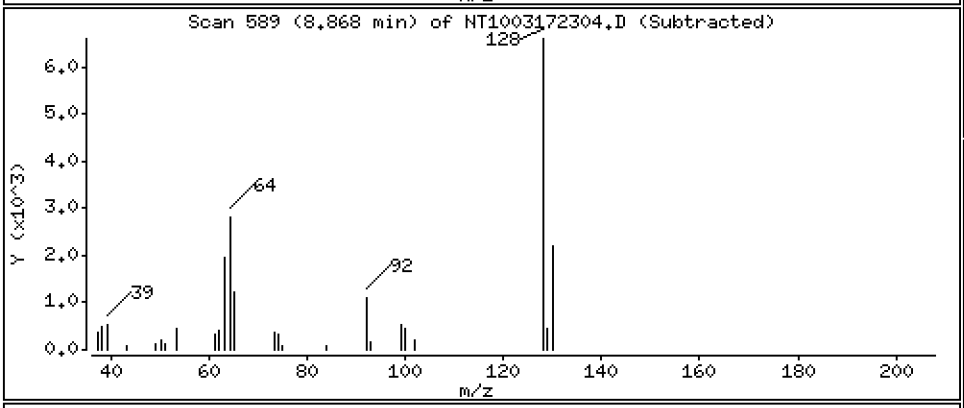
Column diameter: 0.25

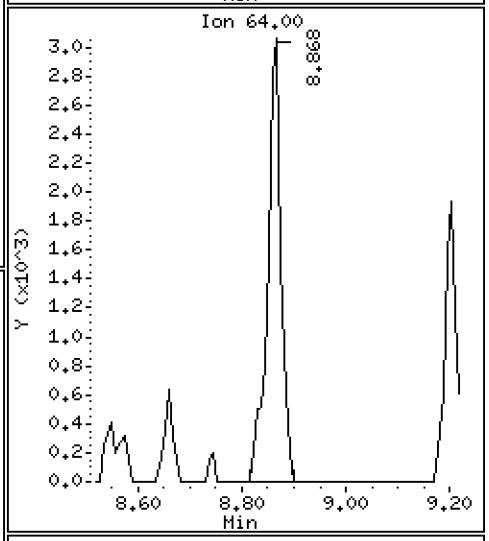
6 2-Chlorophenol

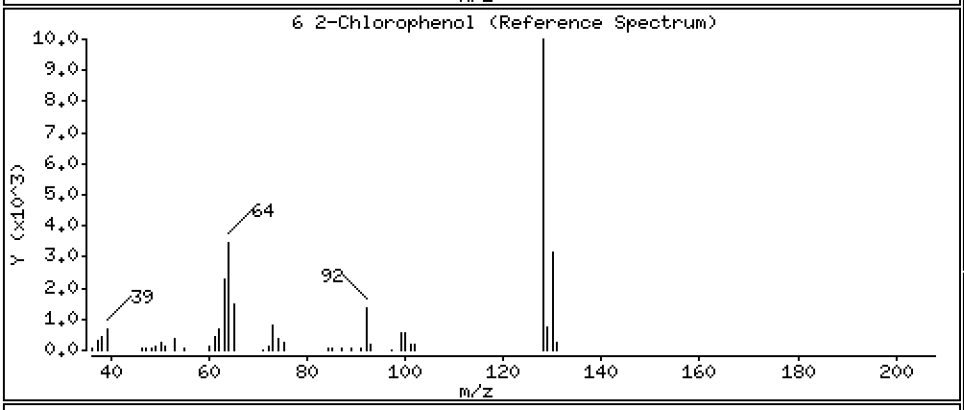
Concentration: 0.1995 ug/mL

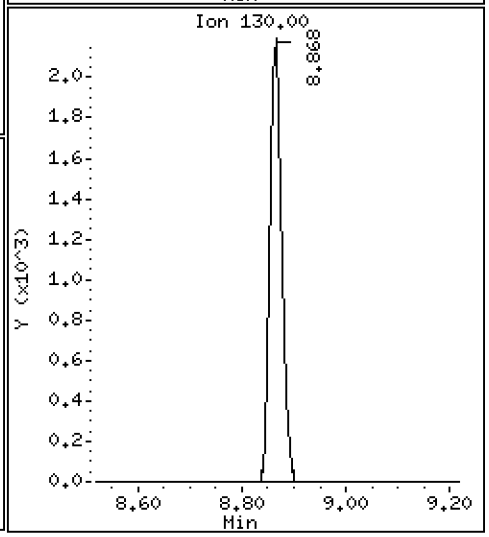


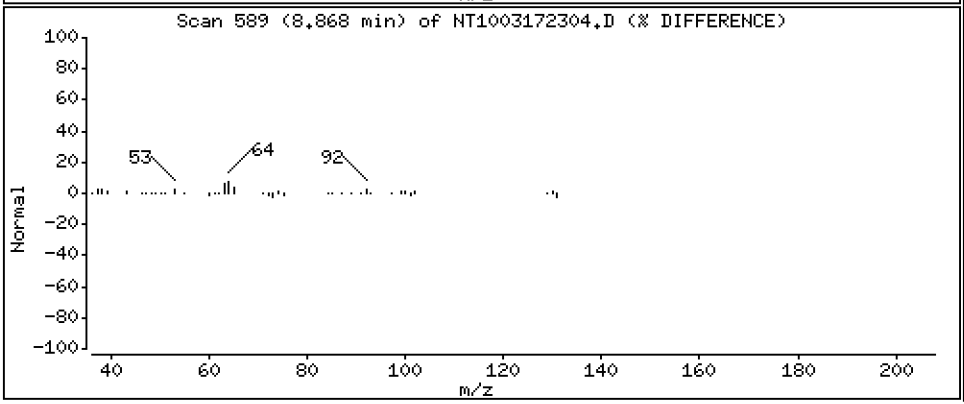












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

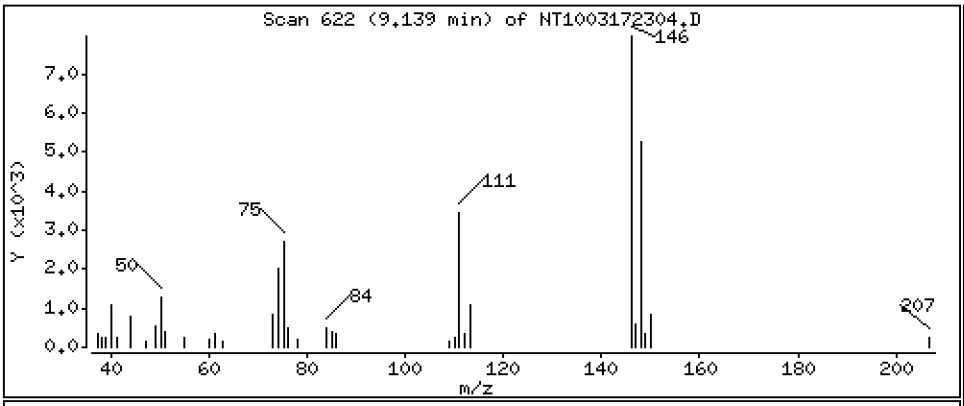
Operator: VTS

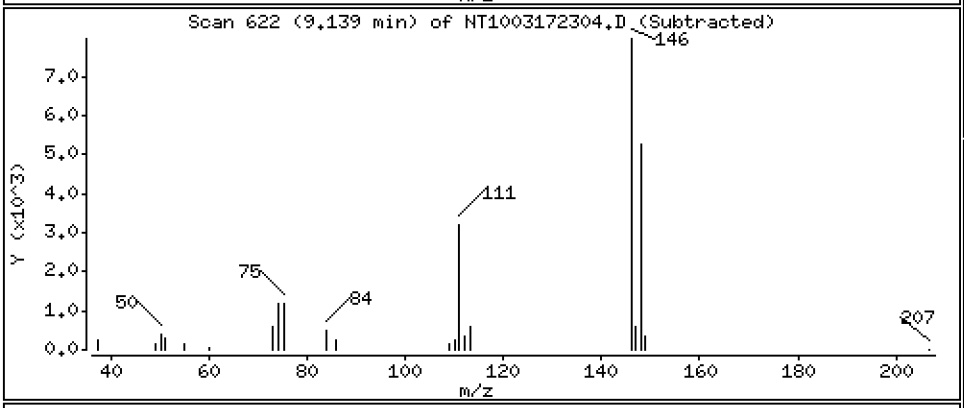
Column phase: ZB-5msi

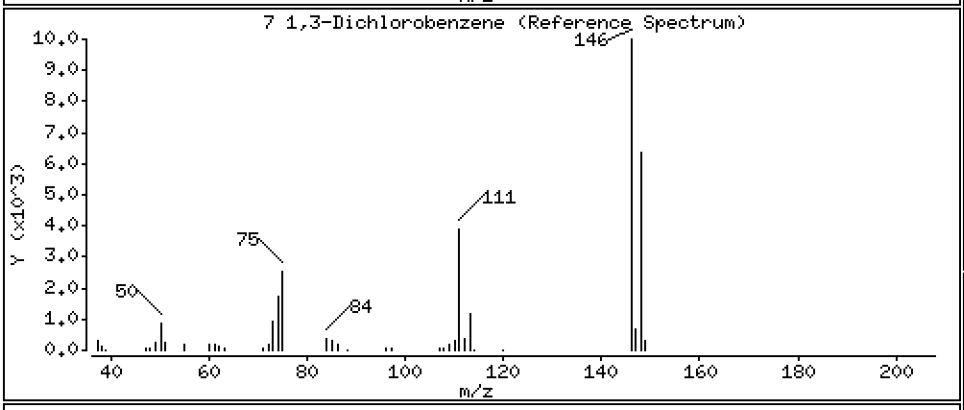
Column diameter: 0.25

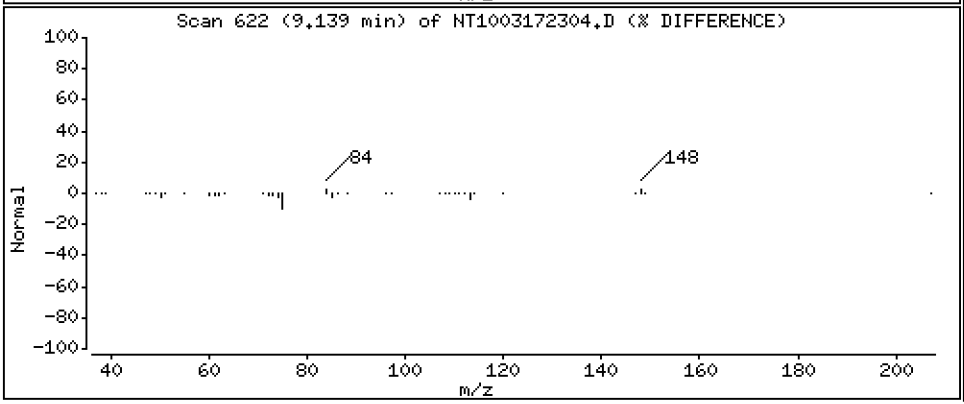
7 1,3-Dichlorobenzene

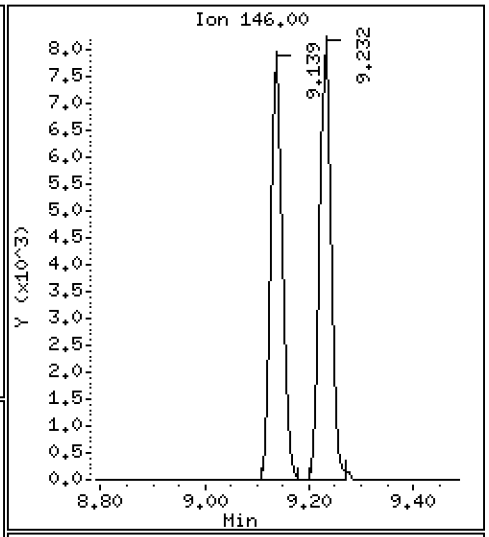
Concentration: 0.2124 ug/mL

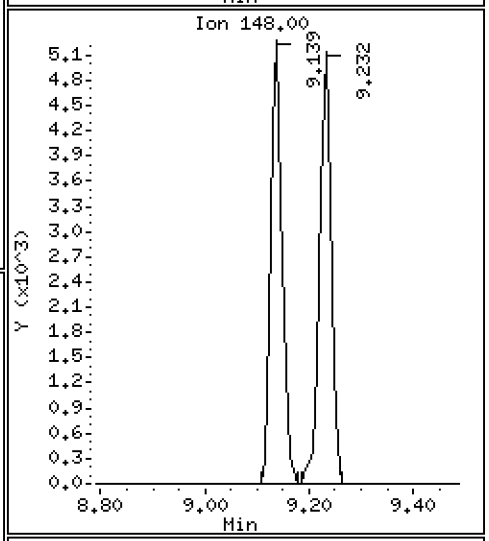


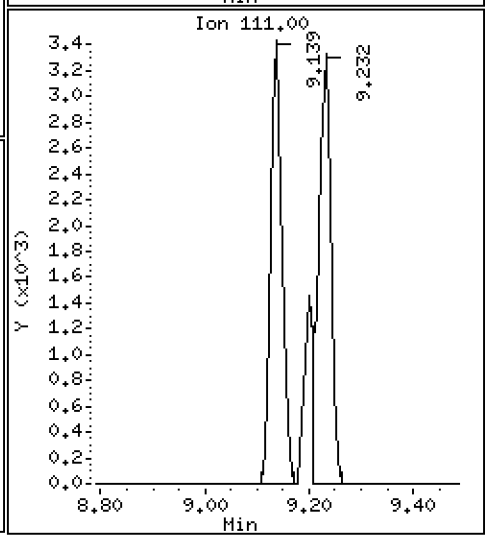












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

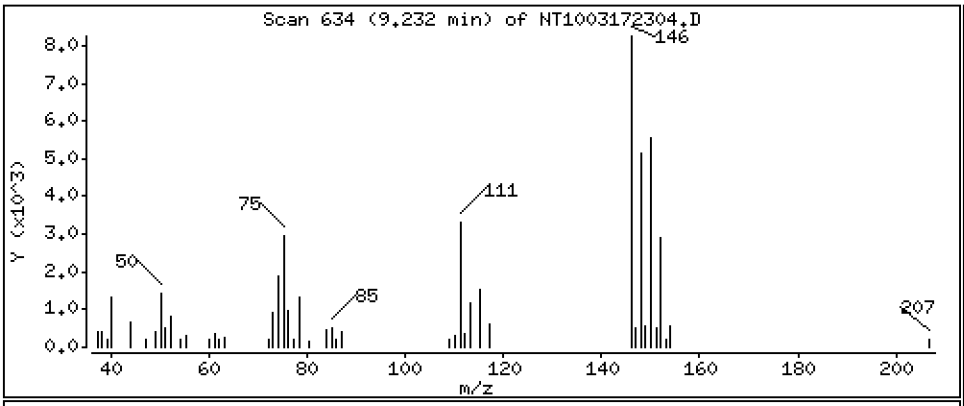
Operator: VTS

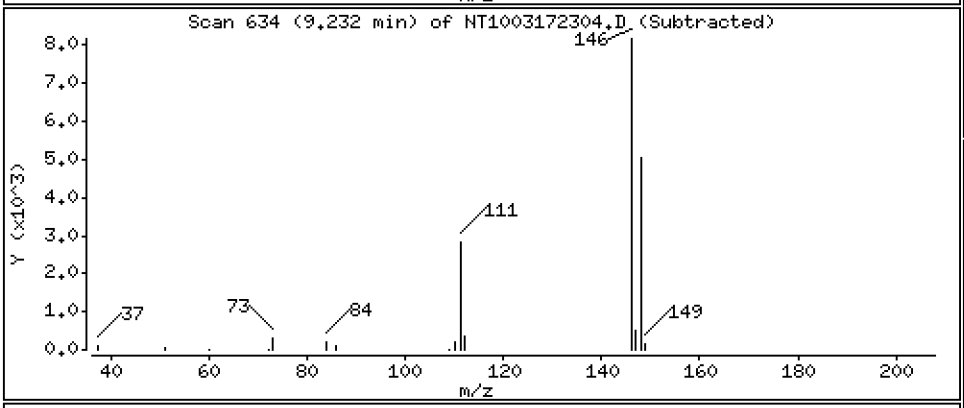
Column phase: ZB-5msi

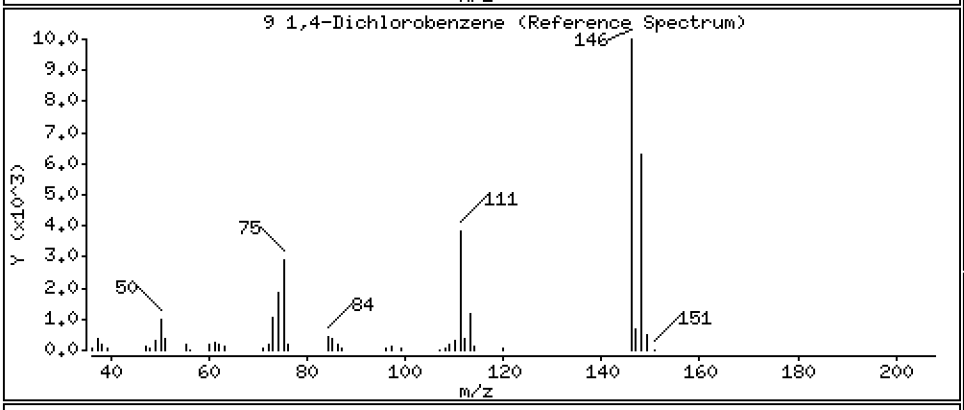
Column diameter: 0.25

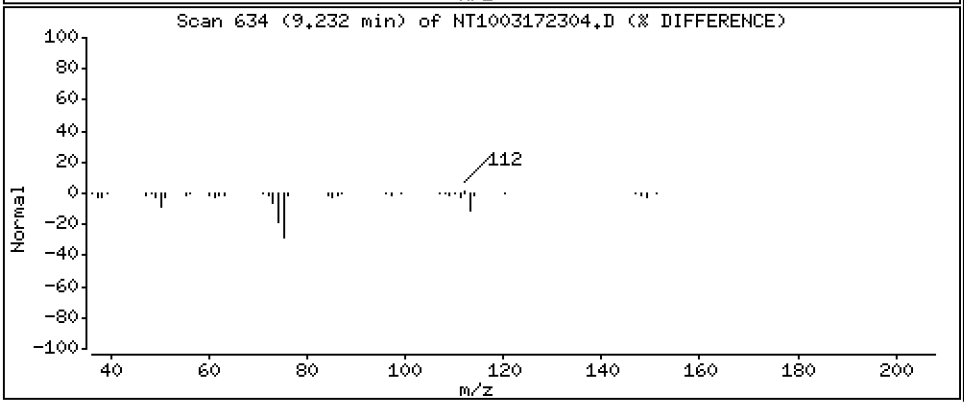
9 1,4-Dichlorobenzene

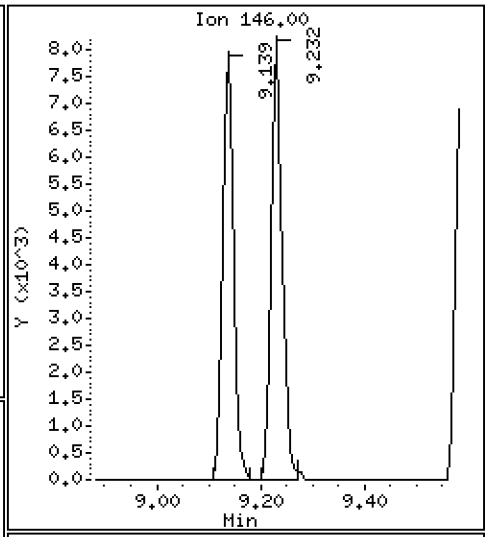
Concentration: 0.2136 ug/mL

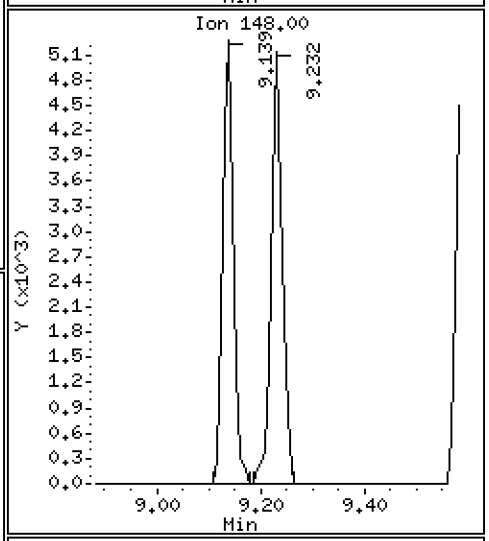


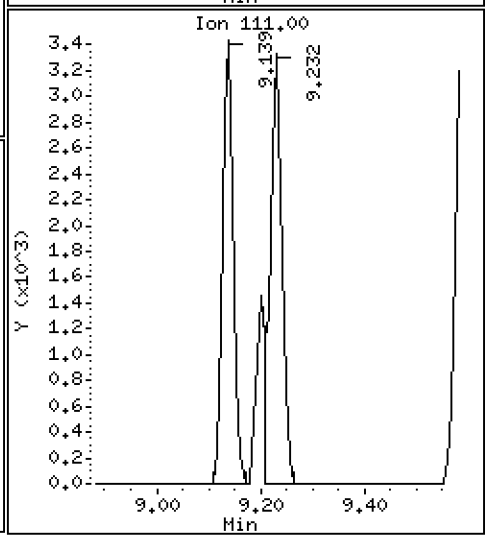












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

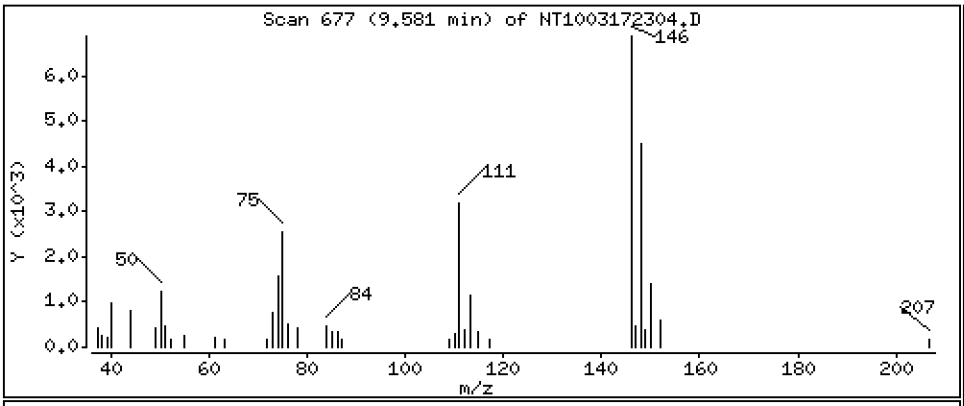
Operator: VTS

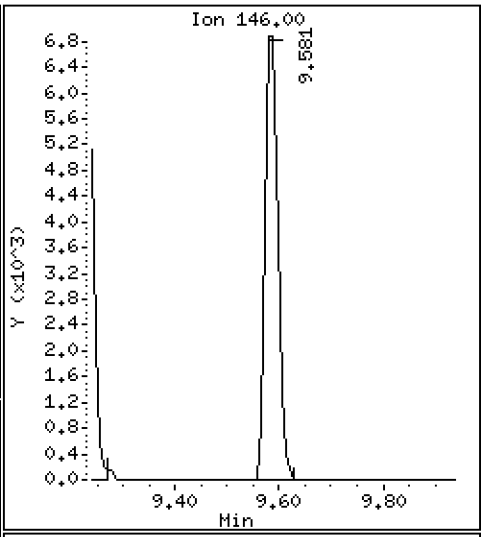
Column phase: ZB-5msi

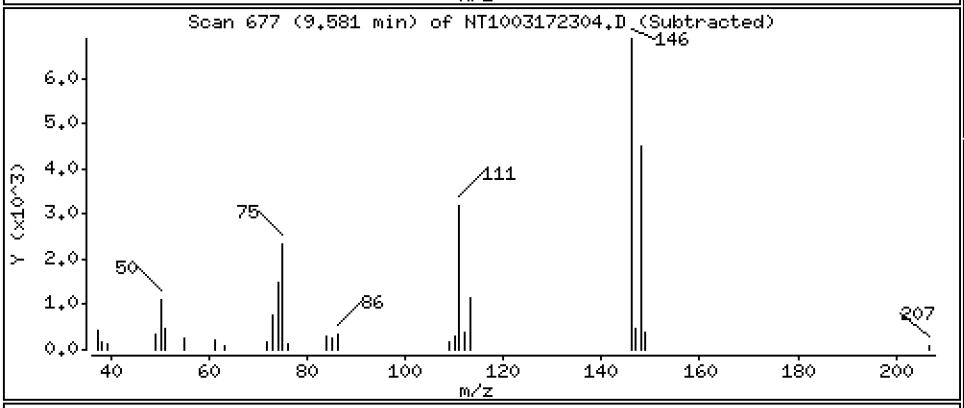
Column diameter: 0.25

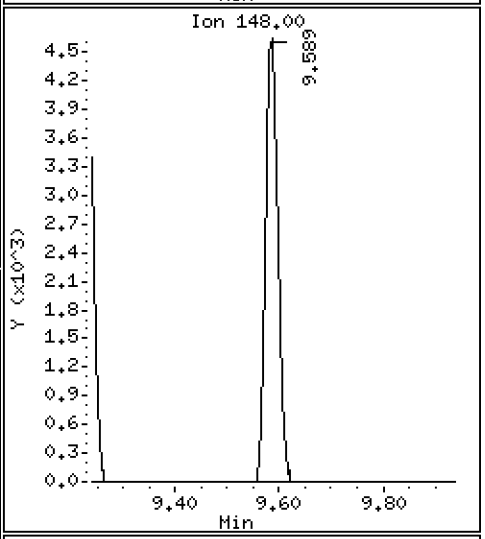
12 1,2-Dichlorobenzene

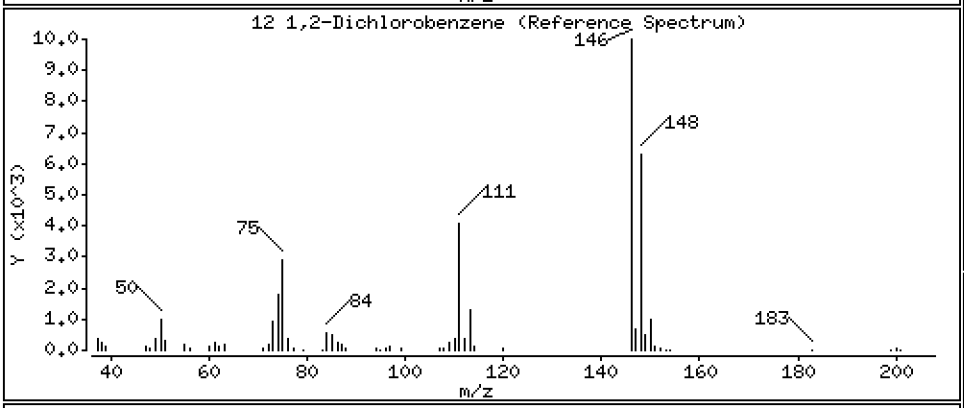
Concentration: 0.2096 ug/mL

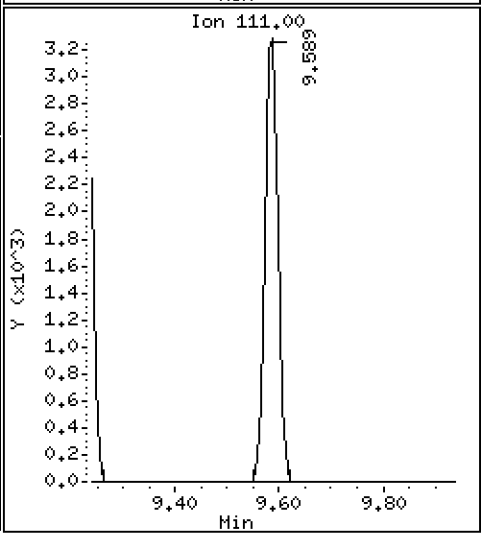


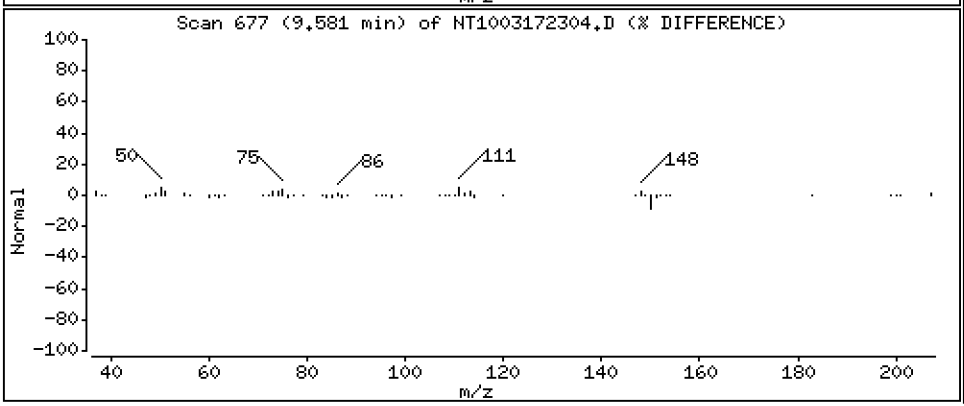












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

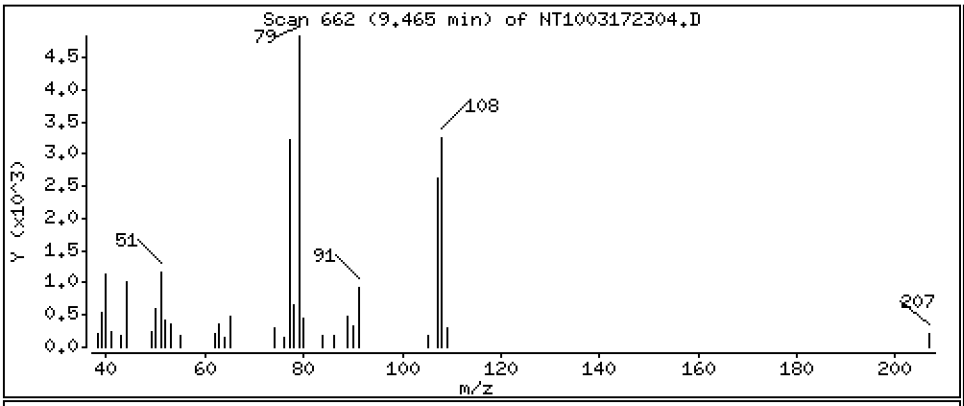
Operator: VTS

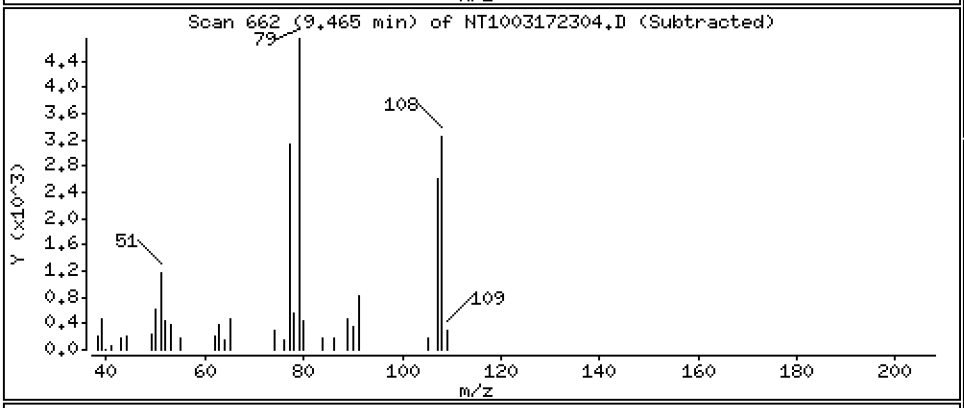
Column phase: ZB-5msi

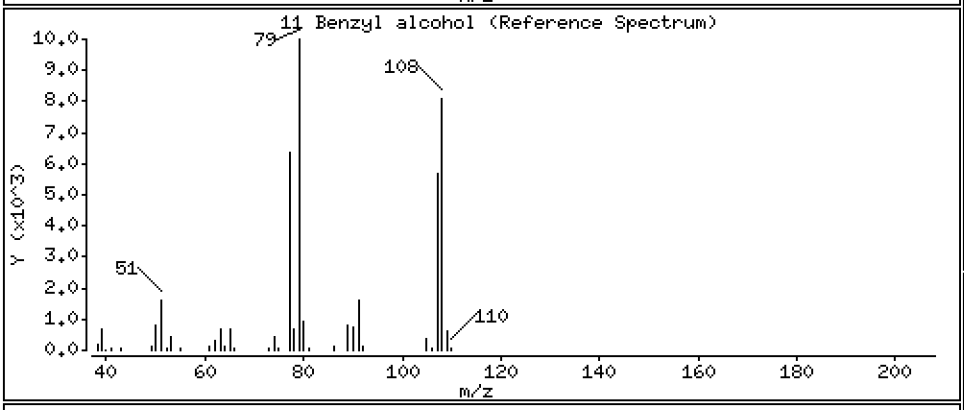
Column diameter: 0.25

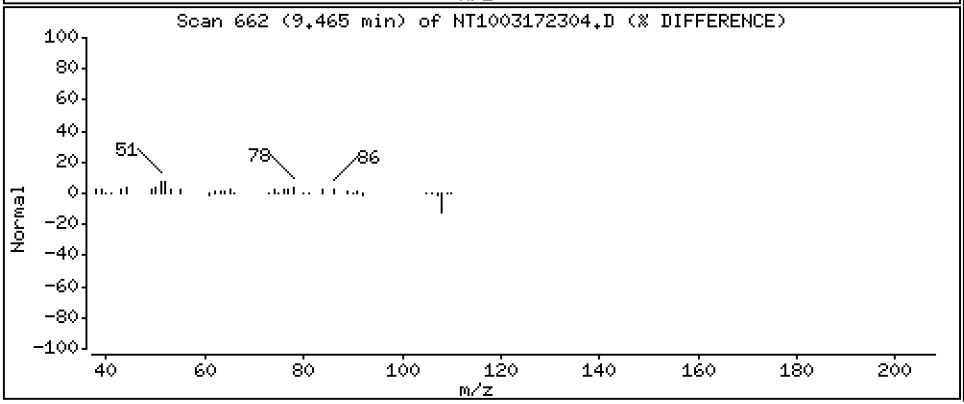
11 Benzyl alcohol

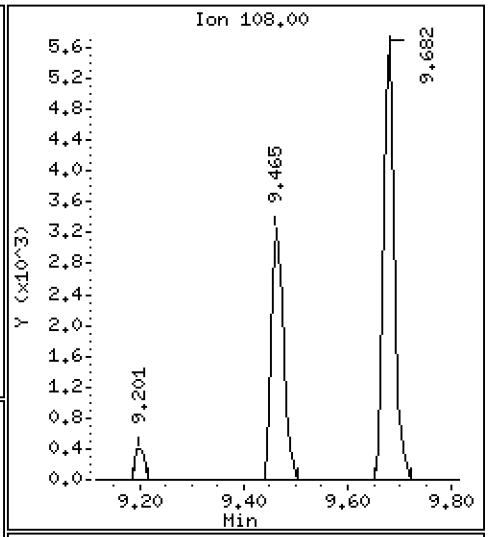
Concentration: 0.1681 ug/mL

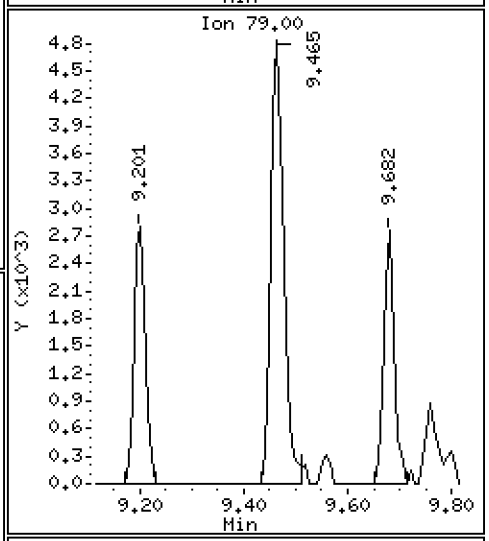


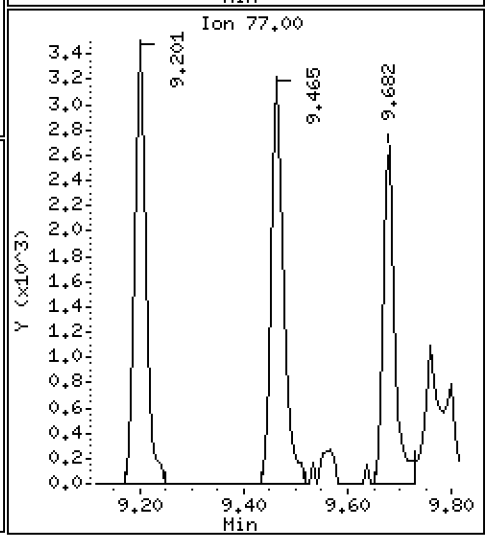












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

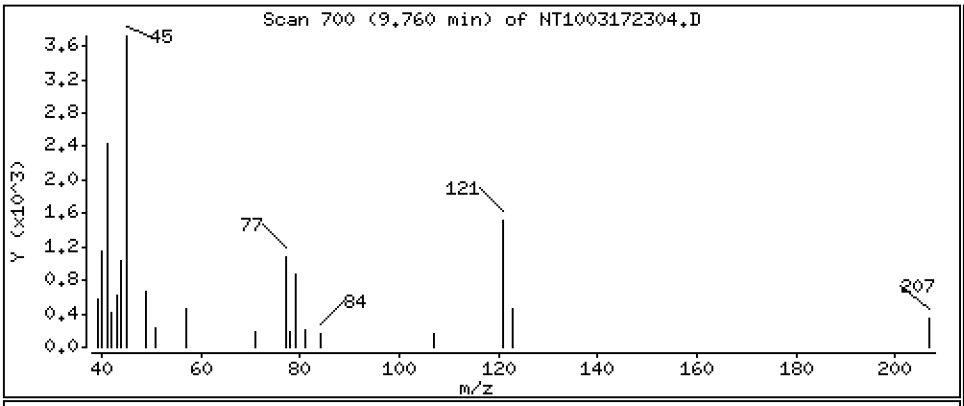
Operator: VTS

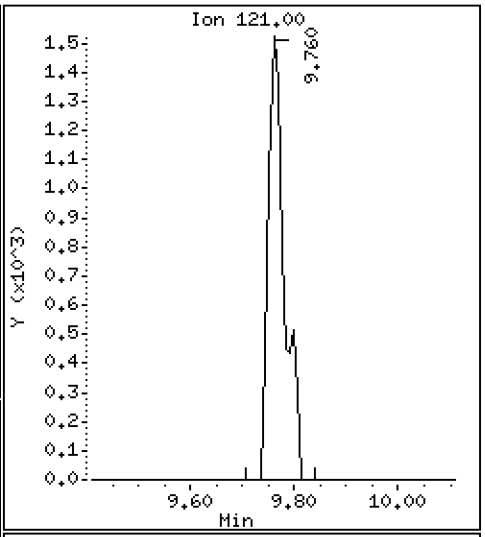
Column phase: ZB-5msi

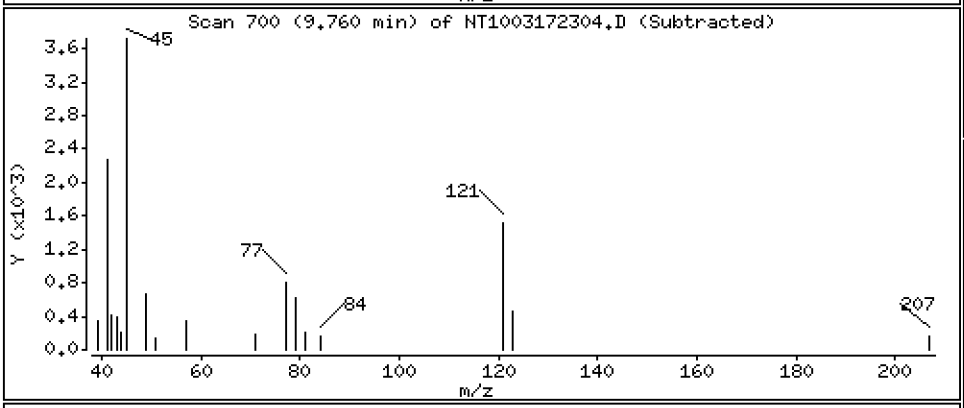
Column diameter: 0.25

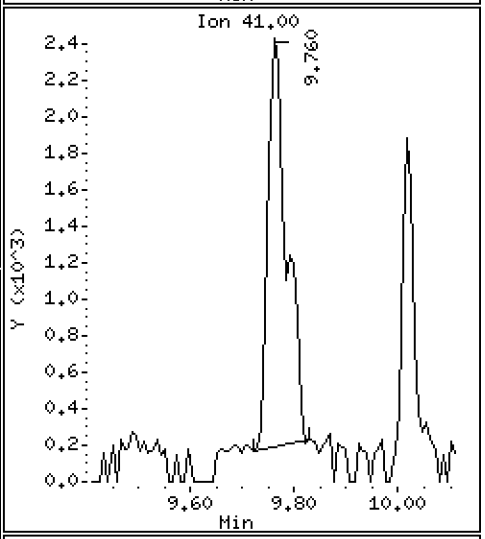
14 2,2'-oxybis(1-Chloropropane)

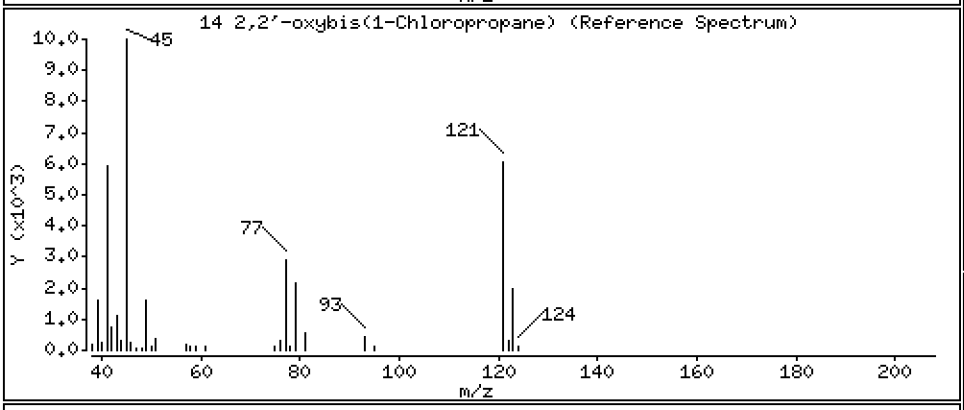
Concentration: 0.2004 ug/mL

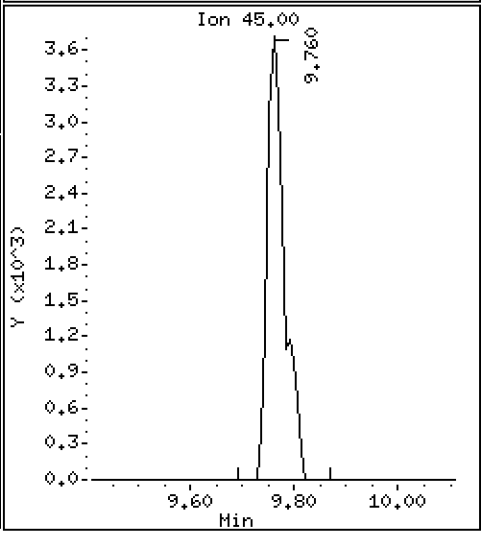


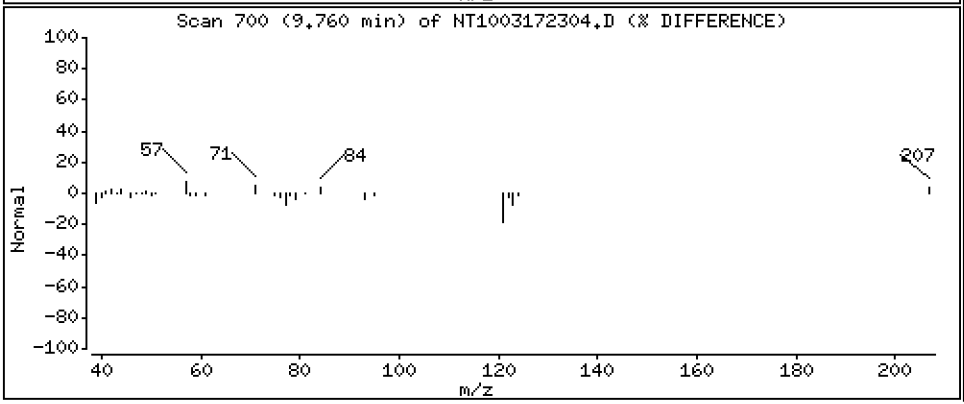












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

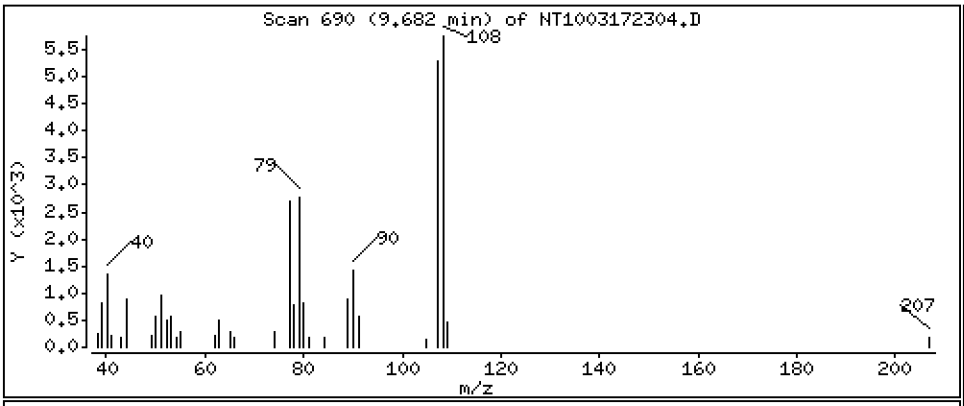
Operator: VTS

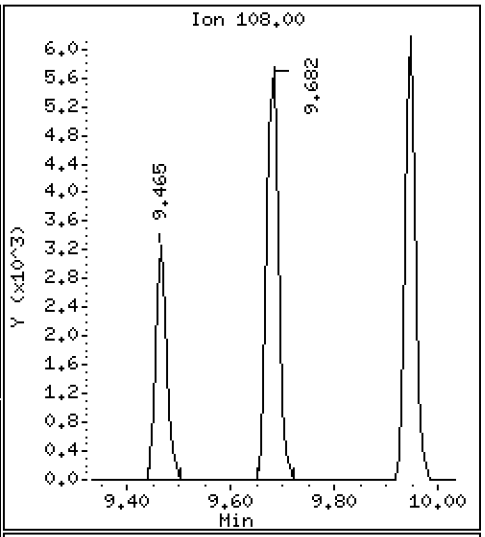
Column phase: ZB-5msi

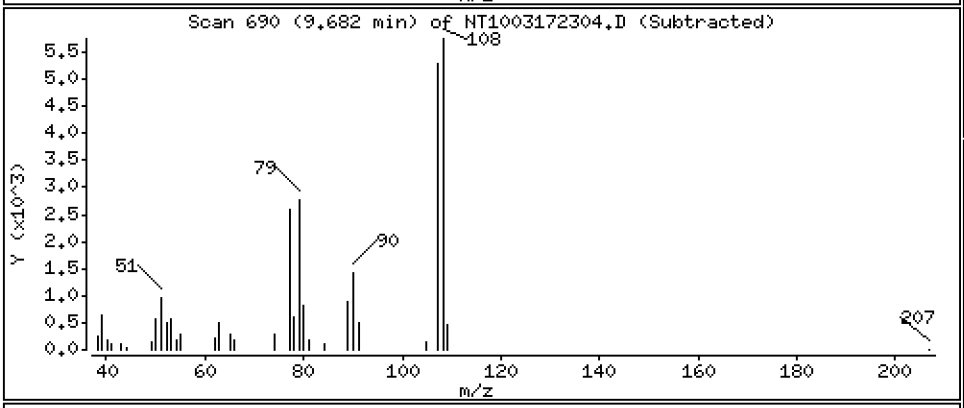
Column diameter: 0.25

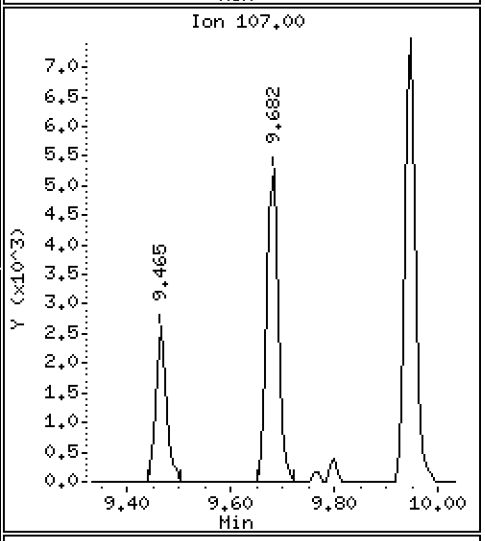
13 2-Methylphenol

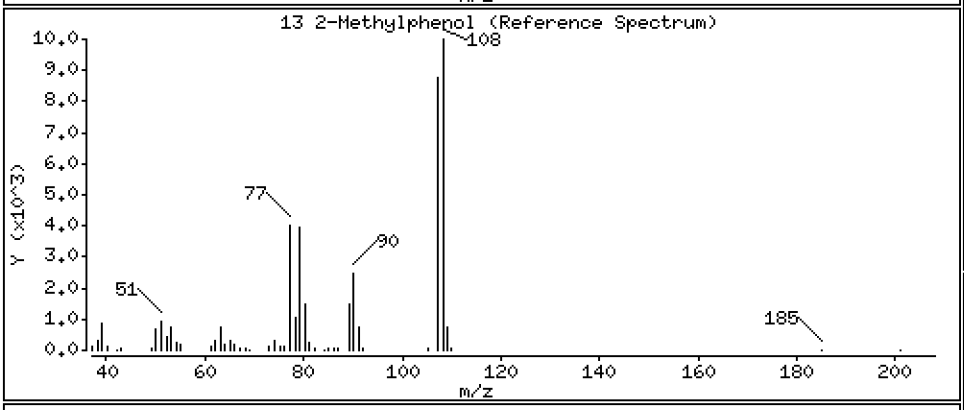
Concentration: 0.1872 ug/mL

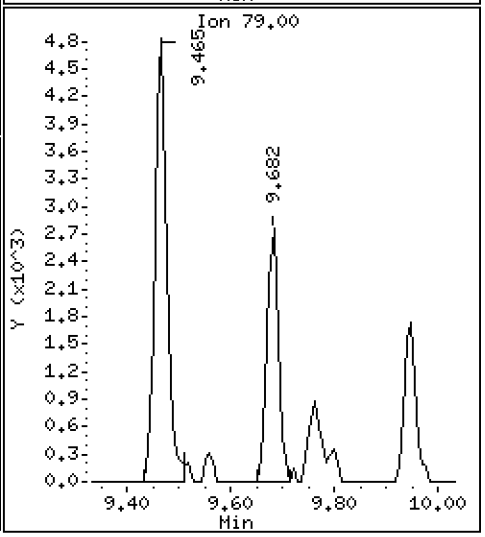


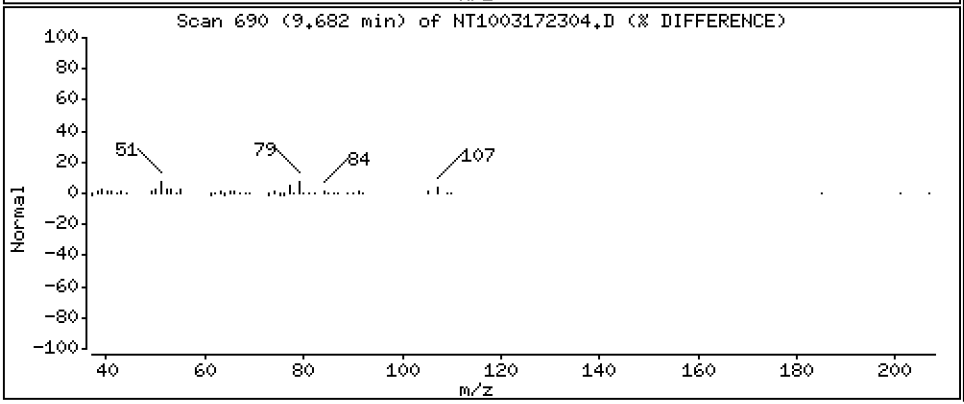












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

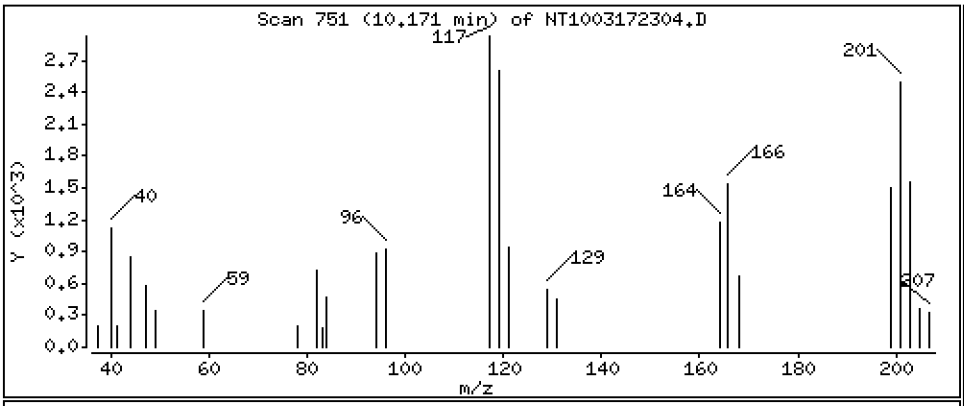
Operator: VTS

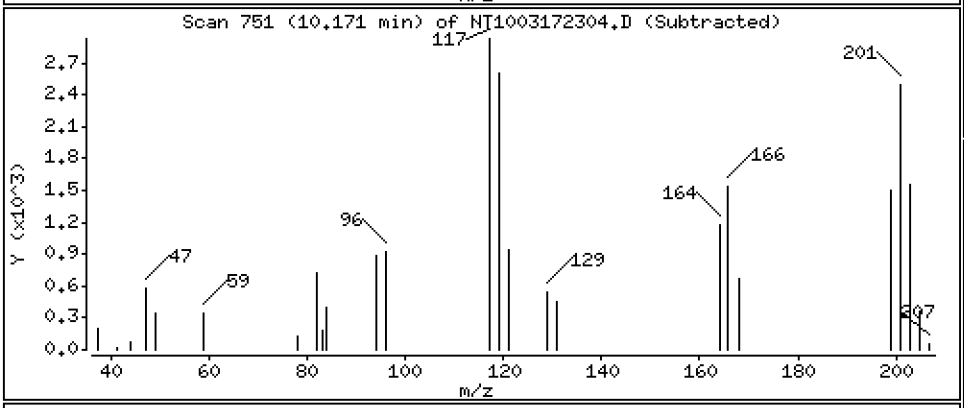
Column phase: ZB-5msi

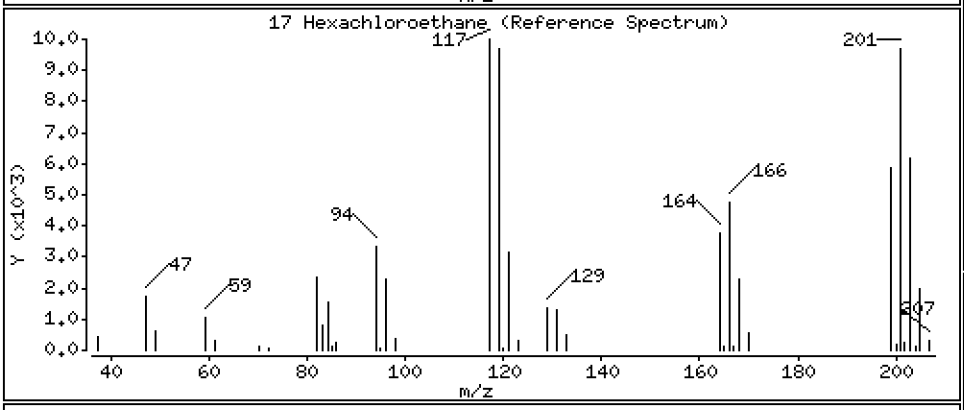
Column diameter: 0.25

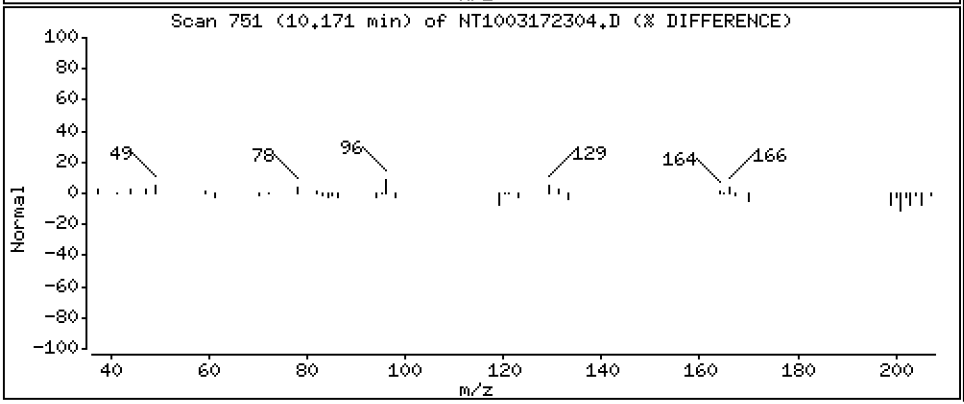
17 Hexachloroethane

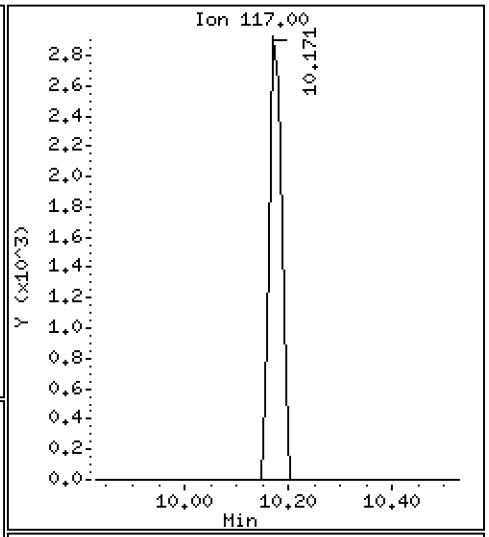
Concentration: 0.2029 ug/mL

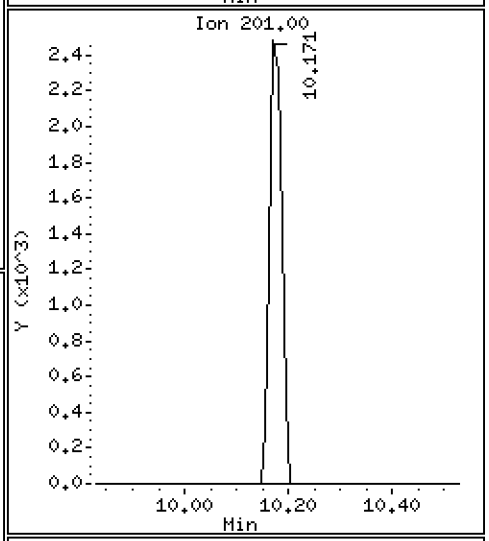


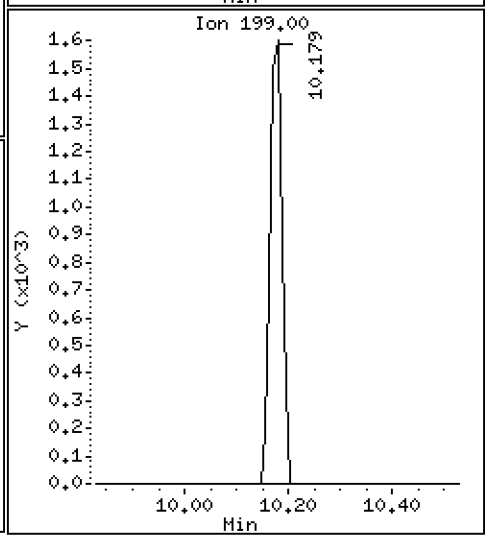












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

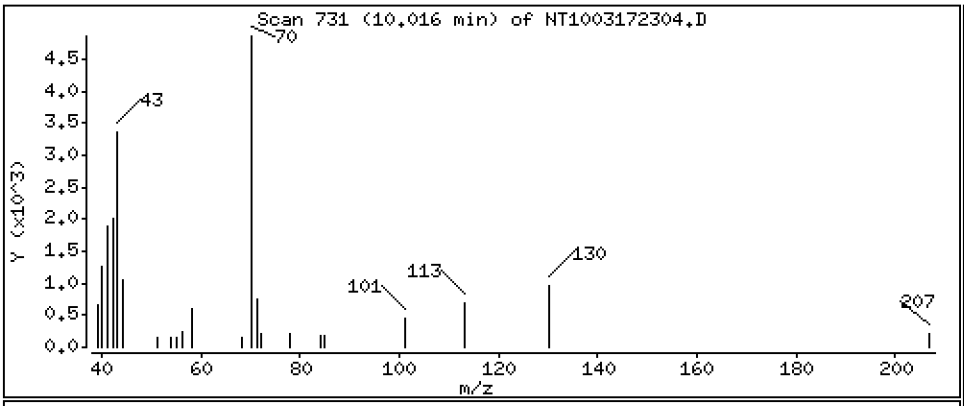
Operator: VTS

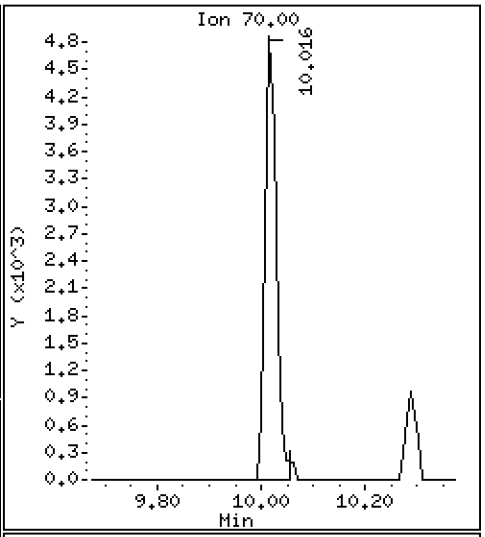
Column phase: ZB-5msi

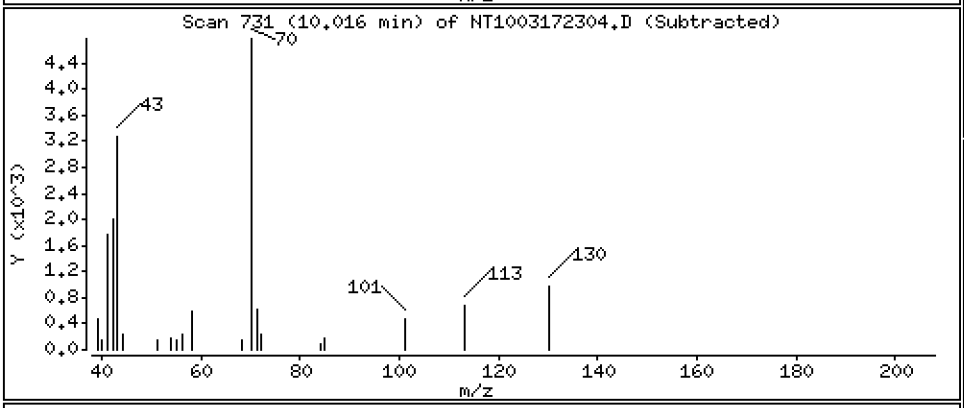
Column diameter: 0.25

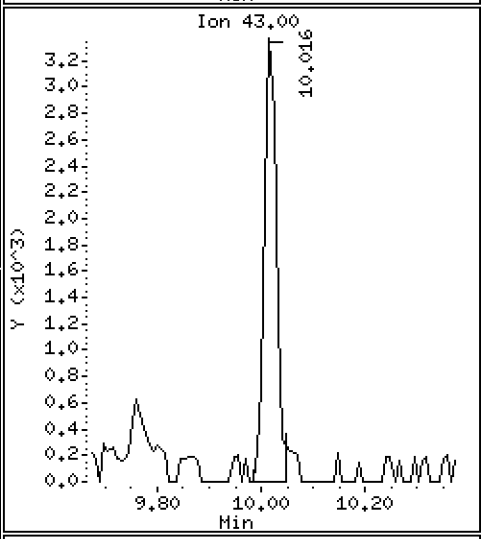
16 N-Nitroso-di-n-propylamine

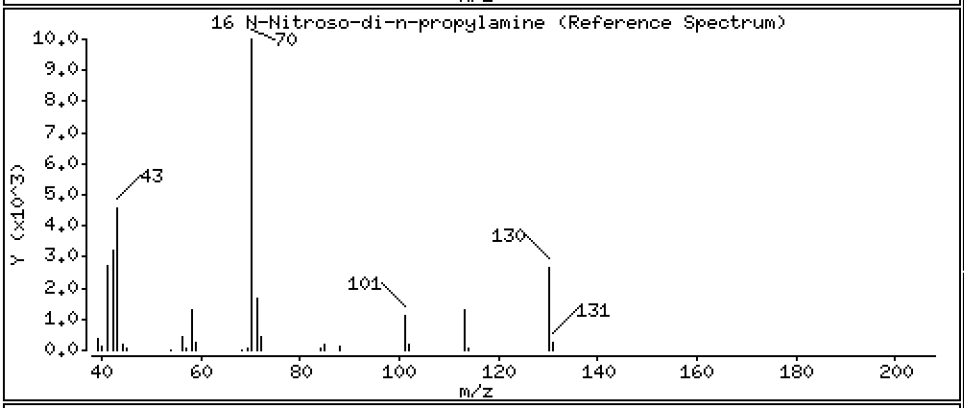
Concentration: 0.1884 ug/mL

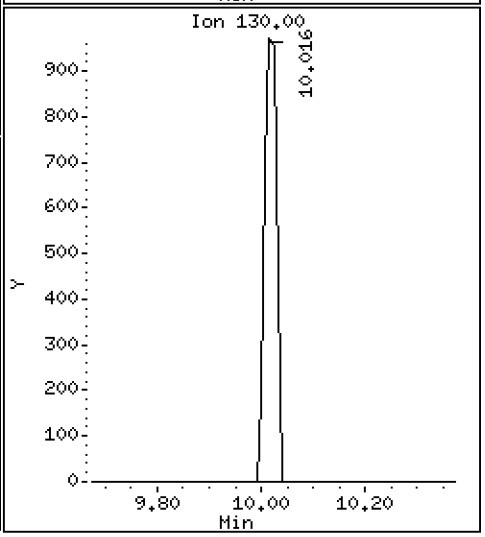


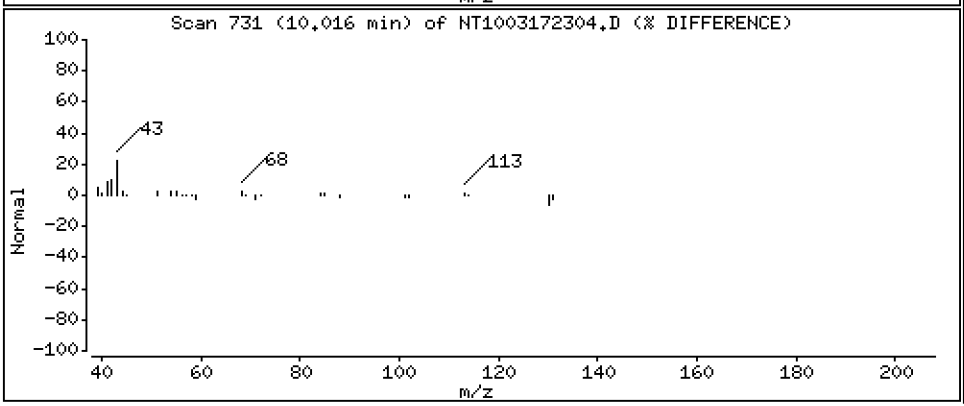












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

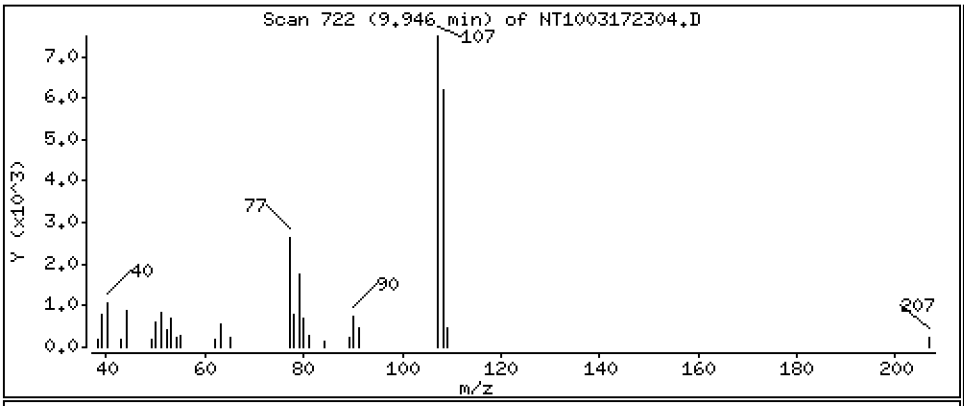
Operator: VTS

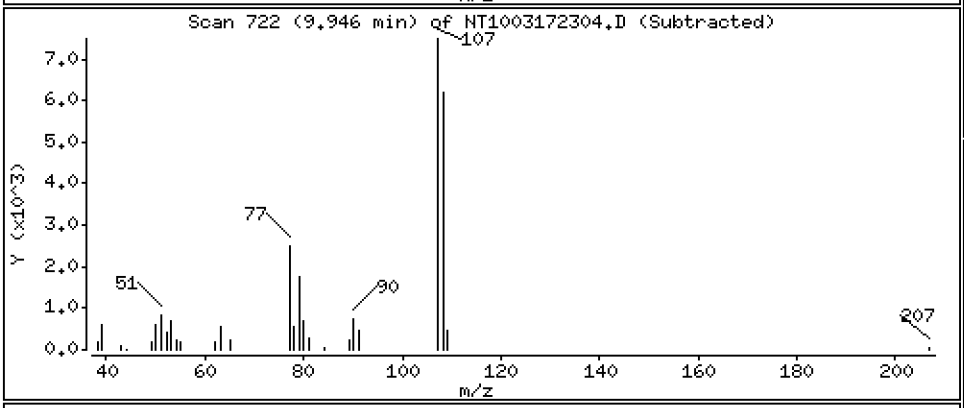
Column phase: ZB-5msi

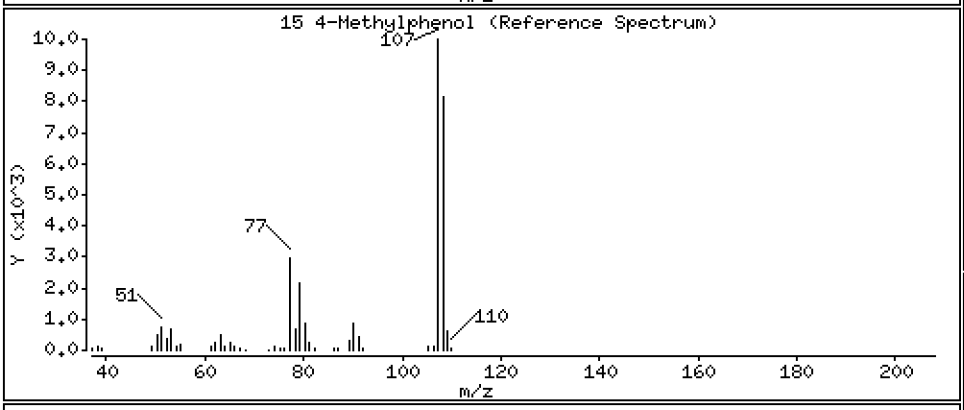
Column diameter: 0.25

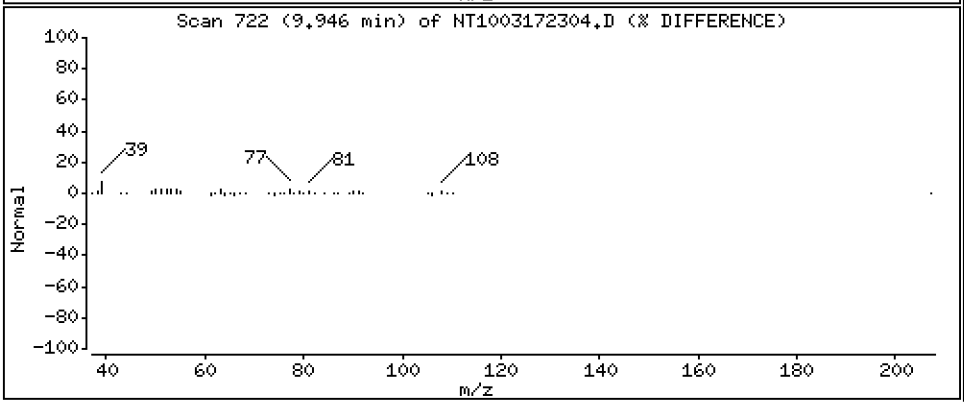
15 4-Methylphenol

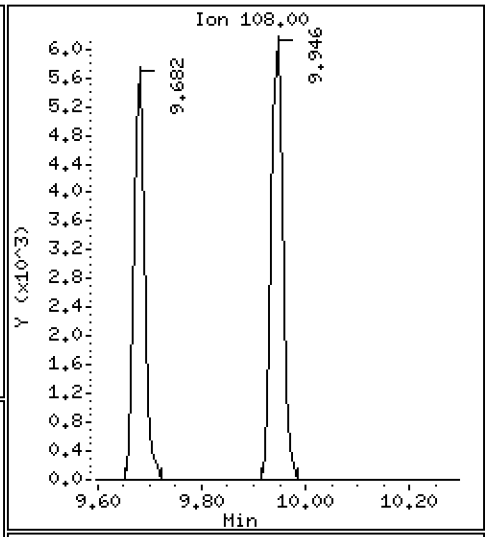
Concentration: 0.1866 ug/mL

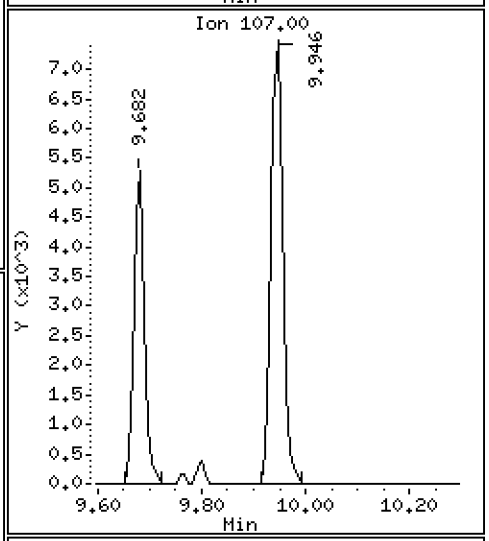


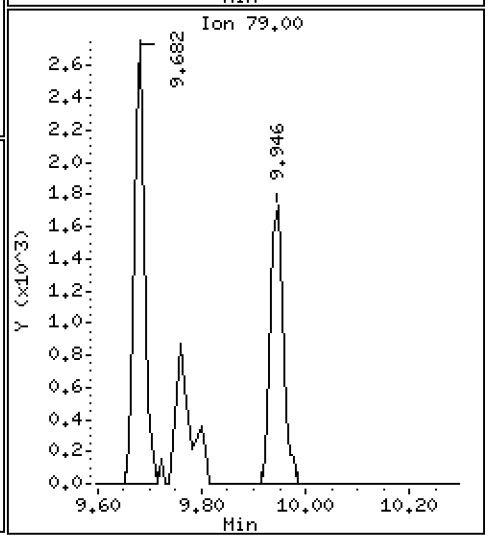












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

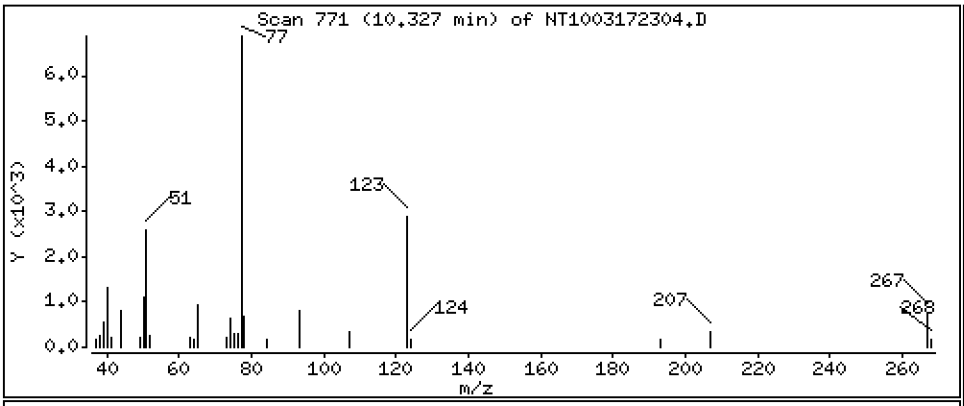
Operator: VTS

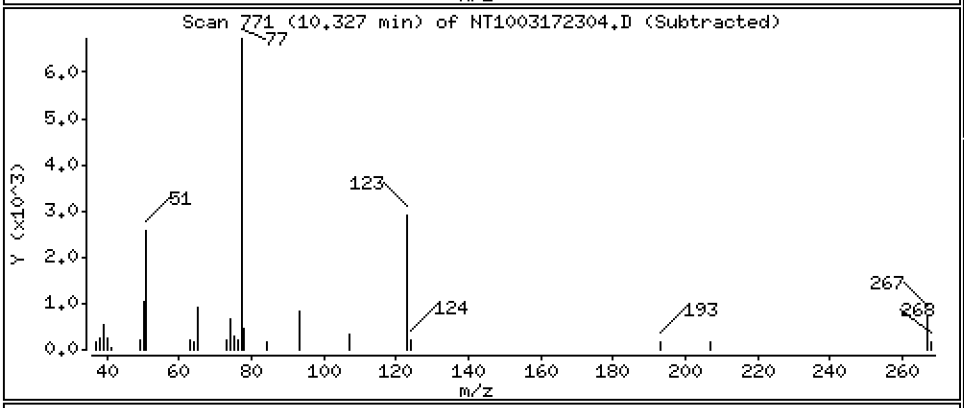
Column phase: ZB-5msi

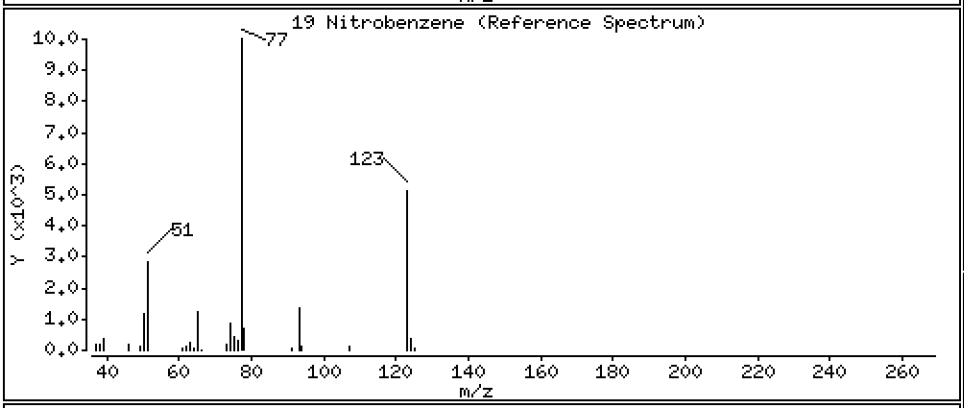
Column diameter: 0.25

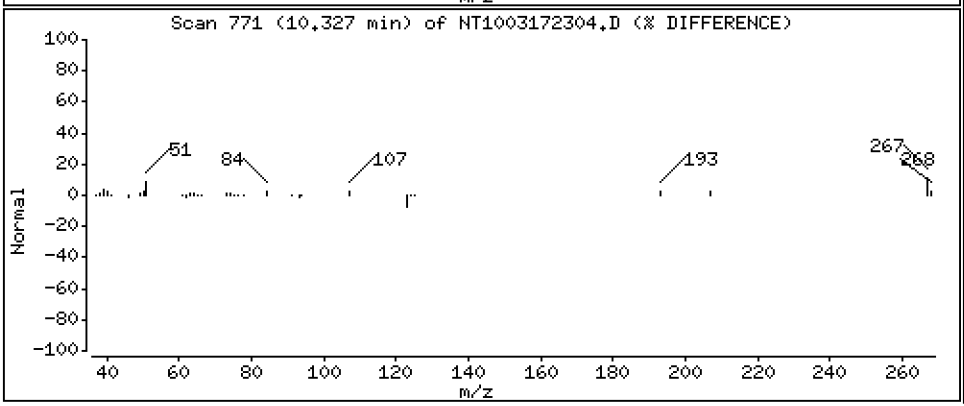
19 Nitrobenzene

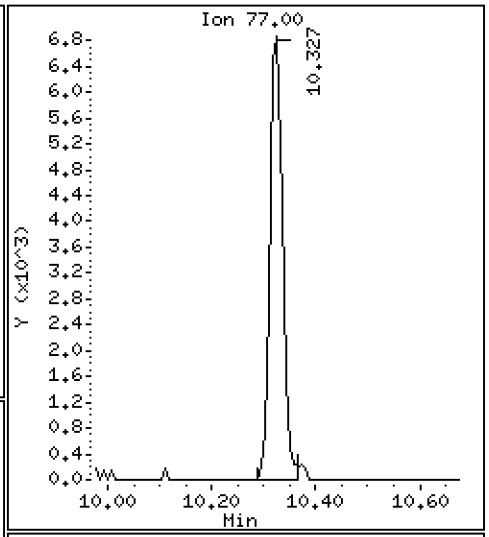
Concentration: 0.2080 ug/mL

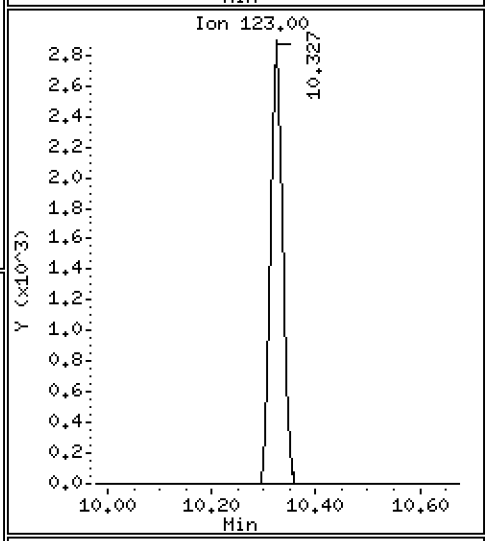


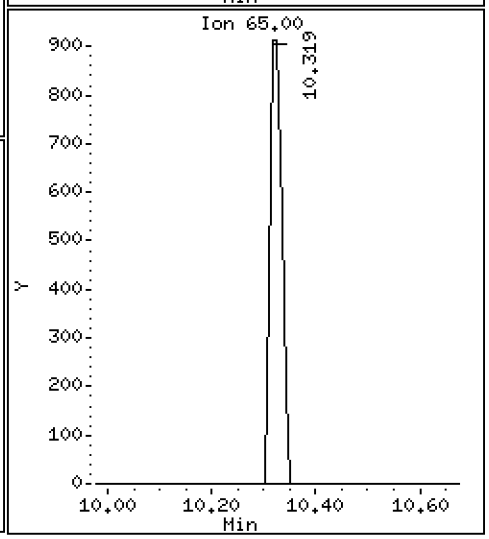












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

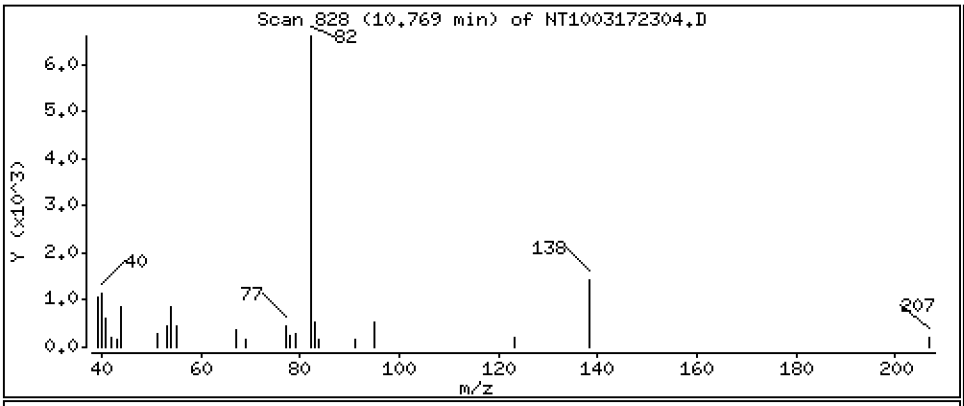
Operator: VTS

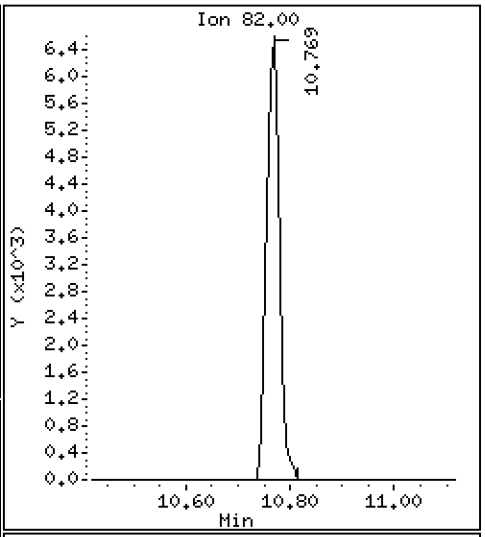
Column phase: ZB-5msi

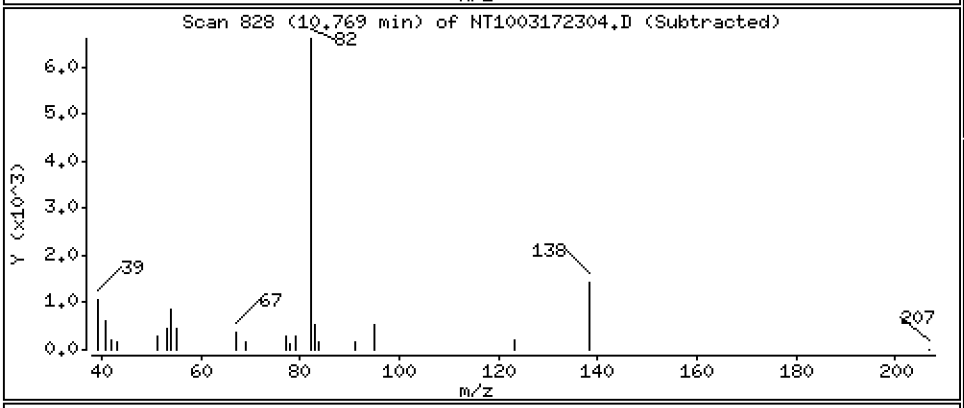
Column diameter: 0.25

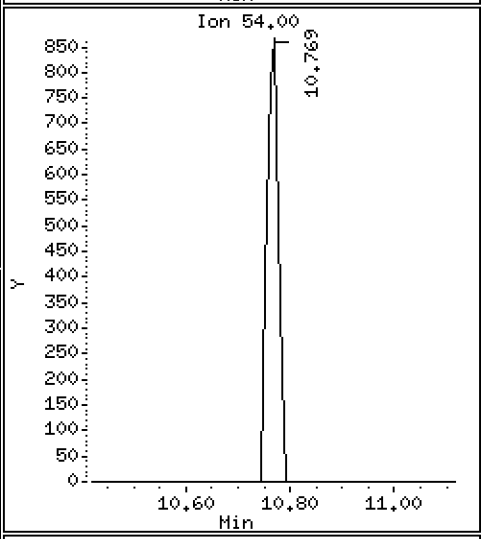
20 Isophorone

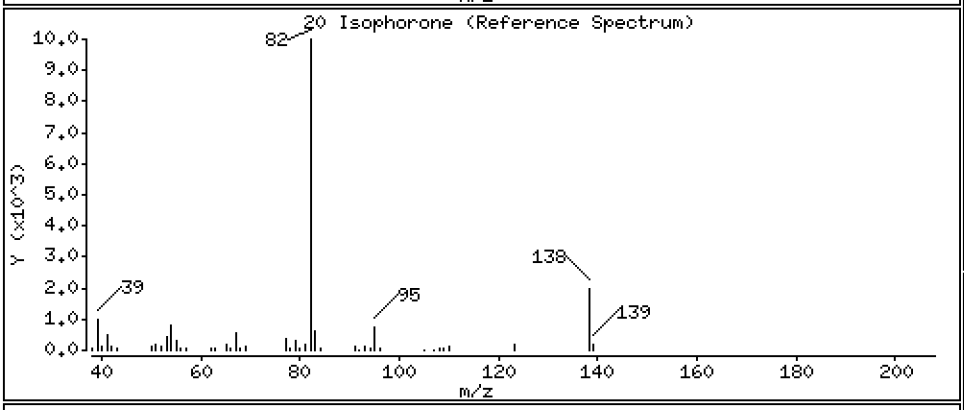
Concentration: 0.1618 ug/mL

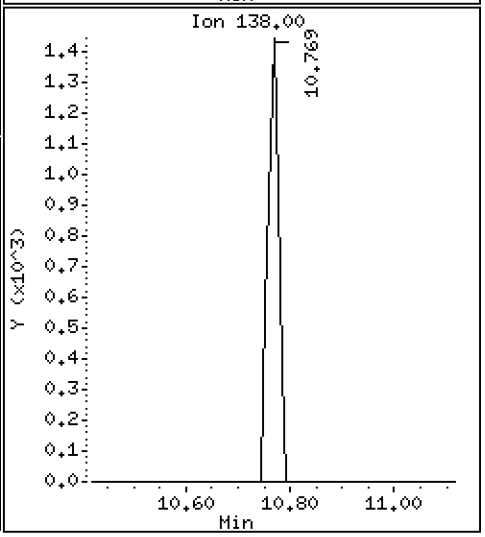


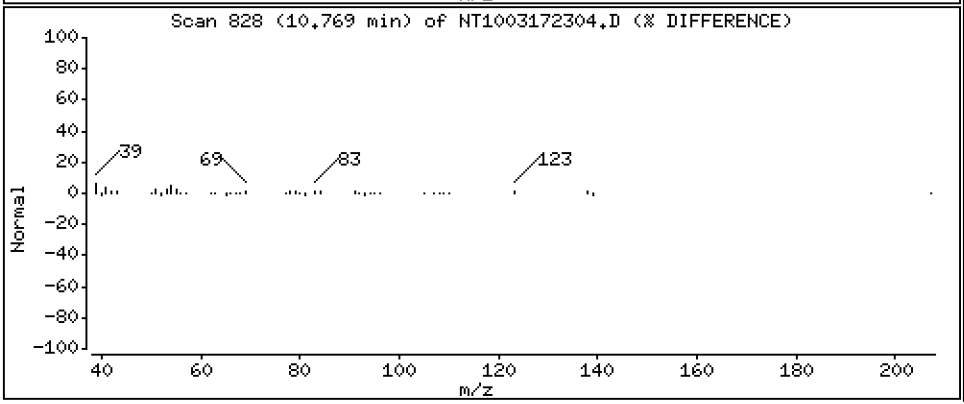












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

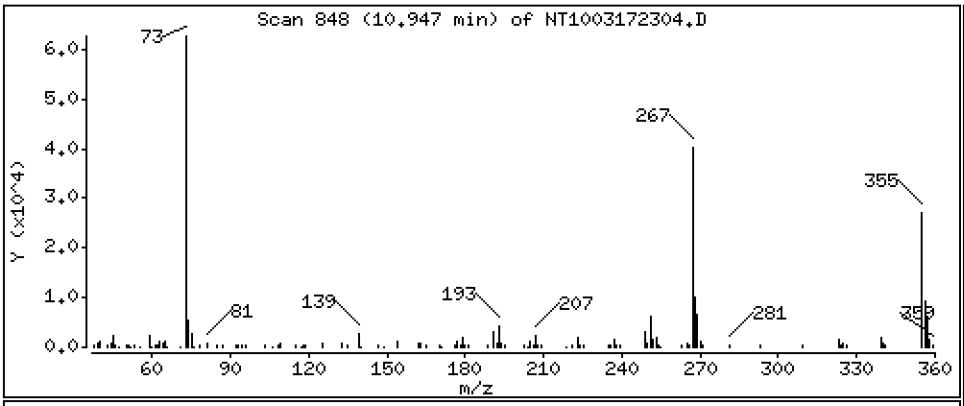
Operator: VTS

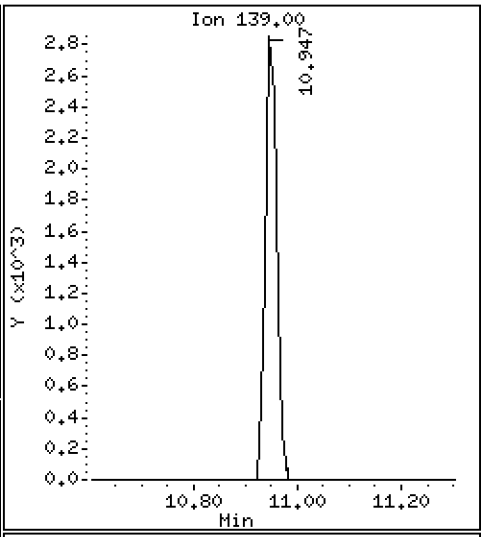
Column phase: ZB-5msi

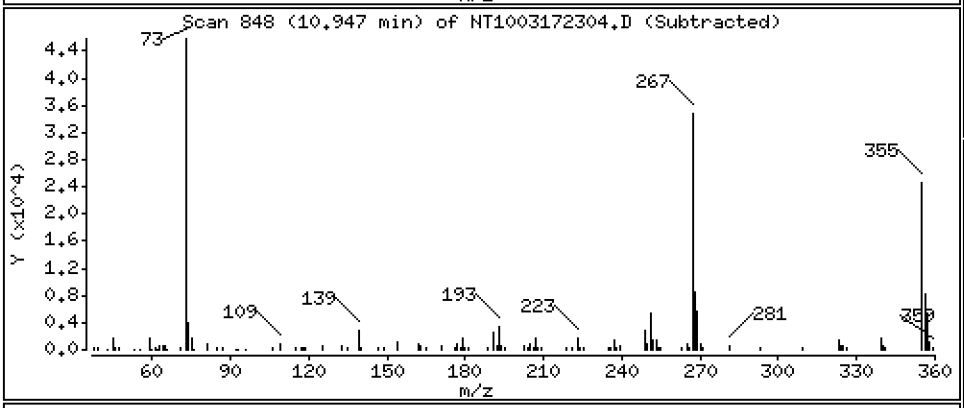
Column diameter: 0.25

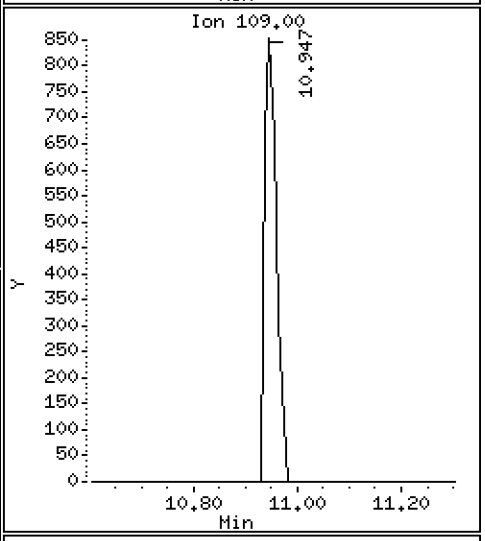
21 2-Nitrophenol

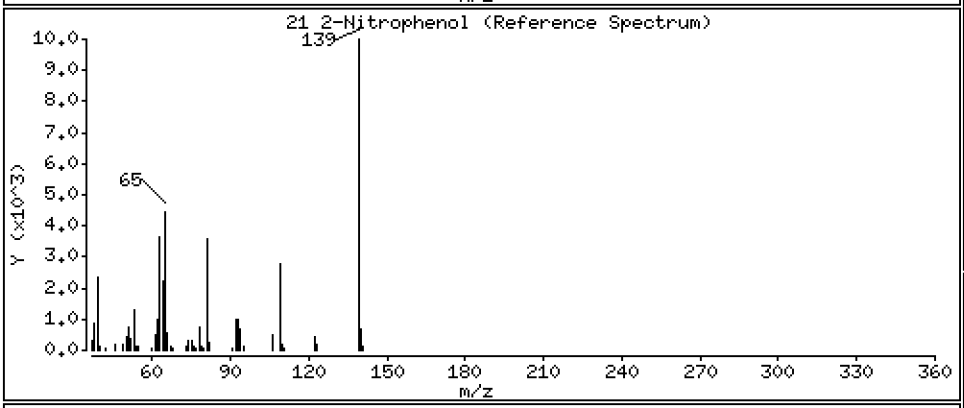
Concentration: 0.1680 ug/mL

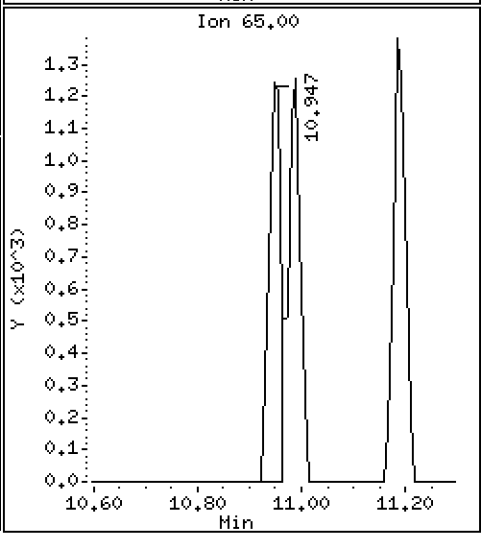


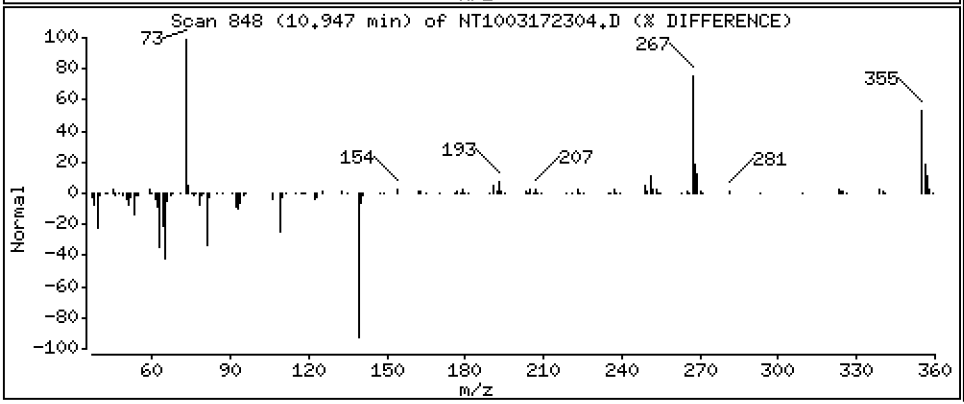












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

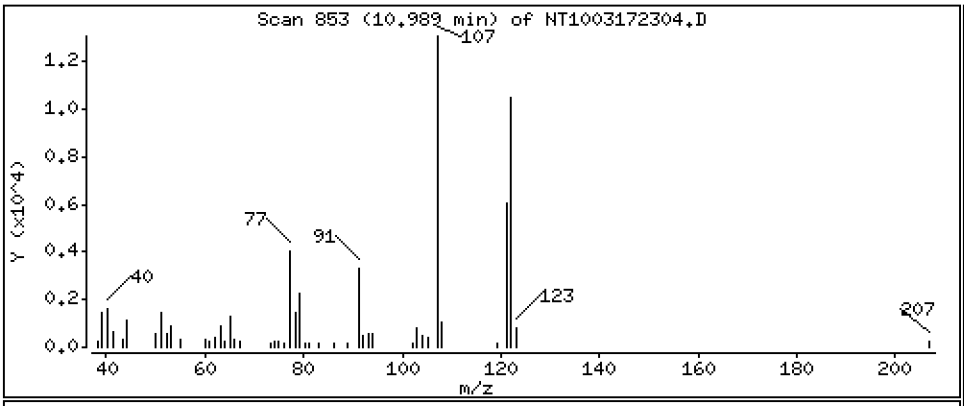
Operator: VTS

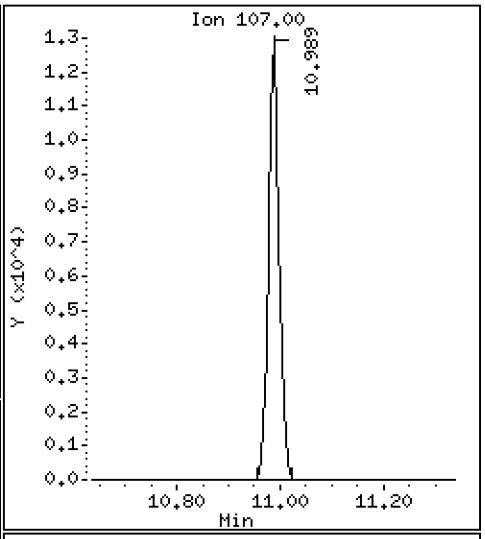
Column phase: ZB-5msi

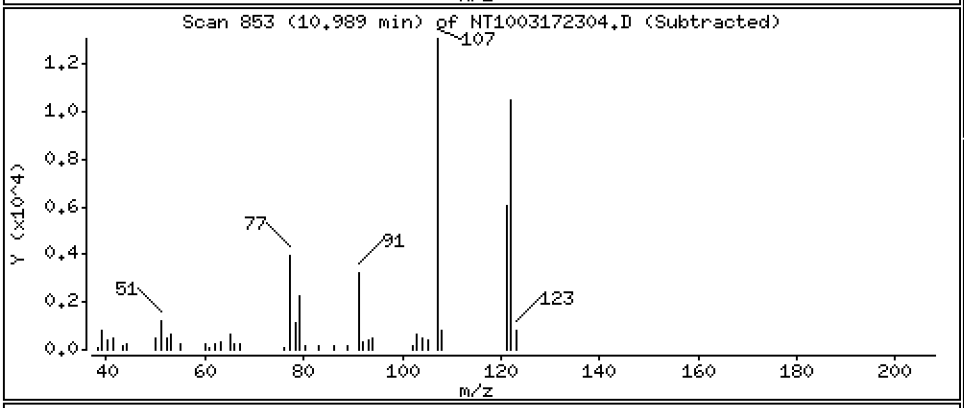
Column diameter: 0.25

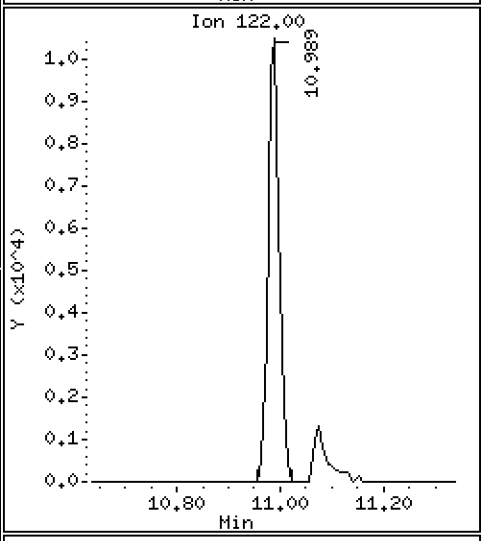
22 2,4-Dimethylphenol

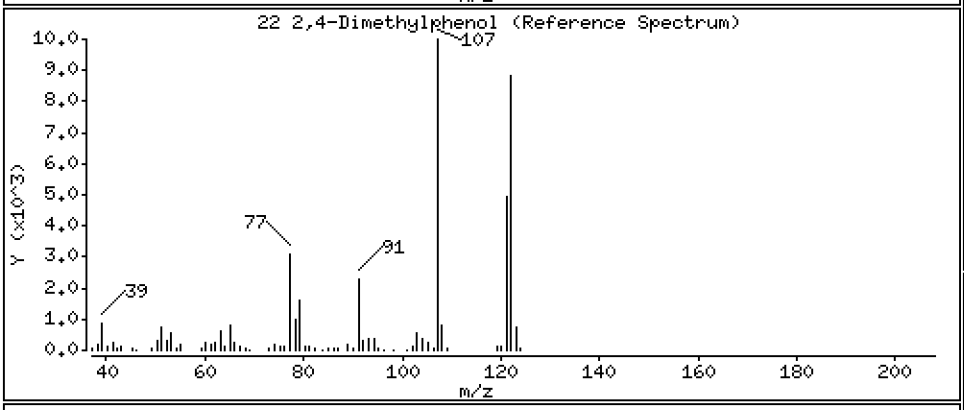
Concentration: 0.3937 ug/mL

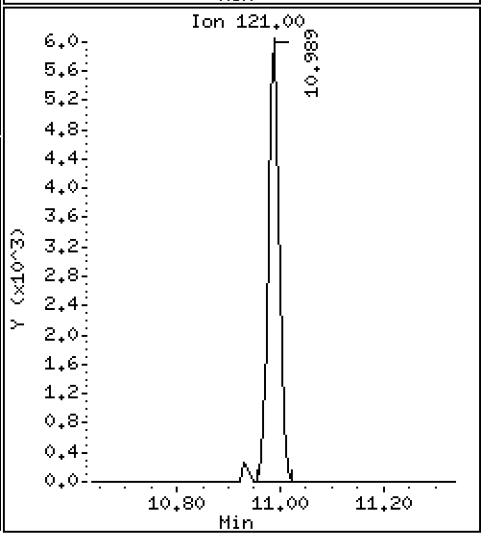


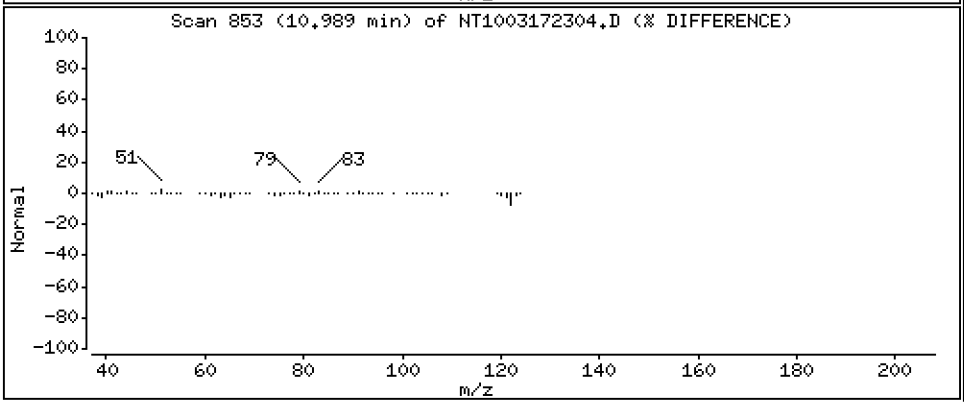












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

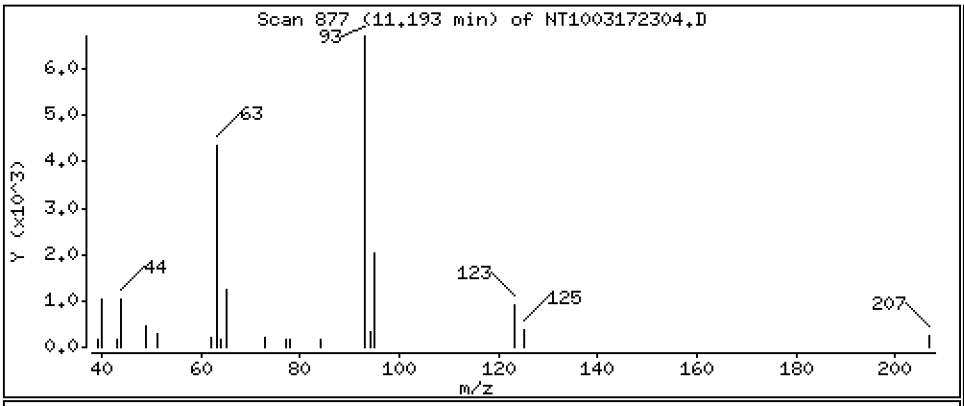
Operator: VTS

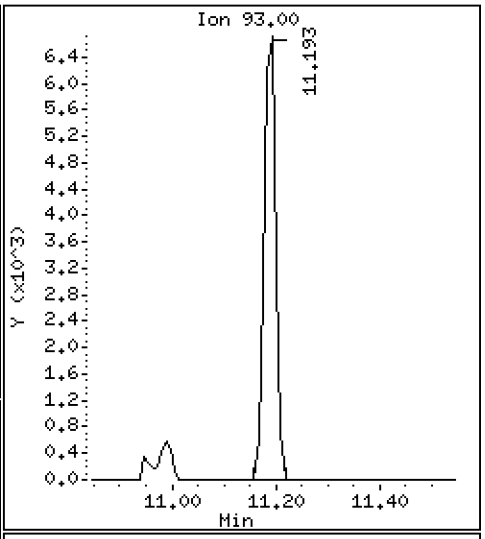
Column phase: ZB-5msi

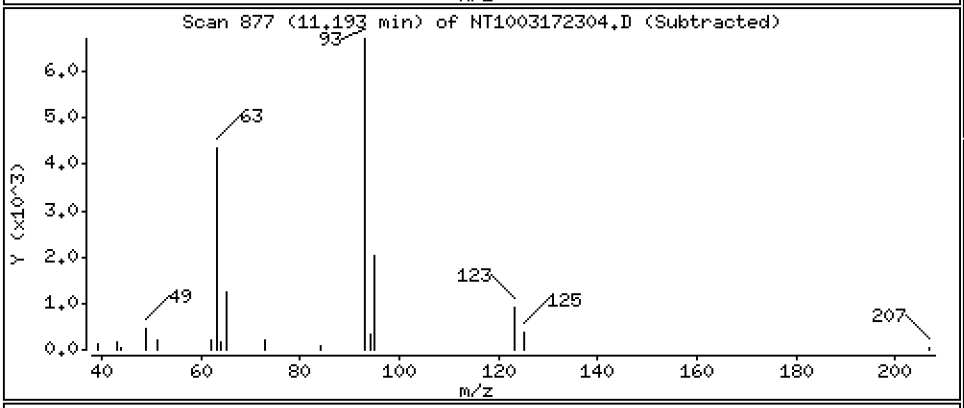
Column diameter: 0.25

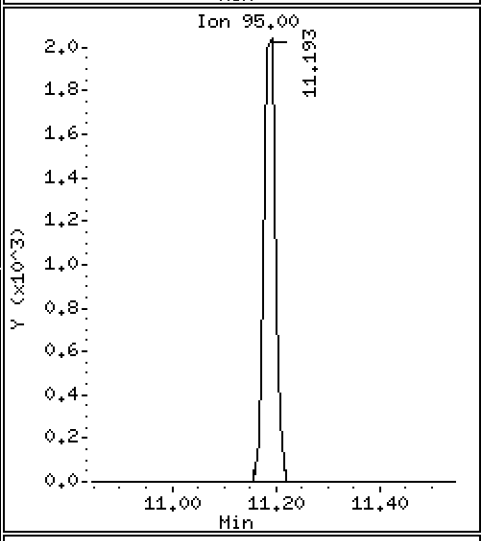
23 Bis(2-Chloroethoxy)methane

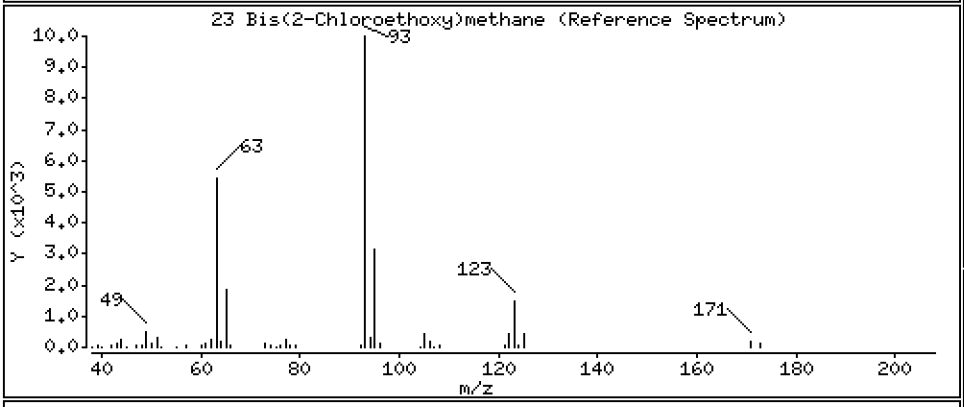
Concentration: 0.2265 ug/mL

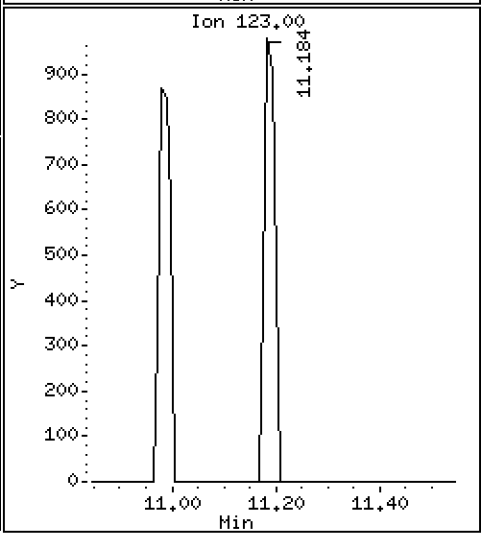


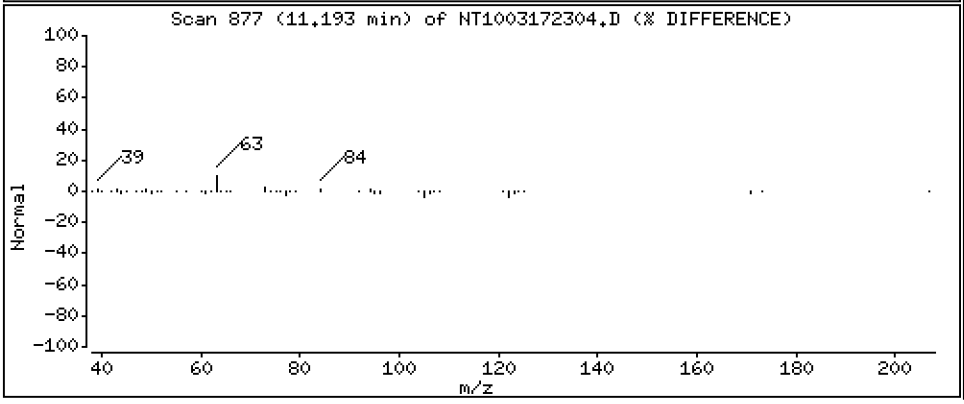












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

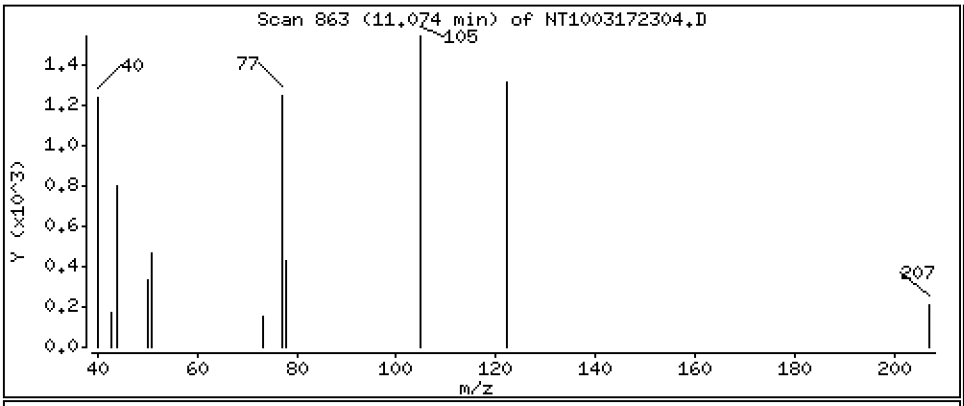
Operator: VTS

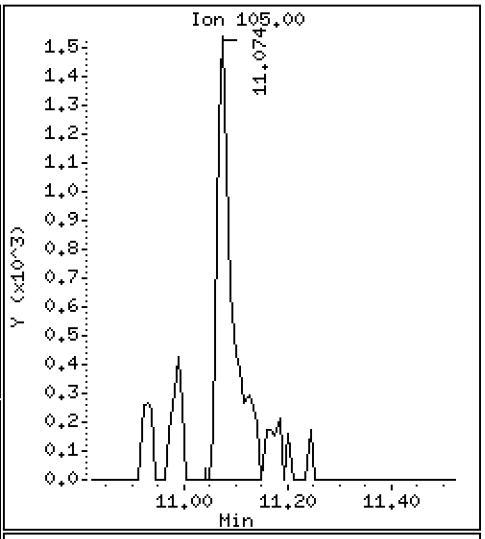
Column phase: ZB-5msi

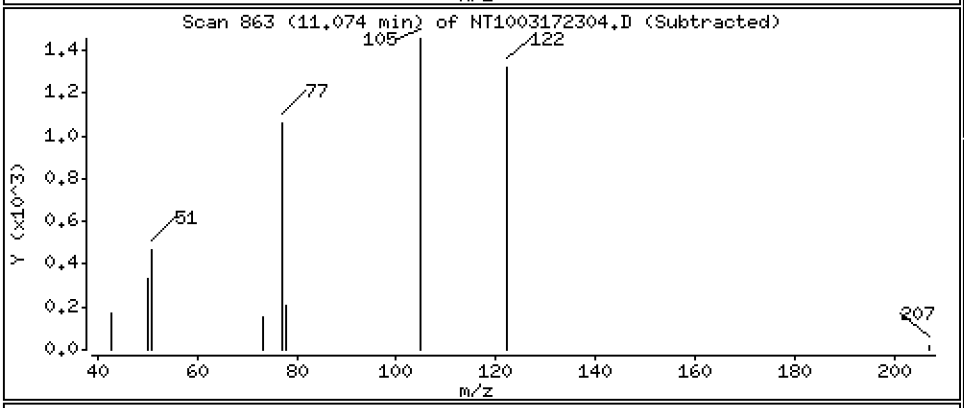
Column diameter: 0.25

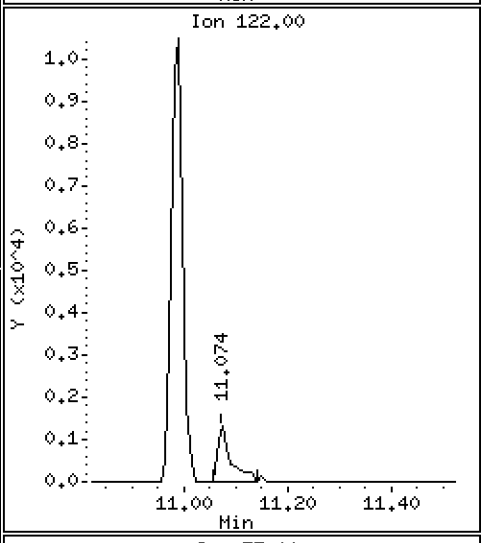
24 Benzoic acid

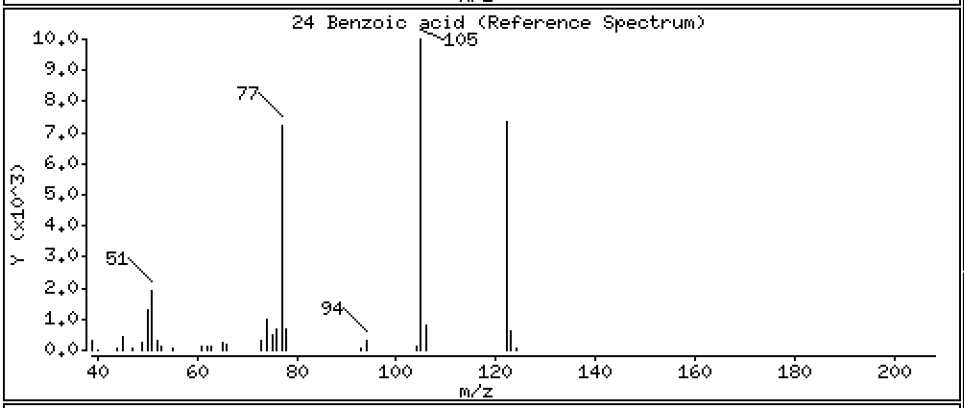
Concentration: 0.1215 ug/mL

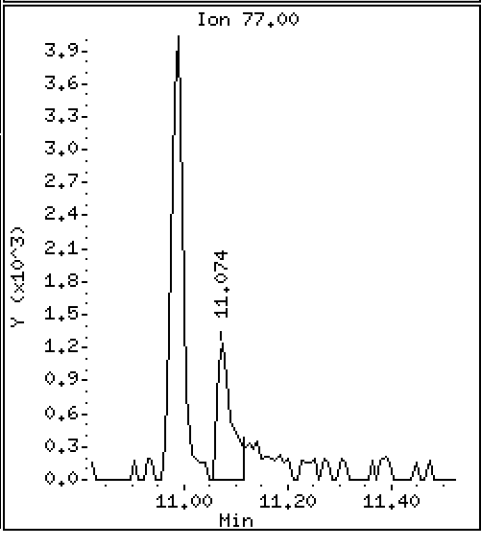


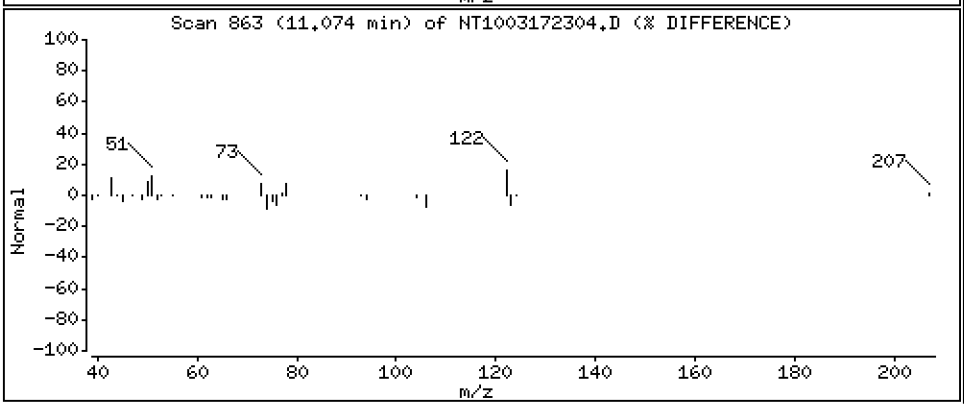












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

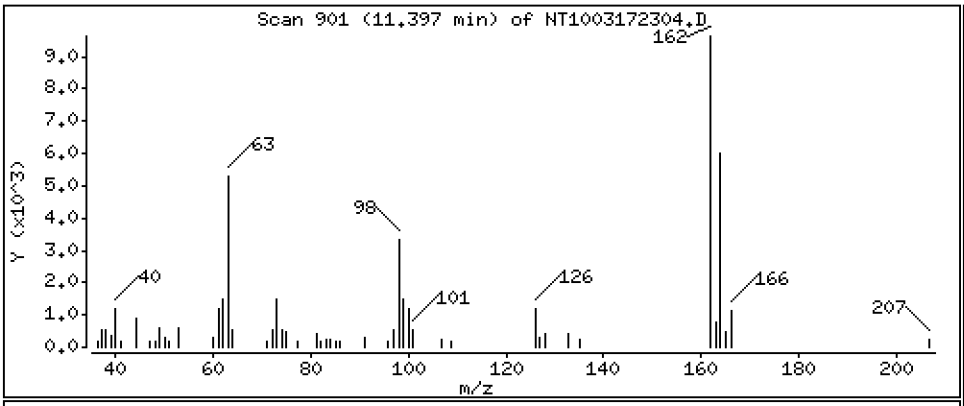
Operator: VTS

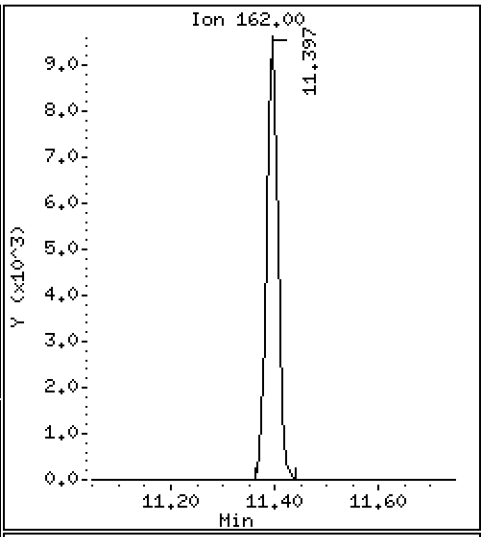
Column phase: ZB-5msi

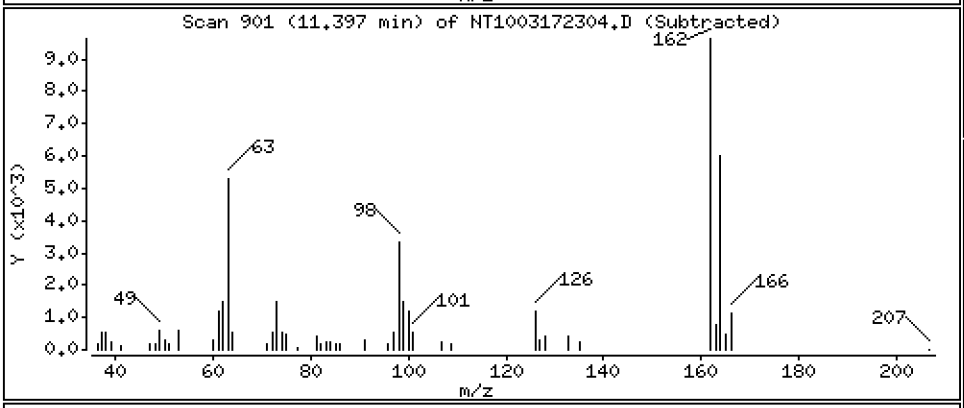
Column diameter: 0.25

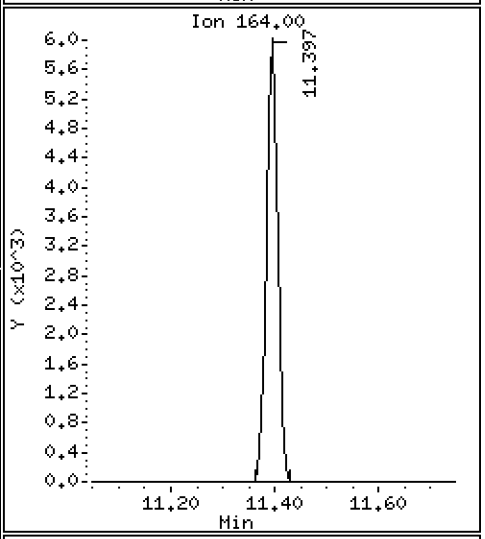
25 2,4-Dichlorophenol

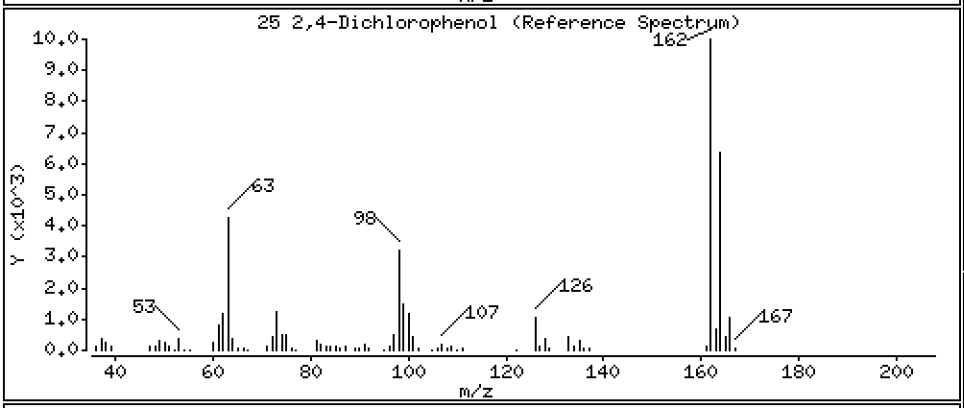
Concentration: 0.3677 ug/mL

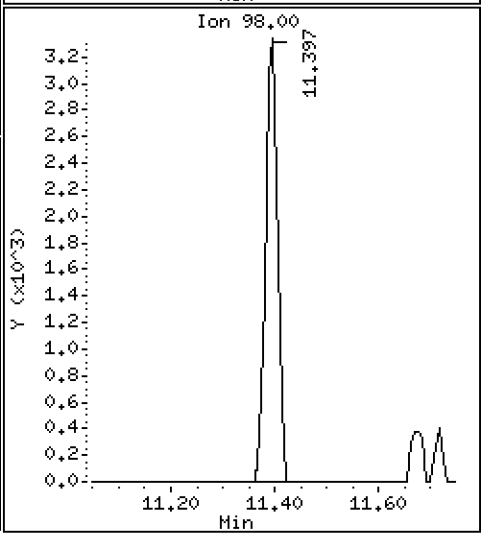


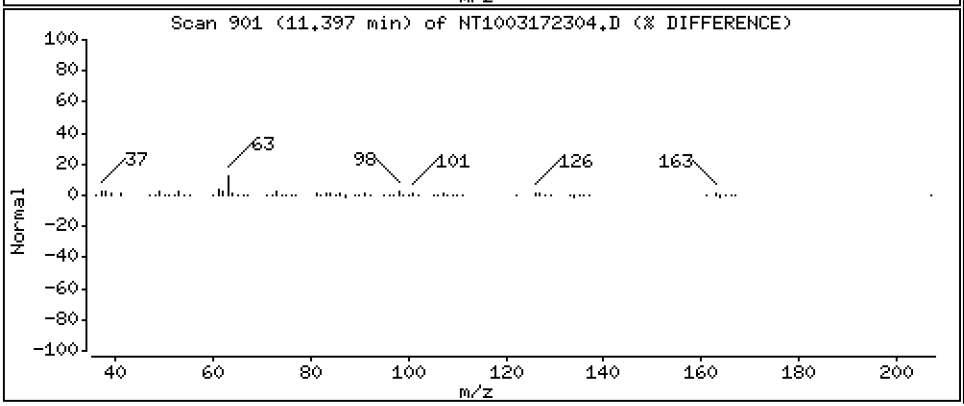












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

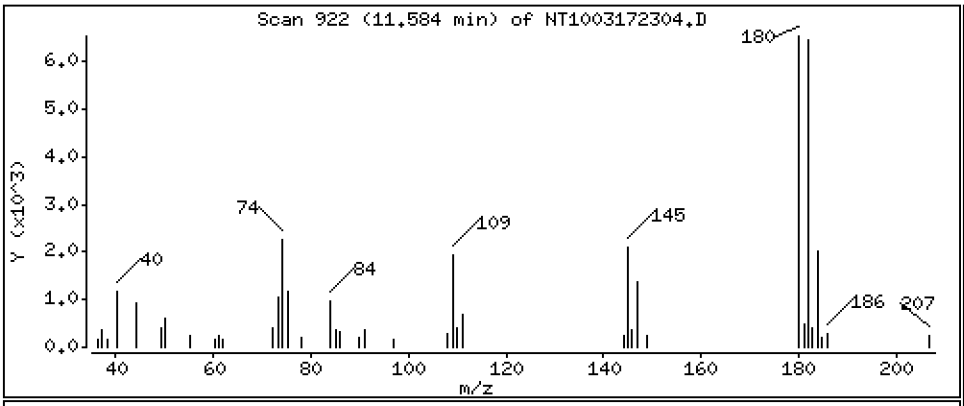
Operator: VTS

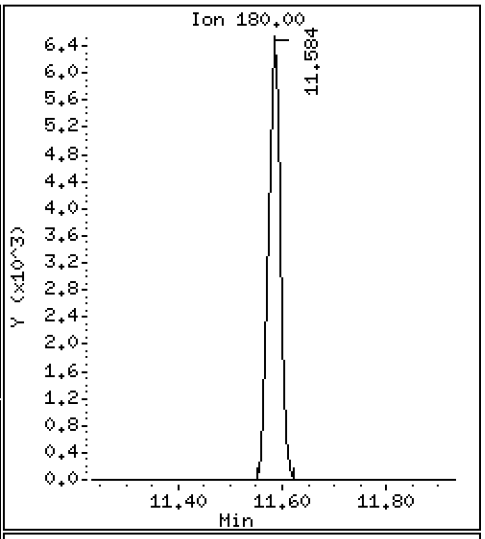
Column phase: ZB-5msi

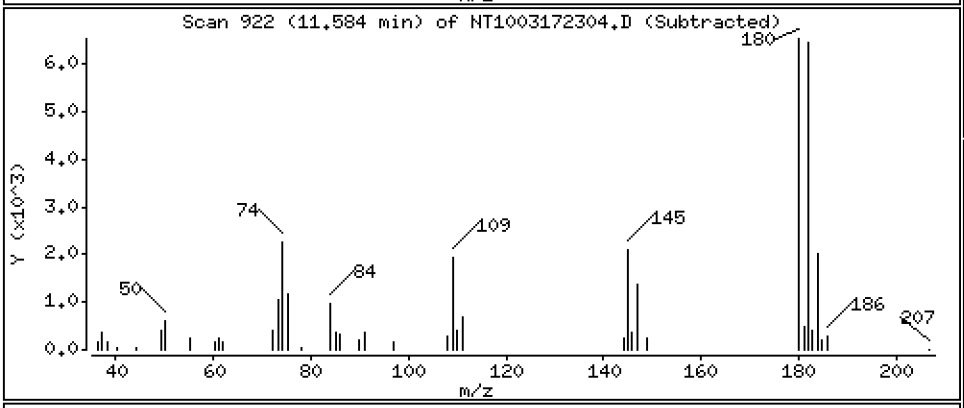
Column diameter: 0.25

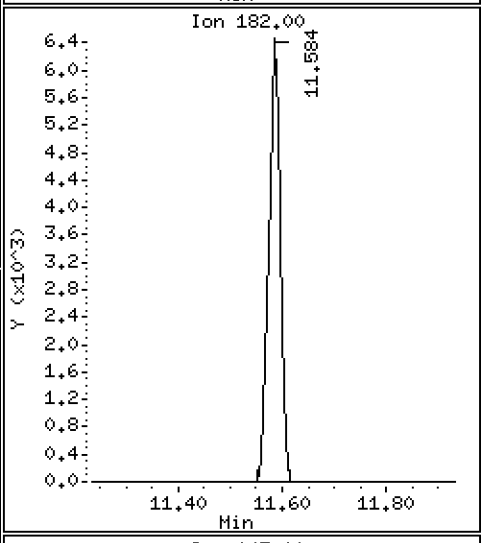
26 1,2,4-Trichlorobenzene

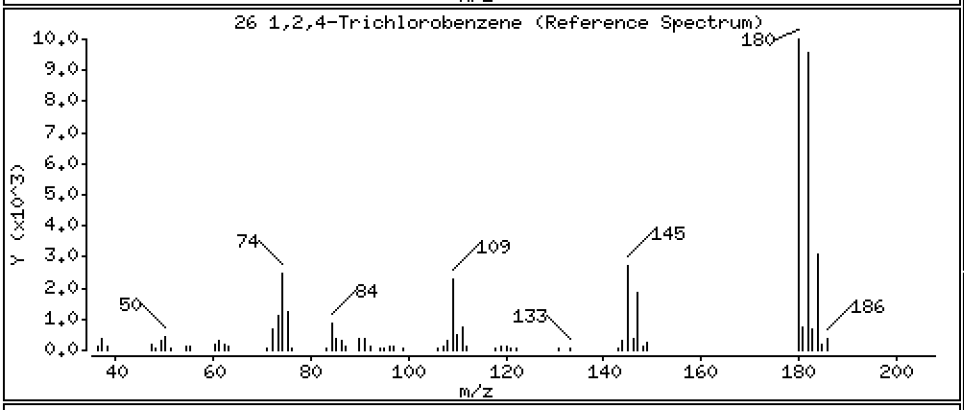
Concentration: 0.2206 ug/mL

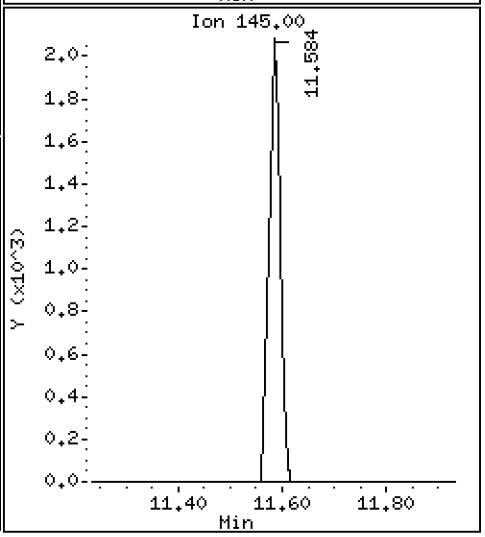


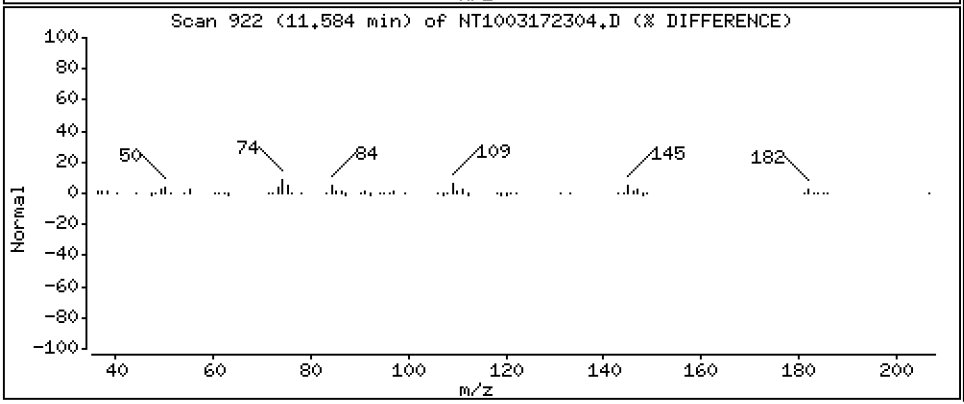












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

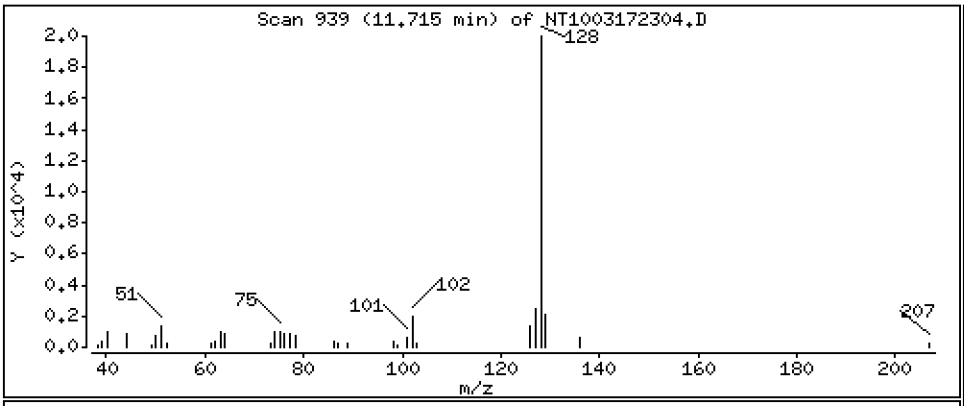
Operator: VTS

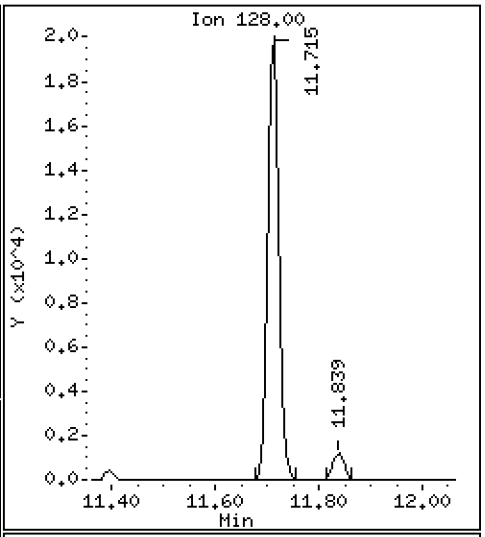
Column phase: ZB-5msi

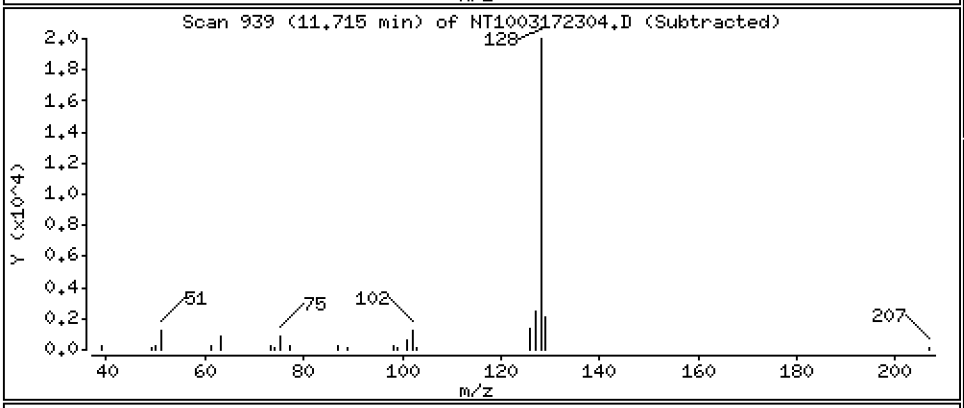
Column diameter: 0.25

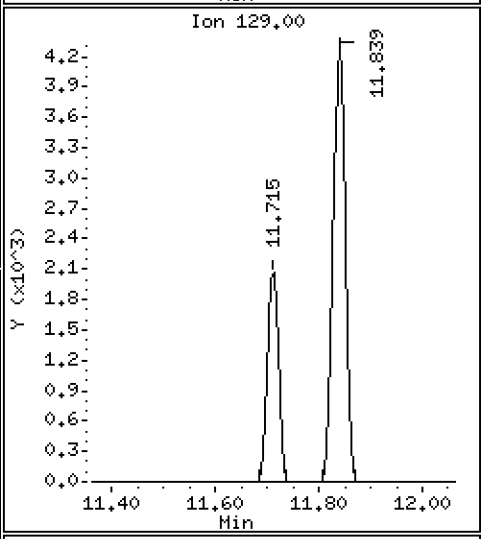
28 Naphthalene

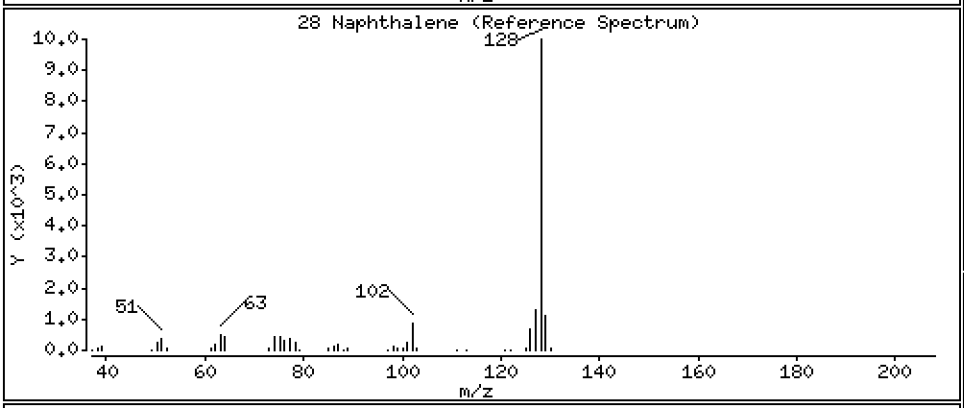
Concentration: 0.2173 ug/mL

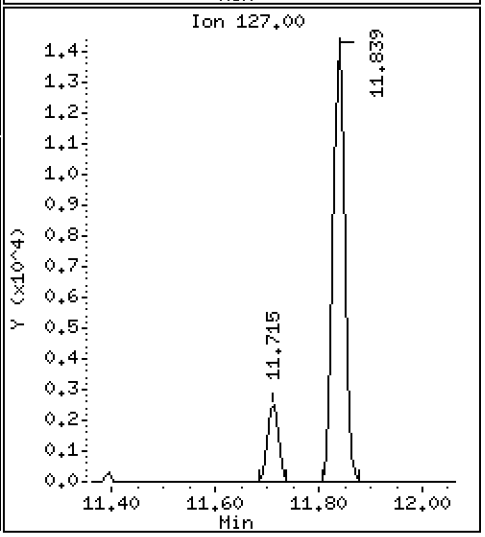


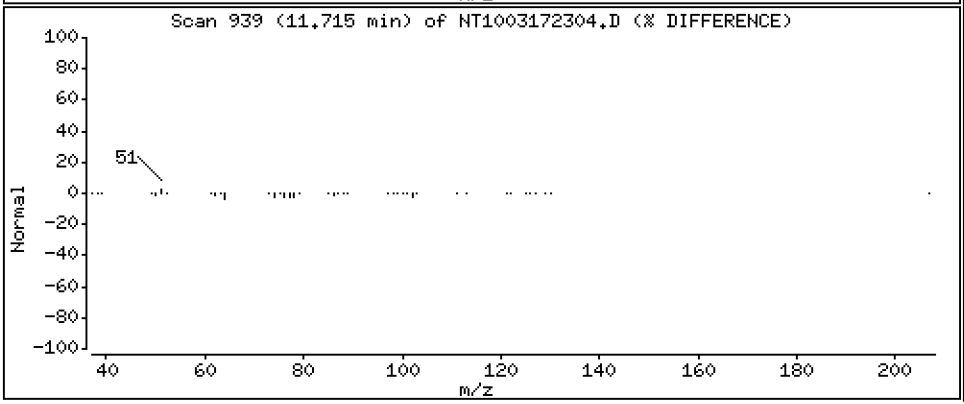












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

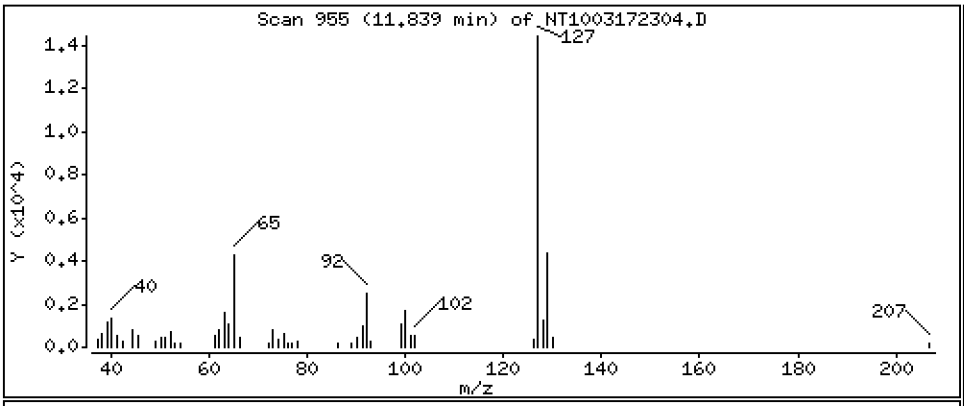
Operator: VTS

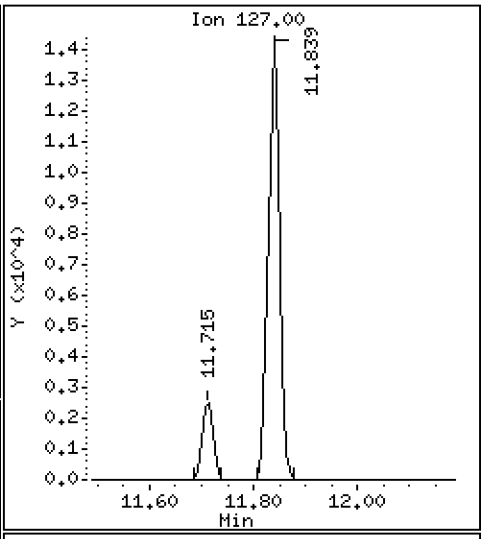
Column phase: ZB-5msi

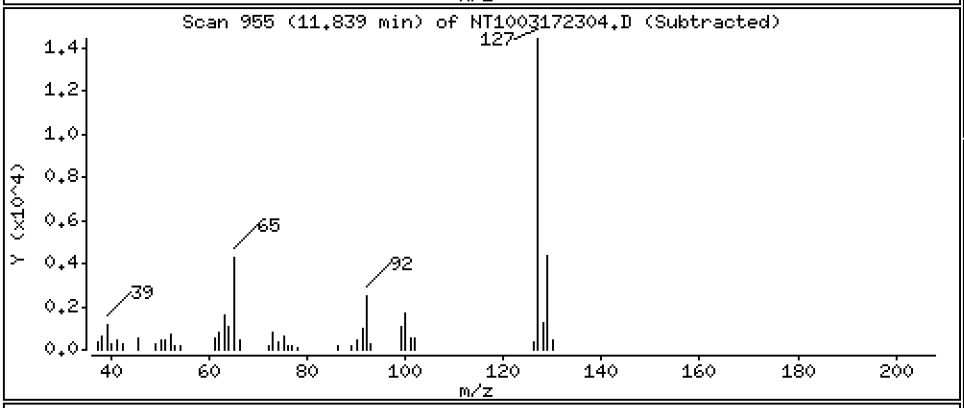
Column diameter: 0.25

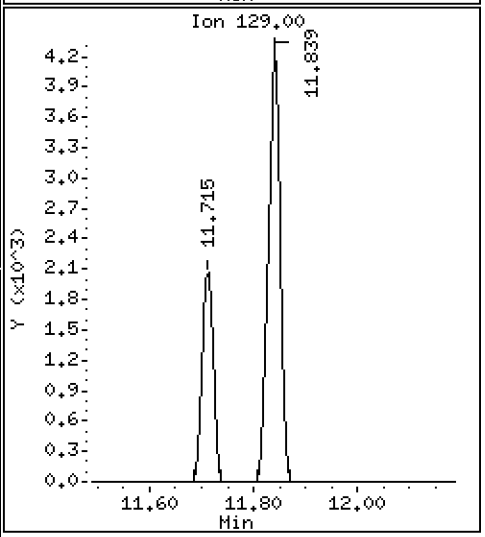
29 4-Chloroaniline

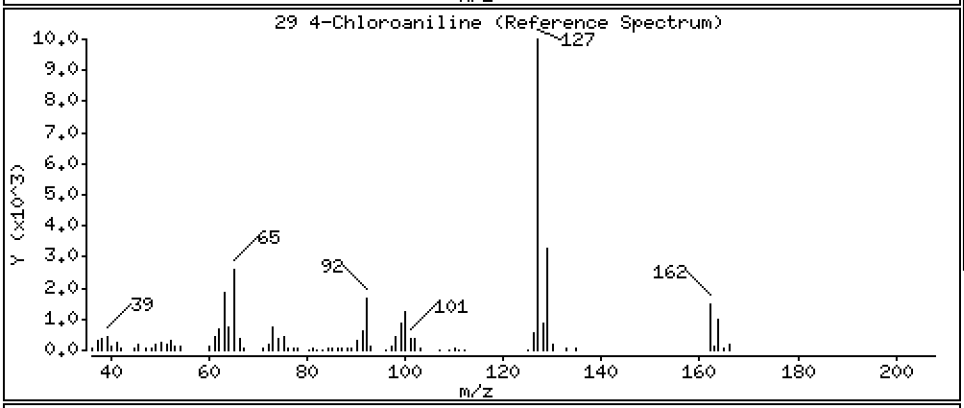
Concentration: 0.3753 ug/mL

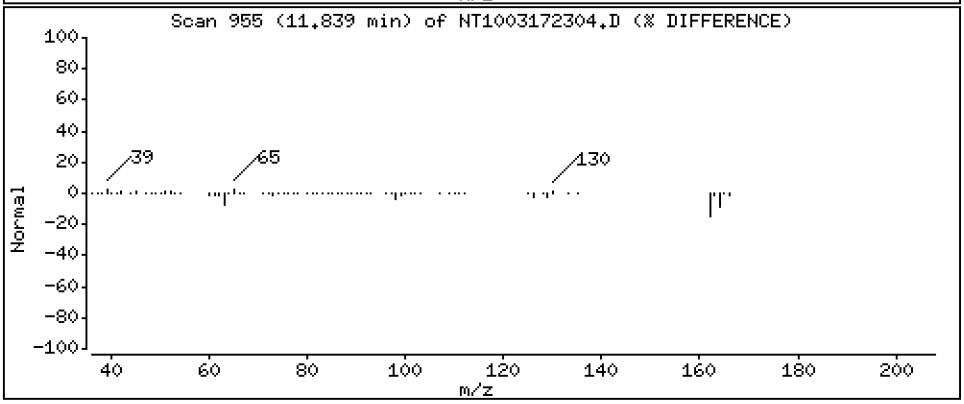












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

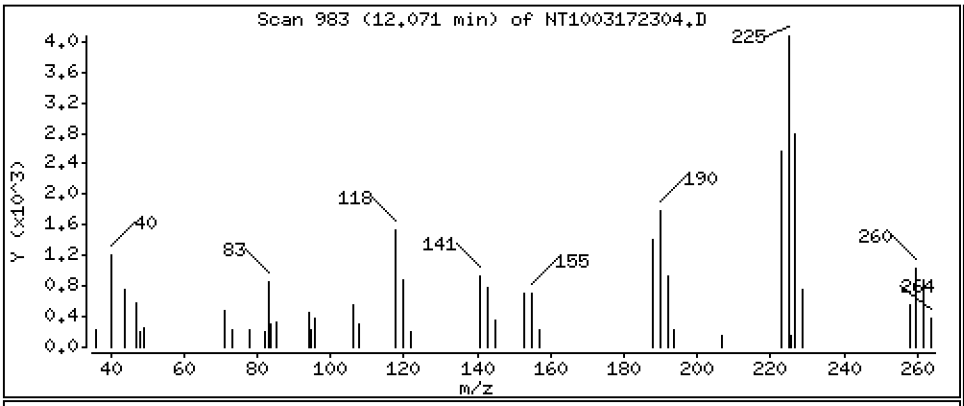
Operator: VTS

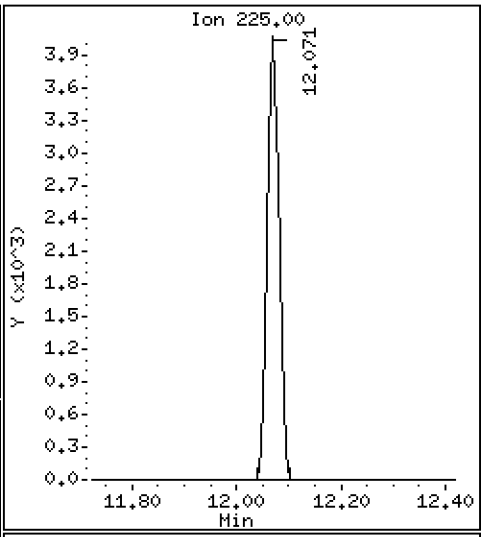
Column phase: ZB-5msi

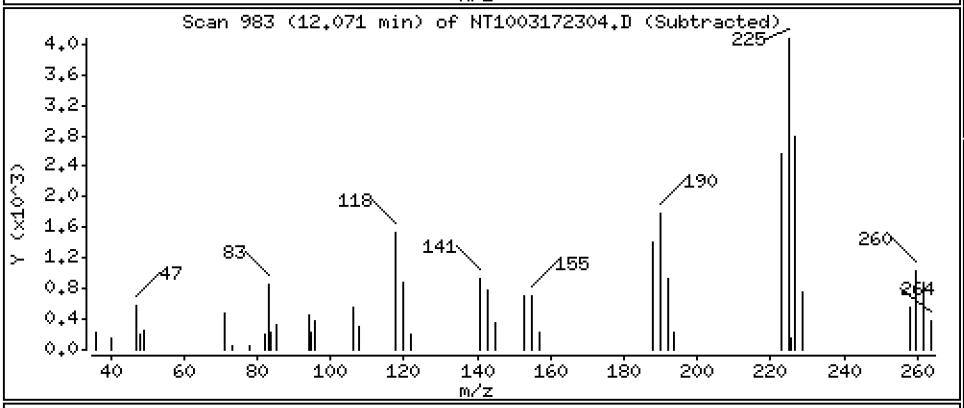
Column diameter: 0.25

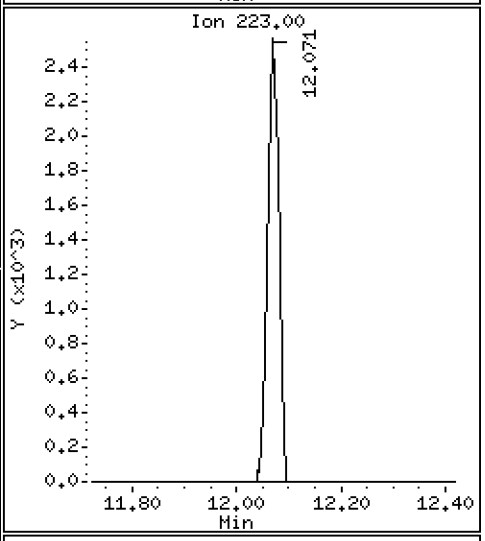
30 Hexachlorobutadiene

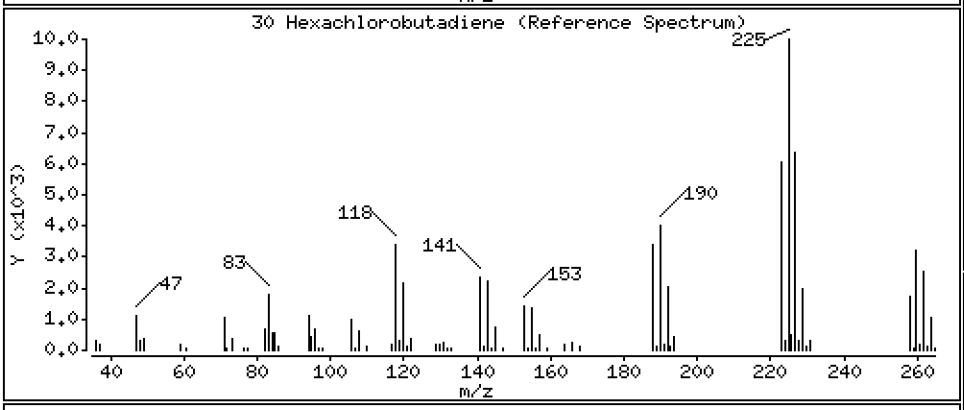
Concentration: 0.2234 ug/mL

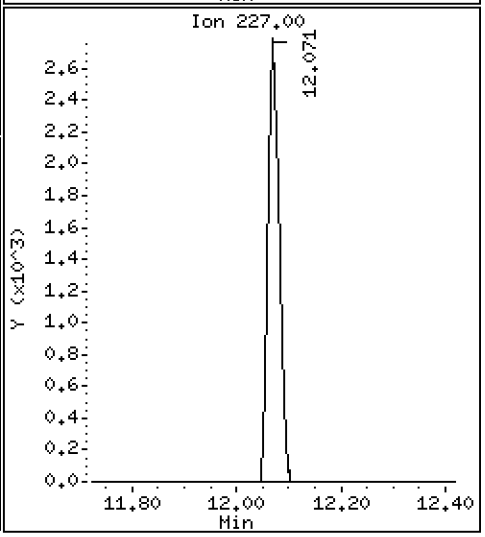


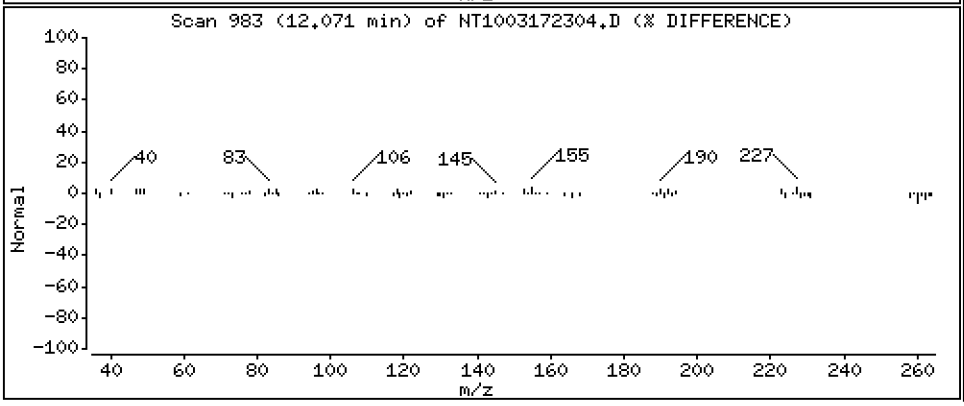












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

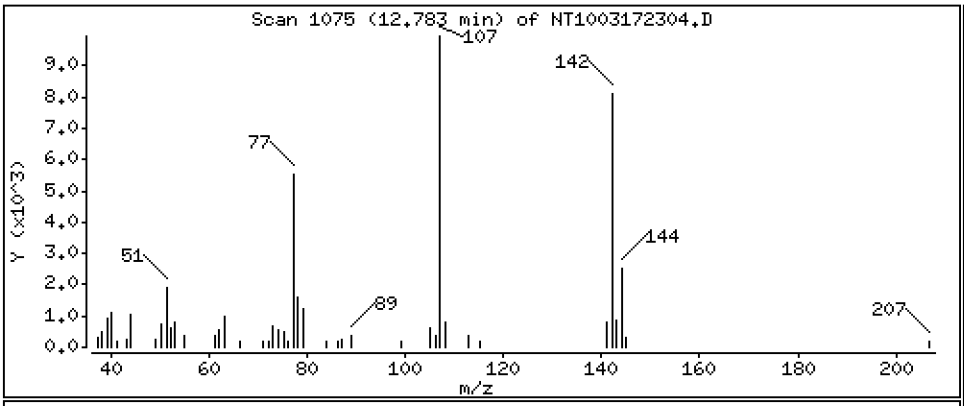
Operator: VTS

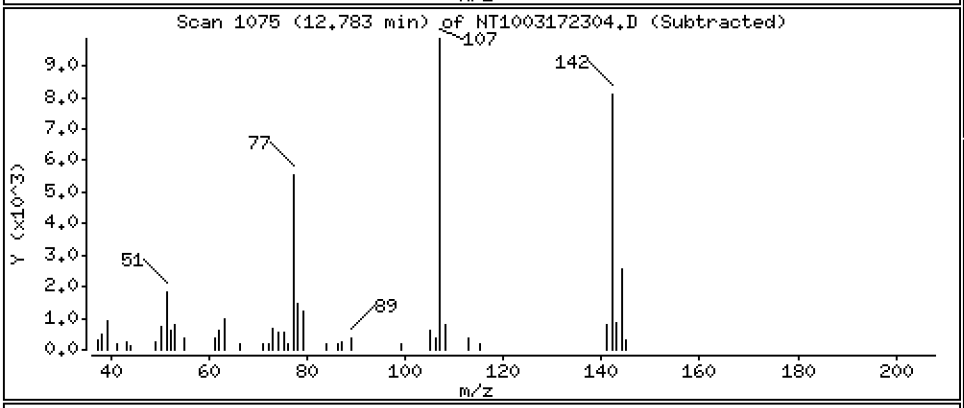
Column phase: ZB-5msi

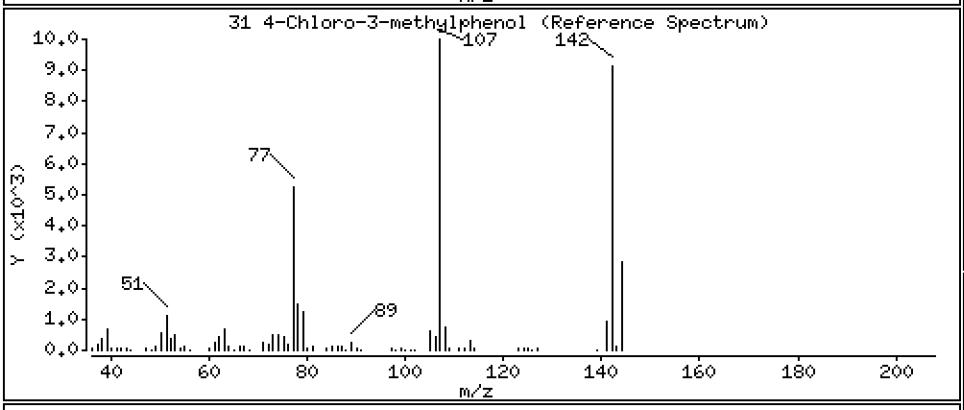
Column diameter: 0.25

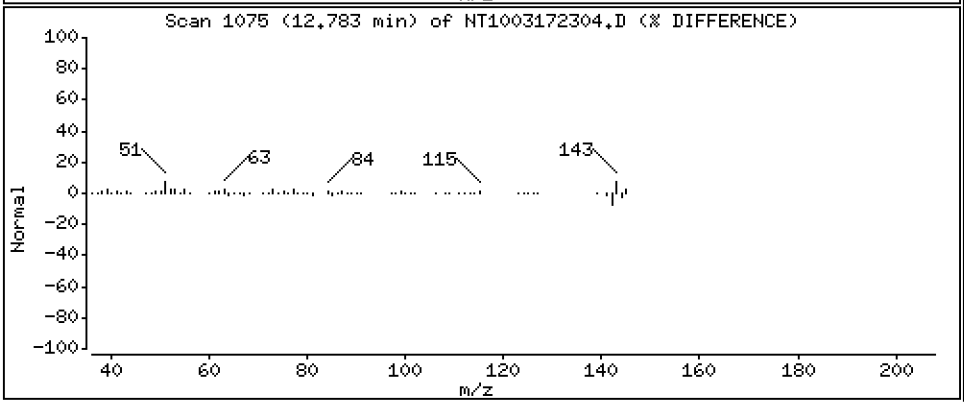
31 4-Chloro-3-methylphenol

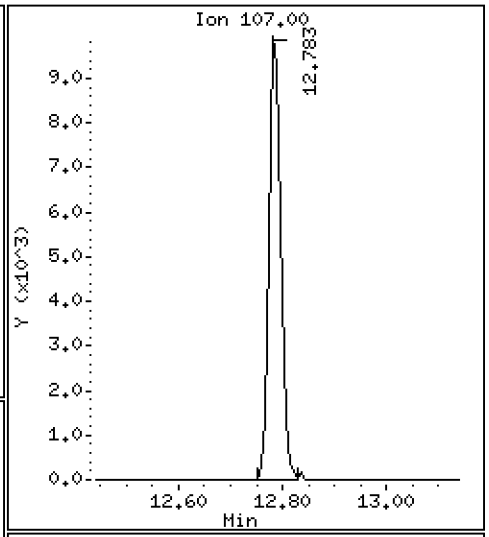
Concentration: 0.3517 ug/mL

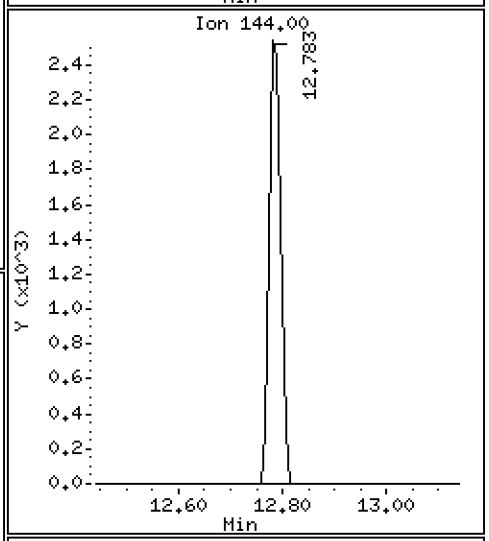


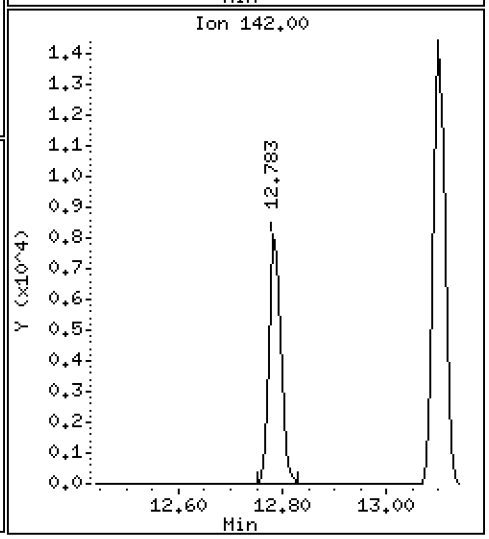












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

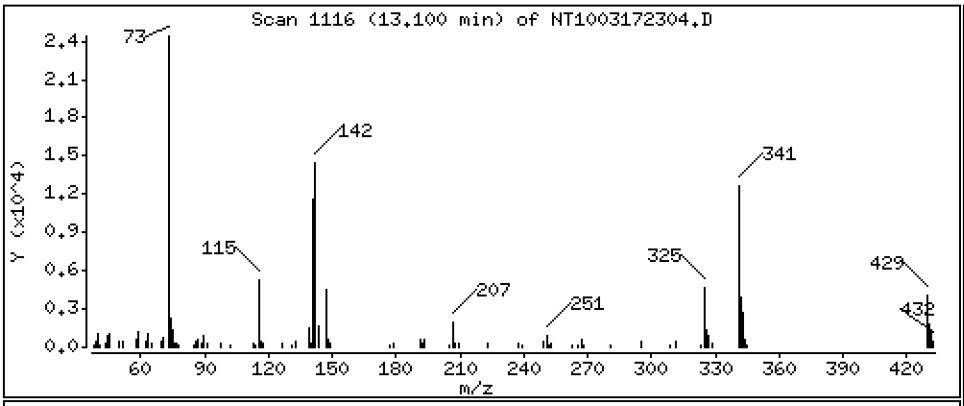
Operator: VTS

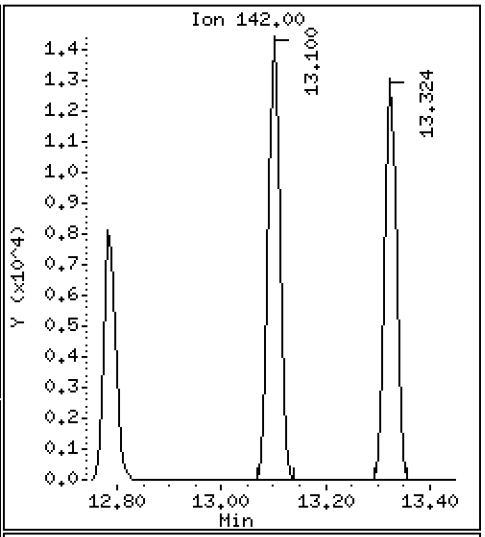
Column phase: ZB-5msi

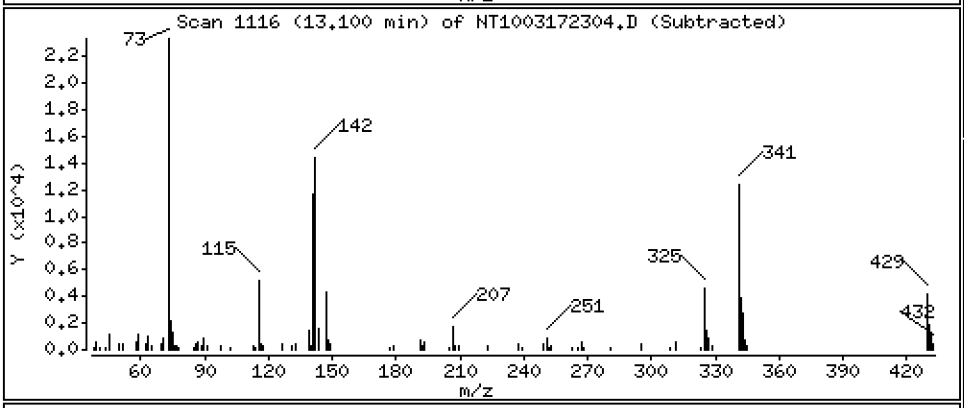
Column diameter: 0.25

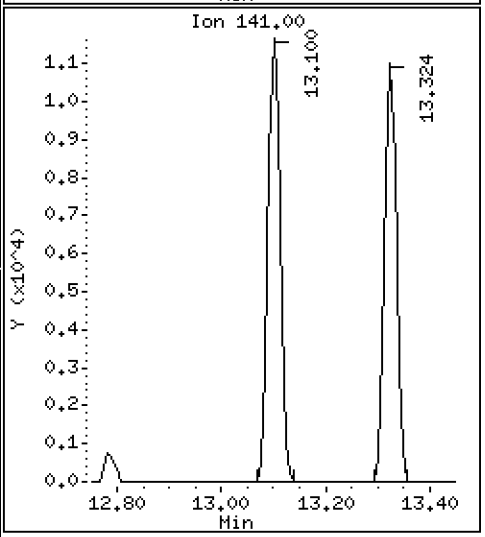
32 2-Methylnaphthalene

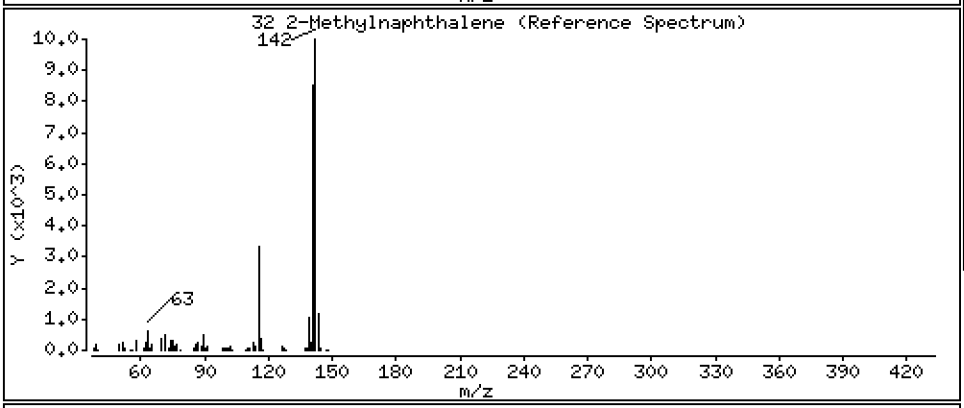
Concentration: 0.2052 ug/mL

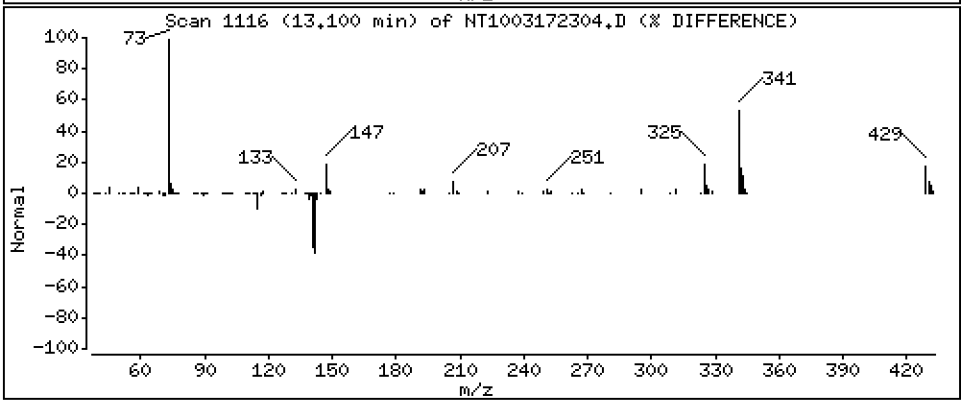












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

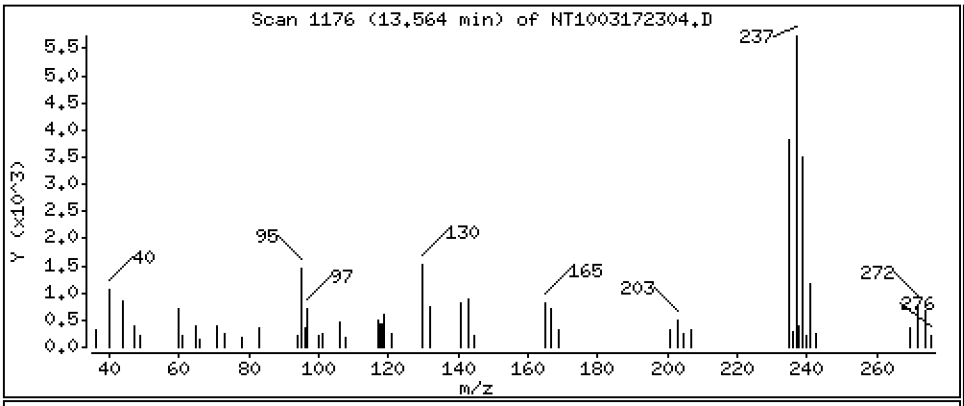
Operator: VTS

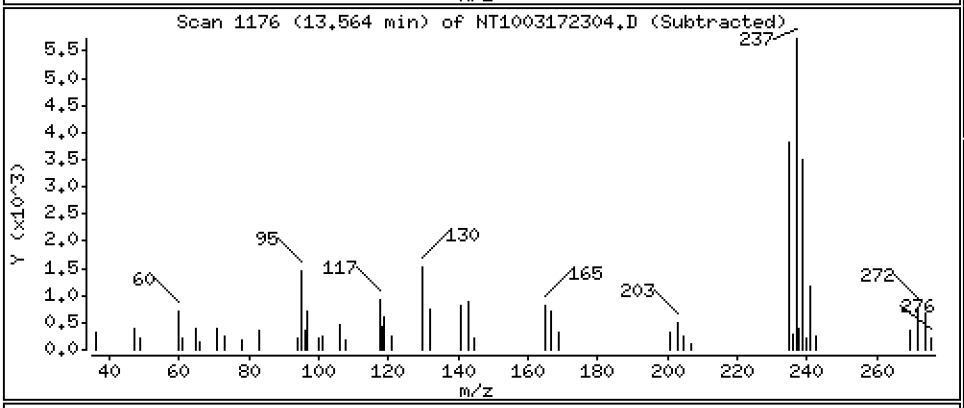
Column phase: ZB-5msi

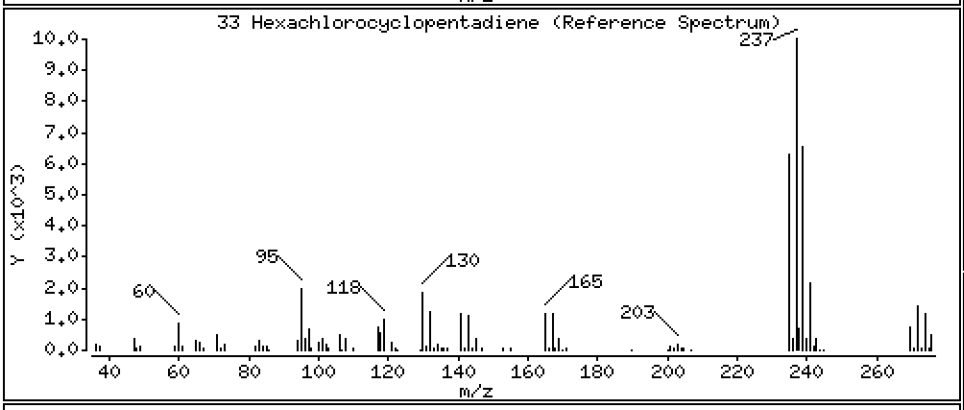
Column diameter: 0.25

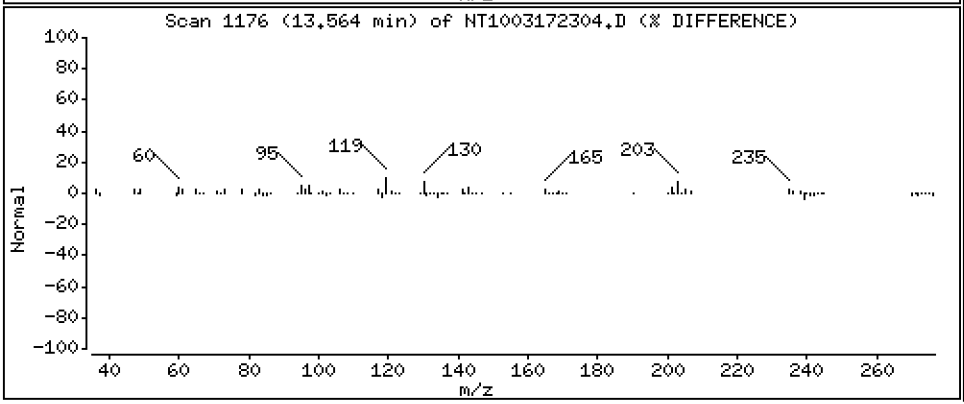
33 Hexachlorocyclopentadiene

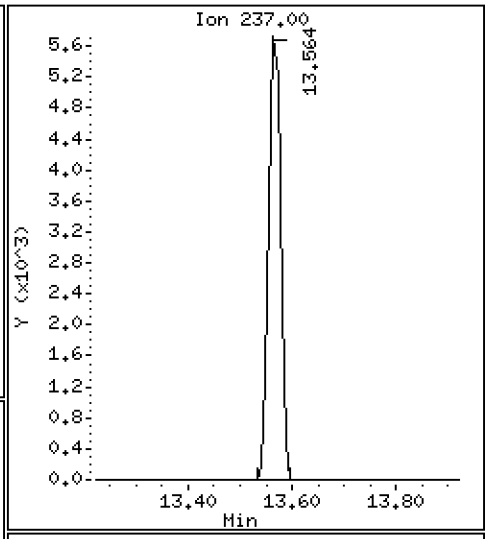
Concentration: 0.3264 ug/mL

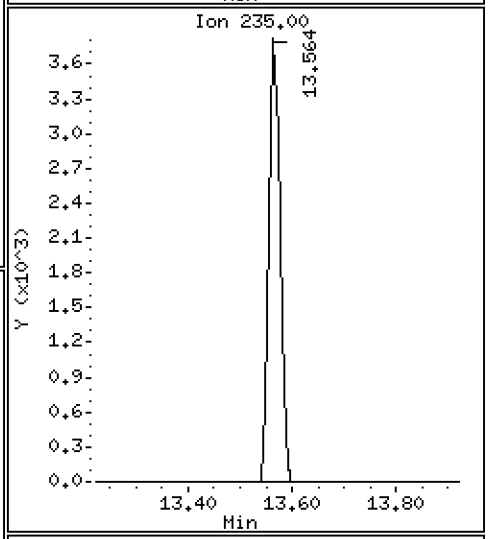


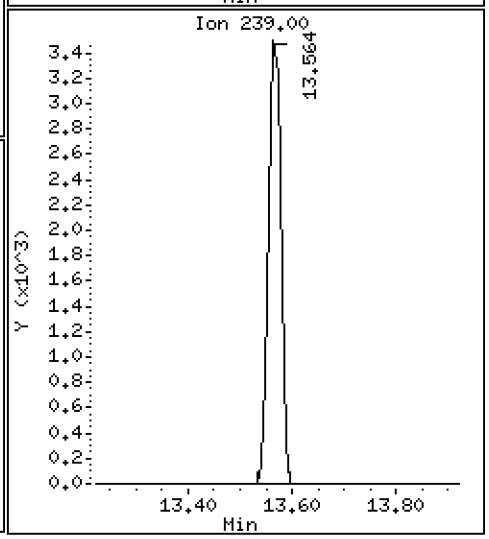












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

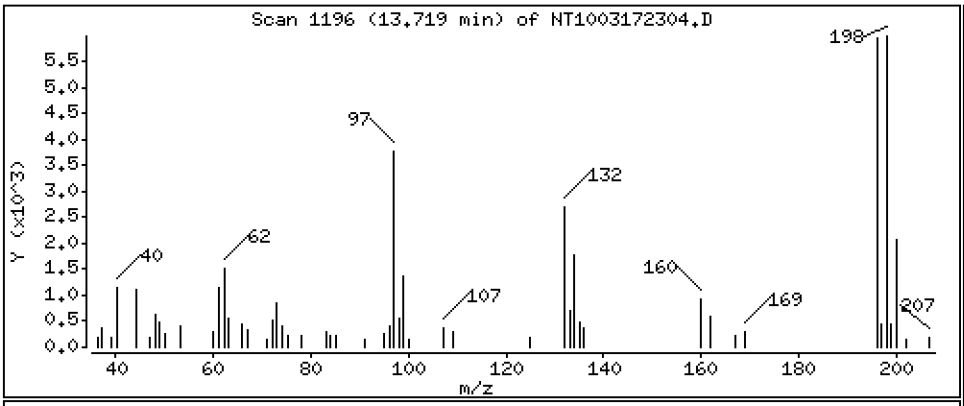
Operator: VTS

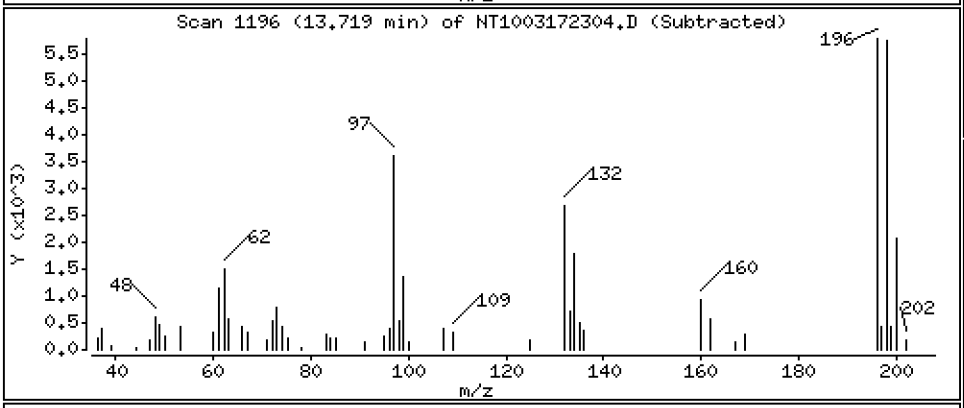
Column phase: ZB-5msi

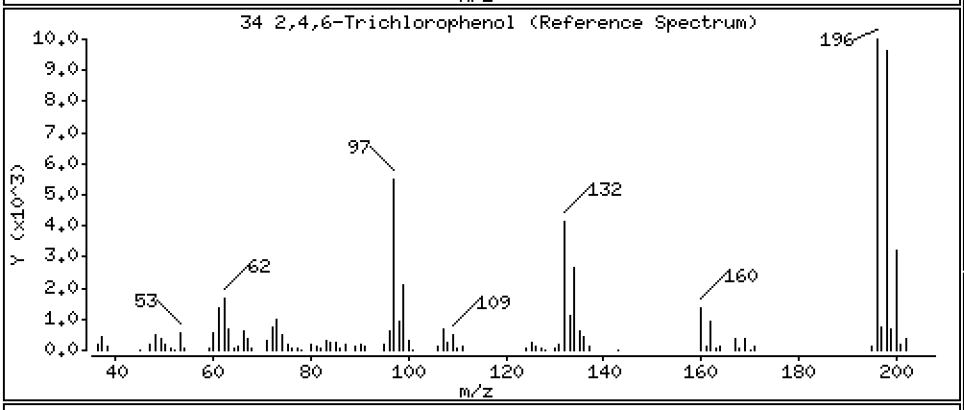
Column diameter: 0.25

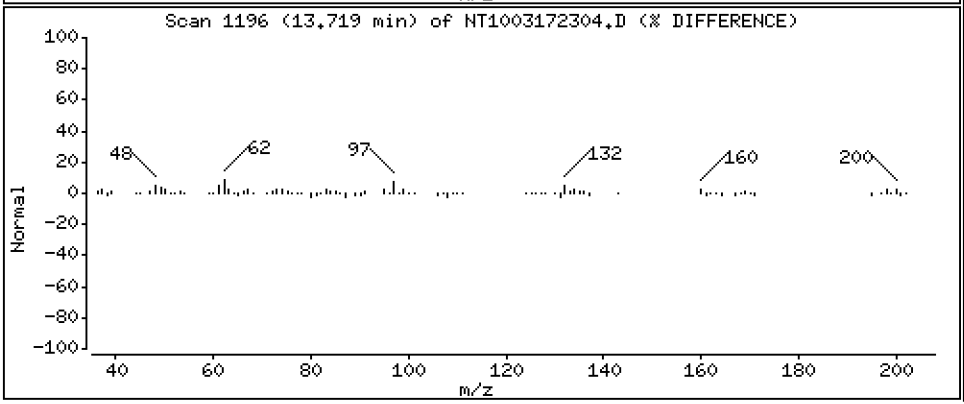
34 2,4,6-Trichlorophenol

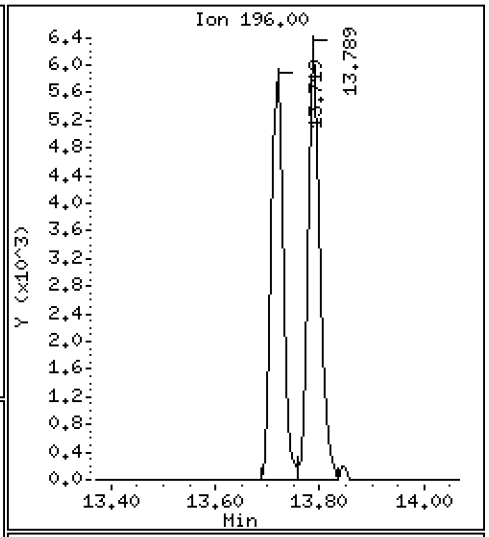
Concentration: 0.3159 ug/mL

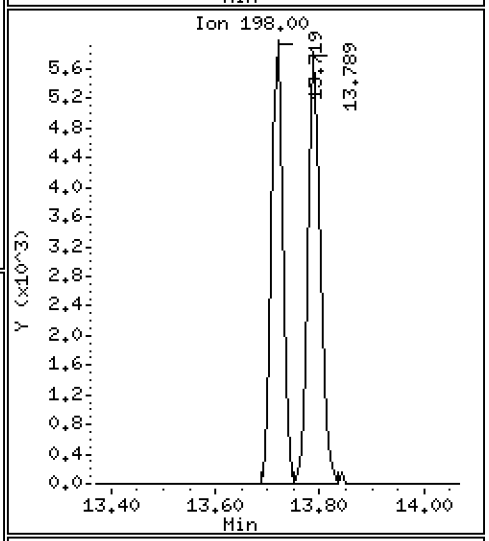


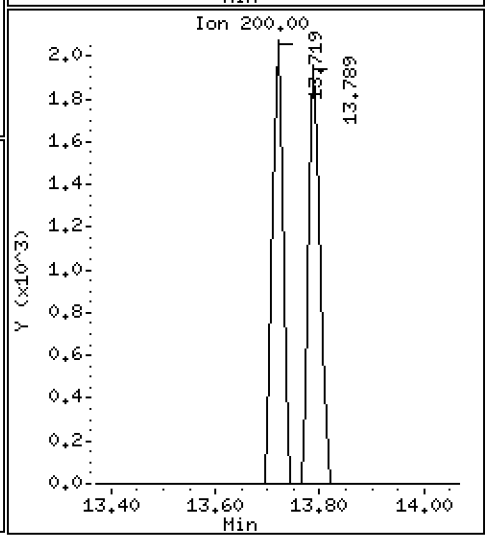












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

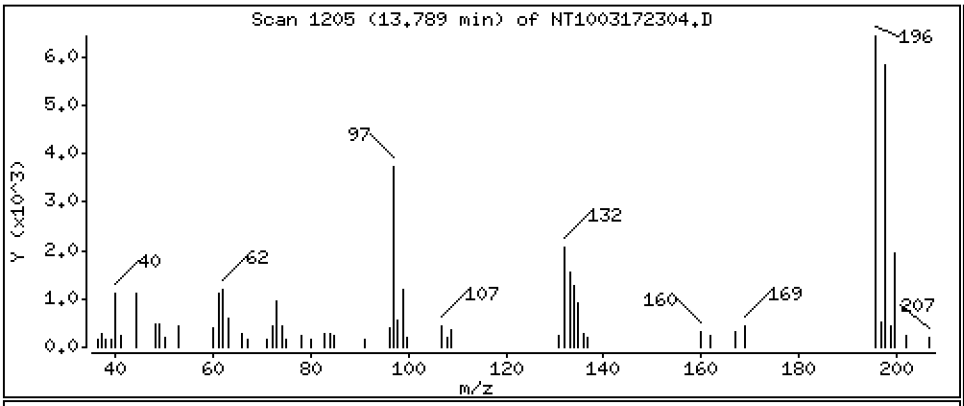
Operator: VTS

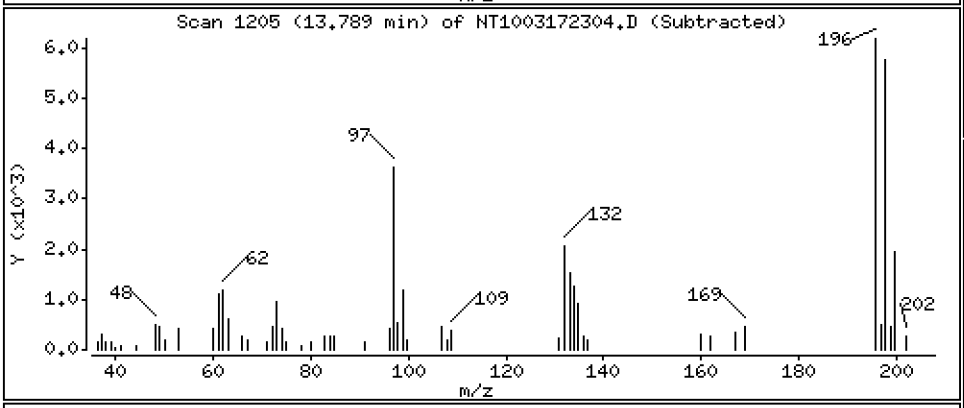
Column phase: ZB-5msi

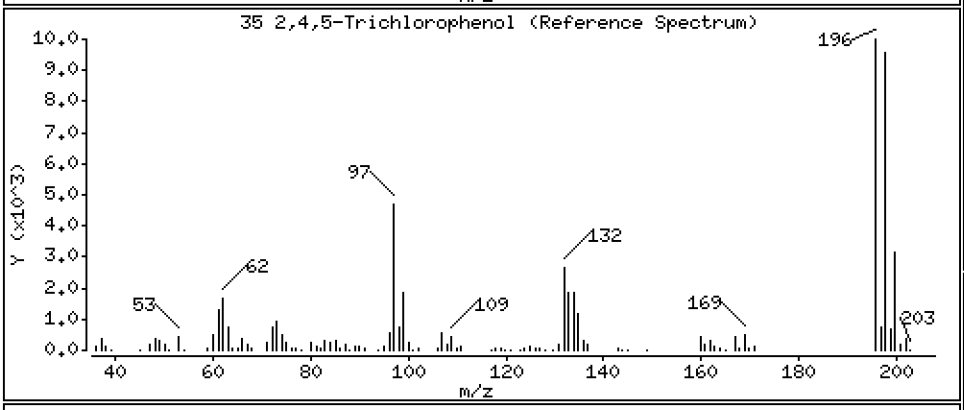
Column diameter: 0.25

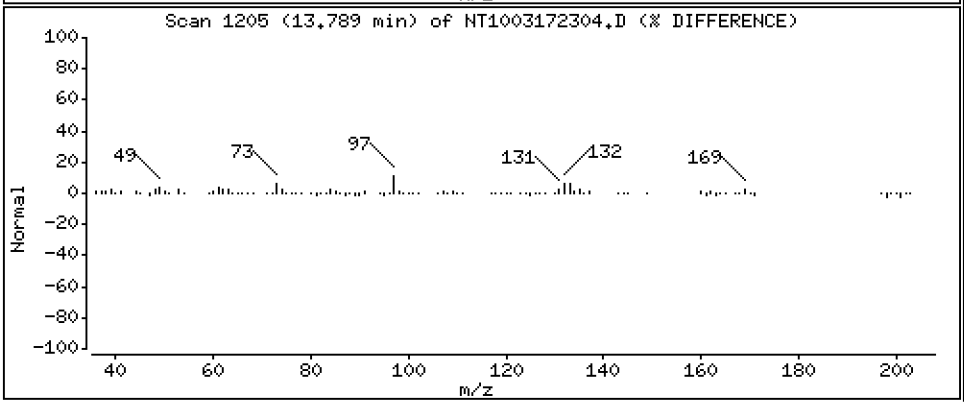
35 2,4,5-Trichlorophenol

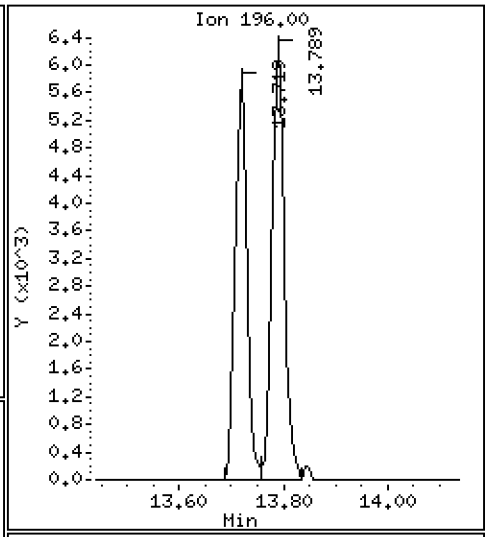
Concentration: 0.3107 ug/mL

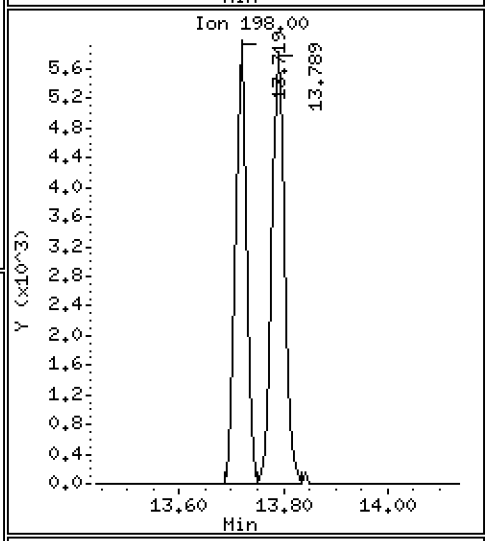


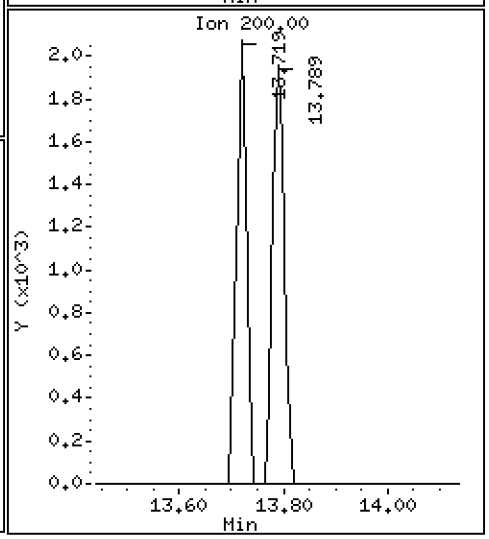












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

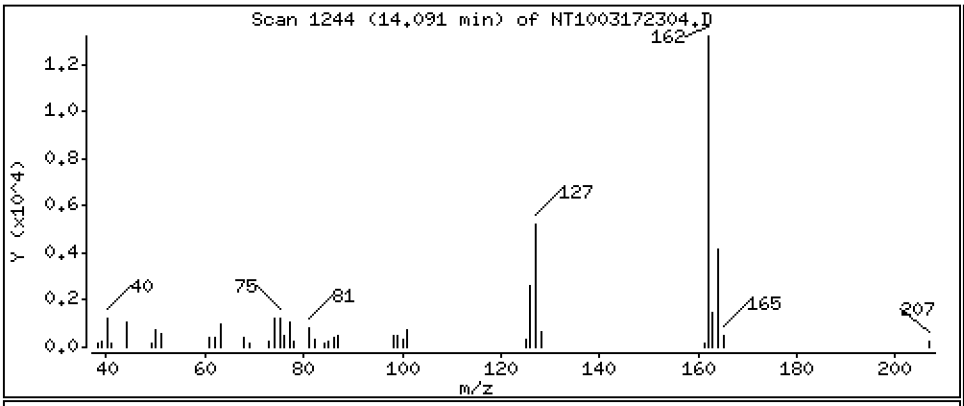
Operator: VTS

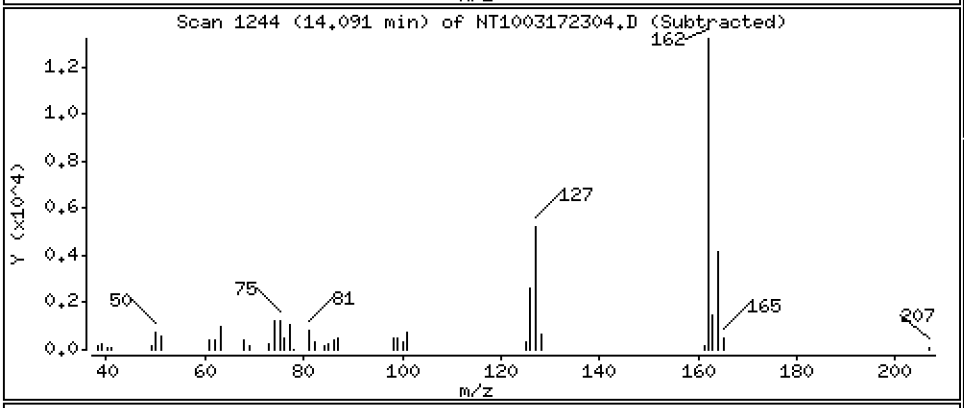
Column phase: ZB-5msi

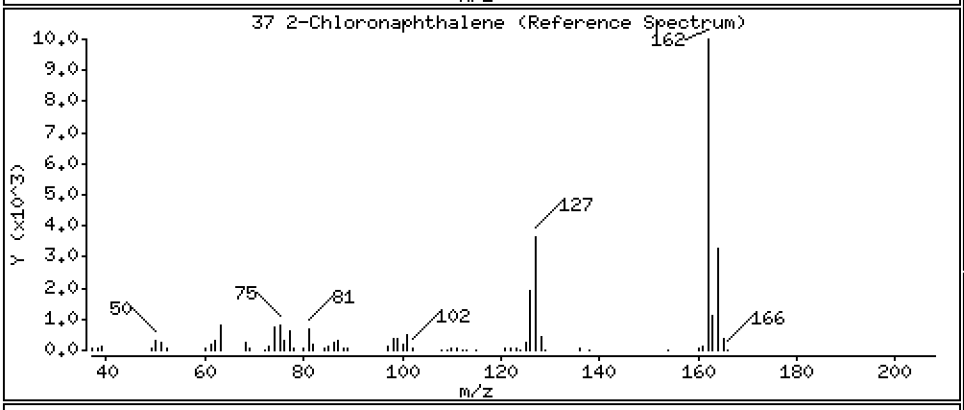
Column diameter: 0.25

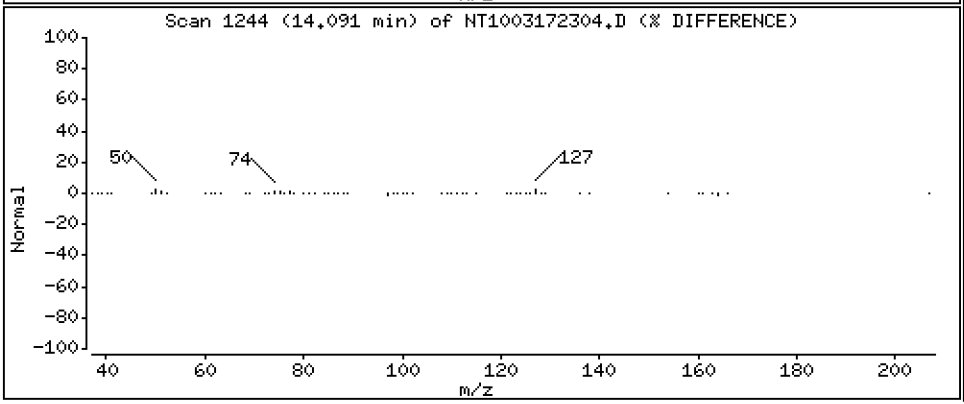
37 2-Chloronaphthalene

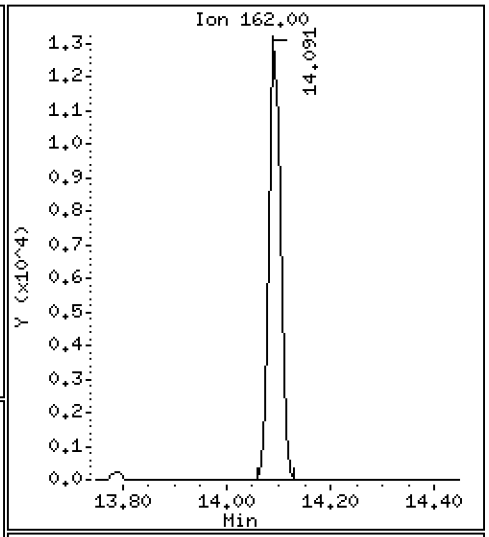
Concentration: 0.2065 ug/mL

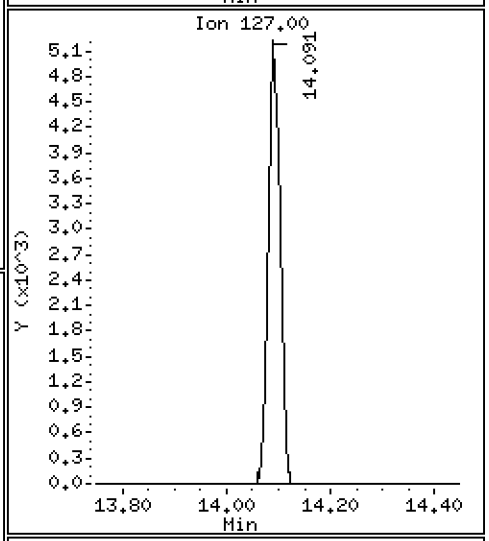


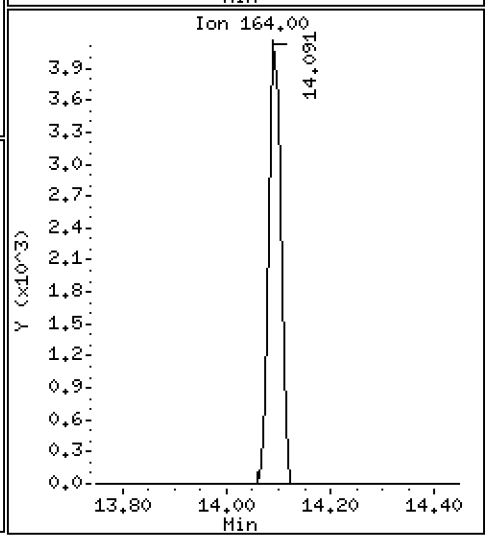












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

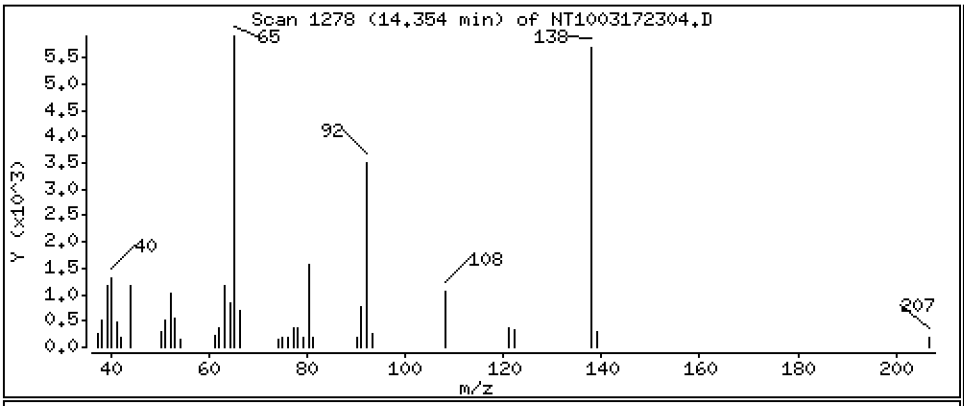
Operator: VTS

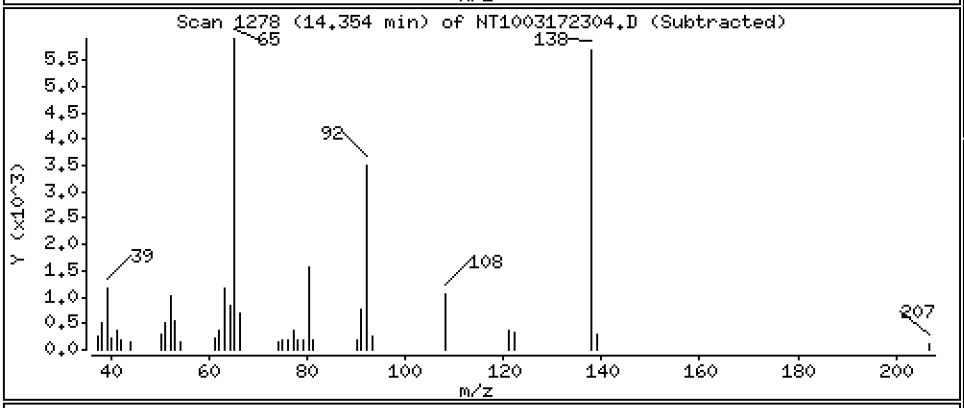
Column phase: ZB-5msi

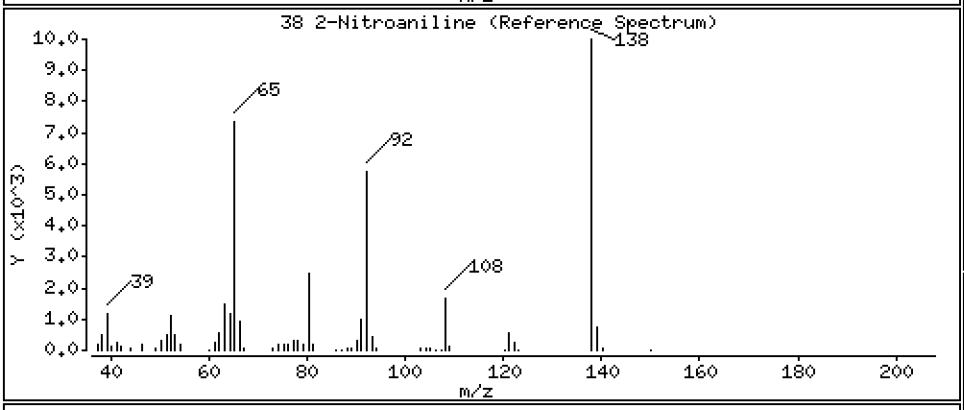
Column diameter: 0.25

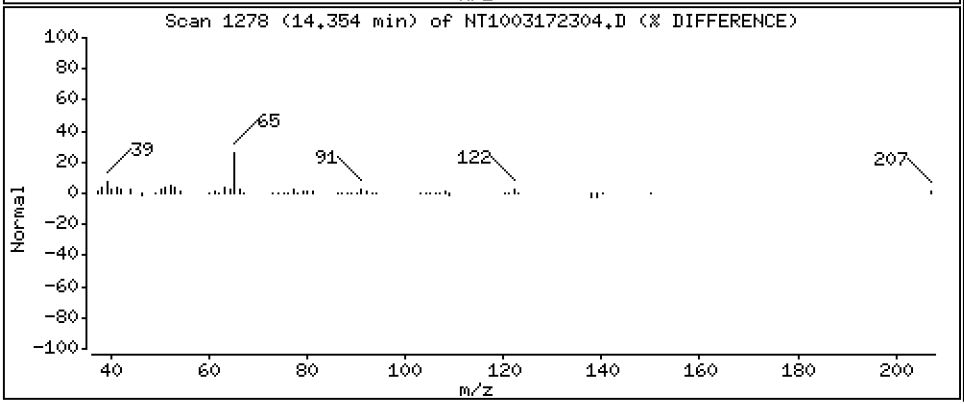
38 2-Nitroaniline

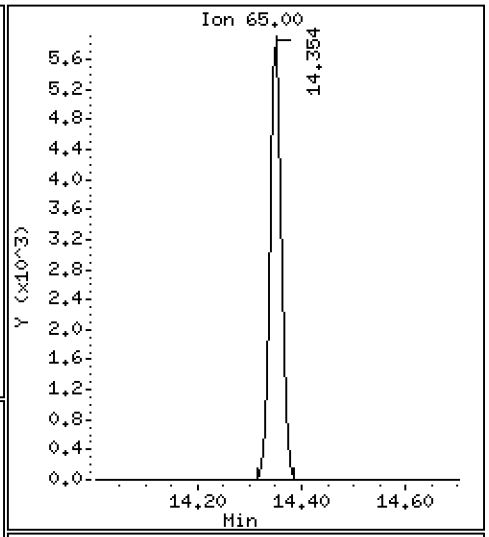
Concentration: 0.3281 ug/mL

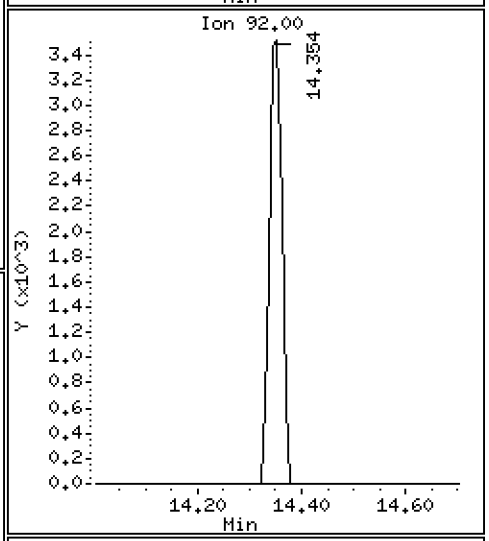


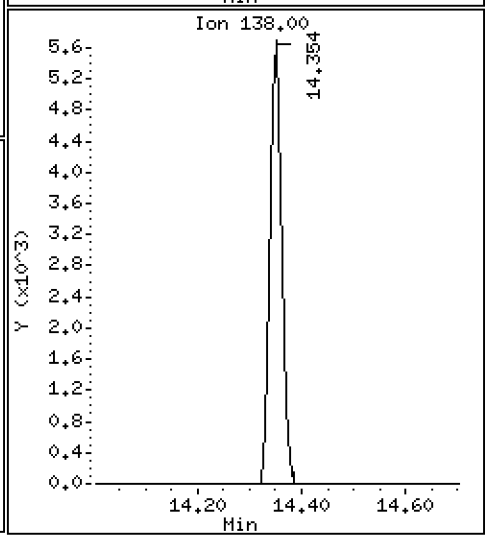












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

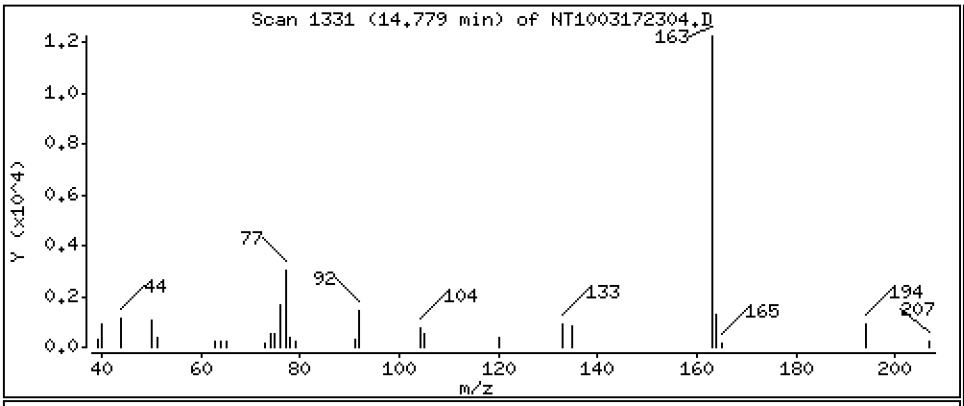
Operator: VTS

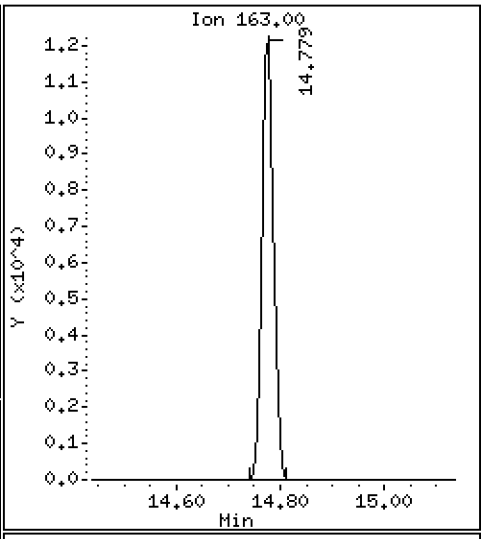
Column phase: ZB-5msi

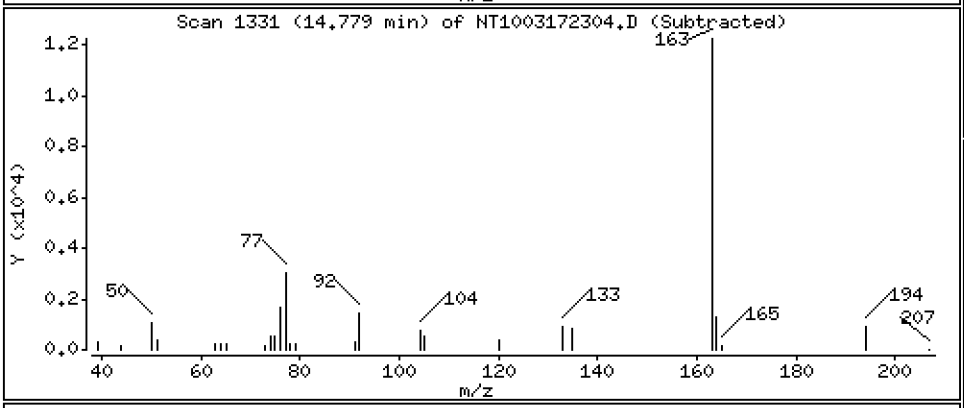
Column diameter: 0.25

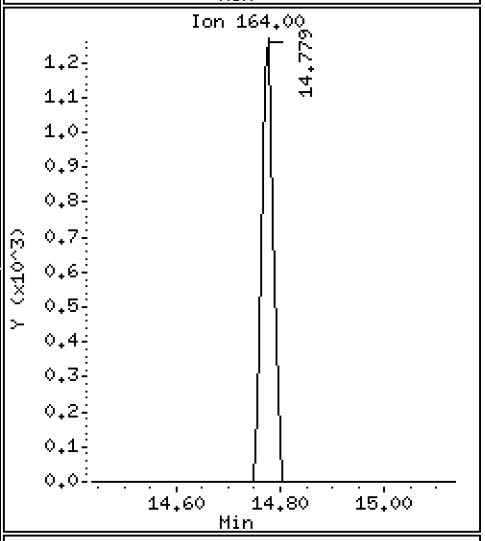
39 Dimethylphthalate

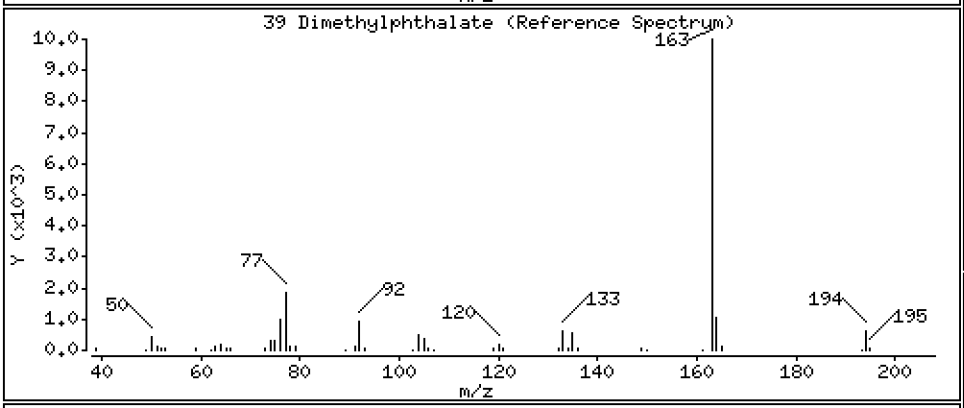
Concentration: 0.2018 ug/mL

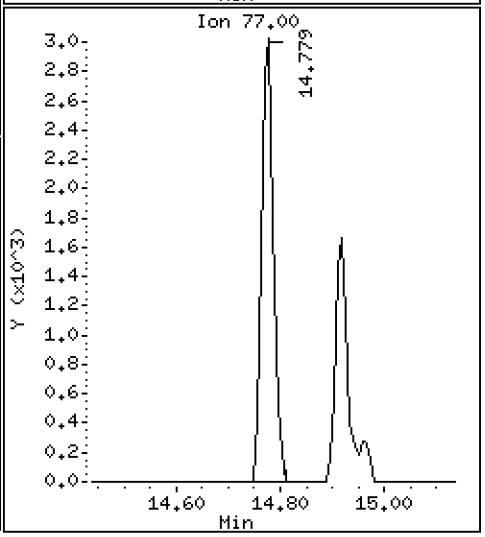


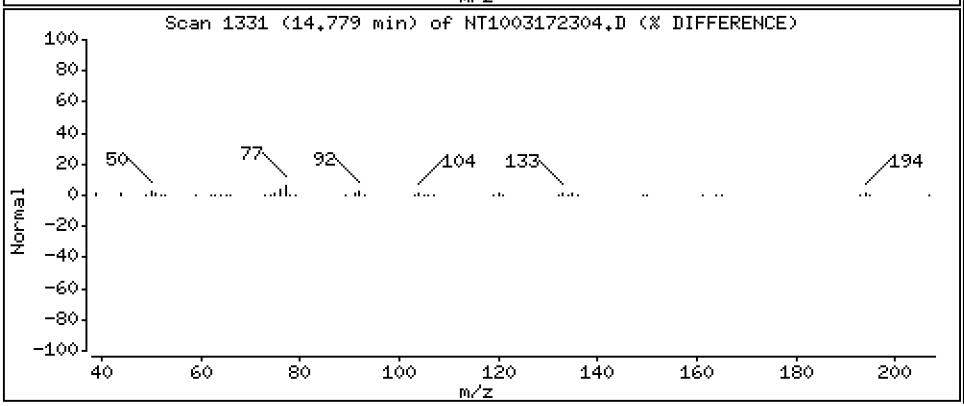












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

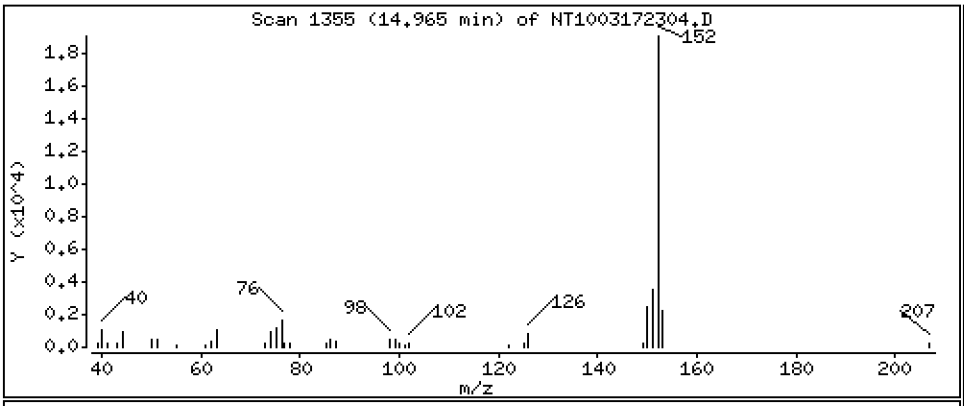
Operator: VTS

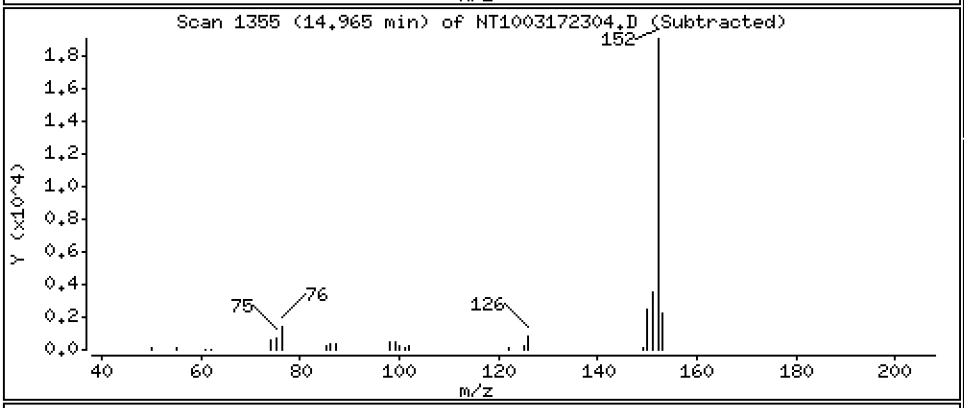
Column phase: ZB-5msi

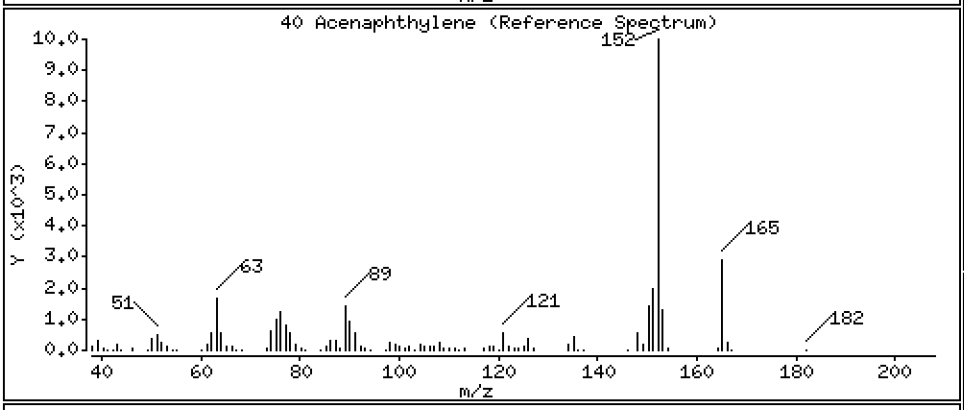
Column diameter: 0.25

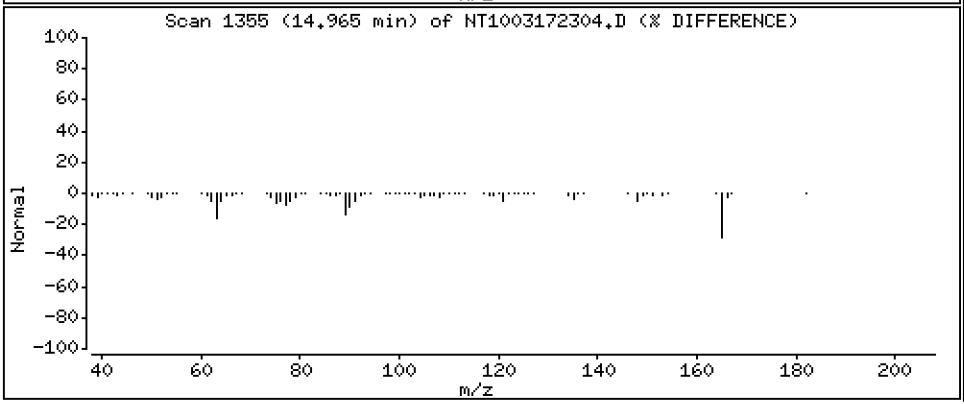
40 Acenaphthylene

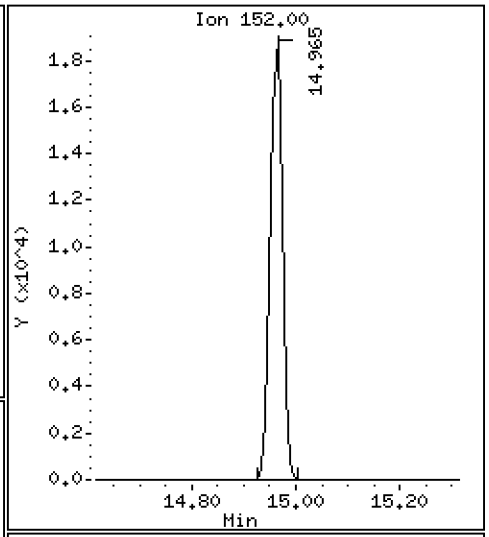
Concentration: 0.2049 ug/mL

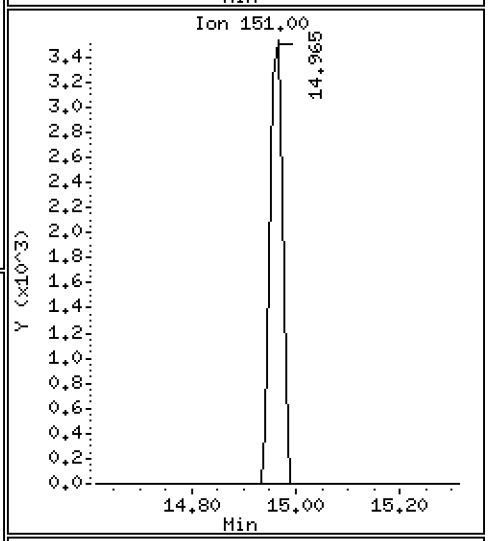


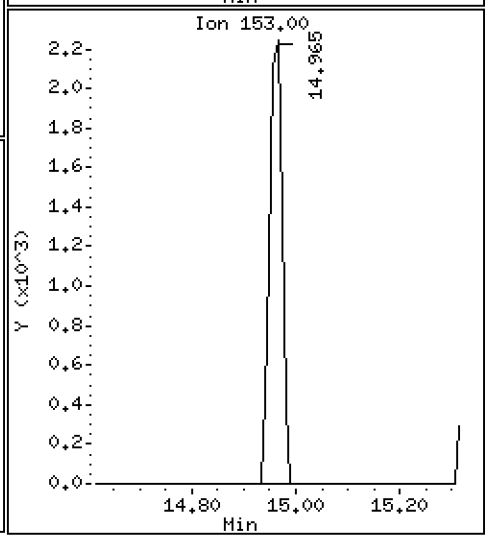












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

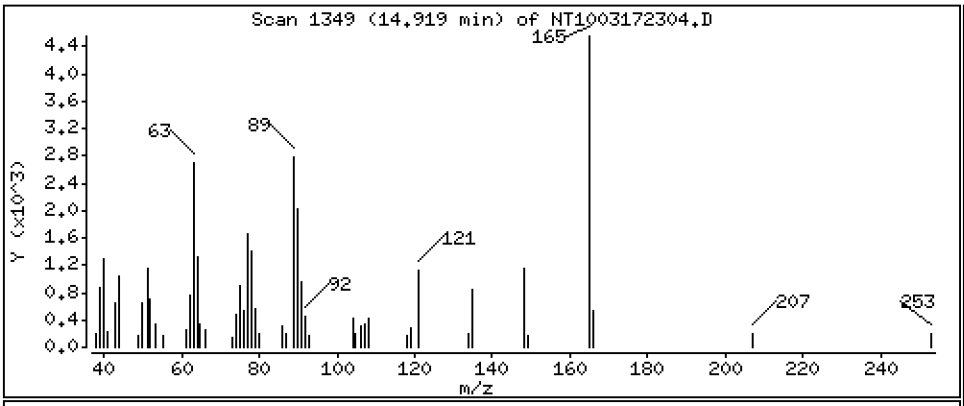
Operator: VTS

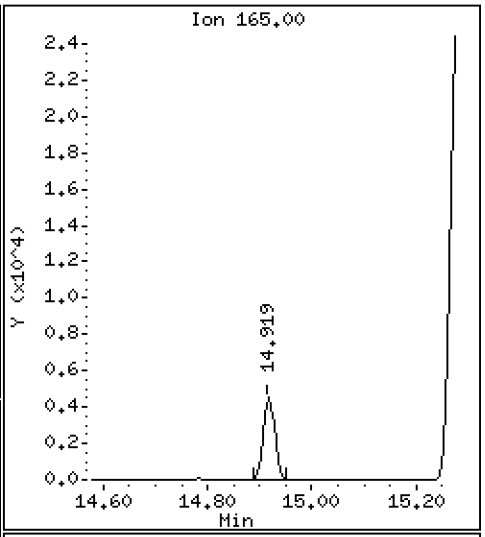
Column phase: ZB-5msi

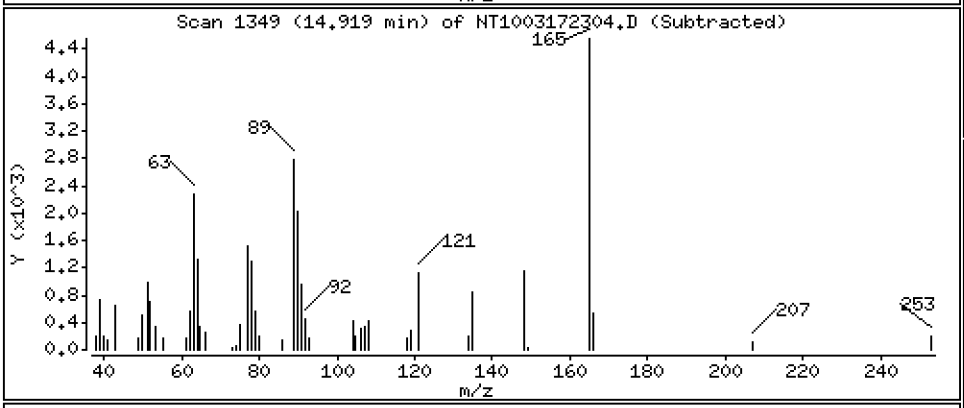
Column diameter: 0.25

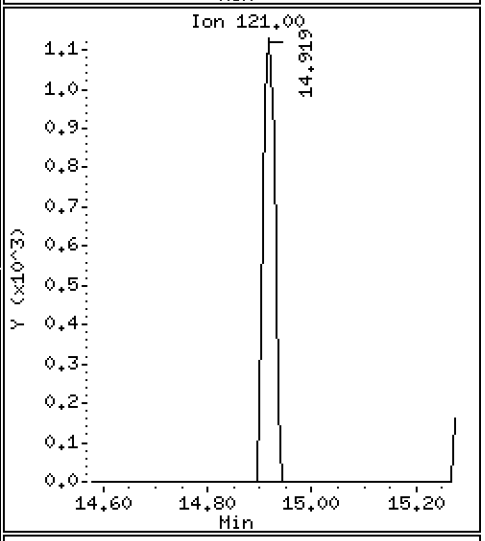
41 2,6-Dinitrotoluene

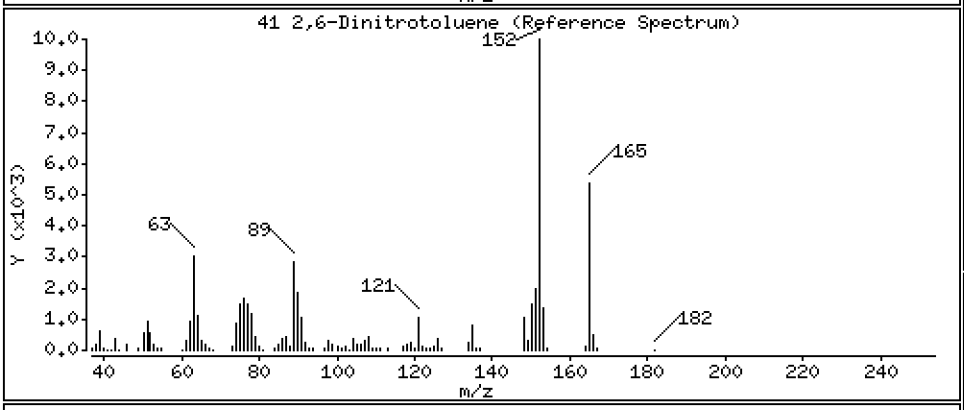
Concentration: 0.3257 ug/mL

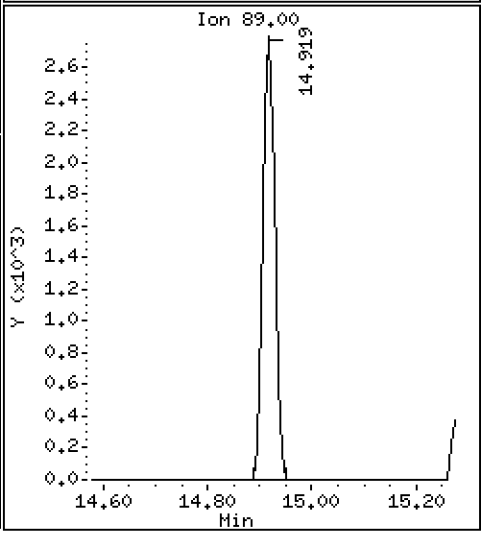


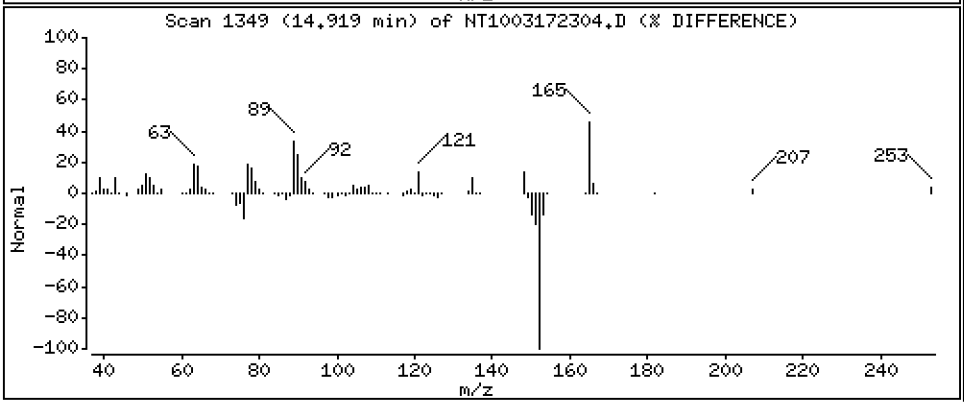












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

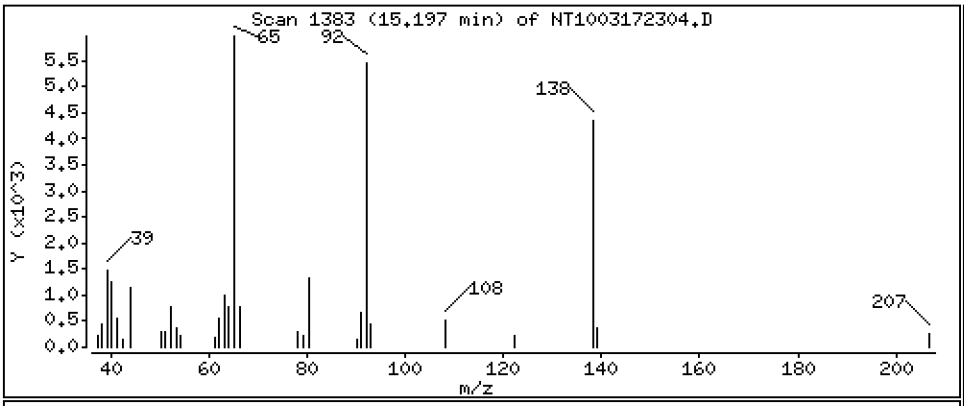
Operator: VTS

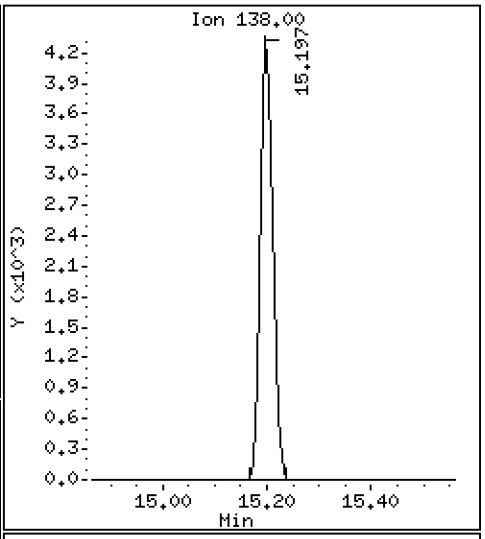
Column phase: ZB-5msi

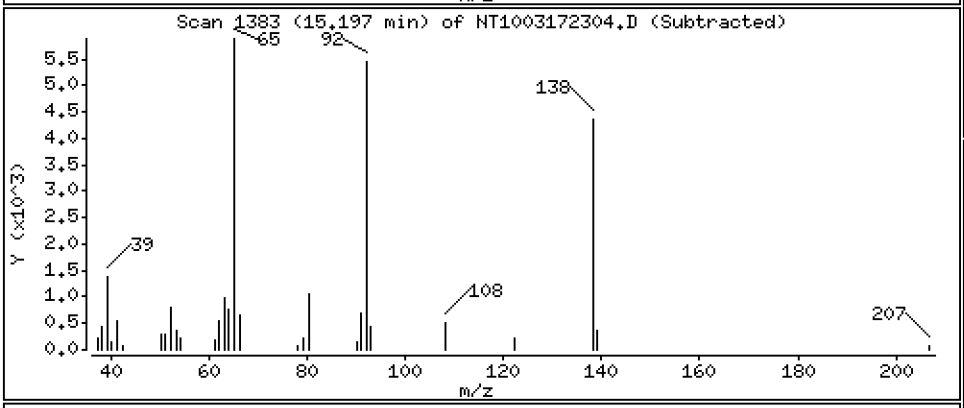
Column diameter: 0.25

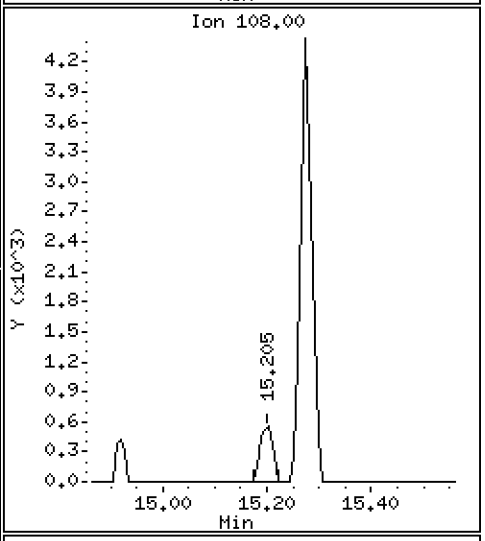
43 3-Nitroaniline

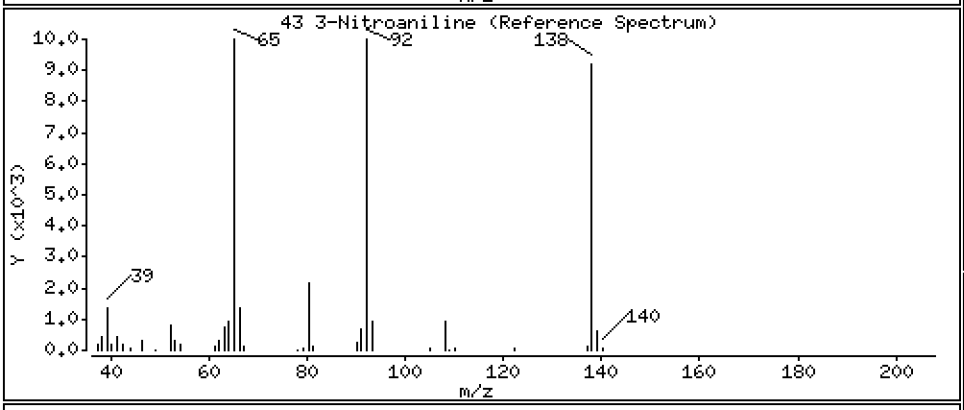
Concentration: 0.3068 ug/mL

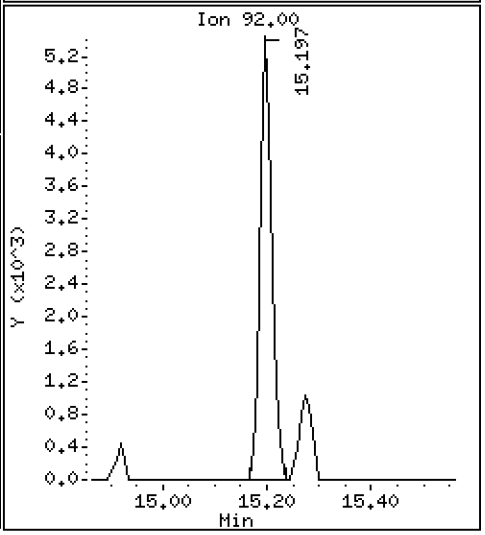


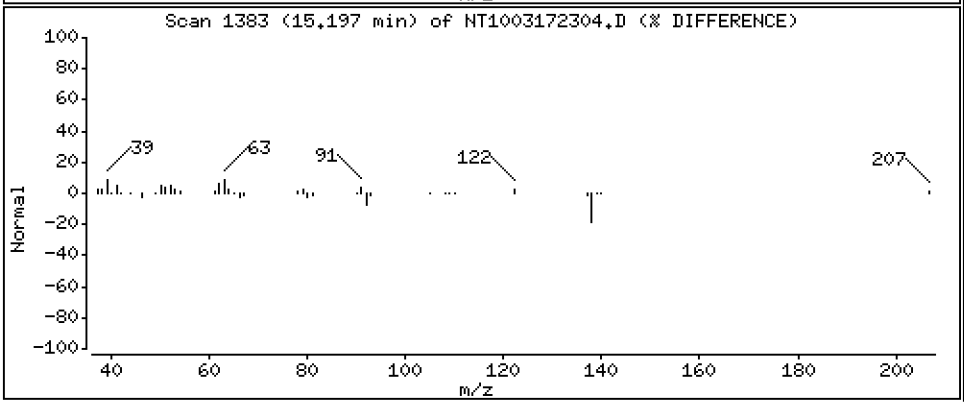












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

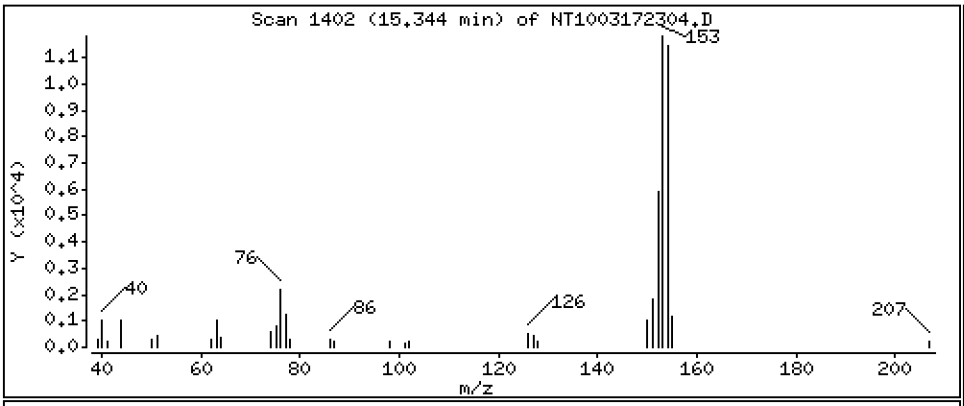
Operator: VTS

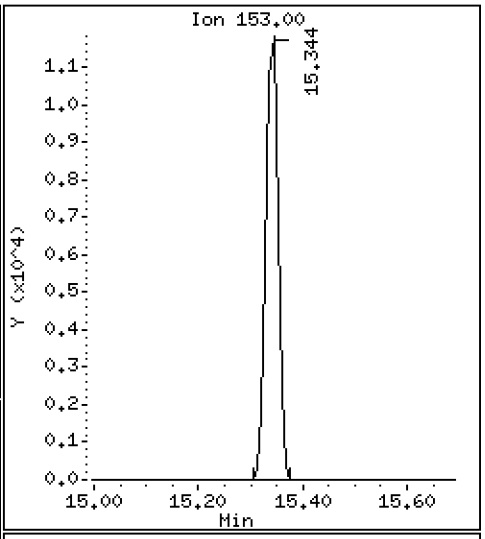
Column phase: ZB-5msi

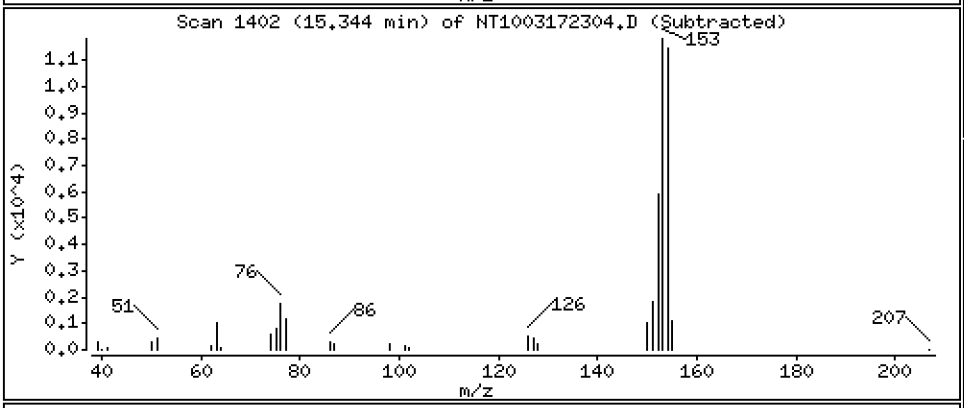
Column diameter: 0.25

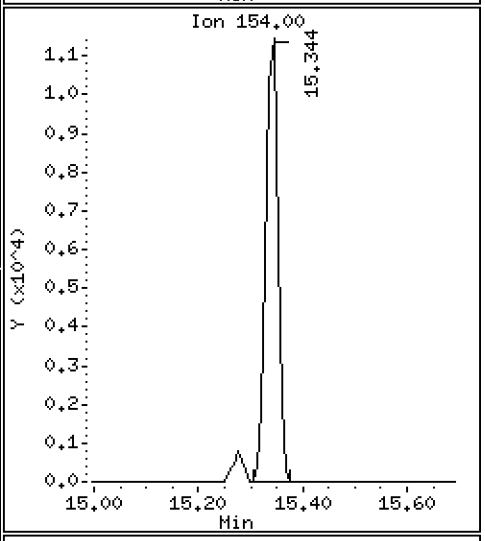
44 Acenaphthene

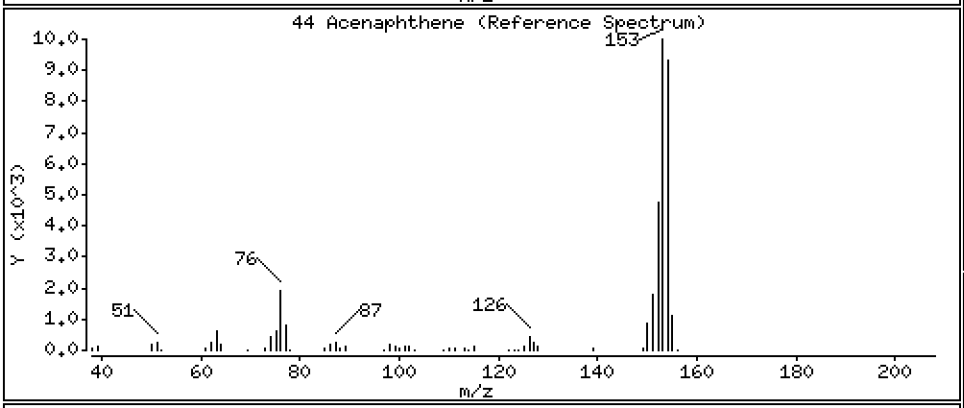
Concentration: 0.2091 ug/mL

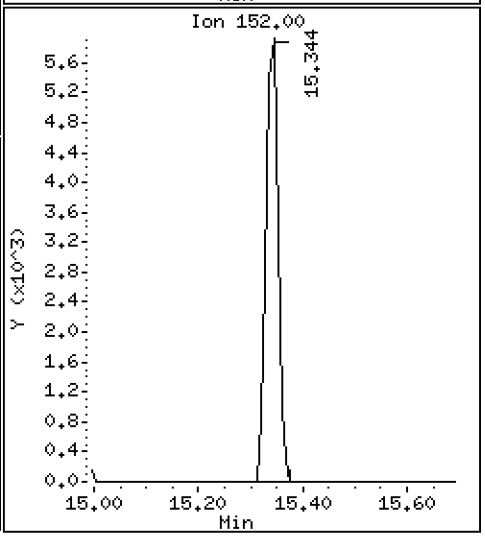


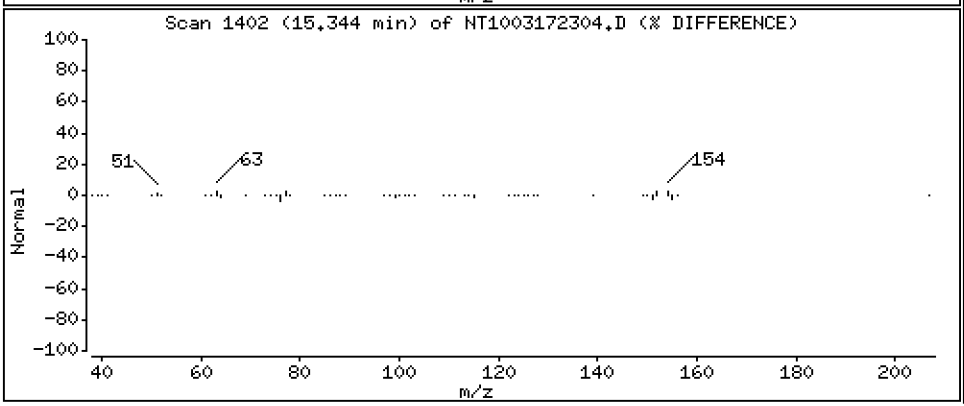












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

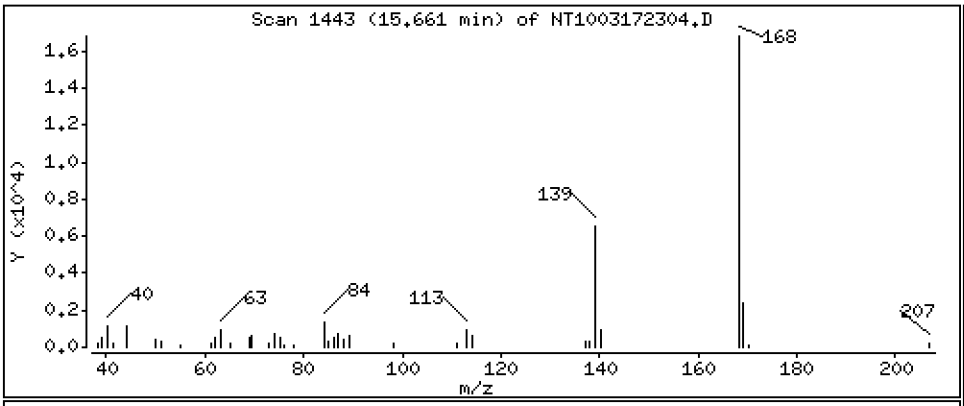
Operator: VTS

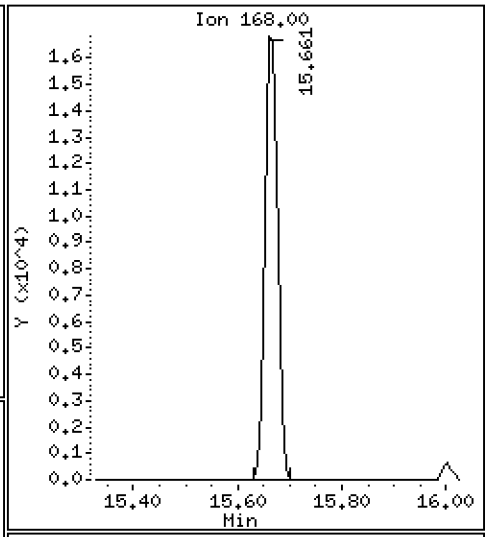
Column phase: ZB-5msi

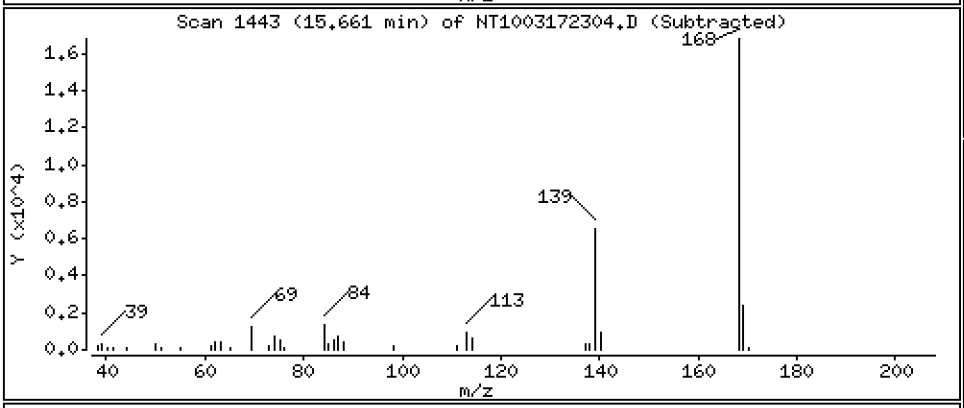
Column diameter: 0.25

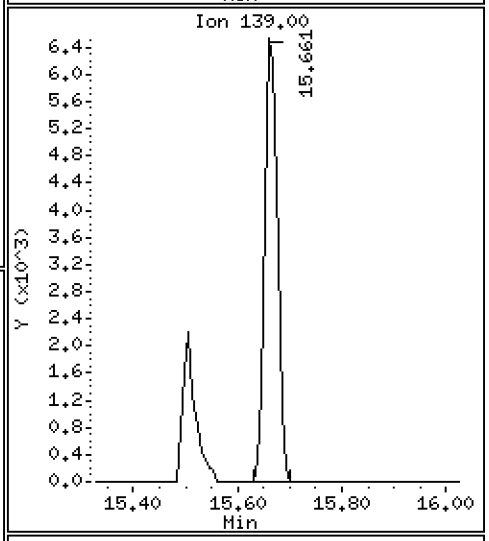
46 Dibenzofuran

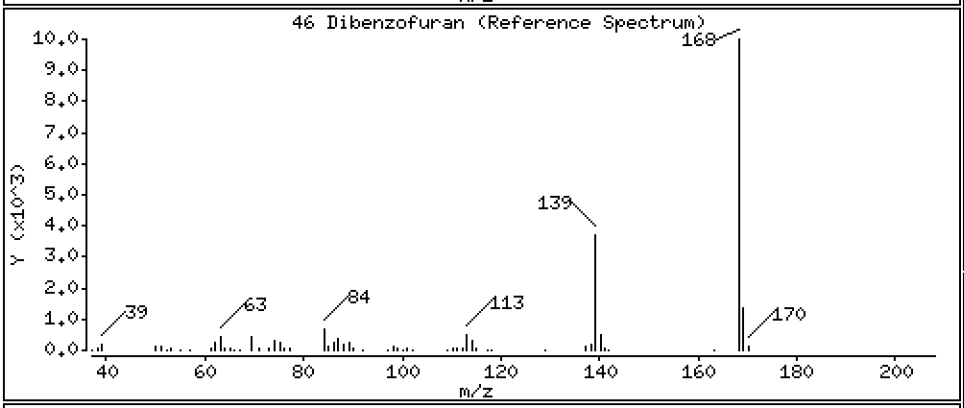
Concentration: 0.2092 ug/mL

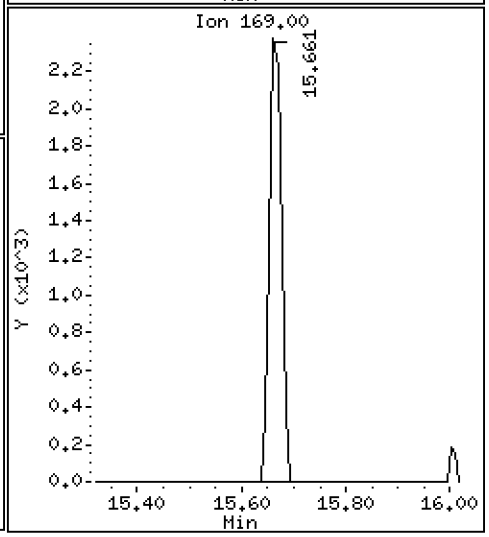


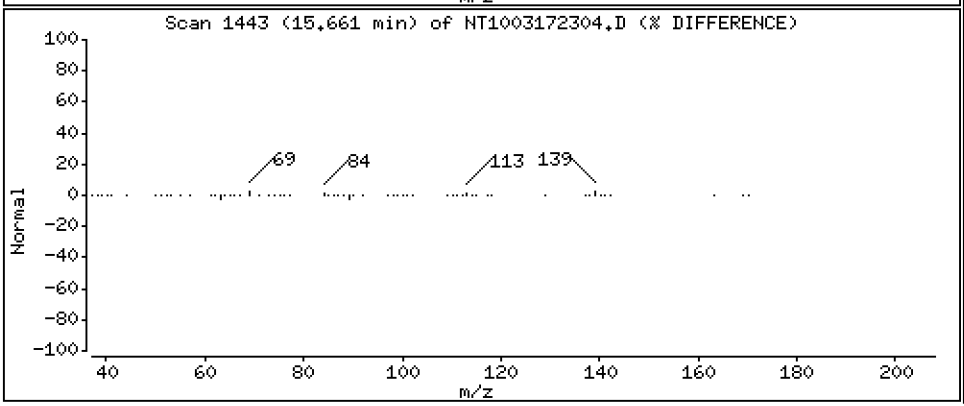












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

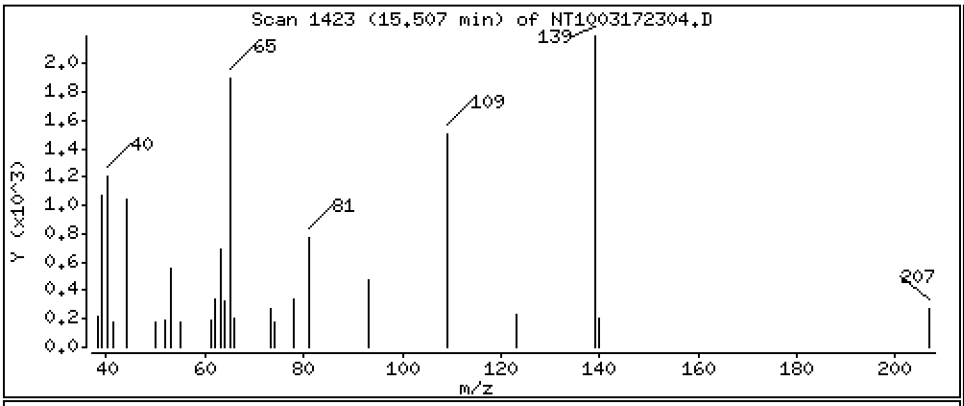
Operator: VTS

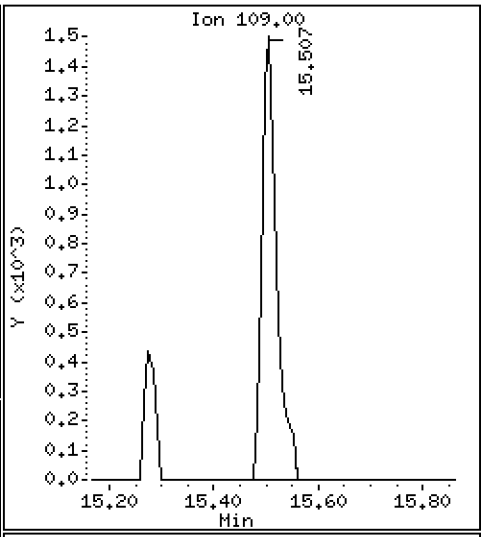
Column phase: ZB-5msi

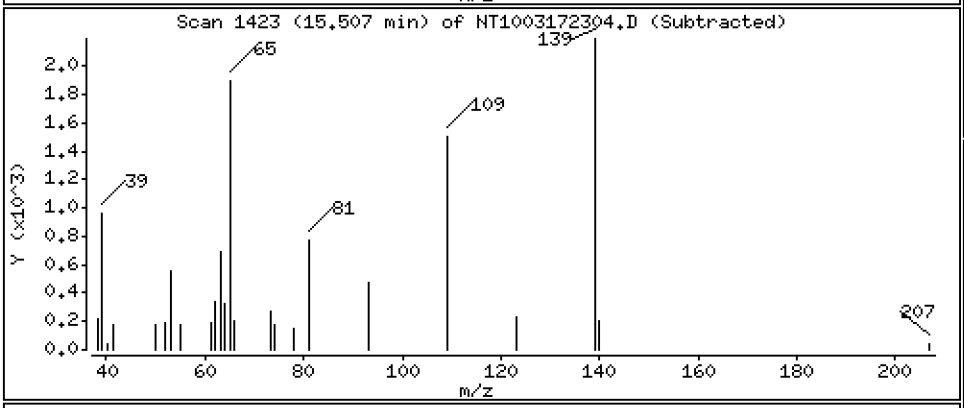
Column diameter: 0.25

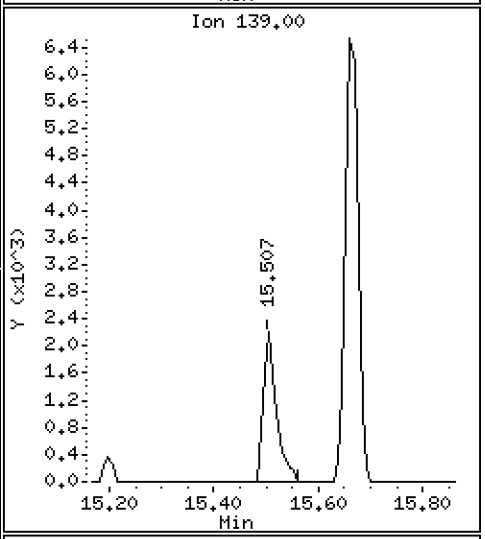
47 4-Nitrophenol

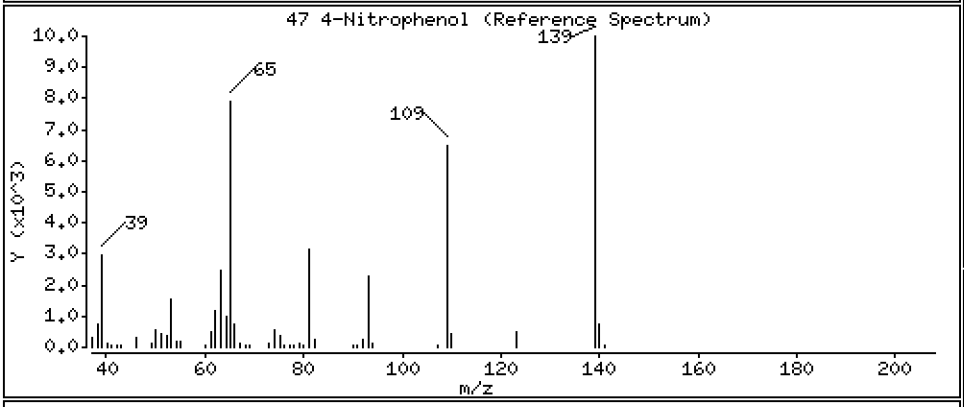
Concentration: 0.1973 ug/mL

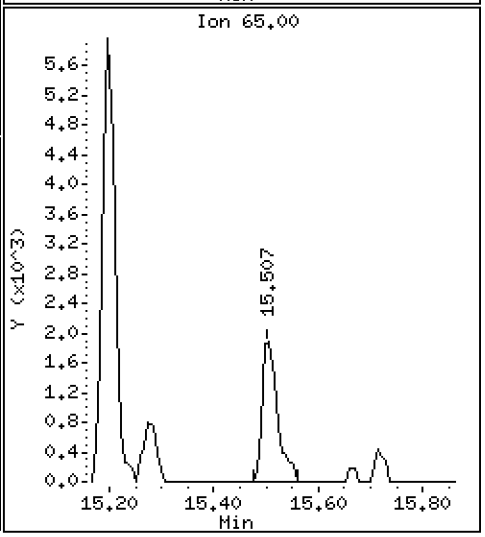


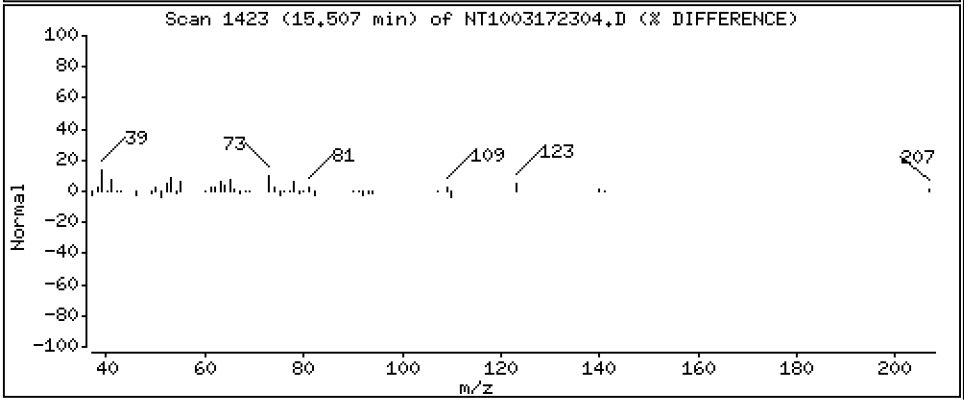












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

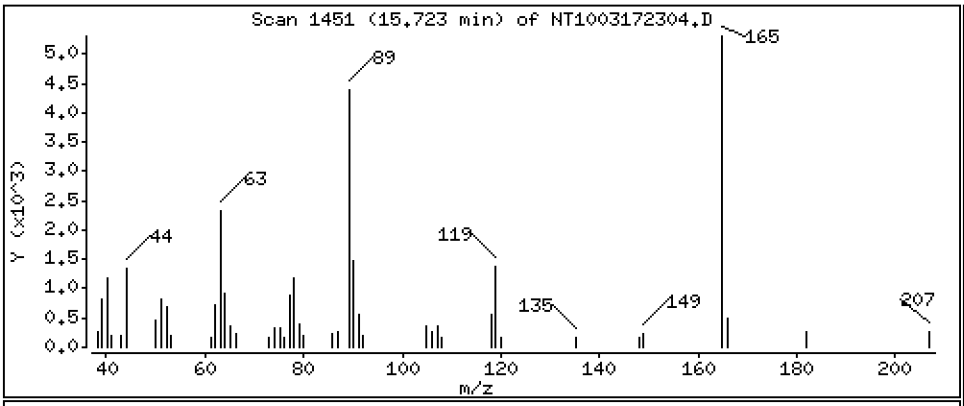
Operator: VTS

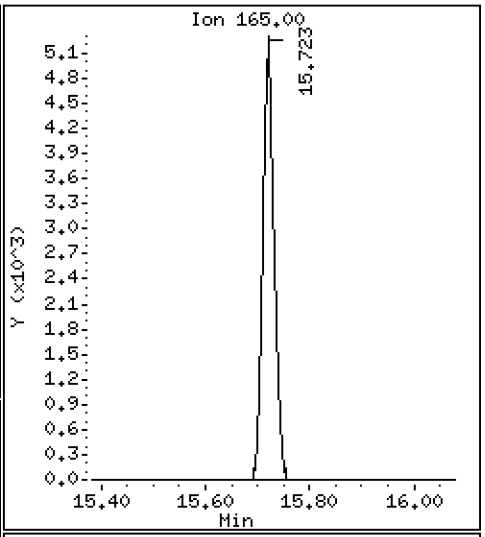
Column phase: ZB-5msi

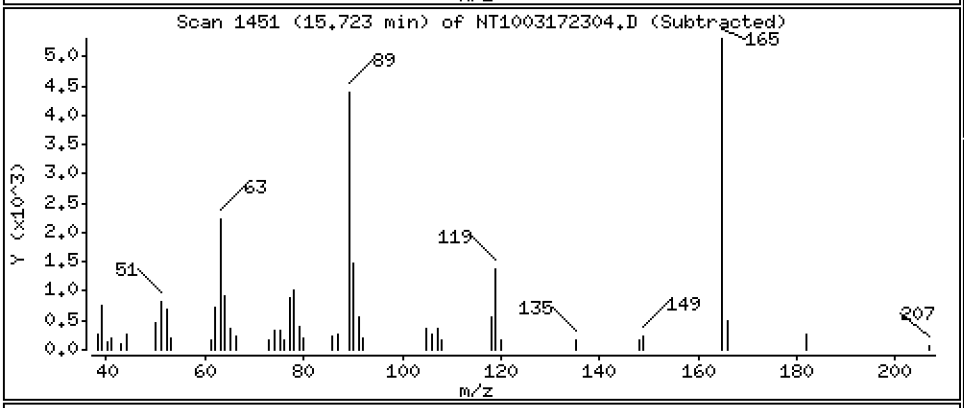
Column diameter: 0.25

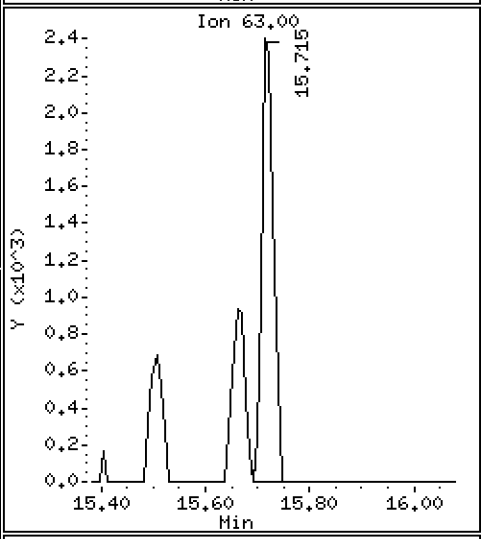
48 2,4-Dinitrotoluene

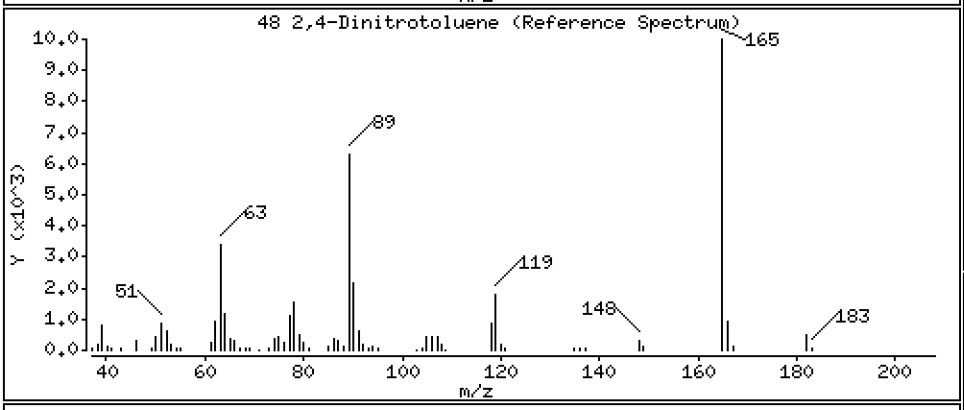
Concentration: 0.2540 ug/mL

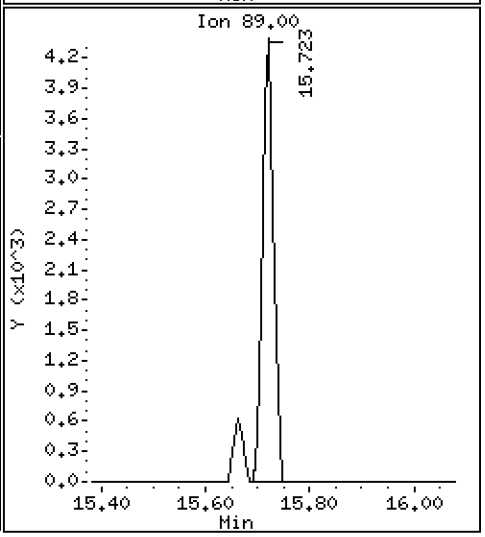


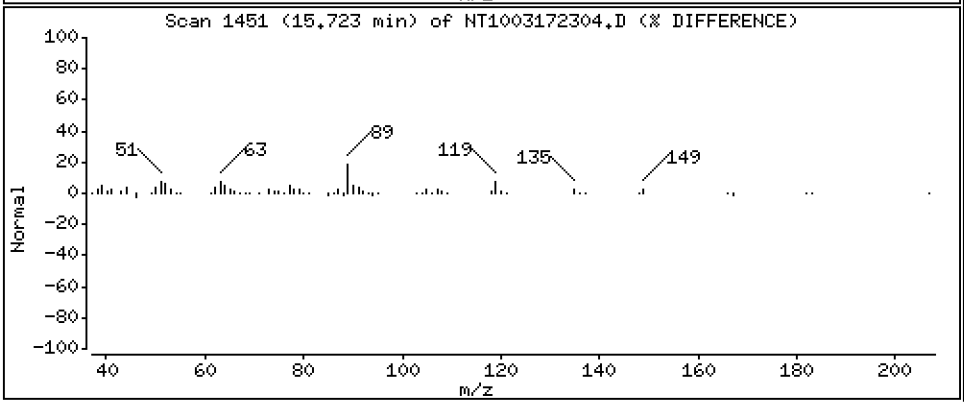












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

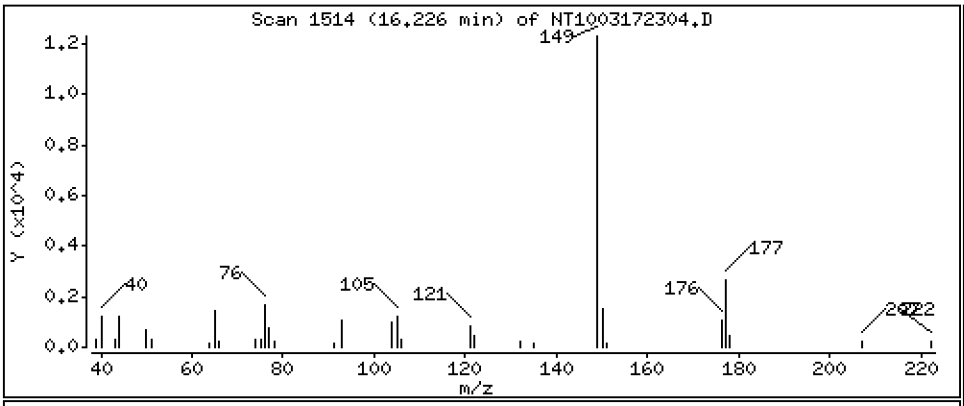
Operator: VTS

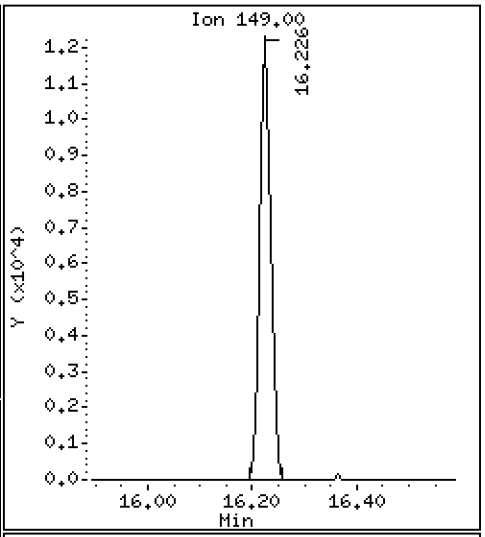
Column phase: ZB-5msi

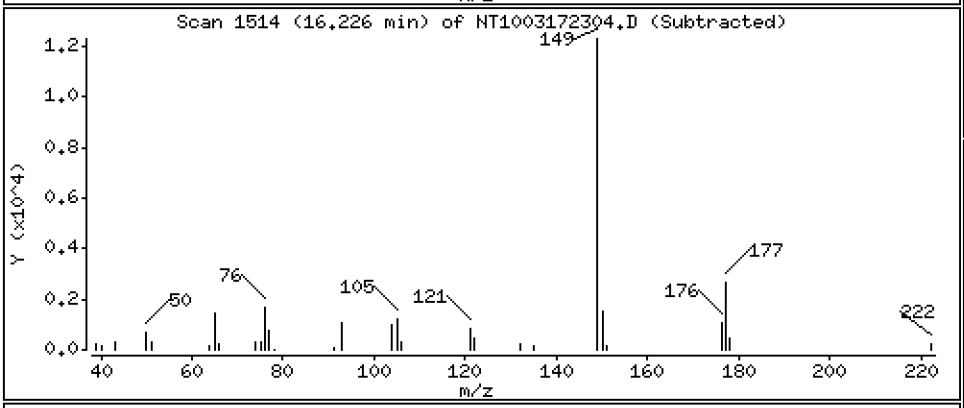
Column diameter: 0.25

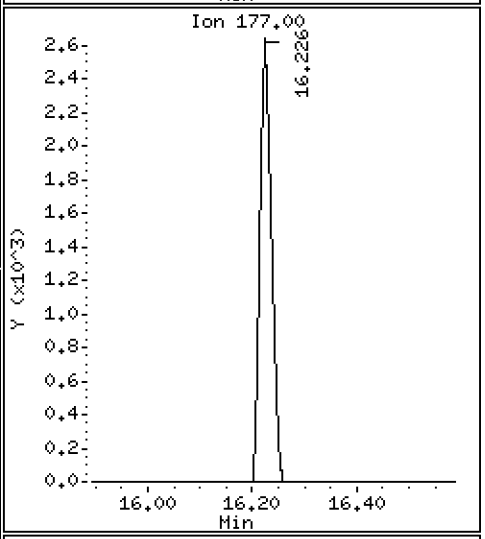
50 Diethylphthalate

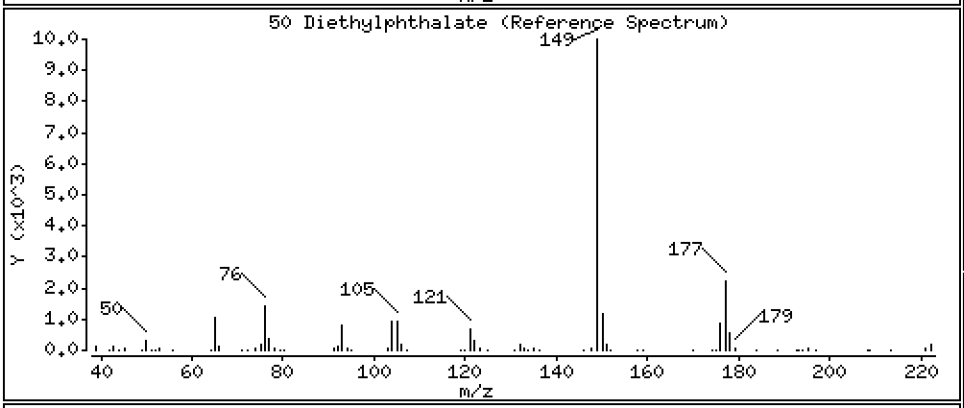
Concentration: 0.1922 ug/mL

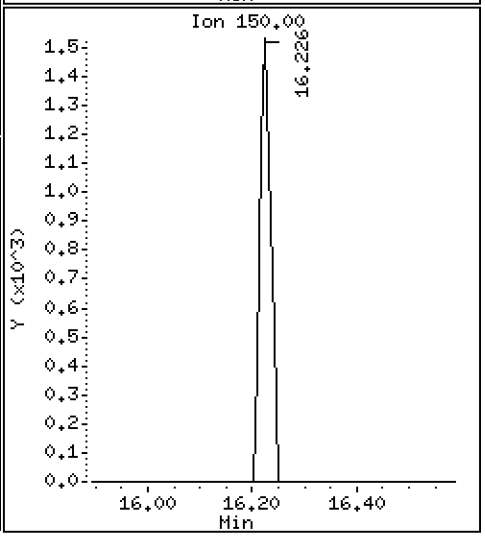


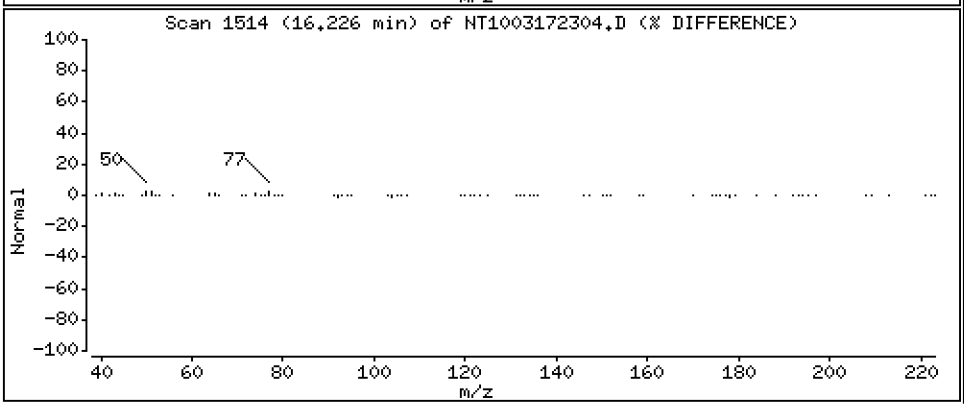












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

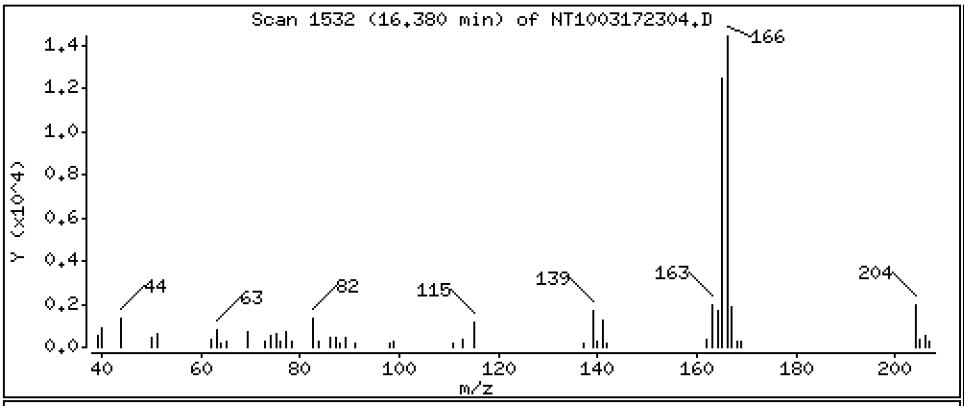
Operator: VTS

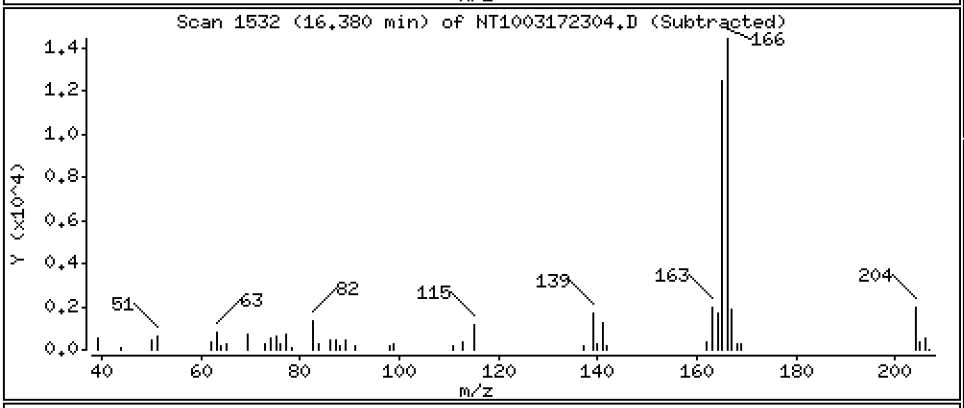
Column phase: ZB-5msi

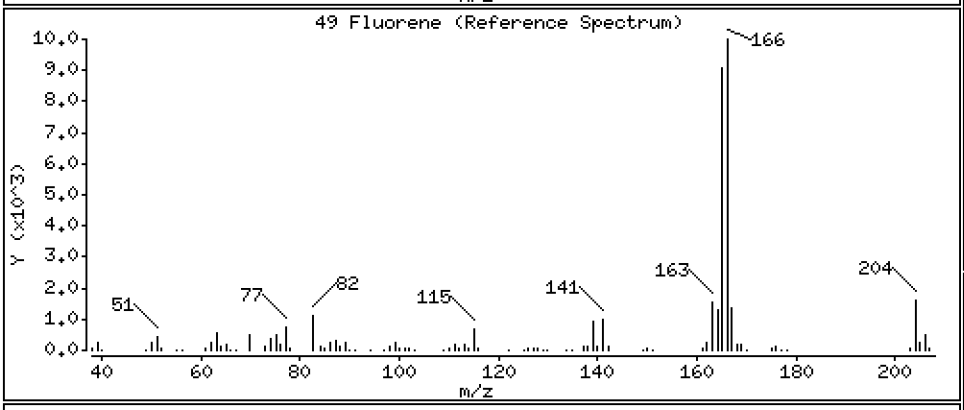
Column diameter: 0.25

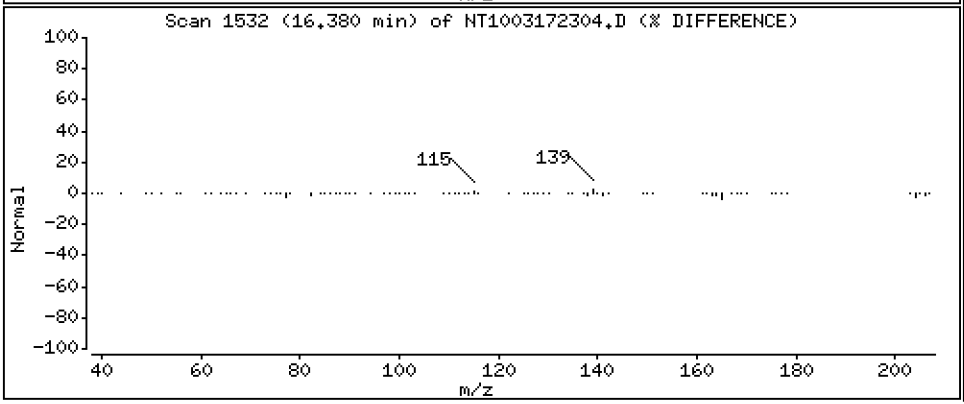
49 Fluorene

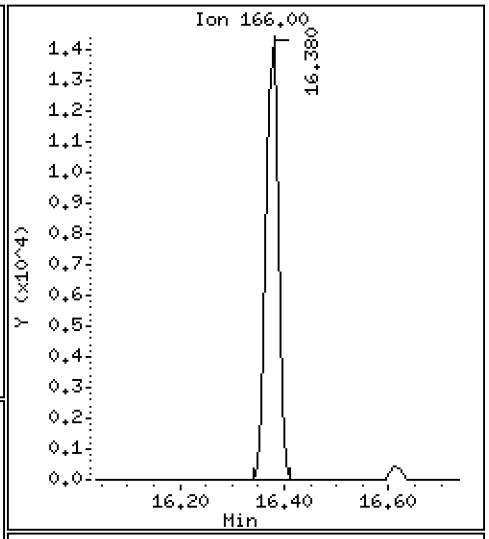
Concentration: 0.2175 ug/mL

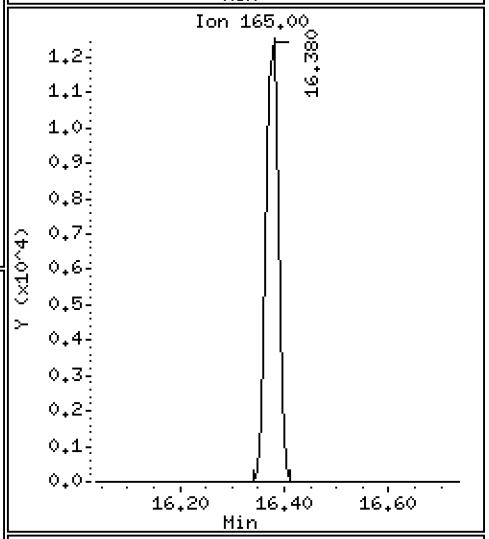


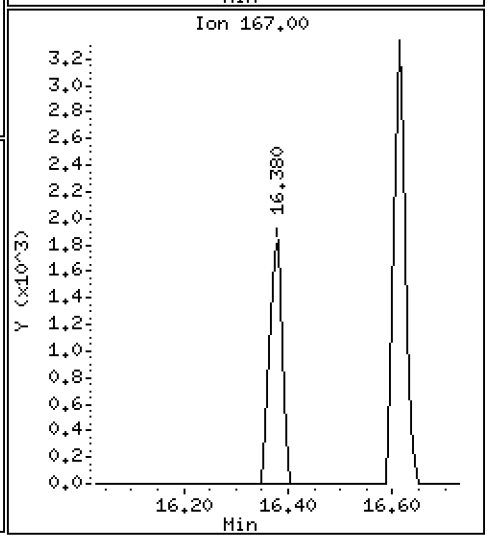












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

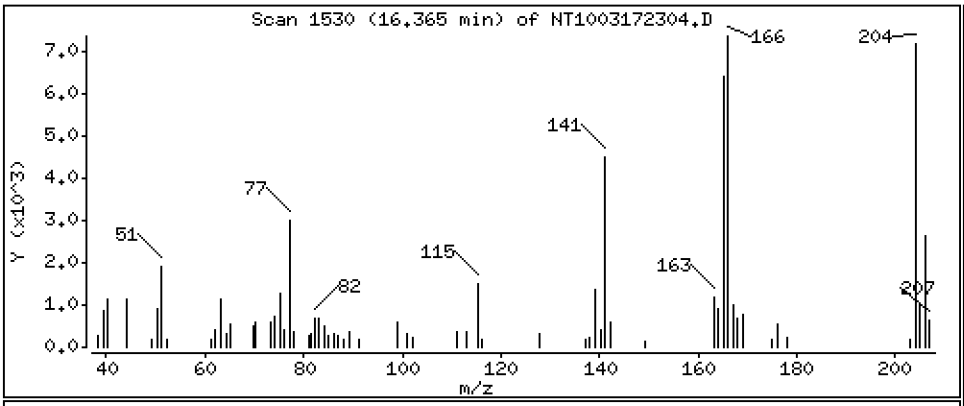
Operator: VTS

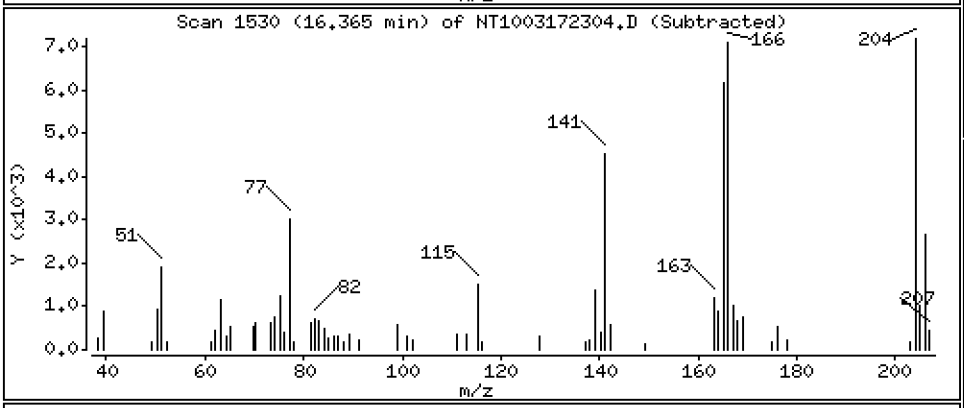
Column phase: ZB-5msi

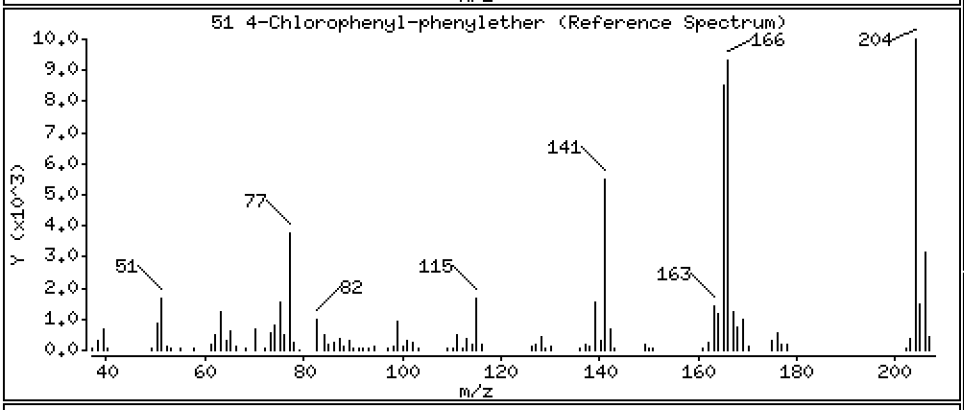
Column diameter: 0.25

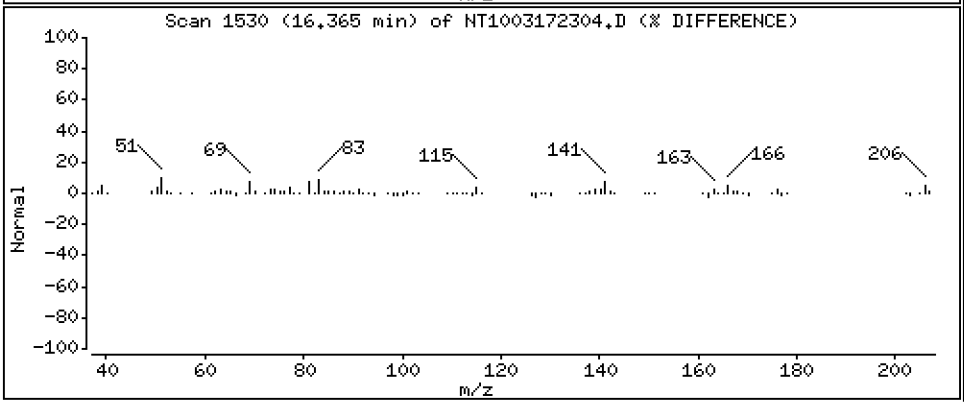
51 4-Chlorophenyl-phenylether

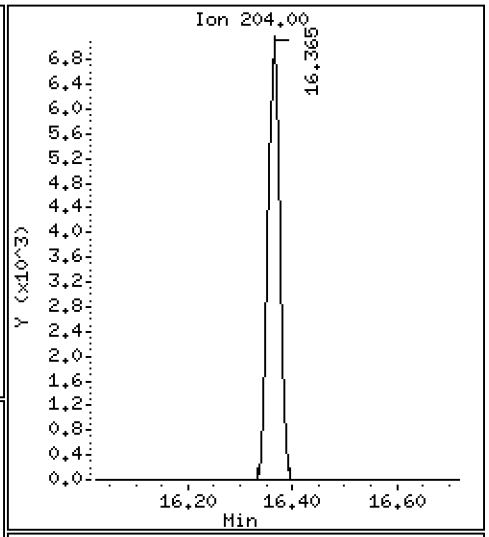
Concentration: 0.2153 ug/mL

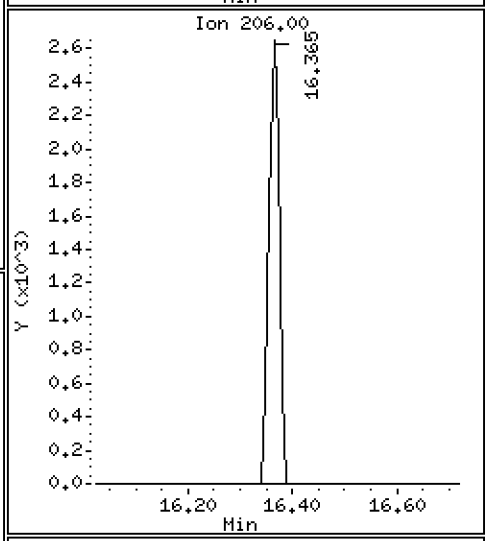


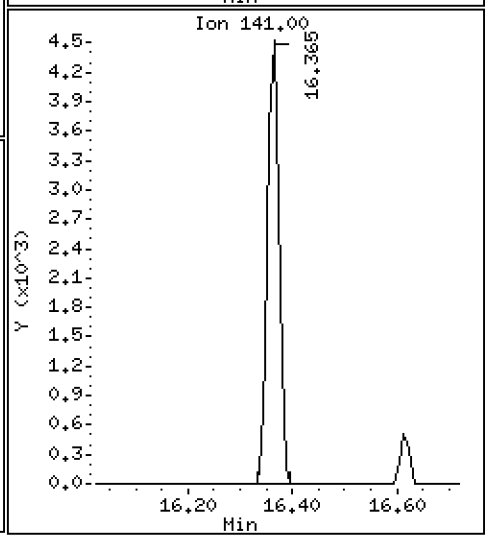












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

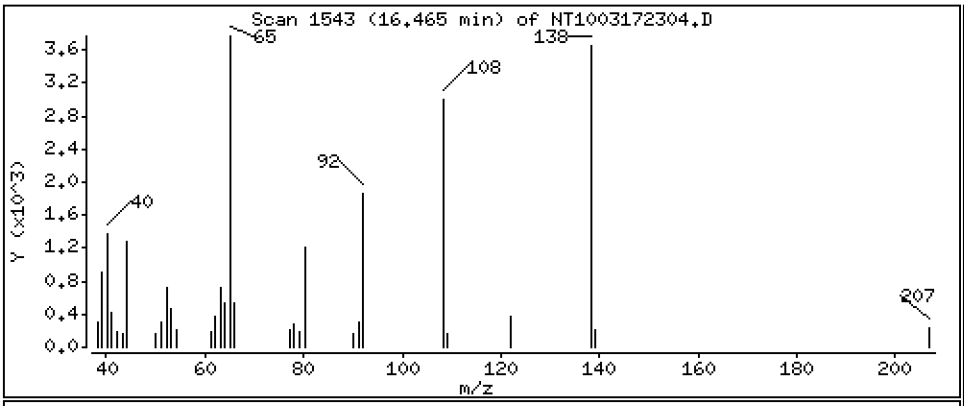
Operator: VTS

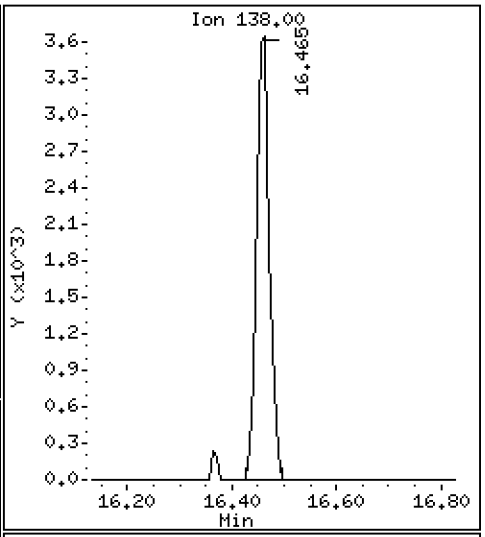
Column phase: ZB-5msi

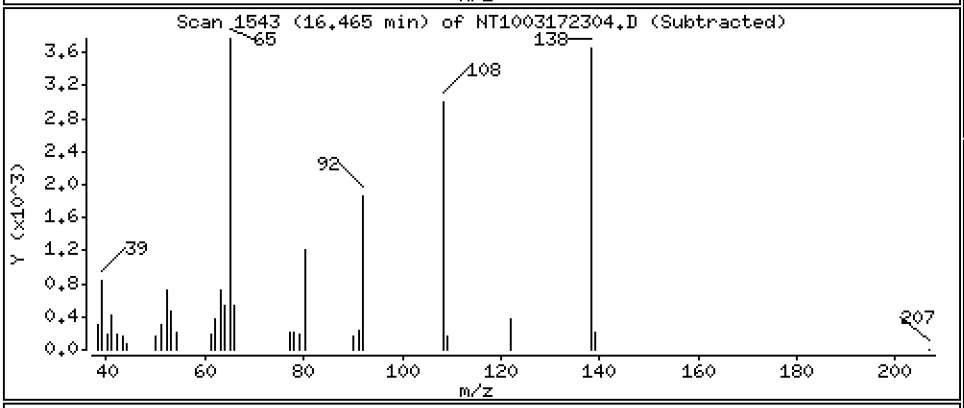
Column diameter: 0.25

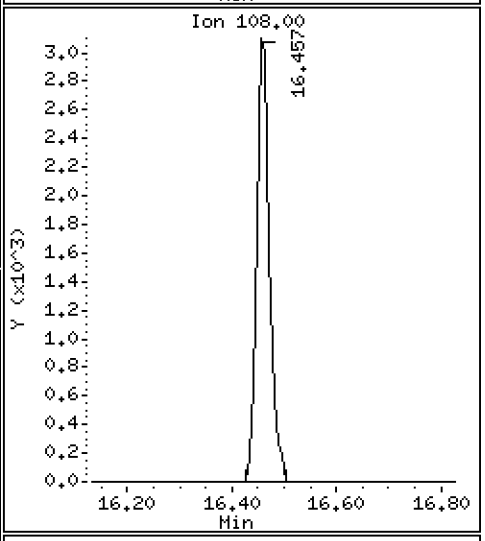
52 4-Nitroaniline

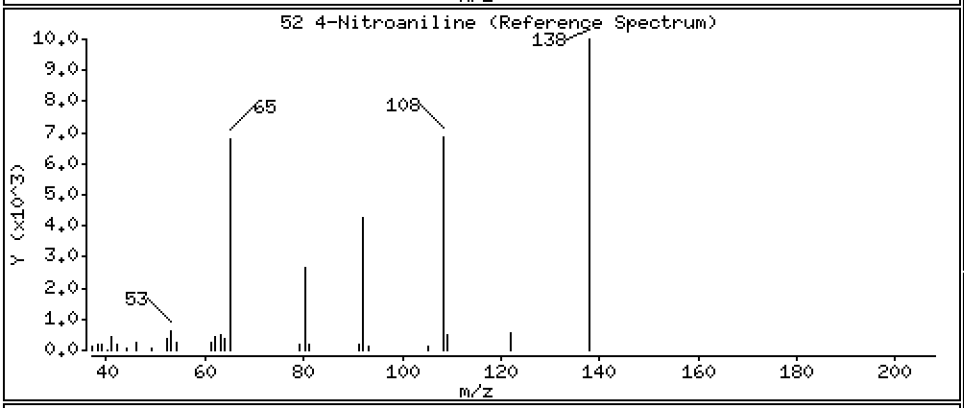
Concentration: 0.3074 ug/mL

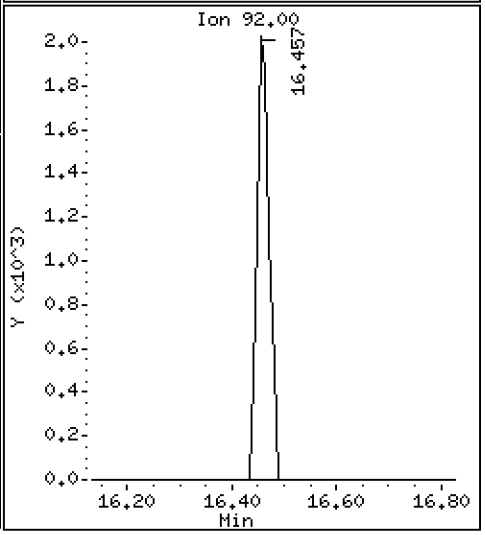


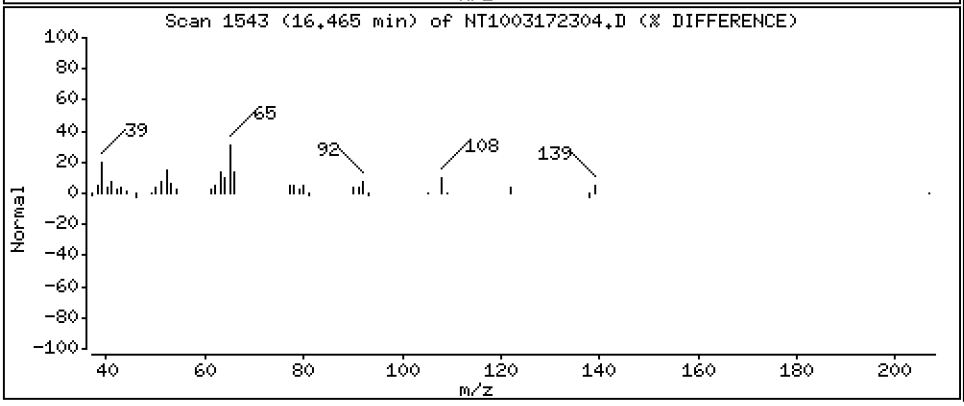












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

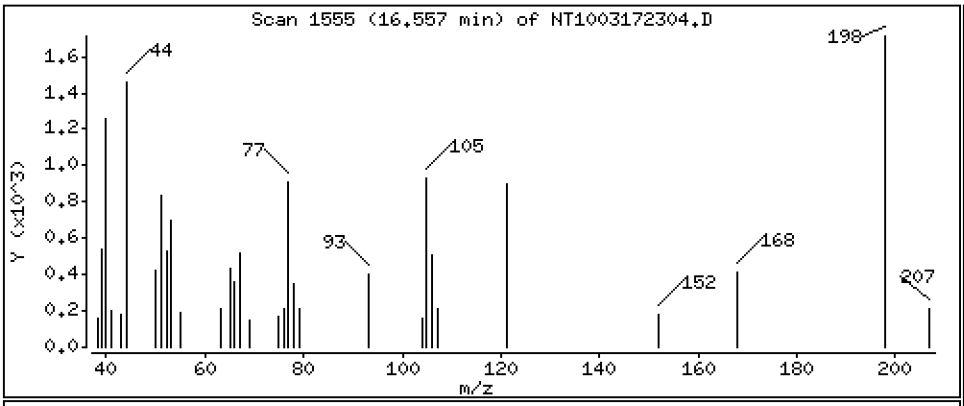
Operator: VTS

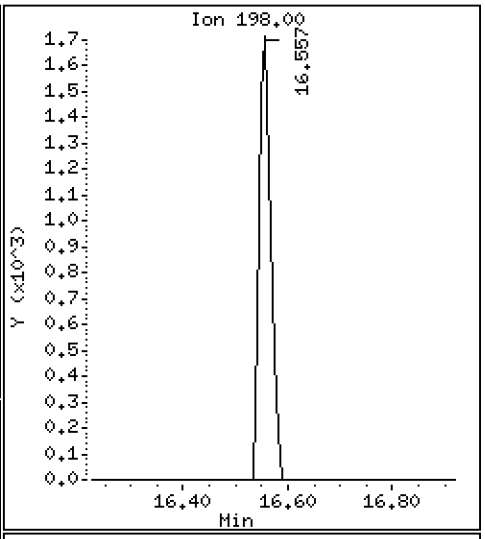
Column phase: ZB-5msi

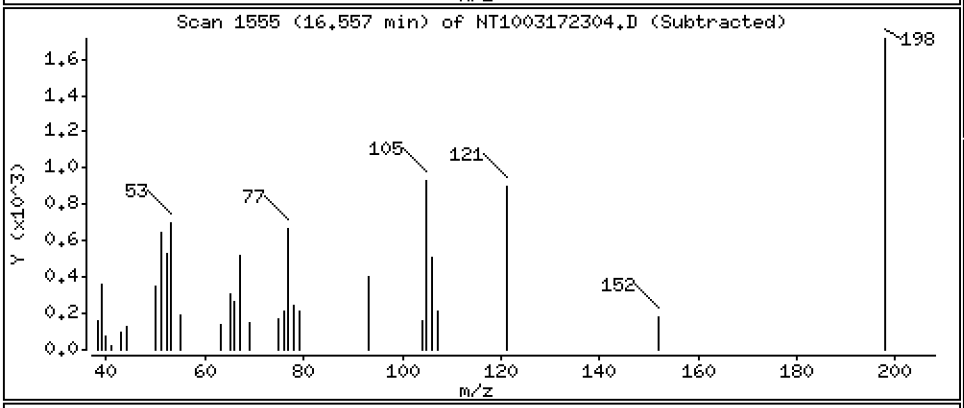
Column diameter: 0.25

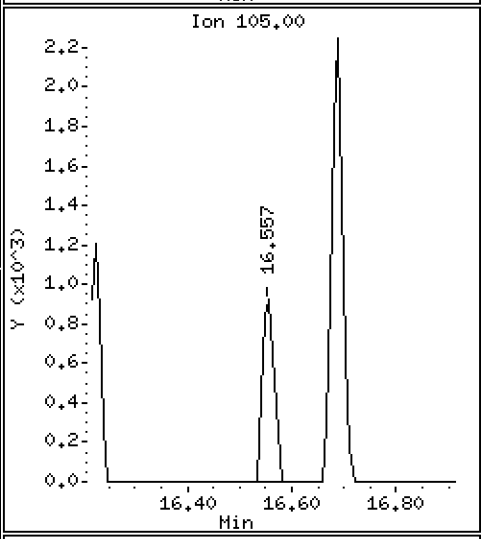
53 4,6-Dinitro-2-methylphenol

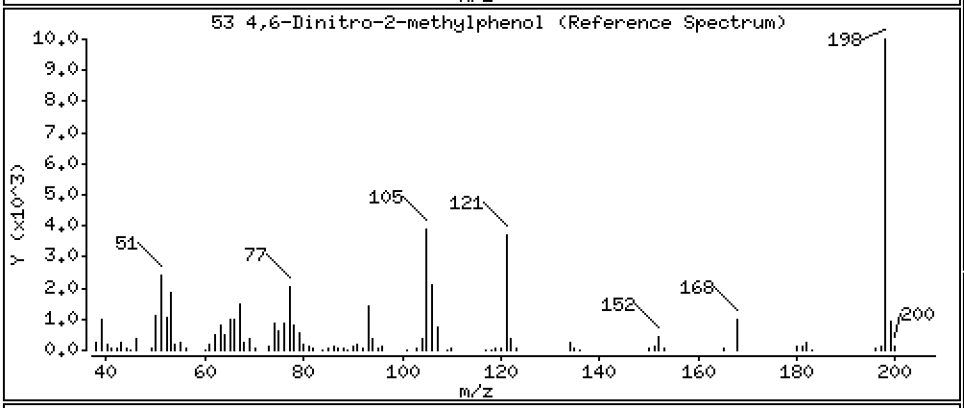
Concentration: 0.1645 ug/mL

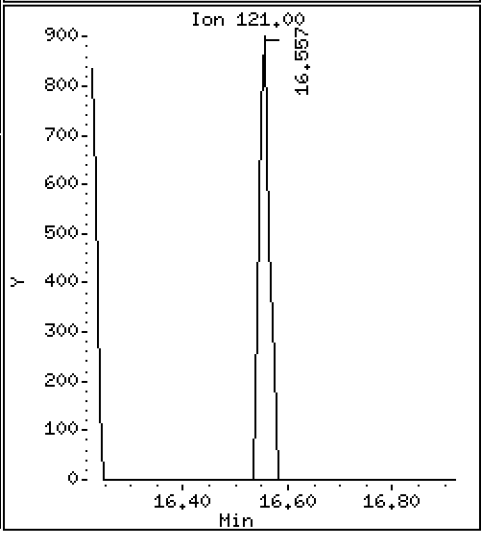


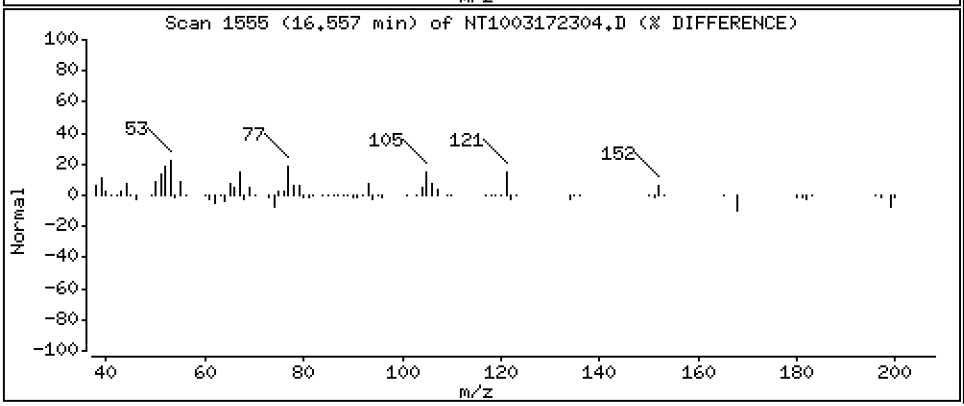












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

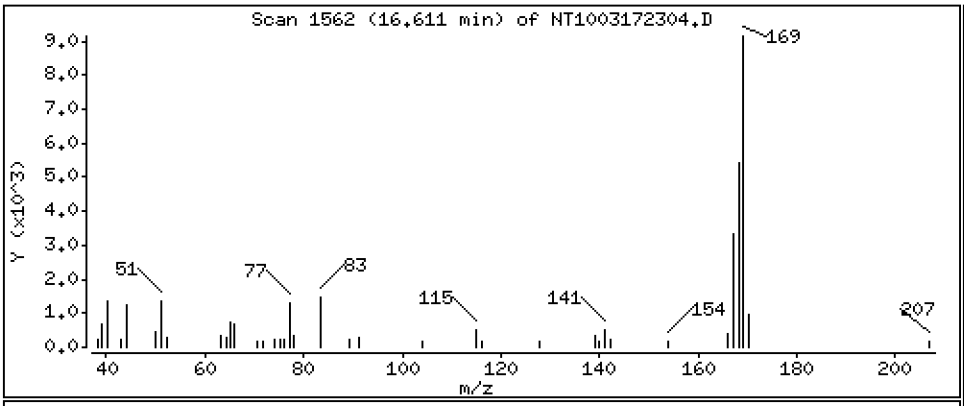
Operator: VTS

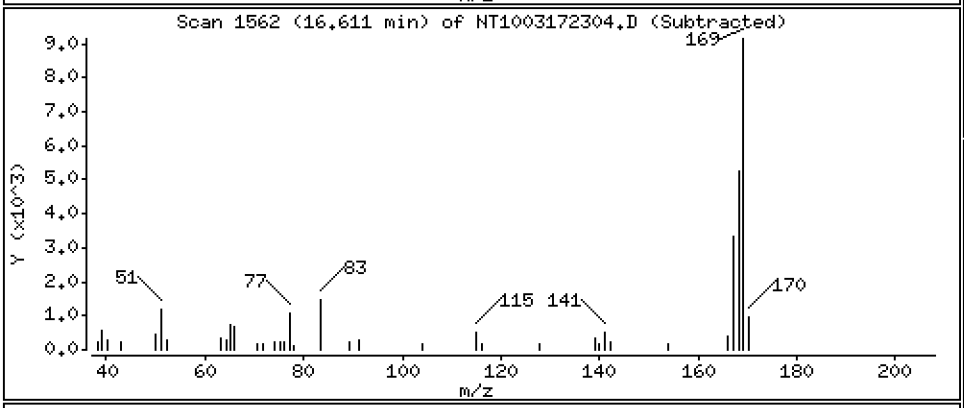
Column phase: ZB-5msi

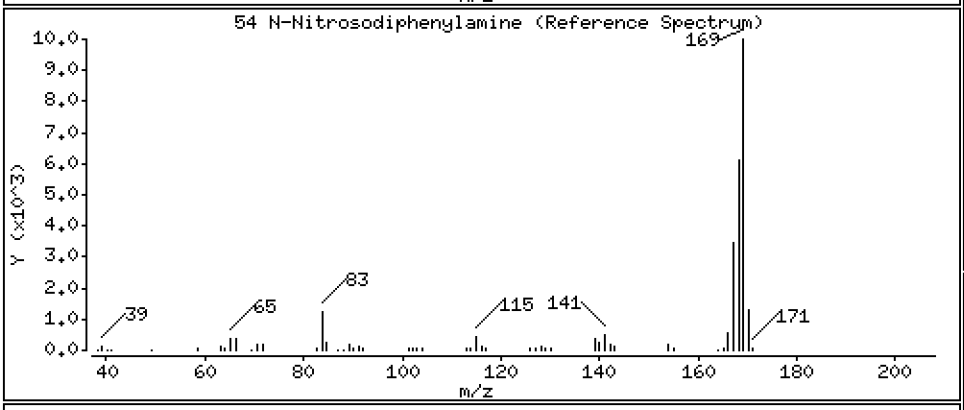
Column diameter: 0.25

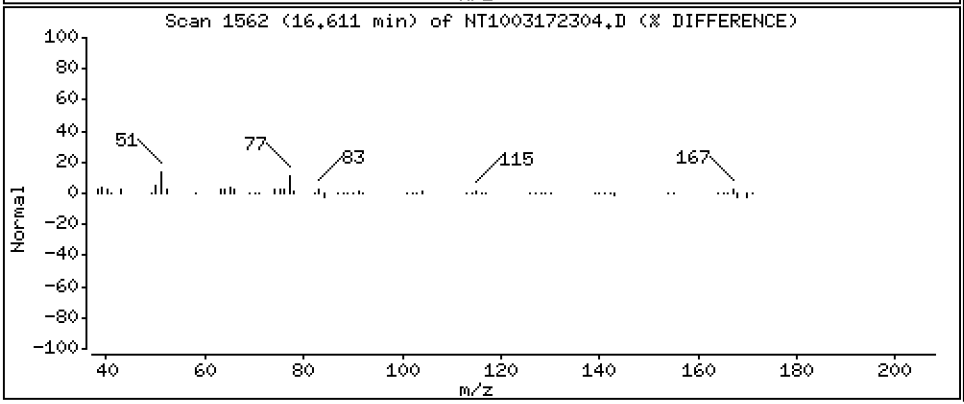
54 N-Nitrosodiphenylamine

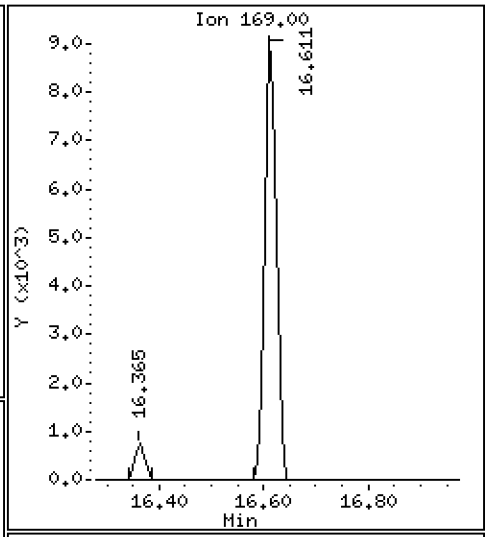
Concentration: 0.1924 ug/mL

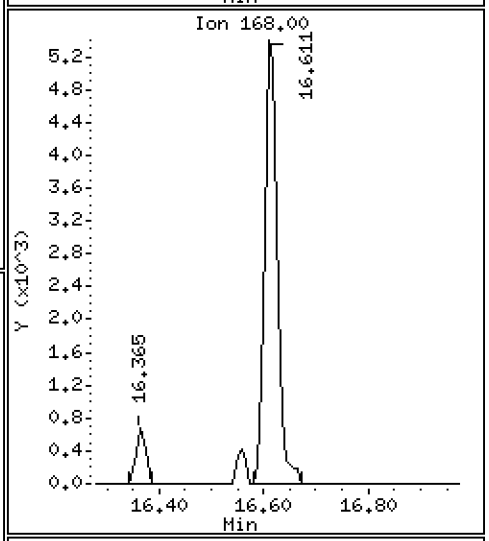


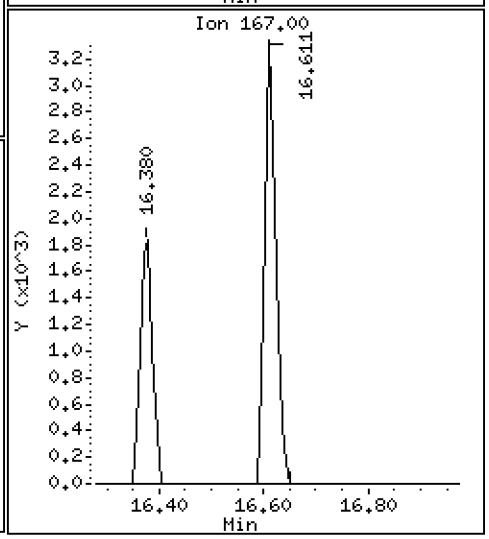












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

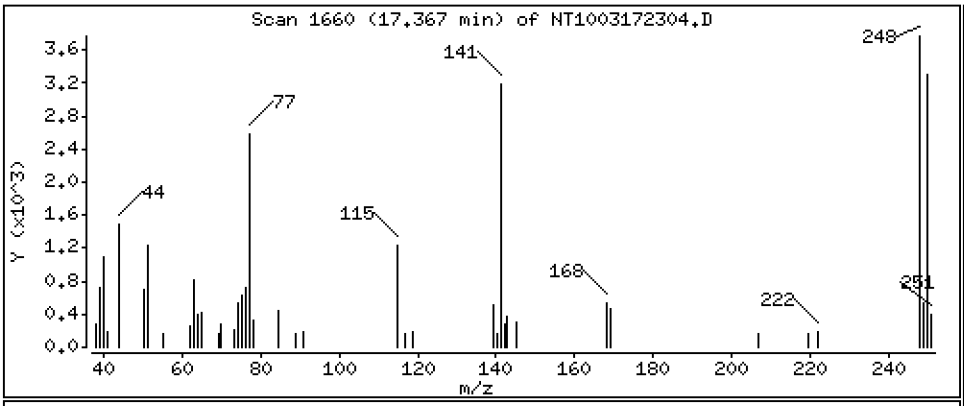
Operator: VTS

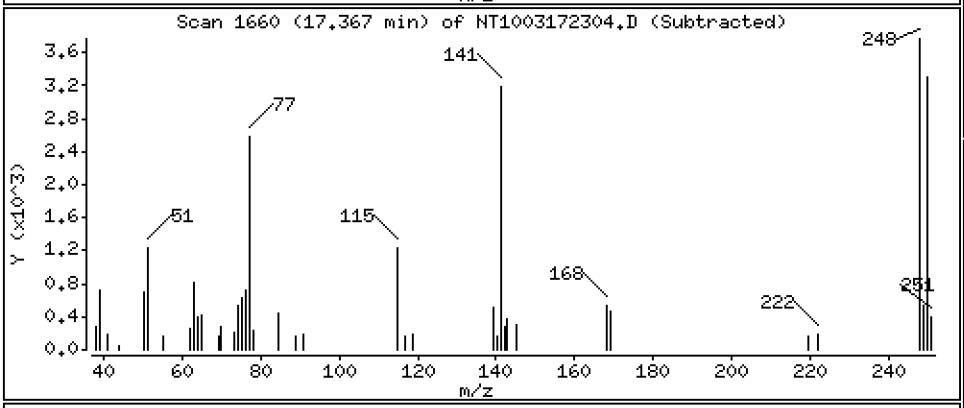
Column phase: ZB-5msi

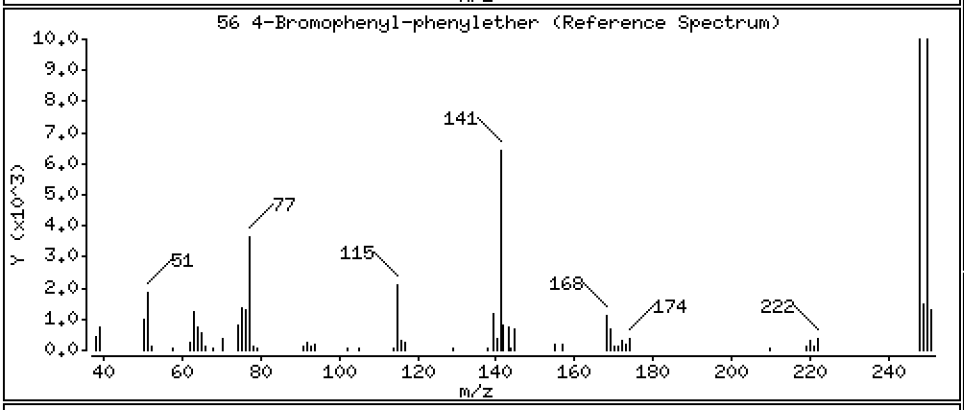
Column diameter: 0.25

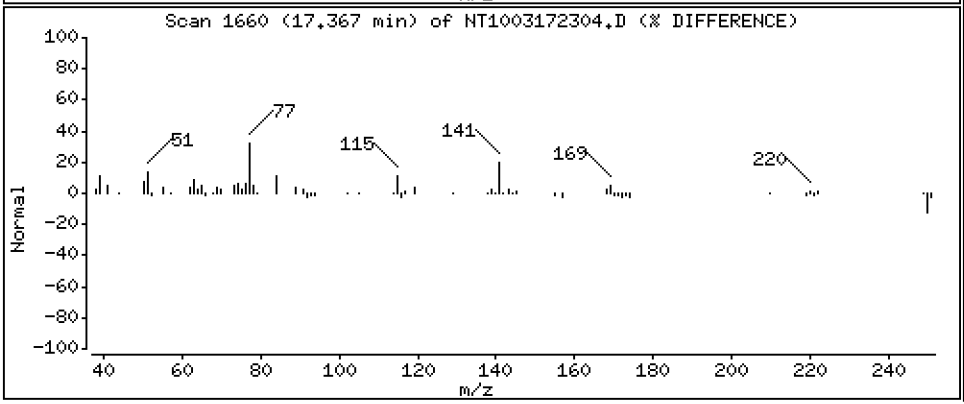
56 4-Bromophenyl-phenylether

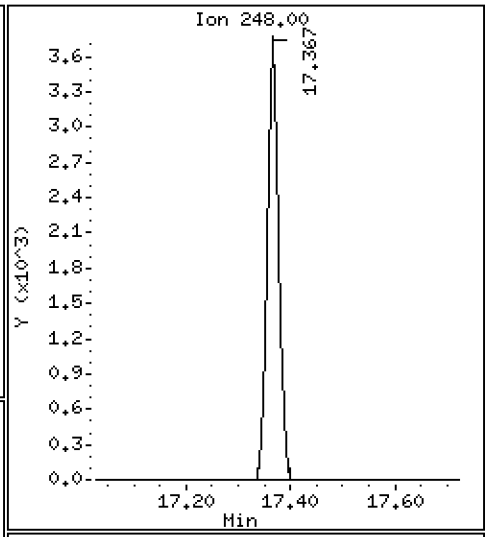
Concentration: 0.1935 ug/mL

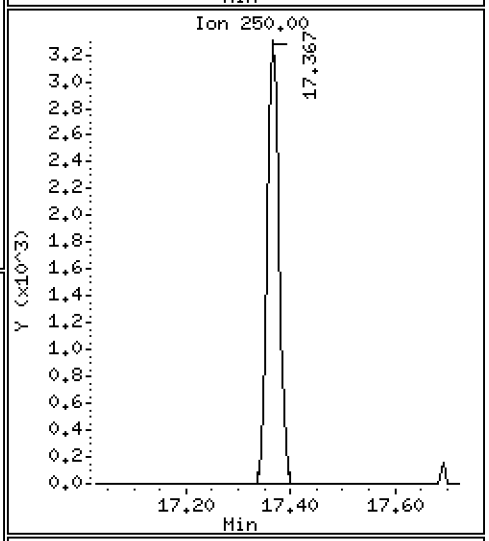


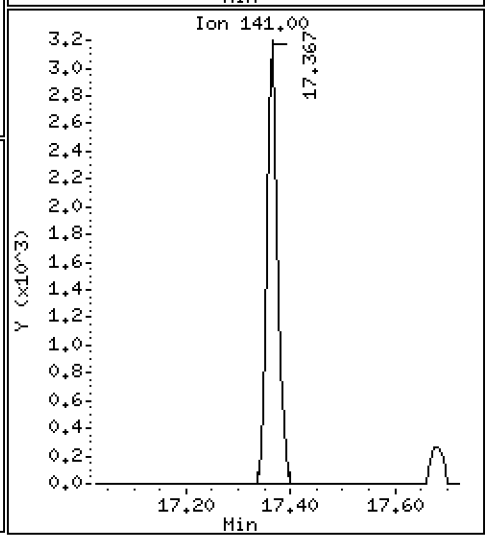












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

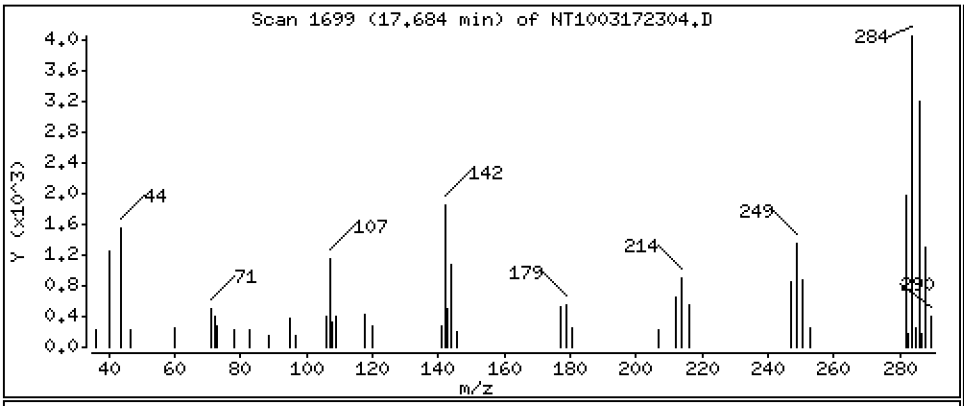
Operator: VTS

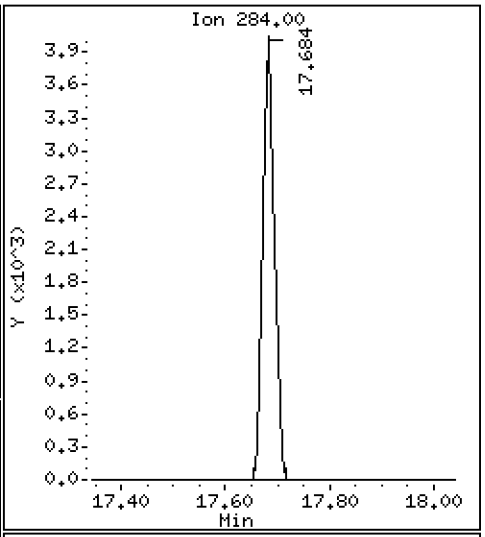
Column phase: ZB-5msi

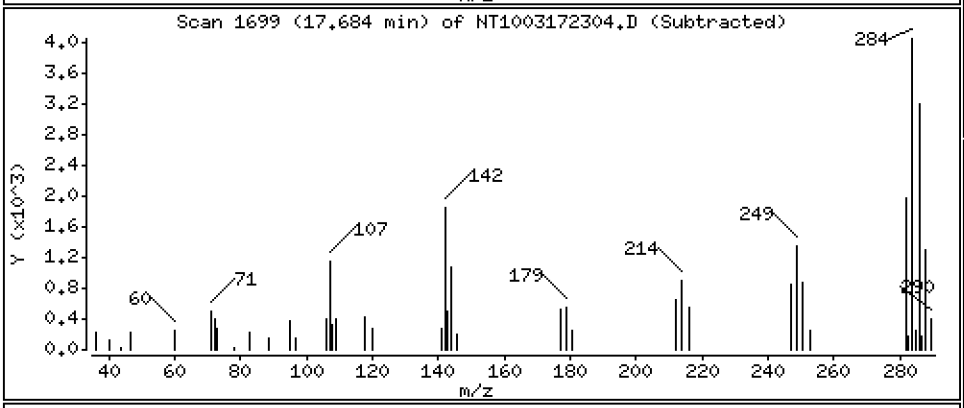
Column diameter: 0.25

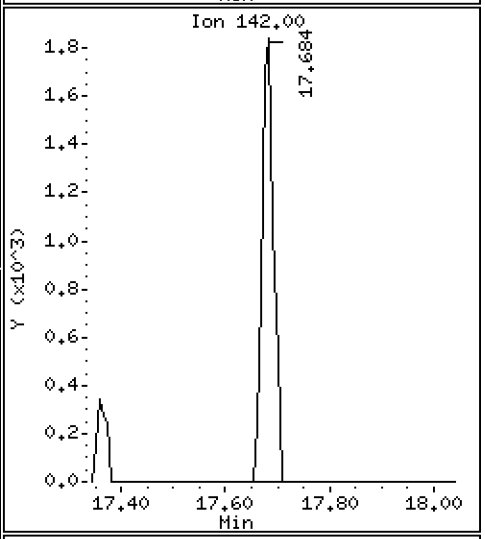
57 Hexachlorobenzene

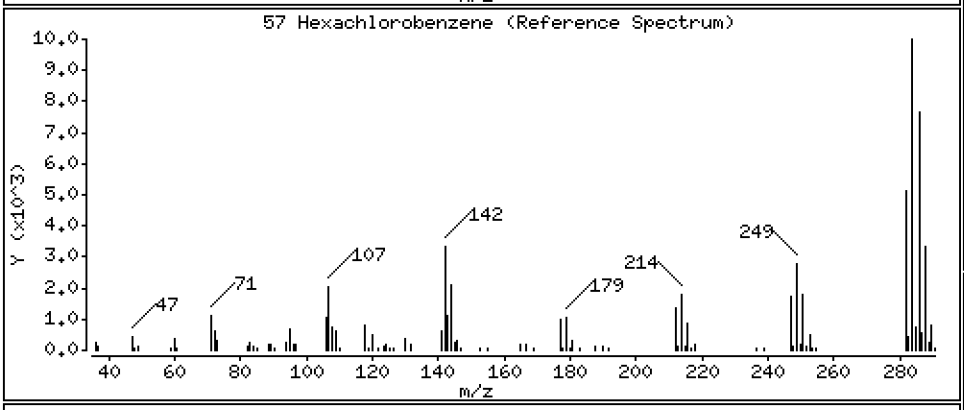
Concentration: 0.1986 ug/mL

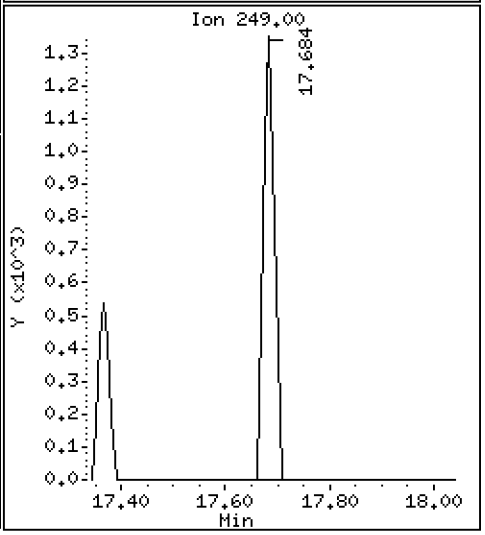


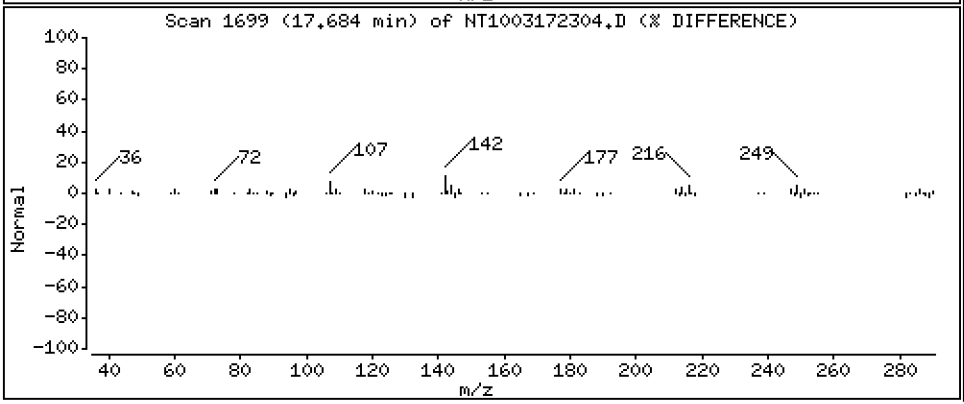












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

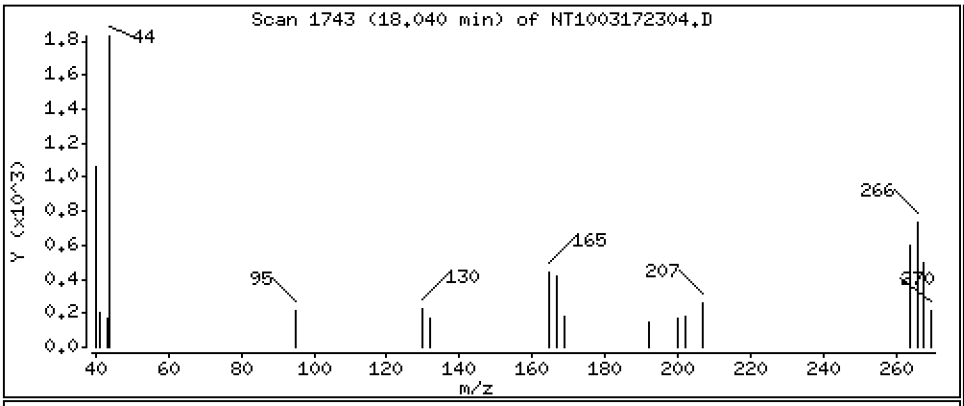
Operator: VTS

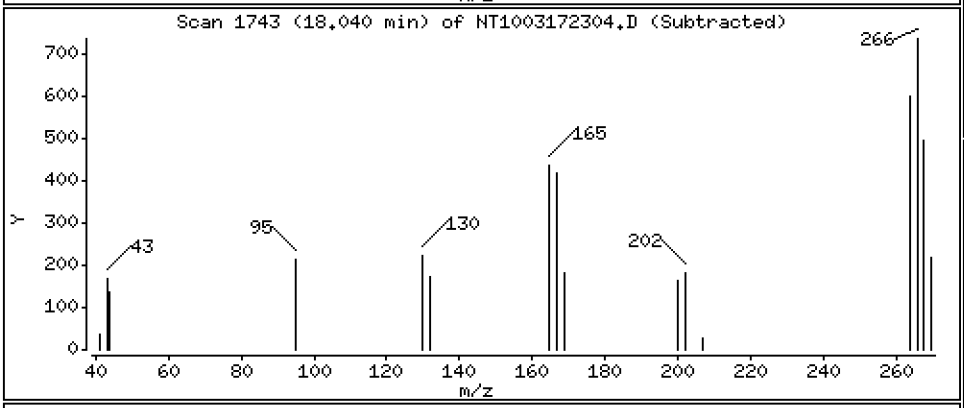
Column phase: ZB-5msi

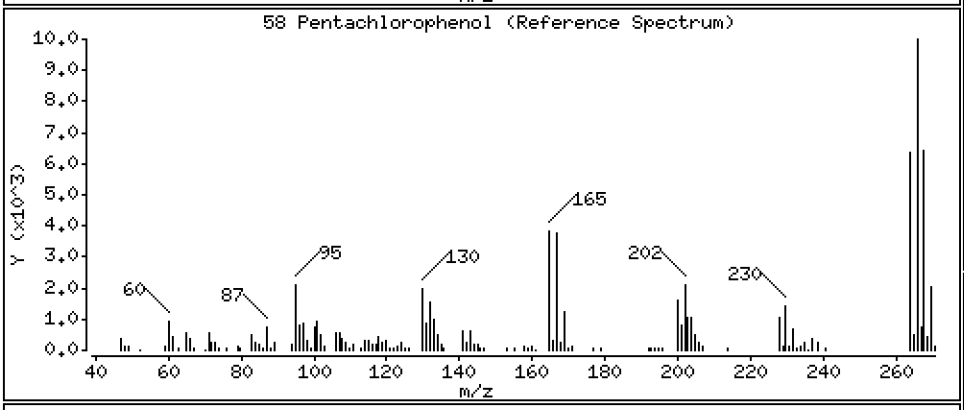
Column diameter: 0.25

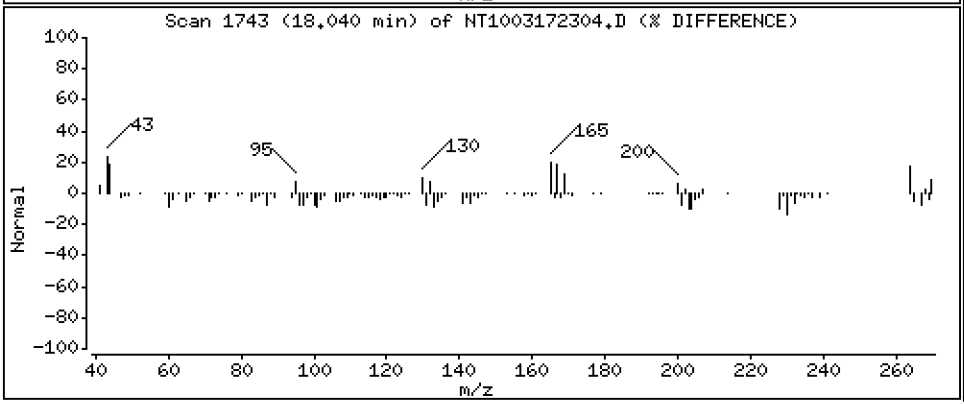
58 Pentachlorophenol

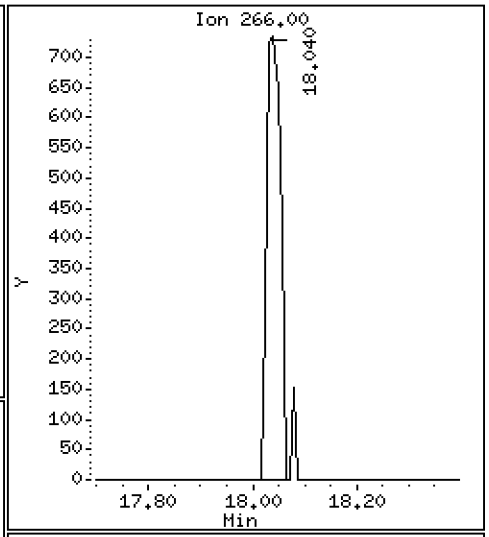
Concentration: 0.07113 ug/mL

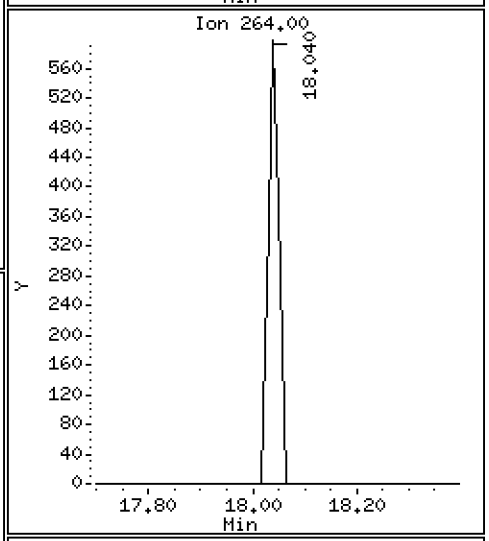


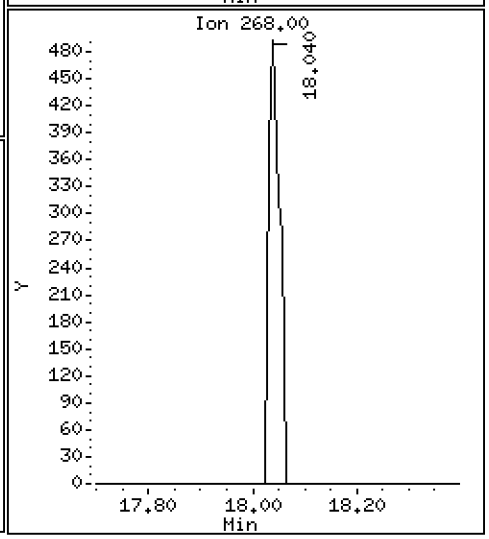












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

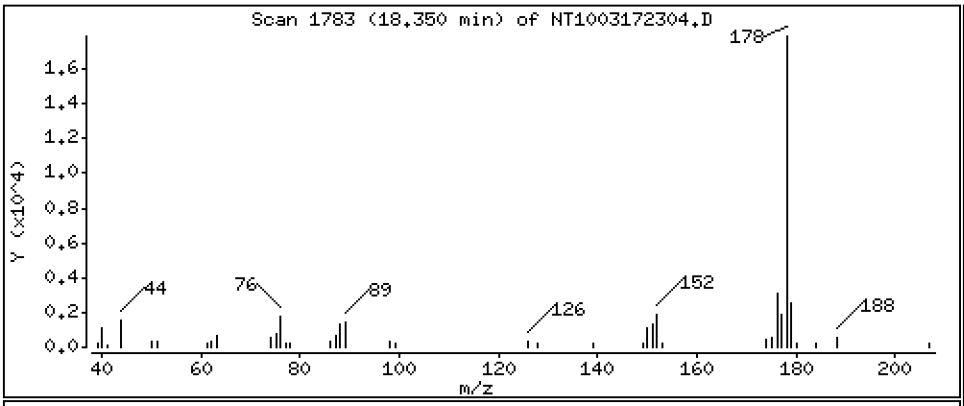
Operator: VTS

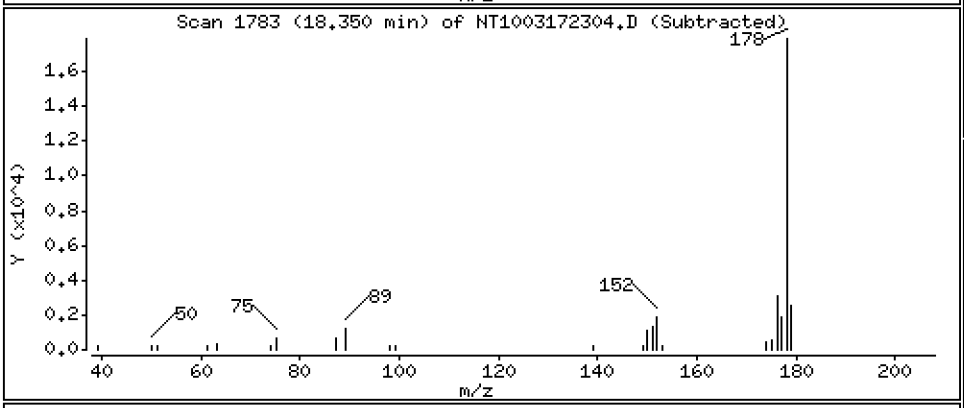
Column phase: ZB-5msi

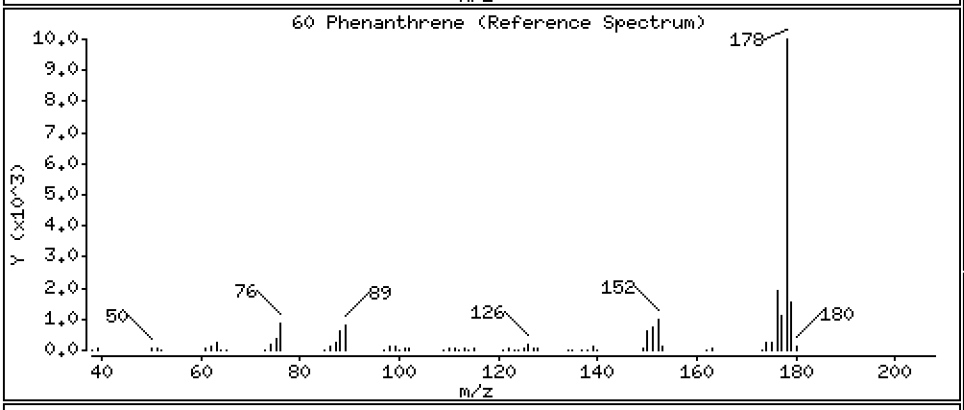
Column diameter: 0.25

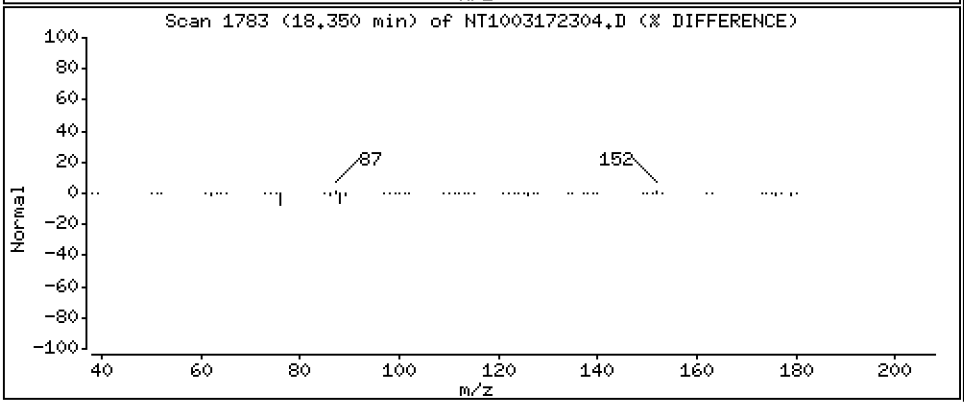
60 Phenanthrene

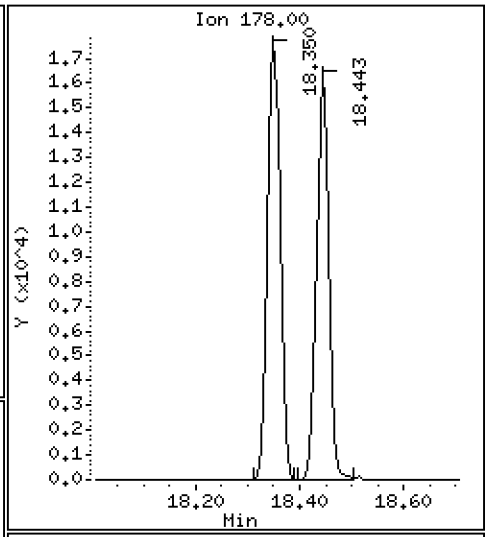
Concentration: 0.1995 ug/mL

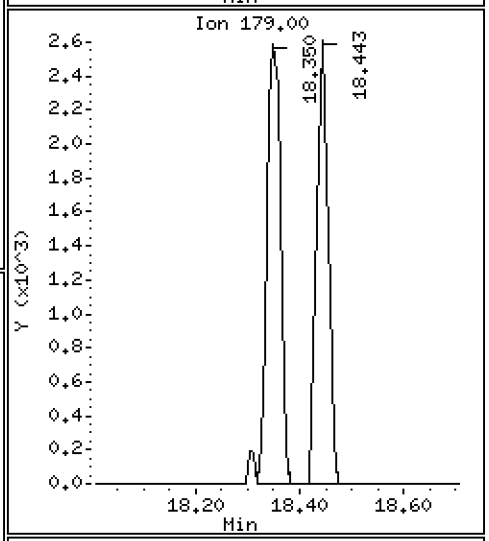


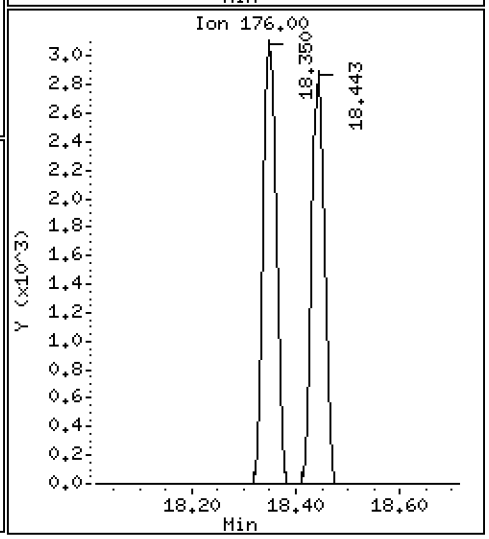












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

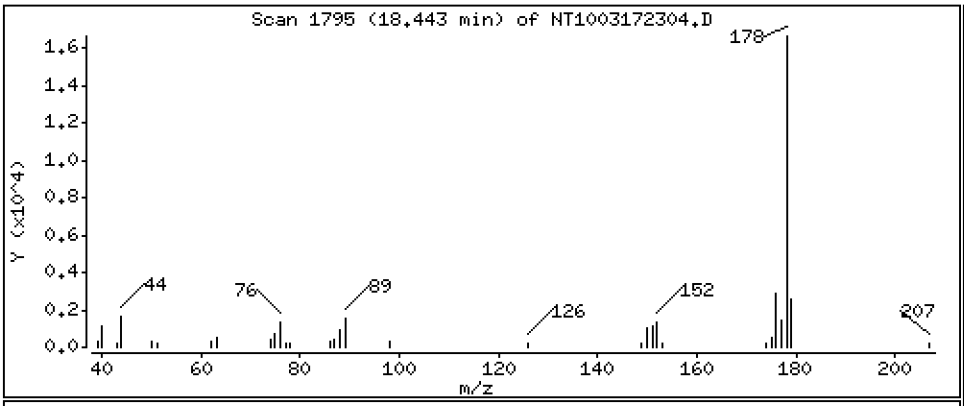
Operator: VTS

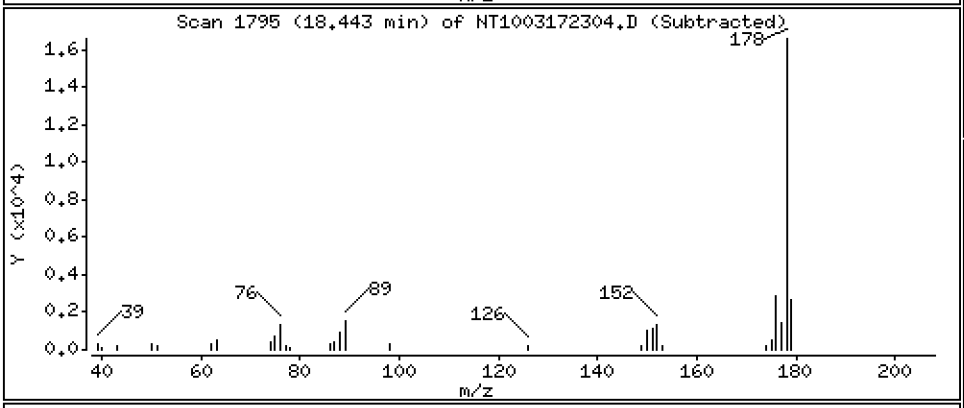
Column phase: ZB-5msi

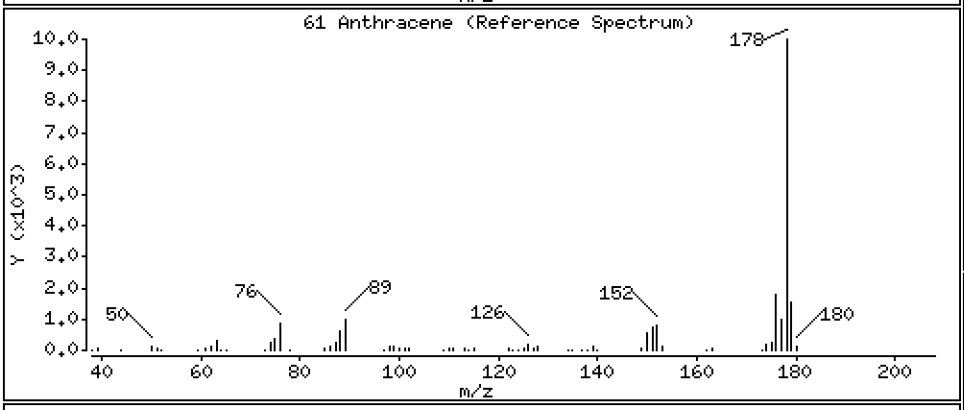
Column diameter: 0.25

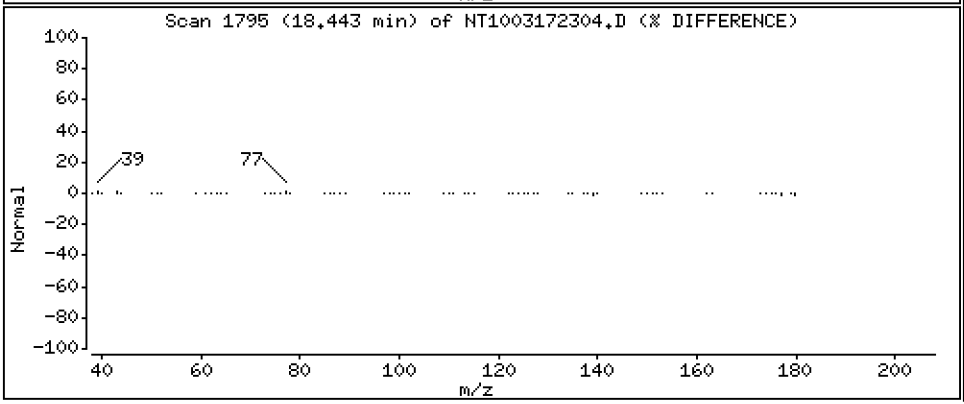
61 Anthracene

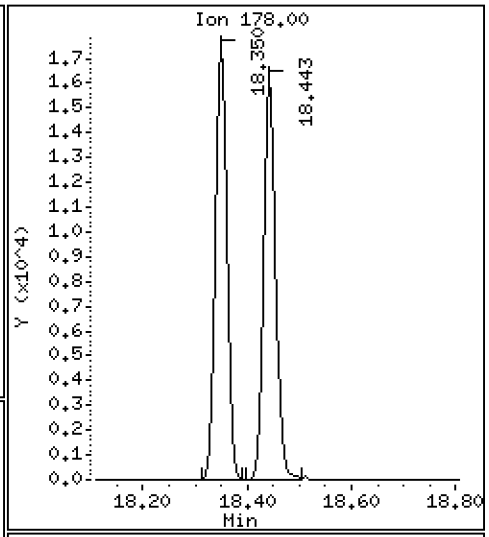
Concentration: 0.1908 ug/mL

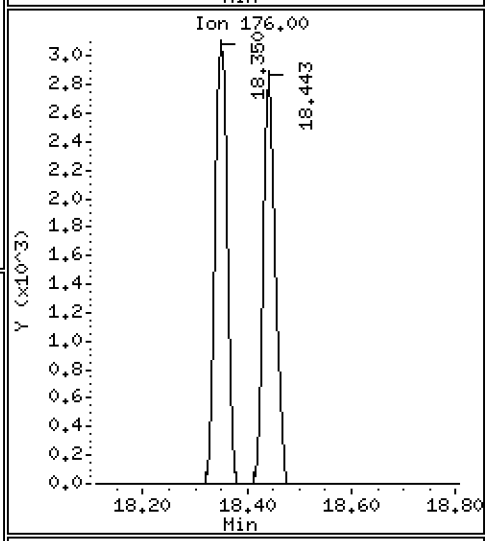


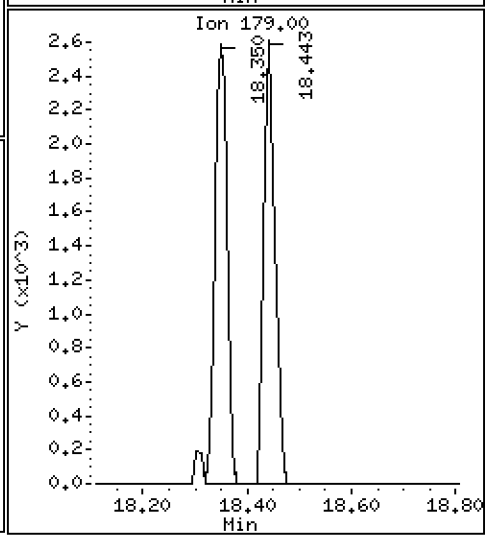












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

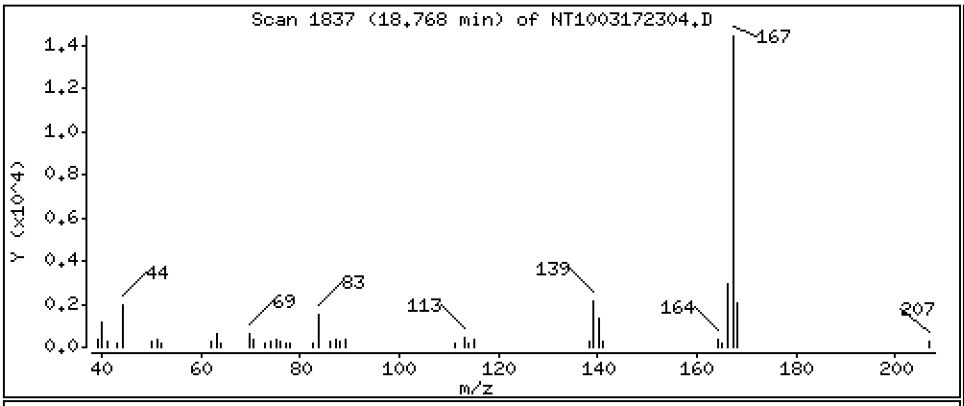
Operator: VTS

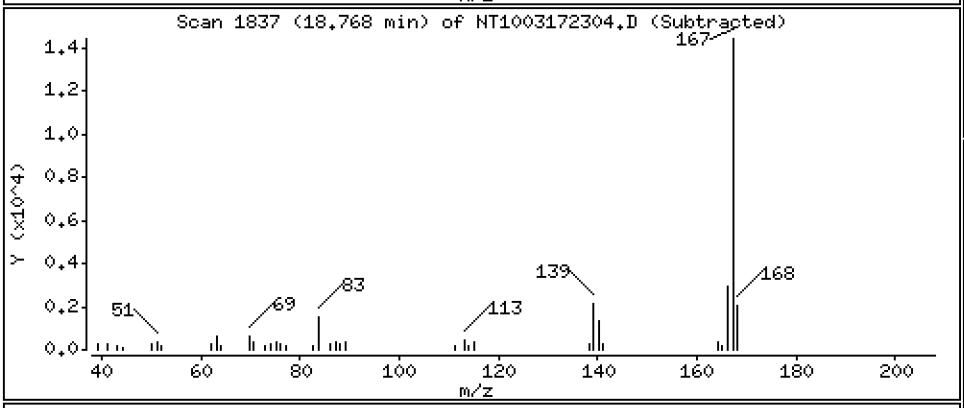
Column phase: ZB-5msi

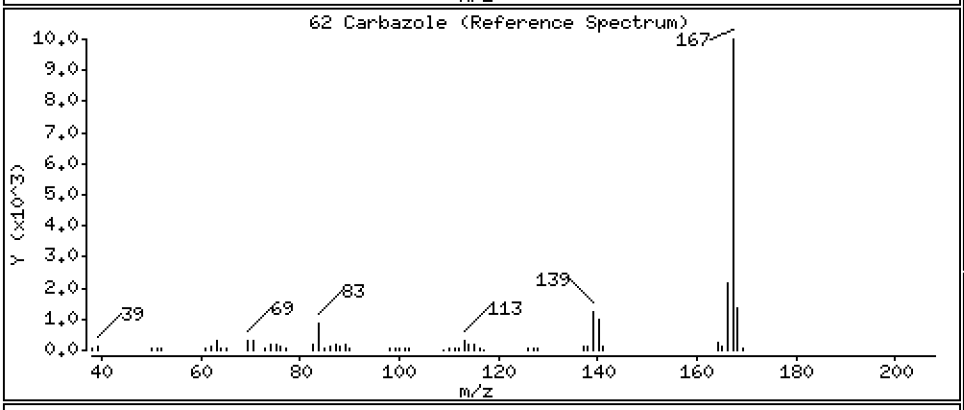
Column diameter: 0.25

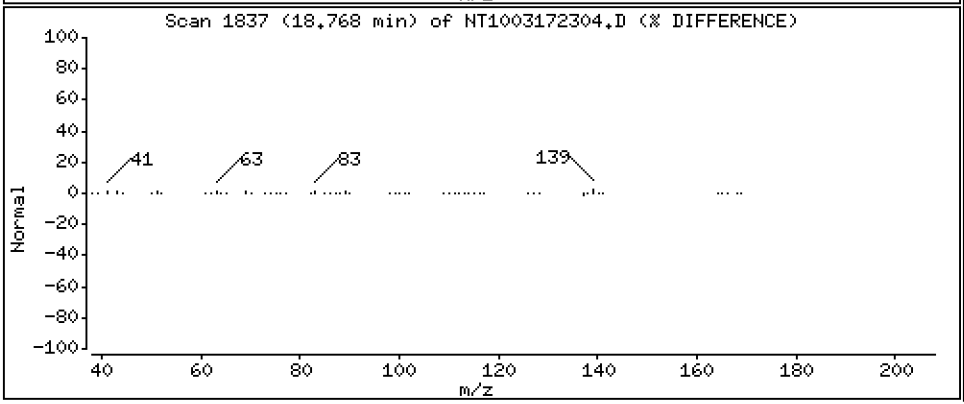
62 Carbazole

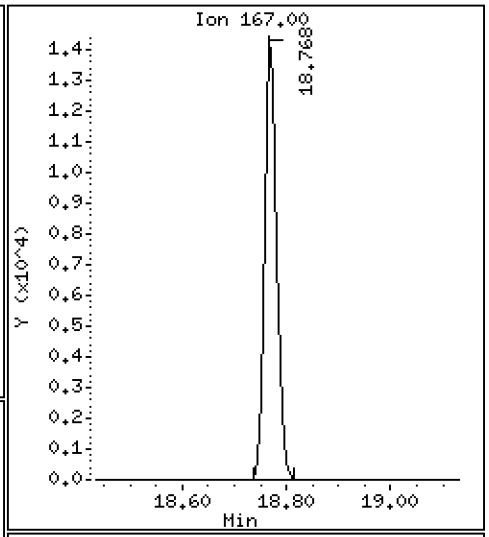
Concentration: 0.1862 ug/mL

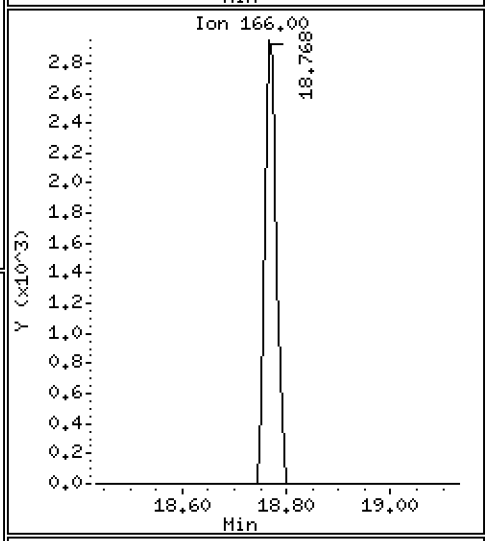


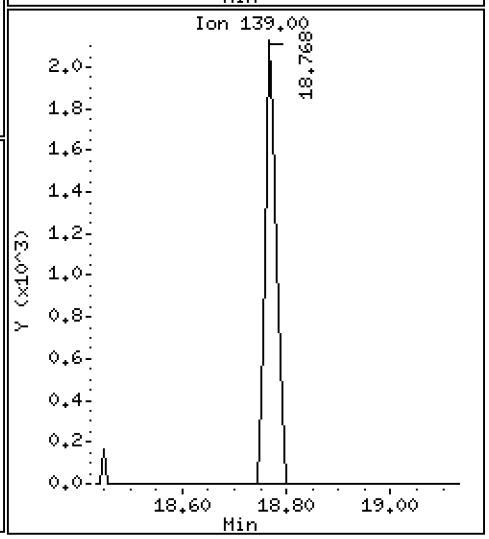












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

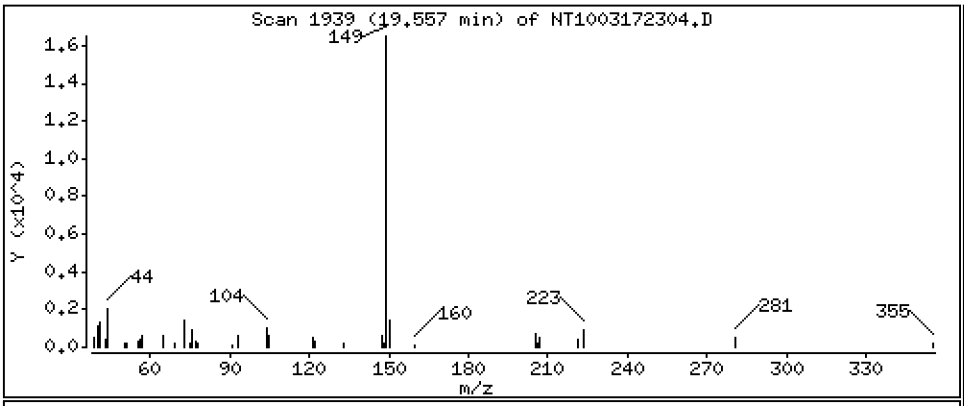
Operator: VTS

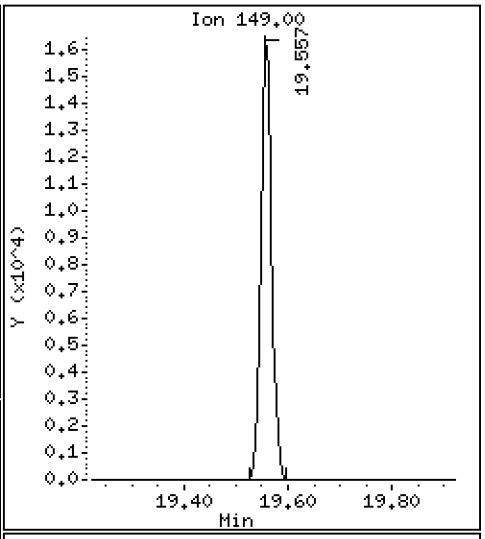
Column phase: ZB-5msi

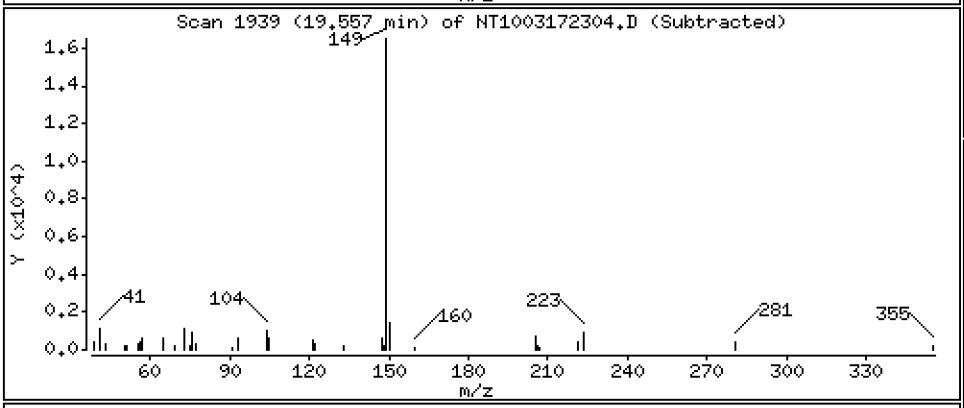
Column diameter: 0.25

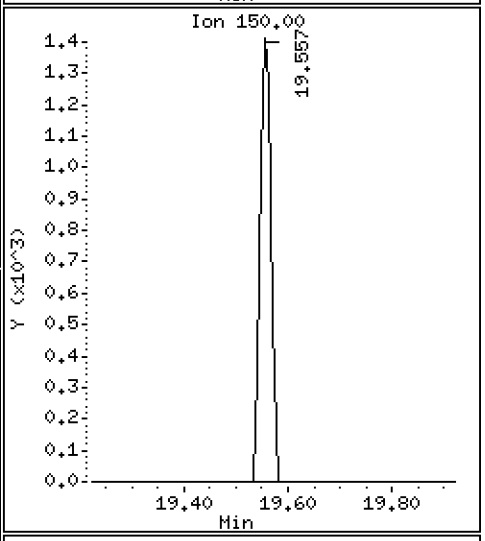
63 Di-n-butylphthalate

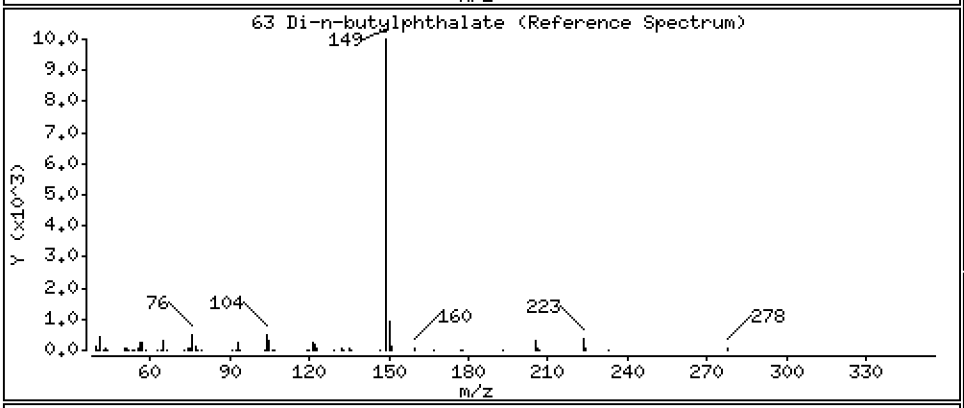
Concentration: 0.1430 ug/mL

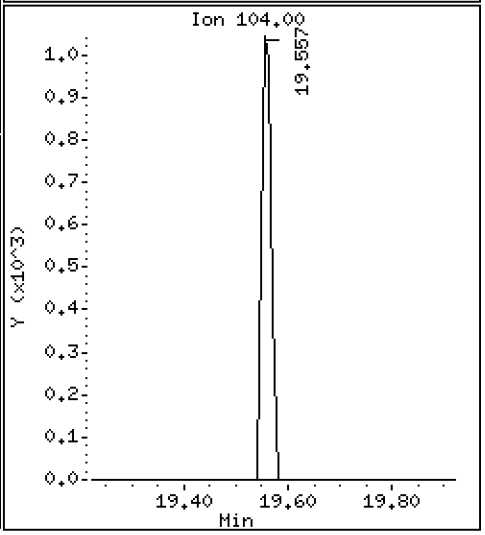


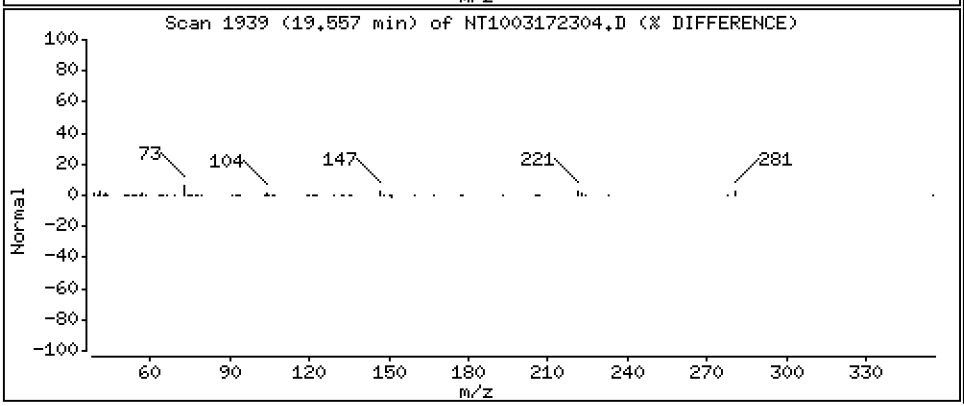












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

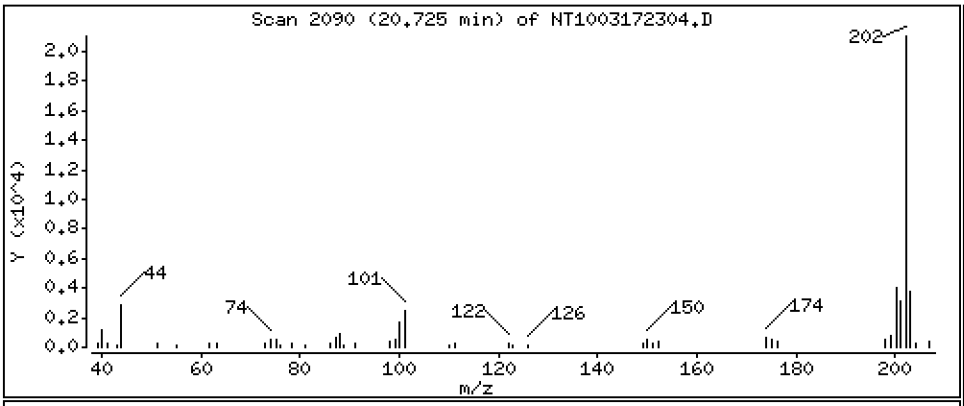
Operator: VTS

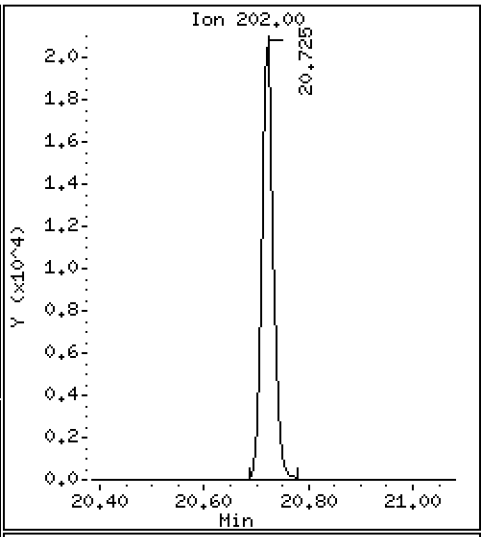
Column phase: ZB-5msi

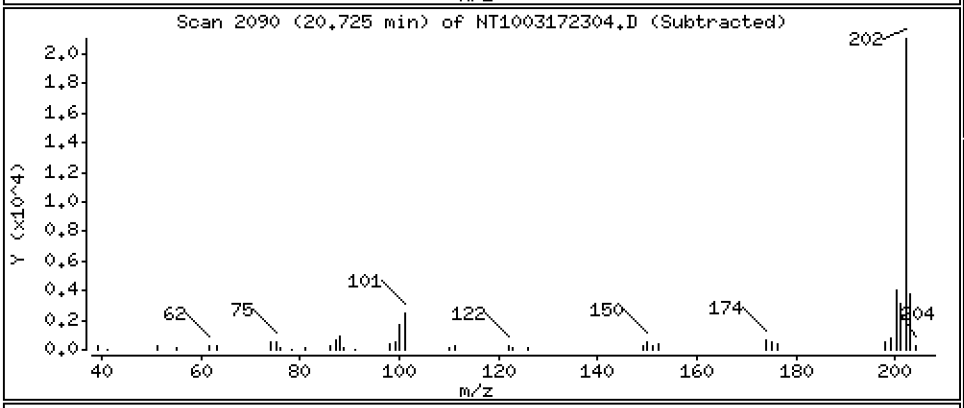
Column diameter: 0.25

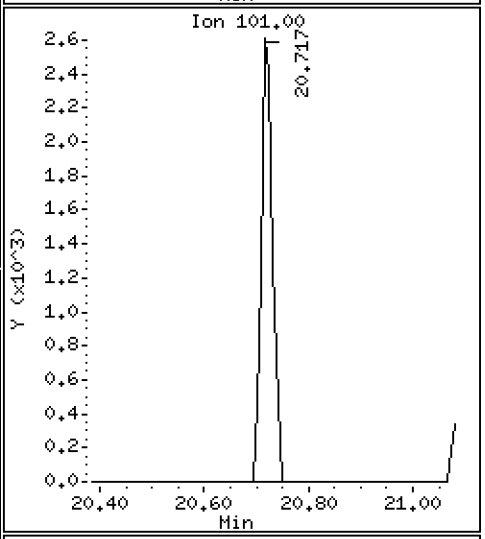
64 Fluoranthene

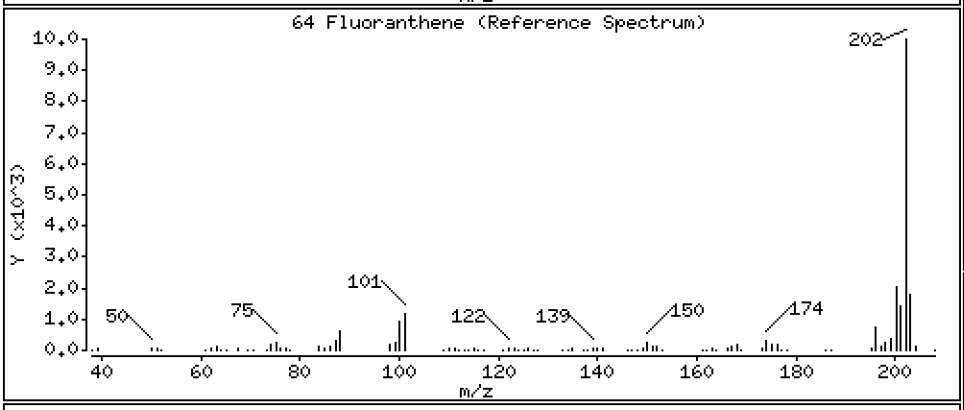
Concentration: 0.1885 ug/mL

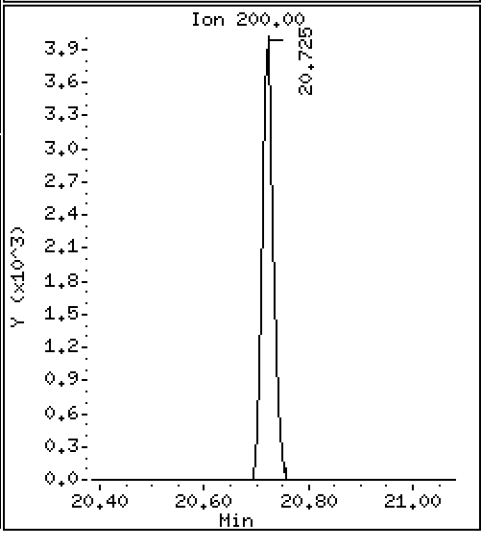


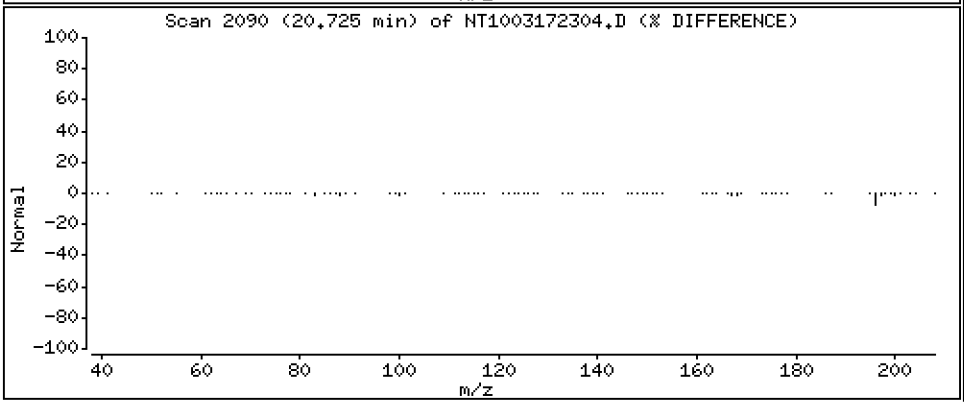












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

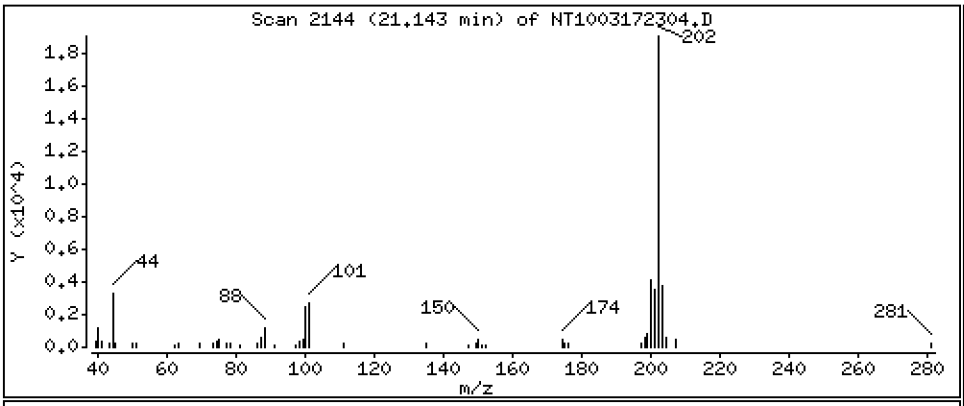
Operator: VTS

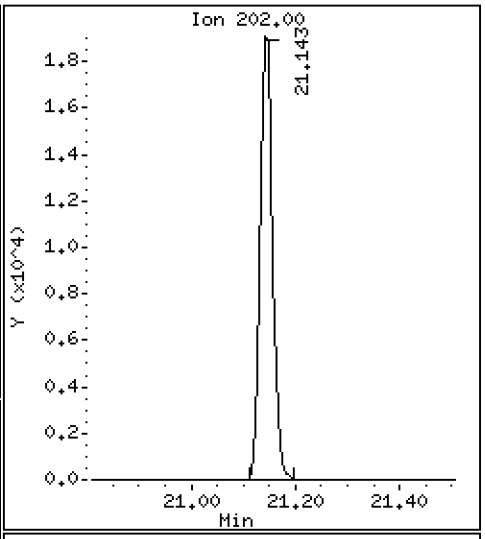
Column phase: ZB-5msi

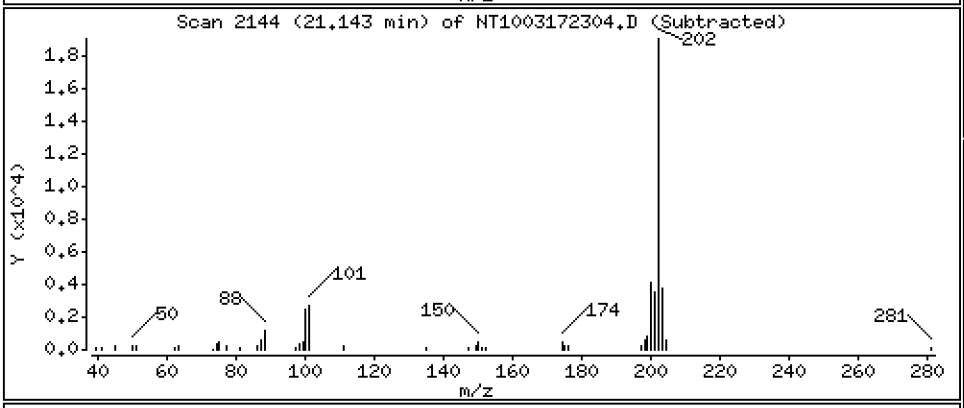
Column diameter: 0.25

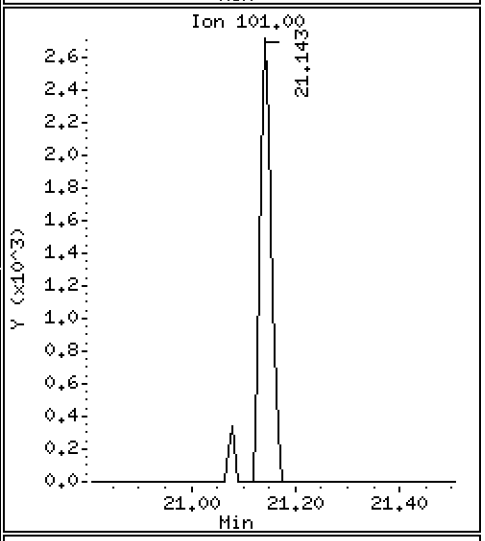
65 Pyrene

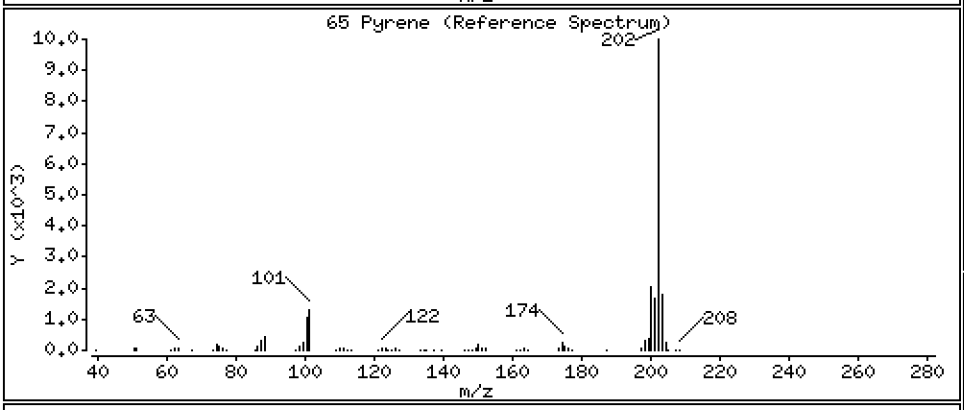
Concentration: 0.1852 ug/mL

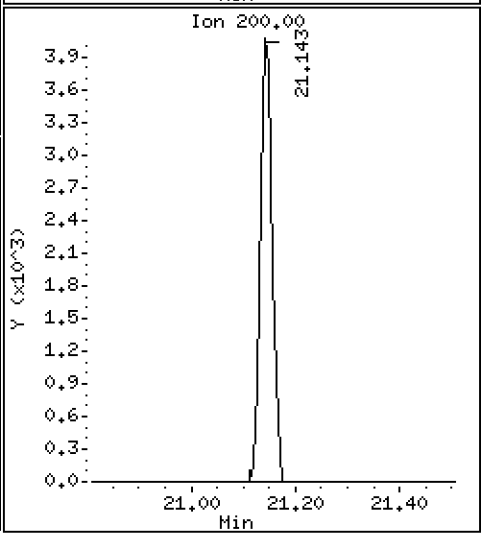


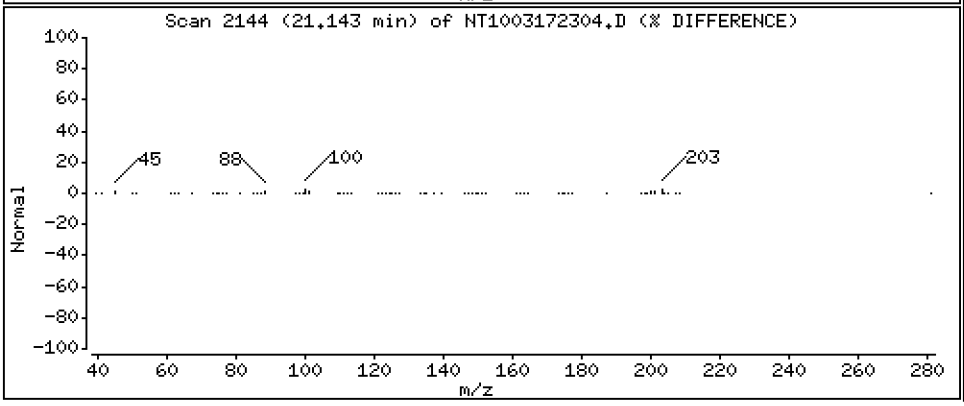












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

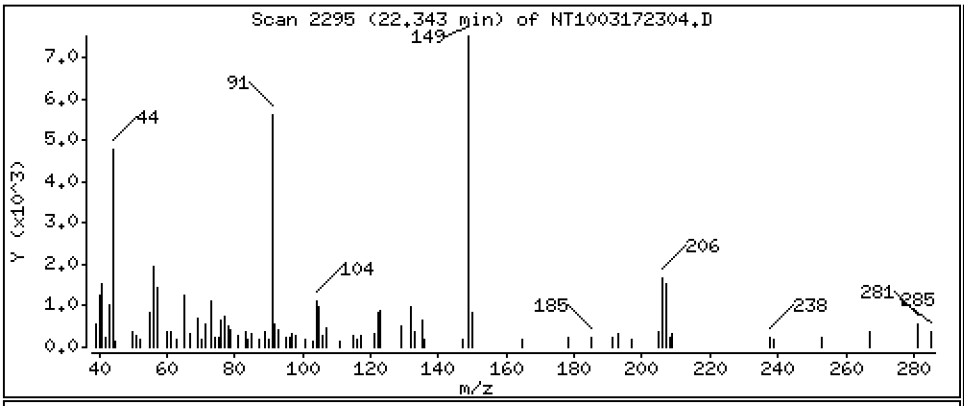
Operator: VTS

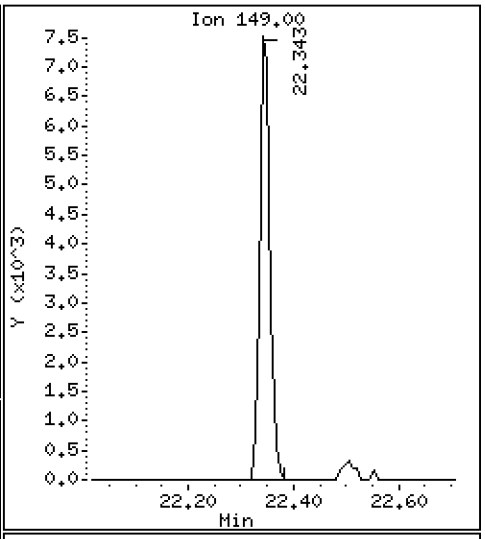
Column phase: ZB-5msi

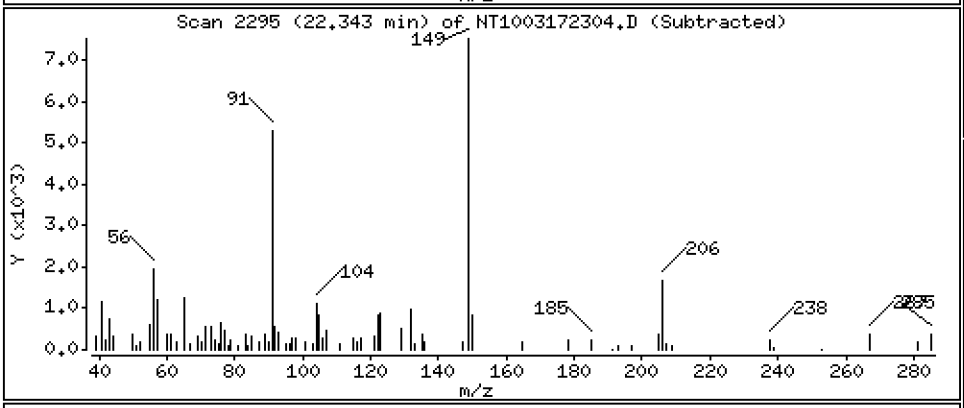
Column diameter: 0.25

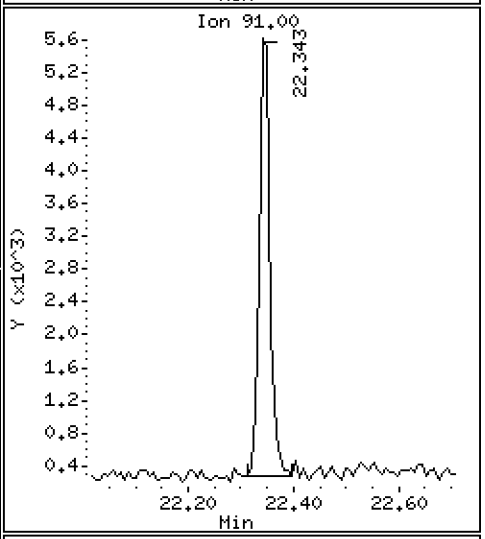
67 Butylbenzylphthalate

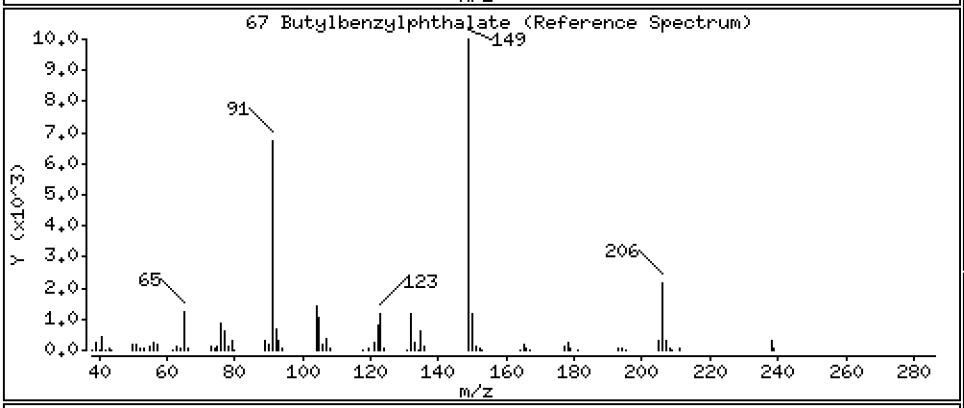
Concentration: 0.1668 ug/mL

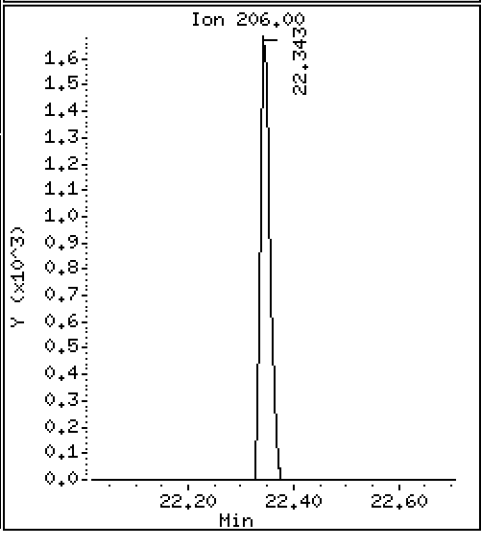


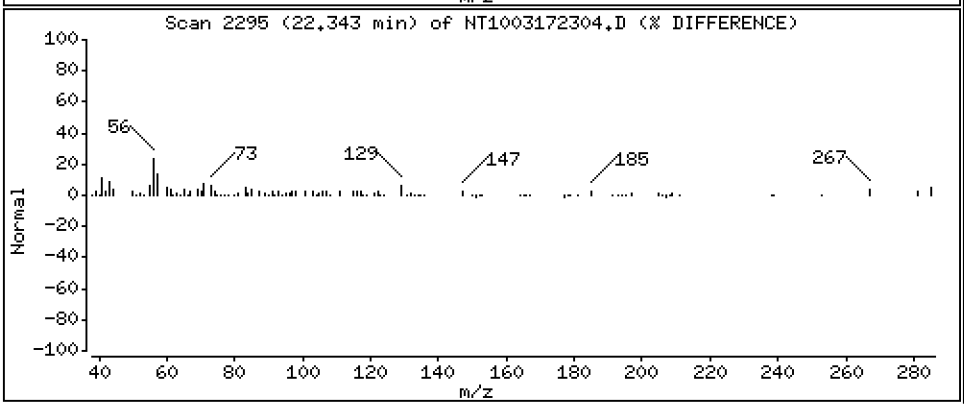












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

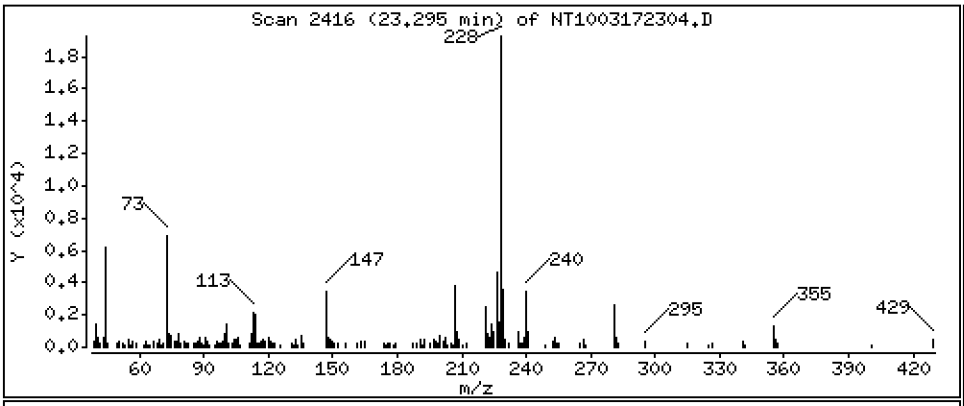
Operator: VTS

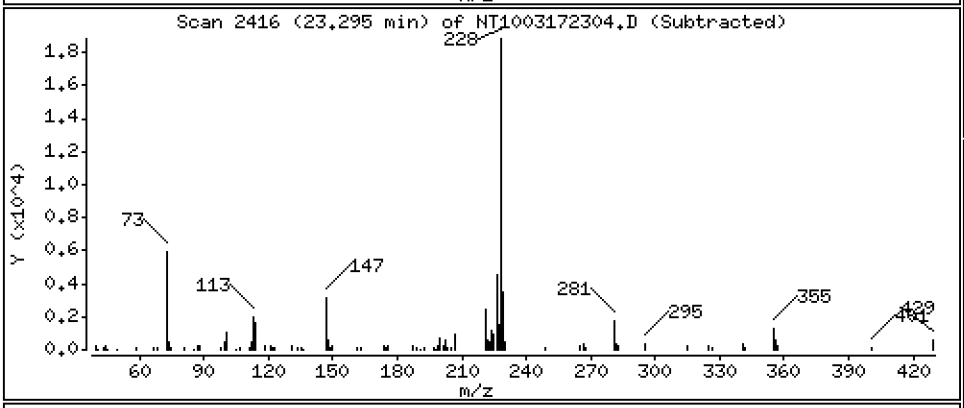
Column phase: ZB-5msi

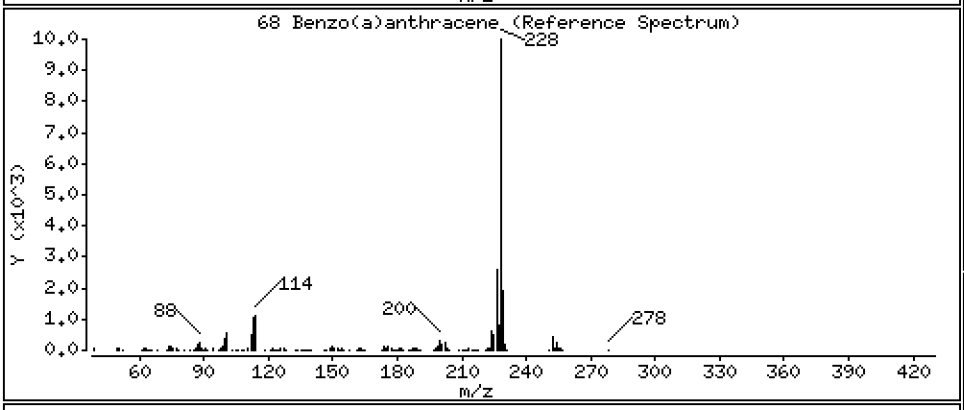
Column diameter: 0.25

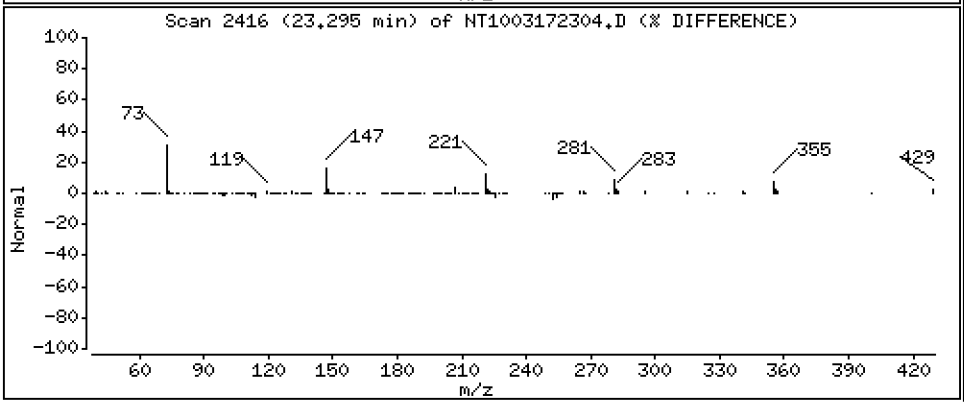
68 Benzo(a)anthracene

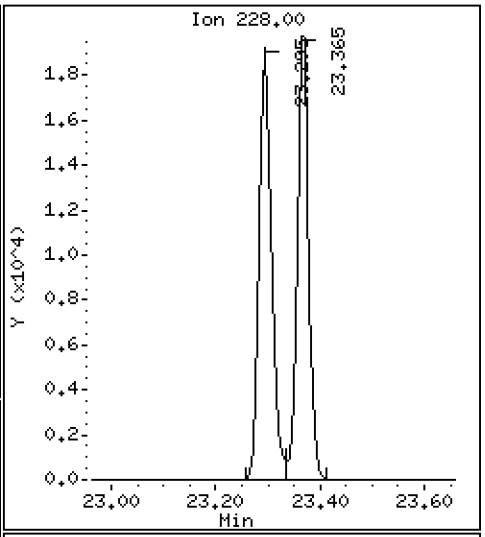
Concentration: 0.2108 ug/mL

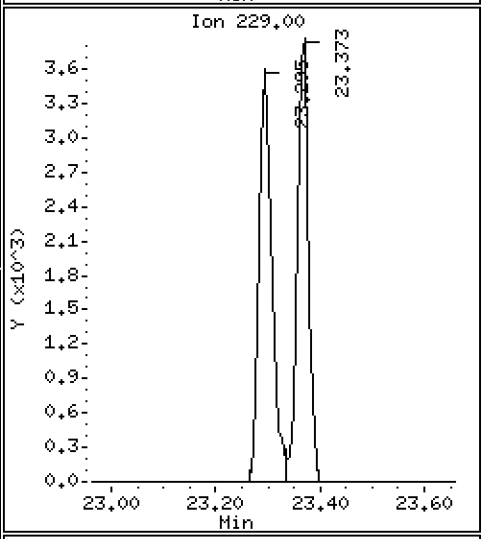


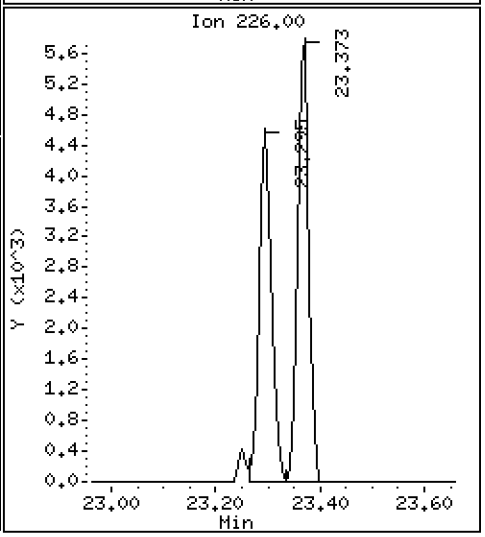












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

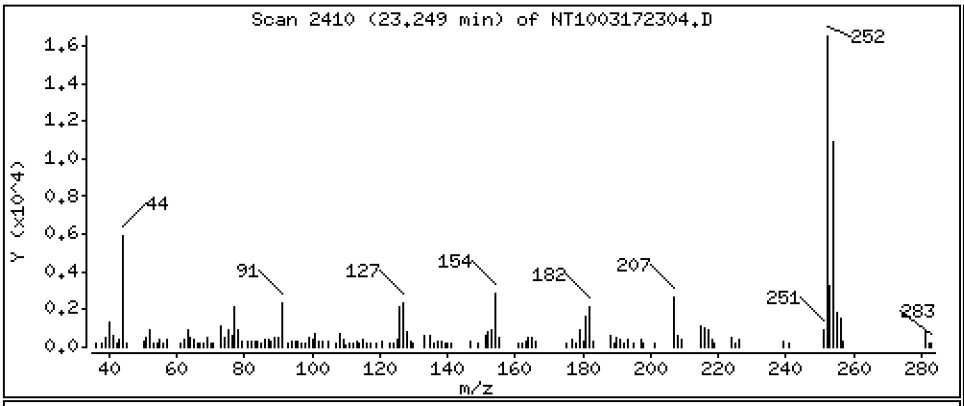
Operator: VTS

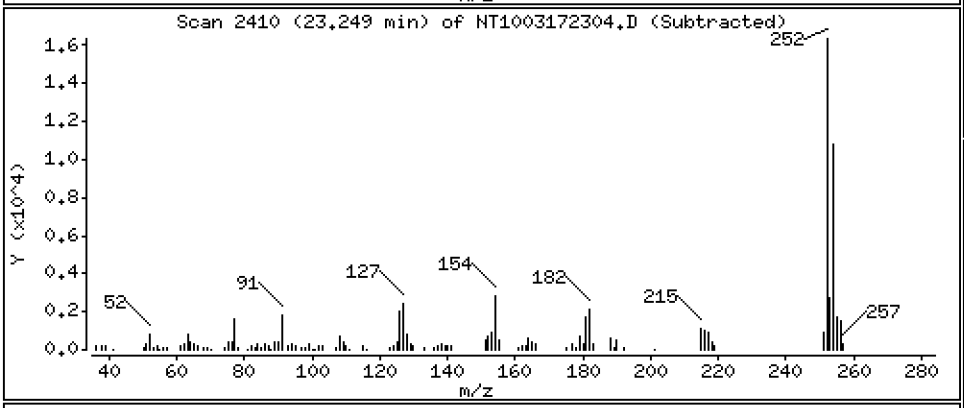
Column phase: ZB-5msi

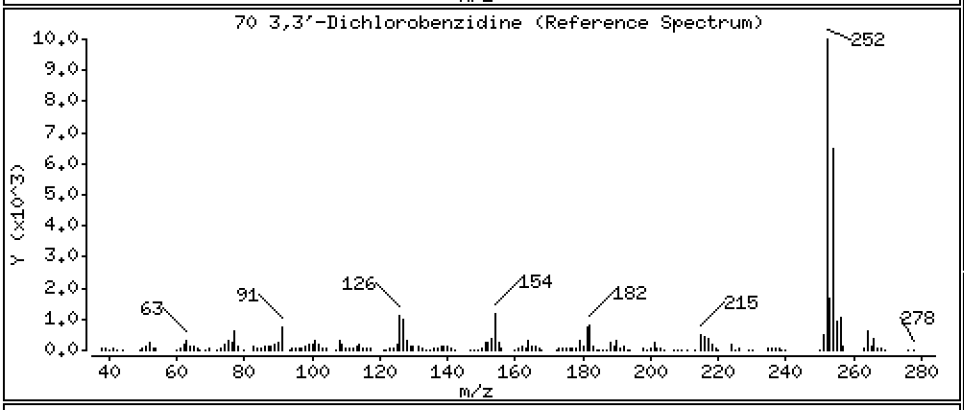
Column diameter: 0.25

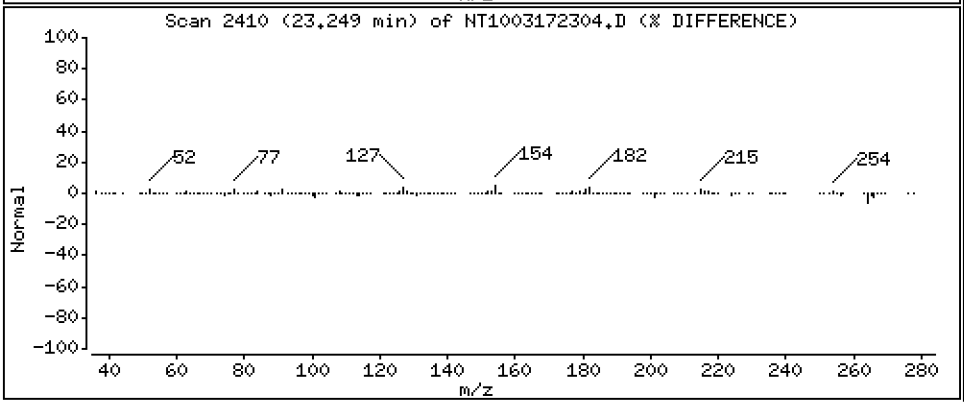
70 3,3'-Dichlorobenzidine

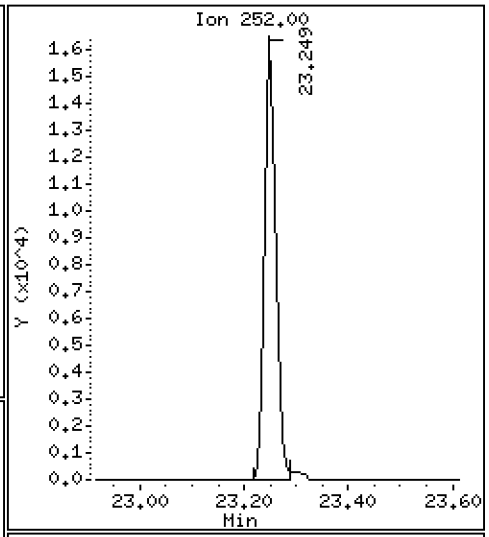
Concentration: 0.4987 ug/mL

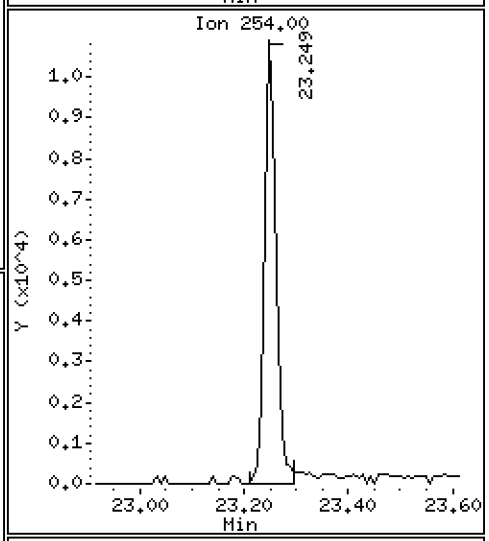


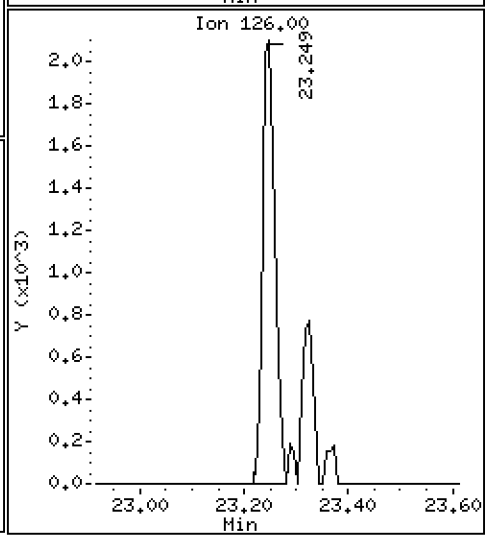












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

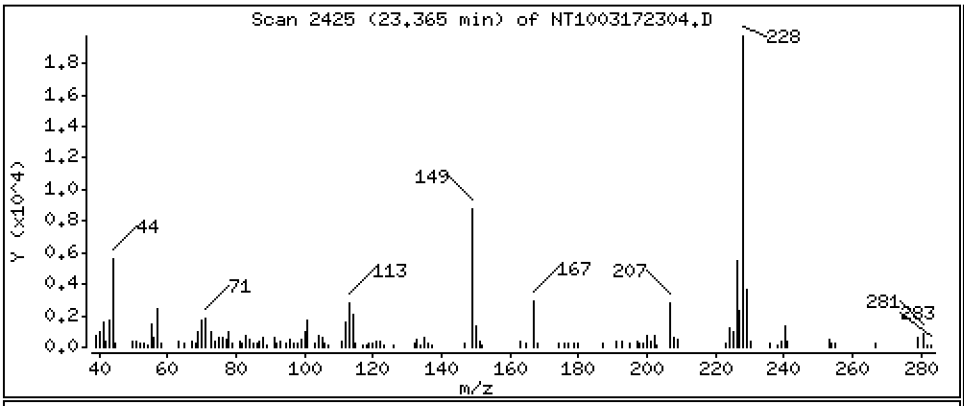
Operator: VTS

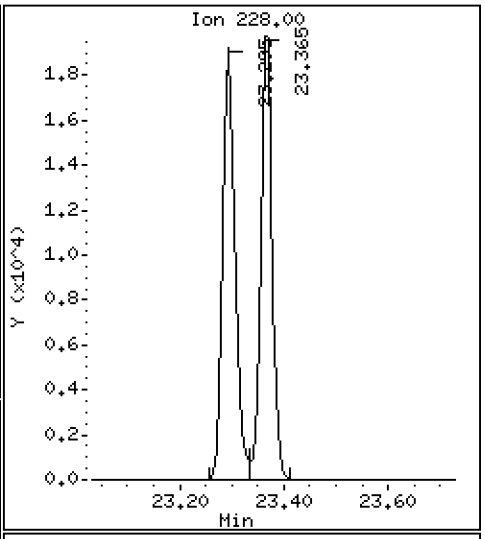
Column phase: ZB-5msi

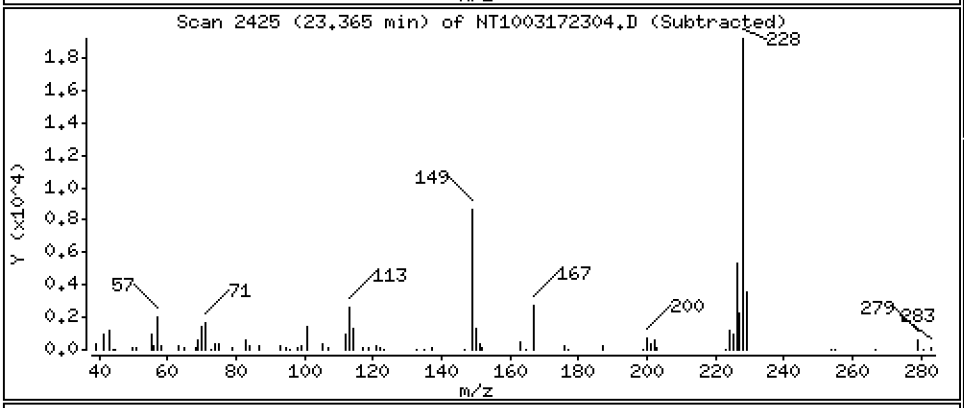
Column diameter: 0.25

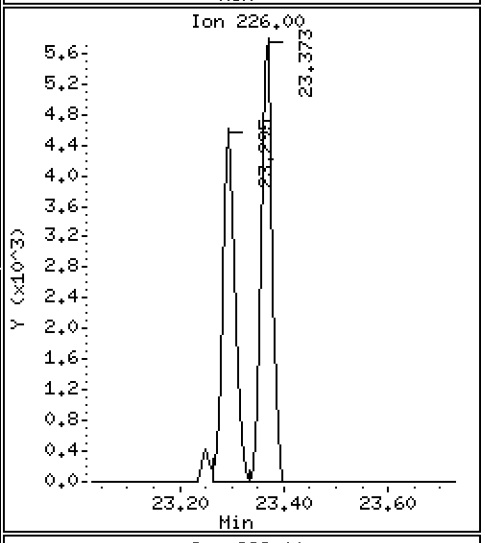
71 Chrysene

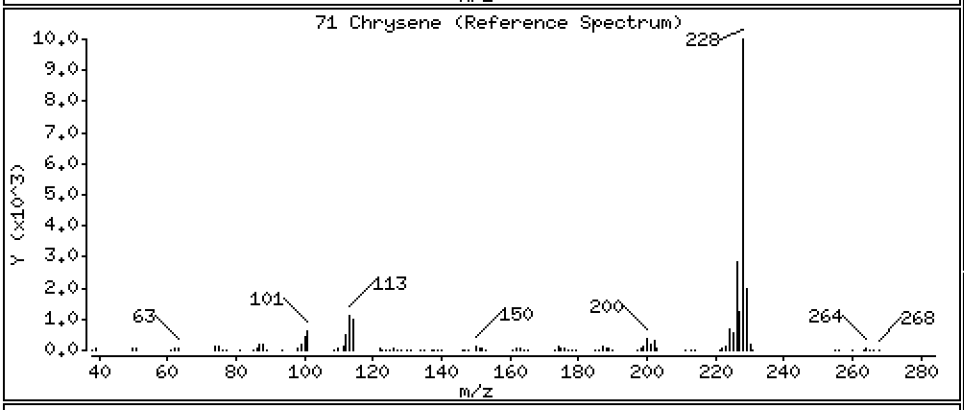
Concentration: 0.2103 ug/mL

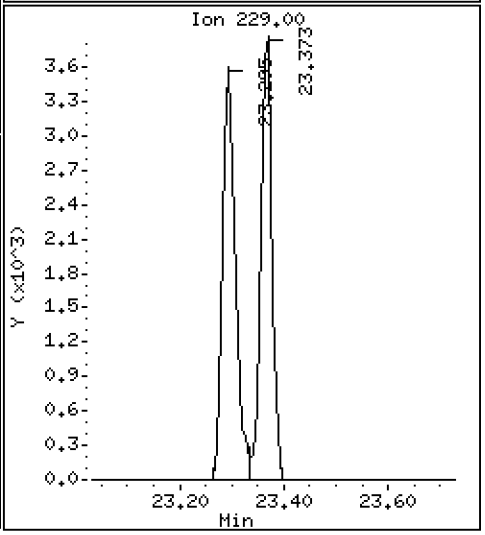


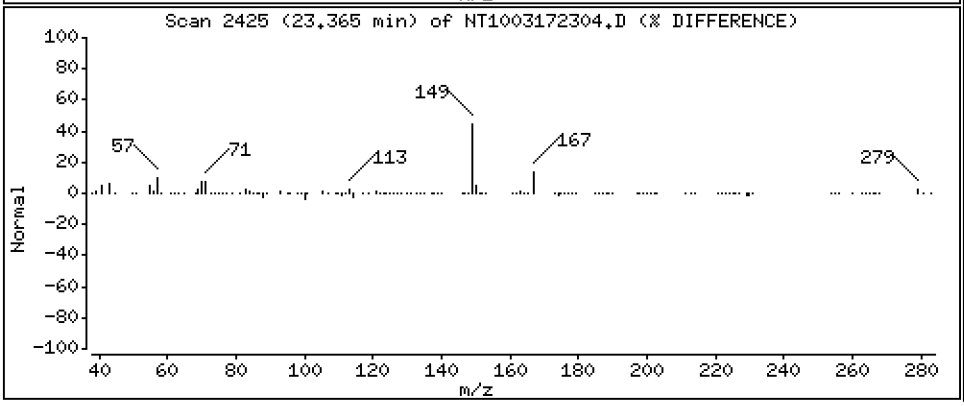












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

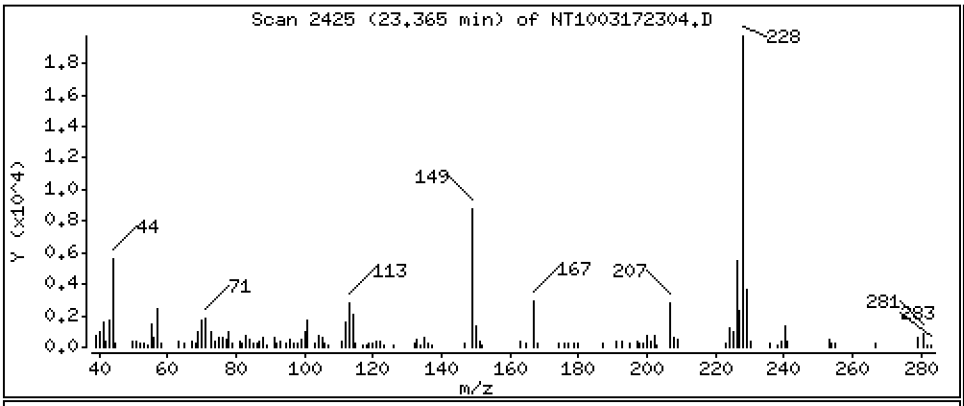
Operator: VTS

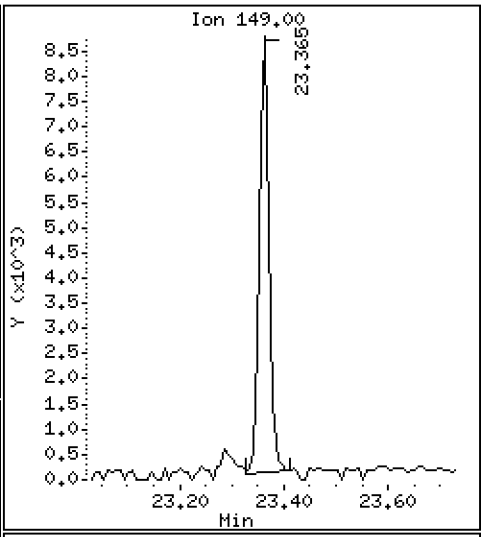
Column phase: ZB-5msi

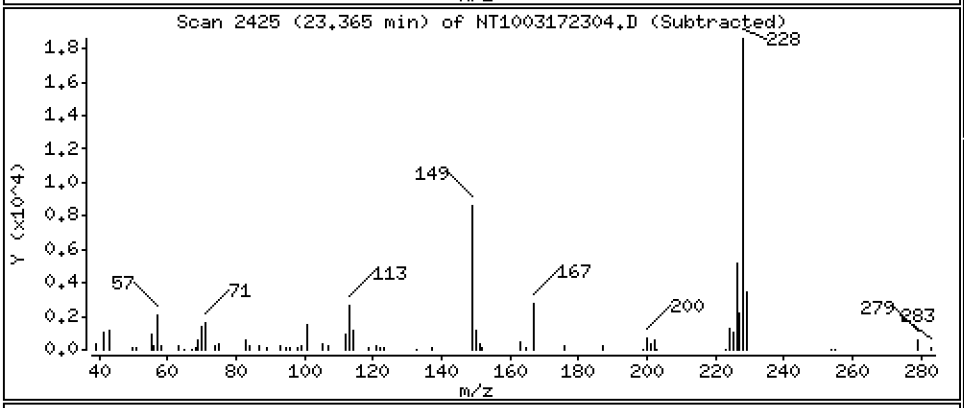
Column diameter: 0.25

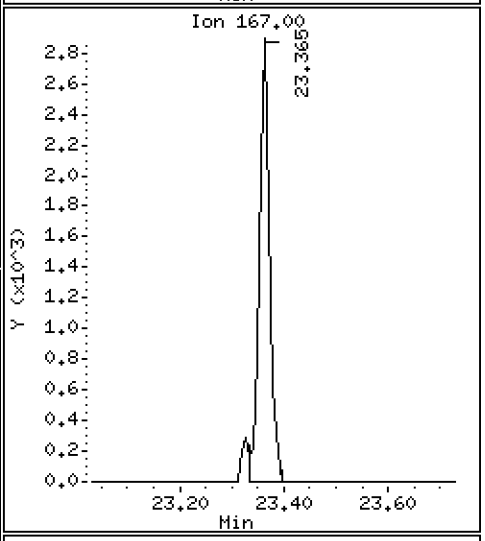
72 bis(2-Ethylhexyl)phthalate

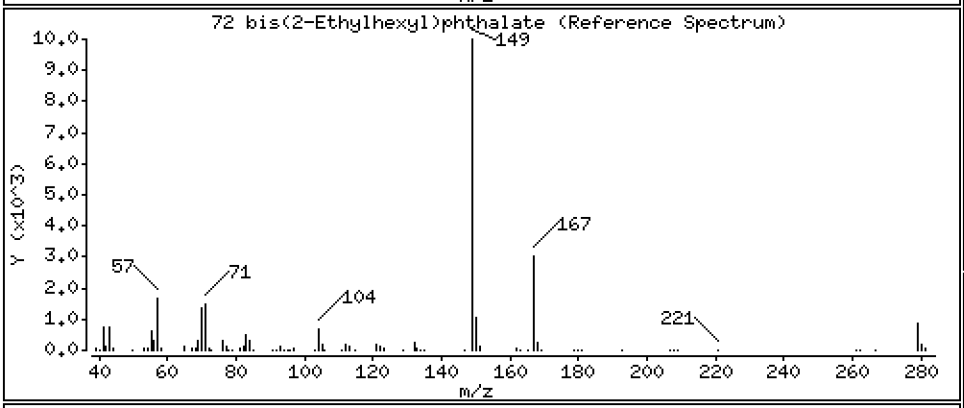
Concentration: 0.1267 ug/mL

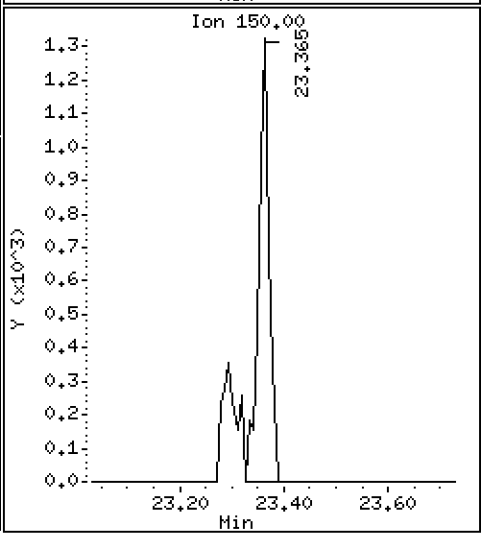


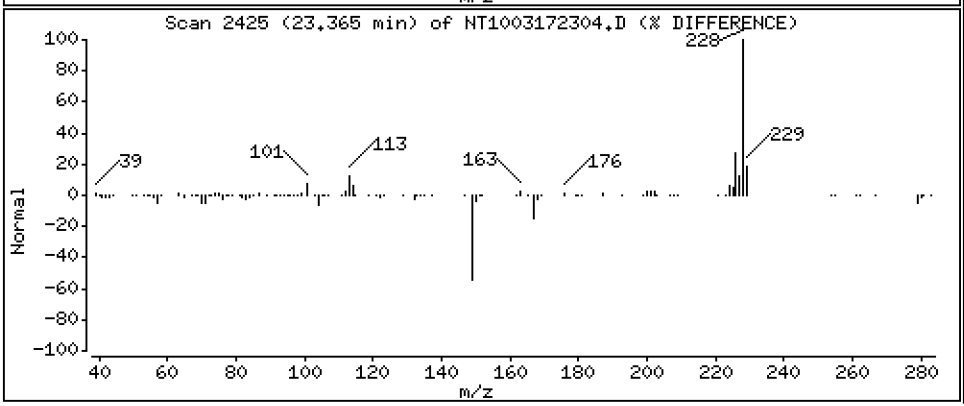












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

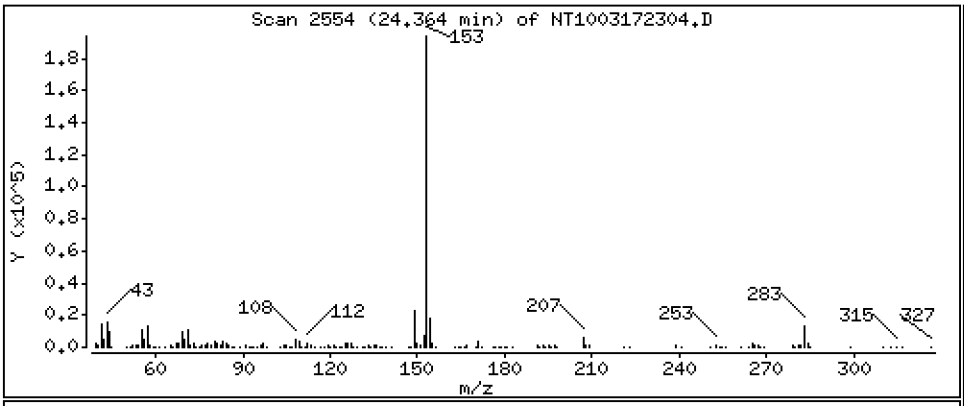
Operator: VTS

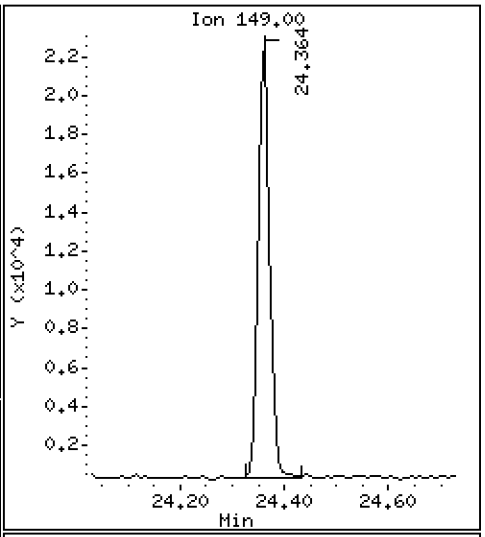
Column phase: ZB-5msi

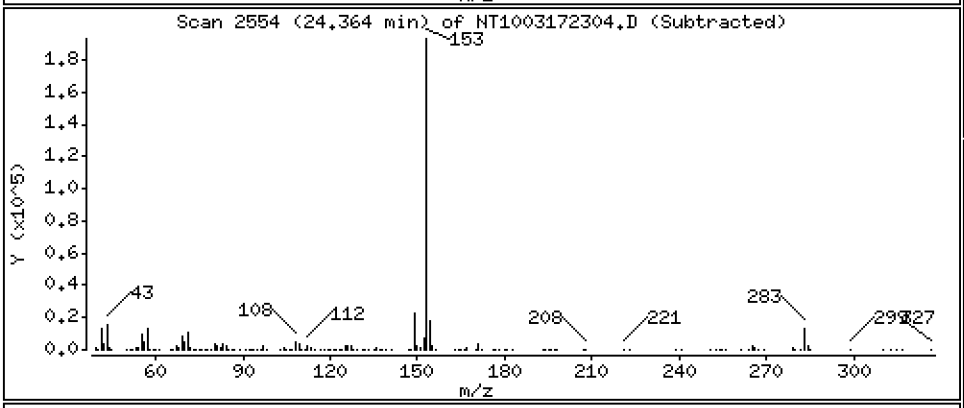
Column diameter: 0.25

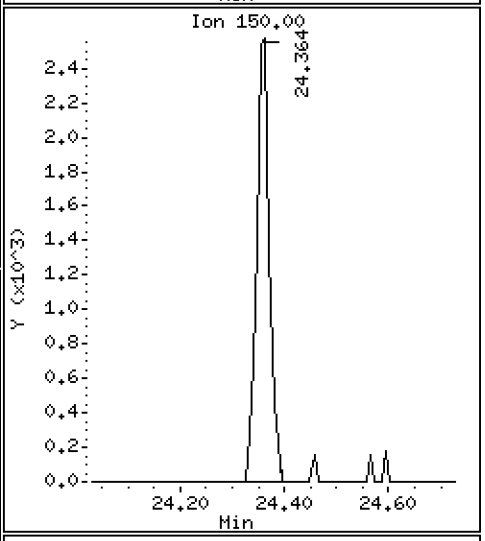
73 Di-n-octylphthalate

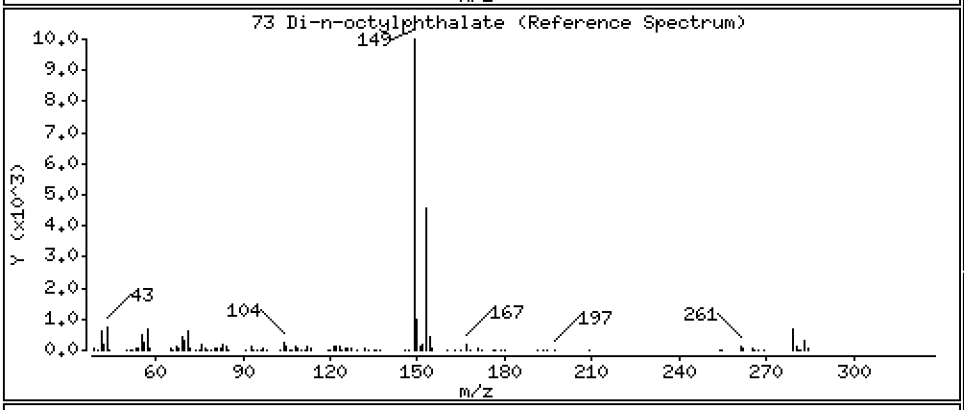
Concentration: 0.2050 ug/mL

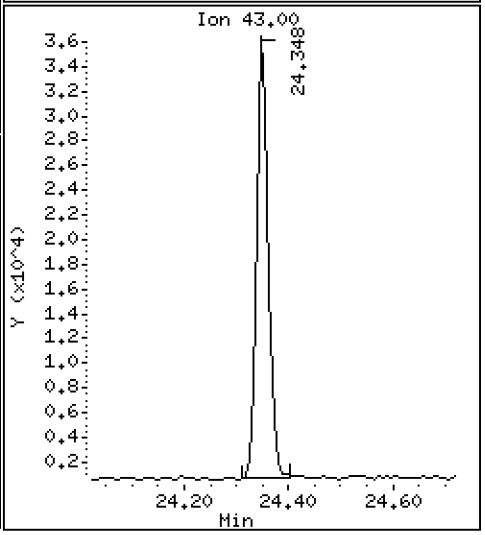


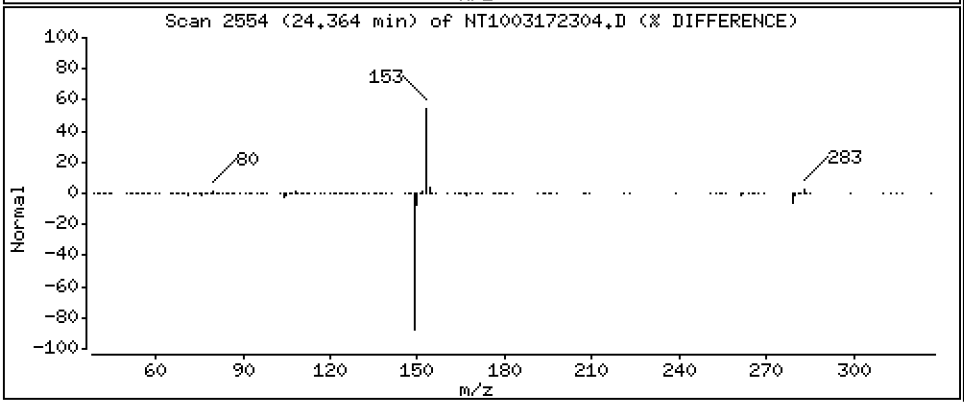












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

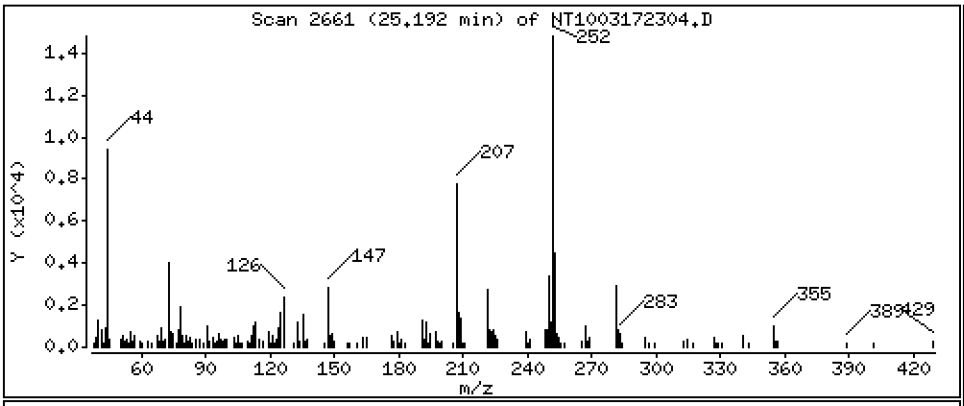
Operator: VTS

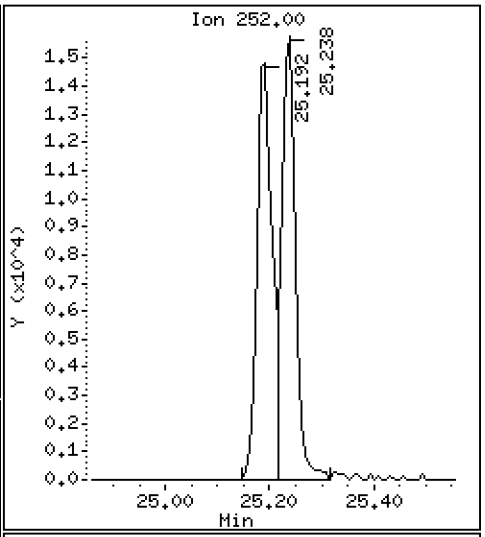
Column phase: ZB-5msi

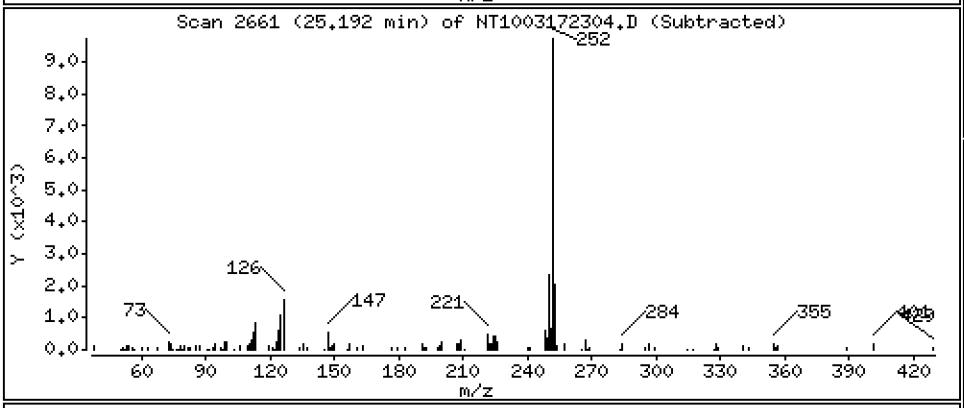
Column diameter: 0.25

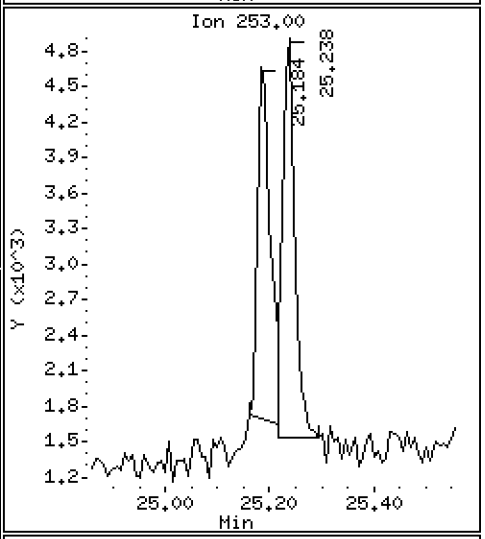
74 Benzo(b)fluoranthene

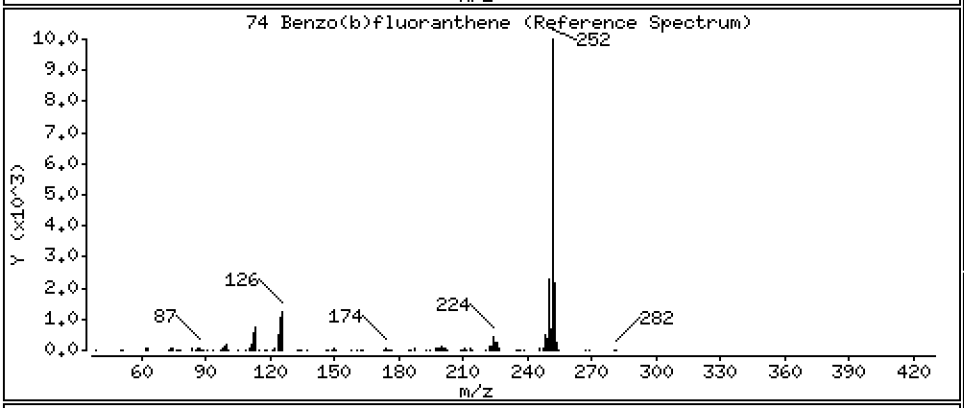
Concentration: 0.2017 ug/mL

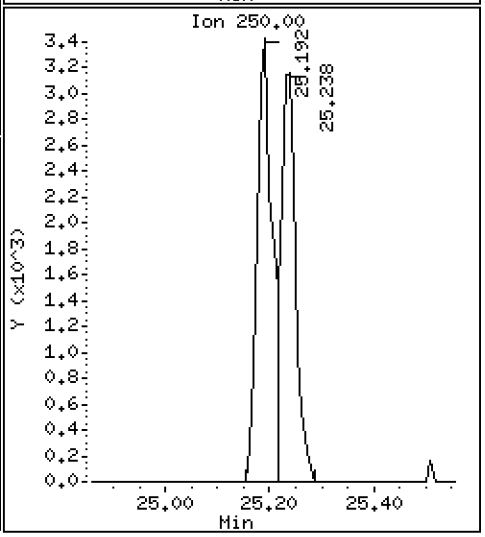


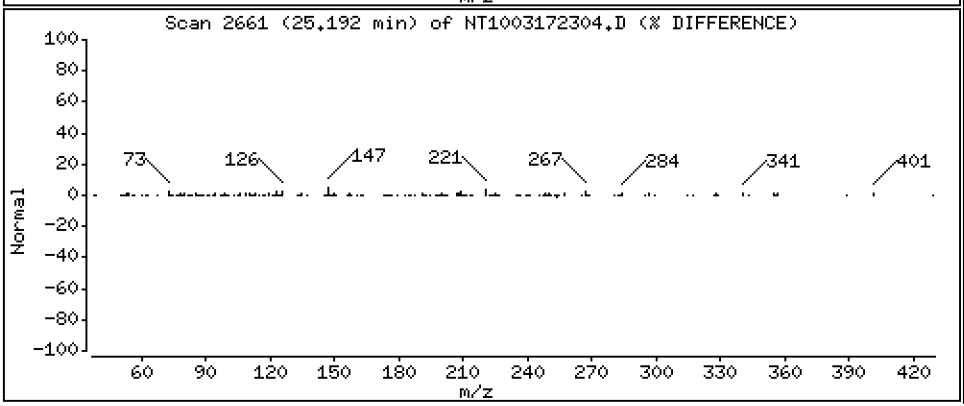












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

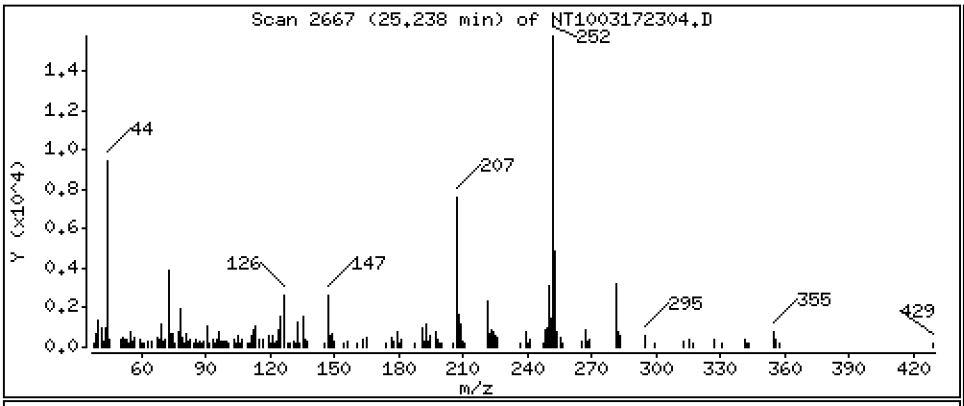
Operator: VTS

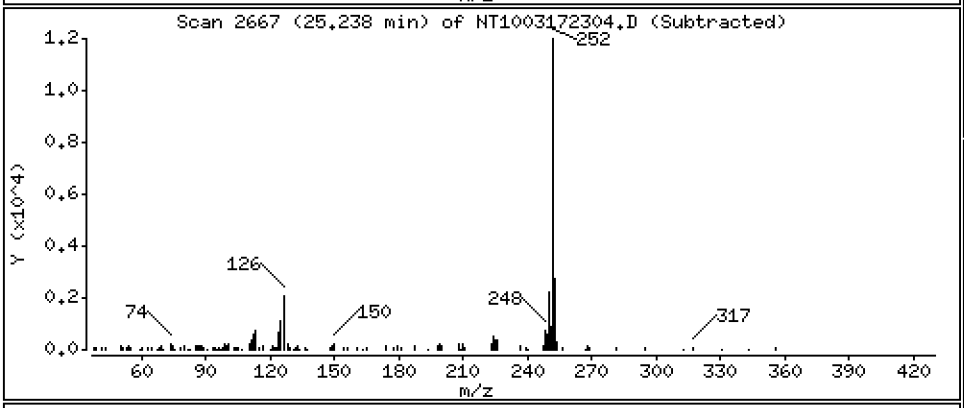
Column phase: ZB-5msi

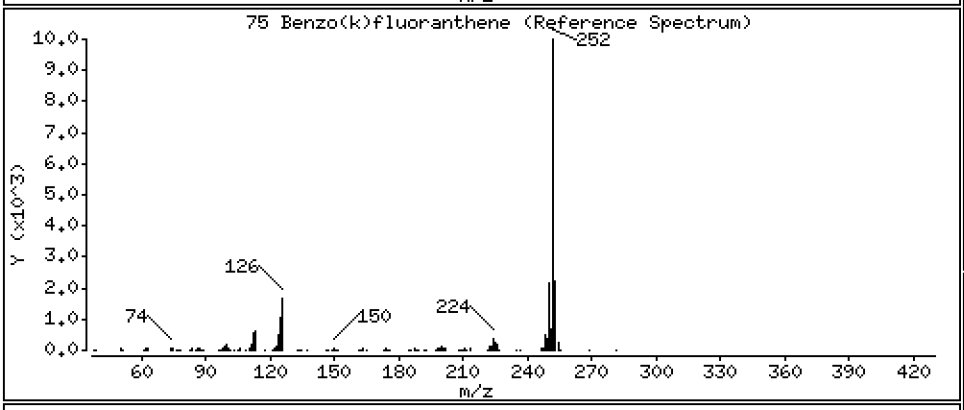
Column diameter: 0.25

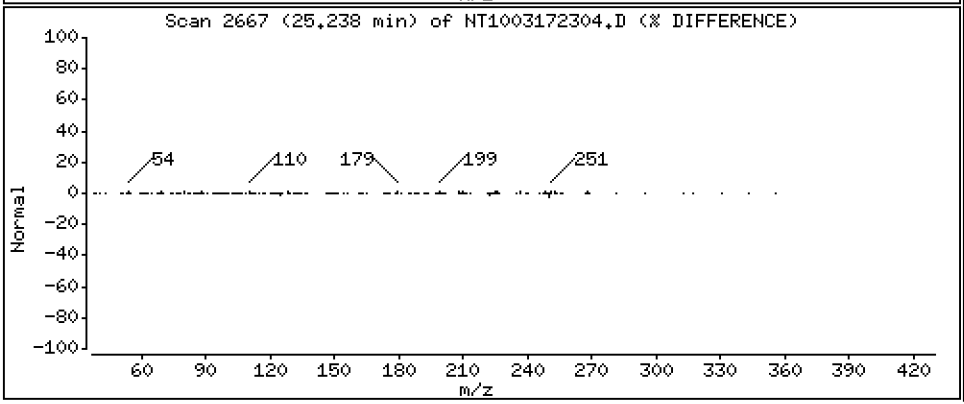
75 Benzo(k)fluoranthene

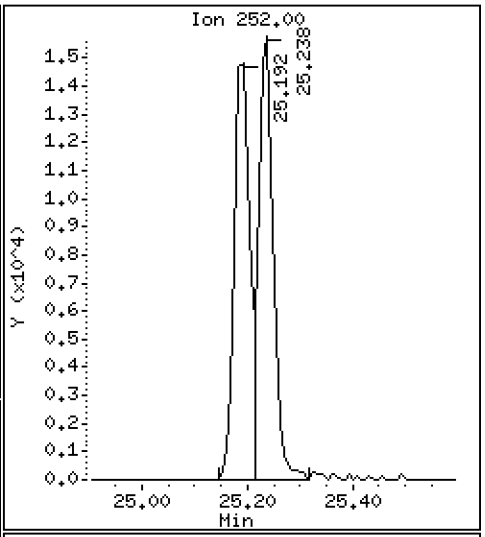
Concentration: 0.2030 ug/mL

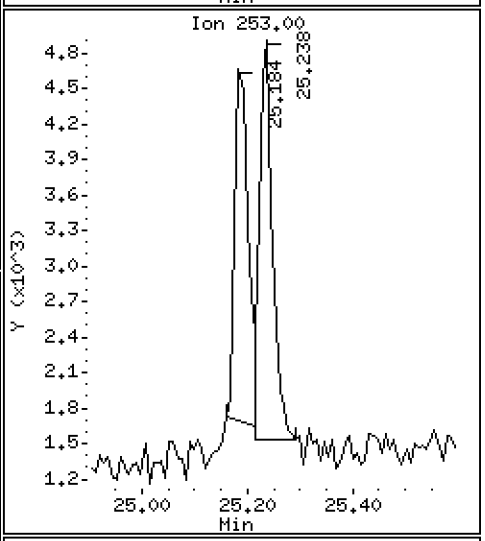


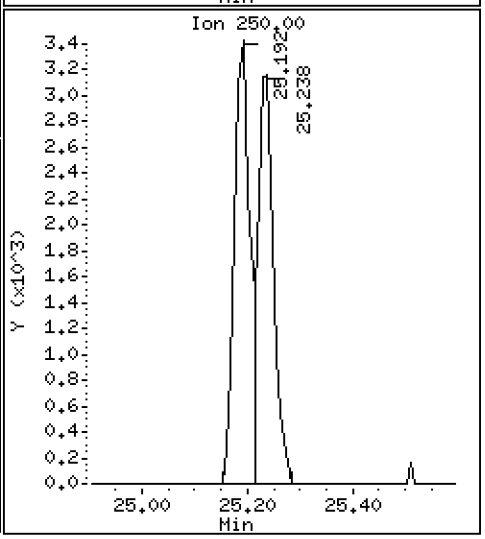












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

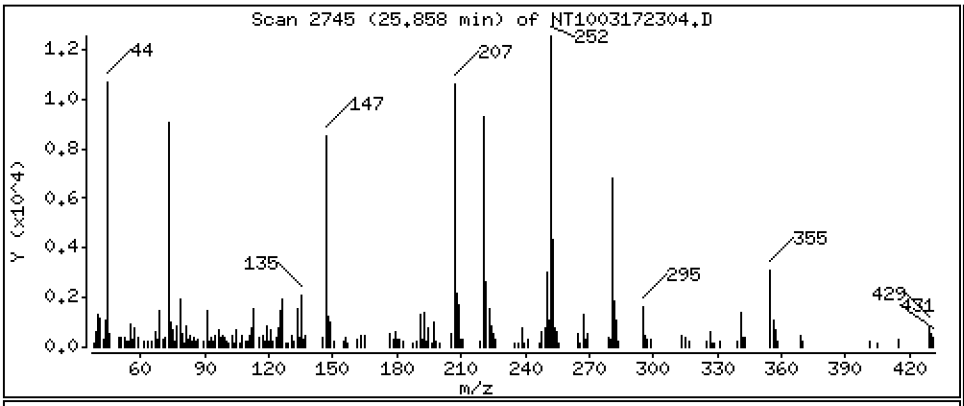
Operator: VTS

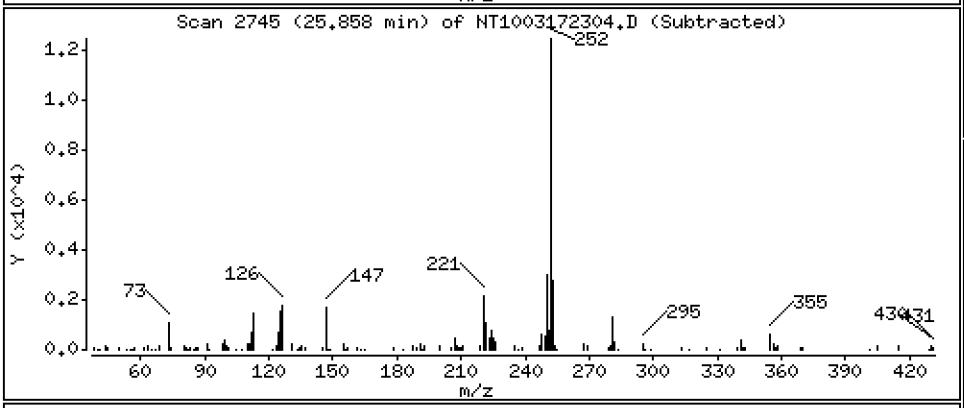
Column phase: ZB-5msi

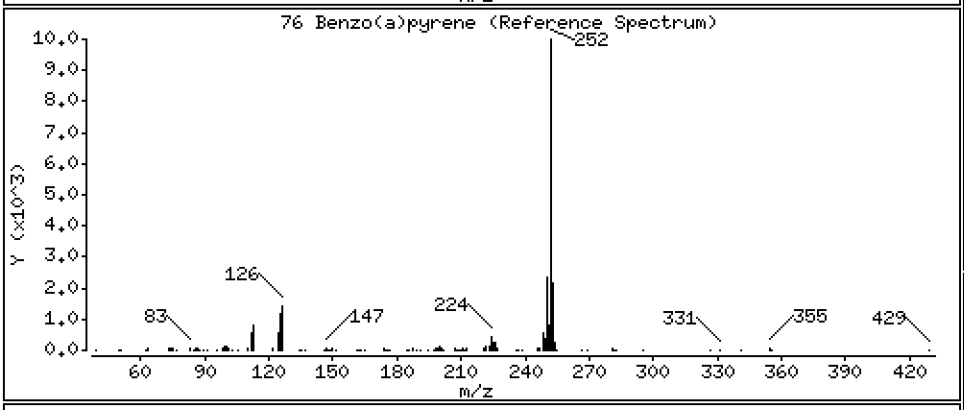
Column diameter: 0.25

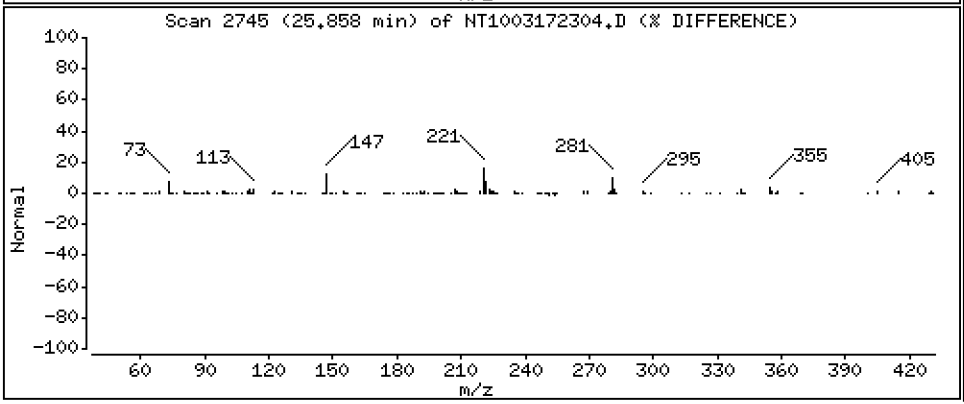
76 Benzo(a)pyrene

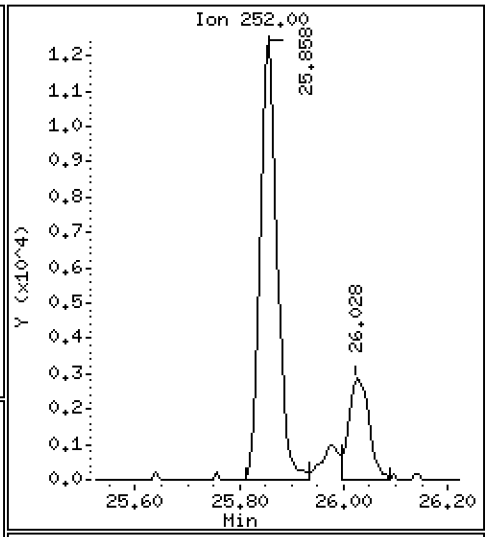
Concentration: 0.2106 ug/mL

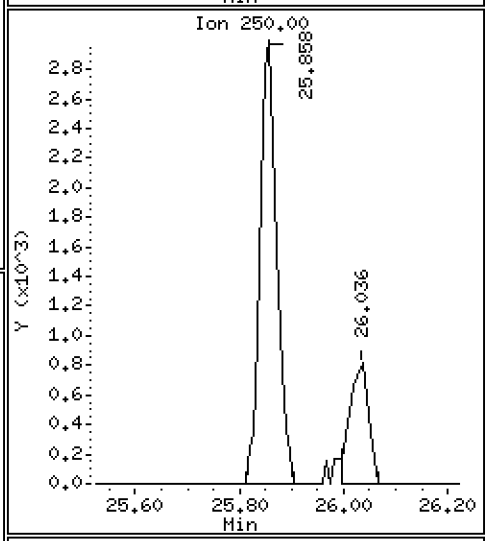


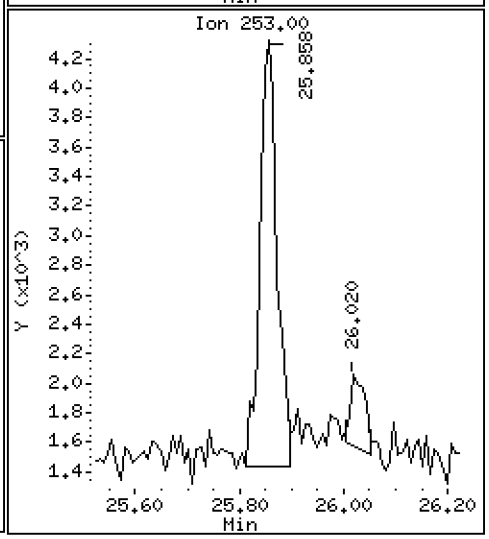












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

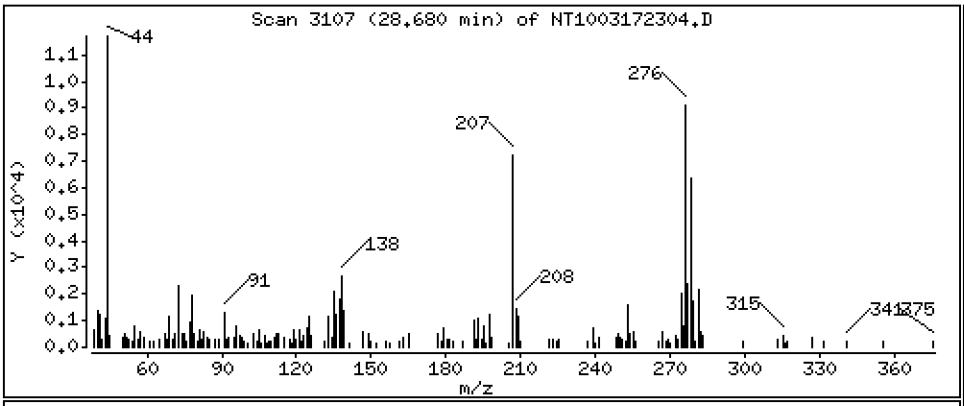
Operator: VTS

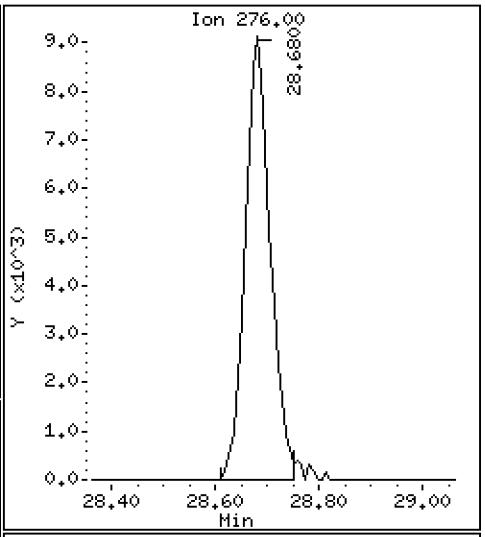
Column phase: ZB-5msi

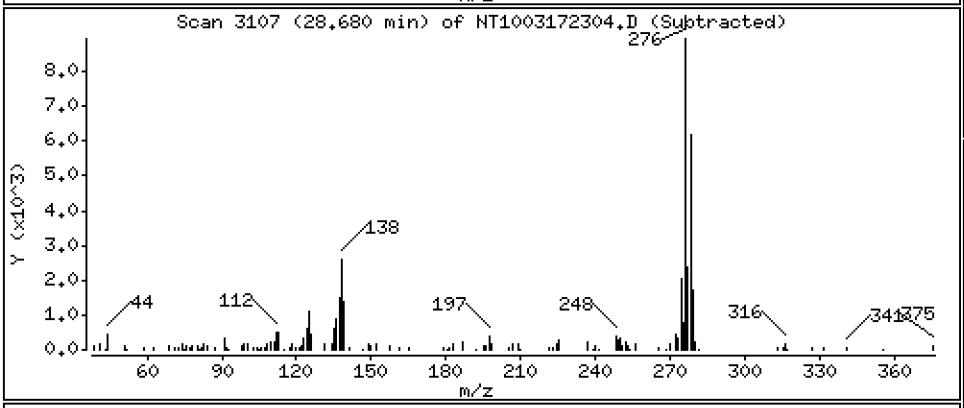
Column diameter: 0.25

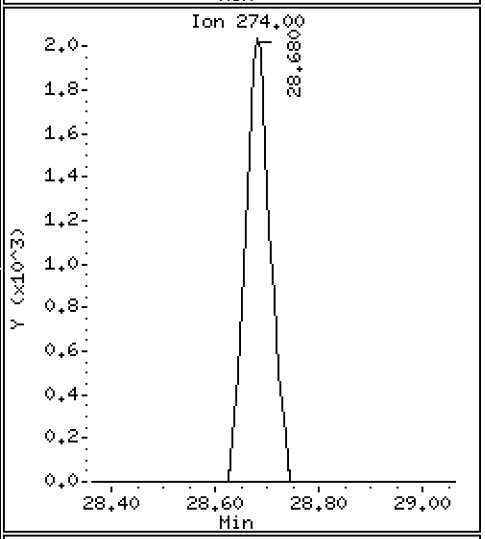
78 Indeno(1,2,3-cd)pyrene

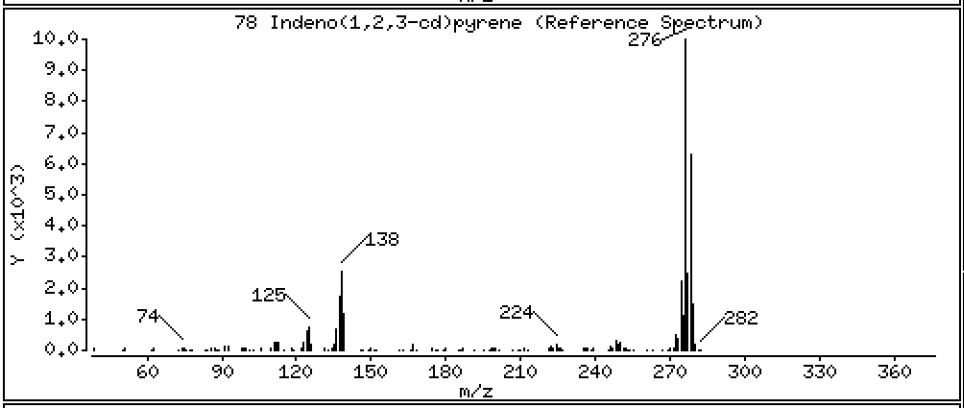
Concentration: 0.1801 ug/mL

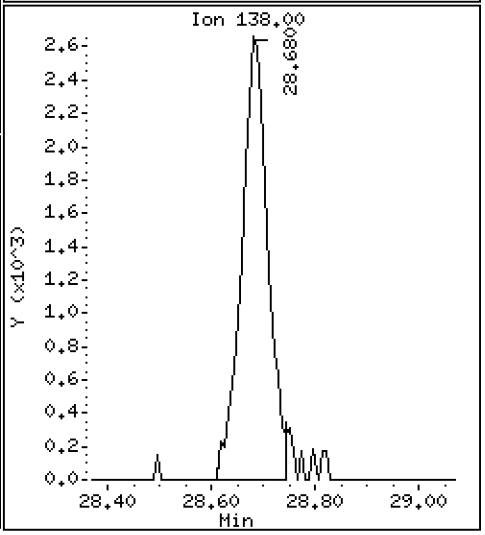


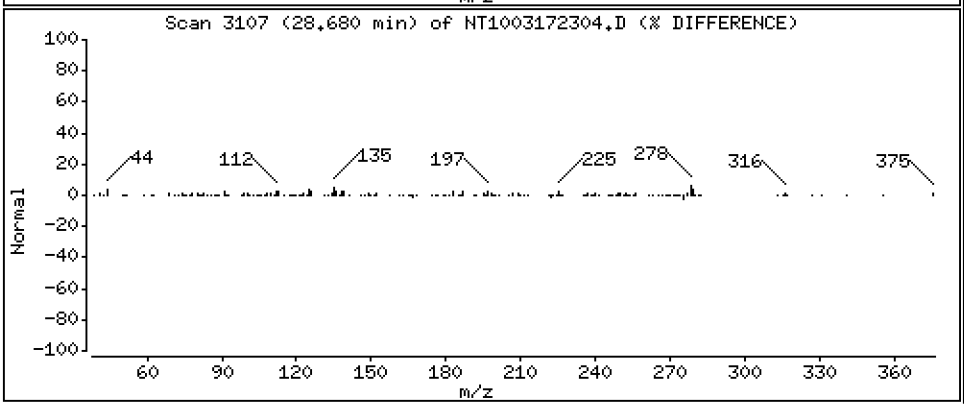












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

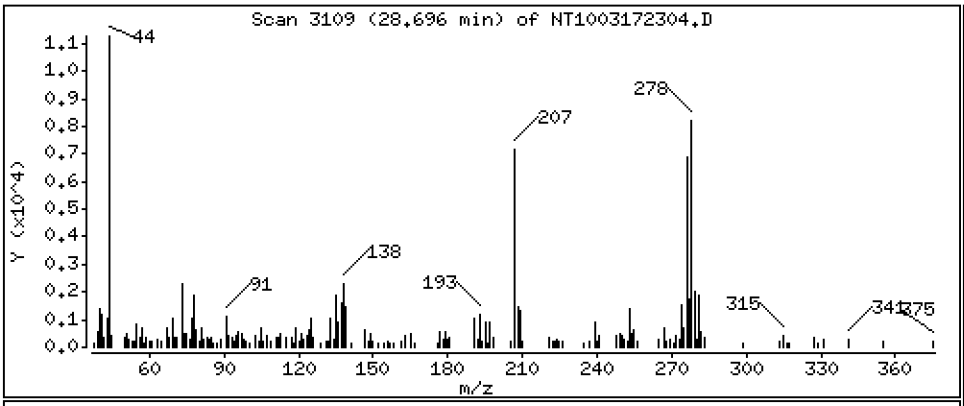
Operator: VTS

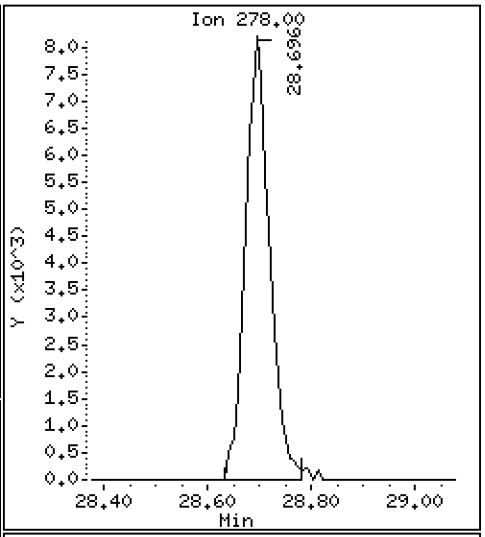
Column phase: ZB-5msi

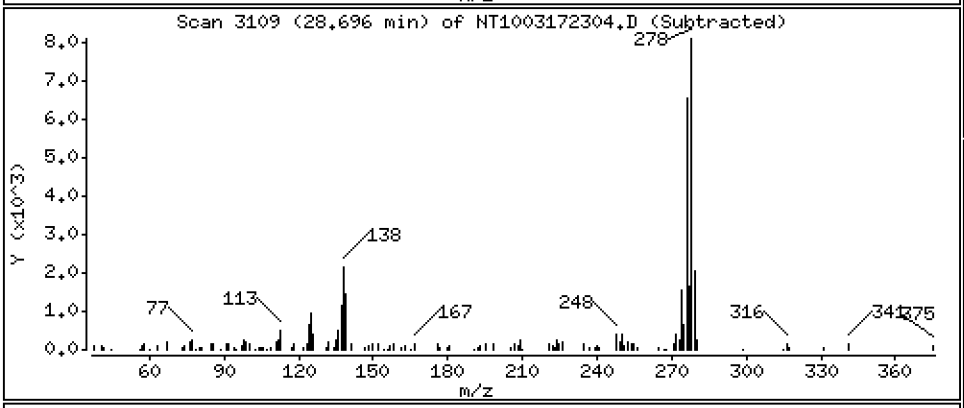
Column diameter: 0.25

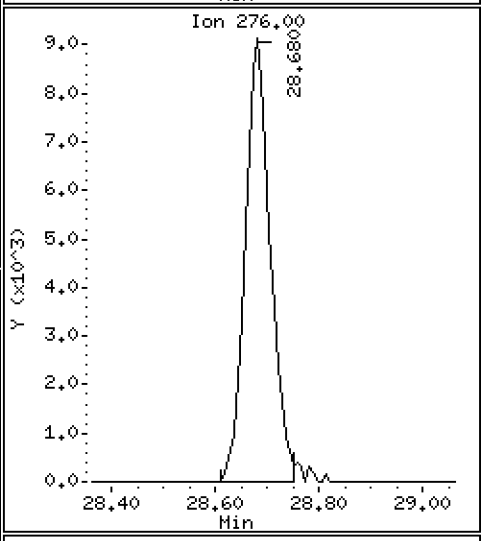
79 Dibenzo(a,h)anthracene

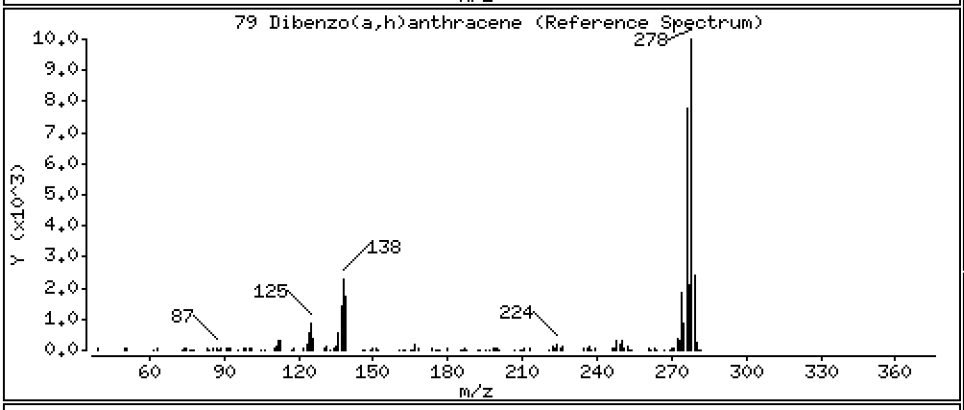
Concentration: 0.1880 ug/mL

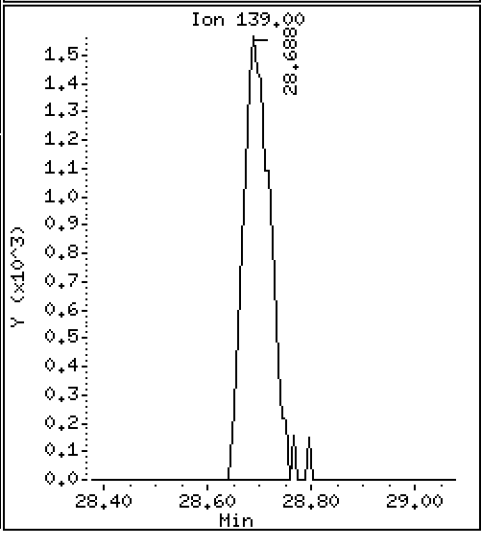


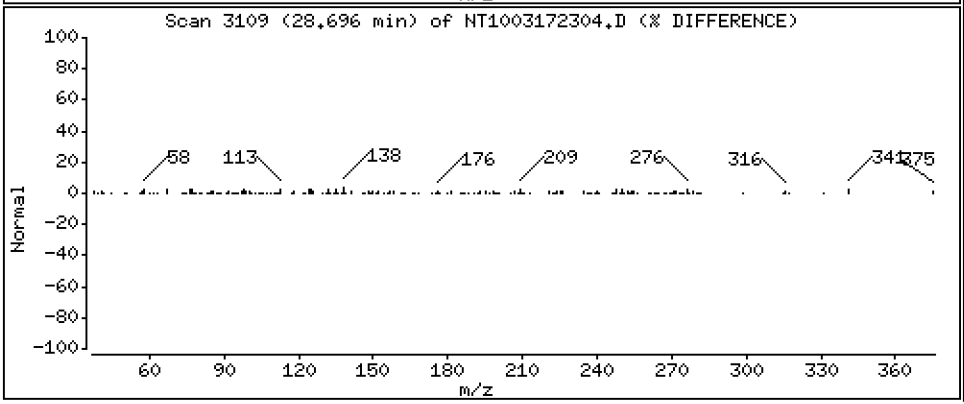












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

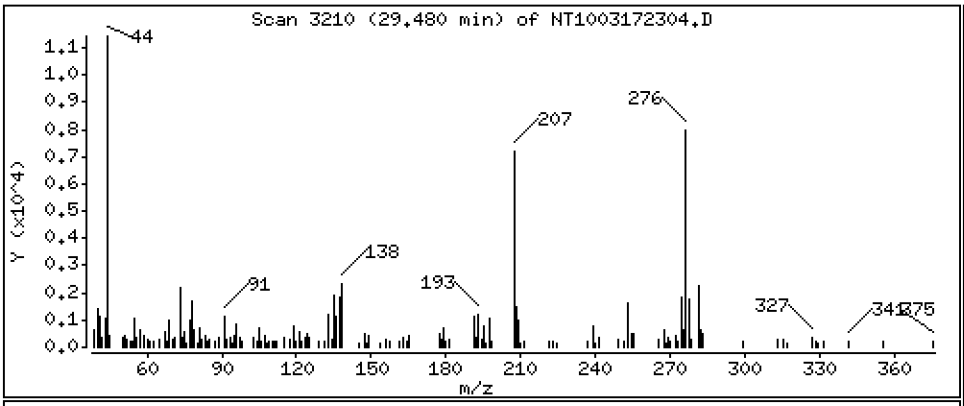
Operator: VTS

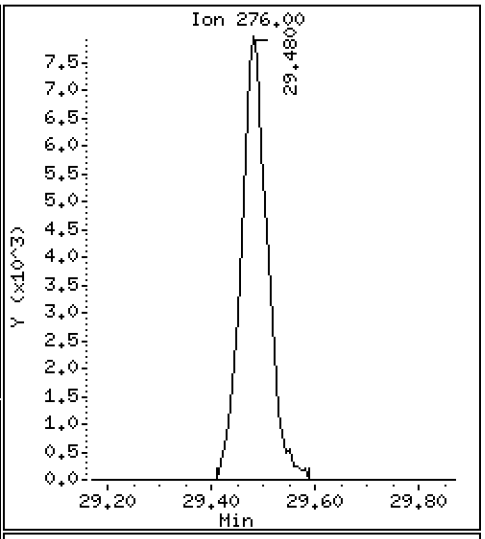
Column phase: ZB-5msi

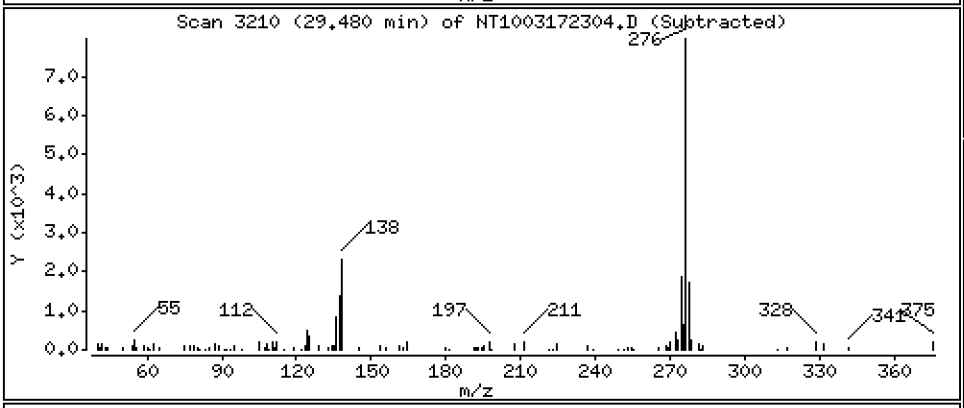
Column diameter: 0.25

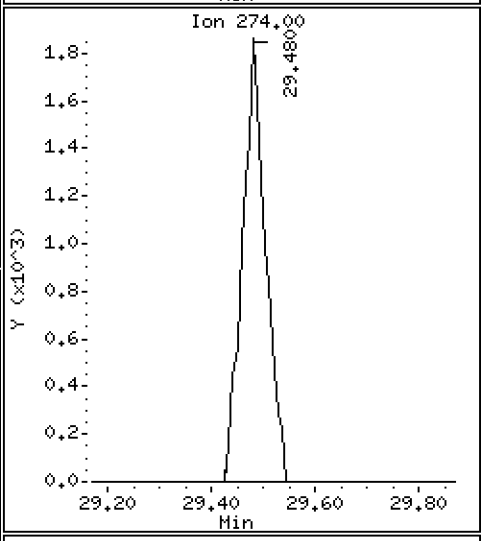
80 Benzo(g,h,i)perylene

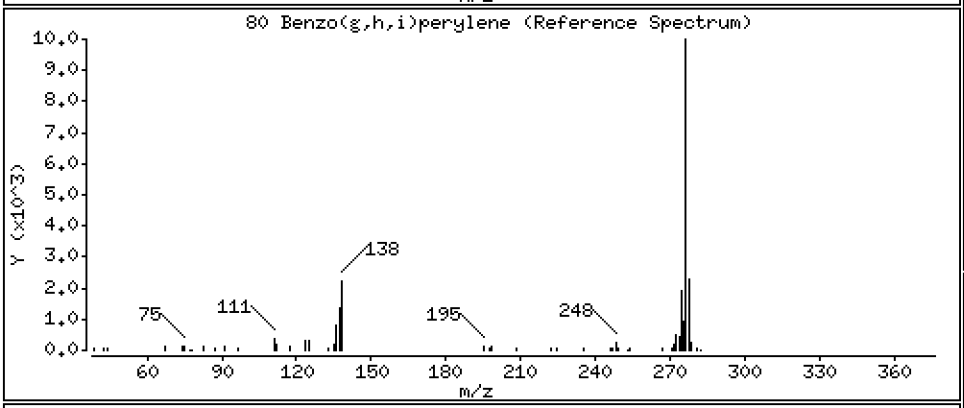
Concentration: 0.1898 ug/mL

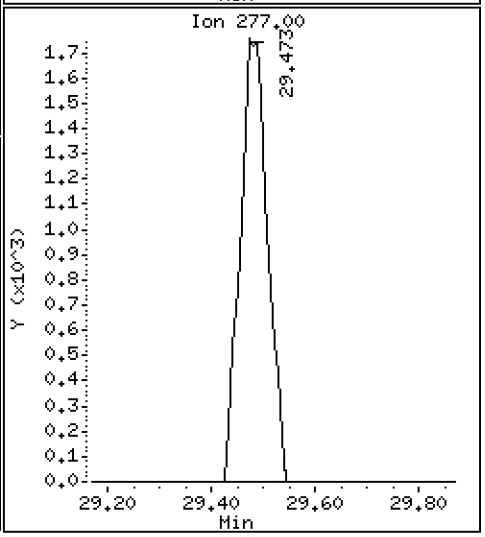


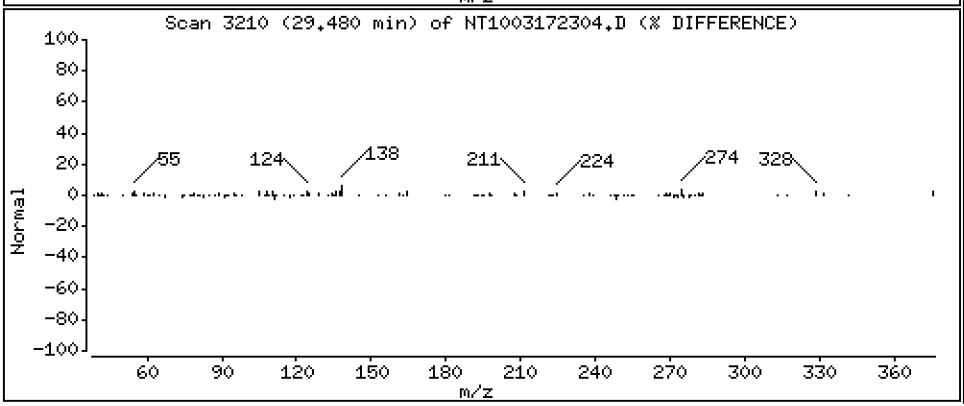












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

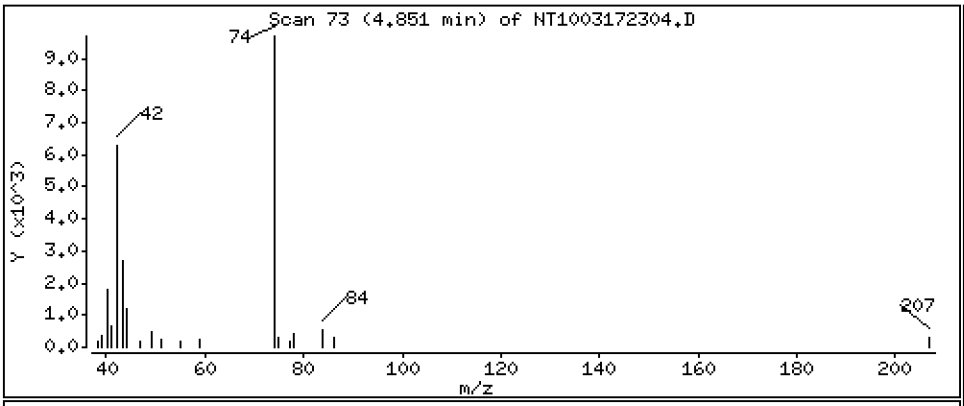
Operator: VTS

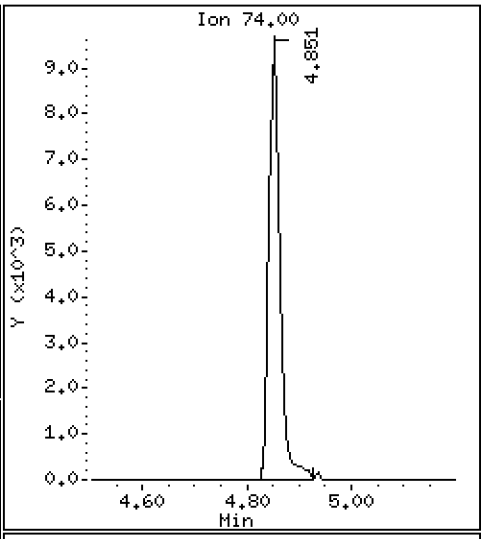
Column phase: ZB-5msi

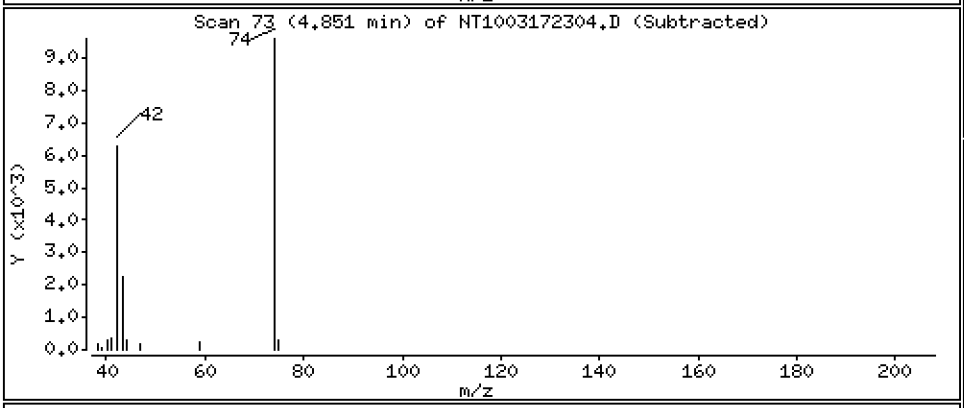
Column diameter: 0.25

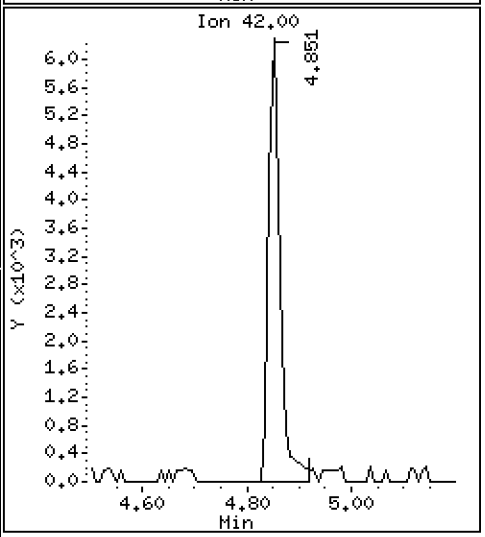
90 N-Nitrosodimethylamine

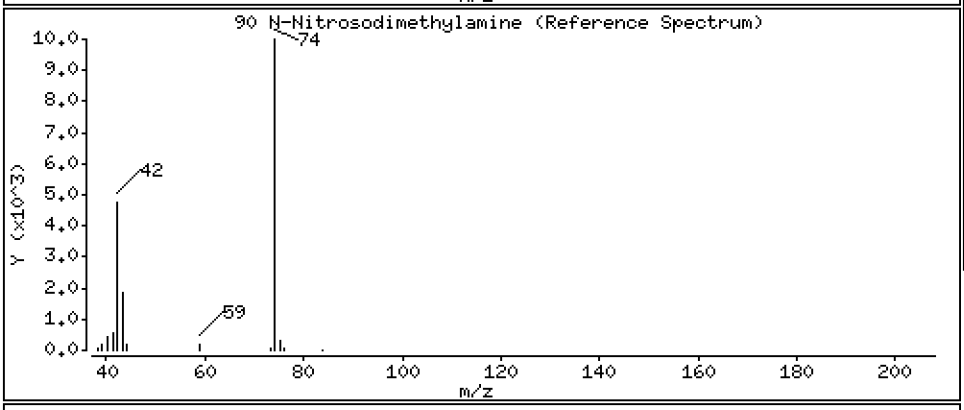
Concentration: 0.4505 ug/mL

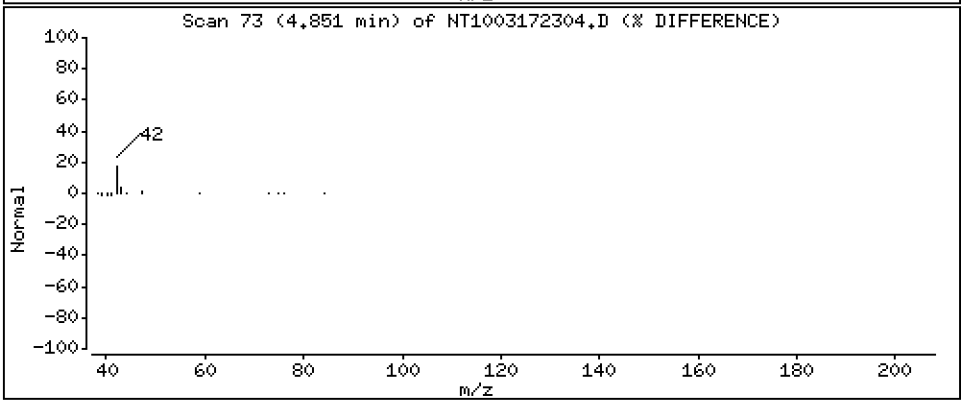












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

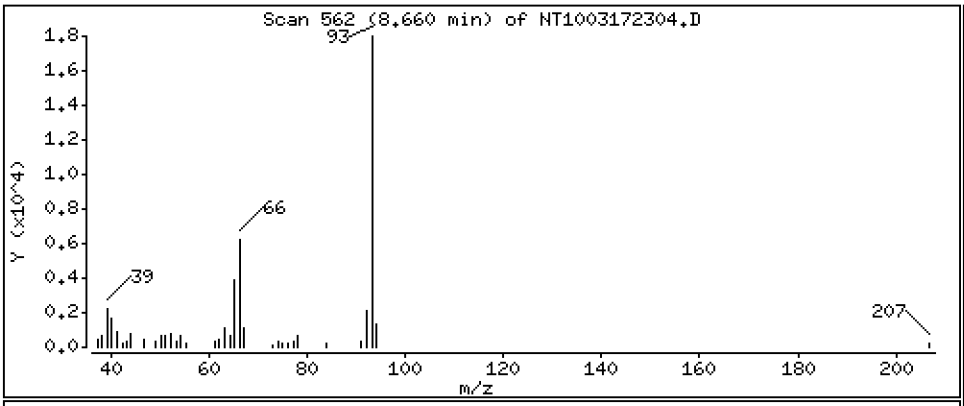
Operator: VTS

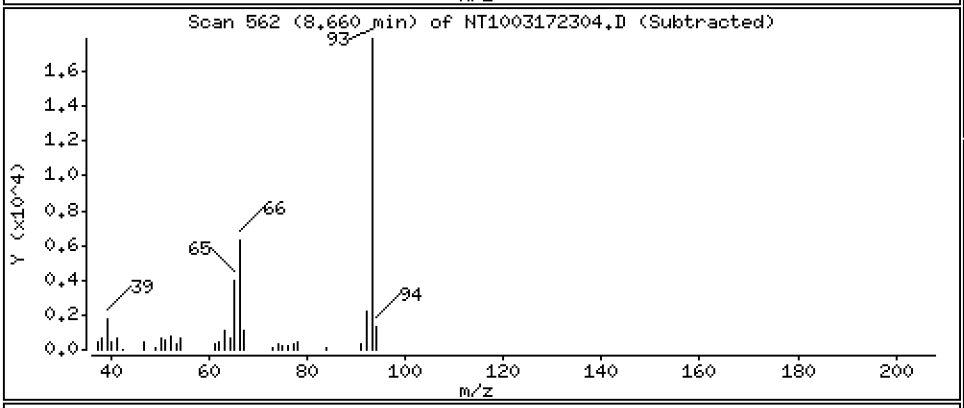
Column phase: ZB-5msi

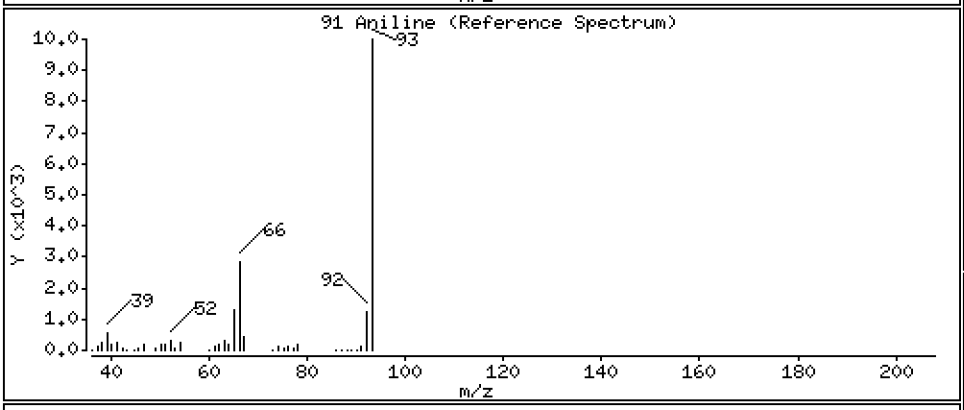
Column diameter: 0.25

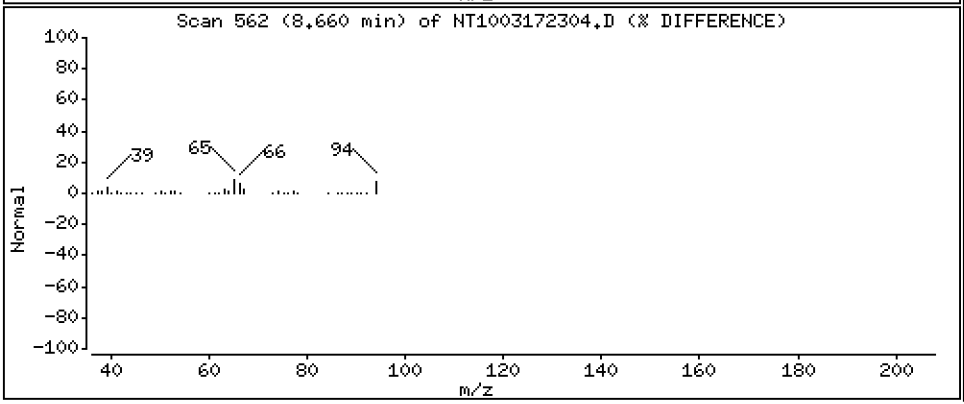
91 Aniline

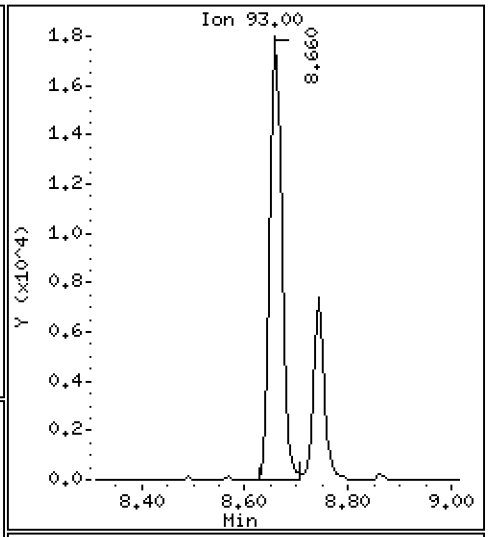
Concentration: 0.4192 ug/mL

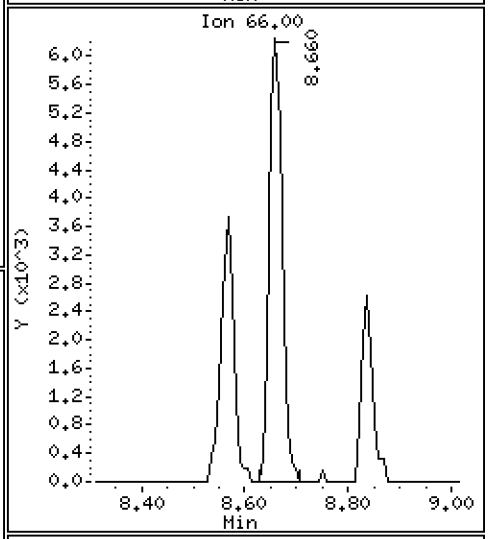


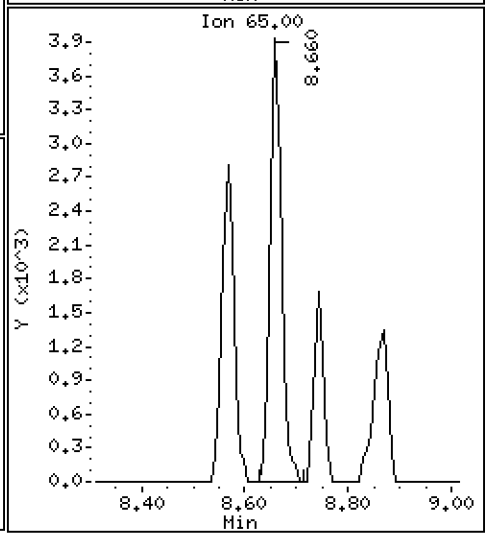












Date : 17-MAR-2023 20:19

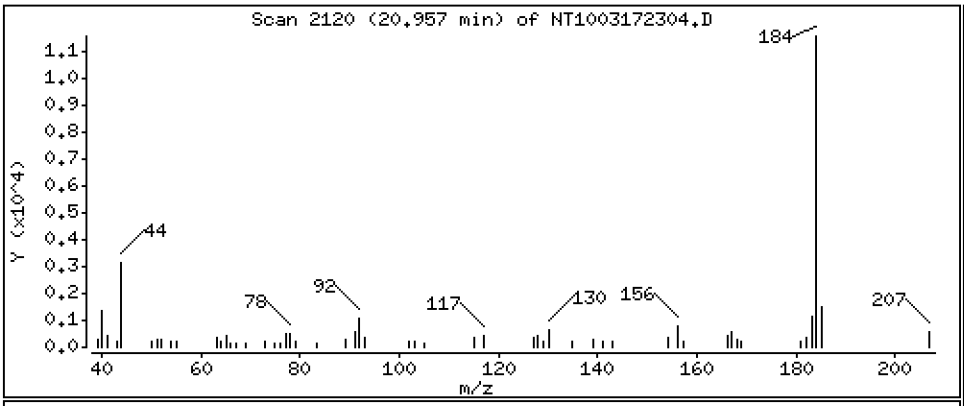
Client ID: Instrument: nt10.i

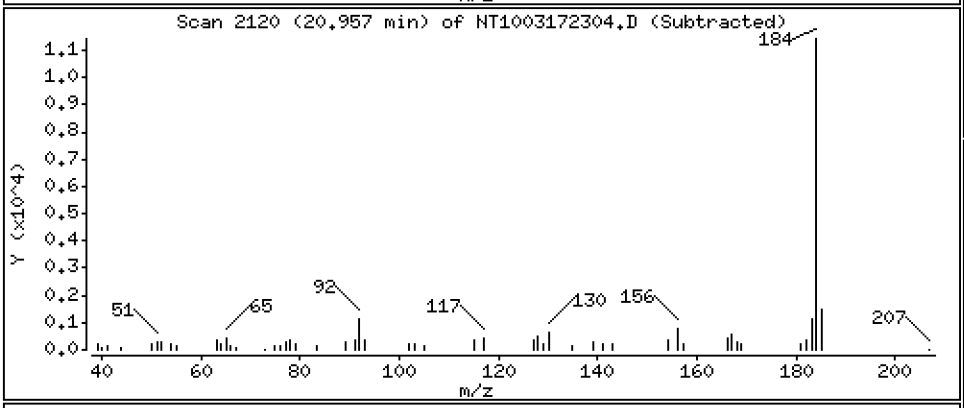
Sample Info: SLC0473-LCV1

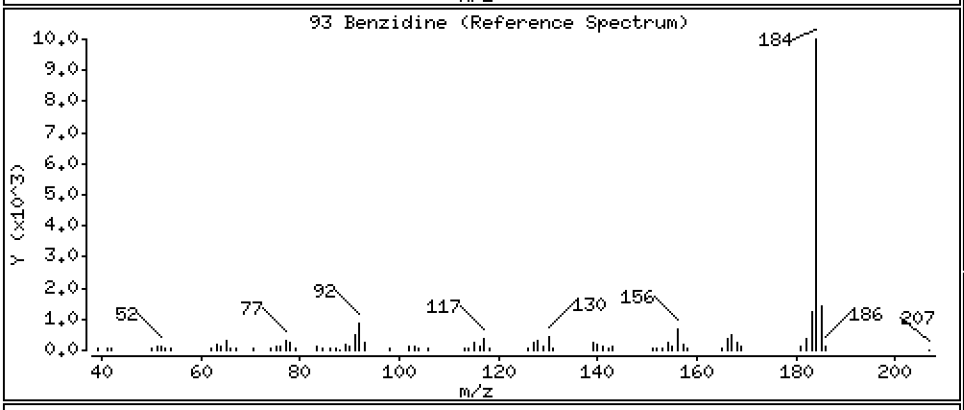
Operator: VTS

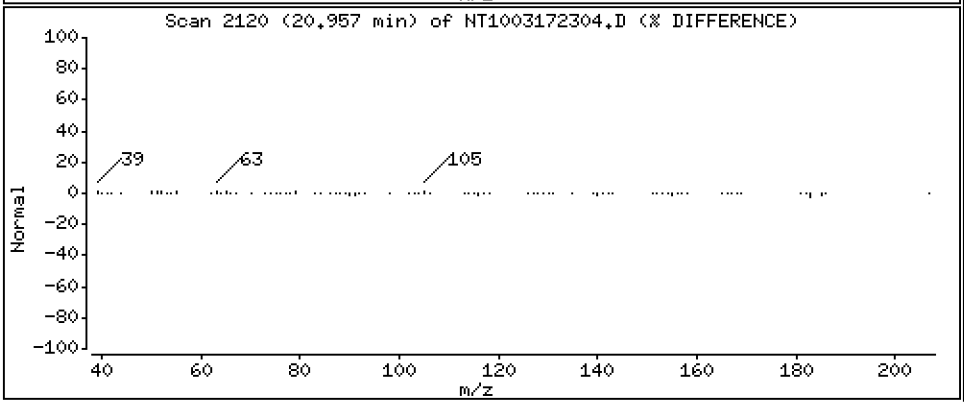
Column phase: ZB-5msi Column diameter: 0.25

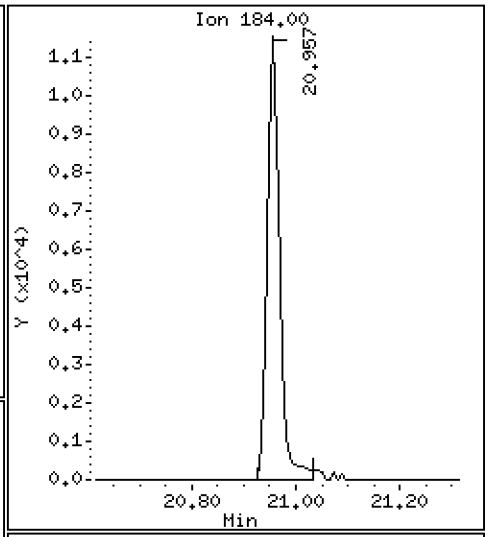
93 Benzidine Concentration: 0.2583 ug/mL

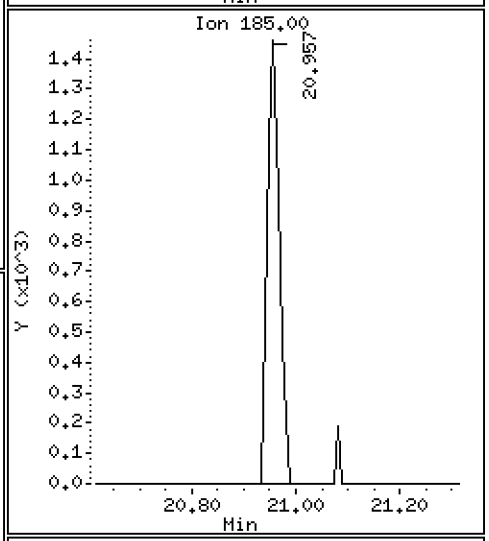


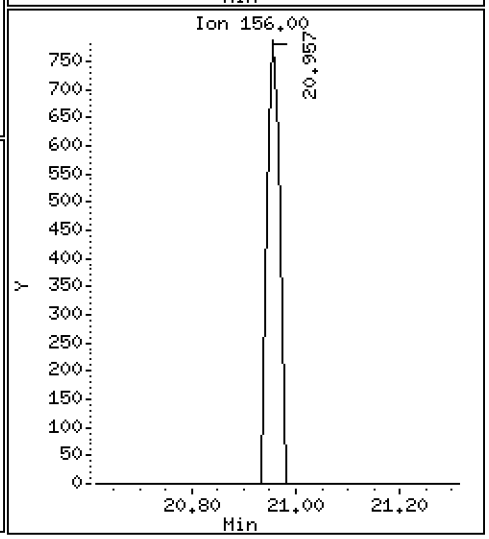












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

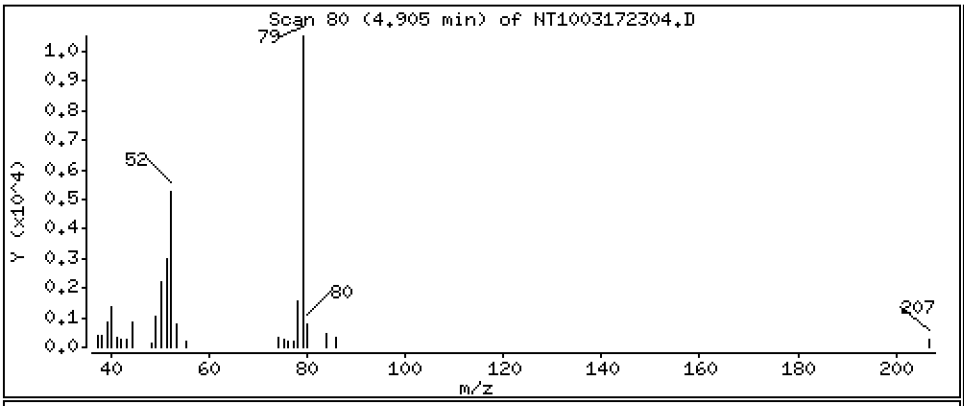
Operator: VTS

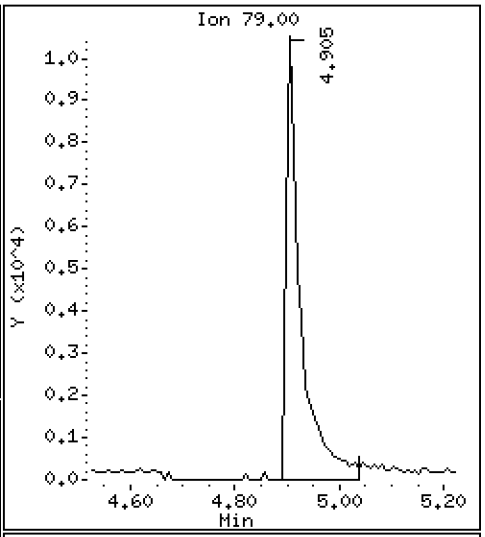
Column phase: ZB-5msi

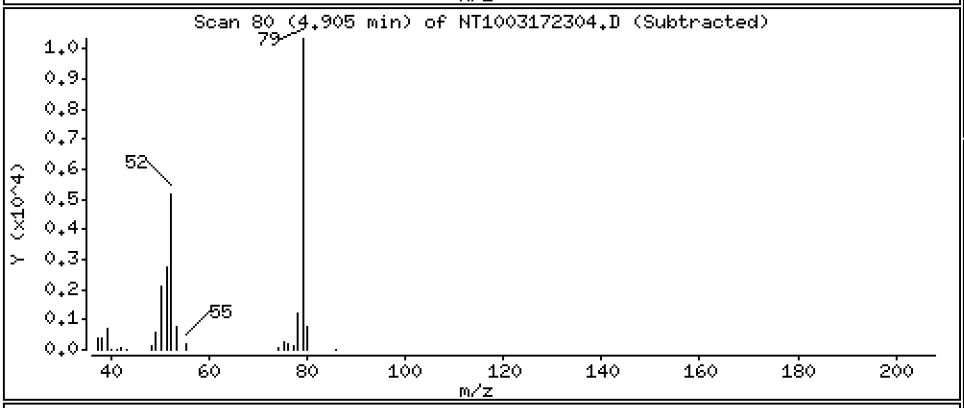
Column diameter: 0.25

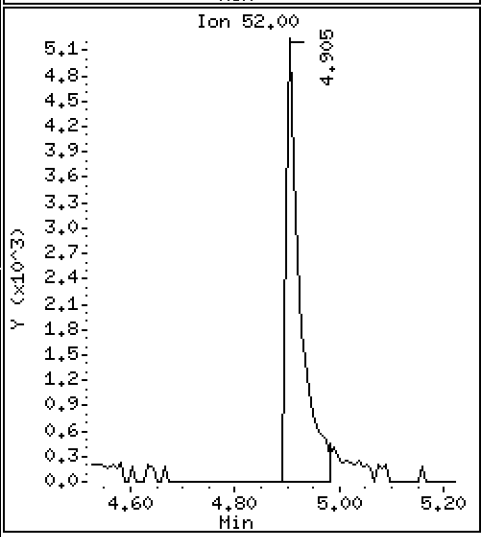
103 Pyridine

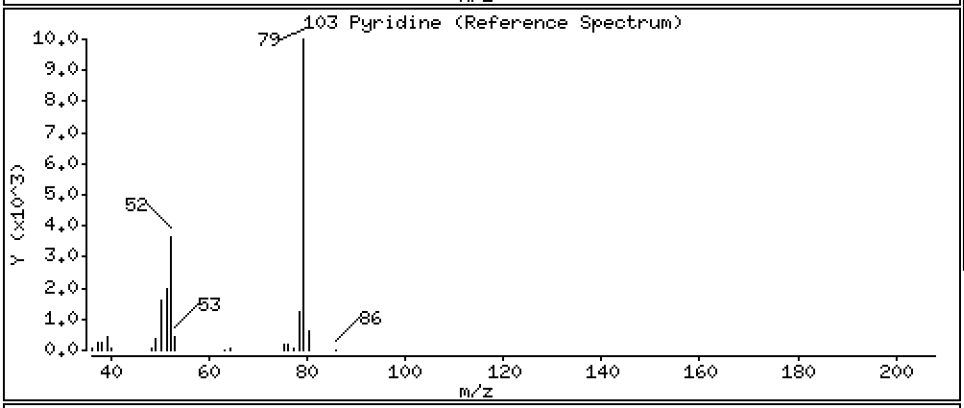
Concentration: 0.4644 ug/mL

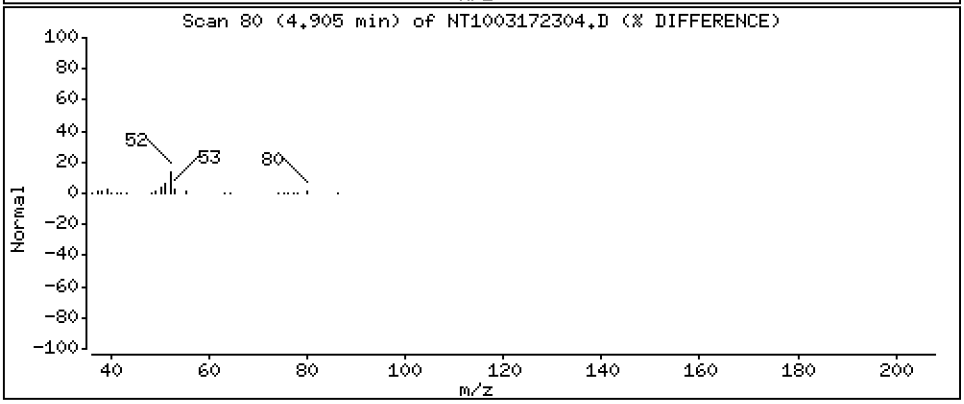












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

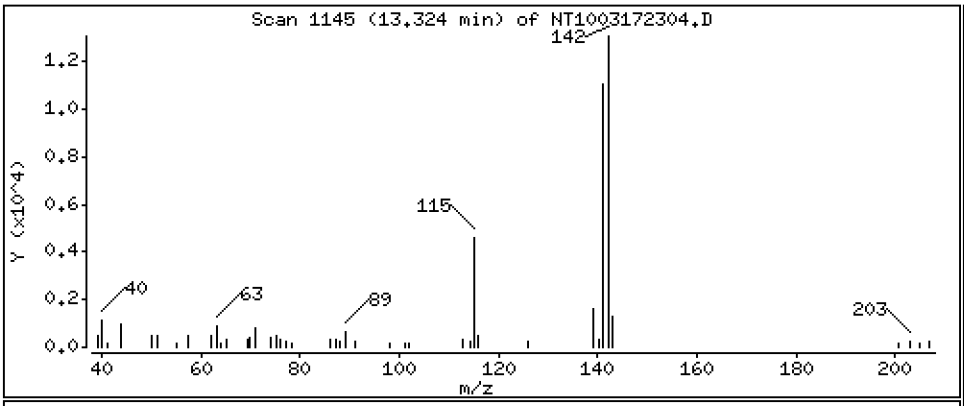
Operator: VTS

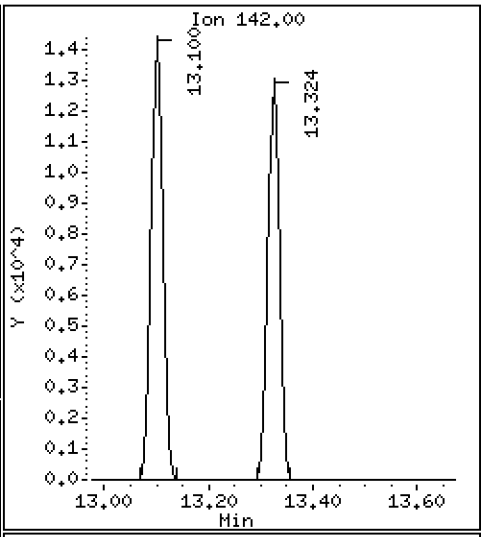
Column phase: ZB-5msi

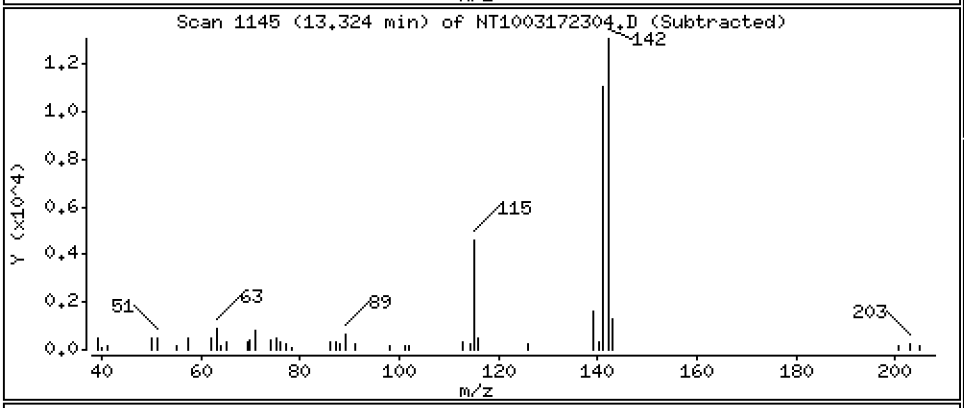
Column diameter: 0.25

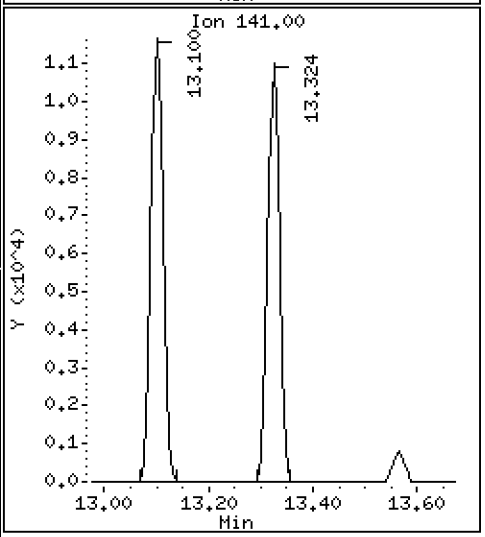
105 1-methylnaphthalene

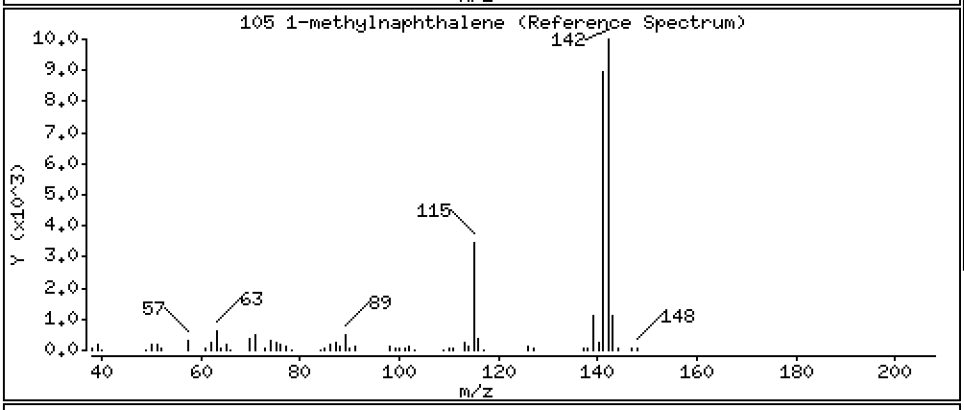
Concentration: 0.2021 ug/mL

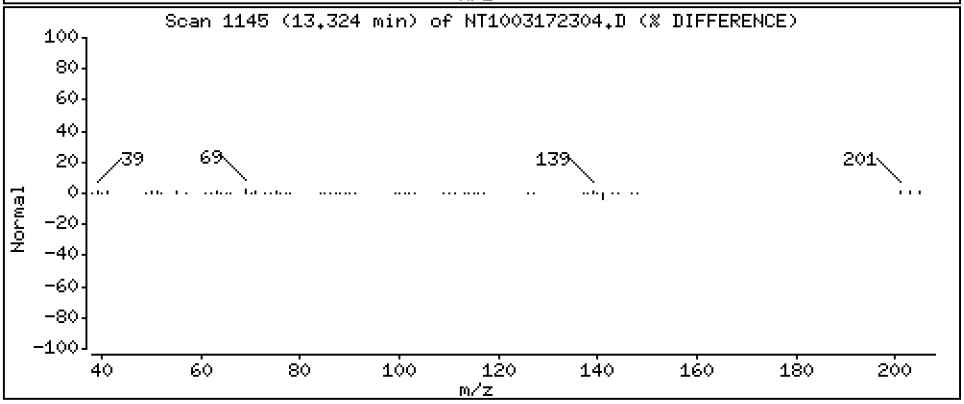












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

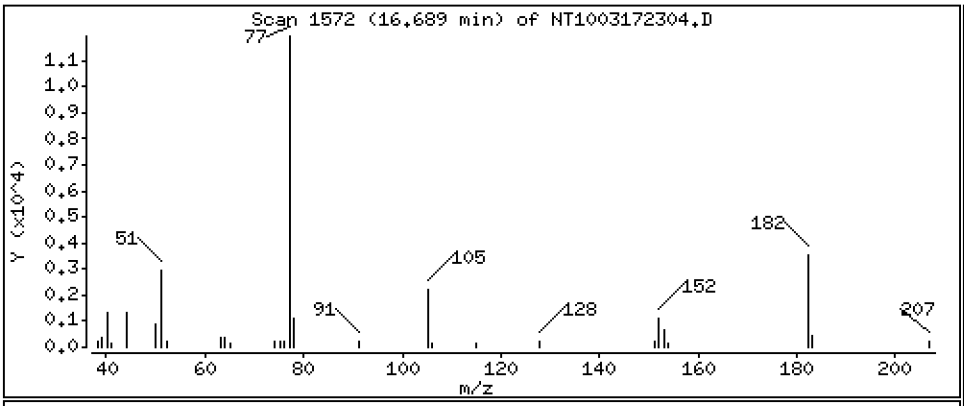
Operator: VTS

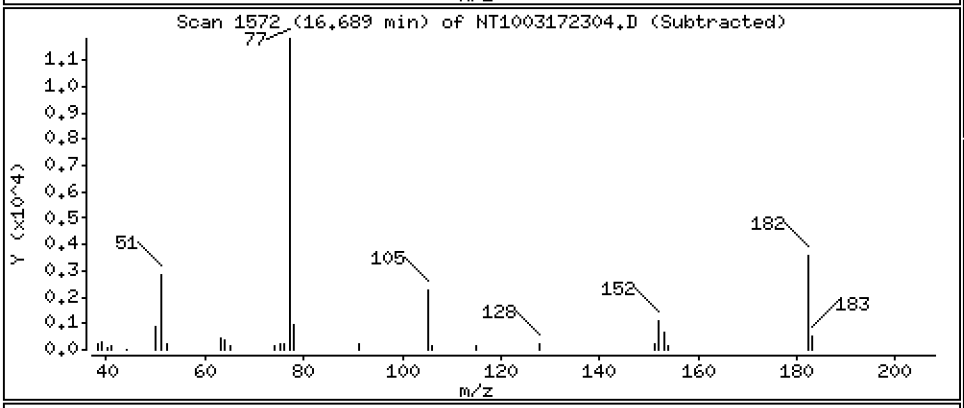
Column phase: ZB-5msi

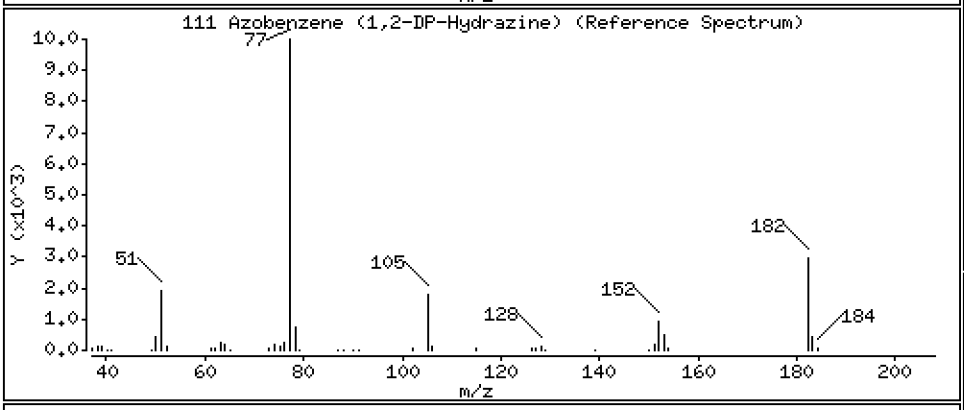
Column diameter: 0.25

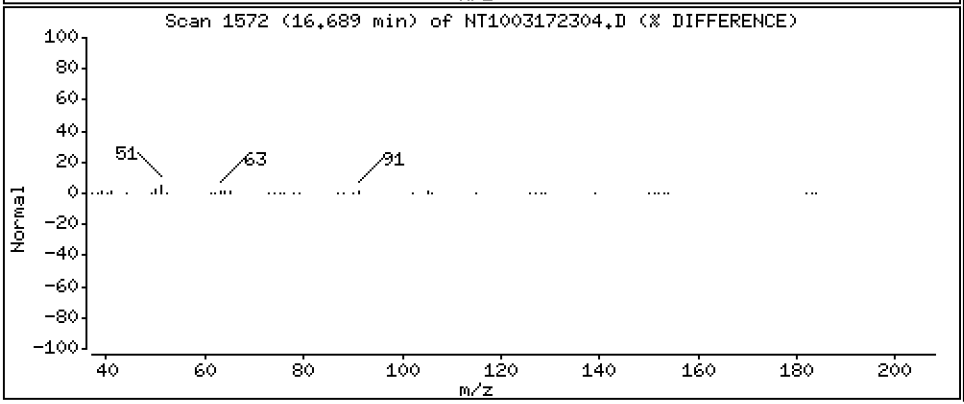
111 Azobenzene (1,2-DP-Hydrazine)

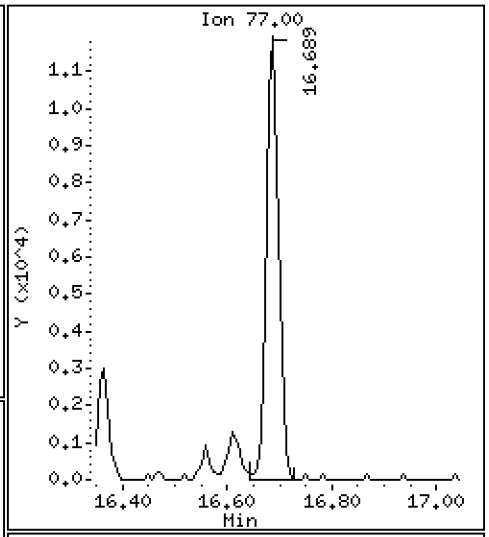
Concentration: 0.1887 ug/mL

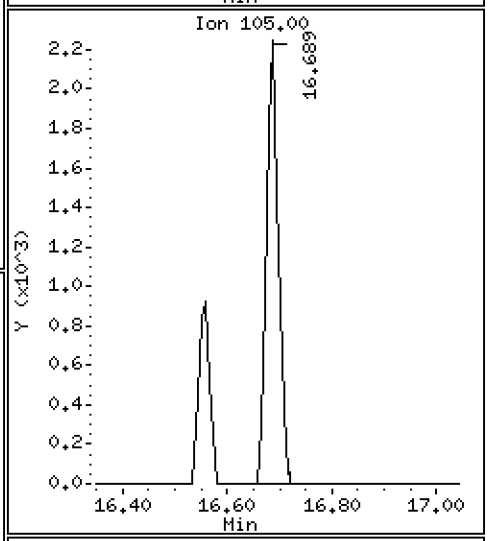


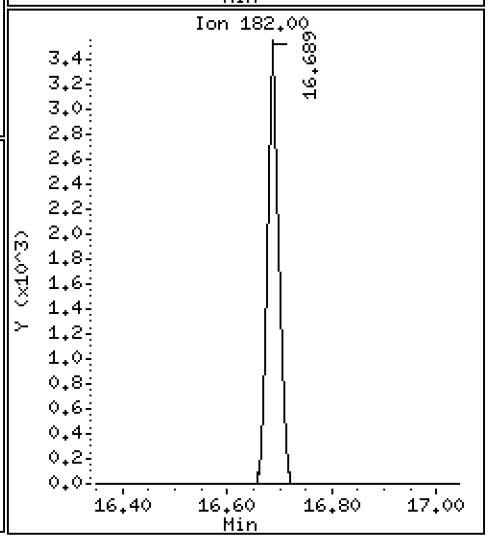












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

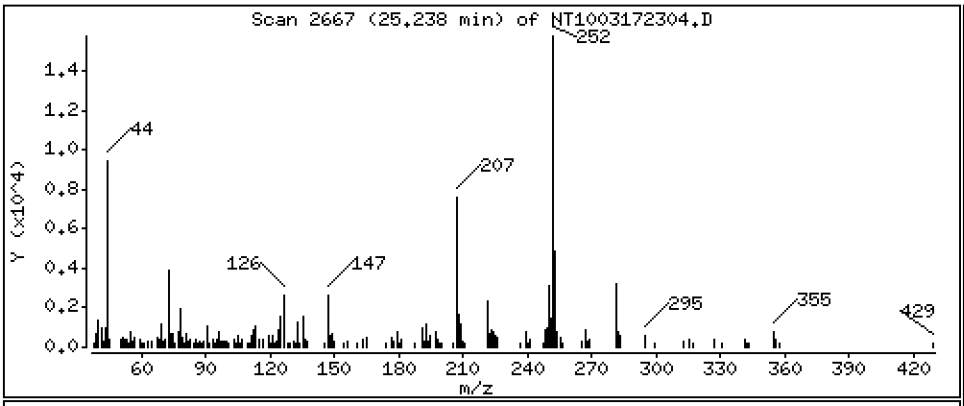
Operator: VTS

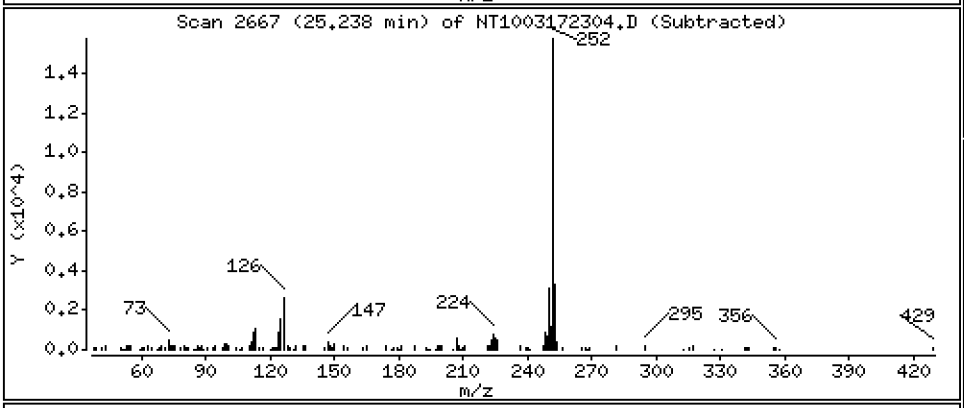
Column phase: ZB-5msi

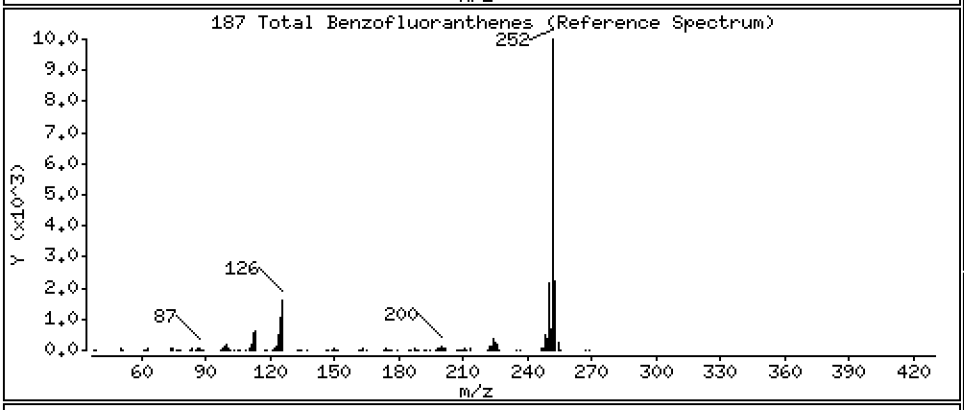
Column diameter: 0.25

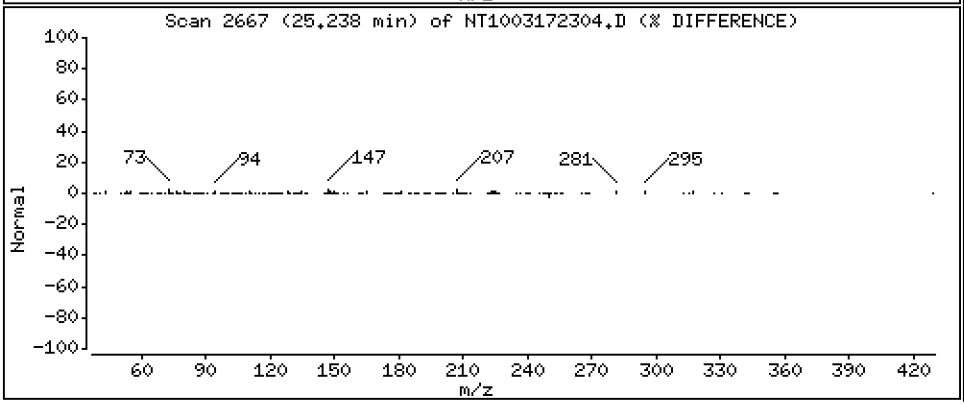
187 Total Benzofluoranthenes

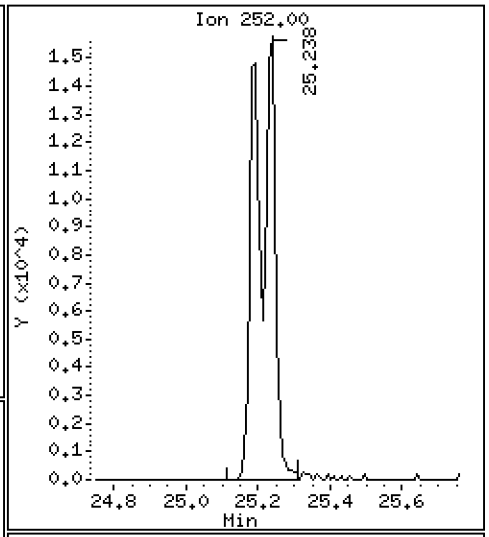
Concentration: 0.4043 ug/mL

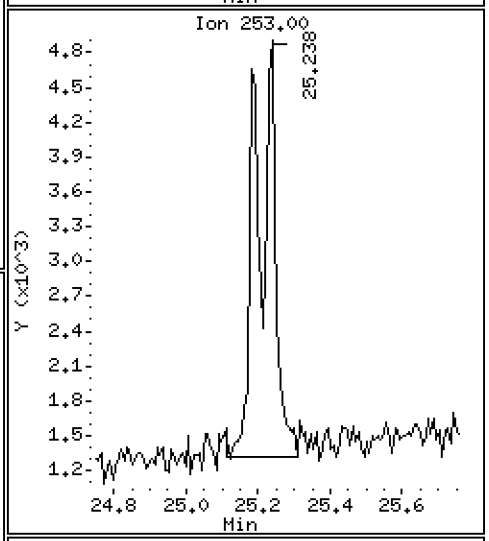


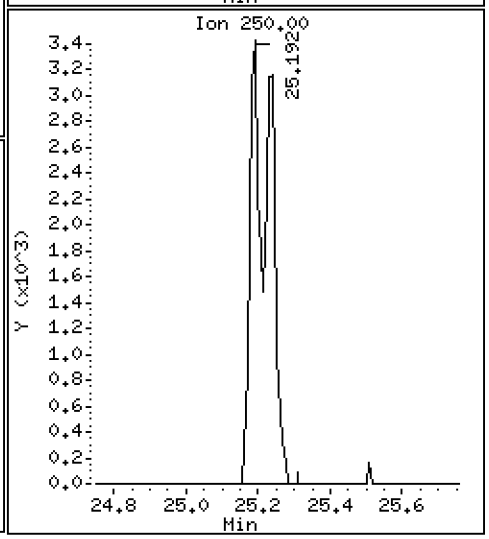












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

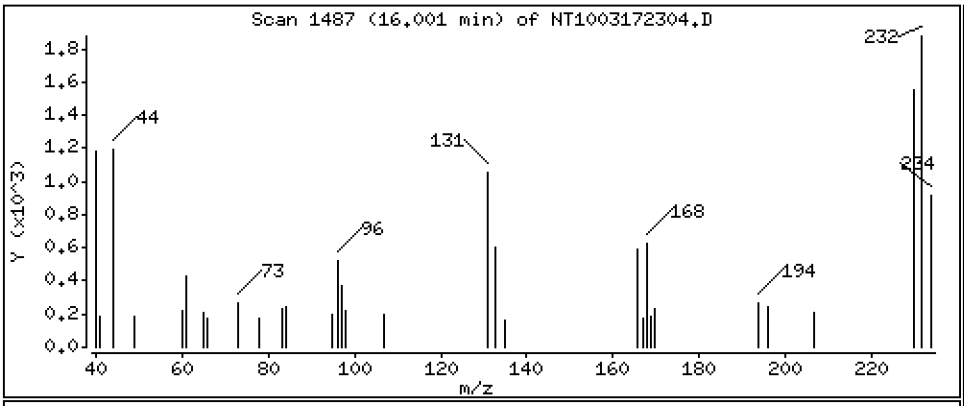
Operator: VTS

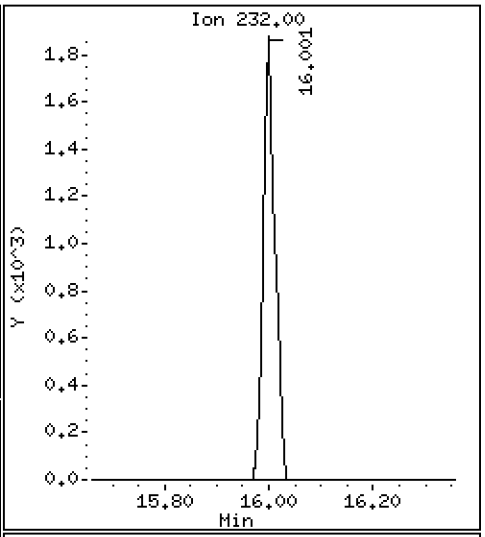
Column phase: ZB-5msi

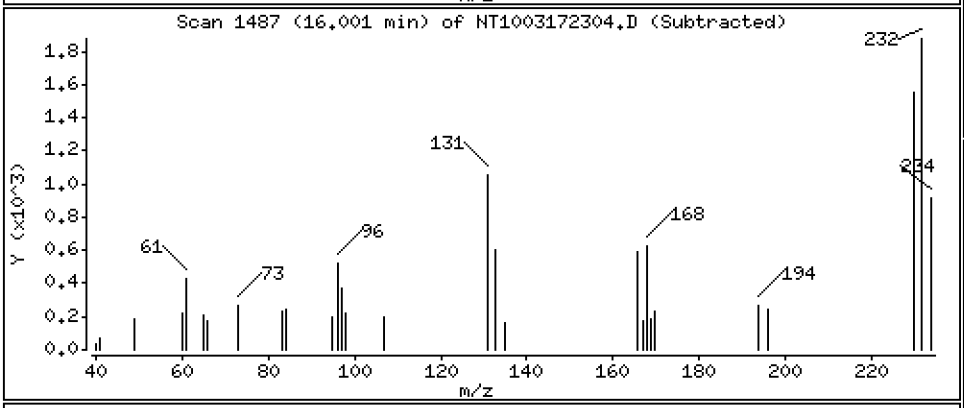
Column diameter: 0.25

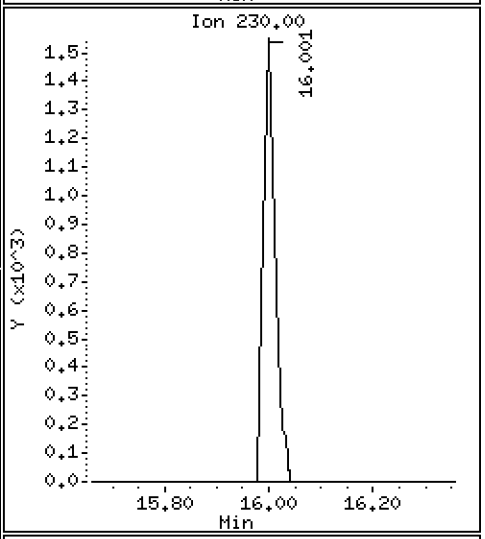
120 2,3,4,6-Tetrachlorophenol

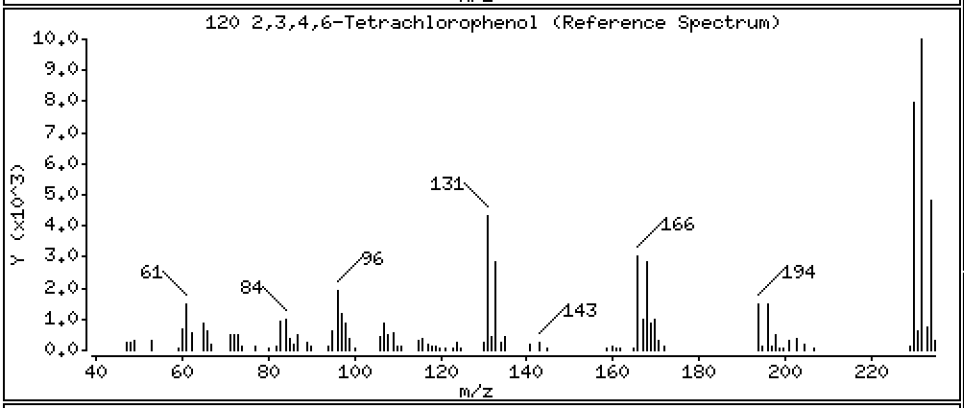
Concentration: 0.09902 ug/mL

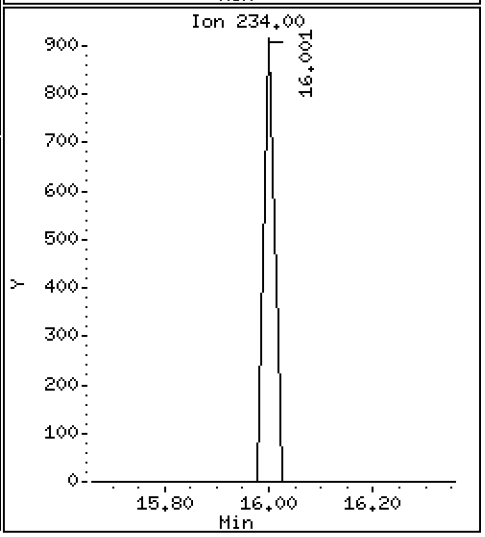


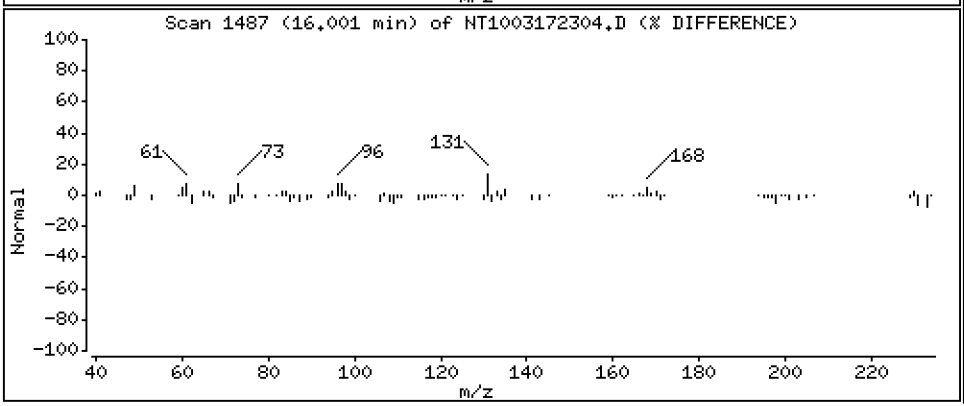












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D
Lab Smp Id: SLC0473-LCV1
Inj Date : 17-MAR-2023 20:19
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0473-LCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230317.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1	2-Fluorophenol	112	6.982	6.975	(0.759)	14216	0.30802	0.3080
$	2	Phenol-d5	99	8.543	8.543	(0.929)	17706	0.29244	0.2924
	3	Phenol	94	8.566	8.566	(0.931)	13670	0.21727	0.2173
$	5	2-Chlorophenol-d4	132	8.837	8.837	(0.960)	15213	0.29425	0.2942
	4	Bis(2-Chloroethyl)ether	93	8.744	8.744	(0.950)	10154	0.21760	0.2176
	6	2-Chlorophenol	128	8.868	8.867	(0.964)	10743	0.19951	0.1995
	7	1,3-Dichlorobenzene	146	9.139	9.138	(0.993)	12094	0.21244	0.2124
*	8	1,4-Dichlorobenzene-d4	152	9.201	9.200	(1.000)	152616	4.00000	
	9	1,4-Dichlorobenzene	146	9.232	9.231	(1.003)	11744	0.21355	0.2136
$	10	1,2-Dichlorobenzene-d4	152	9.558	9.557	(1.039)	7933	0.21366	0.2137
	12	1,2-Dichlorobenzene	146	9.581	9.588	(1.041)	11346	0.20964	0.2096
	11	Benzyl alcohol	108	9.464	9.464	(1.029)	4965	0.16813	0.1681
	14	2,2'-oxybis(1-Chloropropane)	121	9.759	9.759	(1.061)	3185	0.20039	0.2004(M)
	13	2-Methylphenol	108	9.682	9.682	(1.052)	8584	0.18716	0.1872
	17	Hexachloroethane	117	10.171	10.178	(1.105)	4577	0.20285	0.2029
	16	N-Nitroso-di-n-propylamine	70	10.016	10.023	(1.089)	6823	0.18840	0.1884
	15	4-Methylphenol	108	9.946	9.946	(1.081)	9018	0.18661	0.1866
$	18	Nitrobenzene-d5	82	10.287	10.287	(0.882)	10899	0.20040	0.2004
	19	Nitrobenzene	77	10.326	10.326	(0.885)	11101	0.20799	0.2080
	20	Isophorone	82	10.768	10.768	(0.923)	11044	0.16175	0.1618
	21	2-Nitrophenol	139	10.946	10.955	(0.938)	4359	0.16796	0.1680
	22	2,4-Dimethylphenol	107	10.989	10.989	(0.942)	19302	0.39373	0.3937
	23	Bis(2-Chloroethoxy)methane	93	11.192	11.192	(0.959)	10329	0.22647	0.2265
	24	Benzoic acid	105	11.074	11.175	(0.949)	3307	0.12149	0.1215(M)
	25	2,4-Dichlorophenol	162	11.396	11.396	(0.977)	14426	0.36773	0.3677
	26	1,2,4-Trichlorobenzene	180	11.584	11.583	(0.993)	10160	0.22063	0.2206
*	27	Naphthalene-d8	136	11.669	11.676	(1.000)	538816	4.00000	
	28	Naphthalene	128	11.715	11.715	(1.004)	31013	0.21727	0.2173
	29	4-Chloroaniline	127	11.838	11.838	(1.015)	20899	0.37530	0.3753
	30	Hexachlorobutadiene	225	12.070	12.070	(1.034)	6027	0.22337	0.2234
	31	4-Chloro-3-methylphenol	107	12.782	12.790	(1.095)	14938	0.35174	0.3517
	32	2-Methylnaphthalene	142	13.100	13.099	(1.123)	21134	0.20516	0.2052
	33	Hexachlorocyclopentadiene	237	13.564	13.571	(0.888)	8648	0.32637	0.3264

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
	Compounds							
34	2,4,6-Trichlorophenol	196	13.719	13.718	(0.898)	8940	0.31592	0.3159
35	2,4,5-Trichlorophenol	196	13.788	13.788	(0.903)	9769	0.31069	0.3107
$ 36	2-Fluorobiphenyl	172	13.881	13.881	(0.909)	22829	0.20157	0.2016
37	2-Chloronaphthalene	162	14.090	14.098	(0.922)	18938	0.20651	0.2065
38	2-Nitroaniline	65	14.353	14.353	(0.940)	8452	0.32810	0.3281
39	Dimethylphthalate	163	14.779	14.787	(0.968)	18766	0.20176	0.2018
40	Acenaphthylene	152	14.965	14.965	(0.980)	29279	0.20489	0.2049
41	2,6-Dinitrotoluene	165	14.918	14.926	(0.977)	6544	0.32569	0.3257
* 42	Acenaphthene-d10	164	15.274	15.282	(1.000)	286313	4.00000	
43	3-Nitroaniline	138	15.197	15.212	(0.995)	6957	0.30677	0.3068
44	Acenaphthene	153	15.344	15.344	(1.005)	18462	0.20913	0.2091
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.661	15.676	(1.025)	27237	0.20922	0.2092
47	4-Nitrophenol	109	15.506	15.514	(1.015)	2815	0.19735	0.1973
48	2,4-Dinitrotoluene	165	15.723	15.730	(1.029)	7721	0.25403	0.2540
50	Diethylphthalate	149	16.225	16.240	(1.062)	17543	0.19224	0.1922
49	Fluorene	166	16.380	16.387	(1.072)	22272	0.21746	0.2175
51	4-Chlorophenyl-phenylether	204	16.364	16.372	(1.071)	10487	0.21532	0.2153
52	4-Nitroaniline	138	16.464	16.480	(1.078)	6283	0.30742	0.3074
53	4,6-Dinitro-2-methylphenol	198	16.557	16.572	(0.905)	2612	0.16454	0.1645
54	N-Nitrosodiphenylamine	169	16.611	16.626	(0.908)	13514	0.19243	0.1924
$ 55	2,4,6-Tribromophenol	330	16.912	16.919	(1.107)	2128	0.15795	0.1580
56	4-Bromophenyl-phenylether	248	17.367	17.374	(0.949)	5686	0.19354	0.1935
57	Hexachlorobenzene	284	17.684	17.691	(0.966)	6118	0.19862	0.1986
58	Pentachlorophenol	266	18.040	18.047	(0.986)	1296	0.07113	0.07113
* 59	Phenanthrene-d10	188	18.303	18.310	(1.000)	525282	4.00000	
60	Phenanthrene	178	18.349	18.357	(1.003)	28576	0.19951	0.1995
61	Anthracene	178	18.442	18.457	(1.008)	26214	0.19079	0.1908
62	Carbazole	167	18.767	18.782	(1.025)	22919	0.18615	0.1862
63	Di-n-butylphthalate	149	19.556	19.572	(1.068)	23673	0.14300	0.1430
64	Fluoranthene	202	20.725	20.732	(0.888)	31865	0.18853	0.1885
65	Pyrene	202	21.142	21.158	(0.906)	32112	0.18521	0.1852
$ 66	Terphenyl-d14	244	21.429	21.436	(0.919)	25192	0.19348	0.1935
67	Butylbenzylphthalate	149	22.342	22.358	(0.958)	10156	0.16682	0.1668
68	Benzo(a)anthracene	228	23.295	23.310	(0.999)	31303	0.21084	0.2108
* 69	Chrysene-d12	240	23.326	23.341	(1.000)	420636	4.00000	
70	3,3'-Dichlorobenzidine	252	23.248	23.264	(0.997)	23719	0.49874	0.4987
71	Chrysene	228	23.364	23.380	(1.002)	30507	0.21031	0.2103
72	bis(2-Ethylhexyl)phthalate	149	23.364	23.380	(0.960)	11619	0.12667	0.1267
* 134	Di-n-octylphthalate-d4	153	24.348	24.363	(1.000)	627203	4.00000	
73	Di-n-octylphthalate	149	24.363	24.378	(1.001)	33655	0.20504	0.2050
74	Benzo(b)fluoranthene	252	25.191	25.207	(0.970)	30596	0.20172	0.2017
75	Benzo(k)fluoranthene	252	25.238	25.253	(0.972)	31259	0.20296	0.2030(H)
76	Benzo(a)pyrene	252	25.857	25.873	(0.996)	28559	0.21060	0.2106
* 77	Perylene-d12	264	25.974	25.997	(1.000)	467919	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	28.680	28.711	(1.104)	31065	0.18006	0.1801
79	Dibenzo(a,h)anthracene	278	28.695	28.726	(1.105)	26926	0.18799	0.1880
80	Benzo(g,h,i)perylene	276	29.480	29.519	(1.135)	28345	0.18984	0.1898
90	N-Nitrosodimethylamine	74	4.851	4.850	(0.527)	13264	0.45047	0.4505
91	Aniline	93	8.659	8.659	(0.941)	27026	0.41922	0.4192
93	Benzidine	184	20.957	20.964	(0.898)	17933	0.25830	0.2583
103	Pyridine	79	4.905	4.873	(0.533)	21002	0.46443	0.4644
105	1-methylnaphthalene	142	13.324	13.324	(1.142)	19072	0.20208	0.2021
111	Azobenzene (1,2-DP-Hydrazine)	77	16.688	16.696	(1.093)	19234	0.18868	0.1887

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.238	25.253	(0.972)	59213	0.40433	0.4043
120 2,3,4,6-Tetrachlorophenol	232	16.001	16.008	(1.048)	2853	0.09902	0.09902

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172304.D
Lab Smp Id: SLC0473-LCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230317.b\ABN.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:02
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	132765	66383	265530	152616	14.95
27 Naphthalene-d8	497947	248974	995894	538816	8.21
42 Acenaphthene-d10	271928	135964	543856	286313	5.29
59 Phenanthrene-d10	497390	248695	994780	525282	5.61
69 Chrysene-d12	391403	195702	782806	420636	7.47
134 Di-n-octylphthala	674651	337326	1349302	627203	-7.03
77 Perylene-d12	408663	204332	817326	467919	14.50

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.20	8.70	9.70	9.20	0.00
27 Naphthalene-d8	11.68	11.18	12.18	11.67	-0.06
42 Acenaphthene-d10	15.28	14.78	15.78	15.27	-0.05
59 Phenanthrene-d10	18.31	17.81	18.81	18.30	-0.04
69 Chrysene-d12	23.34	22.84	23.84	23.33	-0.07
134 Di-n-octylphthala	24.36	23.86	24.86	24.35	-0.06
77 Perylene-d12	26.00	25.50	26.50	25.97	-0.09

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

REVIEW SUMMARY FOR FILE - NT1003172304.D

Lab ID: SLC0473-LCV1
nt10.i, 20230317.b\ABN.m,   17-MAR-2023 20:19

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.949	0.957	-0.0081	Benzoic acid

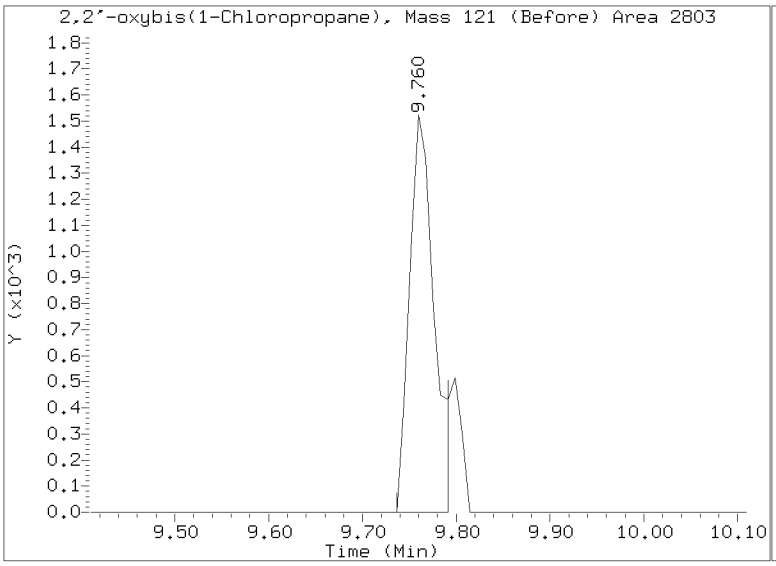
RRT check based on Ccal File: NT1003172302.D

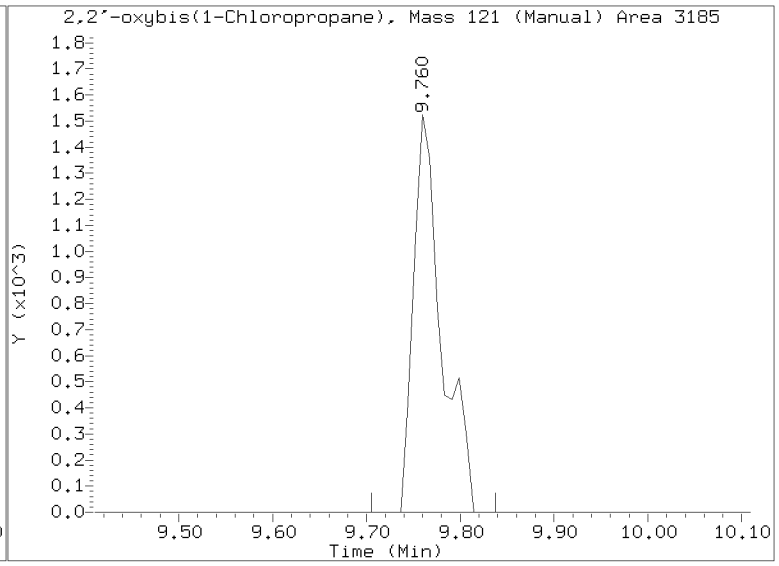
On Column LOD for nt10.i, 20230317.b\ABN.m, ICAL.sub = 0.0000

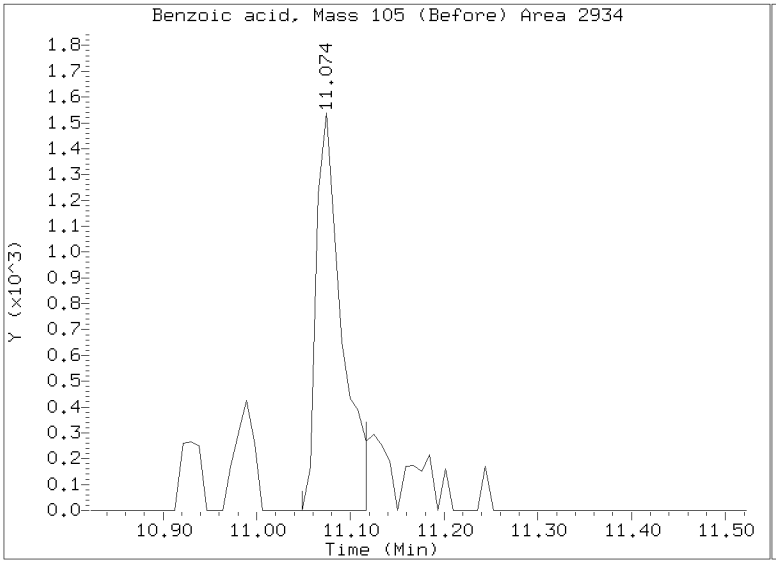
* Only compounds listed in the work order have been verified by the analyst *

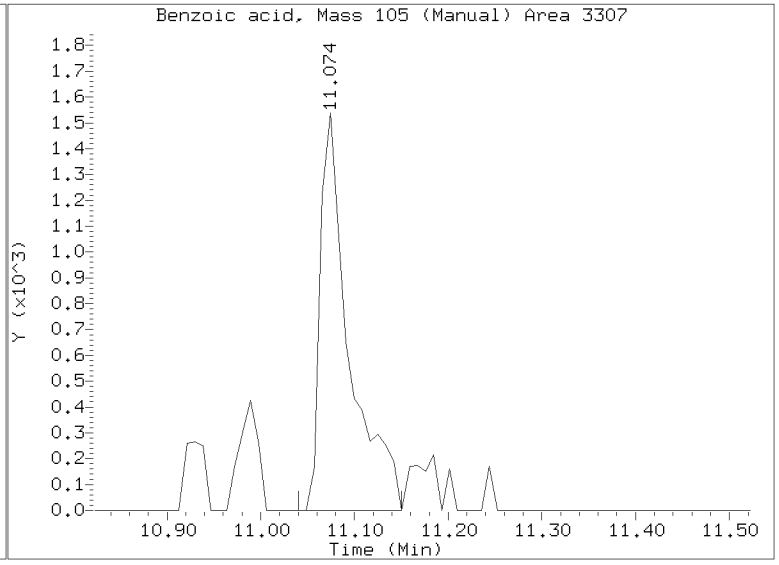
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230317.b/NT1003172304.D
Injection Date: 17-MAR-2023 20:19
Lab ID:SLC0473-LCV1 Client ID:
Report Date: 03/30/2023 07:21









Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00046
Lab File ID:	NT1003172302.D	Calibration Date:	03/15/2023
Sequence:	SLC0473	Injection Date:	03/17/23
Lab Sample ID:	SLC0473-ICV1	Injection Time:	19:02
Sequence Name:	ABN 5		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Phenol	A	5.0000	5.3	1.6490140	1.7357230		5.3	+/-20
4-Methylphenol	A	5.0000	5.4	1.2665770	1.3610580		7.5	+/-20
Naphthalene	A	5.0000	4.9	1.0596590	1.0386900		-2.0	+/-20
2-Methylnaphthalene	A	5.0000	4.9	0.7647129	0.7426220		-2.9	+/-20
Acenaphthylene	A	5.0000	5.0	1.9964080	1.9924270		-0.2	+/-20
Dimethylphthalate	A	5.0000	5.1	1.2994310	1.3139630		1.1	+/-20
Acenaphthene	A	5.0000	5.0	1.2333460	1.2409520		0.6	+/-20
Dibenzofuran	A	5.0000	4.8	1.8187540	1.7440090		-4.1	+/-20
Fluorene	A	5.0000	5.1	1.4308680	1.4676890		2.6	+/-20
Phenanthrene	A	5.0000	4.9	1.0907130	1.0678370		-2.1	+/-20
Anthracene	A	5.0000	5.2	1.0462760	1.0779890		3.0	+/-20
Fluoranthene	A	5.0000	4.8	1.6072690	1.5527220		-3.4	+/-20
Pyrene	A	5.0000	4.7	1.6487720	1.5648590		-5.1	+/-20
Butylbenzylphthalate	A	5.0000	5.4	0.5292894	0.6455873		7.8	+/-20
Benzo(a)anthracene	A	5.0000	4.9	1.4118770	1.3943030		-1.2	+/-20
Chrysene	A	5.0000	5.0	1.3793780	1.3712620		-0.6	+/-20
bis(2-Ethylhexyl)phthalate	A	5.0000	4.6	0.5248968	0.5341393		-9.0	+/-20
Benzofluoranthenes, Total	A	10.000	10.4	1.2519020	1.3017230		4.0	+/-20
Benzo(a)pyrene	A	5.0000	5.6	1.1592370	1.3020900		12.3	+/-20
Indeno(1,2,3-cd)pyrene	A	5.0000	4.9	1.4748270	1.4407240		-2.3	+/-20
Dibenzo(a,h)anthracene	A	5.0000	4.9	1.2244340	1.2049560		-1.6	+/-20
Benzo(g,h,i)perylene	A	5.0000	5.2	1.2763410	1.3255190		3.9	+/-20
2-Fluorophenol	A	7.5000	7.66	1.2096460	1.2358320		2.2	+/-20
Phenol-d5	A	7.5000	7.88	1.5868760	1.6680100		5.1	+/-20
2-Chlorophenol-d4	A	7.5000	7.58	1.3550800	1.3700120		1.1	+/-20
1,2-Dichlorobenzene-d4	A	5.0000	4.87	0.9731556	0.9487199		-2.5	+/-20
Nitrobenzene-d5	A	5.0000	5.30	0.4037447	0.4279106		6.0	+/-20
2-Fluorobiphenyl	A	5.0000	4.71	1.5822890	1.4908920		-5.8	+/-20
2,4,6-Tribromophenol	A	7.5000	6.98	0.1585901	0.1734361		-7.0	+/-20
p-Terphenyl-d14	A	5.0000	4.60	1.2381950	1.1401400		-7.9	+/-20

* Values outside of QC limits

INITIAL CALIBRATION CHECK
EPA 8270E

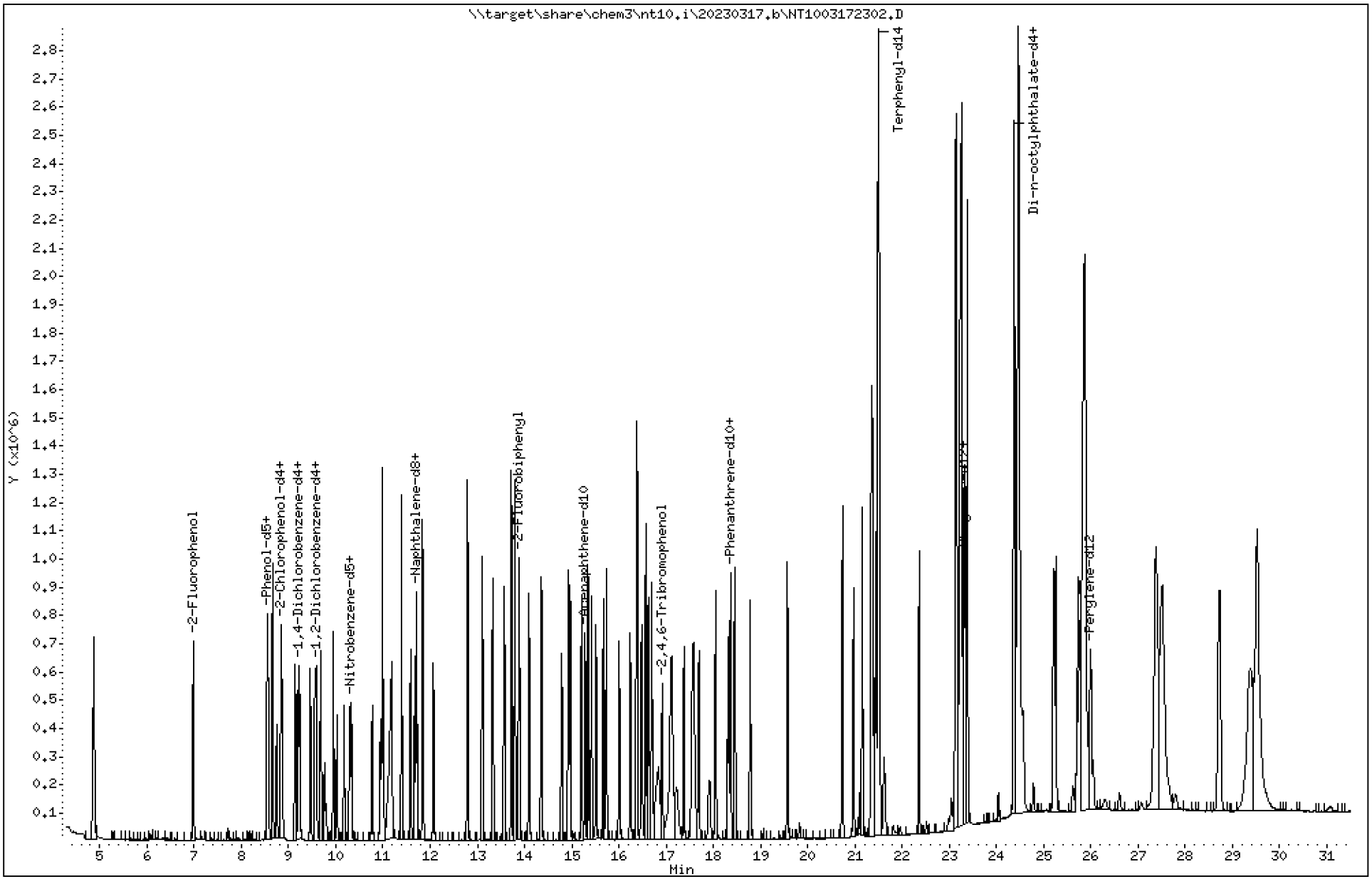
Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00046
Lab File ID:	NT1003172302.D	Calibration Date:	03/15/2023
Sequence:	SLC0473	Injection Date:	03/17/23
Lab Sample ID:	SLC0473-ICV1	Injection Time:	19:02
Sequence Name:	ABN 5		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
1,4-Dichlorobenzene-d4	A	4.0000	4.0	42885.5000	1.0000			
Naphthalene-d8	A	4.0000	4.0	156116.5000	1.0000			
Acenaphthene-d10	A	4.0000	4.0	84306.5000	1.0000			
Phenanthrene-d10	A	4.0000	4.0	143212.3000	1.0000			
Chrysene-d12	A	4.0000	4.0	86767.0000	1.0000			
Di-n-Octylphthalate-d4	A	4.0000	4.0	125079.3000	1.0000			
Perylene-d12	A	4.0000	4.0	105387.3000	1.0000			

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172302.D
Date : 17-MAR-2023 19:02
Client ID:
Sample Info: SLC0473-ICV1

Instrument: nt10.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230317.b\NT1003172302.D
Lab Smp Id: SLC0473-ICV1
Inj Date : 17-MAR-2023 19:02
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0473-ICV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230317.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.975	6.975	(0.758)	307641	7.50000	7.662
$	2 Phenol-d5	99	8.543	8.543	(0.929)	415225	7.50000	7.883
	3 Phenol	94	8.566	8.566	(0.931)	288054	5.00000	5.263
$	5 2-Chlorophenol-d4	132	8.837	8.837	(0.960)	341043	7.50000	7.583
	4 Bis(2-Chloroethyl)ether	93	8.744	8.744	(0.950)	207281	5.00000	5.106
	6 2-Chlorophenol	128	8.867	8.867	(0.964)	236933	5.00000	5.058
	7 1,3-Dichlorobenzene	146	9.138	9.138	(0.993)	242180	5.00000	4.890
*	8 1,4-Dichlorobenzene-d4	152	9.200	9.200	(1.000)	132765	4.00000	
	9 1,4-Dichlorobenzene	146	9.231	9.231	(1.003)	237460	5.00000	4.964
$	10 1,2-Dichlorobenzene-d4	152	9.557	9.557	(1.039)	157446	5.00000	4.874
	12 1,2-Dichlorobenzene	146	9.588	9.588	(1.042)	231874	5.00000	4.925
	11 Benzyl alcohol	108	9.464	9.464	(1.029)	145242	5.00000	5.654
	14 2,2'-oxybis(1-Chloropropane)	121	9.759	9.759	(1.061)	75769	5.00000	5.480(M)
	13 2-Methylphenol	108	9.682	9.682	(1.052)	210157	5.00000	5.267
	17 Hexachloroethane	117	10.178	10.178	(1.106)	100202	5.00000	5.105
	16 N-Nitroso-di-n-propylamine	70	10.023	10.023	(1.089)	173205	5.00000	5.498
	15 4-Methylphenol	108	9.946	9.946	(1.081)	225876	5.00000	5.373
$	18 Nitrobenzene-d5	82	10.287	10.287	(0.881)	266346	5.00000	5.299
	19 Nitrobenzene	77	10.326	10.326	(0.884)	254318	5.00000	5.156
	20 Isophorone	82	10.768	10.768	(0.922)	330718	5.00000	5.241
	21 2-Nitrophenol	139	10.955	10.955	(0.938)	130944	5.00000	5.428
	22 2,4-Dimethylphenol	107	10.989	10.989	(0.941)	410898	10.0000	9.070
	23 Bis(2-Chloroethoxy)methane	93	11.192	11.192	(0.959)	219756	5.00000	5.214
	24 Benzoic acid	105	11.175	11.175	(0.957)	547499	20.0000	20.72
	25 2,4-Dichlorophenol	162	11.396	11.396	(0.976)	378356	10.0000	10.44
	26 1,2,4-Trichlorobenzene	180	11.583	11.583	(0.992)	202478	5.00000	4.758
*	27 Naphthalene-d8	136	11.676	11.676	(1.000)	497947	4.00000	
	28 Naphthalene	128	11.715	11.715	(1.003)	646516	5.00000	4.901
	29 4-Chloroaniline	127	11.838	11.838	(1.014)	531651	10.0000	10.33
	30 Hexachlorobutadiene	225	12.070	12.070	(1.034)	117967	5.00000	4.731
	31 4-Chloro-3-methylphenol	107	12.790	12.790	(1.095)	423112	10.0000	10.78
	32 2-Methylnaphthalene	142	13.099	13.099	(1.122)	462233	5.00000	4.856
	33 Hexachlorocyclopentadiene	237	13.571	13.571	(0.888)	253221	10.0000	10.06

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.718	13.718	(0.898)	287100	10.0000	10.68
	35	2,4,5-Trichlorophenol	196	13.788	13.788	(0.902)	312621	10.0000	10.47
$	36	2-Fluorobiphenyl	172	13.881	13.881	(0.908)	506769	5.00000	4.711
	37	2-Chloronaphthalene	162	14.098	14.098	(0.923)	419306	5.00000	4.814
	38	2-Nitroaniline	65	14.353	14.353	(0.939)	276927	10.0000	11.32
	39	Dimethylphthalate	163	14.787	14.787	(0.968)	446629	5.00000	5.056
	40	Acenaphthylene	152	14.965	14.965	(0.979)	677246	5.00000	4.990
	41	2,6-Dinitrotoluene	165	14.926	14.926	(0.977)	212732	10.0000	11.15
*	42	Acenaphthene-d10	164	15.282	15.282	(1.000)	271928	4.00000	
	43	3-Nitroaniline	138	15.212	15.212	(0.995)	237179	10.0000	11.01
	44	Acenaphthene	153	15.344	15.344	(1.004)	421812	5.00000	5.031
	45	2,4-Dinitrophenol	184	15.421	15.421	(1.009)	219624	20.0000	18.37
	46	Dibenzofuran	168	15.676	15.676	(1.026)	592806	5.00000	4.795
	47	4-Nitrophenol	109	15.514	15.514	(1.015)	142356	10.0000	10.58
	48	2,4-Dinitrotoluene	165	15.730	15.730	(1.029)	293252	10.0000	10.33
	50	Diethylphthalate	149	16.240	16.240	(1.063)	455653	5.00000	5.257
	49	Fluorene	166	16.387	16.387	(1.072)	498882	5.00000	5.129
	51	4-Chlorophenyl-phenylether	204	16.372	16.372	(1.071)	231752	5.00000	5.010
	52	4-Nitroaniline	138	16.480	16.480	(1.078)	233592	10.0000	12.03
	53	4,6-Dinitro-2-methylphenol	198	16.572	16.572	(0.905)	302164	20.0000	19.68
	54	N-Nitrosodiphenylamine	169	16.626	16.626	(0.908)	324245	5.00000	4.876
$	55	2,4,6-Tribromophenol	330	16.919	16.919	(1.107)	88429	7.50000	6.975
	56	4-Bromophenyl-phenylether	248	17.374	17.374	(0.949)	137004	5.00000	4.925
	57	Hexachlorobenzene	284	17.691	17.691	(0.966)	133950	5.00000	4.592
	58	Pentachlorophenol	266	18.047	18.047	(0.986)	170639	10.0000	9.707
*	59	Phenanthrene-d10	188	18.310	18.310	(1.000)	497390	4.00000	
	60	Phenanthrene	178	18.357	18.357	(1.003)	663914	5.00000	4.895
	61	Anthracene	178	18.457	18.457	(1.008)	670226	5.00000	5.152
	62	Carbazole	167	18.782	18.782	(1.026)	615503	5.00000	5.280
	63	Di-n-butylphthalate	149	19.572	19.572	(1.069)	812064	5.00000	5.209
	64	Fluoranthene	202	20.732	20.732	(0.888)	759675	5.00000	4.830
	65	Pyrene	202	21.158	21.158	(0.906)	765613	5.00000	4.746
$	66	Terphenyl-d14	244	21.436	21.436	(0.918)	557818	5.00000	4.604
	67	Butylbenzylphthalate	149	22.358	22.358	(0.958)	315856	5.00000	5.388
	68	Benzo(a)anthracene	228	23.310	23.310	(0.999)	682168	5.00000	4.938
*	69	Chrysene-d12	240	23.341	23.341	(1.000)	391403	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.264	23.264	(0.997)	654470	15.0000	14.79
	71	Chrysene	228	23.380	23.380	(1.002)	670895	5.00000	4.971
	72	bis(2-Ethylhexyl)phthalate	149	23.380	23.380	(0.960)	450447	5.00000	4.552
*	134	Di-n-octylphthalate-d4	153	24.363	24.363	(1.000)	674651	4.00000	
	73	Di-n-octylphthalate	149	24.378	24.378	(1.001)	858982	5.00000	4.865
	74	Benzo(b)fluoranthene	252	25.207	25.207	(0.970)	683694	5.00000	5.161
	75	Benzo(k)fluoranthene	252	25.253	25.253	(0.971)	715531	5.00000	5.319(H)
	76	Benzo(a)pyrene	252	25.873	25.873	(0.995)	665145	5.00000	5.616
*	77	Perylene-d12	264	25.997	25.997	(1.000)	408663	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.711	28.711	(1.104)	735963	5.00000	4.884
	79	Dibenzo(a,h)anthracene	278	28.726	28.726	(1.105)	615526	5.00000	4.920
	80	Benzo(g,h,i)perylene	276	29.519	29.519	(1.135)	677113	5.00000	5.193
	90	N-Nitrosodimethylamine	74	4.850	4.850	(0.527)	275406	10.0000	10.75
	91	Aniline	93	8.659	8.659	(0.941)	584103	10.0000	10.42
	93	Benzidine	184	20.964	20.964	(0.898)	534039	10.0000	8.267
	103	Pyridine	79	4.873	4.873	(0.530)	399078	10.0000	10.14
	105	1-methylnaphthalene	142	13.324	13.324	(1.141)	427246	5.00000	4.898
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.696	16.696	(1.093)	511215	5.00000	5.280

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.253	25.253	(0.971)	1329915	10.0000	10.40
120 2,3,4,6-Tetrachlorophenol	232	16.008	16.008	(1.048)	147351	5.00000	5.205

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172302.D
Lab Smp Id: SLC0473-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230317.b\ABN.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 21:50
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	132765	66383	265530	132765	0.00
27 Naphthalene-d8	497947	248974	995894	497947	0.00
42 Acenaphthene-d10	271928	135964	543856	271928	0.00
59 Phenanthrene-d10	497390	248695	994780	497390	0.00
69 Chrysene-d12	391403	195702	782806	391403	0.00
134 Di-n-octylphthala	674651	337326	1349302	674651	0.00
77 Perylene-d12	408663	204332	817326	408663	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.20	8.70	9.70	9.20	0.00
27 Naphthalene-d8	11.68	11.18	12.18	11.68	0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	0.00
59 Phenanthrene-d10	18.31	17.81	18.81	18.31	0.00
69 Chrysene-d12	23.34	22.84	23.84	23.34	0.00
134 Di-n-octylphthala	24.36	23.86	24.86	24.36	0.00
77 Perylene-d12	26.00	25.50	26.50	26.00	0.00

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

REVIEW SUMMARY FOR FILE - NT1003172302.D

Lab ID: SLC0473-ICV1
nt10.i, 20230317.b\ABN.m,   17-MAR-2023 19:02

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

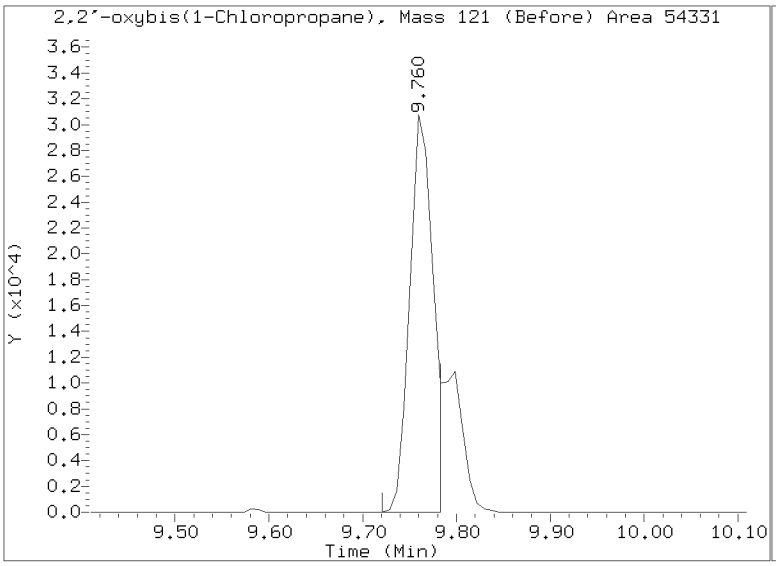
No RRT check. Ccal file.

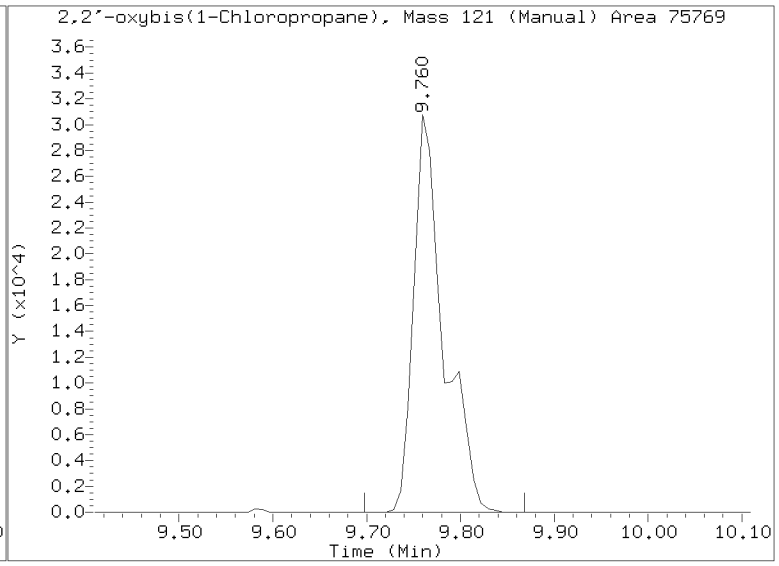
On Column LOD for nt10.i, 20230317.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230317.b/NT1003172302.D
Injection Date: 17-MAR-2023 19:02
Lab ID:SLC0473-ICV1 Client ID:
Report Date: 03/30/2023 07:21





Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230317.b

Instrument: nt10.i Date: 17-MAR-2023 Method: 20230317.b\ABN.m

INITIAL CAL: 15-MAR-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1003172302.D 17-MAR-2023 19:02

Compound	%D
NO Q-FLAGS	

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00046
Lab File ID:	NT10031511.D	Calibration Date:	03/15/2023
Sequence:	SLC0228	Injection Date:	03/16/23
Lab Sample ID:	SLC0228-SCV1	Injection Time:	02:16
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	5.0000	4.4	1.6490140	1.4552130		-11.8	+/-20
4-Methylphenol	A	5.0000	4.4	1.2665770	1.1056260		-12.7	+/-20
Naphthalene	A	5.0000	4.7	1.0596590	0.9996013		-5.7	+/-20
2-Methylnaphthalene	A	5.0000	4.6	0.7647129	0.7029502		-8.1	+/-20
Acenaphthylene	A	5.0000	4.8	1.9964080	1.9185840		-3.9	+/-20
Dimethylphthalate	A	5.0000	4.9	1.2994310	1.2831790		-1.3	+/-20
Acenaphthene	A	5.0000	4.8	1.2333460	1.1780660		-4.5	+/-20
Dibenzofuran	A	5.0000	4.6	1.8187540	1.6906760		-7.0	+/-20
Fluorene	A	5.0000	4.7	1.4308680	1.3472940		-5.8	+/-20
Phenanthrene	A	5.0000	4.6	1.0907130	1.0038520		-8.0	+/-20
Anthracene	A	5.0000	4.2	1.0462760	0.8719973		-16.7	+/-20
Fluoranthene	A	5.0000	4.5	1.6072690	1.4376960		-10.6	+/-20
Pyrene	A	5.0000	4.3	1.6487720	1.4307800		-13.2	+/-20
Butylbenzylphthalate	A	5.0000	4.8	0.5292894	0.5769788		-3.3	+/-20
Benzo(a)anthracene	A	5.0000	4.6	1.4118770	1.3122590		-7.1	+/-20
Chrysene	A	5.0000	4.5	1.3793780	1.2442450		-9.8	+/-20
bis(2-Ethylhexyl)phthalate	A	5.0000	4.7	0.5248968	0.5492136		-6.4	+/-20
Benzofluoranthenes, Total	A	10.000	9.5	1.2519020	1.1872400		-5.2	+/-20
Benzo(a)pyrene	A	5.0000	4.9	1.1592370	1.1298800		-2.5	+/-20
Indeno(1,2,3-cd)pyrene	A	5.0000	4.6	1.4748270	1.3499250		-8.5	+/-20
Dibenzo(a,h)anthracene	A	5.0000	4.5	1.2244340	1.1134110		-9.1	+/-20
Benzo(g,h,i)perylene	A	5.0000	4.6	1.2763410	1.1716820		-8.2	+/-20
2-Fluorophenol	A		0.00	1.2096460				+/-20
Phenol-d5	A		0.00	1.5868760				+/-20
2-Chlorophenol-d4	A		0.00	1.3550800				+/-20
1,2-Dichlorobenzene-d4	A		0.00	0.9731556				+/-20
Nitrobenzene-d5	A		0.00	0.4037447				+/-20
2-Fluorobiphenyl	A		0.00	1.5822890				+/-20
2,4,6-Tribromophenol	A		0.00	0.1585901				+/-20
p-Terphenyl-d14	A		0.00	1.2381950				+/-20

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Page 1

Date : 16-MAR-2023 02:16

Client ID:

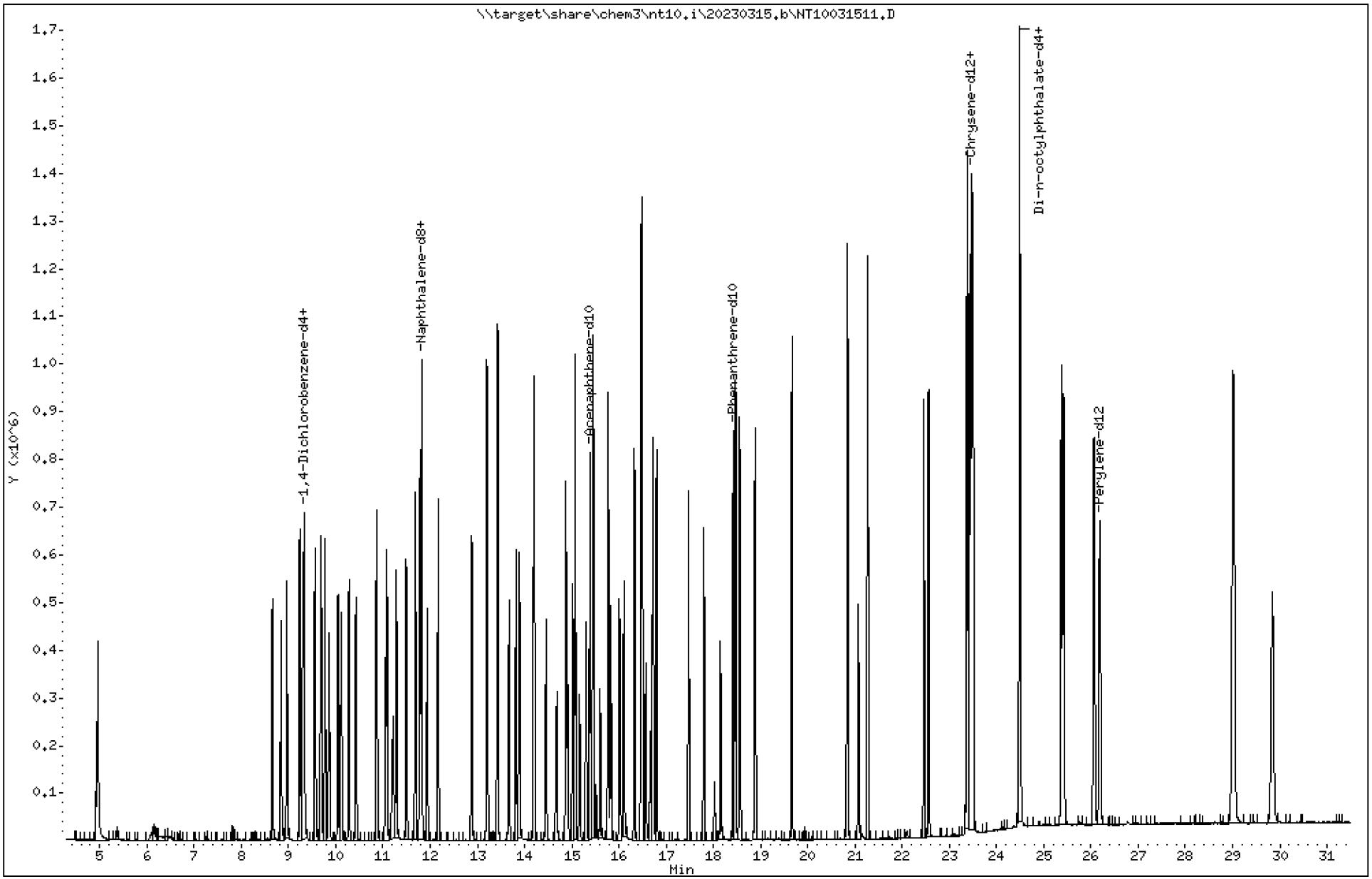
Instrument: nt10.i

Sample Info: SLC0228-SCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

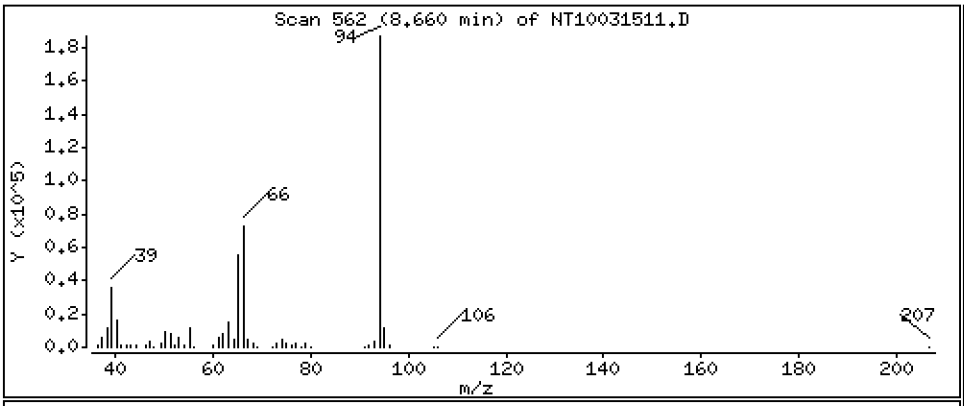
Operator: VTS

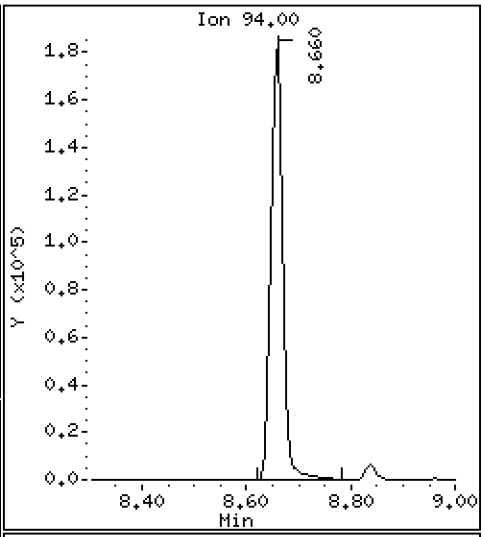
Column phase: ZB-5msi

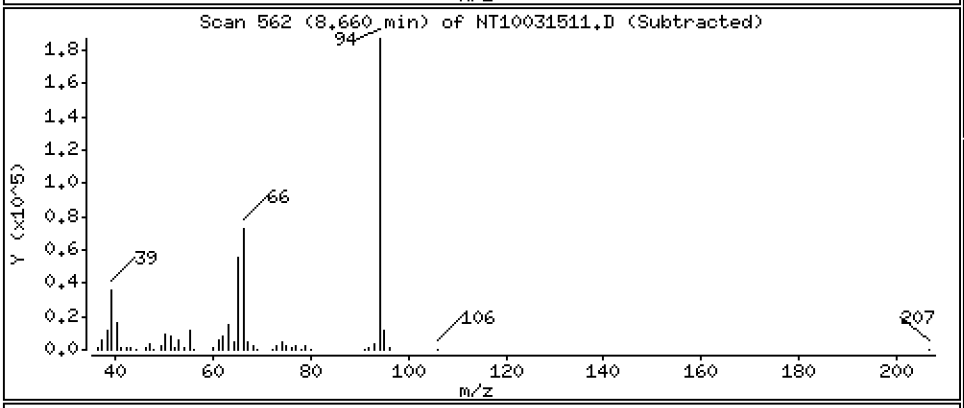
Column diameter: 0.25

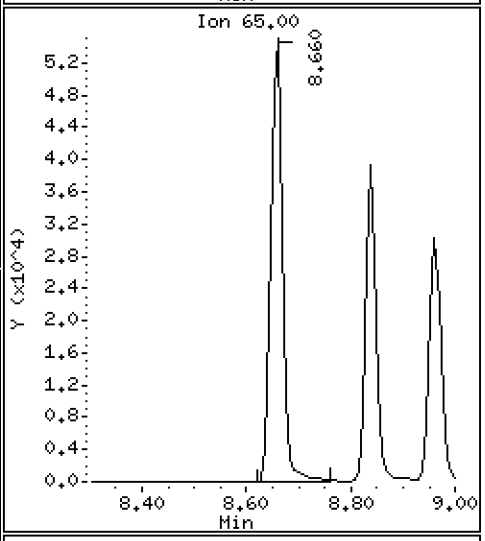
3 Phenol

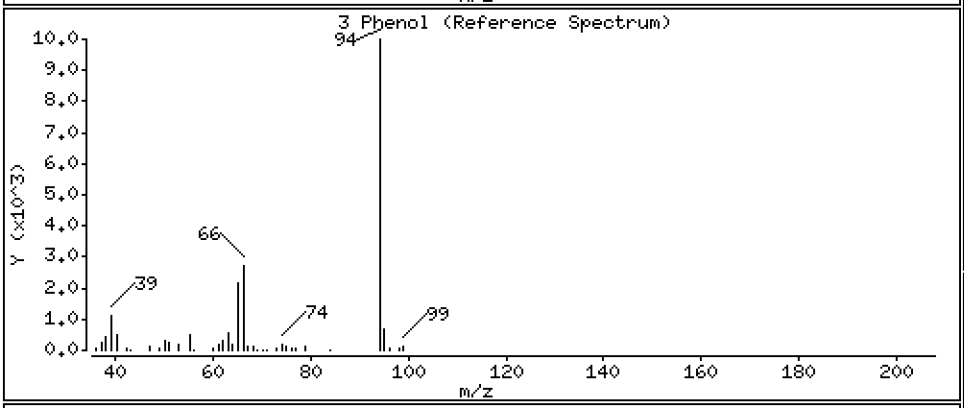
Concentration: 4.412 ug/mL

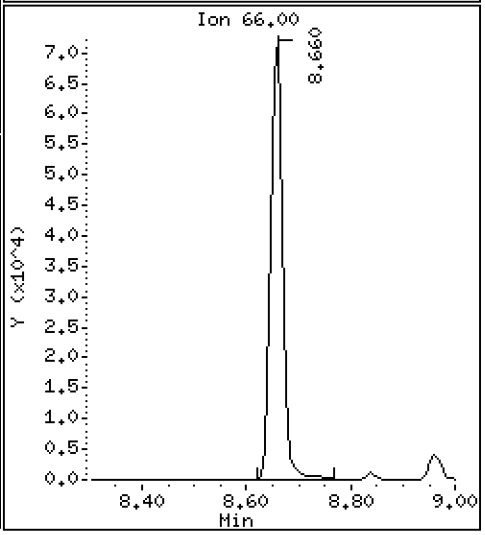


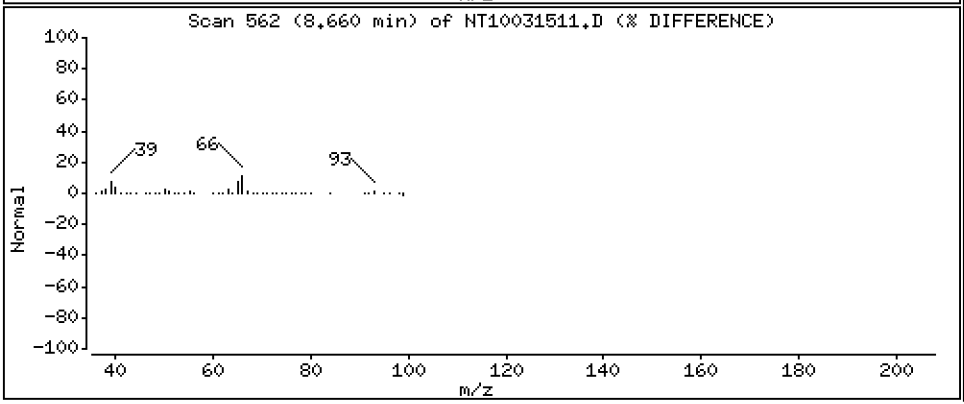












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

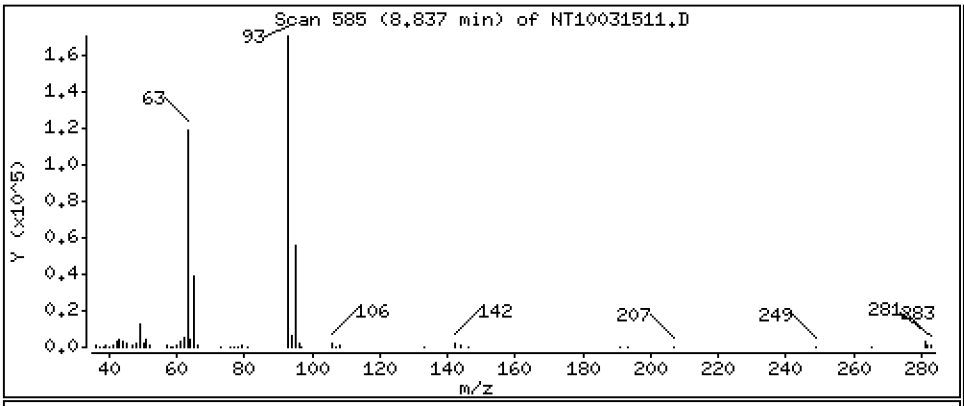
Operator: VTS

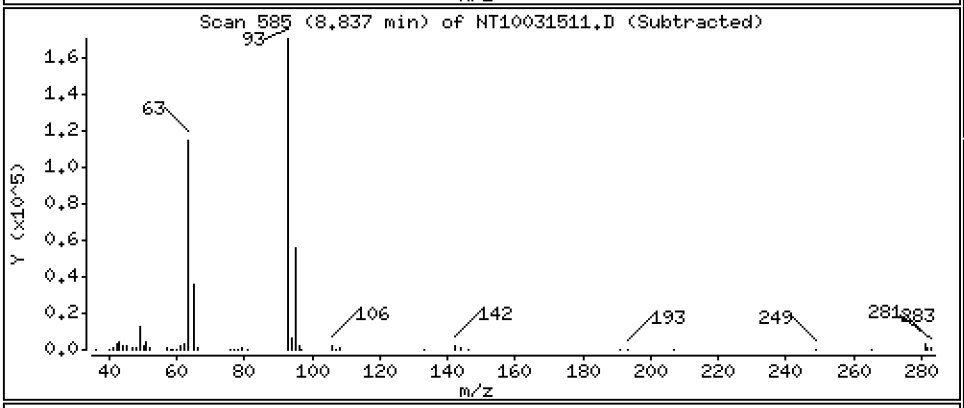
Column phase: ZB-5msi

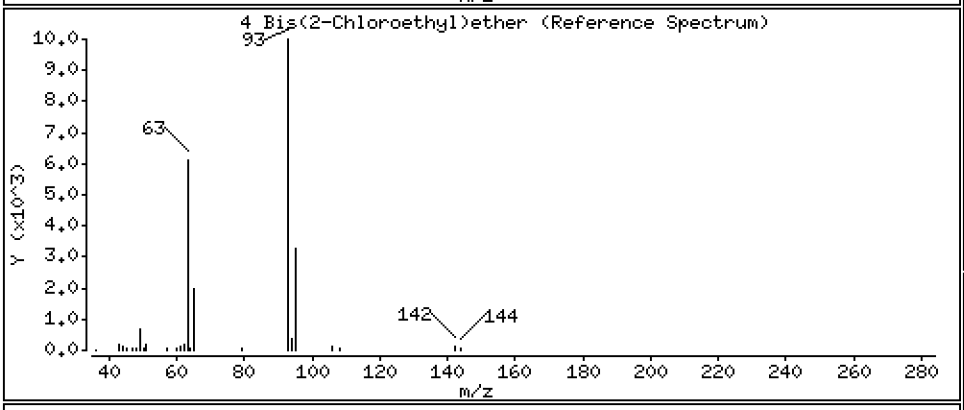
Column diameter: 0.25

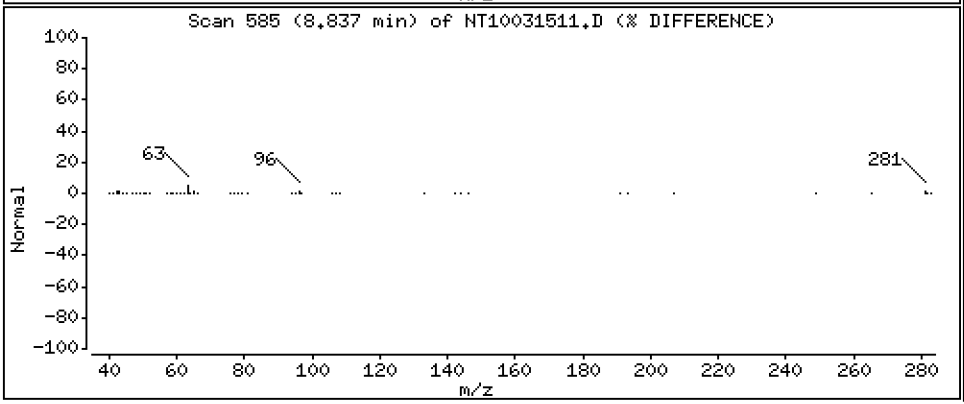
4 Bis(2-Chloroethyl)ether

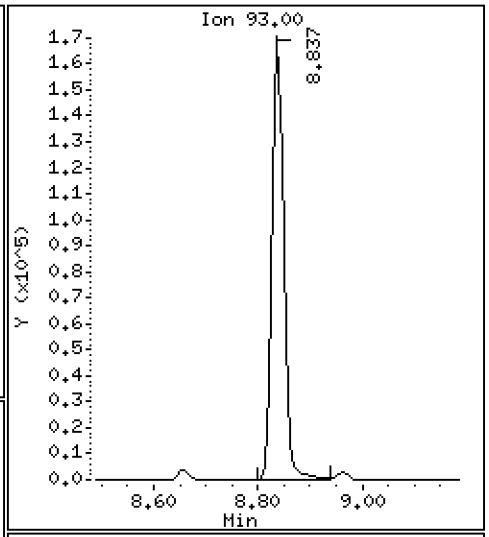
Concentration: 5.258 ug/mL

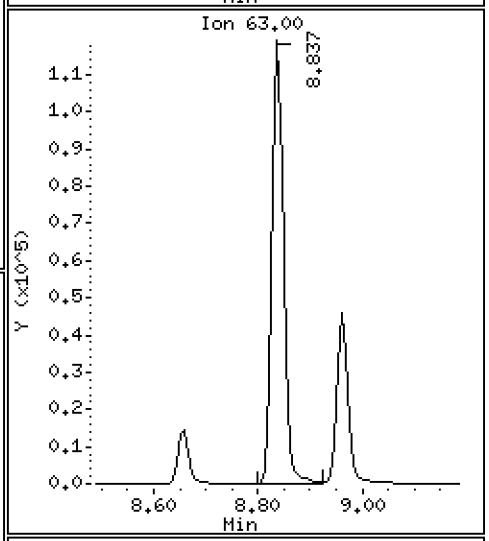


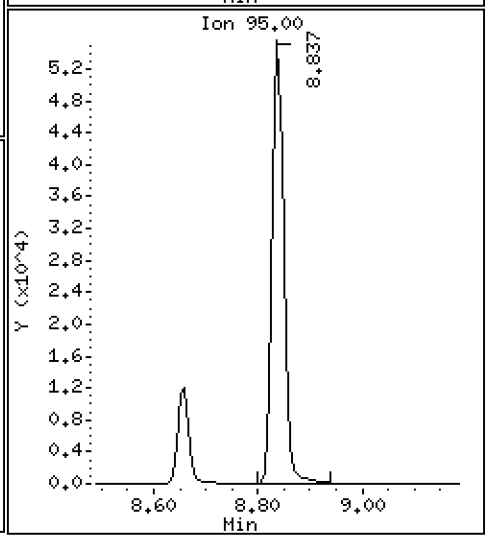












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

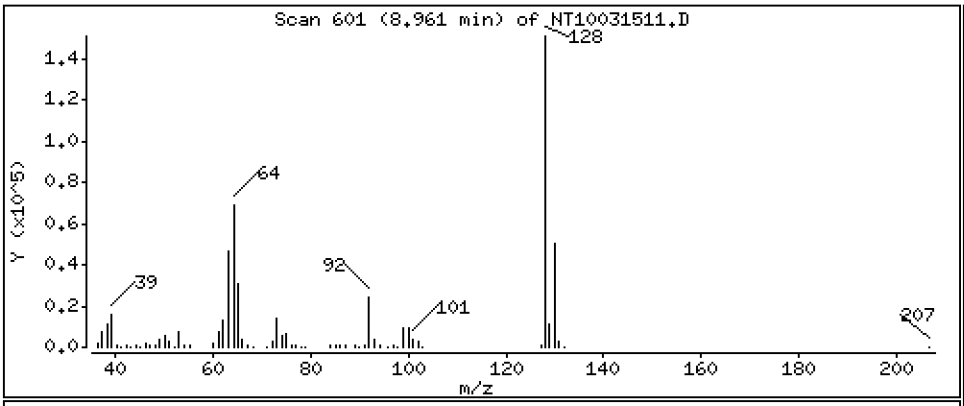
Operator: VTS

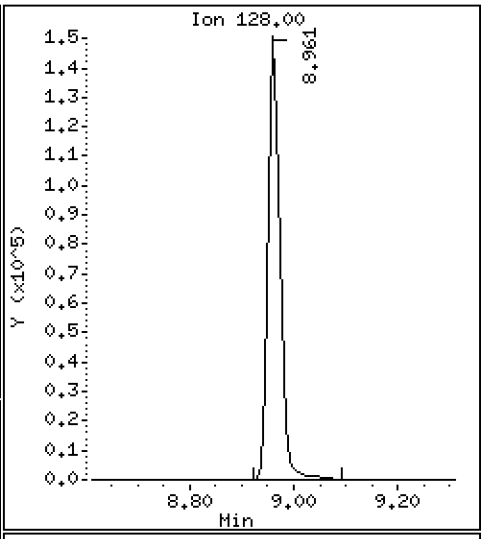
Column phase: ZB-5msi

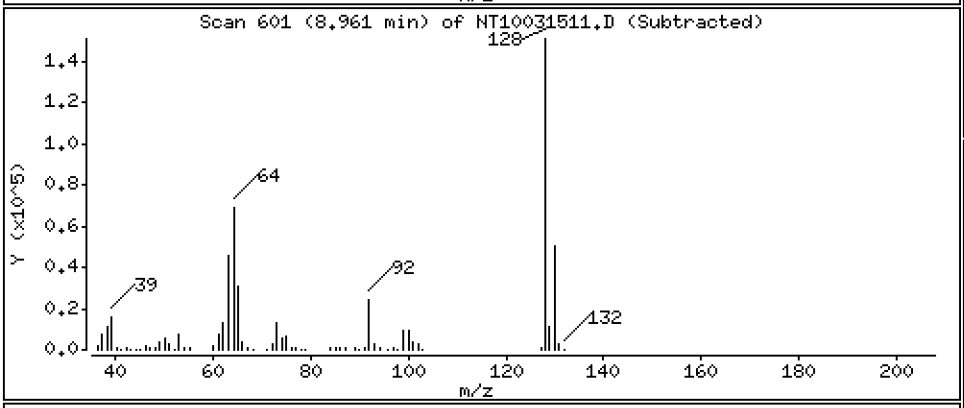
Column diameter: 0.25

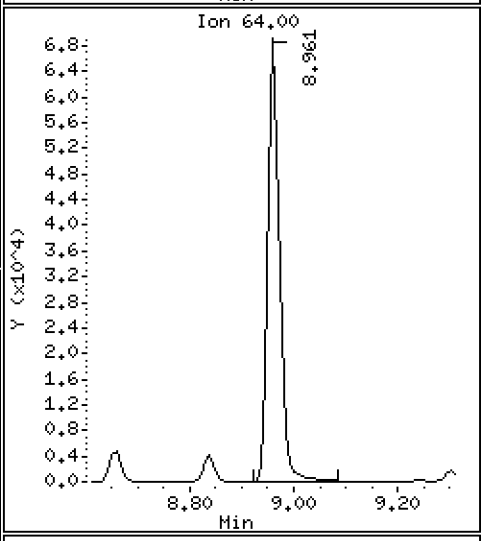
6 2-Chlorophenol

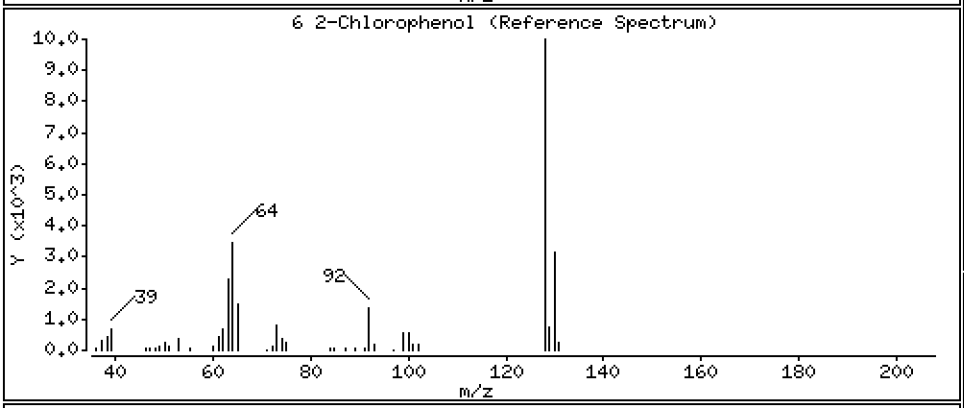
Concentration: 4.277 ug/mL

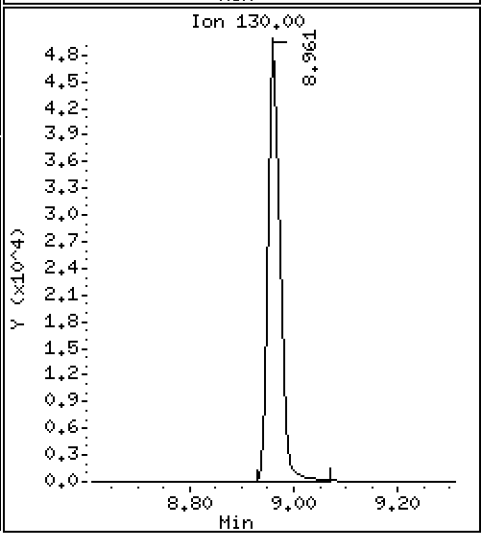


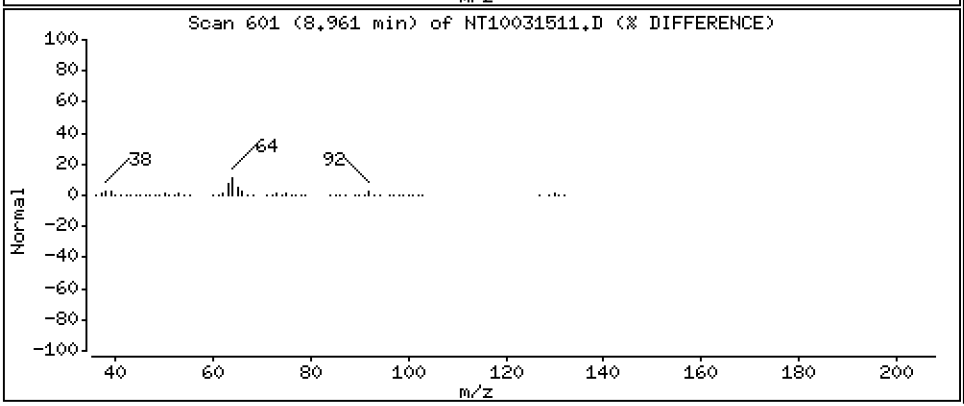












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

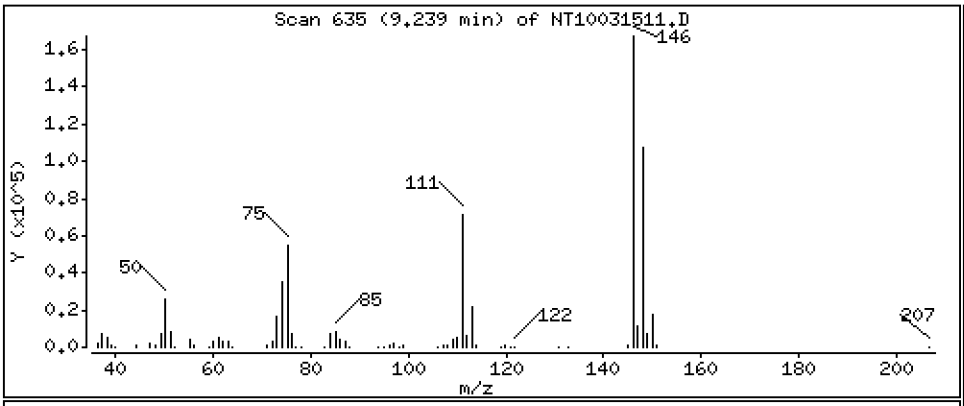
Operator: VTS

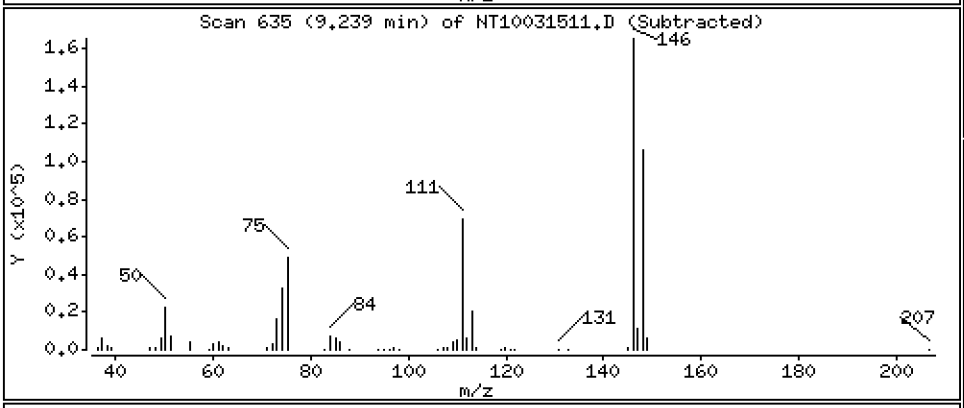
Column phase: ZB-5msi

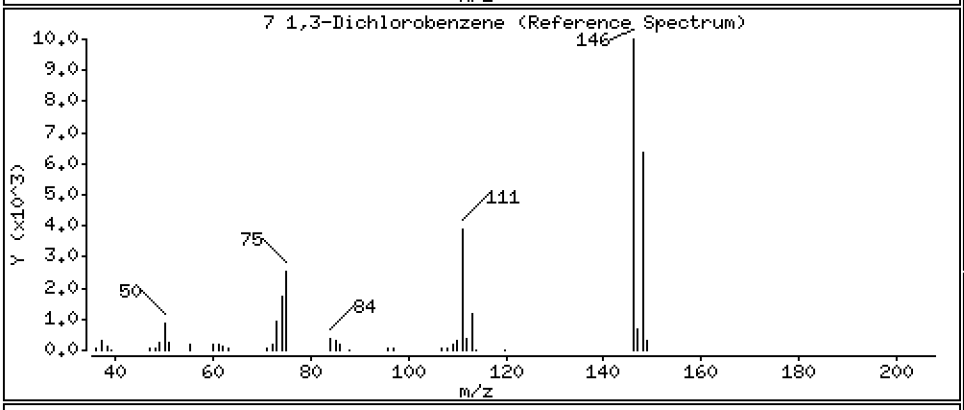
Column diameter: 0.25

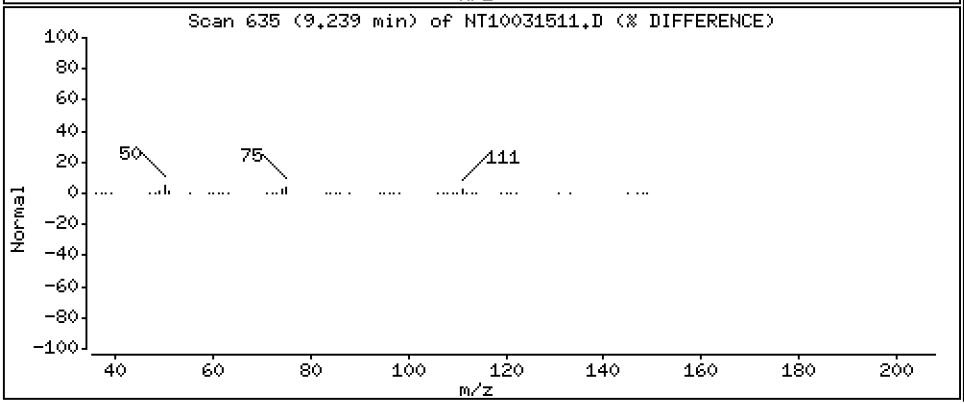
7 1,3-Dichlorobenzene

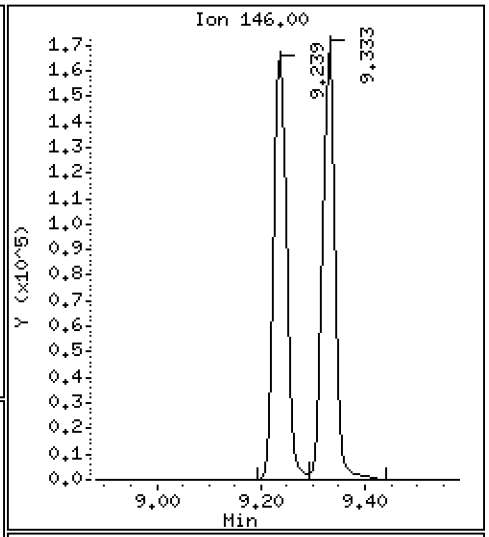
Concentration: 4.772 ug/mL

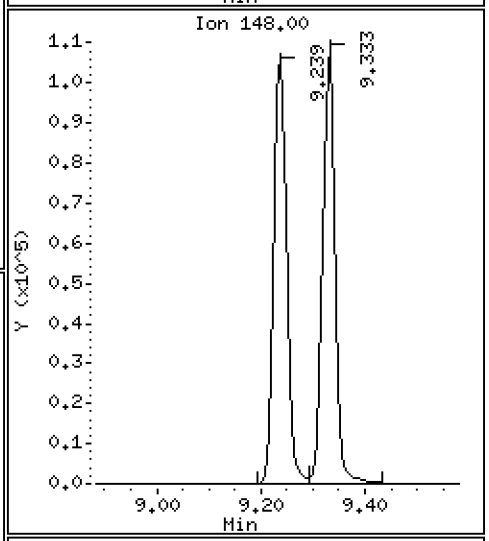


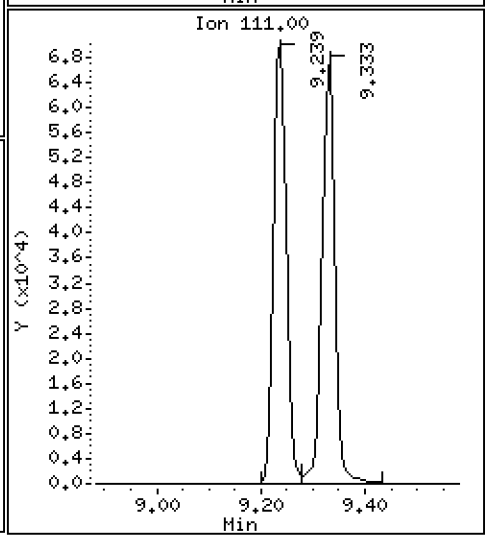












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

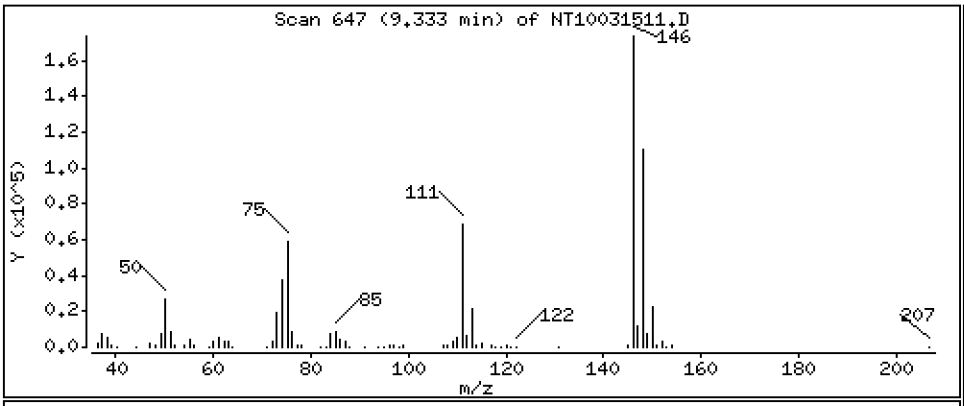
Operator: VTS

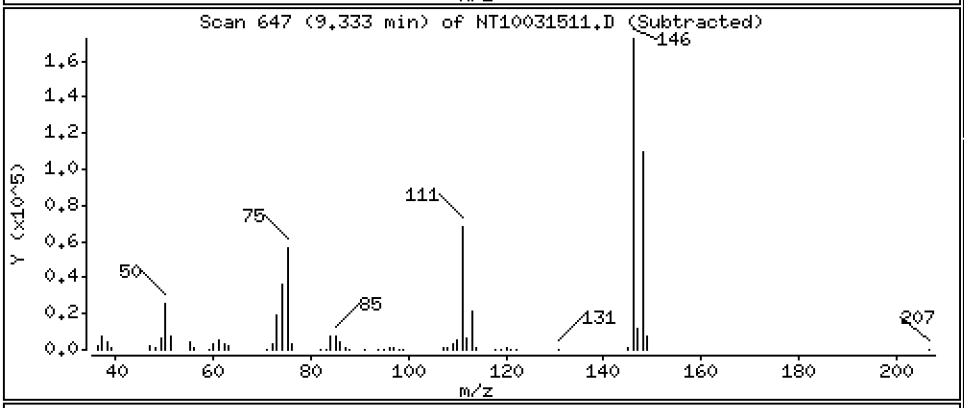
Column phase: ZB-5msi

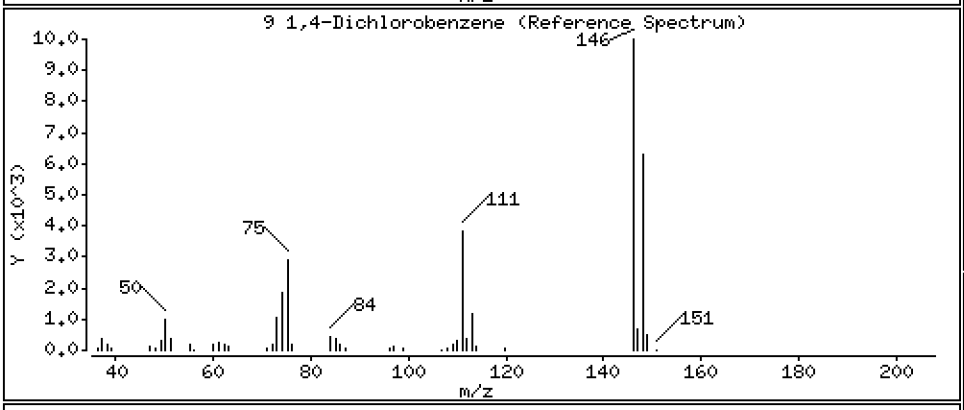
Column diameter: 0.25

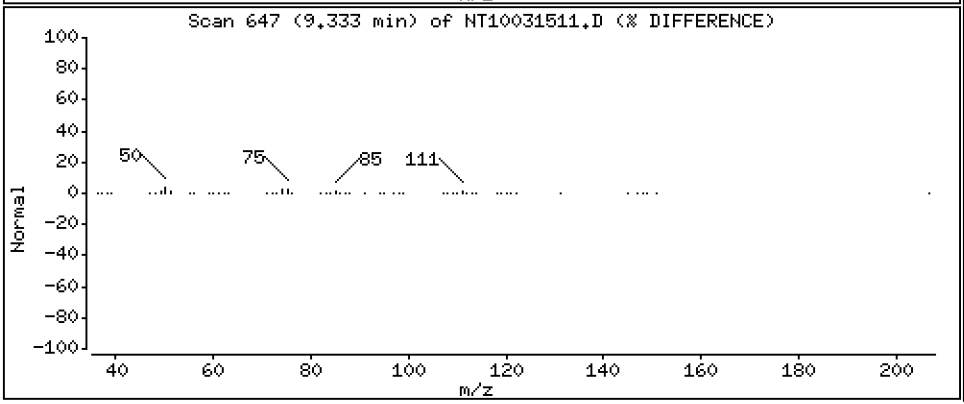
9 1,4-Dichlorobenzene

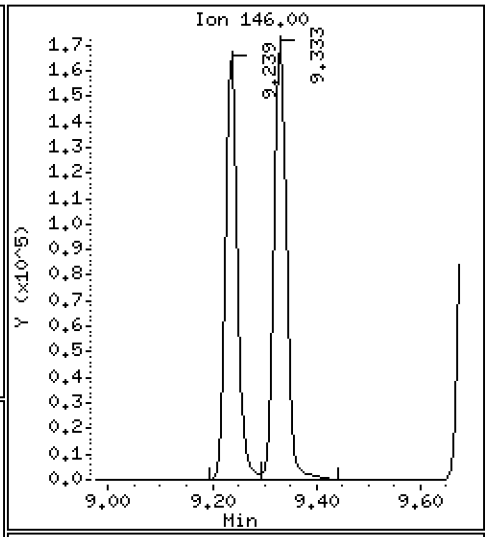
Concentration: 4.913 ug/mL

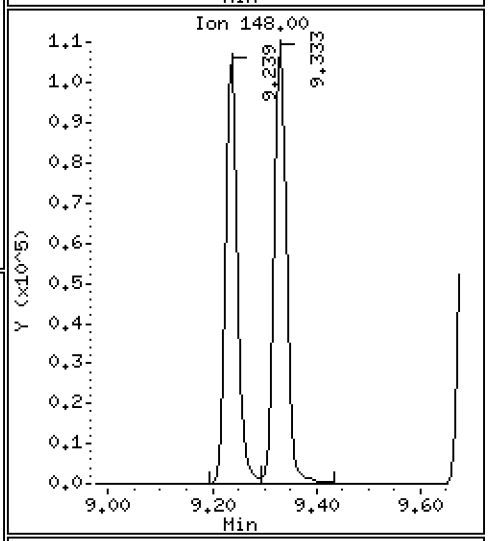


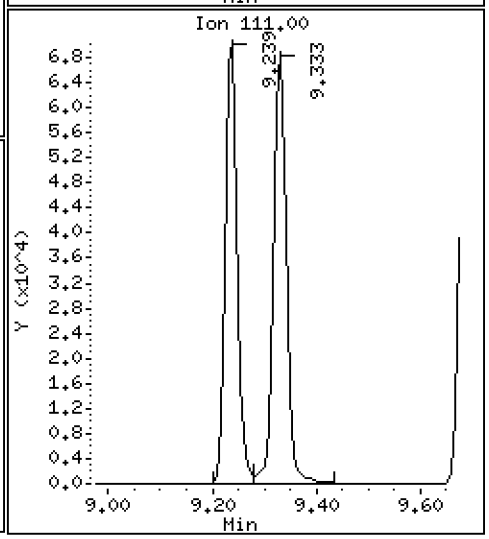












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

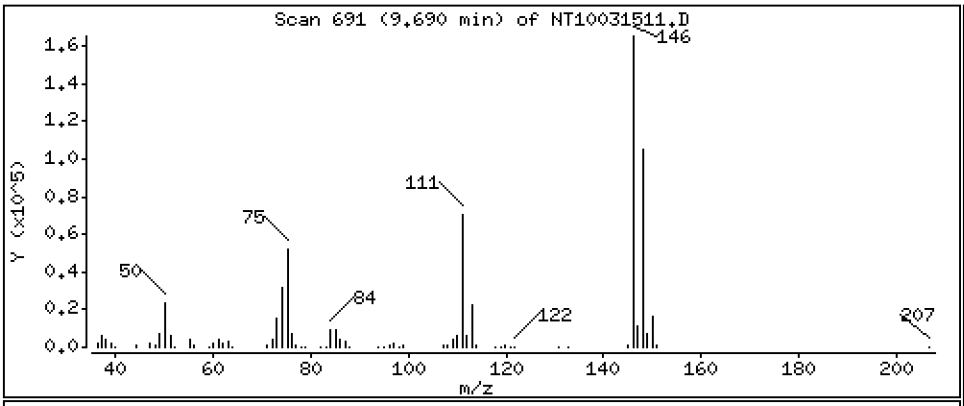
Operator: VTS

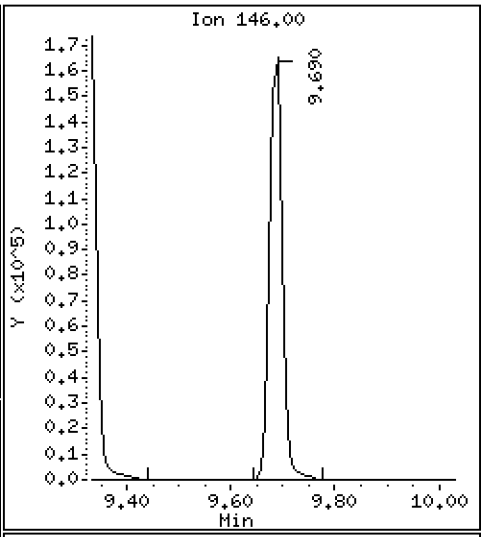
Column phase: ZB-5msi

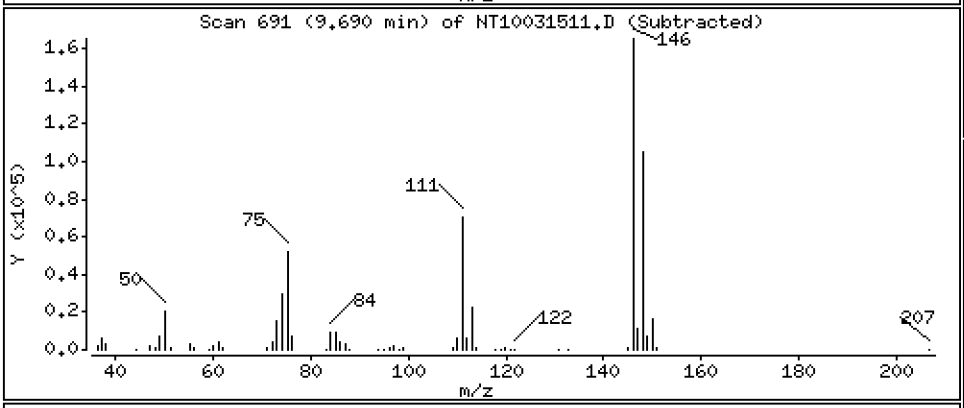
Column diameter: 0.25

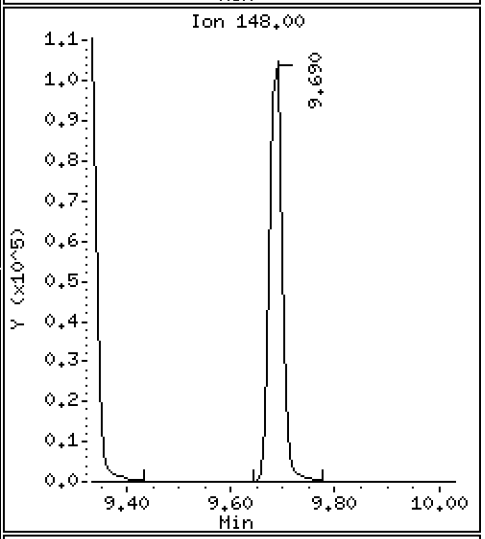
12 1,2-Dichlorobenzene

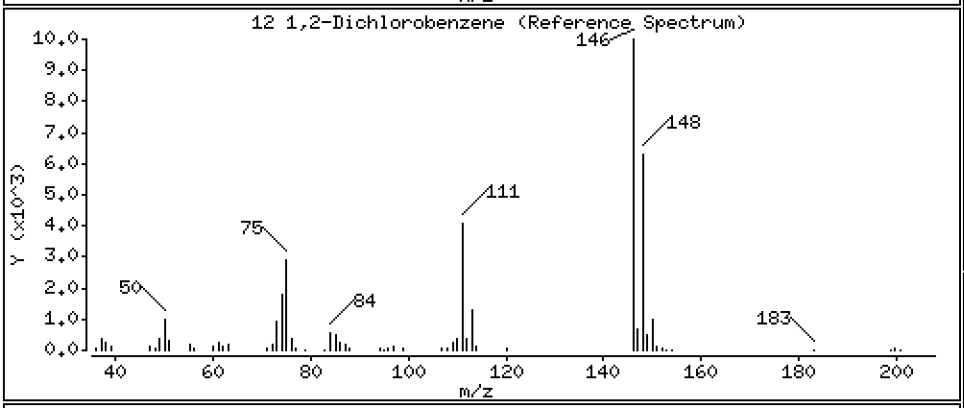
Concentration: 4.882 ug/mL

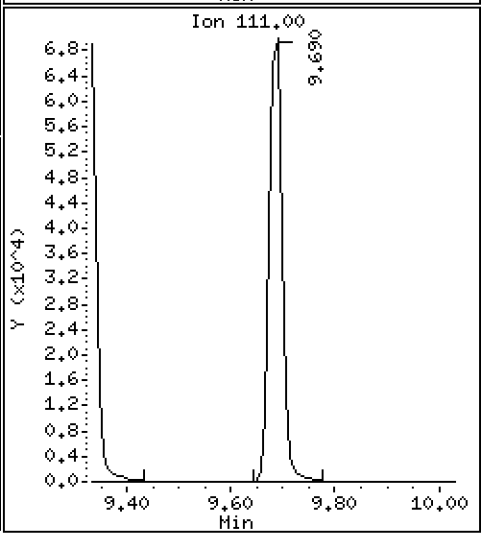


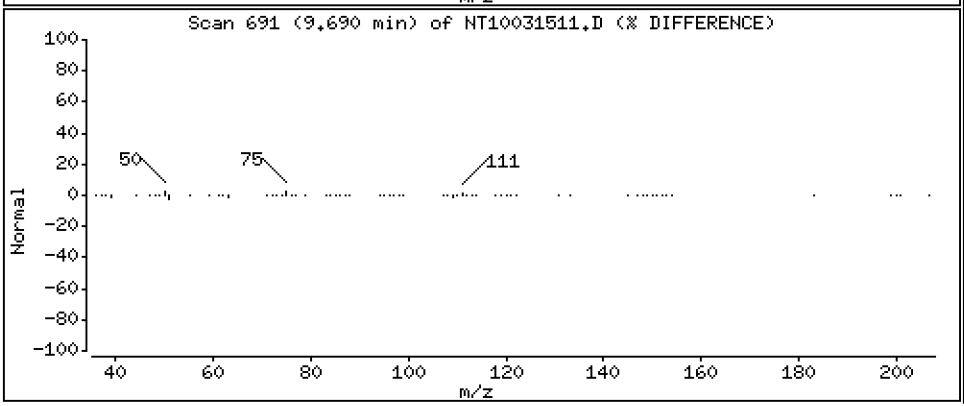












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

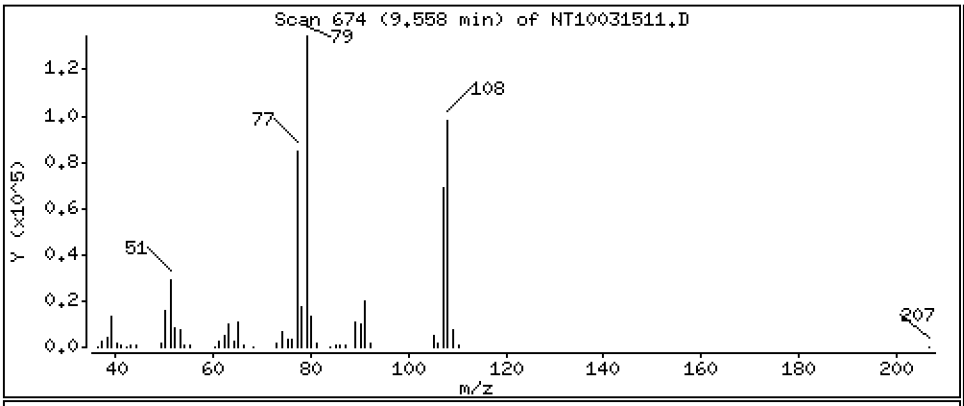
Operator: VTS

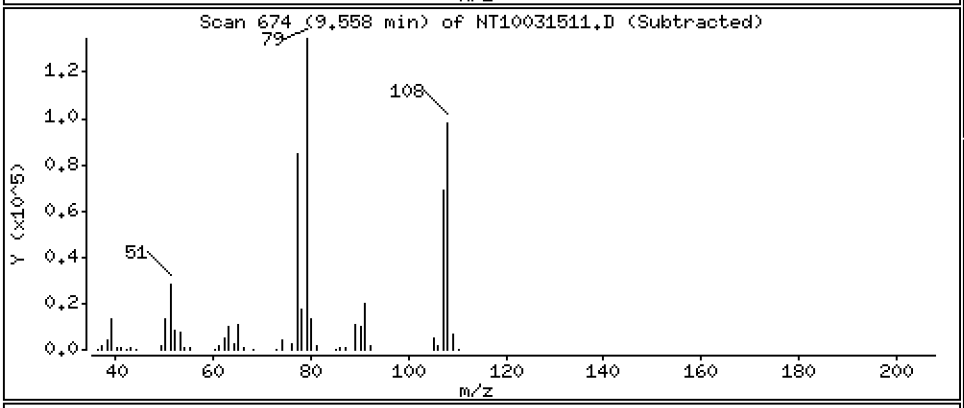
Column phase: ZB-5msi

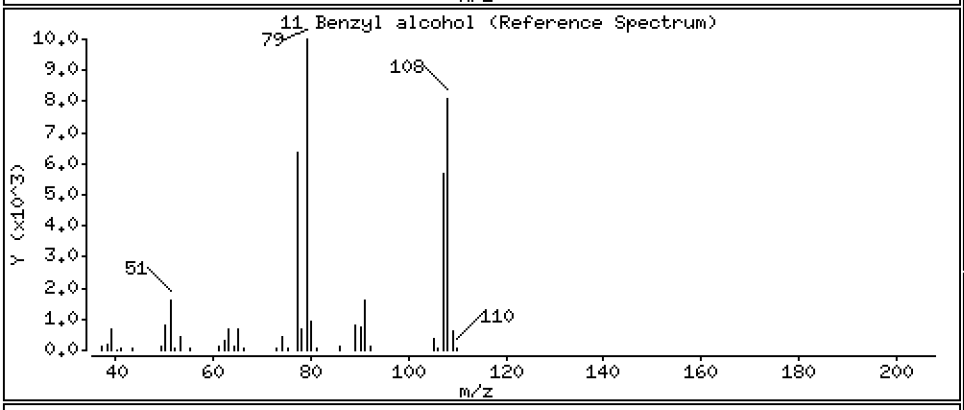
Column diameter: 0.25

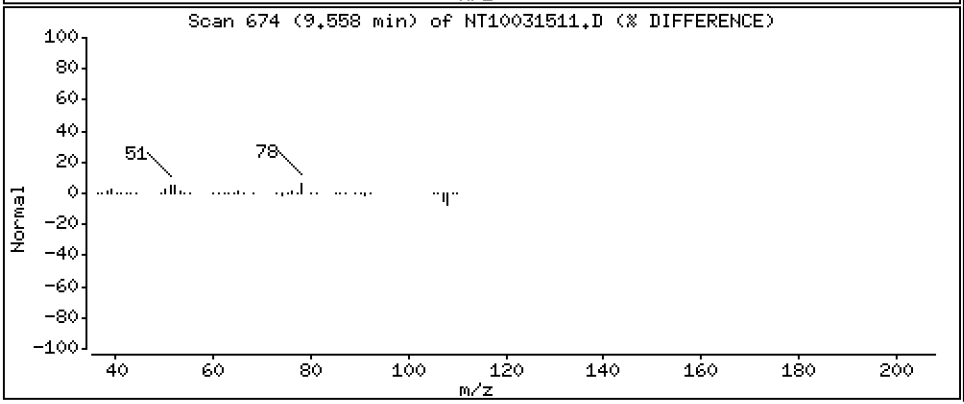
11 Benzyl alcohol

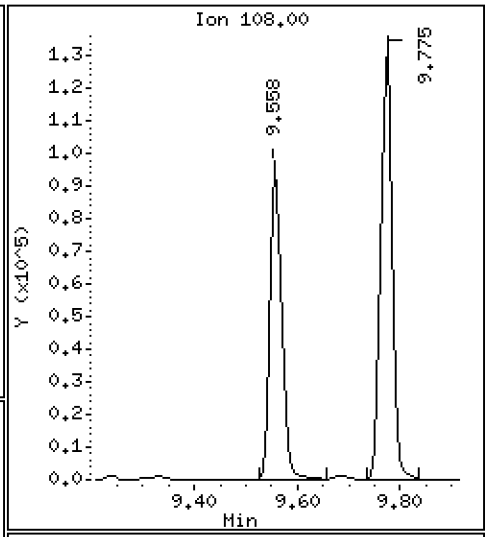
Concentration: 4.927 ug/mL

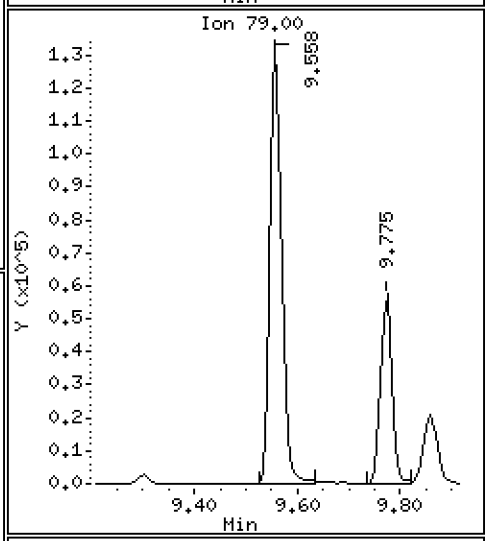


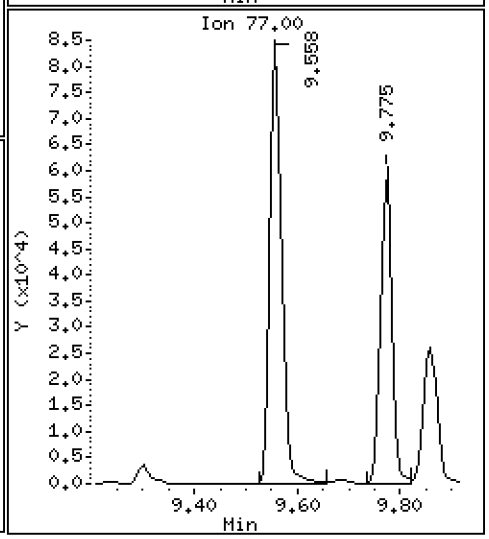












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

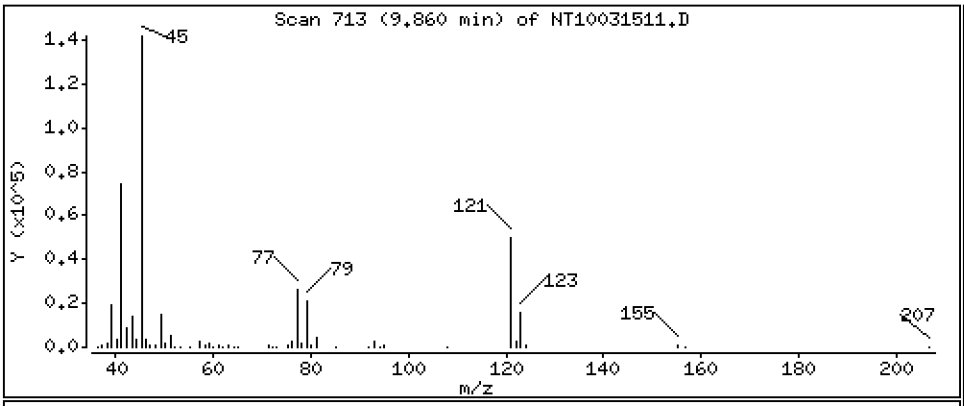
Operator: VTS

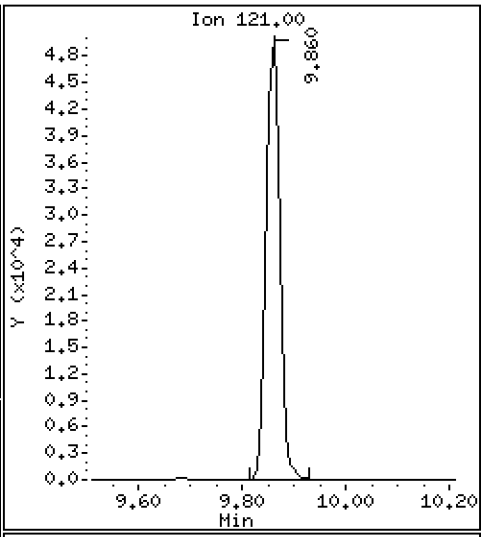
Column phase: ZB-5msi

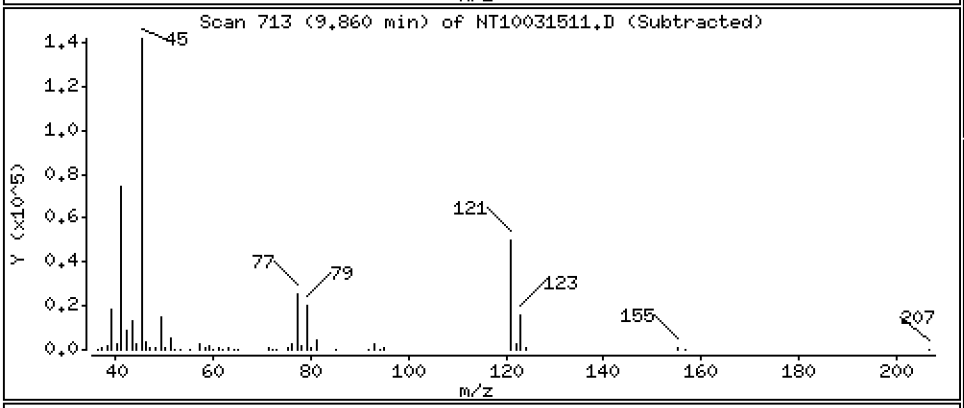
Column diameter: 0.25

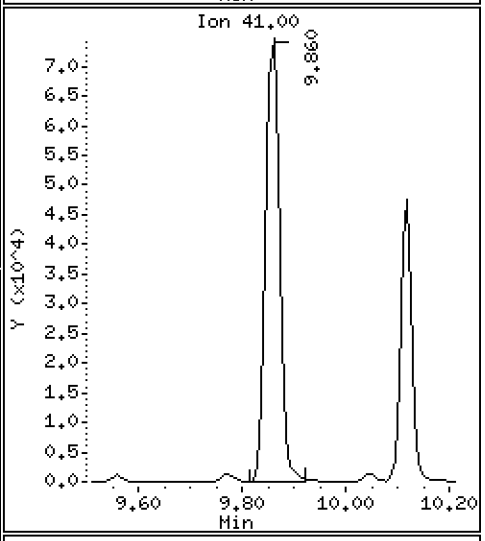
14 2,2'-oxybis(1-Chloropropane)

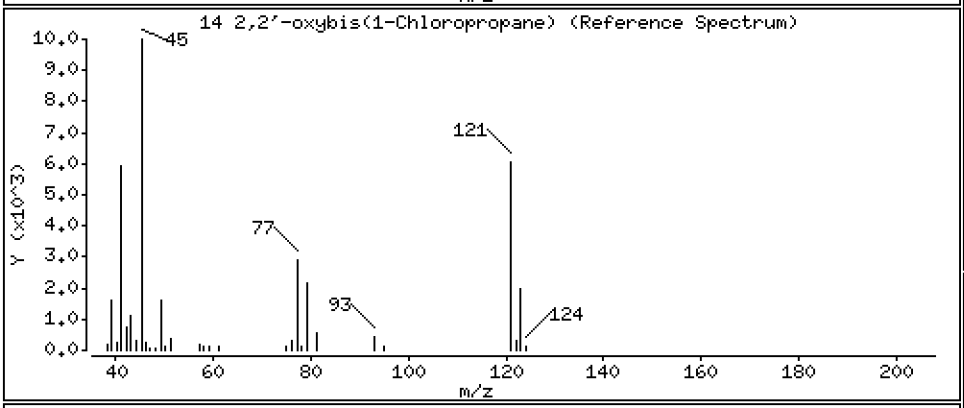
Concentration: 6.214 ug/mL

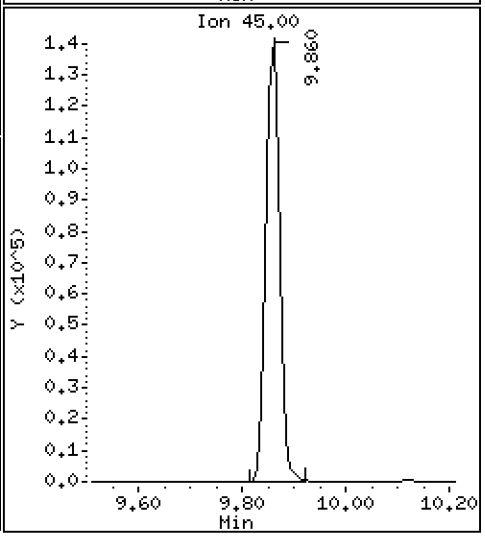


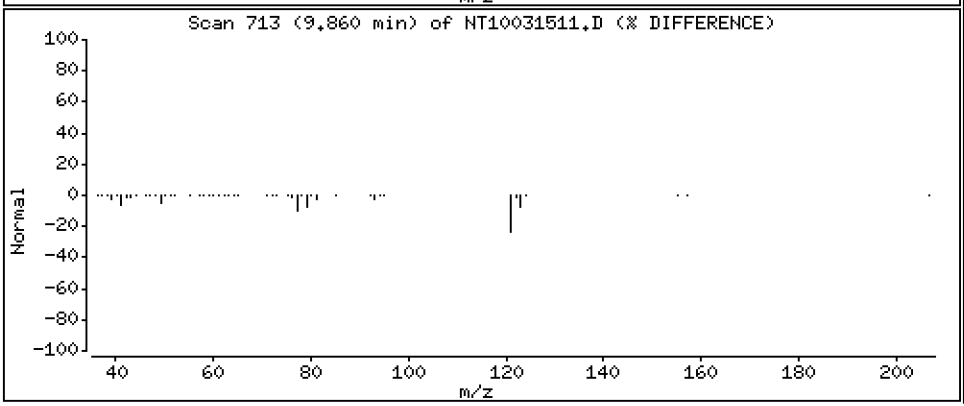












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

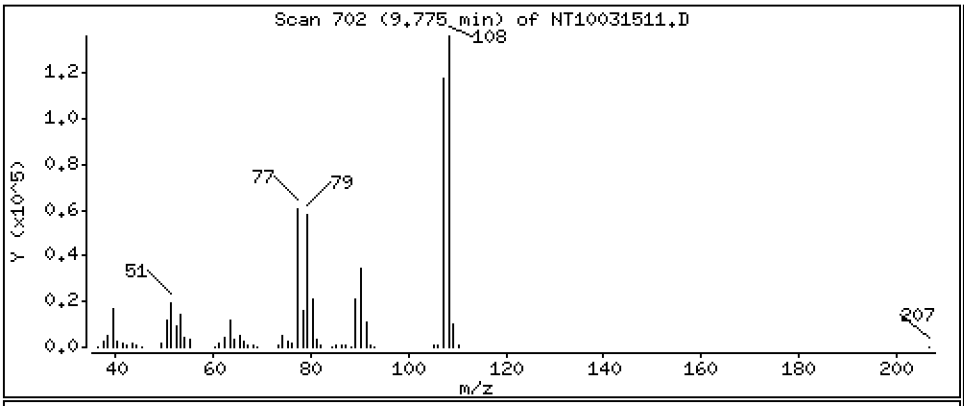
Operator: VTS

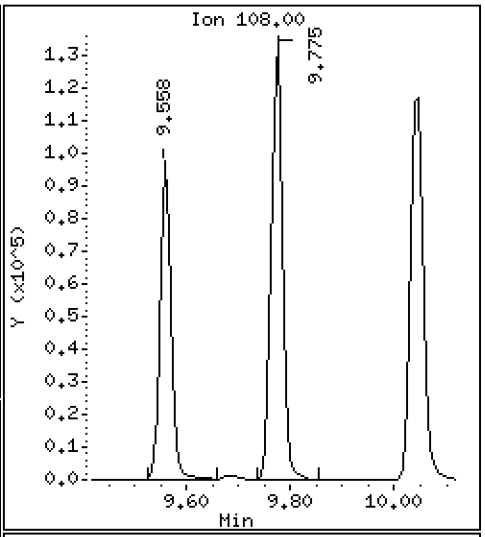
Column phase: ZB-5msi

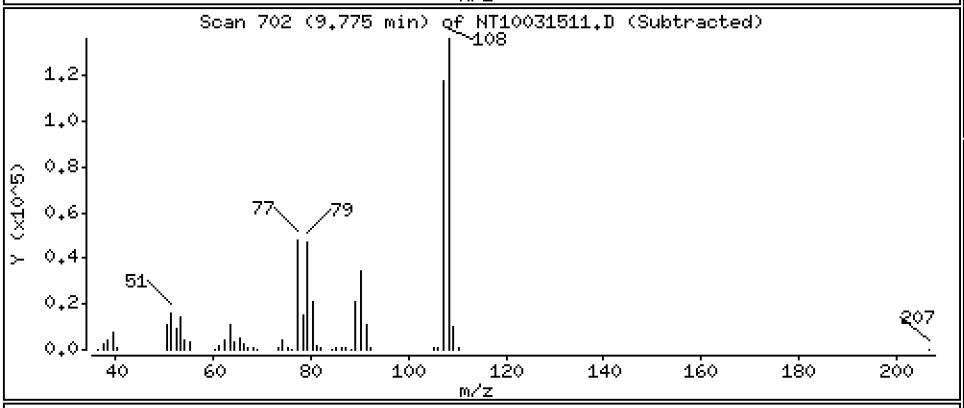
Column diameter: 0.25

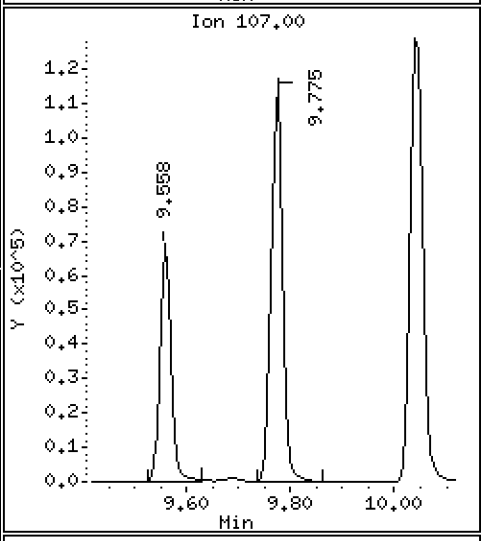
13 2-Methylphenol

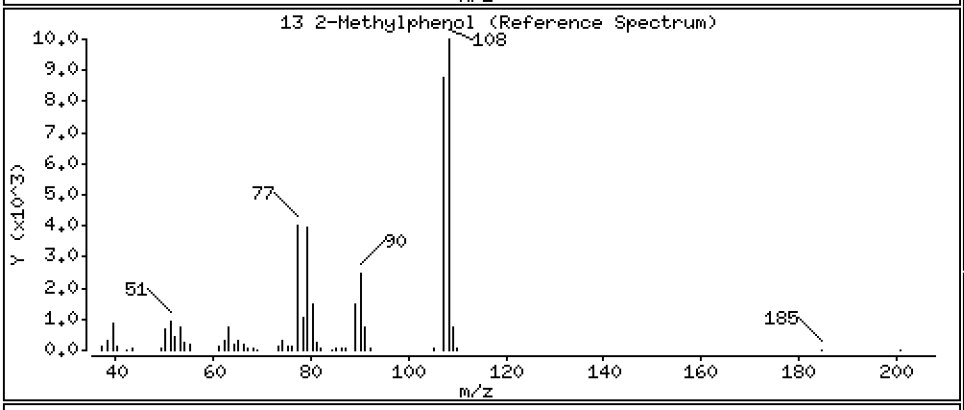
Concentration: 4.215 ug/mL

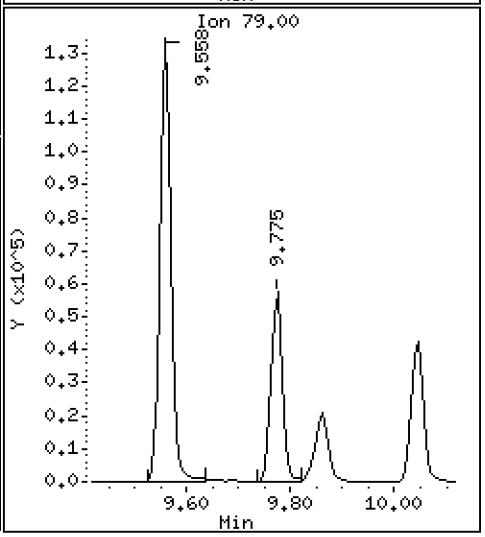


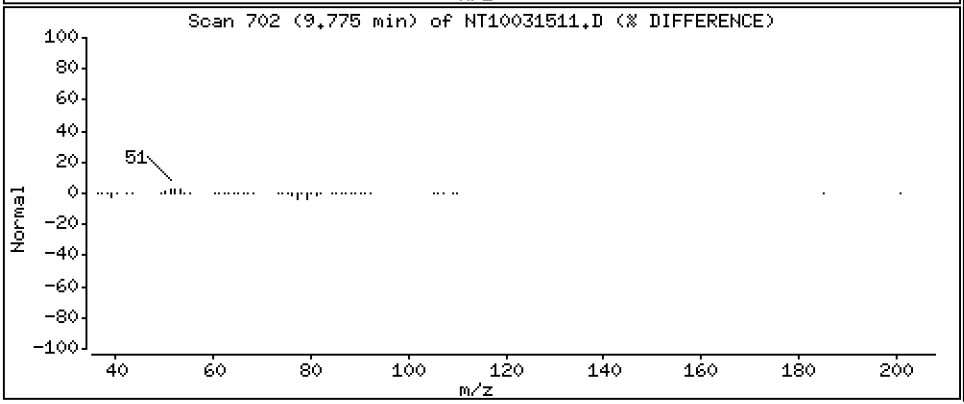












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

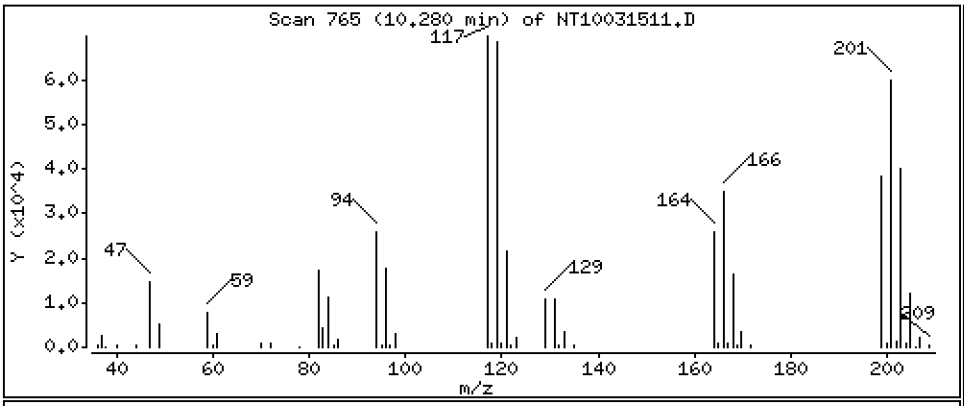
Operator: VTS

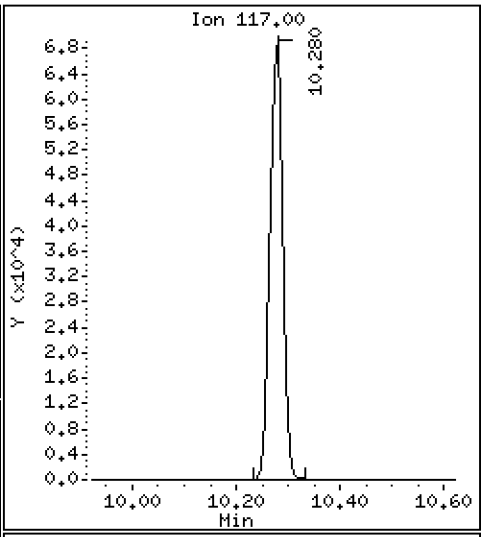
Column phase: ZB-5msi

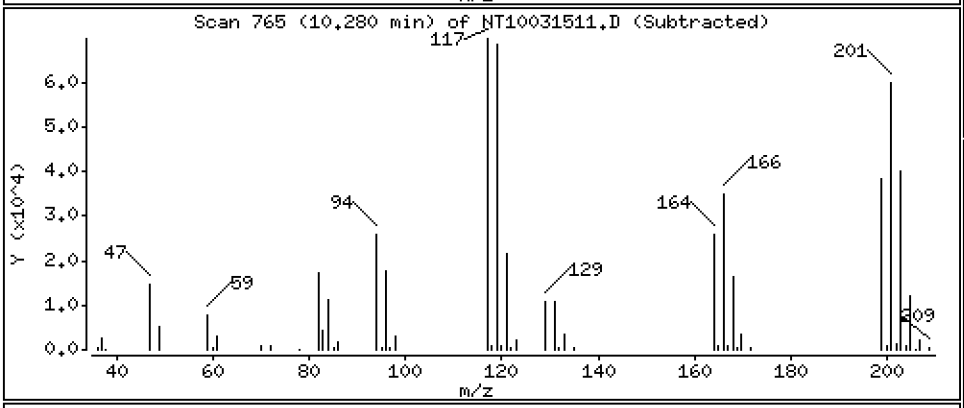
Column diameter: 0.25

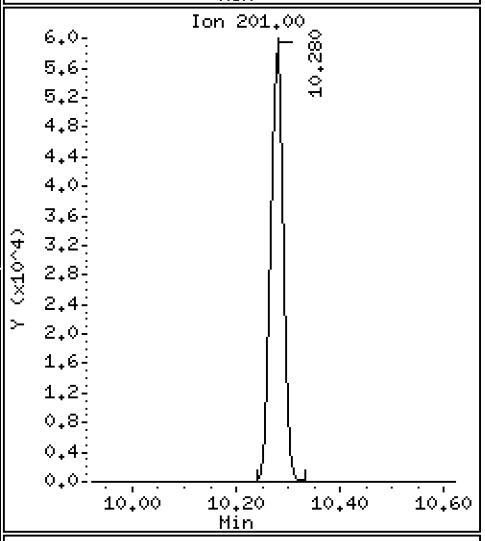
17 Hexachloroethane

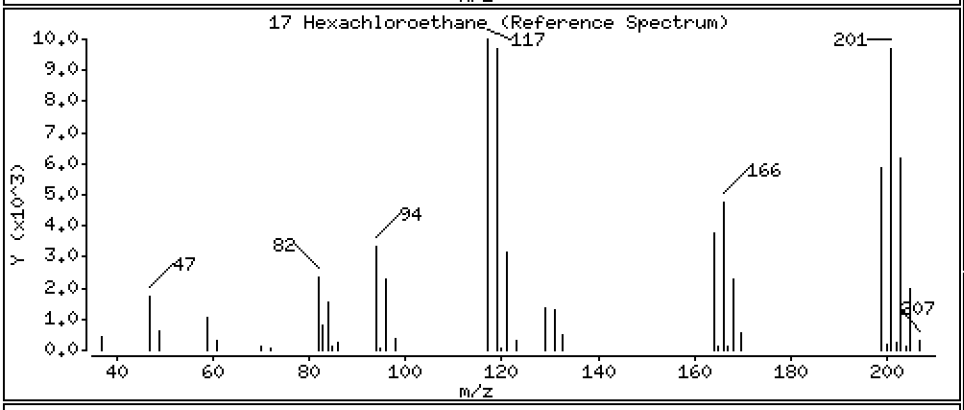
Concentration: 5.003 ug/mL

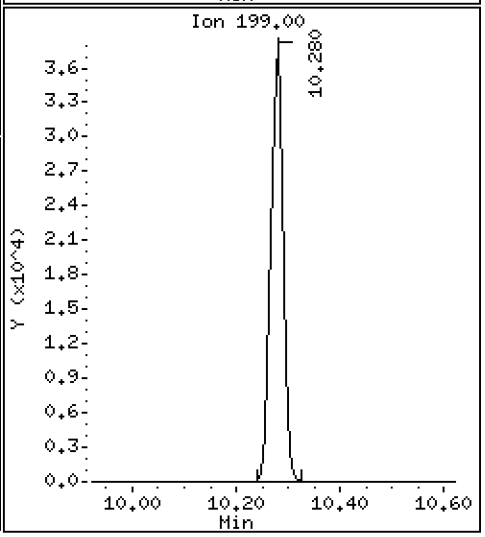


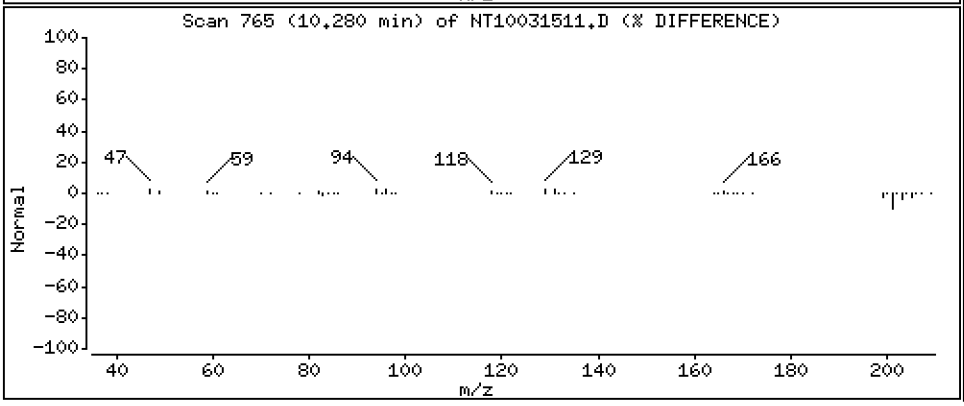












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

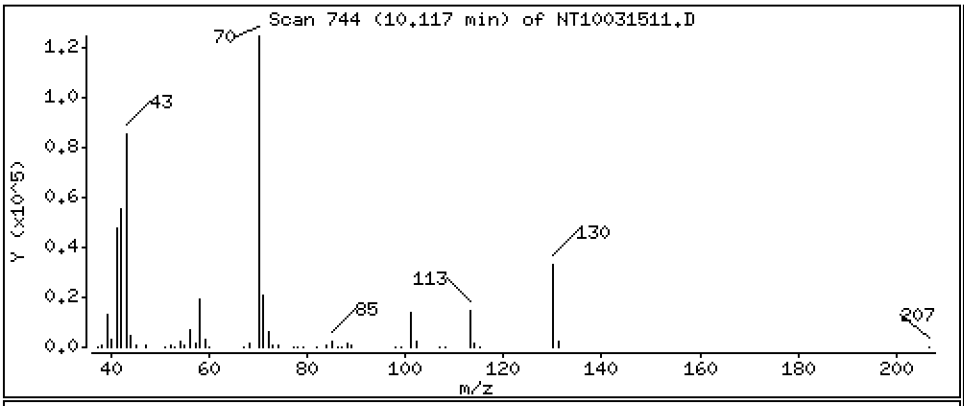
Operator: VTS

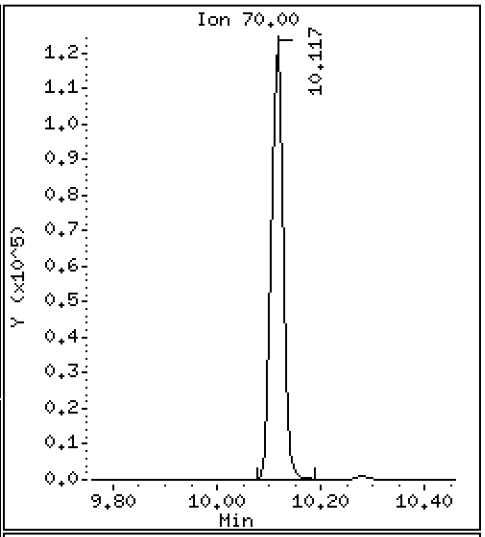
Column phase: ZB-5msi

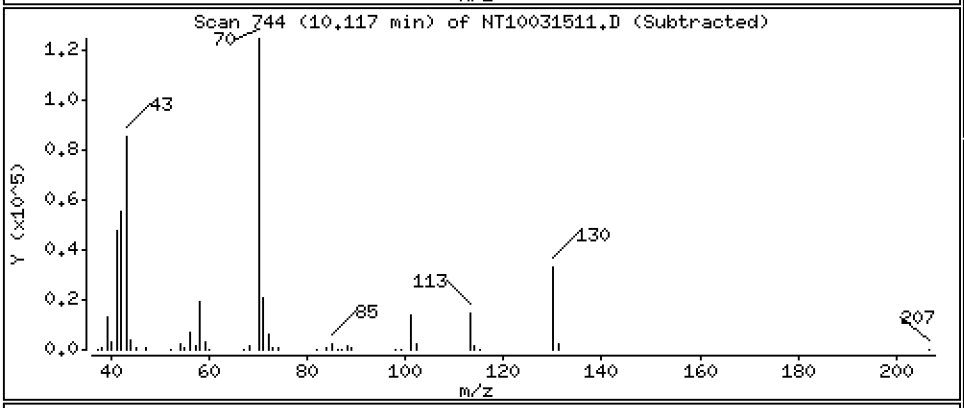
Column diameter: 0.25

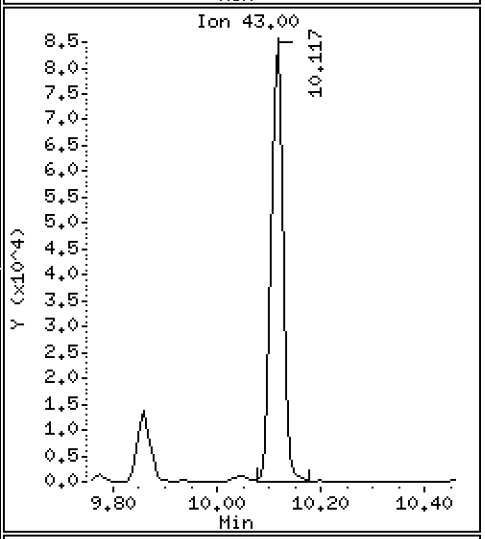
16 N-Nitroso-di-n-propylamine

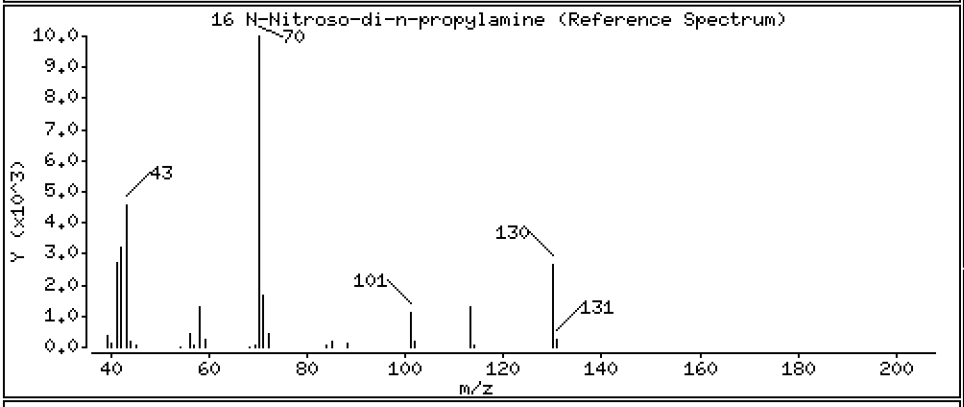
Concentration: 5.179 ug/mL

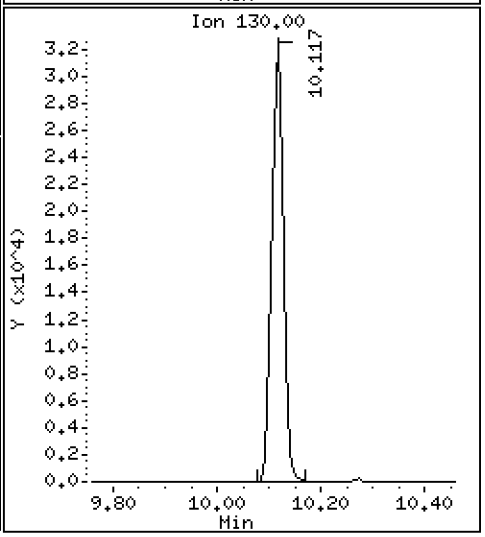


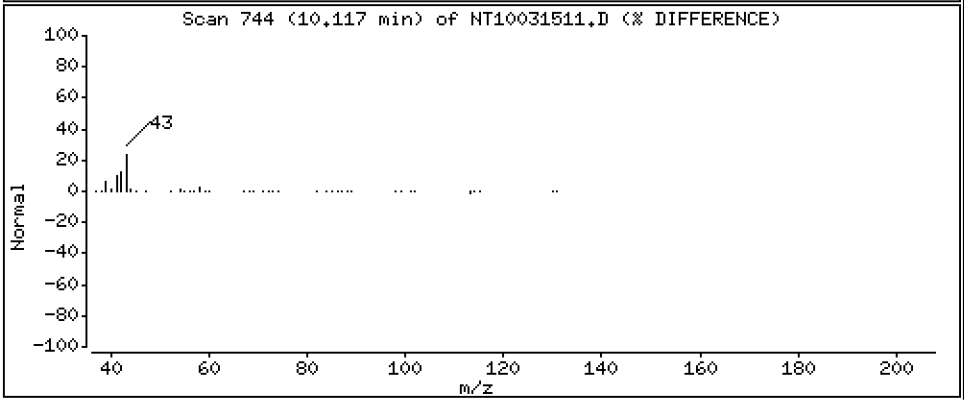












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

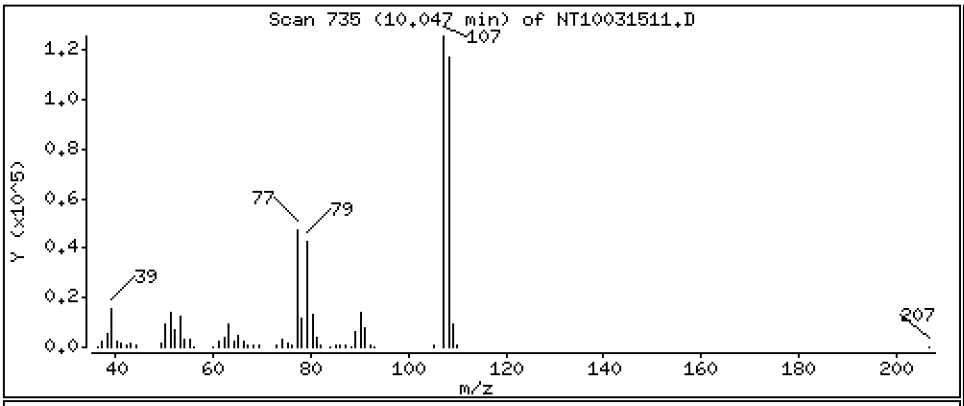
Operator: VTS

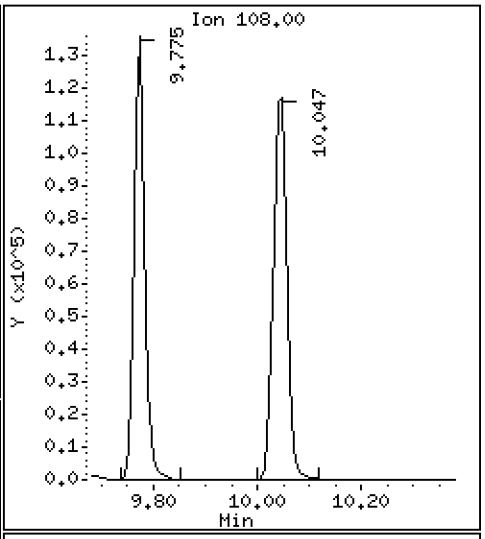
Column phase: ZB-5msi

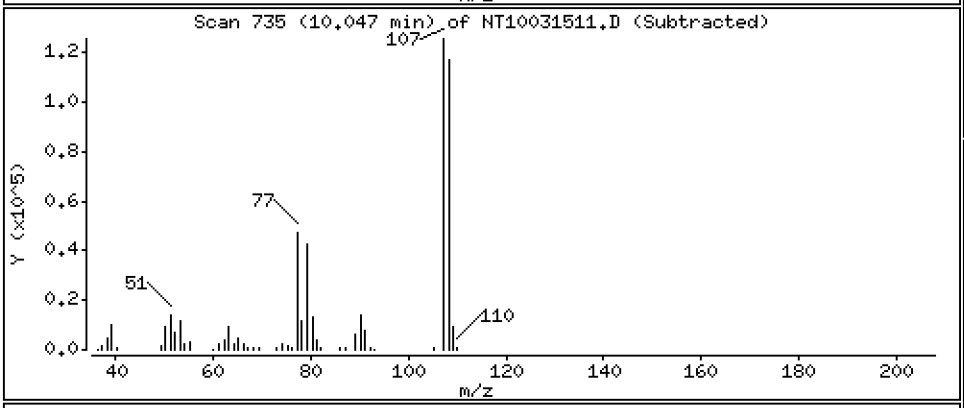
Column diameter: 0.25

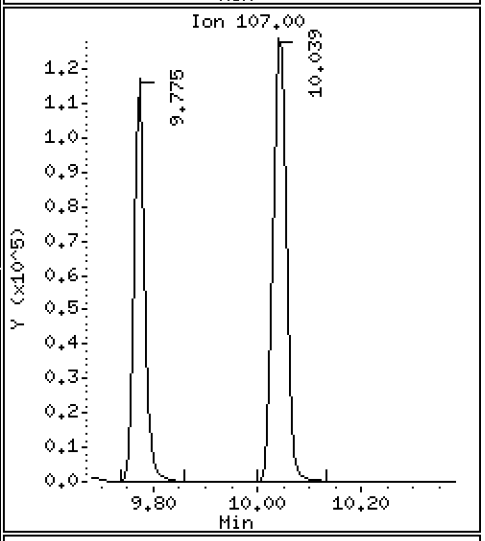
15 4-Methylphenol

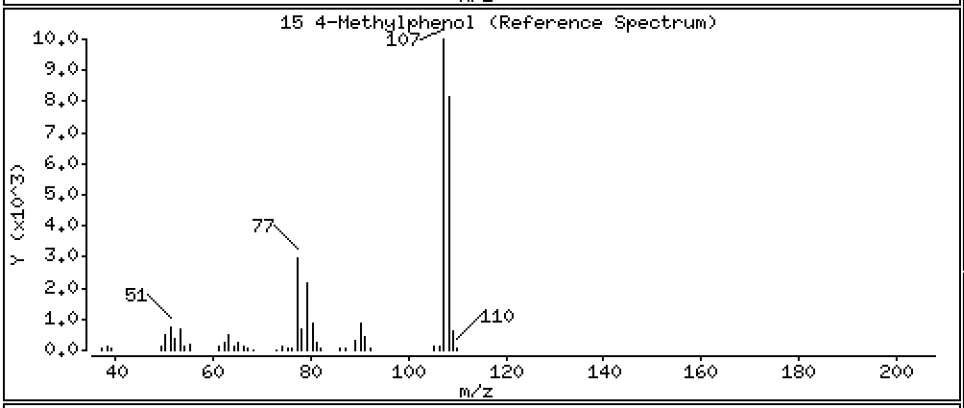
Concentration: 4.365 ug/mL

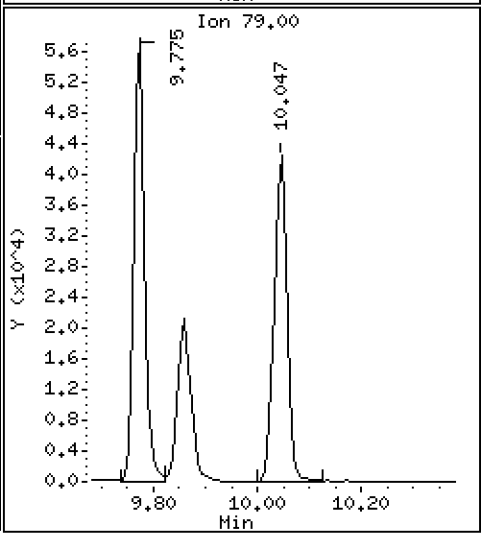


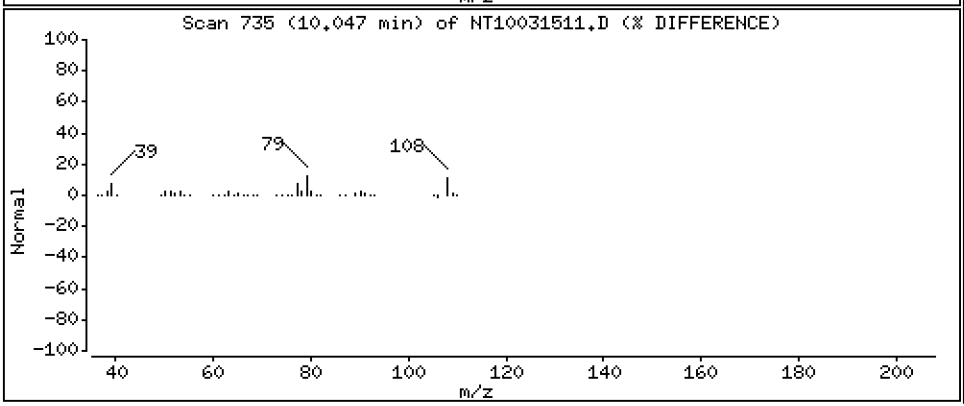












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

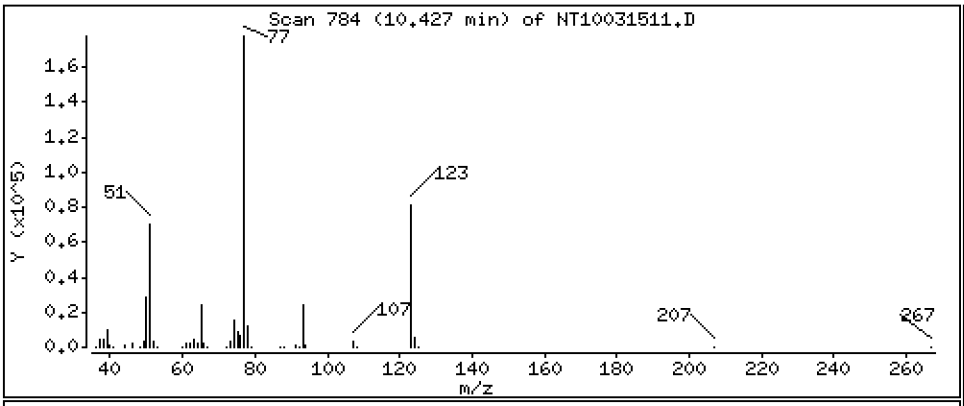
Operator: VTS

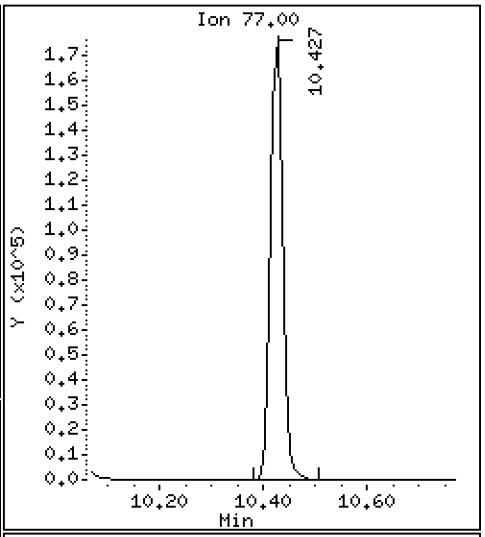
Column phase: ZB-5msi

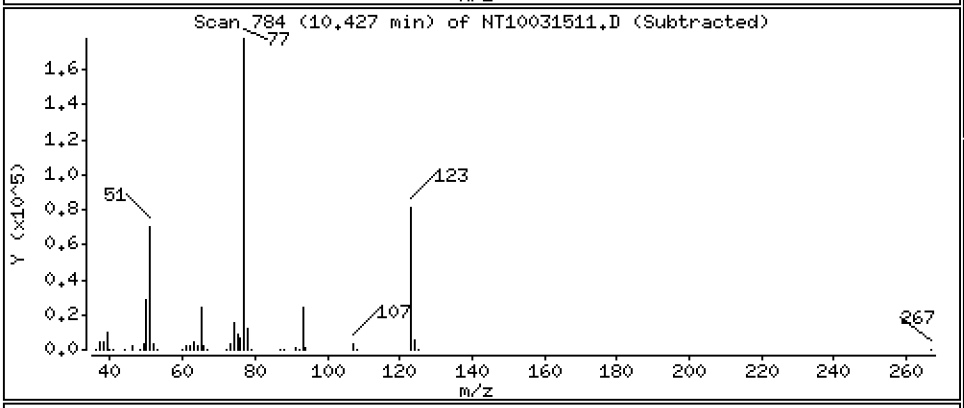
Column diameter: 0.25

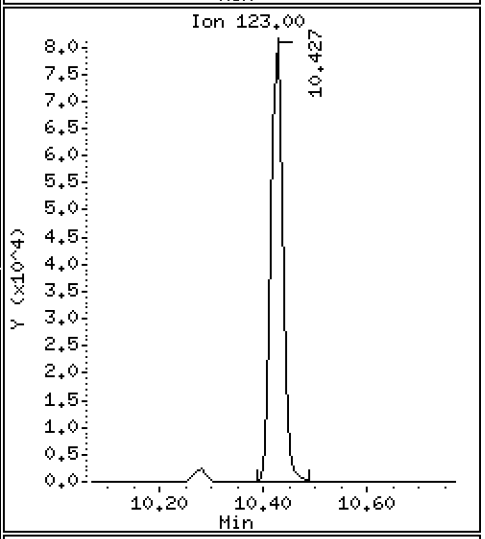
19 Nitrobenzene

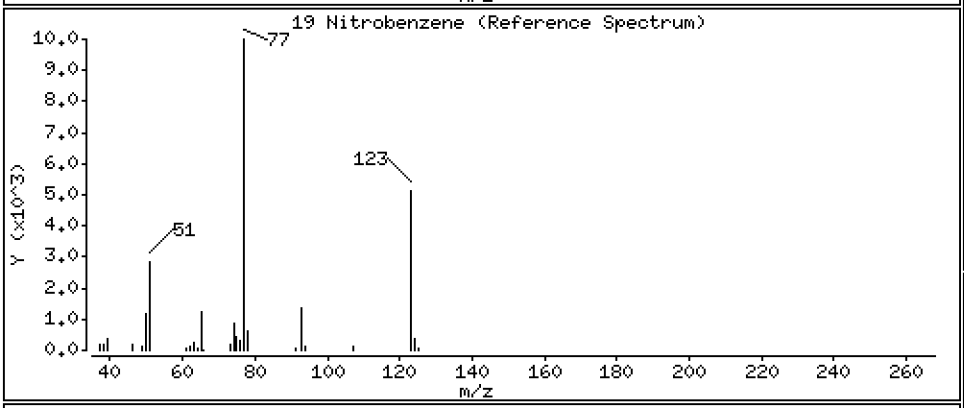
Concentration: 4.858 ug/mL

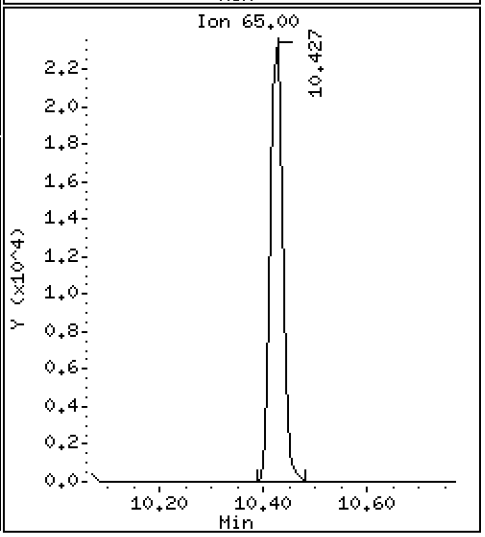


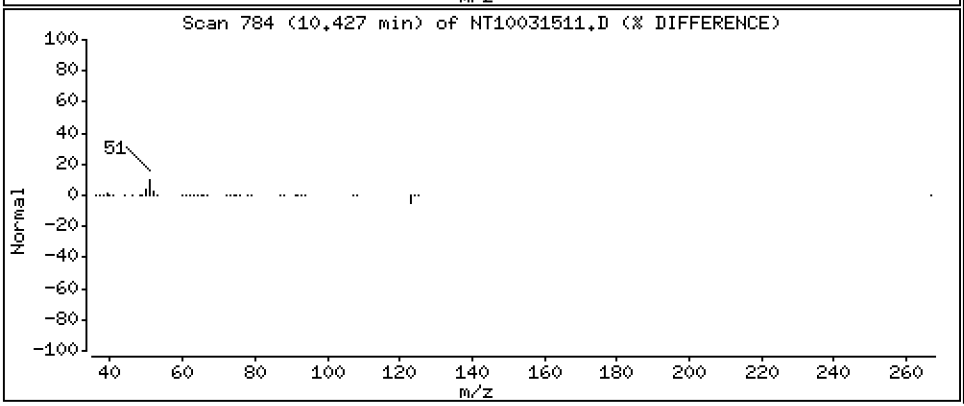












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

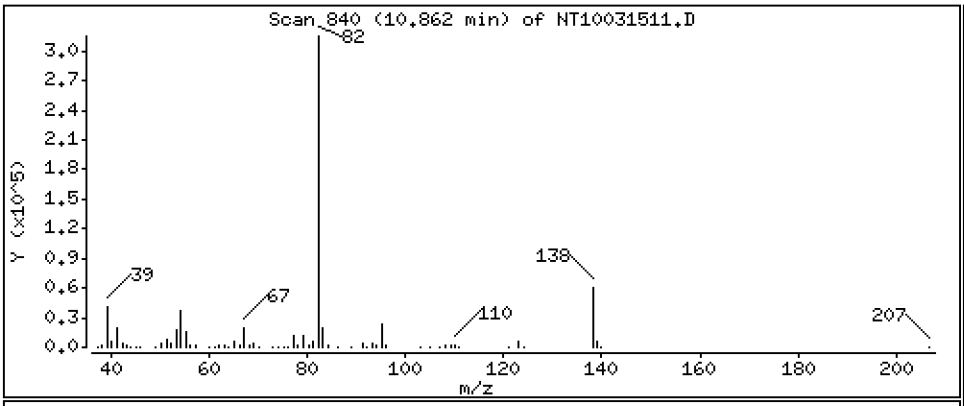
Operator: VTS

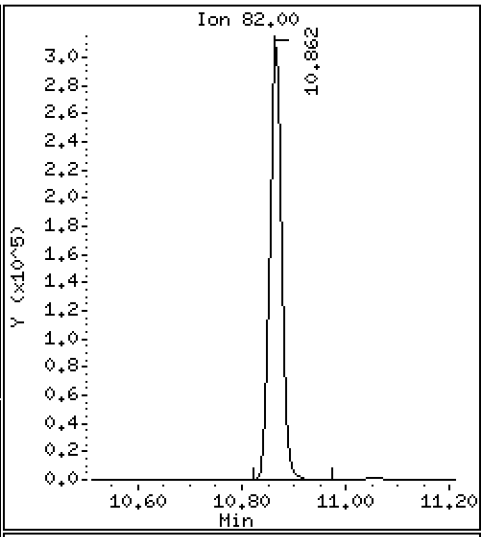
Column phase: ZB-5msi

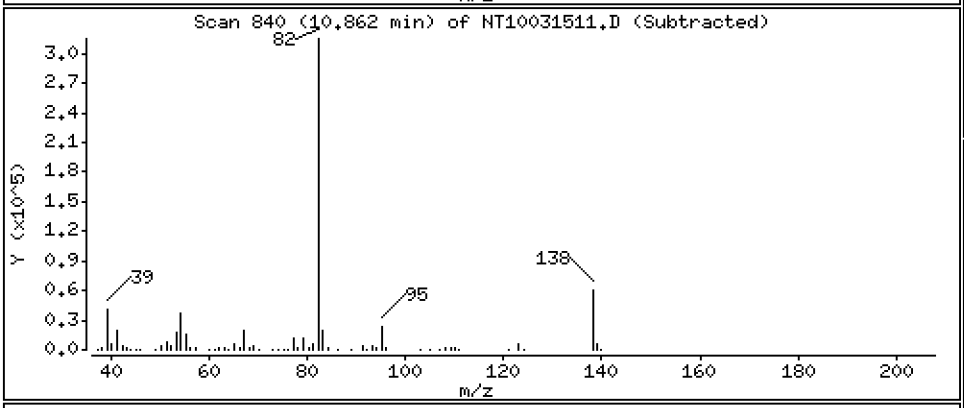
Column diameter: 0.25

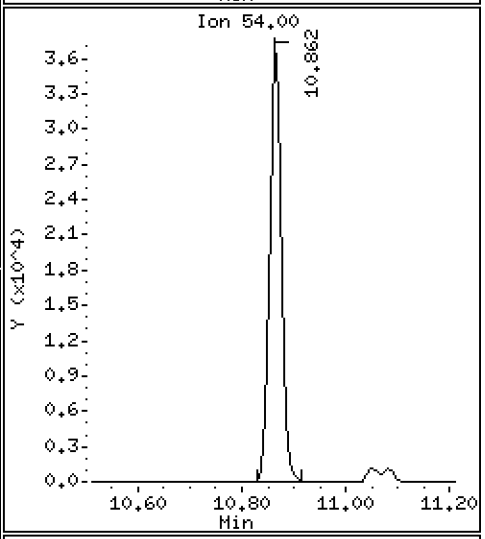
20 Isophorone

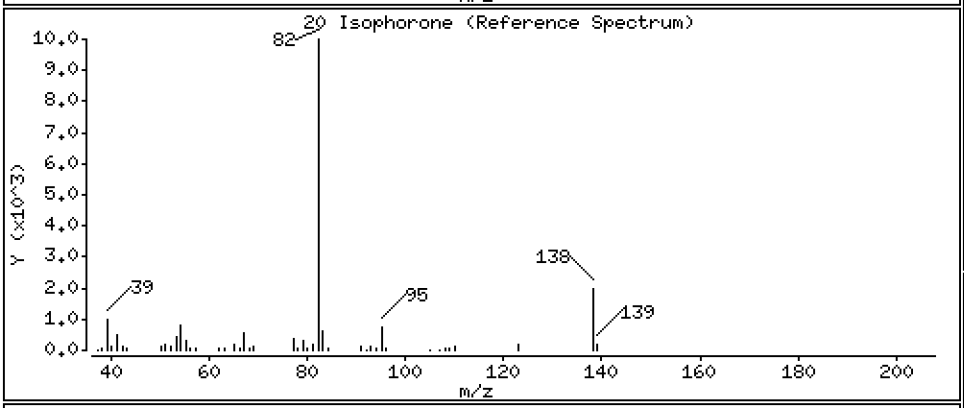
Concentration: 7.696 ug/mL

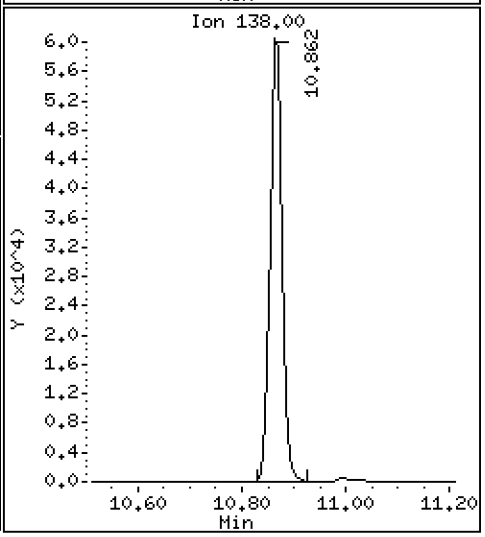


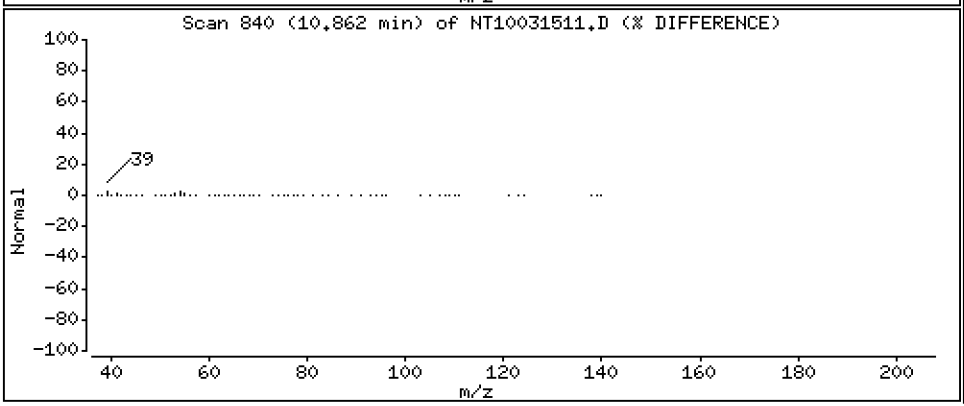












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

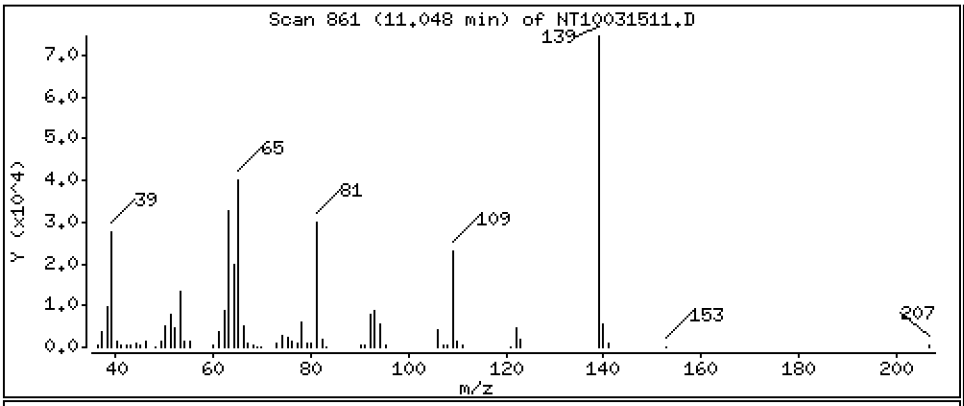
Operator: VTS

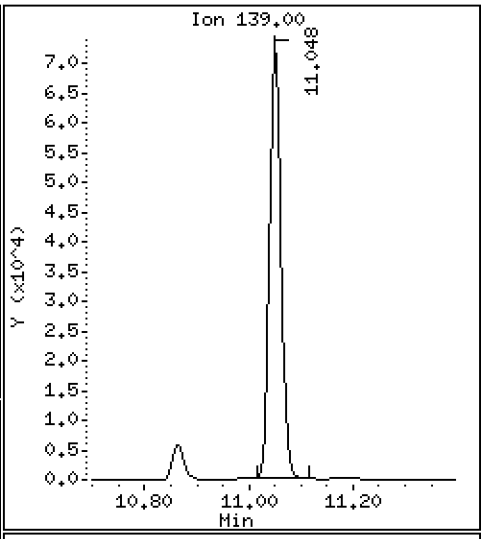
Column phase: ZB-5msi

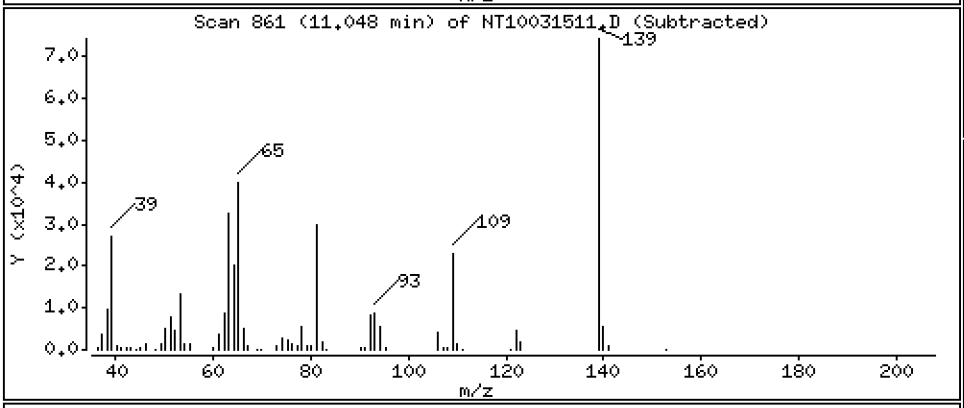
Column diameter: 0.25

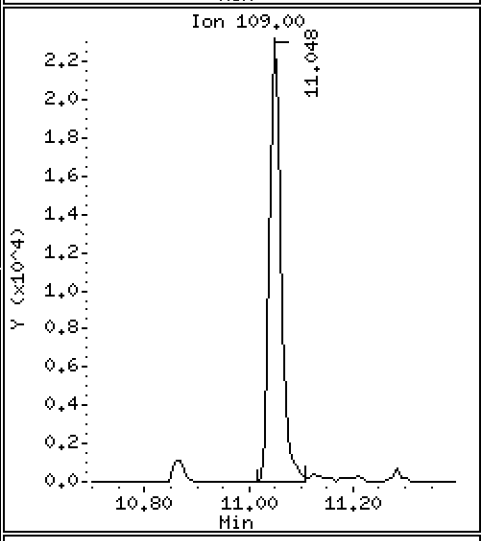
21 2-Nitrophenol

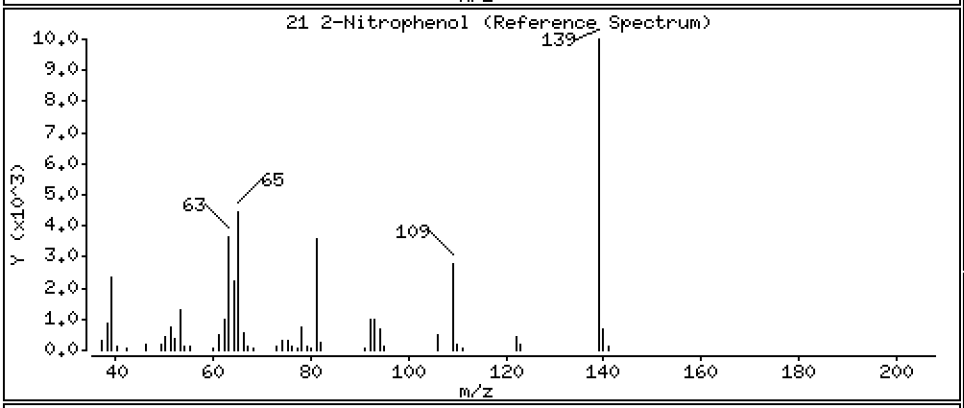
Concentration: 3.995 ug/mL

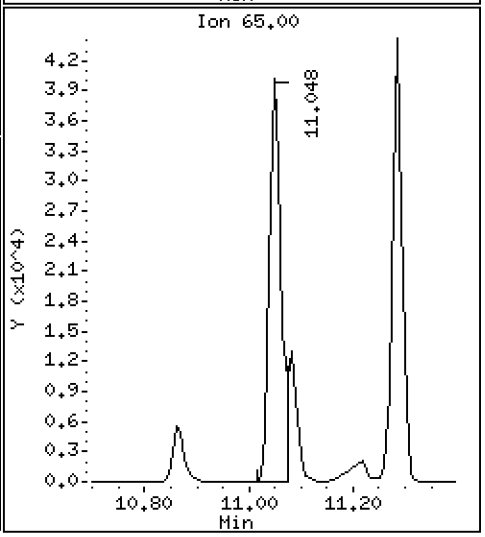


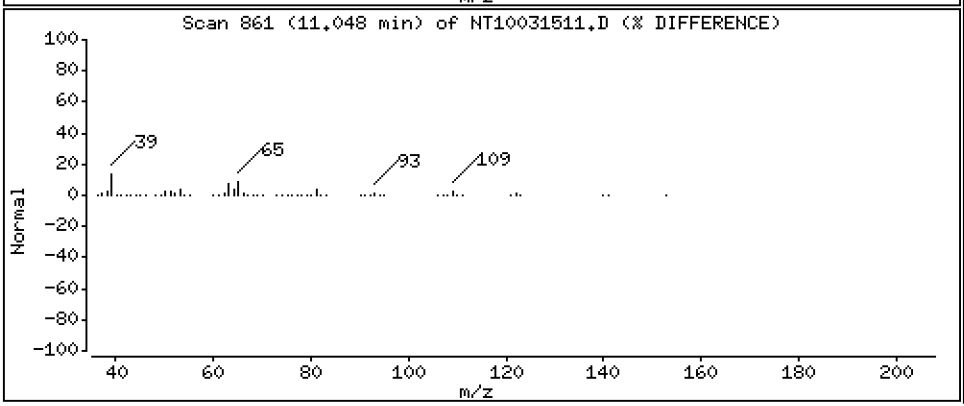












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

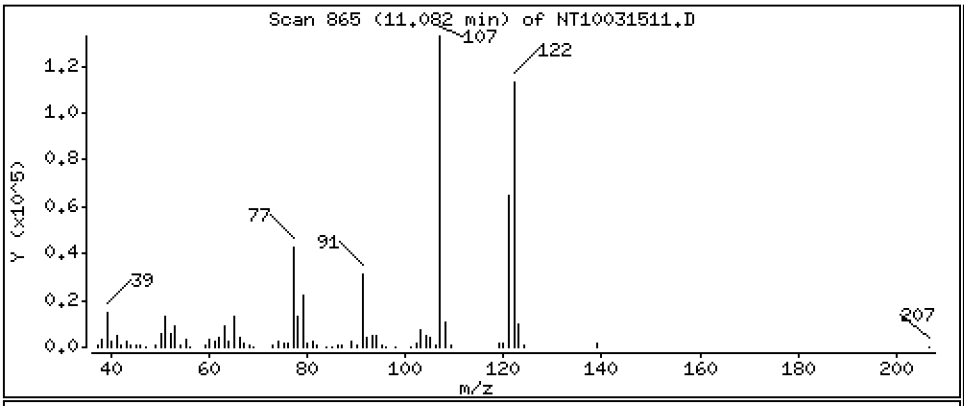
Operator: VTS

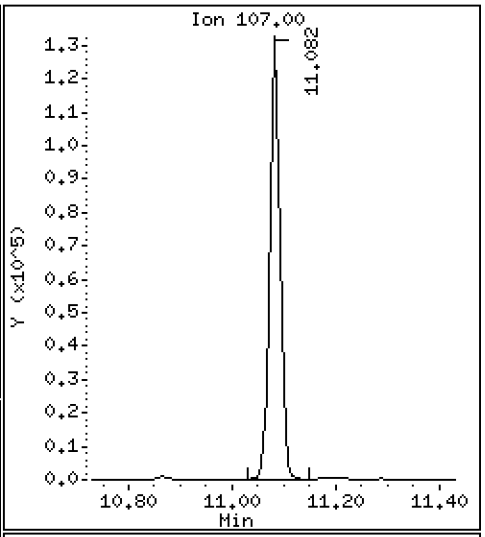
Column phase: ZB-5msi

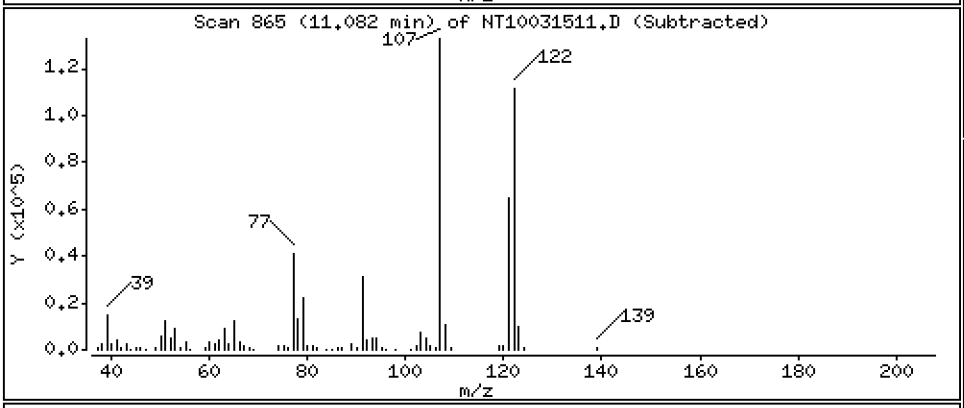
Column diameter: 0.25

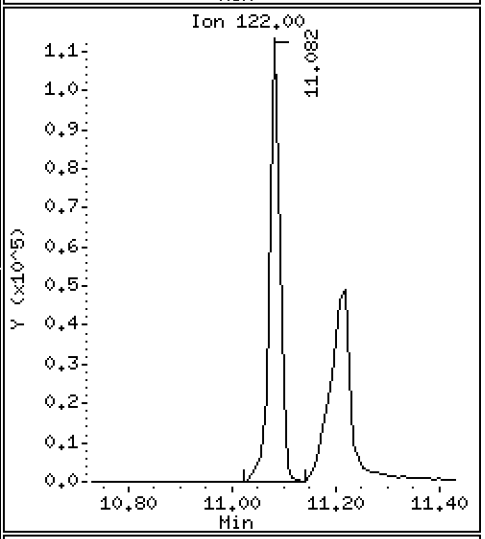
22 2,4-Dimethylphenol

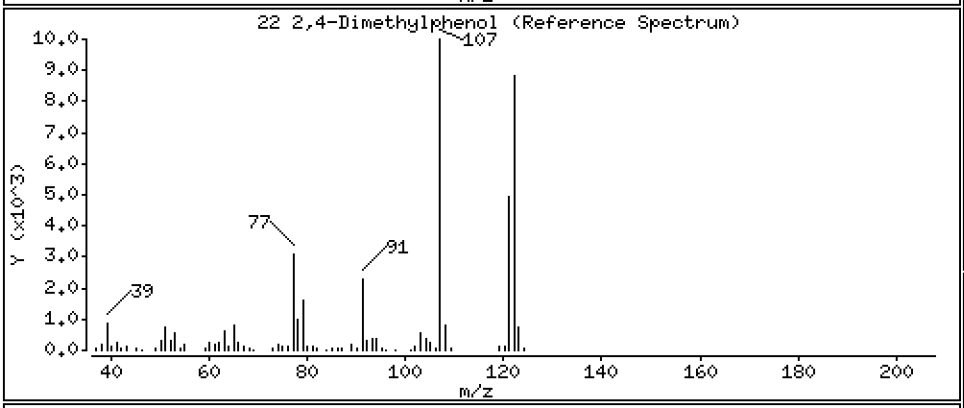
Concentration: 3.632 ug/mL

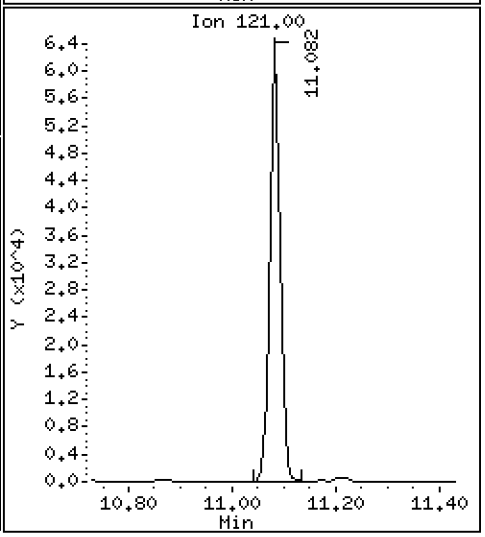


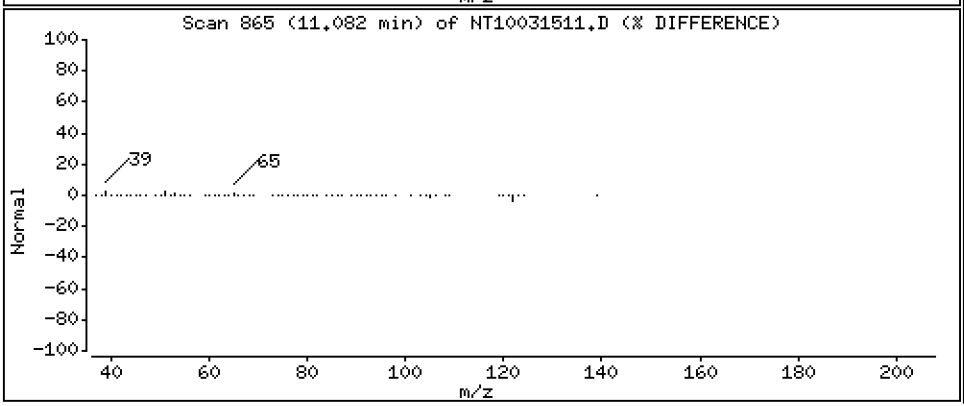












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

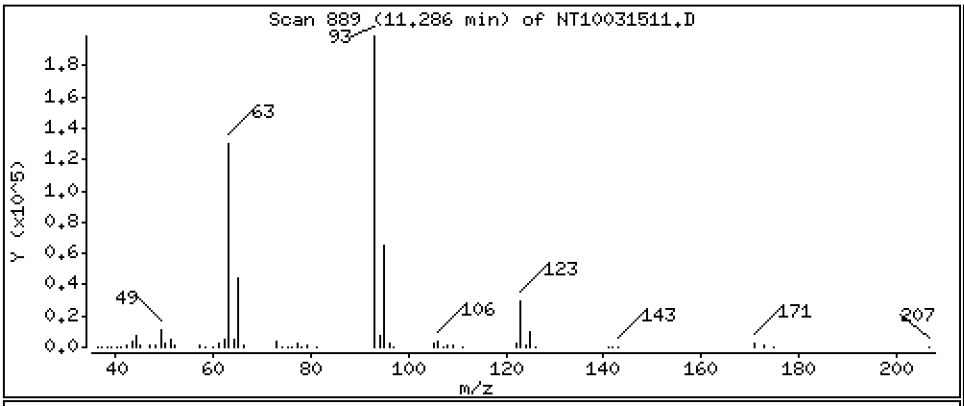
Operator: VTS

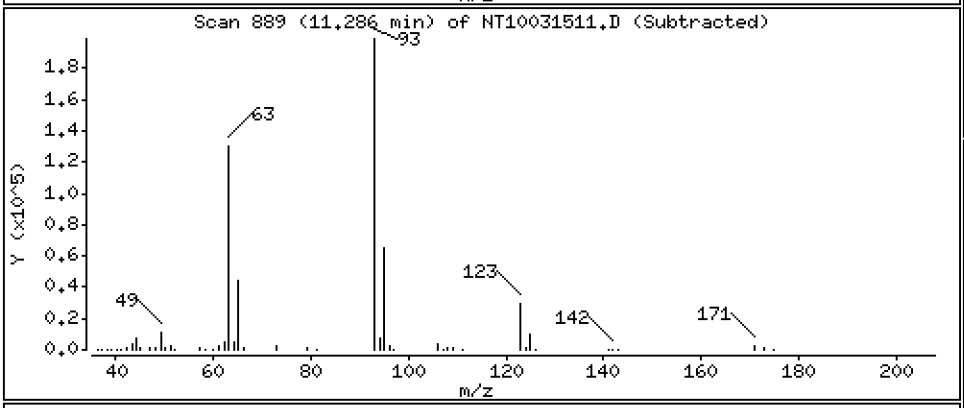
Column phase: ZB-5msi

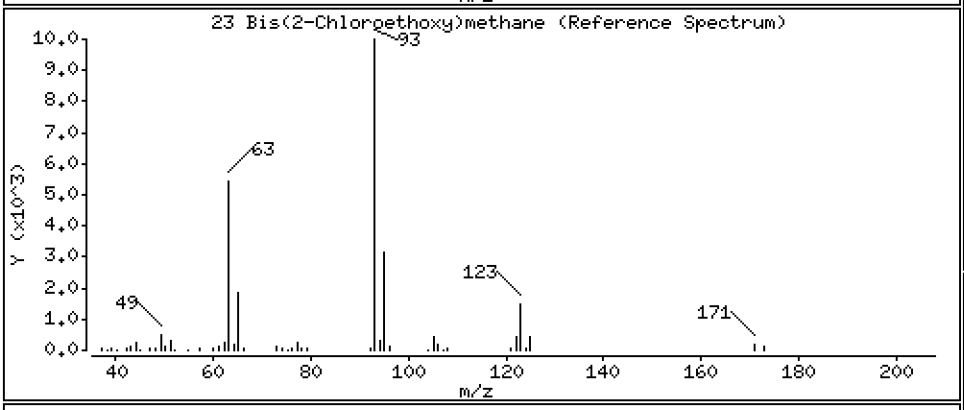
Column diameter: 0.25

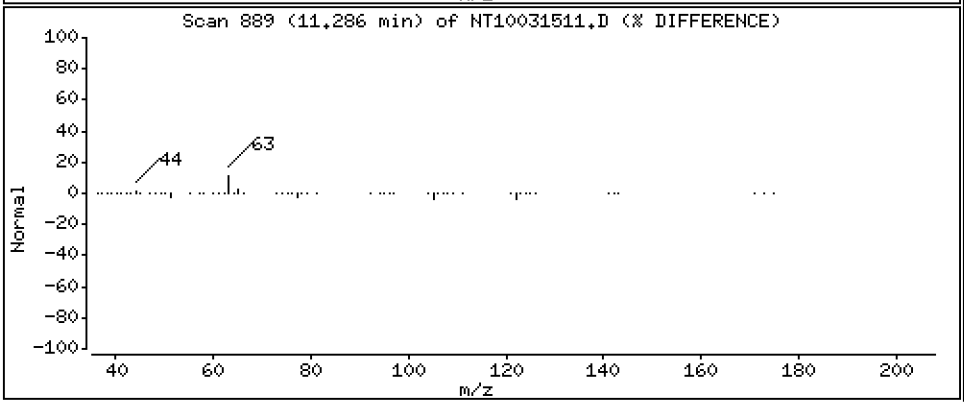
23 Bis(2-Chloroethoxy)methane

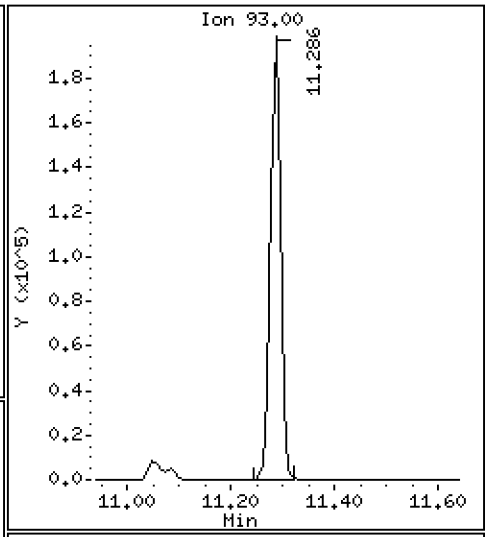
Concentration: 5.654 ug/mL

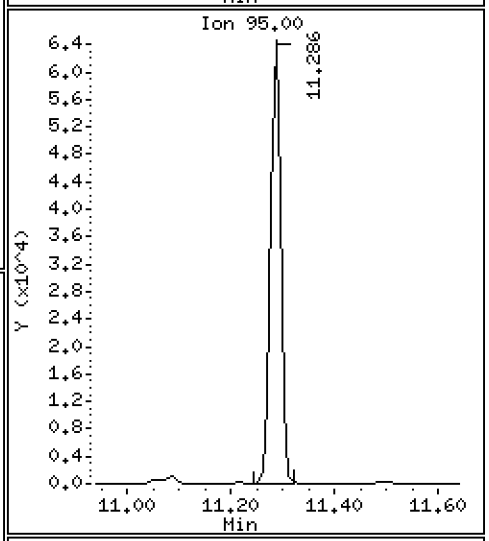


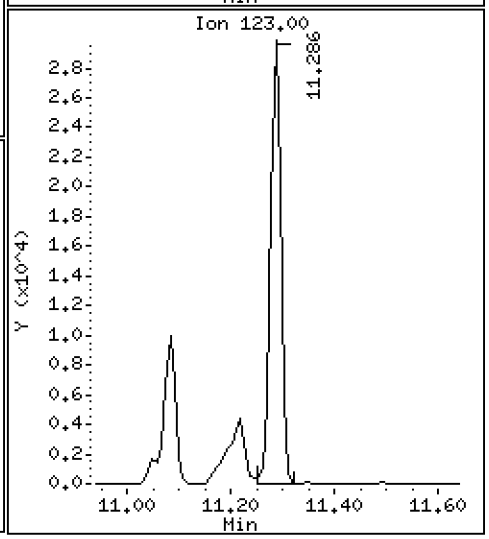












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

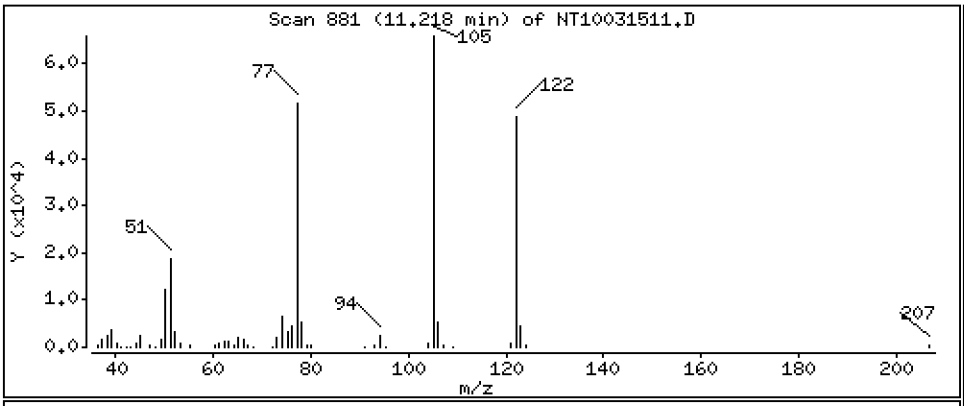
Operator: VTS

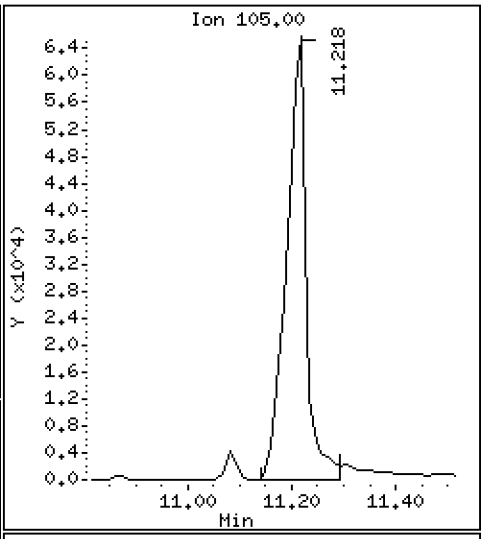
Column phase: ZB-5msi

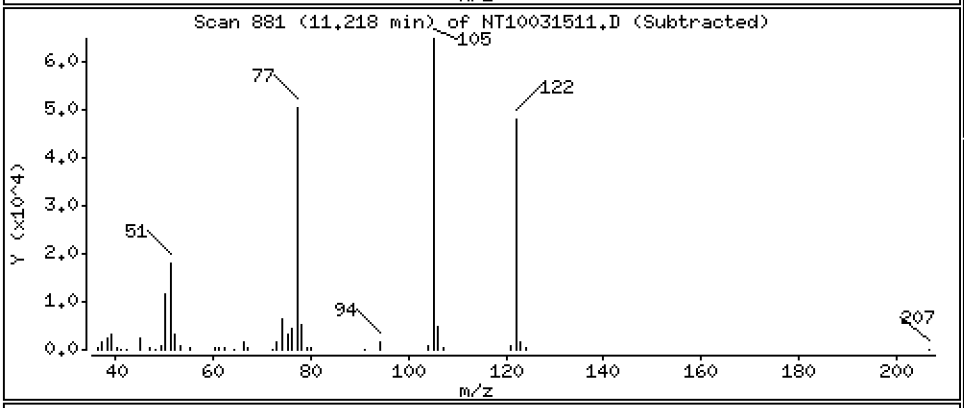
Column diameter: 0.25

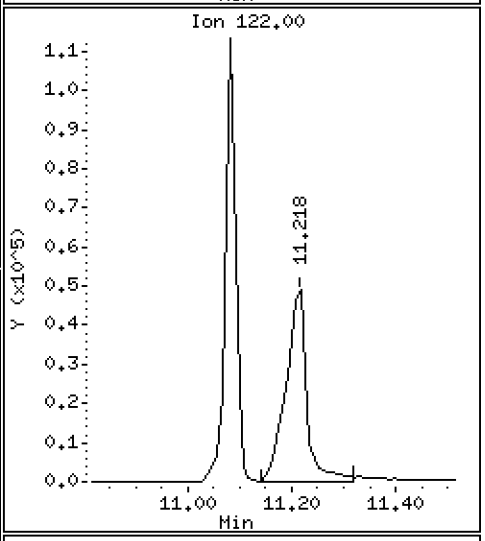
24 Benzoic acid

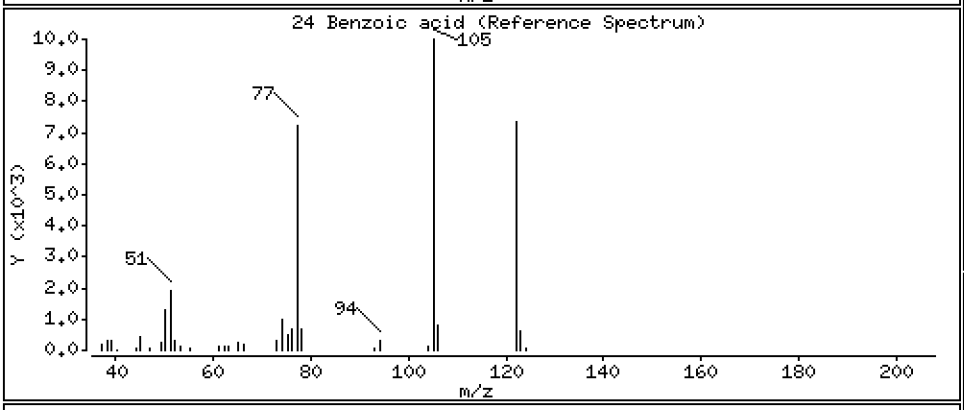
Concentration: 5.952 ug/mL

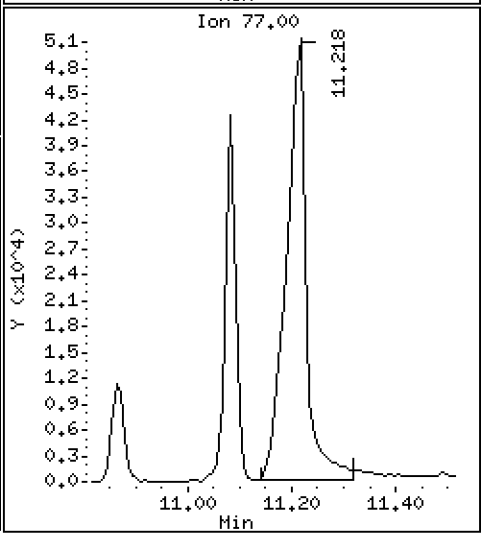


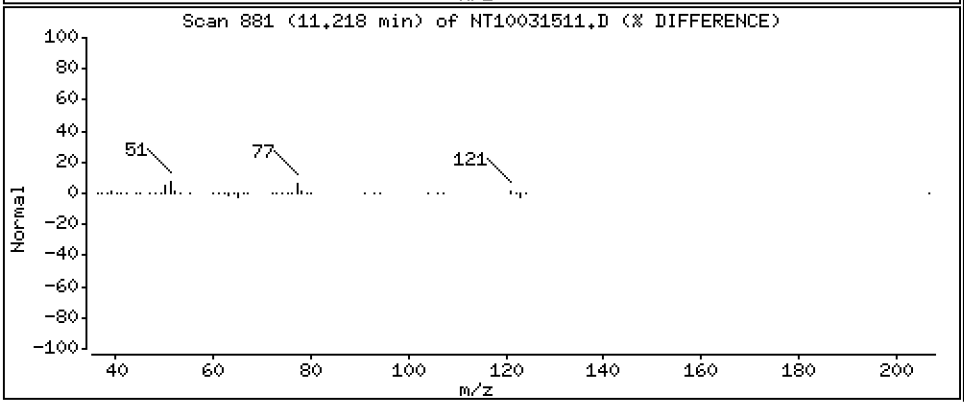












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

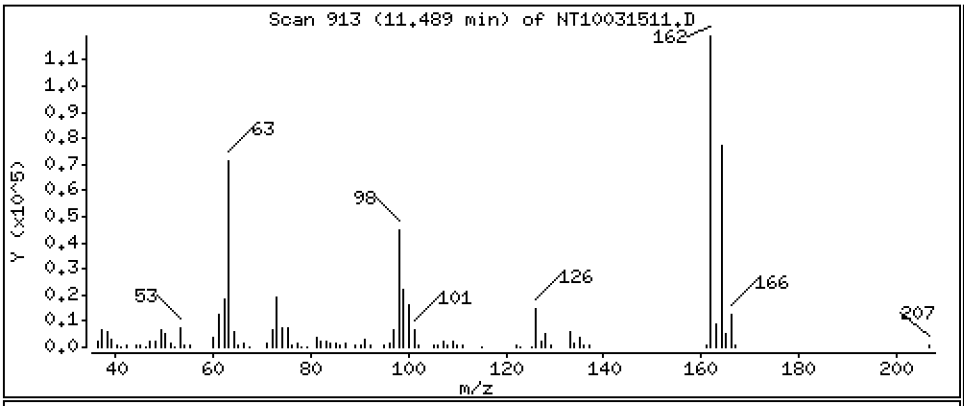
Operator: VTS

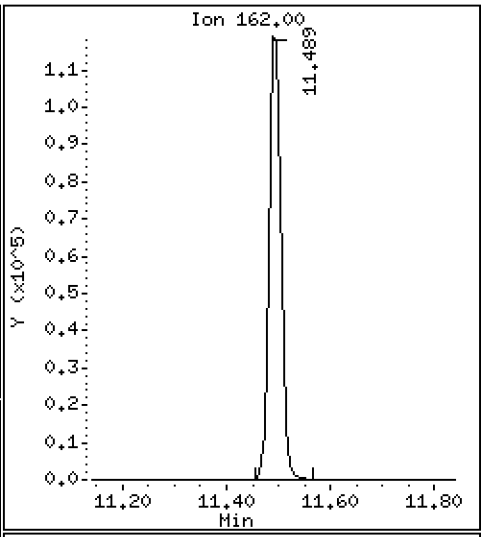
Column phase: ZB-5msi

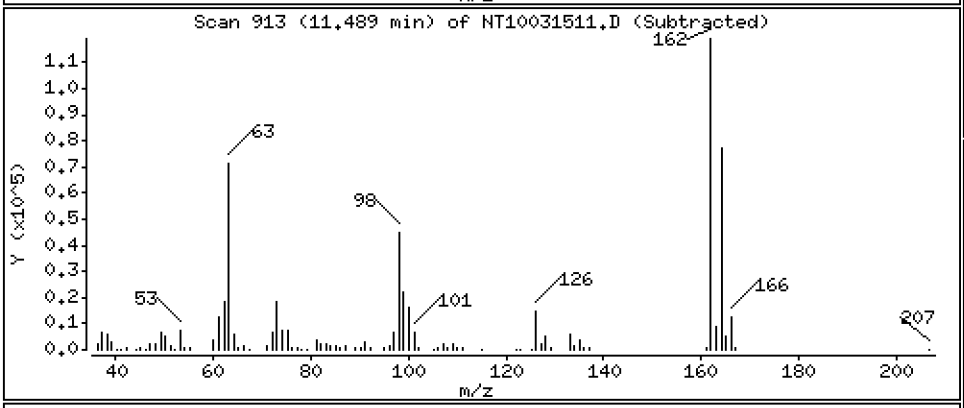
Column diameter: 0.25

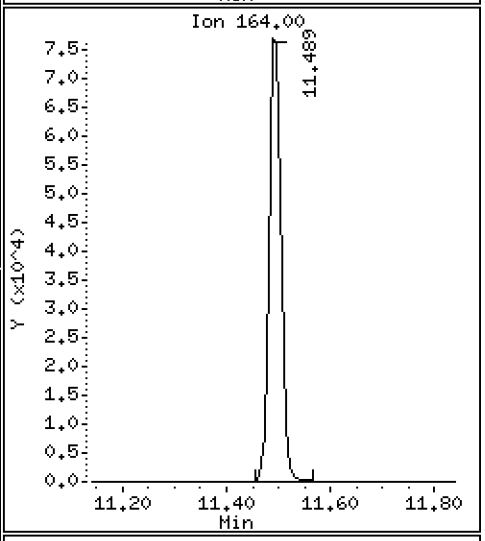
25 2,4-Dichlorophenol

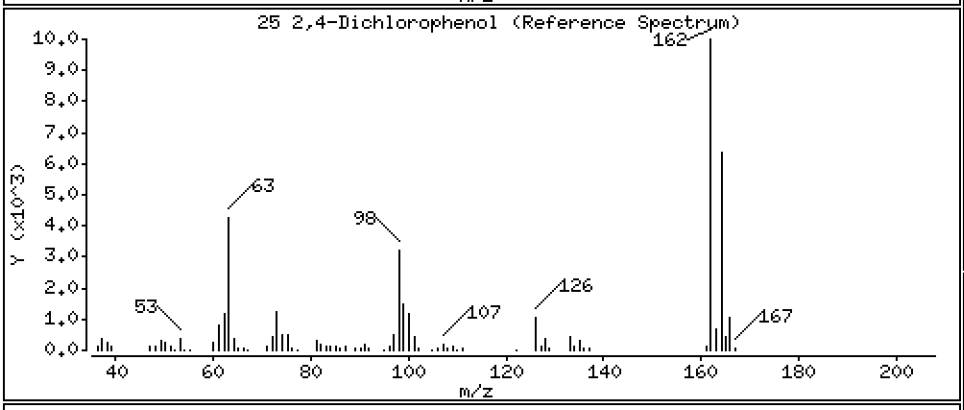
Concentration: 4.703 ug/mL

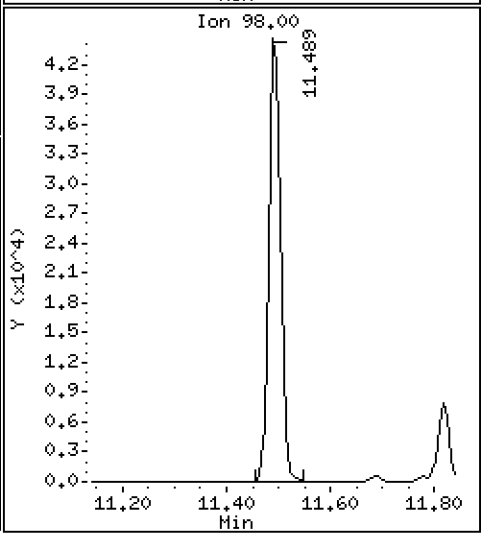


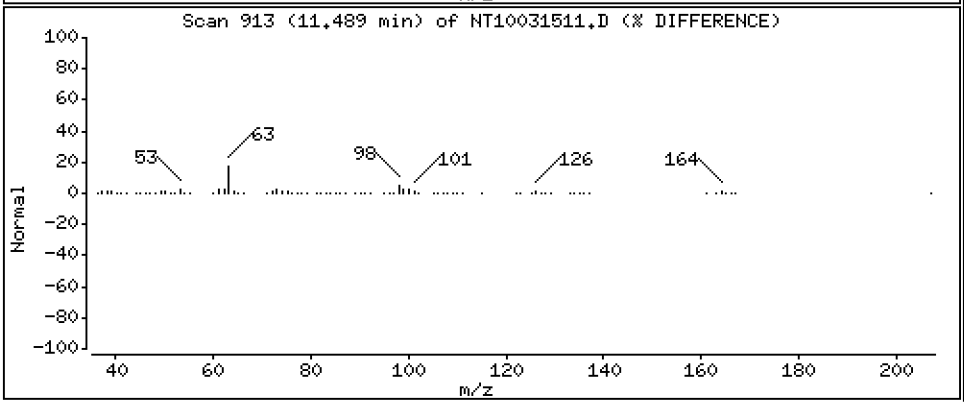












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

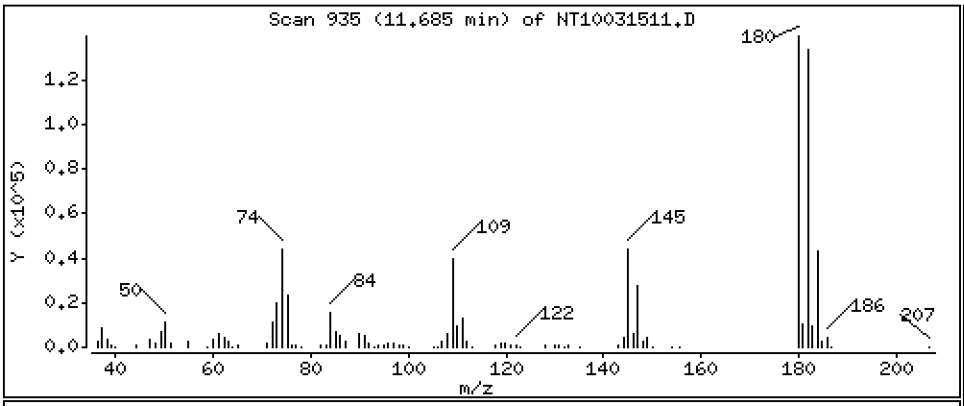
Operator: VTS

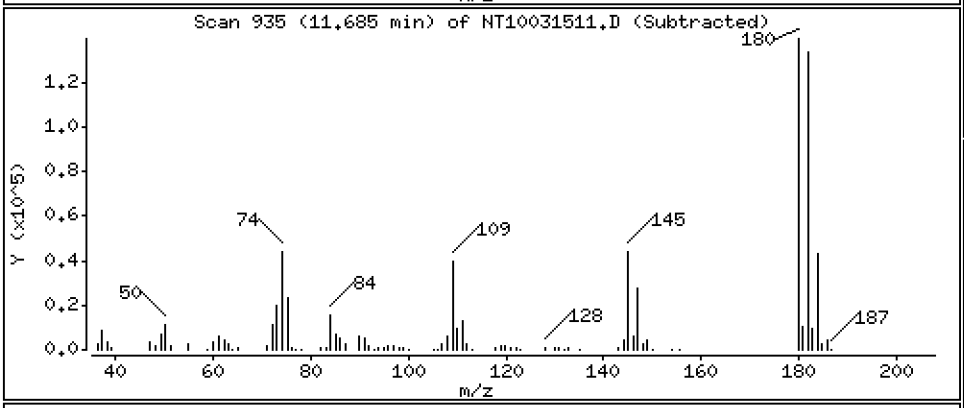
Column phase: ZB-5msi

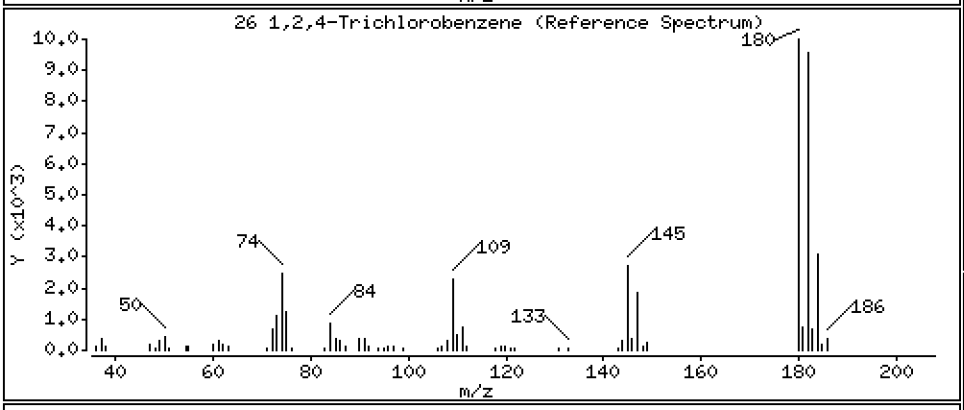
Column diameter: 0.25

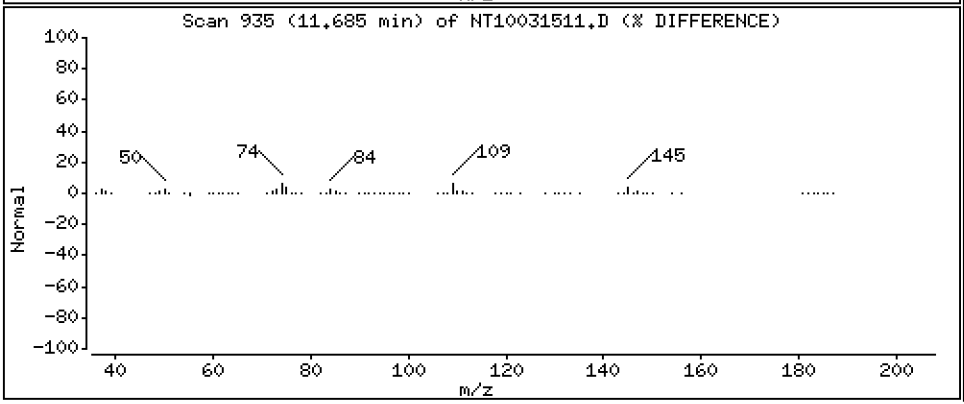
26 1,2,4-Trichlorobenzene

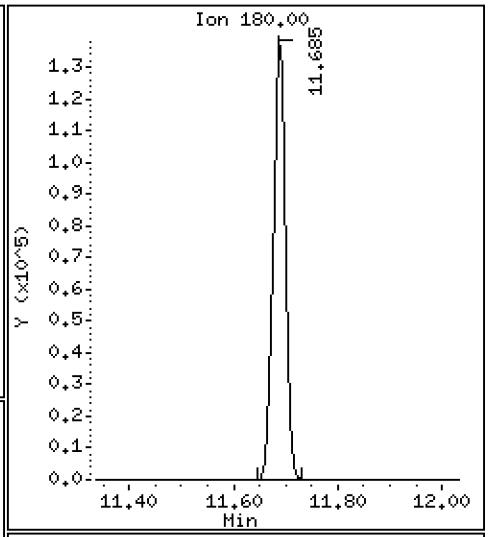
Concentration: 4.554 ug/mL

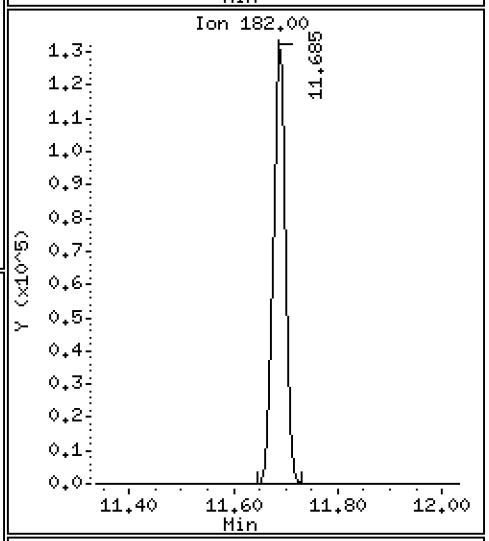


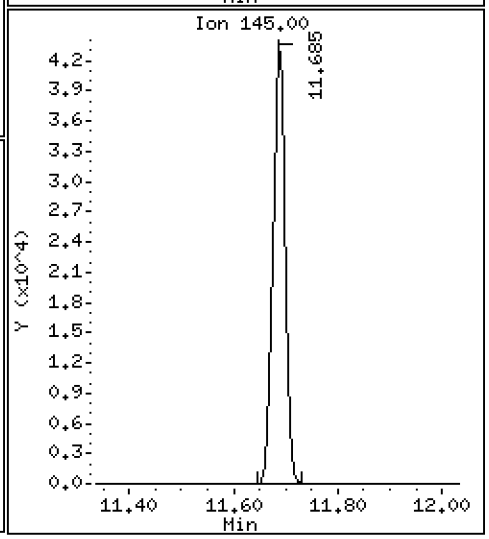












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

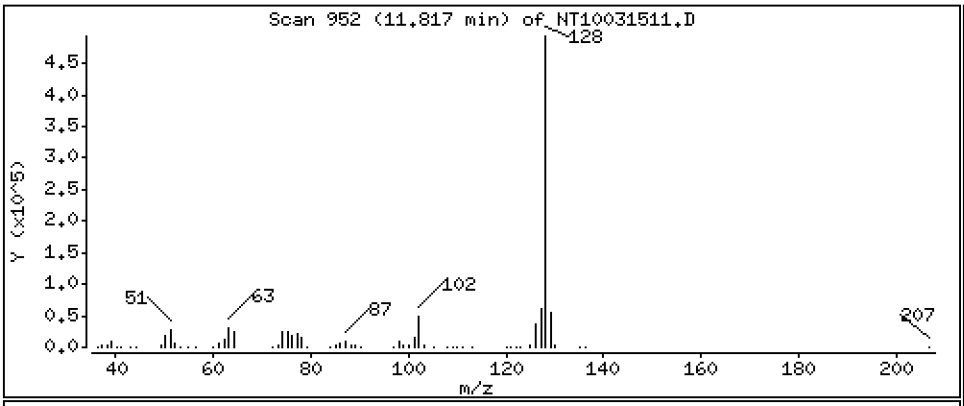
Operator: VTS

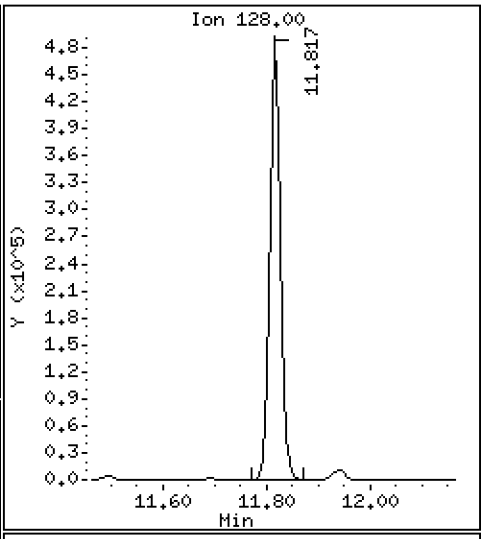
Column phase: ZB-5msi

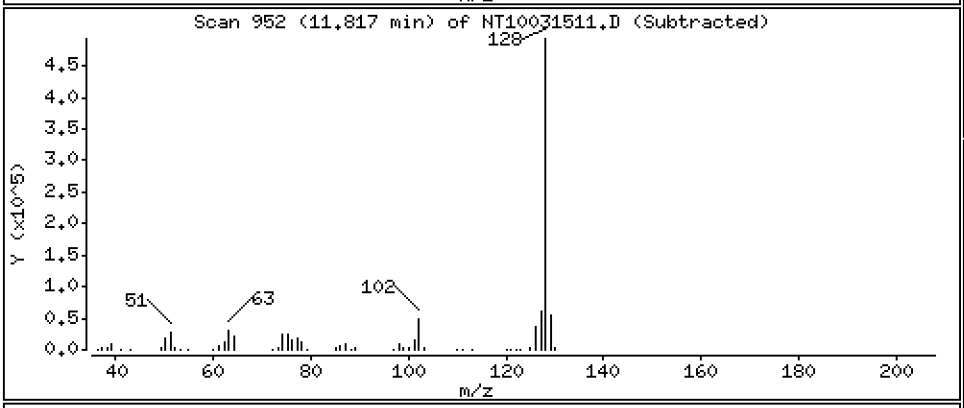
Column diameter: 0.25

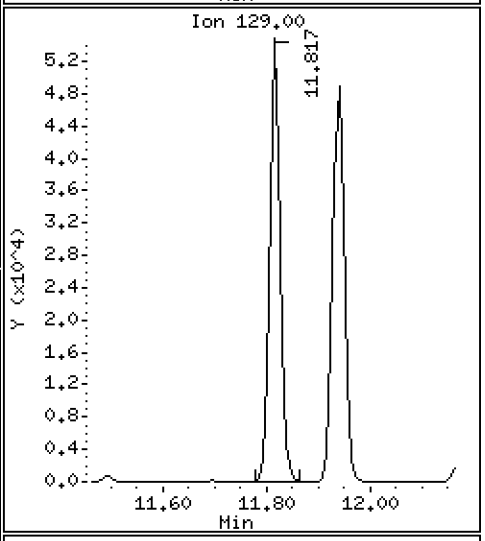
28 Naphthalene

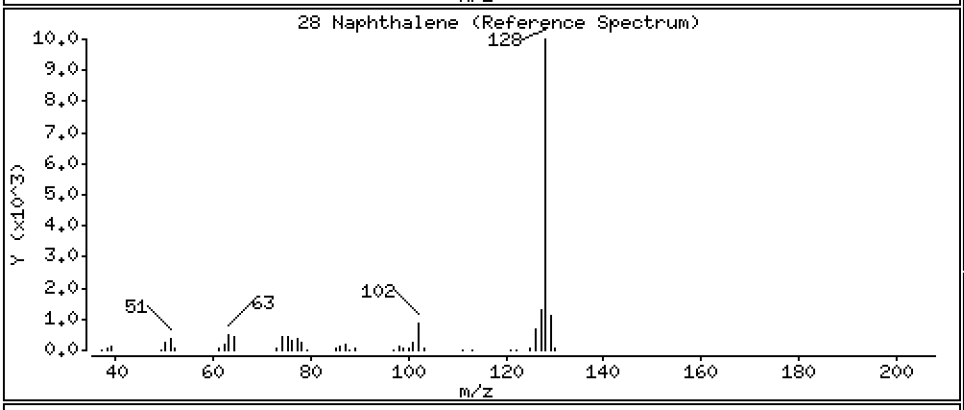
Concentration: 4.717 ug/mL

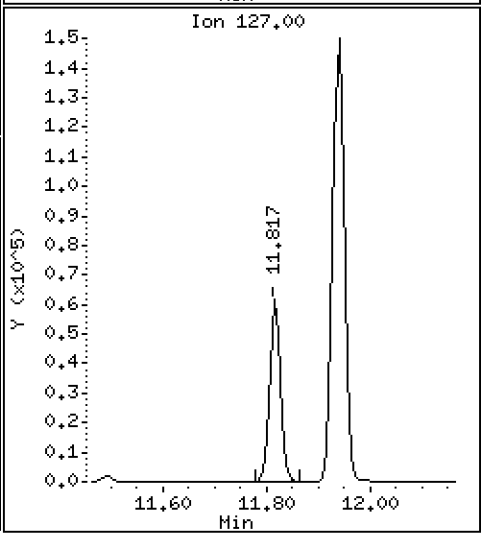


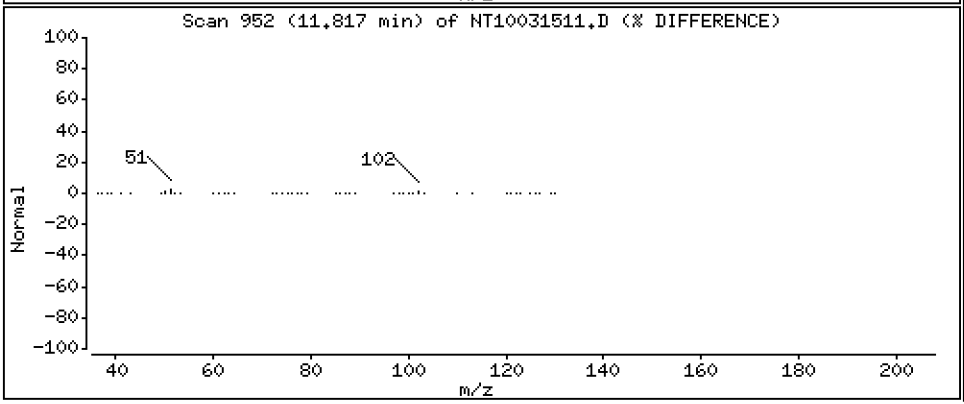












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

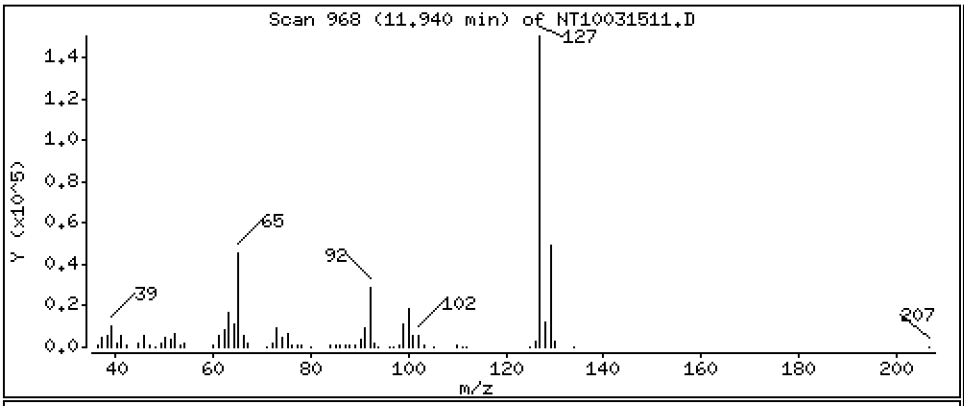
Operator: VTS

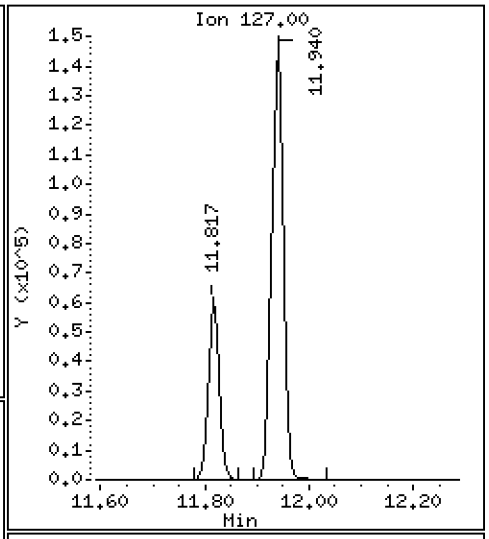
Column phase: ZB-5msi

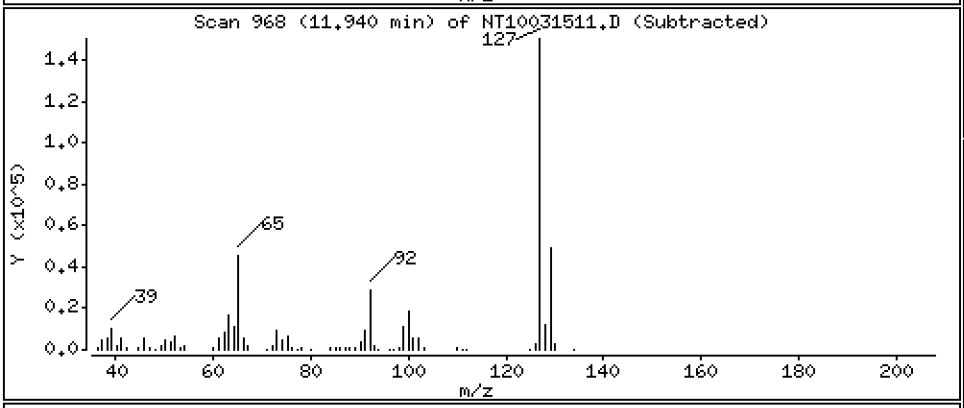
Column diameter: 0.25

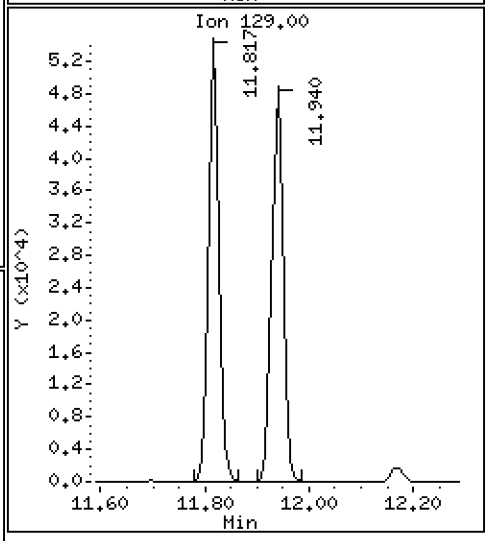
29 4-Chloroaniline

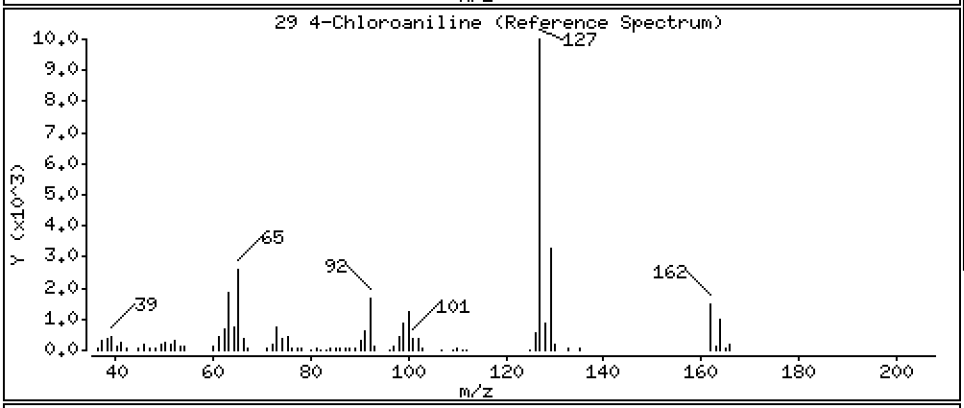
Concentration: 3.787 ug/mL

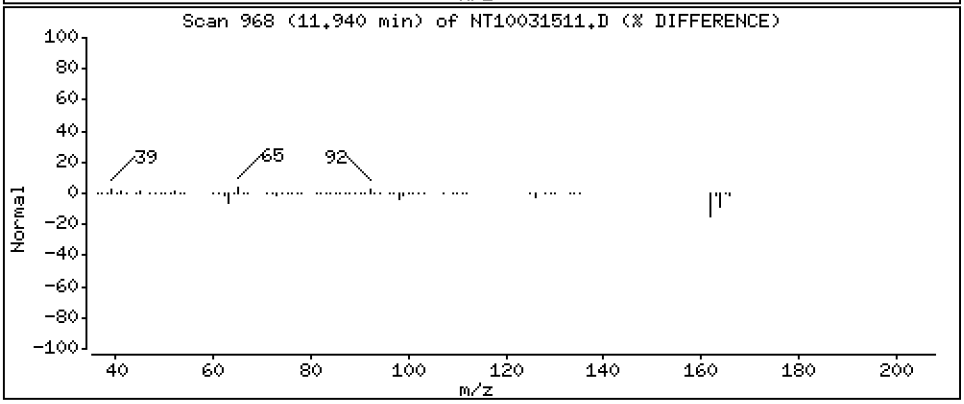












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

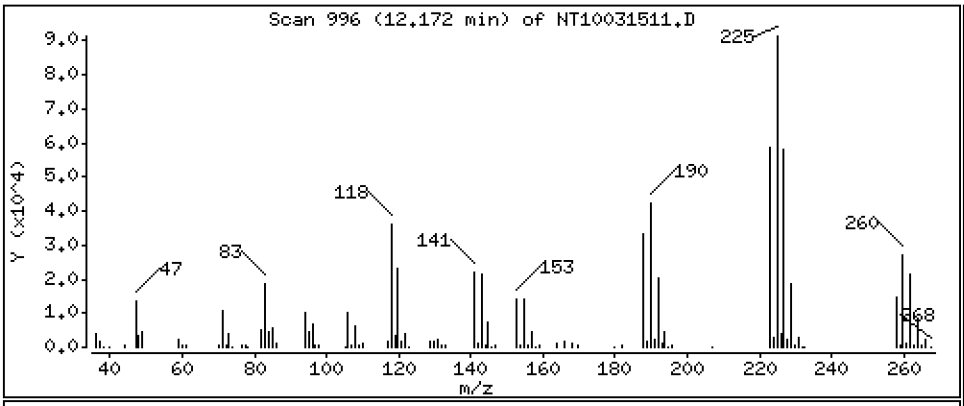
Operator: VTS

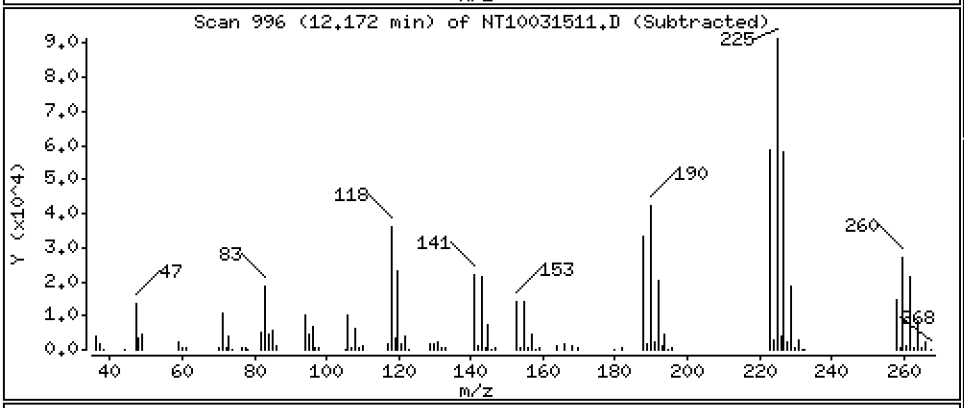
Column phase: ZB-5msi

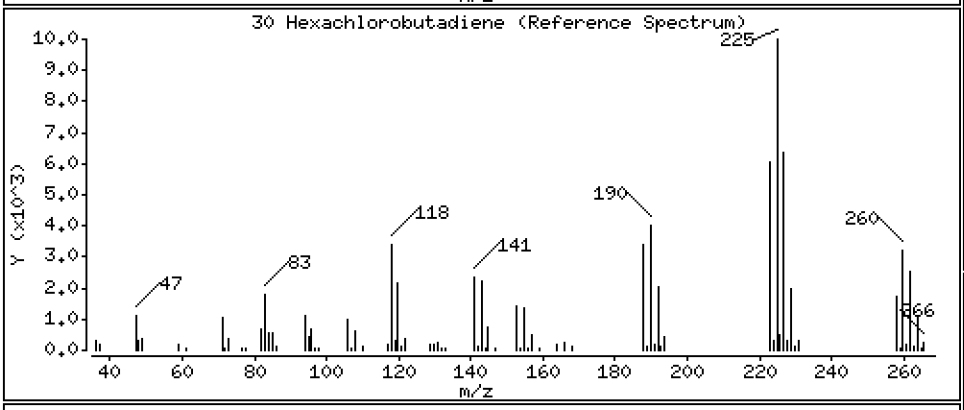
Column diameter: 0.25

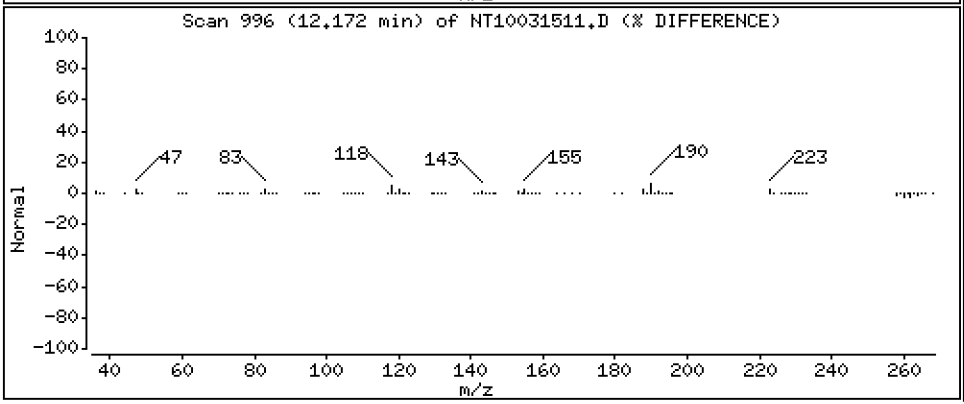
30 Hexachlorobutadiene

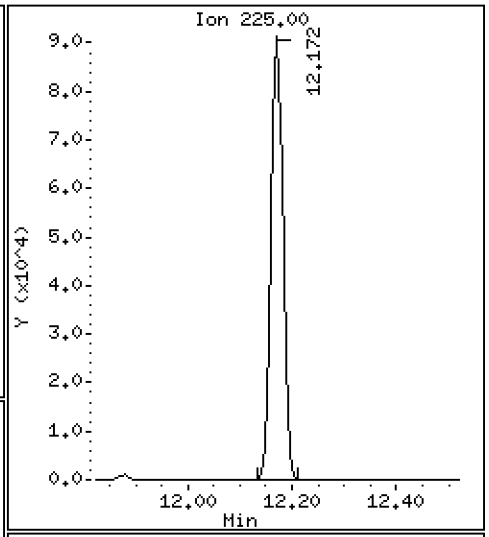
Concentration: 4.834 ug/mL

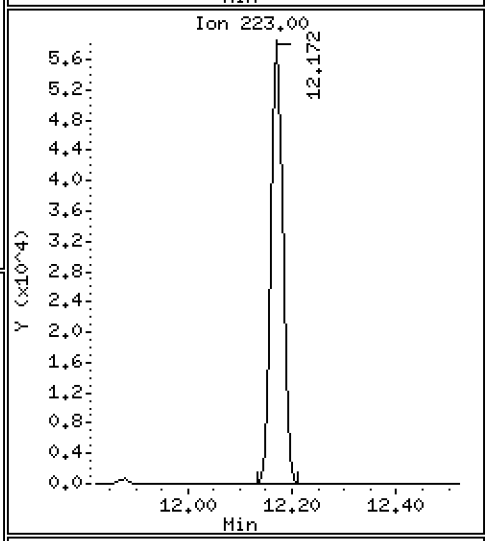


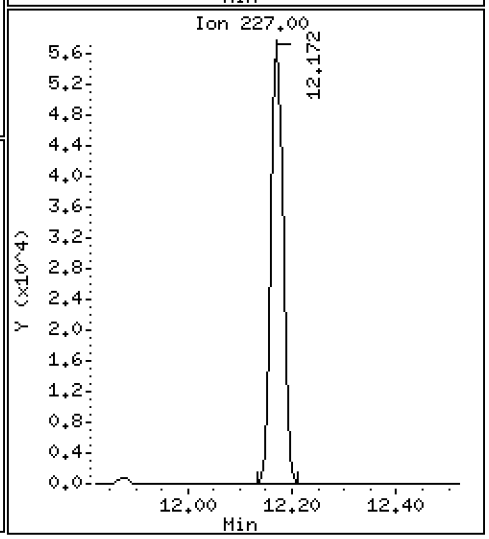












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

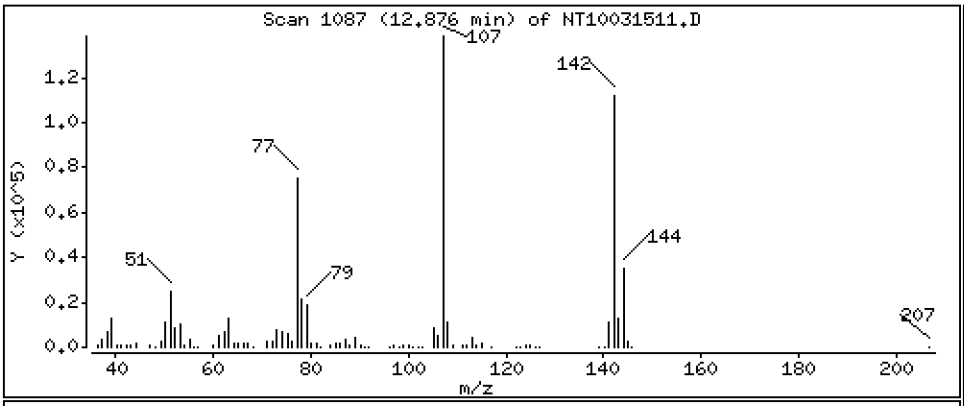
Operator: VTS

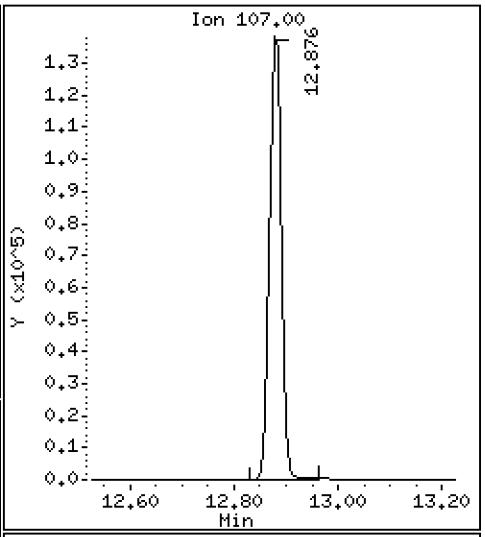
Column phase: ZB-5msi

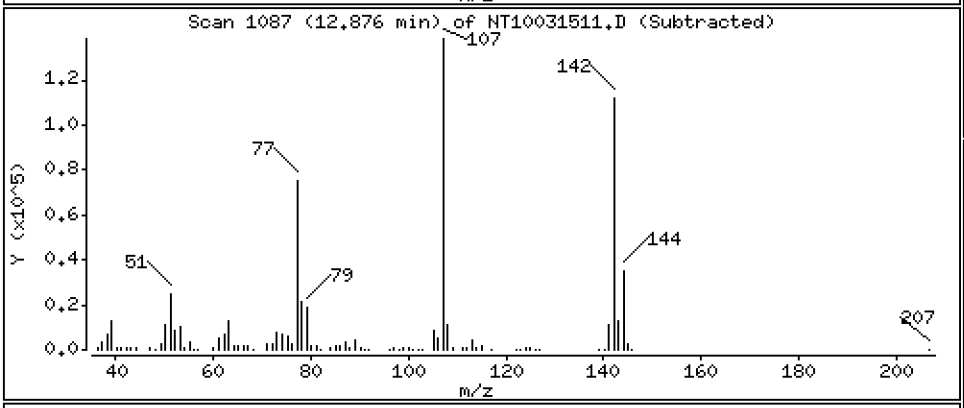
Column diameter: 0.25

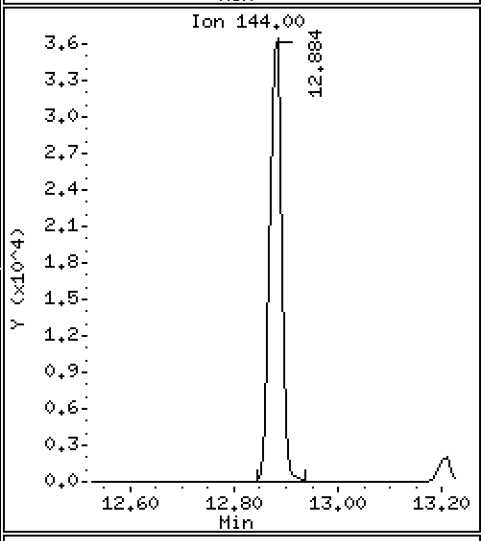
31 4-Chloro-3-methylphenol

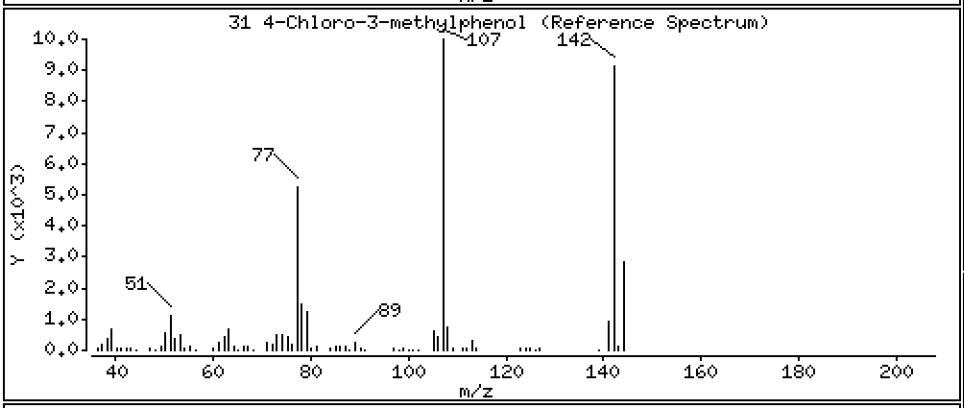
Concentration: 4.640 ug/mL

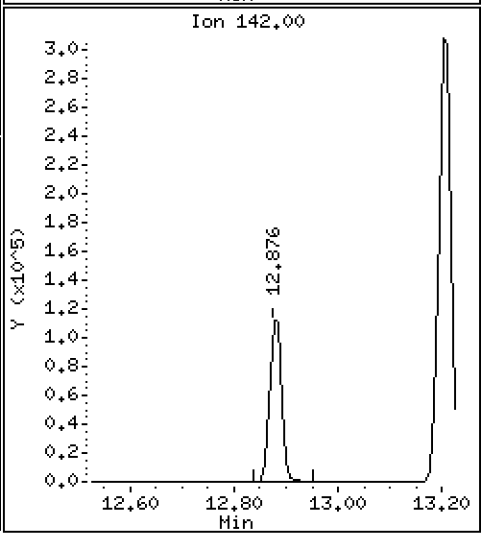


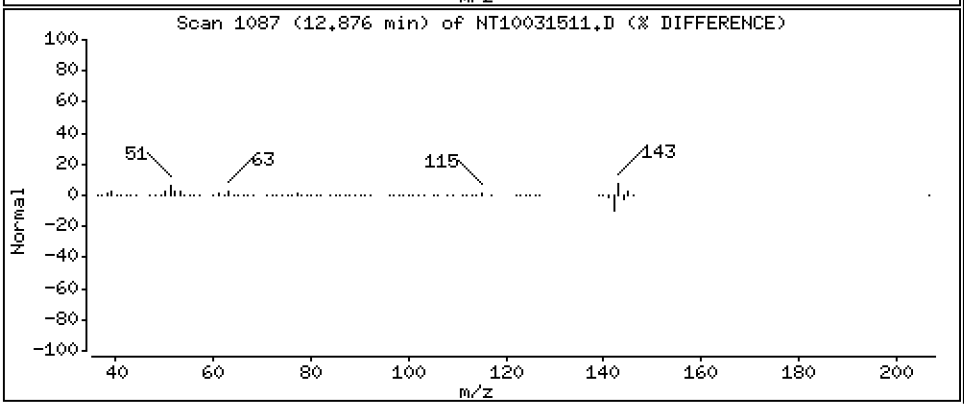












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

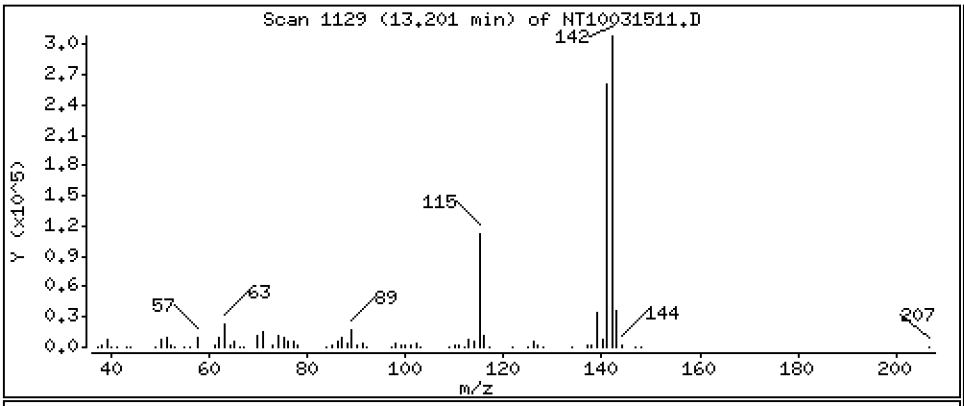
Operator: VTS

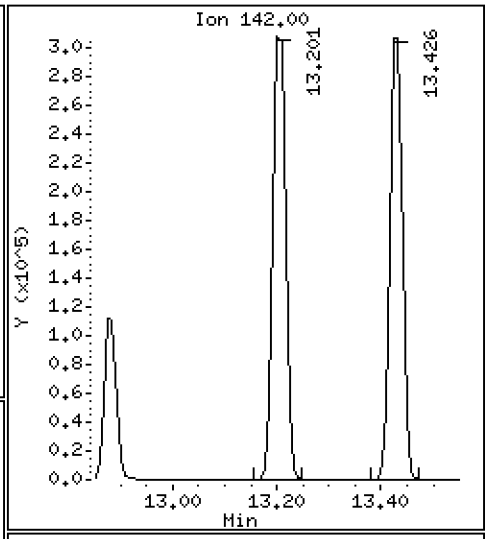
Column phase: ZB-5msi

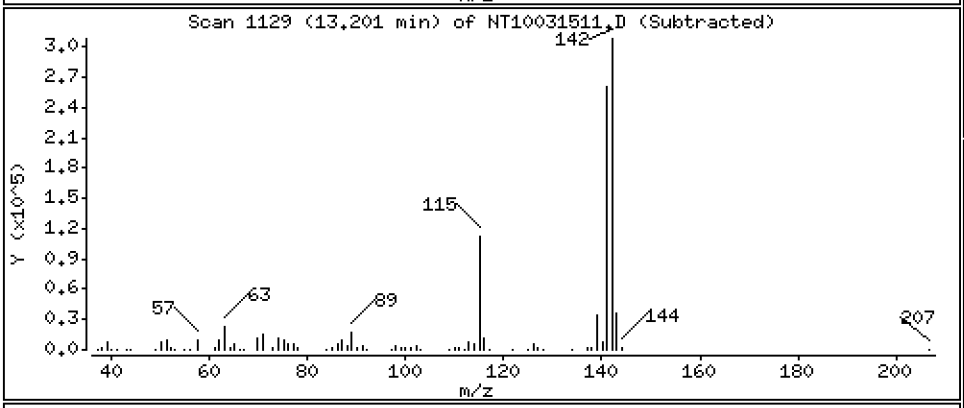
Column diameter: 0.25

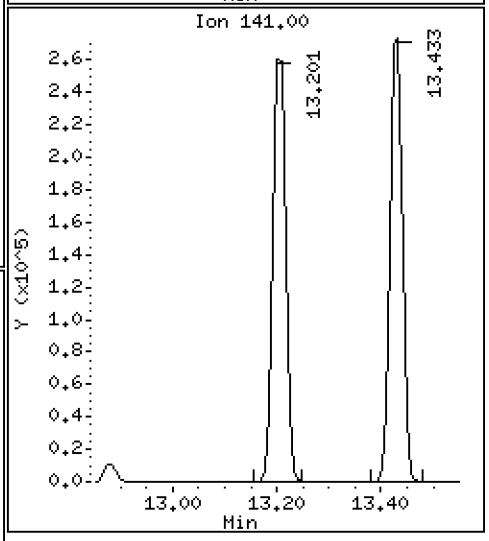
32 2-Methylnaphthalene

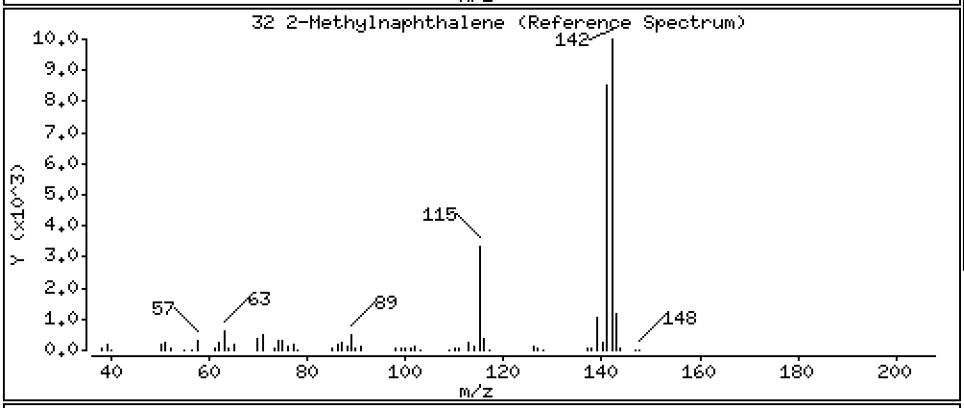
Concentration: 4.596 ug/mL

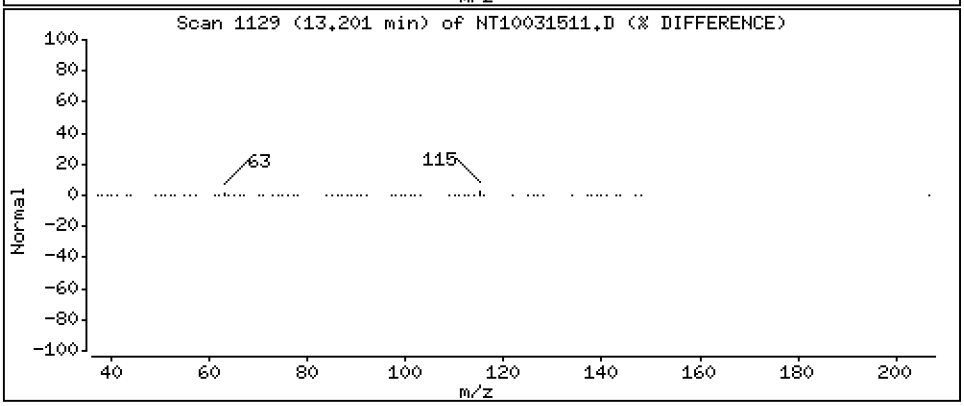












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

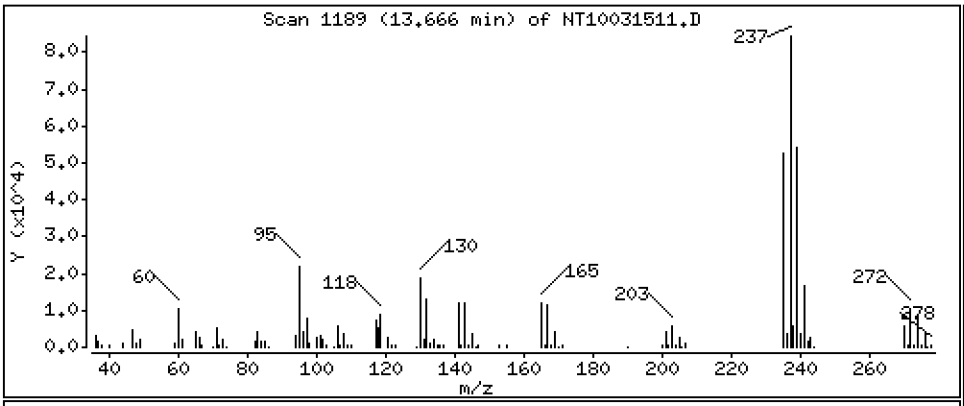
Operator: VTS

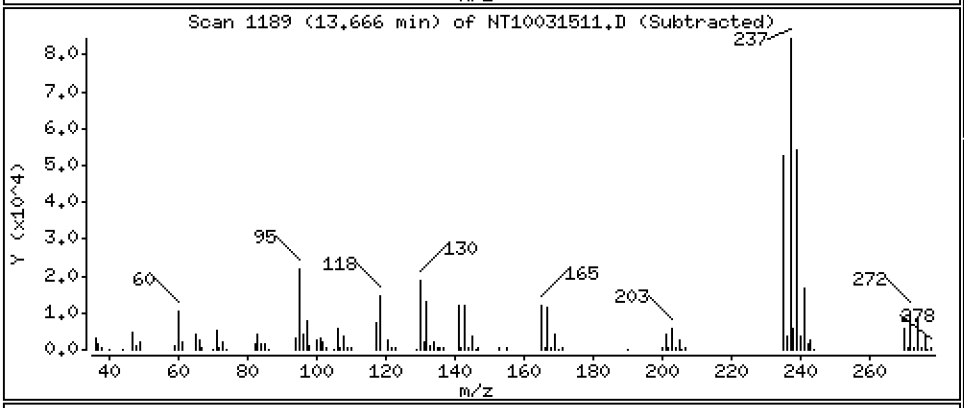
Column phase: ZB-5msi

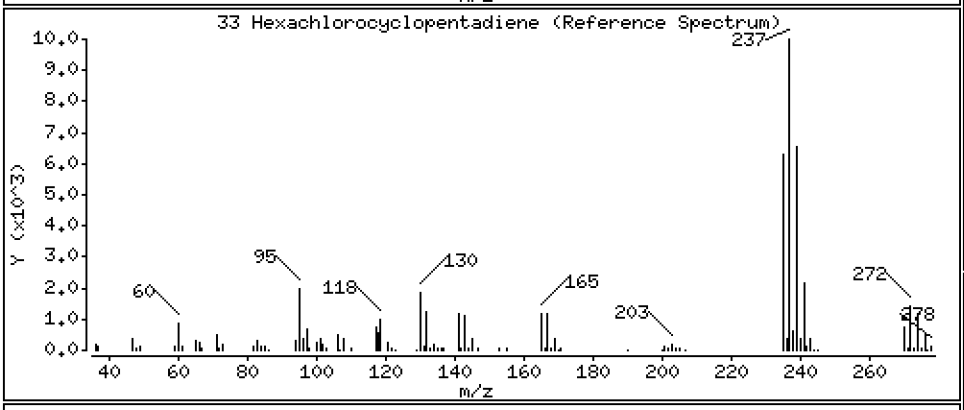
Column diameter: 0.25

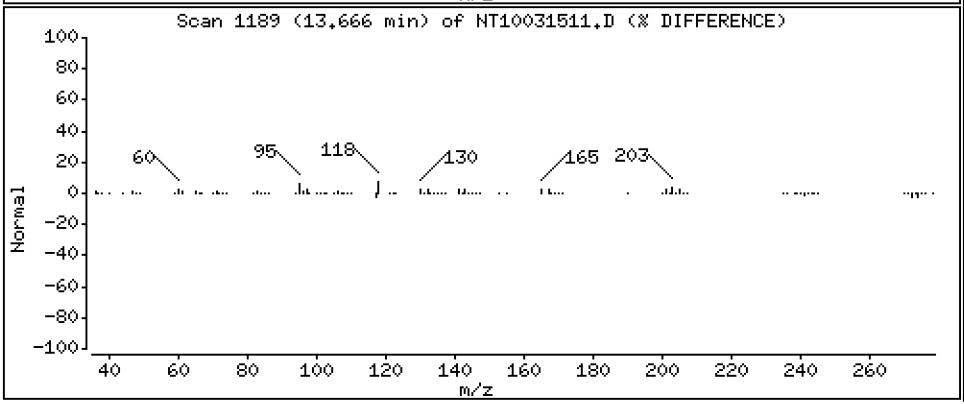
33 Hexachlorocyclopentadiene

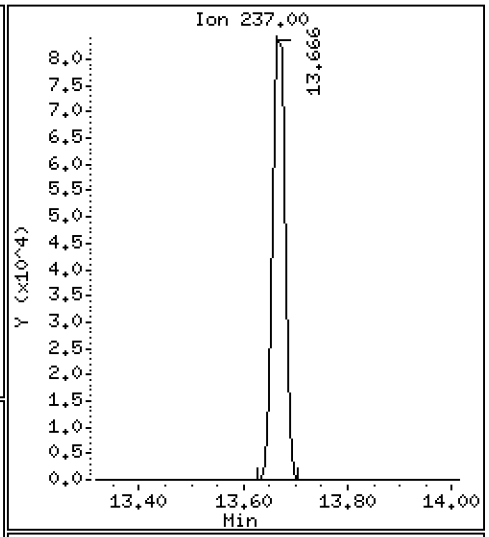
Concentration: 4.729 ug/mL

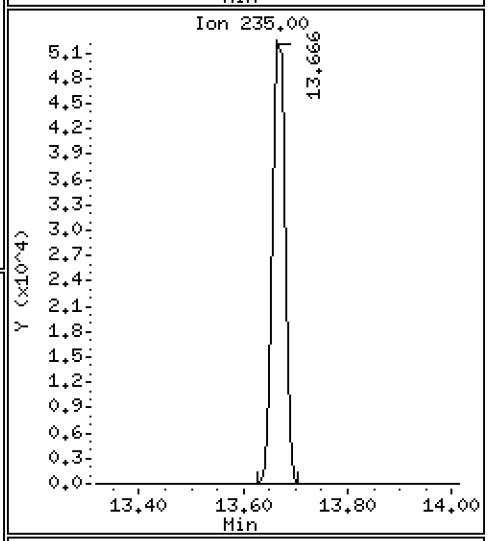


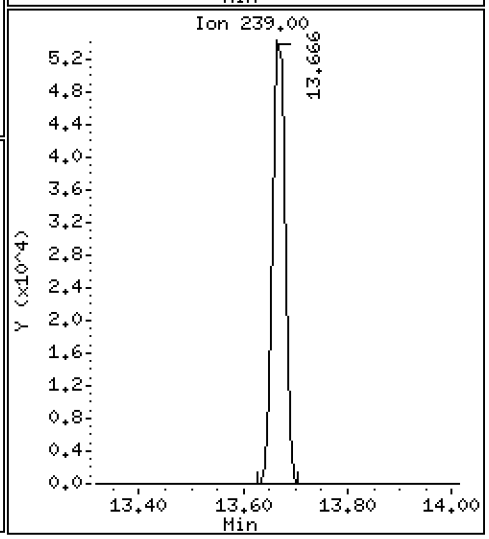












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

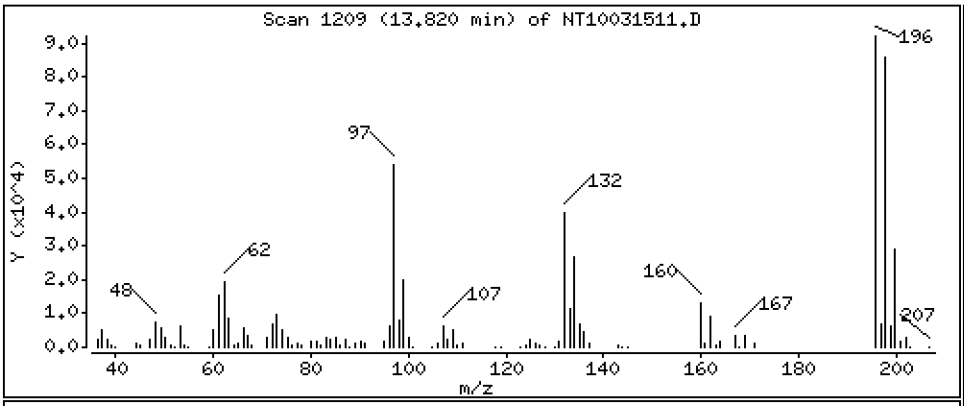
Operator: VTS

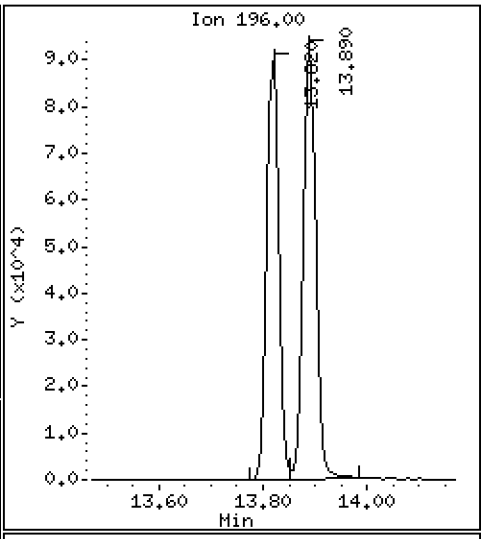
Column phase: ZB-5msi

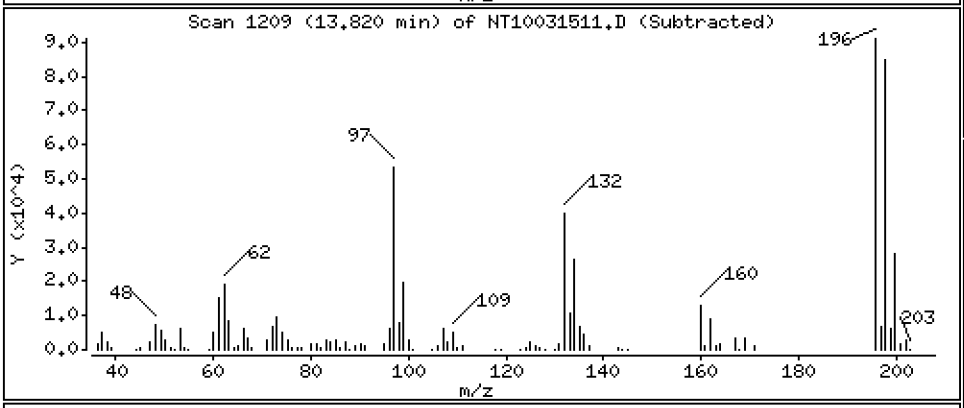
Column diameter: 0.25

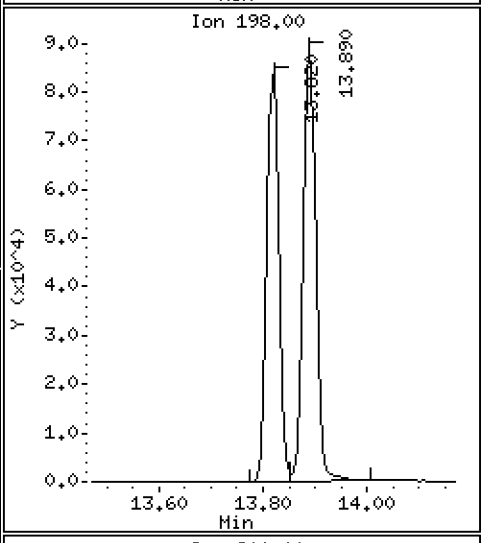
34 2,4,6-Trichlorophenol

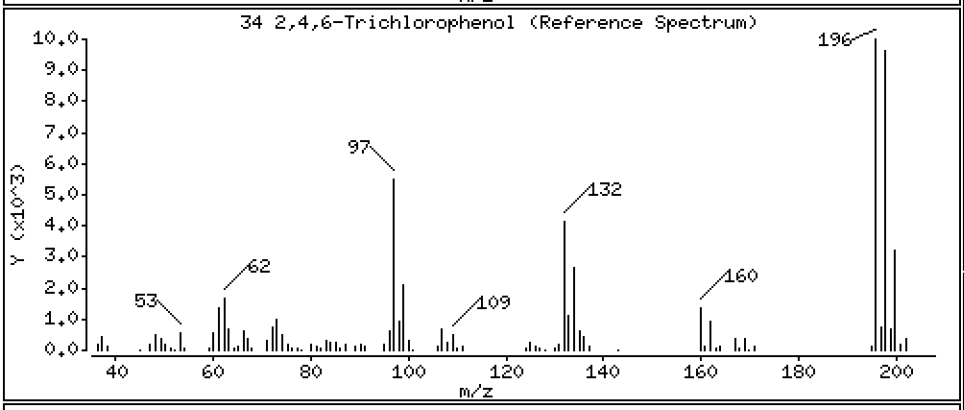
Concentration: 4.596 ug/mL

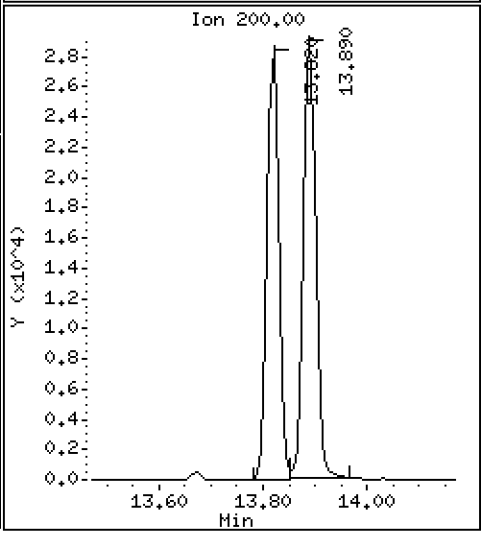


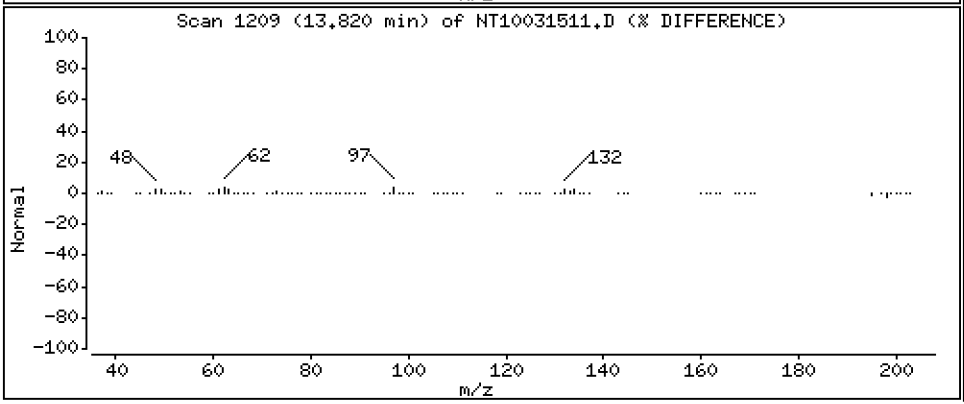












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

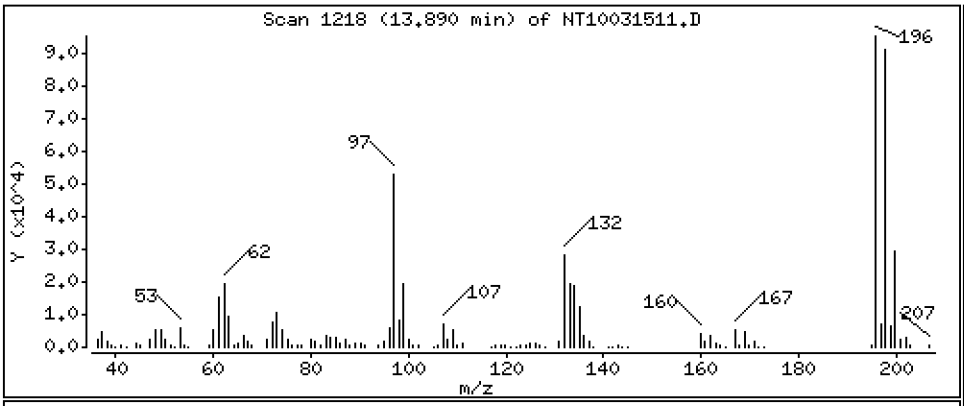
Operator: VTS

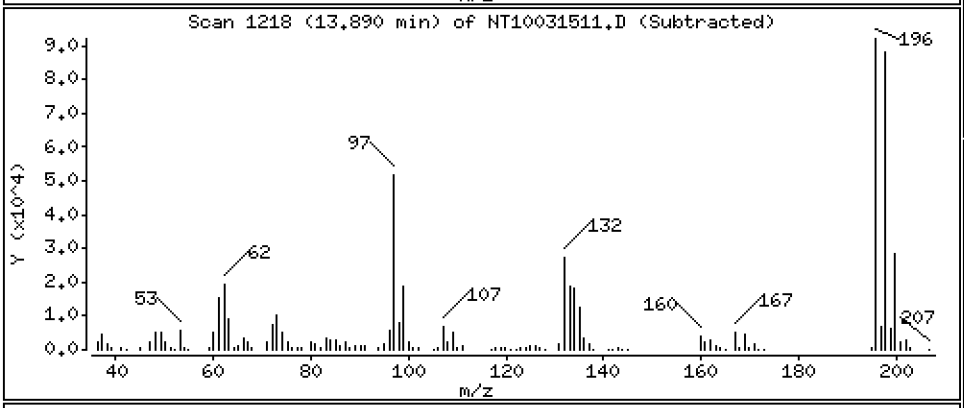
Column phase: ZB-5msi

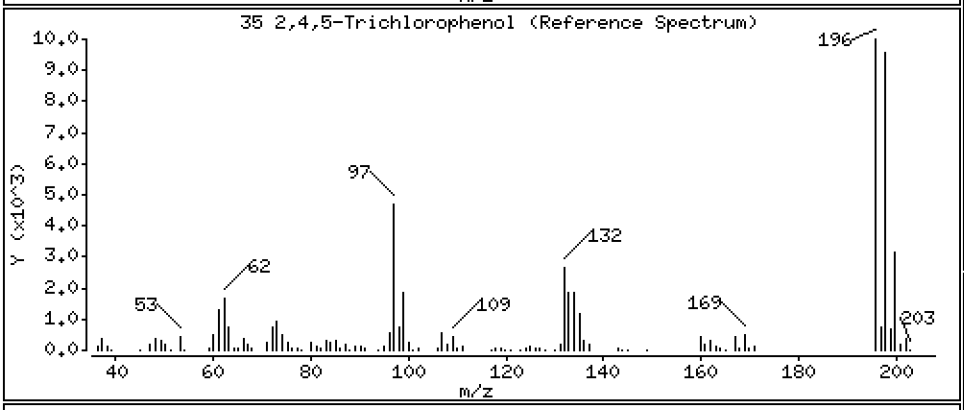
Column diameter: 0.25

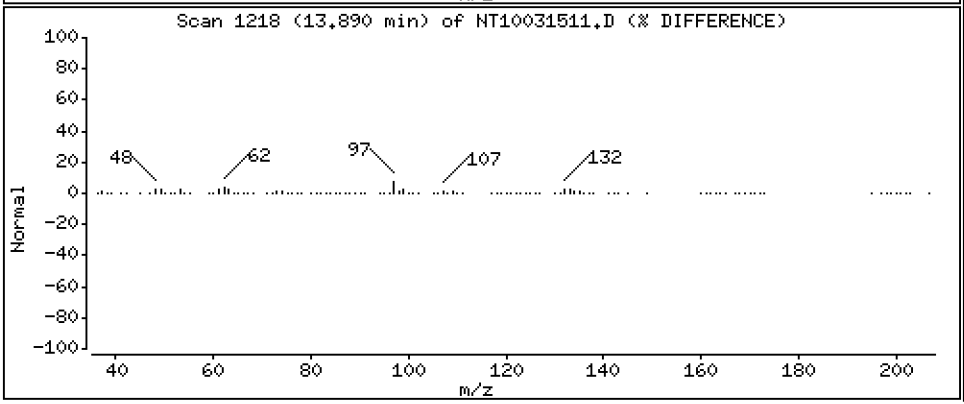
35 2,4,5-Trichlorophenol

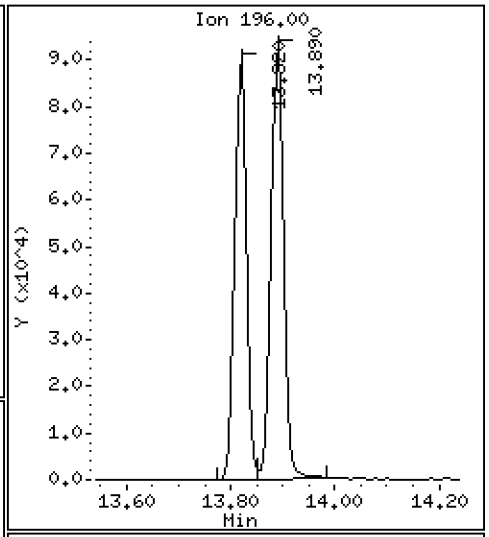
Concentration: 4.409 ug/mL

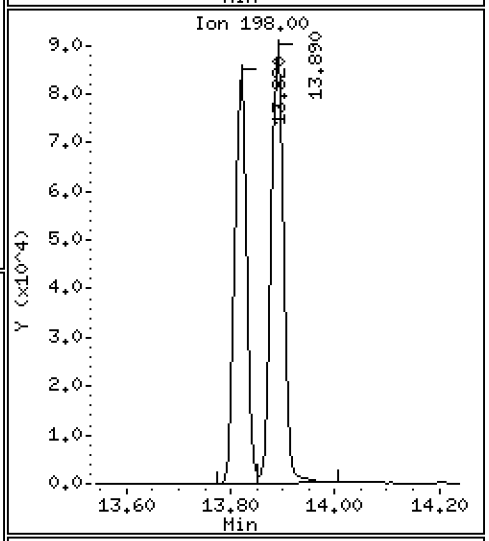


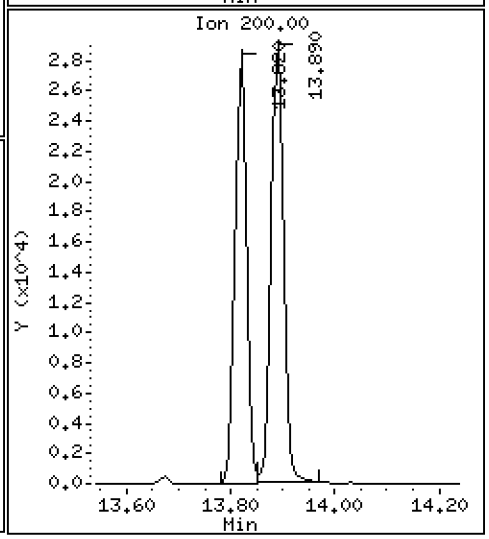












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

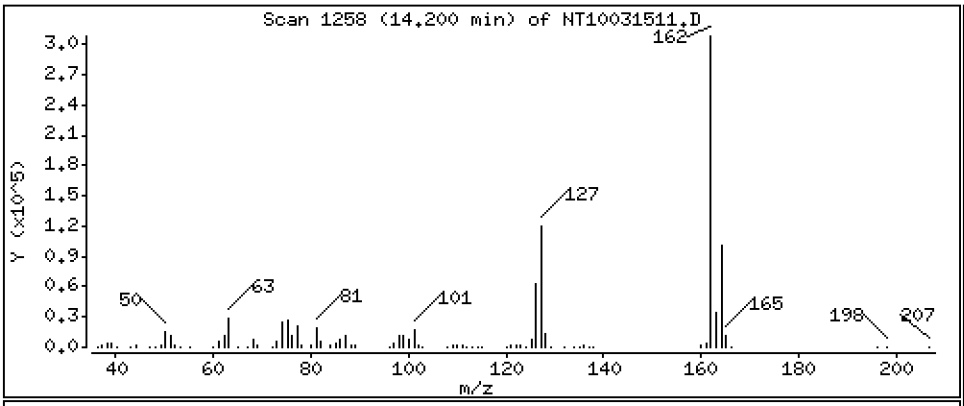
Operator: VTS

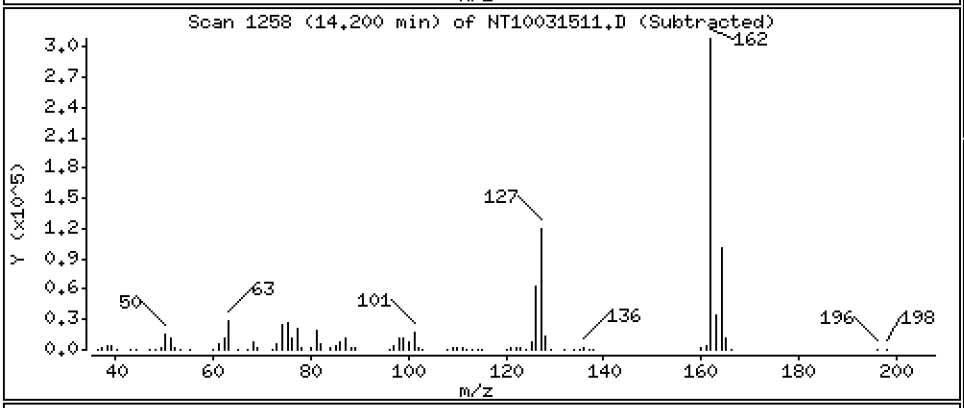
Column phase: ZB-5msi

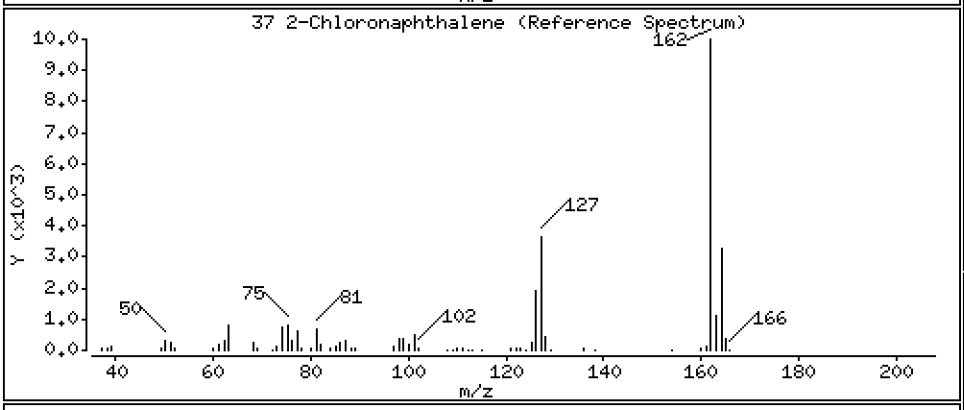
Column diameter: 0.25

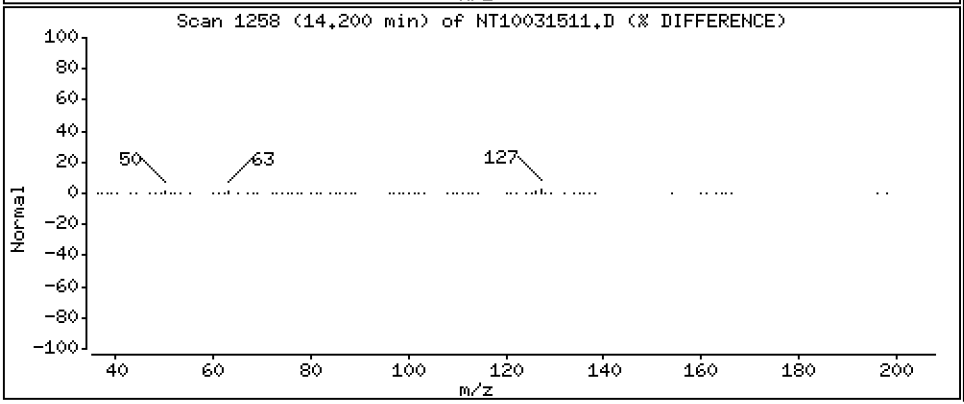
37 2-Chloronaphthalene

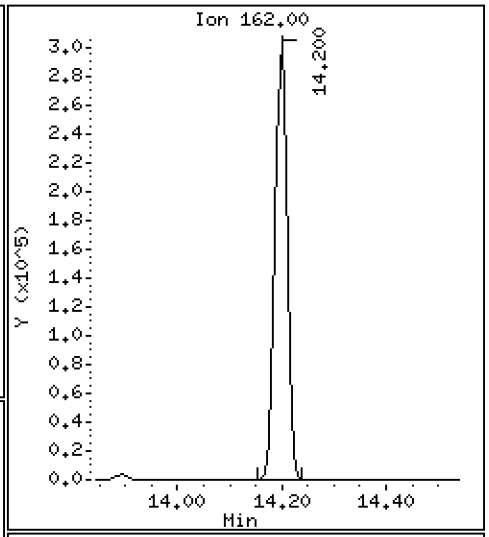
Concentration: 4.796 ug/mL

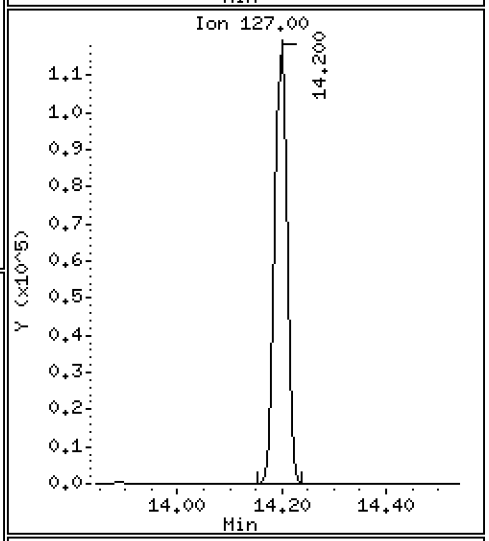


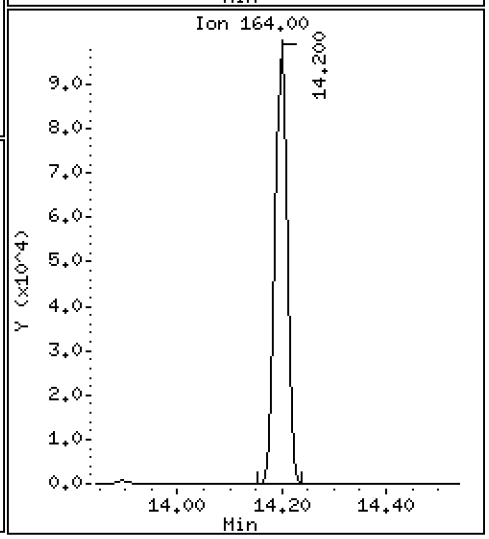












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

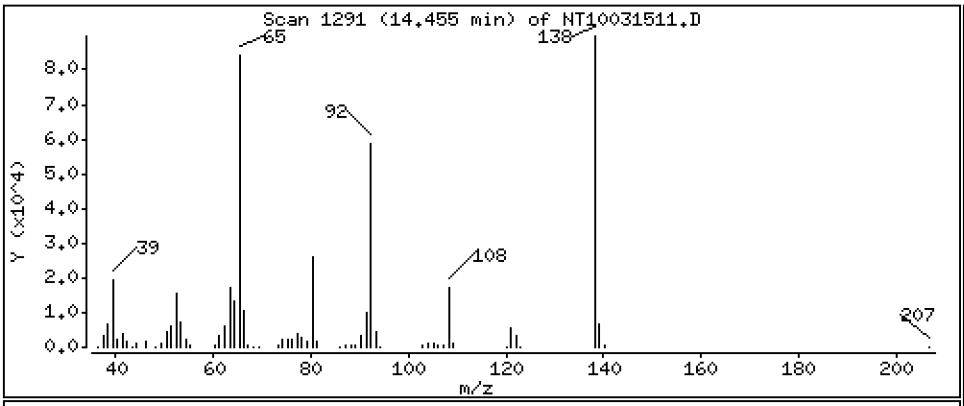
Operator: VTS

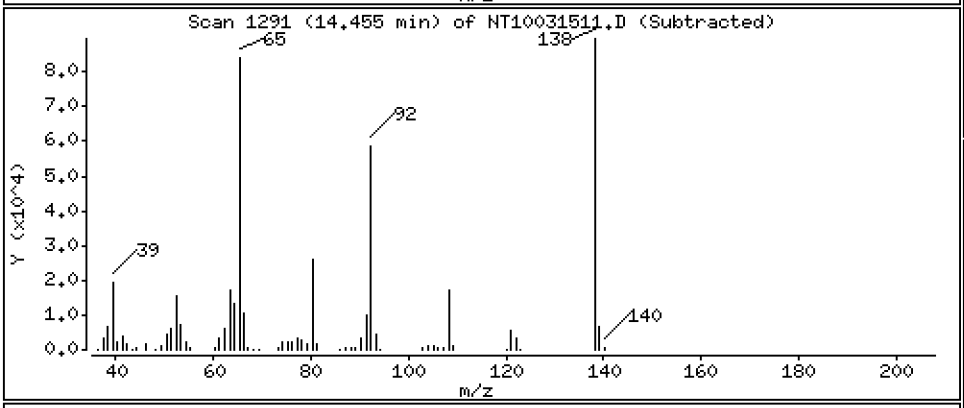
Column phase: ZB-5msi

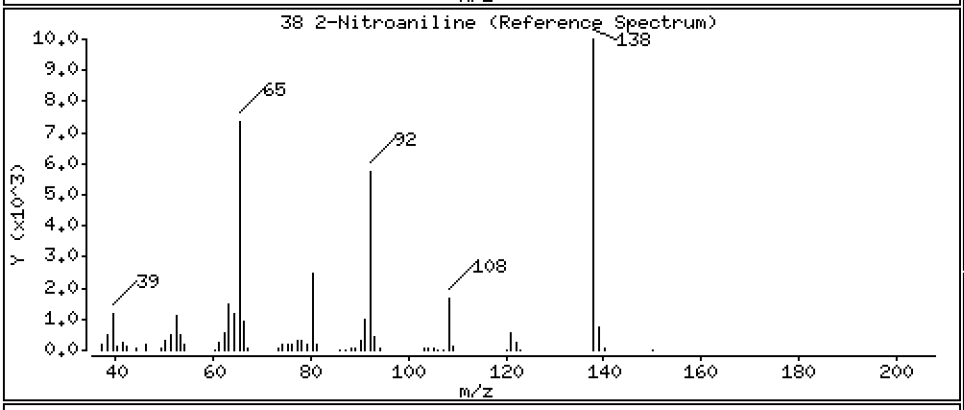
Column diameter: 0.25

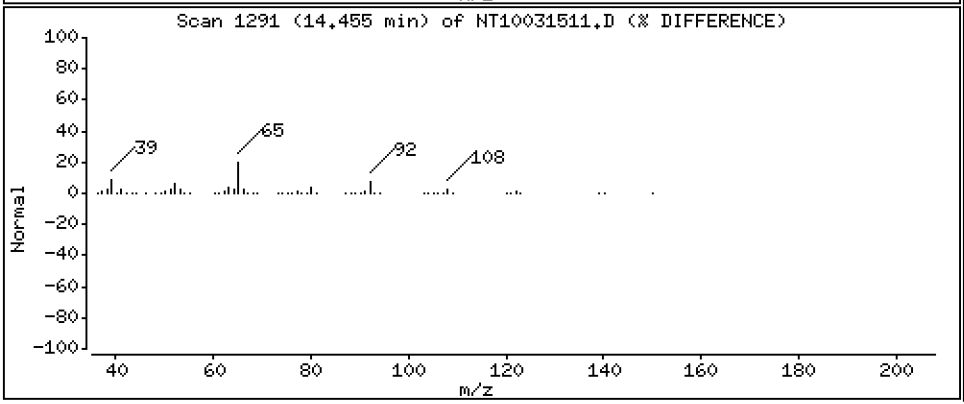
38 2-Nitroaniline

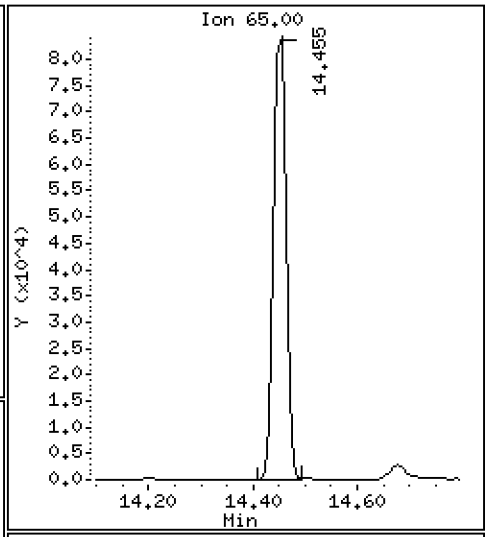
Concentration: 4.911 ug/mL

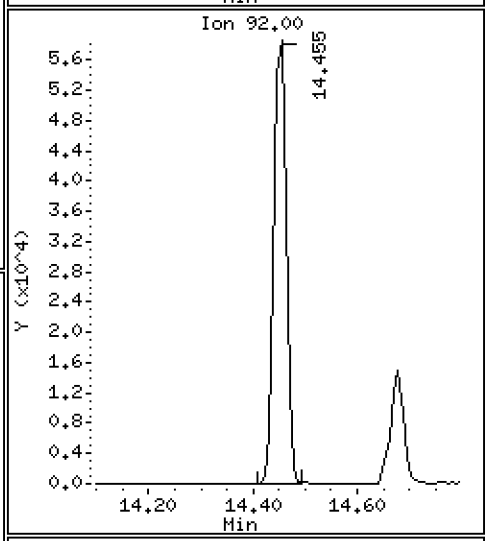


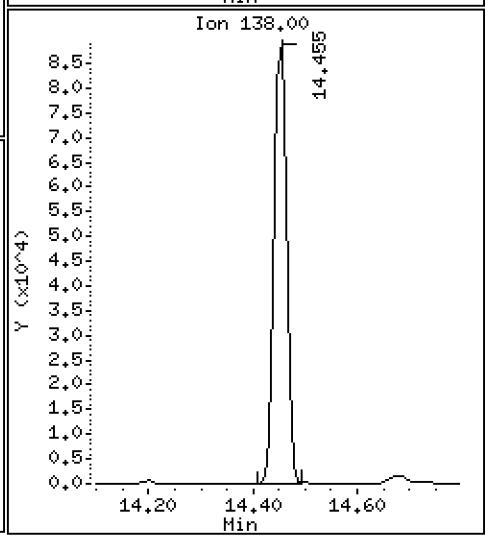












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

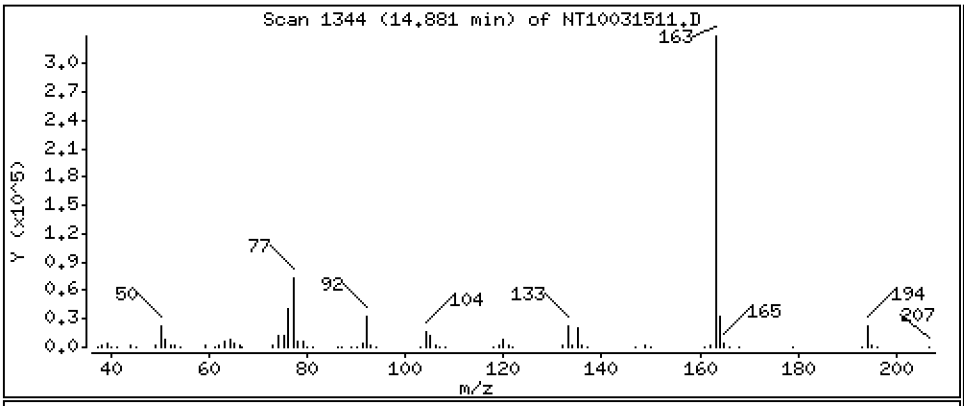
Operator: VTS

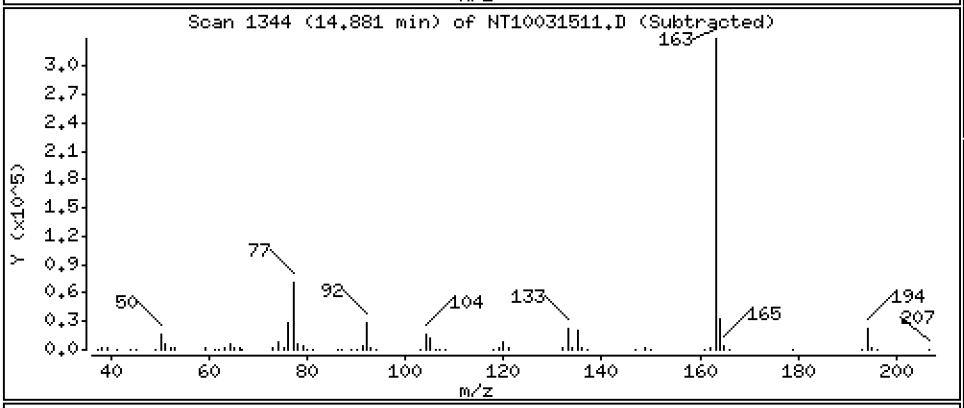
Column phase: ZB-5msi

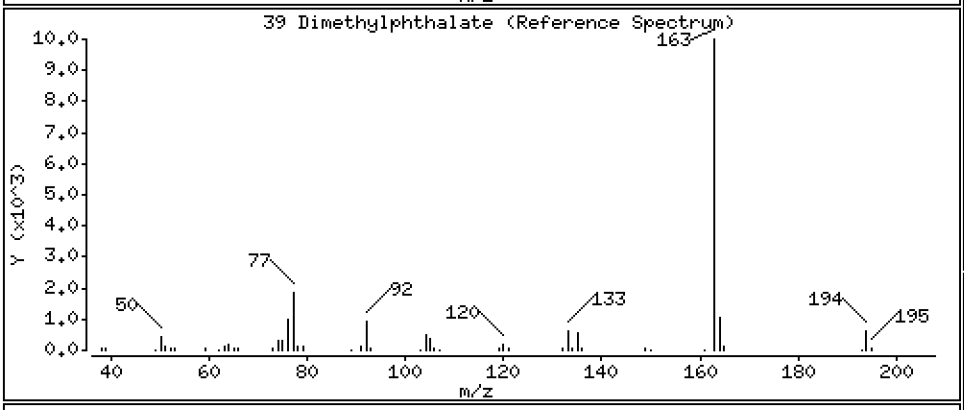
Column diameter: 0.25

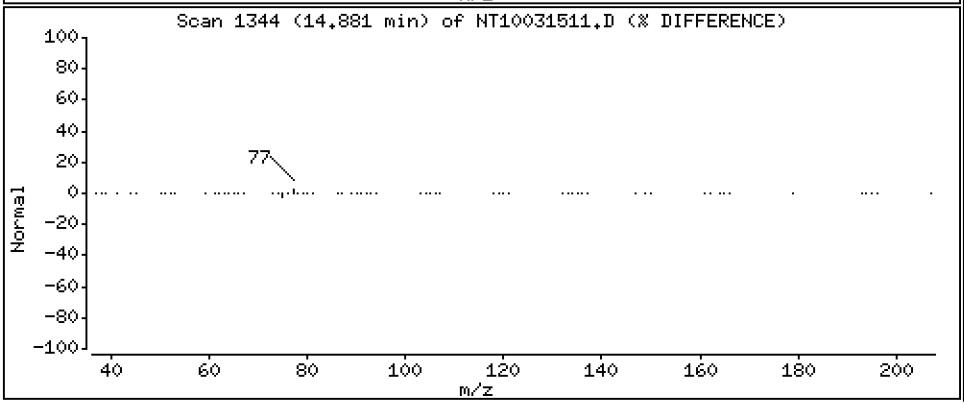
39 Dimethylphthalate

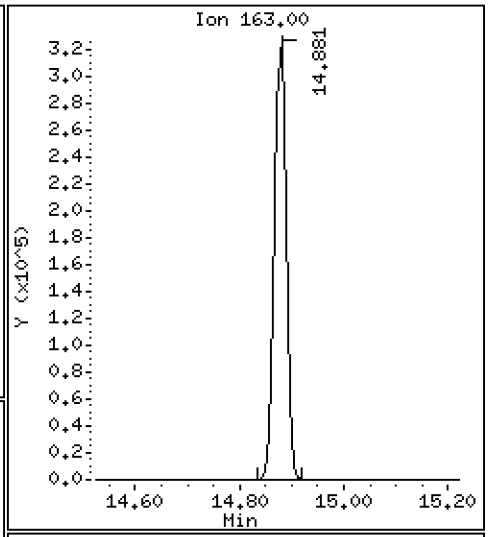
Concentration: 4.937 ug/mL

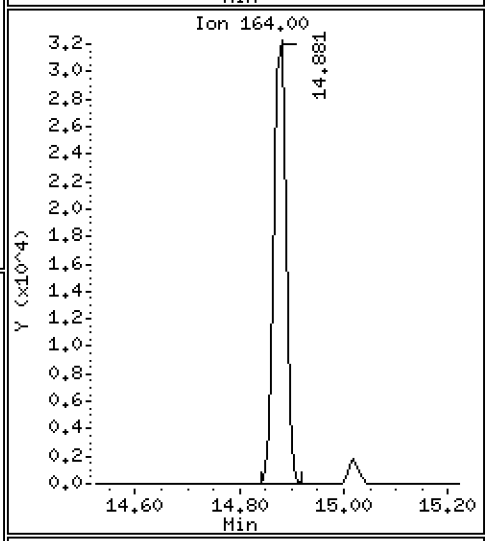


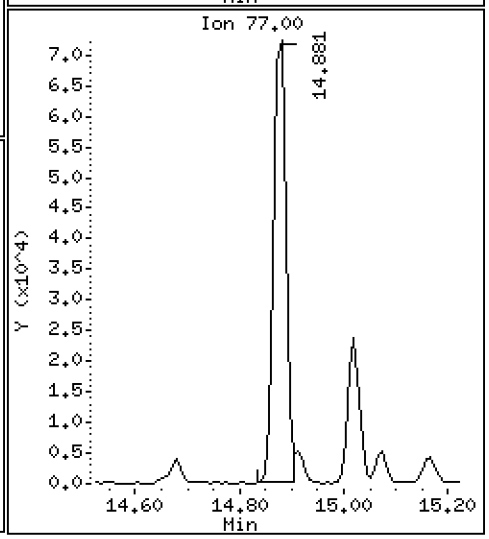












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

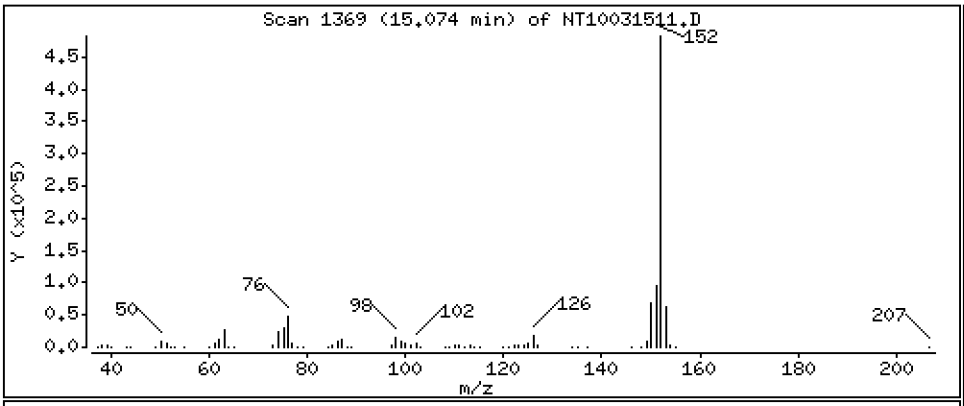
Operator: VTS

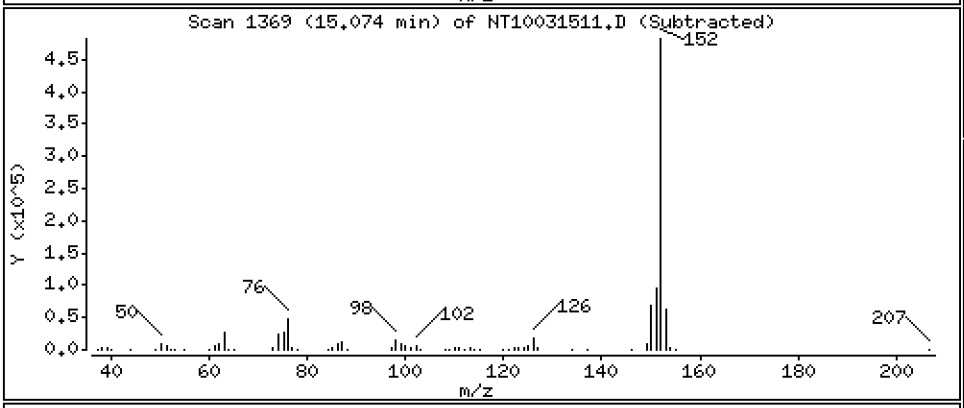
Column phase: ZB-5msi

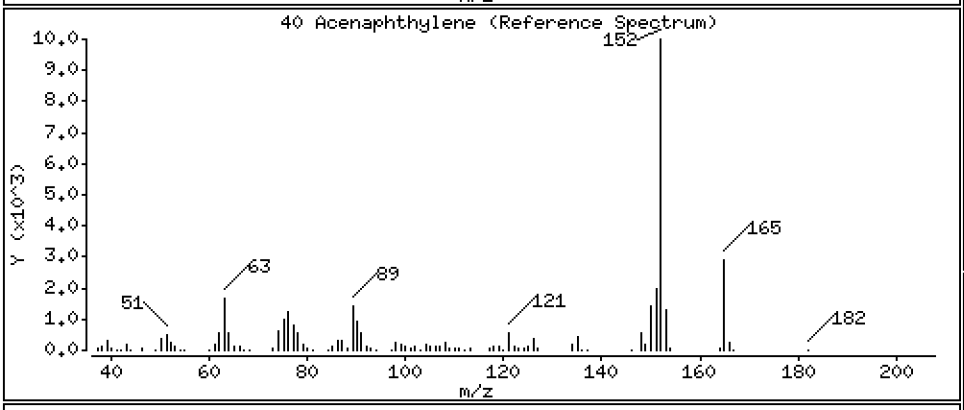
Column diameter: 0.25

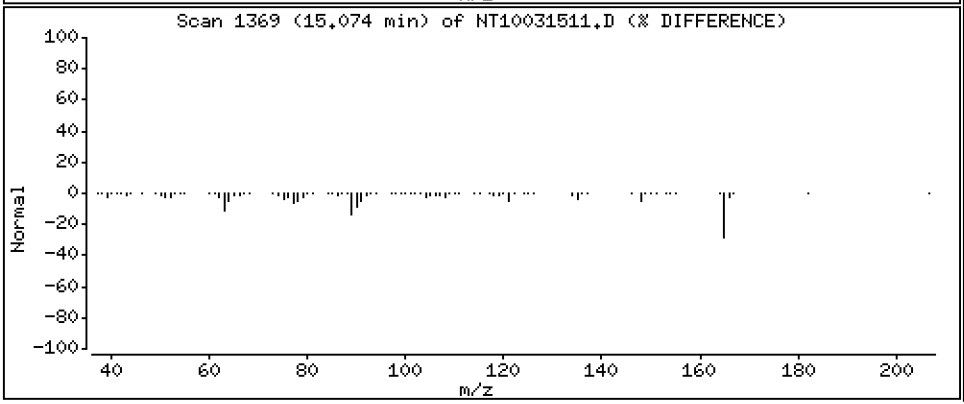
40 Acenaphthylene

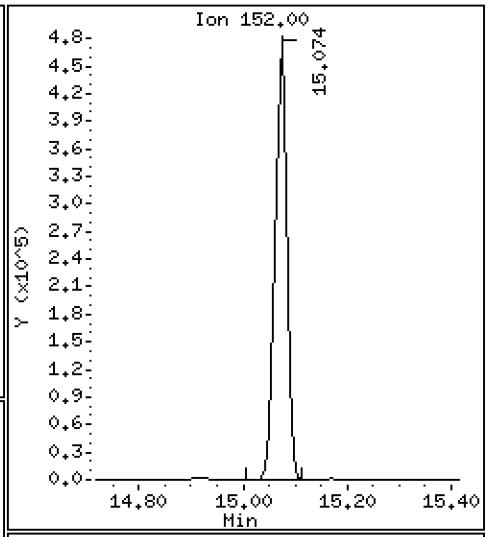
Concentration: 4.805 ug/mL

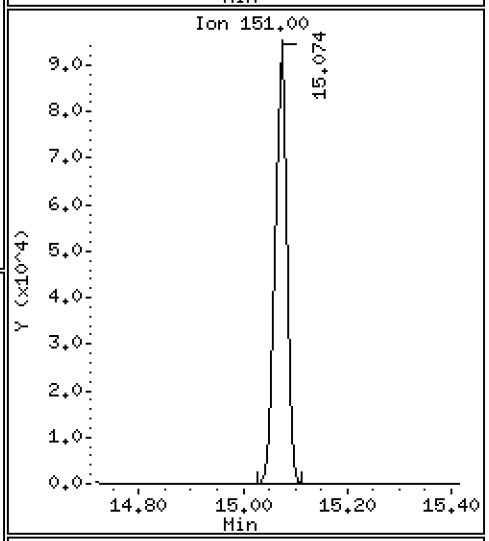


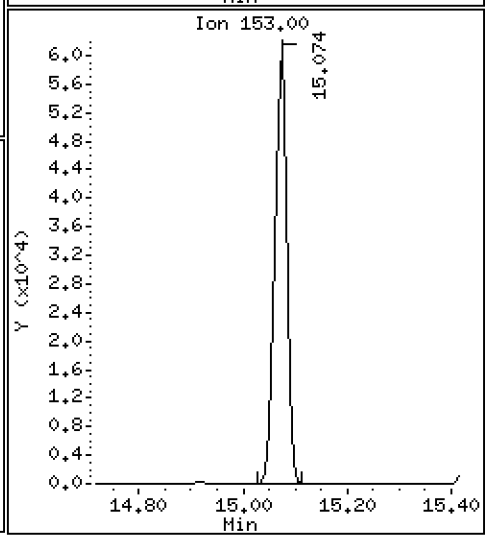












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

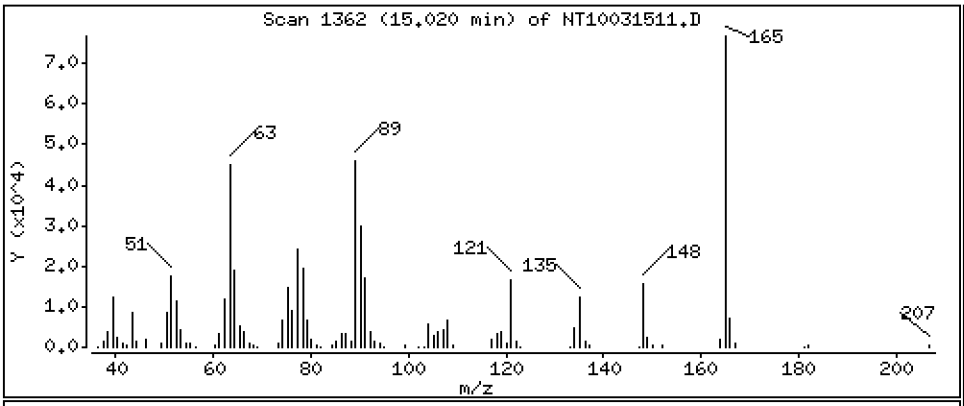
Operator: VTS

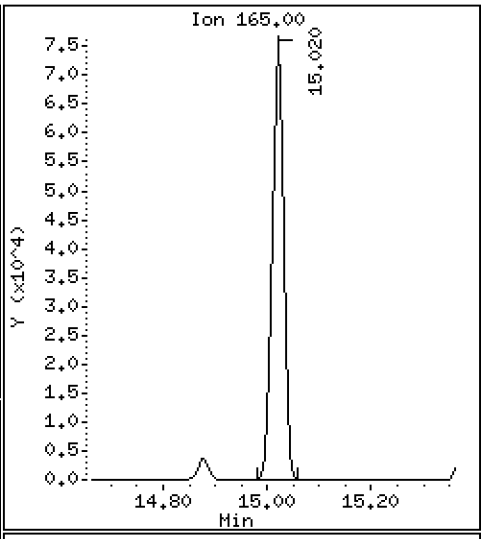
Column phase: ZB-5msi

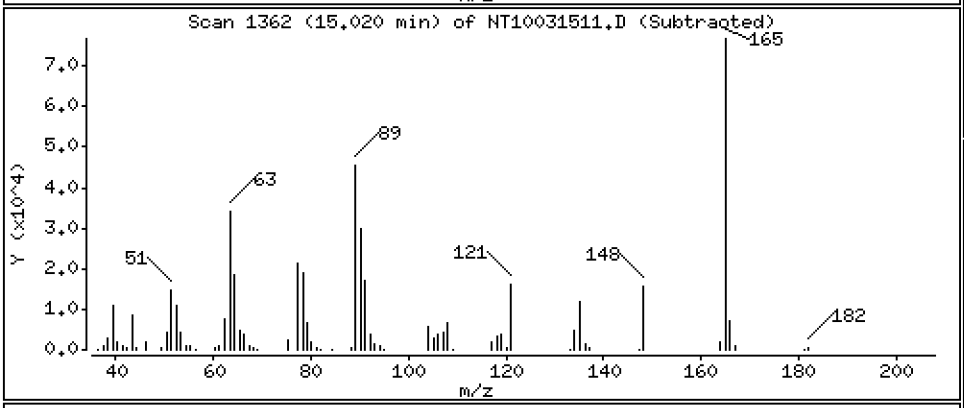
Column diameter: 0.25

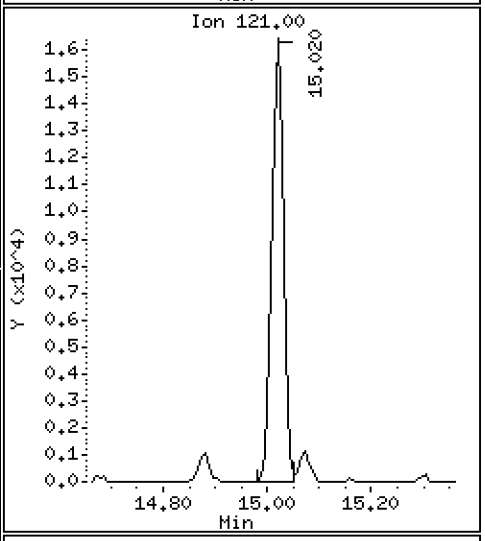
41 2,6-Dinitrotoluene

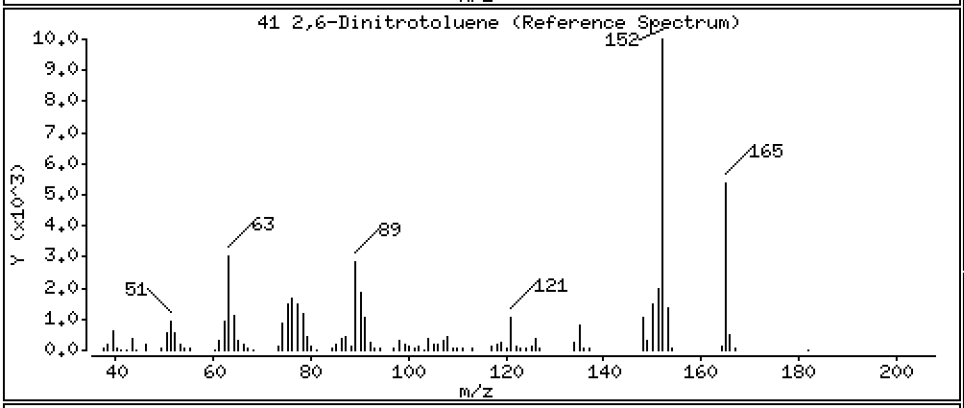
Concentration: 5.298 ug/mL

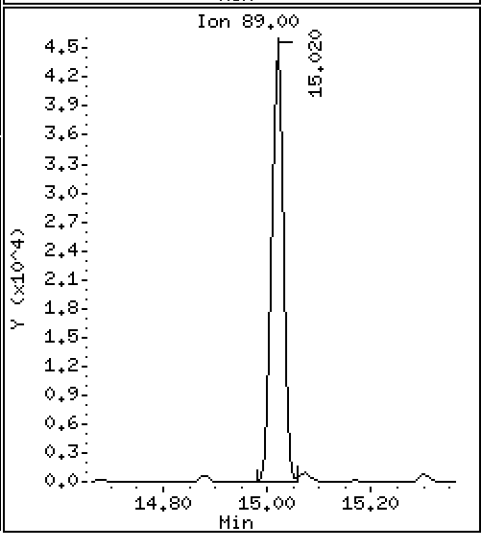


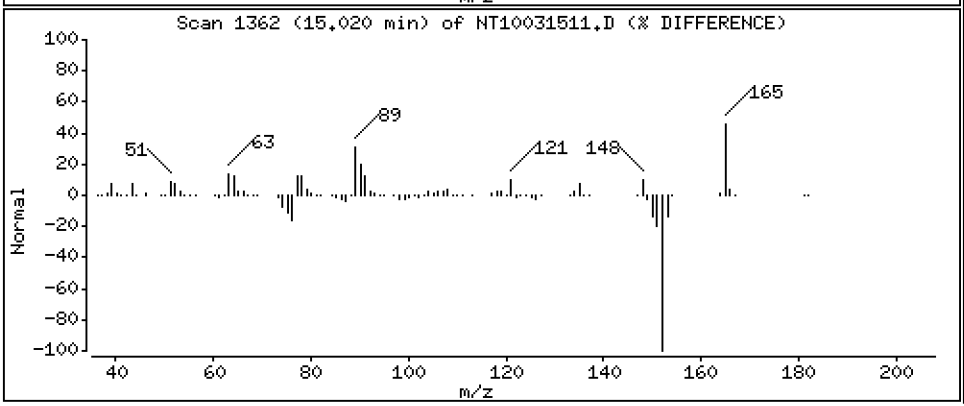












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

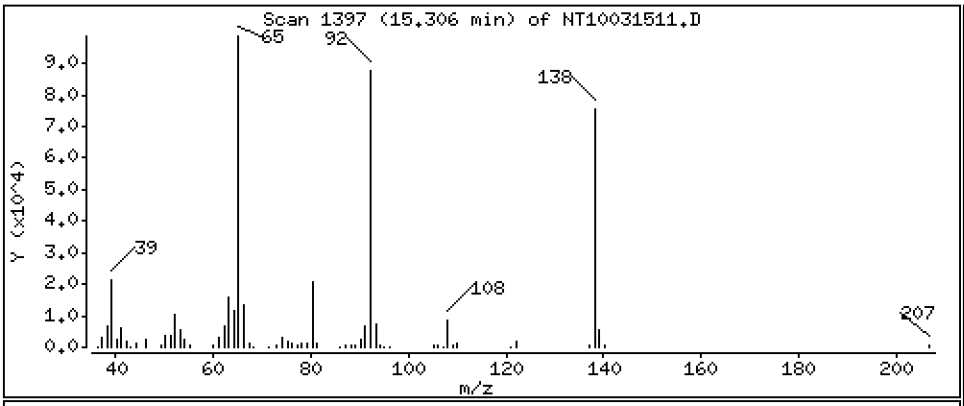
Operator: VTS

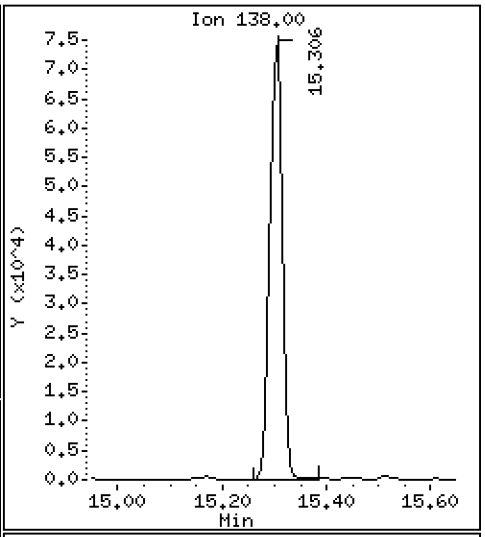
Column phase: ZB-5msi

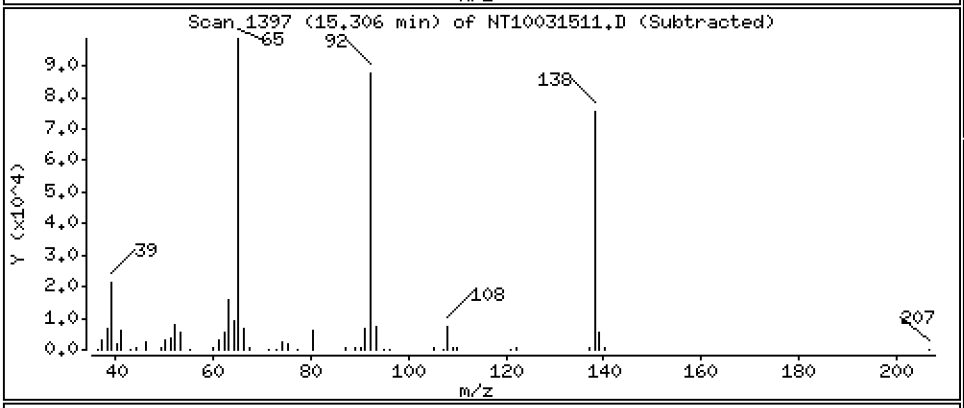
Column diameter: 0.25

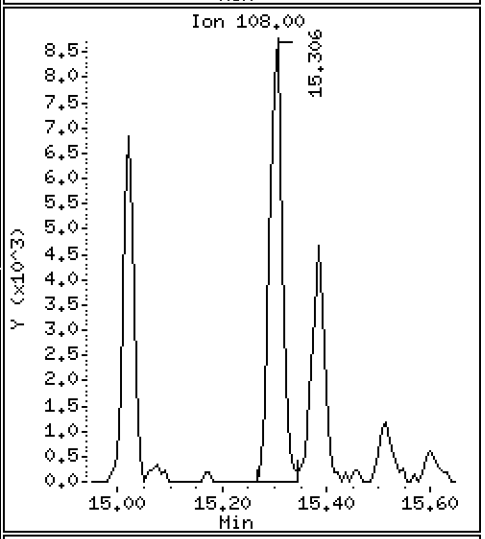
43 3-Nitroaniline

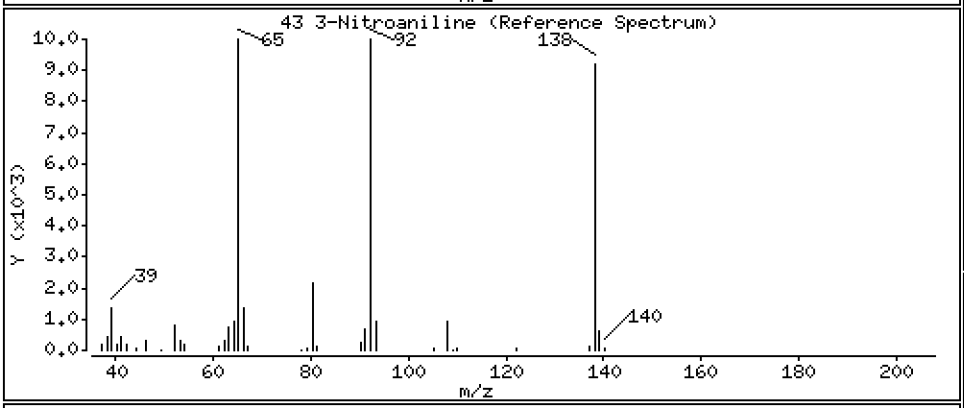
Concentration: 5.014 ug/mL

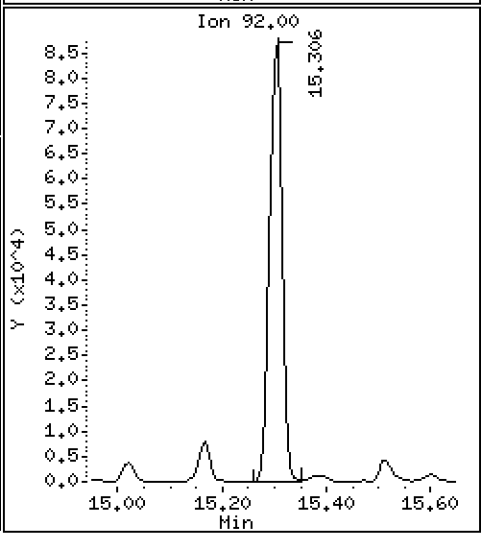


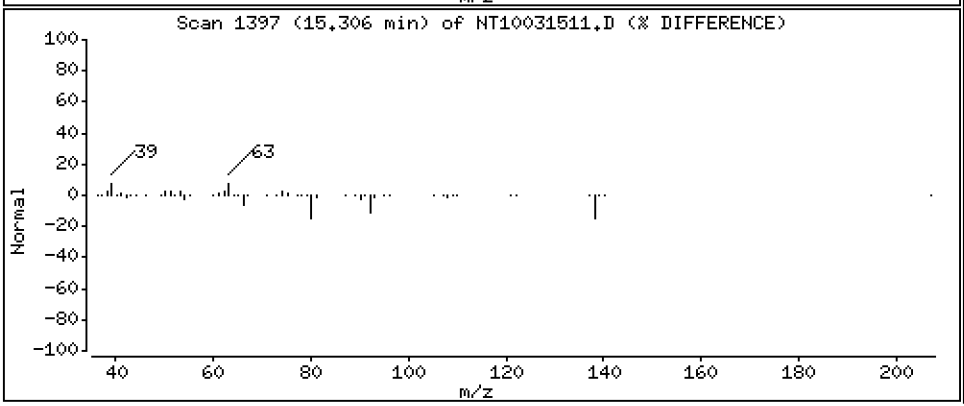












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

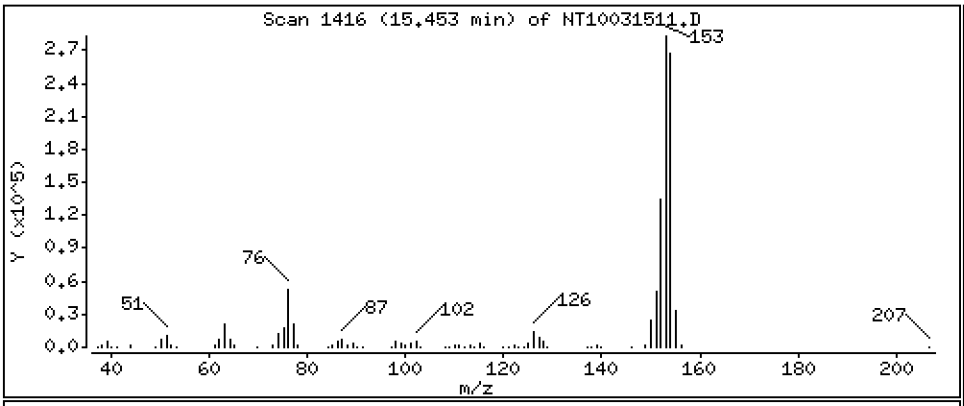
Operator: VTS

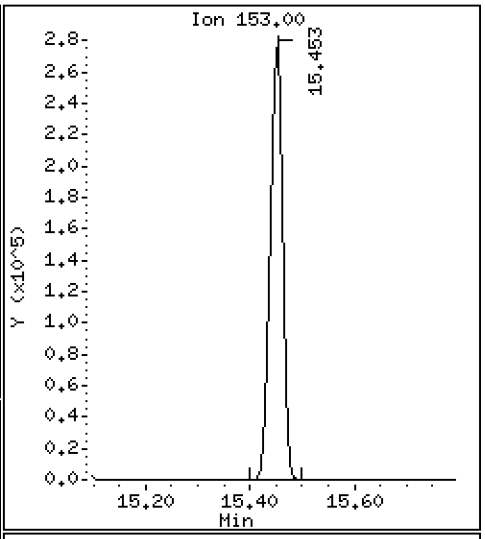
Column phase: ZB-5msi

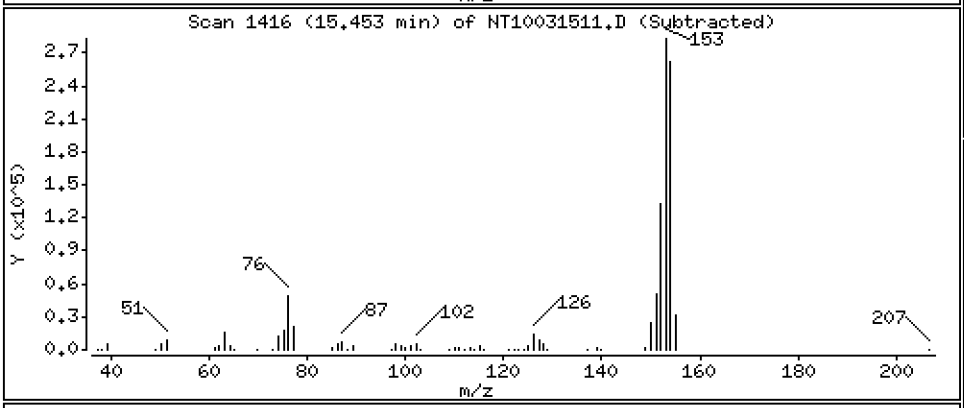
Column diameter: 0.25

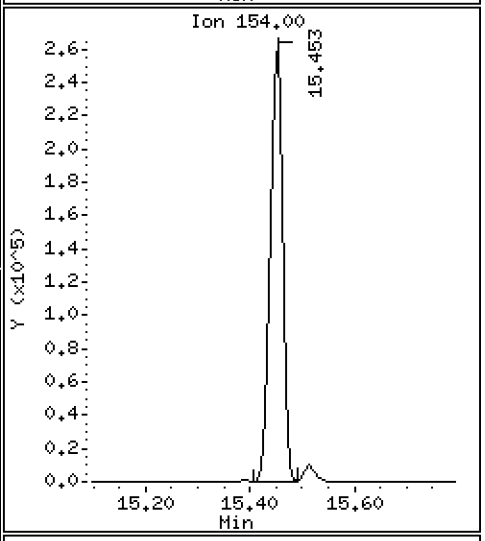
44 Acenaphthene

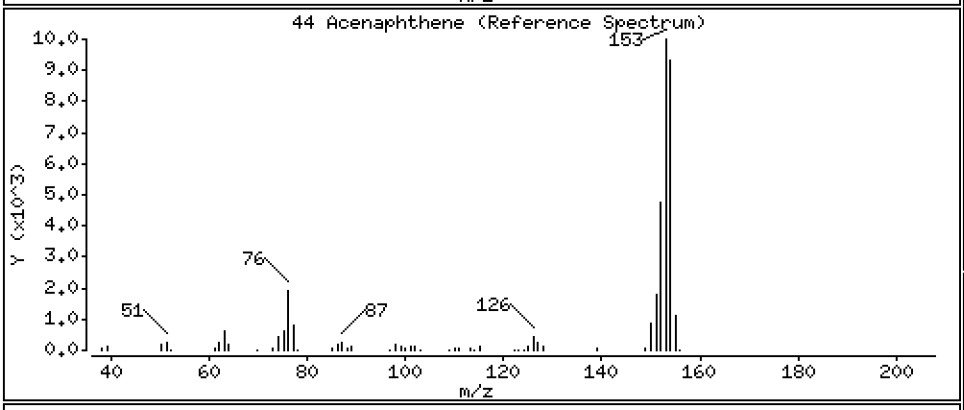
Concentration: 4.776 ug/mL

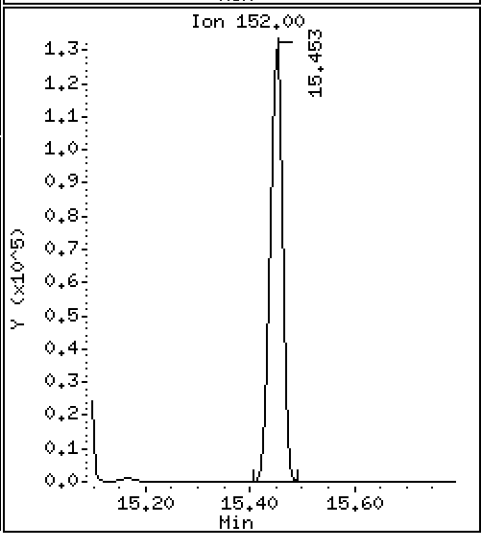


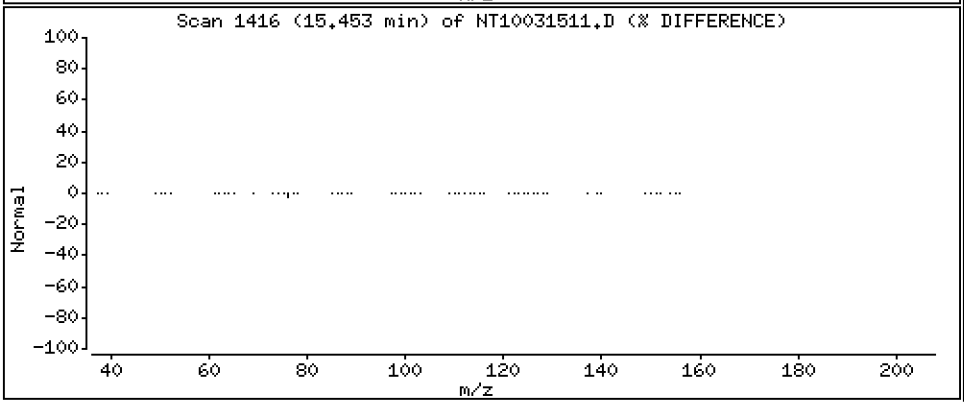












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

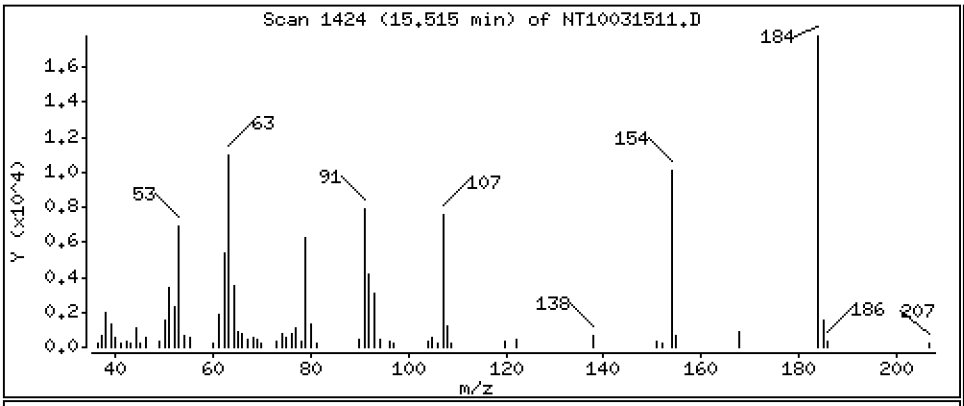
Operator: VTS

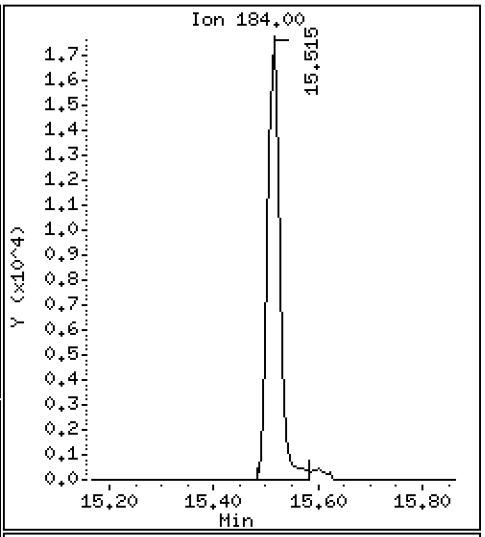
Column phase: ZB-5msi

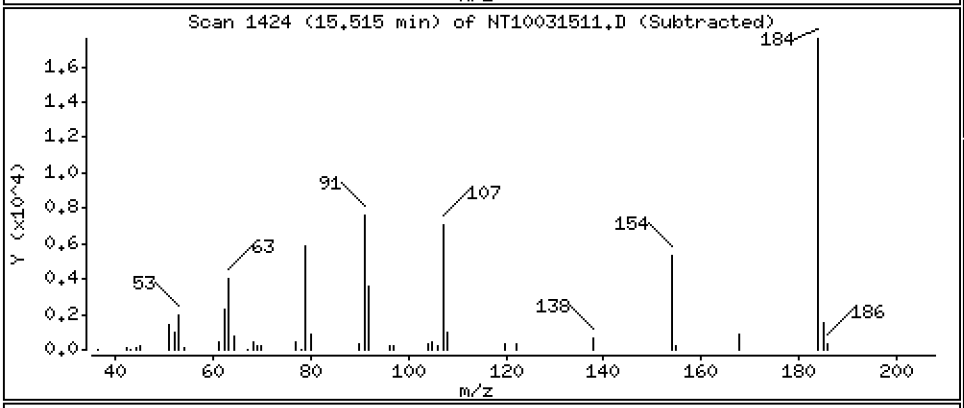
Column diameter: 0.25

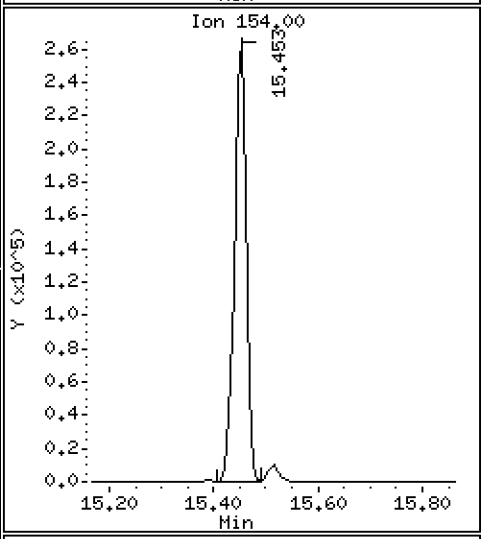
45 2,4-Dinitrophenol

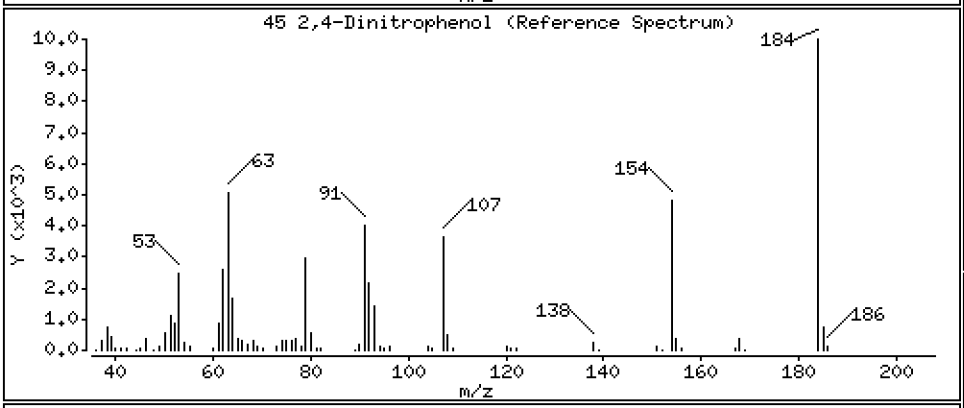
Concentration: 2.124 ug/mL

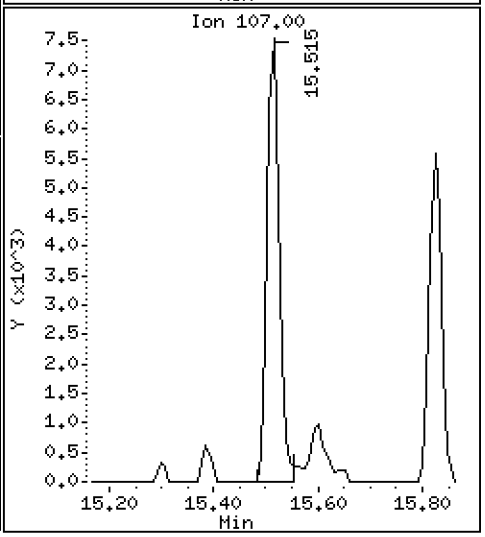


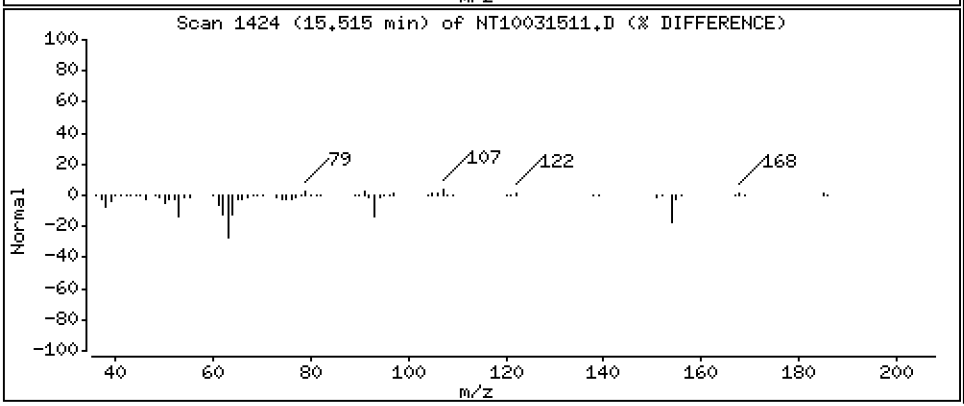












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

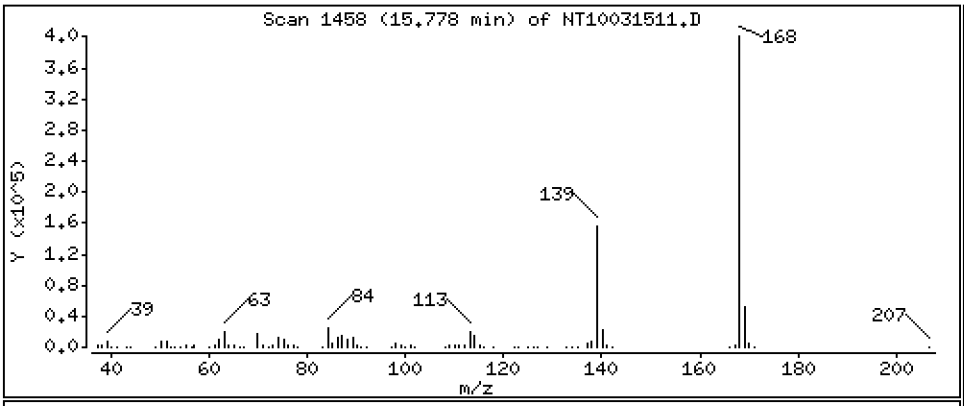
Operator: VTS

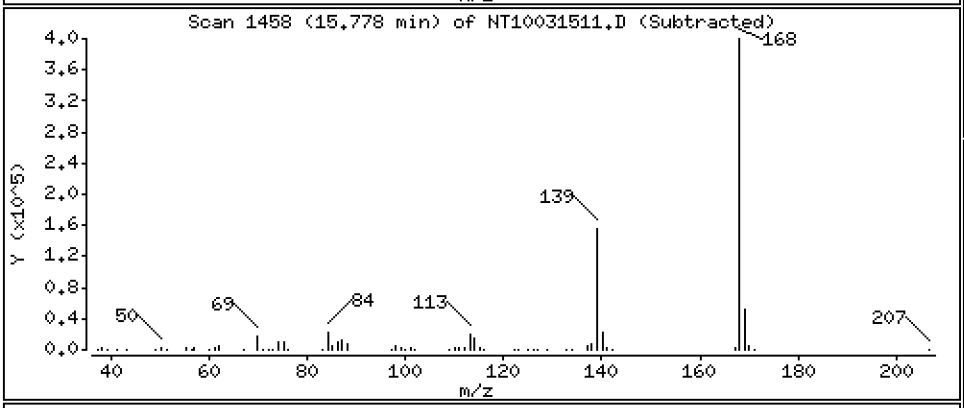
Column phase: ZB-5msi

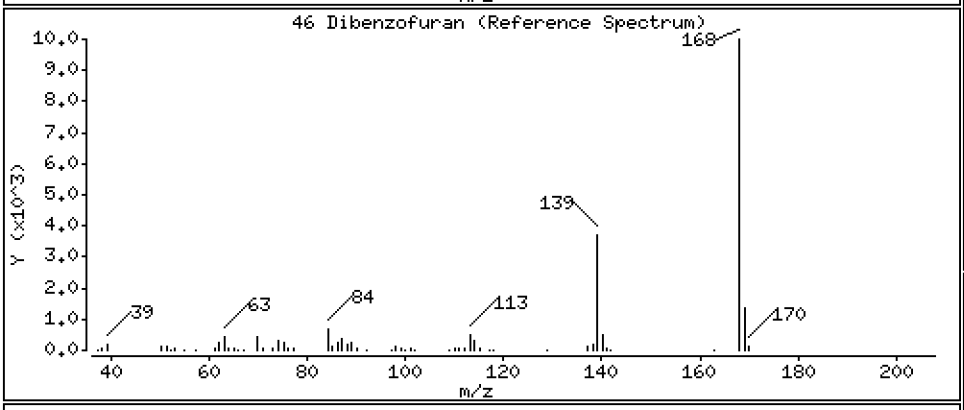
Column diameter: 0.25

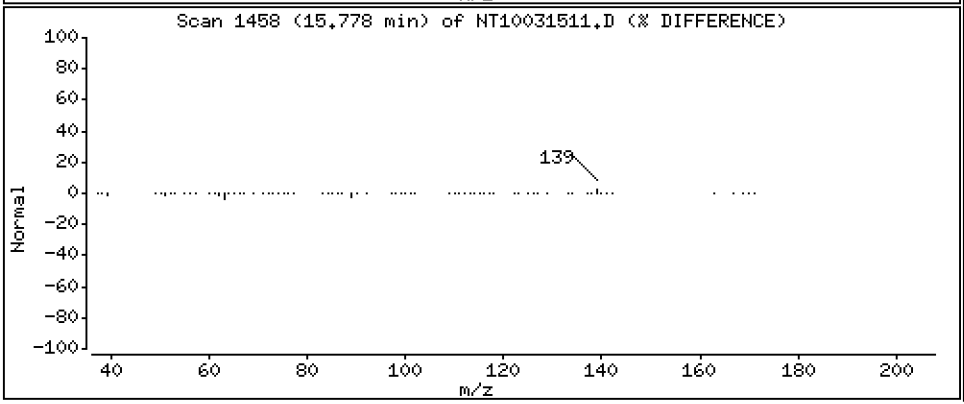
46 Dibenzofuran

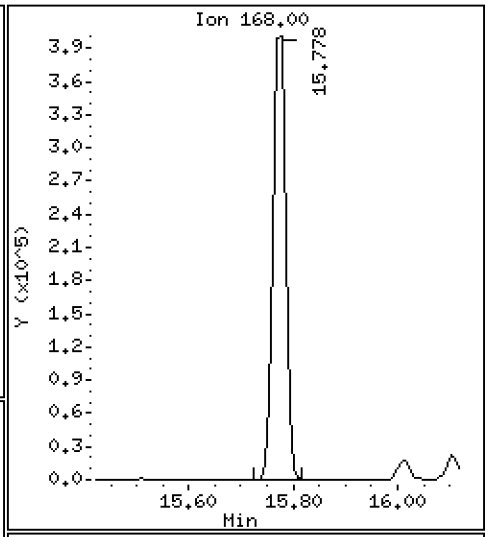
Concentration: 4.648 ug/mL

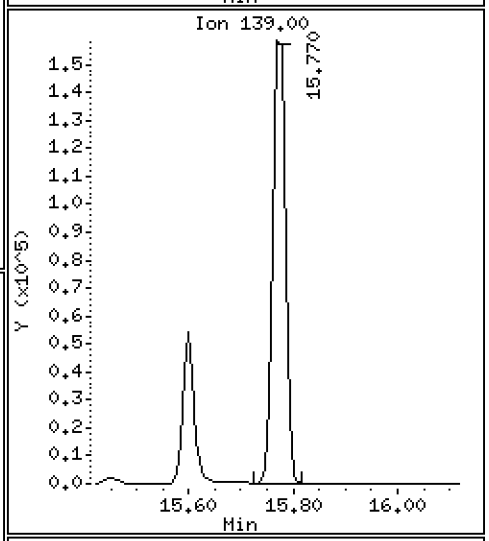


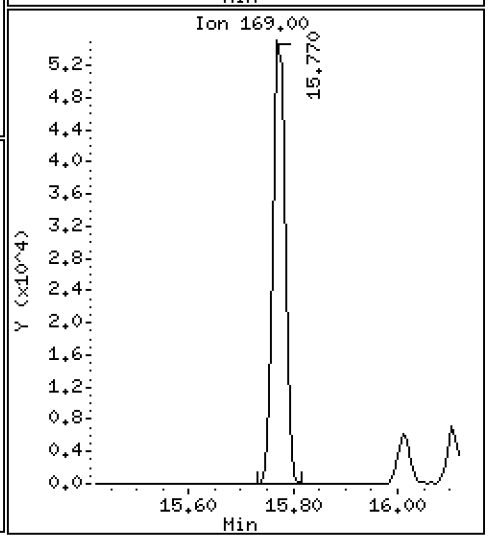












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

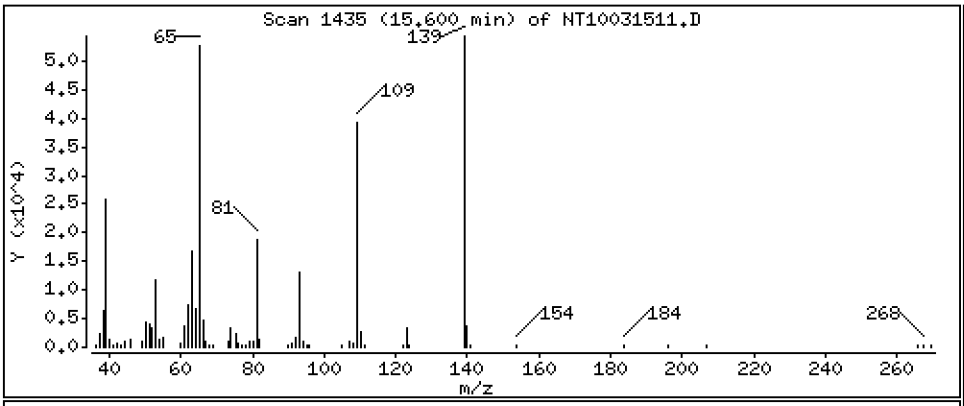
Operator: VTS

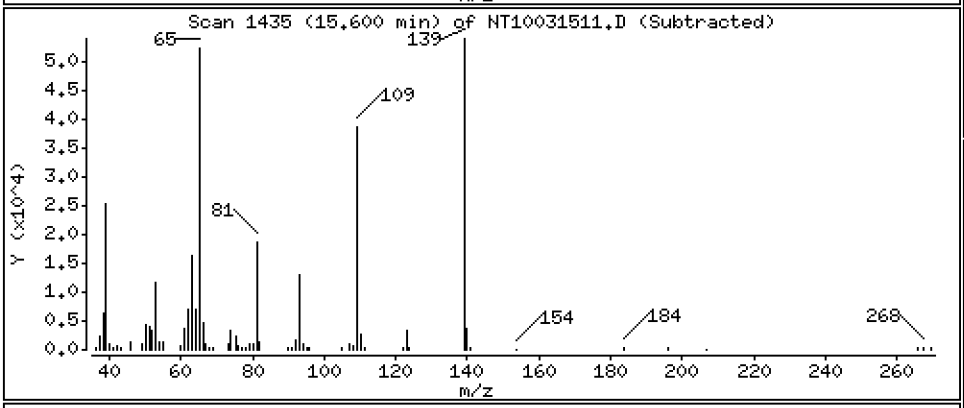
Column phase: ZB-5msi

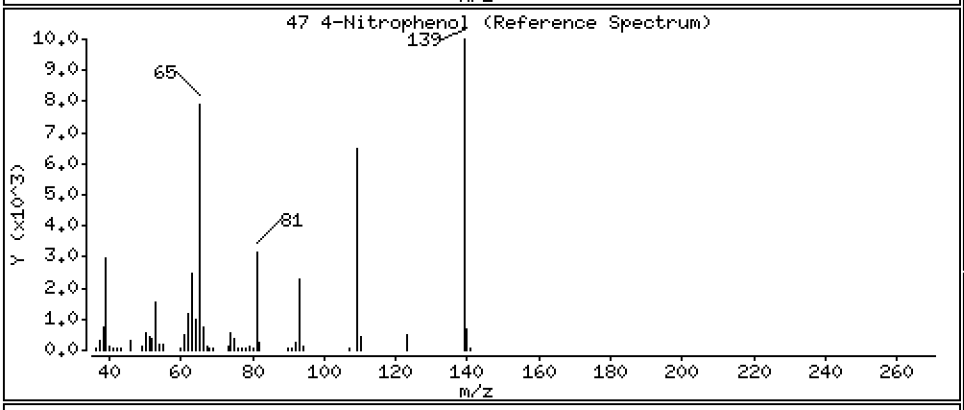
Column diameter: 0.25

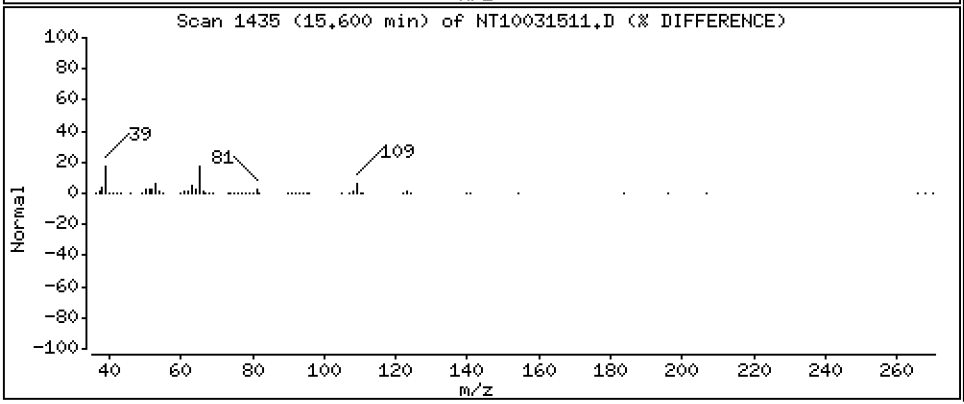
47 4-Nitrophenol

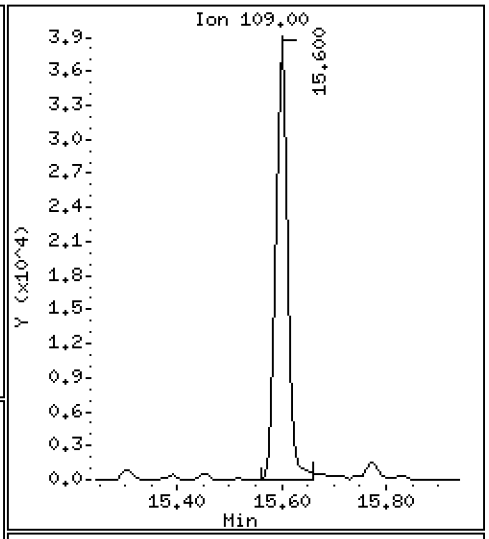
Concentration: 3.966 ug/mL

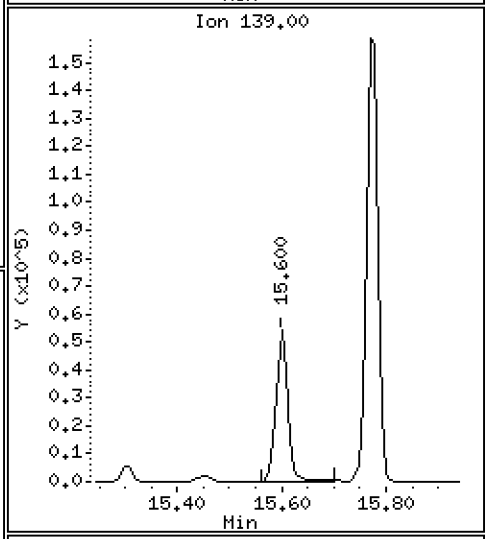


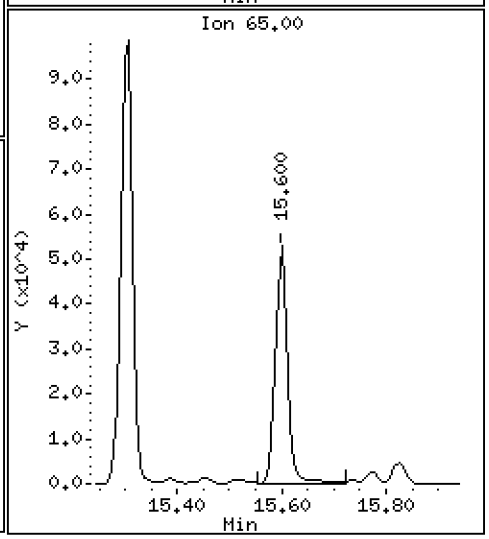












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

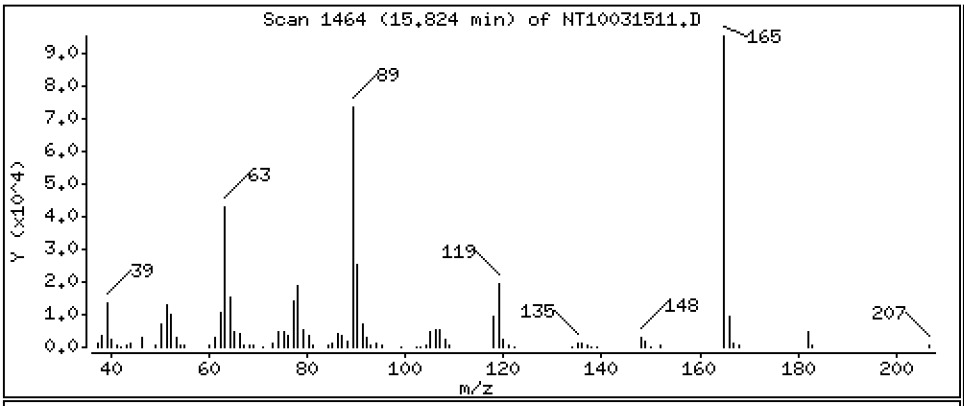
Operator: VTS

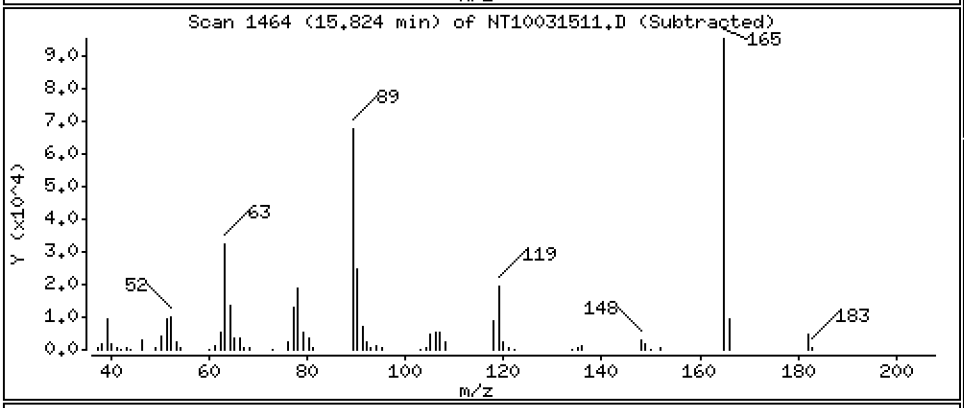
Column phase: ZB-5msi

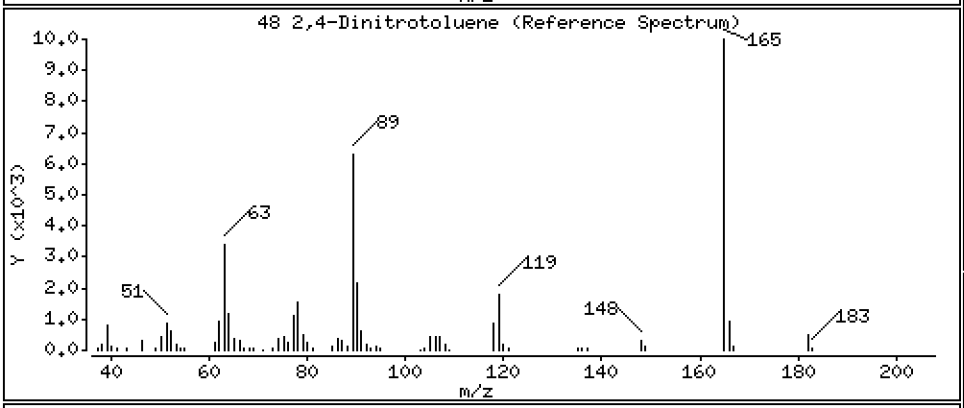
Column diameter: 0.25

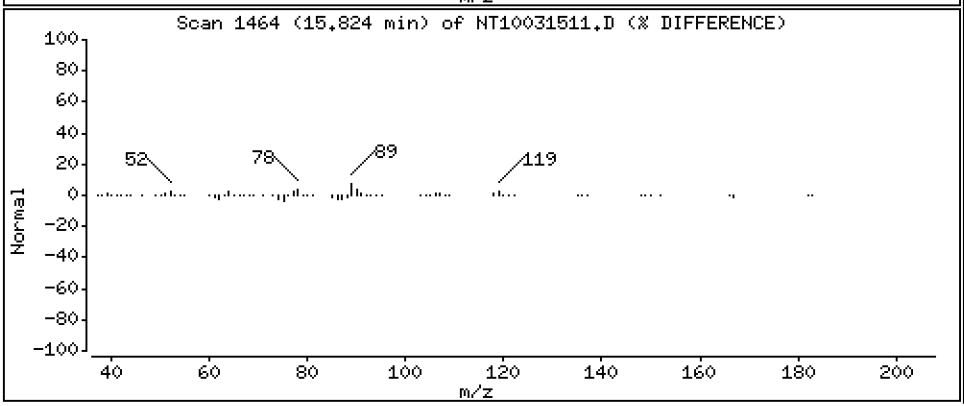
48 2,4-Dinitrotoluene

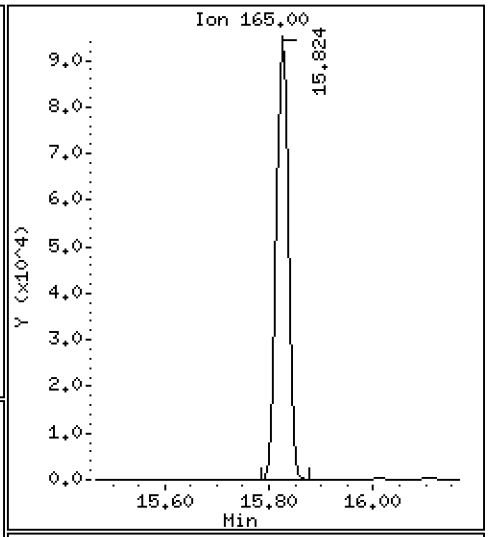
Concentration: 4.510 ug/mL

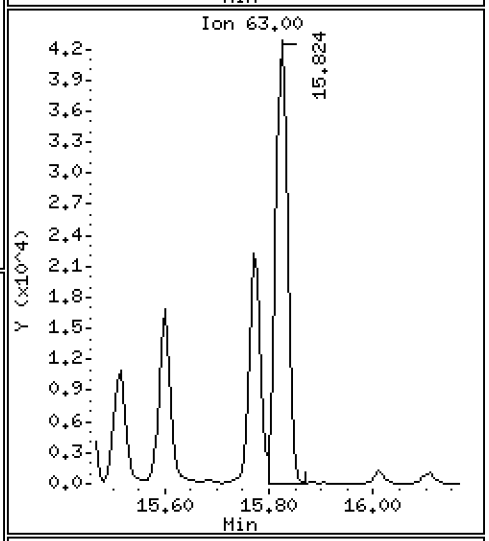


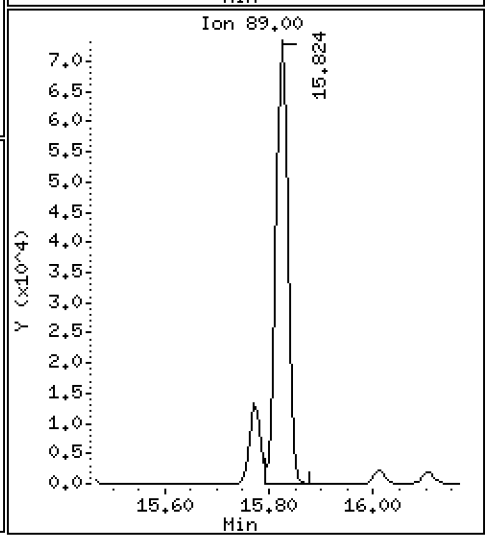












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

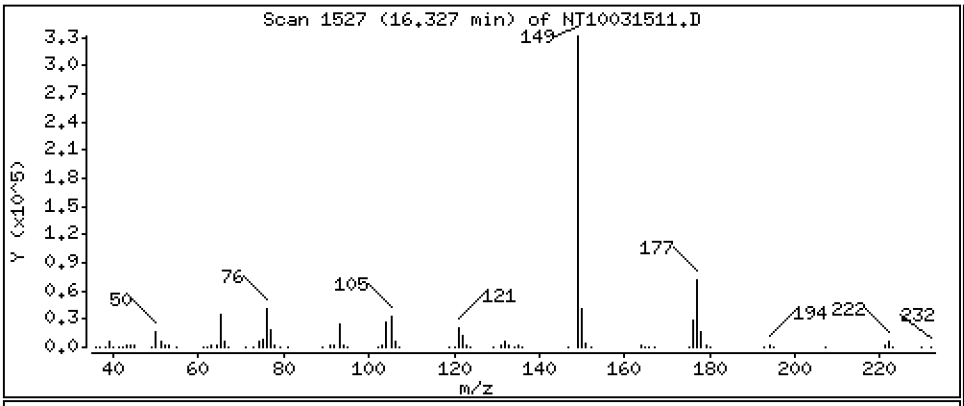
Operator: VTS

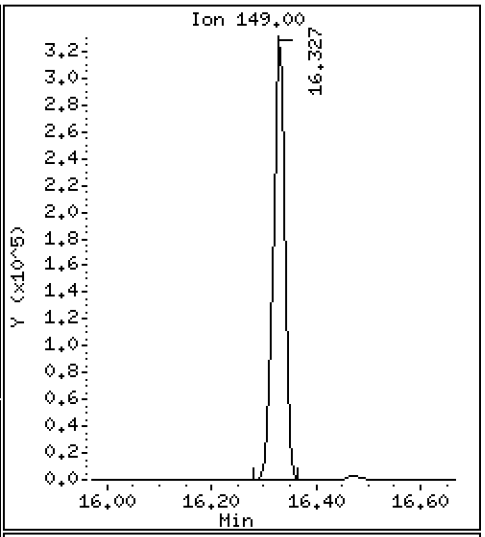
Column phase: ZB-5msi

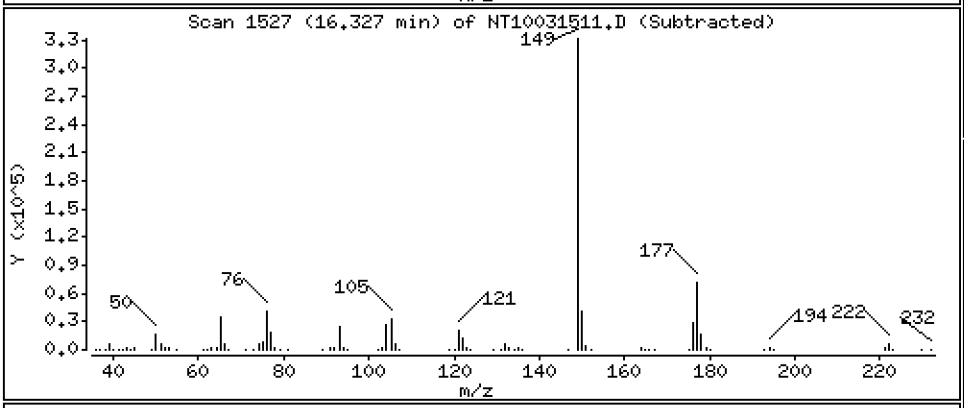
Column diameter: 0.25

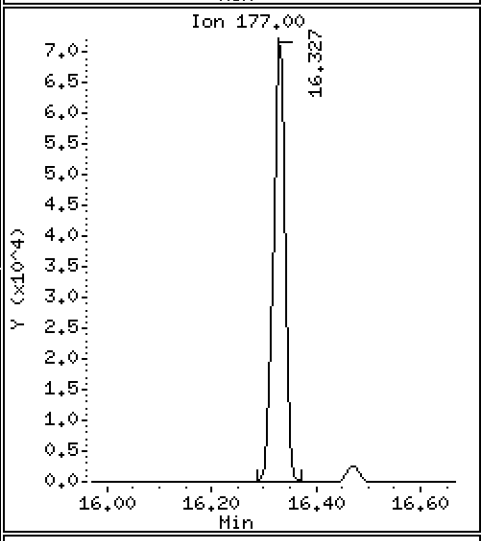
50 Diethylphthalate

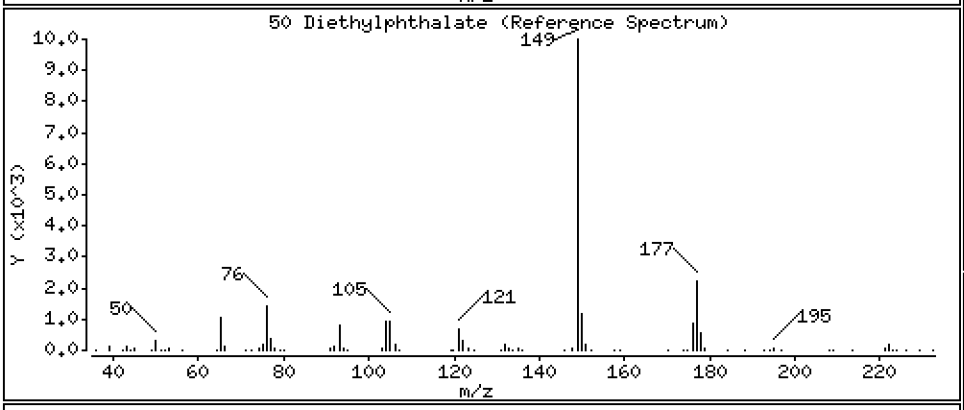
Concentration: 5.209 ug/mL

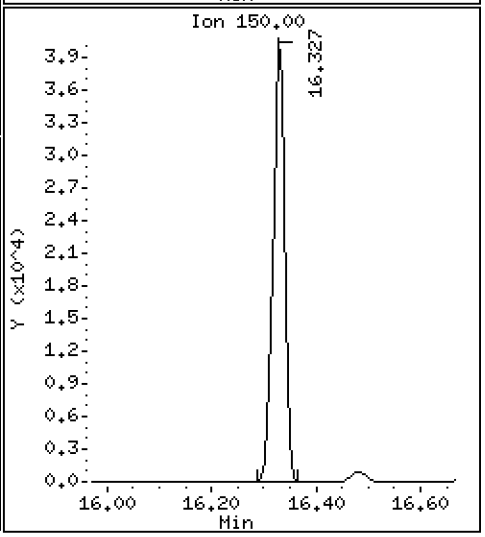


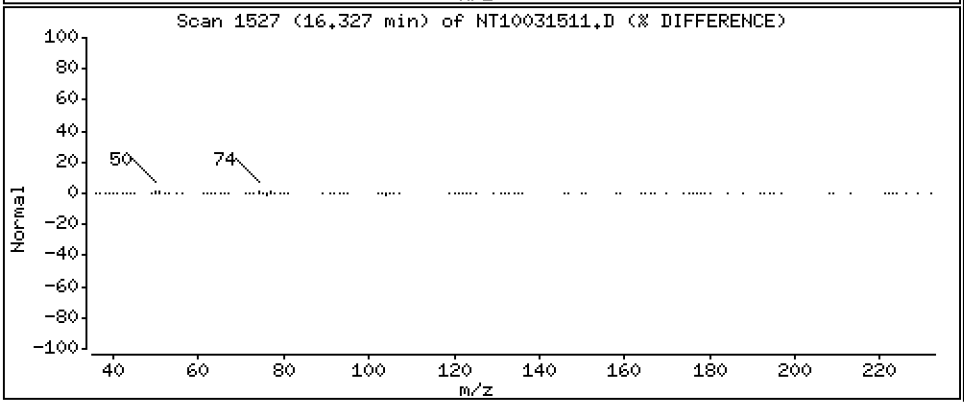












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

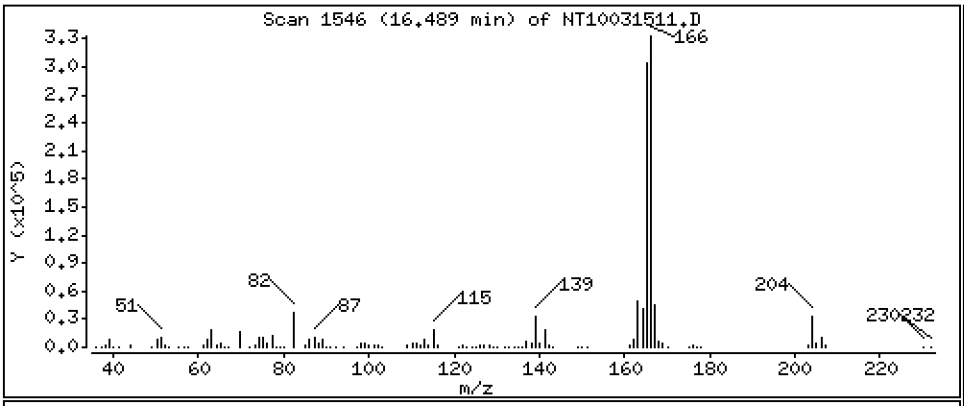
Operator: VTS

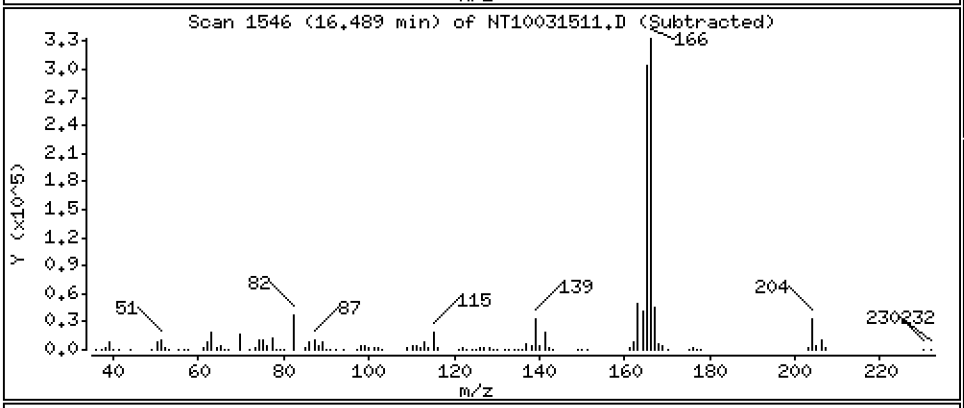
Column phase: ZB-5msi

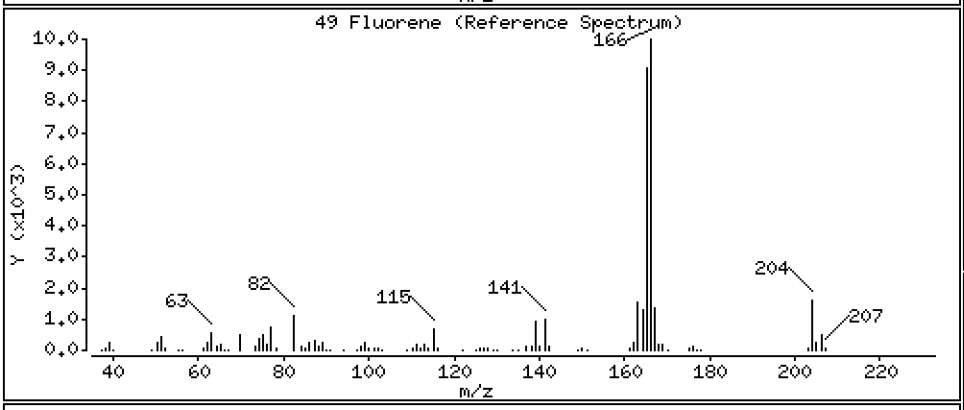
Column diameter: 0.25

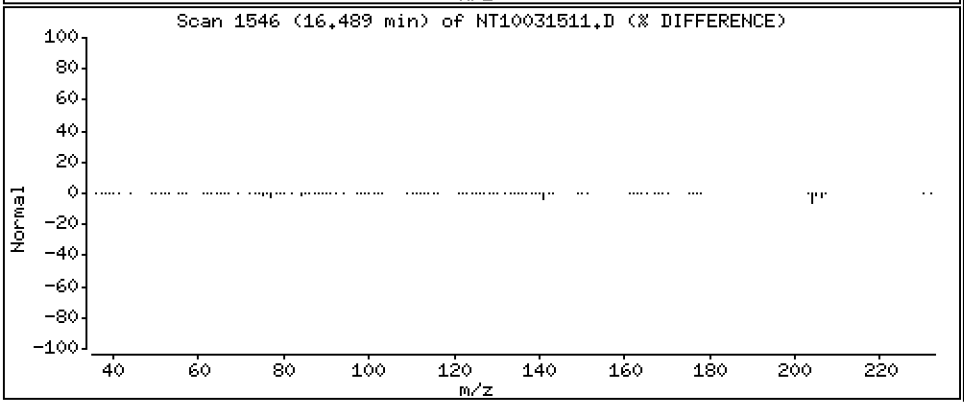
49 Fluorene

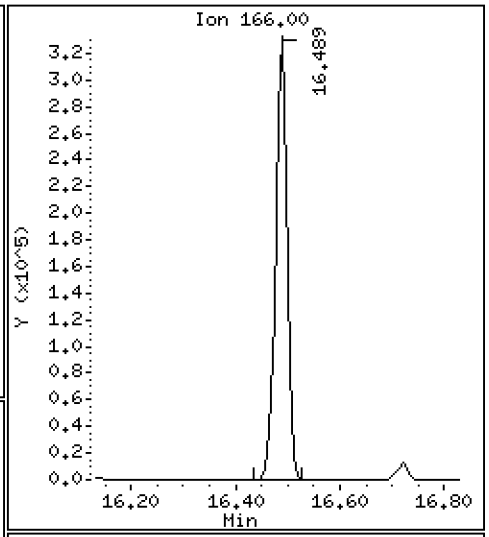
Concentration: 4.708 ug/mL

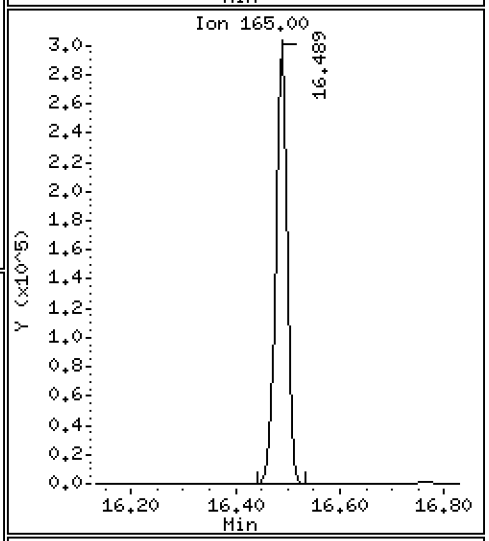


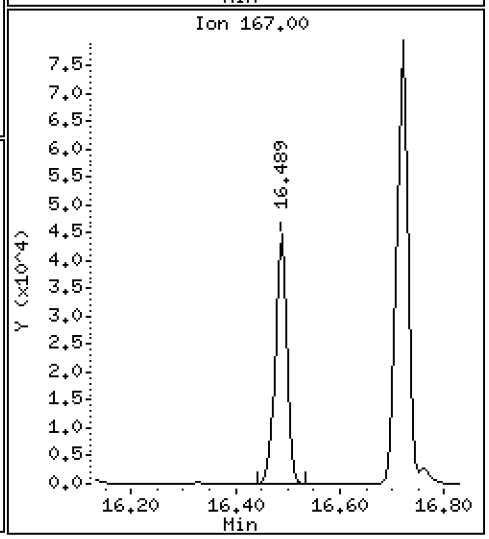












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

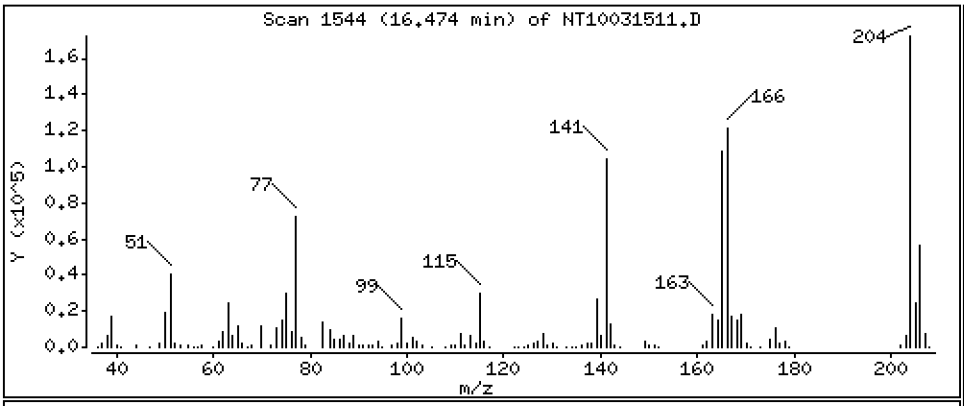
Operator: VTS

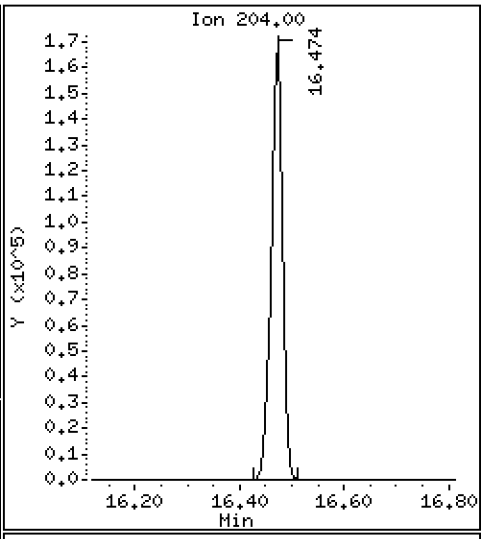
Column phase: ZB-5msi

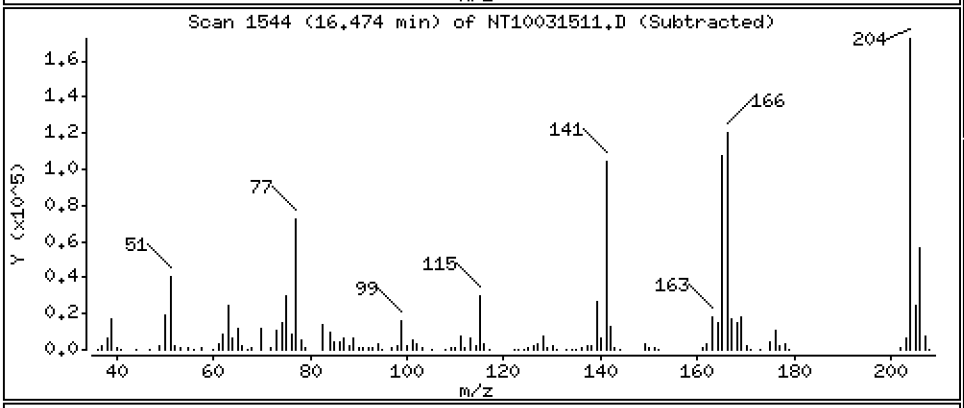
Column diameter: 0.25

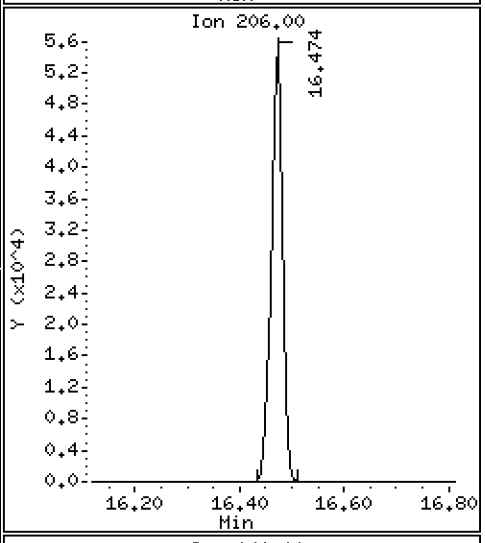
51 4-Chlorophenyl-phenylether

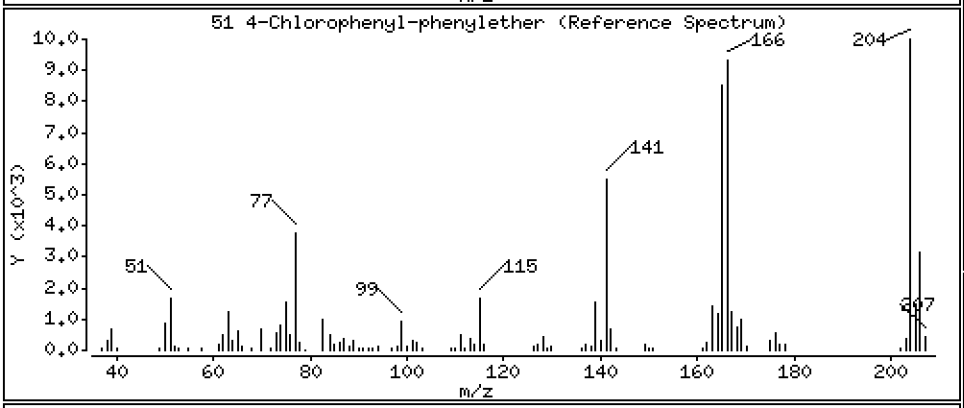
Concentration: 4.993 ug/mL

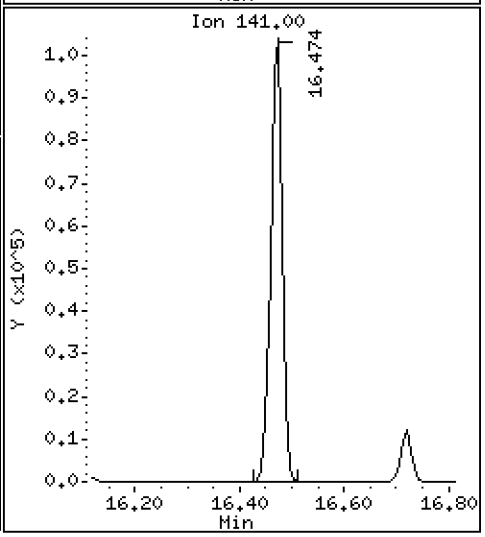


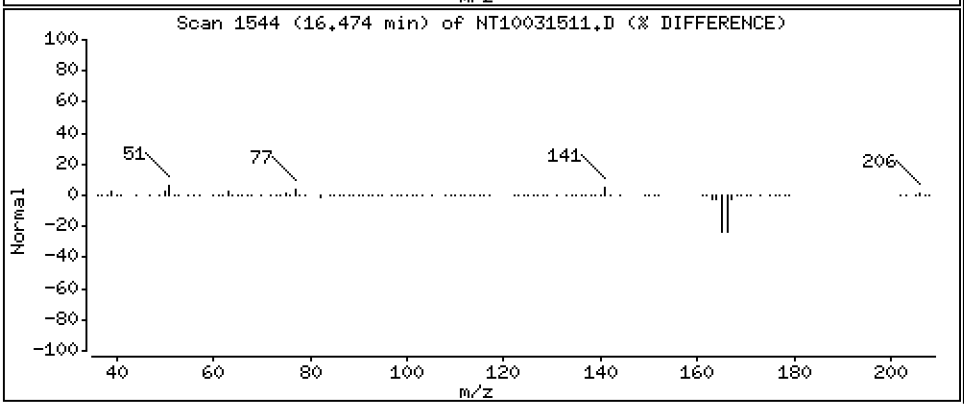












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

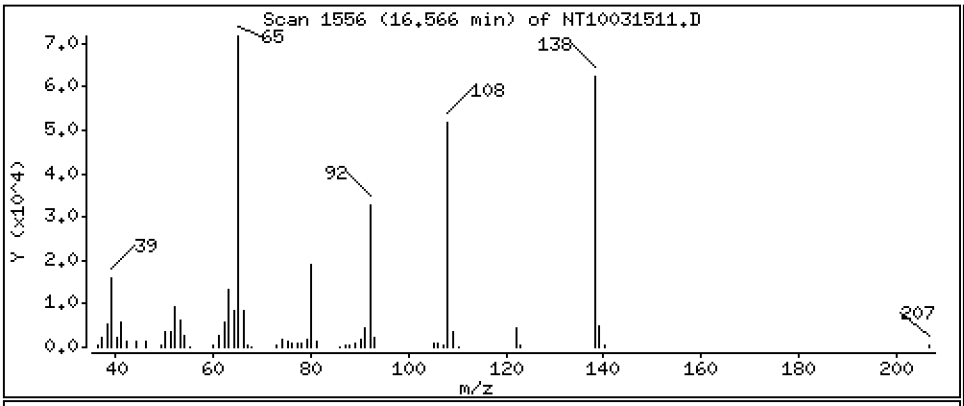
Operator: VTS

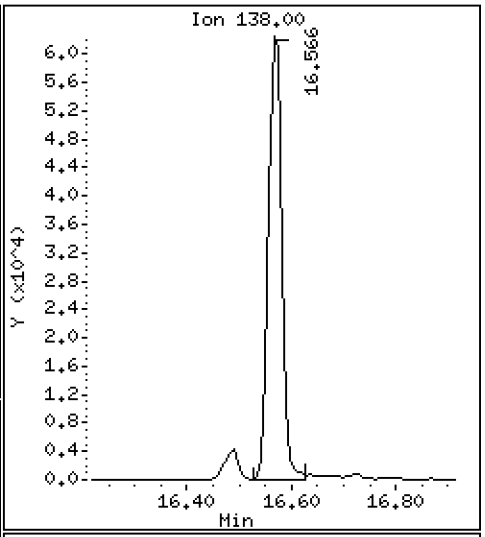
Column phase: ZB-5msi

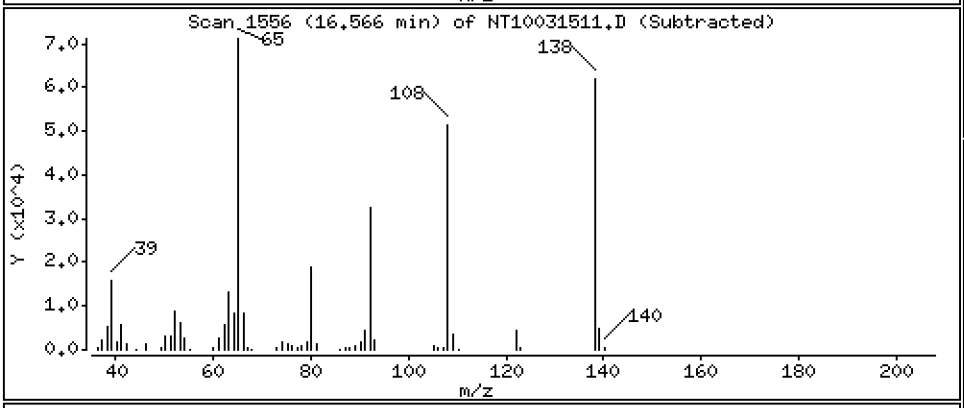
Column diameter: 0.25

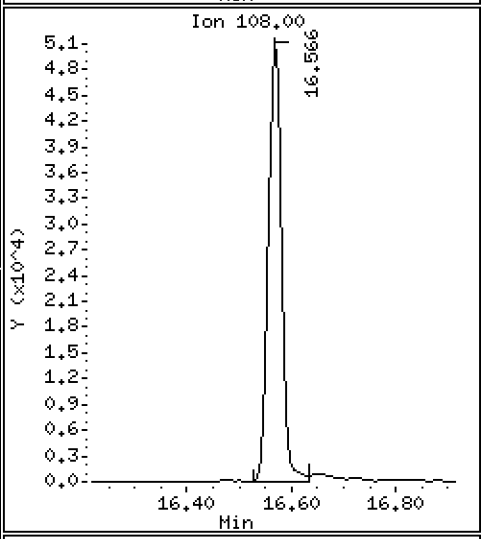
52 4-Nitroaniline

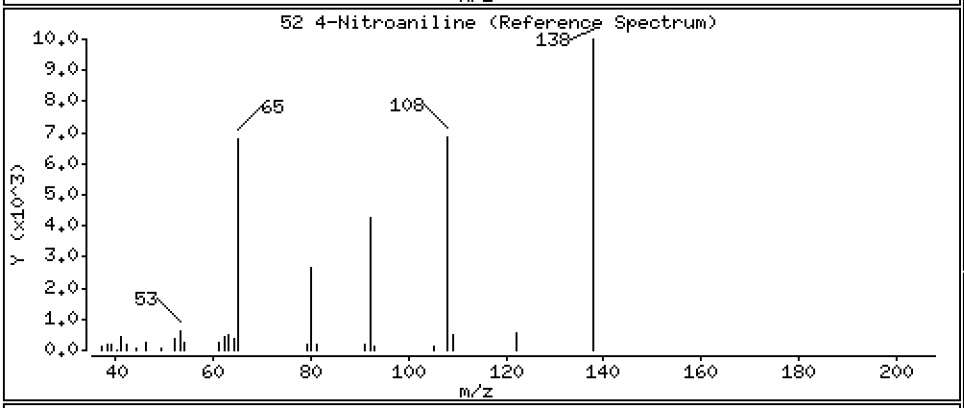
Concentration: 4.925 ug/mL

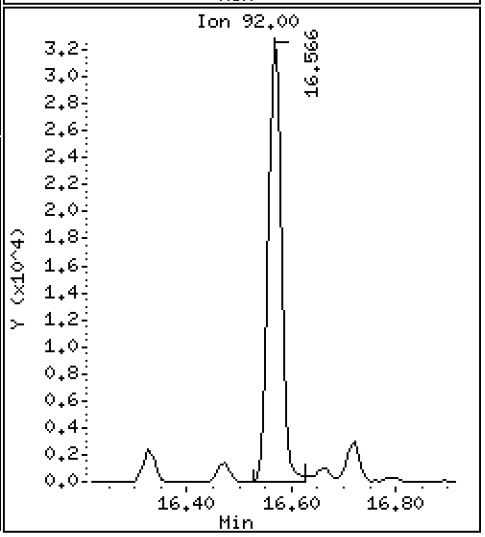


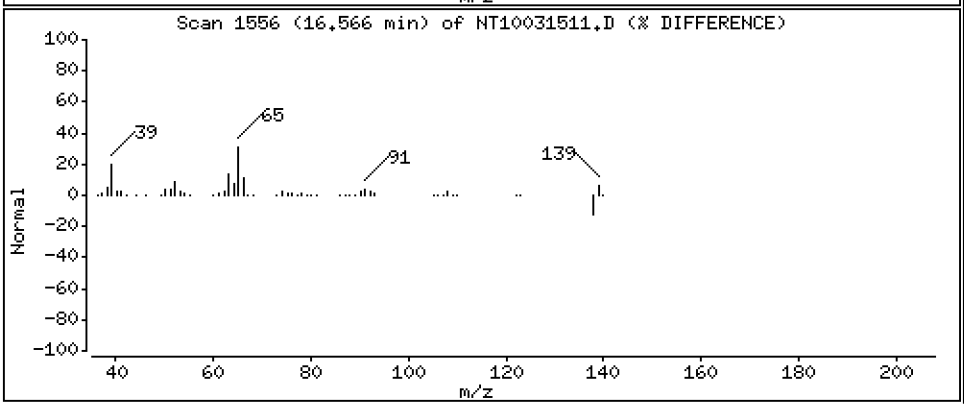












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

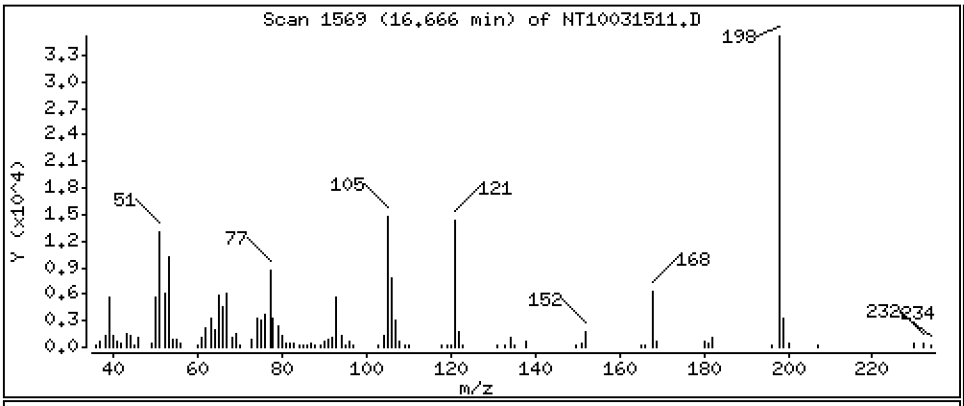
Operator: VTS

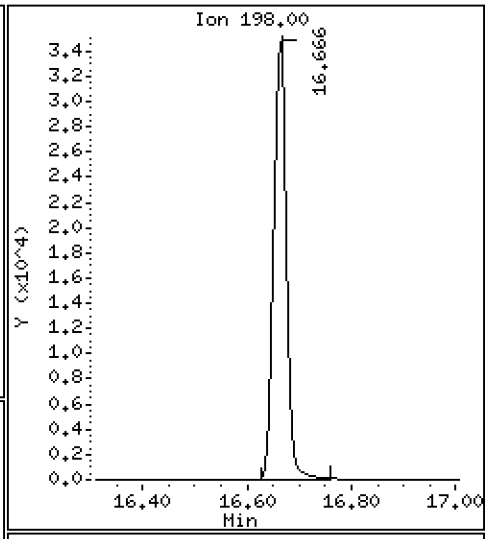
Column phase: ZB-5msi

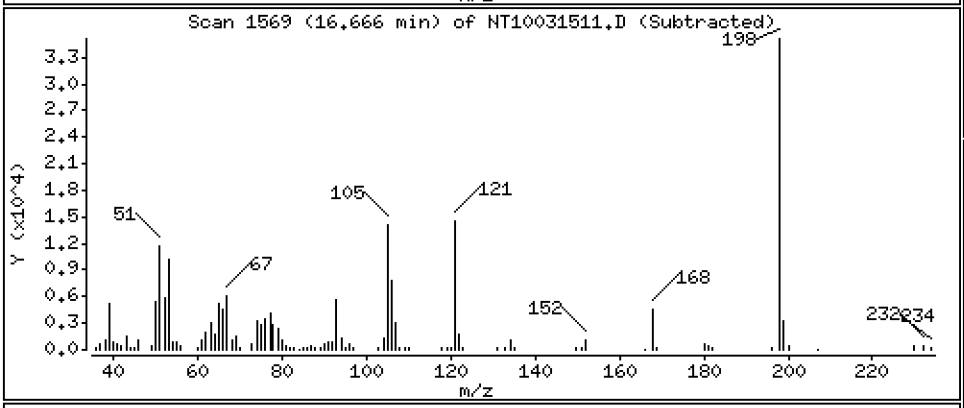
Column diameter: 0.25

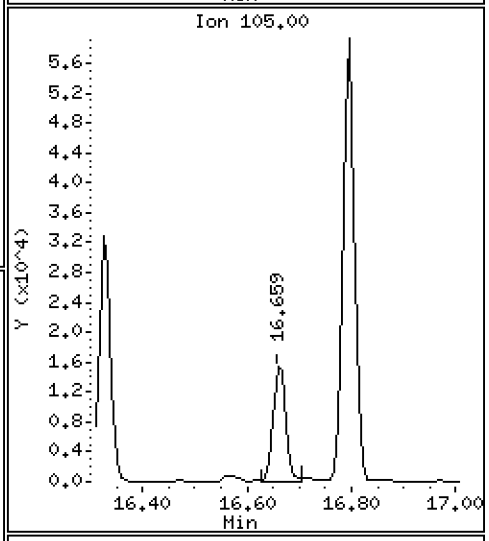
53 4,6-Dinitro-2-methylphenol

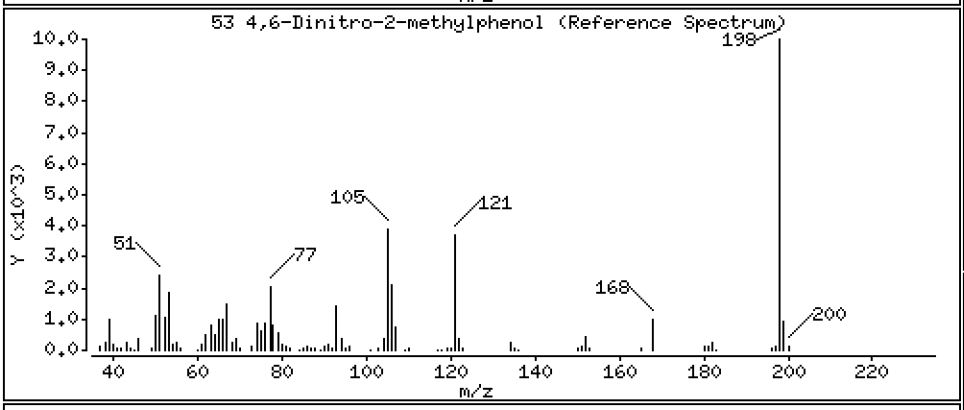
Concentration: 3.515 ug/mL

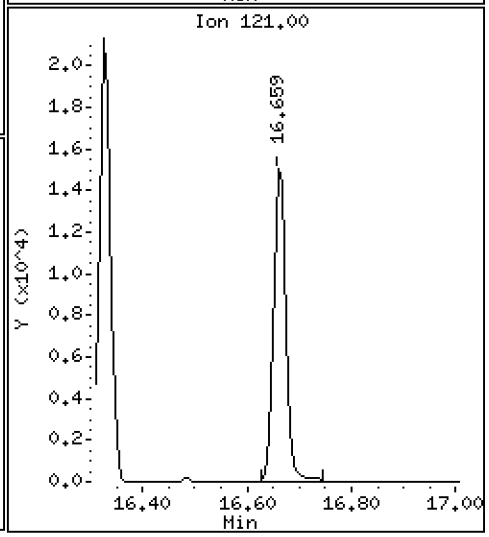


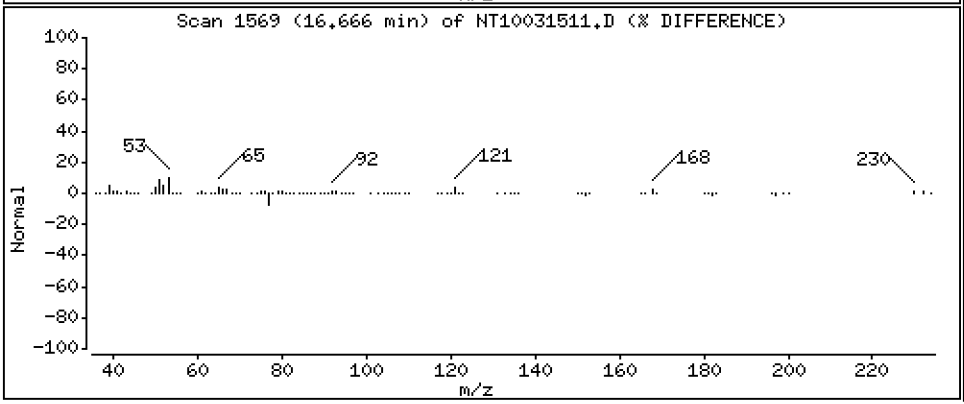












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

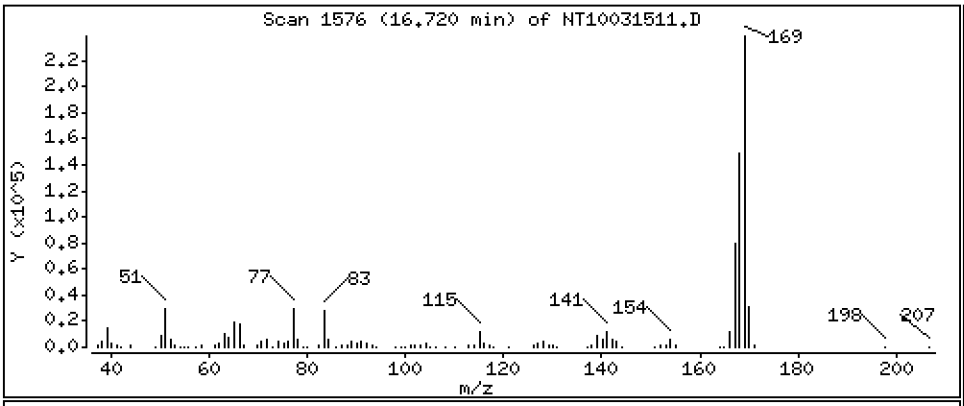
Operator: VTS

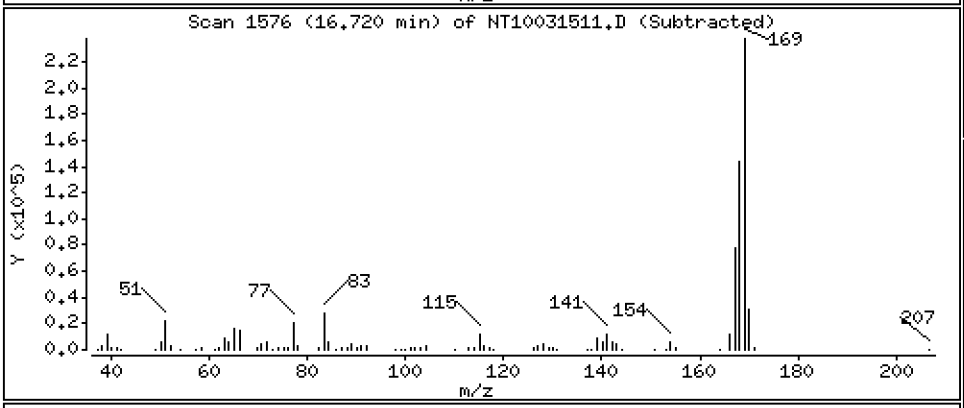
Column phase: ZB-5msi

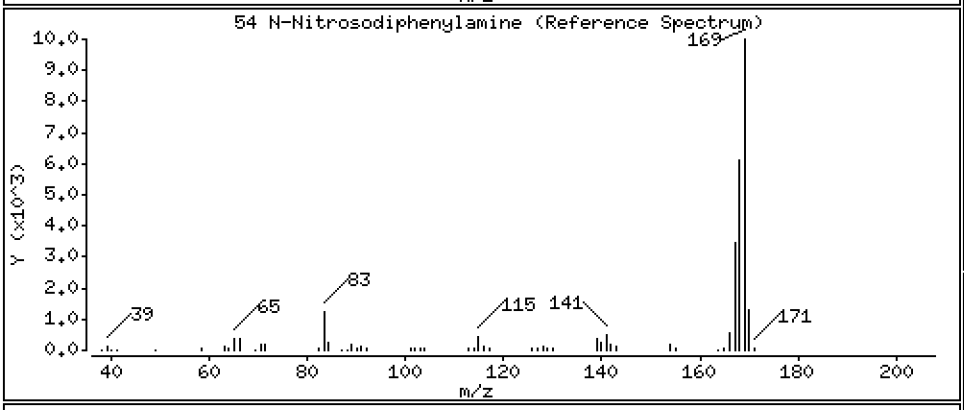
Column diameter: 0.25

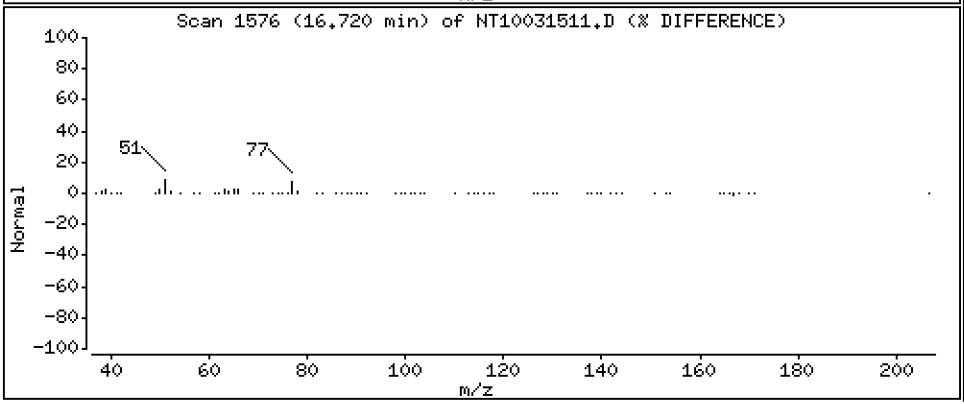
54 N-Nitrosodiphenylamine

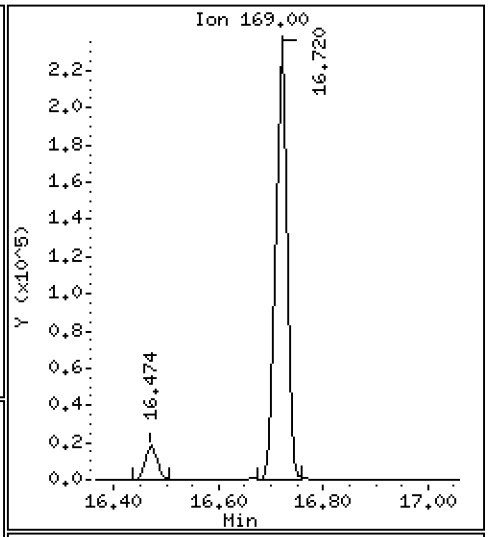
Concentration: 4.802 ug/mL

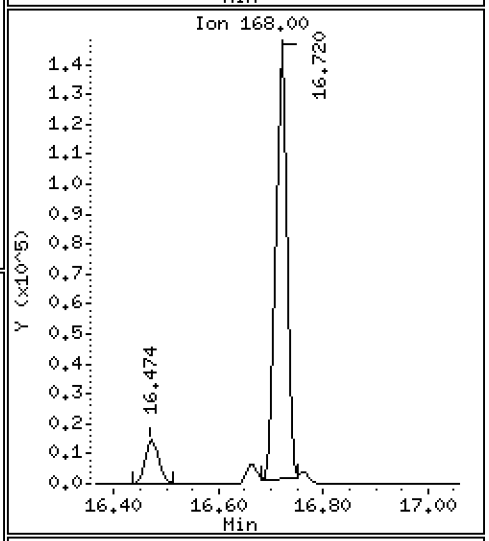


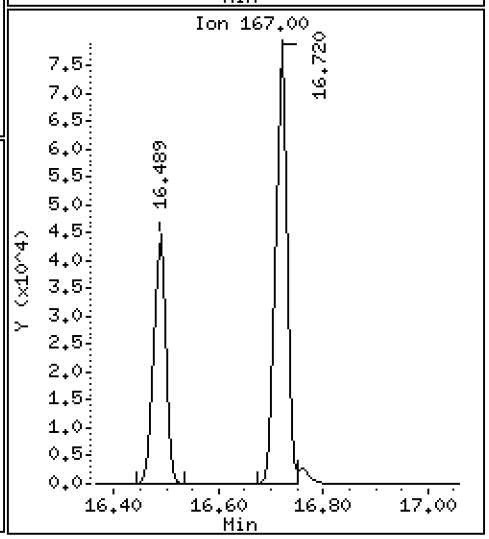












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

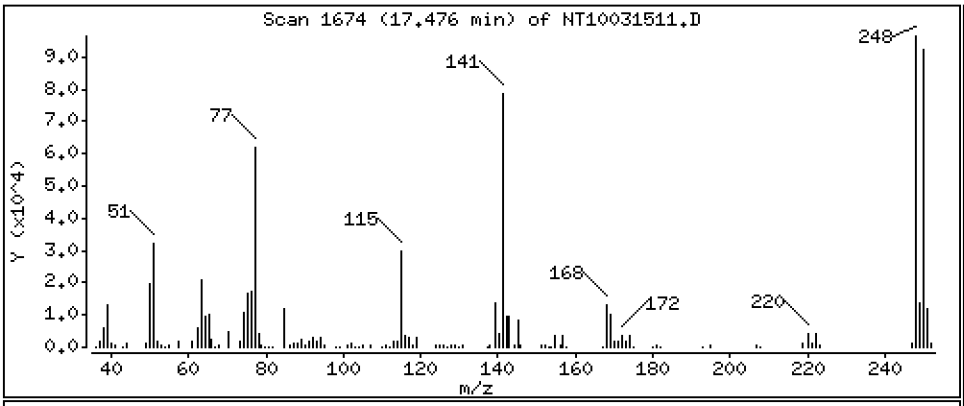
Operator: VTS

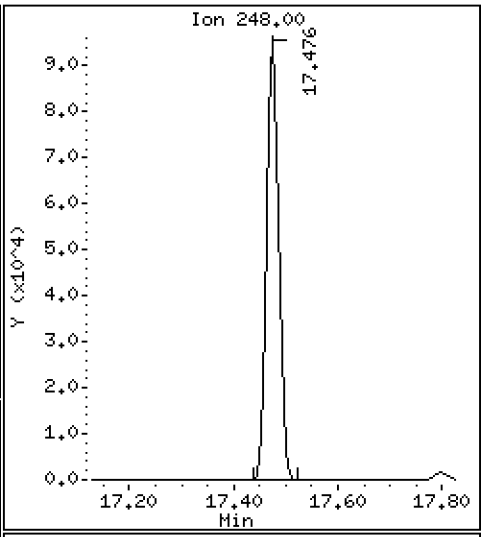
Column phase: ZB-5msi

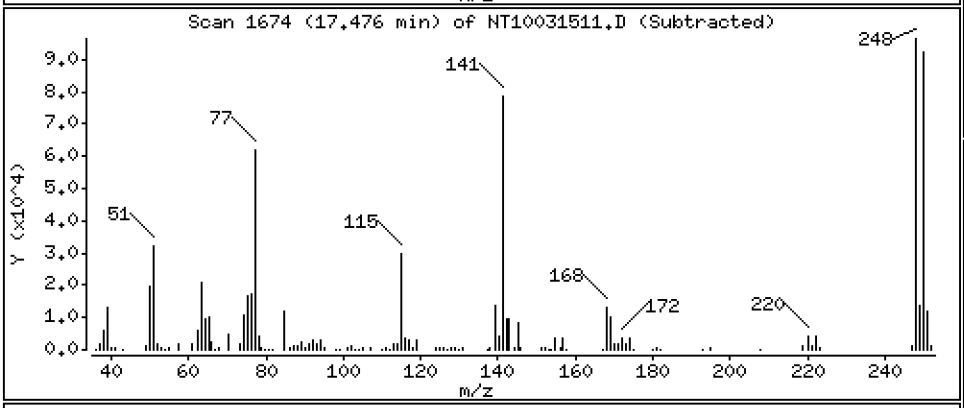
Column diameter: 0.25

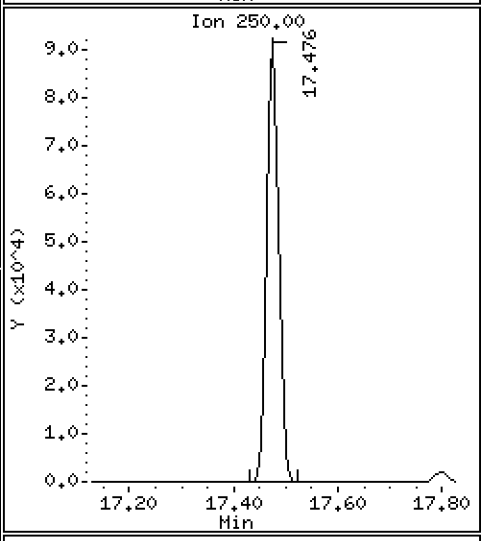
56 4-Bromophenyl-phenylether

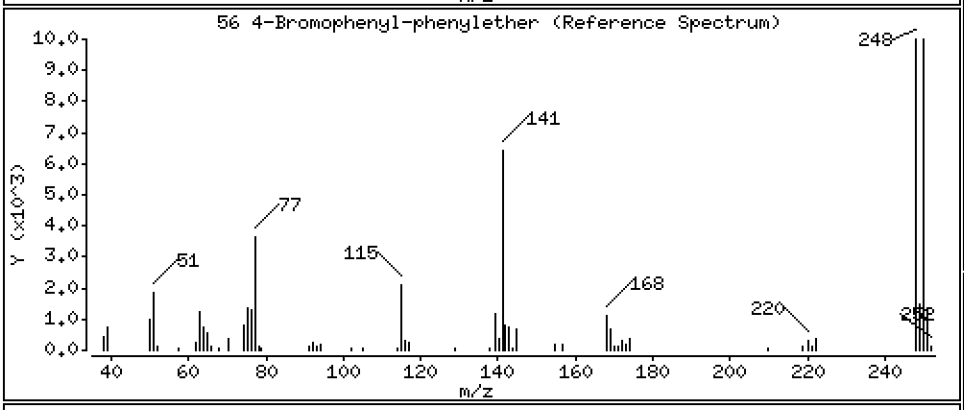
Concentration: 5.060 ug/mL

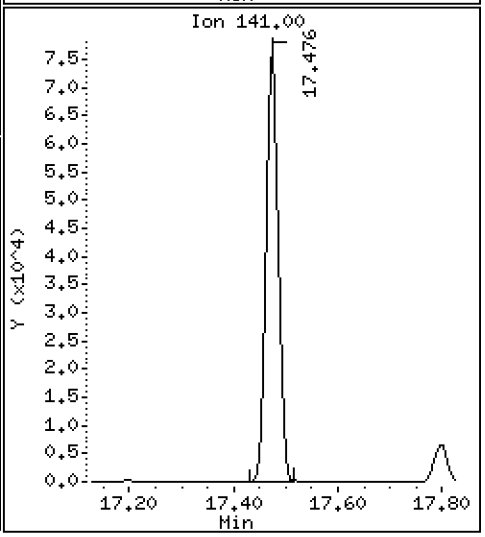


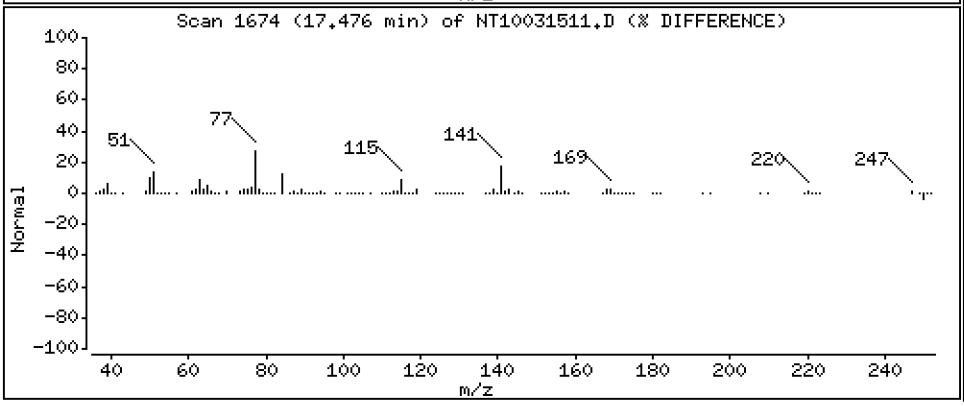












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

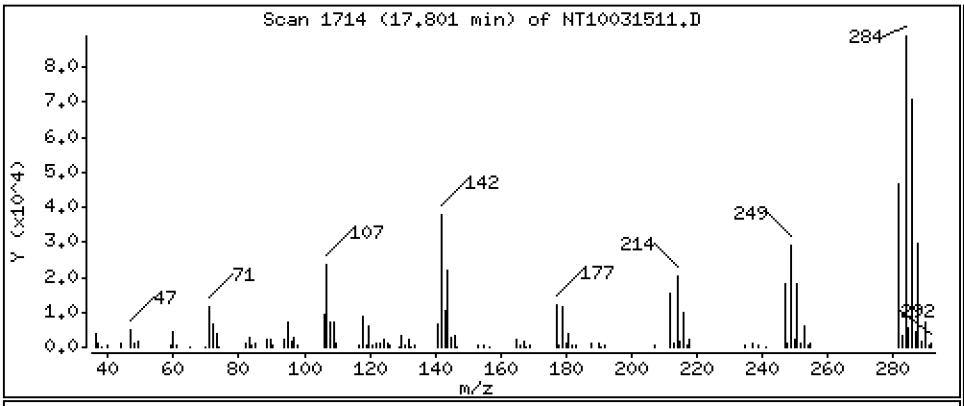
Operator: VTS

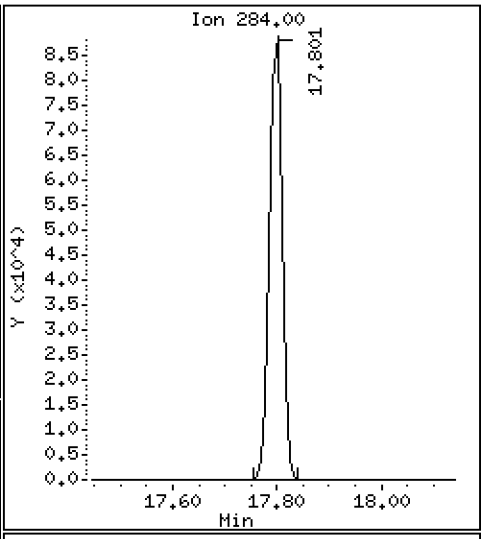
Column phase: ZB-5msi

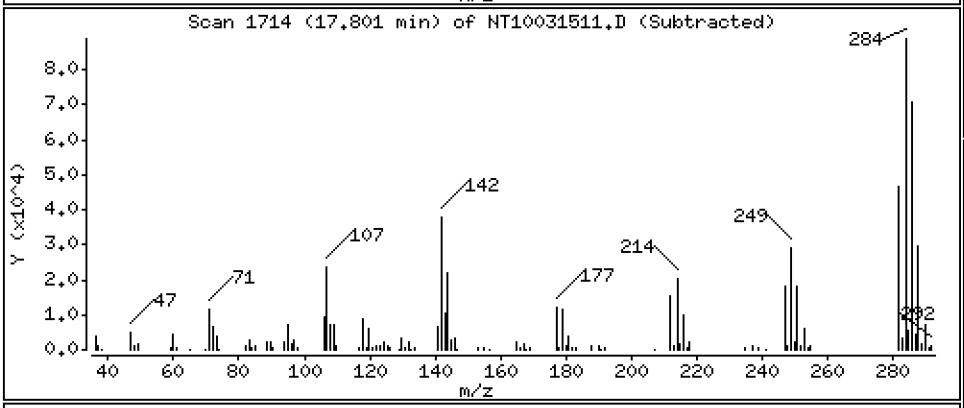
Column diameter: 0.25

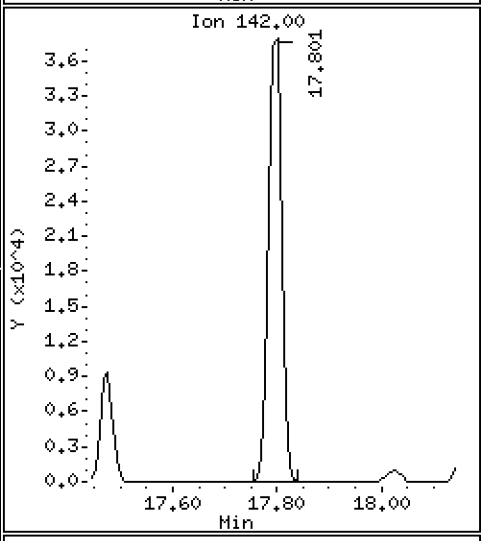
57 Hexachlorobenzene

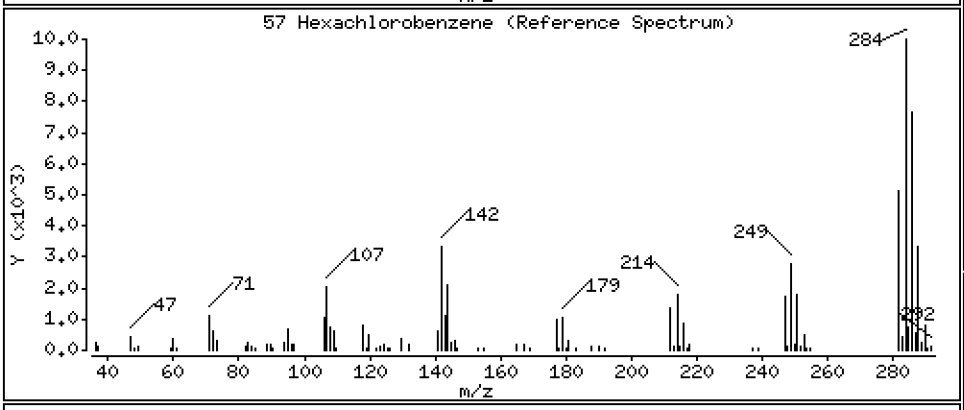
Concentration: 4.596 ug/mL

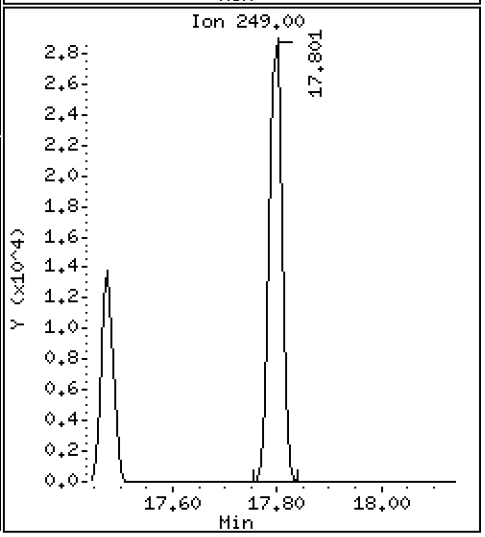


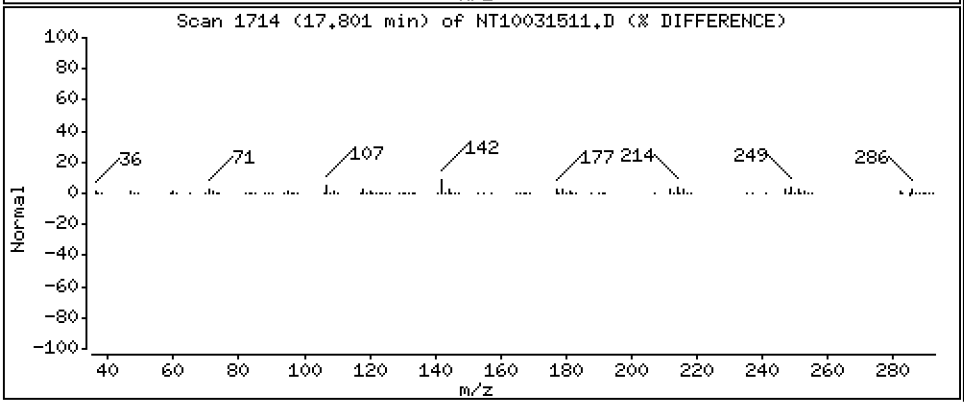












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

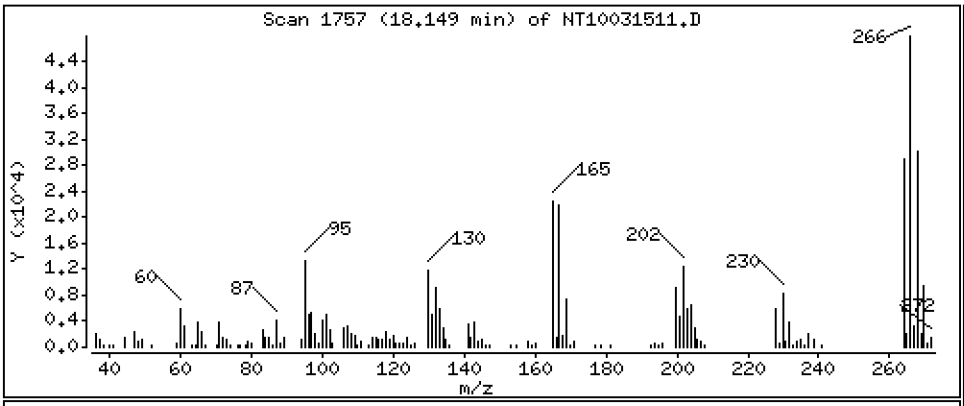
Operator: VTS

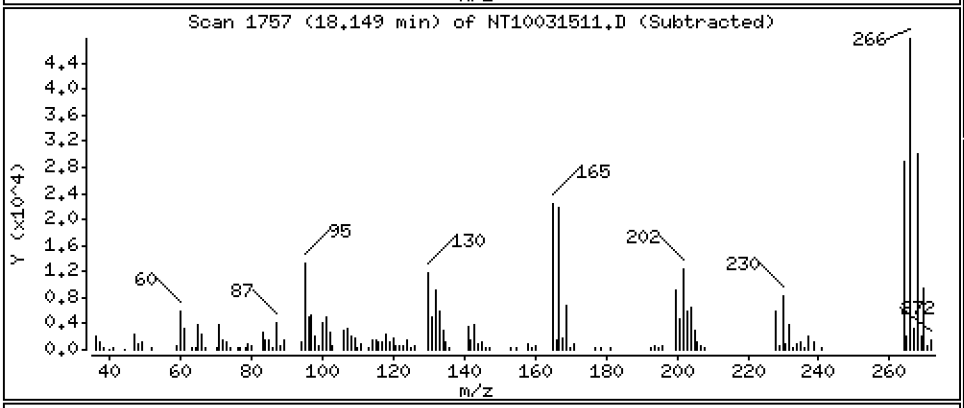
Column phase: ZB-5msi

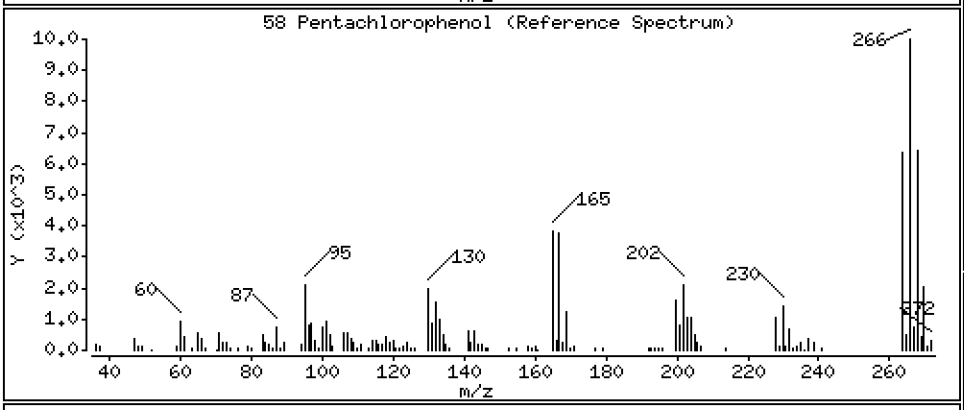
Column diameter: 0.25

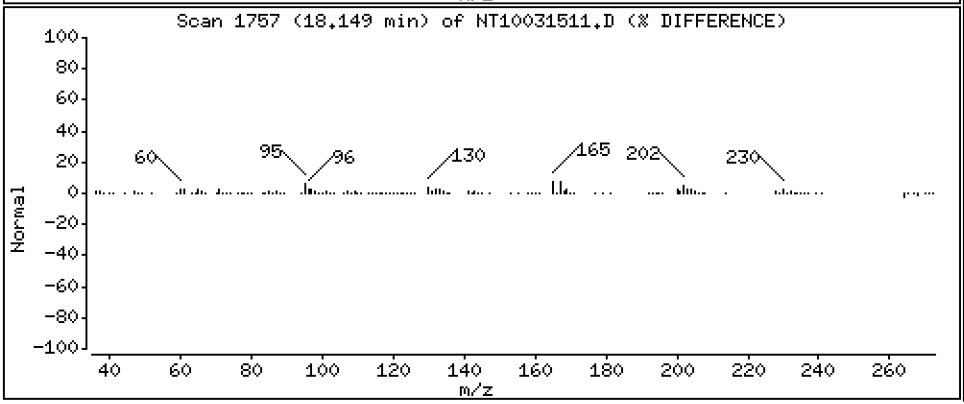
58 Pentachlorophenol

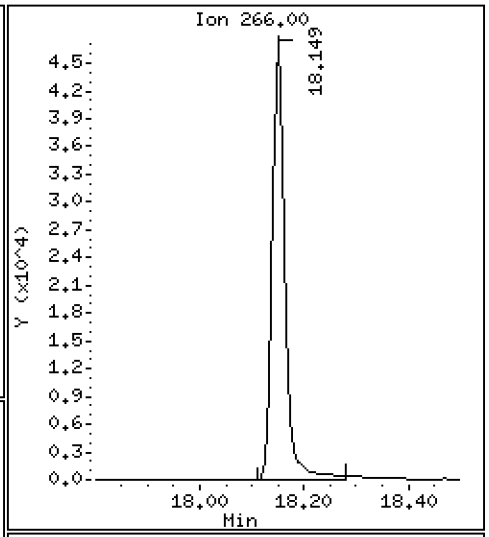
Concentration: 4.057 ug/mL

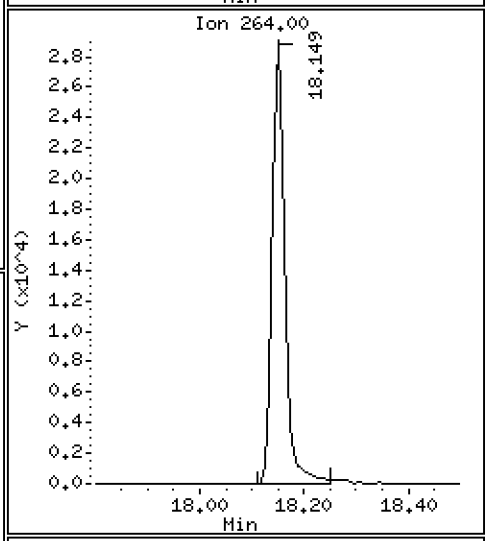


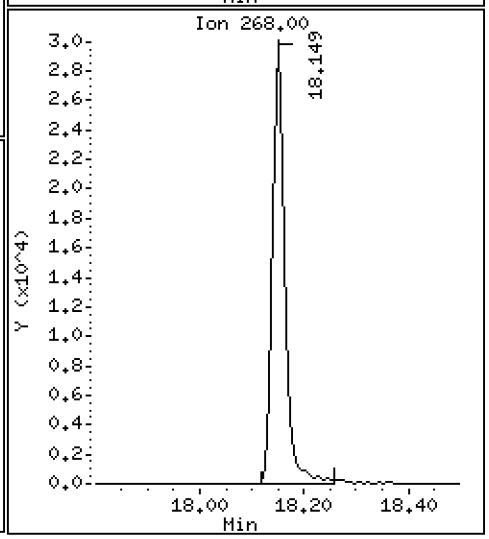












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

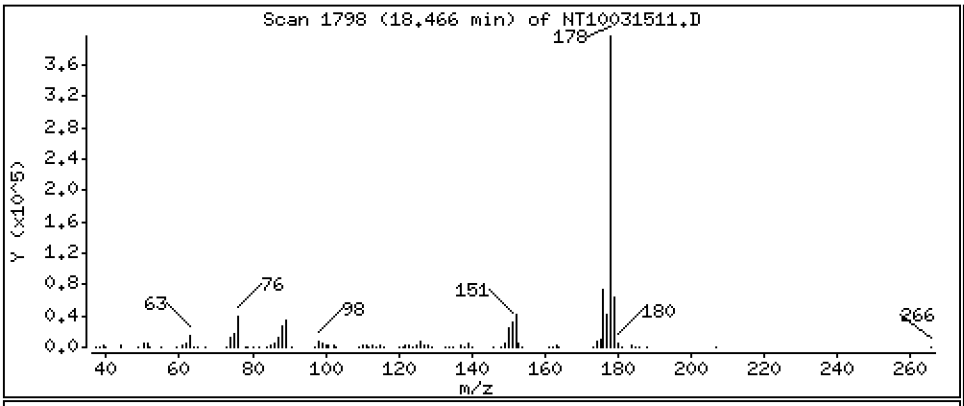
Operator: VTS

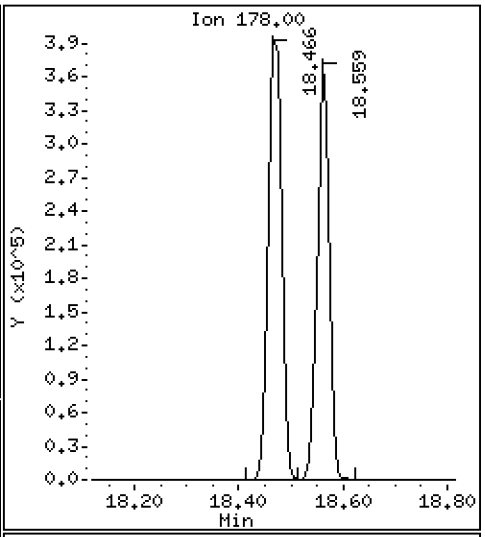
Column phase: ZB-5msi

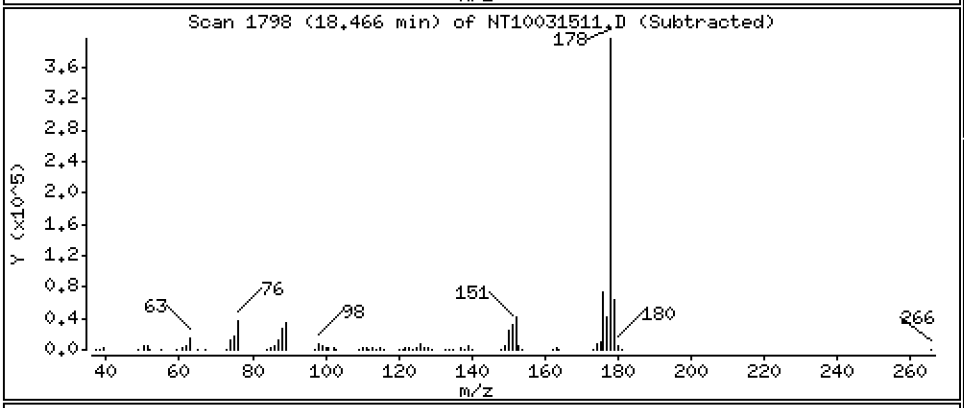
Column diameter: 0.25

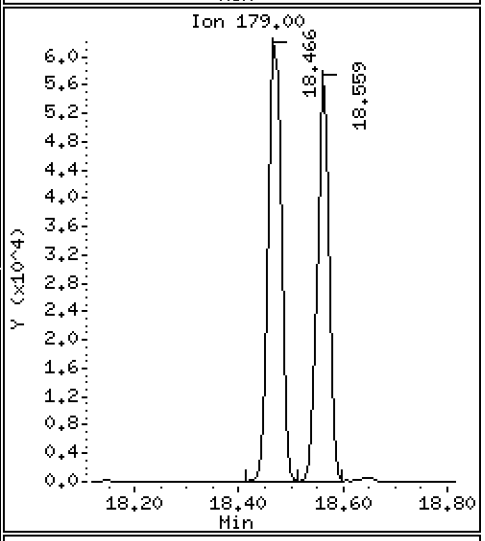
60 Phenanthrene

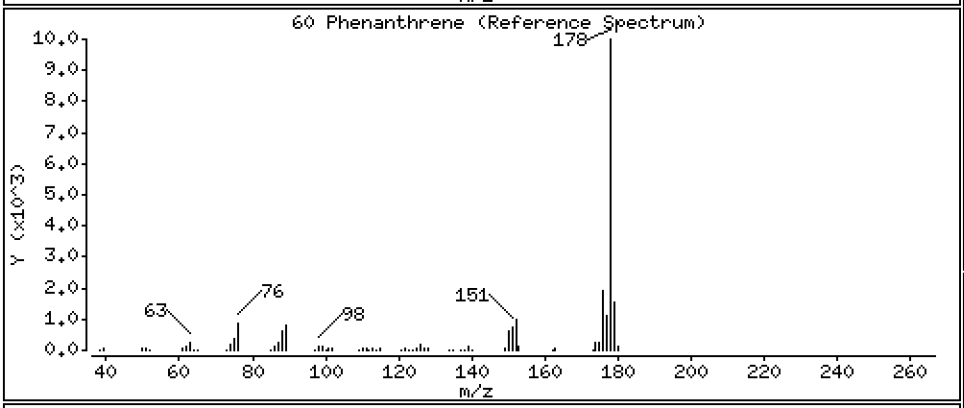
Concentration: 4.602 ug/mL

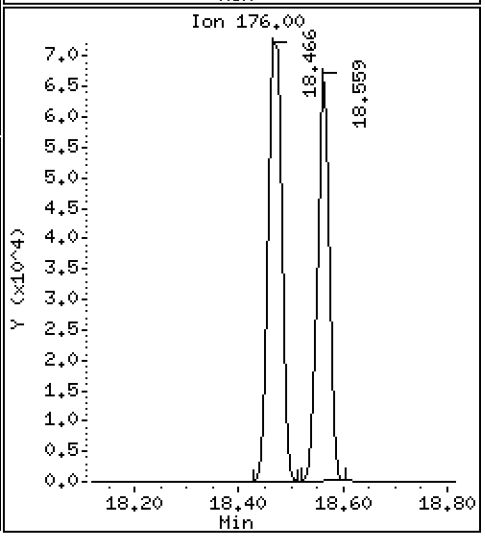


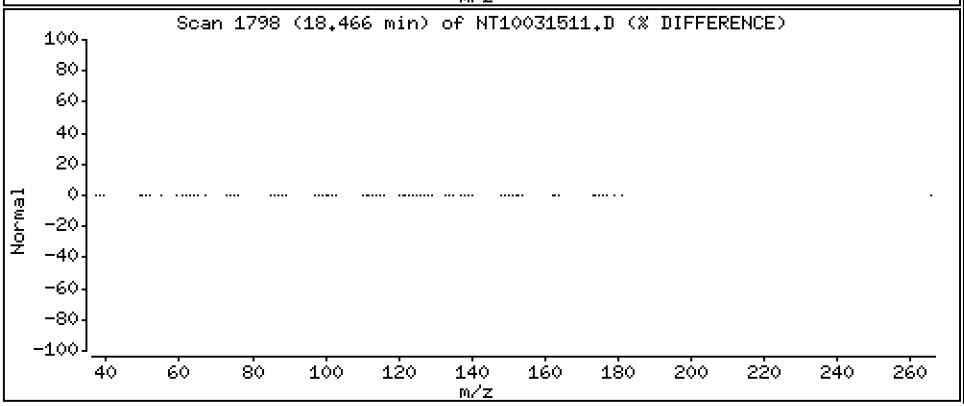












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

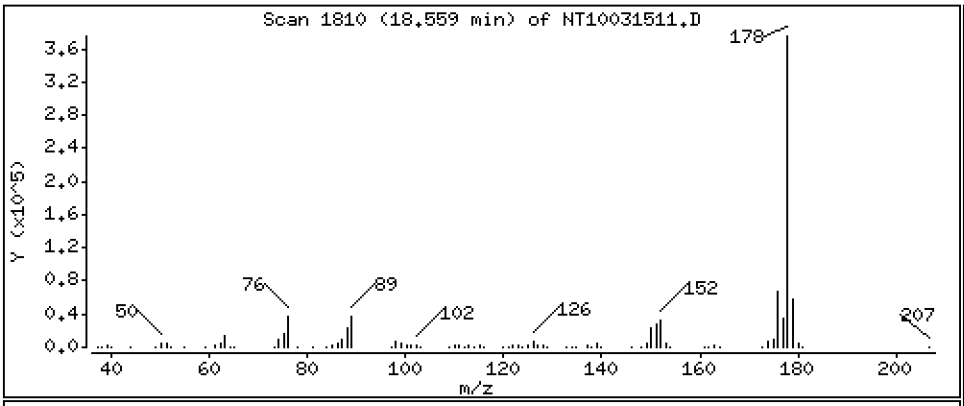
Operator: VTS

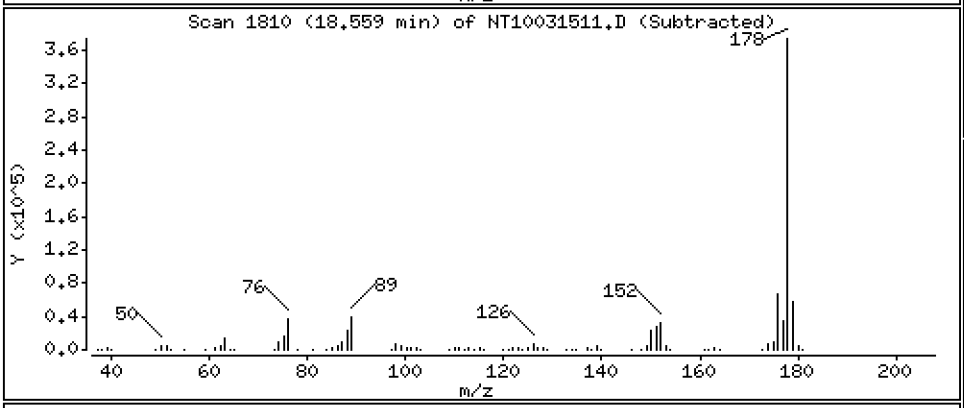
Column phase: ZB-5msi

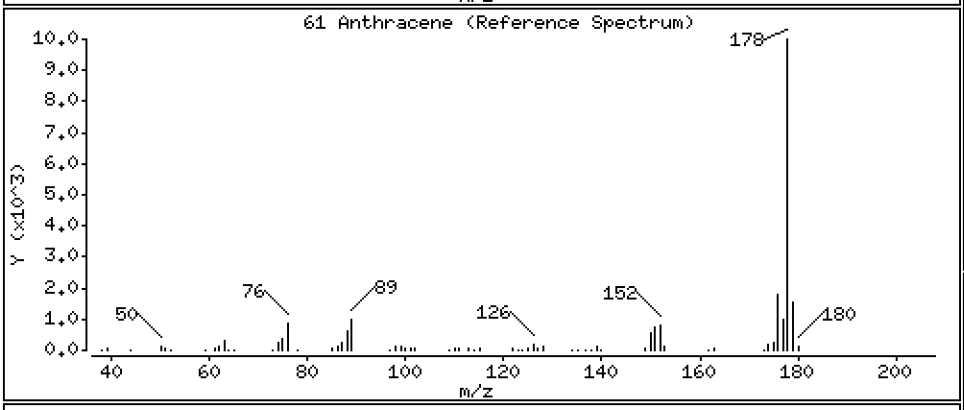
Column diameter: 0.25

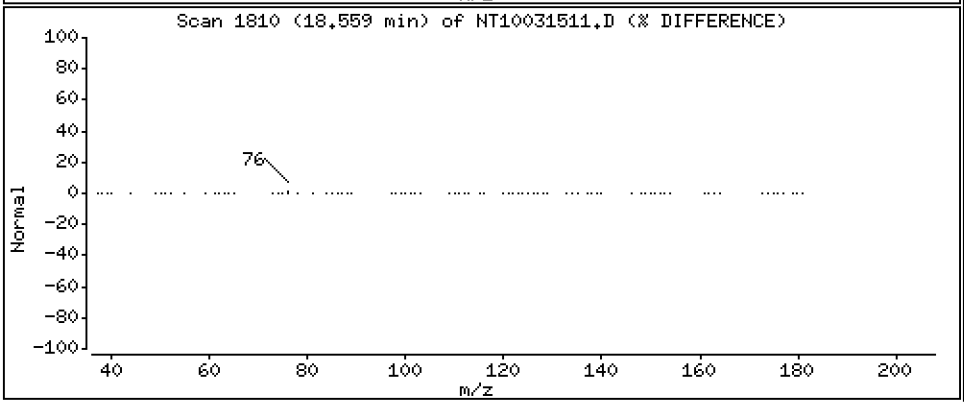
61 Anthracene

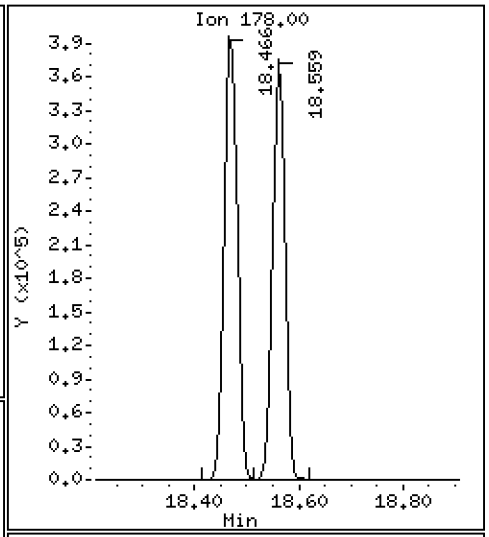
Concentration: 4.167 ug/mL

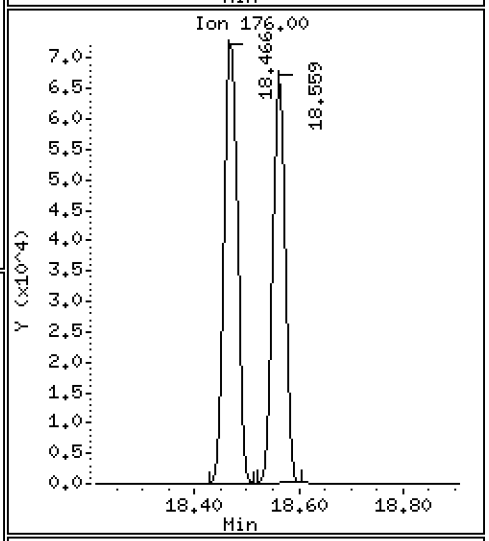


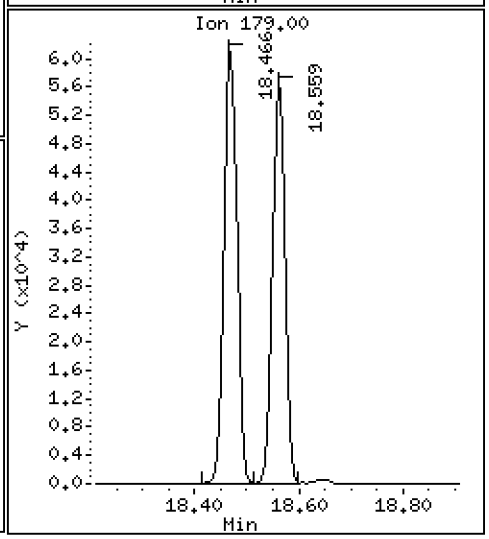












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

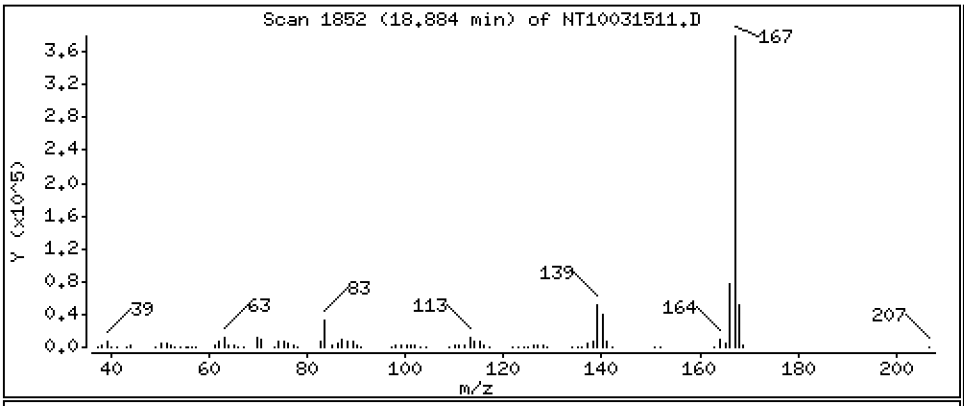
Operator: VTS

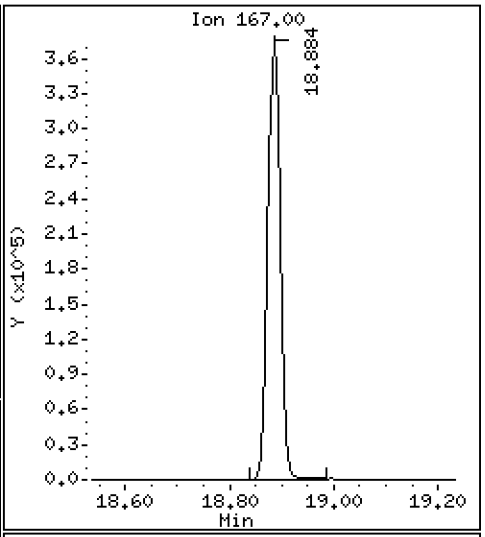
Column phase: ZB-5msi

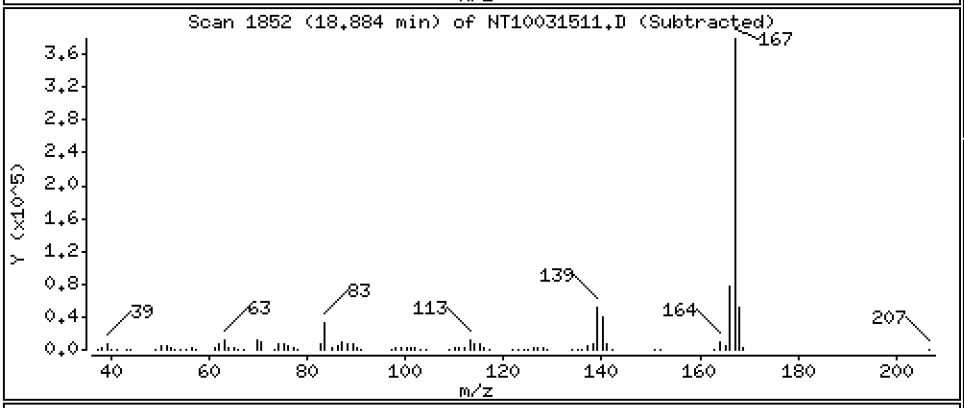
Column diameter: 0.25

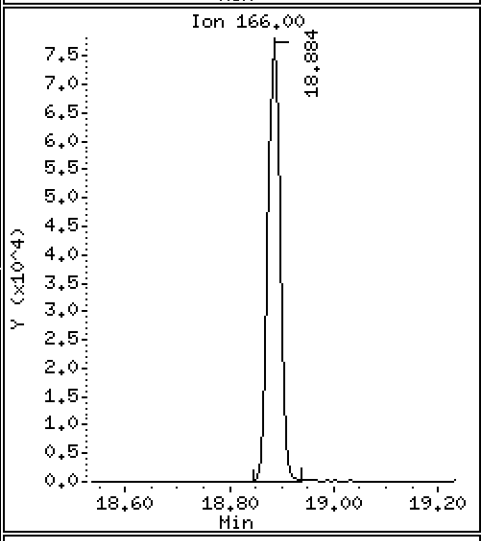
62 Carbazole

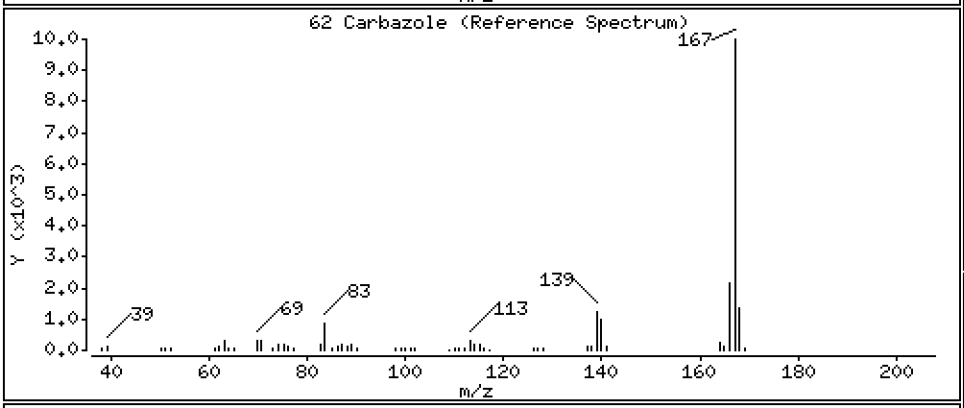
Concentration: 4.730 ug/mL

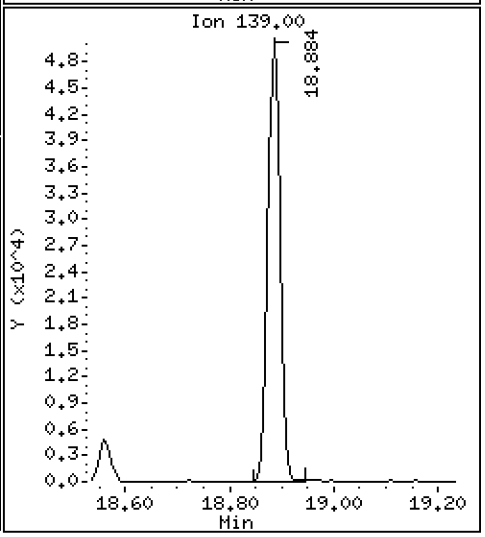


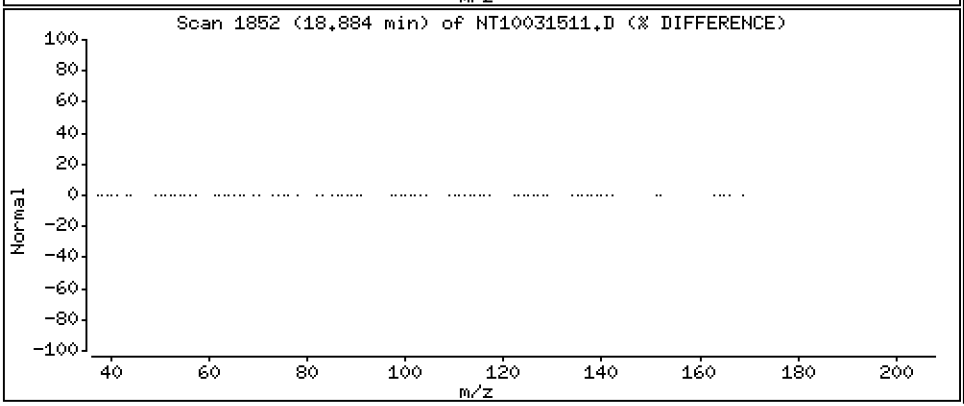












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

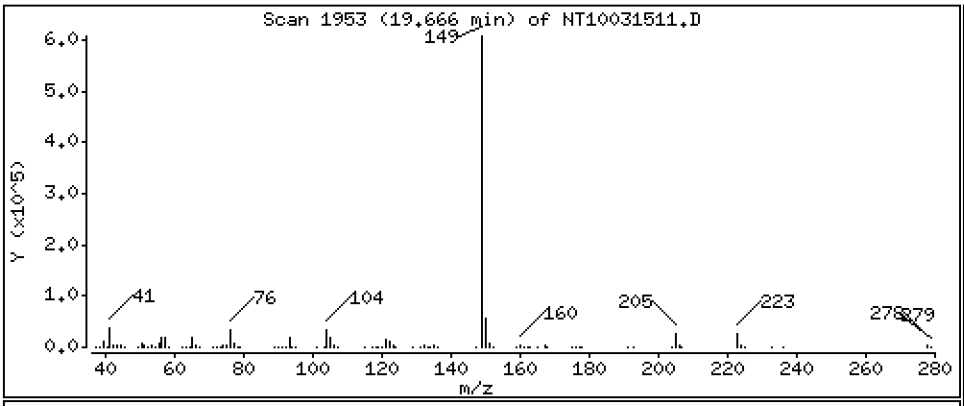
Operator: VTS

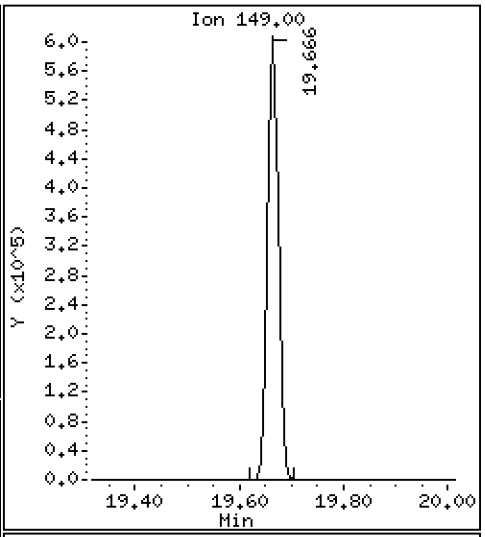
Column phase: ZB-5msi

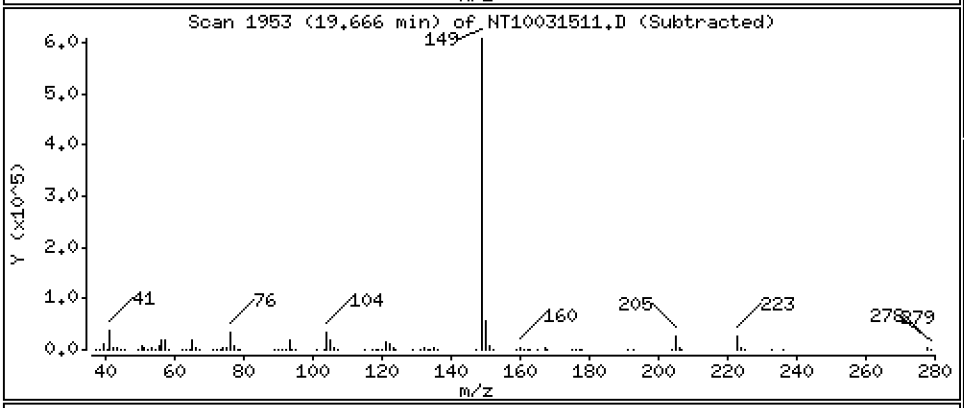
Column diameter: 0.25

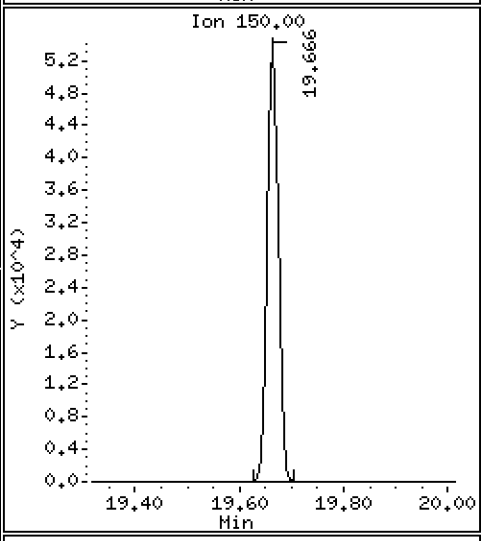
63 Di-n-butylphthalate

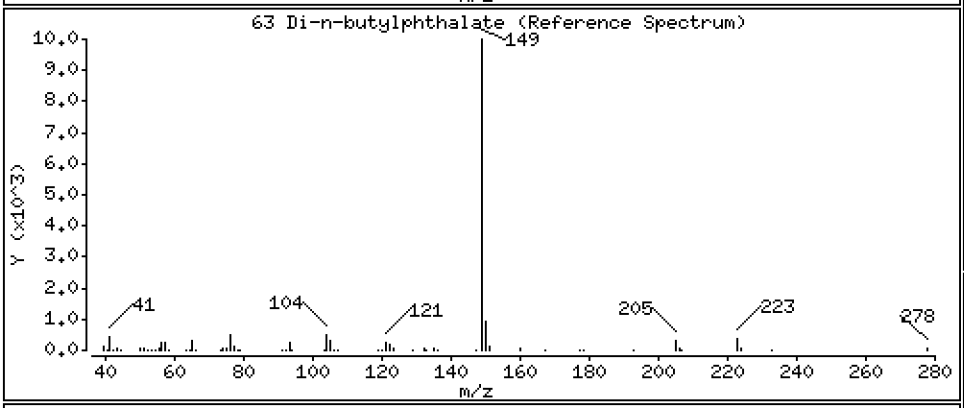
Concentration: 4.967 ug/mL

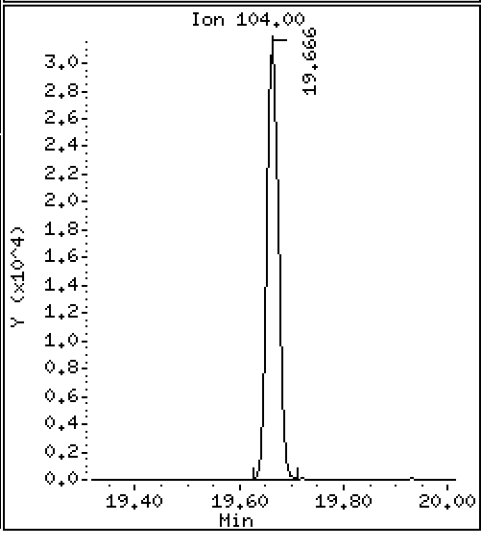


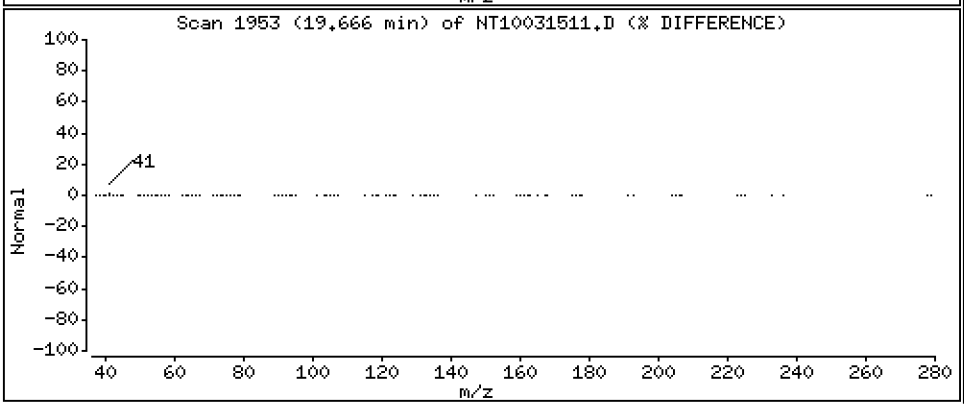












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

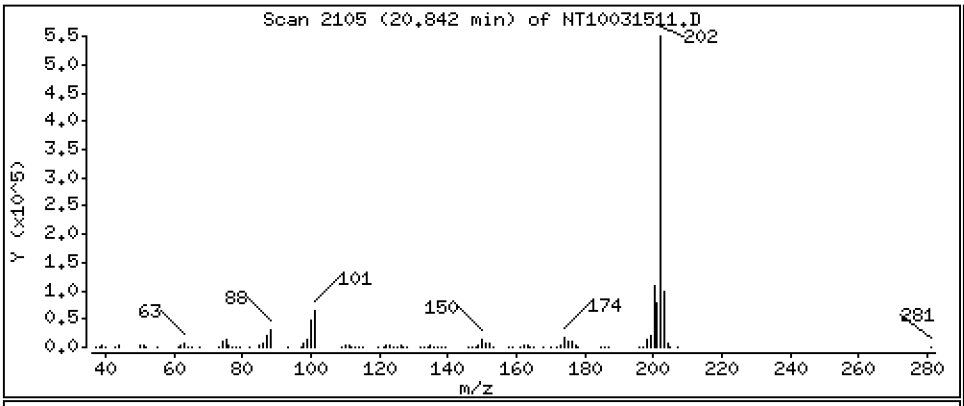
Operator: VTS

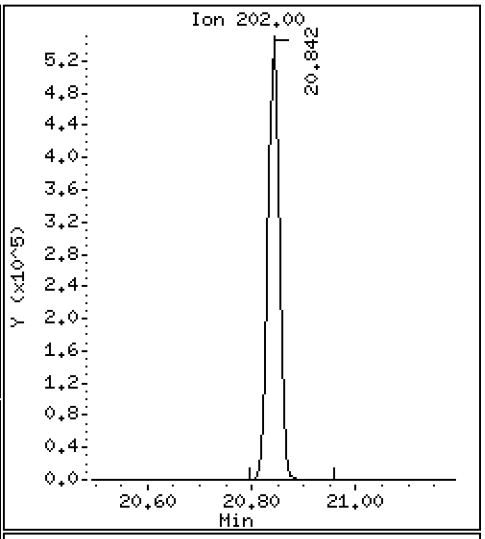
Column phase: ZB-5msi

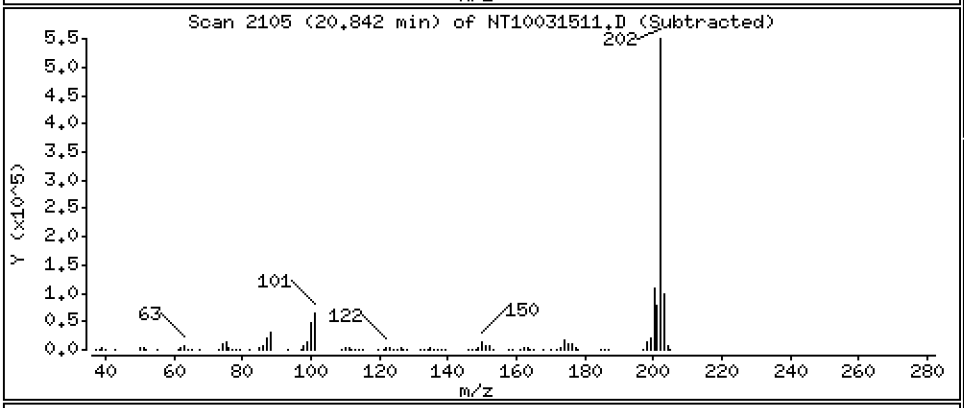
Column diameter: 0.25

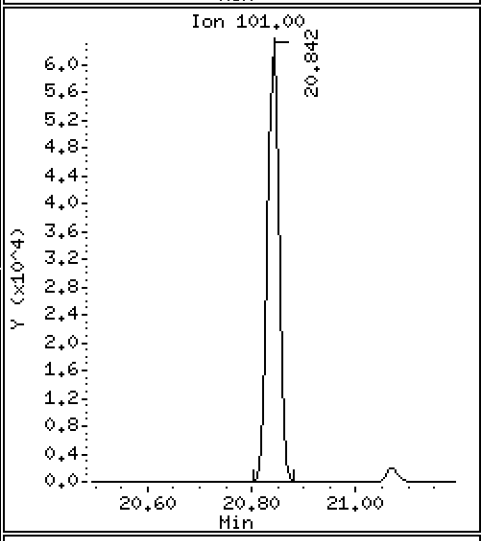
64 Fluoranthene

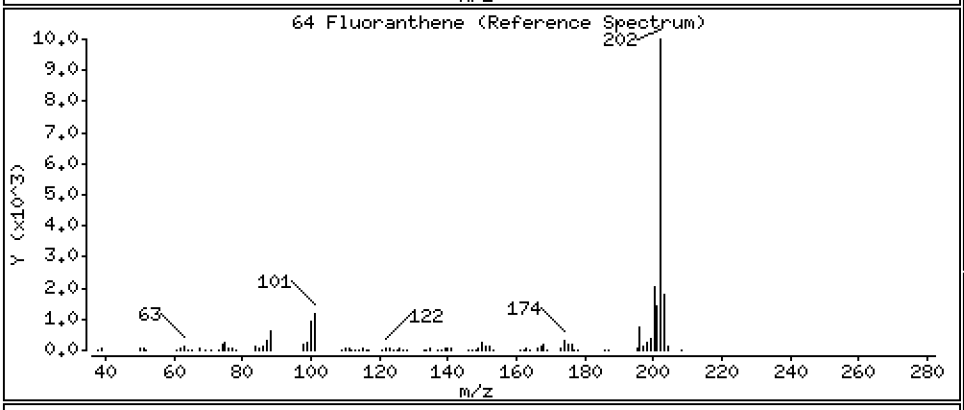
Concentration: 4.472 ug/mL

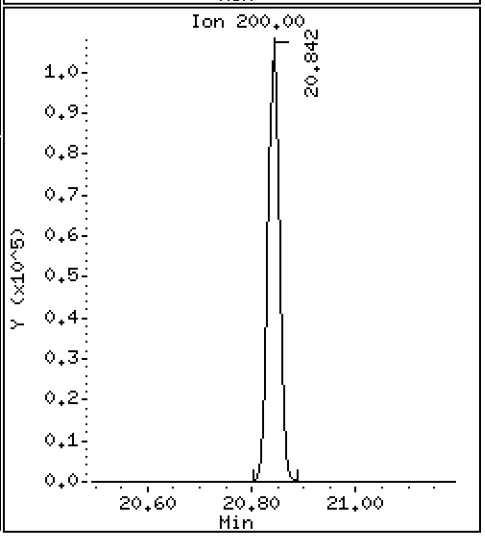


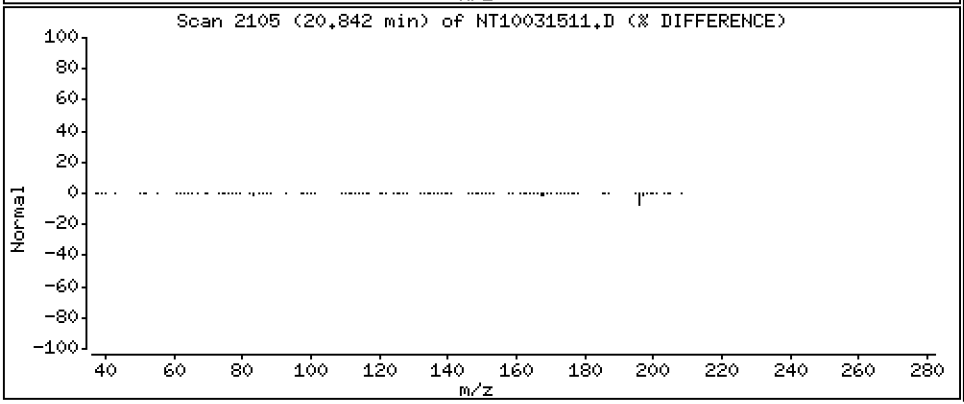












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

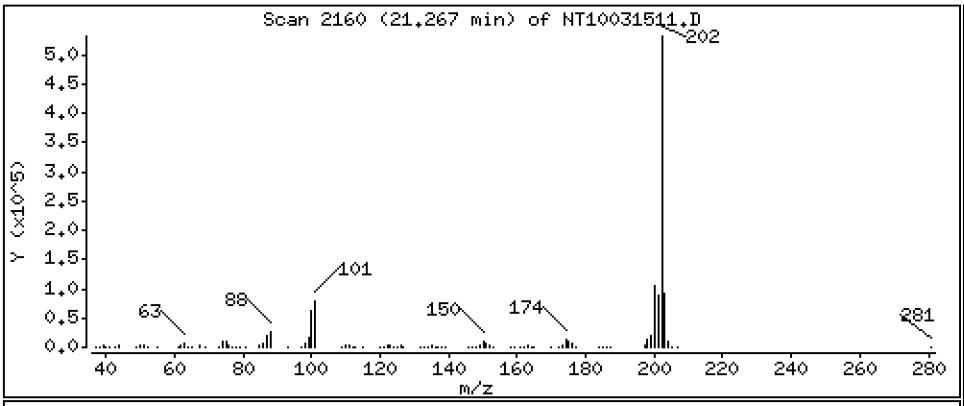
Operator: VTS

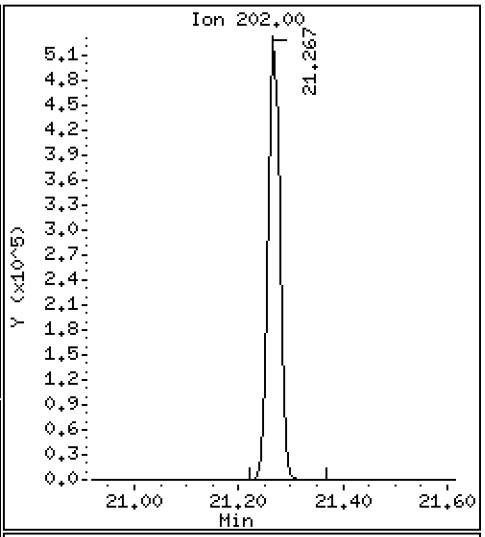
Column phase: ZB-5msi

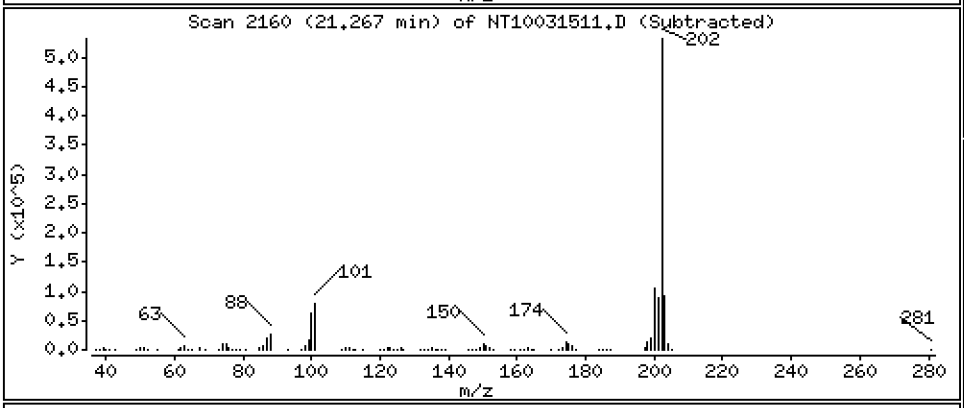
Column diameter: 0.25

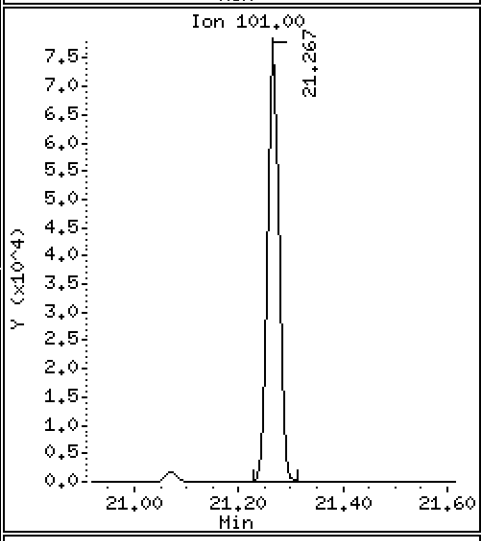
65 Pyrene

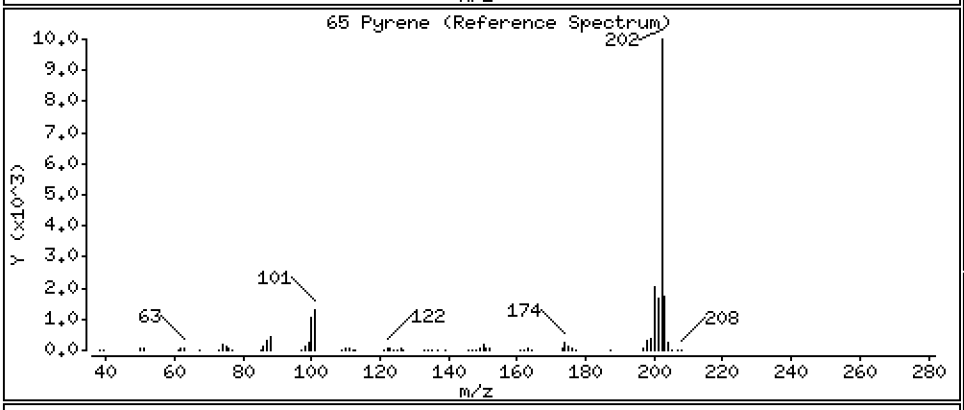
Concentration: 4.339 ug/mL

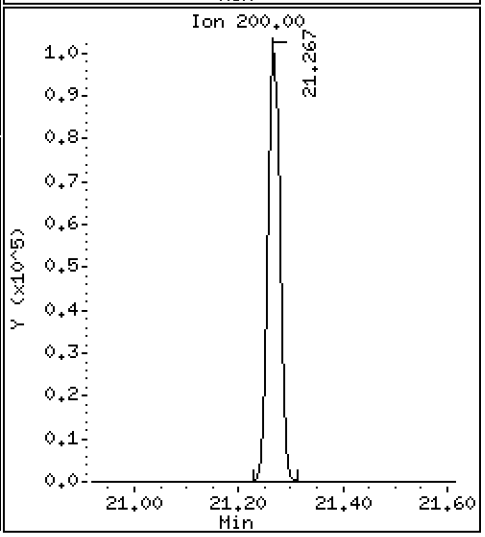


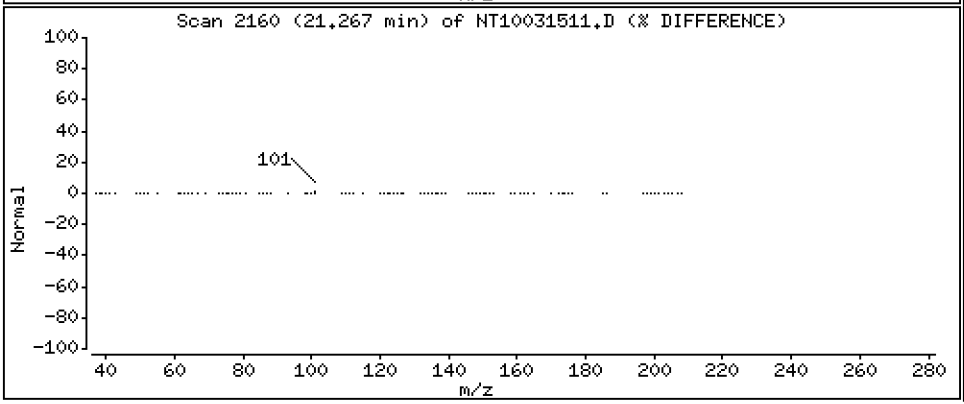












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

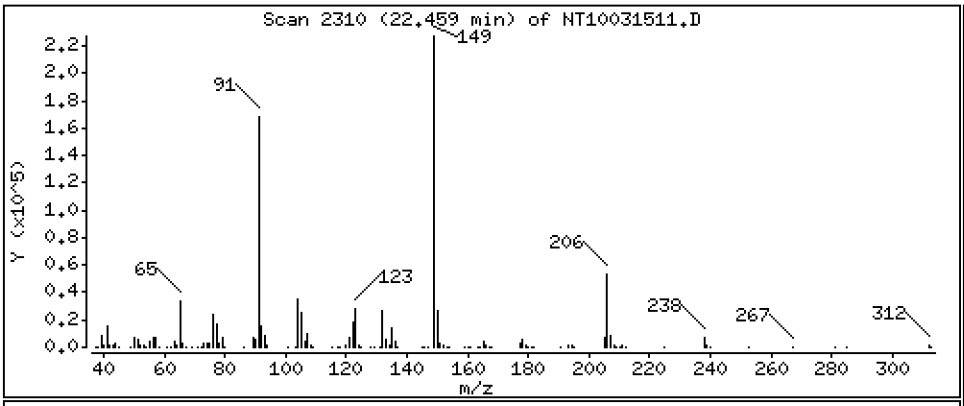
Operator: VTS

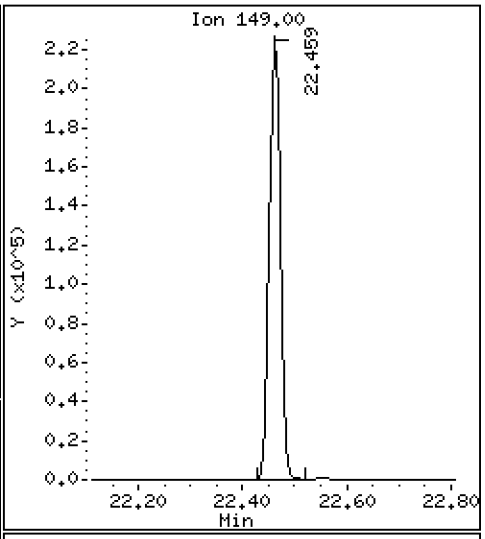
Column phase: ZB-5msi

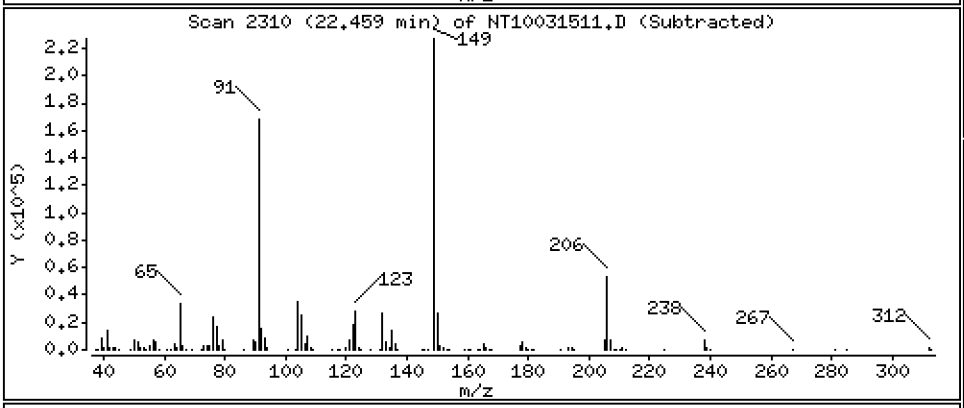
Column diameter: 0.25

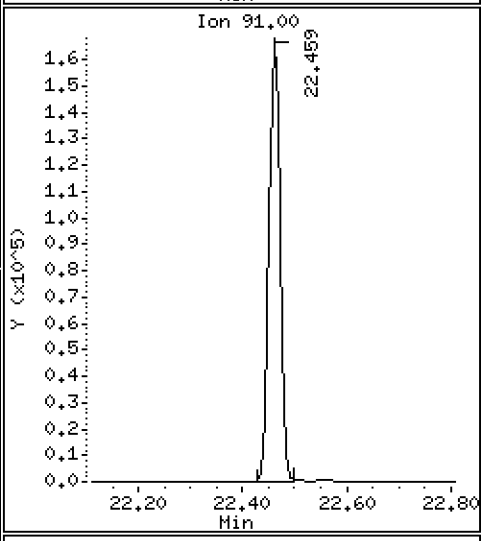
67 Butylbenzylphthalate

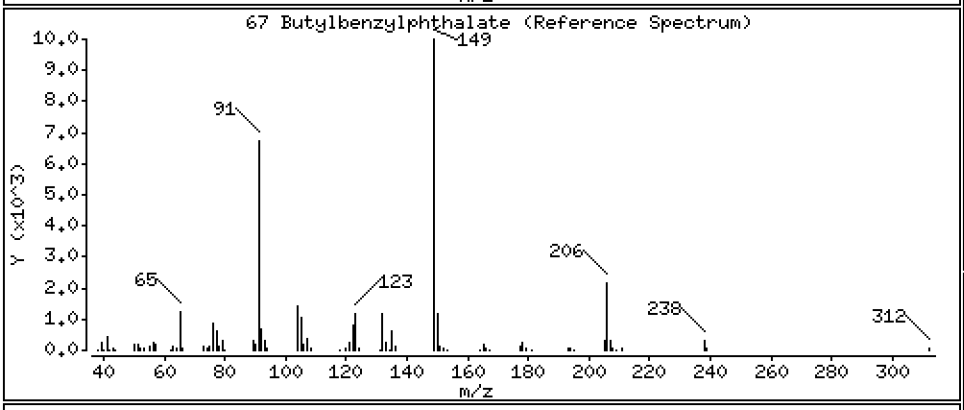
Concentration: 4.834 ug/mL

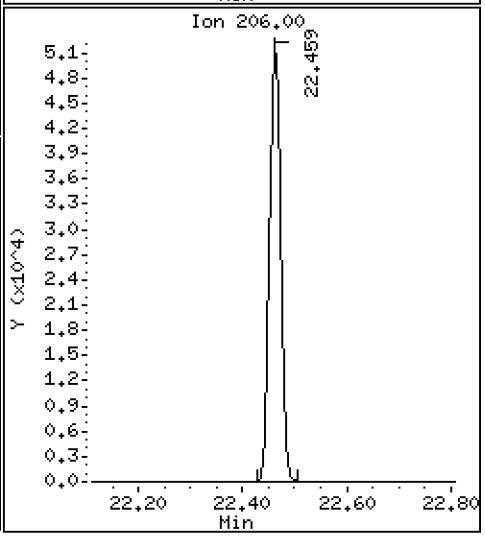


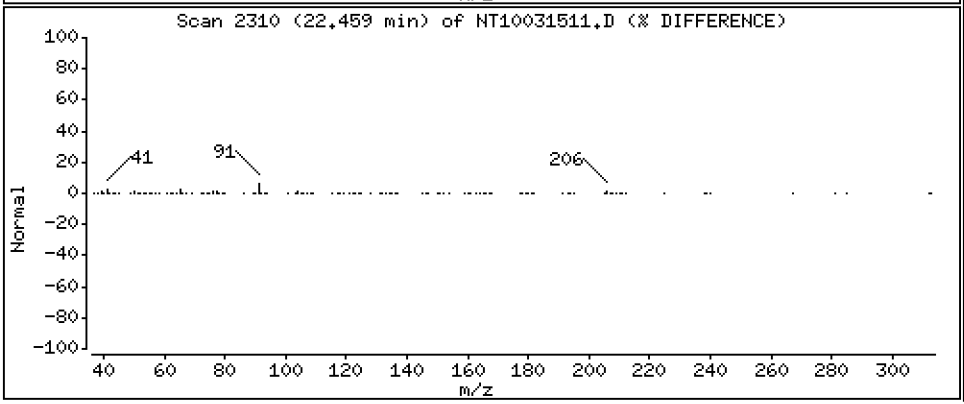












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

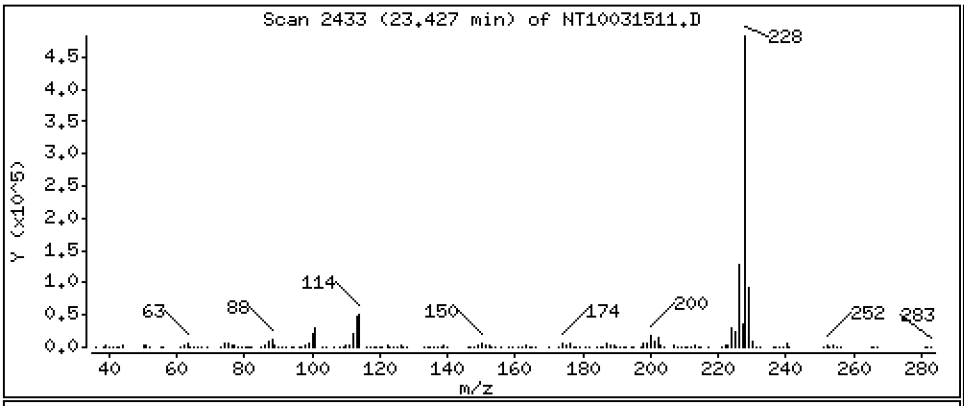
Operator: VTS

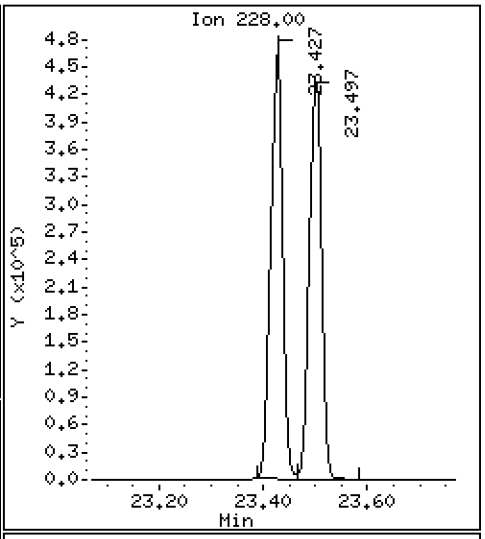
Column phase: ZB-5msi

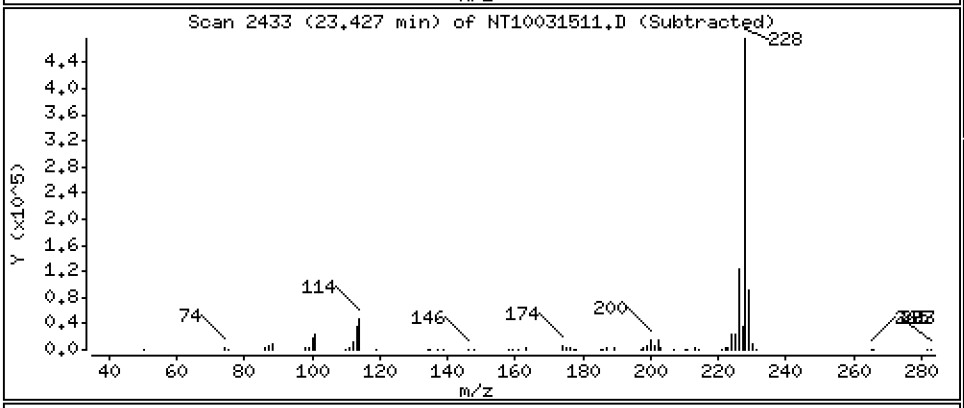
Column diameter: 0.25

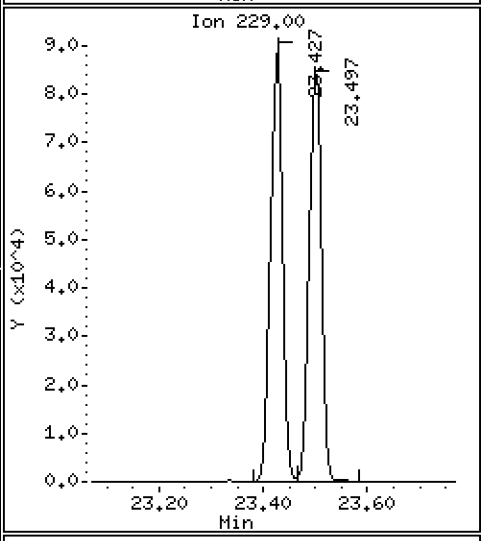
68 Benzo(a)anthracene

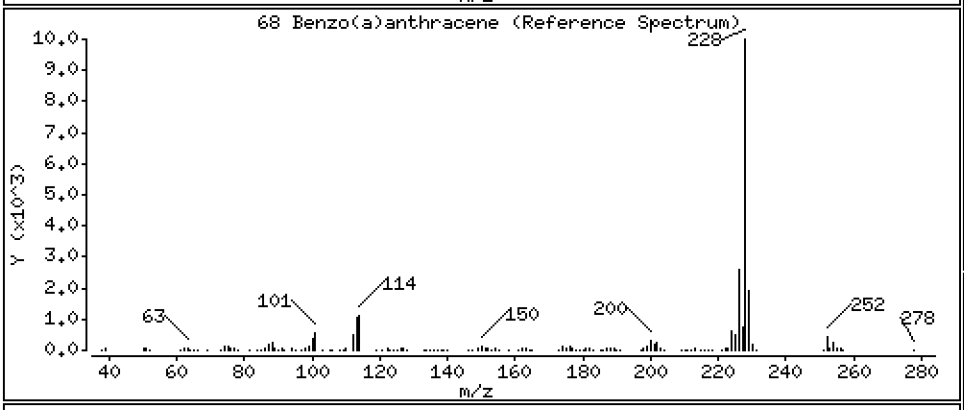
Concentration: 4.647 ug/mL

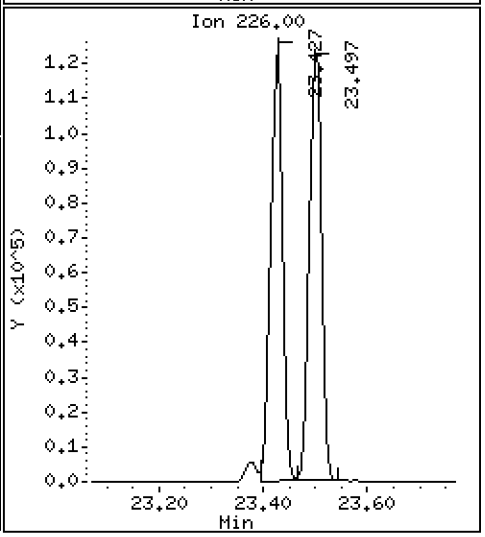


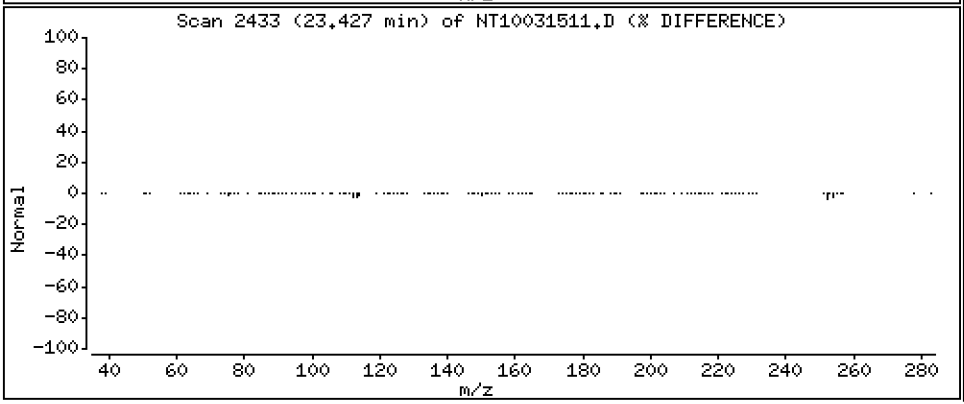












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

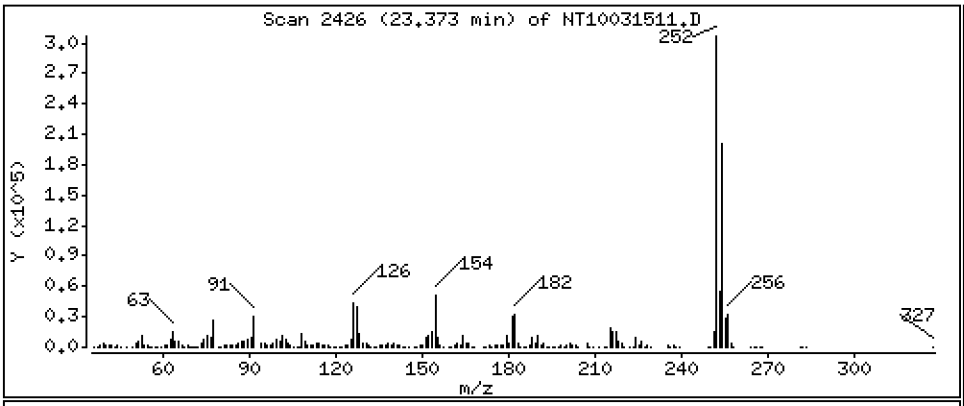
Operator: VTS

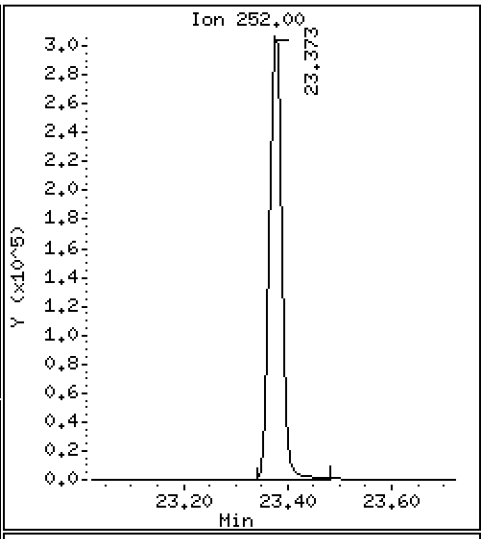
Column phase: ZB-5msi

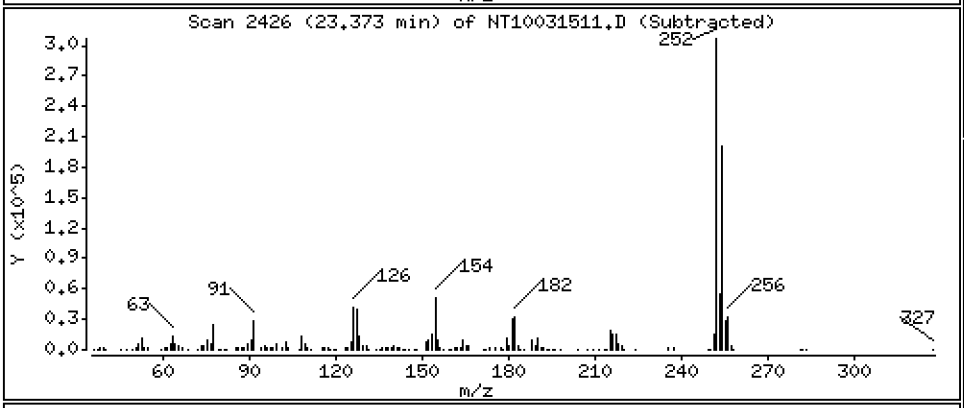
Column diameter: 0.25

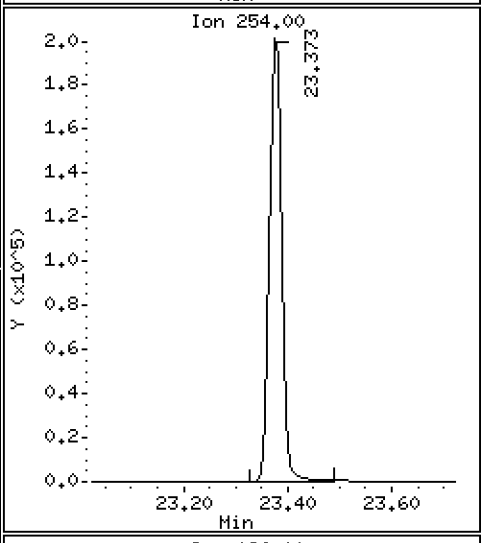
70 3,3'-Dichlorobenzidine

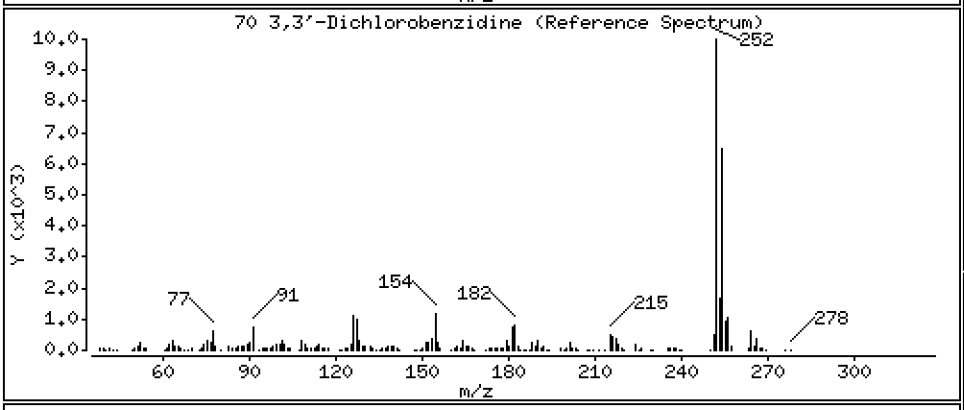
Concentration: 9.817 ug/mL

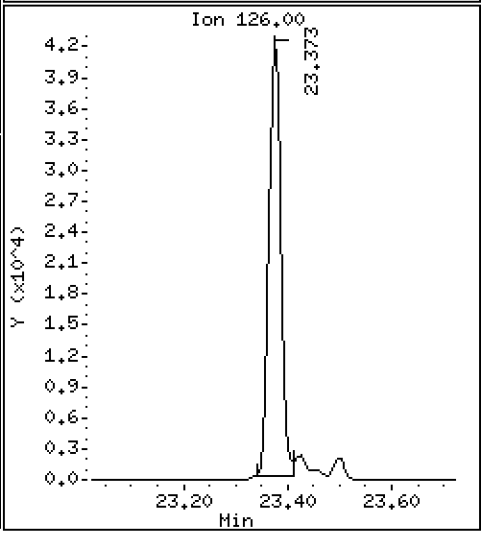


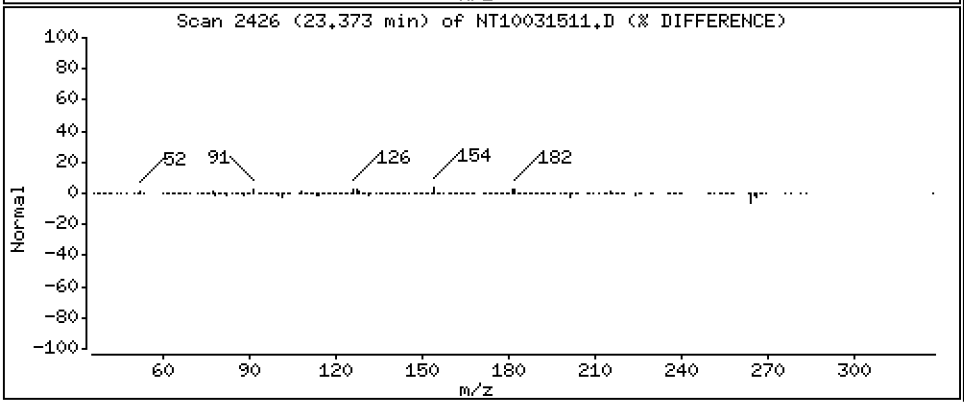












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

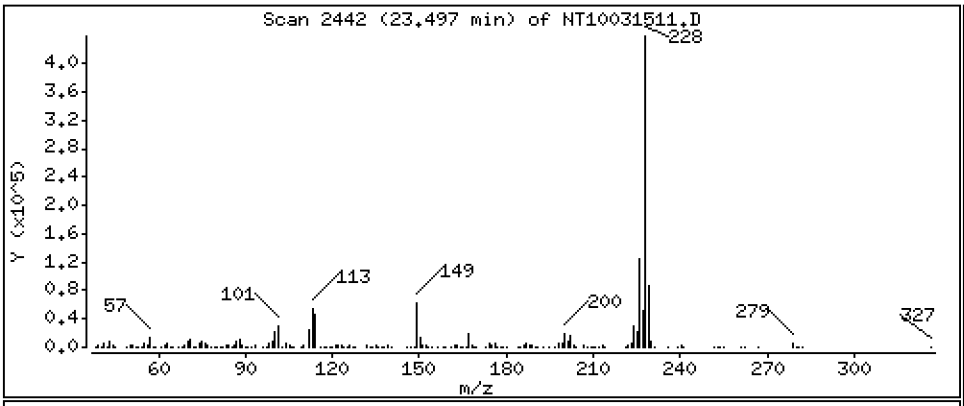
Operator: VTS

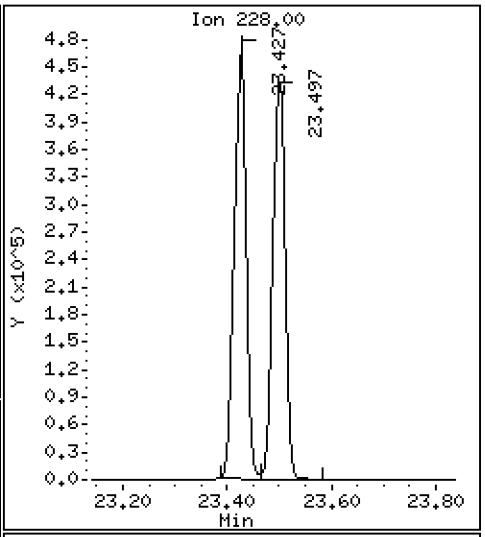
Column phase: ZB-5msi

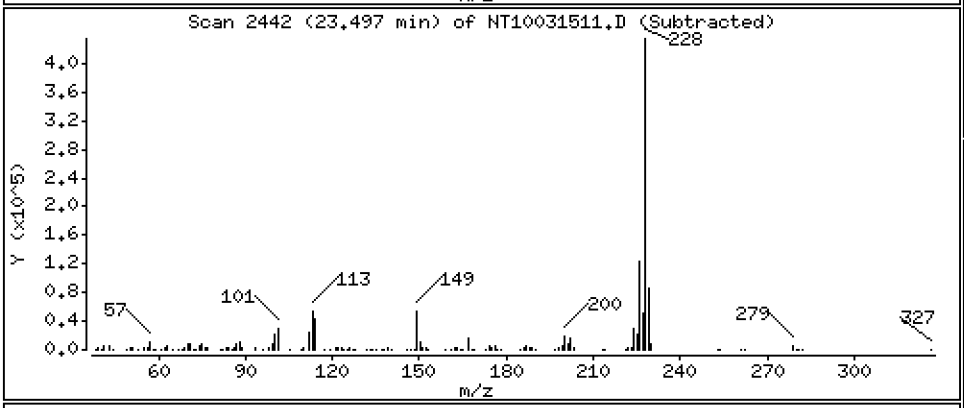
Column diameter: 0.25

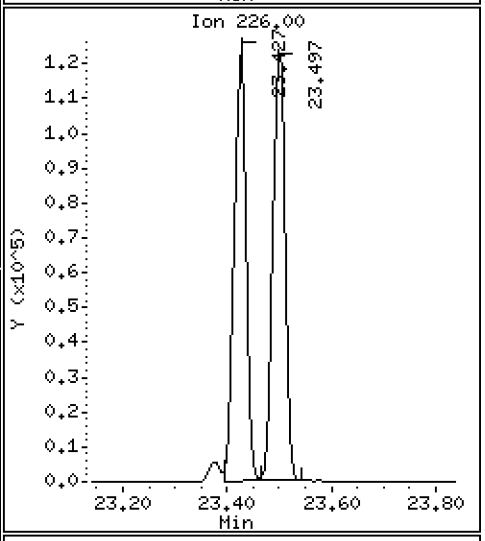
71 Chrysene

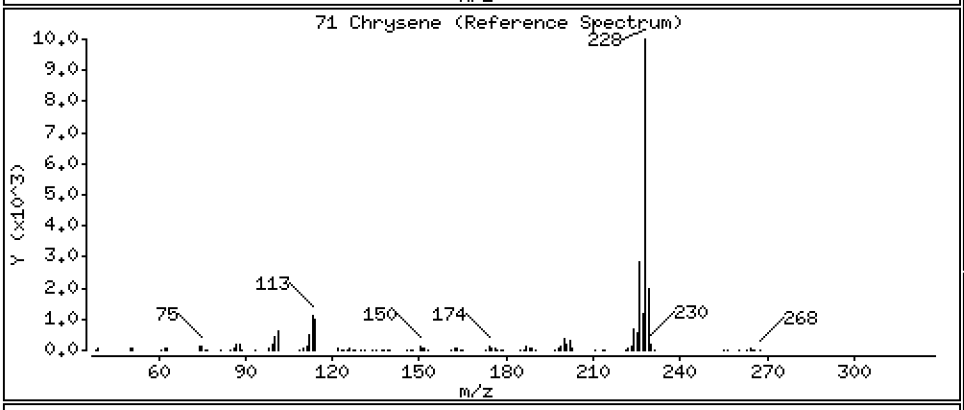
Concentration: 4.510 ug/mL

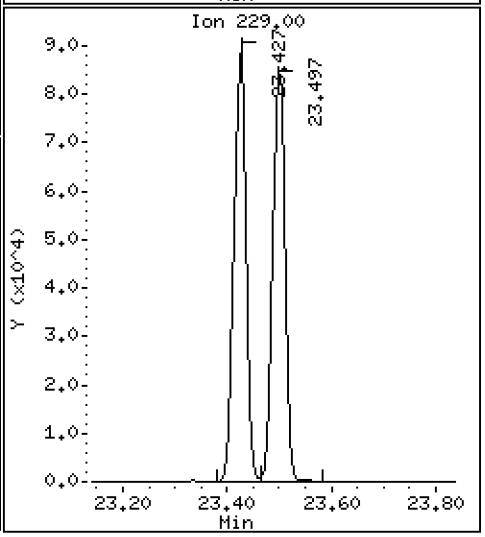


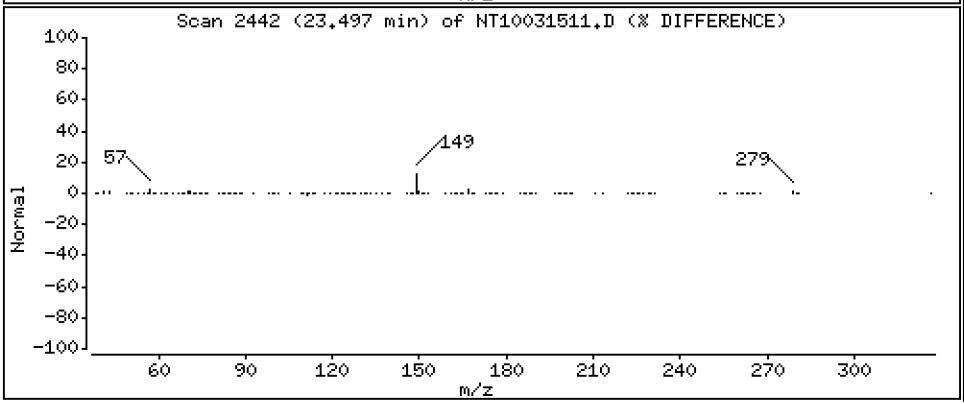












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

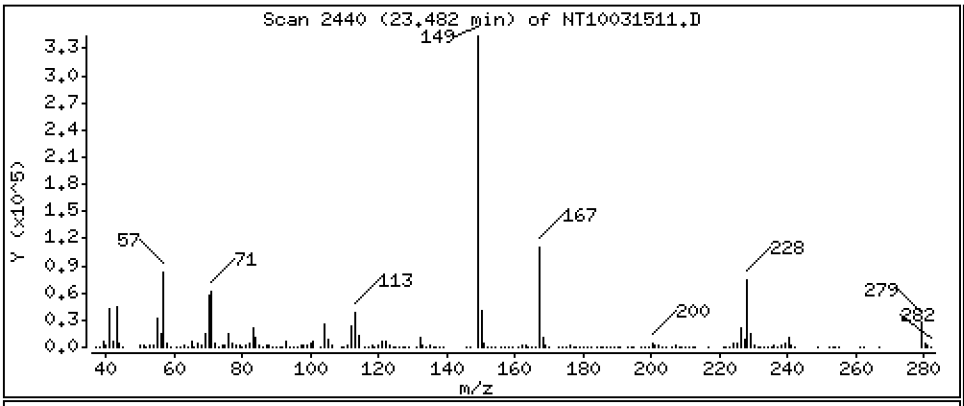
Operator: VTS

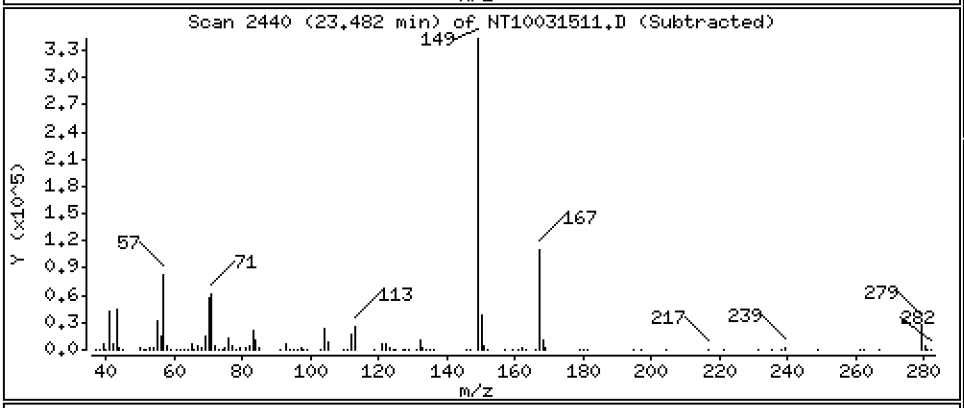
Column phase: ZB-5msi

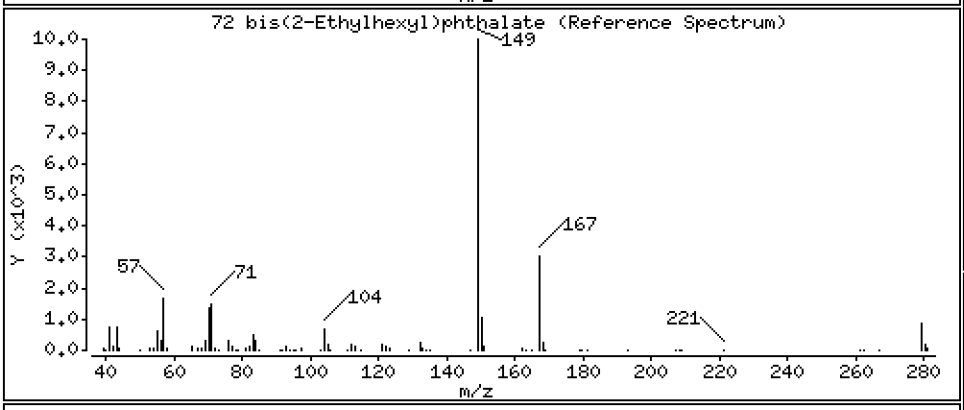
Column diameter: 0.25

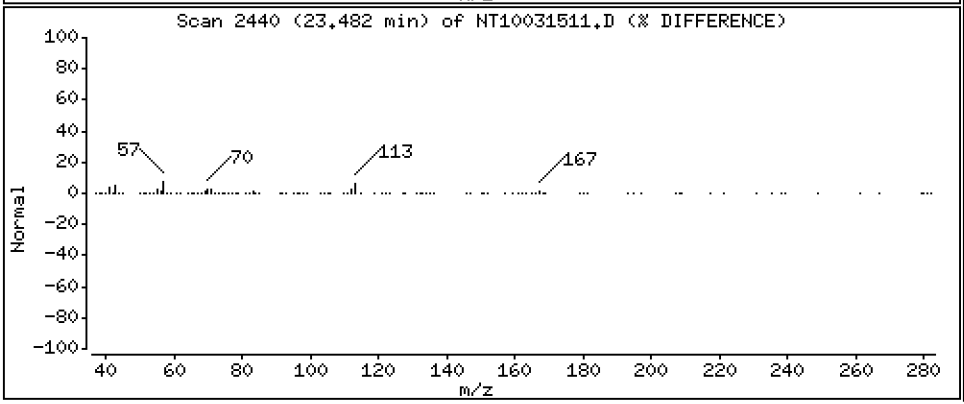
72 bis(2-Ethylhexyl)phthalate

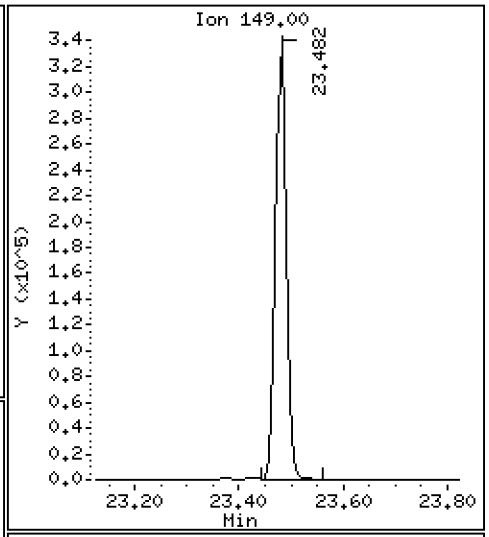
Concentration: 4.680 ug/mL

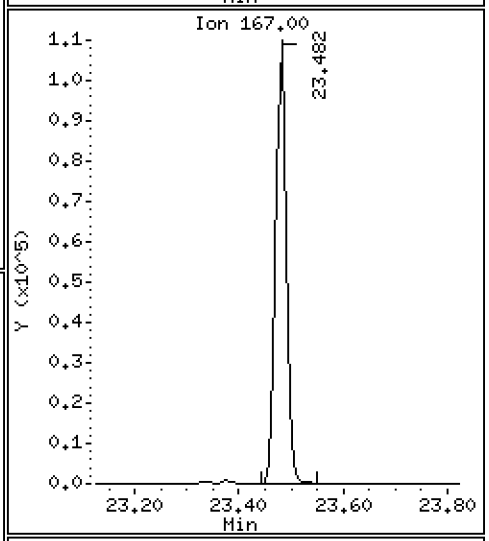


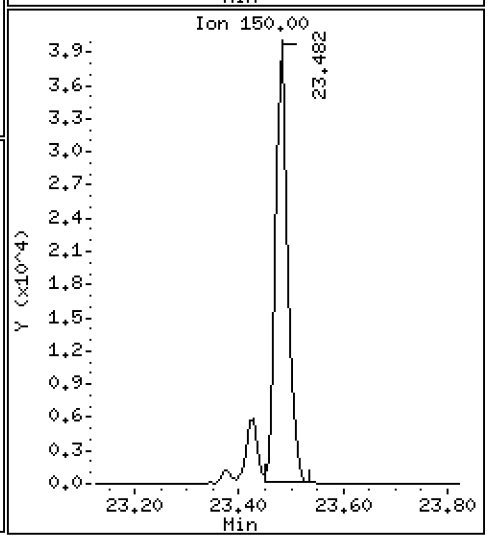












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

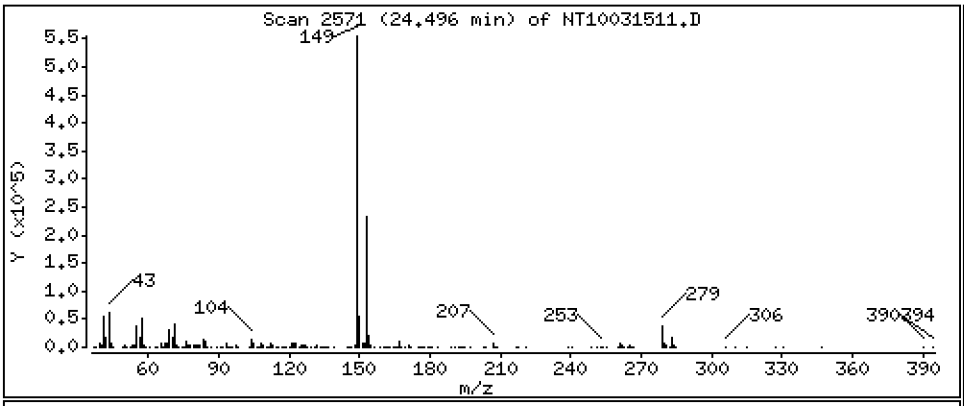
Operator: VTS

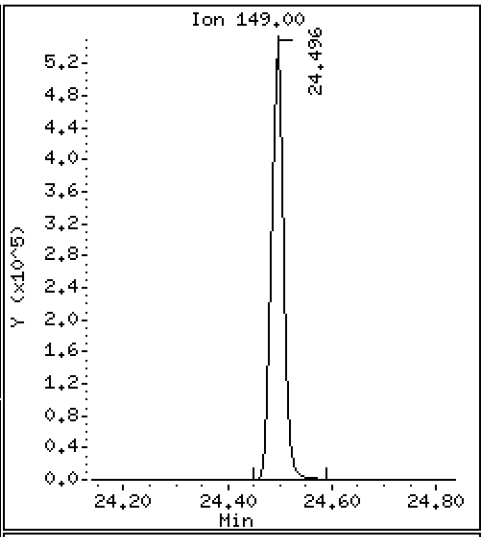
Column phase: ZB-5msi

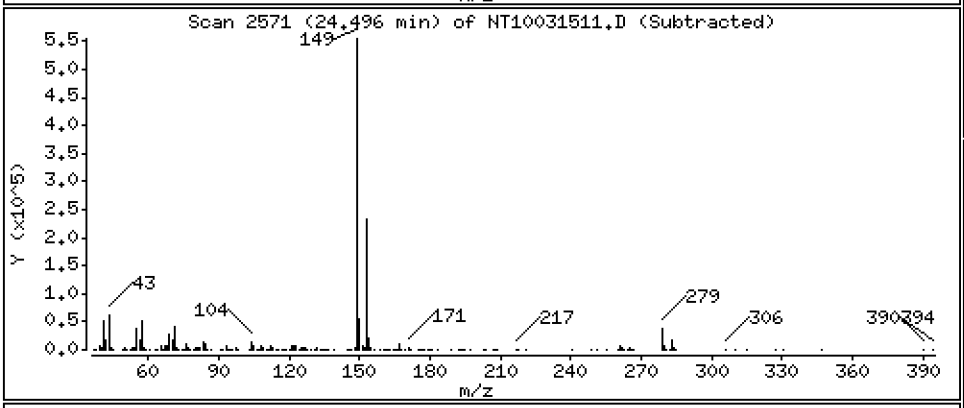
Column diameter: 0.25

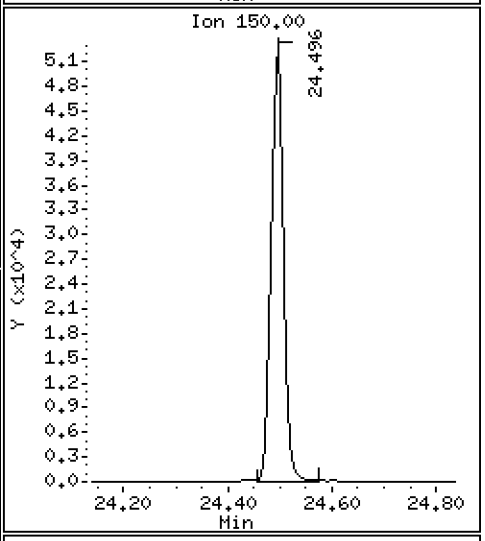
73 Di-n-octylphthalate

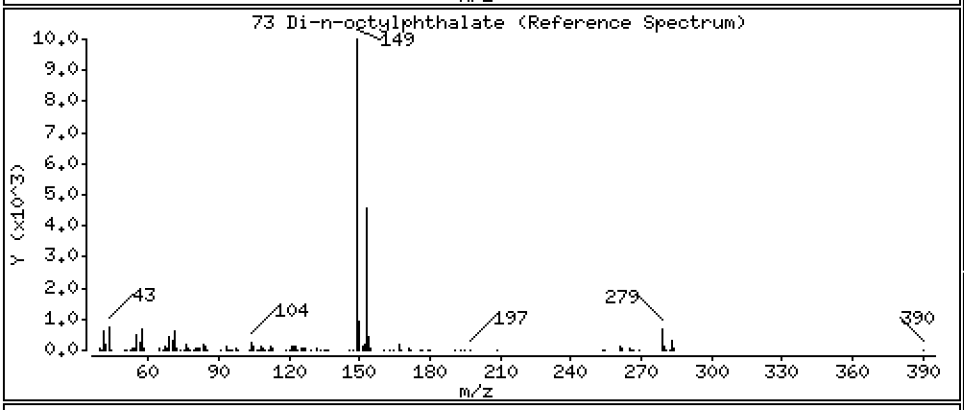
Concentration: 4.947 ug/mL

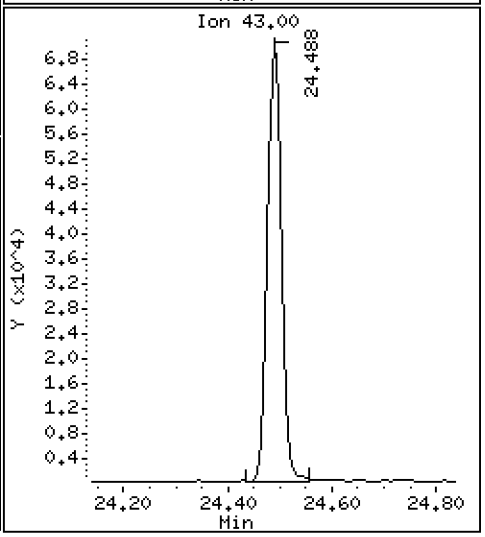


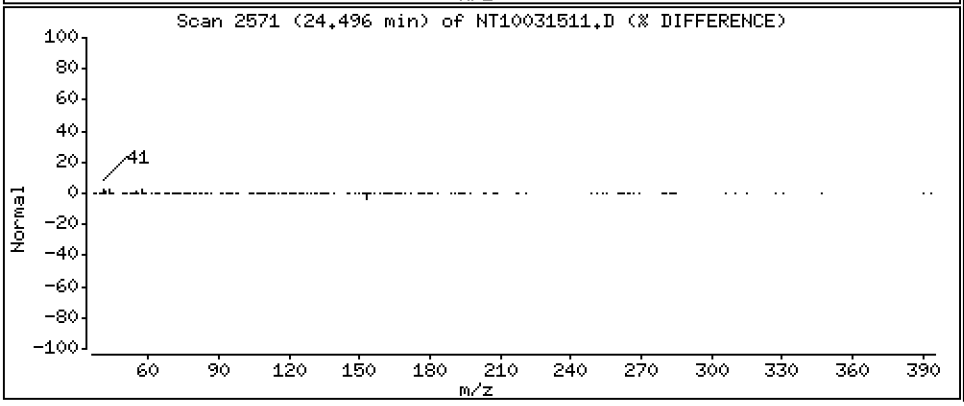












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

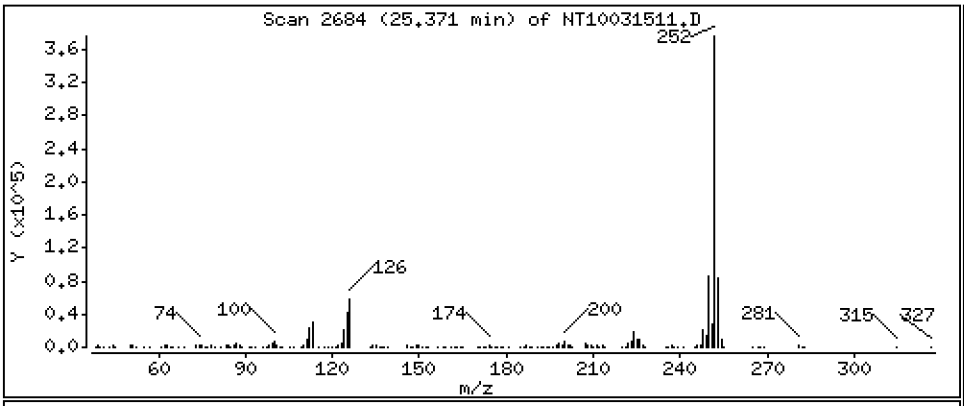
Operator: VTS

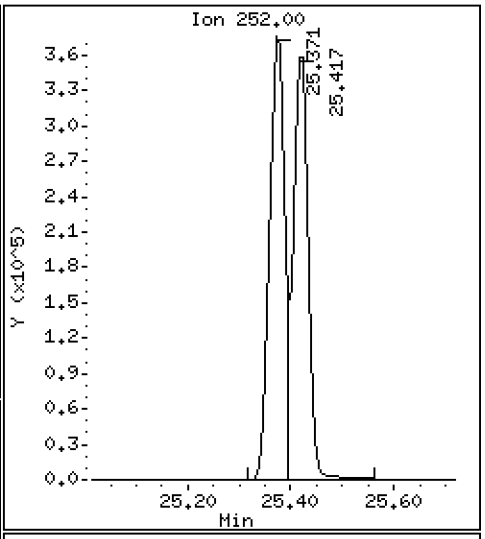
Column phase: ZB-5msi

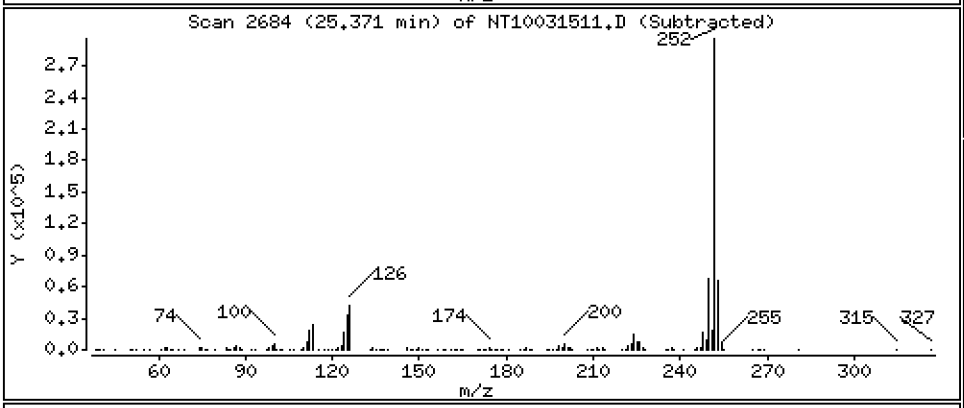
Column diameter: 0.25

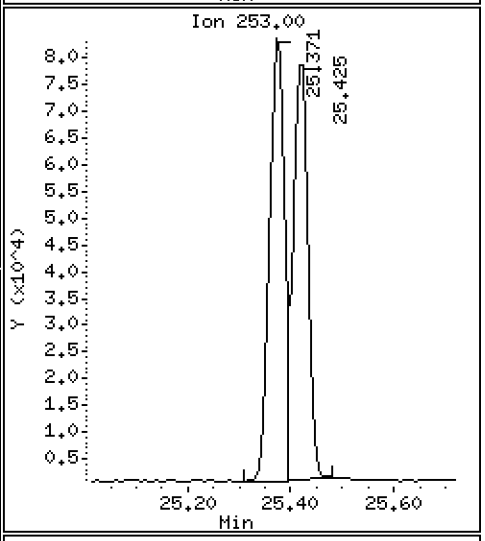
74 Benzo(b)fluoranthene

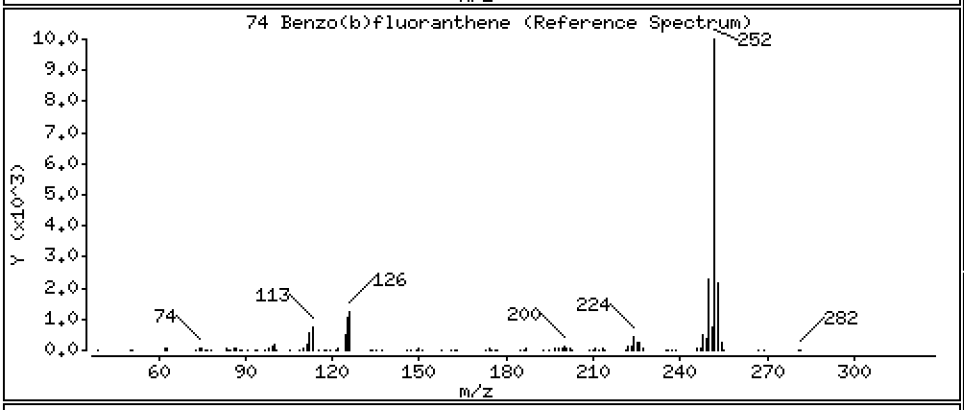
Concentration: 4.602 ug/mL

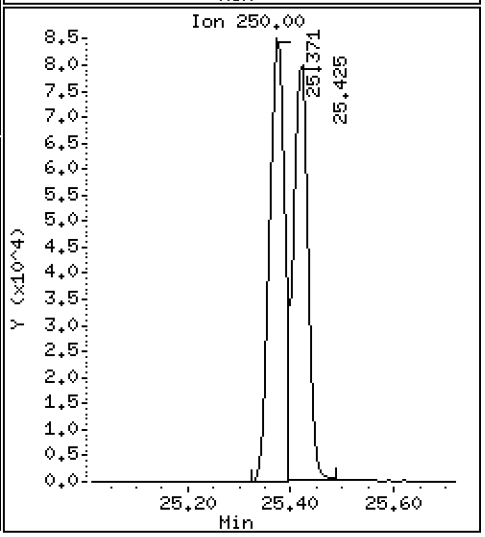


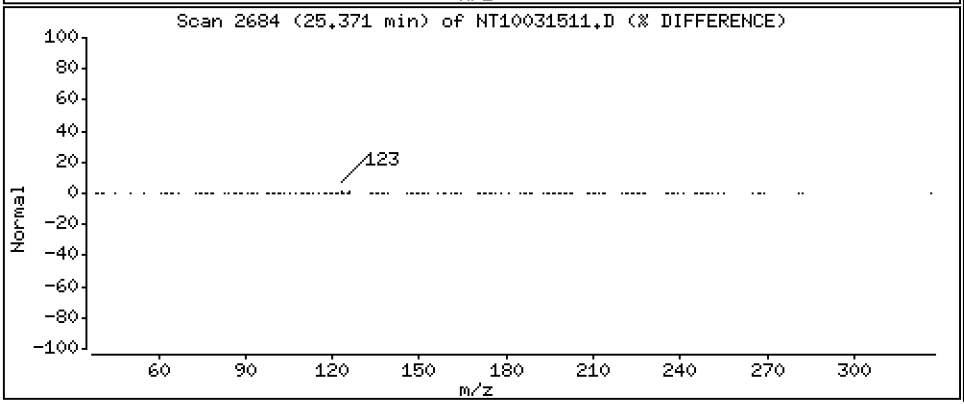












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

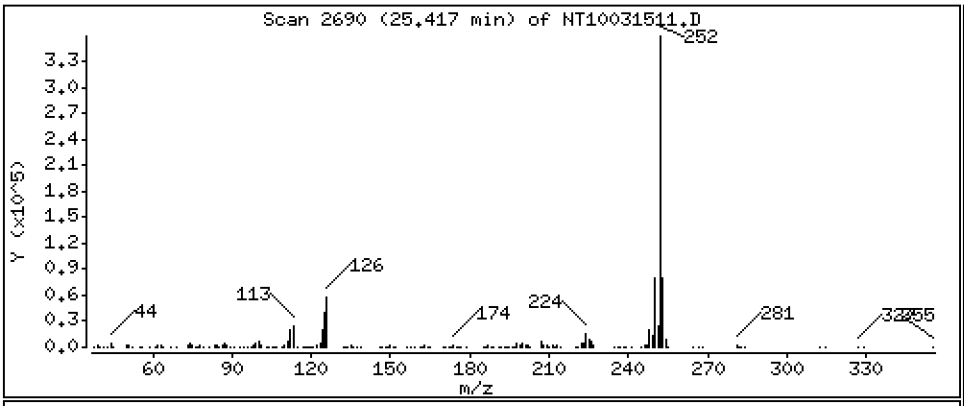
Operator: VTS

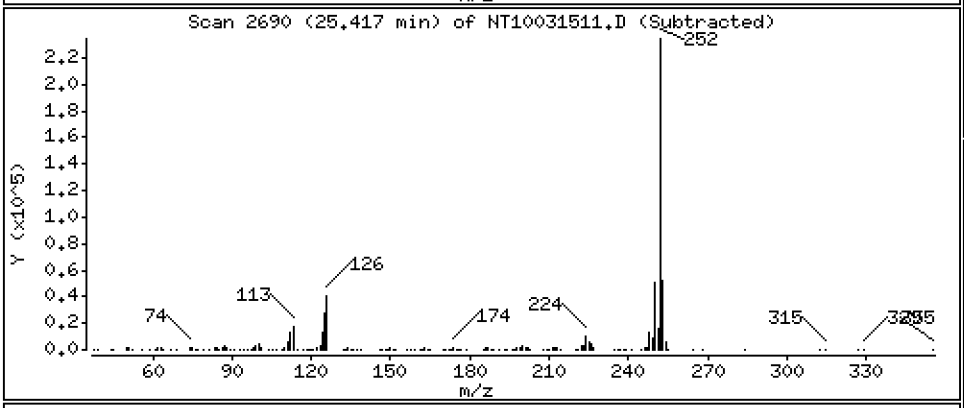
Column phase: ZB-5msi

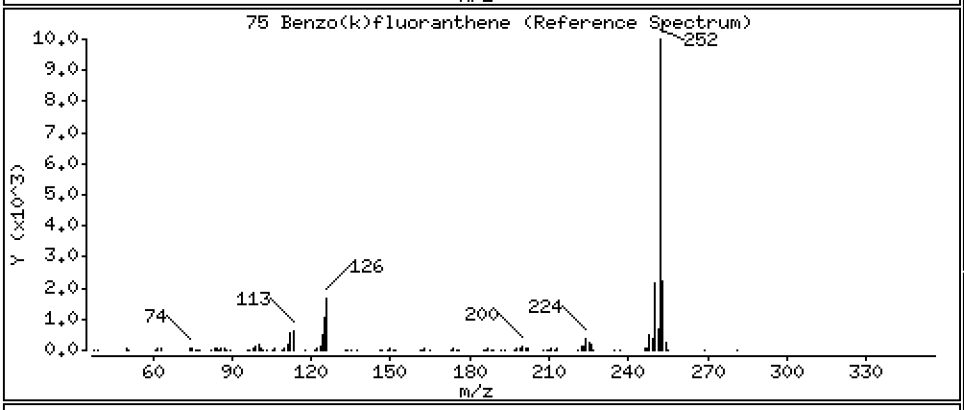
Column diameter: 0.25

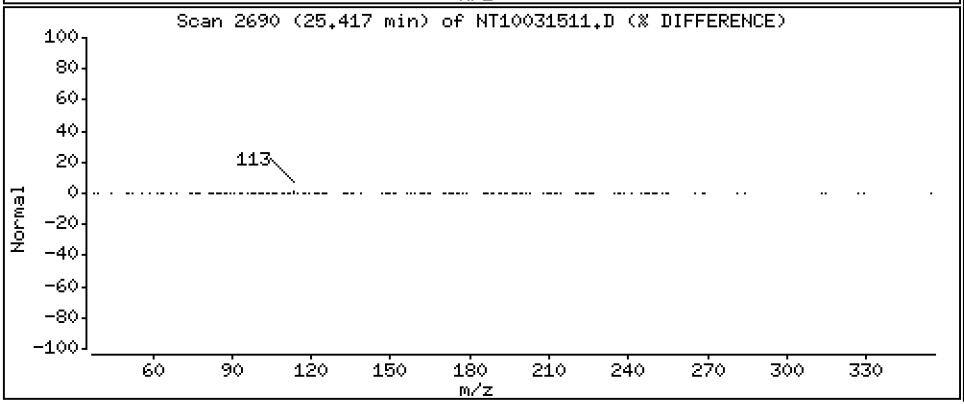
75 Benzo(k)fluoranthene

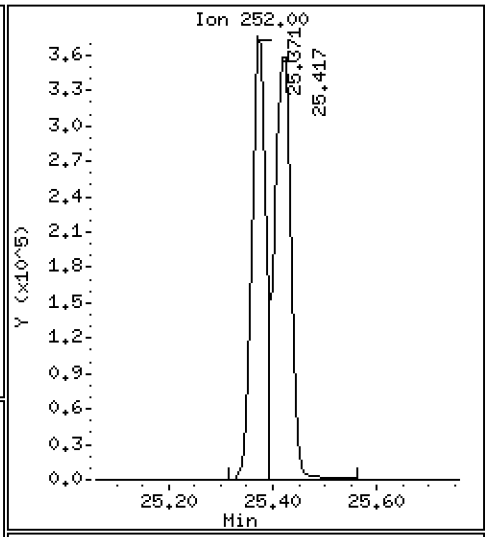
Concentration: 4.898 ug/mL

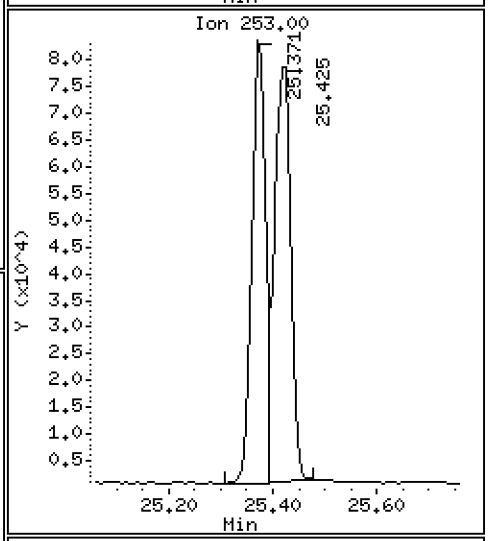


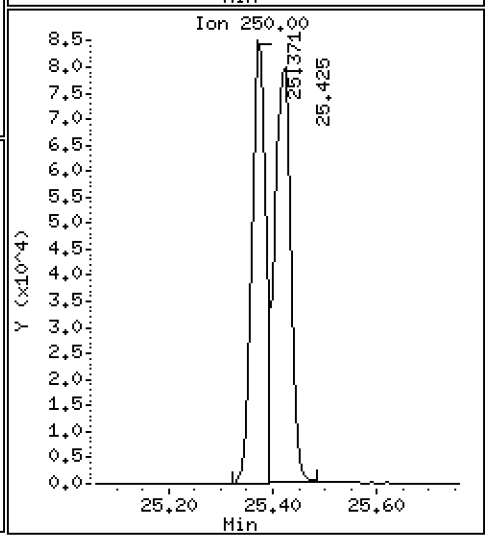












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

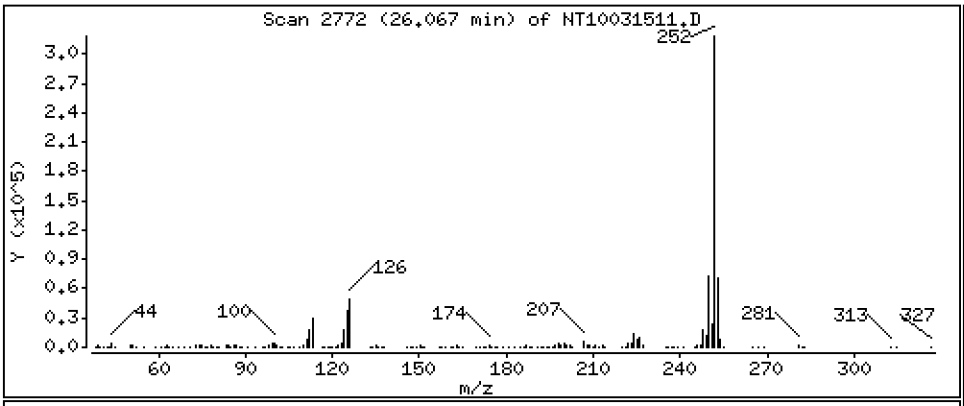
Operator: VTS

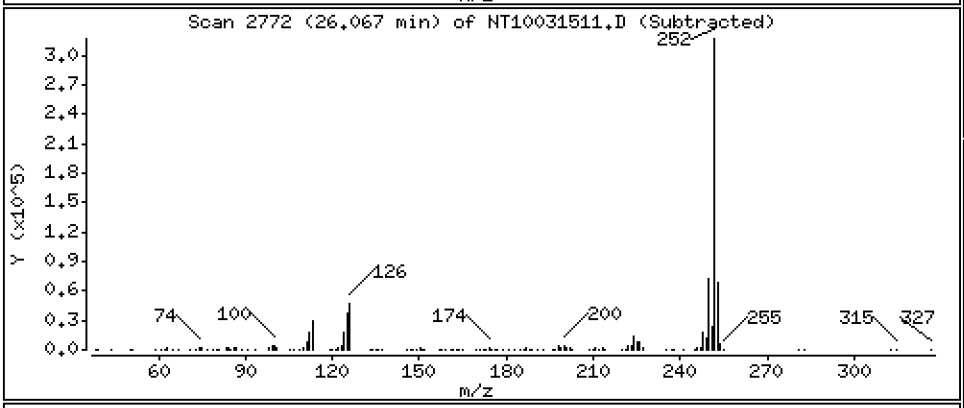
Column phase: ZB-5msi

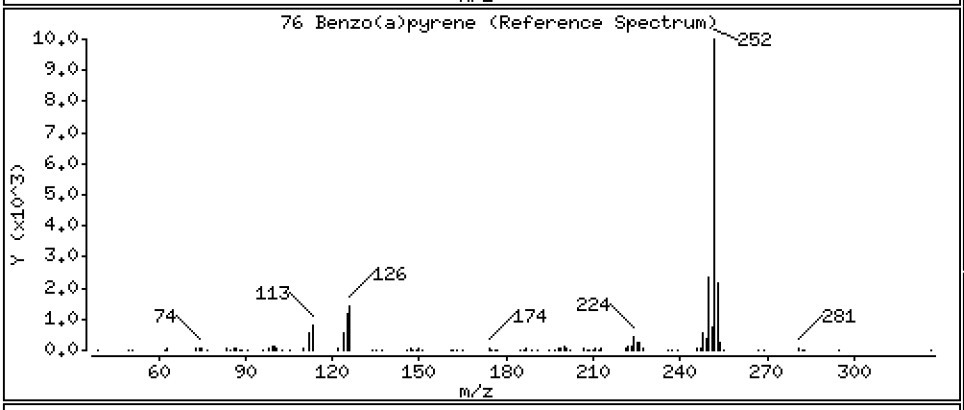
Column diameter: 0.25

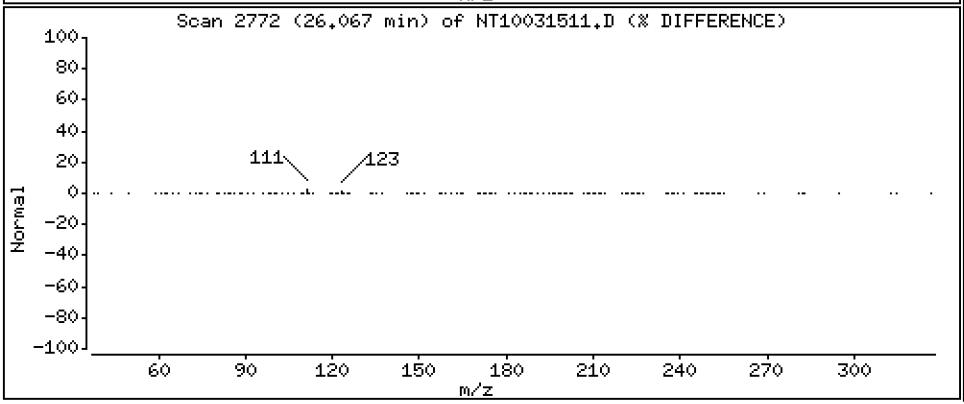
76 Benzo(a)pyrene

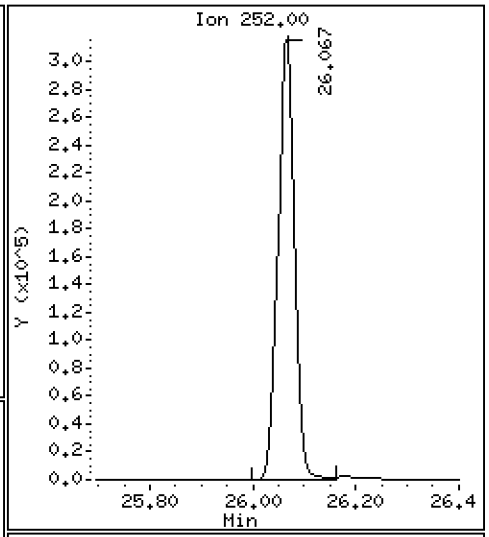
Concentration: 4.873 ug/mL

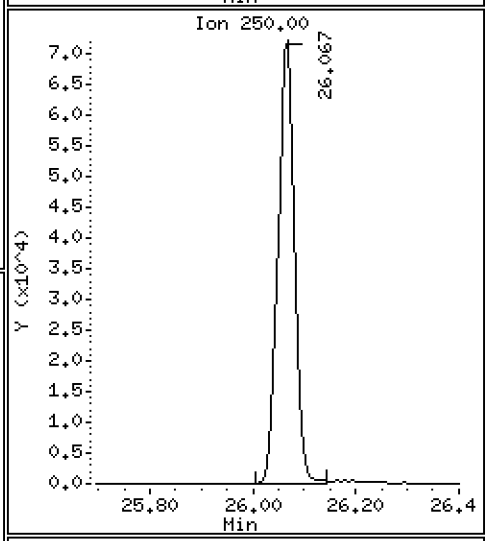


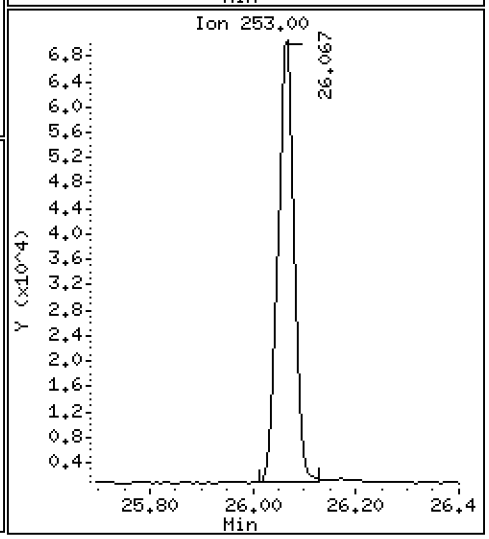












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

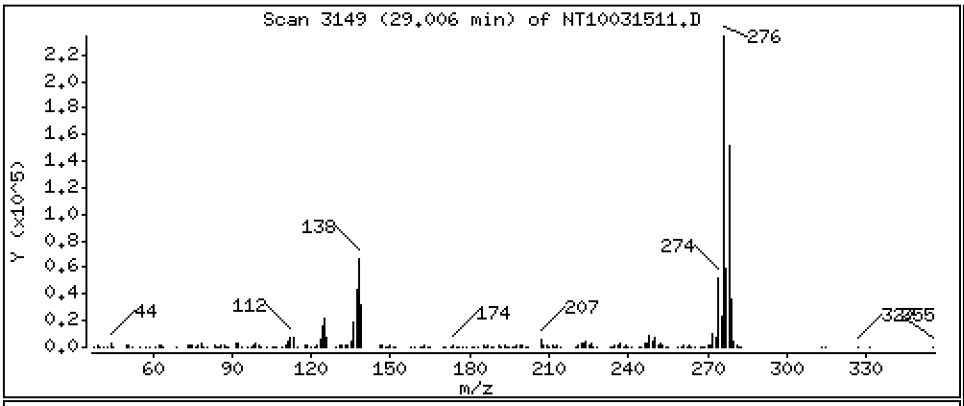
Operator: VTS

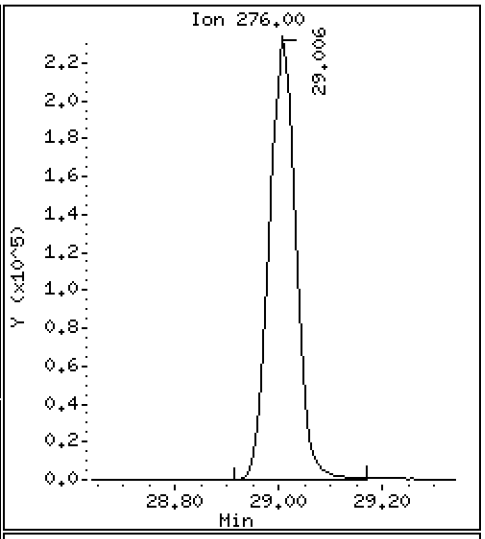
Column phase: ZB-5msi

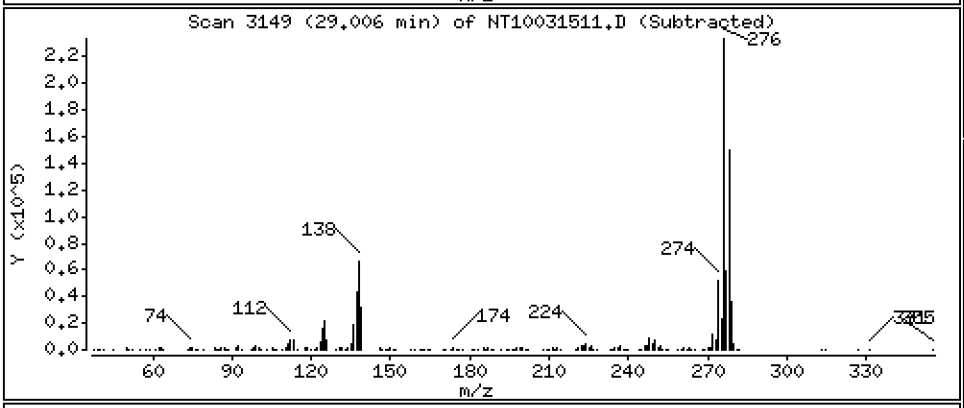
Column diameter: 0.25

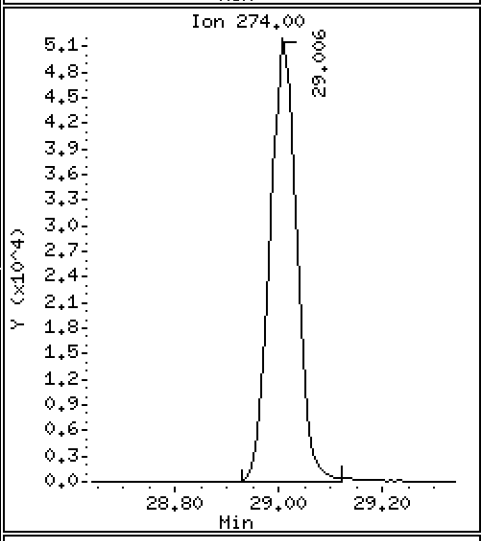
78 Indeno(1,2,3-cd)pyrene

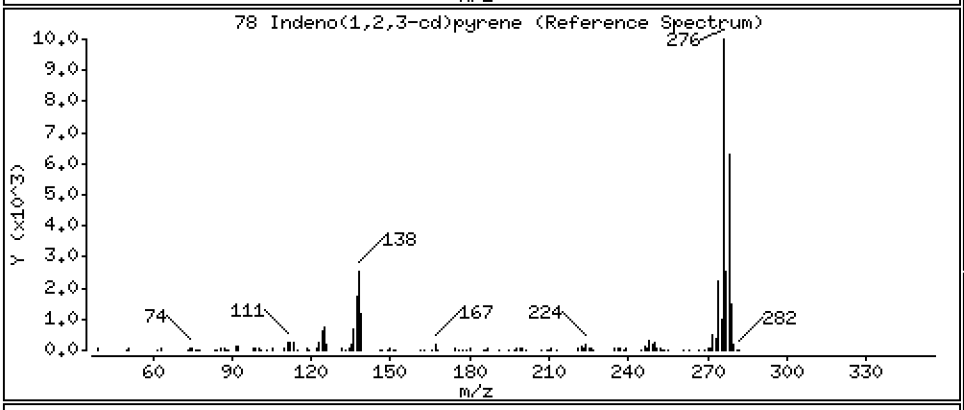
Concentration: 4.577 ug/mL

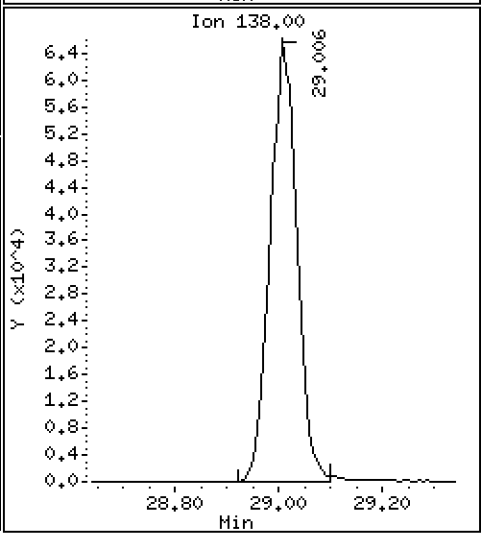


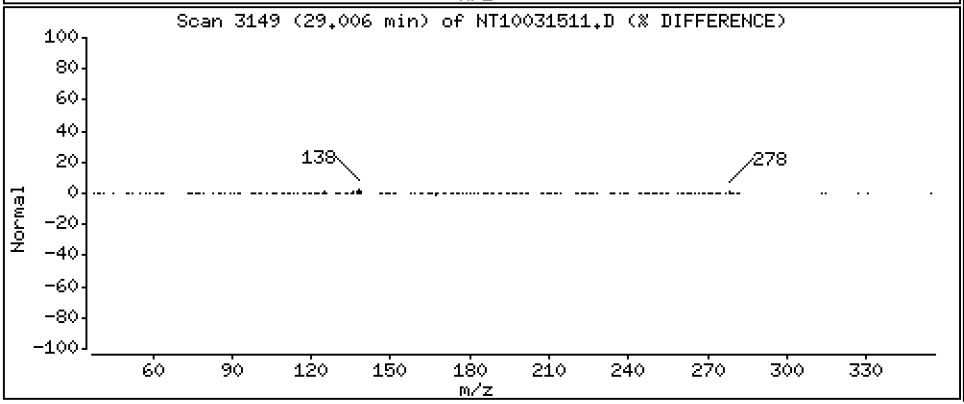












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

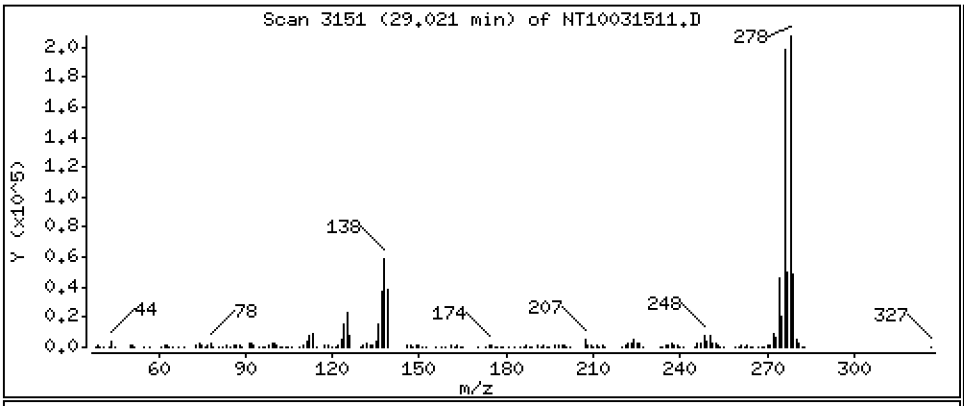
Operator: VTS

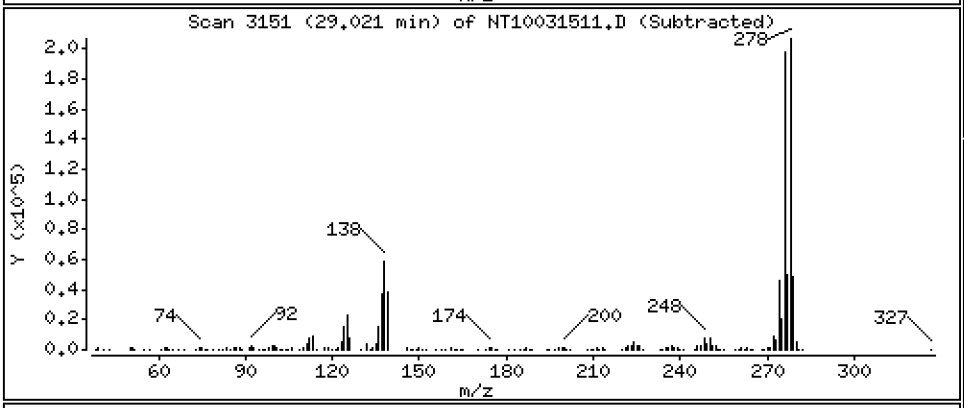
Column phase: ZB-5msi

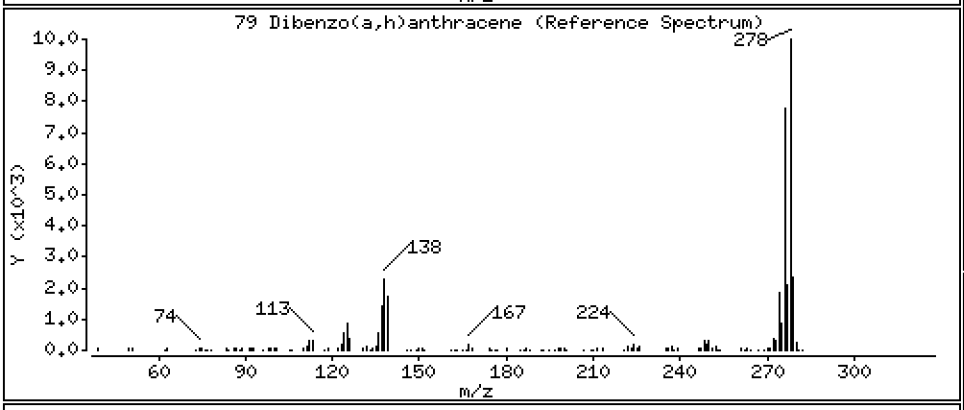
Column diameter: 0.25

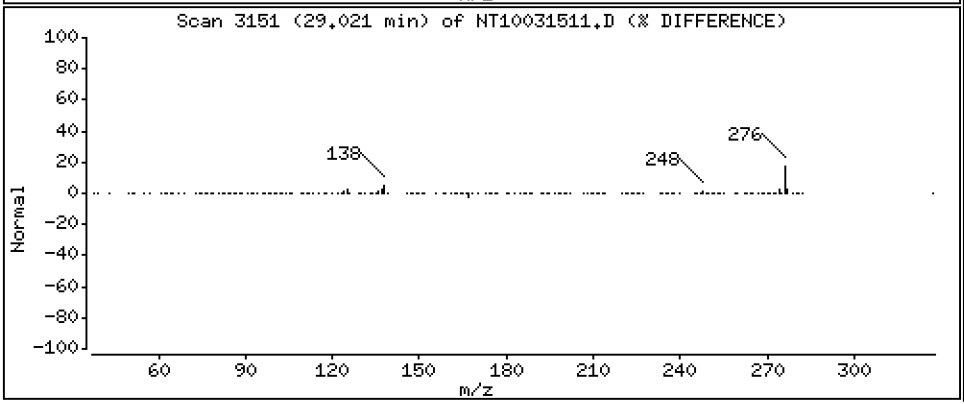
79 Dibenzo(a,h)anthracene

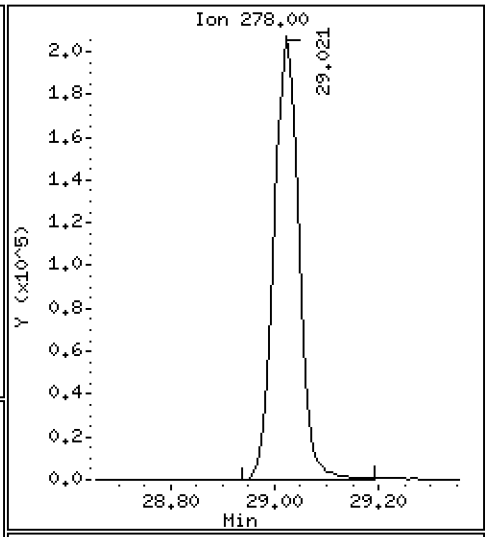
Concentration: 4.547 ug/mL

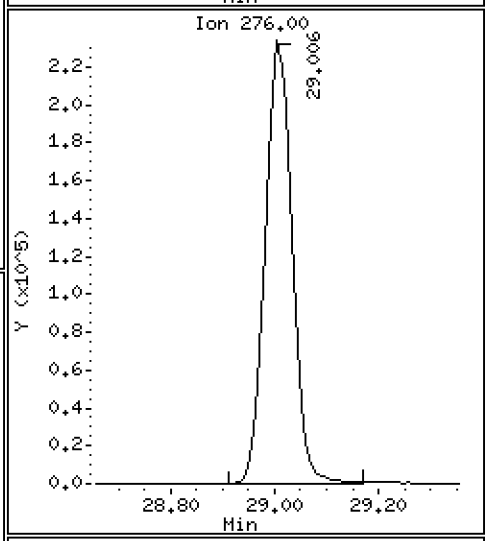


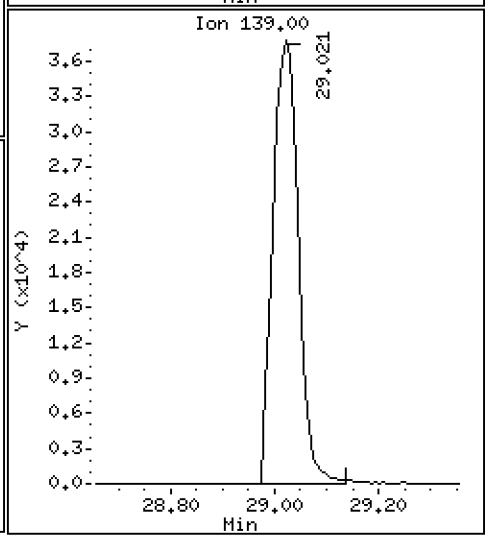












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

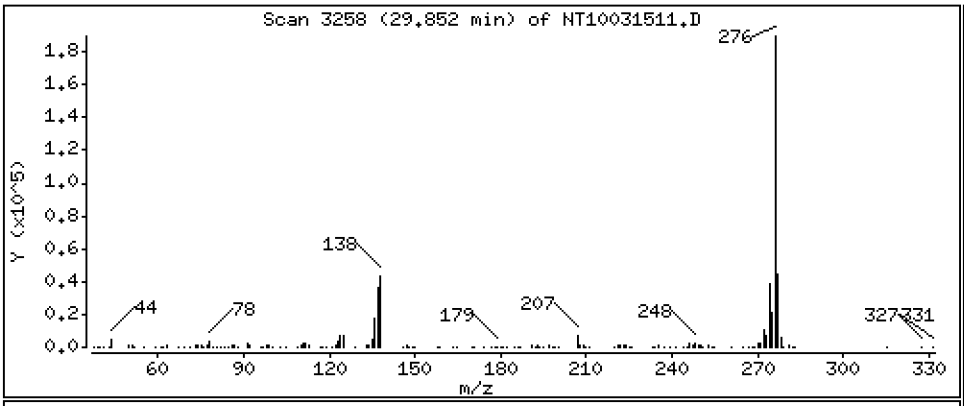
Operator: VTS

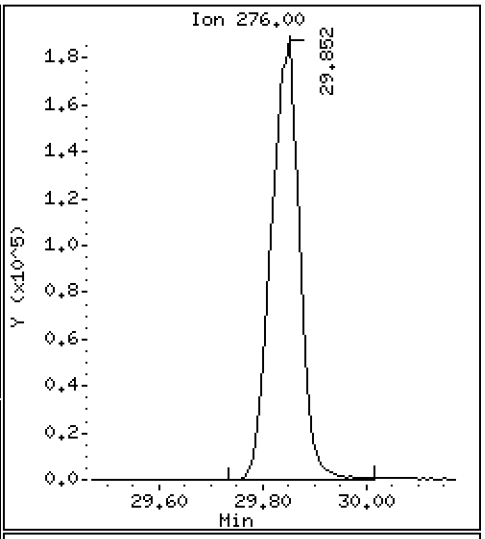
Column phase: ZB-5msi

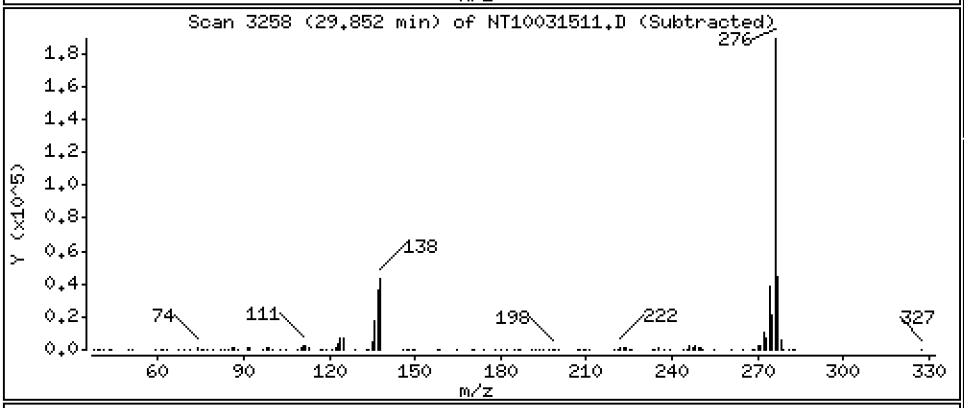
Column diameter: 0.25

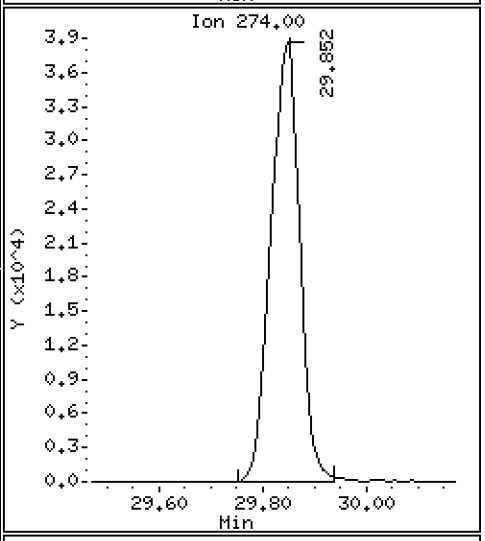
80 Benzo(g,h,i)perylene

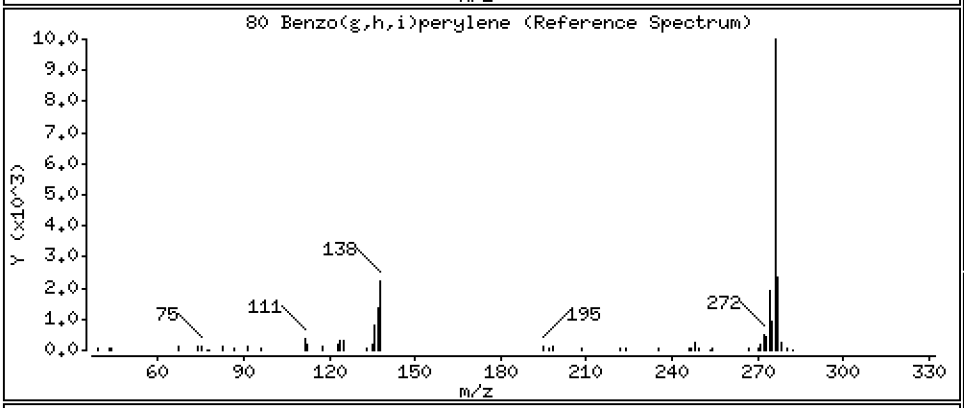
Concentration: 4.590 ug/mL

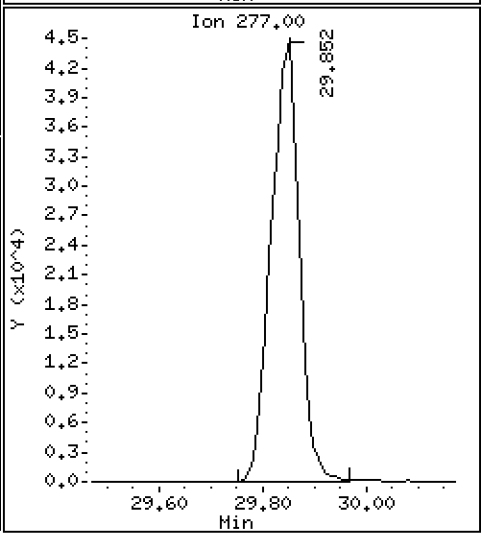


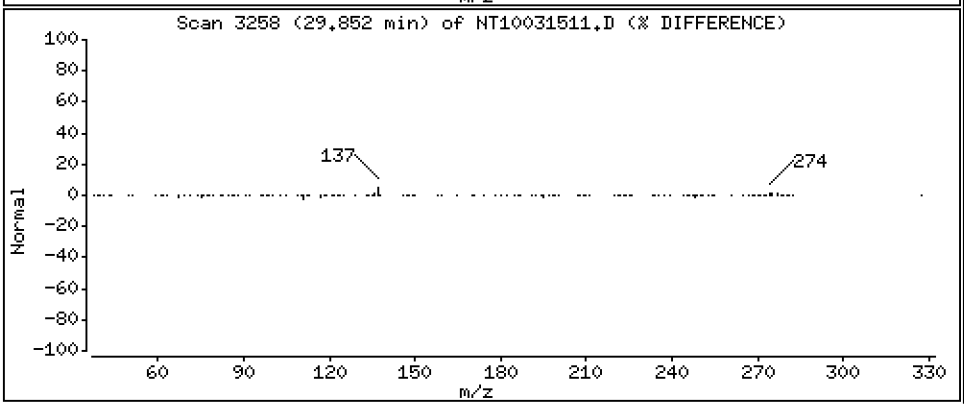












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

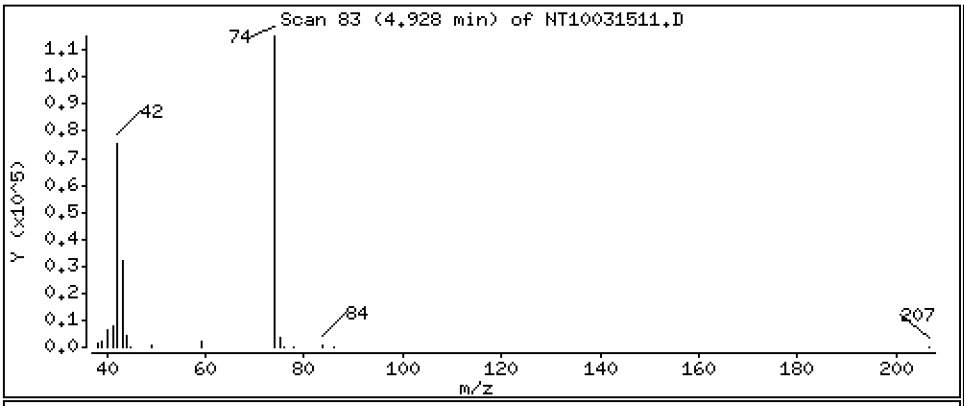
Operator: VTS

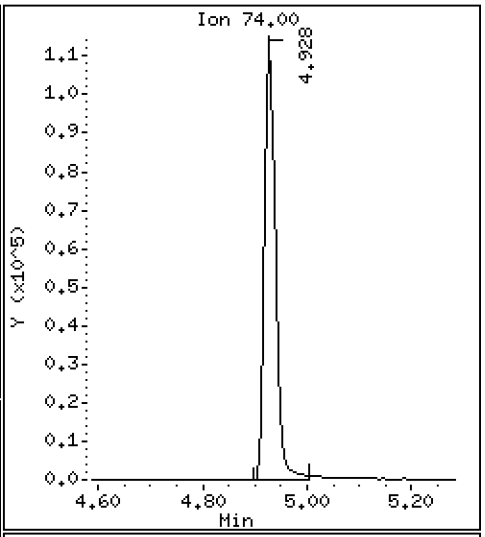
Column phase: ZB-5msi

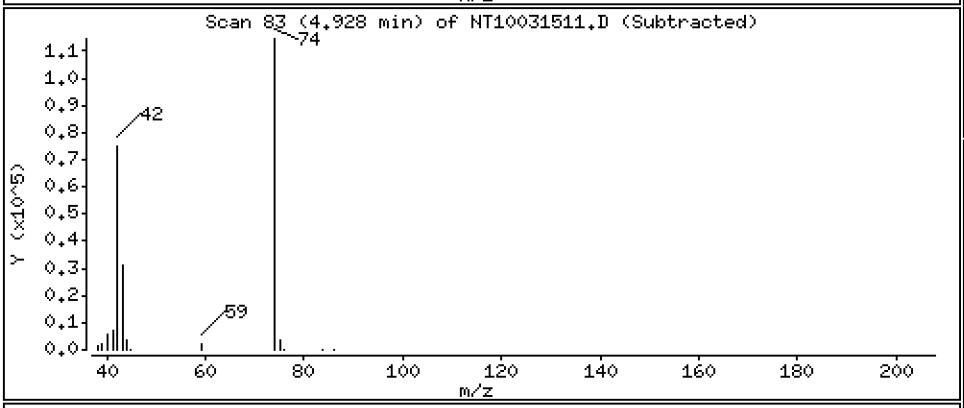
Column diameter: 0.25

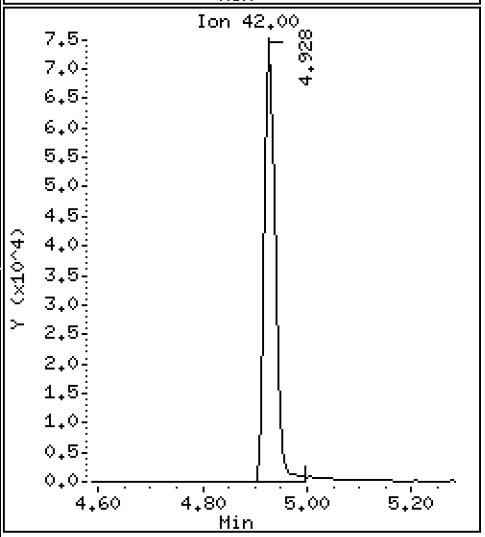
90 N-Nitrosodimethylamine

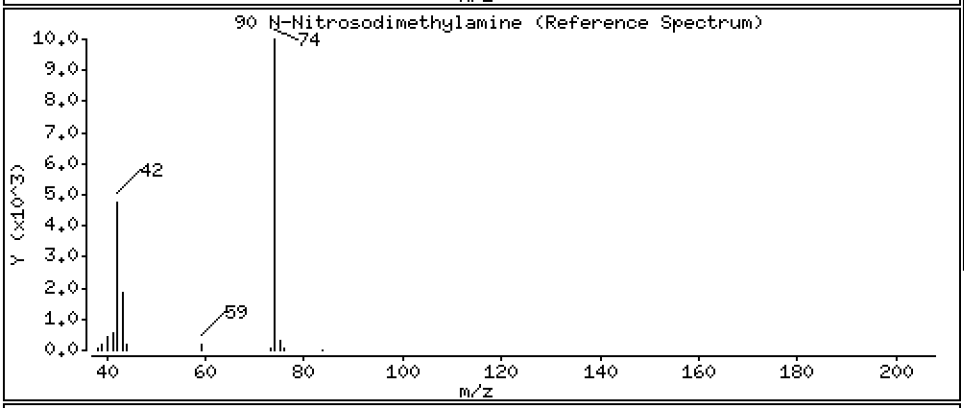
Concentration: 5.194 ug/mL

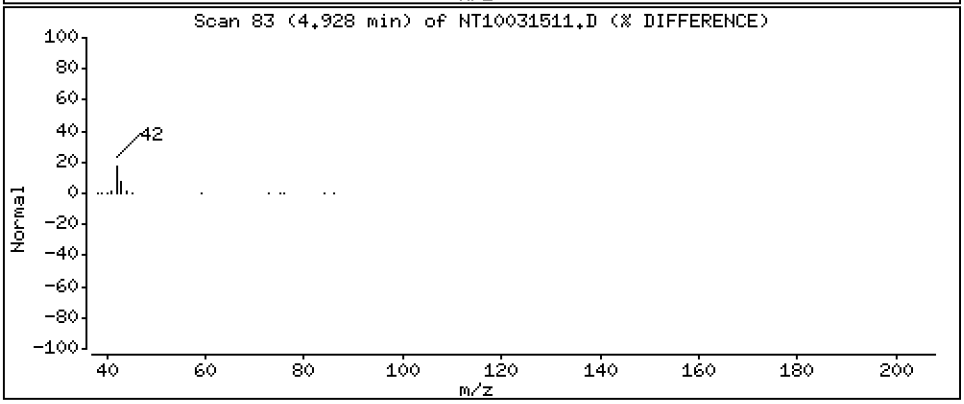












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

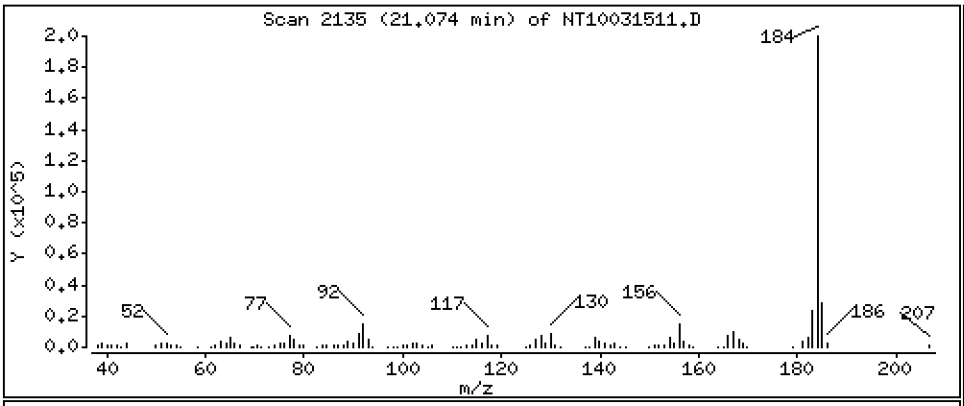
Operator: VTS

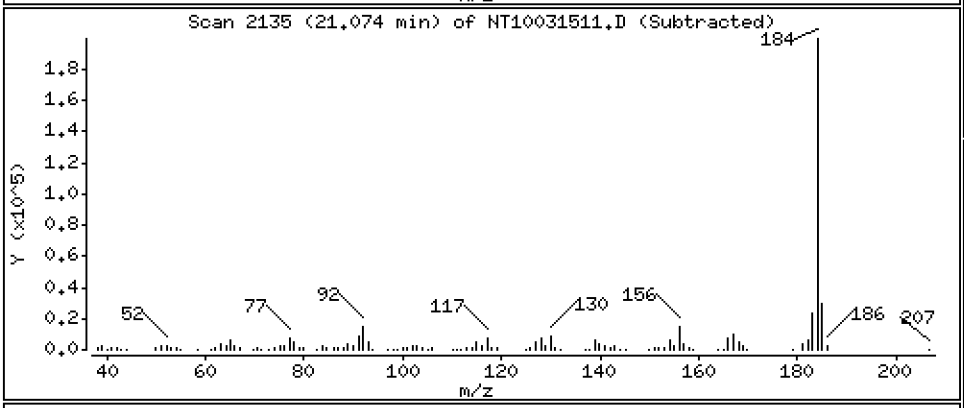
Column phase: ZB-5msi

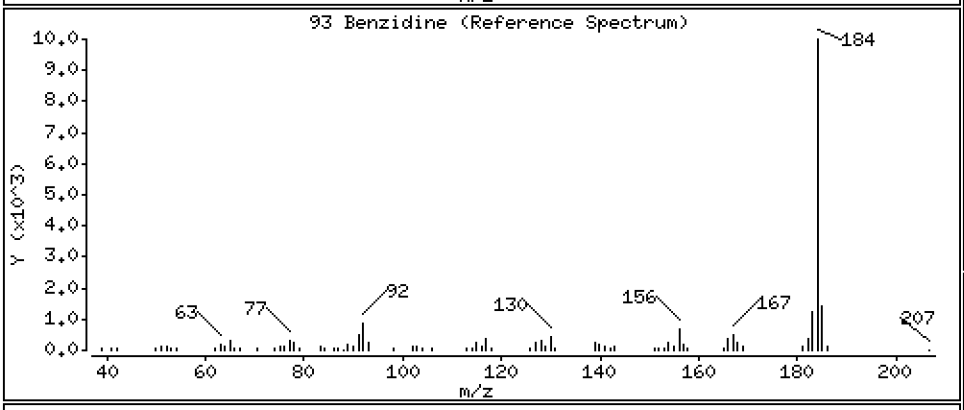
Column diameter: 0.25

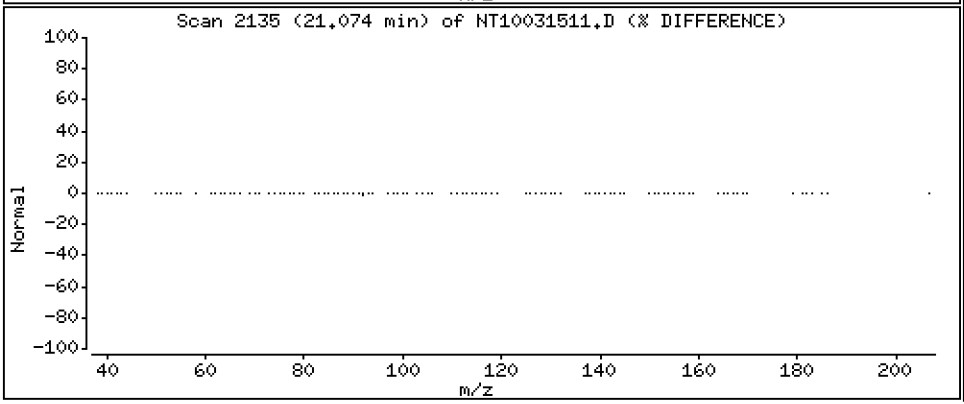
93 Benzidine

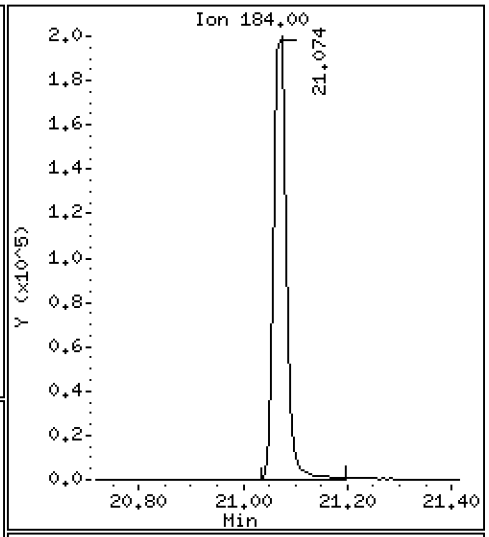
Concentration: 4.380 ug/mL

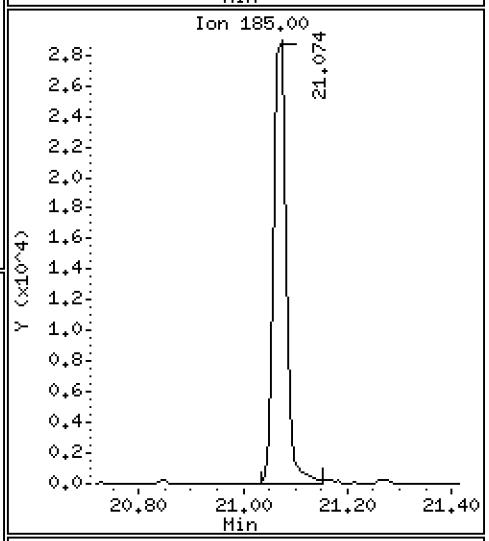


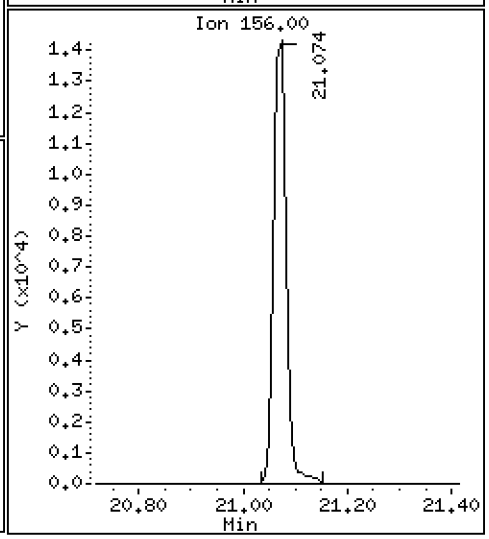












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

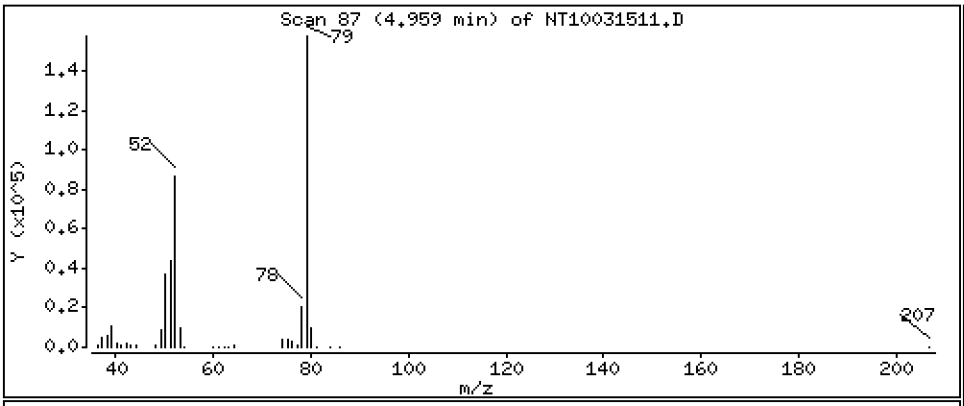
Operator: VTS

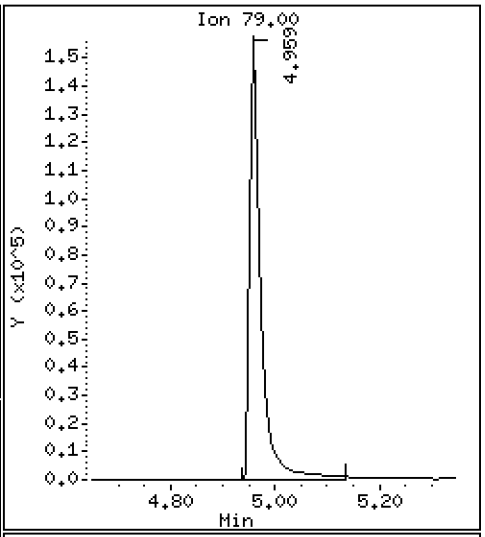
Column phase: ZB-5msi

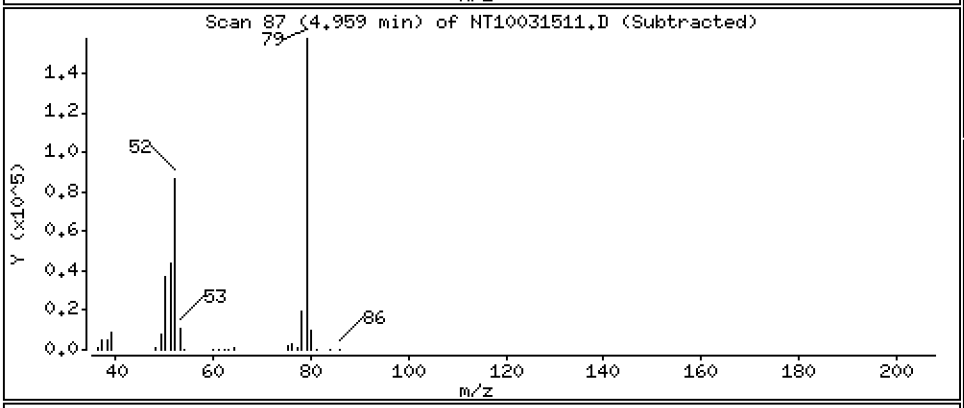
Column diameter: 0.25

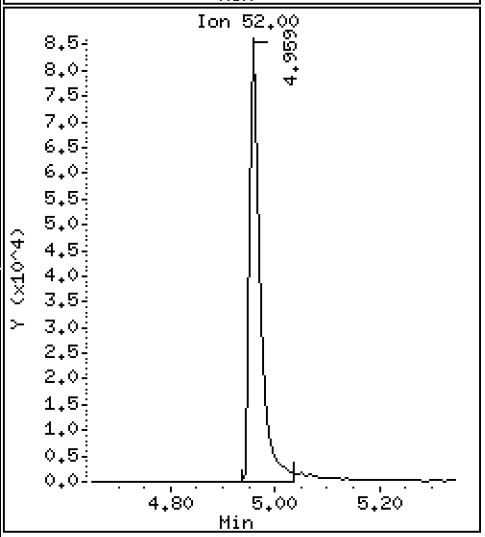
103 Pyridine

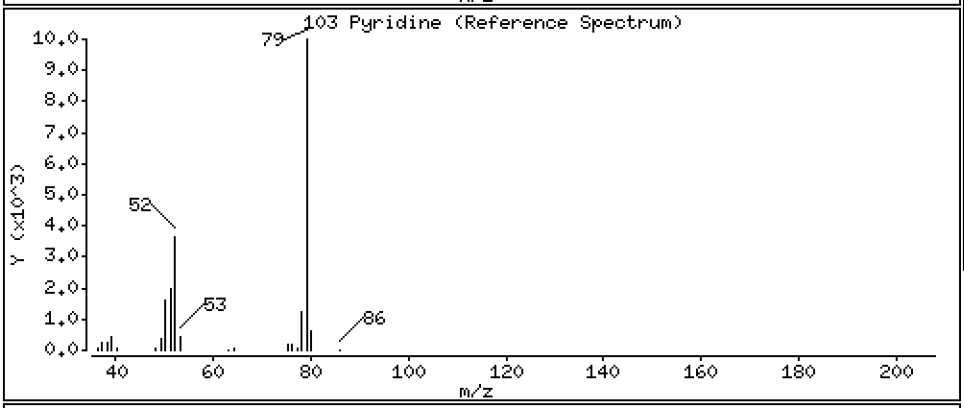
Concentration: 5.337 ug/mL

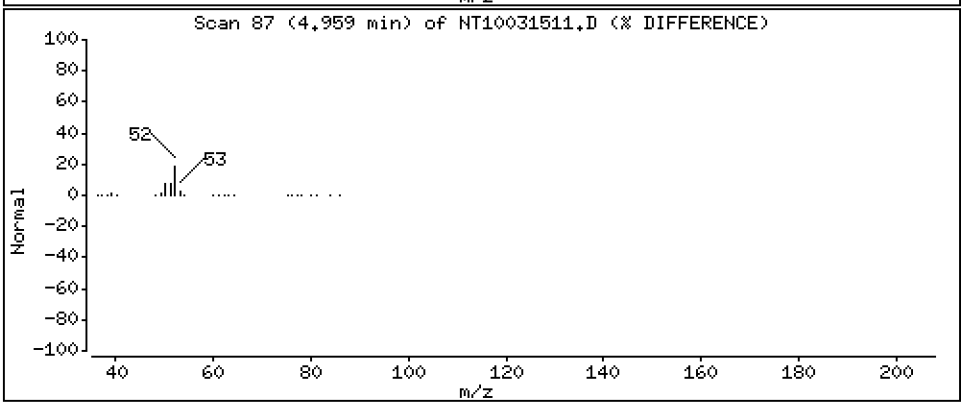












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

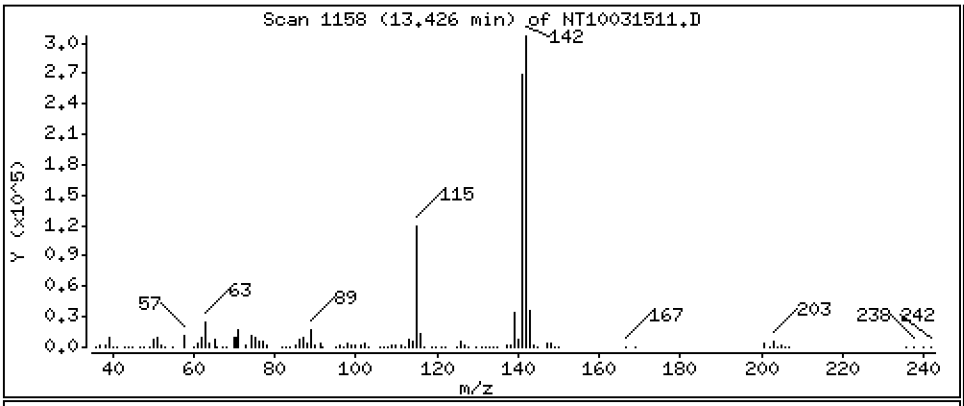
Operator: VTS

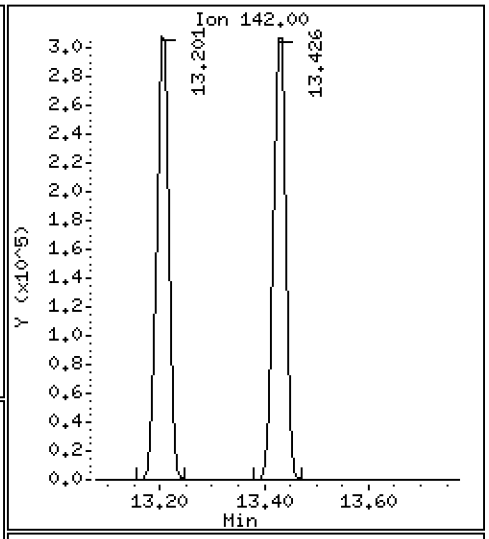
Column phase: ZB-5msi

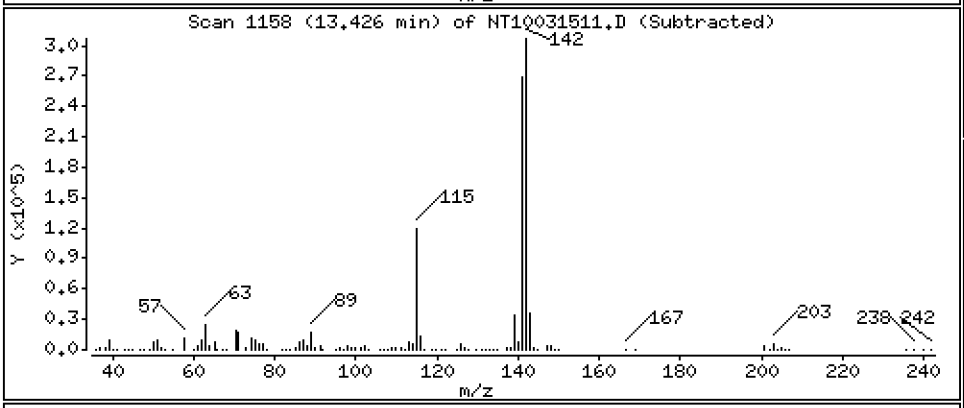
Column diameter: 0.25

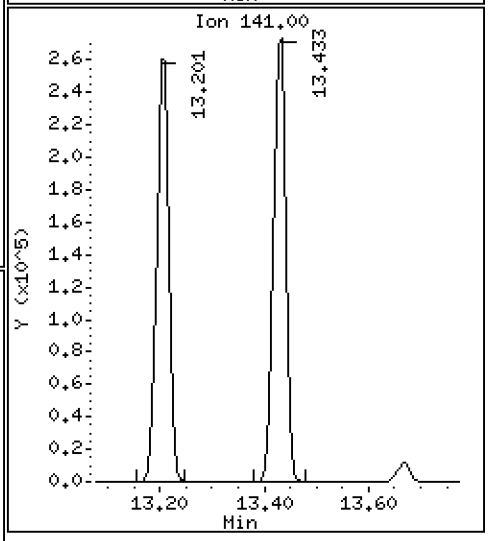
105 1-methylnaphthalene

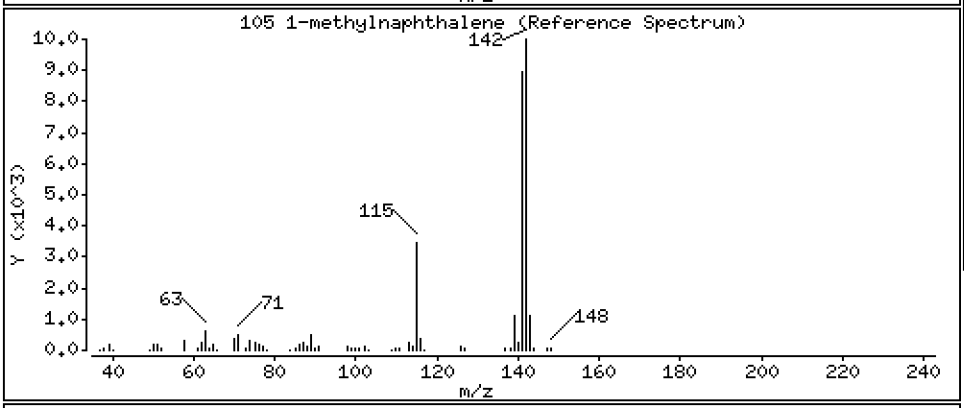
Concentration: 4.875 ug/mL

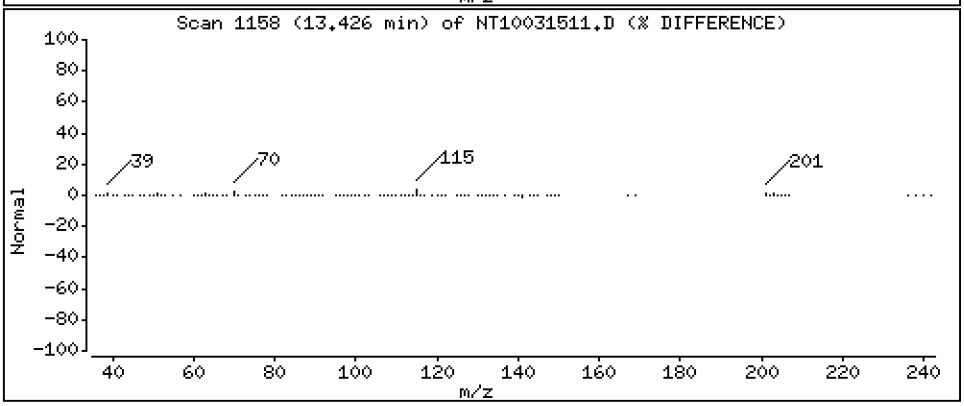












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

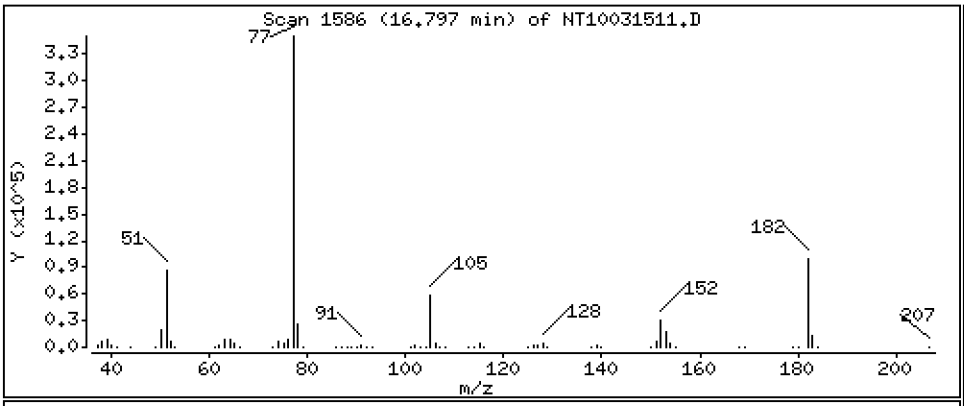
Operator: VTS

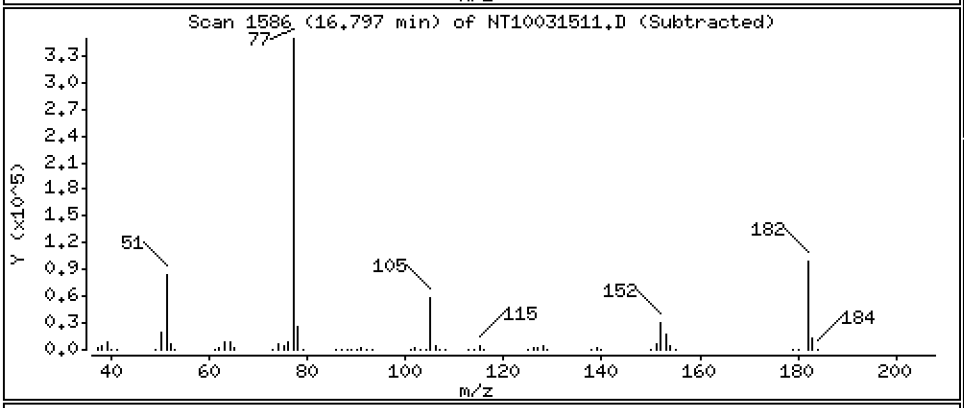
Column phase: ZB-5msi

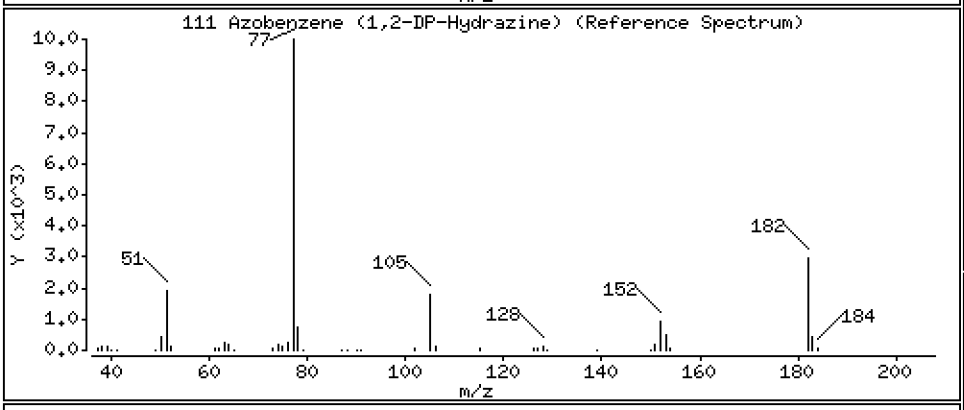
Column diameter: 0.25

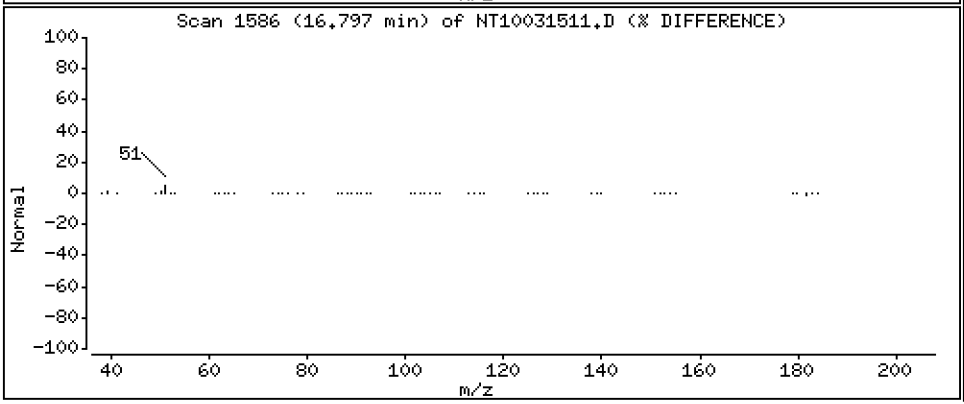
111 Azobenzene (1,2-DP-Hydrazine)

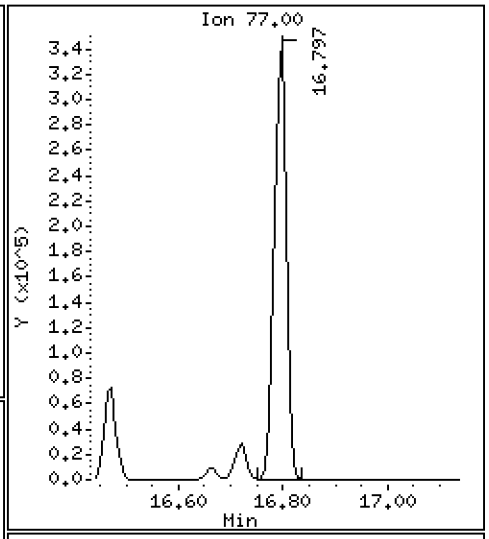
Concentration: 4.937 ug/mL

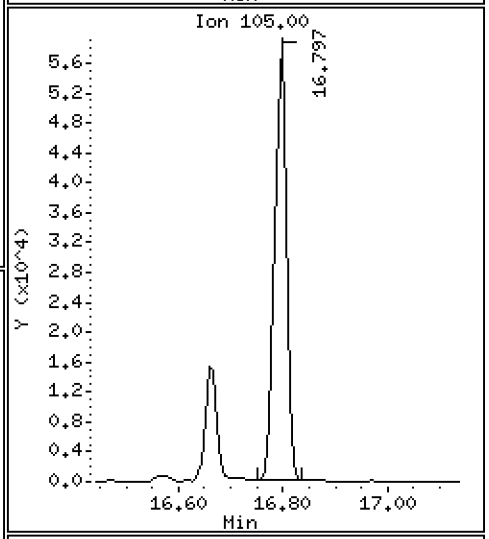


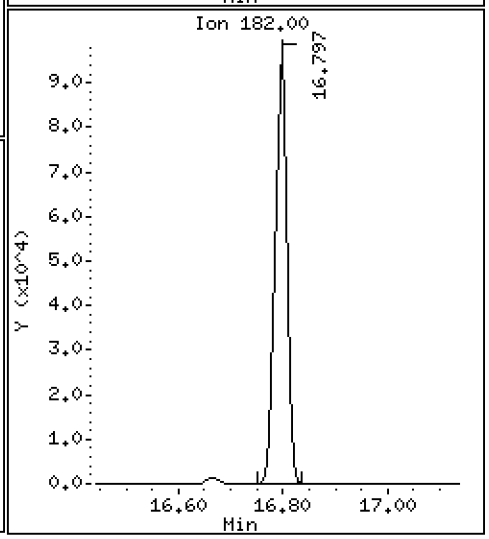












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

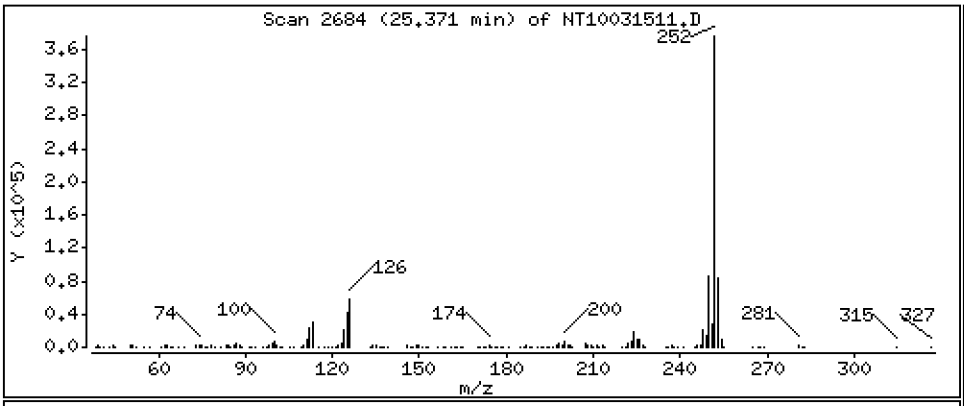
Operator: VTS

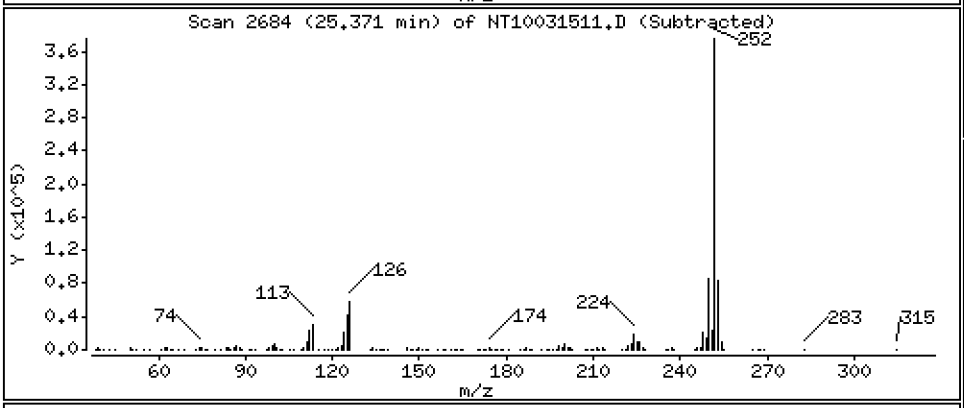
Column phase: ZB-5msi

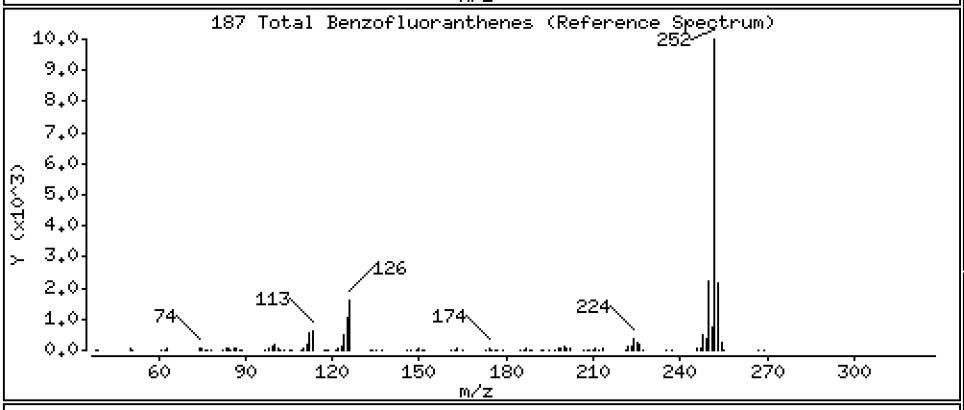
Column diameter: 0.25

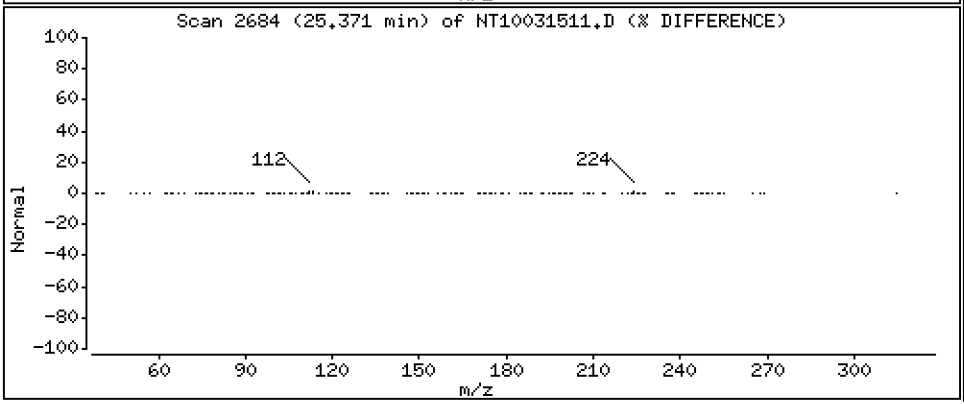
187 Total Benzofluoranthenes

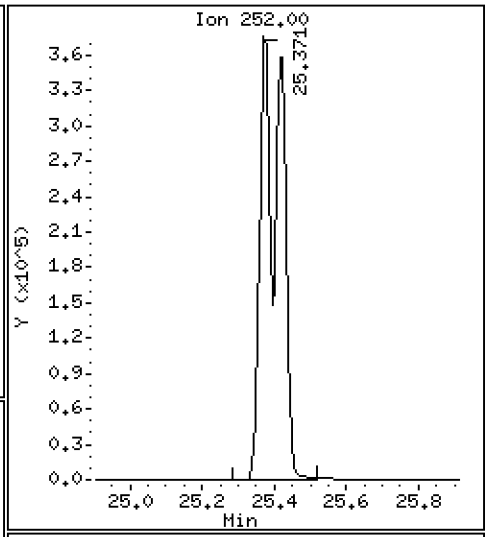
Concentration: 9.483 ug/mL

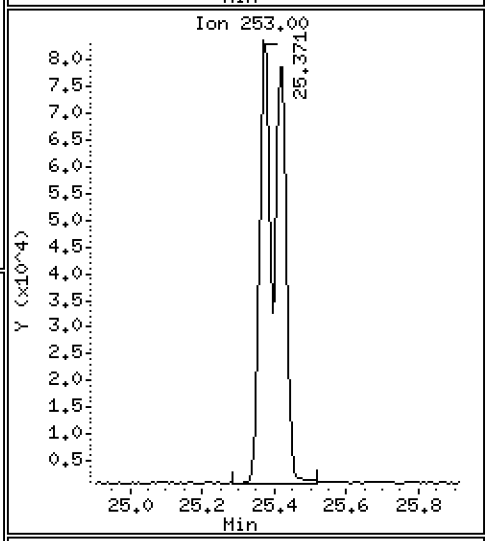


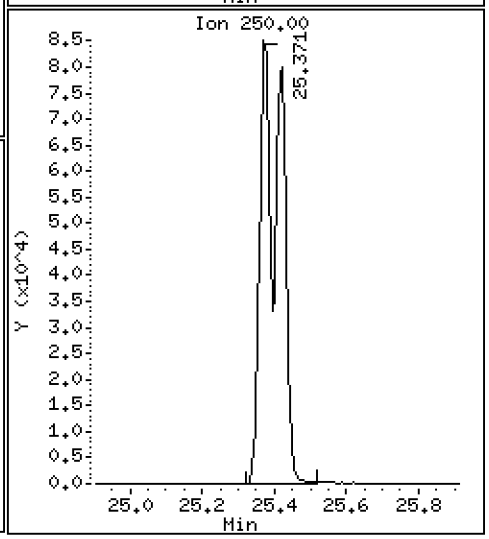












Data File: \\target\share\chem3\nt10.i\20230315.b\NT10031511.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0228-SCV1

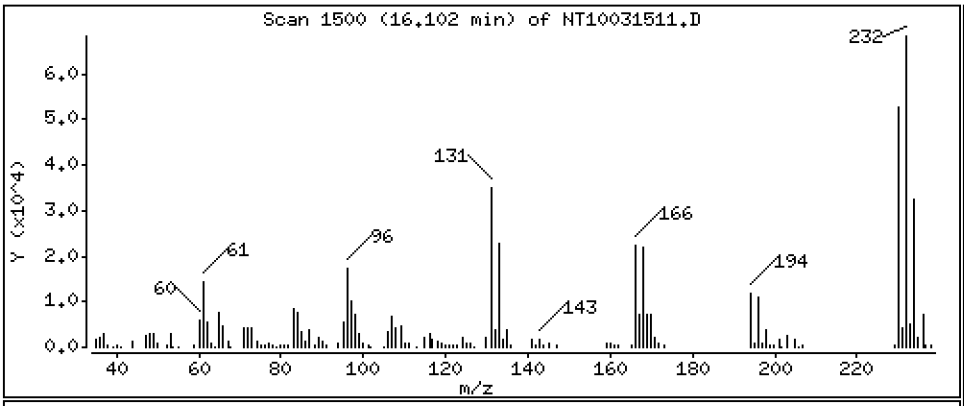
Operator: VTS

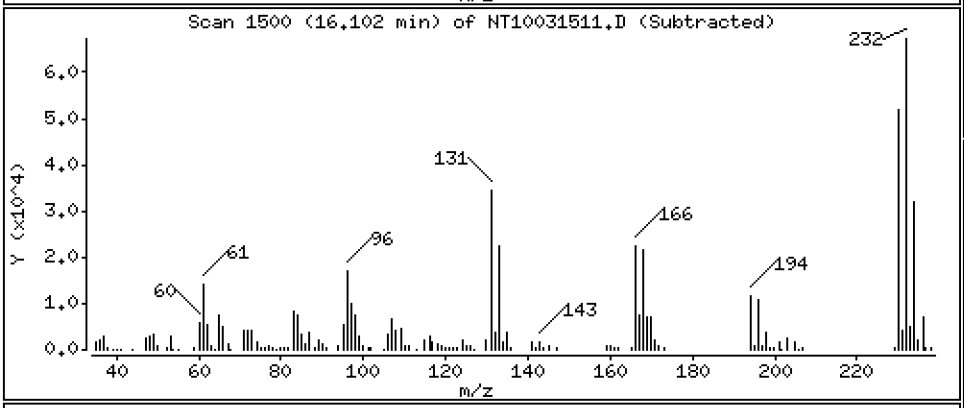
Column phase: ZB-5msi

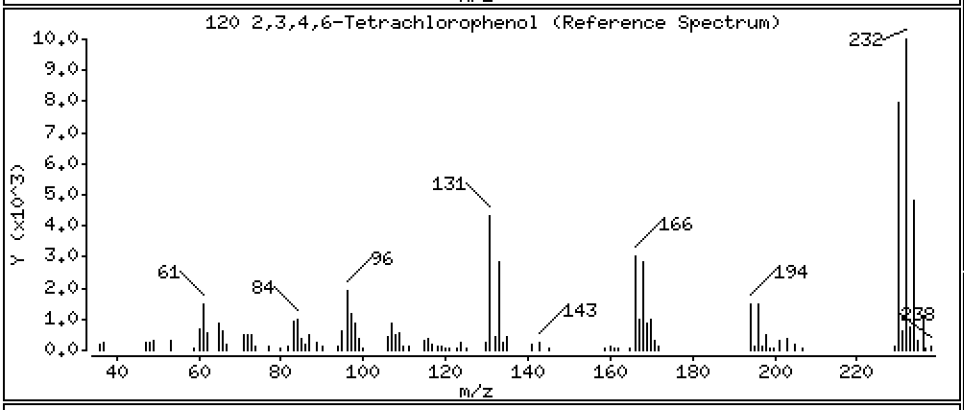
Column diameter: 0.25

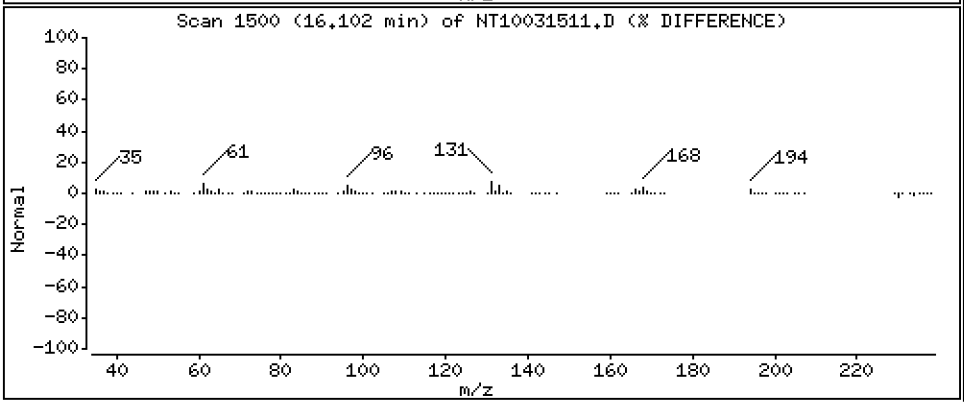
120 2,3,4,6-Tetrachlorophenol

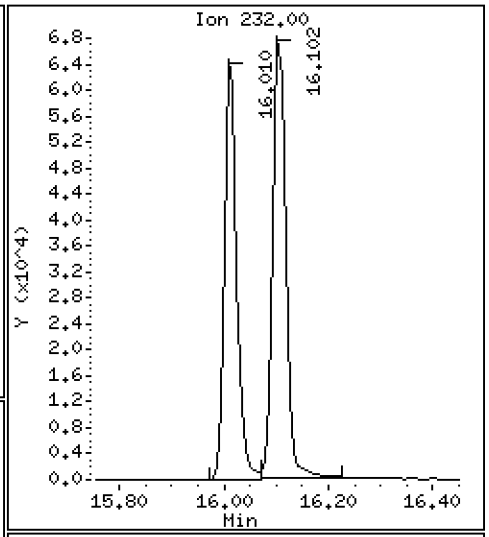
Concentration: 3.980 ug/mL

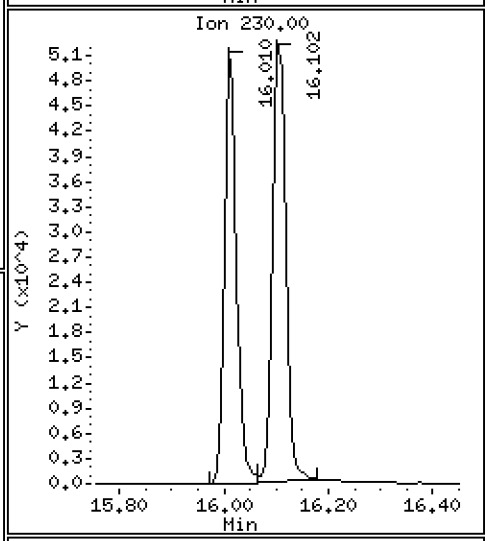


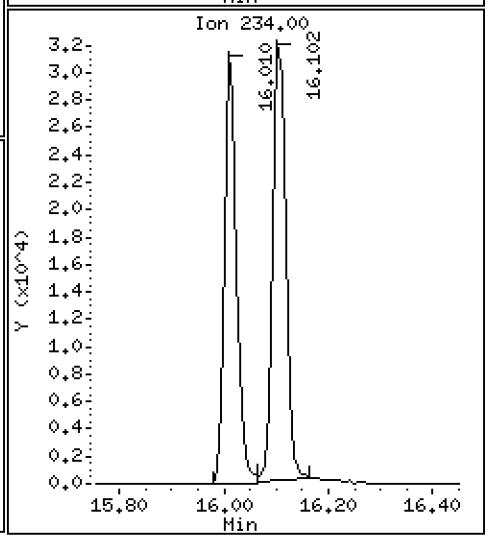












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230315.b\NT10031511.D
Lab Smp Id: SLC0228-SCV1
Inj Date : 16-MAR-2023 02:16
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0228-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230315.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$	1 2-Fluorophenol	112	Compound Not Detected.					
$	2 Phenol-d5	99	Compound Not Detected.					
	3 Phenol	94	8.659	8.652	(0.931)	281600	4.41237	4.412
$	5 2-Chlorophenol-d4	132	Compound Not Detected.					
	4 Bis(2-Chloroethyl)ether	93	8.837	8.837	(0.950)	248892	5.25818	5.258
	6 2-Chlorophenol	128	8.960	8.961	(0.963)	233608	4.27685	4.277
	7 1,3-Dichlorobenzene	146	9.239	9.231	(0.993)	275540	4.77157	4.772
*	8 1,4-Dichlorobenzene-d4	152	9.301	9.293	(1.000)	154809	4.00000	
	9 1,4-Dichlorobenzene	146	9.332	9.325	(1.003)	274051	4.91272	4.913
$	10 1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	9.689	9.682	(1.042)	268028	4.88215	4.882
	11 Benzyl alcohol	108	9.557	9.557	(1.028)	147597	4.92722	4.927
	14 2,2'-oxybis(1-Chloropropane)	121	9.860	9.860	(1.060)	100179	6.21363	6.214
	13 2-Methylphenol	108	9.775	9.767	(1.051)	196115	4.21542	4.215
	17 Hexachloroethane	117	10.279	10.271	(1.105)	114513	5.00332	5.003
	16 N-Nitroso-di-n-propylamine	70	10.116	10.108	(1.088)	190250	5.17896	5.179
	15 4-Methylphenol	108	10.046	10.031	(1.080)	213951	4.36462	4.365
$	18 Nitrobenzene-d5	82	Compound Not Detected.					
	19 Nitrobenzene	77	10.426	10.419	(0.885)	274714	4.85798	4.858
	20 Isophorone	82	10.861	10.861	(0.922)	556741	7.69604	7.696
	21 2-Nitrophenol	139	11.047	11.048	(0.938)	110302	3.99452	3.995
	22 2,4-Dimethylphenol	107	11.081	11.082	(0.941)	188638	3.63181	3.632
	23 Bis(2-Chloroethoxy)methane	93	11.285	11.285	(0.958)	273219	5.65409	5.654
	24 Benzoic acid	105	11.217	11.166	(0.952)	173961	5.95241	5.952
	25 2,4-Dichlorophenol	162	11.489	11.489	(0.975)	195480	4.70301	4.703
	26 1,2,4-Trichlorobenzene	180	11.685	11.685	(0.992)	222176	4.55366	4.554
*	27 Naphthalene-d8	136	11.777	11.770	(1.000)	570882	4.00000	
	28 Naphthalene	128	11.816	11.816	(1.003)	713318	4.71662	4.717
	29 4-Chloroaniline	127	11.940	11.940	(1.014)	223402	3.78650	3.787
	30 Hexachlorobutadiene	225	12.171	12.172	(1.033)	138198	4.83404	4.834
	31 4-Chloro-3-methylphenol	107	12.876	12.876	(1.093)	208794	4.64027	4.640
	32 2-Methylnaphthalene	142	13.201	13.201	(1.121)	501627	4.59617	4.596
	33 Hexachlorocyclopentadiene	237	13.665	13.665	(0.888)	132827	4.72902	4.729

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	13.820	13.820	(0.898)	137849	4.59559	4.596
35	2,4,5-Trichlorophenol	196	13.889	13.890	(0.903)	146935	4.40855	4.409
$ 36	2-Fluorobiphenyl	172	Compound Not Detected.					
37	2-Chloronaphthalene	162	14.199	14.191	(0.923)	466196	4.79589	4.796
38	2-Nitroaniline	65	14.454	14.447	(0.940)	134108	4.91137	4.911
39	Dimethylphthalate	163	14.880	14.873	(0.967)	486790	4.93747	4.937
40	Acenaphthylene	152	15.074	15.066	(0.980)	727839	4.80509	4.805
41	2,6-Dinitrotoluene	165	15.020	15.012	(0.976)	112840	5.29815	5.298
* 42	Acenaphthene-d10	164	15.383	15.383	(1.000)	303490	4.00000	
43	3-Nitroaniline	138	15.306	15.298	(0.995)	120530	5.01393	5.014
44	Acenaphthene	153	15.453	15.445	(1.005)	446914	4.77589	4.776
45	2,4-Dinitrophenol	184	15.515	15.515	(1.009)	27409	2.12395	2.124
46	Dibenzofuran	168	15.777	15.770	(1.026)	641379	4.64790	4.648
47	4-Nitrophenol	109	15.600	15.592	(1.014)	59816	3.96568	3.966
48	2,4-Dinitrotoluene	165	15.824	15.817	(1.029)	144262	4.51019	4.510
50	Diethylphthalate	149	16.326	16.319	(1.061)	503887	5.20905	5.209
49	Fluorene	166	16.489	16.481	(1.072)	511113	4.70796	4.708
51	4-Chlorophenyl-phenylether	204	16.473	16.466	(1.071)	257762	4.99294	4.993
52	4-Nitroaniline	138	16.566	16.566	(1.077)	106701	4.92532	4.925
53	4,6-Dinitro-2-methylphenol	198	16.666	16.658	(0.905)	56867	3.51509	3.515
54	N-Nitrosodiphenylamine	169	16.720	16.712	(0.908)	342454	4.80180	4.802
$ 55	2,4,6-Tribromophenol	330	Compound Not Detected.					
56	4-Bromophenyl-phenylether	248	17.475	17.476	(0.949)	150956	5.05964	5.060
57	Hexachlorobenzene	284	17.800	17.793	(0.966)	143751	4.59553	4.596
58	Pentachlorophenol	266	18.149	18.149	(0.985)	75635	4.05676	4.057
* 59	Phenanthrene-d10	188	18.420	18.420	(1.000)	533431	4.00000	
60	Phenanthrene	178	18.466	18.466	(1.003)	669357	4.60181	4.602
61	Anthracene	178	18.559	18.559	(1.008)	581438	4.16715	4.167
62	Carbazole	167	18.884	18.884	(1.025)	591382	4.72989	4.730
63	Di-n-butylphthalate	149	19.665	19.666	(1.068)	830680	4.96738	4.967
64	Fluoranthene	202	20.841	20.841	(0.888)	782432	4.47248	4.472
65	Pyrene	202	21.267	21.267	(0.907)	778668	4.33892	4.339
$ 66	Terphenyl-d14	244	Compound Not Detected.					
67	Butylbenzylphthalate	149	22.459	22.460	(0.957)	314007	4.83397	4.834
68	Benzo(a)anthracene	228	23.427	23.419	(0.999)	714166	4.64722	4.647
* 69	Chrysene-d12	240	23.458	23.450	(1.000)	435381	4.00000	
70	3,3'-Dichlorobenzidine	252	23.373	23.373	(0.996)	483256	9.81738	9.817
71	Chrysene	228	23.497	23.489	(1.002)	677151	4.51017	4.510
72	bis(2-Ethylhexyl)phthalate	149	23.481	23.474	(0.959)	453669	4.67998	4.680
* 134	Di-n-octylphthalate-d4	153	24.487	24.480	(1.000)	660827	4.00000	
73	Di-n-octylphthalate	149	24.495	24.488	(1.000)	855562	4.94734	4.947
74	Benzo(b)fluoranthene	252	25.370	25.362	(0.969)	737887	4.60200	4.602(H)
75	Benzo(k)fluoranthene	252	25.416	25.409	(0.970)	797521	4.89839	4.898
76	Benzo(a)pyrene	252	26.067	26.052	(0.995)	698616	4.87338	4.873
* 77	Perylene-d12	264	26.191	26.183	(1.000)	494648	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.005	28.990	(1.107)	834672	4.57655	4.577
79	Dibenzo(a,h)anthracene	278	29.021	29.005	(1.108)	688433	4.54663	4.547
80	Benzo(g,h,i)perylene	276	29.852	29.821	(1.140)	724463	4.59000	4.590
90	N-Nitrosodimethylamine	74	4.928	4.936	(0.530)	155126	5.19378	5.194
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	21.073	21.066	(0.898)	314737	4.37985	4.380
103	Pyridine	79	4.959	4.997	(0.533)	244801	5.33678	5.337
105	1-methylnaphthalene	142	13.425	13.425	(1.140)	487498	4.87520	4.875
111	Azobenzene (1,2-DP-Hydrazine)	77	16.797	16.789	(1.092)	533524	4.93744	4.937

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.370	25.409	(0.969)	1468165	9.48349	9.483
120 2,3,4,6-Tetrachlorophenol	232	16.102	16.103	(1.047)	124685	3.97959	3.980

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031511.D
Lab Smp Id: SLC0228-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230315.b\ABN.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 21:50
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	171542	85771	343084	154809	-9.75
27 Naphthalene-d8	624466	312233	1248932	570882	-8.58
42 Acenaphthene-d10	337226	168613	674452	303490	-10.00
59 Phenanthrene-d10	572849	286425	1145698	533431	-6.88
69 Chrysene-d12	347068	173534	694136	435381	25.45
134 Di-n-octylphthala	500317	250159	1000634	660827	32.08
77 Perylene-d12	421549	210775	843098	494648	17.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	-0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	0.01
42 Acenaphthene-d10	15.38	14.88	15.88	15.38	0.00
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.46	0.04
134 Di-n-octylphthala	24.48	23.98	24.98	24.49	0.03
77 Perylene-d12	26.18	25.68	26.68	26.19	0.03

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

REVIEW SUMMARY FOR FILE - NT10031511.D

Lab ID: SLC0228-SCV1
nt10.i, 20230315.b\ABN.m,   16-MAR-2023 02:16

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.000	0.9524	Benzoic acid

RRT check based on Ccal File: NT10031508.D

On Column LOD for nt10.i, 20230315.b\ABN.m, ICAL.sub = 0.0000

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

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00046
Lab File ID:	NT1003172316.D	Calibration Date:	03/15/2023
Sequence:	SLC0473	Injection Date:	03/18/23
Lab Sample ID:	SLC0473-CCV1	Injection Time:	03:57
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	5.0000	5.2	1.6490140	1.7314560		5.0	+/-50
4-Methylphenol	A	5.0000	5.3	1.2665770	1.3383790		5.7	+/-50
Naphthalene	A	5.0000	4.8	1.0596590	1.0215880		-3.6	+/-50
2-Methylnaphthalene	A	5.0000	4.9	0.7647129	0.7507307		-1.8	+/-50
Acenaphthylene	A	5.0000	4.9	1.9964080	1.9424680		-2.7	+/-50
Dimethylphthalate	A	5.0000	5.1	1.2994310	1.3330770		2.6	+/-50
Acenaphthene	A	5.0000	5.0	1.2333460	1.2265570		-0.6	+/-50
Dibenzofuran	A	5.0000	4.8	1.8187540	1.7297180		-4.9	+/-50
Fluorene	A	5.0000	5.0	1.4308680	1.4235850		-0.5	+/-50
Phenanthrene	A	5.0000	4.7	1.0907130	1.0237700		-6.1	+/-50
Anthracene	A	5.0000	5.1	1.0462760	1.0649110		1.8	+/-50
Fluoranthene	A	5.0000	4.5	1.6072690	1.4623390		-9.0	+/-50
Pyrene	A	5.0000	4.6	1.6487720	1.5092400		-8.5	+/-50
Butylbenzylphthalate	A	5.0000	5.3	0.5292894	0.6362938		6.3	+/-50
Benzo(a)anthracene	A	5.0000	5.1	1.4118770	1.4324860		1.5	+/-50
Chrysene	A	5.0000	5.0	1.3793780	1.3696480		-0.7	+/-50
bis(2-Ethylhexyl)phthalate	A	5.0000	4.7	0.5248968	0.5520252		-5.9	+/-50
Benzofluoranthenes, Total	A	10.000	10.0	1.2519020	1.2573540		0.4	+/-50
Benzo(a)pyrene	A	5.0000	5.2	1.1592370	1.2010910		3.6	+/-50
Indeno(1,2,3-cd)pyrene	A	5.0000	4.8	1.4748270	1.4169380		-3.9	+/-50
Dibenzo(a,h)anthracene	A	5.0000	4.9	1.2244340	1.1997350		-2.0	+/-50
Benzo(g,h,i)perylene	A	5.0000	4.6	1.2763410	1.1697700		-8.3	+/-50
2-Fluorophenol	A	7.5000	7.80	1.2096460	1.2587030		4.1	+/-50
Phenol-d5	A	7.5000	7.75	1.5868760	1.6390490		3.3	+/-50
2-Chlorophenol-d4	A	7.5000	7.83	1.3550800	1.4139030		4.3	+/-50
1,2-Dichlorobenzene-d4	A	5.0000	4.86	0.9731556	0.9454932		-2.8	+/-50
Nitrobenzene-d5	A	5.0000	5.07	0.4037447	0.4095662		1.4	+/-50
2-Fluorobiphenyl	A	5.0000	4.75	1.5822890	1.5018180		-5.1	+/-50
2,4,6-Tribromophenol	A	7.5000	6.57	0.1585901	0.1633308		-12.5	+/-50
p-Terphenyl-d14	A	5.0000	4.56	1.2381950	1.1301570		-8.7	+/-50

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172316.D

Page 1

Date : 18-MAR-2023 03:57

Client ID:

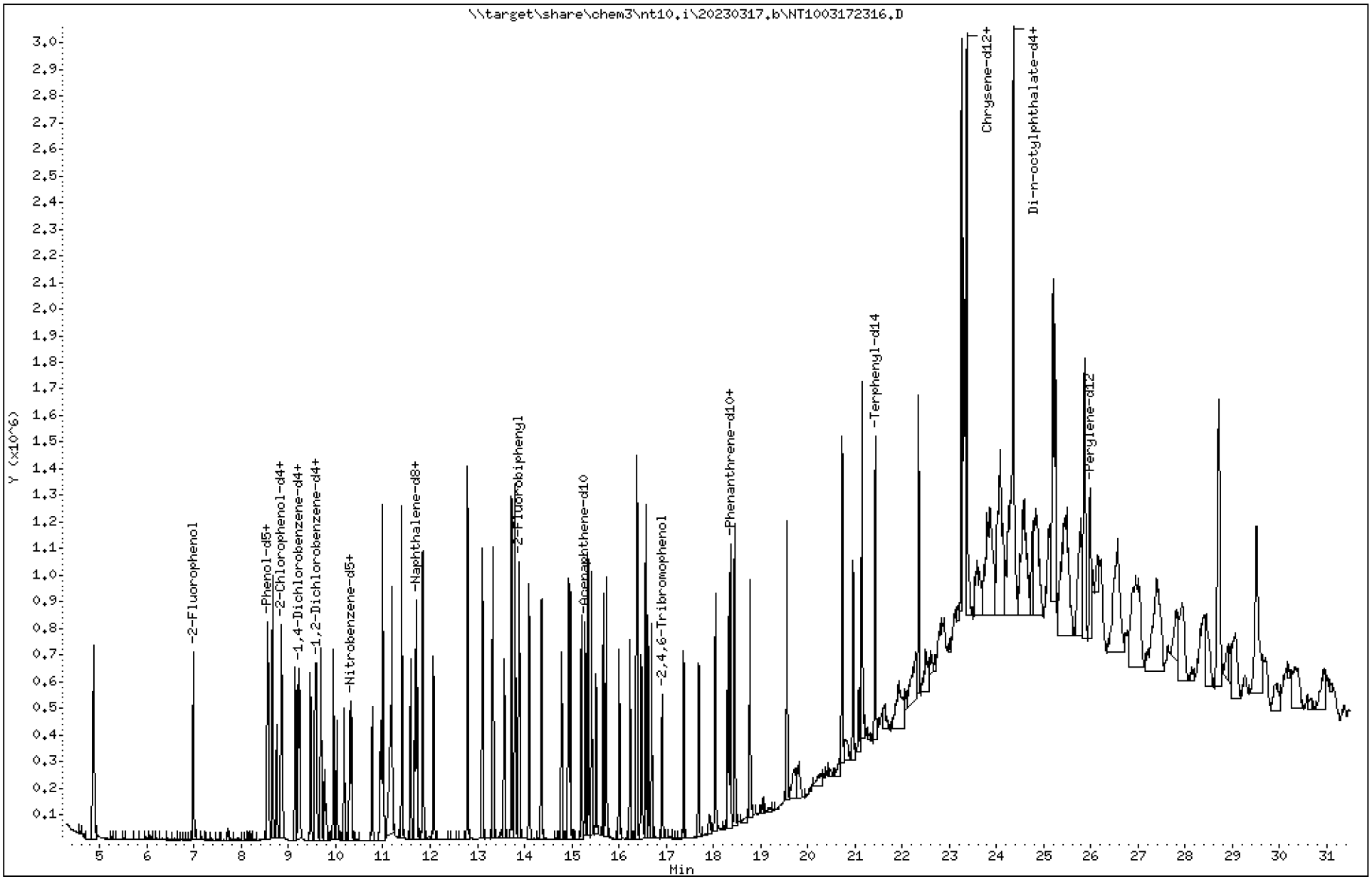
Instrument: nt10.i

Sample Info: SLC0473-CCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

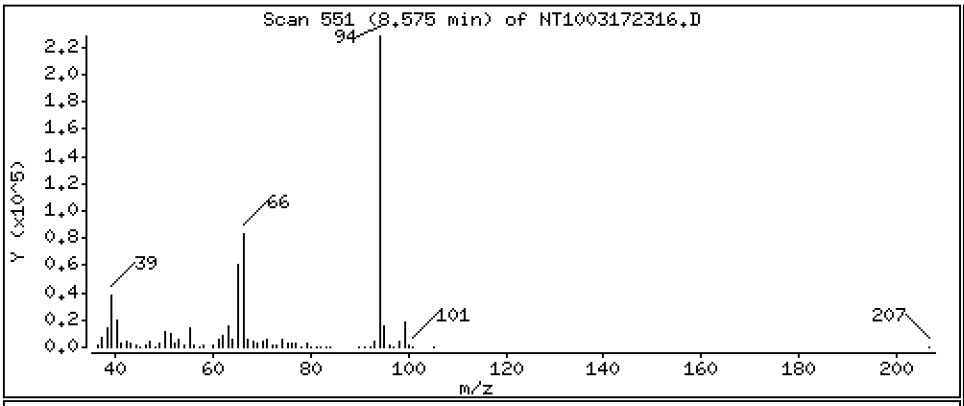
Operator: VTS

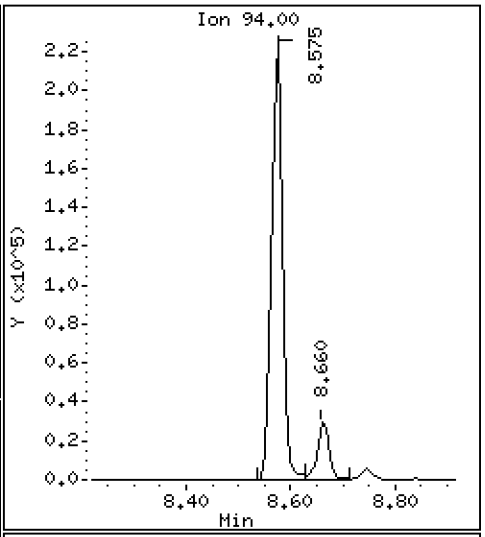
Column phase: ZB-5msi

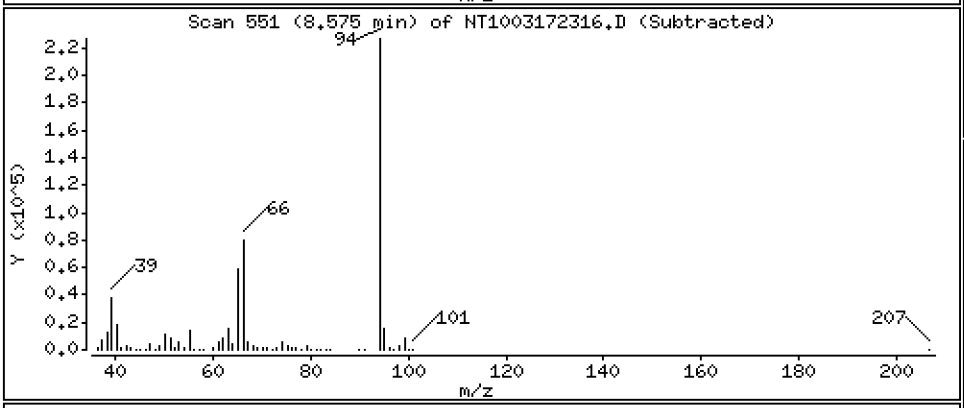
Column diameter: 0.25

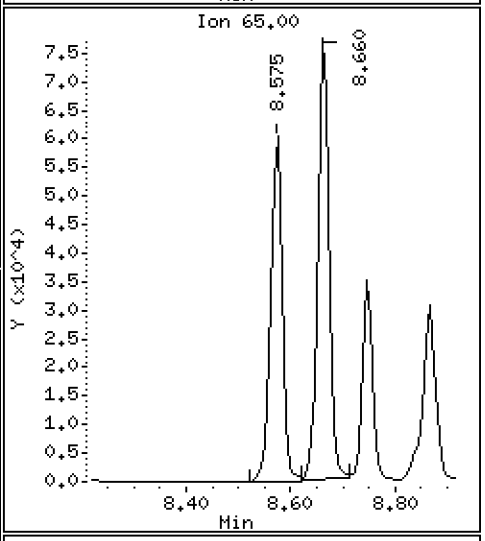
3 Phenol

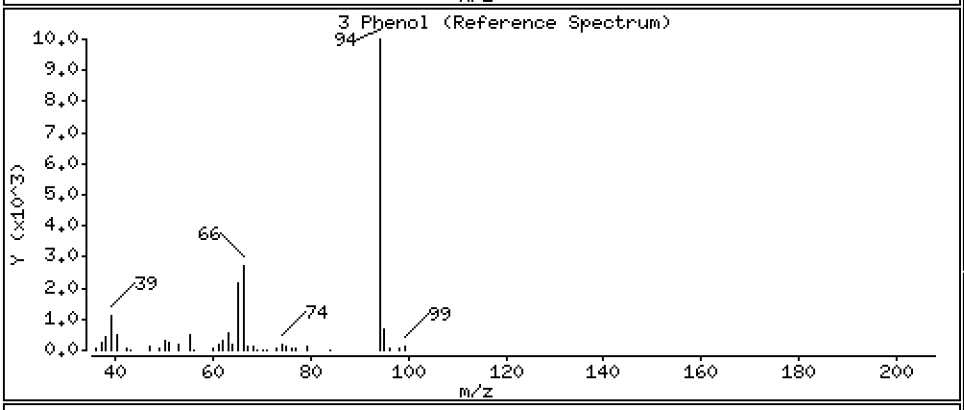
Concentration: 5.250 ug/mL

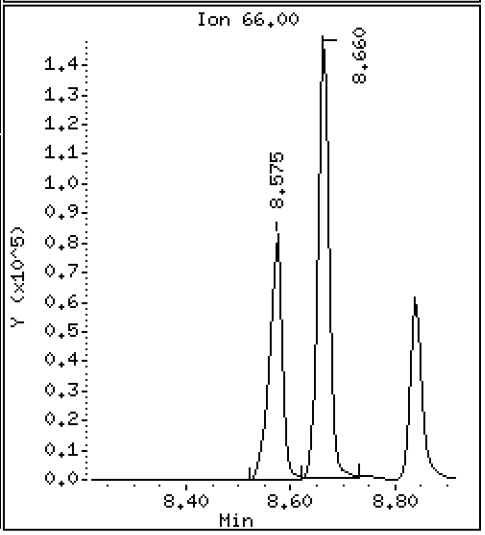


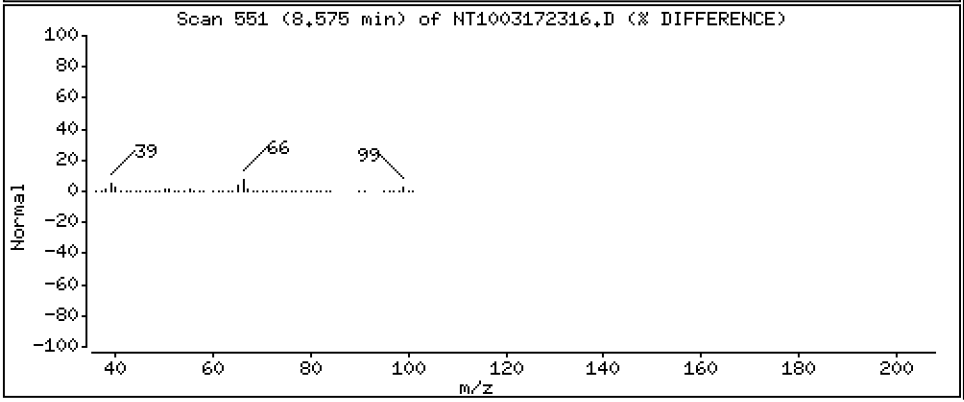












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

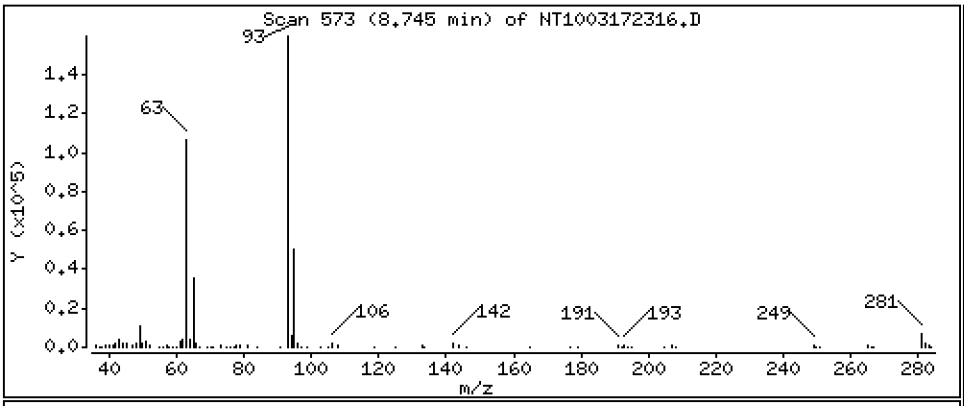
Operator: VTS

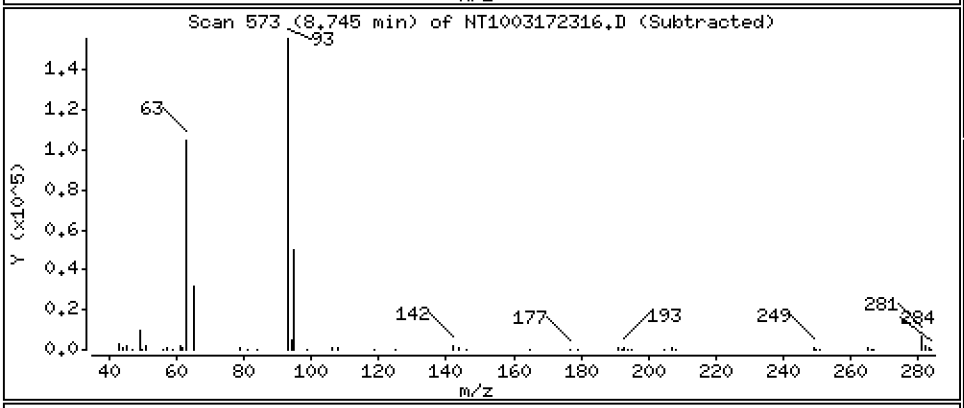
Column phase: ZB-5msi

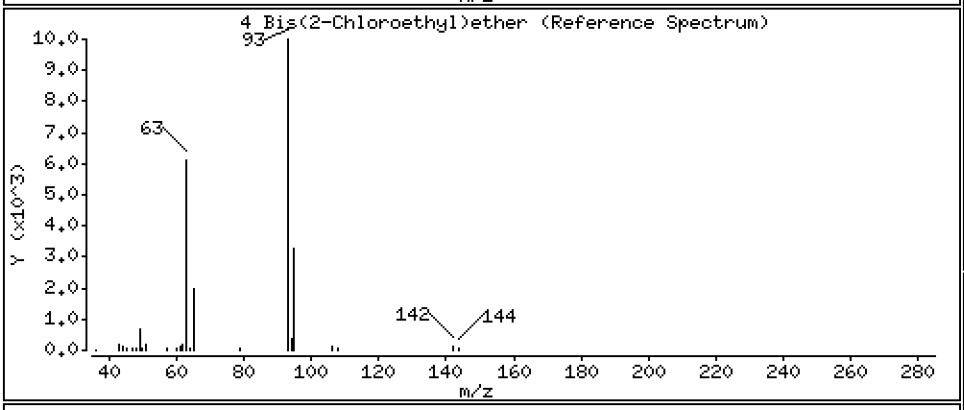
Column diameter: 0.25

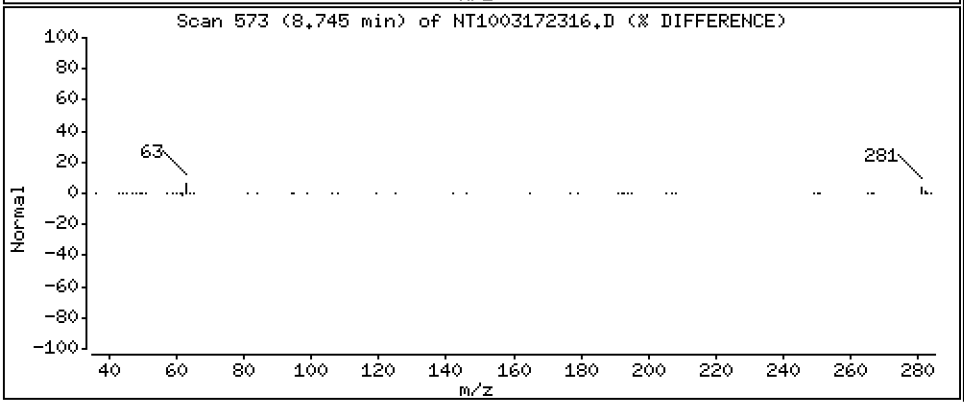
4 Bis(2-Chloroethyl)ether

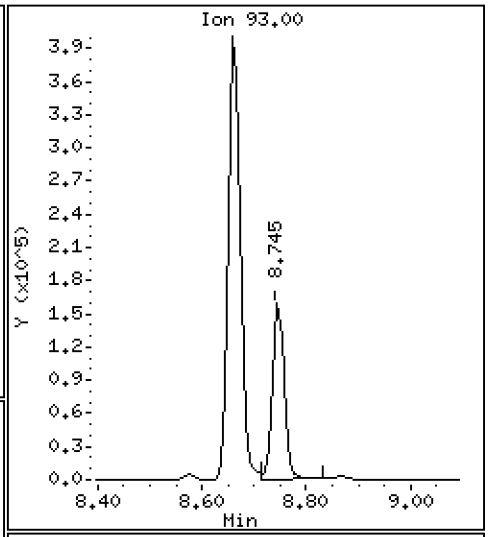
Concentration: 5.128 ug/mL

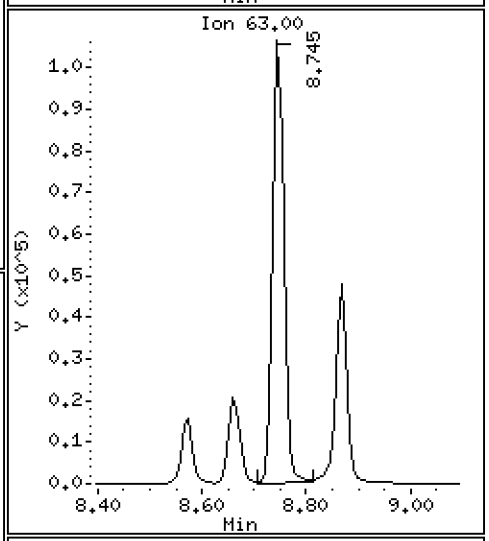


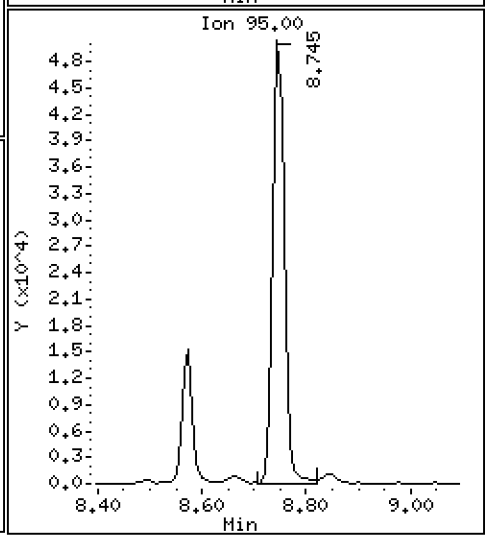












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

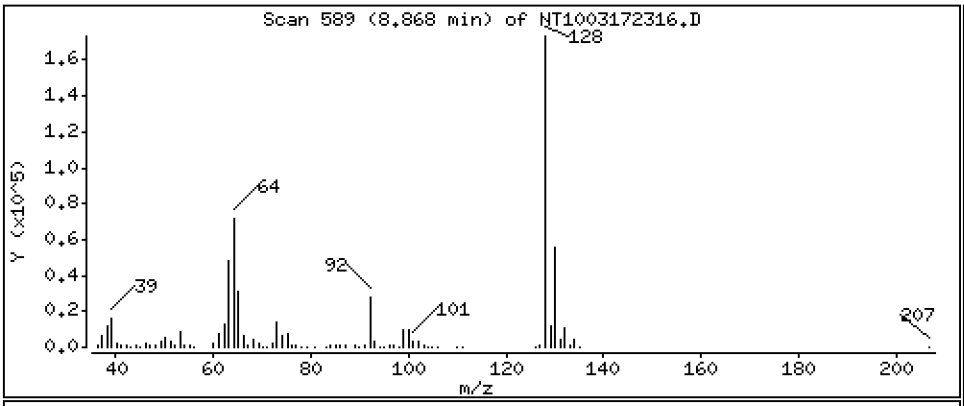
Operator: VTS

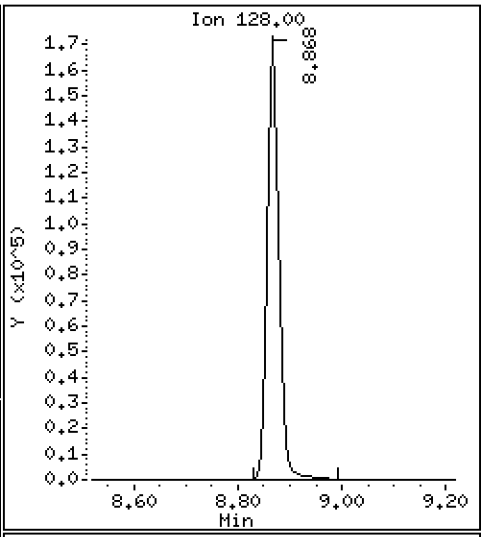
Column phase: ZB-5msi

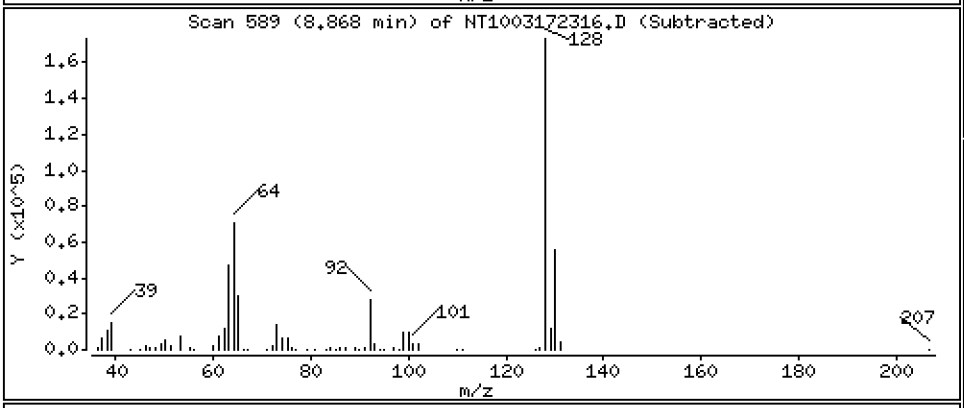
Column diameter: 0.25

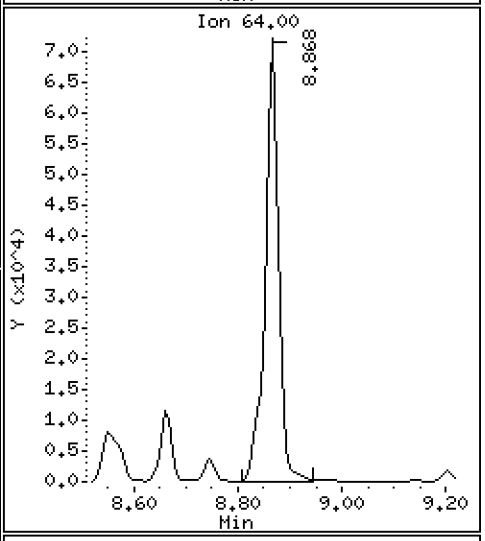
6 2-Chlorophenol

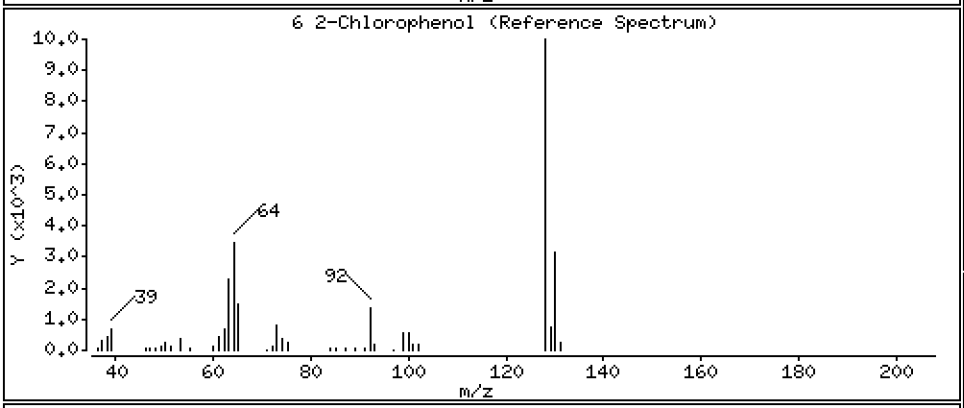
Concentration: 5.043 ug/mL

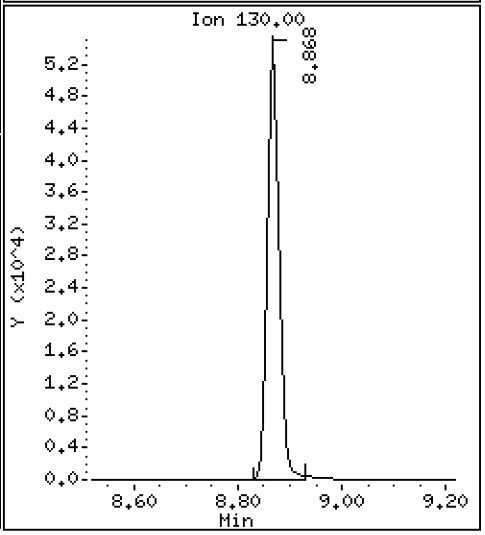


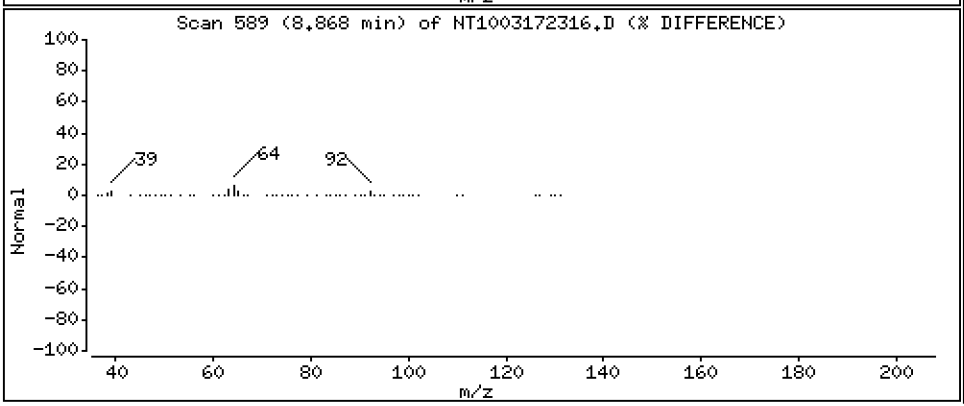












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

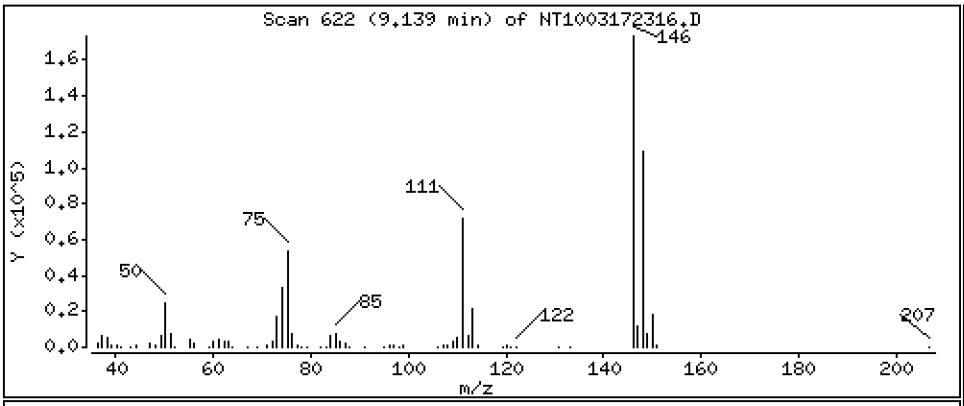
Operator: VTS

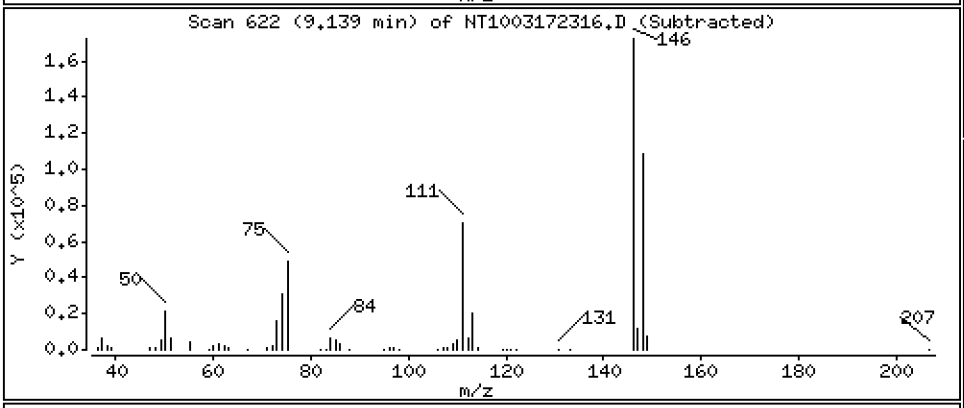
Column phase: ZB-5msi

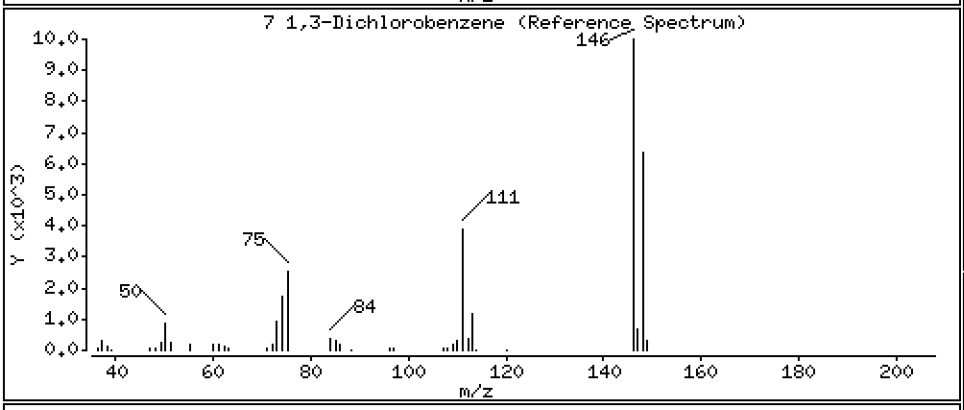
Column diameter: 0.25

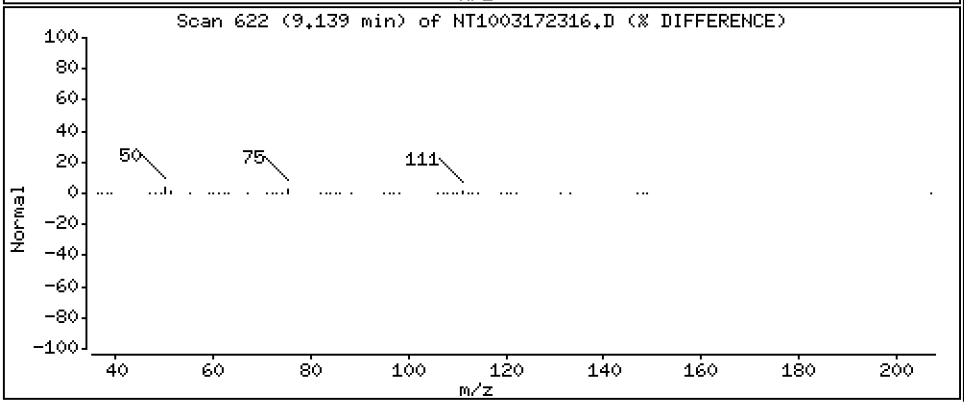
7 1,3-Dichlorobenzene

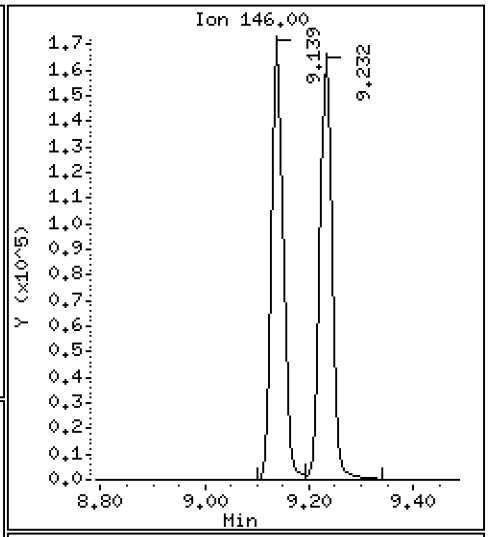
Concentration: 4.840 ug/mL

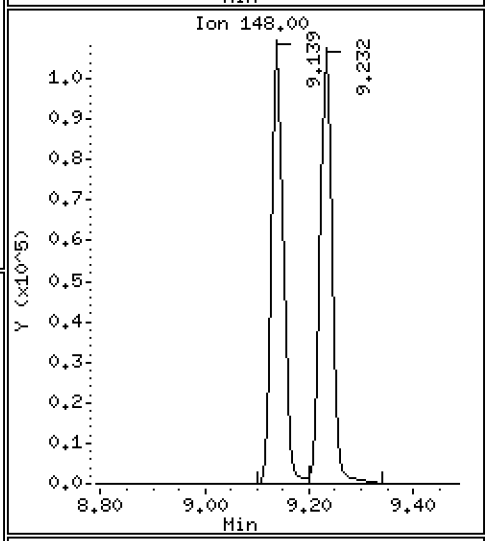


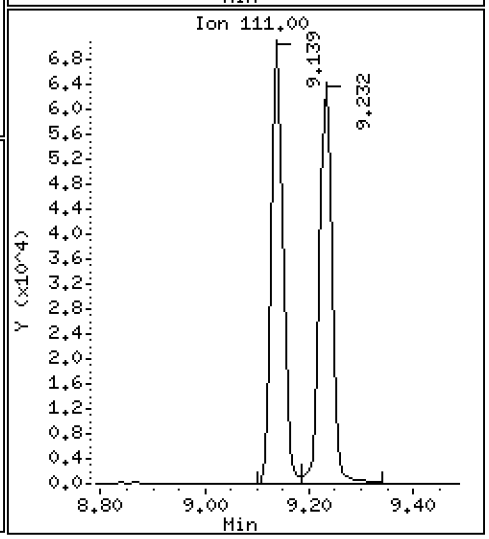












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

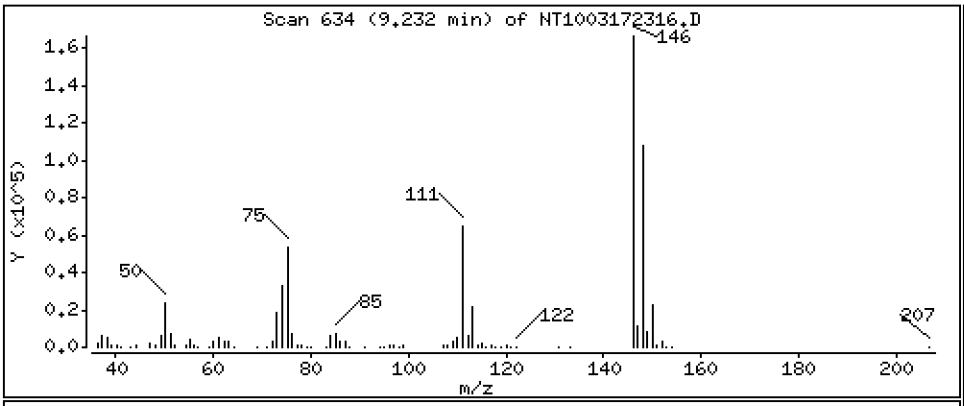
Operator: VTS

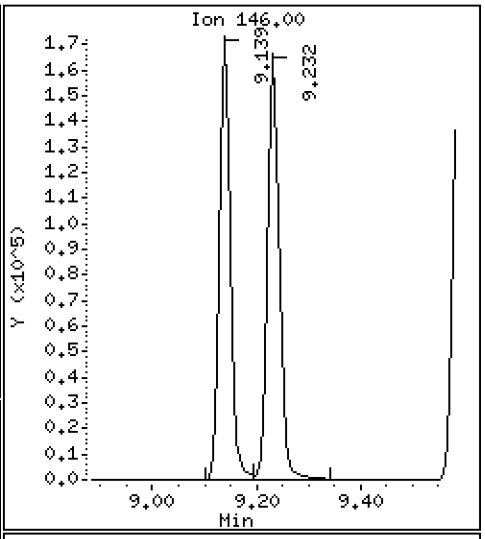
Column phase: ZB-5msi

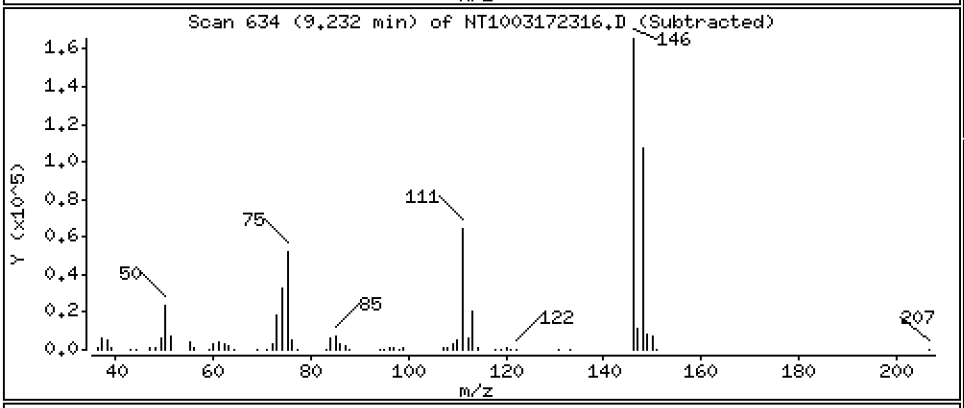
Column diameter: 0.25

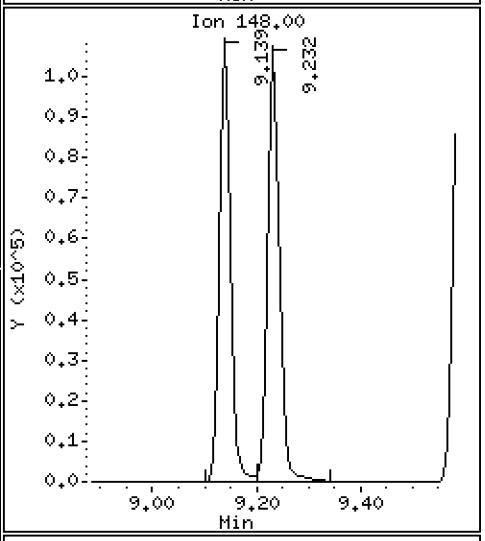
9 1,4-Dichlorobenzene

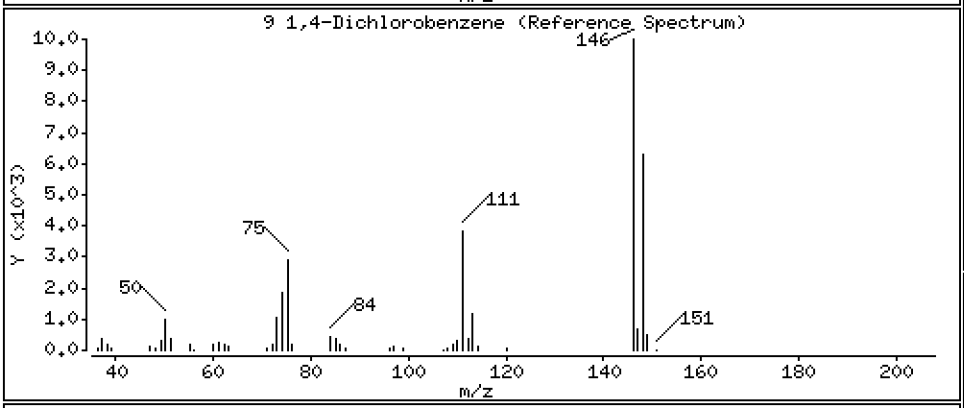
Concentration: 4.859 ug/mL

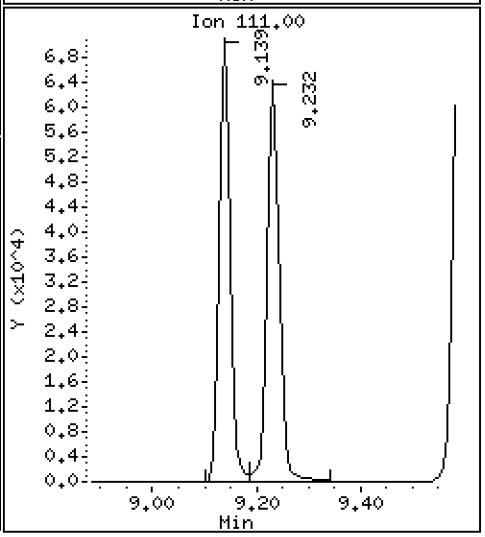


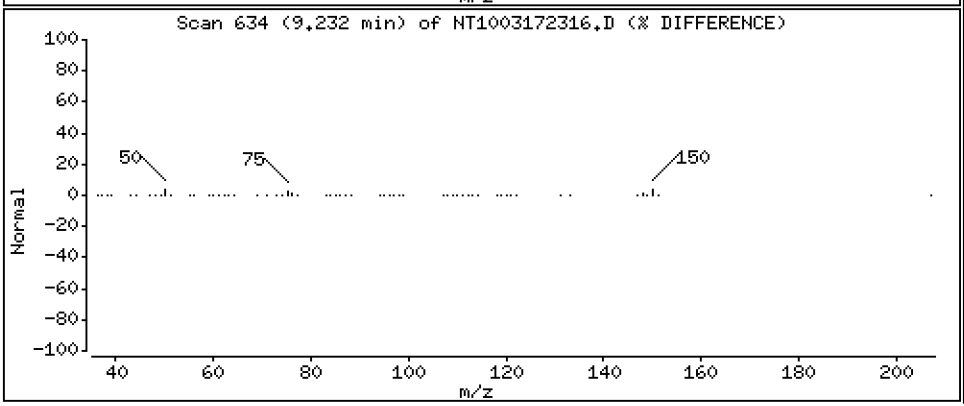












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

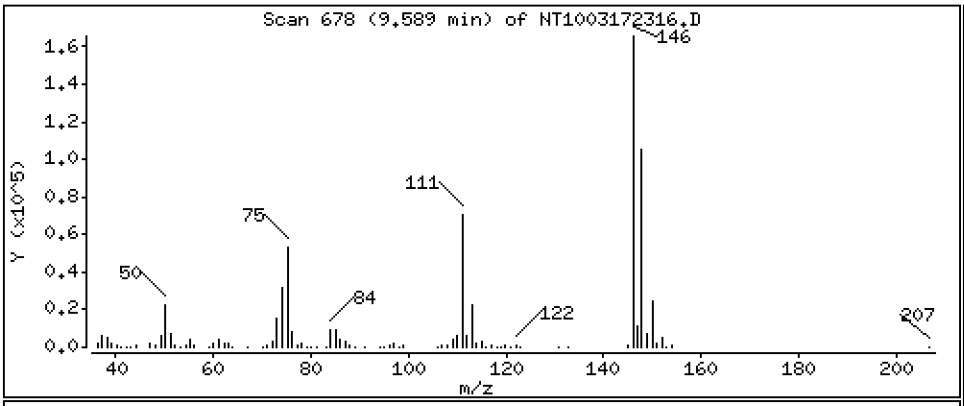
Operator: VTS

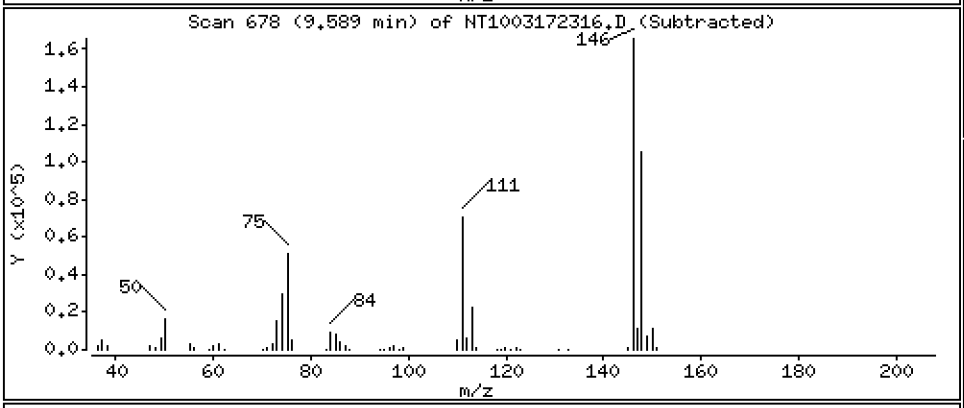
Column phase: ZB-5msi

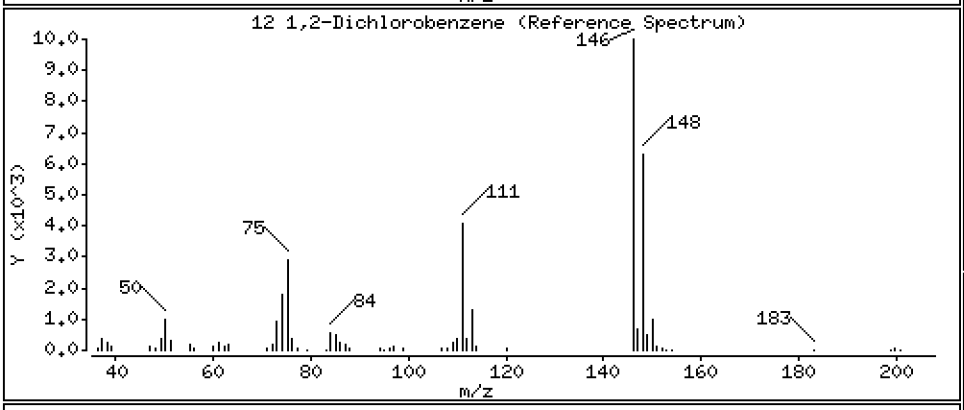
Column diameter: 0.25

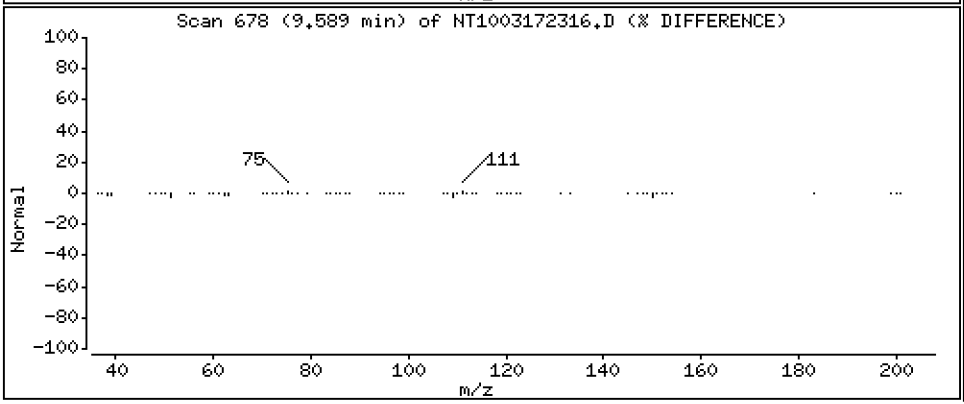
12 1,2-Dichlorobenzene

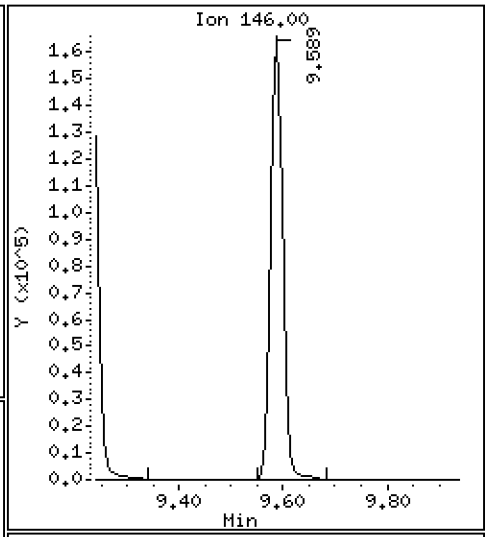
Concentration: 4.867 ug/mL

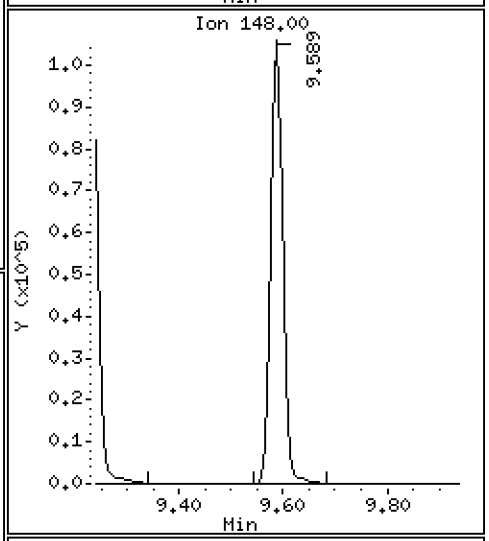


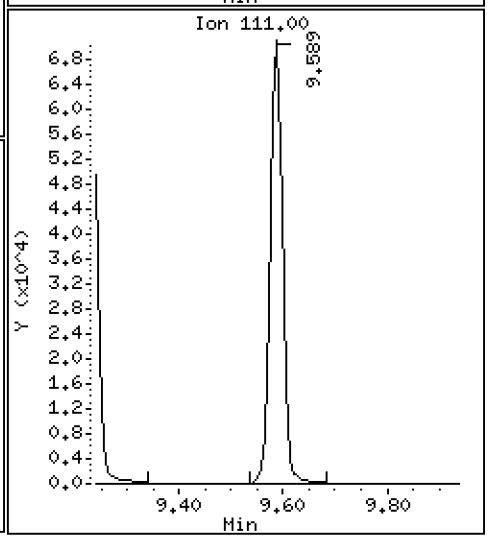












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

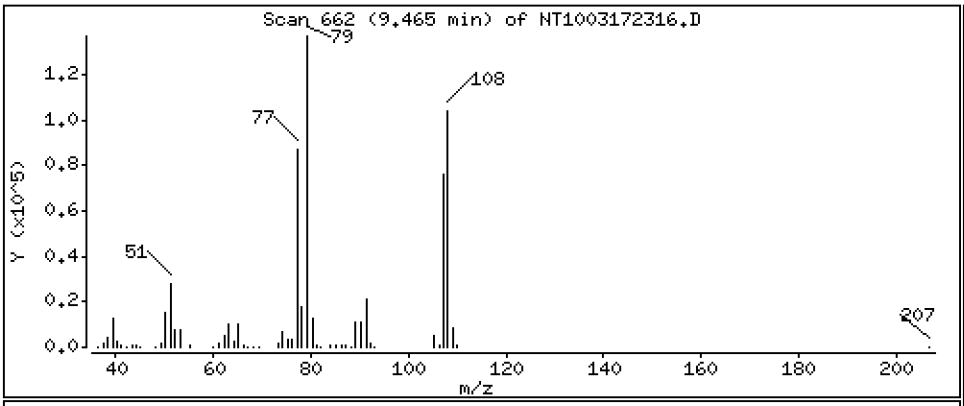
Operator: VTS

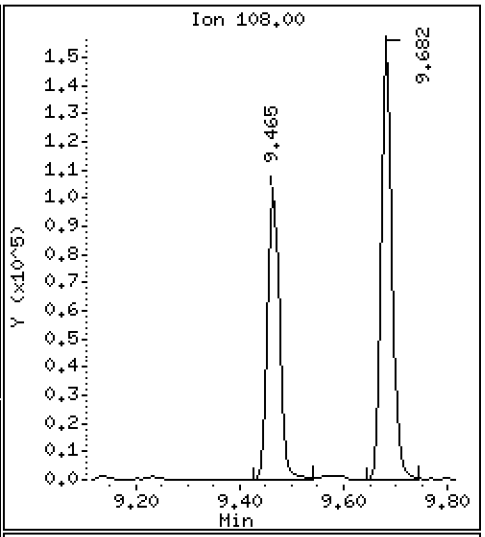
Column phase: ZB-5msi

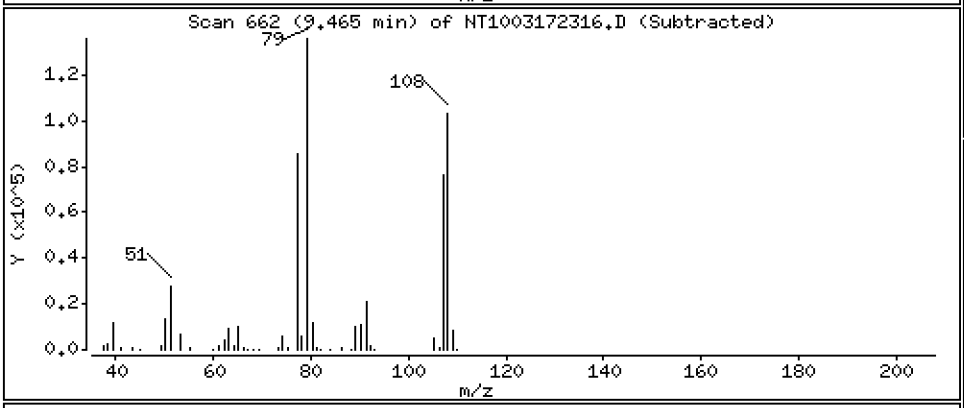
Column diameter: 0.25

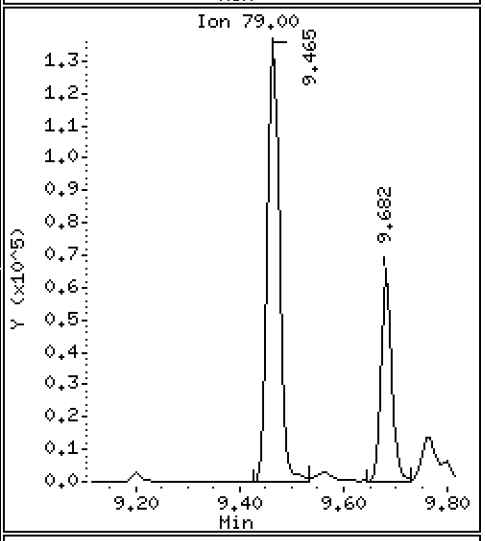
11 Benzyl alcohol

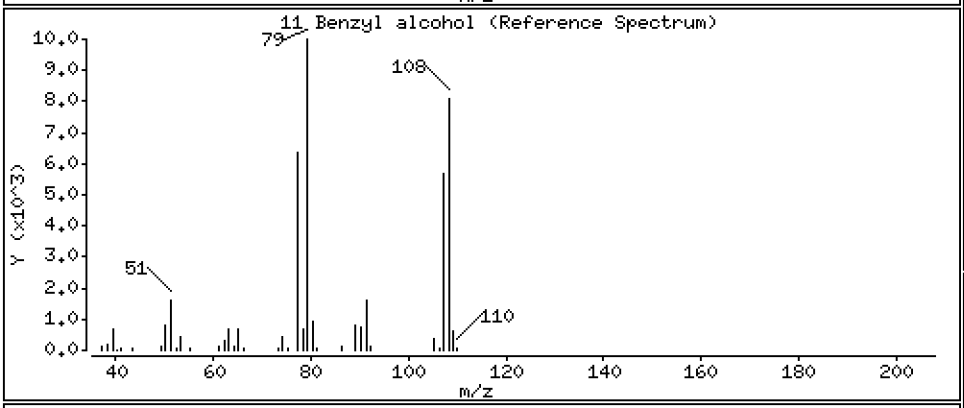
Concentration: 5.490 ug/mL

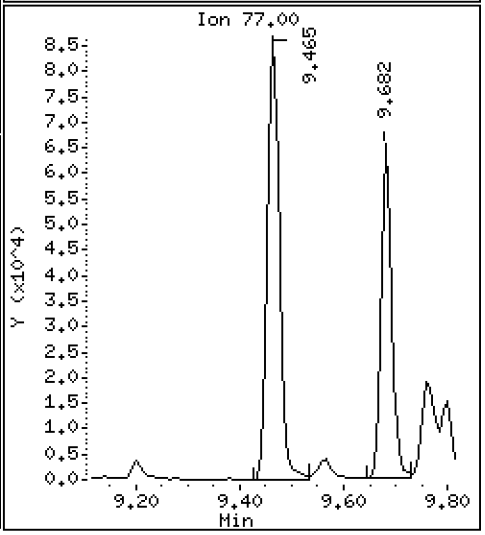


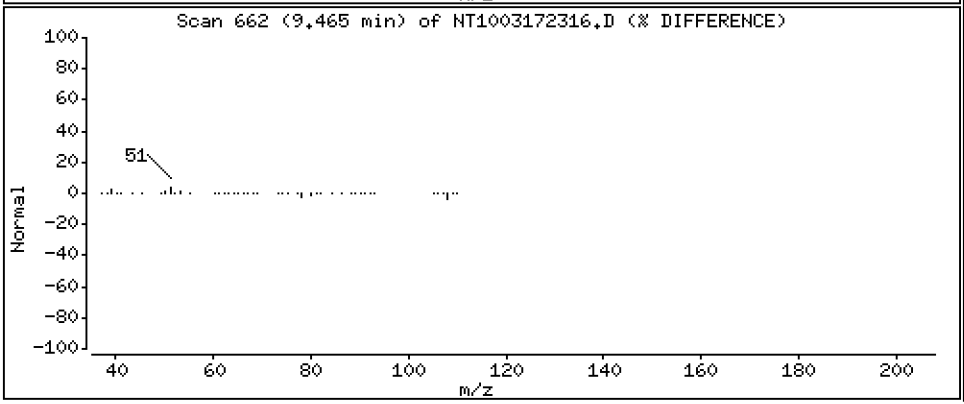












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

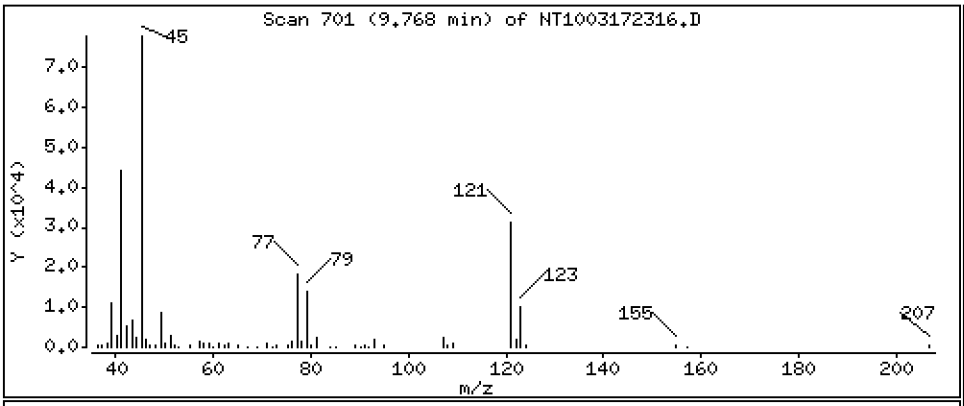
Operator: VTS

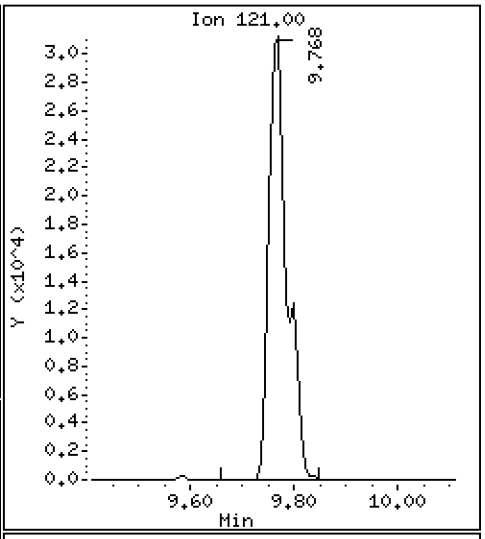
Column phase: ZB-5msi

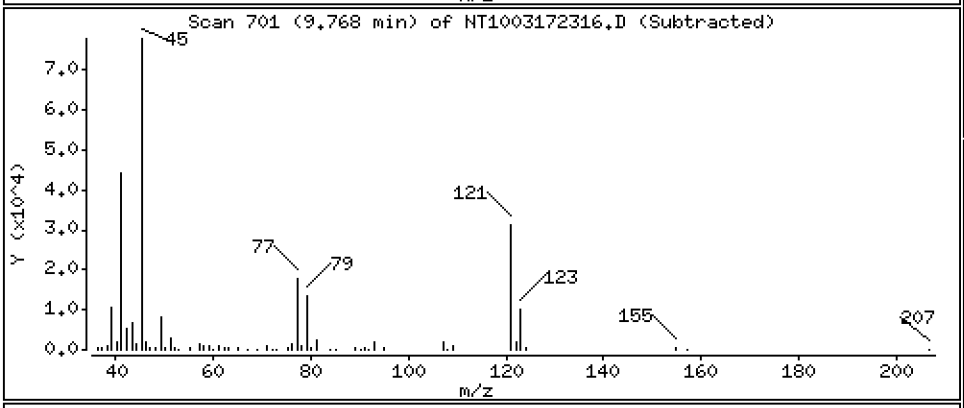
Column diameter: 0.25

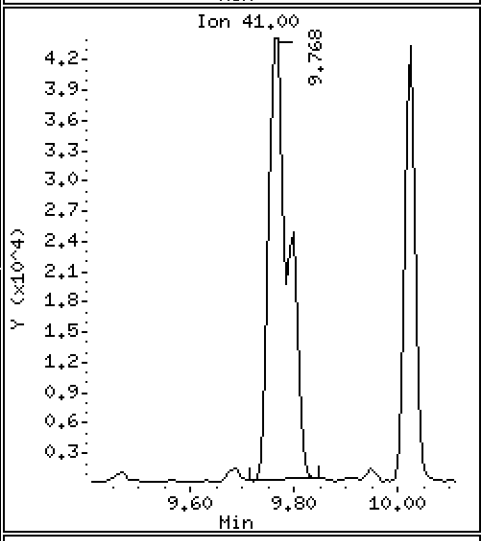
14 2,2'-oxybis(1-Chloropropane)

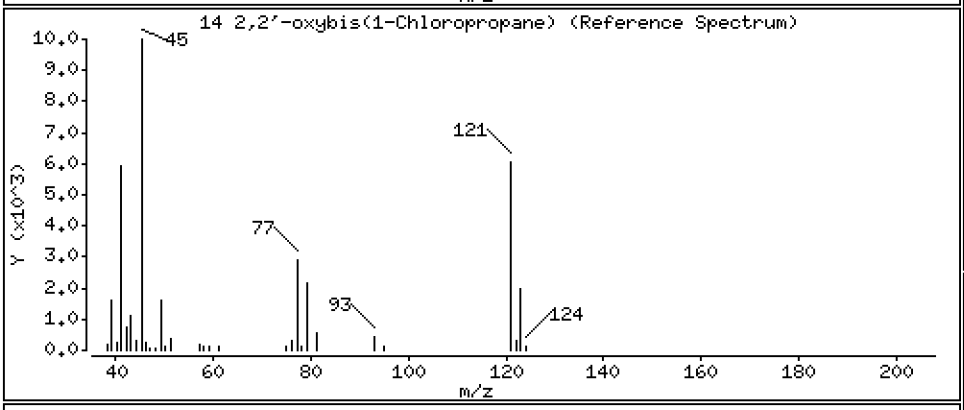
Concentration: 4.907 ug/mL

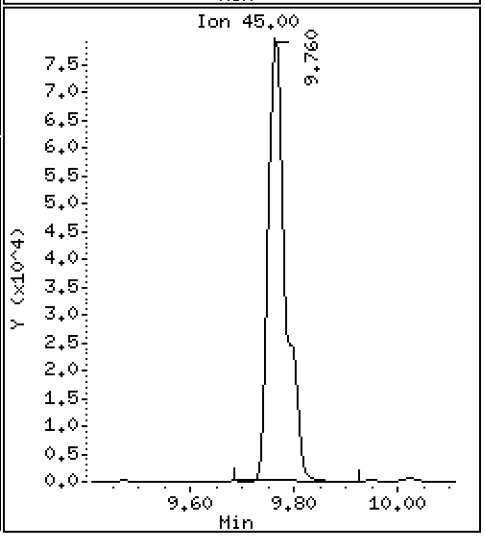


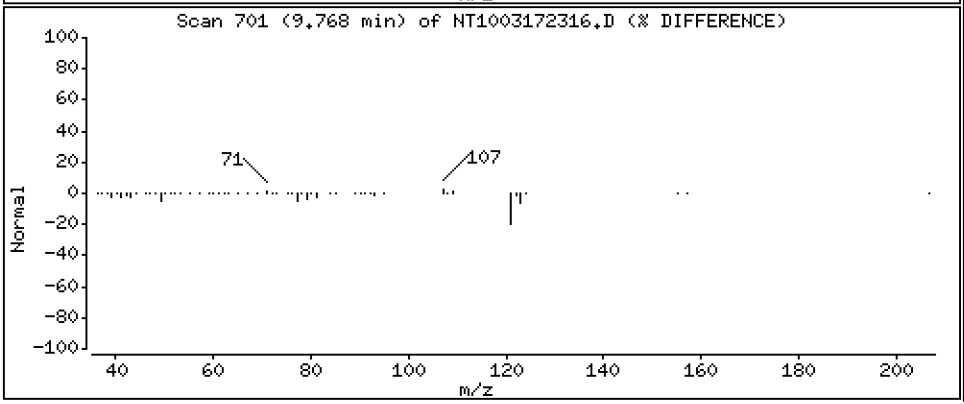












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

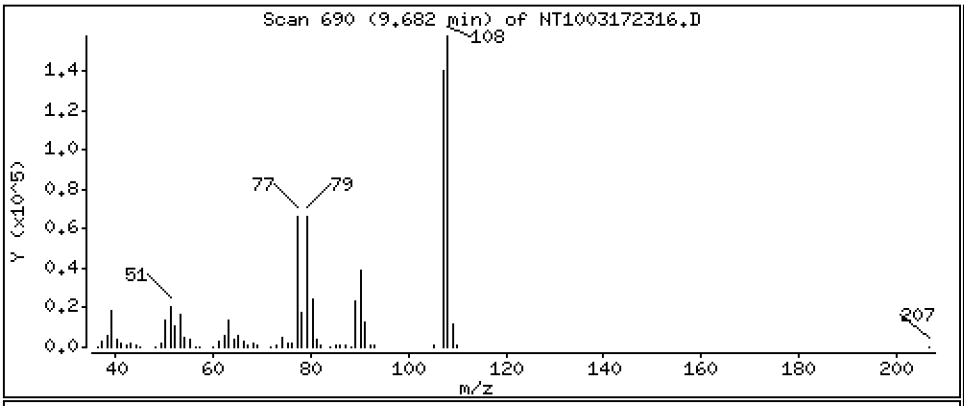
Operator: VTS

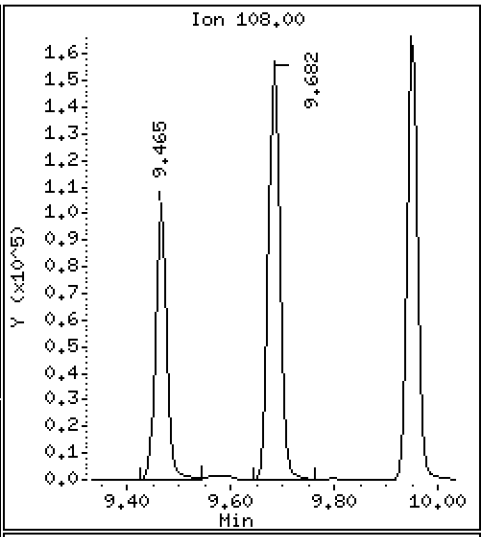
Column phase: ZB-5msi

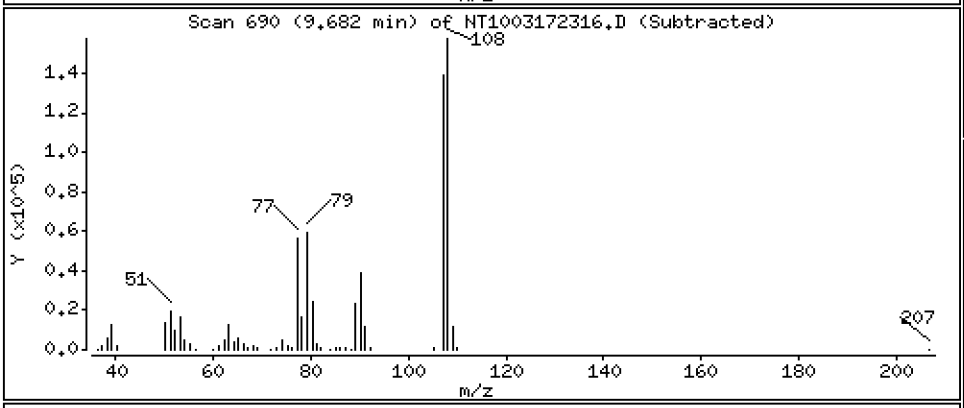
Column diameter: 0.25

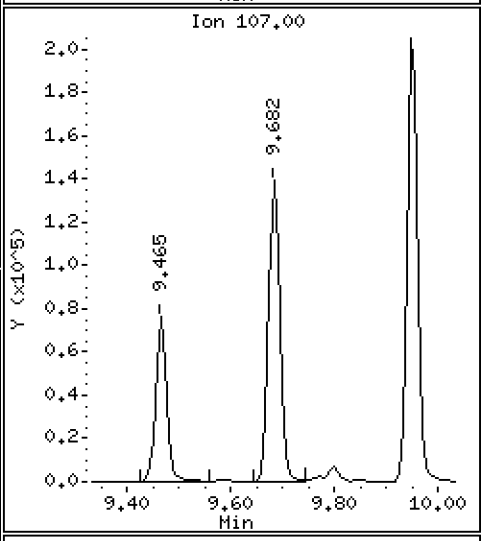
13 2-Methylphenol

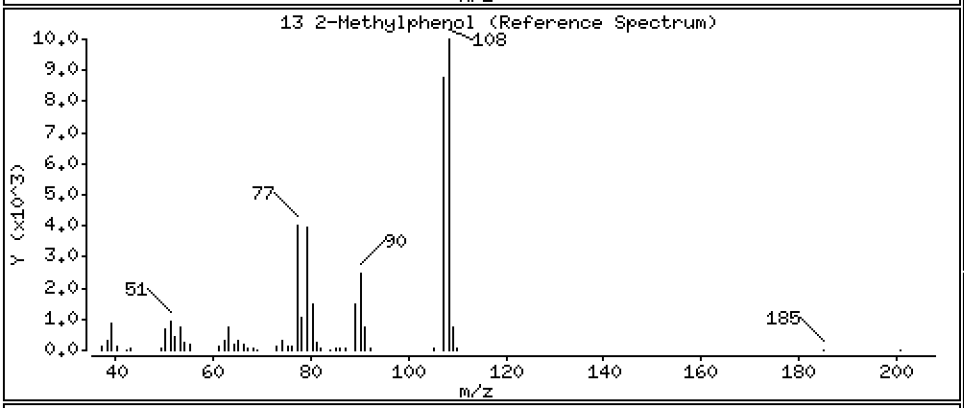
Concentration: 5.199 ug/mL

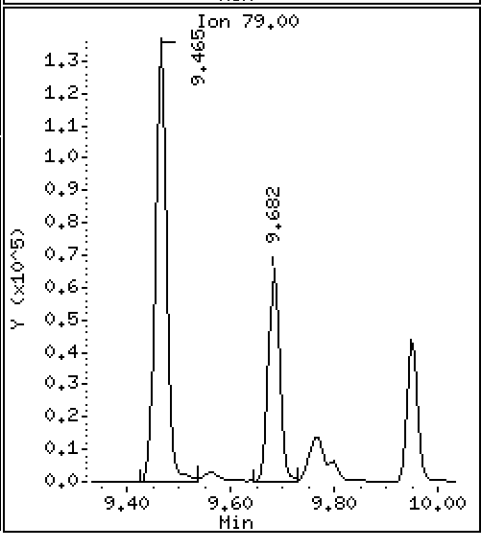


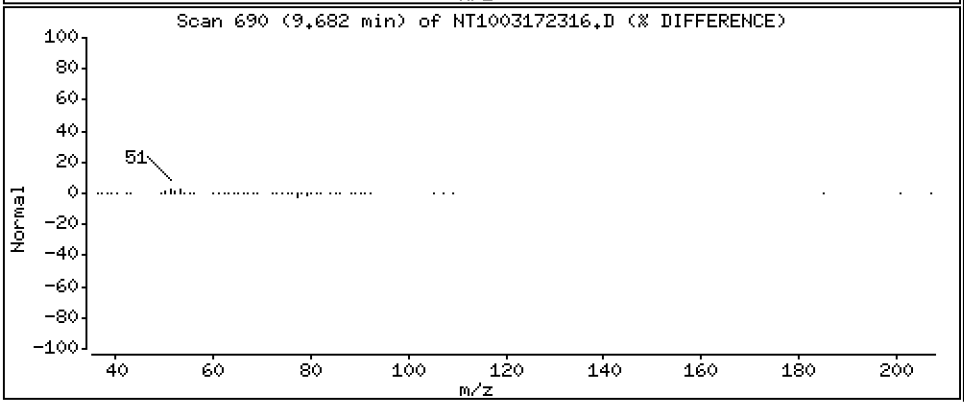












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

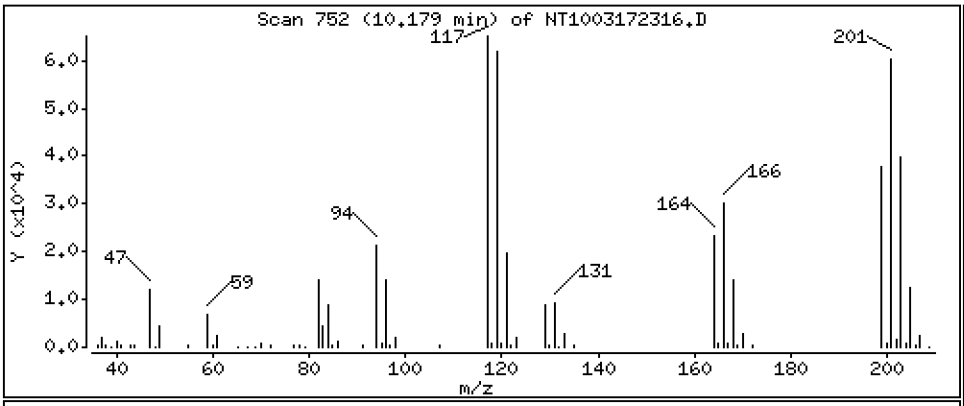
Operator: VTS

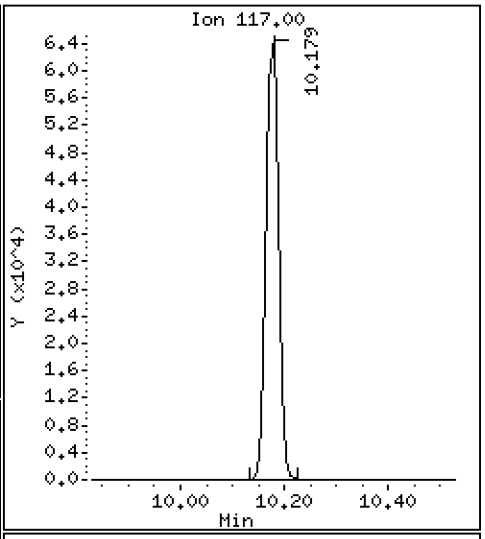
Column phase: ZB-5msi

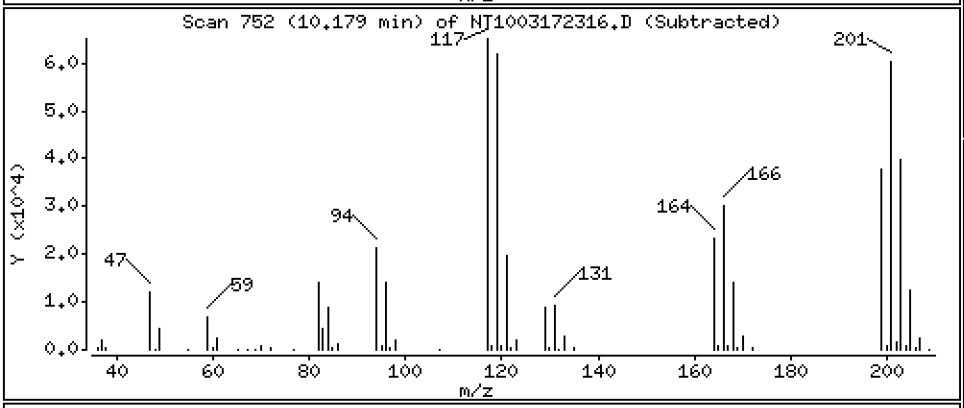
Column diameter: 0.25

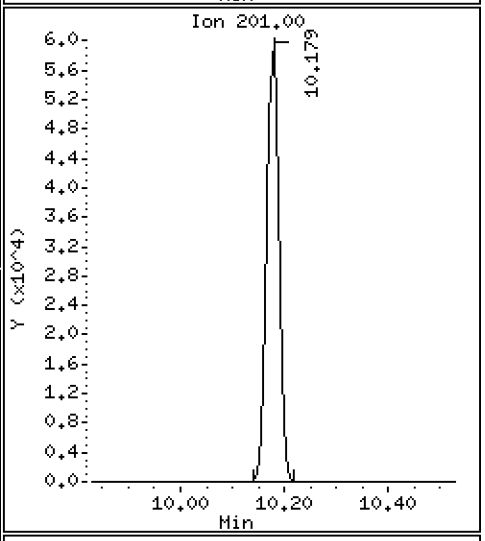
17 Hexachloroethane

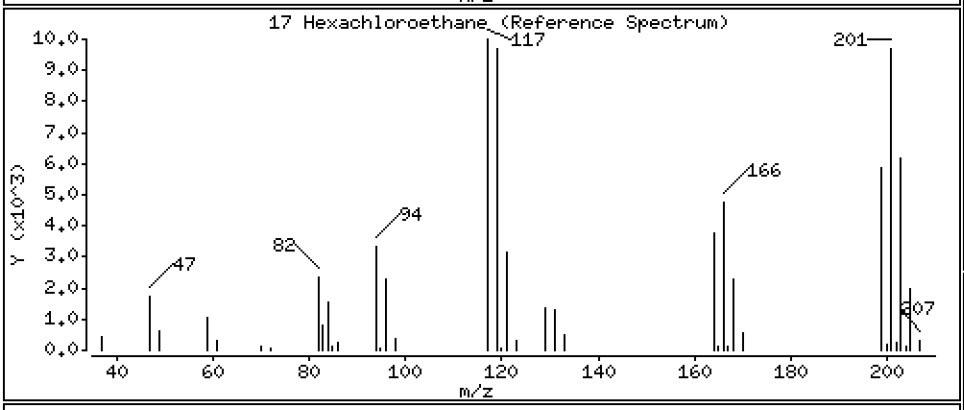
Concentration: 4.710 ug/mL

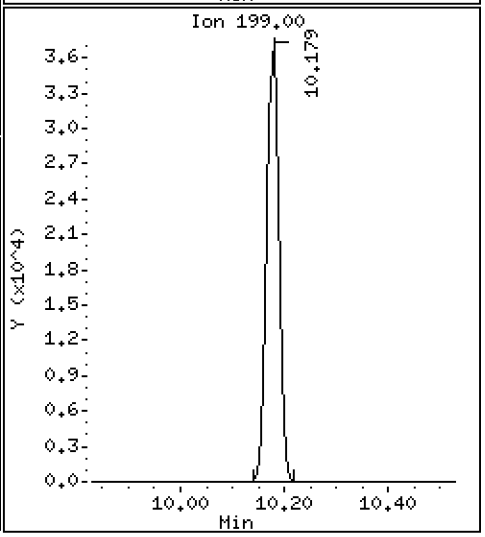


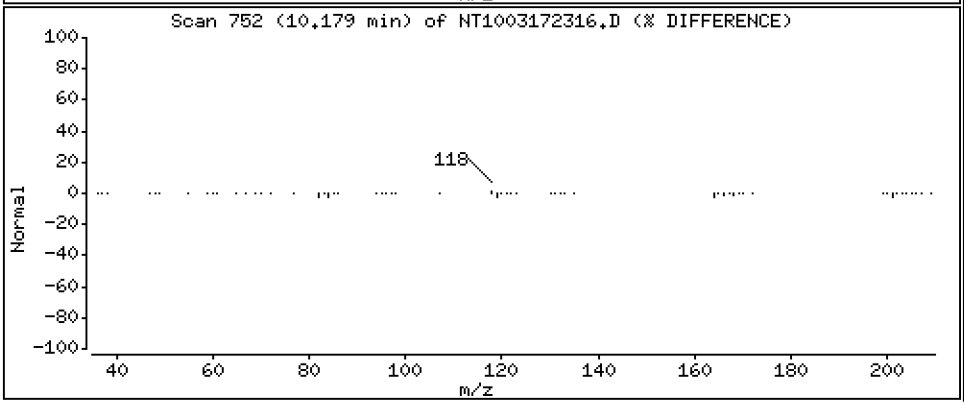












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

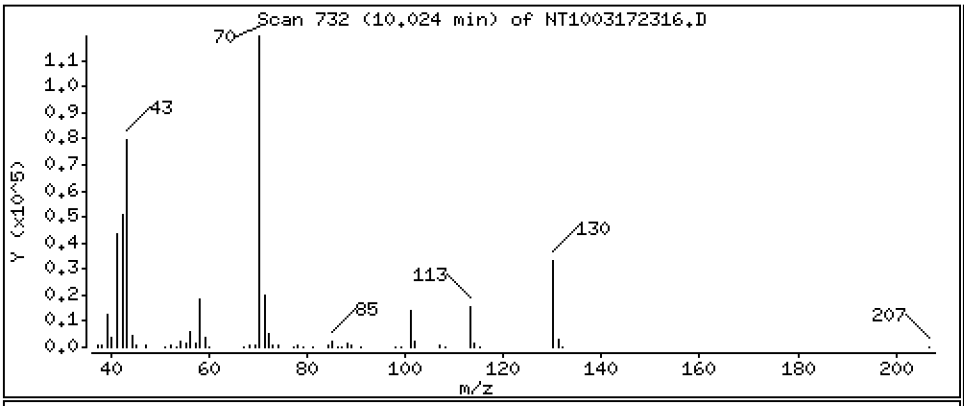
Operator: VTS

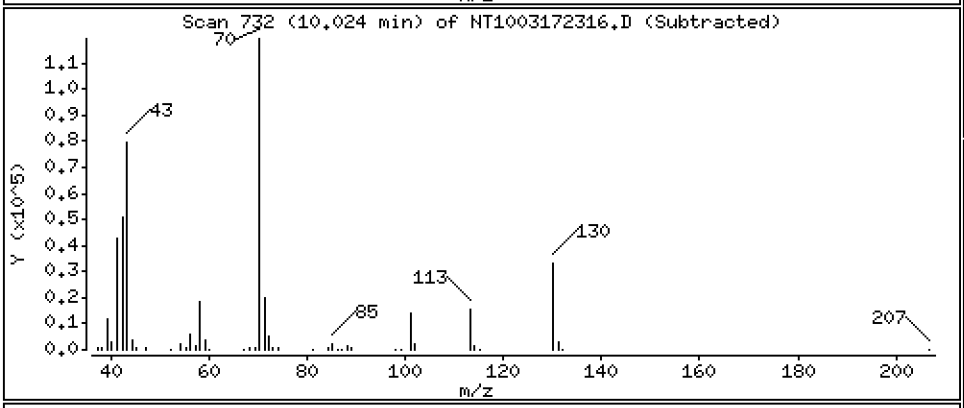
Column phase: ZB-5msi

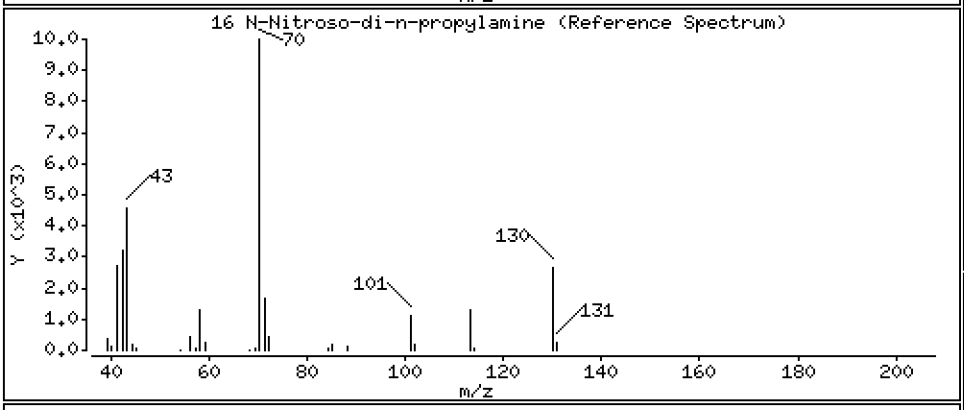
Column diameter: 0.25

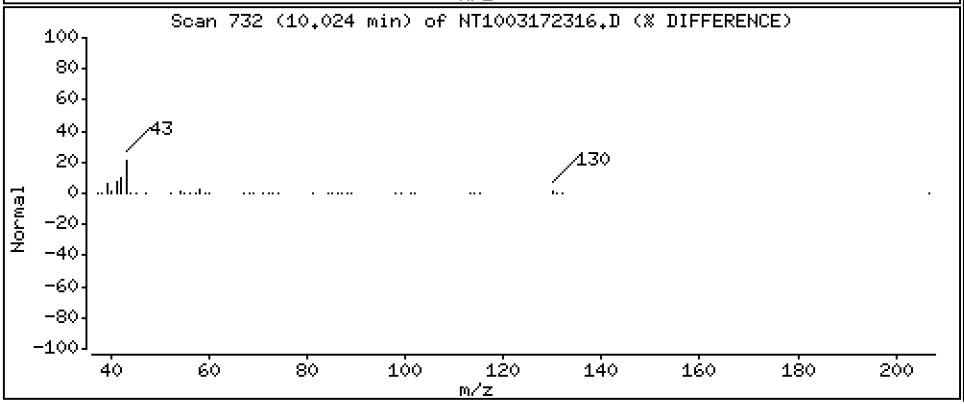
16 N-Nitroso-di-n-propylamine

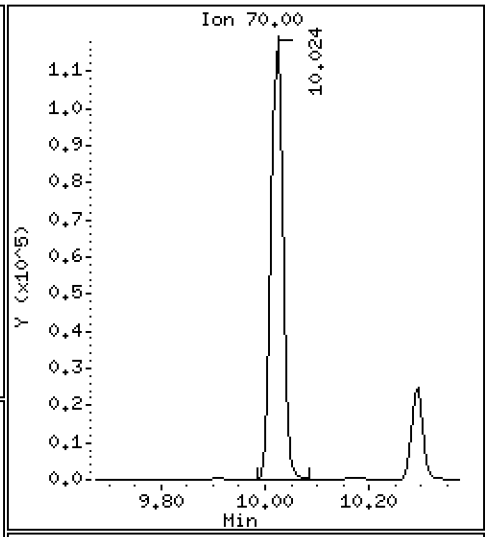
Concentration: 5.117 ug/mL

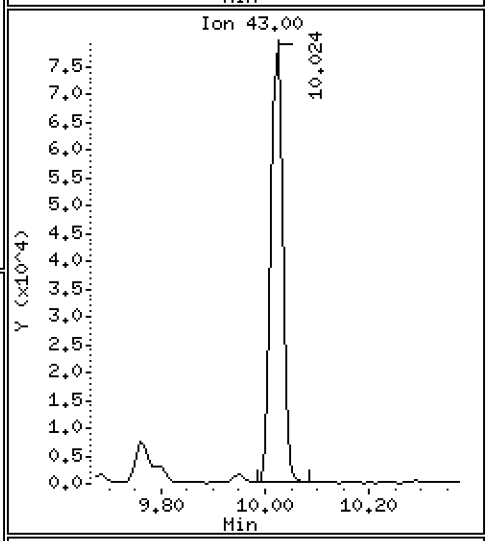


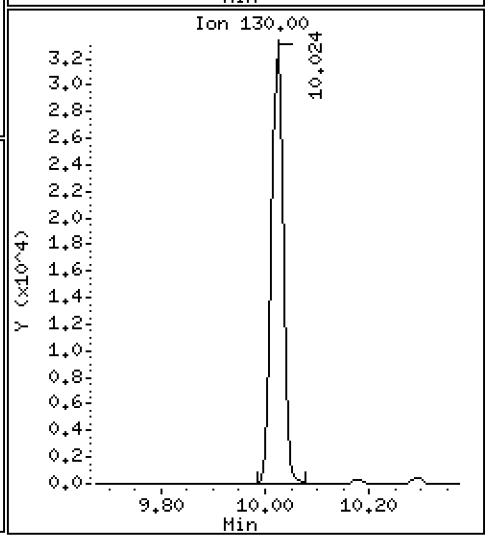












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

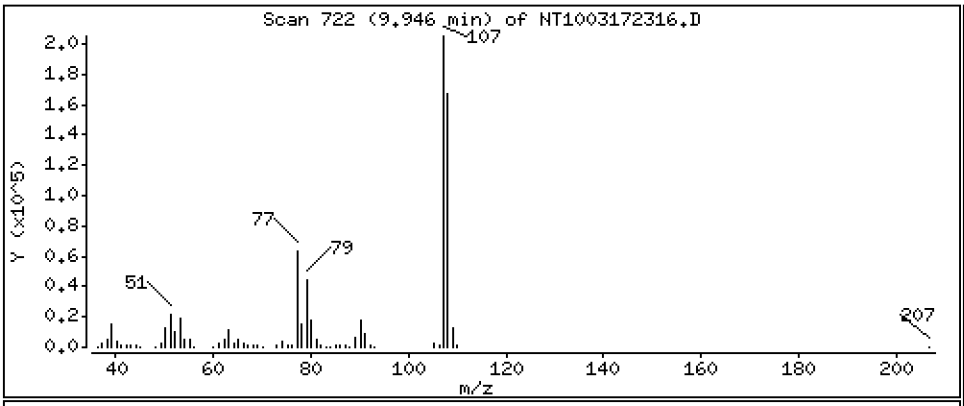
Operator: VTS

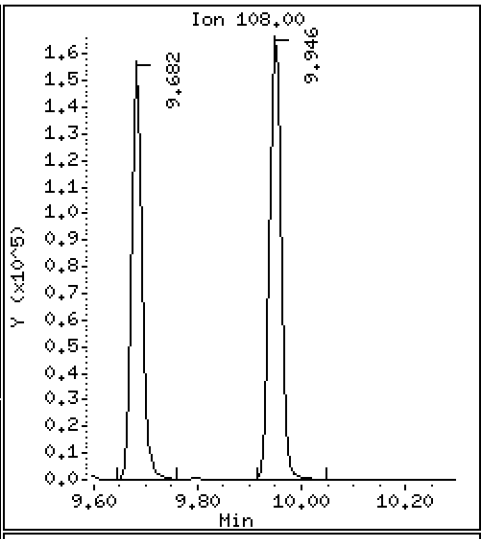
Column phase: ZB-5msi

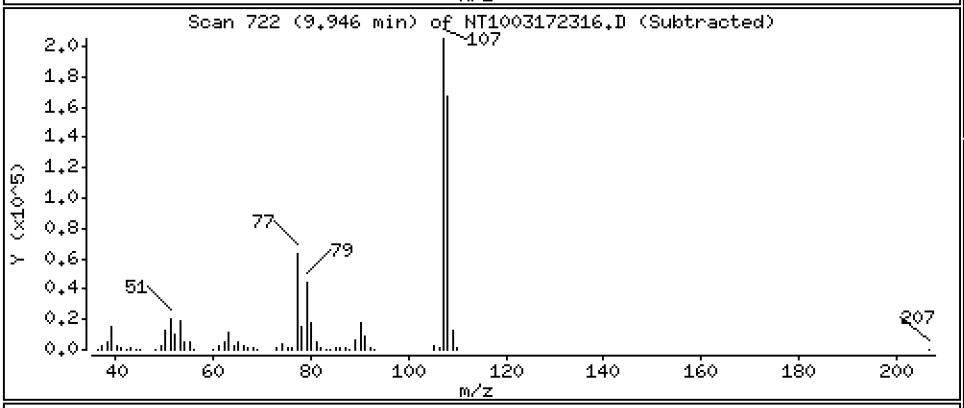
Column diameter: 0.25

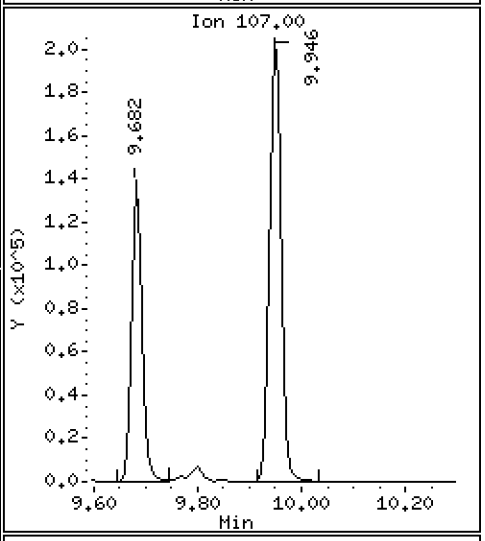
15 4-Methylphenol

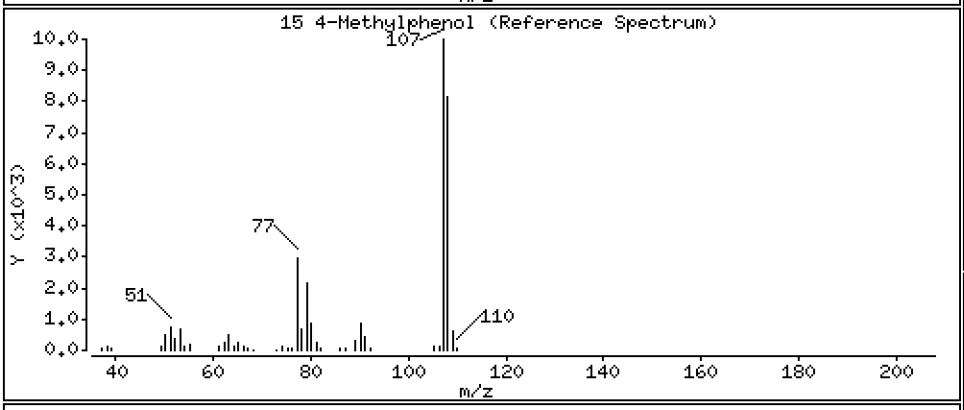
Concentration: 5.283 ug/mL

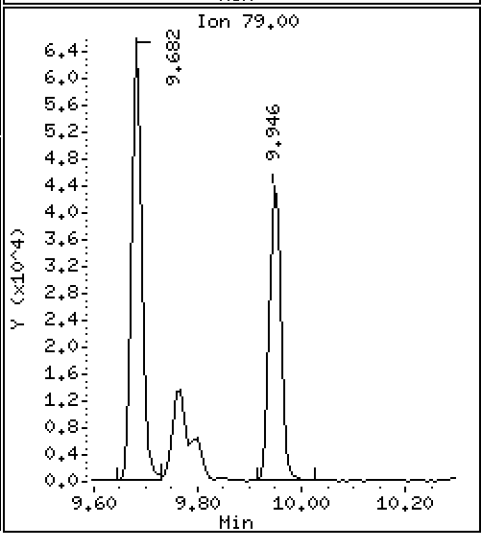


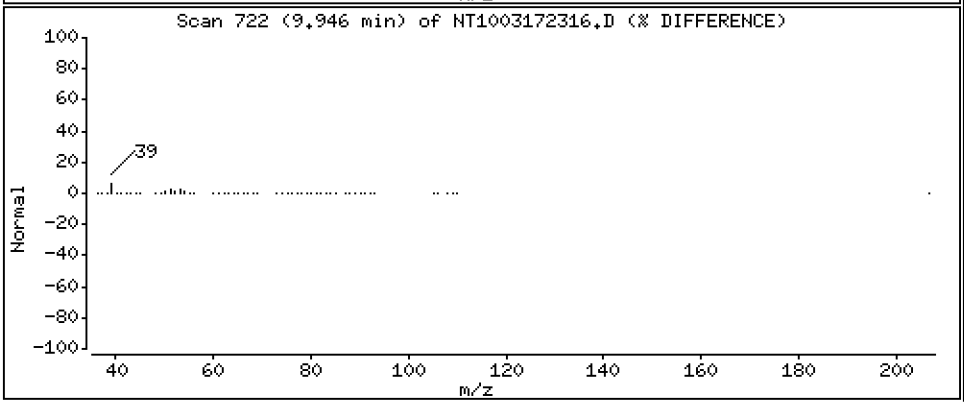












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

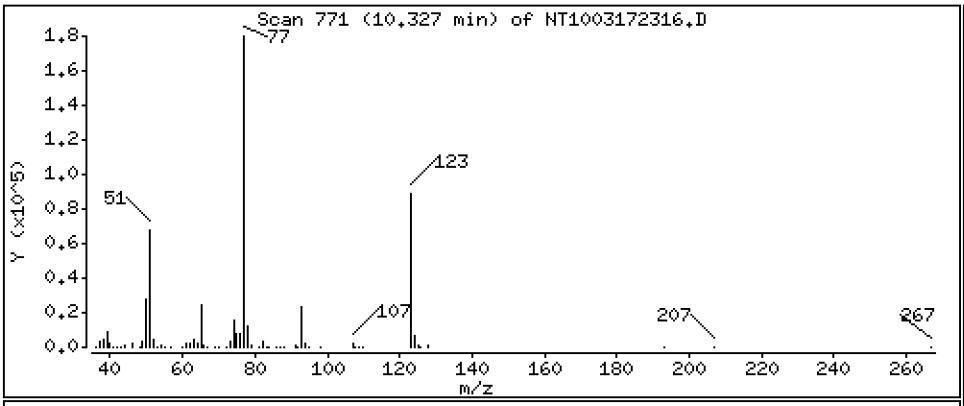
Operator: VTS

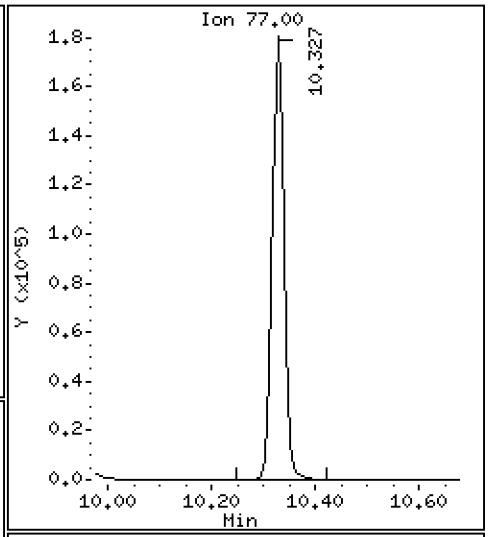
Column phase: ZB-5msi

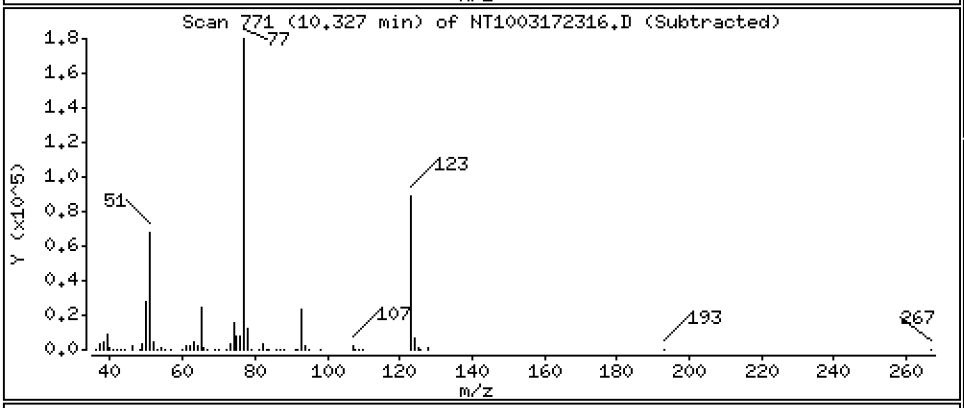
Column diameter: 0.25

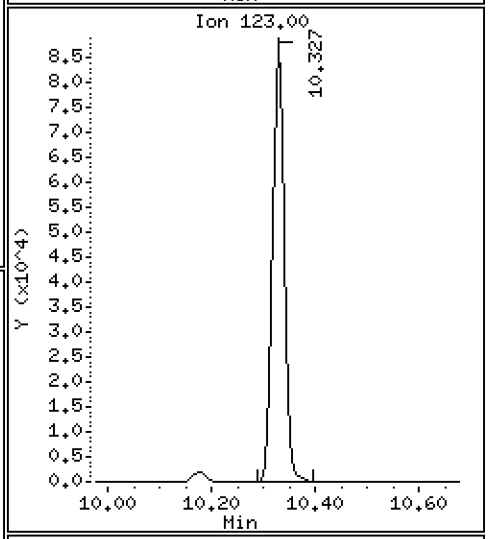
19 Nitrobenzene

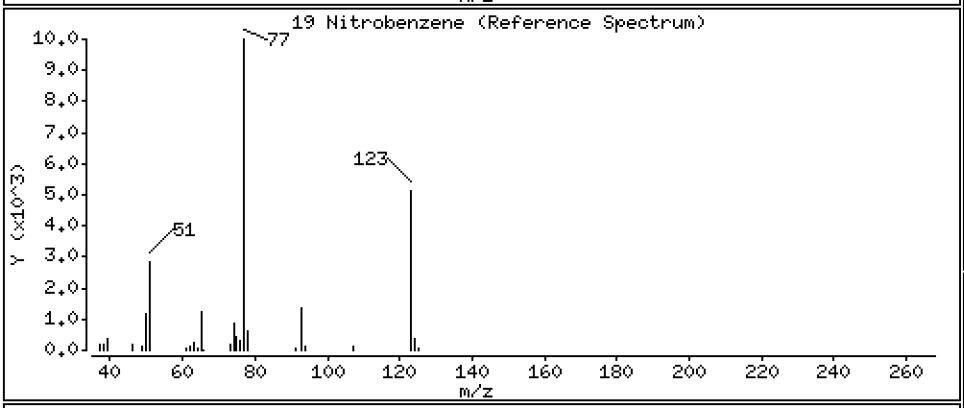
Concentration: 4.971 ug/mL

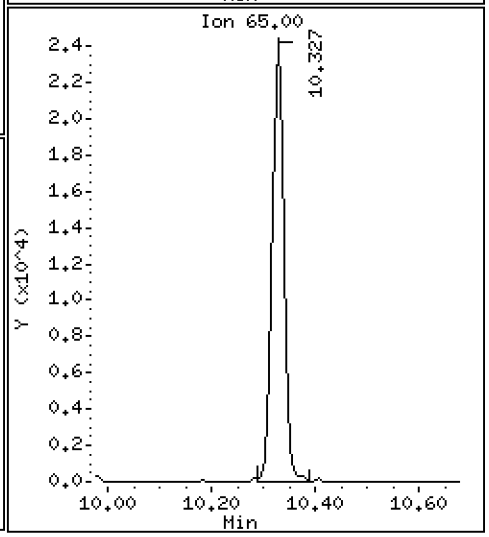


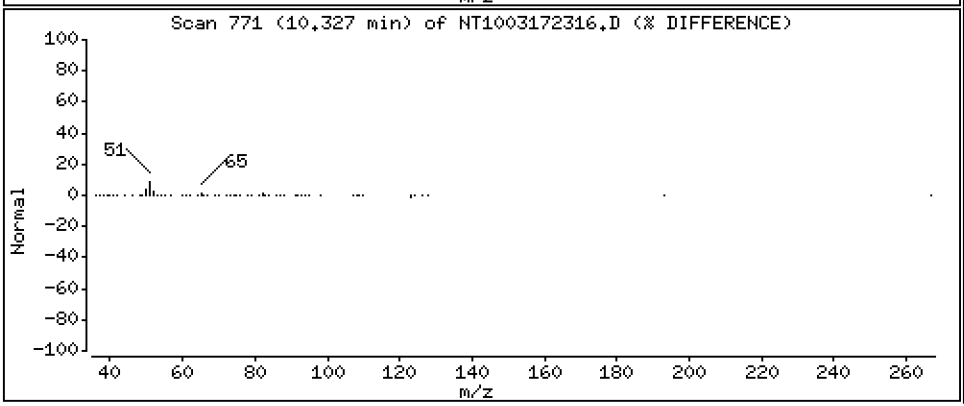












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172316.D

Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

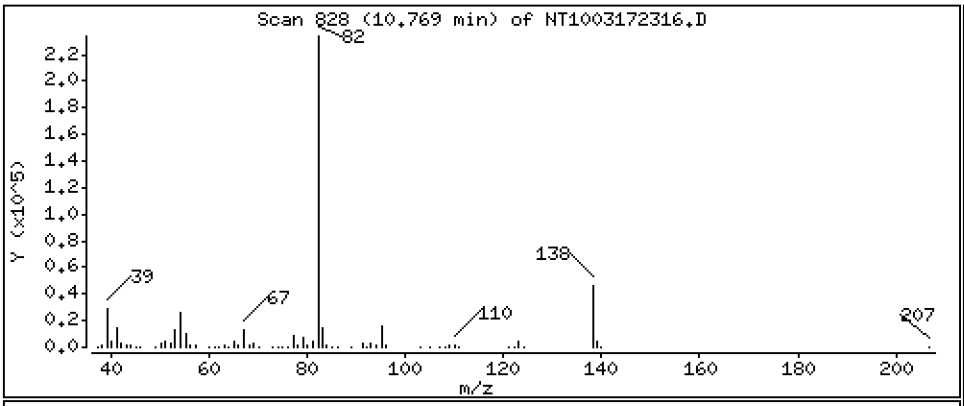
Operator: VTS

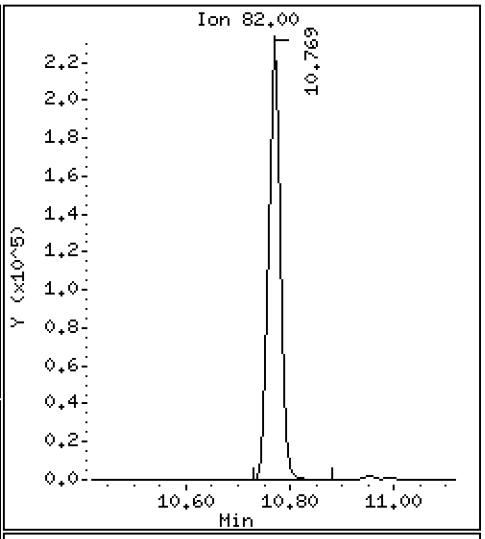
Column phase: ZB-5msi

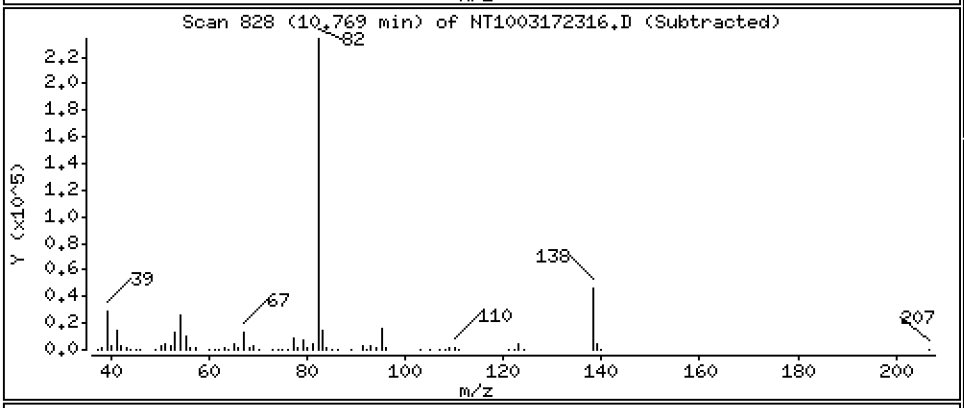
Column diameter: 0.25

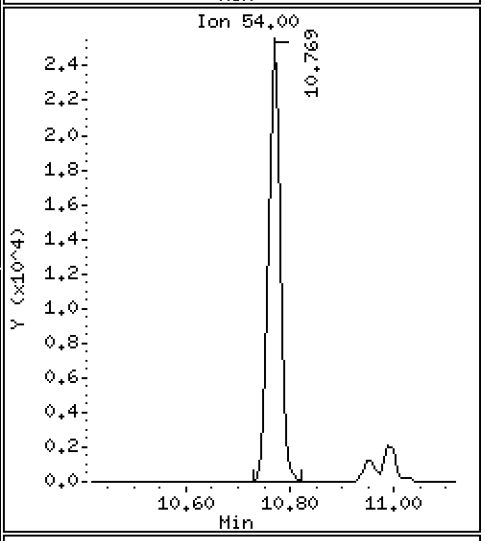
20 Isophorone

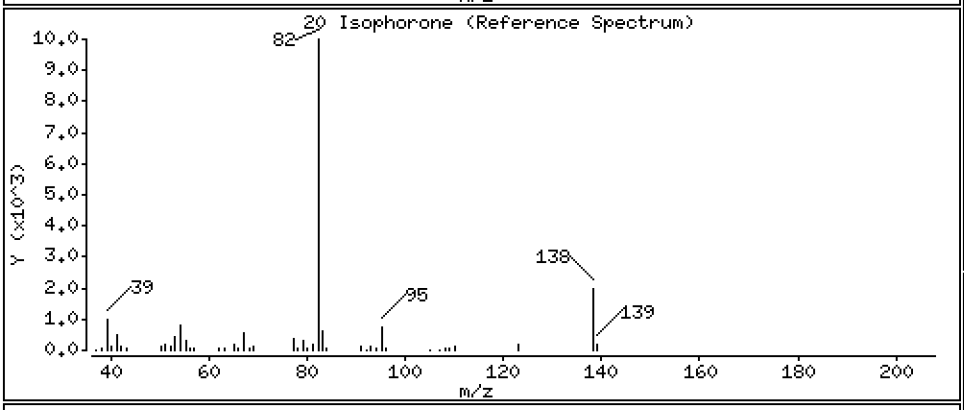
Concentration: 5.852 ug/mL

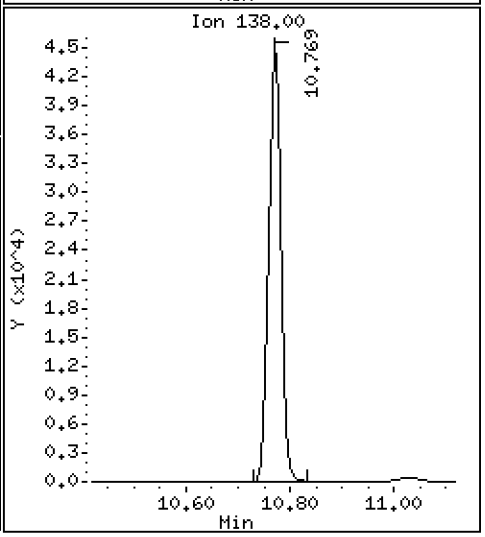


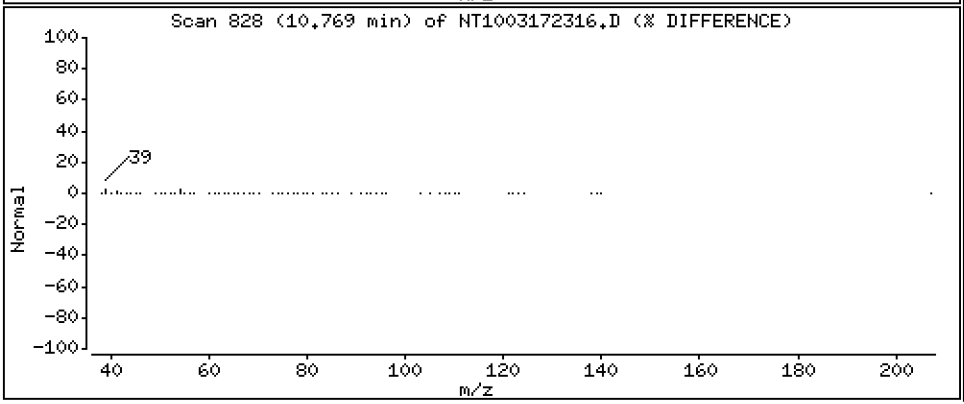












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

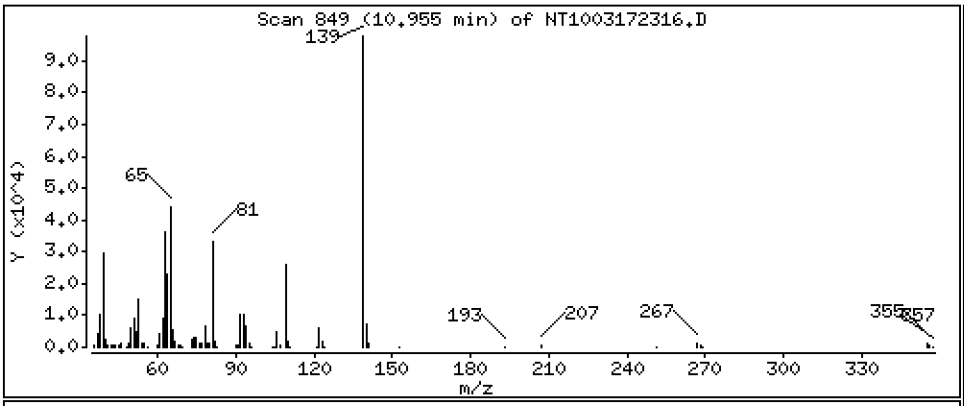
Operator: VTS

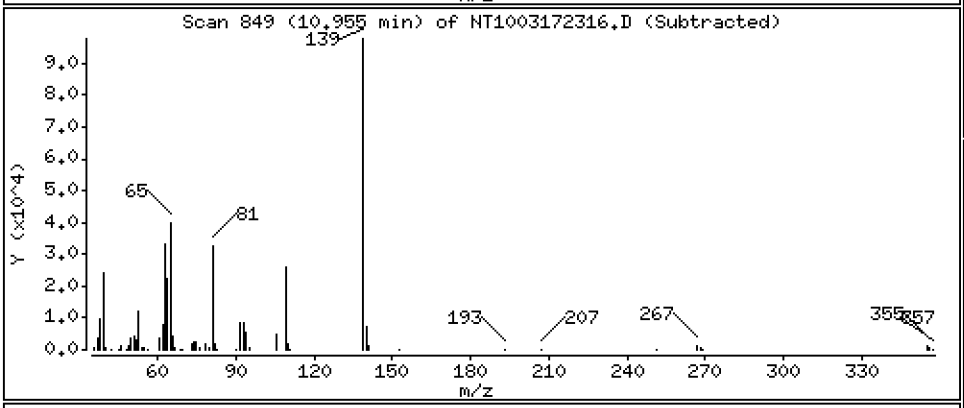
Column phase: ZB-5msi

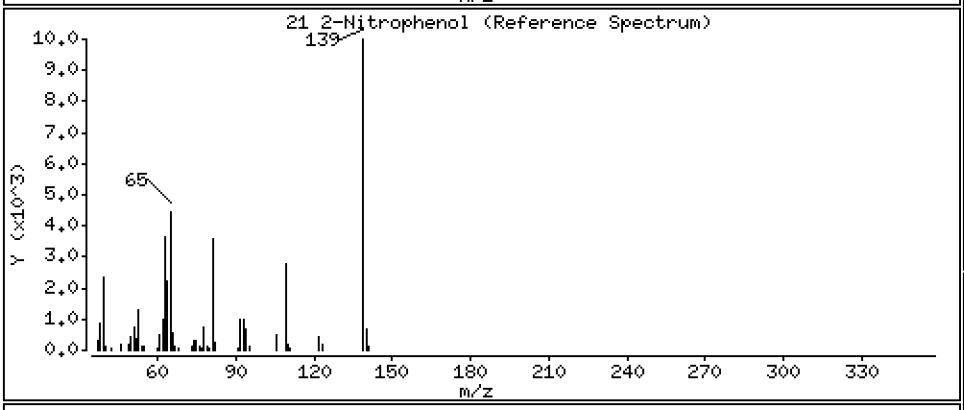
Column diameter: 0.25

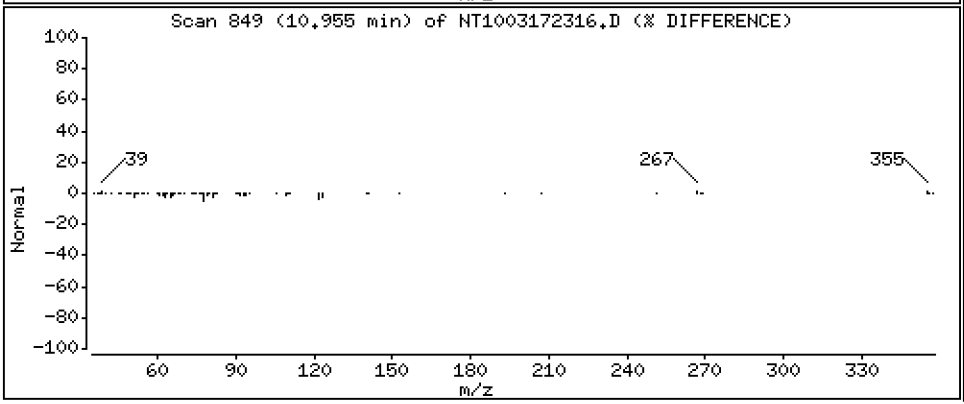
21 2-Nitrophenol

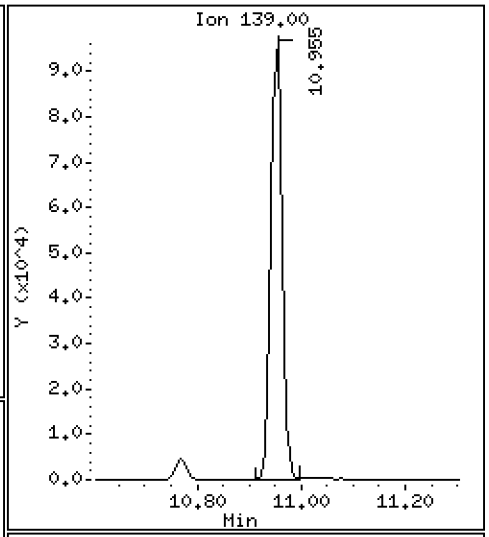
Concentration: 5.577 ug/mL

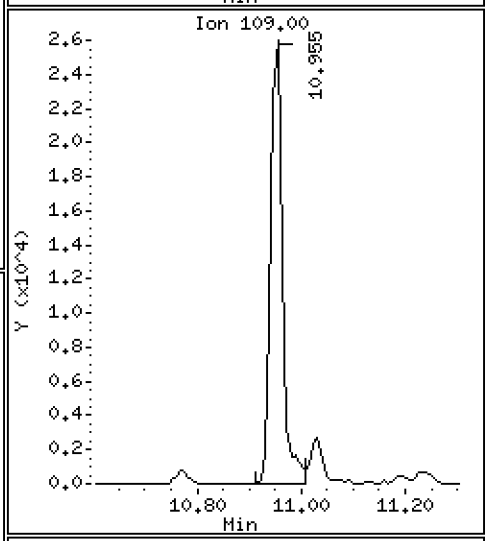


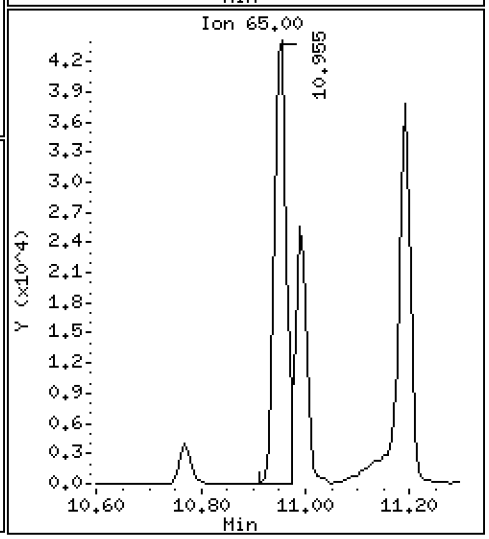












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

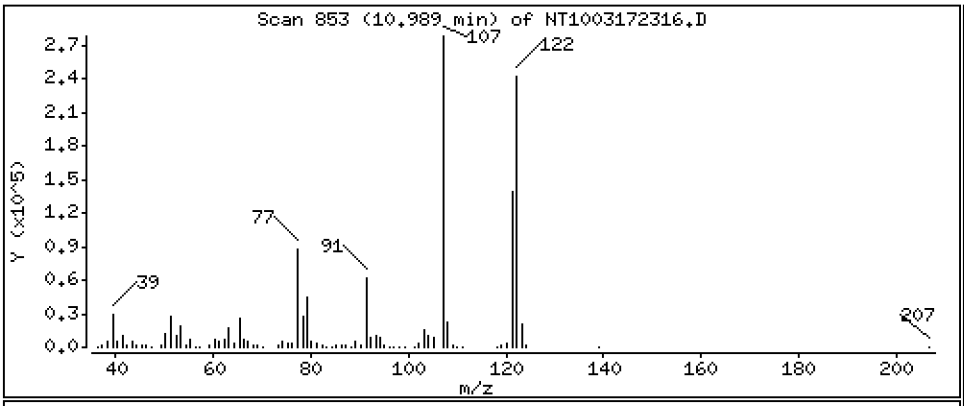
Operator: VTS

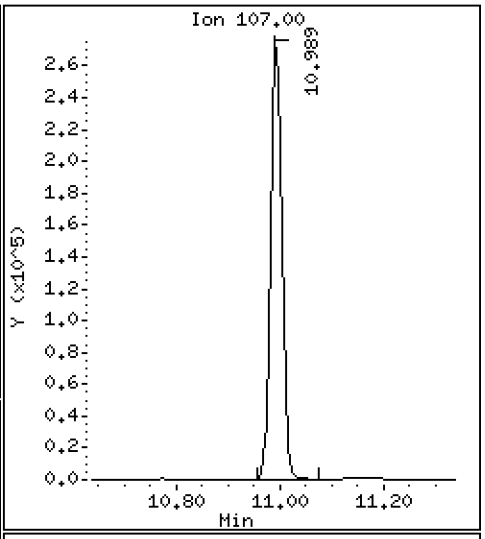
Column phase: ZB-5msi

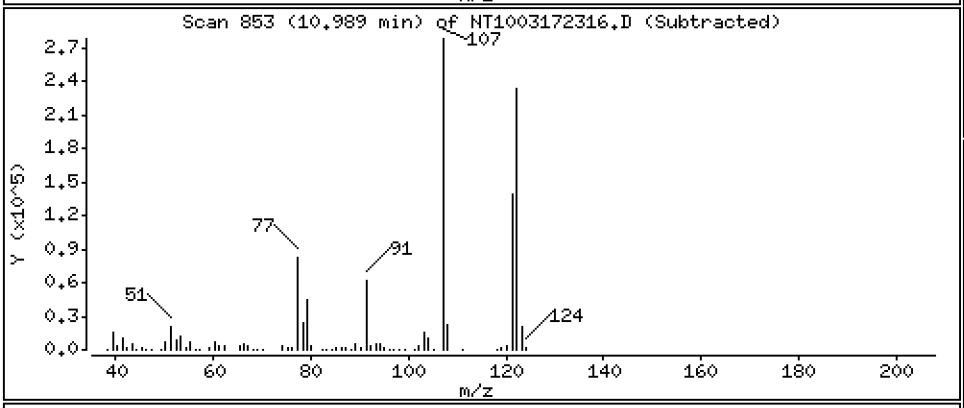
Column diameter: 0.25

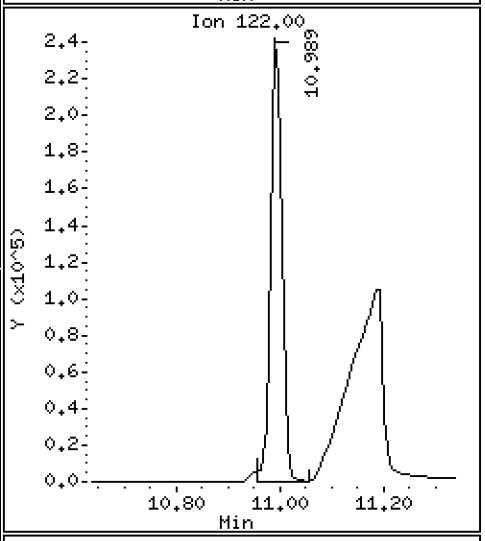
22 2,4-Dimethylphenol

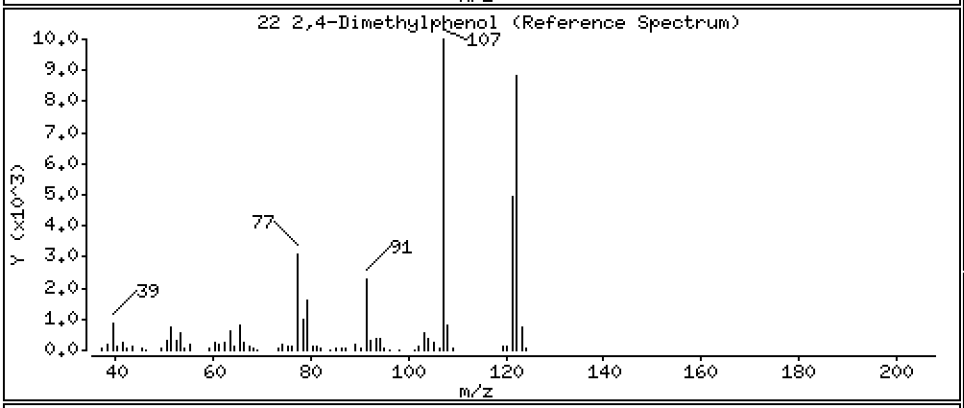
Concentration: 8.714 ug/mL

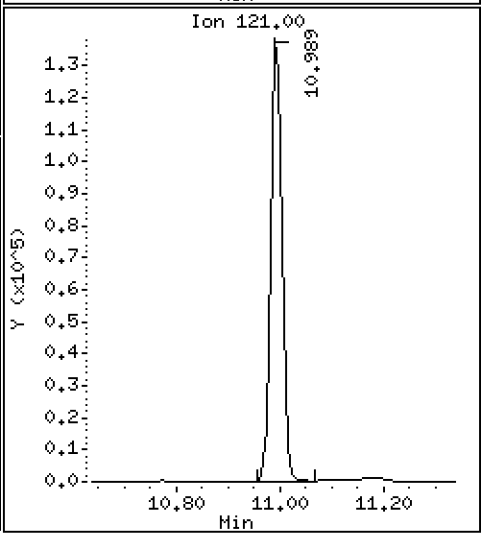


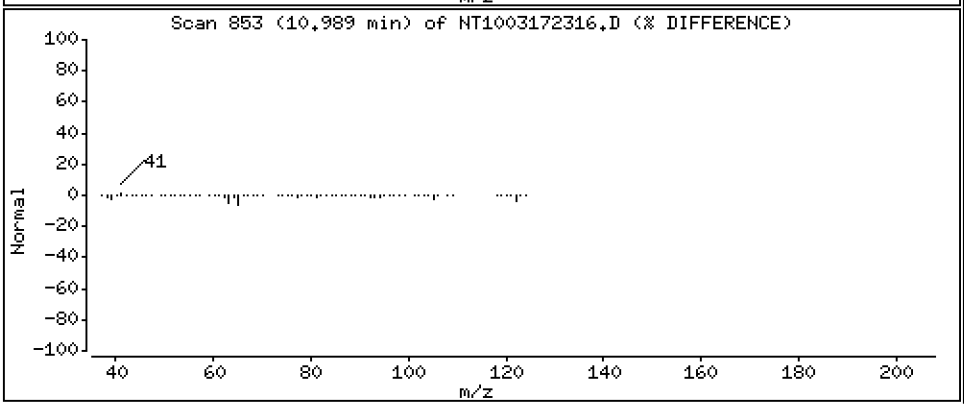












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

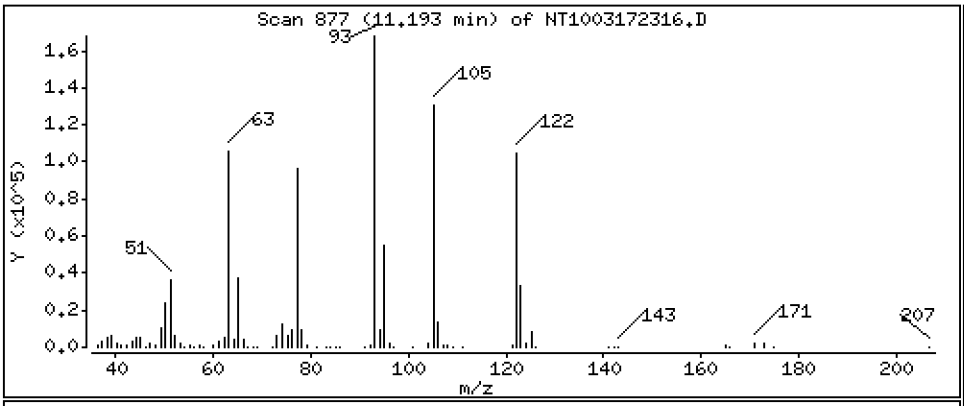
Operator: VTS

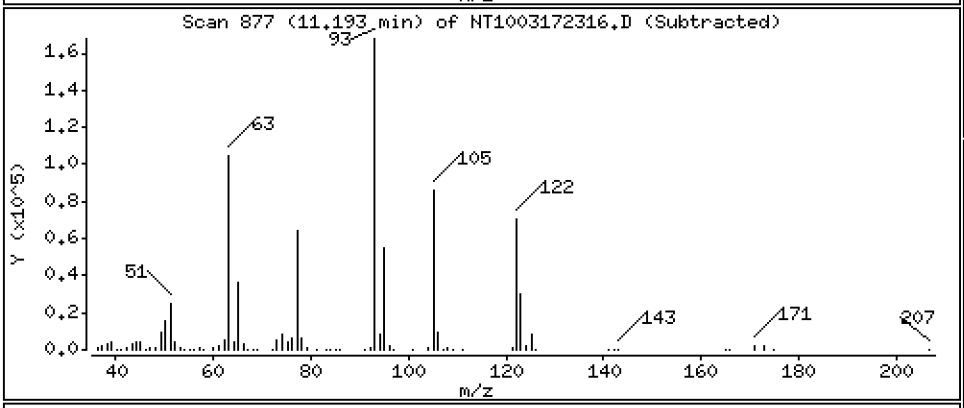
Column phase: ZB-5msi

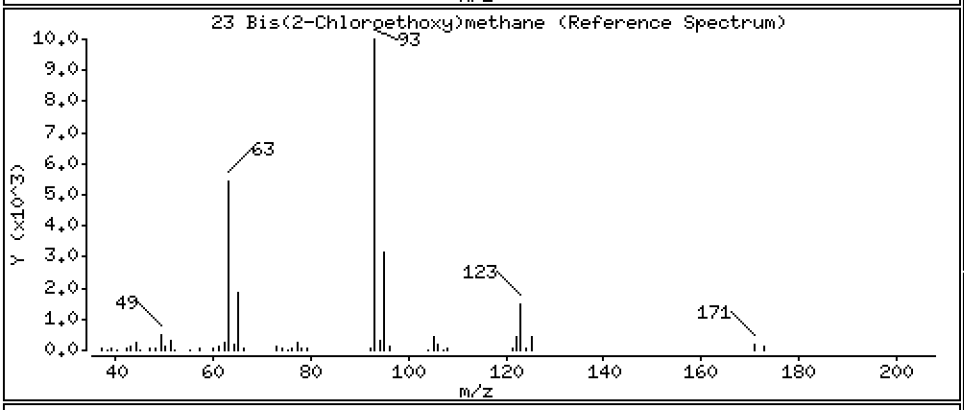
Column diameter: 0.25

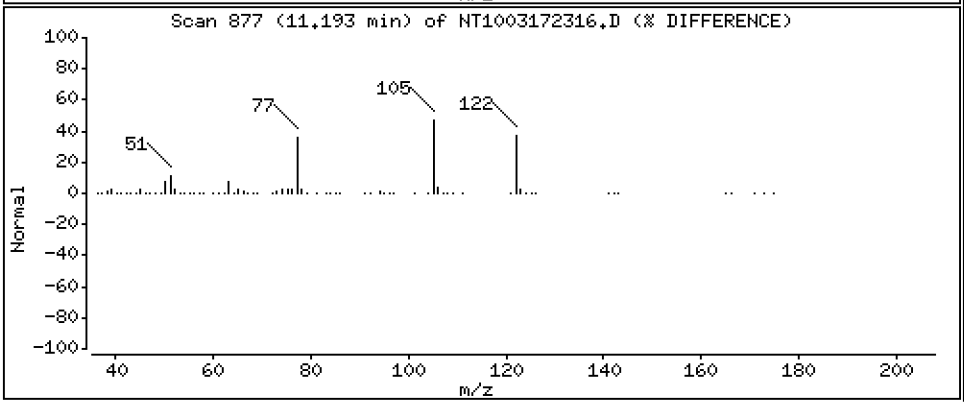
23 Bis(2-Chloroethoxy)methane

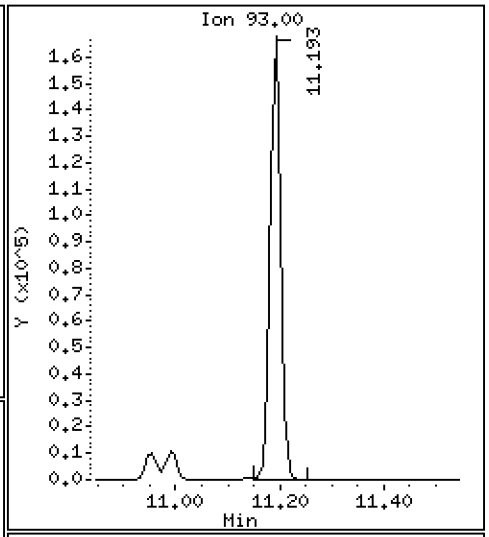
Concentration: 5.053 ug/mL

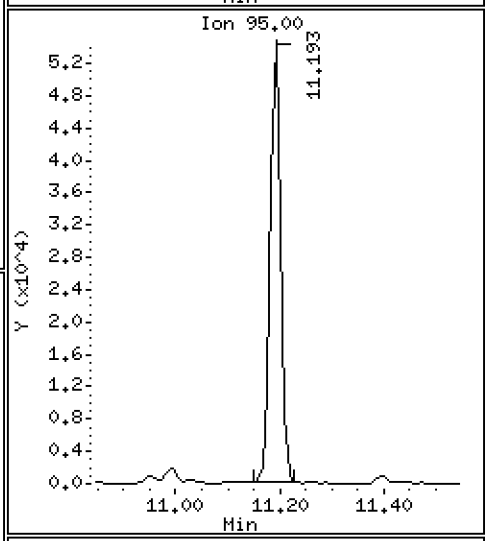


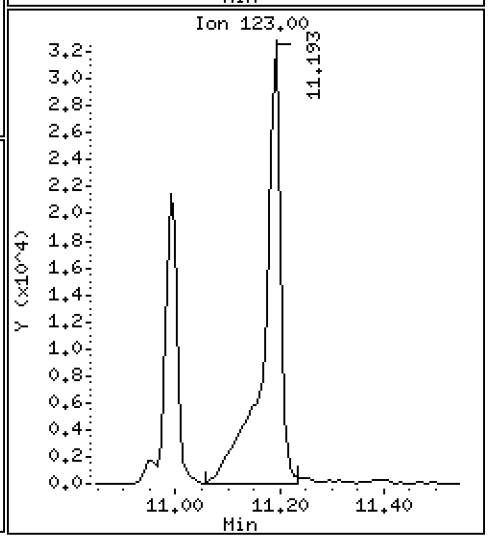












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

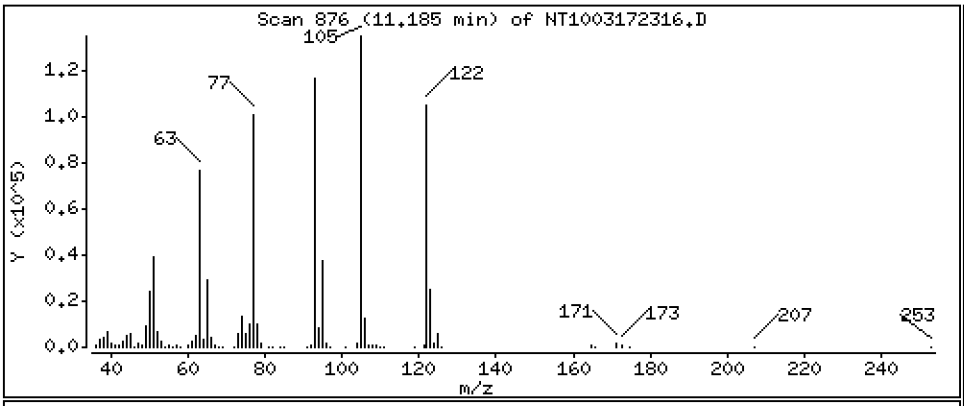
Operator: VTS

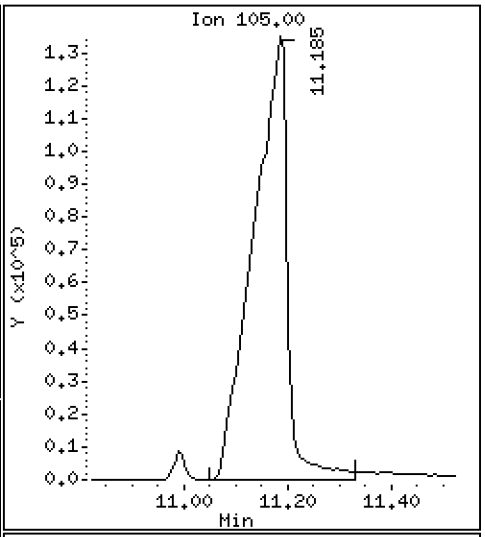
Column phase: ZB-5msi

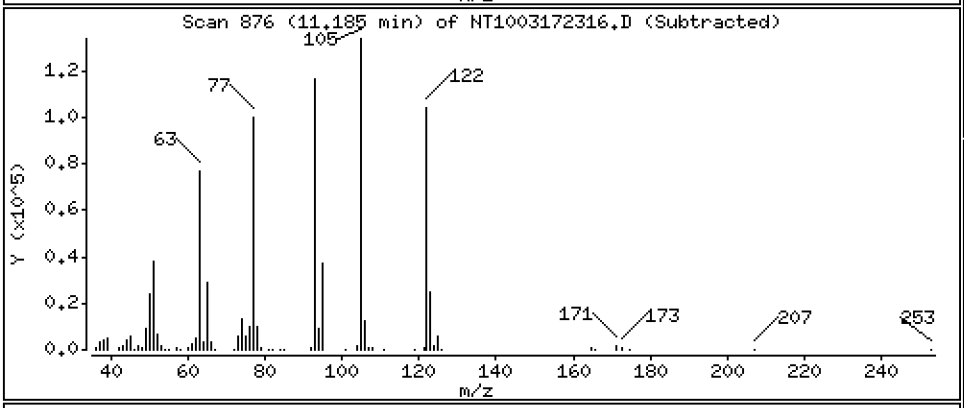
Column diameter: 0.25

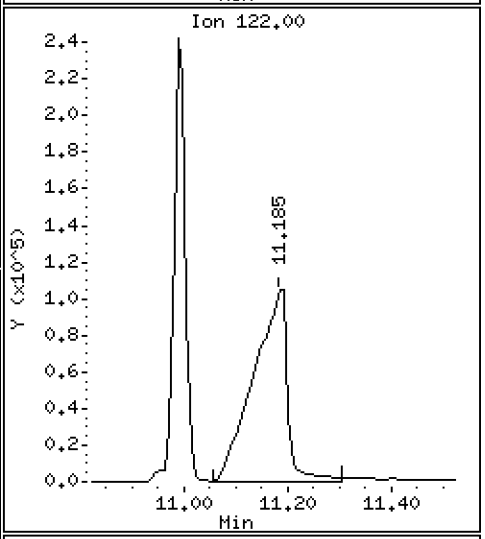
24 Benzoic acid

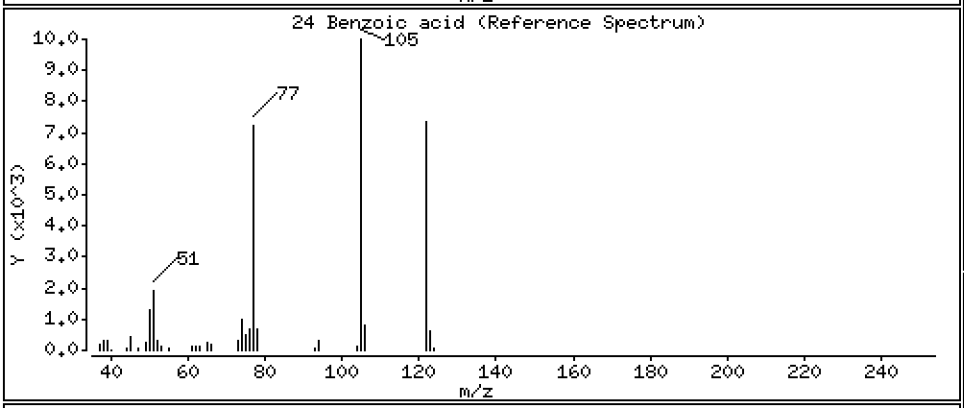
Concentration: 21.47 ug/mL

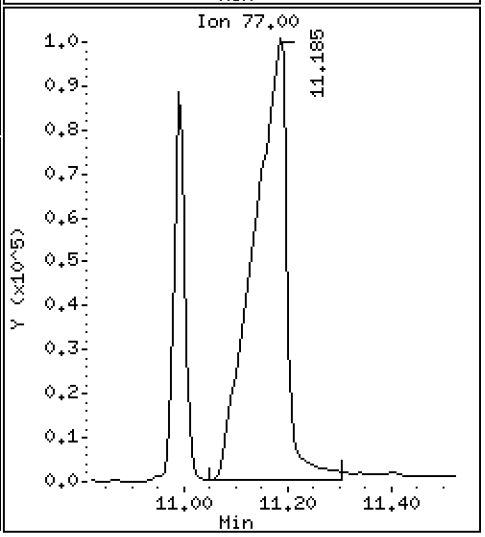


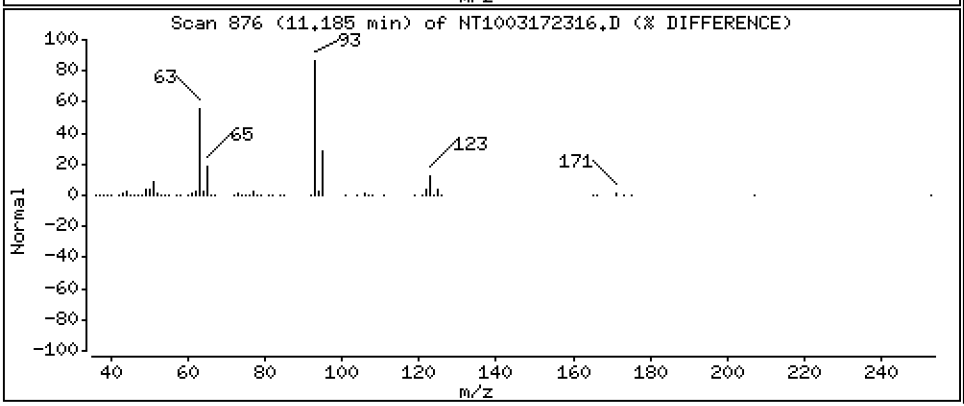












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

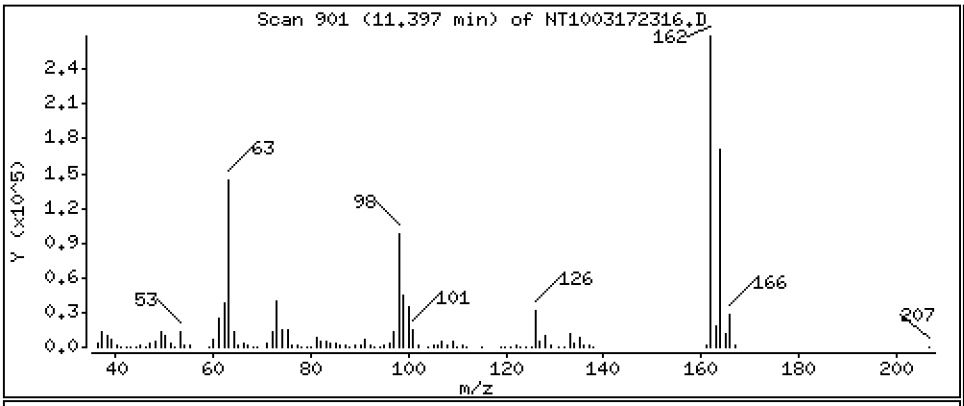
Operator: VTS

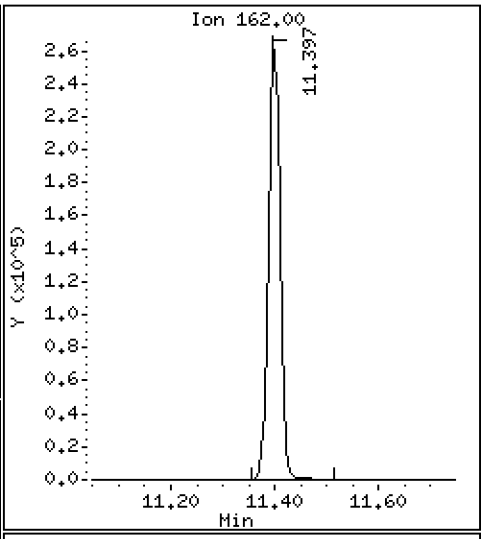
Column phase: ZB-5msi

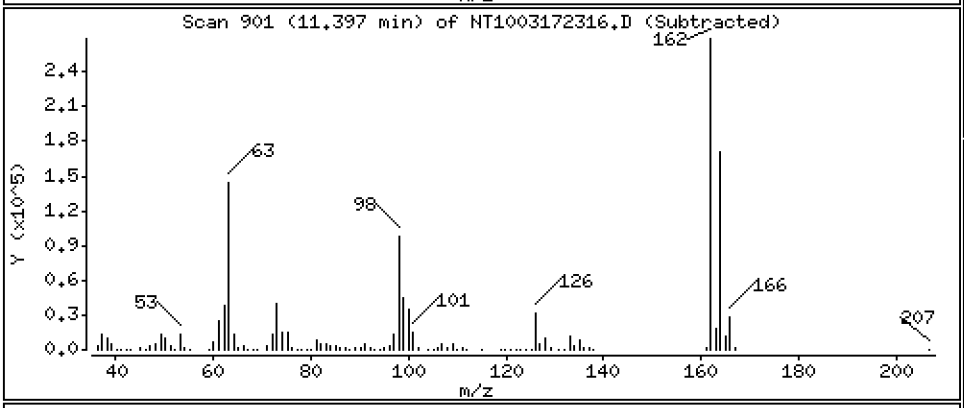
Column diameter: 0.25

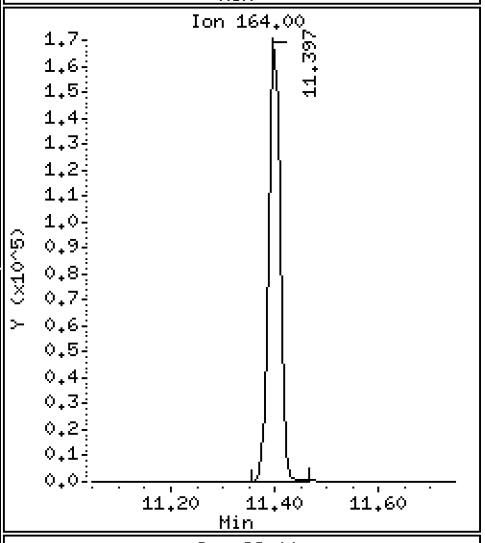
25 2,4-Dichlorophenol

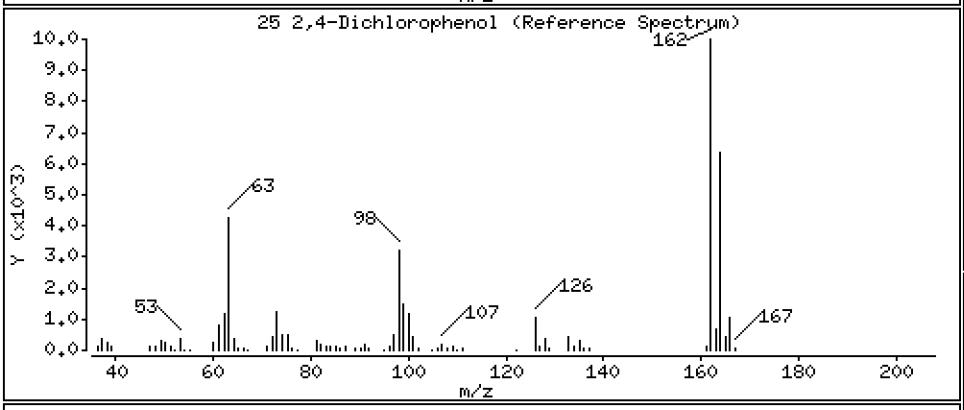
Concentration: 11.48 ug/mL

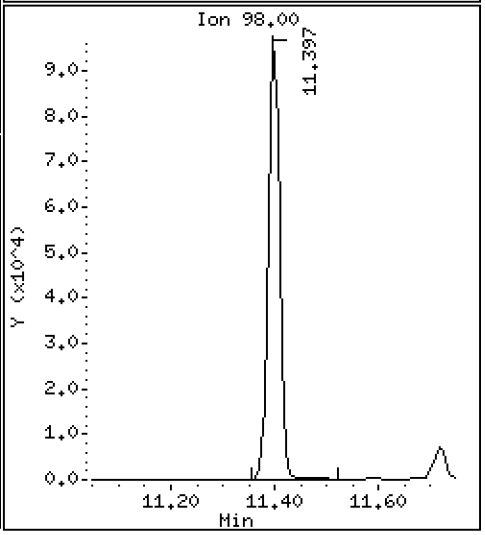


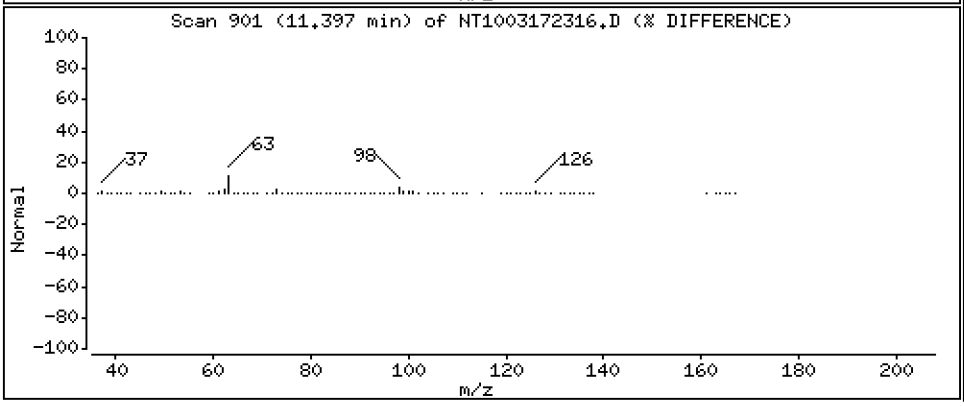












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

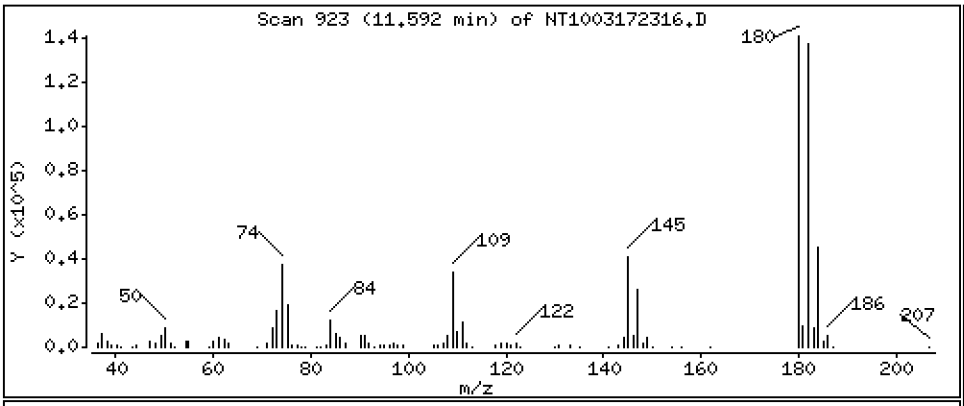
Operator: VTS

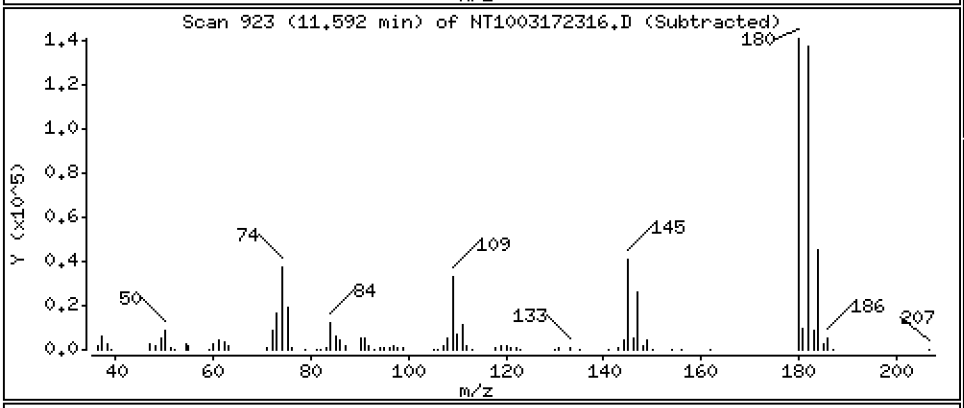
Column phase: ZB-5msi

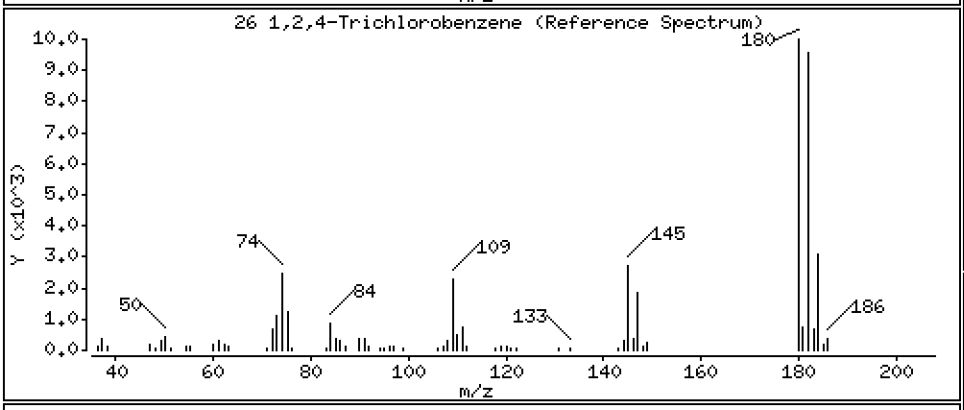
Column diameter: 0.25

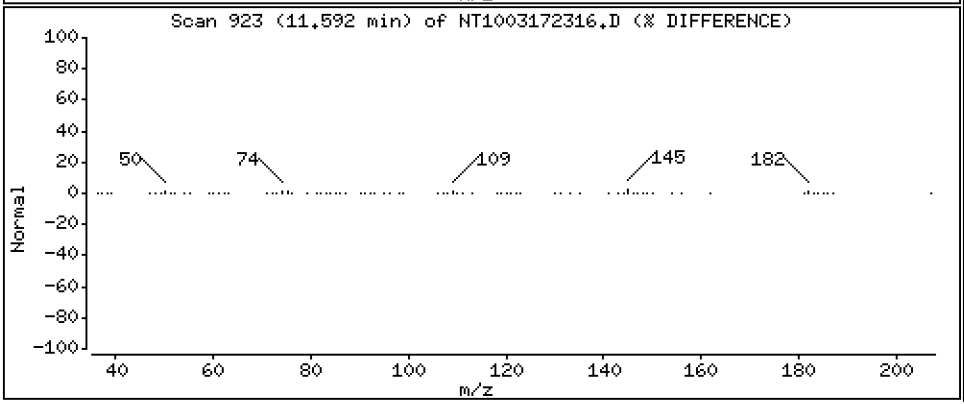
26 1,2,4-Trichlorobenzene

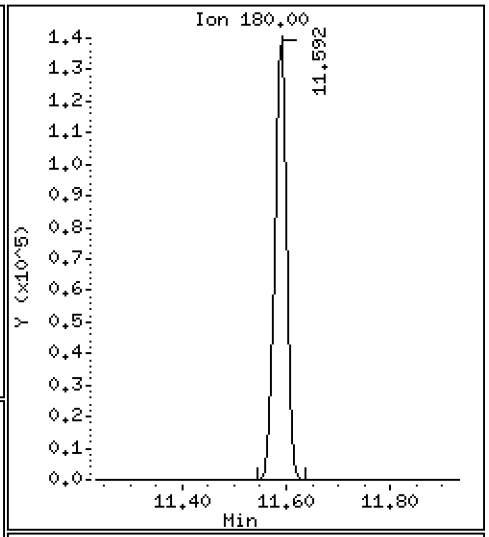
Concentration: 4.824 ug/mL

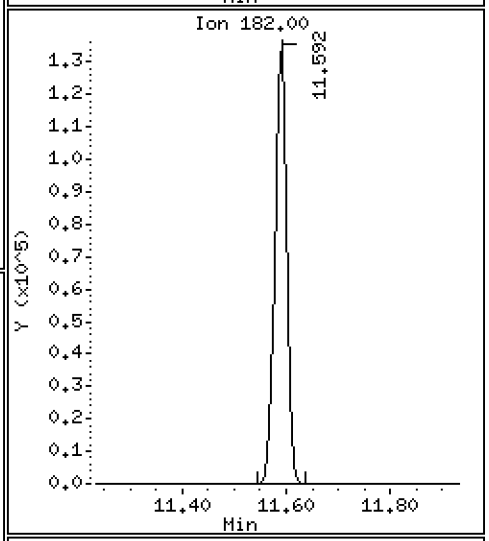


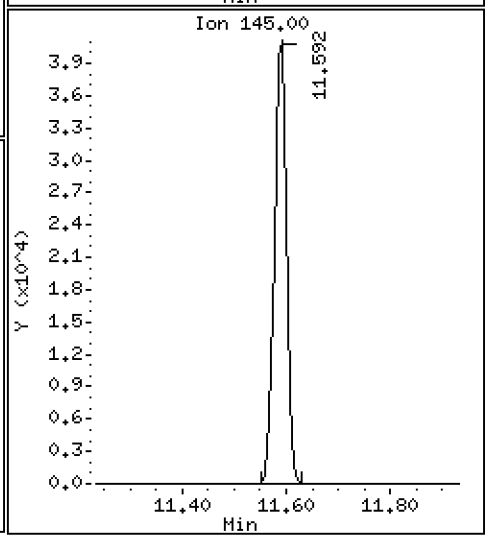












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172316.D

Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

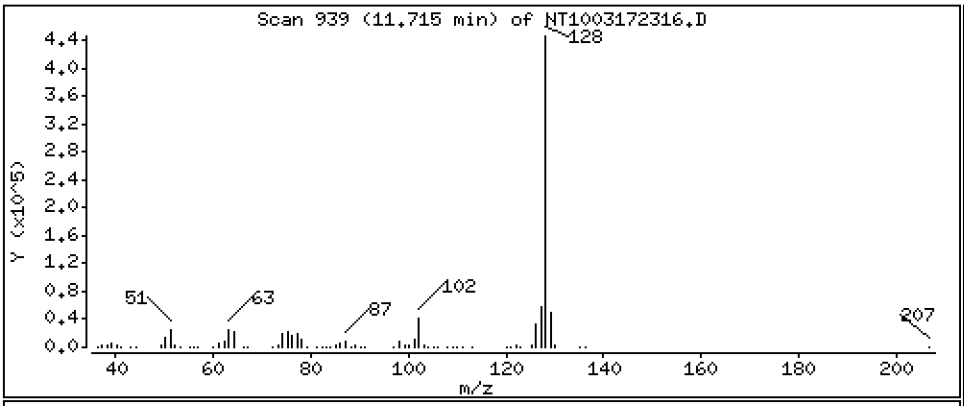
Operator: VTS

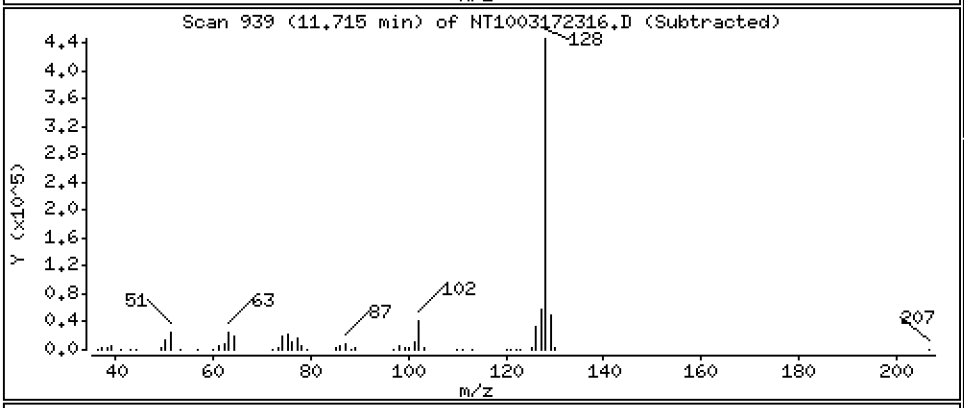
Column phase: ZB-5msi

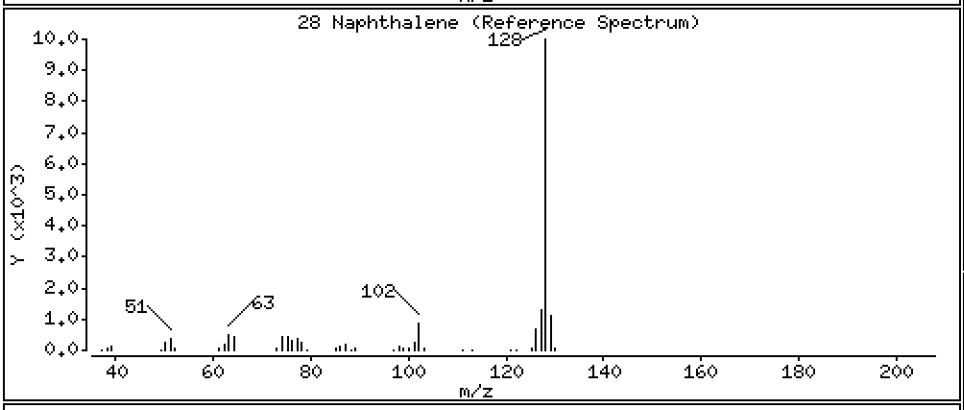
Column diameter: 0.25

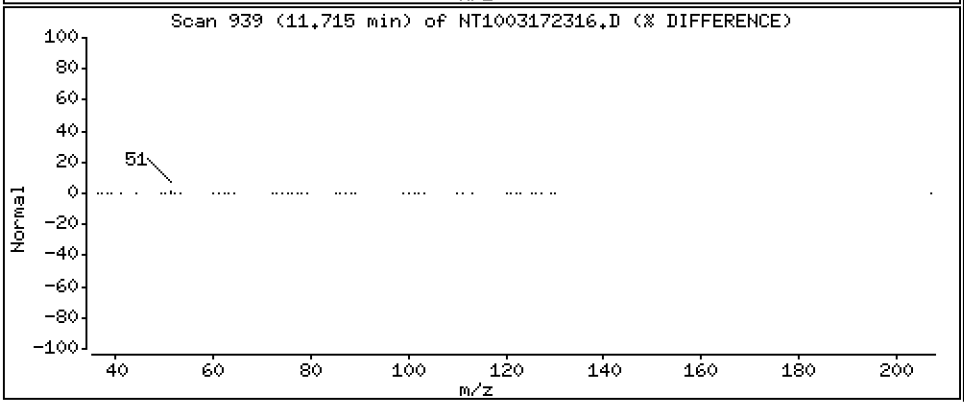
28 Naphthalene

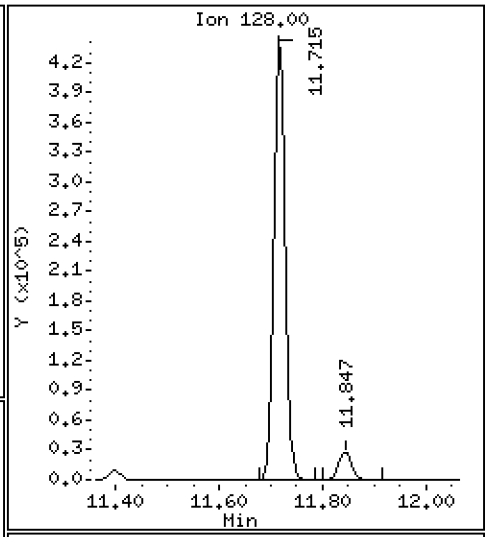
Concentration: 4.820 ug/mL

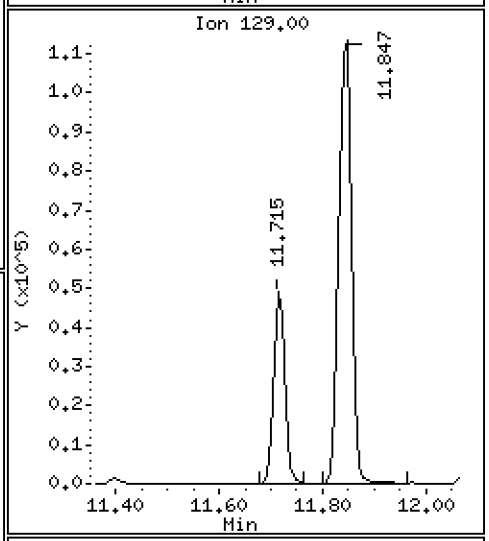


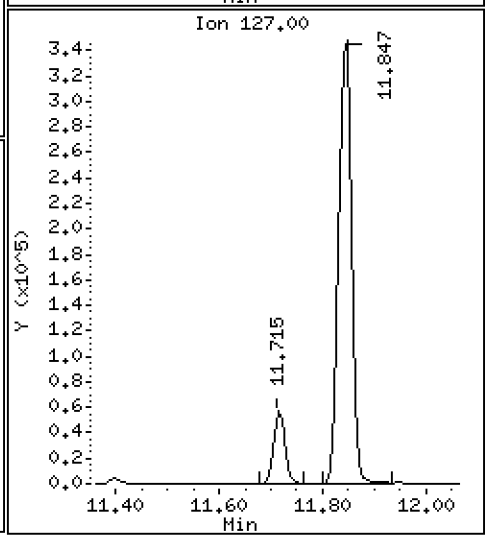












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

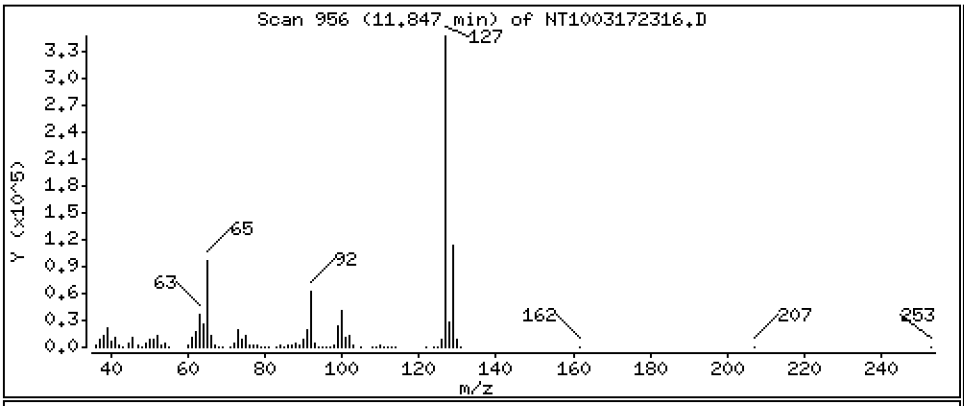
Operator: VTS

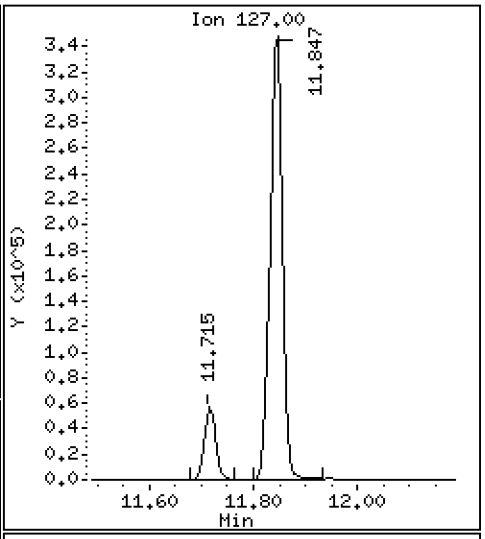
Column phase: ZB-5msi

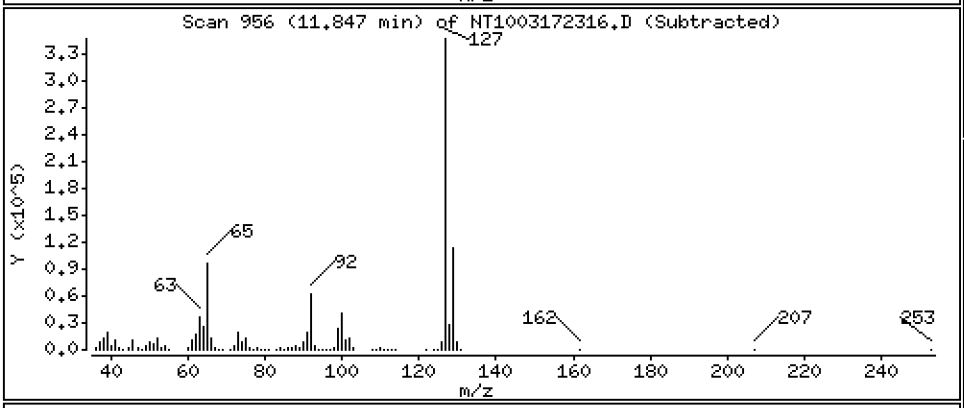
Column diameter: 0.25

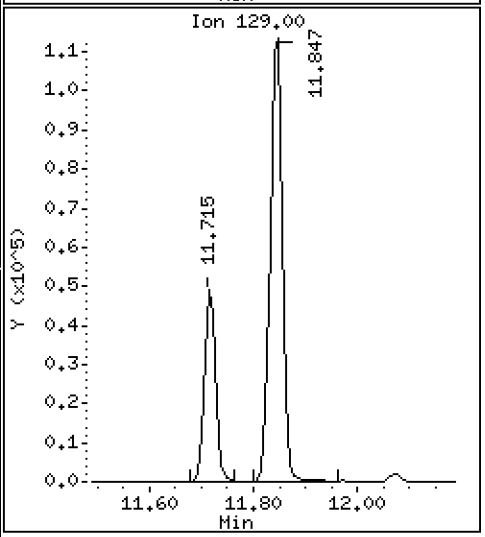
29 4-Chloroaniline

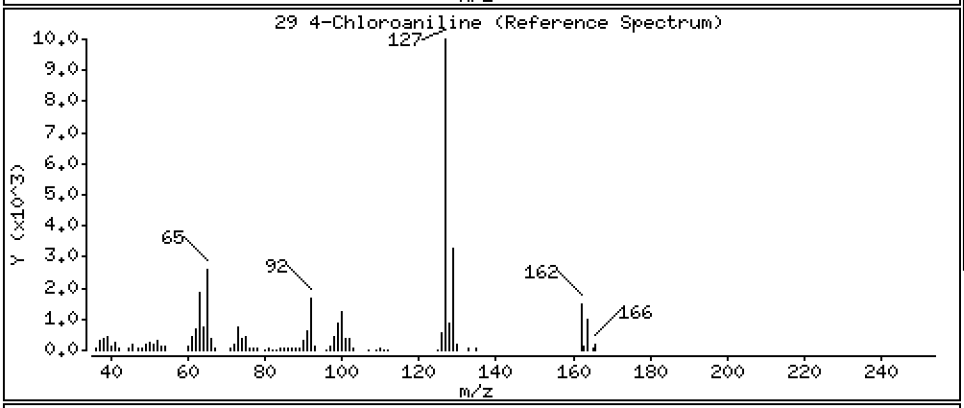
Concentration: 10.20 ug/mL

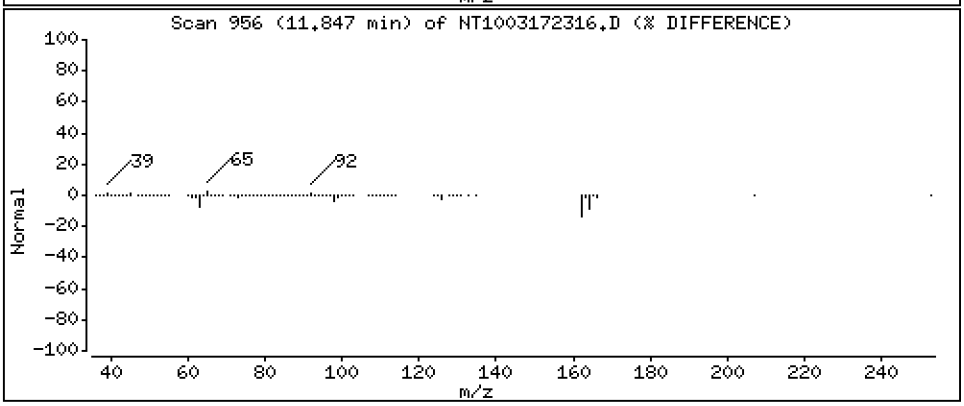












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

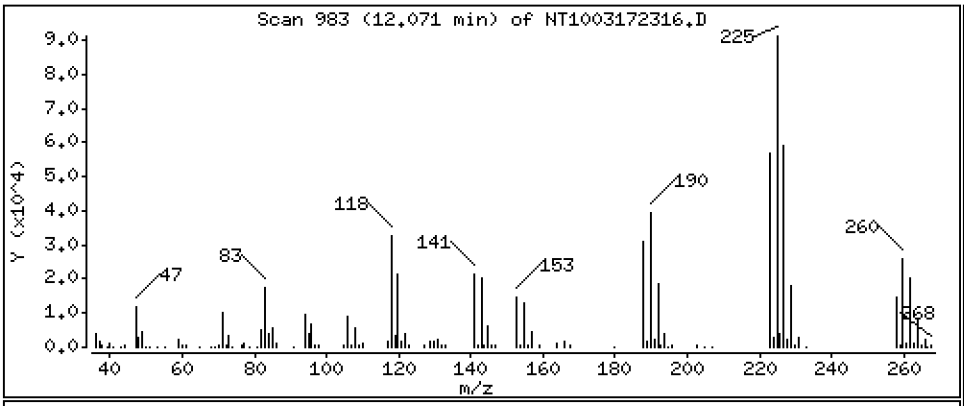
Operator: VTS

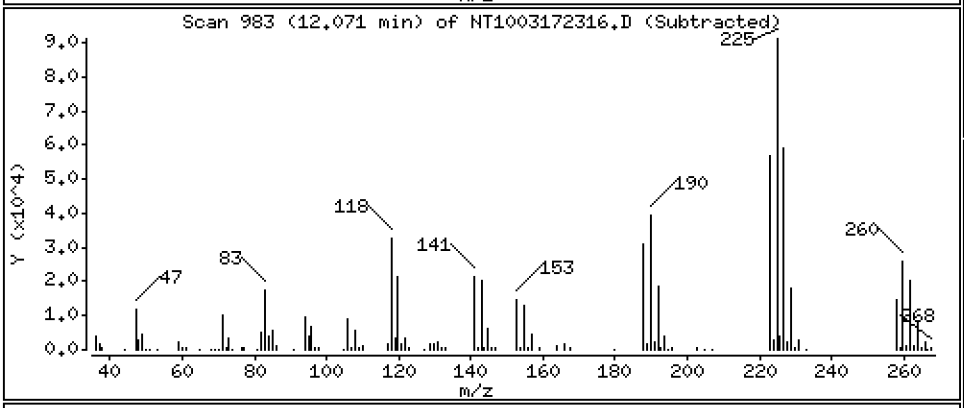
Column phase: ZB-5msi

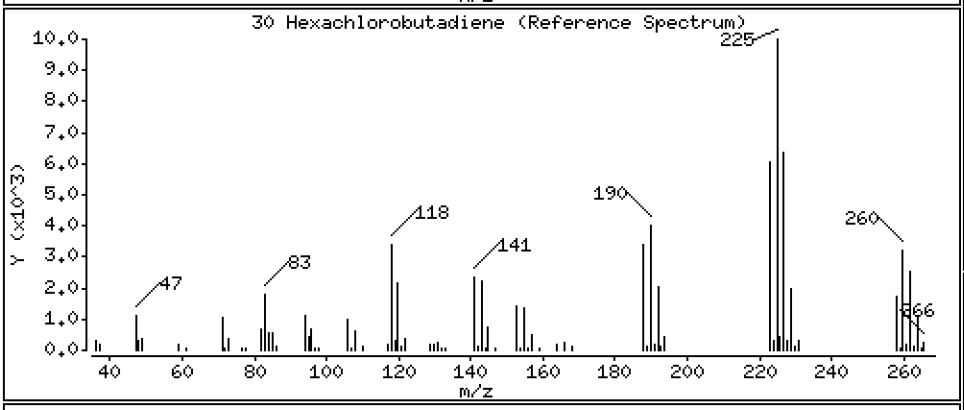
Column diameter: 0.25

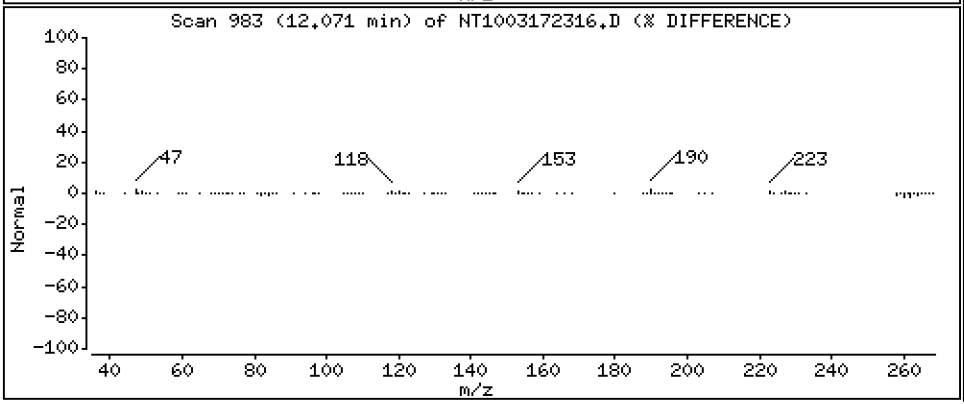
30 Hexachlorobutadiene

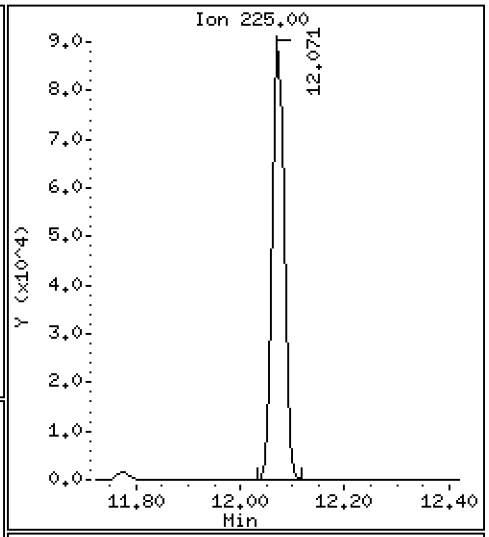
Concentration: 4.960 ug/mL

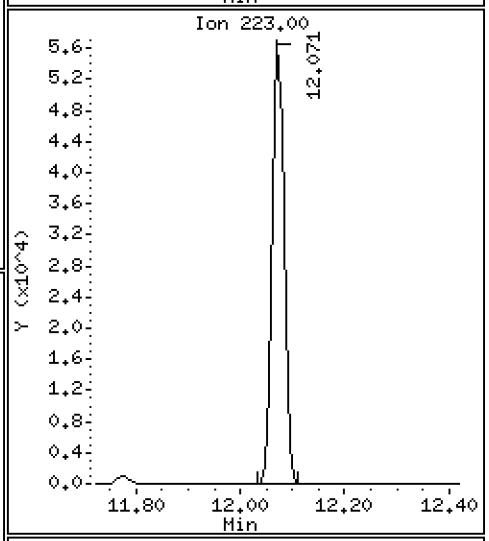


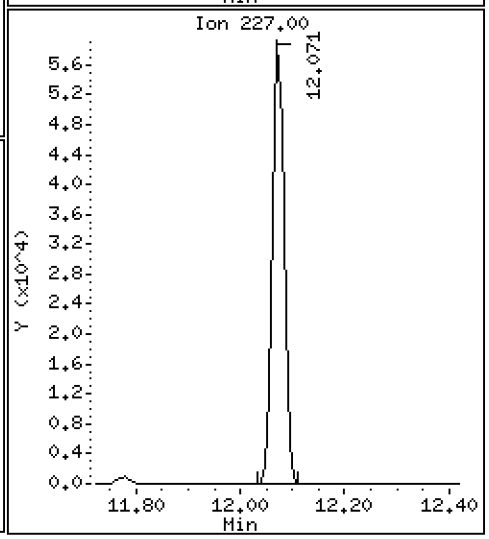












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

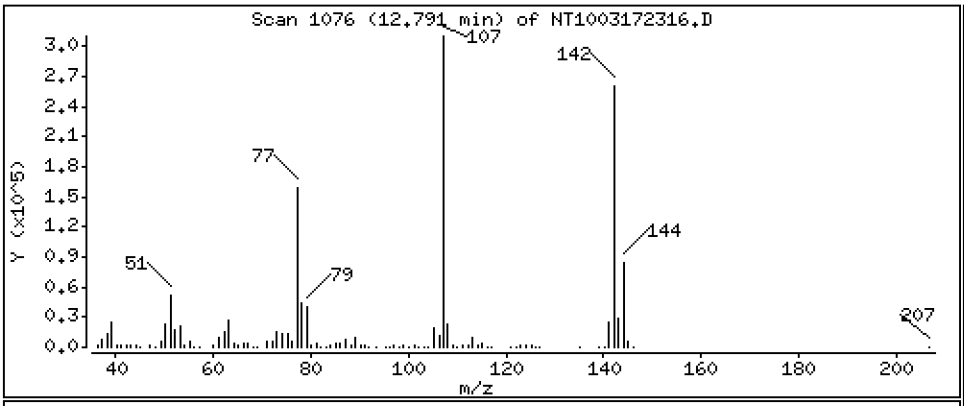
Operator: VTS

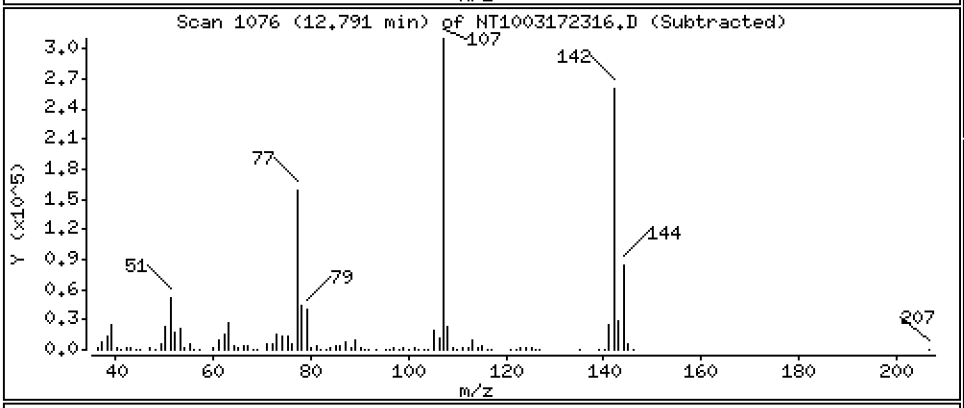
Column phase: ZB-5msi

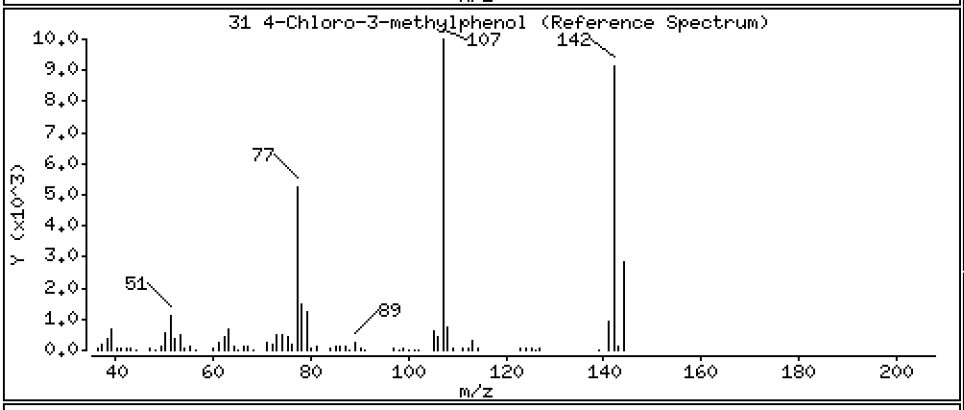
Column diameter: 0.25

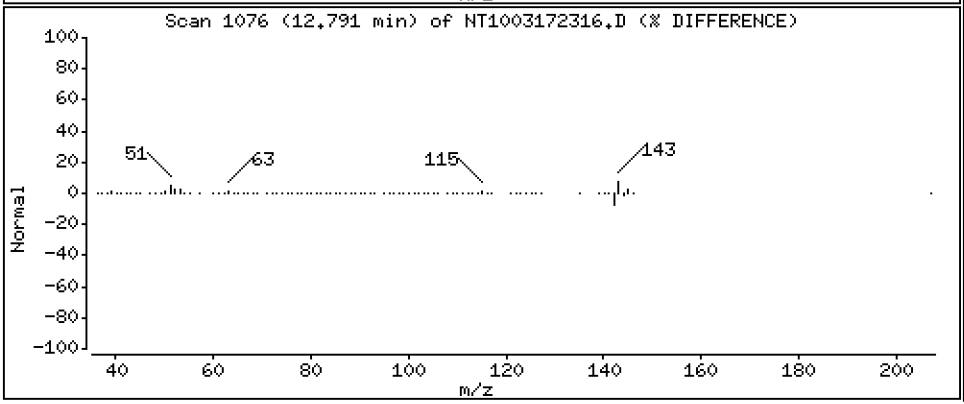
31 4-Chloro-3-methylphenol

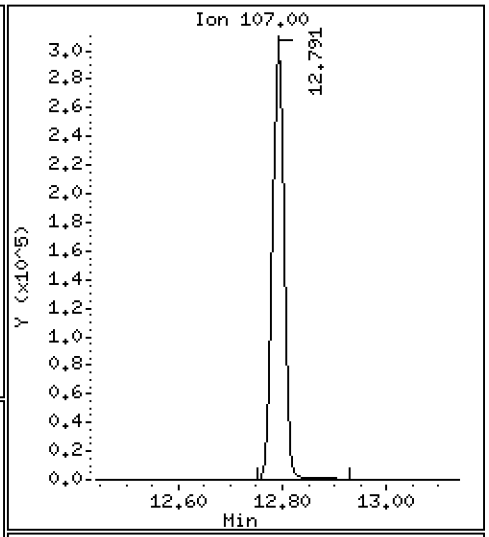
Concentration: 10.41 ug/mL

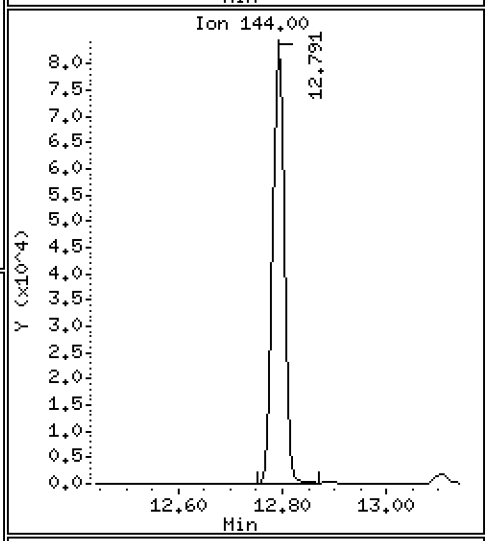


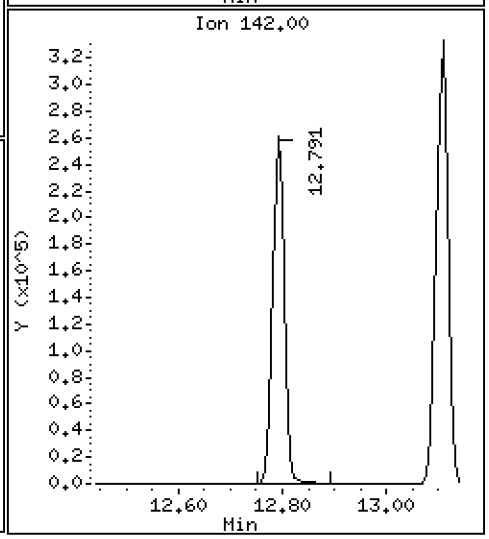












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

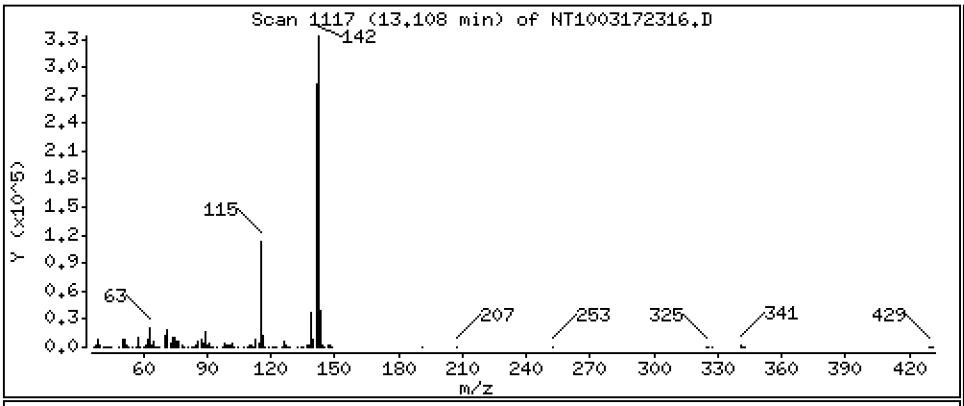
Operator: VTS

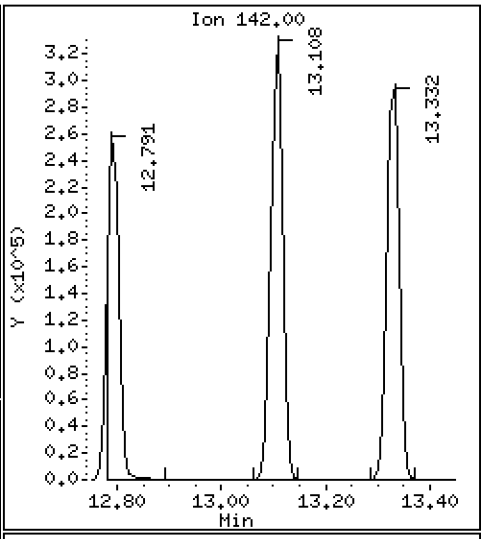
Column phase: ZB-5msi

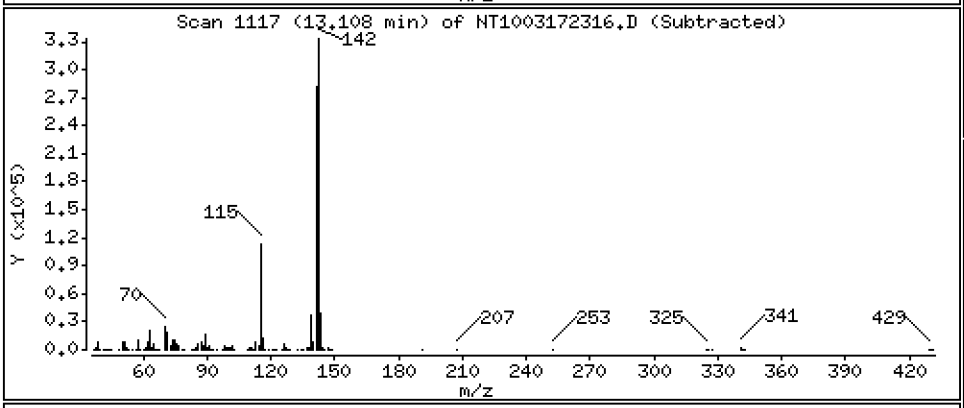
Column diameter: 0.25

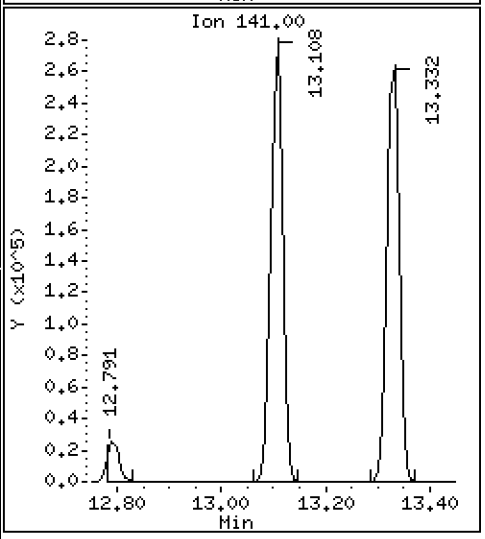
32 2-Methylnaphthalene

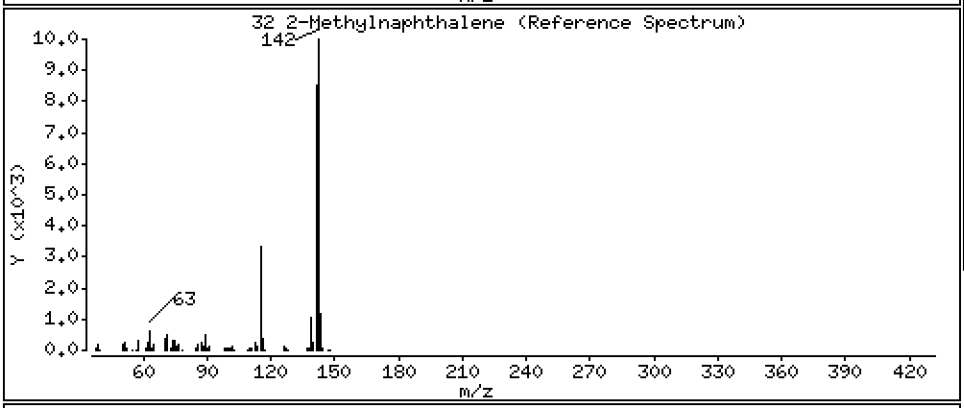
Concentration: 4.909 ug/mL

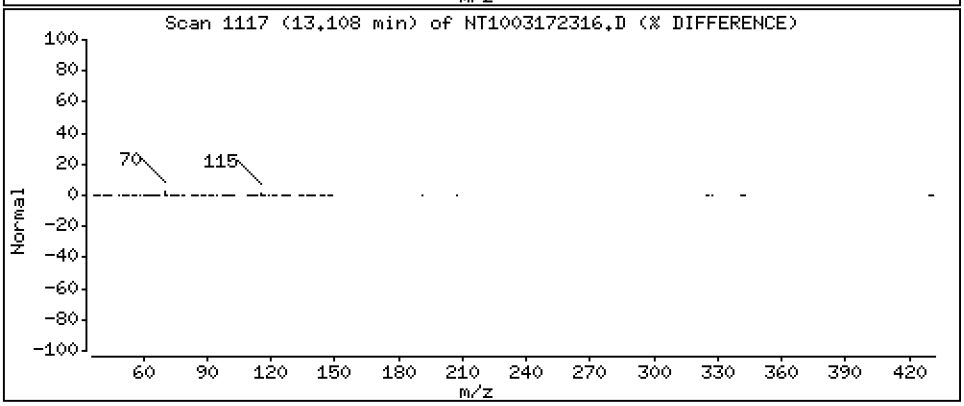












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172316.D

Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

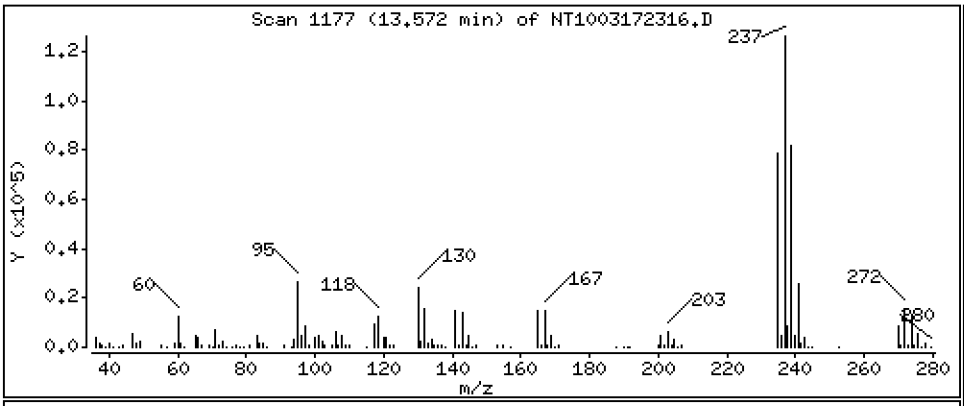
Operator: VTS

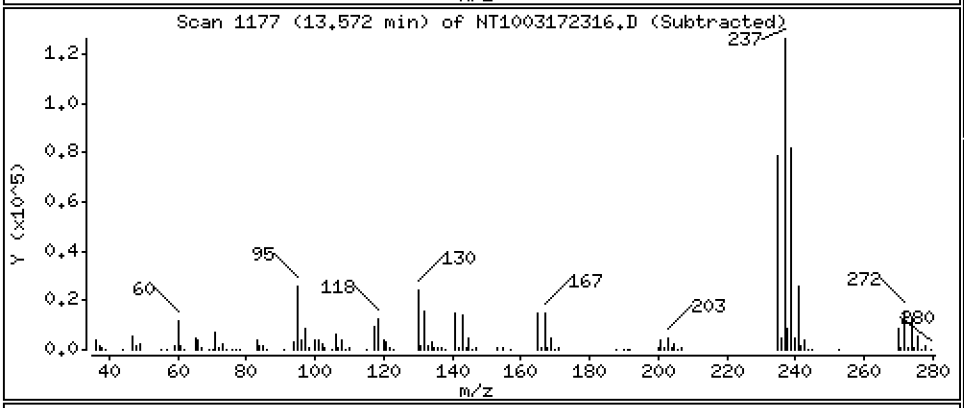
Column phase: ZB-5msi

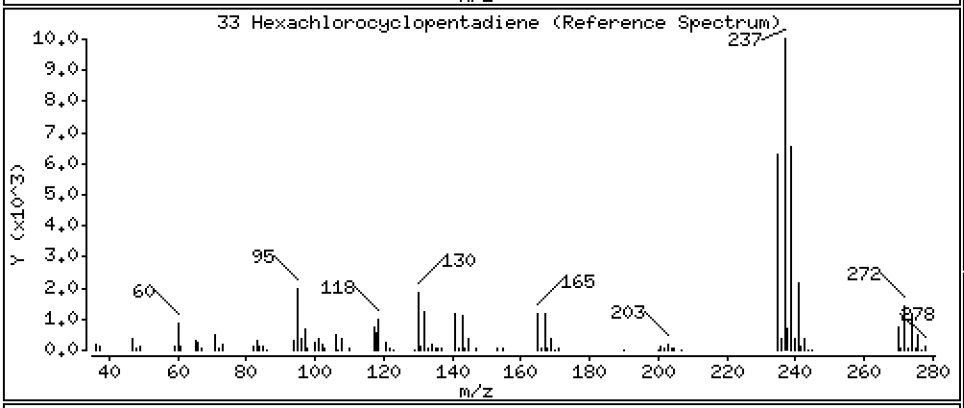
Column diameter: 0.25

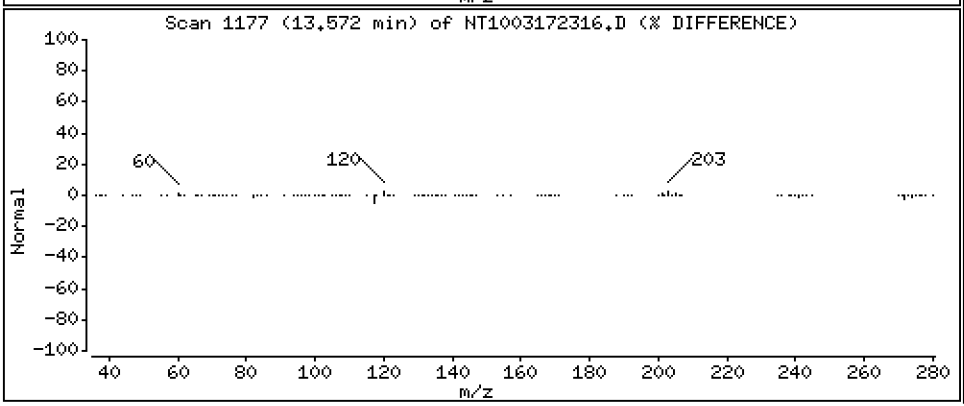
33 Hexachlorocyclopentadiene

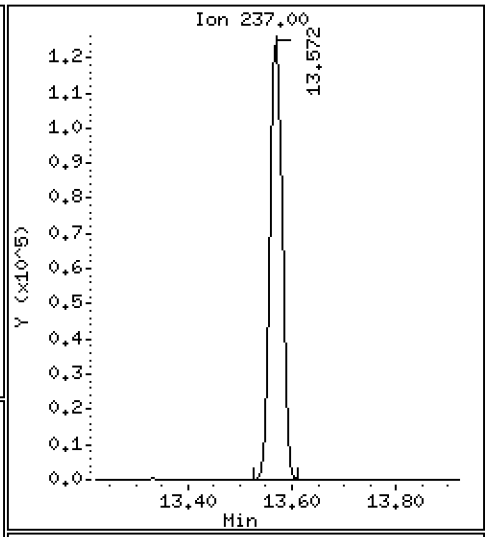
Concentration: 7.047 ug/mL

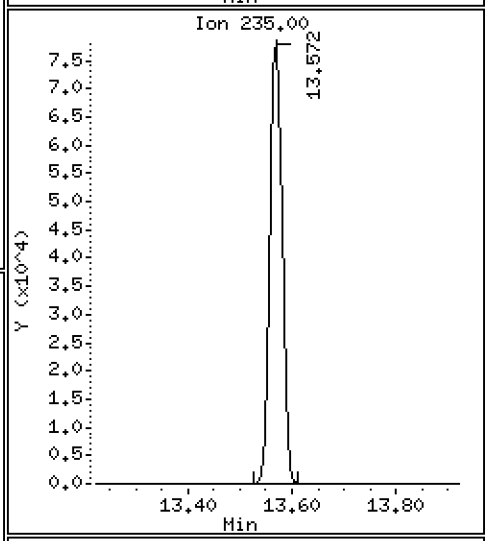


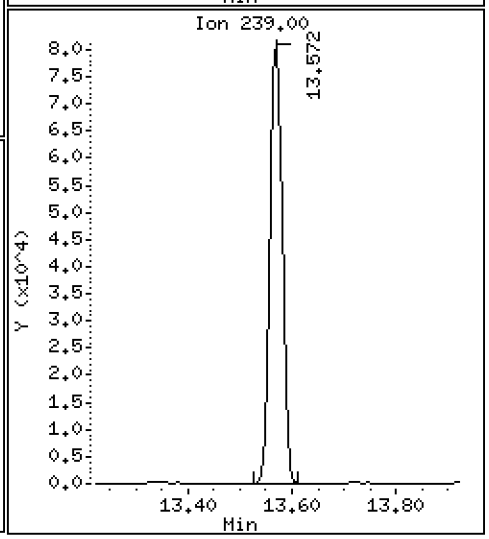












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

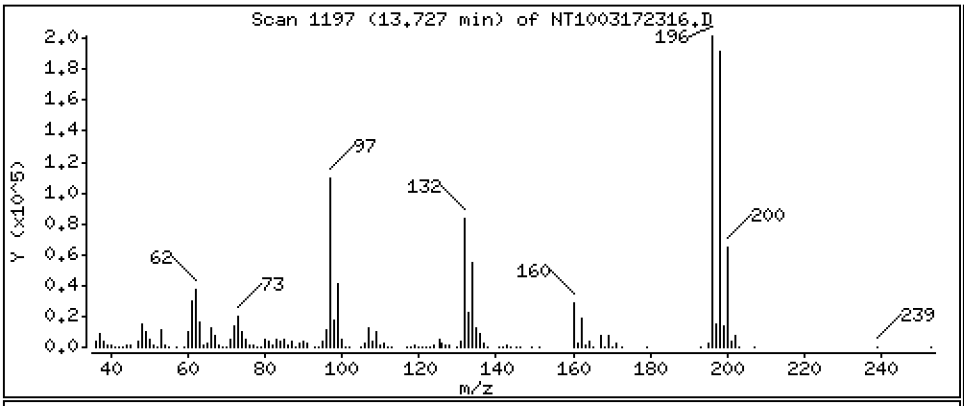
Operator: VTS

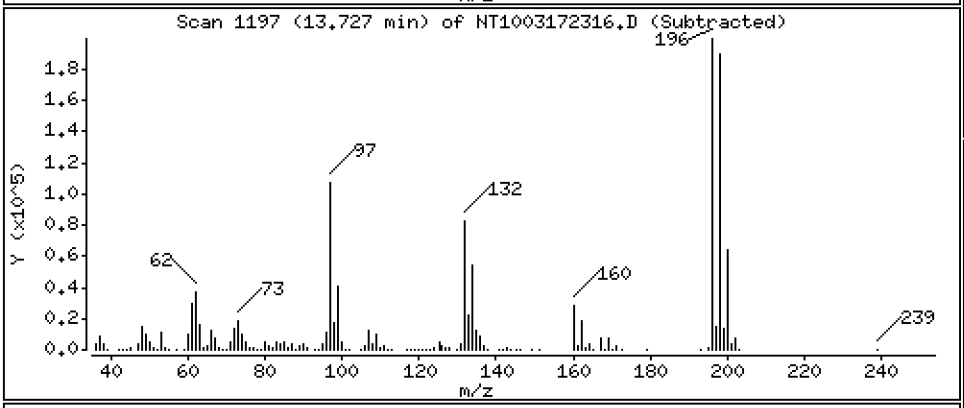
Column phase: ZB-5msi

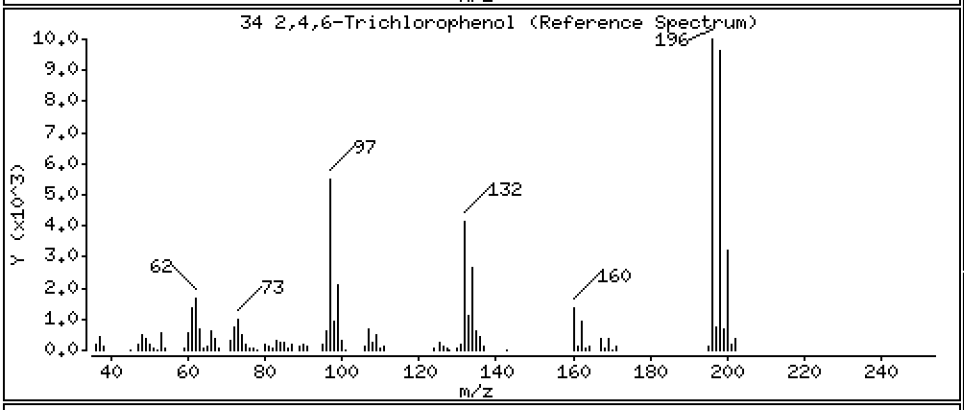
Column diameter: 0.25

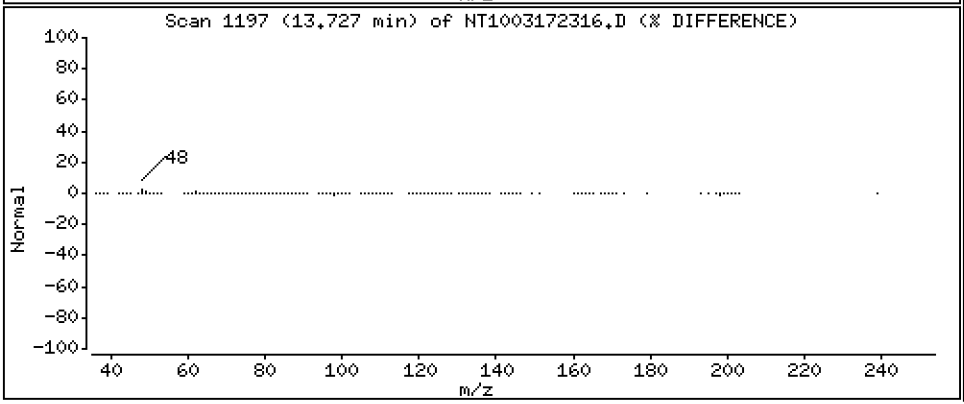
34 2,4,6-Trichlorophenol

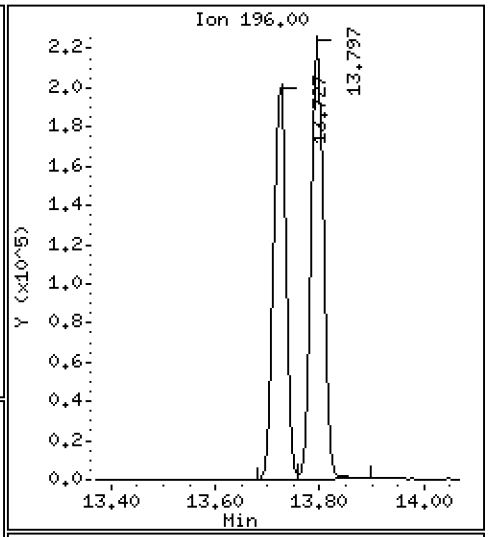
Concentration: 10.92 ug/mL

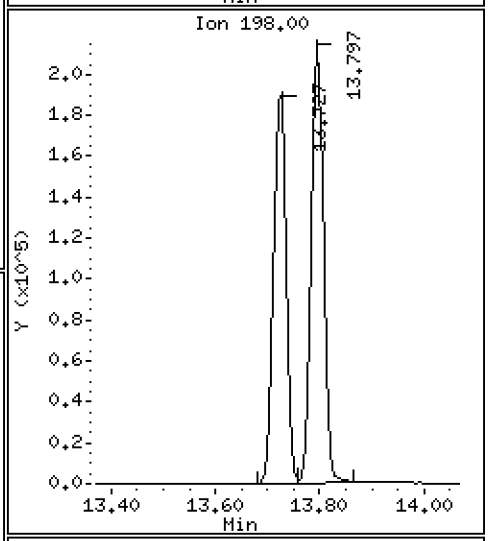


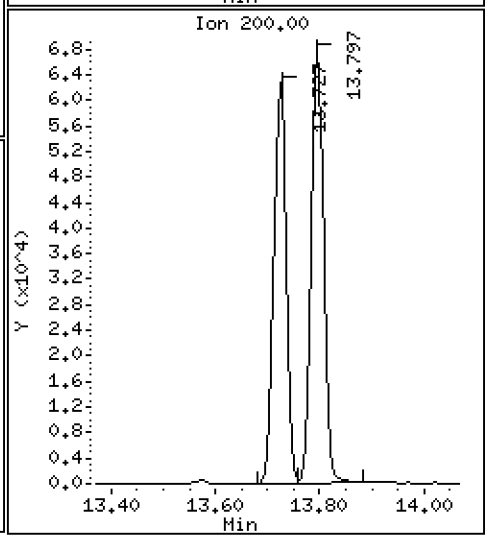












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

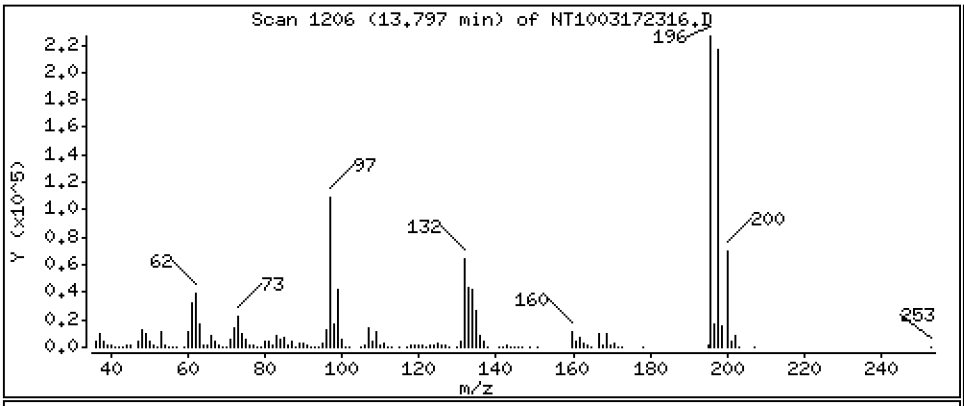
Operator: VTS

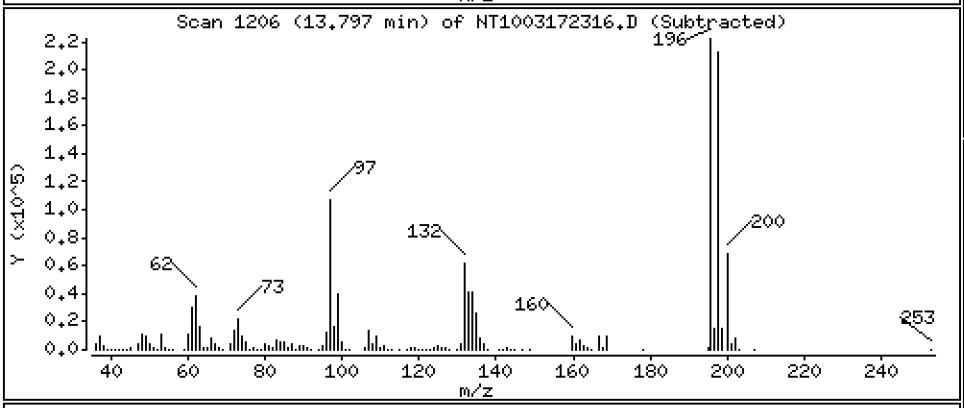
Column phase: ZB-5msi

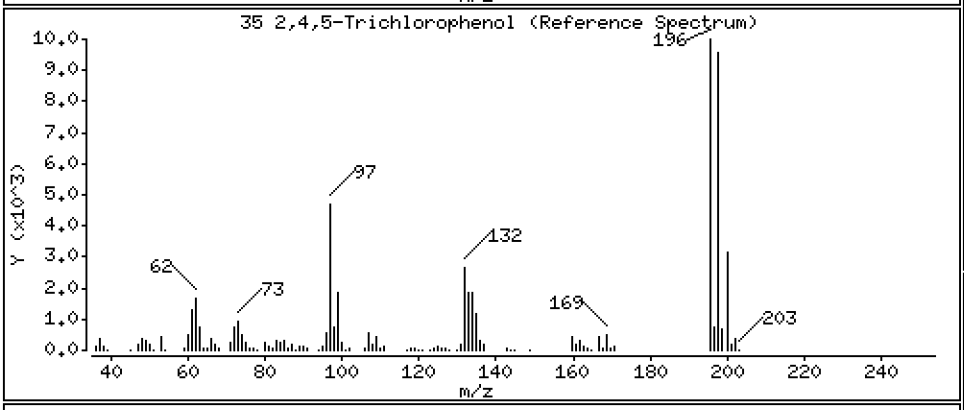
Column diameter: 0.25

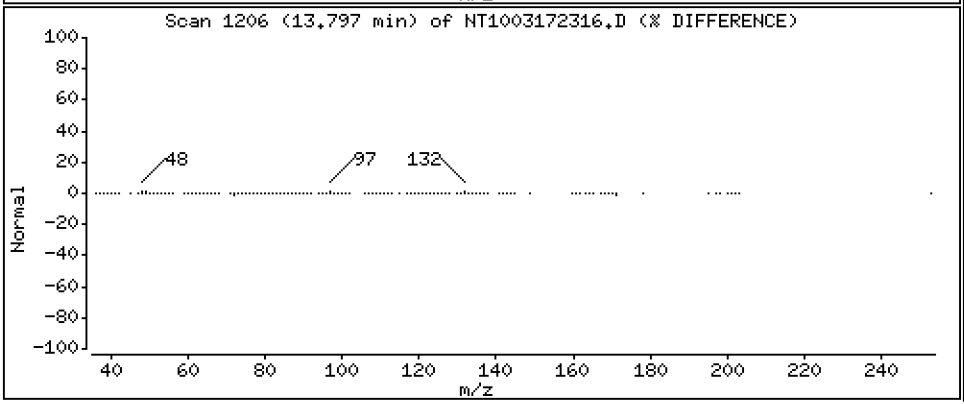
35 2,4,5-Trichlorophenol

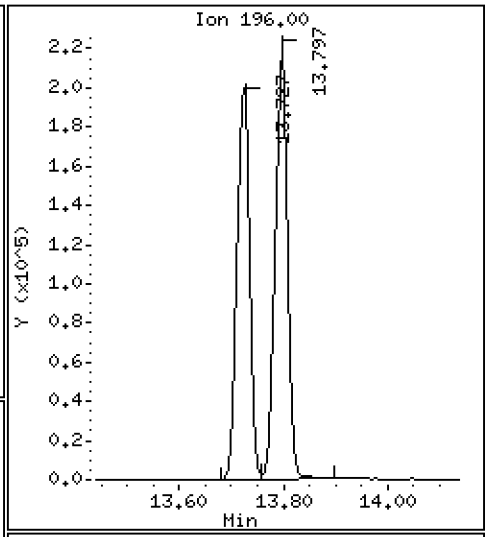
Concentration: 10.54 ug/mL

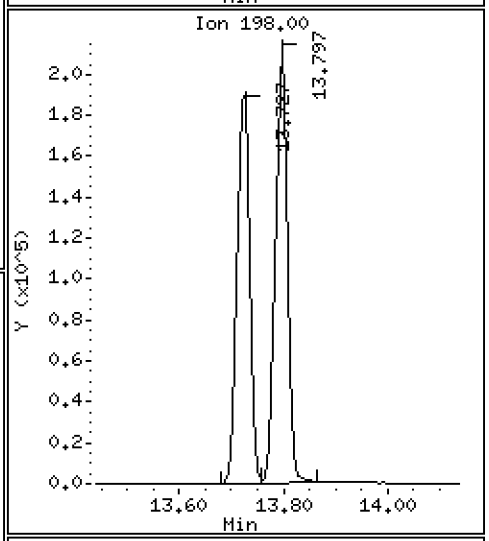


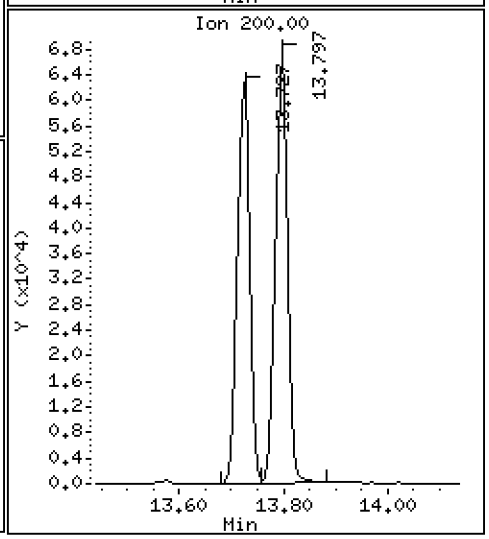












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

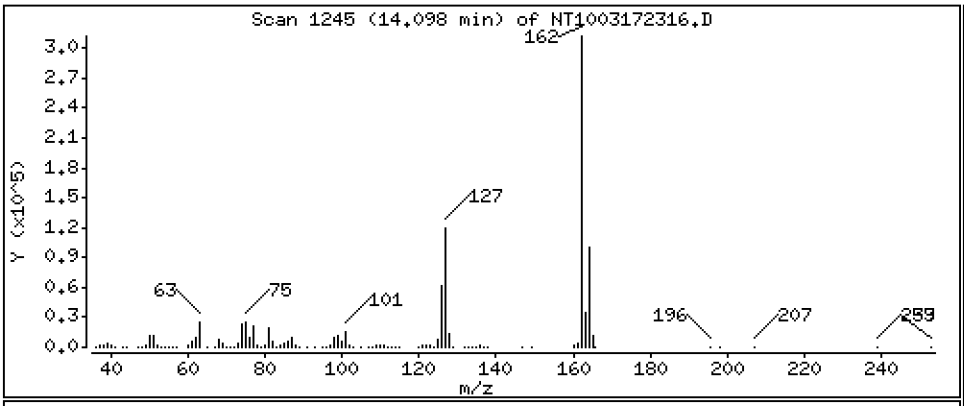
Operator: VTS

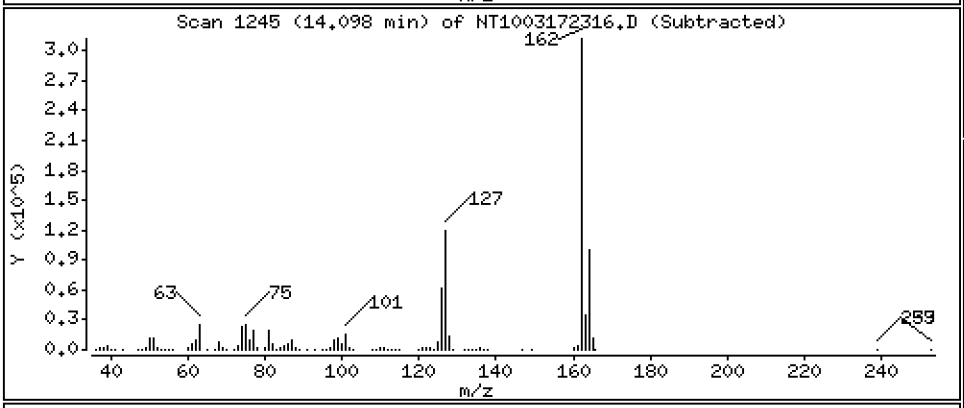
Column phase: ZB-5msi

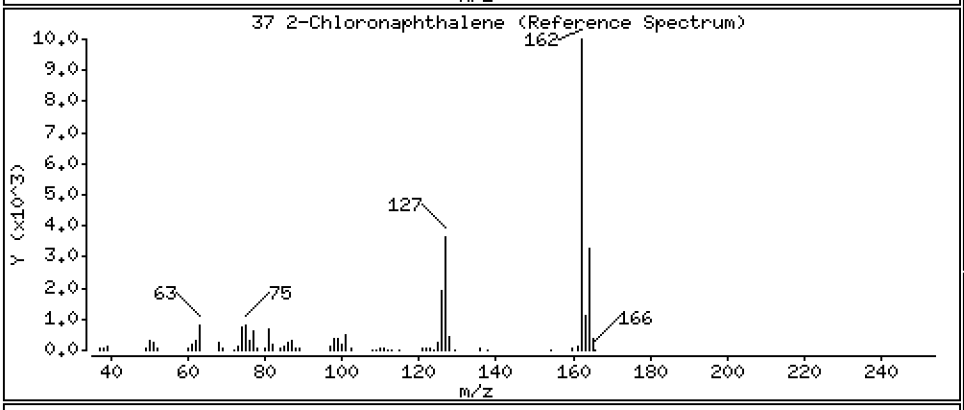
Column diameter: 0.25

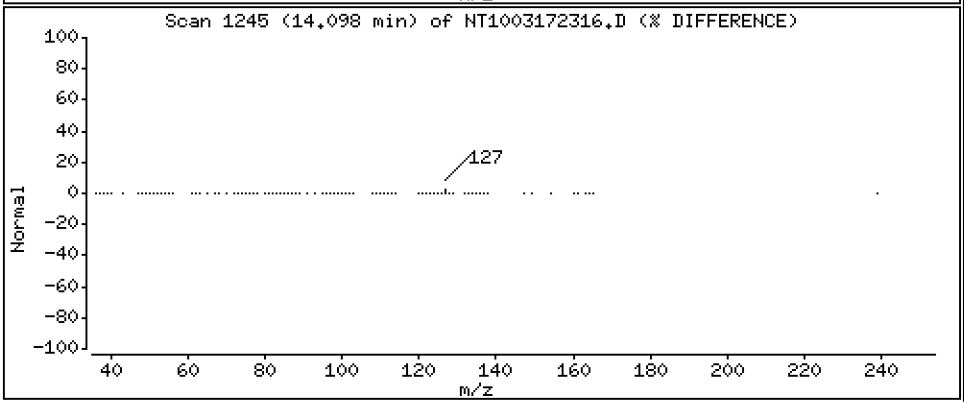
37 2-Chloronaphthalene

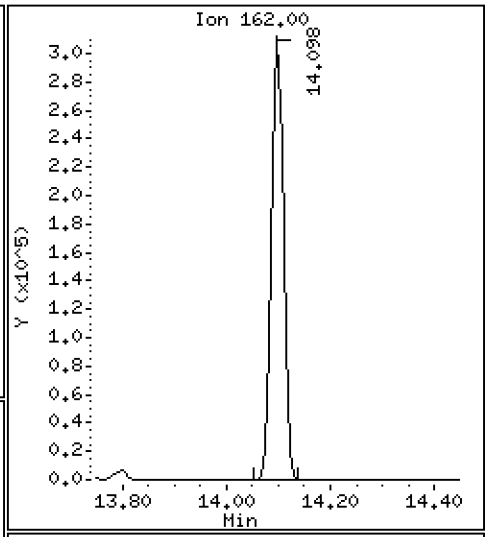
Concentration: 4.907 ug/mL

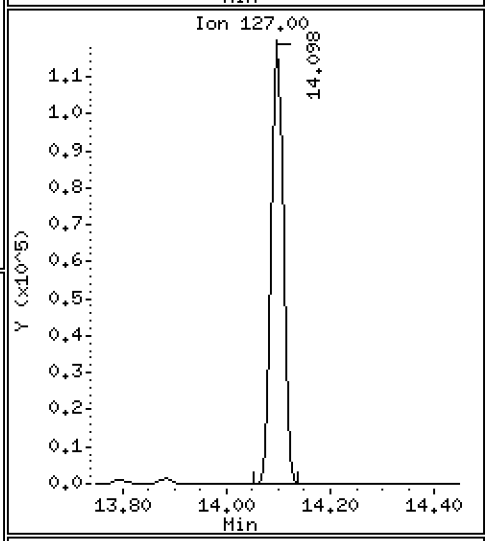


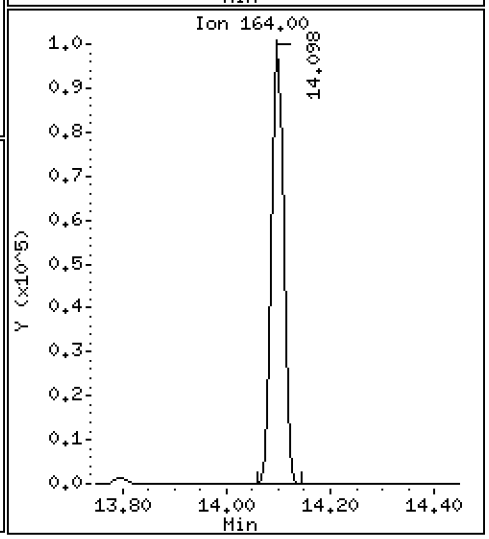












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

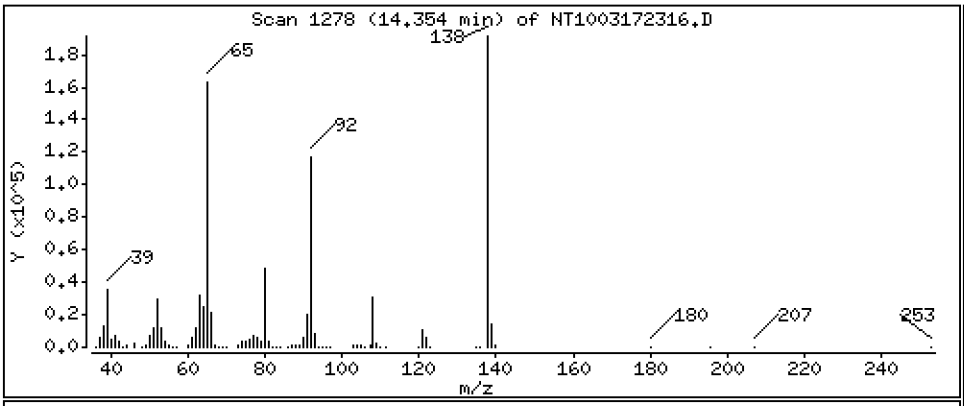
Operator: VTS

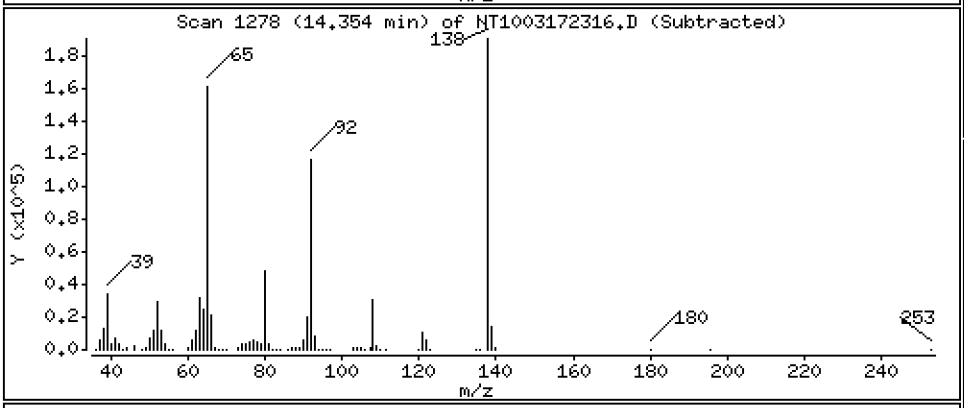
Column phase: ZB-5msi

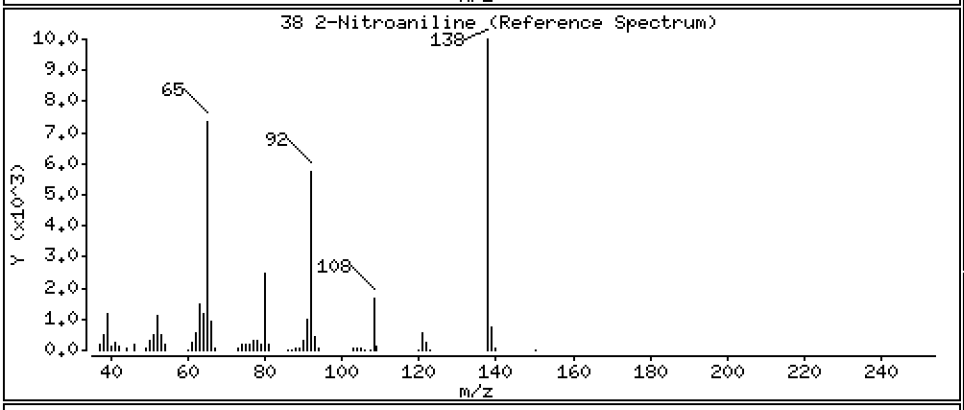
Column diameter: 0.25

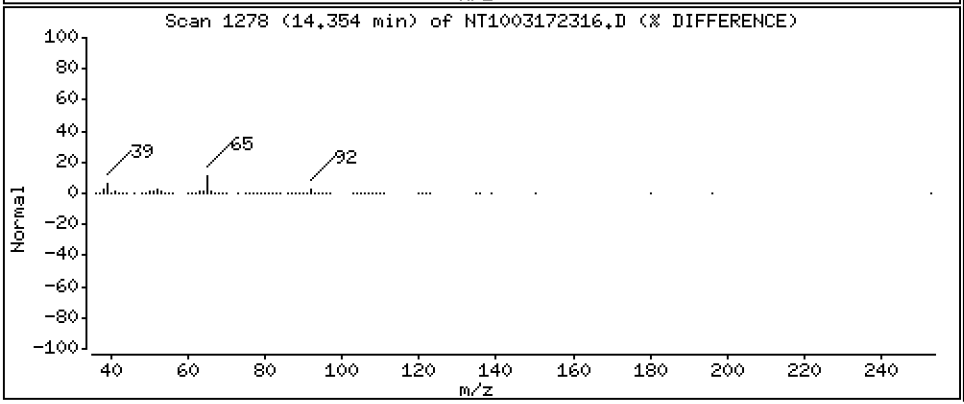
38 2-Nitroaniline

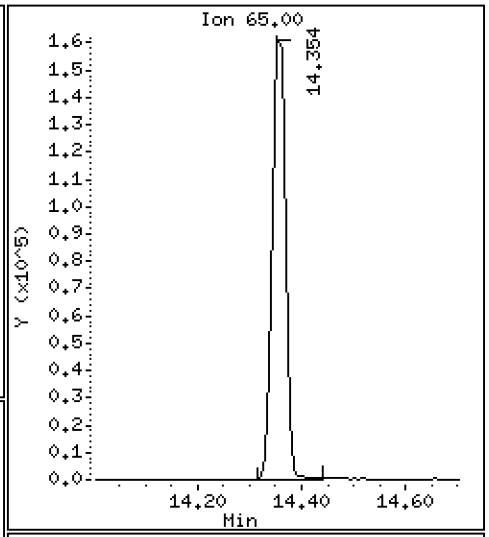
Concentration: 10.06 ug/mL

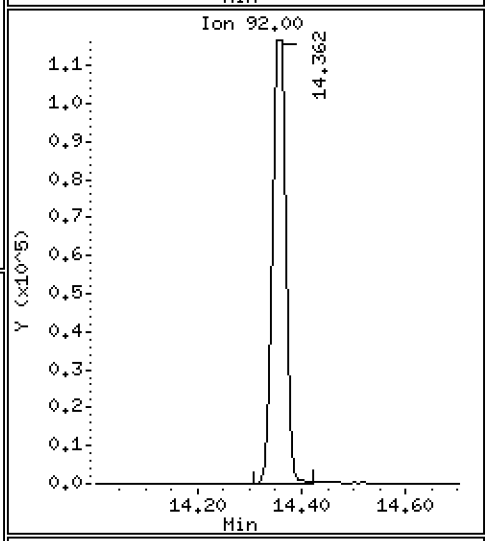


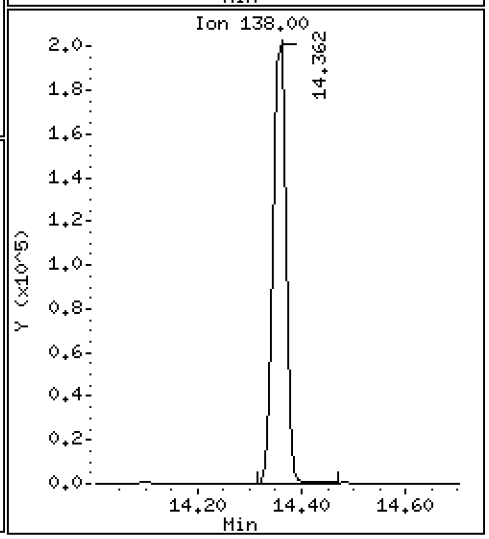












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

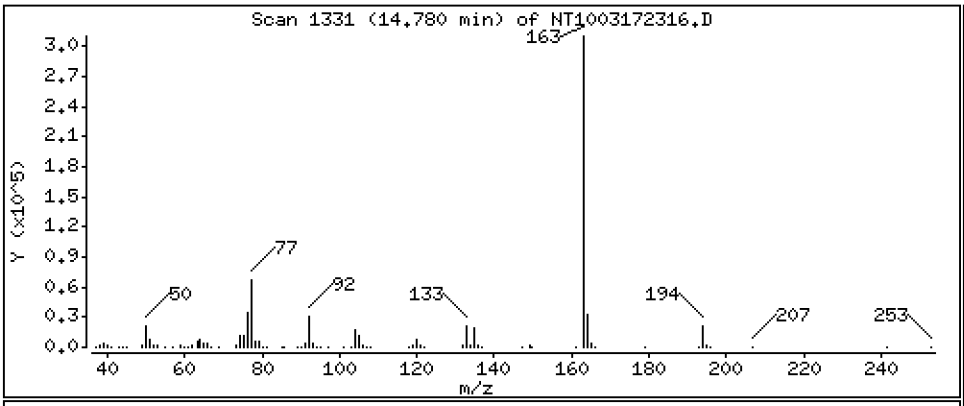
Operator: VTS

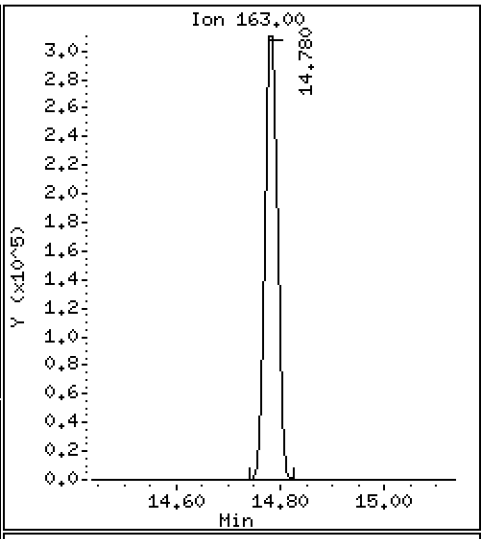
Column phase: ZB-5msi

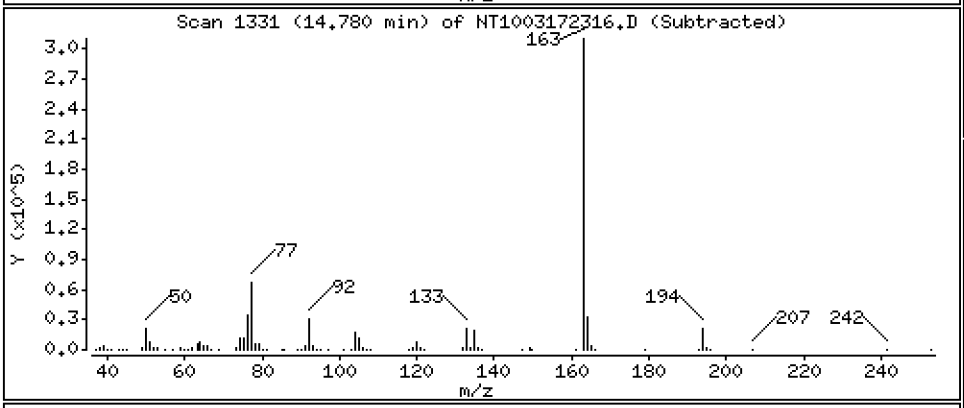
Column diameter: 0.25

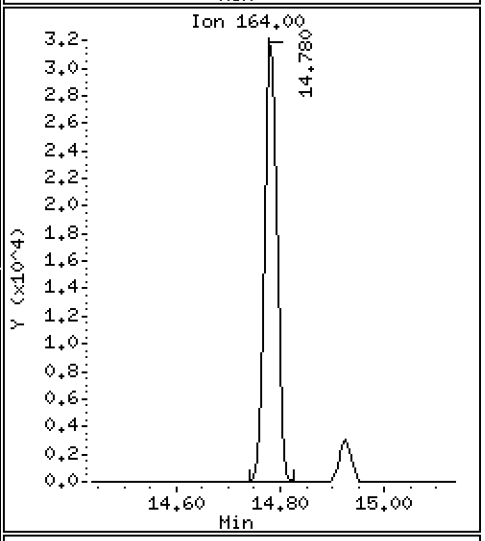
39 Dimethylphthalate

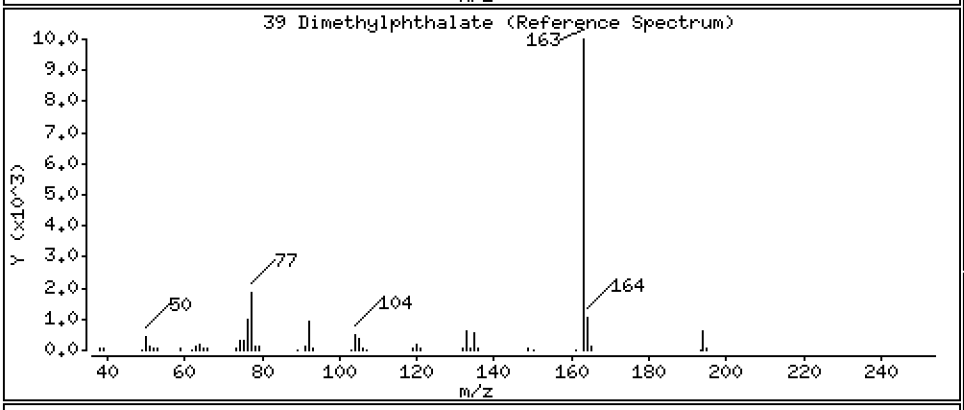
Concentration: 5.129 ug/mL

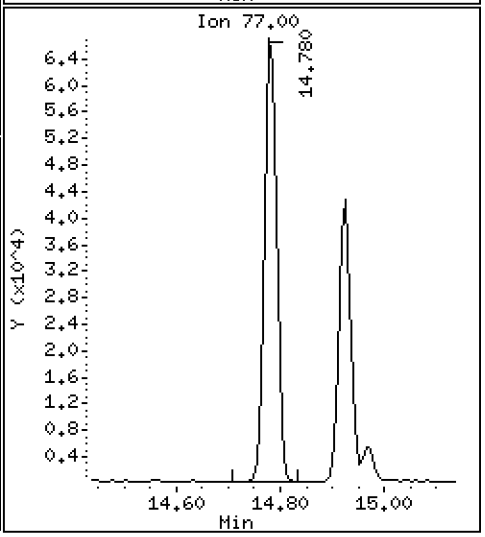


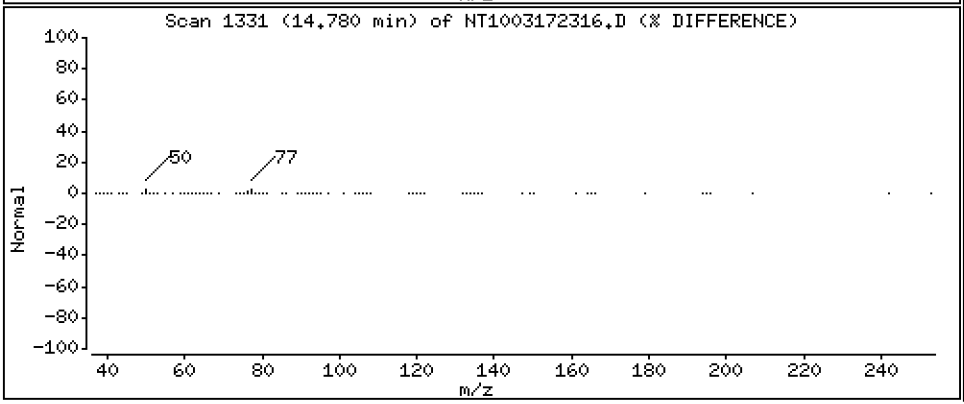












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

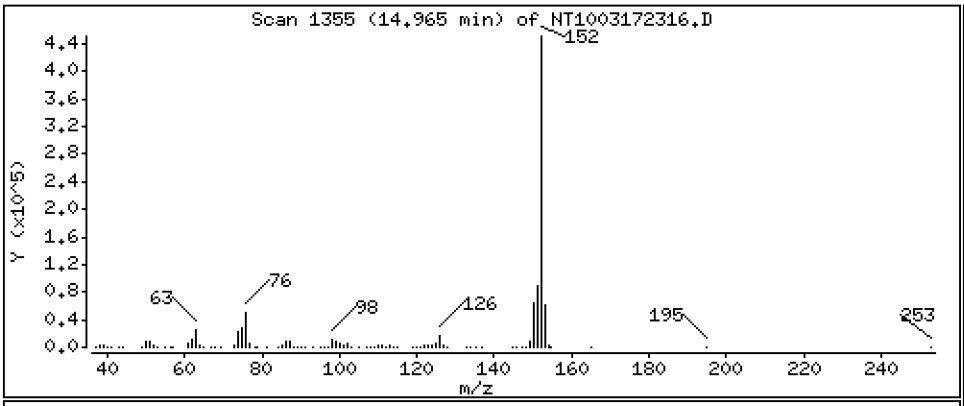
Operator: VTS

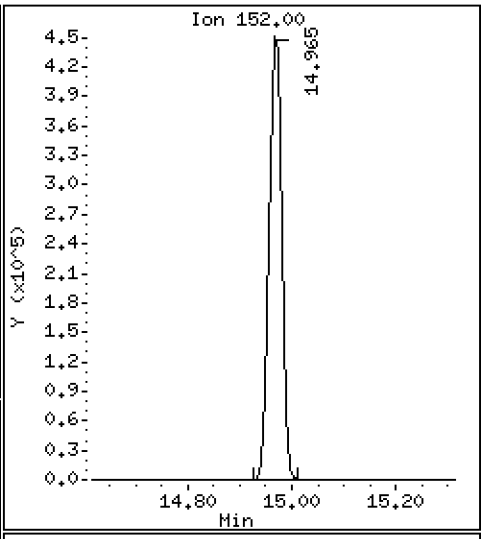
Column phase: ZB-5msi

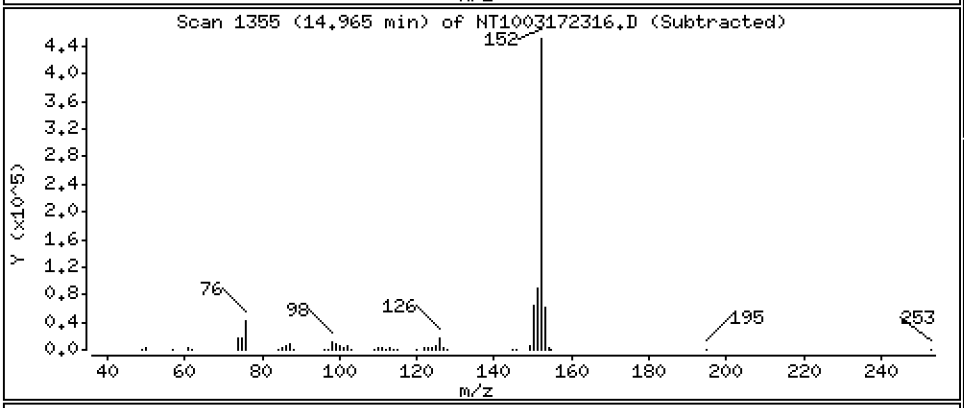
Column diameter: 0.25

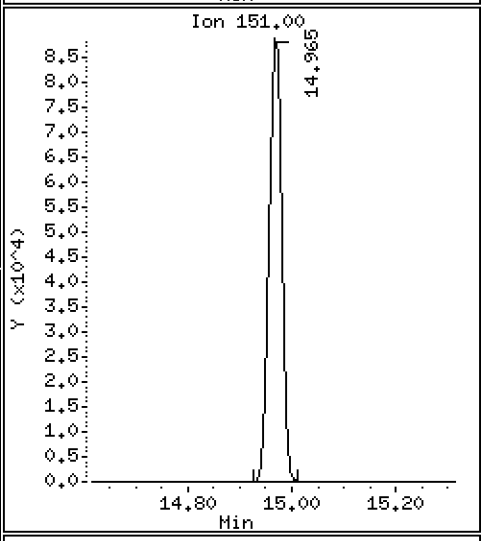
40 Acenaphthylene

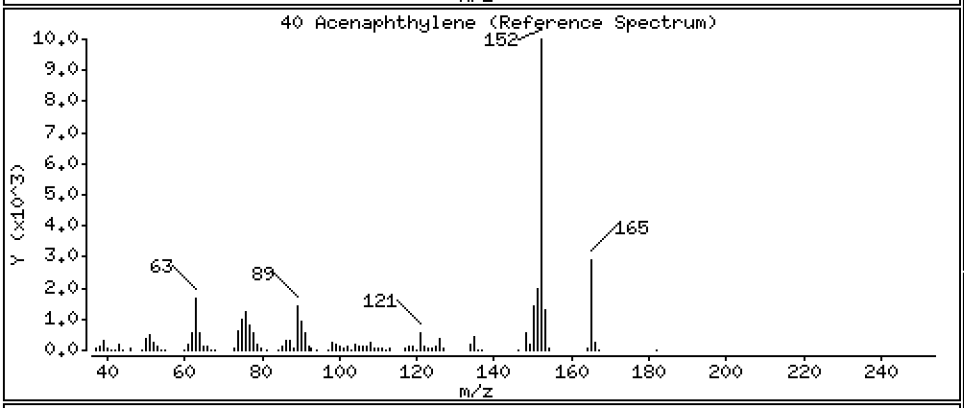
Concentration: 4.865 ug/mL

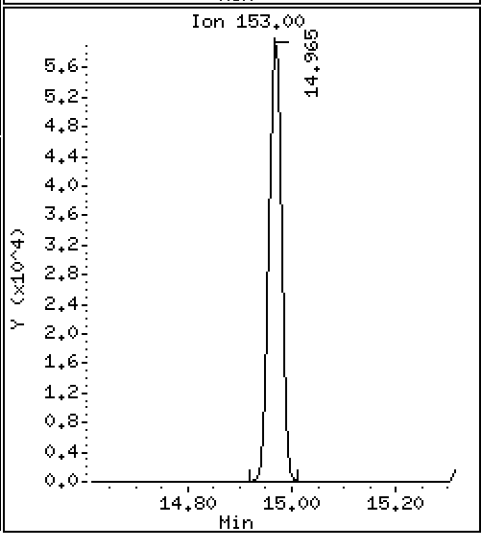


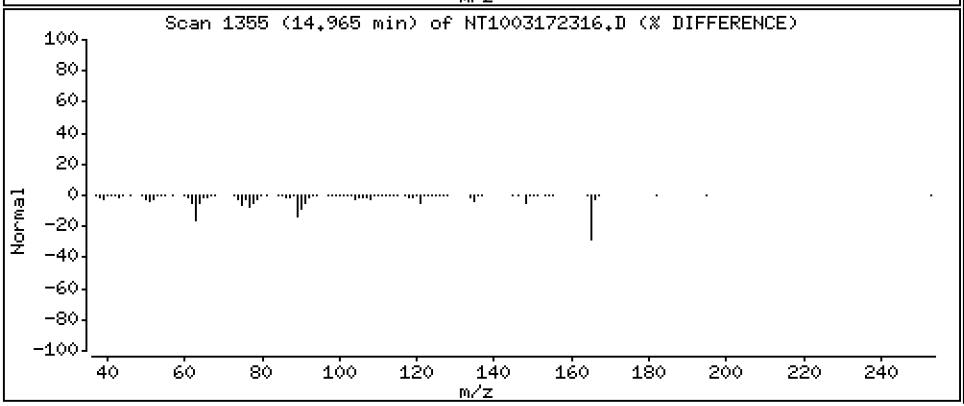












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

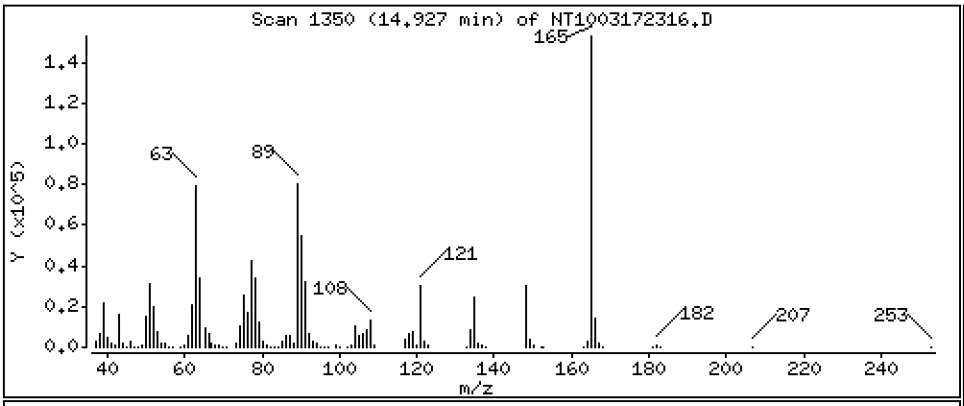
Operator: VTS

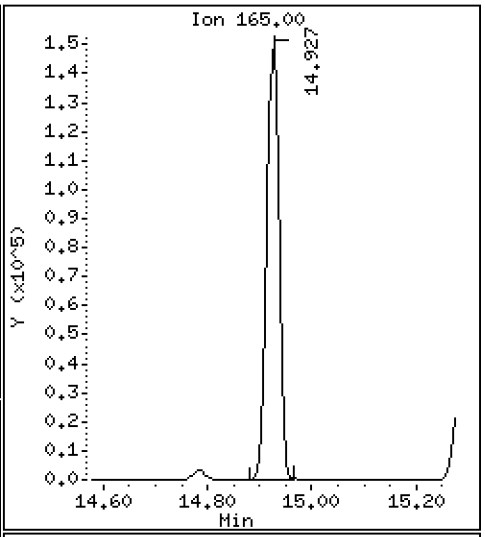
Column phase: ZB-5msi

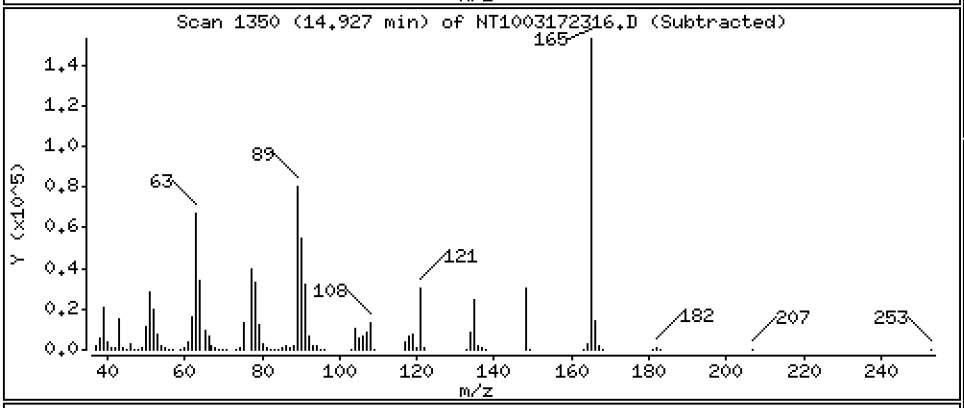
Column diameter: 0.25

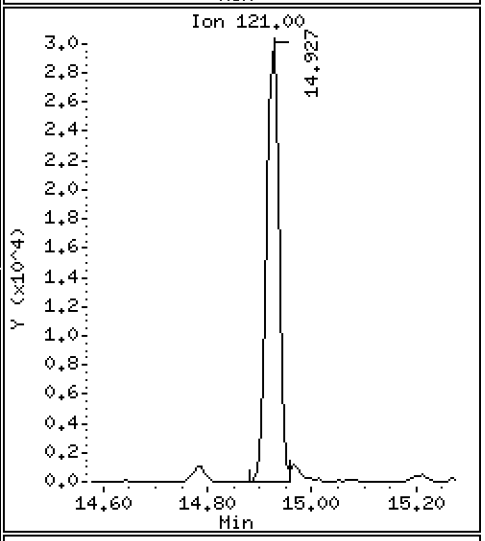
41 2,6-Dinitrotoluene

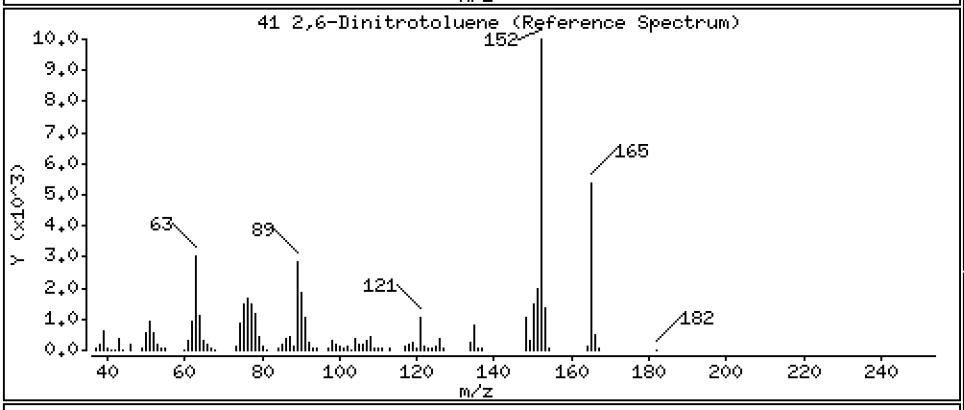
Concentration: 11.13 ug/mL

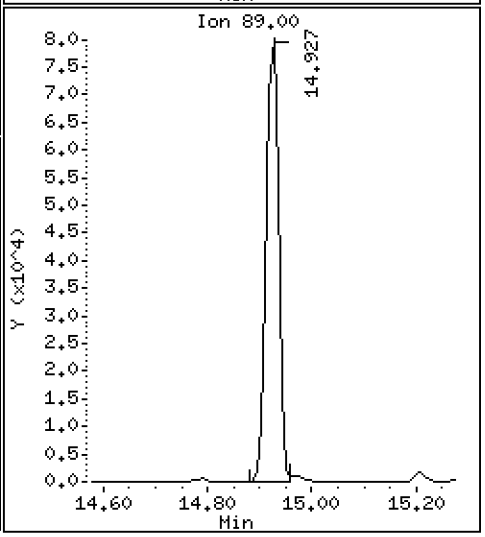


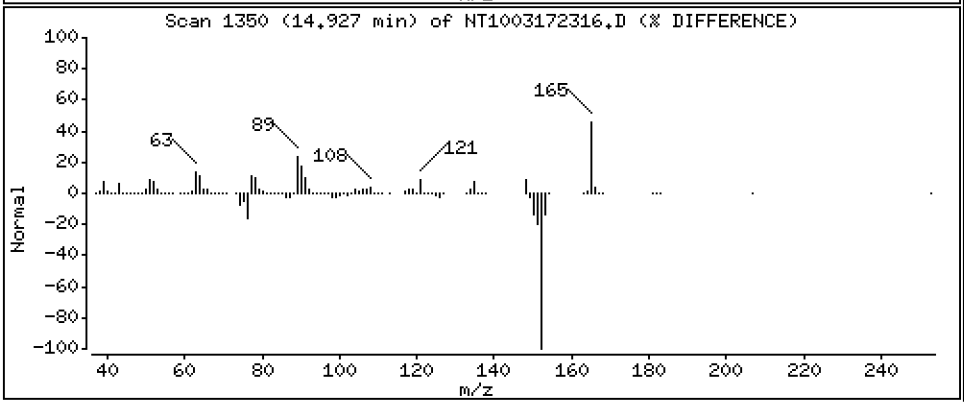












Date : 18-MAR-2023 03:57

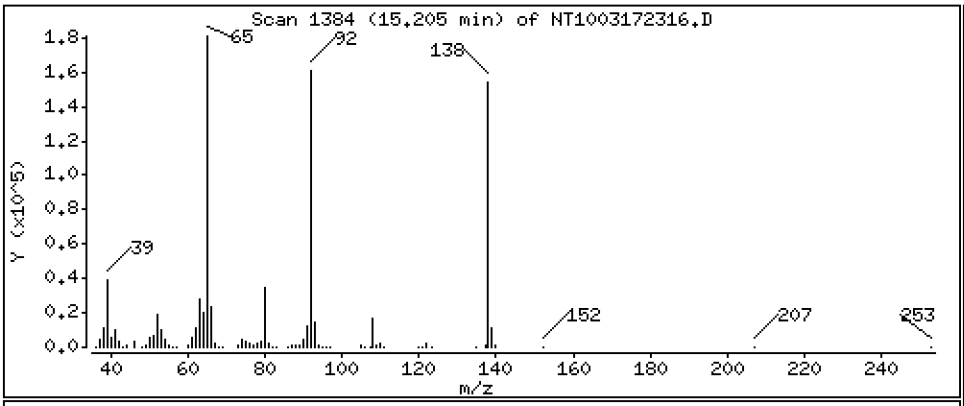
Client ID: Instrument: nt10.i

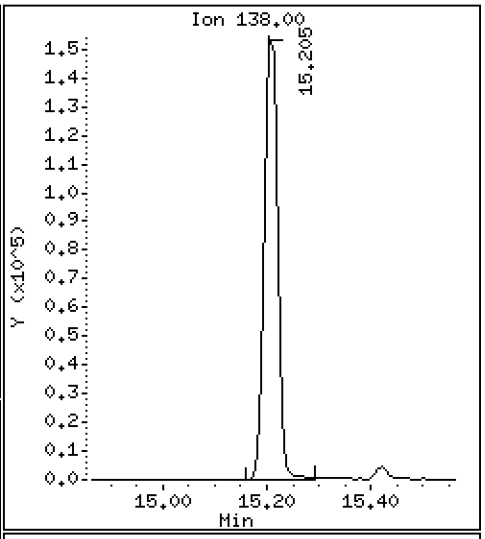
Sample Info: SLC0473-CCV1

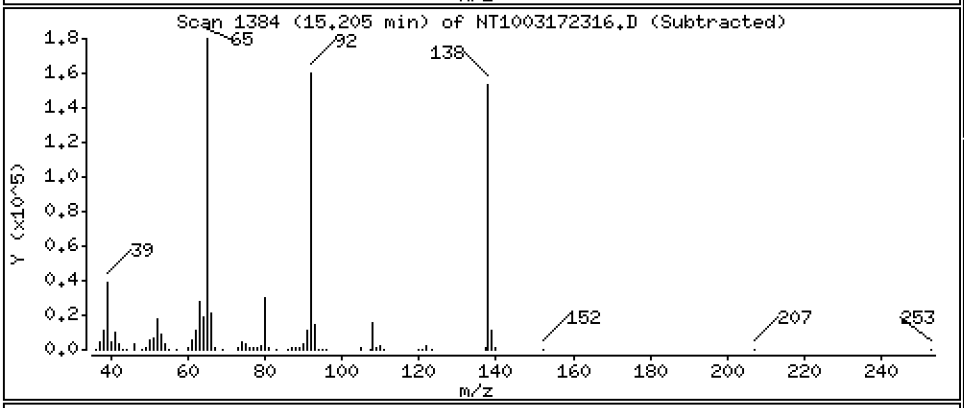
Operator: VTS

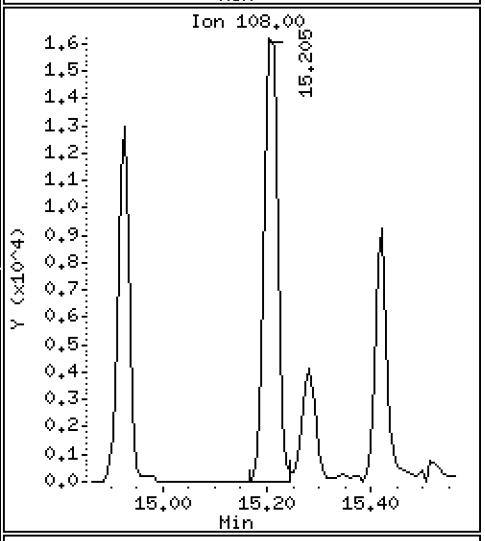
Column phase: ZB-5msi Column diameter: 0.25

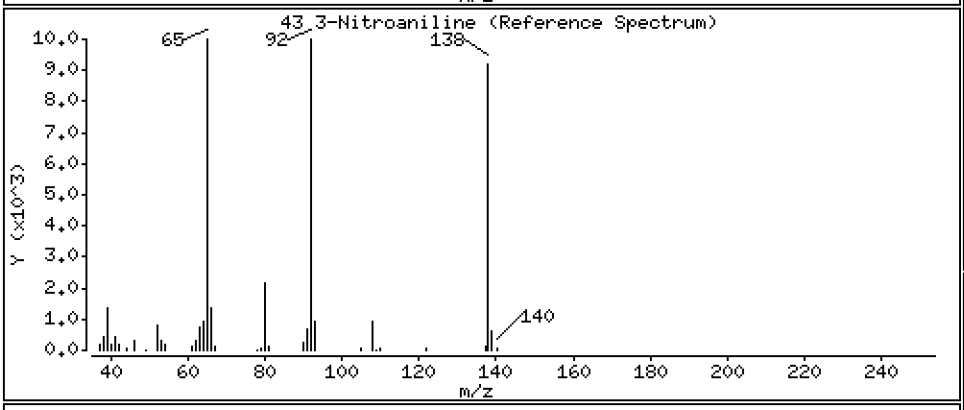
43 3-Nitroaniline Concentration: 10.97 ug/mL

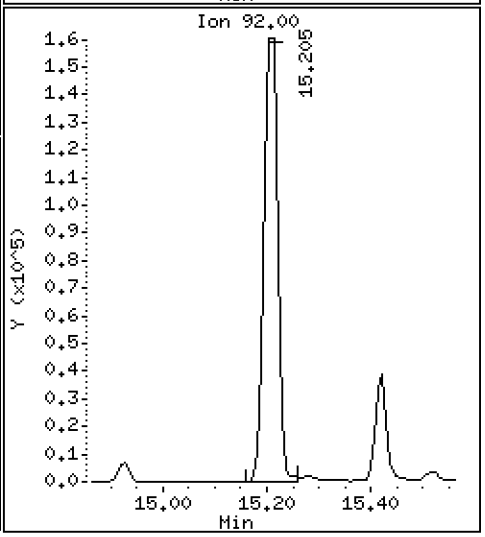


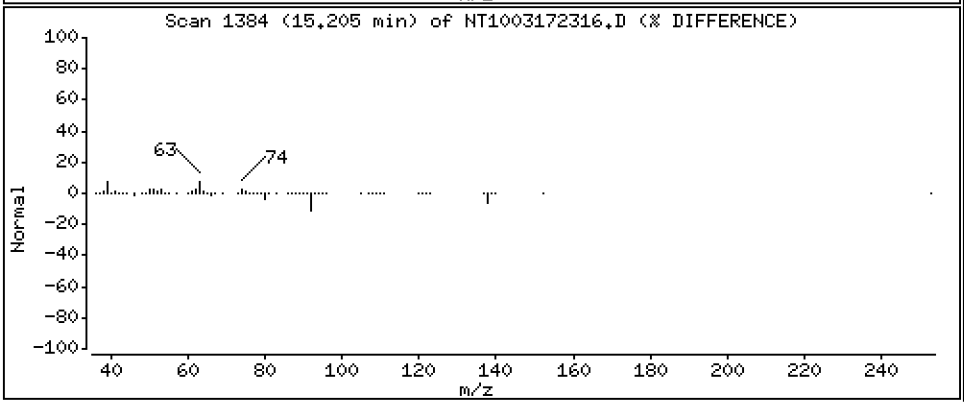












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

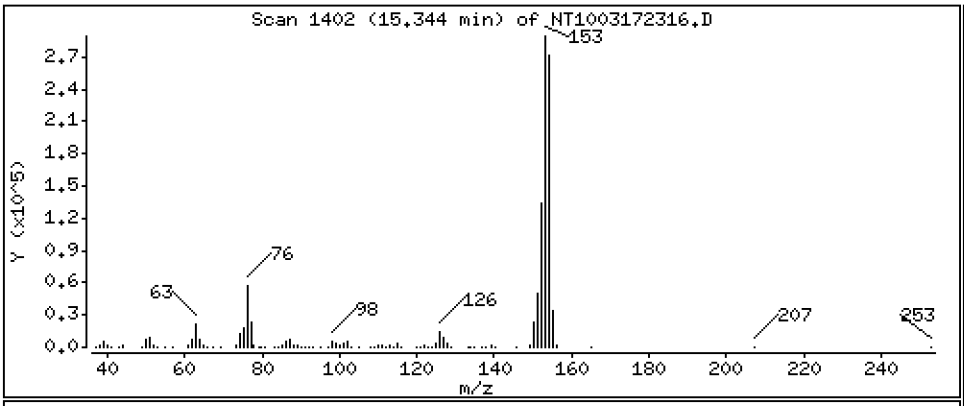
Operator: VTS

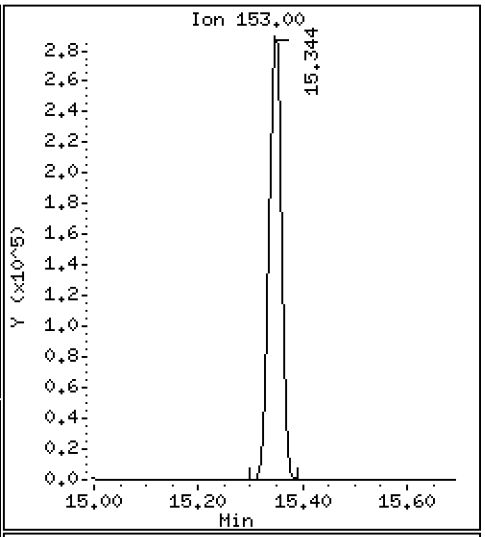
Column phase: ZB-5msi

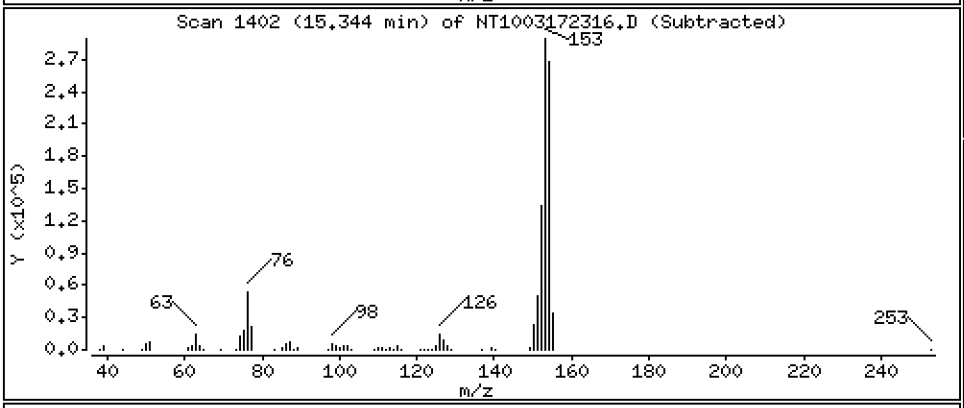
Column diameter: 0.25

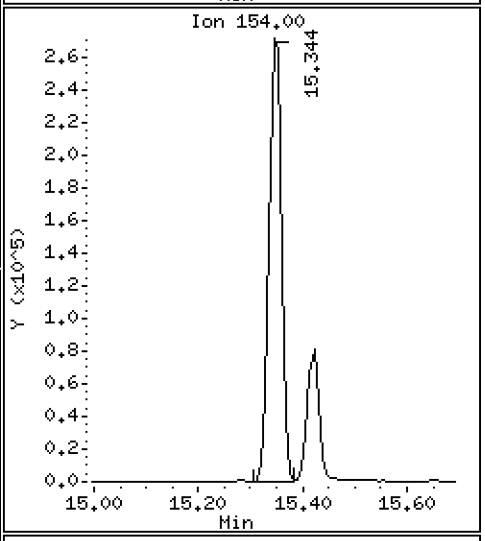
44 Acenaphthene

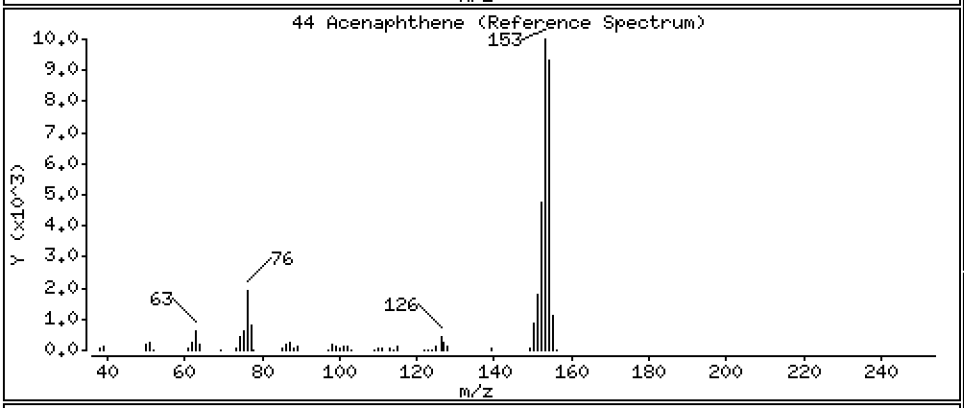
Concentration: 4.972 ug/mL

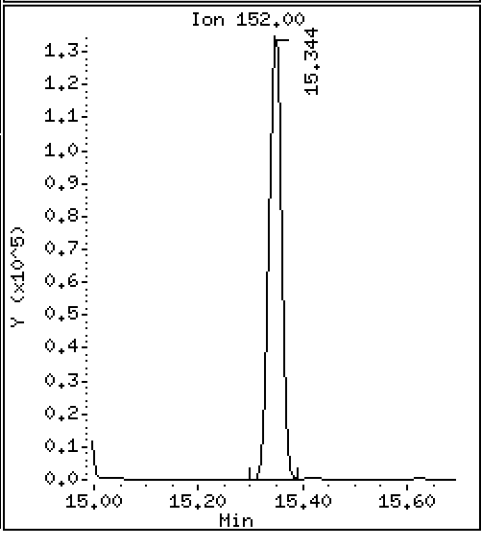


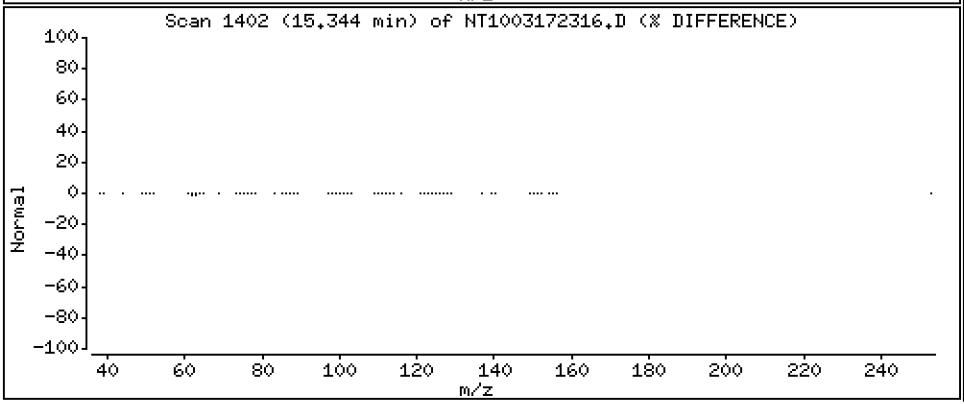












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

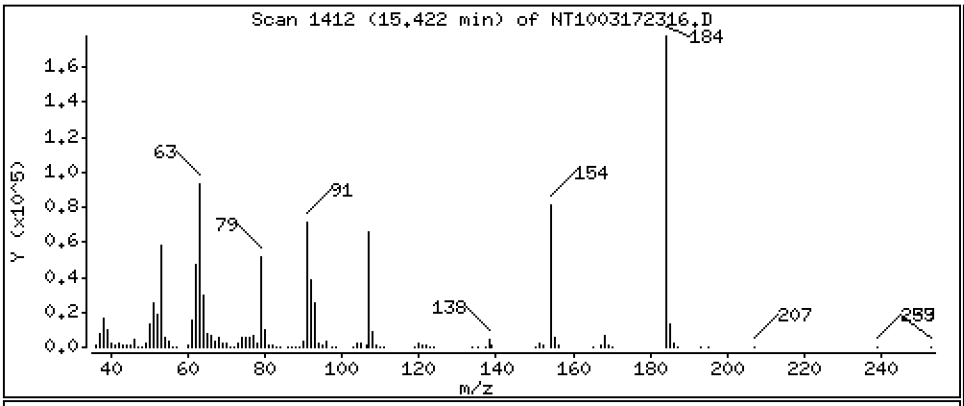
Operator: VTS

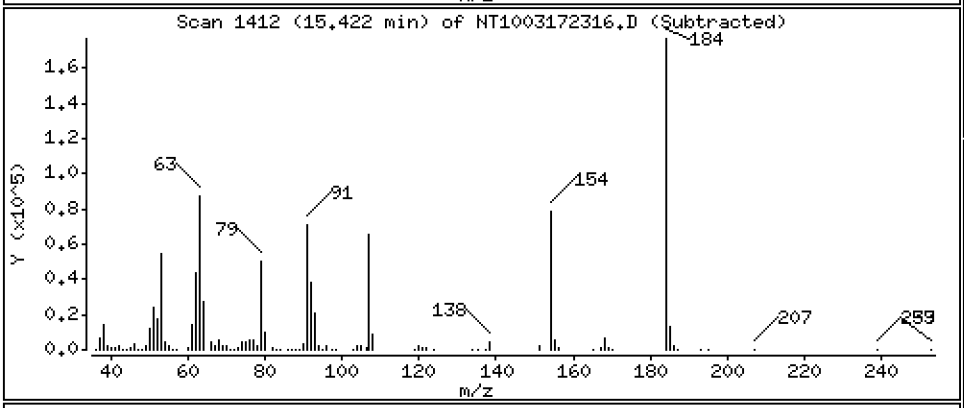
Column phase: ZB-5msi

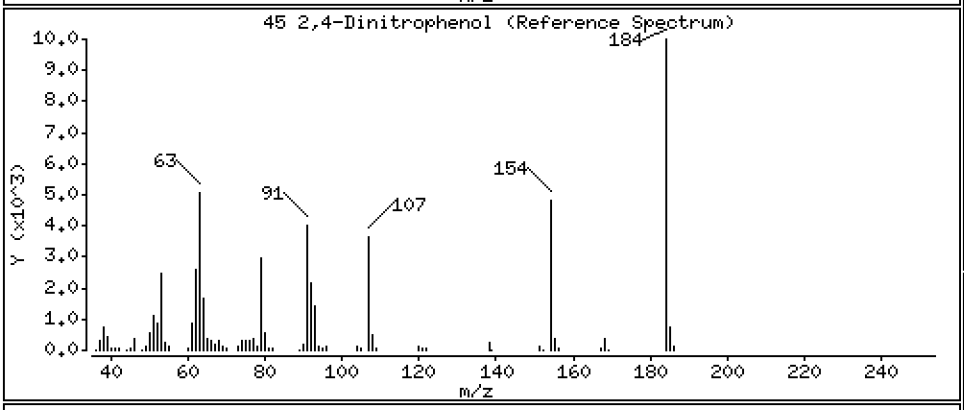
Column diameter: 0.25

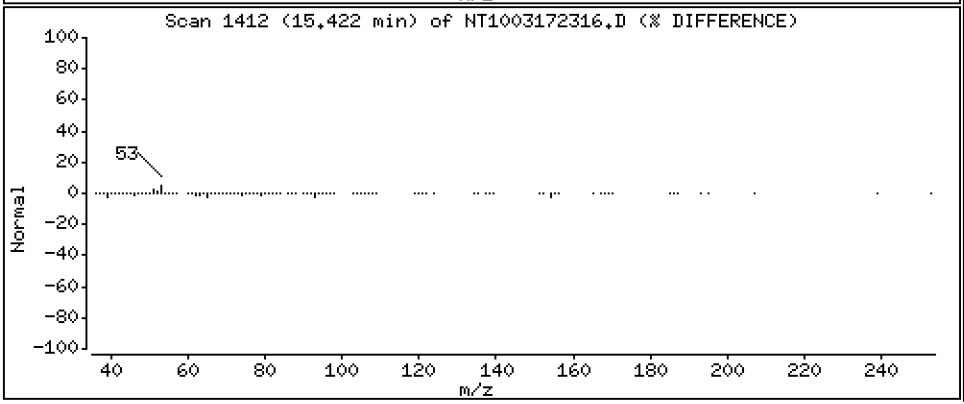
45 2,4-Dinitrophenol

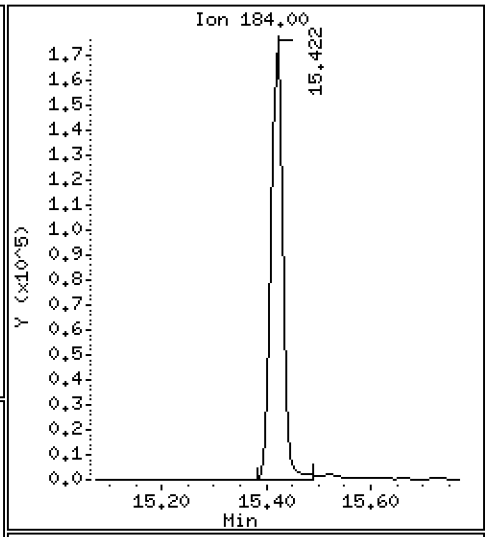
Concentration: 19.64 ug/mL

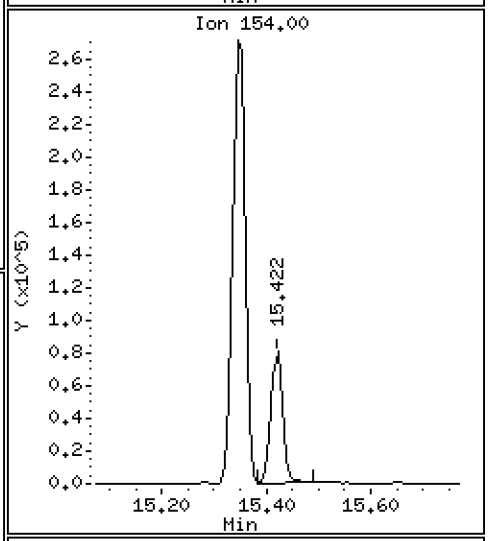


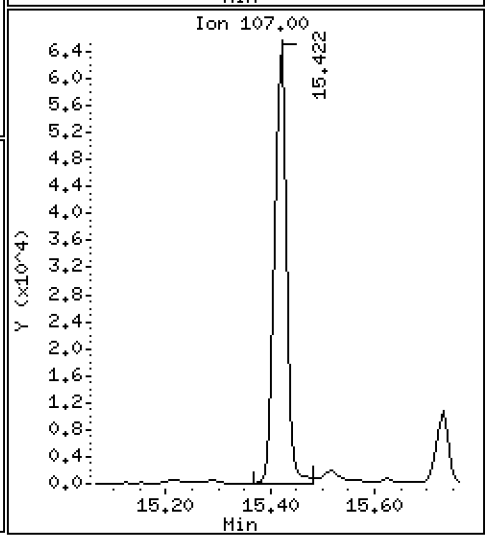












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

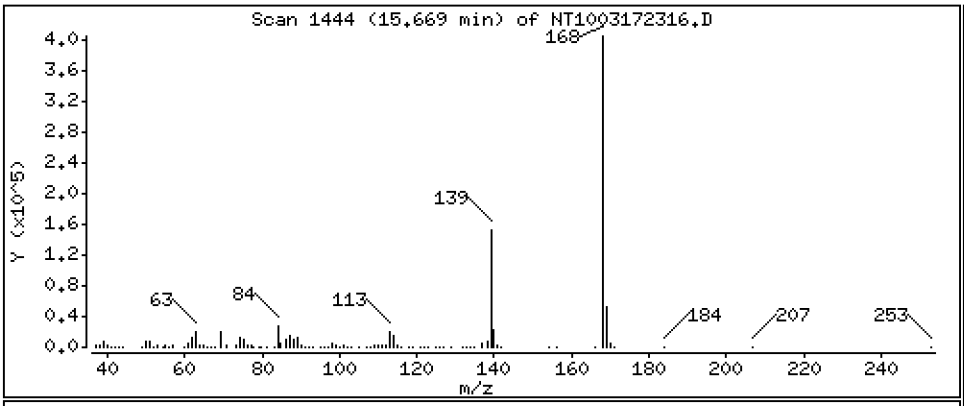
Operator: VTS

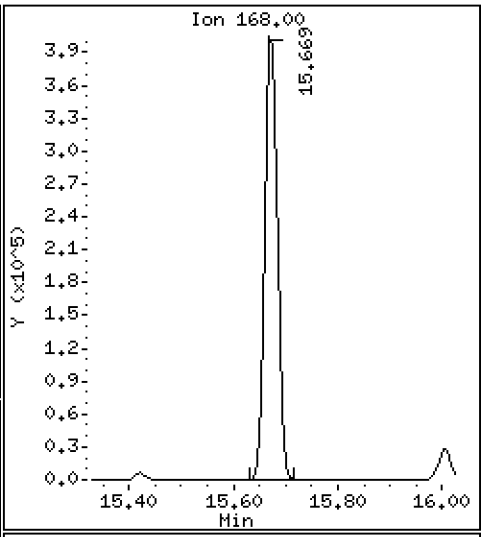
Column phase: ZB-5msi

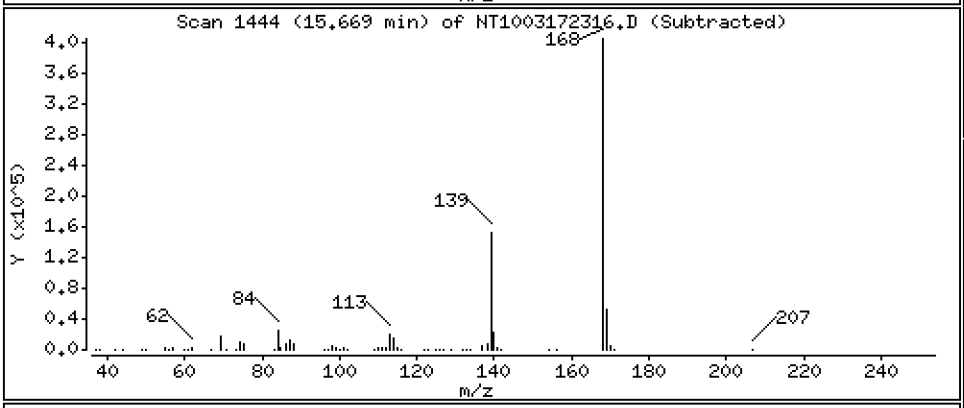
Column diameter: 0.25

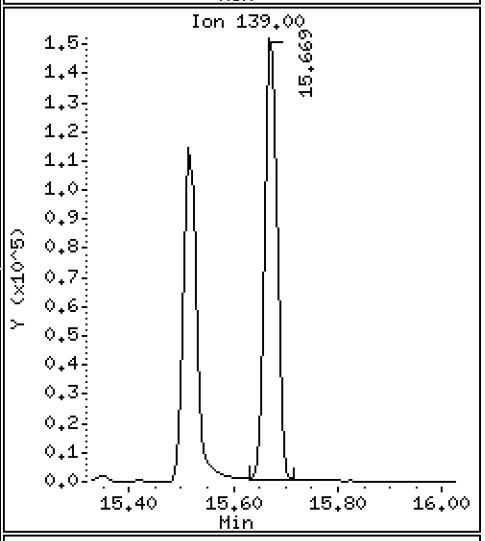
46 Dibenzofuran

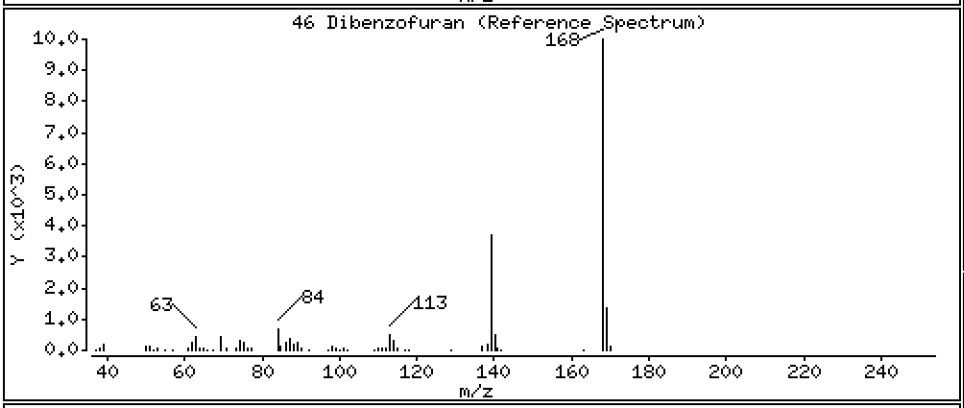
Concentration: 4.755 ug/mL

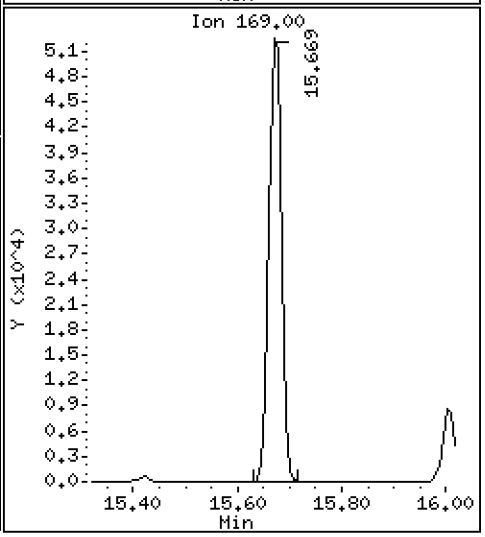


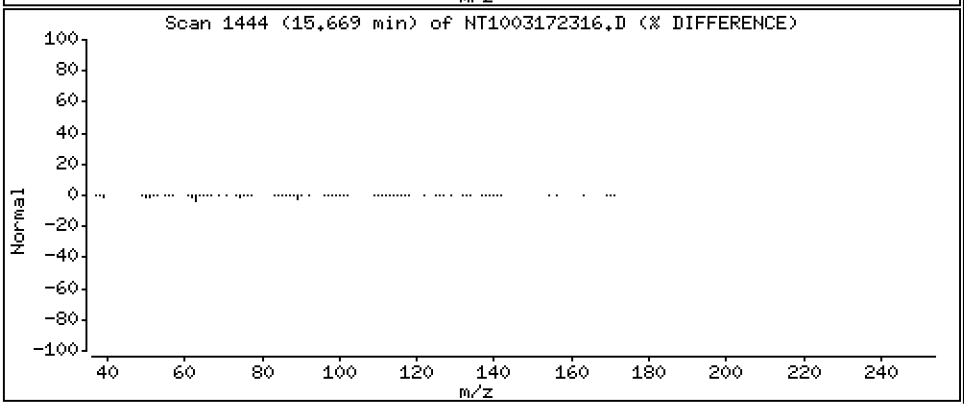












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172316.D

Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

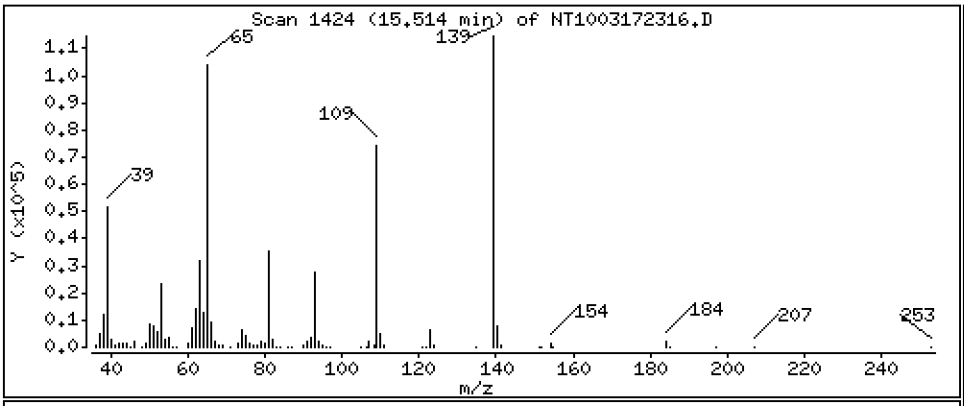
Operator: VTS

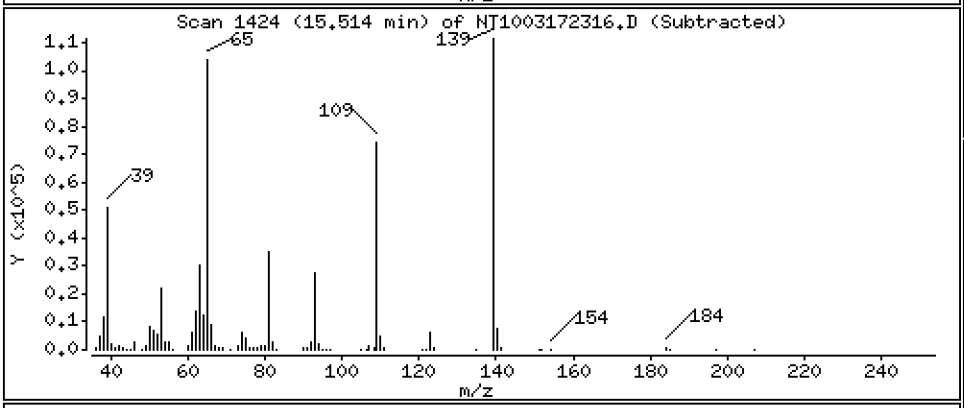
Column phase: ZB-5msi

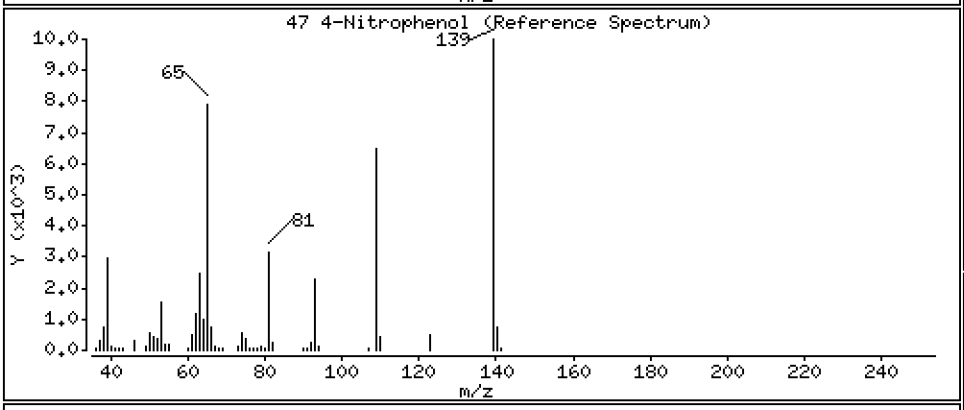
Column diameter: 0.25

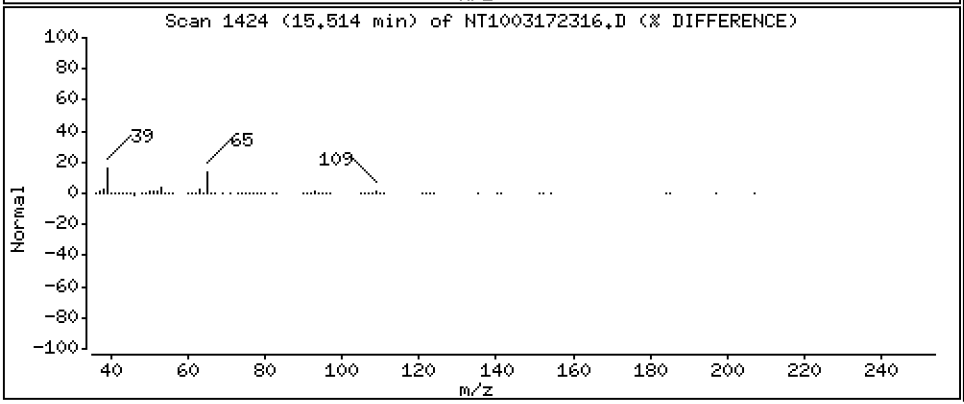
47 4-Nitrophenol

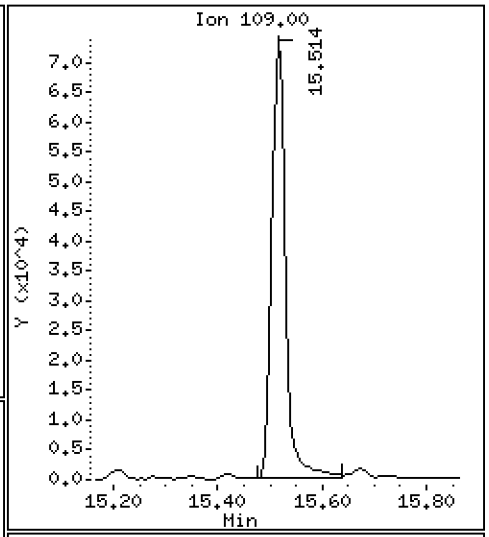
Concentration: 8.714 ug/mL

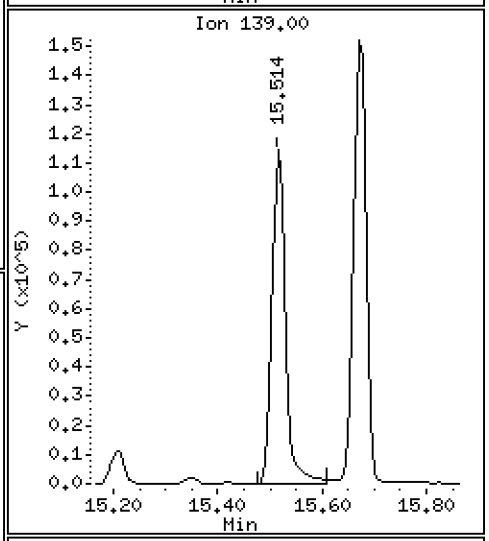


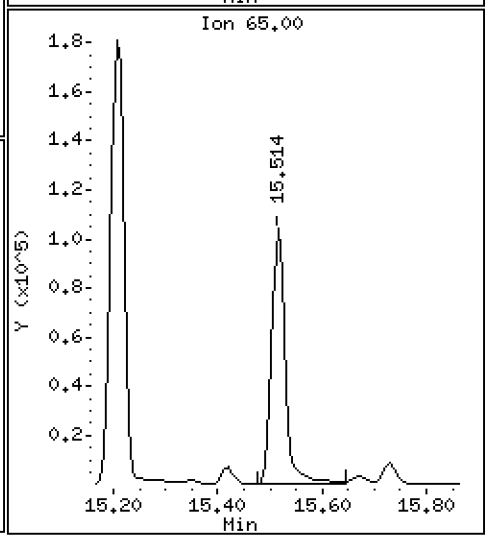












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

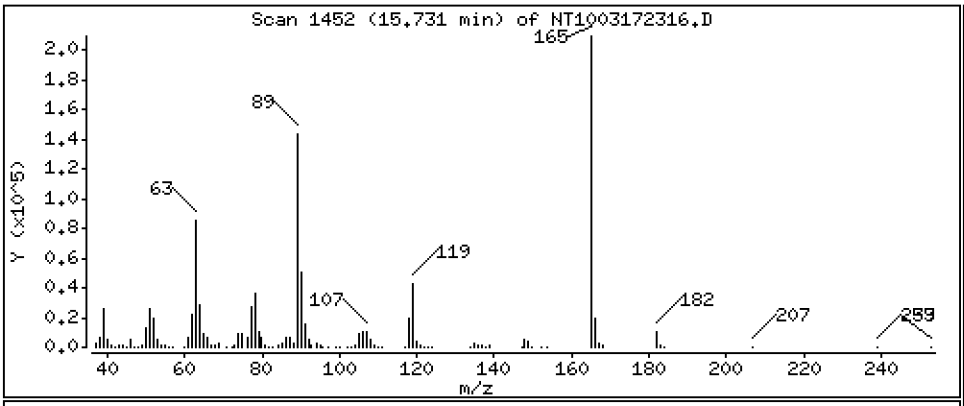
Operator: VTS

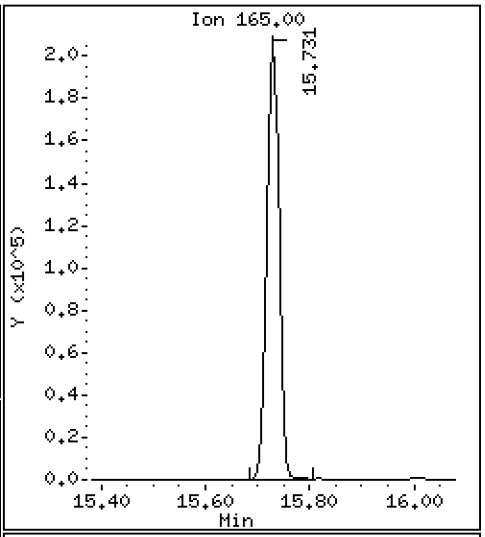
Column phase: ZB-5msi

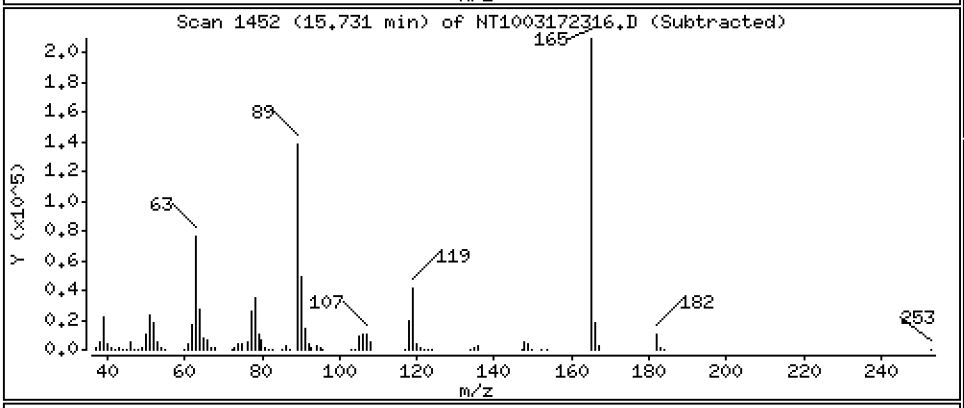
Column diameter: 0.25

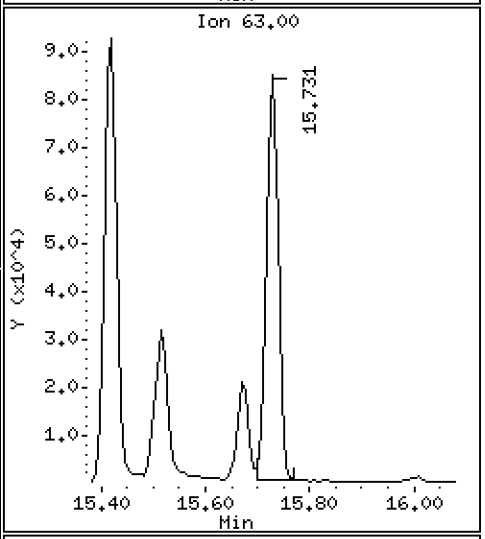
48 2,4-Dinitrotoluene

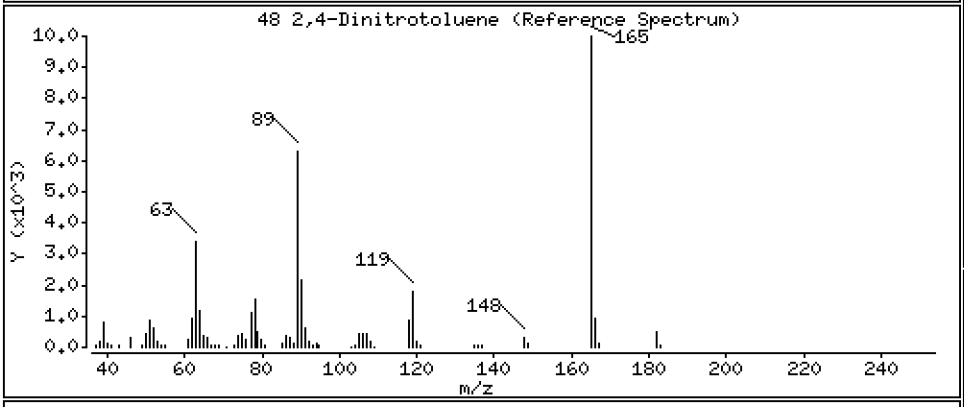
Concentration: 10.23 ug/mL

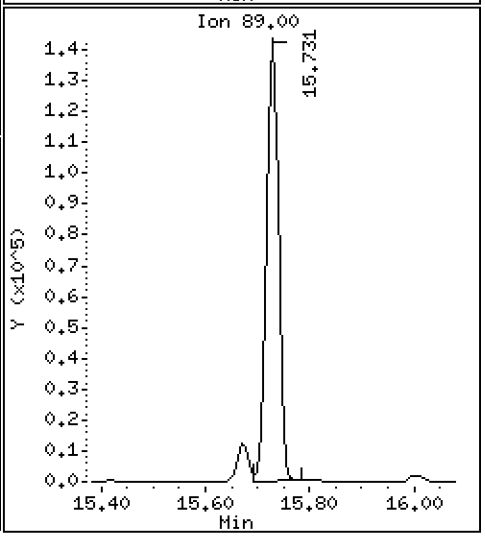


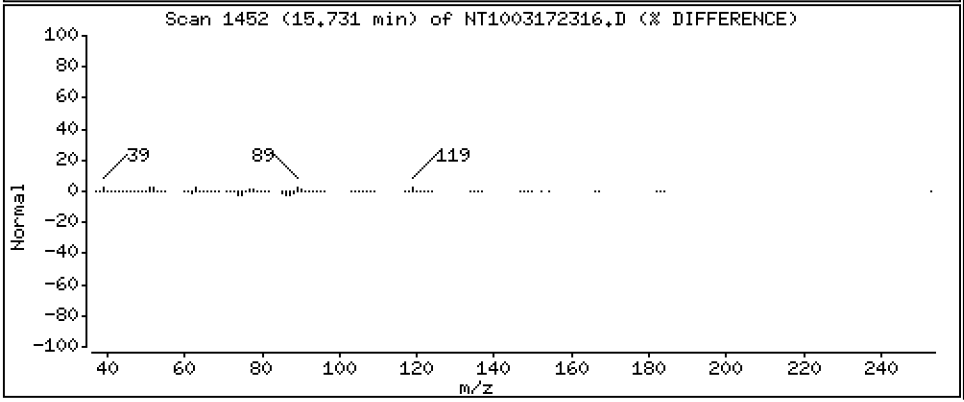












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

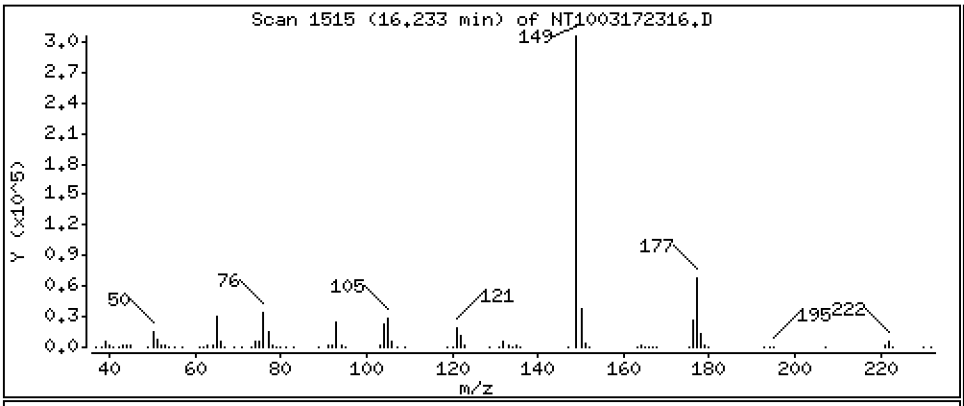
Operator: VTS

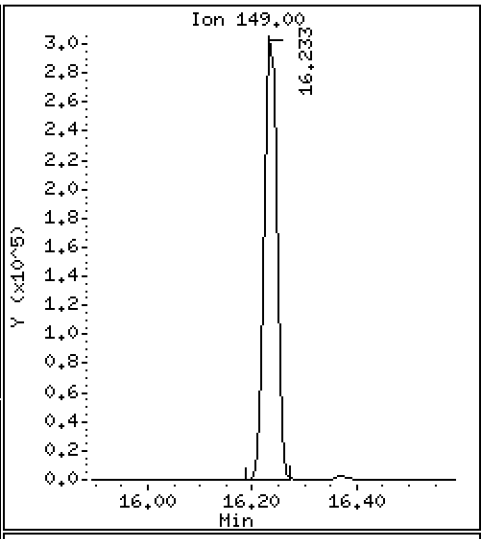
Column phase: ZB-5msi

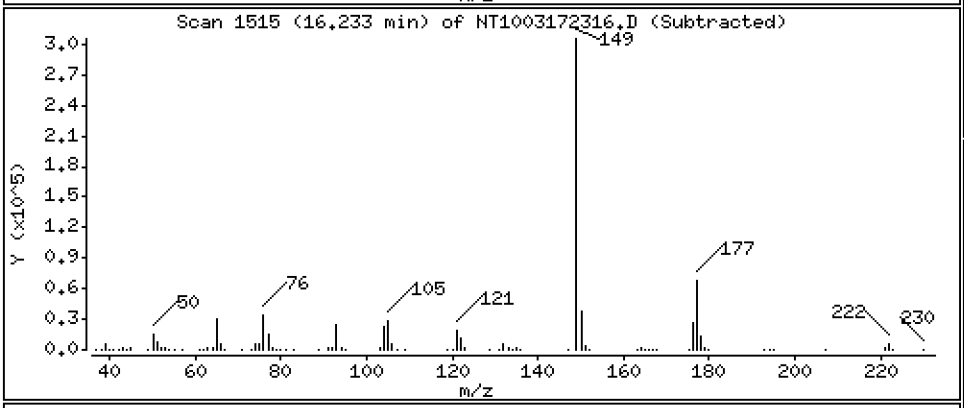
Column diameter: 0.25

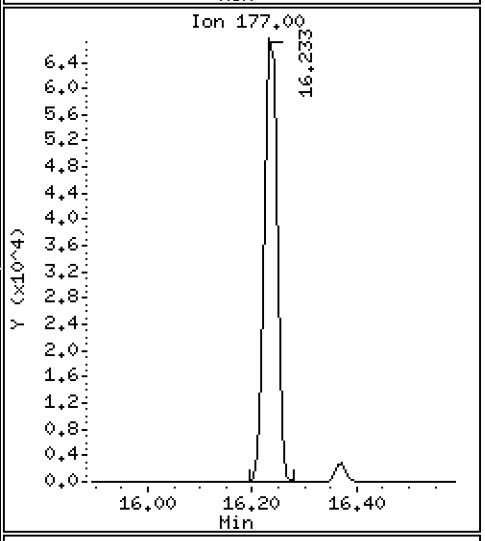
50 Diethylphthalate

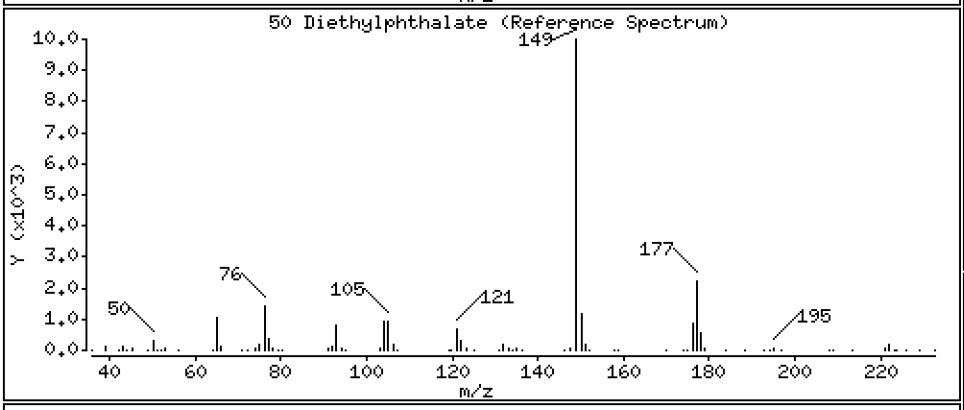
Concentration: 5.112 ug/mL

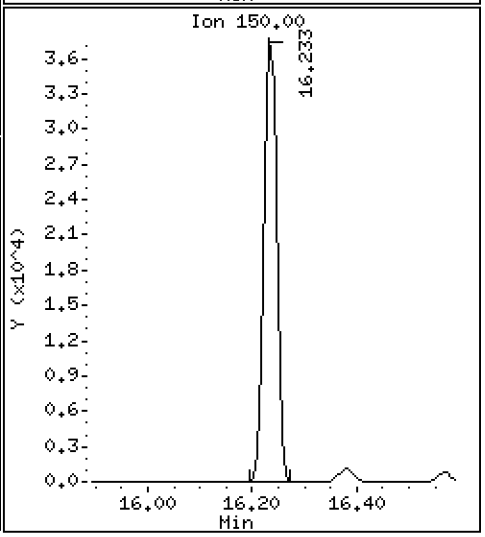


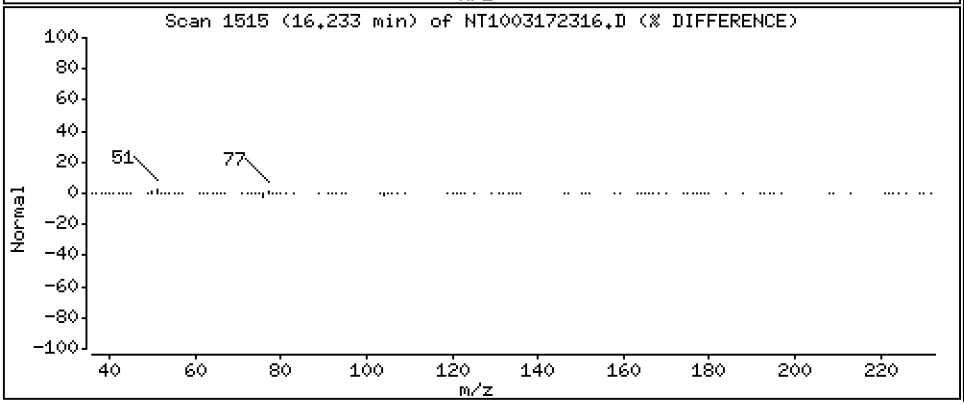












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

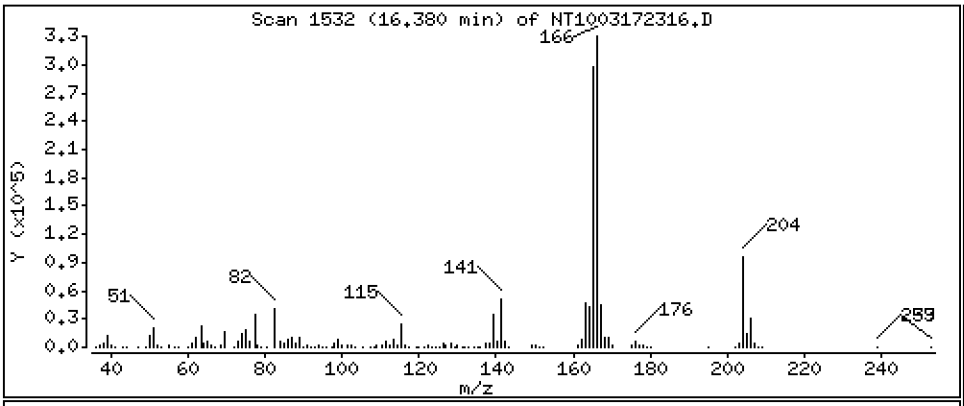
Operator: VTS

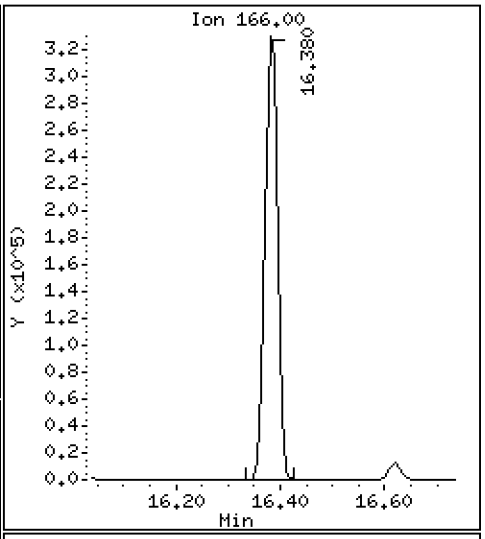
Column phase: ZB-5msi

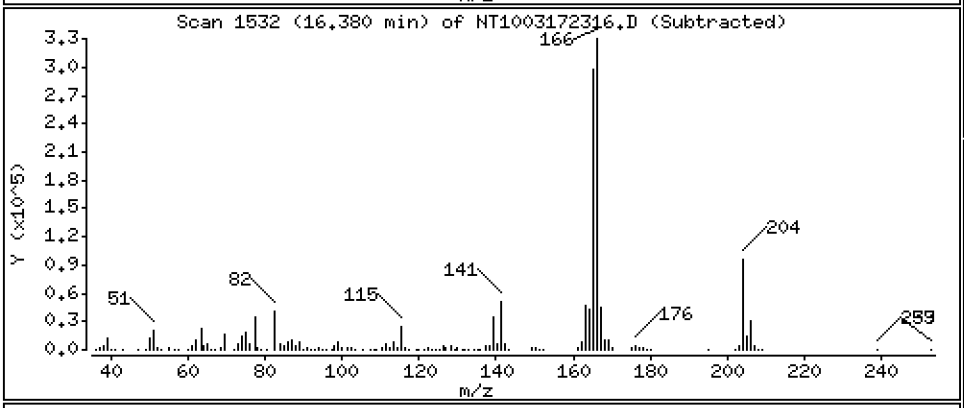
Column diameter: 0.25

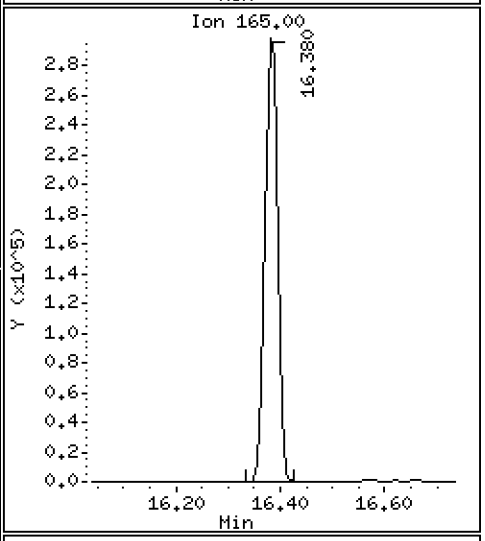
49 Fluorene

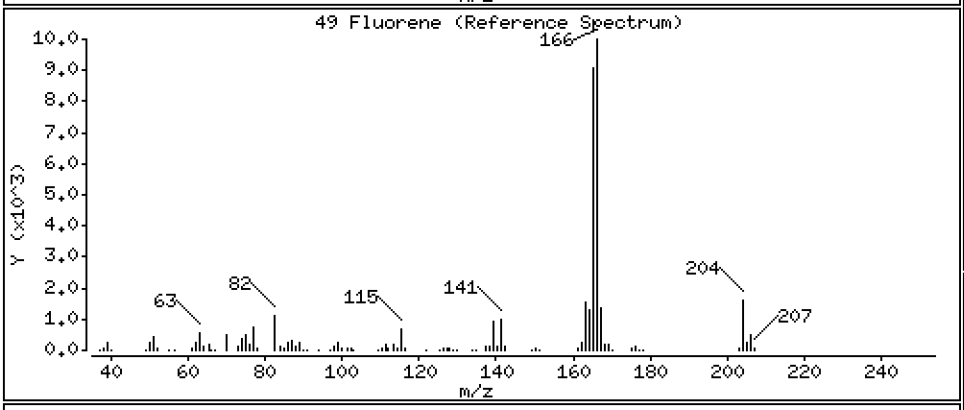
Concentration: 4.975 ug/mL

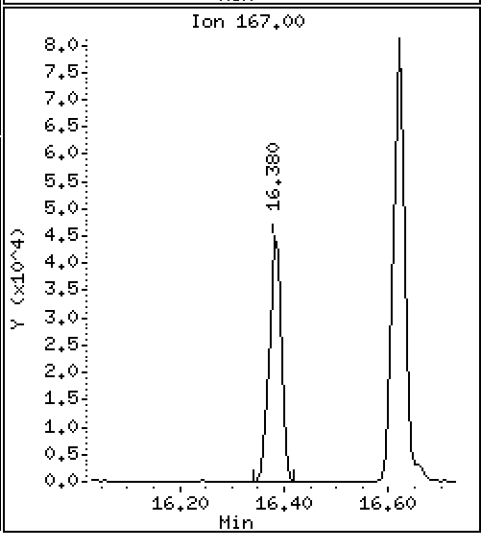


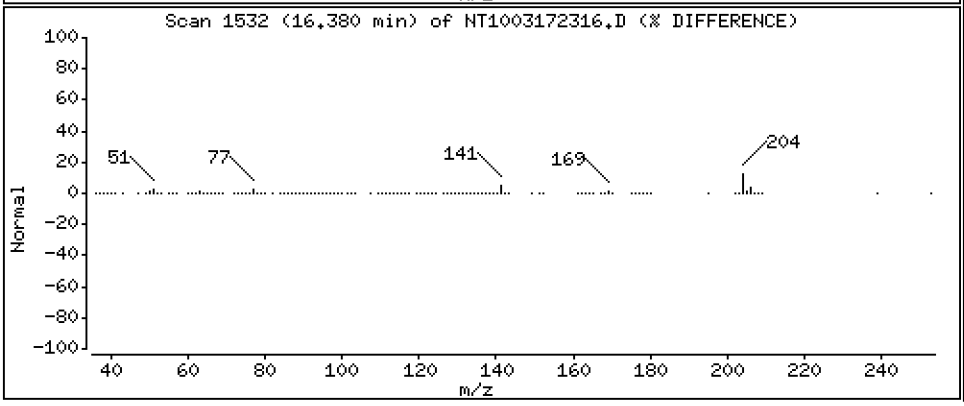












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

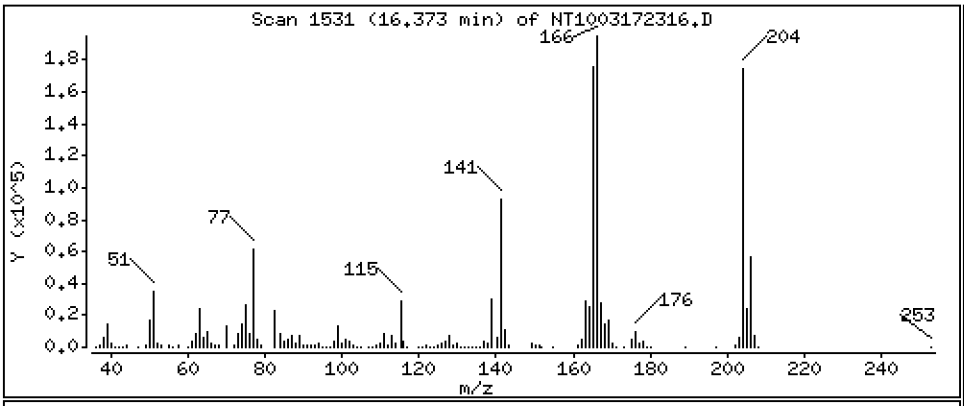
Operator: VTS

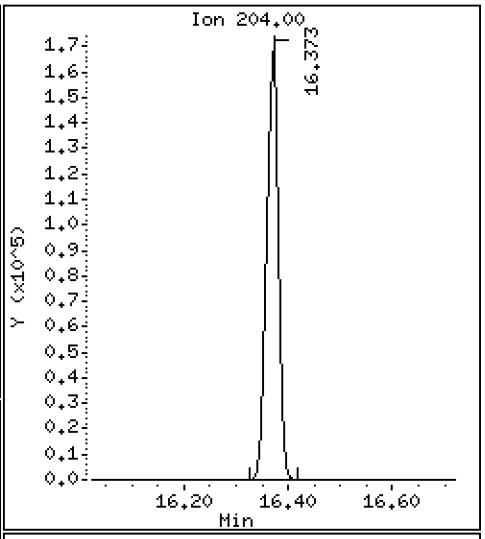
Column phase: ZB-5msi

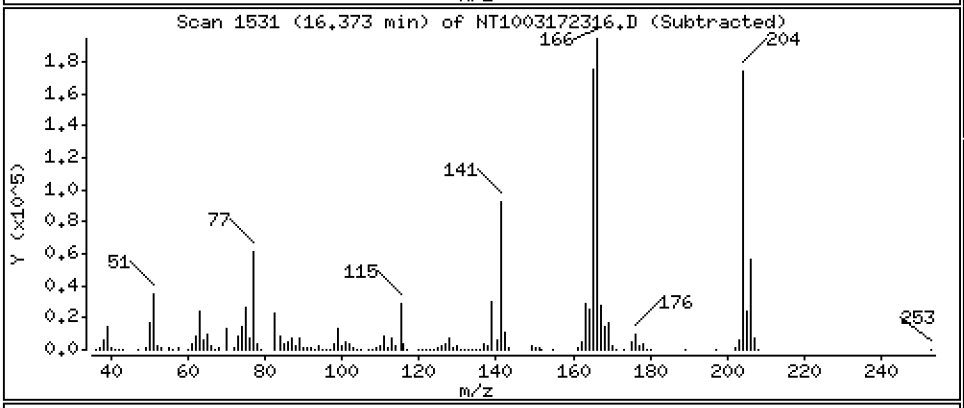
Column diameter: 0.25

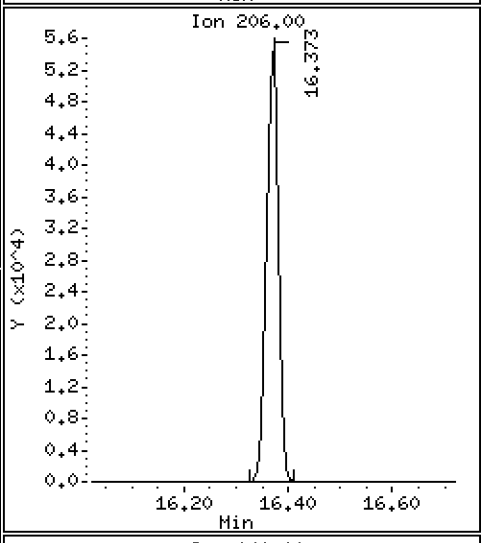
51 4-Chlorophenyl-phenylether

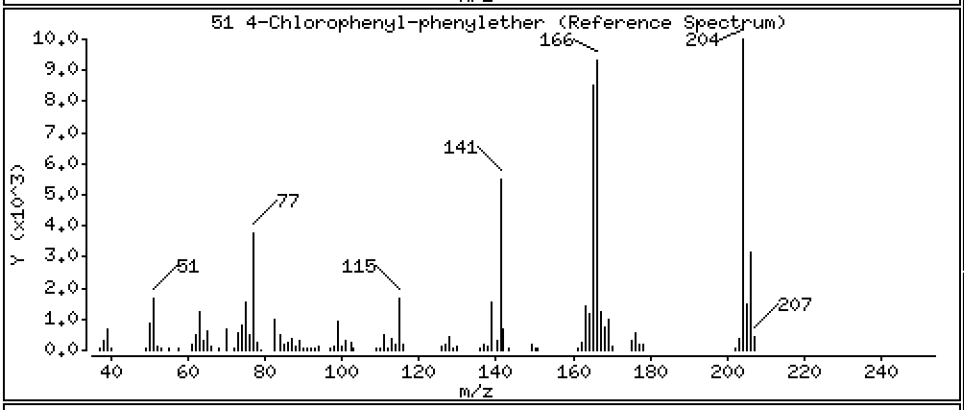
Concentration: 5.004 ug/mL

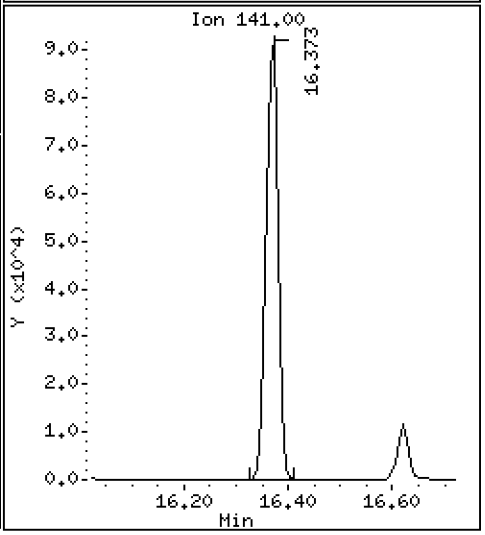


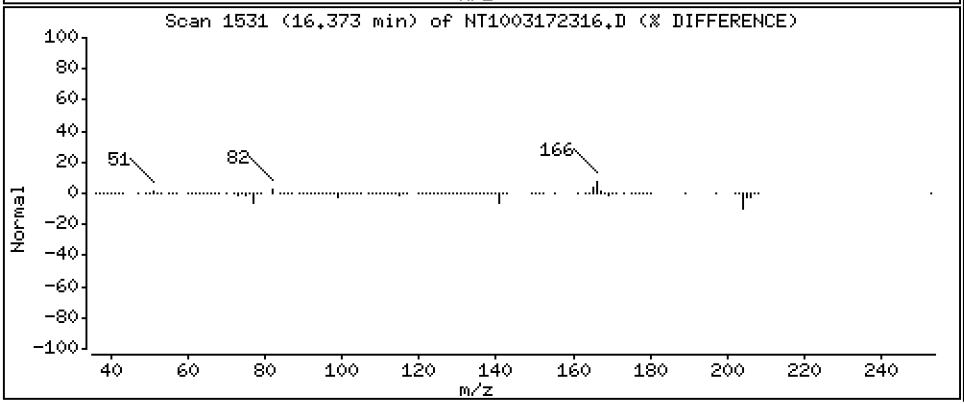












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

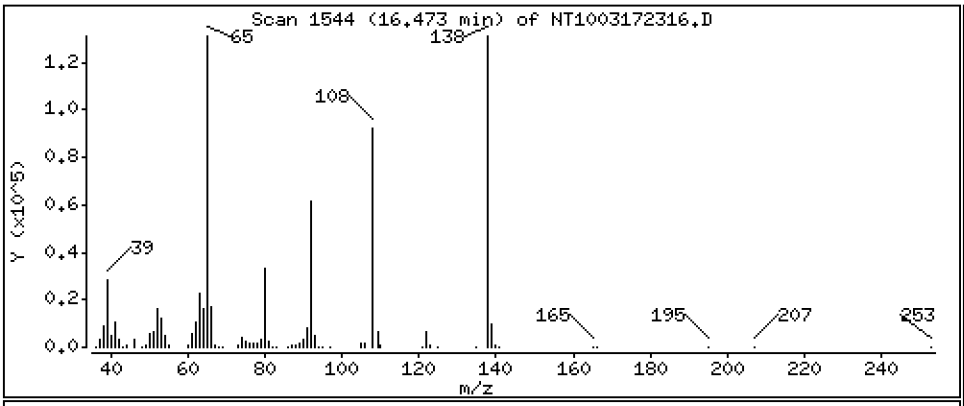
Operator: VTS

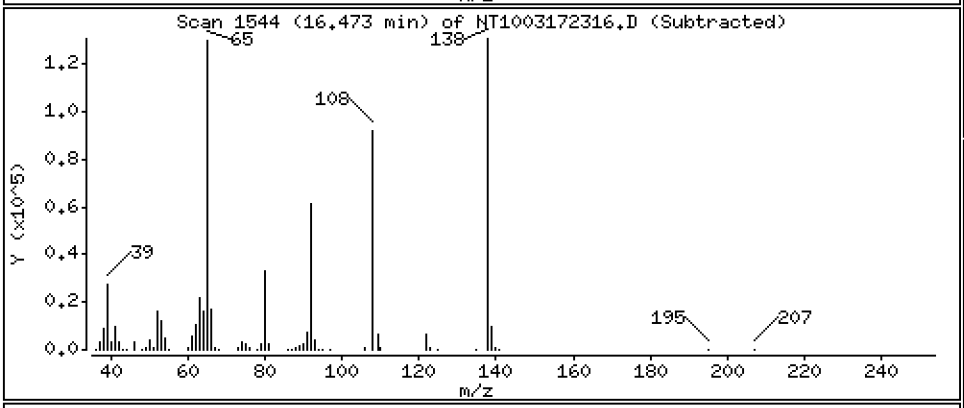
Column phase: ZB-5msi

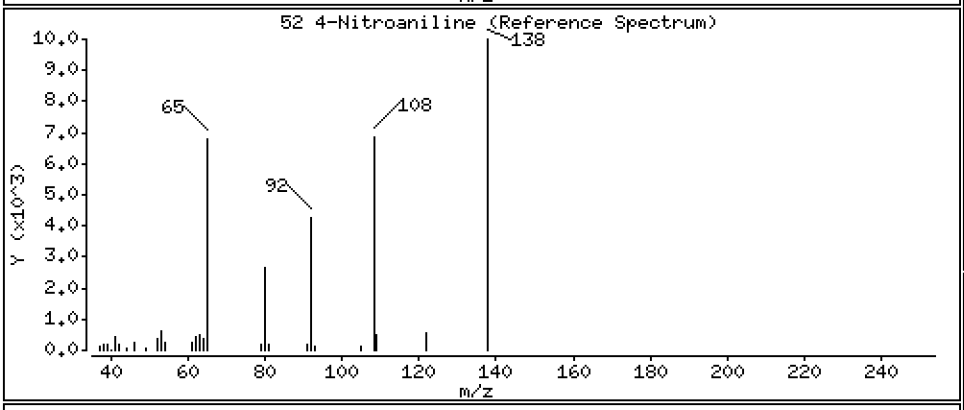
Column diameter: 0.25

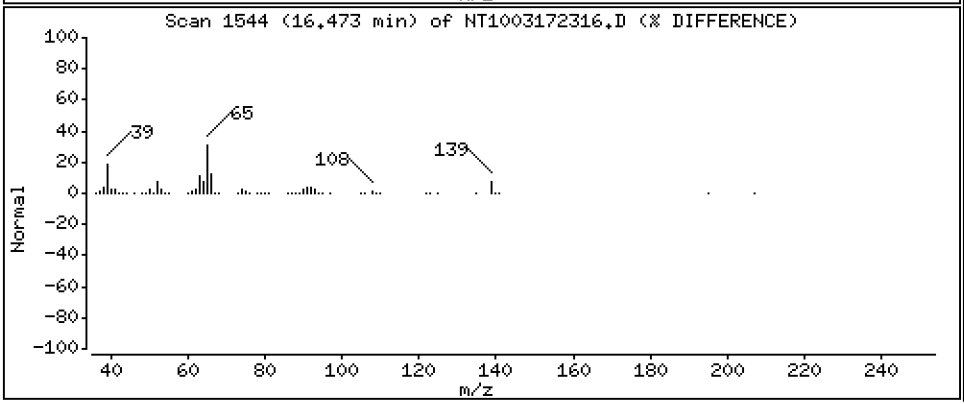
52 4-Nitroaniline

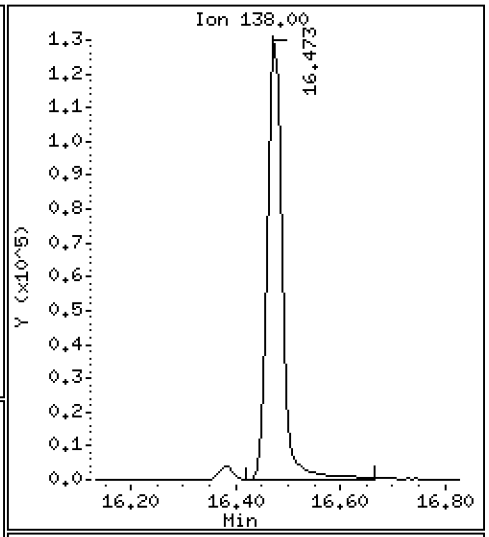
Concentration: 11.64 ug/mL

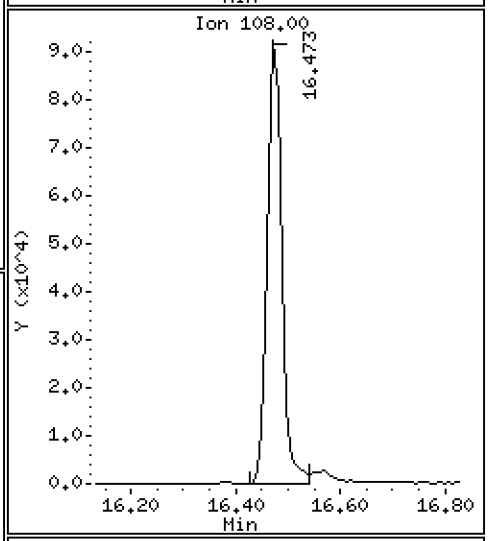


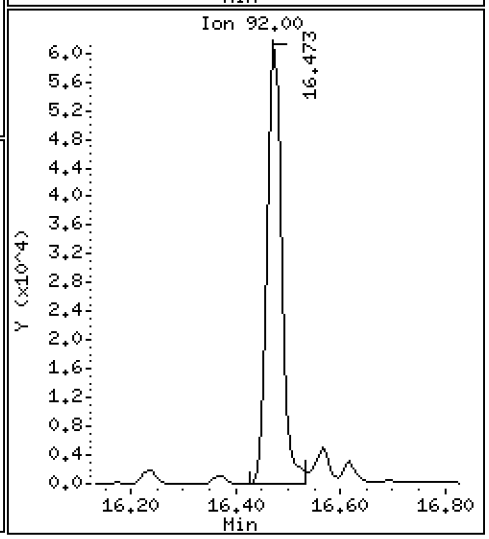












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

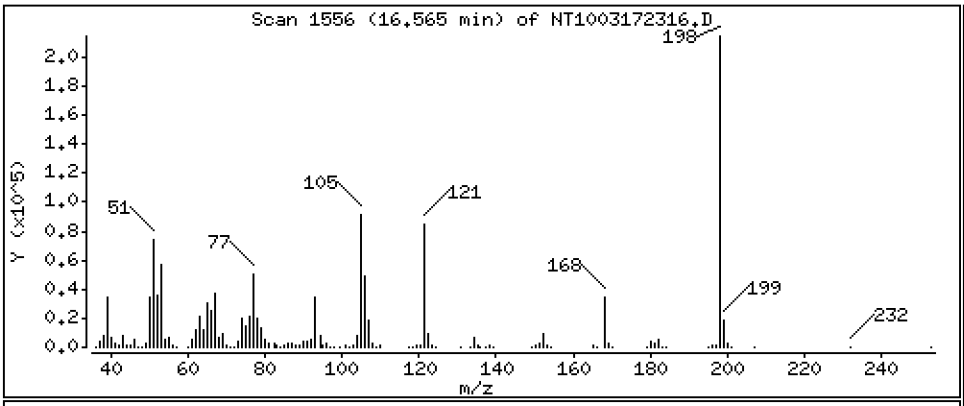
Operator: VTS

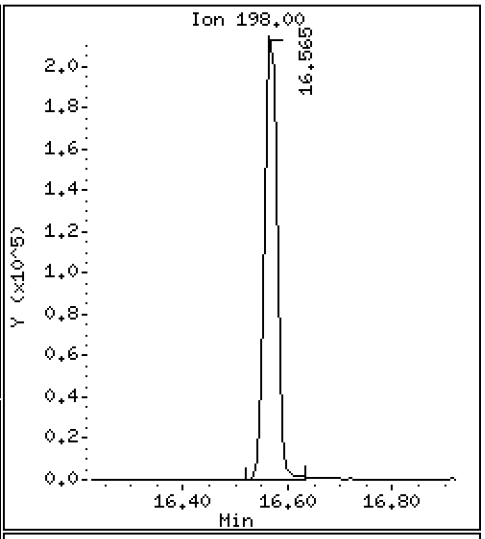
Column phase: ZB-5msi

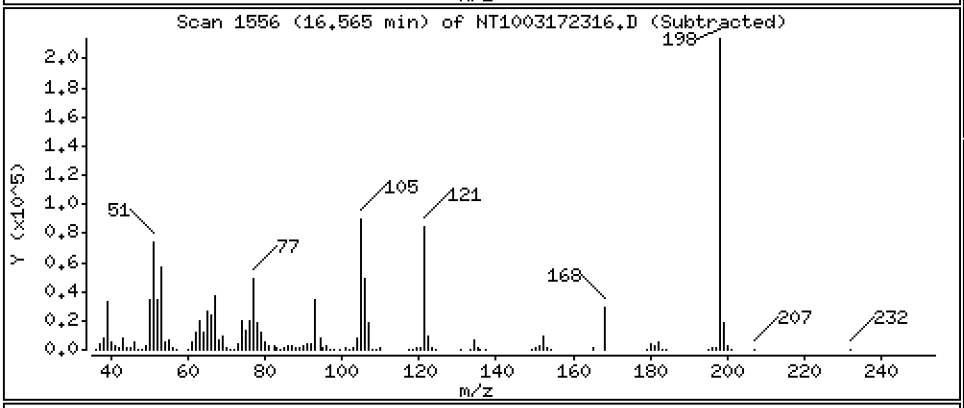
Column diameter: 0.25

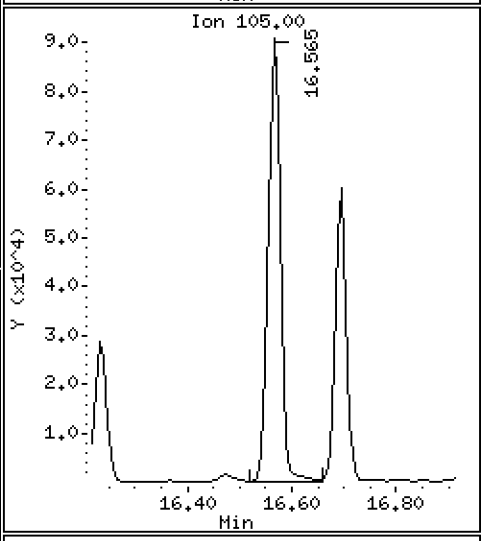
53 4,6-Dinitro-2-methylphenol

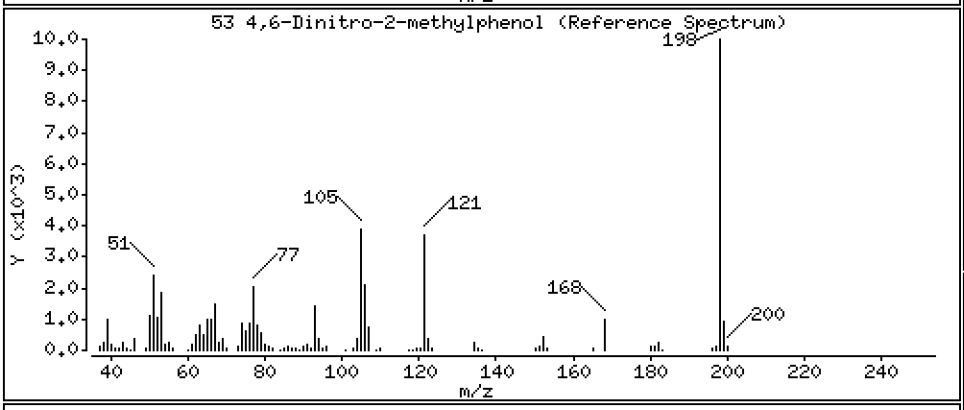
Concentration: 19.92 ug/mL

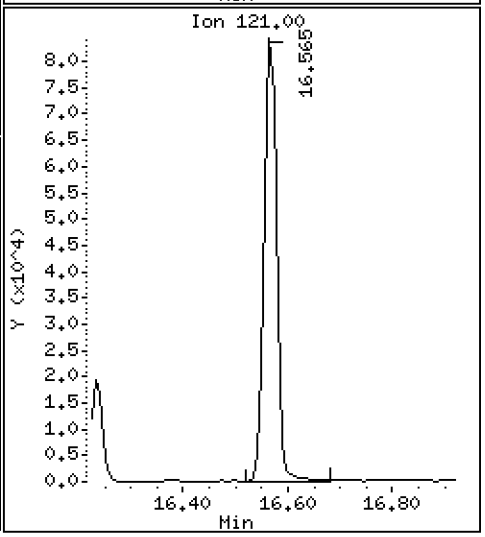


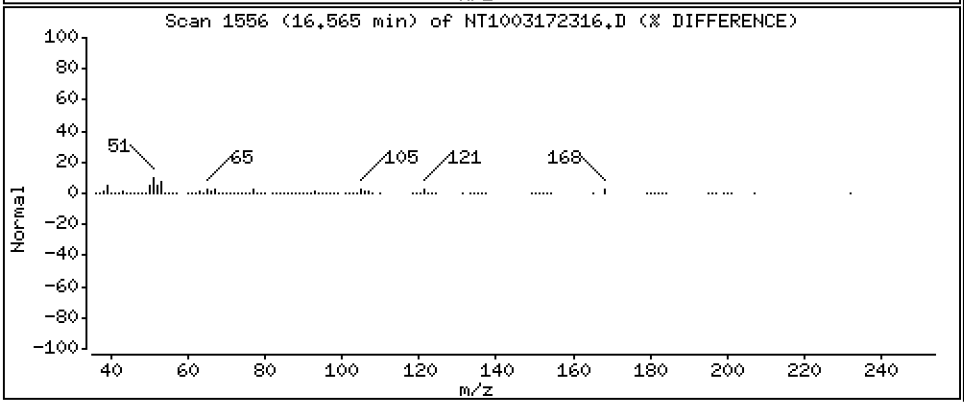












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

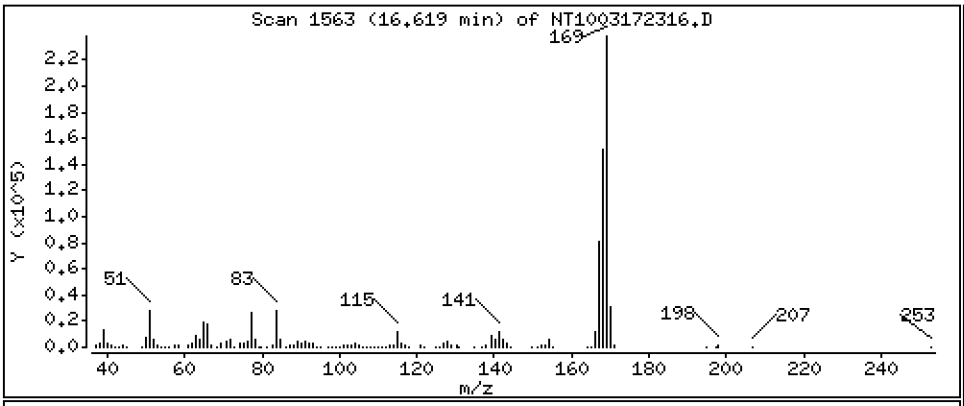
Operator: VTS

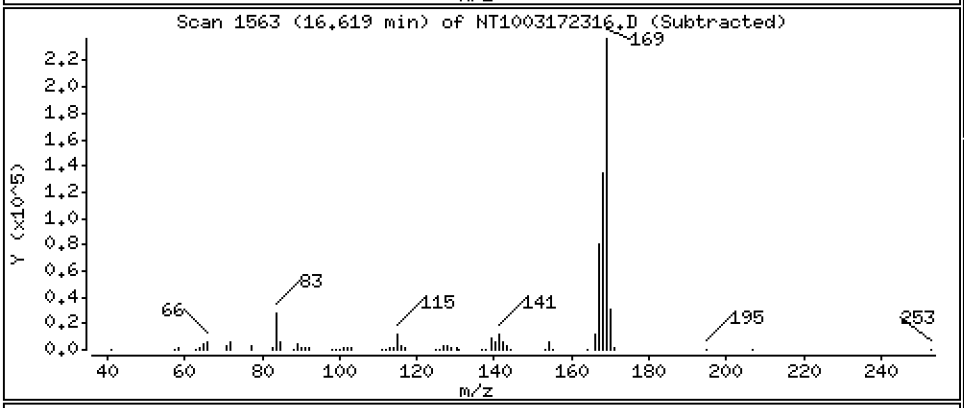
Column phase: ZB-5msi

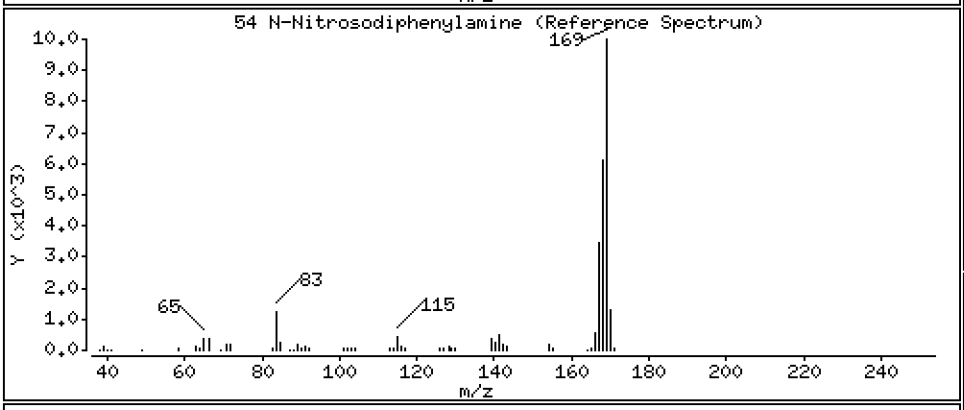
Column diameter: 0.25

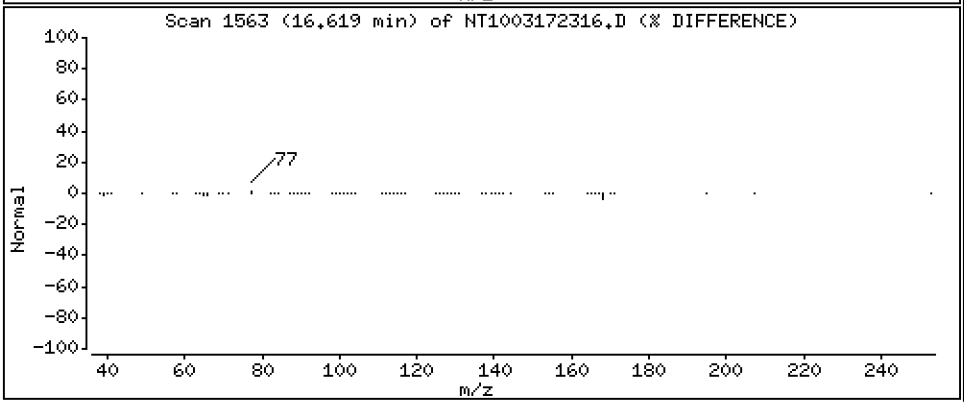
54 N-Nitrosodiphenylamine

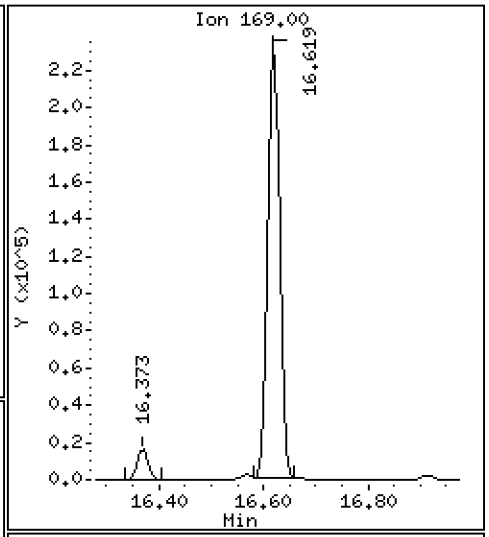
Concentration: 4.647 ug/mL

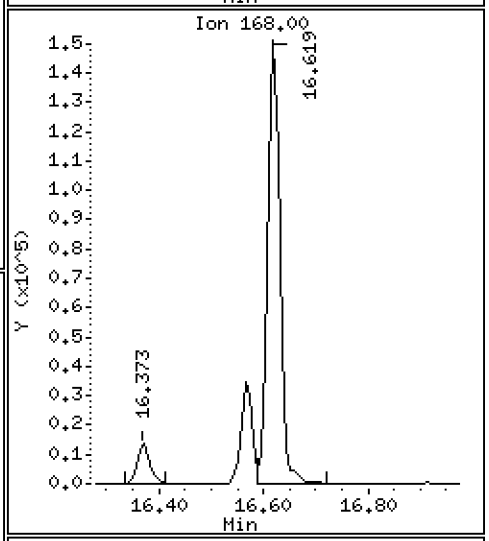


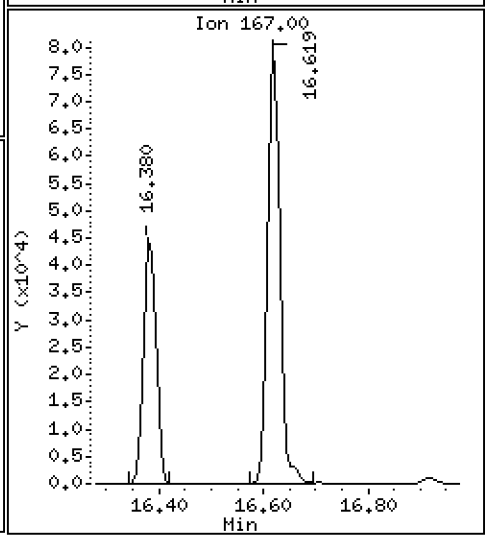












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

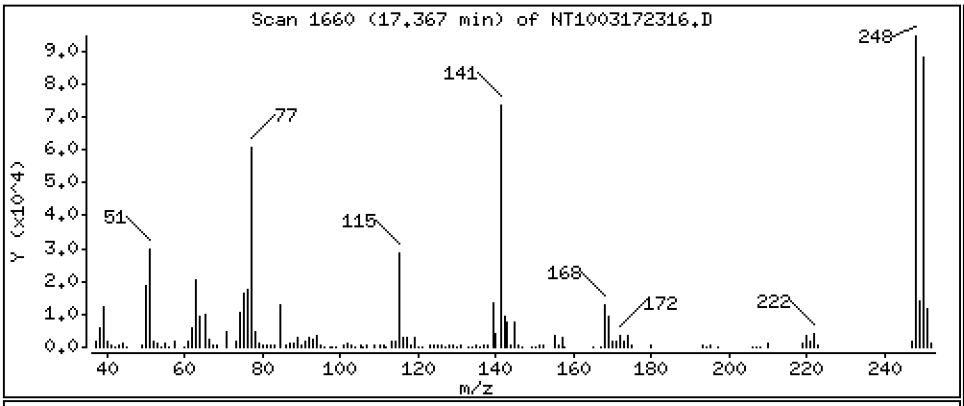
Operator: VTS

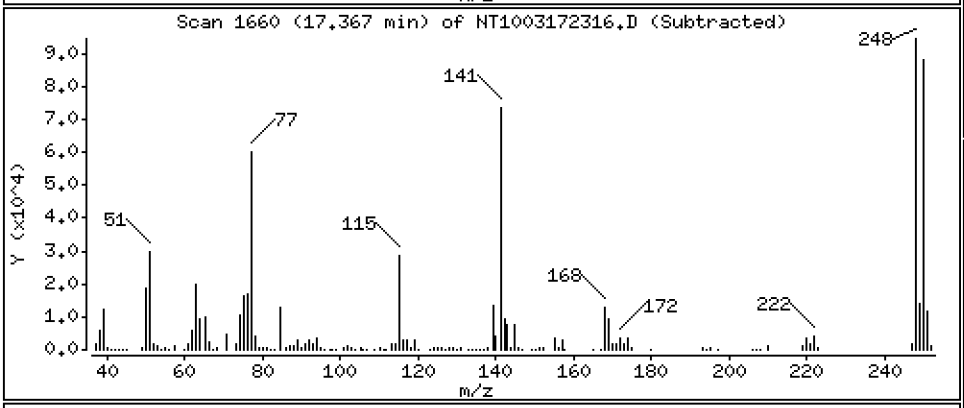
Column phase: ZB-5msi

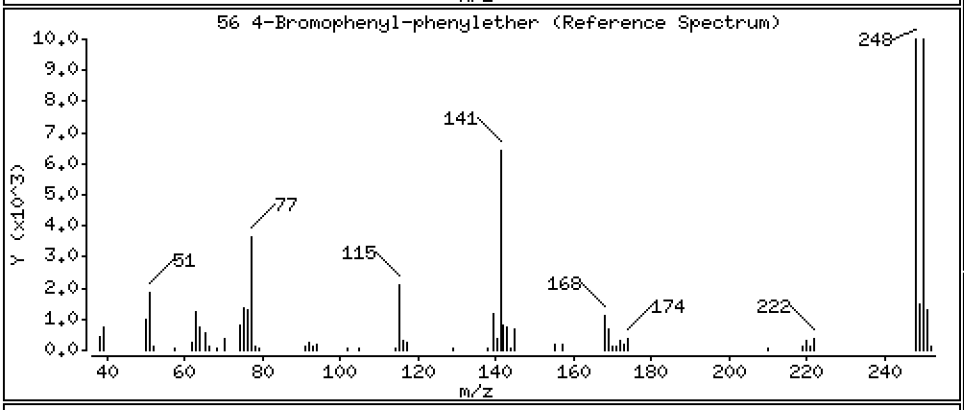
Column diameter: 0.25

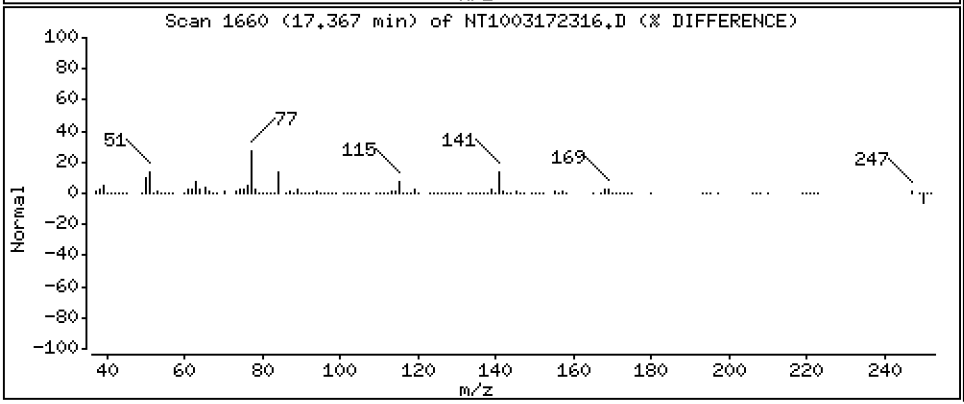
56 4-Bromophenyl-phenylether

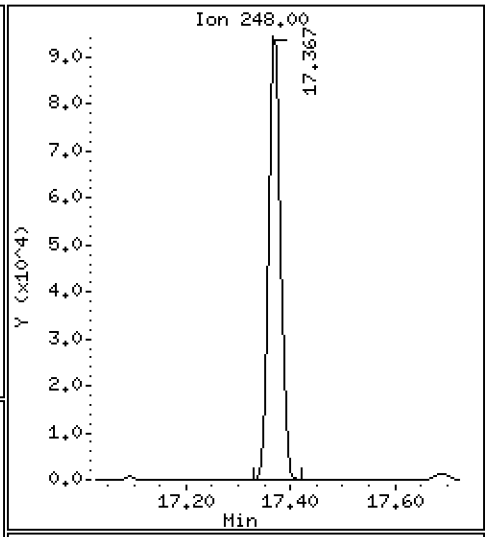
Concentration: 4.873 ug/mL

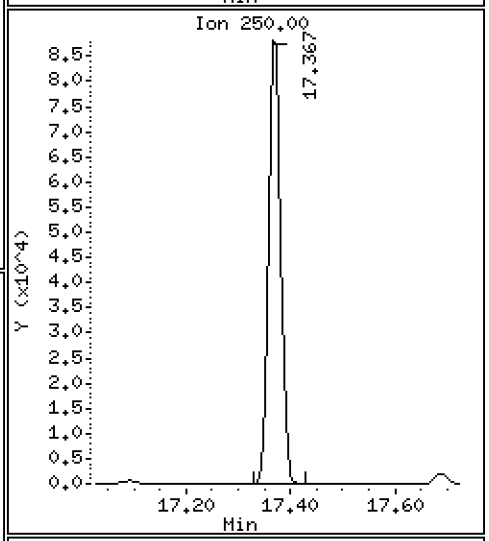


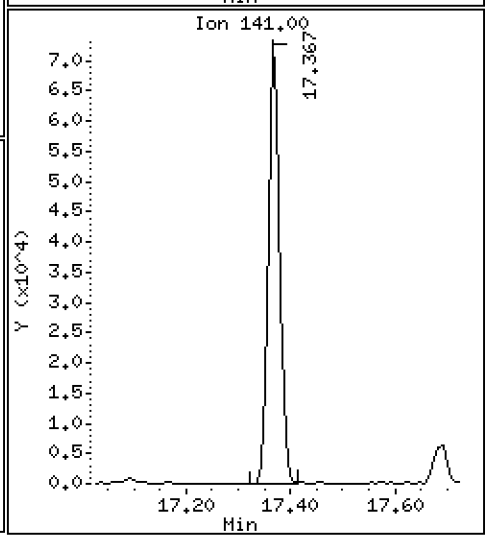












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

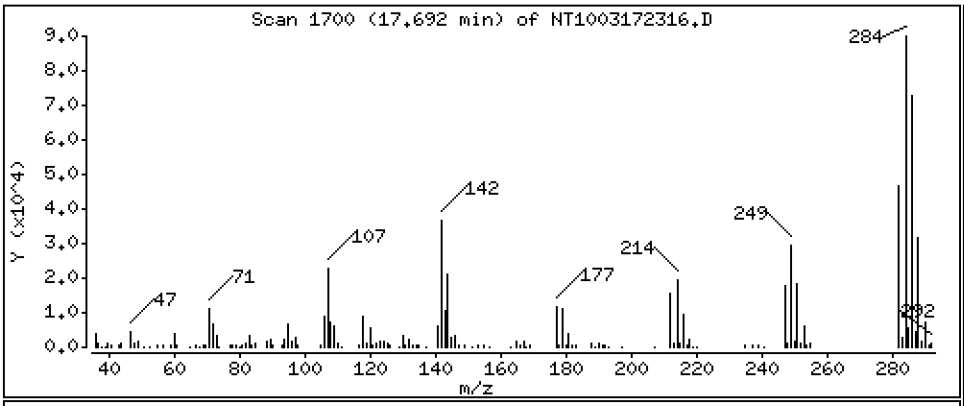
Operator: VTS

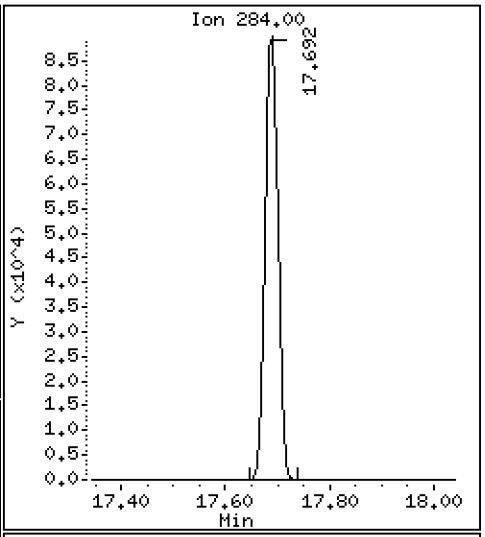
Column phase: ZB-5msi

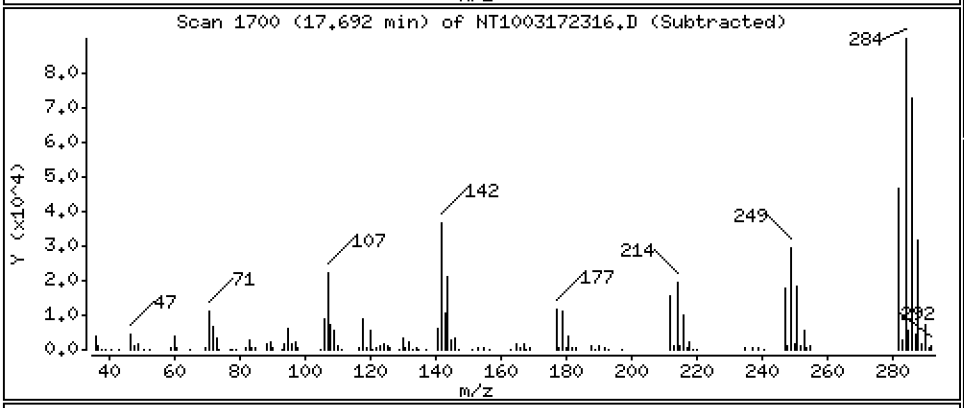
Column diameter: 0.25

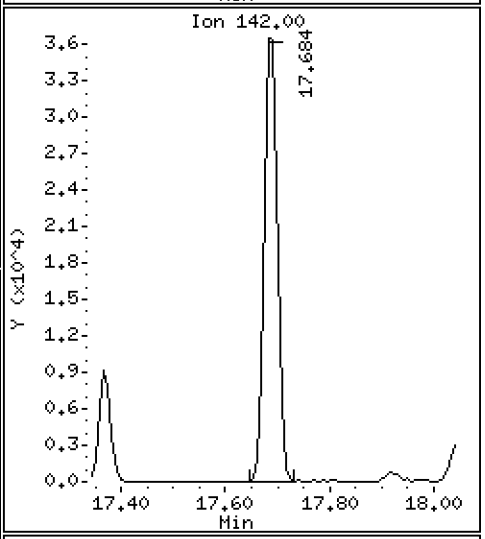
57 Hexachlorobenzene

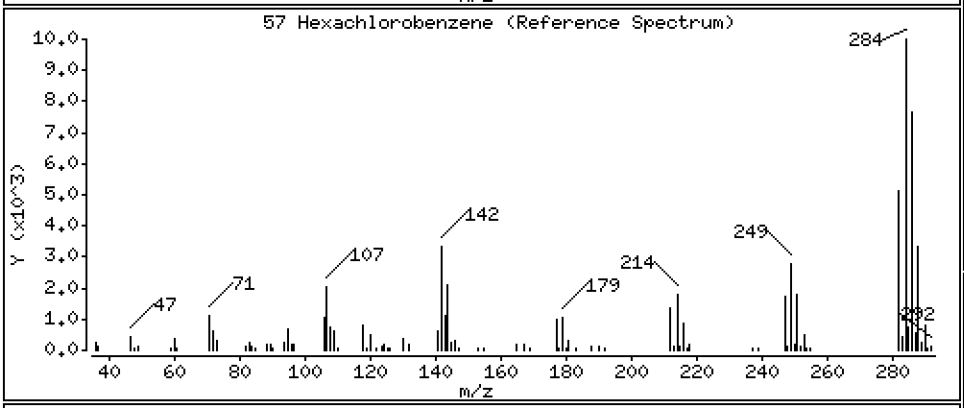
Concentration: 4.560 ug/mL

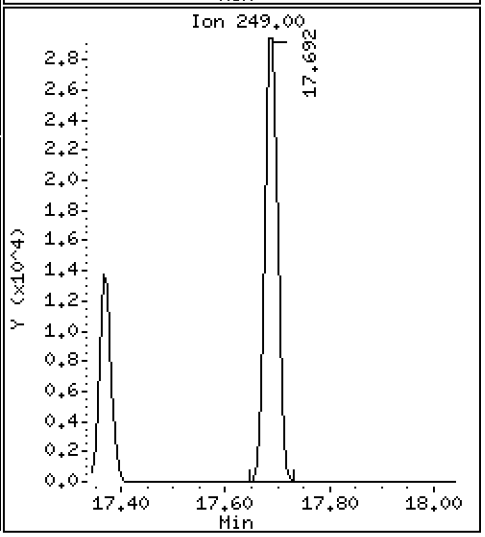


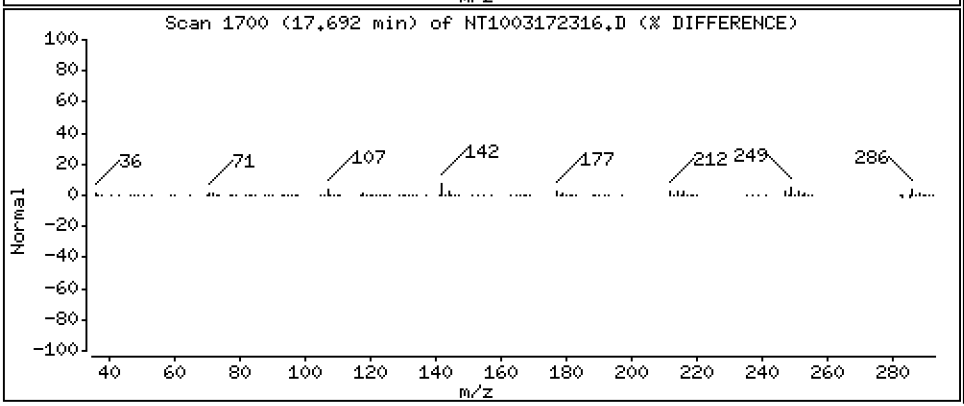












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

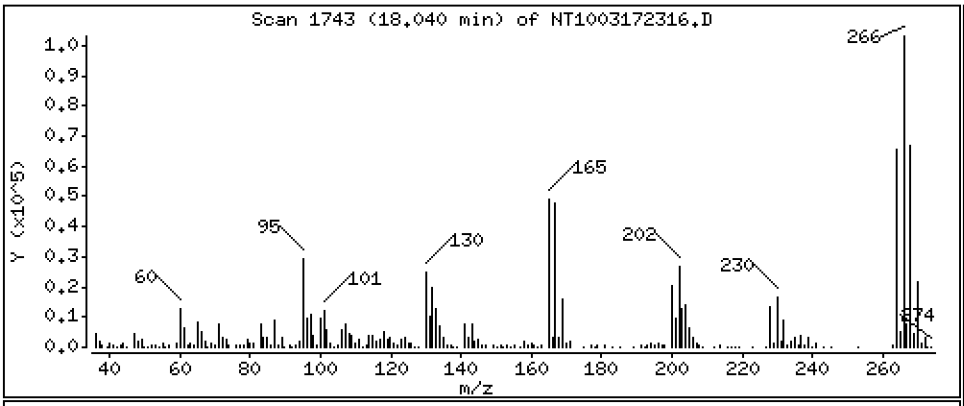
Operator: VTS

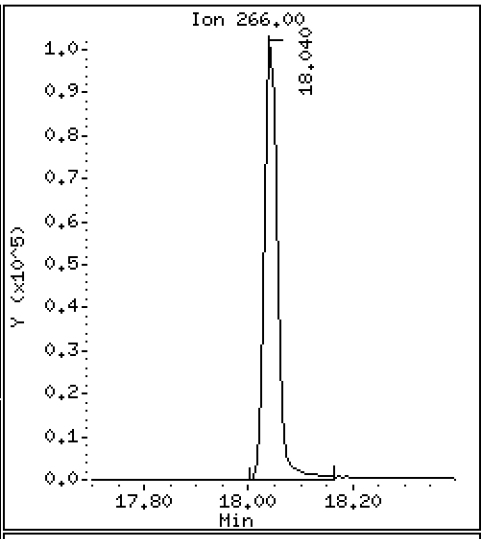
Column phase: ZB-5msi

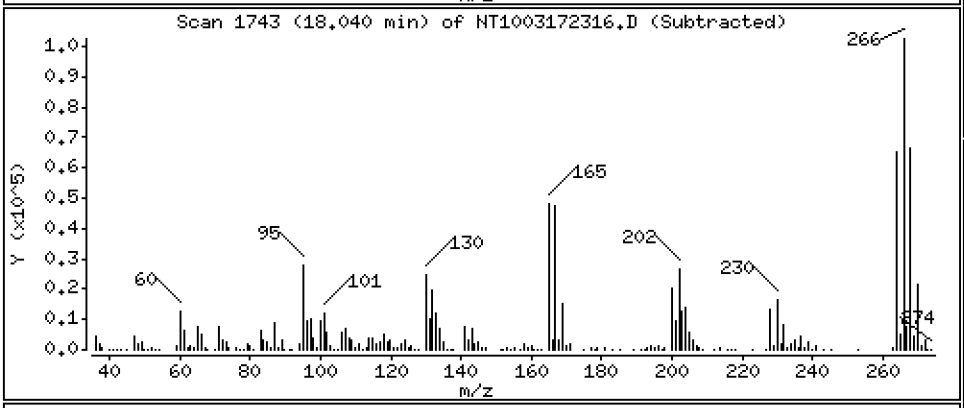
Column diameter: 0.25

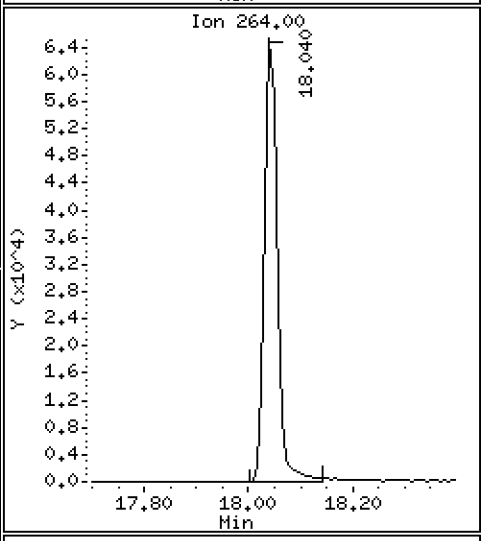
58 Pentachlorophenol

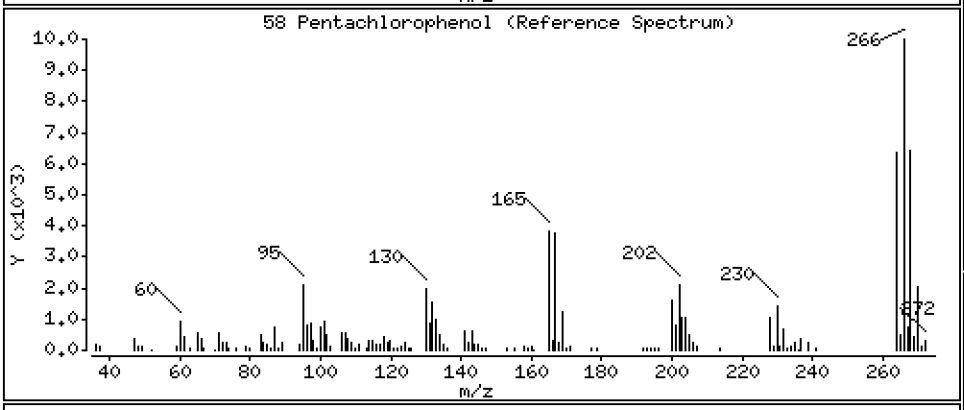
Concentration: 8.664 ug/mL

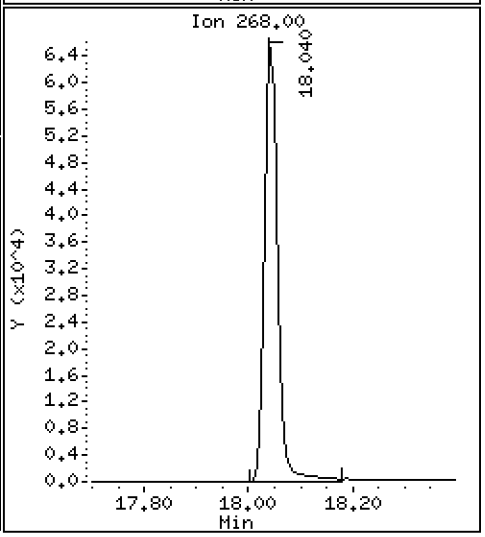


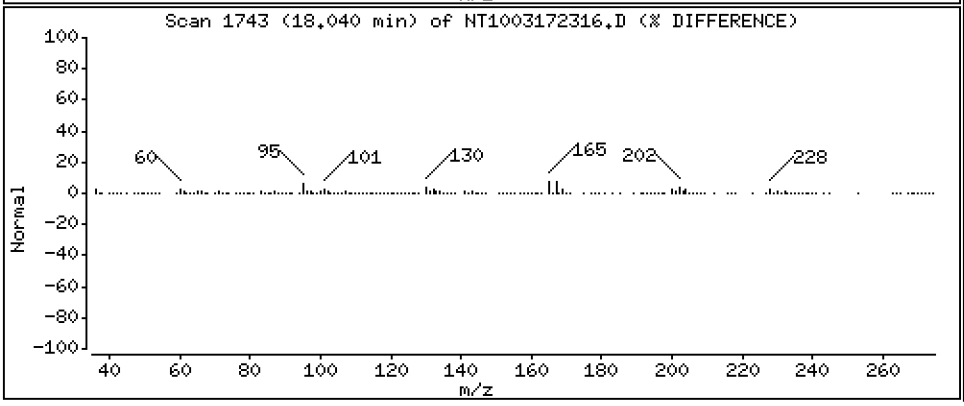












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172316.D

Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

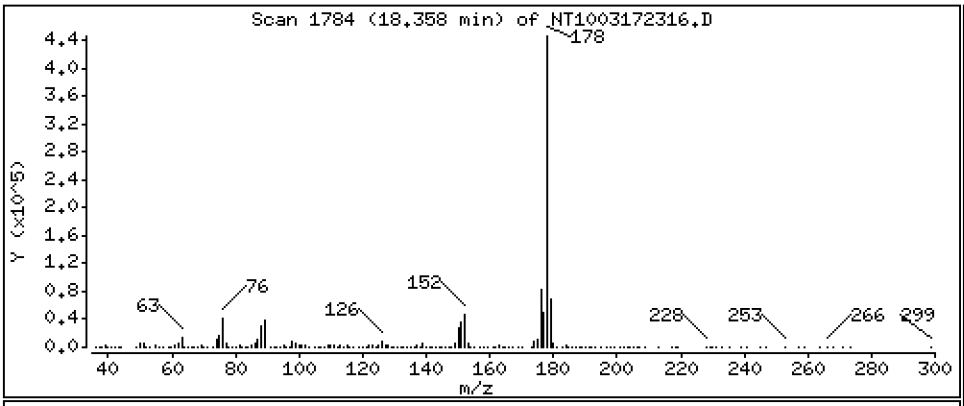
Operator: VTS

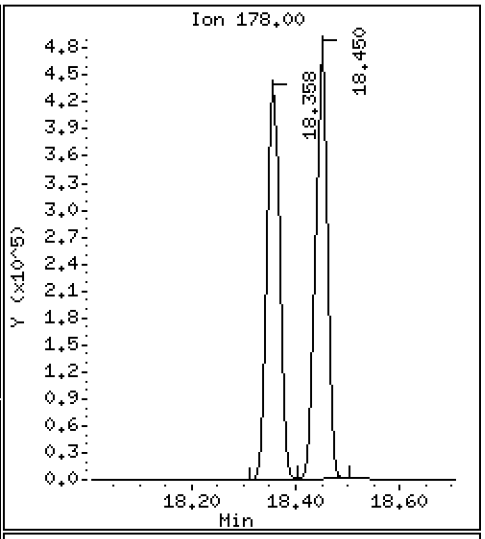
Column phase: ZB-5msi

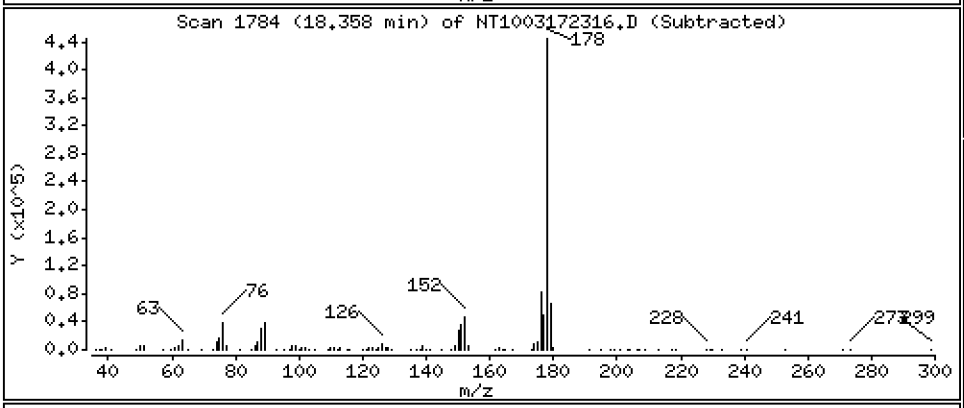
Column diameter: 0.25

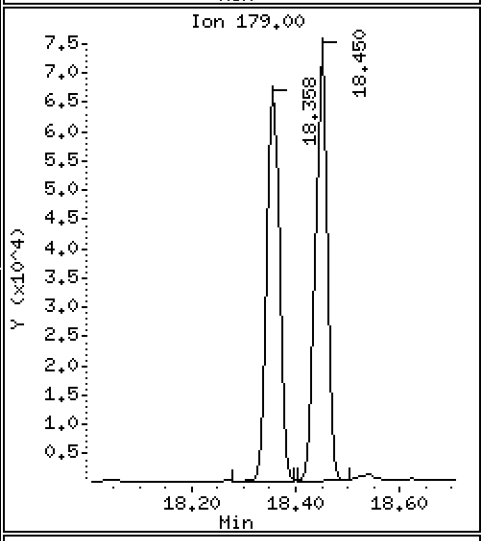
60 Phenanthrene

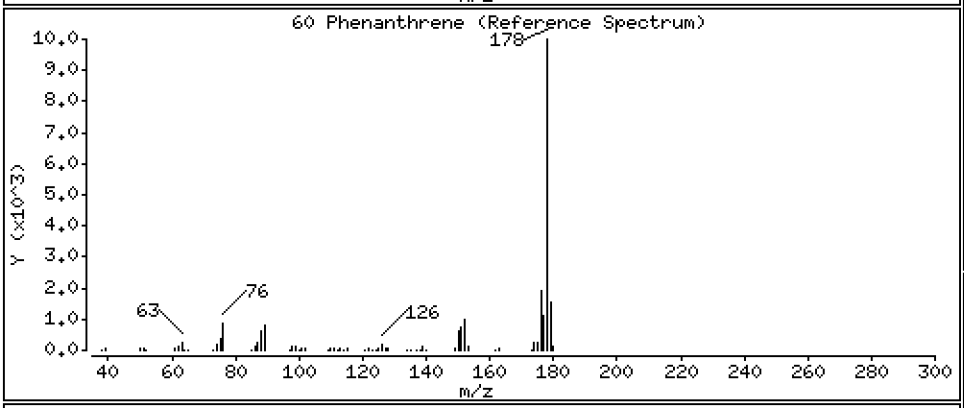
Concentration: 4.693 ug/mL

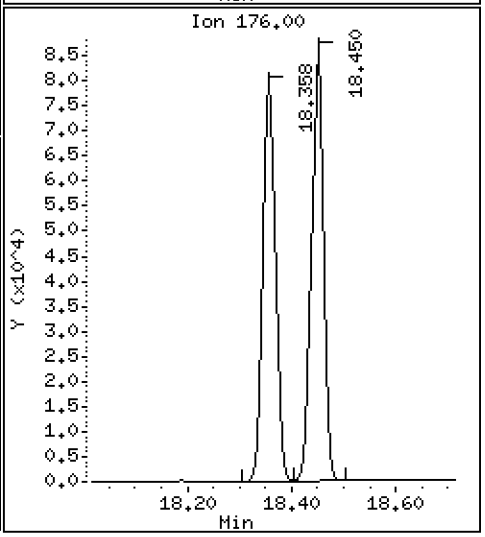


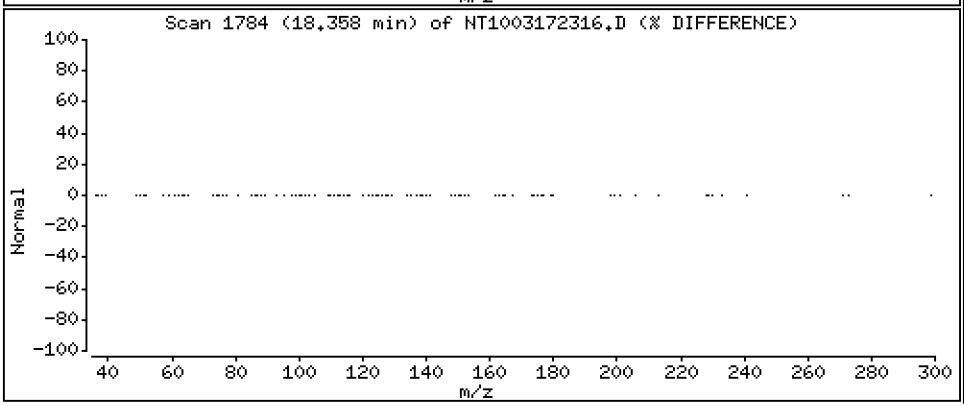












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

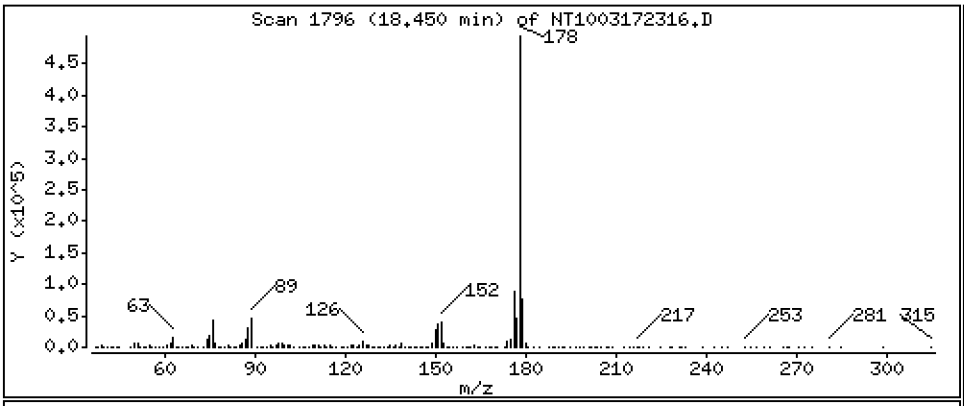
Operator: VTS

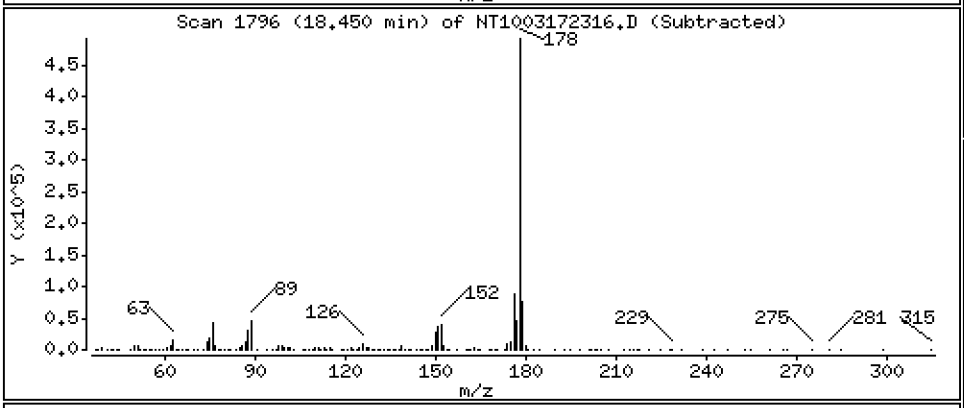
Column phase: ZB-5msi

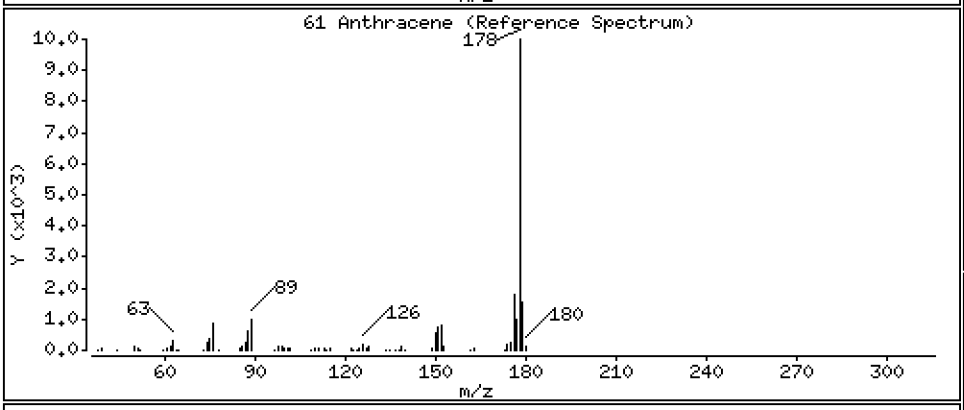
Column diameter: 0.25

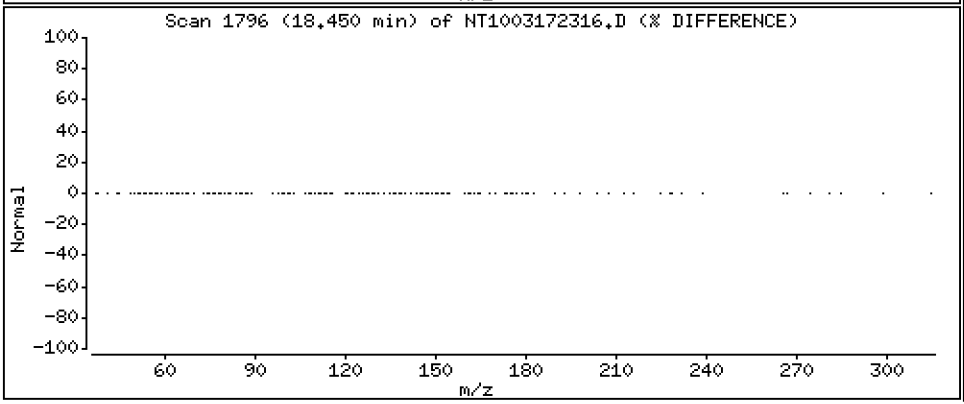
61 Anthracene

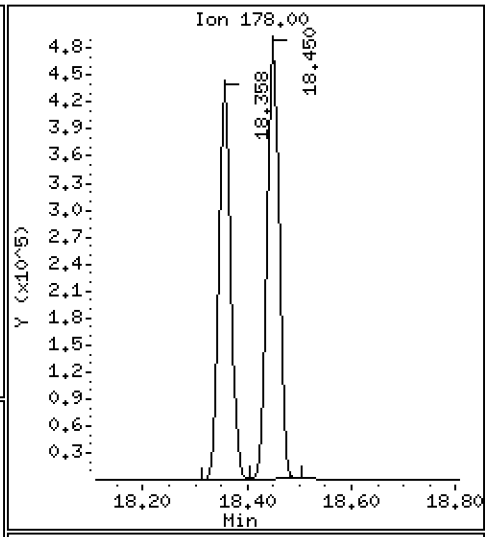
Concentration: 5.089 ug/mL

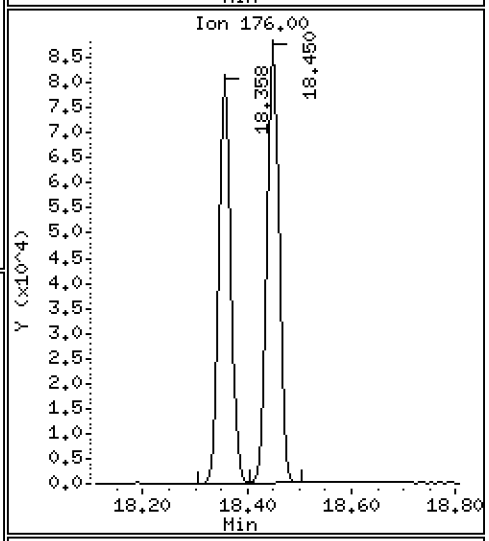


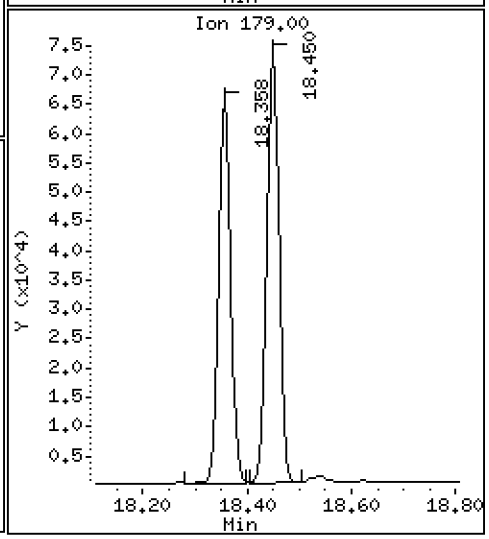












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172316.D

Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

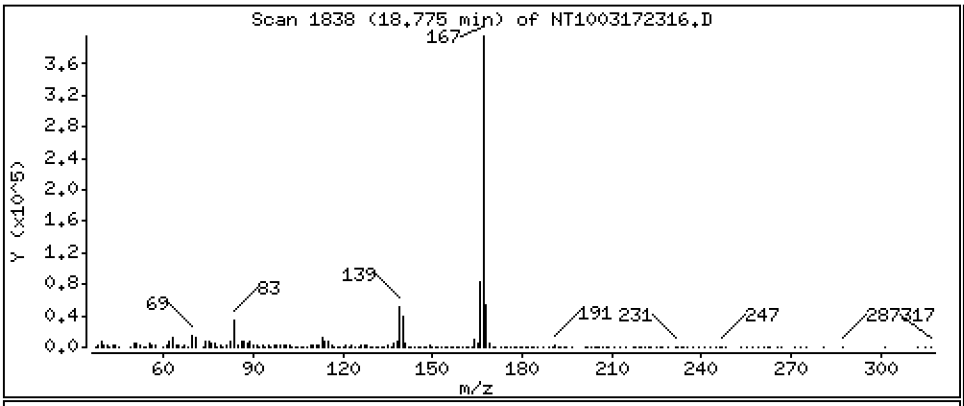
Operator: VTS

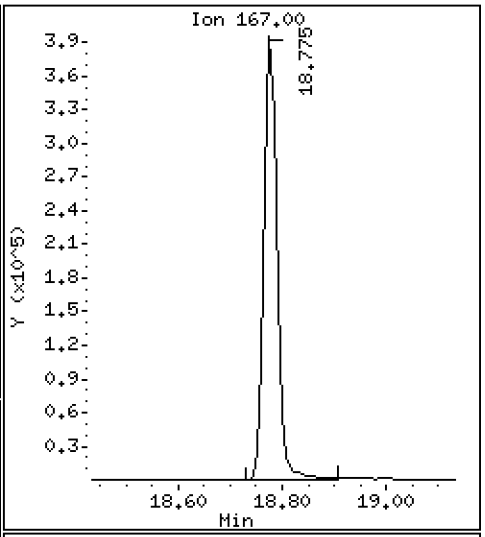
Column phase: ZB-5msi

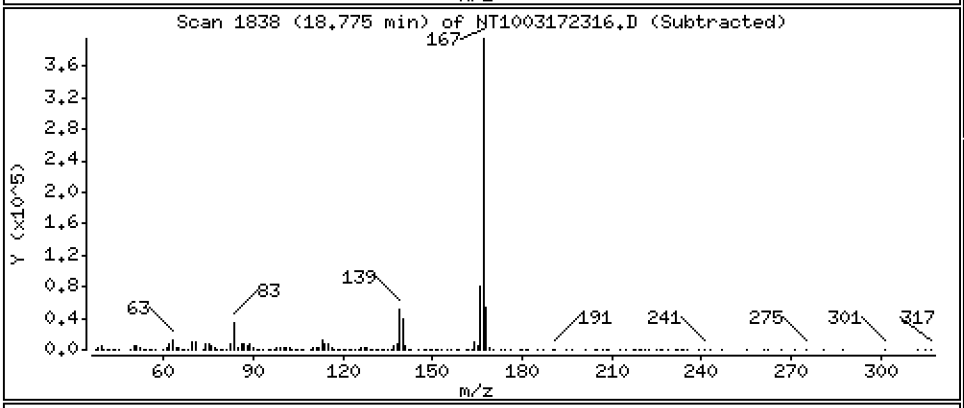
Column diameter: 0.25

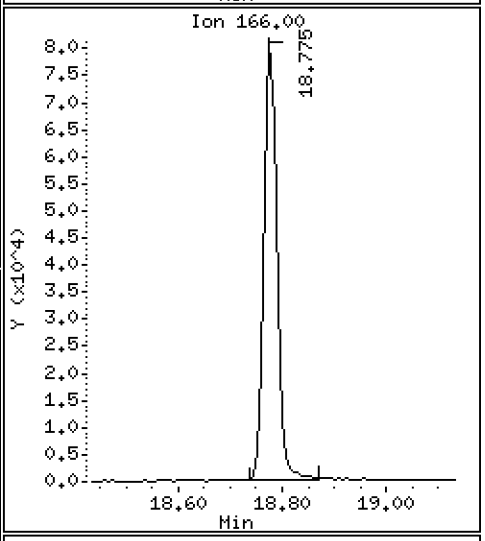
62 Carbazole

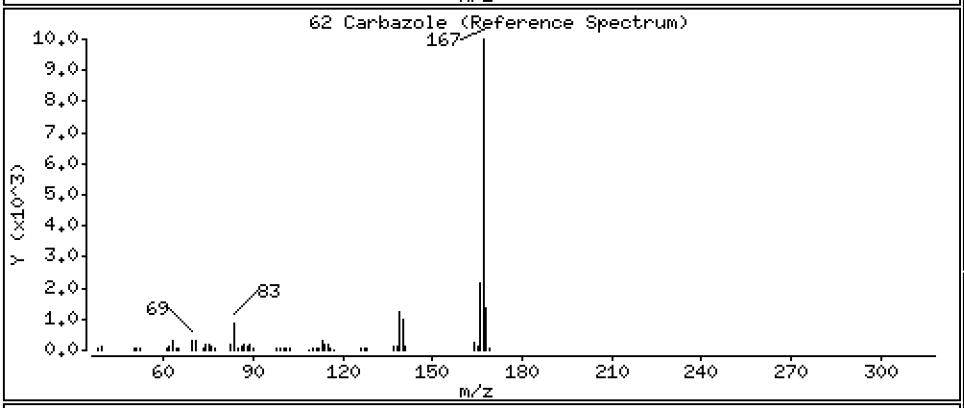
Concentration: 5.035 ug/mL

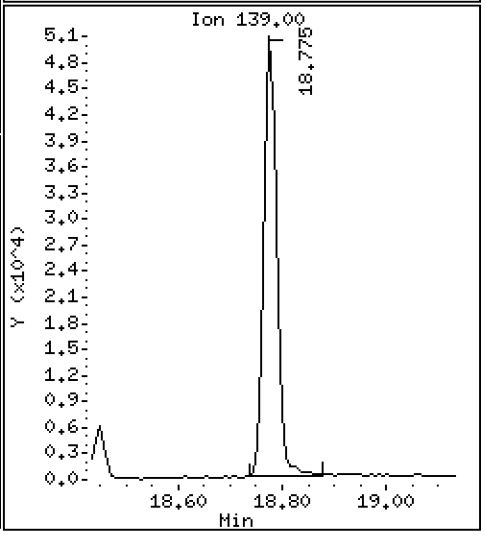


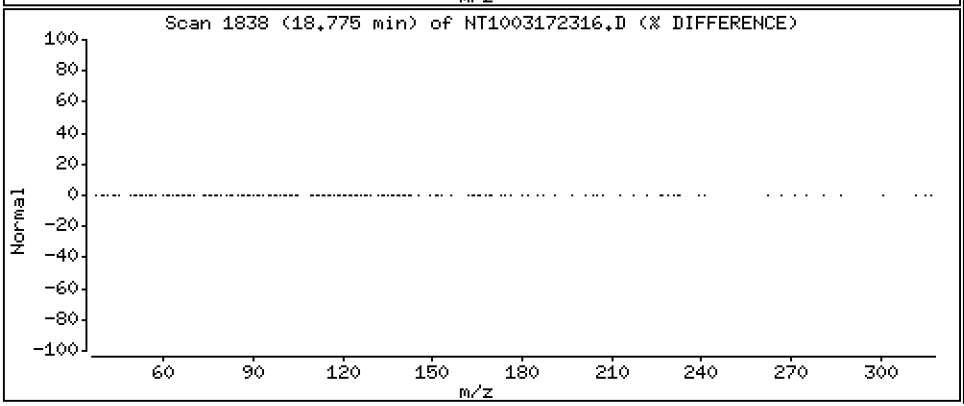












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

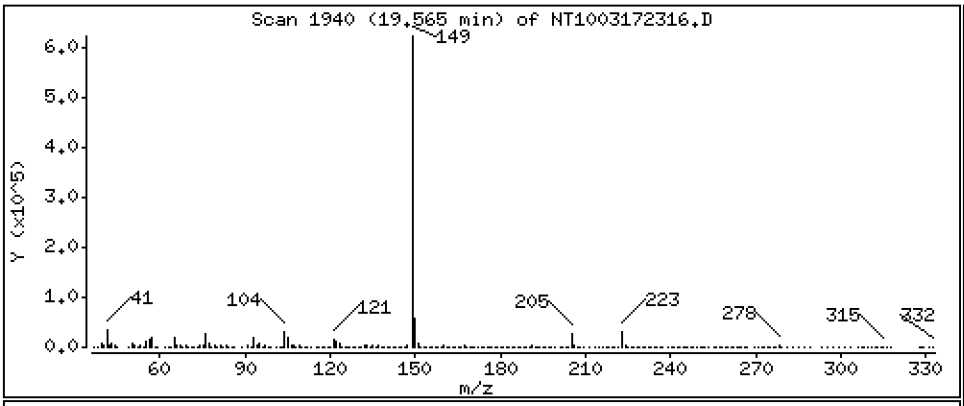
Operator: VTS

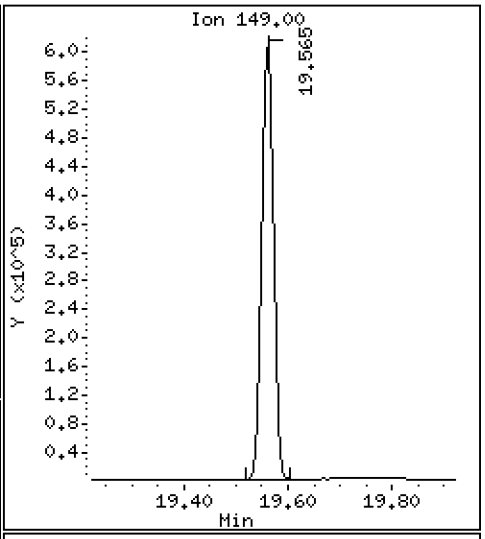
Column phase: ZB-5msi

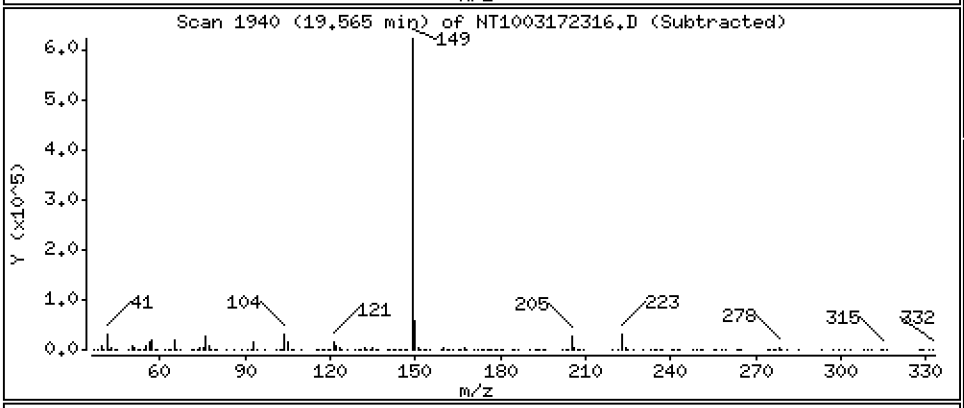
Column diameter: 0.25

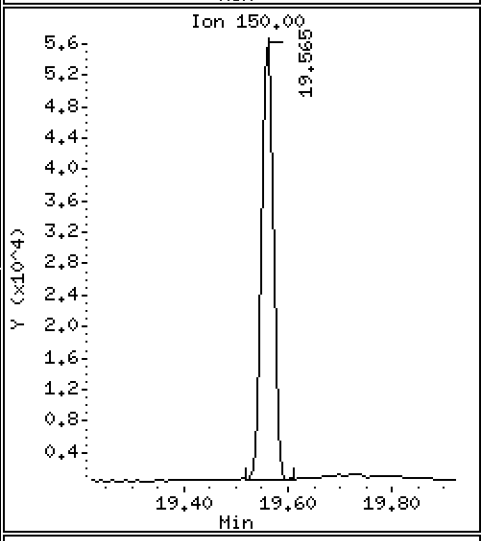
63 Di-n-butylphthalate

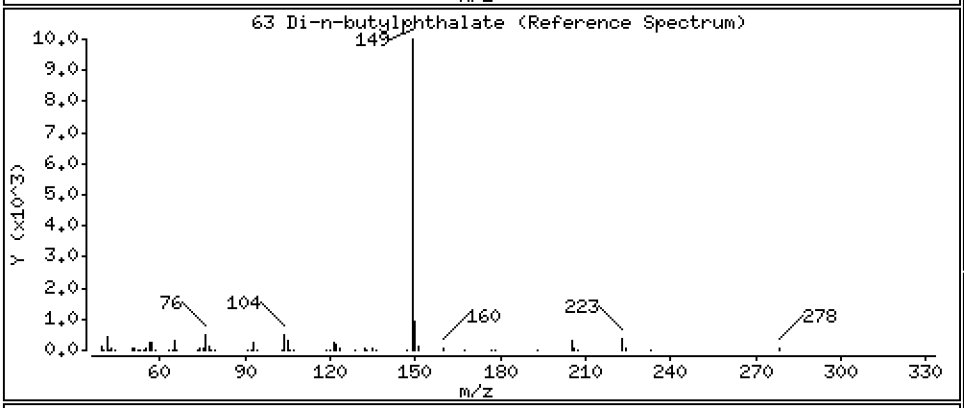
Concentration: 5.253 ug/mL

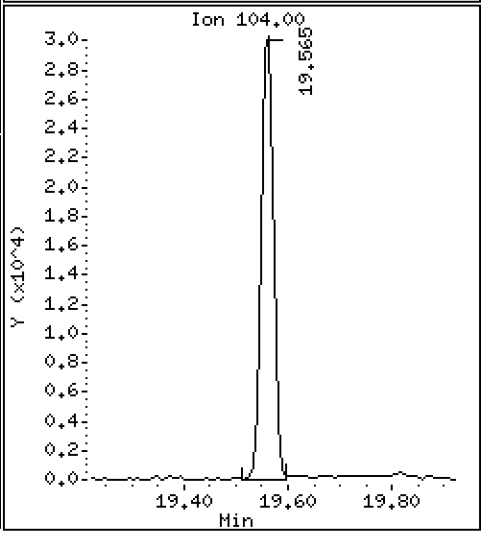


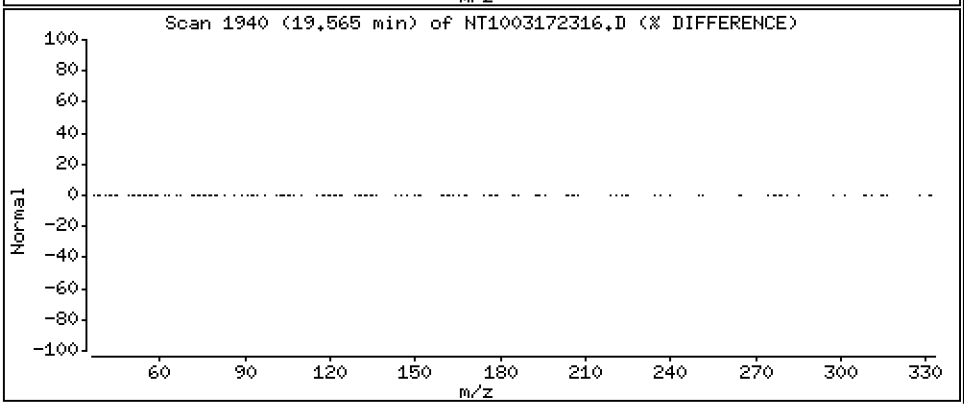












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

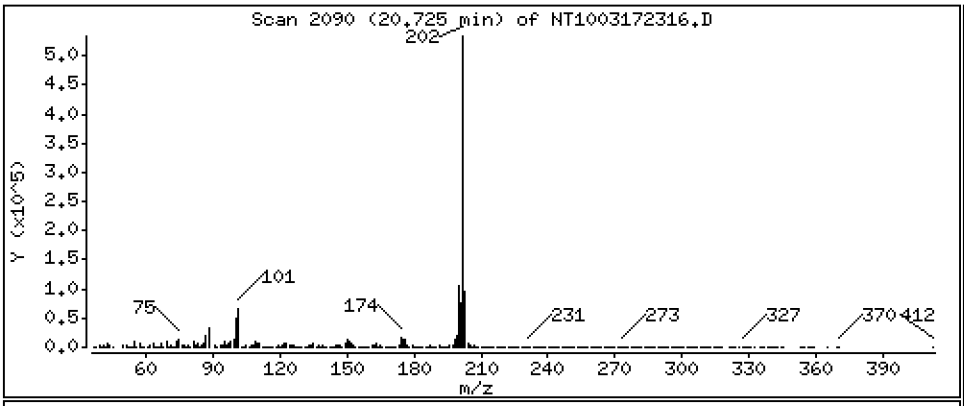
Operator: VTS

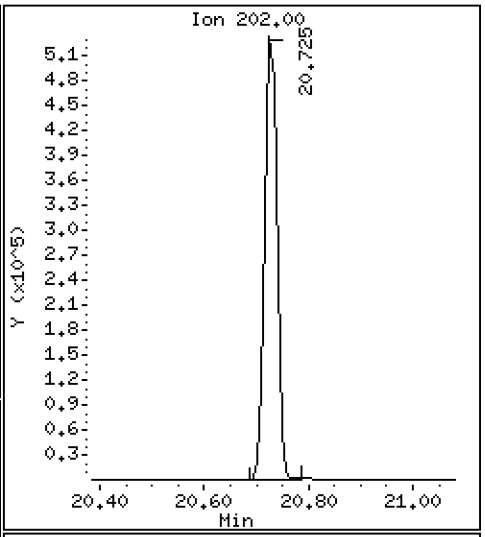
Column phase: ZB-5msi

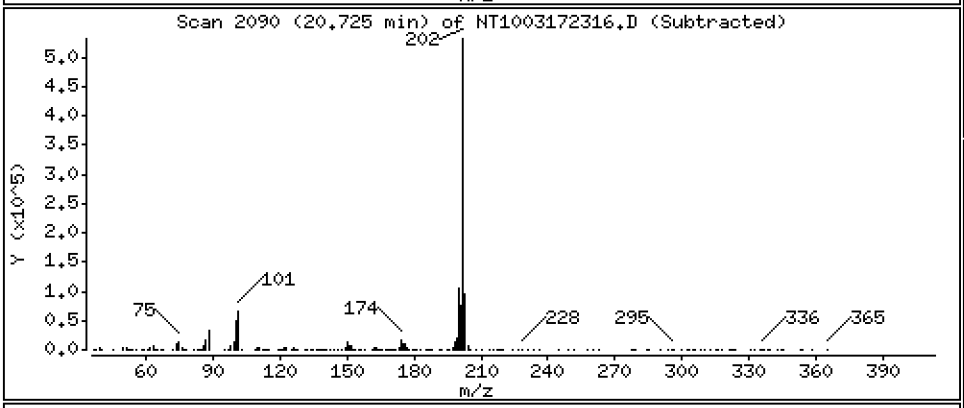
Column diameter: 0.25

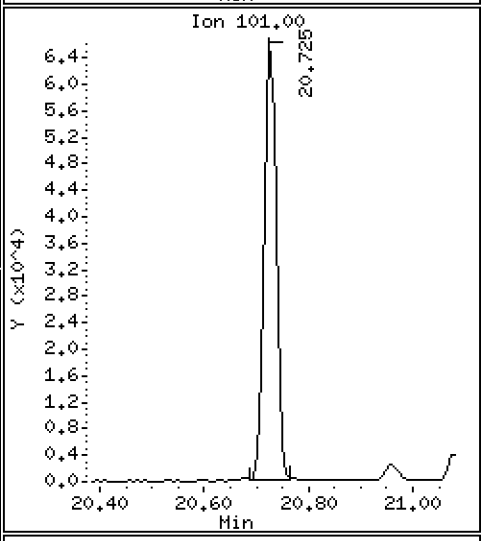
64 Fluoranthene

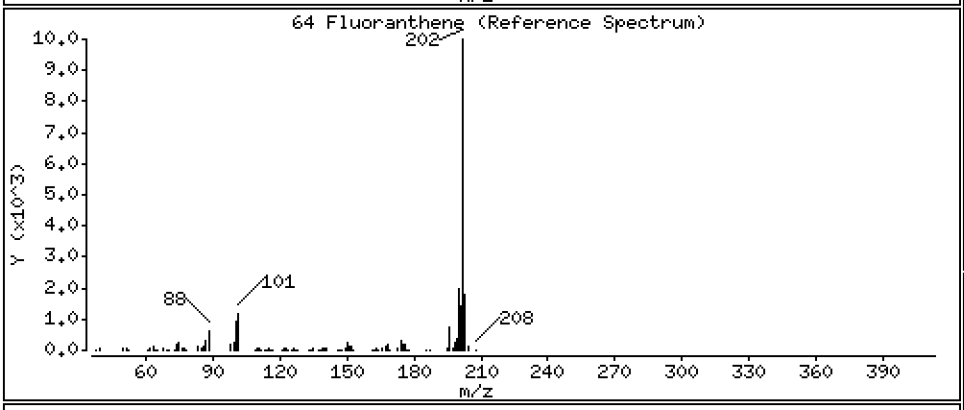
Concentration: 4.549 ug/mL

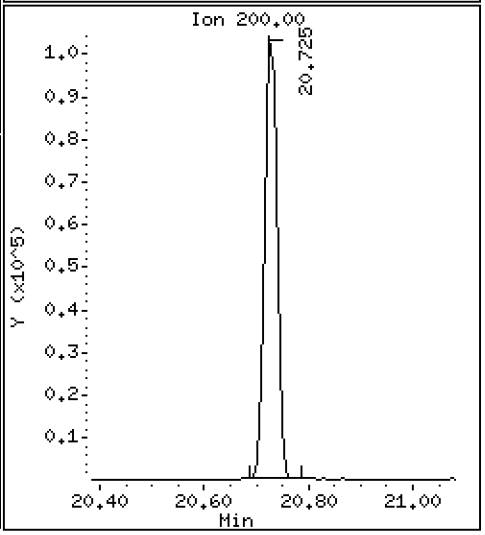


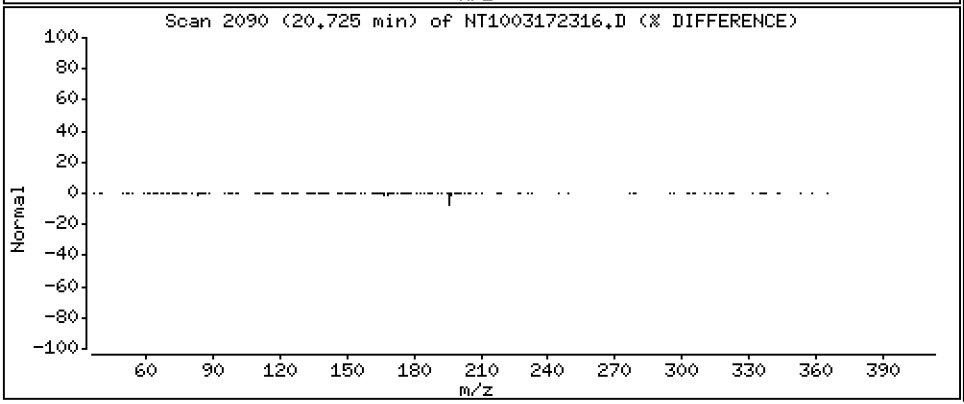












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

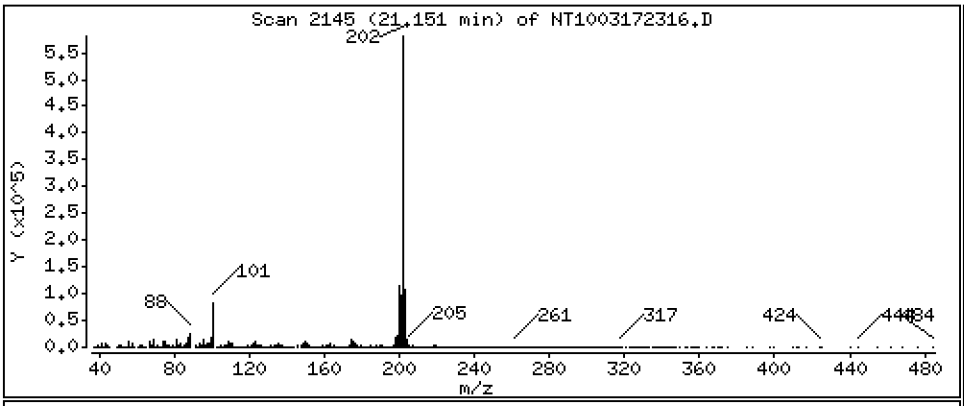
Operator: VTS

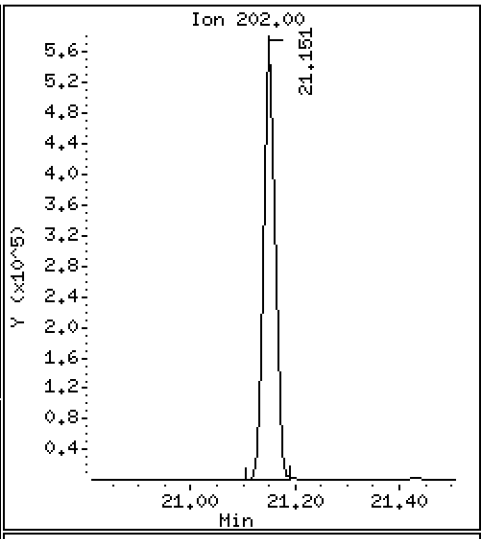
Column phase: ZB-5msi

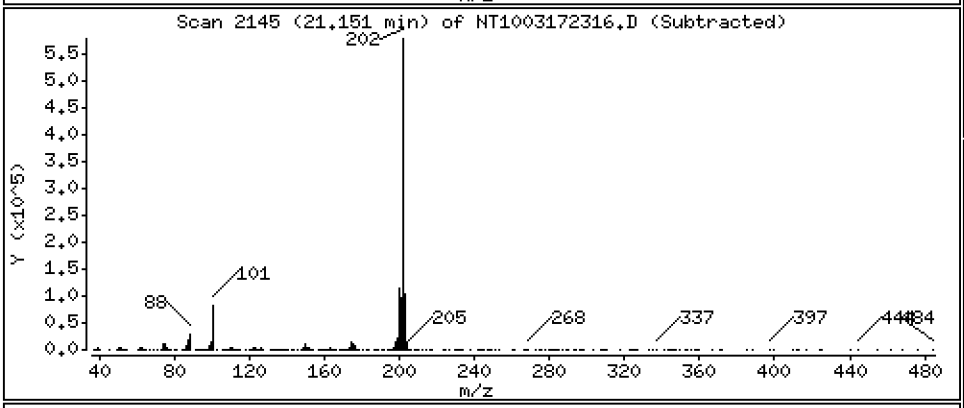
Column diameter: 0.25

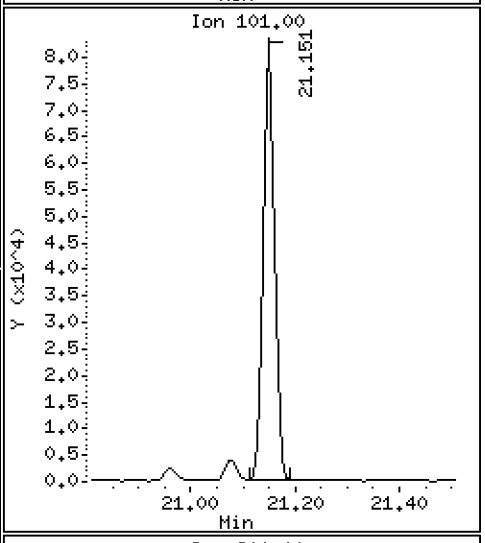
65 Pyrene

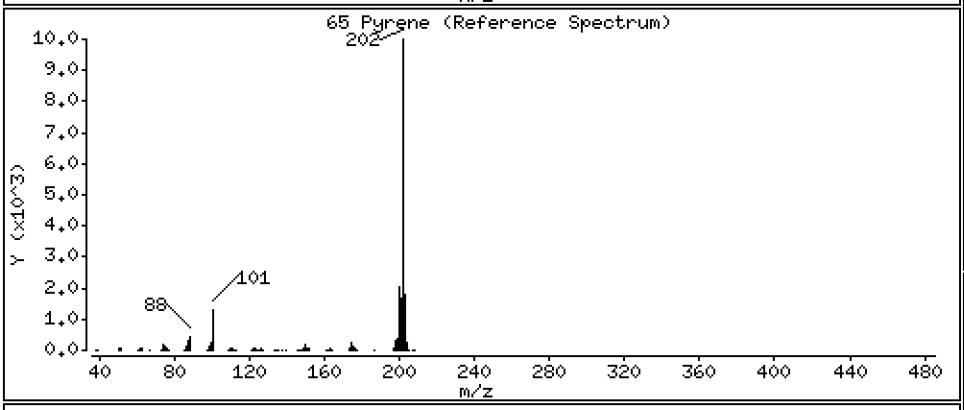
Concentration: 4.577 ug/mL

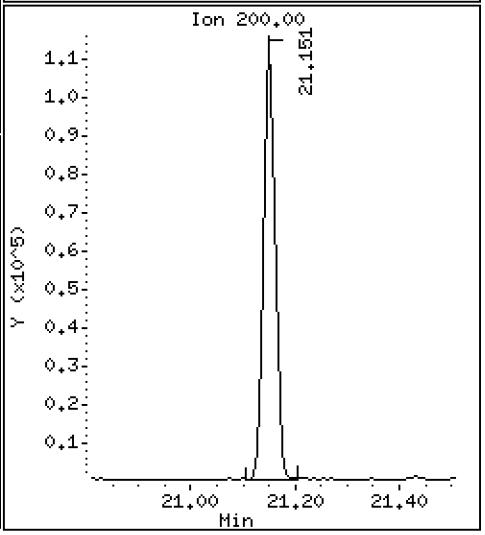


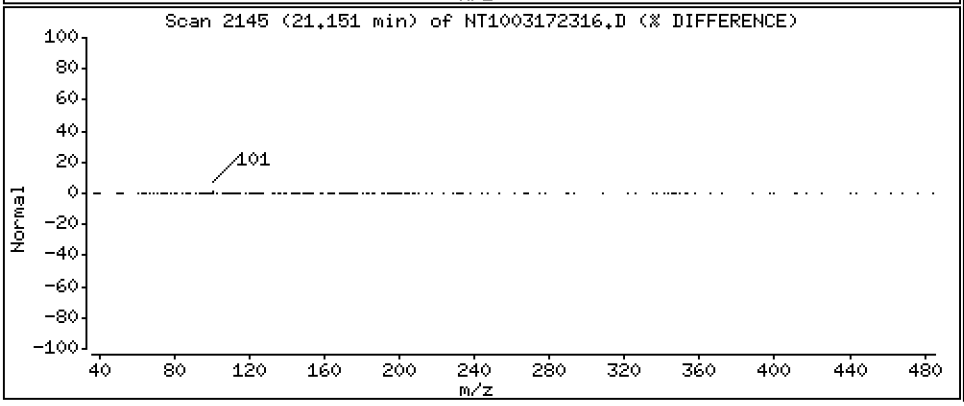












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

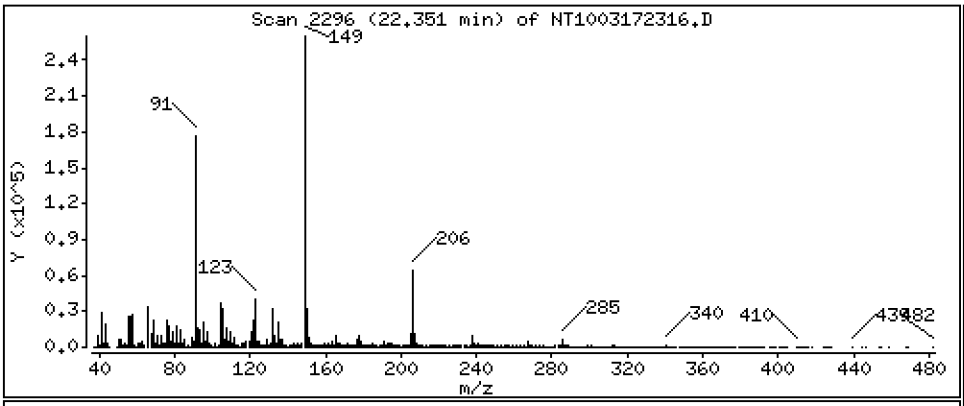
Operator: VTS

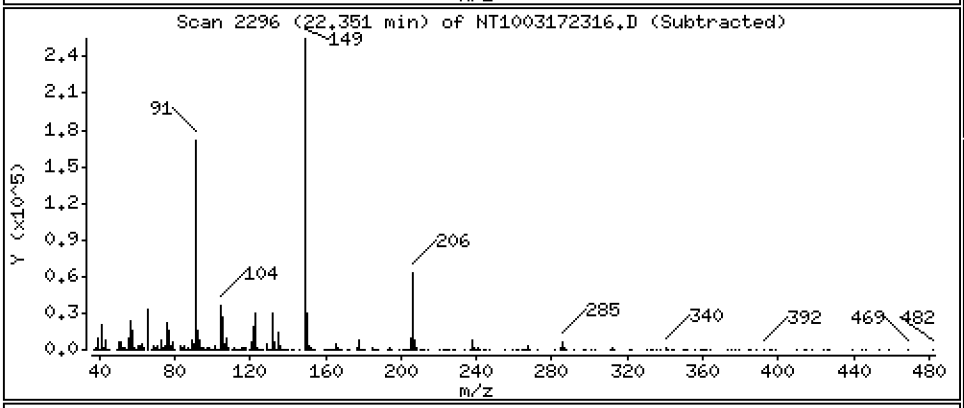
Column phase: ZB-5msi

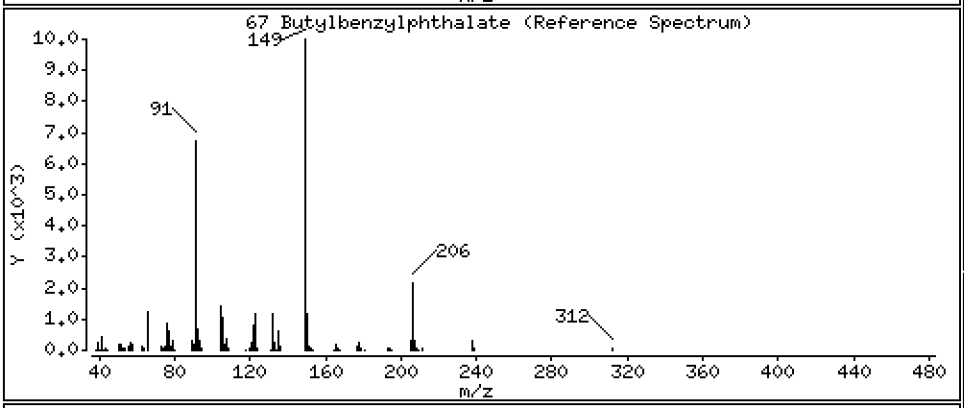
Column diameter: 0.25

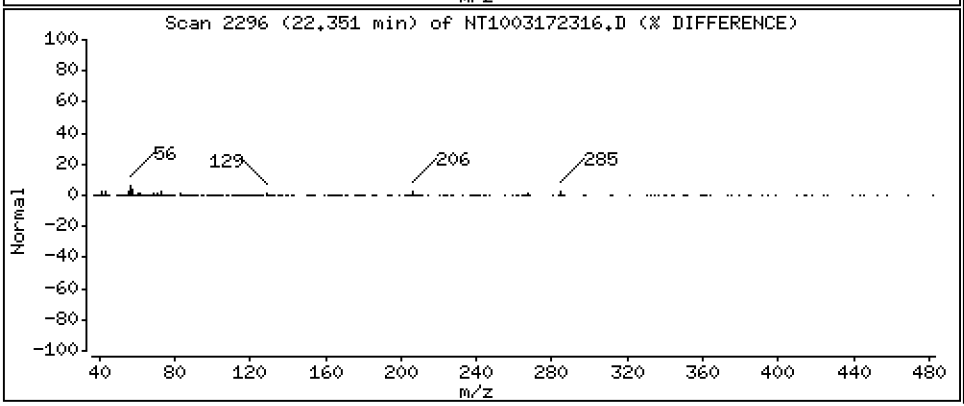
67 Butylbenzylphthalate

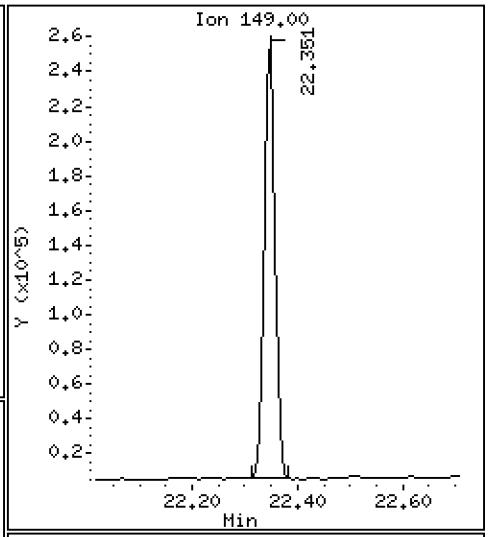
Concentration: 5.313 ug/mL

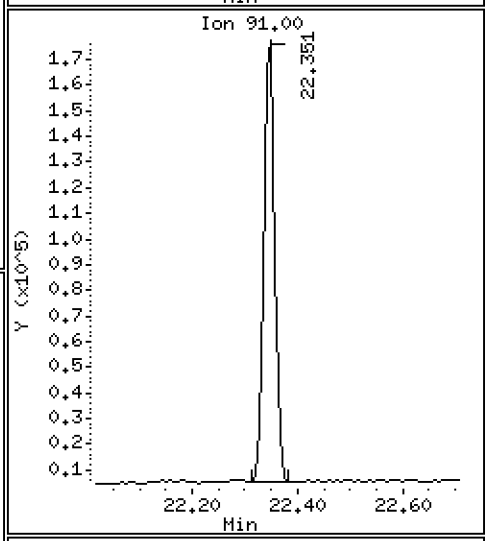


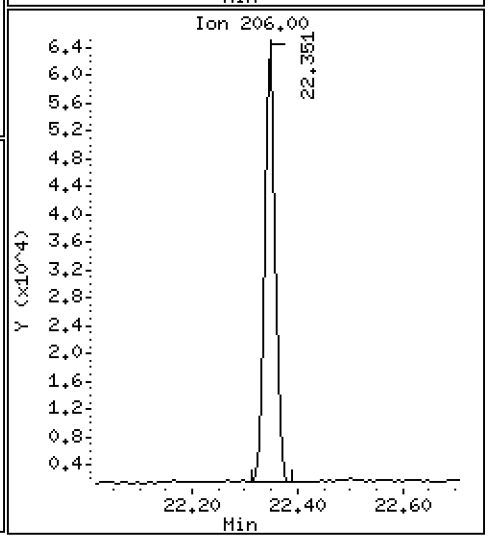












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

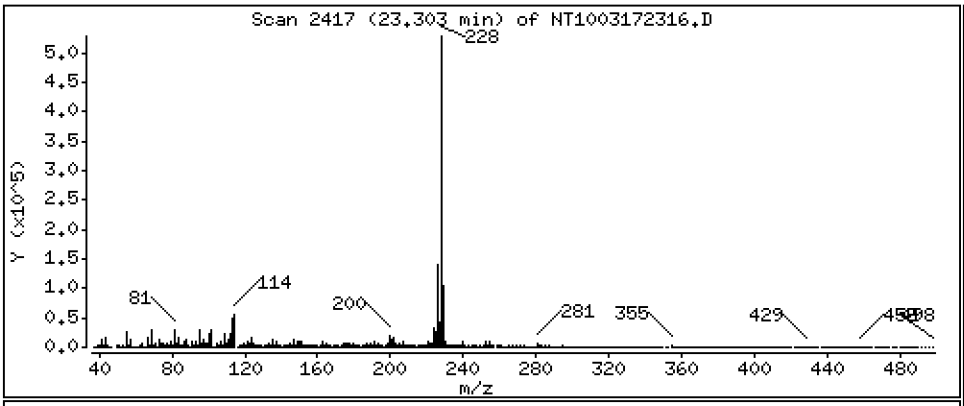
Operator: VTS

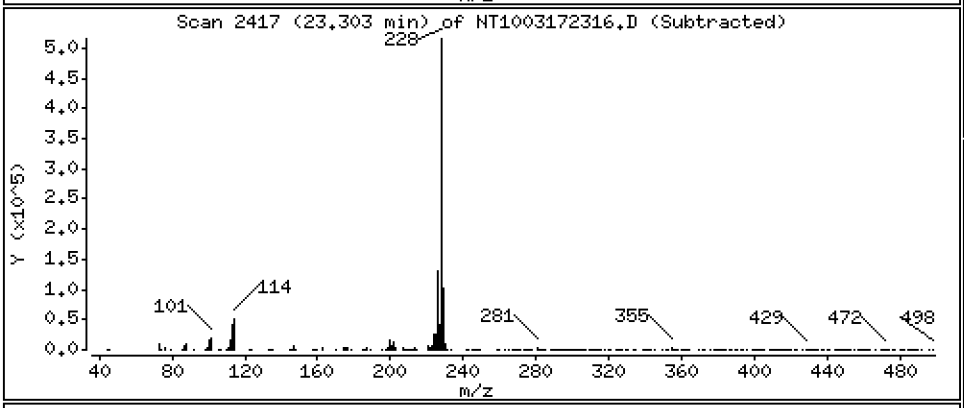
Column phase: ZB-5msi

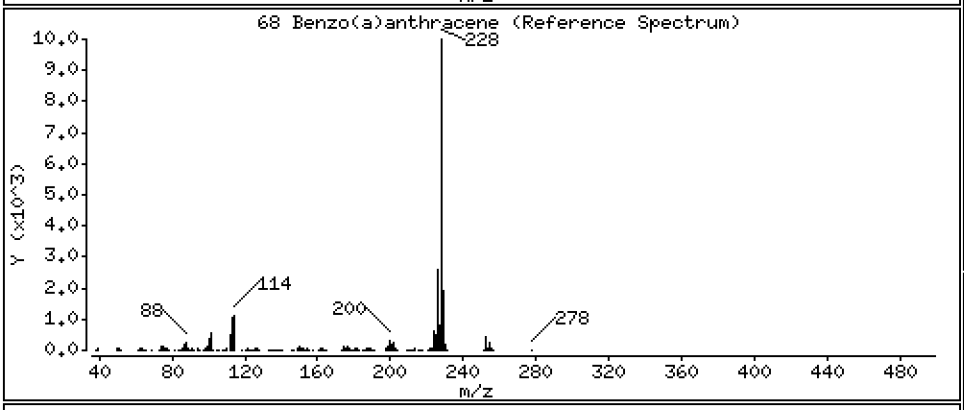
Column diameter: 0.25

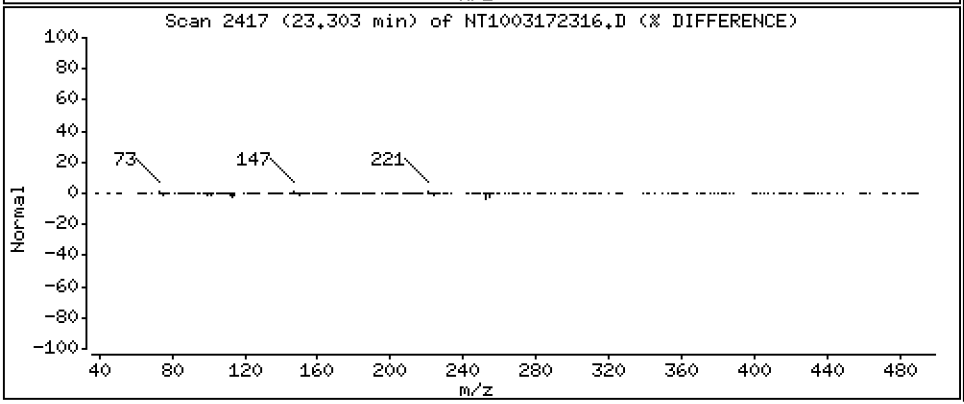
68 Benzo(a)anthracene

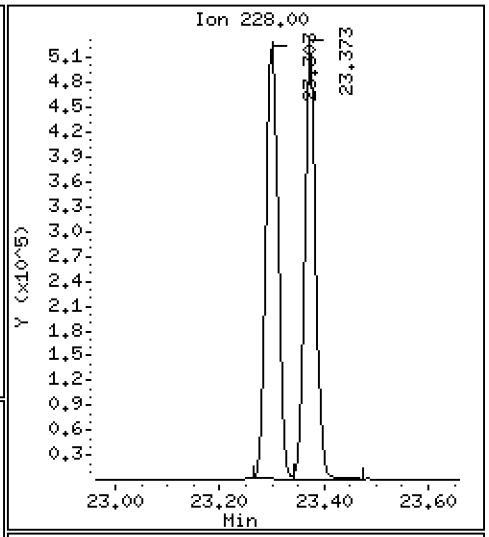
Concentration: 5.073 ug/mL

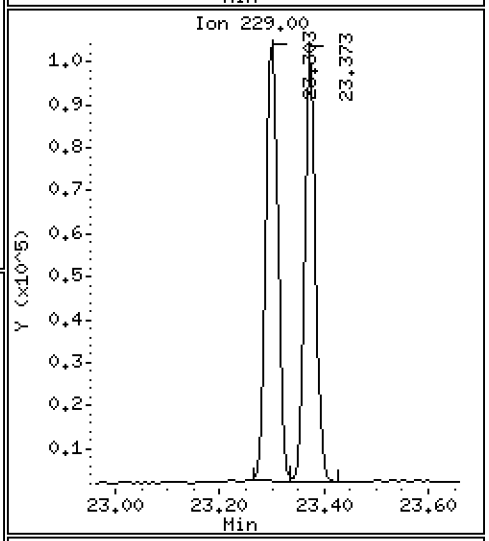


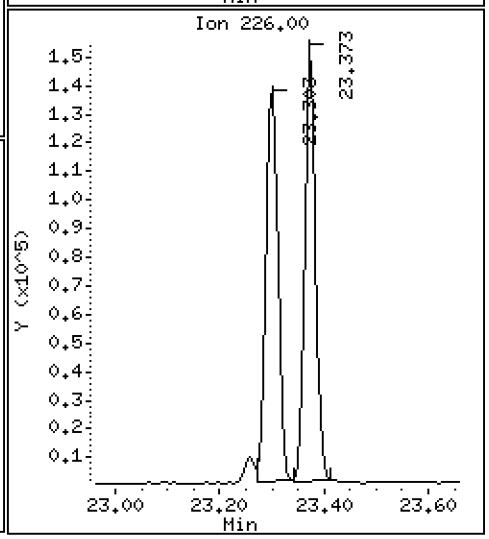












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

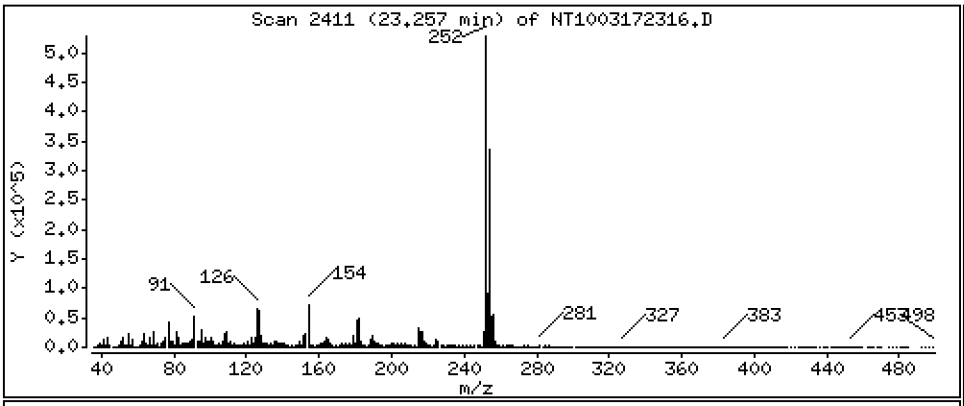
Operator: VTS

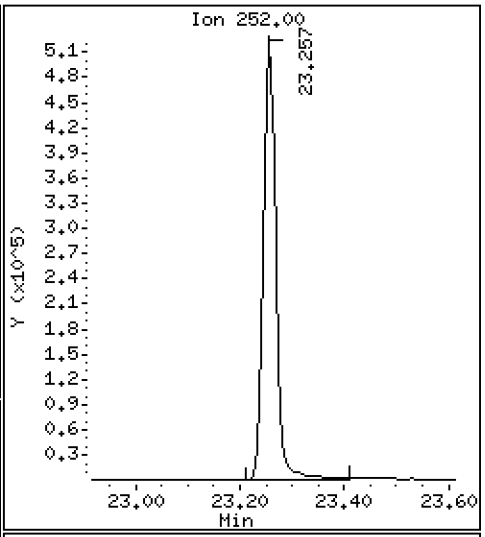
Column phase: ZB-5msi

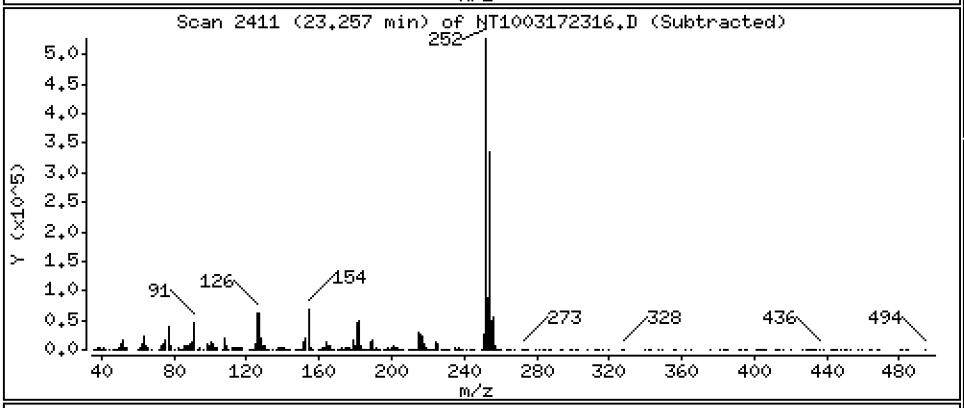
Column diameter: 0.25

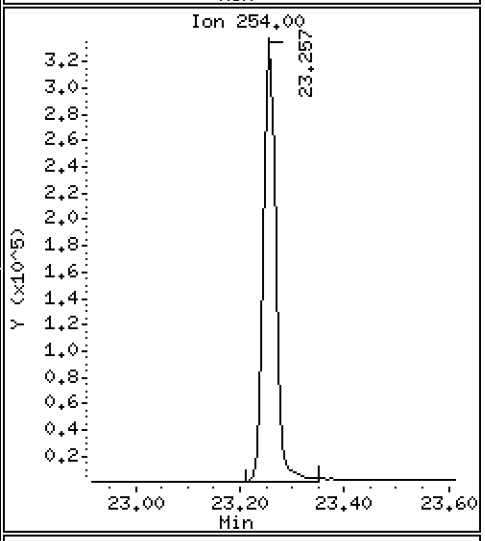
70 3,3'-Dichlorobenzidine

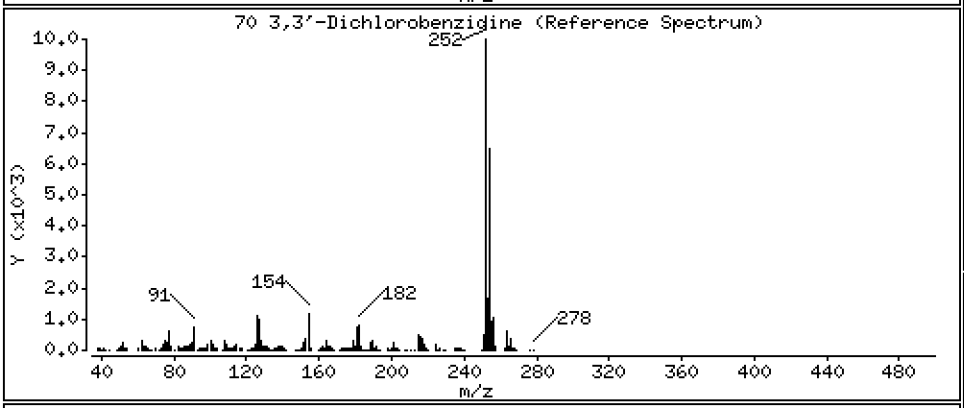
Concentration: 16.05 ug/mL

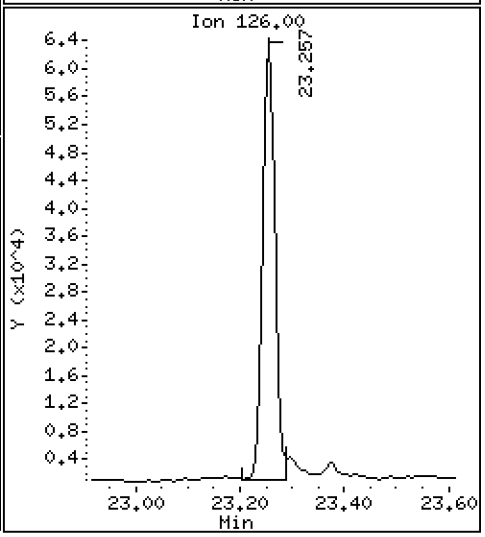


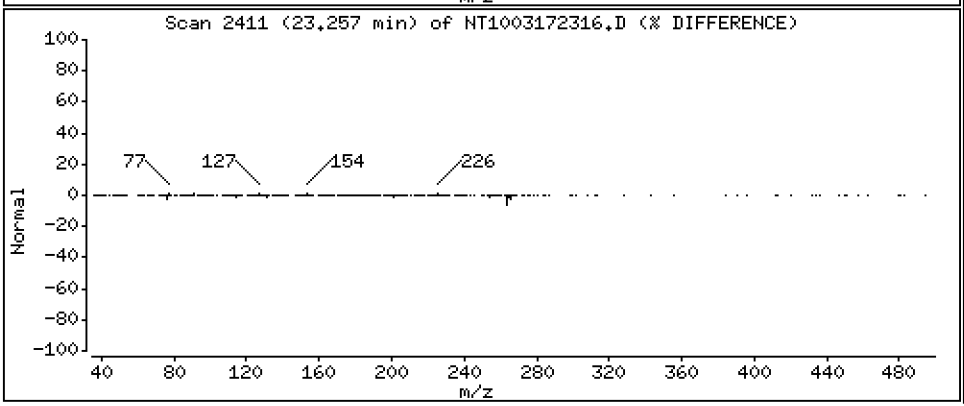












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

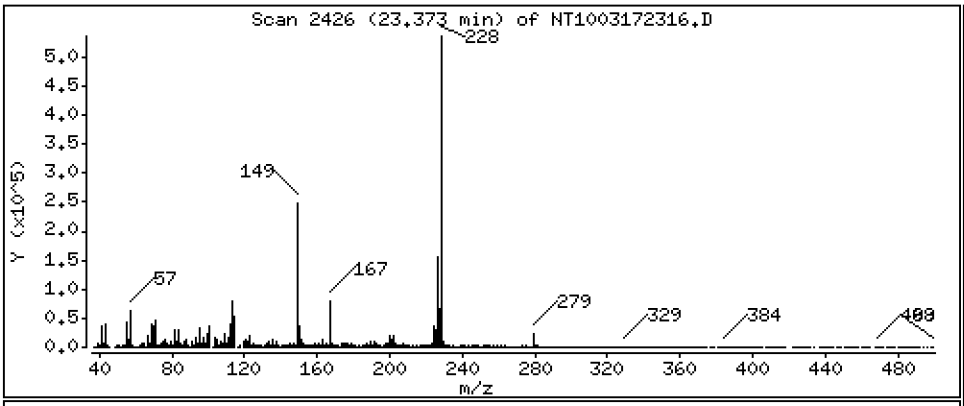
Operator: VTS

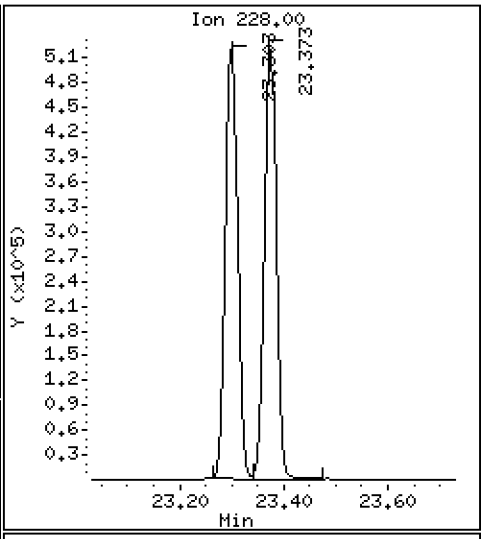
Column phase: ZB-5msi

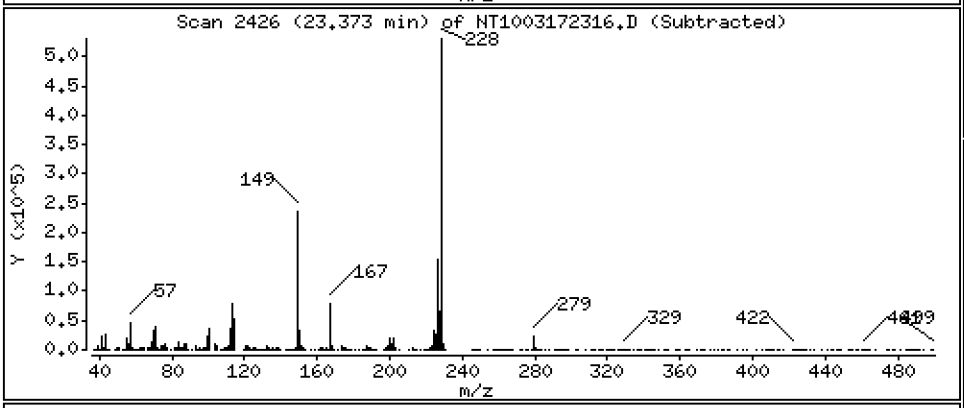
Column diameter: 0.25

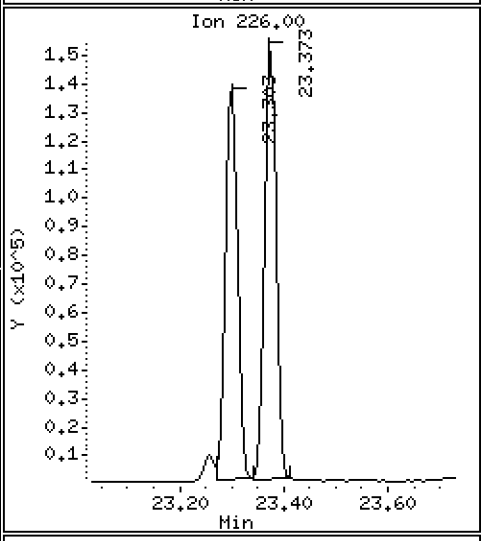
71 Chrysene

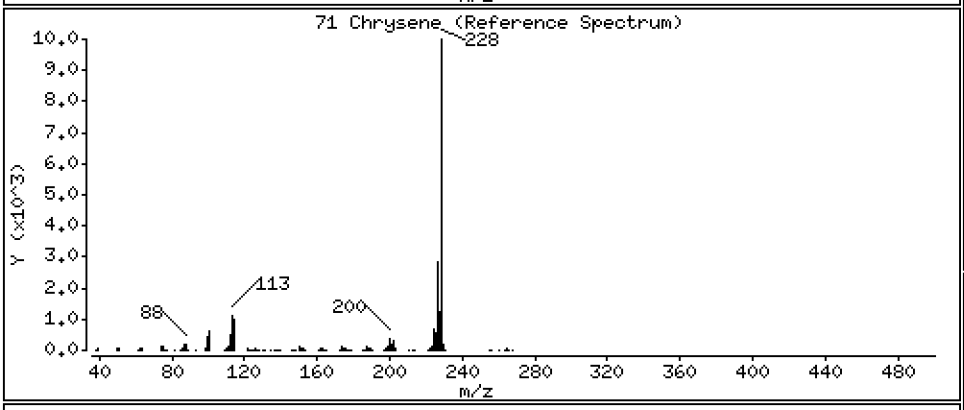
Concentration: 4.965 ug/mL

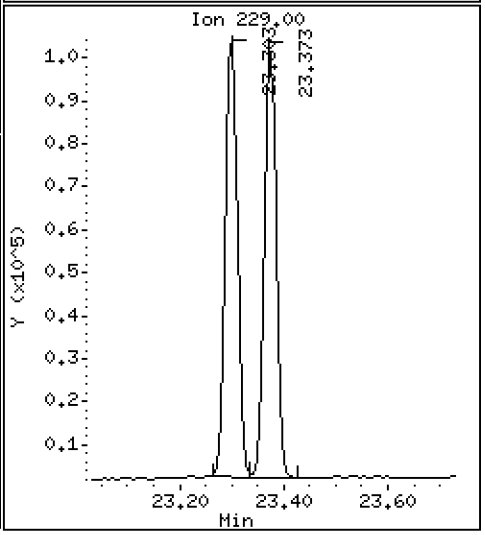


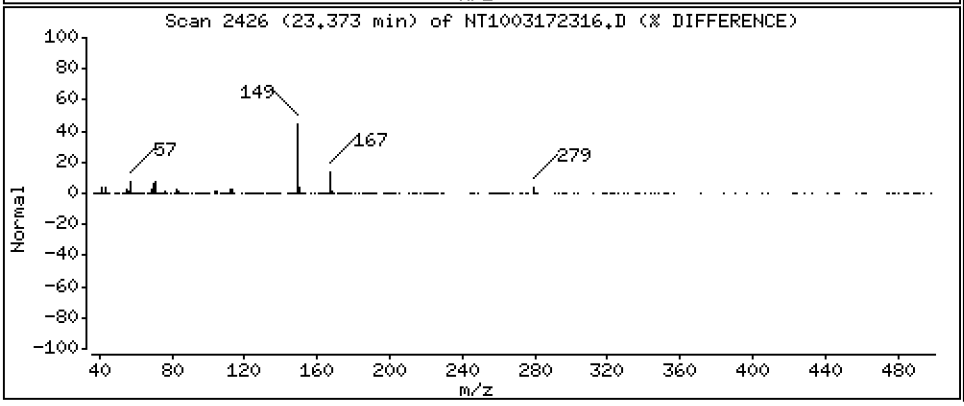












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

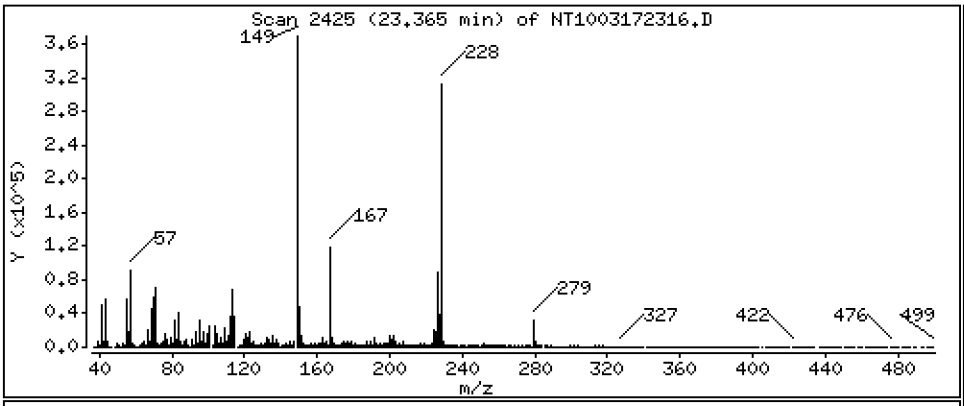
Operator: VTS

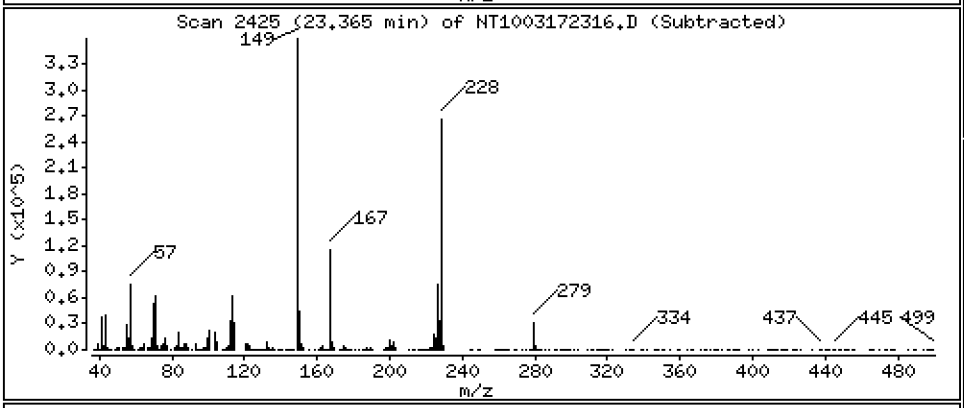
Column phase: ZB-5msi

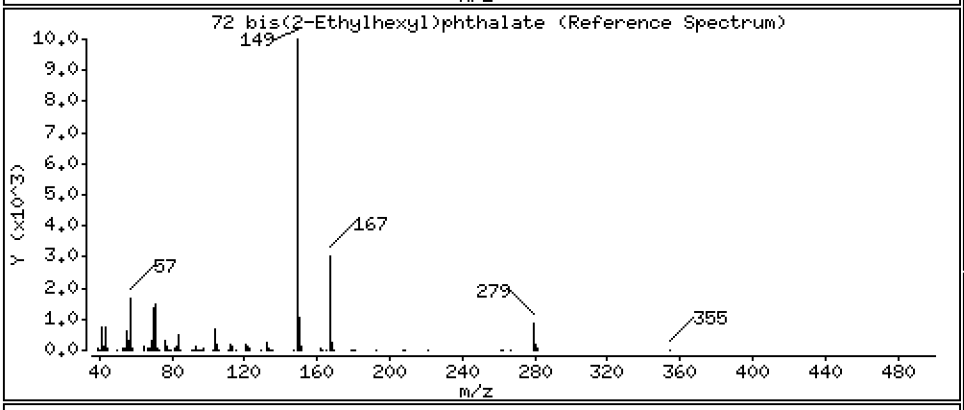
Column diameter: 0.25

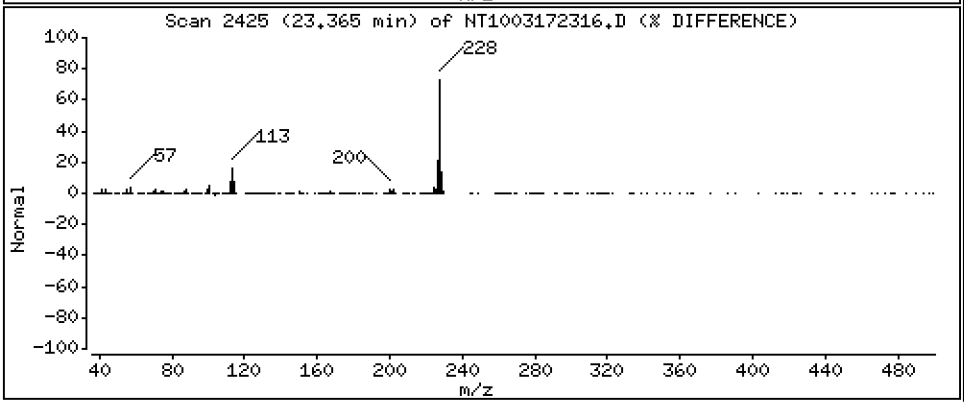
72 bis(2-Ethylhexyl)phthalate

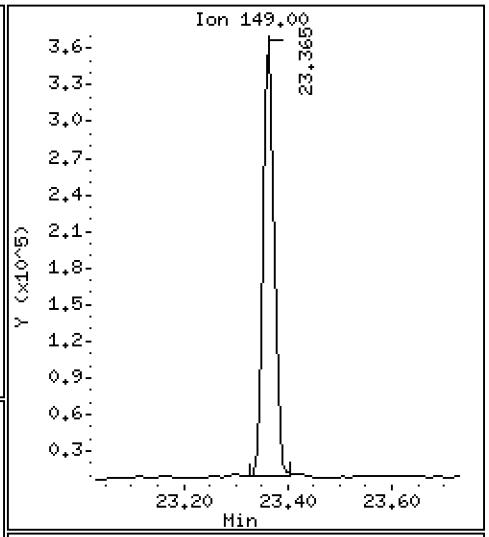
Concentration: 4.704 ug/mL

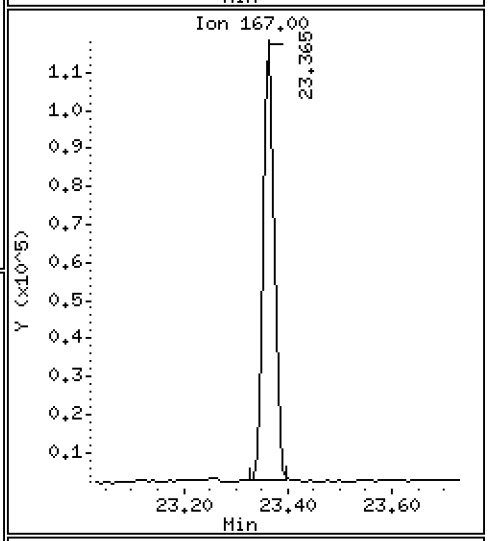


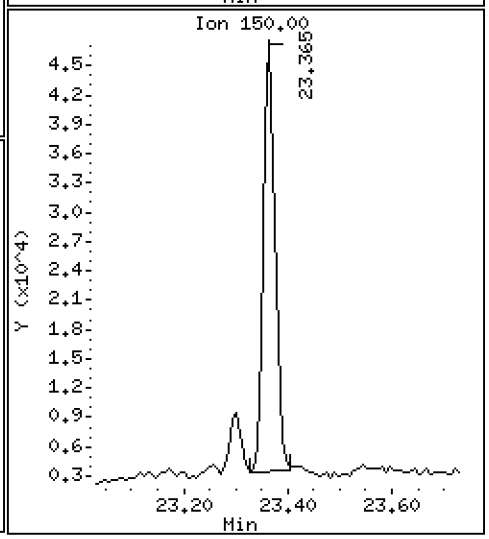












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

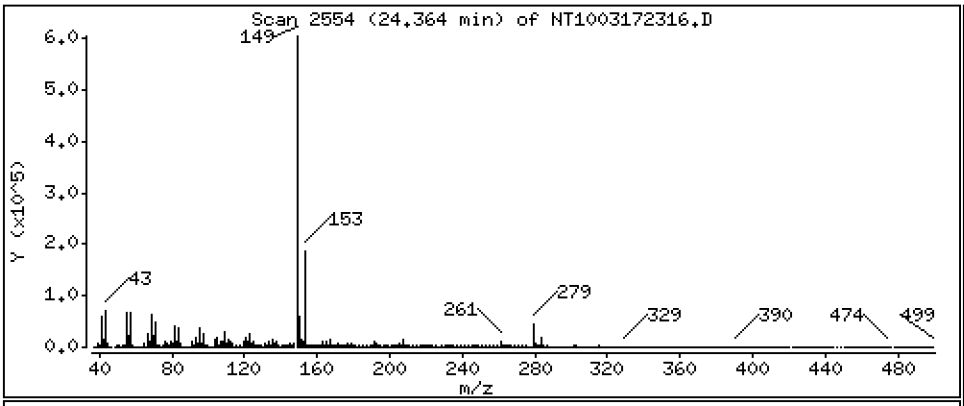
Operator: VTS

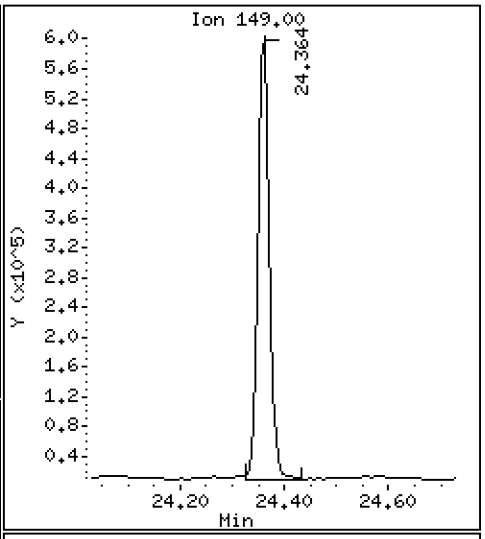
Column phase: ZB-5msi

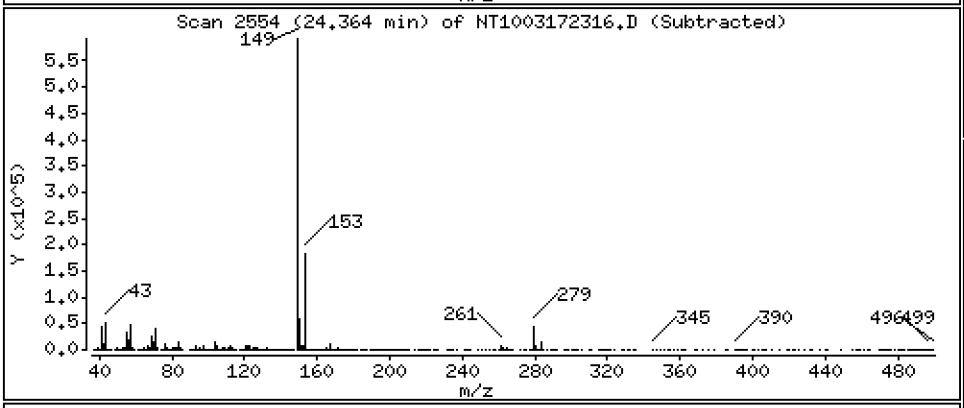
Column diameter: 0.25

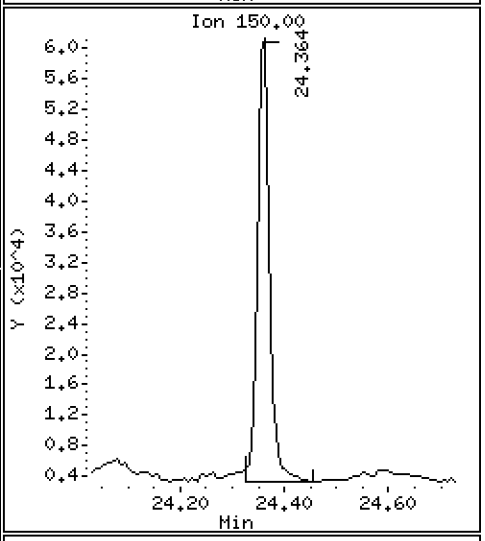
73 Di-n-octylphthalate

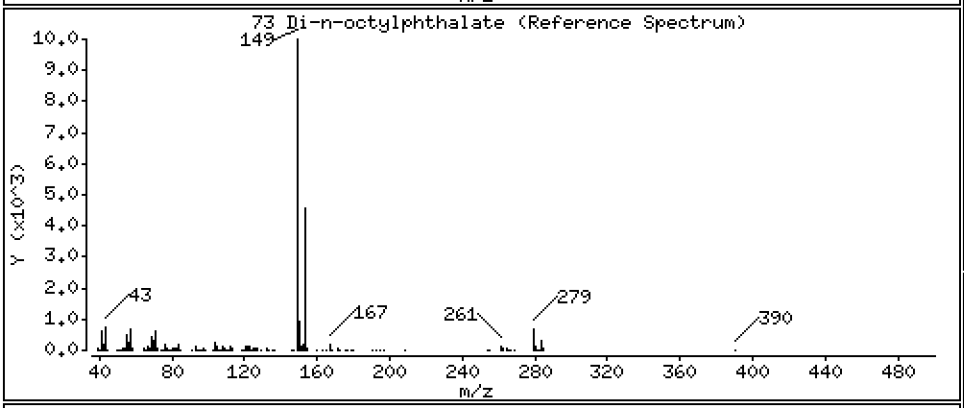
Concentration: 4.677 ug/mL

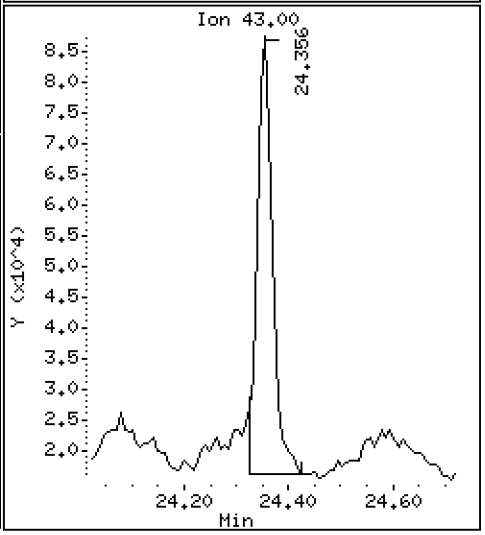


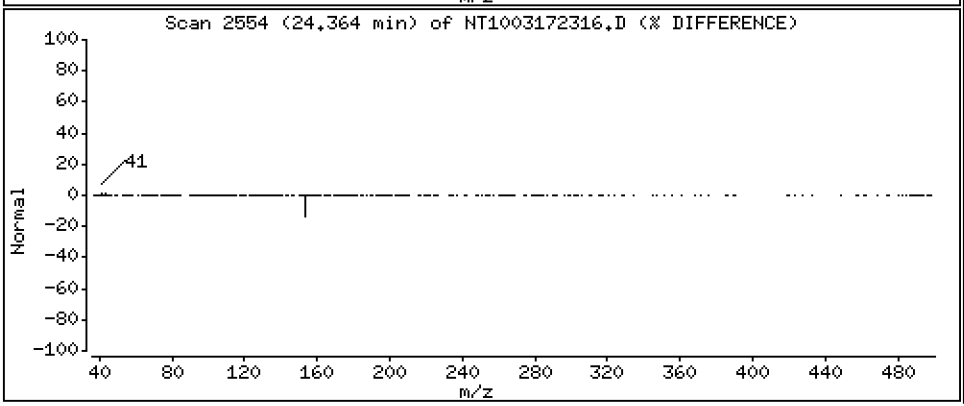












Date : 18-MAR-2023 03:57

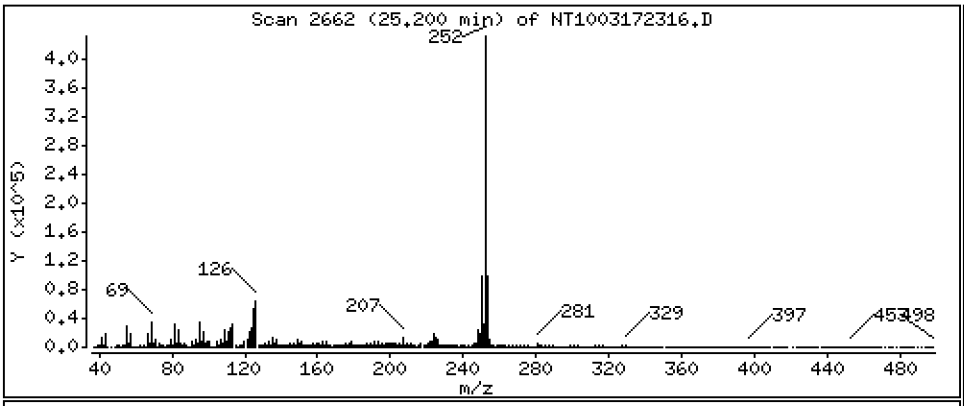
Client ID: Instrument: nt10.i

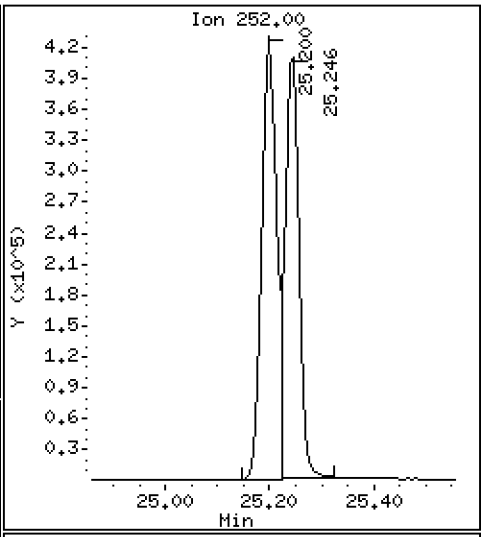
Sample Info: SLC0473-CCV1

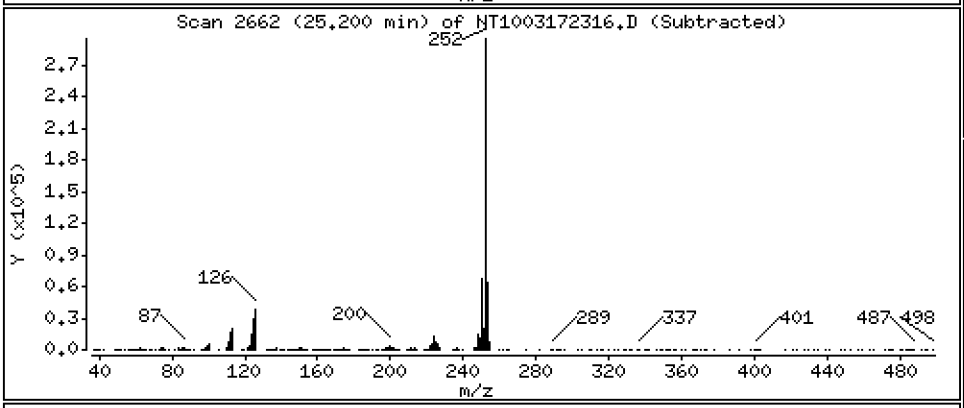
Operator: VTS

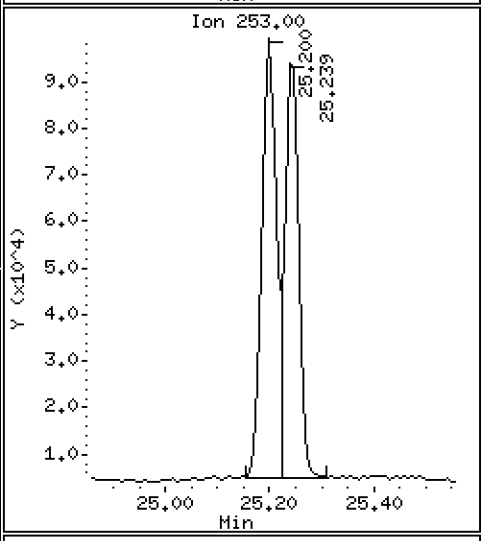
Column phase: ZB-5msi Column diameter: 0.25

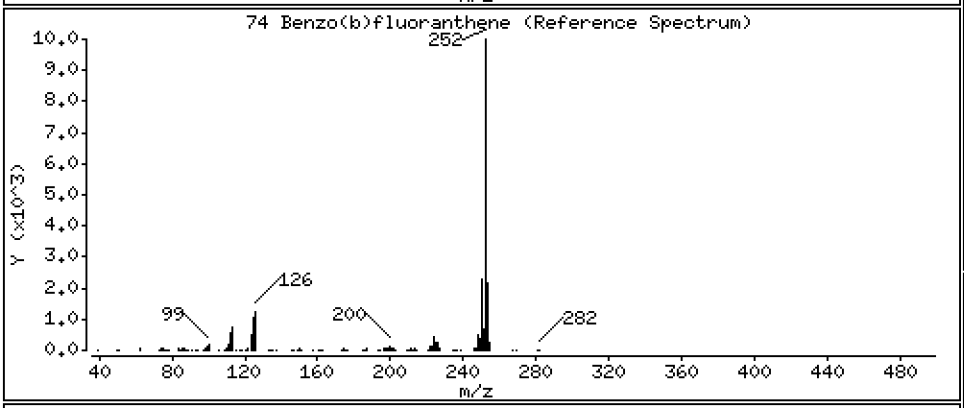
74 Benzo(b)fluoranthene Concentration: 5.182 ug/mL

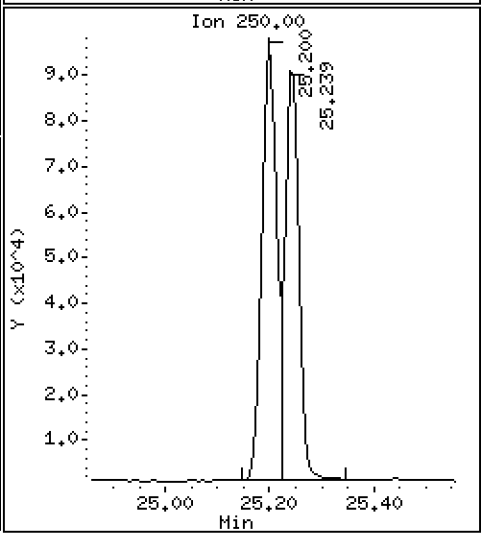


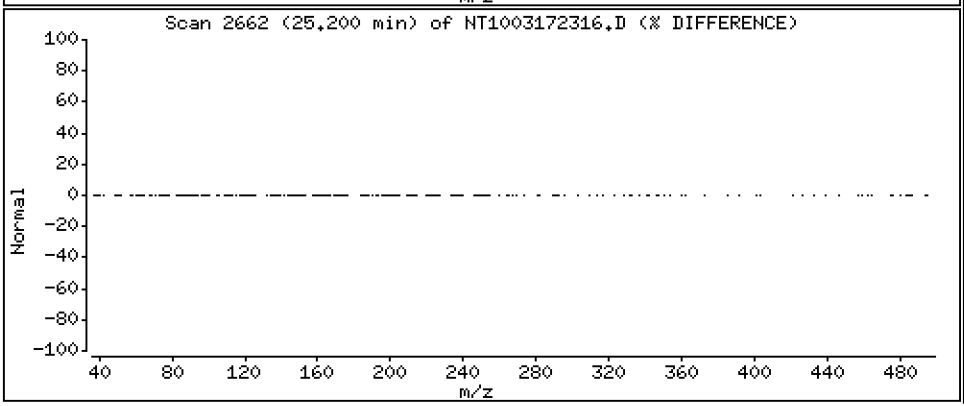












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

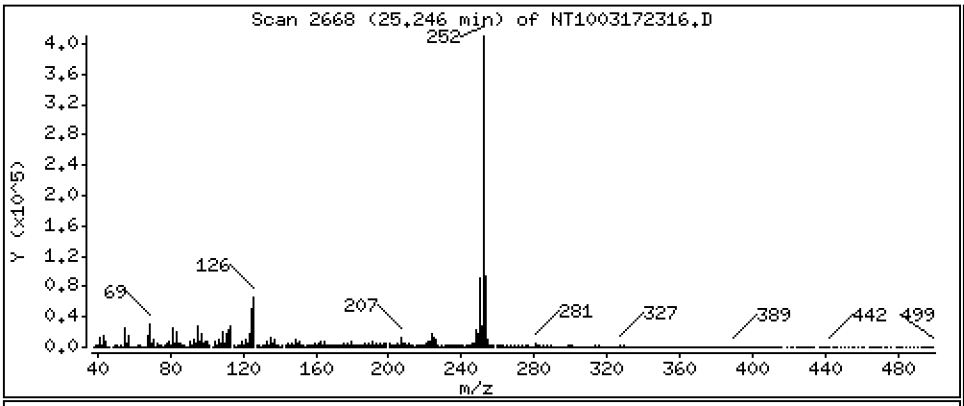
Operator: VTS

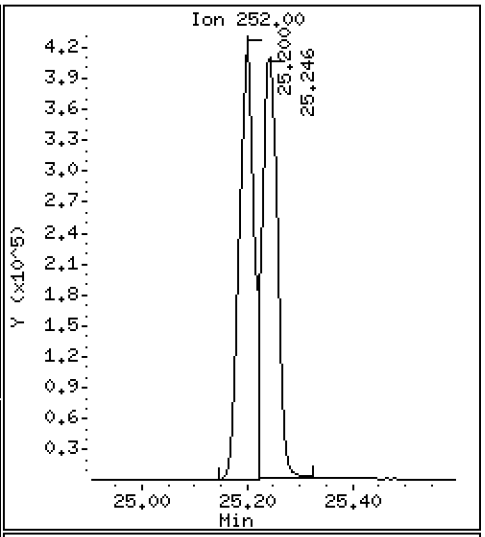
Column phase: ZB-5msi

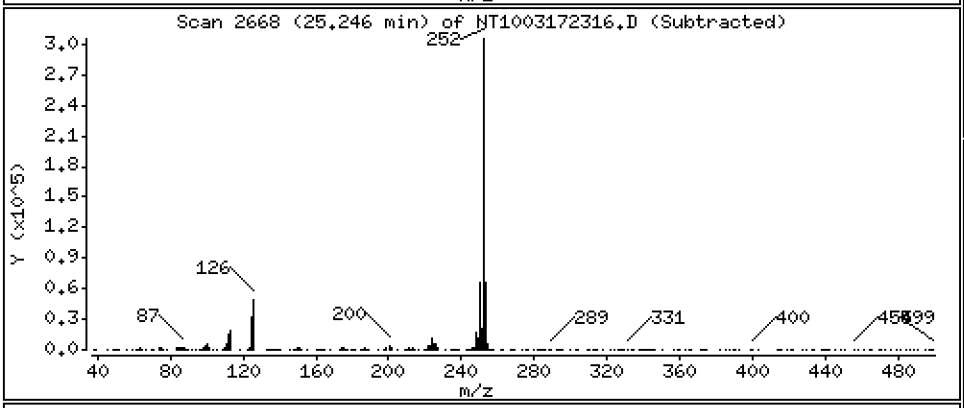
Column diameter: 0.25

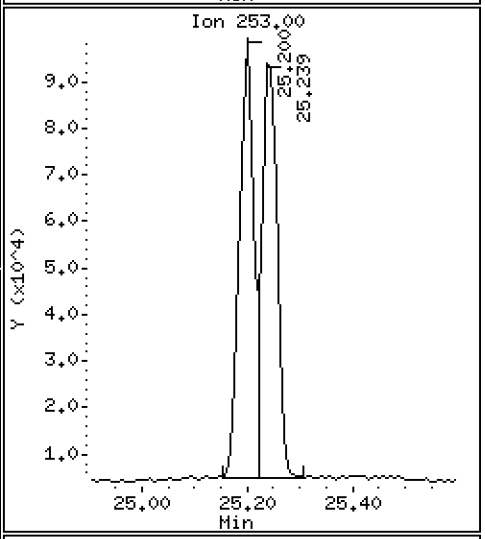
75 Benzo(k)fluoranthene

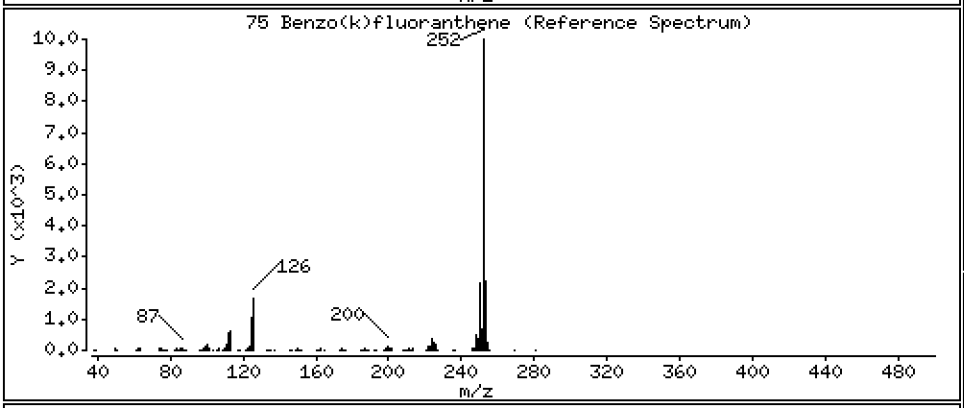
Concentration: 4.895 ug/mL

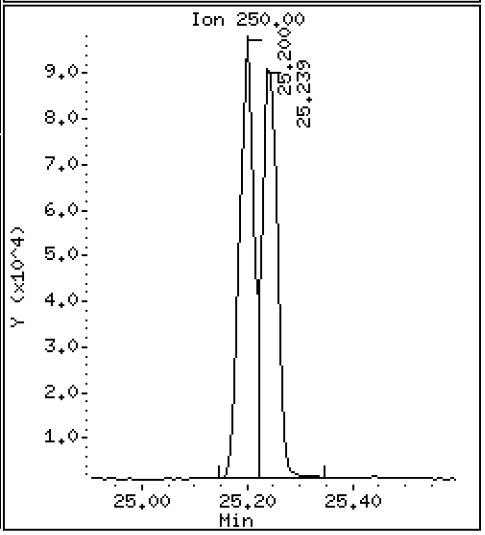


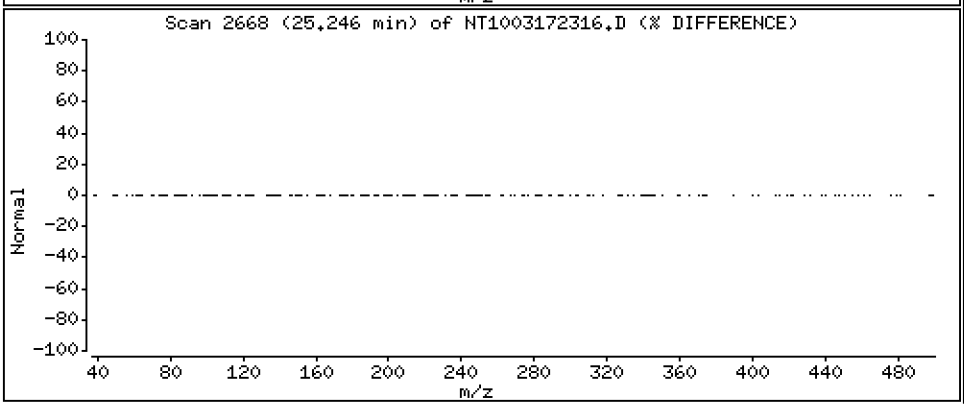












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172316.D

Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

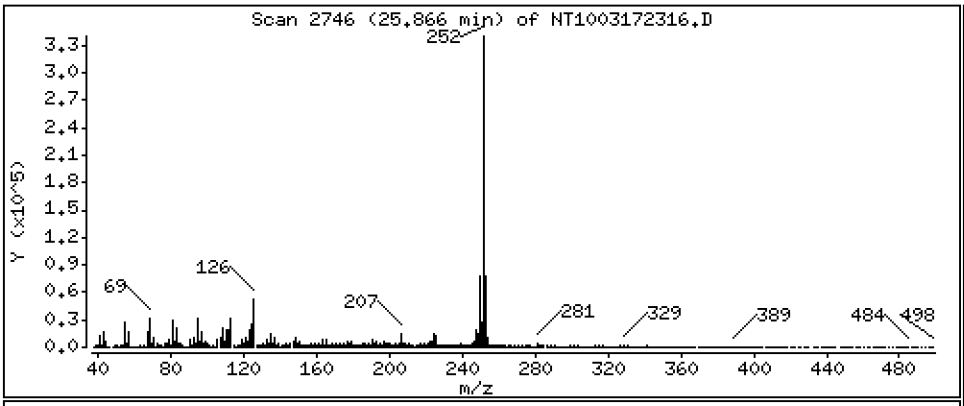
Operator: VTS

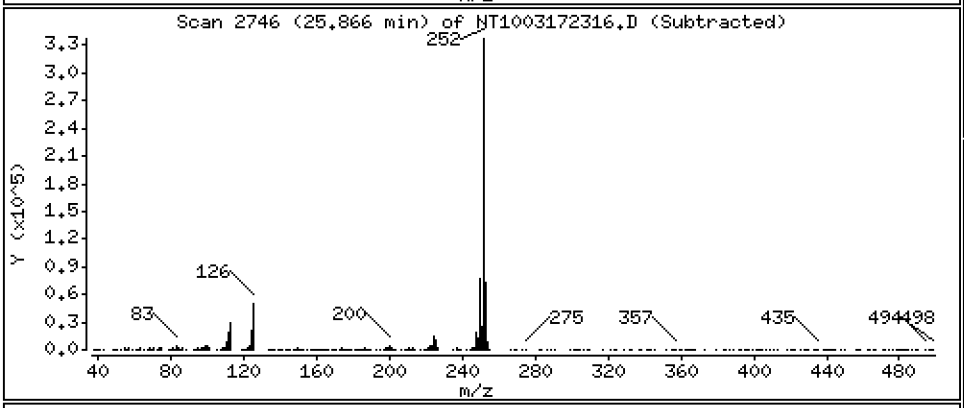
Column phase: ZB-5msi

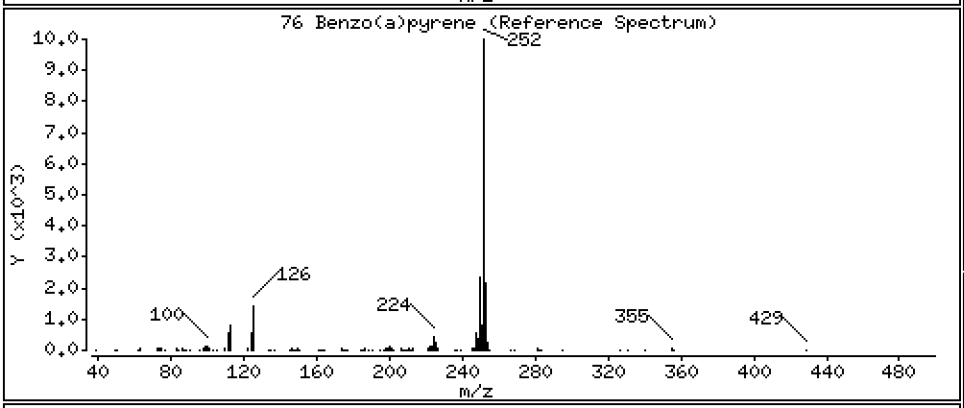
Column diameter: 0.25

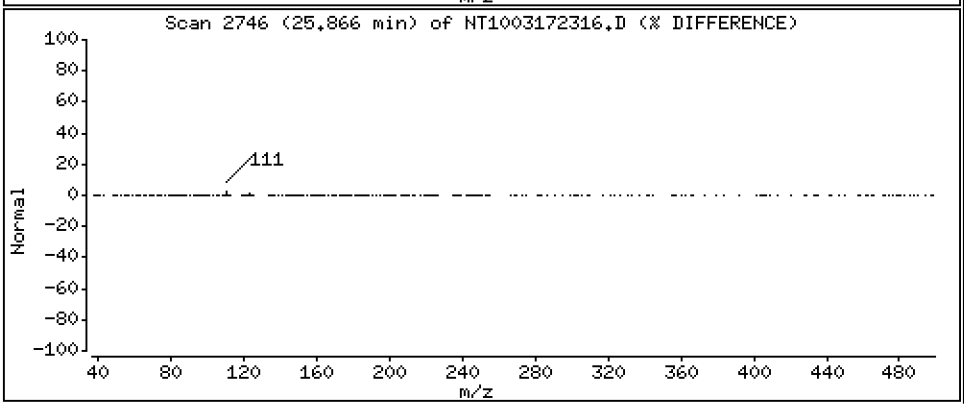
76 Benzo(a)pyrene

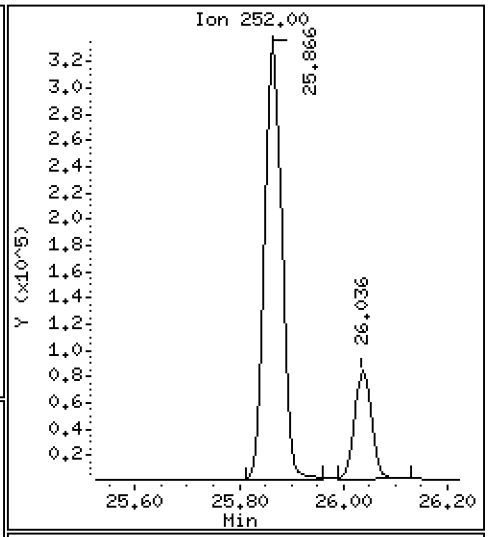
Concentration: 5.181 ug/mL

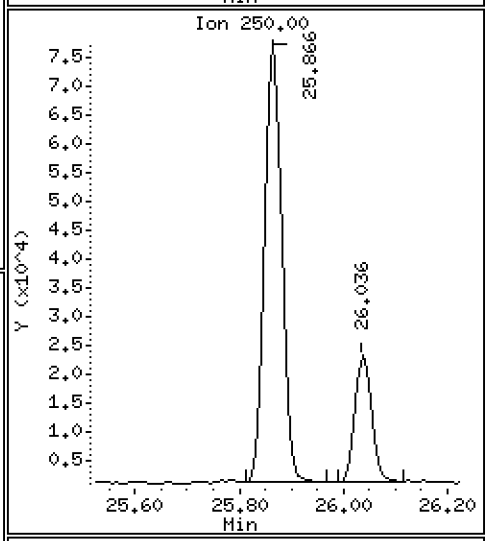


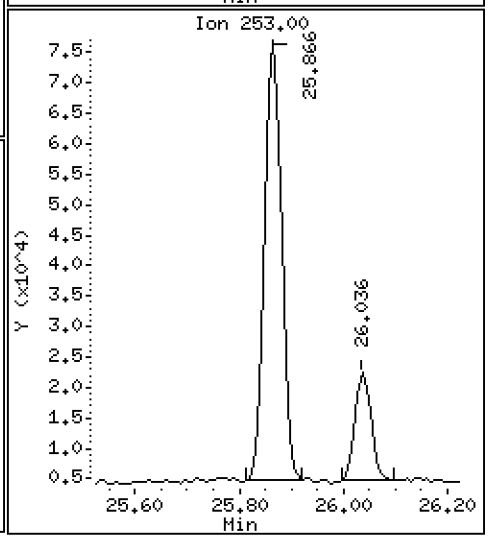












Date : 18-MAR-2023 03:57

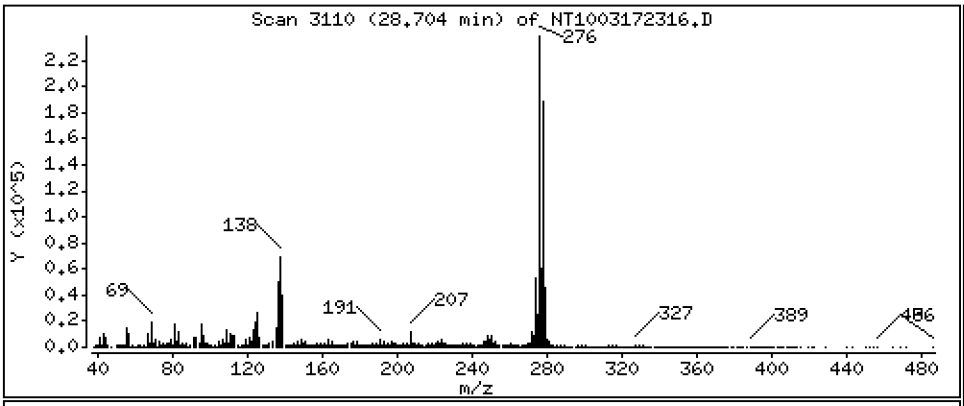
Client ID: Instrument: nt10.i

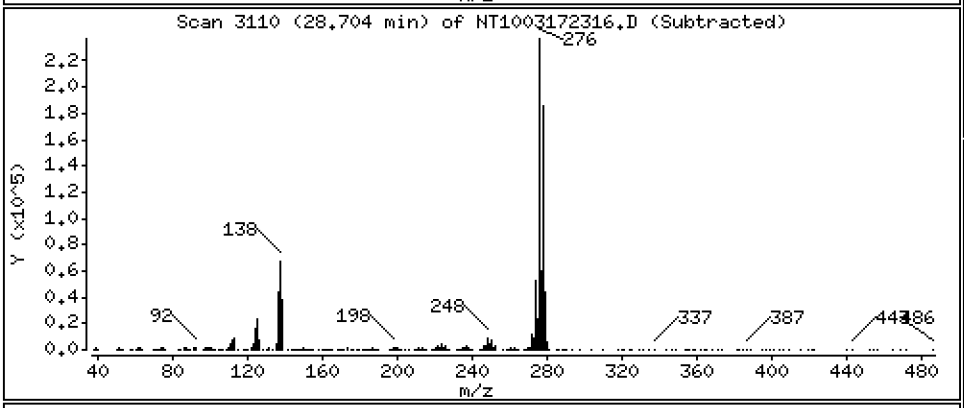
Sample Info: SLC0473-CCV1

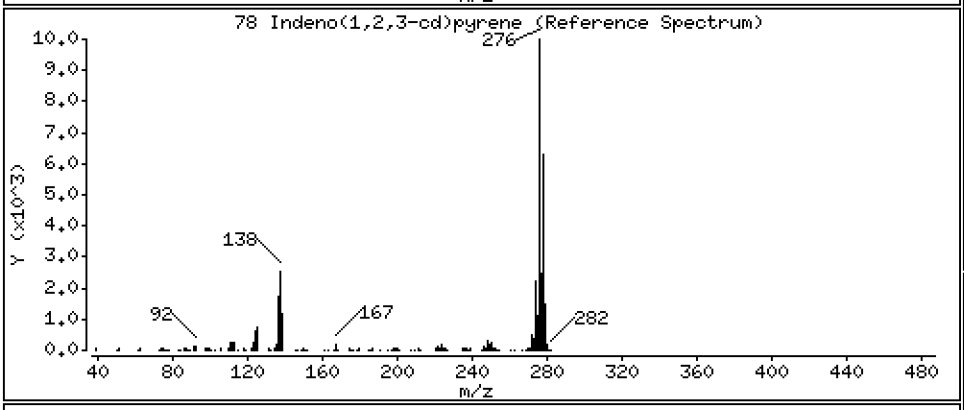
Operator: VTS

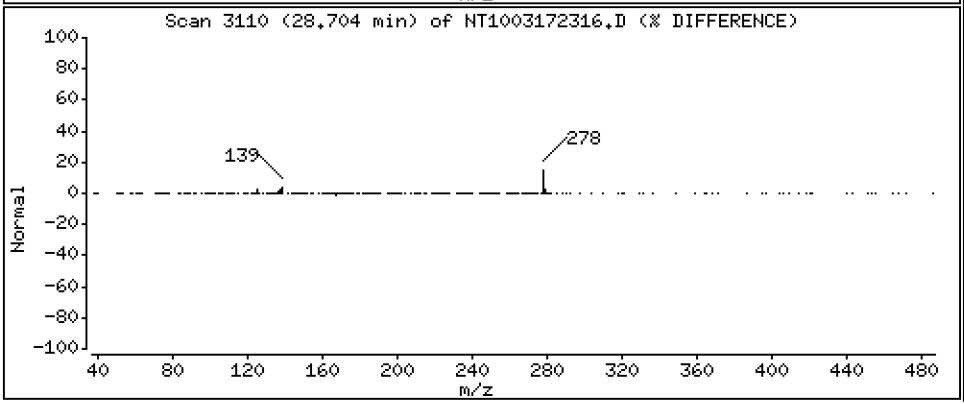
Column phase: ZB-5msi Column diameter: 0.25

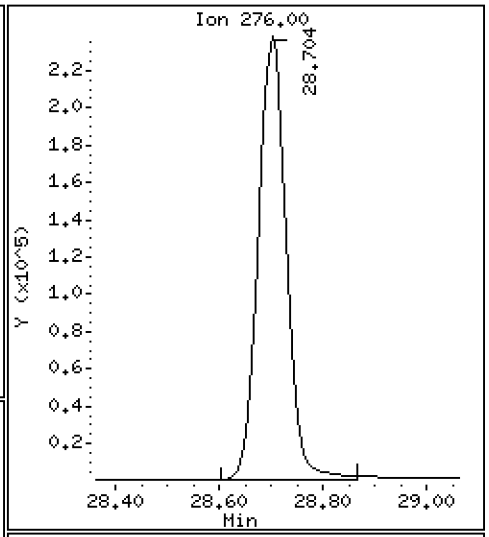
78 Indeno(1,2,3-cd)pyrene Concentration: 4.804 ug/mL

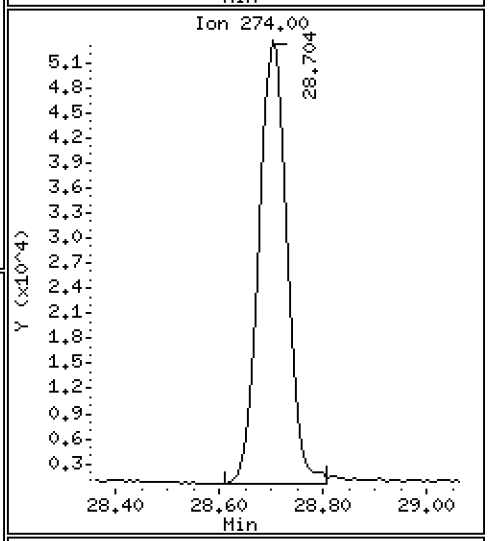


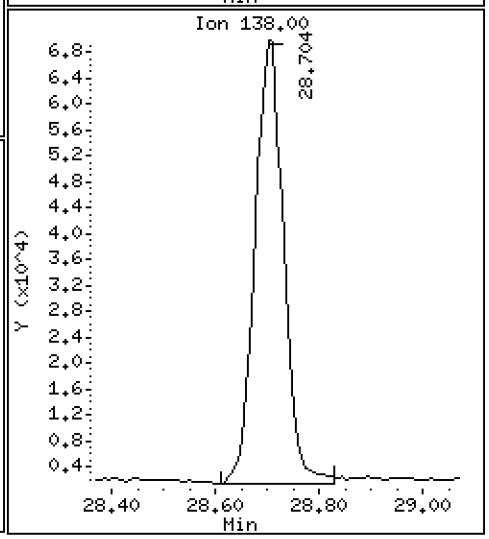












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172316.D

Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

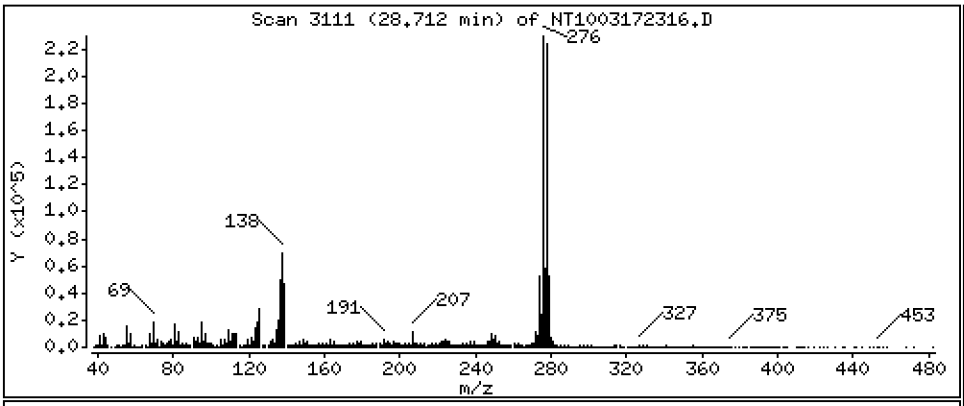
Operator: VTS

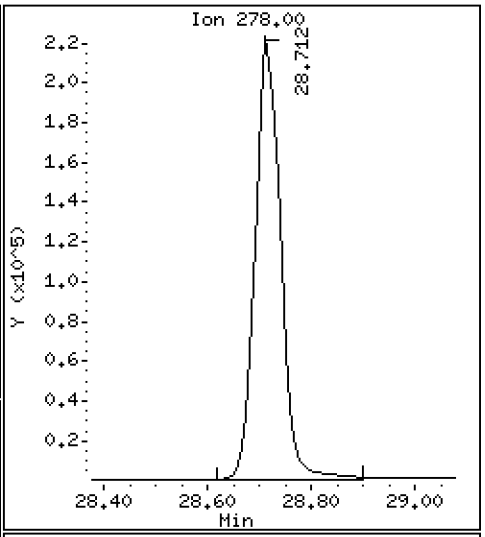
Column phase: ZB-5msi

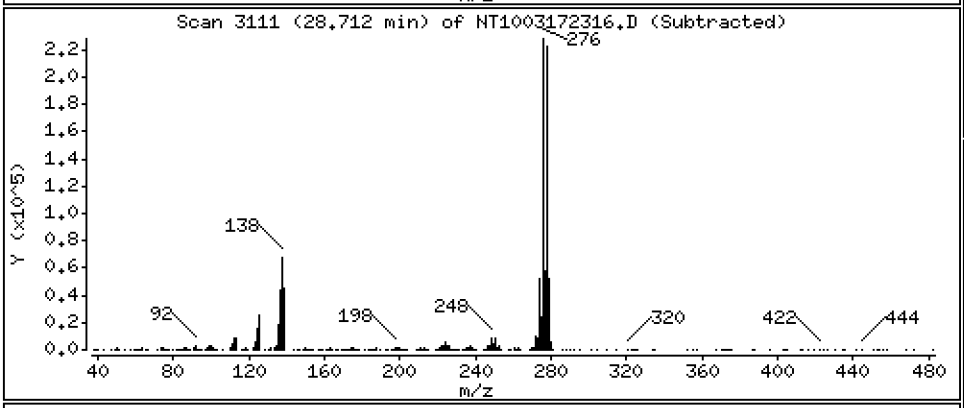
Column diameter: 0.25

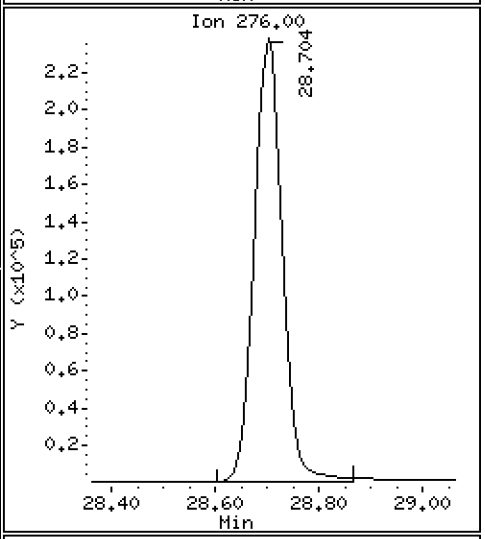
79 Dibenzo(a,h)anthracene

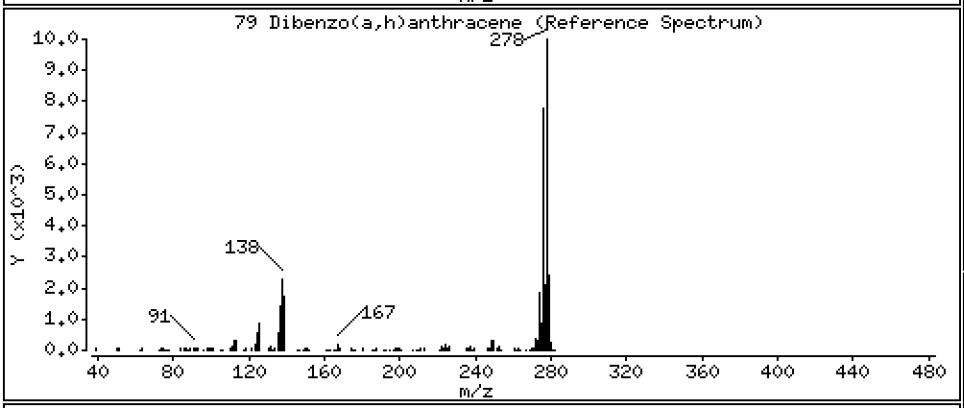
Concentration: 4.899 ug/mL

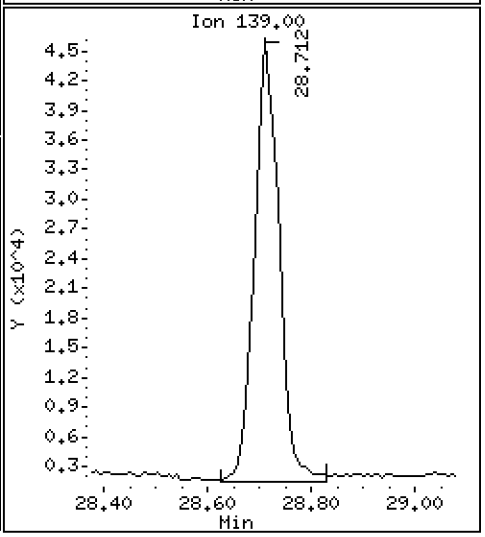


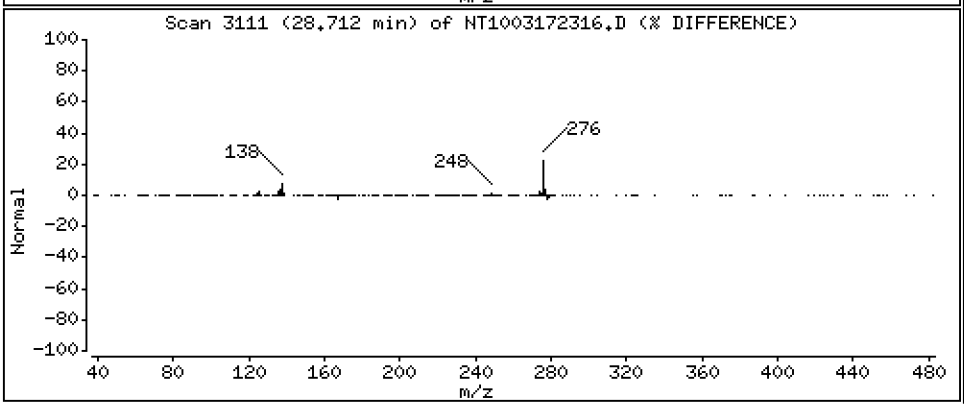












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

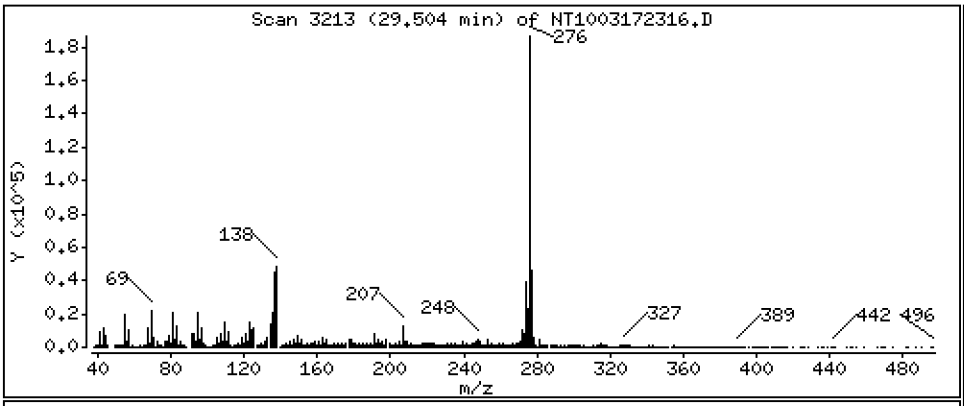
Operator: VTS

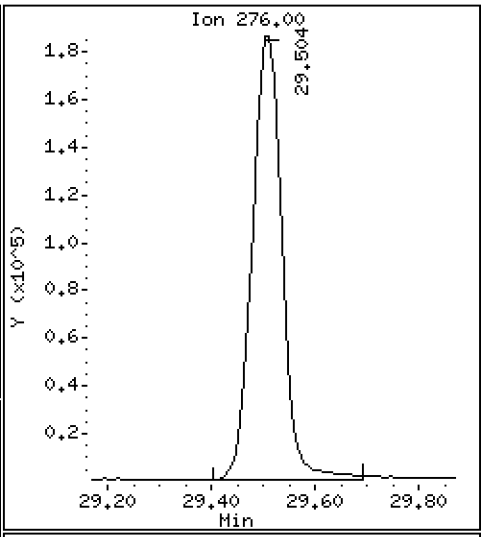
Column phase: ZB-5msi

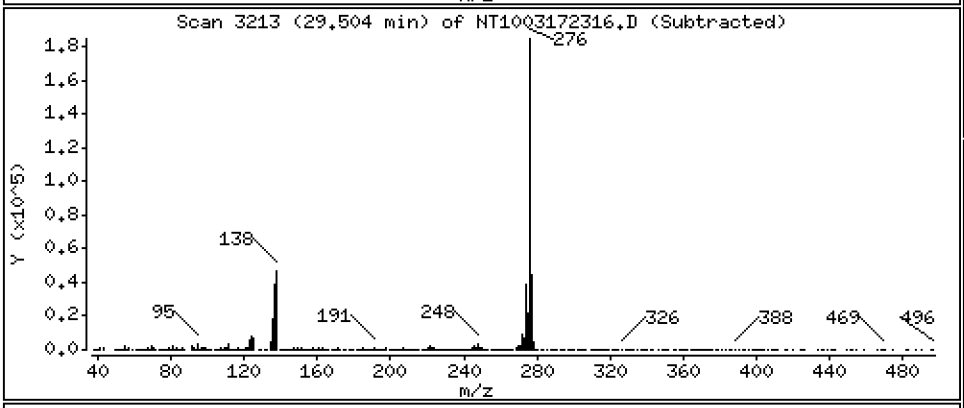
Column diameter: 0.25

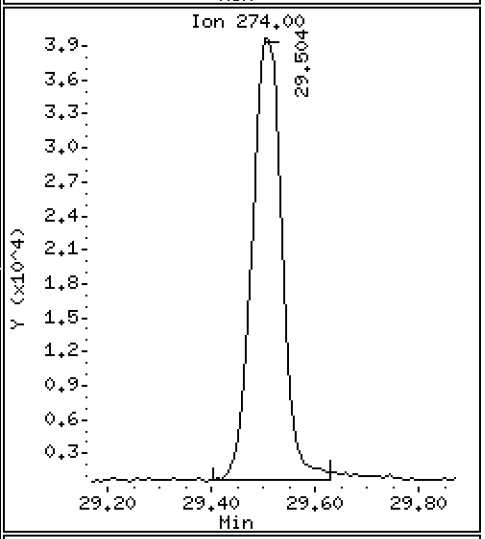
80 Benzo(g,h,i)perylene

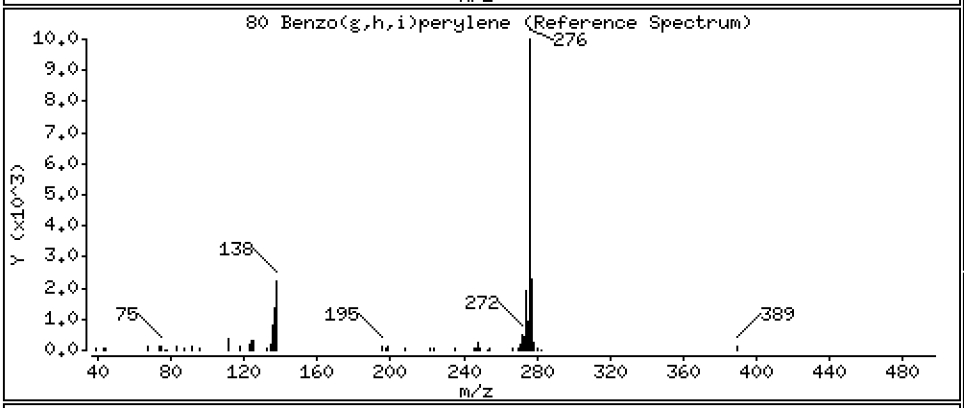
Concentration: 4.583 ug/mL

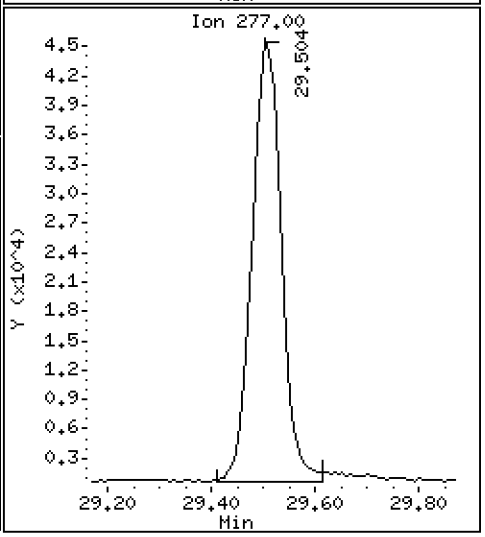


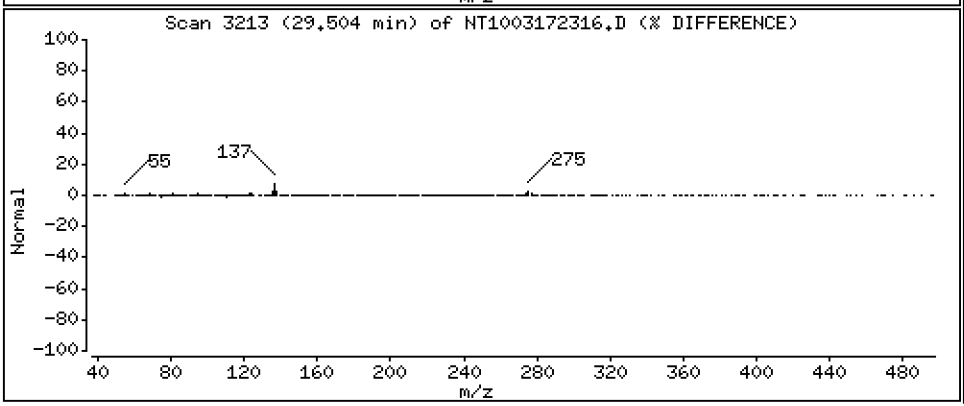












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

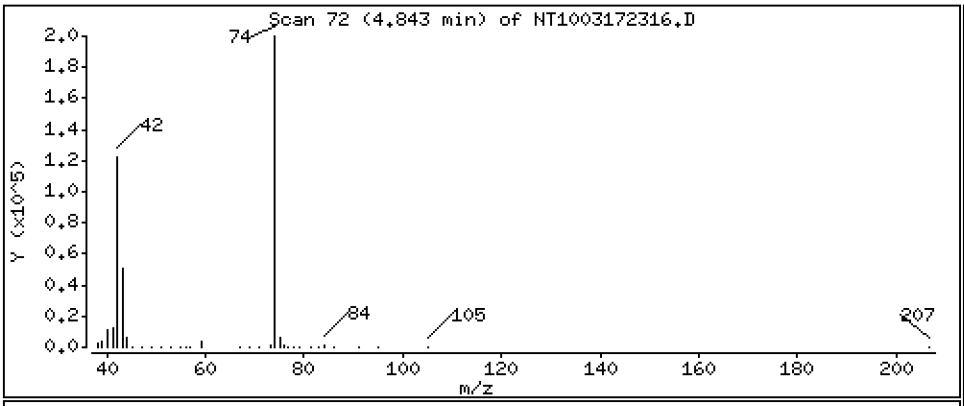
Operator: VTS

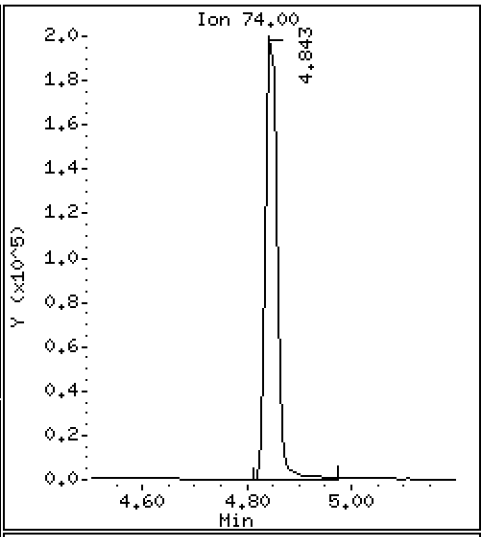
Column phase: ZB-5msi

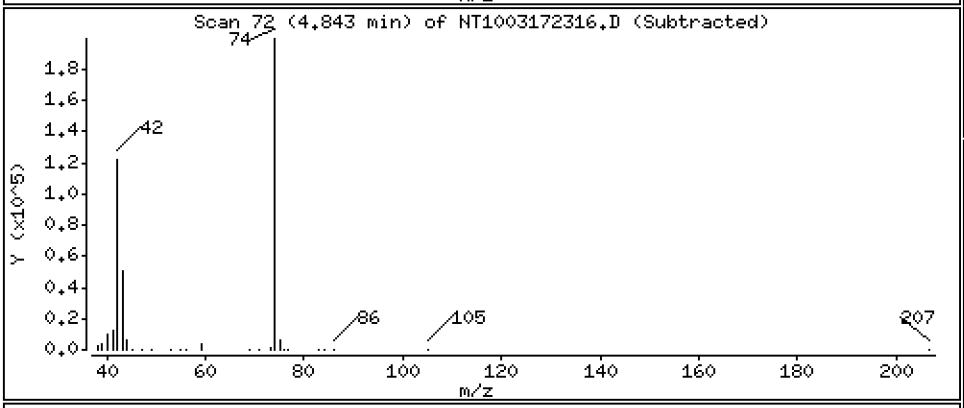
Column diameter: 0.25

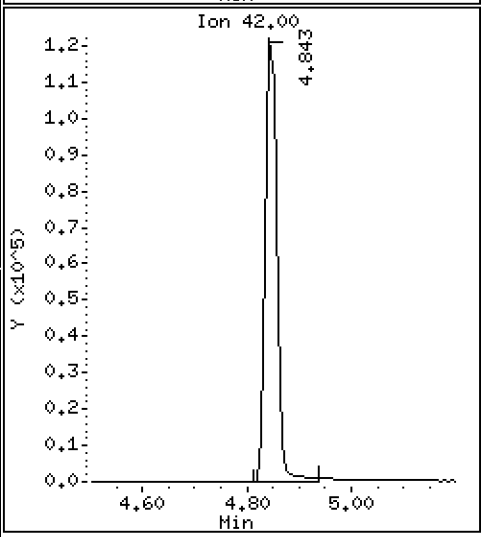
90 N-Nitrosodimethylamine

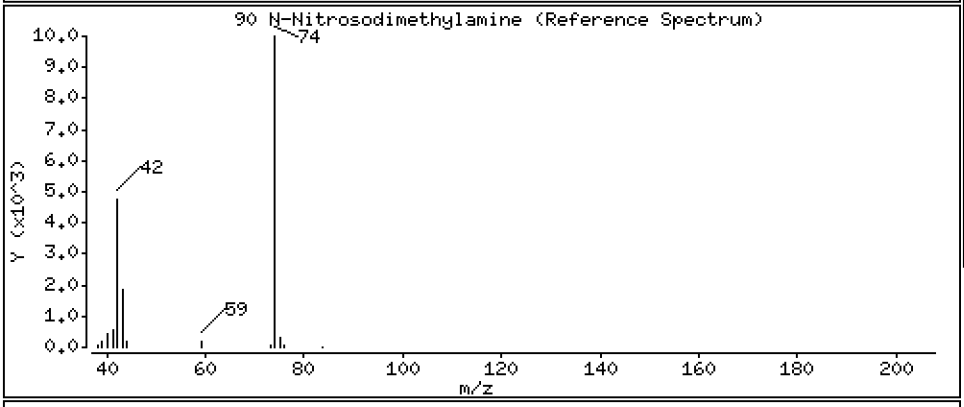
Concentration: 10.27 ug/mL

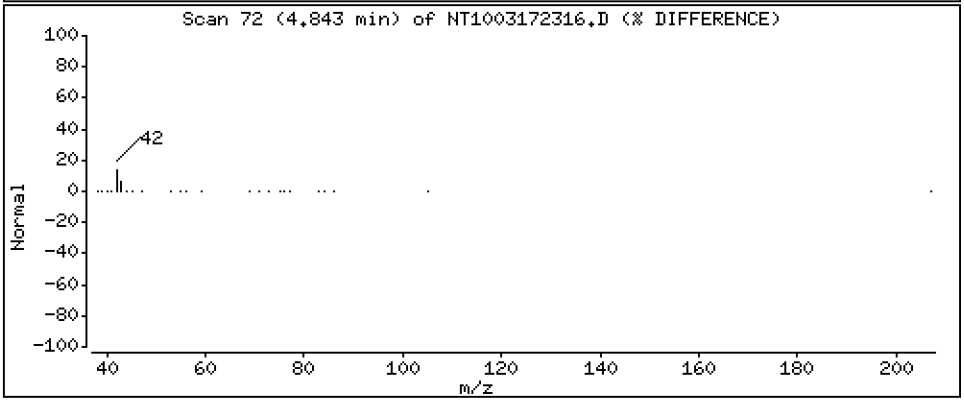












Date : 18-MAR-2023 03:57

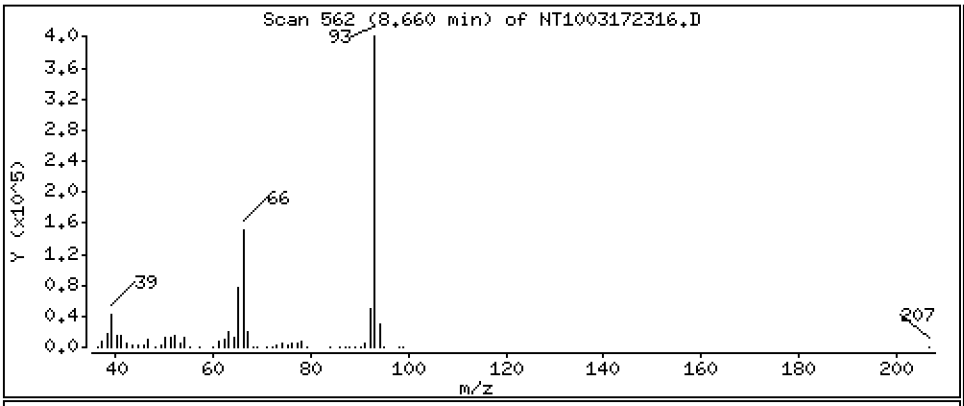
Client ID: Instrument: nt10.i

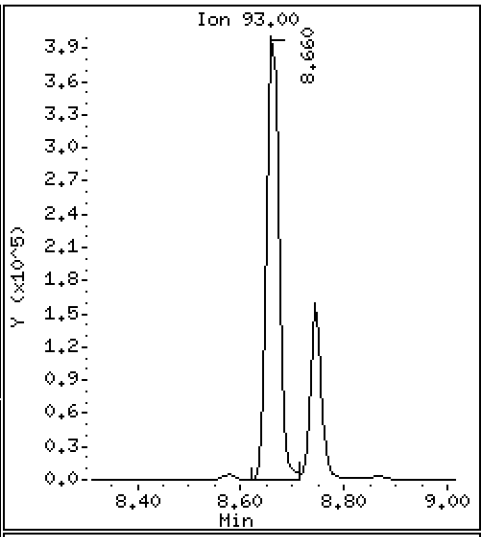
Sample Info: SLC0473-CCV1

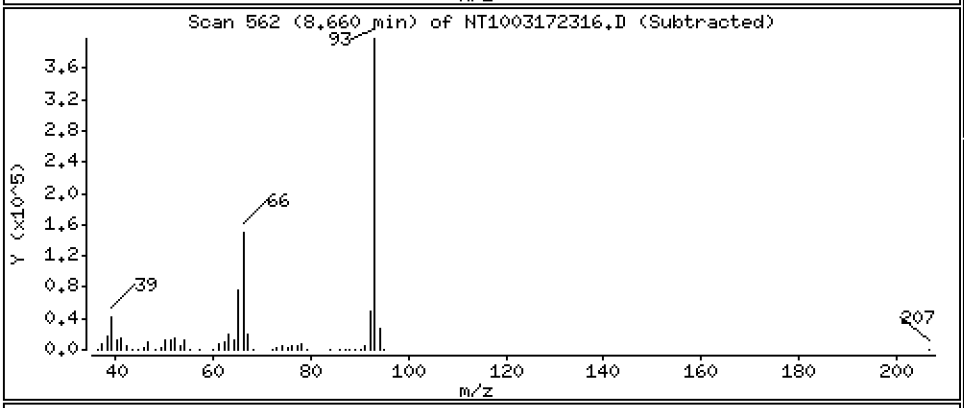
Operator: VTS

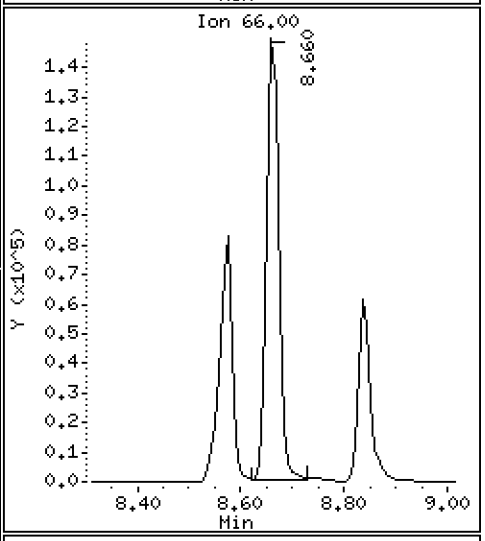
Column phase: ZB-5msi Column diameter: 0.25

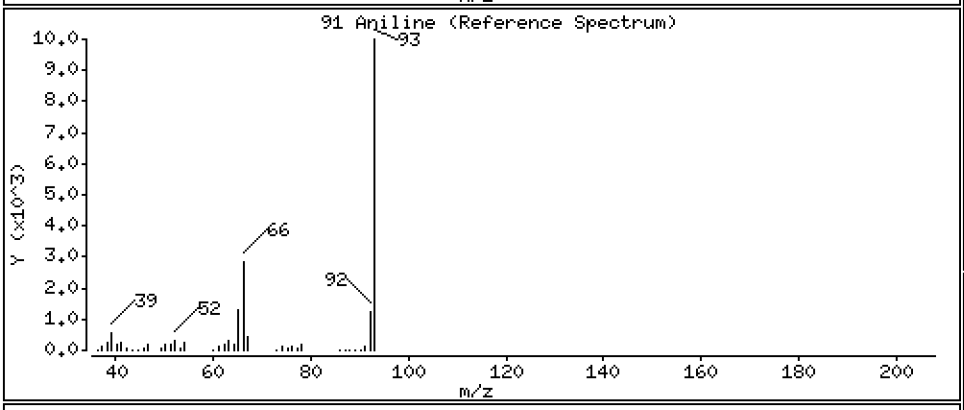
91 Aniline Concentration: 10.08 ug/mL

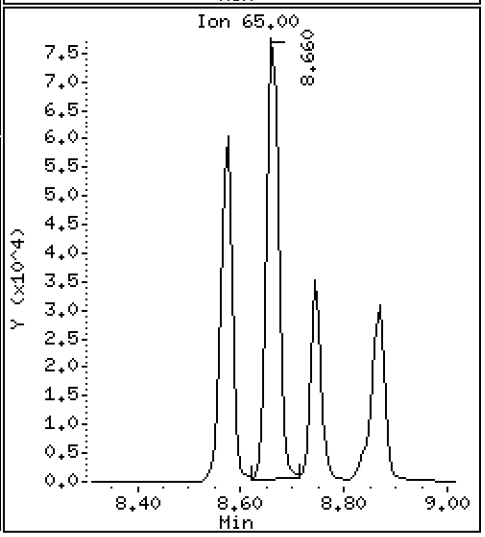


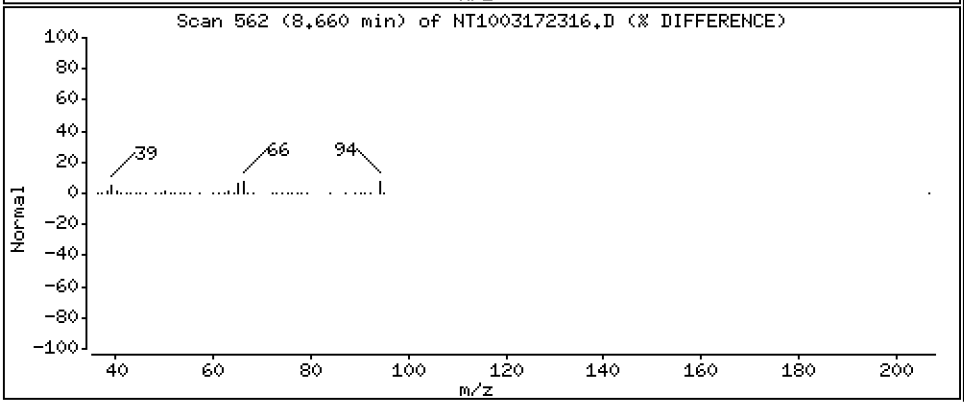












Date : 18-MAR-2023 03:57

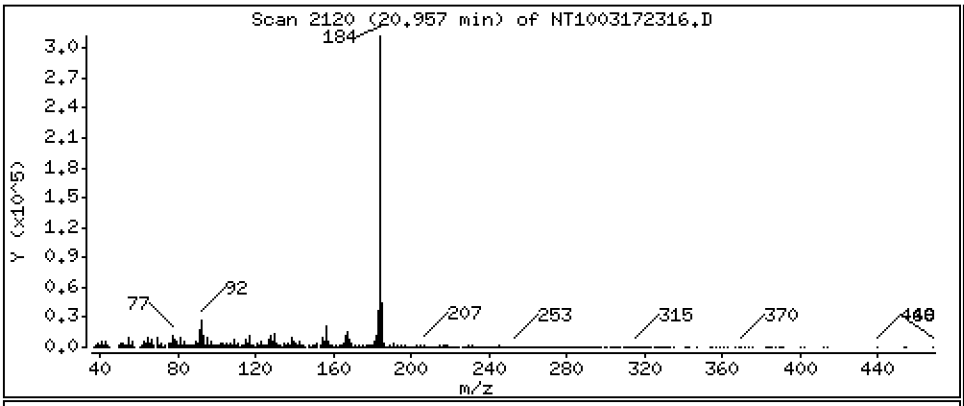
Client ID: Instrument: nt10.i

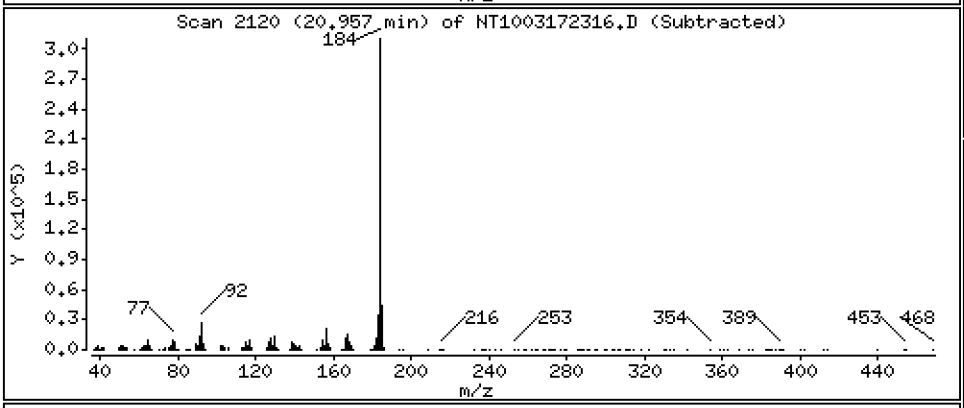
Sample Info: SLC0473-CCV1

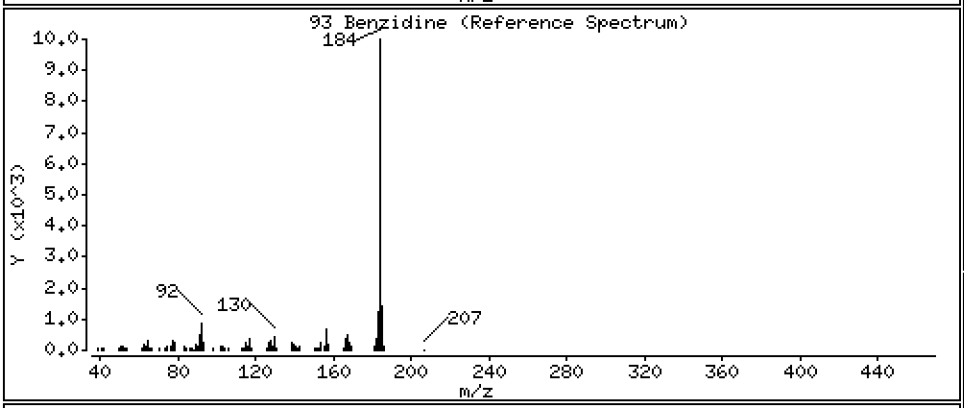
Operator: VTS

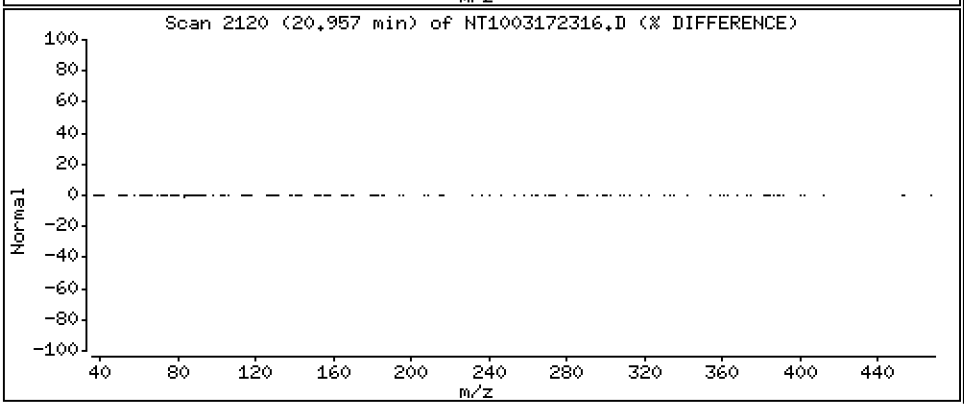
Column phase: ZB-5msi Column diameter: 0.25

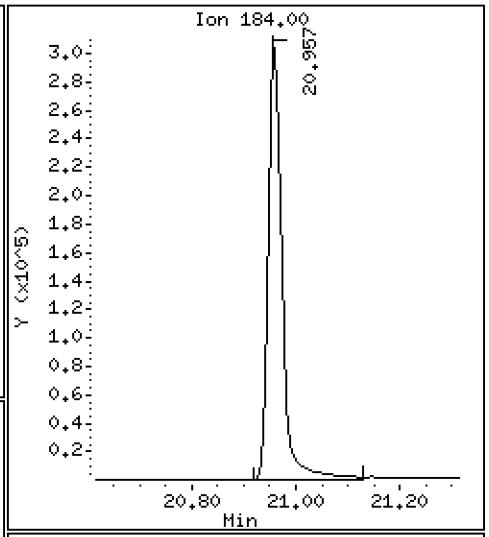
93 Benzidine Concentration: 7.251 ug/mL

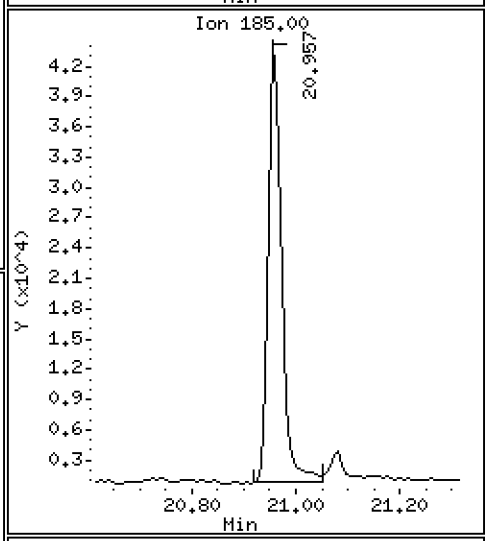


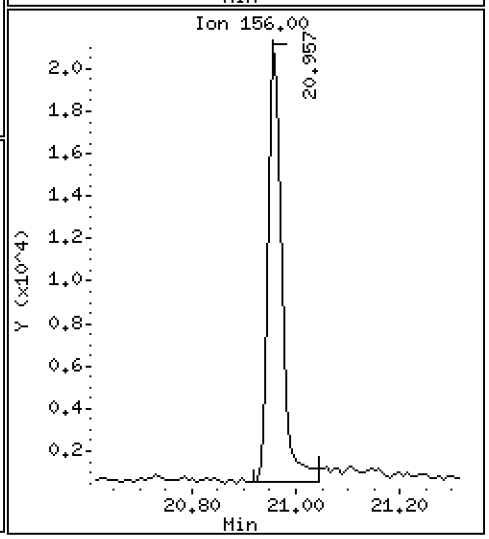












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

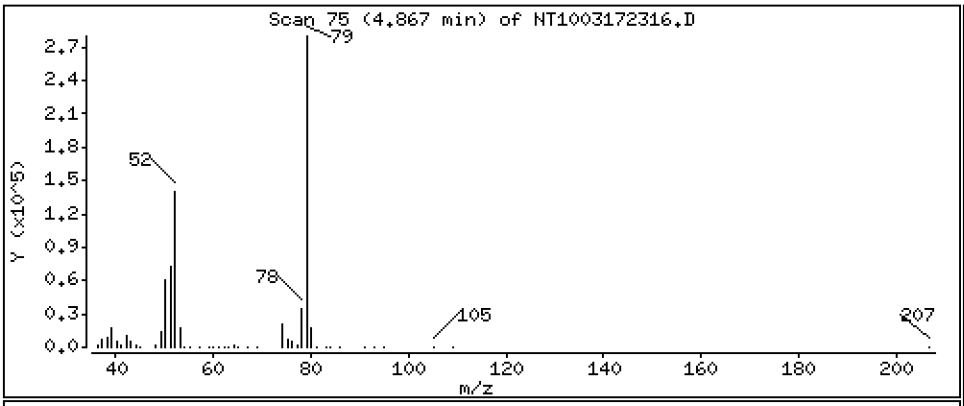
Operator: VTS

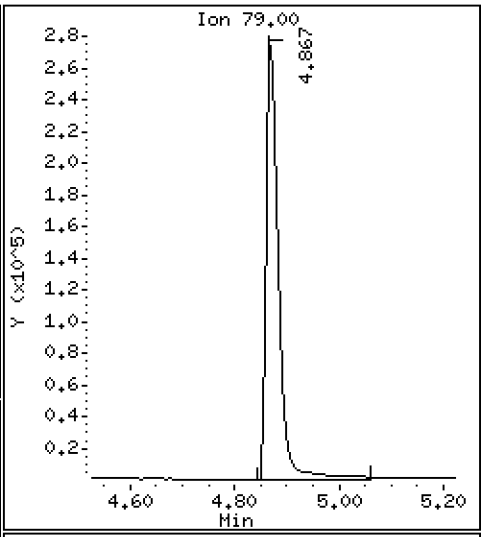
Column phase: ZB-5msi

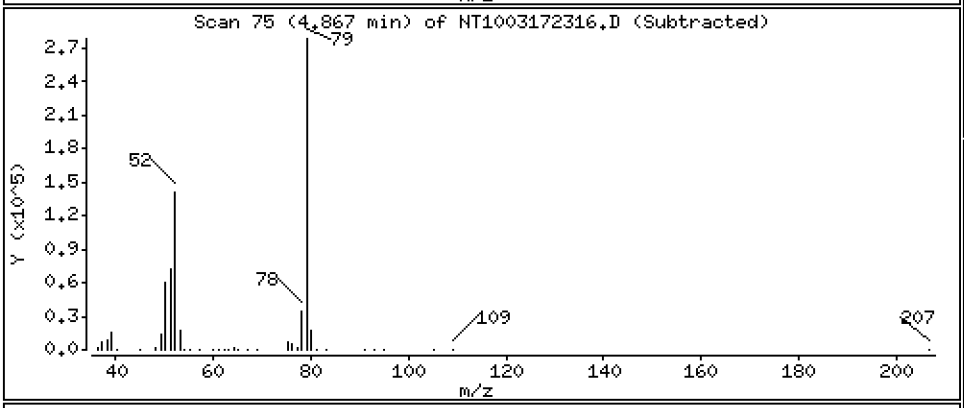
Column diameter: 0.25

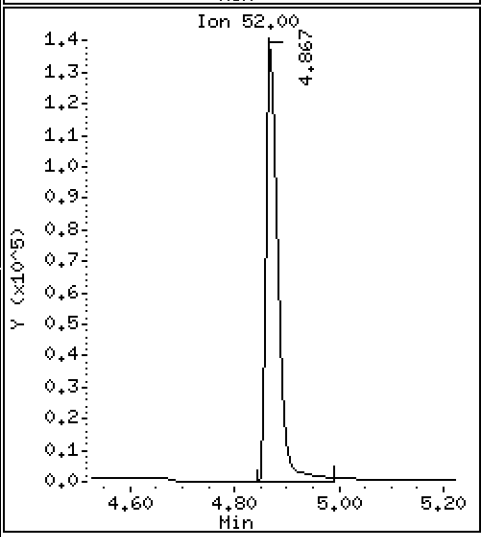
103 Pyridine

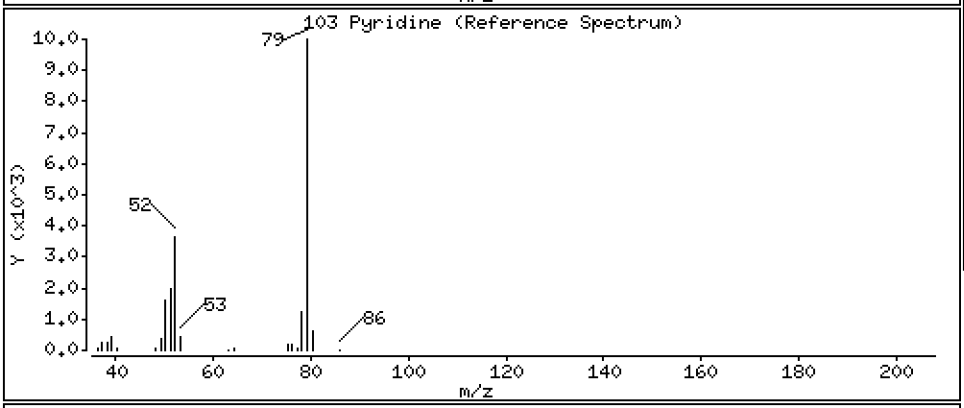
Concentration: 9.981 ug/mL

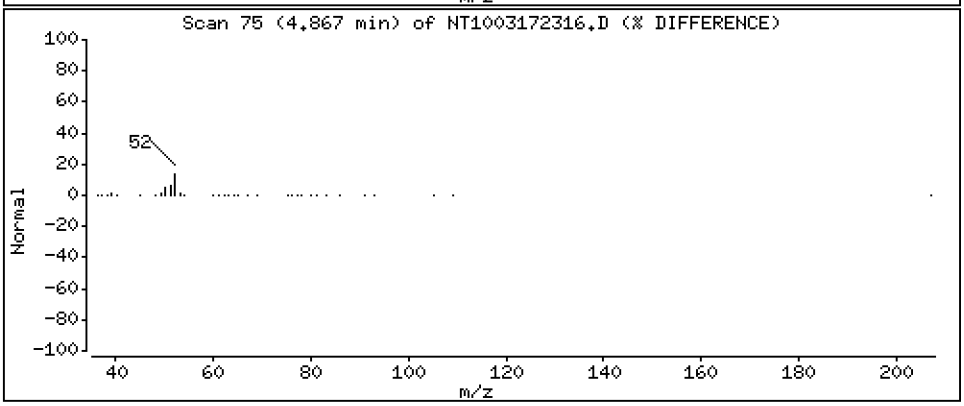












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

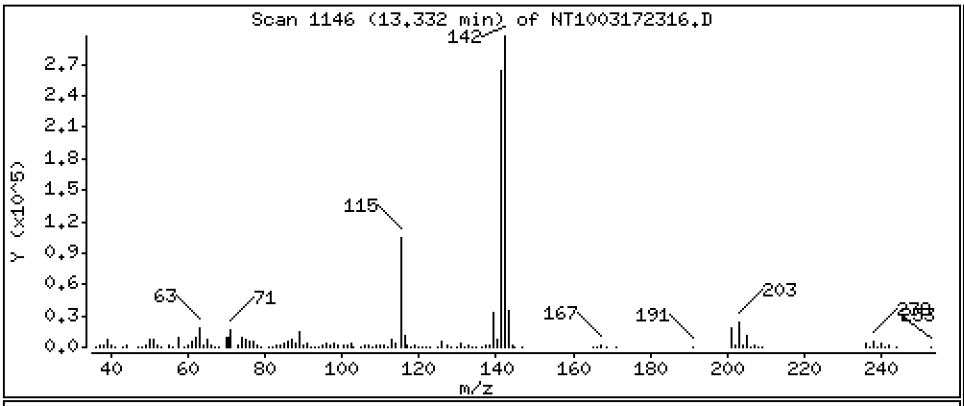
Operator: VTS

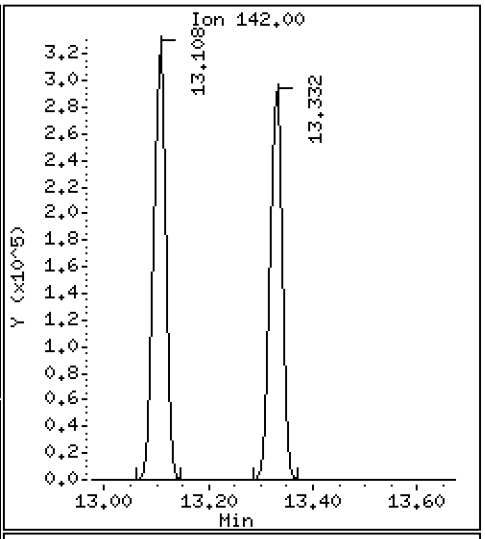
Column phase: ZB-5msi

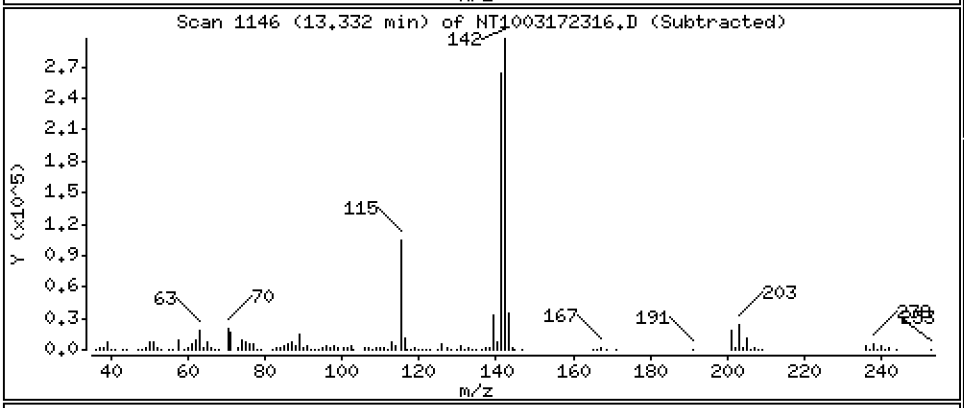
Column diameter: 0.25

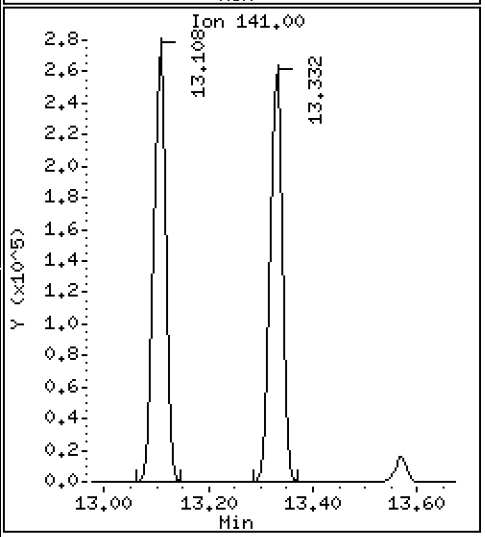
105 1-methylnaphthalene

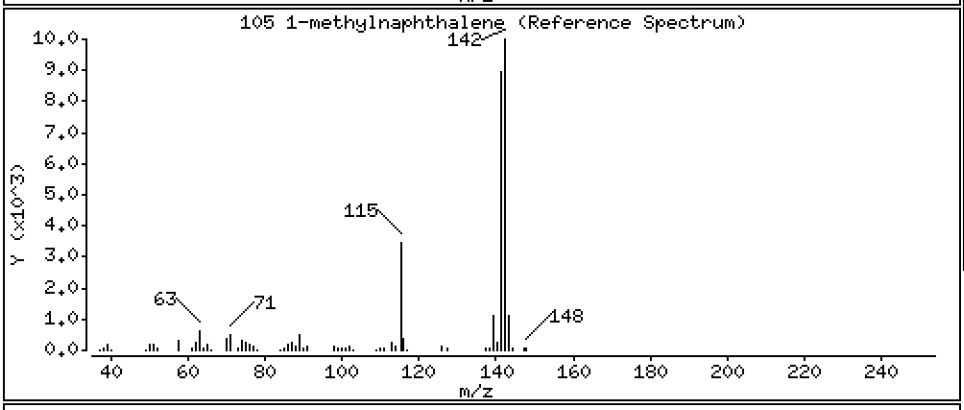
Concentration: 4.865 ug/mL

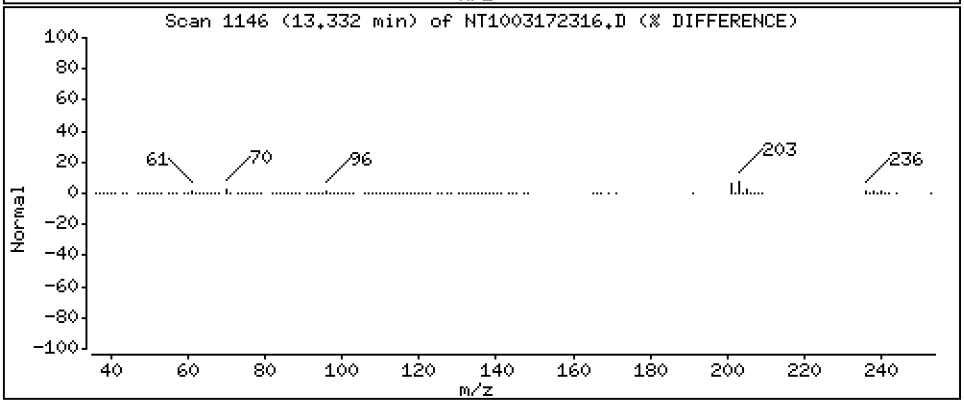












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

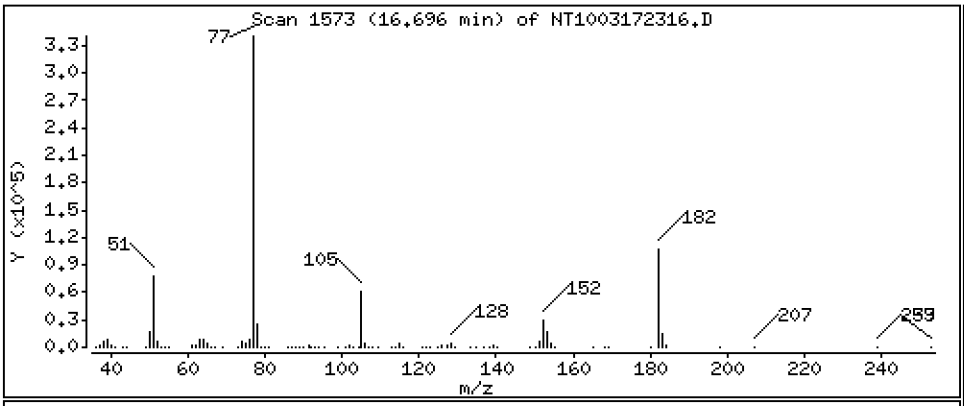
Operator: VTS

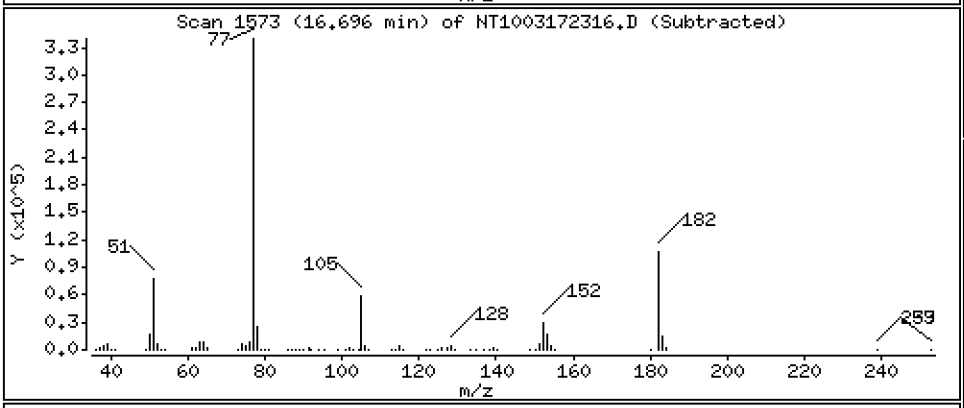
Column phase: ZB-5msi

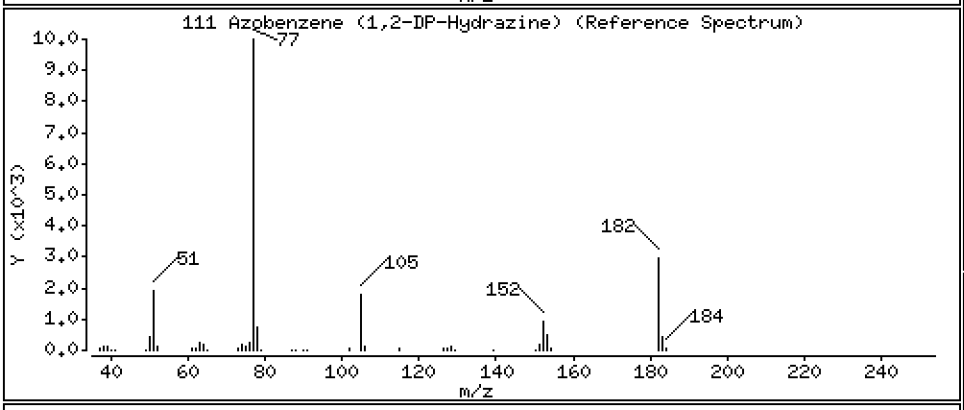
Column diameter: 0.25

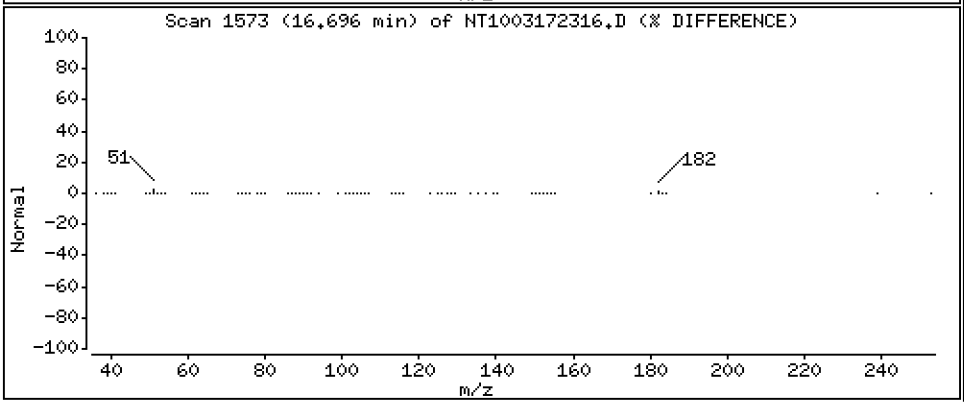
111 Azobenzene (1,2-DP-Hydrazine)

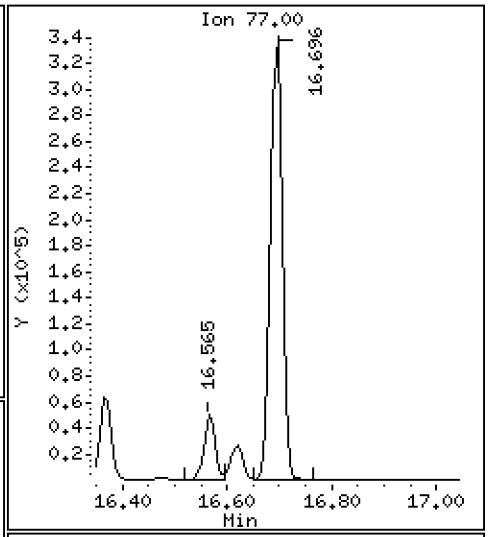
Concentration: 4.736 ug/mL

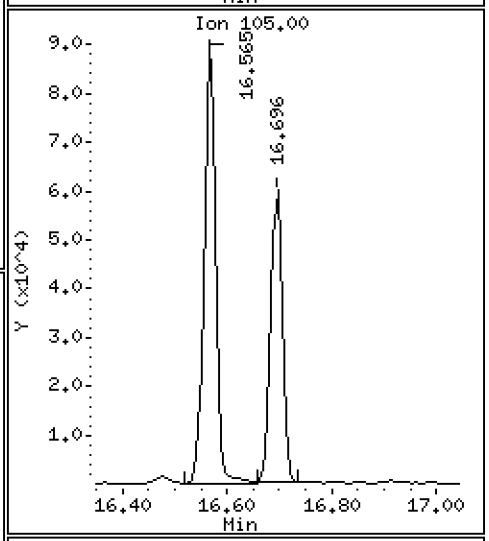


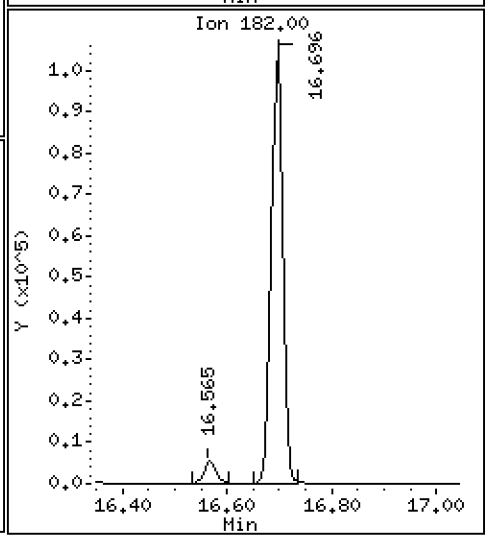












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Date : 18-MAR-2023 03:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-CCV1

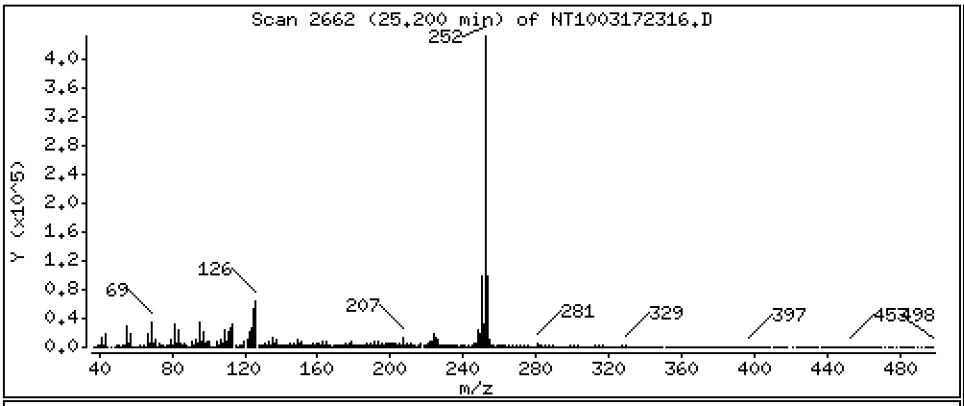
Operator: VTS

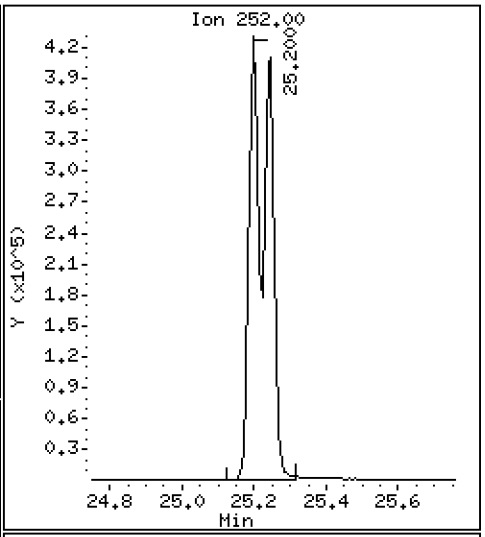
Column phase: ZB-5msi

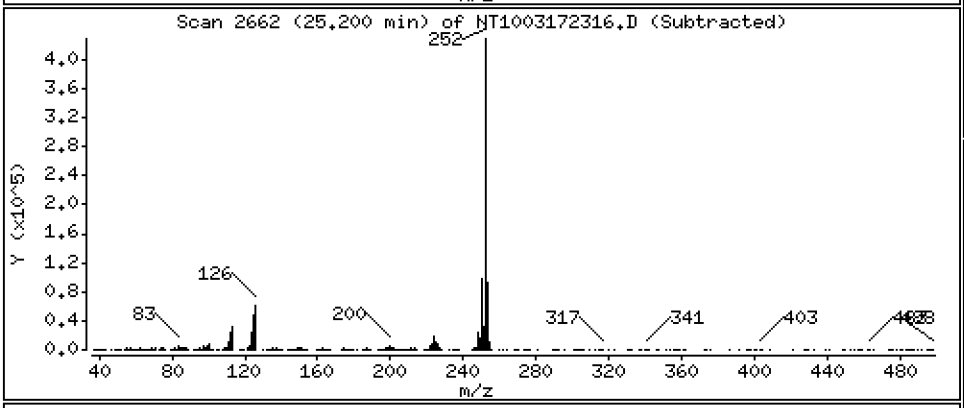
Column diameter: 0.25

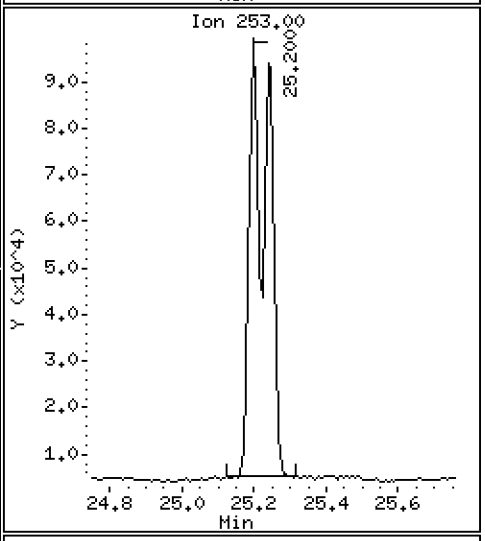
187 Total Benzofluoranthenes

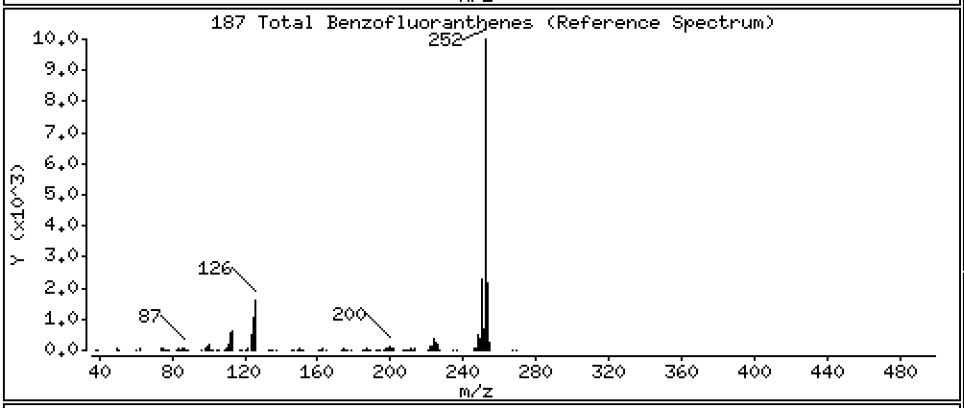
Concentration: 10.04 ug/mL

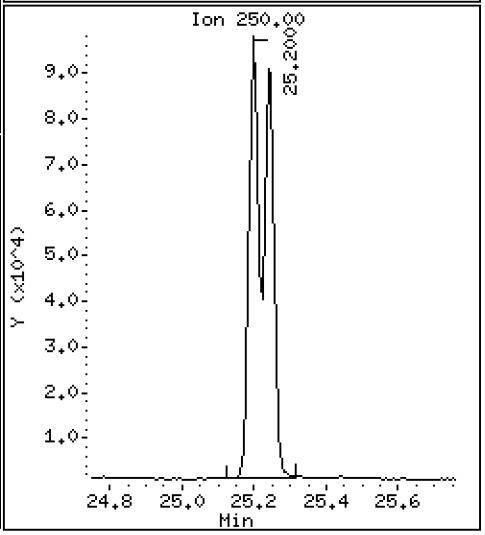


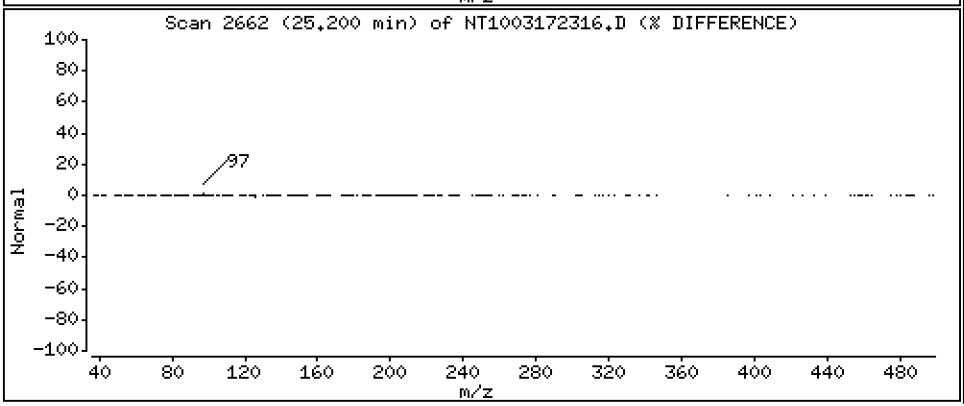












Date : 18-MAR-2023 03:57

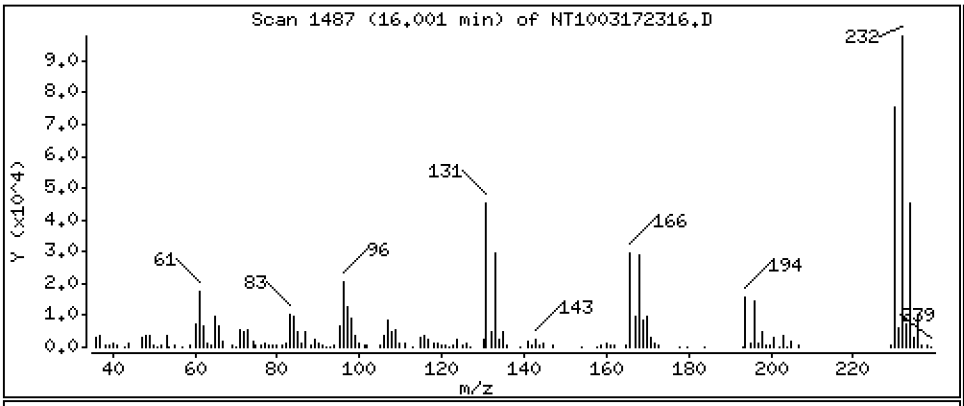
Client ID: Instrument: nt10.i

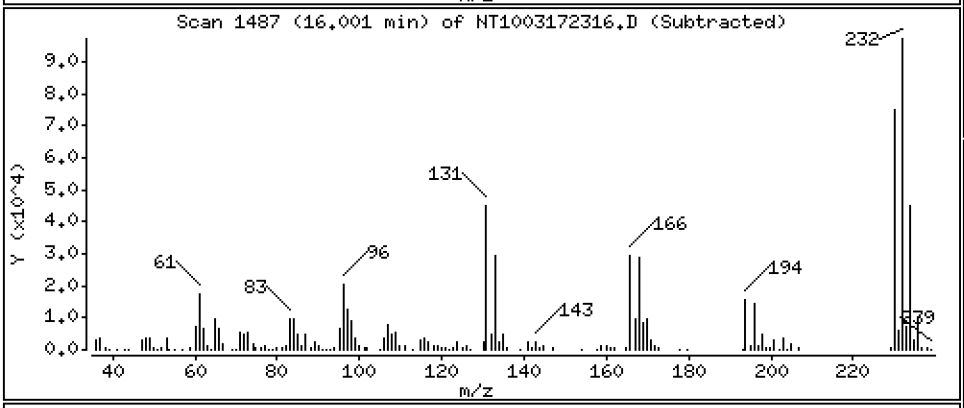
Sample Info: SLC0473-CCV1

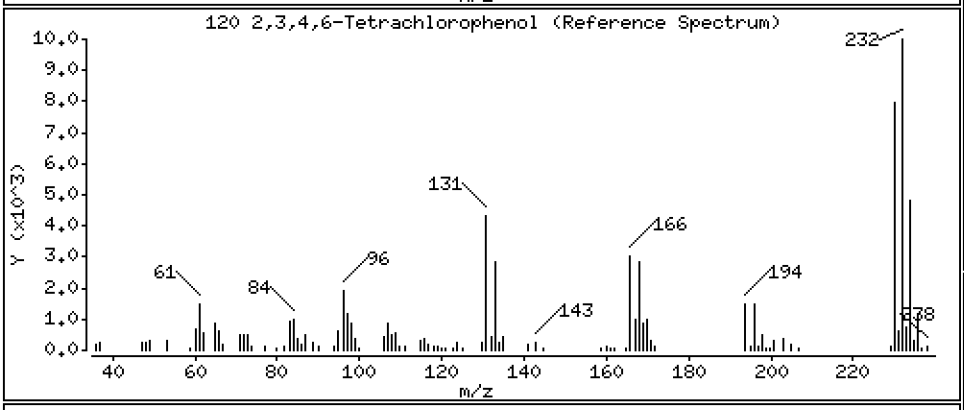
Operator: VTS

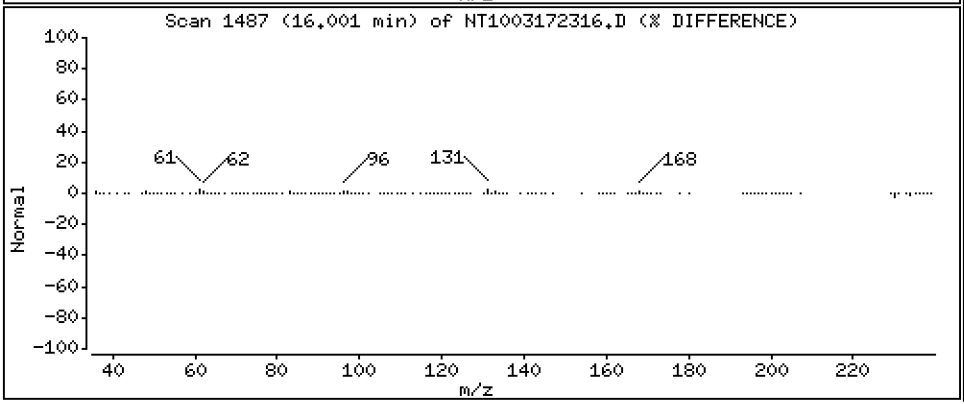
Column phase: ZB-5msi Column diameter: 0.25

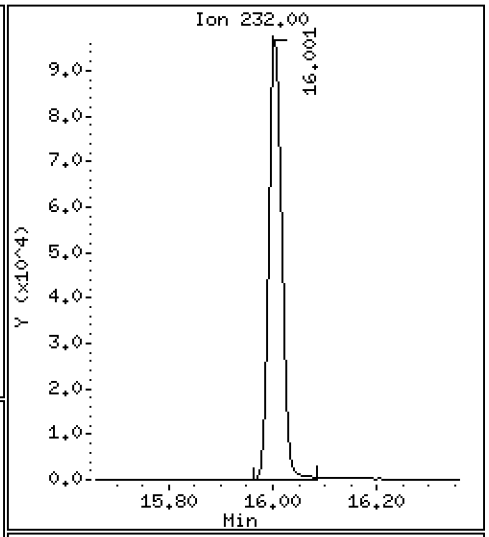
120 2,3,4,6-Tetrachlorophenol Concentration: 5.173 ug/mL

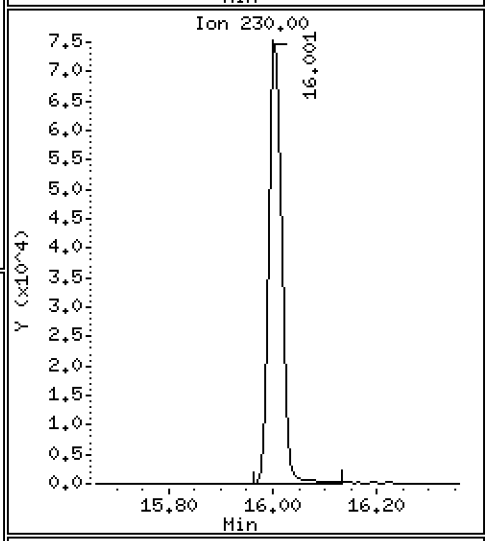


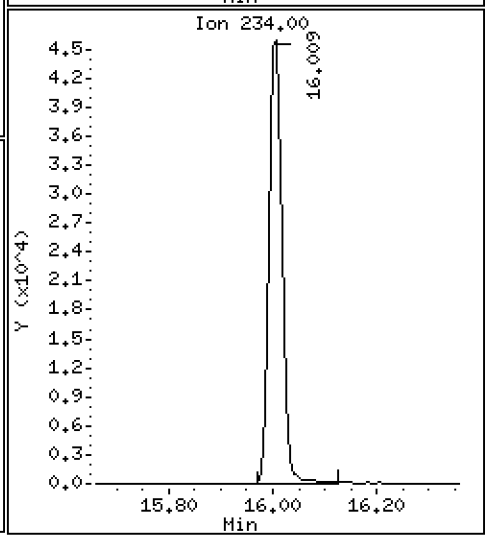












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230317.b\NT1003172316.D
Lab Smp Id: SLC0473-CCV1
Inj Date : 18-MAR-2023 03:57
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0473-CCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230317.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	6.983	6.975	(0.759)	346484	7.80416	7.804
$	2 Phenol-d5	99	8.551	8.543	(0.929)	451182	7.74658	7.747
	3 Phenol	94	8.574	8.566	(0.932)	317746	5.24998	5.250
$	5 2-Chlorophenol-d4	132	8.837	8.837	(0.960)	389206	7.82557	7.826
	4 Bis(2-Chloroethyl)ether	93	8.744	8.744	(0.950)	230206	5.12836	5.128
	6 2-Chlorophenol	128	8.868	8.867	(0.964)	261240	5.04329	5.043
	7 1,3-Dichlorobenzene	146	9.139	9.138	(0.993)	265072	4.84037	4.840
*	8 1,4-Dichlorobenzene-d4	152	9.201	9.200	(1.000)	146811	4.00000	
	9 1,4-Dichlorobenzene	146	9.232	9.231	(1.003)	257027	4.85855	4.859
$	10 1,2-Dichlorobenzene-d4	152	9.558	9.557	(1.039)	173511	4.85787	4.858
	12 1,2-Dichlorobenzene	146	9.589	9.588	(1.042)	253413	4.86741	4.867
	11 Benzyl alcohol	108	9.465	9.464	(1.029)	155949	5.48965	5.490
	14 2,2'-oxybis(1-Chloropropane)	121	9.767	9.759	(1.062)	75020	4.90663	4.907(M)
	13 2-Methylphenol	108	9.682	9.682	(1.052)	229368	5.19877	5.199
	17 Hexachloroethane	117	10.179	10.178	(1.106)	102236	4.71026	4.710
	16 N-Nitroso-di-n-propylamine	70	10.023	10.023	(1.089)	178259	5.11690	5.117
	15 4-Methylphenol	108	9.946	9.946	(1.081)	245611	5.28345	5.283
$	18 Nitrobenzene-d5	82	10.295	10.287	(0.882)	277540	5.07209	5.072
	19 Nitrobenzene	77	10.326	10.326	(0.884)	266928	4.97077	4.971
	20 Isophorone	82	10.768	10.768	(0.922)	401998	5.85184	5.852
	21 2-Nitrophenol	139	10.955	10.955	(0.938)	146506	5.57733	5.577
	22 2,4-Dimethylphenol	107	10.989	10.989	(0.941)	429818	8.71431	8.714
	23 Bis(2-Chloroethoxy)methane	93	11.193	11.192	(0.959)	231855	5.05270	5.053
	24 Benzoic acid	105	11.184	11.175	(0.958)	618947	21.4692	21.47
	25 2,4-Dichlorophenol	162	11.396	11.396	(0.976)	453082	11.4790	11.48
	26 1,2,4-Trichlorobenzene	180	11.591	11.583	(0.993)	223519	4.82428	4.824
*	27 Naphthalene-d8	136	11.676	11.676	(1.000)	542115	4.00000	
	28 Naphthalene	128	11.715	11.715	(1.003)	692273	4.82037	4.820
	29 4-Chloroaniline	127	11.846	11.838	(1.015)	571298	10.1969	10.20
	30 Hexachlorobutadiene	225	12.070	12.070	(1.034)	134644	4.95964	4.960
	31 4-Chloro-3-methylphenol	107	12.790	12.790	(1.095)	444779	10.4094	10.41
	32 2-Methylnaphthalene	142	13.107	13.099	(1.123)	508728	4.90858	4.909
	33 Hexachlorocyclopentadiene	237	13.572	13.571	(0.888)	195411	7.04714	7.047

		QUANT SIG					CONCENTRATIONS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	13.727	13.718	(0.898)	323461	10.9229	10.92
	35 2,4,5-Trichlorophenol	196	13.796	13.788	(0.903)	346832	10.5407	10.54
$	36 2-Fluorobiphenyl	172	13.881	13.881	(0.908)	562461	4.74571	4.746
	37 2-Chloronaphthalene	162	14.098	14.098	(0.923)	470878	4.90669	4.907
	38 2-Nitroaniline	65	14.353	14.353	(0.939)	271134	10.0580	10.06
	39 Dimethylphthalate	163	14.779	14.787	(0.967)	499264	5.12947	5.129
	40 Acenaphthylene	152	14.965	14.965	(0.979)	727493	4.86491	4.865
	41 2,6-Dinitrotoluene	165	14.926	14.926	(0.977)	233985	11.1283	11.13
*	42 Acenaphthene-d10	164	15.282	15.282	(1.000)	299616	4.00000	
	43 3-Nitroaniline	138	15.205	15.212	(0.995)	260324	10.9692	10.97
	44 Acenaphthene	153	15.344	15.344	(1.004)	459370	4.97248	4.972
	45 2,4-Dinitrophenol	184	15.421	15.421	(1.009)	259377	19.6404	19.64
	46 Dibenzofuran	168	15.669	15.676	(1.025)	647814	4.75523	4.755
	47 4-Nitrophenol	109	15.514	15.514	(1.015)	129361	8.71360	8.714
	48 2,4-Dinitrotoluene	165	15.730	15.730	(1.029)	319869	10.2258	10.23
	50 Diethylphthalate	149	16.233	16.240	(1.062)	488199	5.11213	5.112
	49 Fluorene	166	16.380	16.387	(1.072)	533161	4.97455	4.975
	51 4-Chlorophenyl-phenylether	204	16.372	16.372	(1.071)	255016	5.00362	5.004
	52 4-Nitroaniline	138	16.472	16.480	(1.078)	248994	11.6422	11.64
	53 4,6-Dinitro-2-methylphenol	198	16.565	16.572	(0.905)	341173	19.9236	19.92
	54 N-Nitrosodiphenylamine	169	16.619	16.626	(0.908)	344539	4.64721	4.647
$	55 2,4,6-Tribromophenol	330	16.912	16.919	(1.107)	91756	6.56524	6.565
	56 4-Bromophenyl-phenylether	248	17.367	17.374	(0.948)	151153	4.87347	4.873
	57 Hexachlorobenzene	284	17.691	17.691	(0.966)	148285	4.56010	4.560
	58 Pentachlorophenol	266	18.040	18.047	(0.985)	169446	8.66358	8.664
*	59 Phenanthrene-d10	188	18.311	18.310	(1.000)	554531	4.00000	
	60 Phenanthrene	178	18.357	18.357	(1.003)	709640	4.69312	4.693
	61 Anthracene	178	18.450	18.457	(1.008)	738158	5.08905	5.089
	62 Carbazole	167	18.775	18.782	(1.025)	654475	5.03533	5.035
	63 Di-n-butylphthalate	149	19.564	19.572	(1.068)	912971	5.25337	5.253
	64 Fluoranthene	202	20.725	20.732	(0.888)	825284	4.54914	4.549
	65 Pyrene	202	21.150	21.158	(0.907)	851753	4.57686	4.577
$	66 Terphenyl-d14	244	21.429	21.436	(0.919)	637814	4.56373	4.564
	67 Butylbenzylphthalate	149	22.350	22.358	(0.958)	359098	5.31340	5.313
	68 Benzo(a)anthracene	228	23.303	23.310	(0.999)	808436	5.07299	5.073
*	69 Chrysene-d12	240	23.326	23.341	(1.000)	451487	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.256	23.264	(0.997)	819520	16.0547	16.05
	71 Chrysene	228	23.372	23.380	(1.002)	772973	4.96473	4.965
	72 bis(2-Ethylhexyl)phthalate	149	23.365	23.380	(0.960)	522220	4.70387	4.704
*	134 Di-n-octylphthalate-d4	153	24.348	24.363	(1.000)	756806	4.00000	
	73 Di-n-octylphthalate	149	24.363	24.378	(1.001)	926216	4.67666	4.677
	74 Benzo(b)fluoranthene	252	25.199	25.207	(0.970)	846211	5.18243	5.182
	75 Benzo(k)fluoranthene	252	25.246	25.253	(0.972)	811683	4.89549	4.895(H)
	76 Benzo(a)pyrene	252	25.865	25.873	(0.996)	756282	5.18052	5.181
*	77 Perylene-d12	264	25.981	25.997	(1.000)	503730	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.703	28.711	(1.105)	892193	4.80374	4.804
	79 Dibenzo(a,h)anthracene	278	28.711	28.726	(1.105)	755428	4.89914	4.899
	80 Benzo(g,h,i)perylene	276	29.503	29.519	(1.136)	736560	4.58251	4.583
	90 N-Nitrosodimethylamine	74	4.843	4.850	(0.526)	290838	10.2680	10.27
	91 Aniline	93	8.659	8.659	(0.941)	625375	10.0842	10.08
	93 Benzidine	184	20.957	20.964	(0.898)	540350	7.25121	7.251
	103 Pyridine	79	4.866	4.873	(0.529)	434184	9.98108	9.981
	105 1-methylnaphthalene	142	13.332	13.324	(1.142)	461970	4.86506	4.865
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.696	16.696	(1.093)	505224	4.73600	4.736

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.199	25.253	(0.970)	1583417	10.0435	10.04
120 2,3,4,6-Tetrachlorophenol	232	16.001	16.008	(1.047)	161346	5.17337	5.173

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172316.D
Lab Smp Id: SLC0473-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230317.b\ABN.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:02
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	132765	66383	265530	146811	10.58
27 Naphthalene-d8	497947	248974	995894	542115	8.87
42 Acenaphthene-d10	271928	135964	543856	299616	10.18
59 Phenanthrene-d10	497390	248695	994780	554531	11.49
69 Chrysene-d12	391403	195702	782806	451487	15.35
134 Di-n-octylphthala	674651	337326	1349302	756806	12.18
77 Perylene-d12	408663	204332	817326	503730	23.26

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.20	8.70	9.70	9.20	0.00
27 Naphthalene-d8	11.68	11.18	12.18	11.68	0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	0.00
59 Phenanthrene-d10	18.31	17.81	18.81	18.31	0.00
69 Chrysene-d12	23.34	22.84	23.84	23.33	-0.06
134 Di-n-octylphthala	24.36	23.86	24.86	24.35	-0.06
77 Perylene-d12	26.00	25.50	26.50	25.98	-0.06

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

REVIEW SUMMARY FOR FILE - NT1003172316.D

Lab ID: SLC0473-CCV1
nt10.i, 20230317.b\ABN.m,   18-MAR-2023 03:57

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

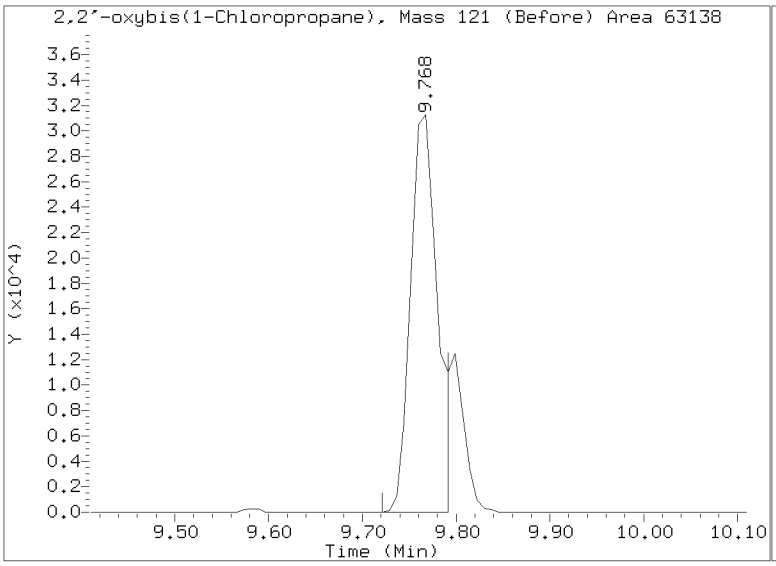
RRT check based on Ccal File: NT1003172302.D

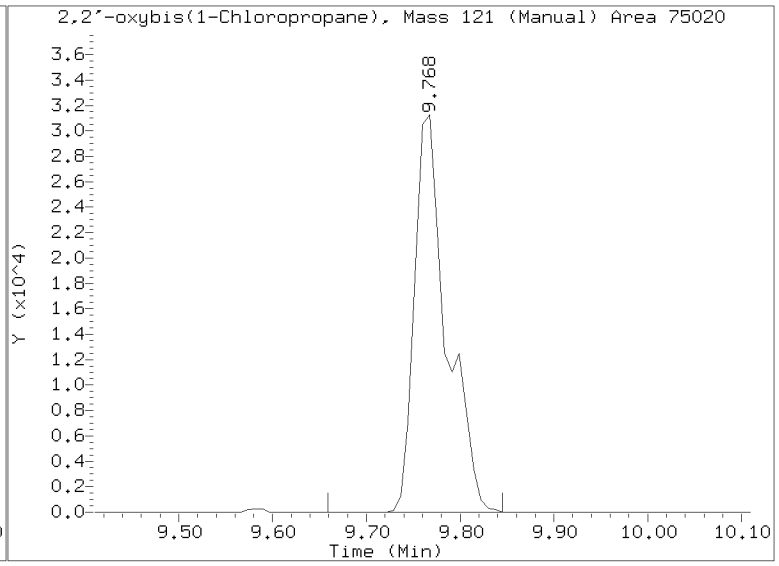
On Column LOD for nt10.i, 20230317.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230317.b/NT1003172316.D
Injection Date: 18-MAR-2023 03:57
Lab ID:SLC0473-CCV1 Client ID:
Report Date: 03/30/2023 07:23





Analytical Resources, LLC
Analytical Chemists and Consultants

LOW-CONCENTRATION CONTINUING CALIBRATION CHECK

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00046
Lab File ID:	NT1003172304.D	Calibration Date:	03/15/2023
Sequence:	SLC0473	Injection Date:	03/17/23
Lab Sample ID:	SLC0473-LCV1	Injection Time:	20:19
Sequence Name:	ABN 0.2		

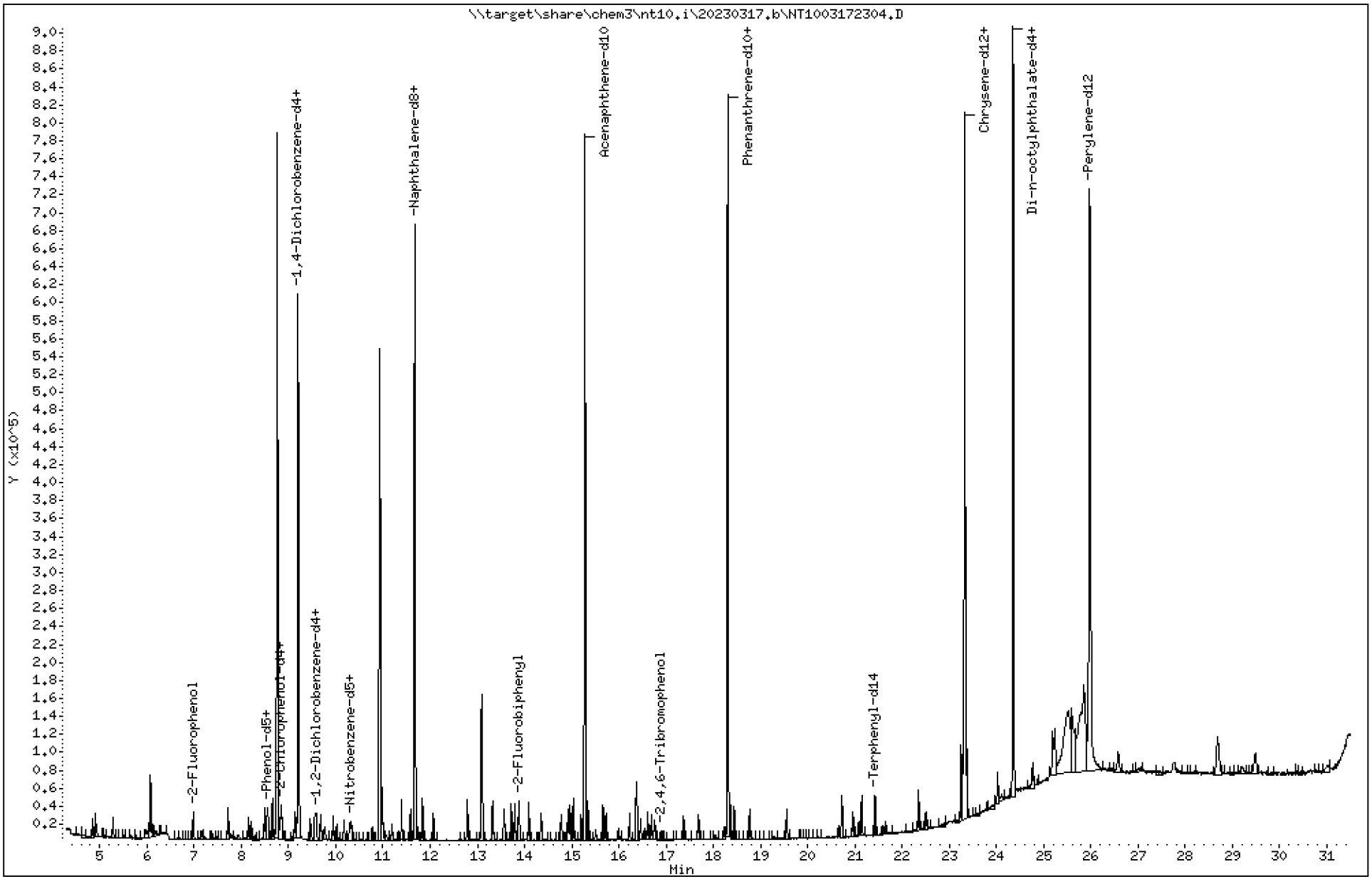
		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	0.20000	0.2	1.6490140	1.7914240		8.6	+/-50
4-Methylphenol	A	0.20000	0.2	1.2665770	1.1817900		-6.7	+/-50
Naphthalene	A	0.20000	0.2	1.0596590	1.1511540		8.6	+/-50
2-Methylnaphthalene	A	0.20000	0.2	0.7647129	0.7844607		2.6	+/-50
Acenaphthylene	A	0.20000	0.2	1.9964080	2.0452440		2.4	+/-50
Dimethylphthalate	A	0.20000	0.2	1.2994310	1.3108730		0.9	+/-50
Acenaphthene	A	0.20000	0.2	1.2333460	1.2896380		4.6	+/-50
Dibenzofuran	A	0.20000	0.2	1.8187540	1.9026030		4.6	+/-50
Fluorene	A	0.20000	0.2	1.4308680	1.5557800		8.7	+/-50
Phenanthrene	A	0.20000	0.2	1.0907130	1.0880250		-0.2	+/-50
Anthracene	A	0.20000	0.2	1.0462760	0.9980925		-4.6	+/-50
Fluoranthene	A	0.20000	0.2	1.6072690	1.5150870		-5.7	+/-50
Pyrene	A	0.20000	0.2	1.6487720	1.5268310		-7.4	+/-50
Butylbenzylphthalate	A	0.20000	0.2	0.5292894	0.4828878		-16.6	+/-50
Benzo(a)anthracene	A	0.20000	0.2	1.4118770	1.4883650		5.4	+/-50
Chrysene	A	0.20000	0.2	1.3793780	1.4505180		5.2	+/-50
bis(2-Ethylhexyl)phthalate	A	0.20000	0.1	0.5248968	0.3705021		-36.7	+/-50
Benzofluoranthenes, Total	A	0.40000	0.4	1.2519020	1.2654540		1.1	+/-50
Benzo(a)pyrene	A	0.20000	0.2	1.1592370	1.2206810		5.3	+/-50
Indeno(1,2,3-cd)pyrene	A	0.20000	0.2	1.4748270	1.3277940		-10.0	+/-50
Dibenzo(a,h)anthracene	A	0.20000	0.2	1.2244340	1.1508830		-6.0	+/-50
Benzo(g,h,i)perylene	A	0.20000	0.2	1.2763410	1.2115340		-5.1	+/-50
2-Fluorophenol	A	0.30000	0.308	1.2096460	1.2419840		2.7	+/-50
Phenol-d5	A	0.30000	0.292	1.5868760	1.5468890		-2.5	+/-50
2-Chlorophenol-d4	A	0.30000	0.294	1.3550800	1.3290870		-1.9	+/-50
1,2-Dichlorobenzene-d4	A	0.20000	0.214	0.9731556	1.0396030		6.8	+/-50
Nitrobenzene-d5	A	0.20000	0.200	0.4037447	0.4045537		0.2	+/-50
2-Fluorobiphenyl	A	0.20000	0.202	1.5822890	1.5946880		0.8	+/-50
2,4,6-Tribromophenol	A	0.30000	0.158	0.1585901	0.0990990		-47.4	+/-50
p-Terphenyl-d14	A	0.20000	0.193	1.2381950	1.1978050		-3.3	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D
Date : 17-MAR-2023 20:19
Client ID:
Sample Info: SLC0473-LCV1

Instrument: nt10.i
Operator: VTS
Column diameter: 0.25

Column phase: ZB-5msi



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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

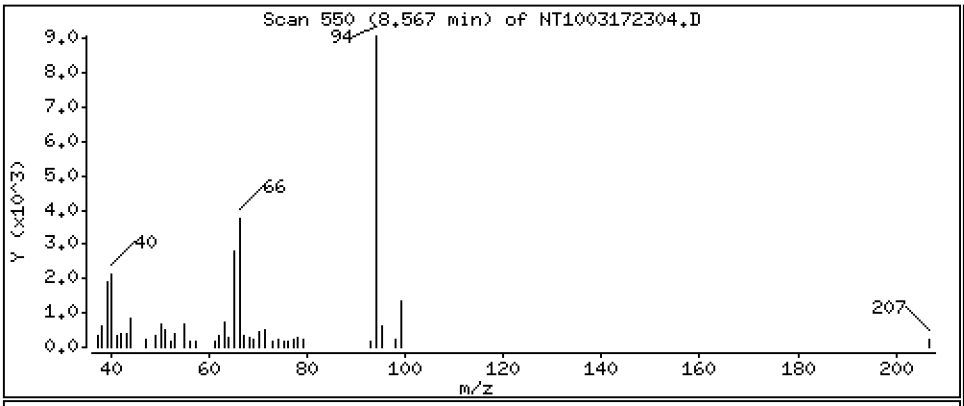
Operator: VTS

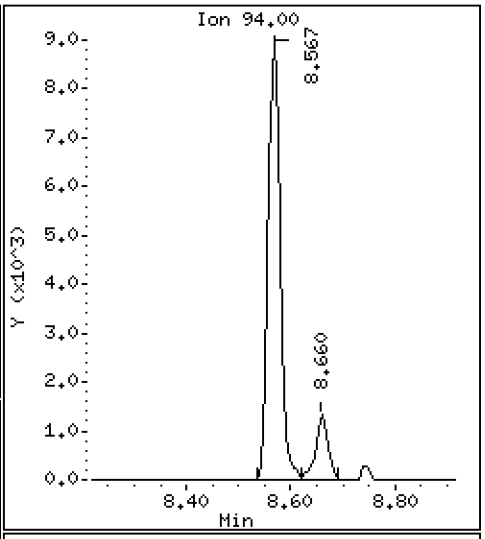
Column phase: ZB-5msi

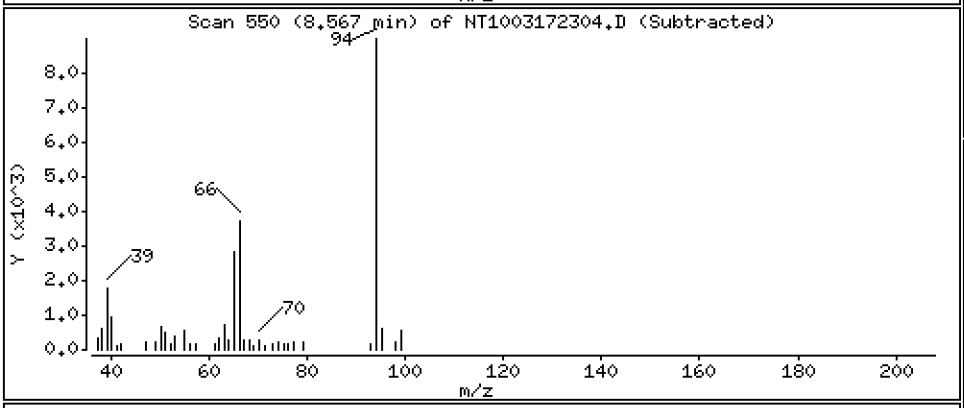
Column diameter: 0.25

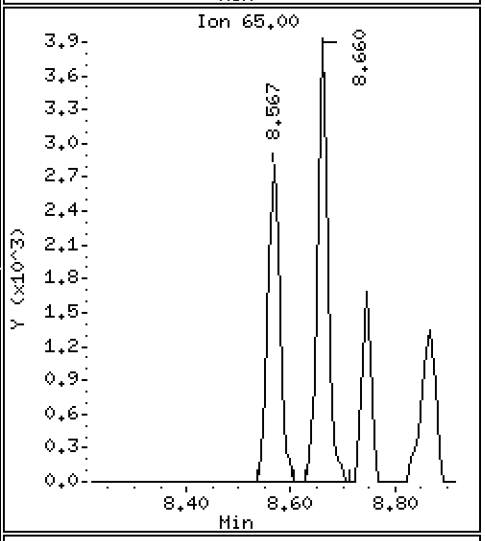
3 Phenol

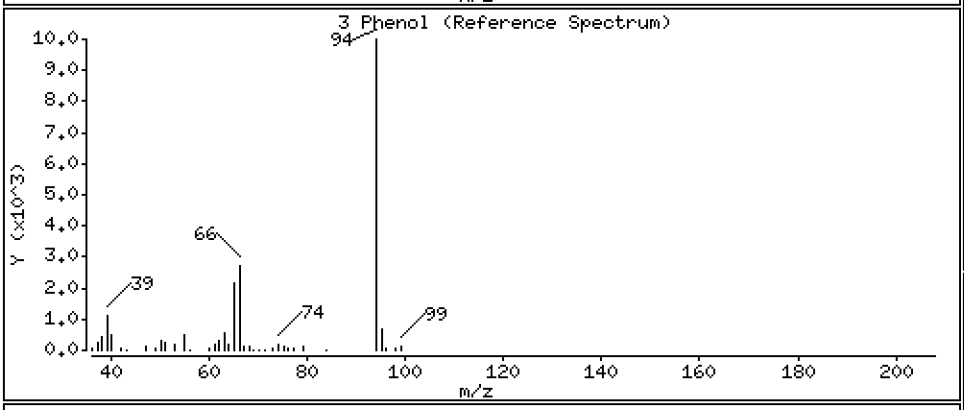
Concentration: 0.2173 ug/mL

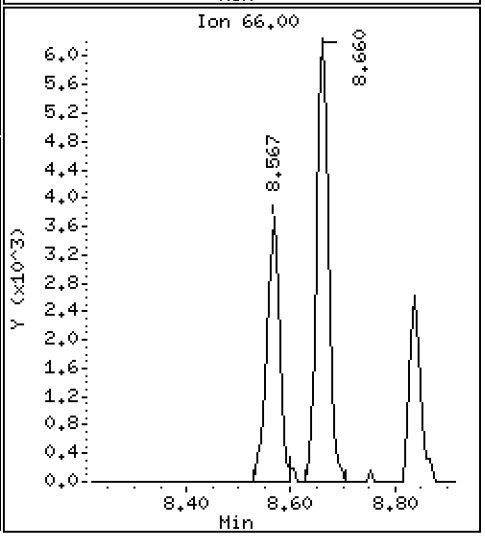


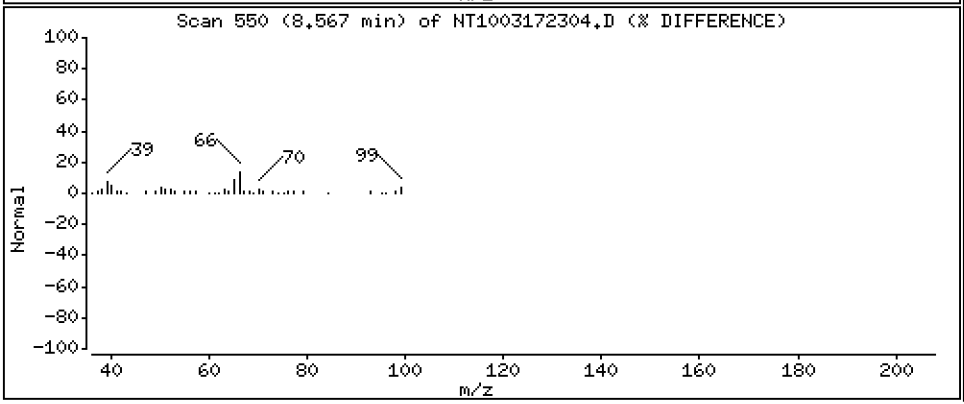












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

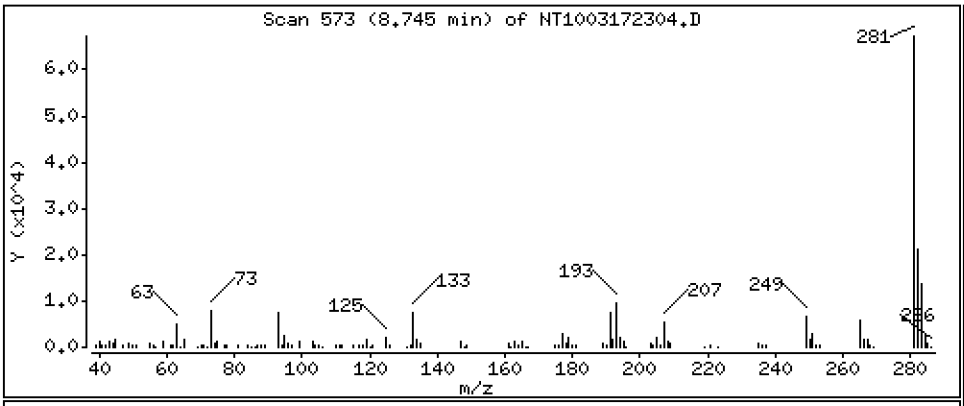
Operator: VTS

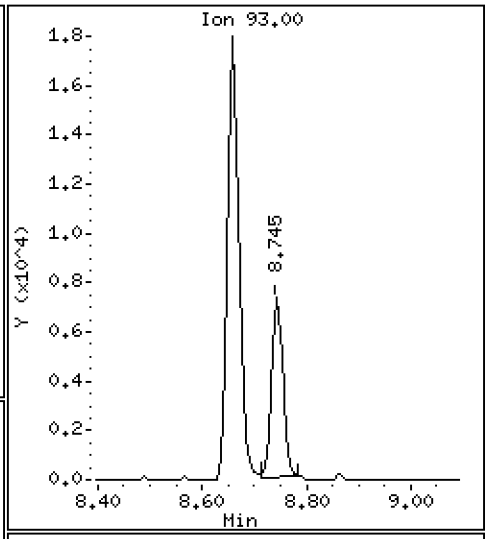
Column phase: ZB-5msi

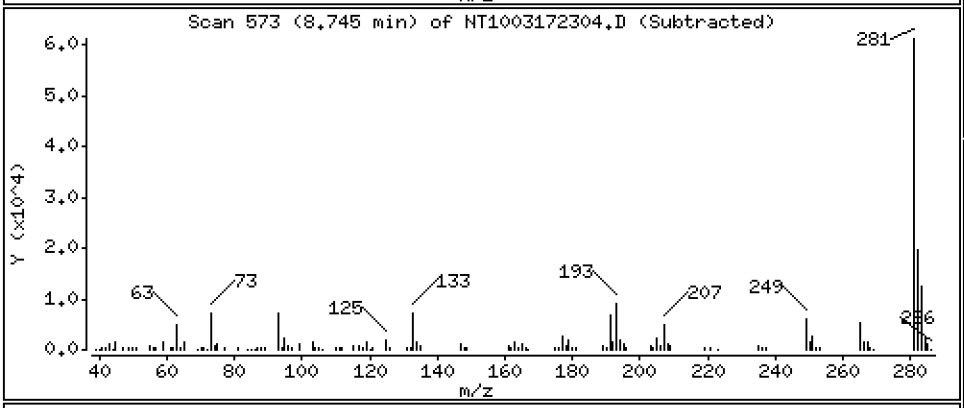
Column diameter: 0.25

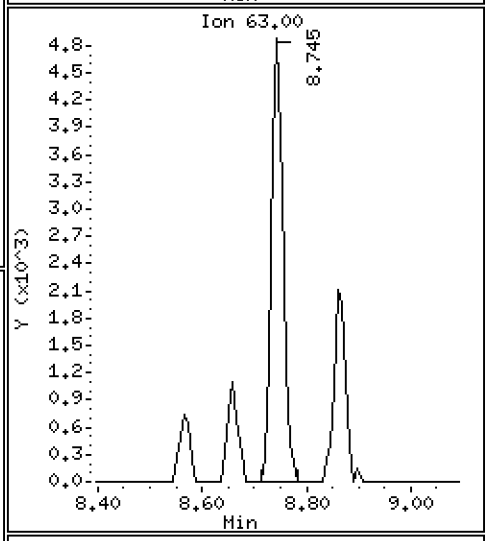
4 Bis(2-Chloroethyl)ether

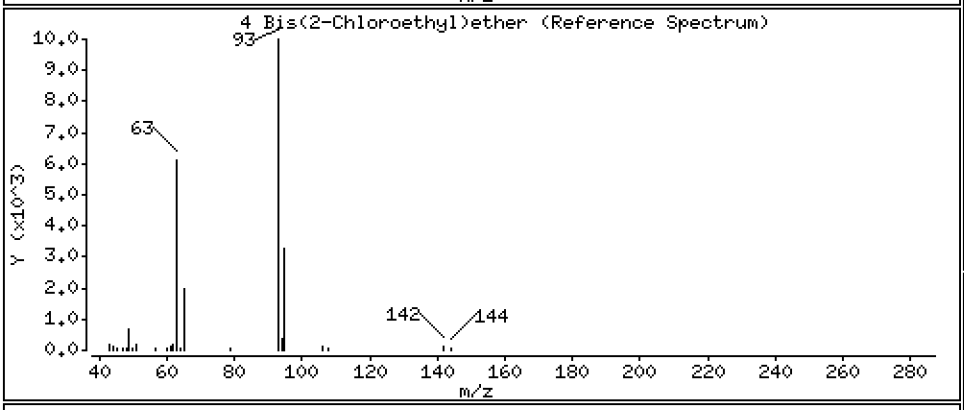
Concentration: 0.2176 ug/mL

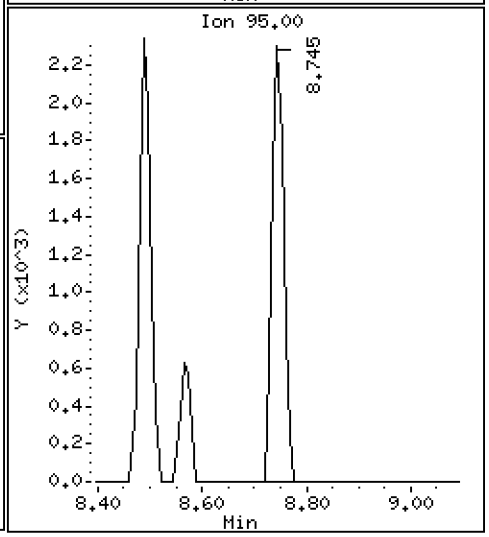


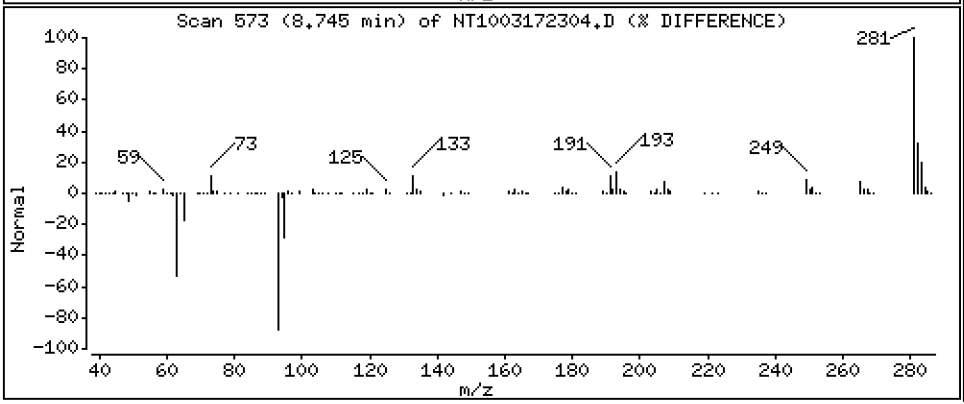












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

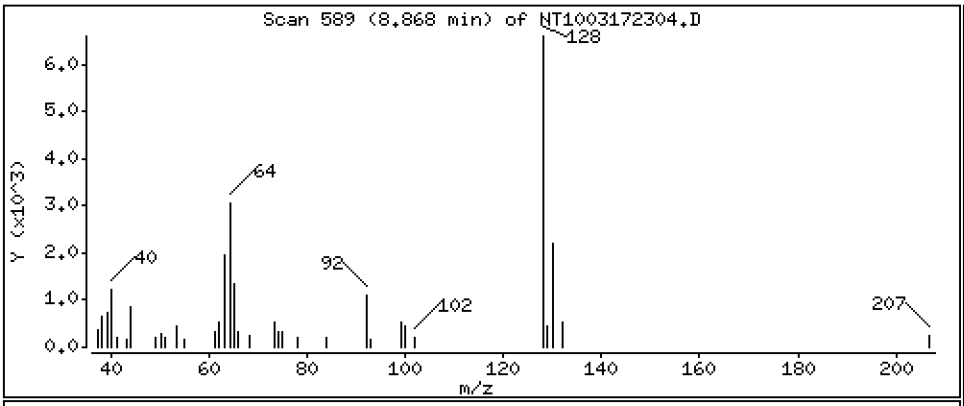
Operator: VTS

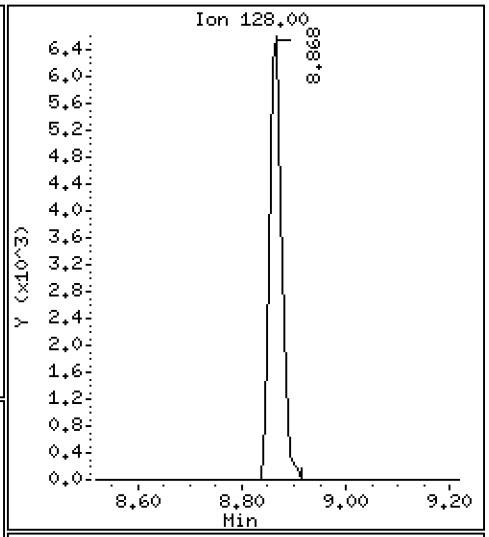
Column phase: ZB-5msi

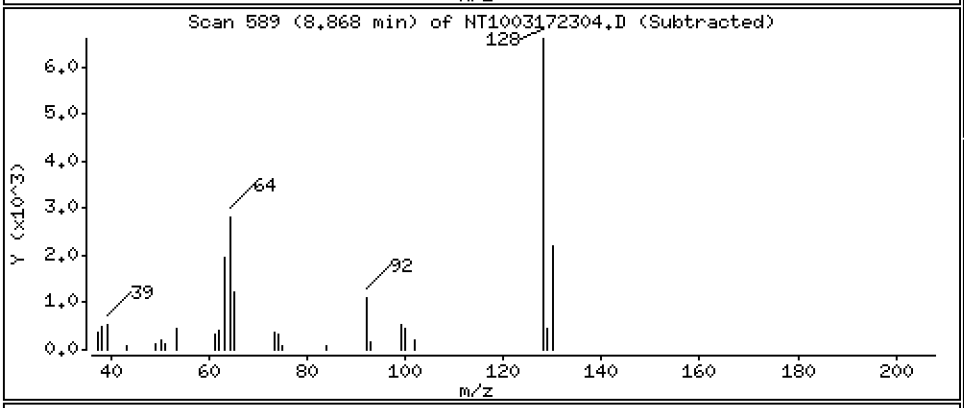
Column diameter: 0.25

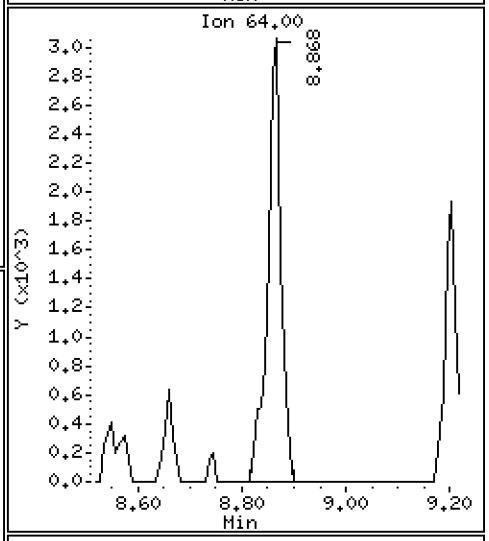
6 2-Chlorophenol

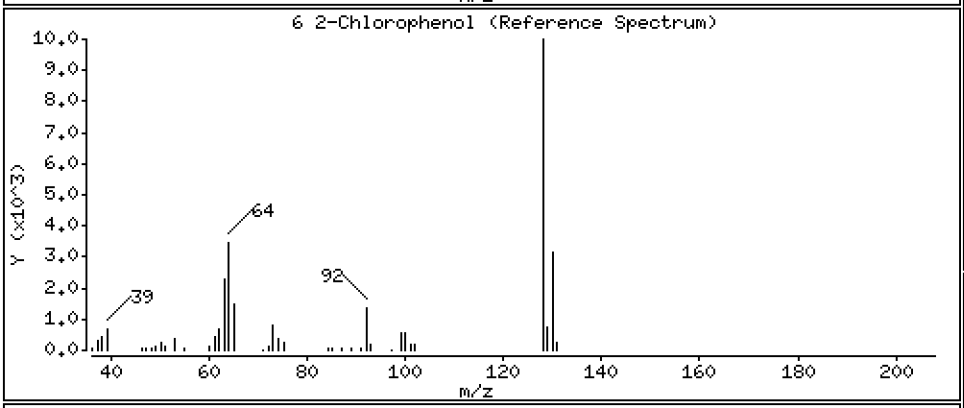
Concentration: 0.1995 ug/mL

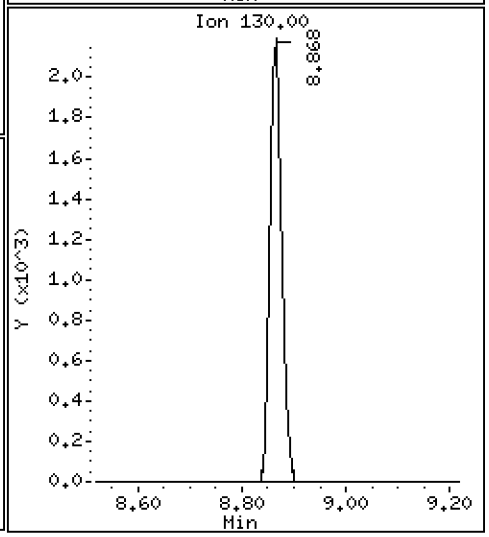


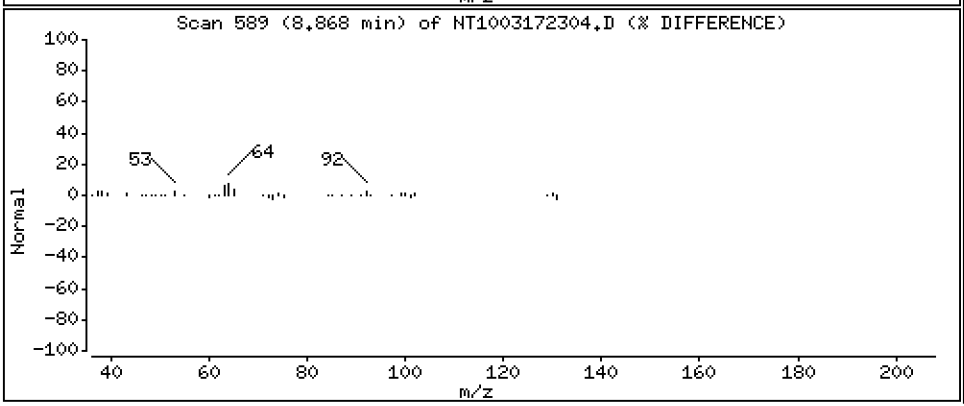












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

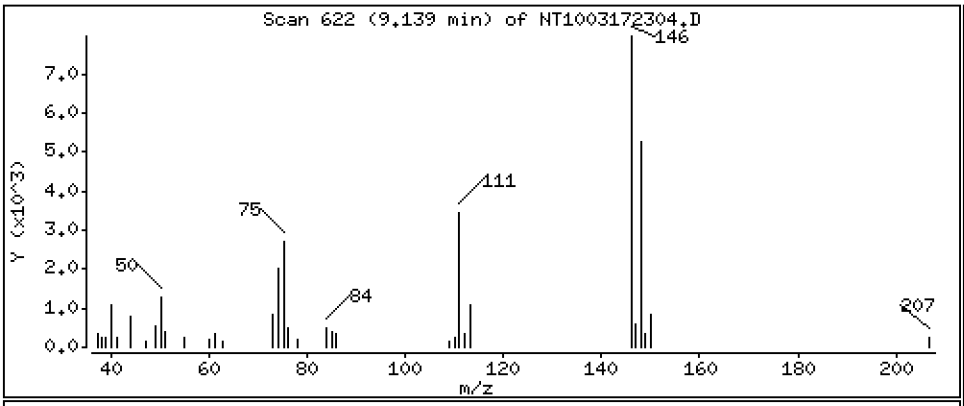
Operator: VTS

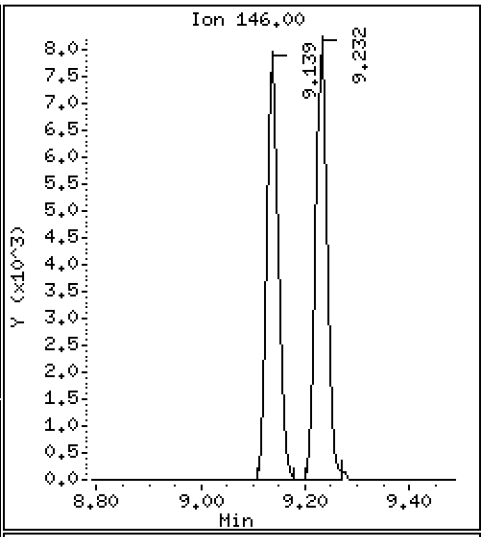
Column phase: ZB-5msi

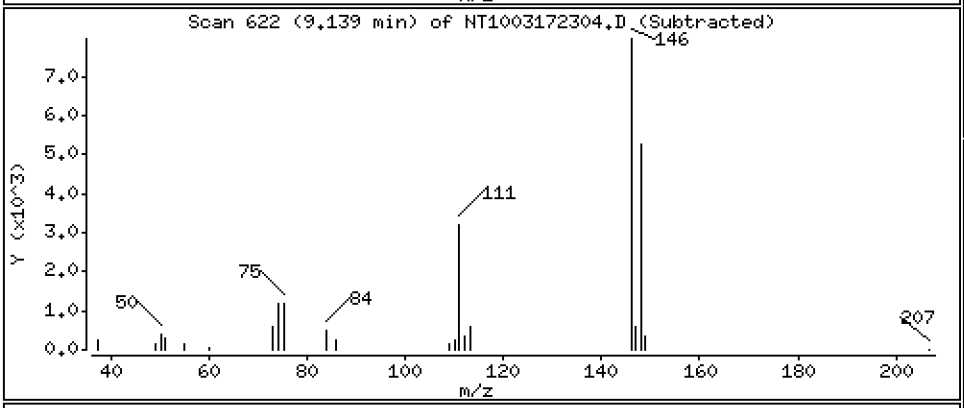
Column diameter: 0.25

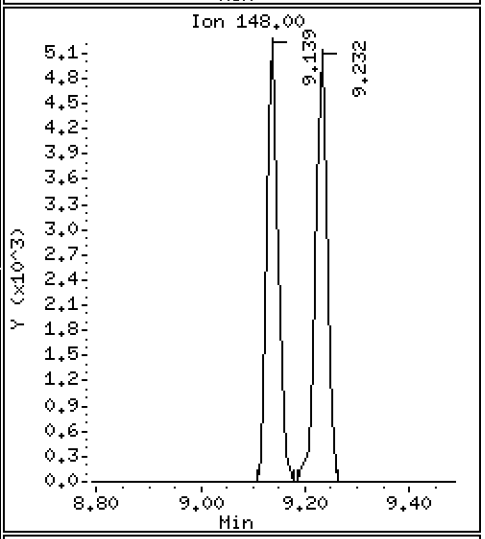
7 1,3-Dichlorobenzene

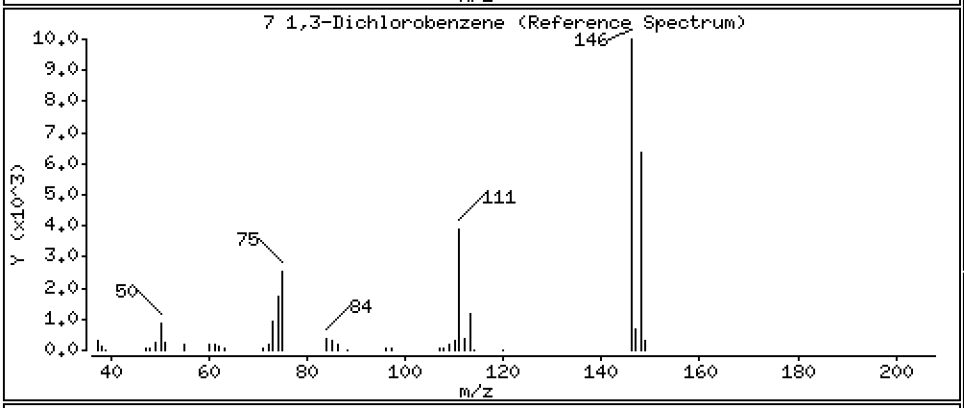
Concentration: 0.2124 ug/mL

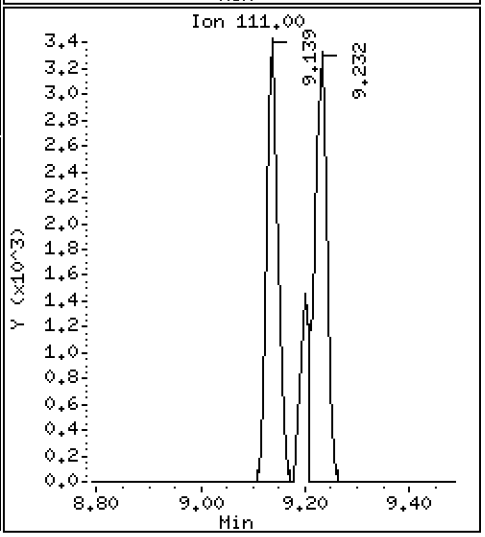


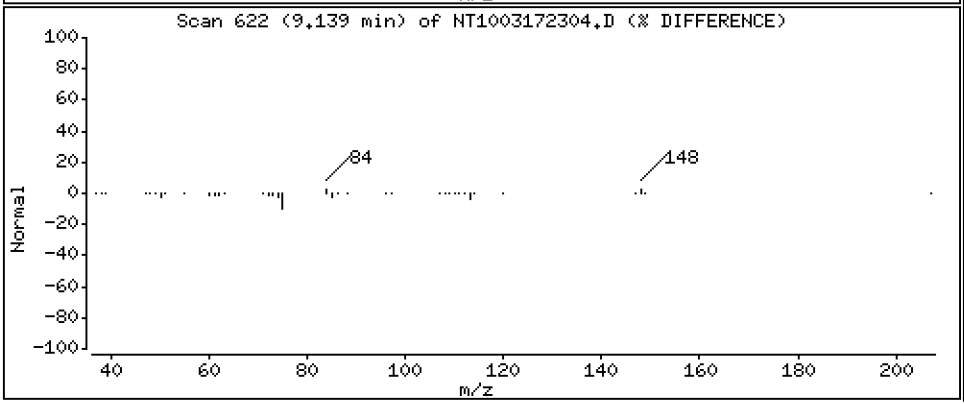












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

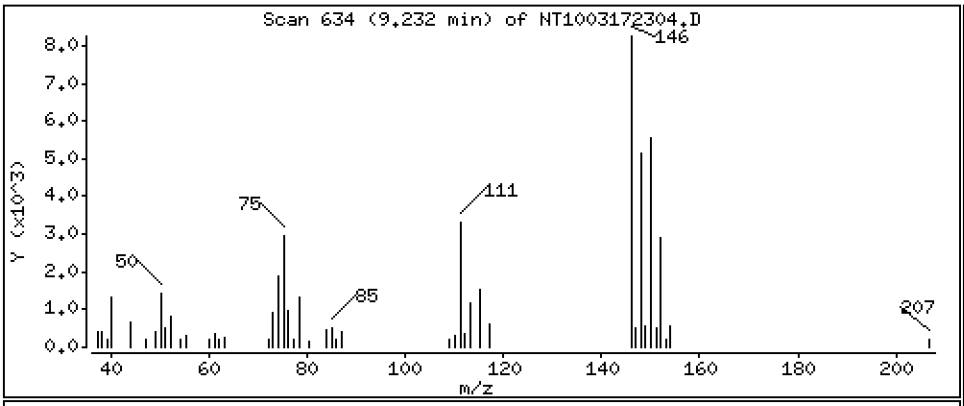
Operator: VTS

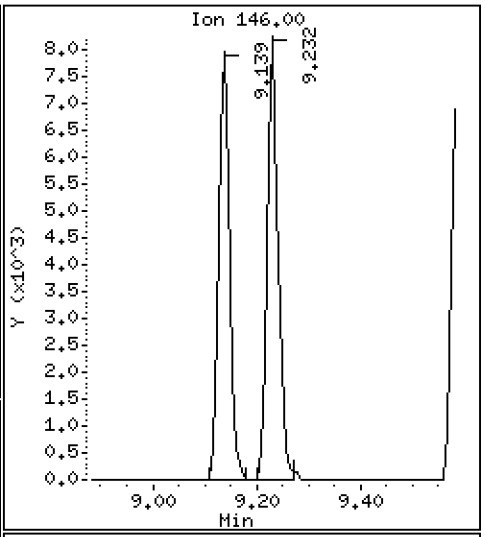
Column phase: ZB-5msi

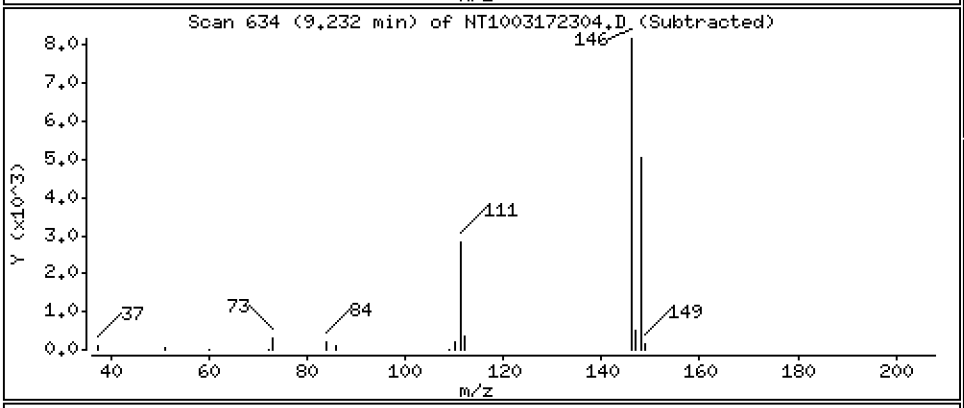
Column diameter: 0.25

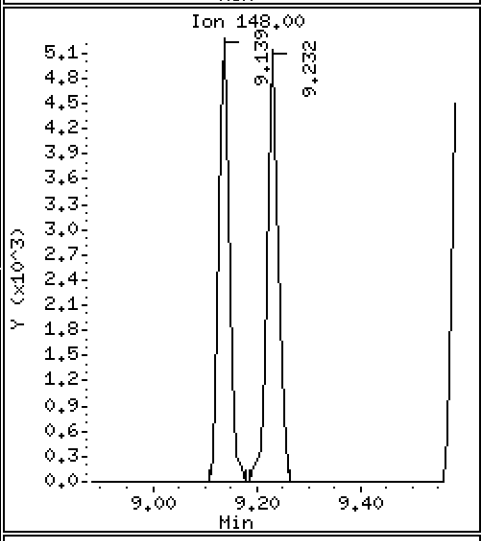
9 1,4-Dichlorobenzene

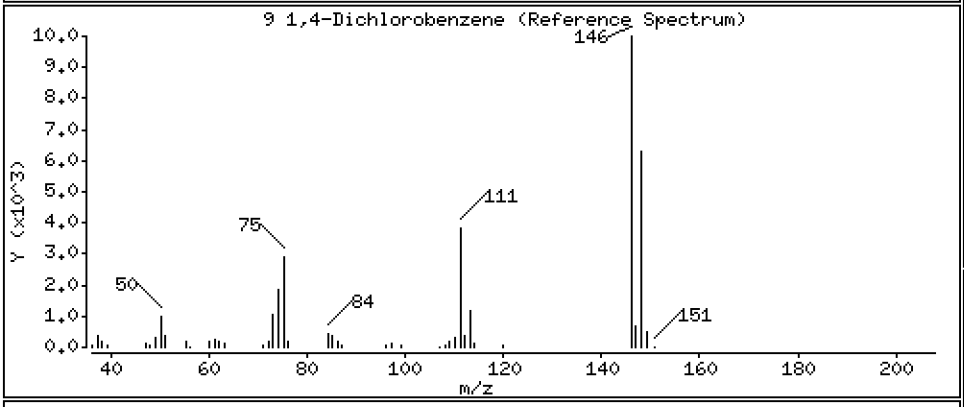
Concentration: 0.2136 ug/mL

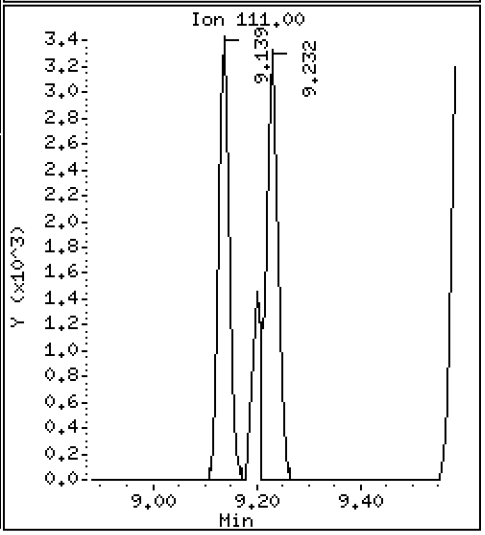


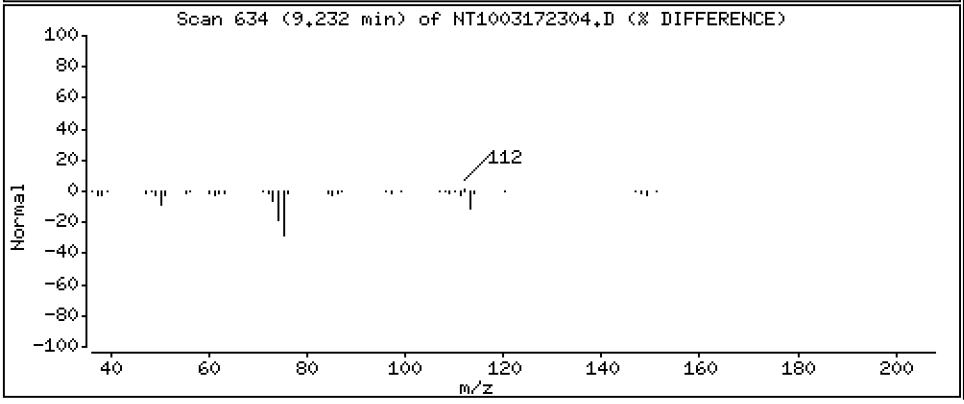












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

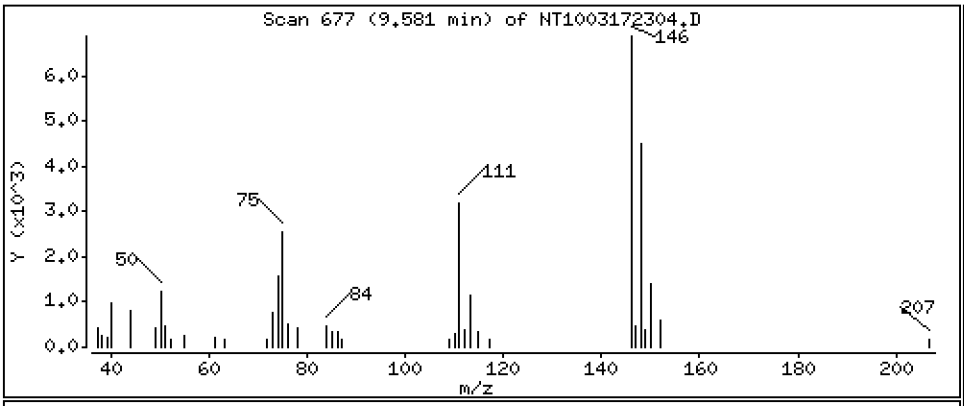
Operator: VTS

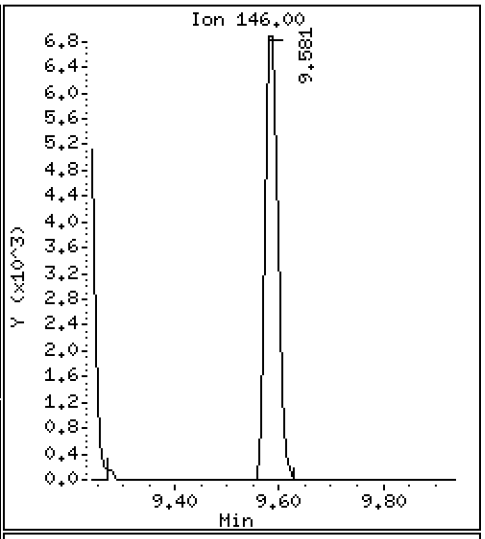
Column phase: ZB-5msi

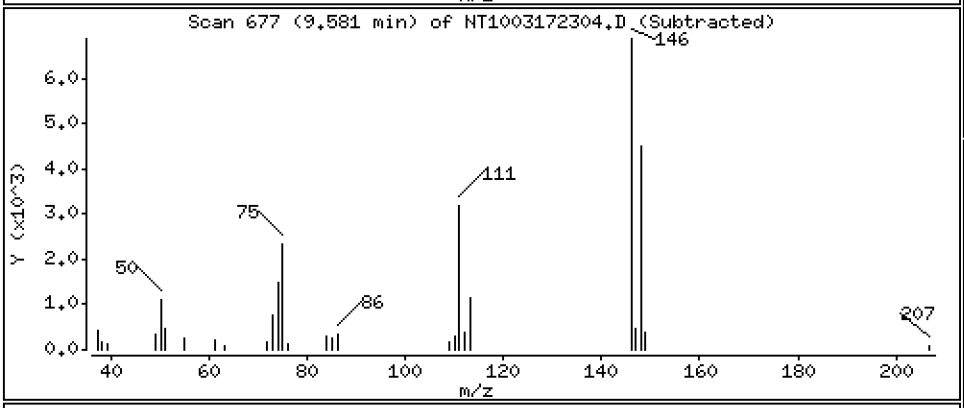
Column diameter: 0.25

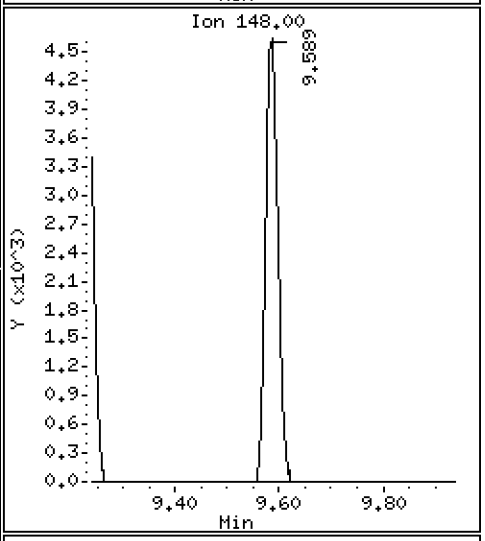
12 1,2-Dichlorobenzene

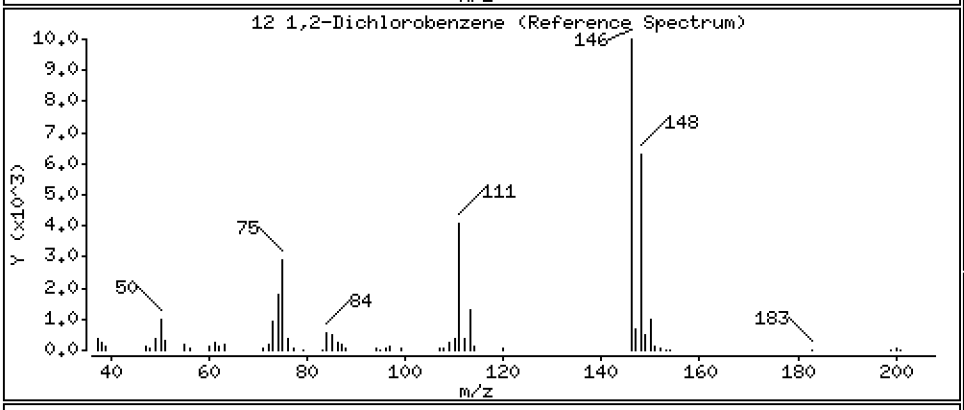
Concentration: 0.2096 ug/mL

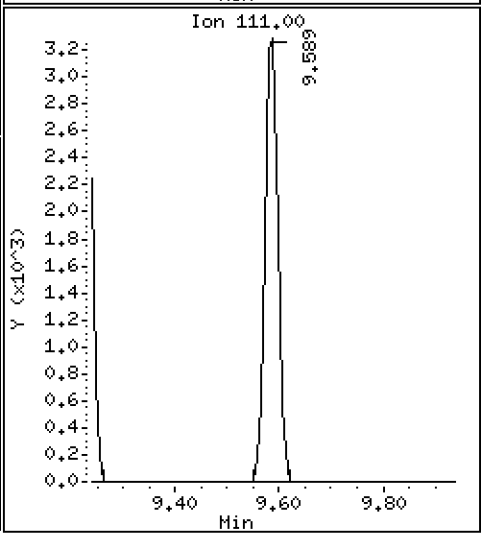


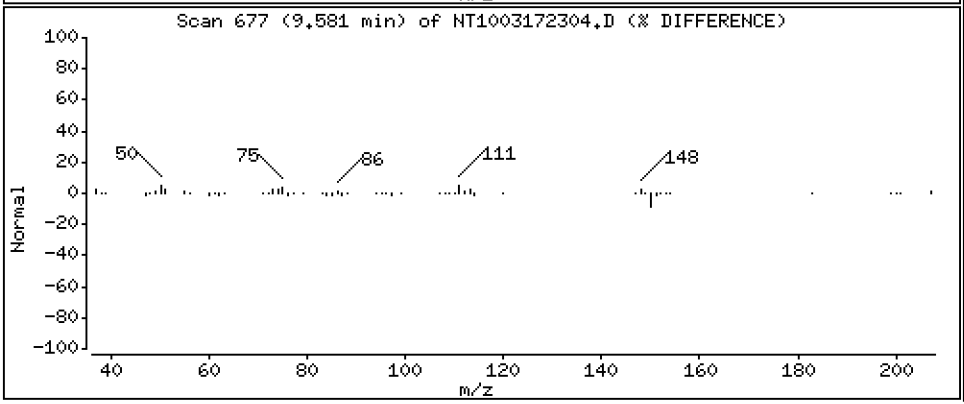












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

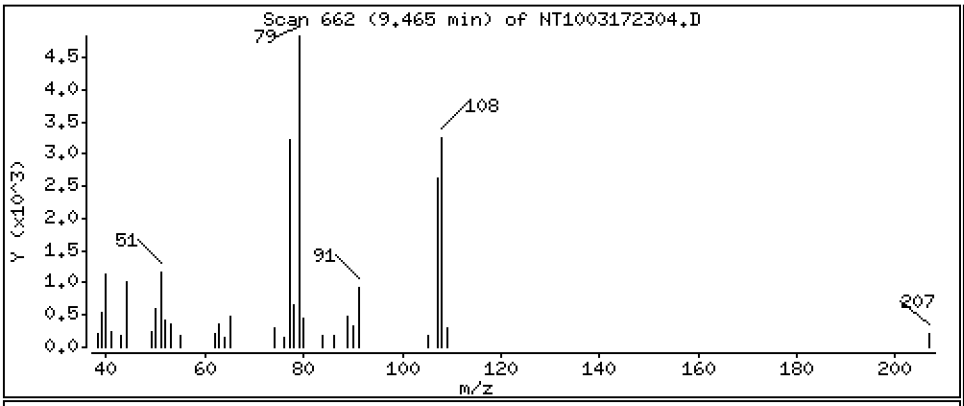
Operator: VTS

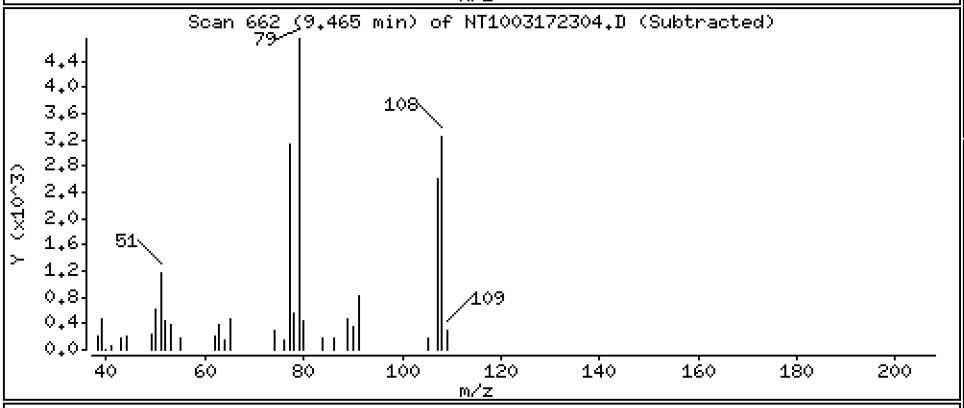
Column phase: ZB-5msi

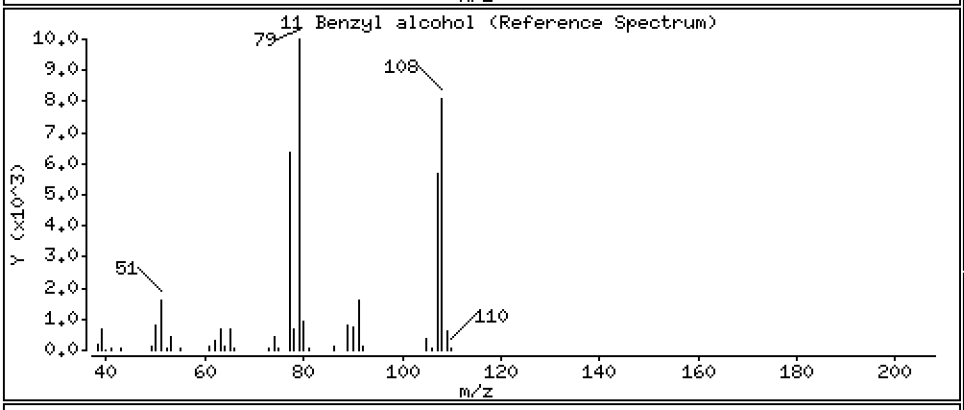
Column diameter: 0.25

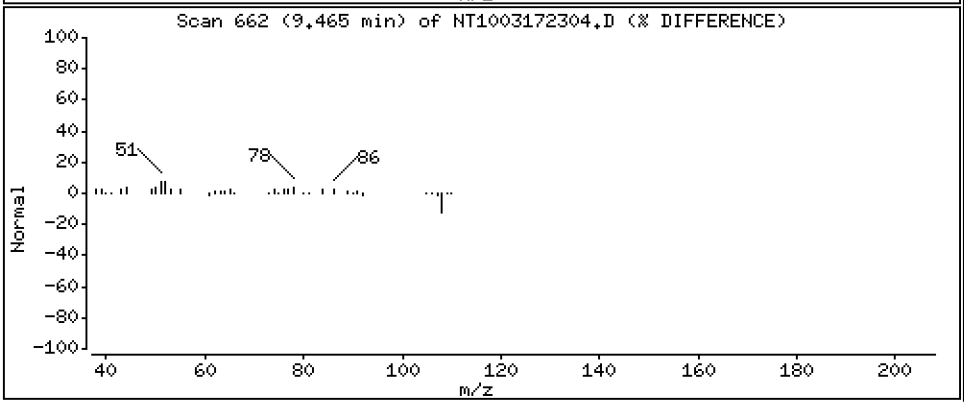
11 Benzyl alcohol

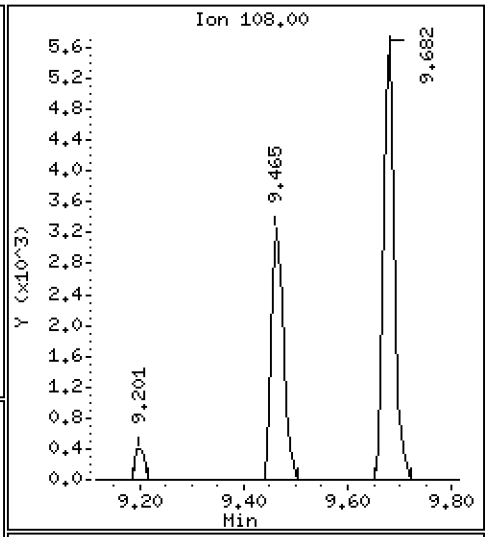
Concentration: 0.1681 ug/mL

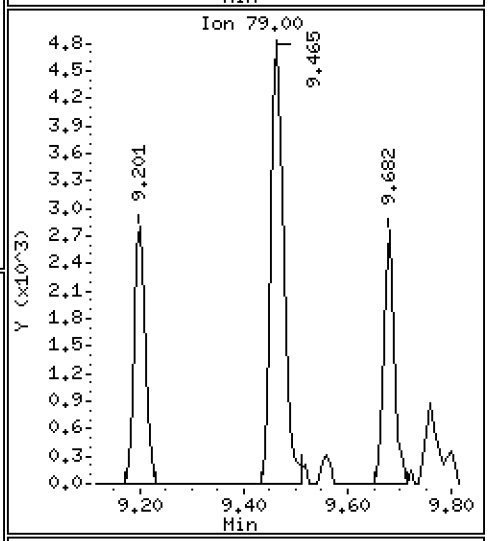


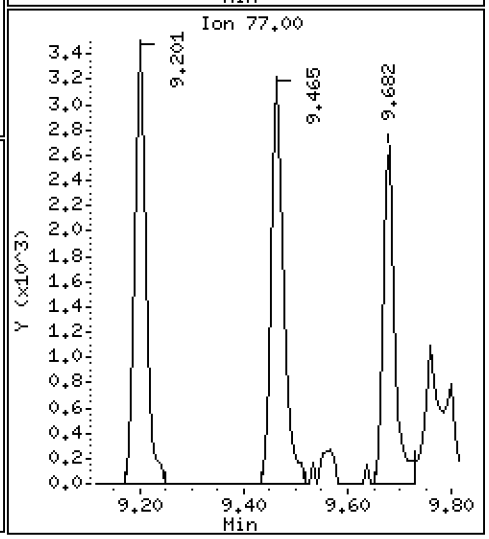












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

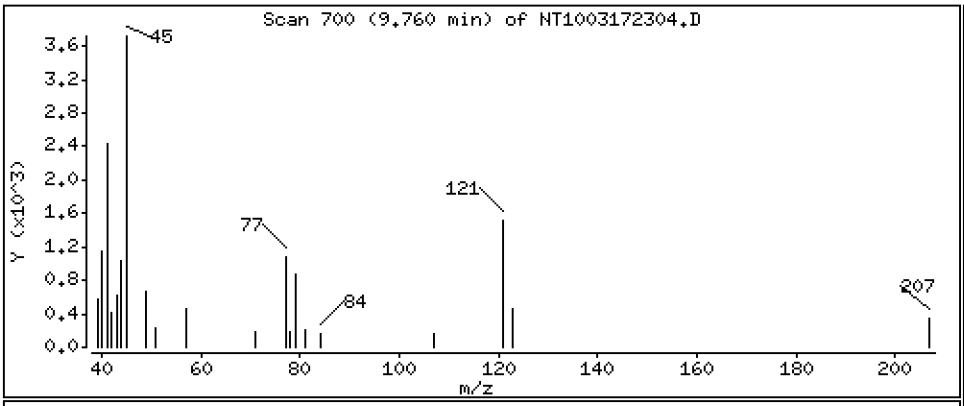
Operator: VTS

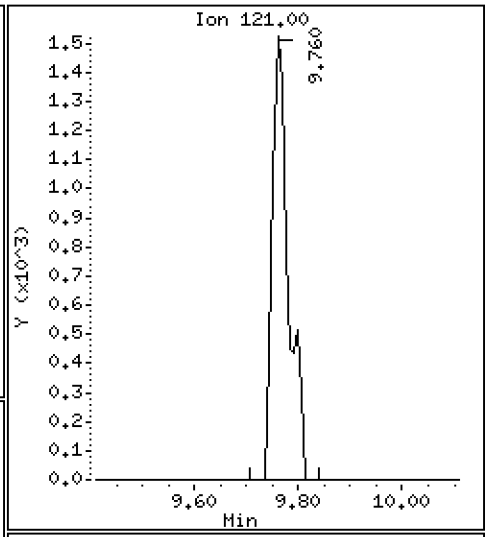
Column phase: ZB-5msi

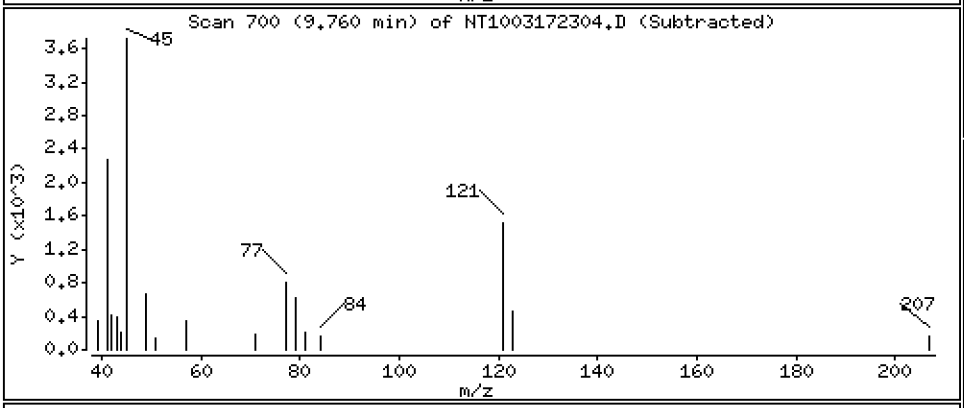
Column diameter: 0.25

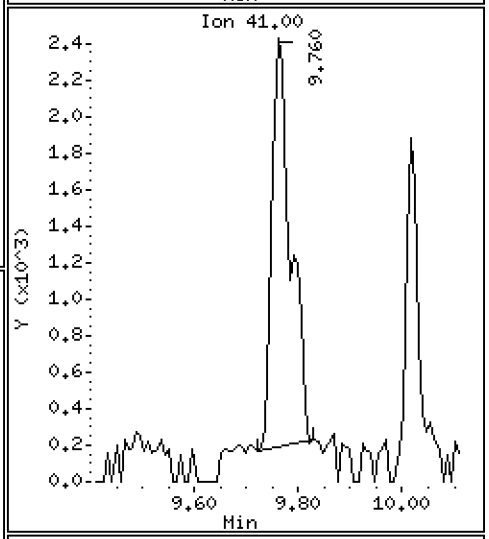
14 2,2'-oxybis(1-Chloropropane)

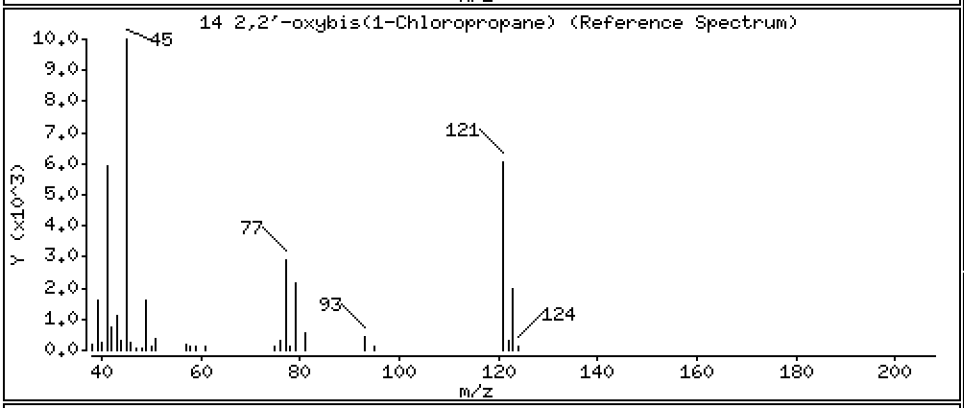
Concentration: 0.2004 ug/mL

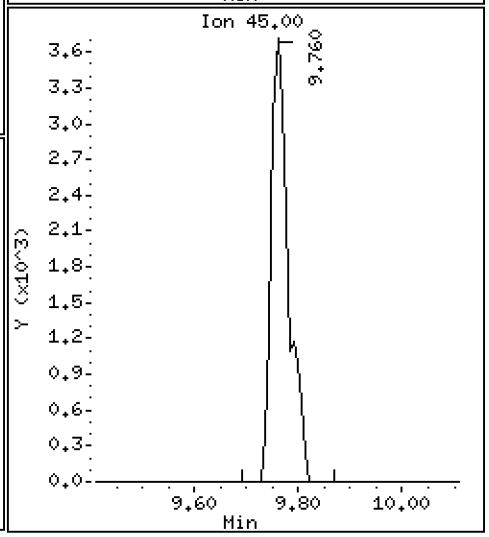


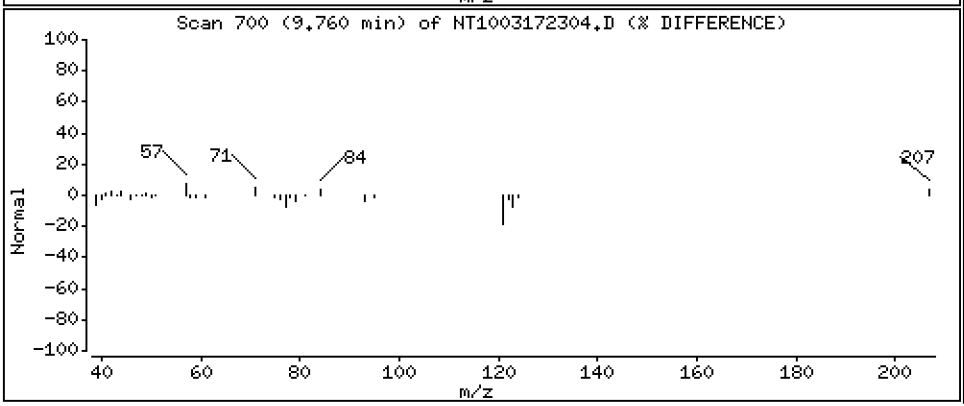












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

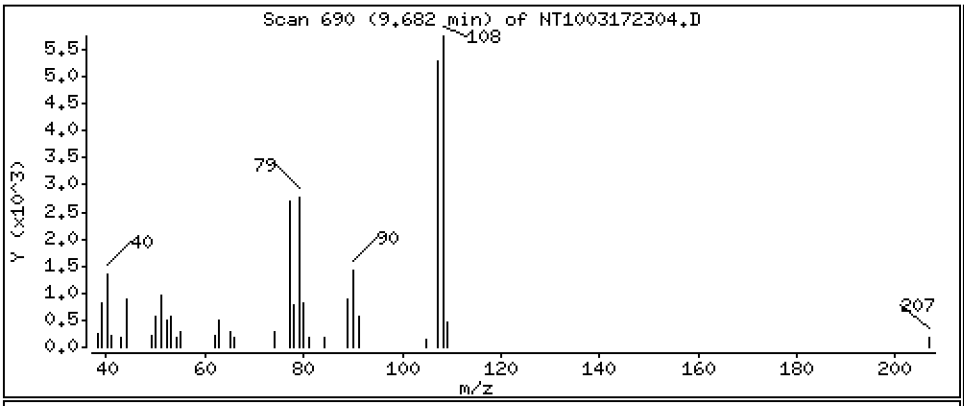
Operator: VTS

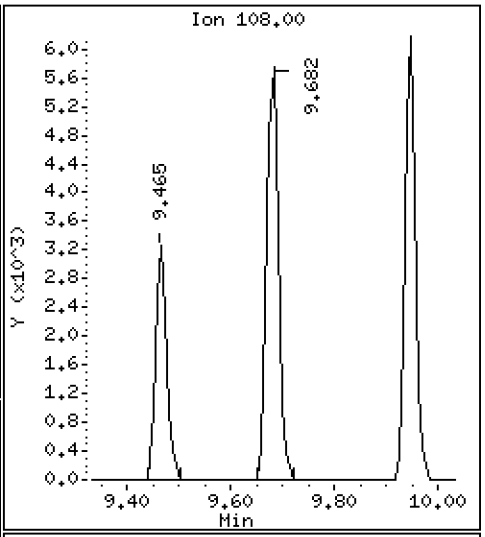
Column phase: ZB-5msi

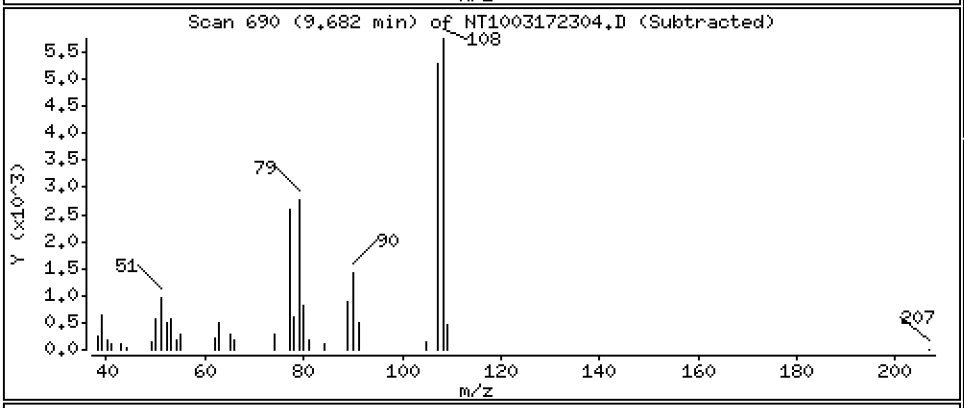
Column diameter: 0.25

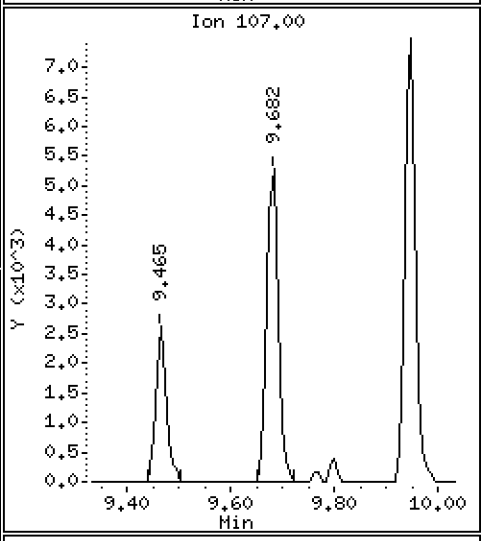
13 2-Methylphenol

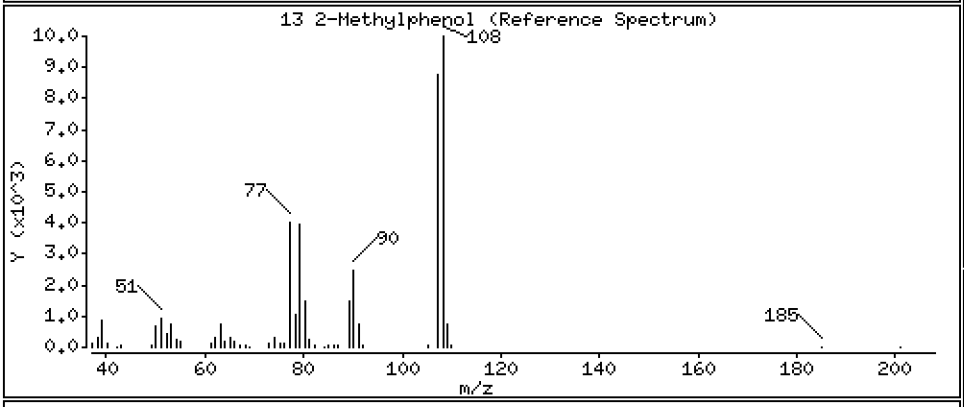
Concentration: 0.1872 ug/mL

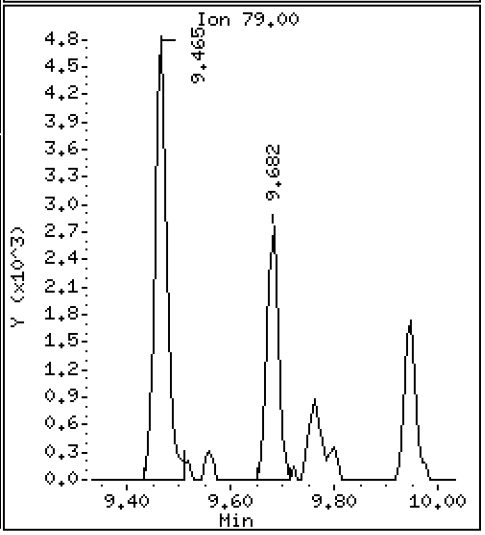


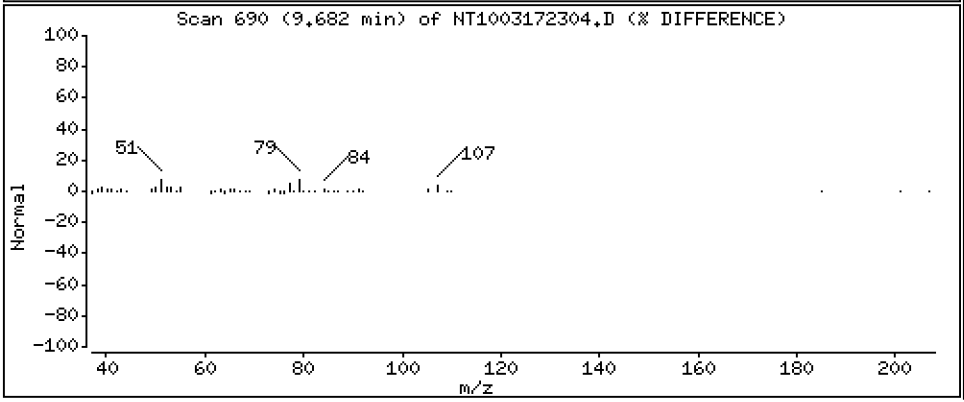












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

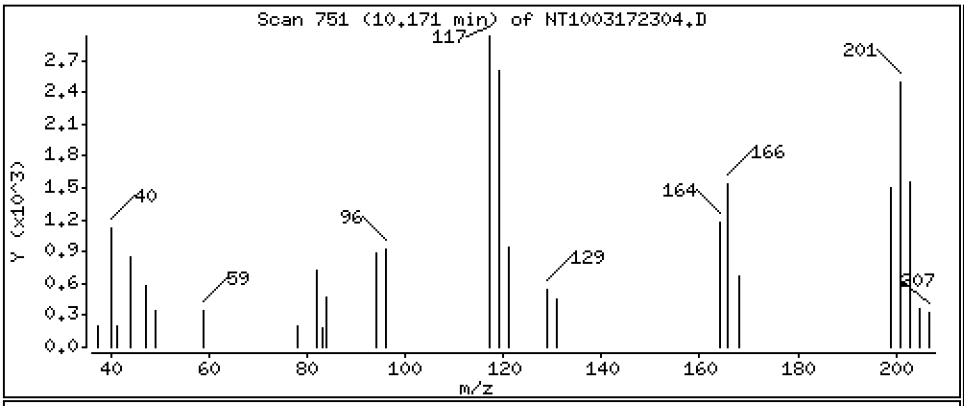
Operator: VTS

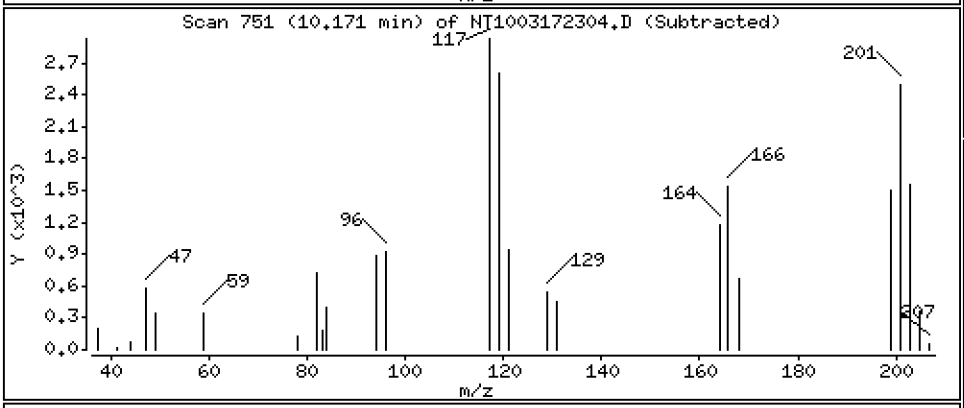
Column phase: ZB-5msi

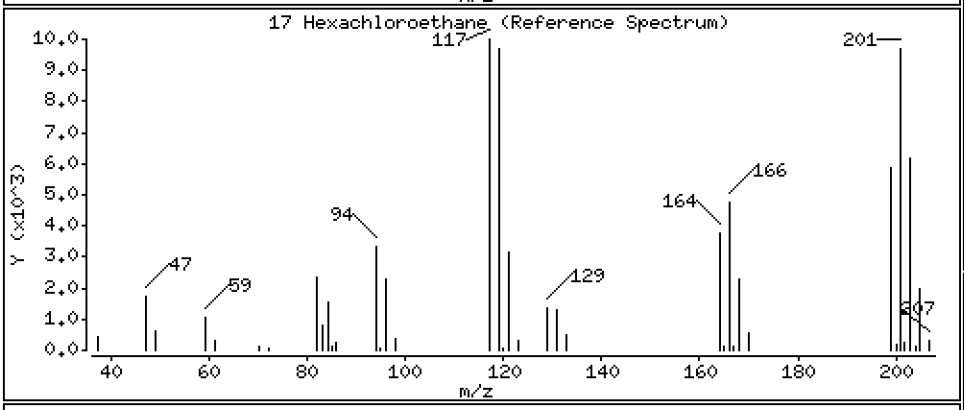
Column diameter: 0.25

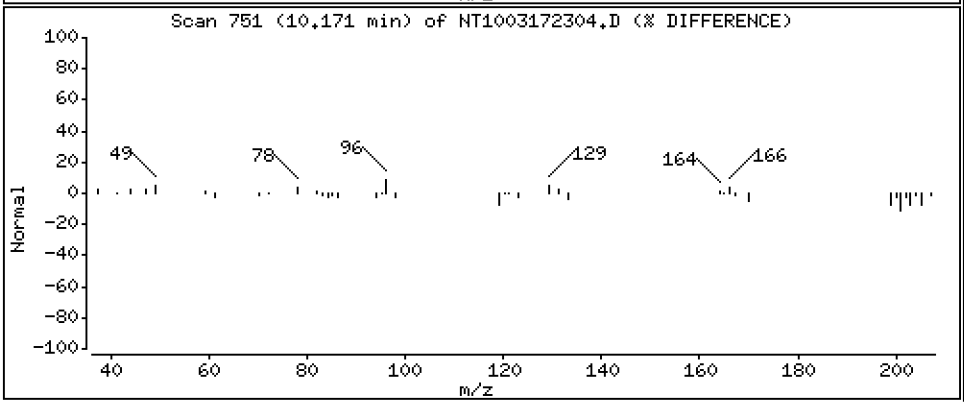
17 Hexachloroethane

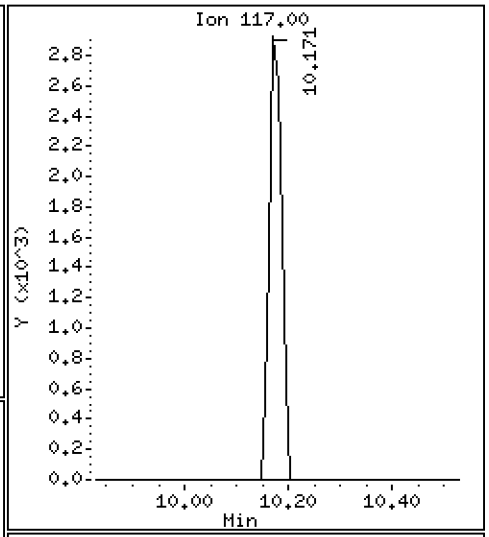
Concentration: 0.2029 ug/mL

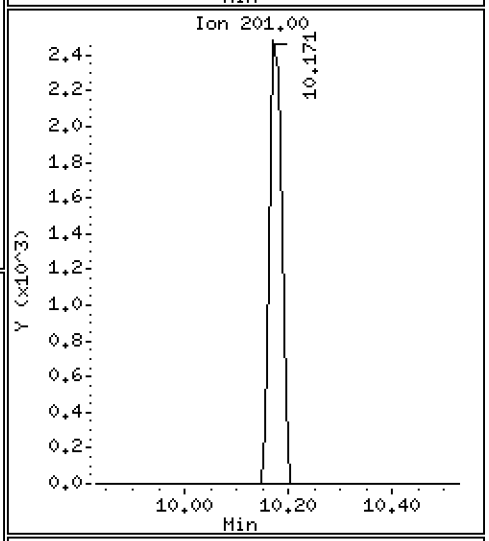


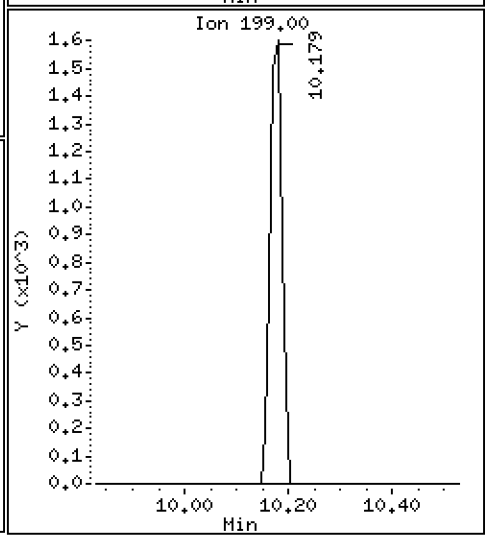












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

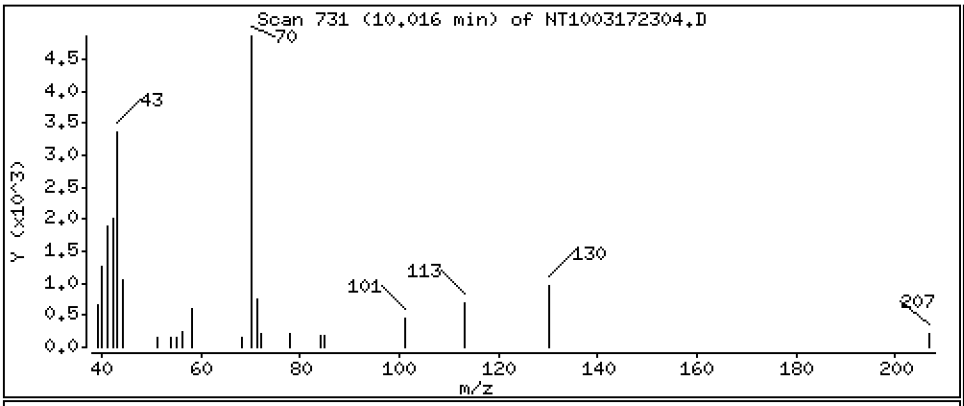
Operator: VTS

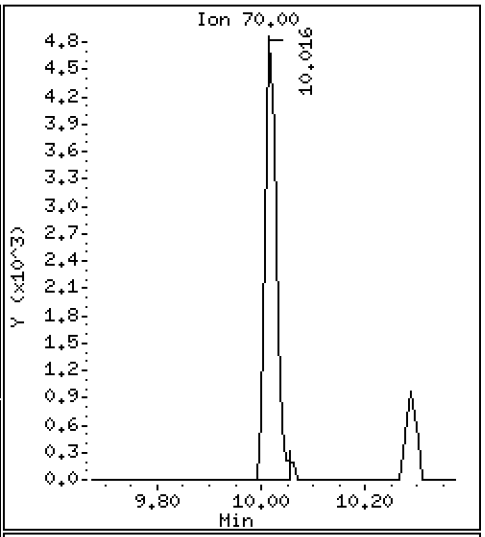
Column phase: ZB-5msi

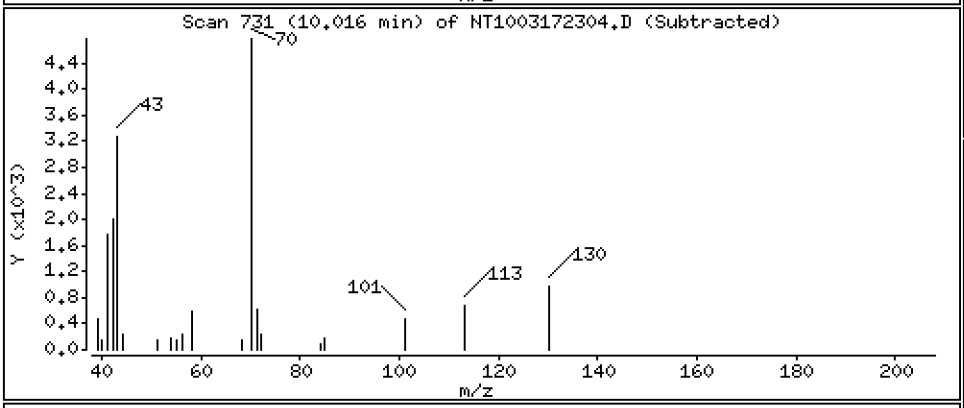
Column diameter: 0.25

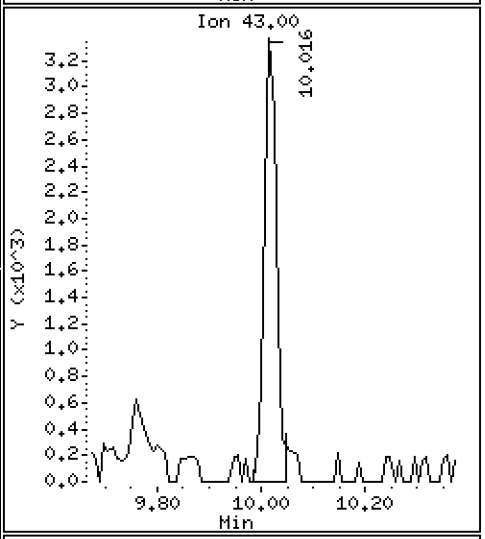
16 N-Nitroso-di-n-propylamine

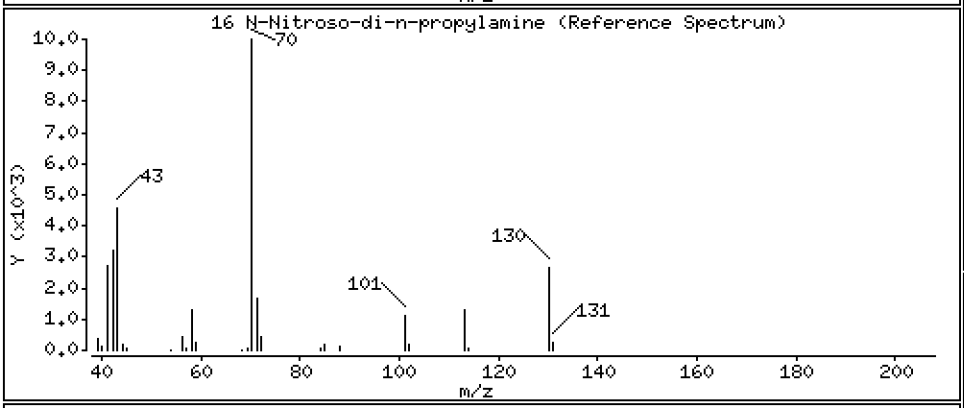
Concentration: 0.1884 ug/mL

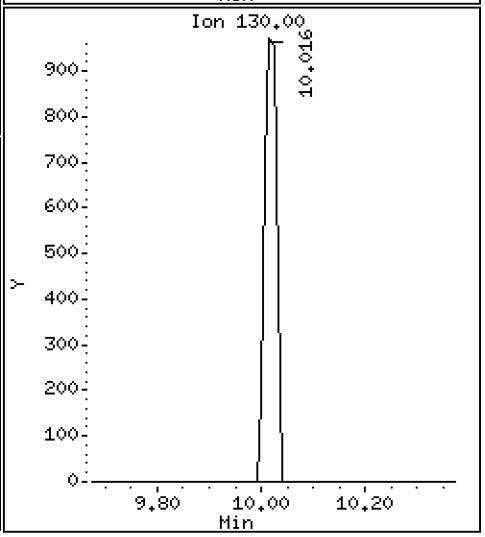


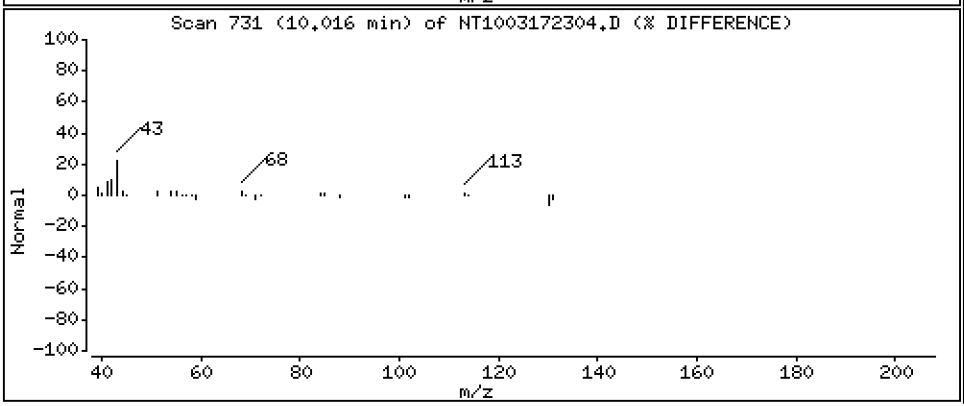












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

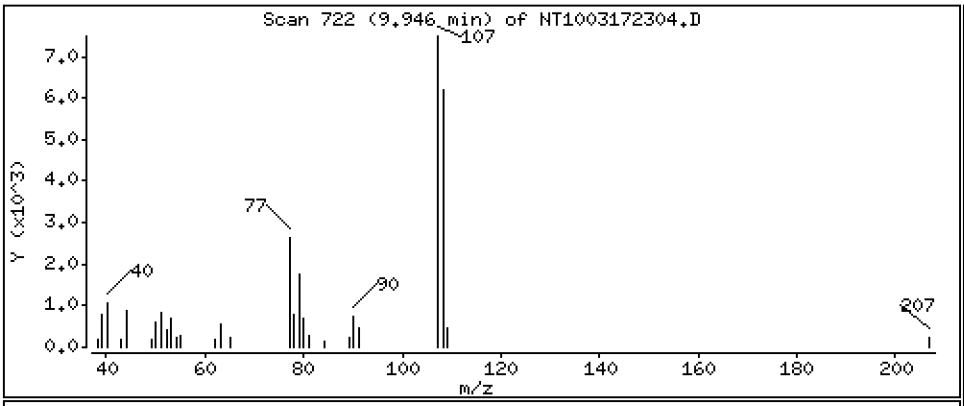
Operator: VTS

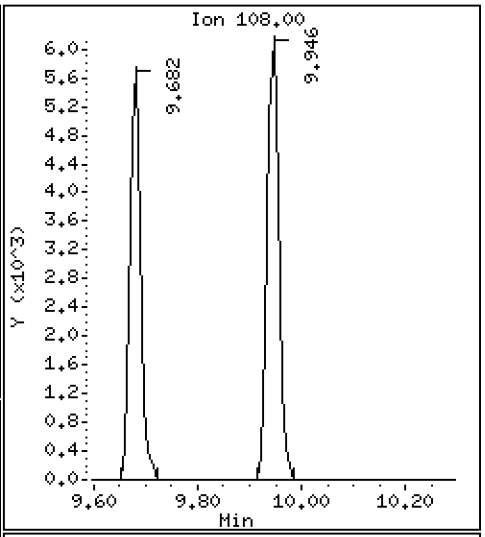
Column phase: ZB-5msi

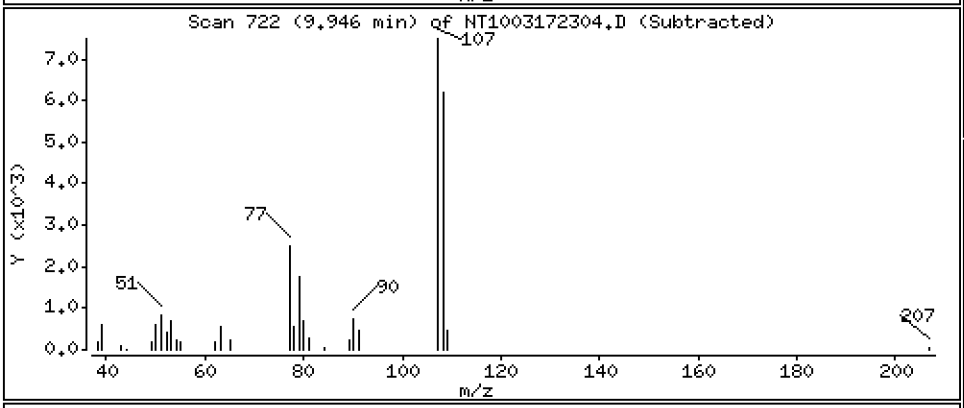
Column diameter: 0.25

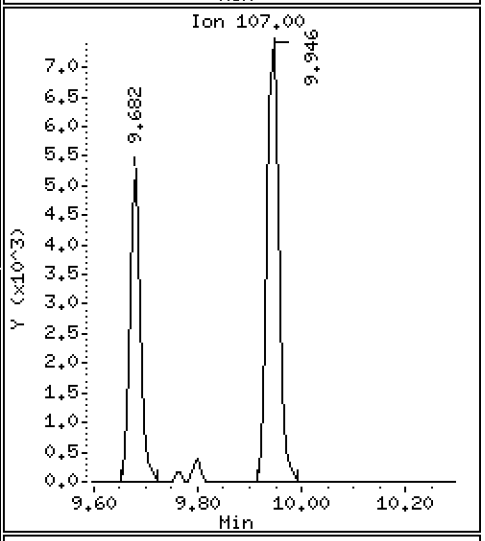
15 4-Methylphenol

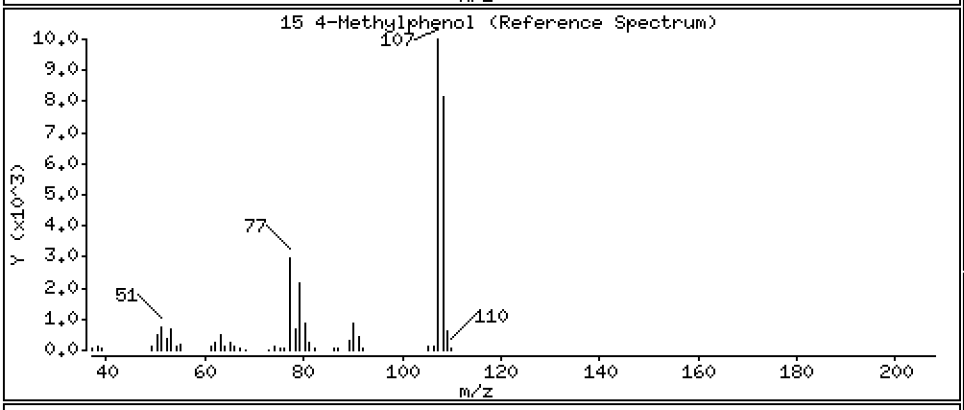
Concentration: 0.1866 ug/mL

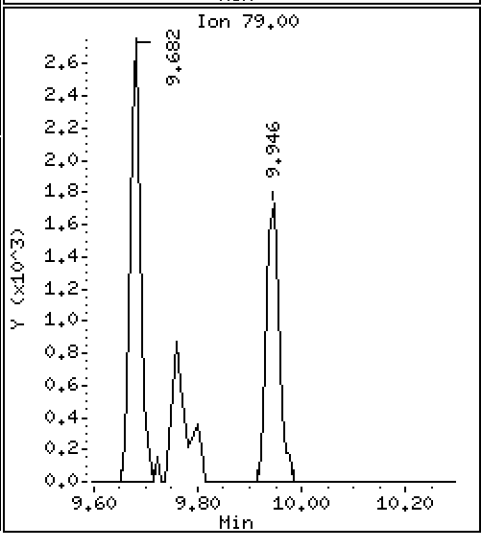


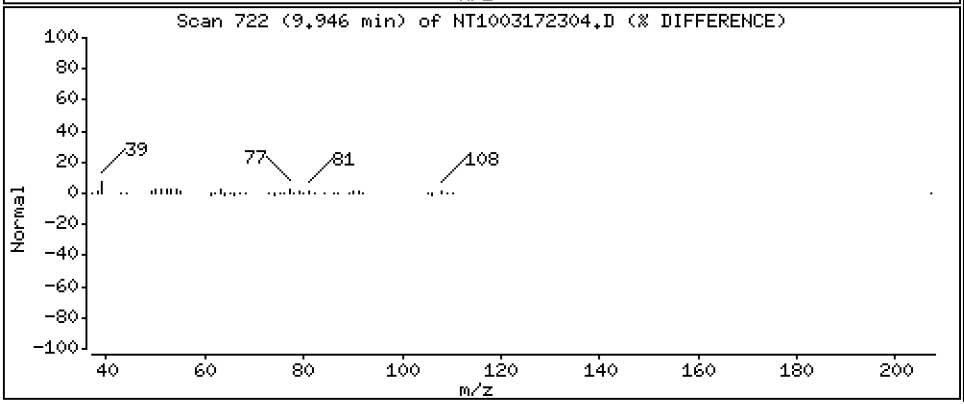












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

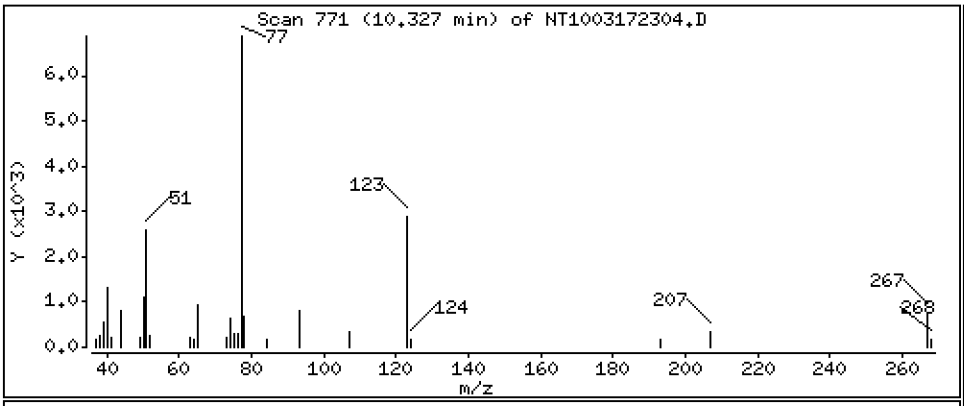
Operator: VTS

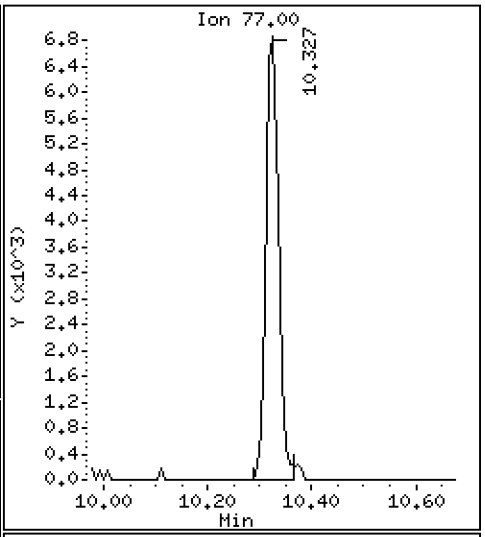
Column phase: ZB-5msi

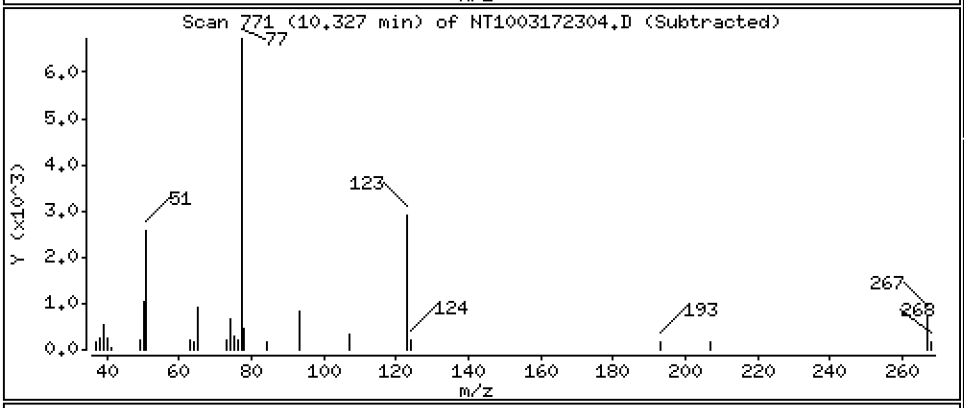
Column diameter: 0.25

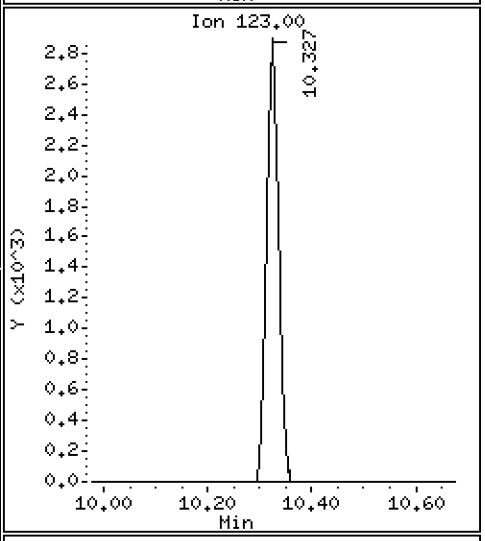
19 Nitrobenzene

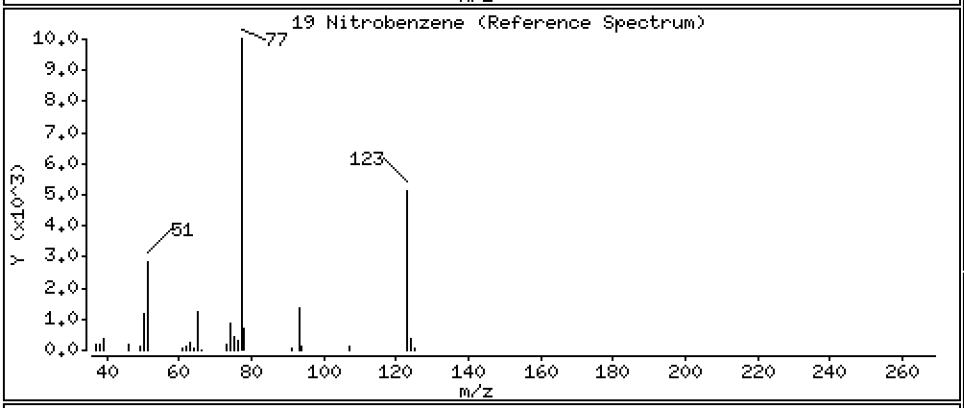
Concentration: 0.2080 ug/mL

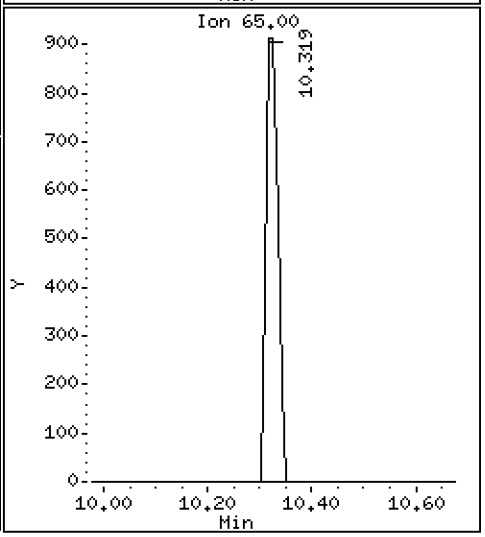


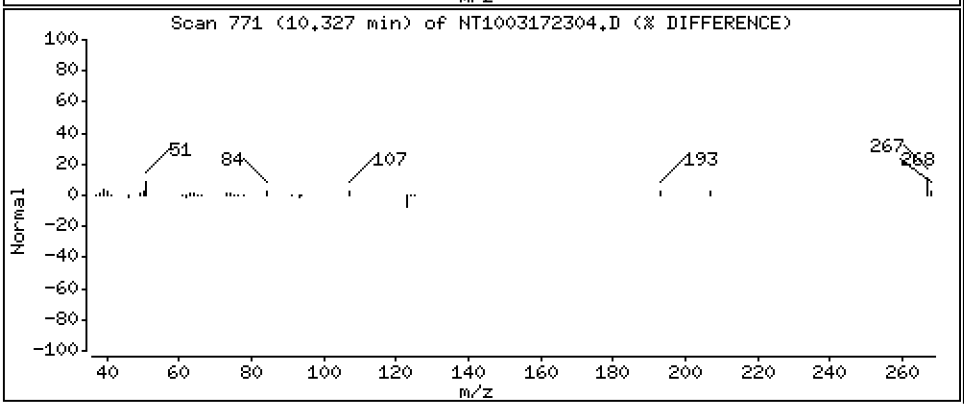












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

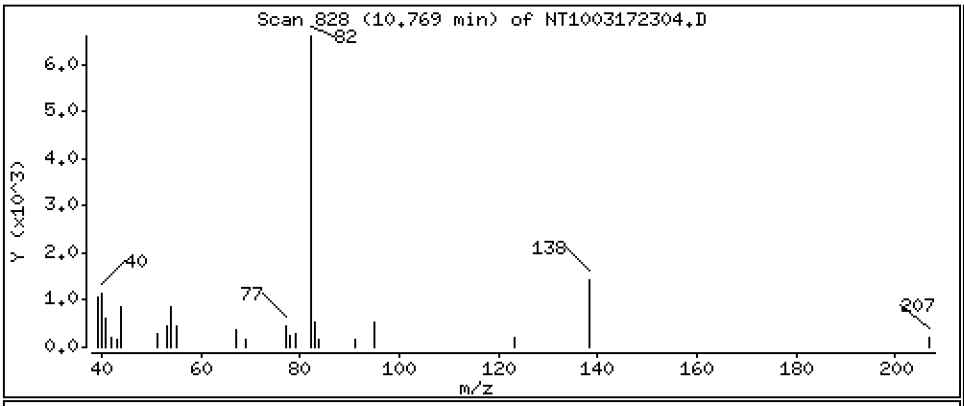
Operator: VTS

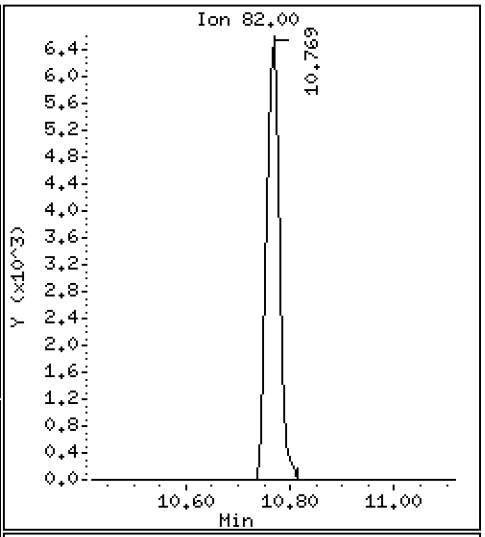
Column phase: ZB-5msi

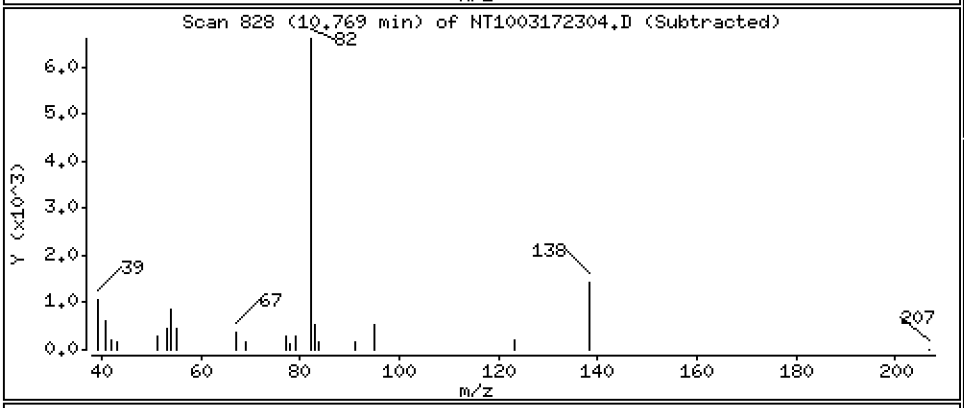
Column diameter: 0.25

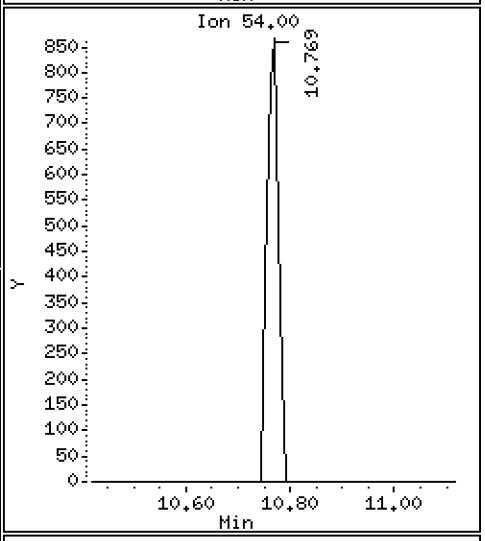
20 Isophorone

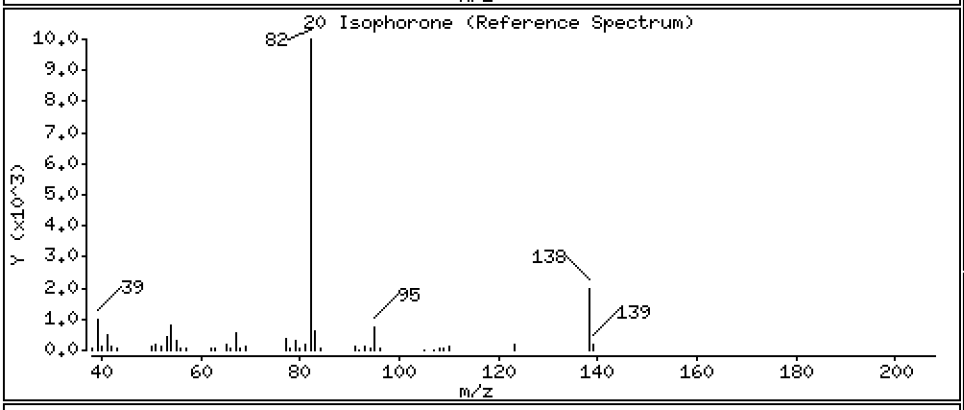
Concentration: 0.1618 ug/mL

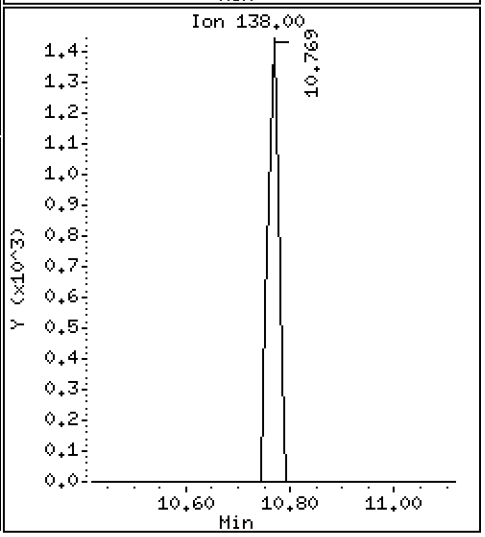


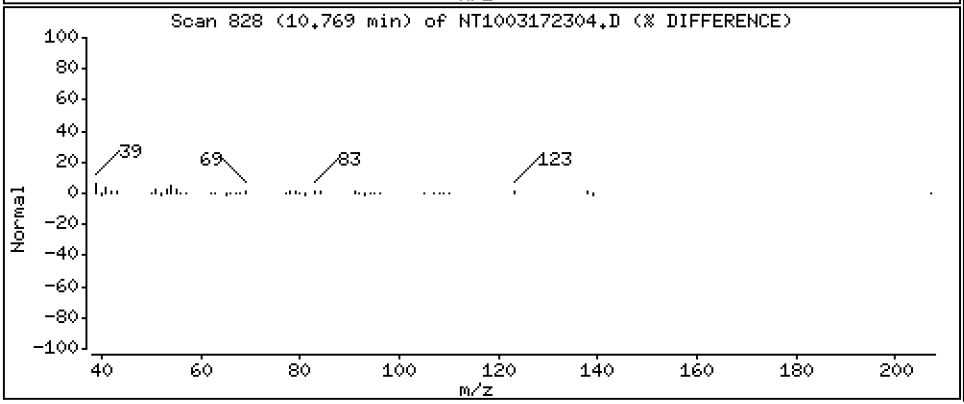












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

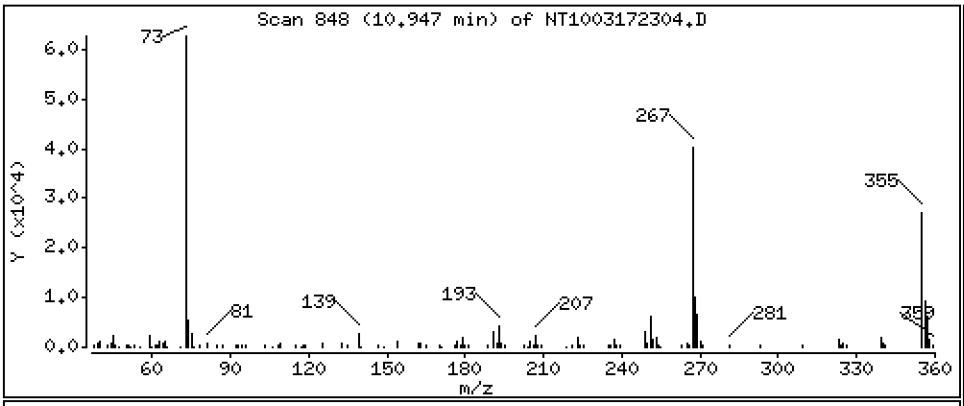
Operator: VTS

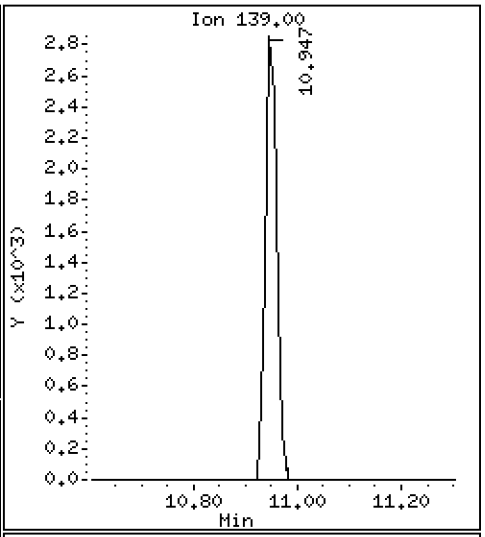
Column phase: ZB-5msi

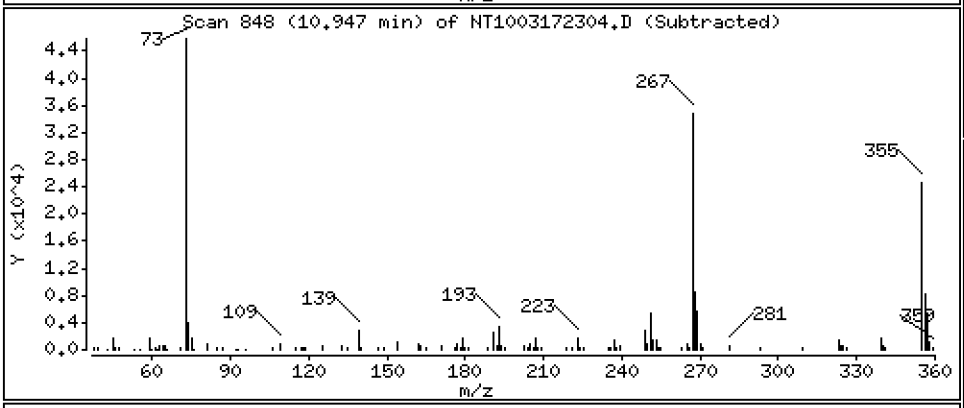
Column diameter: 0.25

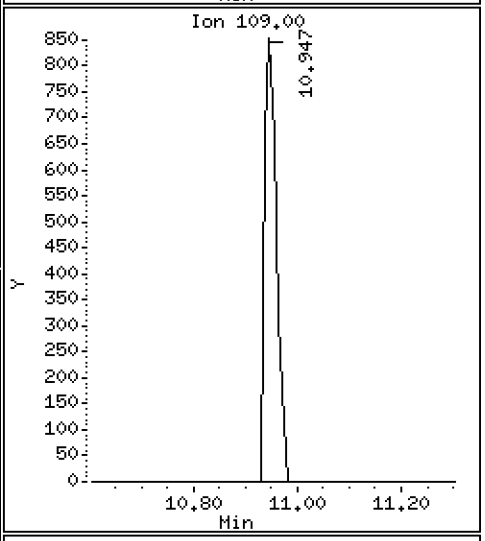
21 2-Nitrophenol

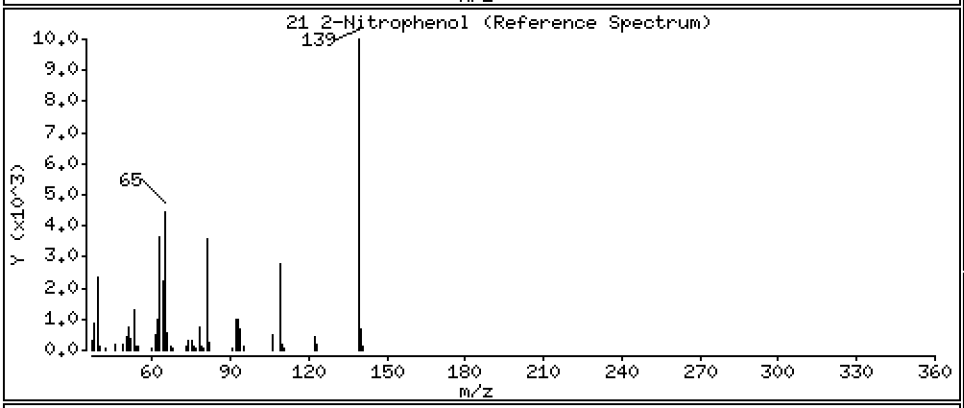
Concentration: 0.1680 ug/mL

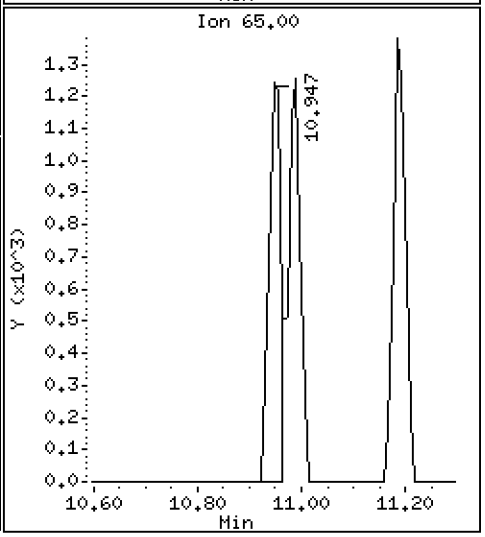


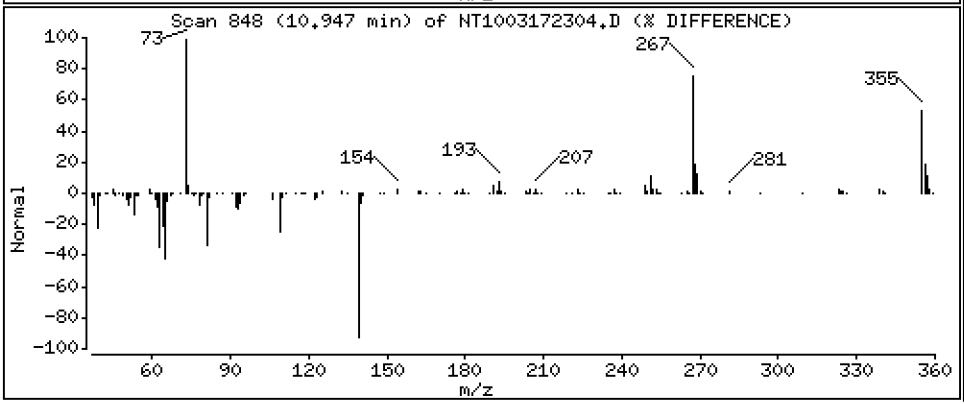












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

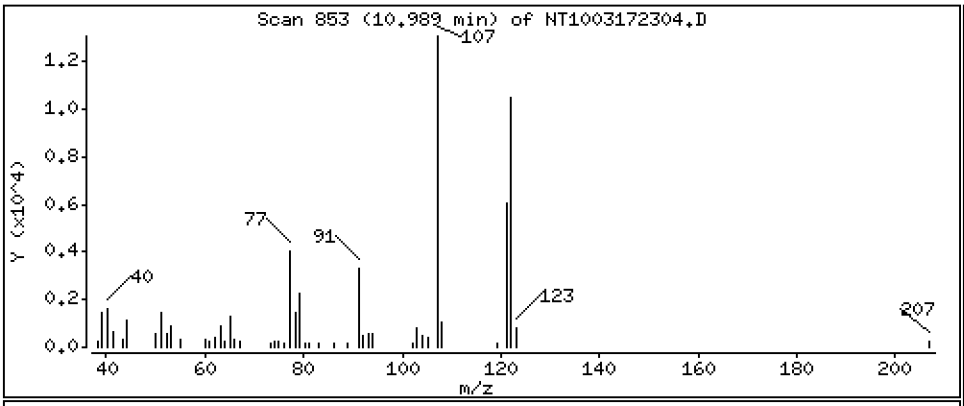
Operator: VTS

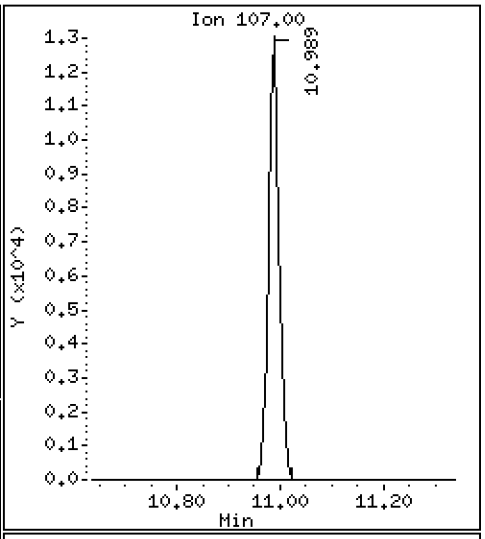
Column phase: ZB-5msi

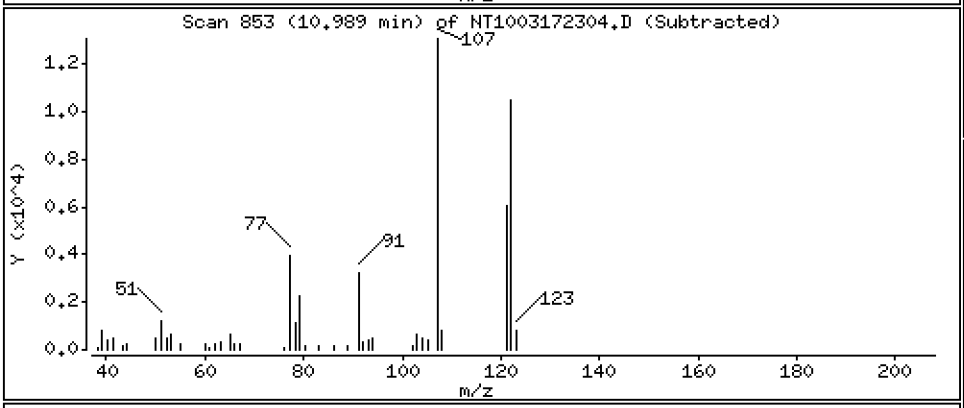
Column diameter: 0.25

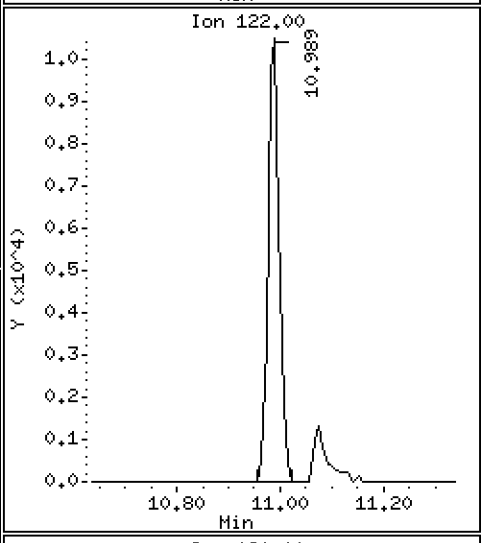
22 2,4-Dimethylphenol

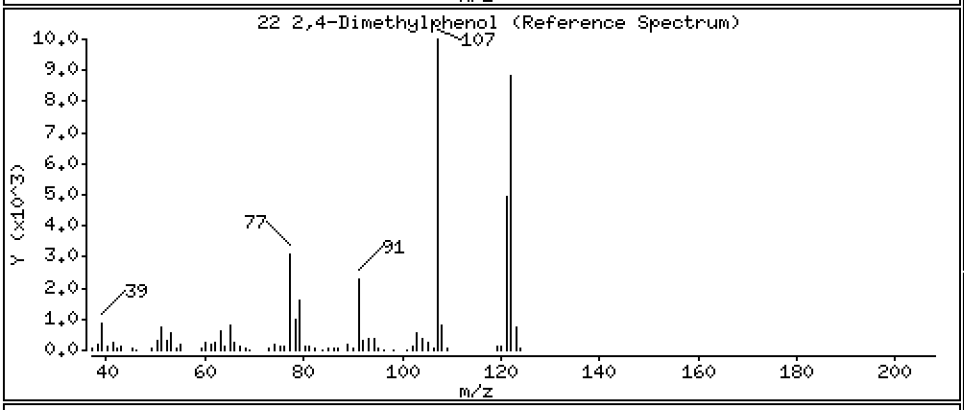
Concentration: 0.3937 ug/mL

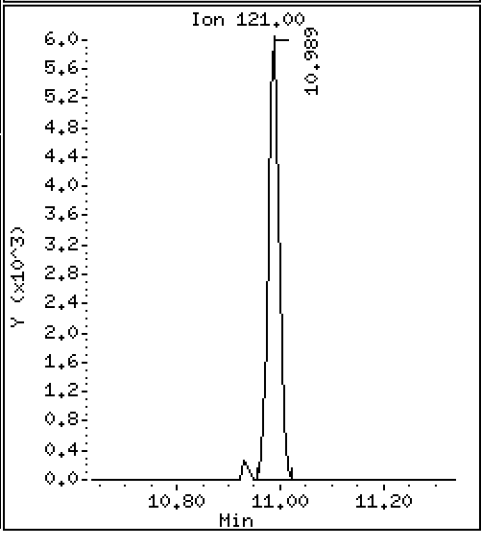


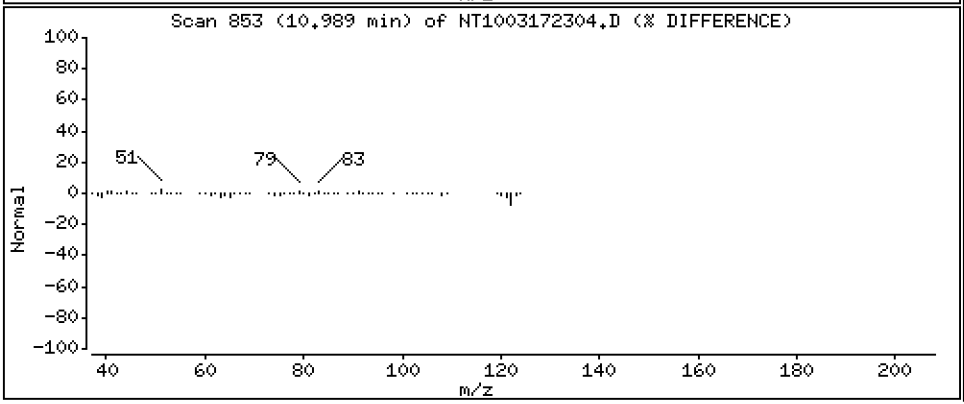












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

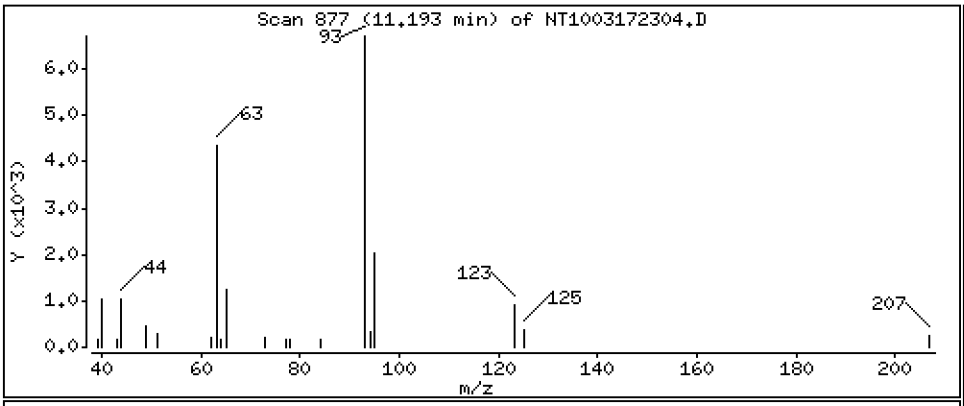
Operator: VTS

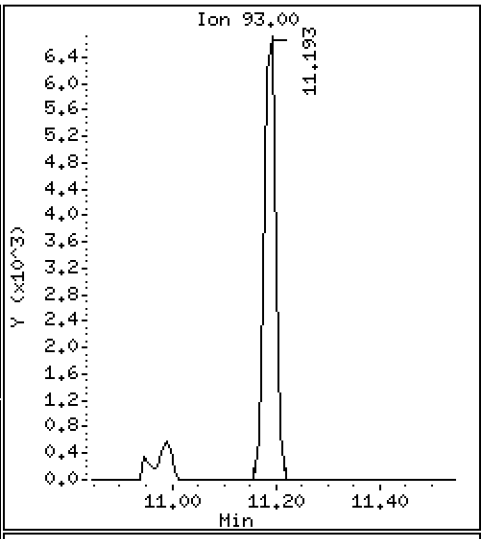
Column phase: ZB-5msi

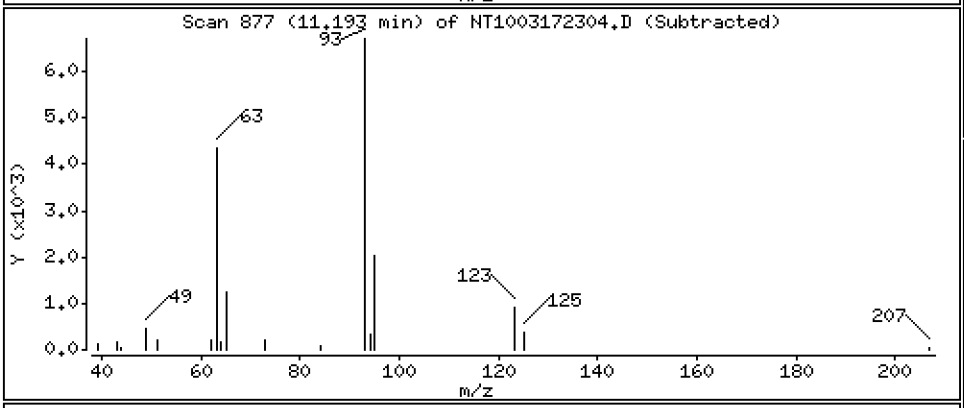
Column diameter: 0.25

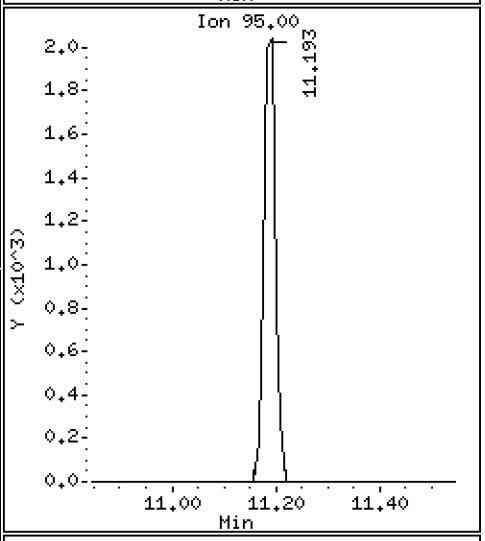
23 Bis(2-Chloroethoxy)methane

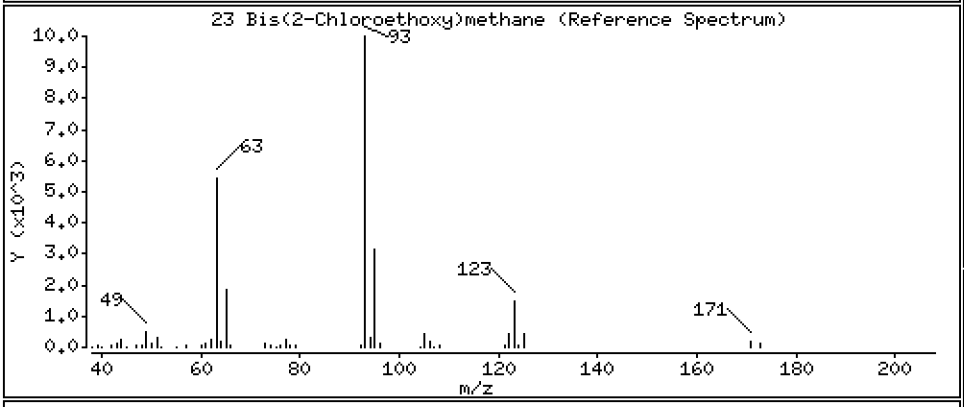
Concentration: 0.2265 ug/mL

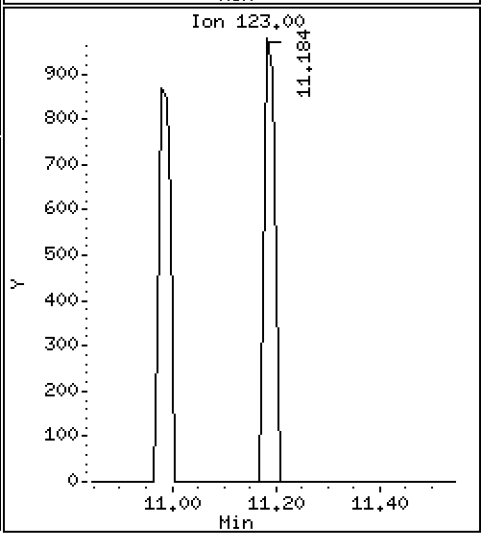


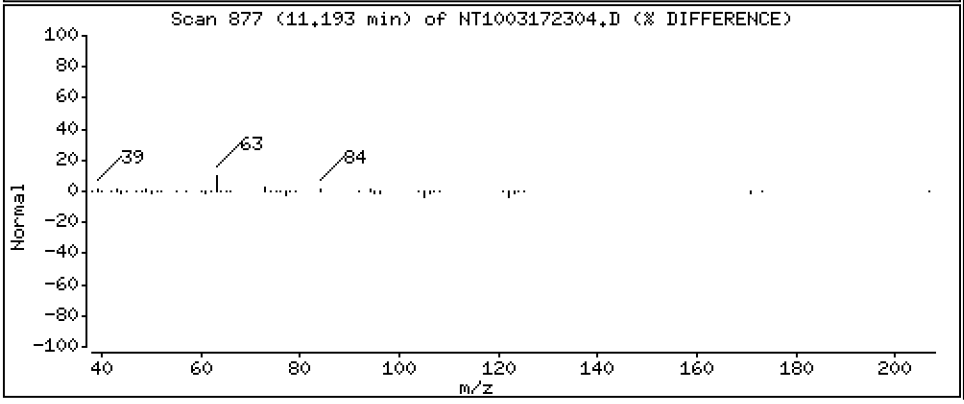












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

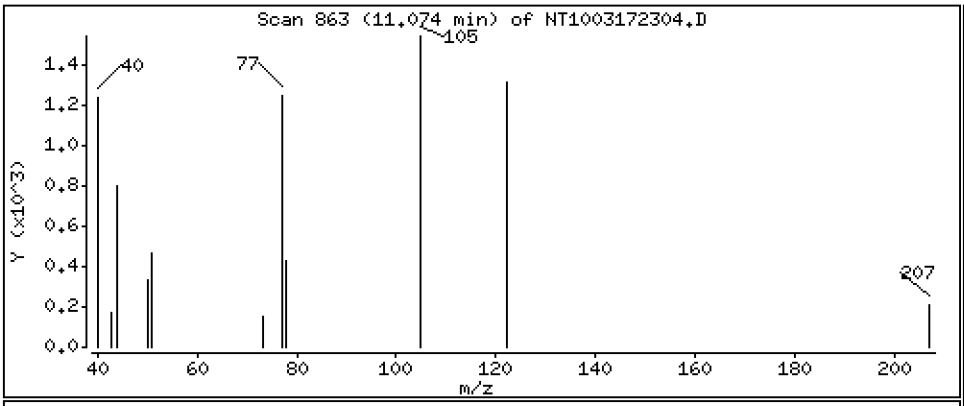
Operator: VTS

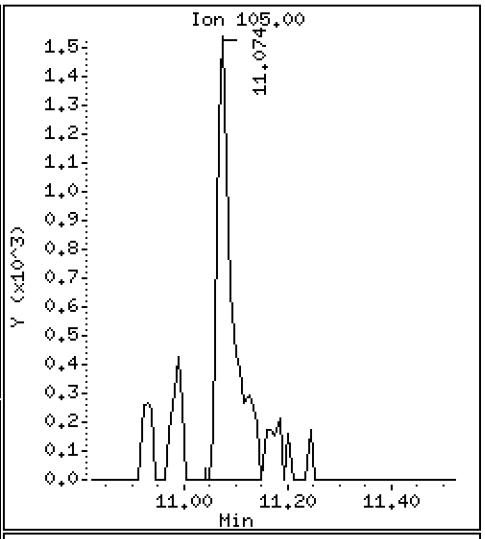
Column phase: ZB-5msi

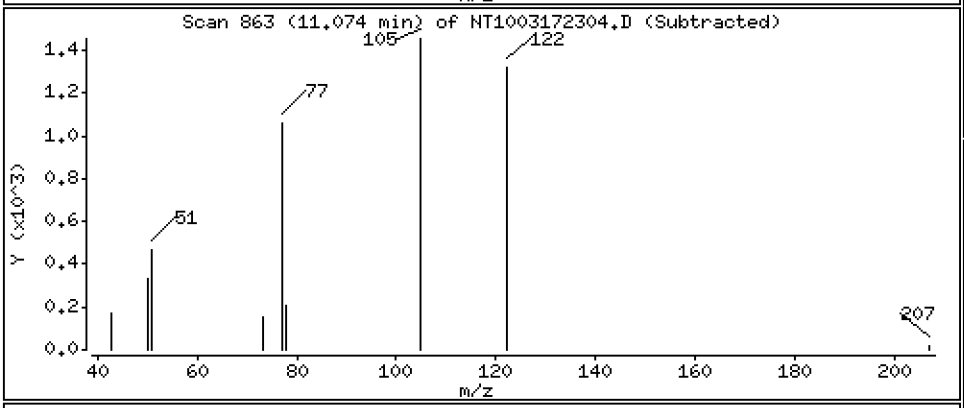
Column diameter: 0.25

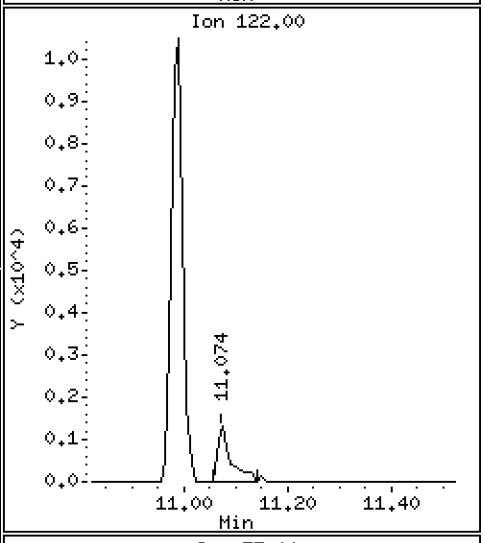
24 Benzoic acid

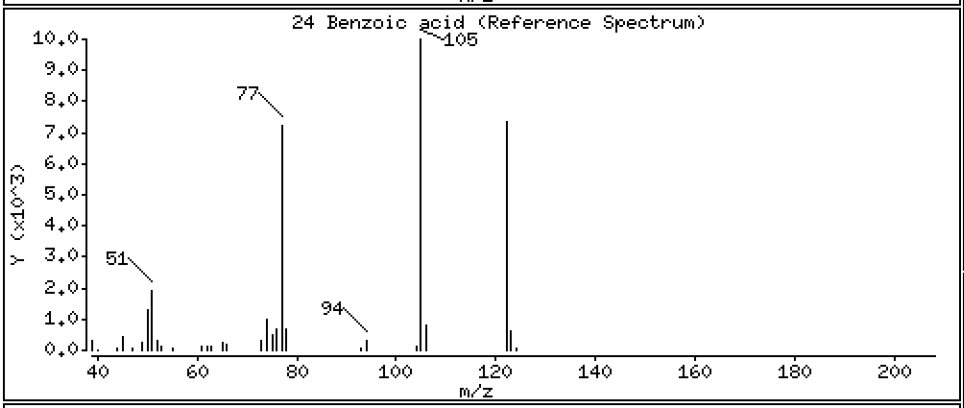
Concentration: 0.1215 ug/mL

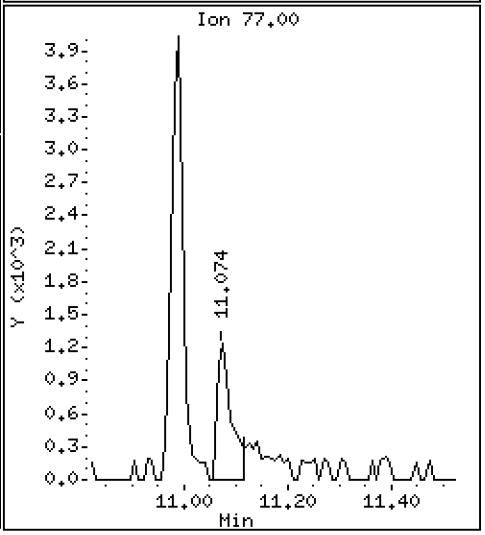


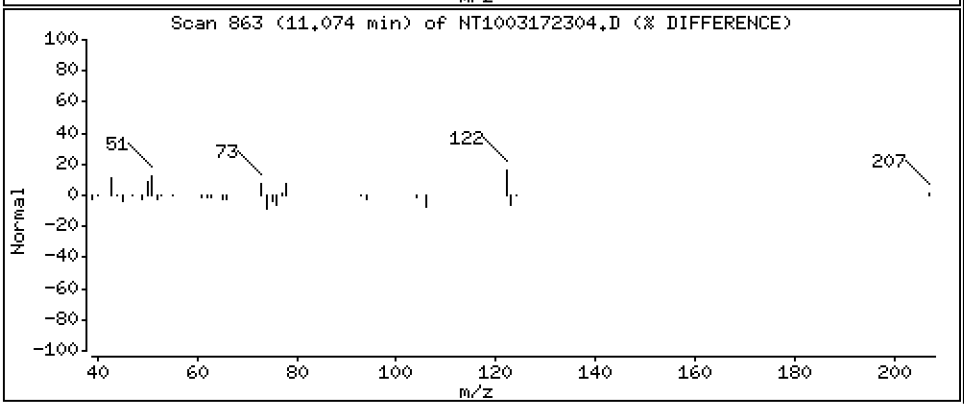












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

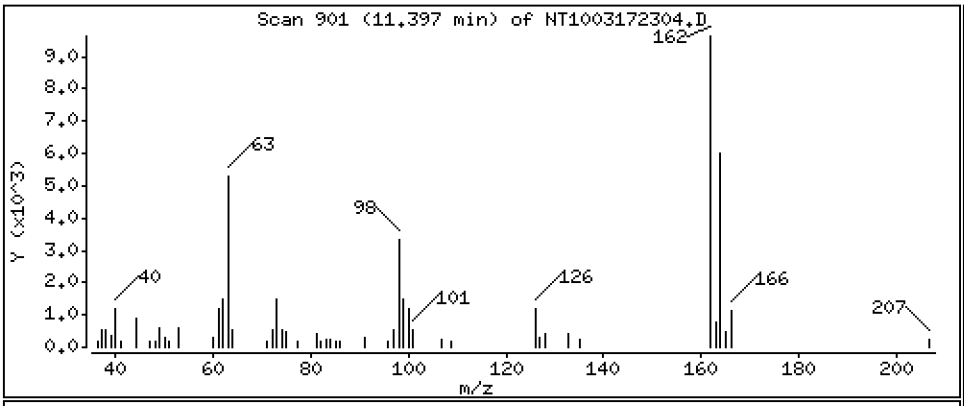
Operator: VTS

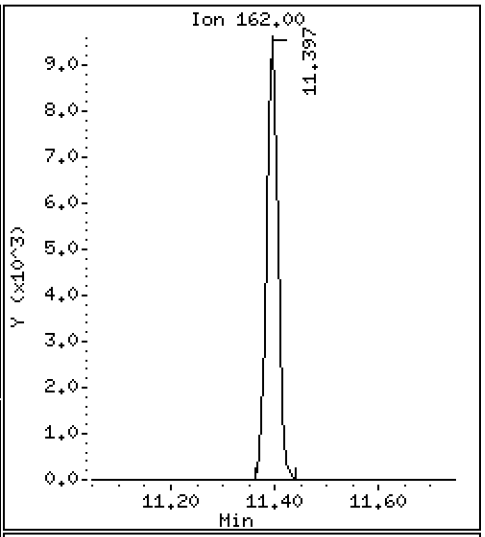
Column phase: ZB-5msi

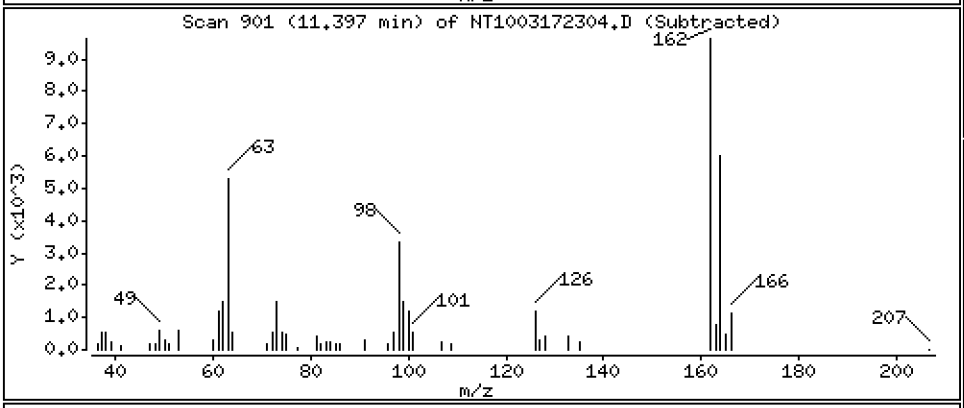
Column diameter: 0.25

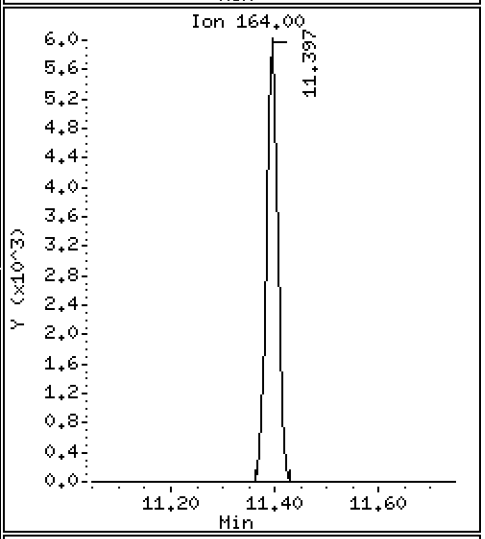
25 2,4-Dichlorophenol

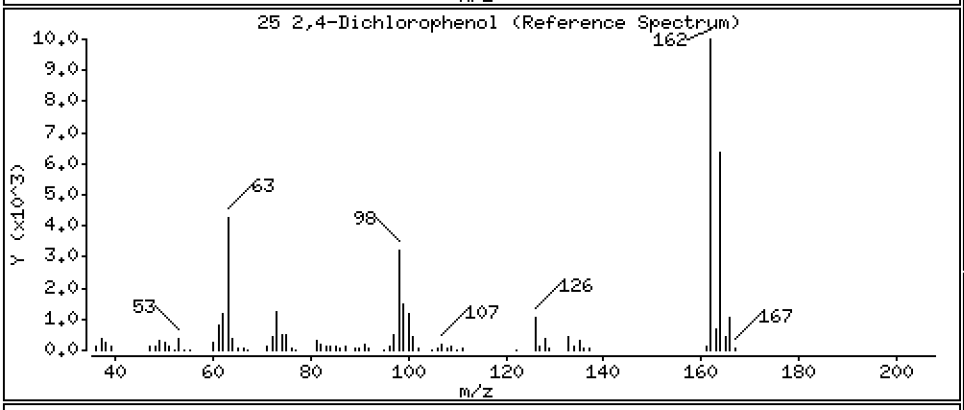
Concentration: 0.3677 ug/mL

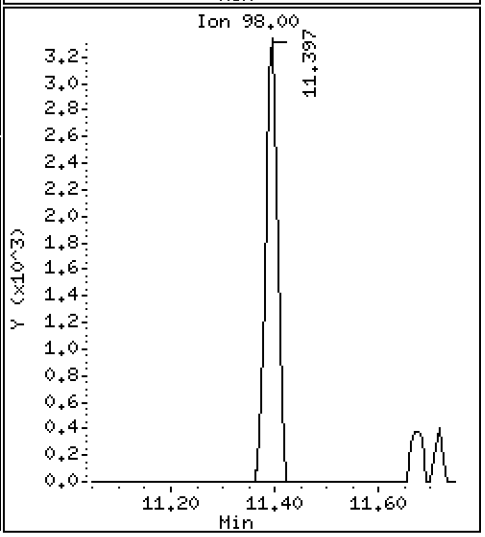


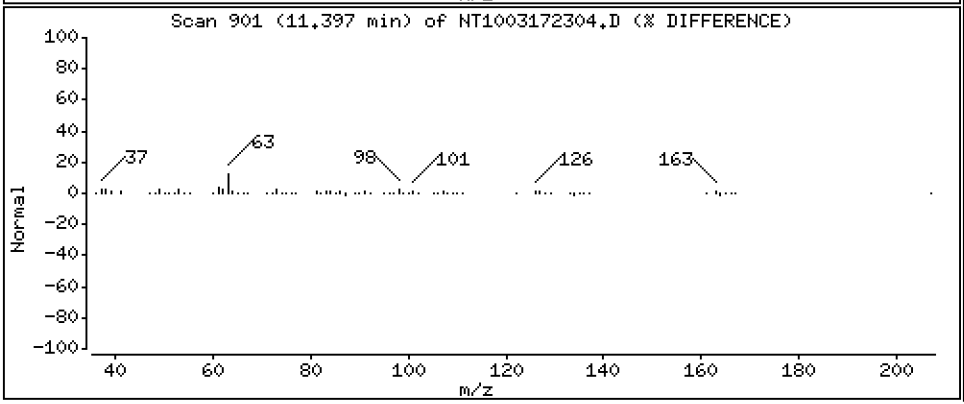












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

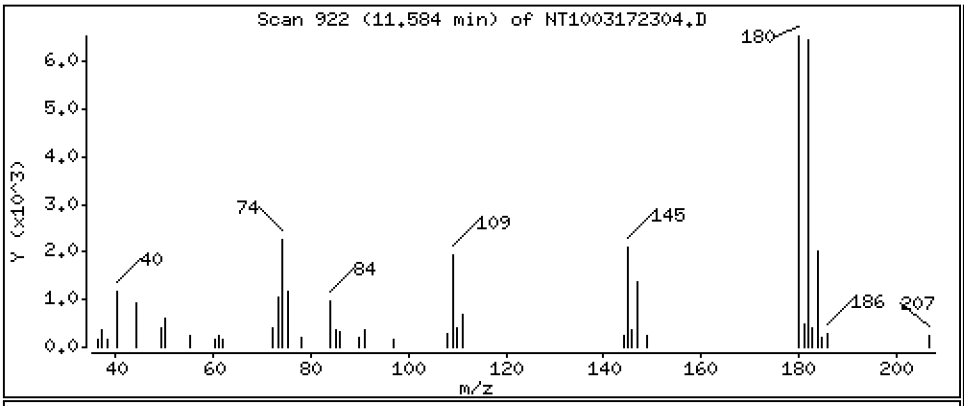
Operator: VTS

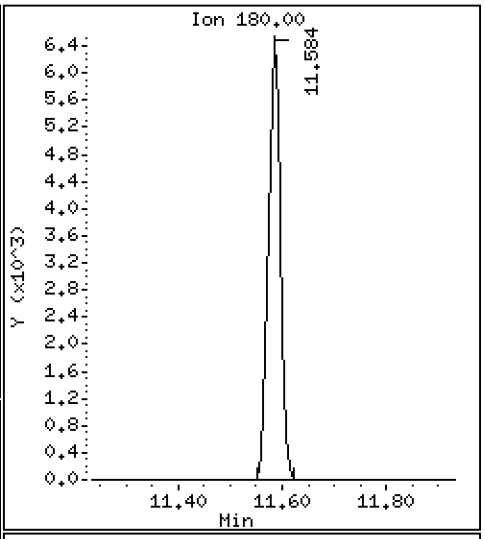
Column phase: ZB-5msi

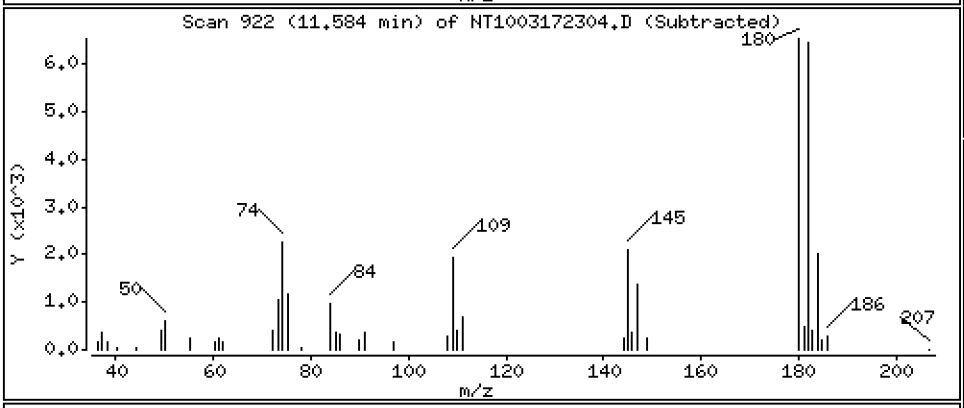
Column diameter: 0.25

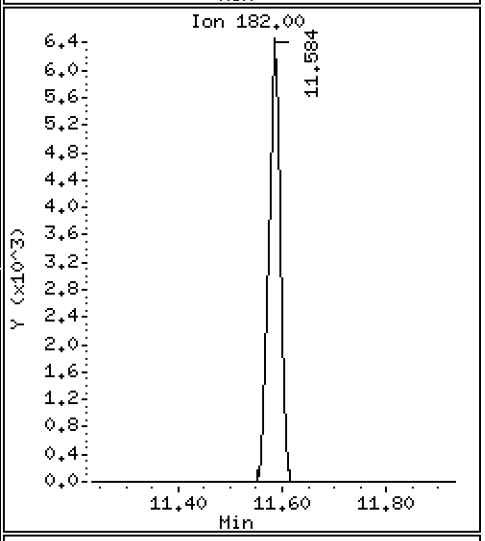
26 1,2,4-Trichlorobenzene

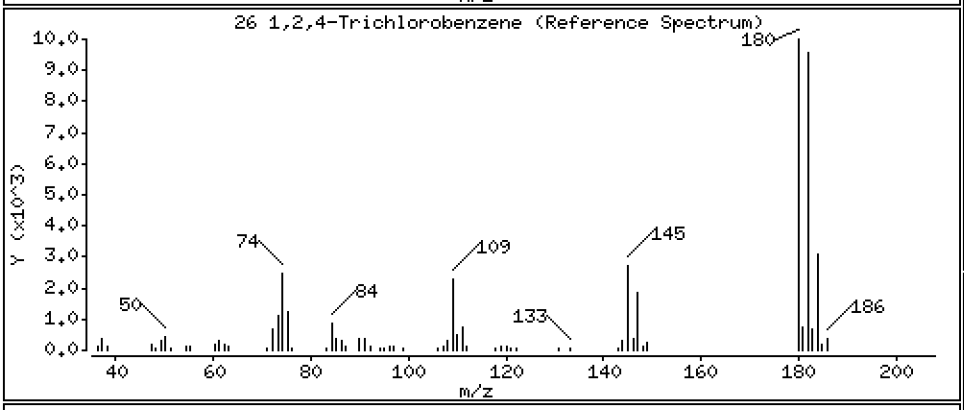
Concentration: 0.2206 ug/mL

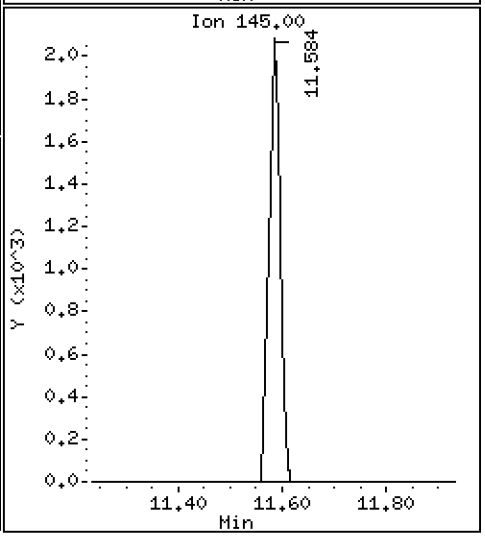


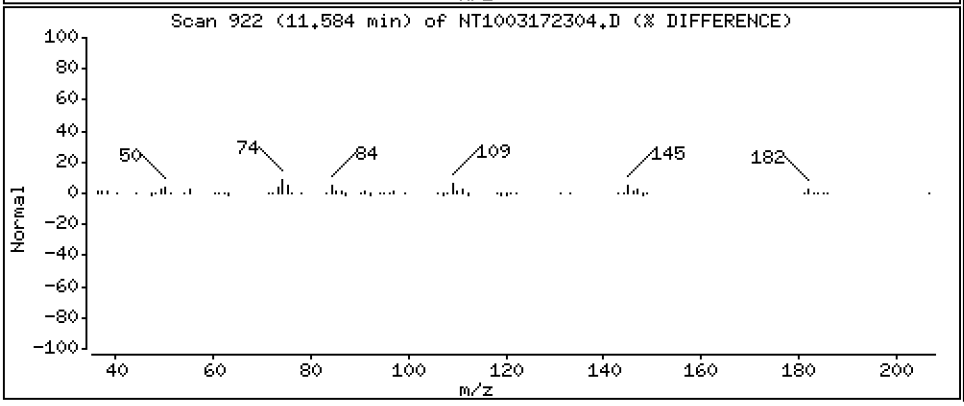












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

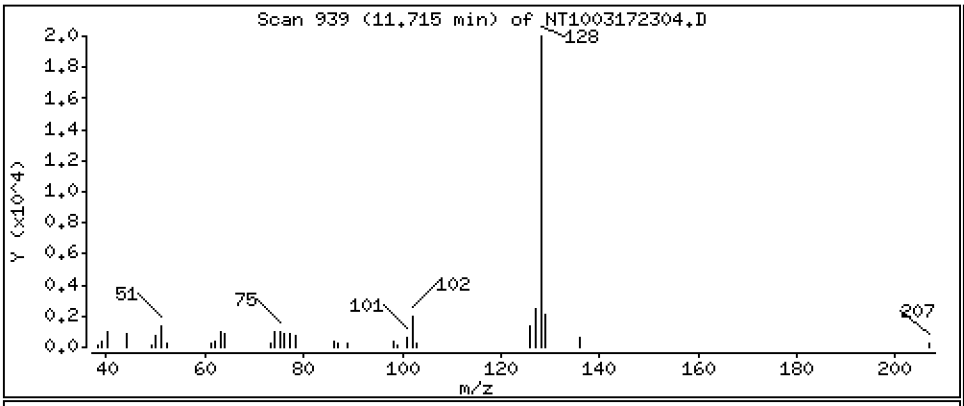
Operator: VTS

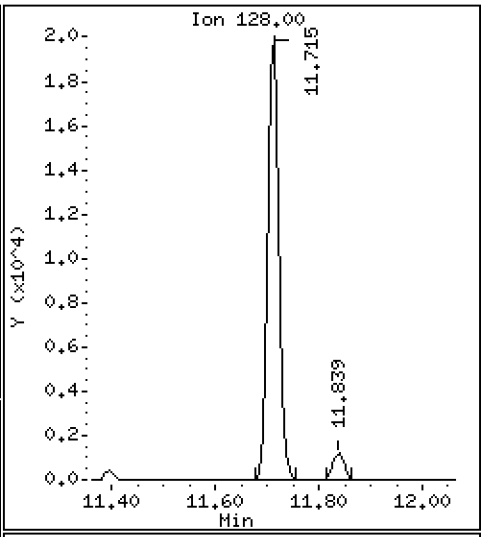
Column phase: ZB-5msi

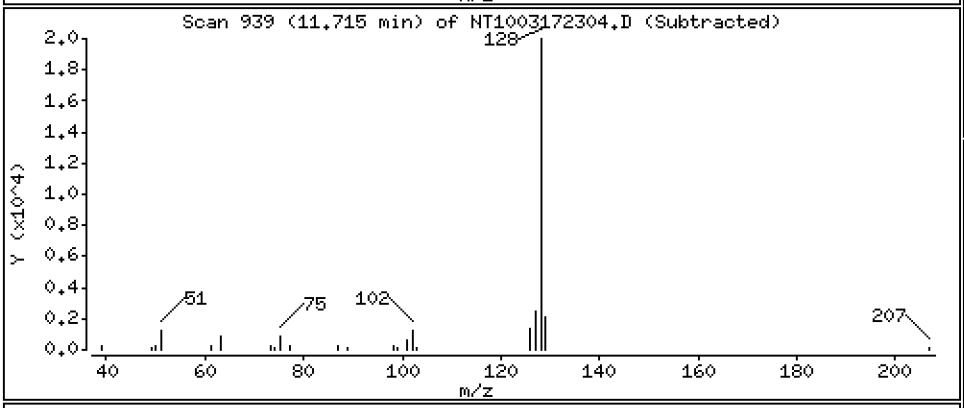
Column diameter: 0.25

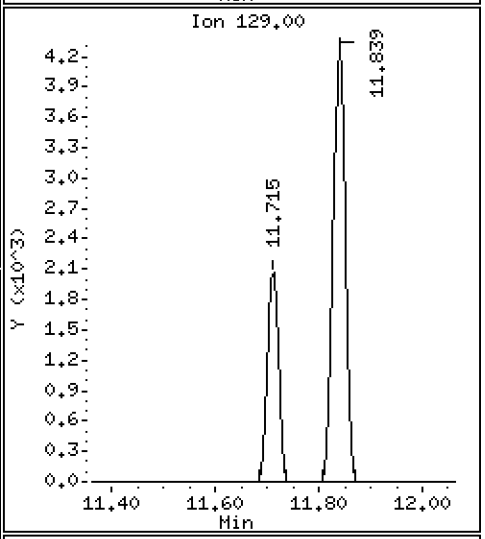
28 Naphthalene

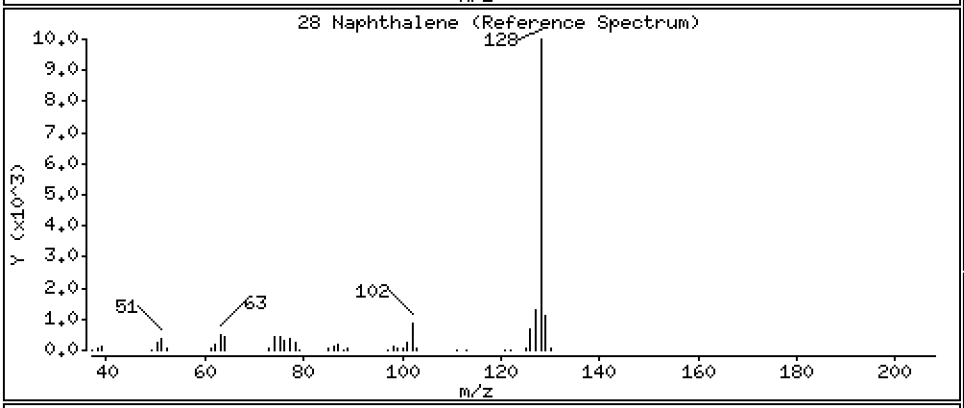
Concentration: 0.2173 ug/mL

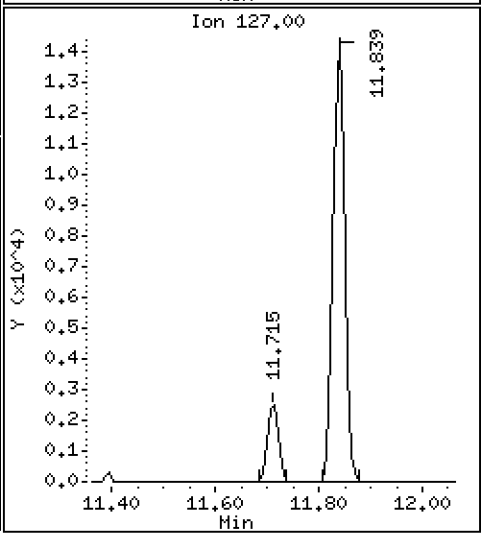


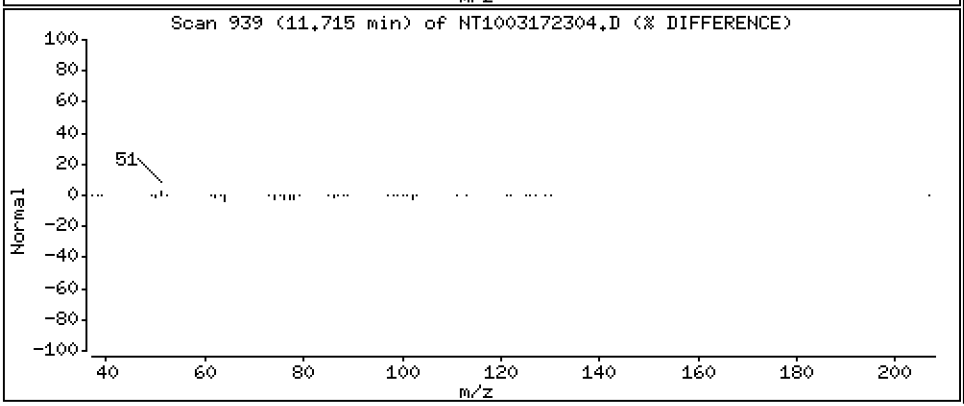












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

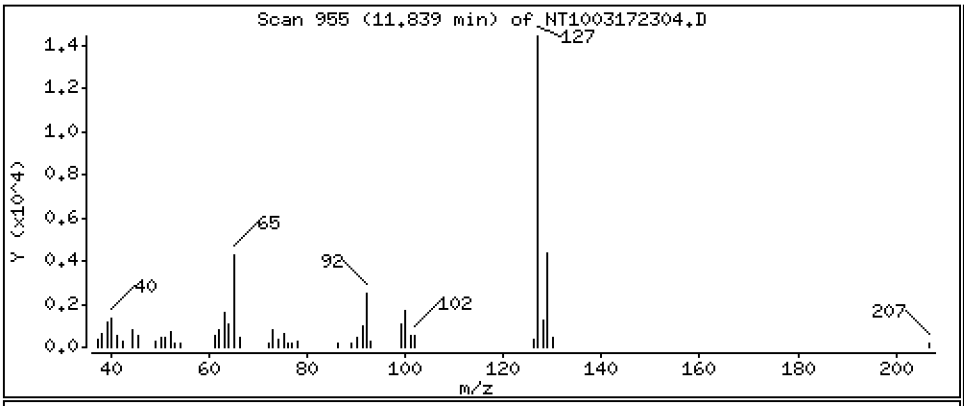
Operator: VTS

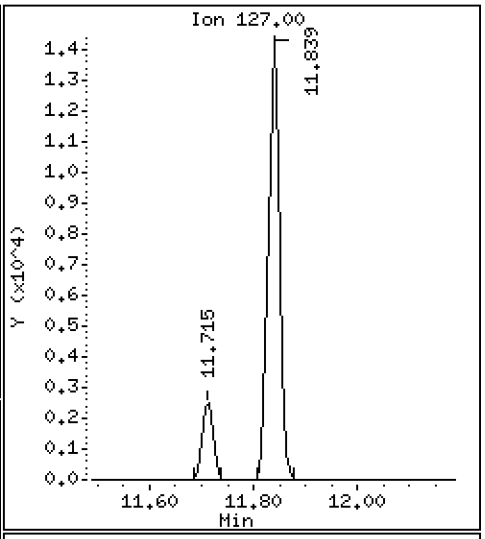
Column phase: ZB-5msi

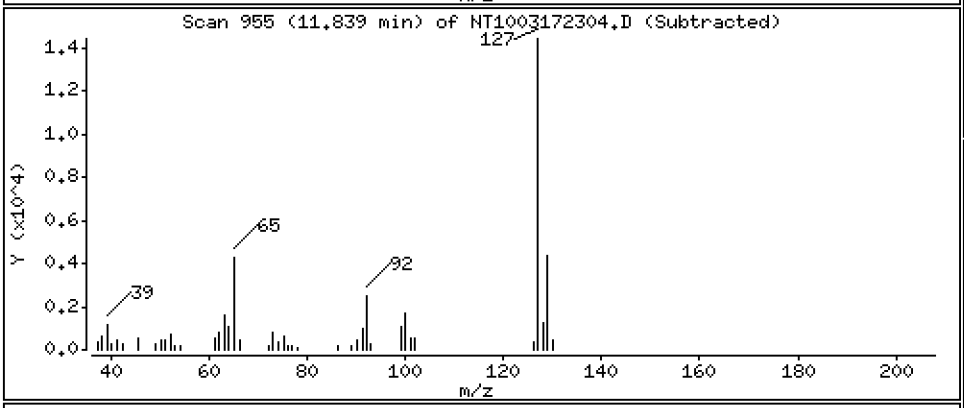
Column diameter: 0.25

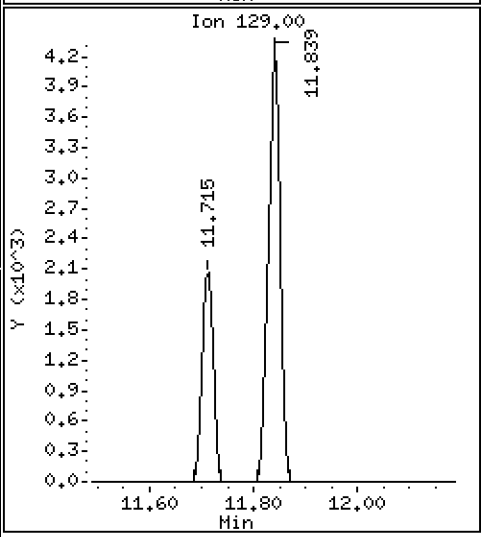
29 4-Chloroaniline

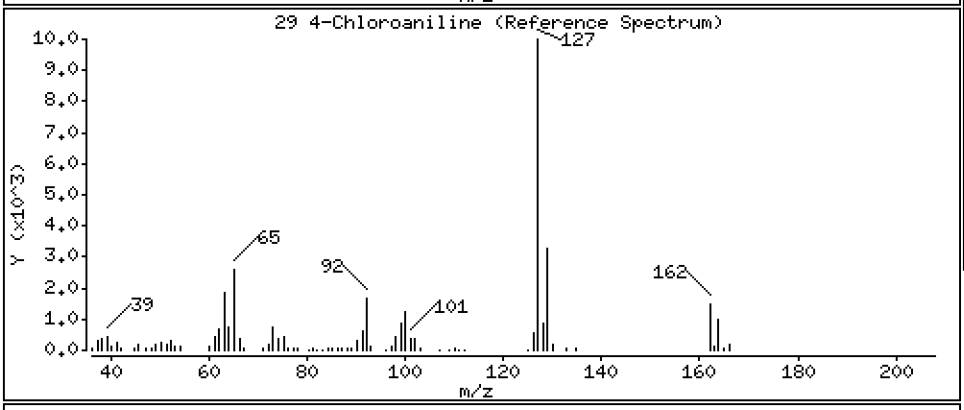
Concentration: 0.3753 ug/mL

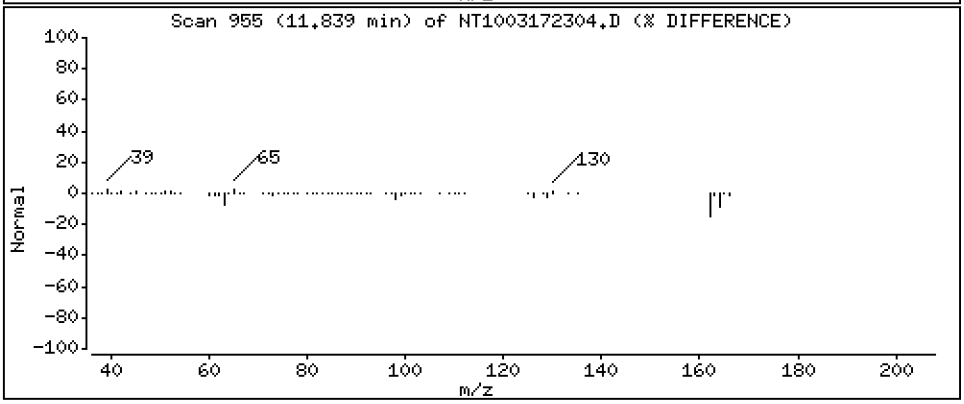












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

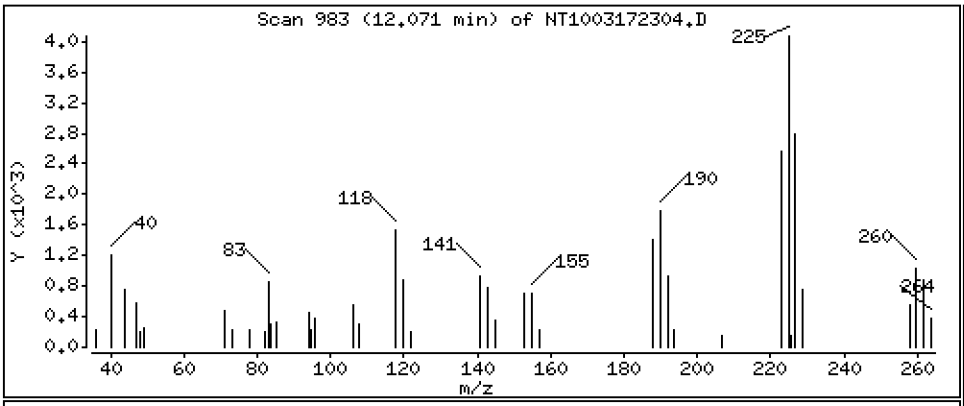
Operator: VTS

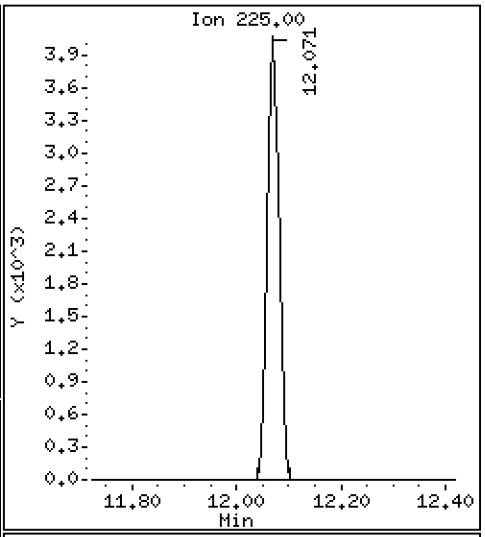
Column phase: ZB-5msi

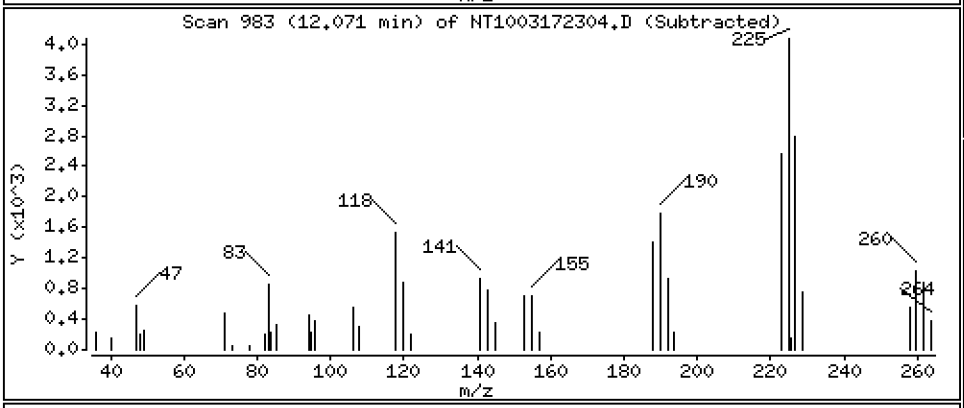
Column diameter: 0.25

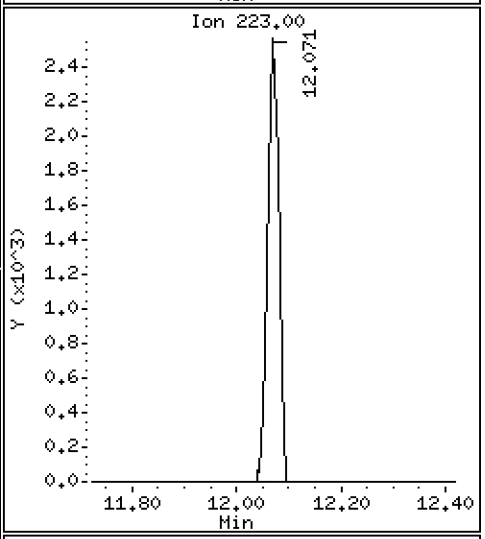
30 Hexachlorobutadiene

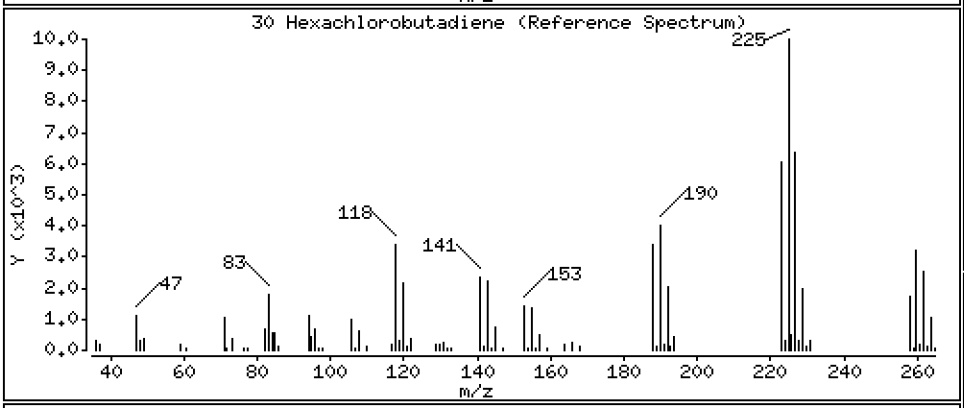
Concentration: 0.2234 ug/mL

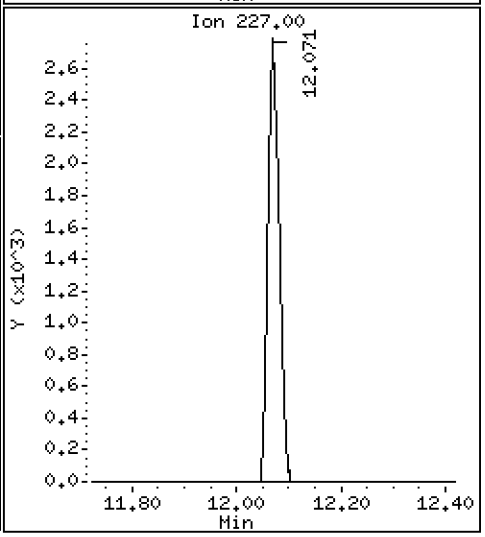


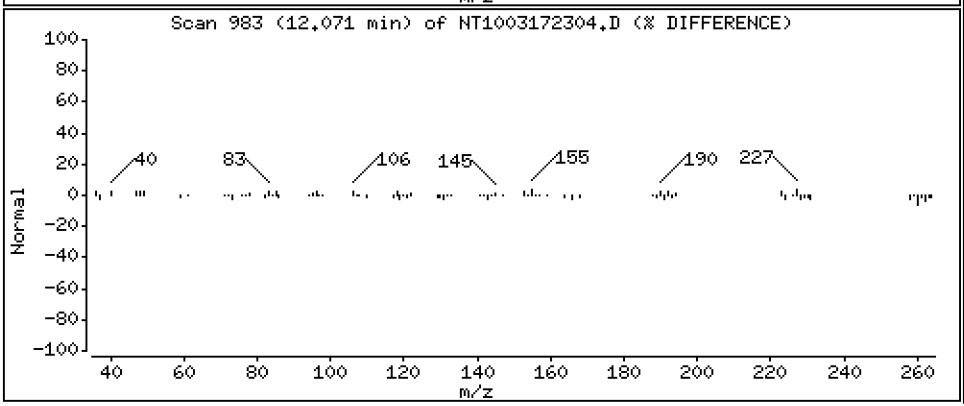












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

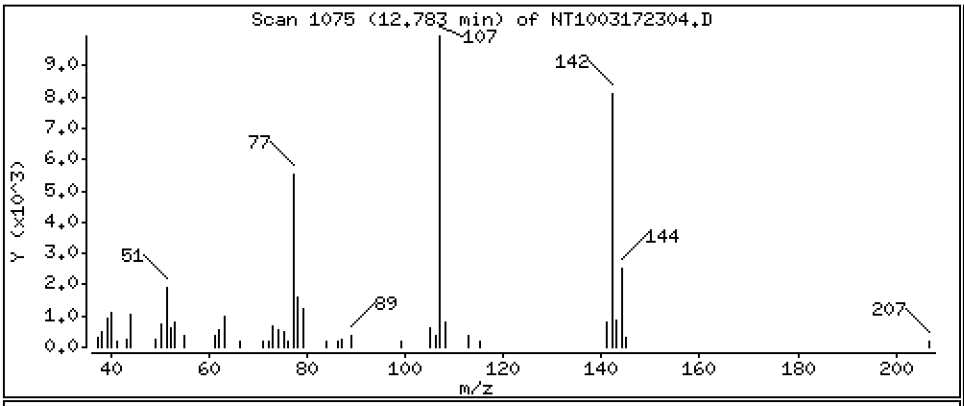
Operator: VTS

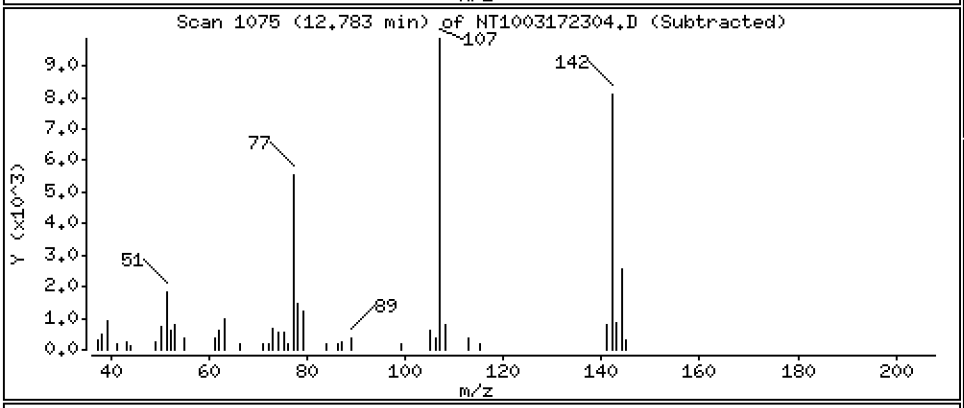
Column phase: ZB-5msi

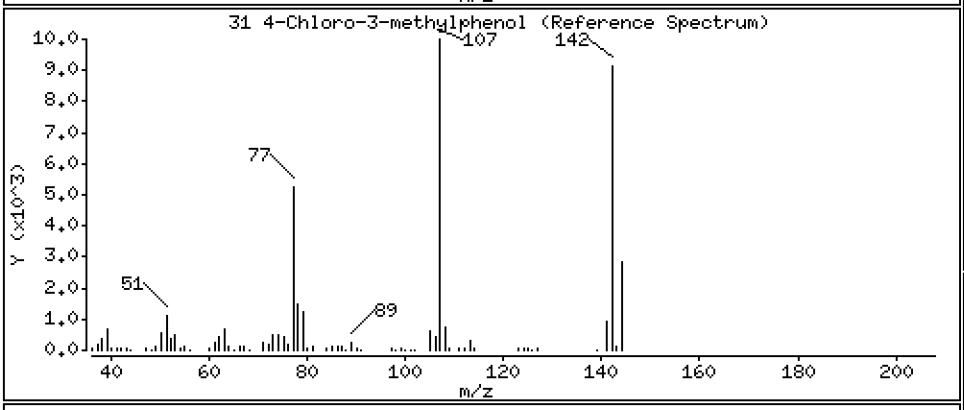
Column diameter: 0.25

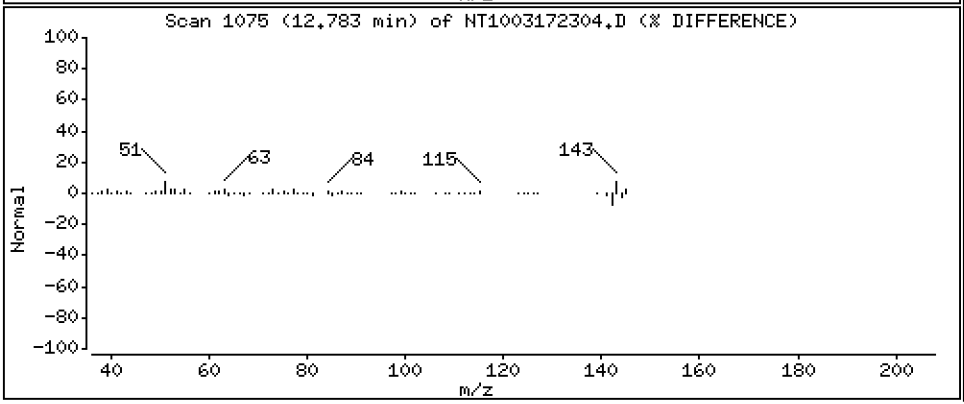
31 4-Chloro-3-methylphenol

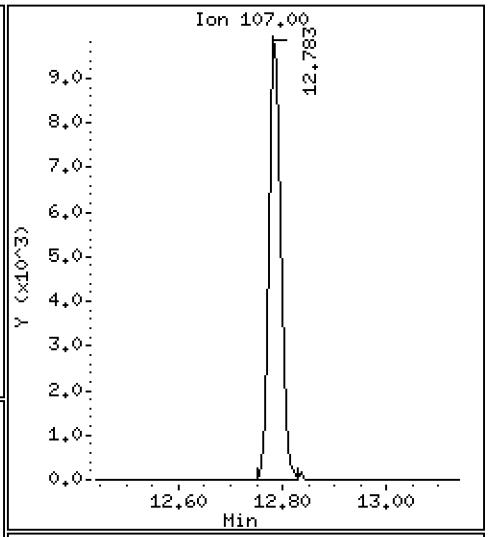
Concentration: 0.3517 ug/mL

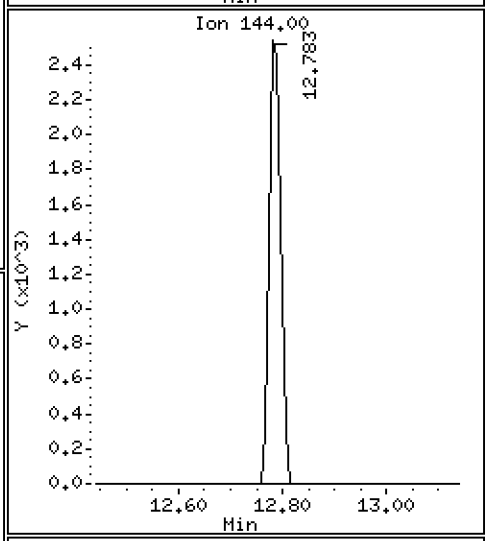


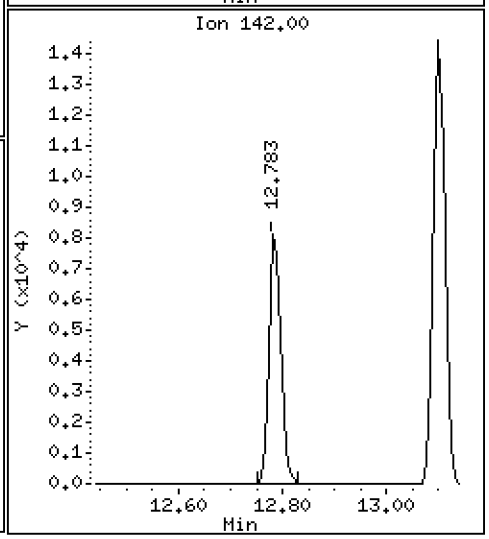












Date : 17-MAR-2023 20:19

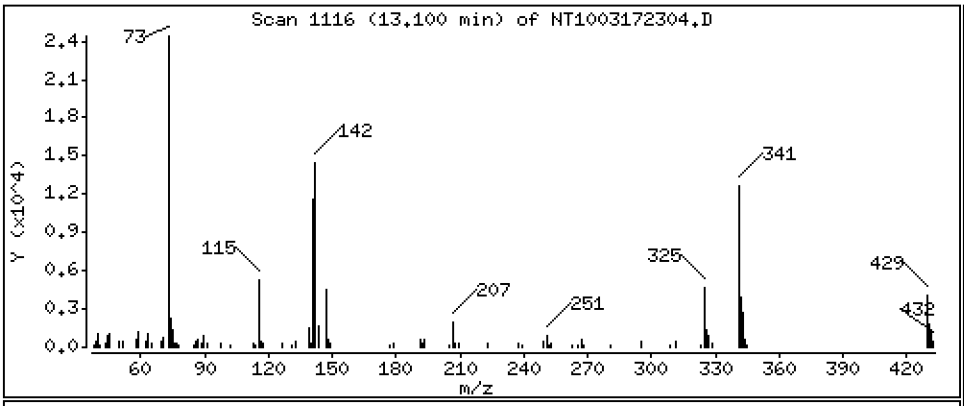
Client ID: Instrument: nt10.i

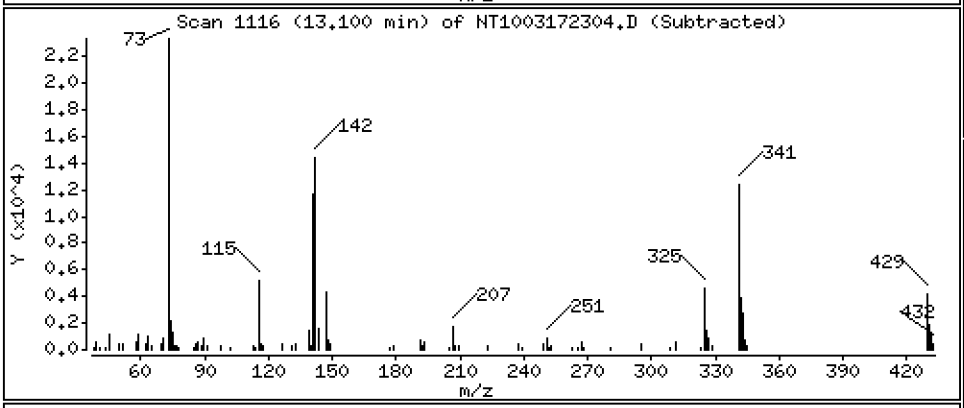
Sample Info: SLC0473-LCV1

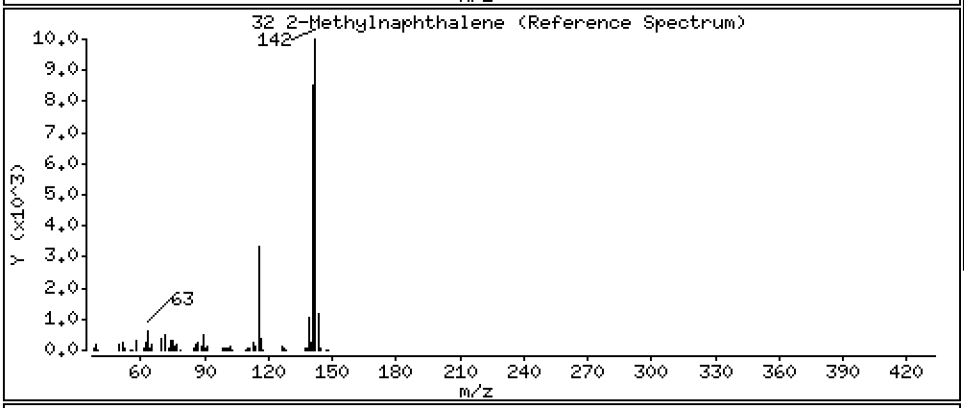
Operator: VTS

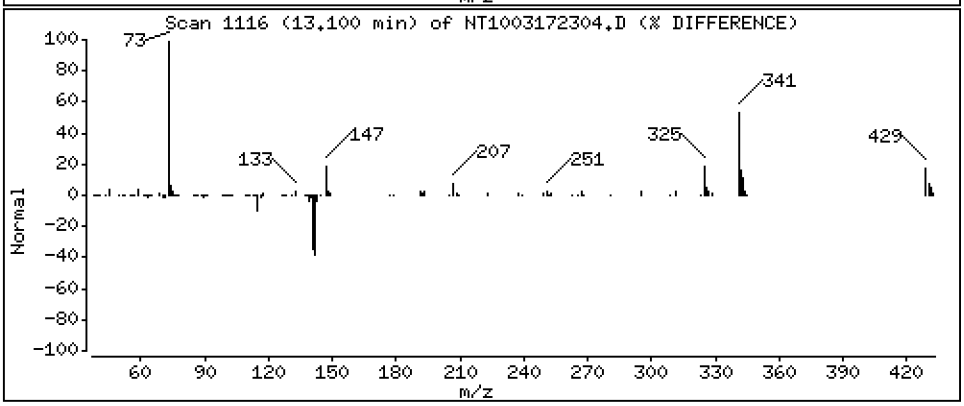
Column phase: ZB-5msi Column diameter: 0.25

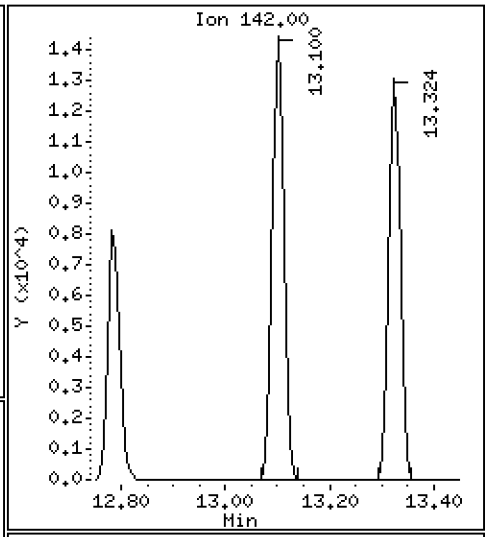
32 2-Methylnaphthalene Concentration: 0.2052 ug/mL

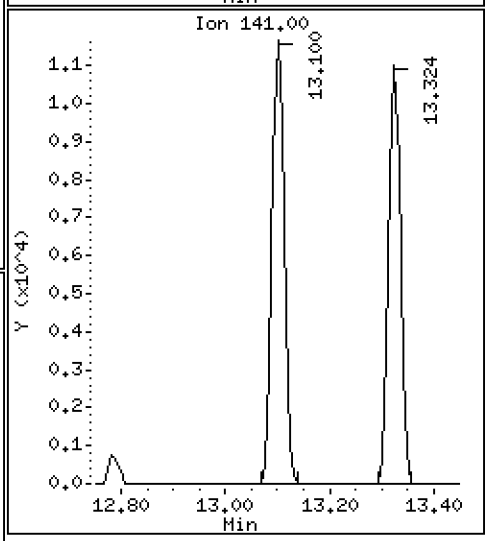












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

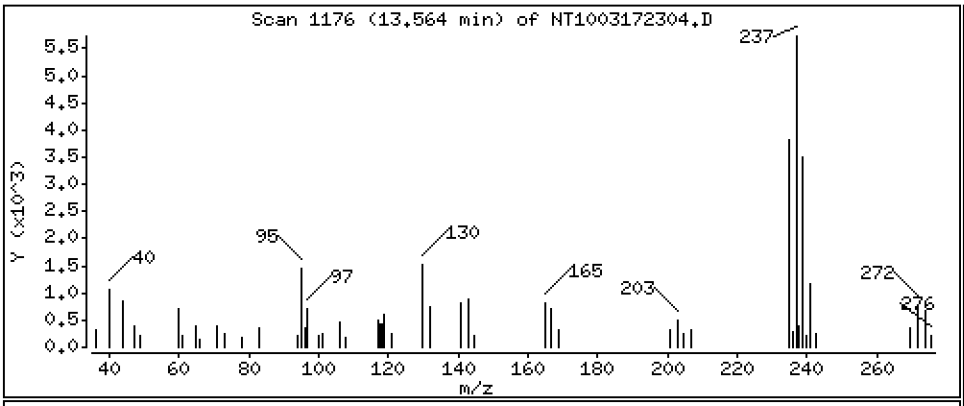
Operator: VTS

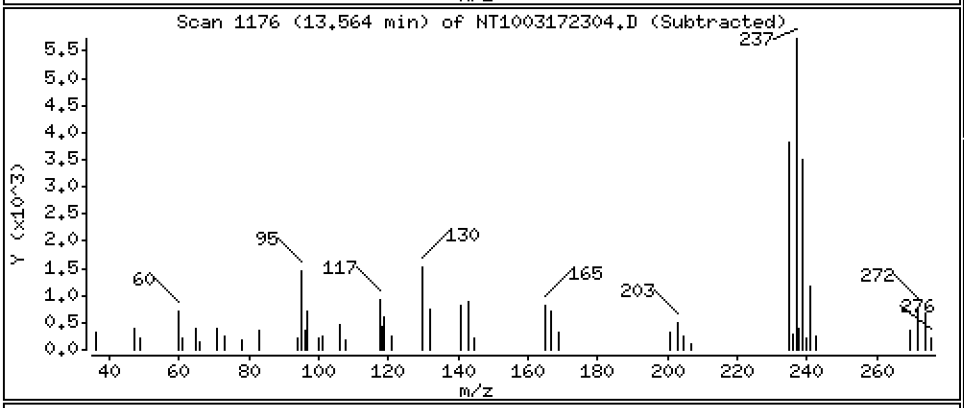
Column phase: ZB-5msi

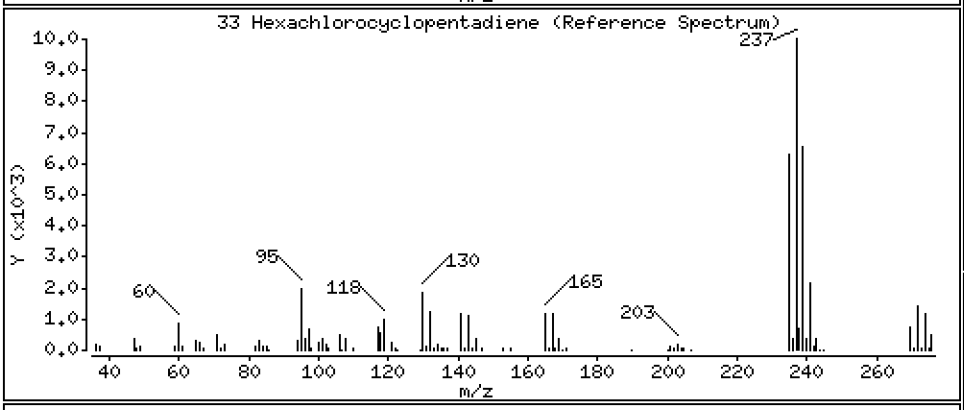
Column diameter: 0.25

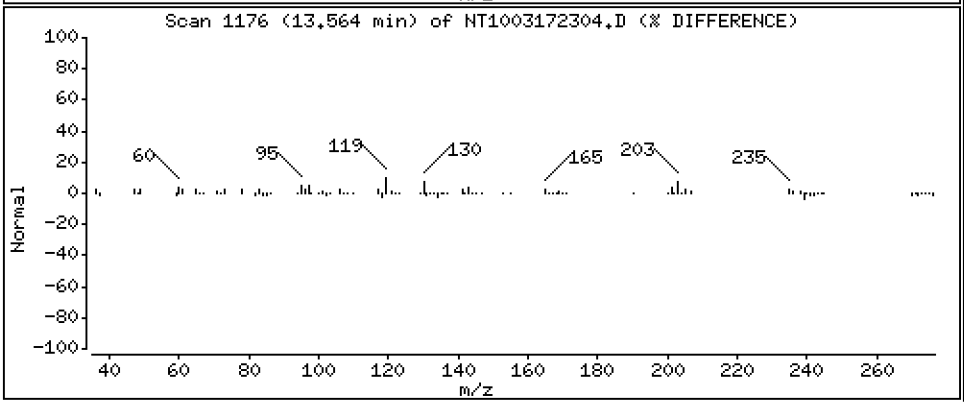
33 Hexachlorocyclopentadiene

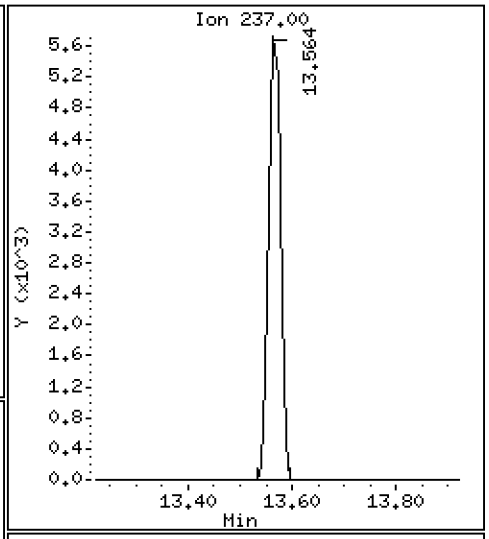
Concentration: 0.3264 ug/mL

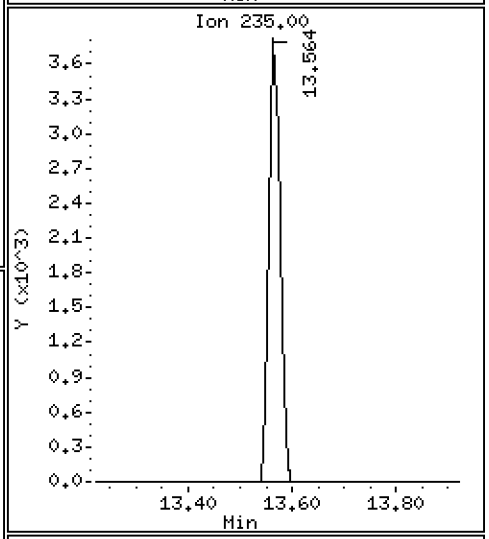


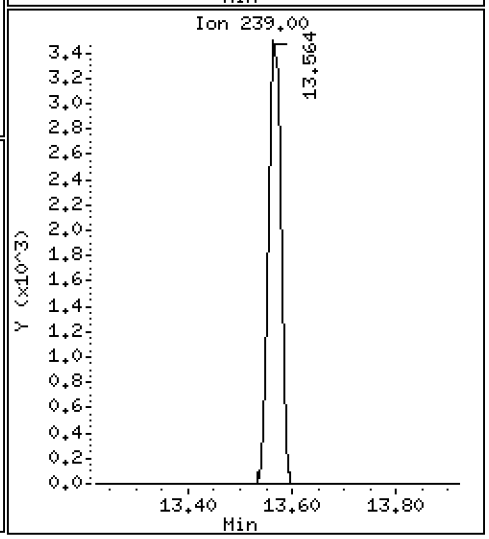












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

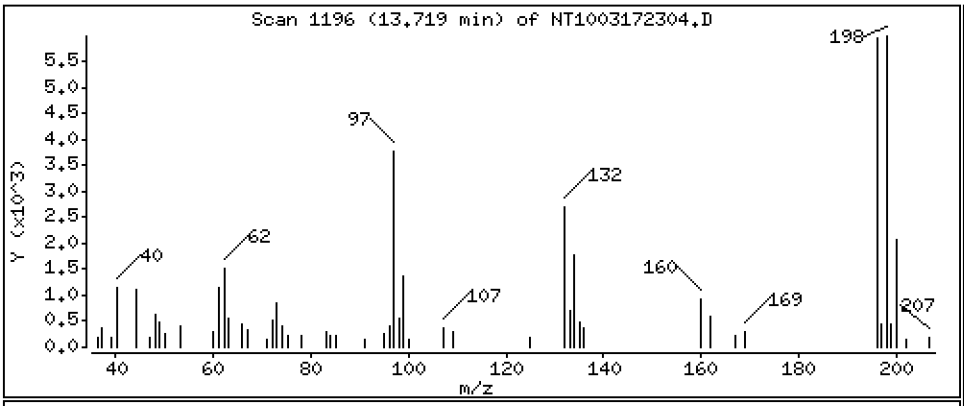
Operator: VTS

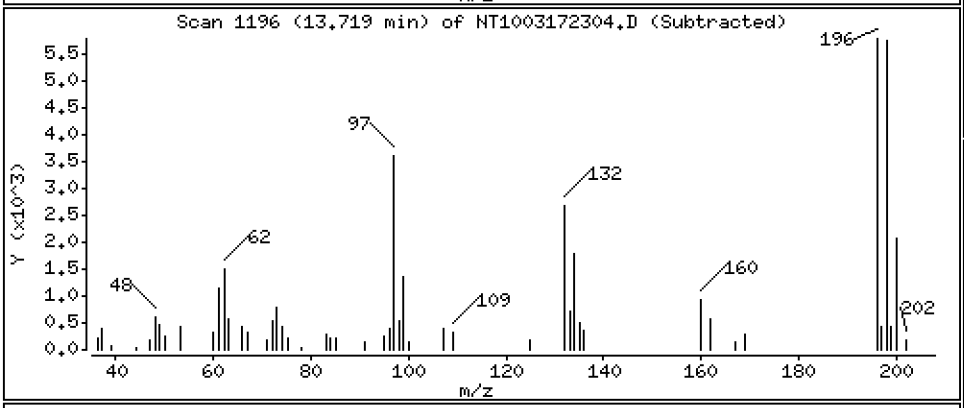
Column phase: ZB-5msi

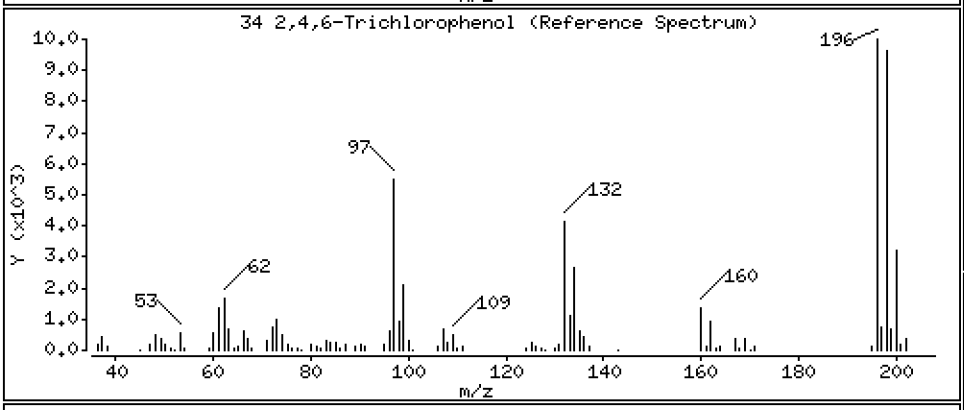
Column diameter: 0.25

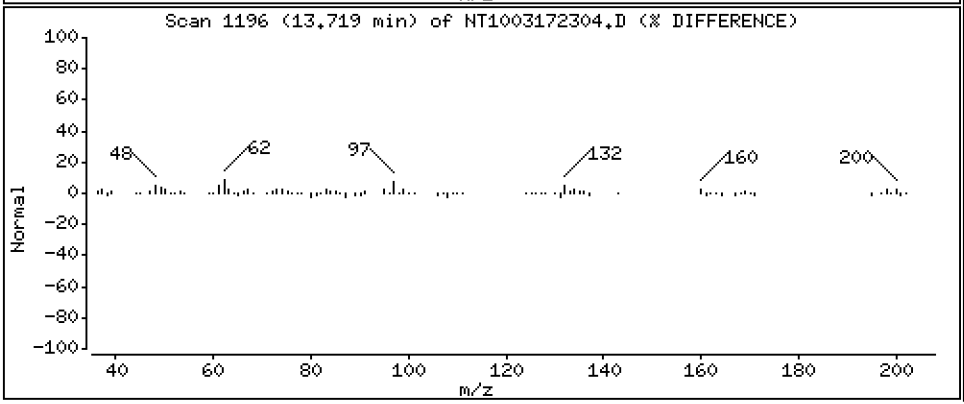
34 2,4,6-Trichlorophenol

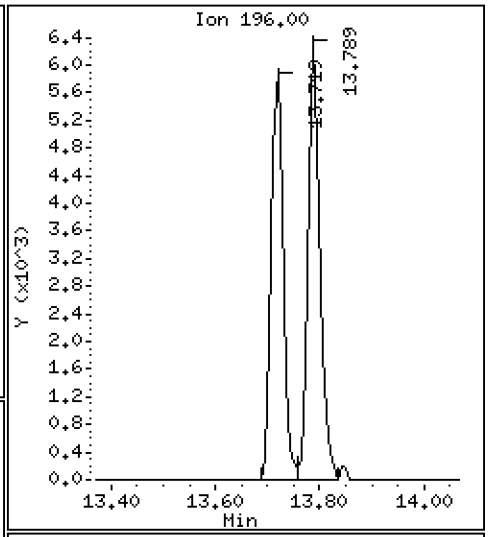
Concentration: 0.3159 ug/mL

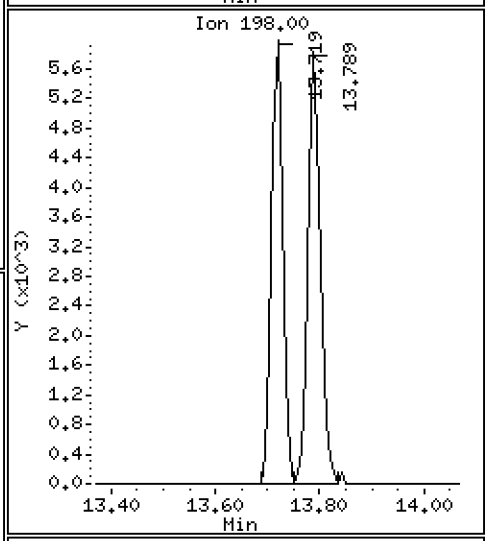


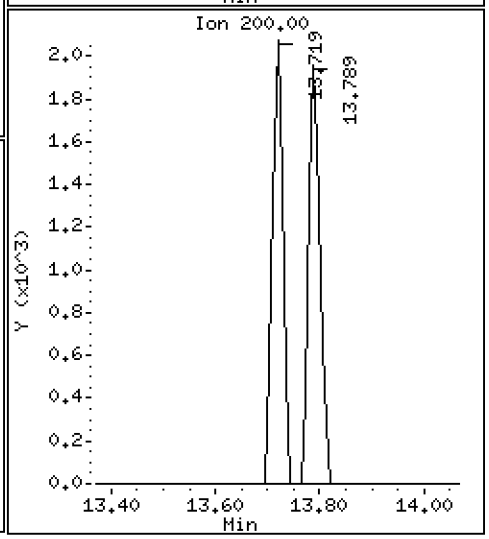












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

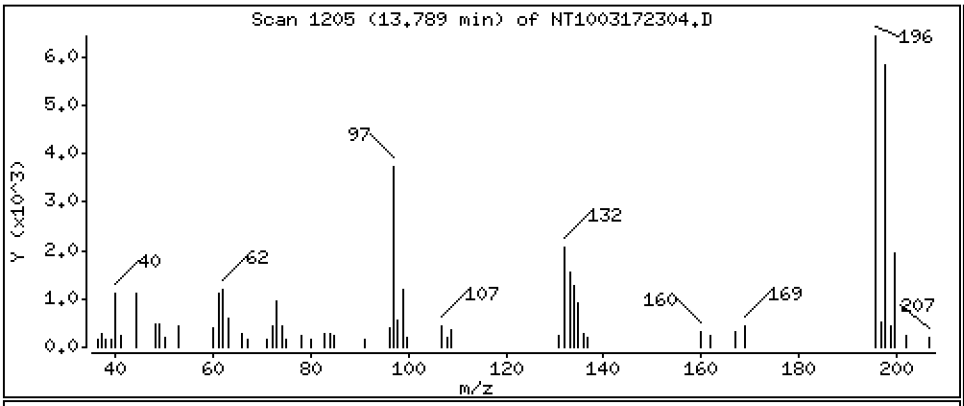
Operator: VTS

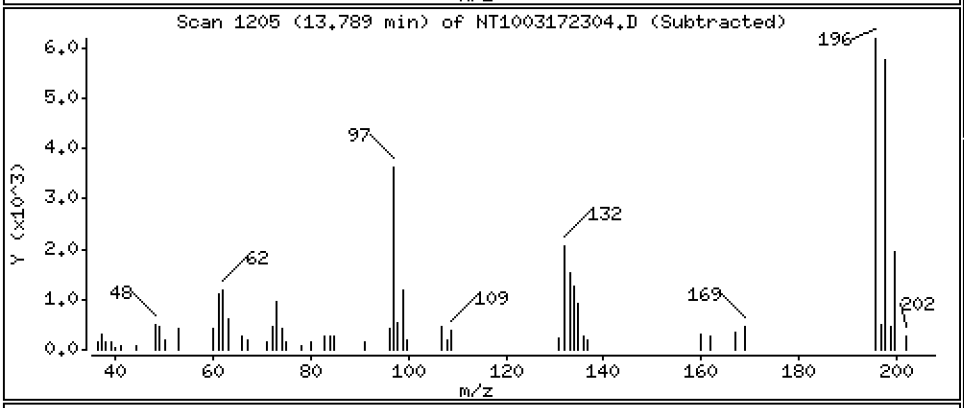
Column phase: ZB-5msi

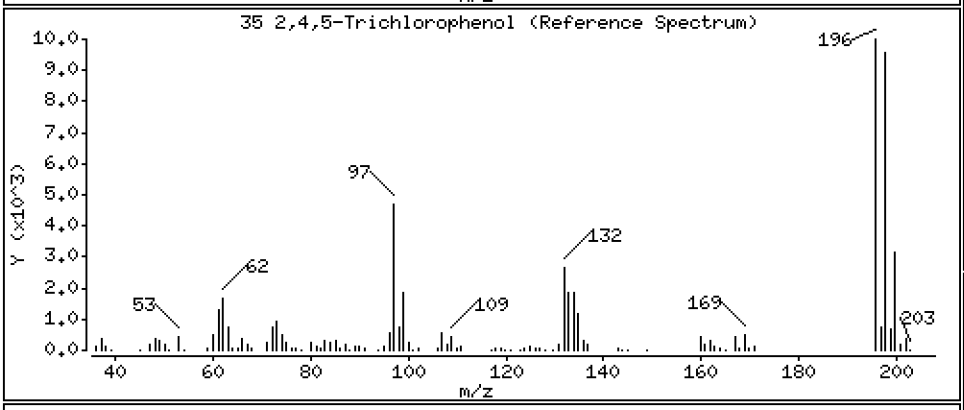
Column diameter: 0.25

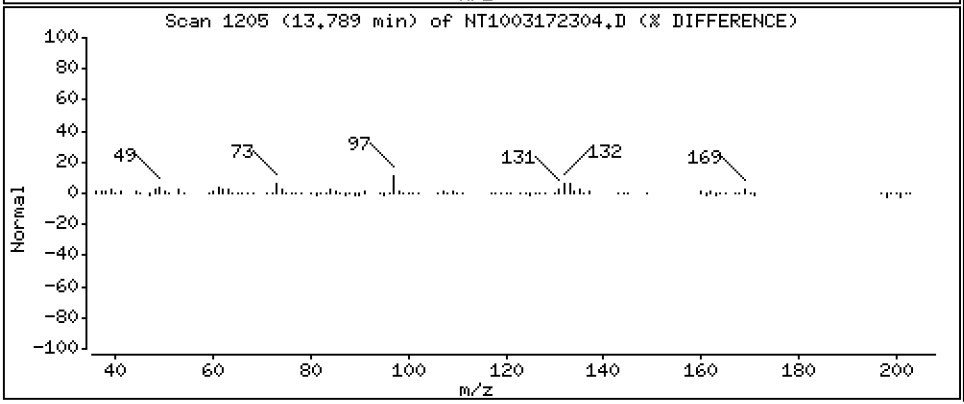
35 2,4,5-Trichlorophenol

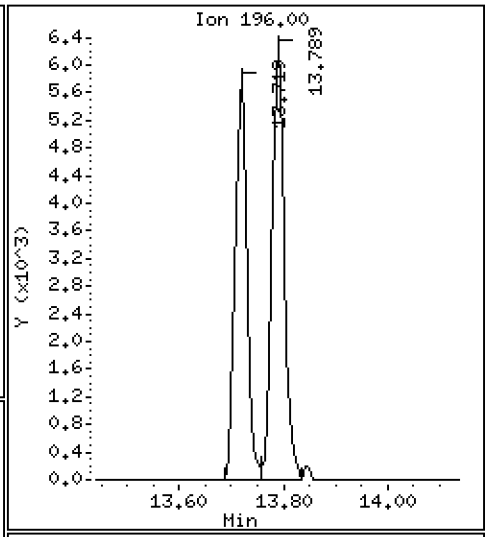
Concentration: 0.3107 ug/mL

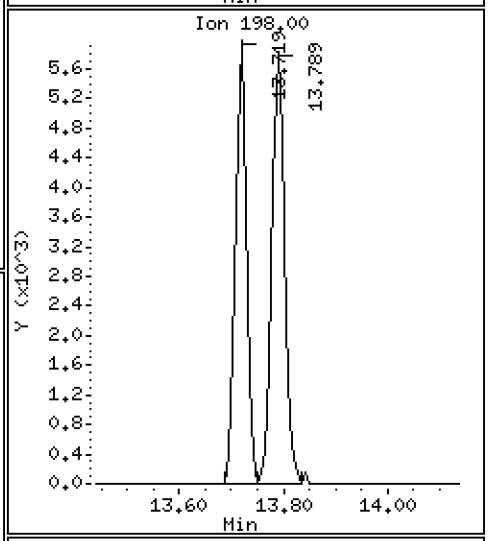


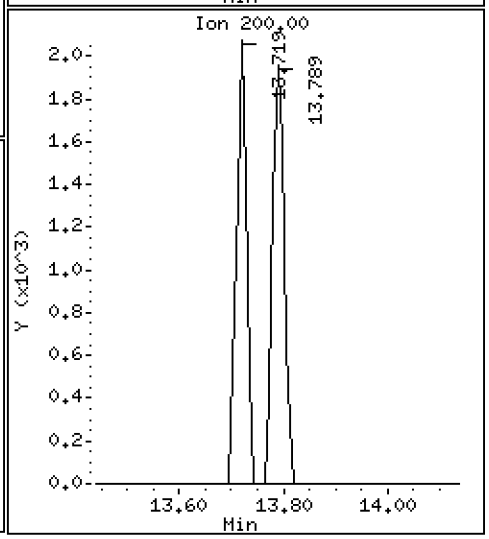












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

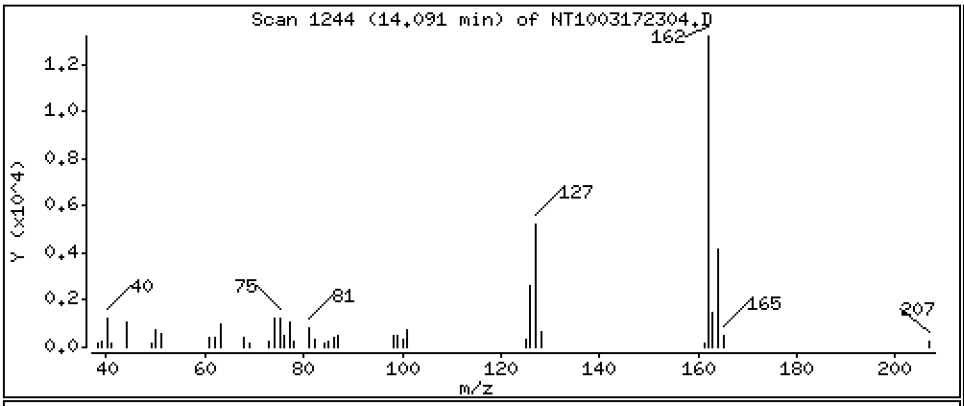
Operator: VTS

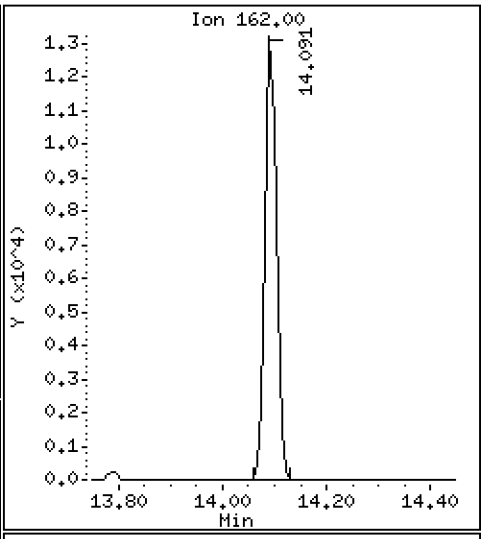
Column phase: ZB-5msi

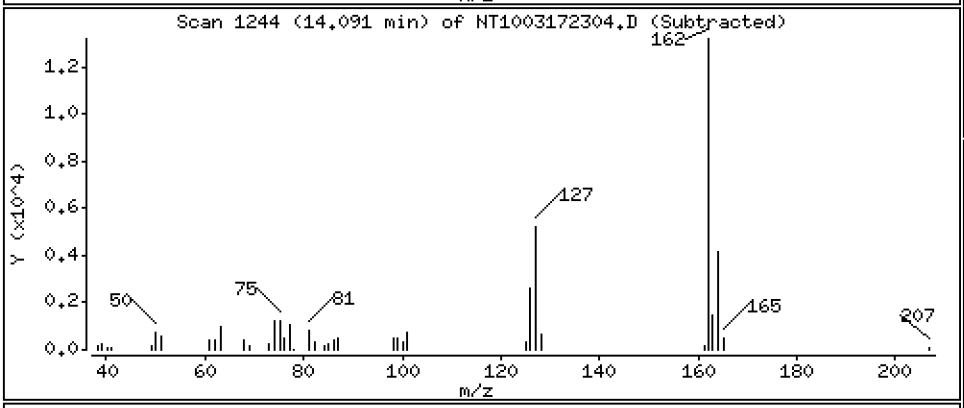
Column diameter: 0.25

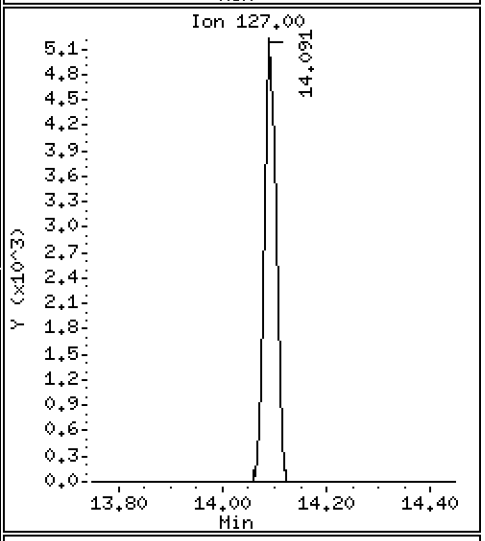
37 2-Chloronaphthalene

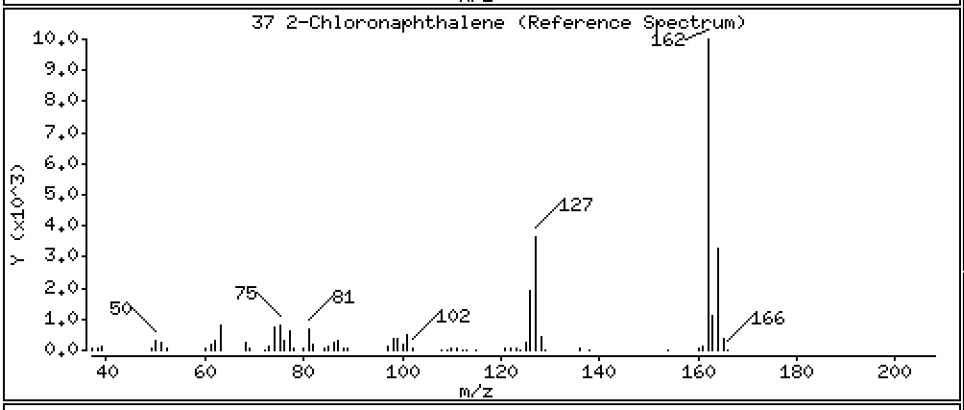
Concentration: 0.2065 ug/mL

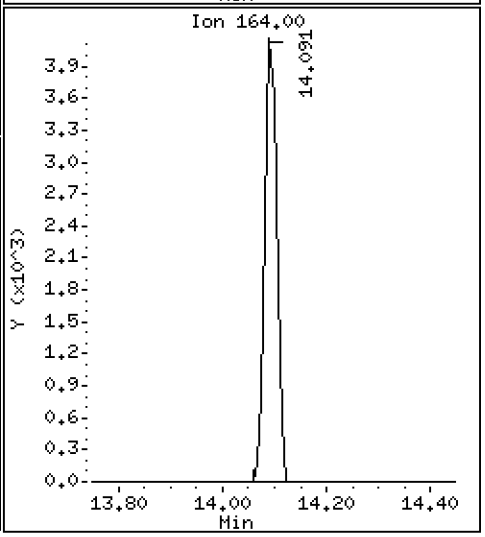


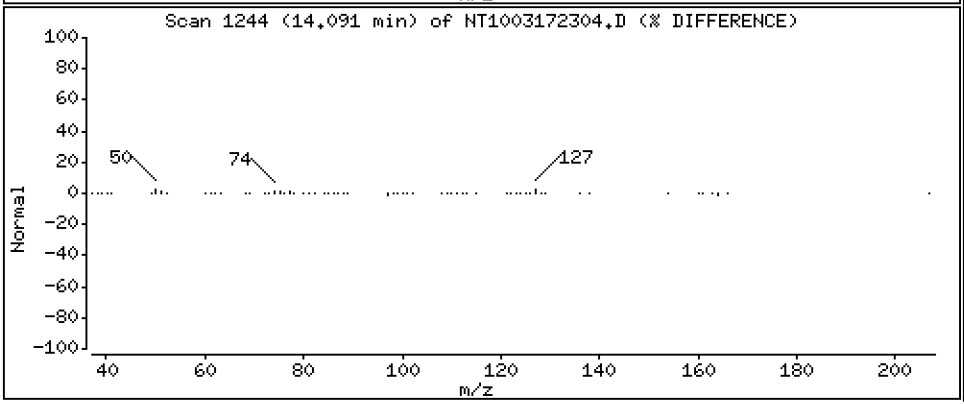












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

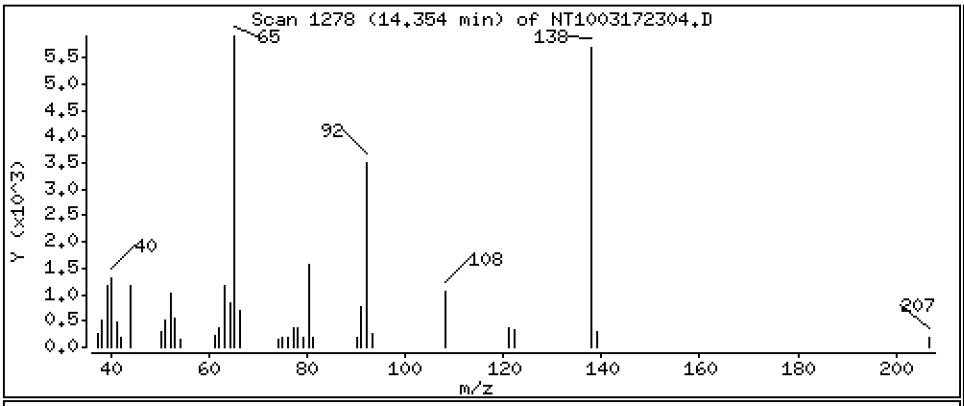
Operator: VTS

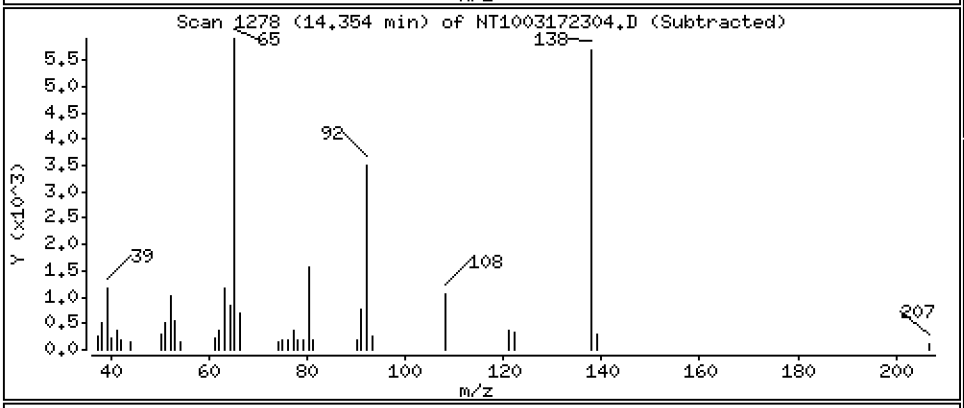
Column phase: ZB-5msi

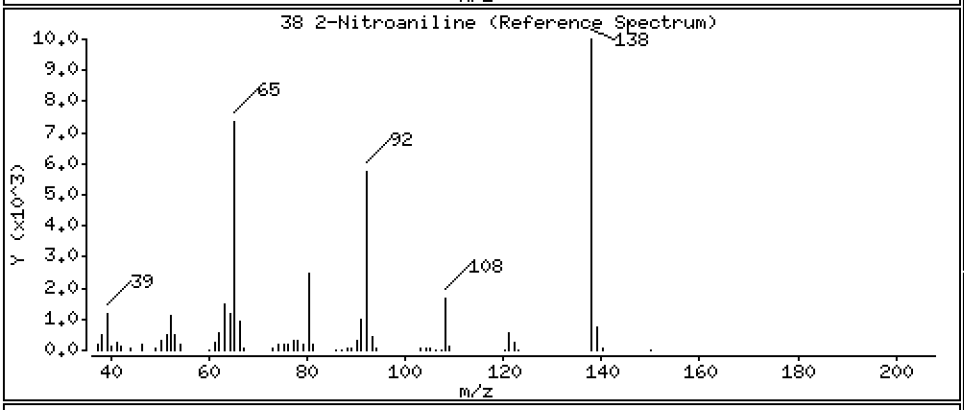
Column diameter: 0.25

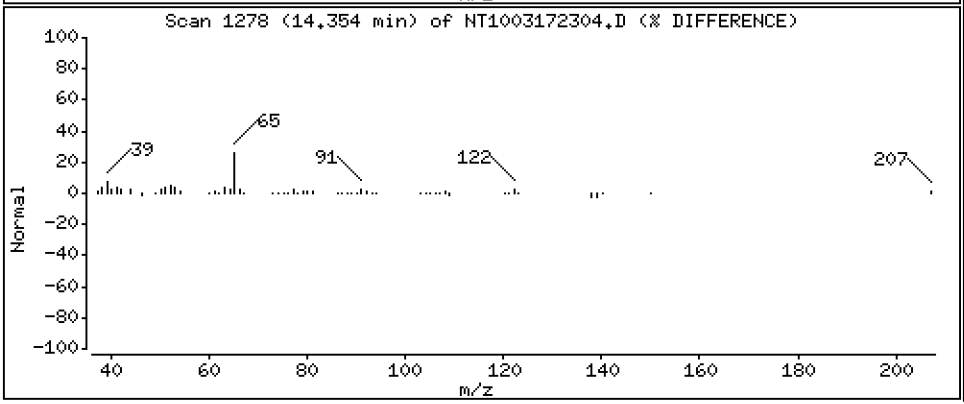
38 2-Nitroaniline

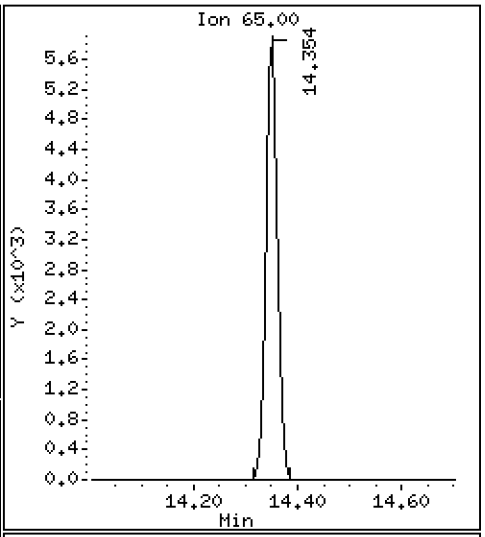
Concentration: 0.3281 ug/mL

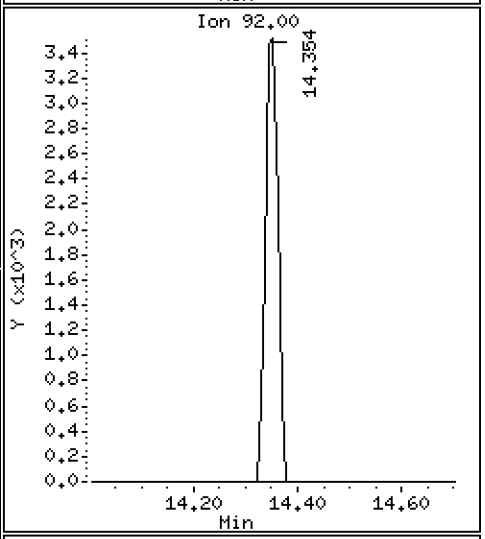


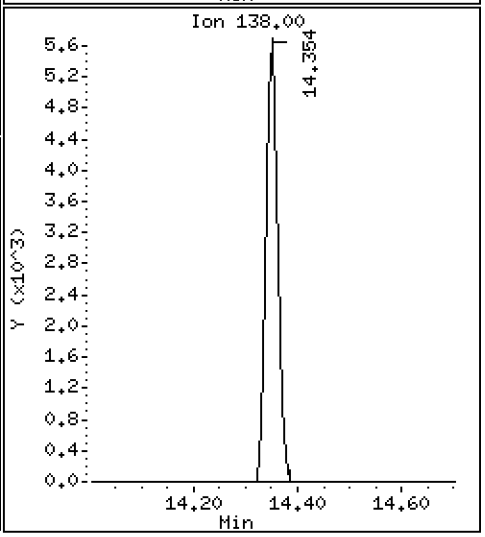












Date : 17-MAR-2023 20:19

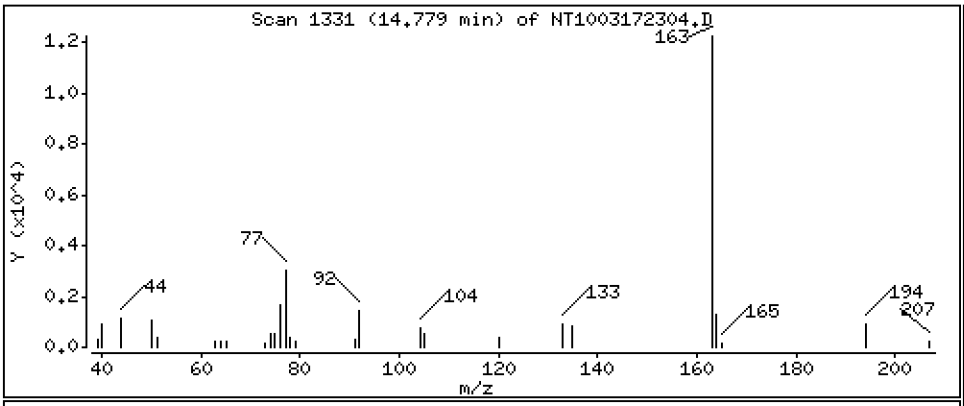
Client ID: Instrument: nt10.i

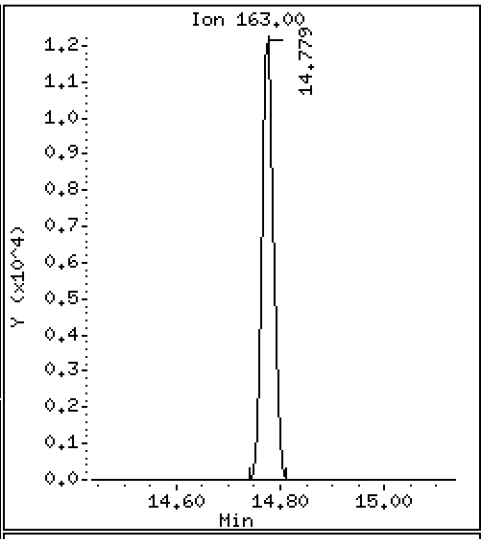
Sample Info: SLC0473-LCV1

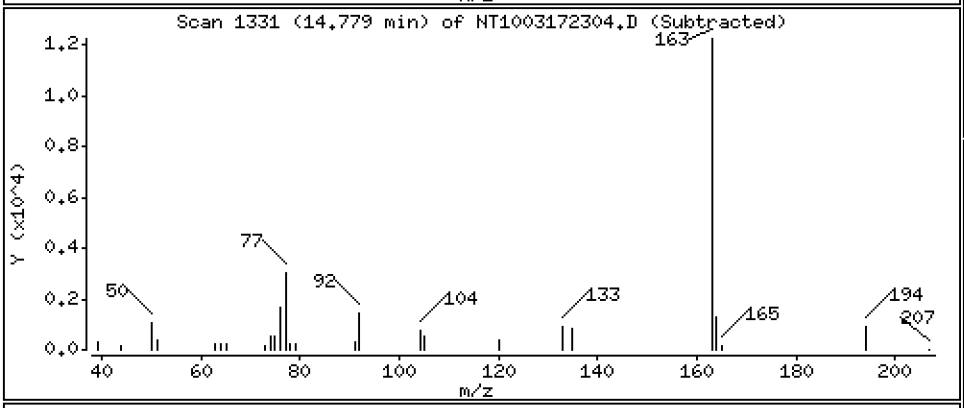
Operator: VTS

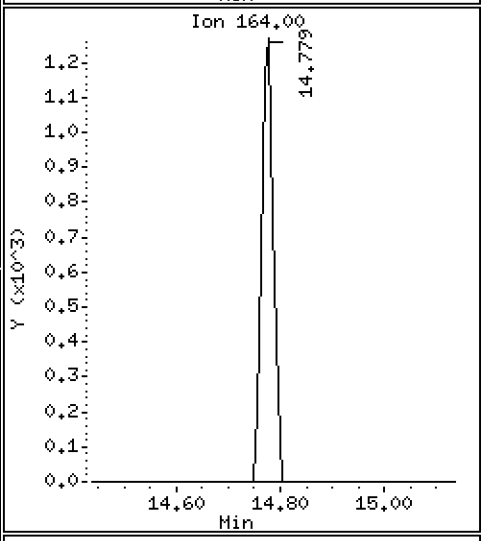
Column phase: ZB-5msi Column diameter: 0.25

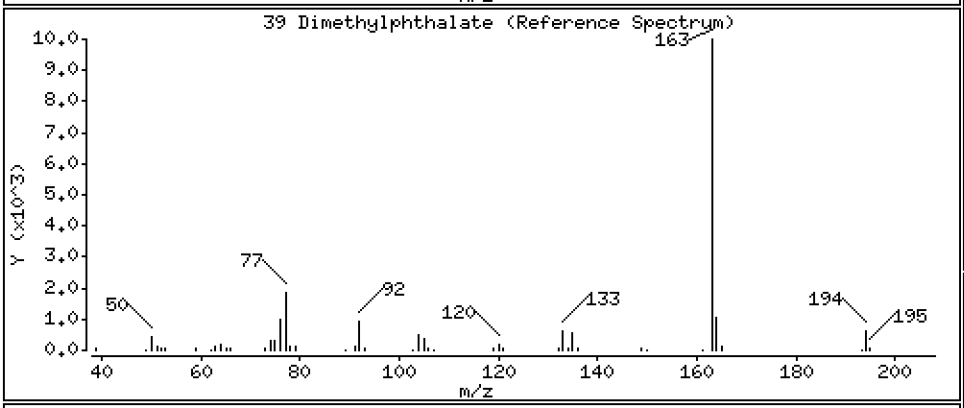
39 Dimethylphthalate Concentration: 0.2018 ug/mL

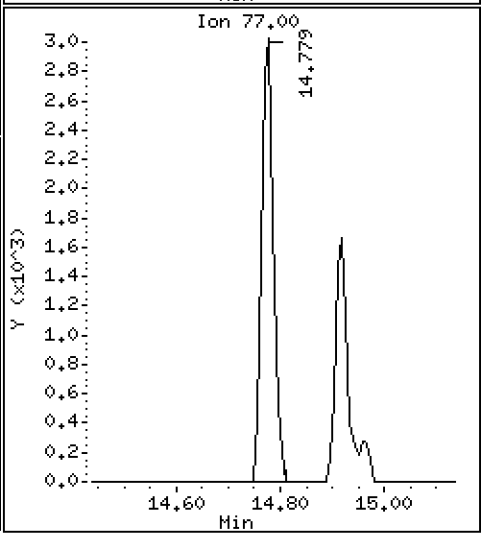


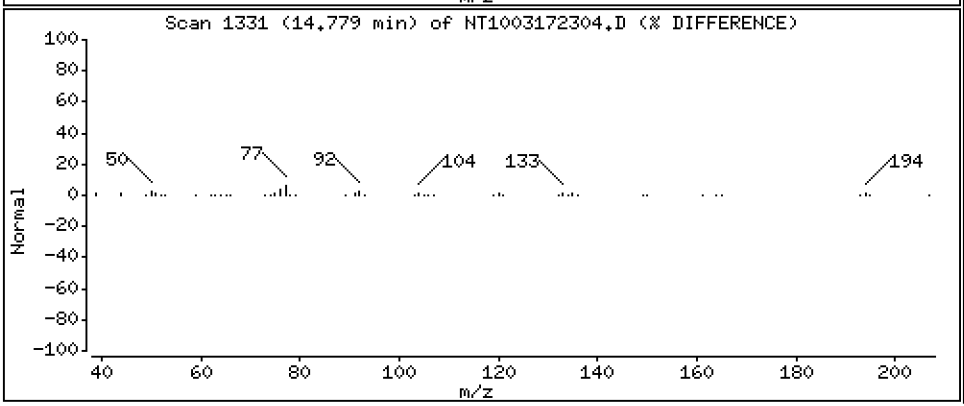












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

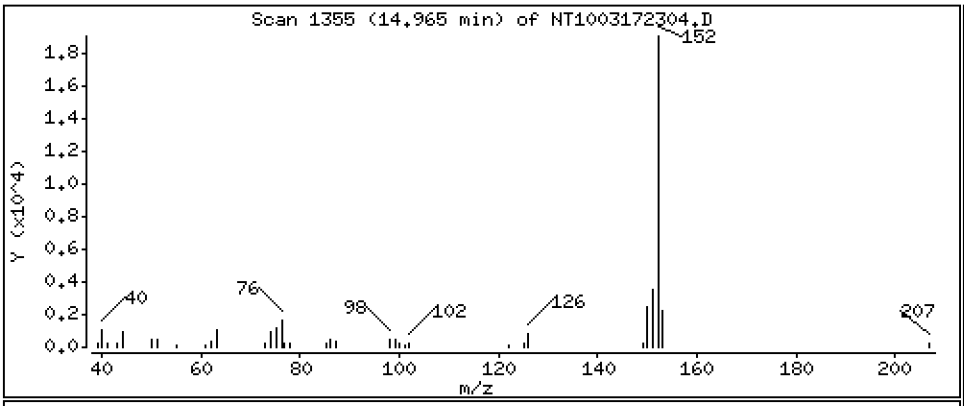
Operator: VTS

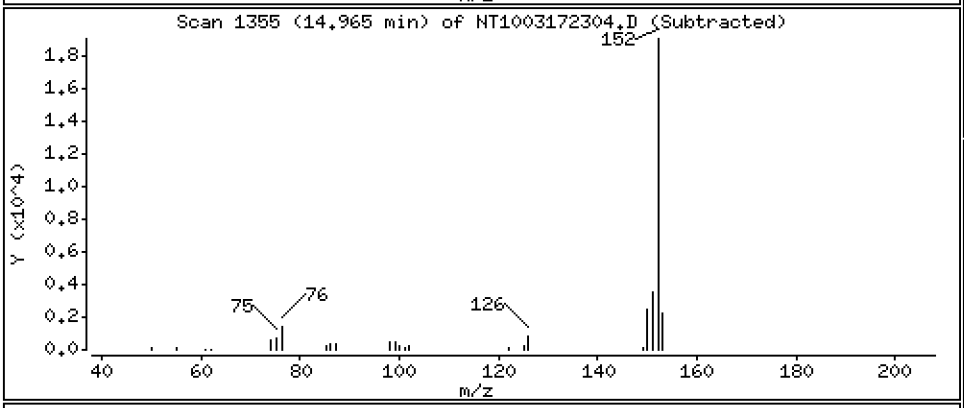
Column phase: ZB-5msi

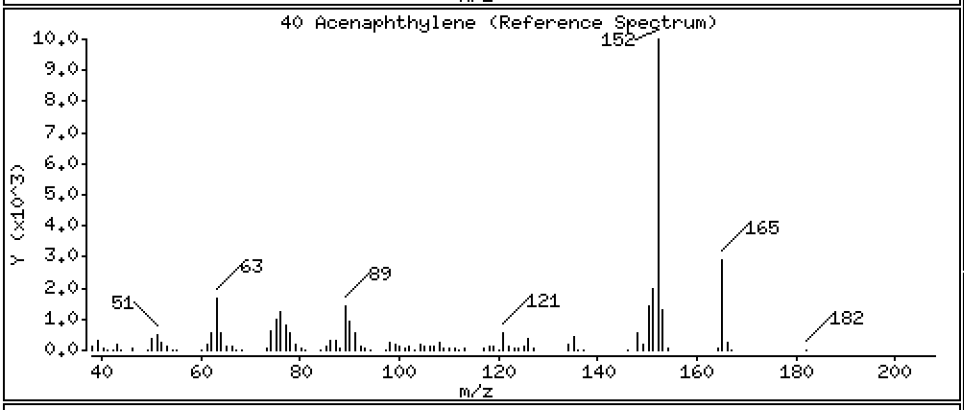
Column diameter: 0.25

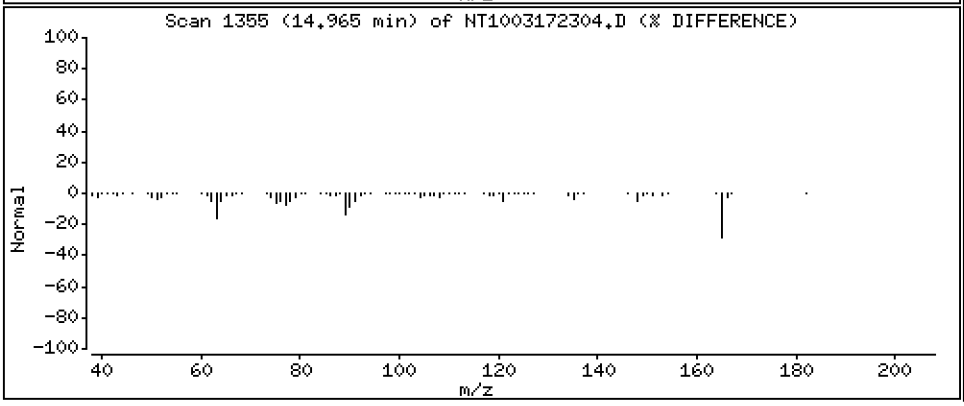
40 Acenaphthylene

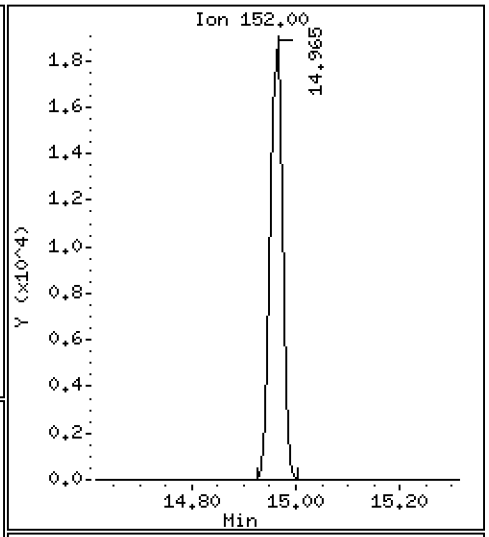
Concentration: 0.2049 ug/mL

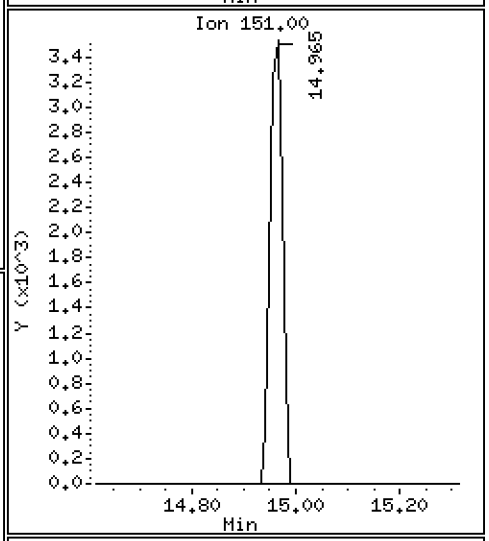


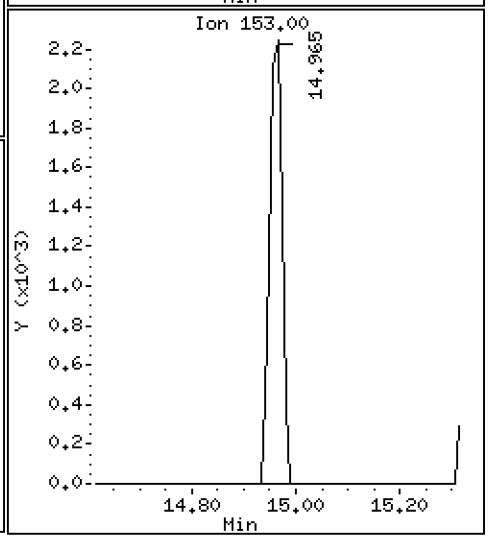












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

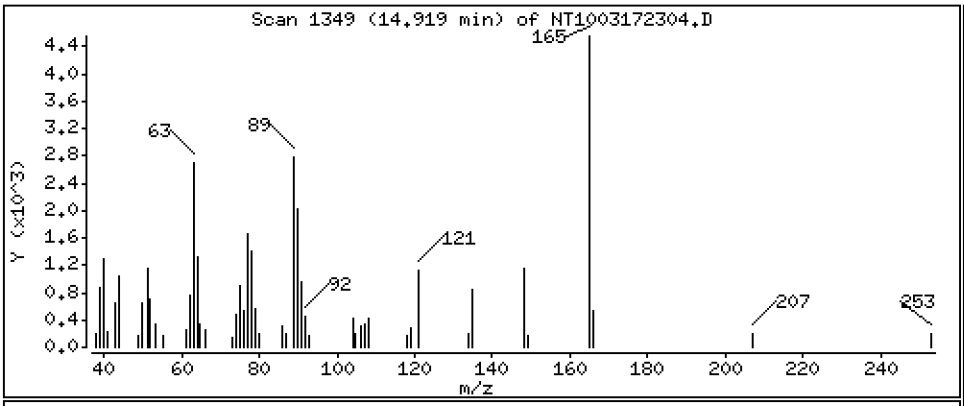
Operator: VTS

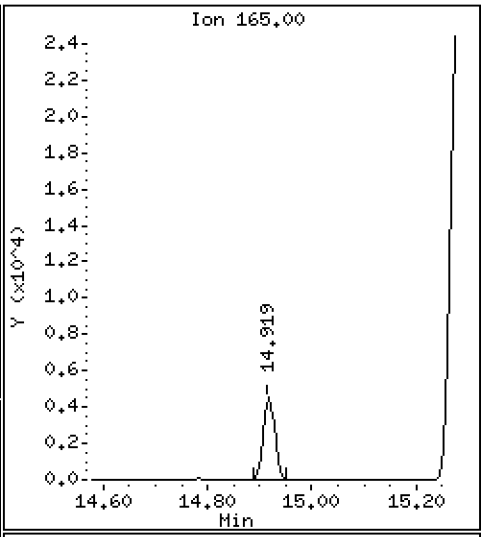
Column phase: ZB-5msi

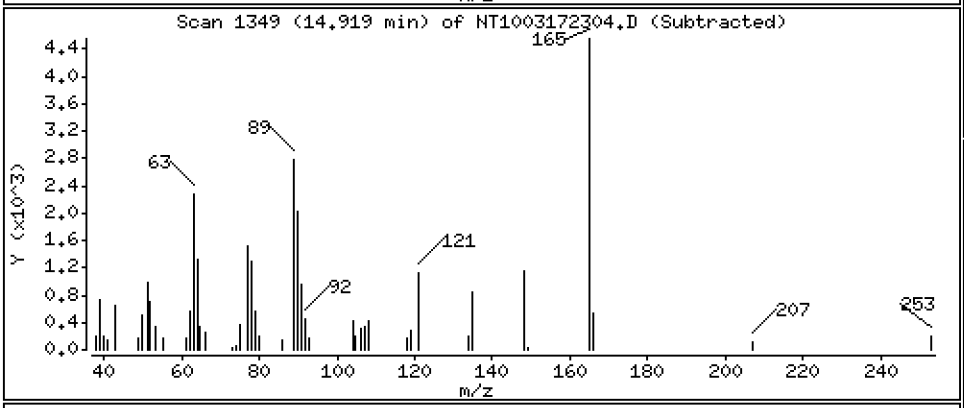
Column diameter: 0.25

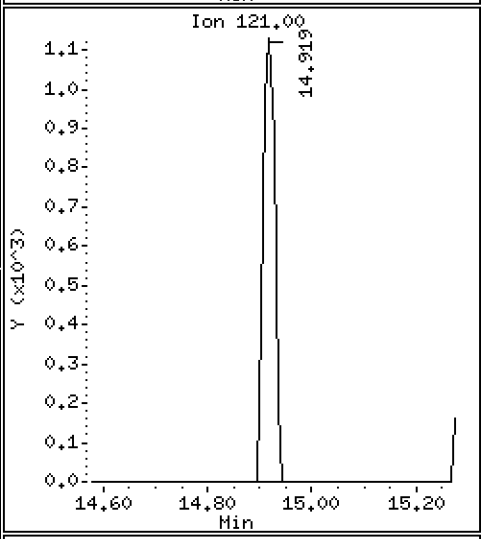
41 2,6-Dinitrotoluene

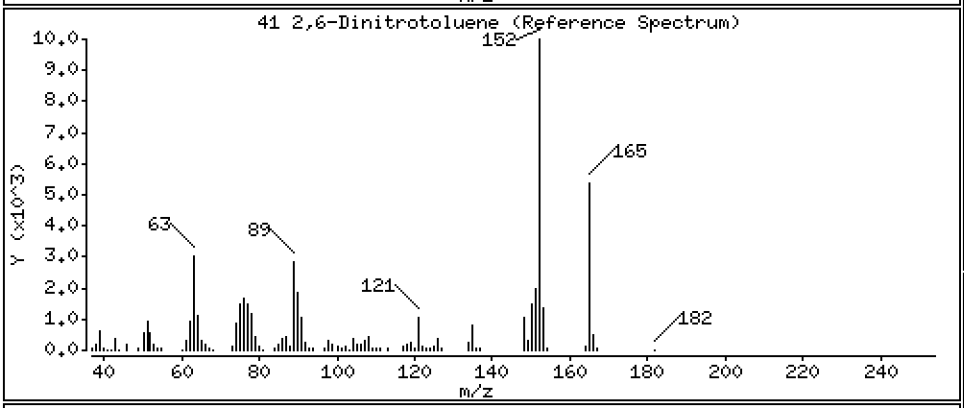
Concentration: 0.3257 ug/mL

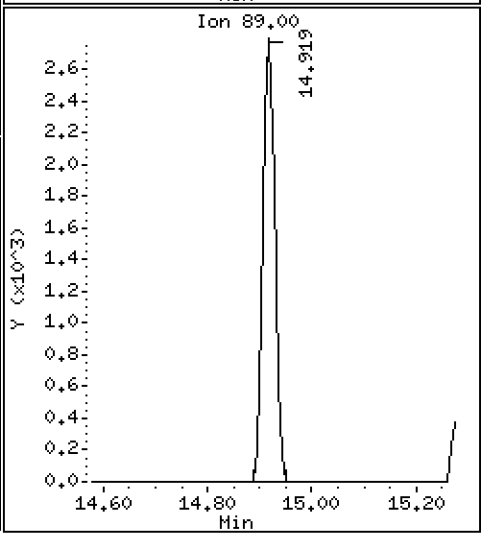


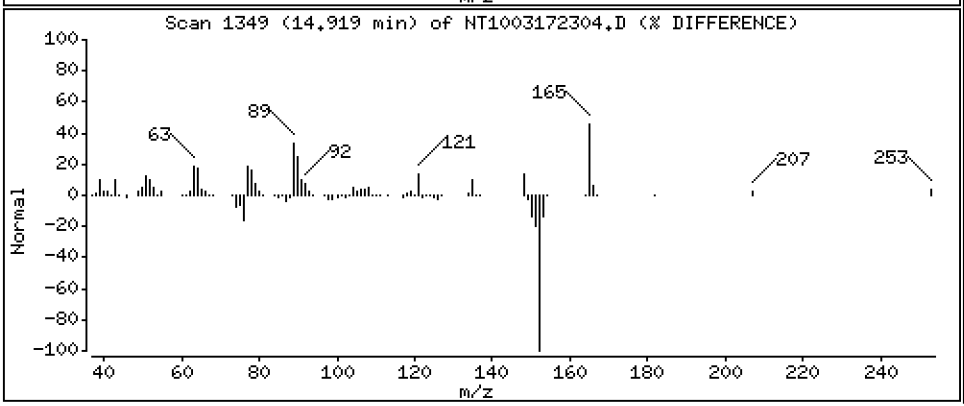












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

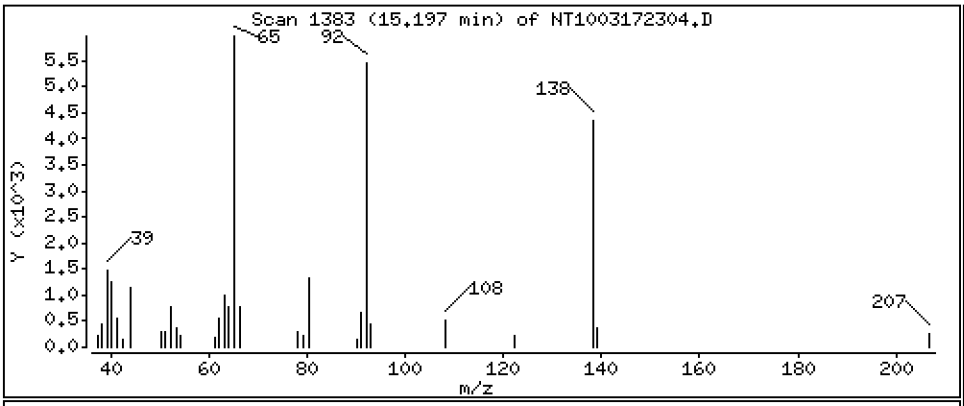
Operator: VTS

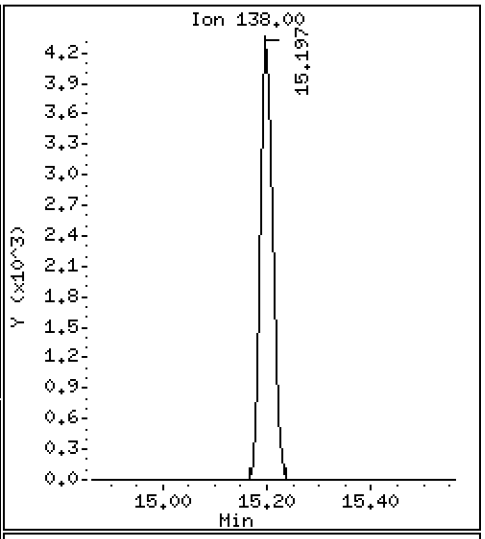
Column phase: ZB-5msi

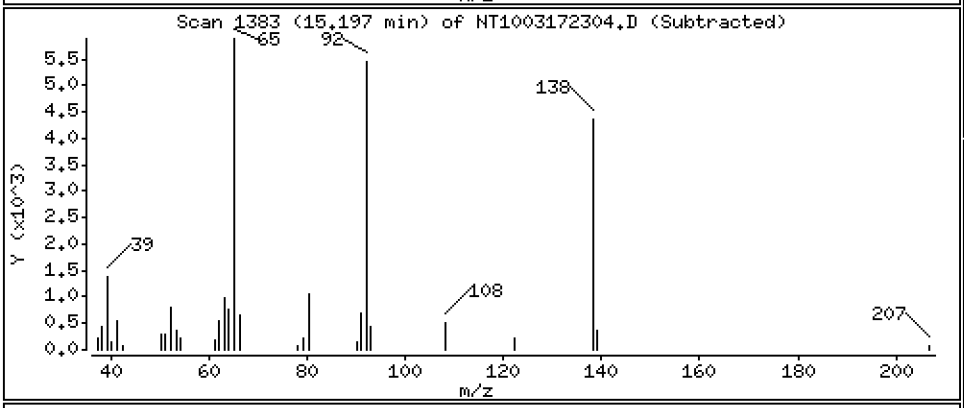
Column diameter: 0.25

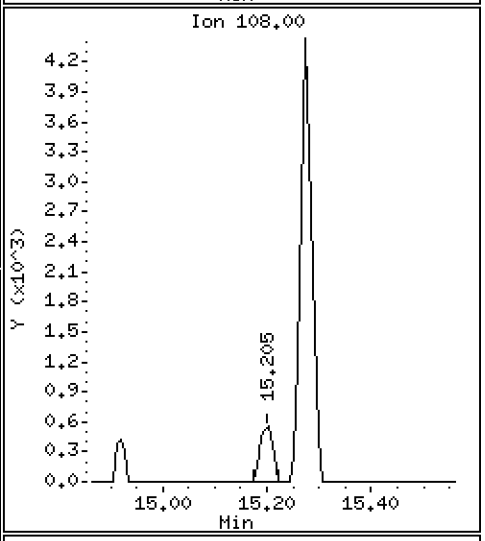
43 3-Nitroaniline

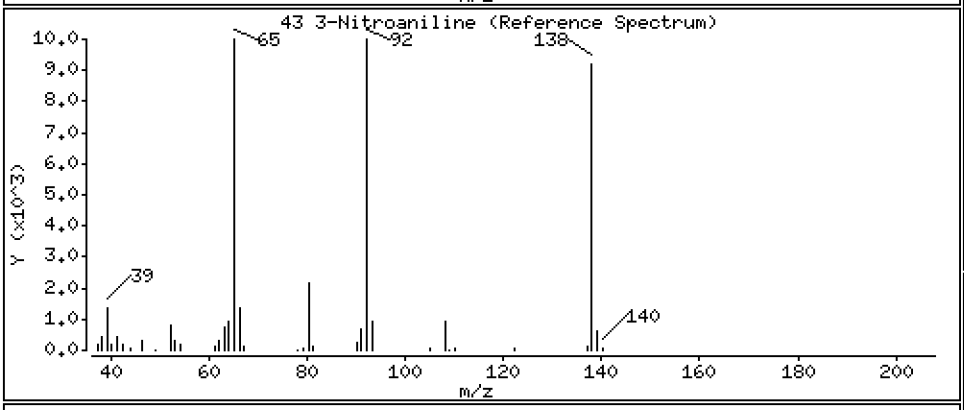
Concentration: 0.3068 ug/mL

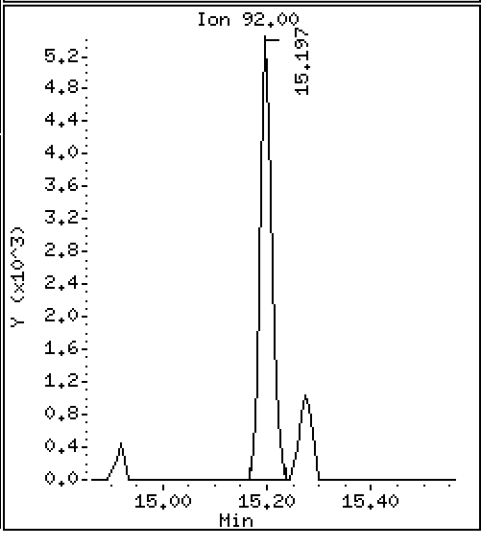


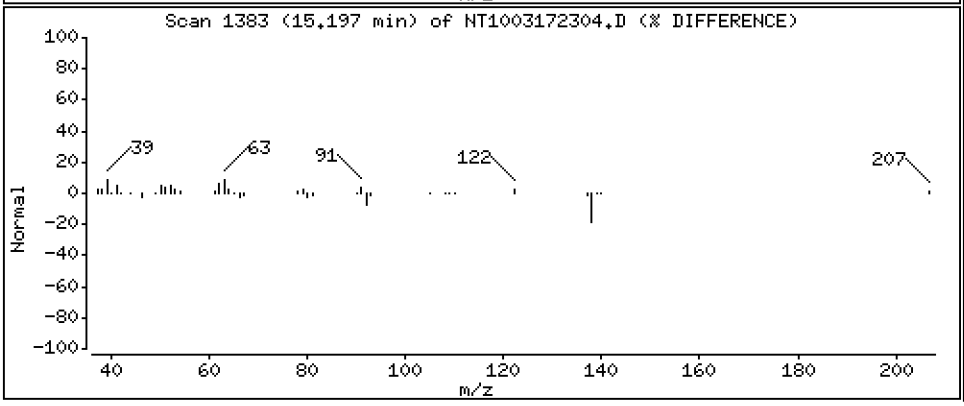












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

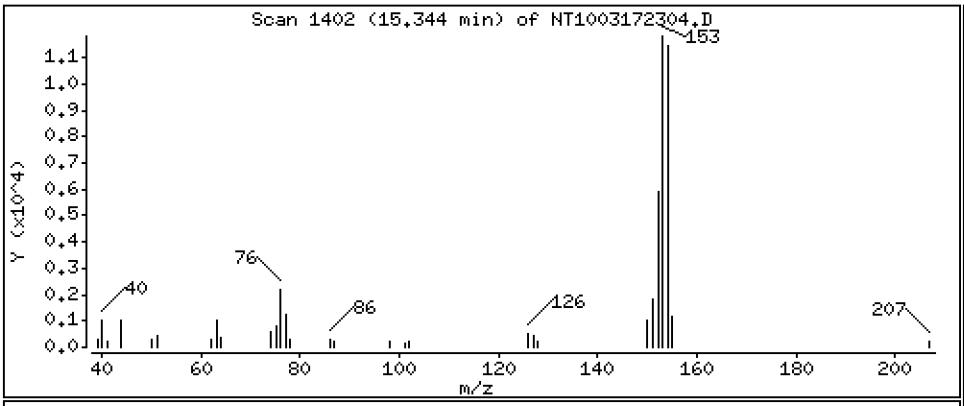
Operator: VTS

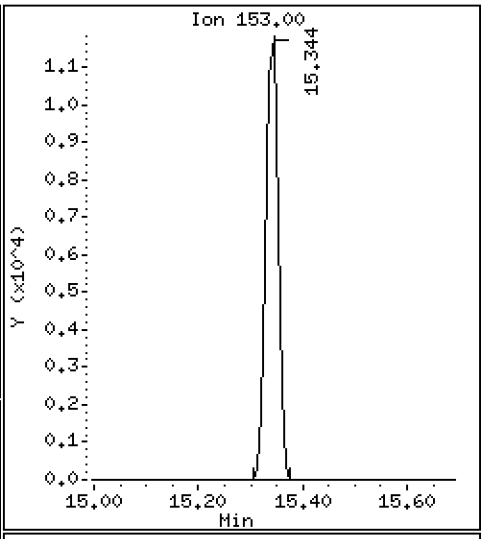
Column phase: ZB-5msi

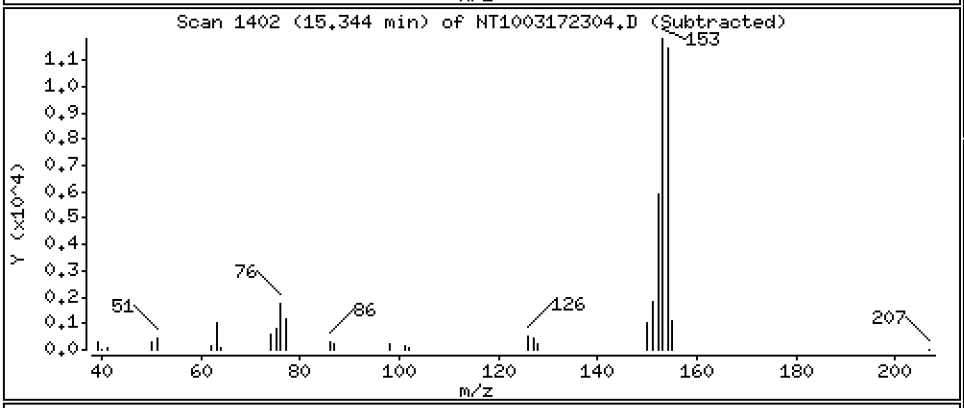
Column diameter: 0.25

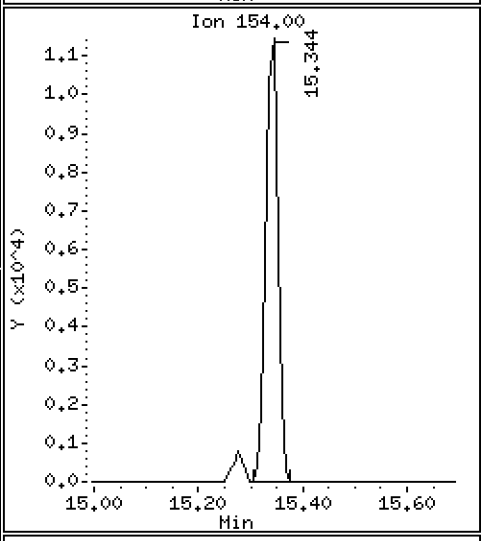
44 Acenaphthene

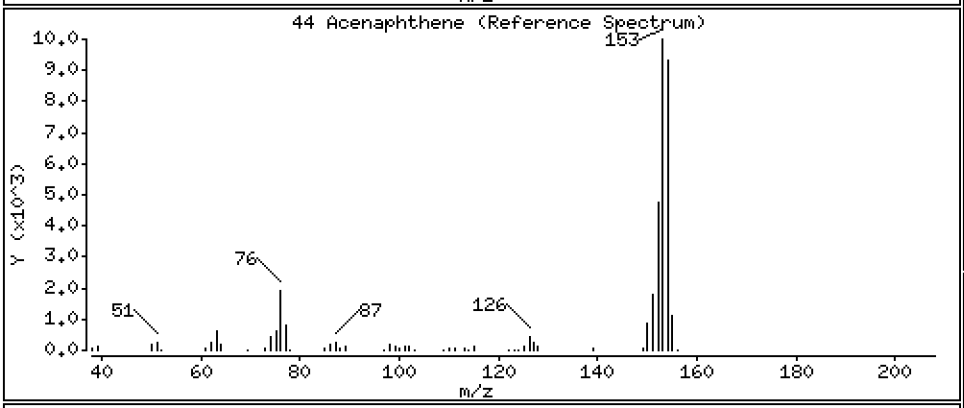
Concentration: 0.2091 ug/mL

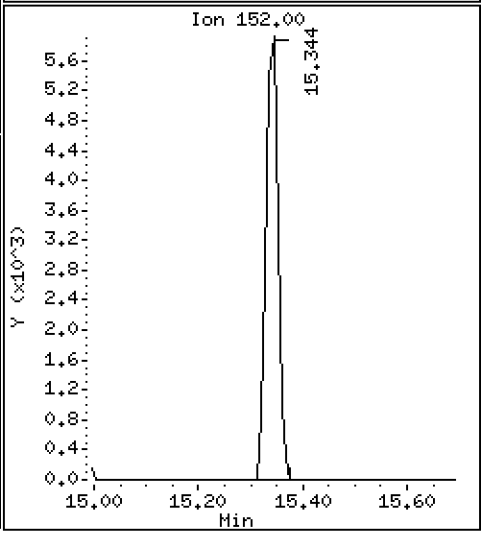


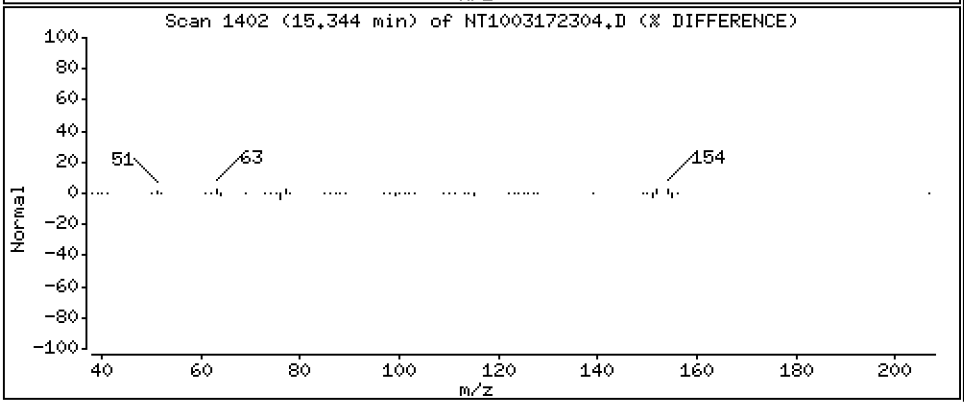












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

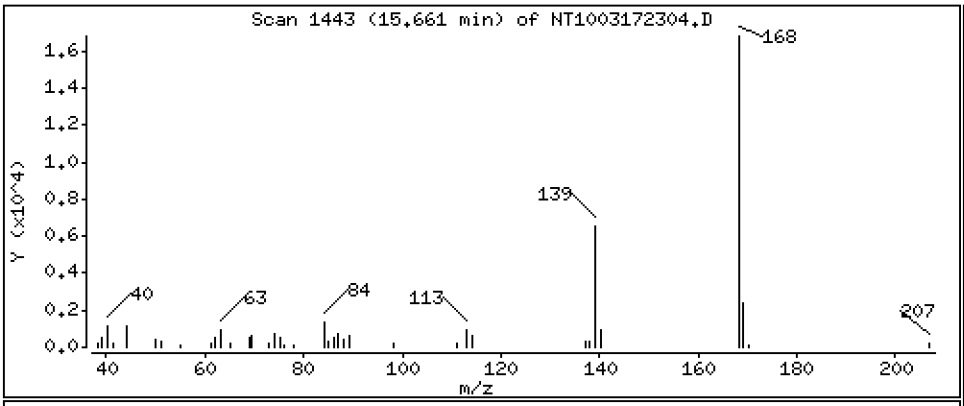
Operator: VTS

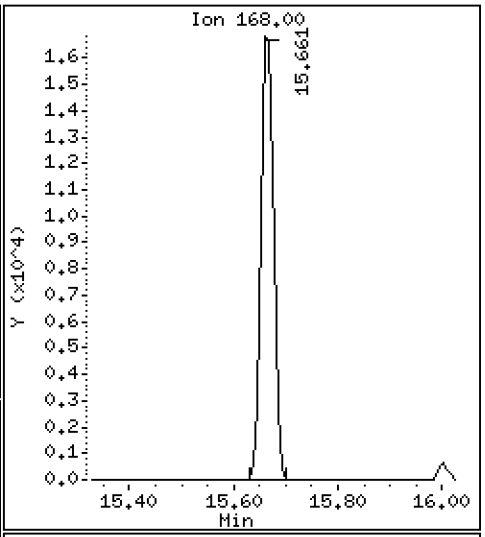
Column phase: ZB-5msi

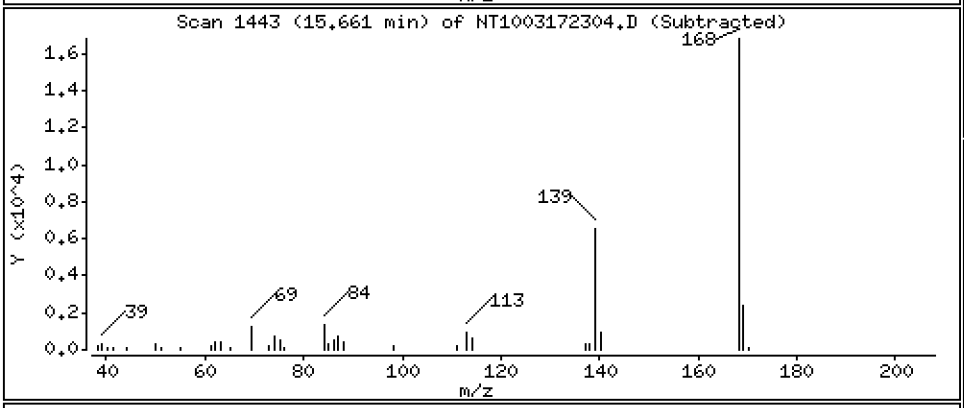
Column diameter: 0.25

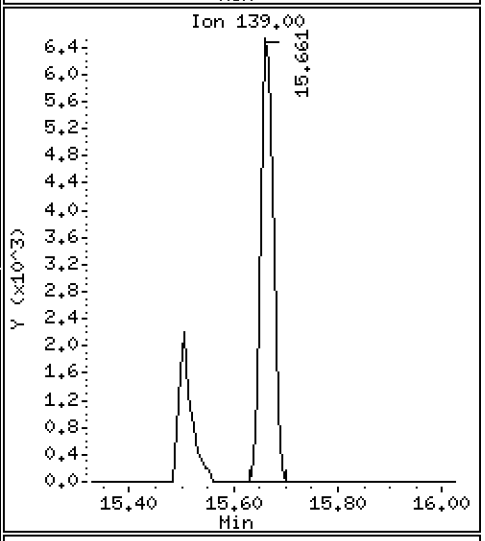
46 Dibenzofuran

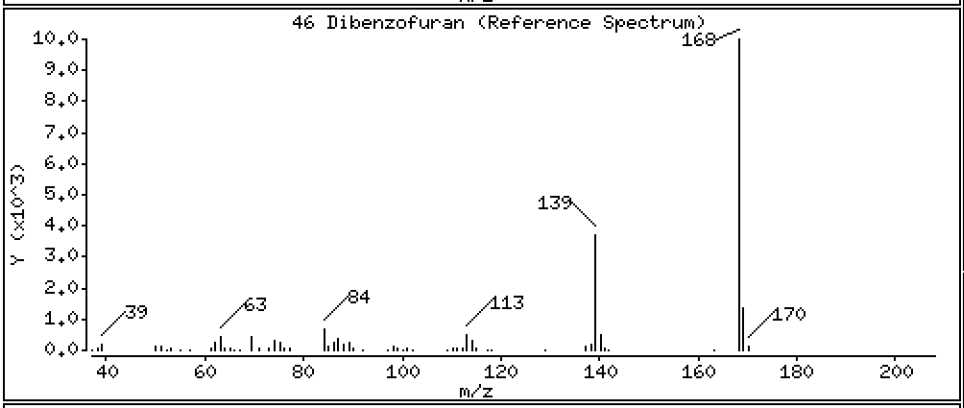
Concentration: 0.2092 ug/mL

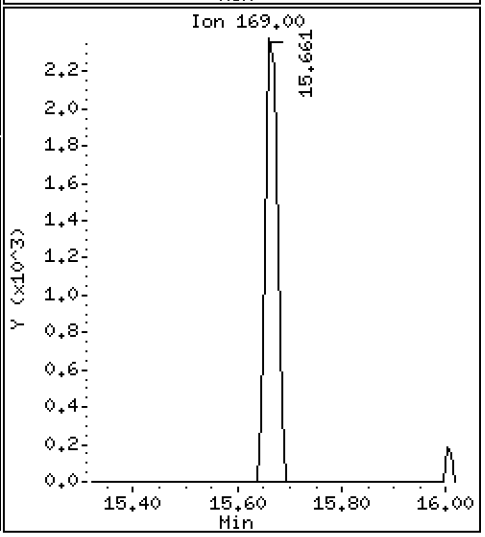


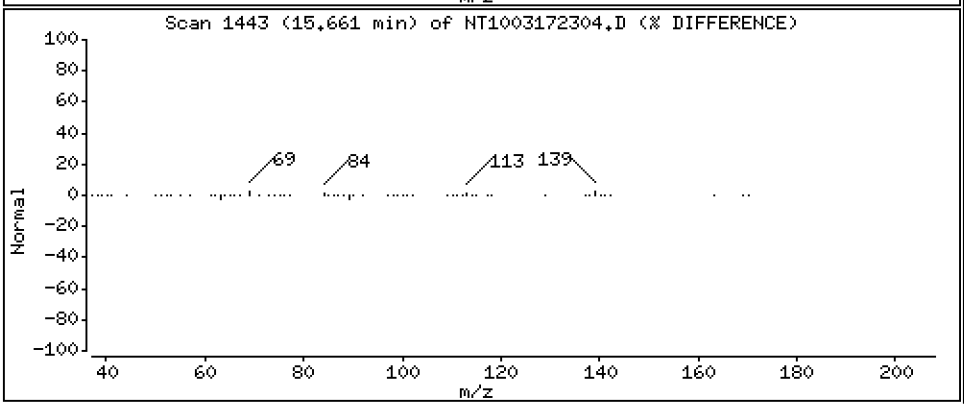












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

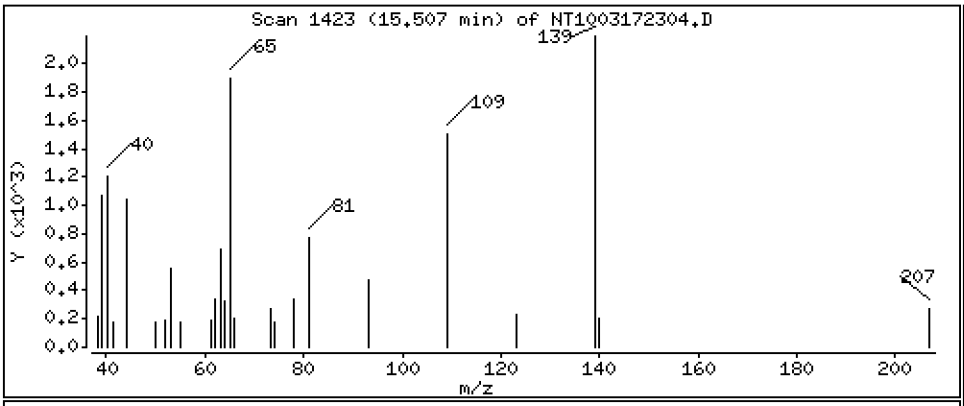
Operator: VTS

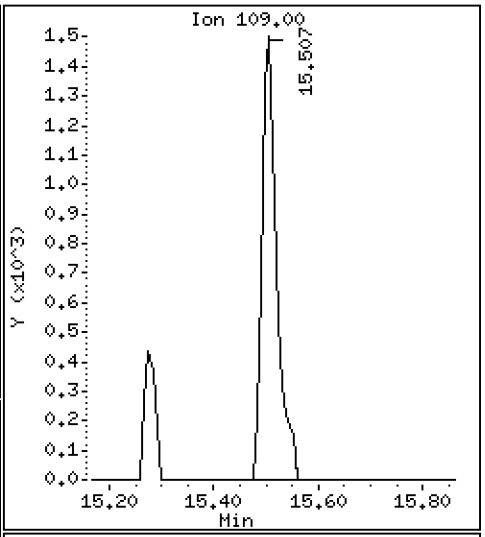
Column phase: ZB-5msi

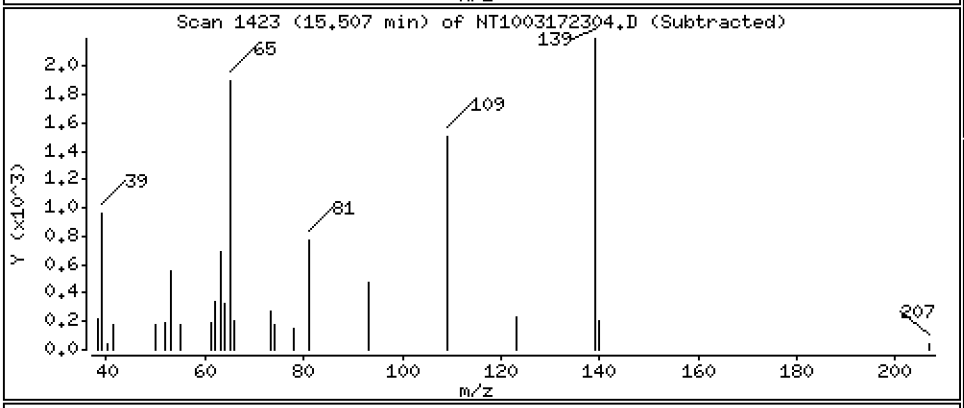
Column diameter: 0.25

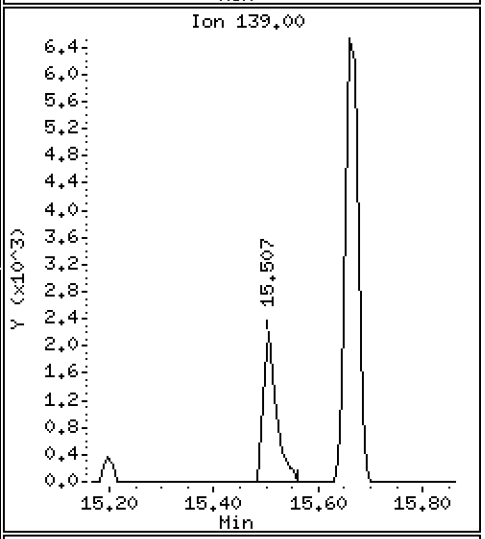
47 4-Nitrophenol

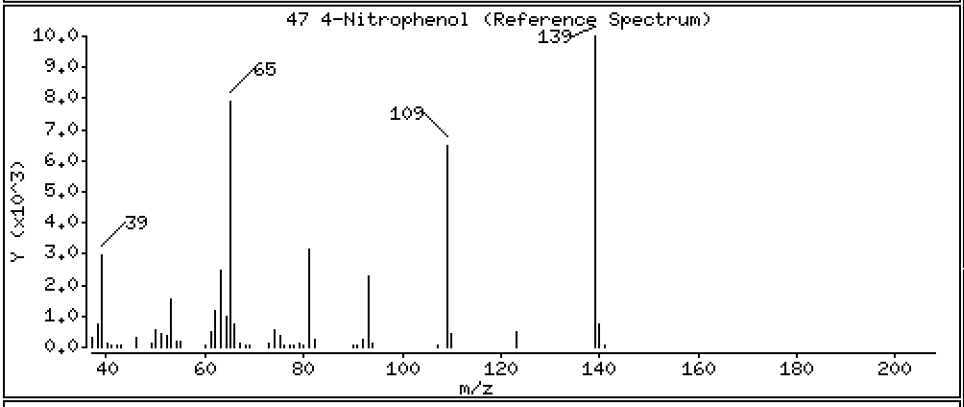
Concentration: 0.1973 ug/mL

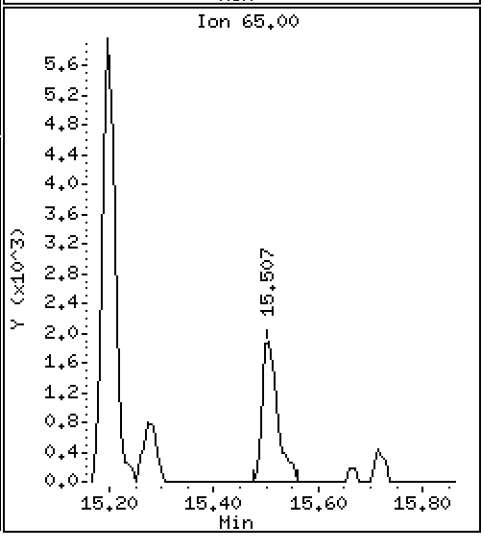


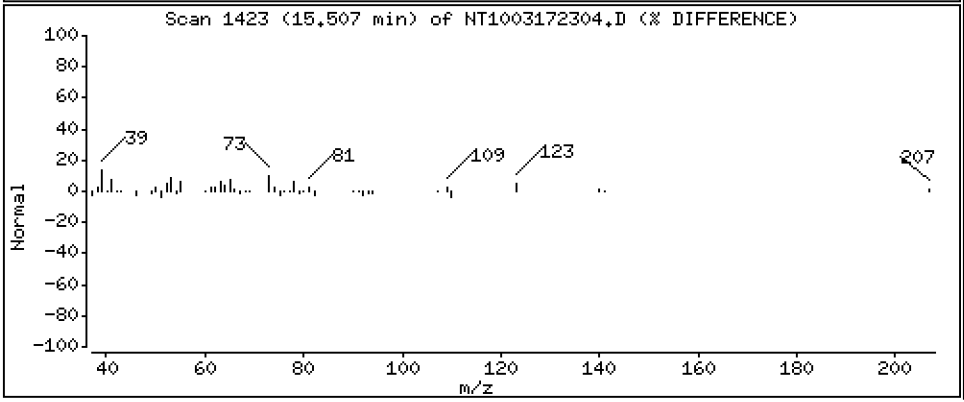












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

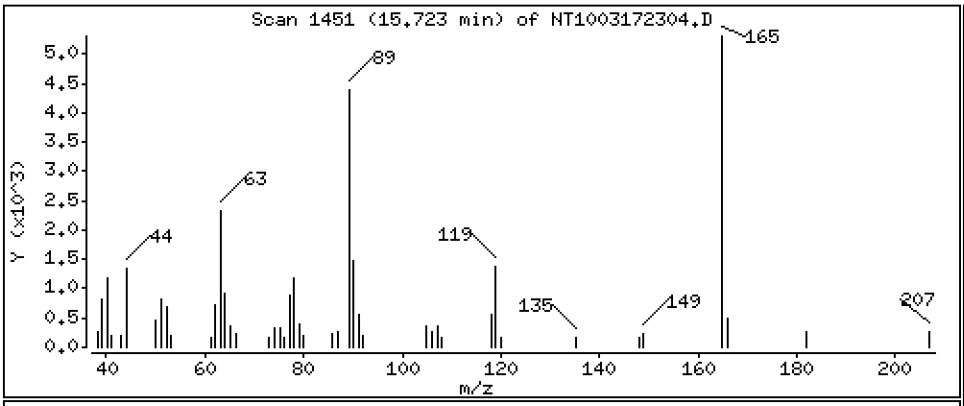
Operator: VTS

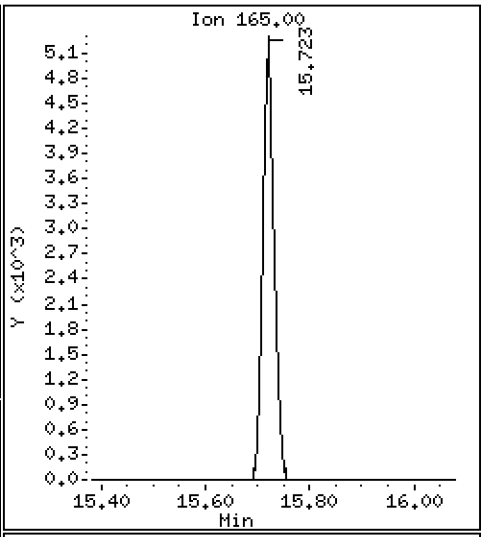
Column phase: ZB-5msi

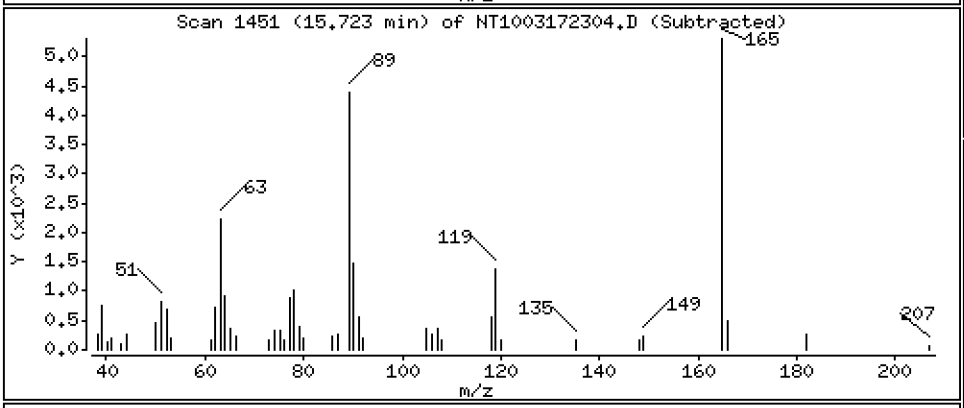
Column diameter: 0.25

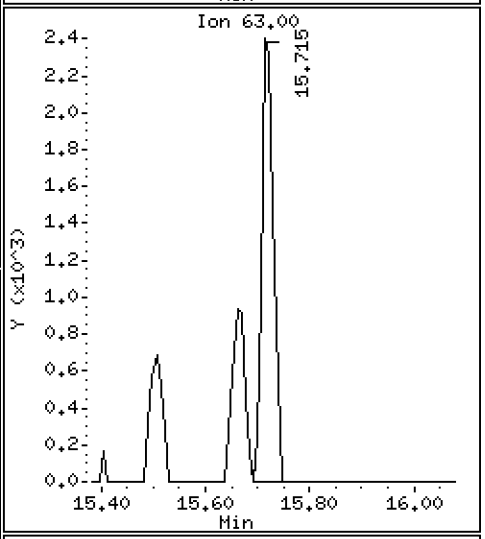
48 2,4-Dinitrotoluene

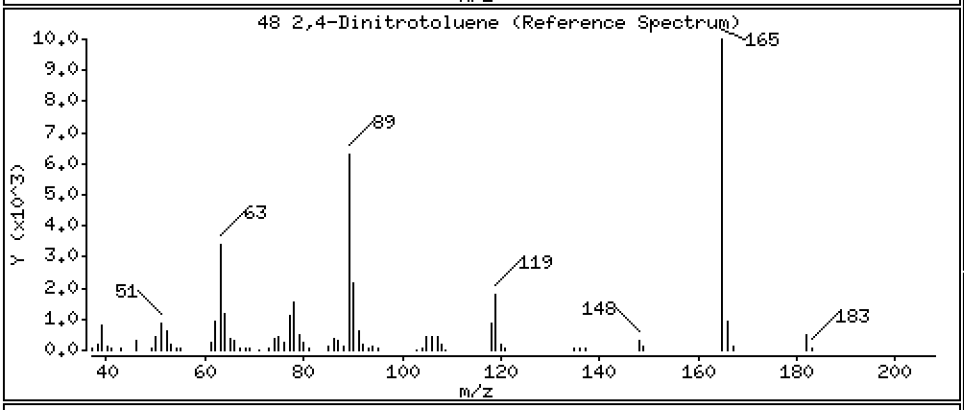
Concentration: 0.2540 ug/mL

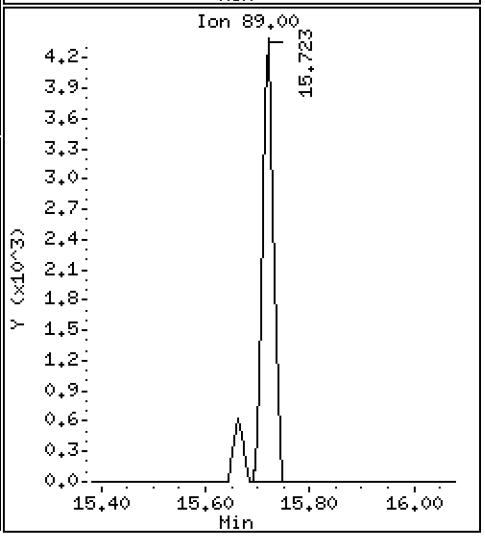


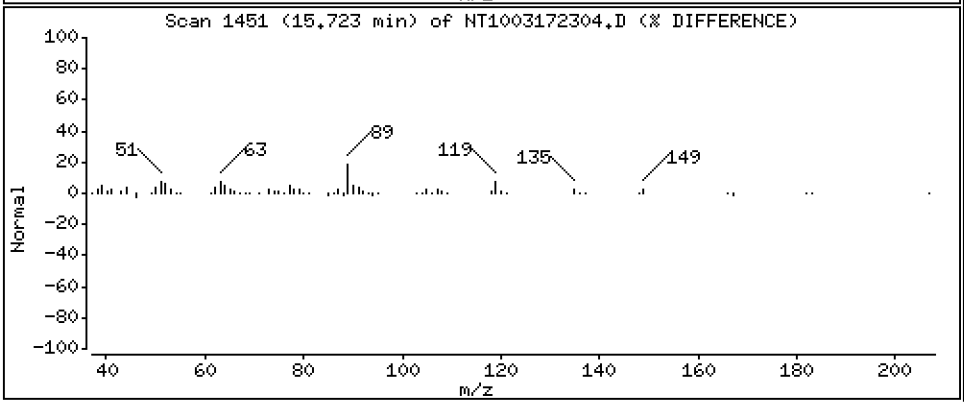












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

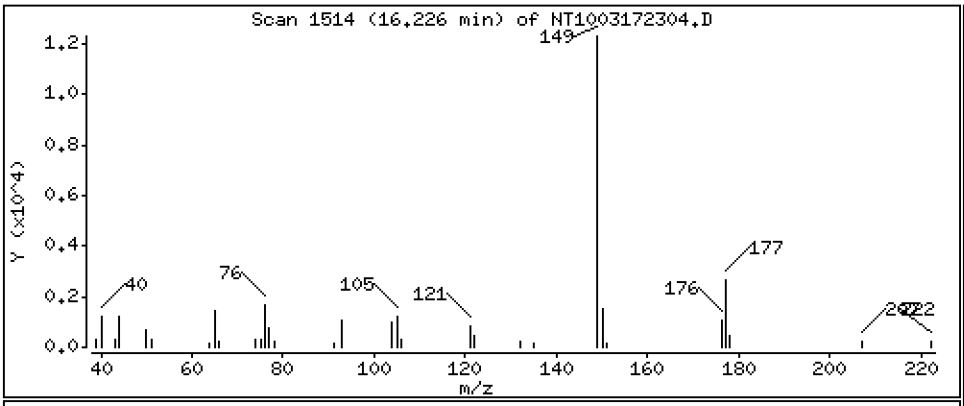
Operator: VTS

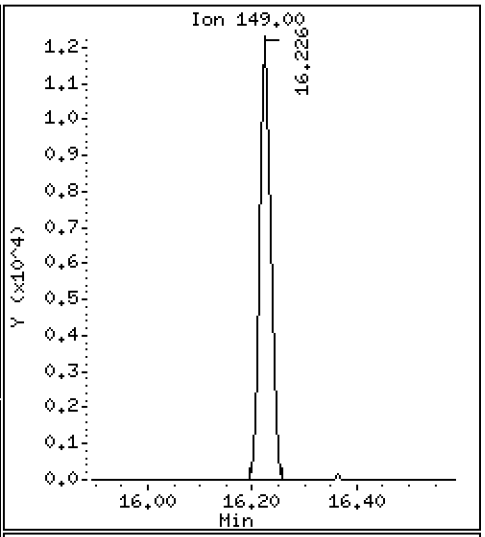
Column phase: ZB-5msi

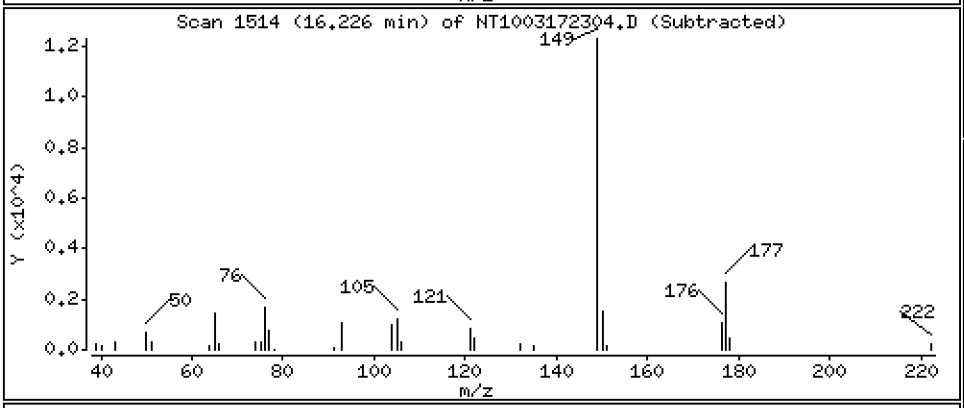
Column diameter: 0.25

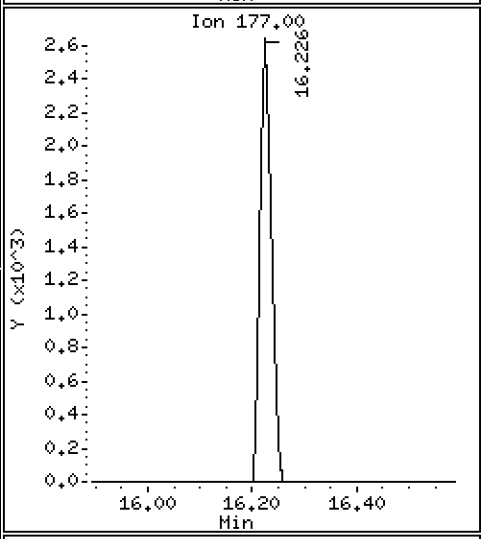
50 Diethylphthalate

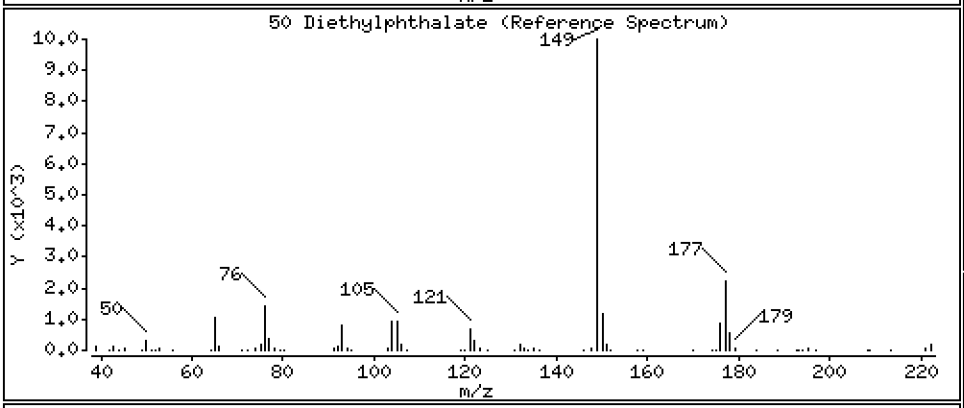
Concentration: 0.1922 ug/mL

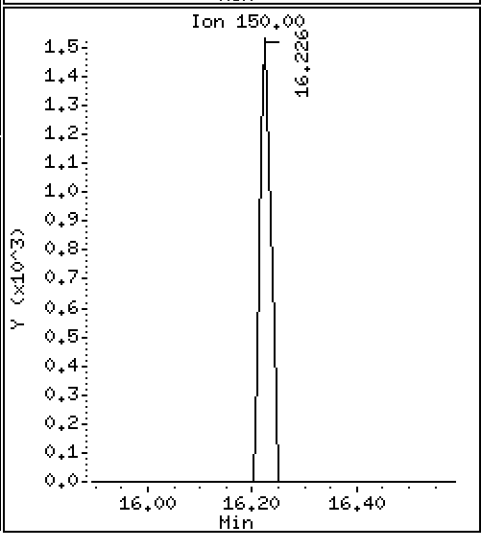


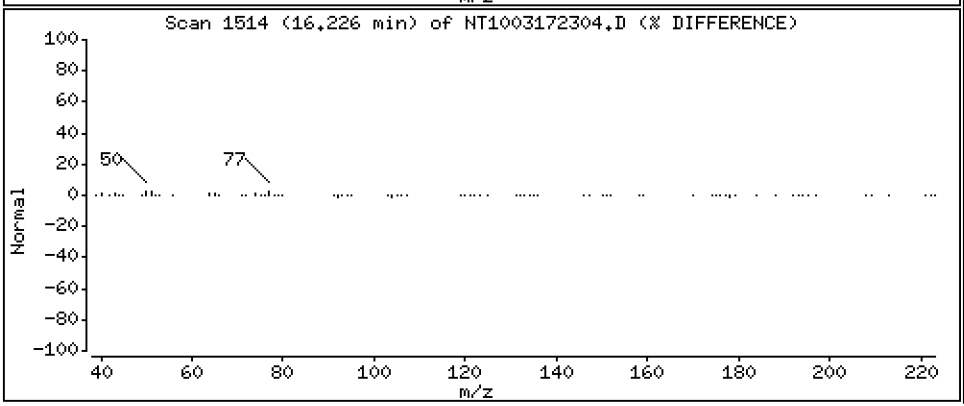












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

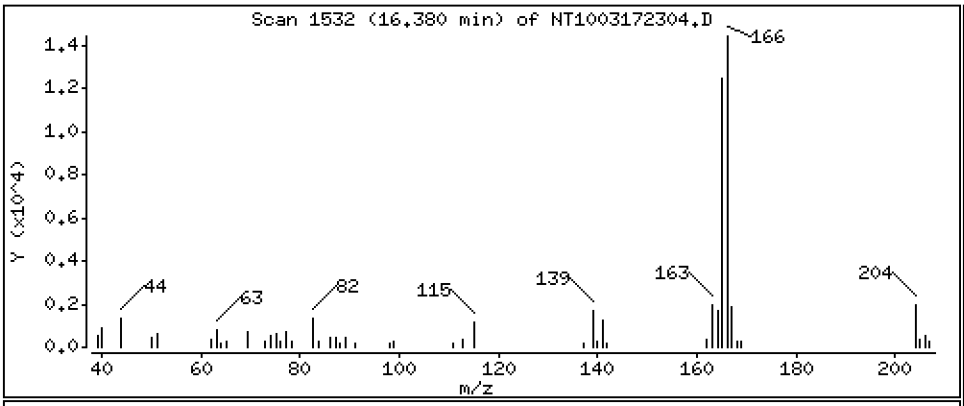
Operator: VTS

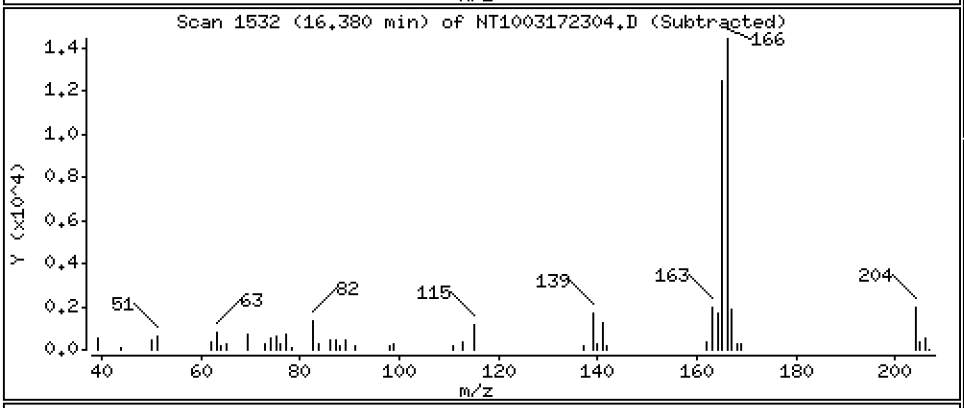
Column phase: ZB-5msi

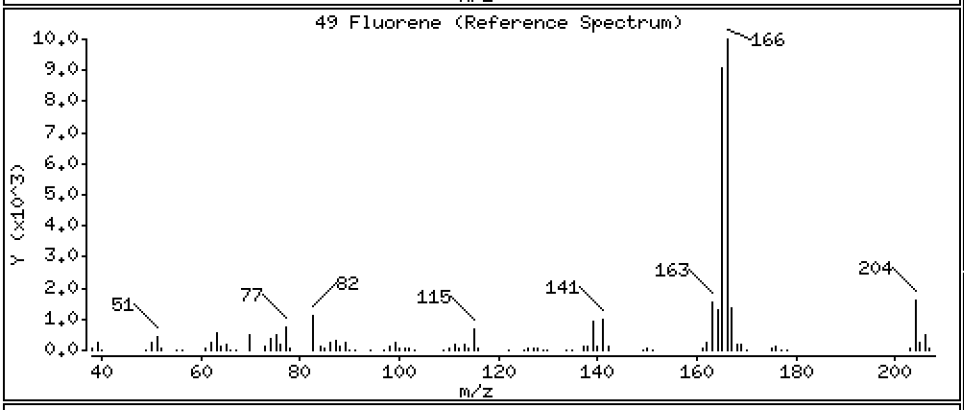
Column diameter: 0.25

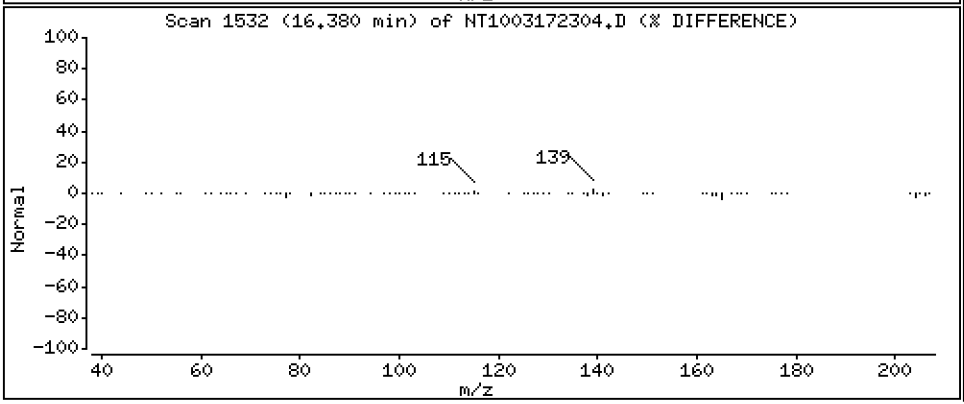
49 Fluorene

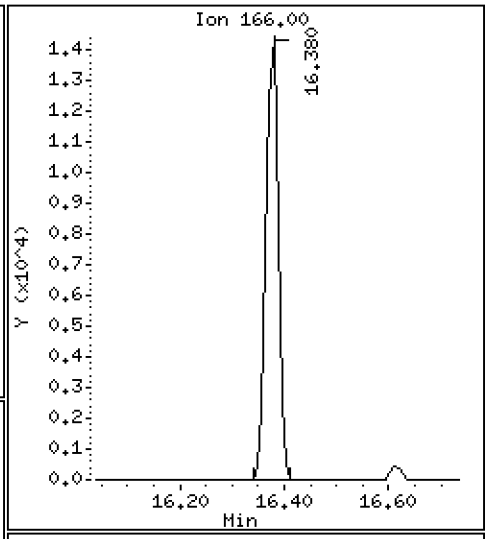
Concentration: 0.2175 ug/mL

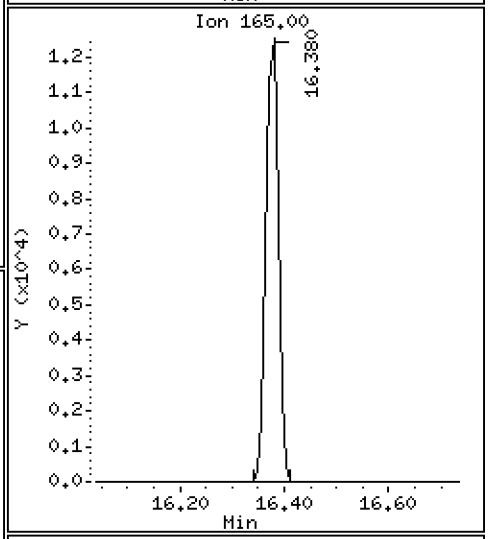


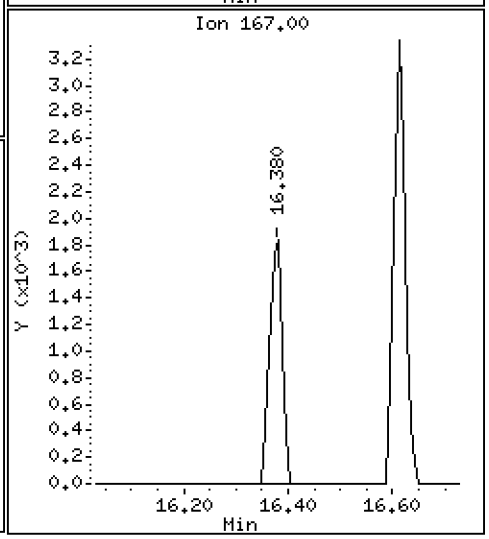












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

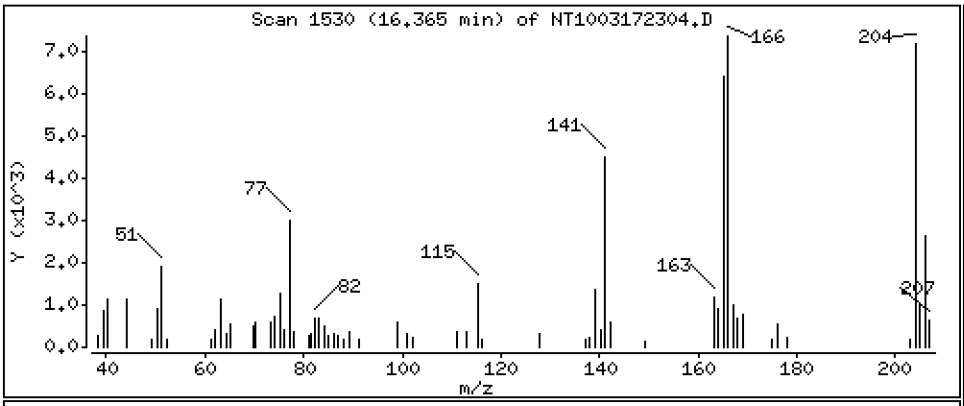
Operator: VTS

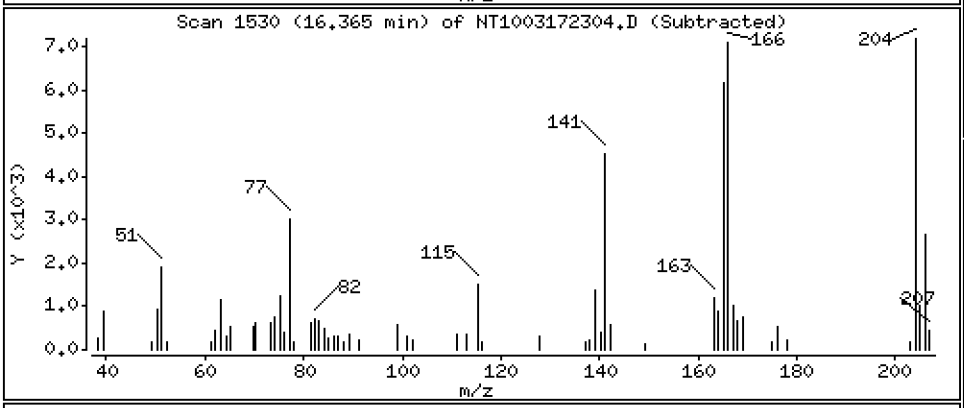
Column phase: ZB-5msi

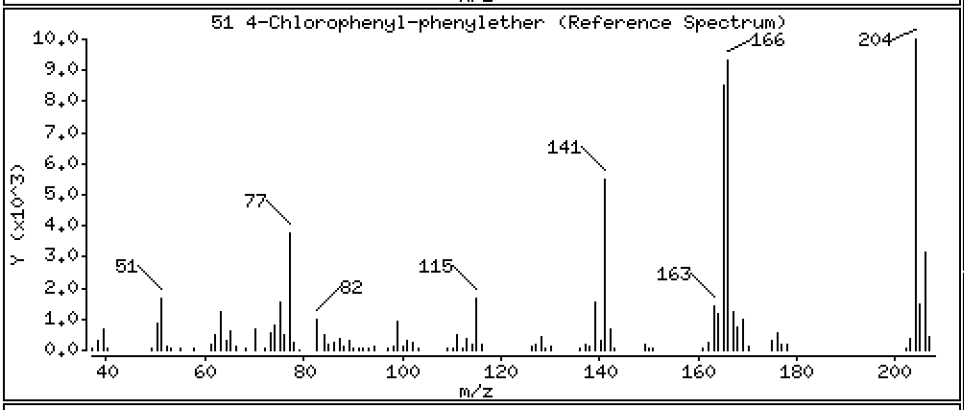
Column diameter: 0.25

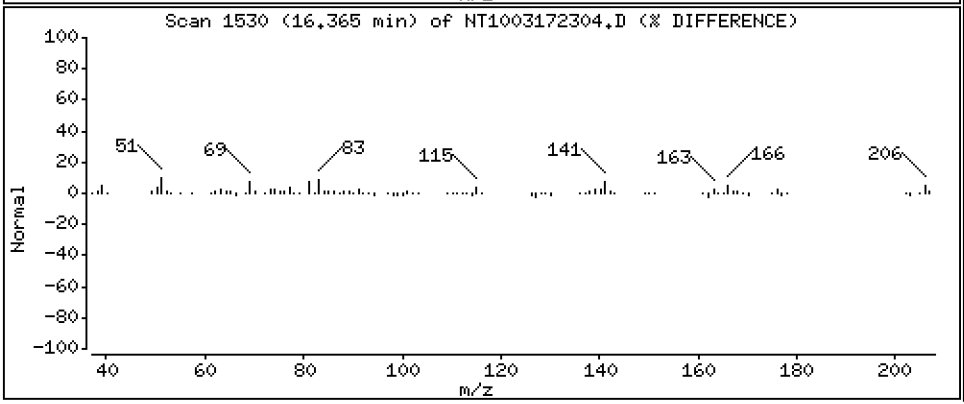
51 4-Chlorophenyl-phenylether

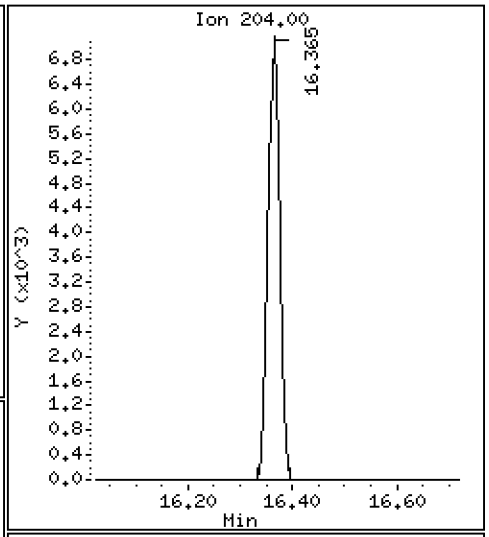
Concentration: 0.2153 ug/mL

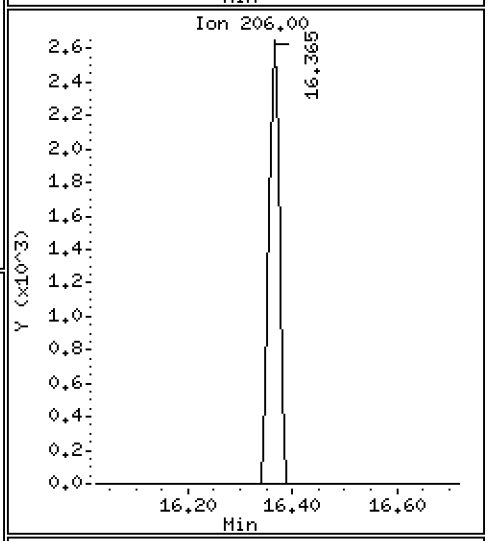


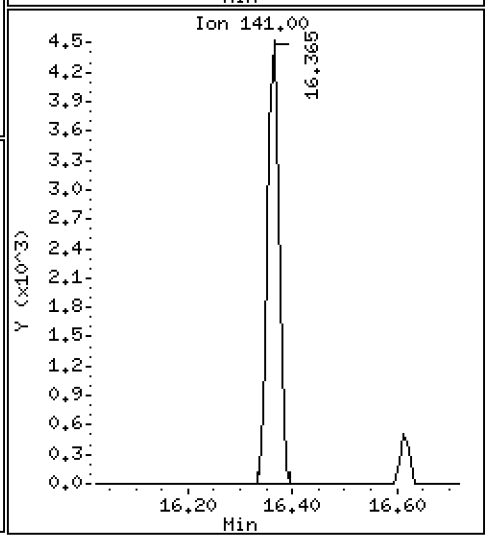












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

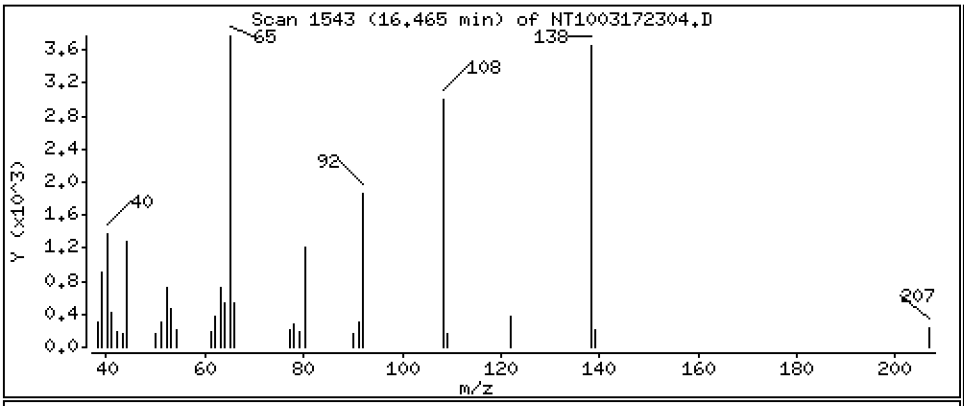
Operator: VTS

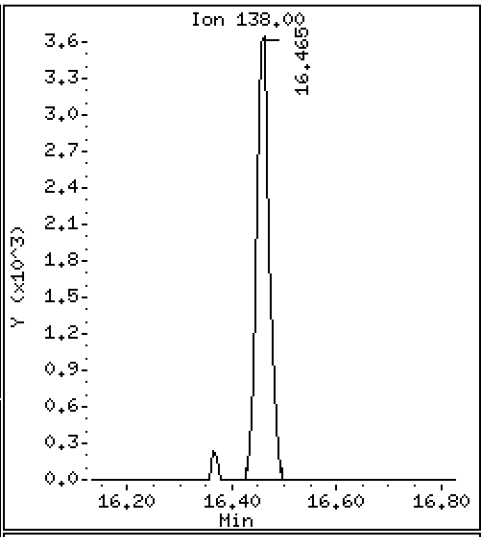
Column phase: ZB-5msi

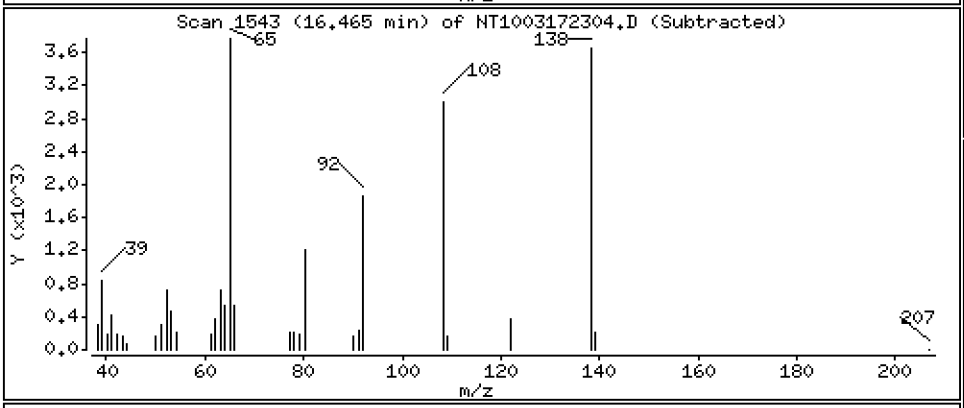
Column diameter: 0.25

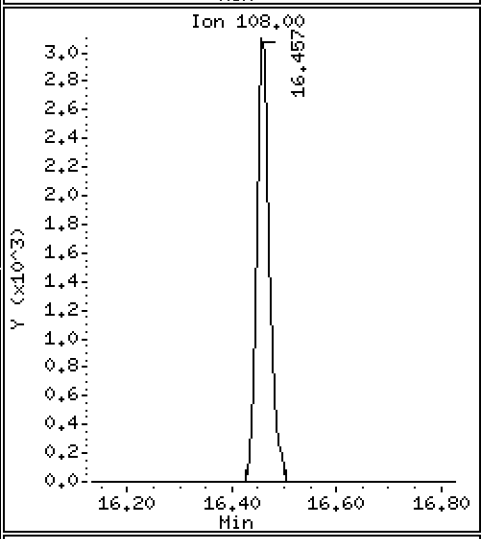
52 4-Nitroaniline

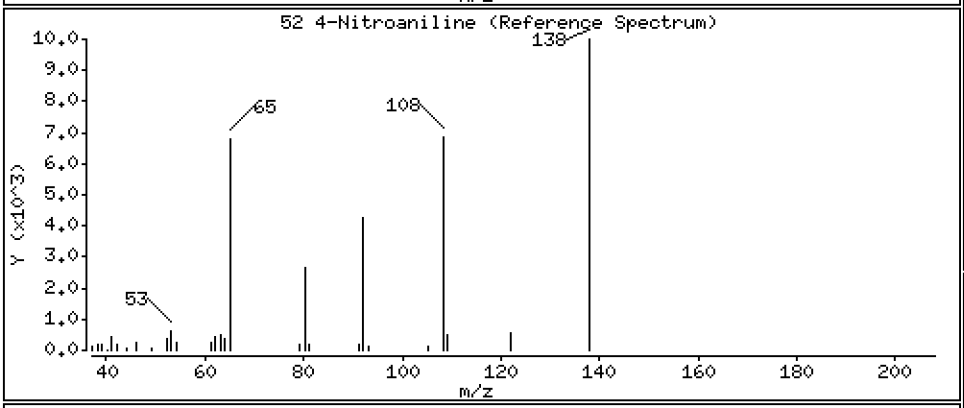
Concentration: 0.3074 ug/mL

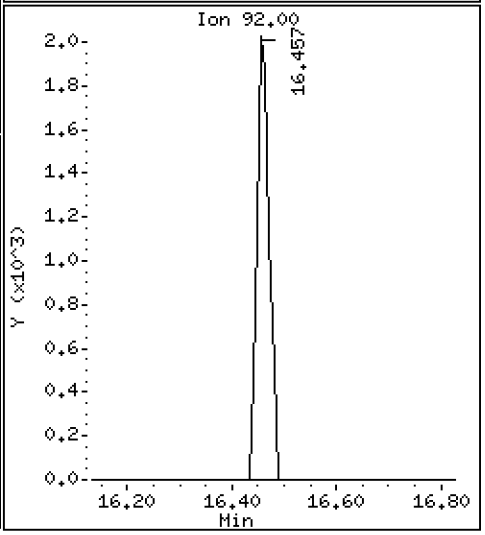


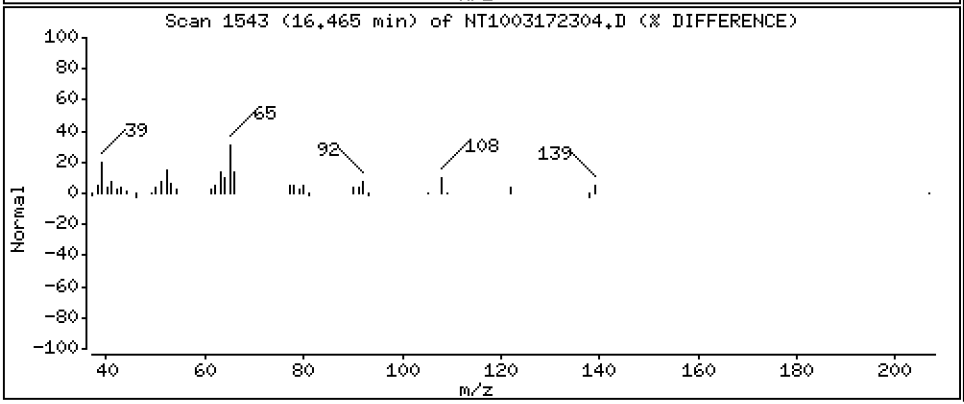












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

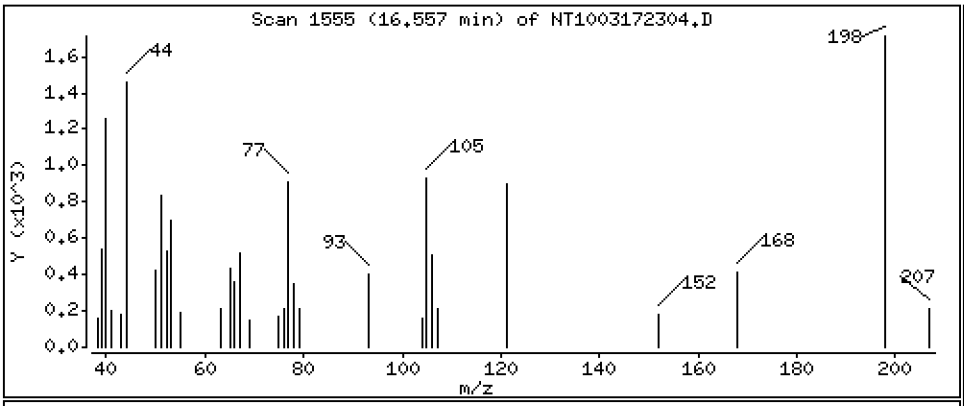
Operator: VTS

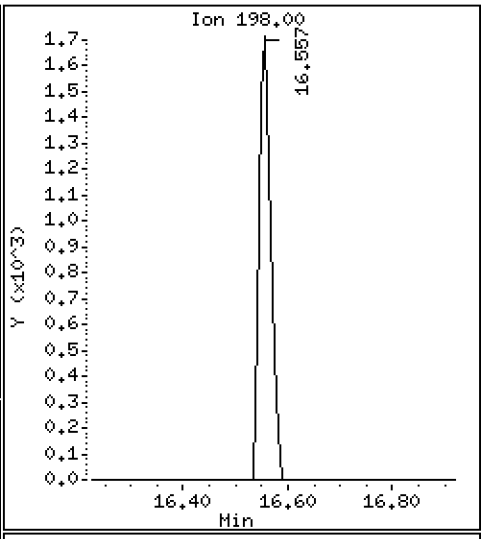
Column phase: ZB-5msi

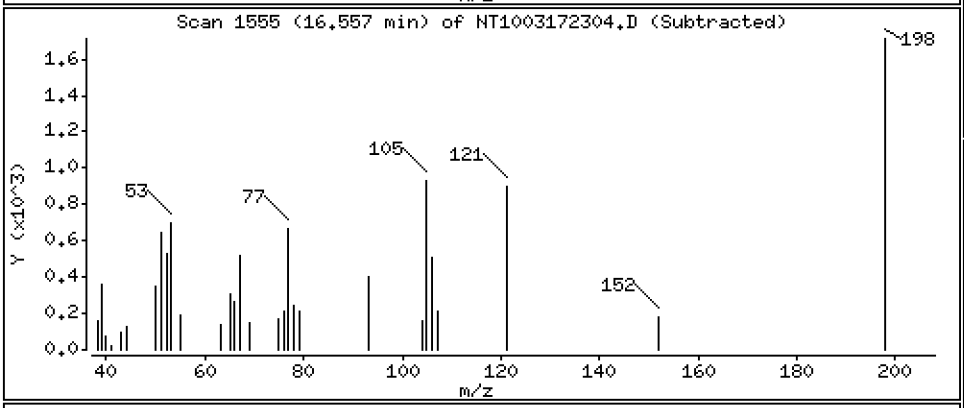
Column diameter: 0.25

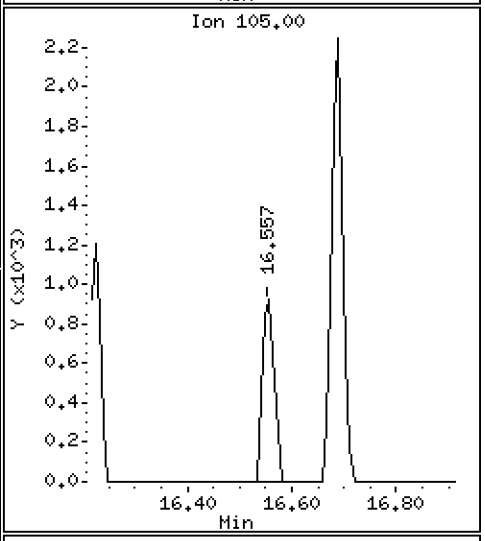
53 4,6-Dinitro-2-methylphenol

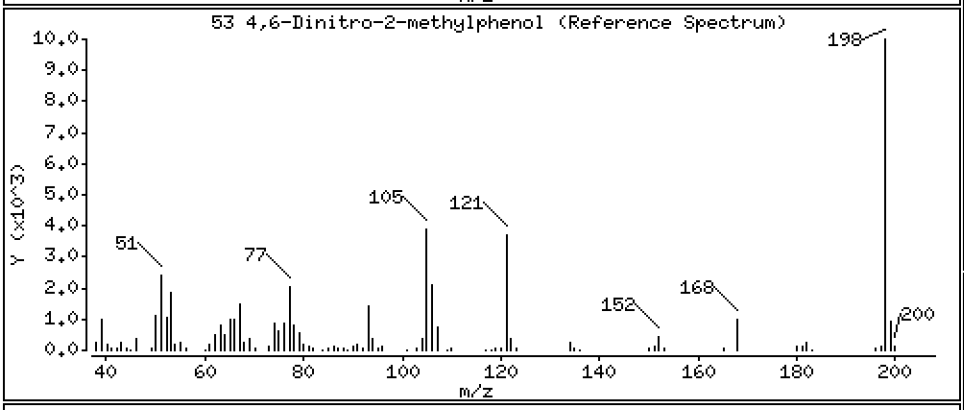
Concentration: 0.1645 ug/mL

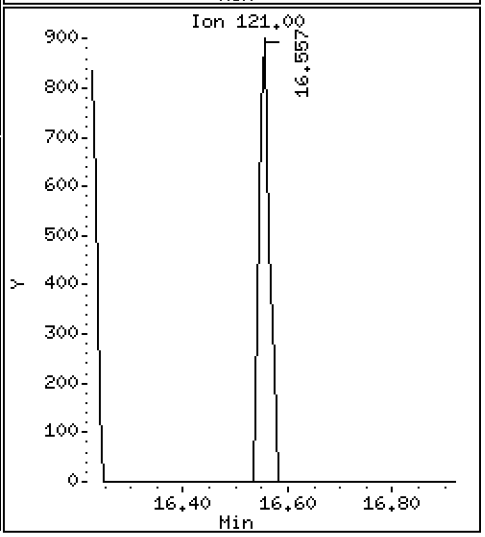


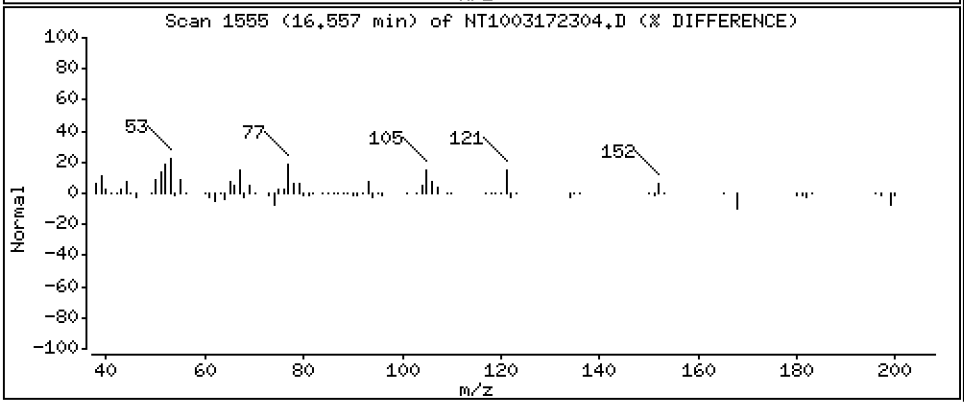












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

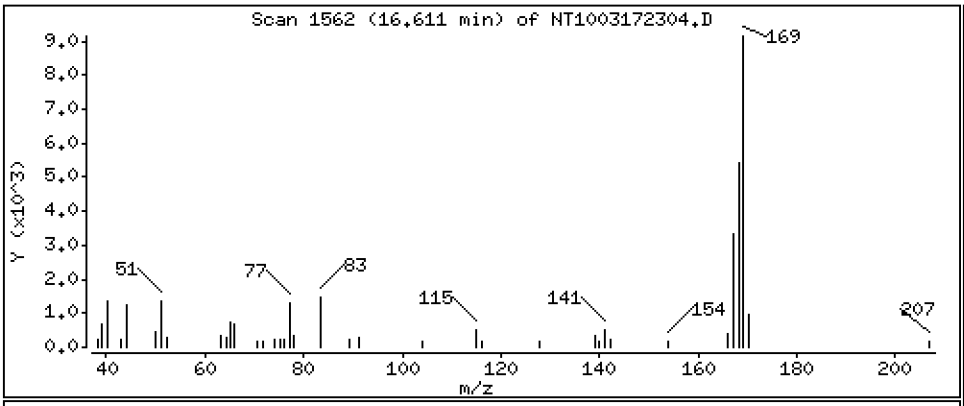
Operator: VTS

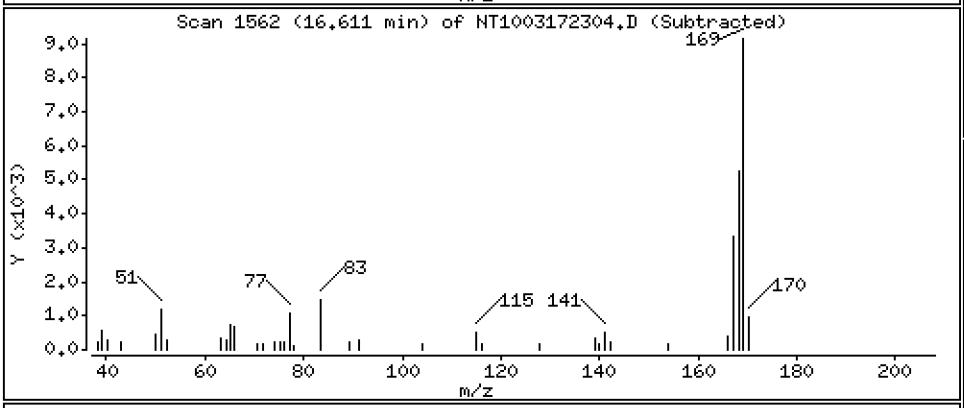
Column phase: ZB-5msi

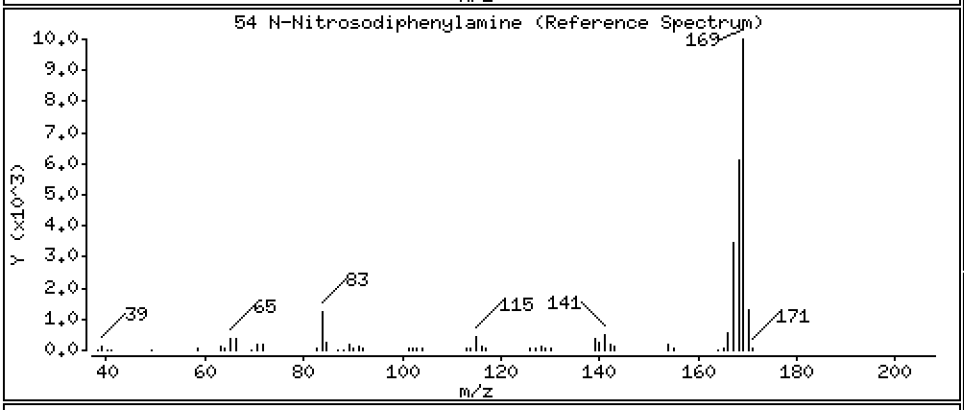
Column diameter: 0.25

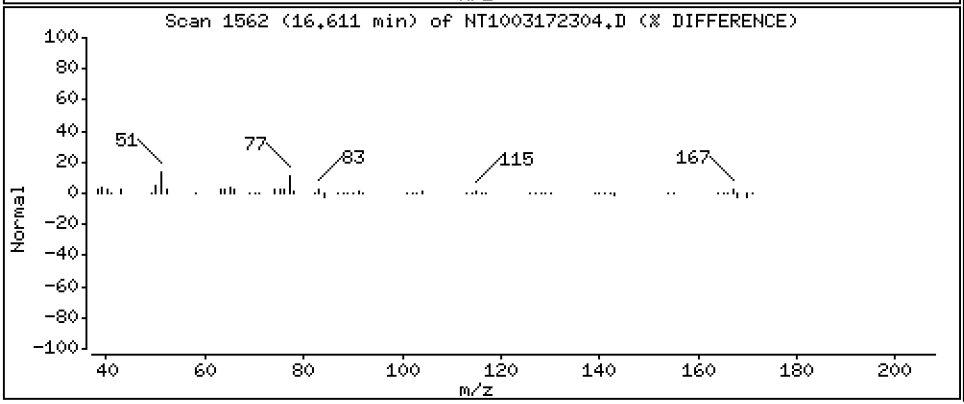
54 N-Nitrosodiphenylamine

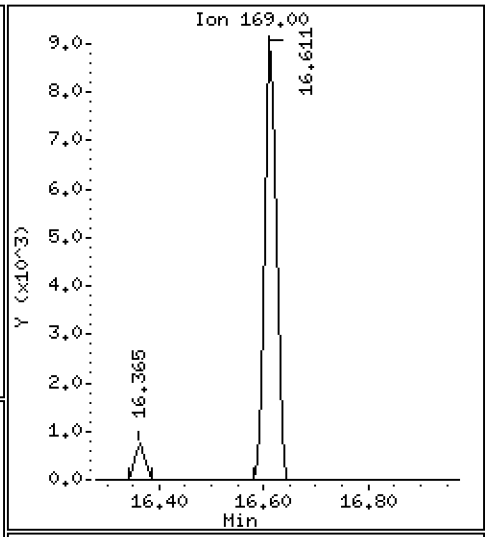
Concentration: 0.1924 ug/mL

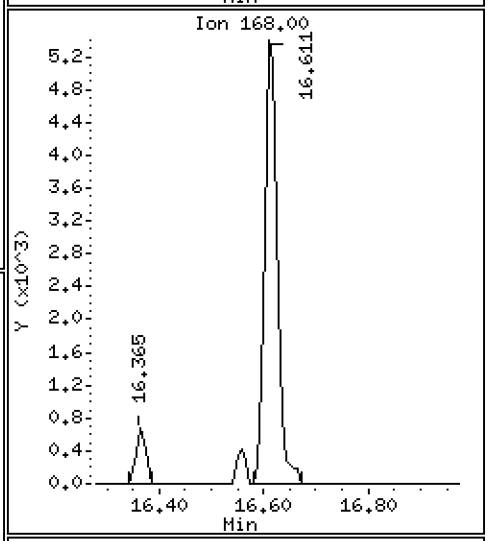


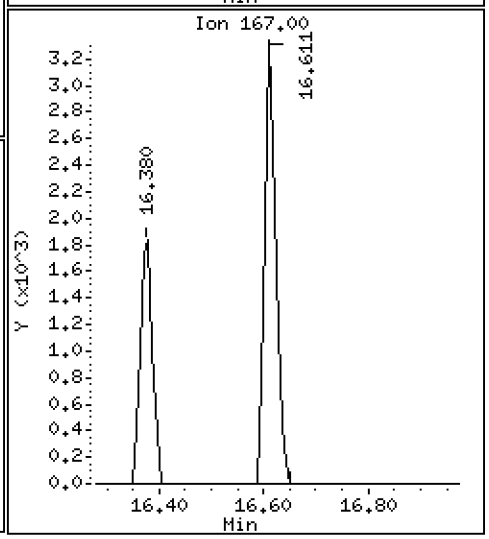












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

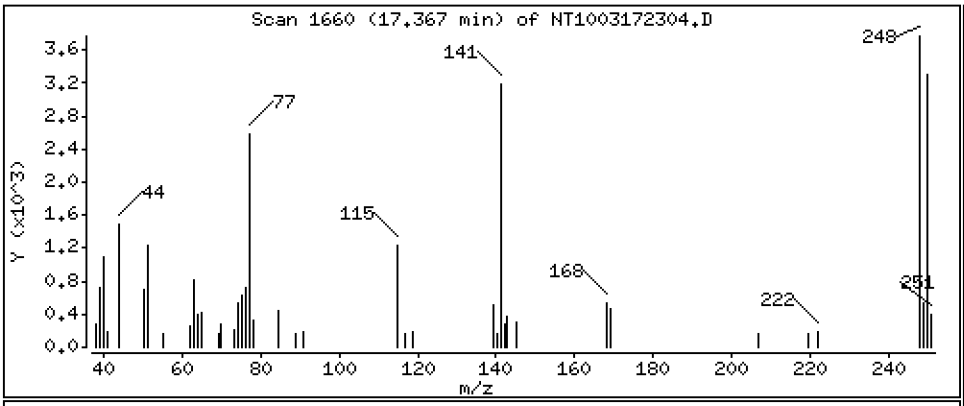
Operator: VTS

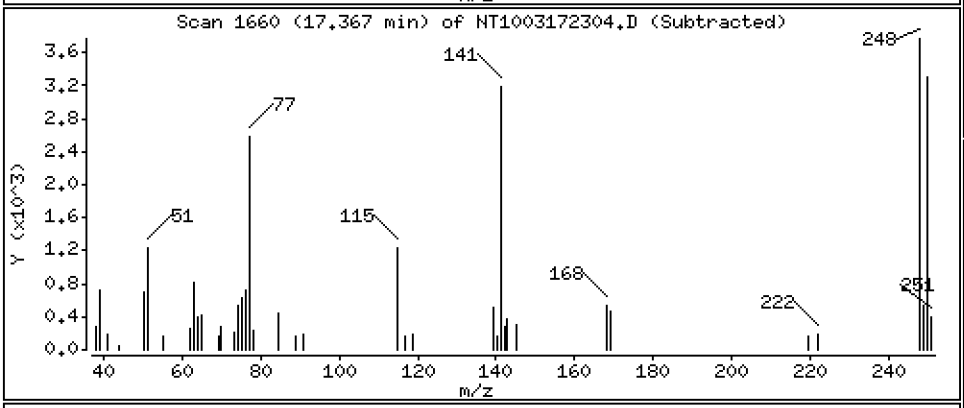
Column phase: ZB-5msi

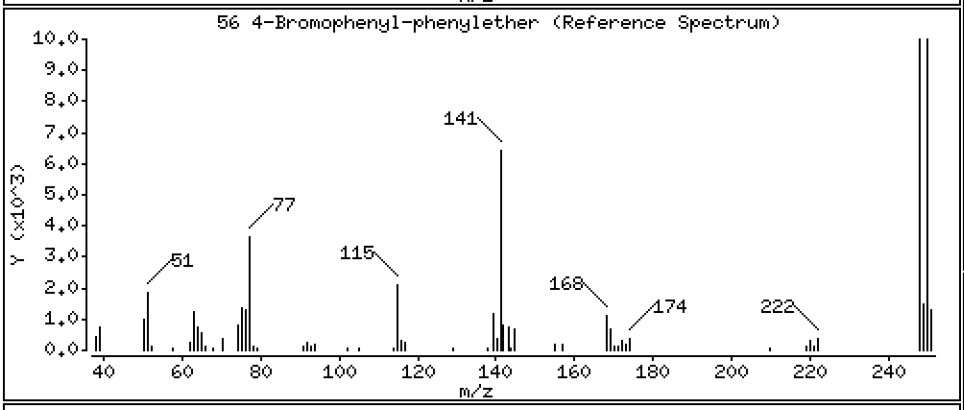
Column diameter: 0.25

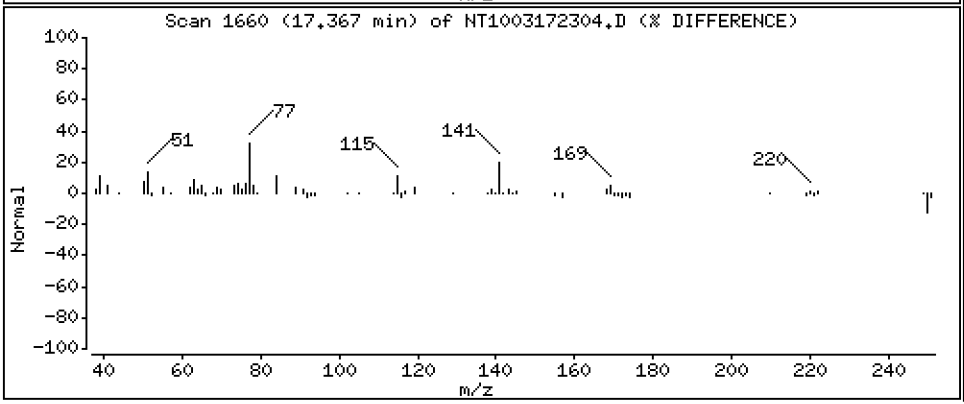
56 4-Bromophenyl-phenylether

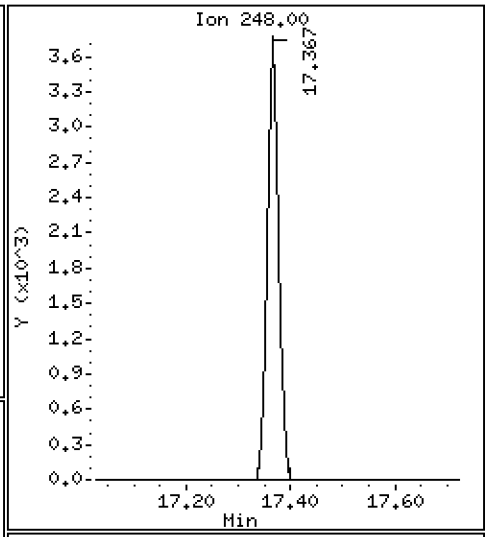
Concentration: 0.1935 ug/mL

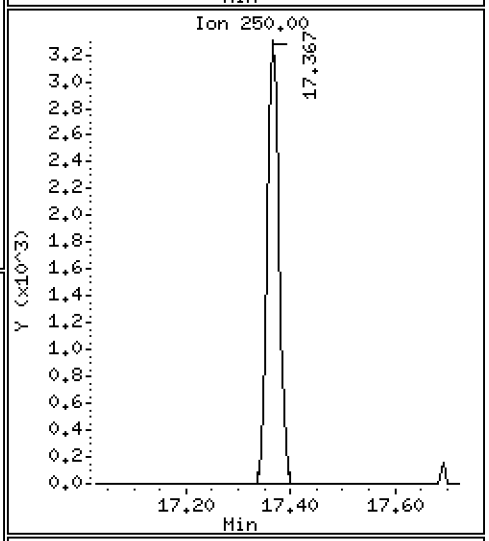


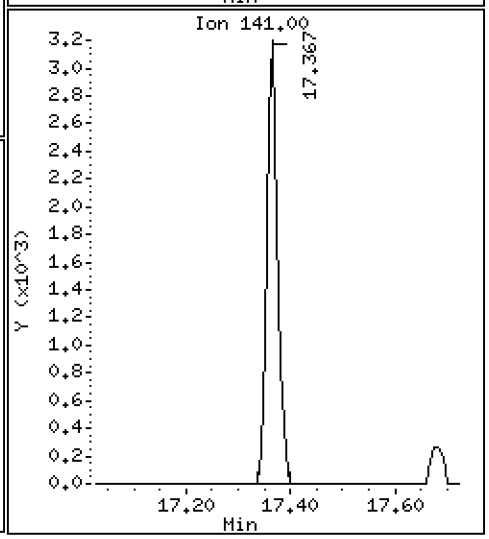












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

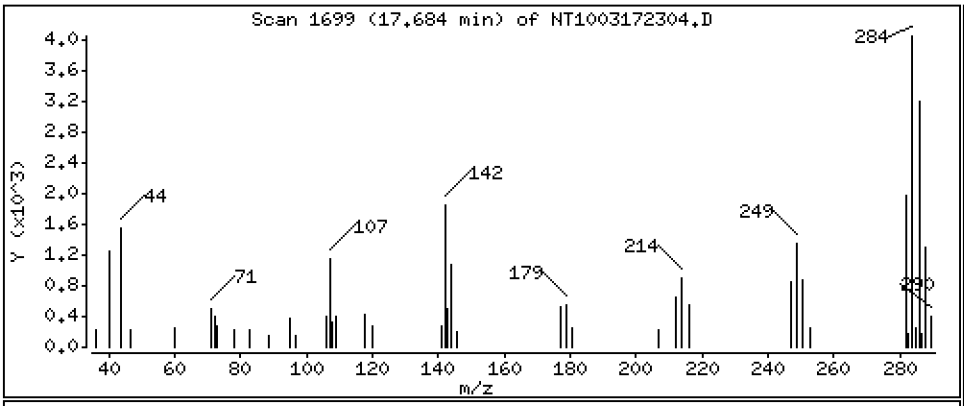
Operator: VTS

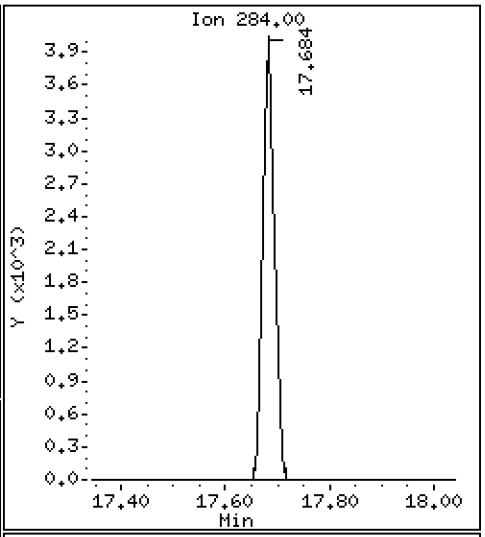
Column phase: ZB-5msi

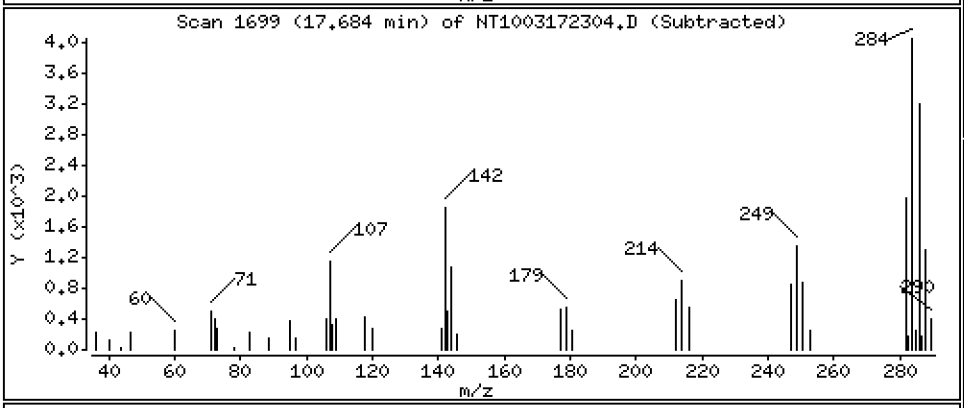
Column diameter: 0.25

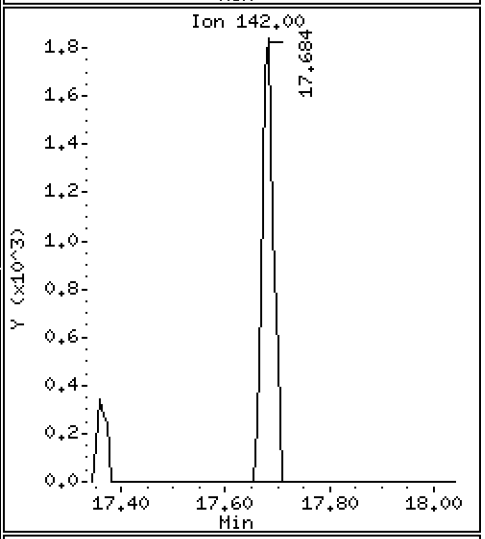
57 Hexachlorobenzene

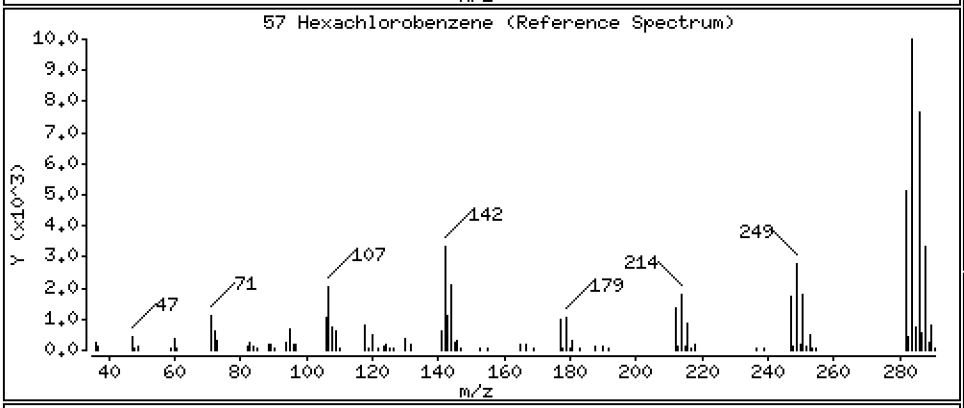
Concentration: 0.1986 ug/mL

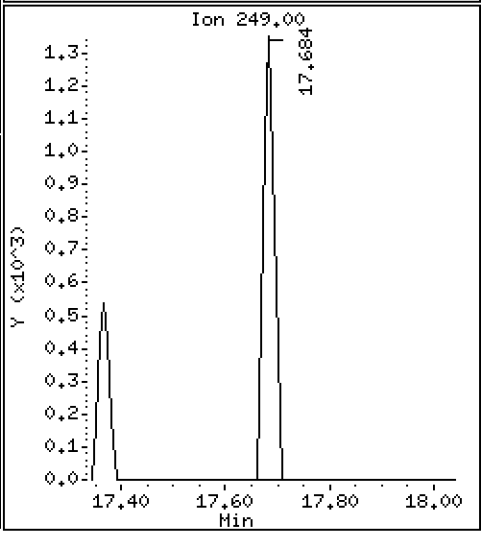


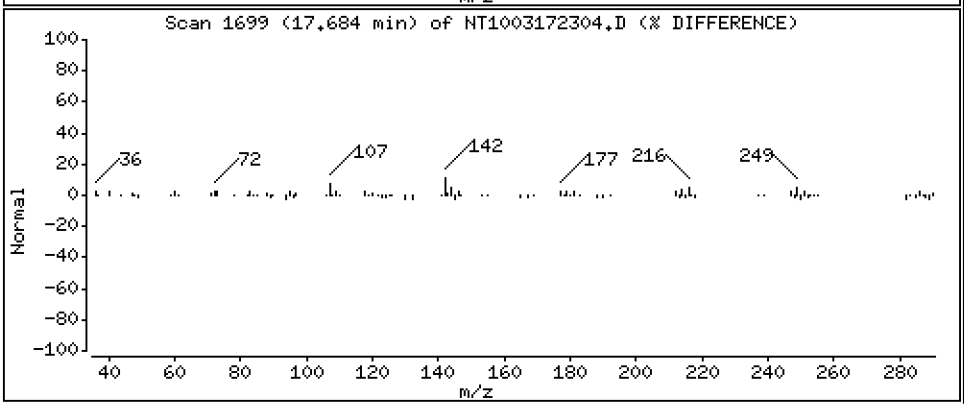












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

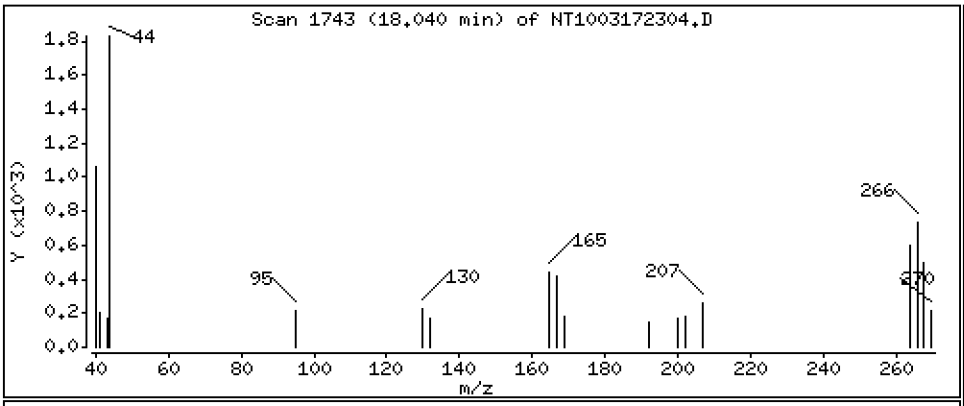
Operator: VTS

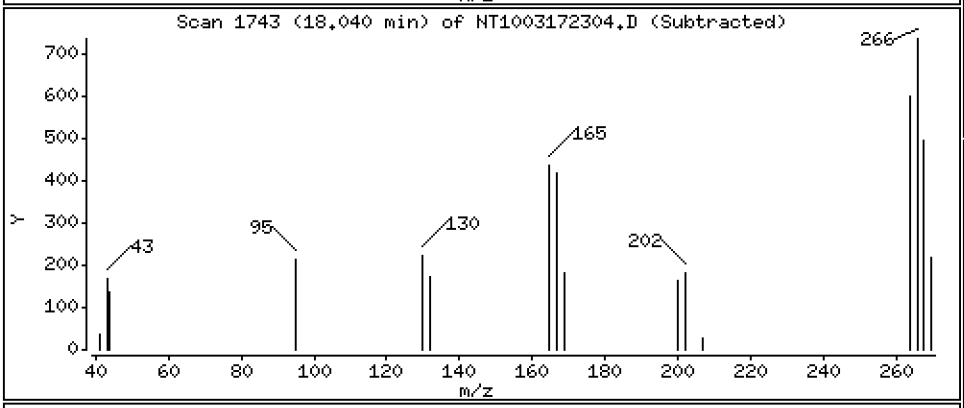
Column phase: ZB-5msi

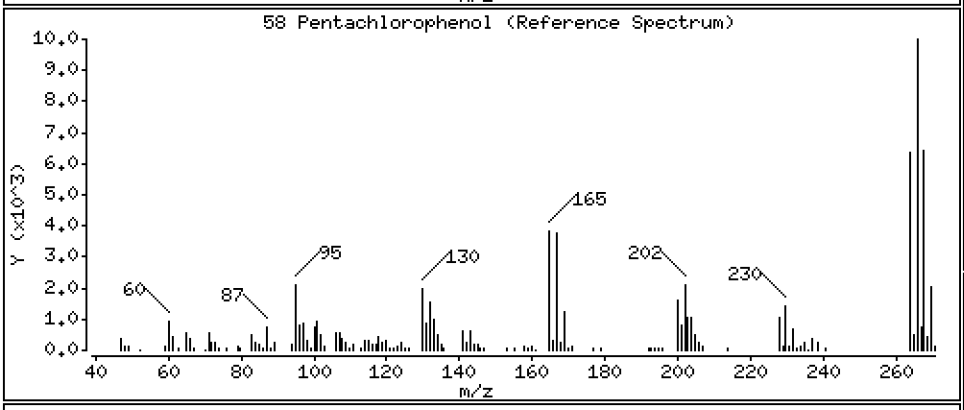
Column diameter: 0.25

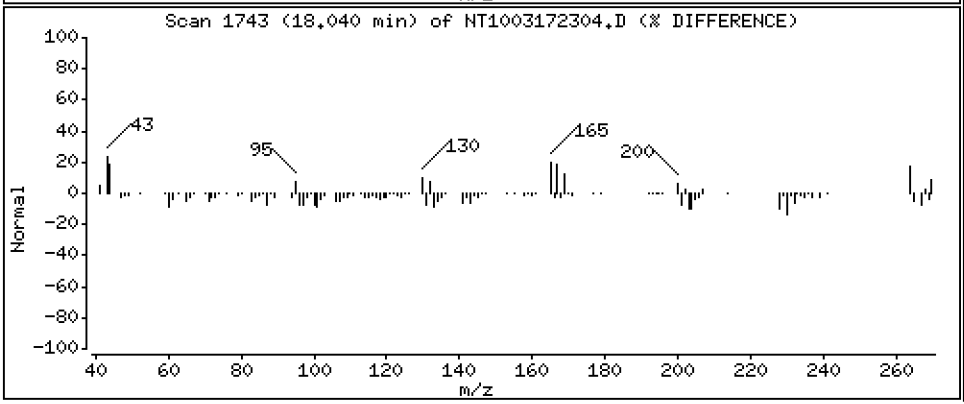
58 Pentachlorophenol

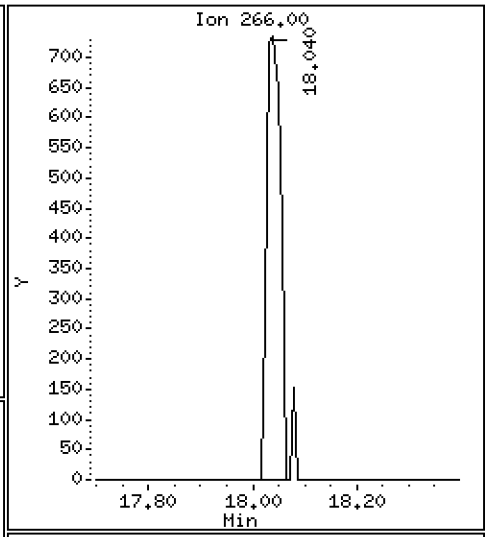
Concentration: 0.07113 ug/mL

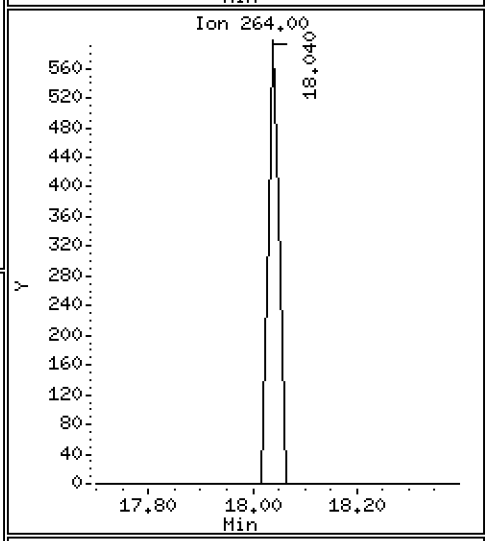


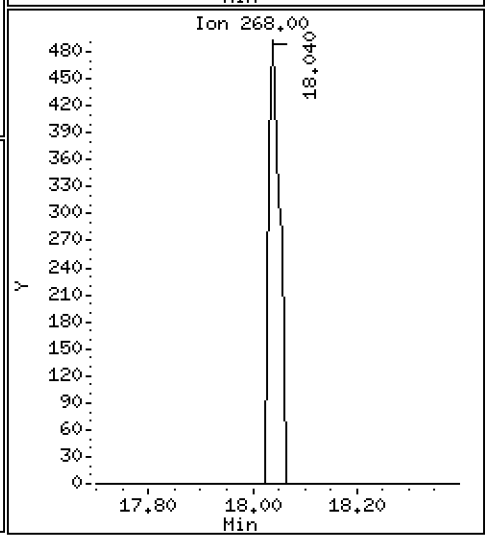












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

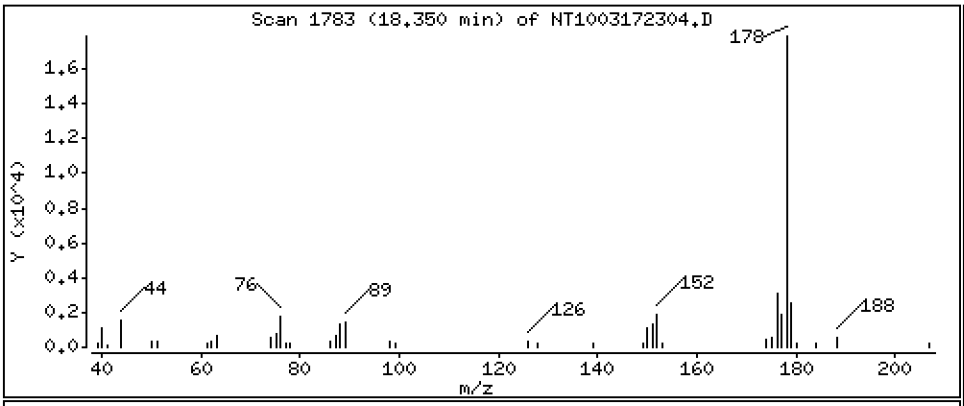
Operator: VTS

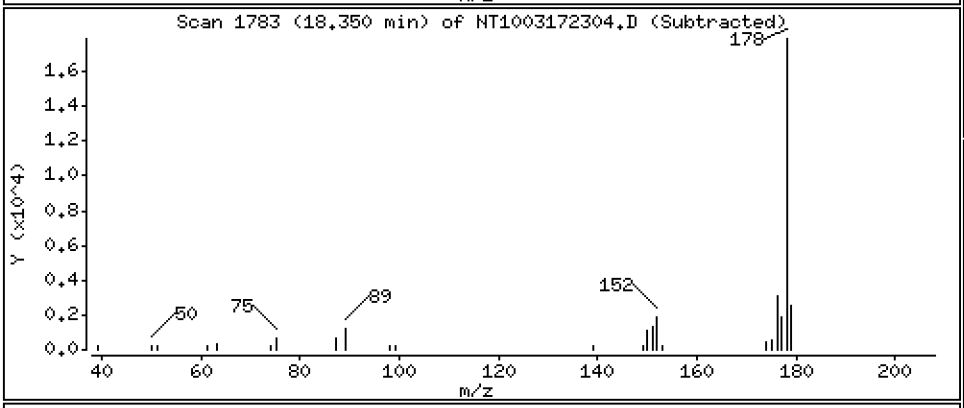
Column phase: ZB-5msi

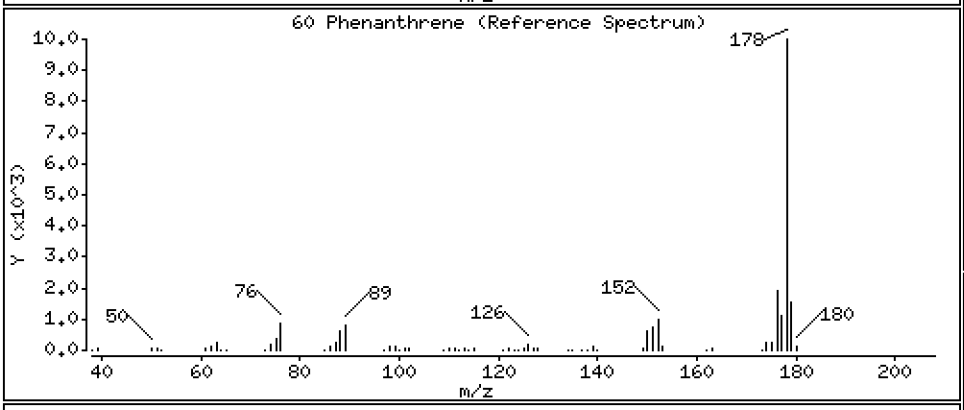
Column diameter: 0.25

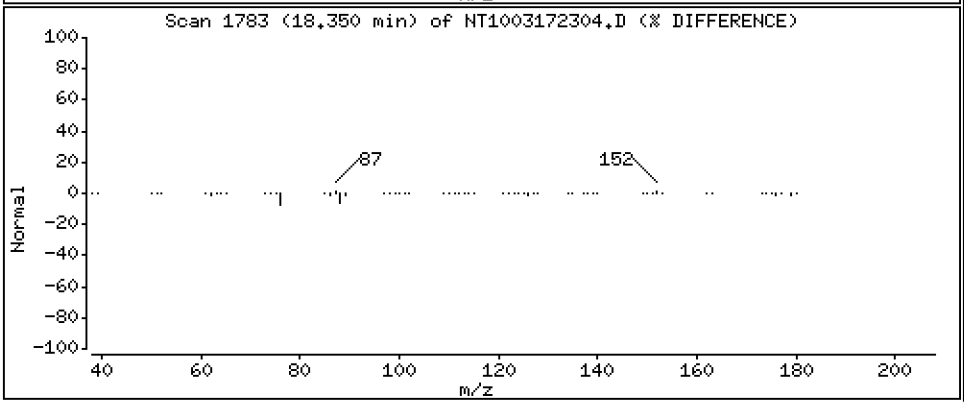
60 Phenanthrene

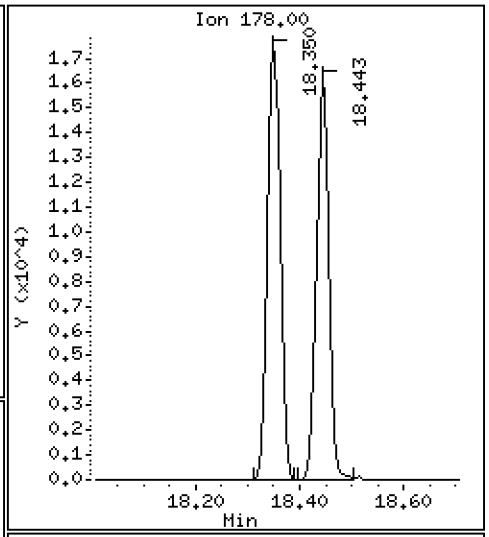
Concentration: 0.1995 ug/mL

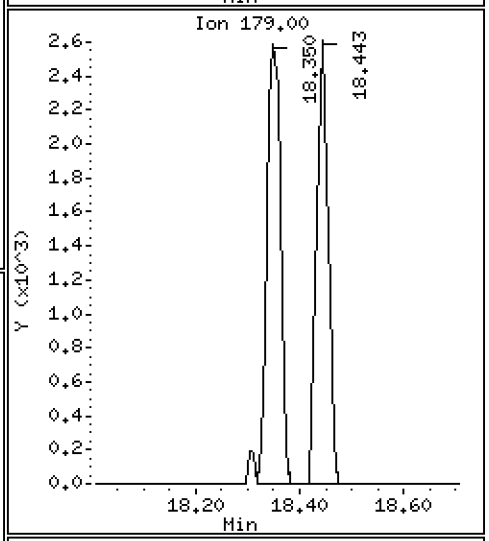


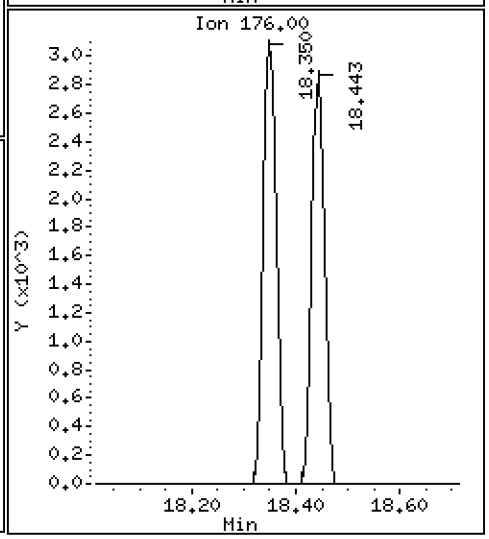












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

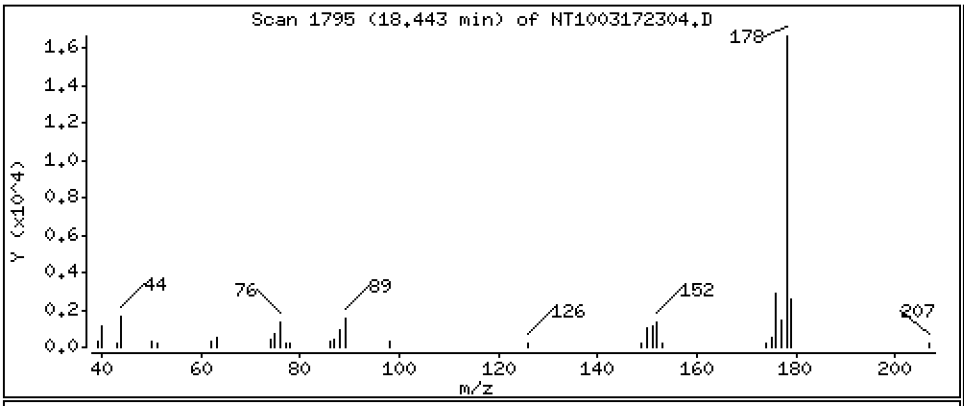
Operator: VTS

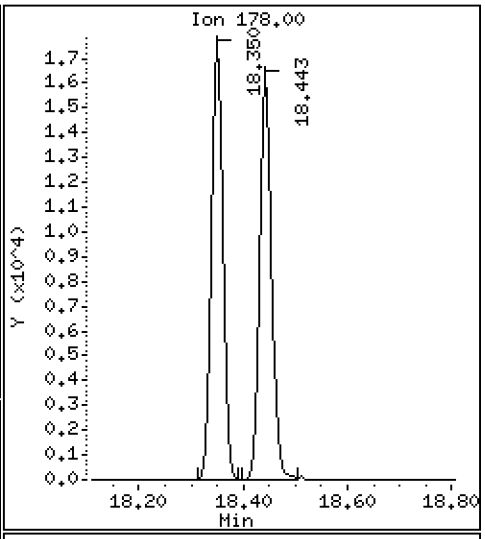
Column phase: ZB-5msi

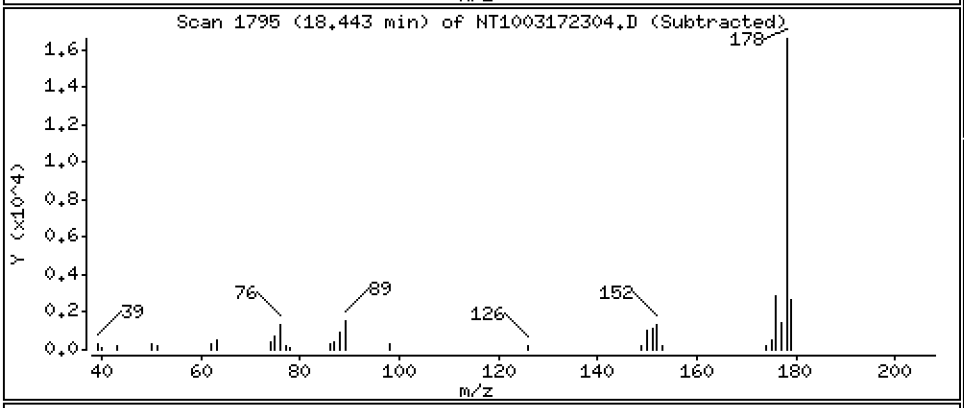
Column diameter: 0.25

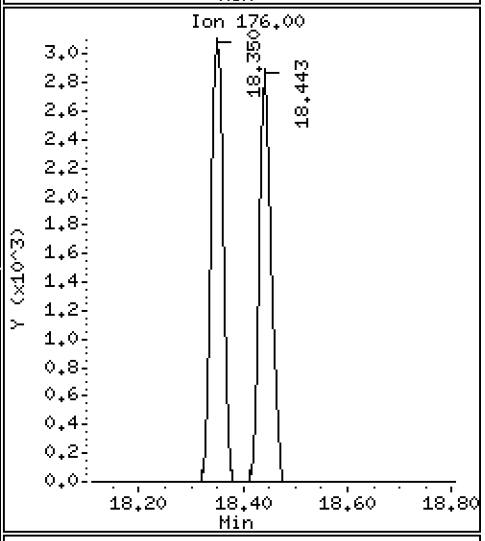
61 Anthracene

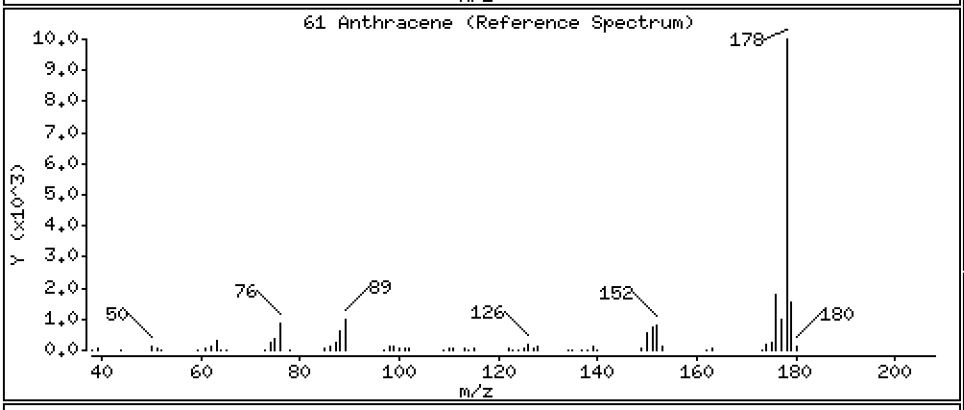
Concentration: 0.1908 ug/mL

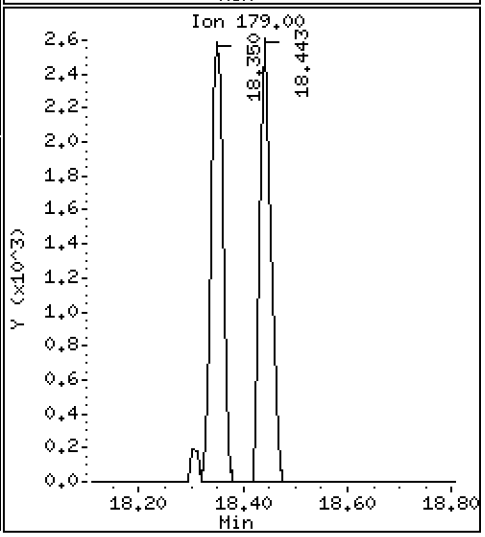


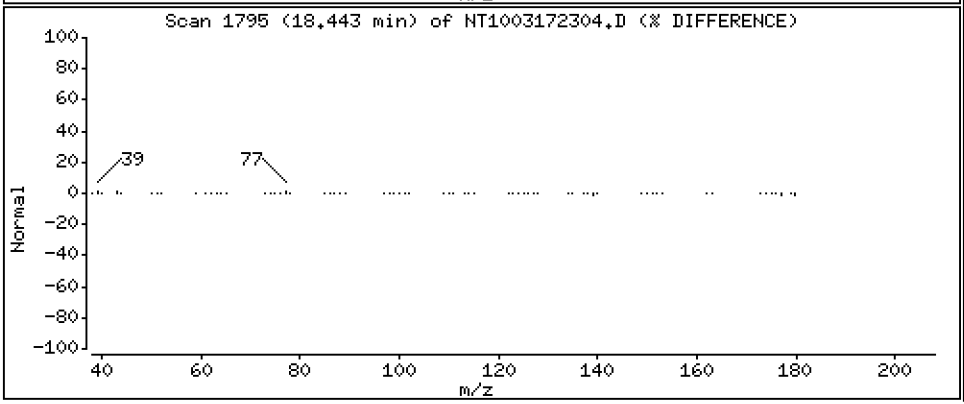












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

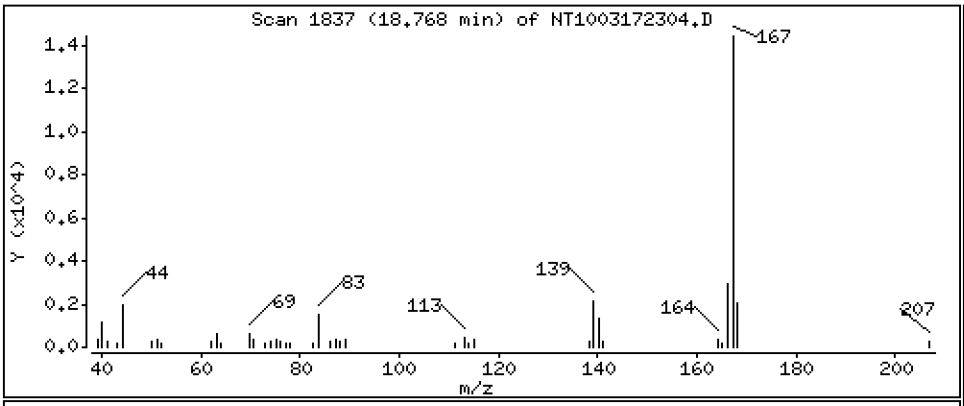
Operator: VTS

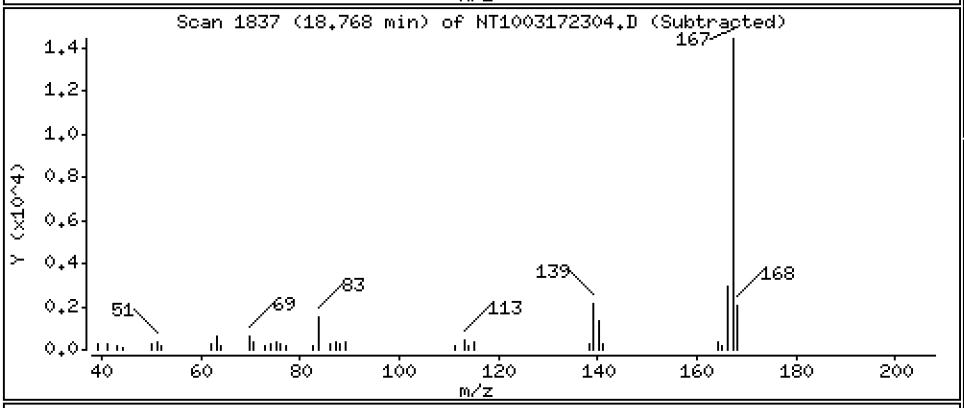
Column phase: ZB-5msi

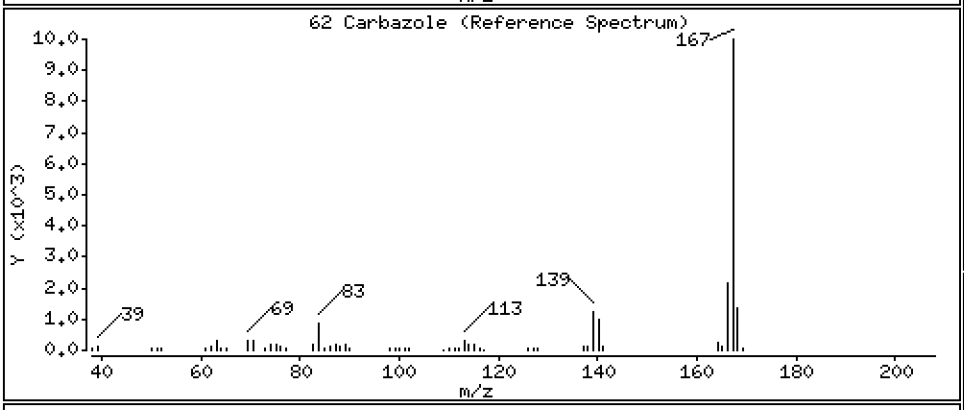
Column diameter: 0.25

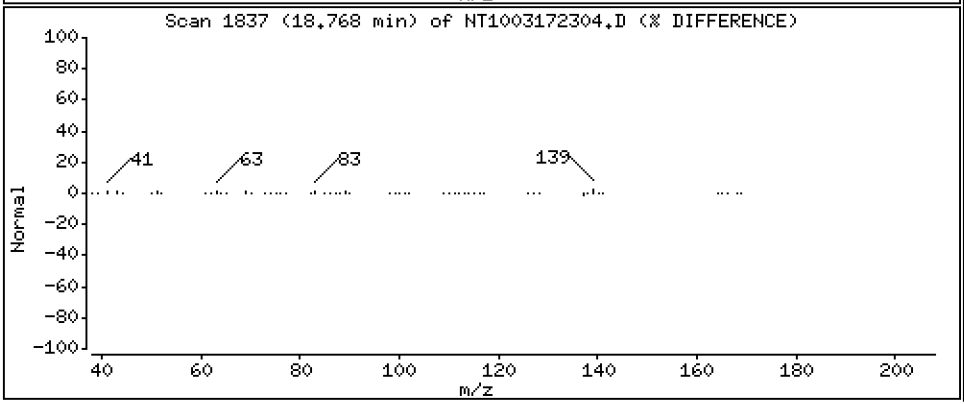
62 Carbazole

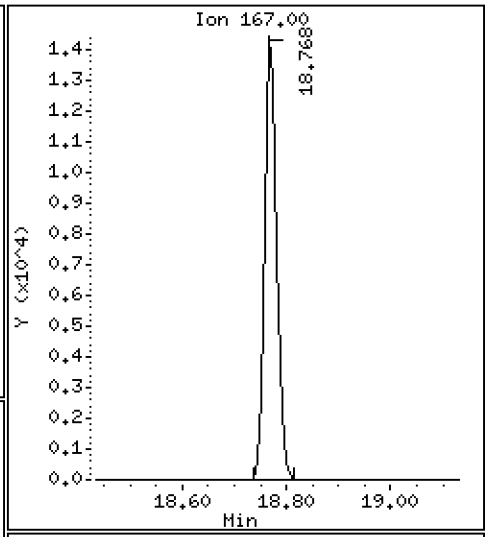
Concentration: 0.1862 ug/mL

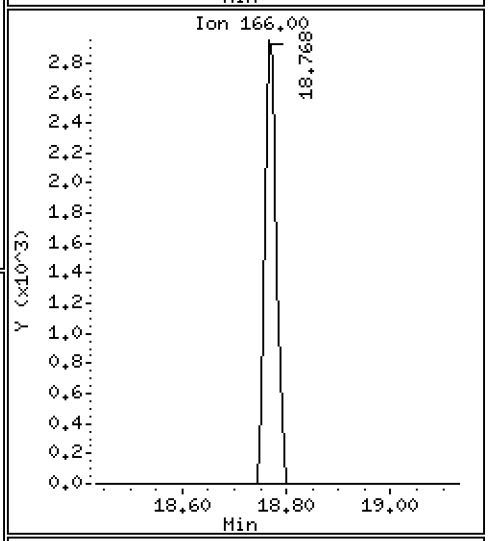


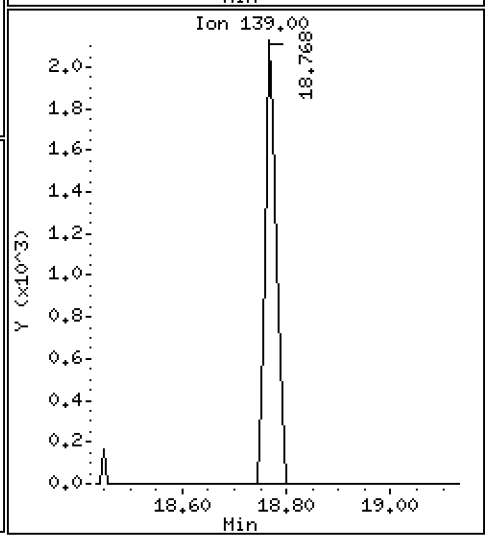












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

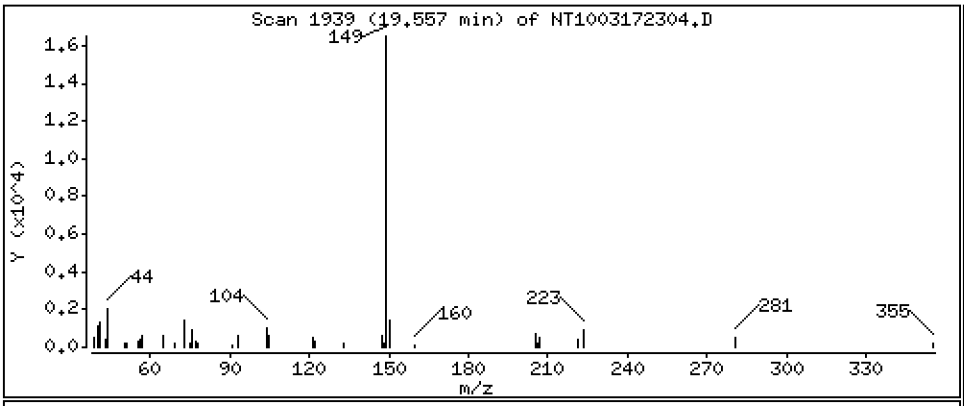
Operator: VTS

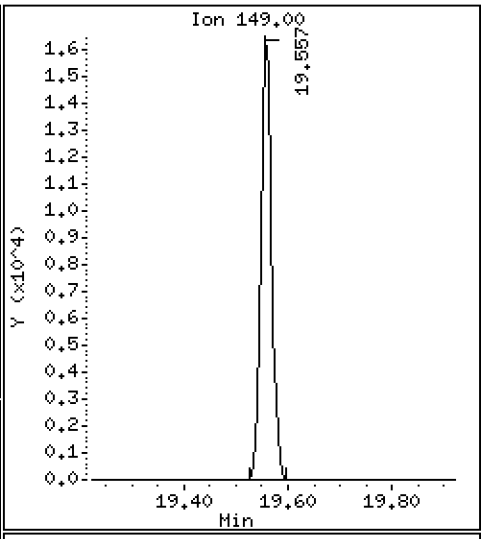
Column phase: ZB-5msi

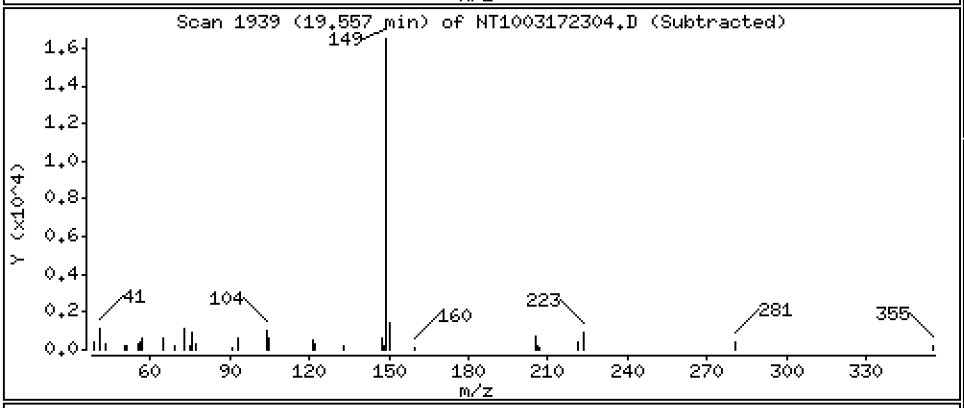
Column diameter: 0.25

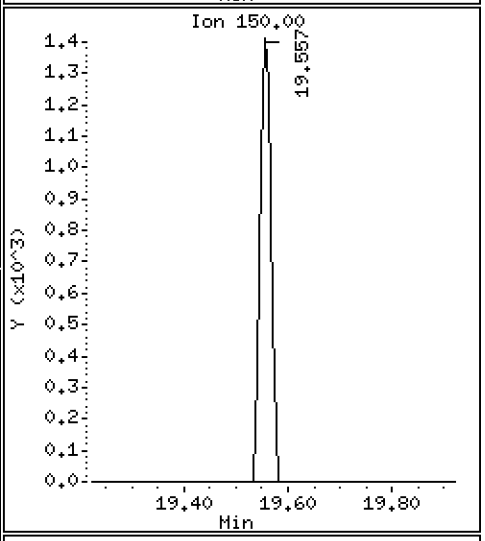
63 Di-n-butylphthalate

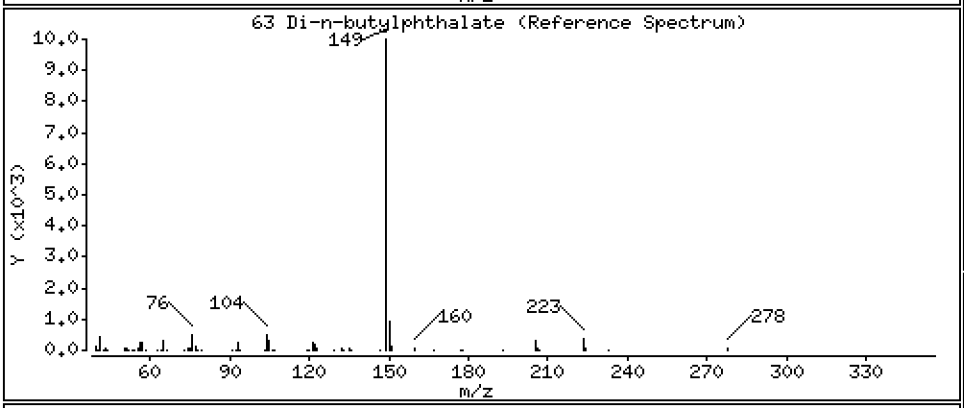
Concentration: 0.1430 ug/mL

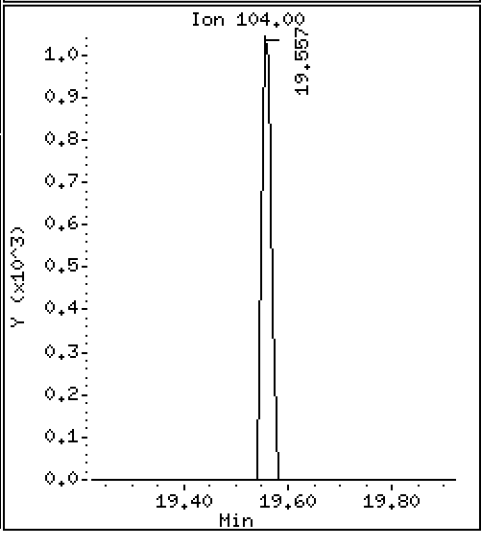


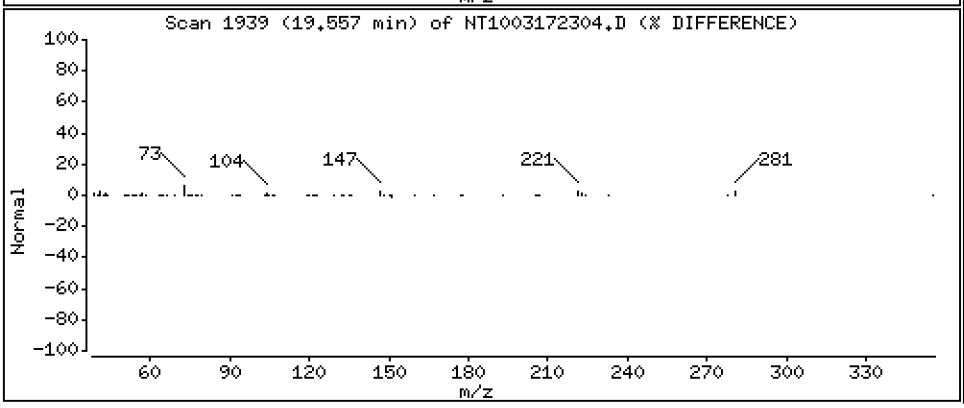












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

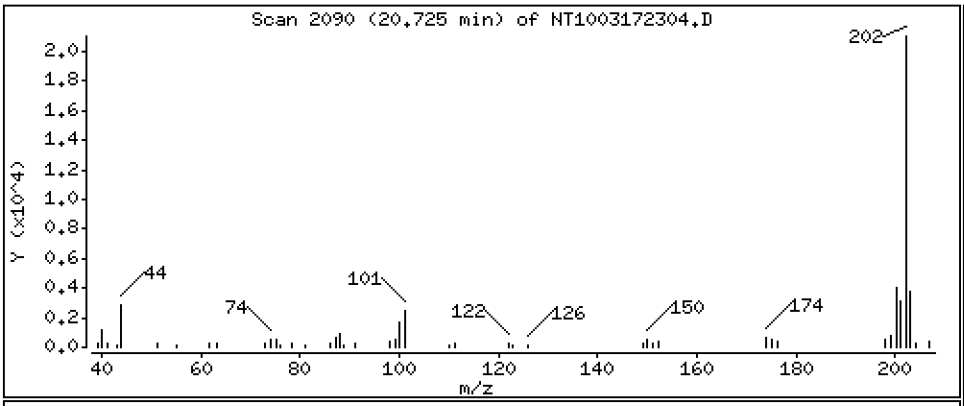
Operator: VTS

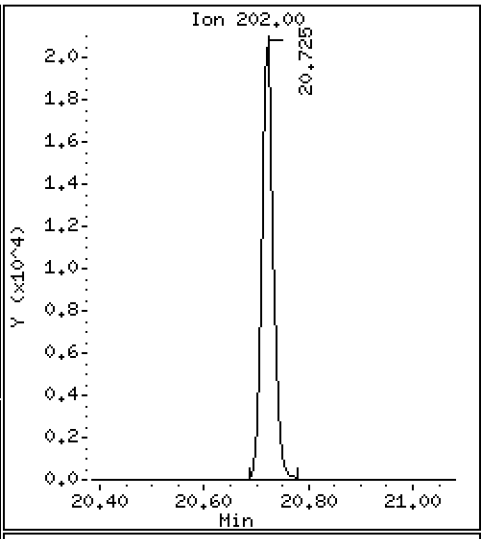
Column phase: ZB-5msi

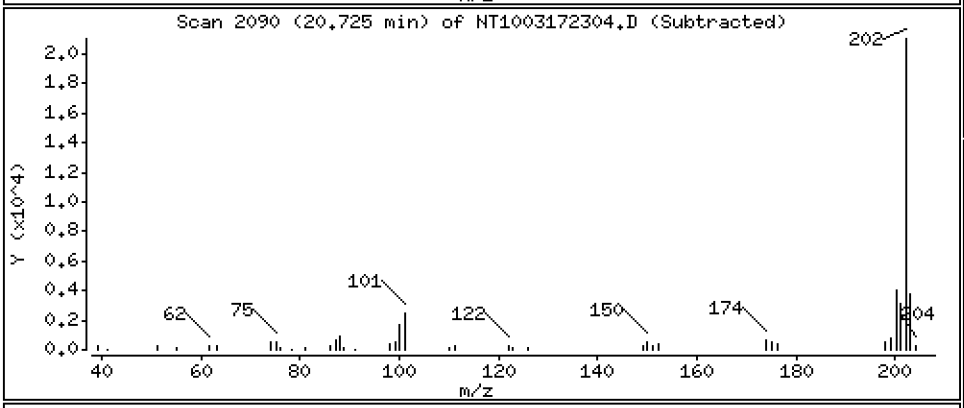
Column diameter: 0.25

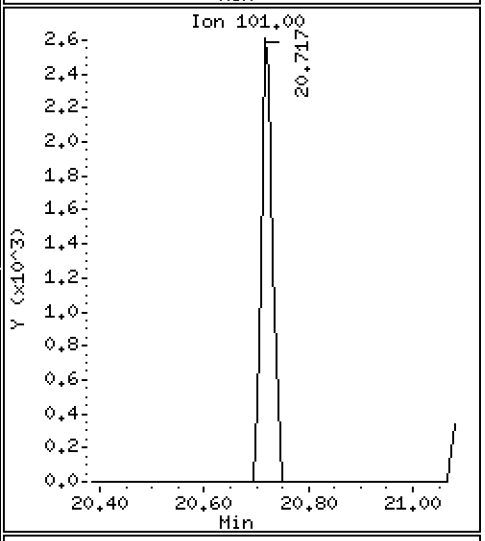
64 Fluoranthene

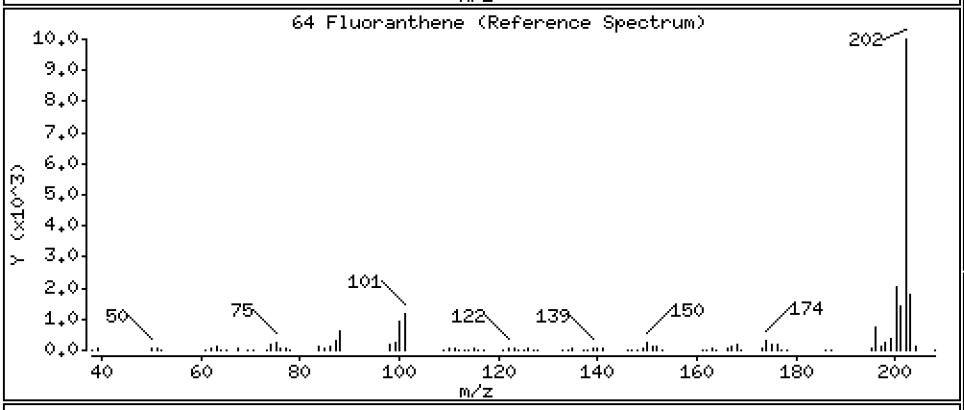
Concentration: 0.1885 ug/mL

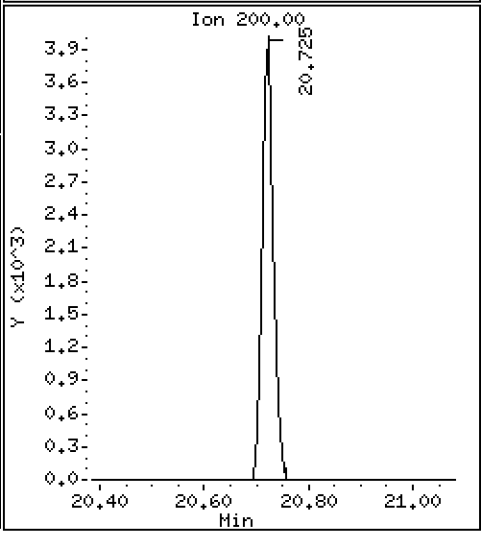


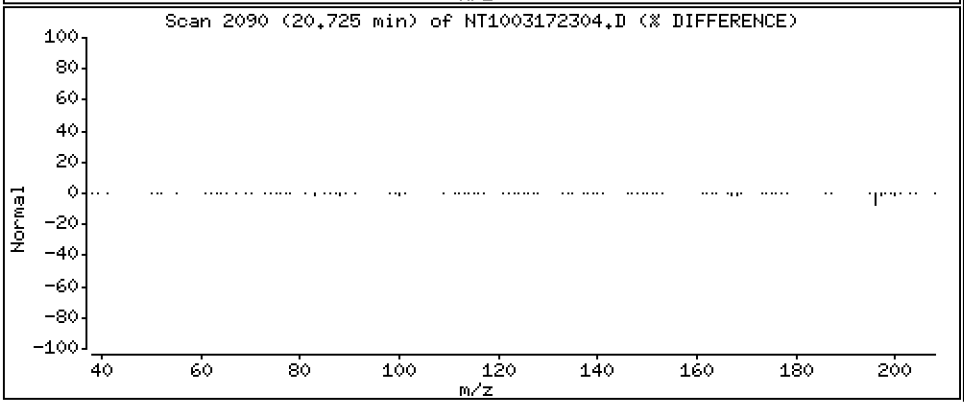












Date : 17-MAR-2023 20:19

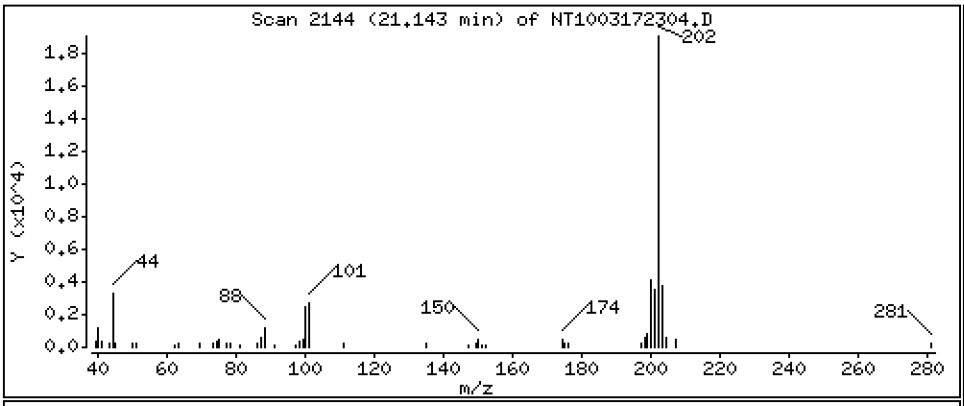
Client ID: Instrument: nt10.i

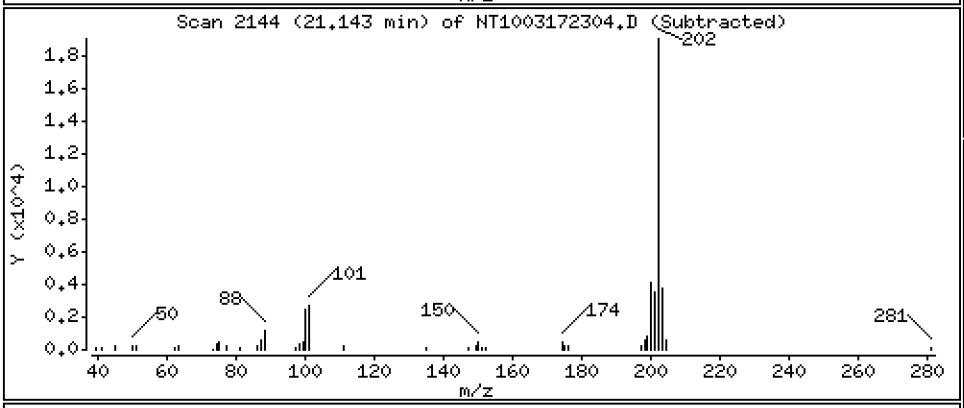
Sample Info: SLC0473-LCV1

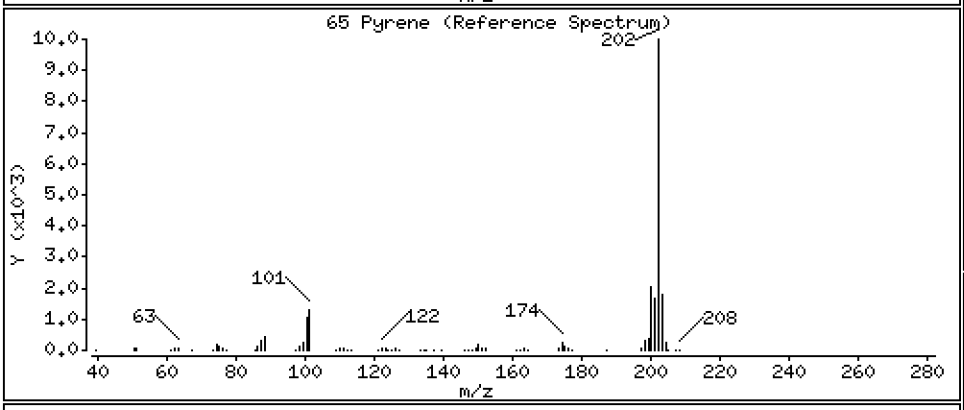
Operator: VTS

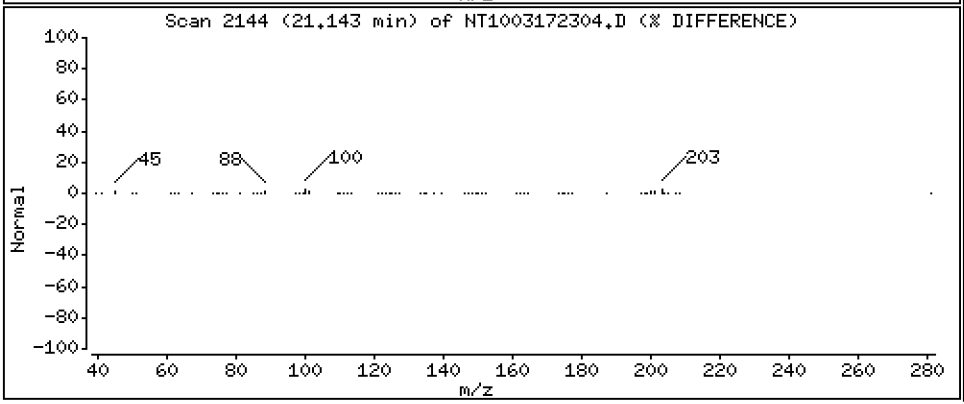
Column phase: ZB-5msi Column diameter: 0.25

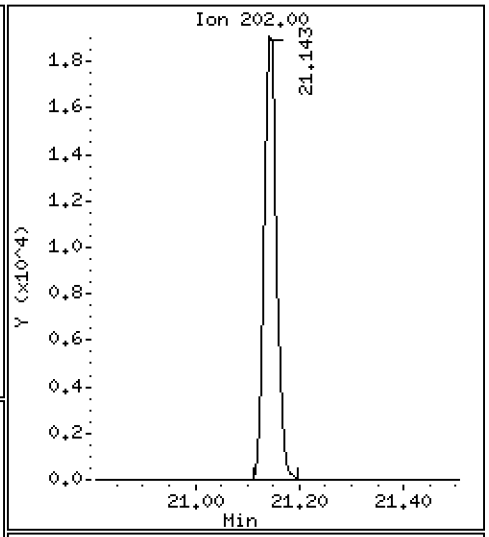
65 Pyrene Concentration: 0.1852 ug/mL

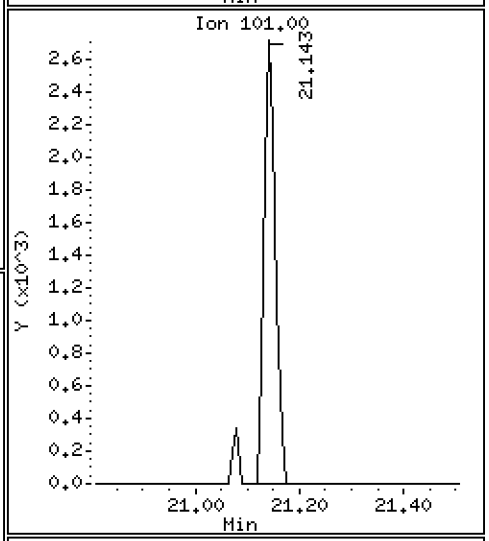


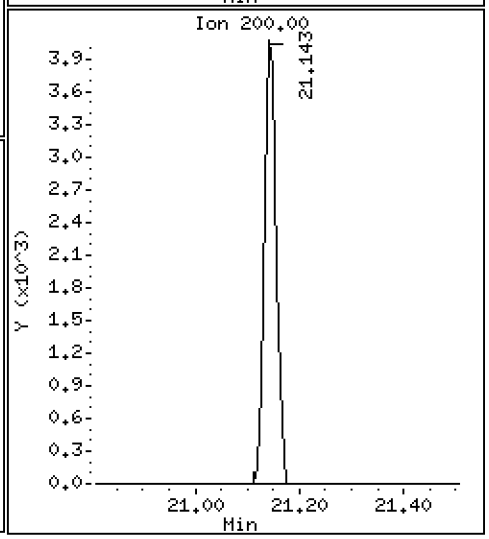












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

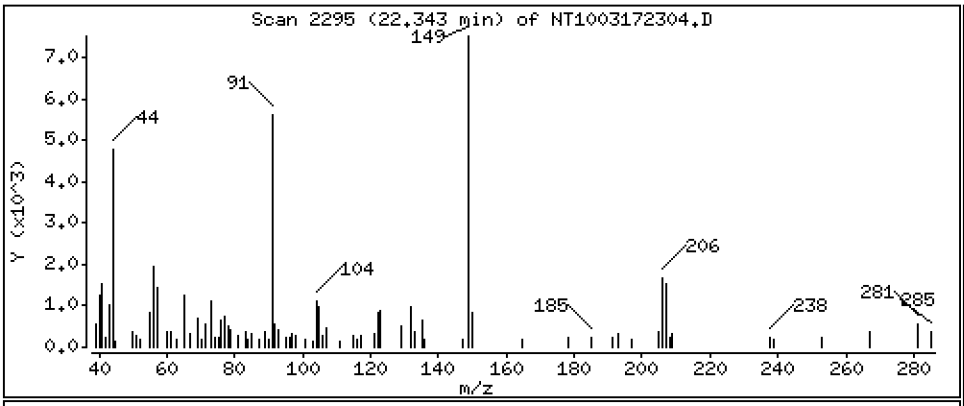
Operator: VTS

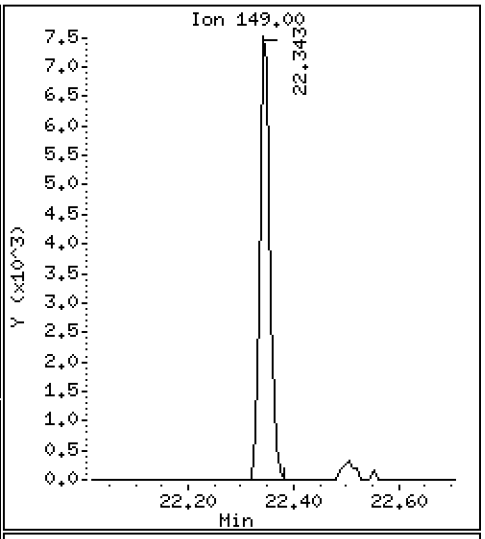
Column phase: ZB-5msi

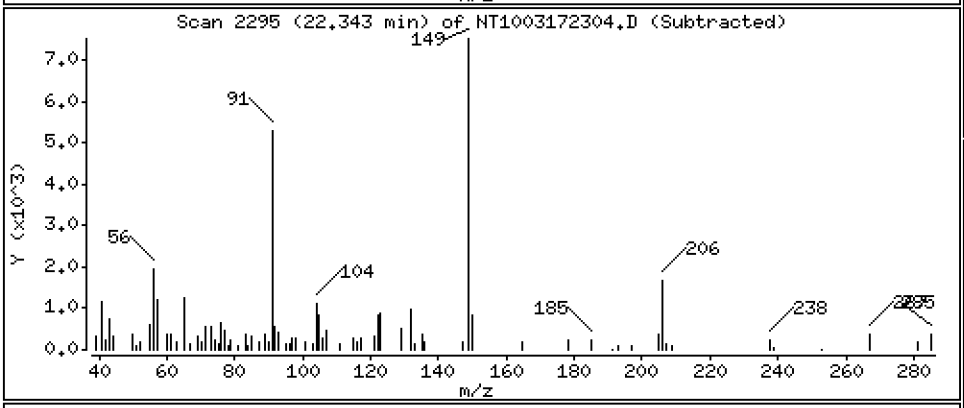
Column diameter: 0.25

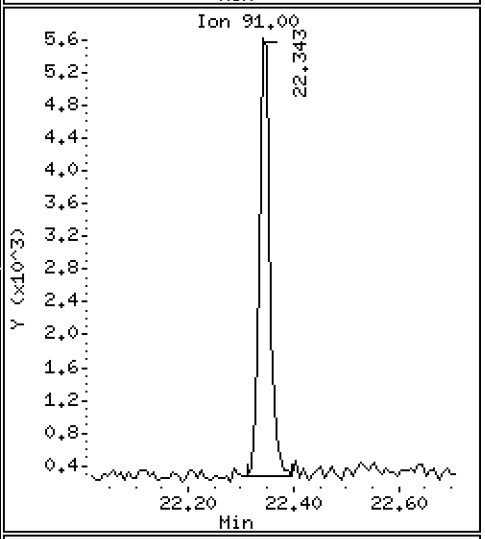
67 Butylbenzylphthalate

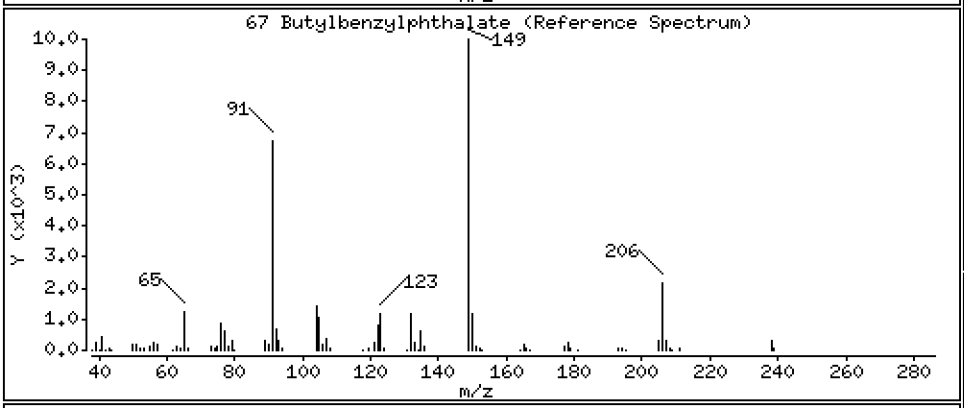
Concentration: 0.1668 ug/mL

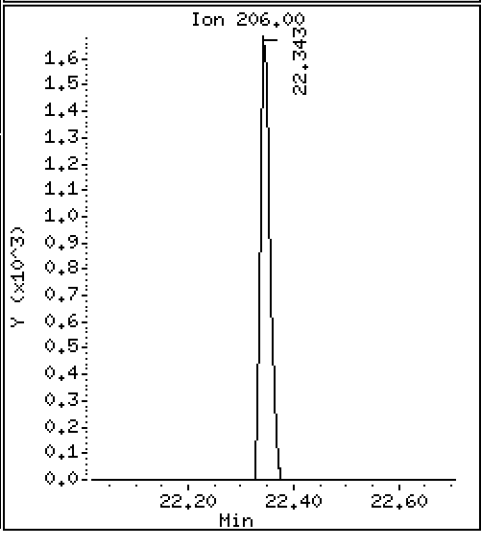


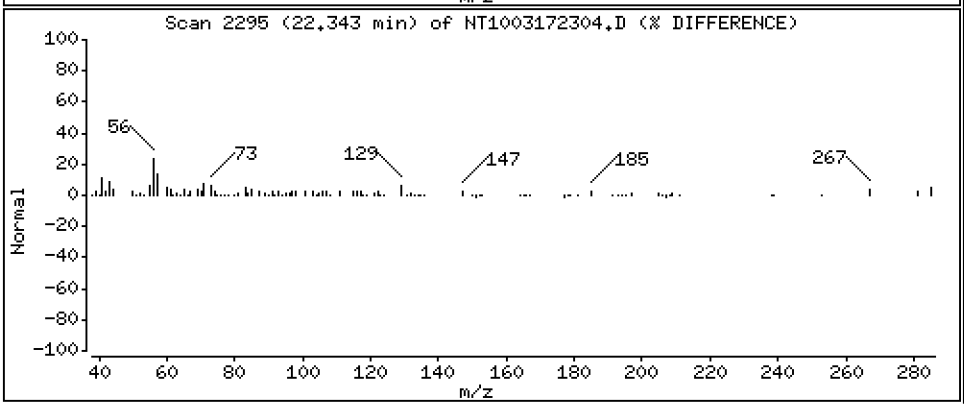












Date : 17-MAR-2023 20:19

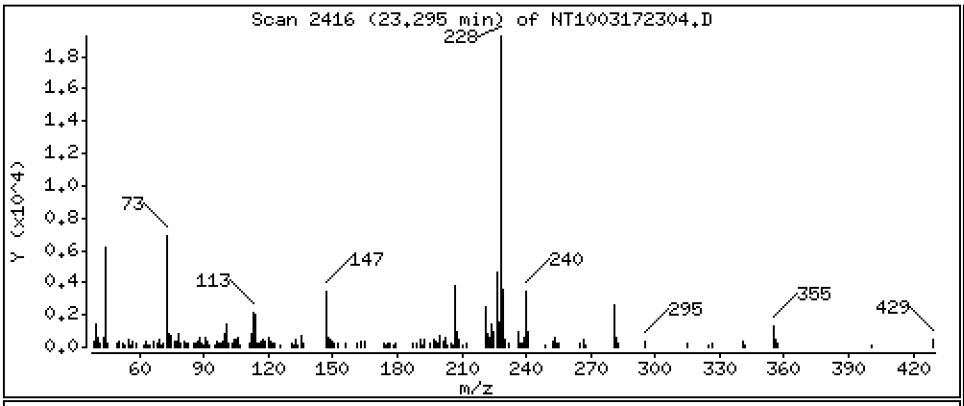
Client ID: Instrument: nt10.i

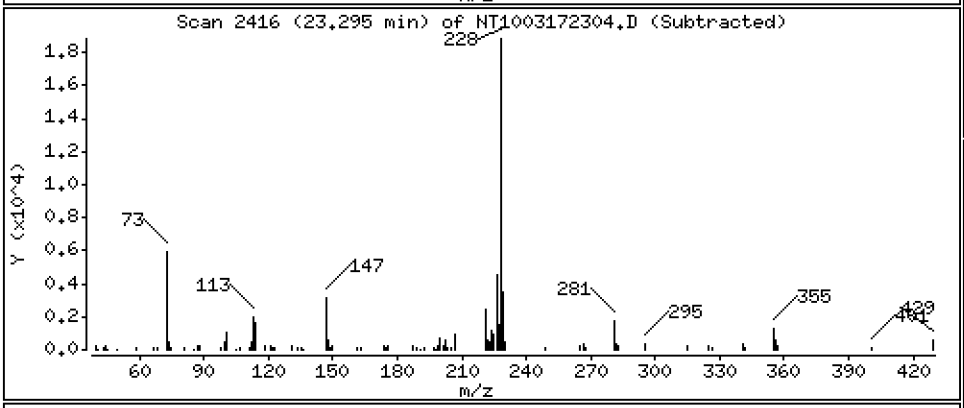
Sample Info: SLC0473-LCV1

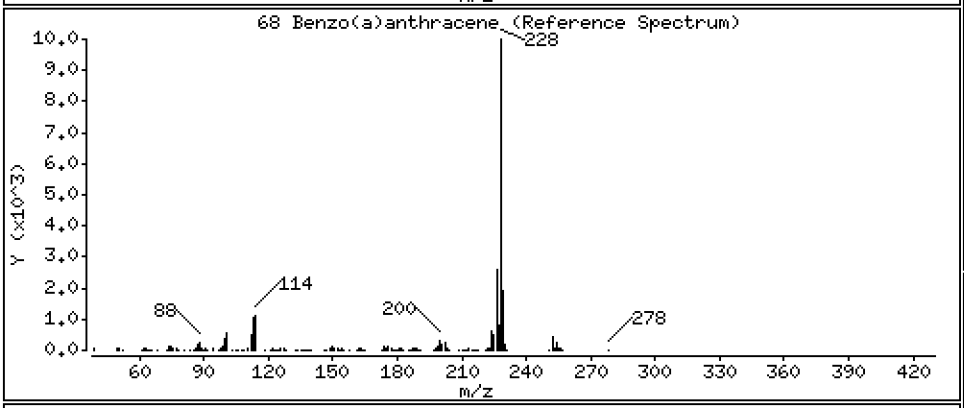
Operator: VTS

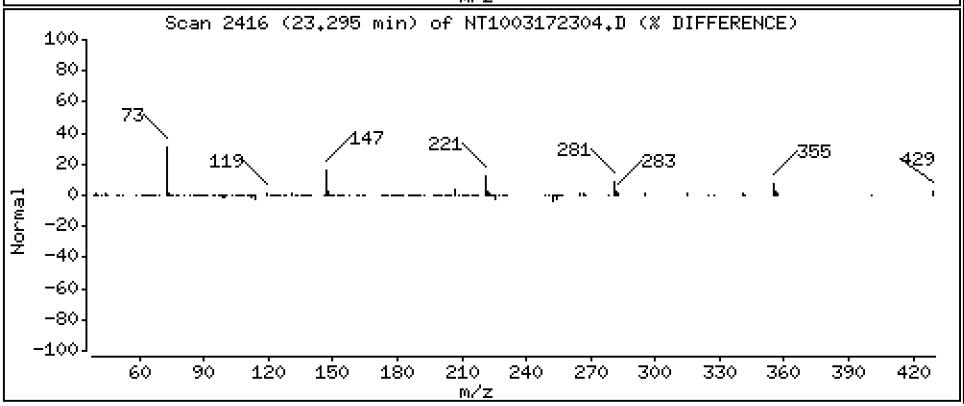
Column phase: ZB-5msi Column diameter: 0.25

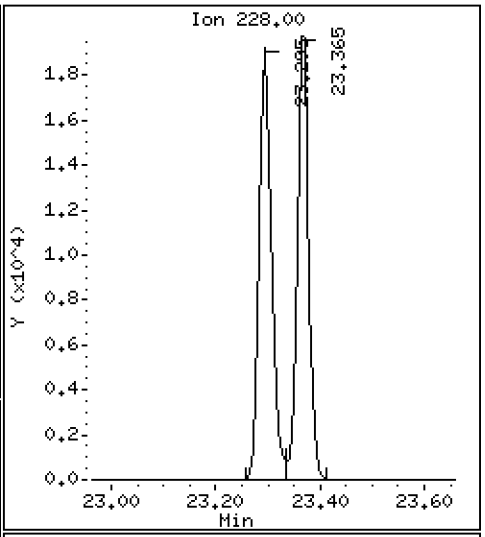
68 Benzo(a)anthracene Concentration: 0.2108 ug/mL

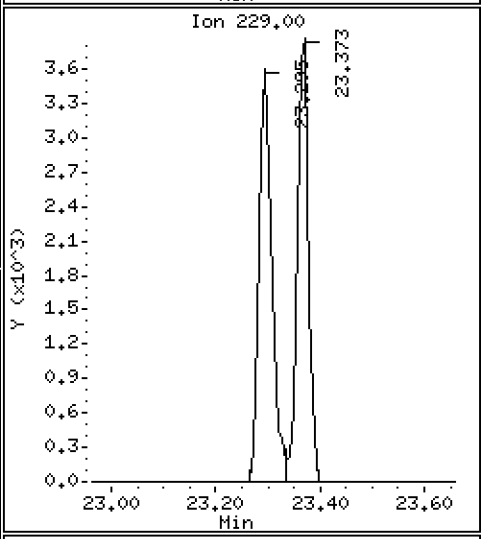


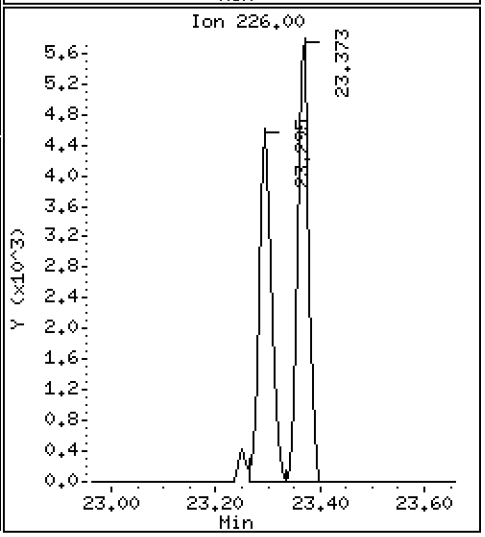












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

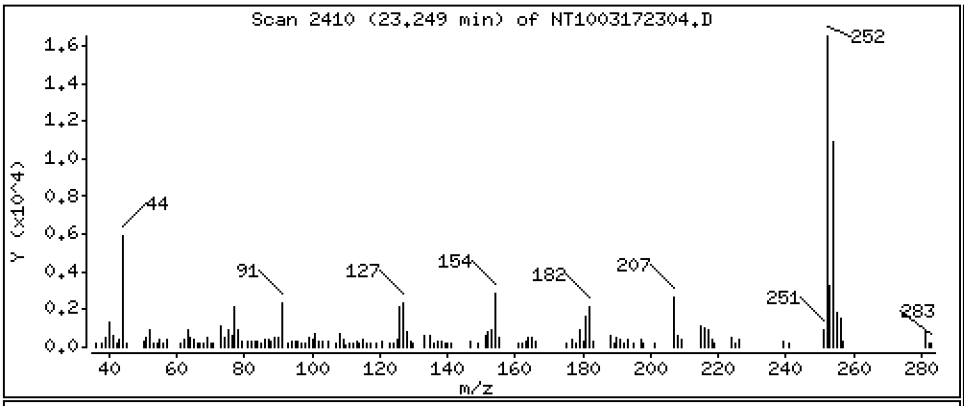
Operator: VTS

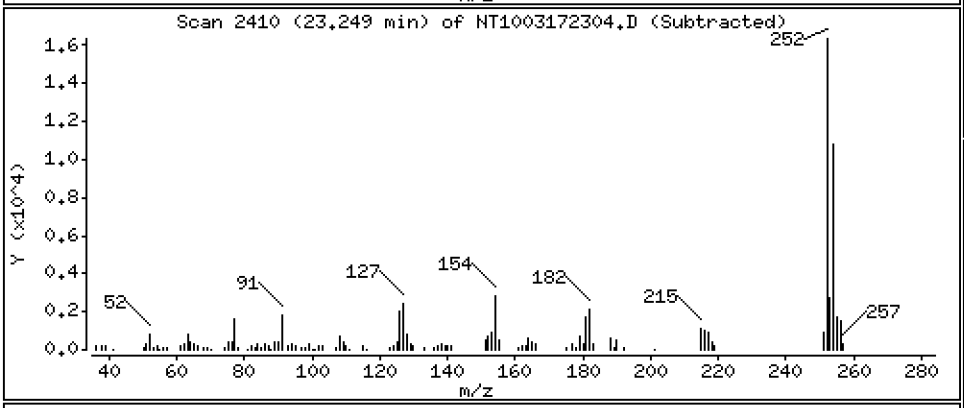
Column phase: ZB-5msi

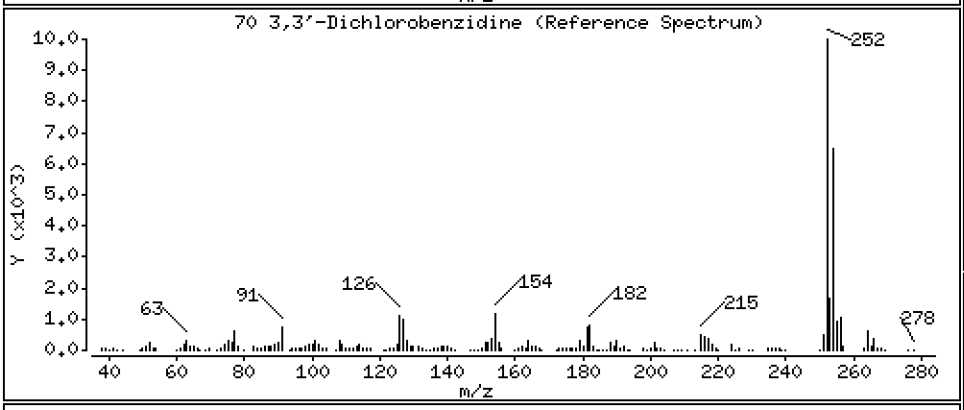
Column diameter: 0.25

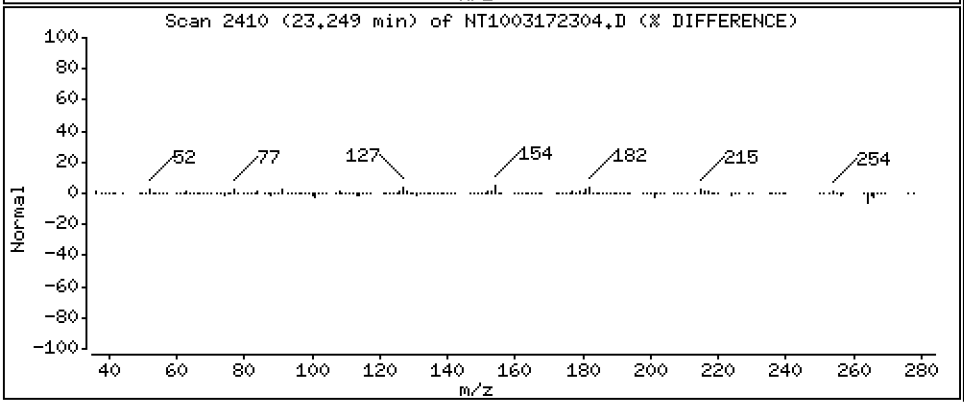
70 3,3'-Dichlorobenzidine

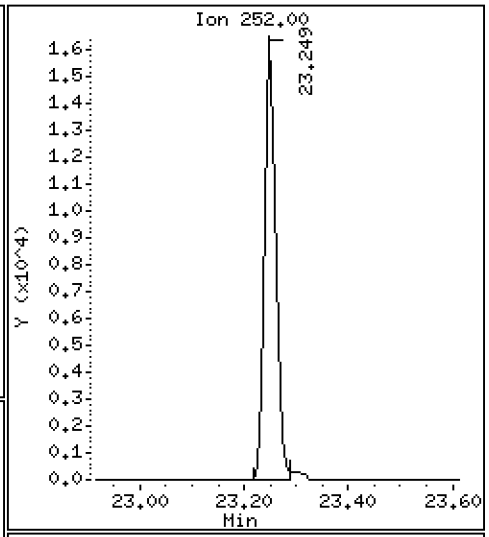
Concentration: 0.4987 ug/mL

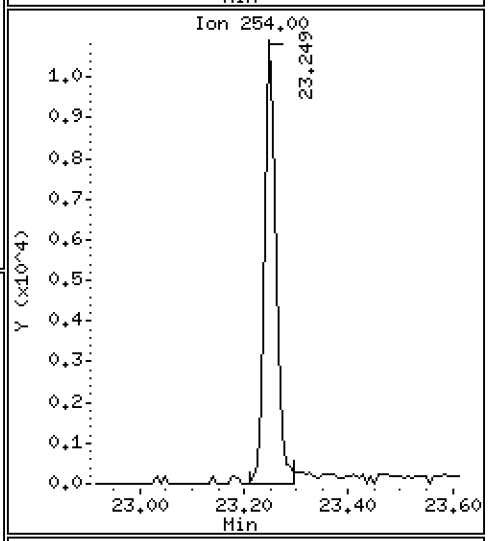


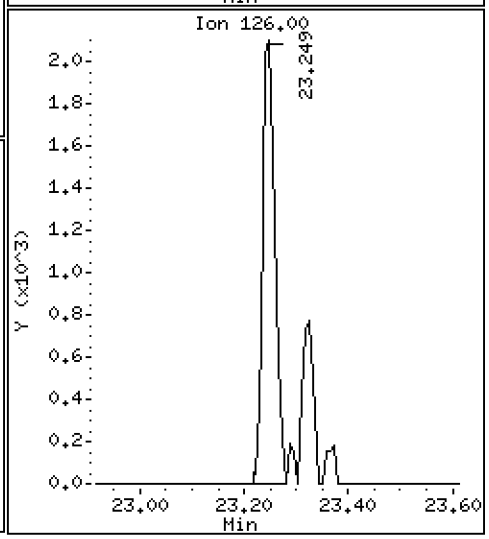












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

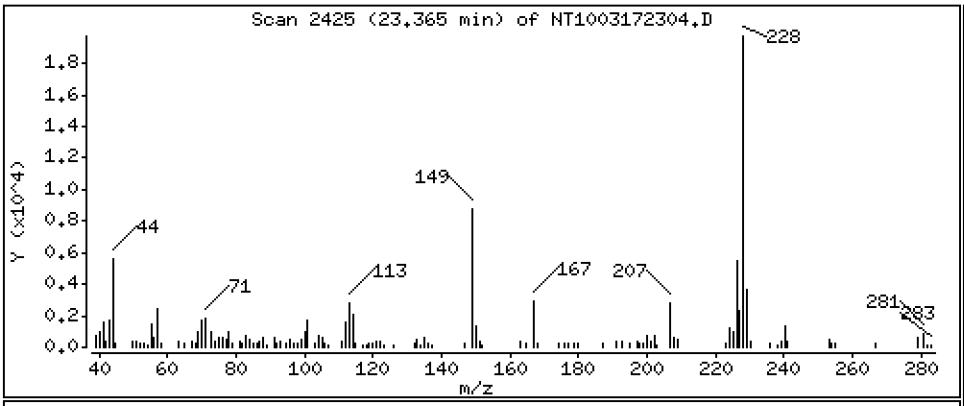
Operator: VTS

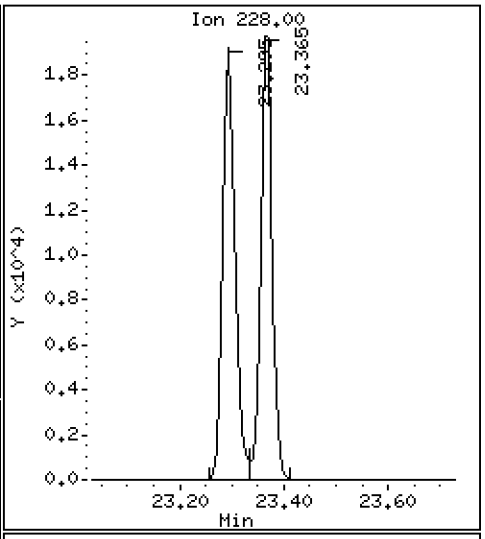
Column phase: ZB-5msi

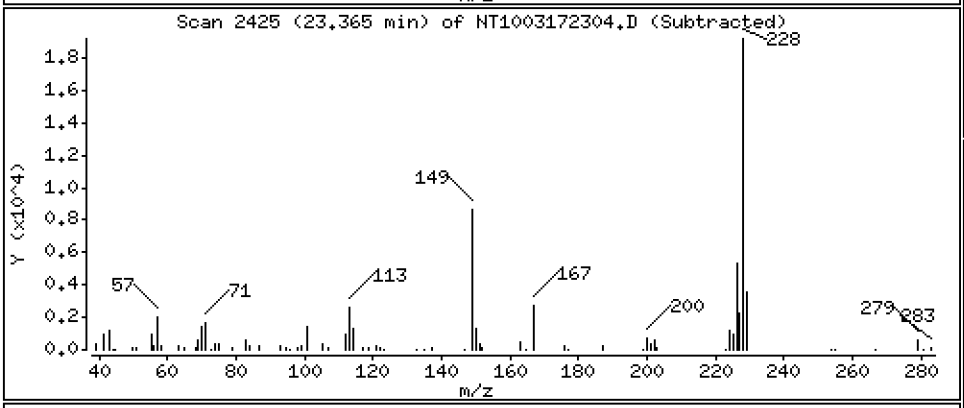
Column diameter: 0.25

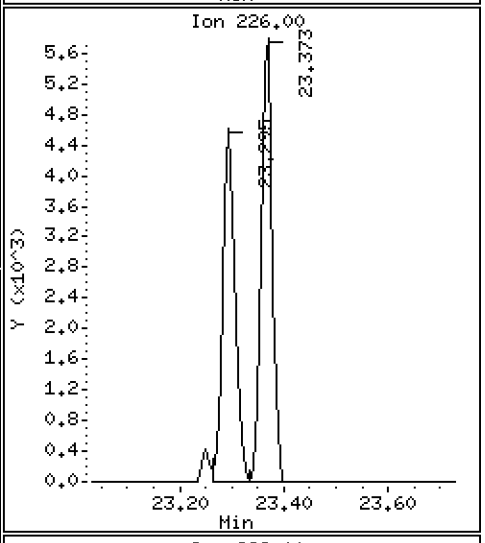
71 Chrysene

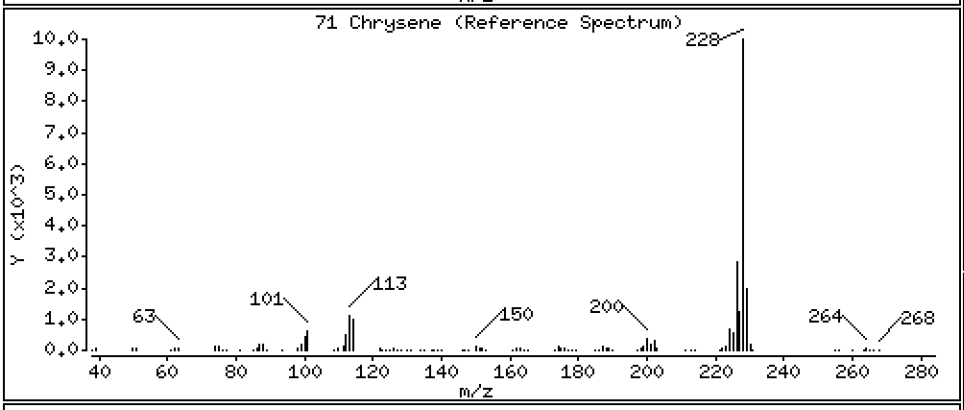
Concentration: 0.2103 ug/mL

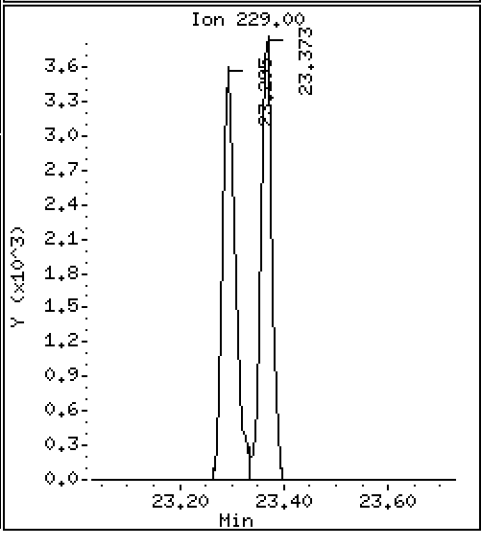


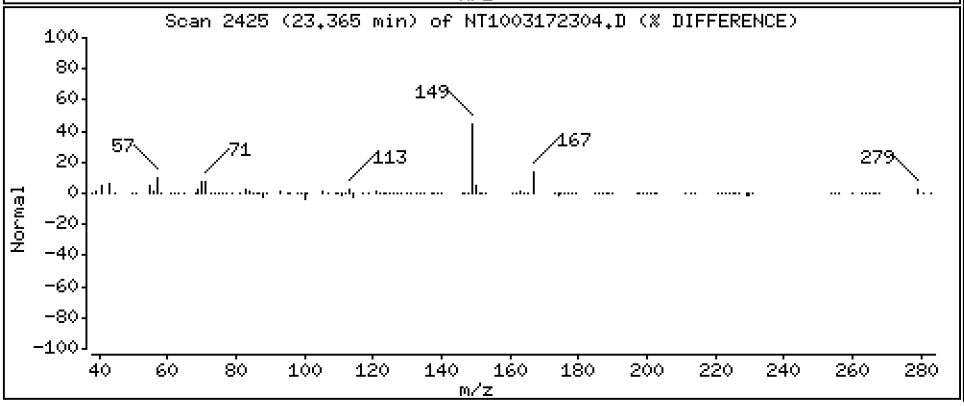












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

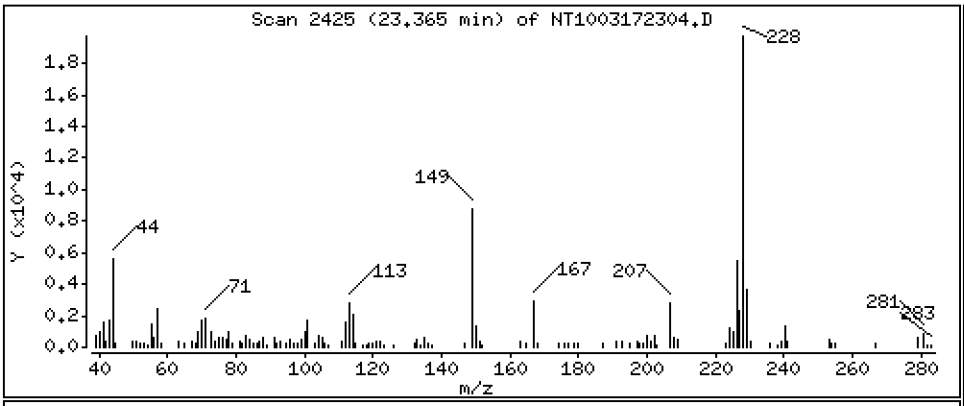
Operator: VTS

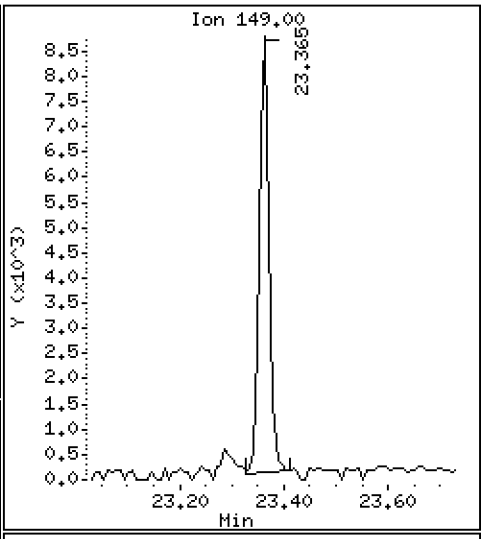
Column phase: ZB-5msi

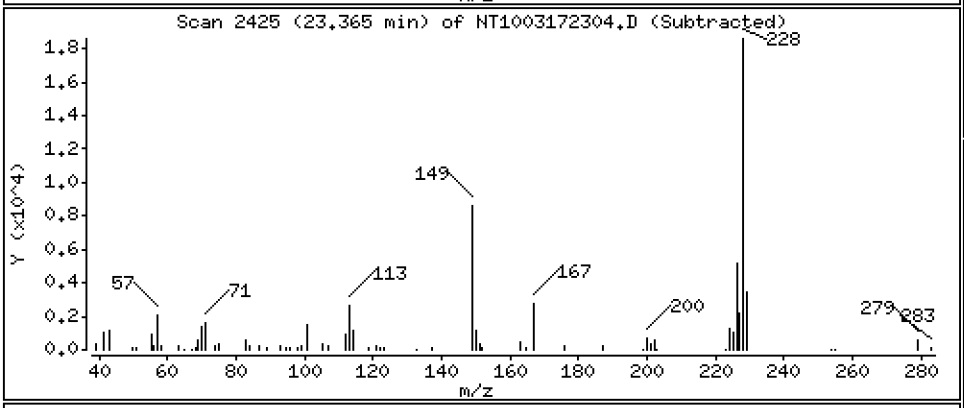
Column diameter: 0.25

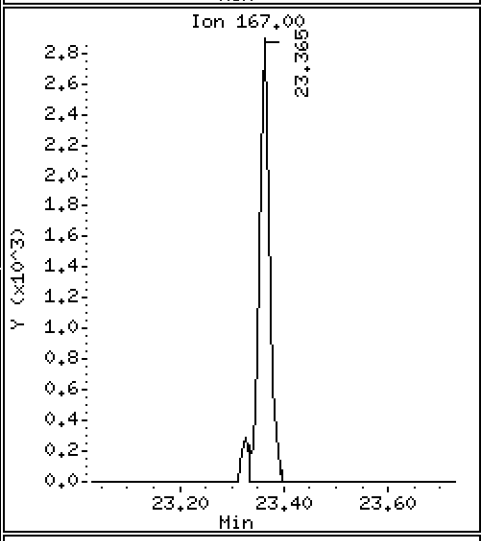
72 bis(2-Ethylhexyl)phthalate

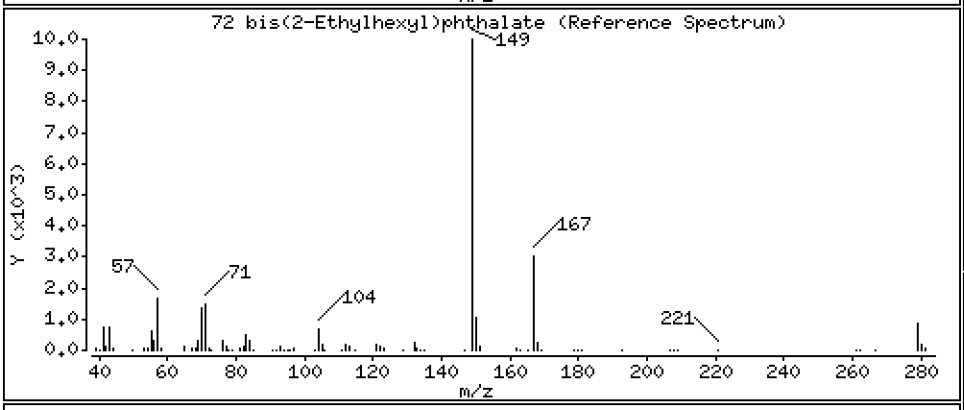
Concentration: 0.1267 ug/mL

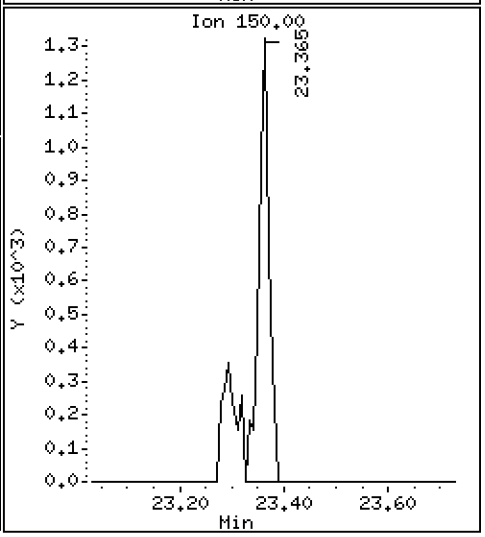


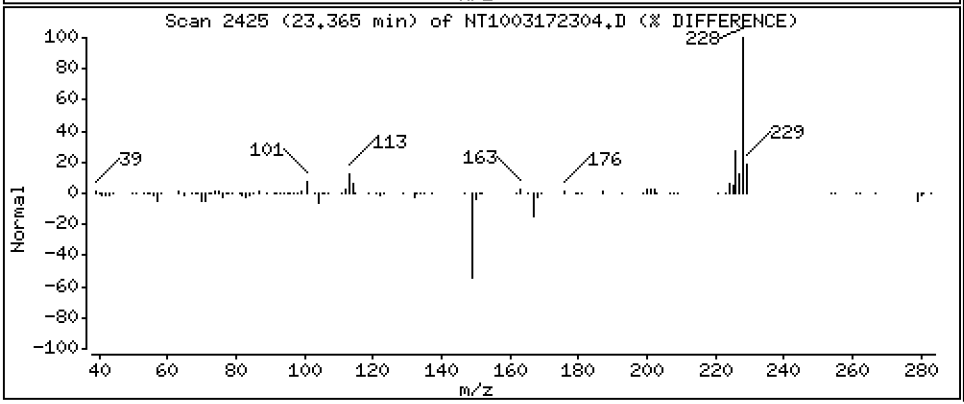












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

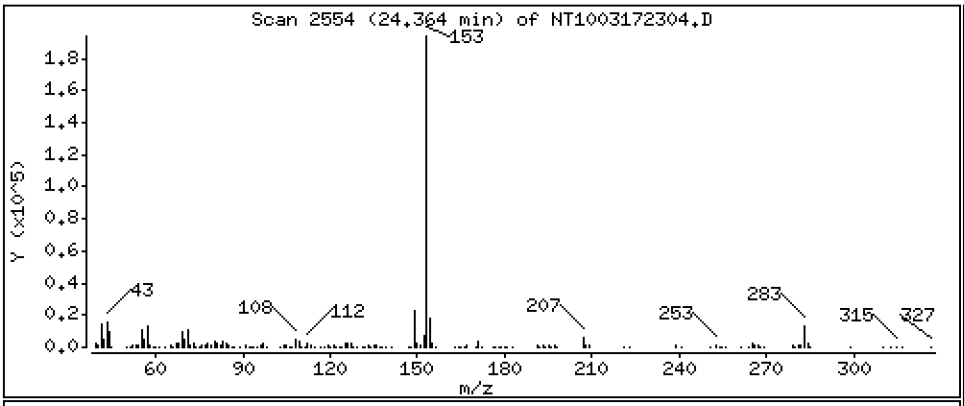
Operator: VTS

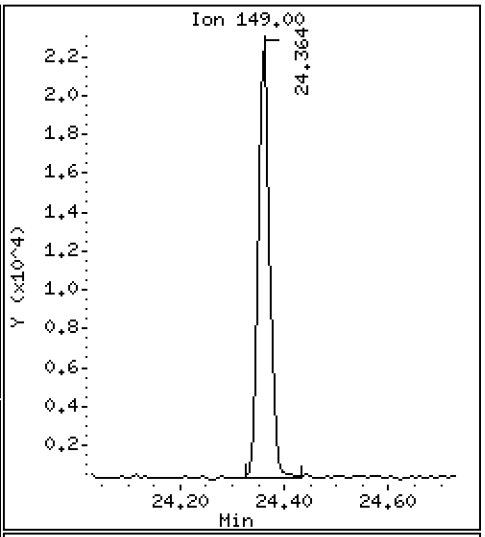
Column phase: ZB-5msi

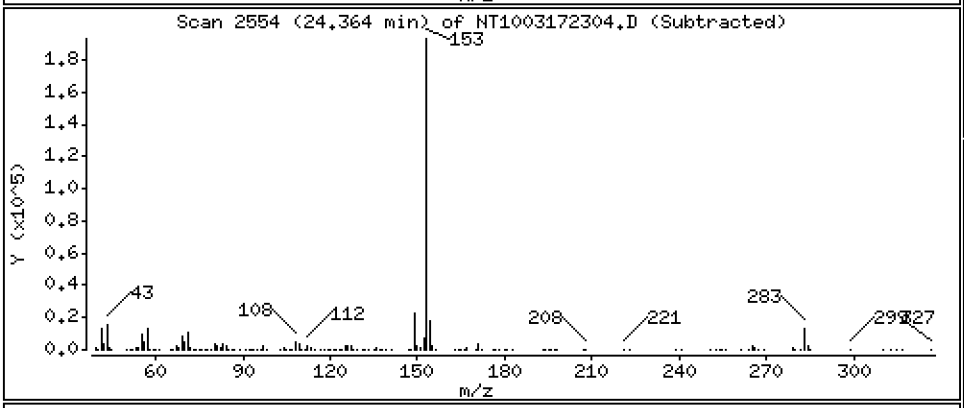
Column diameter: 0.25

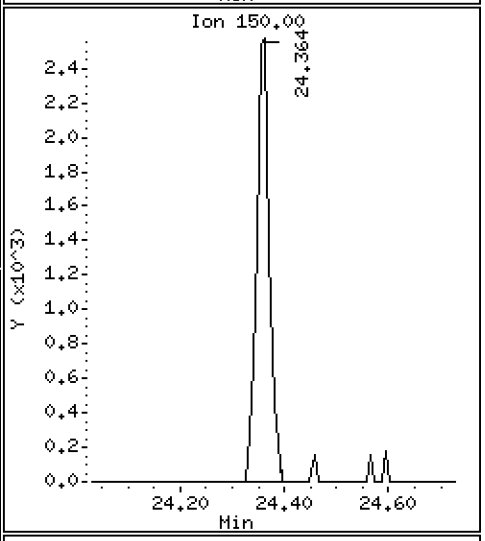
73 Di-n-octylphthalate

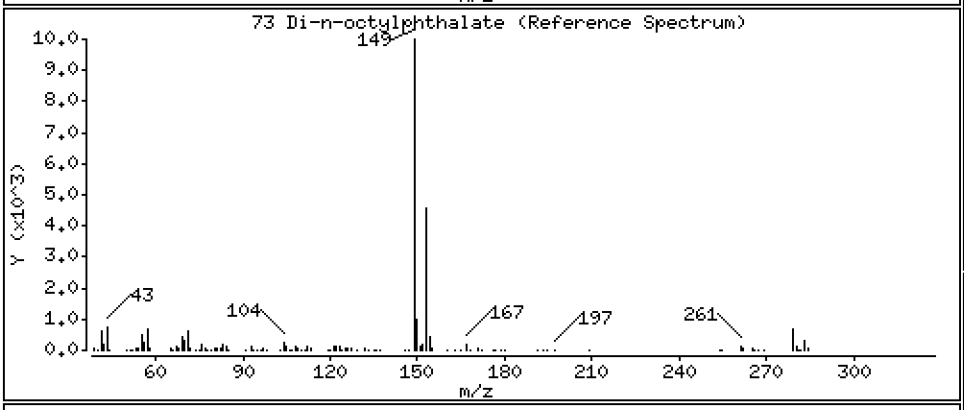
Concentration: 0.2050 ug/mL

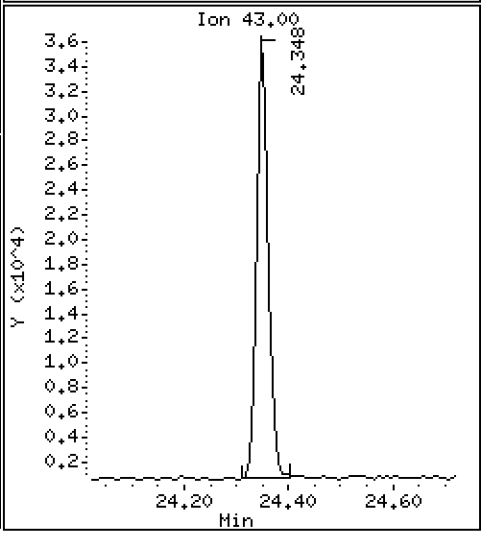


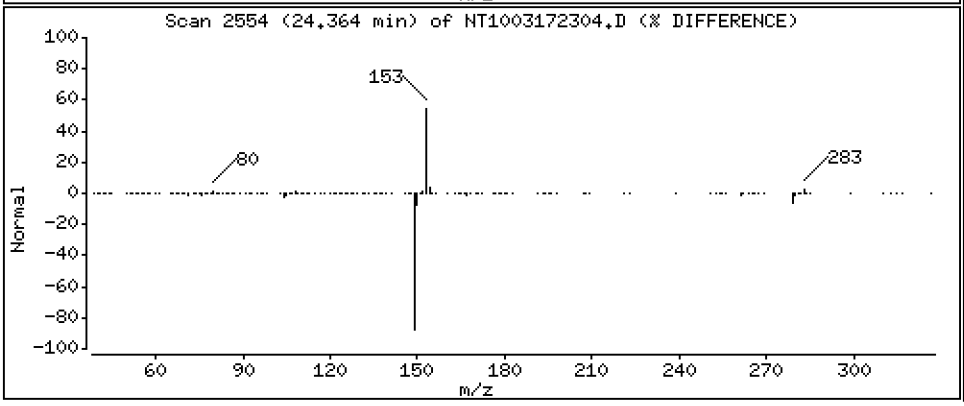












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

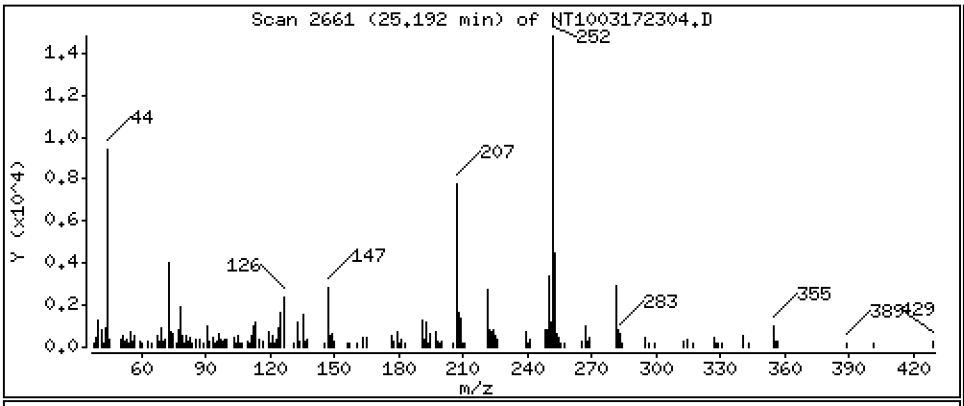
Operator: VTS

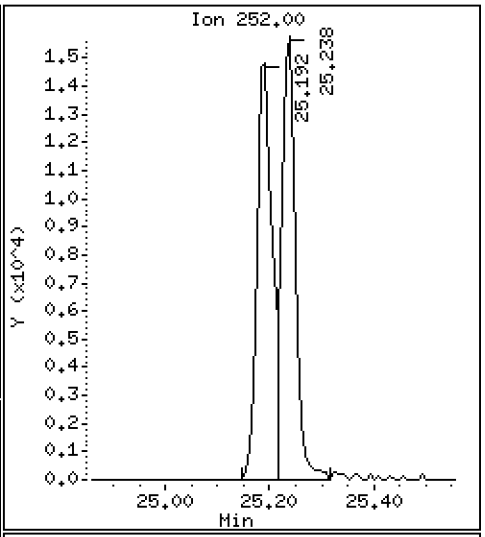
Column phase: ZB-5msi

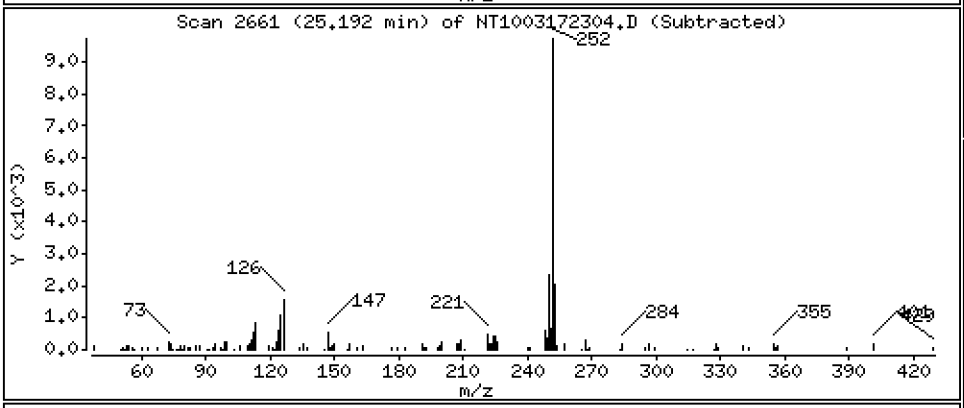
Column diameter: 0.25

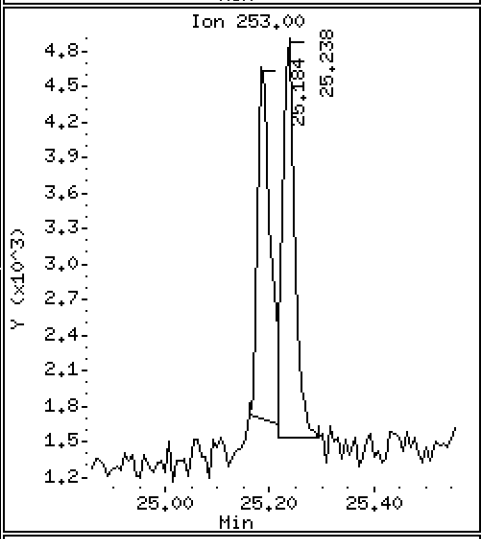
74 Benzo(b)fluoranthene

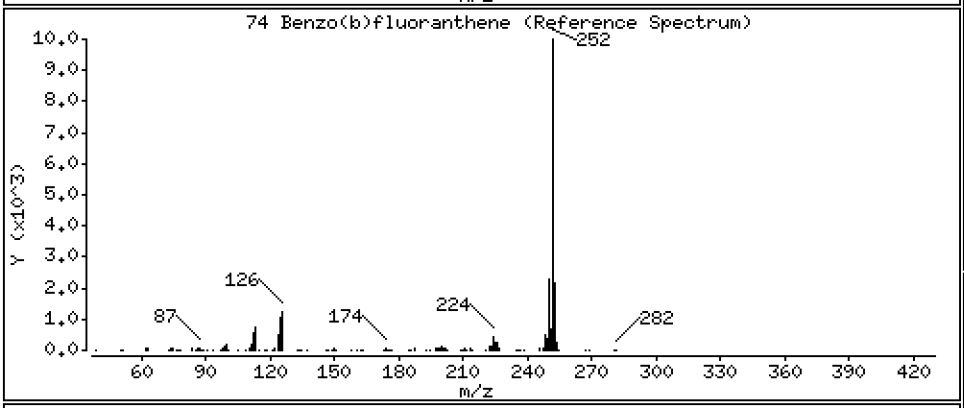
Concentration: 0.2017 ug/mL

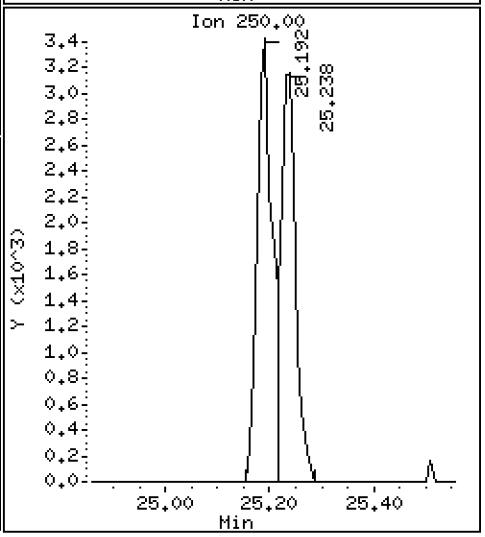


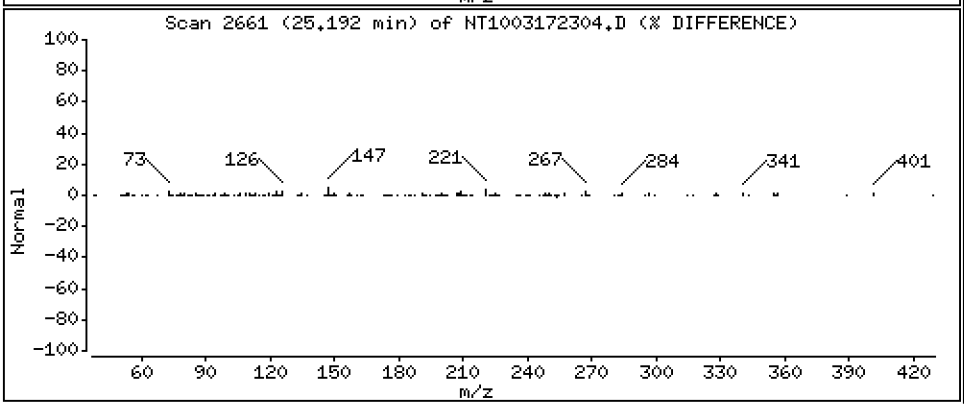












Date : 17-MAR-2023 20:19

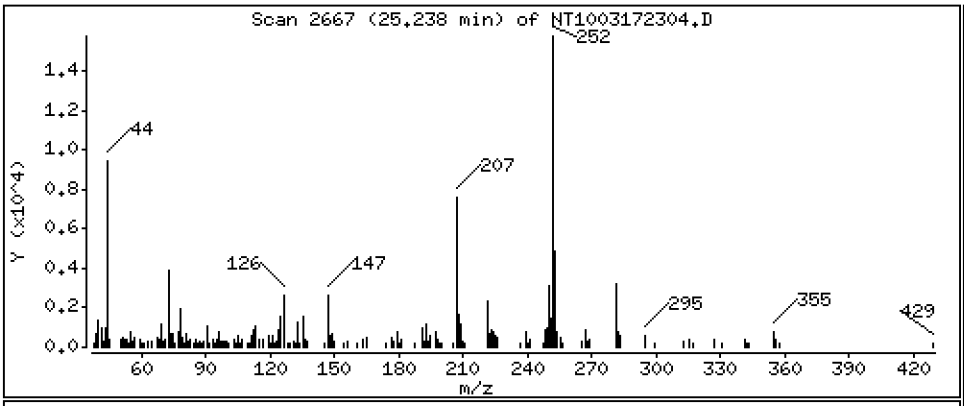
Client ID: Instrument: nt10.i

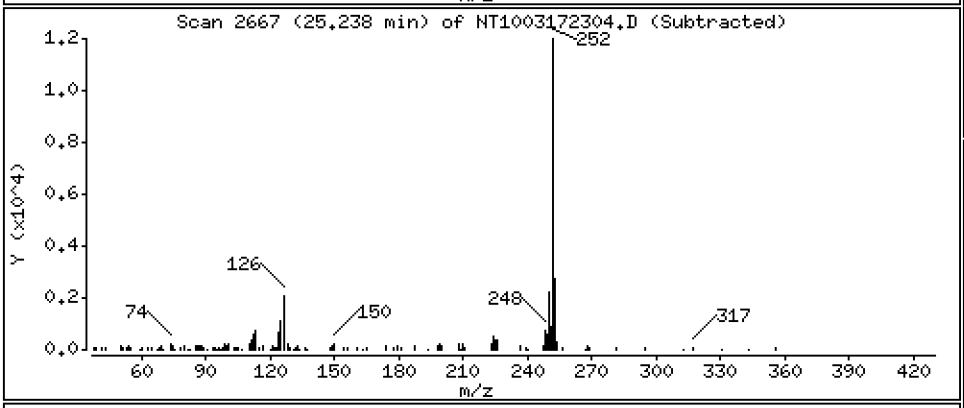
Sample Info: SLC0473-LCV1

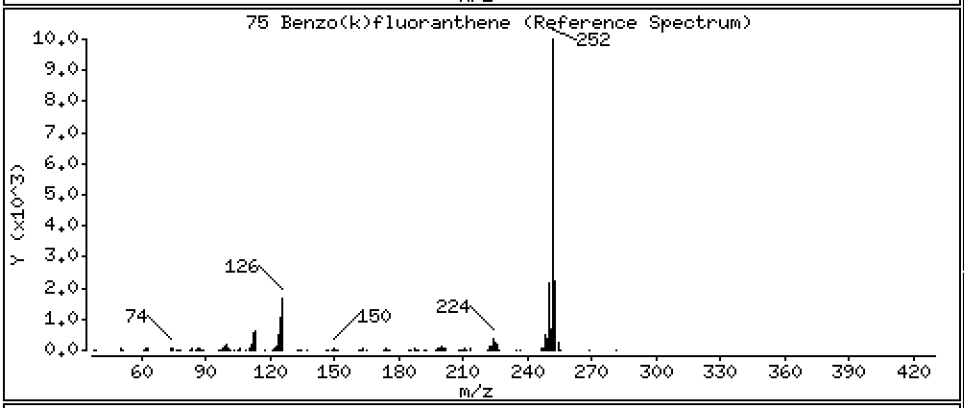
Operator: VTS

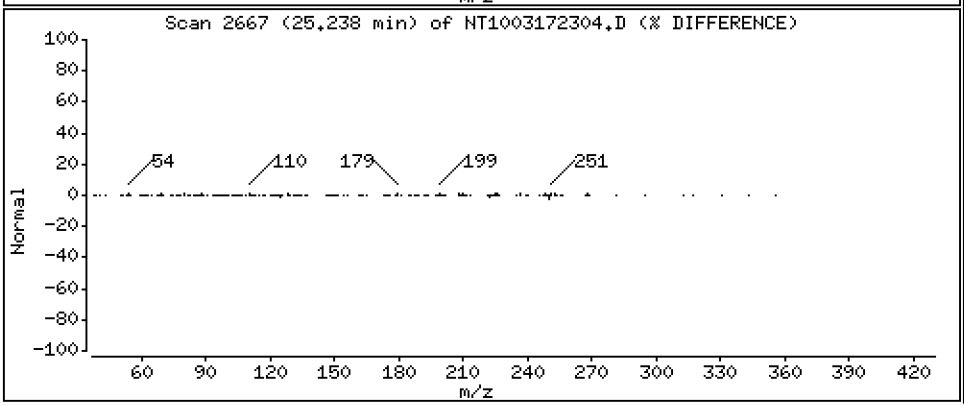
Column phase: ZB-5msi Column diameter: 0.25

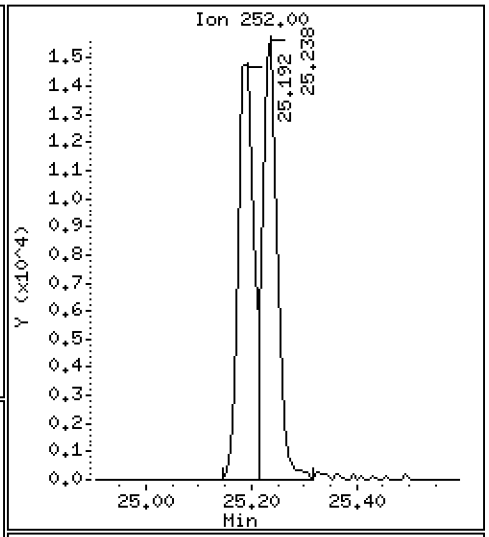
75 Benzo(k)fluoranthene Concentration: 0.2030 ug/mL

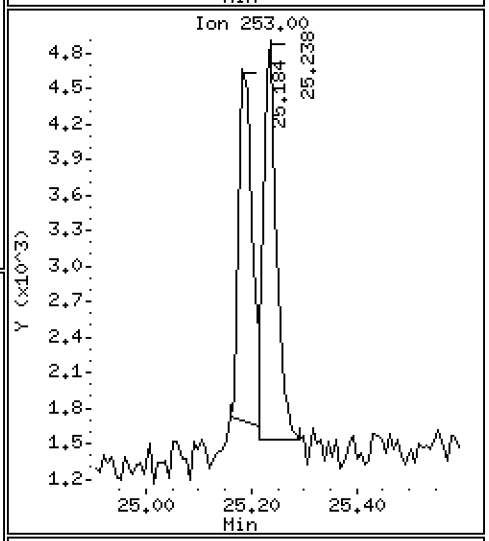


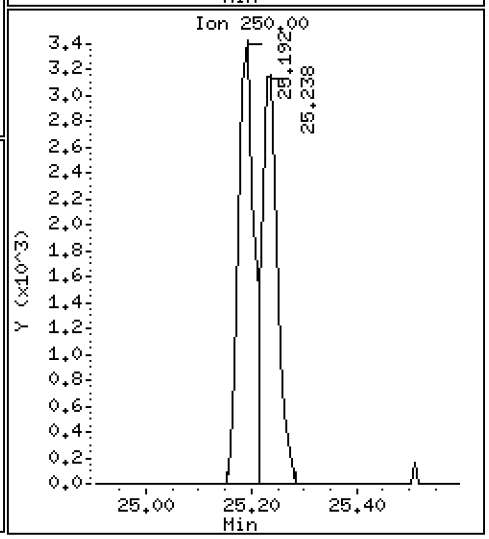












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

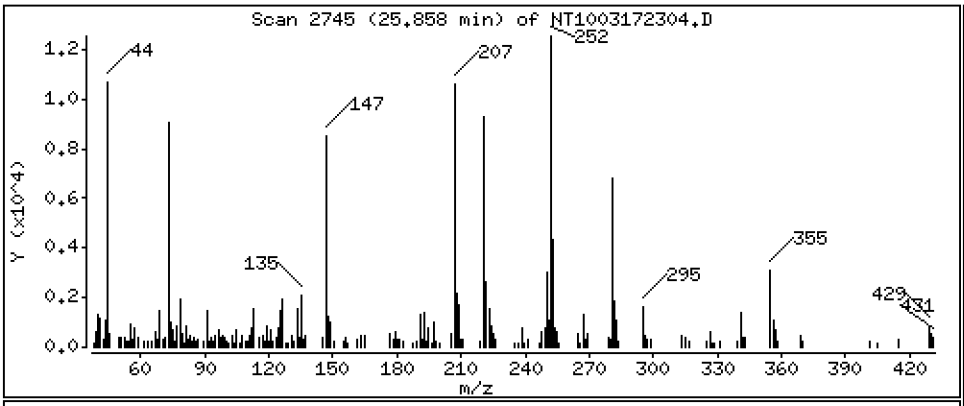
Operator: VTS

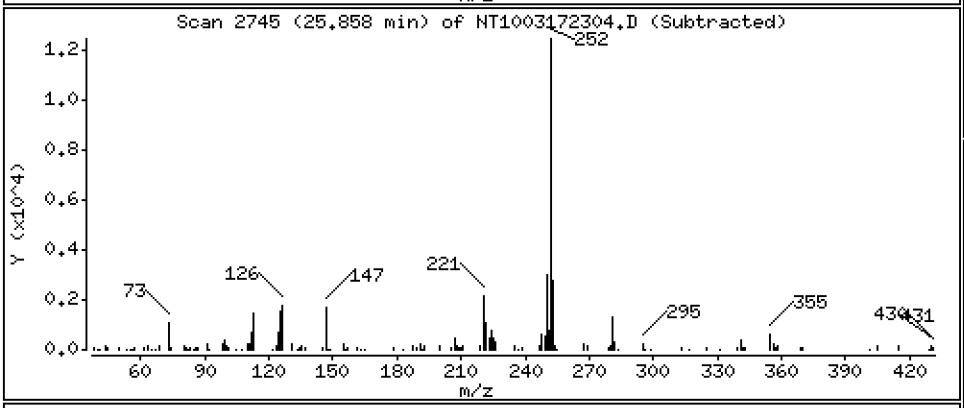
Column phase: ZB-5msi

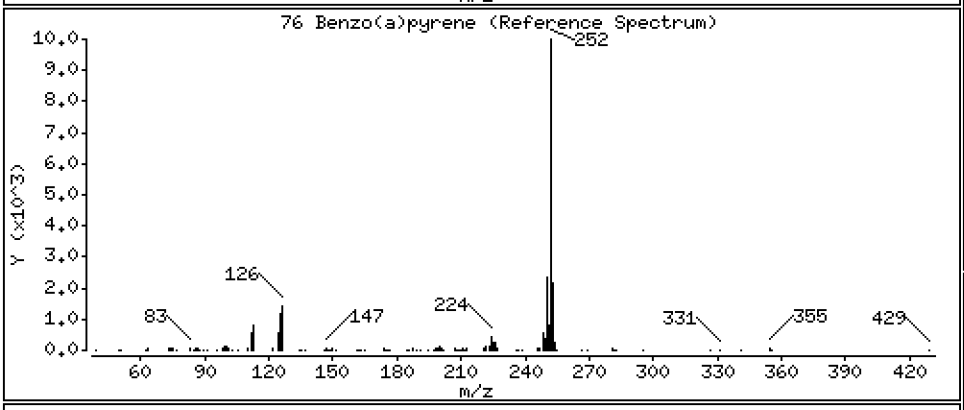
Column diameter: 0.25

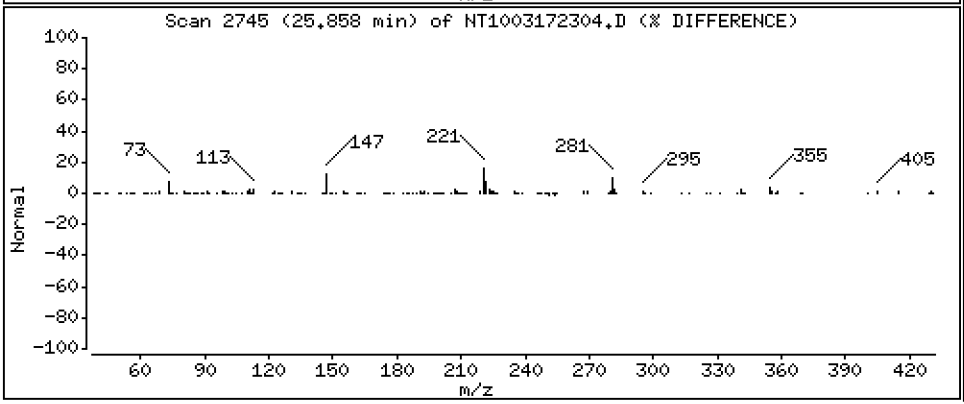
76 Benzo(a)pyrene

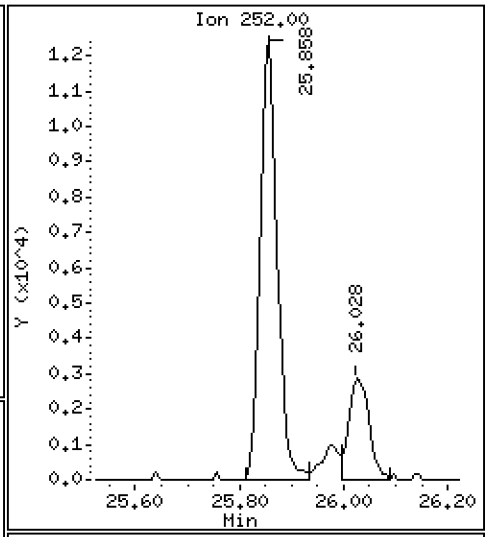
Concentration: 0.2106 ug/mL

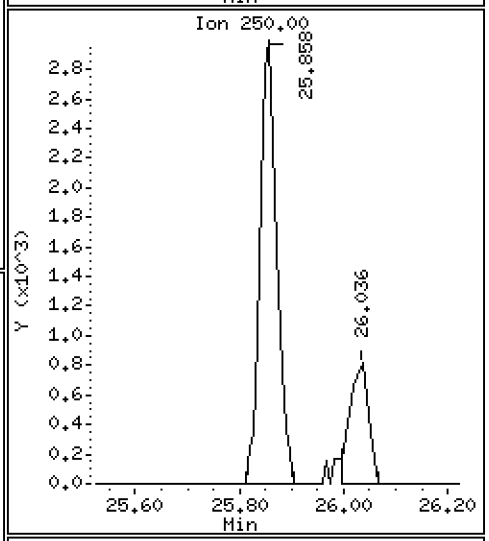


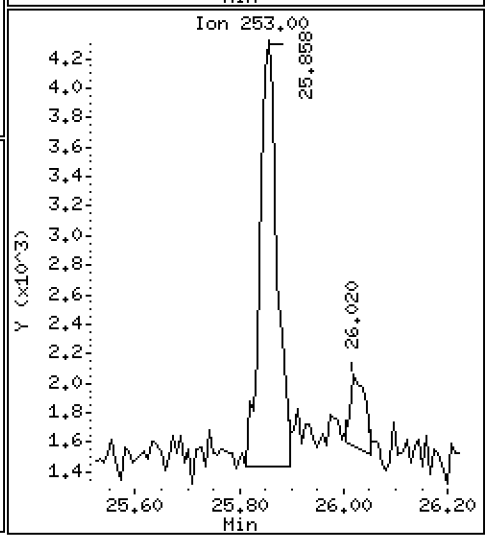












Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

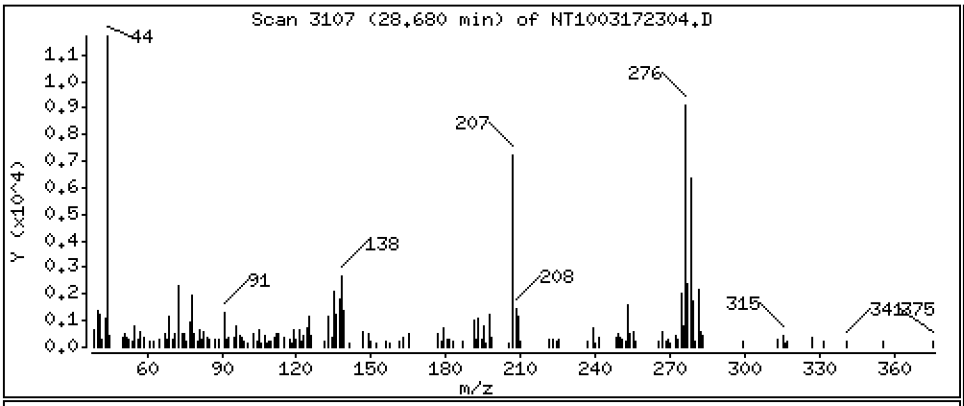
Operator: VTS

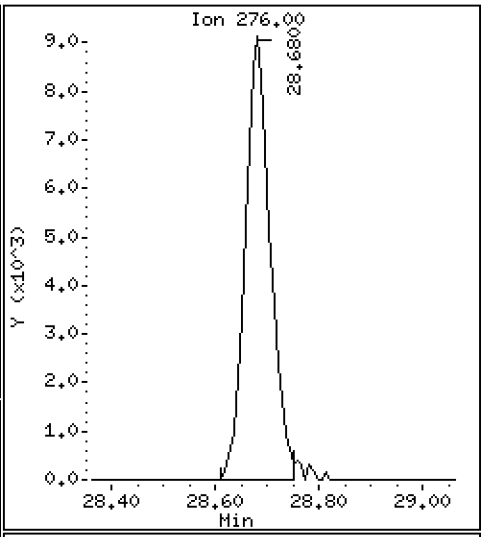
Column phase: ZB-5msi

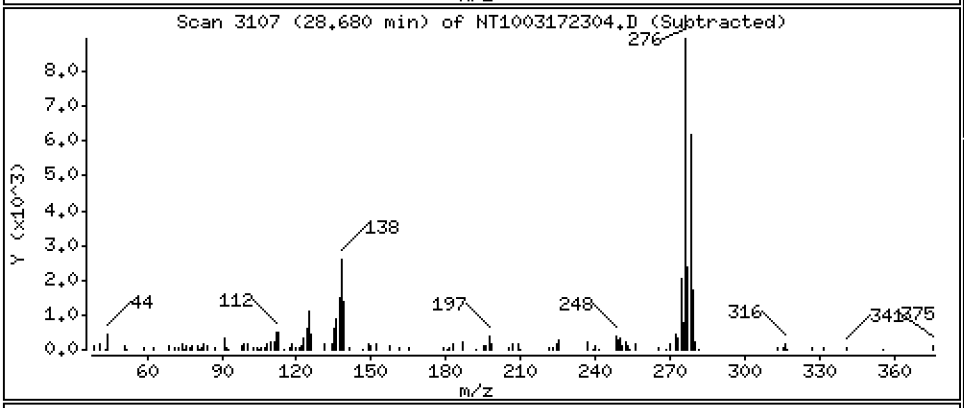
Column diameter: 0.25

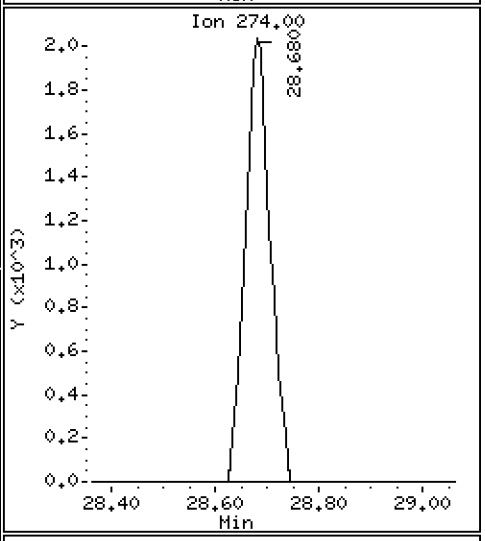
78 Indeno(1,2,3-cd)pyrene

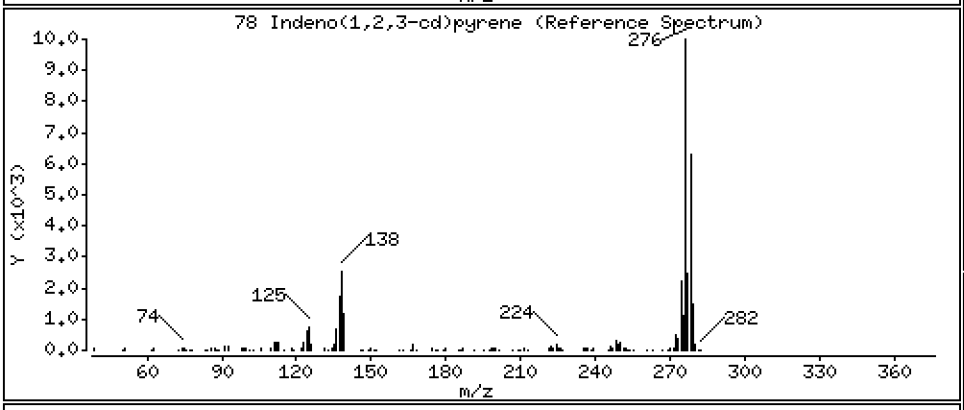
Concentration: 0.1801 ug/mL

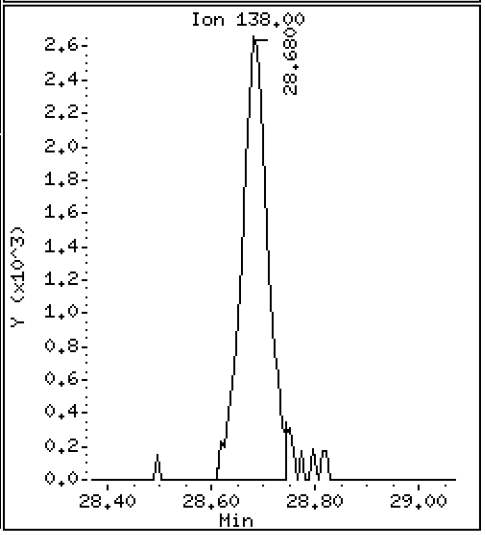


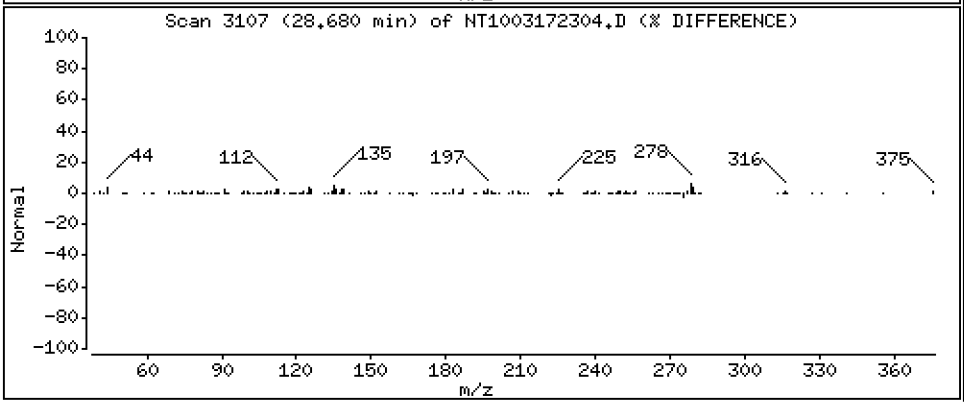












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

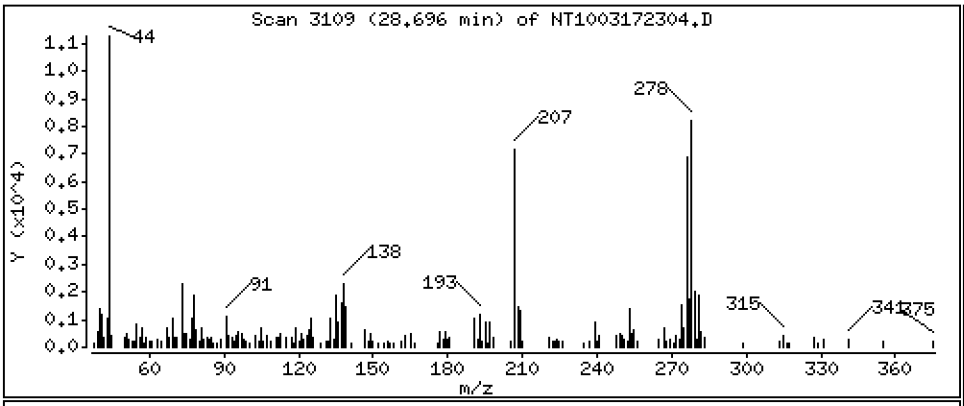
Operator: VTS

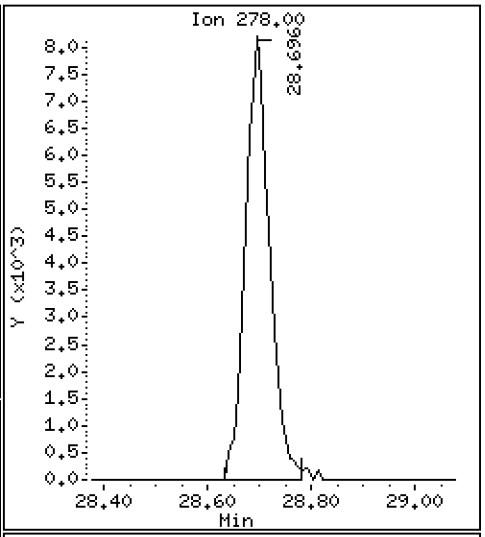
Column phase: ZB-5msi

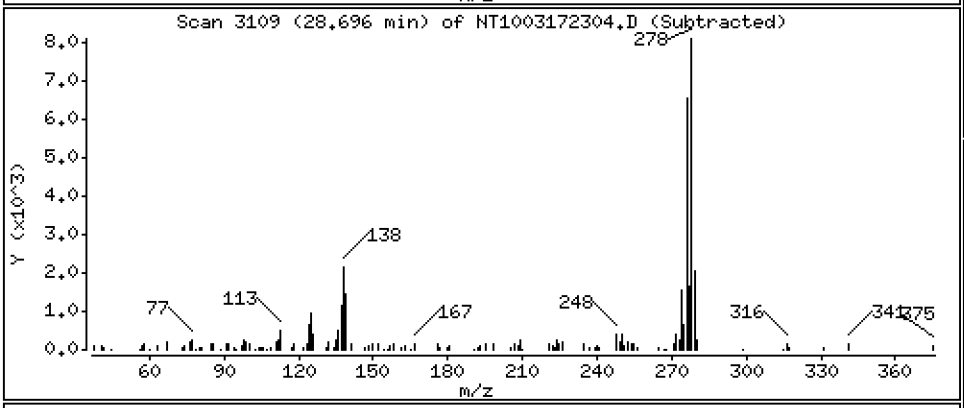
Column diameter: 0.25

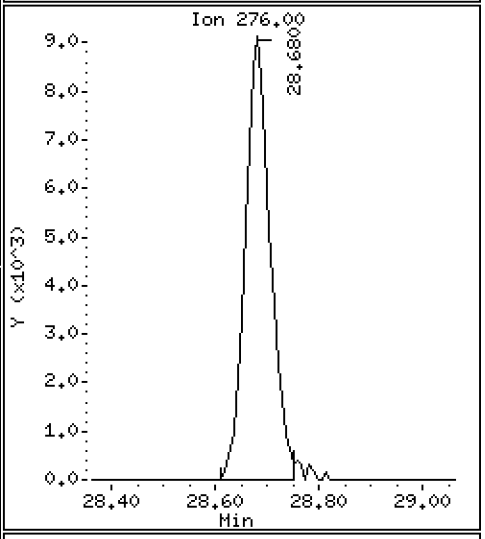
79 Dibenzo(a,h)anthracene

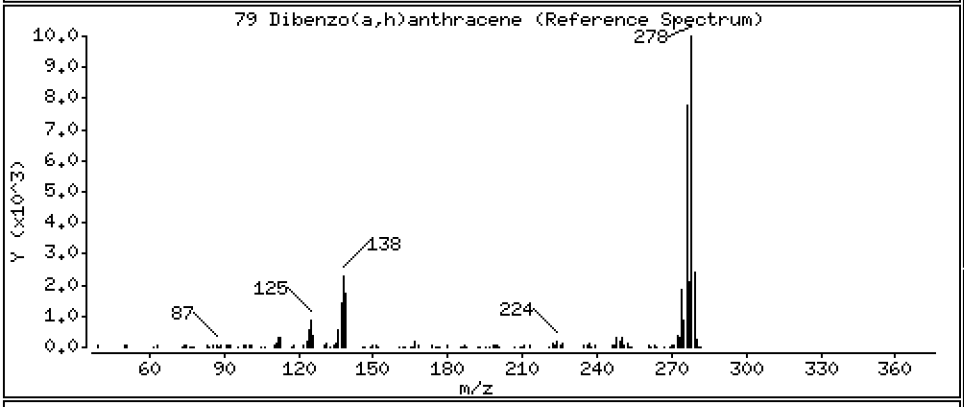
Concentration: 0.1880 ug/mL

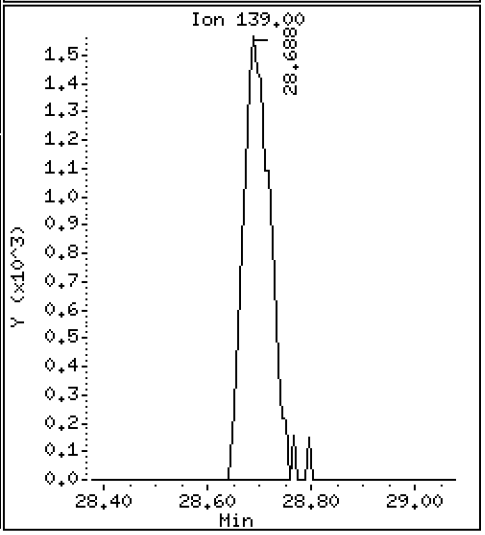


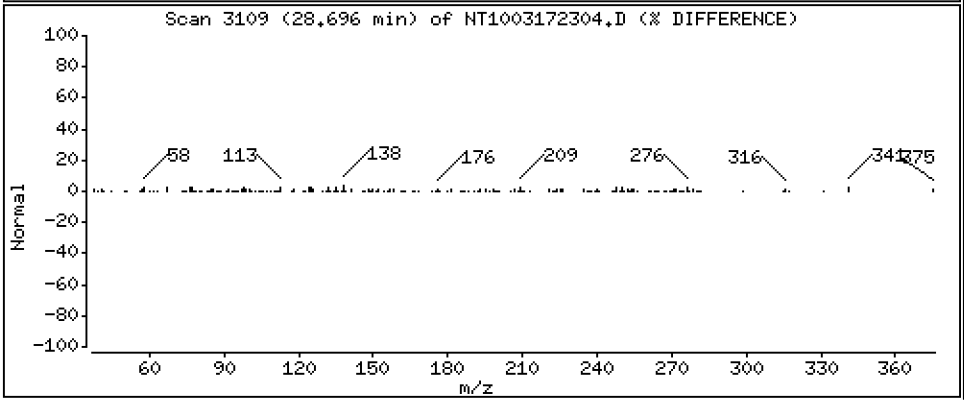












Date : 17-MAR-2023 20:19

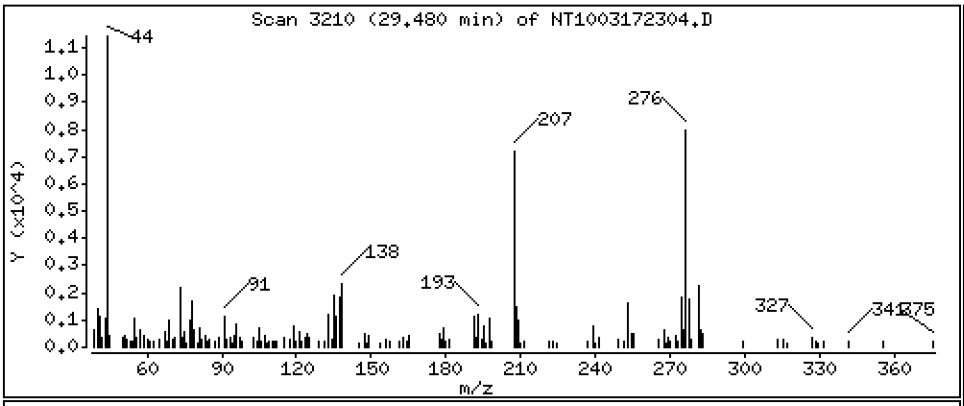
Client ID: Instrument: nt10.i

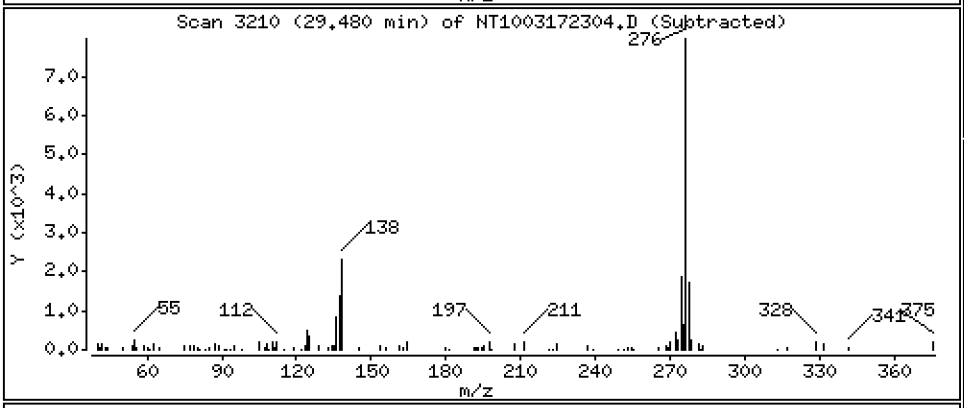
Sample Info: SLC0473-LCV1

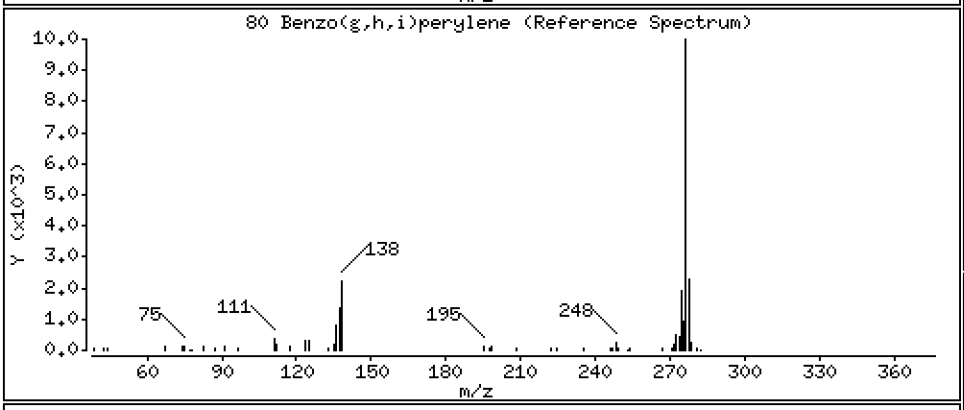
Operator: VTS

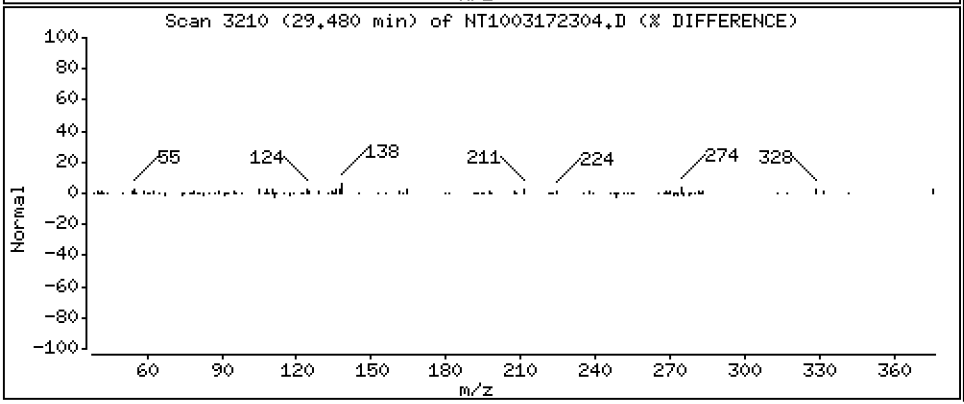
Column phase: ZB-5msi Column diameter: 0.25

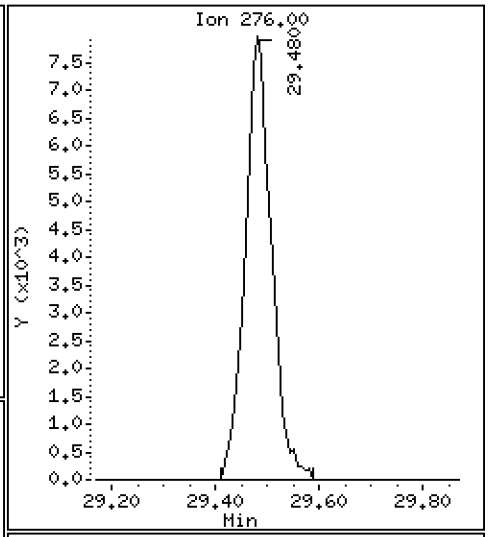
80 Benzo(g,h,i)perylene Concentration: 0.1898 ug/mL

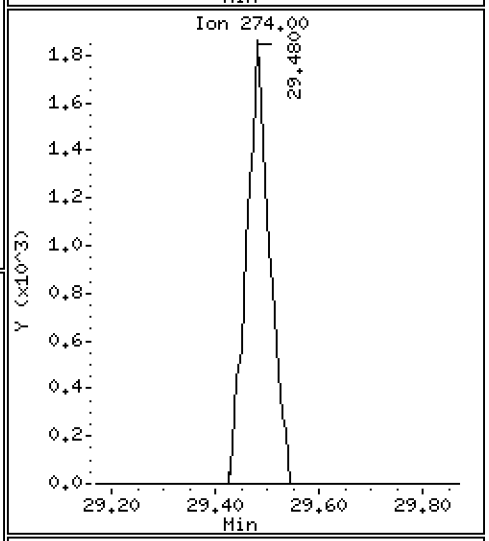


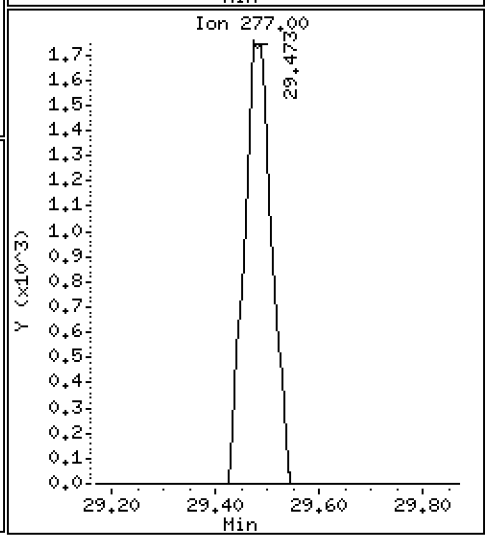












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

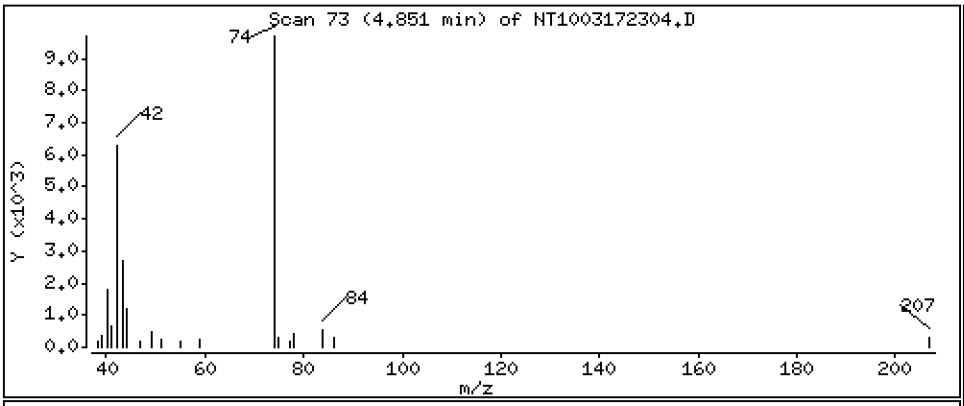
Operator: VTS

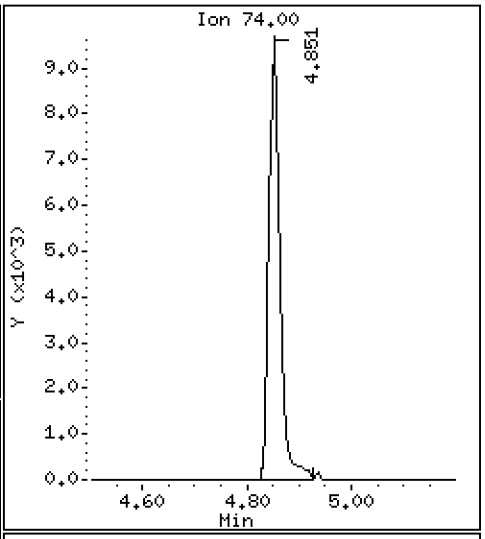
Column phase: ZB-5msi

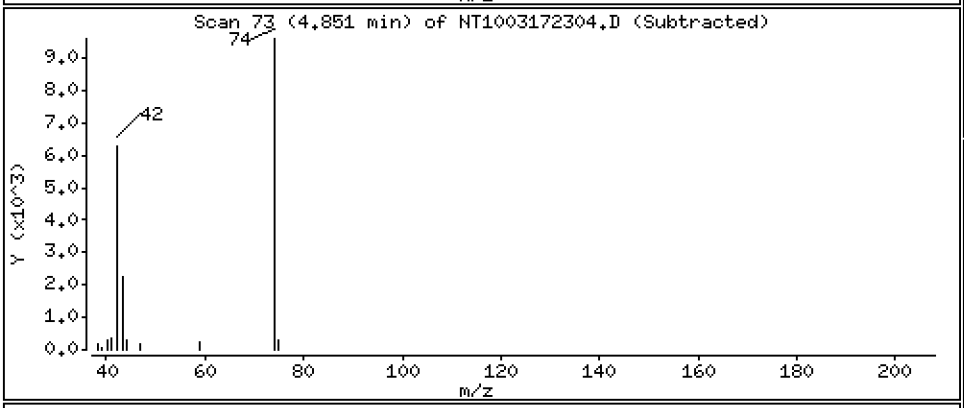
Column diameter: 0.25

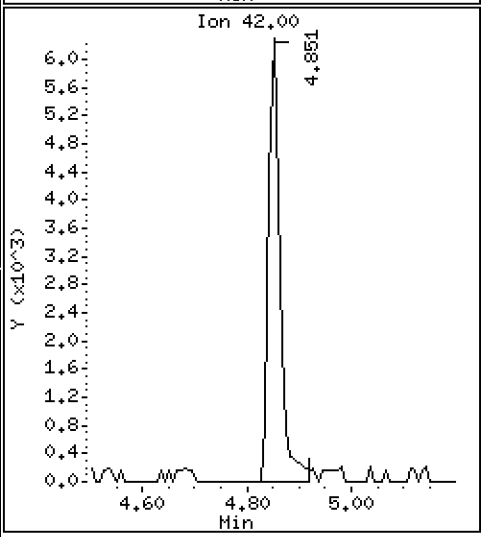
90 N-Nitrosodimethylamine

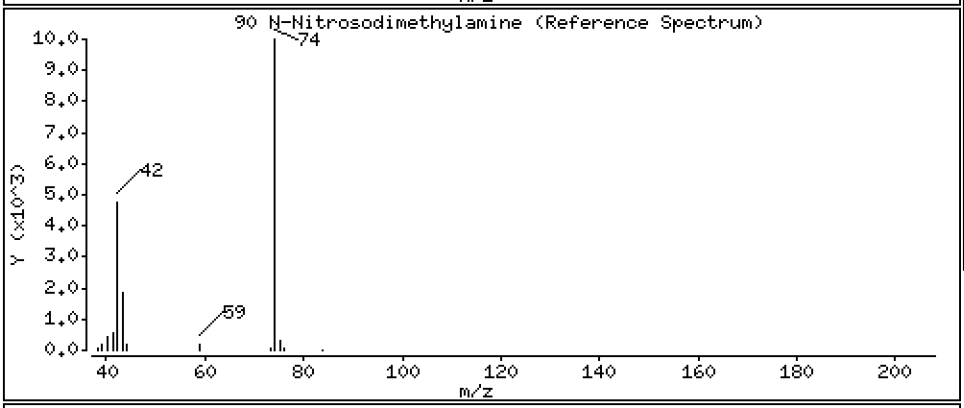
Concentration: 0.4505 ug/mL

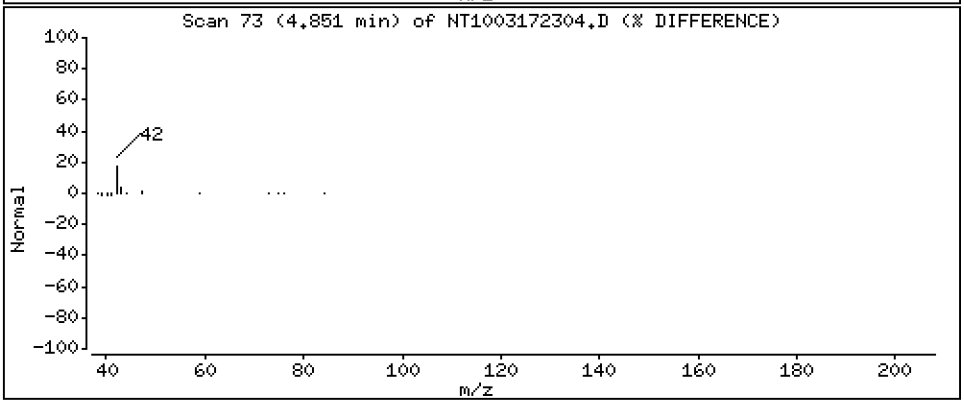












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

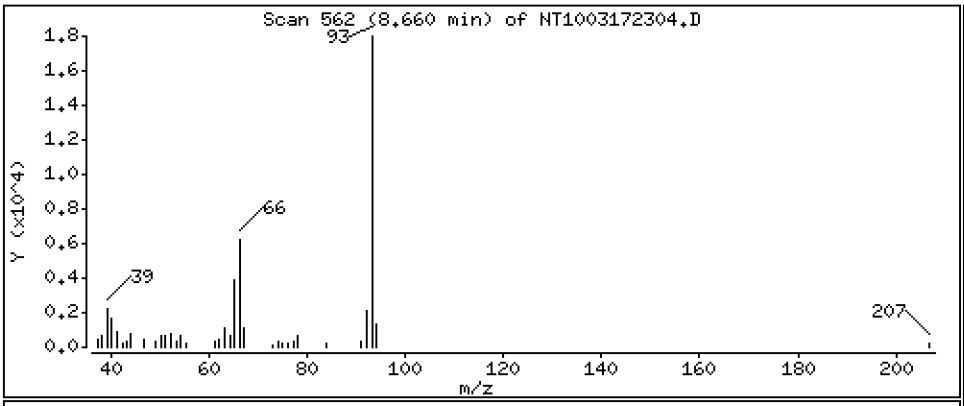
Operator: VTS

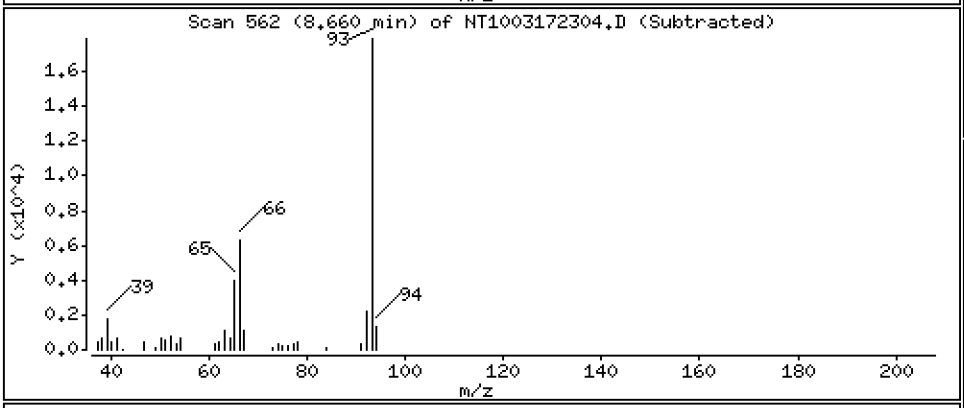
Column phase: ZB-5msi

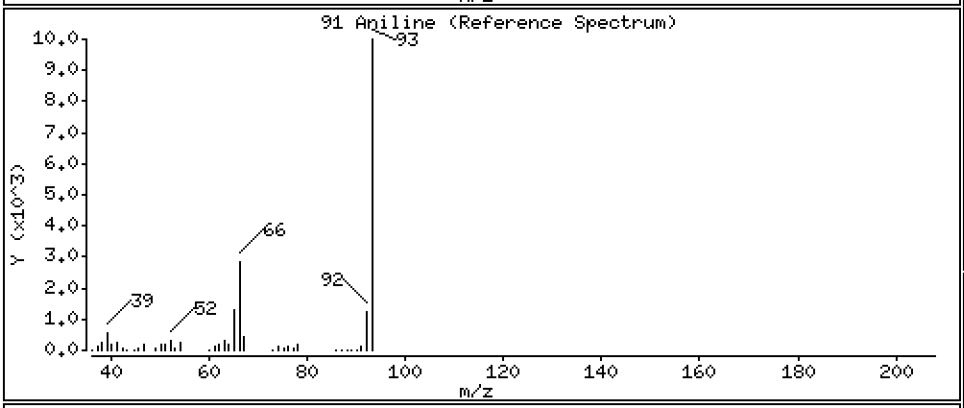
Column diameter: 0.25

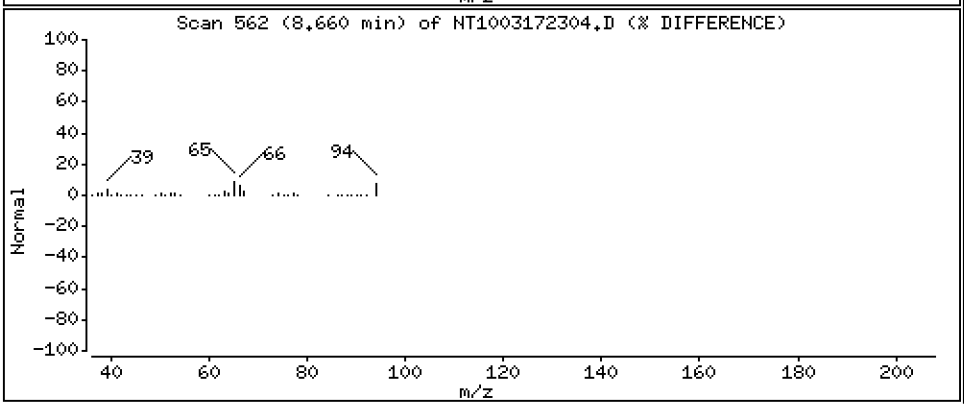
91 Aniline

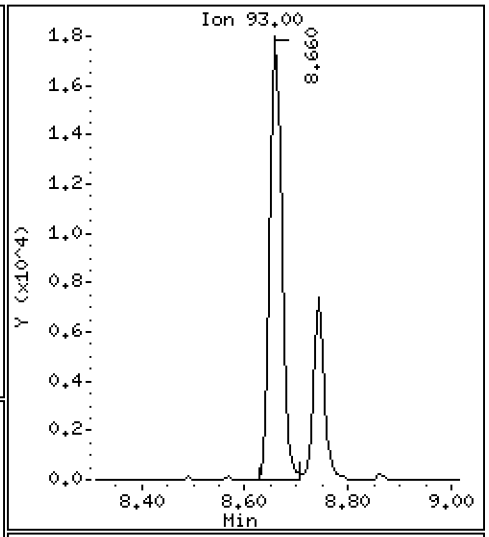
Concentration: 0.4192 ug/mL

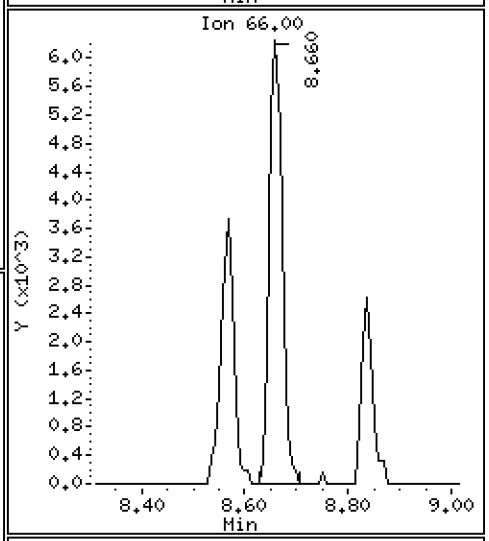


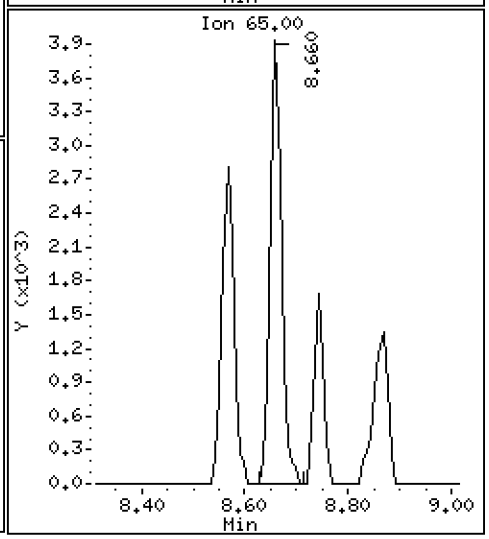












Date : 17-MAR-2023 20:19

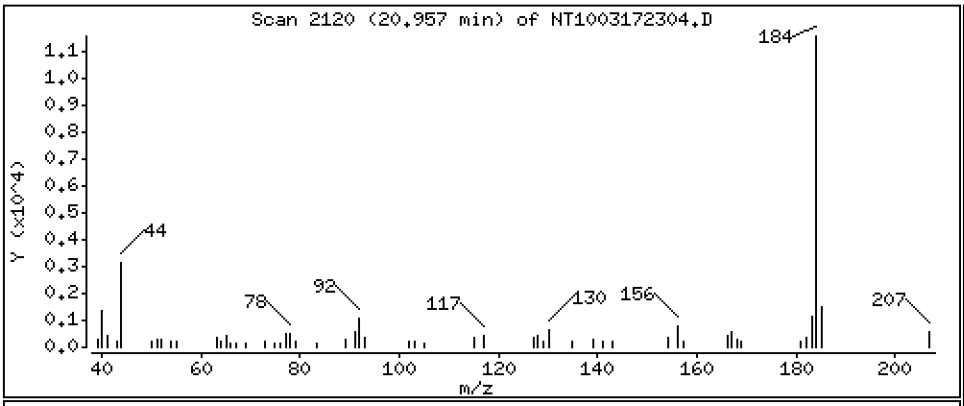
Client ID: Instrument: nt10.i

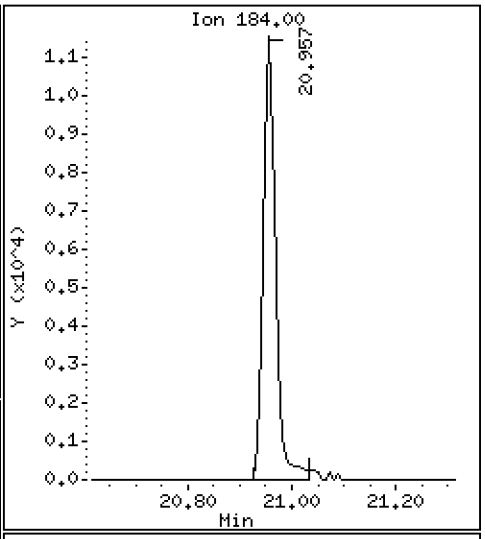
Sample Info: SLC0473-LCV1

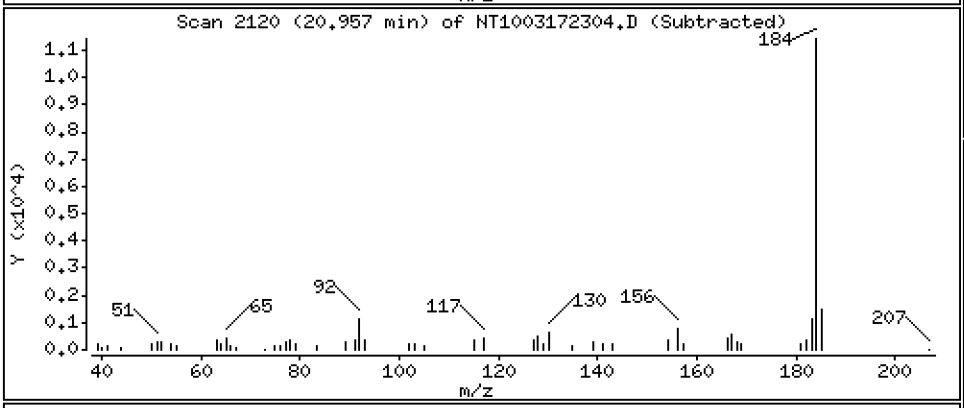
Operator: VTS

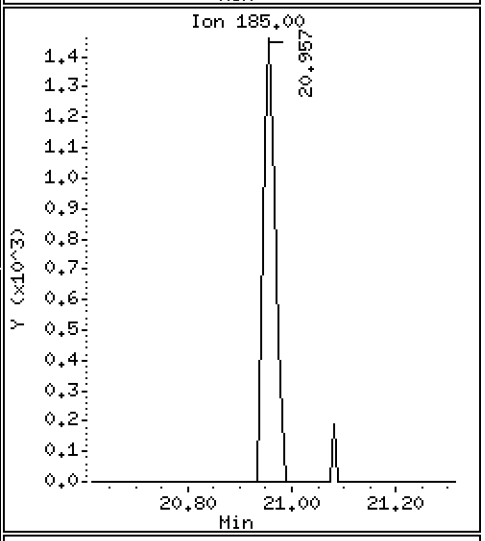
Column phase: ZB-5msi Column diameter: 0.25

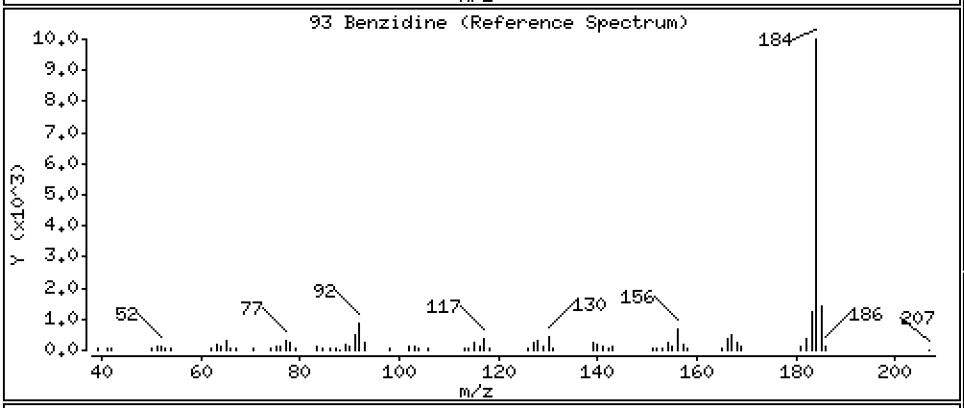
93 Benzidine Concentration: 0.2583 ug/mL

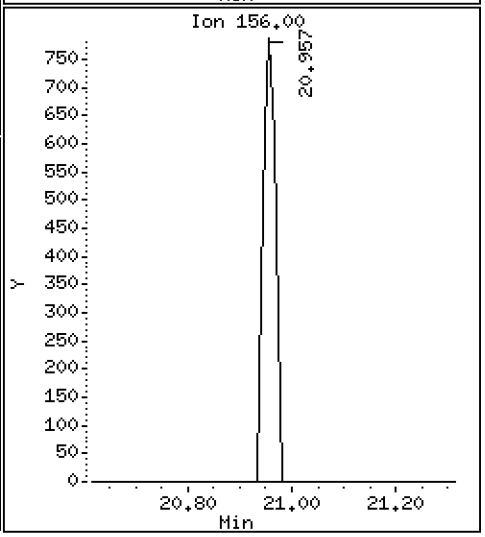


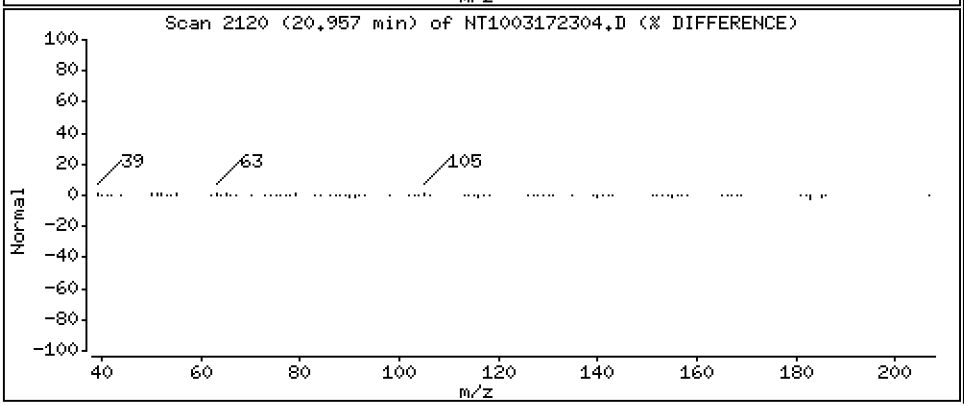












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

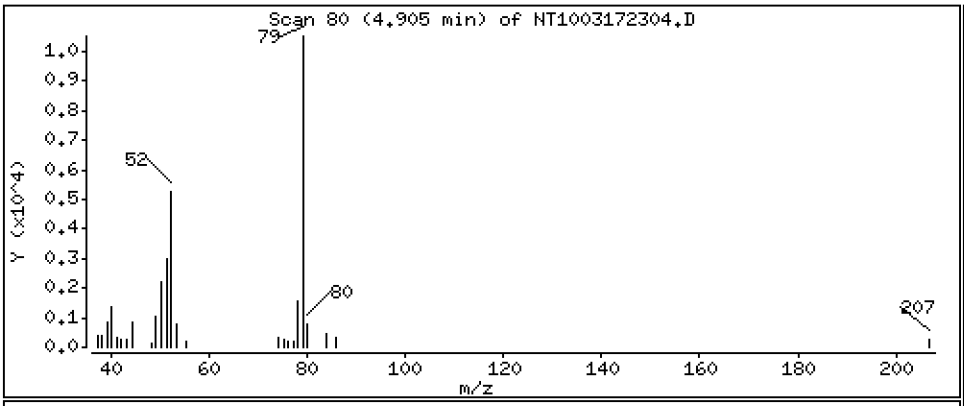
Operator: VTS

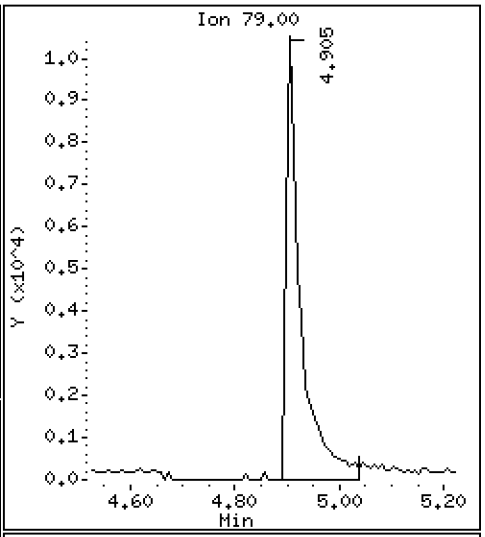
Column phase: ZB-5msi

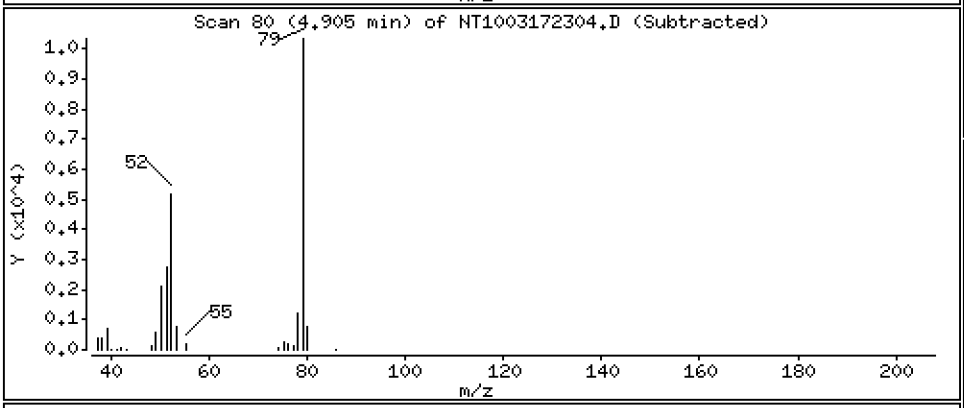
Column diameter: 0.25

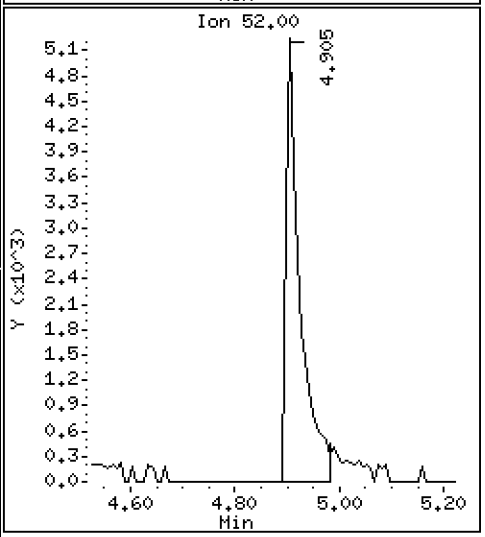
103 Pyridine

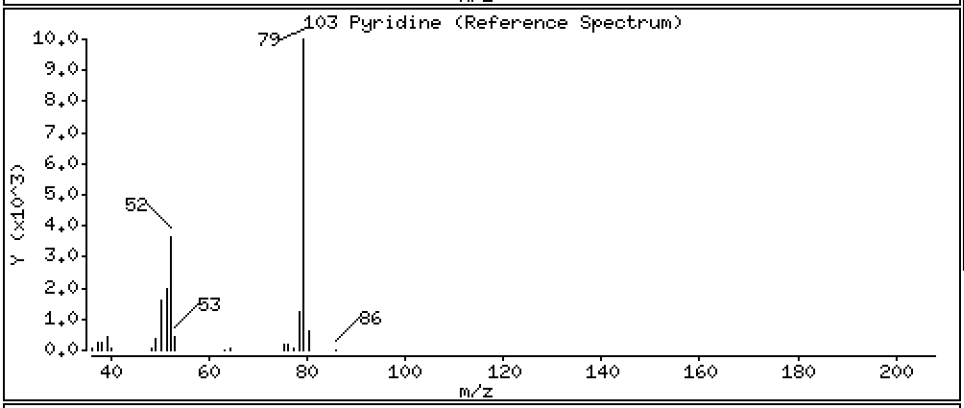
Concentration: 0.4644 ug/mL

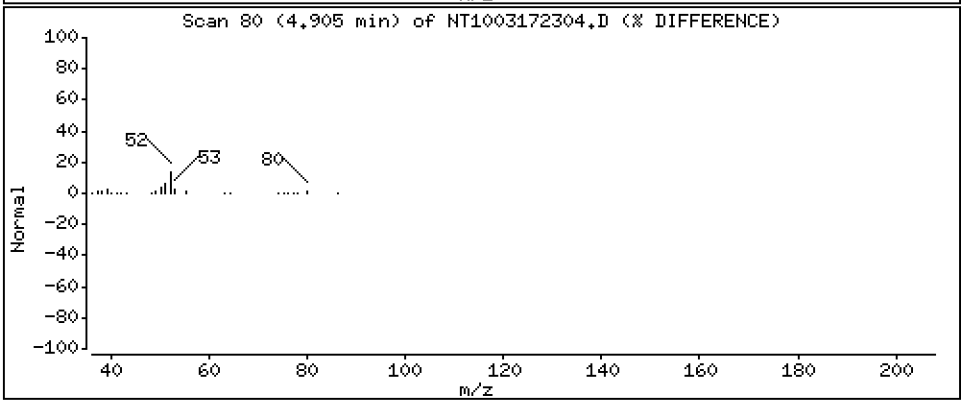












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

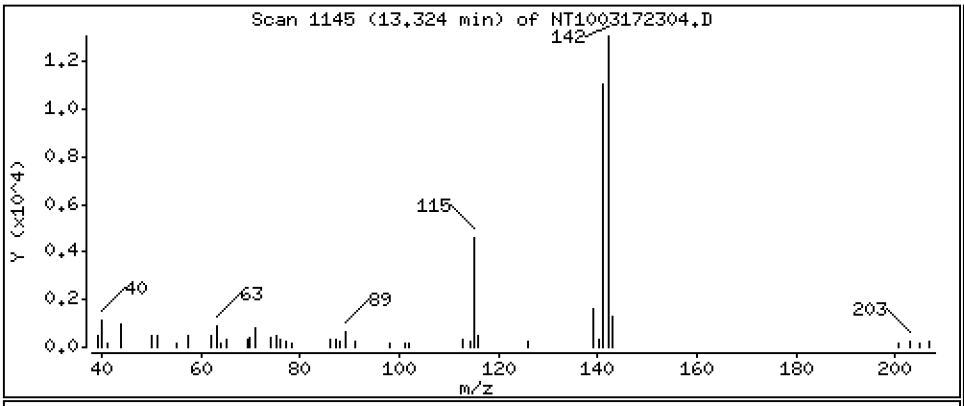
Operator: VTS

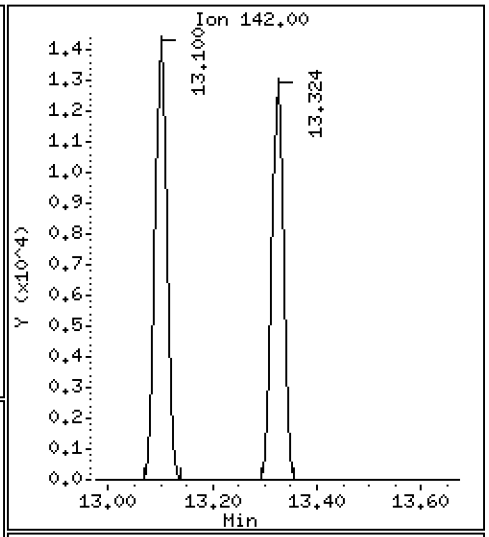
Column phase: ZB-5msi

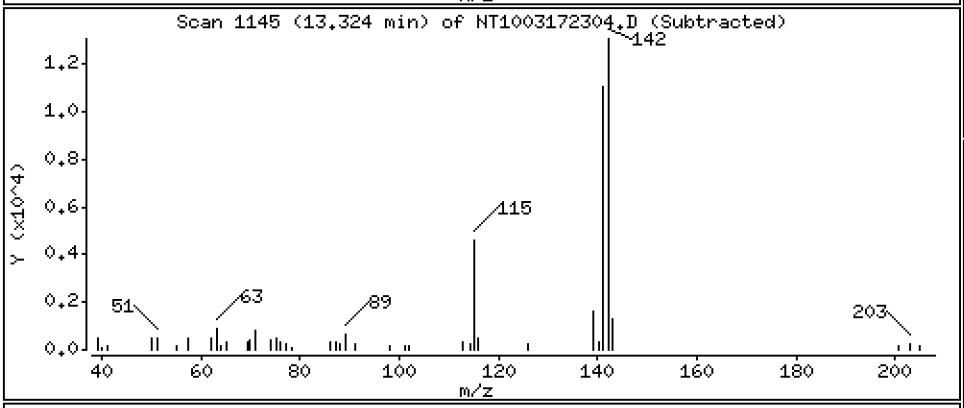
Column diameter: 0.25

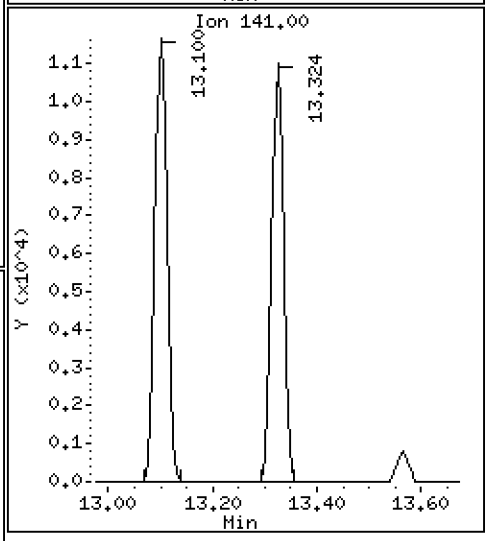
105 1-methylnaphthalene

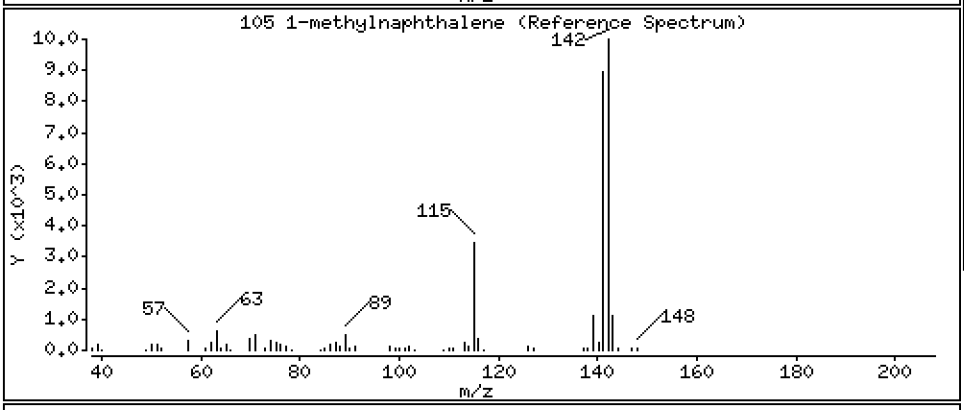
Concentration: 0.2021 ug/mL

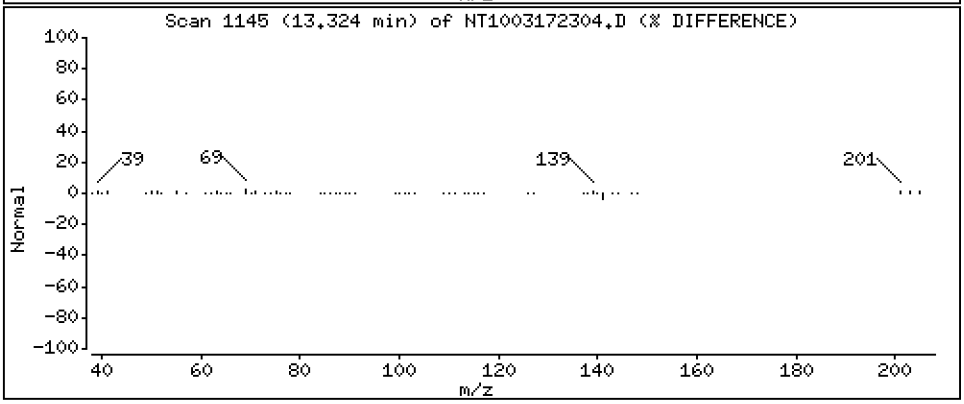












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

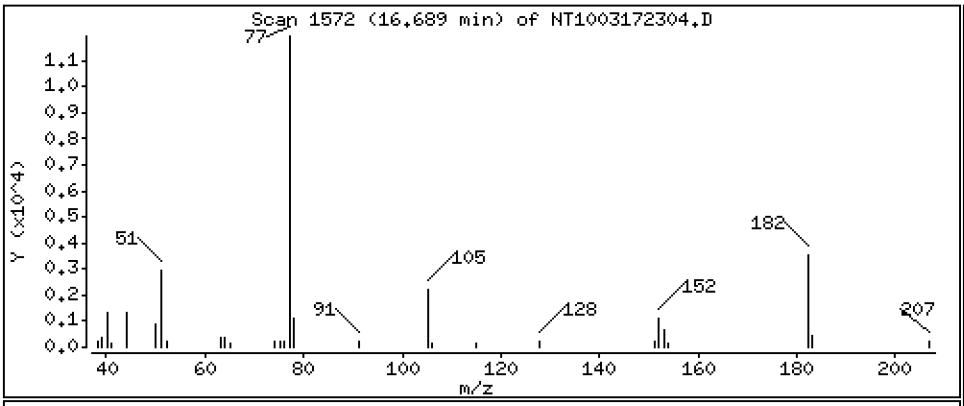
Operator: VTS

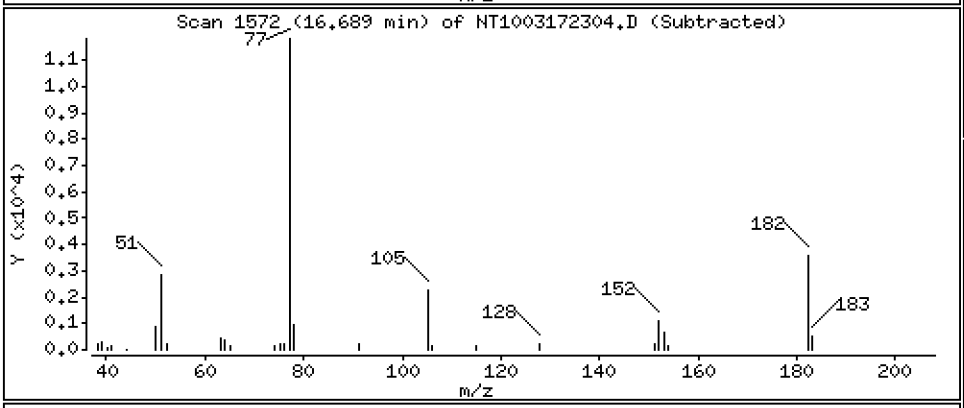
Column phase: ZB-5msi

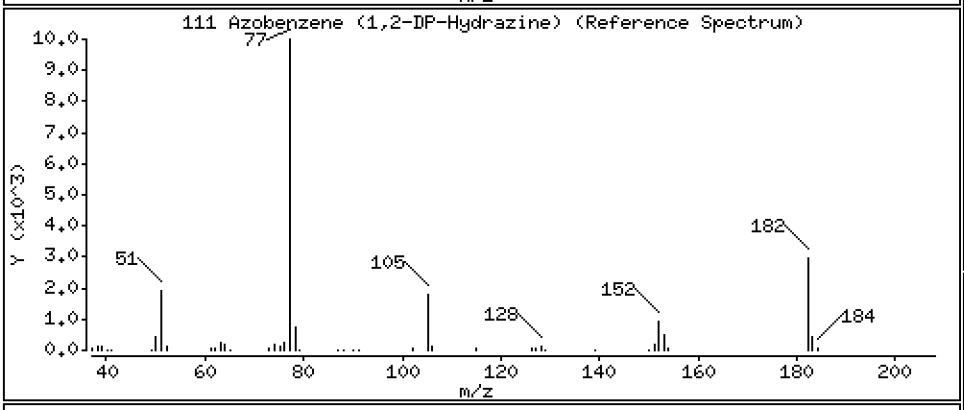
Column diameter: 0.25

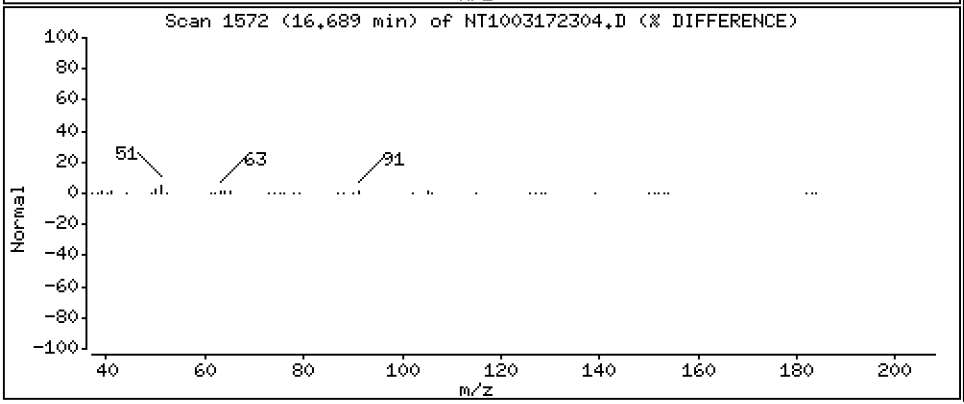
111 Azobenzene (1,2-DP-Hydrazine)

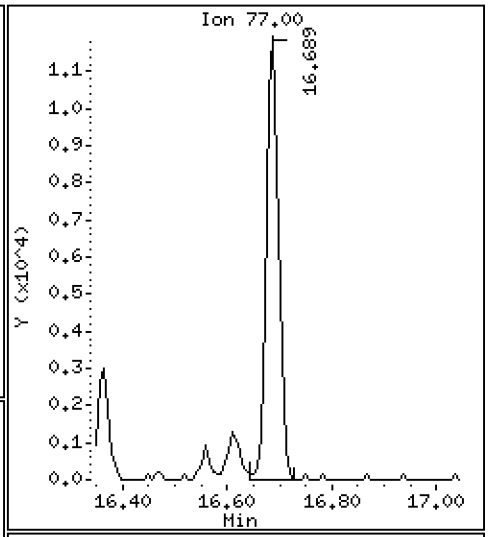
Concentration: 0.1887 ug/mL

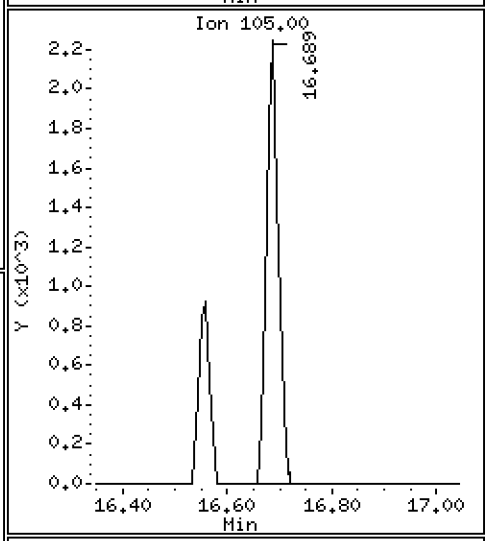


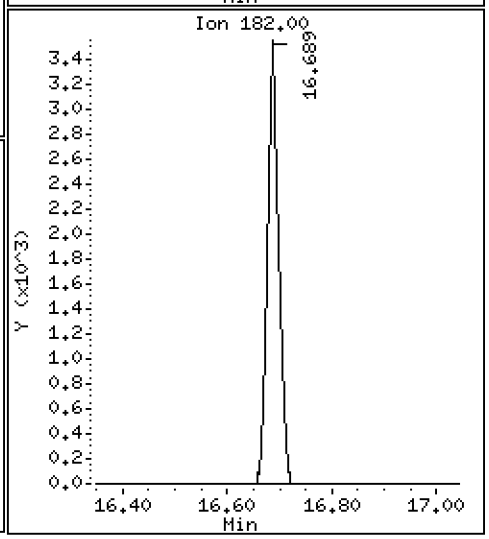












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Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

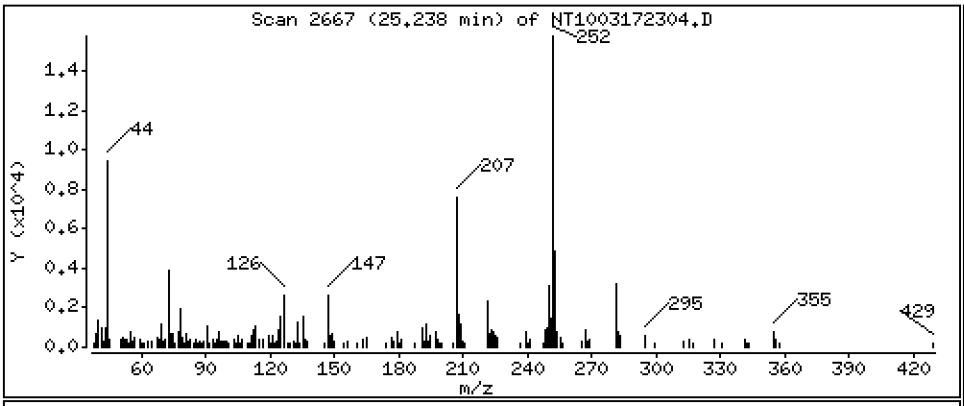
Operator: VTS

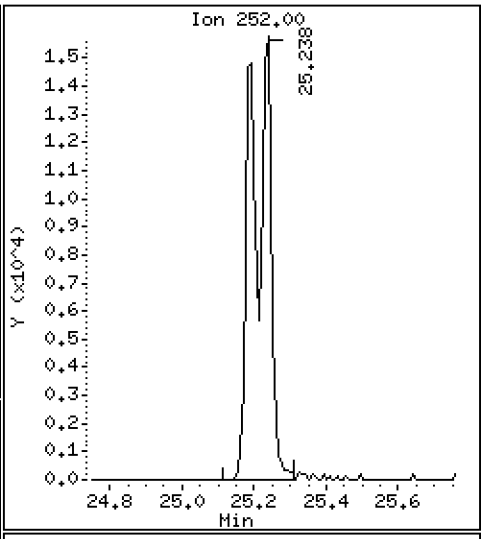
Column phase: ZB-5msi

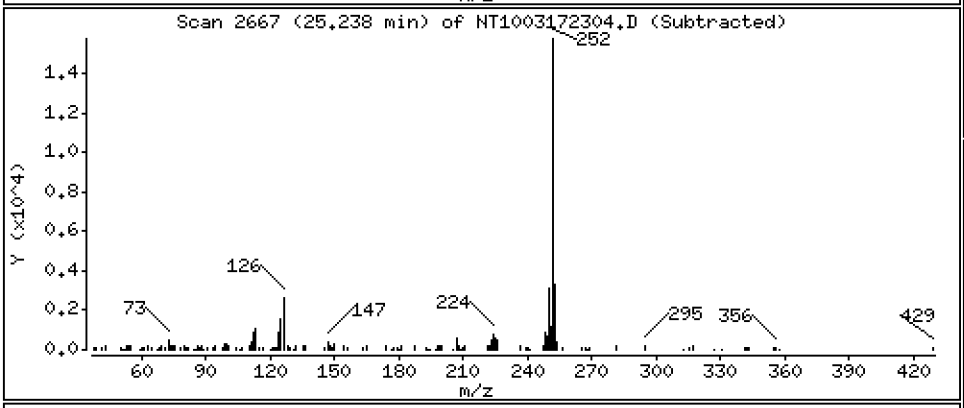
Column diameter: 0.25

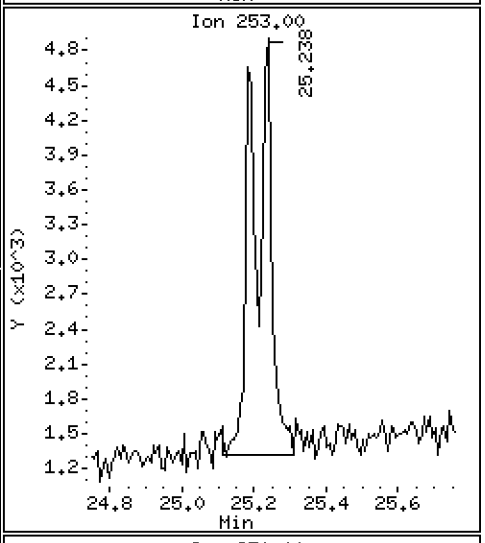
187 Total Benzofluoranthenes

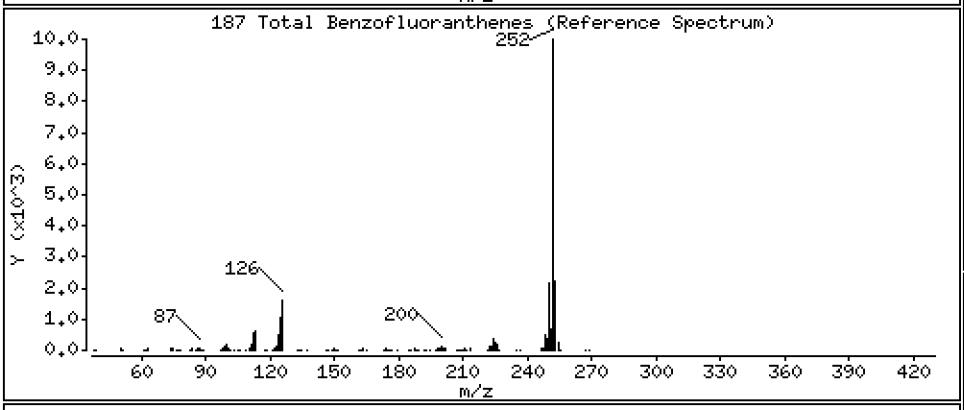
Concentration: 0.4043 ug/mL

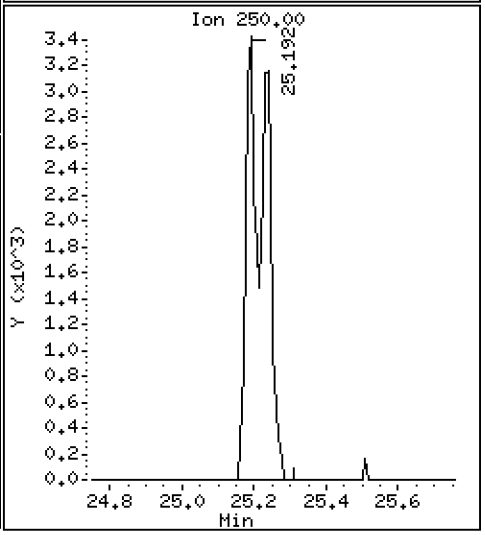


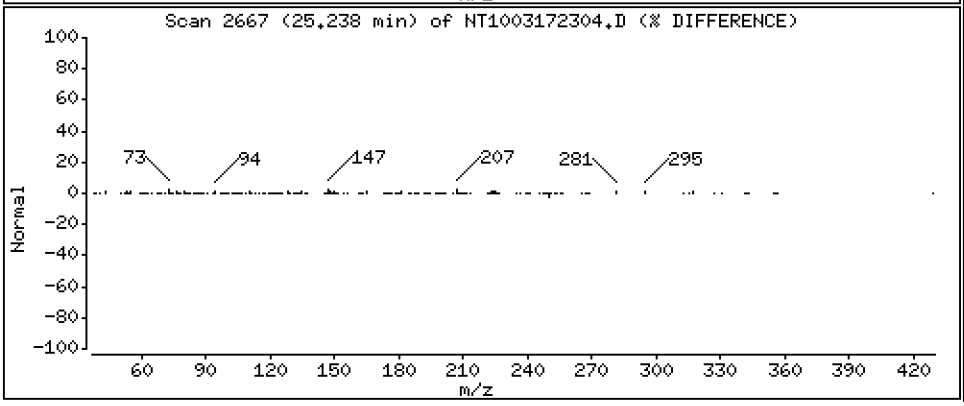












Data File: \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D

Date : 17-MAR-2023 20:19

Client ID:

Instrument: nt10.i

Sample Info: SLC0473-LCV1

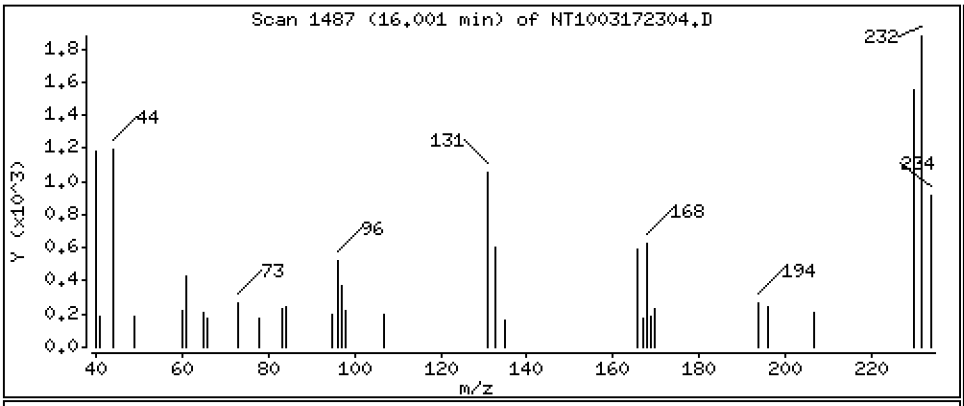
Operator: VTS

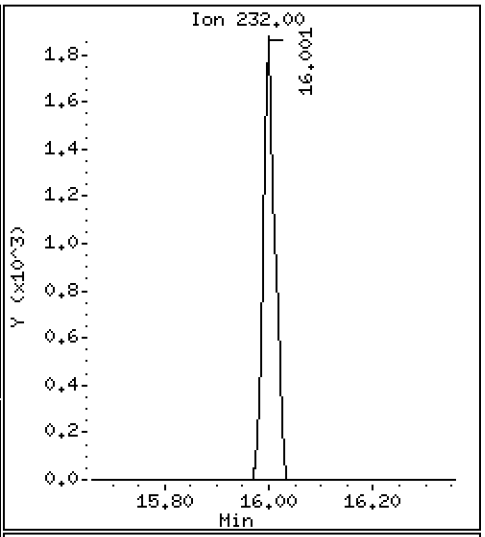
Column phase: ZB-5msi

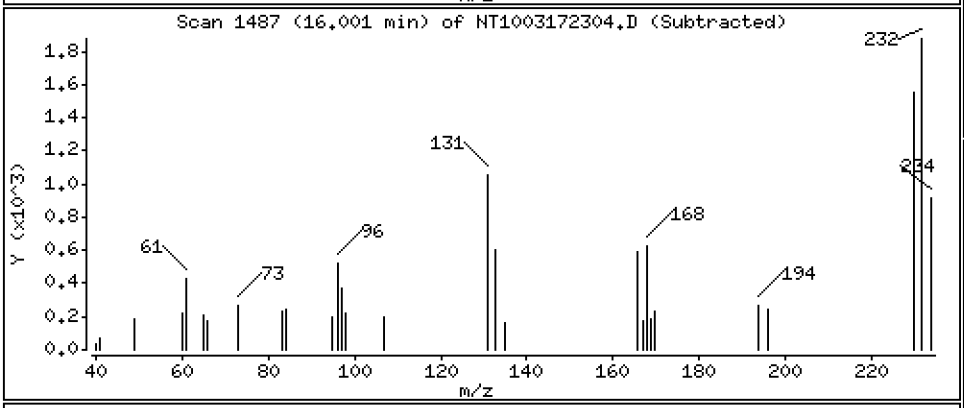
Column diameter: 0.25

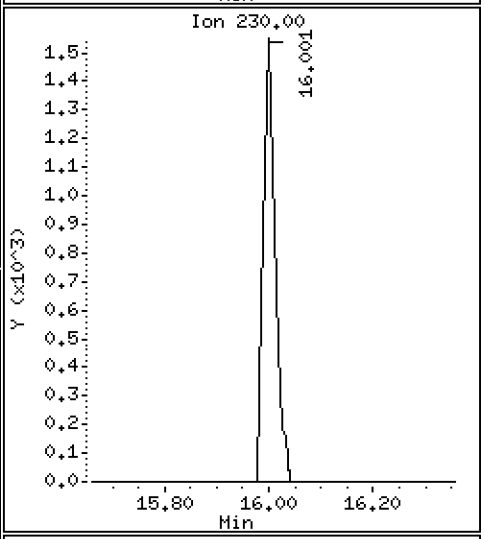
120 2,3,4,6-Tetrachlorophenol

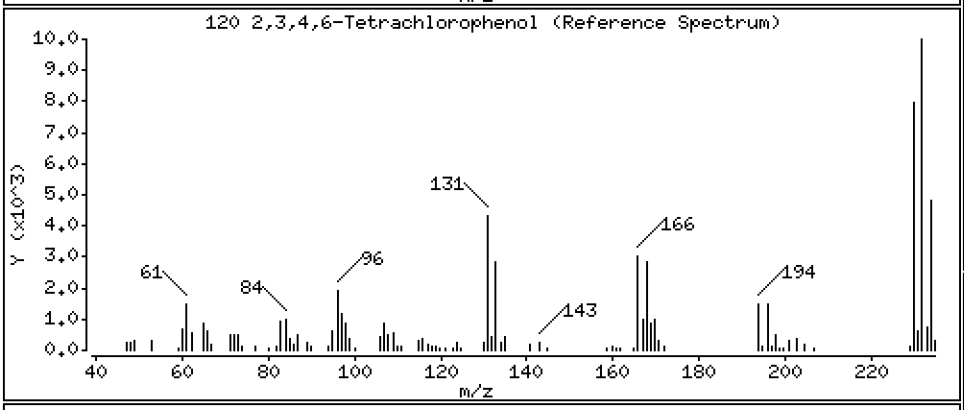
Concentration: 0.09902 ug/mL

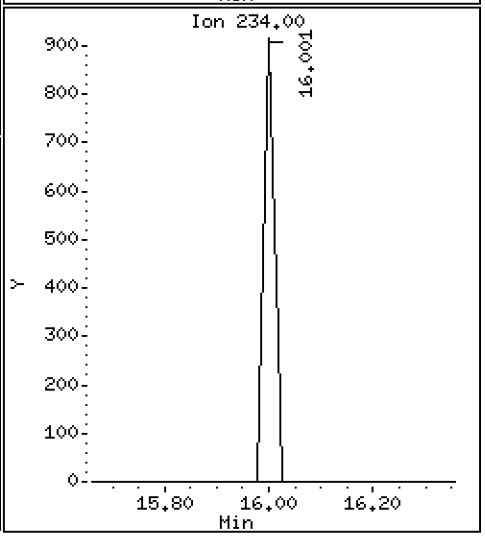


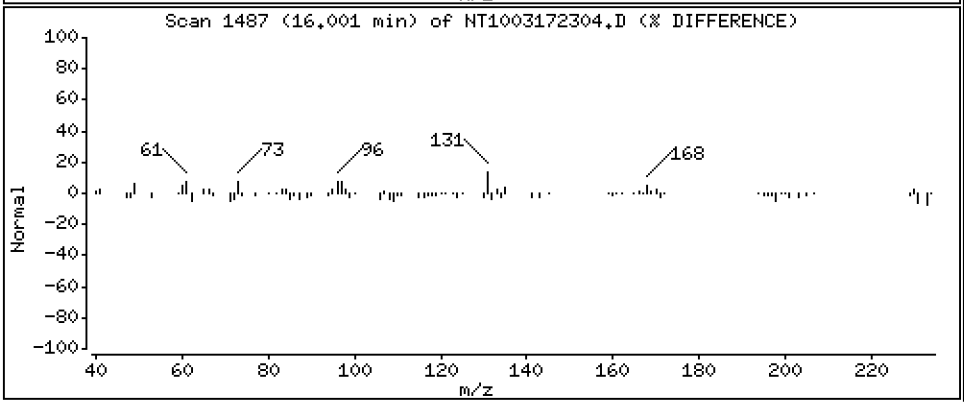












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230317.b\NT1003172304.D
Lab Smp Id: SLC0473-LCV1
Inj Date : 17-MAR-2023 20:19
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0473-LCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230317.b\ABN.m
Meth Date : 16-Mar-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAR-2023 00:22 Cal File: NT10031508.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1	2-Fluorophenol	112	6.982	6.975	(0.759)	14216	0.30802	0.3080
$	2	Phenol-d5	99	8.543	8.543	(0.929)	17706	0.29244	0.2924
	3	Phenol	94	8.566	8.566	(0.931)	13670	0.21727	0.2173
$	5	2-Chlorophenol-d4	132	8.837	8.837	(0.960)	15213	0.29425	0.2942
	4	Bis(2-Chloroethyl)ether	93	8.744	8.744	(0.950)	10154	0.21760	0.2176
	6	2-Chlorophenol	128	8.868	8.867	(0.964)	10743	0.19951	0.1995
	7	1,3-Dichlorobenzene	146	9.139	9.138	(0.993)	12094	0.21244	0.2124
*	8	1,4-Dichlorobenzene-d4	152	9.201	9.200	(1.000)	152616	4.00000	
	9	1,4-Dichlorobenzene	146	9.232	9.231	(1.003)	11744	0.21355	0.2136
$	10	1,2-Dichlorobenzene-d4	152	9.558	9.557	(1.039)	7933	0.21366	0.2137
	12	1,2-Dichlorobenzene	146	9.581	9.588	(1.041)	11346	0.20964	0.2096
	11	Benzyl alcohol	108	9.464	9.464	(1.029)	4965	0.16813	0.1681
	14	2,2'-oxybis(1-Chloropropane)	121	9.759	9.759	(1.061)	3185	0.20039	0.2004(M)
	13	2-Methylphenol	108	9.682	9.682	(1.052)	8584	0.18716	0.1872
	17	Hexachloroethane	117	10.171	10.178	(1.105)	4577	0.20285	0.2029
	16	N-Nitroso-di-n-propylamine	70	10.016	10.023	(1.089)	6823	0.18840	0.1884
	15	4-Methylphenol	108	9.946	9.946	(1.081)	9018	0.18661	0.1866
$	18	Nitrobenzene-d5	82	10.287	10.287	(0.882)	10899	0.20040	0.2004
	19	Nitrobenzene	77	10.326	10.326	(0.885)	11101	0.20799	0.2080
	20	Isophorone	82	10.768	10.768	(0.923)	11044	0.16175	0.1618
	21	2-Nitrophenol	139	10.946	10.955	(0.938)	4359	0.16796	0.1680
	22	2,4-Dimethylphenol	107	10.989	10.989	(0.942)	19302	0.39373	0.3937
	23	Bis(2-Chloroethoxy)methane	93	11.192	11.192	(0.959)	10329	0.22647	0.2265
	24	Benzoic acid	105	11.074	11.175	(0.949)	3307	0.12149	0.1215(M)
	25	2,4-Dichlorophenol	162	11.396	11.396	(0.977)	14426	0.36773	0.3677
	26	1,2,4-Trichlorobenzene	180	11.584	11.583	(0.993)	10160	0.22063	0.2206
*	27	Naphthalene-d8	136	11.669	11.676	(1.000)	538816	4.00000	
	28	Naphthalene	128	11.715	11.715	(1.004)	31013	0.21727	0.2173
	29	4-Chloroaniline	127	11.838	11.838	(1.015)	20899	0.37530	0.3753
	30	Hexachlorobutadiene	225	12.070	12.070	(1.034)	6027	0.22337	0.2234
	31	4-Chloro-3-methylphenol	107	12.782	12.790	(1.095)	14938	0.35174	0.3517
	32	2-Methylnaphthalene	142	13.100	13.099	(1.123)	21134	0.20516	0.2052
	33	Hexachlorocyclopentadiene	237	13.564	13.571	(0.888)	8648	0.32637	0.3264

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.719	13.718	(0.898)	8940	0.31592	0.3159
	35	2,4,5-Trichlorophenol	196	13.788	13.788	(0.903)	9769	0.31069	0.3107
$	36	2-Fluorobiphenyl	172	13.881	13.881	(0.909)	22829	0.20157	0.2016
	37	2-Chloronaphthalene	162	14.090	14.098	(0.922)	18938	0.20651	0.2065
	38	2-Nitroaniline	65	14.353	14.353	(0.940)	8452	0.32810	0.3281
	39	Dimethylphthalate	163	14.779	14.787	(0.968)	18766	0.20176	0.2018
	40	Acenaphthylene	152	14.965	14.965	(0.980)	29279	0.20489	0.2049
	41	2,6-Dinitrotoluene	165	14.918	14.926	(0.977)	6544	0.32569	0.3257
*	42	Acenaphthene-d10	164	15.274	15.282	(1.000)	286313	4.00000	
	43	3-Nitroaniline	138	15.197	15.212	(0.995)	6957	0.30677	0.3068
	44	Acenaphthene	153	15.344	15.344	(1.005)	18462	0.20913	0.2091
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	15.661	15.676	(1.025)	27237	0.20922	0.2092
	47	4-Nitrophenol	109	15.506	15.514	(1.015)	2815	0.19735	0.1973
	48	2,4-Dinitrotoluene	165	15.723	15.730	(1.029)	7721	0.25403	0.2540
	50	Diethylphthalate	149	16.225	16.240	(1.062)	17543	0.19224	0.1922
	49	Fluorene	166	16.380	16.387	(1.072)	22272	0.21746	0.2175
	51	4-Chlorophenyl-phenylether	204	16.364	16.372	(1.071)	10487	0.21532	0.2153
	52	4-Nitroaniline	138	16.464	16.480	(1.078)	6283	0.30742	0.3074
	53	4,6-Dinitro-2-methylphenol	198	16.557	16.572	(0.905)	2612	0.16454	0.1645
	54	N-Nitrosodiphenylamine	169	16.611	16.626	(0.908)	13514	0.19243	0.1924
$	55	2,4,6-Tribromophenol	330	16.912	16.919	(1.107)	2128	0.15795	0.1580
	56	4-Bromophenyl-phenylether	248	17.367	17.374	(0.949)	5686	0.19354	0.1935
	57	Hexachlorobenzene	284	17.684	17.691	(0.966)	6118	0.19862	0.1986
	58	Pentachlorophenol	266	18.040	18.047	(0.986)	1296	0.07113	0.07113
*	59	Phenanthrene-d10	188	18.303	18.310	(1.000)	525282	4.00000	
	60	Phenanthrene	178	18.349	18.357	(1.003)	28576	0.19951	0.1995
	61	Anthracene	178	18.442	18.457	(1.008)	26214	0.19079	0.1908
	62	Carbazole	167	18.767	18.782	(1.025)	22919	0.18615	0.1862
	63	Di-n-butylphthalate	149	19.556	19.572	(1.068)	23673	0.14300	0.1430
	64	Fluoranthene	202	20.725	20.732	(0.888)	31865	0.18853	0.1885
	65	Pyrene	202	21.142	21.158	(0.906)	32112	0.18521	0.1852
$	66	Terphenyl-d14	244	21.429	21.436	(0.919)	25192	0.19348	0.1935
	67	Butylbenzylphthalate	149	22.342	22.358	(0.958)	10156	0.16682	0.1668
	68	Benzo(a)anthracene	228	23.295	23.310	(0.999)	31303	0.21084	0.2108
*	69	Chrysene-d12	240	23.326	23.341	(1.000)	420636	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.248	23.264	(0.997)	23719	0.49874	0.4987
	71	Chrysene	228	23.364	23.380	(1.002)	30507	0.21031	0.2103
	72	bis(2-Ethylhexyl)phthalate	149	23.364	23.380	(0.960)	11619	0.12667	0.1267
*	134	Di-n-octylphthalate-d4	153	24.348	24.363	(1.000)	627203	4.00000	
	73	Di-n-octylphthalate	149	24.363	24.378	(1.001)	33655	0.20504	0.2050
	74	Benzo(b)fluoranthene	252	25.191	25.207	(0.970)	30596	0.20172	0.2017
	75	Benzo(k)fluoranthene	252	25.238	25.253	(0.972)	31259	0.20296	0.2030(H)
	76	Benzo(a)pyrene	252	25.857	25.873	(0.996)	28559	0.21060	0.2106
*	77	Perylene-d12	264	25.974	25.997	(1.000)	467919	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.680	28.711	(1.104)	31065	0.18006	0.1801
	79	Dibenzo(a,h)anthracene	278	28.695	28.726	(1.105)	26926	0.18799	0.1880
	80	Benzo(g,h,i)perylene	276	29.480	29.519	(1.135)	28345	0.18984	0.1898
	90	N-Nitrosodimethylamine	74	4.851	4.850	(0.527)	13264	0.45047	0.4505
	91	Aniline	93	8.659	8.659	(0.941)	27026	0.41922	0.4192
	93	Benzidine	184	20.957	20.964	(0.898)	17933	0.25830	0.2583
	103	Pyridine	79	4.905	4.873	(0.533)	21002	0.46443	0.4644
	105	1-methylnaphthalene	142	13.324	13.324	(1.142)	19072	0.20208	0.2021
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.688	16.696	(1.093)	19234	0.18868	0.1887

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.238	25.253	(0.972)	59213	0.40433	0.4043
120 2,3,4,6-Tetrachlorophenol	232	16.001	16.008	(1.048)	2853	0.09902	0.09902

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172304.D
Lab Smp Id: SLC0473-LCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230317.b\ABN.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:02
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	132765	66383	265530	152616	14.95
27 Naphthalene-d8	497947	248974	995894	538816	8.21
42 Acenaphthene-d10	271928	135964	543856	286313	5.29
59 Phenanthrene-d10	497390	248695	994780	525282	5.61
69 Chrysene-d12	391403	195702	782806	420636	7.47
134 Di-n-octylphthala	674651	337326	1349302	627203	-7.03
77 Perylene-d12	408663	204332	817326	467919	14.50

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.20	8.70	9.70	9.20	0.00
27 Naphthalene-d8	11.68	11.18	12.18	11.67	-0.06
42 Acenaphthene-d10	15.28	14.78	15.78	15.27	-0.05
59 Phenanthrene-d10	18.31	17.81	18.81	18.30	-0.04
69 Chrysene-d12	23.34	22.84	23.84	23.33	-0.07
134 Di-n-octylphthala	24.36	23.86	24.86	24.35	-0.06
77 Perylene-d12	26.00	25.50	26.50	25.97	-0.09

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

REVIEW SUMMARY FOR FILE - NT1003172304.D

Lab ID: SLC0473-LCV1
nt10.i, 20230317.b\ABN.m,   17-MAR-2023 20:19

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.949	0.957	-0.0081	Benzoic acid

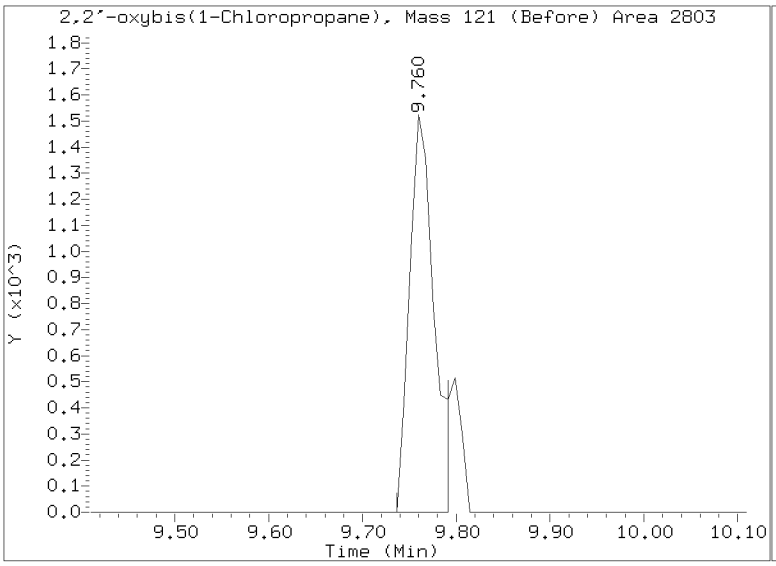
RRT check based on Ccal File: NT1003172302.D

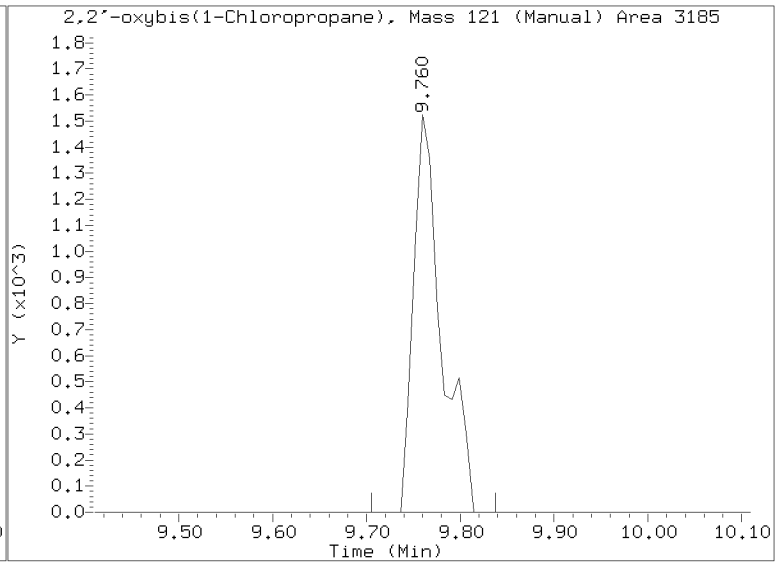
On Column LOD for nt10.i, 20230317.b\ABN.m, ICAL.sub = 0.0000

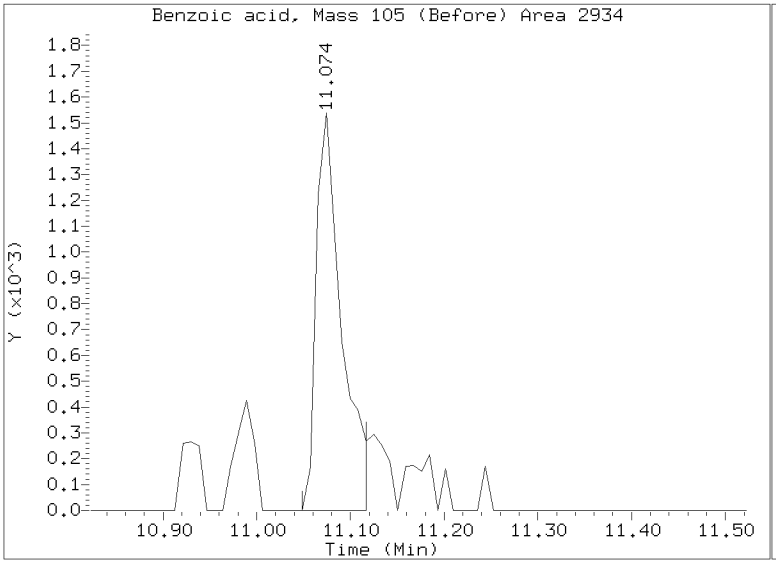
* Only compounds listed in the work order have been verified by the analyst *

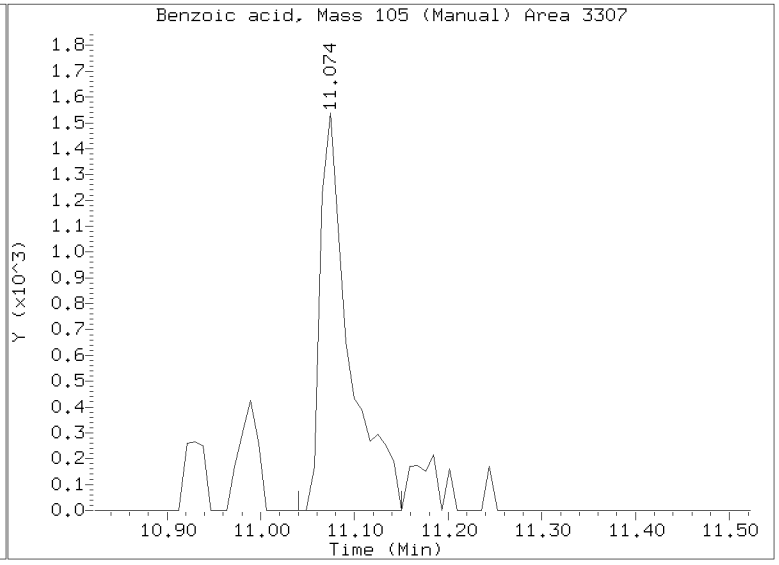
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230317.b/NT1003172304.D
Injection Date: 17-MAR-2023 20:19
Lab ID:SLC0473-LCV1 Client ID:
Report Date: 03/30/2023 07:21









Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0228	Instrument:	NT10
		Calibration:	GC00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0228-TUN1	NT10031501.D	NA	03/15/23 20:19
CAL 20	SLC0228-CAL7	NT10031502.D	NA	03/15/23 20:34
CAL 10	SLC0228-CAL6	NT10031503.D	NA	03/15/23 21:12
CAL 5	SLC0228-CAL5	NT10031504.D	NA	03/15/23 21:50
CAL 2.5	SLC0228-CAL4	NT10031505.D	NA	03/15/23 22:28
CAL 1.0	SLC0228-CAL3	NT10031506.D	NA	03/15/23 23:06
CAL 0.5	SLC0228-CAL2	NT10031507.D	NA	03/15/23 23:44
CAL 0.2	SLC0228-CAL1	NT10031508.D	NA	03/16/23 00:22
SCV 5.0	SLC0228-SCV1	NT10031511.D	NA	03/16/23 02:16
Initial Cal Blank	SLC0228-ICB1	NT10031512.D	NA	03/16/23 02:54

Printed: 3/16/2023 1:05:08PM

ANALYSIS SEQUENCE

SLC0228

Instrument ID: NT10
Calibration ID: GC00046
MS EM Level: 1271 EV

GCMS Description: Agilent 5975/MS http://bi
GCMS Column ID: L002830

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0228-TUN1	MS Tune	QC		1	K004775		03/15/2023 20:19	NT10031501.D	JGR	
SLC0228-CAL7	CAL 20	QC		2	K011111	K010831	03/15/2023 20:34	NT10031502.D	VTS	
SLC0228-CAL6	CAL 10	QC		3	K011110	K010831	03/15/2023 21:12	NT10031503.D	VTS	
SLC0228-CAL5	CAL 5	QC		4	K011109	K010831	03/15/2023 21:50	NT10031504.D	VTS	
SLC0228-CAL4	CAL 2.5	QC		5	K011108	K010831	03/15/2023 22:28	NT10031505.D	VTS	
SLC0228-CAL3	CAL 1.0	QC		6	K011107	K010831	03/15/2023 23:06	NT10031506.D	VTS	
SLC0228-CAL2	CAL 0.5	QC		7	K011106	K010831	03/15/2023 23:44	NT10031507.D	VTS	
SLC0228-CAL1	CAL 0.2	QC		8	K011105	K010831	03/16/2023 00:22	NT10031508.D	VTS	
SLC0228-SCV1	SCV 5.0	QC		9	L002833	K010831	03/16/2023 02:16	NT10031511.D	VTS	
SLC0228-ICB1	Initial Cal Blank	QC		10	K005156	K010831	03/16/2023 02:54	NT10031512.D	VTS	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230315.b

	Time	Filename	LabID	ClientId	DF																			
1	2019	NT10031501.D	SLC0228-TUN1		1	|NO ISTDS FOUND||																		
2	2034	NT10031502.D	SLC0228-CAL7		1	| 9.30	177375	||11.78	659656	||15.38	352987	||18.42	587447	||23.46	356463	||26.19	404994	||24.49	617041	|				
3	2112	NT10031503.D	SLC0228-CAL6		1	| 9.30	174984	||11.78	633941	||15.38	344087	||18.42	605930	||23.46	437116	||26.18	463440	||24.48	674085	|				
4	2150	NT10031504.D	SLC0228-CAL5		1	| 9.30	171542	||11.78	624466	||15.38	337226	||18.42	572849	||23.45	347068	||26.18	421549	||24.48	500317	|				
5	2228	NT10031505.D	SLC0228-CAL4		1	| 9.30	158570	||11.78	582079	||15.38	306729	||18.42	522311	||23.45	356282	||26.18	420725	||24.48	471925	|				
6	2306	NT10031506.D	SLC0228-CAL3		1	| 9.29	172257	||11.78	625894	||15.38	330997	||18.42	568685	||23.45	426836	||26.18	489106	||24.48	555437	|				
7	2344	NT10031507.D	SLC0228-CAL2		1	| 9.30	176328	||11.78	638835	||15.38	333617	||18.42	594262	||23.45	428263	||26.18	479116	||24.48	530893	|				
8	0022	NT10031508.D	SLC0228-CAL1		1	| 9.29	173382	||11.77	622719	||15.38	323444	||18.42	582036	||23.45	443504	||26.18	490725	||24.48	540769	|				
9	0100	NT10031509.D	SEQ-SIM2		1	| 9.29	175576	||11.78	624440	||15.38	329518	||18.42	581173	||23.45	424576	||26.18	472151	||24.48	491201	|				
10	0138	NT10031510.D	SEQ-SIM1		1	| 9.30	172228	||11.77	609518	||15.38	313933	||18.42	564567	||23.45	413842	||26.18	461161	||24.48	469814	|				
11	0216	NT10031511.D	SLC0228-SCV1		1	| 9.30	154809	||11.78	570882	||15.38	303490	||18.42	533431	||23.46	435381	||26.19	494648	||24.49	660827	|				
12	0254	NT10031512.D	SLC0228-ICB1		1	| 9.30	173115	||11.78	625865	||15.38	328712	||18.42	592693	||23.45	442208	||26.18	499804	||24.48	526309	|				

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230315.b

Instrument: nt10.i Date: 15-MAR-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
2019	NT10031501.D	SLC0228-TUN1	1	NO MANUAL INTEGRATION
2034	NT10031502.D	SLC0228-CAL7	1	Benzoic acid,
2112	NT10031503.D	SLC0228-CAL6	1	2,2'-oxybis(1-Chloropropane),
2150	NT10031504.D	SLC0228-CAL5	1	2,2'-oxybis(1-Chloropropane),
2228	NT10031505.D	SLC0228-CAL4	1	2,2'-oxybis(1-Chloropropane),
2306	NT10031506.D	SLC0228-CAL3	1	2,2'-oxybis(1-Chloropropane),
2344	NT10031507.D	SLC0228-CAL2	1	2,2'-oxybis(1-Chloropropane), Benzoic acid,
0022	NT10031508.D	SLC0228-CAL1	1	2,2'-oxybis(1-Chloropropane), 1,2-Dichlorobenzene-d4,
0100	NT10031509.D	SEQ-SIM2	1	NO MANUAL INTEGRATION
0138	NT10031510.D	SEQ-SIM1	1	NO MANUAL INTEGRATION
0216	NT10031511.D	SLC0228-SCV1	1	NO MANUAL INTEGRATION
0254	NT10031512.D	SLC0228-ICB1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 16-Mar-2023 13:06

NT10031501.D	Data Locked	van, 16-Mar-2023 13:06
NT10031502.D	Data Locked	van, 16-Mar-2023 13:06
NT10031503.D	Data Locked	van, 16-Mar-2023 13:06
NT10031504.D	Data Locked	van, 16-Mar-2023 13:06
NT10031505.D	Data Locked	van, 16-Mar-2023 13:06
NT10031506.D	Data Locked	van, 16-Mar-2023 13:06
NT10031507.D	Data Locked	van, 16-Mar-2023 13:06
NT10031508.D	Data Locked	van, 16-Mar-2023 13:06
NT10031509.D	Data Locked	van, 16-Mar-2023 13:06
NT10031510.D	Data Locked	van, 16-Mar-2023 13:06
NT10031511.D	Data Locked	van, 16-Mar-2023 13:06
NT10031512.D	Data Locked	van, 16-Mar-2023 13:06

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0473	Instrument:	NT10
		Calibration:	GC00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0473-TUN1	NT1003172301.D	NA	03/17/23 18:47
ABN 5	SLC0473-ICV1	NT1003172302.D	NA	03/17/23 19:02
ABN 0.2	SLC0473-LCV1	NT1003172304.D	NA	03/17/23 20:19
Blank	BLB0495-BLK1	NT1003172306.D	Solid	03/17/23 21:36
LCS	BLB0495-BS1	NT1003172307.D	Solid	03/17/23 22:14
LCS Dup	BLB0495-BSD1	NT1003172308.D	Solid	03/17/23 22:53
Reference	BLB0495-SRM1	NT1003172309.D	Solid	03/17/23 23:31
LDW23-SC1045	23A0420-01	NT1003172310.D	Solid	03/18/23 00:09
LDW23-SC1003	23A0420-07	NT1003172311.D	Solid	03/18/23 00:47
LDW23-SC1004	23A0420-08	NT1003172312.D	Solid	03/18/23 01:25
LDW23-SC1004	BLB0495-MS1	NT1003172313.D	Solid	03/18/23 02:03
LDW23-SC1004	BLB0495-MSD1	NT1003172314.D	Solid	03/18/23 02:41
LDW23-SC1082	23A0420-09	NT1003172315.D	Solid	03/18/23 03:19
Calibration Check	SLC0473-CCV1	NT1003172316.D	NA	03/18/23 03:57

Printed: 3/30/2023 7:50:13AM

ANALYSIS SEQUENCE

SLC0473

Instrument ID: NT10
Calibration ID: GC00046
MS EM Level: 1271 EV

GCMS Description: Agilent 5975/MS http://bi
GCMS Column ID: L002830

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0473-TUN1	MS Tune	QC		1	K004775		03/17/2023 18:47	NT1003172301.D	JGR	
SLC0473-ICV1	ABN 5	QC		2	K011109	K010831	03/17/2023 19:02	NT1003172302.D	VTS	
SLC0473-LCV1	ABN 0.2	QC		3	K011105	K010831	03/17/2023 20:19	NT1003172304.D	VTS	
BLB0495-BLK1	Blank	QC		4		K010831	03/17/2023 21:36	NT1003172306.D	VTS	
BLB0495-BS1	LCS	QC		5		K010831	03/17/2023 22:14	NT1003172307.D	VTS	
BLB0495-BSD1	LCS Dup	QC		6		K010831	03/17/2023 22:53	NT1003172308.D	VTS	
BLB0495-SRM1	Reference	QC		7		K010831	03/17/2023 23:31	NT1003172309.D	VTS	
23A0420-01	LDW23-SC1045	(20ug/kg solid or 0.2ug/L l	A 03	8		K010831	03/18/2023 00:09	NT1003172310.D	VTS	
23A0420-07	LDW23-SC1003	(20ug/kg solid or 0.2ug/L l	A 03	9		K010831	03/18/2023 00:47	NT1003172311.D	VTS	
23A0420-08	LDW23-SC1004	(20ug/kg solid or 0.2ug/L l	A 03	10		K010831	03/18/2023 01:25	NT1003172312.D	VTS	
BLB0495-MS1	Matrix Spike	QC		11		K010831	03/18/2023 02:03	NT1003172313.D	VTS	
BLB0495-MSD1	Matrix Spike Dup	QC		12		K010831	03/18/2023 02:41	NT1003172314.D	VTS	
23A0420-09	LDW23-SC1082	(20ug/kg solid or 0.2ug/L l	A 03	13		K010831	03/18/2023 03:19	NT1003172315.D	VTS	
SLC0473-CCV1	Calibration Check	QC		14	K011109	K010831	03/18/2023 03:57	NT1003172316.D	VTS	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230317.b

	Time	Filename	LabID	ClientId	DF							
1	1847	NT1003172301.D	SLC0473-TUN1		1	NO ISTDS FOUND						
2	1902	NT1003172302.D	SLC0473-ICV1		1	9.20 132765	11.68 497947	15.28 271928	18.31 497390	23.34 391403	26.00 408663	24.36 674651
3	1940	NT1003172303.D	SEQ-ICVSIM		1	9.20 168212	11.68 606252	15.27 326303	18.30 592803	23.33 488189	25.98 524270	24.36 747722
4	2019	NT1003172304.D	SLC0473-LCV1		1	9.20 152616	11.67 538816	15.27 286313	18.30 525282	23.33 420636	25.97 467919	24.35 627203
5	2057	NT1003172305.D	SEQ-SIM100		1	9.20 138921	11.67 492798	15.28 260088	18.30 461416	23.33 358931	25.97 381686	24.35 531857
6	2136	NT1003172306.D	BLB0495-BLK1		1	9.20 161583	11.67 580695	15.27 300894	18.30 532566	23.32 406088	25.97 399257	24.34 655299
7	2214	NT1003172307.D	BLB0495-BS1		1	9.20 164701	11.68 595659	15.27 321951	18.30 590299	23.33 468141	25.97 491214	24.35 781050
8	2253	NT1003172308.D	BLB0495-BSD1		1	9.20 145573	11.68 531090	15.27 289222	18.30 513176	23.32 403797	25.97 412942	24.35 667494
9	2331	NT1003172309.D	BLB0495-SRM1		1	9.20 166636	11.67 600742	15.28 319558	18.30 574394	23.32 435378	25.97 434581	24.34 730373
10	0009	NT1003172310.D	23A0420-01		1	9.20 156838	11.68 566529	15.27 300789	18.30 596211	23.34 467242	25.99 527842	24.35 854021
11	0047	NT1003172311.D	23A0420-07		1	9.20 175334	11.68 641354	15.28 339645	18.31 650888	23.35 498997	26.00 550397	24.36 886315
12	0125	NT1003172312.D	23A0420-08		1	9.20 178410	11.68 658429	15.28 352175	18.31 666439	23.34 496218	26.00 556801	24.36 883552
13	0203	NT1003172313.D	BLB0495-MS1		1	9.20 173887	11.68 636818	15.28 343951	18.31 641328	23.35 488701	26.00 550243	24.36 866231
14	0241	NT1003172314.D	BLB0495-MSD1		1	9.20 168873	11.68 618199	15.28 338303	18.31 624502	23.34 489765	26.00 558197	24.36 838372
15	0319	NT1003172315.D	23A0420-09		1	9.20 172915	11.68 613822	15.28 332649	18.32 628288	23.37 496616	26.04 540661	24.38 778184
16	0357	NT1003172316.D	SLC0473-CCV1		1	9.20 146811	11.68 542115	15.28 299616	18.31 554531	23.33 451487	25.98 503730	24.35 756806

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230317.b

Instrument: nt10.i Date: 17-MAR-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1847	NT1003172301.D	SLC0473-TUN1	1	NO MANUAL INTEGRATION
1902	NT1003172302.D	SLC0473-ICV1	1	2,2'-oxybis(1-Chloropropane),
1940	NT1003172303.D	SEQ-ICVSIM	1	NO MANUAL INTEGRATION
2019	NT1003172304.D	SLC0473-LCV1	1	2,2'-oxybis(1-Chloropropane), Benzoic acid,
2057	NT1003172305.D	SEQ-SIM100	1	NO MANUAL INTEGRATION
2136	NT1003172306.D	BLB0495-BLK1	1	NO MANUAL INTEGRATION
2214	NT1003172307.D	BLB0495-BS1	1	N-Nitroso-di-n-propylamine,
2253	NT1003172308.D	BLB0495-BSD1	1	NO MANUAL INTEGRATION
2331	NT1003172309.D	BLB0495-SRM1	1	NO MANUAL INTEGRATION
0009	NT1003172310.D	23A0420-01	1	2-Methylphenol,
0047	NT1003172311.D	23A0420-07	1	2-Methylphenol, Benzoic acid,
0125	NT1003172312.D	23A0420-08	1	2-Methylphenol, Benzoic acid,
0203	NT1003172313.D	BLB0495-MS1	1	NO MANUAL INTEGRATION
0241	NT1003172314.D	BLB0495-MSD1	1	NO MANUAL INTEGRATION
0319	NT1003172315.D	23A0420-09	1	2-Methylphenol, Benzoic acid, Benzo(a)anthracene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)an Total Benzofluoranthenes,
0357	NT1003172316.D	SLC0473-CCV1	1	2,2'-oxybis(1-Chloropropane),

Security Status Report

Date: 30-Mar-2023 07:51

NT1003172301.D	Data Locked	van, 30-Mar-2023 07:51
NT1003172302.D	Data Locked	van, 30-Mar-2023 07:51
NT1003172303.D	Data Locked	van, 30-Mar-2023 07:51
NT1003172304.D	Data Locked	van, 30-Mar-2023 07:51
NT1003172305.D	Data Locked	van, 30-Mar-2023 07:51
NT1003172306.D	Data Locked	van, 30-Mar-2023 07:51
NT1003172307.D	Data Locked	van, 30-Mar-2023 07:51
NT1003172308.D	Data Locked	van, 30-Mar-2023 07:51
NT1003172309.D	Data Locked	van, 30-Mar-2023 07:51
NT1003172310.D	Data Locked	van, 30-Mar-2023 07:51
NT1003172311.D	Data Locked	van, 30-Mar-2023 07:51
NT1003172312.D	Data Locked	van, 30-Mar-2023 07:51
NT1003172313.D	Data Locked	van, 30-Mar-2023 07:51
NT1003172314.D	Data Locked	van, 30-Mar-2023 07:51
NT1003172315.D	Data Locked	van, 30-Mar-2023 07:51
NT1003172316.D	Data Locked	van, 30-Mar-2023 07:51

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0228	Instrument:	NT10
Calibration:	GC00046	Calibration Date:	03/16/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0228-SCV1 (Solid)			Lab File ID: NT10031511.D			Analyzed: 03/16/23 02:16		
2-Fluorophenol			80 - 120		7.067714	-7.0677	N/A	
Phenol-d5			80 - 120		8.638143	-8.6381	N/A	
2-Chlorophenol-d4			80 - 120		8.931857	-8.9319	N/A	
1,2-Dichlorobenzene-d4			80 - 120		9.659143	-9.6591	N/A	
Nitrobenzene-d5			80 - 120		10.389	-10.3890	N/A	
2-Fluorobiphenyl			80 - 120		13.982	-13.9820	N/A	
2,4,6-Tribromophenol			80 - 120		17.02143	-17.0214	N/A	
p-Terphenyl-d14			80 - 120		21.54257	-21.5426	N/A	
SLC0228-ICB1 (Solid)			Lab File ID: NT10031512.D			Analyzed: 03/16/23 02:54		
2-Fluorophenol	7.5000	92.3	27 - 120	7.067	7.067714	-0.0007	N/A	
Phenol-d5	7.5000	92.6	29 - 120	8.636	8.638143	-0.0021	N/A	
2-Chlorophenol-d4	7.5000	94.7	31 - 120	8.929	8.931857	-0.0029	N/A	
1,2-Dichlorobenzene-d4	5.0000	92.2	32 - 120	9.658	9.659143	-0.0011	N/A	
Nitrobenzene-d5	5.0000	93.1	30 - 120	10.387	10.389	-0.0020	N/A	
2-Fluorobiphenyl	5.0000	94.6	35 - 120	13.981	13.982	-0.0010	N/A	
2,4,6-Tribromophenol	7.5000	74.6	24 - 134	17.02	17.02143	-0.0014	N/A	
p-Terphenyl-d14	5.0000	91.7	37 - 120	21.544	21.54257	0.0014	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0473	Instrument:	NT10
Calibration:	GC00046	Calibration Date:	03/16/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0473-ICV1 (Solid)			Lab File ID: NT1003172302.D			Analyzed: 03/17/23 19:02		
2-Fluorophenol	7.5000	102	80 - 120	6.975	7.067714	-0.0927	N/A	
Phenol-d5	7.5000	105	80 - 120	8.543	8.638143	-0.0951	N/A	
2-Chlorophenol-d4	7.5000	101	80 - 120	8.837	8.931857	-0.0949	N/A	
1,2-Dichlorobenzene-d4	5.0000	97.5	80 - 120	9.557	9.659143	-0.1021	N/A	
Nitrobenzene-d5	5.0000	106	80 - 120	10.287	10.389	-0.1020	N/A	
2-Fluorobiphenyl	5.0000	94.2	80 - 120	13.881	13.982	-0.1010	N/A	
2,4,6-Tribromophenol	7.5000	93.0	80 - 120	16.919	17.02143	-0.1024	N/A	
p-Terphenyl-d14	5.0000	92.1	80 - 120	21.436	21.54257	-0.1066	N/A	
SLC0473-LCV1 (Solid)			Lab File ID: NT1003172304.D			Analyzed: 03/17/23 20:19		
2-Fluorophenol	0.30000	103	50 - 150	6.982	7.067714	-0.0857	N/A	
Phenol-d5	0.30000	97.5	50 - 150	8.543	8.638143	-0.0951	N/A	
2-Chlorophenol-d4	0.30000	98.1	50 - 150	8.837	8.931857	-0.0949	N/A	
1,2-Dichlorobenzene-d4	0.20000	107	50 - 150	9.558	9.659143	-0.1011	N/A	
Nitrobenzene-d5	0.20000	100	50 - 150	10.287	10.389	-0.1020	N/A	
2-Fluorobiphenyl	0.20000	101	50 - 150	13.881	13.982	-0.1010	N/A	
2,4,6-Tribromophenol	0.30000	52.7	50 - 150	16.912	17.02143	-0.1094	N/A	
p-Terphenyl-d14	0.20000	96.7	50 - 150	21.429	21.54257	-0.1136	N/A	
BLB0495-BLK1 (Solid)			Lab File ID: NT1003172306.D			Analyzed: 03/17/23 21:36		
2-Fluorophenol	750.00	38.6	27 - 120	6.982	7.067714	-0.0857	N/A	
Phenol-d5	750.00	47.4	29 - 120	8.543	8.638143	-0.0951	N/A	
2-Chlorophenol-d4	750.00	71.3	31 - 120	8.837	8.931857	-0.0949	N/A	
1,2-Dichlorobenzene-d4	500.00	75.0	32 - 120	9.557	9.659143	-0.1021	N/A	
Nitrobenzene-d5	500.00	80.5	30 - 120	10.287	10.389	-0.1020	N/A	
2-Fluorobiphenyl	500.00	81.2	35 - 120	13.881	13.982	-0.1010	N/A	
2,4,6-Tribromophenol	750.00	66.4	24 - 134	16.904	17.02143	-0.1174	N/A	
p-Terphenyl-d14	500.00	92.8	37 - 120	21.421	21.54257	-0.1216	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0473	Instrument:	NT10
Calibration:	GC00046	Calibration Date:	03/16/2023

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLB0495-BS1 (Solid)			Lab File ID: NT1003172307.D			Analyzed: 03/17/23 22:14		
2-Fluorophenol	750.00	33.6	27 - 120	6.983	7.067714	-0.0847	N/A	
Phenol-d5	750.00	41.8	29 - 120	8.543	8.638143	-0.0951	N/A	
2-Chlorophenol-d4	750.00	63.5	31 - 120	8.837	8.931857	-0.0949	N/A	
1,2-Dichlorobenzene-d4	500.00	67.6	32 - 120	9.558	9.659143	-0.1011	N/A	
Nitrobenzene-d5	500.00	74.9	30 - 120	10.287	10.389	-0.1020	N/A	
2-Fluorobiphenyl	500.00	76.4	35 - 120	13.881	13.982	-0.1010	N/A	
2,4,6-Tribromophenol	750.00	71.4	24 - 134	16.912	17.02143	-0.1094	N/A	
p-Terphenyl-d14	500.00	95.6	37 - 120	21.421	21.54257	-0.1216	N/A	
BLB0495-BSD1 (Solid)			Lab File ID: NT1003172308.D			Analyzed: 03/17/23 22:53		
2-Fluorophenol	750.00	38.6	27 - 120	6.975	7.067714	-0.0927	N/A	
Phenol-d5	750.00	46.8	29 - 120	8.543	8.638143	-0.0951	N/A	
2-Chlorophenol-d4	750.00	69.5	31 - 120	8.837	8.931857	-0.0949	N/A	
1,2-Dichlorobenzene-d4	500.00	72.0	32 - 120	9.558	9.659143	-0.1011	N/A	
Nitrobenzene-d5	500.00	79.0	30 - 120	10.287	10.389	-0.1020	N/A	
2-Fluorobiphenyl	500.00	78.7	35 - 120	13.881	13.982	-0.1010	N/A	
2,4,6-Tribromophenol	750.00	83.1	24 - 134	16.912	17.02143	-0.1094	N/A	
p-Terphenyl-d14	500.00	93.5	37 - 120	21.421	21.54257	-0.1216	N/A	
BLB0495-SRM1 (Solid)			Lab File ID: NT1003172309.D			Analyzed: 03/17/23 23:31		
2-Fluorophenol	7500.0	31.8	27 - 120	6.975	7.067714	-0.0927	N/A	
Phenol-d5	7500.0	40.6	29 - 120	8.544	8.638143	-0.0941	N/A	
2-Chlorophenol-d4	7500.0	64.5	31 - 120	8.837	8.931857	-0.0949	N/A	
1,2-Dichlorobenzene-d4	5000.0	66.0	32 - 120	9.558	9.659143	-0.1011	N/A	
Nitrobenzene-d5	5000.0	70.9	30 - 120	10.287	10.389	-0.1020	N/A	
2-Fluorobiphenyl	5000.0	75.7	35 - 120	13.882	13.982	-0.1000	N/A	
2,4,6-Tribromophenol	7500.0	79.8	24 - 134	16.905	17.02143	-0.1164	N/A	
p-Terphenyl-d14	5000.0	87.4	37 - 120	21.422	21.54257	-0.1206	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0473	Instrument:	NT10
Calibration:	GC00046	Calibration Date:	03/16/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0420-01 (Solid)			Lab File ID: NT1003172310.D			Analyzed: 03/18/23 00:09		
2-Fluorophenol	749.52	34.7	27 - 120	6.975	7.067714	-0.0927	N/A	
Phenol-d5	749.52	44.2	29 - 120	8.543	8.638143	-0.0951	N/A	
2-Chlorophenol-d4	749.52	62.9	31 - 120	8.837	8.931857	-0.0949	N/A	
1,2-Dichlorobenzene-d4	499.68	62.3	32 - 120	9.557	9.659143	-0.1021	N/A	
Nitrobenzene-d5	499.68	72.7	30 - 120	10.287	10.389	-0.1020	N/A	
2-Fluorobiphenyl	499.68	77.7	35 - 120	13.881	13.982	-0.1010	N/A	
2,4,6-Tribromophenol	749.52	90.9	24 - 134	16.911	17.02143	-0.1104	N/A	
p-Terphenyl-d14	499.68	81.2	37 - 120	21.444	21.54257	-0.0986	N/A	
23A0420-07 (Solid)			Lab File ID: NT1003172311.D			Analyzed: 03/18/23 00:47		
2-Fluorophenol	749.65	31.1	27 - 120	6.983	7.067714	-0.0847	N/A	
Phenol-d5	749.65	40.6	29 - 120	8.551	8.638143	-0.0871	N/A	
2-Chlorophenol-d4	749.65	61.7	31 - 120	8.837	8.931857	-0.0949	N/A	
1,2-Dichlorobenzene-d4	499.76	61.1	32 - 120	9.558	9.659143	-0.1011	N/A	
Nitrobenzene-d5	499.76	66.9	30 - 120	10.287	10.389	-0.1020	N/A	
2-Fluorobiphenyl	499.76	78.7	35 - 120	13.882	13.982	-0.1000	N/A	
2,4,6-Tribromophenol	749.65	90.7	24 - 134	16.913	17.02143	-0.1084	N/A	
p-Terphenyl-d14	499.76	83.4	37 - 120	21.445	21.54257	-0.0976	N/A	
23A0420-08 (Solid)			Lab File ID: NT1003172312.D			Analyzed: 03/18/23 01:25		
2-Fluorophenol	748.53	36.5	27 - 120	6.982	7.067714	-0.0857	N/A	
Phenol-d5	748.53	45.4	29 - 120	8.551	8.638143	-0.0871	N/A	
2-Chlorophenol-d4	748.53	66.1	31 - 120	8.837	8.931857	-0.0949	N/A	
1,2-Dichlorobenzene-d4	499.02	63.9	32 - 120	9.558	9.659143	-0.1011	N/A	
Nitrobenzene-d5	499.02	69.5	30 - 120	10.287	10.389	-0.1020	N/A	
2-Fluorobiphenyl	499.02	78.0	35 - 120	13.881	13.982	-0.1010	N/A	
2,4,6-Tribromophenol	748.53	87.8	24 - 134	16.912	17.02143	-0.1094	N/A	
p-Terphenyl-d14	499.02	83.9	37 - 120	21.444	21.54257	-0.0986	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0473
Instrument: NT10
Calibration: GC00046
Calibration Date: 03/16/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLB0495-MS1 (Solid)			Lab File ID: NT1003172313.D			Analyzed: 03/18/23 02:03		
2-Fluorophenol	749.88	36.0	27 - 120	6.982	7.067714	-0.0857	N/A	
Phenol-d5	749.88	43.5	29 - 120	8.551	8.638143	-0.0871	N/A	
2-Chlorophenol-d4	749.88	61.2	31 - 120	8.837	8.931857	-0.0949	N/A	
1,2-Dichlorobenzene-d4	499.92	59.6	32 - 120	9.557	9.659143	-0.1021	N/A	
Nitrobenzene-d5	499.92	66.0	30 - 120	10.295	10.389	-0.0940	N/A	
2-Fluorobiphenyl	499.92	76.3	35 - 120	13.881	13.982	-0.1010	N/A	
2,4,6-Tribromophenol	749.88	89.4	24 - 134	16.919	17.02143	-0.1024	N/A	
p-Terphenyl-d14	499.92	83.3	37 - 120	21.444	21.54257	-0.0986	N/A	
BLB0495-MSD1 (Solid)			Lab File ID: NT1003172314.D			Analyzed: 03/18/23 02:41		
2-Fluorophenol	749.88	32.9	27 - 120	6.983	7.067714	-0.0847	N/A	
Phenol-d5	749.88	41.5	29 - 120	8.551	8.638143	-0.0871	N/A	
2-Chlorophenol-d4	749.88	61.5	31 - 120	8.837	8.931857	-0.0949	N/A	
1,2-Dichlorobenzene-d4	499.92	59.5	32 - 120	9.558	9.659143	-0.1011	N/A	
Nitrobenzene-d5	499.92	65.1	30 - 120	10.295	10.389	-0.0940	N/A	
2-Fluorobiphenyl	499.92	76.4	35 - 120	13.881	13.982	-0.1010	N/A	
2,4,6-Tribromophenol	749.88	91.1	24 - 134	16.919	17.02143	-0.1024	N/A	
p-Terphenyl-d14	499.92	86.9	37 - 120	21.436	21.54257	-0.1066	N/A	
23A0420-09 (Solid)			Lab File ID: NT1003172315.D			Analyzed: 03/18/23 03:19		
2-Fluorophenol	749.85	33.2	27 - 120	6.983	7.067714	-0.0847	N/A	
Phenol-d5	749.85	43.2	29 - 120	8.551	8.638143	-0.0871	N/A	
2-Chlorophenol-d4	749.85	63.6	31 - 120	8.837	8.931857	-0.0949	N/A	
1,2-Dichlorobenzene-d4	499.90	63.0	32 - 120	9.558	9.659143	-0.1011	N/A	
Nitrobenzene-d5	499.90	69.4	30 - 120	10.287	10.389	-0.1020	N/A	
2-Fluorobiphenyl	499.90	82.3	35 - 120	13.882	13.982	-0.1000	N/A	
2,4,6-Tribromophenol	749.85	92.5	24 - 134	16.92	17.02143	-0.1014	N/A	
p-Terphenyl-d14	499.90	85.7	37 - 120	21.453	21.54257	-0.0896	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0473	Instrument:	NT10
Calibration:	GC00046	Calibration Date:	03/16/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0473-CCV1 (Solid)			Lab File ID: NT1003172316.D				Analyzed: 03/18/23 03:57	
2-Fluorophenol	7.5000	104	50 - 150	6.983	7.067714	-0.0847	N/A	
Phenol-d5	7.5000	103	50 - 150	8.551	8.638143	-0.0871	N/A	
2-Chlorophenol-d4	7.5000	104	50 - 150	8.837	8.931857	-0.0949	N/A	
1,2-Dichlorobenzene-d4	5.0000	97.2	50 - 150	9.558	9.659143	-0.1011	N/A	
Nitrobenzene-d5	5.0000	101	50 - 150	10.295	10.389	-0.0940	N/A	
2-Fluorobiphenyl	5.0000	94.9	50 - 150	13.881	13.982	-0.1010	N/A	
2,4,6-Tribromophenol	7.5000	87.5	50 - 150	16.912	17.02143	-0.1094	N/A	
p-Terphenyl-d14	5.0000	91.3	50 - 150	21.429	21.54257	-0.1136	N/A	

Analytical Resources, LLC
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INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0228	Instrument:	NT10
		Calibration:	GC00046

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLC0228-SCV1)		(Solid)		Lab File ID: NT10031511.D				Analyzed: 03/16/23 02:16	
1,4-Dichlorobenzene-d4	154809	9.301	171542	9.301	90	50 - 200	0.000	+/-0.50	
Naphthalene-d8	570882	11.777	624466	11.777	91	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	303490	15.383	337226	15.382	90	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	533431	18.42	572849	18.419	93	50 - 200	0.001	+/-0.50	
Chrysene-d12	435381	23.458	347068	23.449	125	50 - 200	0.009	+/-0.50	
Di-n-Octylphthalate-d4	660827	24.487	500317	24.479	132	50 - 200	0.008	+/-0.50	
Perylene-d12	494648	26.191	421549	26.182	117	50 - 200	0.009	+/-0.50	
Initial Cal Blank (SLC0228-ICB1)		(Solid)		Lab File ID: NT10031512.D				Analyzed: 03/16/23 02:54	
1,4-Dichlorobenzene-d4	173115	9.301	171542	9.301	101	50 - 200	0.000	+/-0.50	
Naphthalene-d8	625865	11.776	624466	11.777	100	50 - 200	-0.001	+/-0.50	
Acenaphthene-d10	328712	15.382	337226	15.382	97	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	592693	18.419	572849	18.419	103	50 - 200	0.000	+/-0.50	
Chrysene-d12	442208	23.449	347068	23.449	127	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	526309	24.479	500317	24.479	105	50 - 200	0.000	+/-0.50	
Perylene-d12	499804	26.182	421549	26.182	119	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0473	Instrument:	NT10
		Calibration:	GC00046

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0473-ICV1)		(Solid)	Lab File ID: NT1003172302.D				Analyzed: 03/17/23 19:02		
1,4-Dichlorobenzene-d4	132765	9.2	132765	9.2	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	497947	11.676	497947	11.676	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	271928	15.282	271928	15.282	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	497390	18.31	497390	18.31	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	391403	23.341	391403	23.341	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	674651	24.363	674651	24.363	100	50 - 200	0.000	+/-0.50	
Perylene-d12	408663	25.997	408663	25.997	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0473-LCV1)		(Solid)	Lab File ID: NT1003172304.D				Analyzed: 03/17/23 20:19		
1,4-Dichlorobenzene-d4	152616	9.201	132765	9.2	115	50 - 200	0.001	+/-0.50	
Naphthalene-d8	538816	11.669	497947	11.676	108	50 - 200	-0.007	+/-0.50	
Acenaphthene-d10	286313	15.274	271928	15.282	105	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	525282	18.303	497390	18.31	106	50 - 200	-0.007	+/-0.50	
Chrysene-d12	420636	23.326	391403	23.341	107	50 - 200	-0.015	+/-0.50	
Di-n-Octylphthalate-d4	627203	24.348	674651	24.363	93	50 - 200	-0.015	+/-0.50	
Perylene-d12	467919	25.974	408663	25.997	114	50 - 200	-0.023	+/-0.50	
Blank (BLB0495-BLK1)		(Solid)	Lab File ID: NT1003172306.D				Analyzed: 03/17/23 21:36		
1,4-Dichlorobenzene-d4	161583	9.2	132765	9.2	122	50 - 200	0.000	+/-0.50	
Naphthalene-d8	580695	11.668	497947	11.676	117	50 - 200	-0.008	+/-0.50	
Acenaphthene-d10	300894	15.274	271928	15.282	111	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	532566	18.303	497390	18.31	107	50 - 200	-0.007	+/-0.50	
Chrysene-d12	406088	23.318	391403	23.341	104	50 - 200	-0.023	+/-0.50	
Di-n-Octylphthalate-d4	655299	24.34	674651	24.363	97	50 - 200	-0.023	+/-0.50	
Perylene-d12	399257	25.966	408663	25.997	98	50 - 200	-0.031	+/-0.50	
LCS (BLB0495-BS1)		(Solid)	Lab File ID: NT1003172307.D				Analyzed: 03/17/23 22:14		
1,4-Dichlorobenzene-d4	164701	9.201	132765	9.2	124	50 - 200	0.001	+/-0.50	
Naphthalene-d8	595659	11.676	497947	11.676	120	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	321951	15.274	271928	15.282	118	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	590299	18.303	497390	18.31	119	50 - 200	-0.007	+/-0.50	
Chrysene-d12	468141	23.326	391403	23.341	120	50 - 200	-0.015	+/-0.50	
Di-n-Octylphthalate-d4	781050	24.348	674651	24.363	116	50 - 200	-0.015	+/-0.50	
Perylene-d12	491214	25.974	408663	25.997	120	50 - 200	-0.023	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0473	Instrument:	NT10
		Calibration:	GC00046

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (BLB0495-BSD1)		(Solid)	Lab File ID: NT1003172308.D				Analyzed: 03/17/23 22:53		
1,4-Dichlorobenzene-d4	145573	9.201	132765	9.2	110	50 - 200	0.001	+/-0.50	
Naphthalene-d8	531090	11.676	497947	11.676	107	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	289222	15.274	271928	15.282	106	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	513176	18.303	497390	18.31	103	50 - 200	-0.007	+/-0.50	
Chrysene-d12	403797	23.318	391403	23.341	103	50 - 200	-0.023	+/-0.50	
Di-n-Octylphthalate-d4	667494	24.348	674651	24.363	99	50 - 200	-0.015	+/-0.50	
Perylene-d12	412942	25.974	408663	25.997	101	50 - 200	-0.023	+/-0.50	
Reference (BLB0495-SRM1)		(Solid)	Lab File ID: NT1003172309.D				Analyzed: 03/17/23 23:31		
1,4-Dichlorobenzene-d4	166636	9.201	132765	9.2	126	50 - 200	0.001	+/-0.50	
Naphthalene-d8	600742	11.669	497947	11.676	121	50 - 200	-0.007	+/-0.50	
Acenaphthene-d10	319558	15.275	271928	15.282	118	50 - 200	-0.007	+/-0.50	
Phenanthrene-d10	574394	18.304	497390	18.31	115	50 - 200	-0.006	+/-0.50	
Chrysene-d12	435378	23.319	391403	23.341	111	50 - 200	-0.022	+/-0.50	
Di-n-Octylphthalate-d4	730373	24.341	674651	24.363	108	50 - 200	-0.022	+/-0.50	
Perylene-d12	434581	25.974	408663	25.997	106	50 - 200	-0.023	+/-0.50	
LDW23-SC1045 (23A0420-01)		(Solid)	Lab File ID: NT1003172310.D				Analyzed: 03/18/23 00:09		
1,4-Dichlorobenzene-d4	156838	9.2	132765	9.2	118	50 - 200	0.000	+/-0.50	
Naphthalene-d8	566529	11.676	497947	11.676	114	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	300789	15.274	271928	15.282	111	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	596211	18.303	497390	18.31	120	50 - 200	-0.007	+/-0.50	
Chrysene-d12	467242	23.341	391403	23.341	119	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	854021	24.347	674651	24.363	127	50 - 200	-0.016	+/-0.50	
Perylene-d12	527842	25.989	408663	25.997	129	50 - 200	-0.008	+/-0.50	
LDW23-SC1003 (23A0420-07)		(Solid)	Lab File ID: NT1003172311.D				Analyzed: 03/18/23 00:47		
1,4-Dichlorobenzene-d4	175334	9.201	132765	9.2	132	50 - 200	0.001	+/-0.50	
Naphthalene-d8	641354	11.677	497947	11.676	129	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	339645	15.275	271928	15.282	125	50 - 200	-0.007	+/-0.50	
Phenanthrene-d10	650888	18.311	497390	18.31	131	50 - 200	0.001	+/-0.50	
Chrysene-d12	498997	23.35	391403	23.341	127	50 - 200	0.009	+/-0.50	
Di-n-Octylphthalate-d4	886315	24.356	674651	24.363	131	50 - 200	-0.007	+/-0.50	
Perylene-d12	550397	25.998	408663	25.997	135	50 - 200	0.001	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0473	Instrument:	NT10
		Calibration:	GC00046

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1004 (23A0420-08)		(Solid)	Lab File ID: NT1003172312.D				Analyzed: 03/18/23 01:25		
1,4-Dichlorobenzene-d4	178410	9.201	132765	9.2	134	50 - 200	0.001	+/-0.50	
Naphthalene-d8	658429	11.676	497947	11.676	132	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	352175	15.282	271928	15.282	130	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	666439	18.311	497390	18.31	134	50 - 200	0.001	+/-0.50	
Chrysene-d12	496218	23.341	391403	23.341	127	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	883552	24.355	674651	24.363	131	50 - 200	-0.008	+/-0.50	
Perylene-d12	556801	25.997	408663	25.997	136	50 - 200	0.000	+/-0.50	
Matrix Spike (BLB0495-MS1)		(Solid)	Lab File ID: NT1003172313.D				Analyzed: 03/18/23 02:03		
1,4-Dichlorobenzene-d4	173887	9.2	132765	9.2	131	50 - 200	0.000	+/-0.50	
Naphthalene-d8	636818	11.676	497947	11.676	128	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	343951	15.282	271928	15.282	126	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	641328	18.311	497390	18.31	129	50 - 200	0.001	+/-0.50	
Chrysene-d12	488701	23.349	391403	23.341	125	50 - 200	0.008	+/-0.50	
Di-n-Octylphthalate-d4	866231	24.355	674651	24.363	128	50 - 200	-0.008	+/-0.50	
Perylene-d12	550243	25.997	408663	25.997	135	50 - 200	0.000	+/-0.50	
Matrix Spike Dup (BLB0495-MSD1)		(Solid)	Lab File ID: NT1003172314.D				Analyzed: 03/18/23 02:41		
1,4-Dichlorobenzene-d4	168873	9.201	132765	9.2	127	50 - 200	0.001	+/-0.50	
Naphthalene-d8	618199	11.676	497947	11.676	124	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	338303	15.282	271928	15.282	124	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	624502	18.311	497390	18.31	126	50 - 200	0.001	+/-0.50	
Chrysene-d12	489765	23.341	391403	23.341	125	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	838372	24.355	674651	24.363	124	50 - 200	-0.008	+/-0.50	
Perylene-d12	558197	25.997	408663	25.997	137	50 - 200	0.000	+/-0.50	
LDW23-SC1082 (23A0420-09)		(Solid)	Lab File ID: NT1003172315.D				Analyzed: 03/18/23 03:19		
1,4-Dichlorobenzene-d4	172915	9.201	132765	9.2	130	50 - 200	0.001	+/-0.50	
Naphthalene-d8	613822	11.677	497947	11.676	123	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	332649	15.283	271928	15.282	122	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	628288	18.319	497390	18.31	126	50 - 200	0.009	+/-0.50	
Chrysene-d12	496616	23.365	391403	23.341	127	50 - 200	0.024	+/-0.50	
Di-n-Octylphthalate-d4	778184	24.38	674651	24.363	115	50 - 200	0.017	+/-0.50	
Perylene-d12	540661	26.036	408663	25.997	132	50 - 200	0.039	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0473
Instrument: NT10
Calibration: GC00046

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (SLC0473-CCV1)		(Solid)		Lab File ID: NT1003172316.D				Analyzed: 03/18/23 03:57	
1,4-Dichlorobenzene-d4	146811	9.201	132765	9.2	111	50 - 200	0.001	+/-0.50	
Naphthalene-d8	542115	11.676	497947	11.676	109	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	299616	15.282	271928	15.282	110	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	554531	18.311	497390	18.31	111	50 - 200	0.001	+/-0.50	
Chrysene-d12	451487	23.326	391403	23.341	115	50 - 200	-0.015	+/-0.50	
Di-n-Octylphthalate-d4	756806	24.348	674651	24.363	112	50 - 200	-0.015	+/-0.50	
Perylene-d12	503730	25.981	408663	25.997	123	50 - 200	-0.016	+/-0.50	

HOLDING TIME SUMMARY

Analysis: EPA 8270E

Laboratory: Analytical Resources, LLC SDG: 23A0420

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1045 23A0420-01	01/19/23 08:10	01/19/23 15:55	02/20/23 16:23	32	365	03/18/23 00:09	25	40	
LDW23-SC1003 23A0420-07	01/19/23 12:25	01/19/23 15:55	02/20/23 16:23	32	365	03/18/23 00:47	25	40	
LDW23-SC1004 23A0420-08	01/19/23 11:55	01/19/23 15:55	02/20/23 16:23	32	365	03/18/23 01:25	25	40	
LDW23-SC1082 23A0420-09	01/19/23 13:40	01/19/23 15:55	02/20/23 16:23	32	365	03/18/23 03:19	25	40	
Matrix Spike BLB0495-MS1	01/19/23 11:55	01/19/23 15:55	02/20/23 16:23	32	365	03/18/23 02:03	25	40	
Matrix Spike Dup BLB0495-MSD1	01/19/23 11:55	01/19/23 15:55	02/20/23 16:23	32	365	03/18/23 02:41	25	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: NT10

Analyte	MDL	RL	Units
Phenol	4.4	20.0	ug/kg
4-Methylphenol	7.4	20.0	ug/kg
Naphthalene	4.2	20.0	ug/kg
2-Methylnaphthalene	4.5	20.0	ug/kg
Acenaphthylene	6.2	20.0	ug/kg
Dimethylphthalate	4.4	20.0	ug/kg
Acenaphthene	5.2	20.0	ug/kg
Dibenzofuran	14.1	20.0	ug/kg
Fluorene	14.6	20.0	ug/kg
Phenanthrene	8.7	20.0	ug/kg
Anthracene	7.2	20.0	ug/kg
Fluoranthene	6.1	20.0	ug/kg
Pyrene	5.7	20.0	ug/kg
Butylbenzylphthalate	9.4	20.0	ug/kg
Benzo(a)anthracene	6.0	20.0	ug/kg
Chrysene	6.1	20.0	ug/kg
bis(2-Ethylhexyl)phthalate	5.5	50.0	ug/kg
Benzofluoranthenes, Total	10.0	40.0	ug/kg
Benzo(a)pyrene	4.2	20.0	ug/kg
Indeno(1,2,3-cd)pyrene	14.7	20.0	ug/kg
Dibenzo(a,h)anthracene	17.2	20.0	ug/kg
Benzo(g,h,i)perylene	13.6	20.0	ug/kg

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001941

Printed: 9/25/2013 1:45:31PM

Description:	SVOC 2,4-Dinitrophenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 13:45 by JZ
Vendor:	SIGMA	Lot #:	65H5021
Vendor Catalog #:			

Comments

Neat, Purity @ 90-95%. (ARI#: 0466)

Analyte	CAS Number	Concentration	Units
2,4-Dinitrophenol	51-28-5	1000000	ug/mL

B001941
SVOA 2,4-Dinitrophenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 2,4-Dinitrophenol

Manufacturer: Sigma

Product #: _____

Lot #: bEH 502 1

Purity: 90 ~ 94%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001945

Printed: 9/25/2013 3:23:22PM

Description:	SVOC Benzoic Acid	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:23 by JZ
Vendor:	ACROS Organics	Lot #:	A0224339
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Benzoic acid	65-85-0	1000000	ug/mL

B001945
SVOC Benzoic Acid
Expires 12/31/2029
Prepared By Jianqing Zhou 12/31/2012

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzoic Acid

Manufacturer: Acros Organics

Product #: _____

Lot #: A0214339

Purity: 98%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001948

Printed: 9/25/2013 3:37:51PM

Description:	SVOC 4,6-Dinitro-2-Methylphenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:37 by JZ
Vendor:	Chem Service	Lot #:	179-31A
Vendor Catalog #:			

Comments

Neat, Purity @ 99%. (ARI#: 009A)

Analyte	CAS Number	Concentration	Units
4,6-Dinitro-2-methylphenol	534-52-1	1000000	ug/mL

B001948
SVOA 4,6-Dinitro-2-Methylphenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,6-Dinitro-2-Methylphenol

Manufacturer: Chem Service

Product #: _____

Lot #: 179-31A

Purity: 99%

Analyst: KB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002054

Printed: 10/4/2013 6:32:21PM

Description:	SVOA 1-Methylnaphthalene	Expires:	02-Apr-14
Standard Type:	Analyte Spike	Prepared:	13-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	04-Oct-13 18:32 by JZ
Vendor:	Chem Service	Lot #:	62-5B
Vendor Catalog #:			

Comments

Neat, Purity @ 99%

Analyte	CAS Number	Concentration	Units
1-Methylnaphthalene	90-12-0	1000000	ug/mL

B002054
SVOA 1-Methylnaphthalene
Solvent / Lot: NA
Prep: 12/13/2012 by JZ
Exp: 12/31/2029
Location:

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 1-Methyl naphthalene

Manufacturer: Chem Service

Product #: 0787

Lot #: 67-53

Purity: 99%

Analyst: AZ

H000691

Data File: \\target\share\chem2\fid4a.i\20230317.b\423C1703.D

Page 1

Date : 17-MAR-2023 10:46

Client ID:

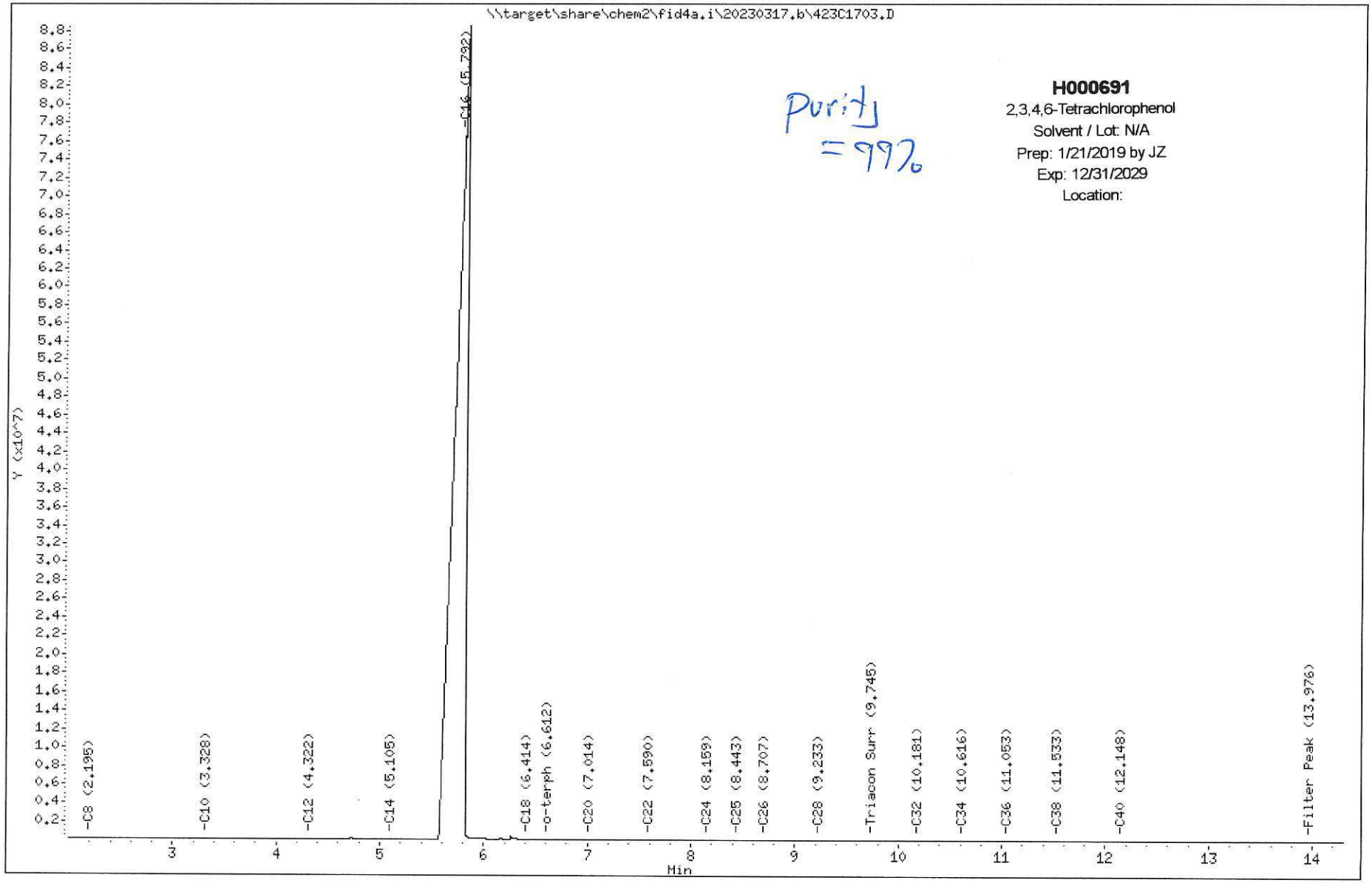
Instrument: fid4a.i

Sample Info: K007226

Operator: AA

Column phase: RTX-1

Column diameter: 0.25



Purity = 99%

H000691
2,3,4,6-Tetrachlorophenol
Solvent / Lot: N/A
Prep: 1/21/2019 by JZ
Exp: 12/31/2029
Location:

ARI Labs, Inc.

Data file : \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
Lab Smp Id: K007226
Inj Date : 17-MAR-2023 10:46
Operator : AA Inst ID: fid4a.i
Smp Info : K007226
Misc Info :
Comment   :
Method   : \\target\share\chem2\fid4a.i\20230317.b\FID4TPH.m
Meth Date : 17-Mar-2023 16:58 alfonso Quant Type: AREA%
Cal Date : 18-AUG-2022 11:51 Cal File: 422H1803.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: tph.sub
Target Version: 4.14
Processing Host: ALFONSO-201901

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.043	81395	55677	0.684	0.012	1 Toluene
2.074	68503	39991	0.584	0.010	
2.104	85451	37158	0.435	0.012	
2.146	59381	25207	0.424	0.008	
2.181	11414	22862	2.003	0.001	
2.195	34939	23199	0.664	0.005	2 C8
2.218	8679	21808	2.513	0.001	
2.224	21070	21832	1.036	0.003	
2.243	45086	20191	0.448	0.006	
2.286	3130	15677	5.009	0.000	
2.291	12615	15880	1.259	0.001	
2.313	20979	15888	0.757	0.003	
2.333	7621	15373	2.017	0.001	
2.348	31874	17112	0.537	0.004	
2.373	4619	13267	2.872	0.000	
2.380	12003	13446	1.120	0.001	
2.393	10327	13347	1.292	0.001	
2.408	9963	12697	1.274	0.001	
2.446	24366	11882	0.488	0.003	
2.498	24898	10214	0.410	0.003	
2.557	1592	6395	4.017	0.000	
2.570	4427	6384	1.442	0.000	
2.583	4275	6215	1.454	0.000	
2.595	1208	6068	5.024	0.000	
2.602	3076	6230	2.025	0.000	
2.607	1560	6270	4.019	0.000	
2.631	17195	8933	0.520	0.002	
2.654	17386	7637	0.439	0.002	
2.703	4531	5468	1.207	0.000	
2.717	9156	5741	0.627	0.001	
2.740	3955	5045	1.275	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.768	1029	4134	4.017	0.000	
2.771	830	4189	5.050	0.000	
2.778	1924	4438	2.307	0.000	
2.784	5498	4564	0.830	0.000	
2.846	25970	8400	0.323	0.003	
2.880	939	3165	3.370	0.000	
2.884	1885	3183	1.688	0.000	
2.901	4805	3504	0.729	0.000	
2.938	581	1990	3.423	0.000	
2.944	1450	2016	1.390	0.000	
2.955	449	1816	4.043	0.000	
2.967	1234	2009	1.629	0.000	
2.982	712	2087	2.931	0.000	
2.988	1000	2338	2.337	0.000	
3.001	3475	3541	1.019	0.000	
3.018	3528	3705	1.050	0.000	
3.033	983	2521	2.564	0.000	
3.038	1297	2686	2.070	0.000	
3.044	2547	2541	0.997	0.000	
3.069	389	1330	3.418	0.000	
3.078	728	1545	2.123	0.000	
3.085	1244	1637	1.316	0.000	
3.098	1115	1624	1.457	0.000	
3.108	926	1475	1.593	0.000	
3.119	239	1202	5.036	0.000	
3.125	540	1251	2.315	0.000	
3.133	409	1219	2.978	0.000	
3.144	2600	1886	0.725	0.000	
3.165	620	1604	2.588	0.000	
3.173	554	1647	2.972	0.000	
3.192	2423	2273	0.938	0.000	
3.197	582	2418	4.158	0.000	
3.204	1161	2723	2.346	0.000	
3.208	825	2777	3.364	0.000	
3.228	4472	3391	0.758	0.000	
3.246	1586	2676	1.688	0.000	
3.279	1194	2070	1.734	0.000	
3.293	854	1951	2.285	0.000	
3.298	595	2029	3.408	0.000	
3.315	2640	2597	0.984	0.000	
3.320	1015	2542	2.504	0.000	
3.328	1549	2593	1.674	0.000	3 C10
3.338	1314	2533	1.928	0.000	
3.350	523	2159	4.130	0.000	
3.358	1776	2105	1.185	0.000	
3.371	356	1797	5.043	0.000	
3.378	914	1880	2.057	0.000	
3.383	380	1927	5.068	0.000	
3.387	595	2023	3.399	0.000	
3.395	1390	2270	1.633	0.000	
3.405	1490	1994	1.338	0.000	
3.423	690	1601	2.321	0.000	
3.435	821	1554	1.894	0.000	
3.441	387	1583	4.087	0.000	
3.444	401	1625	4.051	0.000	
3.448	403	1636	4.060	0.000	
3.455	1216	1700	1.398	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
3.478	235	1185	5.047	0.000	
3.482	412	1229	2.986	0.000	
3.488	695	1177	1.694	0.000	
3.501	239	969	4.063	0.000	
3.509	914	1149	1.258	0.000	
3.520	1078	1069	0.992	0.000	
3.540	301	927	3.079	0.000	
3.556	406	849	2.089	0.000	
3.567	370	873	2.359	0.000	
3.572	178	939	5.270	0.000	
3.578	591	1171	1.981	0.000	
3.591	869	1353	1.556	0.000	
3.596	741	1352	1.826	0.000	
3.606	471	1401	2.976	0.000	
3.613	548	1411	2.577	0.000	
3.618	433	1521	3.511	0.000	
3.625	710	1635	2.303	0.000	
3.630	910	1667	1.832	0.000	
3.652	661	1562	2.362	0.000	
3.670	462	1214	2.627	0.000	
3.686	1036	1453	1.403	0.000	
3.690	829	1374	1.658	0.000	
3.702	531	1191	2.241	0.000	
3.712	452	1355	3.001	0.000	
3.716	820	1423	1.736	0.000	
3.736	2685	2093	0.780	0.000	
3.752	689	2030	2.946	0.000	
3.760	4109	2349	0.572	0.000	
3.805	3183	2036	0.640	0.000	
3.823	496	1686	3.401	0.000	
3.835	1641	2314	1.410	0.000	
3.859	9243	4616	0.499	0.001	
3.897	851	1745	2.051	0.000	
3.904	503	1721	3.419	0.000	
3.927	3866	3293	0.852	0.000	
3.941	5520	3558	0.645	0.000	
3.980	573	1715	2.991	0.000	
3.992	1027	1794	1.748	0.000	
3.995	1494	1860	1.245	0.000	
4.010	887	1639	1.847	0.000	
4.021	663	1724	2.602	0.000	
4.026	1380	1776	1.287	0.000	
4.045	306	1546	5.059	0.000	
4.053	1001	1758	1.757	0.000	
4.061	1137	1804	1.586	0.000	
4.072	779	1773	2.275	0.000	
4.080	989	1896	1.917	0.000	
4.087	561	1905	3.396	0.000	
4.098	1956	2156	1.103	0.000	
4.106	1168	2044	1.750	0.000	
4.127	1049	1627	1.551	0.000	
4.142	587	1545	2.633	0.000	
4.148	1155	1572	1.361	0.000	
4.173	3682	2398	0.651	0.000	
4.189	1023	1738	1.700	0.000	
4.204	549	1627	2.961	0.000	
4.213	628	1658	2.641	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
4.221	1039	1830	1.761	0.000	
4.227	447	1814	4.058	0.000	
4.248	2703	2638	0.976	0.000	
4.256	1387	2945	2.123	0.000	
4.260	743	2988	4.022	0.000	
4.265	912	3081	3.378	0.000	
4.268	779	3140	4.031	0.000	
4.275	1736	3217	1.853	0.000	
4.289	2688	3495	1.300	0.000	
4.295	3466	3448	0.995	0.000	
4.322	1054	2680	2.543	0.000	4 C12
4.330	1686	2627	1.558	0.000	
4.358	1066	1974	1.852	0.000	
4.378	434	1758	4.054	0.000	
4.384	1324	1879	1.419	0.000	
4.403	860	1608	1.869	0.000	
4.414	457	1567	3.431	0.000	
4.421	1117	1675	1.499	0.000	
4.433	910	1538	1.690	0.000	
4.439	865	1534	1.774	0.000	
4.449	764	1302	1.705	0.000	
4.471	433	1123	2.593	0.000	
4.476	734	1135	1.546	0.000	
4.490	385	1005	2.610	0.000	
4.498	555	1186	2.137	0.000	
4.502	695	1166	1.677	0.000	
4.518	587	949	1.618	0.000	
4.526	316	925	2.924	0.000	
4.533	560	989	1.765	0.000	
4.543	469	1001	2.135	0.000	
4.548	222	916	4.130	0.000	
4.553	188	980	5.207	0.000	
4.558	255	1038	4.076	0.000	
4.568	652	1157	1.775	0.000	
4.573	338	1151	3.409	0.000	
4.580	487	1283	2.636	0.000	
4.596	3801	1950	0.513	0.000	
4.631	531	1429	2.692	0.000	
4.663	4548	3737	0.822	0.000	
4.667	2815	3822	1.358	0.000	
4.679	2199	3760	1.710	0.000	
4.688	1068	3585	3.356	0.000	
4.694	2166	3742	1.727	0.000	
4.723	372603	172476	0.463	0.055	
4.894	47034	21828	0.464	0.006	
4.956	80510	28154	0.350	0.011	
4.999	54273	16950	0.312	0.008	
5.068	1137	5713	5.027	0.000	
5.072	8415	5792	0.688	0.001	
5.105	4203	4316	1.027	0.000	5 C14
5.146	660	2685	4.070	0.000	
5.153	2524	2649	1.050	0.000	
5.170	1076	2437	2.265	0.000	
5.174	2371	2438	1.028	0.000	
5.201	1013	2011	1.986	0.000	
5.210	2064	2332	1.130	0.000	
5.224	1083	2304	2.127	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
5.228	2027	2354	1.162	0.000	
5.276	4673	2682	0.574	0.000	
5.322	195	844	4.328	0.000	
5.331	977	1203	1.231	0.000	
5.356	490	993	2.027	0.000	
5.361	814	1044	1.283	0.000	
5.382	115	387	3.351	0.000	
5.399	619	960	1.551	0.000	
5.406	402	1035	2.576	0.000	
5.410	378	1122	2.968	0.000	
5.423	1663	1555	0.935	0.000	
5.452	5951	5020	0.844	0.000	
5.501	290	797	2.753	0.000	
5.523	2317	2472	1.067	0.000	
5.538	5946	6823	1.147	0.000	
5.792	501855376	76456669	0.152	74.449	6 C16
5.807	79757019	82319946	1.032	11.775	
5.823	77929961	88539160	1.136	11.505	
5.962	75333	84828	1.126	0.011	
5.986	474748	124326	0.262	0.070	
6.070	17103	57180	3.343	0.002	
6.074	120761	57565	0.477	0.017	
6.113	90233	47140	0.522	0.013	
6.165	407438	218439	0.536	0.060	
6.263	944101	374166	0.396	0.139	
6.414	114839	39498	0.344	0.016	7 C18
6.464	53190	31177	0.586	0.007	
6.523	31509	25870	0.821	0.004	
6.551	4785	23963	5.008	0.000	
6.559	51194	25409	0.496	0.007	
6.590	21354	21666	1.015	0.003	
6.612	35061	21127	0.603	0.005	$ 8 o-terph
6.638	17712	19934	1.125	0.002	
6.672	22159	19651	0.887	0.003	
6.683	26846	19268	0.718	0.003	
6.708	5413	18142	3.351	0.000	
6.713	24941	18247	0.732	0.003	
6.747	50657	18478	0.365	0.007	
6.795	23973	17444	0.728	0.003	
6.814	28457	17895	0.629	0.004	
6.837	10746	15445	1.437	0.001	
6.871	29974	21406	0.714	0.004	
6.874	4287	21471	5.009	0.000	
6.882	20520	21675	1.056	0.003	
6.944	32864	17445	0.531	0.004	
6.978	9138	15347	1.679	0.001	
7.014	4130	13830	3.348	0.000	9 C20
7.025	12567	14083	1.121	0.001	
7.038	4952	14274	2.882	0.000	
7.044	6508	14578	2.240	0.000	
7.050	25344	14736	0.581	0.003	
7.099	5531	12365	2.236	0.000	
7.108	16440	12371	0.752	0.002	
7.129	9415	11275	1.198	0.001	
7.175	3589	10327	2.878	0.000	
7.182	7285	10474	1.438	0.001	
7.212	11252	10002	0.889	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.227	5193	9506	1.830	0.000	
7.237	5172	9476	1.832	0.000	
7.247	4652	9357	2.011	0.000	
7.254	3258	9369	2.875	0.000	
7.259	7003	9455	1.350	0.001	
7.272	5540	9252	1.670	0.000	
7.283	4511	9087	2.014	0.000	
7.296	5828	9031	1.550	0.000	
7.308	4850	8866	1.828	0.000	
7.318	3111	9014	2.897	0.000	
7.324	3191	9168	2.873	0.000	
7.328	2775	9325	3.360	0.000	
7.339	6190	9713	1.569	0.000	
7.344	2920	9761	3.343	0.000	
7.350	17091	9874	0.578	0.002	
7.379	7217	8616	1.194	0.001	
7.395	5430	8408	1.548	0.000	
7.404	2492	8342	3.348	0.000	
7.409	1666	8354	5.014	0.000	
7.415	2955	8500	2.877	0.000	
7.423	3887	8782	2.259	0.000	
7.465	28160	14253	0.506	0.004	
7.471	6466	14499	2.242	0.000	
7.480	6649	15111	2.273	0.000	
7.484	26595	15197	0.571	0.003	
7.514	13964	13621	0.975	0.002	
7.539	8118	12614	1.554	0.001	
7.553	10540	12495	1.185	0.001	
7.584	2820	11307	4.010	0.000	
7.590	4522	11429	2.527	0.000	10 C22
7.620	16634	10435	0.627	0.002	
7.653	6793	9783	1.440	0.001	
7.663	8606	9666	1.123	0.001	
7.675	2827	9464	3.347	0.000	
7.683	9373	9620	1.026	0.001	
7.699	3657	9205	2.517	0.000	
7.708	5071	9290	1.832	0.000	
7.713	10483	9274	0.885	0.001	
7.735	10686	9257	0.866	0.001	
7.752	4732	8664	1.831	0.000	
7.765	5624	8765	1.558	0.000	
7.773	5614	8686	1.547	0.000	
7.784	3375	8506	2.520	0.000	
7.793	2118	8517	4.021	0.000	
7.799	10086	8544	0.847	0.001	
7.817	7761	8325	1.073	0.001	
7.833	2415	8088	3.350	0.000	
7.838	2838	8160	2.875	0.000	
7.844	3649	8173	2.240	0.000	
7.858	2009	8069	4.017	0.000	
7.864	4482	8197	1.829	0.000	
7.871	3688	8223	2.230	0.000	
7.879	4875	8269	1.696	0.000	
7.889	2009	8061	4.013	0.000	
7.897	4080	8308	2.036	0.000	
7.916	17828	10103	0.567	0.002	
7.935	4052	9086	2.242	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.940	2229	8948	4.015	0.000	
7.945	5765	8973	1.556	0.000	
7.954	6458	8765	1.357	0.000	
7.976	2099	8428	4.016	0.000	
7.984	10213	8807	0.862	0.001	
7.999	4897	8282	1.691	0.000	
8.013	8782	8112	0.924	0.001	
8.028	5860	7858	1.341	0.000	
8.040	3929	7871	2.003	0.000	
8.054	9161	8146	0.889	0.001	
8.067	2701	7766	2.876	0.000	
8.074	3069	7702	2.510	0.000	
8.081	2694	7742	2.874	0.000	
8.088	2705	7793	2.881	0.000	
8.095	5842	7832	1.341	0.000	
8.104	5419	7841	1.447	0.000	
8.119	5740	7735	1.348	0.000	
8.134	4986	7768	1.558	0.000	
8.141	5893	8009	1.359	0.000	
8.159	9098	8027	0.882	0.001	11 C24
8.174	3156	7971	2.526	0.000	
8.185	2376	7967	3.353	0.000	
8.190	4739	7937	1.675	0.000	
8.202	5181	8028	1.549	0.000	
8.212	1994	8027	4.025	0.000	
8.223	6137	8270	1.348	0.000	
8.236	6864	8171	1.190	0.001	
8.248	2383	7986	3.351	0.000	
8.253	2405	8059	3.351	0.000	
8.259	5294	8207	1.550	0.000	
8.268	2866	8235	2.874	0.000	
8.280	6583	8312	1.263	0.000	
8.289	4538	8296	1.828	0.000	
8.295	2060	8300	4.029	0.000	
8.300	2063	8291	4.020	0.000	
8.313	7062	8400	1.189	0.001	
8.318	1667	8375	5.023	0.000	
8.332	11362	9100	0.801	0.001	
8.343	4357	8741	2.006	0.000	
8.358	1267	8458	6.676	0.000	
8.363	2991	8621	2.882	0.000	
8.371	3980	8983	2.257	0.000	
8.379	6330	9083	1.435	0.000	
8.385	3111	8963	2.881	0.000	
8.393	6706	9050	1.349	0.000	
8.404	4903	8943	1.824	0.000	
8.417	8437	8972	1.063	0.001	
8.438	7166	9103	1.270	0.001	
8.443	3211	9227	2.873	0.000	12 C25
8.450	3688	9295	2.521	0.000	
8.455	2313	9276	4.010	0.000	
8.475	30054	13714	0.456	0.004	
8.504	5760	9733	1.690	0.000	
8.519	2799	9376	3.350	0.000	
8.529	4766	9710	2.037	0.000	
8.537	4875	9815	2.013	0.000	
8.543	8411	9973	1.186	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
8.555	2969	9916	3.340	0.000	
8.560	3974	9987	2.513	0.000	
8.568	2483	9997	4.026	0.000	
8.572	5007	10043	2.006	0.000	
8.591	14074	10725	0.762	0.002	
8.602	2648	10665	4.028	0.000	
8.606	2159	10862	5.032	0.000	
8.609	2183	10952	5.017	0.000	
8.633	7361	10561	1.435	0.001	
8.647	6774	10495	1.549	0.001	
8.658	2596	10420	4.014	0.000	
8.663	4723	10573	2.239	0.000	
8.669	3156	10589	3.355	0.000	
8.687	15405	11334	0.736	0.002	
8.699	6103	11158	1.828	0.000	
8.707	2223	11136	5.009	0.000	13 C26
8.730	28697	12536	0.437	0.004	
8.754	8658	11553	1.334	0.001	
8.763	2896	11612	4.010	0.000	
8.780	15029	12352	0.822	0.002	
8.788	1833	12243	6.680	0.000	
8.798	11854	12679	1.070	0.001	
8.806	1873	12509	6.677	0.000	
8.809	3133	12565	4.011	0.000	
8.813	2506	12550	5.008	0.000	
8.819	7588	12757	1.681	0.001	
8.829	4418	12679	2.870	0.000	
8.835	6988	12762	1.826	0.001	
8.848	13711	13258	0.967	0.002	
8.872	26625	13656	0.513	0.003	
8.894	4575	13127	2.869	0.000	
8.898	2631	13188	5.013	0.000	
8.902	5918	13262	2.241	0.000	
8.914	8577	13313	1.552	0.001	
8.922	4011	13433	3.349	0.000	
8.926	4724	13546	2.867	0.000	
8.933	6787	13651	2.011	0.001	
8.946	9614	13923	1.448	0.001	
8.951	6274	14004	2.232	0.000	
8.960	5592	14036	2.510	0.000	
8.966	3513	14090	4.011	0.000	
8.969	2829	14171	5.009	0.000	
8.973	4976	14233	2.860	0.000	
8.980	4289	14365	3.350	0.000	
8.996	27708	16441	0.593	0.004	
9.013	8129	14847	1.827	0.001	
9.025	8129	14840	1.826	0.001	
9.036	7503	15229	2.030	0.001	
9.040	4559	15225	3.340	0.000	
9.057	14920	16251	1.089	0.002	
9.067	9915	16831	1.698	0.001	
9.076	8535	17331	2.031	0.001	
9.081	5250	17596	3.352	0.000	
9.084	10558	17675	1.674	0.001	
9.095	4386	17601	4.013	0.000	
9.111	30564	19262	0.630	0.004	
9.128	8346	18722	2.243	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.139	15095	18986	1.258	0.002	
9.149	6655	19050	2.862	0.000	
9.158	23240	19719	0.848	0.003	
9.171	1903	19042	10.005	0.000	
9.175	4773	19156	4.013	0.000	
9.187	23630	19927	0.843	0.003	
9.199	4925	19763	4.013	0.000	
9.208	14115	20394	1.445	0.002	
9.219	12303	20691	1.682	0.001	
9.226	7266	20831	2.867	0.001	
9.233	15622	21000	1.344	0.002	14 C28
9.247	9280	20714	2.232	0.001	
9.262	45057	27849	0.618	0.006	
9.281	22651	23200	1.024	0.003	
9.304	13489	22820	1.692	0.001	
9.307	18038	22862	1.267	0.002	
9.328	8656	21778	2.516	0.001	
9.334	8635	21650	2.507	0.001	
9.343	16240	21738	1.339	0.002	
9.354	5409	21709	4.013	0.000	
9.367	16481	22234	1.349	0.002	
9.370	6683	22346	3.344	0.000	
9.382	14775	23166	1.568	0.002	
9.390	11679	23531	2.015	0.001	
9.394	12888	23584	1.830	0.001	
9.408	18752	23645	1.261	0.002	
9.416	4675	23396	5.004	0.000	
9.428	25138	24392	0.970	0.003	
9.438	20233	24095	1.191	0.002	
9.468	67429	26696	0.396	0.009	
9.496	8413	24122	2.867	0.001	
9.507	12049	24259	2.013	0.001	
9.527	36362	25771	0.709	0.005	
9.538	12891	25911	2.010	0.001	
9.543	6452	25853	4.007	0.000	
9.551	10420	26202	2.515	0.001	
9.557	29750	26593	0.894	0.004	
9.574	6252	25071	4.010	0.000	
9.593	29143	27655	0.949	0.004	
9.599	40783	27905	0.684	0.006	
9.620	13159	26364	2.004	0.001	
9.632	17259	26799	1.553	0.002	
9.640	13210	26592	2.013	0.001	
9.664	35362	28170	0.797	0.005	
9.672	27890	28134	1.009	0.004	
9.696	26737	28634	1.071	0.003	
9.711	53475	30848	0.577	0.007	
9.745	33266	29504	0.887	0.004	$ 15 Triacon Surr
9.752	7348	29501	4.015	0.001	
9.756	20542	29565	1.439	0.003	
9.768	7255	29059	4.005	0.001	
9.773	7275	29173	4.010	0.001	
9.785	31543	30611	0.970	0.004	
9.803	46804	32832	0.701	0.006	
9.821	10456	30060	2.875	0.001	
9.833	30772	31156	1.012	0.004	
9.860	77784	33514	0.431	0.011	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.881	12779	32069	2.510	0.001	
9.892	14531	32668	2.248	0.002	
9.896	8201	32902	4.012	0.001	
9.908	23357	33882	1.451	0.003	
9.912	27050	34095	1.260	0.003	
9.939	14585	32570	2.233	0.002	
9.951	23032	33095	1.437	0.003	
9.956	11596	33292	2.871	0.001	
9.966	16544	33271	2.011	0.002	
9.971	11660	33391	2.864	0.001	
9.975	10051	33617	3.345	0.001	
9.983	15209	33983	2.234	0.002	
9.988	15177	33830	2.229	0.002	
9.996	10128	33907	3.348	0.001	
10.018	43348	35629	0.822	0.006	
10.021	7133	35693	5.004	0.001	
10.025	8960	35988	4.016	0.001	
10.034	42064	36944	0.878	0.006	
10.063	65447	38699	0.591	0.009	
10.077	7375	36906	5.004	0.001	
10.083	16743	37428	2.235	0.002	
10.095	34467	38665	1.122	0.005	
10.118	90921	40621	0.447	0.013	
10.151	37738	38047	1.008	0.005	
10.158	11383	38037	3.342	0.001	
10.168	36074	38274	1.061	0.005	
10.181	15072	37809	2.509	0.002	16 C32
10.185	5655	37746	6.675	0.000	
10.198	43905	38471	0.876	0.006	
10.208	24771	38177	1.541	0.003	
10.218	19031	38113	2.003	0.002	
10.228	13353	38279	2.867	0.001	
10.237	21225	38826	1.829	0.003	
10.243	30946	38929	1.258	0.004	
10.266	43064	39733	0.923	0.006	
10.275	11912	39784	3.340	0.001	
10.278	19932	39886	2.001	0.002	
10.293	46366	40725	0.878	0.006	
10.318	46465	41024	0.883	0.006	
10.328	24720	41353	1.673	0.003	
10.334	10308	41278	4.005	0.001	
10.343	29100	41866	1.439	0.004	
10.354	22822	41695	1.827	0.003	
10.360	16568	41490	2.504	0.002	
10.376	31388	42321	1.348	0.004	
10.384	36478	43119	1.182	0.005	
10.393	21427	43144	2.014	0.003	
10.416	82339	44731	0.543	0.012	
10.434	23173	42257	1.824	0.003	
10.455	42801	43684	1.021	0.006	
10.459	19648	44004	2.240	0.002	
10.469	19632	43883	2.235	0.002	
10.492	56113	45807	0.816	0.008	
10.497	20626	45915	2.226	0.003	
10.503	27439	45837	1.671	0.004	
10.513	31833	45842	1.440	0.004	
10.523	6773	45190	6.672	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
10.529	22697	45513	2.005	0.003	
10.543	39087	46432	1.188	0.005	
10.552	16284	46719	2.869	0.002	
10.558	18796	47158	2.509	0.002	
10.576	69878	48769	0.698	0.010	
10.586	12085	48384	4.004	0.001	
10.592	21757	48469	2.228	0.003	
10.609	46960	50482	1.075	0.006	
10.616	40486	50812	1.255	0.005	17 C34
10.628	52392	50284	0.960	0.007	
10.665	99744	52644	0.528	0.014	
10.680	20832	52264	2.509	0.003	
10.699	126137	55939	0.443	0.018	
10.723	18258	52316	2.865	0.002	
10.733	65550	52928	0.807	0.009	
10.751	49102	51903	1.057	0.007	
10.765	10288	51490	5.005	0.001	
10.777	73220	52877	0.722	0.010	
10.791	15621	52150	3.338	0.002	
10.799	46819	52190	1.115	0.006	
10.817	52000	52328	1.006	0.007	
10.828	13014	52167	4.008	0.001	
10.833	18275	52280	2.861	0.002	
10.838	67284	52271	0.777	0.009	
10.860	15395	51401	3.339	0.002	
10.867	15366	51252	3.335	0.002	
10.874	25712	51608	2.007	0.003	
10.885	59363	52064	0.877	0.008	
10.901	33199	51247	1.544	0.004	
10.911	35859	51446	1.435	0.005	
10.925	15150	50526	3.335	0.002	
10.936	27761	50508	1.819	0.004	
10.954	40634	51235	1.261	0.005	
10.958	17973	51428	2.861	0.002	
10.982	101216	54997	0.543	0.014	
10.999	80380	54264	0.675	0.011	
11.022	15822	52869	3.342	0.002	
11.029	23878	53171	2.227	0.003	
11.032	23908	53219	2.226	0.003	
11.044	39793	53228	1.338	0.005	
11.053	13218	52959	4.007	0.001	19 C36
11.057	26491	53088	2.004	0.003	
11.069	47933	53454	1.115	0.007	
11.079	78088	52997	0.679	0.011	
11.132	4853	48537	10.002	0.000	
11.138	21933	48845	2.227	0.003	
11.148	46678	49317	1.057	0.006	
11.158	12248	49060	4.006	0.001	
11.164	14711	49102	3.338	0.002	
11.179	64473	49939	0.775	0.009	
11.192	19751	49439	2.503	0.002	
11.197	14848	49541	3.337	0.002	
11.202	17336	49566	2.859	0.002	
11.206	12400	49639	4.003	0.001	
11.212	56808	49881	0.878	0.008	
11.230	26830	48794	1.819	0.003	
11.263	19014	47590	2.503	0.002	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
11.267	11927	47790	4.007	0.001	
11.285	66432	50042	0.753	0.009	
11.308	17214	49235	2.860	0.002	
11.312	19684	49285	2.504	0.002	
11.322	19740	49570	2.511	0.002	
11.331	27467	50208	1.828	0.004	
11.334	12565	50301	4.003	0.001	
11.338	17617	50367	2.859	0.002	
11.356	50450	50688	1.005	0.007	
11.383	31641	48774	1.541	0.004	
11.392	14562	48589	3.337	0.002	
11.398	14566	48593	3.336	0.002	
11.405	21947	48858	2.226	0.003	
11.418	36961	49602	1.342	0.005	
11.428	52174	49838	0.955	0.007	
11.438	46900	49605	1.058	0.006	
11.456	66003	49218	0.746	0.009	
11.481	84312	48818	0.579	0.012	
11.518	39837	46996	1.180	0.005	
11.533	55836	46822	0.839	0.008	20 C38
11.560	30101	46465	1.544	0.004	
11.568	20916	46512	2.224	0.003	
11.573	11637	46596	4.004	0.001	
11.579	23274	46598	2.002	0.003	
11.586	13953	46531	3.335	0.002	
11.591	9318	46631	5.004	0.001	
11.623	97892	48831	0.499	0.014	
11.631	17107	48984	2.863	0.002	
11.638	22090	49260	2.230	0.003	
11.642	32050	49351	1.540	0.004	
11.669	95446	50981	0.534	0.014	
11.685	95822	49865	0.520	0.014	
11.788	8918	44609	5.002	0.001	
11.791	35704	44768	1.254	0.005	
11.804	11082	44350	4.002	0.001	
11.813	22172	44403	2.003	0.003	
11.823	19993	44543	2.228	0.002	
11.829	13395	44754	3.341	0.001	
11.837	20184	44981	2.228	0.002	
11.852	26933	44942	1.669	0.003	
11.866	36041	45224	1.255	0.005	
11.877	15835	45355	2.864	0.002	
11.883	18222	45726	2.509	0.002	
11.889	15985	45741	2.861	0.002	
11.896	20679	46117	2.230	0.003	
11.905	23259	46896	2.016	0.003	
11.929	70146	49826	0.710	0.010	
11.936	52288	50085	0.958	0.007	
11.951	14787	49369	3.339	0.002	
11.957	17313	49595	2.865	0.002	
11.961	32199	49647	1.542	0.004	
11.971	19578	49063	2.506	0.002	
11.980	34244	49065	1.433	0.005	
12.019	96987	51133	0.527	0.014	
12.025	48685	51499	1.058	0.007	
12.053	38386	51386	1.339	0.005	
12.062	38575	51549	1.336	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
12.070	17923	51300	2.862	0.002	
12.078	45780	51141	1.117	0.006	
12.105	31495	48817	1.550	0.004	
12.118	85510	48295	0.565	0.012	
12.148	55474	46657	0.841	0.008	21 C40
12.172	34299	45899	1.338	0.005	
12.181	18286	45754	2.502	0.002	
12.188	20565	45727	2.223	0.003	
12.198	29701	45787	1.542	0.004	
12.212	11377	45530	4.002	0.001	
12.218	29576	45566	1.541	0.004	
12.237	41054	45750	1.114	0.006	
12.243	13695	45701	3.337	0.002	
12.253	27528	46122	1.675	0.004	
12.260	16149	46201	2.861	0.002	
12.272	32473	46571	1.434	0.004	
12.347	231342	54259	0.235	0.034	
12.355	96470	54322	0.563	0.014	
12.383	13155	52687	4.005	0.001	
12.389	52817	52930	1.002	0.007	
12.434	117936	55204	0.468	0.017	
12.440	19323	55283	2.861	0.002	
12.448	22049	55156	2.502	0.003	
12.460	127044	56114	0.442	0.018	
12.500	63536	55700	0.877	0.009	
12.519	44746	56237	1.257	0.006	
12.523	16928	56556	3.341	0.002	
12.528	14154	56666	4.003	0.002	
12.532	14154	56644	4.002	0.002	
12.538	25607	57089	2.229	0.003	
12.543	31284	57010	1.822	0.004	
12.560	76588	57084	0.745	0.011	
12.574	22463	56167	2.500	0.003	
12.583	192414	56305	0.293	0.028	
12.668	201456	54098	0.269	0.029	
12.722	63529	49368	0.777	0.009	
12.744	14574	48683	3.340	0.002	
12.757	68233	49046	0.719	0.010	
12.777	29106	48653	1.672	0.004	
12.802	69072	49884	0.722	0.010	
12.805	19947	49915	2.502	0.002	
12.813	12457	49907	4.006	0.001	
12.826	42860	50672	1.182	0.006	
12.830	15192	50711	3.338	0.002	
12.835	63121	50727	0.804	0.009	
12.856	30109	50299	1.671	0.004	
12.871	12459	49875	4.003	0.001	
12.876	24950	49913	2.001	0.003	
12.883	12458	49860	4.002	0.001	
12.892	24999	50091	2.004	0.003	
12.904	37682	50442	1.339	0.005	
12.918	60965	51059	0.838	0.009	
12.929	15268	50972	3.338	0.002	
12.950	101236	52476	0.518	0.014	
12.991	32619	50285	1.542	0.004	
13.030	23826	47690	2.002	0.003	
13.047	49429	47410	0.959	0.007	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.072	11668	46709	4.003	0.001	
13.077	14056	46964	3.341	0.002	
13.083	21201	47214	2.227	0.003	
13.092	45034	47490	1.055	0.006	
13.103	33139	47401	1.430	0.004	
13.119	58622	47300	0.807	0.008	
13.136	61979	46406	0.749	0.009	
13.163	36232	45399	1.253	0.005	
13.172	13552	45219	3.337	0.002	
13.178	13550	45211	3.337	0.002	
13.183	13581	45318	3.337	0.002	
13.188	15867	45365	2.859	0.002	
13.193	11350	45433	4.003	0.001	
13.206	54879	45909	0.837	0.008	
13.233	74220	46899	0.632	0.010	
13.246	18724	46923	2.506	0.002	
13.250	14089	47028	3.338	0.002	
13.254	9392	46999	5.004	0.001	
13.261	35241	47103	1.337	0.005	
13.270	21093	46884	2.223	0.003	
13.278	16404	46889	2.858	0.002	
13.284	28108	46937	1.670	0.004	
13.309	27777	46575	1.677	0.004	
13.313	11643	46617	4.004	0.001	
13.323	30391	46938	1.544	0.004	
13.337	49696	47554	0.957	0.007	
13.345	11906	47686	4.005	0.001	
13.352	21499	47921	2.229	0.003	
13.358	14416	48133	3.339	0.002	
13.366	24163	48487	2.007	0.003	
13.391	108474	49842	0.459	0.016	
13.411	39818	49922	1.254	0.005	
13.421	140245	49882	0.356	0.020	
13.468	75433	46221	0.613	0.011	
13.519	59701	44435	0.744	0.008	
13.538	26345	44021	1.671	0.003	
13.553	17475	43727	2.502	0.002	
13.559	19699	43828	2.225	0.002	
13.566	15324	43832	2.860	0.002	
13.574	28519	43956	1.541	0.004	
13.585	21950	43943	2.002	0.003	
13.595	26497	44341	1.673	0.003	
13.603	22230	44574	2.005	0.003	
13.608	11135	44585	4.004	0.001	
13.633	100703	46371	0.460	0.014	
13.650	25255	45974	1.820	0.003	
13.663	20511	45675	2.227	0.003	
13.670	15945	45584	2.859	0.002	
13.677	40973	45642	1.114	0.006	
13.688	4544	45448	10.002	0.000	
13.693	29520	45508	1.542	0.004	
13.718	24720	44995	1.820	0.003	
13.727	11216	44890	4.002	0.001	
13.735	29185	45025	1.543	0.004	
13.752	17874	44782	2.505	0.002	
13.767	35874	45020	1.255	0.005	
13.775	36036	45104	1.252	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.785	11226	44939	4.003	0.001	
13.790	47016	44953	0.956	0.006	
13.813	11118	44516	4.004	0.001	
13.818	37641	44507	1.182	0.005	
13.832	15424	44192	2.865	0.002	
13.838	17564	43967	2.503	0.002	
13.844	26339	43892	1.666	0.003	
13.855	30567	43821	1.434	0.004	
13.865	23854	43526	1.825	0.003	
13.882	28266	43639	1.544	0.004	
13.886	30418	43629	1.434	0.004	
13.901	34702	43472	1.253	0.005	
13.920	48162	44005	0.914	0.007	
13.928	17577	43956	2.501	0.002	
13.941	15410	44084	2.861	0.002	
13.946	11045	44251	4.006	0.001	
13.949	24369	44341	1.820	0.003	
13.959	22103	44264	2.003	0.003	
13.967	22088	44195	2.001	0.003	
13.976	33207	44336	1.335	0.004	18 Filter Peak
13.998	24195	44018	1.819	0.003	
14.007	15335	43888	2.862	0.002	
14.014	17519	43863	2.504	0.002	
14.019	54335	43870	0.807	0.008	
14.046	10722	42915	4.003	0.001	
14.052	19305	42955	2.225	0.002	
14.058	8568	42864	5.003	0.001	
14.067	38739	43159	1.114	0.005	
14.077	15012	42931	2.860	0.002	
14.083	25753	42977	1.669	0.003	
14.102	25682	42913	1.671	0.003	
14.108	19267	42865	2.225	0.002	
14.116	12834	42815	3.336	0.001	
14.126	25874	43369	1.676	0.003	
14.133	56339	43595	0.774	0.008	
14.161	32503	43582	1.341	0.004	
14.165	10909	43696	4.006	0.001	
14.170	15313	43822	2.862	0.002	
14.175	10960	43911	4.007	0.001	
14.178	13176	43945	3.335	0.001	
14.183	19785	43976	2.223	0.002	
14.191	8796	44018	5.005	0.001	
14.197	17636	44177	2.505	0.002	
14.208	28815	44459	1.543	0.004	
14.219	8873	44379	5.002	0.001	
14.223	13318	44445	3.337	0.001	
14.229	28860	44456	1.540	0.004	
14.247	15436	44194	2.863	0.002	
14.260	37147	43758	1.178	0.005	
14.274	45685	43705	0.957	0.006	
	677340272	268782821		100.000	

Total unknown % area = 25.478

Supelco®

www.sigmaaldrich.com

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAC9813
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9813.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005199
SVOA-ABN BASE STOCK-200-800ug/ml
Expires 5/31/2023
Prepared By Jianqing Zhou 5/18/2021

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE CAS# 91-94-1	802	µg/mL	99.9	LC27068
2,4-DINITROTOLUENE CAS# 121-14-2	802	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	801	µg/mL	99.9	LB79891
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	802	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	801	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	201	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	803	µg/mL	100.0	10126MG
4-CHLOROANILINE CAS# 106-47-8	803	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	802	µg/mL	99.9	LC05068
3-NITROANILINE CAS# 99-09-2	802	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	802	µg/mL	99.9	LC11400
PYRIDINE (LOW WATER) CAS# 110-86-1	802	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 12-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9813.01	12-May-2021	Original Release Date

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Certificate of Composition - Analytical Standard

ACID STOC"

Product no.: 22523046
Lot no.: LRAC9812
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9812.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005200
SVOA-ABN ACID STOCK-200-800ug/ml
Solvent / Lot: DCM
Prep: 5/18/2021 by JZ
Exp: 5/31/2023
Location:

JZ 5/18/21

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2,4-DIMETHYLPHENOL CAS# 105-67-9	802	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	802	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	802	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1806	µg/mL	75.9	MKBP5833V
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	803	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	801	µg/mL	99.9	JS00013
4-NITROPHENOL CAS# 100-02-7	801	µg/mL	99.9	LC10889
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1804	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	803	µg/mL	98.7	MKCK8156
BENZOIC ACID CAS# 65-85-0	1805	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

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Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Agilent

Certificate of Analysis

J008074

SVOA PAH STD 2000ug/ml
Expires 6/30/2023
Prepared By Joshua Rains 8/5/2021

Product Name: PAH Standard

Product Number: US-106N-1

Lot Number: 0006540449

Lot Issue Date: 11-Jun-2020

Expiration Date: 30-Jun-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
acenaphthene	000083-32-9	RM10879	2008 ± 10 µg/mL
acenaphthylene	000208-96-8	RM10891	2003 ± 10 µg/mL
anthracene	000120-12-7	RM14212	2006 ± 10 µg/mL
benz[a]anthracene	000056-55-3	RM16072	2006 ± 10 µg/mL
benzo[b]fluoranthene	000205-99-2	RM14571	2005 ± 10 µg/mL
benzo[k]fluoranthene	000207-08-9	RM14321	2009 ± 10 µg/mL
benzo[ghi]perylene	000191-24-2	RM15761	2008 ± 10 µg/mL
benzo[a]pyrene	000050-32-8	RM12669	2009 ± 10 µg/mL
chrysene	000218-01-9	RM12260	2009 ± 10 µg/mL
dibenz[a,h]anthracene	000053-70-3	RM06786	2009 ± 10 µg/mL
fluoranthene	000206-44-0	RM12277	2004 ± 10 µg/mL
fluorene	000086-73-7	RM09441	2009 ± 10 µg/mL
indeno[1,2,3-cd]pyrene	000193-39-5	RM14192	2009 ± 10 µg/mL
naphthalene	000091-20-3	NT00970	2008 ± 10 µg/mL
phenanthrene	000085-01-8	RM10495	2009 ± 10 µg/mL
pyrene	000129-00-0	RM03479	2008 ± 10 µg/mL

Matrix: methylene chloride/benzene (1:1)

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 17025 Cert No. AT-1937

Certificate of Analysis

Product Number: US-106N-1 **Lot Number:** 0006540449

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ISO 17025 Cert
No. AT-1937

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16062
Certification Date: November 19, 2020
Expiration Date: November 30, 2030

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 2.740%
3,3'-Dichlorobenzidine	91-94-1	2000	± 3.229%

J008310
Benzidines std @2000ug/ml
Expires 11/30/2030
Prepared By Van Spohn 8/12/2021

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018_us

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Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246
Description: Benzoic Acid
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16693
Certification Date: May 6, 2021
Expiration Date: April 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 4.383%

K3238

A2LA ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

A2LA ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 25 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
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[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101443
Description: Aniline
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17696
Certification Date: December 14, 2021
Expiration Date: December 31, 2029

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aniline	62-53-3	1000	± 0.760%

K 3239

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

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Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

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2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

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5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

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[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Certified Values

Analyte	*Units*	*Certified Value* [1,4]
1,2,4-Trichlorobenzene	µg/Kg	1477 ± 181
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	1625 ± 292
1-Chloronaphthalene	µg/Kg	2809 ± 84
2,3-Dimethylphenol	µg/Kg	4552 ± 137
2,4,5-Trichlorophenol	µg/Kg	3438 ± 245
2,4,6-Trichlorophenol	µg/Kg	2194 ± 251
2,4-Dichlorophenol	µg/Kg	6991 ± 394
2,4-Dimethylphenol	µg/Kg	6357 ± 879
2,4-Dinitrophenol	µg/Kg	2922 ± 523
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	3318 ± 442
2,6-Dichlorophenol	µg/Kg	4578 ± 874
2,6-Dimethylphenol	µg/Kg	7582 ± 228
2-Chloronaphthalene	µg/Kg	2223 ± 168
2-Chlorophenol	µg/Kg	1678 ± 202
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	5148 ± 685
2-Methylphenol (o-Cresol)	µg/Kg	6004 ± 573
2-Nitrophenol	µg/Kg	6456 ± 383
3,4-Dimethylphenol	µg/Kg	7185 ± 216
3+4-Methylphenol (m+p-Cresol)	µg/Kg	8033 ± 1613
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	7169 ± 310
4-Chloro-3-methylphenol	µg/Kg	2071 ± 110
4-Chlorophenyl phenylether	µg/Kg	2052 ± 113
4-Methylphenol (p-Cresol)	µg/Kg	6617 ± 1371
4-Nitrophenol	µg/Kg	6812 ± 595
Acenaphthene	µg/Kg	5489 ± 380

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Acenaphthylene	µg/Kg	1948 ± 240
Anthracene	µg/Kg	2866 ± 237
Benzo(a)anthracene	µg/Kg	5751 ± 552
Benzo(a)pyrene	µg/Kg	5902 ± 612
Benzo(b)fluoranthene	µg/Kg	3010 ± 409
Benzo(b+k)fluoranthene	µg/Kg	6534 ± 196
Benzo(g,h,i)perylene	µg/Kg	1380 ± 136
Benzo(k)fluoranthene	µg/Kg	2215 ± 237
Butyl benzyl phthalate	µg/Kg	3511 ± 384
Carbazole	µg/Kg	5412 ± 407
Chrysene	µg/Kg	1477 ± 72
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	2905 ± 321
Dibenzo(a,h)anthracene	µg/Kg	3420 ± 302
Dibenzofuran	µg/Kg	6130 ± 253
Dimethyl phthalate	µg/Kg	4537 ± 250
Di-n-butyl phthalate	µg/Kg	1721 ± 154
Di-n-octyl phthalate	µg/Kg	2744 ± 288
Fluoranthene	µg/Kg	2497 ± 222
Fluorene	µg/Kg	3724 ± 222
Hexachlorobutadiene	µg/Kg	1877 ± 245
Indeno(1,2,3-cd) pyrene	µg/Kg	3914 ± 409
Isophorone	µg/Kg	1615 ± 170
Naphthalene	µg/Kg	4458 ± 480
Nitrobenzene	µg/Kg	3539 ± 266
n-Nitrosodimethylamine	µg/Kg	1580 ± 402
n-Nitrosodiphenylamine	µg/Kg	2854 ± 379
Pentachlorophenol	µg/Kg	3411 ± 358
Phenanthrene	µg/Kg	5052 ± 385
Phenol	µg/Kg	2660 ± 184
Pyrene	µg/Kg	2964 ± 256
Pyridine	µg/Kg	1008 ± 30

Informational Values

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Analyte	*Units*	*Suggested Acceptance Windows*	*Standard Deviation*
1,2,4-Trichlorobenzene	µg/Kg	148 to 2853	459
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	163 to 3440	605
1-Chloronaphthalene	µg/Kg	1123 to 4494	562
2,3-Dimethylphenol	µg/Kg	1821 to 7284	910
2,4,5-Trichlorophenol	µg/Kg	1003 to 5872	811
2,4,6-Trichlorophenol	µg/Kg	640 to 3748	518
2,4-Dichlorophenol	µg/Kg	2391 to 11591	1533
2,4-Dimethylphenol	µg/Kg	0.00 to 13959	2534
2,4-Dinitrophenol	µg/Kg	1169 to 4675	584
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	1248 to 5388	690
2,6-Dichlorophenol	µg/Kg	1831 to 7324	916
2,6-Dimethylphenol	µg/Kg	3033 to 12132	1516
2-Chloronaphthalene	µg/Kg	748 to 3699	492
2-Chlorophenol	µg/Kg	415 to 2942	421
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	0.00 to 10347	1733
2-Methylphenol (o-Cresol)	µg/Kg	1306 to 10702	1566
2-Nitrophenol	µg/Kg	1534 to 11379	1641
3,4-Dimethylphenol	µg/Kg	2874 to 11495	1437
3+4-Methylphenol (m+p-Cresol)	µg/Kg	4054 to 16218	2027
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	2901 to 11437	1423
4-Chloro-3-methylphenol	µg/Kg	677 to 3464	464
4-Chlorophenyl phenylether	µg/Kg	756 to 3348	432
4-Methylphenol (p-Cresol)	µg/Kg	2647 to 10587	1323
4-Nitrophenol	µg/Kg	681 to 14762	2650
Acenaphthene	µg/Kg	2243 to 8736	1082
Acenaphthylene	µg/Kg	712 to 3183	412
Anthracene	µg/Kg	1218 to 4515	550
Benzo(a)anthracene	µg/Kg	2806 to 8696	982
Benzo(a)pyrene	µg/Kg	2512 to 9292	1130
Benzo(b)fluoranthene	µg/Kg	1197 to 4822	604
Benzo(b+k)fluoranthene	µg/Kg	2614 to 10454	1307

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Benzo(g,h,i)perylene	µg/Kg	489 to 2271	297
Benzo(k)fluoranthene	µg/Kg	892 to 3537	441
Butyl benzyl phthalate	µg/Kg	1255 to 5766	752
Carbazole	µg/Kg	2032 to 8792	1127
Chrysene	µg/Kg	669 to 2284	269
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	765 to 5045	713
Dibenzo(a,h)anthracene	µg/Kg	1257 to 5583	721
Dibenzofuran	µg/Kg	2766 to 9493	1121
Dimethyl phthalate	µg/Kg	1842 to 7231	898
Di-n-butyl phthalate	µg/Kg	495 to 2947	409
Di-n-octyl phthalate	µg/Kg	690 to 4798	685
Fluoranthene	µg/Kg	984 to 4009	504
Fluorene	µg/Kg	1638 to 5810	695
Hexachlorobutadiene	µg/Kg	425 to 3329	484
Indeno(1,2,3-cd) pyrene	µg/Kg	870 to 6957	1015
Isophorone	µg/Kg	437 to 2792	392
Naphthalene	µg/Kg	1131 to 7784	1109
Nitrobenzene	µg/Kg	1024 to 6054	838
n-Nitrosodimethylamine	µg/Kg	632 to 2528	316
n-Nitrosodiphenylamine	µg/Kg	1142 to 4567	571
Pentachlorophenol	µg/Kg	341 to 7037	1209
Phenanthrene	µg/Kg	2307 to 7798	915
Phenol	µg/Kg	681 to 4639	660
Pyrene	µg/Kg	1118 to 4810	615
Pyridine	µg/Kg	403 to 1613	202

Additional Information:

DESCRIPTION

The organic sample is a soil containing extractable BNAs for analysis by 8100, 8270, 8310 or equivalent methods.

This product consist of a 5 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested how homogeneity. Only one vial is need for test the remaining vials are to be used for multiple methods or routine testing.

The soil has been sterilized to minimize degradation of the sample.

The sample has been sized to 100 mesh.

Required storage condition is 4ºC.

The sample has been intentionally prepared with an apparent headspace.

STORAGE

The sample should be stored at 4ºC. It has been determined to be stable for the duration of the expiration date.

After sub-sampling replace cap securely and store remaining sample at 4ºC.

The shelf life of the product was determined by historic stability of similar CRM's. The expiration date may be extended based on stock and popularity upon successful stability testing by a 17025 accredited laboratory.

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID	CRM143-50G
Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

Stability and shelf life after opening must be determined by the user, taking into account sampling frequency/volume and all local conditions.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Assume a 10g sample size for all calculations.

Note: Sample extracts and calibration solutions should be in the same solvent.

Report all results on a wet weight basis, do not correct for moisture.

NOTE: For method 8100 and using a packed column gas chromatographic method or cannot adequately resolve the following may coelute in four pairs of compounds: anthracene and phenanthrene; chrysene and benzo(a)anthracene; benzo(b)fluoranthene and benzo(k)fluoranthene; and dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

SCOPE AND APPLICATION

The BNAs in Soil Certified Reference Material (CRM) consists of 5 10mL VOA vials, with a Teflon lined closures containing approximately 10 grams of soil, fortified with BNAs. Being a natural matrix waste sample the analyst is challenged by the same preparation problems, analytical interferences, etc. as is typical for similar matrices received by the laboratory for analysis.

Description

Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

1 **Metrological traceability:** Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

***k*:** Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470).**

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certification Date	January 05, 2021
Version	0-152021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Certificate of Analysis

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Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101291	**Lot Number:**	CL11000
Description:	GC/MS Tuning Mix	**Certification Date:**	May 9, 2014
Storage:	4 °C	**Expiration Date:**	December 31, 2023
Provided As:	1 mL in 2 mL Ampoule in Methylene chloride	**Revision Date:**	August 5, 2015

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 0.208%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

K003891
GC/MS Tune solution-1000ug/ml
Solvent / Lot: CL11000
Prep: 4/22/2022 by VS
Exp: 12/31/2023
Location:

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

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Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

IL111106131.us

Reference Materials Producer
Cert #2495.01

Certificate of Analysis

Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics**® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021 Certifying Officer: Shannon Mora

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory , please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i, where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Cert #2495.01

ECS

Certificate of Analysis

ilac-MRA ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
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2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
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Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
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Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

K004542

Certificate of Reference Material

Catalog Number: ECS-A-030

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Lot No. AA210126005

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021

Certifying Officer: Shannon Nave

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

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- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
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Storage Requirements:

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Material Source:

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Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-104N-1 **Lot Issue Date:** 02-Jul-2021

Lot Number: 0006620643 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
aniline	000062-53-3	RM12853	2005 ± 10 µg/mL
benzyl alcohol	000100-51-6	RM10547	2004 ± 10 µg/mL
4-chloroaniline	000106-47-8	RM01886	2002 ± 10 µg/mL
dibenzofuran	000132-64-9	RM02077	2002 ± 10 µg/mL
2-methylnaphthalene	000091-57-6	RM01258	2006 ± 10 µg/mL
2-nitroaniline	000088-74-4	RM02402	2003 ± 10 µg/mL
3-nitroaniline	000099-09-2	RM02424	2003 ± 10 µg/mL
4-nitroaniline	000100-01-6	RM02425	2003 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

K004544
toxic sub mix#2
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

05/11/22

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0181243

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

05/11/22

K004545
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO175316
Prep: 5/11/2022 by JZ
Exp: 10/20/2025
Location:

Elution Order	Compound	Gr (weig					
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBJ2508) **Purity** 99%	1,50		+/- 53.3632	µg/mL	Stressed	
2	Phenol-d6 **CAS #** 13127-88-3 (Lot PR-31262) **Purity** 99%	1,506.0	µg/mL	+/- 8.9452 +/- 43.9882 +/- 53.3632	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,510.0	µg/mL	+/- 8.9689 +/- 44.1050 +/- 53.5049	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot PR-32542/022621DB1 **Purity** 99%	1,004.0	µg/mL	+/- 5.9635 +/- 29.3255 +/- 35.5754	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	1,008.0	µg/mL	+/- 5.9872 +/- 29.4423 +/- 35.7172	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 19169) **Purity** 99%	1,006.0	µg/mL	+/- 5.9753 +/- 29.3839 +/- 35.6463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot MKCJ7664) **Purity** 99%	1,506.0	µg/mL	+/- 8.9452 +/- 43.9882 +/- 53.3632	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

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6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.:	AL0-101246	**Lot Number:**	CL17953
Description:	Benzoic Acid	**Certification Date:**	January 31, 2022
Storage:	4 °C	**Expiration Date:**	January 31, 2032
Provided As:	1 mL in 2 mL Ampoule in Methylene Chloride		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 2.714%

K004603
Benzoic Acid @2000ug/ml
Solvent / Lot: N/A
Prep: 5/13/2022 by JZ
Exp: 1/31/2032
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

phenova Certified Reference Materials | A Phenomenex Company

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018 us

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17662
Certification Date: December 2, 2021
Expiration Date: November 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K004604
Benzidines std @2000ug/ml
Solvent / Lot: MeCl2
Prep: 5/13/2022 by JZ
Exp: 11/30/2031
Location: GC

5/13/22

Supelco®

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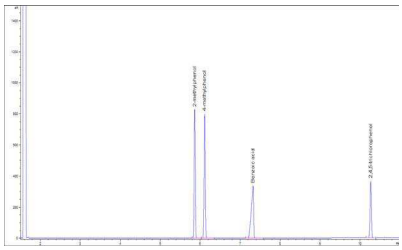
Certificate of Analysis - Certified Reference Material

EPA TCL Hazardous Substances Mix 1

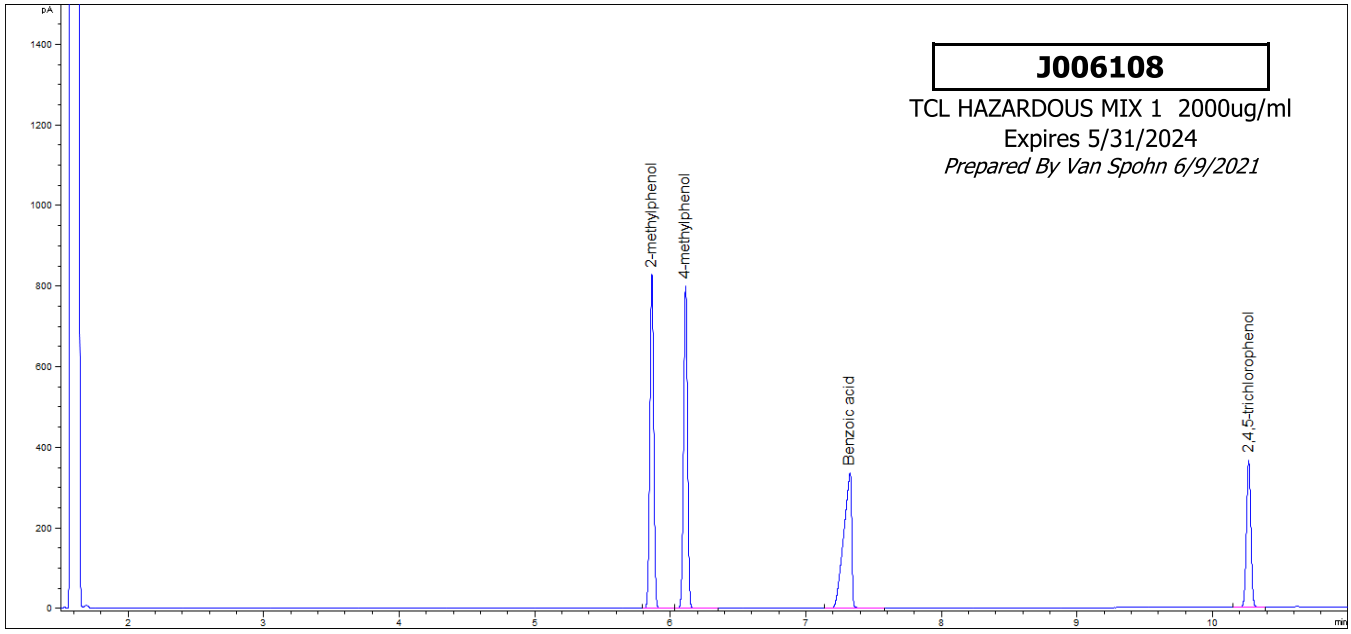
Product no.: 48907
Lot no.: LRAC9610
Expiry Date: May 2024
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAC9610.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Elution order*	*Raw Material Lot*
2-METHYLPHENOL CAS# 95-48-7	2004 ± 9	µg/mL	99.0	1	G1735A
4-METHYLPHENOL CAS# 106-44-5	2004 ± 13	µg/mL	98.9	2	06921MG
BENZOIC ACID CAS# 65-85-0	2012 ± 6	µg/mL	99.9	3	LC16514
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	2003 ± 6	µg/mL	99.9	4	JS00008

Informational Values:



Additional Information:
Analytical Method Parameters:
Column: Equity-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #98)
Carrier Gas: H2, Flow: 4.5 mL/min
Inlet Temperature: 170 °C, Injection Volume: 1 µL
Injection Mode: Split, Split Ratio: 20:1

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Temperature Program: 80 °C @ 10 °C/min to 190 °C (Hold 5 min)
Detector: FID
Detector Temperature: 310 °C

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 20-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom}\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9610.01	20-May-2021	Original Release Date

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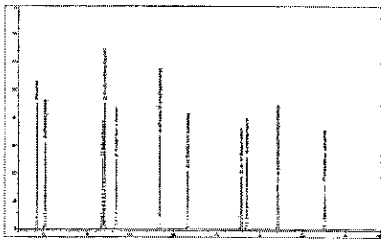
Supelco®

www.sigmaaldrich.com

Certificate of Analysis - Certified Reference Material

EPA TCL Phenols Mix

Product no.: 48904
Lot no.: LRAD0139
Expiry Date: July 2024
Manufacturing Date: July 2021
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0139.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



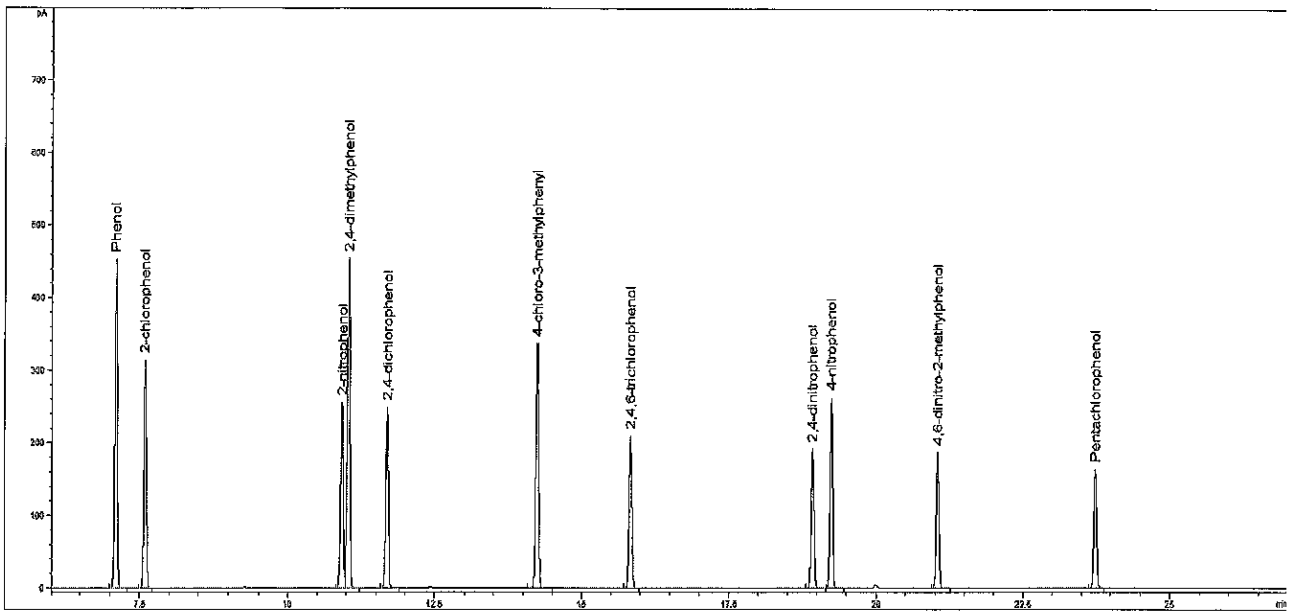
Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2-CHLOROPHENOL CAS# 95-57-8	2001 ± 25	µg/mL	99.9	STBG3033V
2-NITROPHENOL CAS# 88-75-5	1999 ± 18	µg/mL	99.3	15905BB
2,4-DIMETHYLPHENOL CAS# 105-67-9	2000 ± 14	µg/mL	99.2	05421CO
2,4-DICHLOROPHENOL CAS# 120-83-2	2000 ± 17	µg/mL	99.5	03221TN
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	2000 ± 5	µg/mL	99.9	JS00013
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	2002 ± 5	µg/mL	99.5	04212PS
2,4-DINITROPHENOL CAS# 51-28-5	2000 ± 28	µg/mL	66.9	STBJ5751
4-NITROPHENOL CAS# 100-02-7	2000 ± 33	µg/mL	99.0	04628LT
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	2000 ± 27	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	1999 ± 25	µg/mL	97.9	MKCD2150

ASSAY Method

J013597
TCL Phenols Mix 2000ug/ml
Solvent / Lot: LRAD0139
Prep: 12/30/2021 by VS
Exp: 7/31/2024
Location:

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.



METHOD: GC (Bellefonte Method)

Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.5 mL/min
Inlet Temperature: 200 °C Injection Volume: 1.0 µL
Injection Mode: 25:1
Temperature Program: 80 °C (Hold 2 min) @ 6 °C/min to 260 °C (Hold 5 min)
Detector: FID Temperature: 310 °C

Elution details:

EO	RT(MIN)	ANALYTE
1	7.095	Phenol
2	7.585	2-chlorophenol
3	10.925	2-nitrophenol
4	11.037	2,4-dimethylphenol
5	11.696	2,4-dichlorphenol
6	14.242	4-chloro-3-m3thylphenol
7	15.842	2,4,6-trichlorophenol
8	18.93	2,4-dinitrophenol
9	19.25	4-nitrophenol
10	21.05	4,6-dinitro-2-methylphenol
11	23.752	Pentachlorophenol

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 12-Jul-2021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{hom\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0139.01	12-Jul-2021	Original Release Date

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Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18355
Certification Date: July 25, 2022
Expiration Date: August 31, 2023

K007995
SVOA-8270 LCS MIX 1000ug/ml
Solvent / Lot: N/A
Prep: 8/29/2022 by JZ
Exp: 8/31/2023
Location: FREEZER 44

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.300%
Acenaphthylene	208-96-8	1000	± 0.225%
Anthracene	120-12-7	1000	± 6.858%
Azobenzene	103-33-3	1000	± 0.224%
Benzo(a)anthracene	56-55-3	1000	± 0.247%
Benzo(a)pyrene	50-32-8	1000	± 0.270%
Benzo(b)fluoranthene	205-99-2	1000	± 0.635%
Benzo(k)fluoranthene	207-08-9	1000	± 0.682%
Benzo(g,h,i)perylene	191-24-2	1000	± 0.272%
Benzyl alcohol	100-51-6	1000	± 0.231%
Benzyl butyl phthalate	85-68-7	1000	± 0.480%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.479%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.479%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.550%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 0.479%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.479%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.479%
Carbazole	86-74-8	1000	± 0.146%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 0.300%
4-Chloro-3-methylphenol	59-50-7	1000	± 0.545%
2-Chloronaphthalene	91-58-7	1000	± 0.224%
2-Chlorophenol	95-57-8	1000	± 0.507%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 0.479%
Chrysene	218-01-9	1000	± 0.145%
Dibenz(a,h)anthracene	53-70-3	1000	± 1.058%
Dibenzofuran	132-64-9	1000	± 0.302%
Di-n-butyl phthalate	84-74-2	1000	± 0.518%
1,2-Dichlorobenzene	95-50-1	1000	± 0.247%
1,3-Dichlorobenzene	541-73-1	1000	± 0.225%
1,4-Dichlorobenzene	106-46-7	1000	± 0.224%
2,4-Dichlorophenol	120-83-2	1000	± 0.545%
Diethyl phthalate	84-66-2	1000	± 0.518%
2,4-Dimethylphenol	105-67-9	1000	± 0.507%
Dimethyl phthalate	131-11-3	1000	± 0.518%
1,2-Dinitrobenzene	528-29-0	1000	± 0.361%
1,3-Dinitrobenzene	99-65-0	1000	± 0.300%
1,4-Dinitrobenzene	100-25-4	1000	± 0.242%
2,4-Dinitrophenol	51-28-5	1000	± 0.545%
2,4-Dinitrotoluene	121-14-2	1000	± 1.128%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.224%
Di-n-octyl phthalate	117-84-0	1000	± 0.486%
Fluoranthene	206-44-0	1000	± 0.224%
Fluorene	86-73-7	1000	± 0.224%
Hexachlorobenzene	118-74-1	1000	± 0.152%
Hexachlorobutadiene	87-68-3	1000	± 0.746%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.153%
Hexachloroethane	67-72-1	1000	± 0.300%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 0.883%
Isophorone	78-59-1	1000	± 0.145%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.508%
1-Methylnaphthalene	90-12-0	1000	± 0.479%
2-Methylnaphthalene	91-57-6	1000	± 0.487%
2-Methylphenol	95-48-7	1000	± 0.545%
3-Methylphenol	108-39-4	500	± 0.279%
4-Methylphenol	106-44-5	500	± 0.399%
Naphthalene	91-20-3	1000	± 0.226%
2-Nitroaniline	88-74-4	1000	± 0.224%
3-Nitroaniline	99-09-2	1000	± 0.235%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 0.300%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 0.514%
4-Nitrophenol	100-02-7	1000	± 0.519%
N-Nitrosodimethylamine	62-75-9	1000	± 0.503%
N-Nitrosodiphenylamine	86-30-6	1000	± 0.476%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.461%
Pentachlorophenol	87-86-5	1000	± 0.202%
Phenanthrene	85-01-8	1000	± 0.145%
Phenol	108-95-2	1000	± 0.545%
Pyrene	129-00-0	1000	± 0.147%
Pyridine	110-86-1	1000	± 0.503%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 0.247%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 0.247%
1,2,4-Trichlorobenzene	120-82-1	1000	± 0.224%
2,4,5-Trichlorophenol	95-95-4	1000	± 0.507%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.509%

Notes: The proper chemical name for Bis(2-Chloroiospropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAD2751
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2751.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE, 100MG, NEAT CAS# 91-94-1	799	µg/mL	99.8	LRAD2376
2,4-DINITROTOLUENE CAS# 121-14-2	801	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	800	µg/mL	99.2	11231AN
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	800	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	800	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	200	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	800	µg/mL	99.9	LA41596
4-CHLOROANILINE CAS# 106-47-8	800	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	799	µg/mL	99.9	07411KN
3-NITROANILINE CAS# 99-09-2	800	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	800	µg/mL	99.9	15609AA
PYRIDINE (LOW WATER) CAS# 110-86-1	800	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 03 JUN 2022

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2751.01	03 JUN 2022	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

LDW23-SC1045

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-01 A	SDG:	23A0420
Sampled:	01/19/23 08:10	Prepared:	02/20/23 16:23	File ID:	NT1003172310S.D
% Solids:	54.71	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/18/23 00:09
Batch:	BLB0495	Sequence:	SLC0475	Initial/Final:	18.29 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00049
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.6	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	50.7		2.5	20.0
65-85-0	Benzoic acid	1	120	Q	13.4	99.9
105-67-9	2,4-Dimethylphenol	1	4.1	J	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	5.6	J	2.1	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	749.52	257	34.2	27 - 120	
p-Terphenyl-d14	499.68	623	125	37 - 120	*

Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723105.D

Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

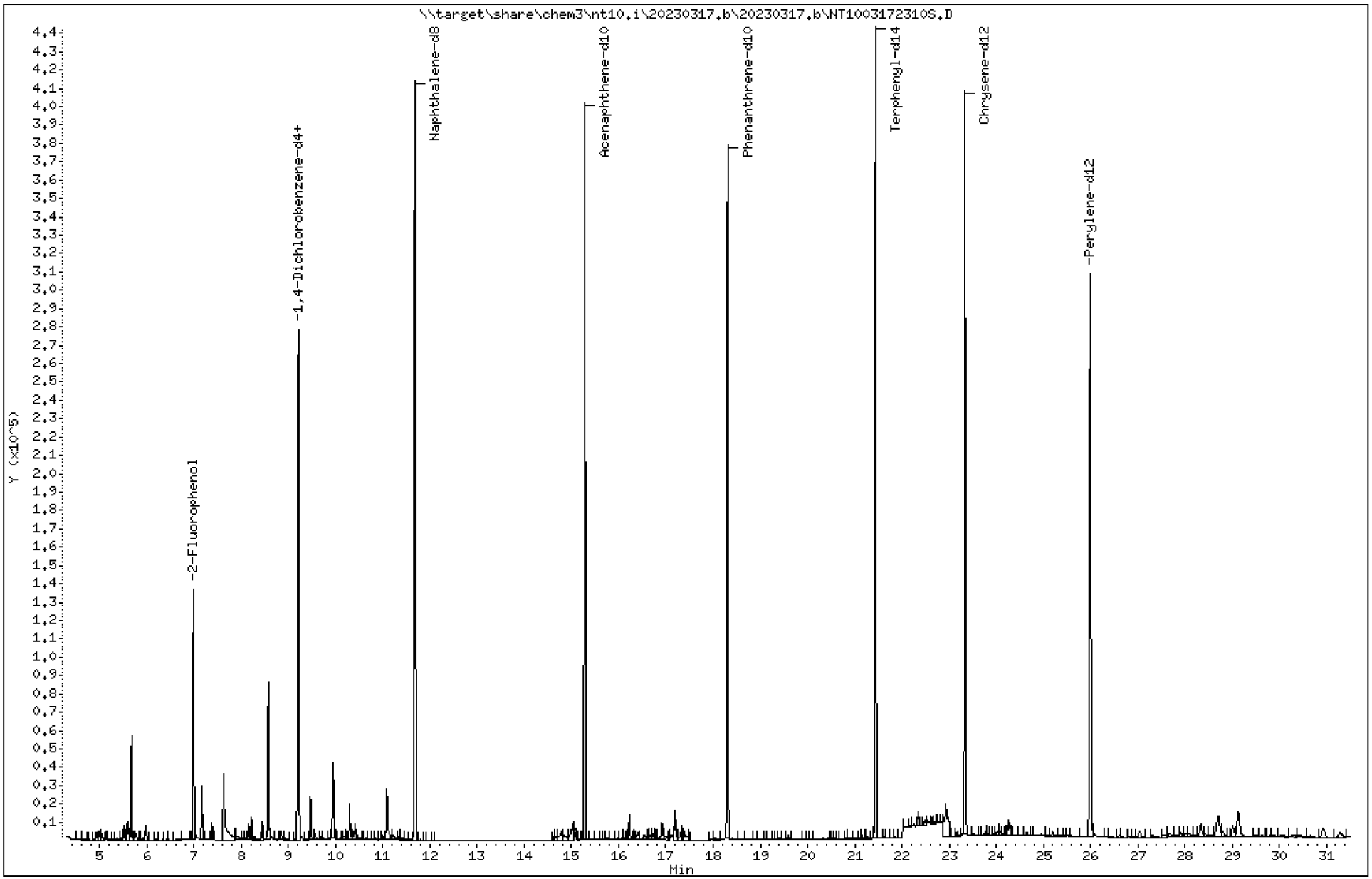
Sample Info: 23A0420-01

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

Volume Injected (uL): 1.0

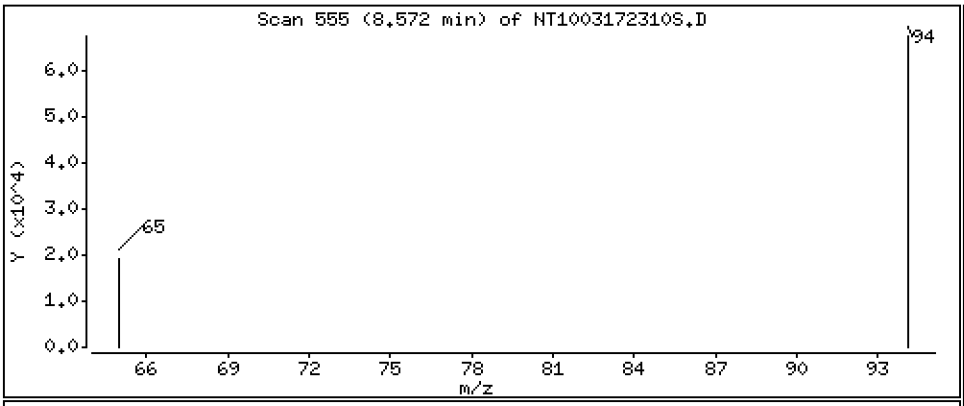
Operator: JGR

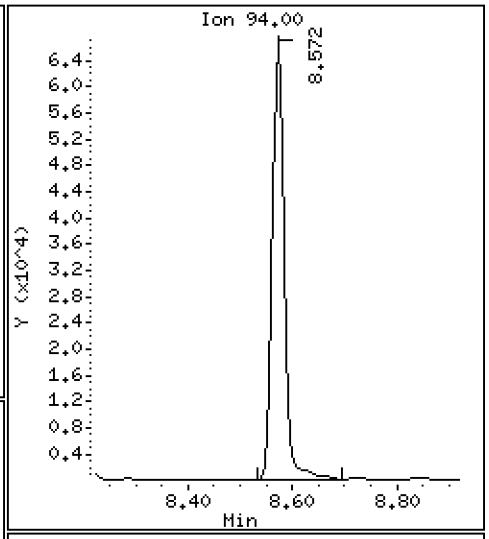
Column phase: ZB-5msi

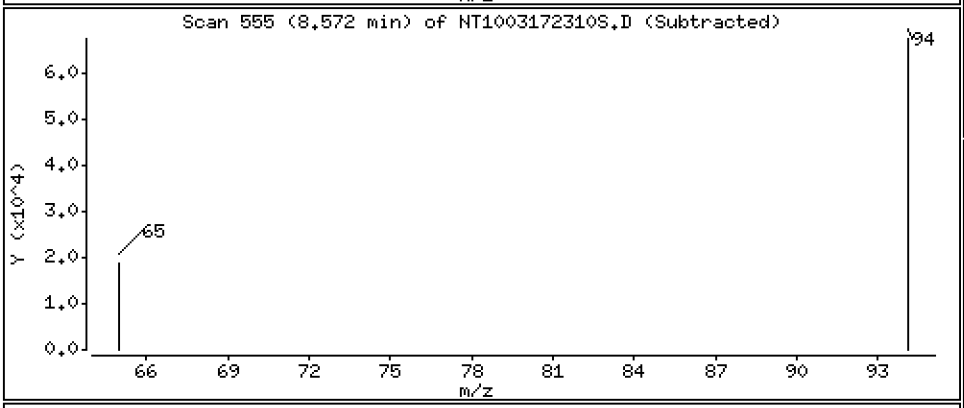
Column diameter: 0.25

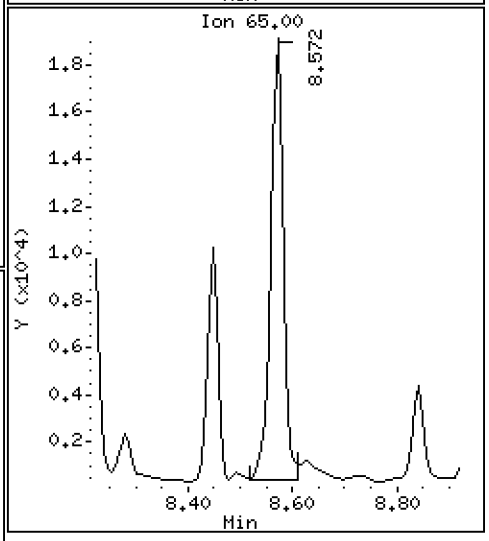
3 Phenol

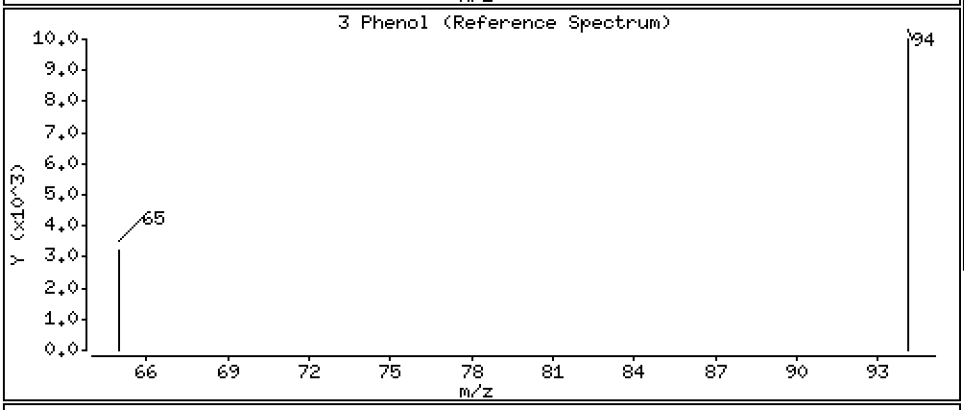
Concentration: 1.385 ug/L

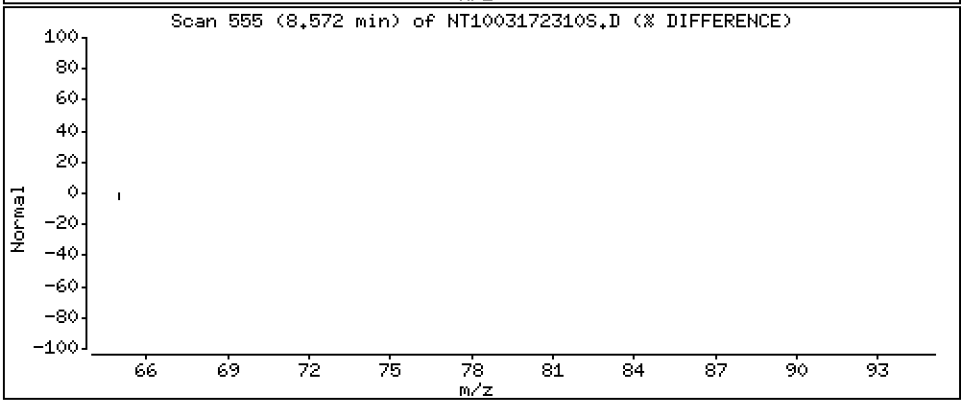












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

Volume Injected (uL): 1.0

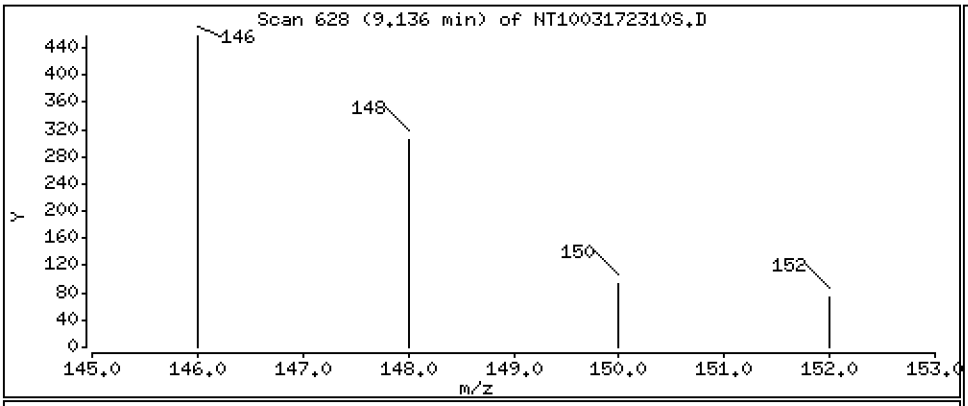
Operator: JGR

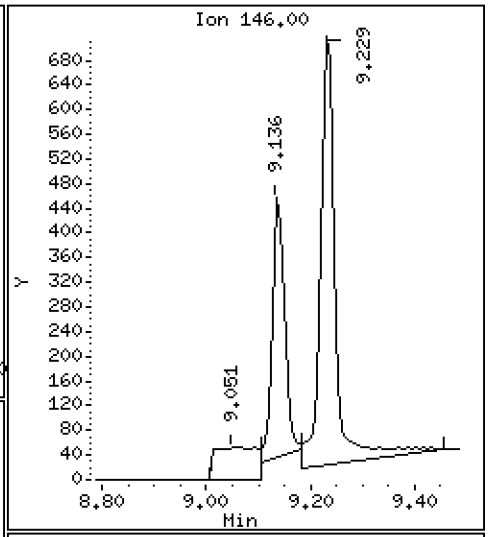
Column phase: ZB-5msi

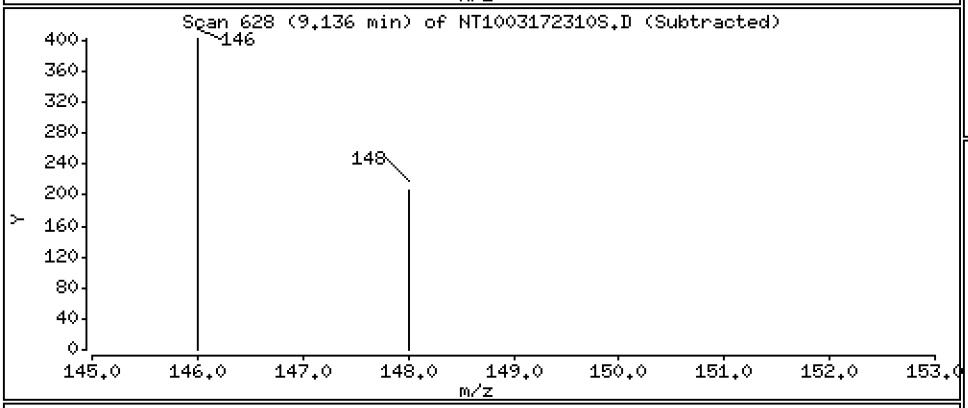
Column diameter: 0.25

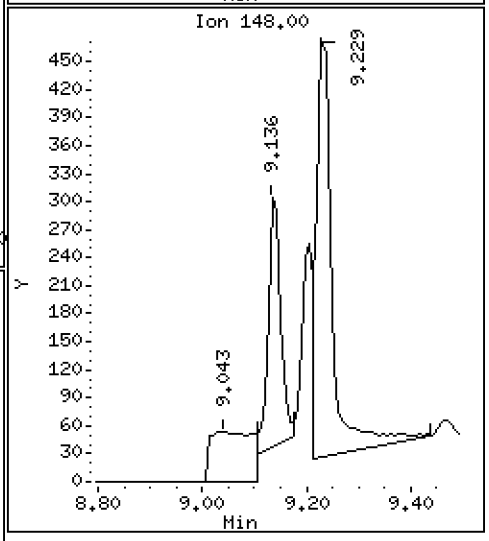
7 1,3-Dichlorobenzene

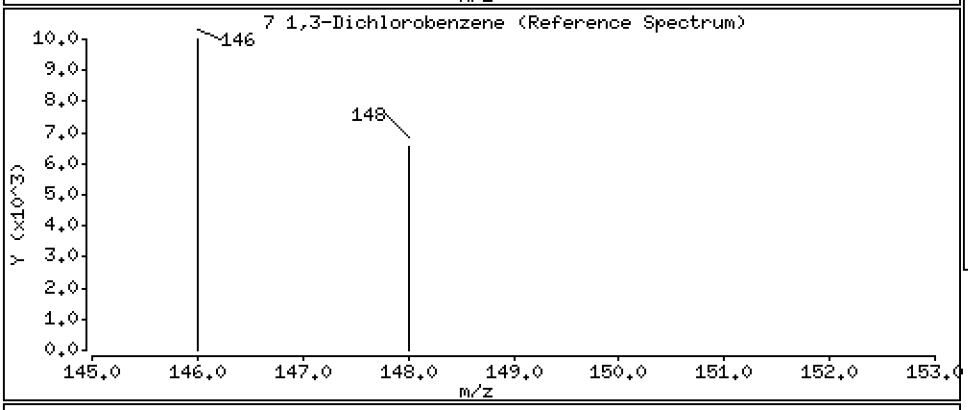
Concentration: 0.01006 ug/L

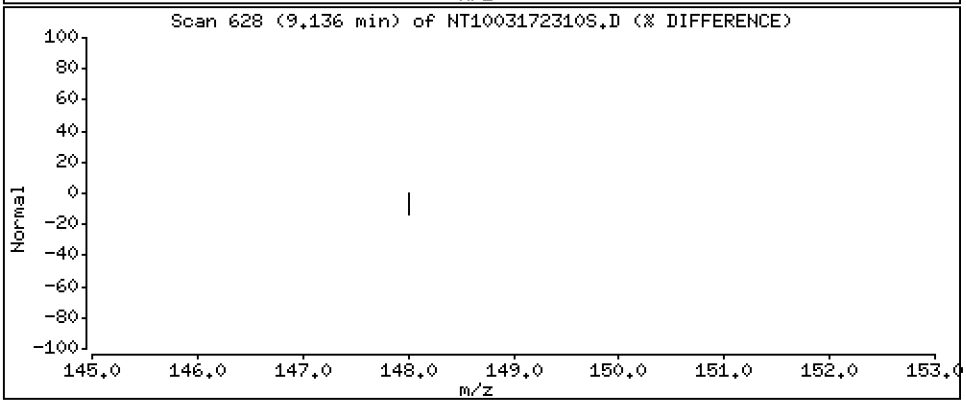












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

Volume Injected (uL): 1.0

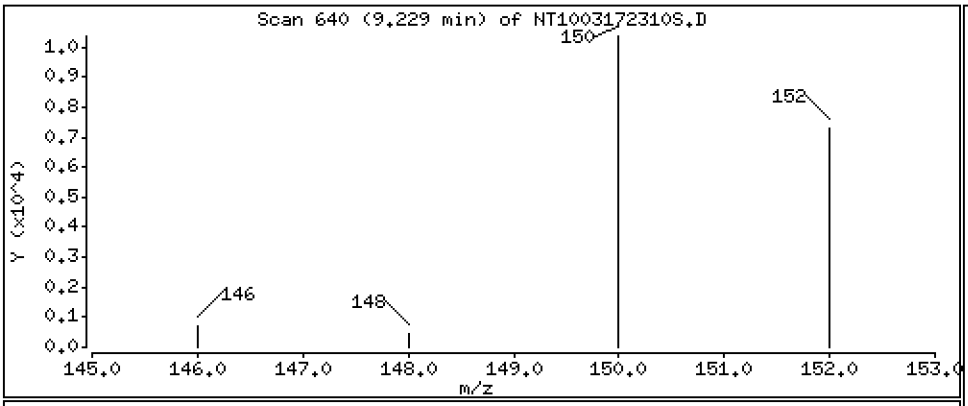
Operator: JGR

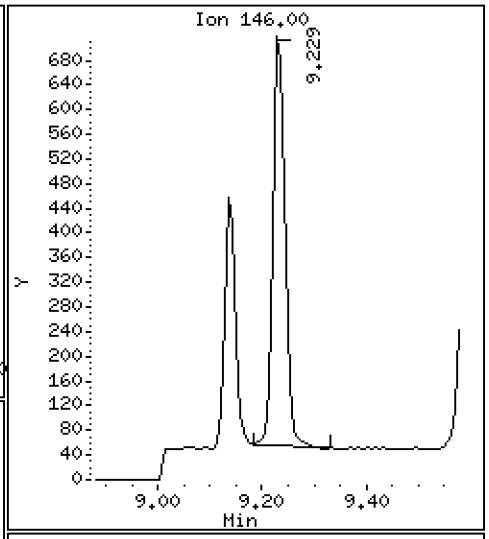
Column phase: ZB-5msi

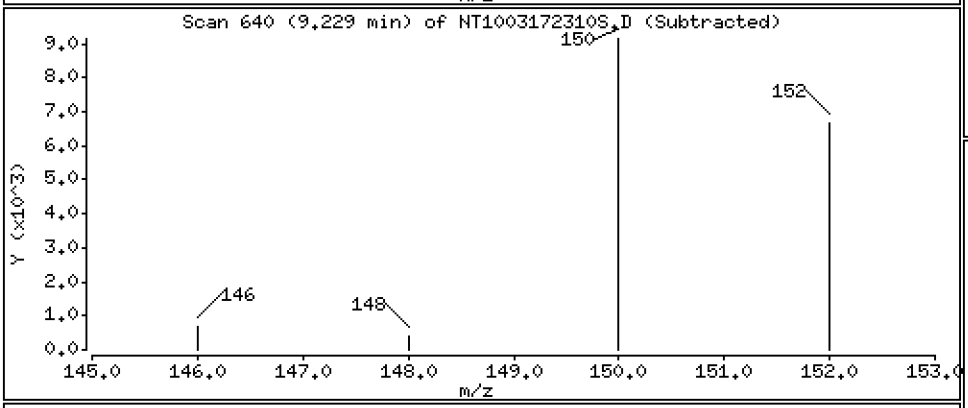
Column diameter: 0.25

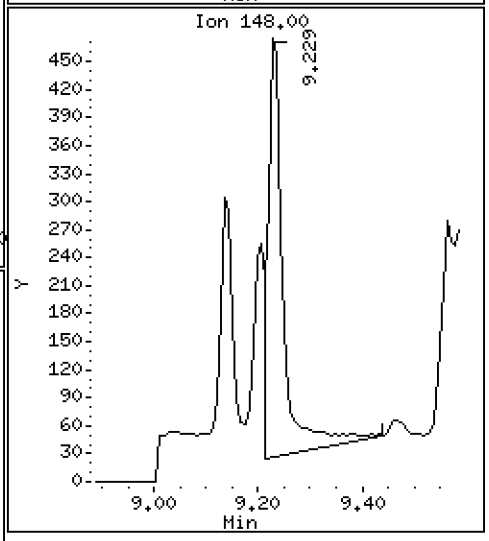
9 1,4-Dichlorobenzene

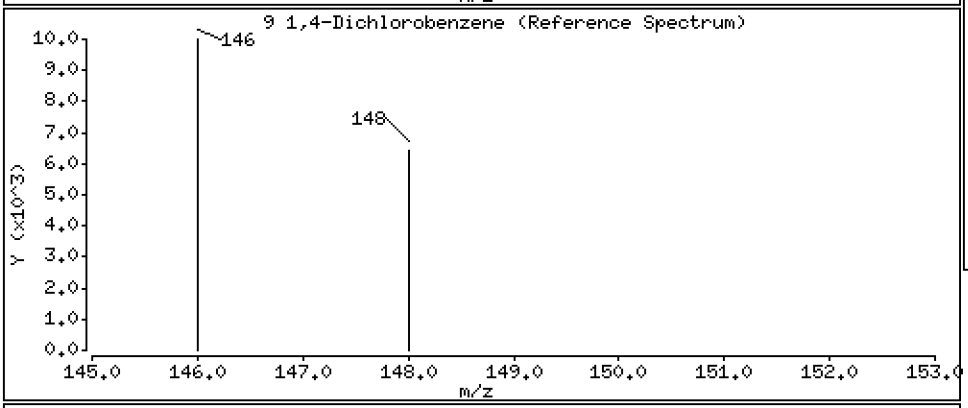
Concentration: 0.01578 ug/L

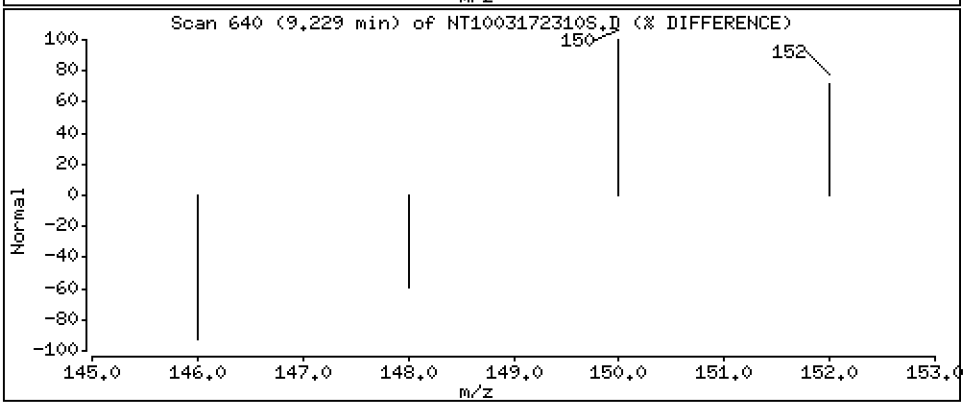












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172310S.D

Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

Volume Injected (uL): 1.0

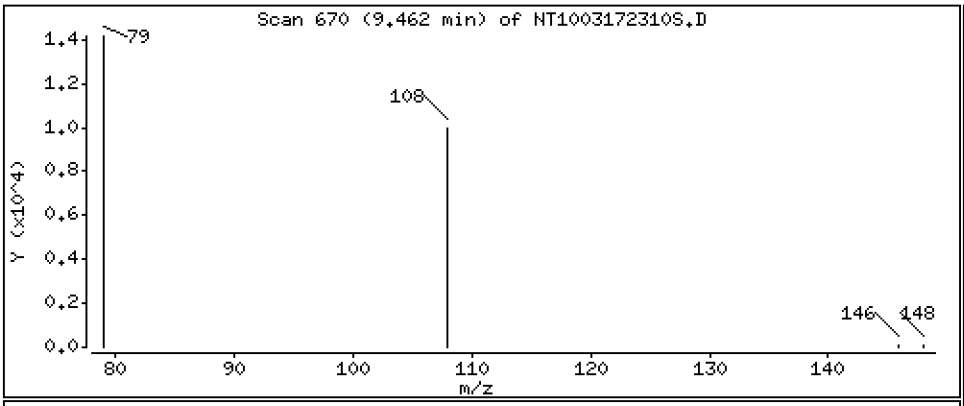
Operator: JGR

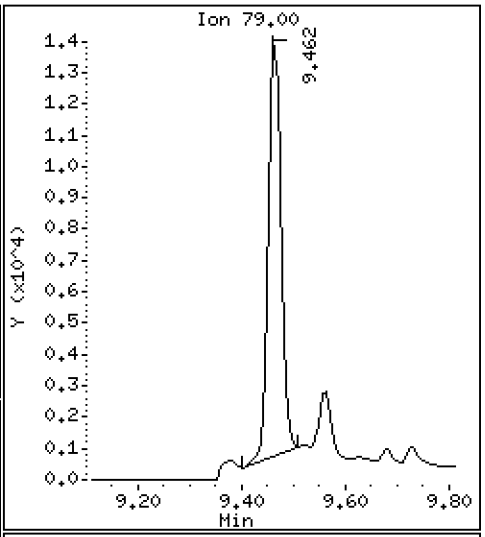
Column phase: ZB-5msi

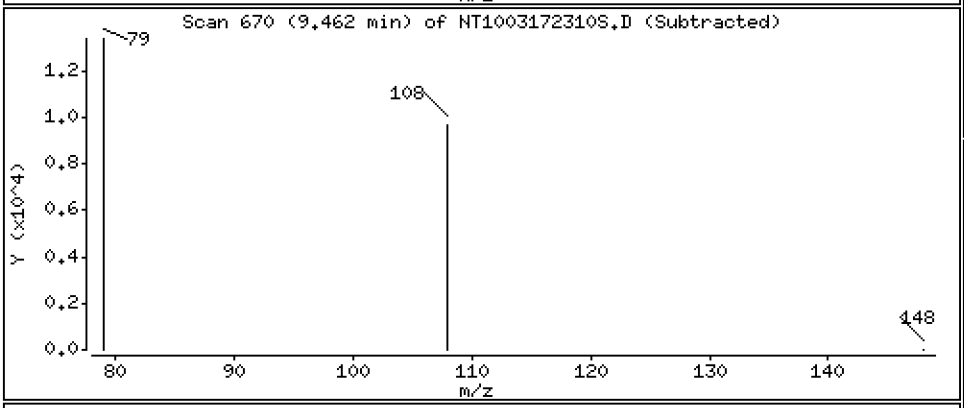
Column diameter: 0.25

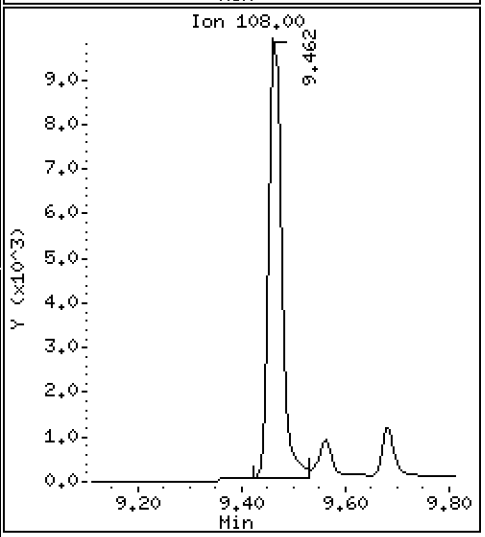
11 Benzyl alcohol

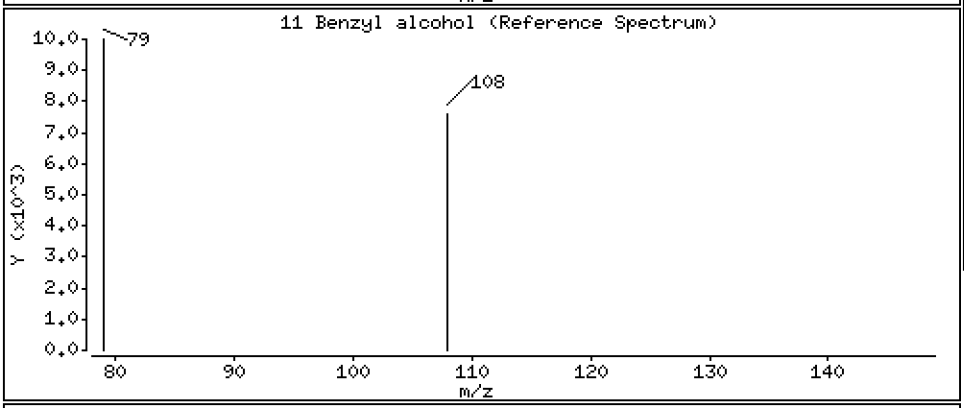
Concentration: 0.5071 ug/L

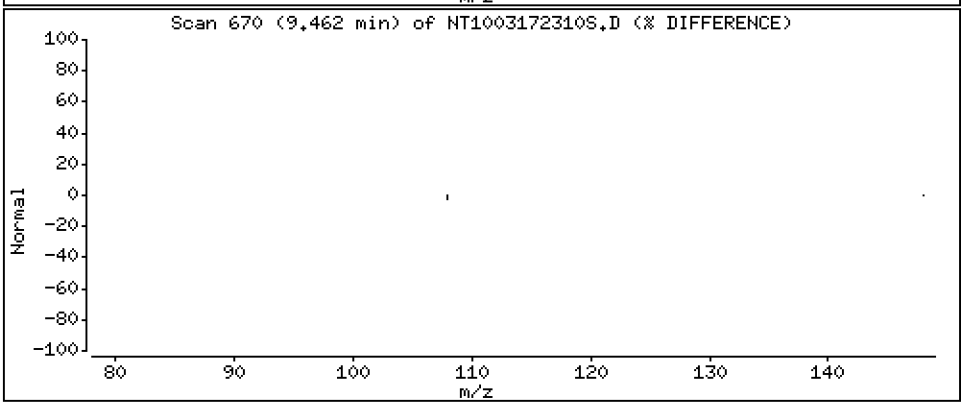












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

Volume Injected (uL): 1.0

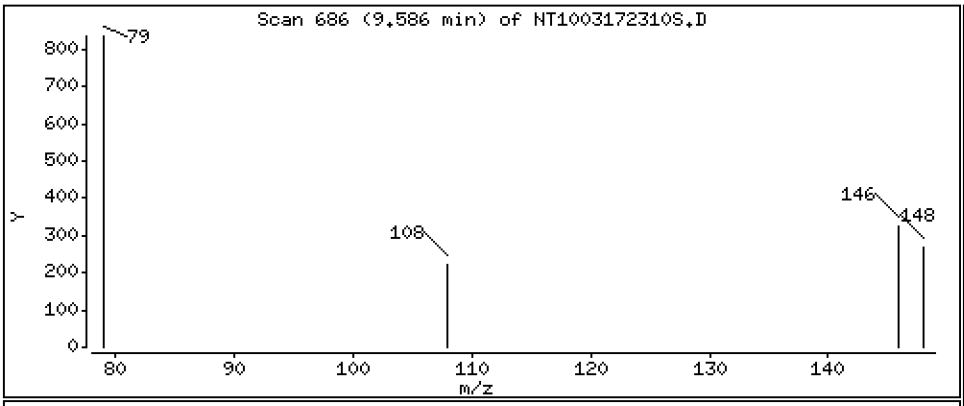
Operator: JGR

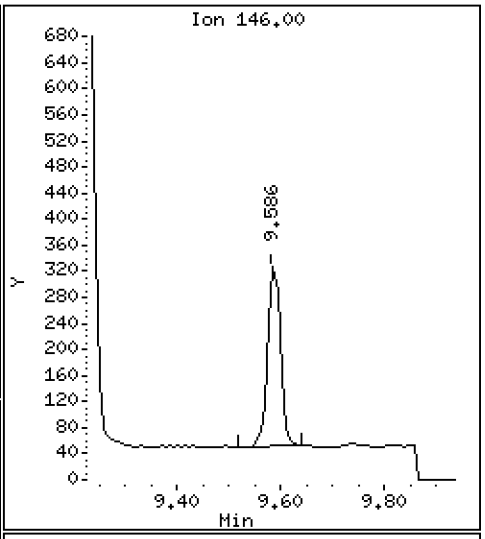
Column phase: ZB-5msi

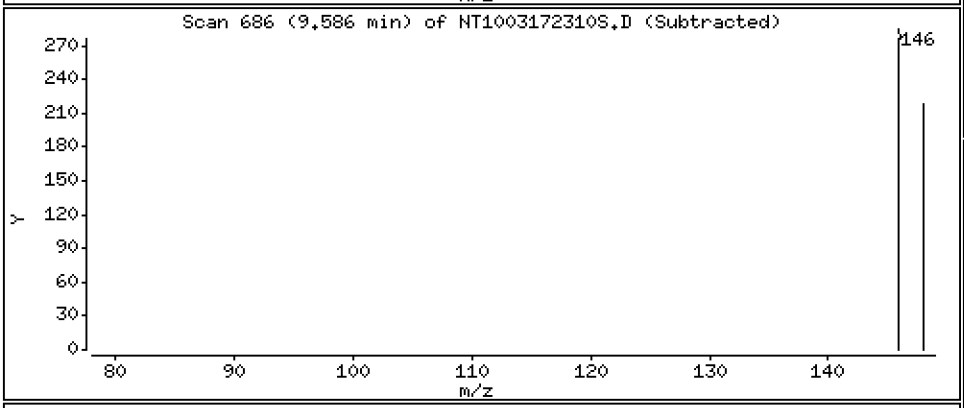
Column diameter: 0.25

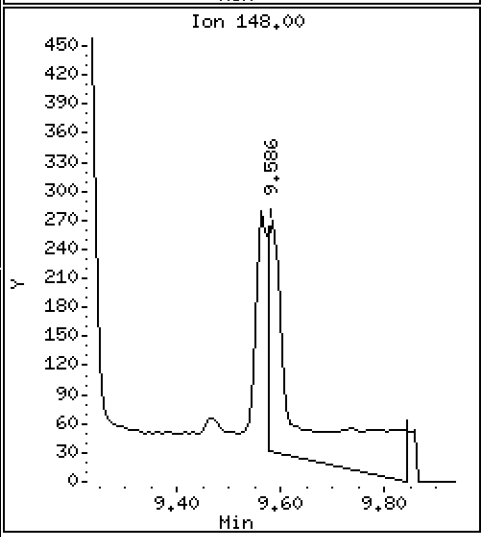
12 1,2-Dichlorobenzene

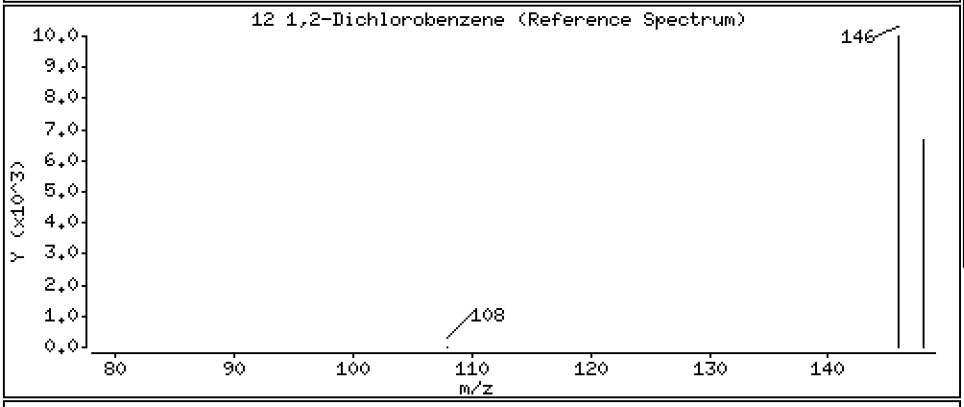
Concentration: 0.006900 ug/L

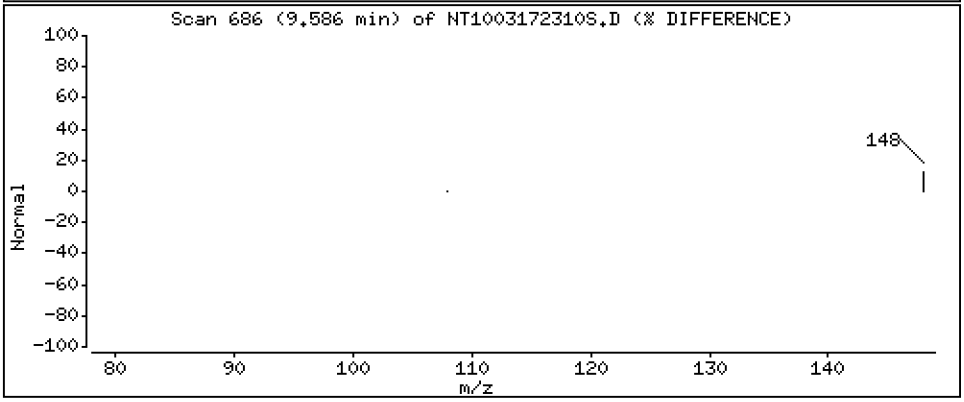












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

Volume Injected (uL): 1.0

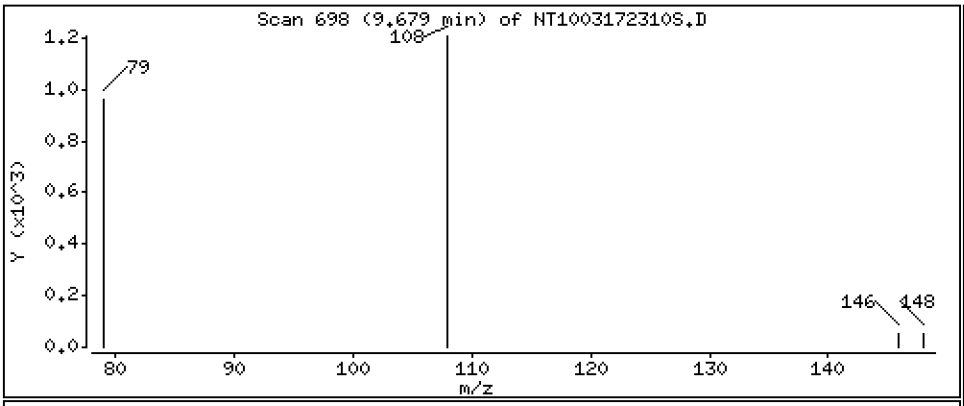
Operator: JGR

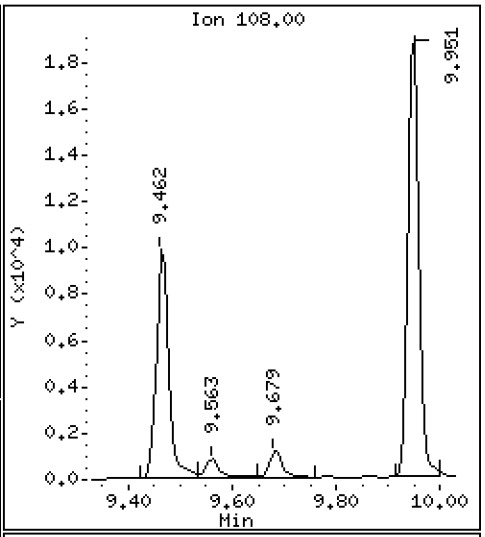
Column phase: ZB-5msi

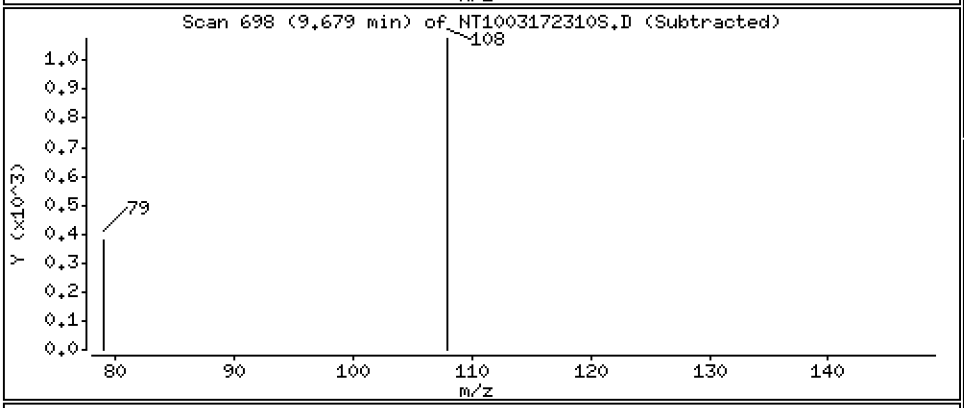
Column diameter: 0.25

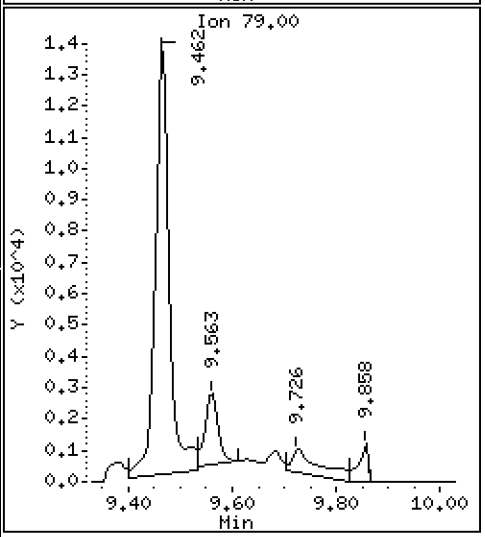
13 2-Methylphenol

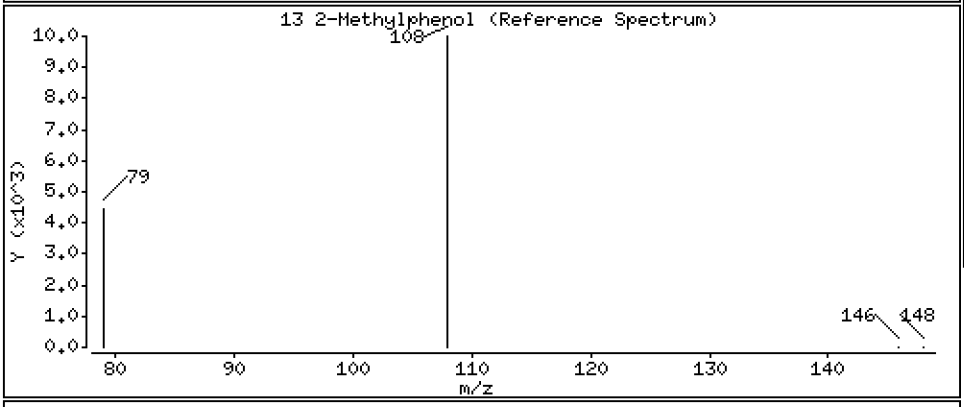
Concentration: 0.03800 ug/L

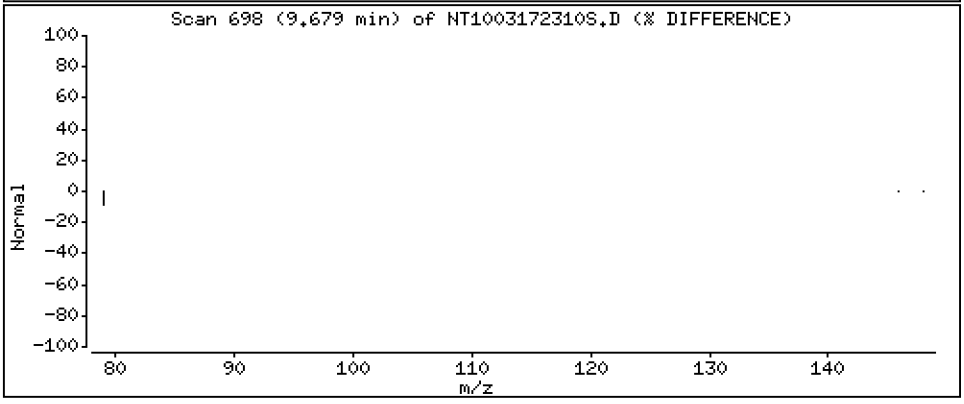












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172310S.D

Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

Volume Injected (uL): 1.0

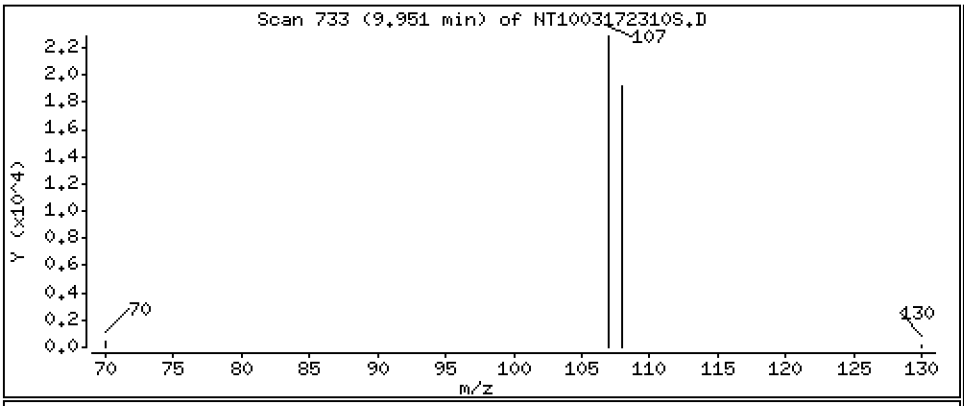
Operator: JGR

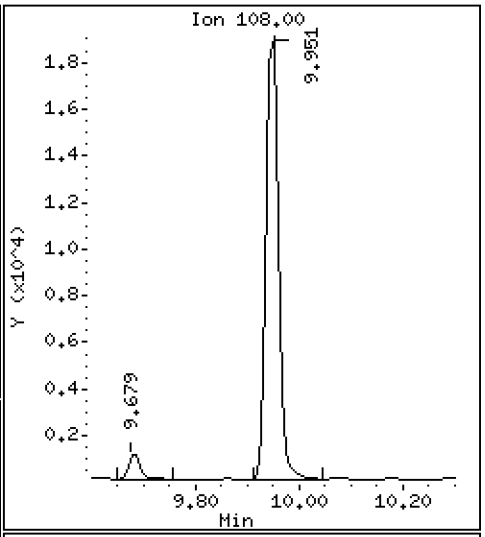
Column phase: ZB-5msi

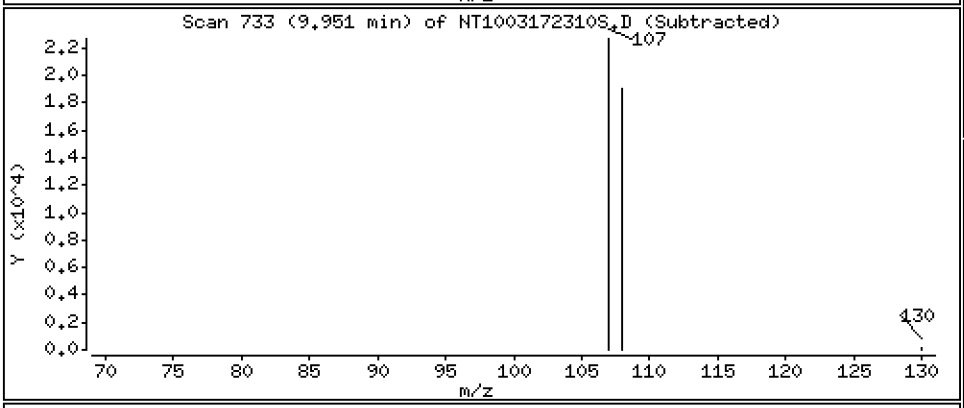
Column diameter: 0.25

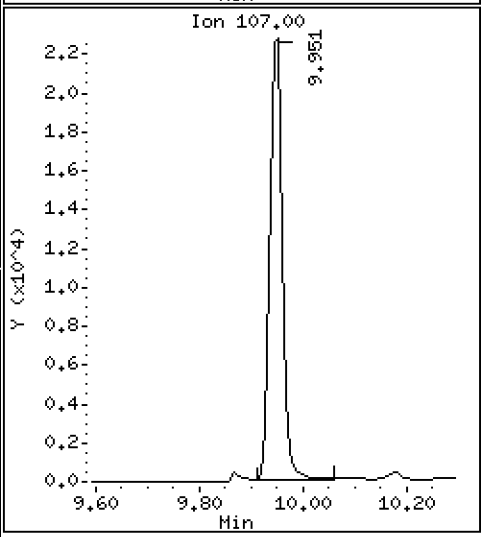
15 4-Methylphenol

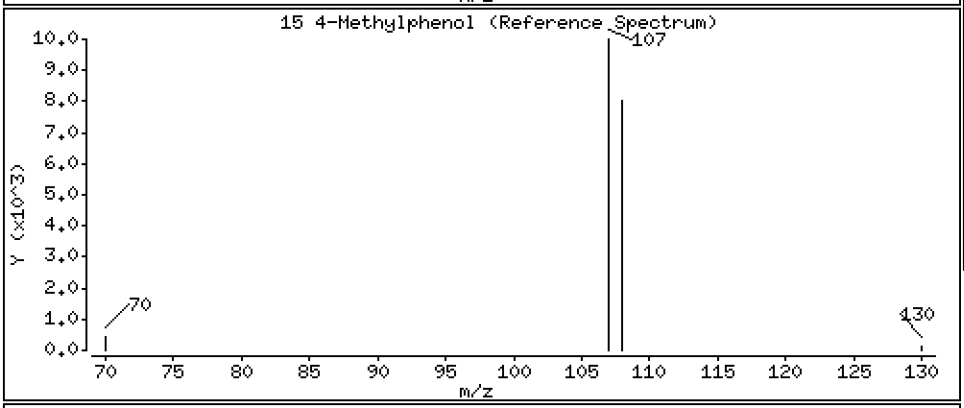
Concentration: 0.5740 ug/L

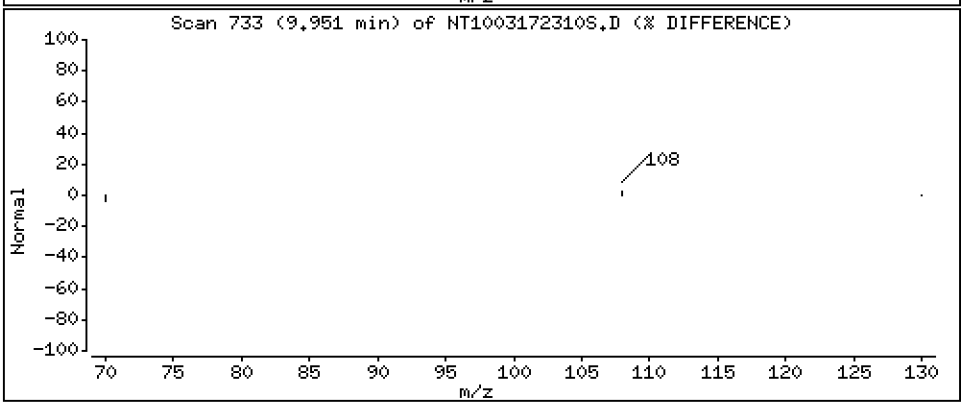












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

Volume Injected (uL): 1.0

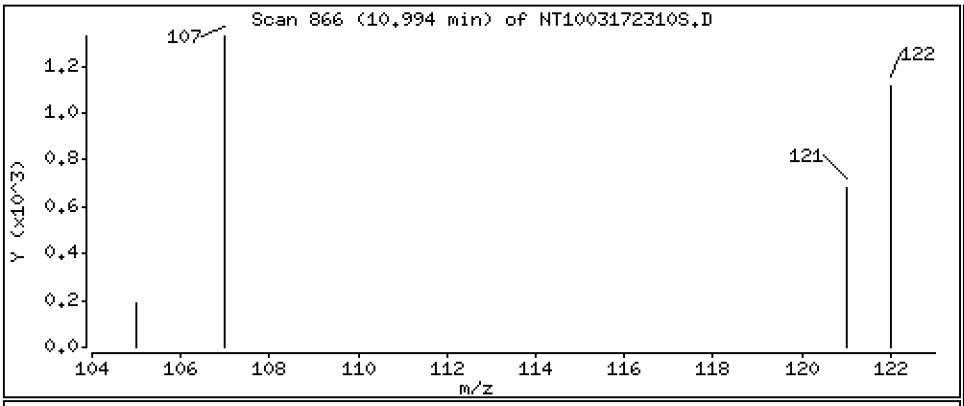
Operator: JGR

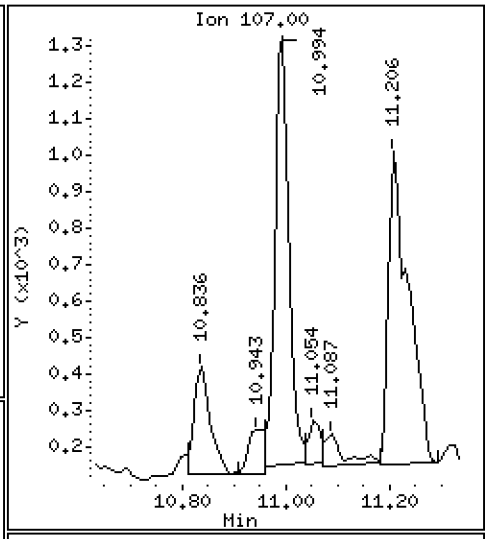
Column phase: ZB-5msi

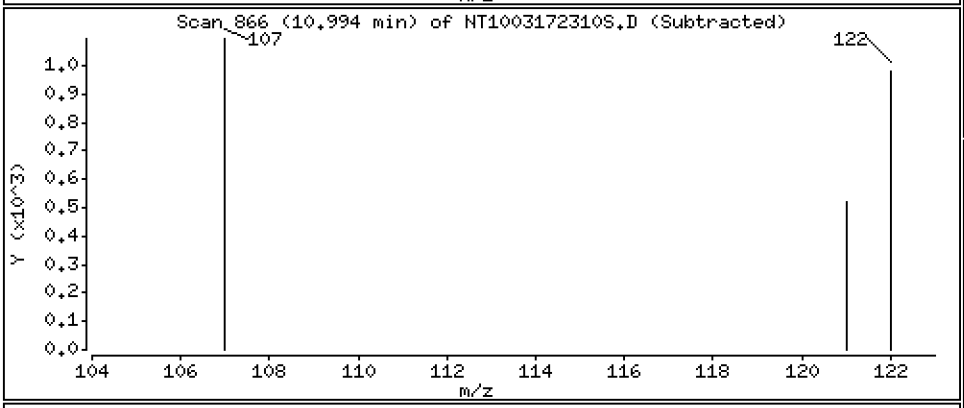
Column diameter: 0.25

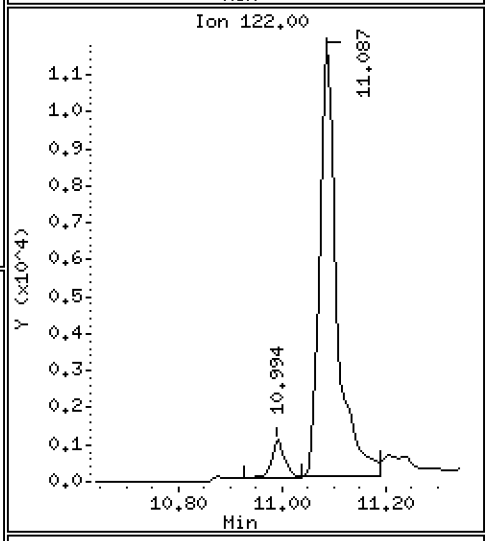
22 2,4-Dimethylphenol

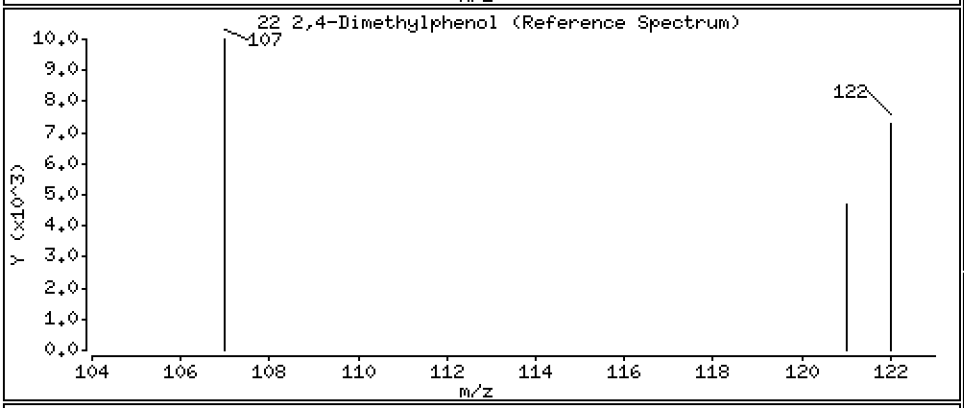
Concentration: 0.04143 ug/L

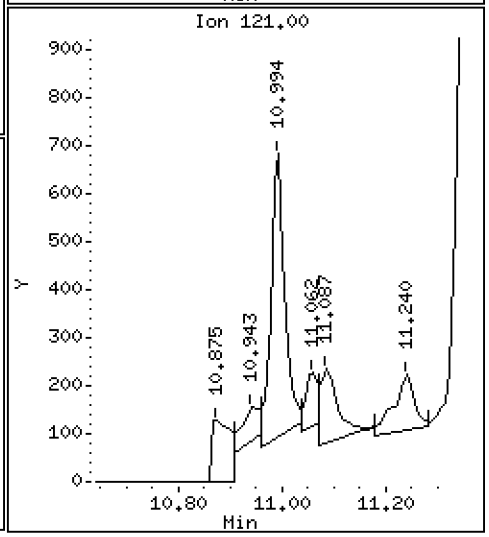


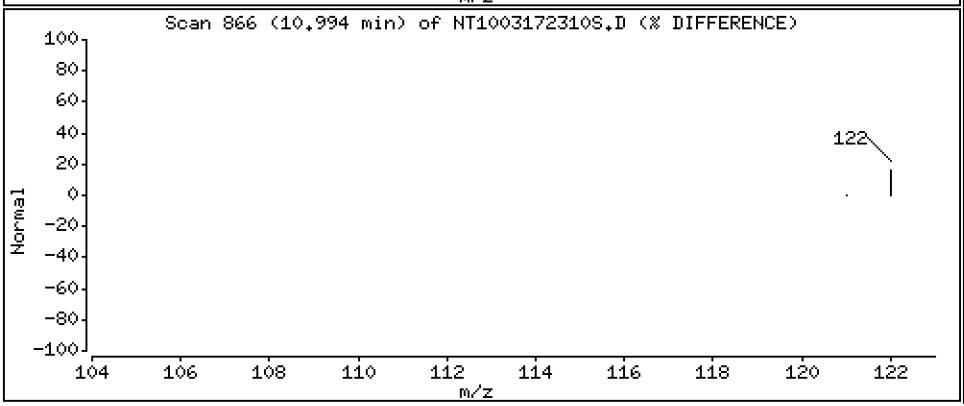












Date : 18-MAR-2023 00:09

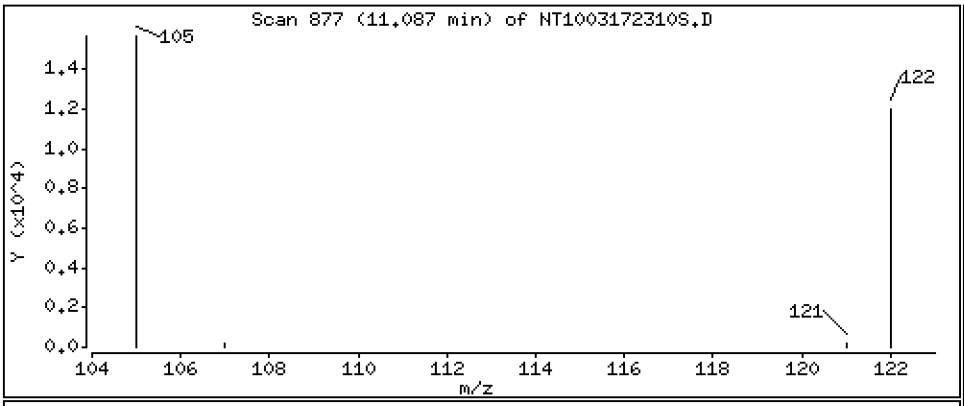
Client ID: Instrument: nt10.i

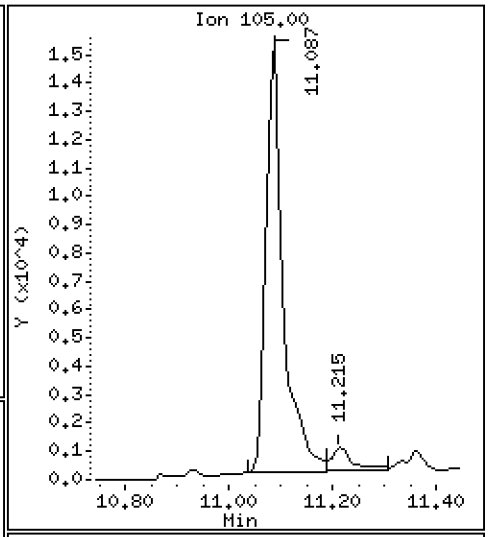
Sample Info: 23A0420-01

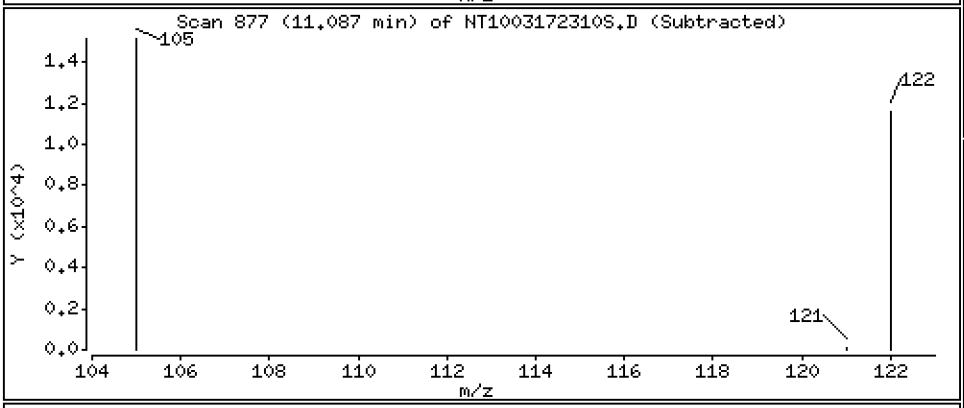
Volume Injected (uL): 1.0 Operator: JGR

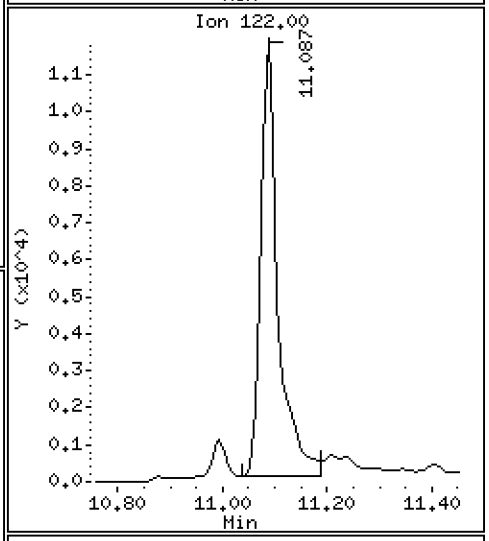
Column phase: ZB-5msi Column diameter: 0.25

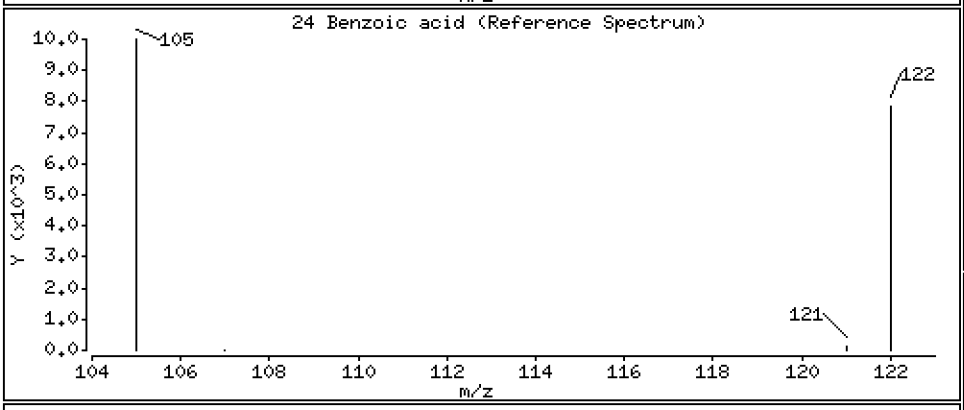
24 Benzoic acid Concentration: 1.203 ug/L

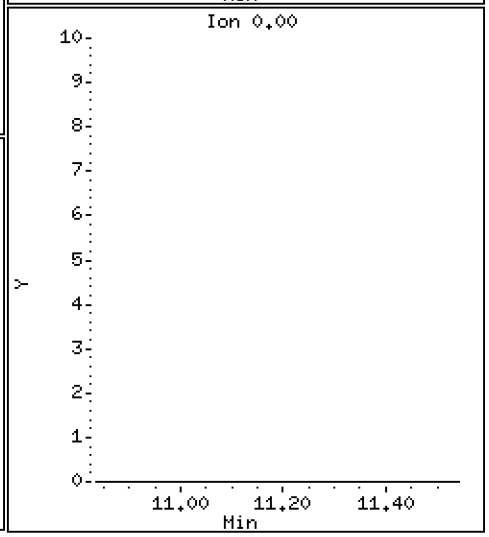


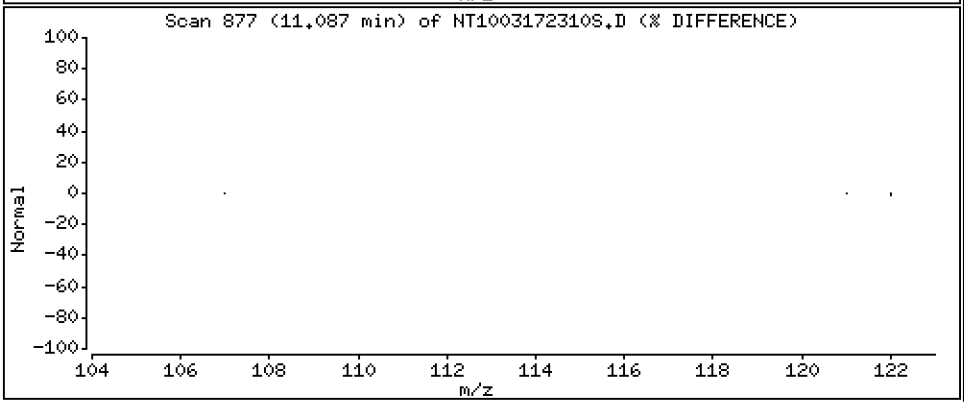












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

Volume Injected (uL): 1.0

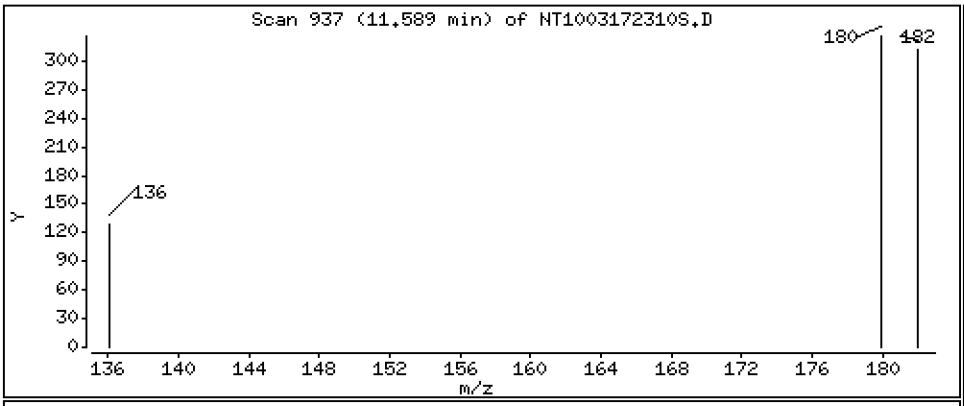
Operator: JGR

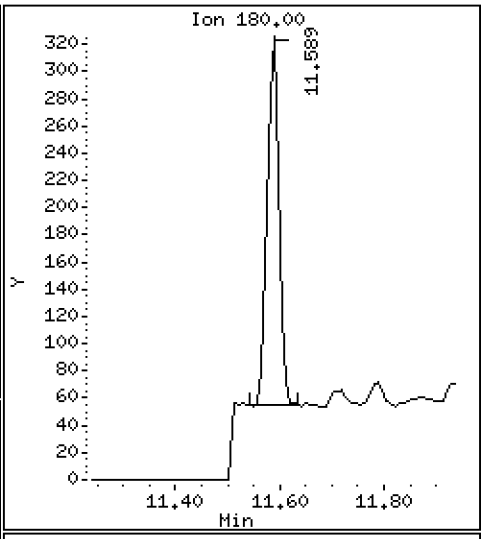
Column phase: ZB-5msi

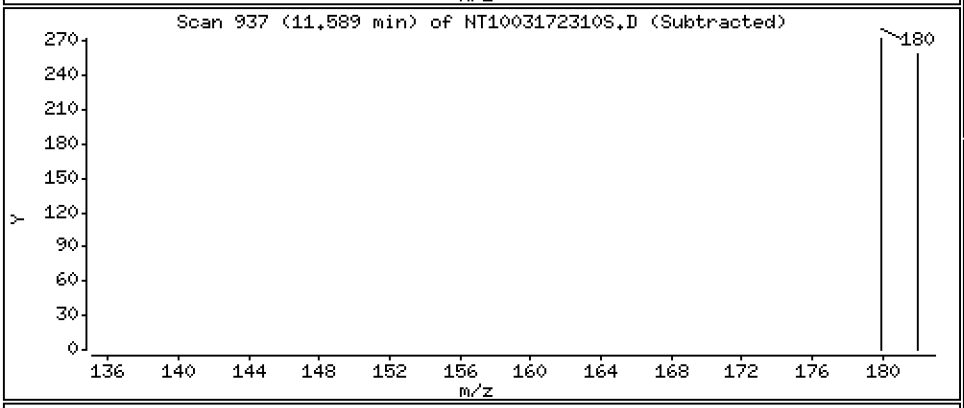
Column diameter: 0.25

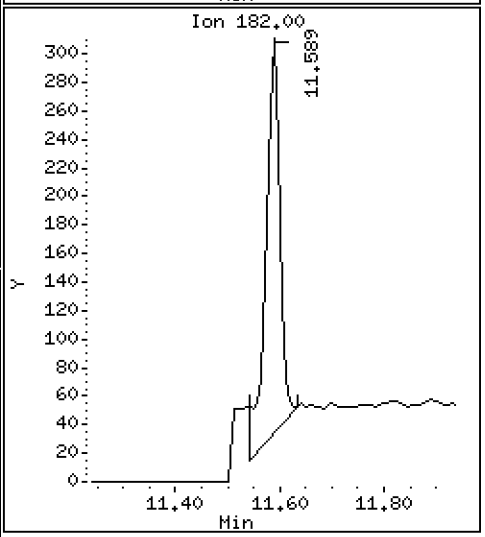
26 1,2,4-Trichlorobenzene

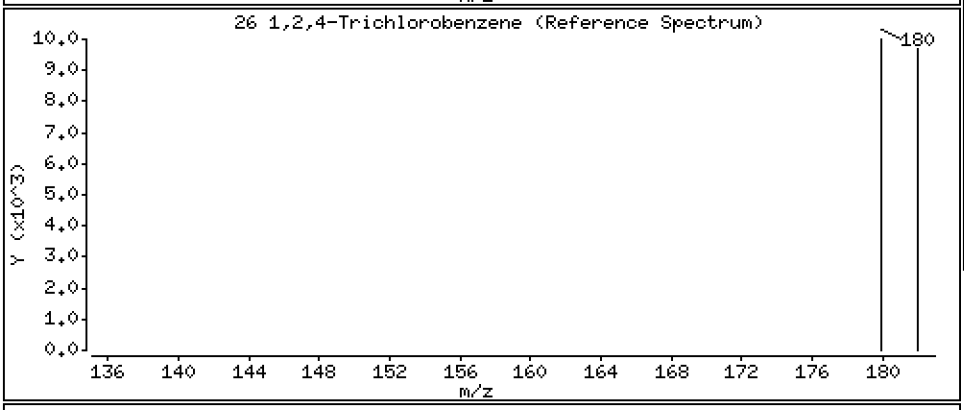
Concentration: 0.007612 ug/L

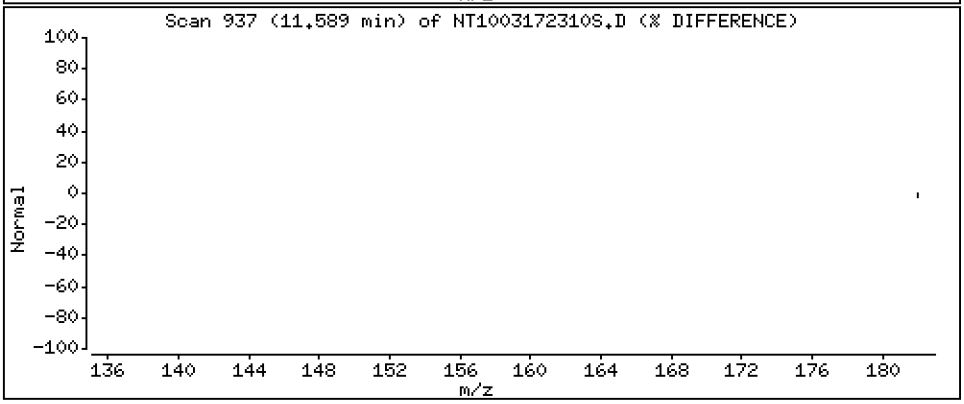












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172310S.D

Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

Volume Injected (uL): 1.0

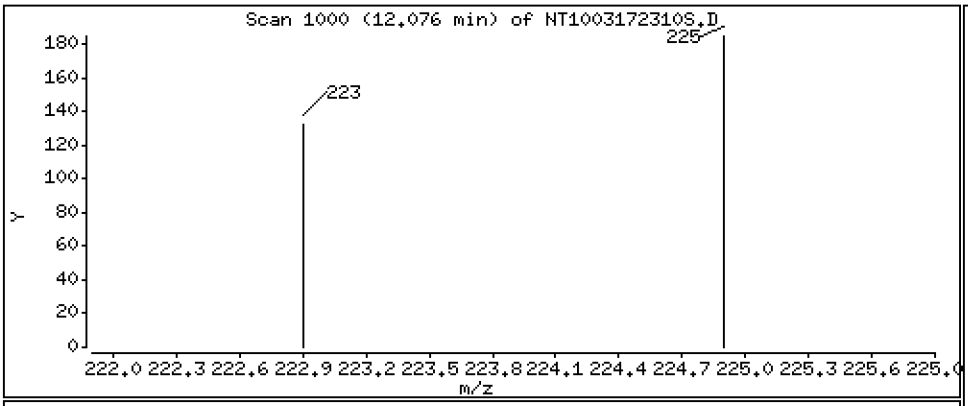
Operator: JGR

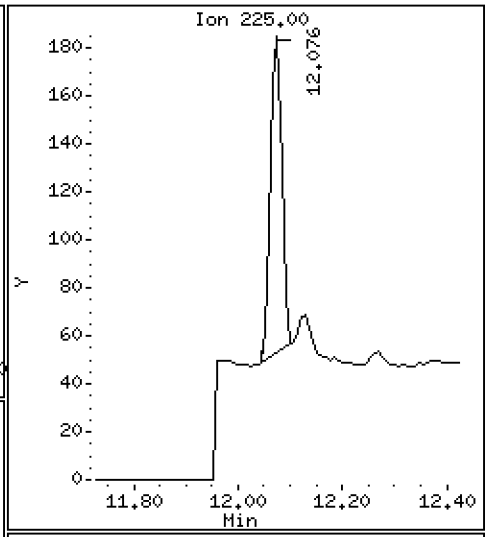
Column phase: ZB-5msi

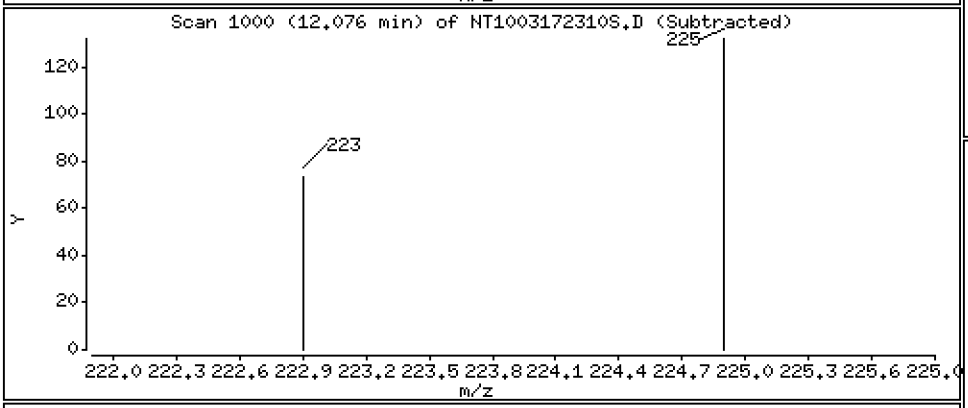
Column diameter: 0.25

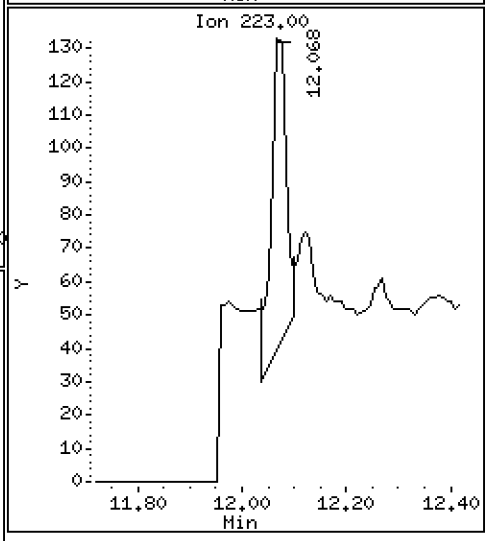
30 Hexachlorobutadiene

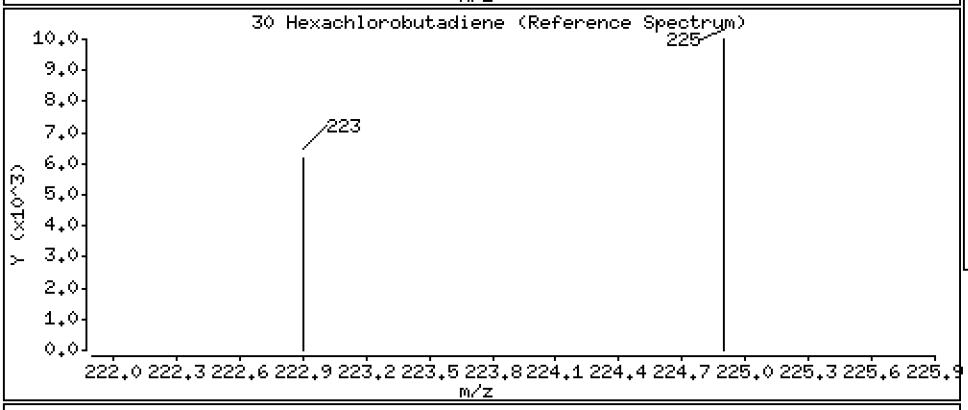
Concentration: 0.005783 ug/L

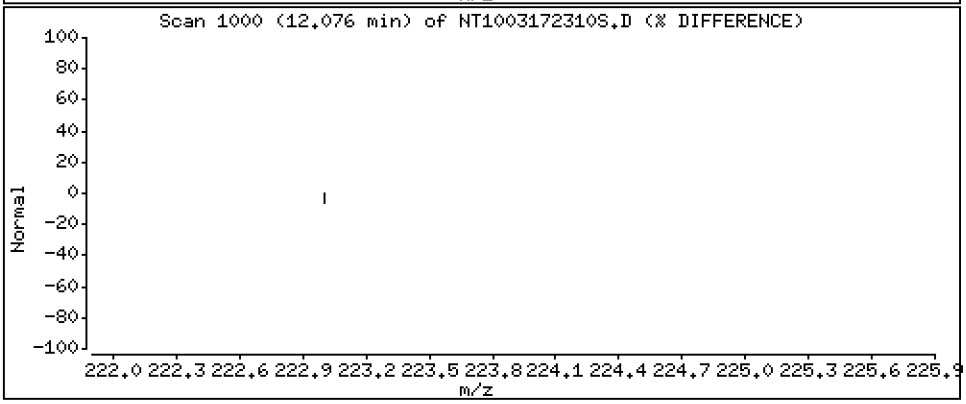












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

Volume Injected (uL): 1.0

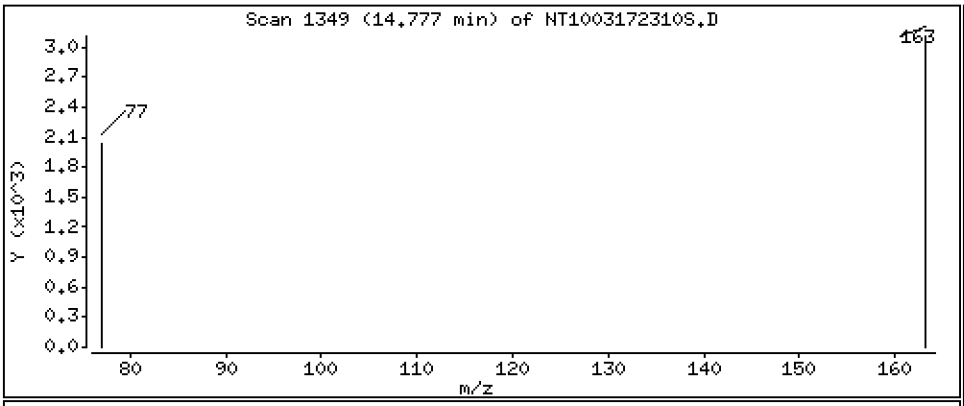
Operator: JGR

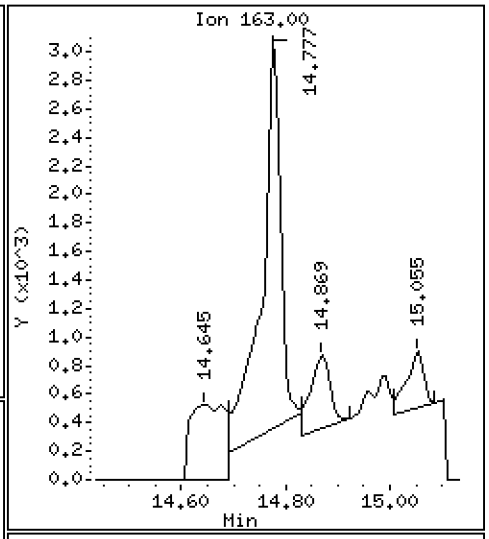
Column phase: ZB-5msi

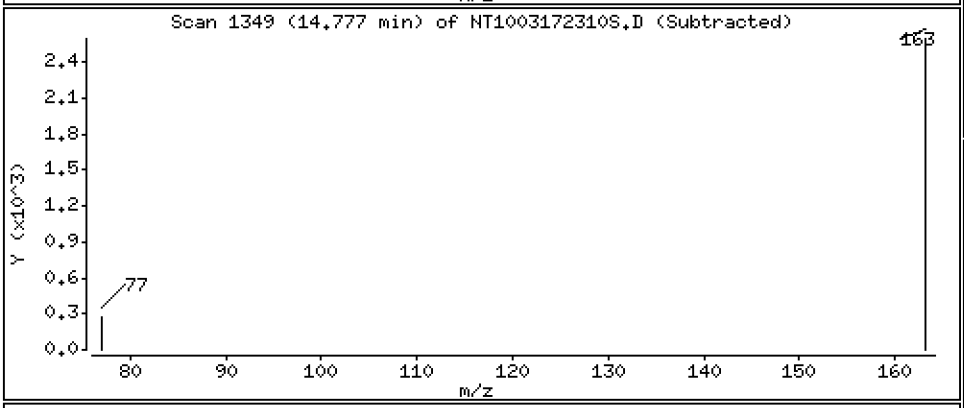
Column diameter: 0.25

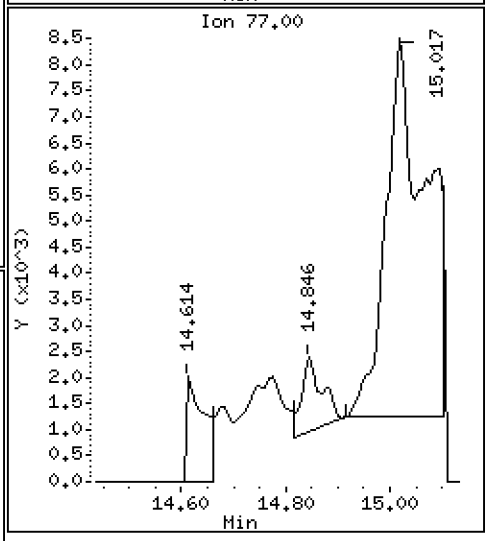
39 Dimethylphthalate

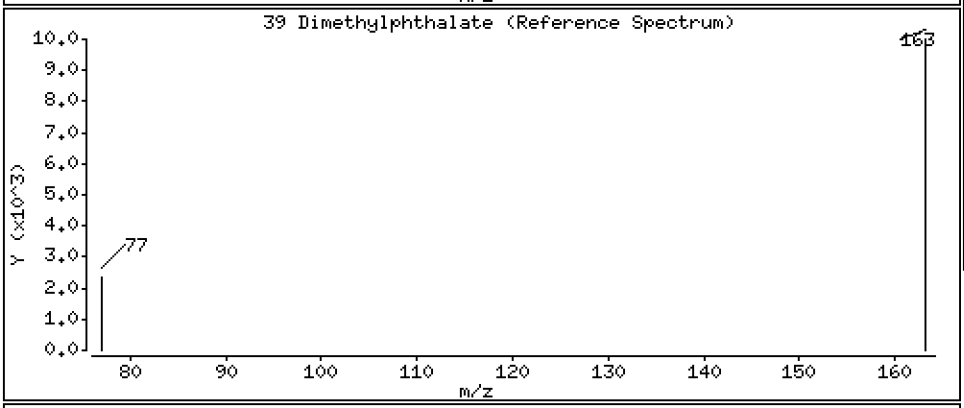
Concentration: 0.07045 ug/L

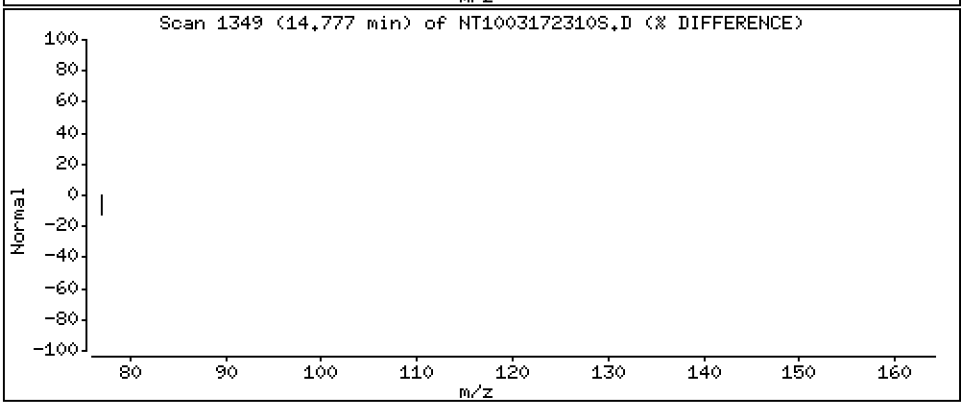












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Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

Volume Injected (uL): 1.0

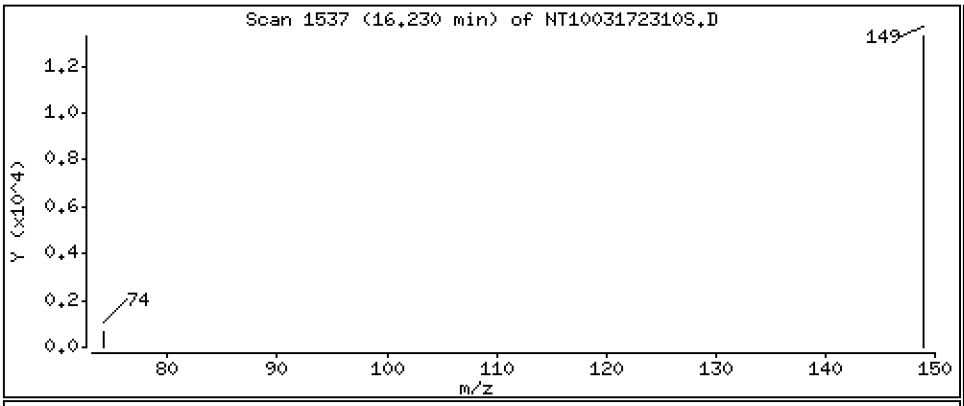
Operator: JGR

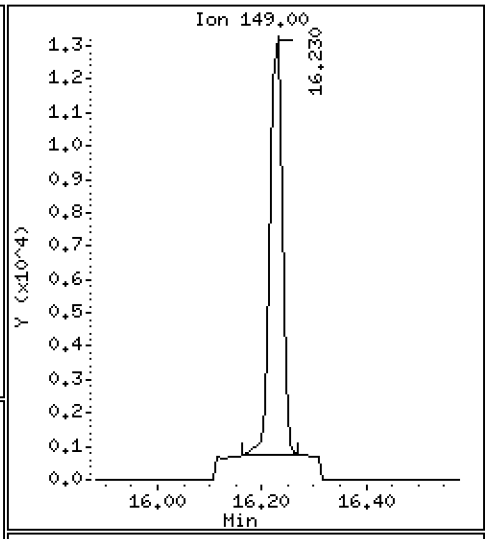
Column phase: ZB-5msi

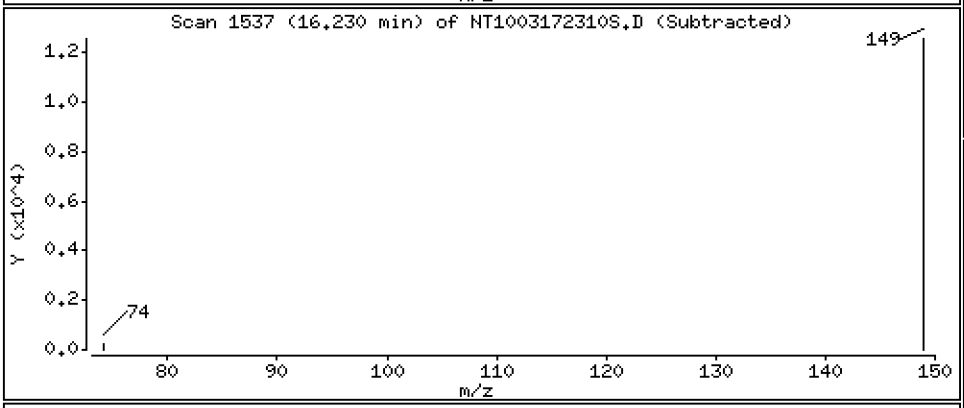
Column diameter: 0.25

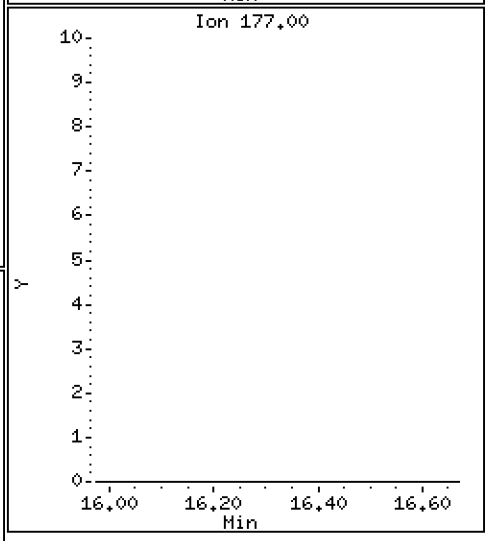
50 Diethylphthalate

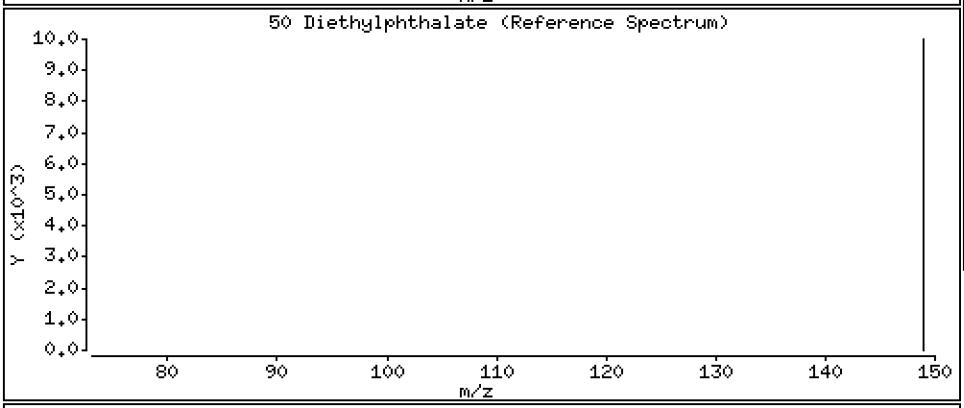
Concentration: 0.1948 ug/L

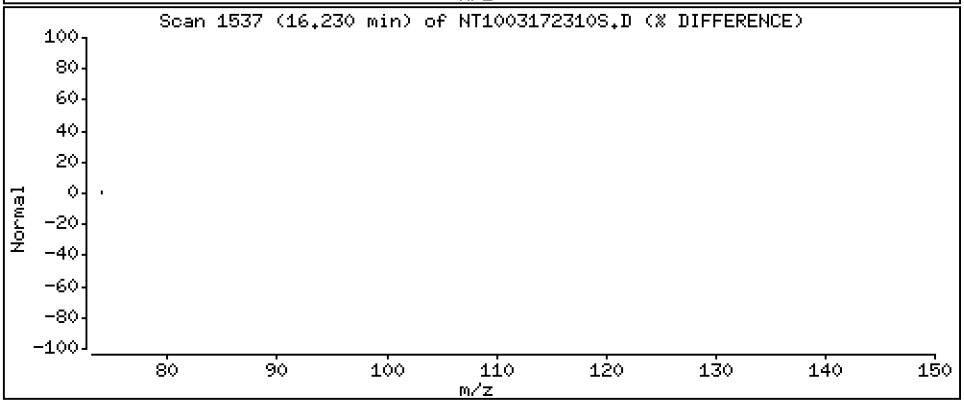












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172310S.D

Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

Volume Injected (uL): 1.0

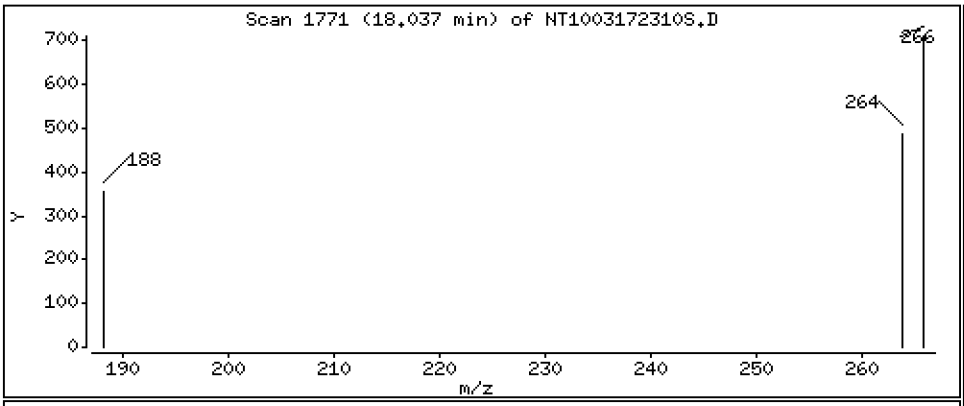
Operator: JGR

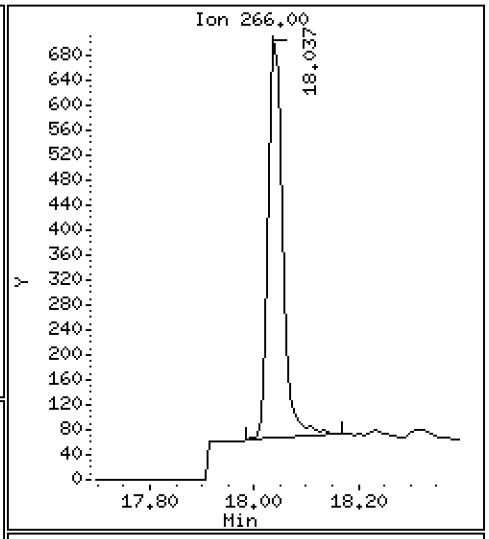
Column phase: ZB-5msi

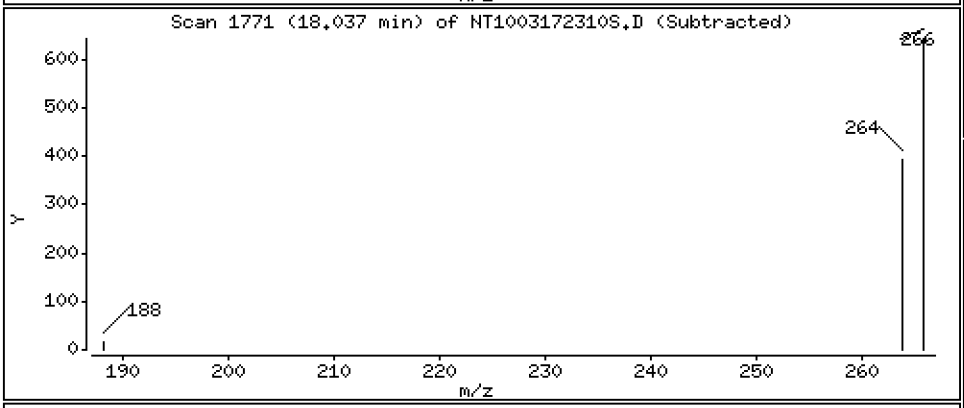
Column diameter: 0.25

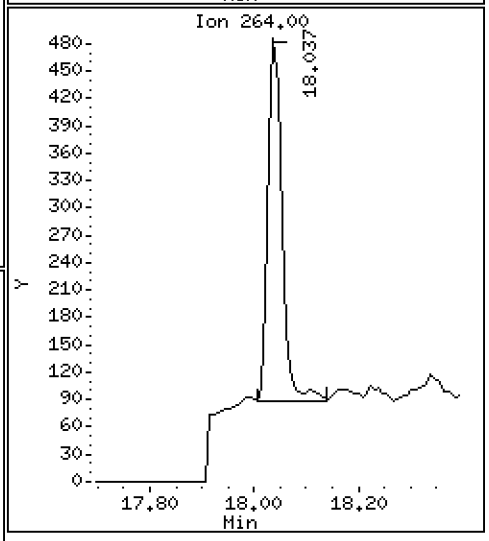
58 Pentachlorophenol

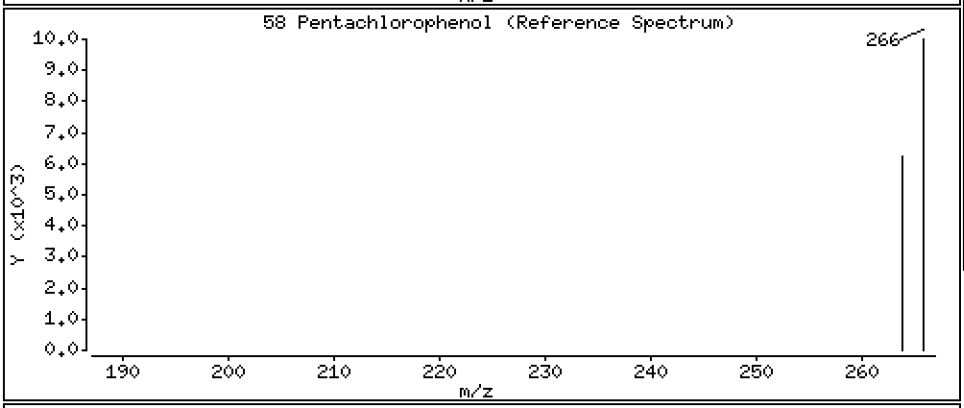
Concentration: 0.05598 ug/L

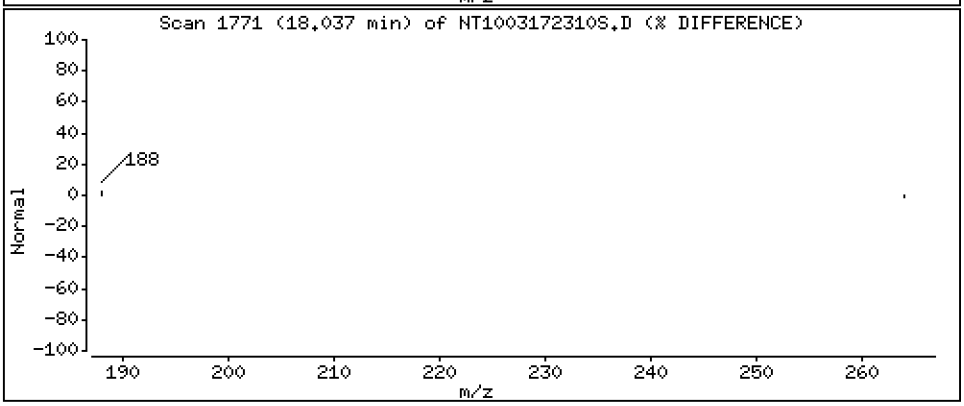












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172310S.D

Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

Volume Injected (uL): 1.0

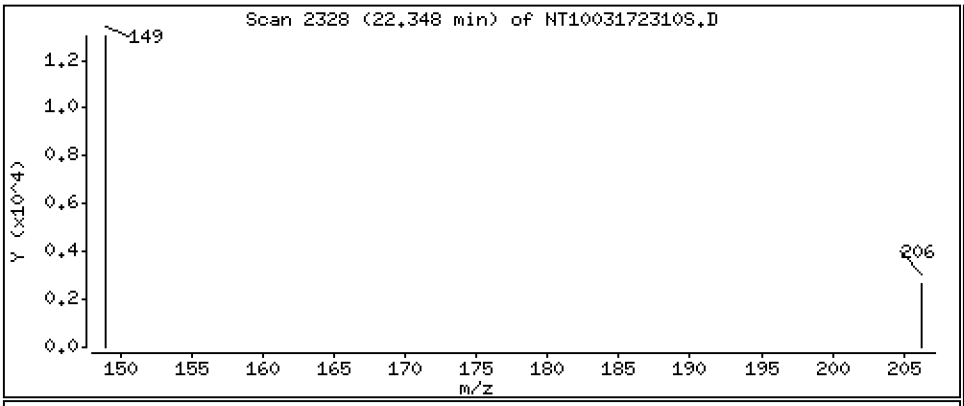
Operator: JGR

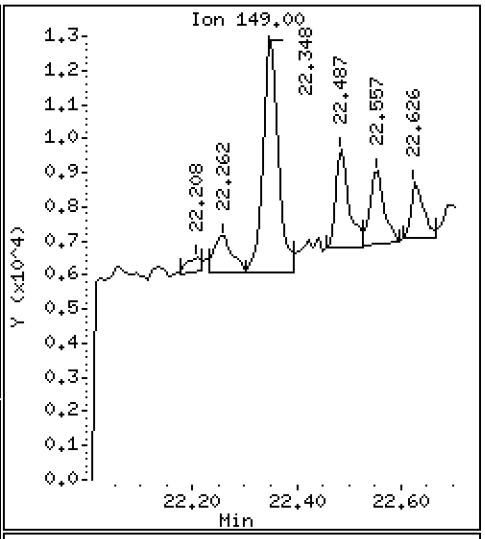
Column phase: ZB-5msi

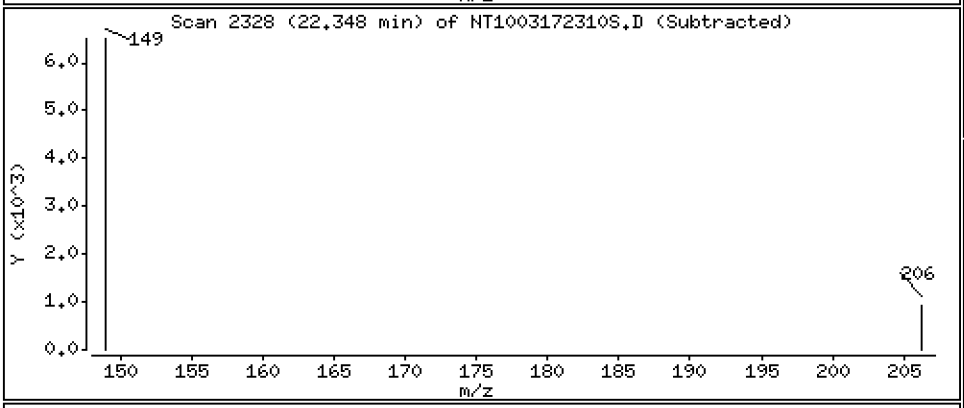
Column diameter: 0.25

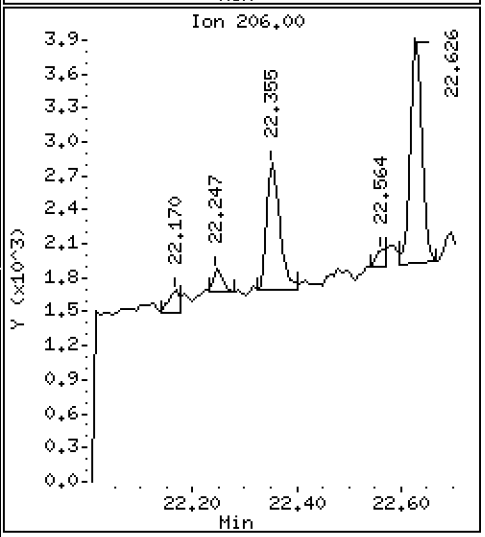
67 Butylbenzylphthalate

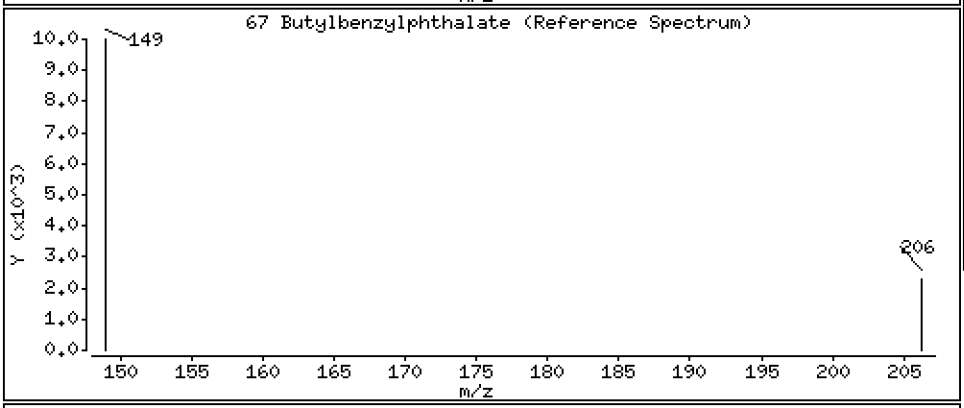
Concentration: 0.2046 ug/L

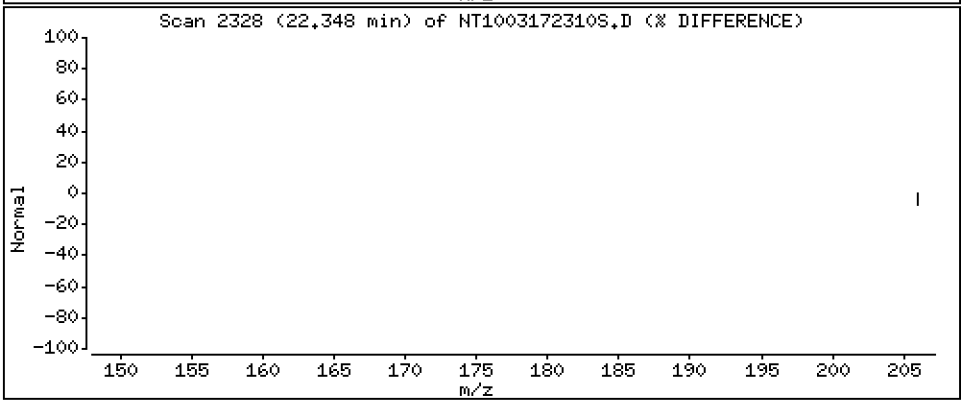












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172310S.D

Date : 18-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-01

Volume Injected (uL): 1.0

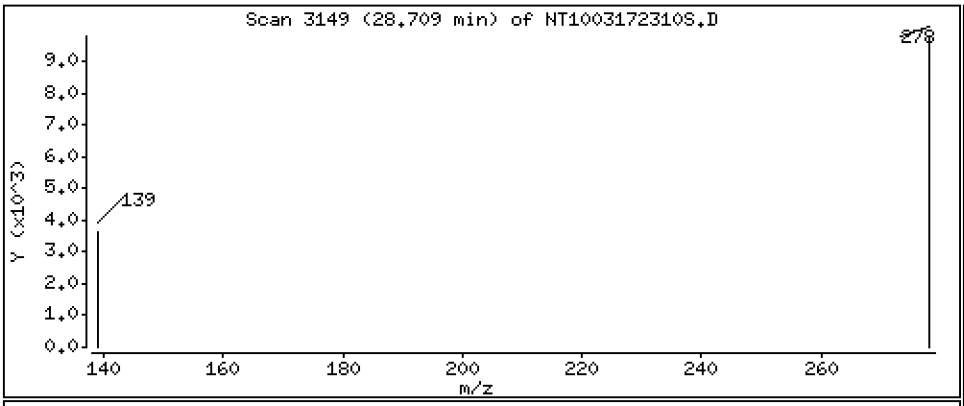
Operator: JGR

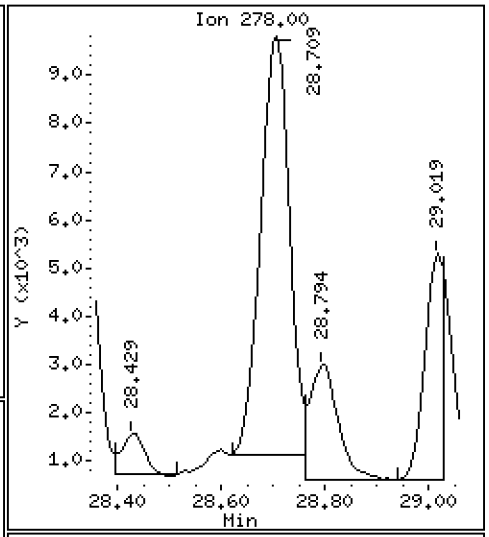
Column phase: ZB-5msi

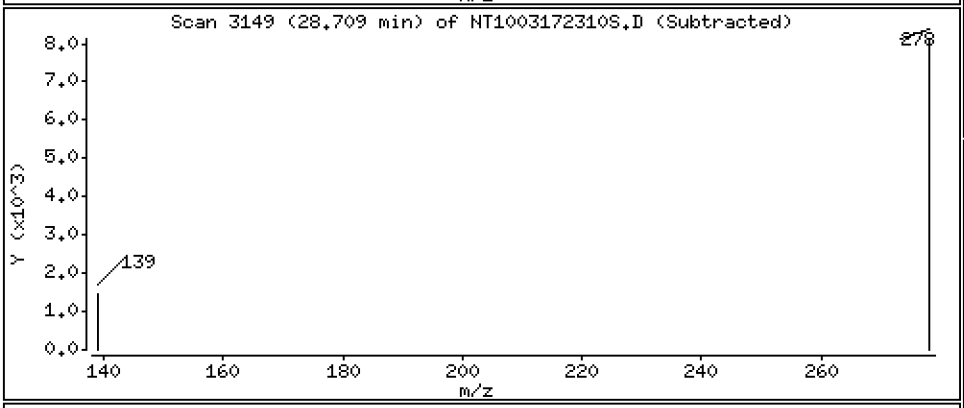
Column diameter: 0.25

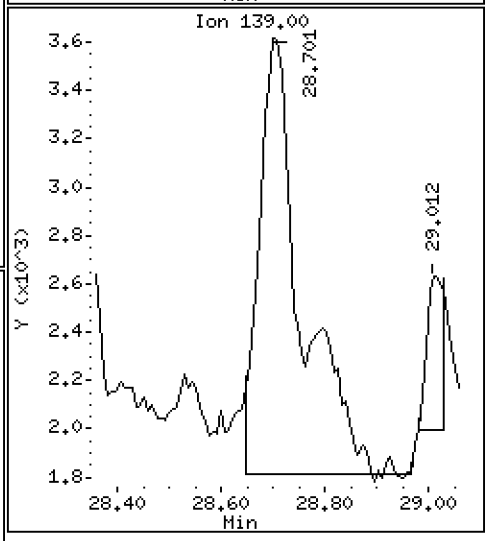
79 Dibenzo(a,h)anthracene

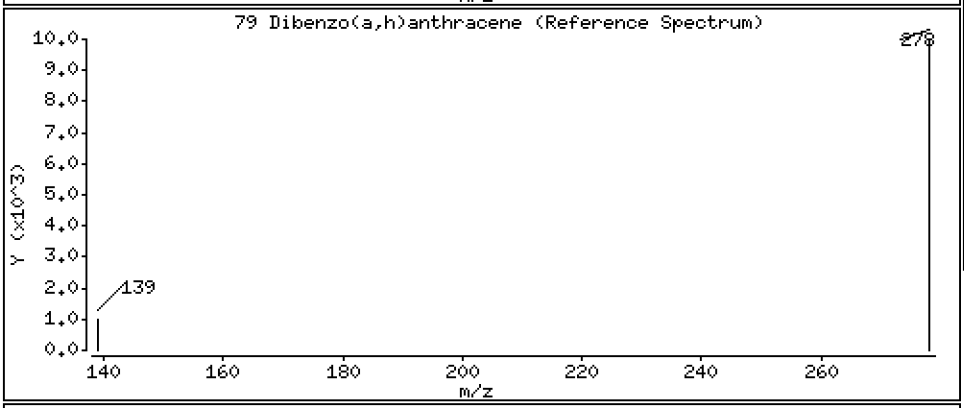
Concentration: 0.1741 ug/L

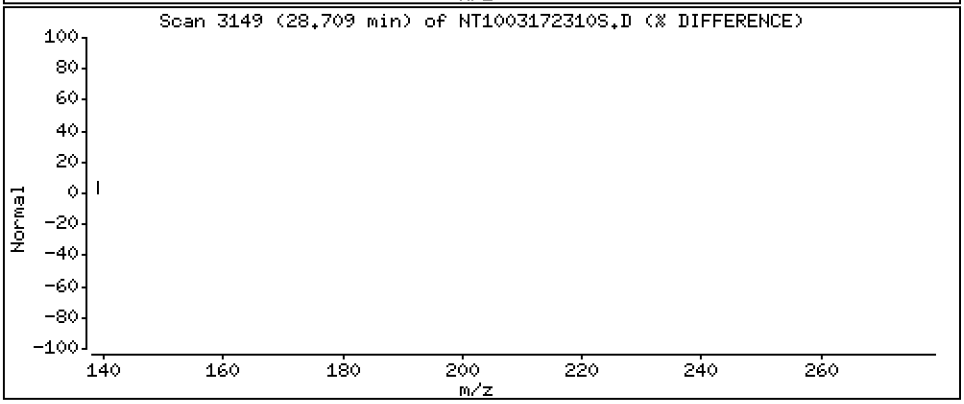












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172310S.D
Lab Smp Id: 23A0420-01
Inj Date : 18-MAR-2023 00:09 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : 23A0420-01
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Meth Date : 30-Mar-2023 14:37 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.980	6.980	(0.758)	134382	2.56816	2.568(R)
3	Phenol	94	8.571	8.572	(0.931)	99398	1.38460	1.385
7	1,3-Dichlorobenzene	146	9.136	9.136	(0.992)	676	0.01006	0.01006
* 8	1,4-Dichlorobenzene-d4	152	9.205	9.206	(1.000)	172554	4.00000	
9	1,4-Dichlorobenzene	146	9.229	9.229	(1.003)	1023	0.01578	0.01578(M)
11	Benzyl alcohol	79	9.462	9.462	(1.028)	21103	0.50706	0.5071(M)
12	1,2-Dichlorobenzene	146	9.586	9.586	(1.041)	440	0.00690	0.006900(M)
13	2-Methylphenol	108	9.679	9.679	(1.051)	1890	0.03800	0.03800
15	4-Methylphenol	108	9.951	9.951	(1.081)	29669	0.57399	0.5740
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
22	2,4-Dimethylphenol	107	10.994	10.985	(0.942)	2202	0.04143	0.04143
24	Benzoic acid	105	11.087	11.096	(0.950)	35114	1.20306	1.203
26	1,2,4-Trichlorobenzene	180	11.588	11.589	(0.993)	407	0.00761	0.007612(M)
* 27	Naphthalene-d8	136	11.673	11.674	(1.000)	614904	4.00000	
30	Hexachlorobutadiene	225	12.075	12.075	(1.034)	188	0.00578	0.005783(M)
39	Dimethylphthalate	163	14.776	14.784	(0.967)	6787	0.07045	0.07045
* 42	Acenaphthene-d10	162	15.279	15.279	(1.000)	305283	4.00000	
50	Diethylphthalate	149	16.230	16.230	(1.062)	19445	0.19484	0.1948(M)
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.037	18.045	(0.985)	1178	0.05598	0.05598(M)
*	59 Phenanthrene-d10	188	18.308	18.308	(1.000)	634546	4.00000	
$	66 Terphenyl-d14	244	21.441	21.434	(0.919)	511183	6.23077	6.231(R)
	67 Butylbenzylphthalate	149	22.347	22.355	(0.958)	13566	0.20459	0.2046
*	69 Chrysene-d12	240	23.338	23.331	(1.000)	503522	4.00000	
*	77 Perylene-d12	264	25.994	25.986	(1.000)	583864	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.708	28.708	(1.104)	33347	0.17412	0.1741
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172310S.D
Lab Smp Id: 23A0420-01
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	184039	92020	368078	172554	-6.24
27 Naphthalene-d8	659935	329968	1319870	614904	-6.82
42 Acenaphthene-d10	325775	162888	651550	305283	-6.29
59 Phenanthrene-d10	616249	308125	1232498	634546	2.97
69 Chrysene-d12	526222	263111	1052444	503522	-4.31
77 Perylene-d12	563117	281559	1126234	583864	3.68

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.21	8.71	9.71	9.21	-0.00
27 Naphthalene-d8	11.67	11.17	12.17	11.67	-0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	-0.00
59 Phenanthrene-d10	18.31	17.81	18.81	18.31	-0.00
69 Chrysene-d12	23.33	22.83	23.83	23.34	0.03
77 Perylene-d12	25.99	25.49	26.49	25.99	0.03

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

REVIEW SUMMARY FOR FILE - NT1003172310S.D

Lab ID: 23A0420-01
nt10.i, 20230317.b\20230317.b\SIMABN2.m,   18-MAR-2023 00:09

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: 20230317.b/NT1003172303S.D

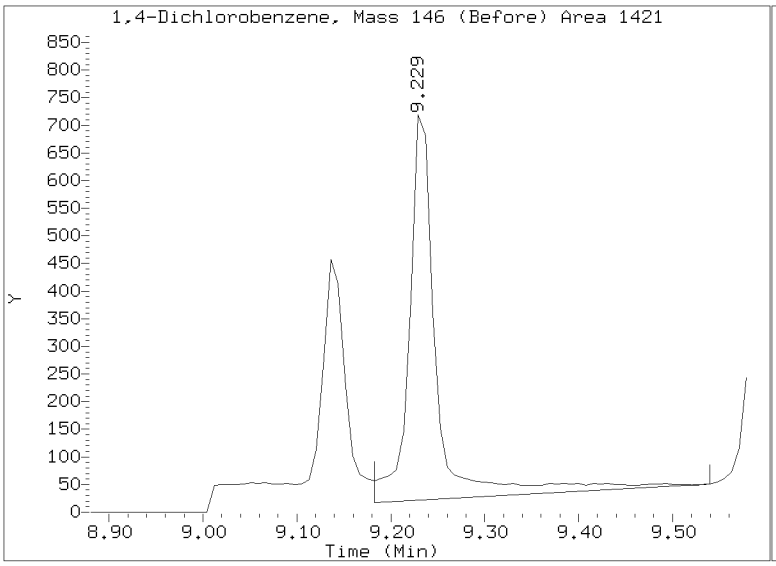
On Column LOD for nt10.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

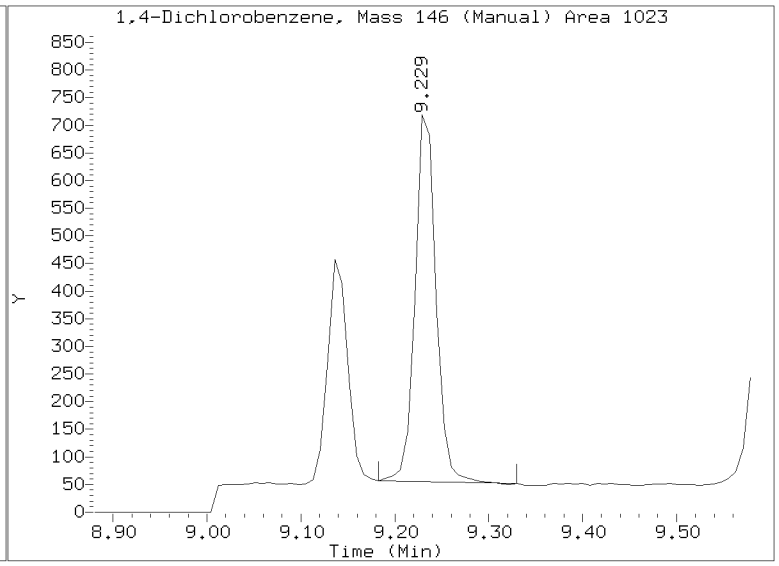
Exception: 1,2,4-Trichlorobenzene 0.0010

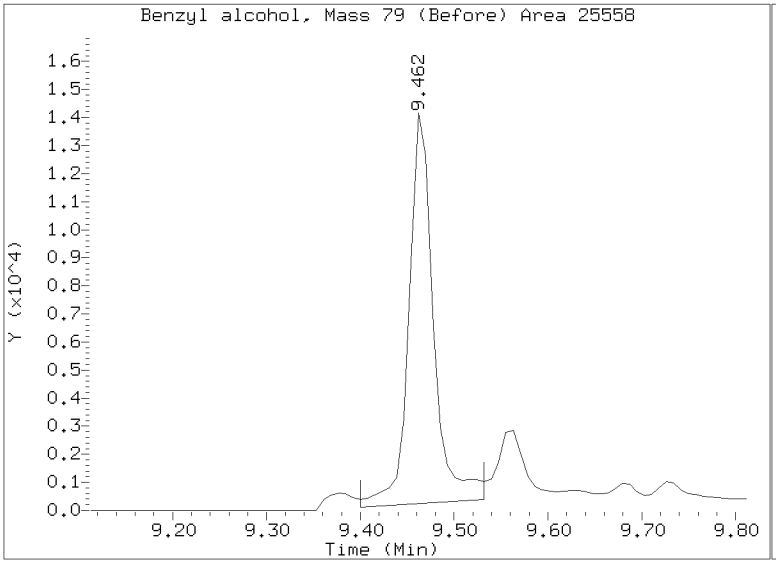
* Only compounds listed in the work order have been verified by the analyst *

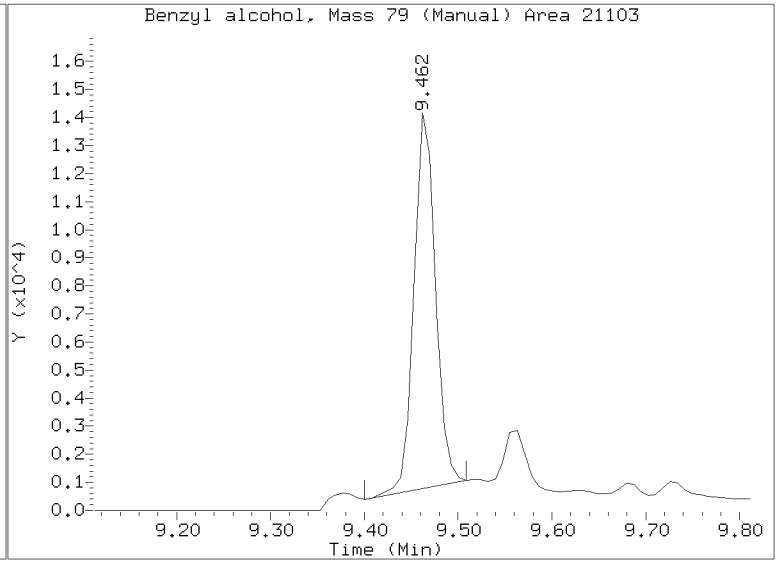
Quant Ion Manual Peak Adjustment Report

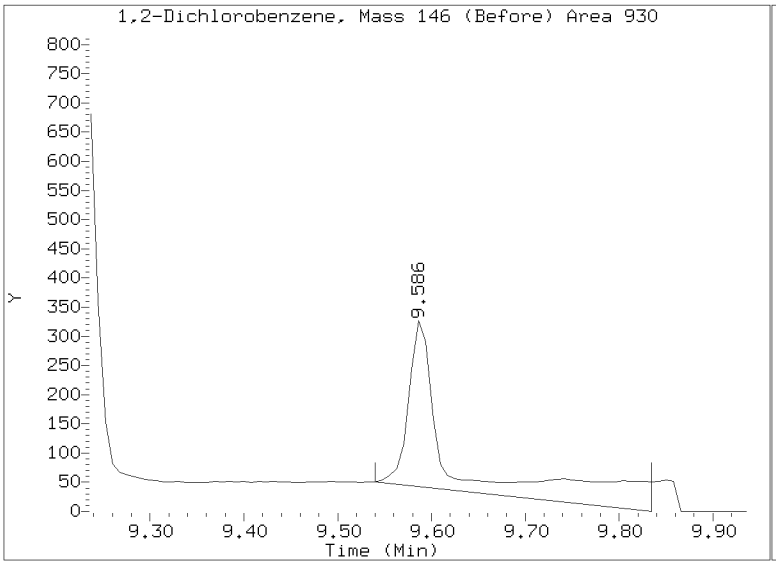
Datafile: //target/share/chem3/nt10.i/20230317.b/20230317.b/NT1003172310S.D
Injection Date: 18-MAR-2023 00:09
Lab ID:23A0420-01 Client ID:
Report Date: 03/30/2023 14:56

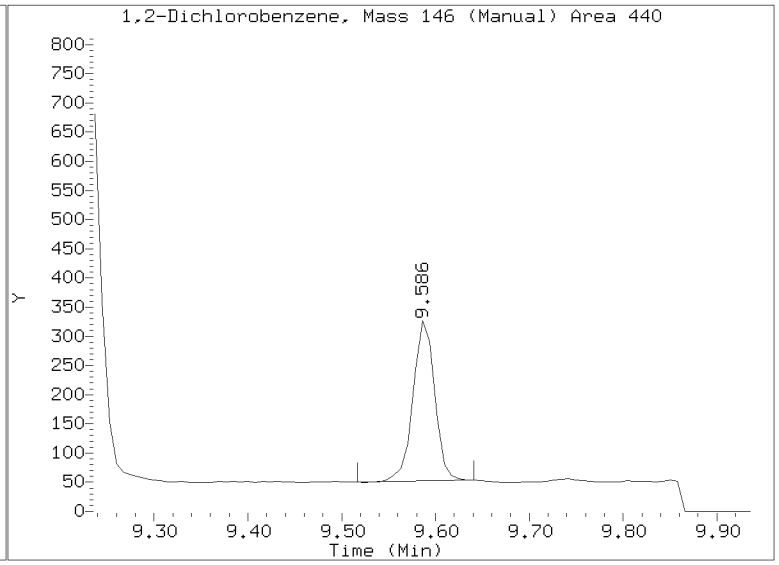












Quant Ion Manual Peak Adjustment Report

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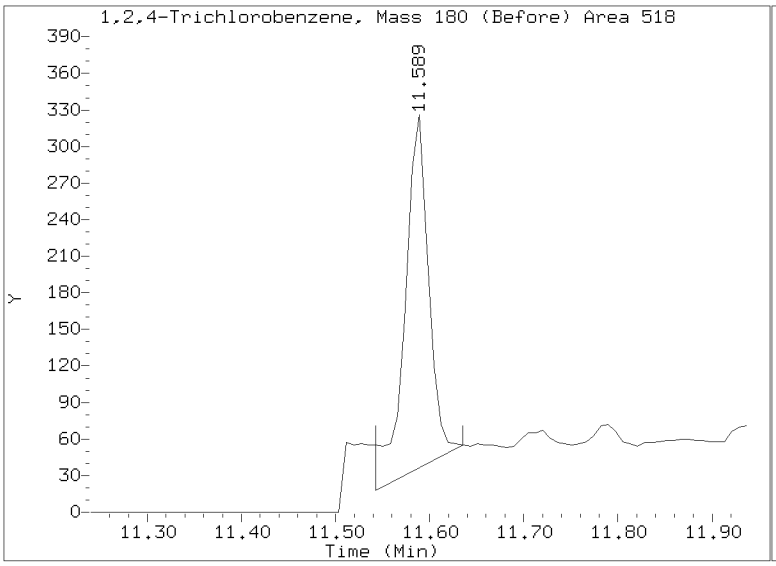
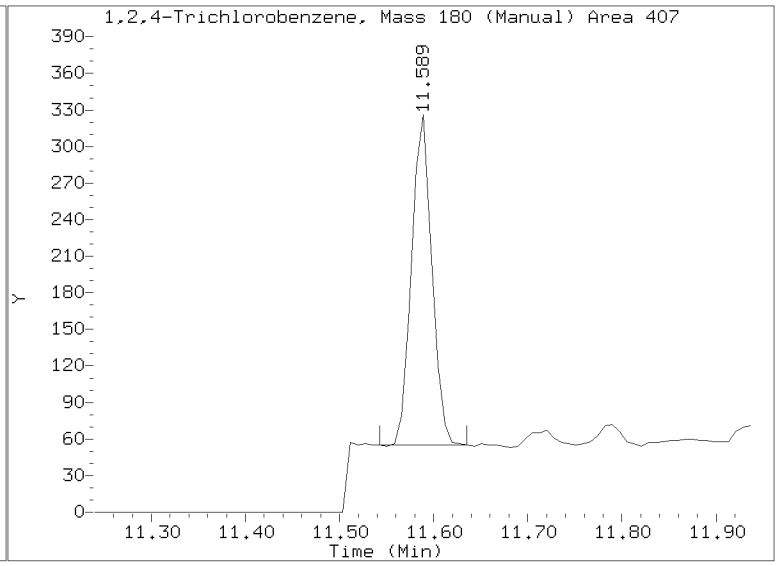
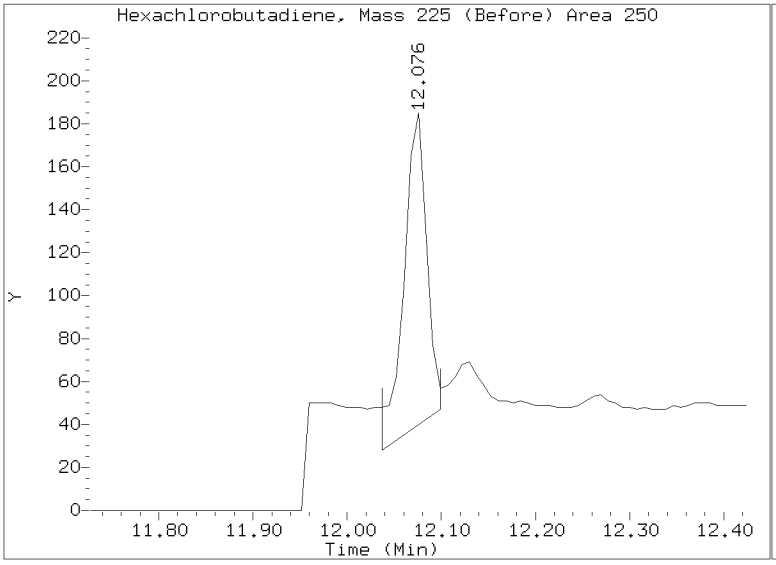
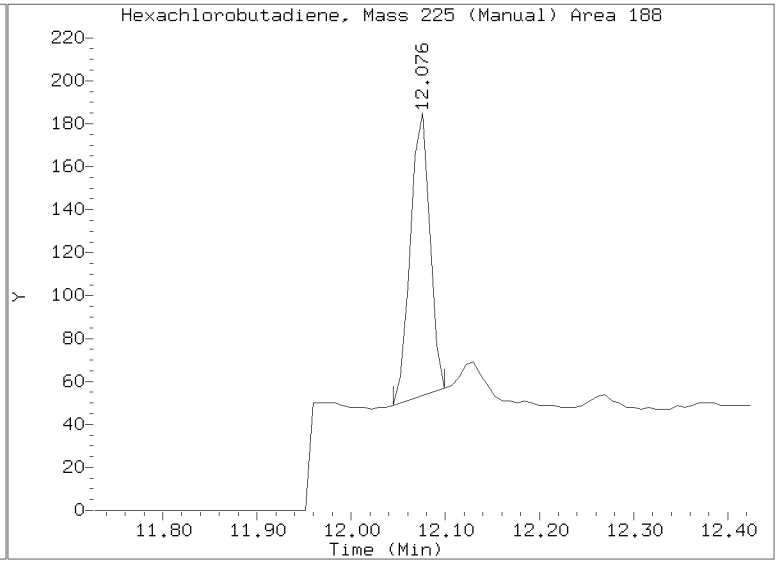
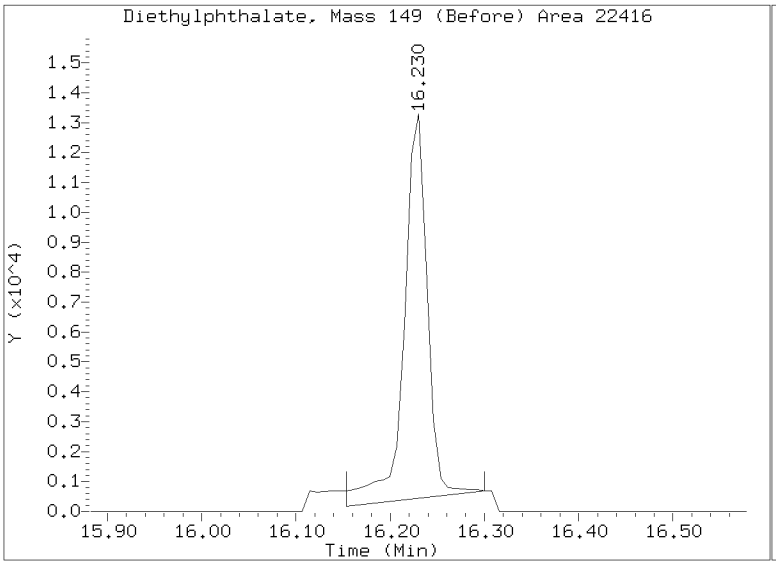
Injection Date: 18-MAR-2023 00:09
Lab ID:23A0420-01 Client ID:
Report Date: 03/30/2023 14:56

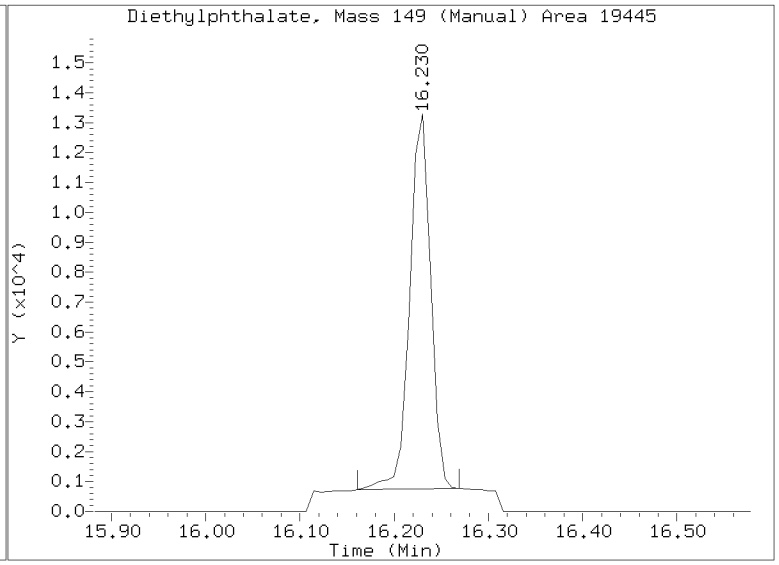






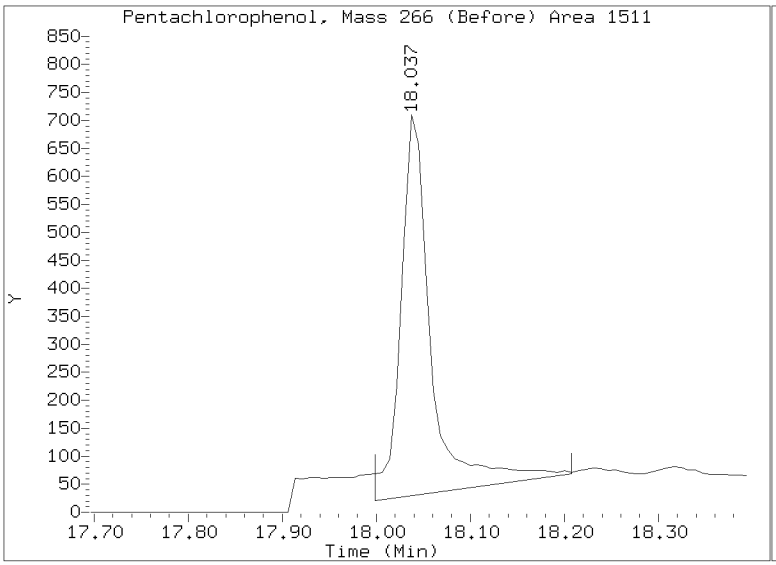


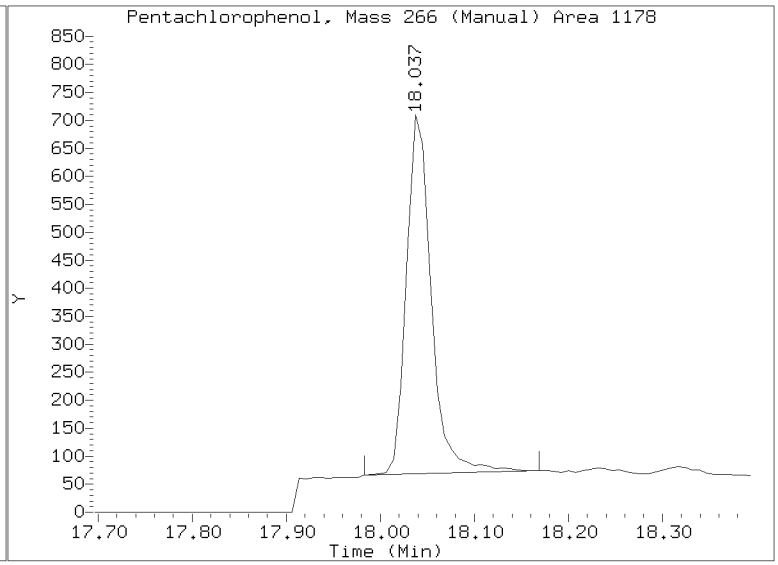




Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230317.b/20230317.b/NT1003172310S.D
Injection Date: 18-MAR-2023 00:09
Lab ID:23A0420-01 Client ID:
Report Date: 03/30/2023 14:56





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-IT1051

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

Polynuclear Aromatic Hydrocarbons

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-04 A	SDG:	23A0420
Sampled:	01/19/23 09:55	Prepared:	02/16/23 14:32	File ID:	N823022320.D
% Solids:	70.53	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/23/23 20:05
Batch:	BLB0386	Sequence:	SLB0310	Initial/Final:	14.2 g Wet / 0.5 mL
Instrument:	NT8	Column:	RXI-17Sil ms	Calibration:	GA00050
Cleanups:	GPC, Silica Gel				

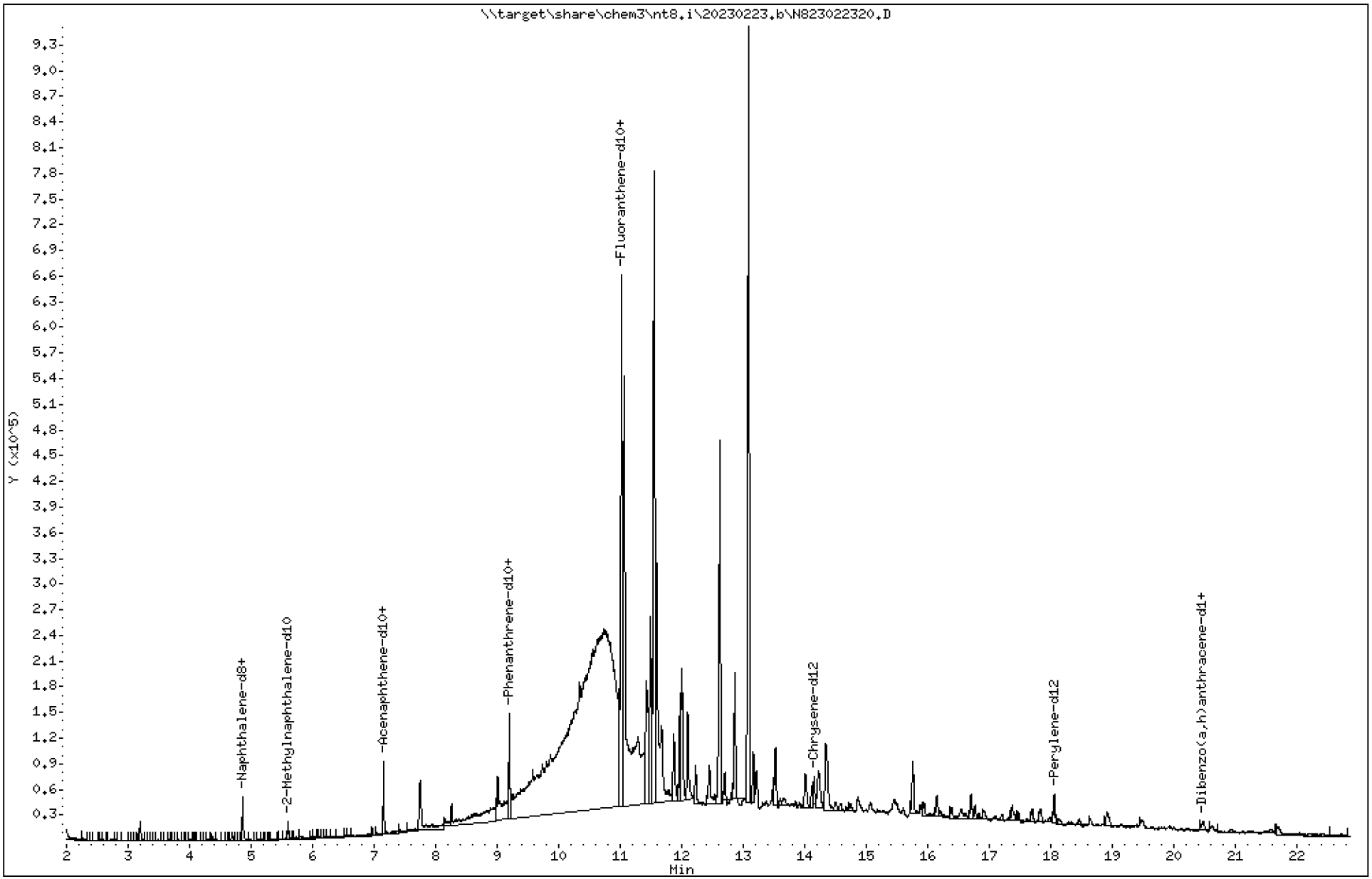
CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
56-55-3	Benzo(a)anthracene	3	100	D	2.47	15.0
218-01-9	Chrysene	3	138	D	3.15	15.0
205-99-2	Benzo(b)fluoranthene	3	126	D	4.11	15.0
207-08-9	Benzo(k)fluoranthene	3	66.5	D	2.28	15.0
50-32-8	Benzo(a)pyrene	3	89.2	D	1.84	15.0
193-39-5	Indeno(1,2,3-cd)pyrene	3	64.2	D	3.15	15.0
53-70-3	Dibenzo(a,h)anthracene	3	17.7	D	2.67	15.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Methylnaphthalene-d10	149.77	97.0	64.7	32 - 120	
Dibenzo[a,h]anthracene-d14	149.77	115	76.6	21 - 133	
Fluoranthene-d10	149.77	99.5	66.4	36 - 134	

Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D
Date : 23-FEB-2023 20:05
Client ID:
Sample Info: 23A0420-04,3

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



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Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

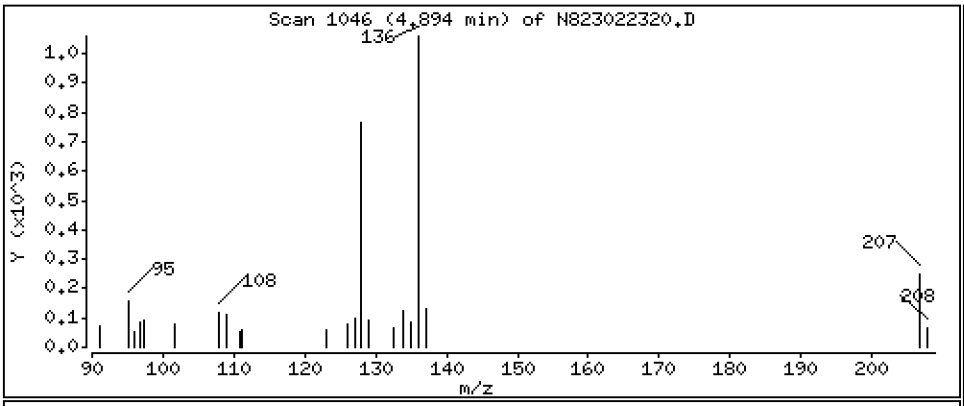
Operator: JZ

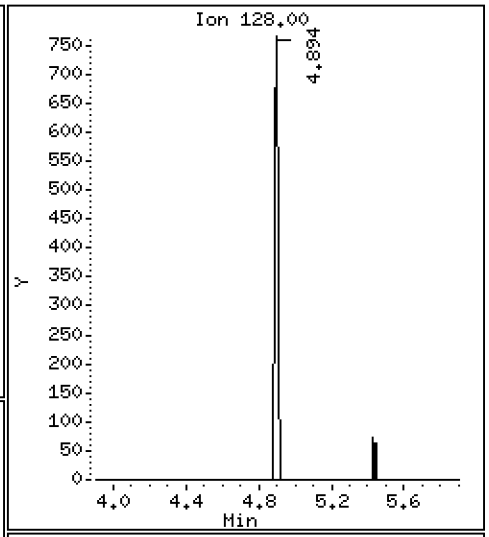
Column phase: Rxi-17sil

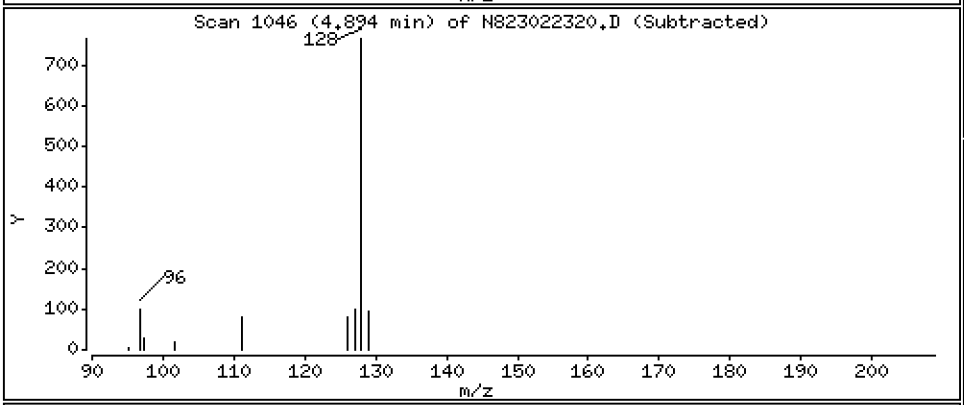
Column diameter: 0.25

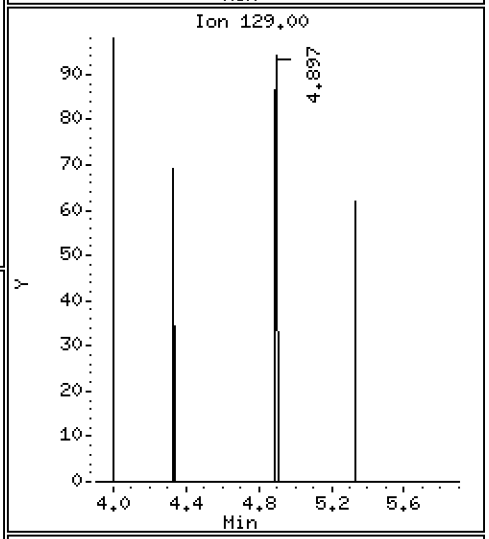
2 Naphthalene

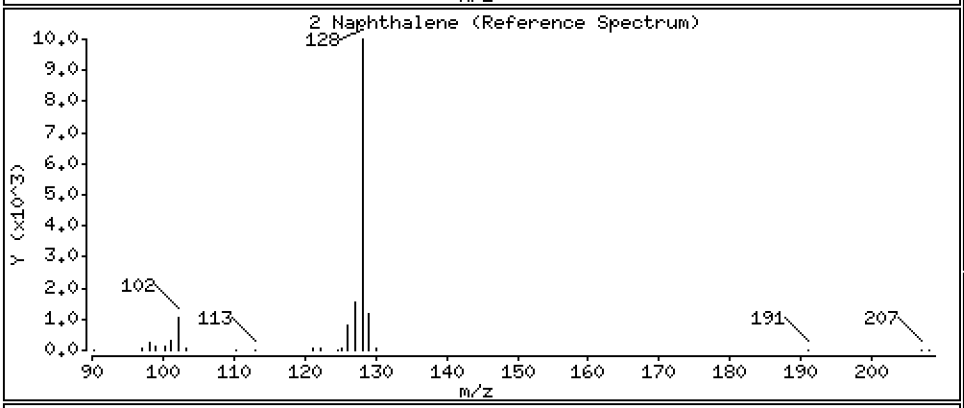
Concentration: 0.1466 ug/mL

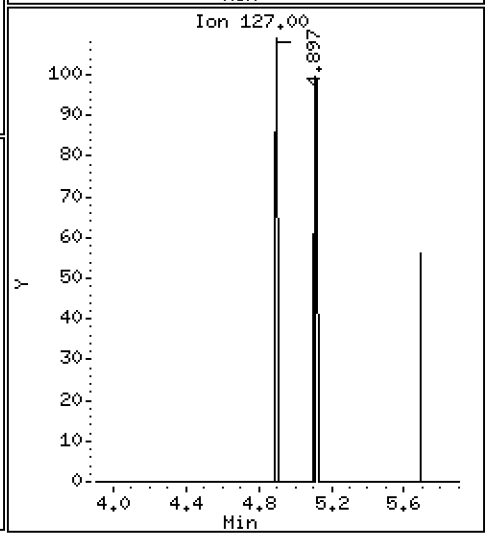


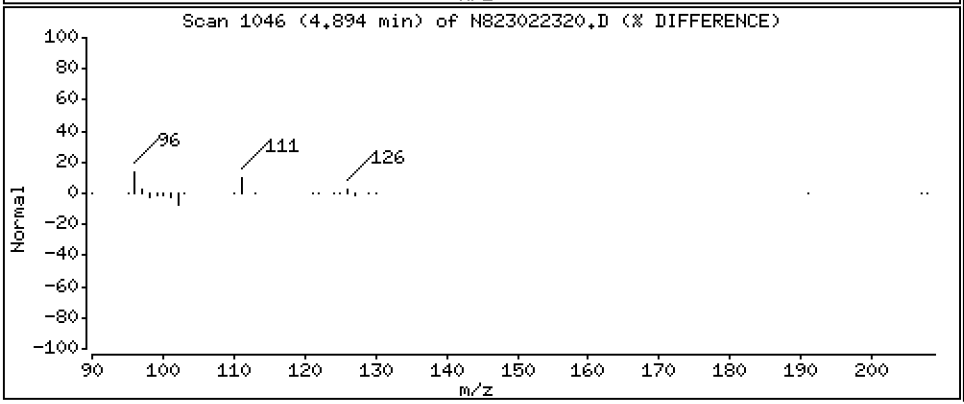












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

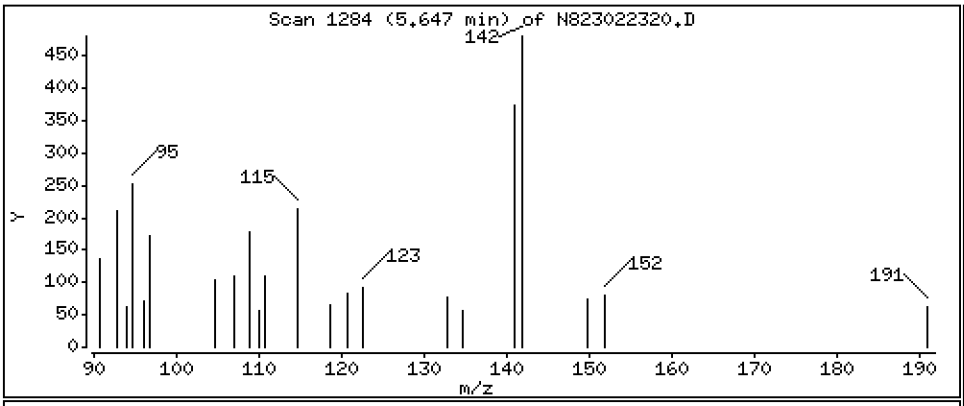
Operator: JZ

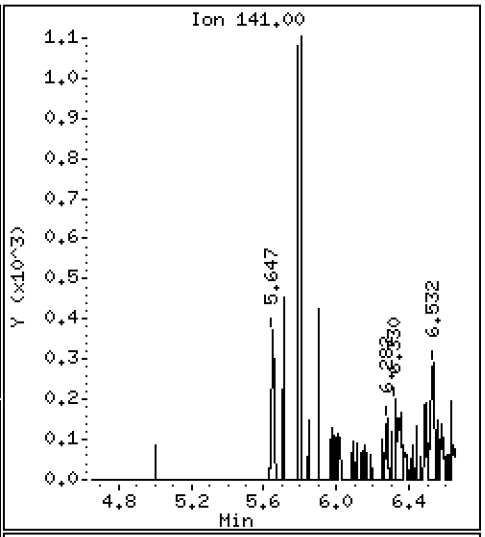
Column phase: Rxi-17sil

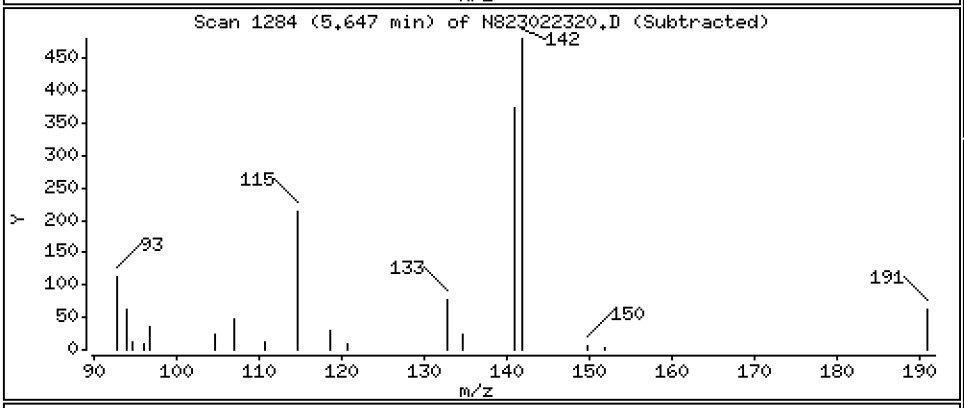
Column diameter: 0.25

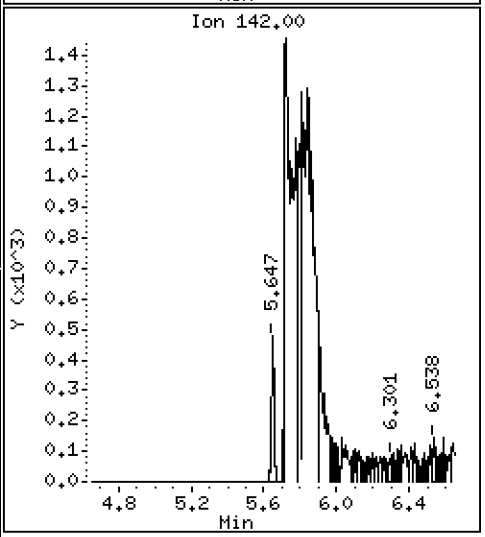
4 2-Methylnaphthalene

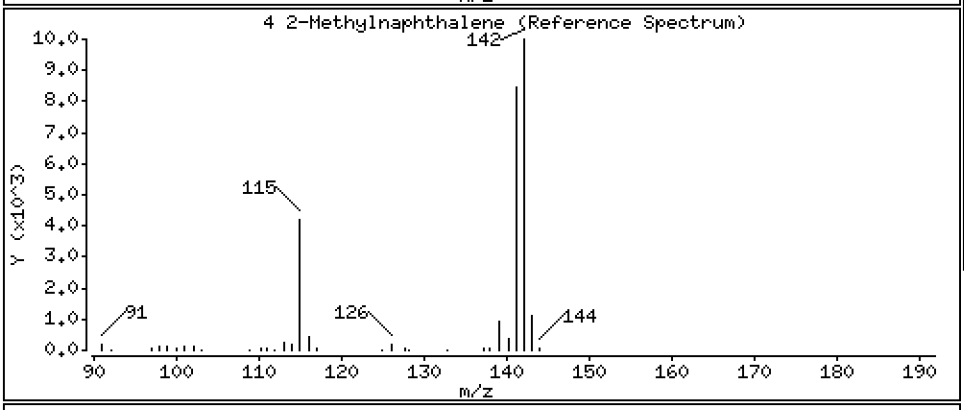
Concentration: 0.1126 ug/mL

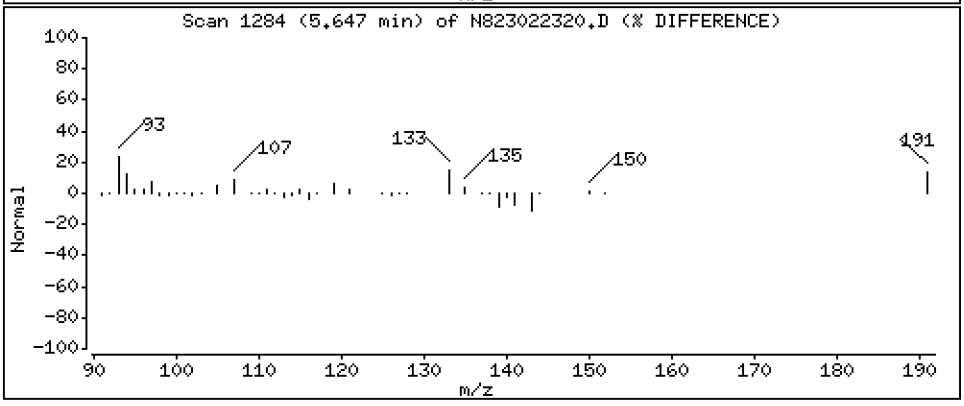












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

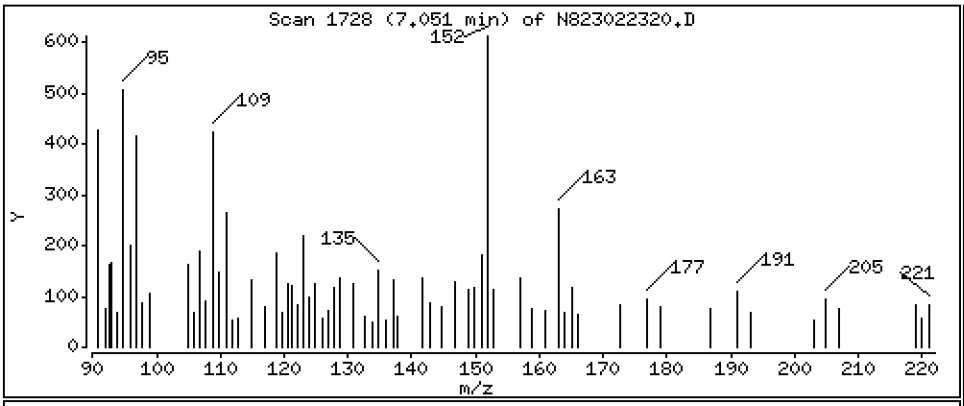
Operator: JZ

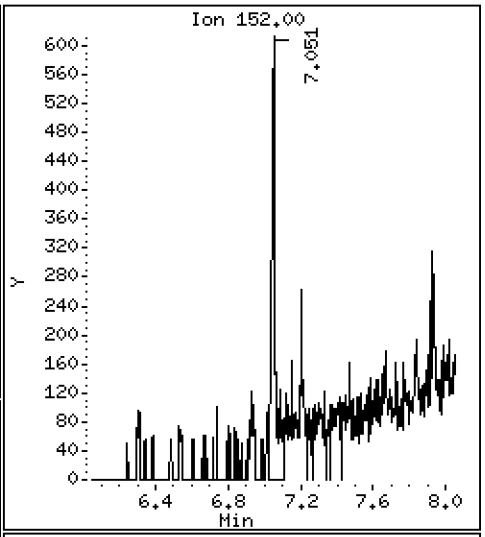
Column phase: Rxi-17sil

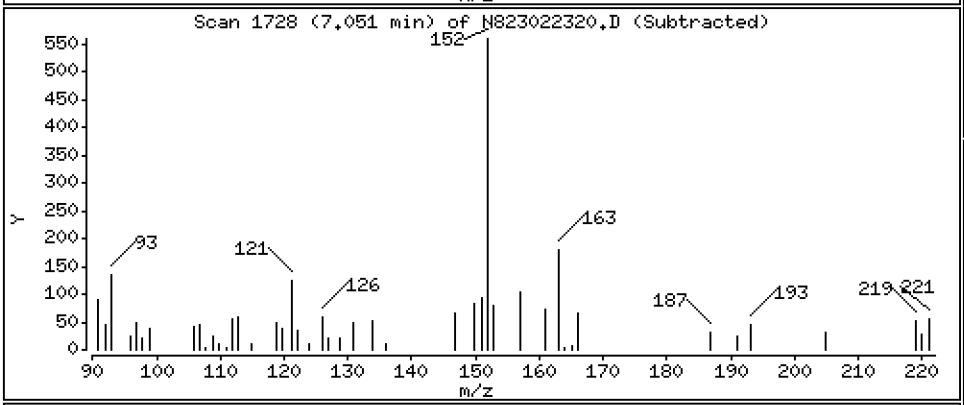
Column diameter: 0.25

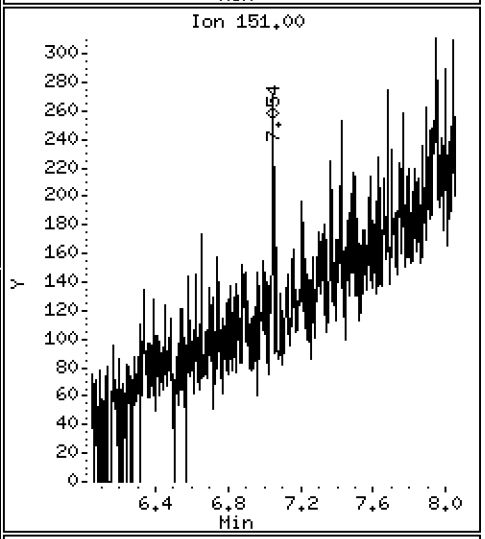
9 Acenaphthylene

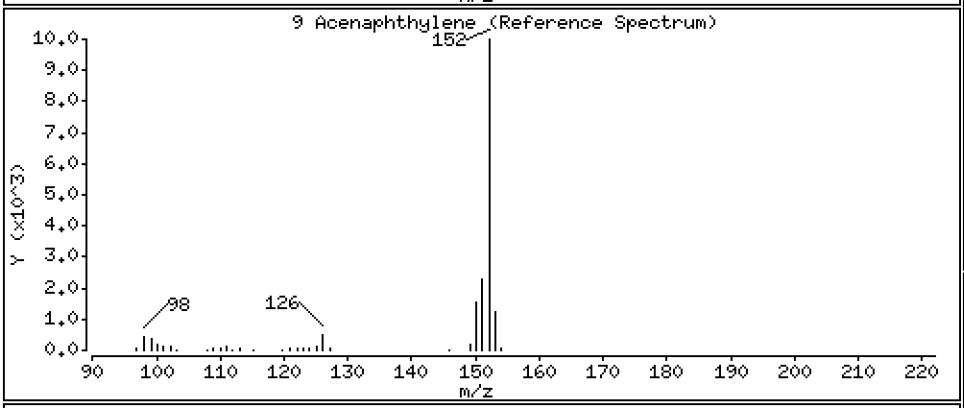
Concentration: 0.1403 ug/mL

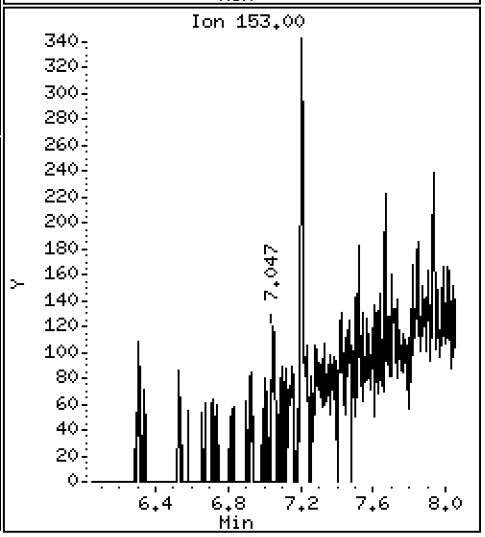


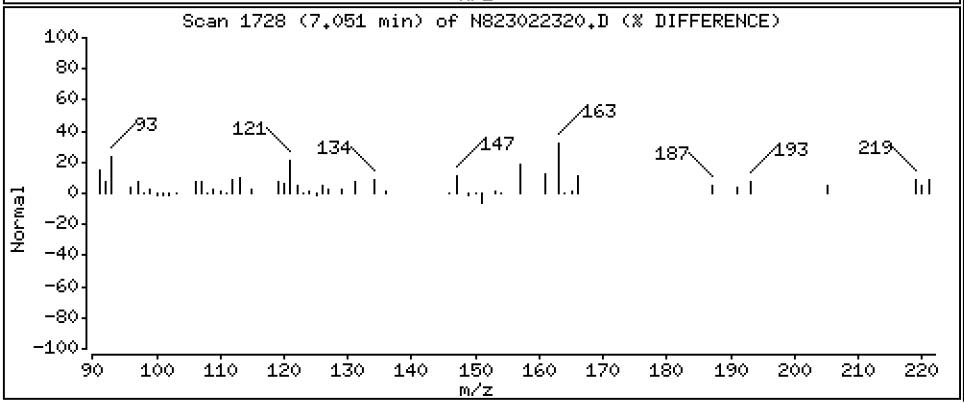












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Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

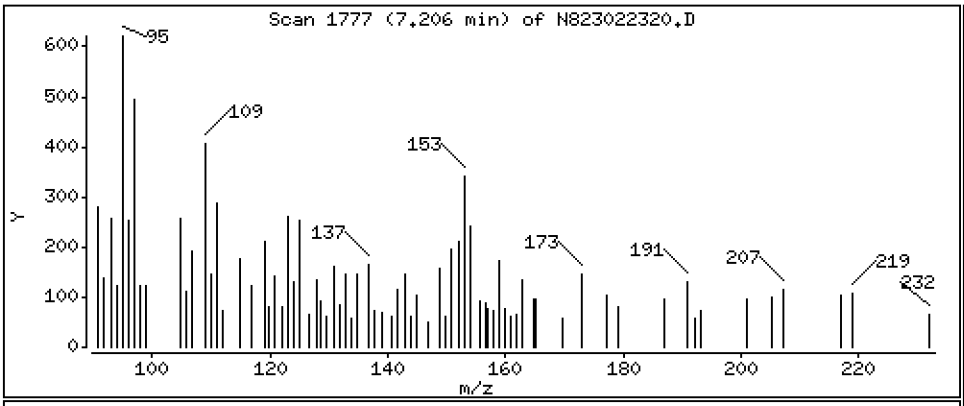
Operator: JZ

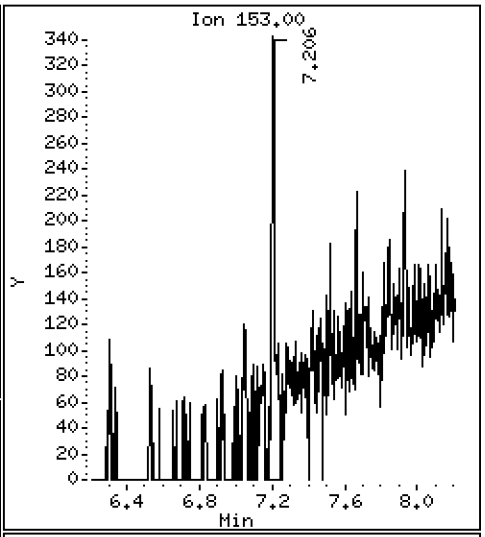
Column phase: Rxi-17sil

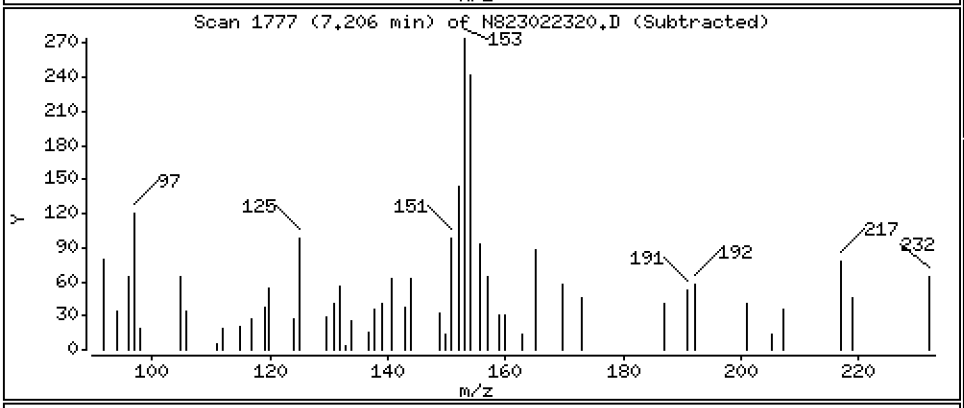
Column diameter: 0.25

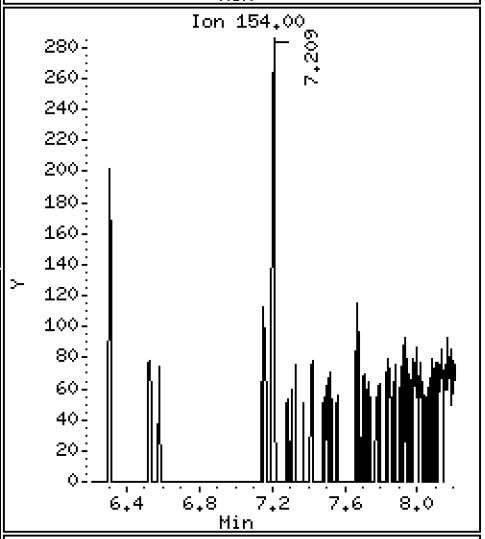
11 Acenaphthene

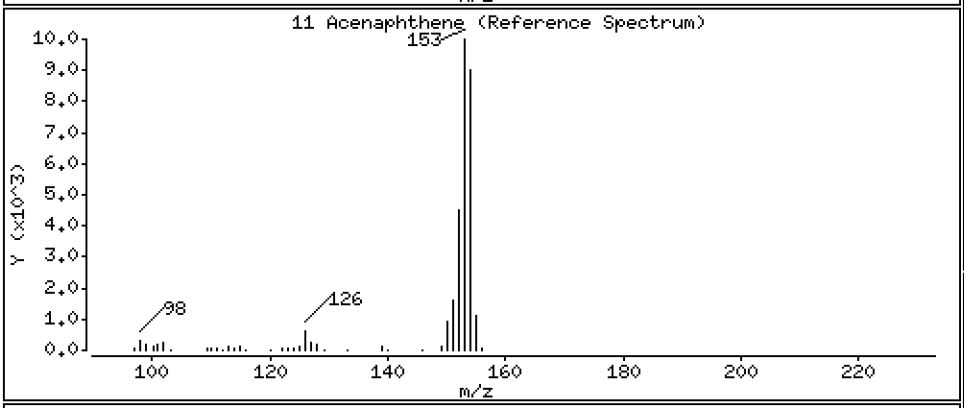
Concentration: 0.1251 ug/mL

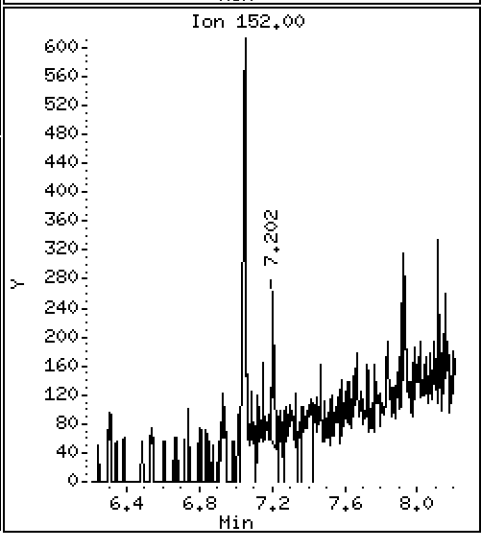


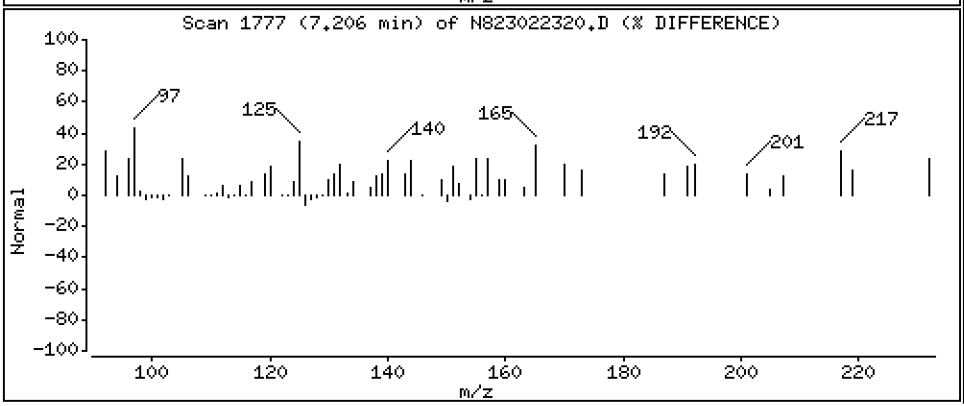












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

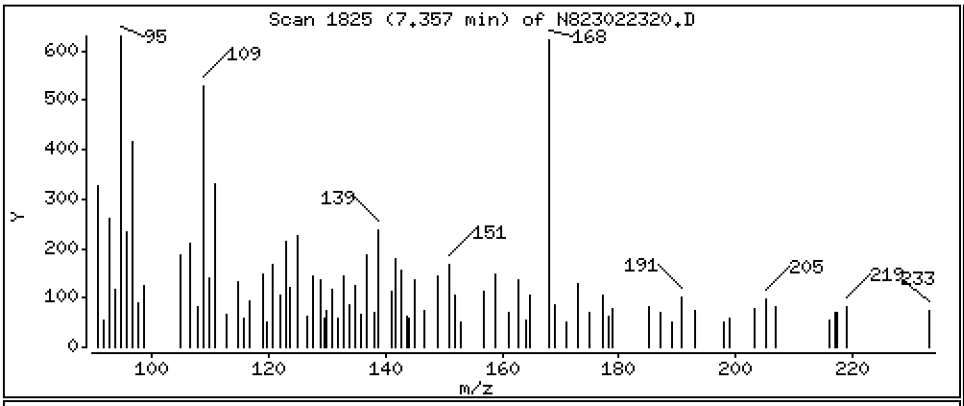
Operator: JZ

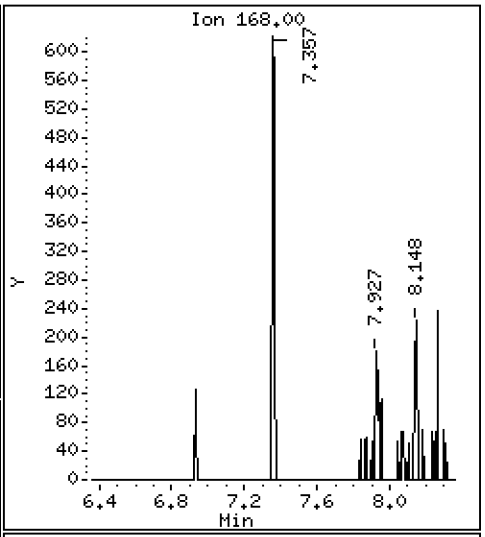
Column phase: Rxi-17sil

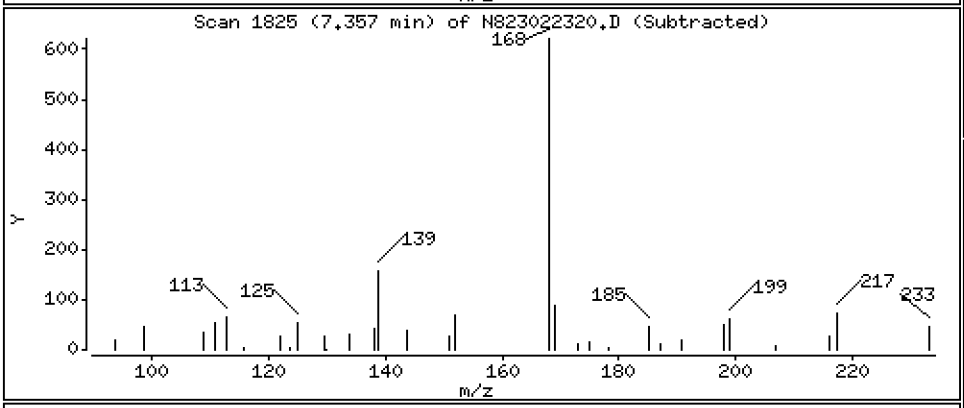
Column diameter: 0.25

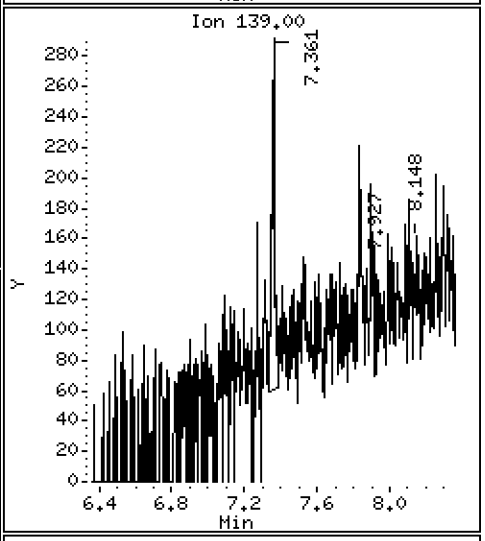
12 Dibenzofuran

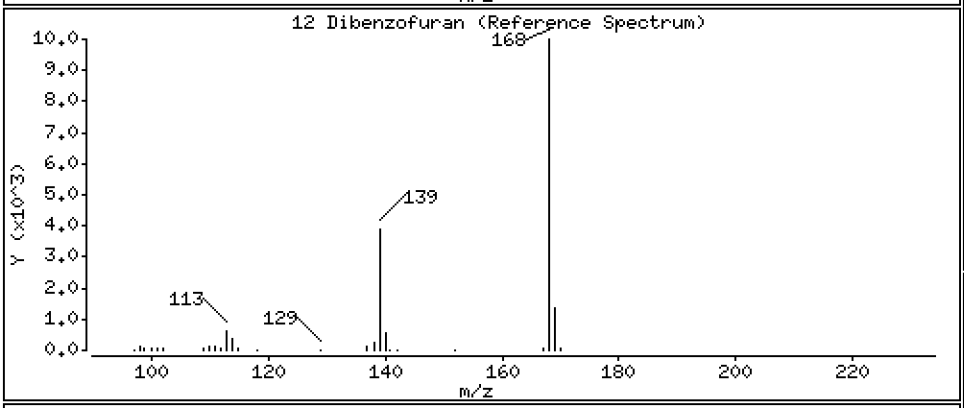
Concentration: 0.09031 ug/mL

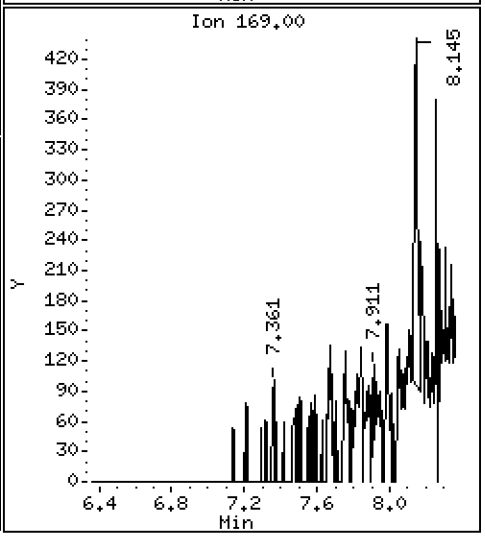


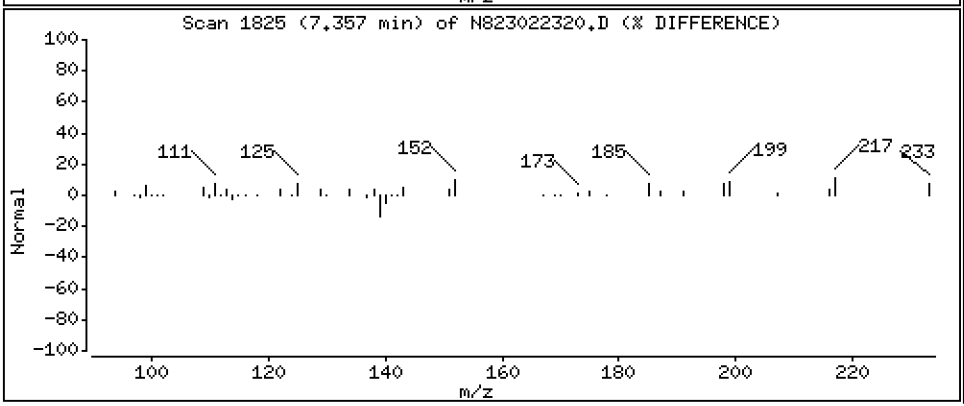












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Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

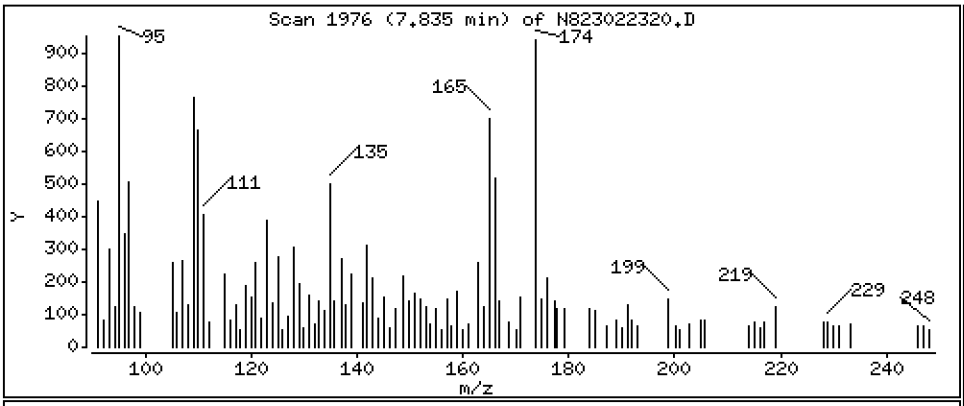
Operator: JZ

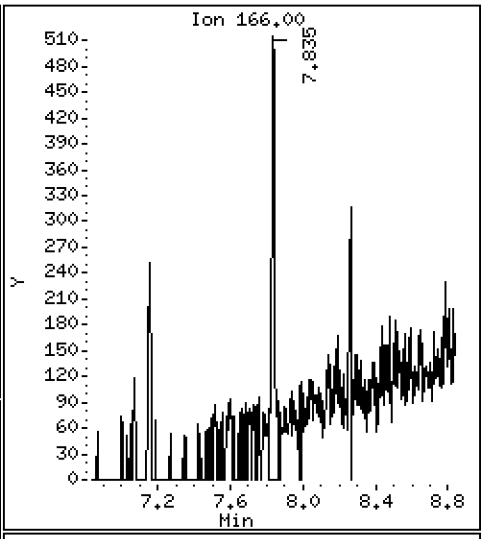
Column phase: Rxi-17sil

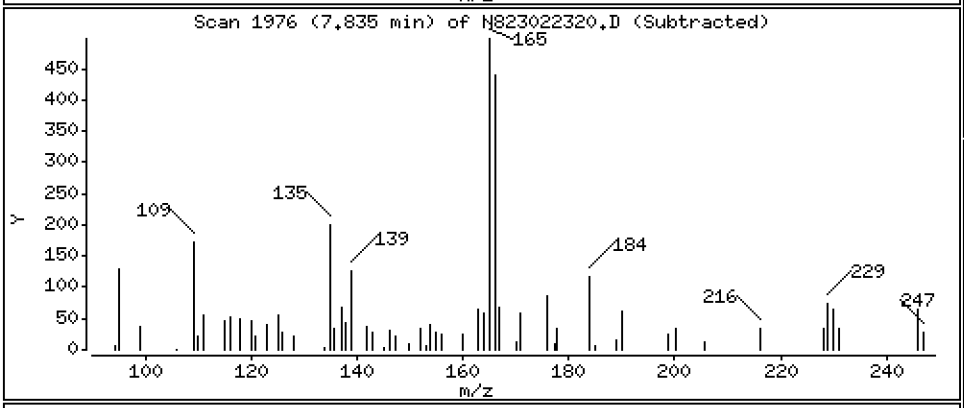
Column diameter: 0.25

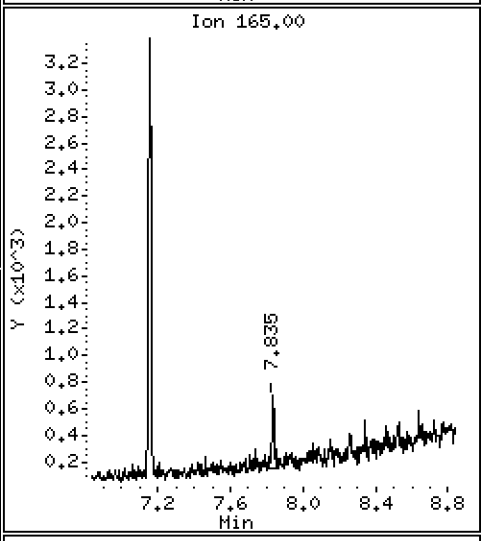
14 Fluorene

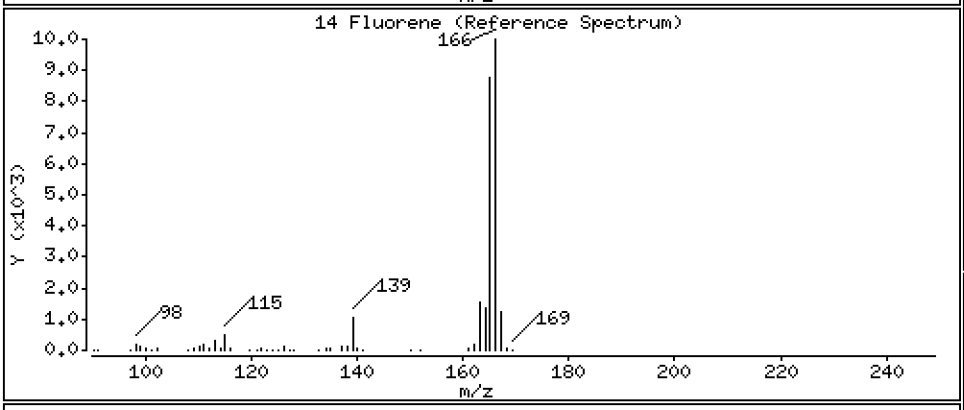
Concentration: 0.1269 ug/mL

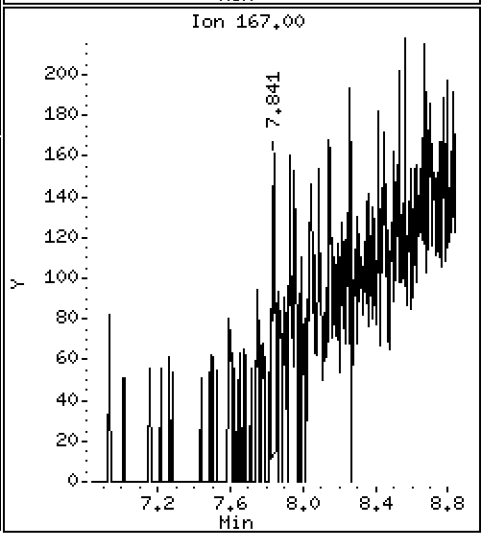


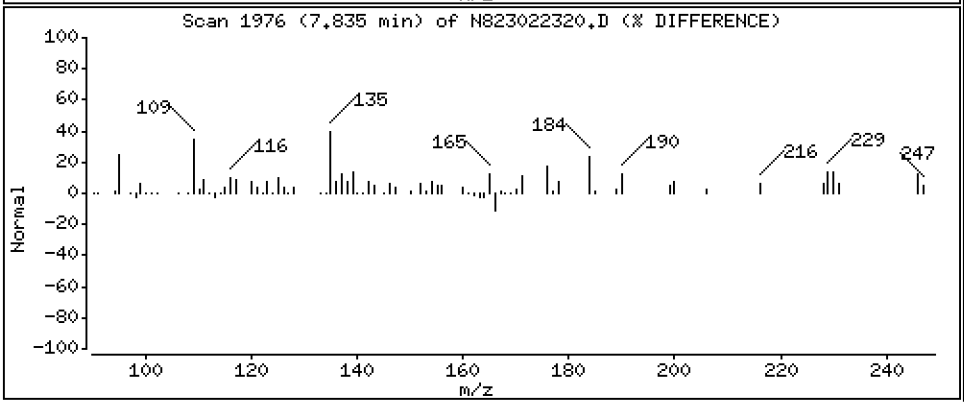












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Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

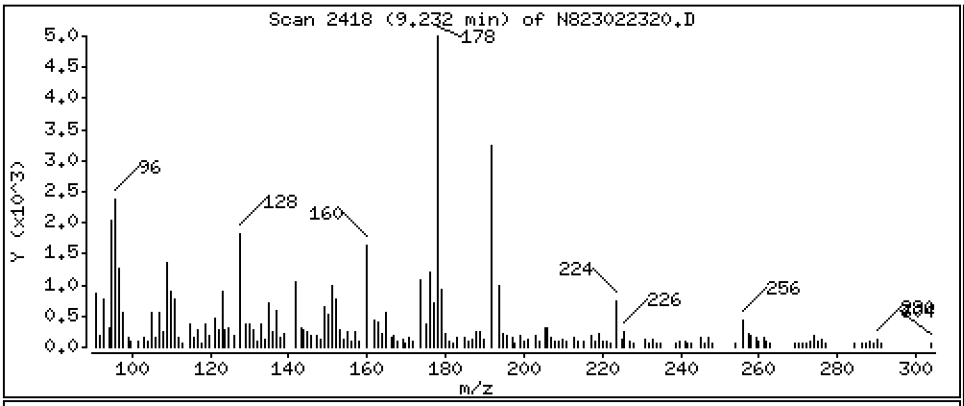
Operator: JZ

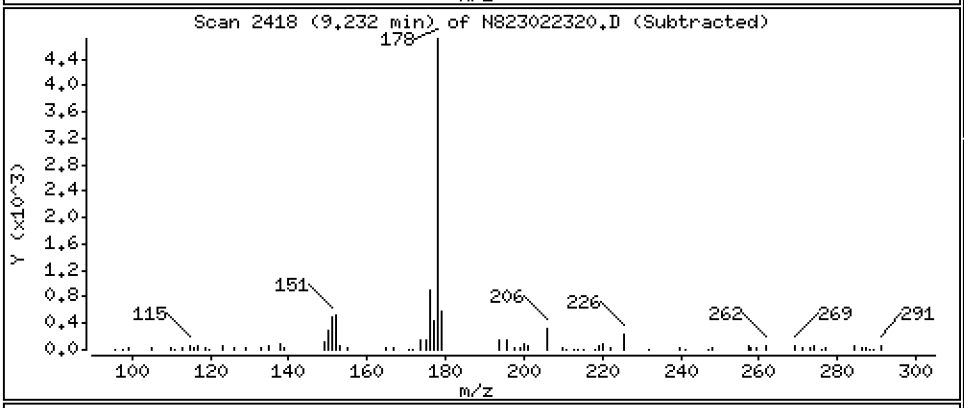
Column phase: Rxi-17sil

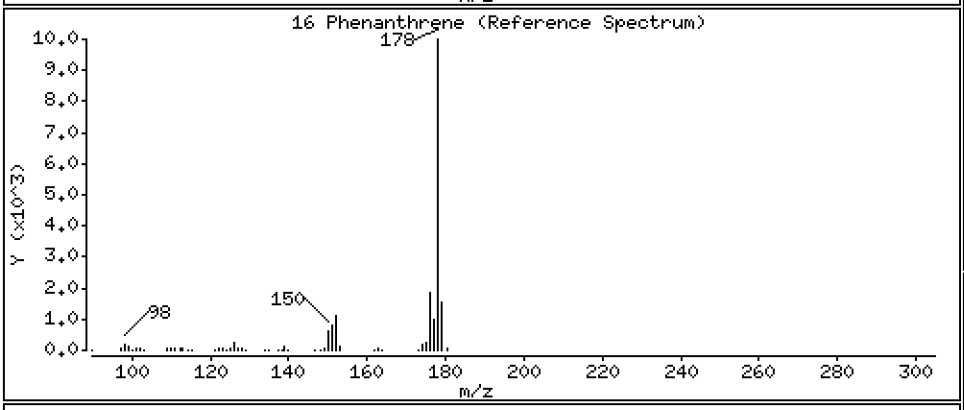
Column diameter: 0.25

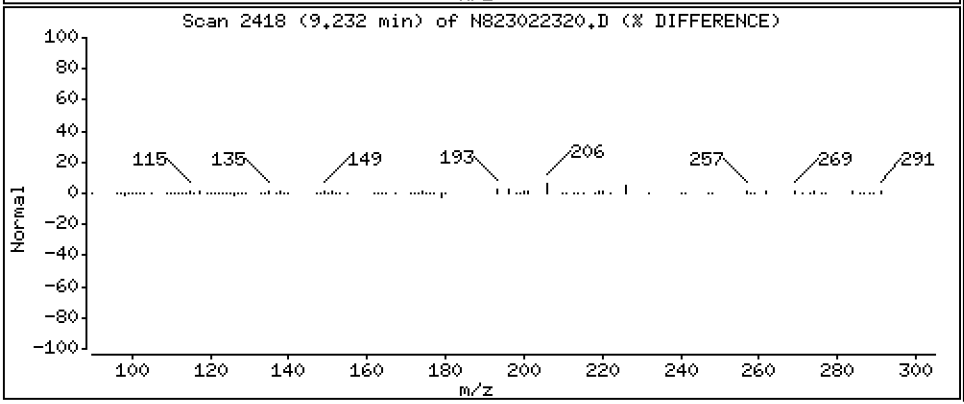
16 Phenanthrene

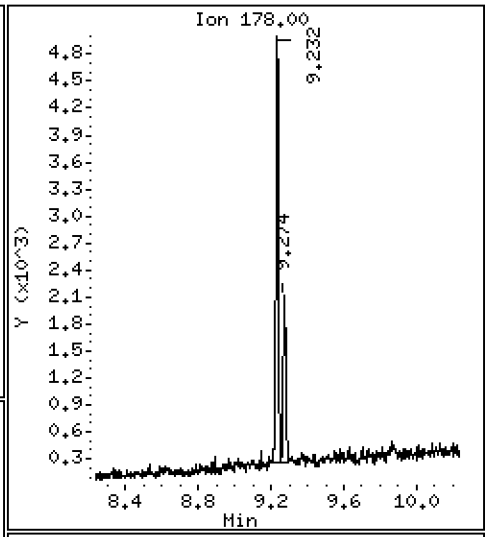
Concentration: 0.5940 ug/mL

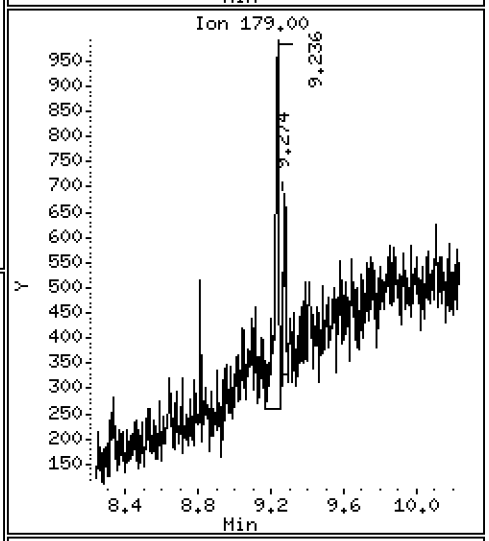


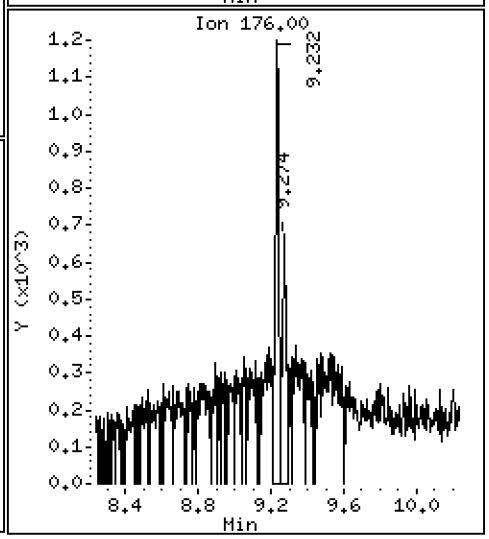












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

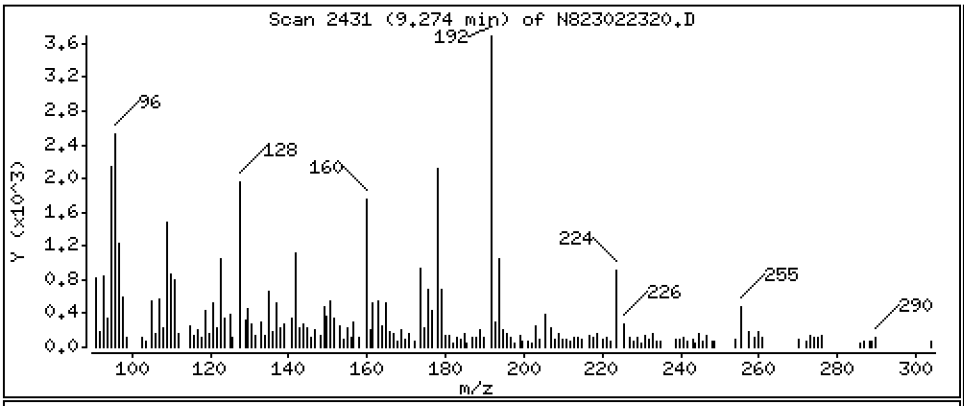
Operator: JZ

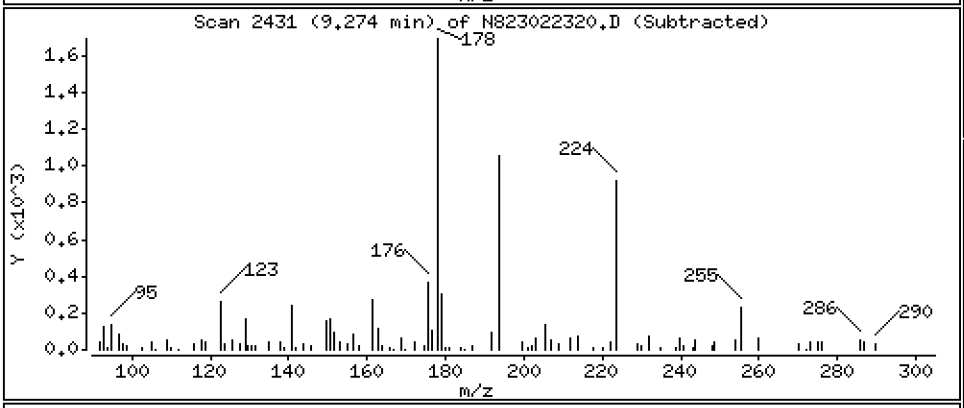
Column phase: Rxi-17sil

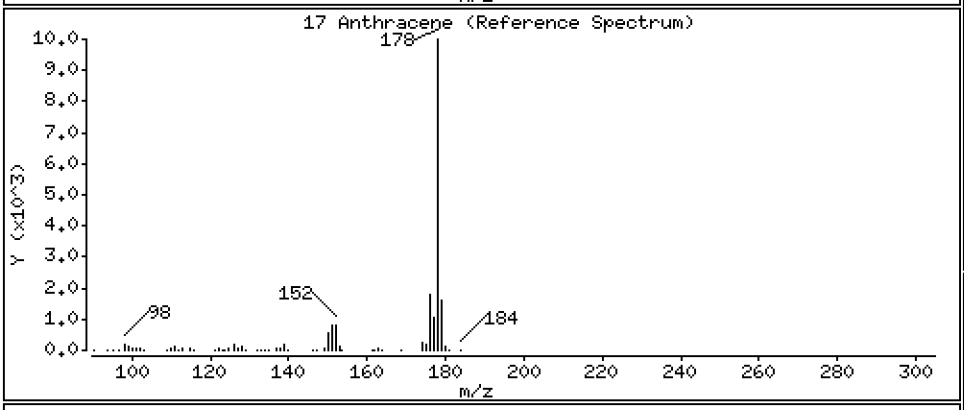
Column diameter: 0.25

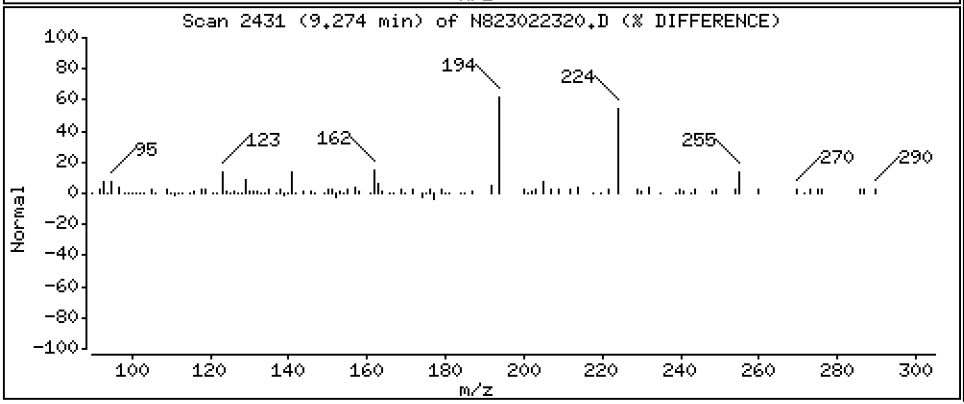
17 Anthracene

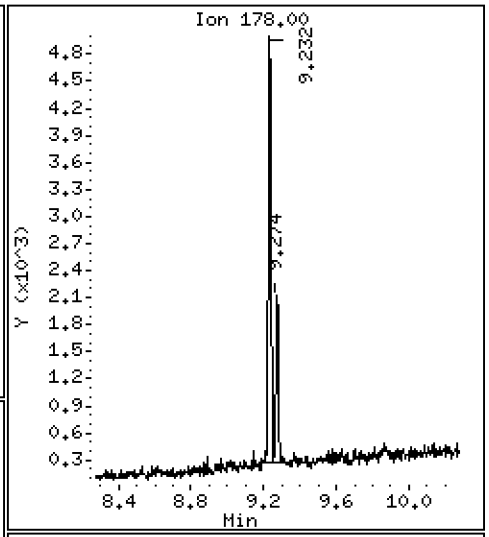
Concentration: 0.2597 ug/mL

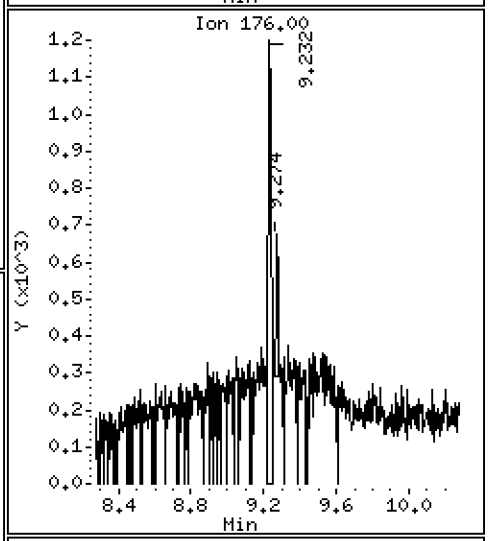


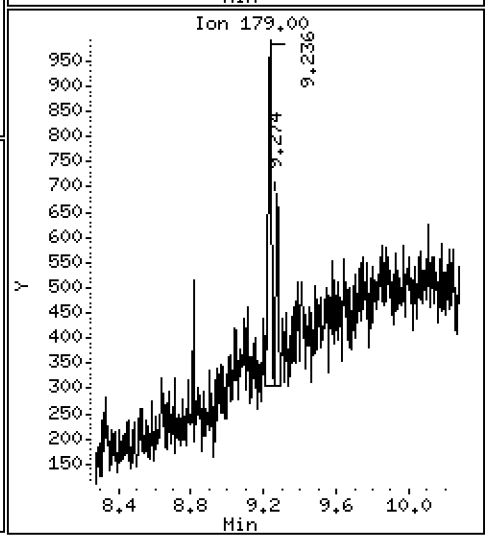












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

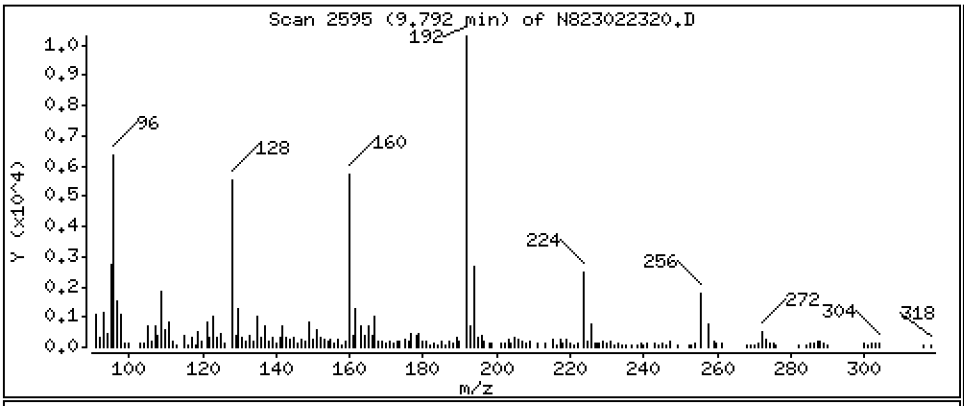
Operator: JZ

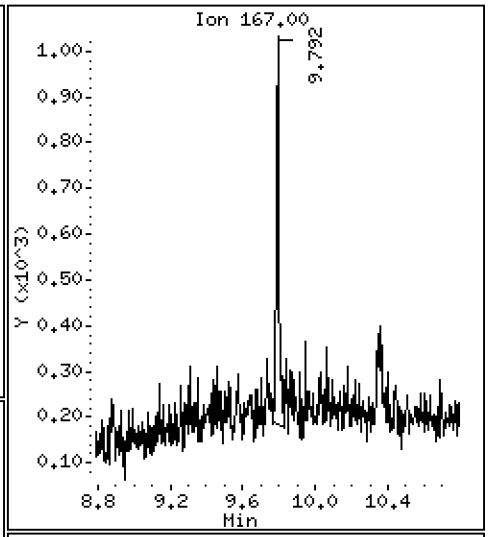
Column phase: Rxi-17sil

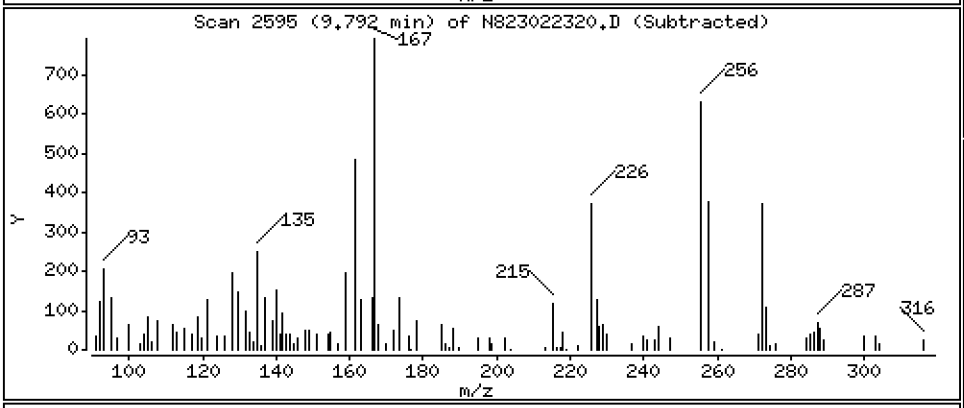
Column diameter: 0.25

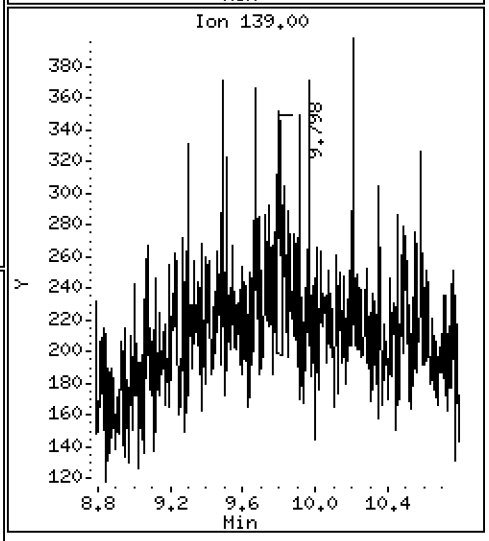
19 Carbazole

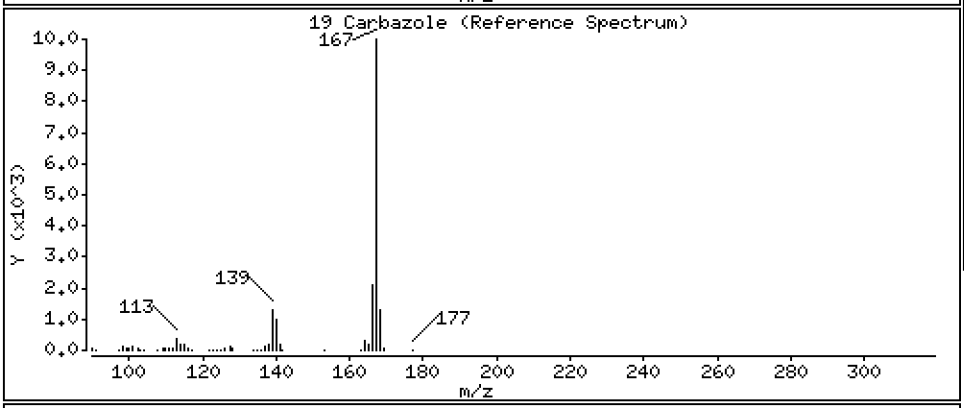
Concentration: 0.1375 ug/mL

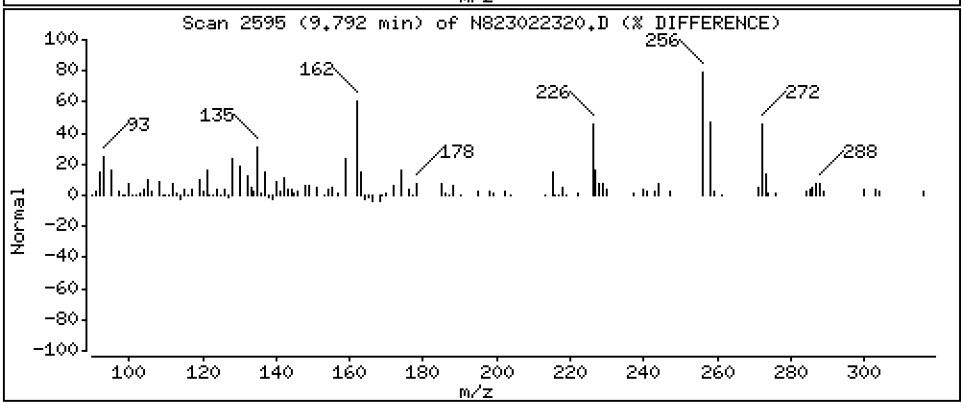












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

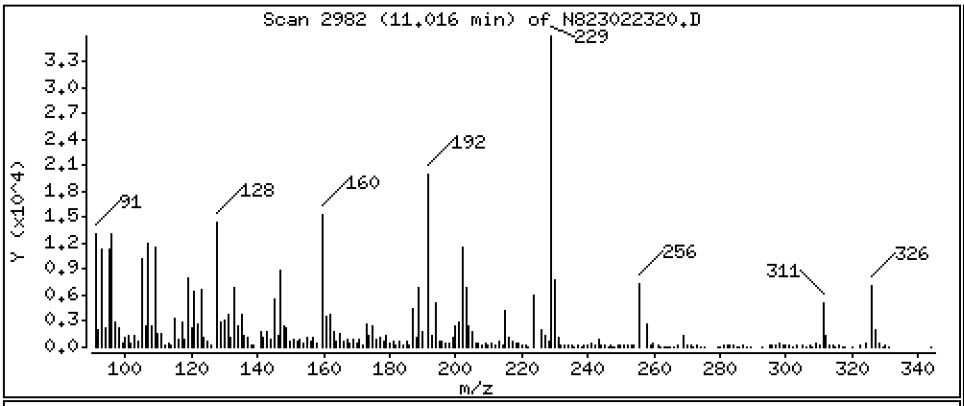
Operator: JZ

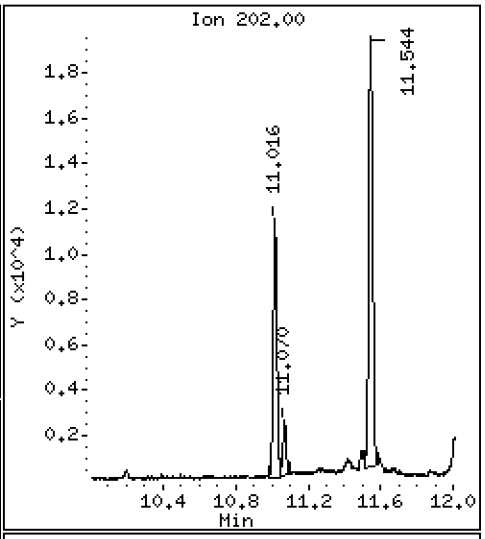
Column phase: Rxi-17sil

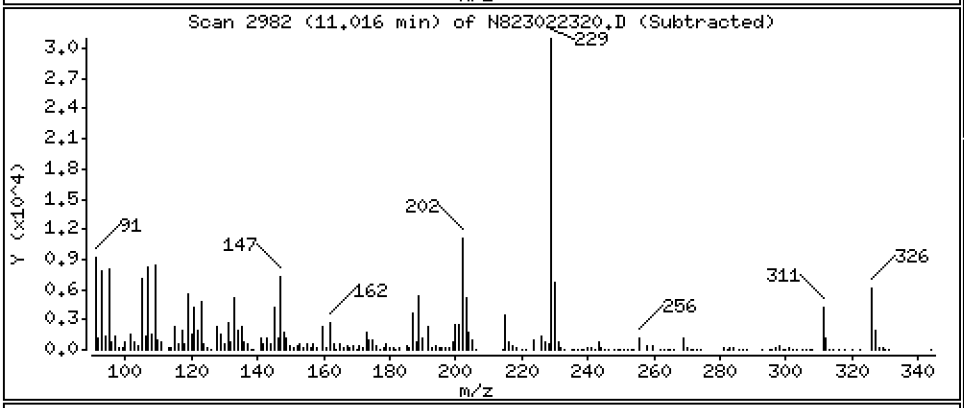
Column diameter: 0.25

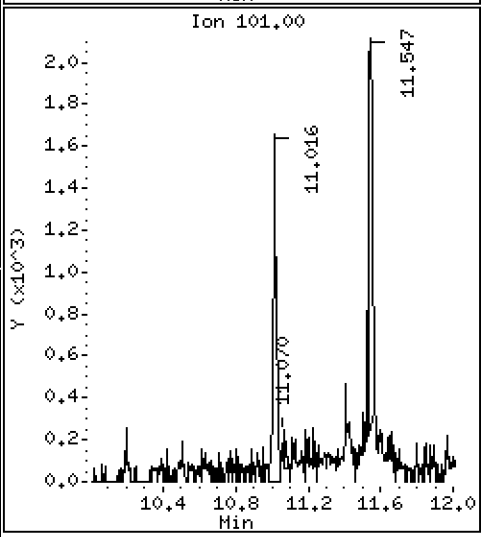
22 Fluoranthene

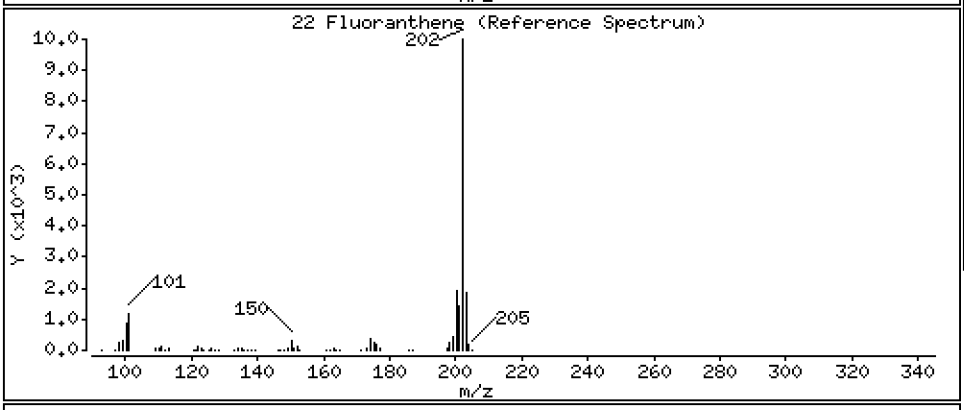
Concentration: 2.072 ug/mL

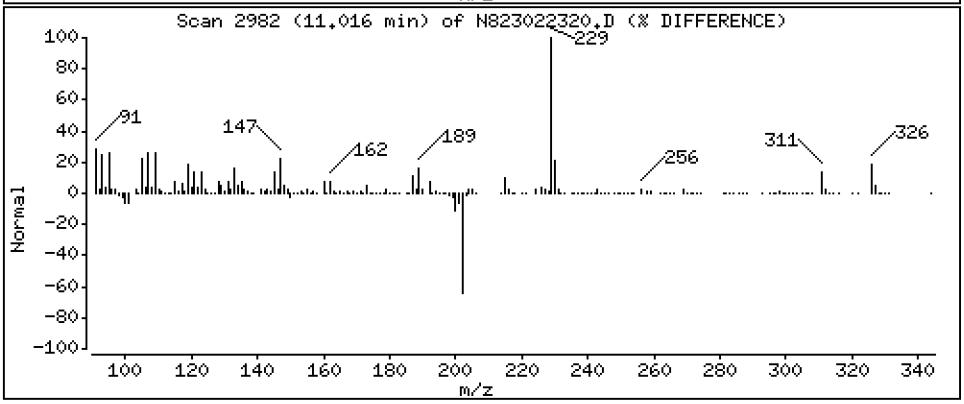












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

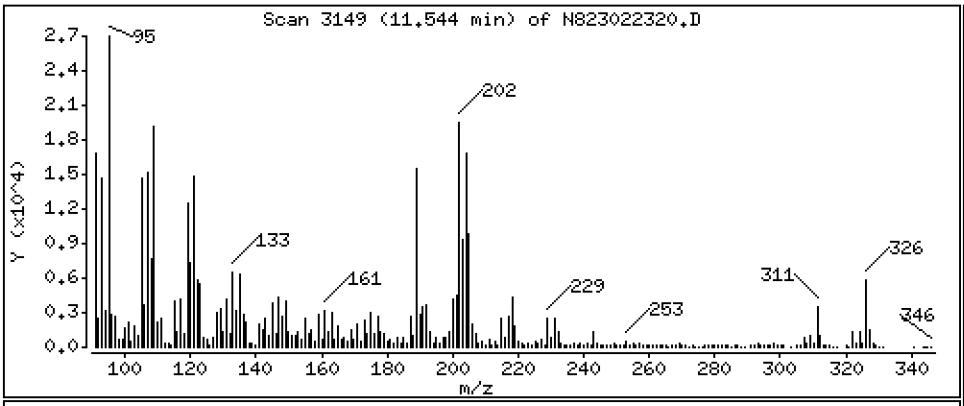
Operator: JZ

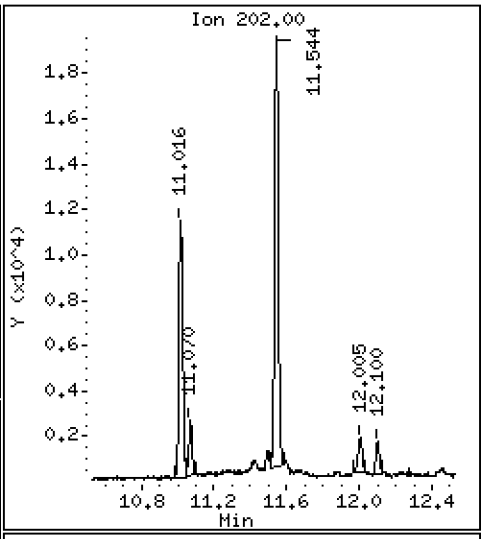
Column phase: Rxi-17sil

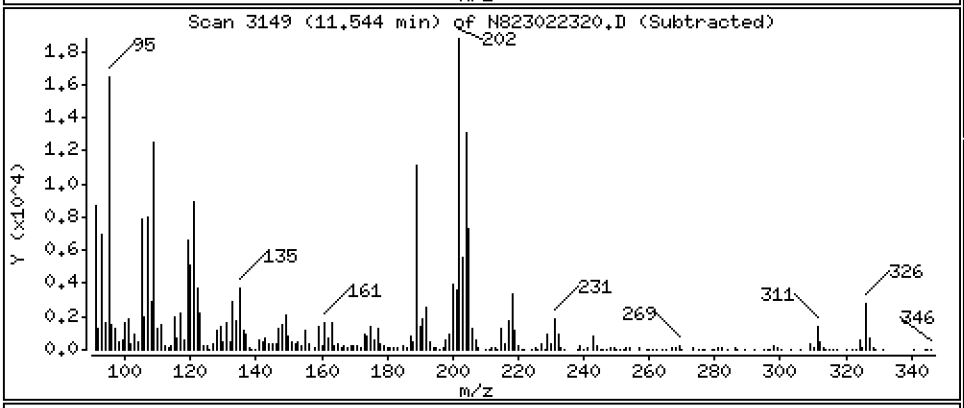
Column diameter: 0.25

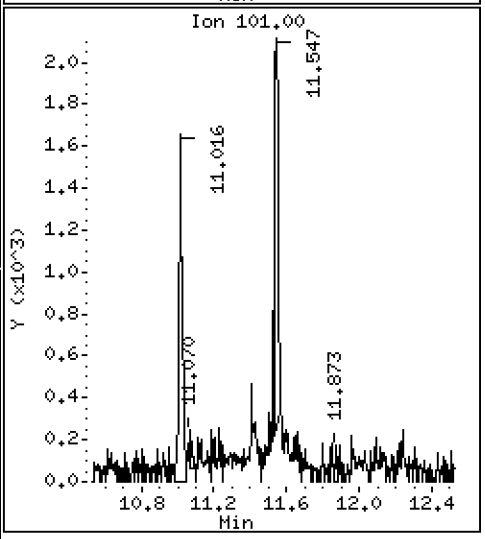
23 Pyrene

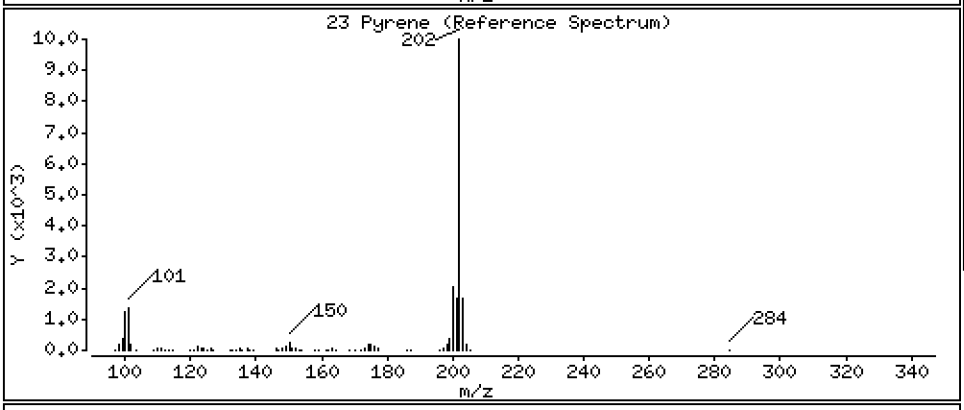
Concentration: 5.769 ug/mL

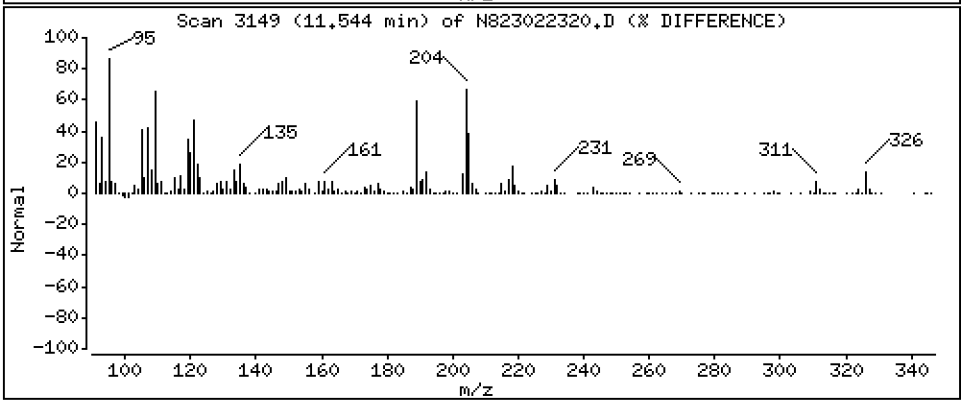












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

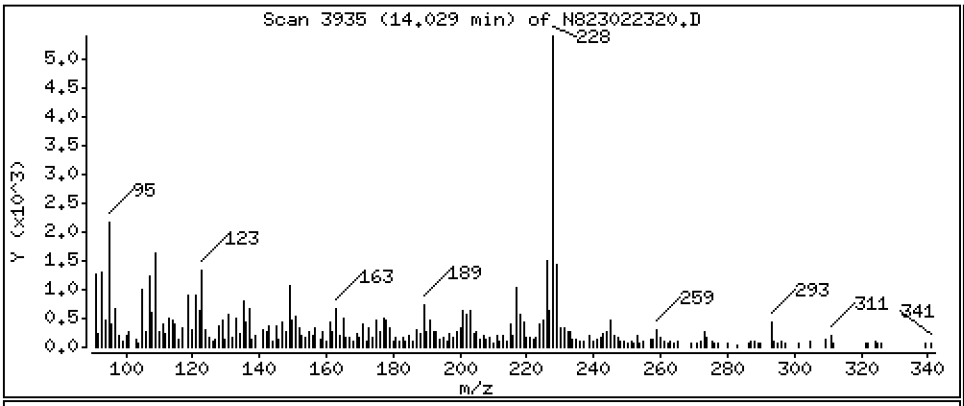
Operator: JZ

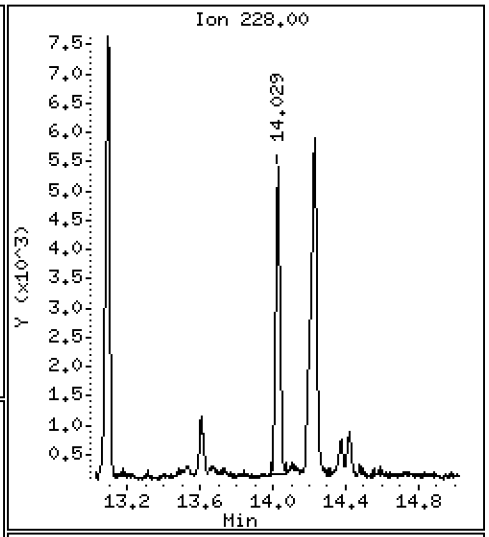
Column phase: Rxi-17sil

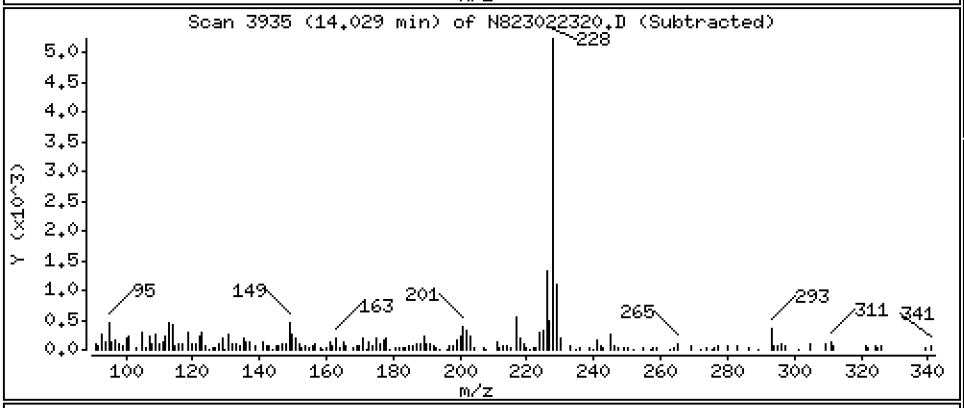
Column diameter: 0.25

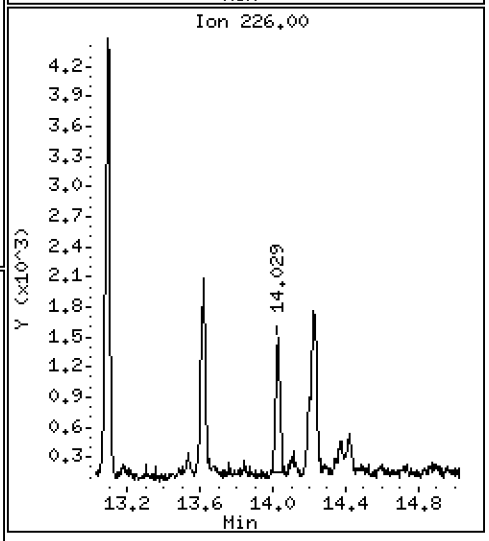
24 Benzo(a)anthracene

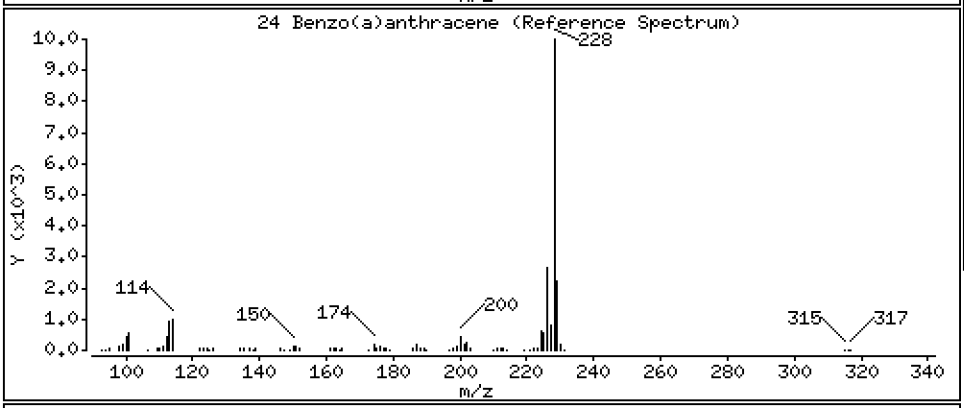
Concentration: 2.012 ug/mL

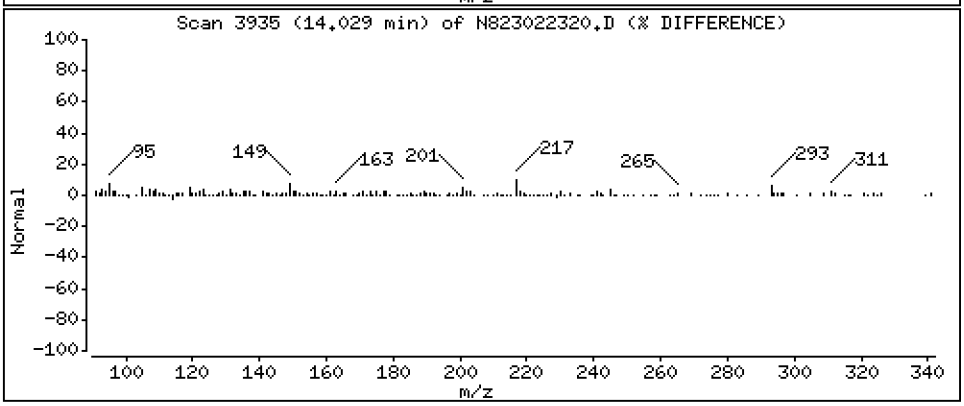












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

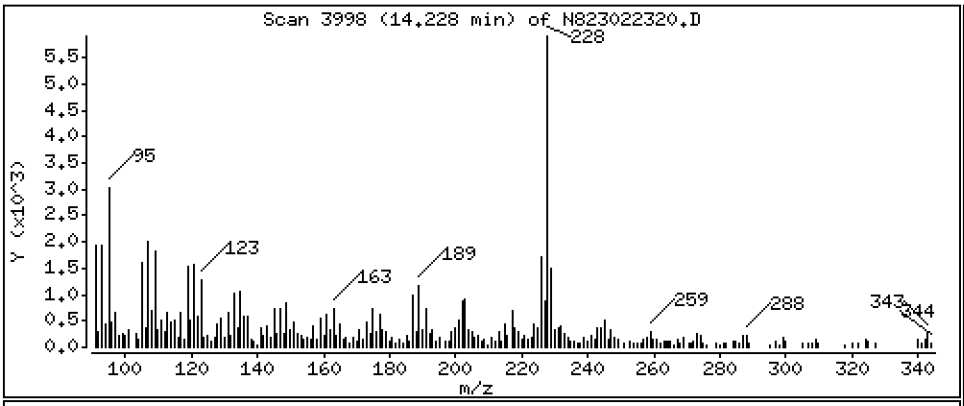
Operator: JZ

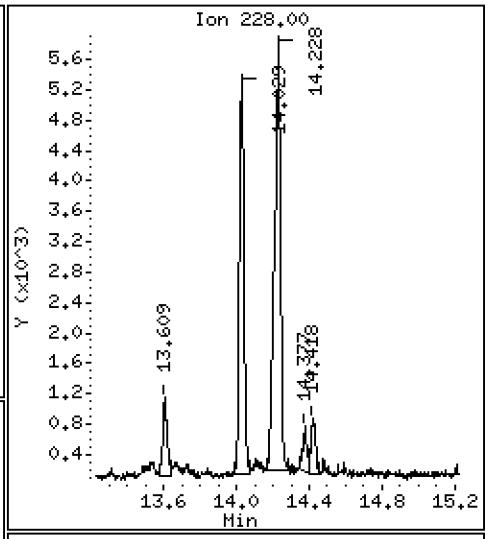
Column phase: Rxi-17sil

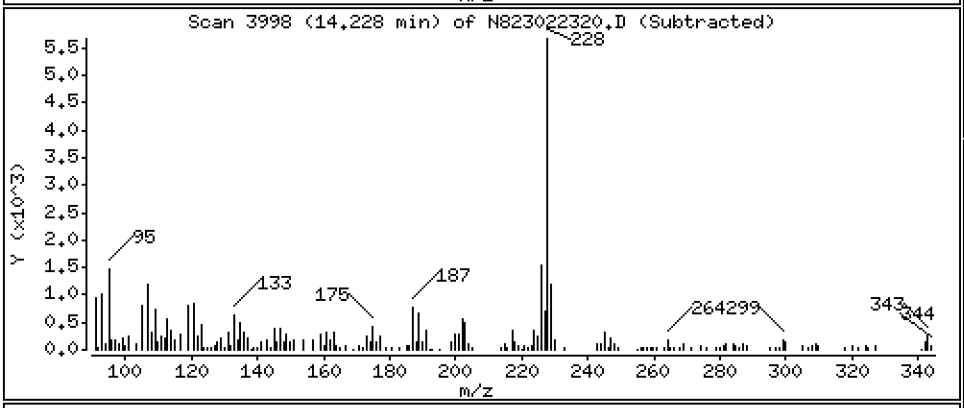
Column diameter: 0.25

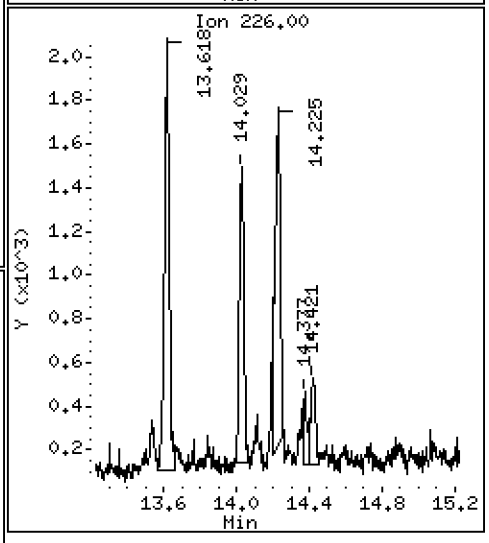
27 Chrysene

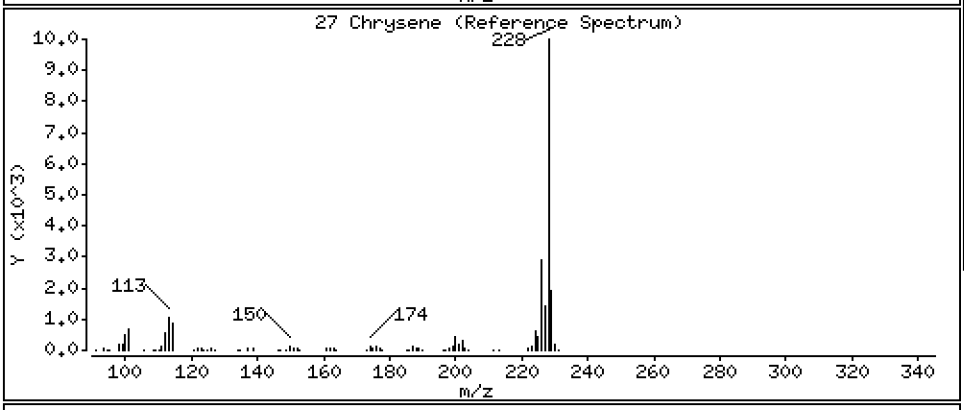
Concentration: 2.768 ug/mL

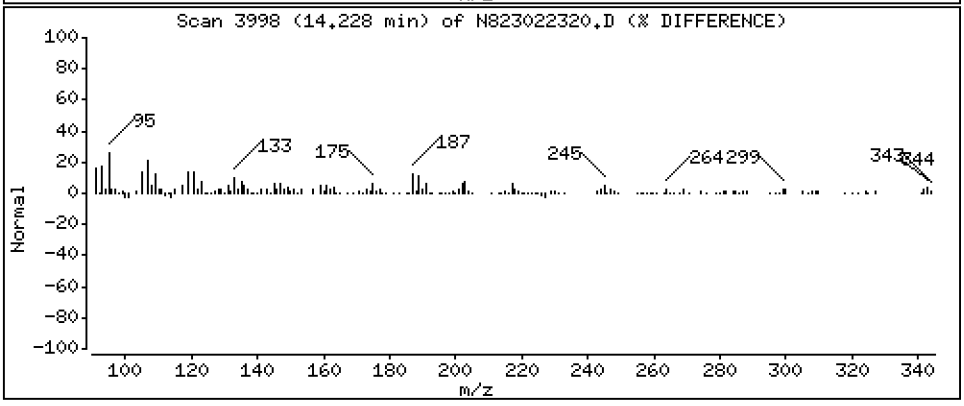












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

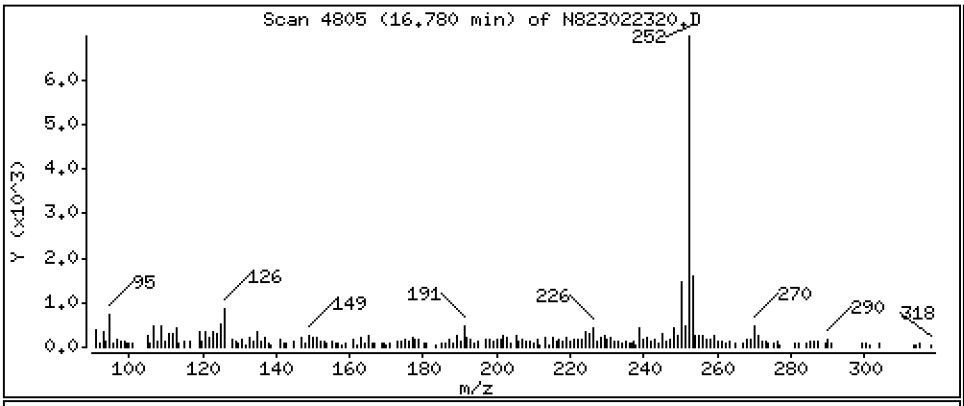
Operator: JZ

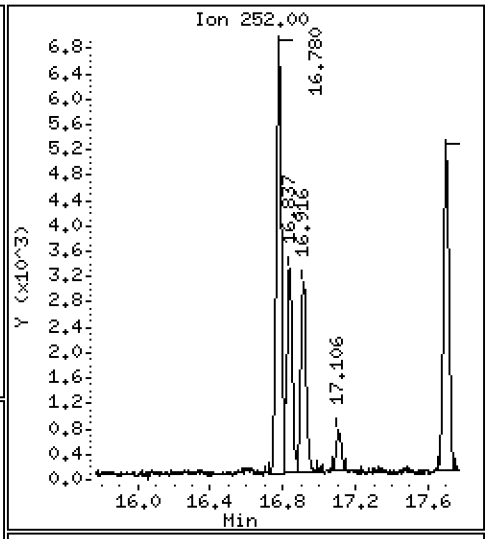
Column phase: Rxi-17sil

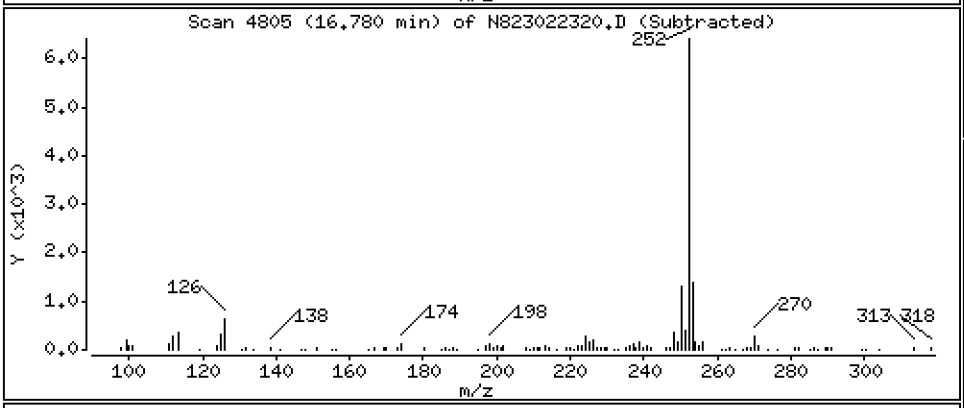
Column diameter: 0.25

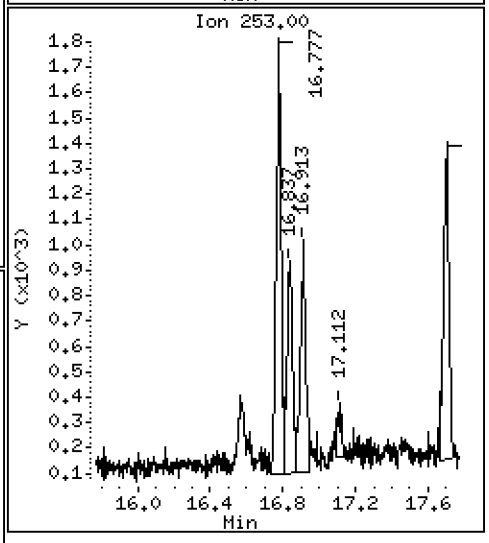
28 Benzo(b)fluoranthene

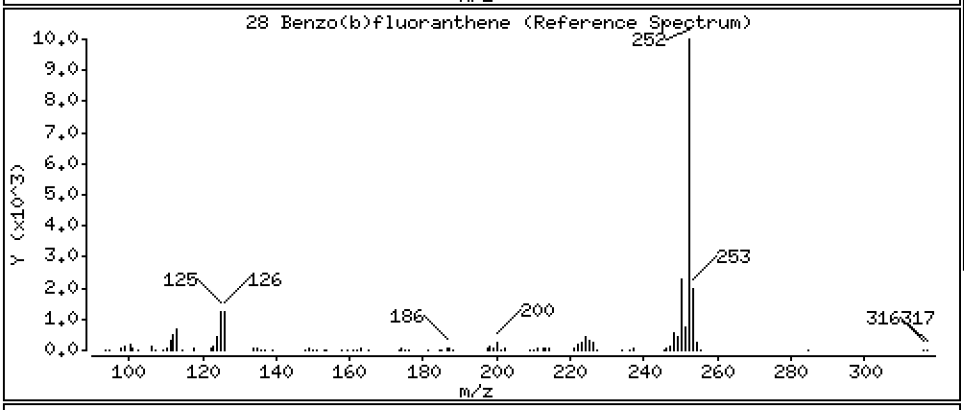
Concentration: 2.526 ug/mL

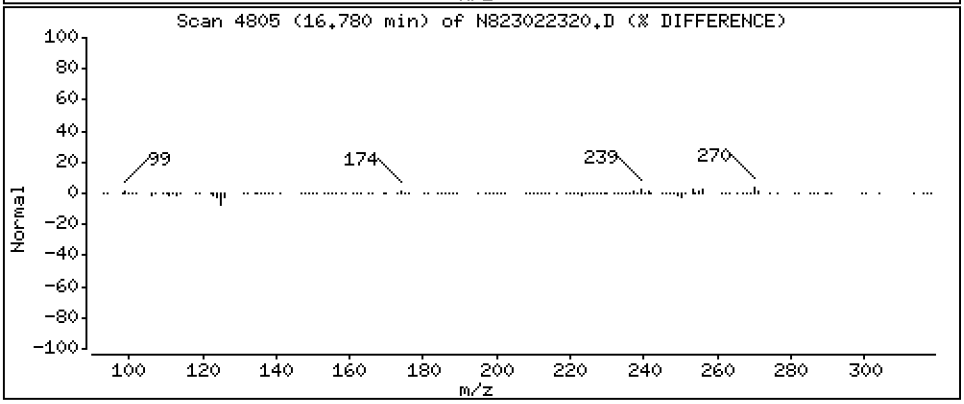












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

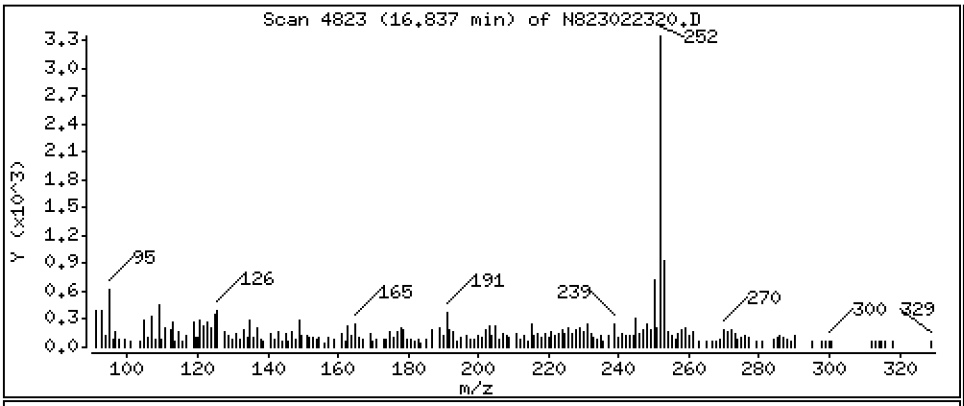
Operator: JZ

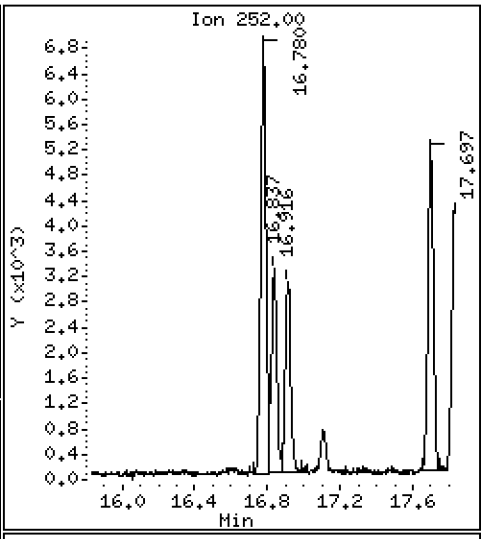
Column phase: Rxi-17sil

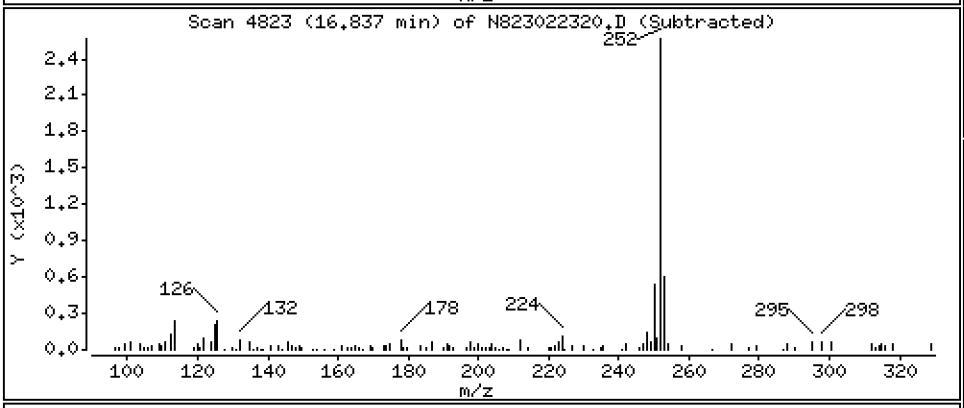
Column diameter: 0.25

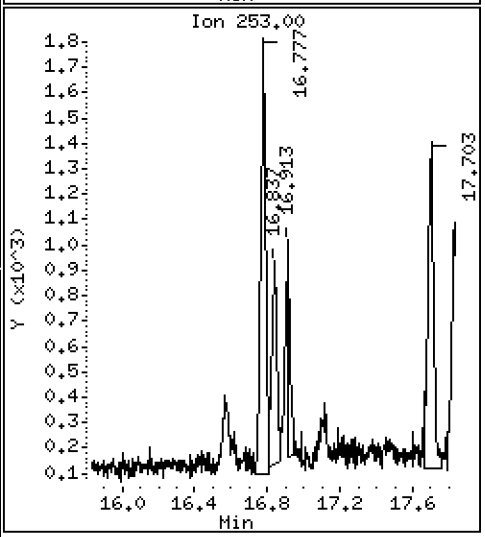
29 Benzo(k)fluoranthene

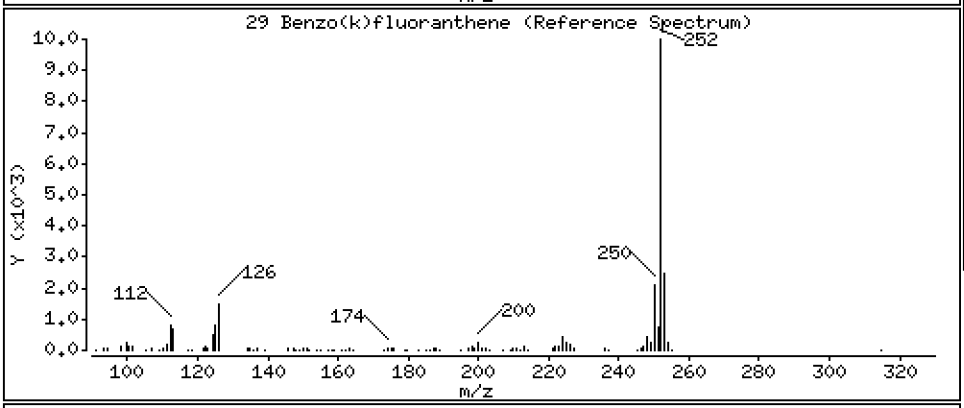
Concentration: 1.331 ug/mL

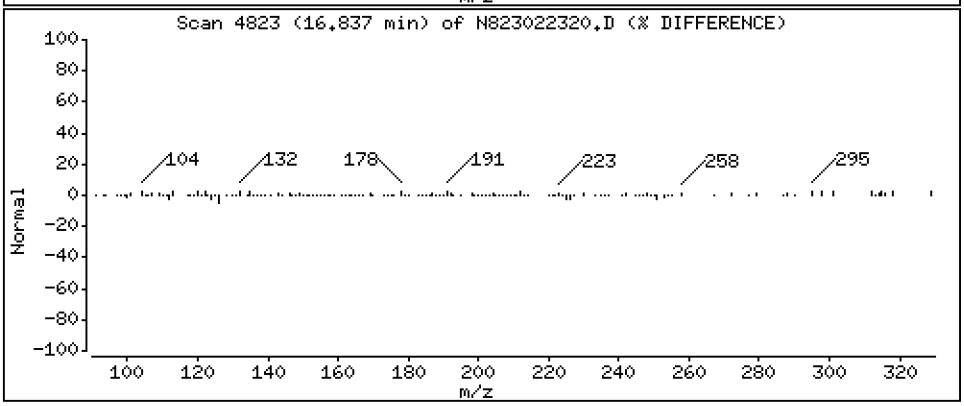












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

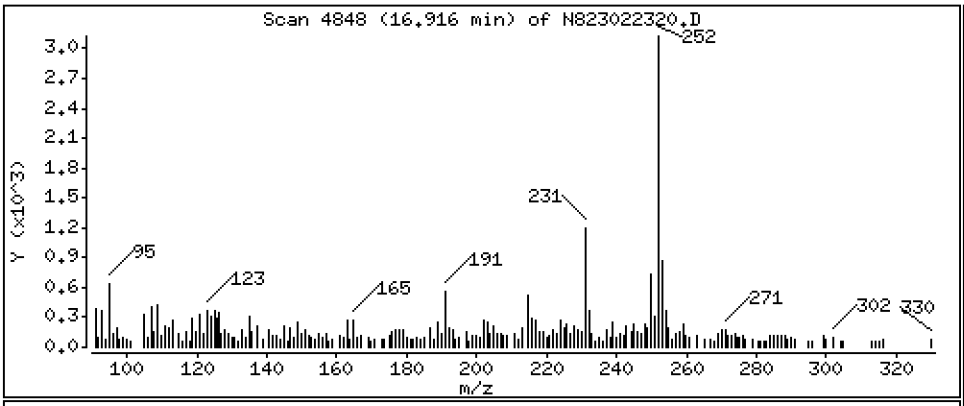
Operator: JZ

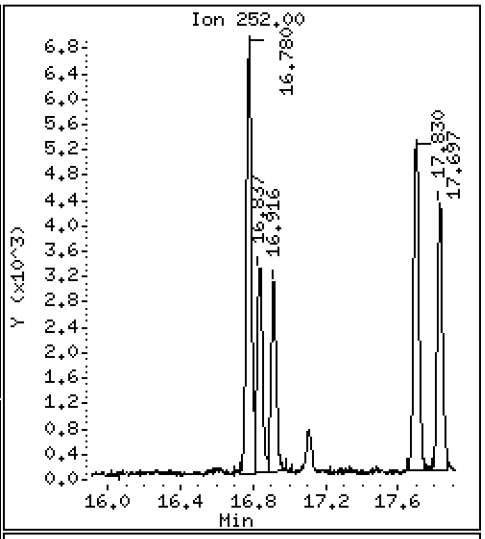
Column phase: Rxi-17sil

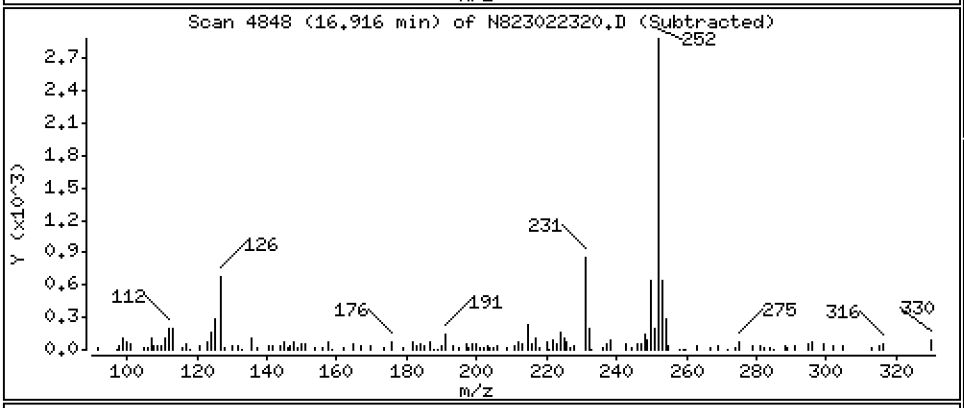
Column diameter: 0.25

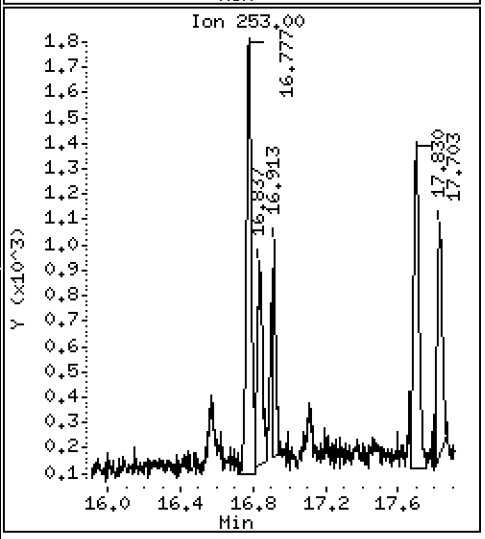
30 Benzo(j)fluoranthene

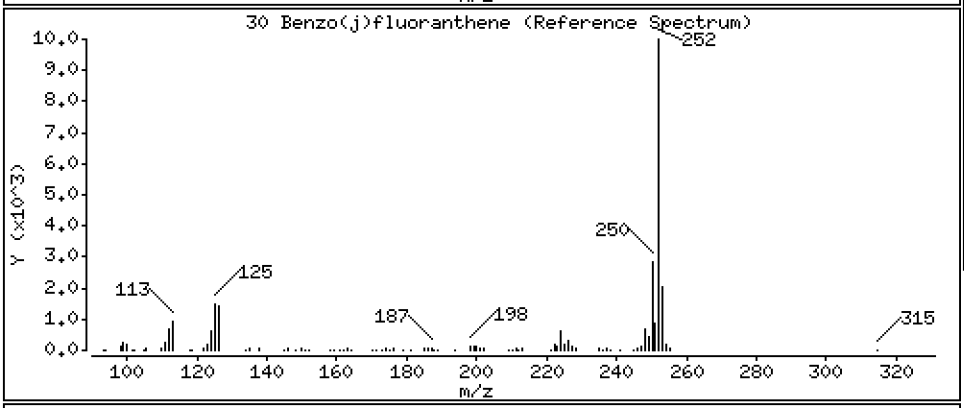
Concentration: 1.288 ug/mL

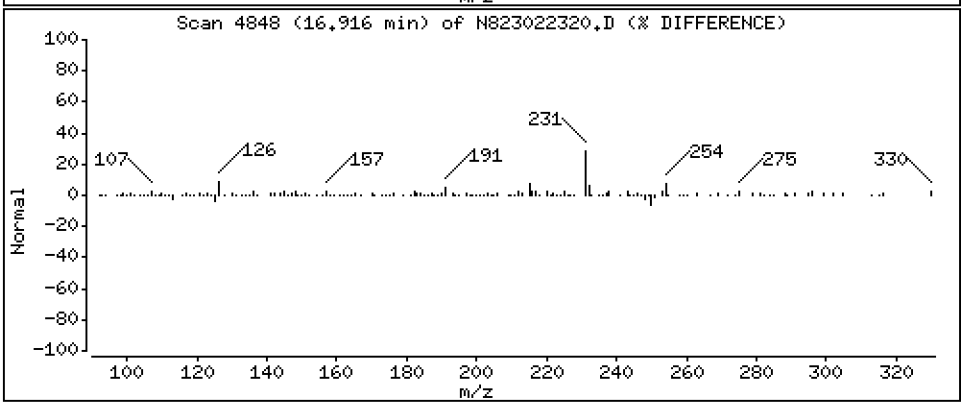












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

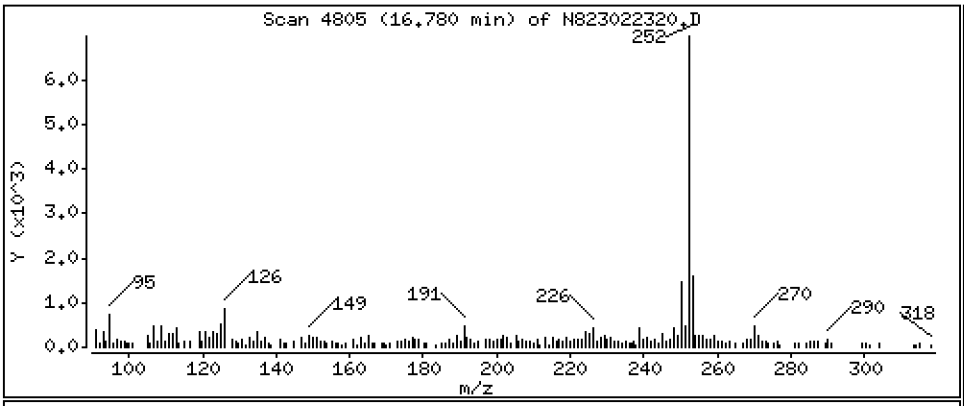
Operator: JZ

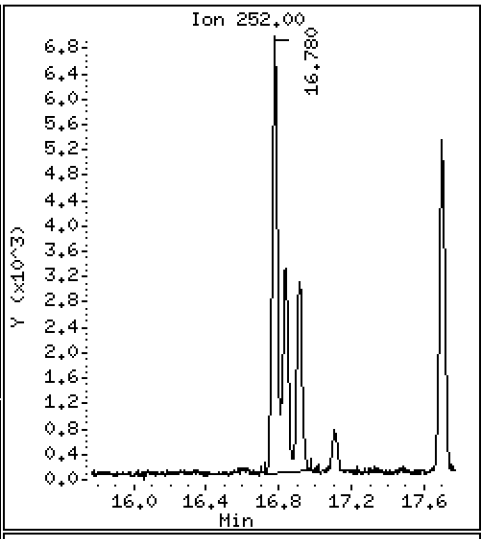
Column phase: Rxi-17sil

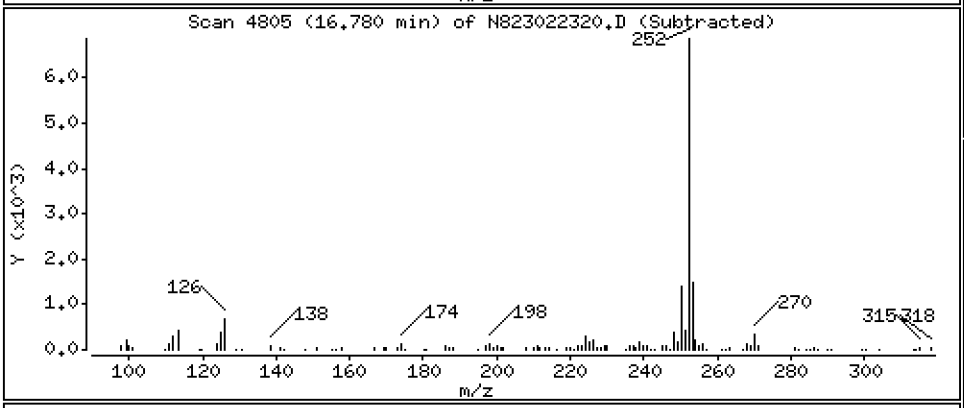
Column diameter: 0.25

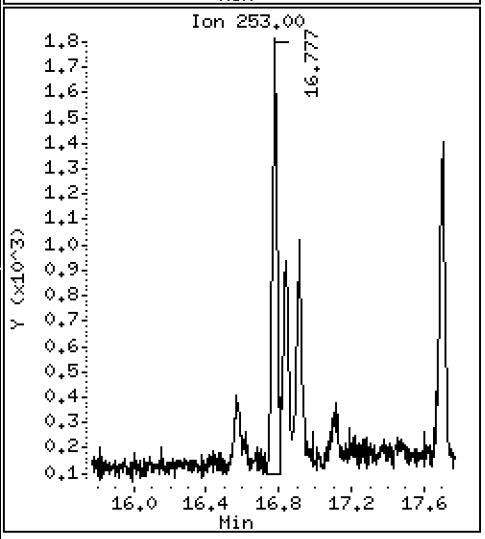
31 Total Benzofluoranthenes

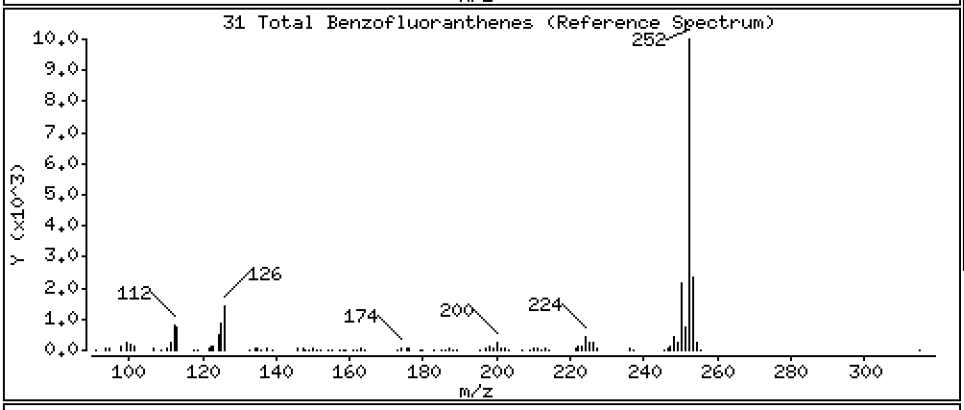
Concentration: 5.177 ug/mL

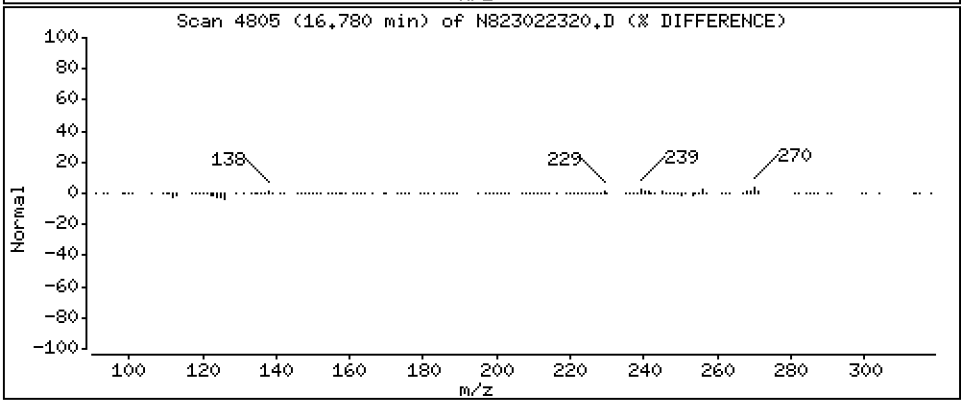












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

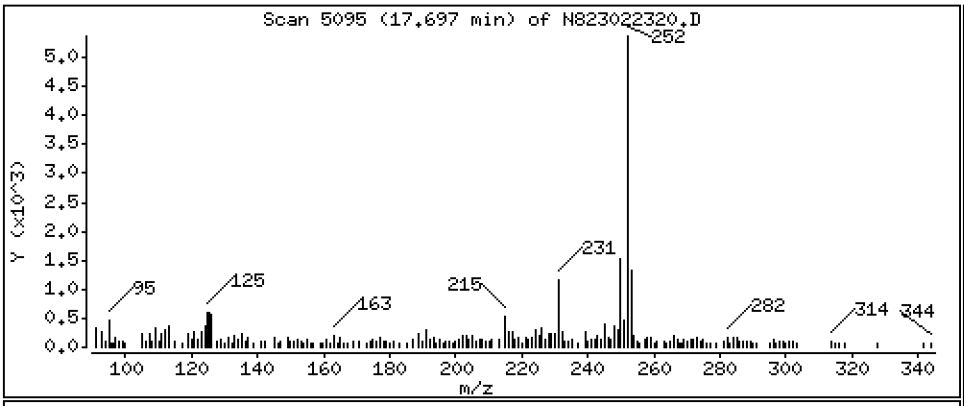
Operator: JZ

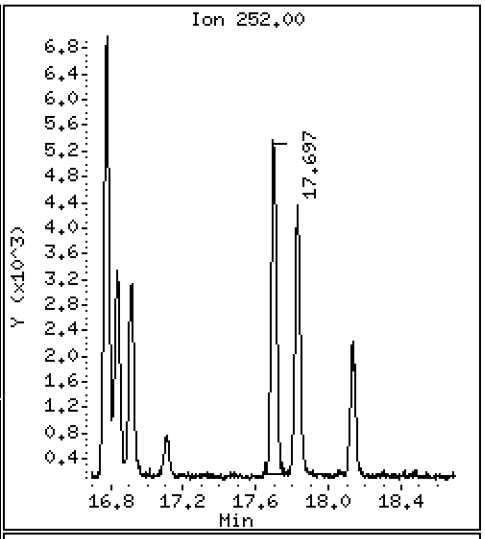
Column phase: Rxi-17sil

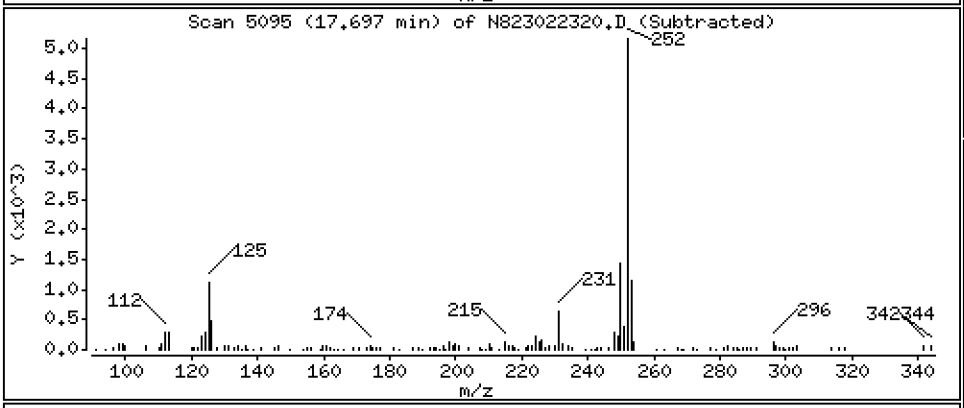
Column diameter: 0.25

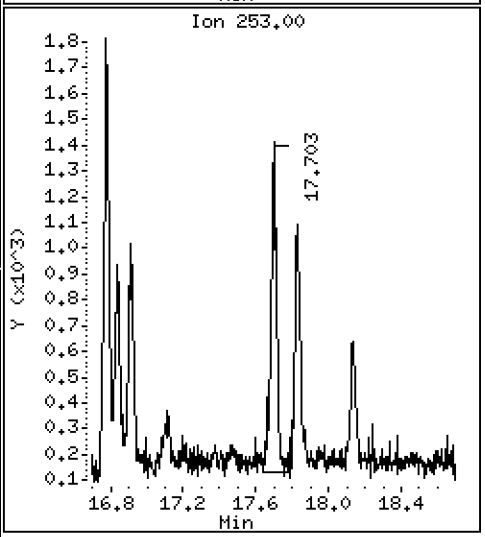
34 Benzo(e)pyrene

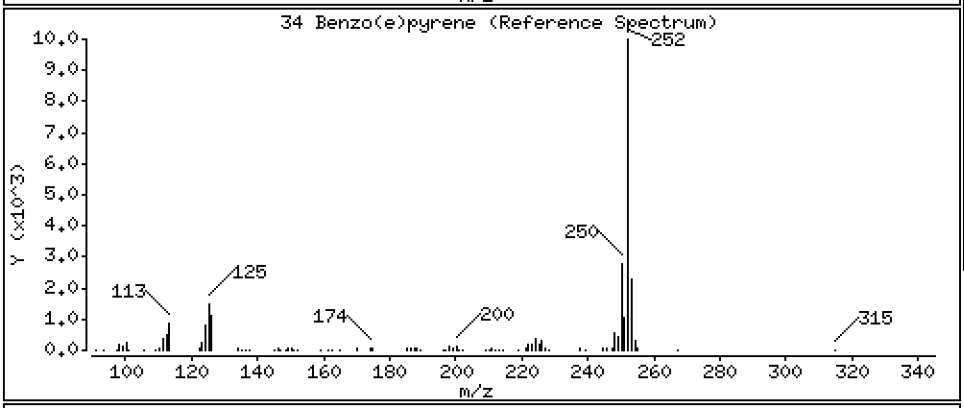
Concentration: 2.011 ug/mL

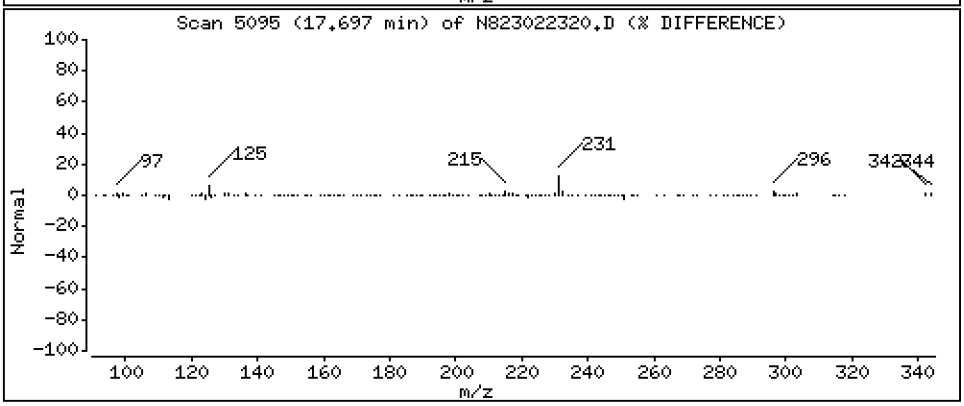












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

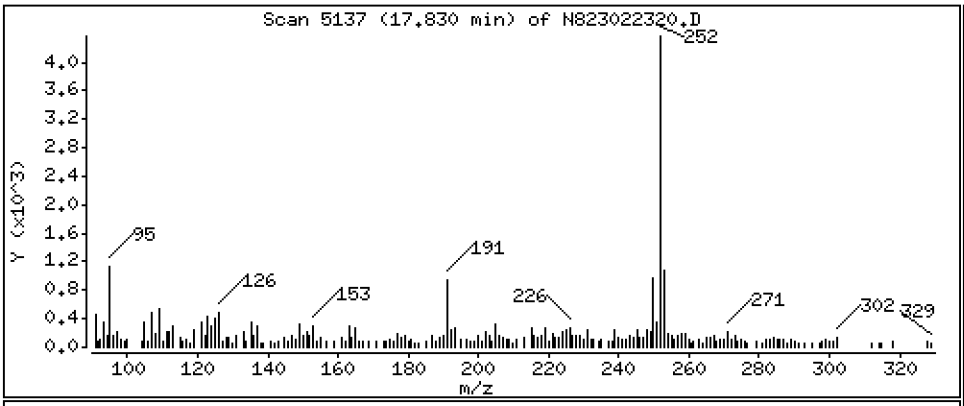
Operator: JZ

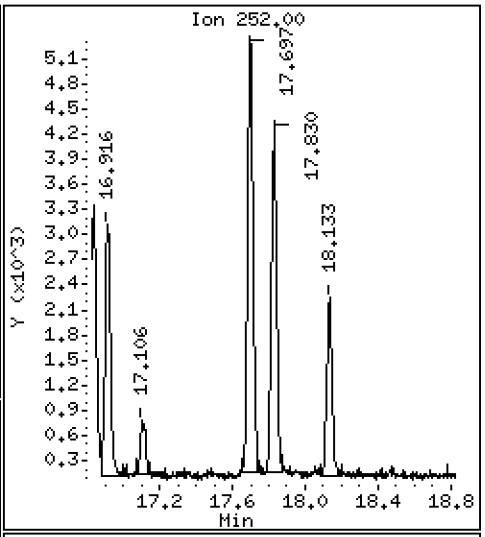
Column phase: Rxi-17sil

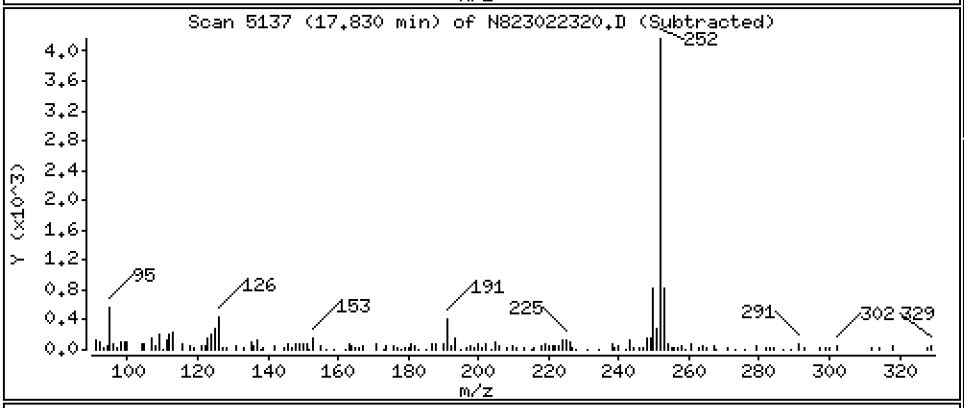
Column diameter: 0.25

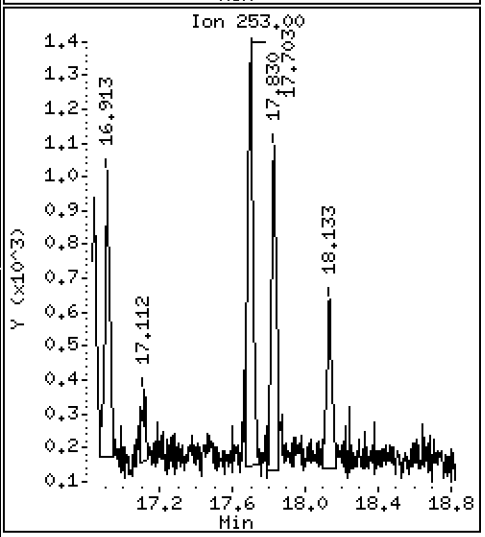
32 Benzo(a)pyrene

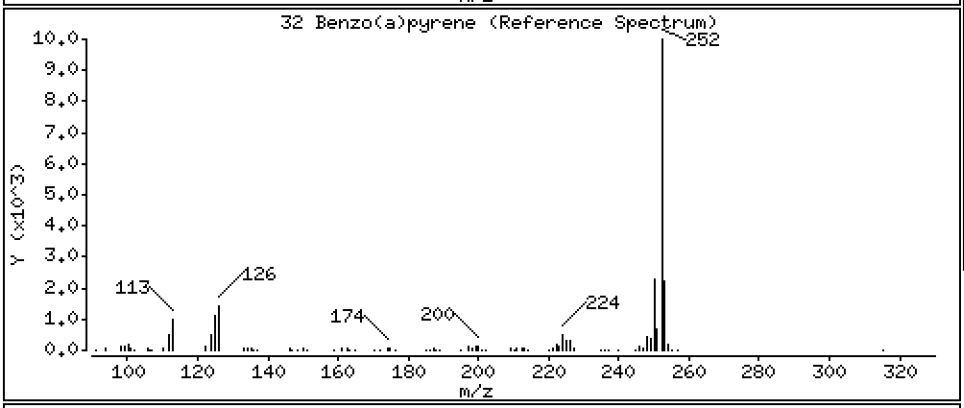
Concentration: 1.787 ug/mL

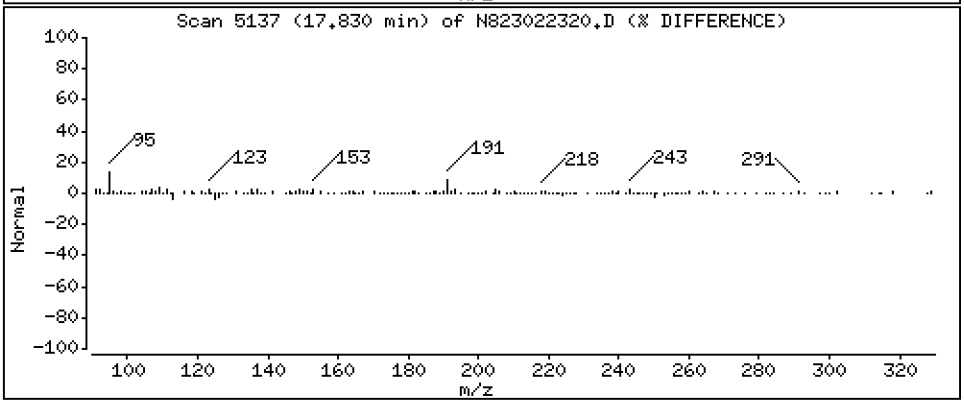












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

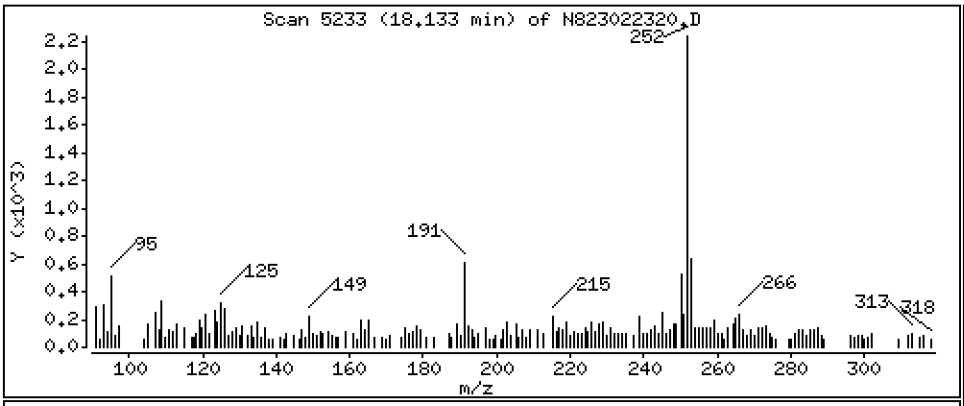
Operator: JZ

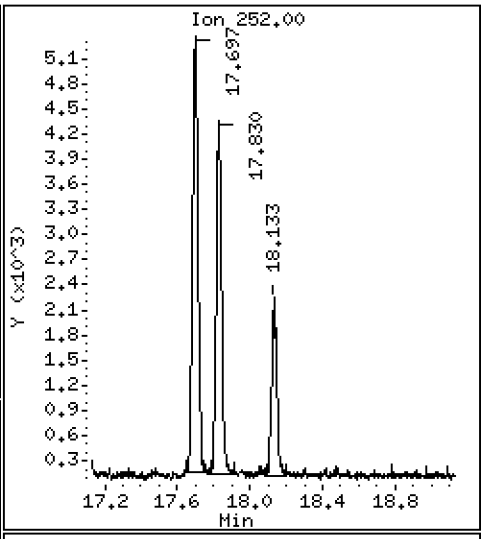
Column phase: Rxi-17sil

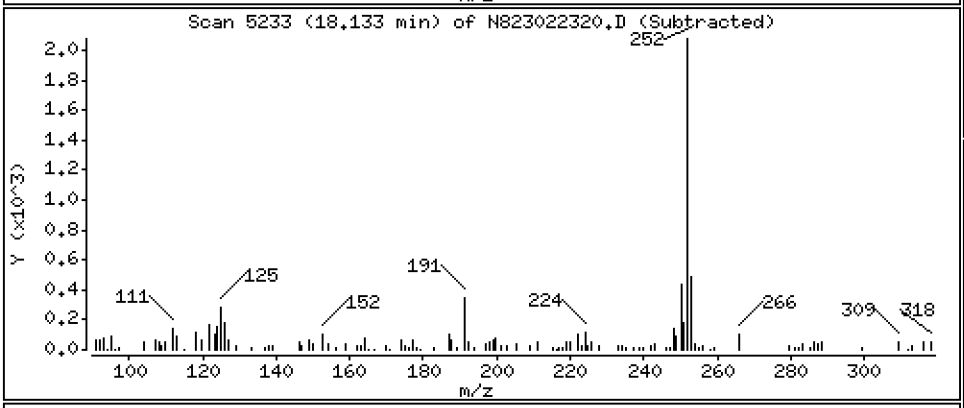
Column diameter: 0.25

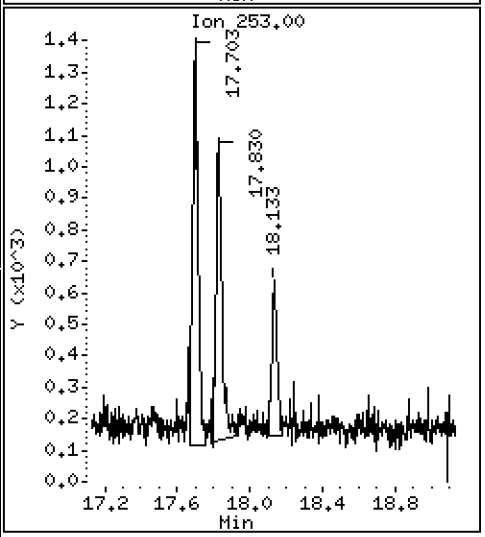
35 Perylene

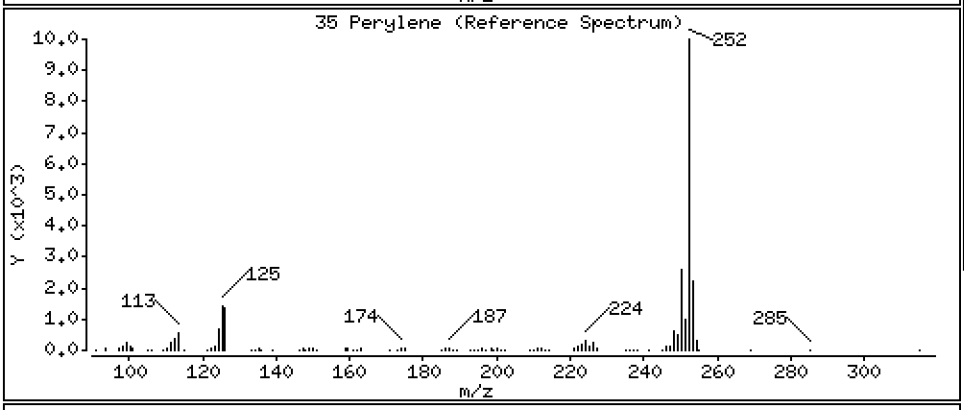
Concentration: 0.8582 ug/mL

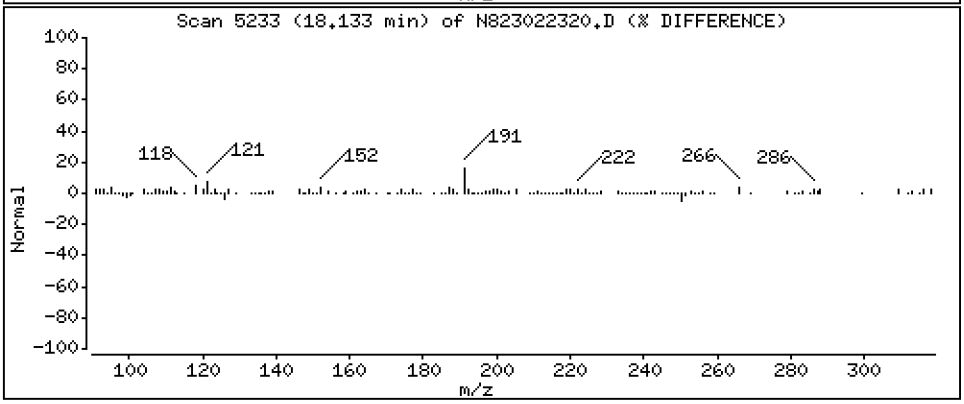












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Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

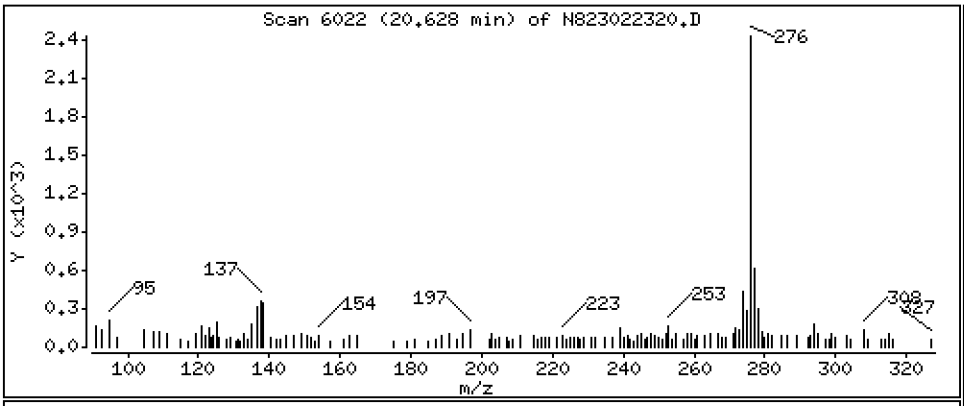
Operator: JZ

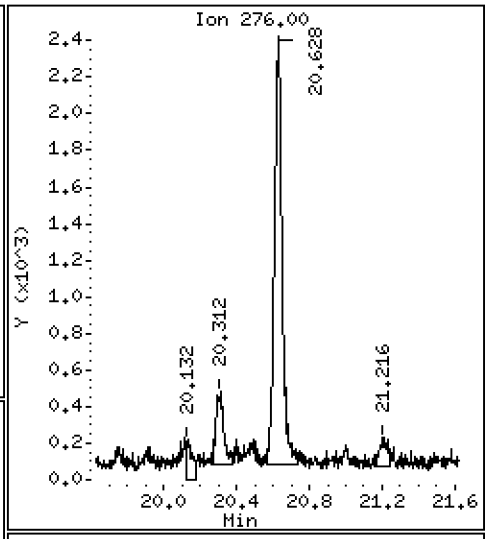
Column phase: Rxi-17sil

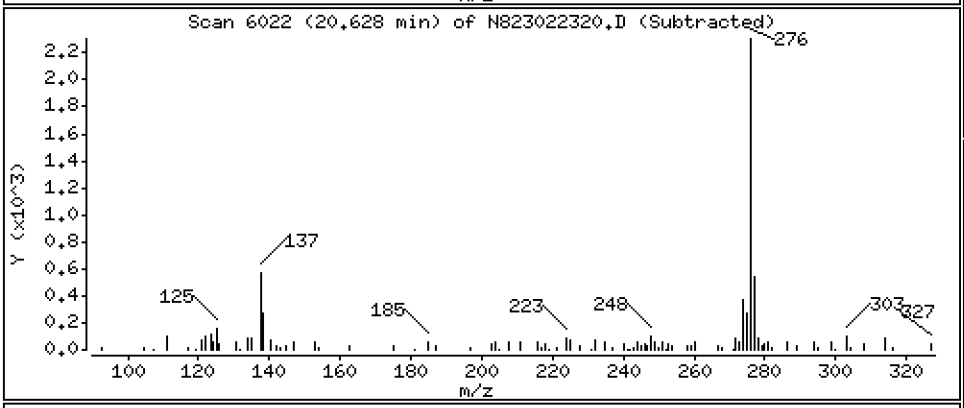
Column diameter: 0.25

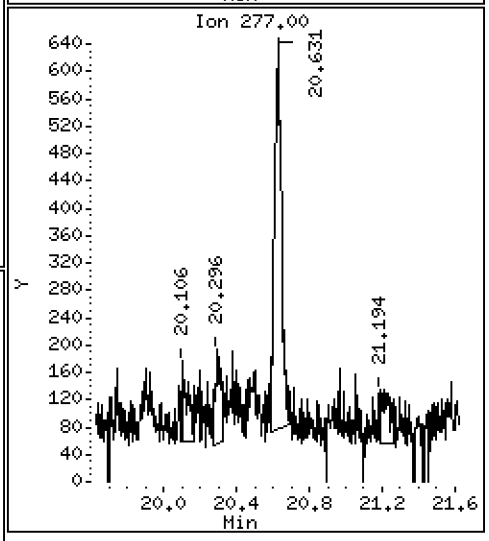
37 Indeno(1,2,3-cd)pyrene

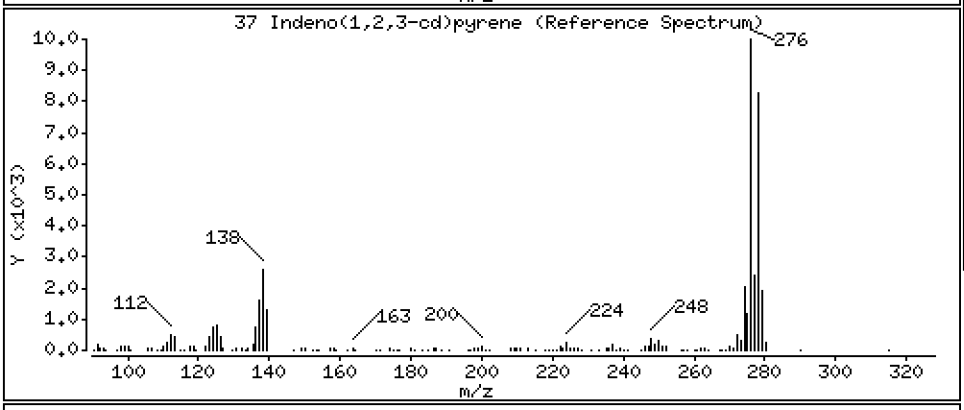
Concentration: 1.287 ug/mL

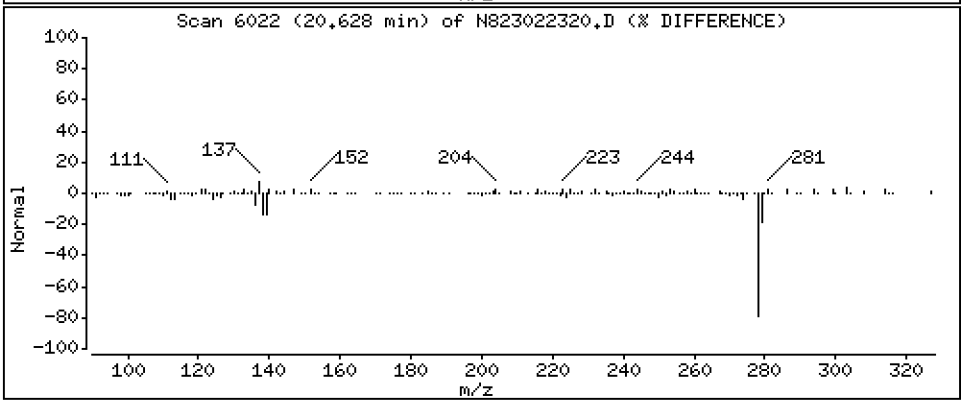












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Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

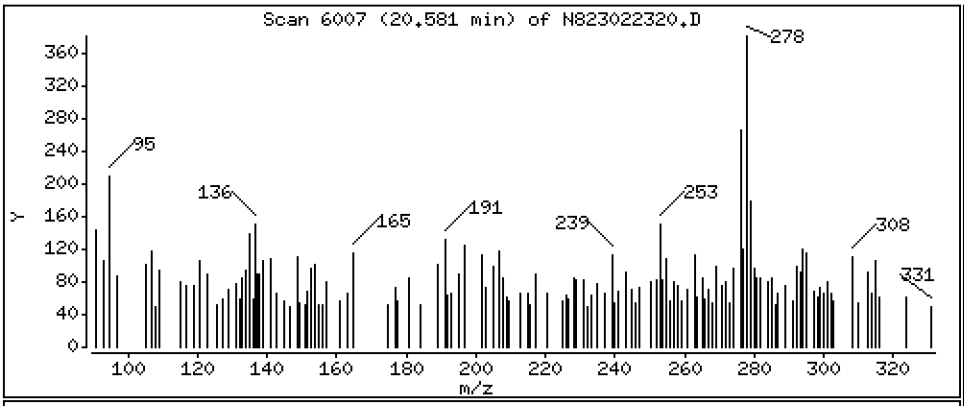
Operator: JZ

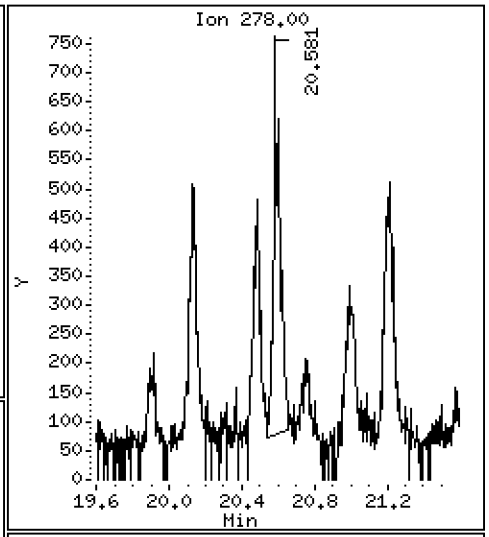
Column phase: Rxi-17sil

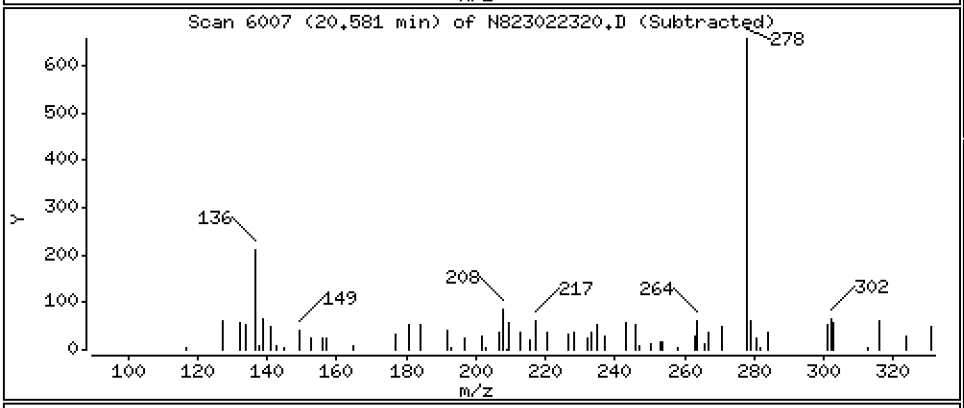
Column diameter: 0.25

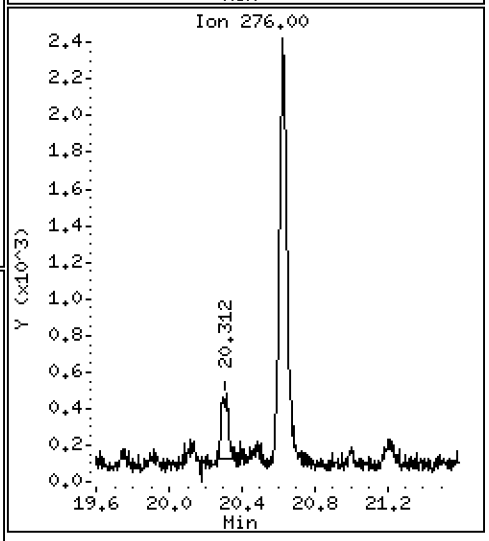
38 Dibenzo(a,h)anthracene

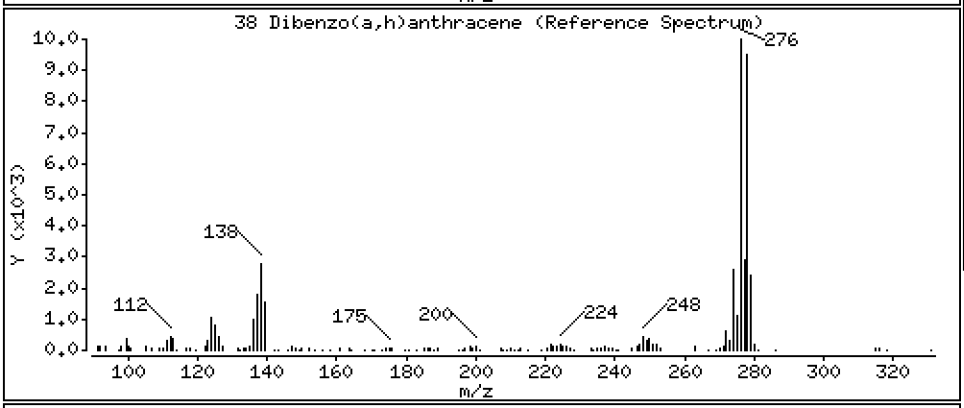
Concentration: 0.3550 ug/mL

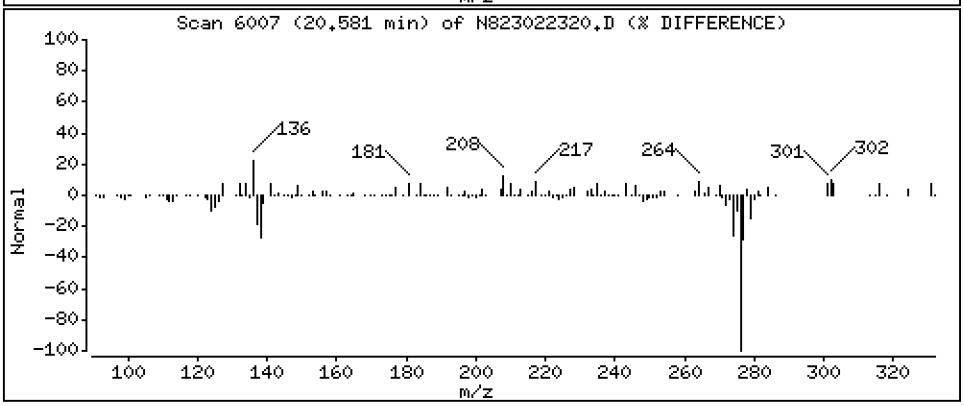












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022320.D

Date : 23-FEB-2023 20:05

Client ID:

Instrument: nt8.i

Sample Info: 23A0420-04,3

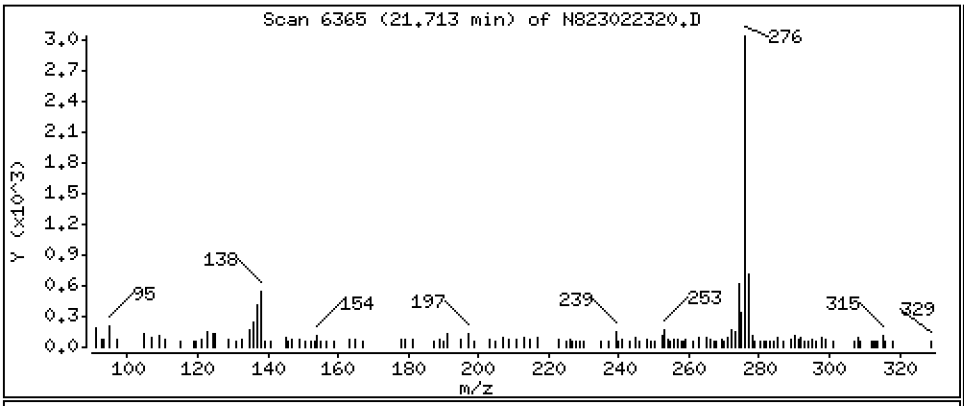
Operator: JZ

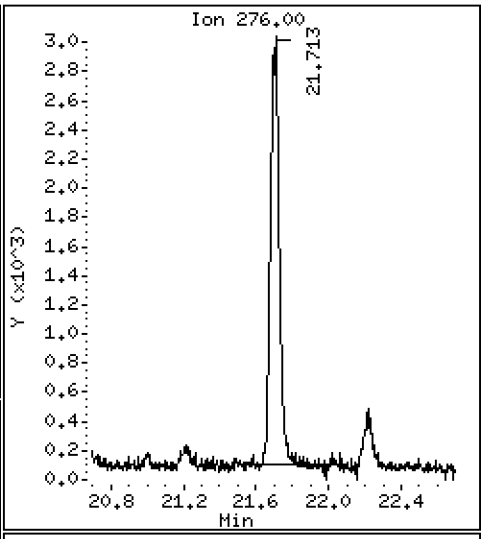
Column phase: Rxi-17sil

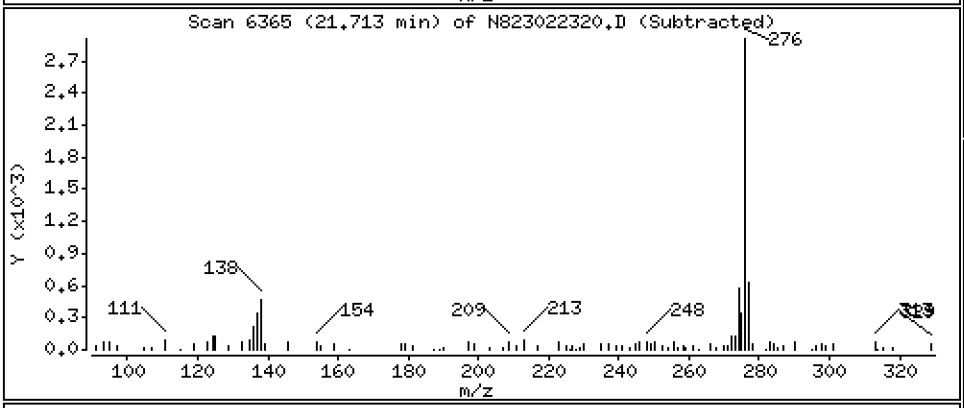
Column diameter: 0.25

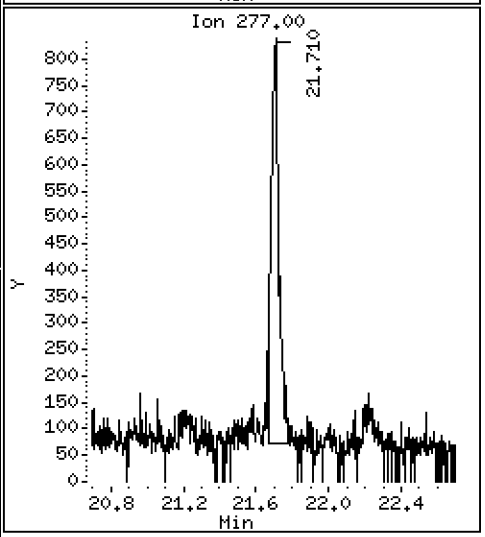
39 Benzo(g,h,i)perylene

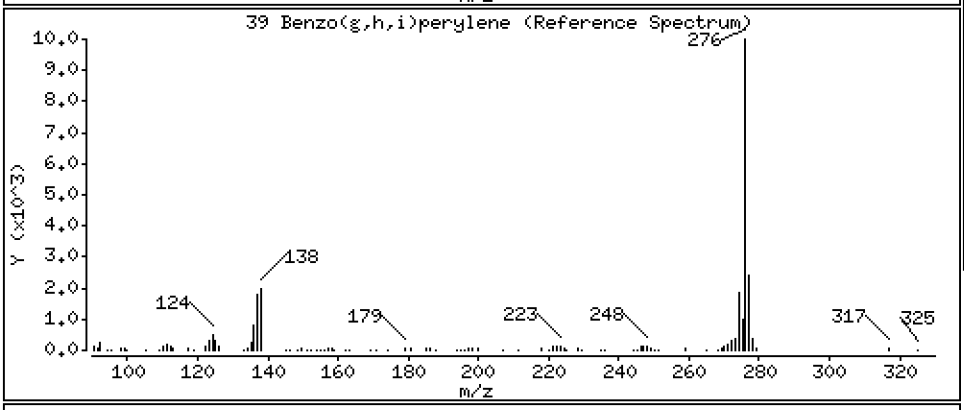
Concentration: 2.058 ug/mL

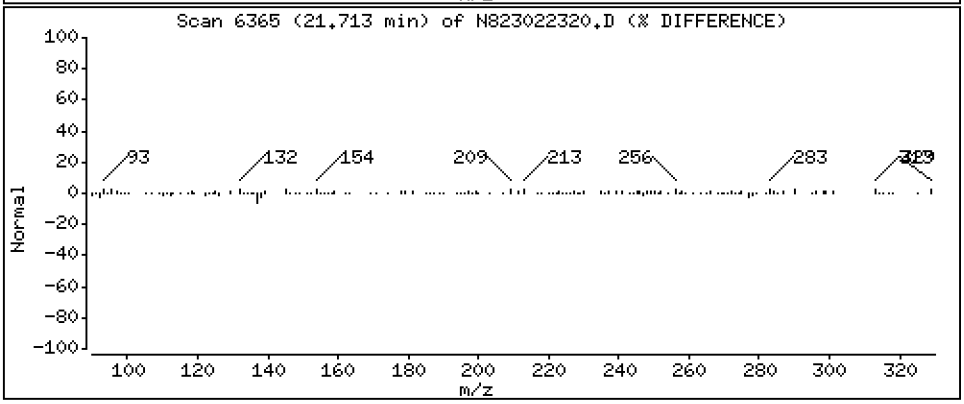












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230223.b\N823022320.D
Lab Smp Id: 23A0420-04
Inj Date : 23-FEB-2023 20:05
Operator : JZ Inst ID: nt8.i
Smp Info : 23A0420-04,3
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230223.b\FSIMPNA230119.m
Meth Date : 26-Feb-2023 12:40 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 20
Dil Factor: 3.00000
Integrator: HP RTE Compound Sublist: PNAXEMDL.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.865	4.871	(1.000)	39884	2.00000	
	2 Naphthalene	128	4.894	4.903	(1.006)	906	0.04886	0.1466
$	3 2-Methylnaphthalene-d10	152	5.602	5.605	(1.151)	7043	0.64749	1.942
	4 2-Methylnaphthalene	141	5.646	5.652	(1.161)	383	0.03755	0.1126
	5 1-methylnaphthalene	141	Compound Not Detected.					
	9 Acenaphthylene	152	7.050	7.050	(0.985)	867	0.04676	0.1403(M)
*	10 Acenaphthene-d10	164	7.155	7.158	(1.000)	24554	2.00000	
	11 Acenaphthene	153	7.205	7.208	(1.007)	518	0.04170	0.1251(M)
	12 Dibenzofuran	168	7.357	7.360	(1.028)	568	0.03010	0.09031
	14 Fluorene	166	7.834	7.837	(1.095)	620	0.04231	0.1269(M)
*	15 Phenanthrene-d10	188	9.197	9.197	(1.000)	46229	2.00000	
	16 Phenanthrene	178	9.232	9.235	(1.004)	4471	0.19799	0.5940
	17 Anthracene	178	9.273	9.276	(1.008)	1776	0.08657	0.2597
	19 Carbazole	167	9.792	9.791	(1.065)	862	0.04584	0.1375(M)
	22 Fluoranthene	202	11.015	11.009	(1.198)	16977	0.69067	2.072
$	21 Fluoranthene-d10	212	10.977	10.971	(1.194)	13545	0.66410	1.992
	23 Pyrene	202	11.543	11.527	(0.815)	28352	1.92305	5.769
	24 Benzo(a)anthracene	228	14.029	14.025	(0.991)	8961	0.67058	2.012(M)
*	25 Chrysene-d12	240	14.155	14.152	(1.000)	23780	2.00000	
	27 Chrysene	228	14.228	14.225	(1.005)	13127	0.92277	2.768
	28 Benzo(b)fluoranthene	252	16.780	16.770	(0.929)	13532	0.84193	2.526
	29 Benzo(k)fluoranthene	252	16.836	16.833	(0.932)	6985	0.44368	1.331
	30 Benzo(j)fluoranthene	252	16.916	16.912	(0.936)	6085	0.42935	1.288
	31 Total Benzofluoranthenes	252	16.780	16.770	(0.929)	26265	1.72550	5.177(M)
	34 Benzo(e)pyrene	252	17.697	17.696	(0.980)	10743	0.67028	2.011(M)
	32 Benzo(a)pyrene	252	17.829	17.826	(0.987)	8423	0.59552	1.787
*	33 Perylene-d12	264	18.063	18.057	(1.000)	27597	2.00000	
	35 Perylene	252	18.133	18.130	(1.004)	4342	0.28608	0.8582
$	36 Dibenzo(a,h)anthracene-d14	292	20.492	20.485	(1.134)	8283	0.76602	2.298
	37 Indeno(1,2,3-cd)pyrene	276	20.628	20.624	(1.142)	6912	0.42896	1.287
	38 Dibenzo(a,h)anthracene	278	20.580	20.596	(1.139)	1641	0.11834	0.3550(M)
	39 Benzo(g,h,i)perylene	276	21.712	21.696	(1.202)	10013	0.68587	2.058(M)

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823022320.D
Lab Smp Id: 23A0420-04
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230223.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 23-FEB-2023
Calibration Time: 11:46
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	37022	18511	74044	39884	7.73
10 Acenaphthene-d10	22454	11227	44908	24554	9.35
15 Phenanthrene-d10	43277	21639	86554	46229	6.82
25 Chrysene-d12	38907	19454	77814	23780	-38.88
33 Perylene-d12	39582	19791	79164	27597	-30.28

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.87	4.37	5.37	4.87	-0.13
10 Acenaphthene-d10	7.16	6.66	7.66	7.16	-0.04
15 Phenanthrene-d10	9.20	8.70	9.70	9.20	0.00
25 Chrysene-d12	14.15	13.65	14.65	14.16	0.02
33 Perylene-d12	18.06	17.56	18.56	18.06	0.04

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

REVIEW SUMMARY FOR FILE - N823022320.D

Lab ID: 23A0420-04
nt8.i, 20230223.b\FSIMPNA230119.m,   23-FEB-2023 20:05

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check performed

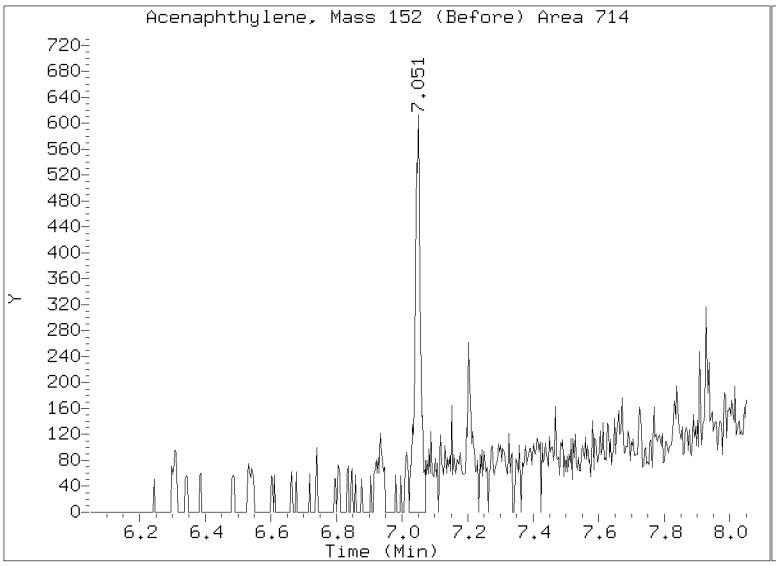
On Column LOD for nt8.i, 20230223.b\FSIMPNA230119.m, PNAXEMDL.sub = 0.0080

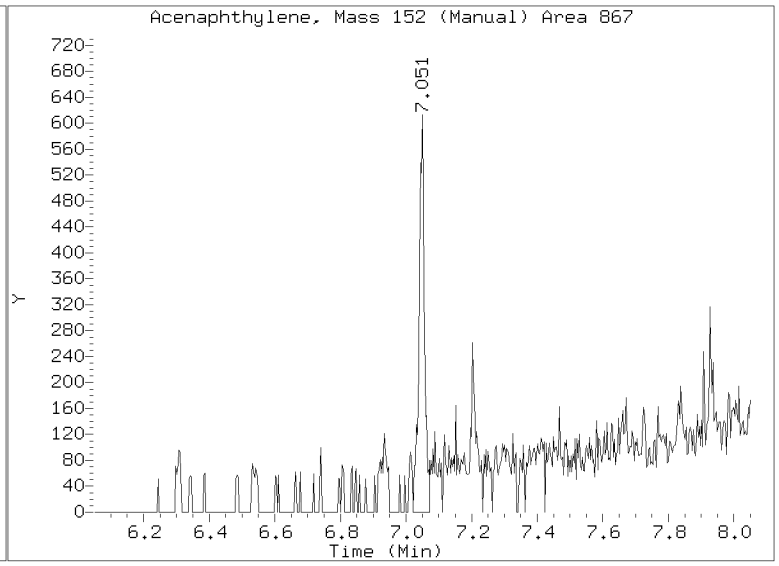
Exception: Benzo(e)pyrene 0.0800

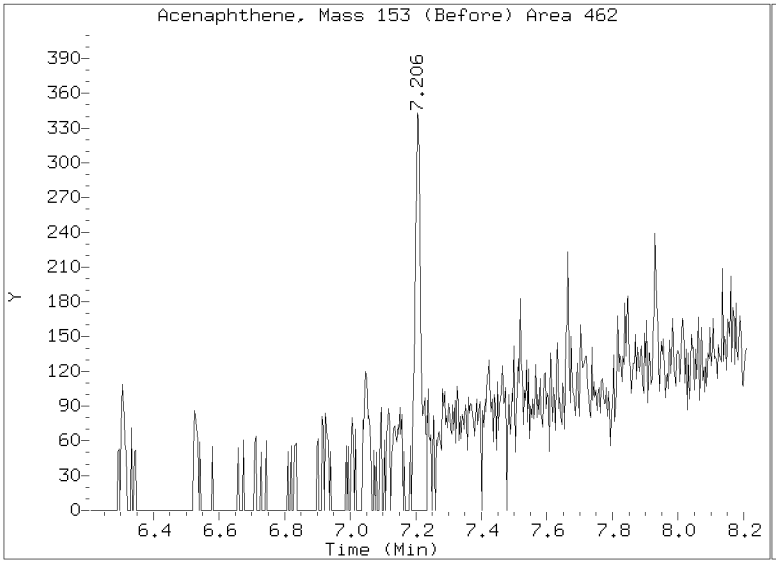
* Only compounds listed in the work order have been verified by the analyst *

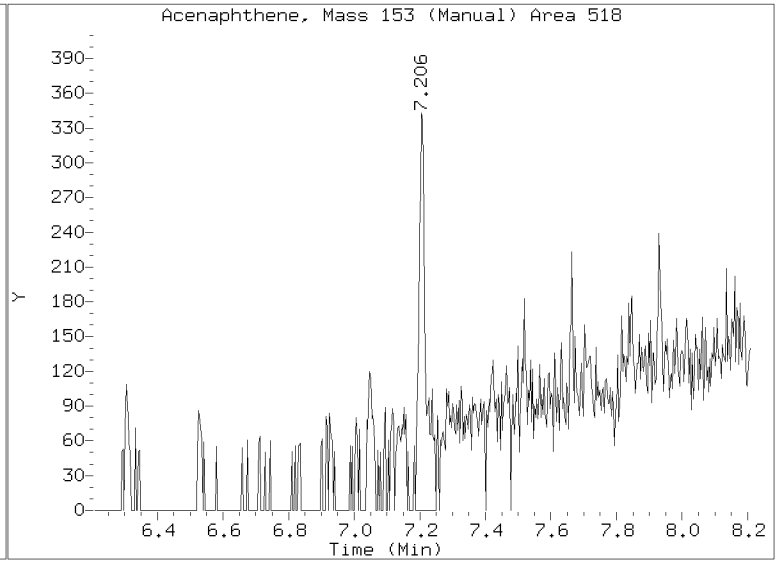
Quant Ion Manual Peak Adjustment Report

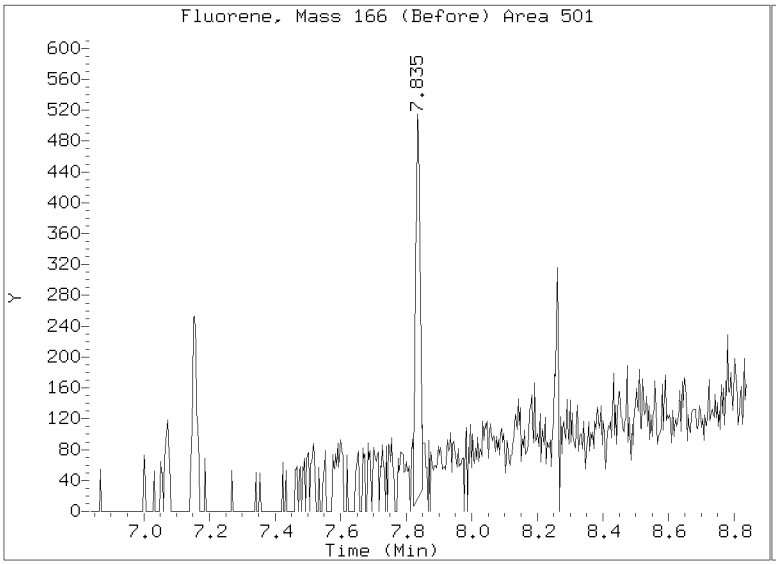
Datafile: //target/share/chem3/nt8.i/20230223.b/N823022320.D
Injection Date: 23-FEB-2023 20:05
Lab ID:23A0420-04 Client ID:
Report Date: 02/26/2023 14:18

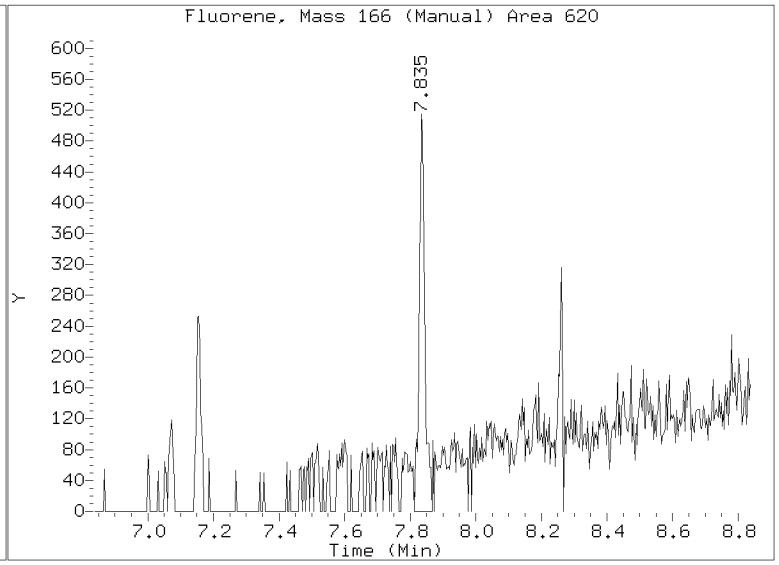












Quant Ion Manual Peak Adjustment Report

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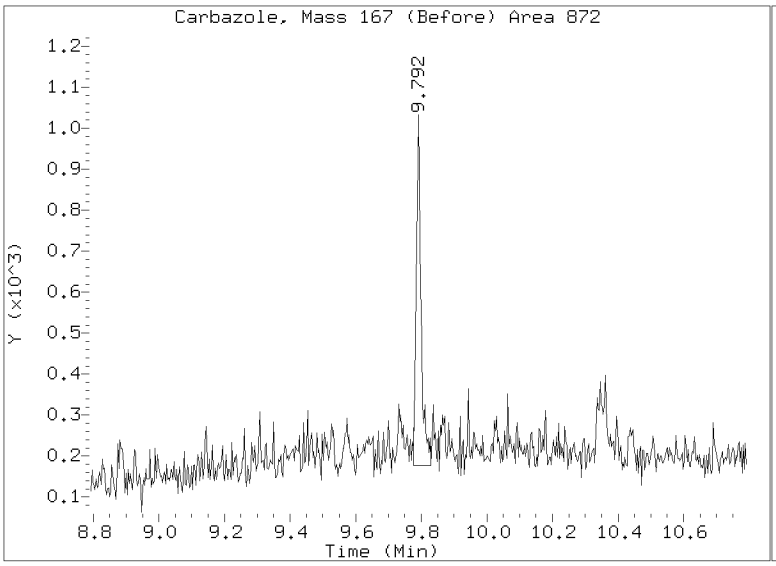
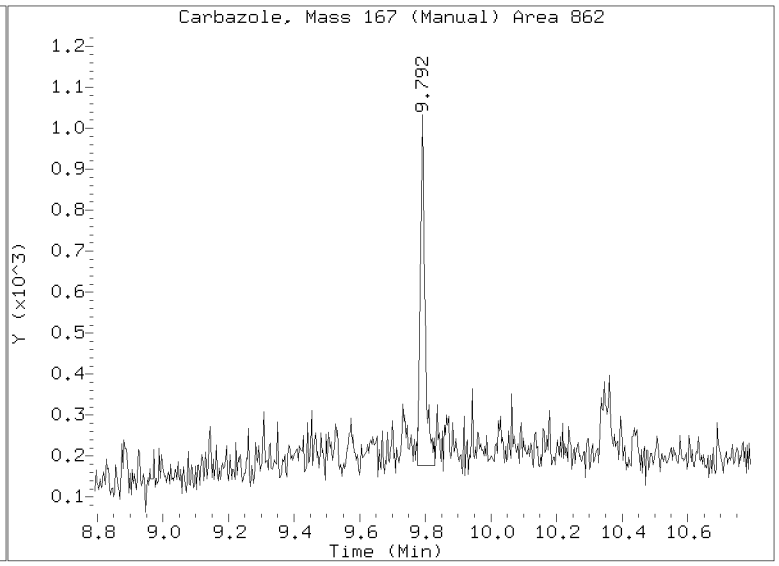
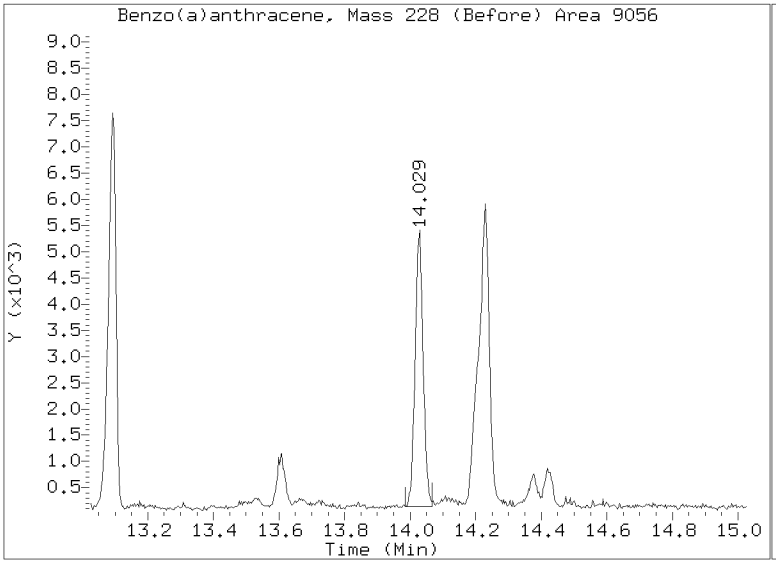
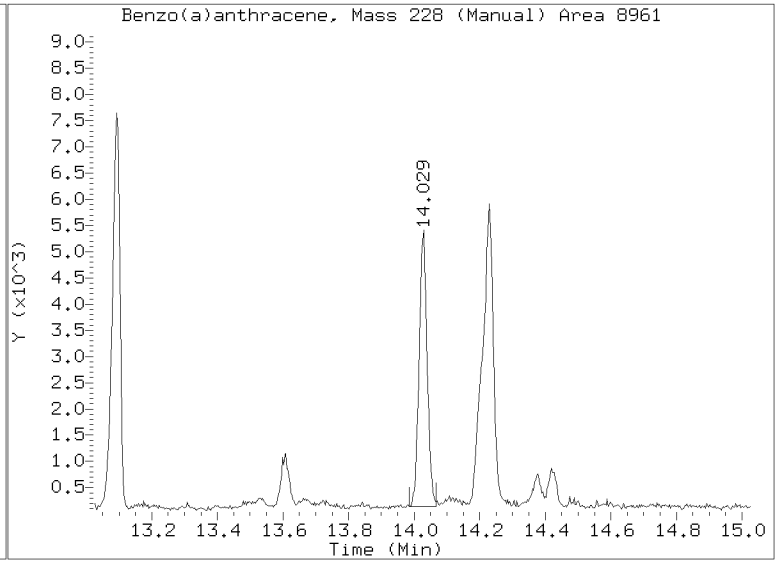
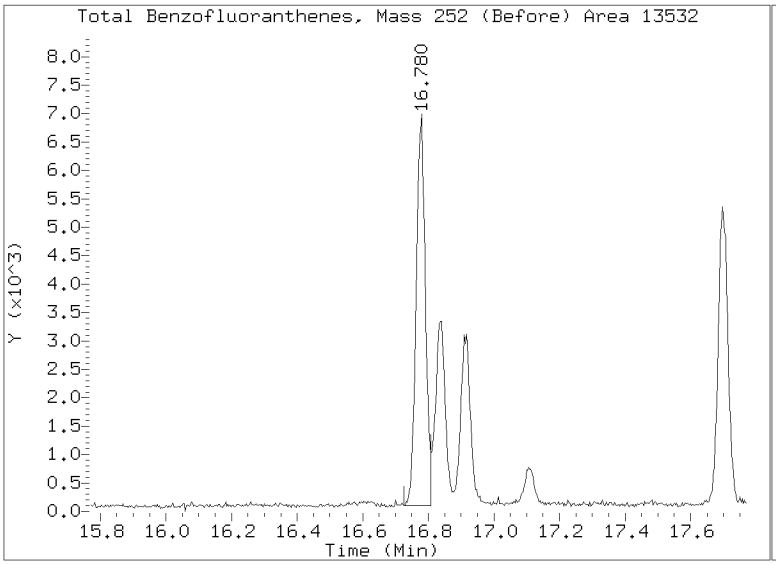
Injection Date: 23-FEB-2023 20:05
Lab ID:23A0420-04 Client ID:
Report Date: 02/26/2023 14:18

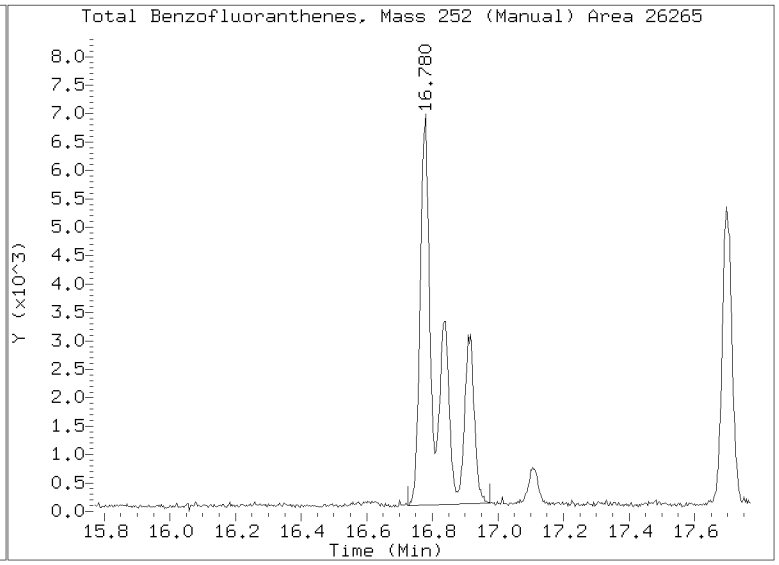












Quant Ion Manual Peak Adjustment Report

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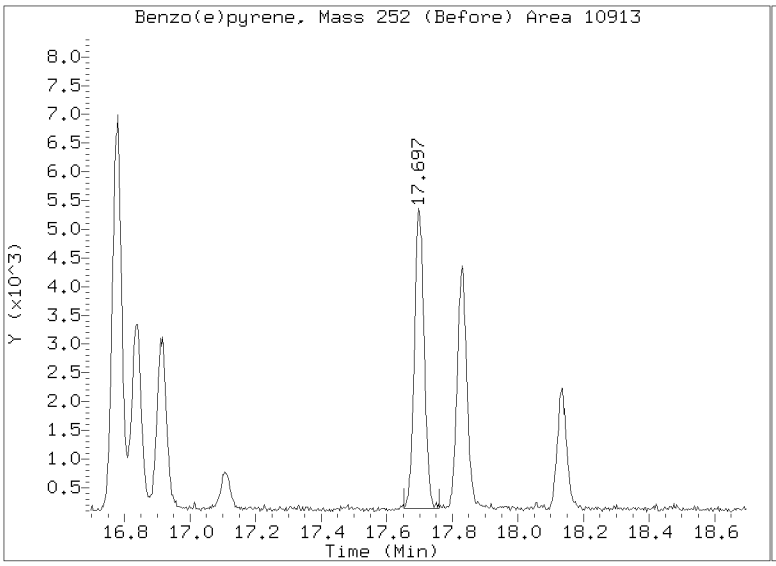
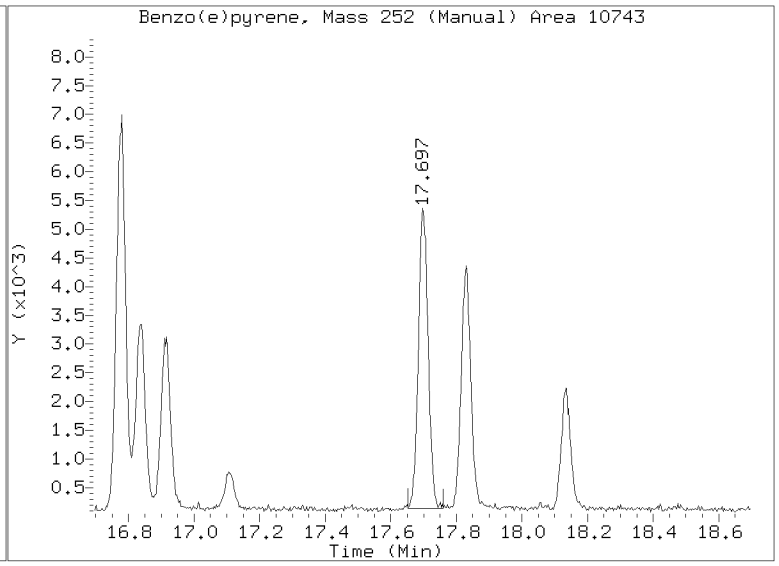
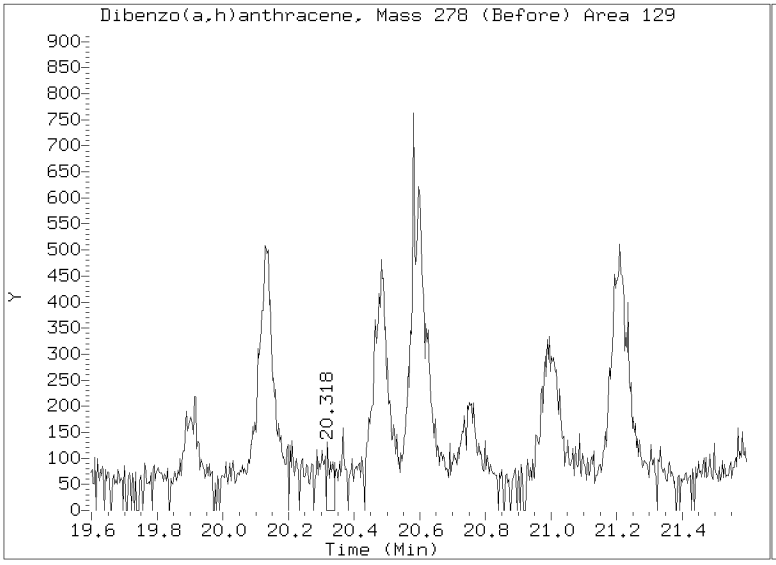
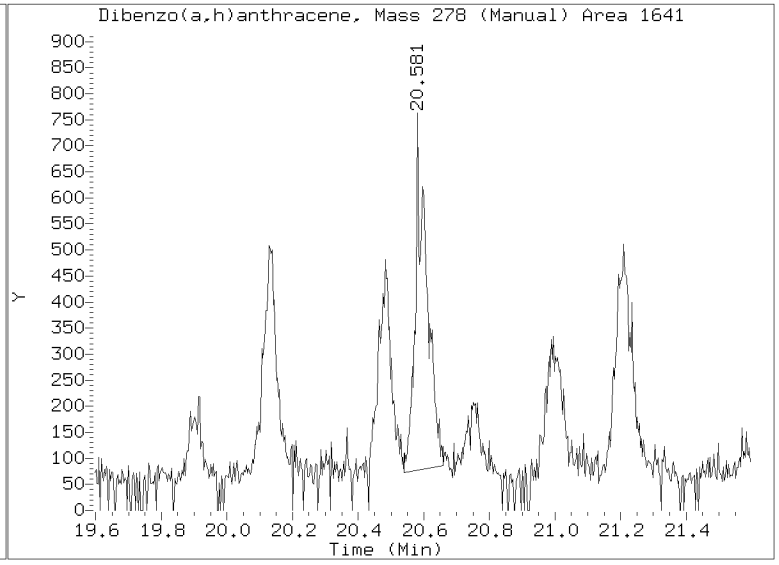
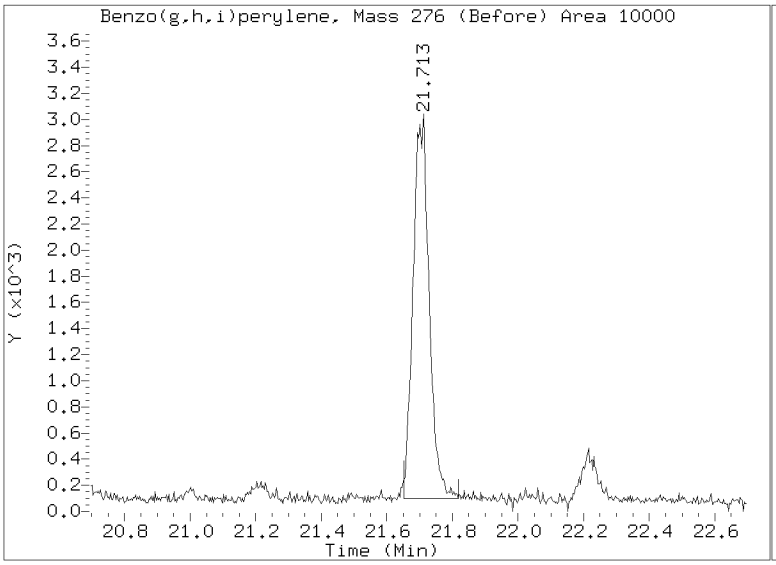
Injection Date: 23-FEB-2023 20:05
Lab ID:23A0420-04 Client ID:
Report Date: 02/26/2023 14:18

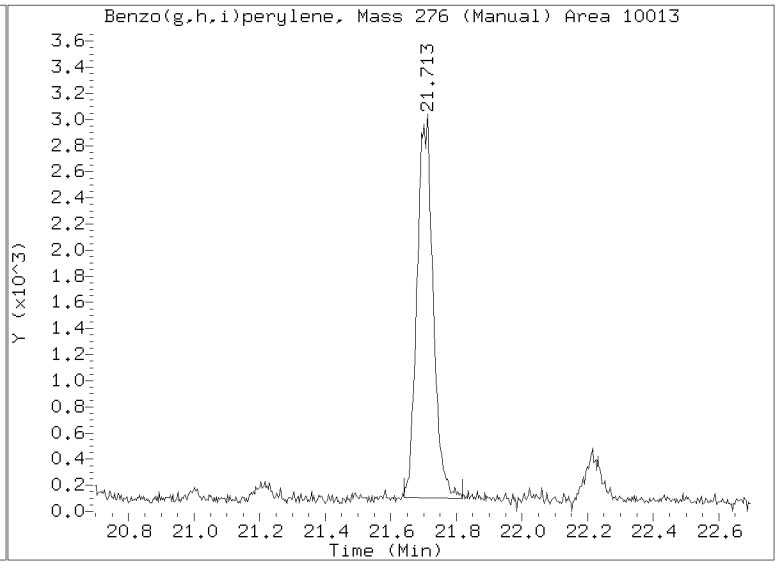












Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1003

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-07 A	SDG:	23A0420
Sampled:	01/19/23 12:25	Prepared:	02/20/23 16:23	File ID:	NT1003172311S.D
% Solids:	51.28	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/18/23 00:47
Batch:	BLB0495	Sequence:	SLC0475	Initial/Final:	19.51 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00049
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	2.6	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	1.0	J	0.7	5.0
100-51-6	Benzyl Alcohol	1	55.2		2.5	20.0
65-85-0	Benzoic acid	1	110	Q	13.4	100
105-67-9	2,4-Dimethylphenol	1	2.6	J	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	4.5	J	2.1	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	749.65	239	31.9	27 - 120	
p-Terphenyl-d14	499.76	618	124	37 - 120	*

Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723115.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

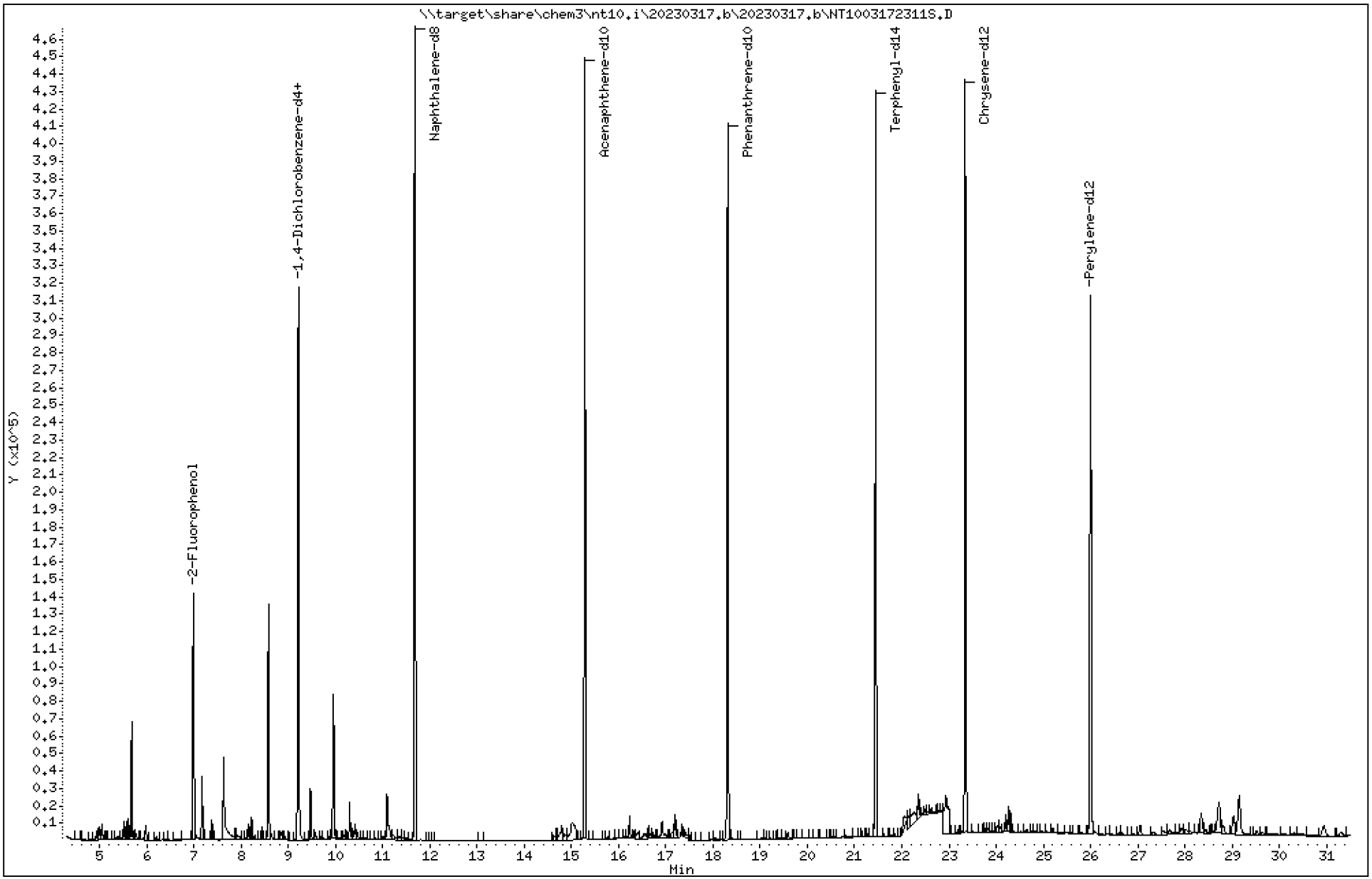
Sample Info: 23A0420-07

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

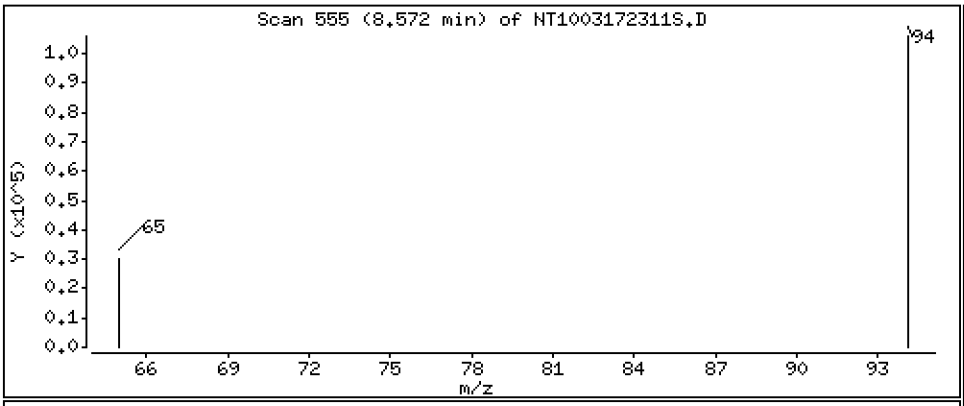
Operator: JGR

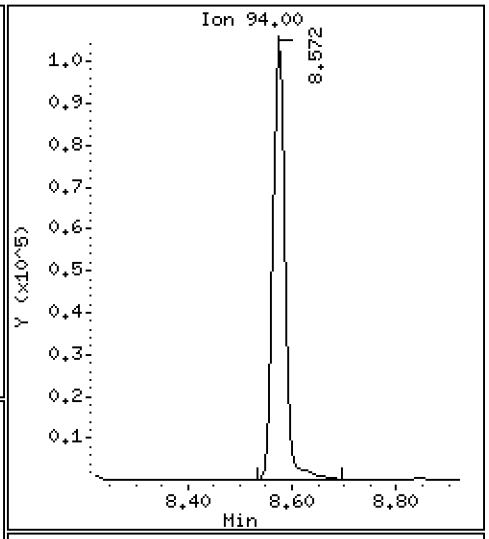
Column phase: ZB-5msi

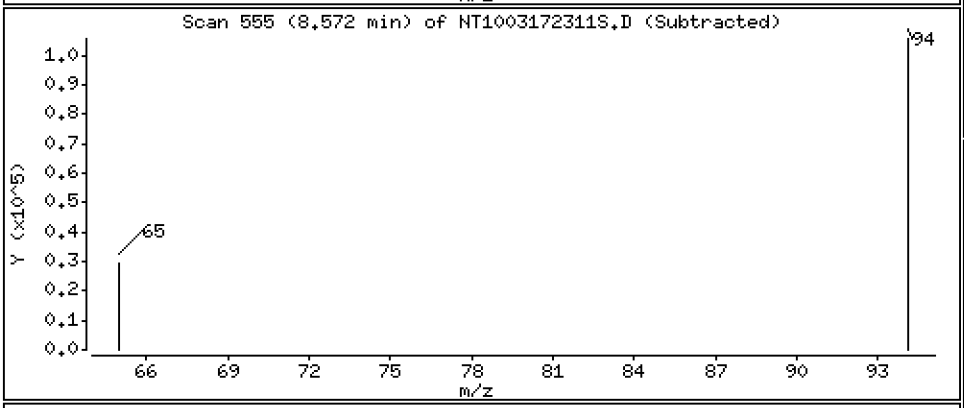
Column diameter: 0.25

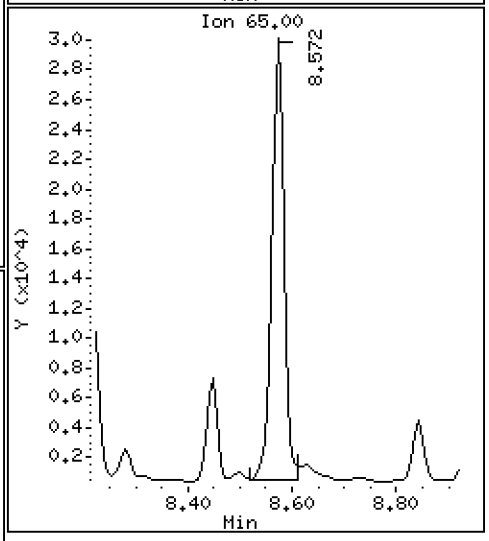
3 Phenol

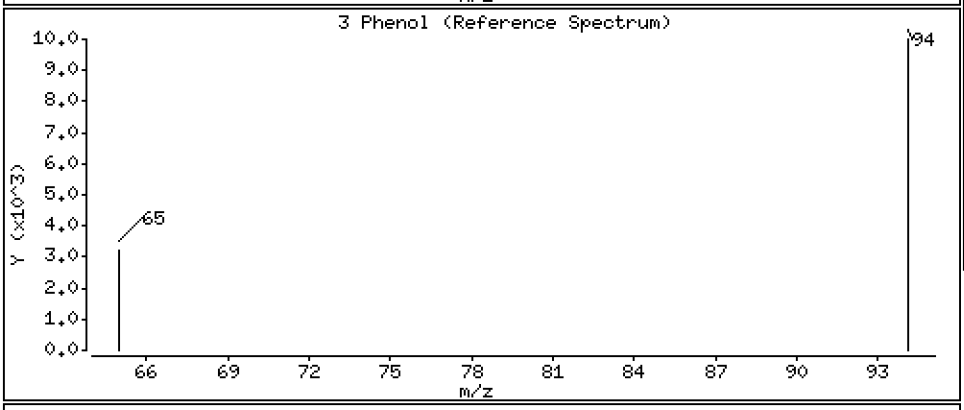
Concentration: 1.962 ug/L

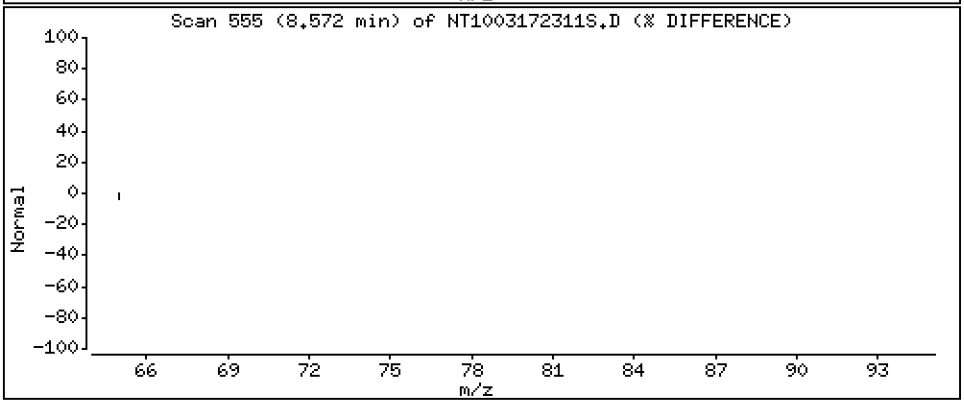












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172311S.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

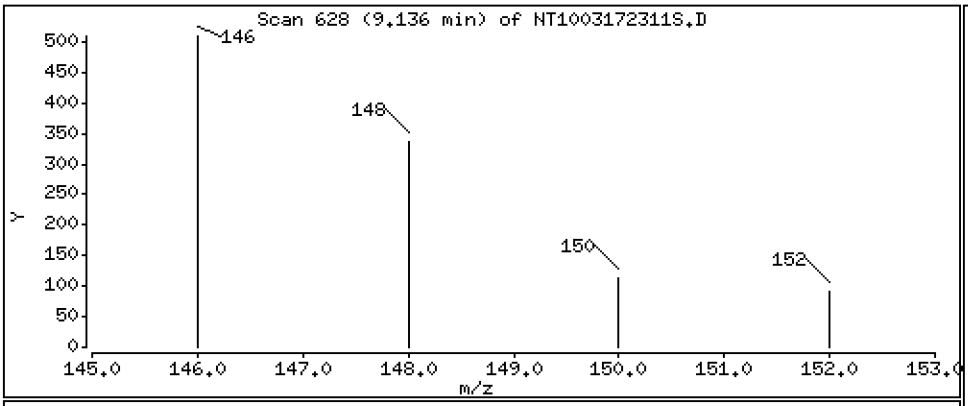
Operator: JGR

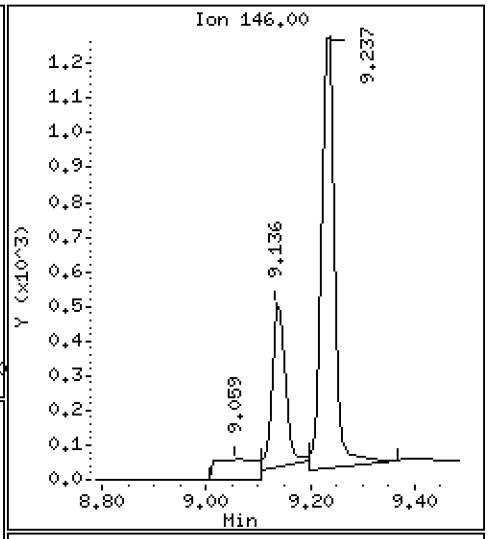
Column phase: ZB-5msi

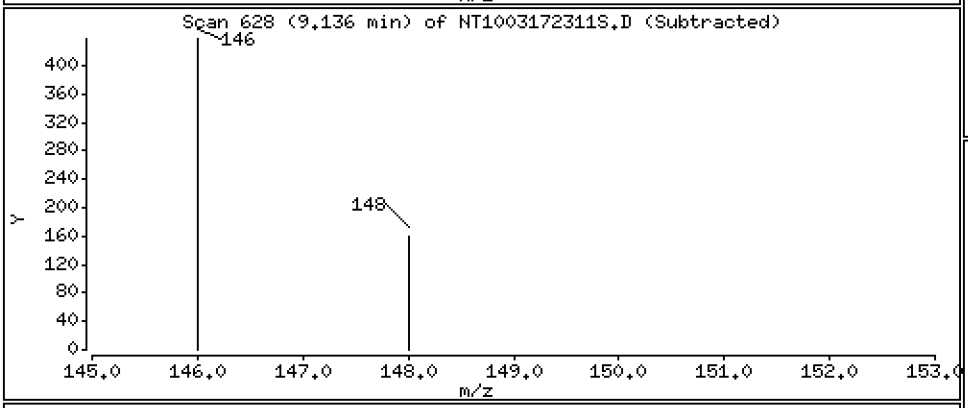
Column diameter: 0.25

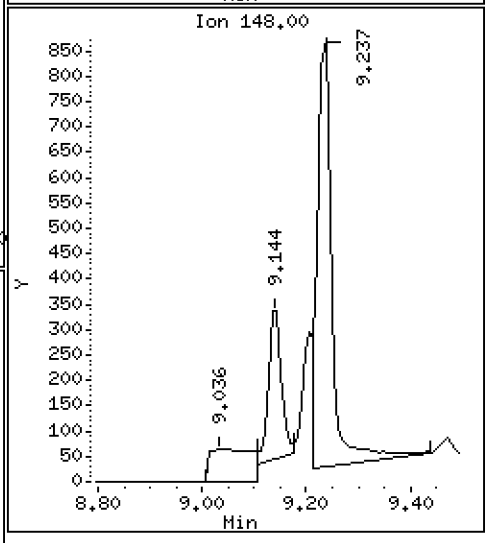
7 1,3-Dichlorobenzene

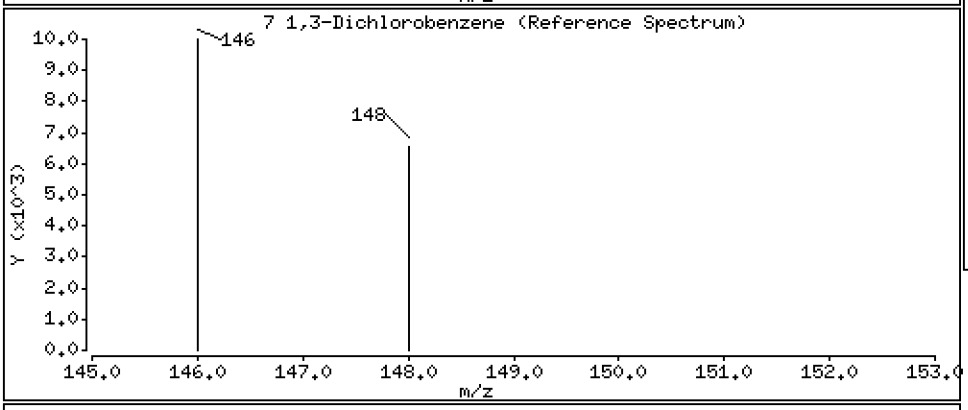
Concentration: 0.01055 ug/L

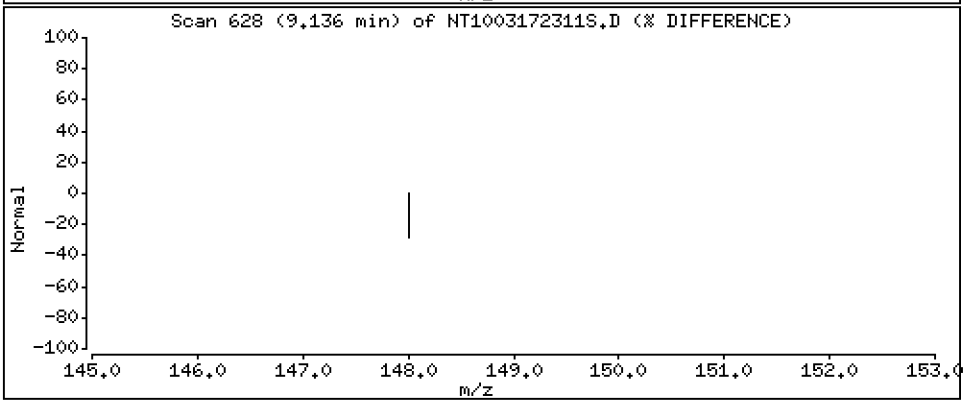












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

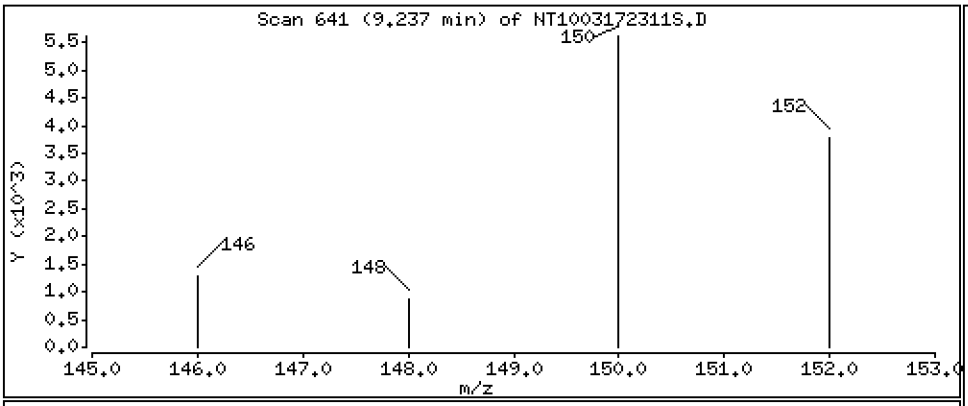
Operator: JGR

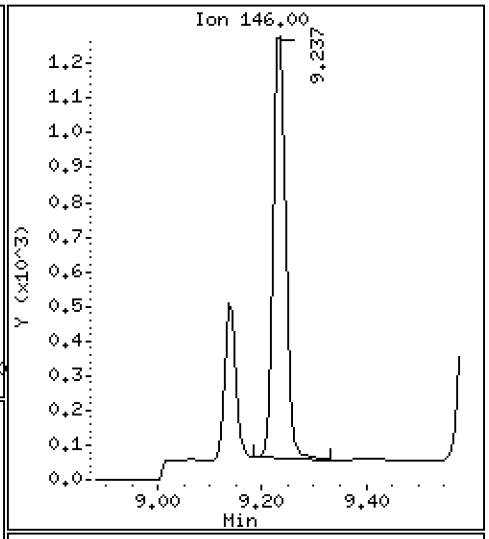
Column phase: ZB-5msi

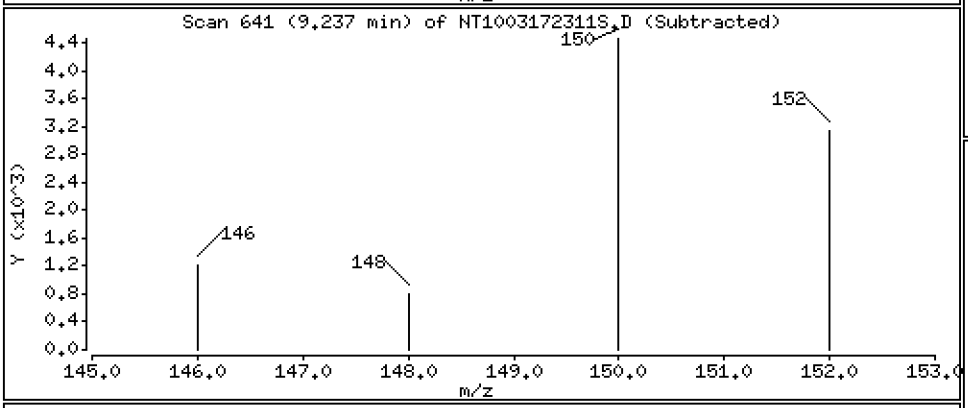
Column diameter: 0.25

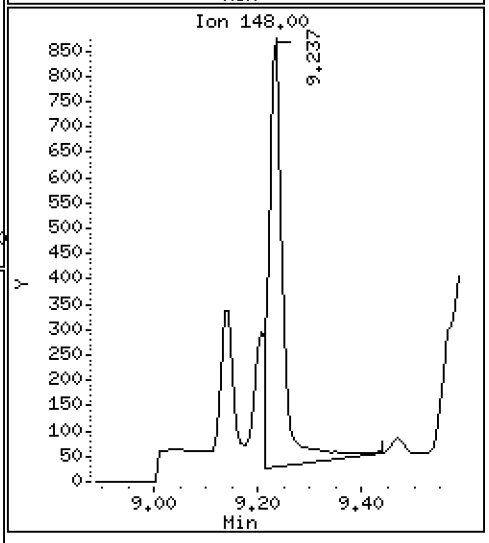
9 1,4-Dichlorobenzene

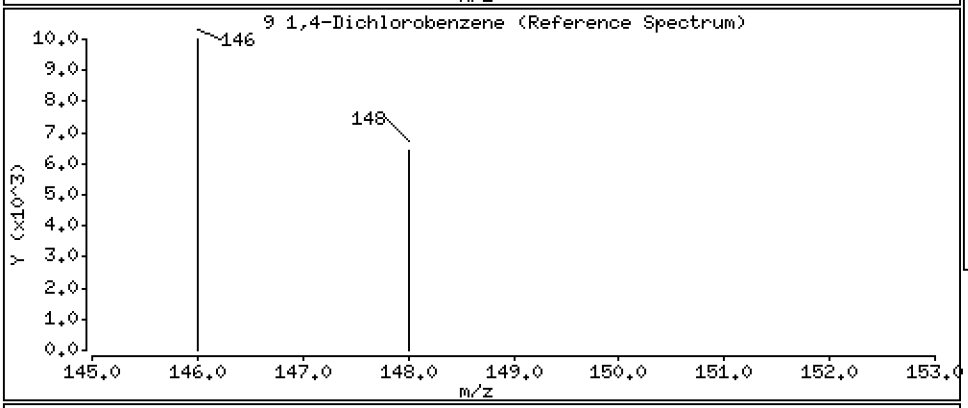
Concentration: 0.02625 ug/L

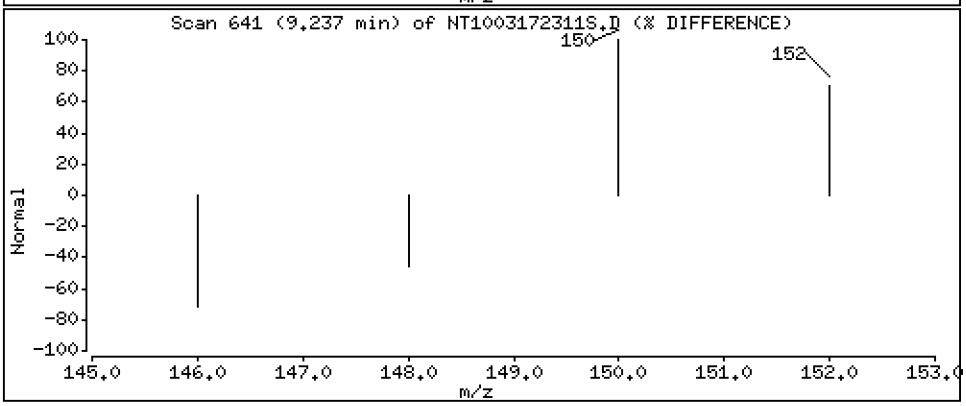












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723115.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

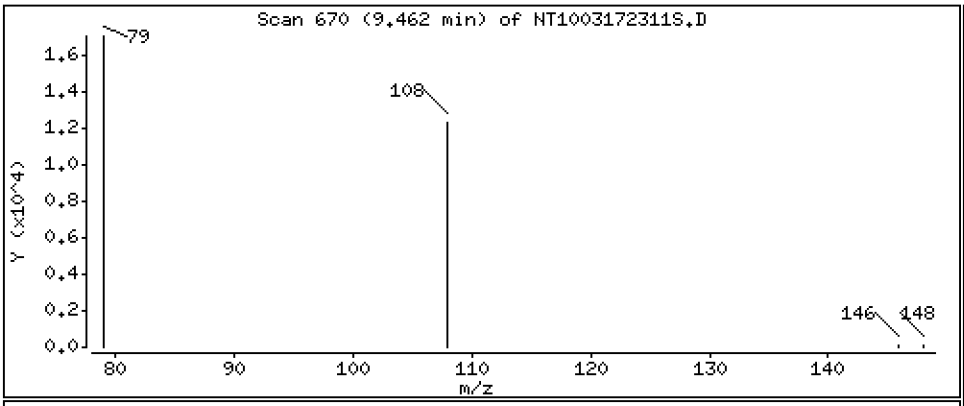
Operator: JGR

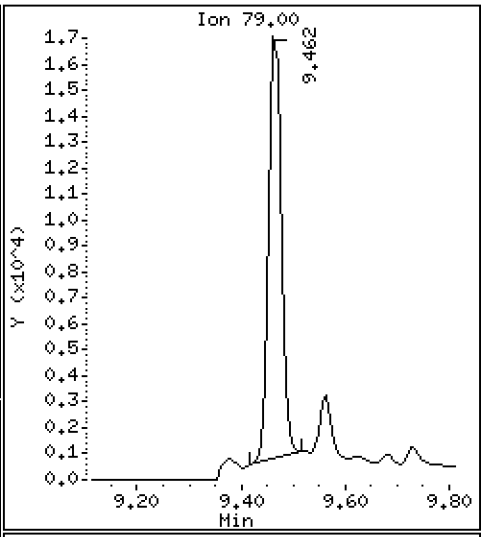
Column phase: ZB-5msi

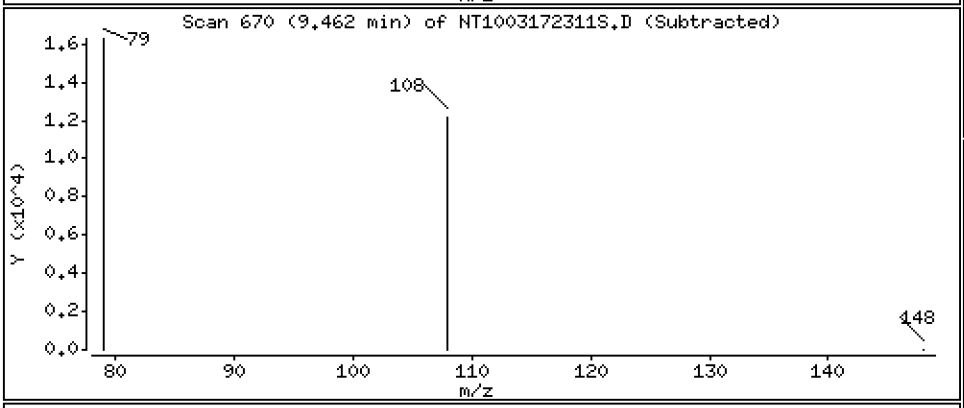
Column diameter: 0.25

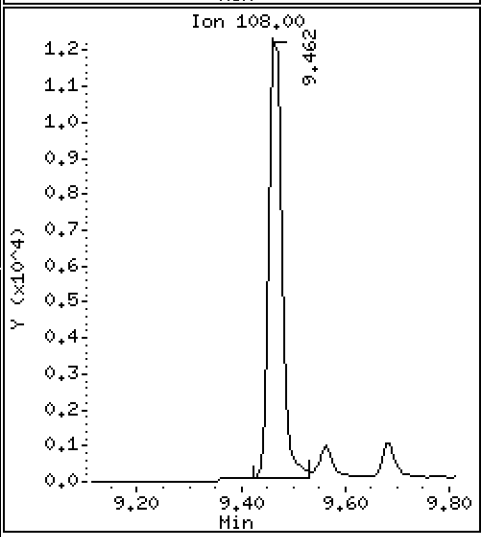
11 Benzyl alcohol

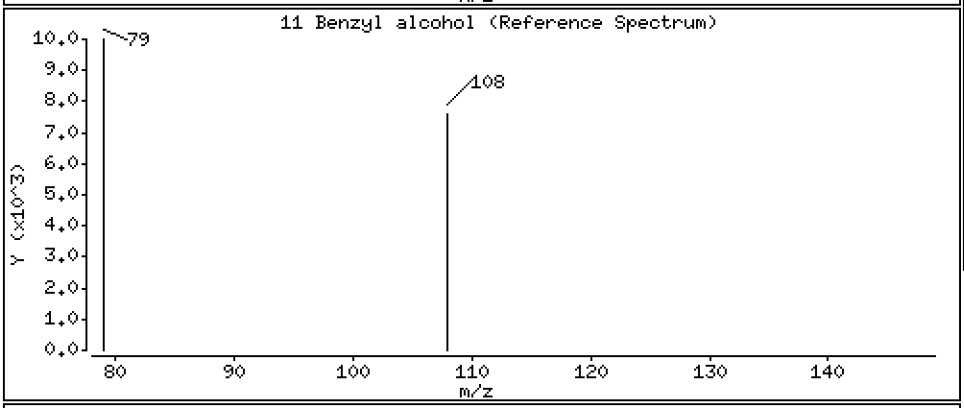
Concentration: 0.5519 ug/L

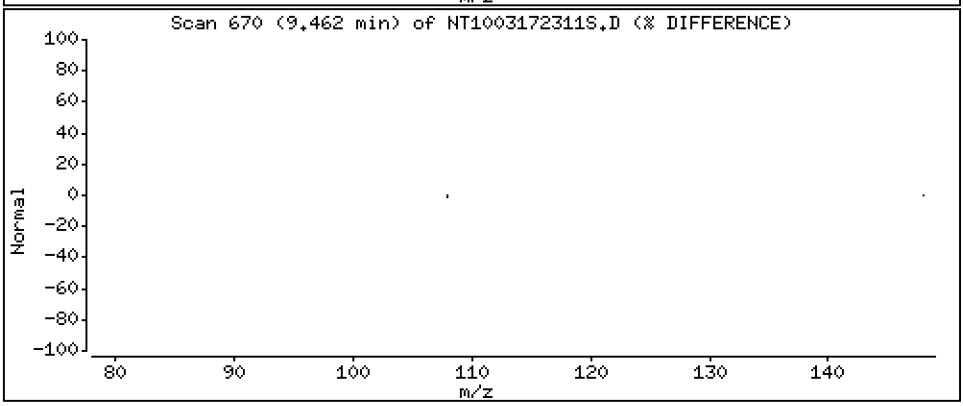












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172311S.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

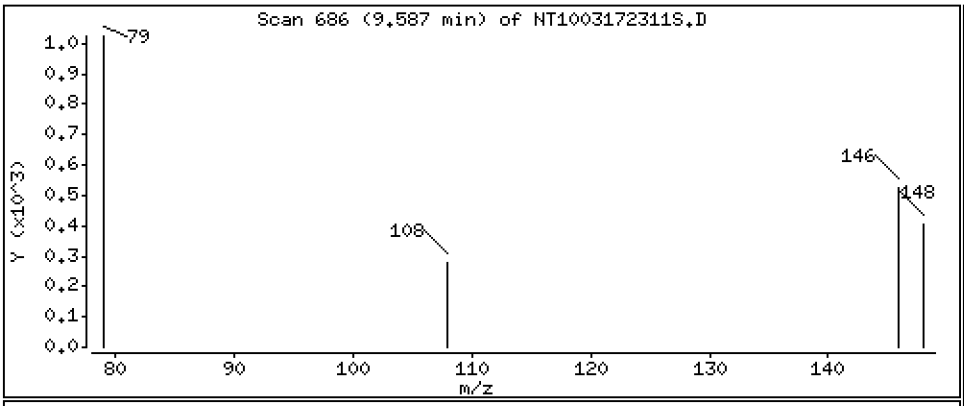
Operator: JGR

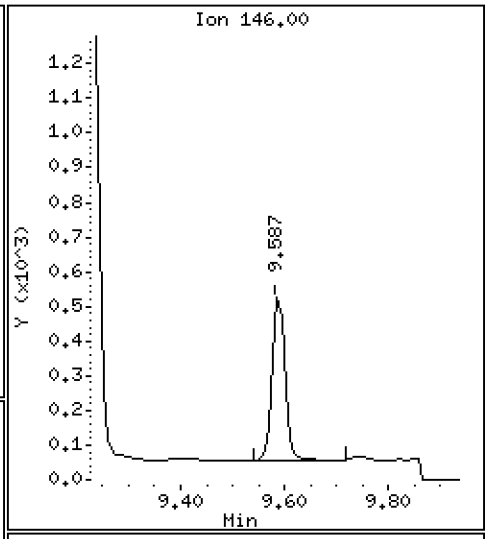
Column phase: ZB-5msi

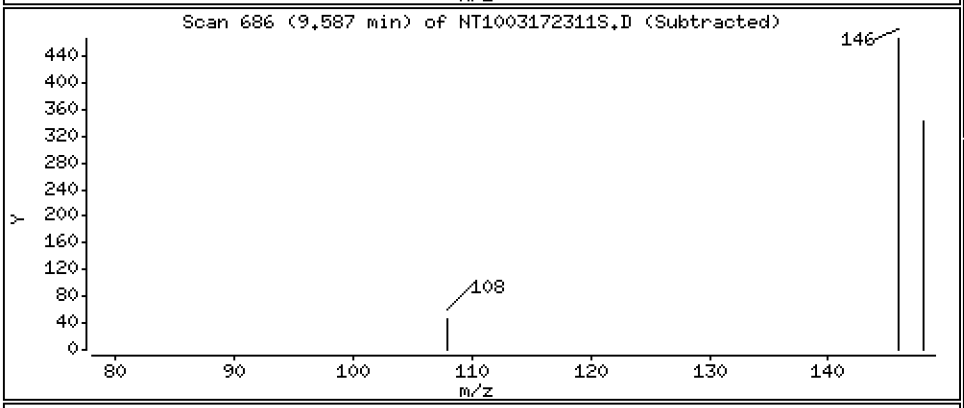
Column diameter: 0.25

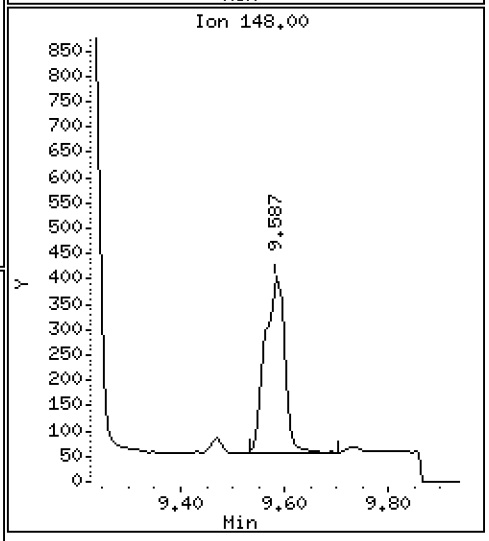
12 1,2-Dichlorobenzene

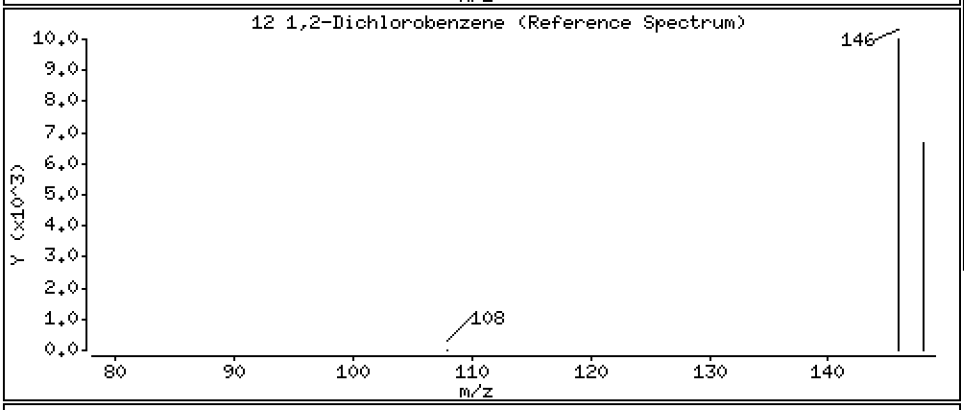
Concentration: 0.01036 ug/L

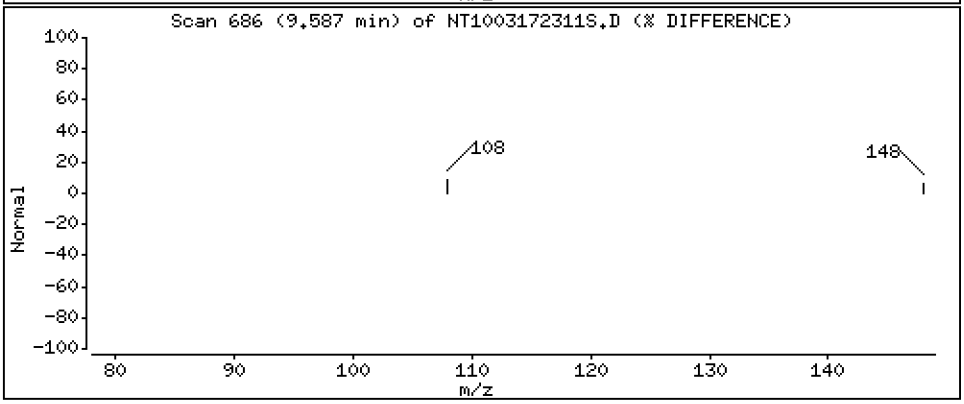












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172311S.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

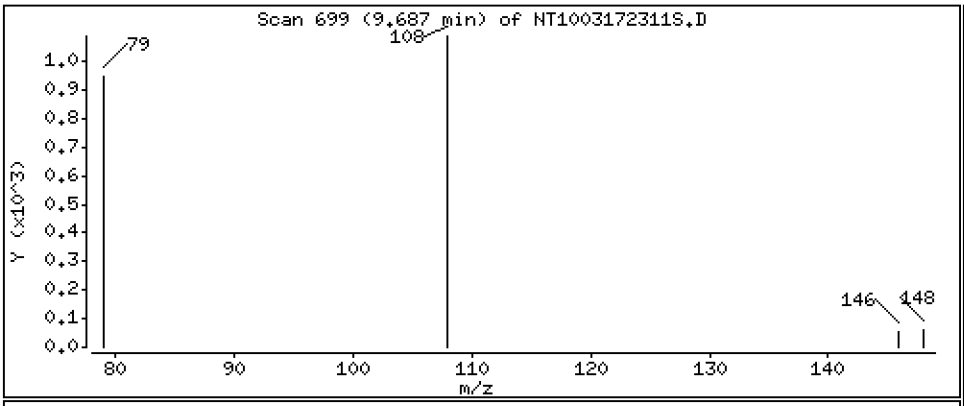
Operator: JGR

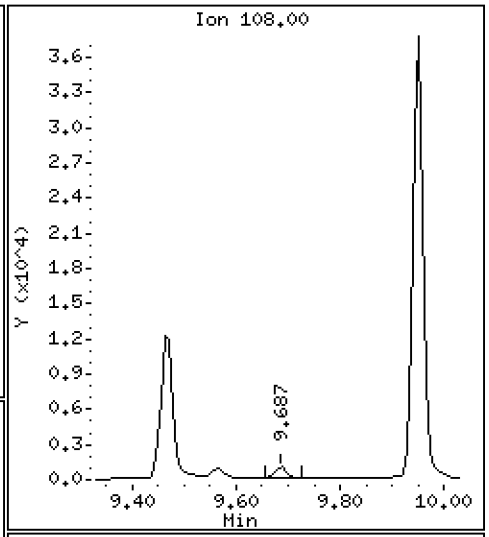
Column phase: ZB-5msi

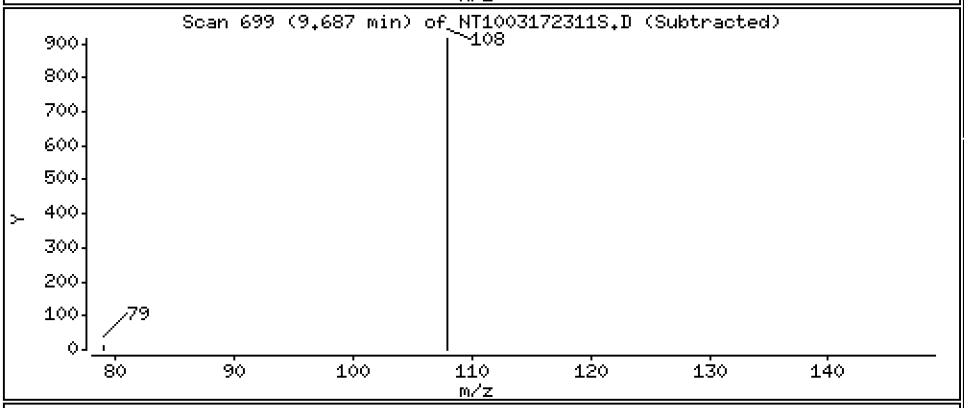
Column diameter: 0.25

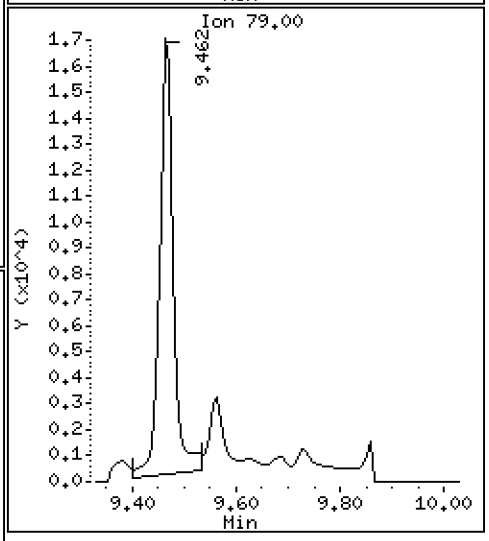
13 2-Methylphenol

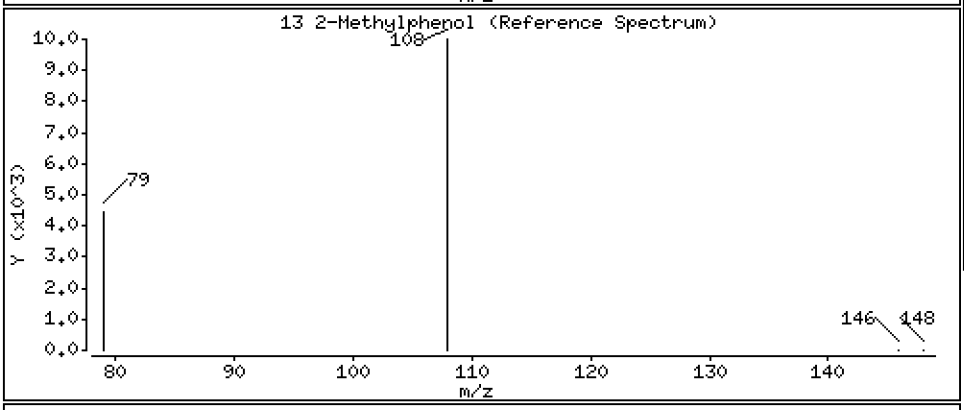
Concentration: 0.02522 ug/L

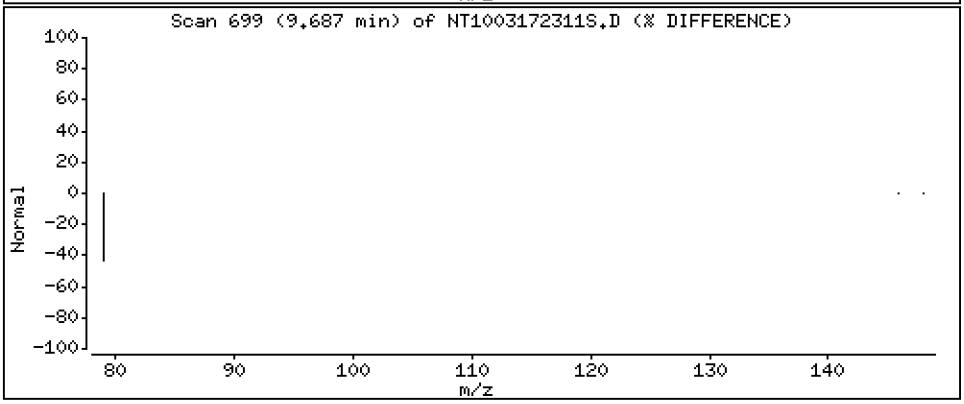












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

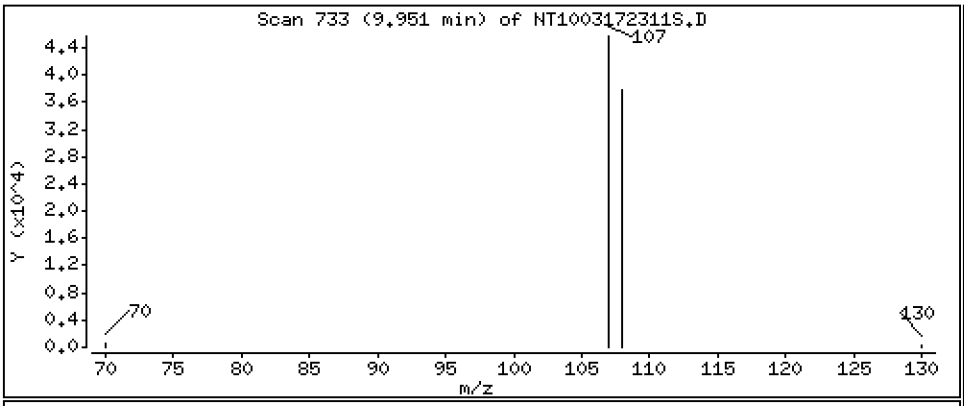
Operator: JGR

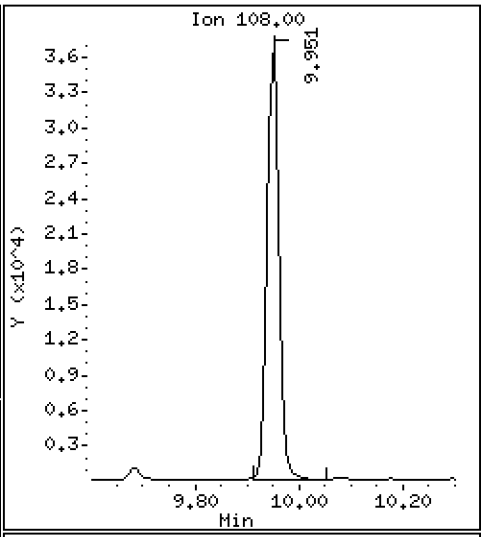
Column phase: ZB-5msi

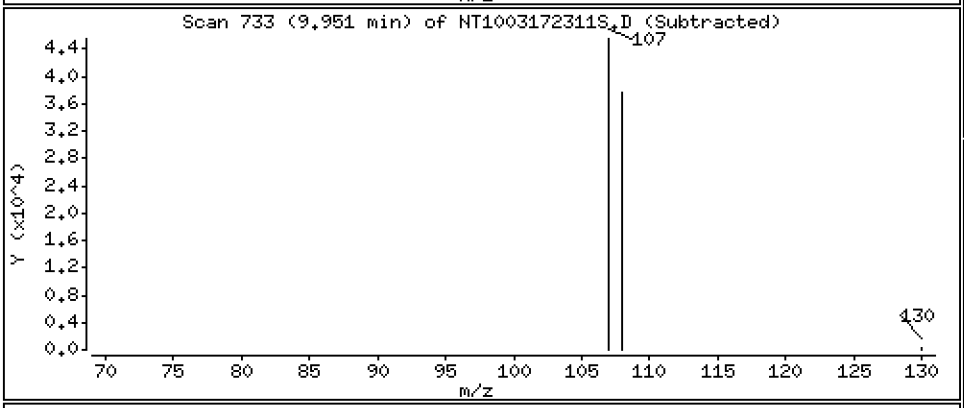
Column diameter: 0.25

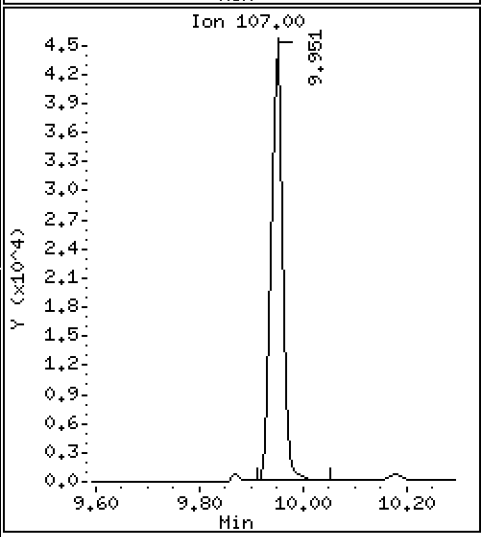
15 4-Methylphenol

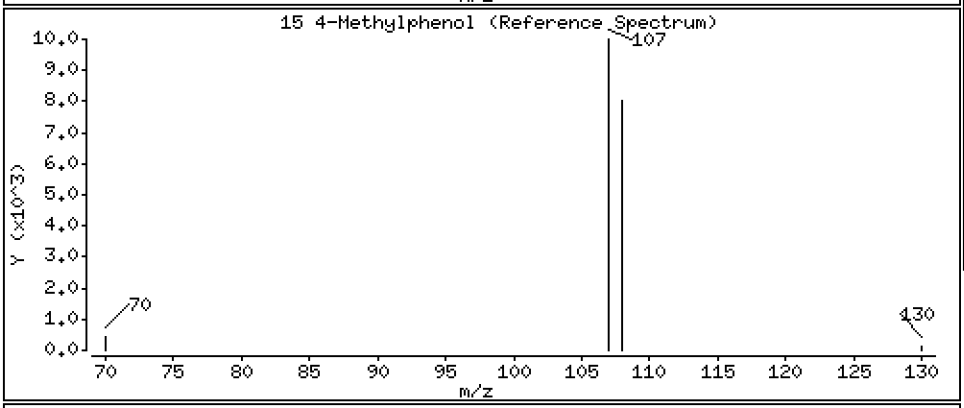
Concentration: 0.9311 ug/L

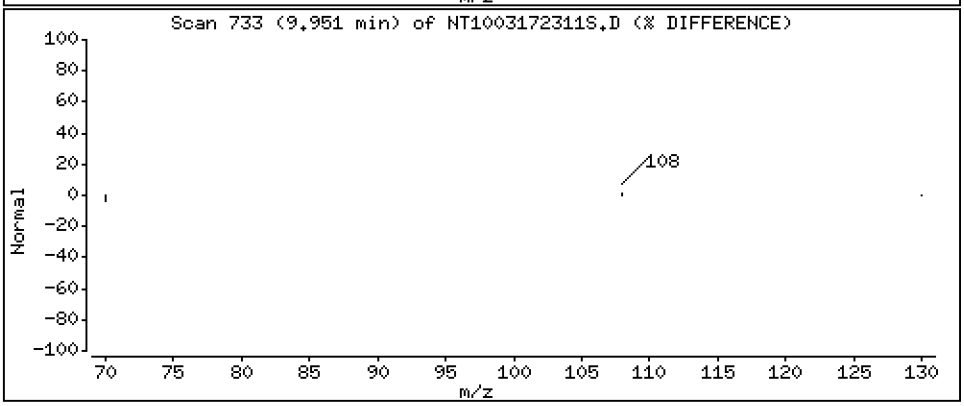












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

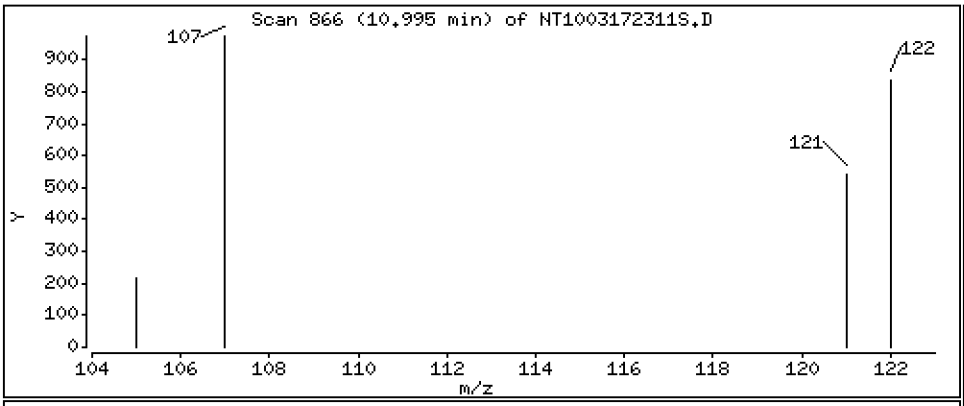
Operator: JGR

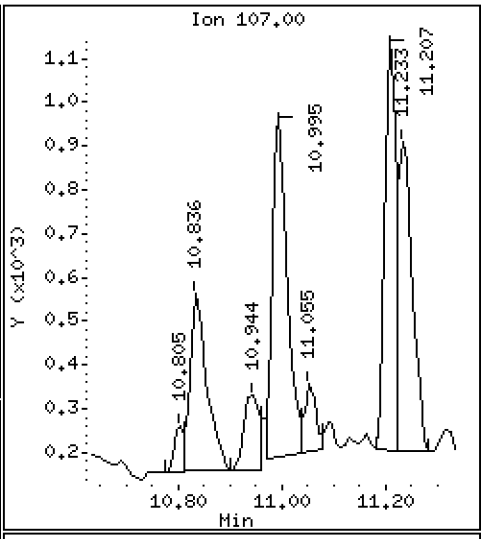
Column phase: ZB-5msi

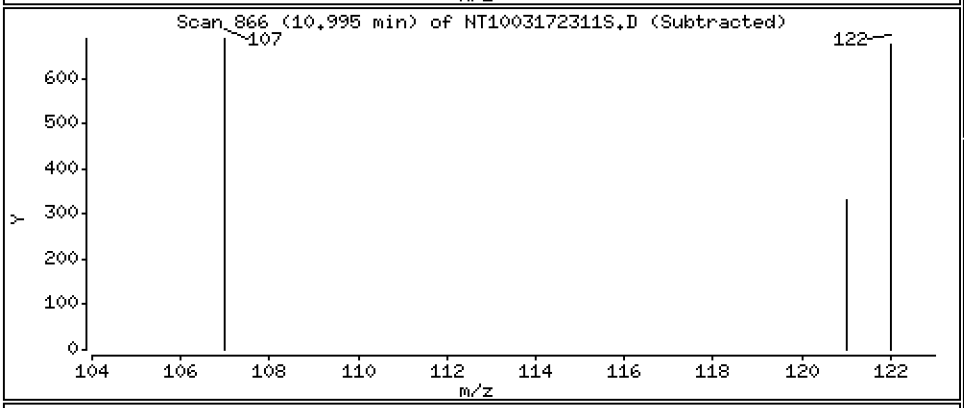
Column diameter: 0.25

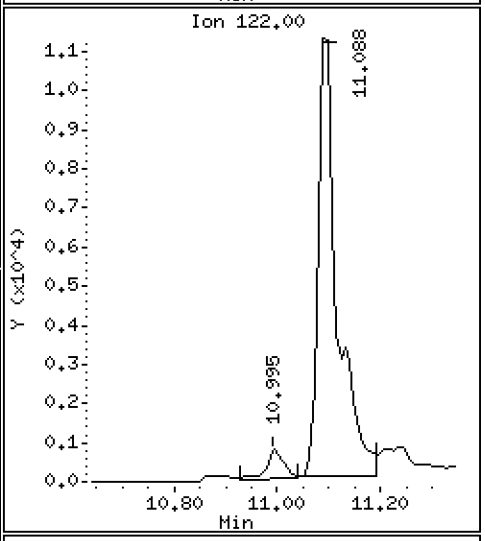
22 2,4-Dimethylphenol

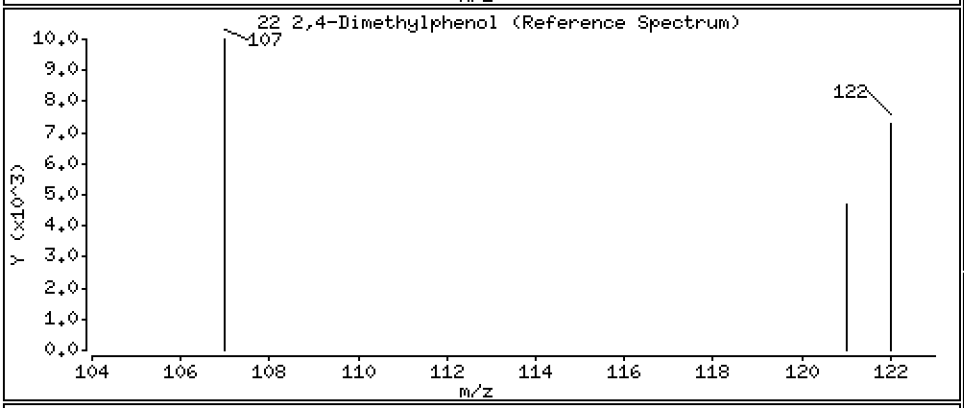
Concentration: 0.02645 ug/L

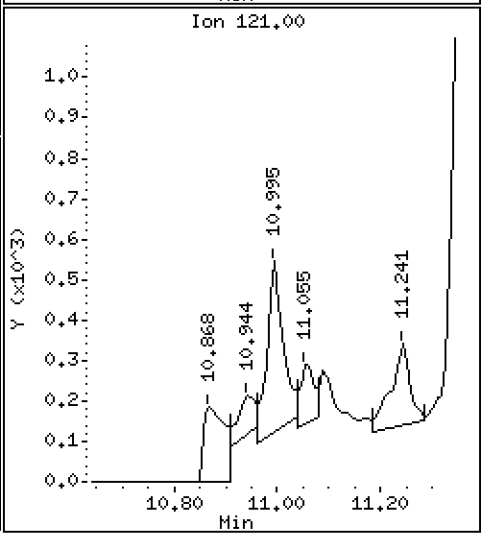


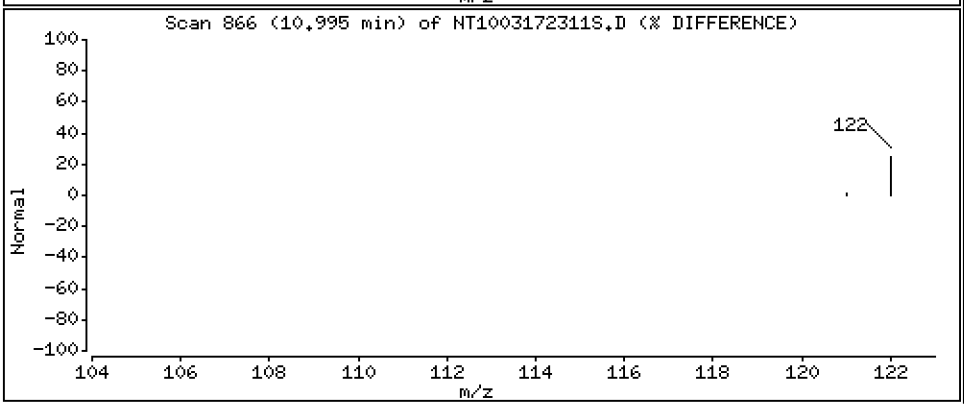












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

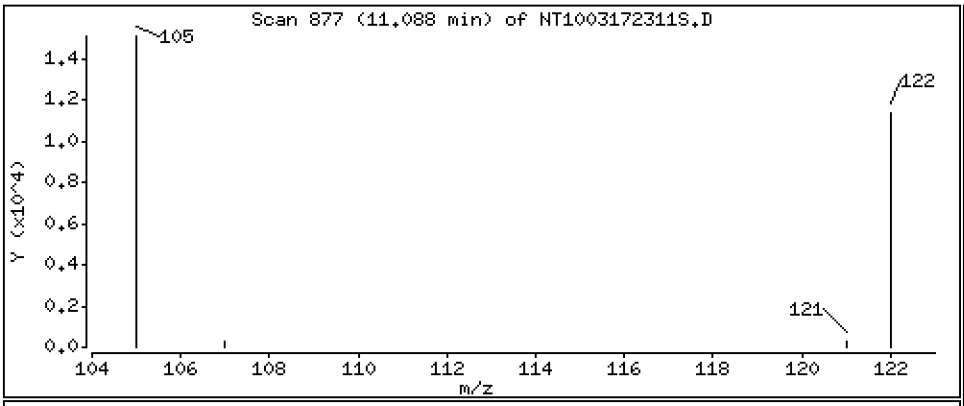
Operator: JGR

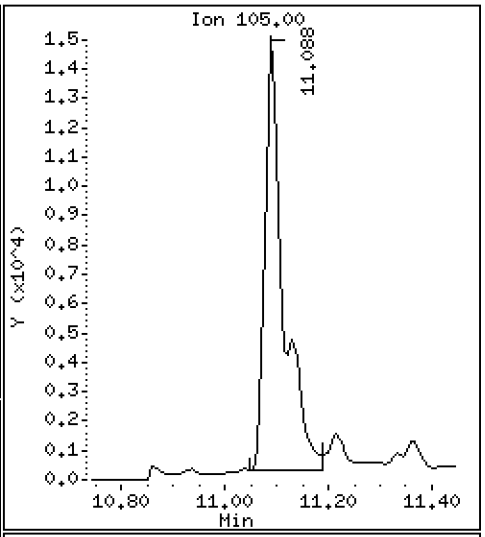
Column phase: ZB-5msi

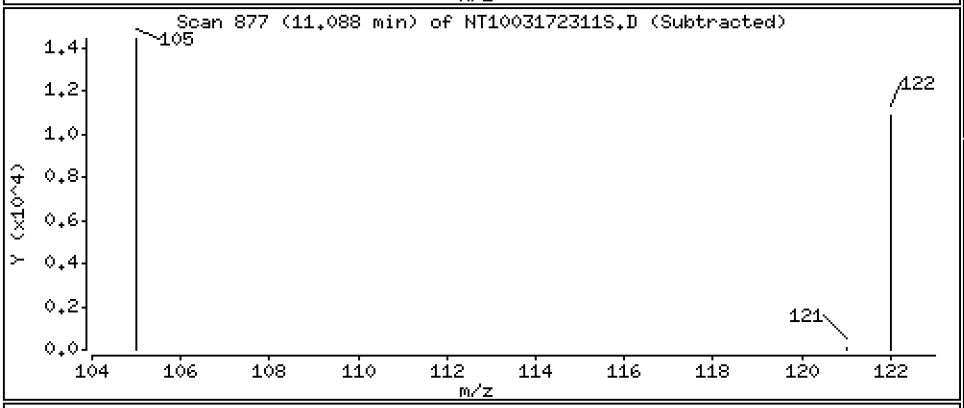
Column diameter: 0.25

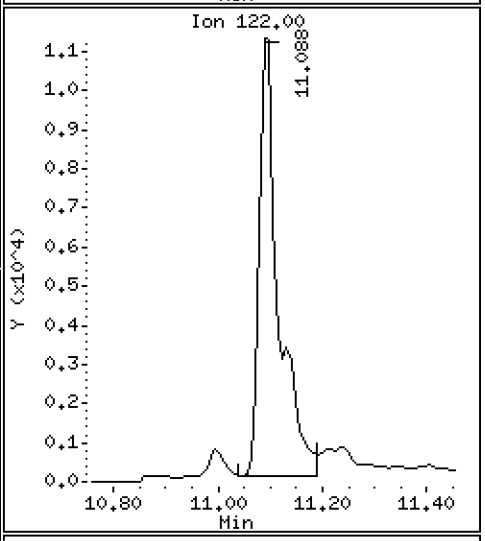
24 Benzoic acid

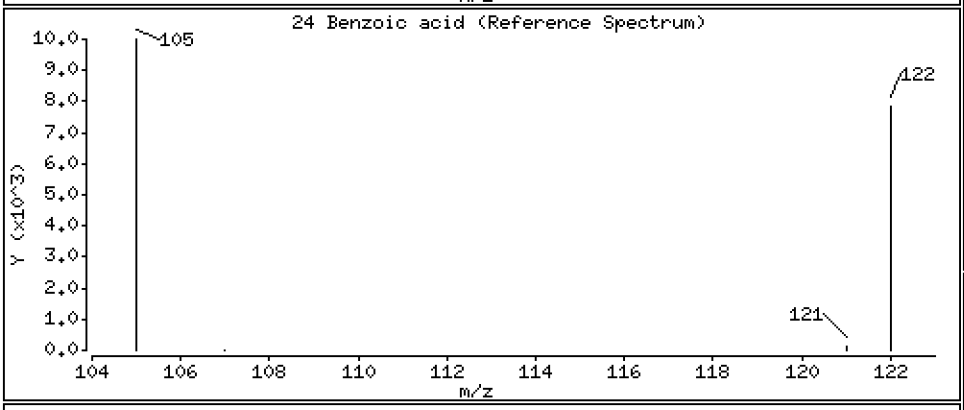
Concentration: 1.102 ug/L

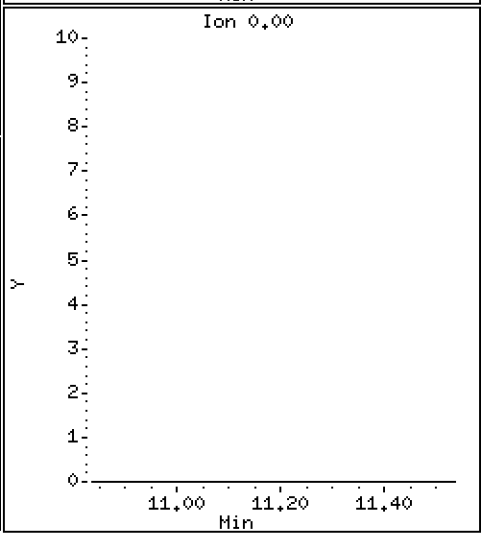


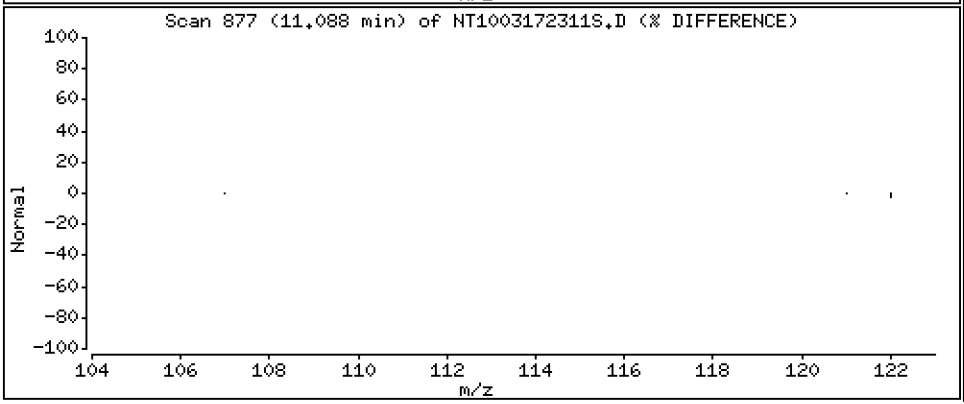












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

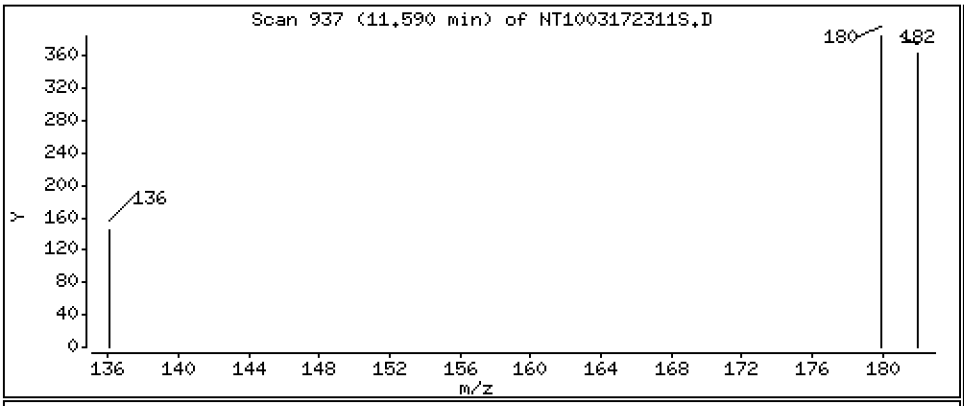
Operator: JGR

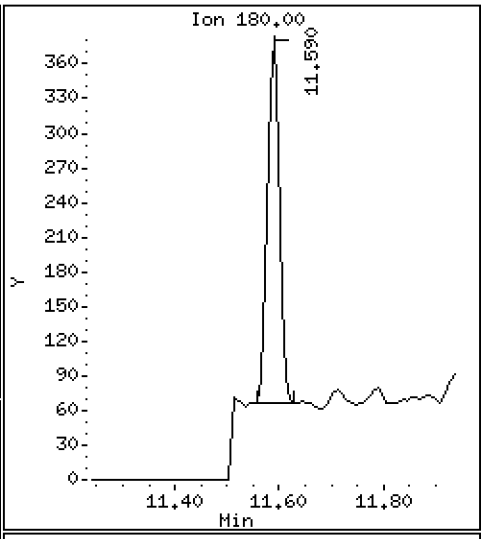
Column phase: ZB-5msi

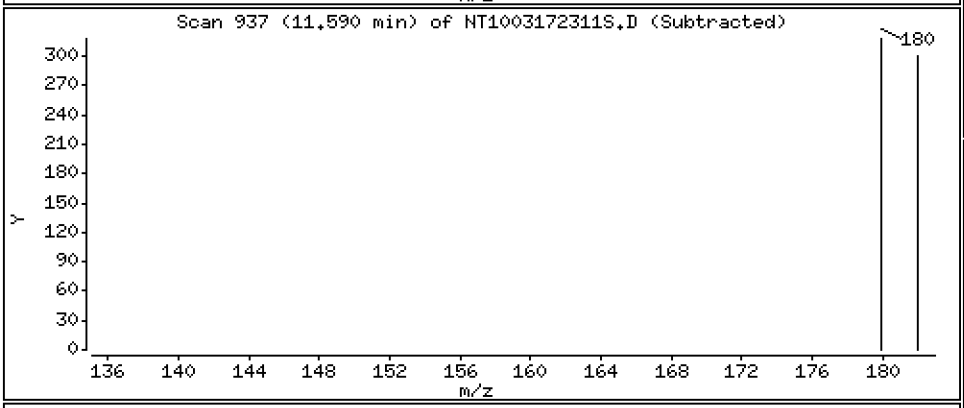
Column diameter: 0.25

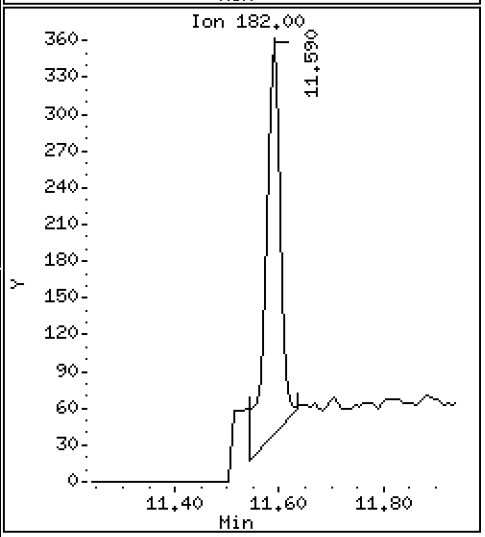
26 1,2,4-Trichlorobenzene

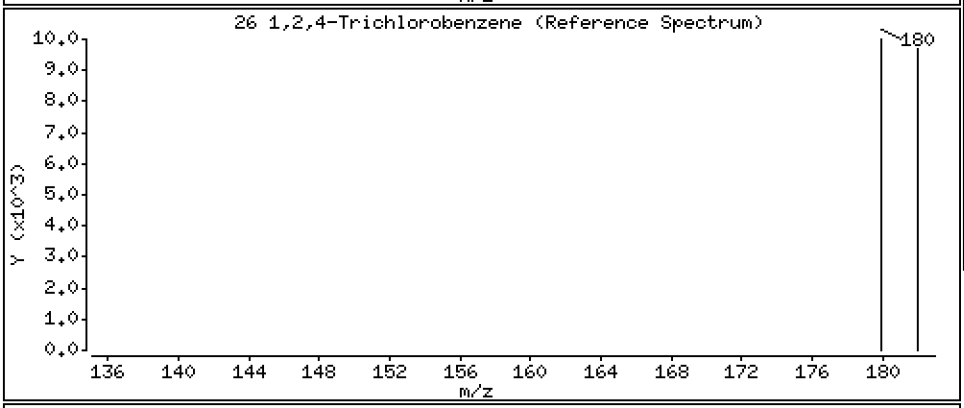
Concentration: 0.008131 ug/L

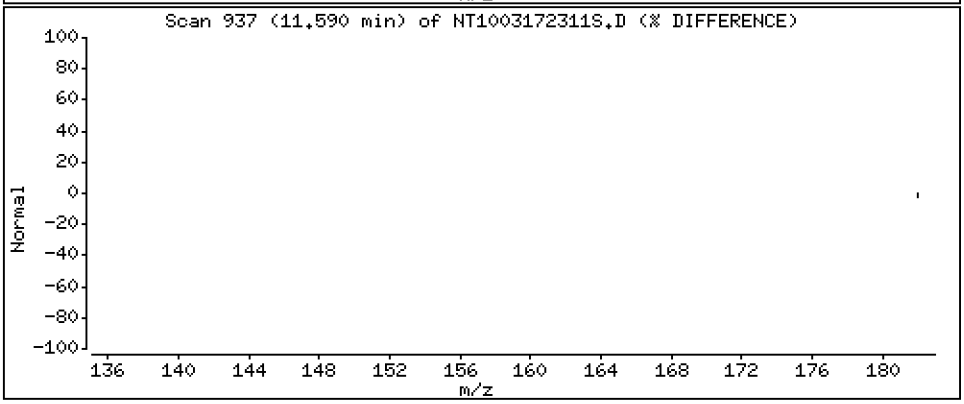












Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

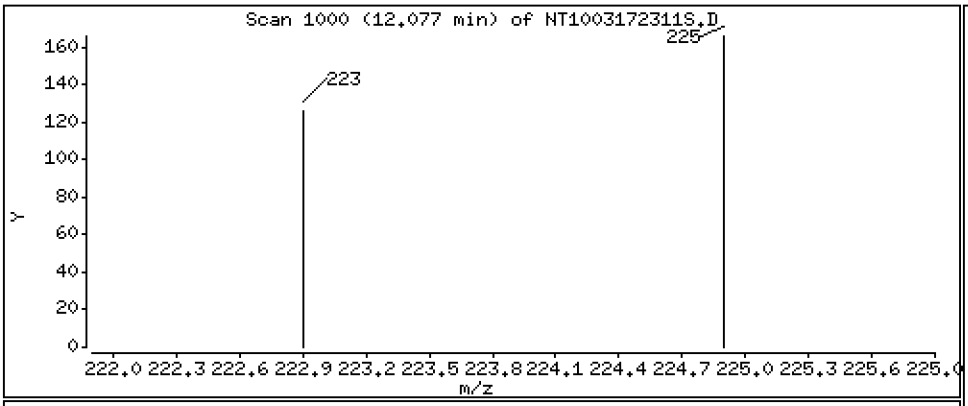
Operator: JGR

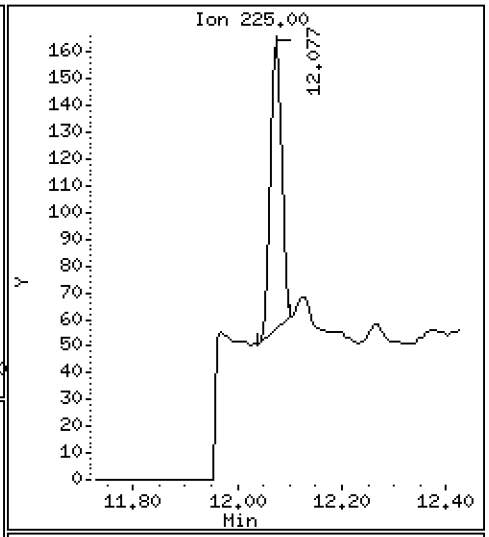
Column phase: ZB-5msi

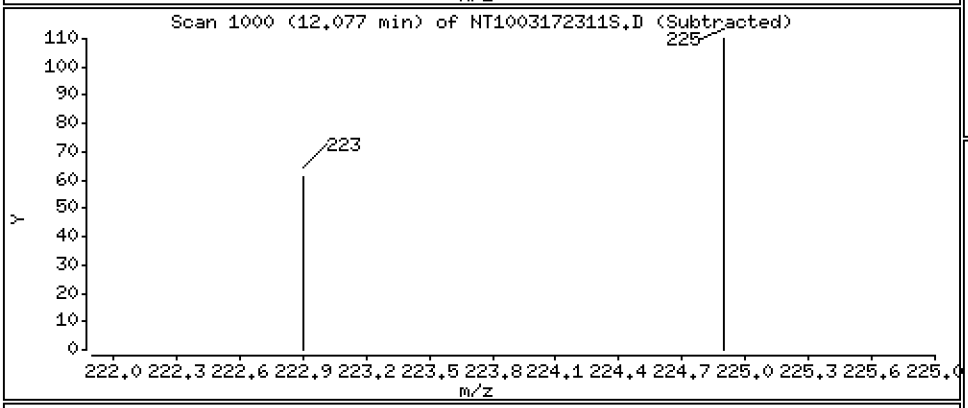
Column diameter: 0.25

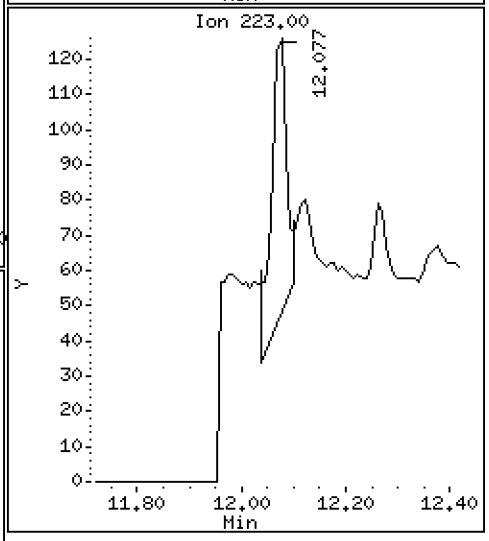
30 Hexachlorobutadiene

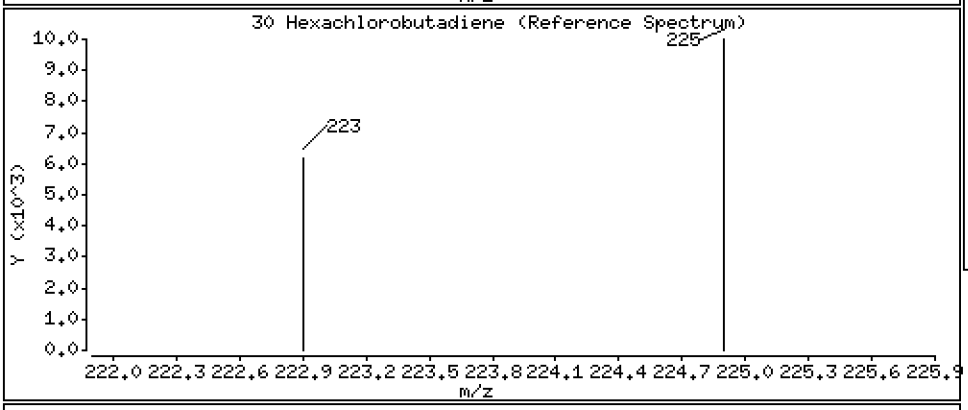
Concentration: 0.004157 ug/L

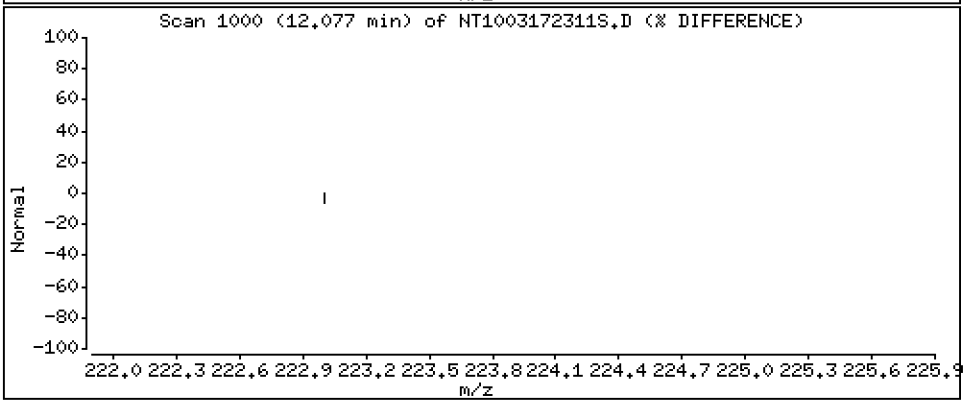












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723115.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

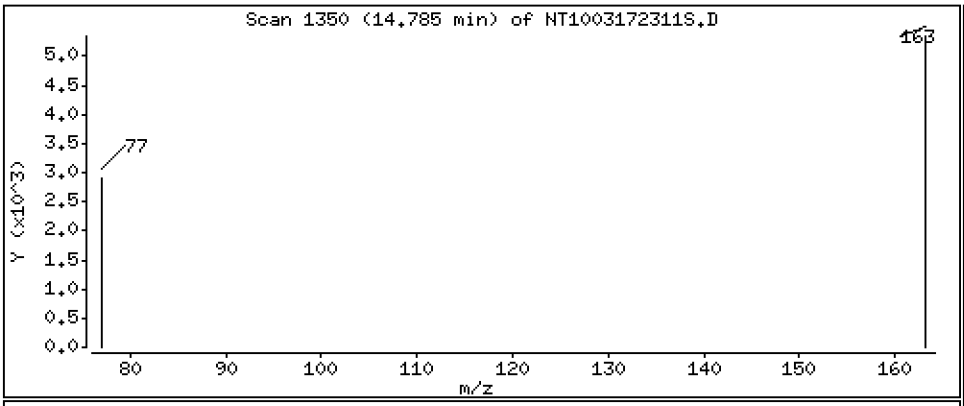
Operator: JGR

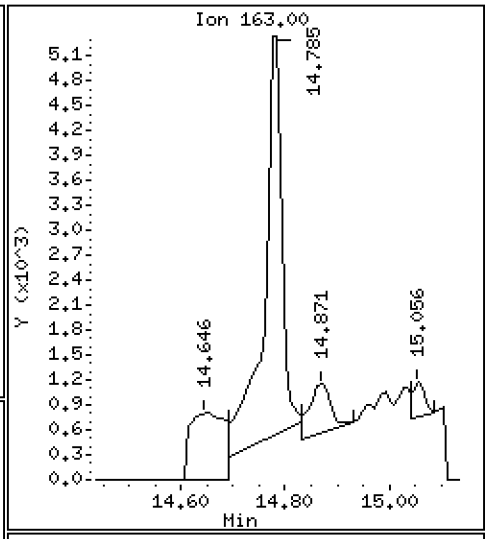
Column phase: ZB-5msi

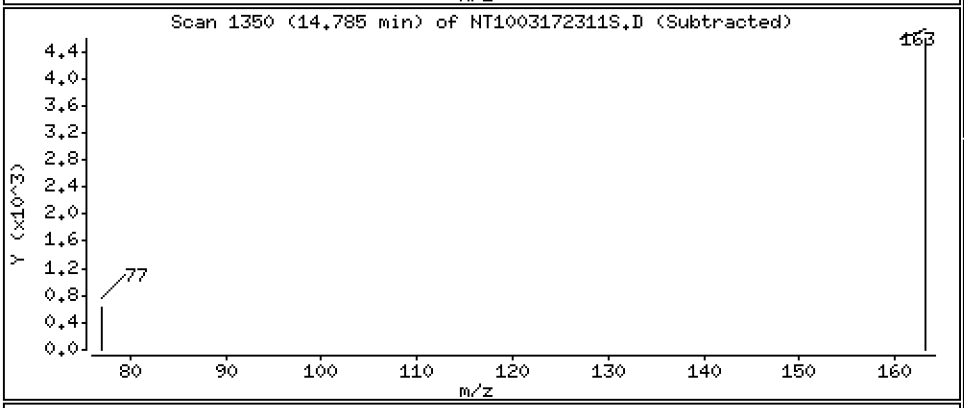
Column diameter: 0.25

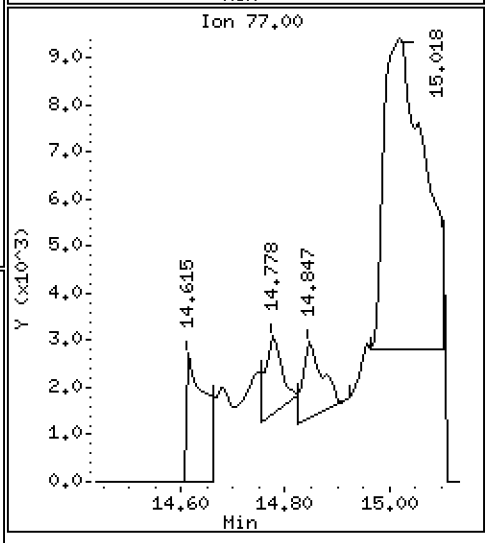
39 Dimethylphthalate

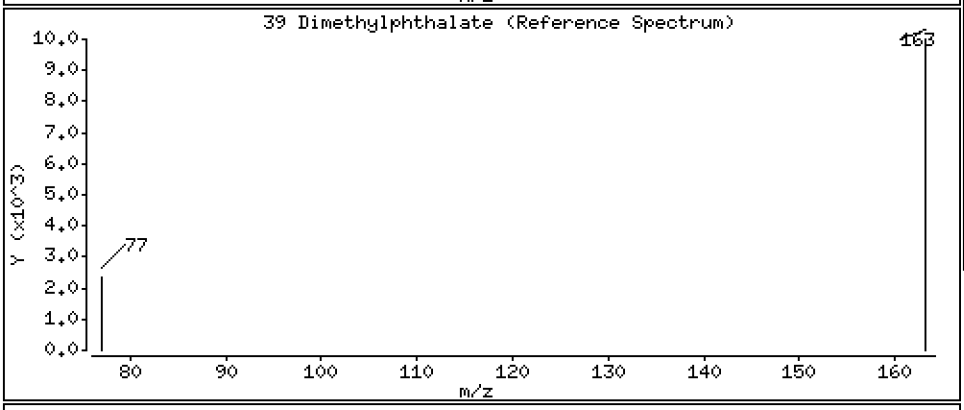
Concentration: 0.1036 ug/L

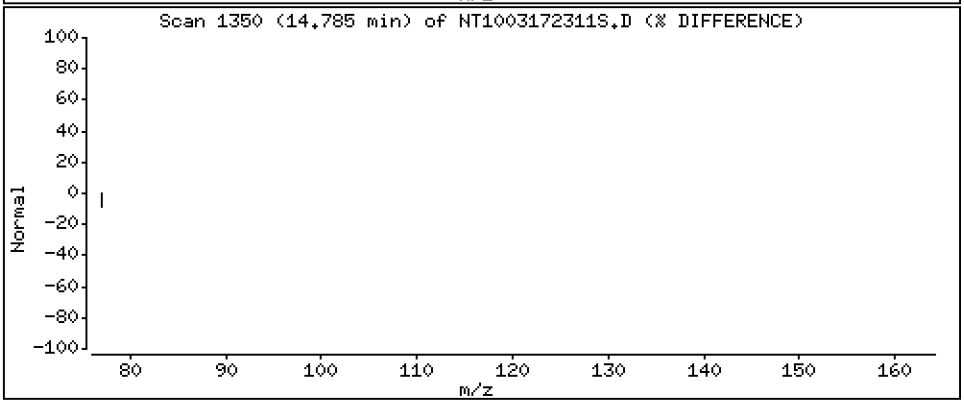












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723115.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

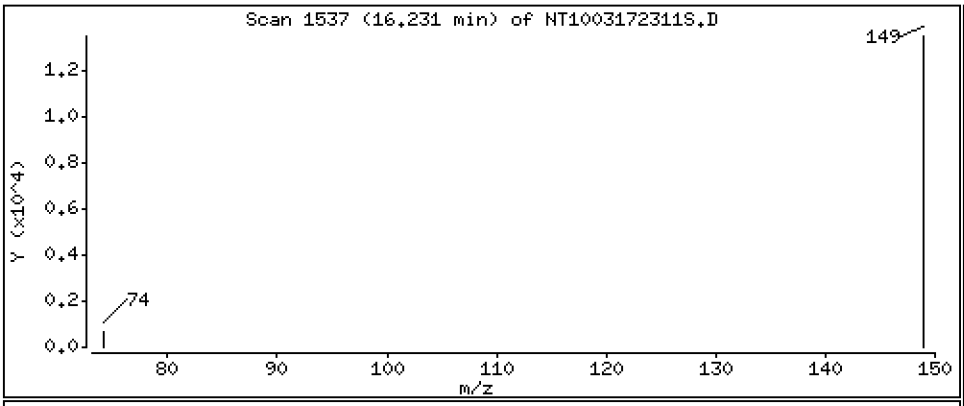
Operator: JGR

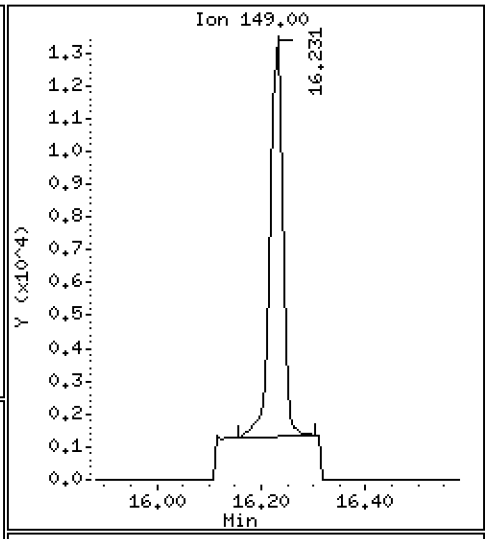
Column phase: ZB-5msi

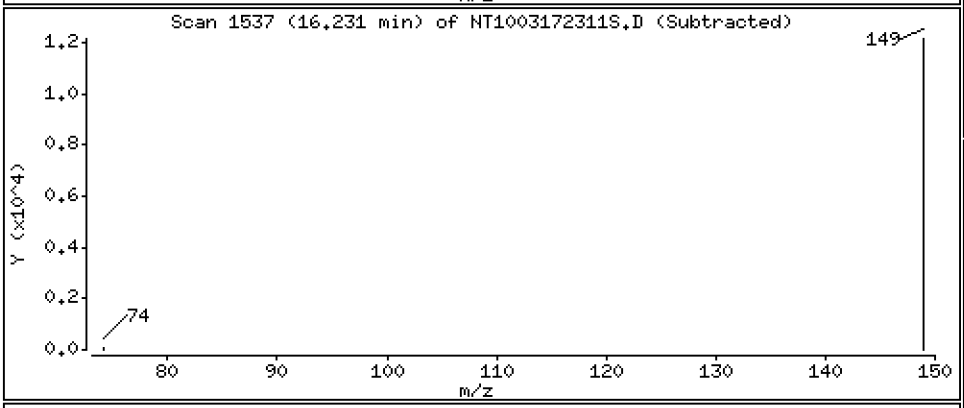
Column diameter: 0.25

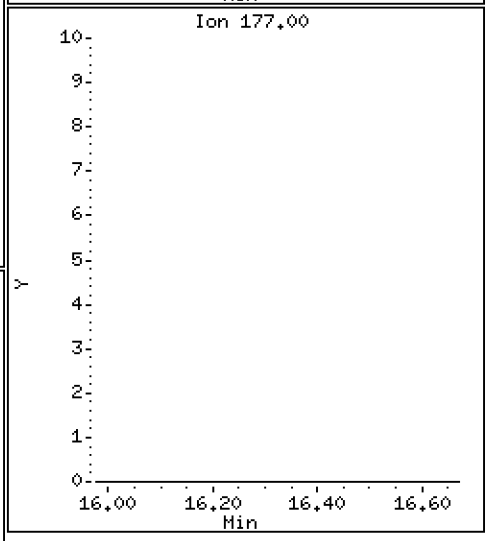
50 Diethylphthalate

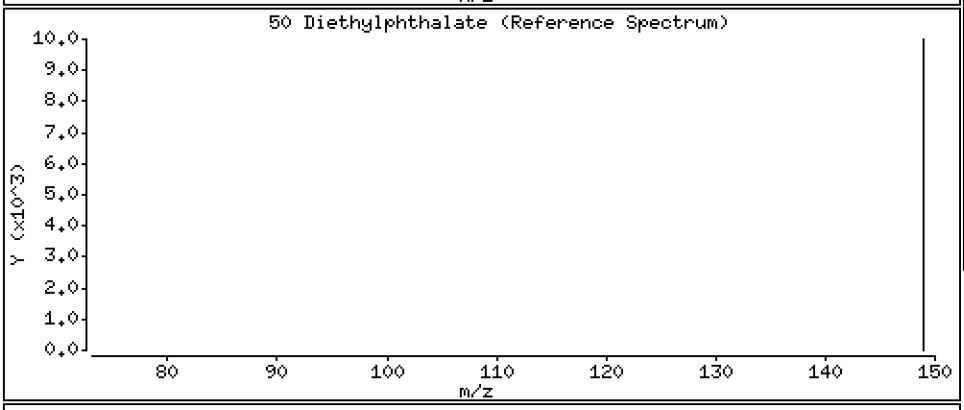
Concentration: 0.1765 ug/L

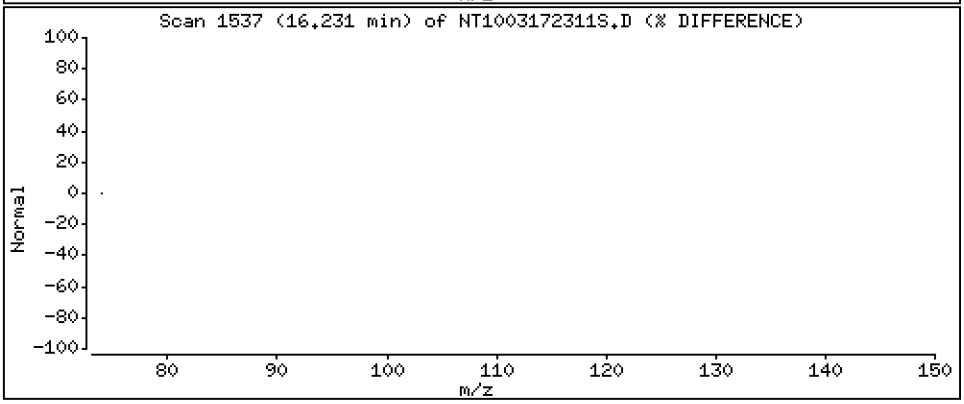












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172311S.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

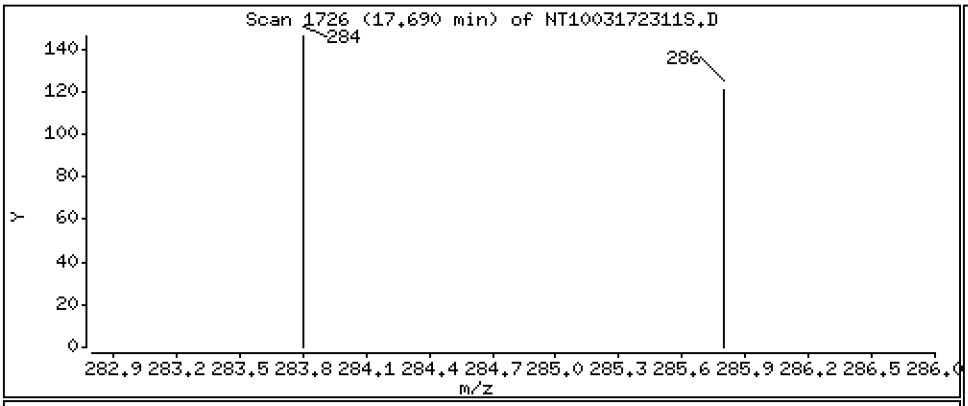
Operator: JGR

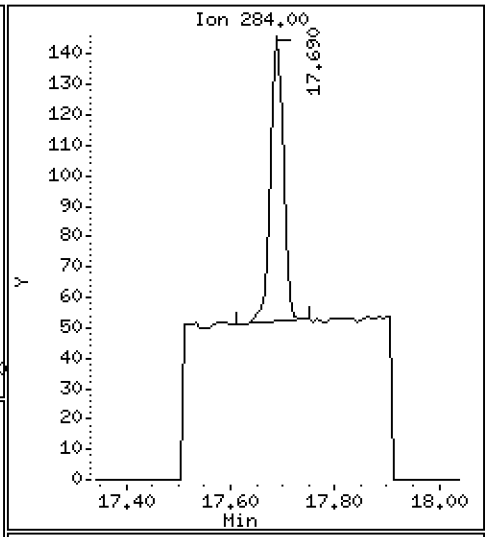
Column phase: ZB-5msi

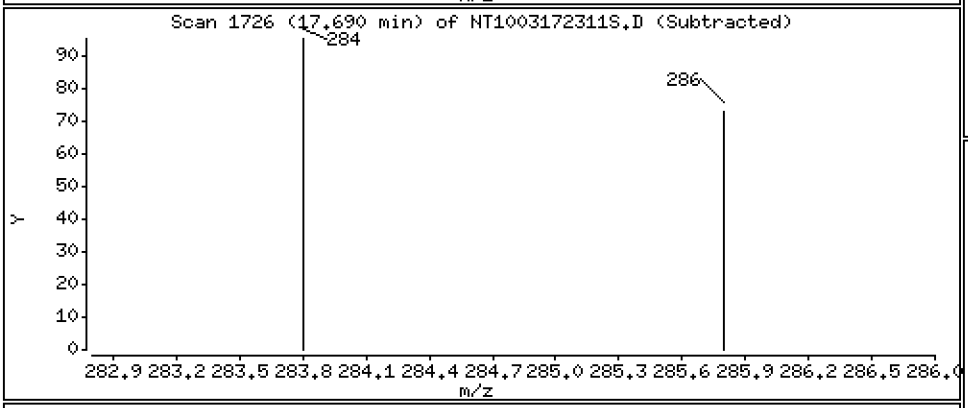
Column diameter: 0.25

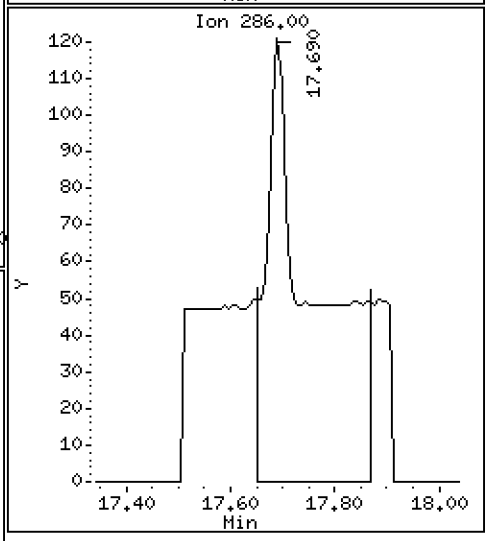
57 Hexachlorobenzene

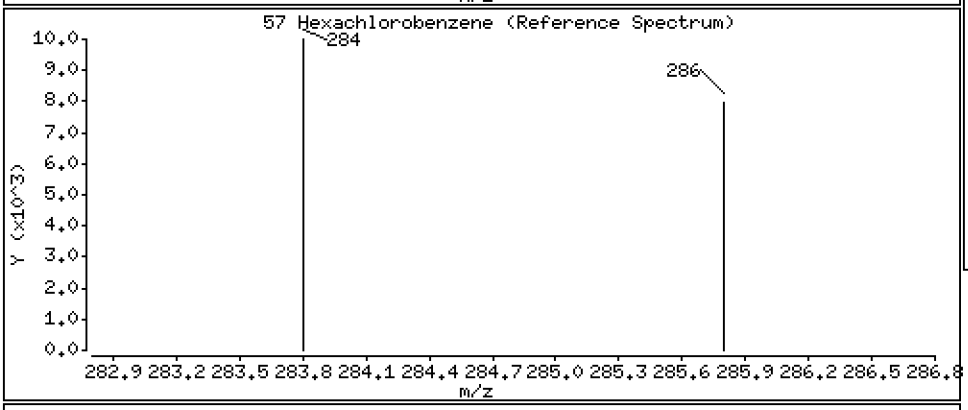
Concentration: 0.003573 ug/L

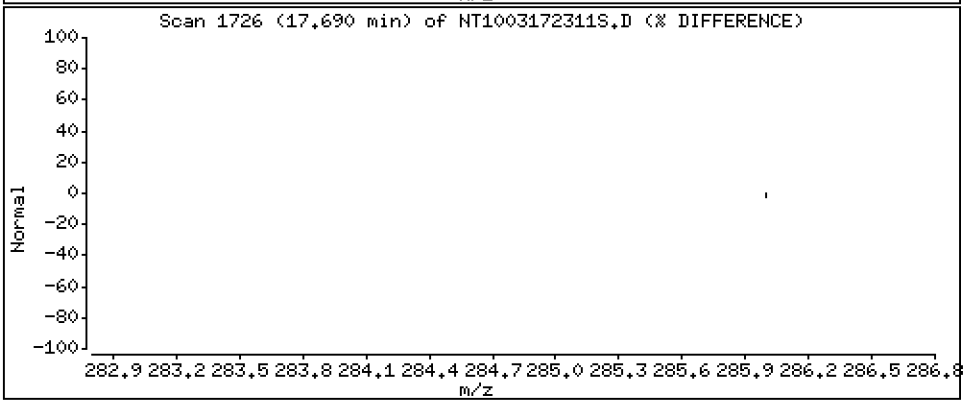












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172311S.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

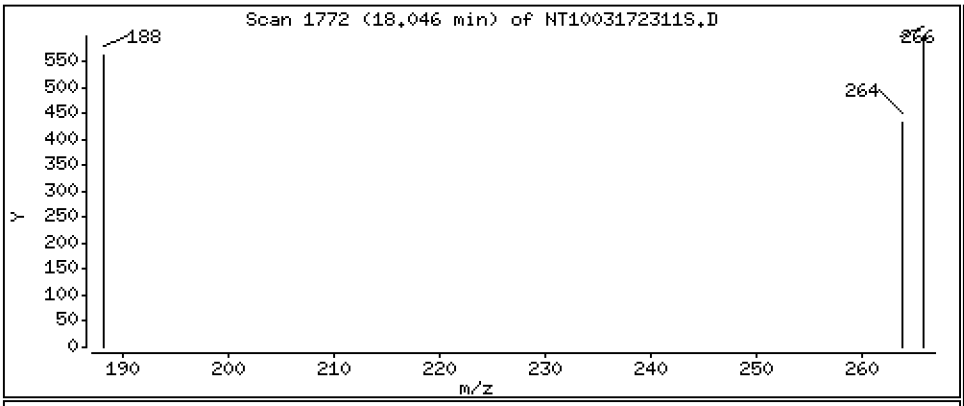
Operator: JGR

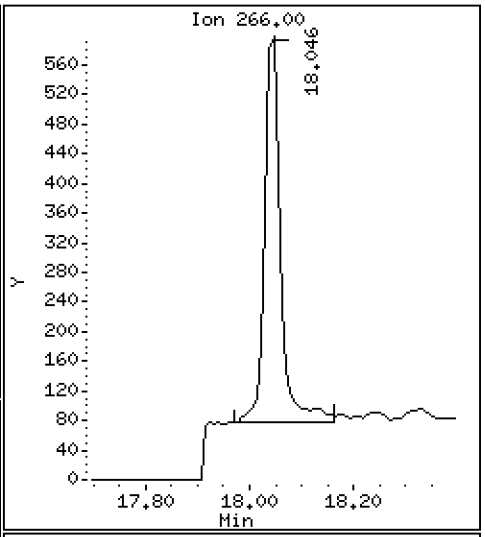
Column phase: ZB-5msi

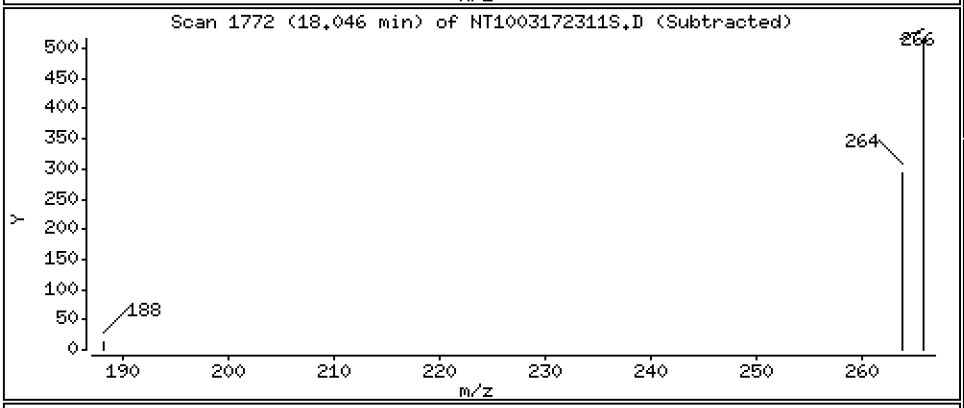
Column diameter: 0.25

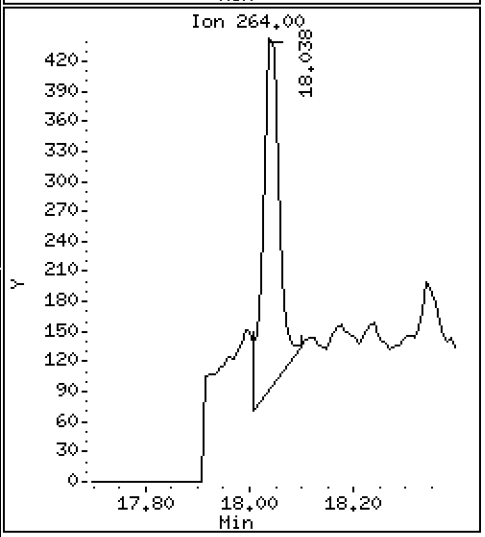
58 Pentachlorophenol

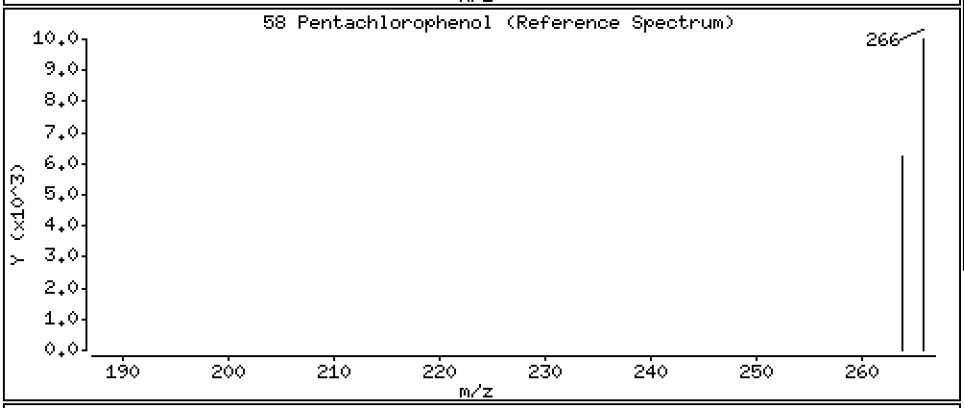
Concentration: 0.04480 ug/L

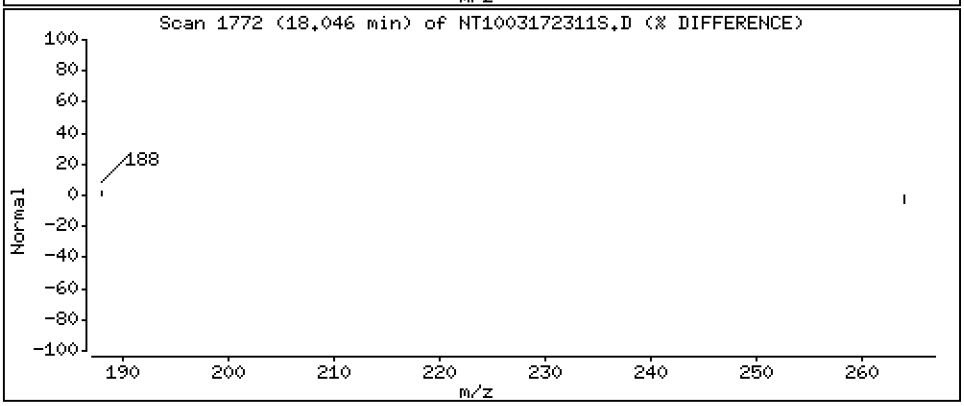












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Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

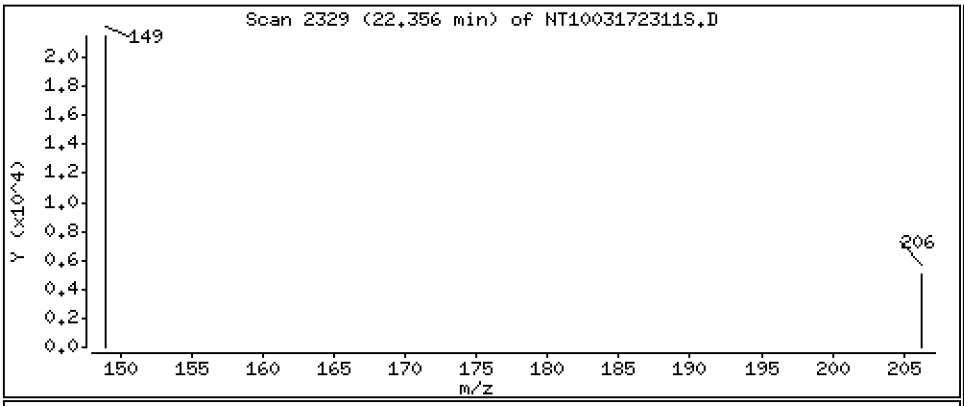
Operator: JGR

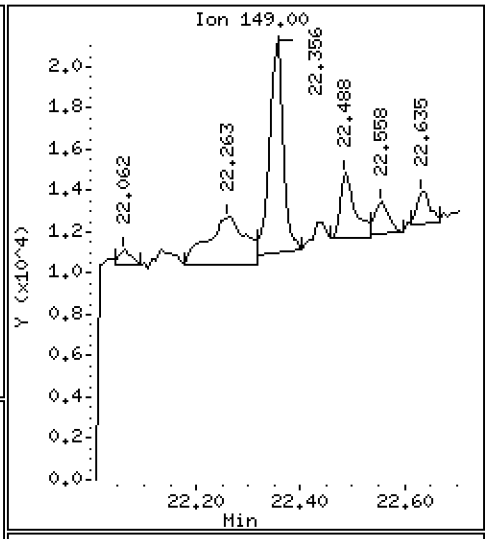
Column phase: ZB-5msi

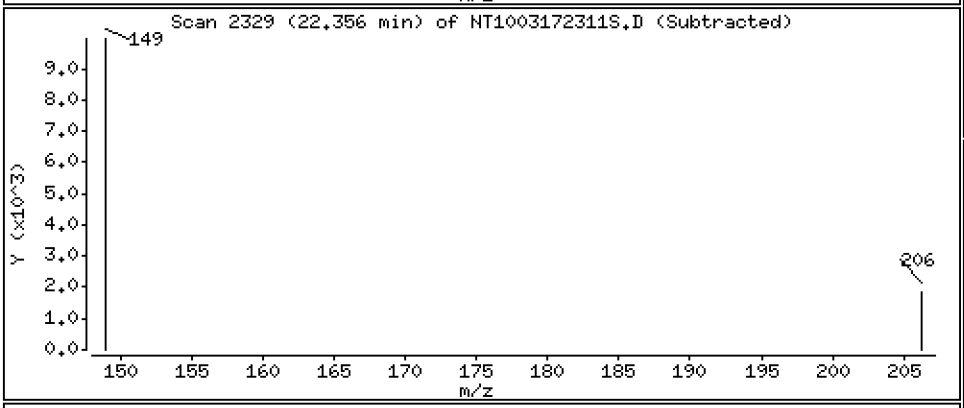
Column diameter: 0.25

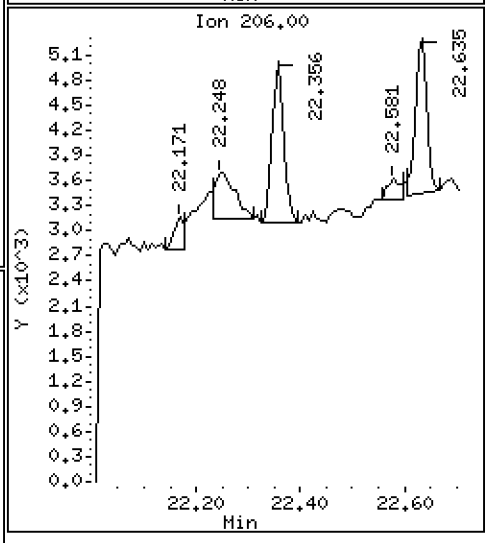
67 Butylbenzylphthalate

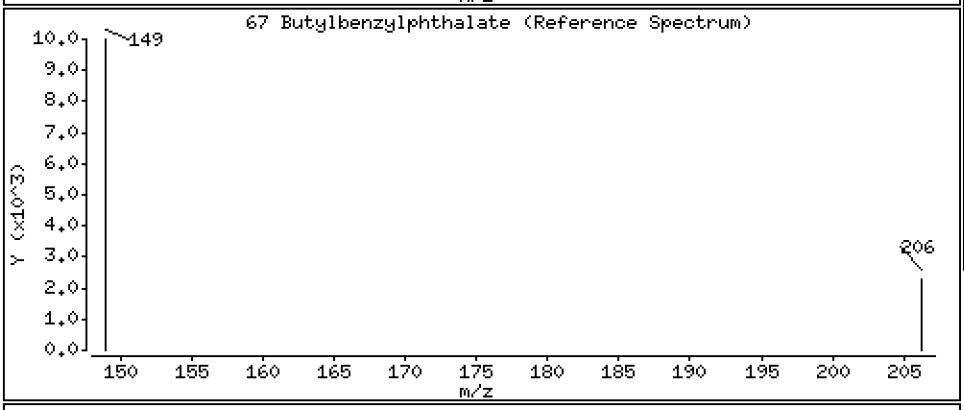
Concentration: 0.2440 ug/L

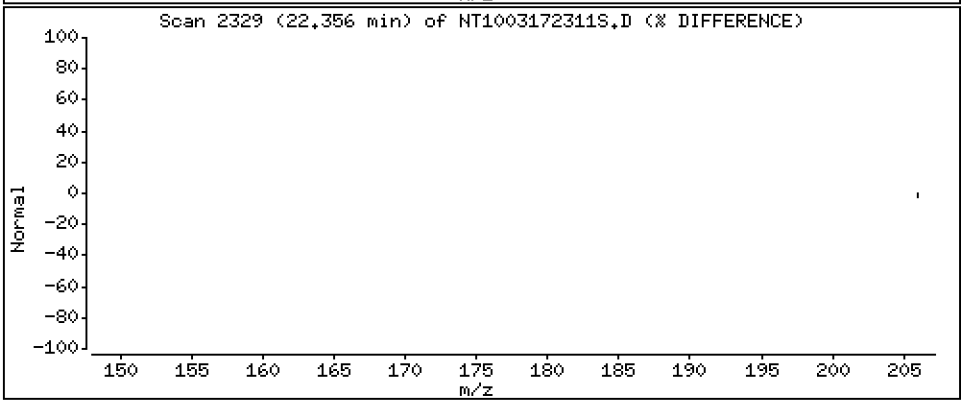












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172311S.D

Date : 18-MAR-2023 00:47

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-07

Volume Injected (uL): 1.0

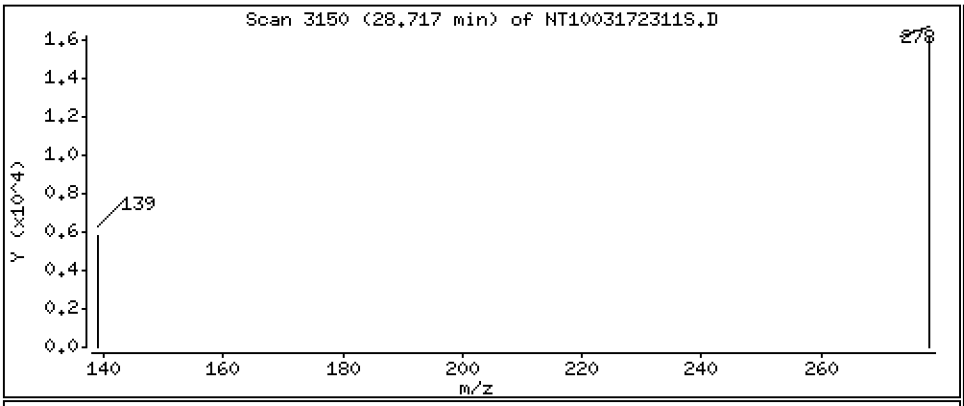
Operator: JGR

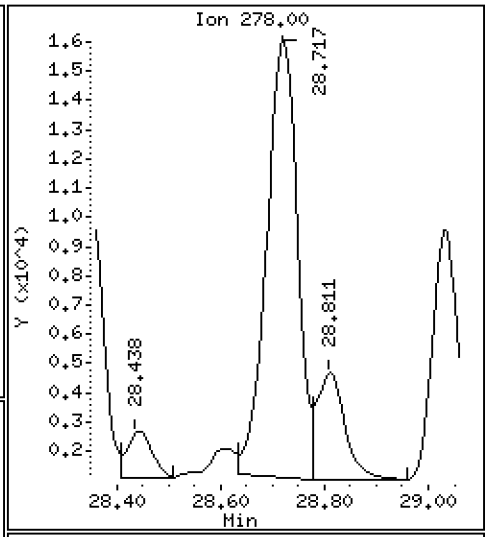
Column phase: ZB-5msi

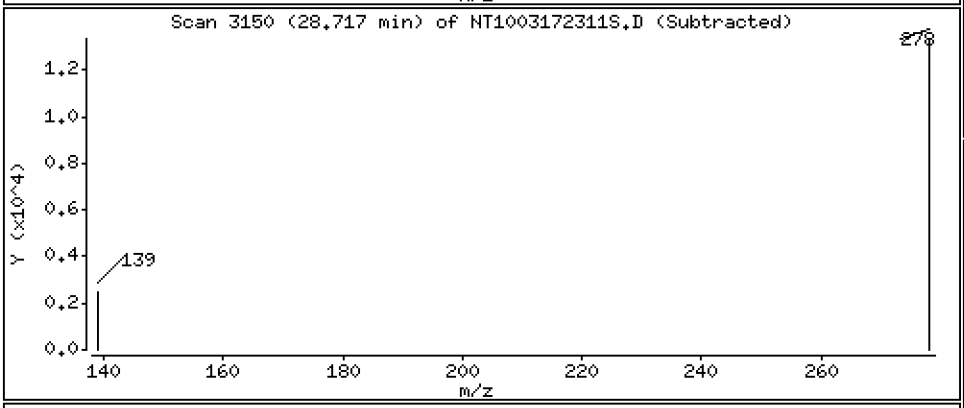
Column diameter: 0.25

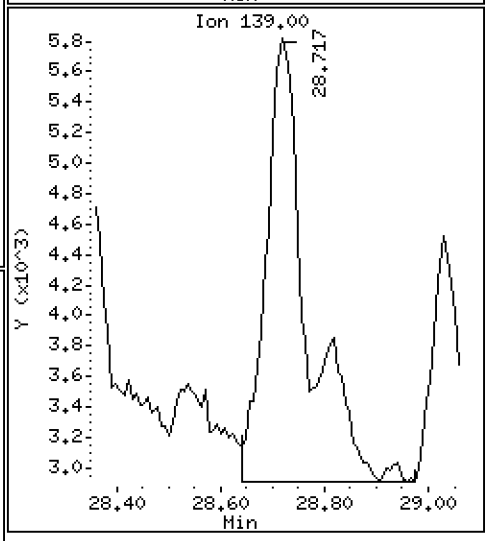
79 Dibenzo(a,h)anthracene

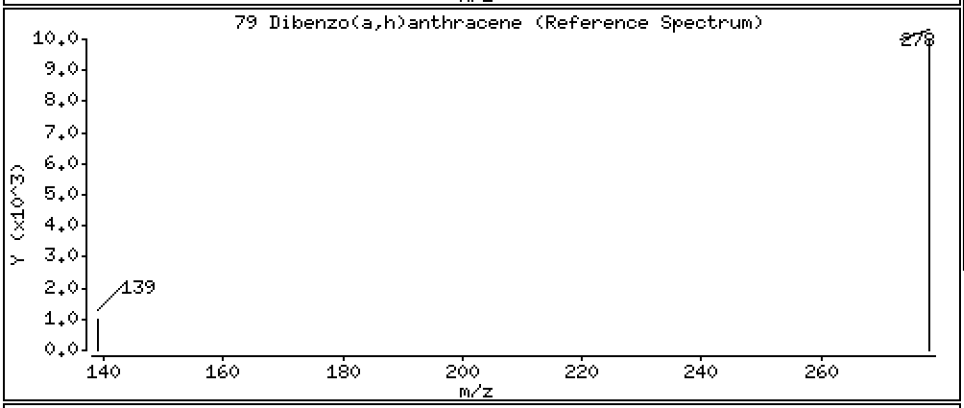
Concentration: 0.3123 ug/L

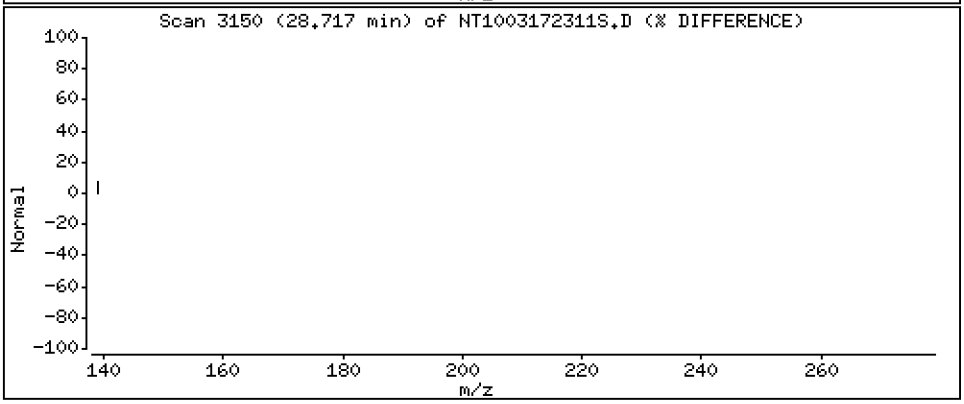












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172311S.D
Lab Smp Id: 23A0420-07
Inj Date : 18-MAR-2023 00:47 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : 23A0420-07
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Meth Date : 30-Mar-2023 14:37 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.980	6.980	(0.758)	141547	2.38940	2.389(R)
3	Phenol	94	8.572	8.572	(0.931)	159426	1.96161	1.962
7	1,3-Dichlorobenzene	146	9.136	9.136	(0.992)	802	0.01055	0.01055
* 8	1,4-Dichlorobenzene-d4	152	9.206	9.206	(1.000)	195352	4.00000	
9	1,4-Dichlorobenzene	146	9.237	9.229	(1.003)	1927	0.02625	0.02625(M)
11	Benzyl alcohol	79	9.462	9.462	(1.028)	26006	0.55195	0.5519(M)
12	1,2-Dichlorobenzene	146	9.586	9.586	(1.041)	748	0.01036	0.01036
13	2-Methylphenol	108	9.687	9.679	(1.052)	1420	0.02522	0.02522(M)
15	4-Methylphenol	108	9.951	9.951	(1.081)	54484	0.93107	0.9311
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
22	2,4-Dimethylphenol	107	10.995	10.985	(0.942)	1581	0.02645	0.02645
24	Benzoic acid	105	11.088	11.096	(0.950)	36180	1.10249	1.102(M)
26	1,2,4-Trichlorobenzene	180	11.590	11.589	(0.993)	489	0.00813	0.008131(M)
* 27	Naphthalene-d8	136	11.674	11.674	(1.000)	691638	4.00000	
30	Hexachlorobutadiene	225	12.076	12.075	(1.034)	152	0.00416	0.004157(M)
39	Dimethylphthalate	163	14.785	14.784	(0.968)	11039	0.10358	0.1036
* 42	Acenaphthene-d10	162	15.280	15.279	(1.000)	337728	4.00000	
50	Diethylphthalate	149	16.231	16.230	(1.062)	19484	0.17647	0.1765(M)
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
57	Hexachlorobenzene	284	17.690	17.689	(0.966)	152	0.00357	0.003573(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.046	18.045	(0.986)	1052	0.04480	0.04480
*	59 Phenanthrene-d10	188	18.309	18.308	(1.000)	708203	4.00000	
$	66 Terphenyl-d14	244	21.442	21.434	(0.918)	544648	6.17832	6.178(R)
	67 Butylbenzylphthalate	149	22.356	22.355	(0.958)	17391	0.24398	0.2440
*	69 Chrysene-d12	240	23.347	23.331	(1.000)	541040	4.00000	
*	77 Perylene-d12	264	26.003	25.986	(1.000)	610661	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.717	28.708	(1.104)	62496	0.31226	0.3123
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172311S.D
Lab Smp Id: 23A0420-07
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	184039	92020	368078	195352	6.15
27 Naphthalene-d8	659935	329968	1319870	691638	4.80
42 Acenaphthene-d10	325775	162888	651550	337728	3.67
59 Phenanthrene-d10	616249	308125	1232498	708203	14.92
69 Chrysene-d12	526222	263111	1052444	541040	2.82
77 Perylene-d12	563117	281559	1126234	610661	8.44

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.21	8.71	9.71	9.21	-0.00
27 Naphthalene-d8	11.67	11.17	12.17	11.67	0.01
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	0.00
59 Phenanthrene-d10	18.31	17.81	18.81	18.31	0.00
69 Chrysene-d12	23.33	22.83	23.83	23.35	0.07
77 Perylene-d12	25.99	25.49	26.49	26.00	0.06

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

REVIEW SUMMARY FOR FILE - NT1003172311S.D

Lab ID: 23A0420-07
nt10.i, 20230317.b\20230317.b\SIMABN2.m,   18-MAR-2023 00:47

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: 20230317.b/NT1003172303S.D

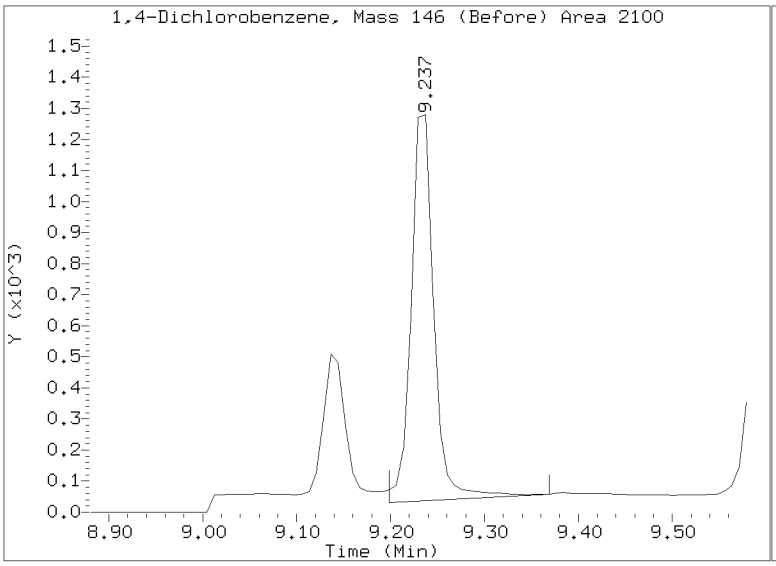
On Column LOD for nt10.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

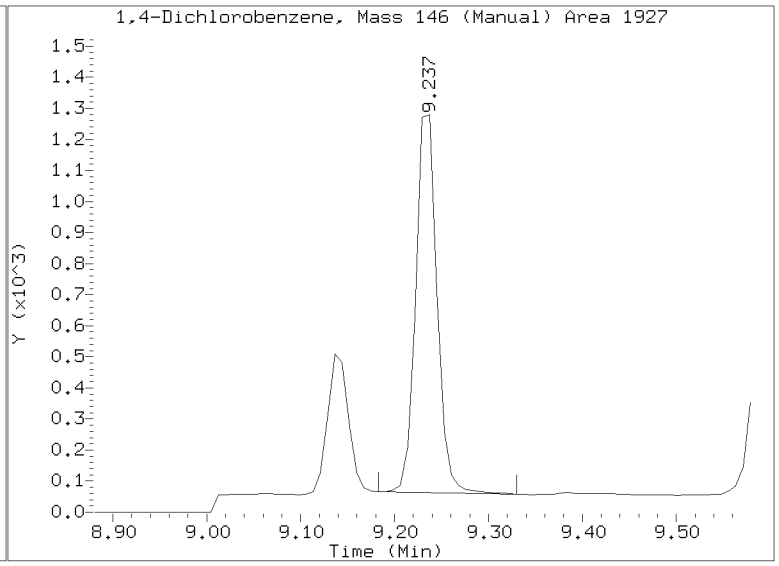
Exception: 1,2,4-Trichlorobenzene 0.0010

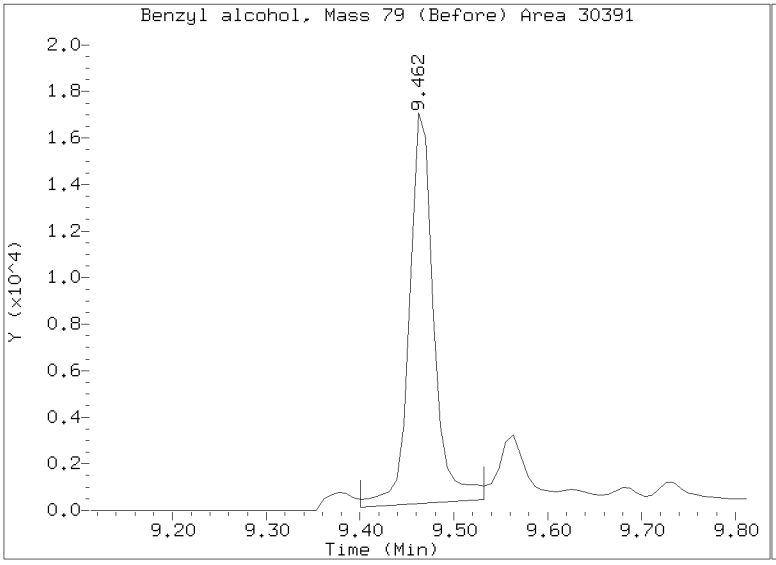
* Only compounds listed in the work order have been verified by the analyst *

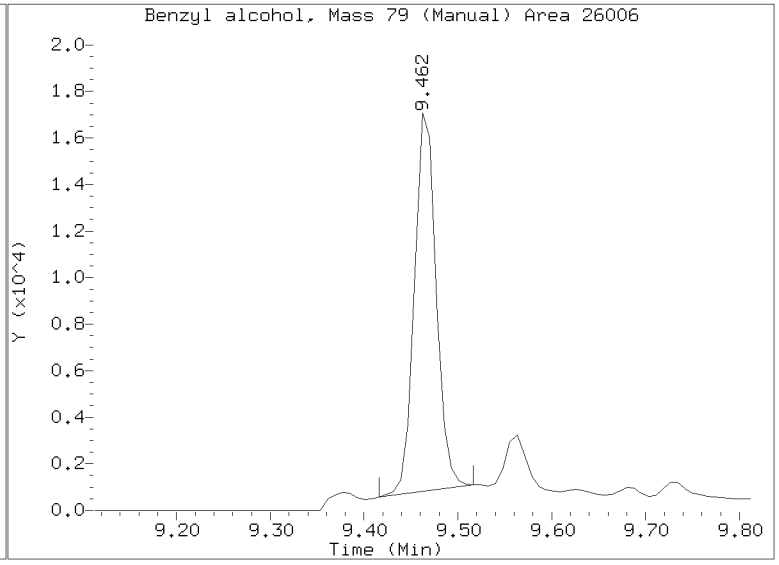
Quant Ion Manual Peak Adjustment Report

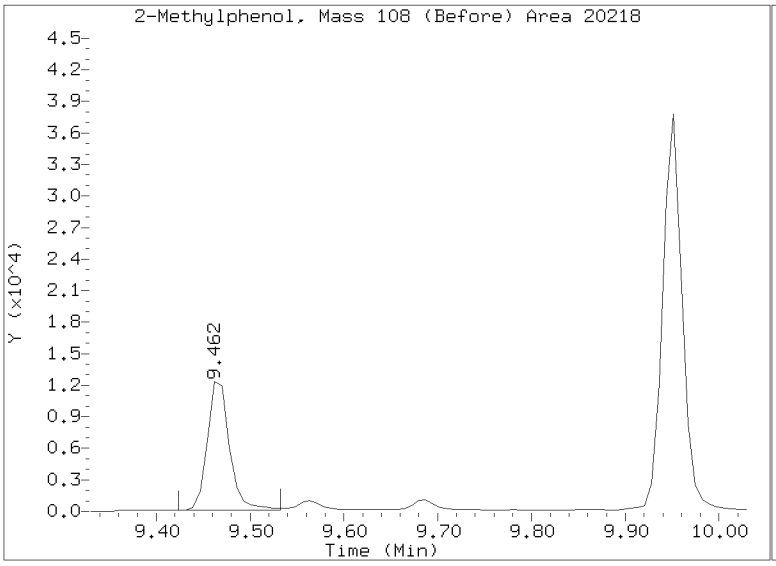
Datafile: //target/share/chem3/nt10.i/20230317.b/20230317.b/NT1003172311S.D
Injection Date: 18-MAR-2023 00:47
Lab ID:23A0420-07 Client ID:
Report Date: 03/30/2023 14:56

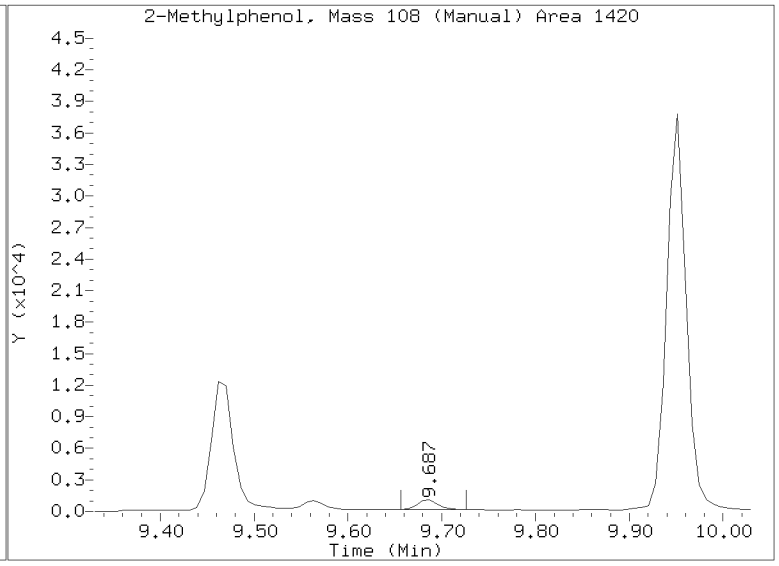






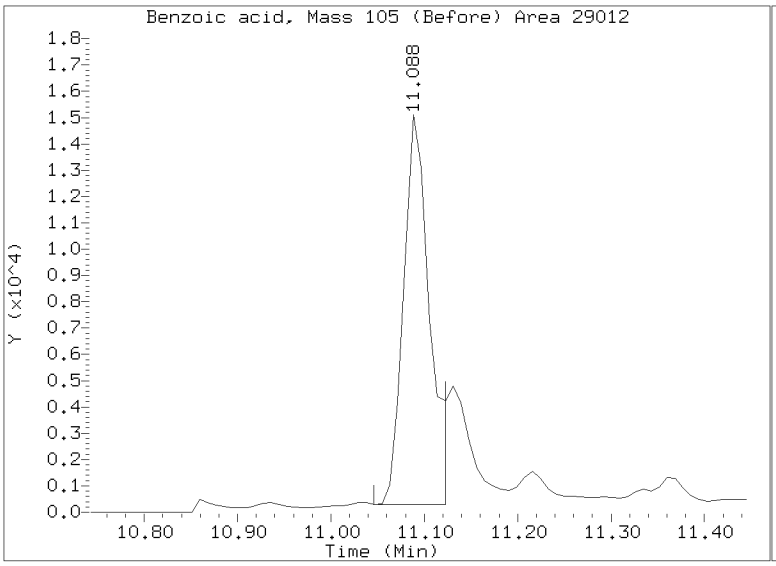


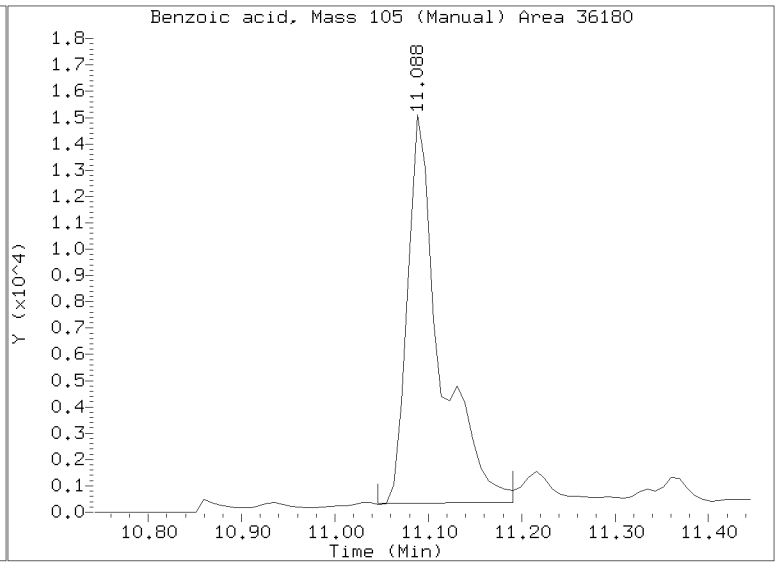


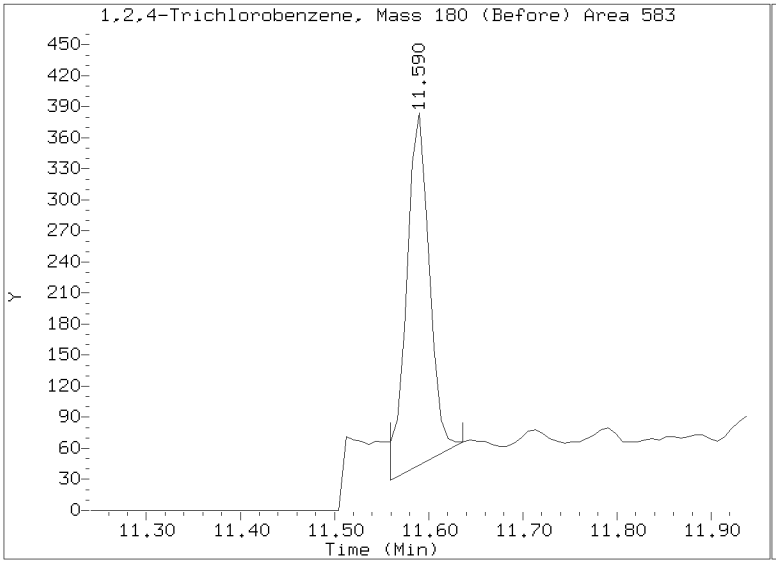


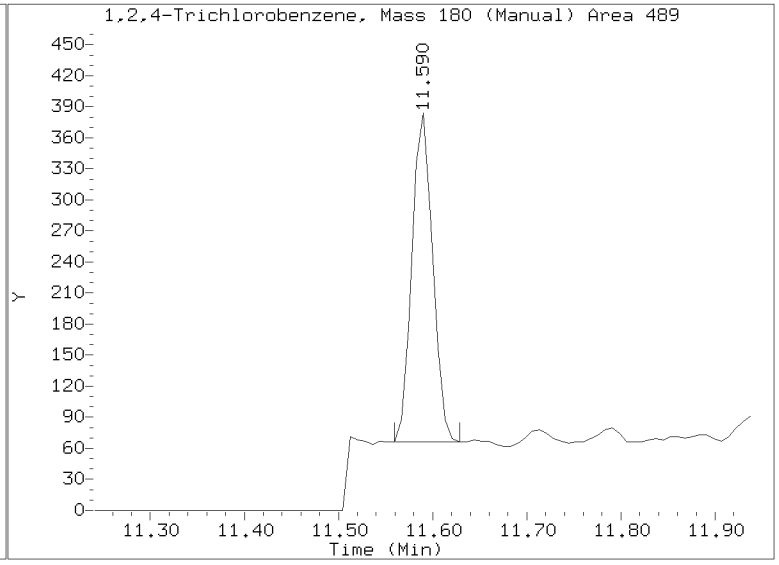
Quant Ion Manual Peak Adjustment Report

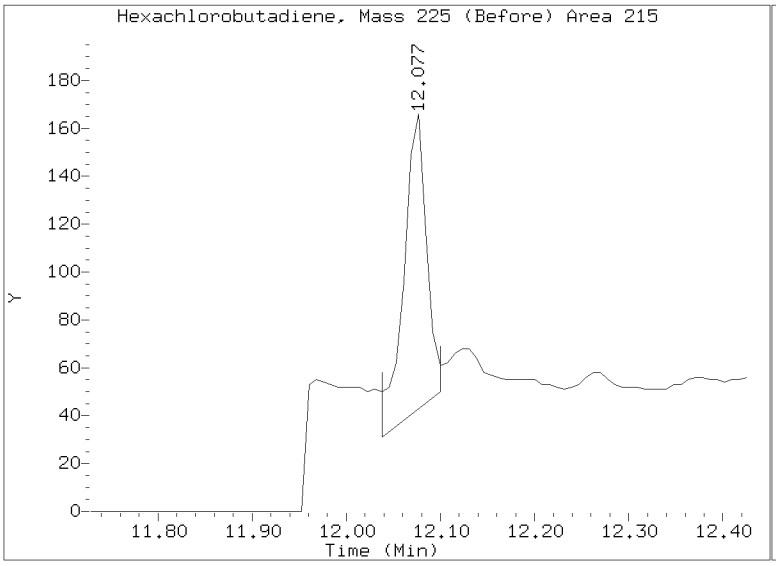
Datafile: //target/share/chem3/nt10.i/20230317.b/20230317.b/NT1003172311S.D
Injection Date: 18-MAR-2023 00:47
Lab ID:23A0420-07 Client ID:
Report Date: 03/30/2023 14:56

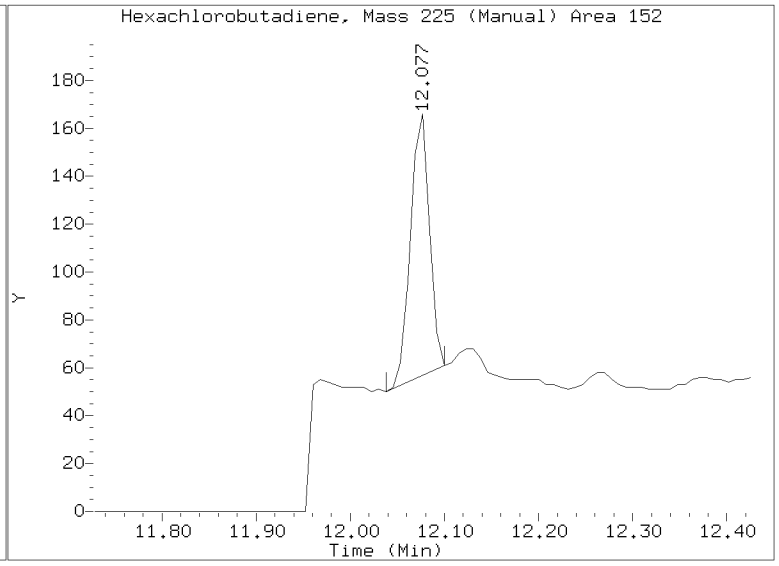






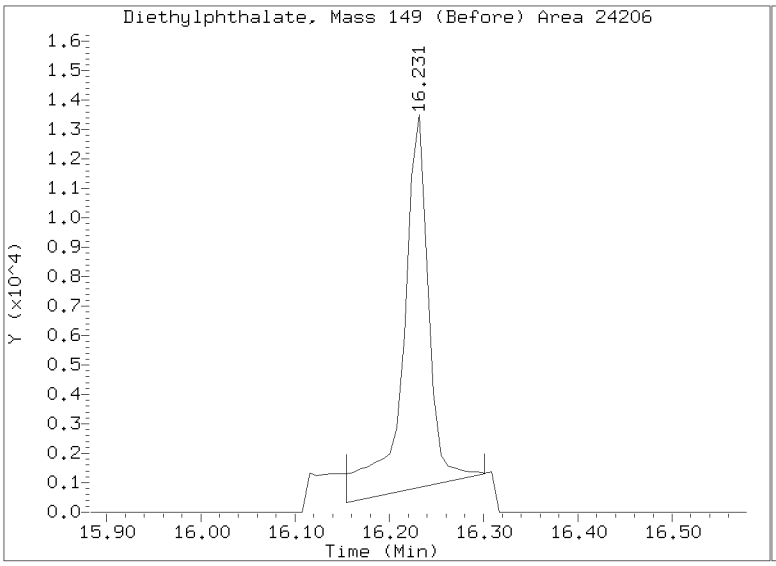


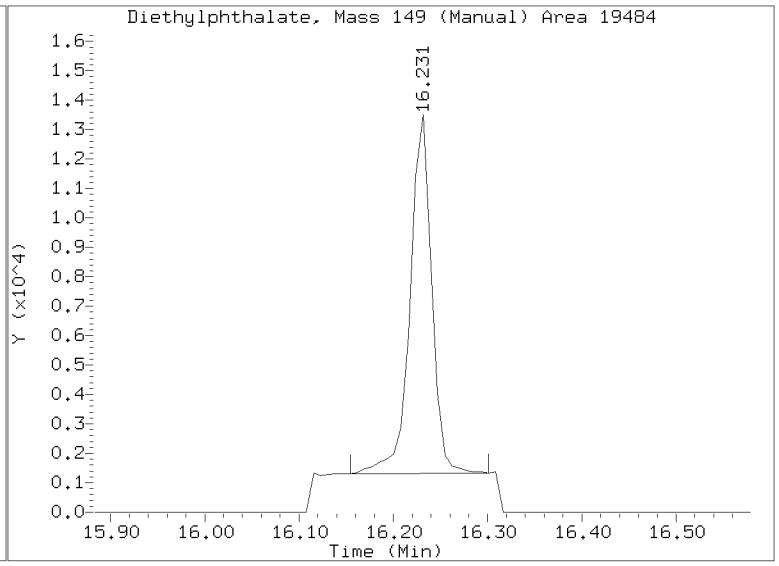


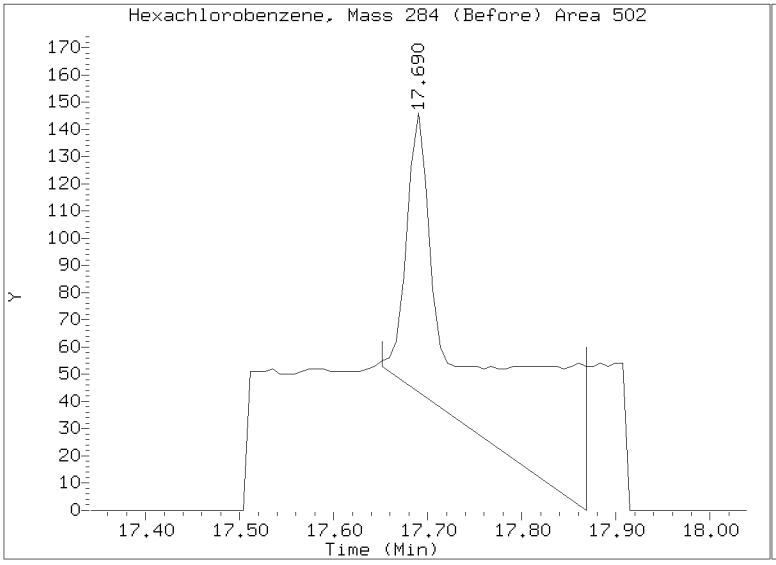


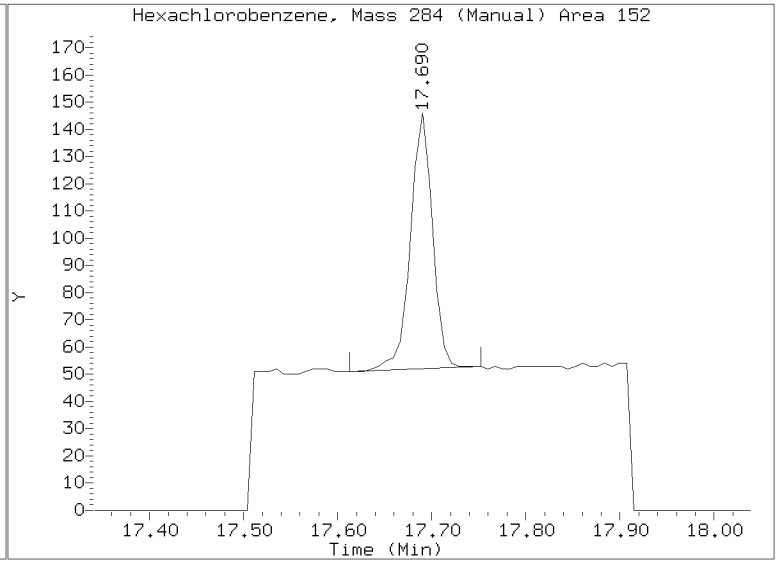
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230317.b/20230317.b/NT1003172311S.D
Injection Date: 18-MAR-2023 00:47
Lab ID:23A0420-07 Client ID:
Report Date: 03/30/2023 14:56









Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1004

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

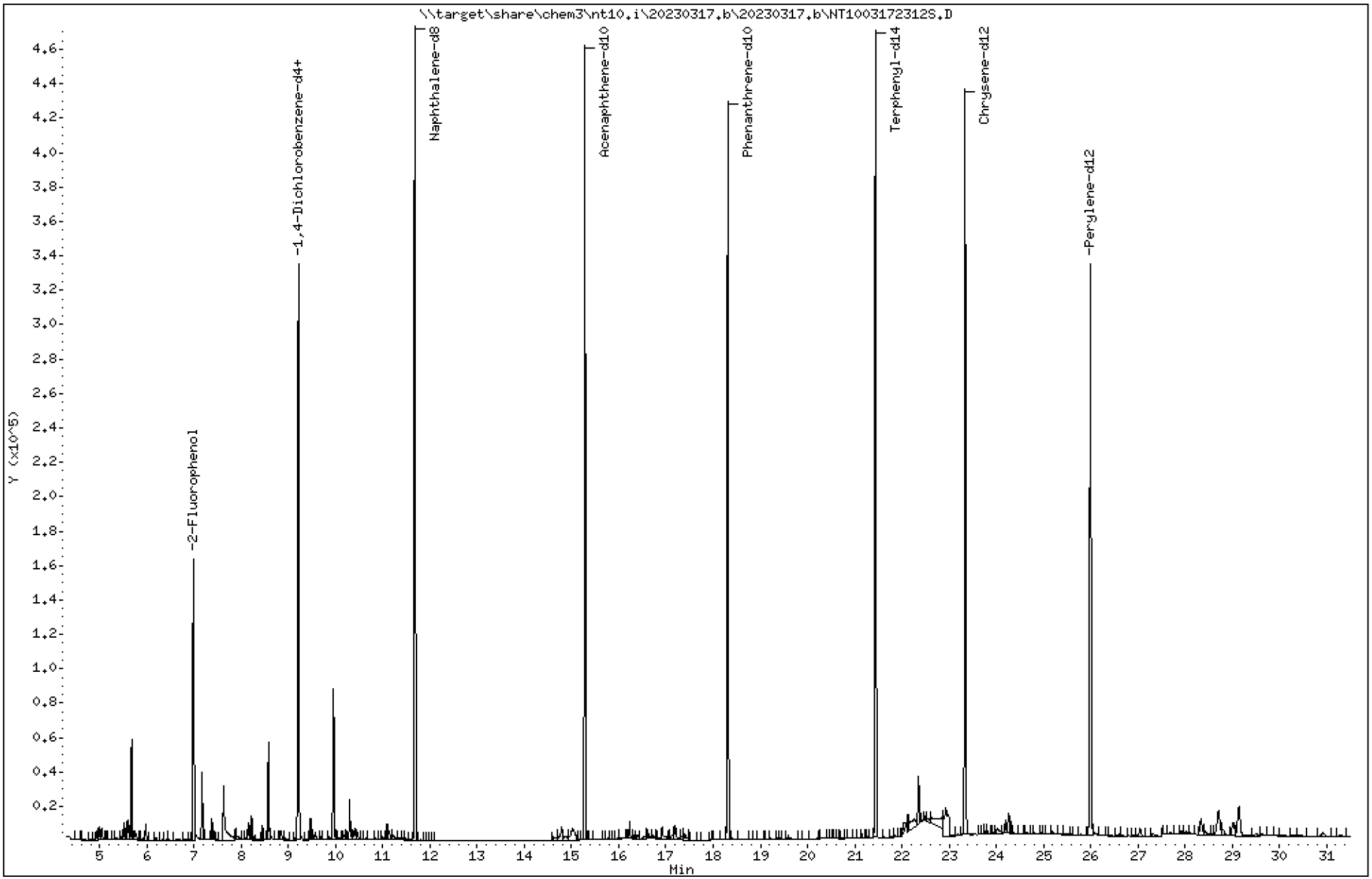
Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-08 A	SDG:	23A0420
Sampled:	01/19/23 11:55	Prepared:	02/20/23 16:23	File ID:	NT1003172312S.D
% Solids:	59.89	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/18/23 01:25
Batch:	BLB0495	Sequence:	SLC0475	Initial/Final:	16.73 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00049
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	2.7	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	1.6	J	0.7	5.0
100-51-6	Benzyl Alcohol	1	23.3		2.5	20.0
65-85-0	Benzoic acid	1	48.4	J	13.4	99.8
105-67-9	2,4-Dimethylphenol	1	2.3	J	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	2.4	J	2.1	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	748.53	271	36.2	27 - 120	
p-Terphenyl-d14	499.02	615	123	37 - 120	*

Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723128.D
Date : 18-MAR-2023 01:25
Client ID:
Sample Info: 23A0420-08
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.i
Operator: JGR
Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723125.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

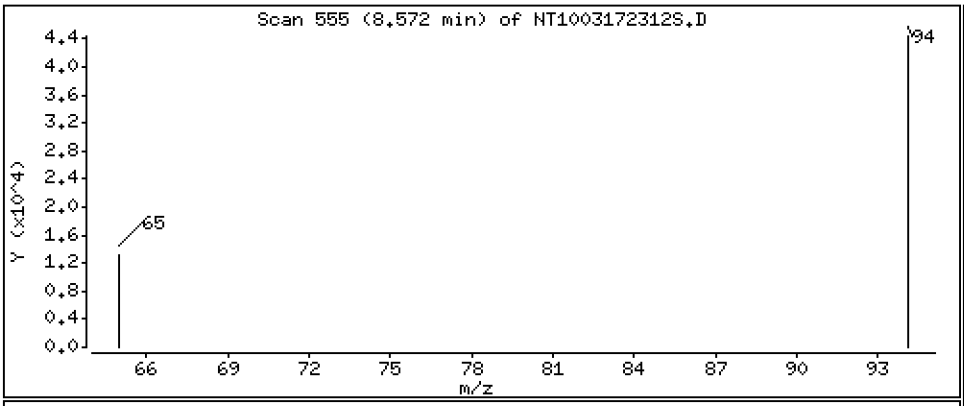
Operator: JGR

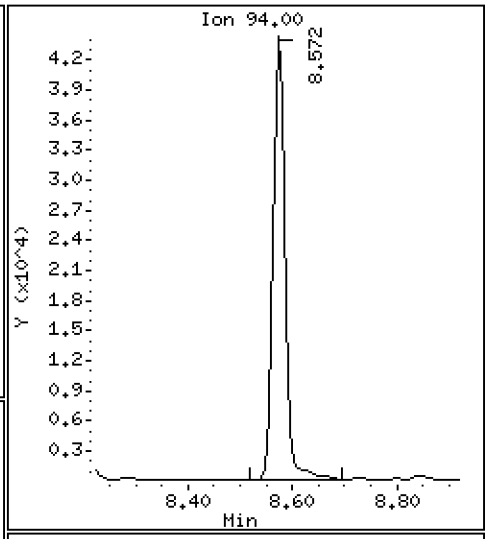
Column phase: ZB-5msi

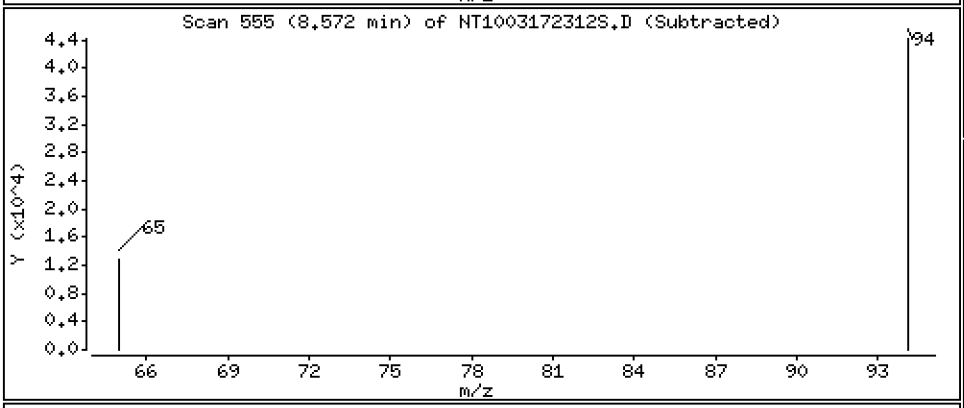
Column diameter: 0.25

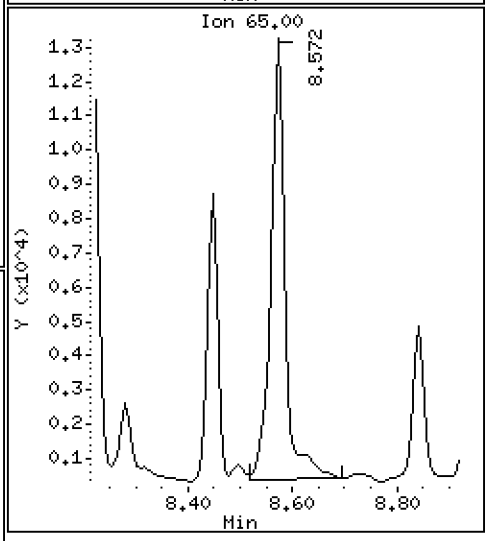
3 Phenol

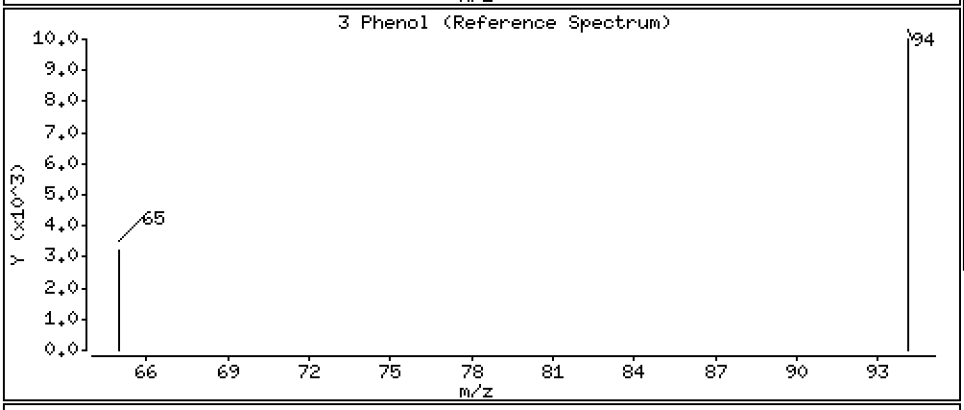
Concentration: 0.7996 ug/L

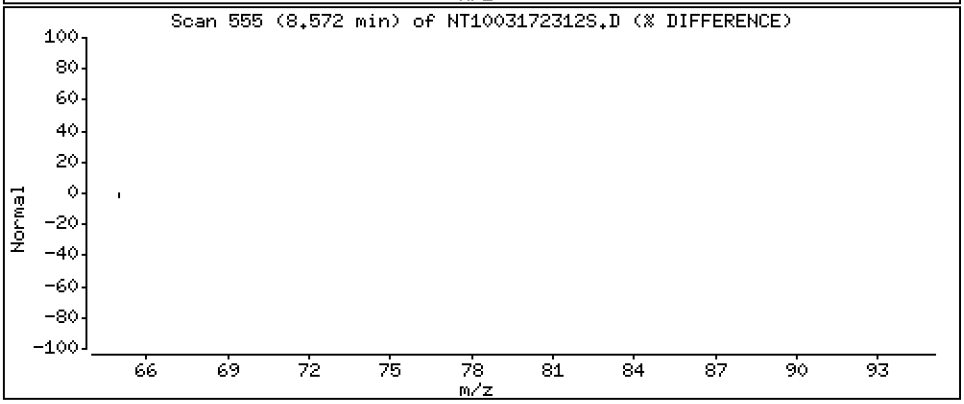












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723125.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

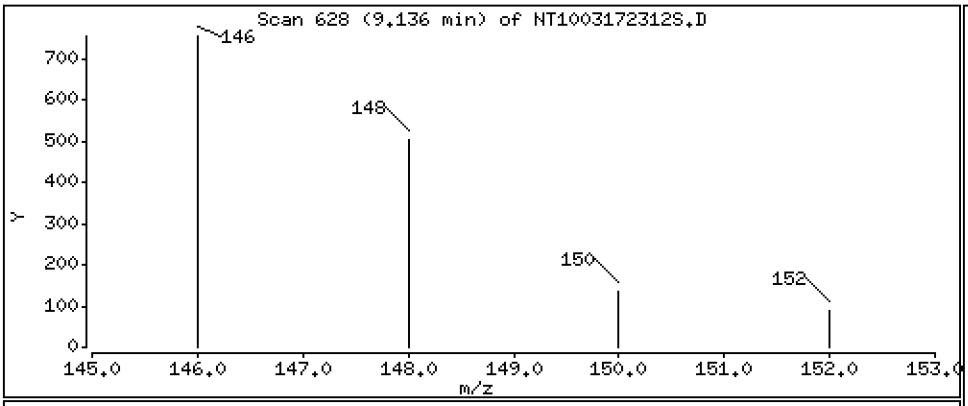
Operator: JGR

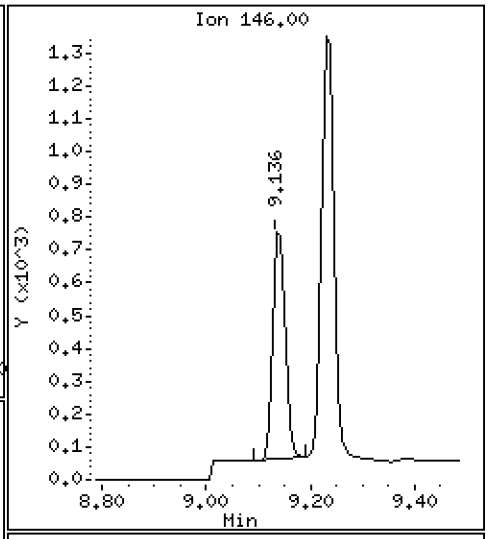
Column phase: ZB-5msi

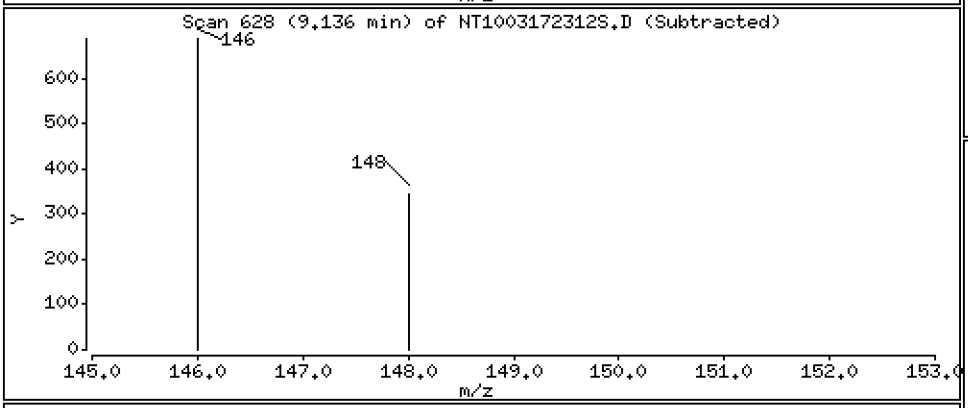
Column diameter: 0.25

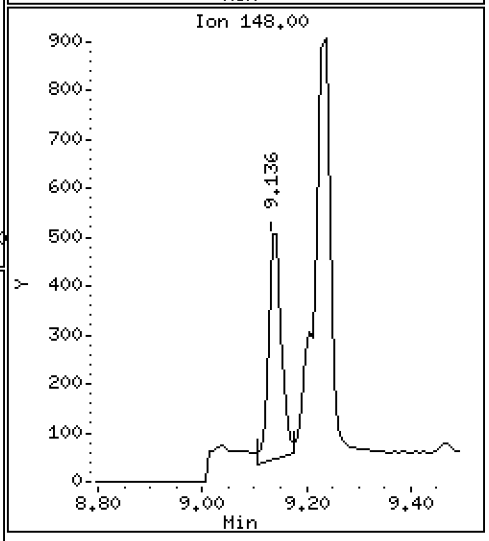
7 1,3-Dichlorobenzene

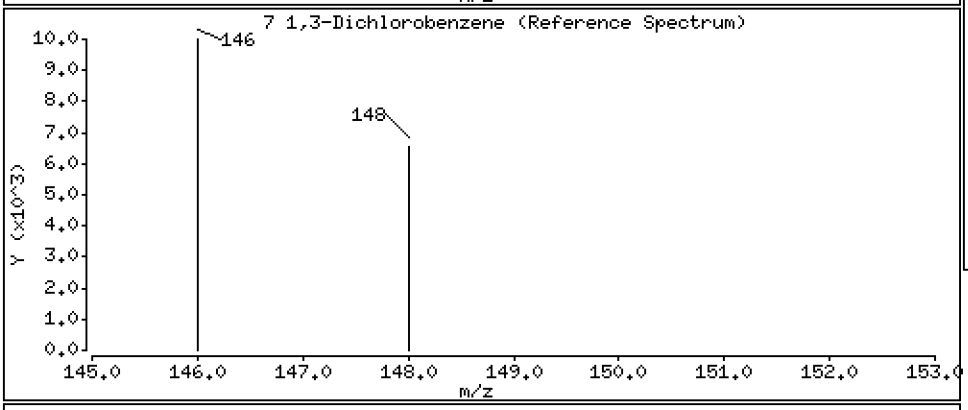
Concentration: 0.01408 ug/L

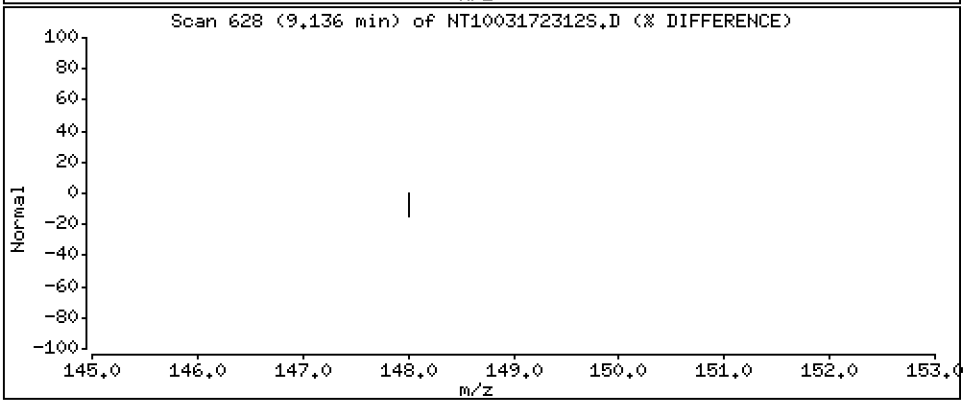












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723125.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

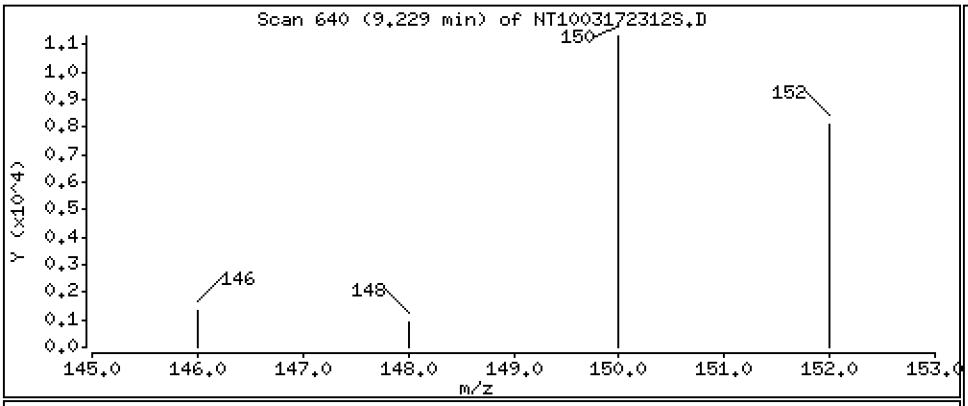
Operator: JGR

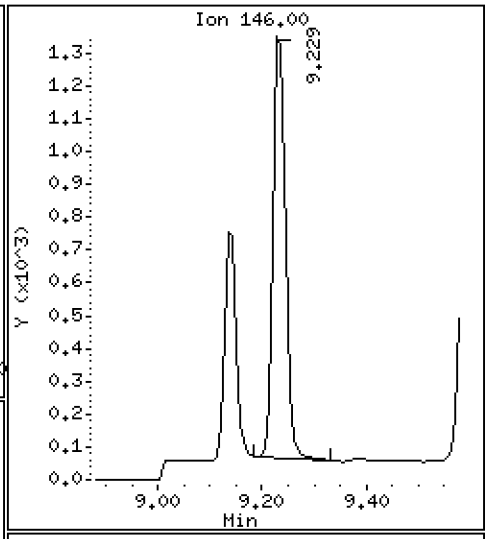
Column phase: ZB-5msi

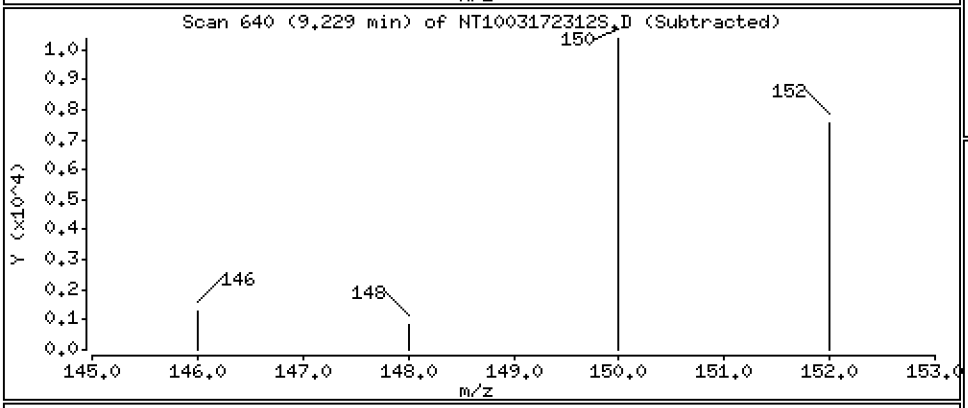
Column diameter: 0.25

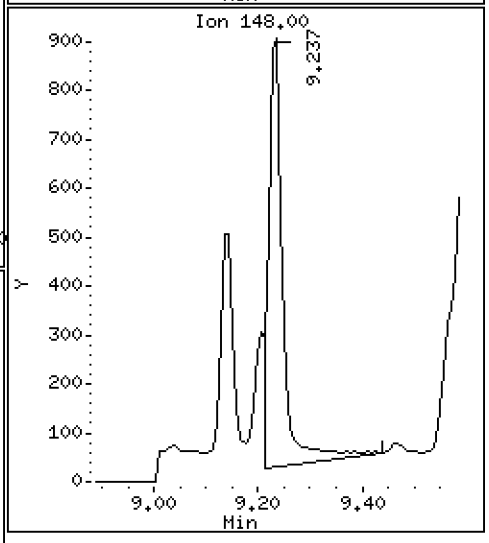
9 1,4-Dichlorobenzene

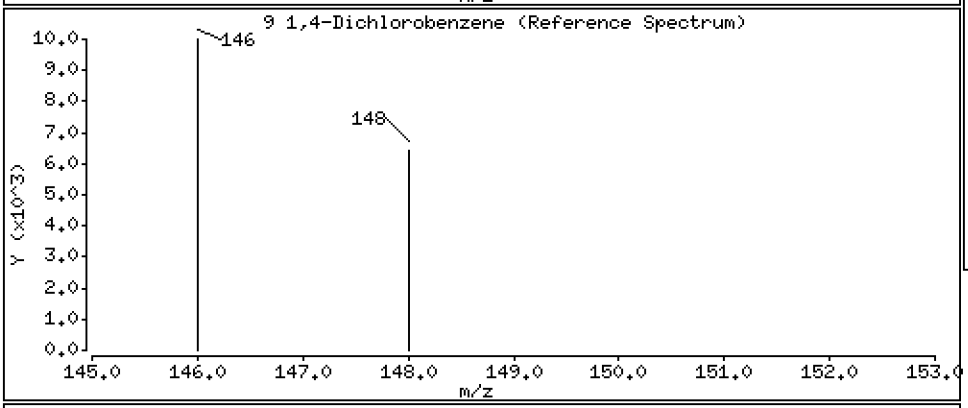
Concentration: 0.02723 ug/L

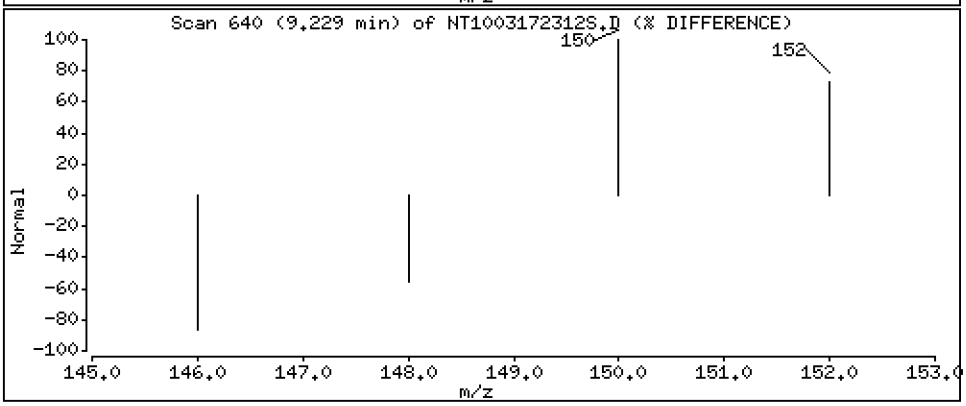












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723125.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

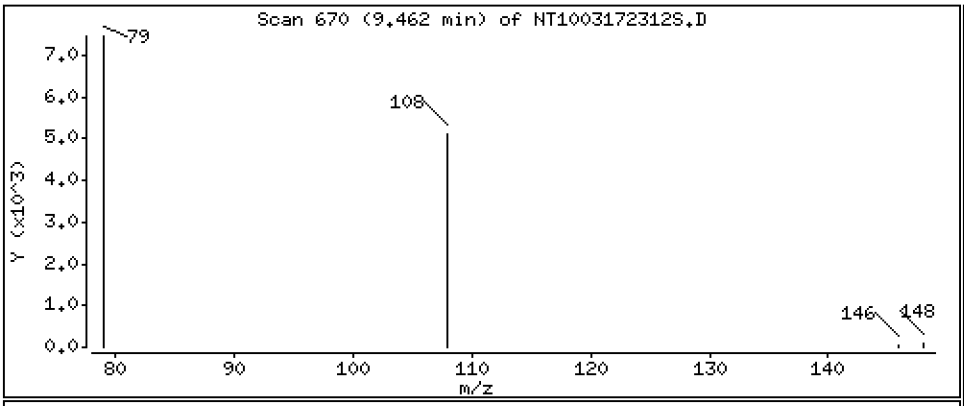
Operator: JGR

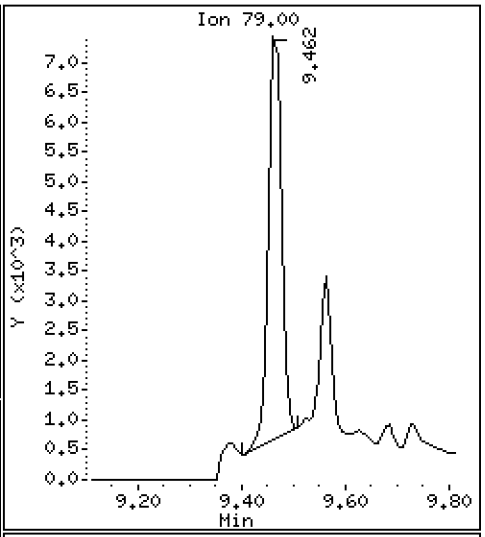
Column phase: ZB-5msi

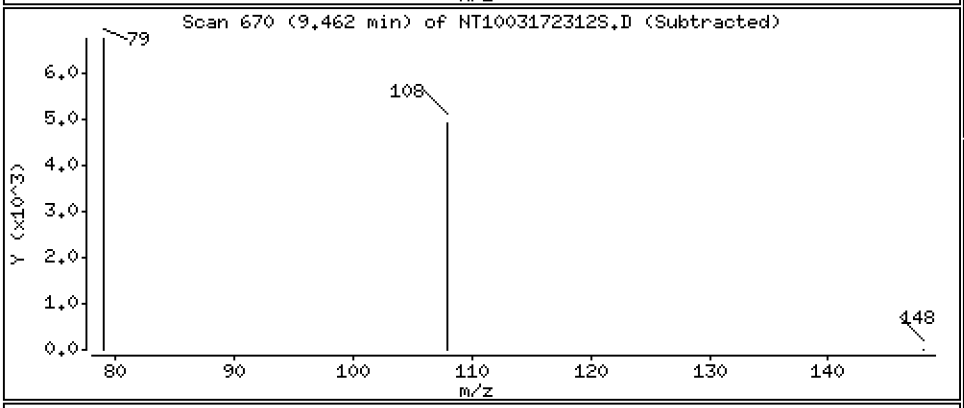
Column diameter: 0.25

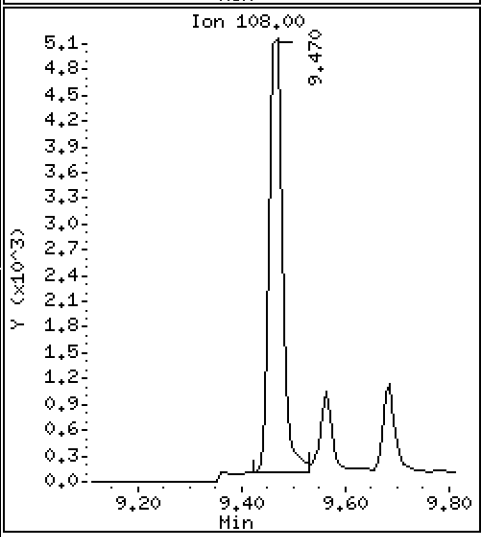
11 Benzyl alcohol

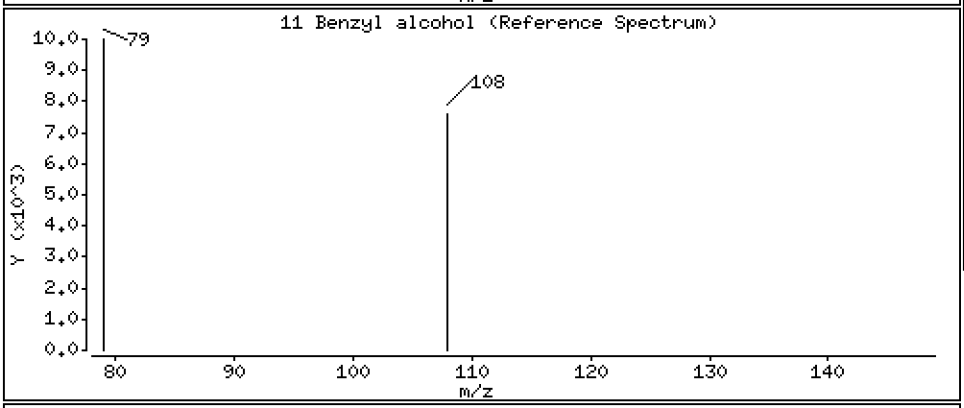
Concentration: 0.2333 ug/L

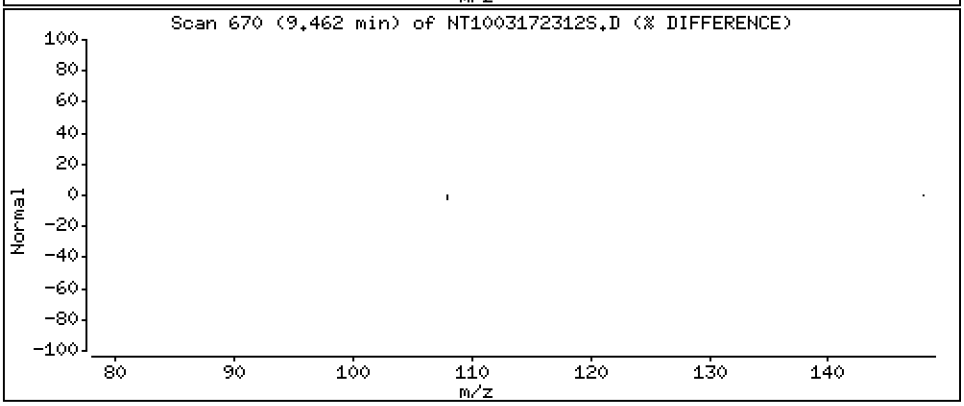












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723125.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

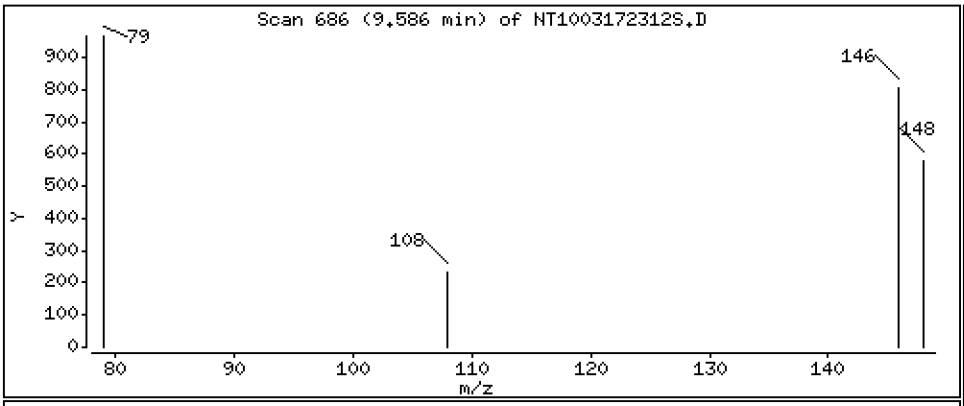
Operator: JGR

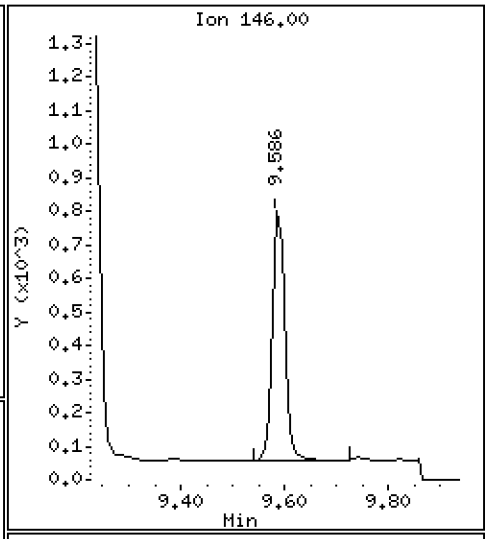
Column phase: ZB-5msi

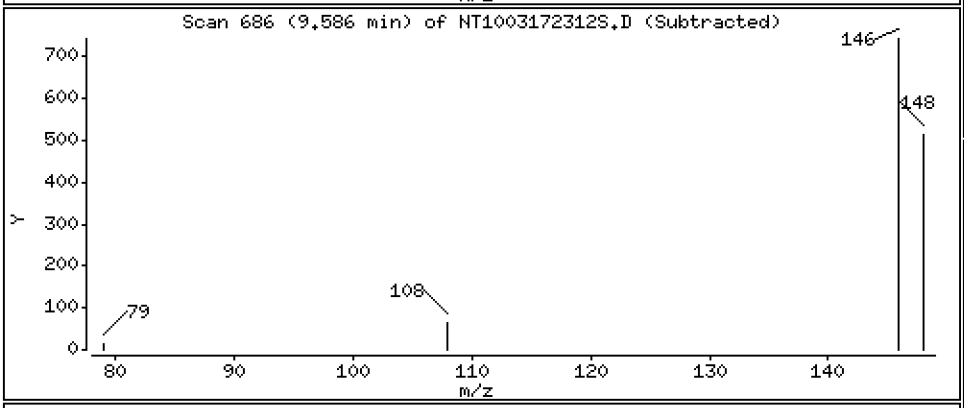
Column diameter: 0.25

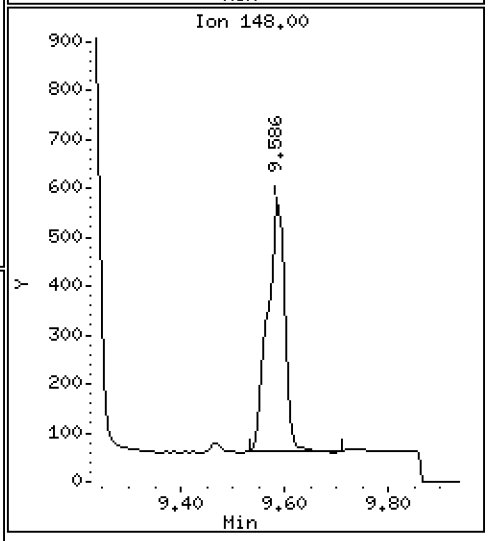
12 1,2-Dichlorobenzene

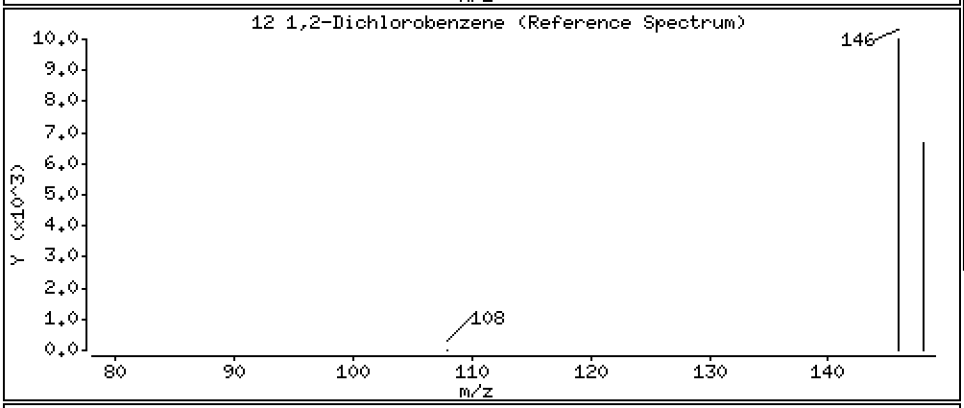
Concentration: 0.01559 ug/L

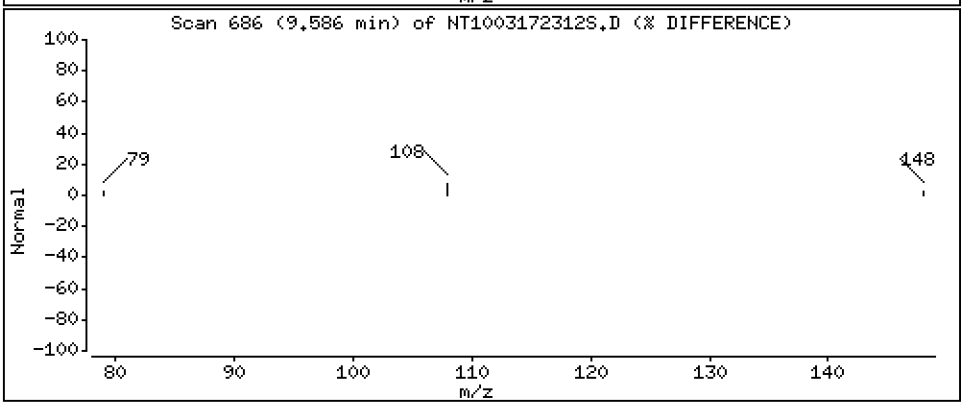












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723125.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

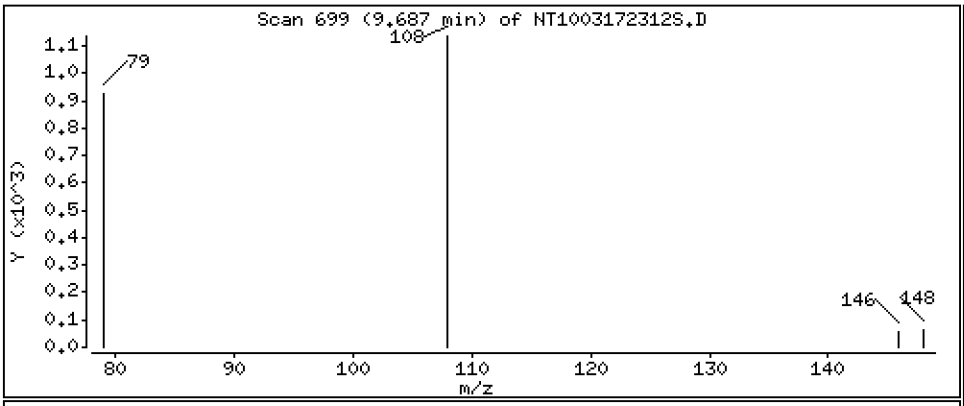
Operator: JGR

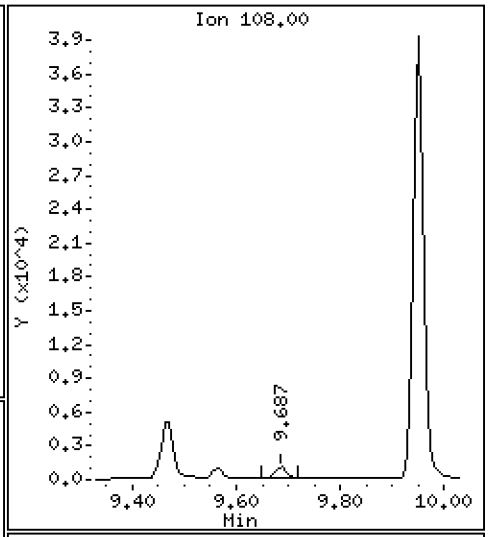
Column phase: ZB-5msi

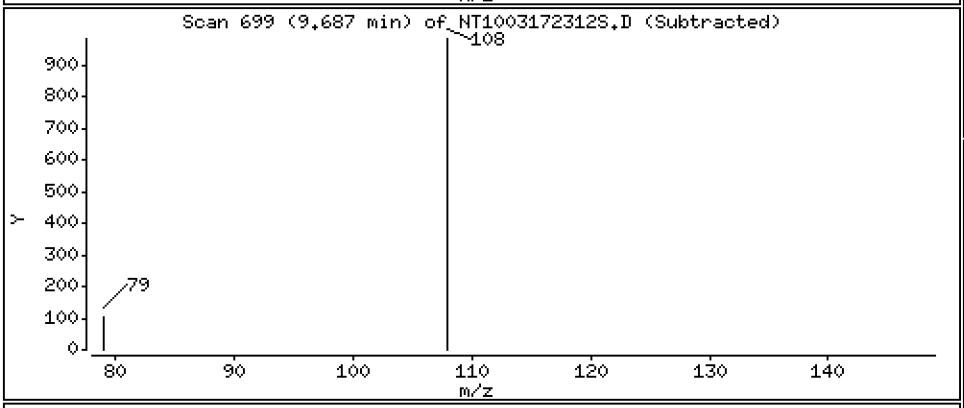
Column diameter: 0.25

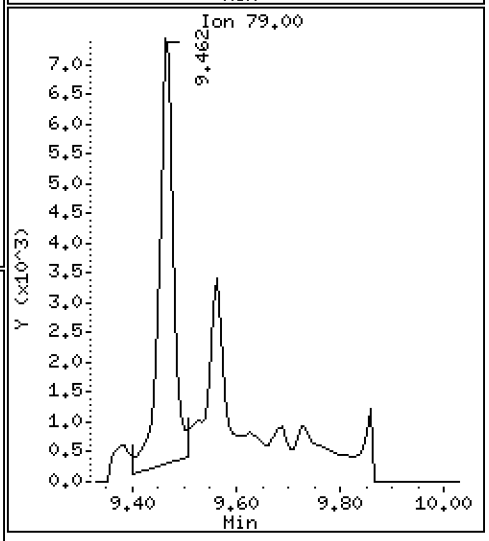
13 2-Methylphenol

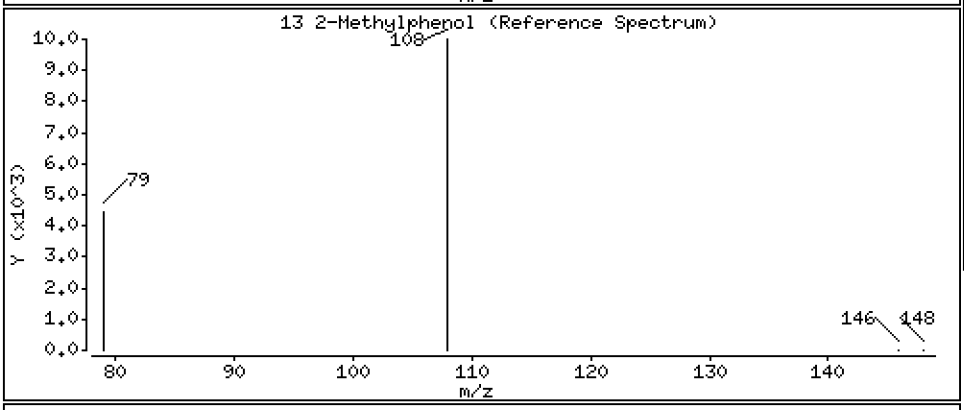
Concentration: 0.02489 ug/L

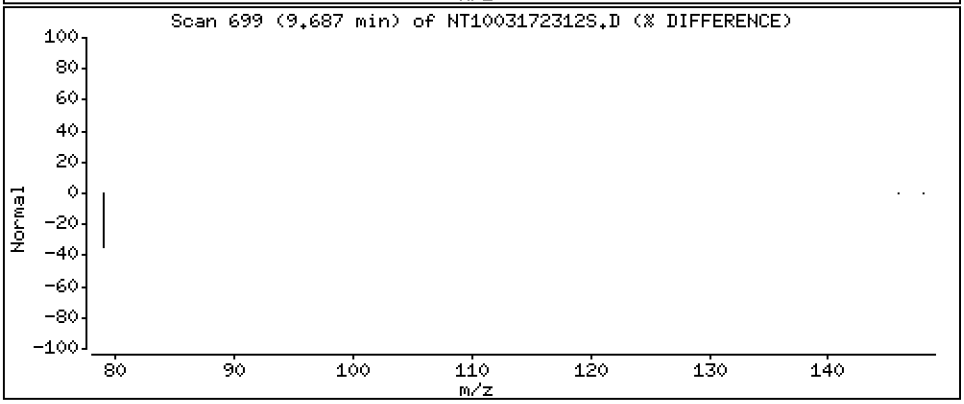












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

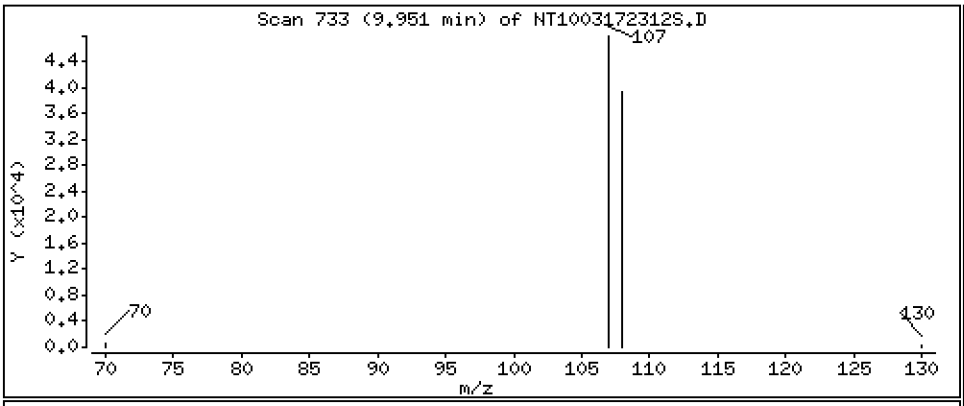
Operator: JGR

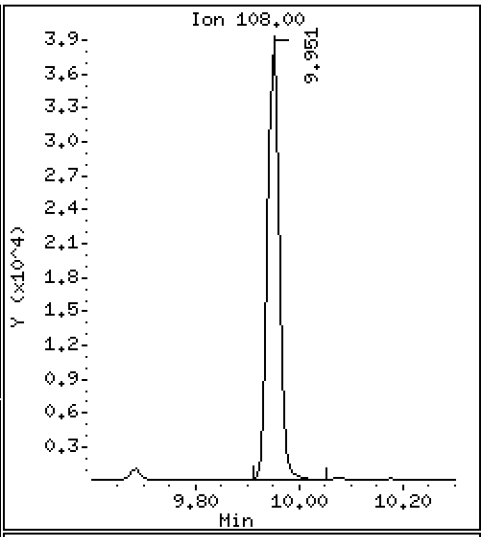
Column phase: ZB-5msi

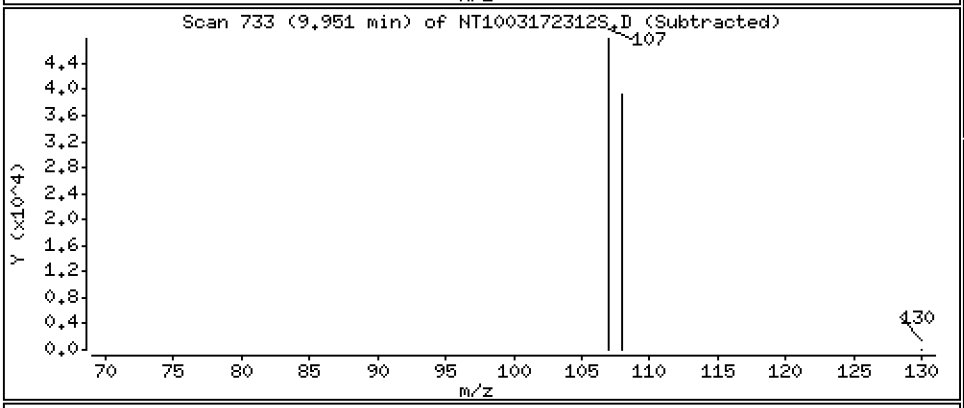
Column diameter: 0.25

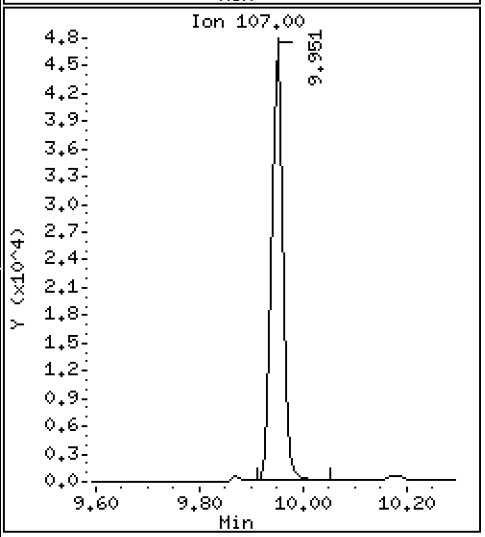
15 4-Methylphenol

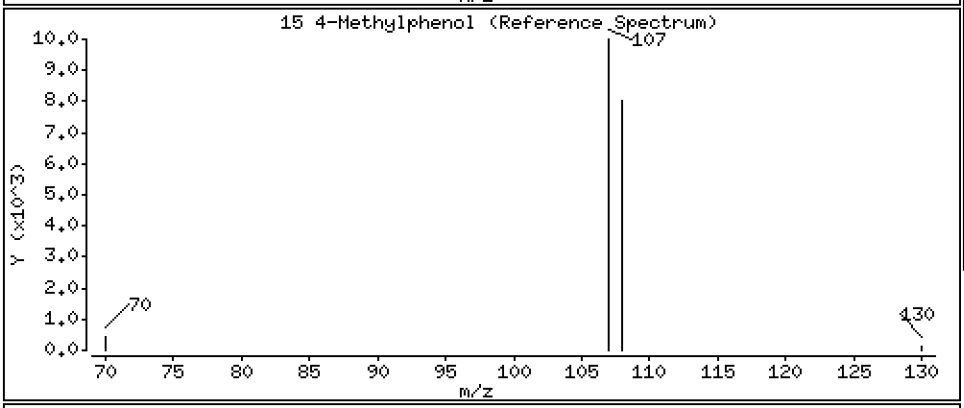
Concentration: 0.9459 ug/L

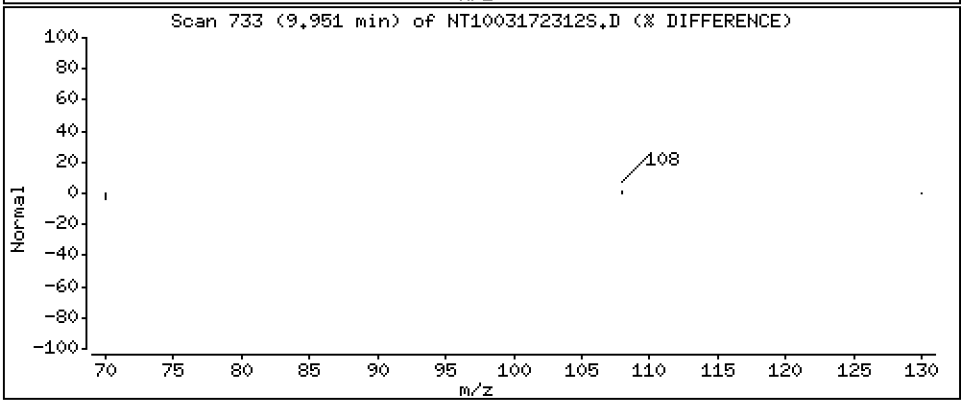












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723125.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

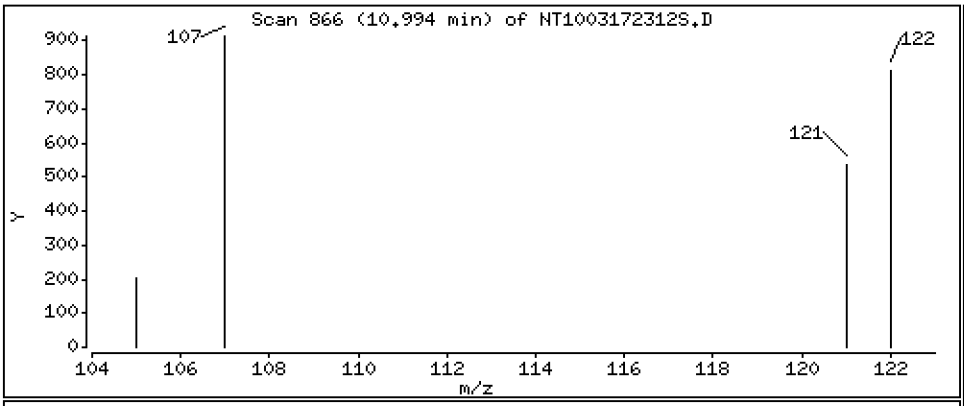
Operator: JGR

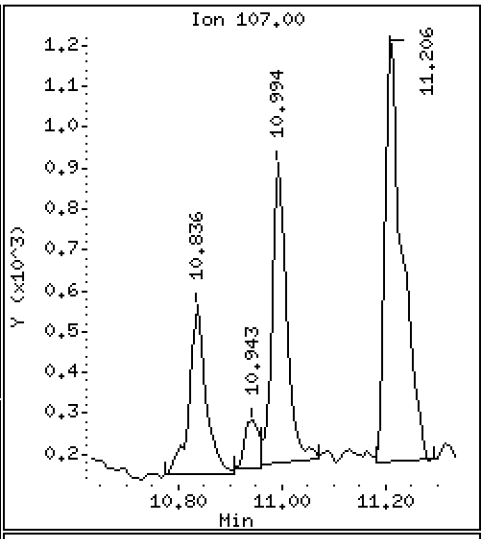
Column phase: ZB-5msi

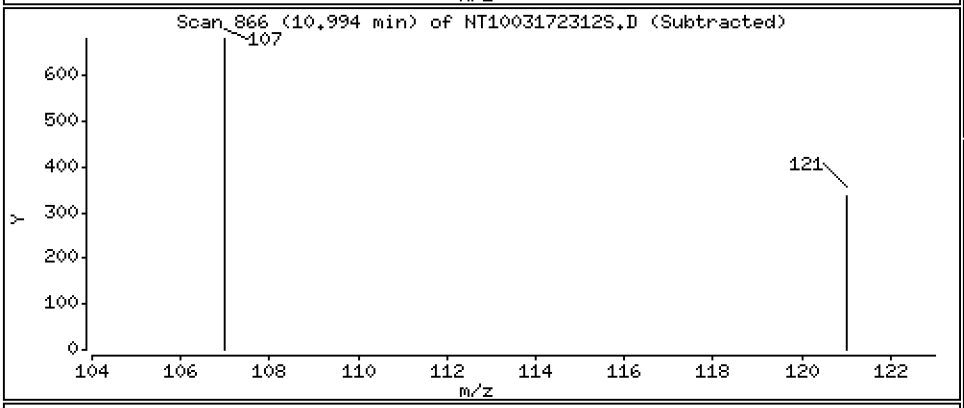
Column diameter: 0.25

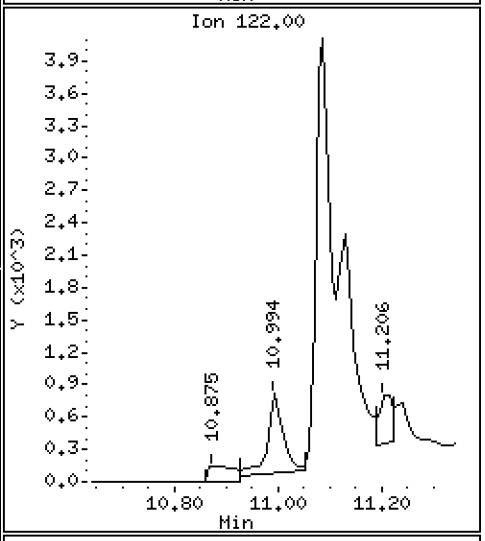
22 2,4-Dimethylphenol

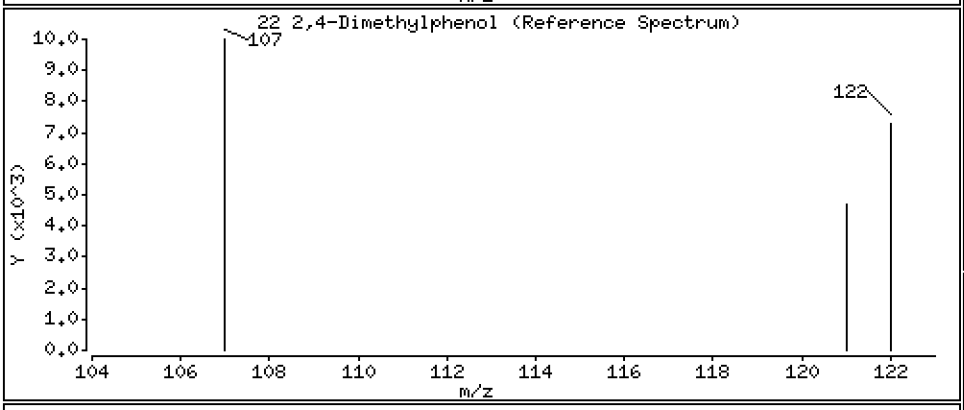
Concentration: 0.02334 ug/L

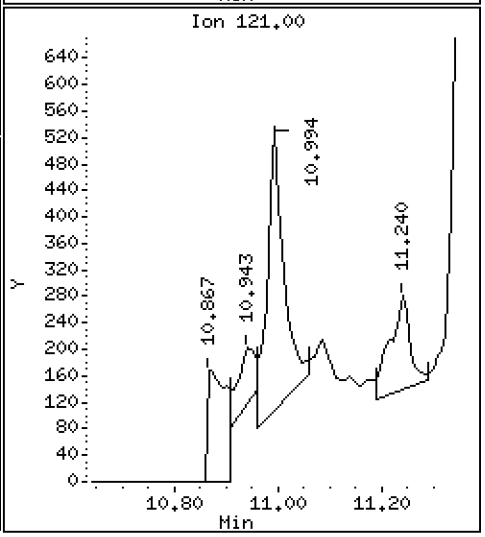


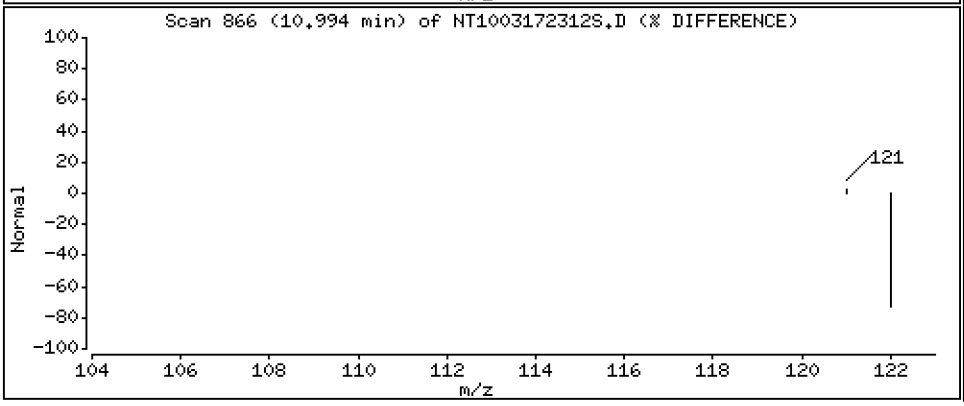












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723125.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

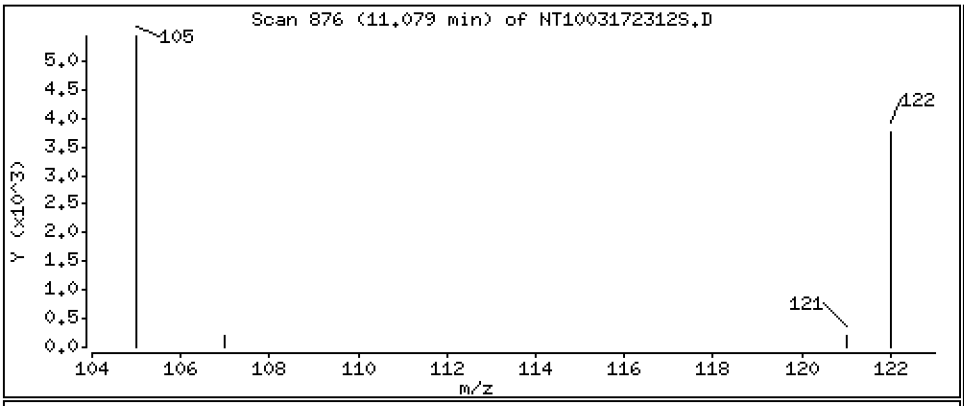
Operator: JGR

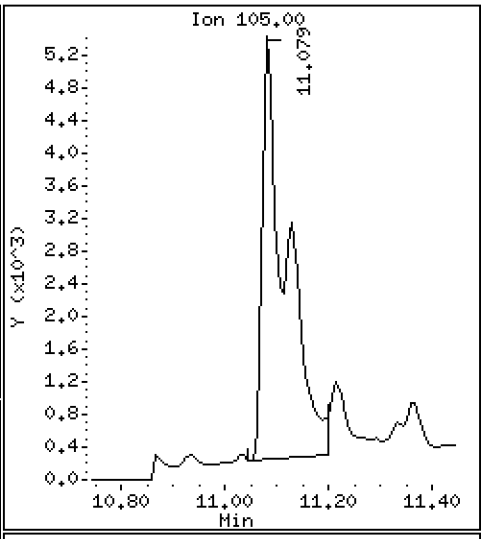
Column phase: ZB-5msi

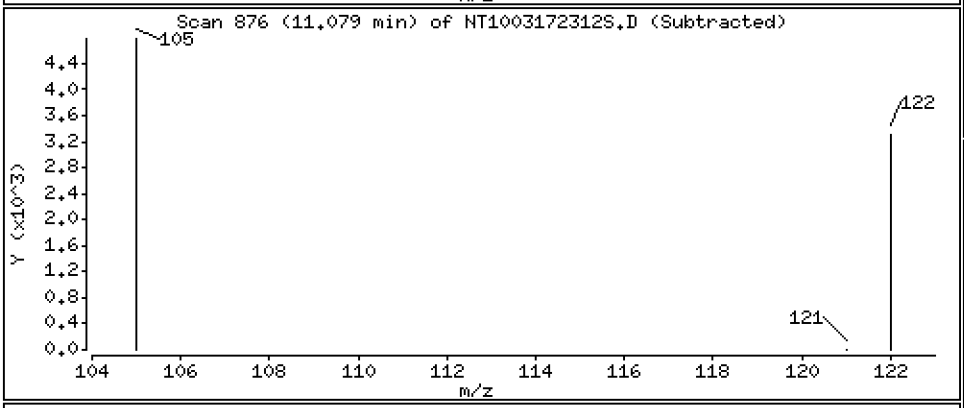
Column diameter: 0.25

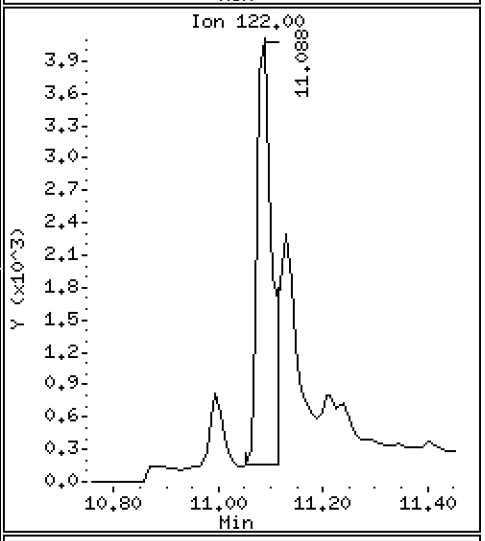
24 Benzoic acid

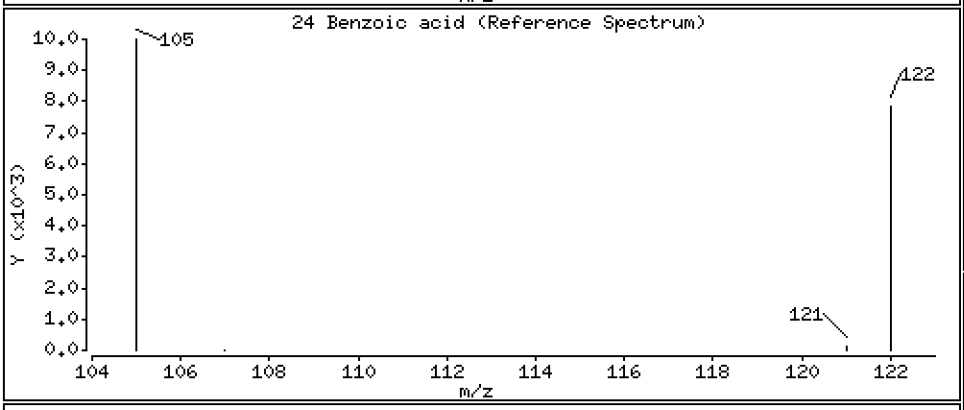
Concentration: 0.4854 ug/L

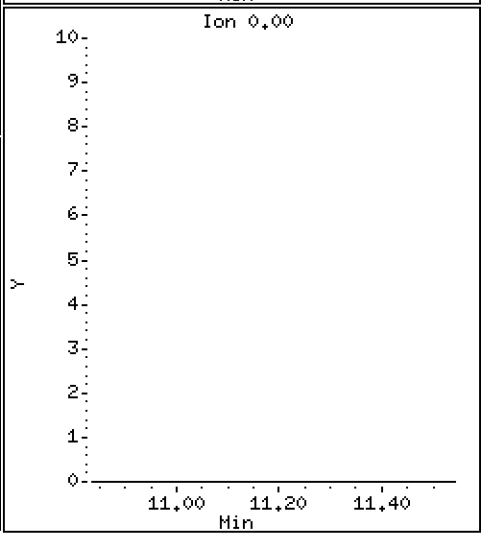


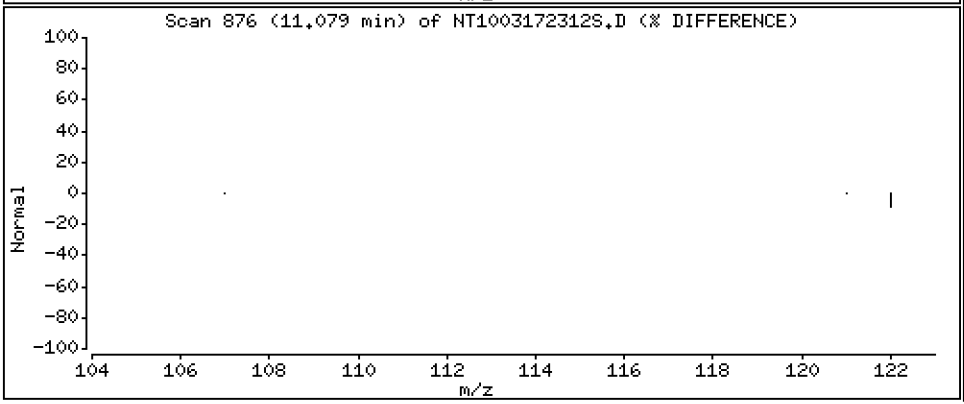












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723125.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

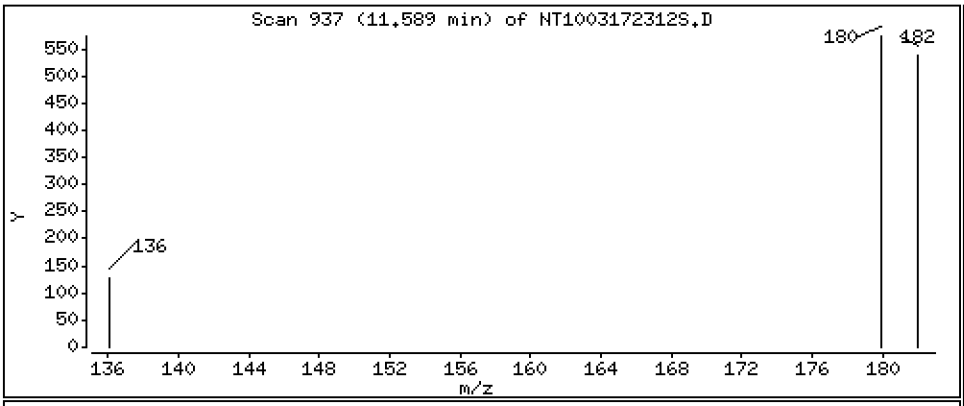
Operator: JGR

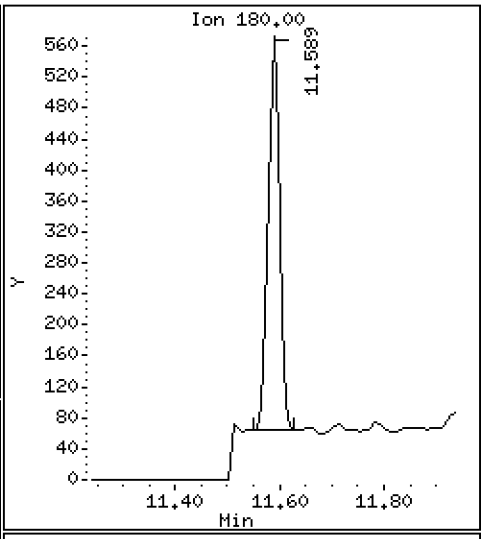
Column phase: ZB-5msi

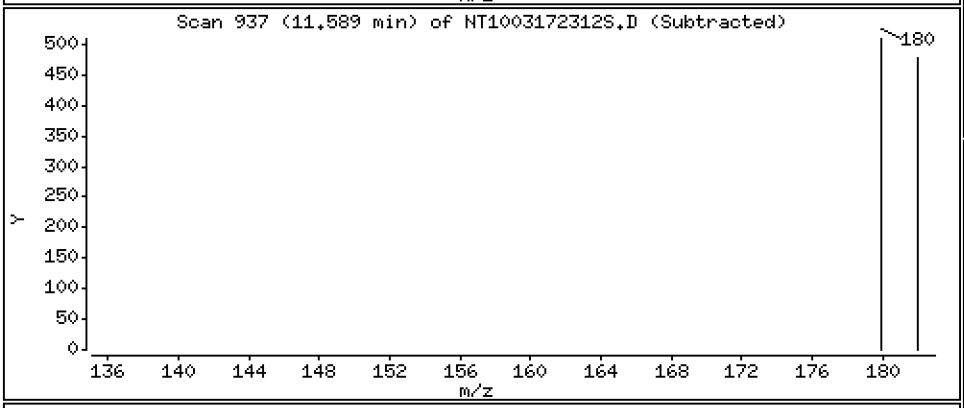
Column diameter: 0.25

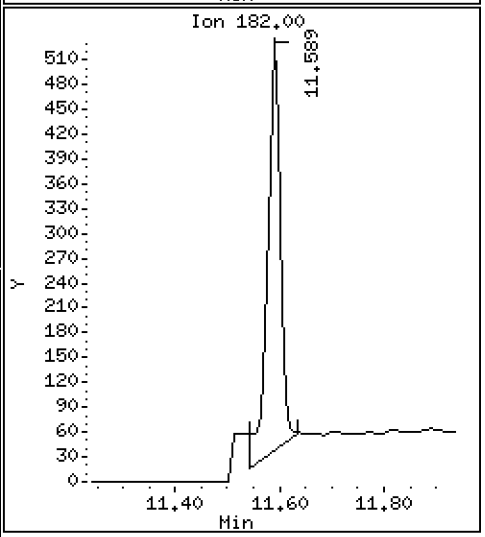
26 1,2,4-Trichlorobenzene

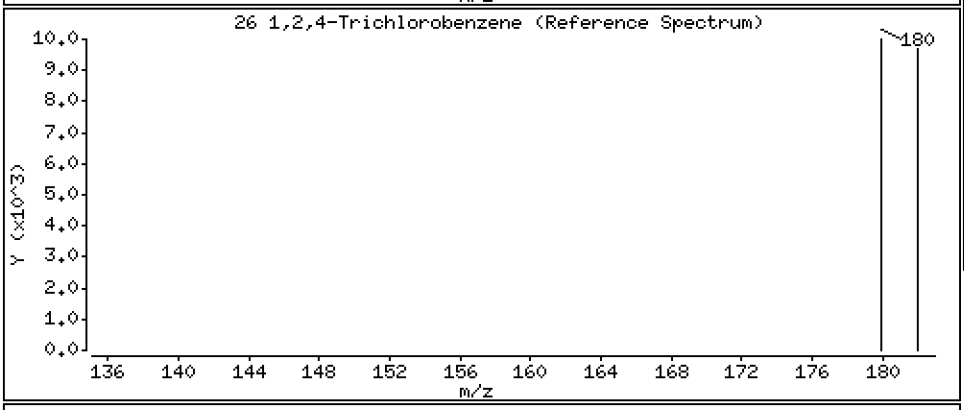
Concentration: 0.01213 ug/L

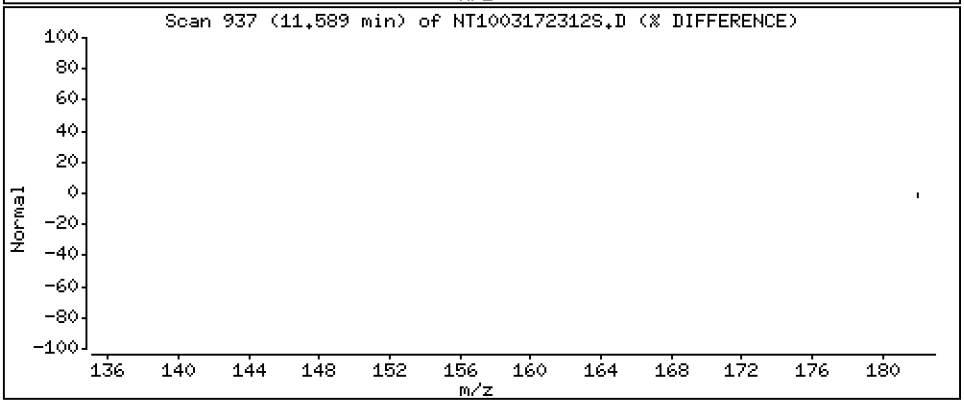












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723125.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

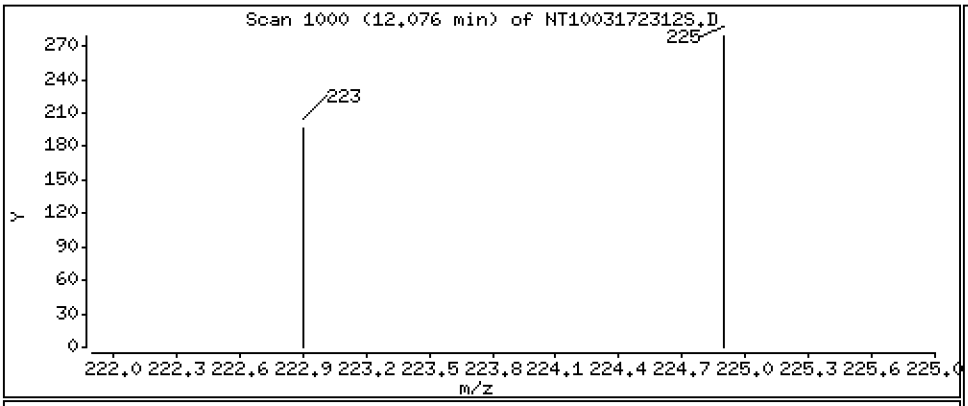
Operator: JGR

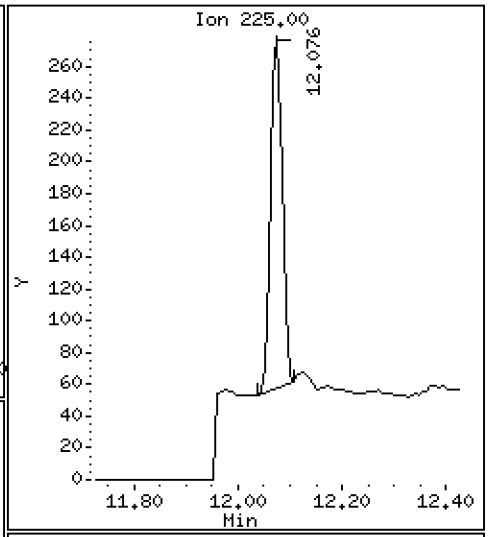
Column phase: ZB-5msi

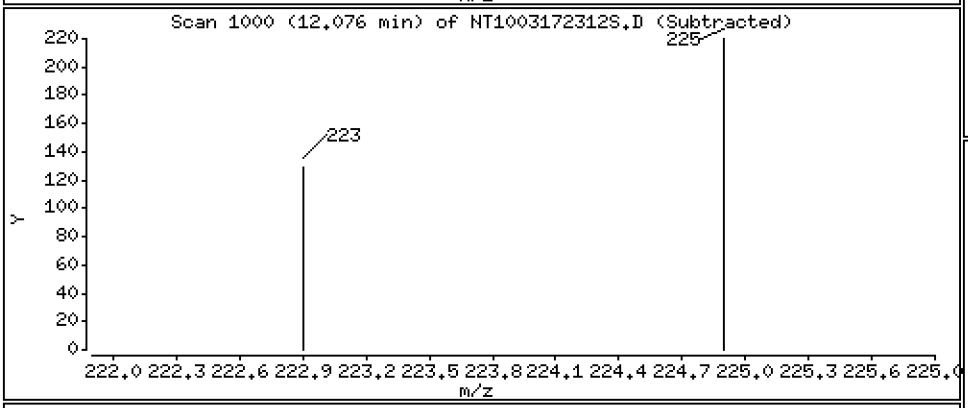
Column diameter: 0.25

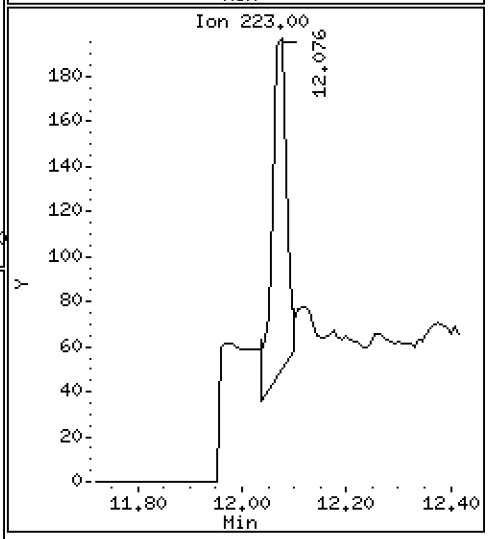
30 Hexachlorobutadiene

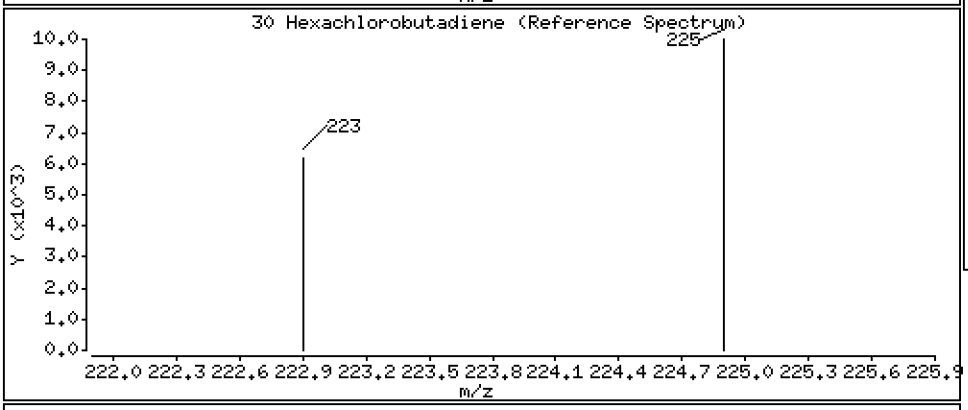
Concentration: 0.008574 ug/L

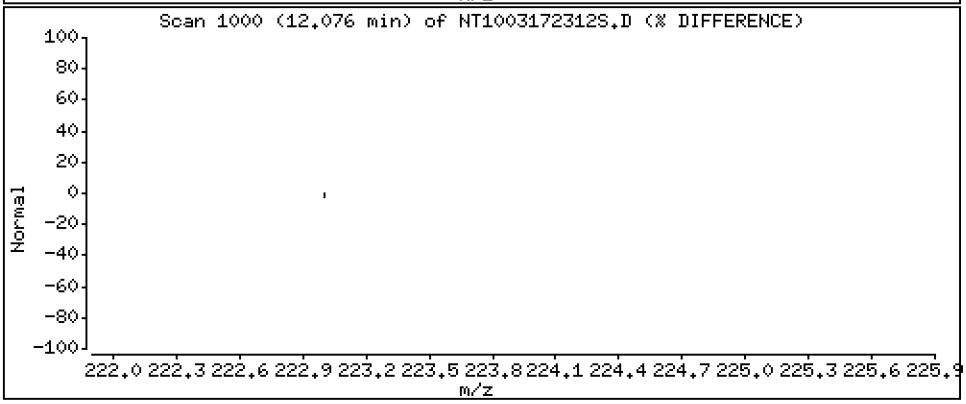












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723125.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

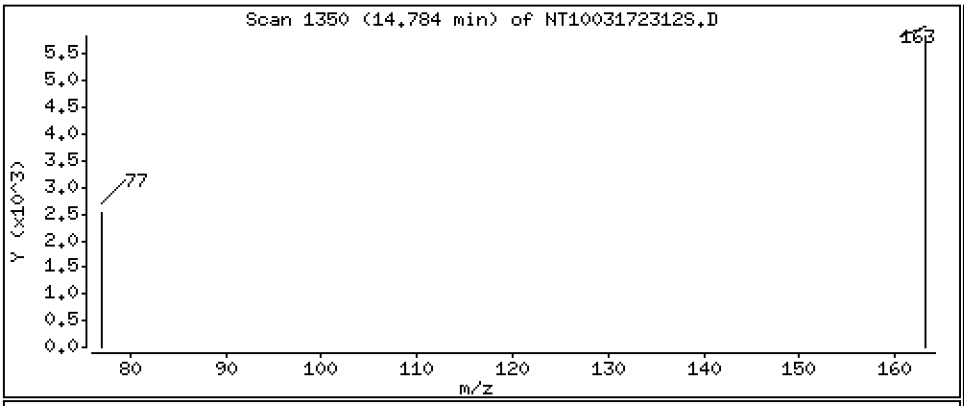
Operator: JGR

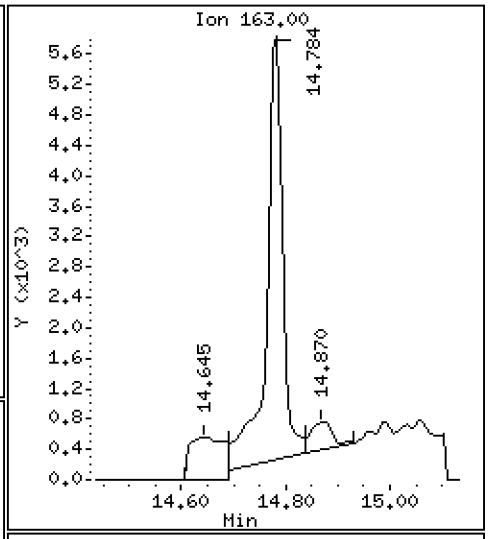
Column phase: ZB-5msi

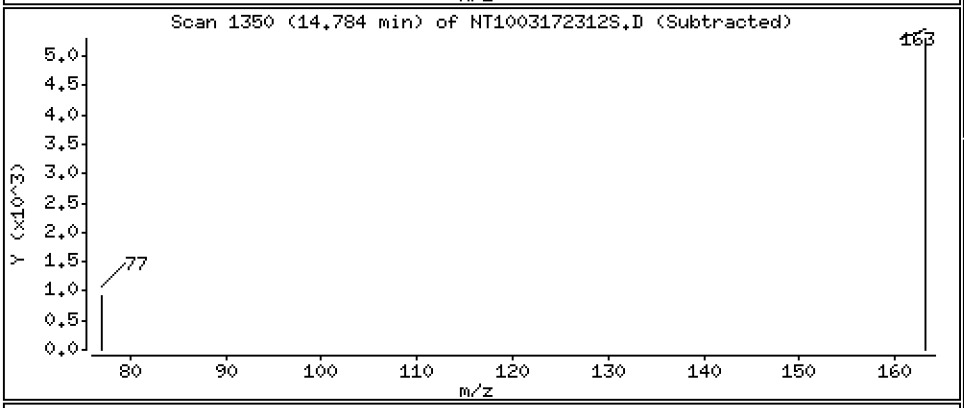
Column diameter: 0.25

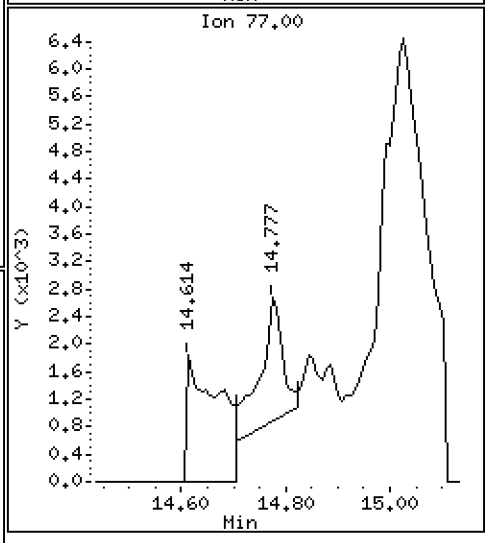
39 Dimethylphthalate

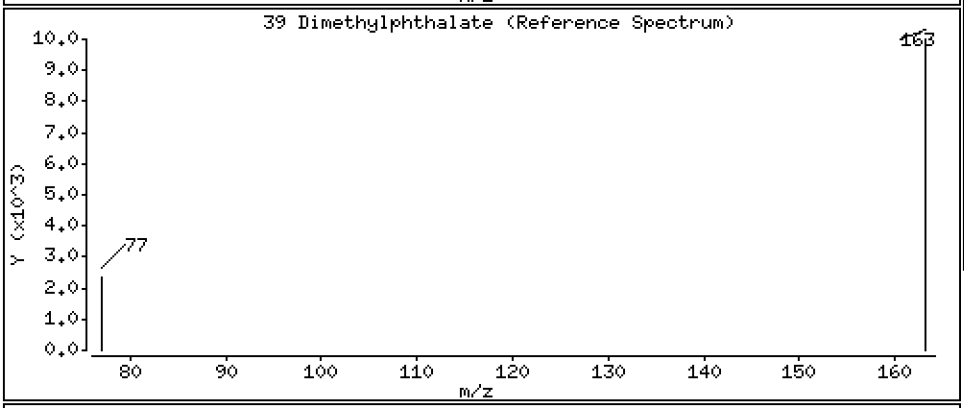
Concentration: 0.1092 ug/L

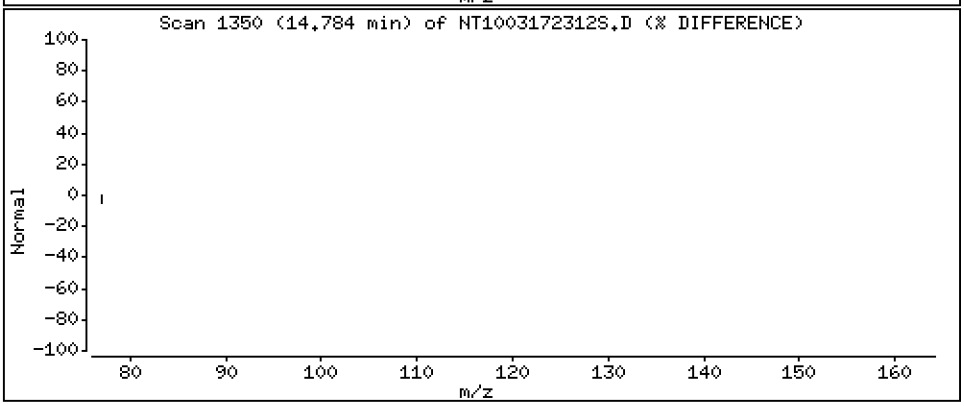












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723125.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

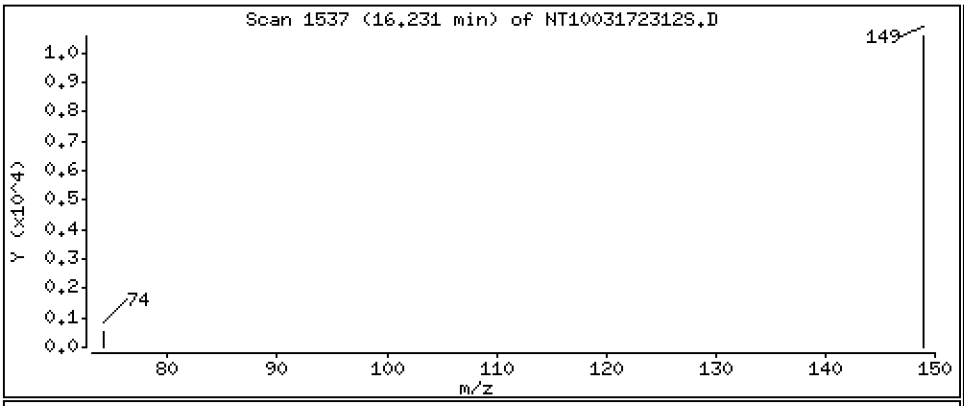
Operator: JGR

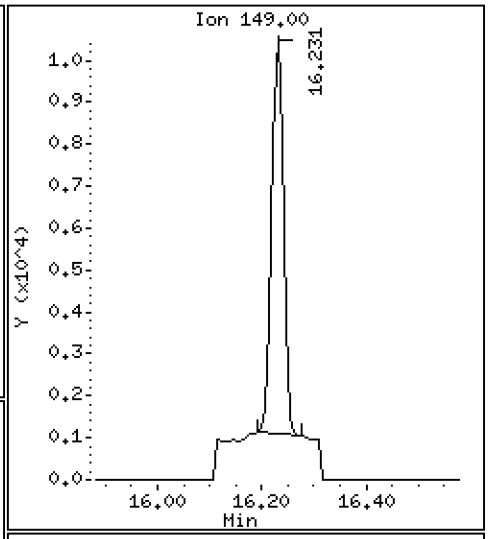
Column phase: ZB-5msi

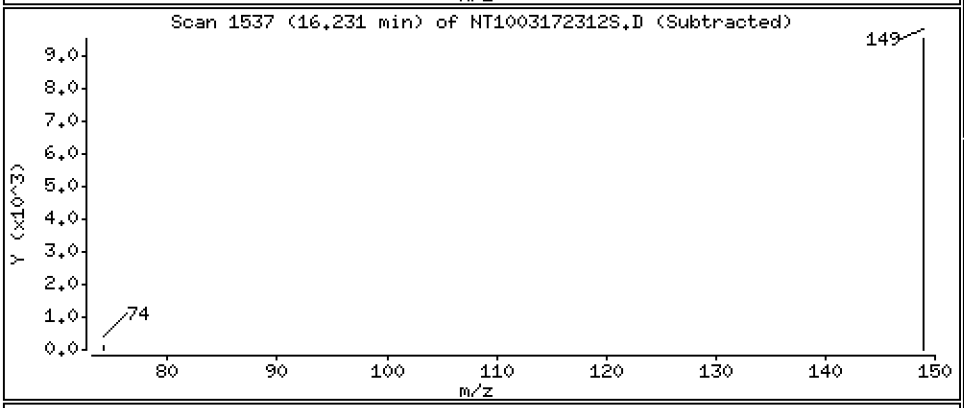
Column diameter: 0.25

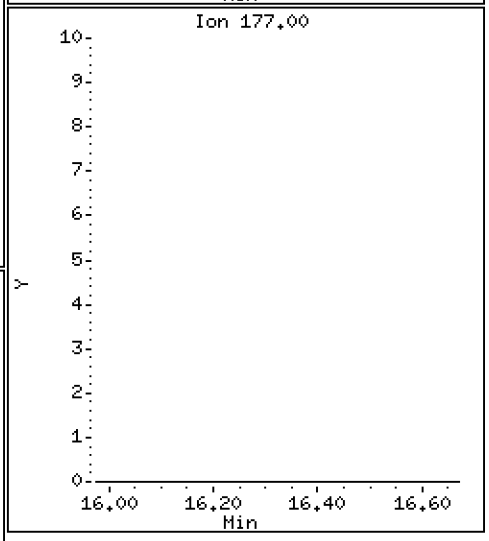
50 Diethylphthalate

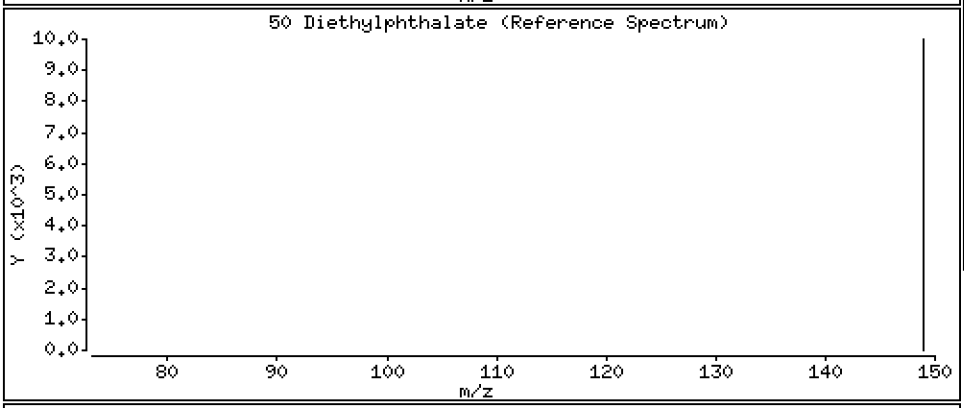
Concentration: 0.1253 ug/L

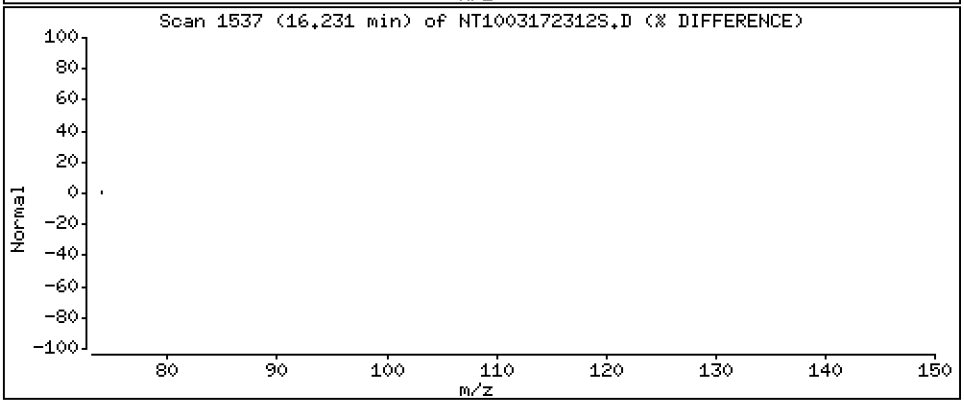












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

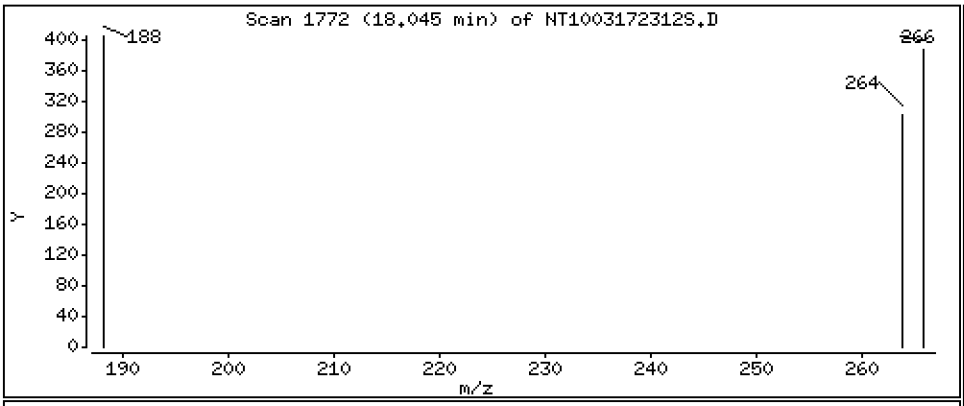
Operator: JGR

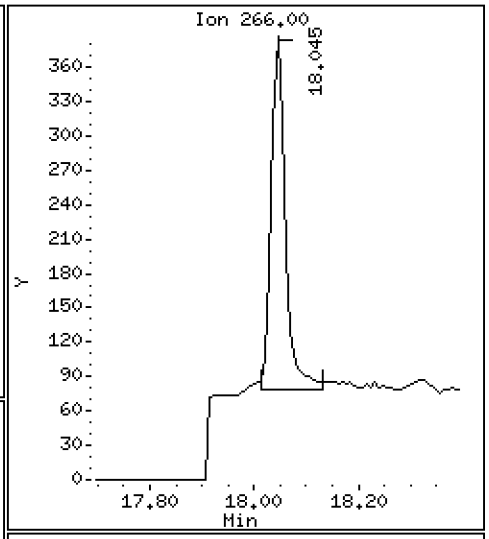
Column phase: ZB-5msi

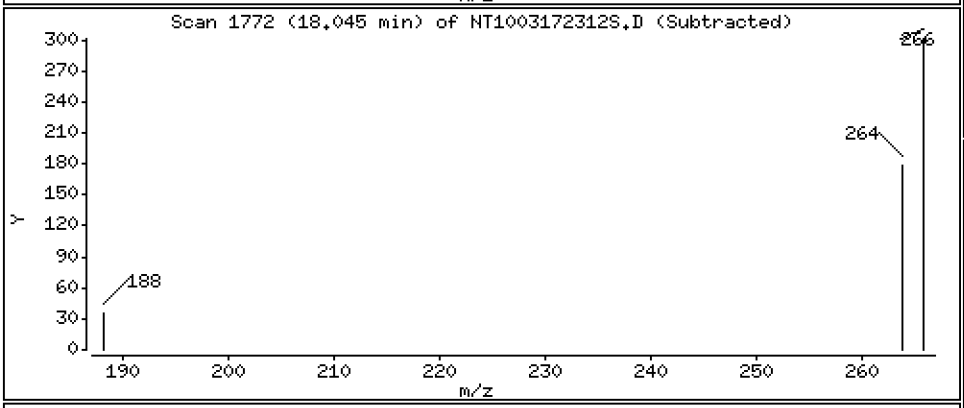
Column diameter: 0.25

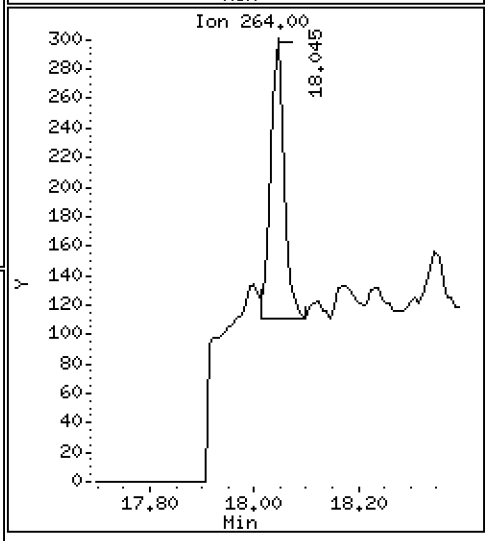
58 Pentachlorophenol

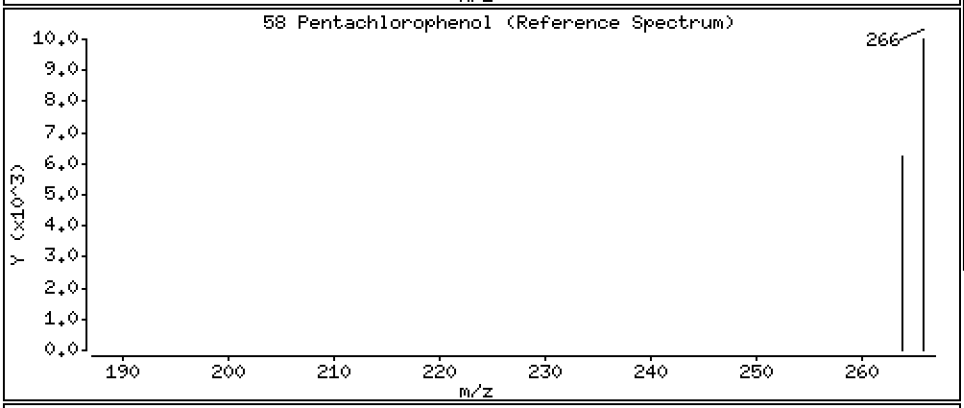
Concentration: 0.02362 ug/L

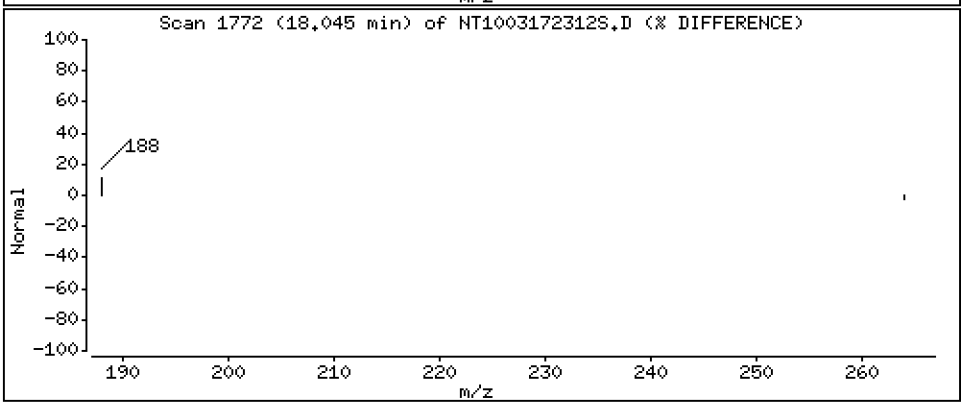












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Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

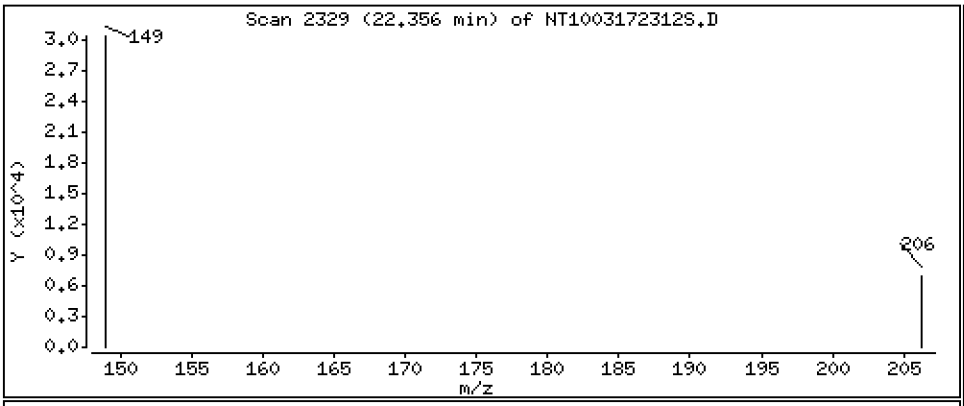
Operator: JGR

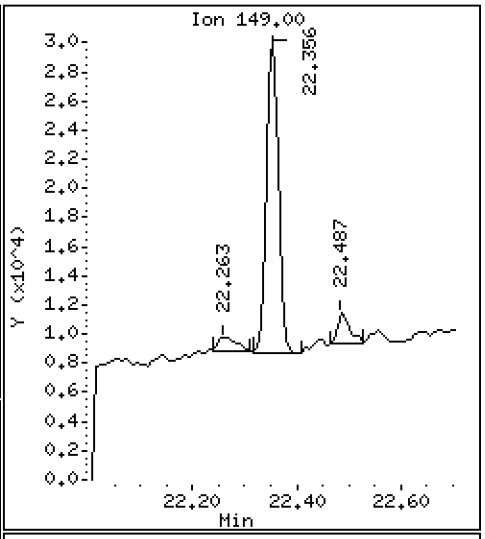
Column phase: ZB-5msi

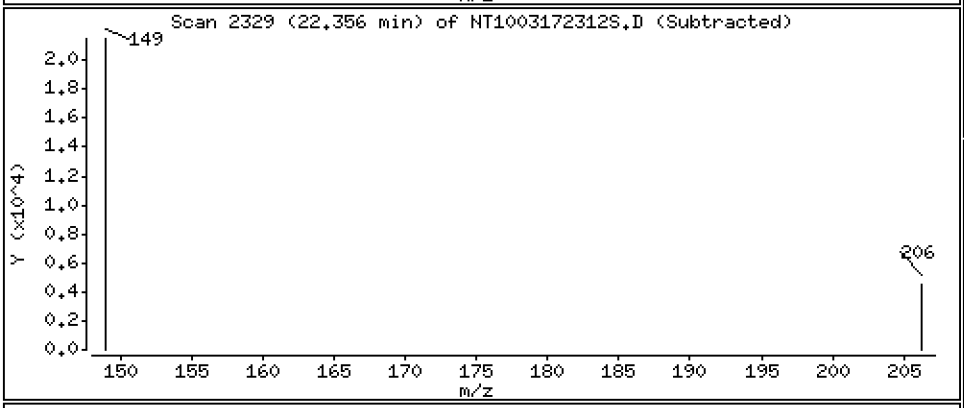
Column diameter: 0.25

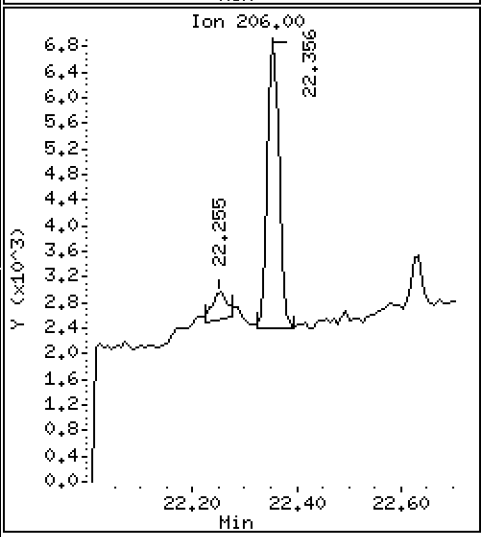
67 Butylbenzylphthalate

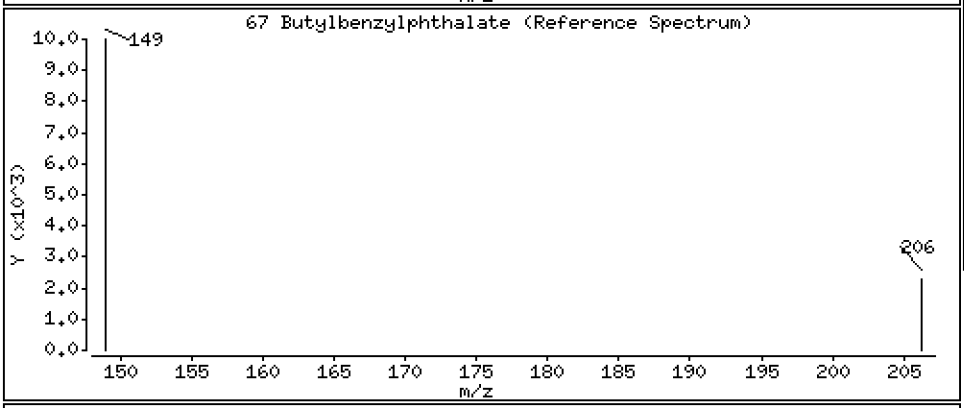
Concentration: 0.4447 ug/L

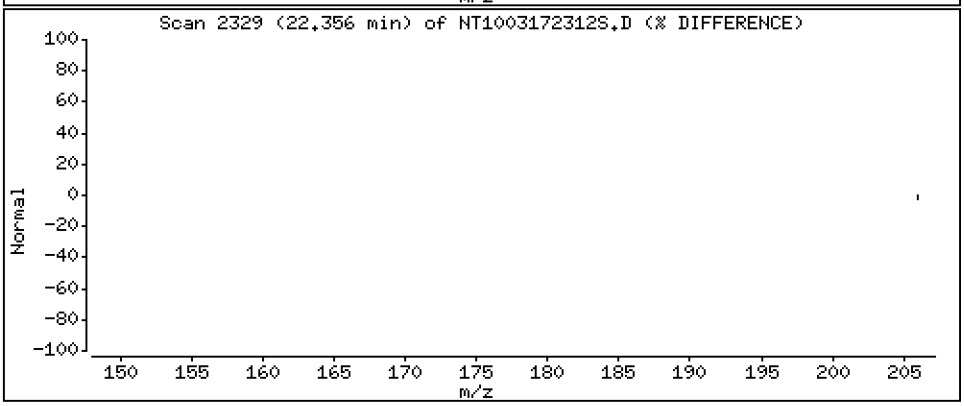












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723125.D

Date : 18-MAR-2023 01:25

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-08

Volume Injected (uL): 1.0

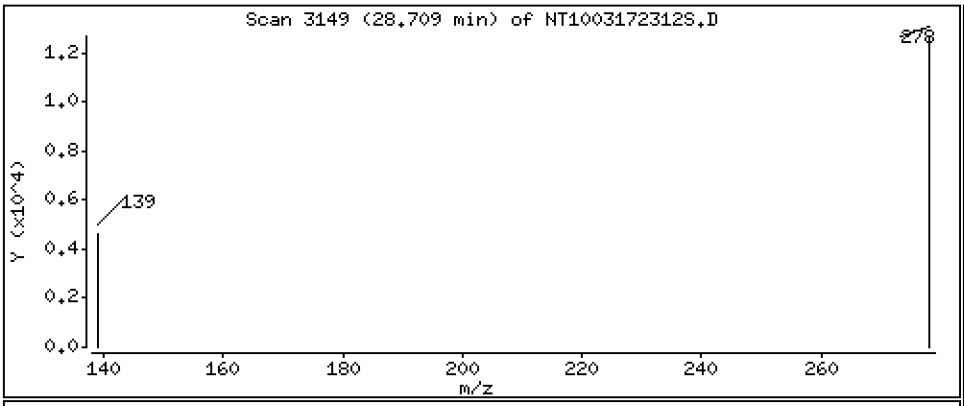
Operator: JGR

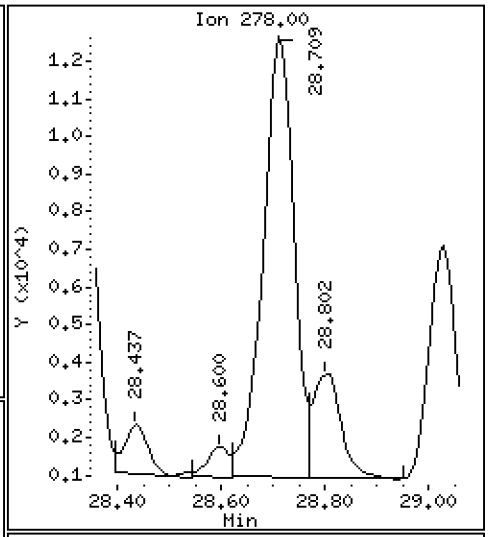
Column phase: ZB-5msi

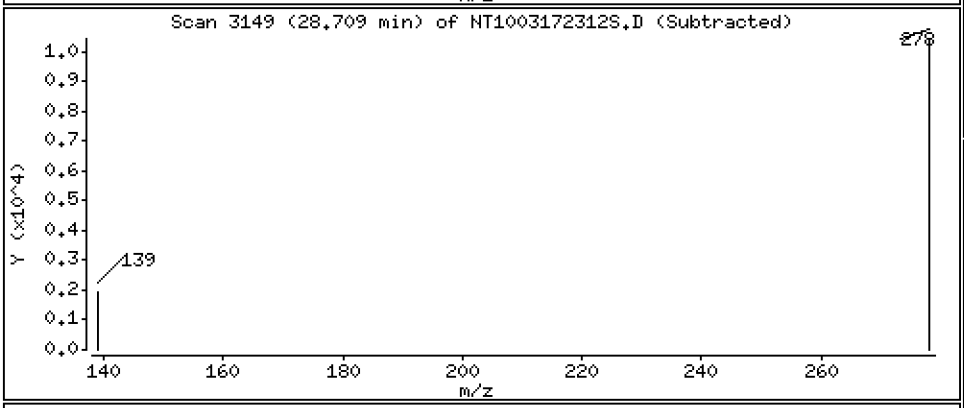
Column diameter: 0.25

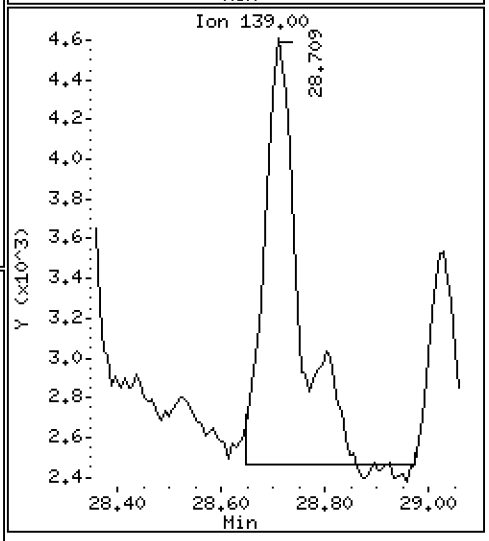
79 Dibenzo(a,h)anthracene

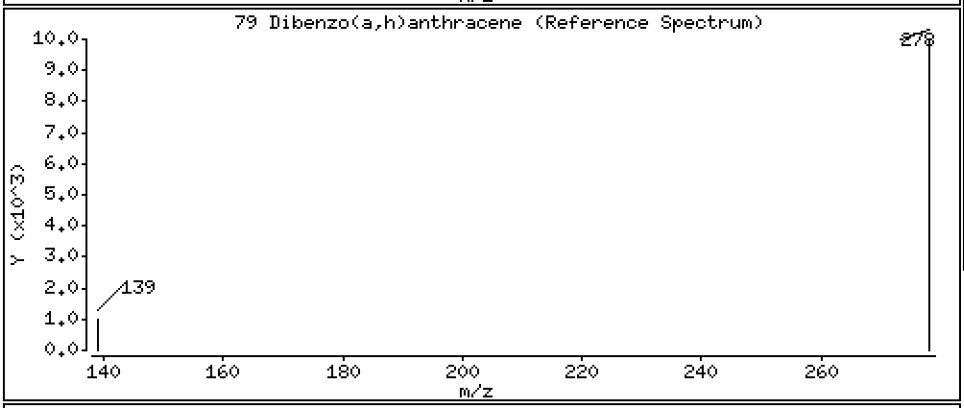
Concentration: 0.2411 ug/L

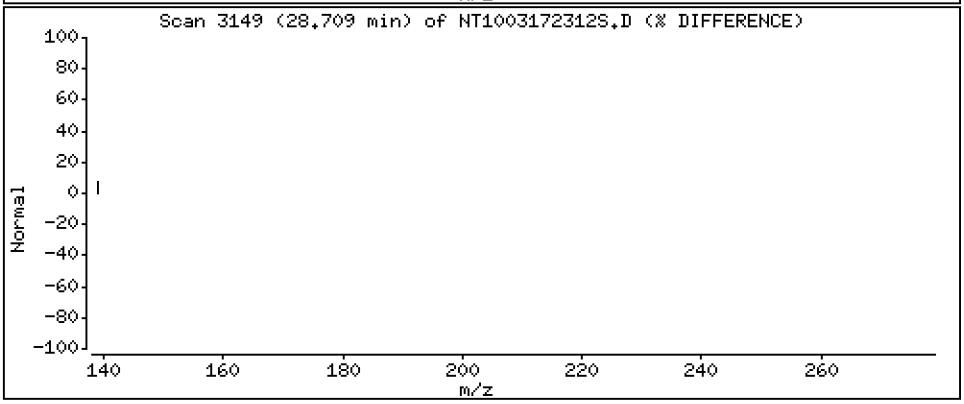












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172312S.D
Lab Smp Id: 23A0420-08
Inj Date : 18-MAR-2023 01:25 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : 23A0420-08
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Meth Date : 30-Mar-2023 14:37 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.980	6.980	(0.758)	164159	2.71245	2.712(R)
3	Phenol	94	8.571	8.572	(0.931)	66388	0.79956	0.7996
7	1,3-Dichlorobenzene	146	9.136	9.136	(0.992)	1094	0.01408	0.01408(M)
* 8	1,4-Dichlorobenzene-d4	152	9.206	9.206	(1.000)	199576	4.00000	
9	1,4-Dichlorobenzene	146	9.229	9.229	(1.003)	2042	0.02723	0.02723(M)
11	Benzyl alcohol	79	9.462	9.462	(1.028)	11228	0.23326	0.2333(M)
12	1,2-Dichlorobenzene	146	9.586	9.586	(1.041)	1150	0.01559	0.01559
13	2-Methylphenol	108	9.687	9.679	(1.052)	1432	0.02489	0.02489(M)
15	4-Methylphenol	108	9.951	9.951	(1.081)	56547	0.94587	0.9459
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
22	2,4-Dimethylphenol	107	10.994	10.985	(0.942)	1442	0.02334	0.02334
24	Benzoic acid	105	11.079	11.096	(0.949)	16421	0.48535	0.4854(M)
26	1,2,4-Trichlorobenzene	180	11.589	11.589	(0.993)	754	0.01213	0.01213(M)
* 27	Naphthalene-d8	136	11.674	11.674	(1.000)	714790	4.00000	
30	Hexachlorobutadiene	225	12.075	12.075	(1.034)	324	0.00857	0.008574(M)
39	Dimethylphthalate	163	14.784	14.784	(0.968)	11751	0.10920	0.1092
* 42	Acenaphthene-d10	162	15.279	15.279	(1.000)	340987	4.00000	
50	Diethylphthalate	149	16.230	16.230	(1.062)	13973	0.12535	0.1253(M)
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.045	18.045	(0.986)	559	0.02362	0.02362(M)
*	59 Phenanthrene-d10	188	18.308	18.308	(1.000)	713877	4.00000	
$	66 Terphenyl-d14	244	21.441	21.434	(0.918)	551953	6.16267	6.163(R)
	67 Butylbenzylphthalate	149	22.355	22.355	(0.958)	32274	0.44467	0.4447
*	69 Chrysene-d12	240	23.346	23.331	(1.000)	549689	4.00000	
*	77 Perylene-d12	264	26.002	25.986	(1.000)	613046	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.708	28.708	(1.104)	48471	0.24114	0.2411
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172312S.D
Lab Smp Id: 23A0420-08
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	184039	92020	368078	199576	8.44
27 Naphthalene-d8	659935	329968	1319870	714790	8.31
42 Acenaphthene-d10	325775	162888	651550	340987	4.67
59 Phenanthrene-d10	616249	308125	1232498	713877	15.84
69 Chrysene-d12	526222	263111	1052444	549689	4.46
77 Perylene-d12	563117	281559	1126234	613046	8.87

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.21	8.71	9.71	9.21	-0.00
27 Naphthalene-d8	11.67	11.17	12.17	11.67	-0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	-0.00
59 Phenanthrene-d10	18.31	17.81	18.81	18.31	-0.00
69 Chrysene-d12	23.33	22.83	23.83	23.35	0.07
77 Perylene-d12	25.99	25.49	26.49	26.00	0.06

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

REVIEW SUMMARY FOR FILE - NT1003172312S.D

Lab ID: 23A0420-08
nt10.i, 20230317.b\20230317.b\SIMABN2.m,   18-MAR-2023 01:25

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: 20230317.b/NT1003172303S.D

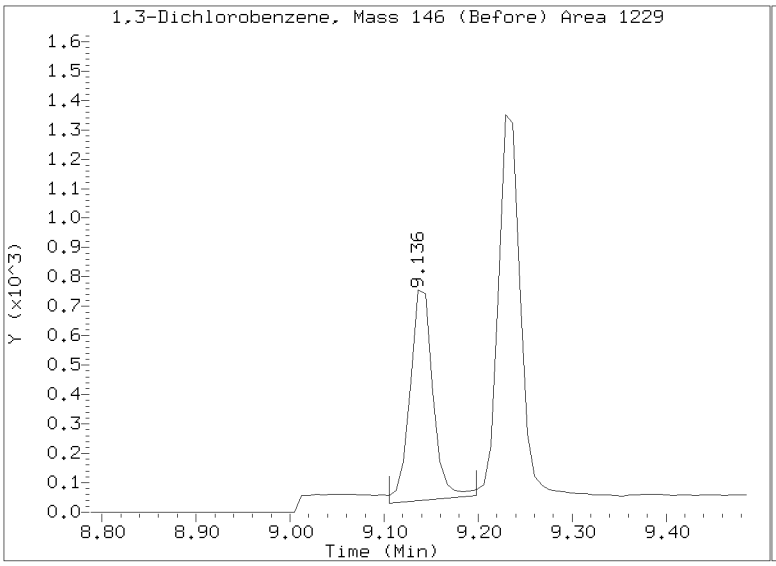
On Column LOD for nt10.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

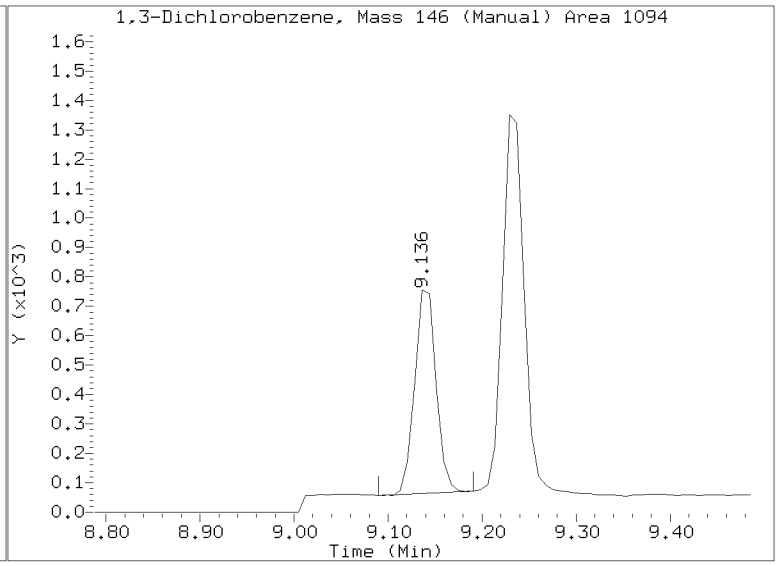
Exception: 1,2,4-Trichlorobenzene 0.0010

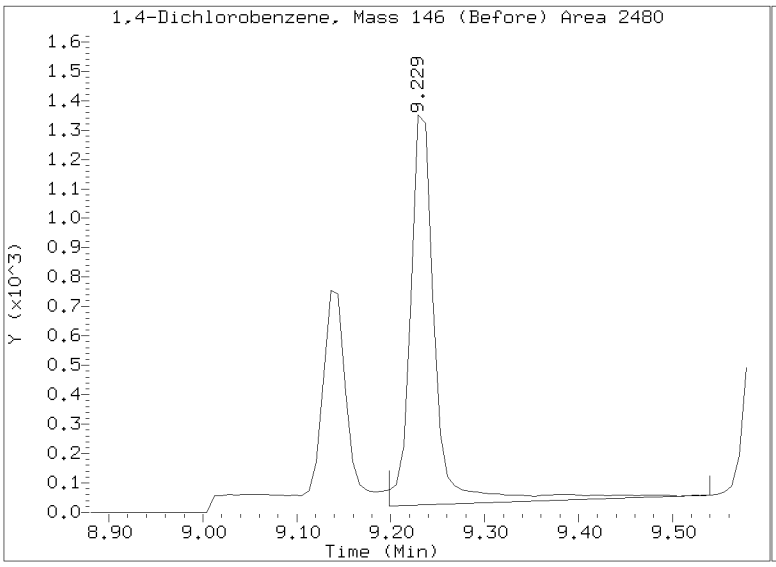
* Only compounds listed in the work order have been verified by the analyst *

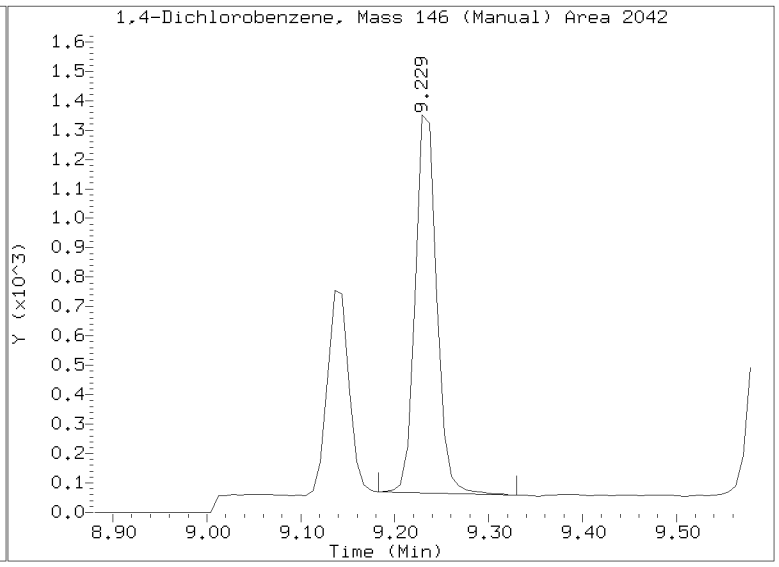
Quant Ion Manual Peak Adjustment Report

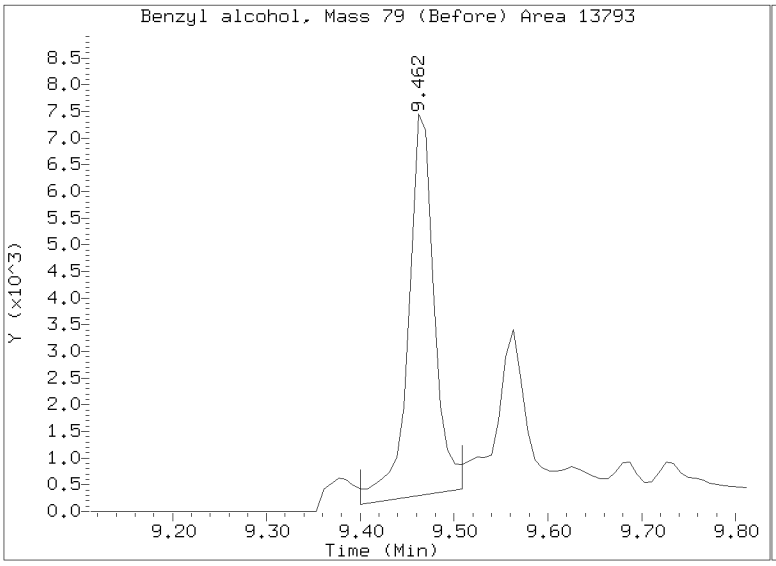
Datafile: //target/share/chem3/nt10.i/20230317.b/20230317.b/NT1003172312S.D
Injection Date: 18-MAR-2023 01:25
Lab ID:23A0420-08 Client ID:
Report Date: 03/30/2023 14:56

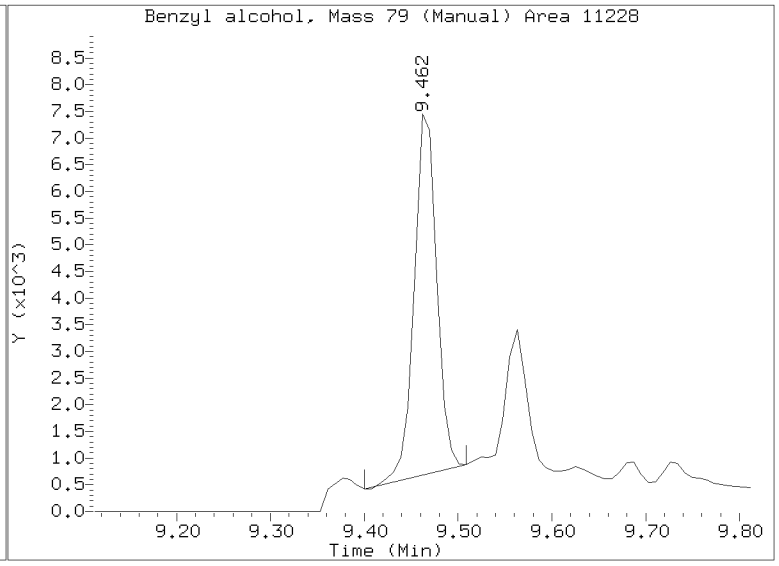






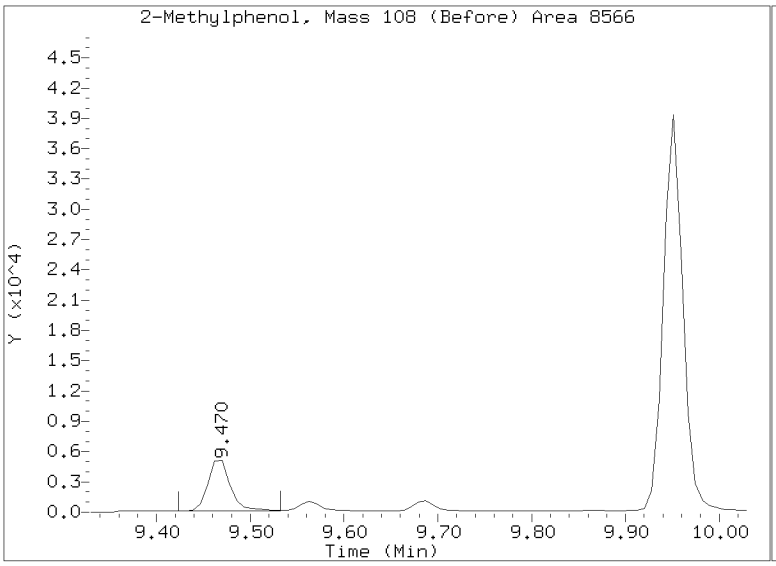


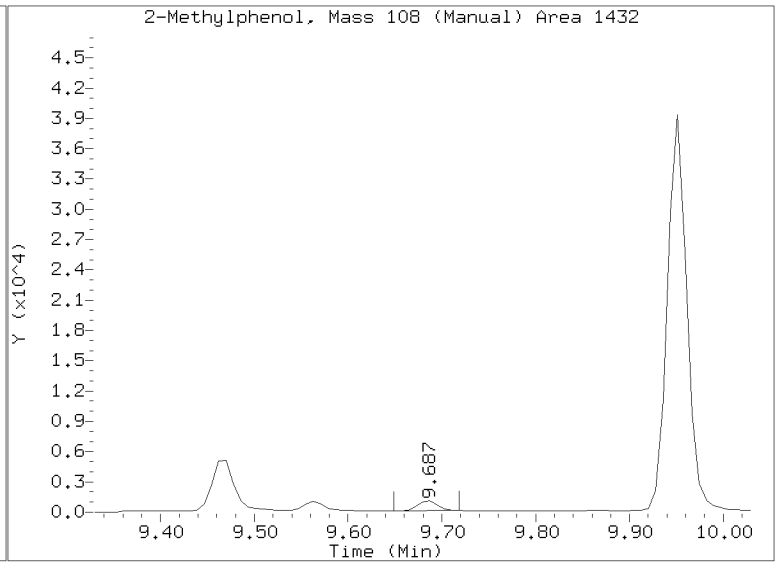


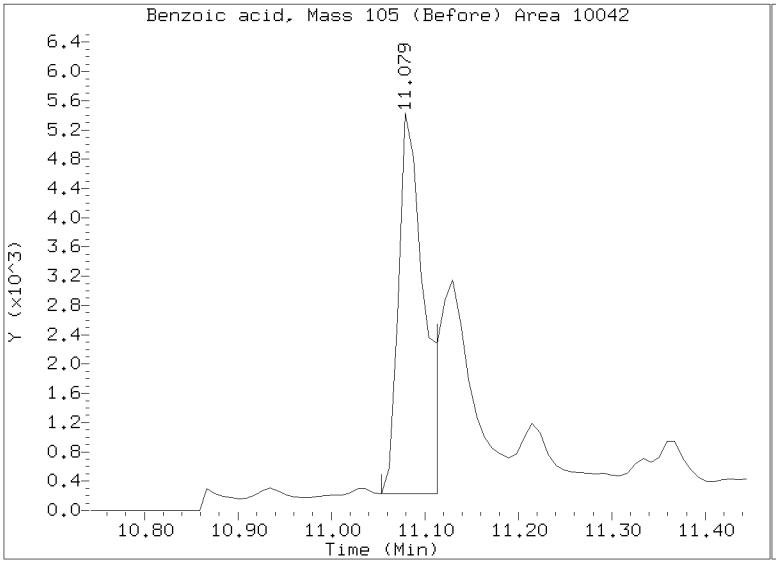


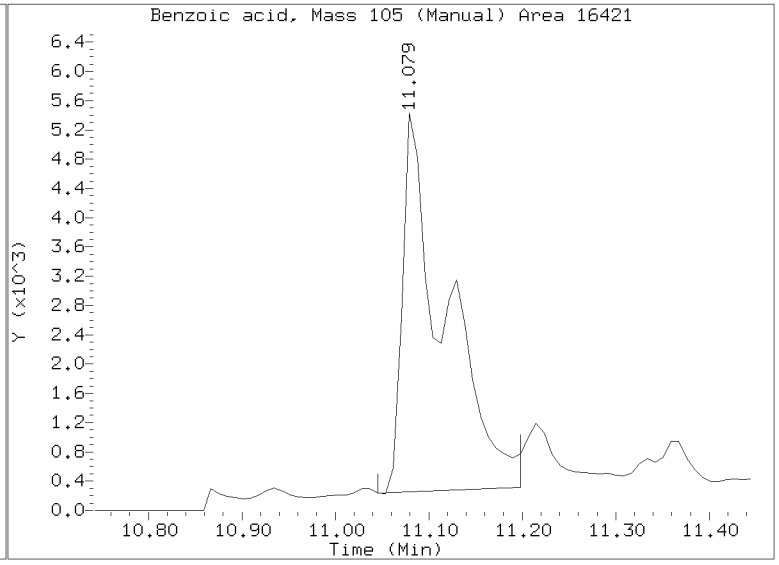
Quant Ion Manual Peak Adjustment Report

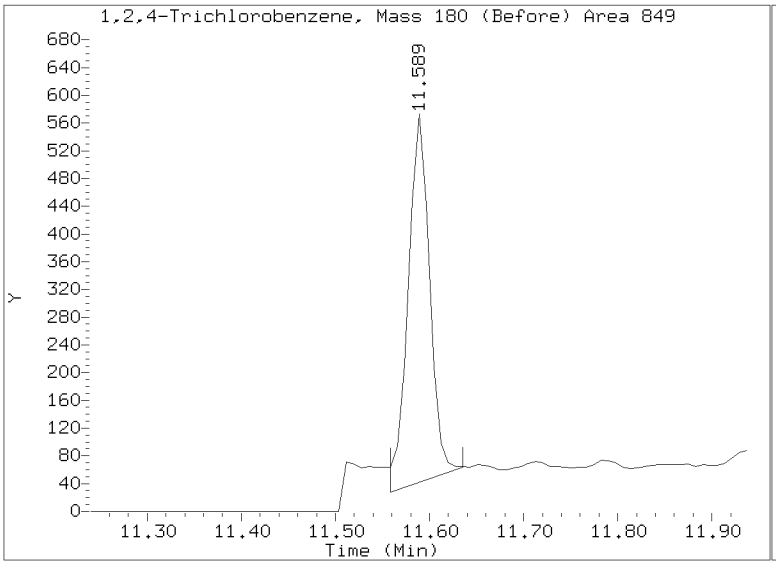
Datafile: //target/share/chem3/nt10.i/20230317.b/20230317.b/NT1003172312S.D
Injection Date: 18-MAR-2023 01:25
Lab ID:23A0420-08 Client ID:
Report Date: 03/30/2023 14:56

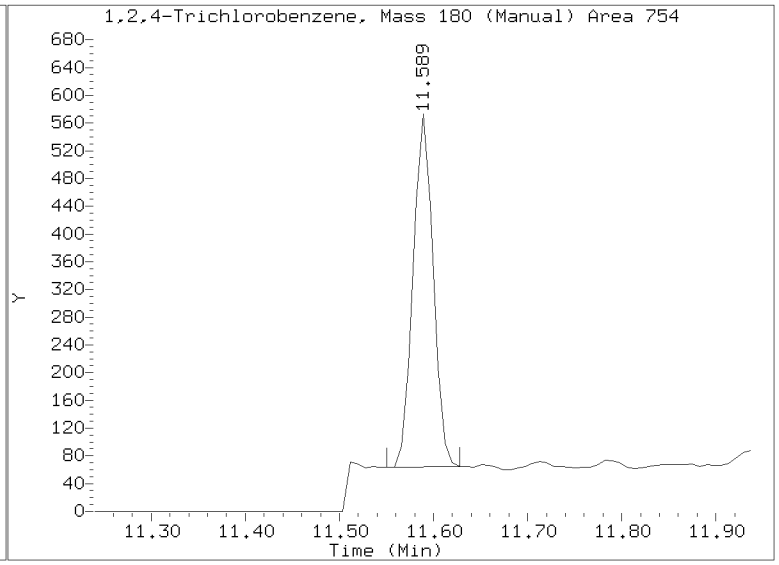












Quant Ion Manual Peak Adjustment Report

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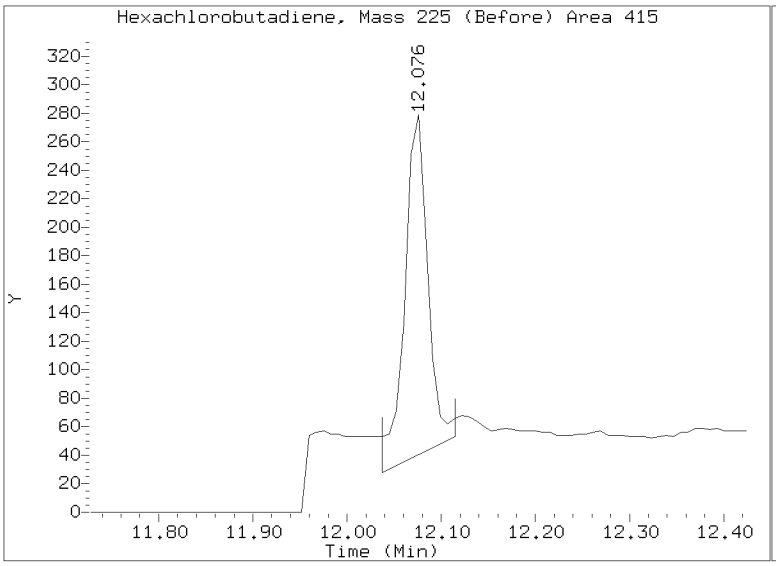
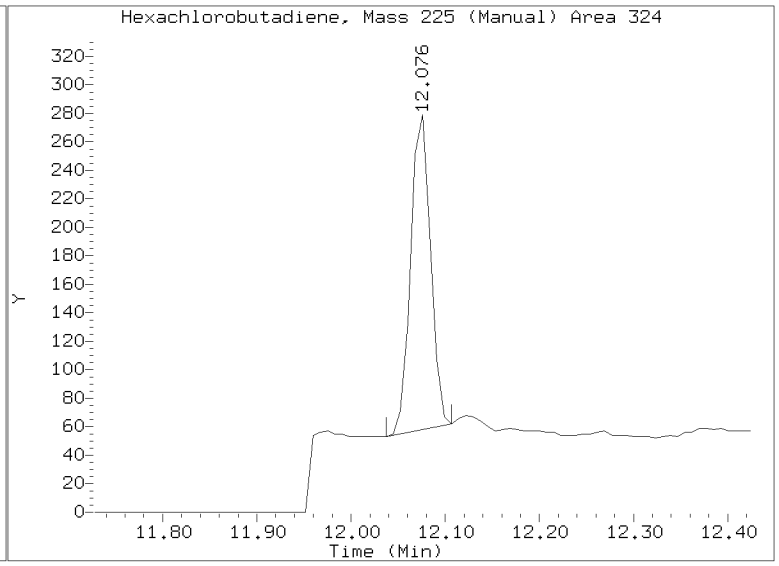
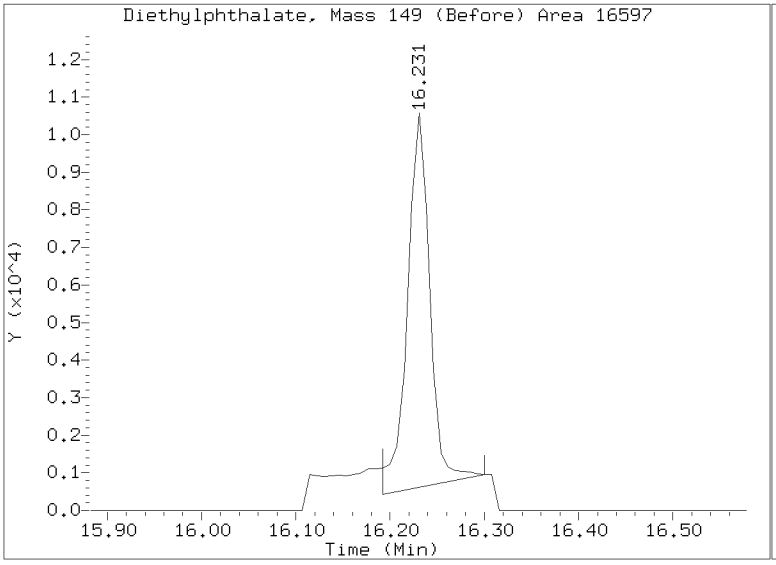
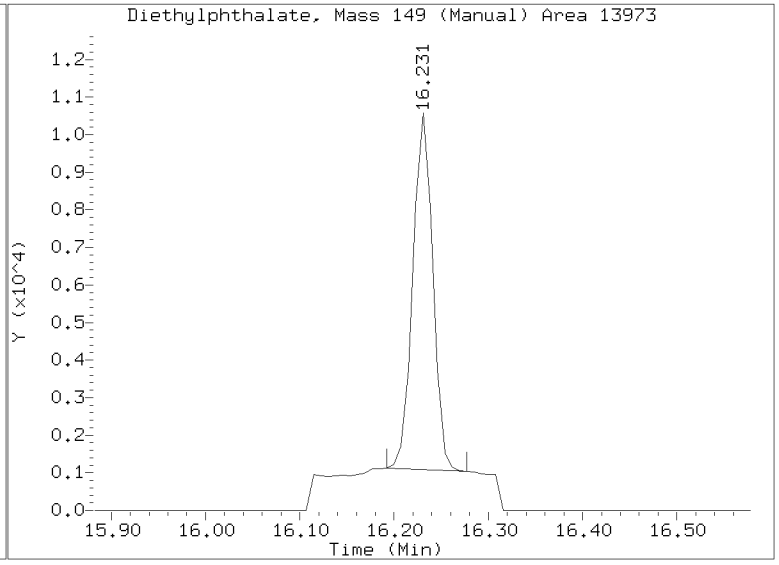
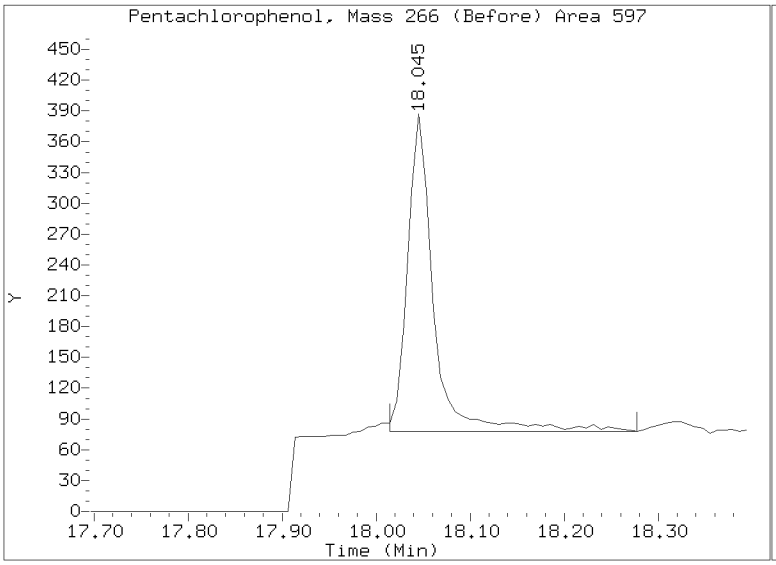
Injection Date: 18-MAR-2023 01:25
Lab ID:23A0420-08 Client ID:
Report Date: 03/30/2023 14:56

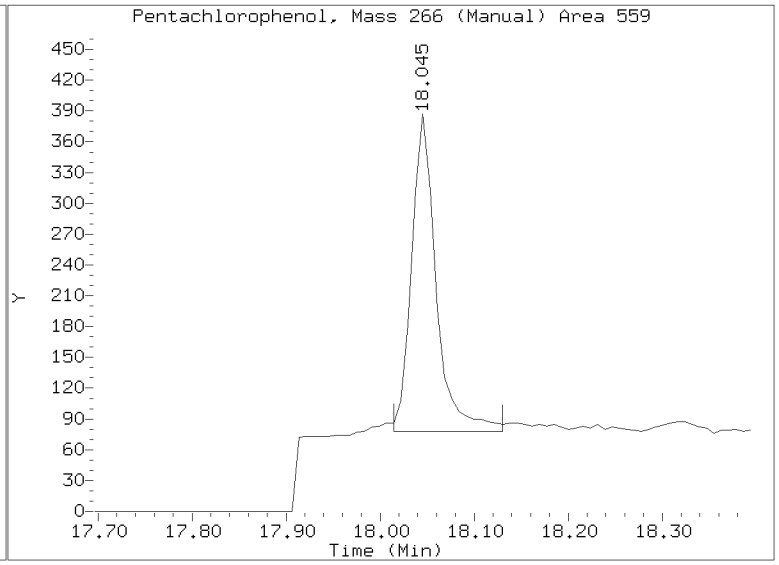












Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1082

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-09 A	SDG:	23A0420
Sampled:	01/19/23 13:40	Prepared:	02/20/23 16:23	File ID:	NT1003172315S.D
% Solids:	58.87	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/18/23 03:19
Batch:	BLB0495	Sequence:	SLC0475	Initial/Final:	16.99 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00049
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	6.2		0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	3.1	J	0.7	5.0
100-51-6	Benzyl Alcohol	1	22.3		2.5	20.0
65-85-0	Benzoic acid	1	56.1	J	13.4	100
105-67-9	2,4-Dimethylphenol	1	9.2	J	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	3.4	J	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	20.0		1.3	5.0
87-86-5	Pentachlorophenol	1	7.8	J	2.1	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	749.85	256	34.2	27 - 120	
p-Terphenyl-d14	499.90	627	126	37 - 120	*

Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723158.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

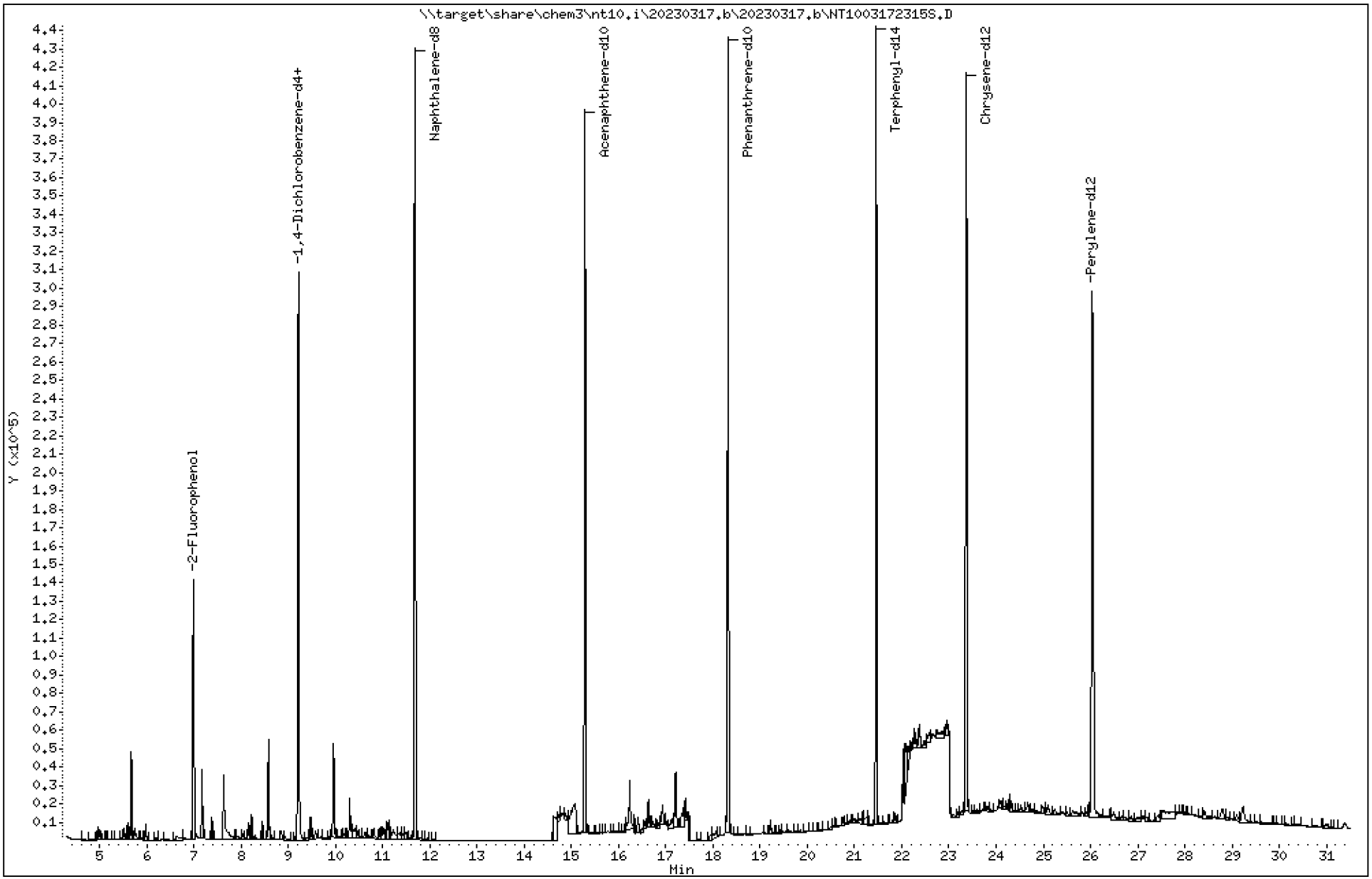
Sample Info: 23A0420-09

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723155S.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

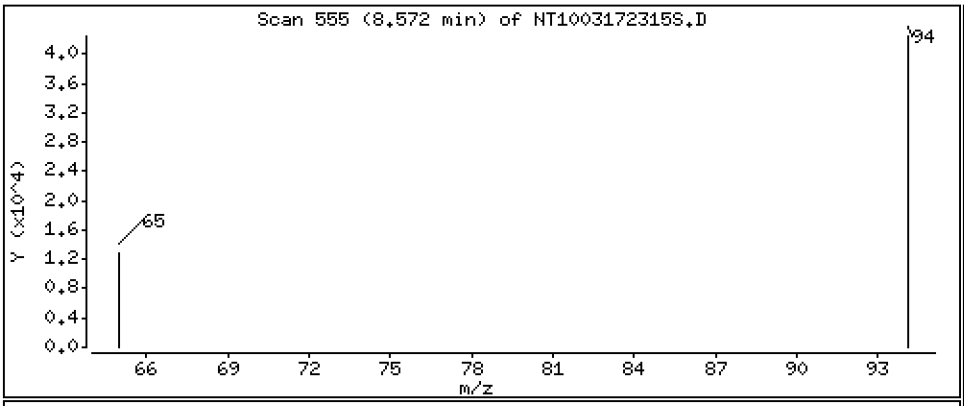
Operator: JGR

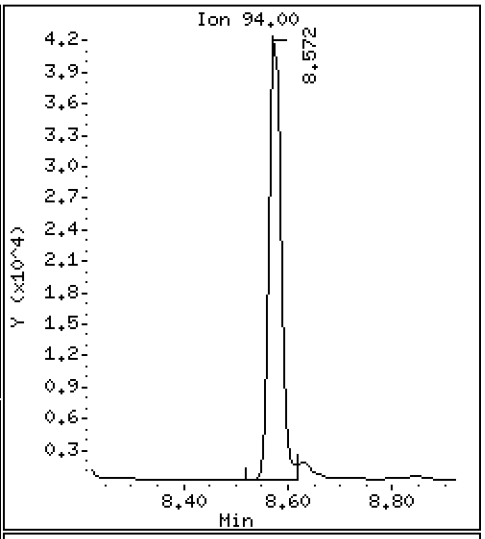
Column phase: ZB-5msi

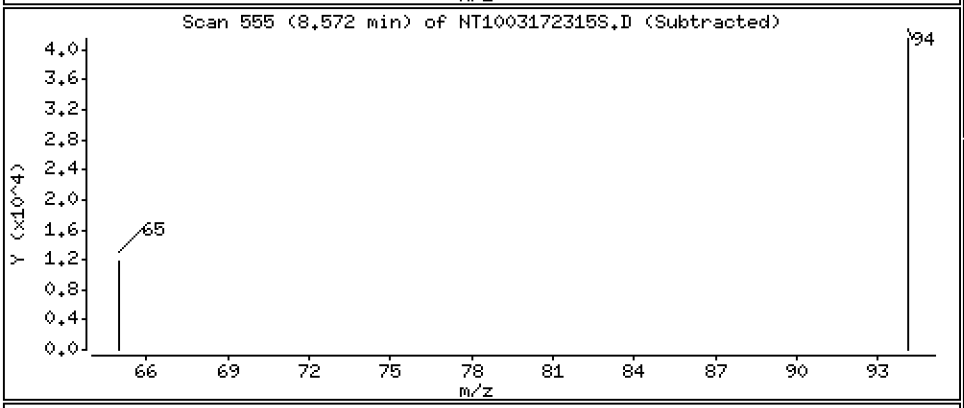
Column diameter: 0.25

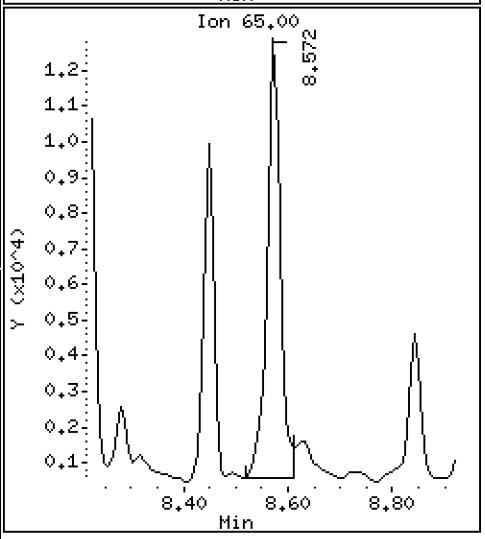
3 Phenol

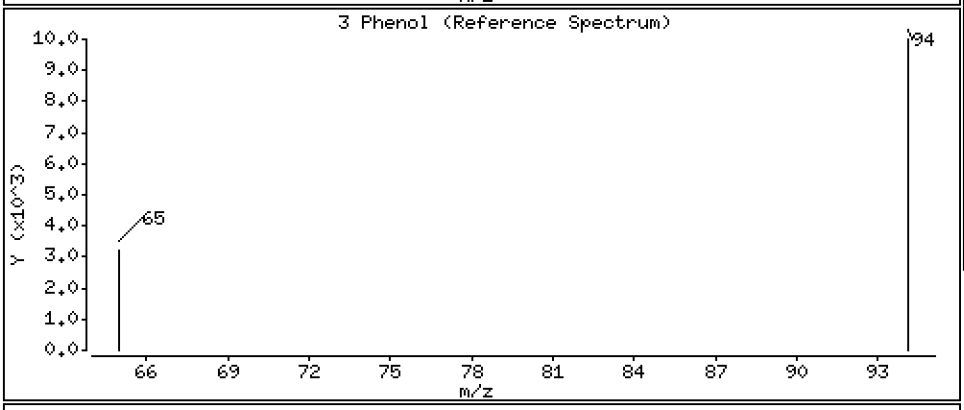
Concentration: 0.8047 ug/L

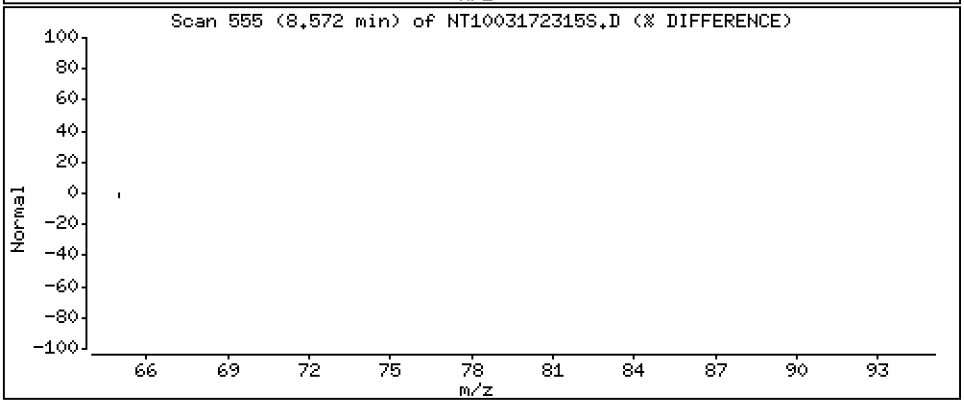












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723155.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

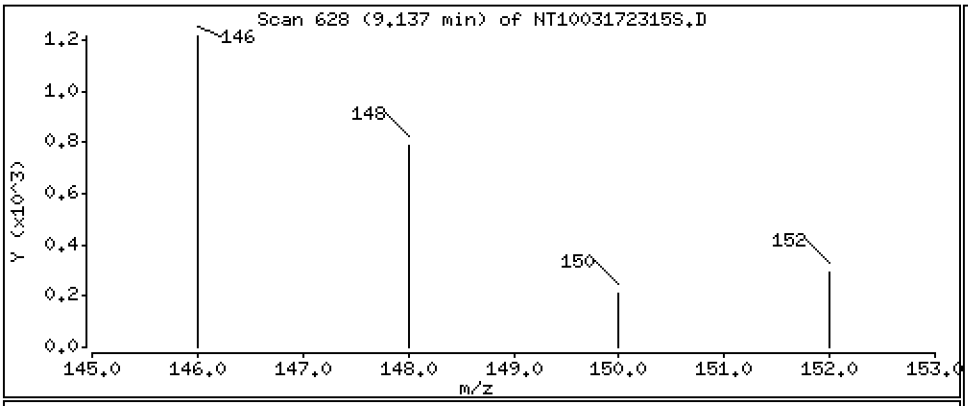
Operator: JGR

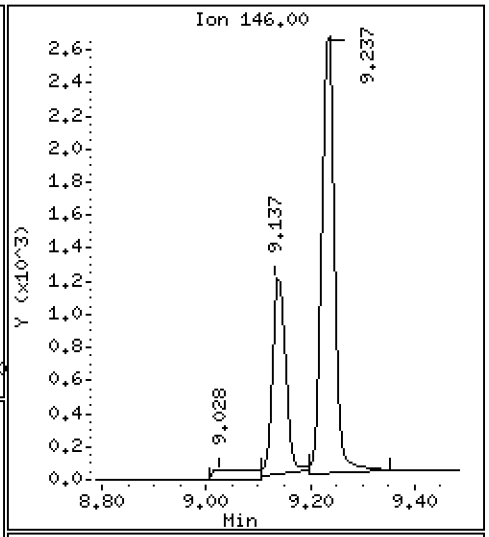
Column phase: ZB-5msi

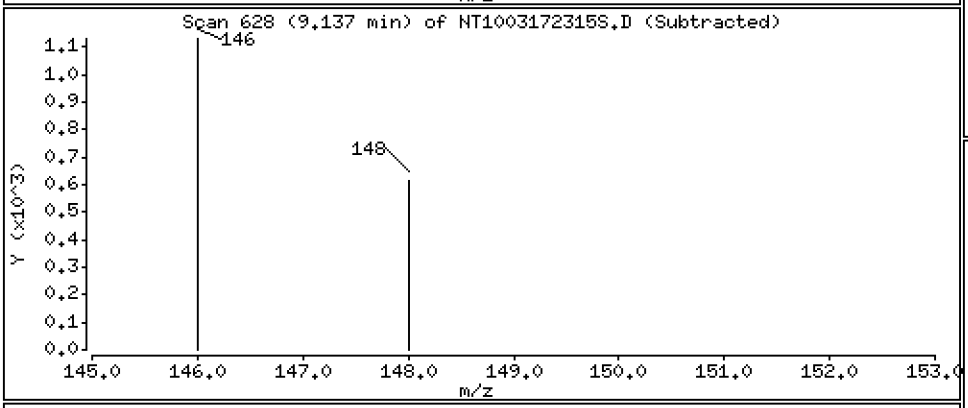
Column diameter: 0.25

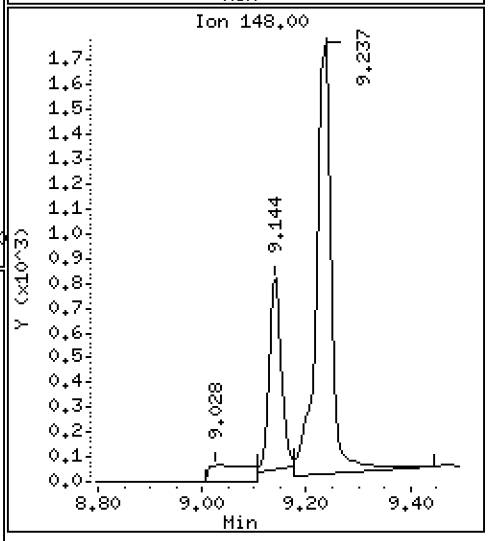
7 1,3-Dichlorobenzene

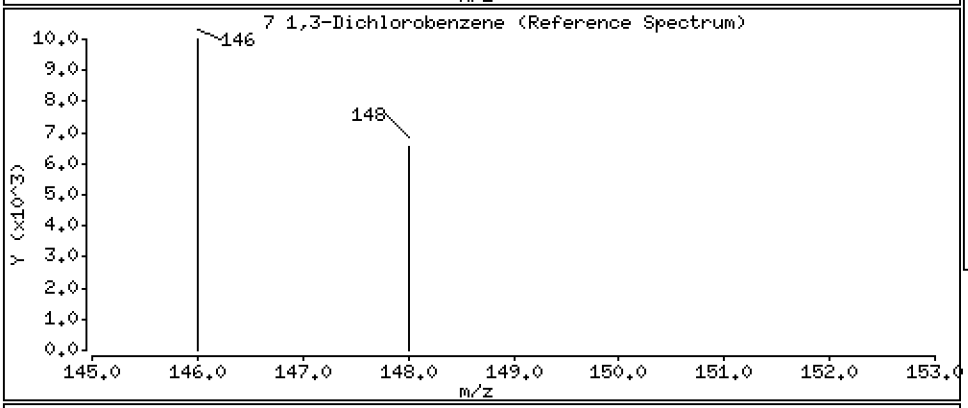
Concentration: 0.02708 ug/L

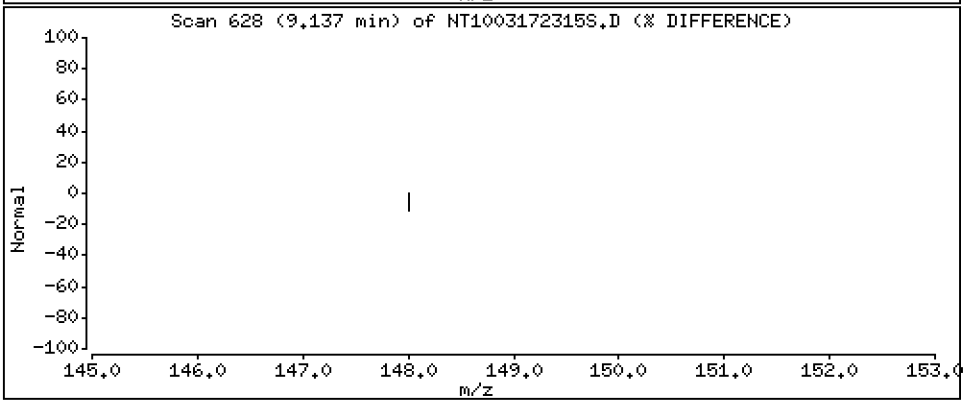












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723155.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

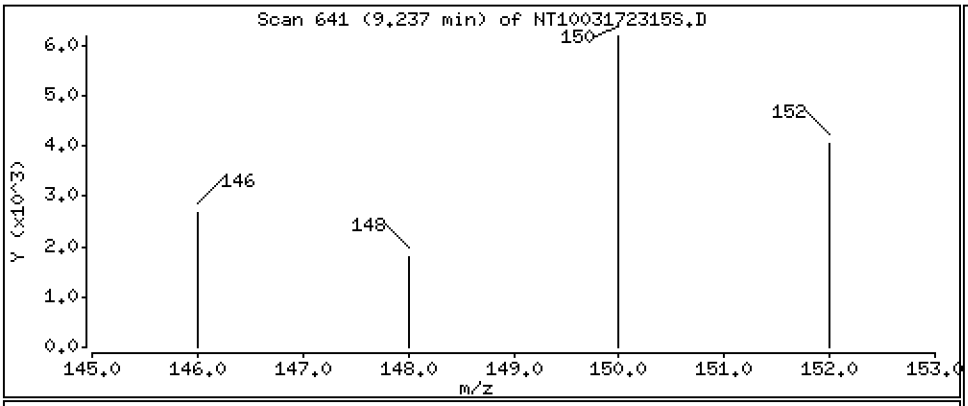
Operator: JGR

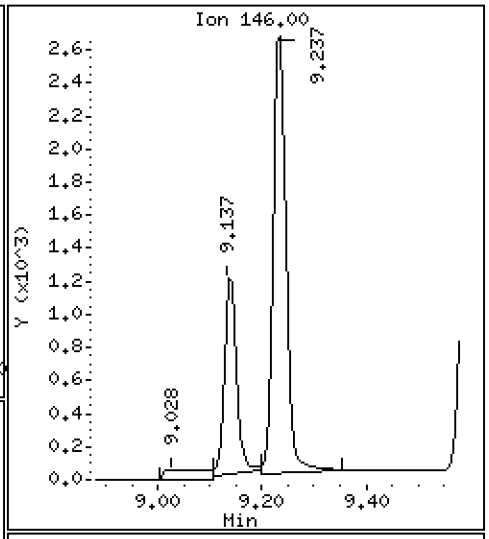
Column phase: ZB-5msi

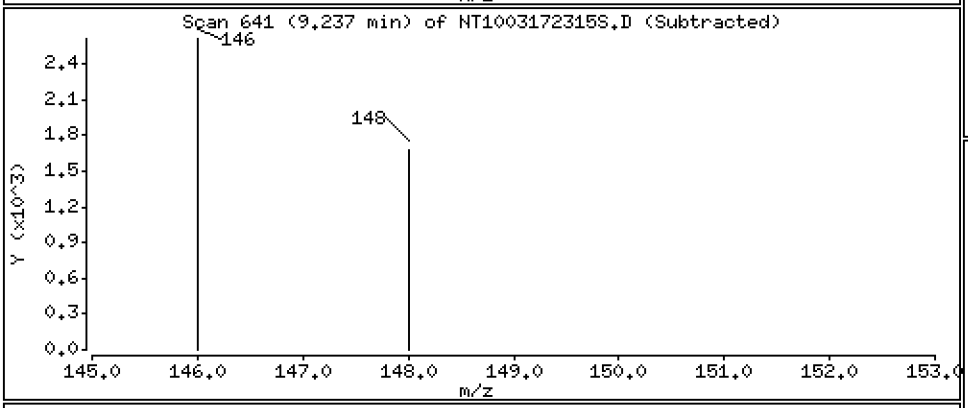
Column diameter: 0.25

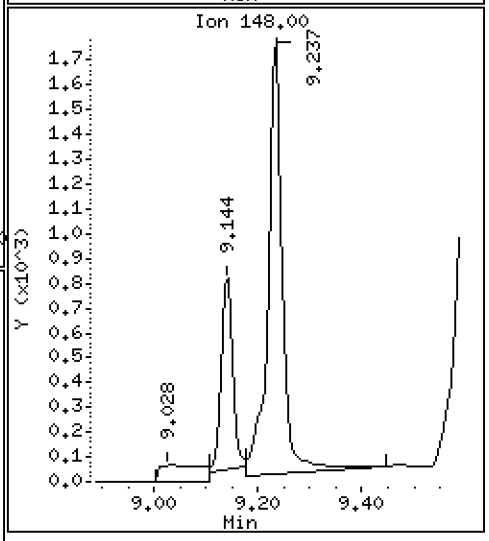
9 1,4-Dichlorobenzene

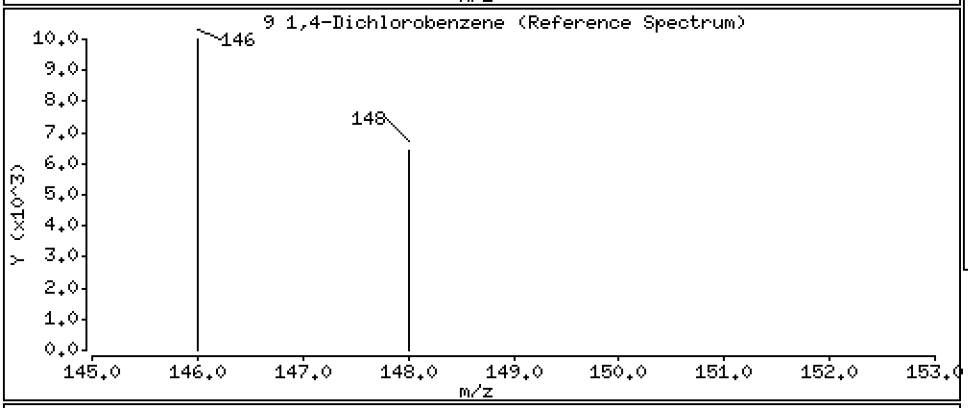
Concentration: 0.06164 ug/L

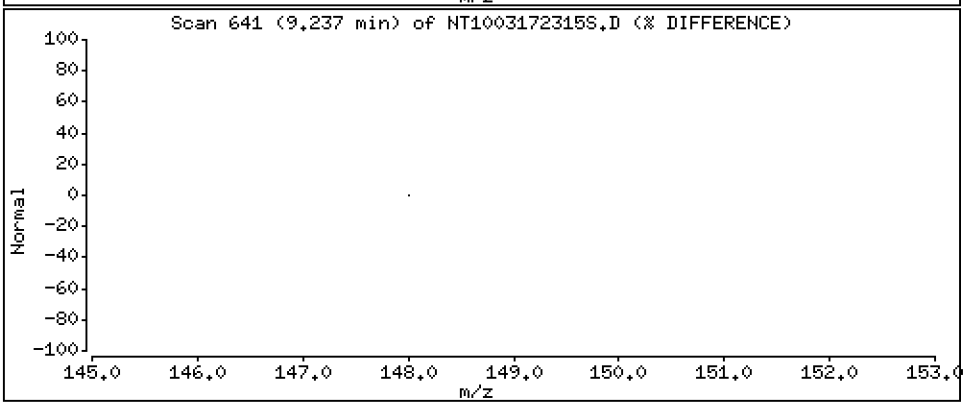












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723155S.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

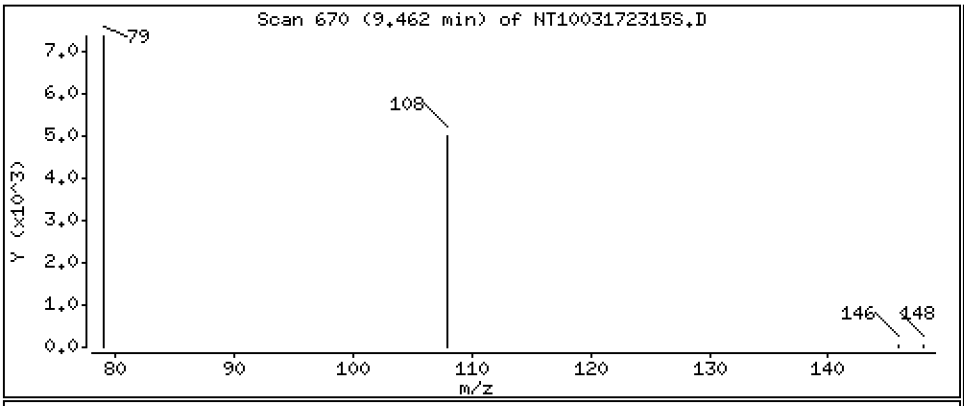
Operator: JGR

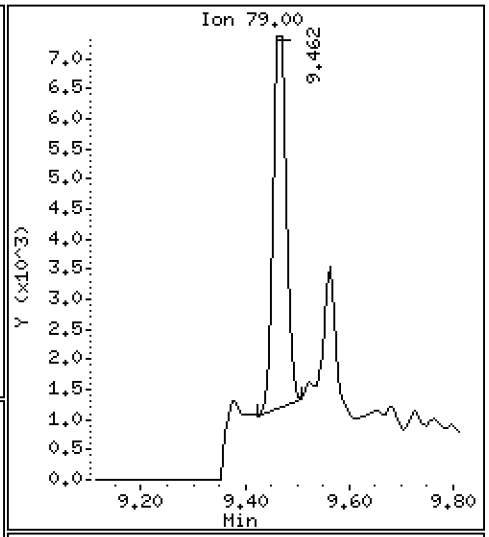
Column phase: ZB-5msi

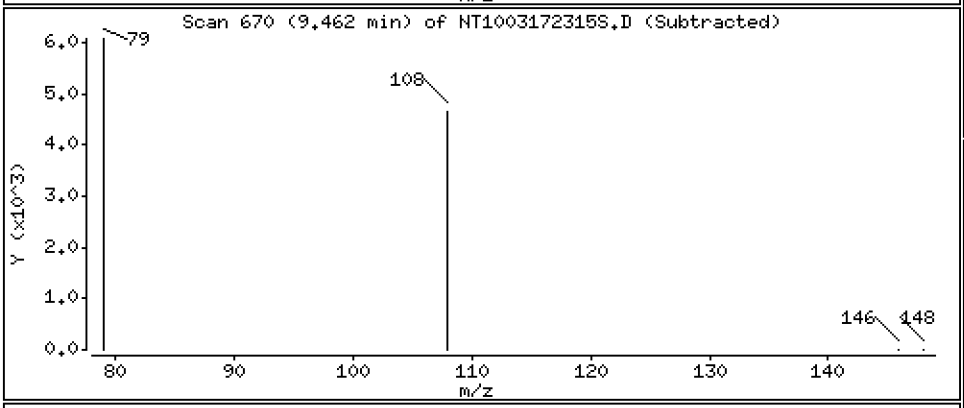
Column diameter: 0.25

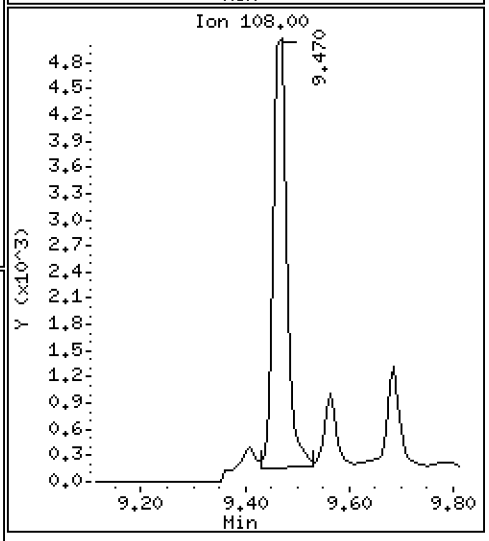
11 Benzyl alcohol

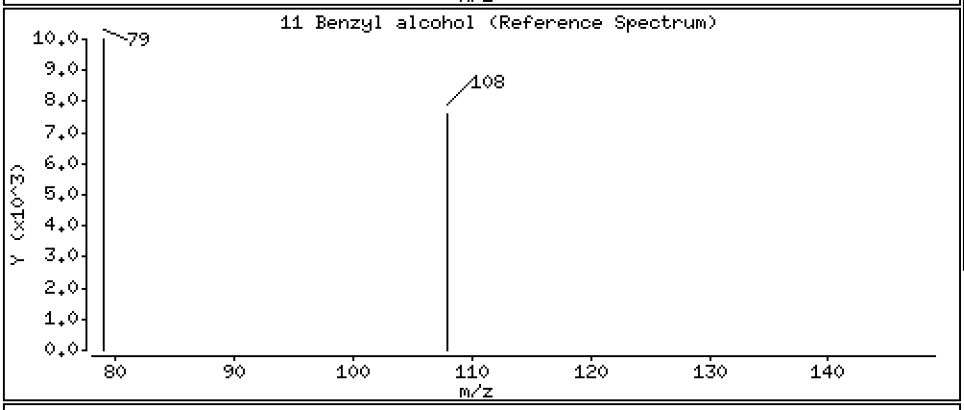
Concentration: 0.2233 ug/L

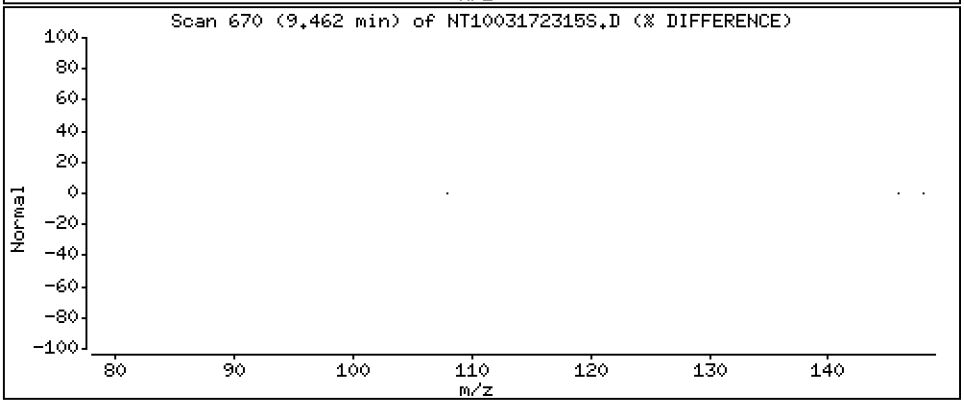












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723155S.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

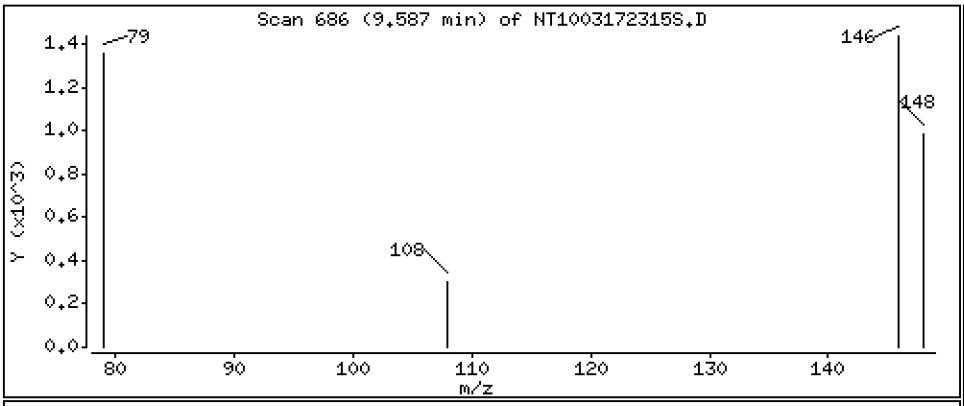
Operator: JGR

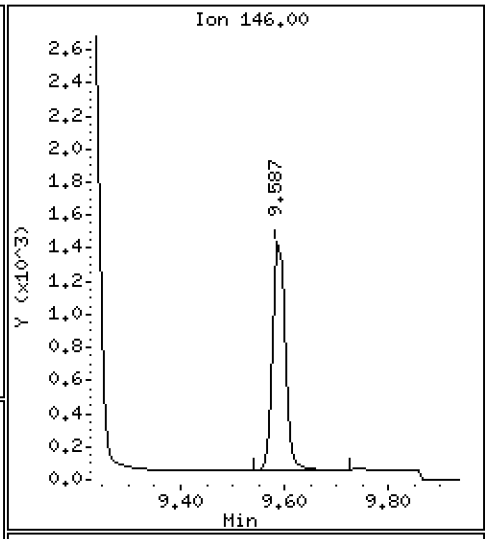
Column phase: ZB-5msi

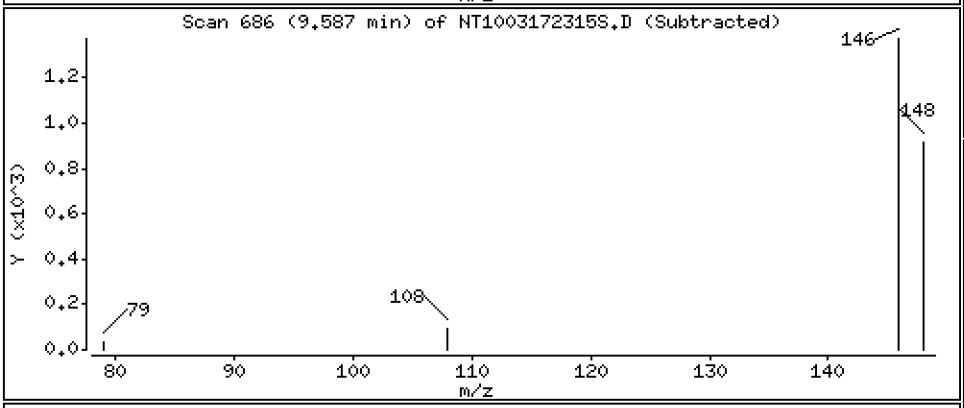
Column diameter: 0.25

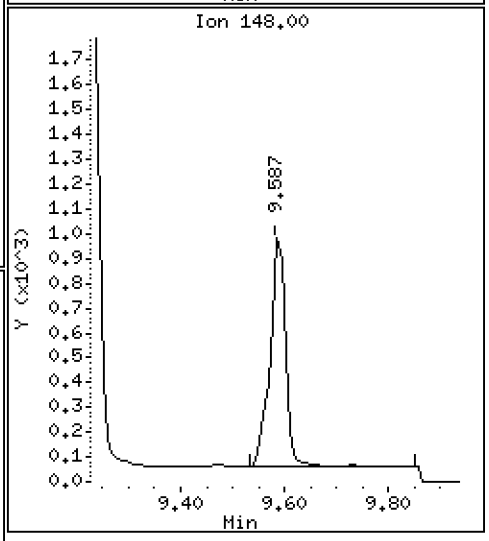
12 1,2-Dichlorobenzene

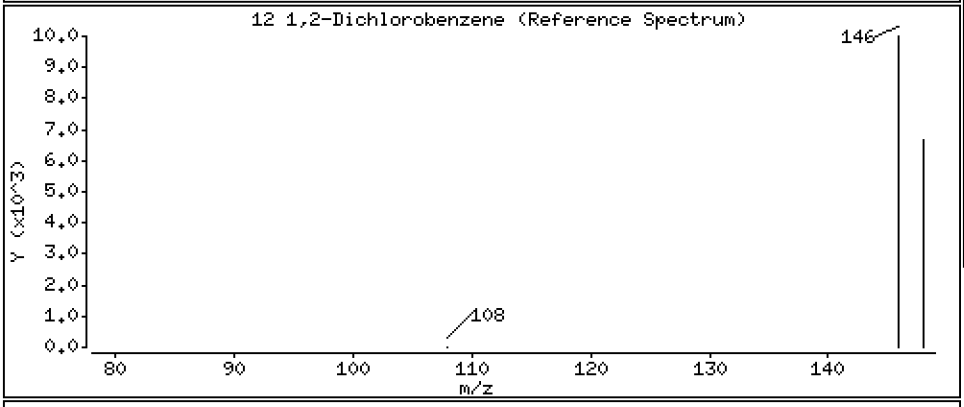
Concentration: 0.03087 ug/L

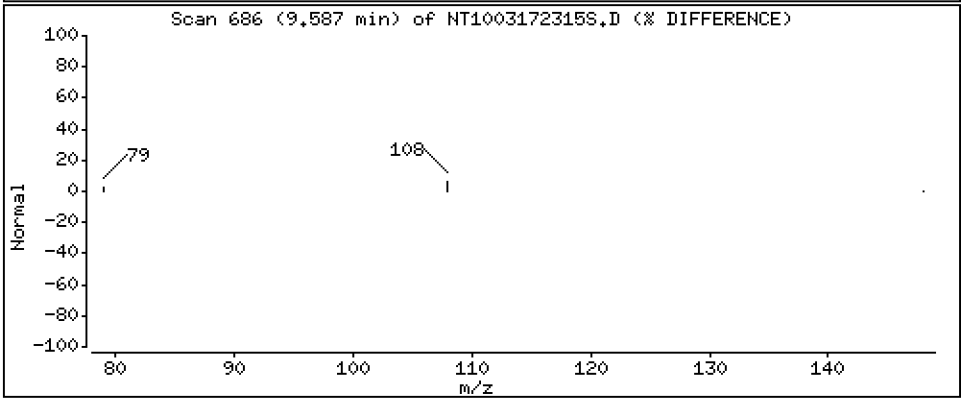












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

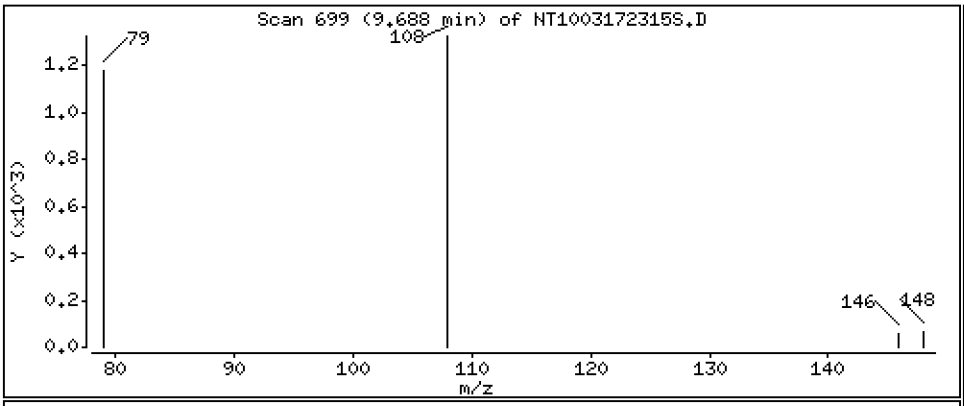
Operator: JGR

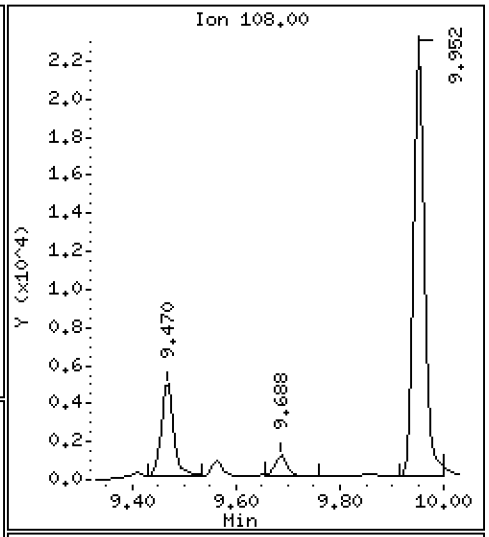
Column phase: ZB-5msi

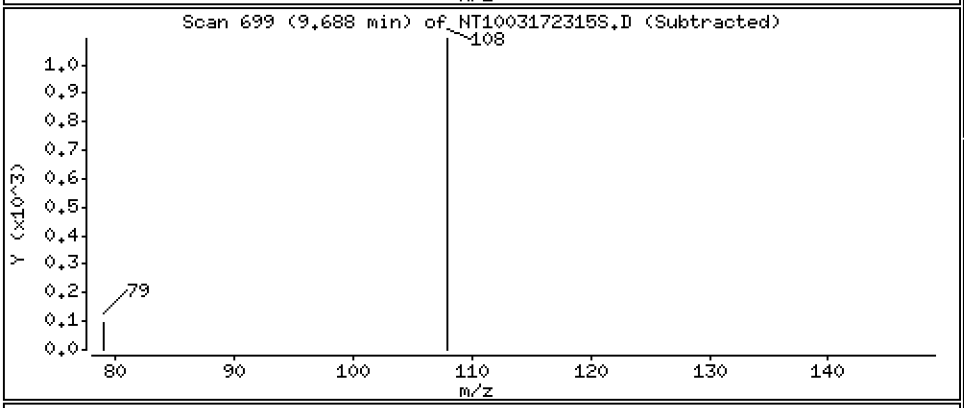
Column diameter: 0.25

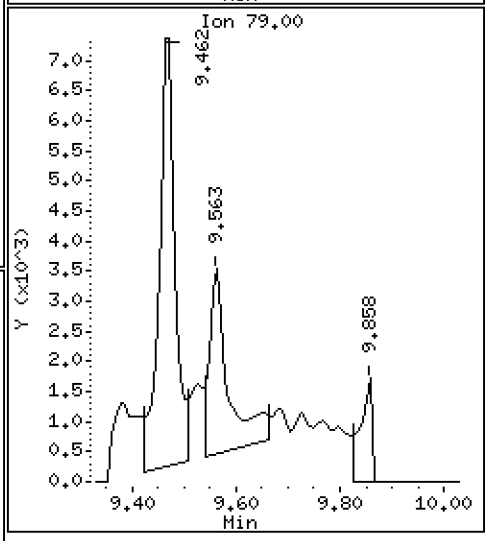
13 2-Methylphenol

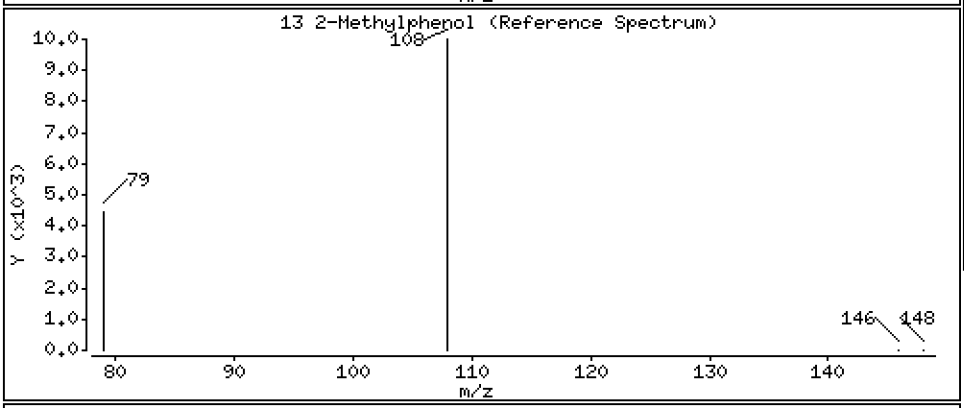
Concentration: 0.03252 ug/L

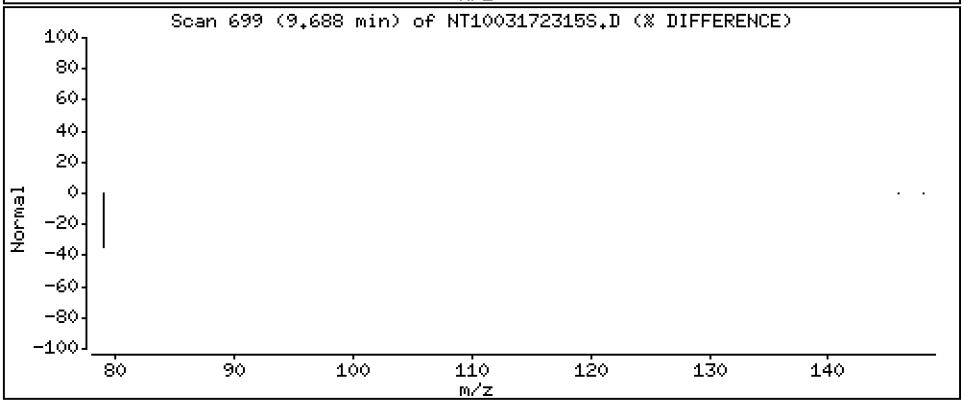












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

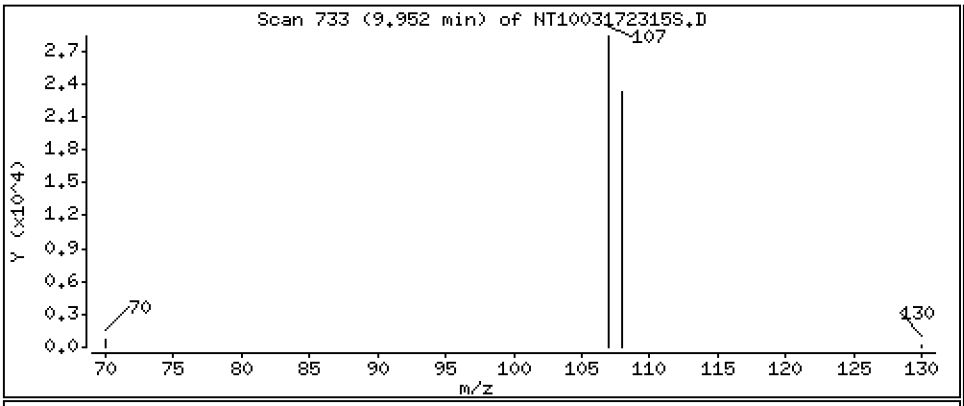
Operator: JGR

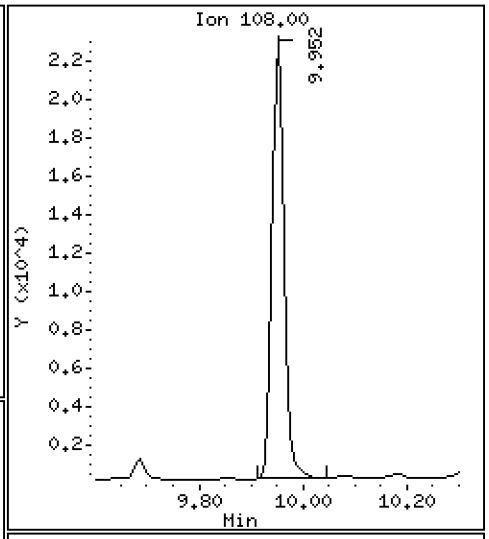
Column phase: ZB-5msi

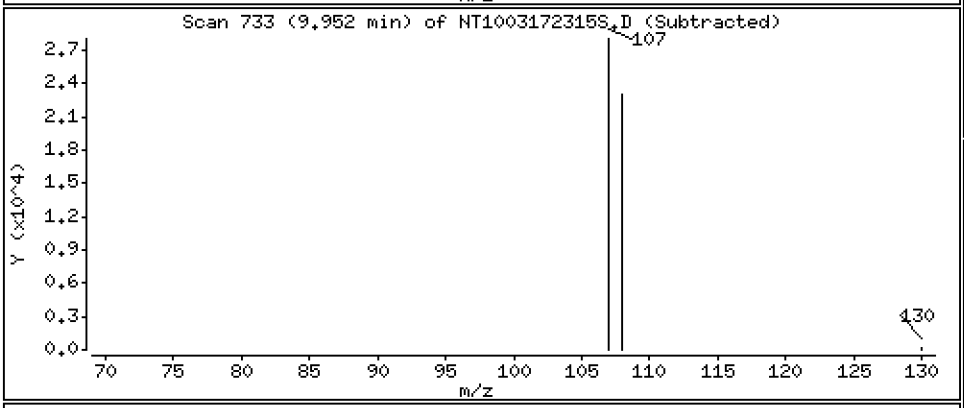
Column diameter: 0.25

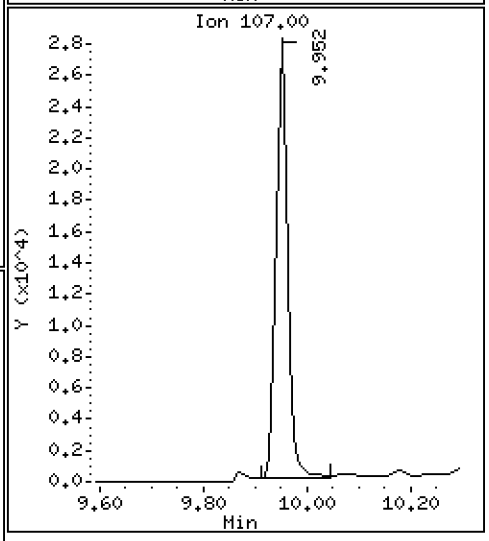
15 4-Methylphenol

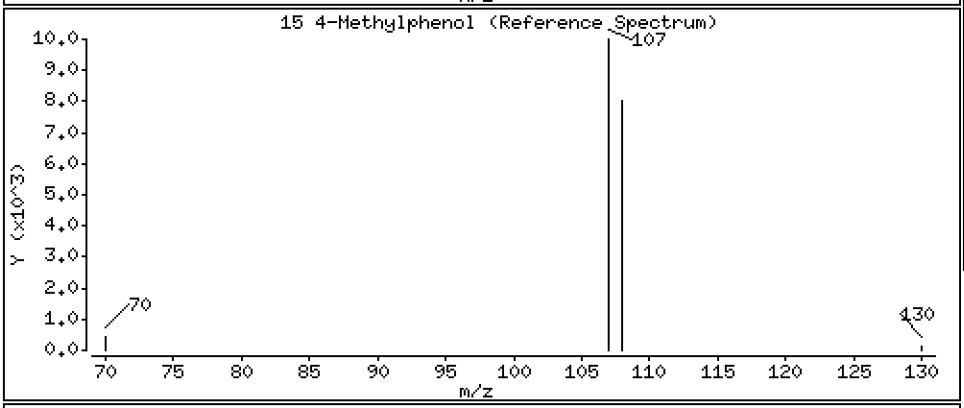
Concentration: 0.6126 ug/L

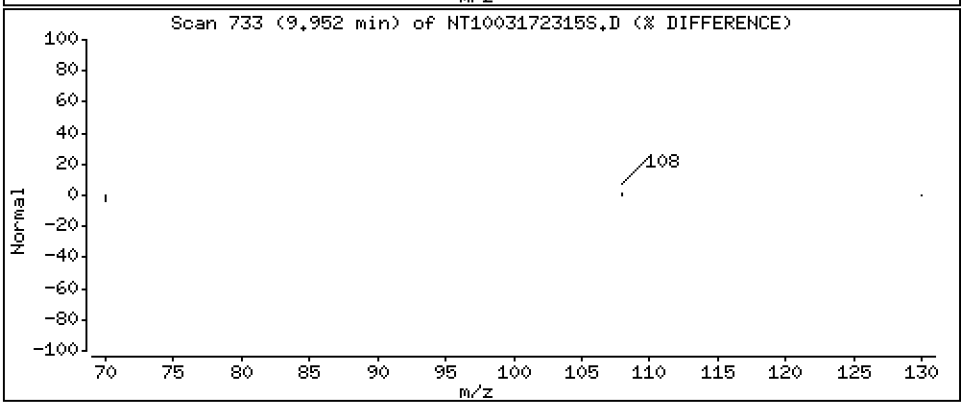












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723155.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

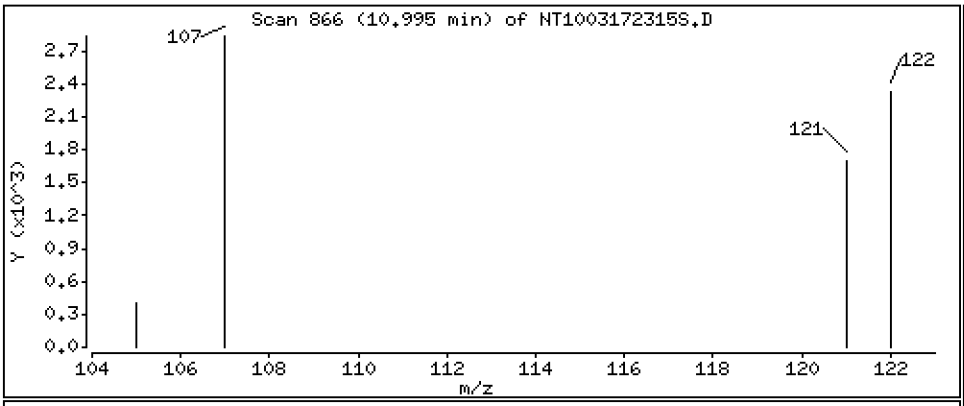
Operator: JGR

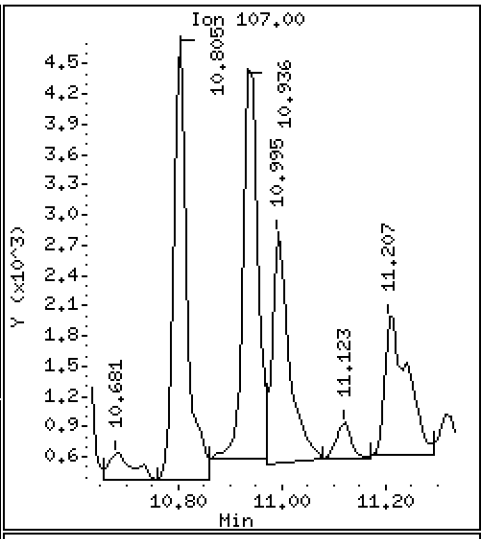
Column phase: ZB-5msi

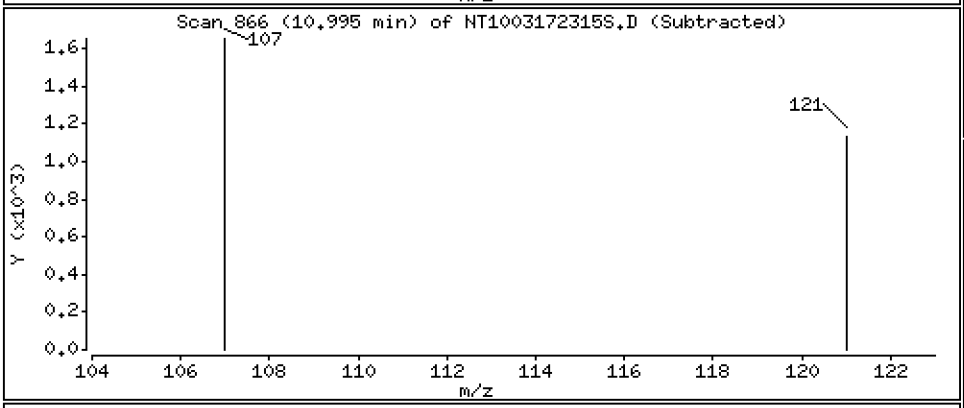
Column diameter: 0.25

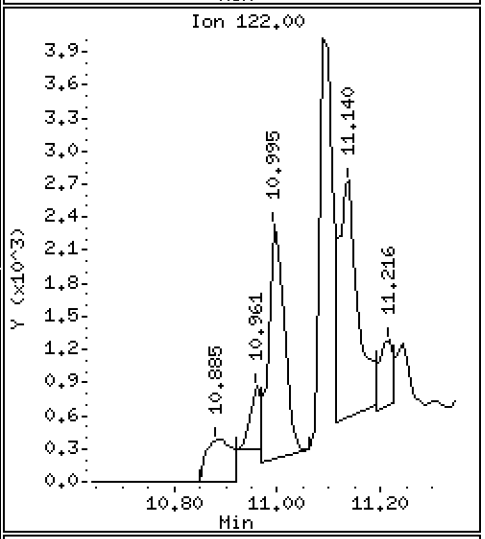
22 2,4-Dimethylphenol

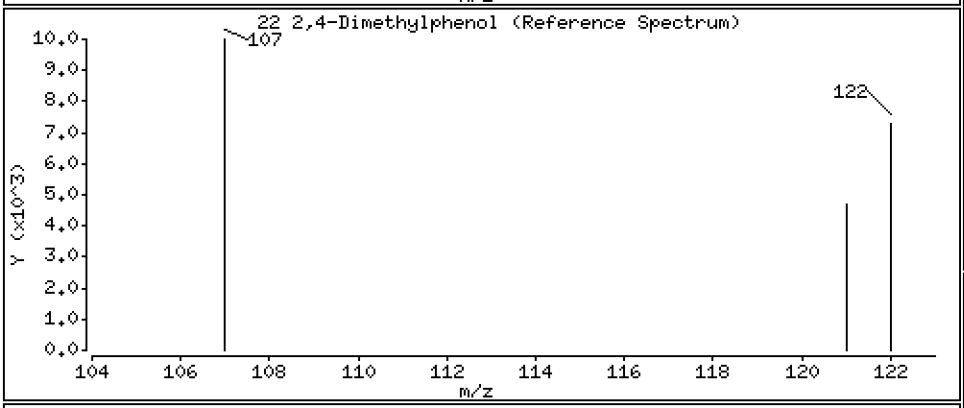
Concentration: 0.09189 ug/L

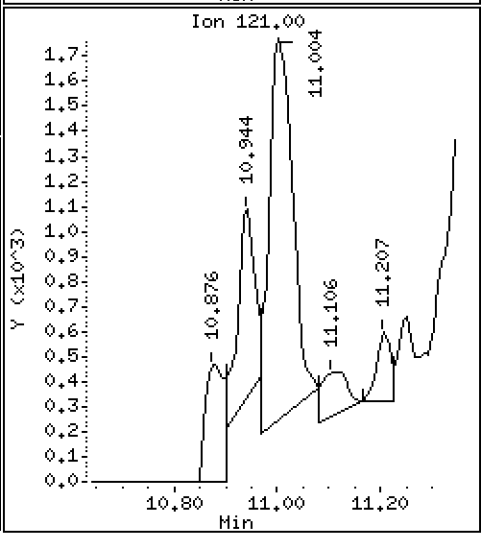


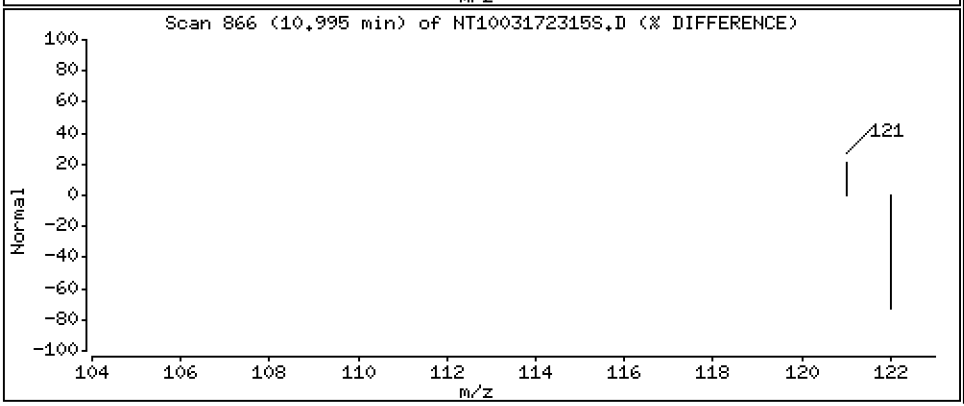












Date : 18-MAR-2023 03:19

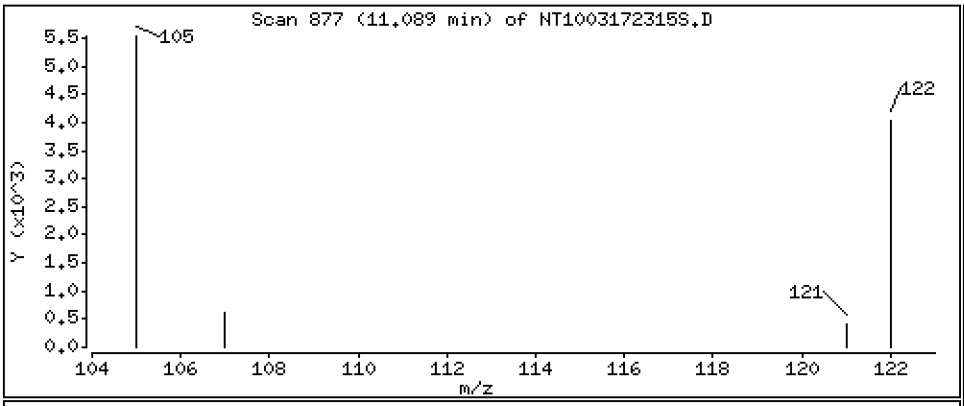
Client ID: Instrument: nt10.i

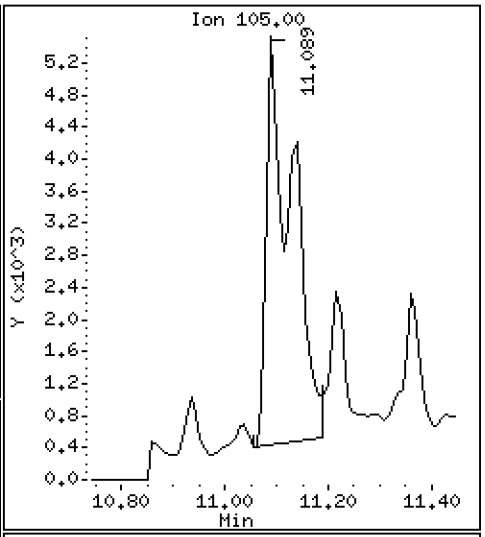
Sample Info: 23A0420-09

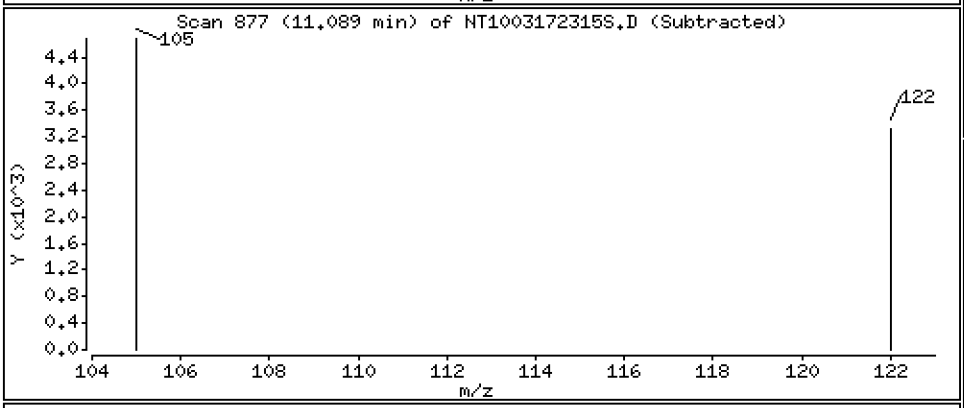
Volume Injected (uL): 1.0 Operator: JGR

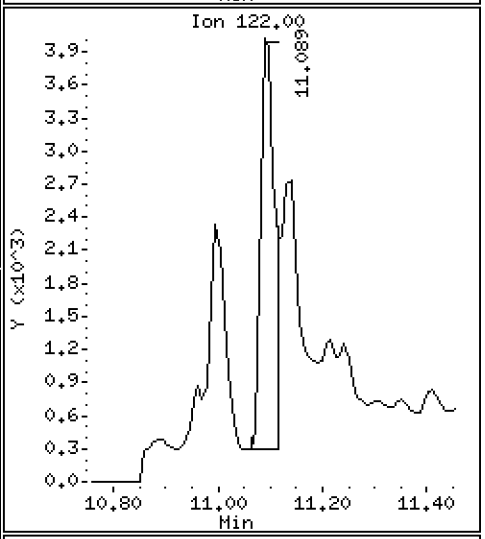
Column phase: ZB-5msi Column diameter: 0.25

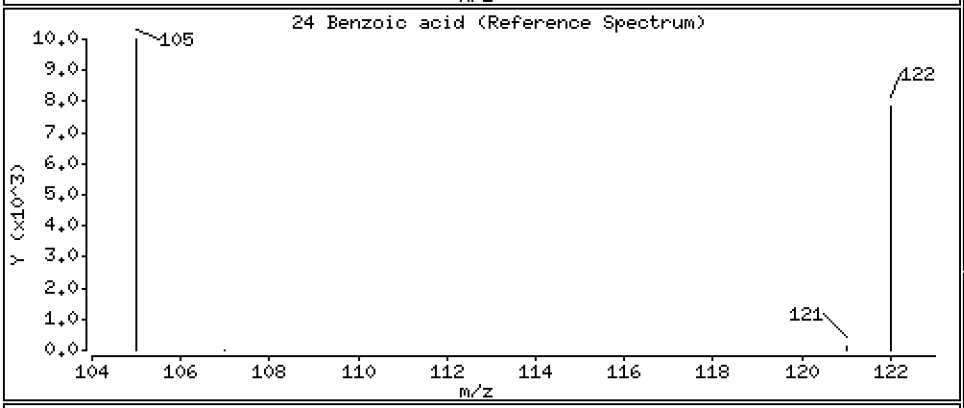
24 Benzoic acid Concentration: 0.5609 ug/L

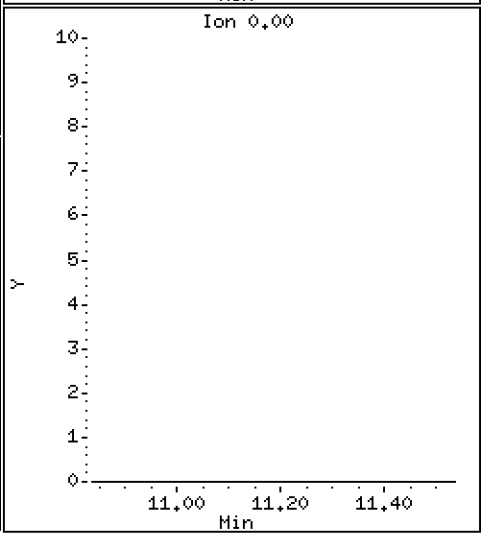


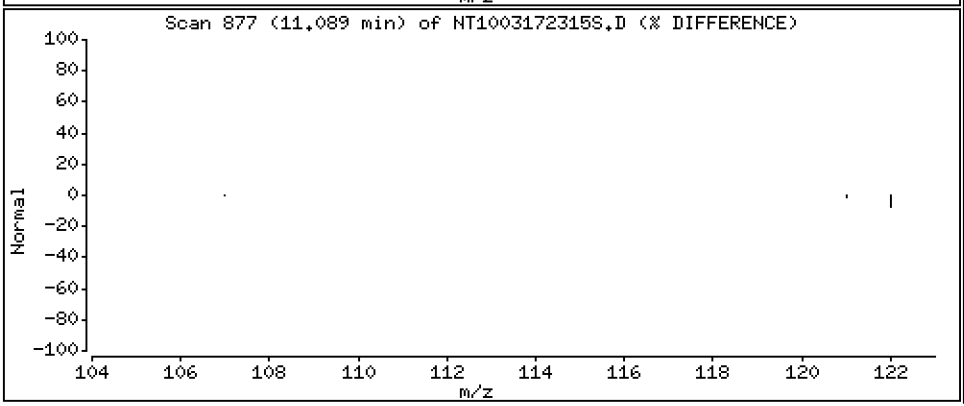












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

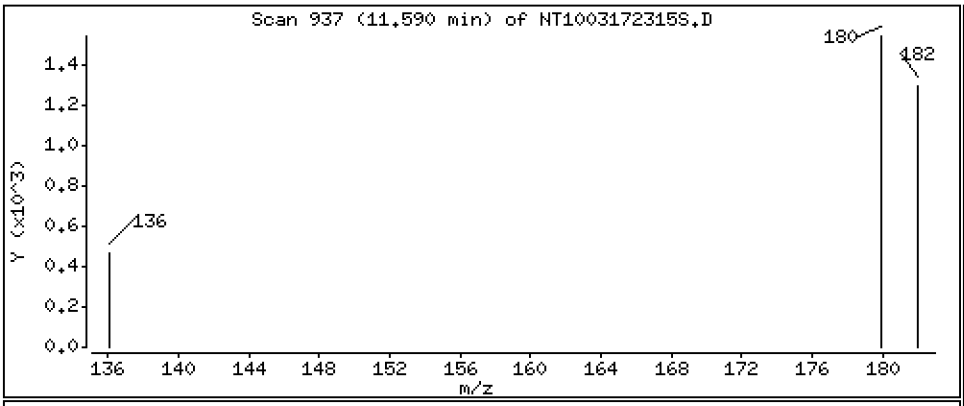
Operator: JGR

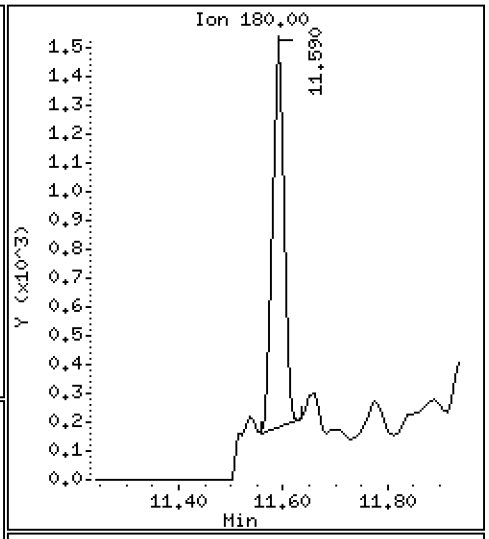
Column phase: ZB-5msi

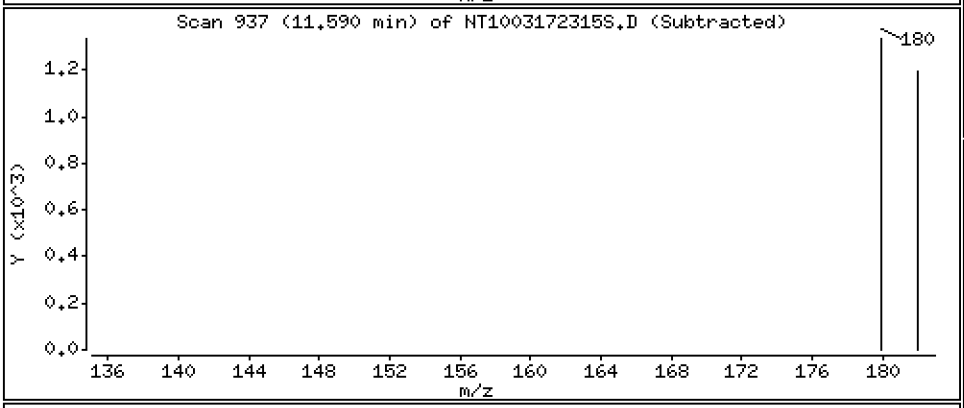
Column diameter: 0.25

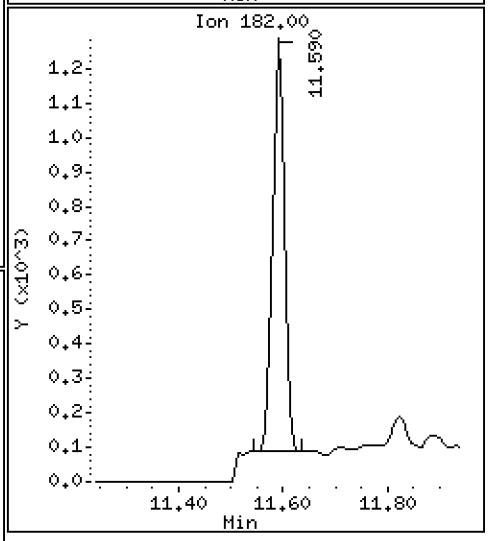
26 1,2,4-Trichlorobenzene

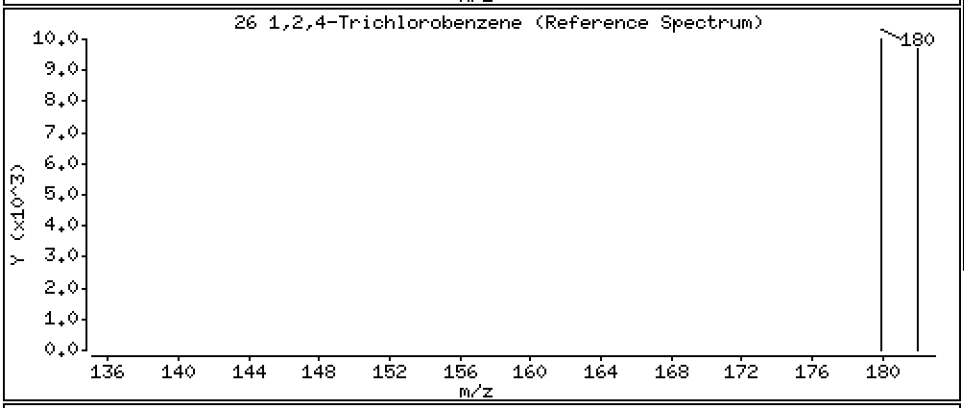
Concentration: 0.03412 ug/L

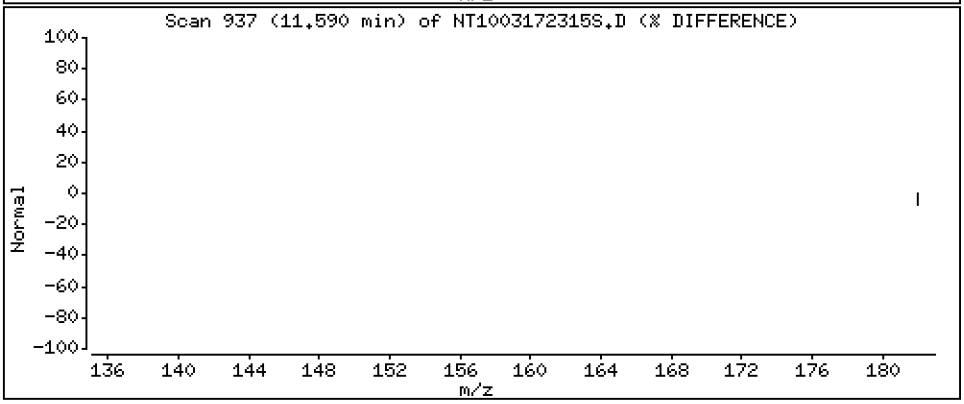












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

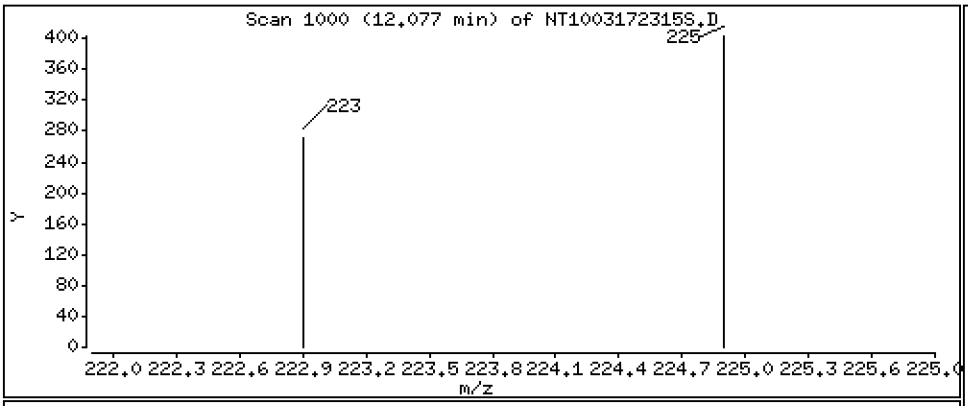
Operator: JGR

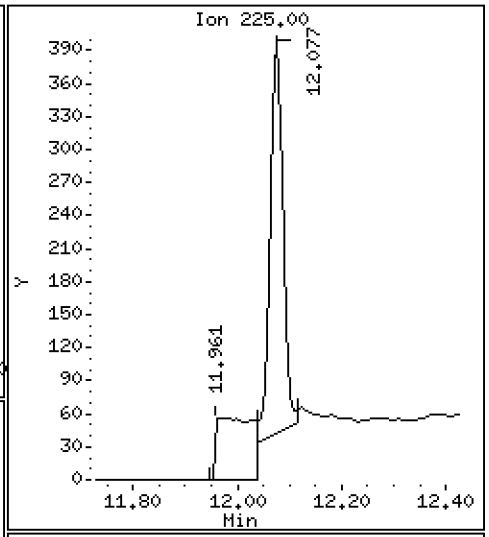
Column phase: ZB-5msi

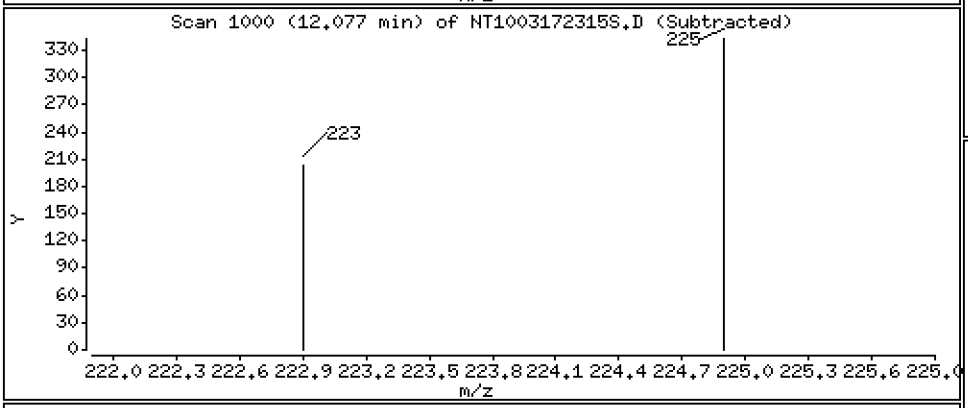
Column diameter: 0.25

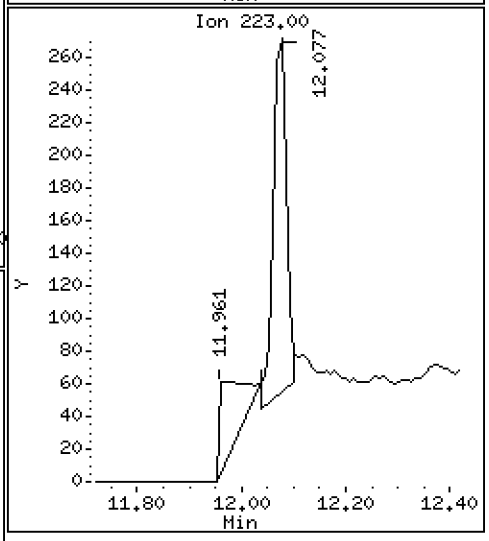
30 Hexachlorobutadiene

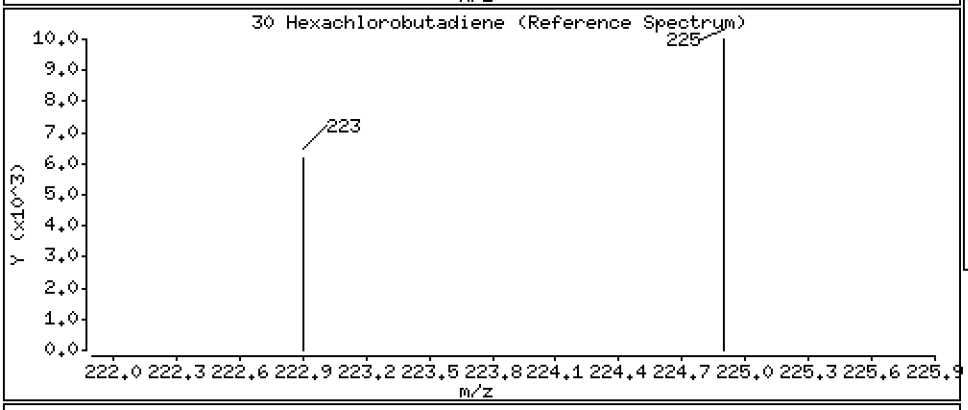
Concentration: 0.01634 ug/L

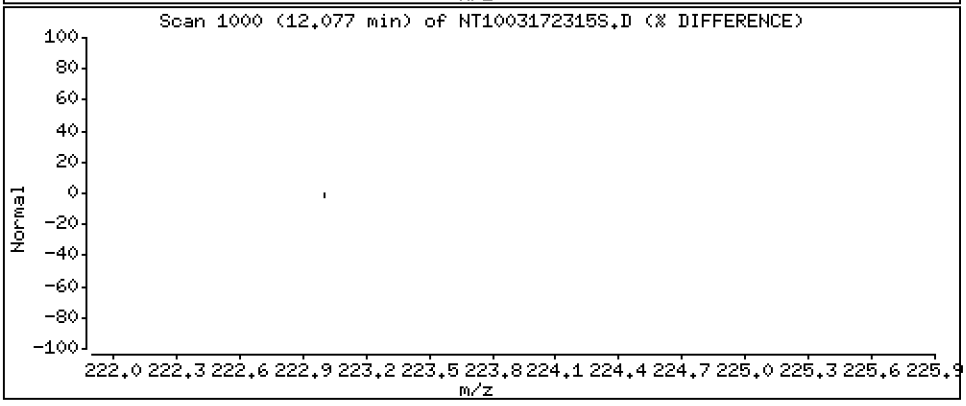












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Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

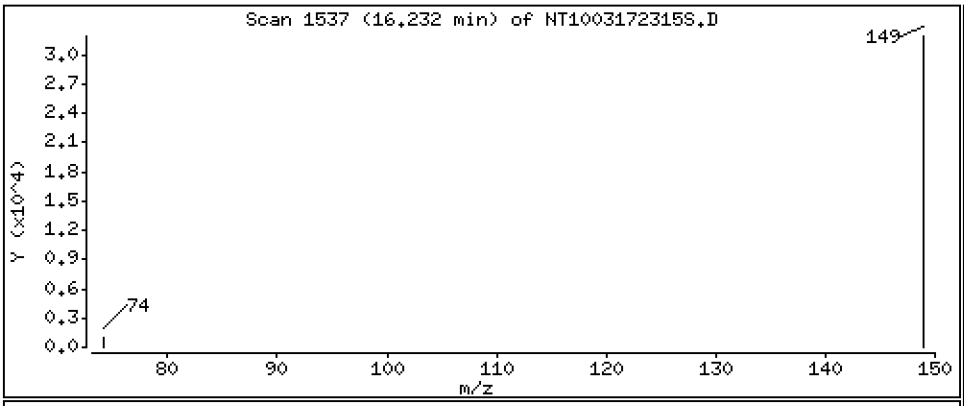
Operator: JGR

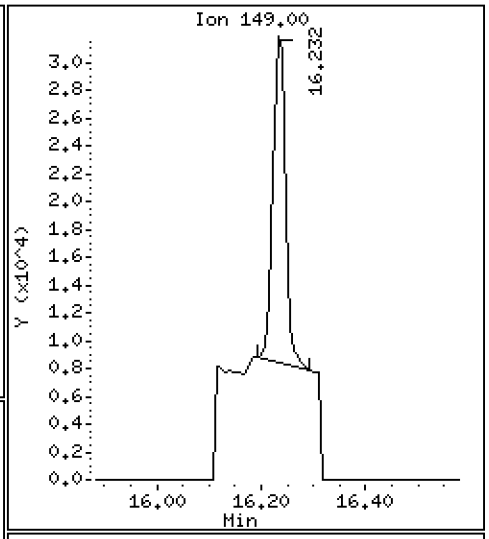
Column phase: ZB-5msi

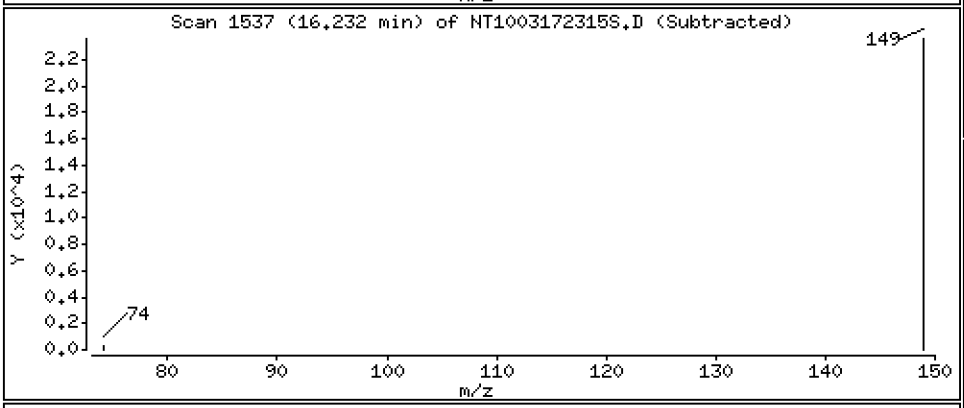
Column diameter: 0.25

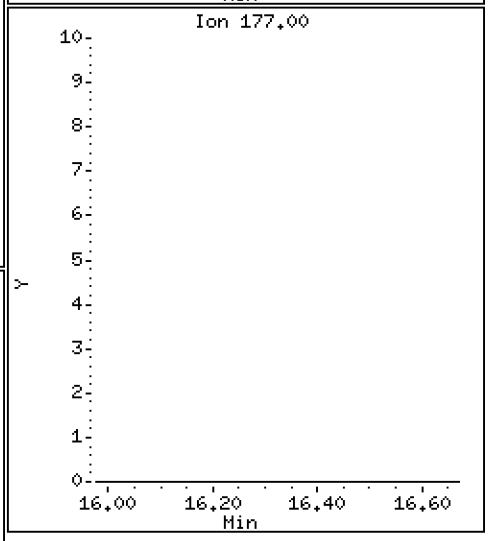
50 Diethylphthalate

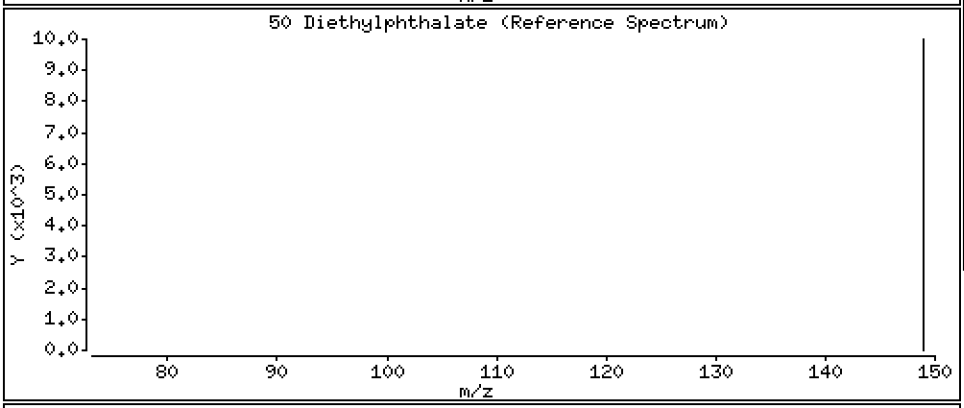
Concentration: 0.3535 ug/L

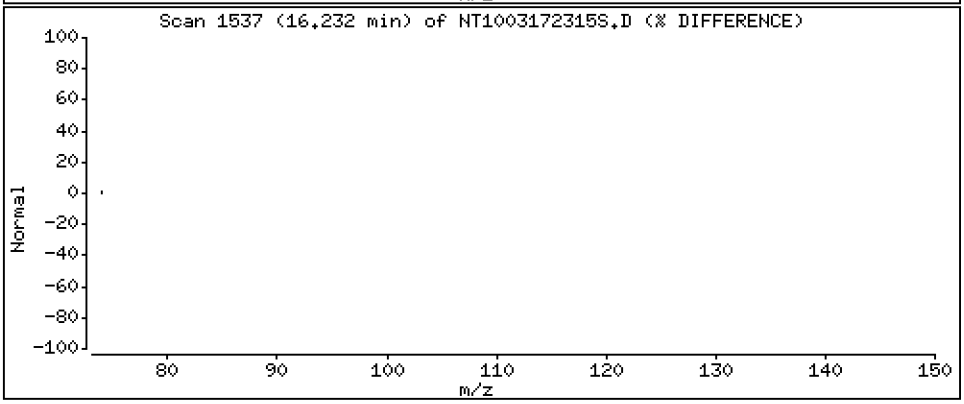












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723155.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

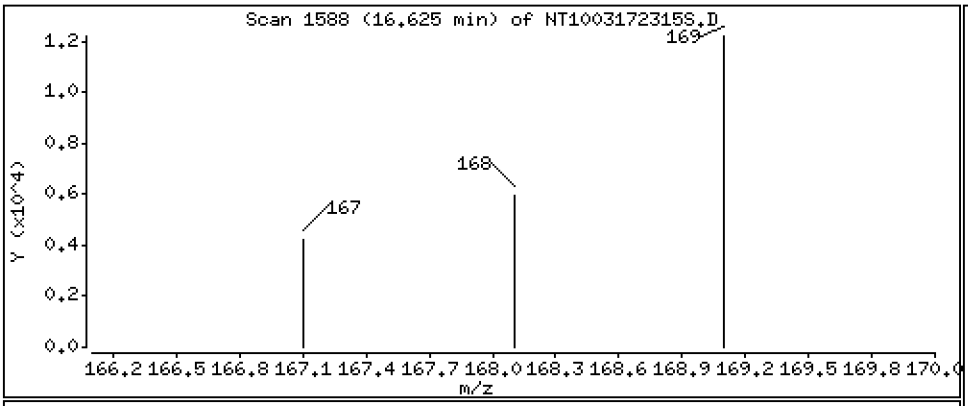
Operator: JGR

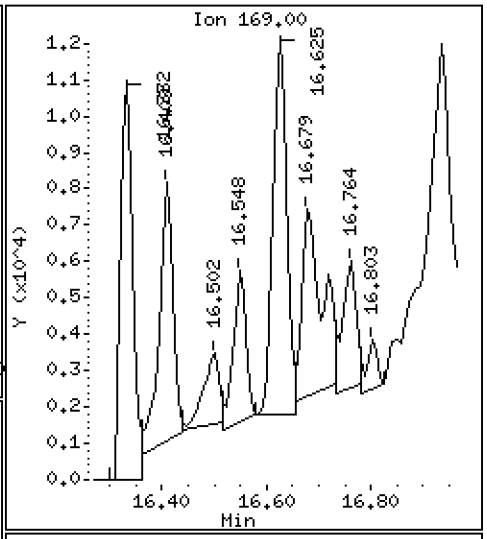
Column phase: ZB-5msi

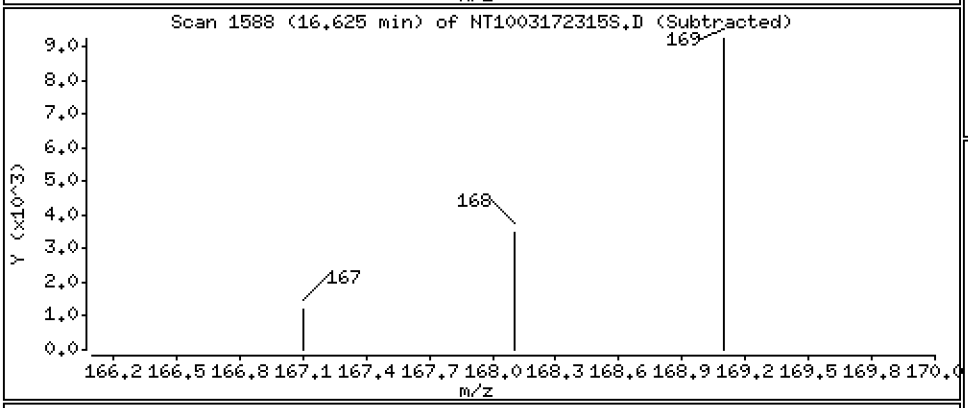
Column diameter: 0.25

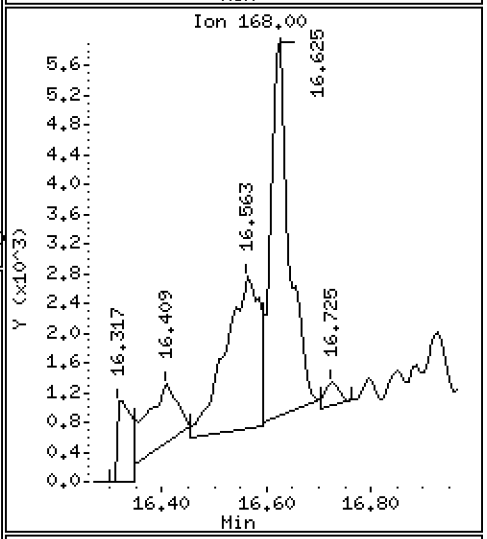
54 N-Nitrosodiphenylamine

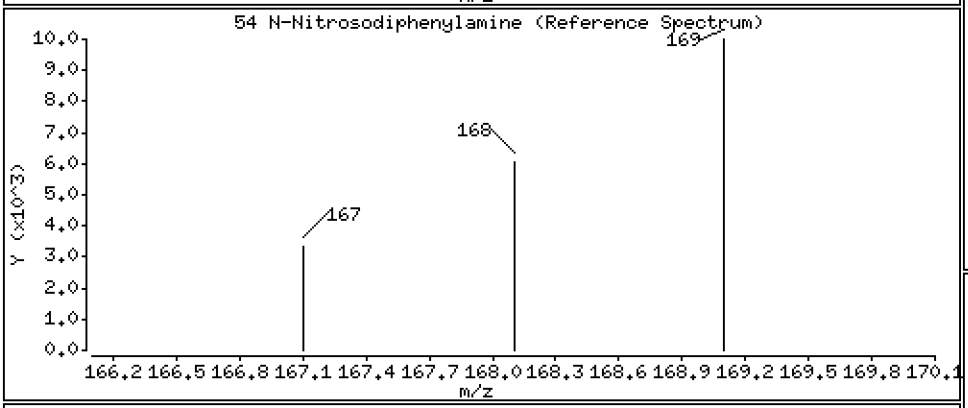
Concentration: 0.2003 ug/L

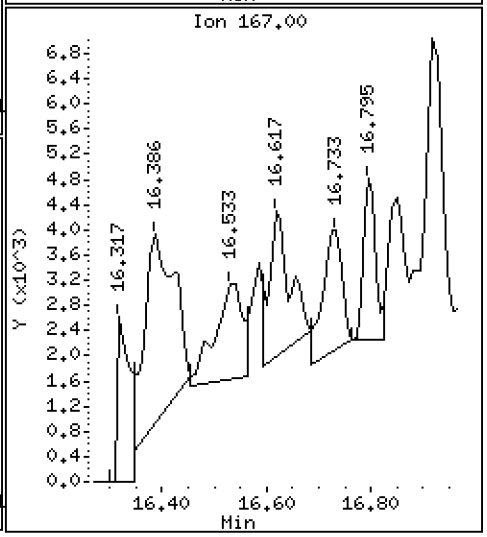


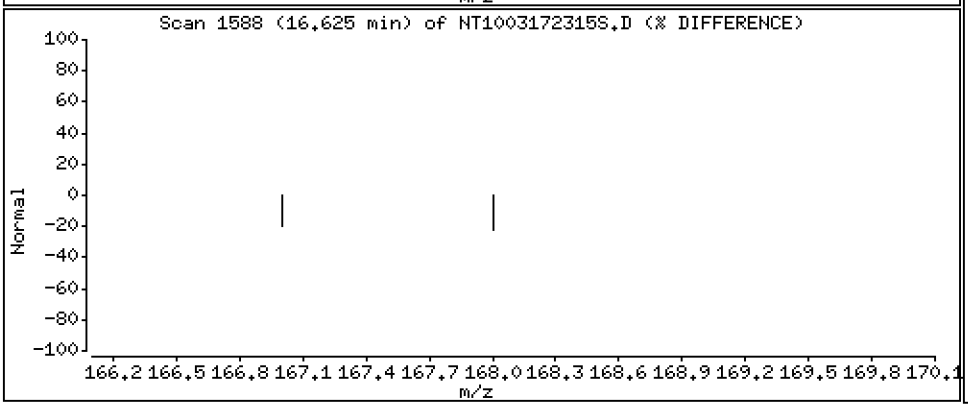












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172315S.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

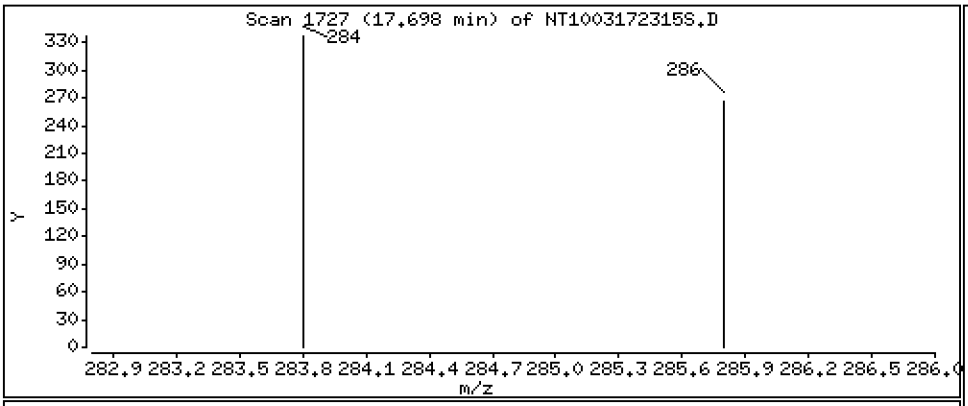
Operator: JGR

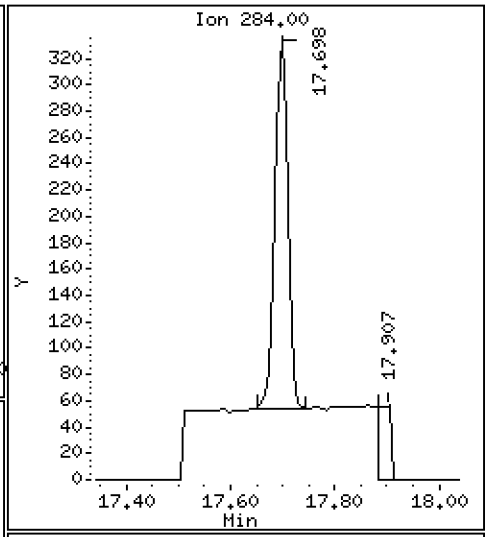
Column phase: ZB-5msi

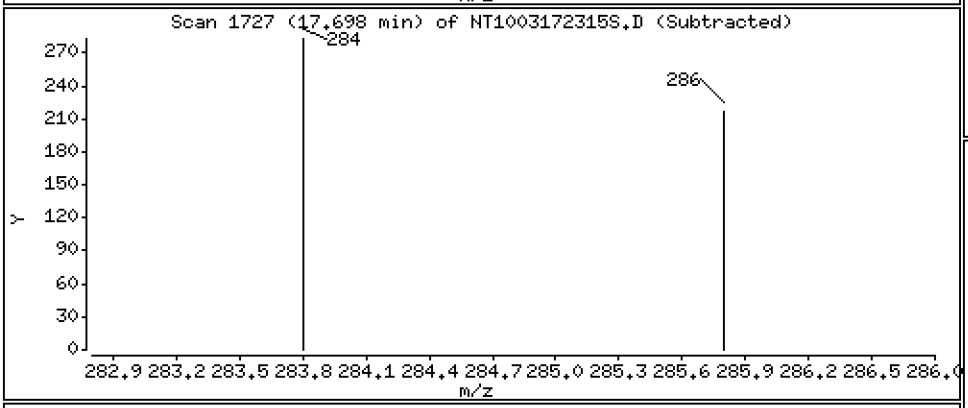
Column diameter: 0.25

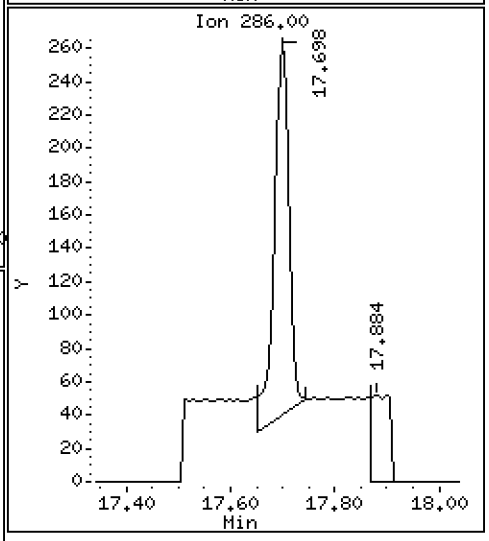
57 Hexachlorobenzene

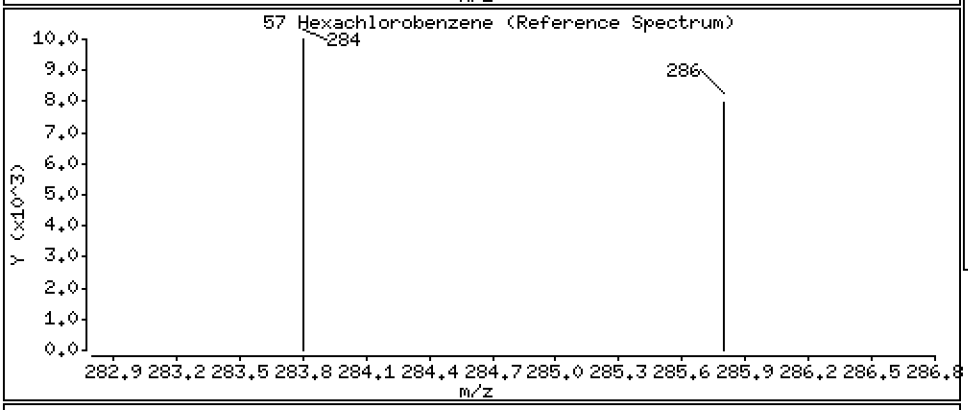
Concentration: 0.01093 ug/L

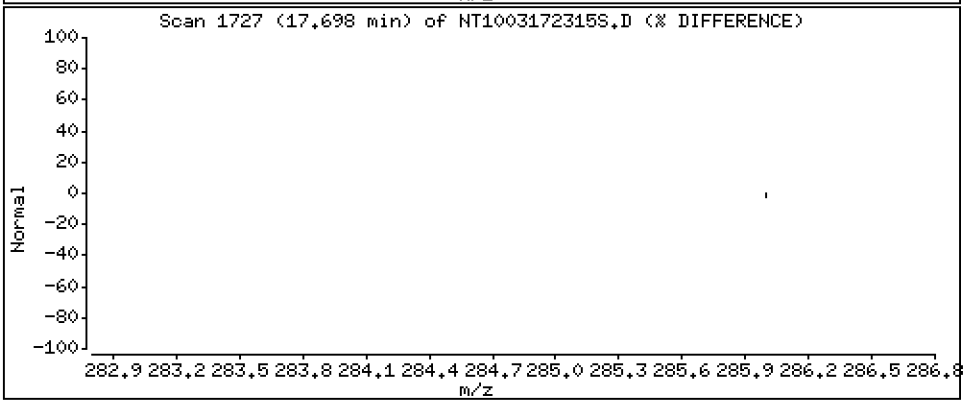












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172315S.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

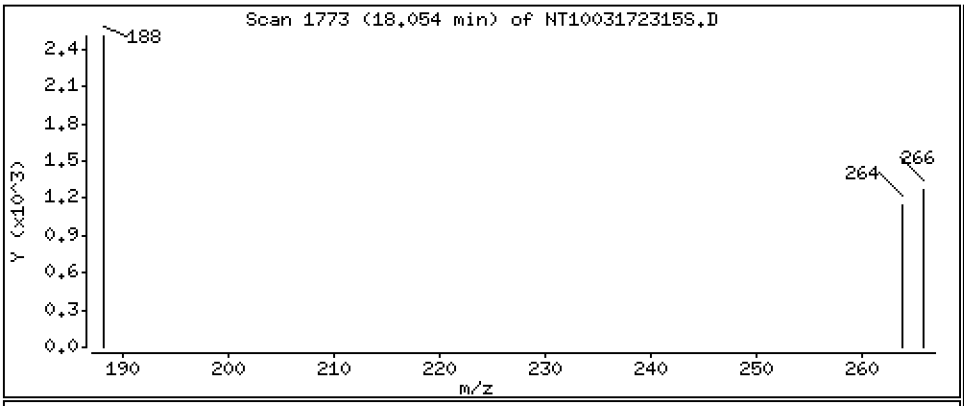
Operator: JGR

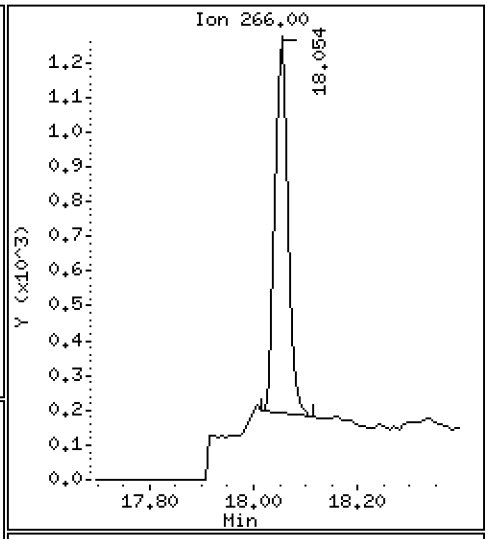
Column phase: ZB-5msi

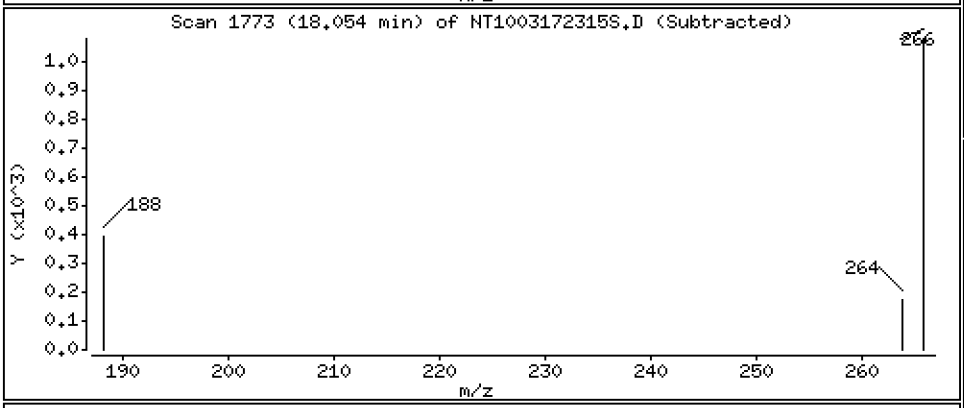
Column diameter: 0.25

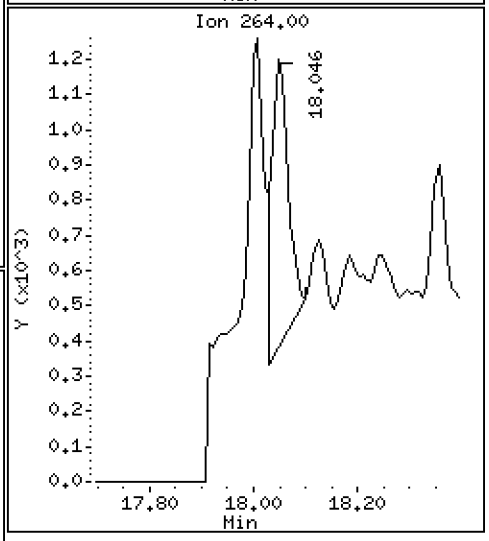
58 Pentachlorophenol

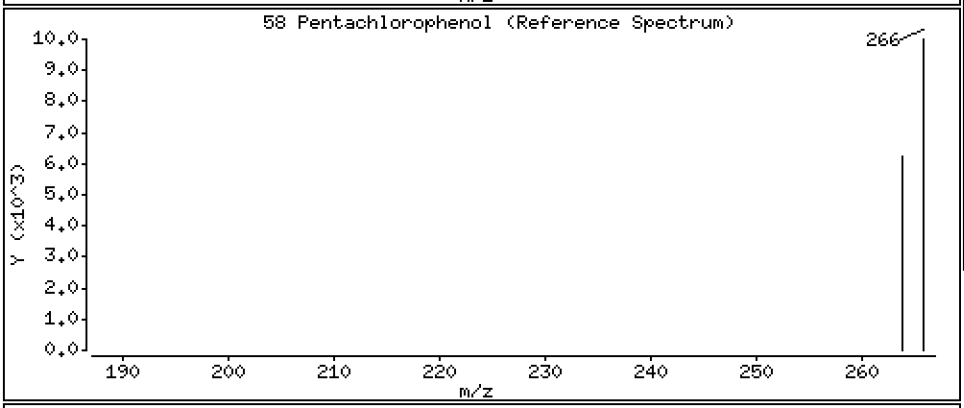
Concentration: 0.07785 ug/L

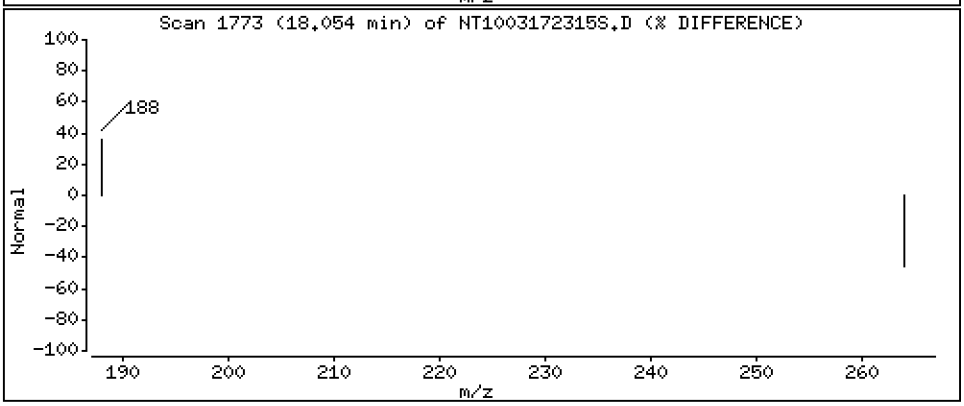












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172315S.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

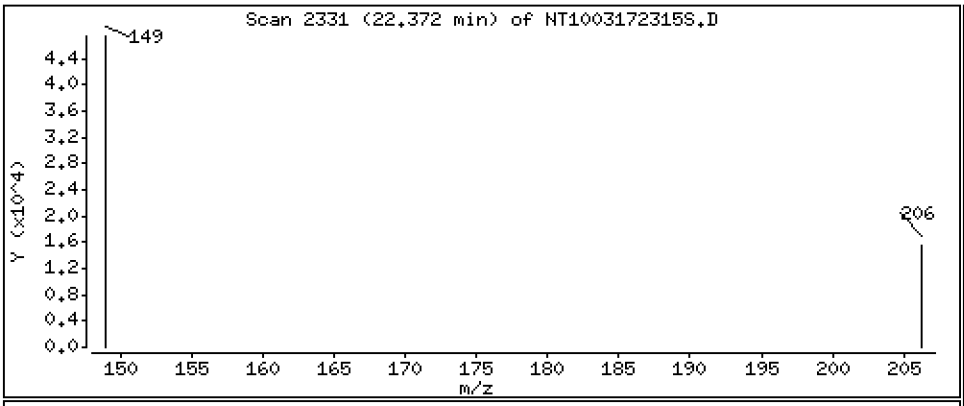
Operator: JGR

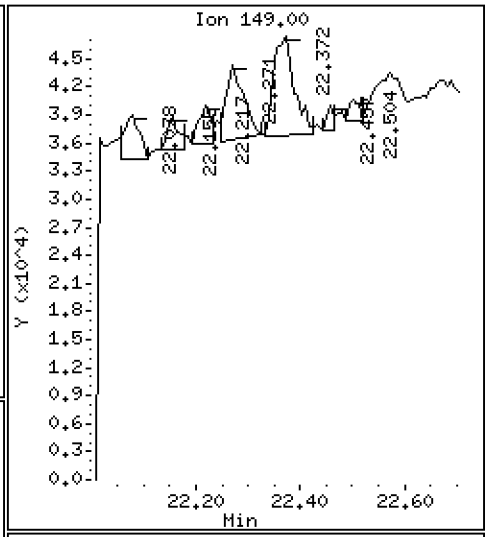
Column phase: ZB-5msi

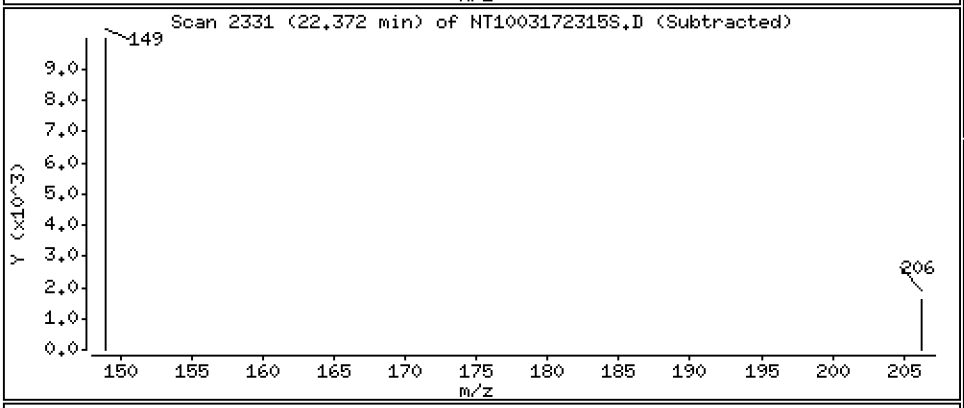
Column diameter: 0.25

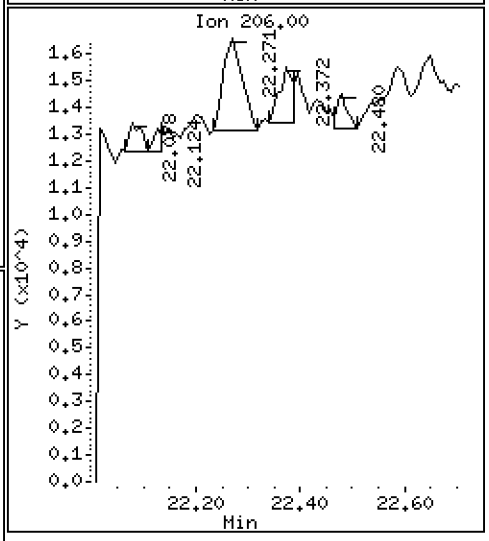
67 Butylbenzylphthalate

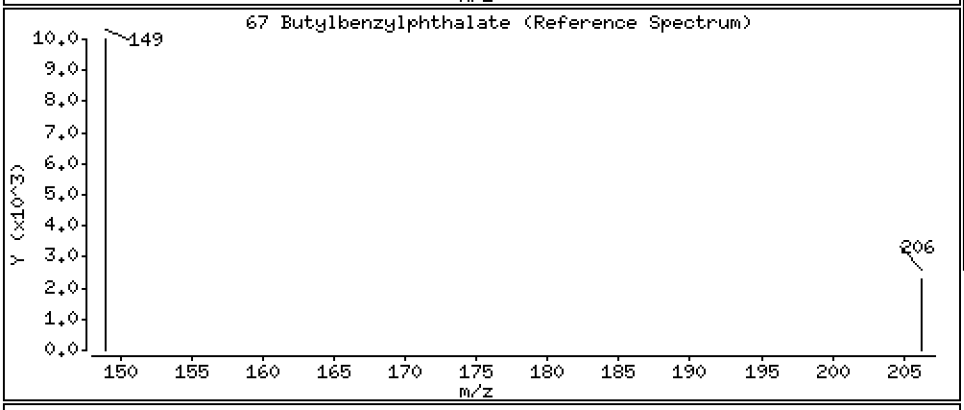
Concentration: 0.3964 ug/L

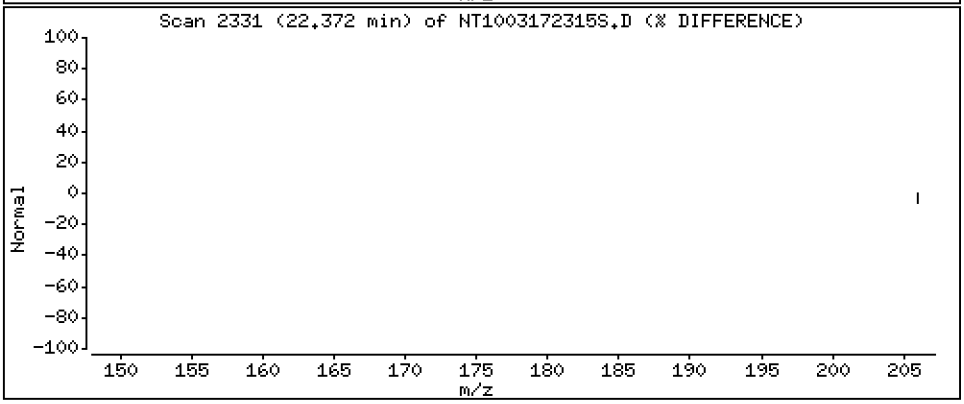












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172315S.D

Date : 18-MAR-2023 03:19

Client ID:

Instrument: nt10.i

Sample Info: 23A0420-09

Volume Injected (uL): 1.0

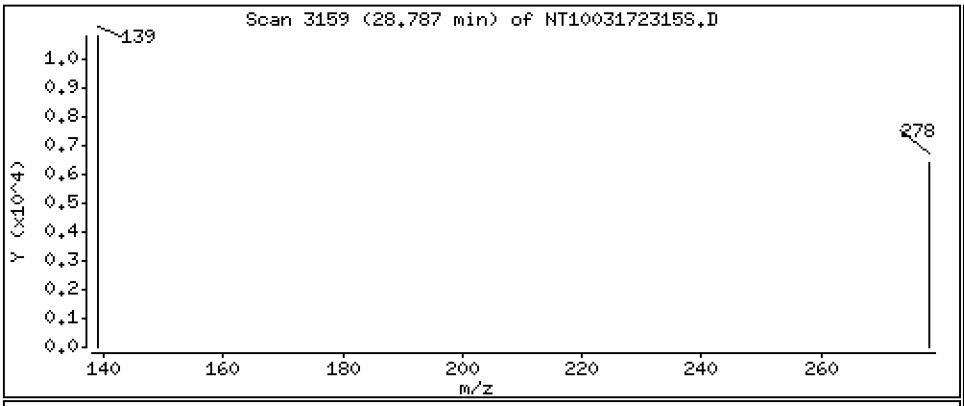
Operator: JGR

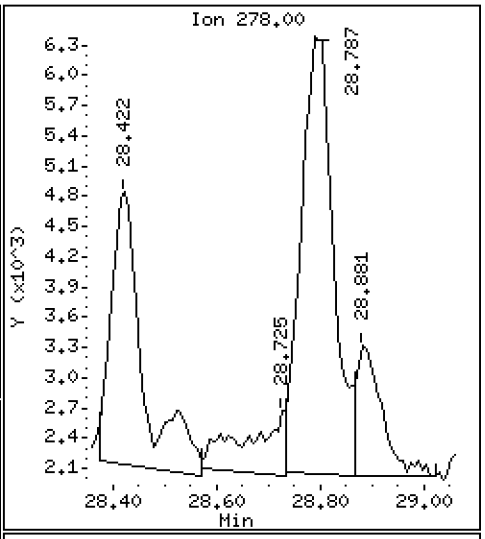
Column phase: ZB-5msi

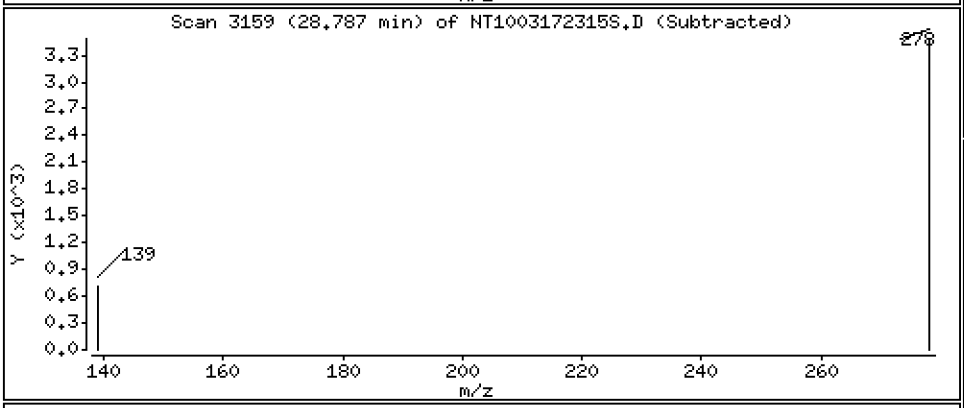
Column diameter: 0.25

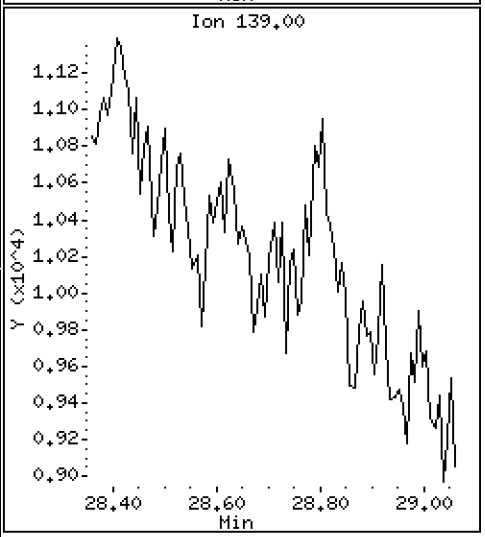
79 Dibenzo(a,h)anthracene

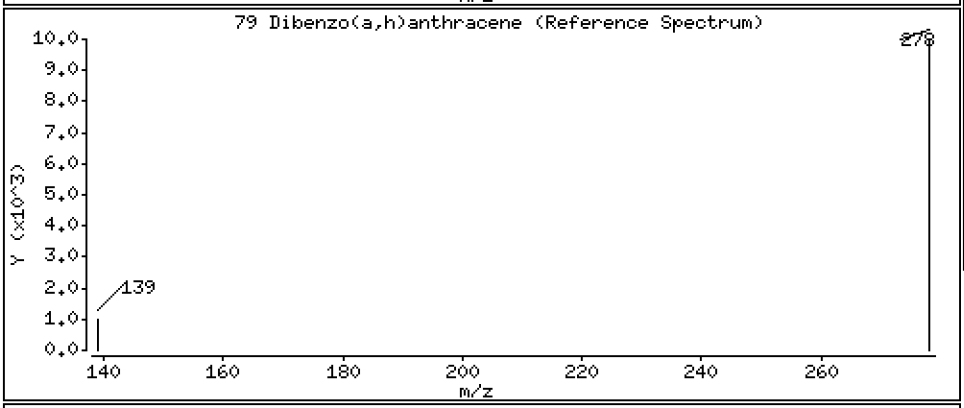
Concentration: 0.09905 ug/L

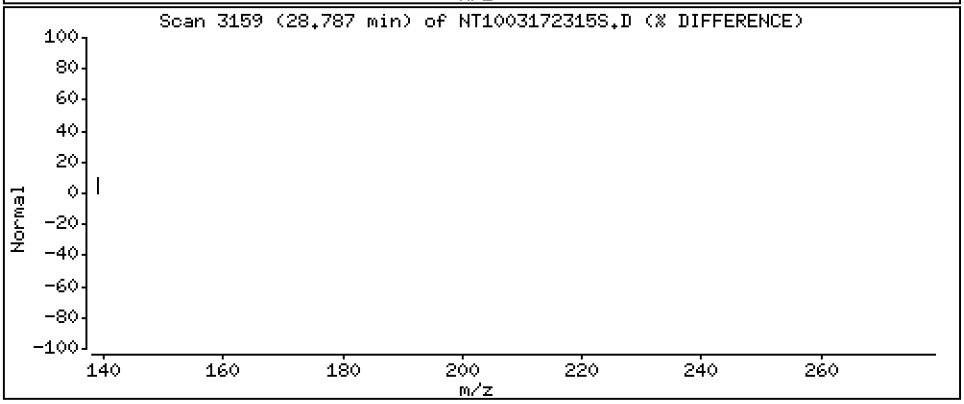












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172315S.D
Lab Smp Id: 23A0420-09
Inj Date : 18-MAR-2023 03:19 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : 23A0420-09
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Meth Date : 30-Mar-2023 14:37 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.980	6.980	(0.758)	147465	2.56238	2.562(R)
3	Phenol	94	8.572	8.572	(0.931)	63535	0.80470	0.8047
7	1,3-Dichlorobenzene	146	9.136	9.136	(0.992)	2001	0.02708	0.02708
* 8	1,4-Dichlorobenzene-d4	152	9.206	9.206	(1.000)	189780	4.00000	
9	1,4-Dichlorobenzene	146	9.237	9.229	(1.003)	4396	0.06164	0.06164
11	Benzyl alcohol	79	9.462	9.462	(1.028)	10222	0.22332	0.2233(M)
12	1,2-Dichlorobenzene	146	9.586	9.586	(1.041)	2165	0.03087	0.03087
13	2-Methylphenol	108	9.687	9.679	(1.052)	1779	0.03252	0.03252
15	4-Methylphenol	108	9.951	9.951	(1.081)	34824	0.61257	0.6126
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
22	2,4-Dimethylphenol	107	10.995	10.985	(0.942)	5343	0.09189	0.09189
24	Benzoic acid	105	11.088	11.096	(0.950)	17866	0.56093	0.5609(M)
26	1,2,4-Trichlorobenzene	180	11.590	11.589	(0.993)	1996	0.03412	0.03412(M)
* 27	Naphthalene-d8	136	11.675	11.674	(1.000)	672714	4.00000	
30	Hexachlorobutadiene	225	12.076	12.075	(1.034)	581	0.01634	0.01634
39	Dimethylphthalate	163	Compound Not Detected.					
* 42	Acenaphthene-d10	162	15.280	15.279	(1.000)	326746	4.00000	
50	Diethylphthalate	149	16.231	16.230	(1.062)	37765	0.35354	0.3535(M)
54	N-Nitrosodiphenylamine	169	16.625	16.616	(0.908)	18837	0.20028	0.2003
57	Hexachlorobenzene	284	17.697	17.689	(0.966)	460	0.01093	0.01093

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	58 Pentachlorophenol	266	18.054	18.045	(0.986)	1810	0.07785	0.07785(M)
*	59 Phenanthrene-d10	188	18.317	18.308	(1.000)	701004	4.00000	
$	66 Terphenyl-d14	244	21.458	21.434	(0.918)	553551	6.27585	6.276(R)
	67 Butylbenzylphthalate	149	22.372	22.355	(0.957)	28321	0.39644	0.3964
*	69 Chrysene-d12	240	23.370	23.331	(1.000)	541338	4.00000	
*	77 Perylene-d12	264	26.041	25.986	(1.000)	583991	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.787	28.708	(1.105)	18983	0.09905	0.09905(H)
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172315S.D
Lab Smp Id: 23A0420-09
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	184039	92020	368078	189780	3.12
27 Naphthalene-d8	659935	329968	1319870	672714	1.94
42 Acenaphthene-d10	325775	162888	651550	326746	0.30
59 Phenanthrene-d10	616249	308125	1232498	701004	13.75
69 Chrysene-d12	526222	263111	1052444	541338	2.87
77 Perylene-d12	563117	281559	1126234	583991	3.71

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.21	8.71	9.71	9.21	0.00
27 Naphthalene-d8	11.67	11.17	12.17	11.68	0.01
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	0.01
59 Phenanthrene-d10	18.31	17.81	18.81	18.32	0.05
69 Chrysene-d12	23.33	22.83	23.83	23.37	0.17
77 Perylene-d12	25.99	25.49	26.49	26.04	0.21

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

REVIEW SUMMARY FOR FILE - NT1003172315S.D

Lab ID: 23A0420-09
nt10.i, 20230317.b\20230317.b\SIMABN2.m,   18-MAR-2023 03:19

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: 20230317.b/NT1003172303S.D

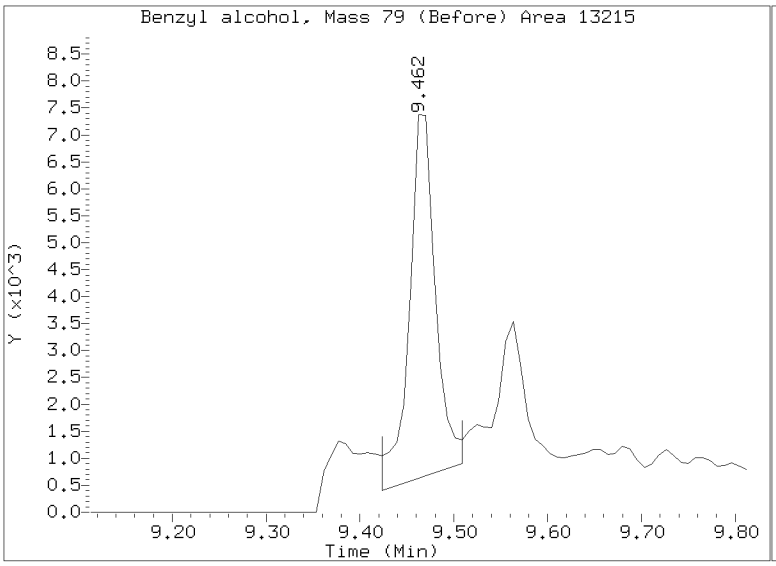
On Column LOD for nt10.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

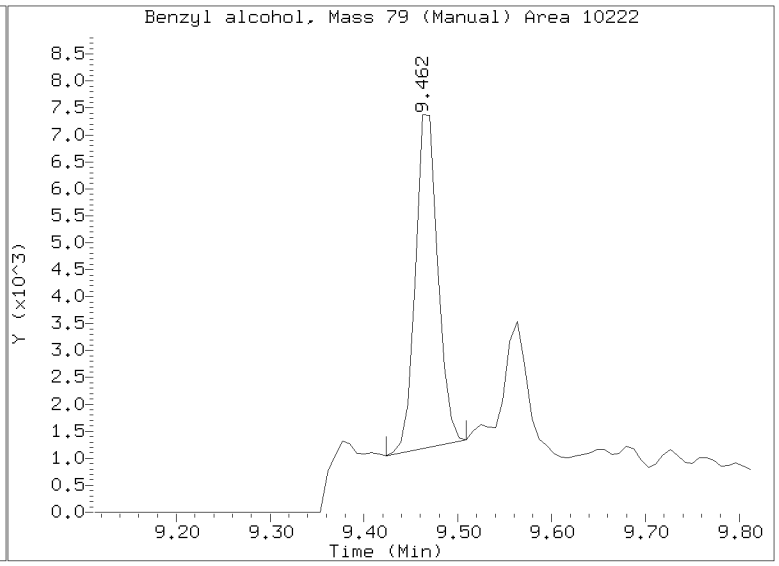
Exception: 1,2,4-Trichlorobenzene 0.0010

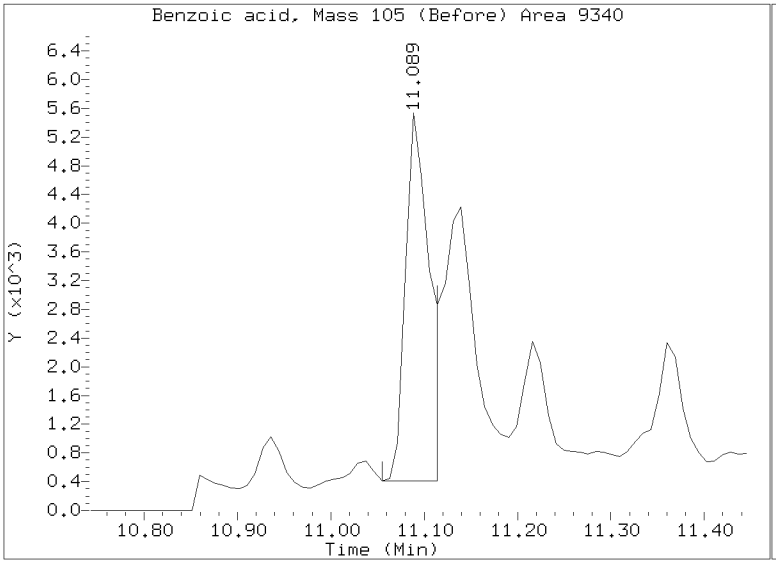
* Only compounds listed in the work order have been verified by the analyst *

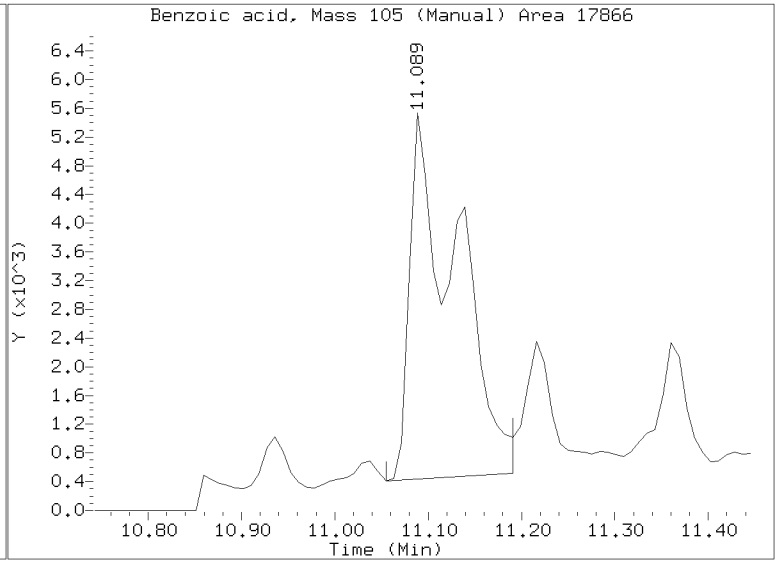
Quant Ion Manual Peak Adjustment Report

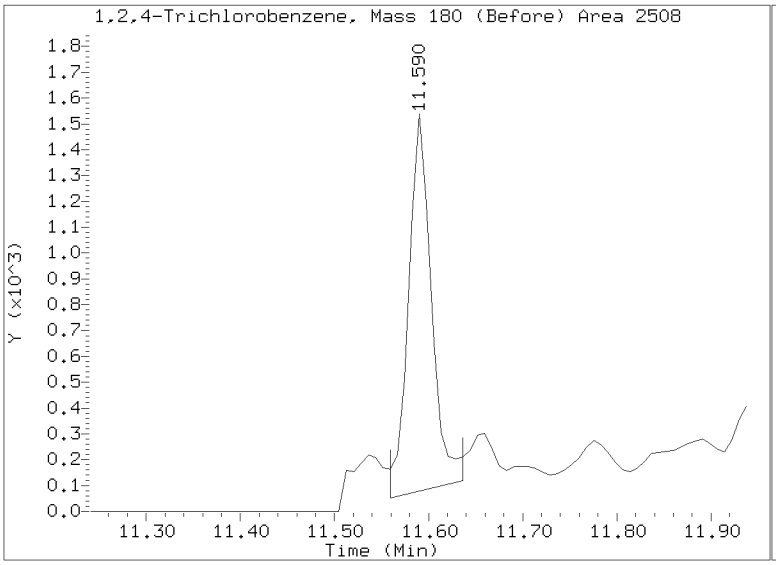
Datafile: //target/share/chem3/nt10.i/20230317.b/20230317.b/NT1003172315S.D
Injection Date: 18-MAR-2023 03:19
Lab ID:23A0420-09 Client ID:
Report Date: 03/30/2023 14:56

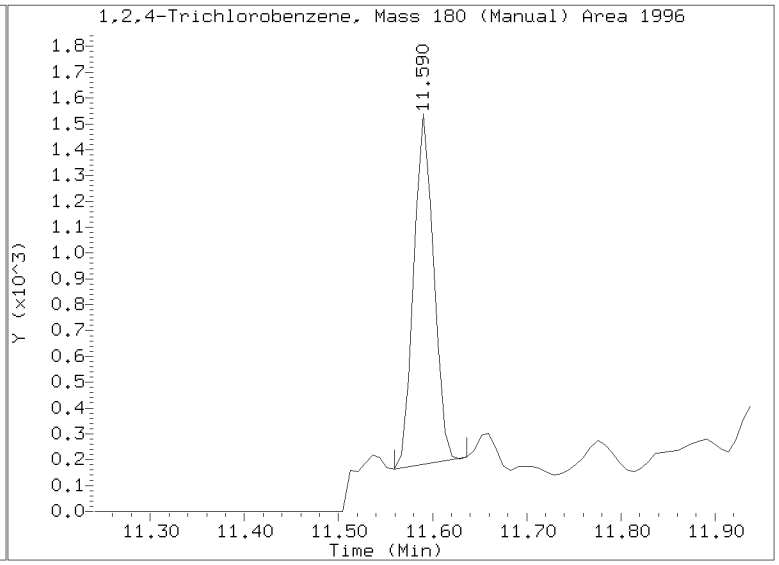






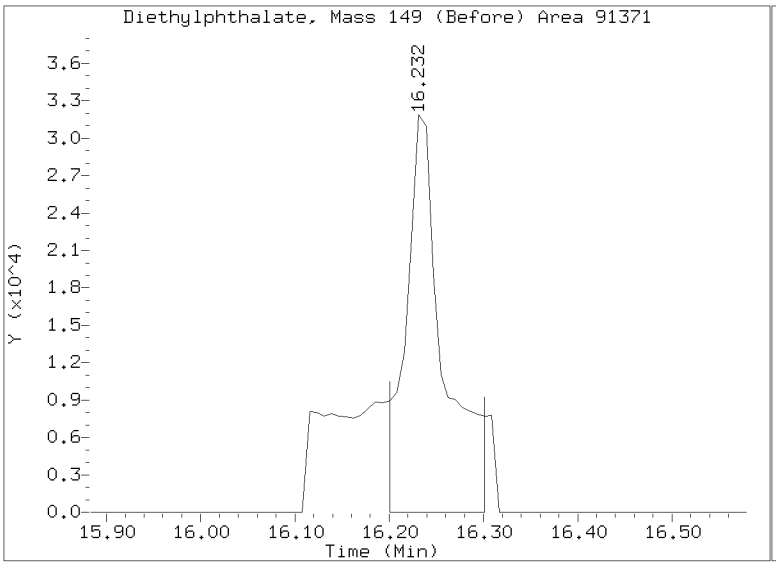


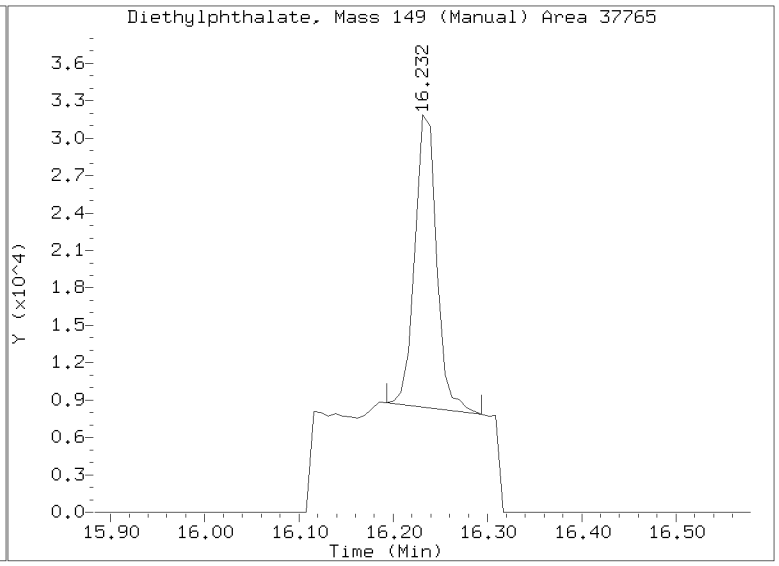


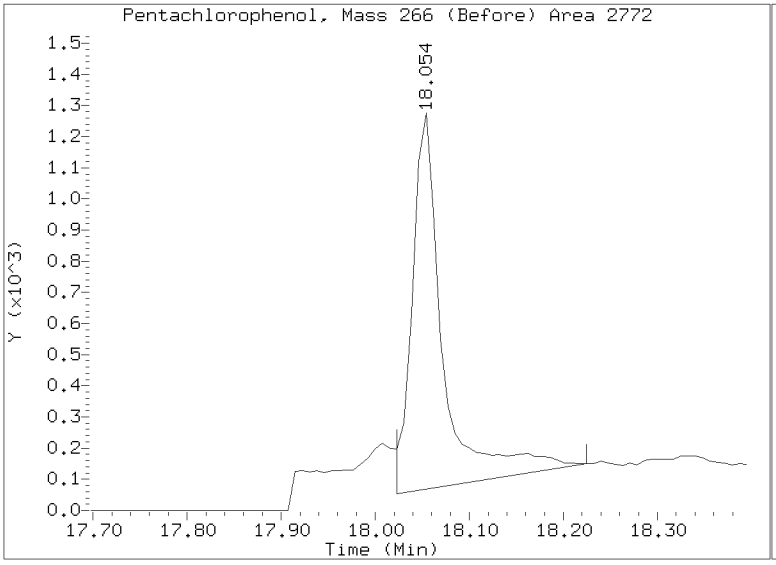


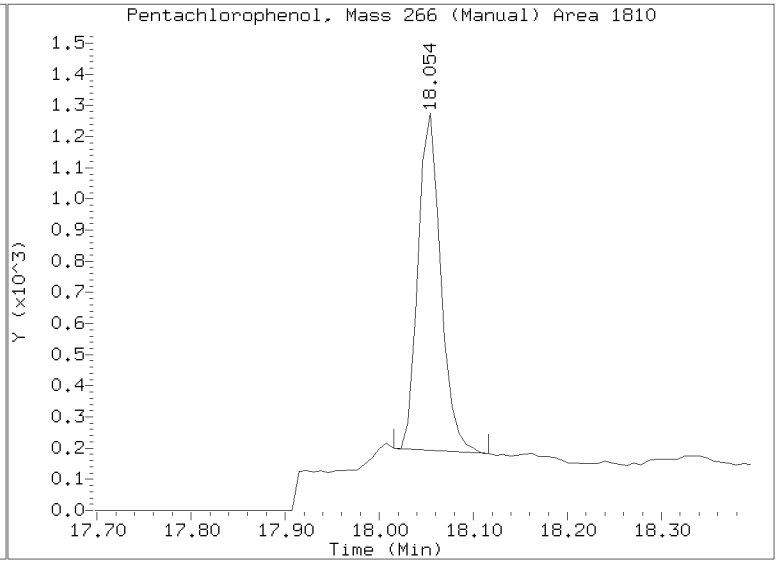
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230317.b/20230317.b/NT1003172315S.D
Injection Date: 18-MAR-2023 03:19
Lab ID:23A0420-09 Client ID:
Report Date: 03/30/2023 14:56









PREPARATION BATCH SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLB0386 Batch Matrix: Solid
Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-IT1051	23A0420-04	N823022320.D	02/16/23 14:32	
Blank	BLB0386-BLK1	N823022303.D	02/16/23 14:32	
LCS	BLB0386-BS1	N823022304.D	02/16/23 14:32	
LCS Dup	BLB0386-BSD1	N823022305.D	02/16/23 14:32	
Reference	BLB0386-SRM1	N823022306.D	02/16/23 14:32	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0386

Prepared using: EPA 3546 (Microwave)

8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

Matrix: Solid Date Prepared: 2/16/23 Balance ID: B159298002 Set Up By: GO 2/15/23

WO Comments

23A0418: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
QLS 4	QLS 4

Analysis: 8270E-SIM PAH (0.1ug/L or 5ug/kg)

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet)	Actual	(REQ/Opt) GPC C/U (1:1) 1 2 3	(REQ/Opt) Sulfur C/U (1:1) Y/N (Transfer Rinse)	(REQ/Opt) Silica Gel C/U (1:1) Y/N	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0418-01 A	81.2	(12.32)	12.88	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	
23A0418-02 A	75.4	(13.26)	13.54	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	
23A0418-04 A	58.6	(17.07)	17.89	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	
23A0418-05 A	71.6	(13.97)	13.98	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	
23A0418-06 A	74.8	(13.37)	13.57	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	
23A0418-07 A	79.9	(12.52)	12.82	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	
23A0418-08 A	59.0	(16.96)	16.96	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	
23A0418-09 A	79.5	(12.59)	12.86	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	
23A0418-10 A	68.4	(14.62)	14.75	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	
23A0418-11 A	73.7	(13.56)	13.85	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	
23A0418-12 A	79.6	(12.57)	12.93	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	
23A0420-04 A	70.5	(14.18)	14.20	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet)	Actual	(REQ/Opt) GPC C/U (1:1) 1 2 3	(REQ/Opt) Sulfur C/U (1:1) Y/N (Transfer Rinse)	(REQ/Opt) Silica Gel C/U (1:1) Y/N	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLB0386-BLK1	100.0	(10.00)	10.00	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	
BLB0386-BS1	100.0	(10.00)	10.00	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	
BLB0386-BSD1	100.0	(10.00)	10.00	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	
BLB0386-MS1	59.0	(16.96)	16.96	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	Use 23A0418-08
BLB0386-MSD1	59.0	(16.96)	16.96	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	Use 23A0418-08
BLB0386-SRM1	100.0	~~(10.00)~~ (5.00)	5.00	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5	0.5	Use ~~I007238~~ L000097

+1g DI WATER

GO 2/16/23

CR 2/16/23 — Client ID verified By / Date

ZH 2/22/23 — Preparation Reviewed By / Date

2/16/23 14:32 — Extraction Date and Time

Printed: 2/15/2023 1:32:42PM

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0386

Prepared using: EPA 3546 (Microwave)

8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

WO Comments

23A0418: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps	Reagents Used	
Microwave (1) 2 3 CR 2/16 Analyst/Date	**Station/Reagent**	**Standard ID**
	Microwave **Analyst:** CR **Date:** 2/16/23	
	Anhydrous Sodium Sulfate	L001285
	1:1 Methylene Chloride/Acetone	L001416
	Methylene Chloride	L000808
Pre-GPC KD 100°C (No Exchange) (0) 1 2 3 (4) (5) 6 LO 2-17 Analyst/Date	Pre-Deactivated Glass Wool	L000252
	Pre GPC KD **Analyst:** LO **Date:** 2-17-23	
Pre GPC TurboVap 1 2 3 (4) TWC 2/17/23 Analyst/Date	Hexane	
	Methylene Chloride	L000808
	GPC Filter Prep **Analyst:** TWC **Date:** 2/17/23	
GPC 1 2 (3) TWC 2/18/23 Analyst/Date	Methylene Chloride	L000808
	GPC Filter	
	GPC **Analyst:** TWC **Date:** 2/18/23	
Post-GPC KD 80°C Hexane Exchange 2 x 20 mL 100°C (0) (1) 2 4 (5) (6) AV 02/20 Analyst/Date	Methylene Chloride	CLA0486-GK1
	GPC Calibration File	K005941
	Post GPC KD **Analyst:** AV **Date:** 02/20/2023	
	Methylene Chloride	K005941
	Hexane	L000889
Pre-Cleanup TurboVap 1 2 3 (4) ZH 2/22/23 Analyst/Date	**Vialing** **Analyst:** ZH **Date:** 2/22/23	
	~~Methylene Chloride~~	
	Silica Gel (SPE) darts	L001284
Post-Cleanup TurboVap 1 (2) (3) 4 ZH 2/22/23 Analyst/Date	~~Sodium Sulfite~~	
	Tetrabutylammonium hydrogensulfate (TBAS)	
	Hexane	L000889
Vialing		

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 15/75µg/mL	**B** K009860 Exp Date: 7/28/23	100µL	CR	✓
Spike 15/75µg/mL	**15** K009081 Exp Date: 8/4/23	200µL	CR	✓

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0386

Prepared using: EPA 3546 (Microwave)

8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

WO Comments

23A0418: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

ZH 2/2/23
Analyst/Date

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SIM PAH Extraction Batch BLB0386

Total Solids Batch: BLB0452 Work Order(s): 23A0418

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
[X] No Anomalies (standard soil/wet sediment/sand/gravel)= 01-12	CR 2/8/23
[ ] Standing Water Decanted (Not shared)=	
[ ] Standing Water Homogenized (Shared samples)=	
[ ] Clay/Clumps (Difficult to homogenize)=	
[ ] Rocks (%+size)?	
[ ] Organics (Leaves/sticks/grass)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Received in 32oz jar(s)=Homogenized in Pyrex dish=	
[X] Previously Frozen = 01-12	CR 2/8/23
[ ] Other (Details)=	
Aqueous:	
[ ] No Anomalies	
[ ] Turbid/Color=	
[ ] Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
[ ] Emulsions (%)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Other (Details)=	
[ ] Received in 1.0L Bottle(s)=No Bottle Rinse=	
[ ] Other Notes/Comments= (Note problems, concerns, corrective actions).	
[X] Share Samples Y / (N)	CR 2/8/23
[X] Multiple Jars Y / (N)	CR 2/8/23
[ ] Sample Pre-Screens indicate analyte activity=	
[ ] Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SVMPAH Extraction Batch: BLB0158

Total Solids Batch: BLB0154 Work Order(s): 23A0420

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☒ Standing Water Decanted (Not shared)= ϕ1 – ϕ9.	✓ ϕ2/14/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☒ Oily, obvious fuel/sulfur odors= ϕ1 – ϕ9.	✓ ϕ2/14/23
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y (N)	✓ ϕ2/14/23
☒ Multiple Jars Y (N)	✓ ϕ2/14/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

PREPARATION BATCH SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC SDG: 23A0420

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

Batch: BLB0495 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1045	23A0420-01	NT1003172310S.D	02/20/23 16:23	
LDW23-SC1003	23A0420-07	NT1003172311S.D	02/20/23 16:23	
LDW23-SC1004	23A0420-08	NT1003172312S.D	02/20/23 16:23	
LDW23-SC1082	23A0420-09	NT1003172315S.D	02/20/23 16:23	
Blank	BLB0495-BLK2	NT1003172306S.D	02/20/23 16:23	
LCS	BLB0495-BS2	NT1003172307S.D	02/20/23 16:23	
LCS Dup	BLB0495-BSD2	NT1003172308S.D	02/20/23 16:23	
LDW23-SC1004	BLB0495-MS2	NT1003172313S.D	02/20/23 16:23	
LDW23-SC1004	BLB0495-MSD2	NT1003172314S.D	02/20/23 16:23	
Reference	BLB0495-SRM2	NT1003172309S.D	02/20/23 16:23	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0495

Prepared using: EPA 3546 (Microwave)

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

Matrix: Solid Date Prepared: 02/24/23 Balance ID: B14646214 Set Up By: CTO 2/20/23

WO Comments

23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

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

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

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0420-01 A	54.7	(18.28) 18.29	(1:1)	1mL	1	0.5	
23A0420-07 A	51.3	(19.50) 19.51	(1:1)	1mL	1	0.5	
23A0420-08 A	59.9	(16.70) 16.73	(1:1)	1mL	1	0.5	
23A0420-09 A	58.9	(16.99) 16.99	(1:1)	1mL	1	0.5	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLB0495-BLK1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLB0495-BS1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLB0495-BSD1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLB0495-MS1	59.9	(16.70) 16.74	(1:1)	1mL	1	0.5	Use 23A0420-08
BLB0495-MSD1	59.9	(16.70) 16.74	(1:1)	1mL	1	0.5	Use 23A0420-08
BLB0495-SRM1	100.0	~~(10.00)~~ (1.00) 1.00 +1g DI WATER	(1:1)	1mL	1	0.5	Use K003477

Client ID Verified By 02/24/23 Date

NM3 2/24/23 Preparation Reviewed By Date

02/24/23 16:23 Extraction Date and Time

Printed: 2/20/2023 9:16:59AM

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0495

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps

Microwave
1 2 3
02/21/23
Analyst/Date

Pre-GPC KD
100°C
Exchange to Hexane
(add 10 mL to KD)
0 2 4 5 6
AV 02/21
Analyst/Date

TurboVap
Pre GPC
1 2 3 4 5
TWC 2/22/23
Analyst/Date

Post GPC KD
80-85°C
0 2 4 5 6
LO 2-24
Analyst/Date

TurboVap
1 2 3 4 5
AW3 2/24/23
Analyst/Date

Water Wash
AW3 2/24/23
Analyst/Date

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: CJ Date: 02/21/23	
Anhydrous Sodium Sulfate	LΦΦ1285
1:1 Methylene Chloride/Acetone	LΦΦ1416
Methylene Chloride	KΦΦ5941
Pre-Deactivated Glass Wool	LΦΦΦ252
Pre GPC KD Analyst: AV Date: 02/21/2023	
~~Pre-Deactivated Glass Wool~~	
~~Anhydrous Sodium Sulfate~~ SH 2/22/23	
Methylene Chloride	KΦΦ5158
Hexane	LΦΦ4889
GPC Filter Prep Analyst: TWC Date: 2/22/23	
Methylene Chloride	KΦΦ5158
GPC Filter	
GPC Analyst: SH Date: 2/22/23	
Methylene Chloride	KΦΦ5198
GPC Calibration File	CLAΦΦ86-GPC1
Post GPC KD Analyst: LO Date: 2-24-23	
Methylene Chloride	KΦΦ5158
Vialing Analyst: AW3 Date: 2/24/23	
Methylene Chloride	KΦΦ5158

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 100/150µg/mL	A L001153 Exp Date: 8/1/2023	50µL	CJ	
Full List Spike (Freezer) 100µg/mL	7 K011369 (V) Exp KΦ11297 Date: 8/3/2023	50µL	CJ	
Base Spike 200µg/mL	56 K011369 (V) Exp KΦΦ3759 Date: 4/19/2023	50µL	CJ	
Acid Spike 100/200µg/mL	38 K011369 (V) Exp KΦΦ3764 Date: 4/19/2023	50µL	CJ	

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: PSDOA / SVOC Extraction Batch BLB0495

Total Solids Batch: BLB0154 Work Order(s): 23A0420

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☒ Standing Water Decanted (Not shared)= 01 - 09.	MJ 02/14/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☒ Oily, obvious fuel/sulfur odors= 01-09.	MJ 02/14/23
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	MJ 02/14/23
☒ Multiple Jars Y / (N)	MJ 02/14/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0495

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

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

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : BLK1

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/22/2023 9:04 PM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : BS1

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/22/2023 10:02 PM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : BSD1

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/22/2023 11:01 PM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : SRM1

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/22/2023 11:59 PM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : 23A0420-01

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/23/2023 12:58 AM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : 23A0420-07

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/23/2023 1:56 AM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : 23A0420-08

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/23/2023 2:55 AM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : MS1

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/23/2023 3:54 AM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

GPC3

GPC3_BAN_12"column

BLB0495

Sample Description:

Sample ID : BLB0495

Sample : 23A0420-09

Method : GPC3_BAN_12"column

Description : BAN Method

Created : 9/10/2019 1:23 PM

By : AA

Modified : 2/23/2023 5:51 AM

Time and Input Events Table (GPC3_BAN_12"column)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc3collect	High	☐
Start_collect	Run Time >	---	---	27.000	min	Colibrick	gpc3collect	Low	☐
Start_dump	Run Time >	---	---	50.000	min	Colibrick	gpc3collect	High	☐
Next_fract	Run Time >	---	---	53.800	min	GPC3fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	70.000	min	Colibrick	GPC3-Poweroff	Low	☐

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0192	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Reference	BLB0386-SRM1	N823022306.D	02/22/2023	
LCS Dup	BLB0386-BSD1	N823022305.D	02/22/2023	
LDW23-IT1051	23A0420-04	N823022320.D	02/22/2023	
LCS	BLB0386-BS1	N823022304.D	02/22/2023	
Blank	BLB0386-BLK1	N823022303.D	02/22/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0192

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0086-GPC1** **Printed: 2/22/2023 2:13:09PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0418-01	A	LDW23-IT1136	A 01	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-02	A	LDW23-IT1142	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-04	A	LDW23-IT1141	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-05	A	LDW23-IT1133	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-06	A	LDW23-IT1133-FD	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-07	A	LDW23-IT1180	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-08	A	LDW23-IT1218	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-09	A	LDW23-IT1216	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-10	A	LDW23-IT1135	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-11	A	LDW23-IT1140	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-12	A	LDW23-IT1275	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0420-04	A	LDW23-IT1051	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
BLB0386-BLK1	-	Blank	-	0.5	0.5	-	2/22/2023	ZH	
BLB0386-BS1	-	LCS	-	0.5	0.5	-	2/22/2023	ZH	
BLB0386-BSD1	-	LCS Dup	-	0.5	0.5	-	2/22/2023	ZH	
BLB0386-MS1	-	Matrix Spike	-	0.5	0.5	-	2/22/2023	ZH	
BLB0386-MSD1	-	Matrix Spike Dup	-	0.5	0.5	-	2/22/2023	ZH	
BLB0386-SRM1	-	Reference	-	0.5	0.5	-	2/22/2023	ZH	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0193	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS	BLB0386-BS1	N823022304.D	02/22/2023	
LCS Dup	BLB0386-BSD1	N823022305.D	02/22/2023	
Blank	BLB0386-BLK1	N823022303.D	02/22/2023	
LDW23-IT1051	23A0420-04	N823022320.D	02/22/2023	
Reference	BLB0386-SRM1	N823022306.D	02/22/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0193

Matrix: Solid **Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL** **Printed: 2/22/2023 2:13:49PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0418-01	A	LDW23-IT1136	A 01	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-02	A	LDW23-IT1142	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-04	A	LDW23-IT1141	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-05	A	LDW23-IT1133	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-06	A	LDW23-IT1133-FD	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-07	A	LDW23-IT1180	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-08	A	LDW23-IT1218	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-09	A	LDW23-IT1216	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-10	A	LDW23-IT1135	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-11	A	LDW23-IT1140	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0418-12	A	LDW23-IT1275	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
23A0420-04	A	LDW23-IT1051	A 02	0.5	0.5	8270E-SIM PAH (0.1ug/L or 5ug/kg)	2/22/2023	ZH	
BLB0386-BLK1	-	Blank	-	0.5	0.5	-	2/22/2023	ZH	
BLB0386-BS1	-	LCS	-	0.5	0.5	-	2/22/2023	ZH	
BLB0386-BSD1	-	LCS Dup	-	0.5	0.5	-	2/22/2023	ZH	
BLB0386-MS1	-	Matrix Spike	-	0.5	0.5	-	2/22/2023	ZH	
BLB0386-MSD1	-	Matrix Spike Dup	-	0.5	0.5	-	2/22/2023	ZH	
BLB0386-SRM1	-	Reference	-	0.5	0.5	-	2/22/2023	ZH	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0226	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	BLB0495-BLK2	NT1003172306S.D	02/24/2023	
LDW23-SC1082	23A0420-09	NT1003172315S.D	02/24/2023	
LDW23-SC1045	23A0420-01	NT1003172310S.D	02/24/2023	
LDW23-SC1004	23A0420-08	NT1003172312S.D	02/24/2023	
Matrix Spike Dup	BLB0495-MSD2	NT1003172314S.D	02/24/2023	
Matrix Spike	BLB0495-MS2	NT1003172313S.D	02/24/2023	
LCS	BLB0495-BS2	NT1003172307S.D	02/24/2023	
LCS Dup	BLB0495-BSD2	NT1003172308S.D	02/24/2023	
LDW23-SC1003	23A0420-07	NT1003172311S.D	02/24/2023	
Reference	BLB0495-SRM2	NT1003172309S.D	02/24/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0226

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLB0150-GPC1** **Printed: 2/24/2023 2:43:53PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0420-01	A	LDW23-SC1045	A 04	1	1	8270E-SIM Dual Scan SVOC	2/24/2023	NRB	
23A0420-01	A	LDW23-SC1045	A 03	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/24/2023	NRB	
23A0420-07	A	LDW23-SC1003	A 04	1	1	8270E-SIM Dual Scan SVOC	2/24/2023	NRB	
23A0420-07	A	LDW23-SC1003	A 03	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/24/2023	NRB	
23A0420-08	A	LDW23-SC1004	A 03	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/24/2023	NRB	
23A0420-08	A	LDW23-SC1004	A 04	1	1	8270E-SIM Dual Scan SVOC	2/24/2023	NRB	
23A0420-09	A	LDW23-SC1082	A 03	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/24/2023	NRB	
23A0420-09	A	LDW23-SC1082	A 04	1	1	8270E-SIM Dual Scan SVOC	2/24/2023	NRB	
BLB0495-BLK1	-	Blank	-	1	1	-	2/24/2023	NRB	
BLB0495-BLK2	-	Blank	-	1	1	-	2/24/2023	NRB	
BLB0495-BS1	-	LCS	-	1	1	-	2/24/2023	NRB	
BLB0495-BS2	-	LCS	-	1	1	-	2/24/2023	NRB	
BLB0495-BSD1	-	LCS Dup	-	1	1	-	2/24/2023	NRB	
BLB0495-BSD2	-	LCS Dup	-	1	1	-	2/24/2023	NRB	
BLB0495-MS1	-	Matrix Spike	-	1	1	-	2/24/2023	NRB	
BLB0495-MS2	-	Matrix Spike	-	1	1	-	2/24/2023	NRB	
BLB0495-MSD1	-	Matrix Spike Dup	-	1	1	-	2/24/2023	NRB	
BLB0495-MSD2	-	Matrix Spike Dup	-	1	1	-	2/24/2023	NRB	
BLB0495-SRM1	-	Reference	-	1	1	-	2/24/2023	NRB	
BLB0495-SRM2	-	Reference	-	1	1	-	2/24/2023	NRB	

Form I

METHOD BLANK DATA SHEET

EPA 8270E-SIM

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLB0386-BLK1	File ID:	N823022303.D
Sampled:	N/A	Prepared:	02/16/23 14:32	Analyzed:	02/23/23 12:28
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 0.5 mL
Batch:	BLB0386	Sequence:	SLB0310	Calibration:	GA00050
Instrument:	NT8	Column:	RXI-17Sil ms	Cleanups:	GPC, Silica Gel

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
56-55-3	Benzo(a)anthracene	1	5.00	U	0.82	5.00
218-01-9	Chrysene	1	5.00	U	1.05	5.00
205-99-2	Benzo(b)fluoranthene	1	5.00	U	1.37	5.00
207-08-9	Benzo(k)fluoranthene	1	5.00	U	0.76	5.00
50-32-8	Benzo(a)pyrene	1	5.00	U	0.61	5.00
193-39-5	Indeno(1,2,3-cd)pyrene	1	5.00	U	1.05	5.00
53-70-3	Dibenzo(a,h)anthracene	1	5.00	U	0.89	5.00

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Methylnaphthalene-d10	150.00	121	80.5	32 - 120	
Dibenzo[a,h]anthracene-d14	150.00	146	97.2	21 - 133	
Fluoranthene-d10	150.00	149	99.3	36 - 134	

Data File: \\target\share\chem3\nt8.i\20230223.b\N823022303.D

Date : 23-FEB-2023 12:28

Client ID:

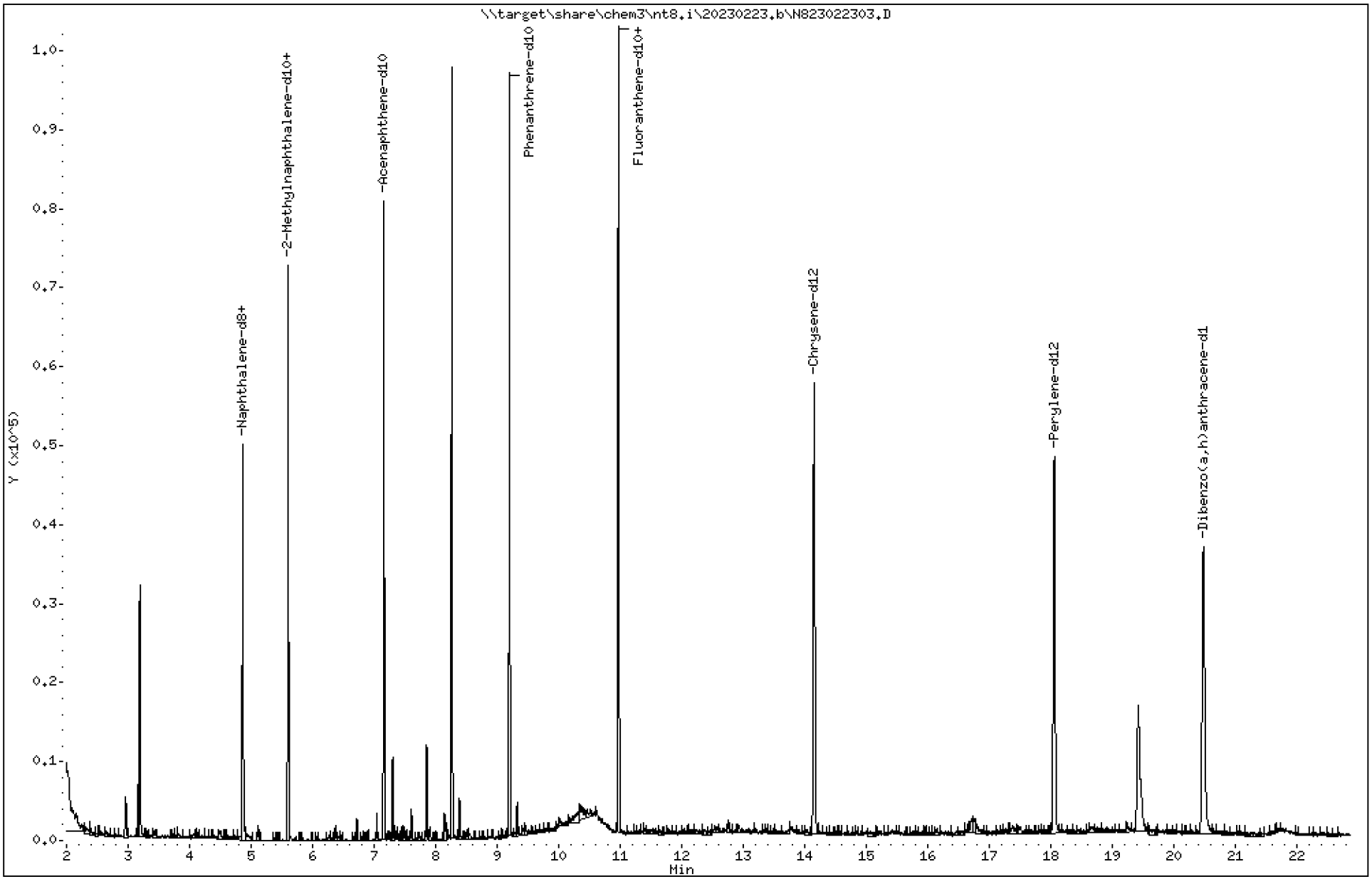
Instrument: nt8.i

Sample Info: BLB0386-BLK1,

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



Data File: \\target\share\chem3\nt8.i\20230223.b\N823022303.D

Date : 23-FEB-2023 12:28

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BLK1,

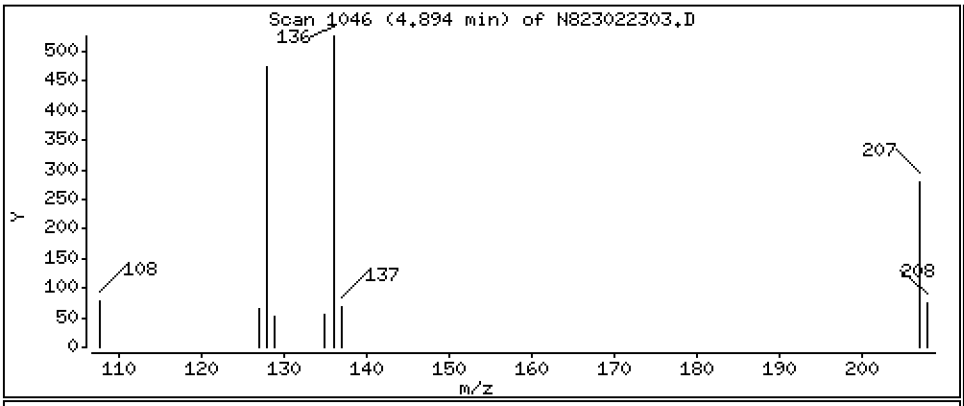
Operator: JZ

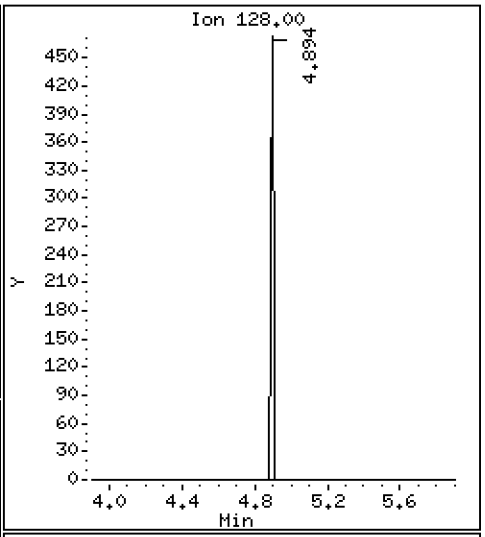
Column phase: Rxi-17sil

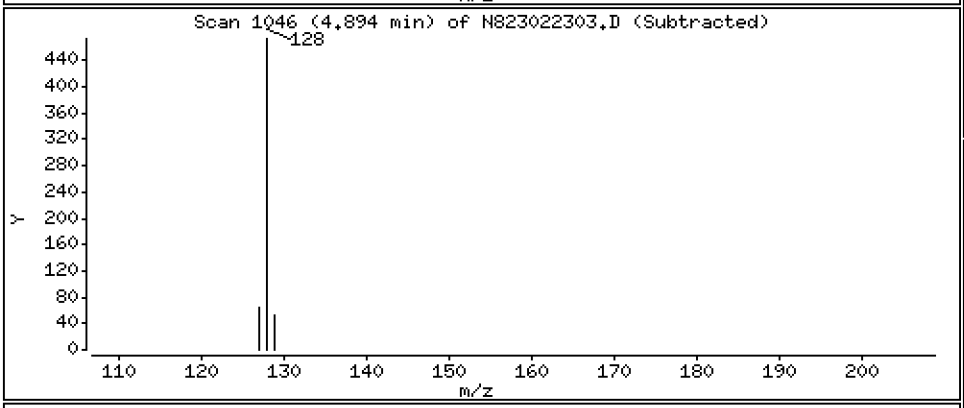
Column diameter: 0.25

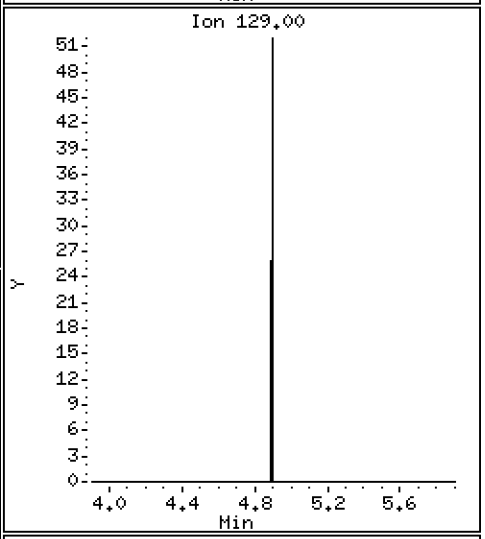
2 Naphthalene

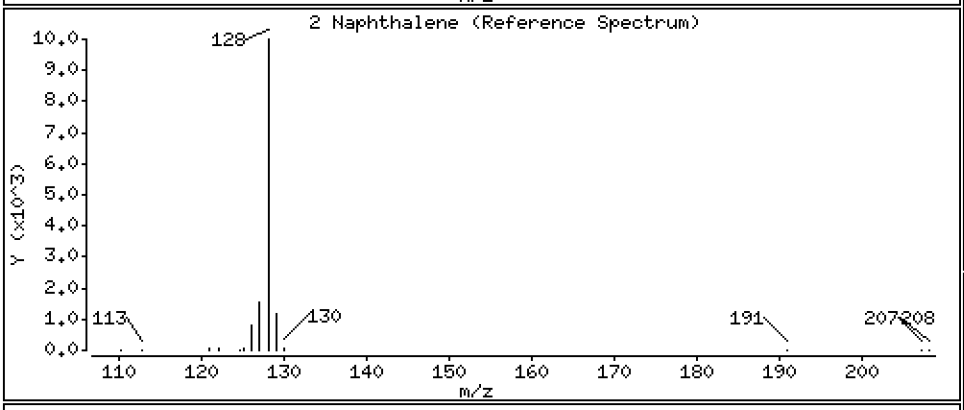
Concentration: 0.02657 ug/mL

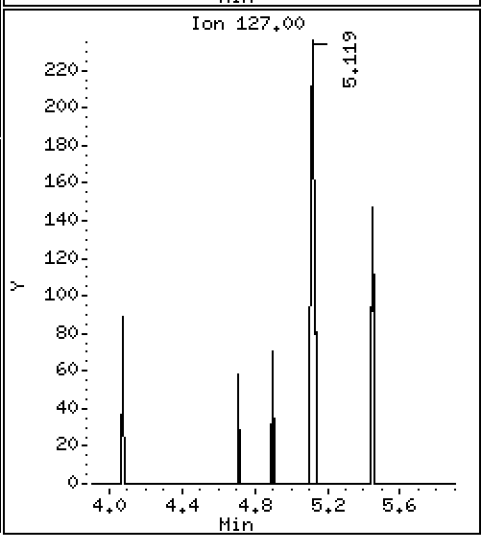


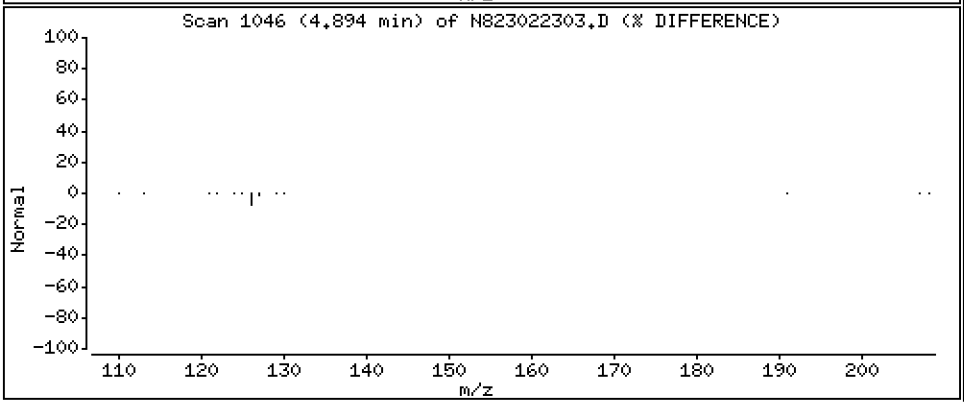












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022303.D

Date : 23-FEB-2023 12:28

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BLK1,

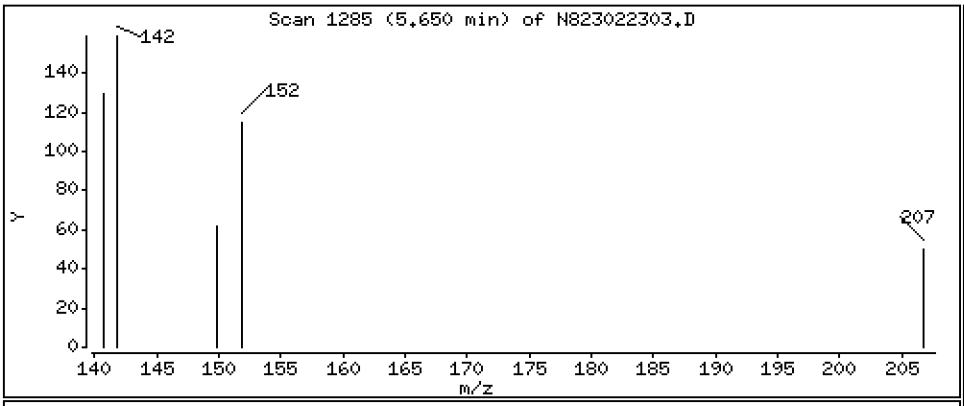
Operator: JZ

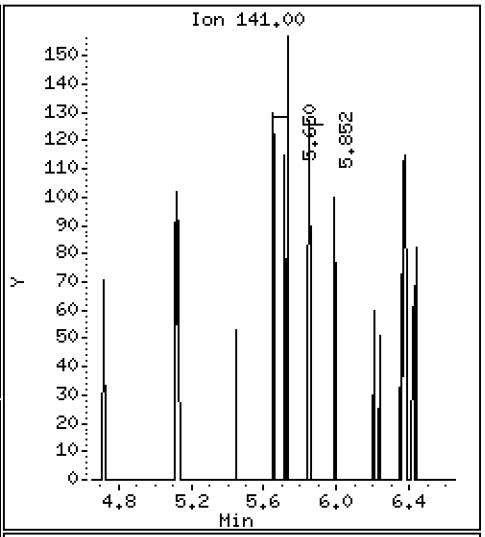
Column phase: Rxi-17sil

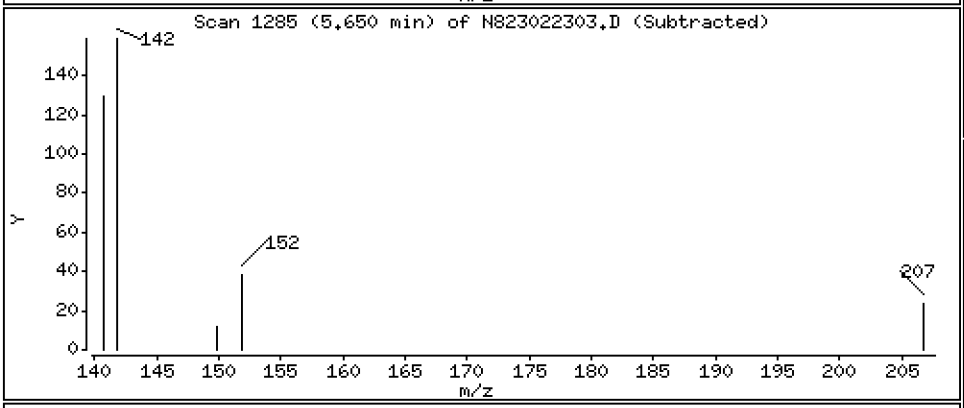
Column diameter: 0.25

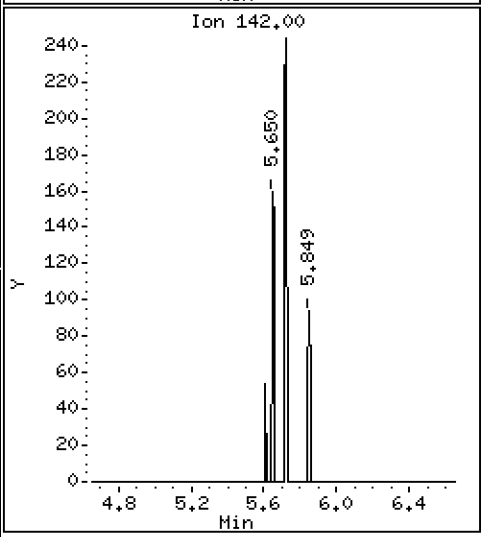
4 2-Methylnaphthalene

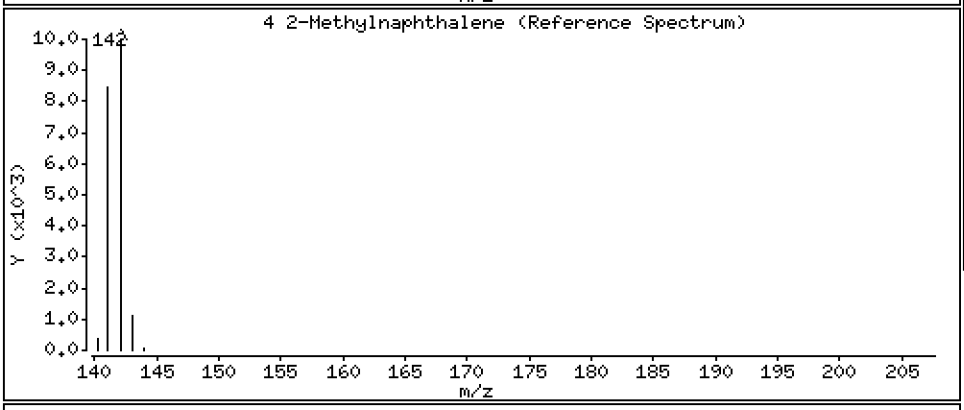
Concentration: 0.01037 ug/mL

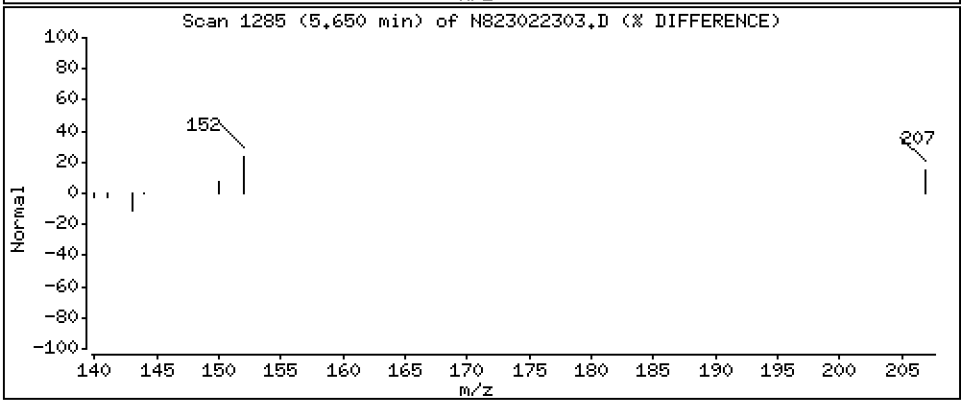












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022303.D

Date : 23-FEB-2023 12:28

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BLK1,

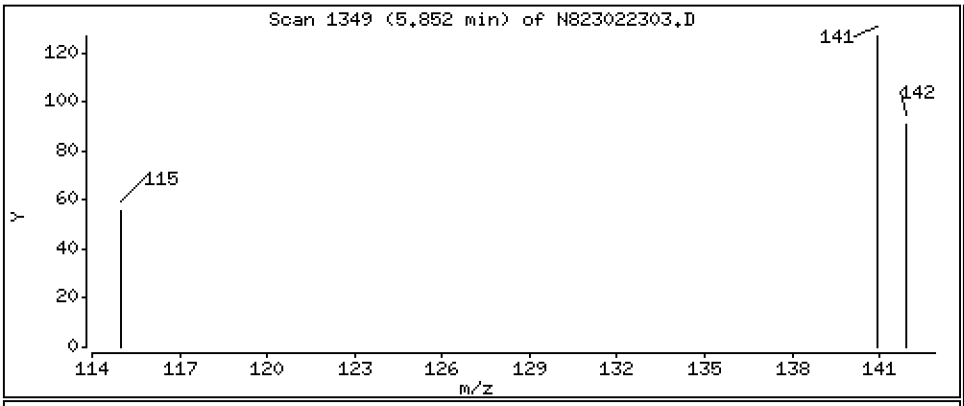
Operator: JZ

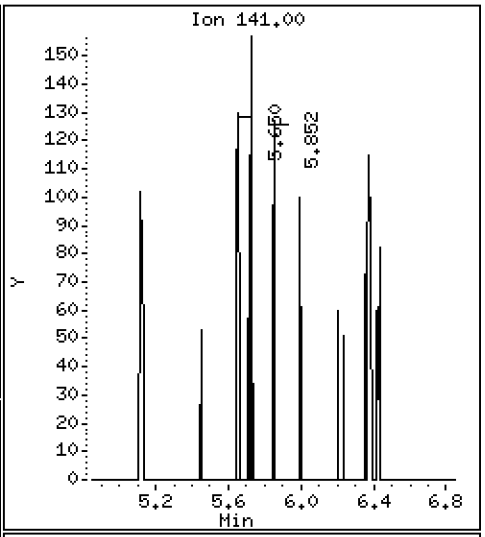
Column phase: Rxi-17sil

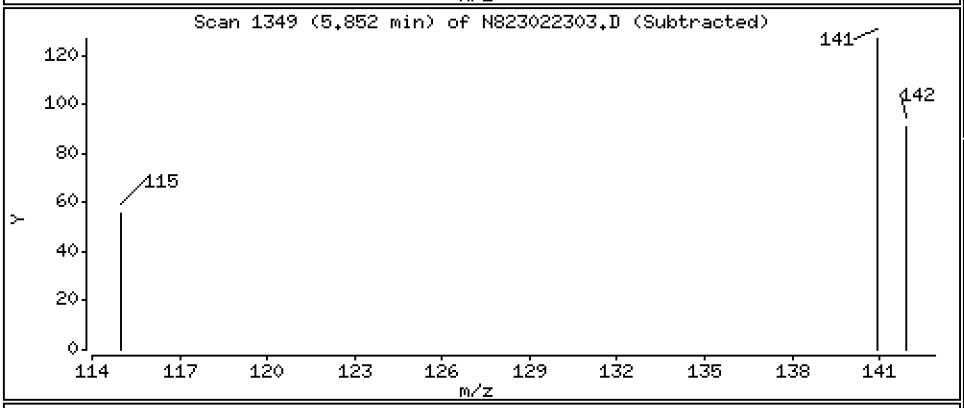
Column diameter: 0.25

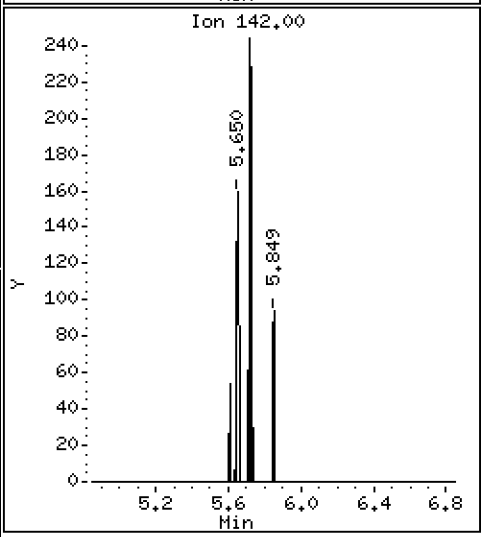
5 1-methylnaphthalene

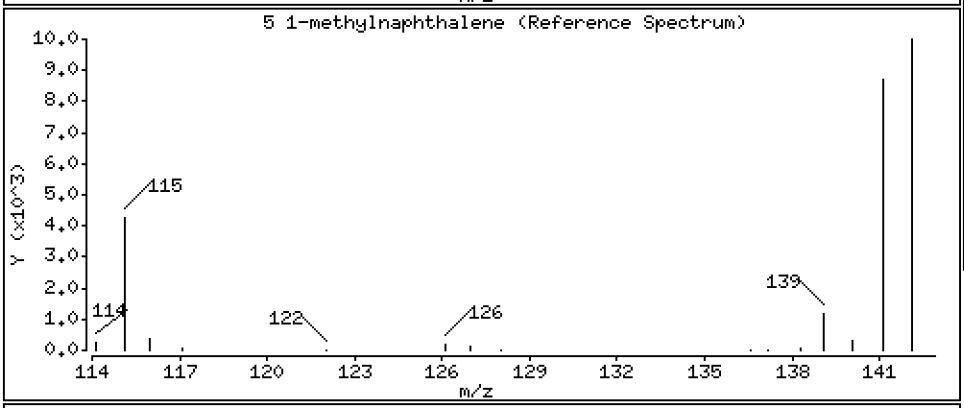
Concentration: 0.008845 ug/mL

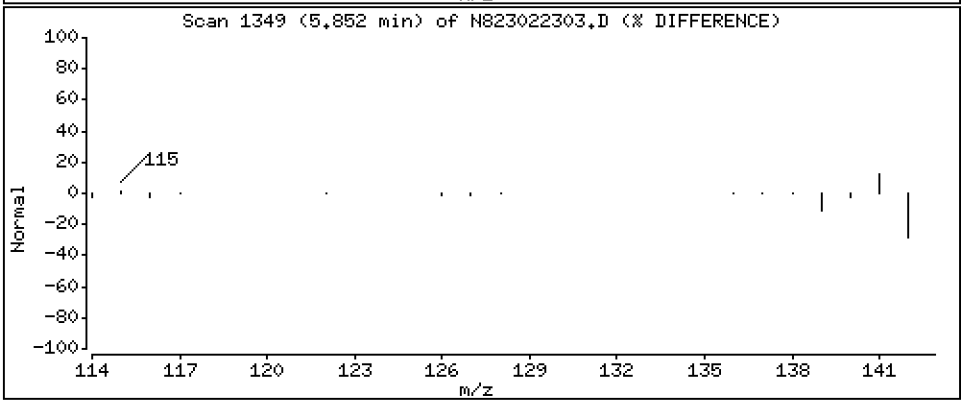












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022303.D

Date : 23-FEB-2023 12:28

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BLK1,

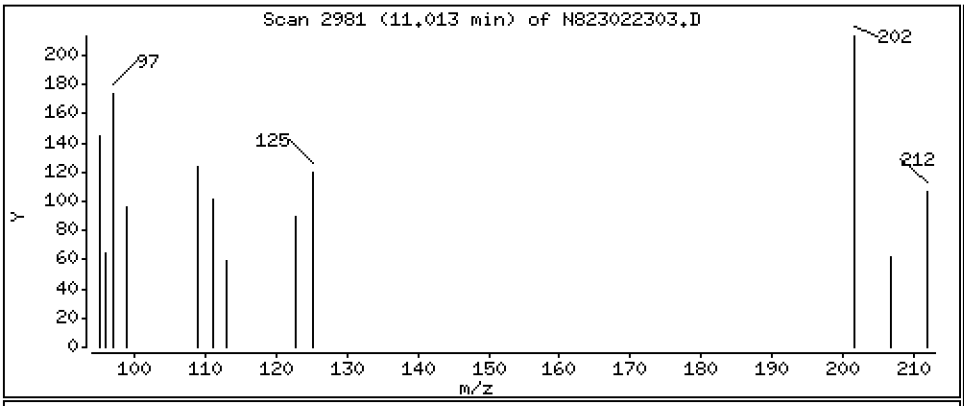
Operator: JZ

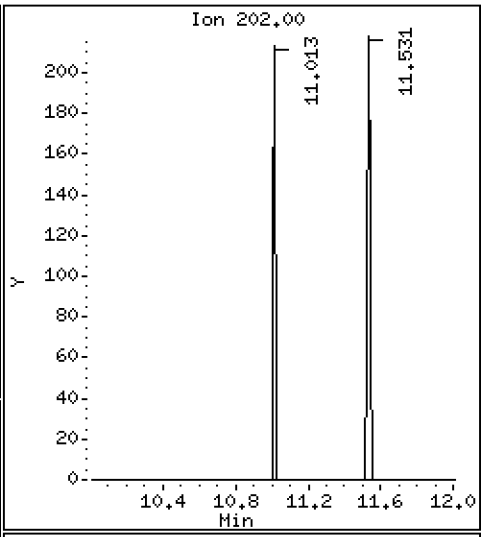
Column phase: Rxi-17sil

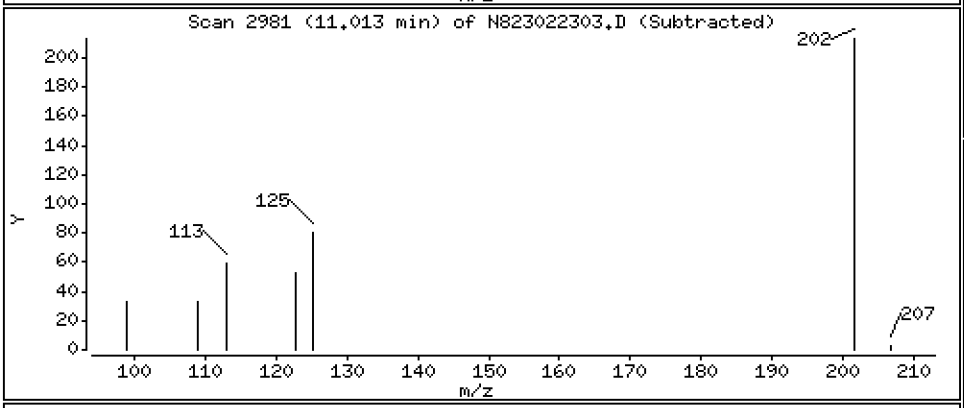
Column diameter: 0.25

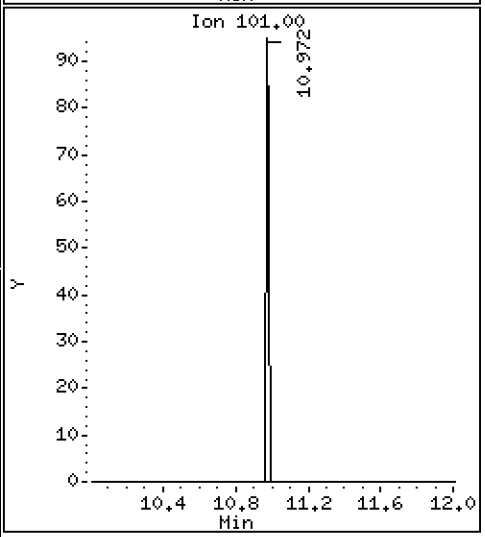
22 Fluoranthene

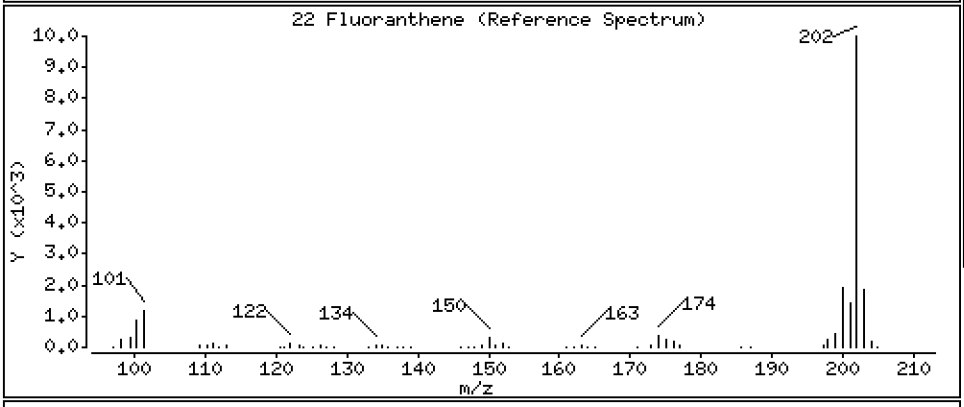
Concentration: 0.008933 ug/mL

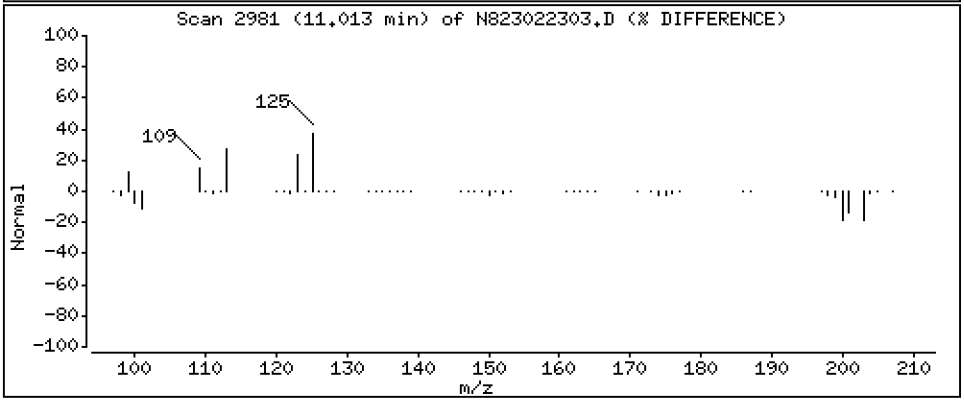












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022303.D

Date : 23-FEB-2023 12:28

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BLK1,

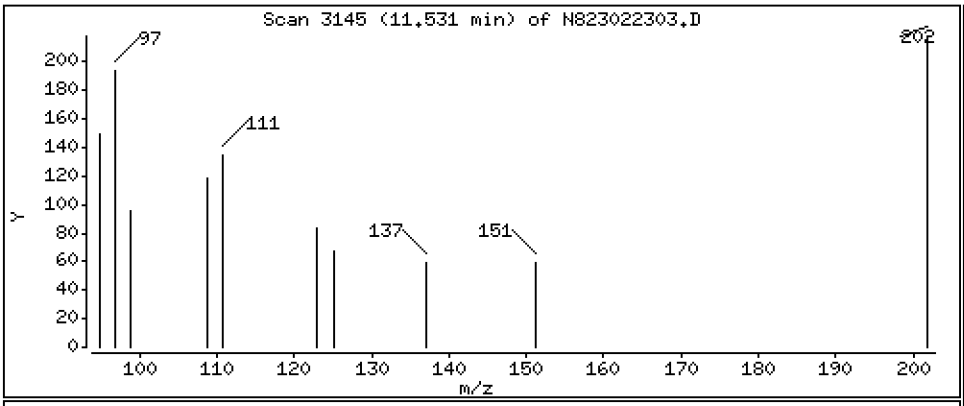
Operator: JZ

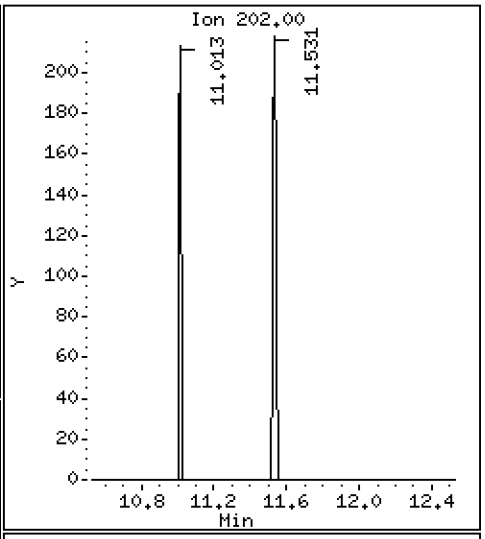
Column phase: Rxi-17sil

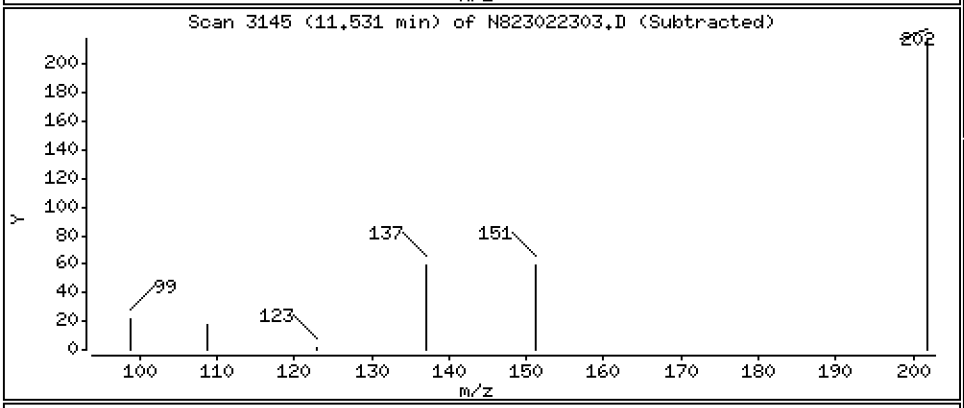
Column diameter: 0.25

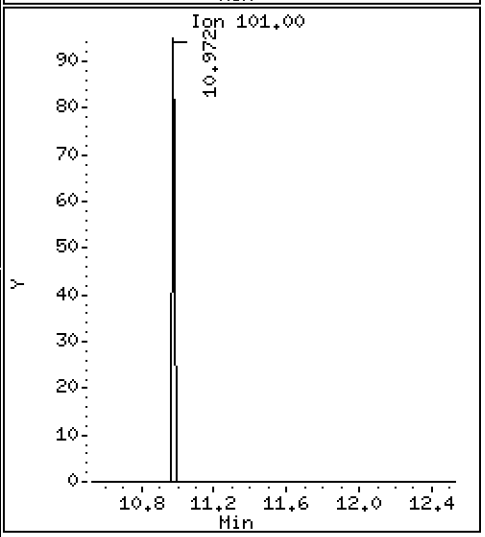
23 Pyrene

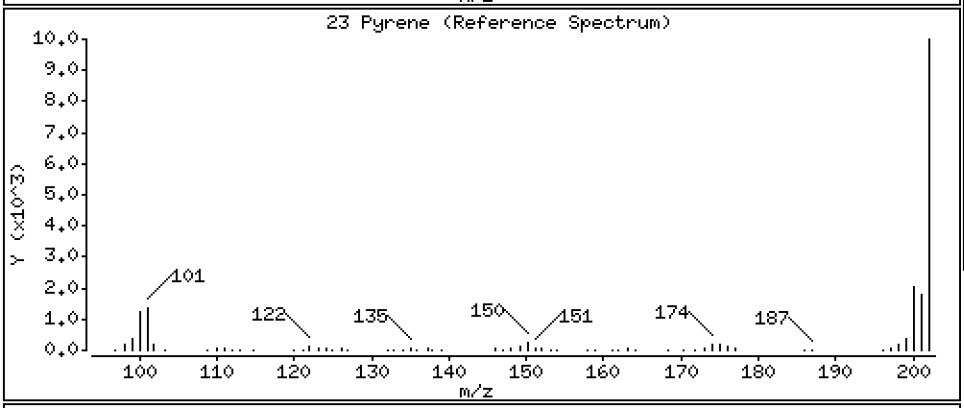
Concentration: 0.01126 ug/mL

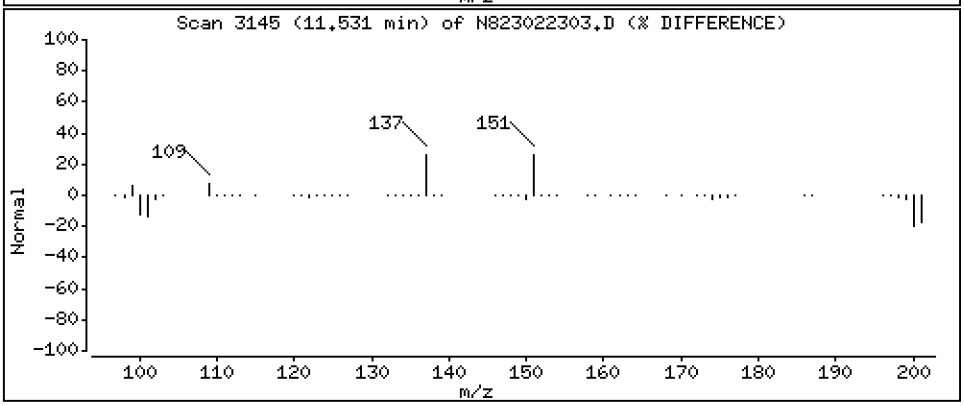












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230223.b\N823022303.D
Lab Smp Id: BLB0386-BLK1
Inj Date : 23-FEB-2023 12:28
Operator : JZ Inst ID: nt8.i
Smp Info : BLB0386-BLK1,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230223.b\FSIMPNA230119.m
Meth Date : 26-Feb-2023 11:43 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PNAXEMDL.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.865	4.871	(1.000)	36588	2.00000	
	2 Naphthalene	128	4.894	4.903	(1.006)	452	0.02657	0.02657
$	3 2-Methylnaphthalene-d10	152	5.602	5.605	(1.151)	24106	2.41580	2.416
	4 2-Methylnaphthalene	141	5.650	5.652	(1.161)	97	0.01037	0.01037
	5 1-methylnaphthalene	141	5.852	5.849	(1.203)	84	0.00884	0.008845
	9 Acenaphthylene	152	Compound Not Detected.					
*	10 Acenaphthene-d10	164	7.161	7.158	(1.000)	22657	2.00000	
	11 Acenaphthene	153	Compound Not Detected.					
	12 Dibenzofuran	168	Compound Not Detected.					
	14 Fluorene	166	Compound Not Detected.					
*	15 Phenanthrene-d10	188	9.200	9.197	(1.000)	43370	2.00000	
	16 Phenanthrene	178	Compound Not Detected.					
	17 Anthracene	178	Compound Not Detected.					
	19 Carbazole	167	Compound Not Detected.					
	22 Fluoranthene	202	11.012	11.009	(1.197)	206	0.00893	0.008933
$	21 Fluoranthene-d10	212	10.974	10.971	(1.193)	57014	2.97962	2.980
	23 Pyrene	202	11.531	11.527	(0.815)	262	0.01126	0.01126
	24 Benzo(a)anthracene	228	Compound Not Detected.					
*	25 Chrysene-d12	240	14.152	14.152	(1.000)	37533	2.00000	
	27 Chrysene	228	Compound Not Detected.					
	28 Benzo(b)fluoranthene	252	Compound Not Detected.					
	29 Benzo(k)fluoranthene	252	Compound Not Detected.					
	30 Benzo(j)fluoranthene	252	Compound Not Detected.					
	31 Total Benzofluoranthenes	252	Compound Not Detected.					
	34 Benzo(e)pyrene	252	Compound Not Detected.					
	32 Benzo(a)pyrene	252	Compound Not Detected.					
*	33 Perylene-d12	264	18.060	18.057	(1.000)	38522	2.00000	
	35 Perylene	252	Compound Not Detected.					
$	36 Dibenzo(a,h)anthracene-d14	292	20.486	20.485	(1.134)	43992	2.91458	2.915
	37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823022303.D
Lab Smp Id: BLB0386-BLK1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230223.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 23-FEB-2023
Calibration Time: 11:46
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	37022	18511	74044	36588	-1.17
10 Acenaphthene-d10	22454	11227	44908	22657	0.90
15 Phenanthrene-d10	43277	21639	86554	43370	0.21
25 Chrysene-d12	38907	19454	77814	37533	-3.53
33 Perylene-d12	39582	19791	79164	38522	-2.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.87	4.37	5.37	4.87	-0.12
10 Acenaphthene-d10	7.16	6.66	7.66	7.16	0.05
15 Phenanthrene-d10	9.20	8.70	9.70	9.20	0.04
25 Chrysene-d12	14.15	13.65	14.65	14.15	0.00
33 Perylene-d12	18.06	17.56	18.56	18.06	0.02

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

REVIEW SUMMARY FOR FILE - N823022303.D

Lab ID: BLB0386-BLK1
nt8.i, 20230223.b\FSIMPNA230119.m,   23-FEB-2023 12:28

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check performed

On Column LOD for nt8.i, 20230223.b\FSIMPNA230119.m, PNAXEMDL.sub = 0.0080

Exception: Benzo(e)pyrene 0.0800

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

Form I

METHOD BLANK DATA SHEET

EPA 8270E-SIM

Blank

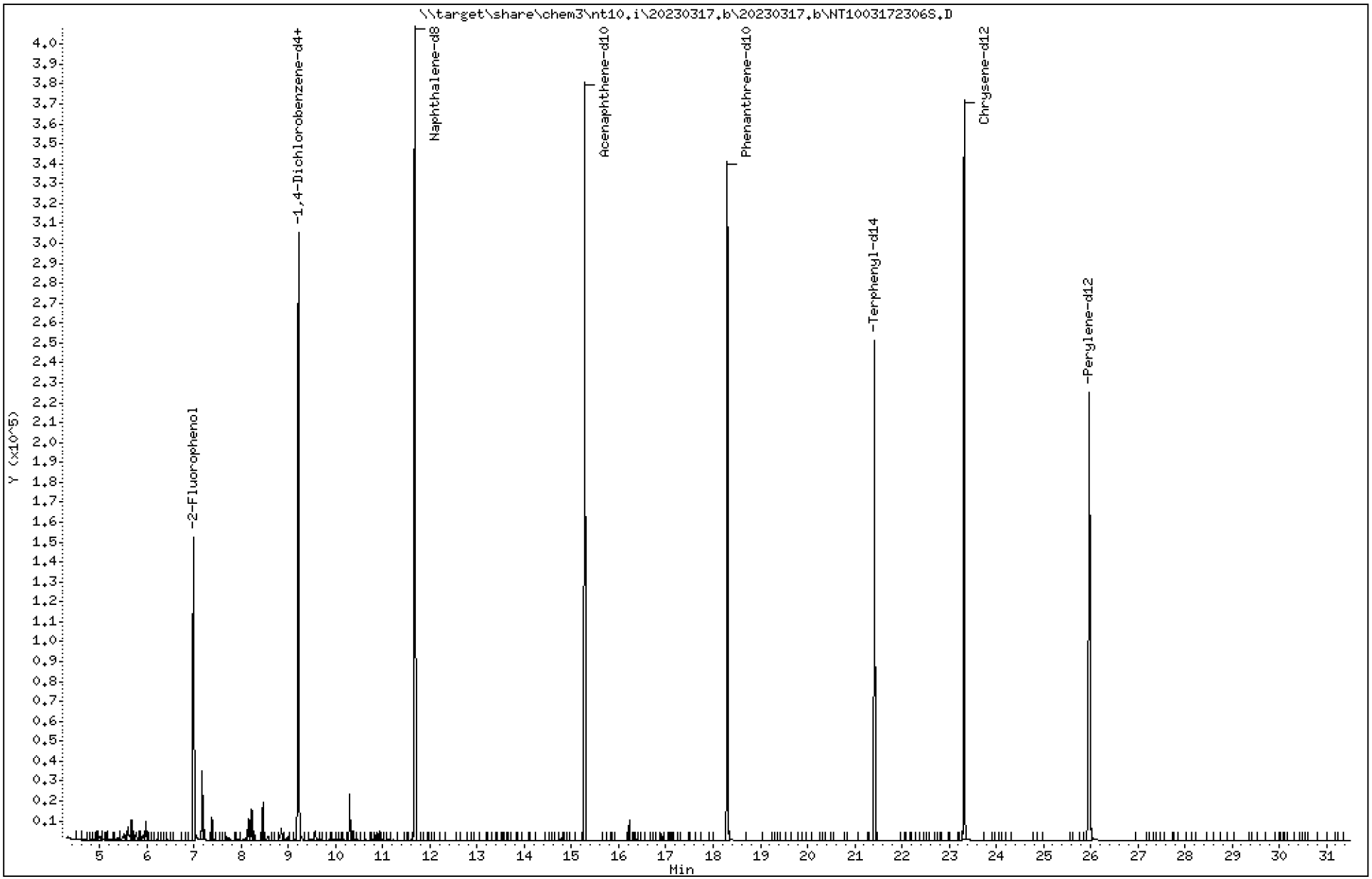
Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLB0495-BLK2	File ID:	NT1003172306S.D
Sampled:	N/A	Prepared:	02/20/23 16:23	Analyzed:	03/17/23 21:36
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 1 mL
Batch:	BLB0495	Sequence:	SLC0475	Calibration:	GC00049
Instrument:	NT10	Column:	ZB-5MSi	Cleanups:	GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	0.9	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	0.9	J	0.7	5.0
100-51-6	Benzyl Alcohol	1	20.0	U	2.5	20.0
65-85-0	Benzoic acid	1	100	U	13.4	100
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	20.0	U	2.1	20.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	282	37.6	27 - 120	
p-Terphenyl-d14	500.00	438	87.6	37 - 120	

Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723068.D
Date : 17-MAR-2023 21:36
Client ID:
Sample Info: BLB0495-BLK2
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.i
Operator: JGR
Column diameter: 0.25



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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK2

Volume Injected (uL): 1.0

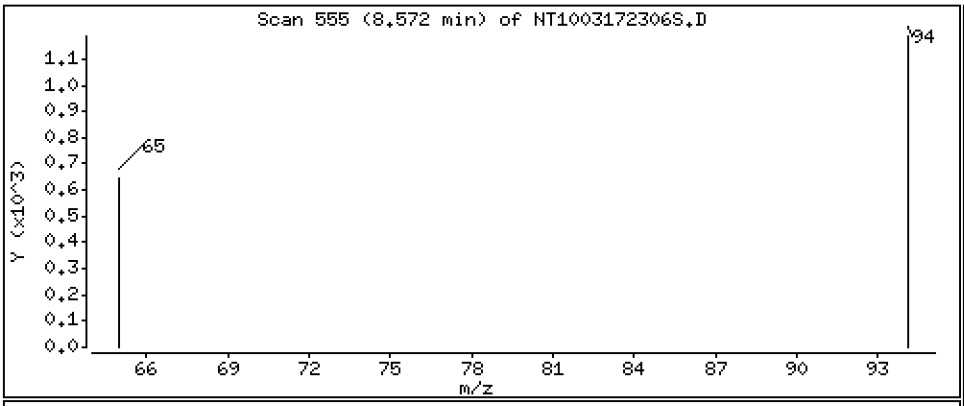
Operator: JGR

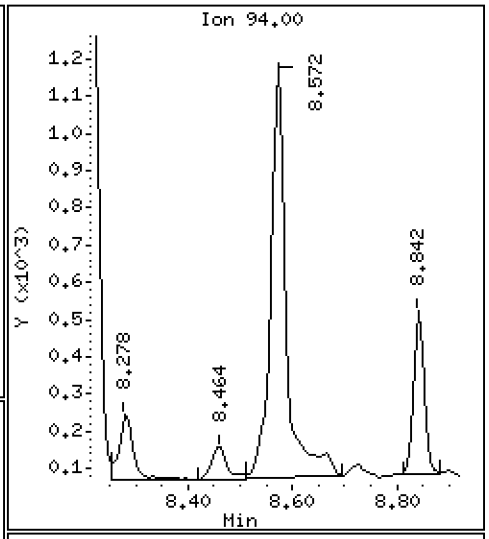
Column phase: ZB-5msi

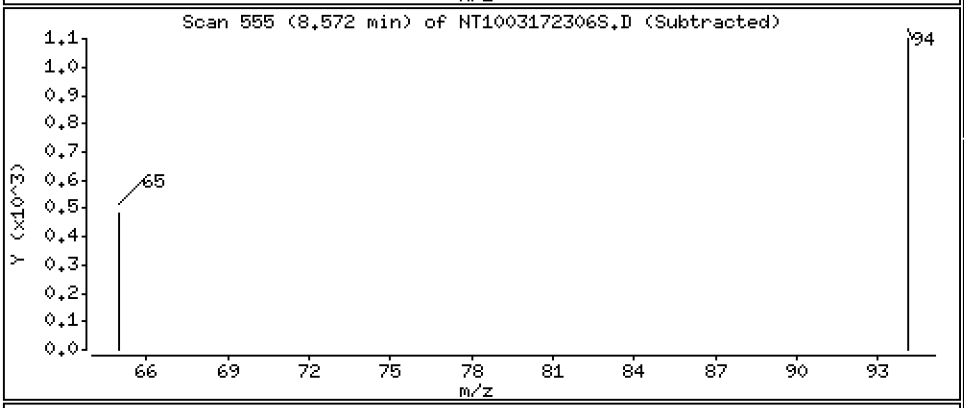
Column diameter: 0.25

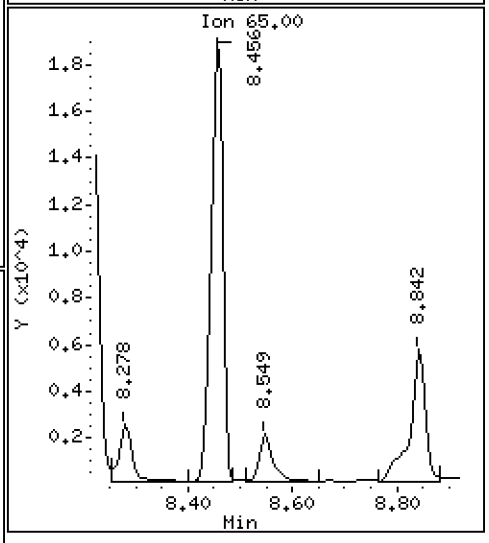
3 Phenol

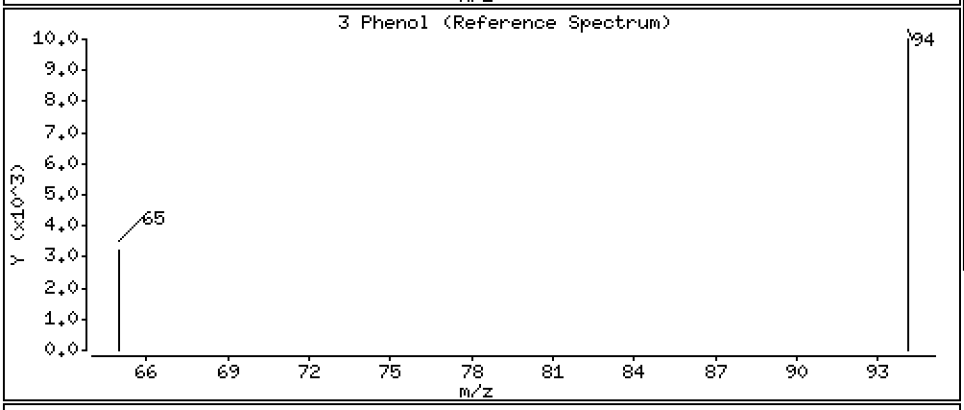
Concentration: 0.03008 ug/L

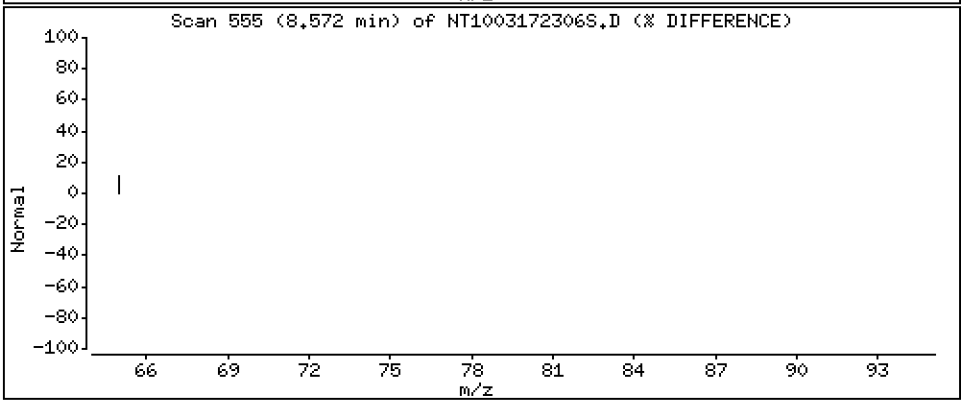












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK2

Volume Injected (uL): 1.0

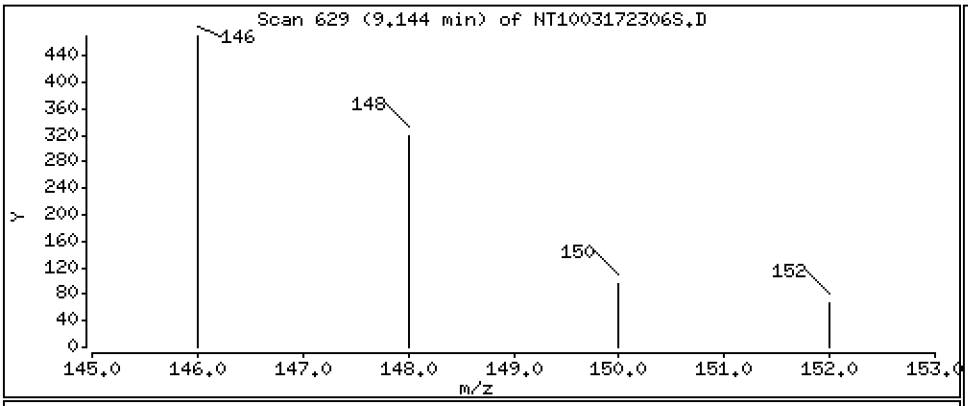
Operator: JGR

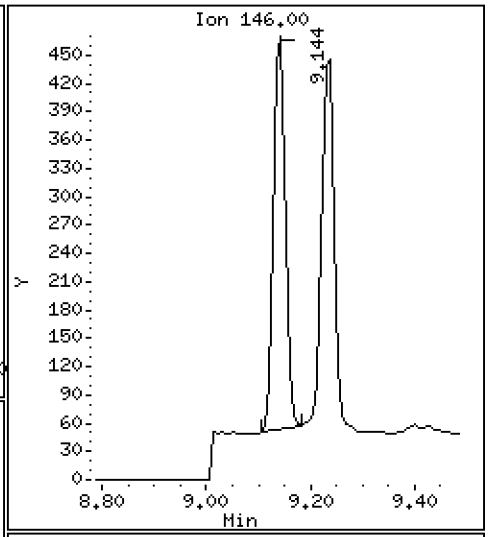
Column phase: ZB-5msi

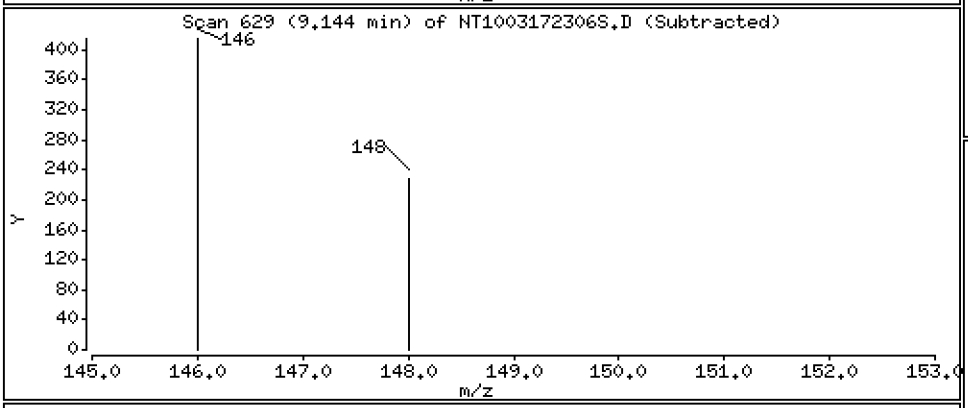
Column diameter: 0.25

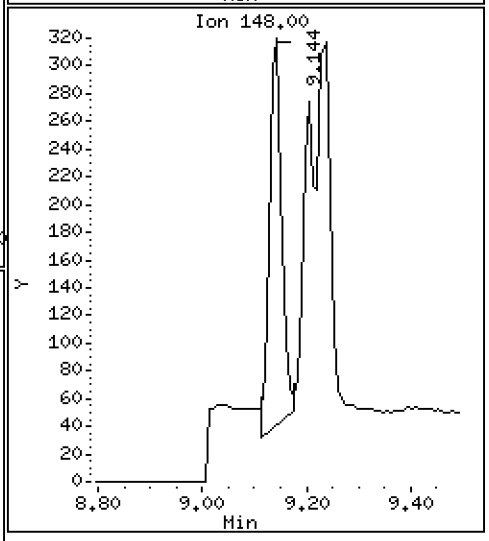
7 1,3-Dichlorobenzene

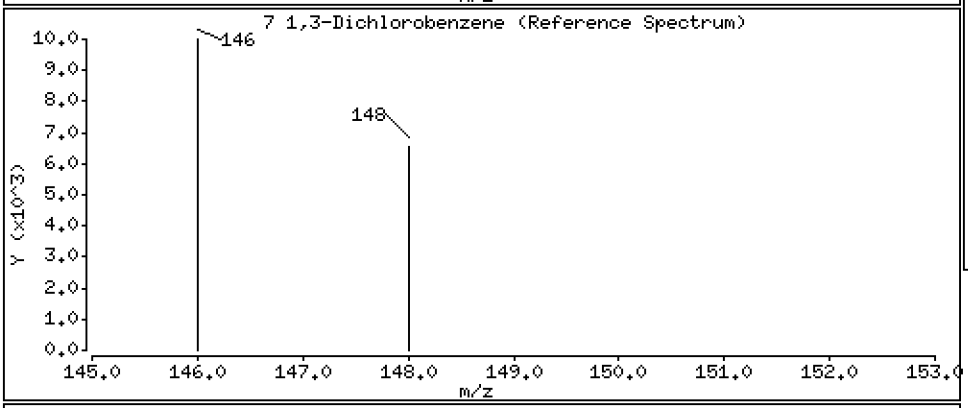
Concentration: 0.009167 ug/L

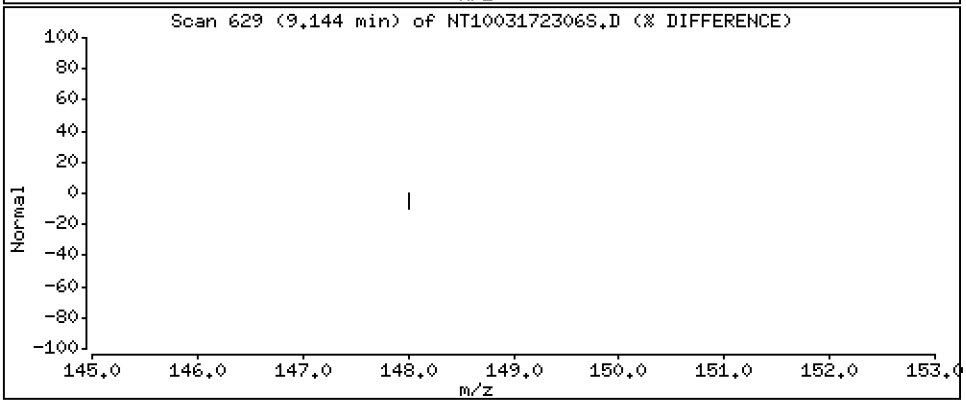












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK2

Volume Injected (uL): 1.0

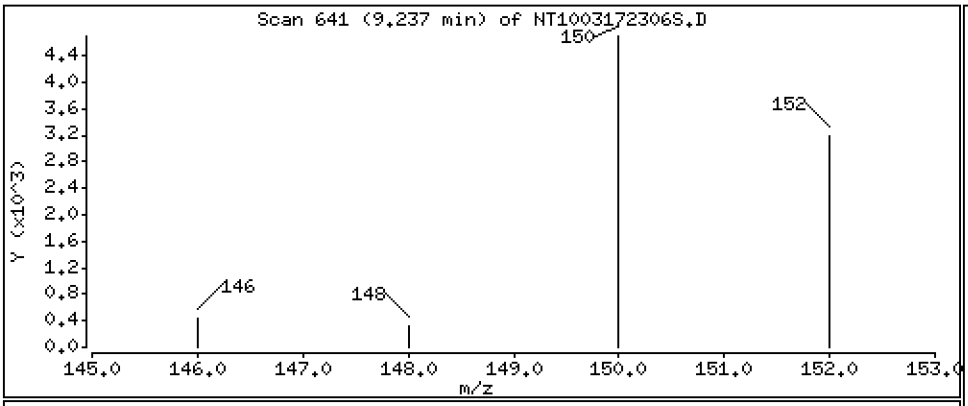
Operator: JGR

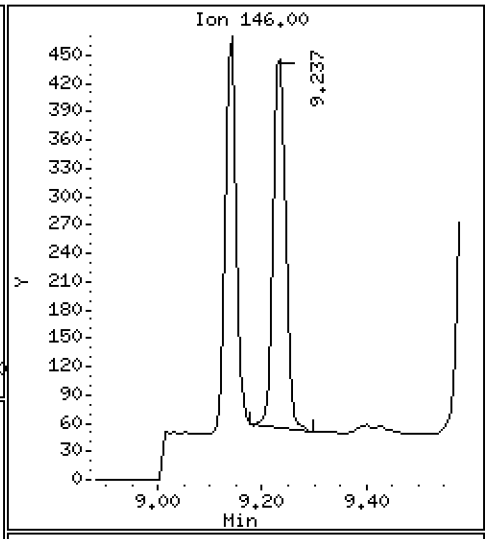
Column phase: ZB-5msi

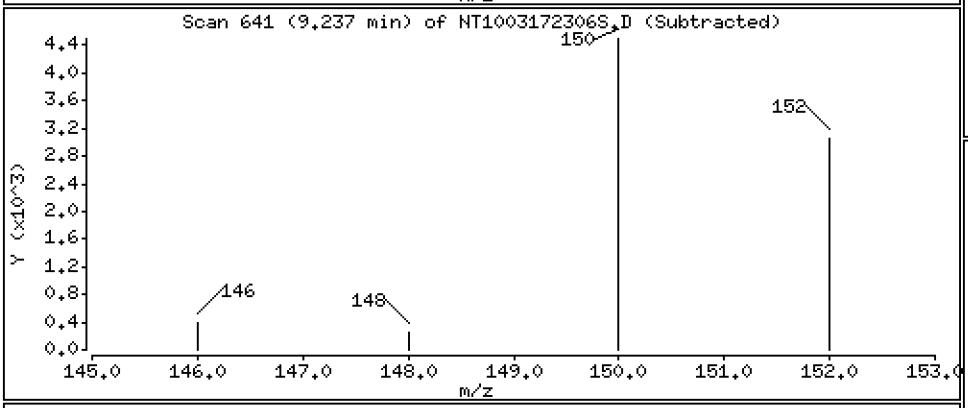
Column diameter: 0.25

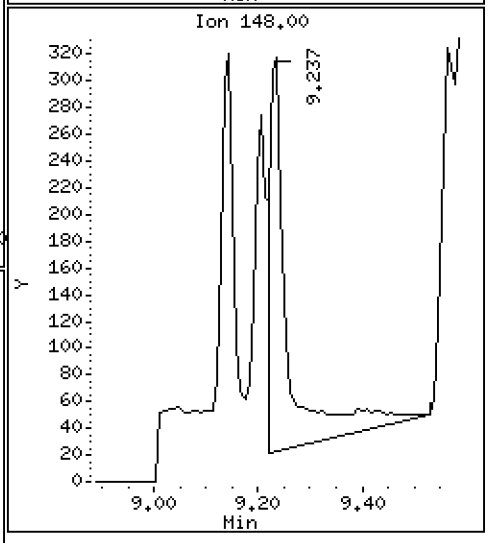
9 1,4-Dichlorobenzene

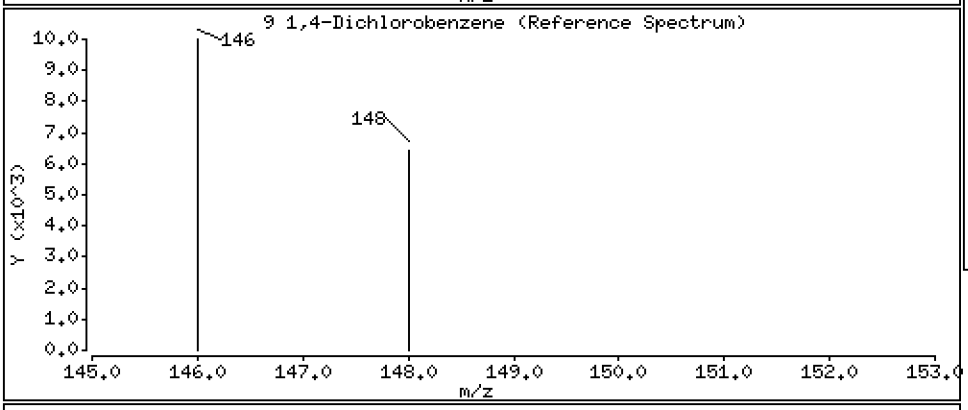
Concentration: 0.009481 ug/L

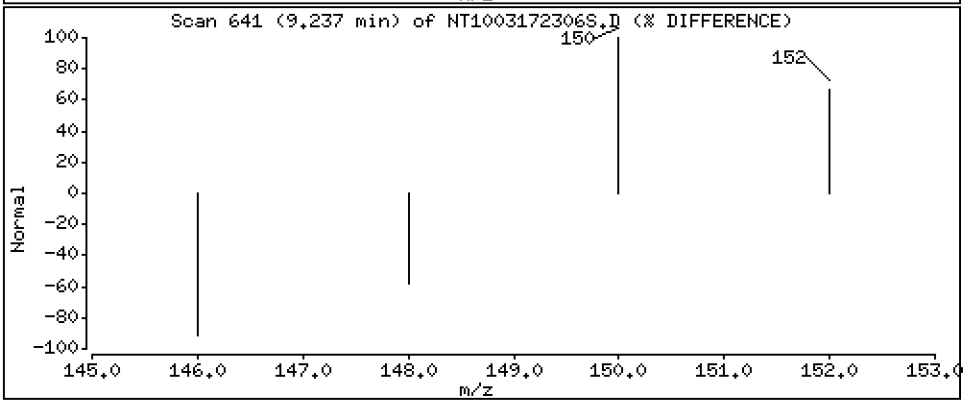












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK2

Volume Injected (uL): 1.0

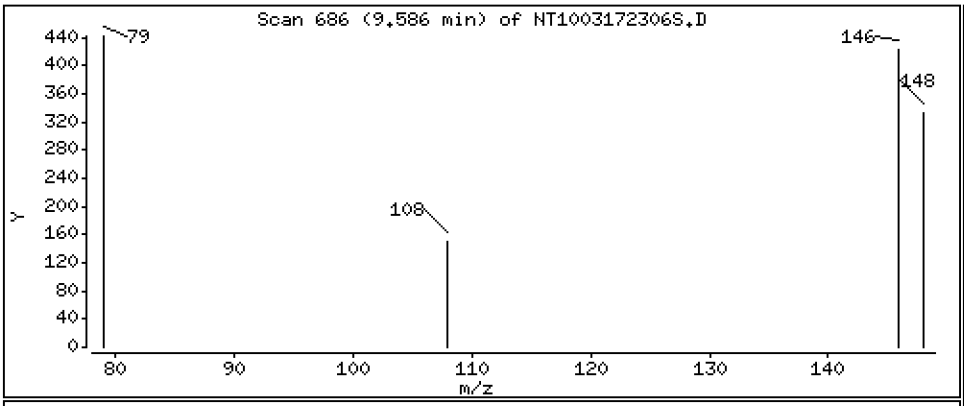
Operator: JGR

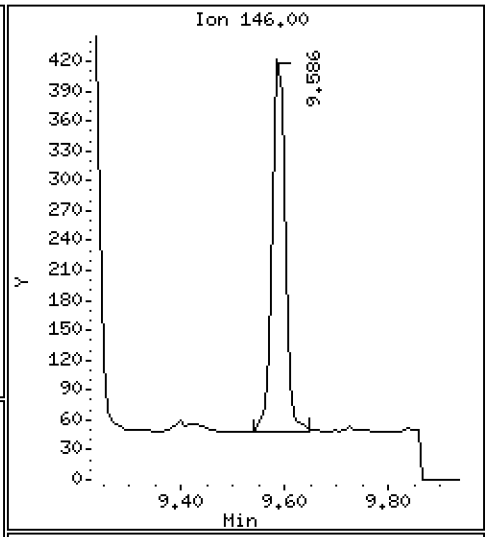
Column phase: ZB-5msi

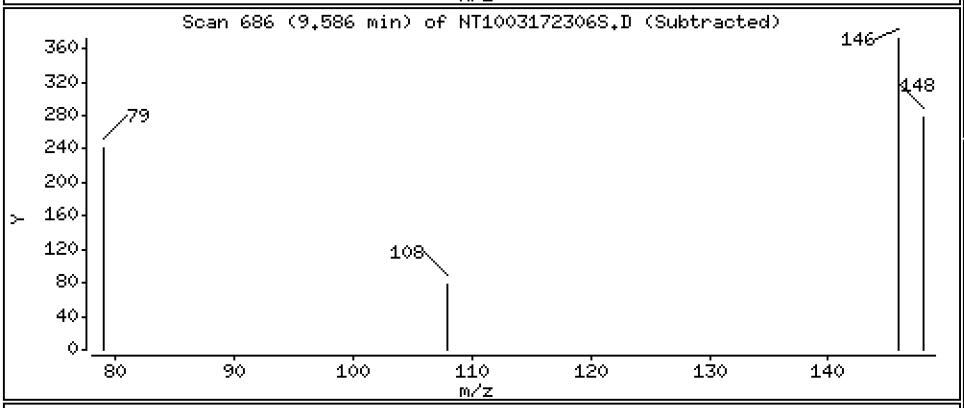
Column diameter: 0.25

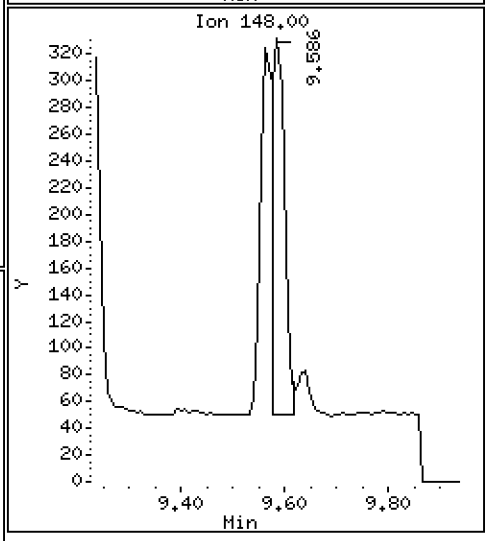
12 1,2-Dichlorobenzene

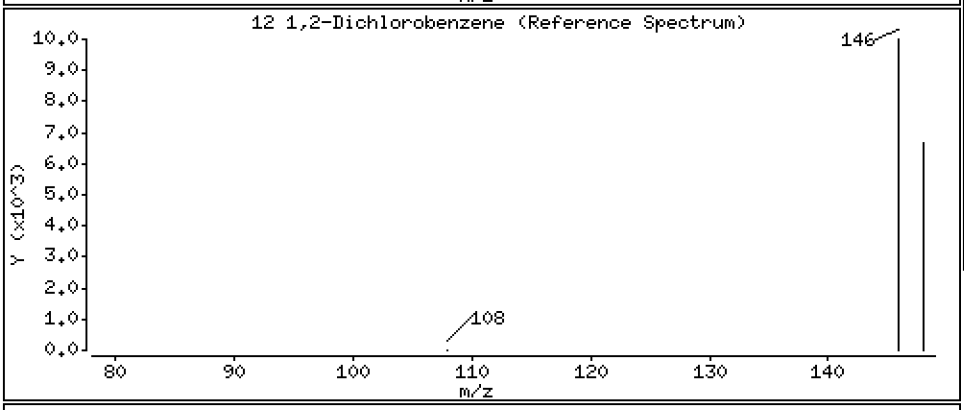
Concentration: 0.009487 ug/L

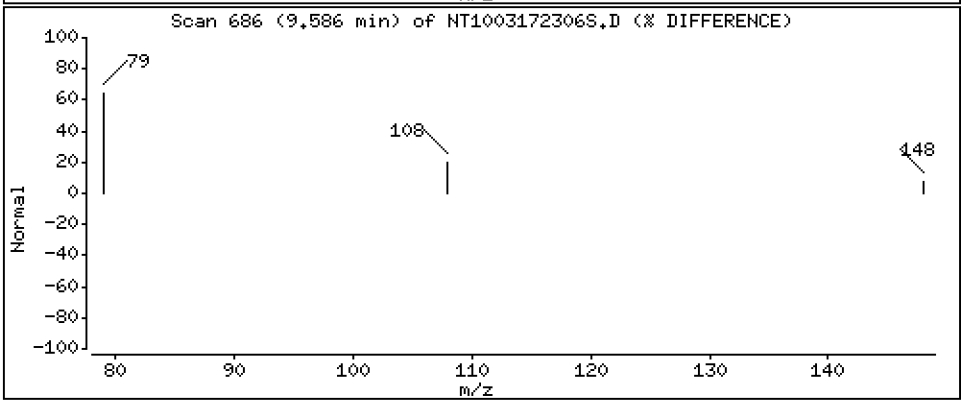












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK2

Volume Injected (uL): 1.0

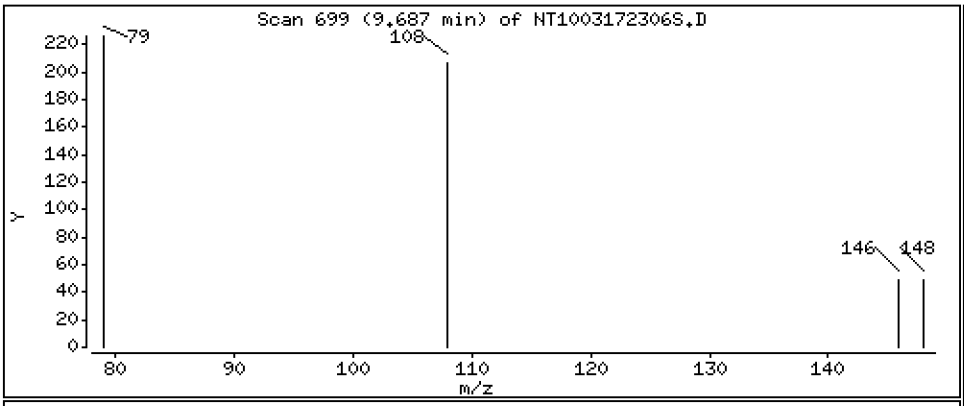
Operator: JGR

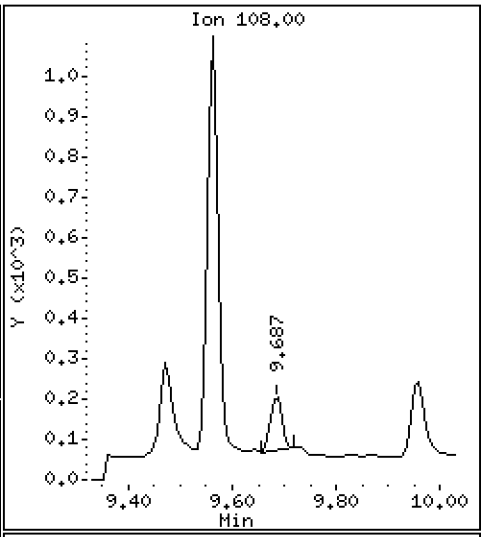
Column phase: ZB-5msi

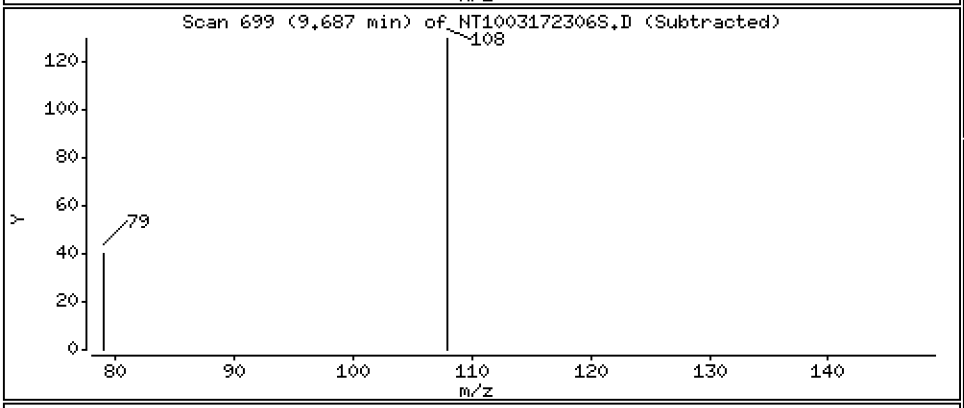
Column diameter: 0.25

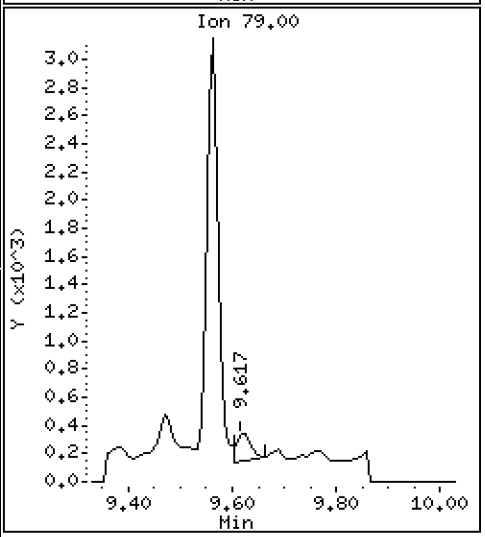
13 2-Methylphenol

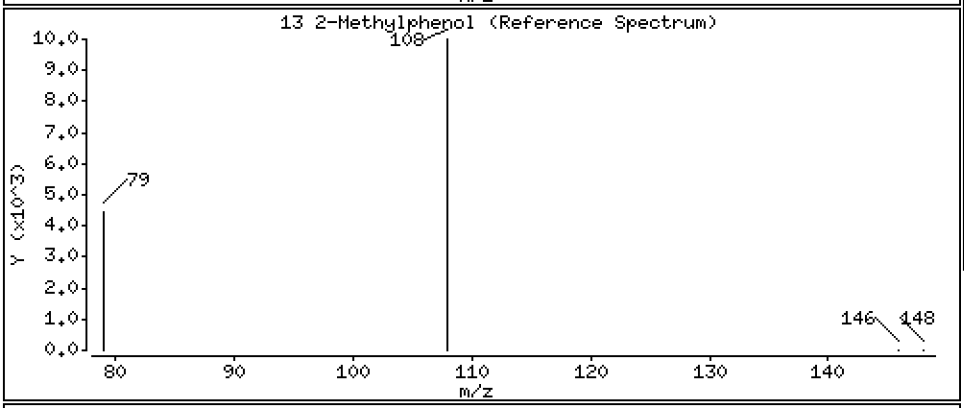
Concentration: 0.003883 ug/L

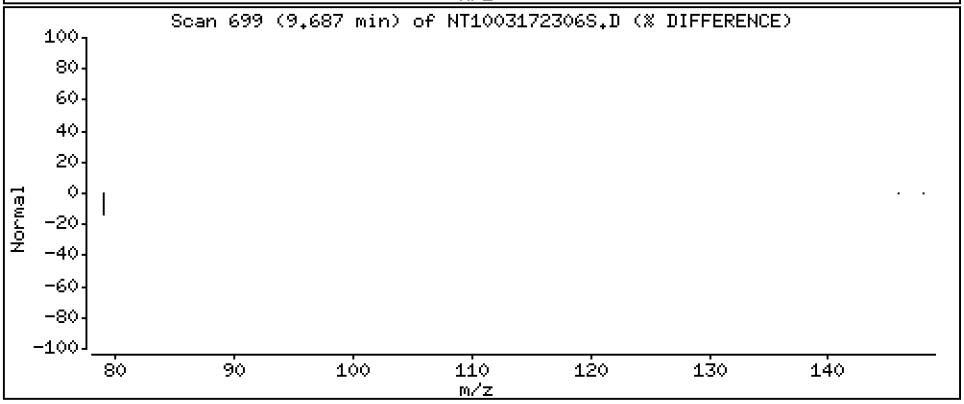












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK2

Volume Injected (uL): 1.0

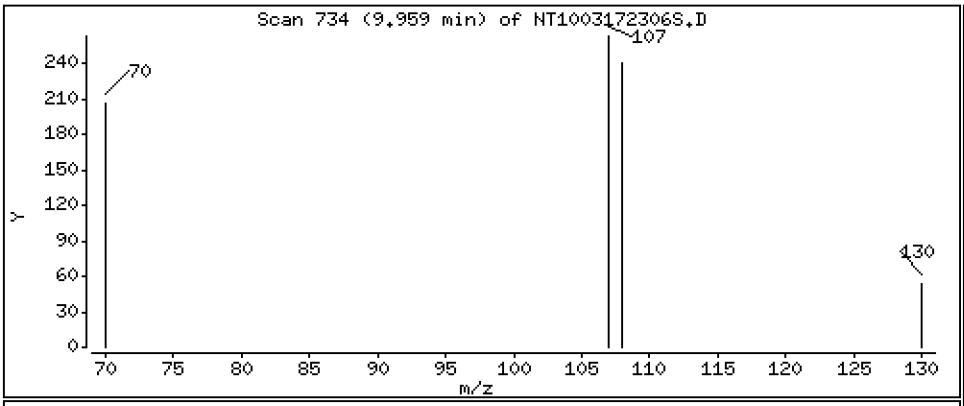
Operator: JGR

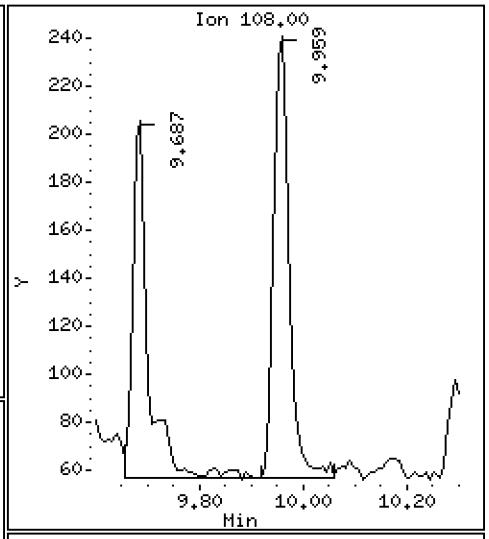
Column phase: ZB-5msi

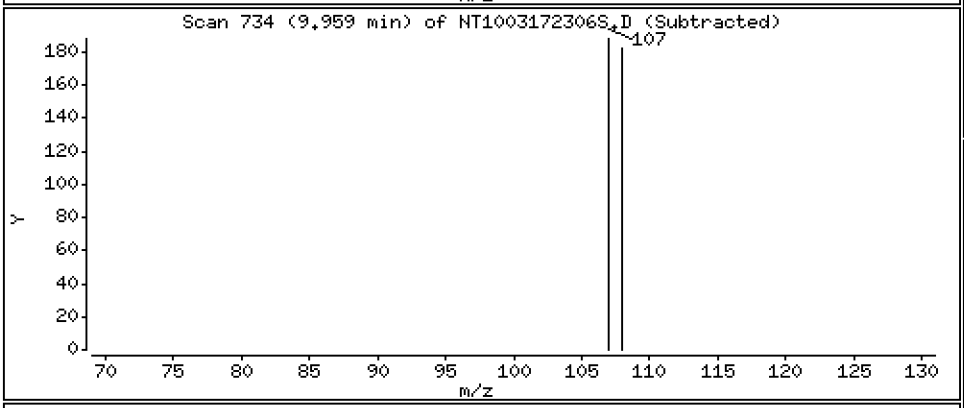
Column diameter: 0.25

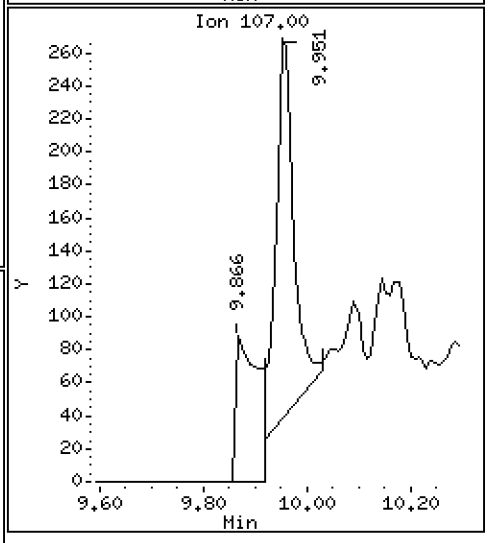
15 4-Methylphenol

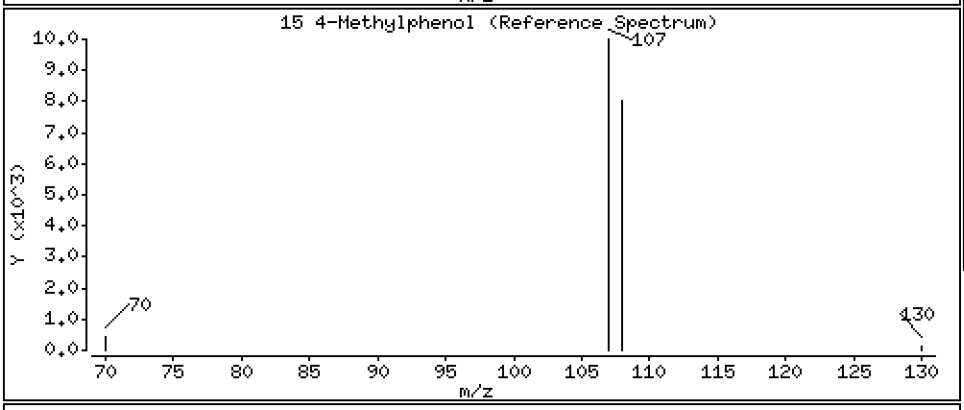
Concentration: 0.007095 ug/L

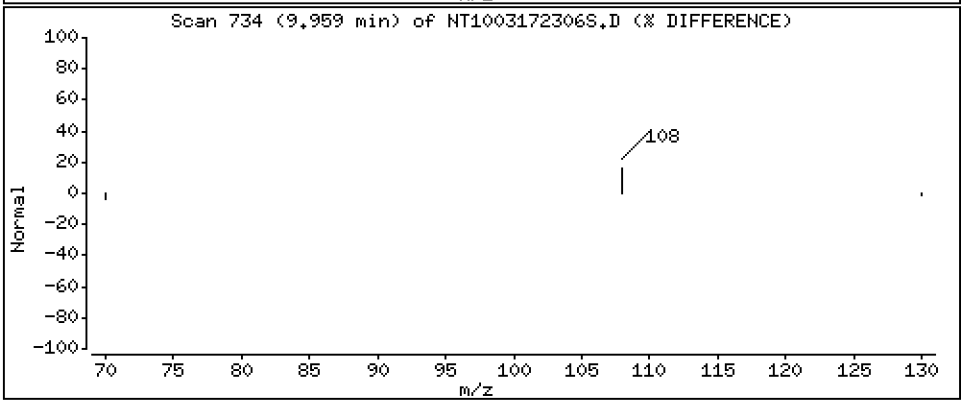












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK2

Volume Injected (uL): 1.0

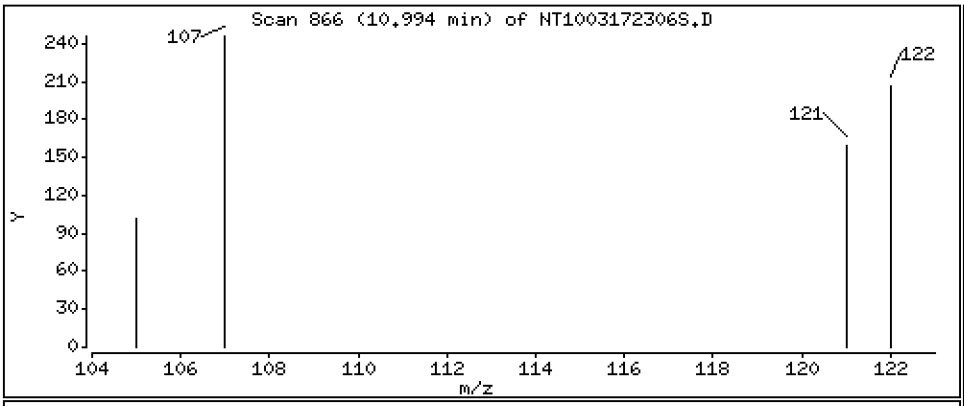
Operator: JGR

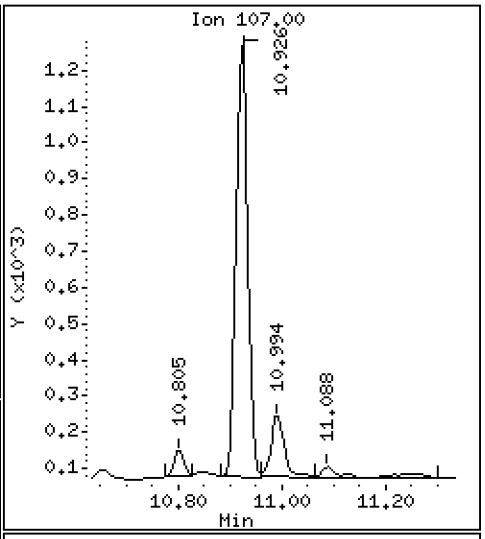
Column phase: ZB-5msi

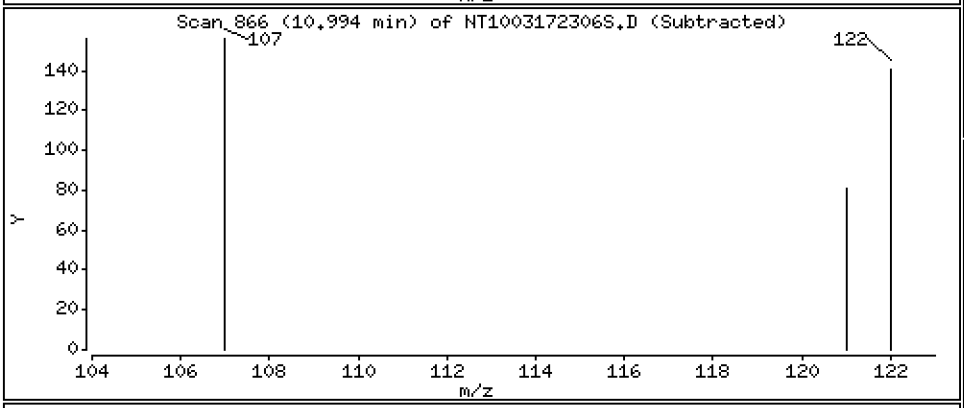
Column diameter: 0.25

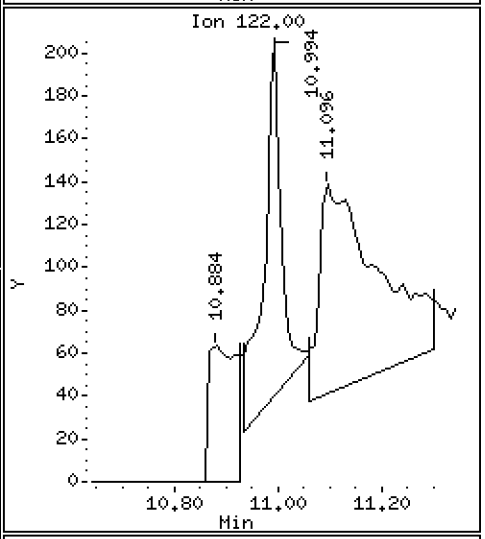
22 2,4-Dimethylphenol

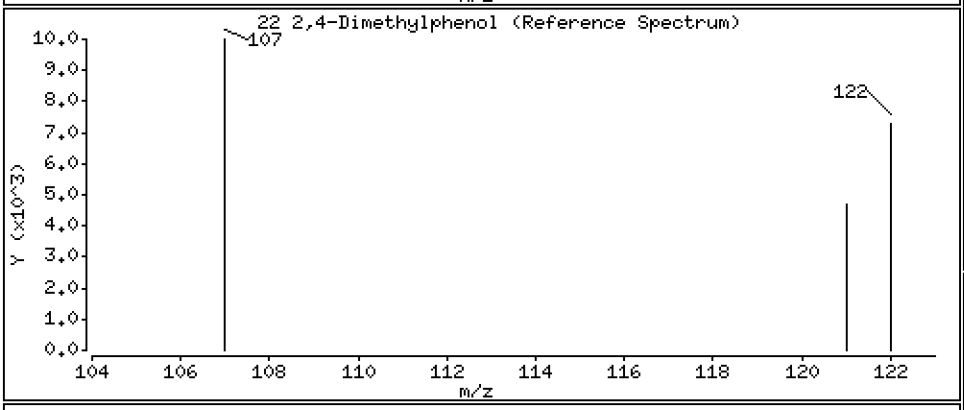
Concentration: 0.005777 ug/L

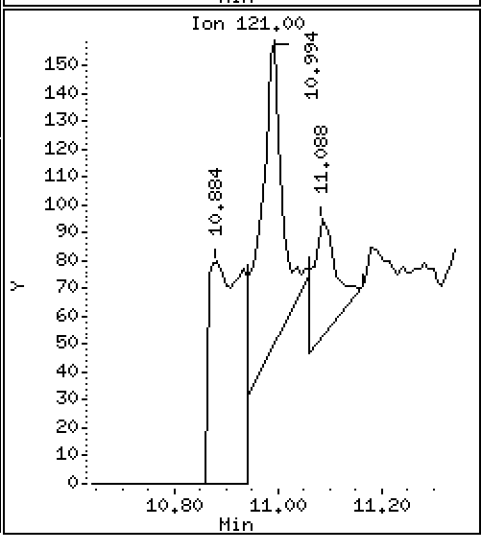


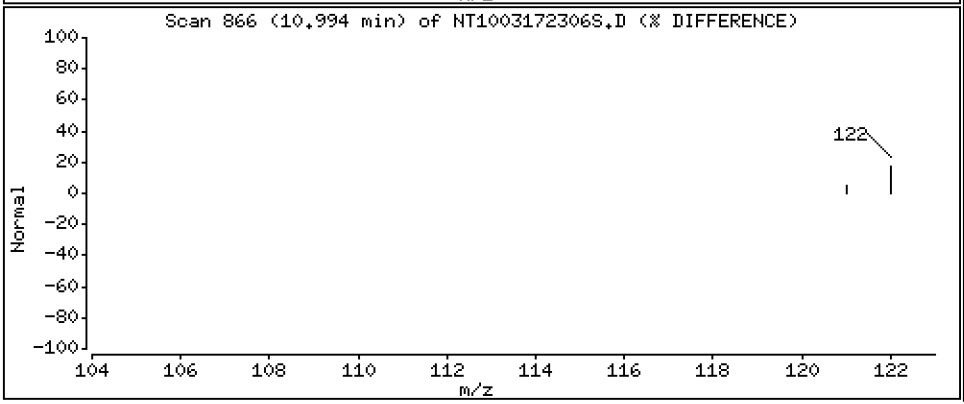












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK2

Volume Injected (uL): 1.0

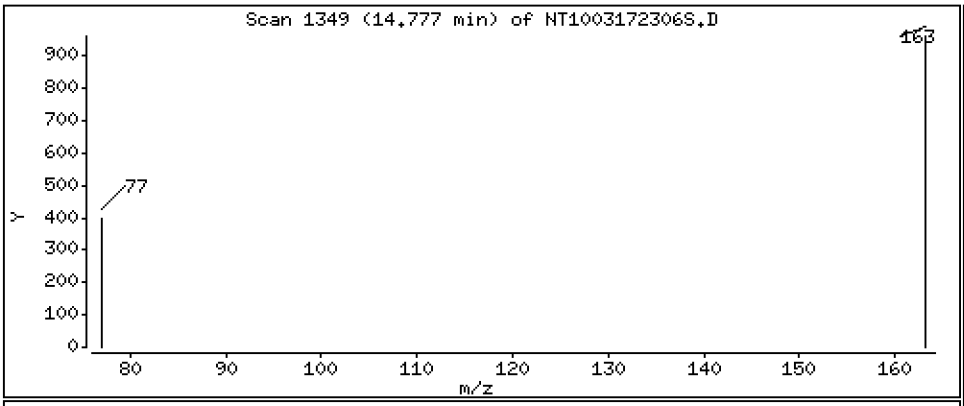
Operator: JGR

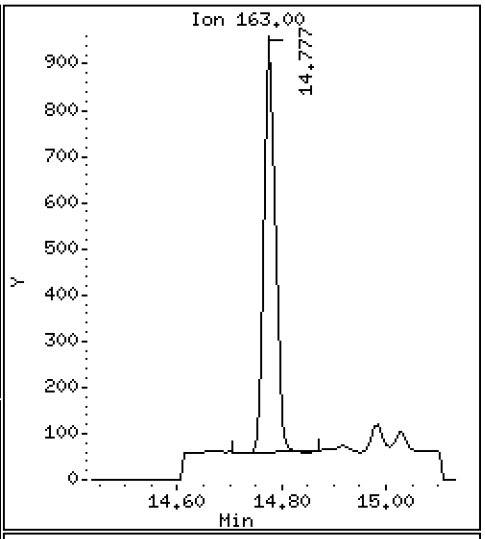
Column phase: ZB-5msi

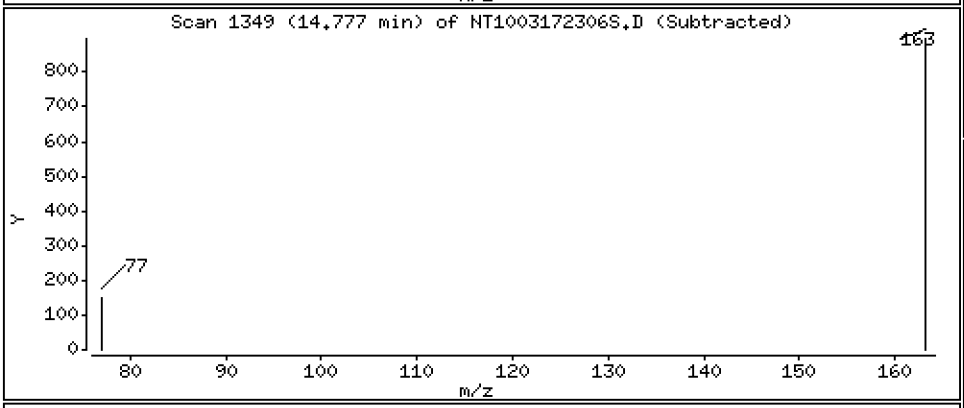
Column diameter: 0.25

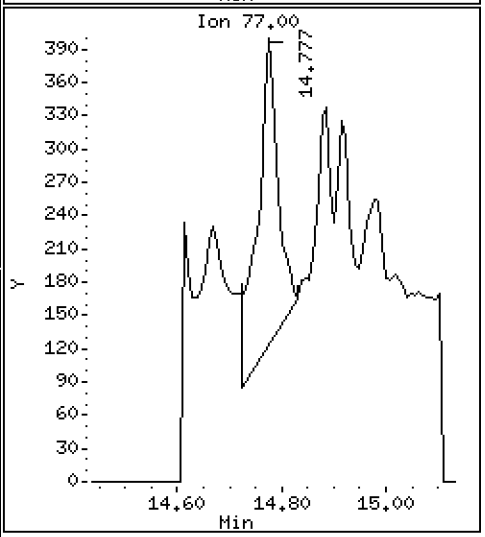
39 Dimethylphthalate

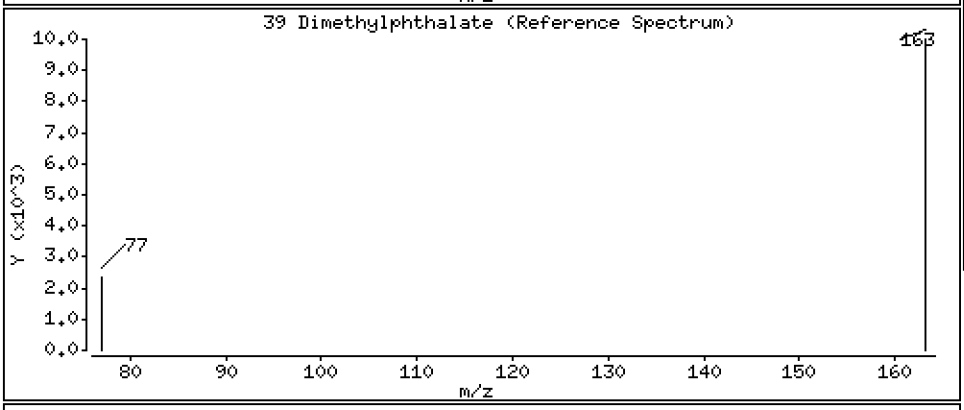
Concentration: 0.01373 ug/L

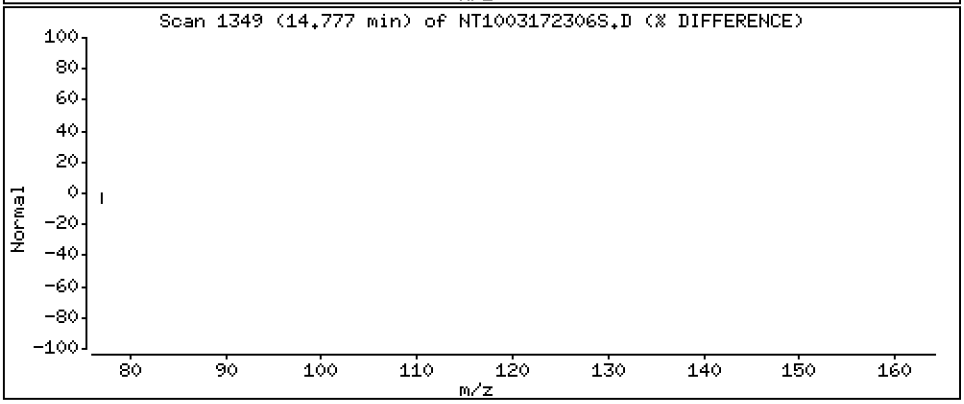












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172306S.D

Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK2

Volume Injected (uL): 1.0

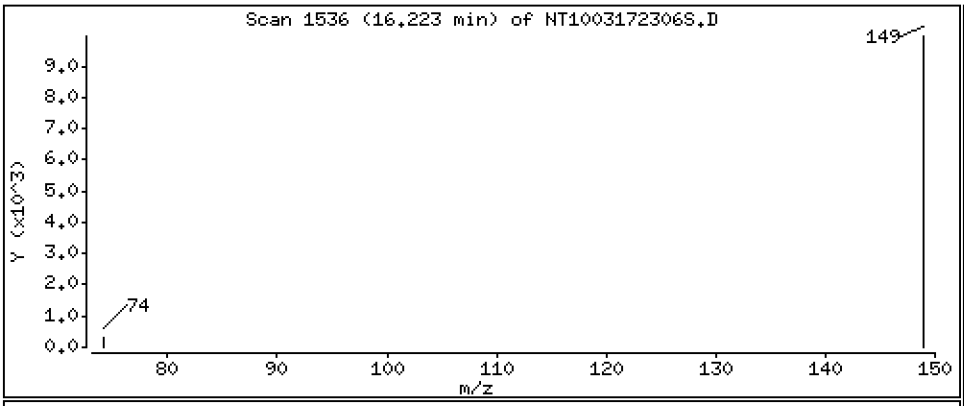
Operator: JGR

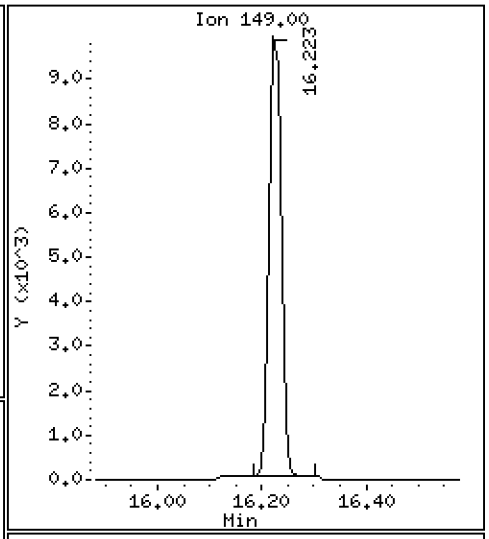
Column phase: ZB-5msi

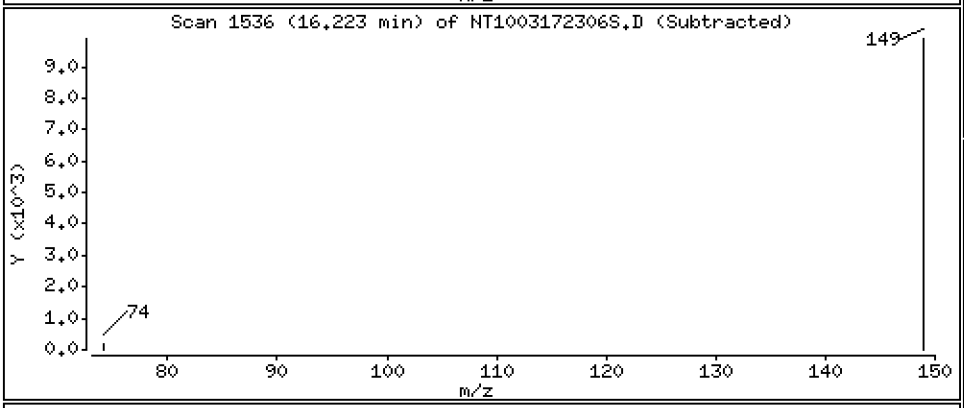
Column diameter: 0.25

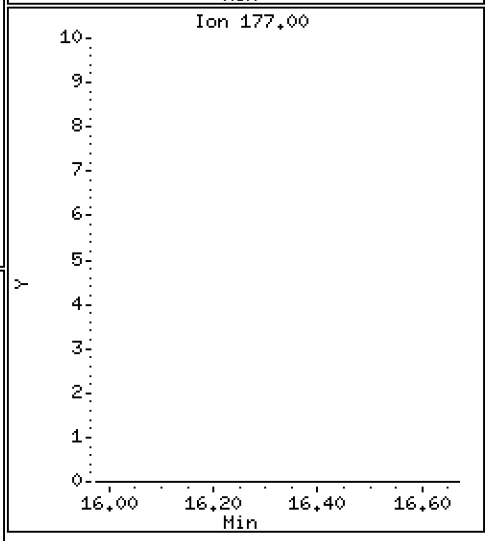
50 Diethylphthalate

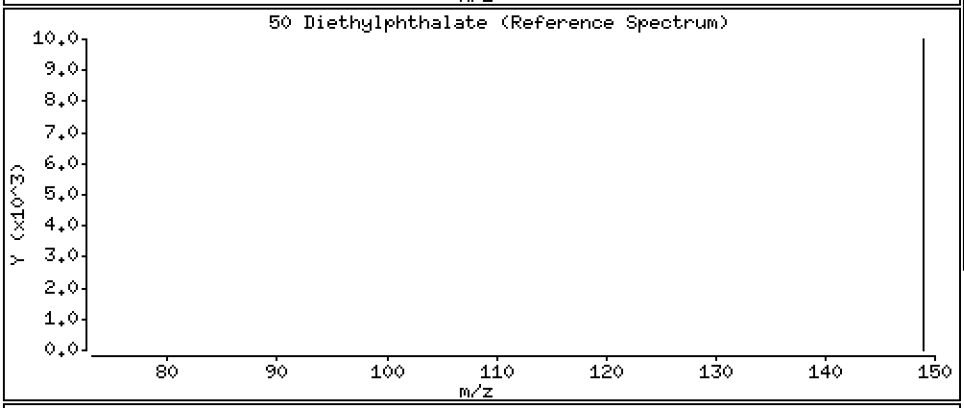
Concentration: 0.1544 ug/L

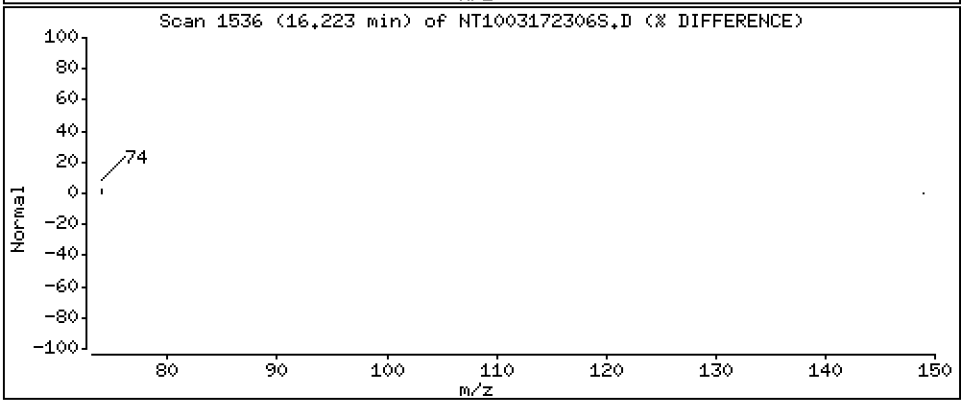












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK2

Volume Injected (uL): 1.0

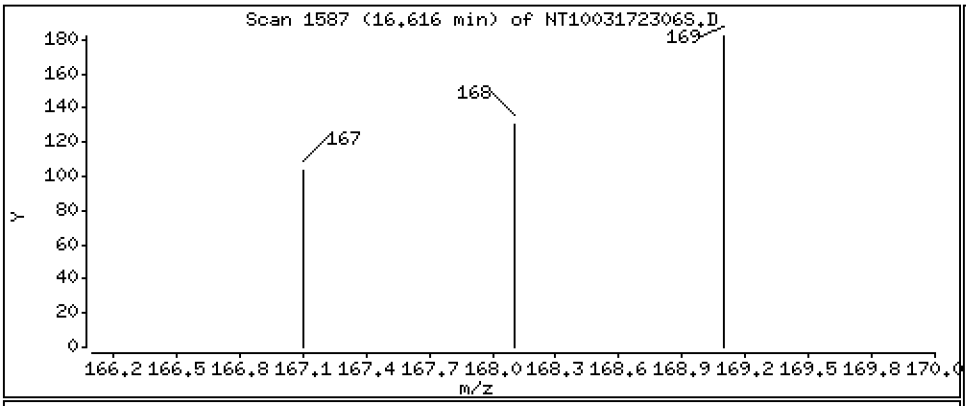
Operator: JGR

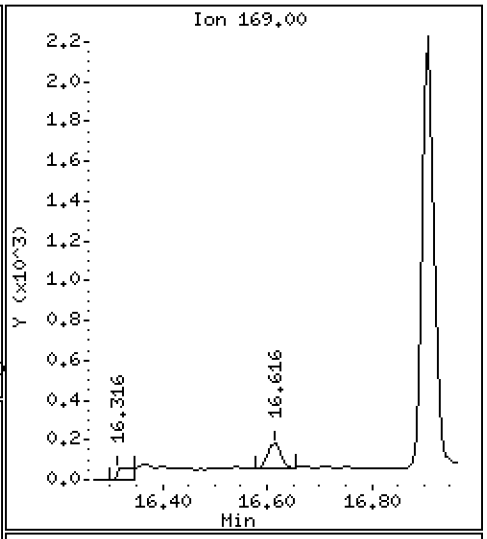
Column phase: ZB-5msi

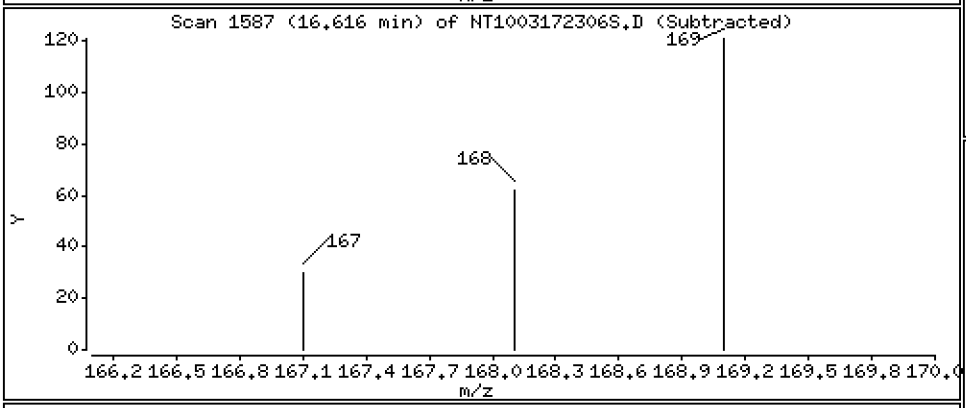
Column diameter: 0.25

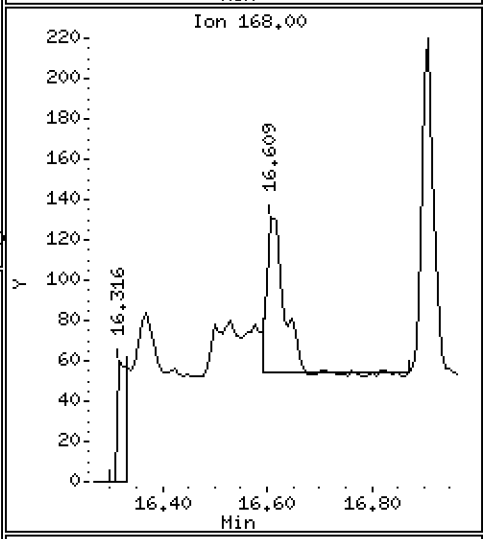
54 N-Nitrosodiphenylamine

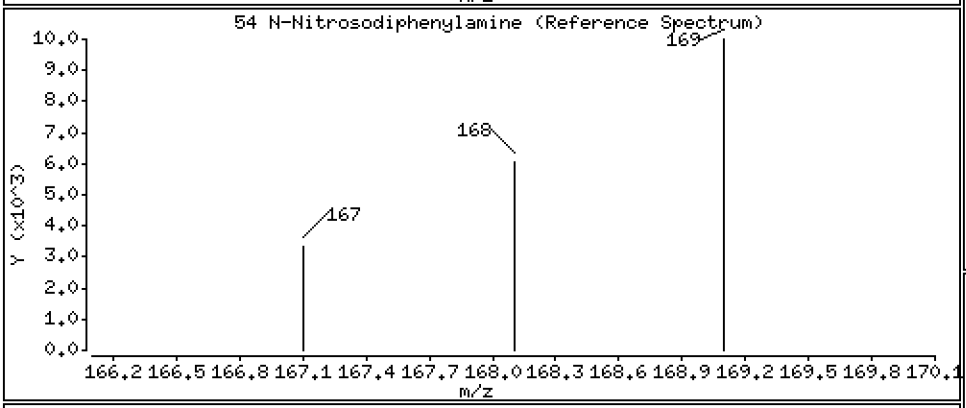
Concentration: 0.002742 ug/L

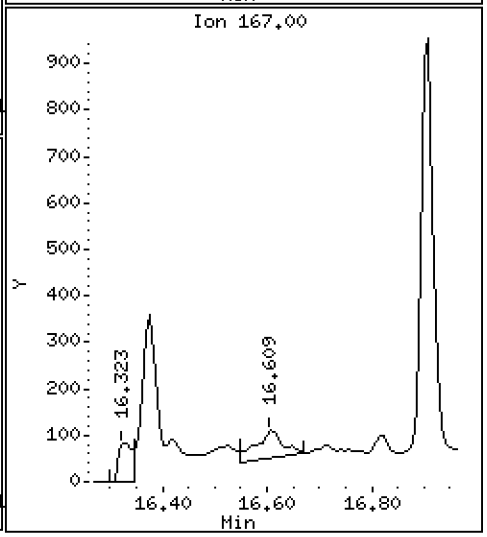


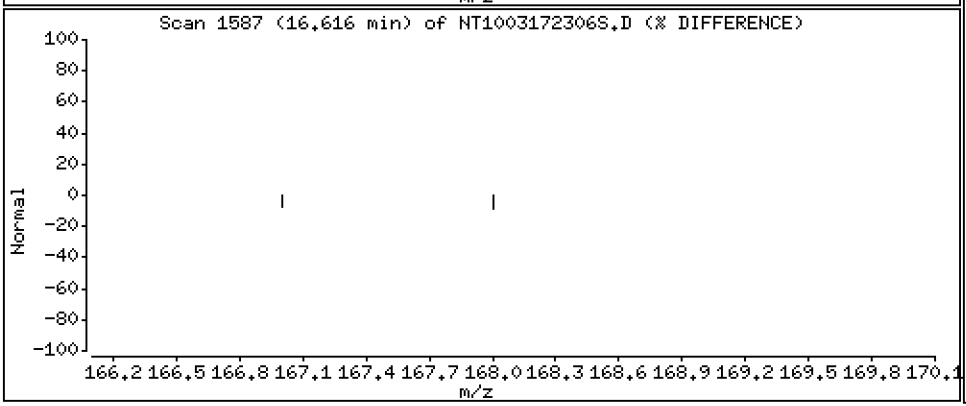












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Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK2

Volume Injected (uL): 1.0

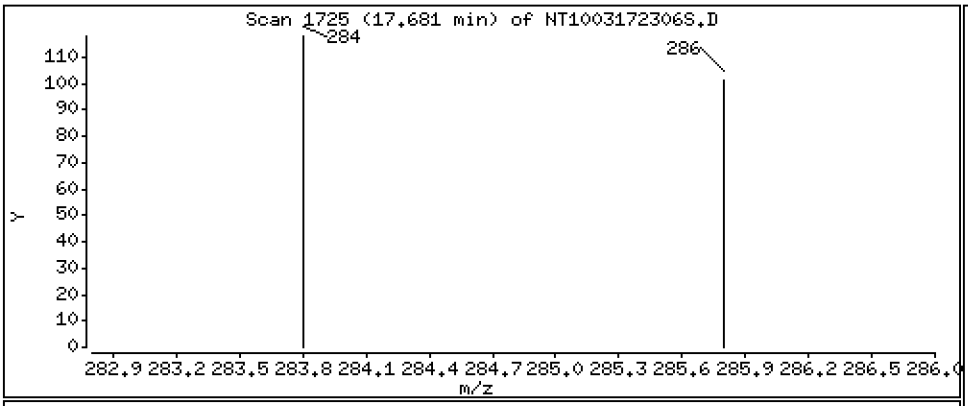
Operator: JGR

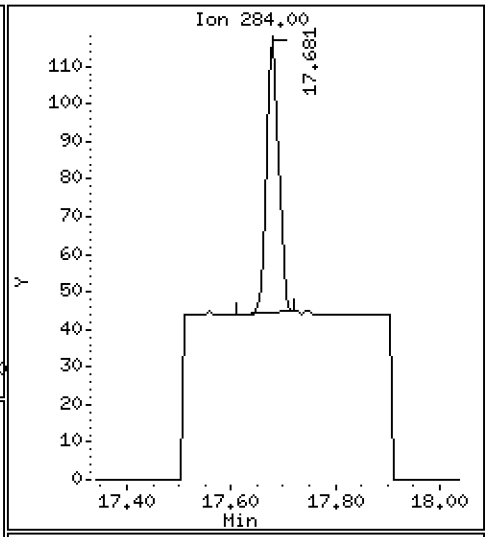
Column phase: ZB-5msi

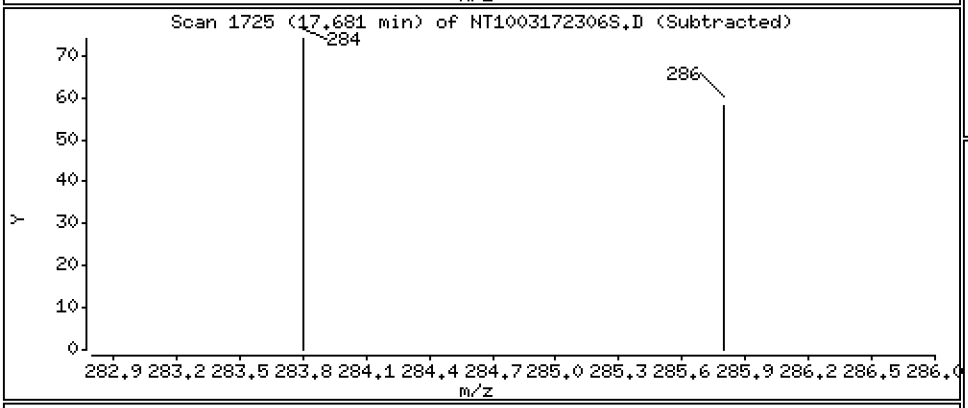
Column diameter: 0.25

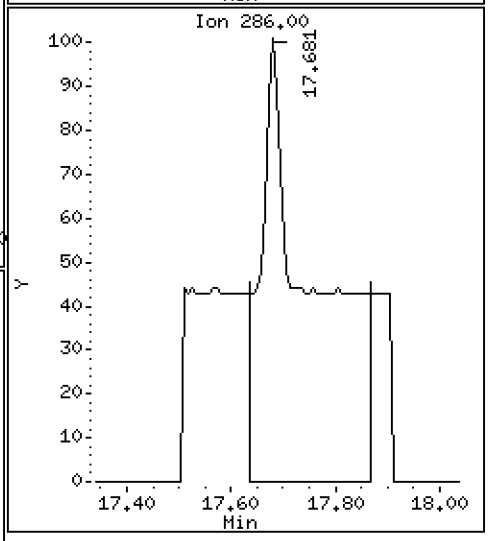
57 Hexachlorobenzene

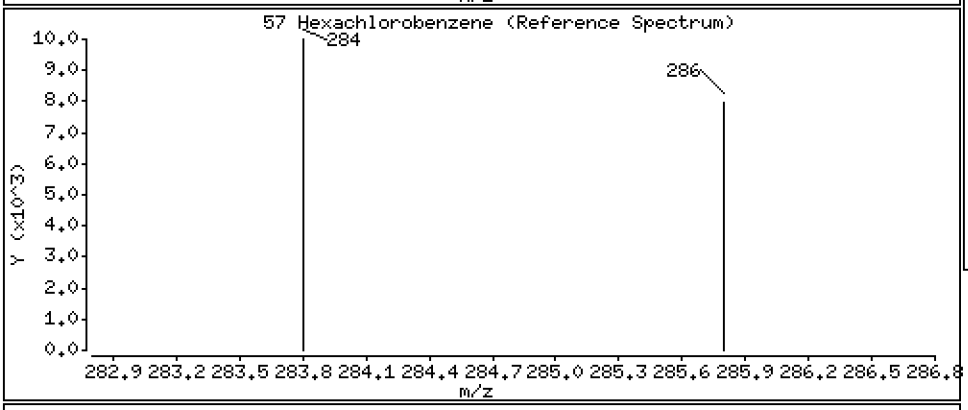
Concentration: 0.003439 ug/L

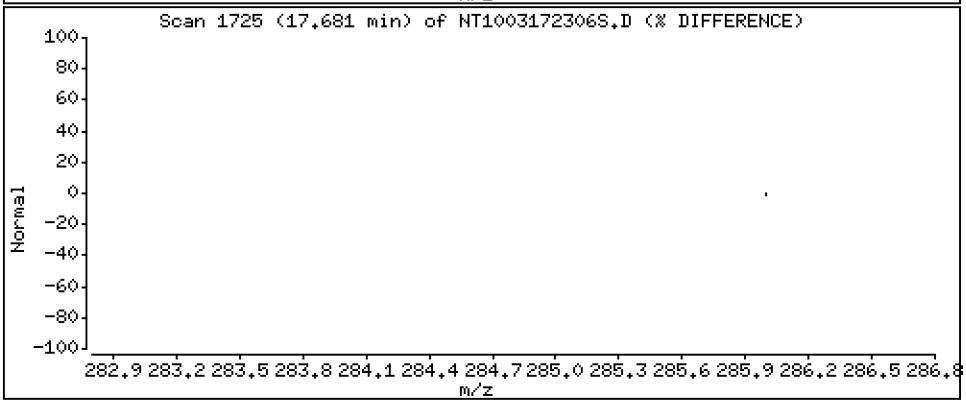












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172306S.D

Date : 17-MAR-2023 21:36

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BLK2

Volume Injected (uL): 1.0

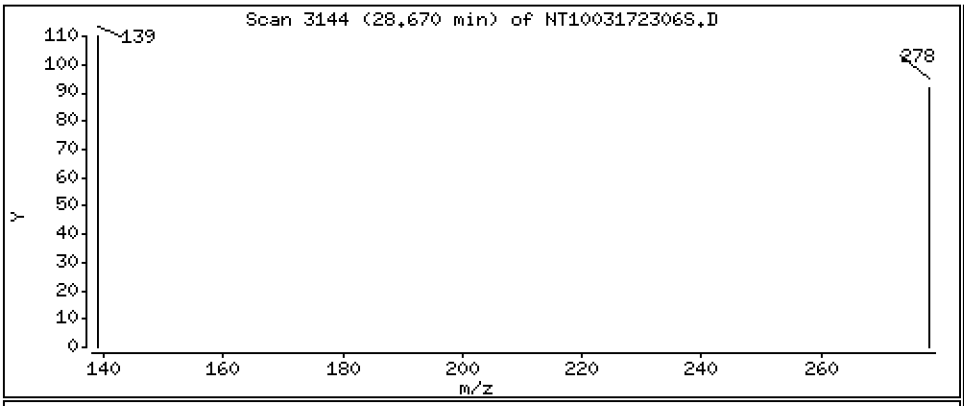
Operator: JGR

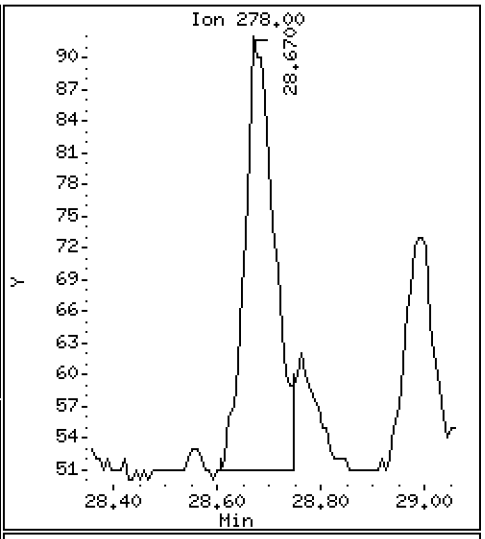
Column phase: ZB-5msi

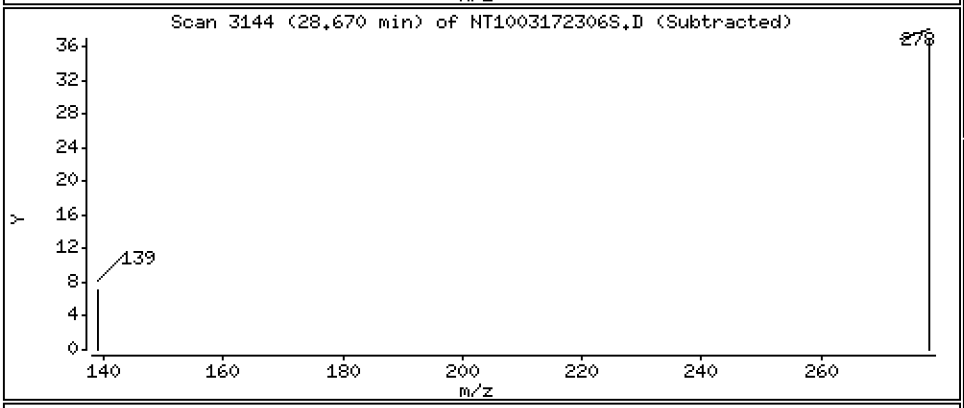
Column diameter: 0.25

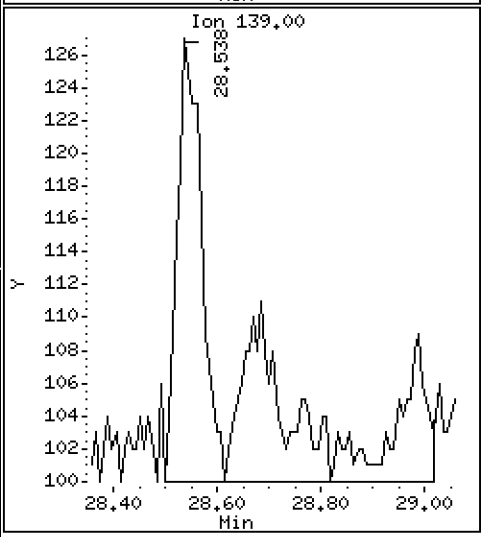
79 Dibenzo(a,h)anthracene

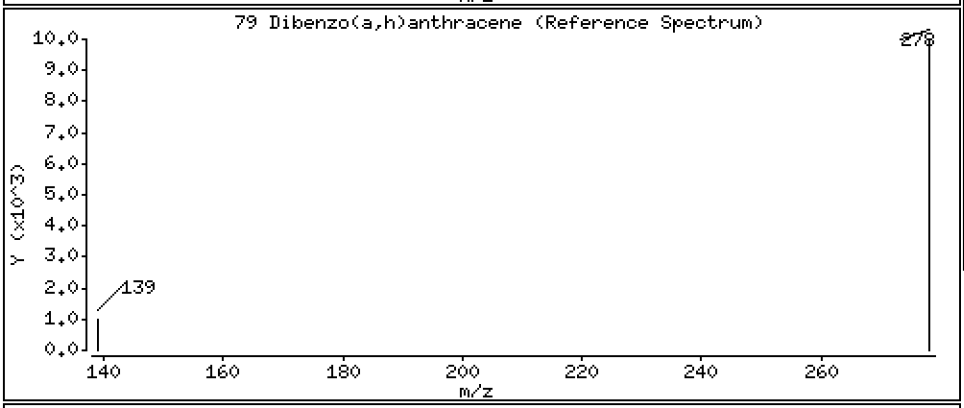
Concentration: 0.001183 ug/L

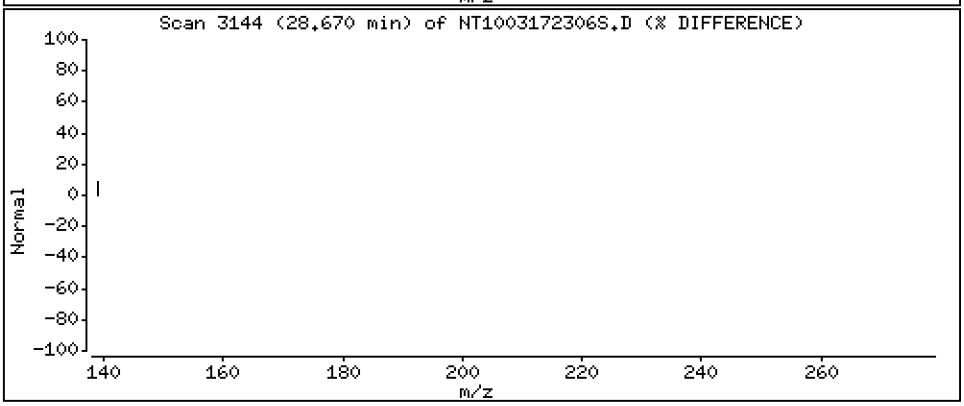












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172306S.D
Lab Smp Id: BLB0495-BLK2
Inj Date : 17-MAR-2023 21:36 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLB0495-BLK2
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Meth Date : 30-Mar-2023 14:37 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.987	6.980	(0.759)	150635	2.82267	2.823(R)
3	Phenol	94	8.571	8.572	(0.931)	2202	0.03008	0.03008
7	1,3-Dichlorobenzene	146	9.143	9.136	(0.993)	628	0.00917	0.009167(M)
* 8	1,4-Dichlorobenzene-d4	152	9.206	9.206	(1.000)	175983	4.00000	
9	1,4-Dichlorobenzene	146	9.237	9.229	(1.003)	627	0.00948	0.009481(M)
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	9.586	9.586	(1.041)	617	0.00949	0.009487(M)
13	2-Methylphenol	108	9.687	9.679	(1.052)	197	0.00388	0.003883(M)
15	4-Methylphenol	108	9.958	9.951	(1.082)	374	0.00709	0.007095
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
22	2,4-Dimethylphenol	107	10.994	10.985	(0.942)	311	0.00578	0.005777
24	Benzoic acid	105	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.673	11.674	(1.000)	622812	4.00000	
30	Hexachlorobutadiene	225	Compound Not Detected.					
39	Dimethylphthalate	163	14.776	14.784	(0.967)	1300	0.01373	0.01373(M)
* 42	Acenaphthene-d10	162	15.279	15.279	(1.000)	300088	4.00000	
50	Diethylphthalate	149	16.222	16.230	(1.062)	15148	0.15441	0.1544
54	N-Nitrosodiphenylamine	169	16.616	16.616	(0.908)	203	0.00274	0.002742
57	Hexachlorobenzene	284	17.681	17.689	(0.966)	114	0.00344	0.003439(M)
58	Pentachlorophenol	266	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
* 59 Phenanthrene-d10	188	18.300	18.308	(1.000)	551891	4.00000	
$ 66 Terphenyl-d14	244	21.426	21.434	(0.919)	311391	4.37842	4.378(R)
67 Butylbenzylphthalate	149	Compound Not Detected.					
* 69 Chrysene-d12	240	23.323	23.331	(1.000)	436488	4.00000	
* 77 Perylene-d12	264	25.971	25.986	(1.000)	422256	4.00000	
79 Dibenzo(a,h)anthracene	278	28.669	28.708	(1.104)	164	0.00118	0.001183(M)
90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172306S.D
Lab Smp Id: BLB0495-BLK2
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	184039	92020	368078	175983	-4.38
27 Naphthalene-d8	659935	329968	1319870	622812	-5.63
42 Acenaphthene-d10	325775	162888	651550	300088	-7.88
59 Phenanthrene-d10	616249	308125	1232498	551891	-10.44
69 Chrysene-d12	526222	263111	1052444	436488	-17.05
77 Perylene-d12	563117	281559	1126234	422256	-25.01

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.21	8.71	9.71	9.21	-0.00
27 Naphthalene-d8	11.67	11.17	12.17	11.67	-0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	-0.00
59 Phenanthrene-d10	18.31	17.81	18.81	18.30	-0.04
69 Chrysene-d12	23.33	22.83	23.83	23.32	-0.03
77 Perylene-d12	25.99	25.49	26.49	25.97	-0.06

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

REVIEW SUMMARY FOR FILE - NT1003172306S.D

Lab ID: BLB0495-BLK2
nt10.i, 20230317.b\20230317.b\SIMABN2.m,   17-MAR-2023 21:36

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: 20230317.b/NT1003172303S.D

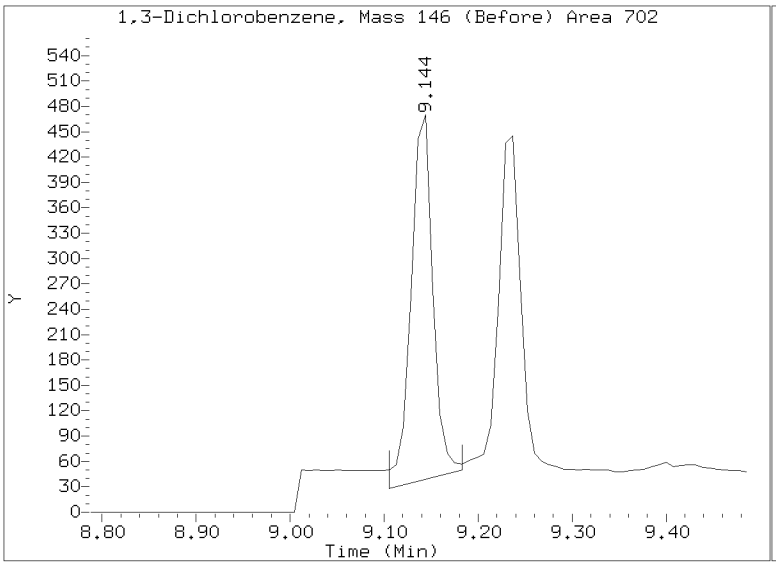
On Column LOD for nt10.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

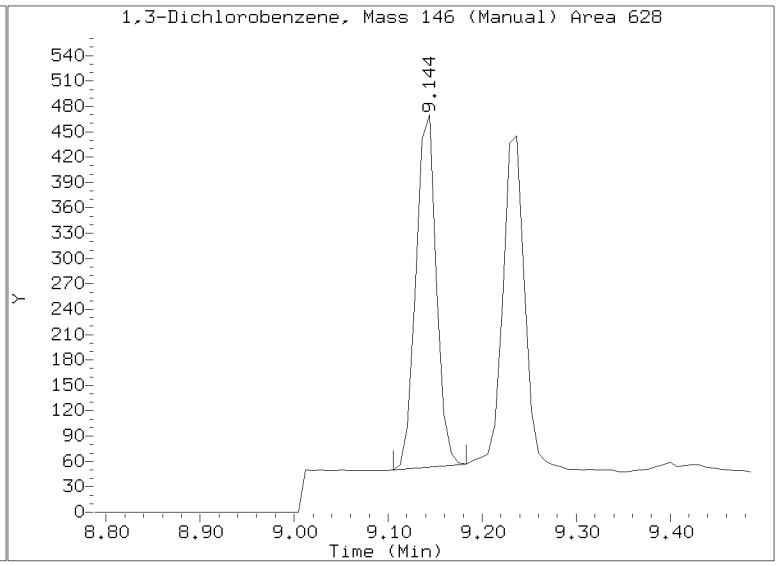
Exception: 1,2,4-Trichlorobenzene 0.0010

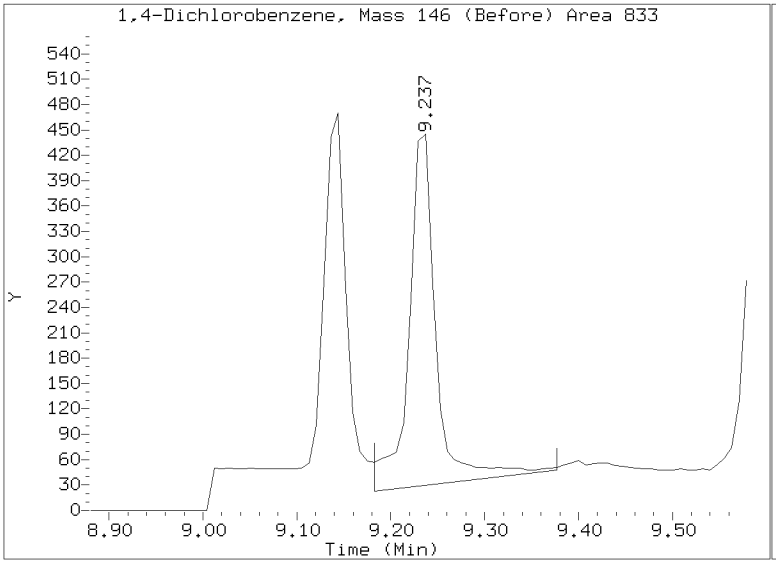
* Only compounds listed in the work order have been verified by the analyst *

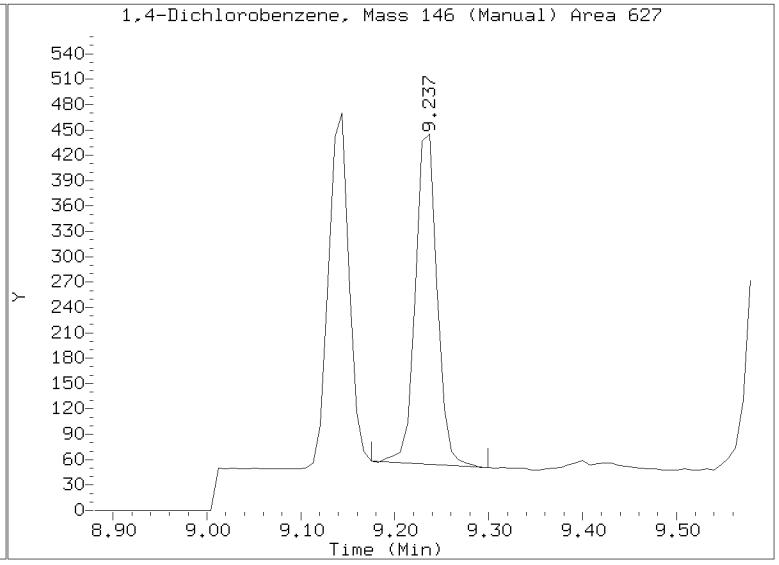
Quant Ion Manual Peak Adjustment Report

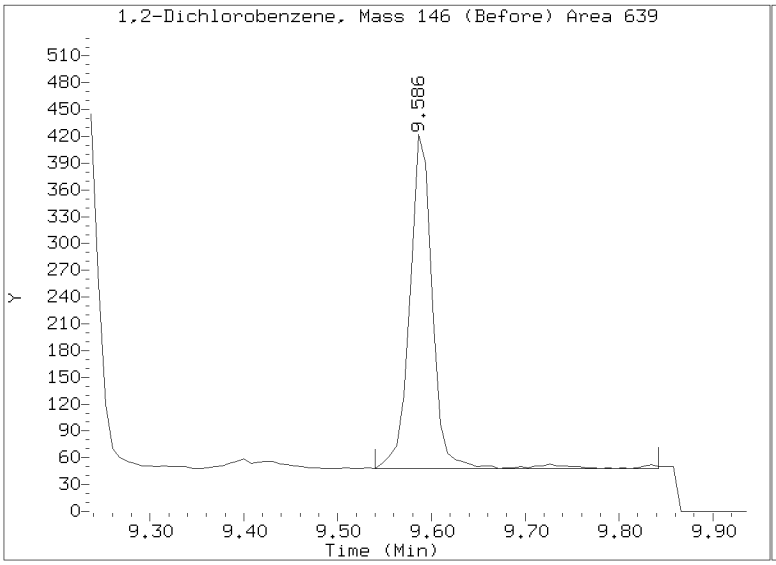
Datafile: //target/share/chem3/nt10.i/20230317.b/20230317.b/NT1003172306S.D
Injection Date: 17-MAR-2023 21:36
Lab ID:BLB0495-BLK2 Client ID:
Report Date: 03/30/2023 14:55

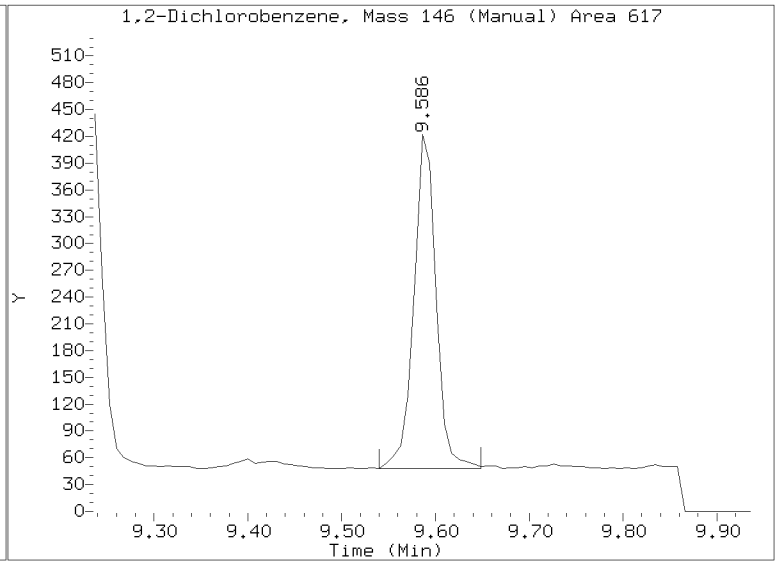












Quant Ion Manual Peak Adjustment Report

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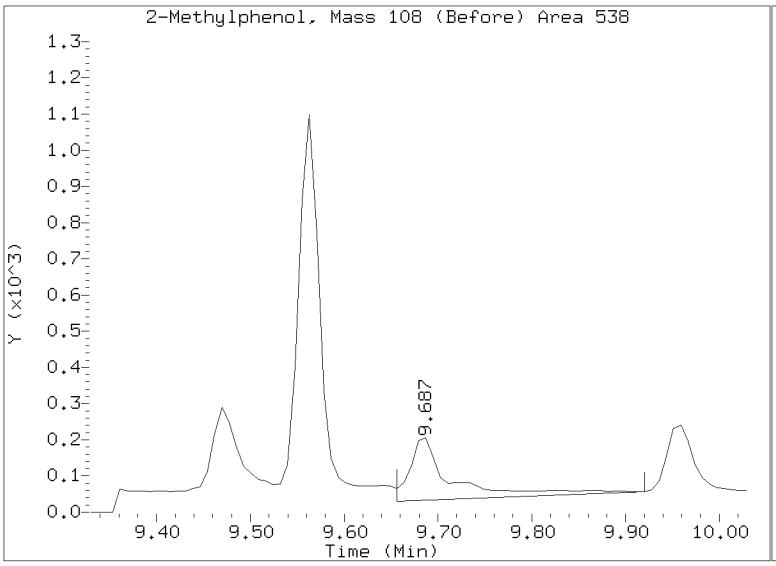
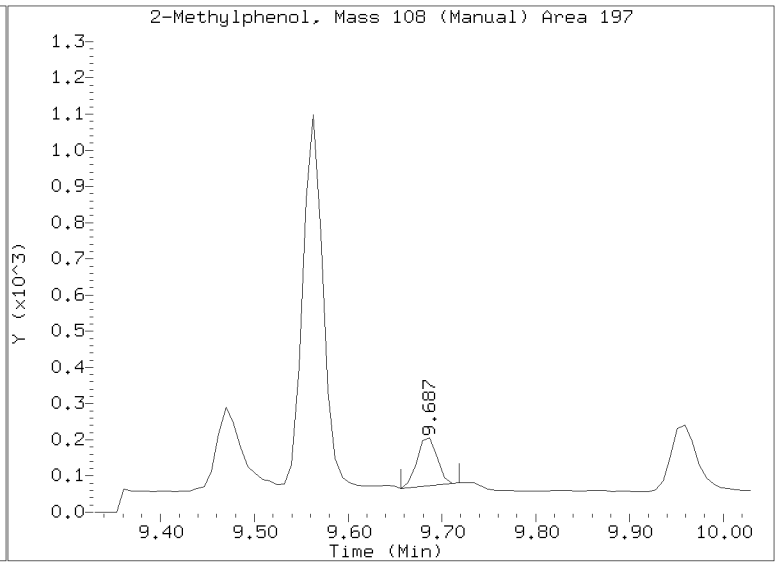
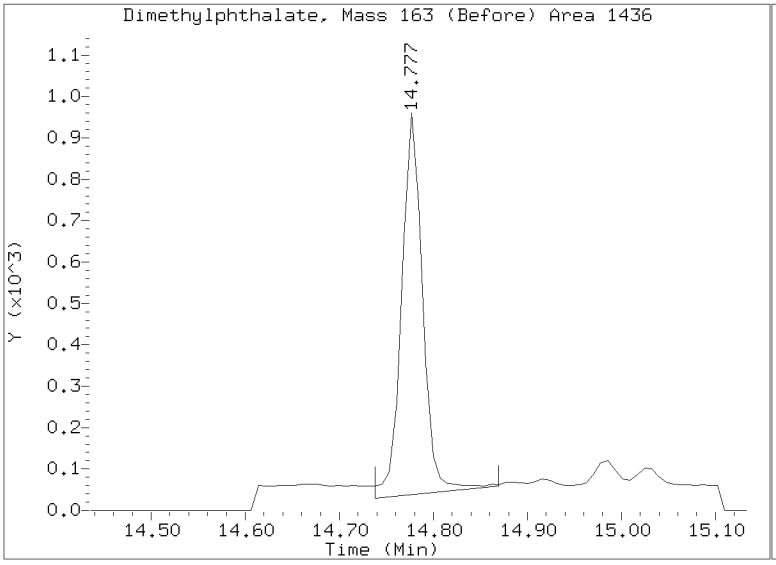
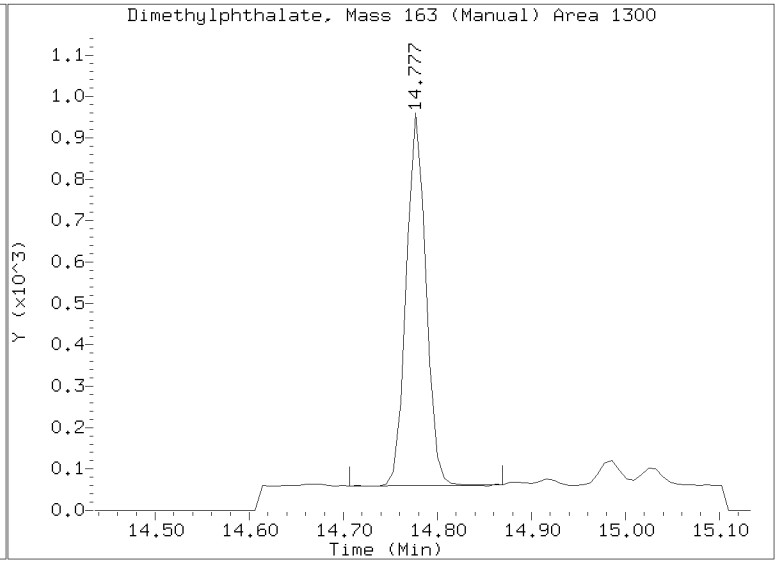
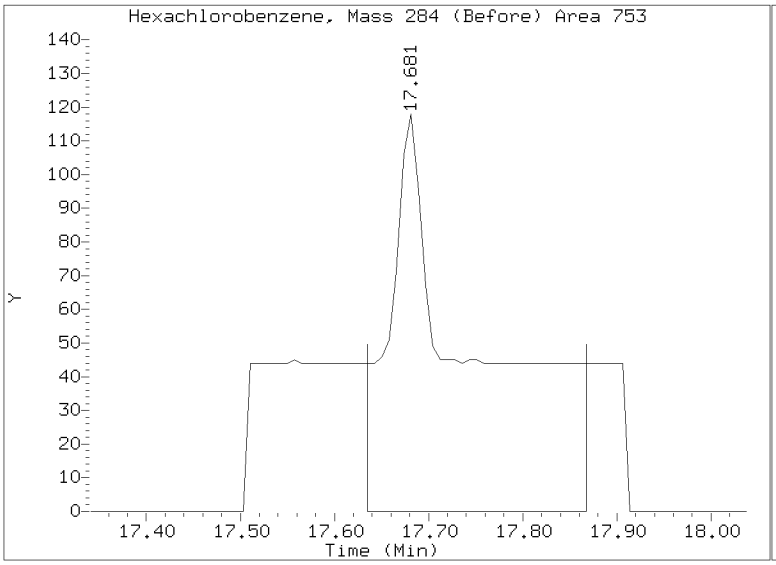
Injection Date: 17-MAR-2023 21:36
Lab ID:BLB0495-BLK2 Client ID:
Report Date: 03/30/2023 14:55

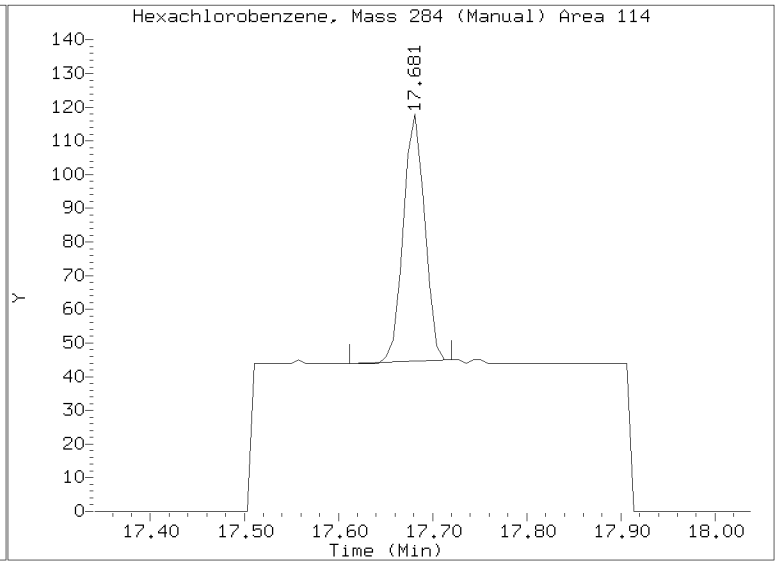






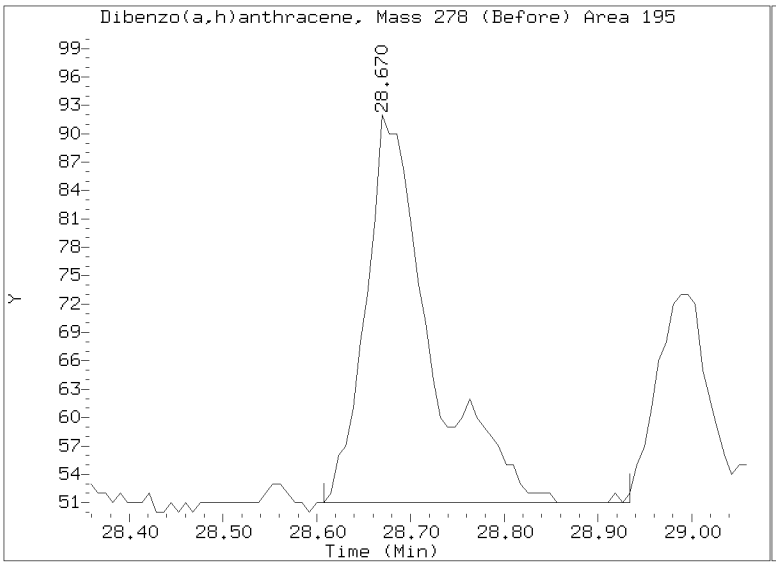


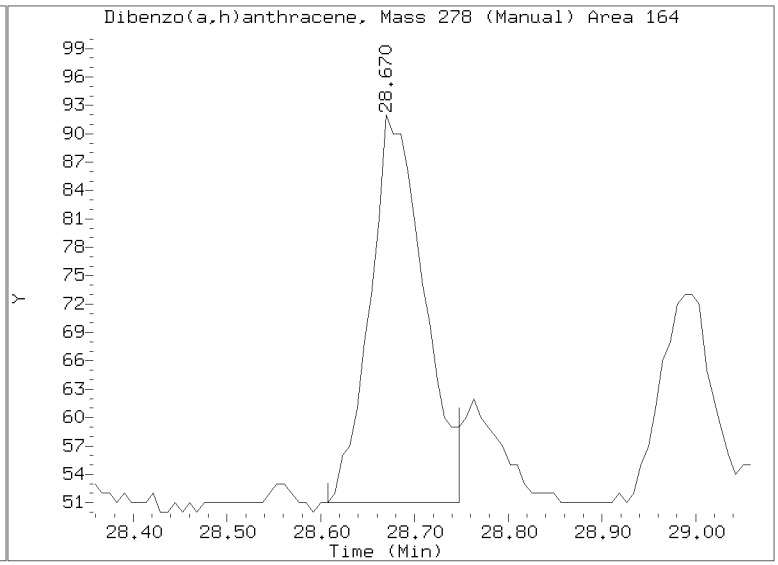




Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230317.b/20230317.b/NT1003172306S.D
Injection Date: 17-MAR-2023 21:36
Lab ID:BLB0495-BLK2 Client ID:
Report Date: 03/30/2023 14:55





LCS / LCS DUPLICATE RECOVERY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/23/23 12:55
Batch:	BLB0386	Laboratory ID:	BLB0386-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 0.5 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Benzo(a)anthracene	300	268		89.5	42 - 120
Chrysene	300	245		81.7	48 - 120
Benzo(b)fluoranthene	300	316		105	52 - 137
Benzo(k)fluoranthene	300	300		100	37 - 129
Benzo(a)pyrene	300	245		81.7	36 - 120
Indeno(1,2,3-cd)pyrene	300	291		97.1	67 - 132
Dibenzo(a,h)anthracene	300	310		103	66 - 139

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzo(a)anthracene	300	266		88.7	0.807	30	42 - 120
Chrysene	300	248		82.8	1.27	30	48 - 120
Benzo(b)fluoranthene	300	314		105	0.625	30	52 - 137
Benzo(k)fluoranthene	300	300		100	0.0298	30	37 - 129
Benzo(a)pyrene	300	232		77.2	5.68	30	36 - 120
Indeno(1,2,3-cd)pyrene	300	291		96.9	0.207	30	67 - 132
Dibenzo(a,h)anthracene	300	317		106	2.38	30	66 - 139

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230223.b\N823022304.D

Date : 23-FEB-2023 12:55

Client ID:

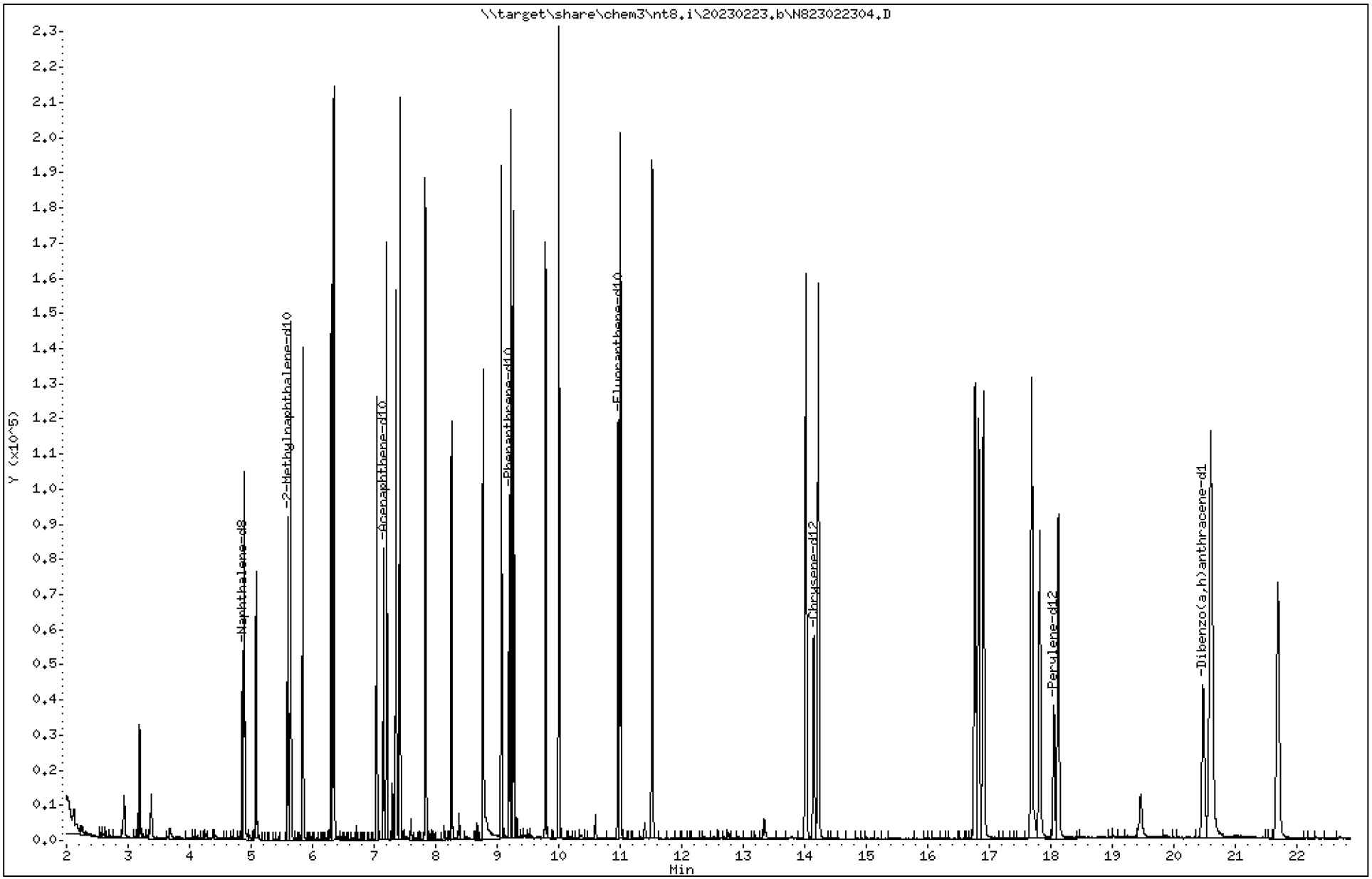
Instrument: nt8.i

Sample Info: BLB0386-BS1,

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



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Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

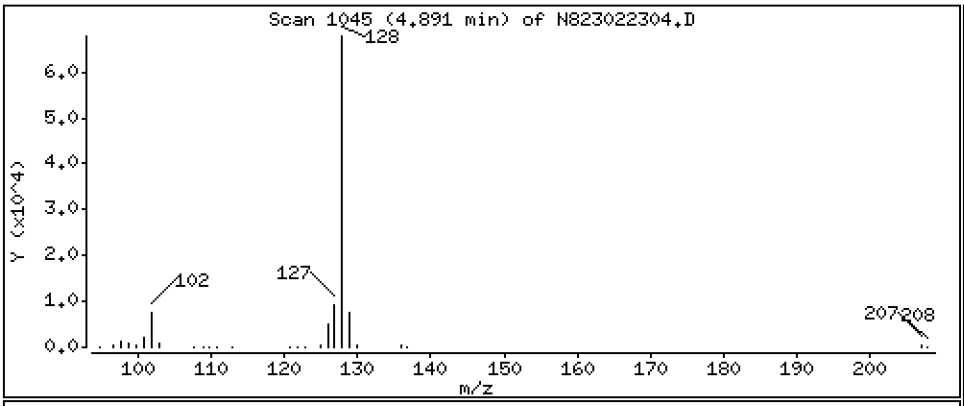
Operator: JZ

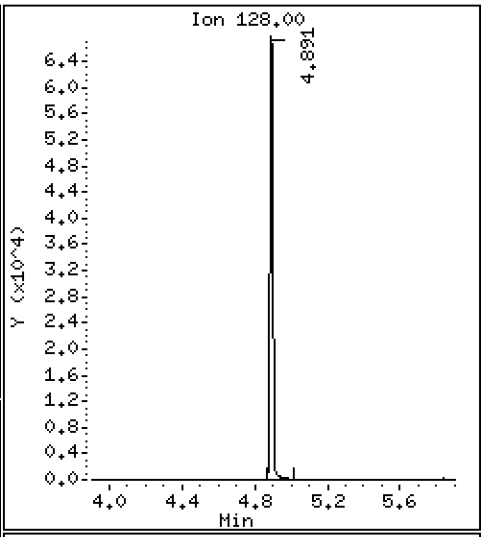
Column phase: Rxi-17sil

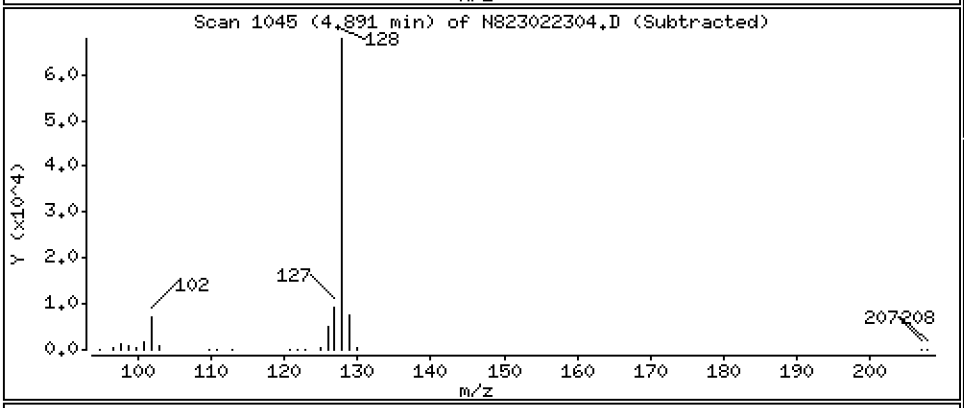
Column diameter: 0.25

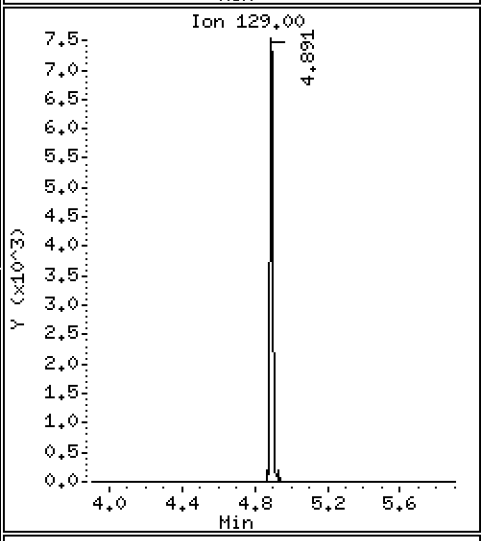
2 Naphthalene

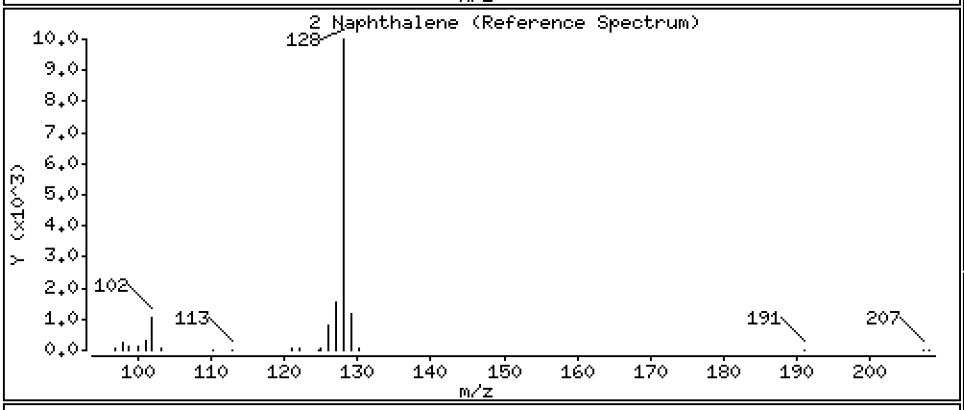
Concentration: 4.291 ug/mL

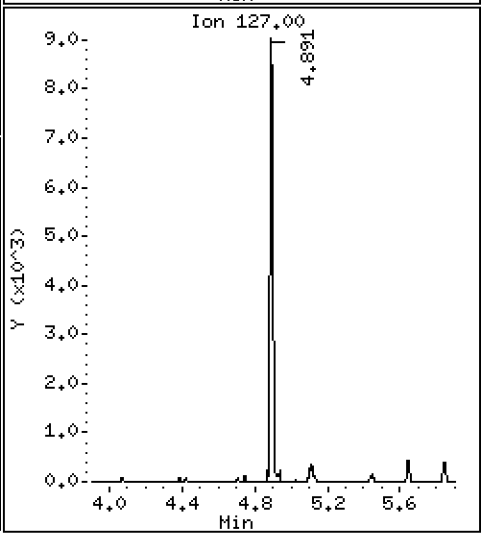


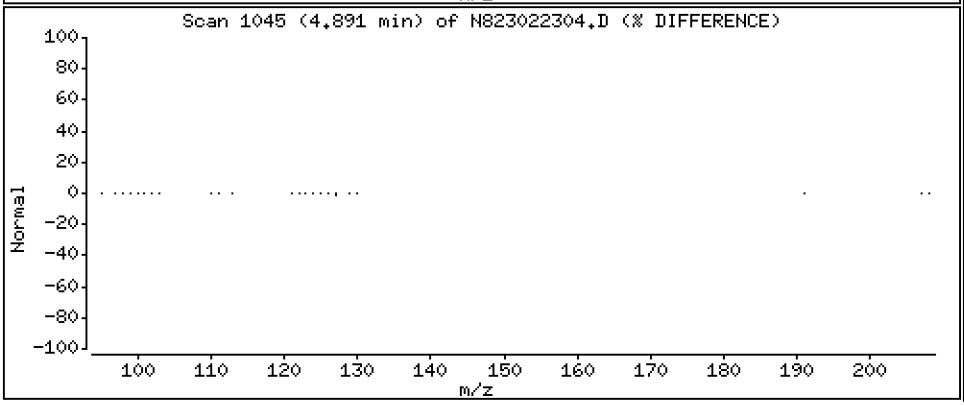












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022304.D

Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

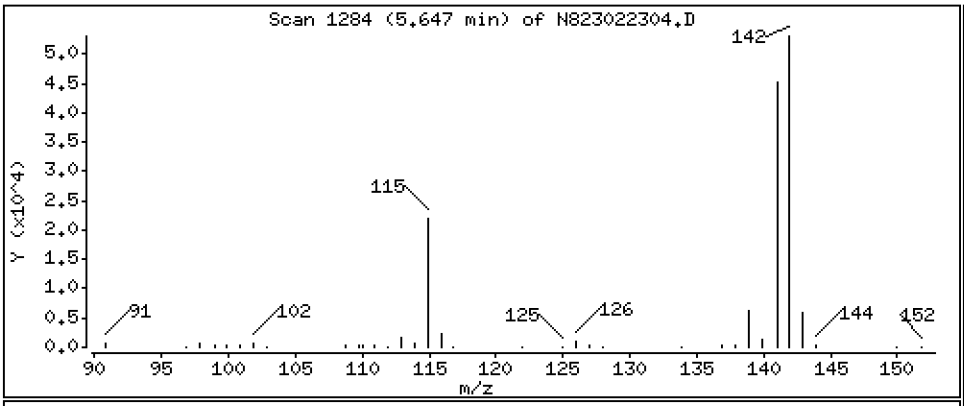
Operator: JZ

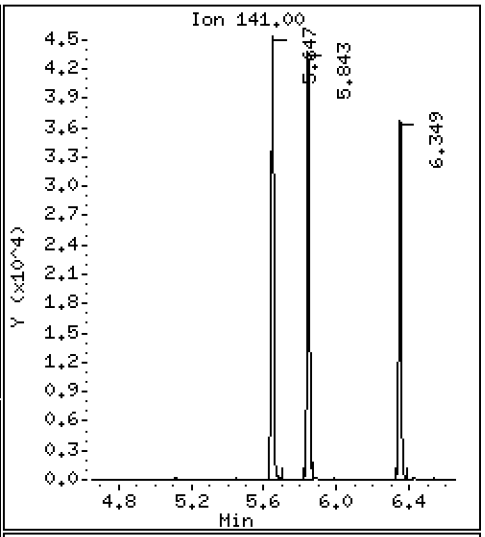
Column phase: Rxi-17sil

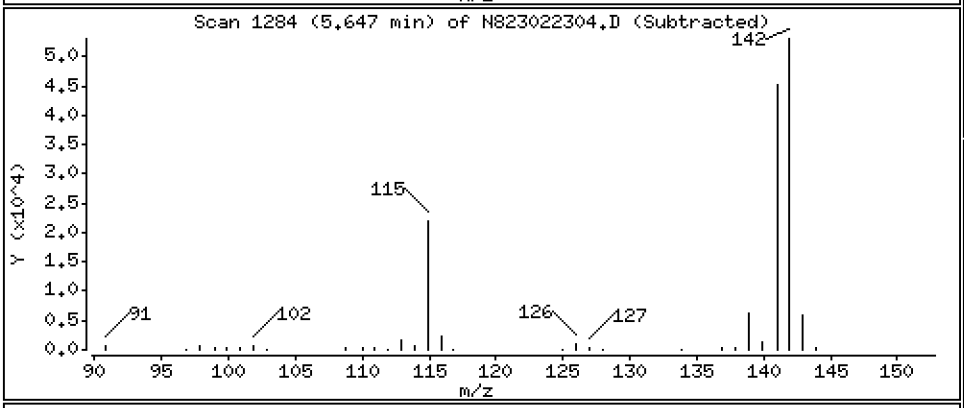
Column diameter: 0.25

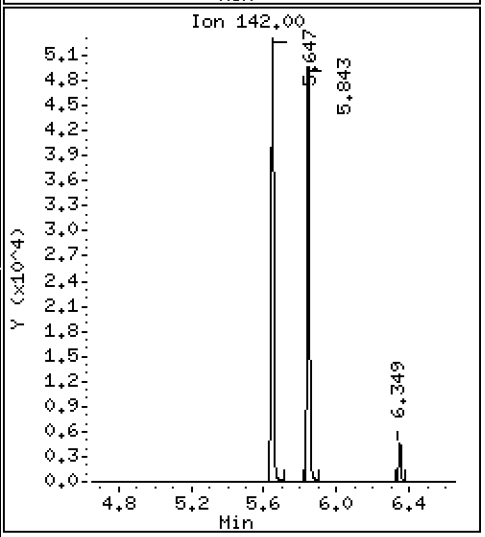
4 2-Methylnaphthalene

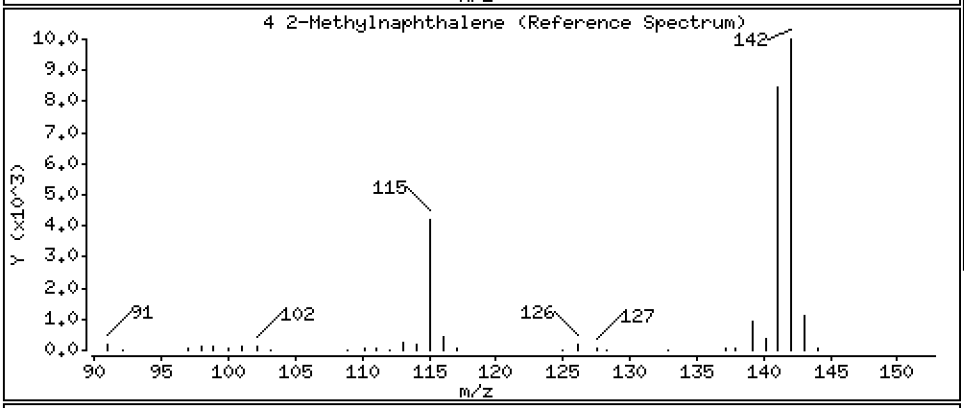
Concentration: 4.498 ug/mL

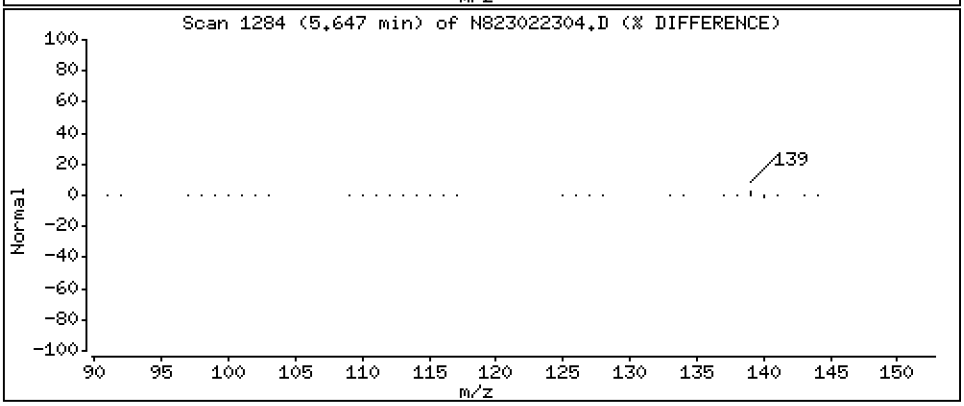












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022304.D

Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

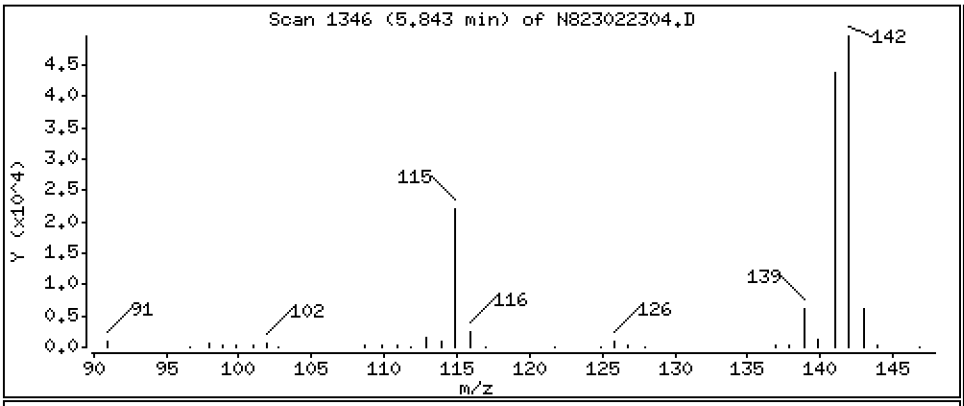
Operator: JZ

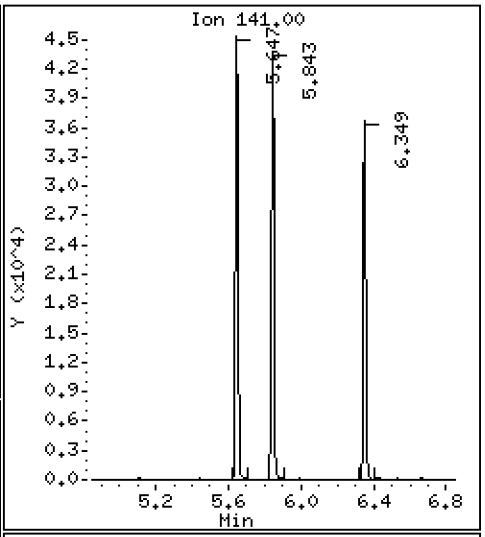
Column phase: Rxi-17sil

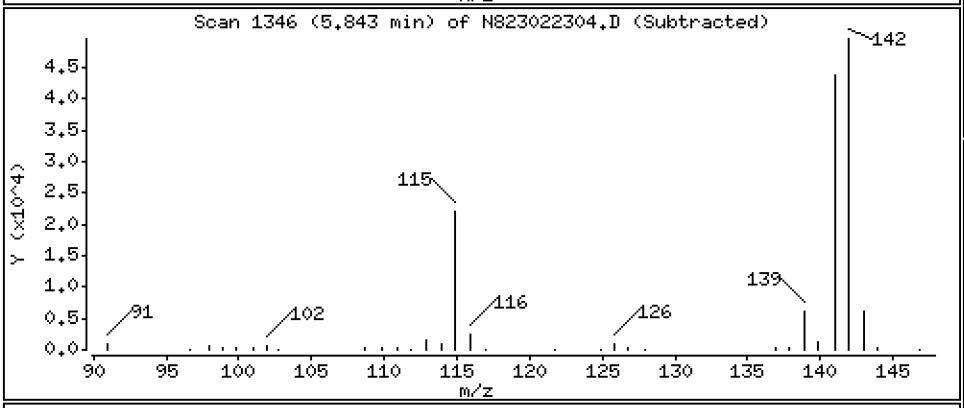
Column diameter: 0.25

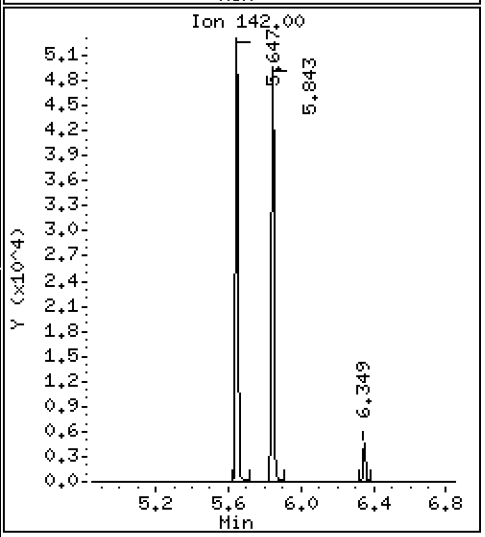
5 1-methylnaphthalene

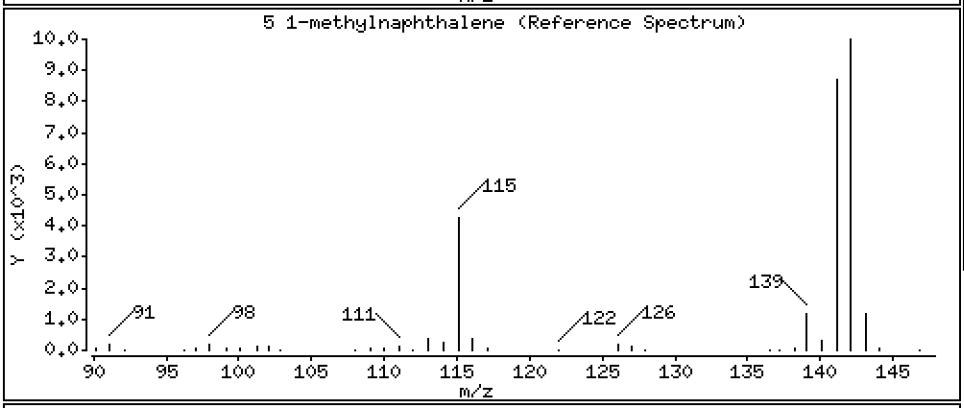
Concentration: 4.429 ug/mL

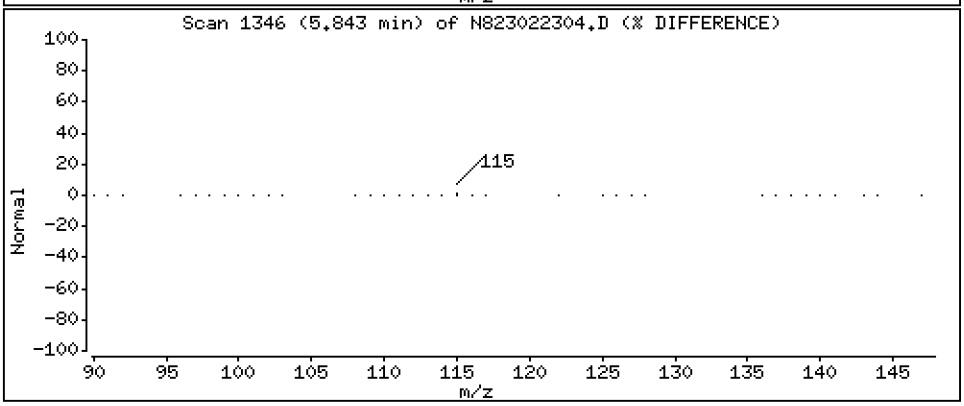












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Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

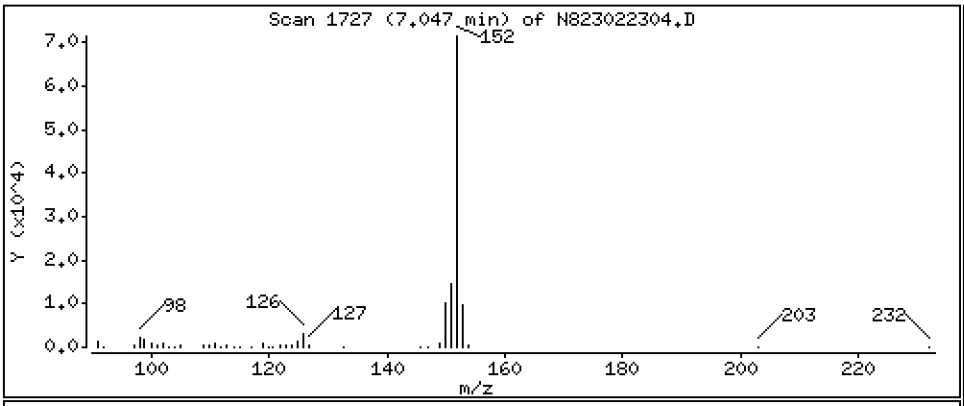
Operator: JZ

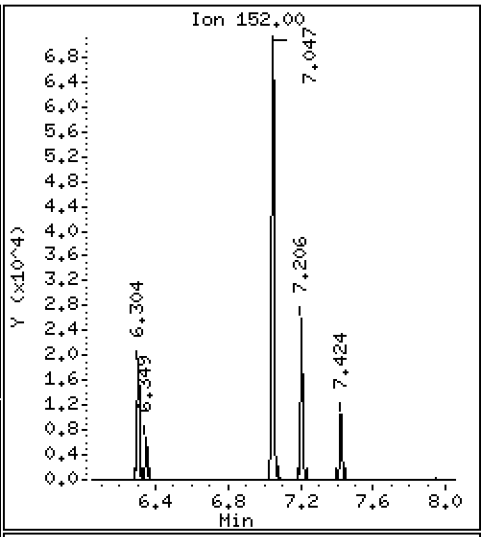
Column phase: Rxi-17sil

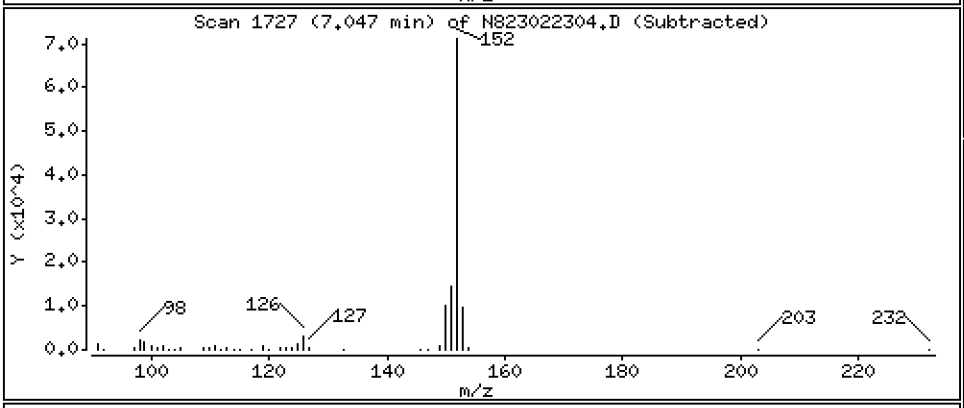
Column diameter: 0.25

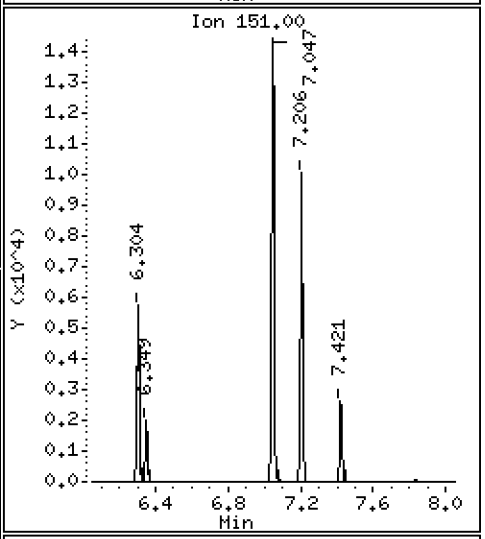
9 Acenaphthylene

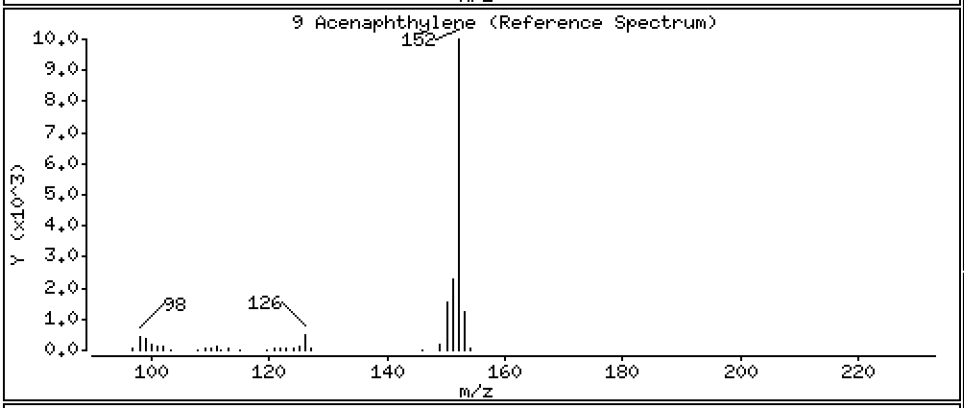
Concentration: 4.035 ug/mL

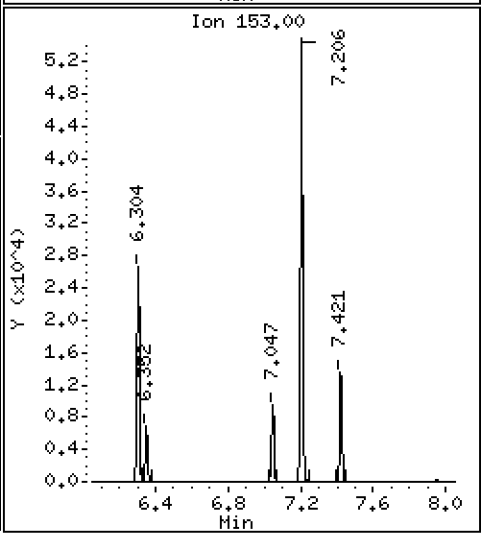


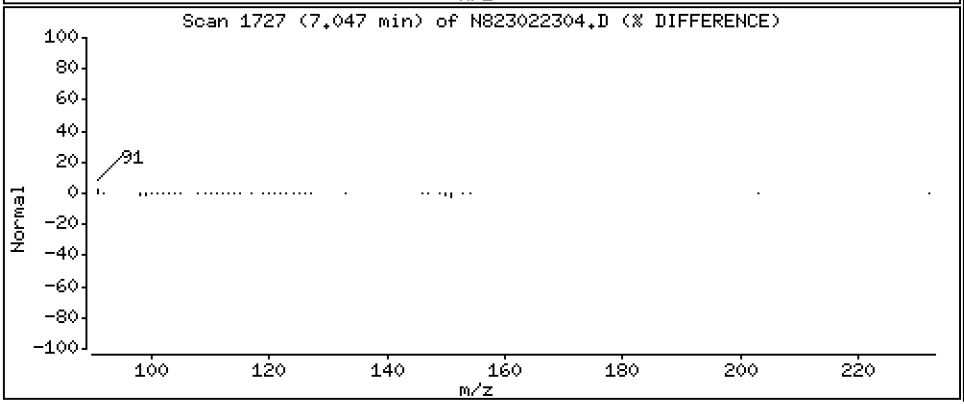












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022304.D

Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

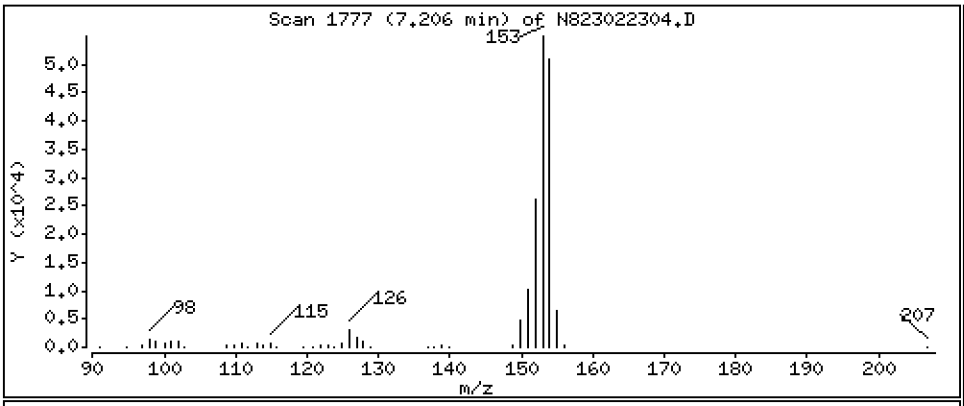
Operator: JZ

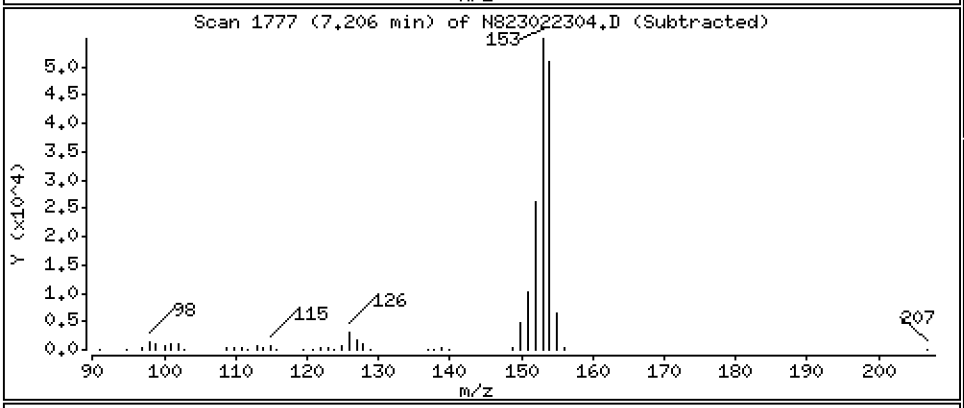
Column phase: Rxi-17sil

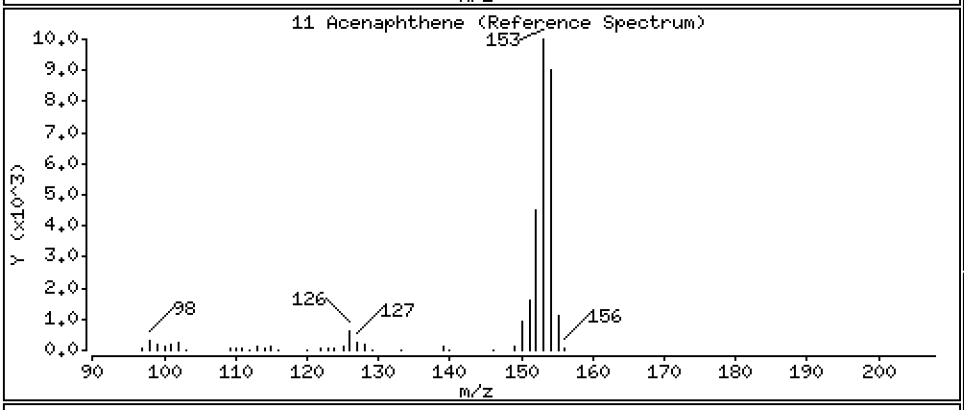
Column diameter: 0.25

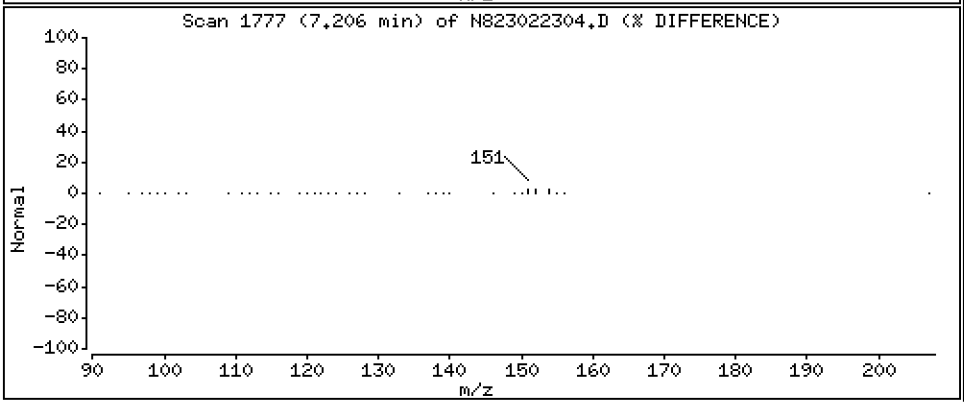
11 Acenaphthene

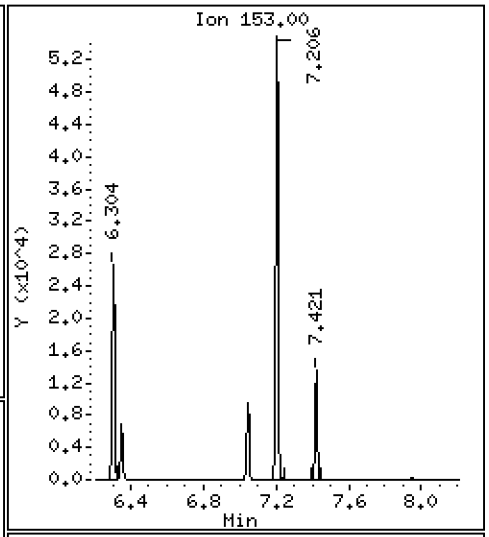
Concentration: 4.305 ug/mL

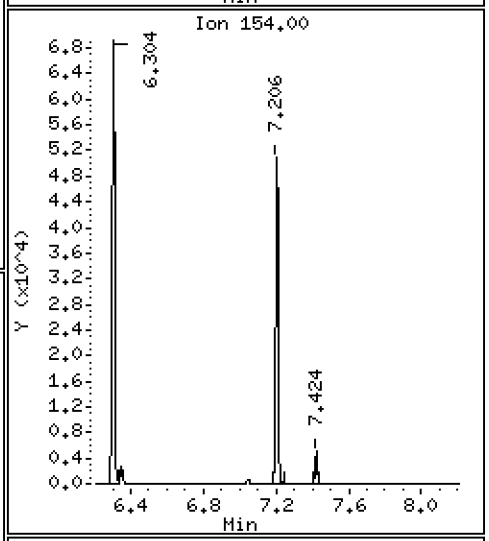


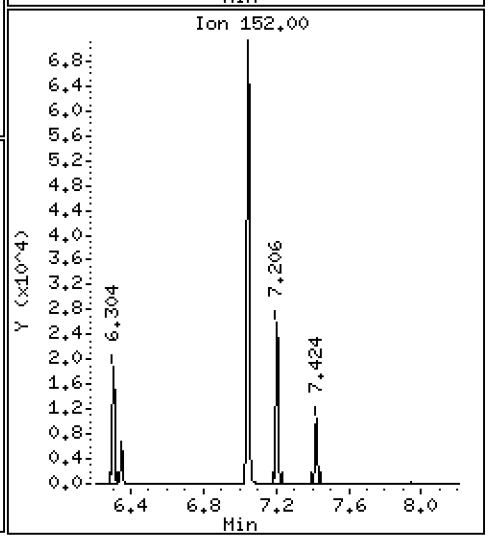












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022304.D

Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

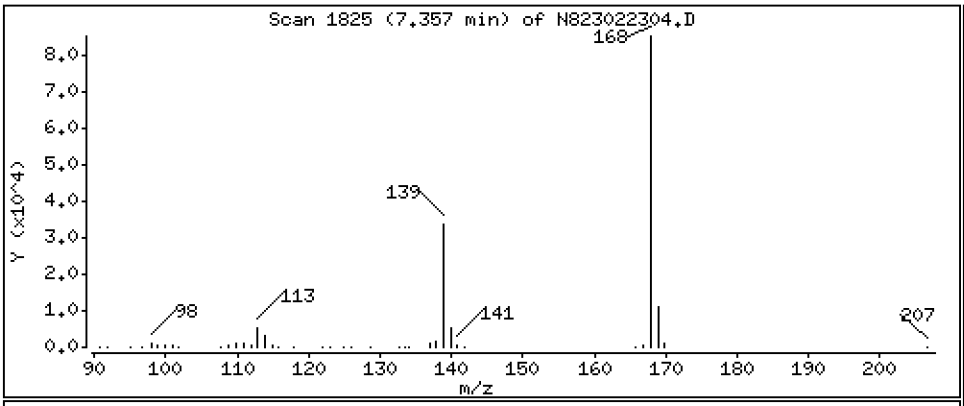
Operator: JZ

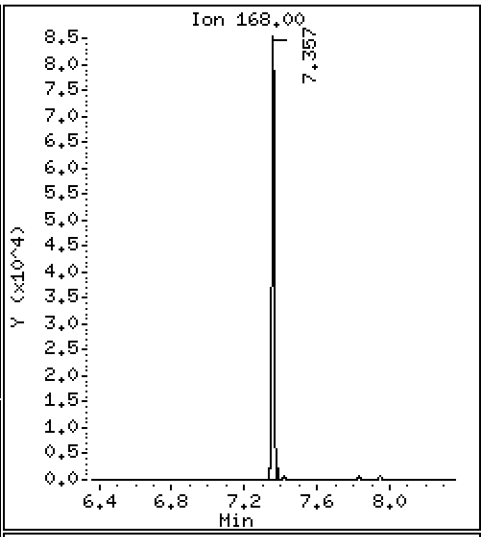
Column phase: Rxi-17sil

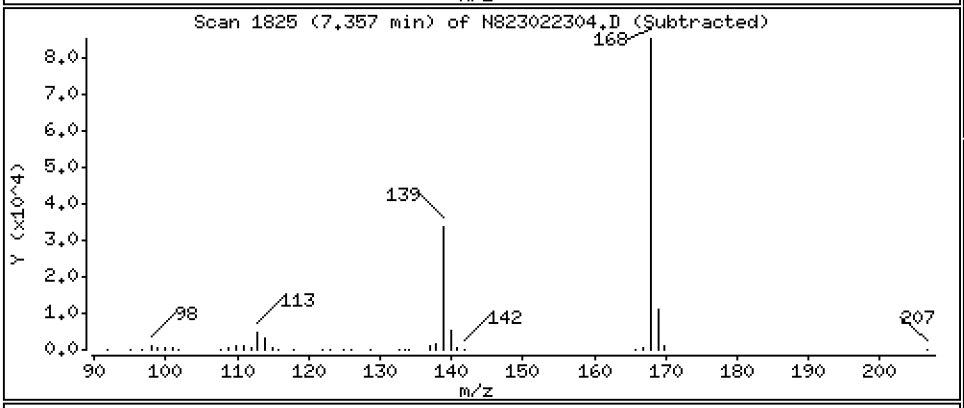
Column diameter: 0.25

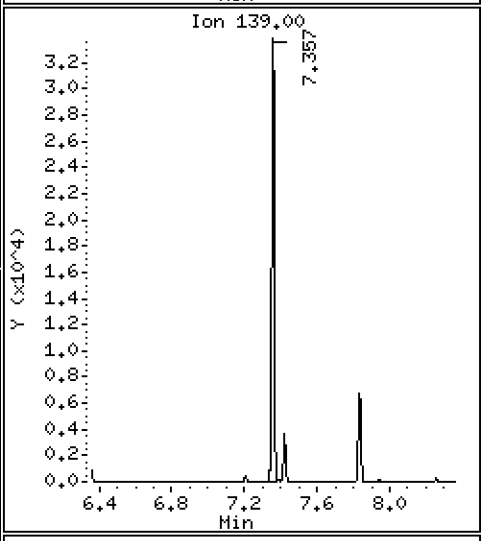
12 Dibenzofuran

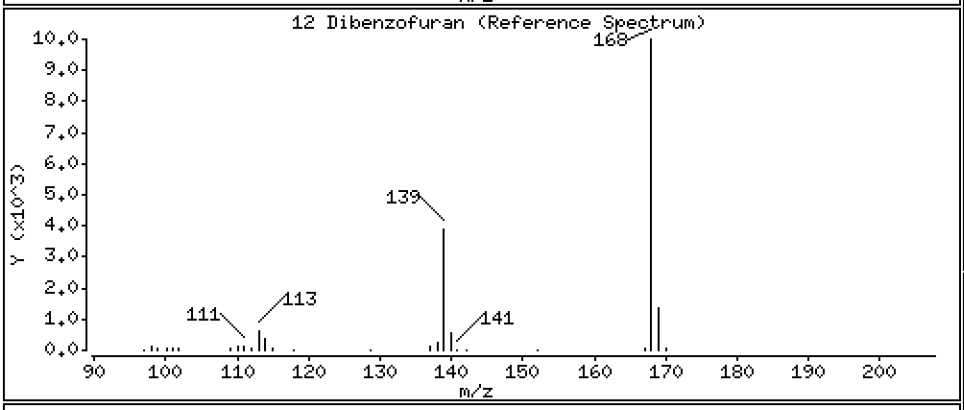
Concentration: 4.401 ug/mL

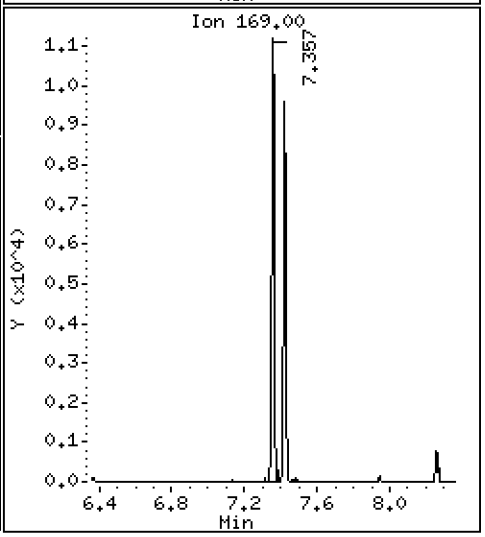


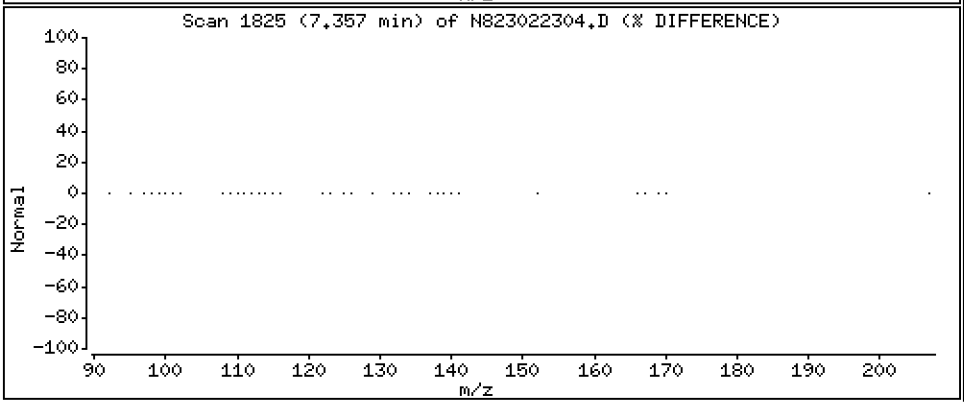












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Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

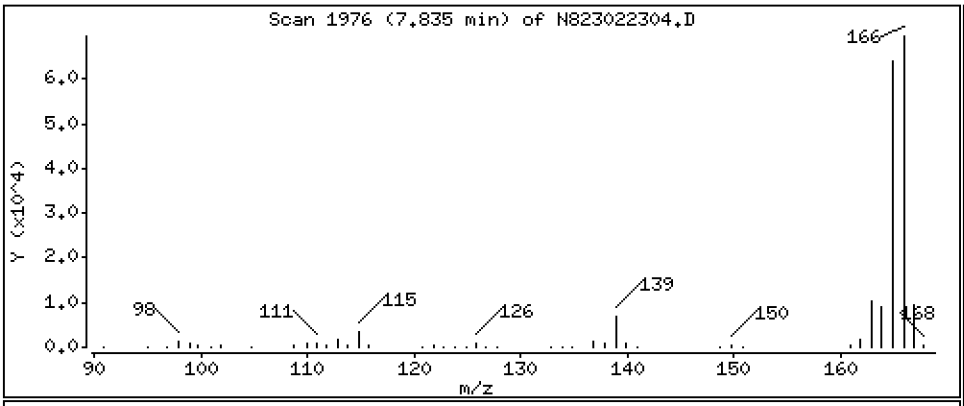
Operator: JZ

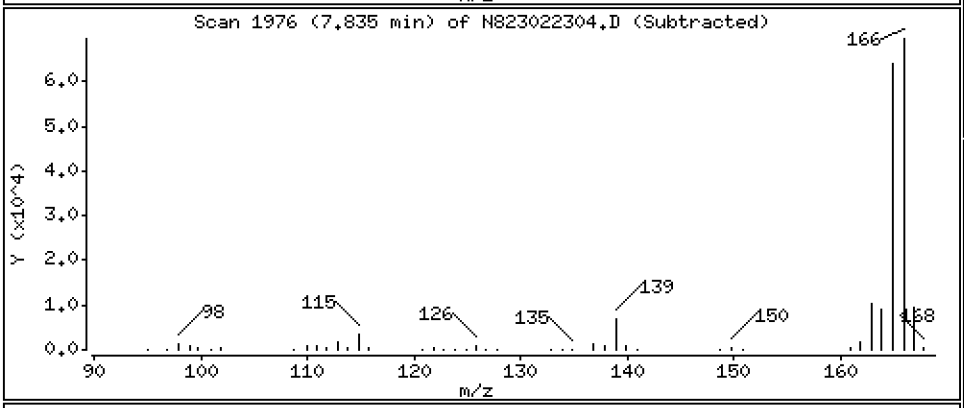
Column phase: Rxi-17sil

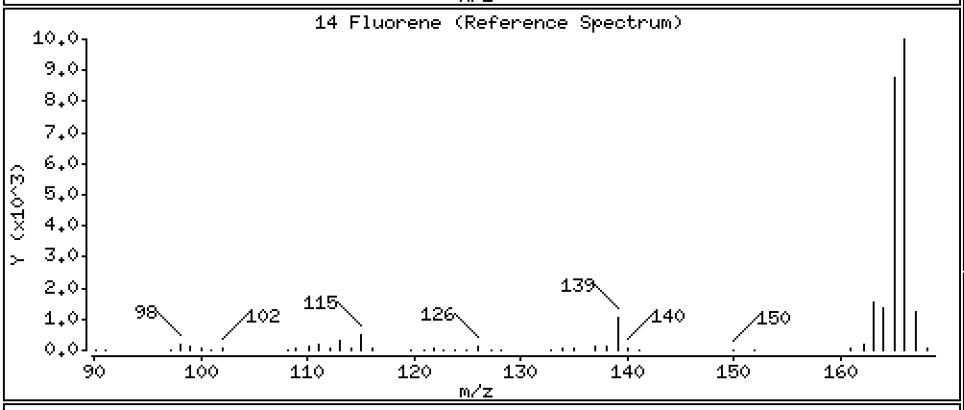
Column diameter: 0.25

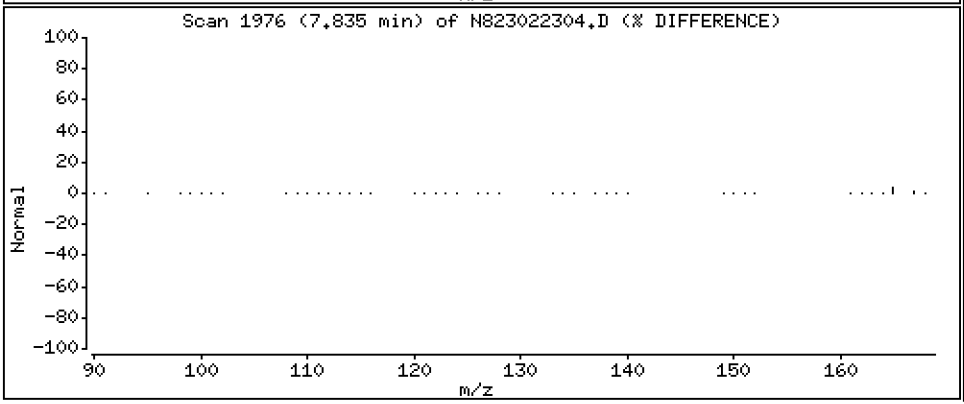
14 Fluorene

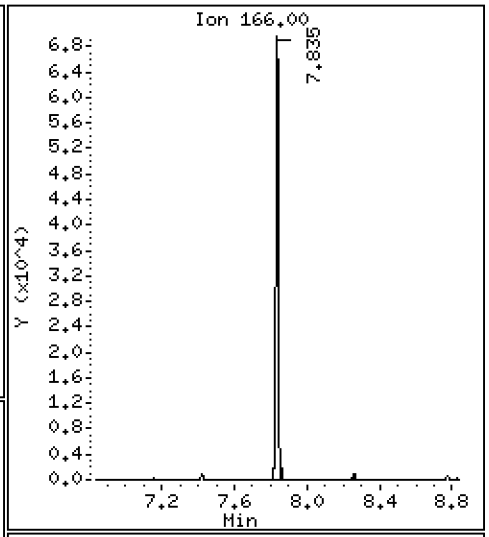
Concentration: 4.732 ug/mL

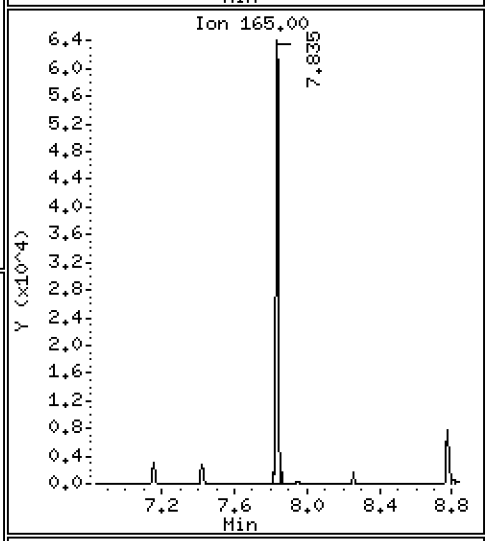


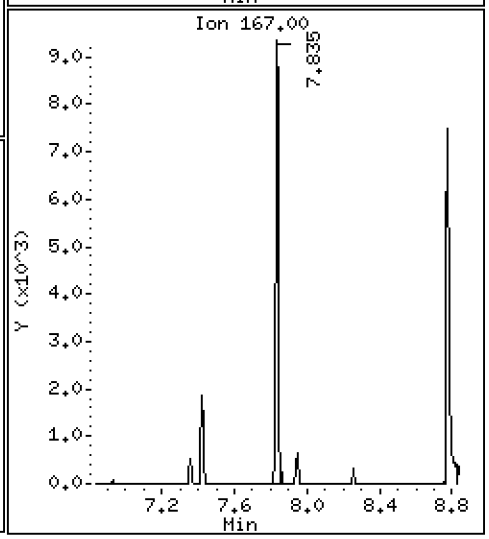












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Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

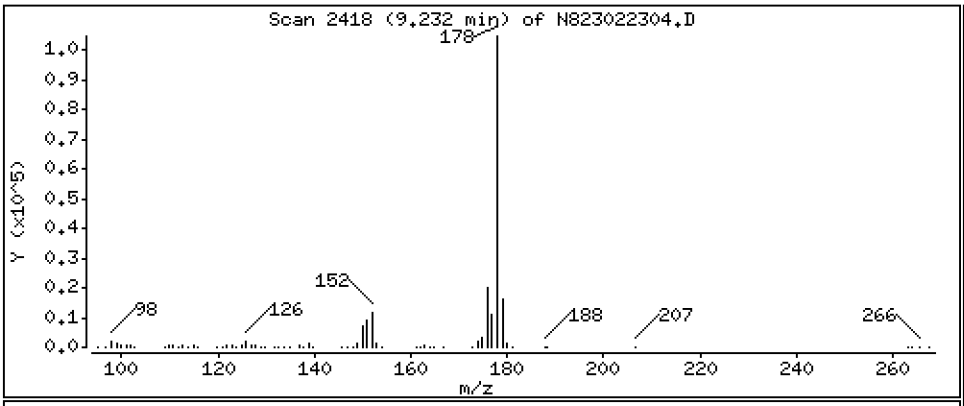
Operator: JZ

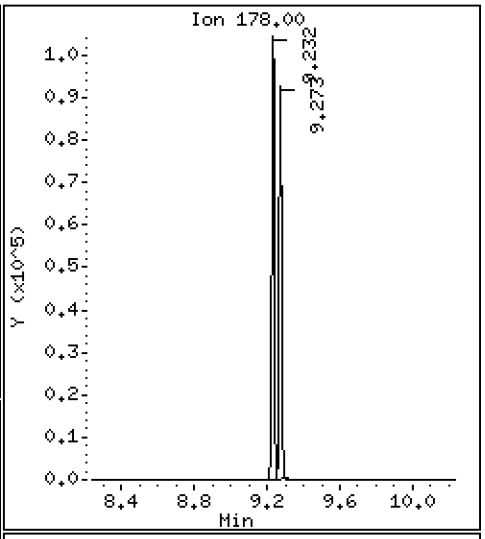
Column phase: Rxi-17sil

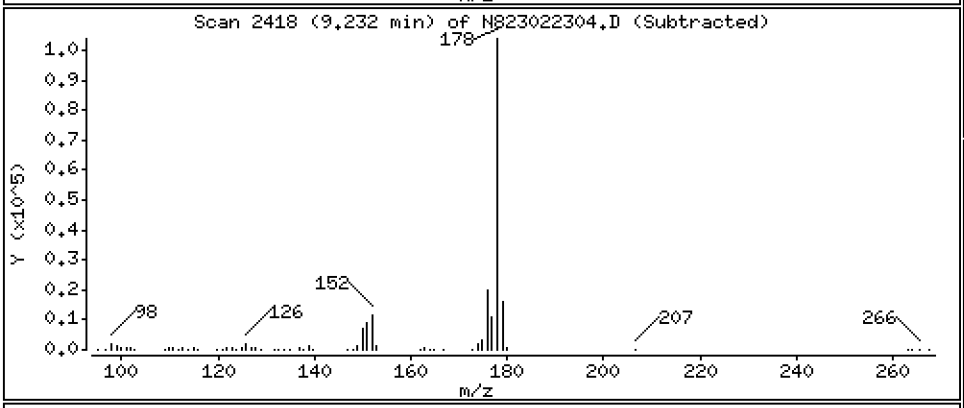
Column diameter: 0.25

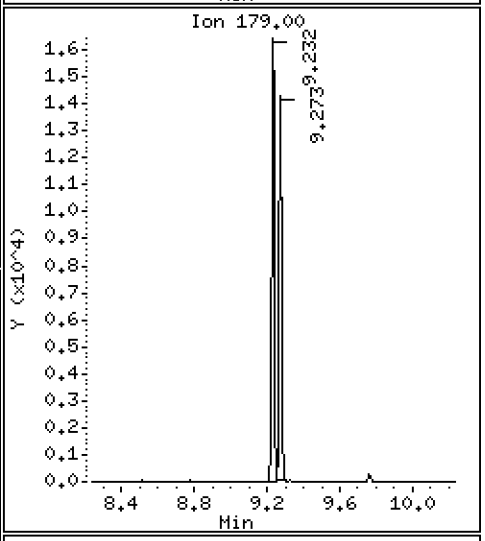
16 Phenanthrene

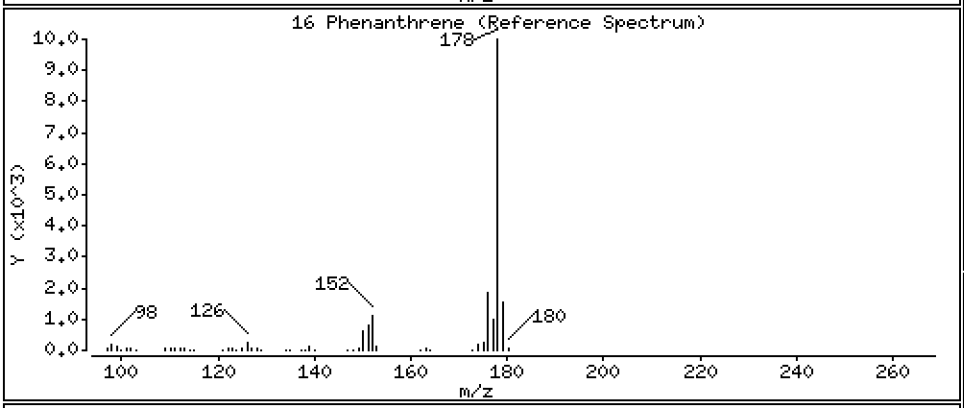
Concentration: 4.658 ug/mL

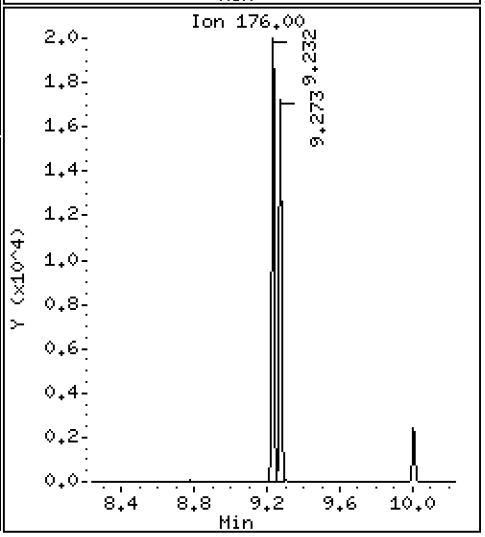


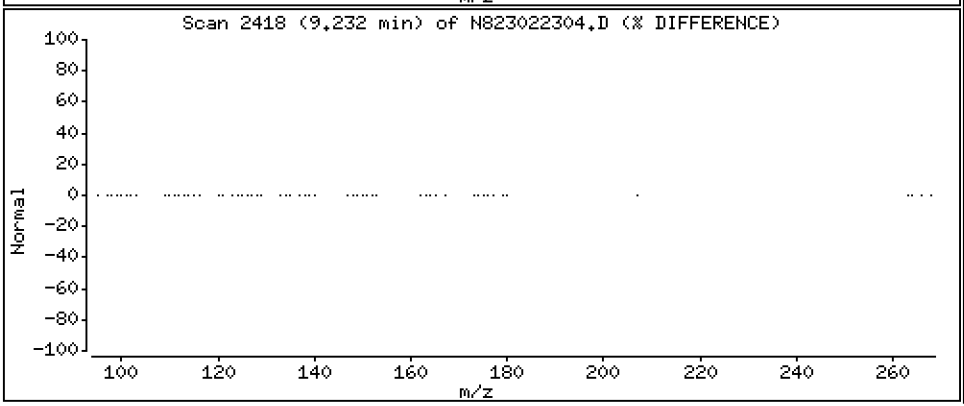












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Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

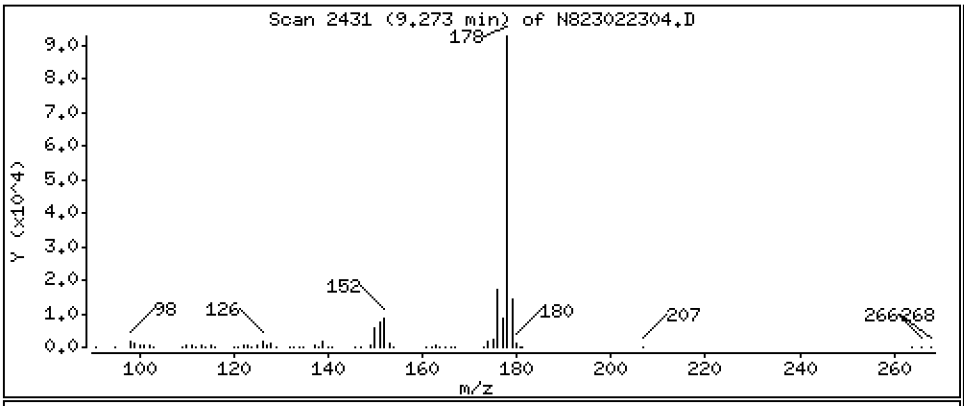
Operator: JZ

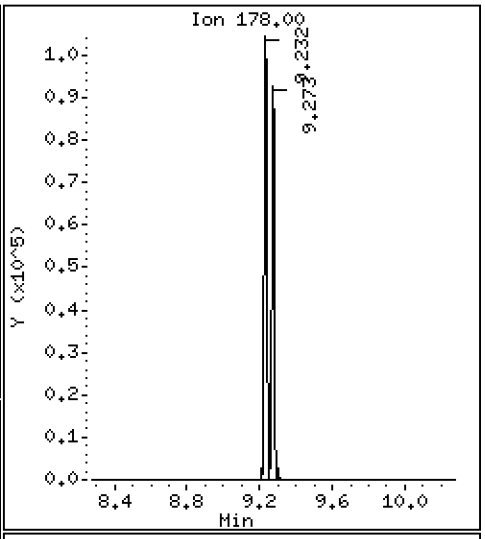
Column phase: Rxi-17sil

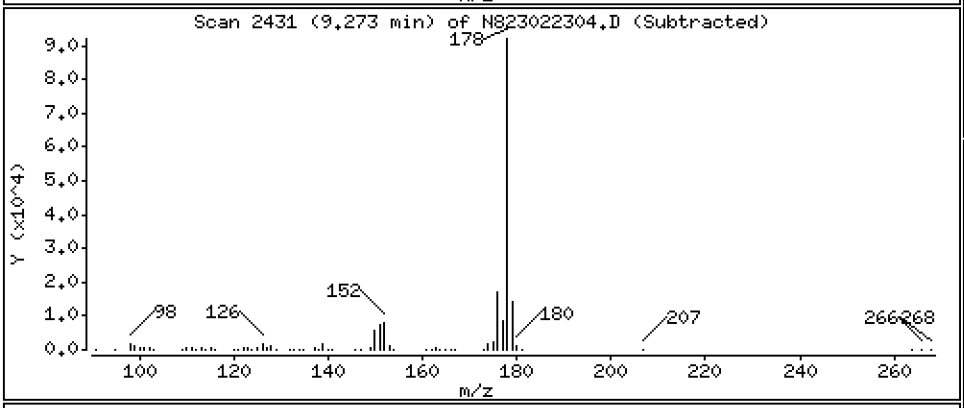
Column diameter: 0.25

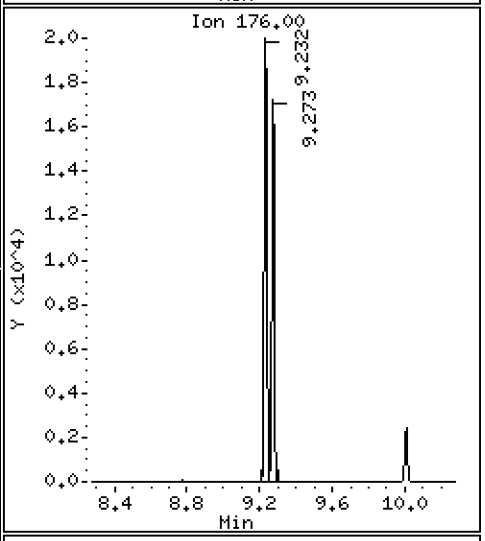
17 Anthracene

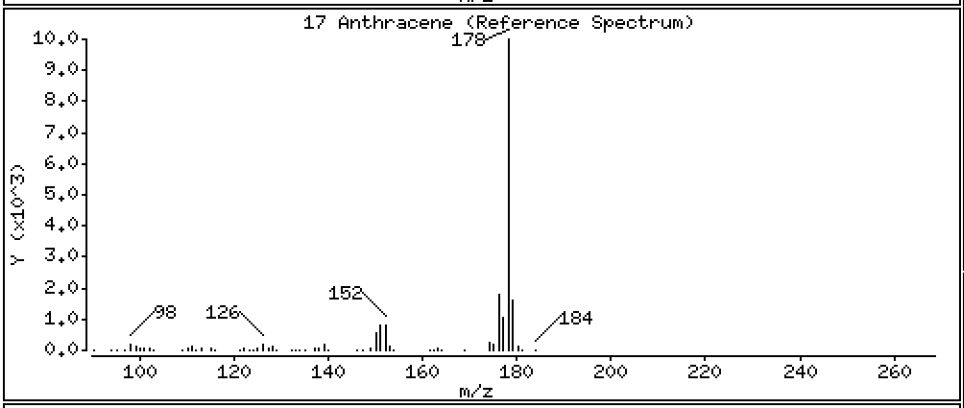
Concentration: 4.476 ug/mL

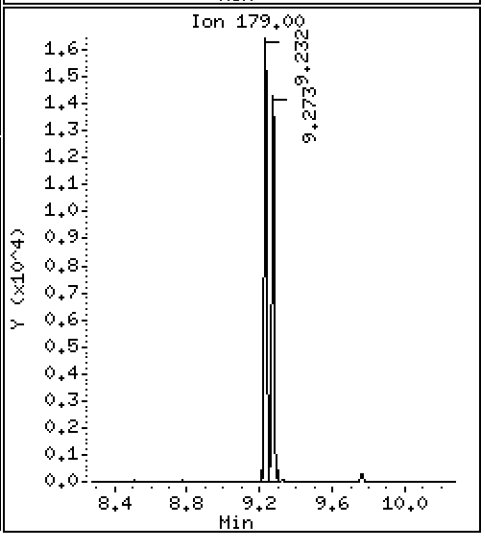


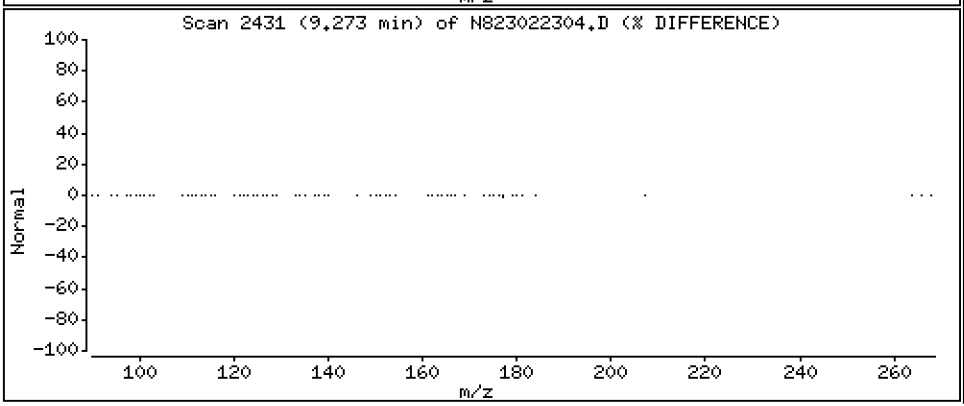












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Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

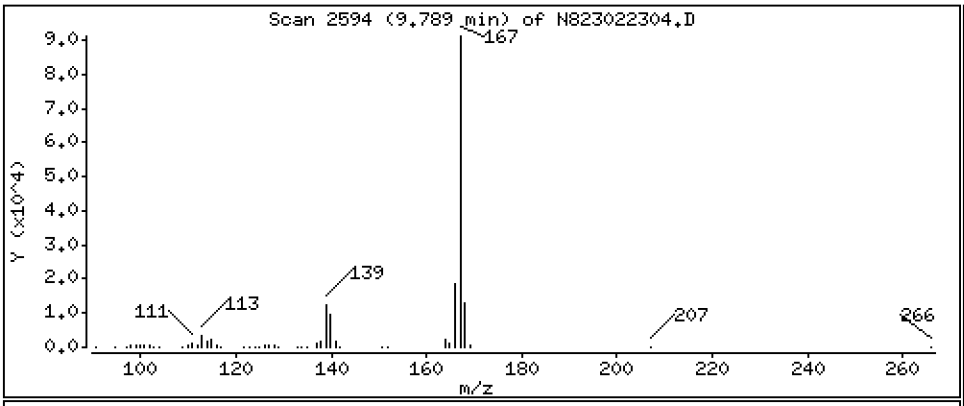
Operator: JZ

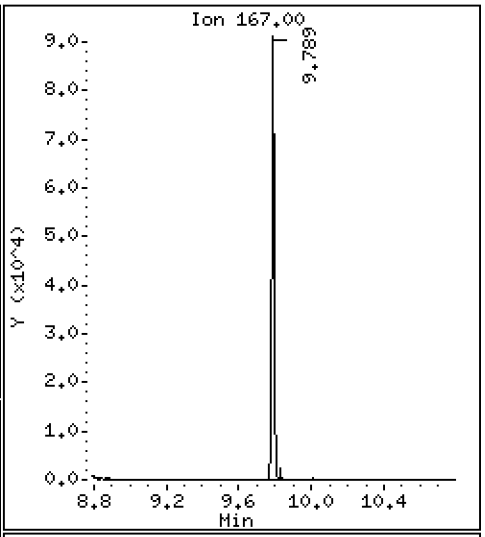
Column phase: Rxi-17sil

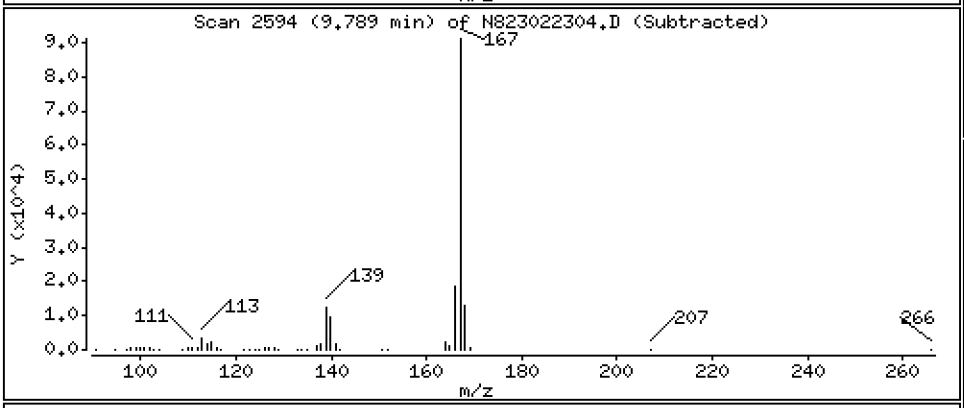
Column diameter: 0.25

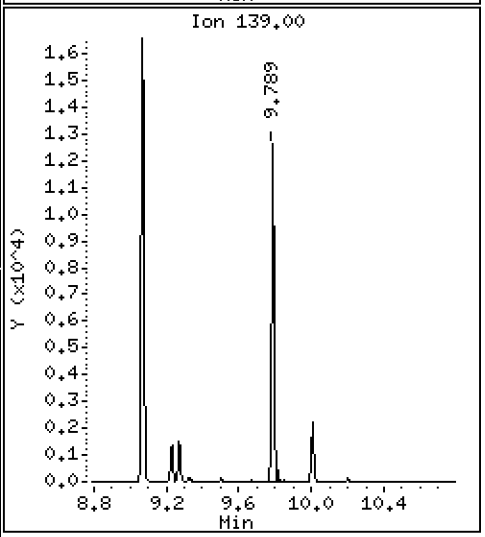
19 Carbazole

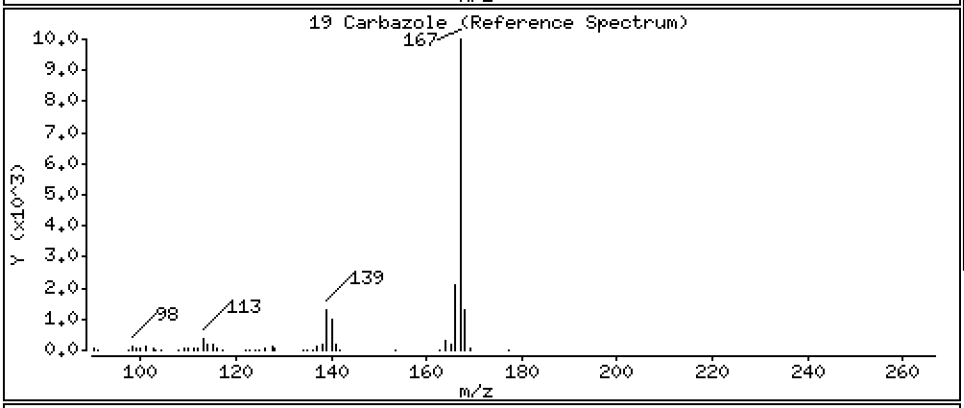
Concentration: 5.058 ug/mL

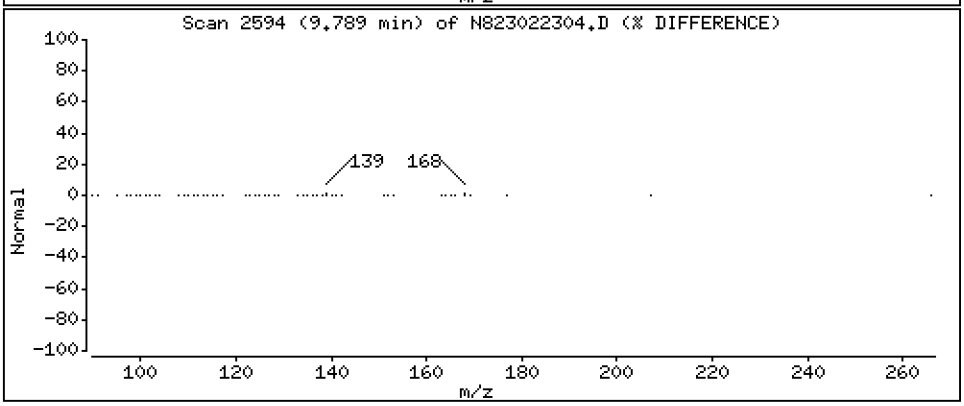












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Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

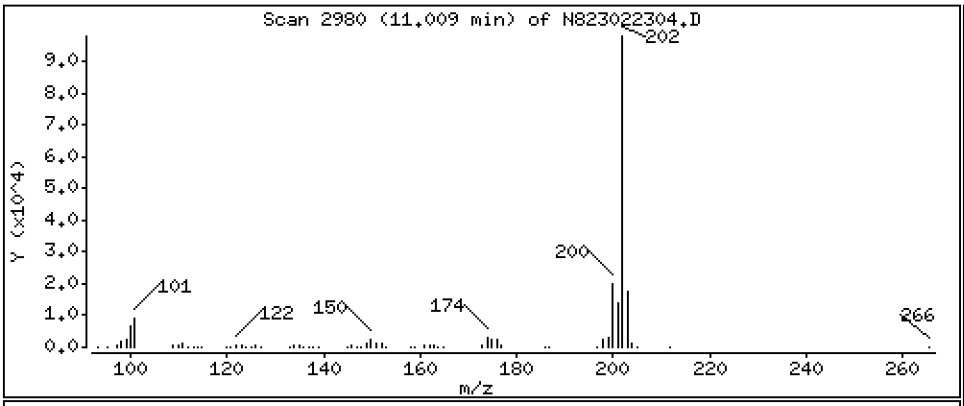
Operator: JZ

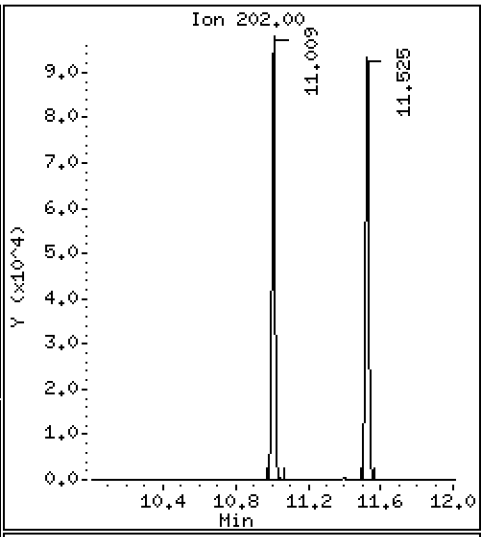
Column phase: Rxi-17sil

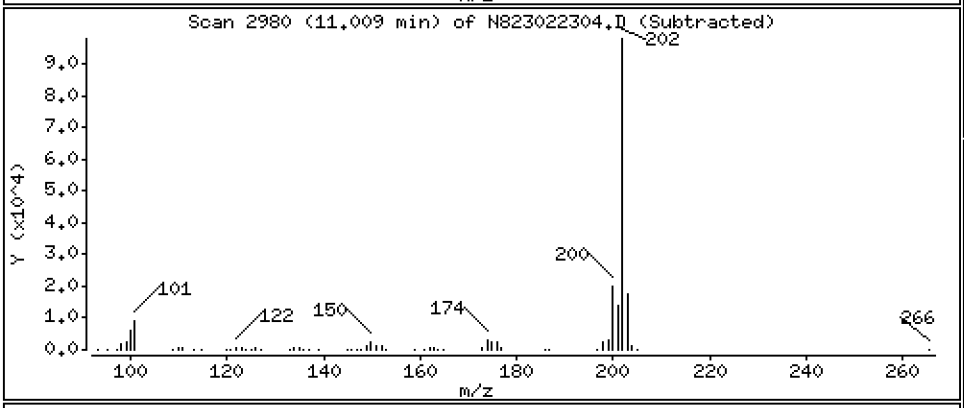
Column diameter: 0.25

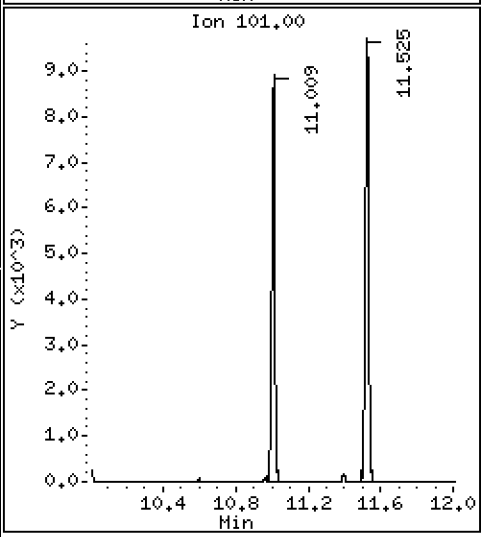
22 Fluoranthene

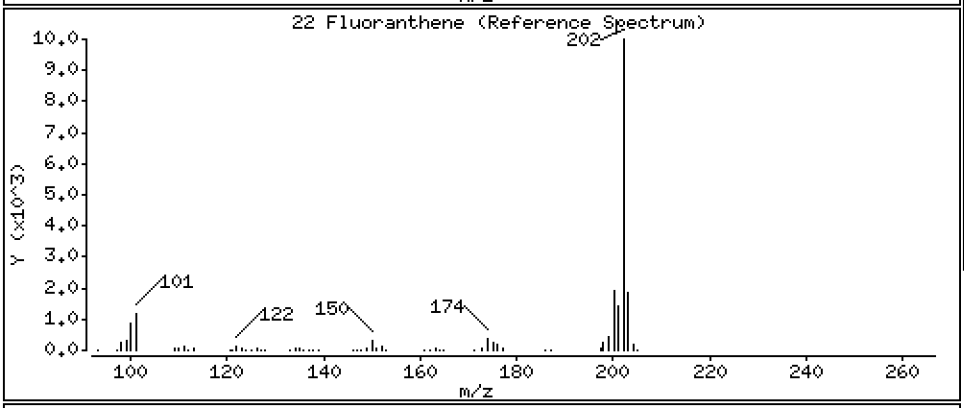
Concentration: 5.040 ug/mL

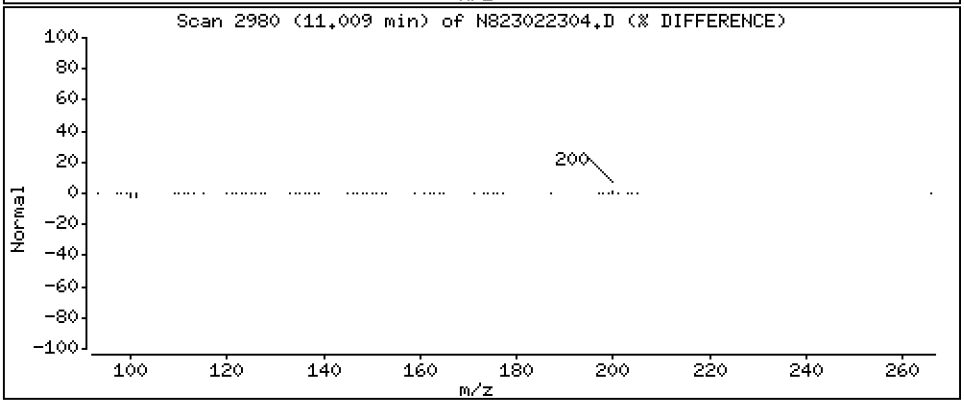












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Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

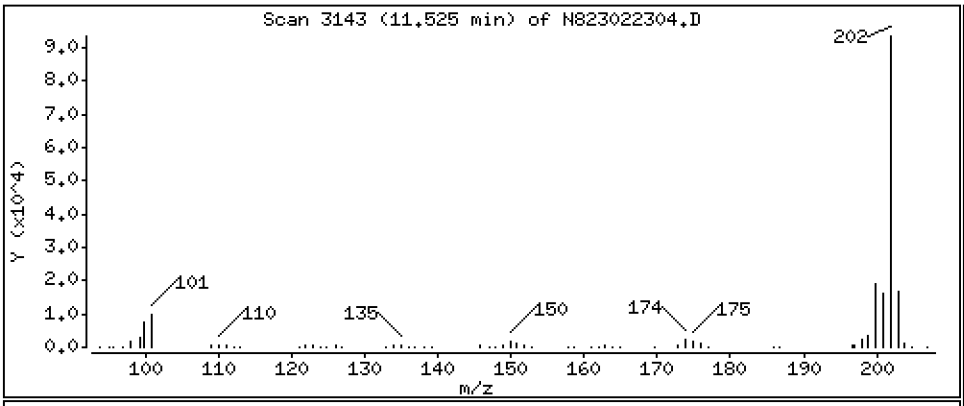
Operator: JZ

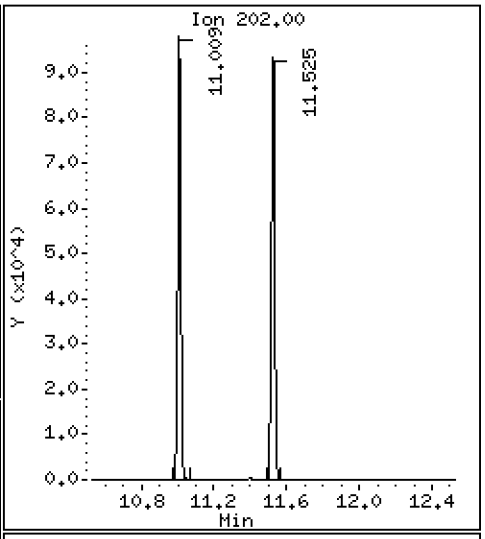
Column phase: Rxi-17sil

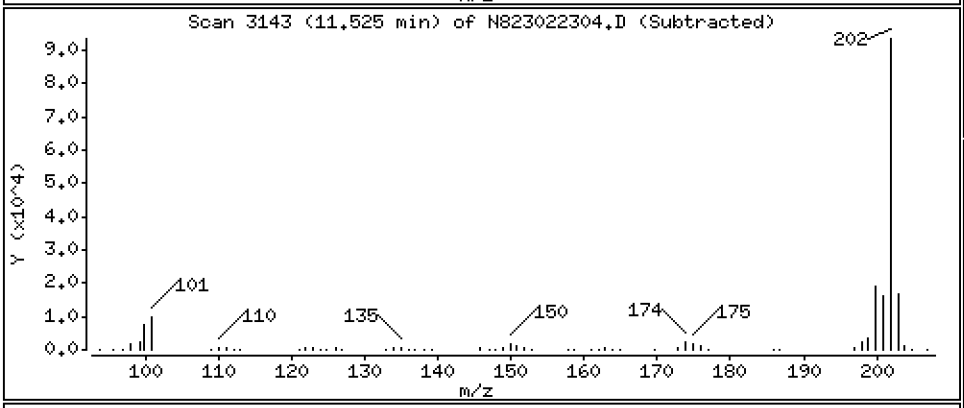
Column diameter: 0.25

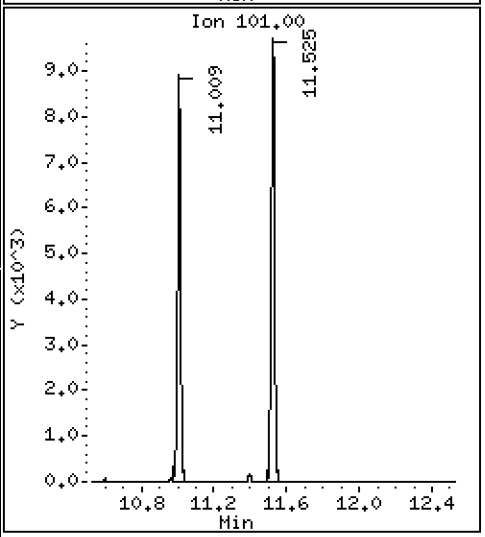
23 Pyrene

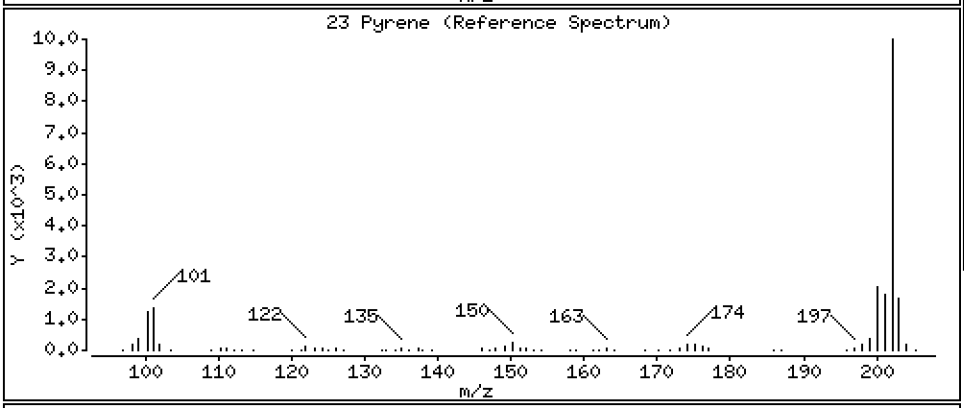
Concentration: 5.153 ug/mL

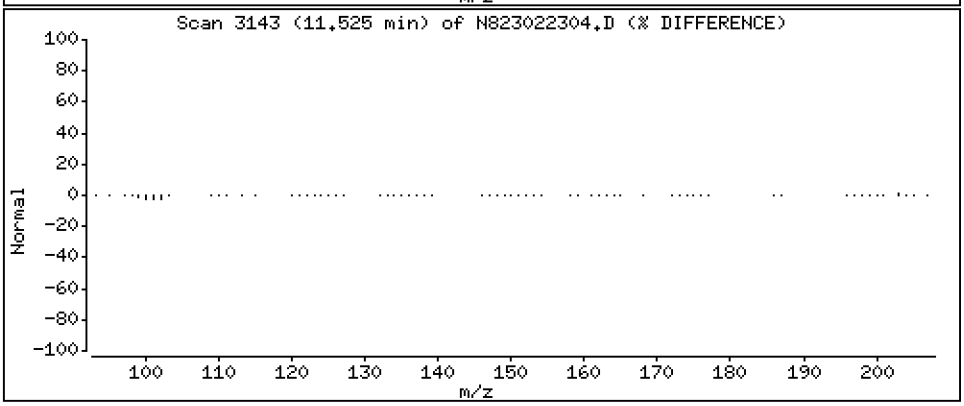












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022304.D

Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

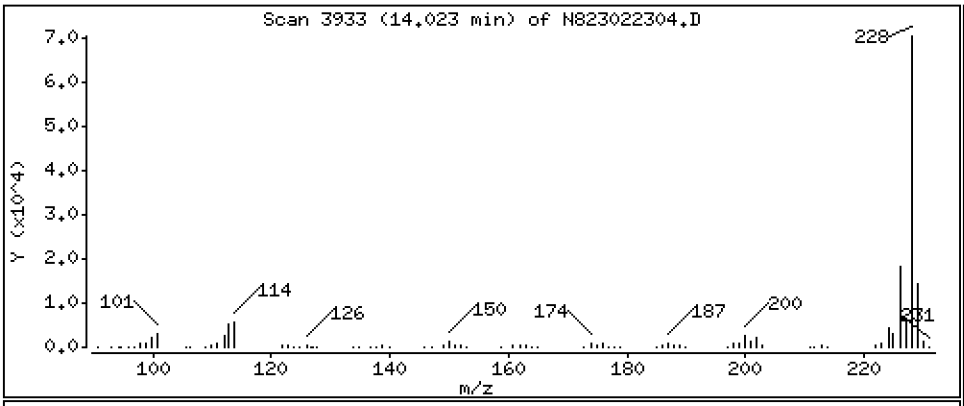
Operator: JZ

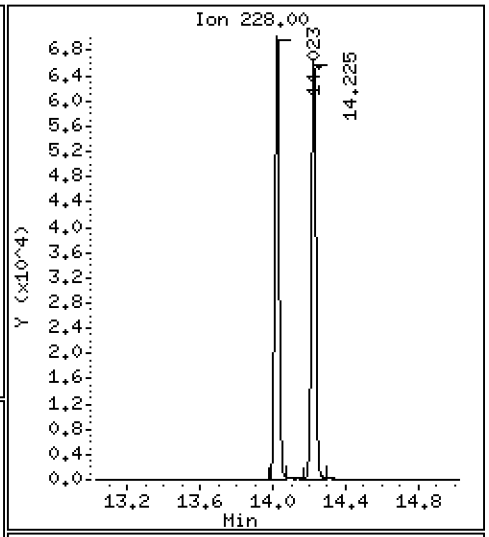
Column phase: Rxi-17sil

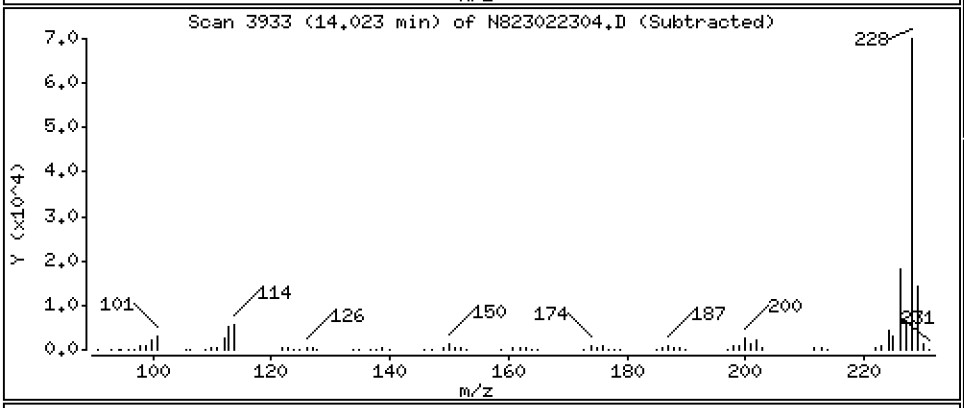
Column diameter: 0.25

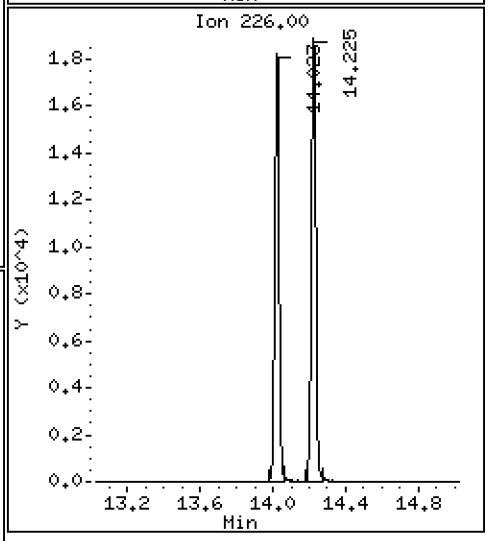
24 Benzo(a)anthracene

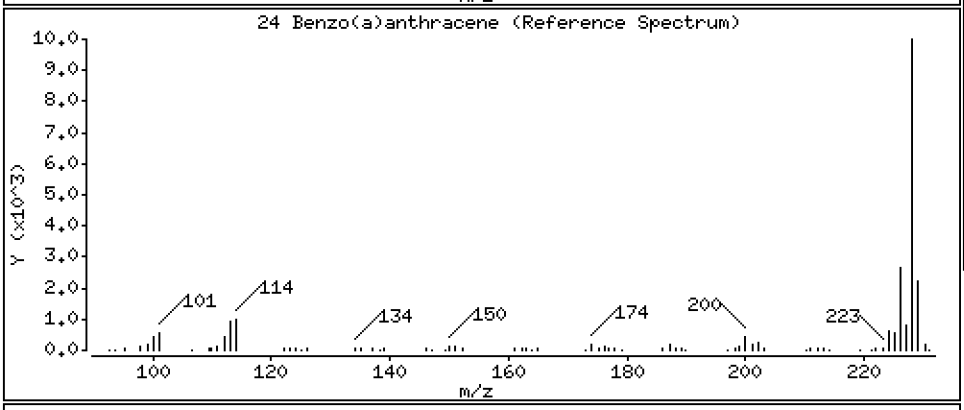
Concentration: 5.368 ug/mL

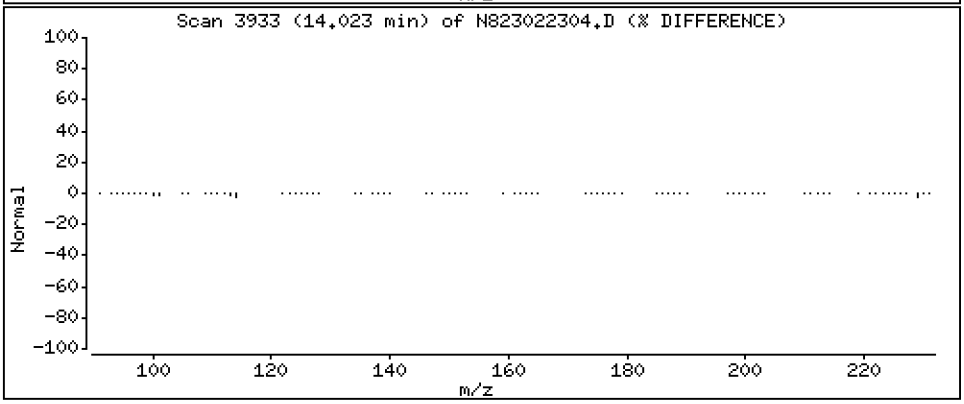












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022304.D

Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

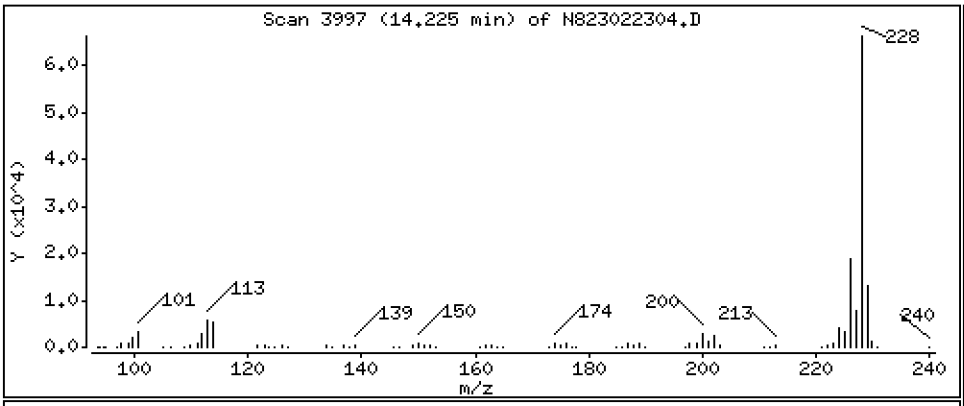
Operator: JZ

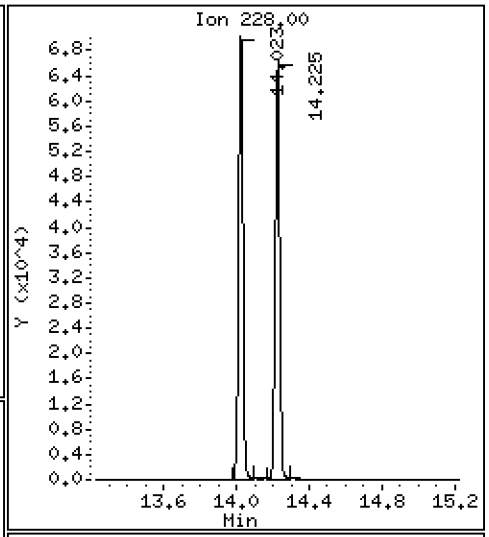
Column phase: Rxi-17sil

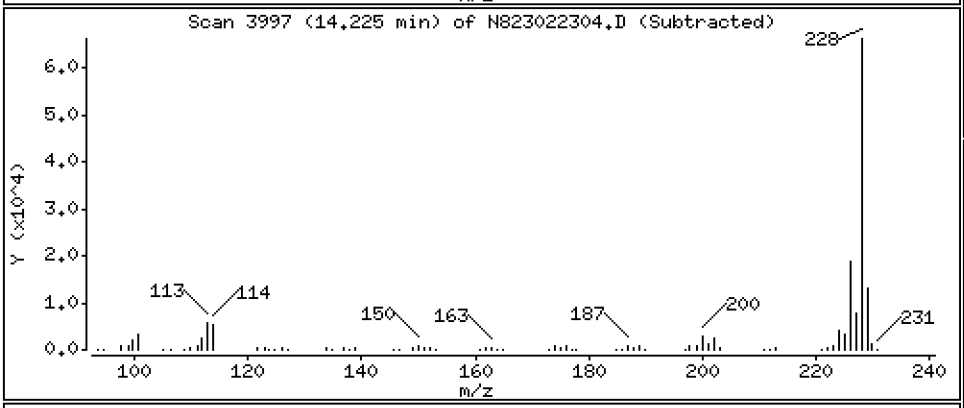
Column diameter: 0.25

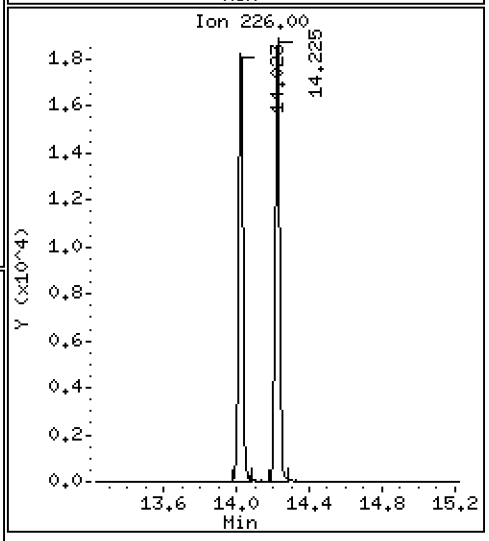
27 Chrysene

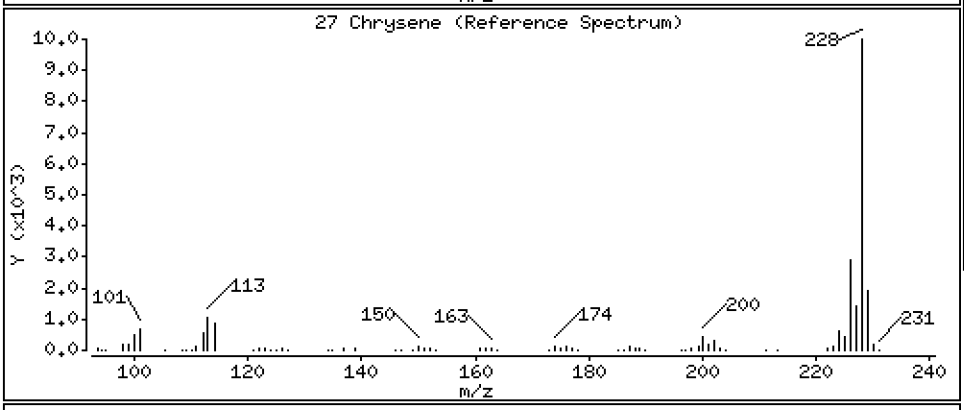
Concentration: 4.904 ug/mL

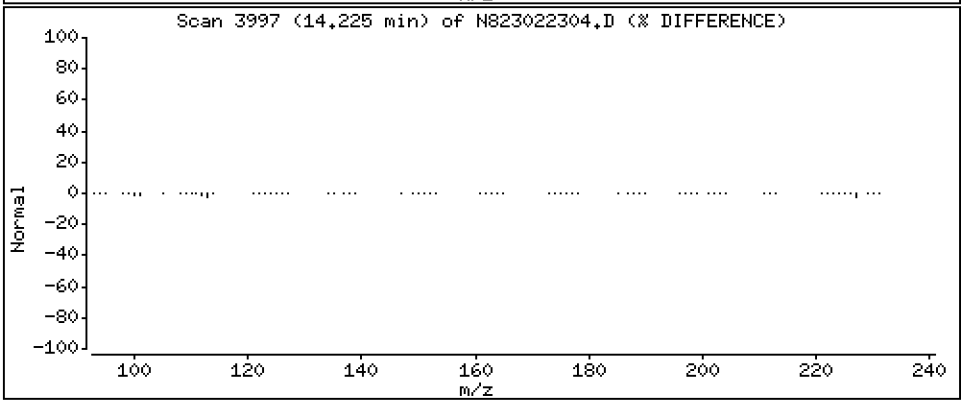












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022304.D

Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

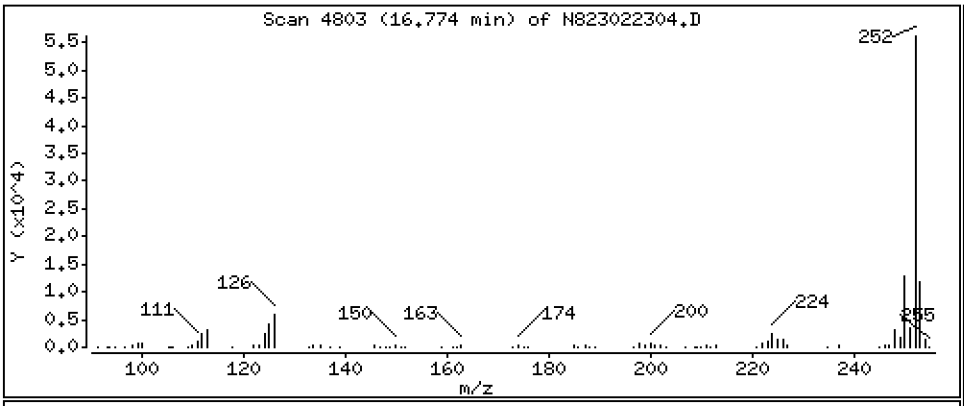
Operator: JZ

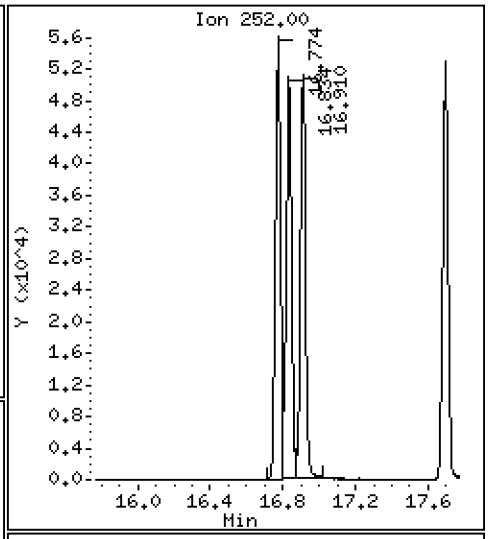
Column phase: Rxi-17sil

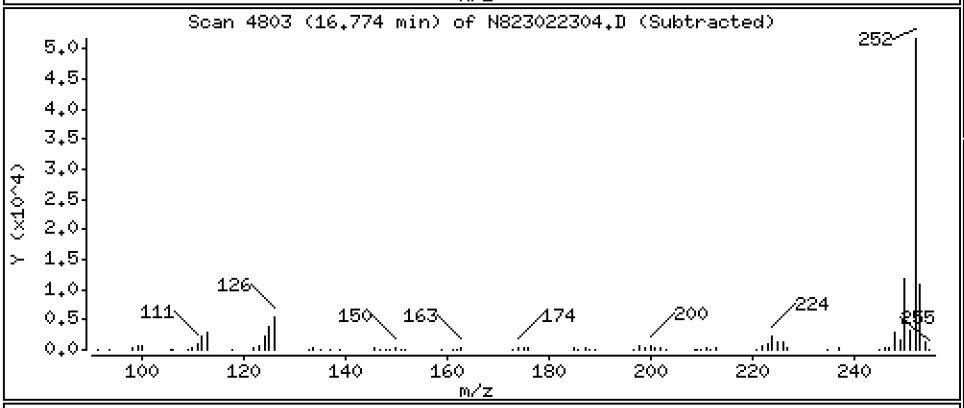
Column diameter: 0.25

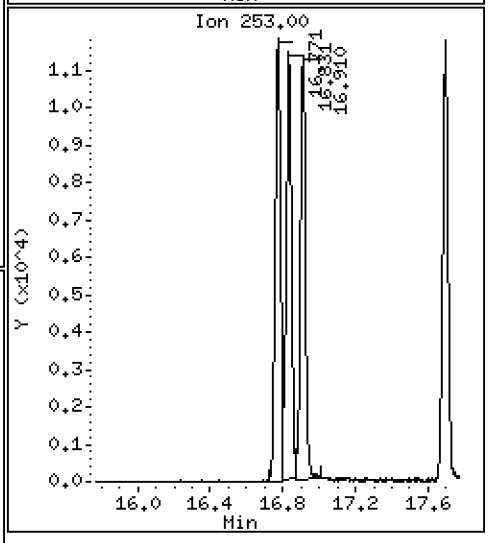
28 Benzo(b)fluoranthene

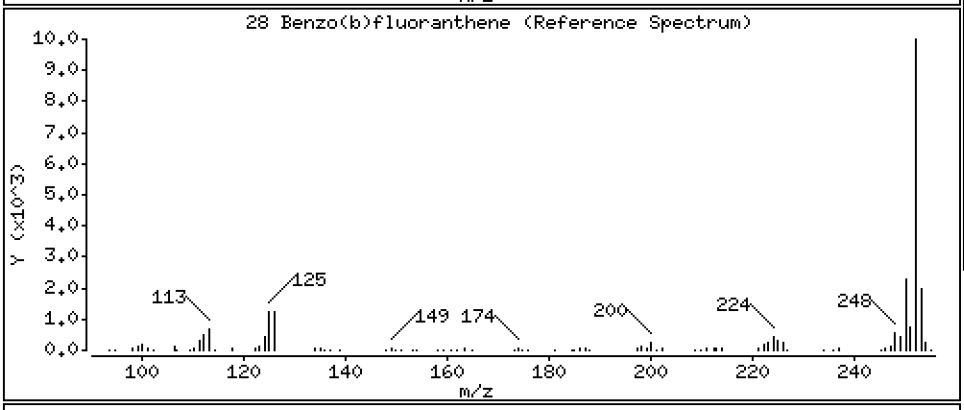
Concentration: 6.321 ug/mL

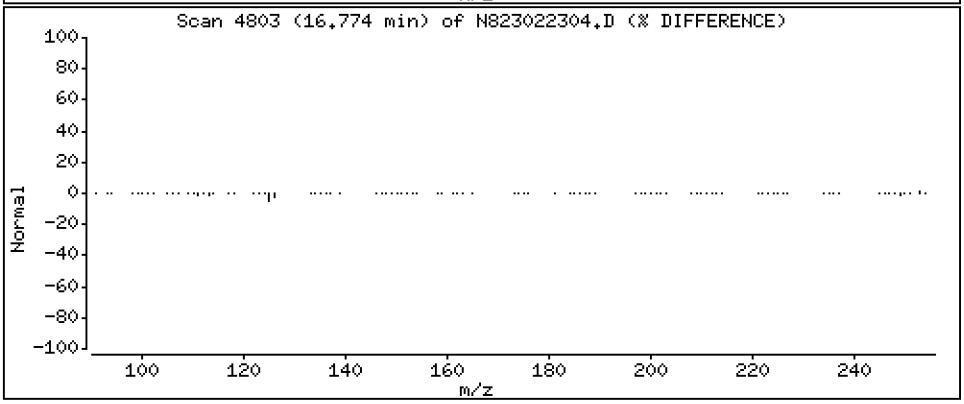












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022304.D

Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

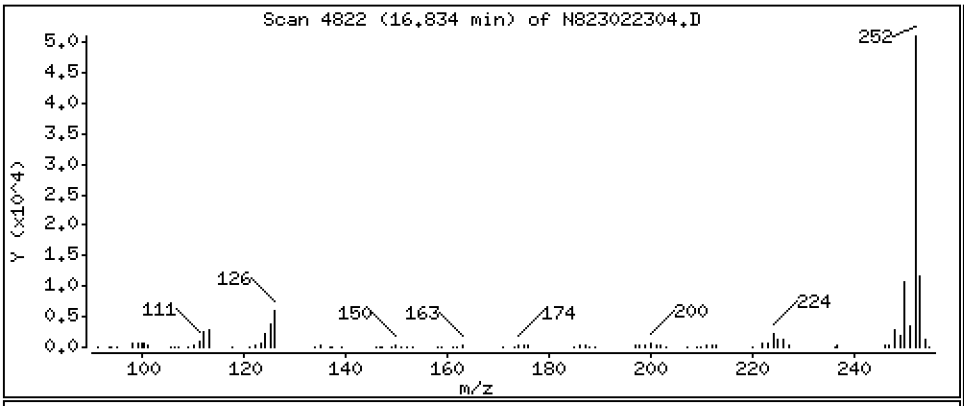
Operator: JZ

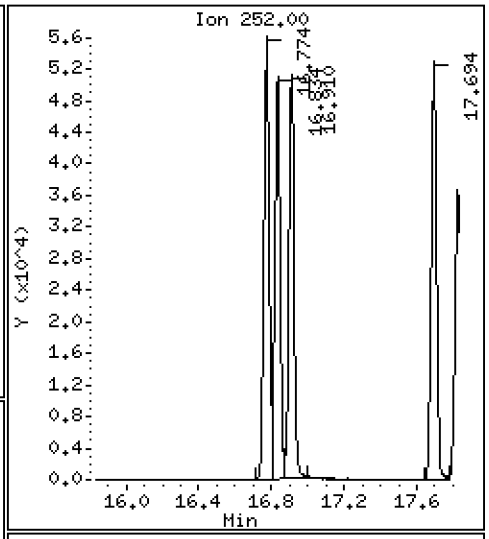
Column phase: Rxi-17sil

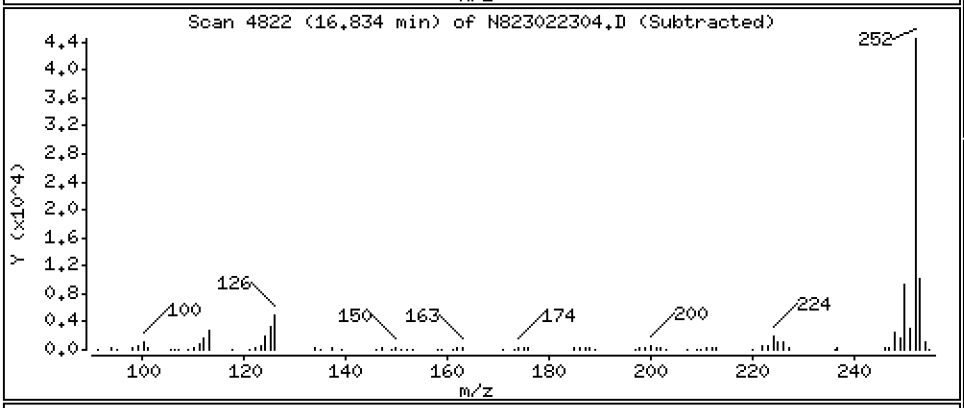
Column diameter: 0.25

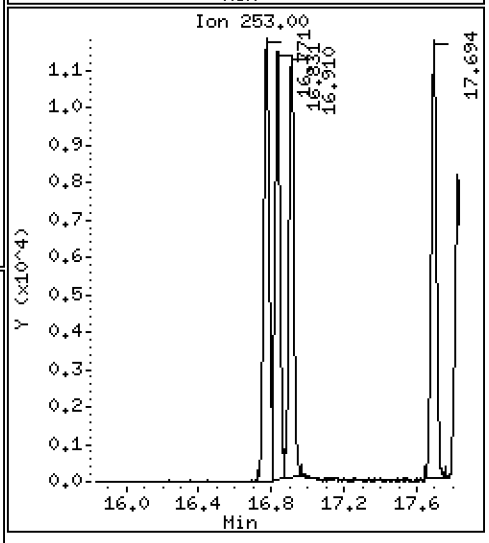
29 Benzo(k)fluoranthene

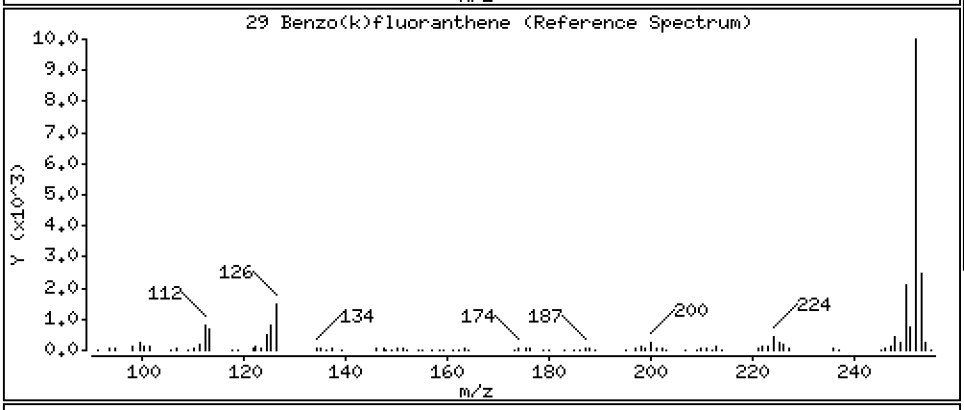
Concentration: 6.001 ug/mL

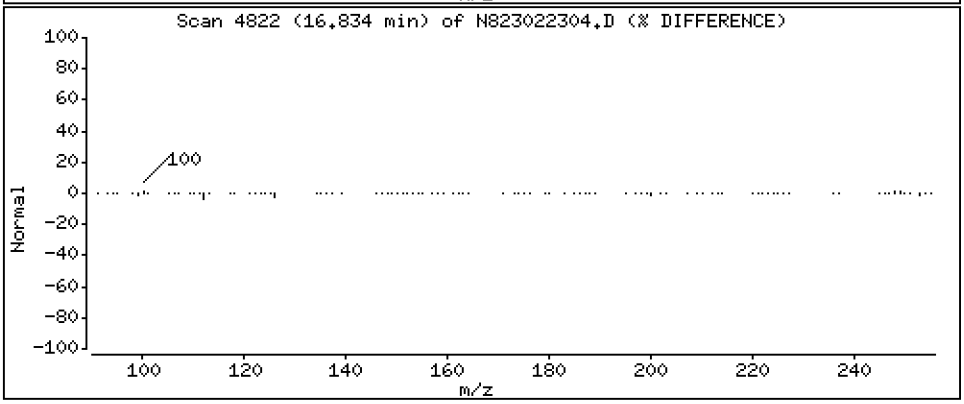












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022304.D

Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

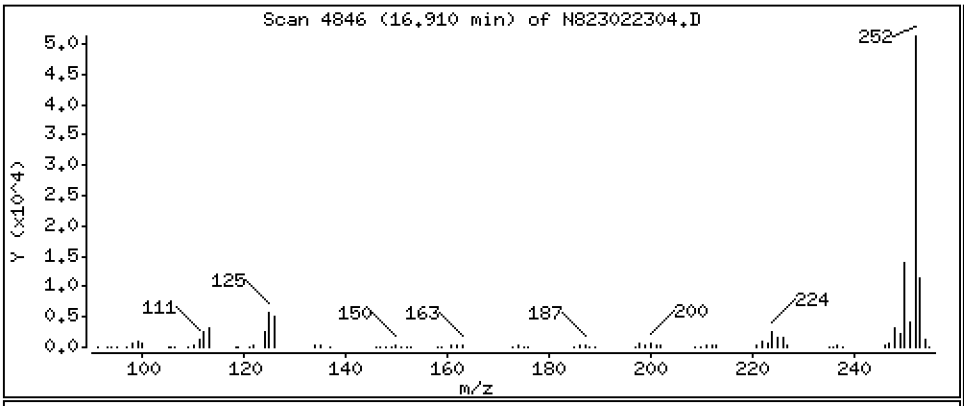
Operator: JZ

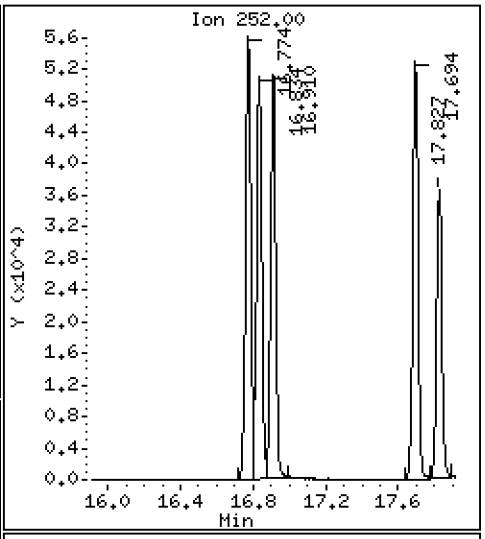
Column phase: Rxi-17sil

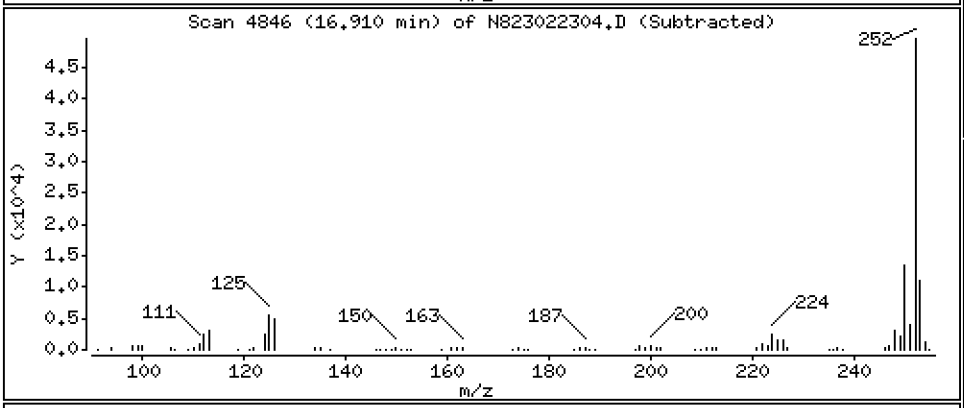
Column diameter: 0.25

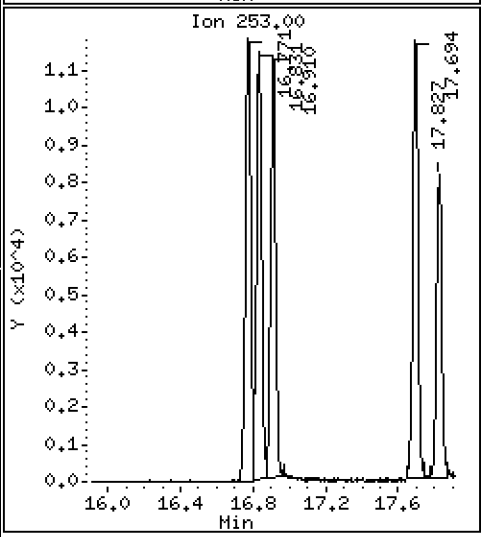
30 Benzo(j)fluoranthene

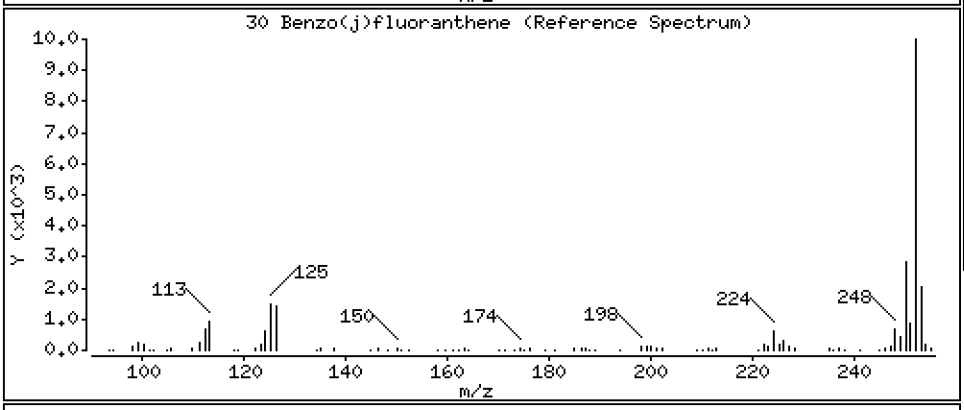
Concentration: 6.460 ug/mL

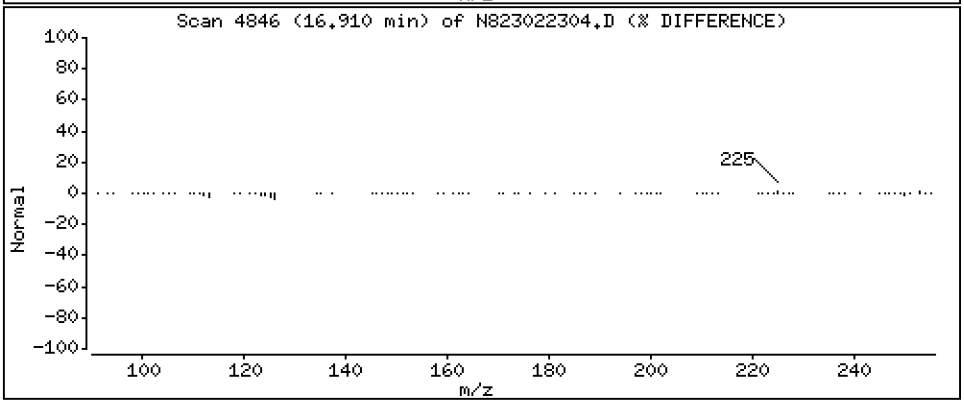












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022304.D

Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

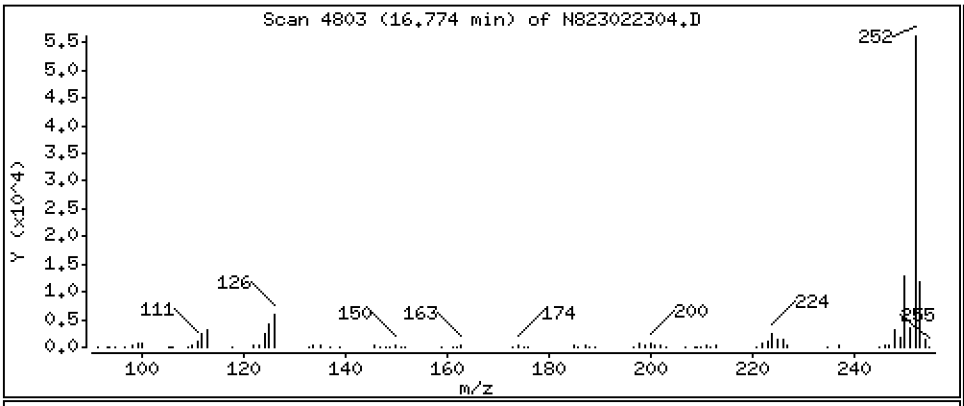
Operator: JZ

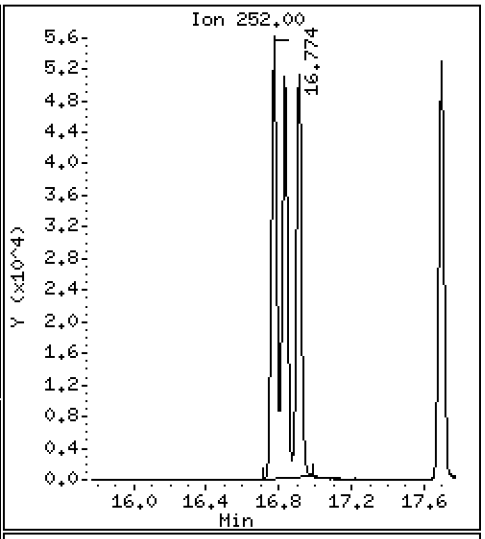
Column phase: Rxi-17sil

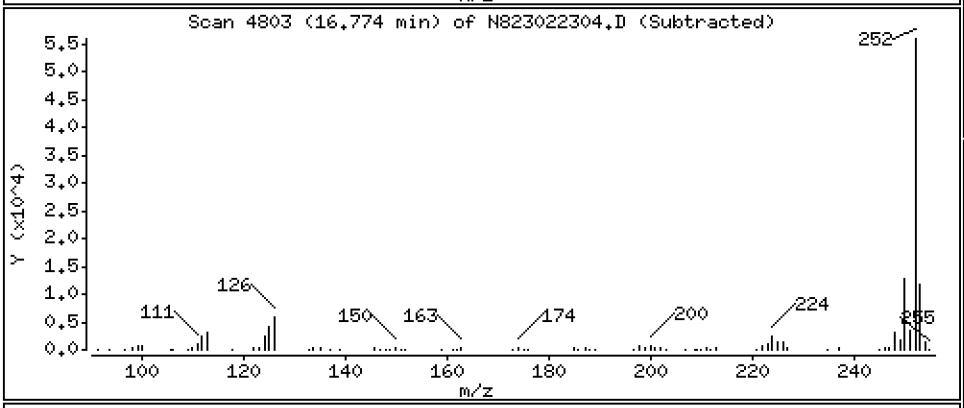
Column diameter: 0.25

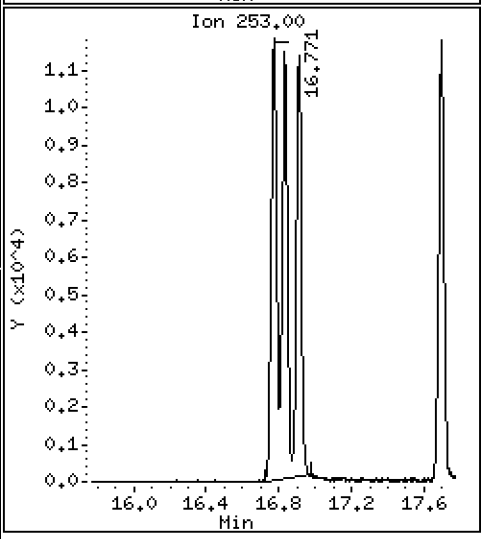
31 Total Benzofluoranthenes

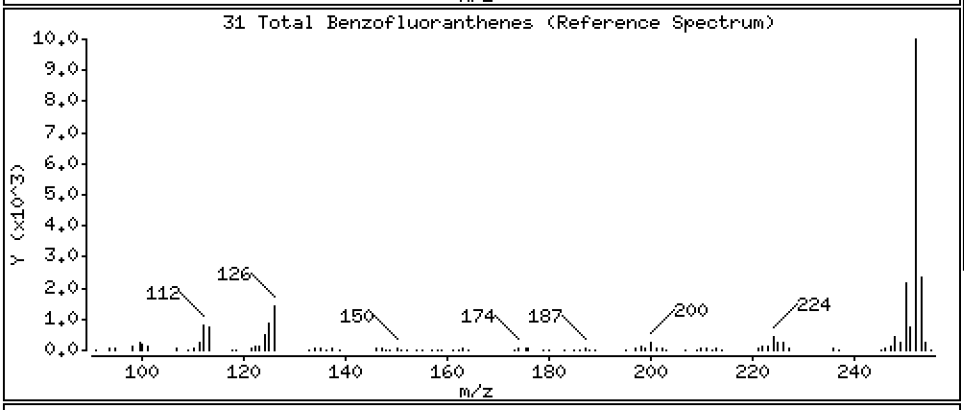
Concentration: 18.70 ug/mL

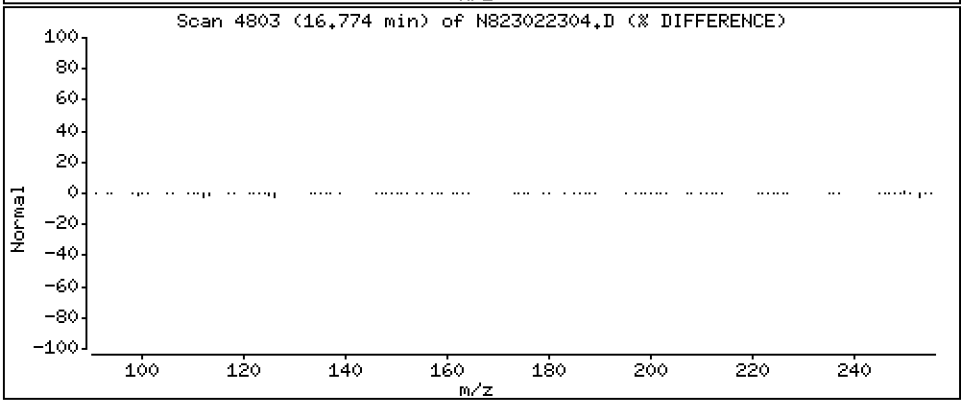












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022304.D

Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

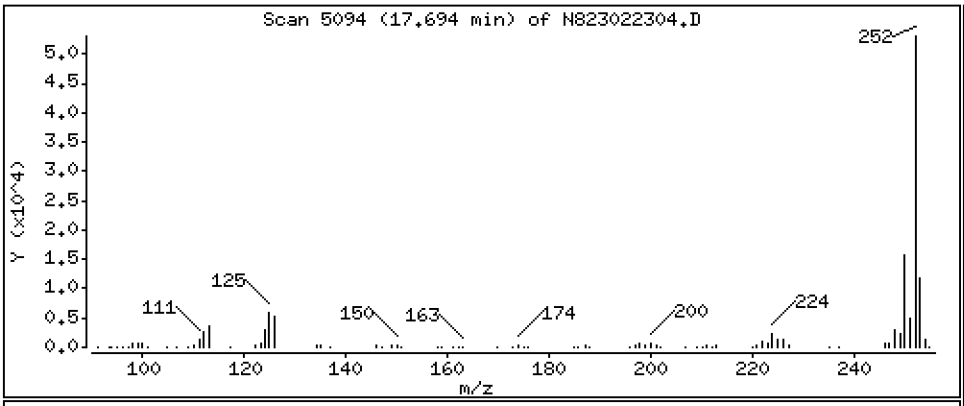
Operator: JZ

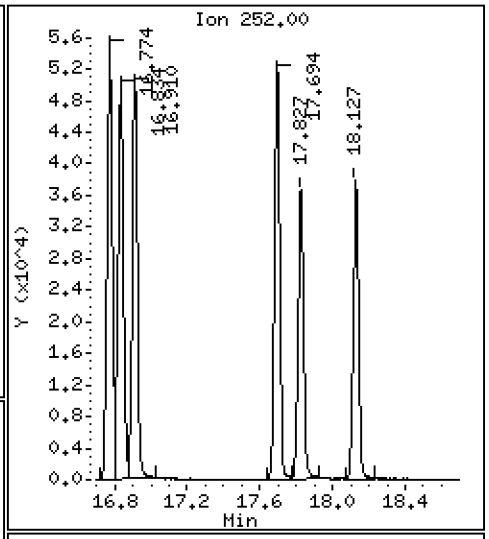
Column phase: Rxi-17sil

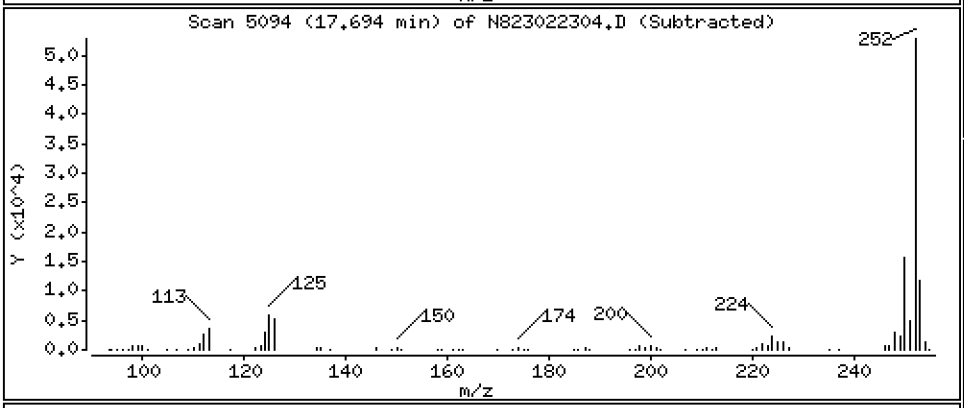
Column diameter: 0.25

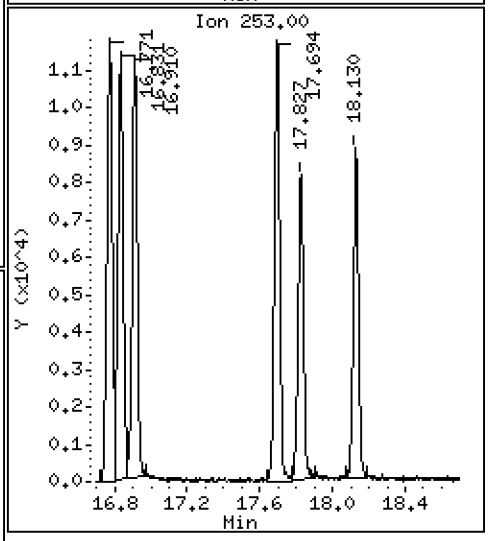
34 Benzo(e)pyrene

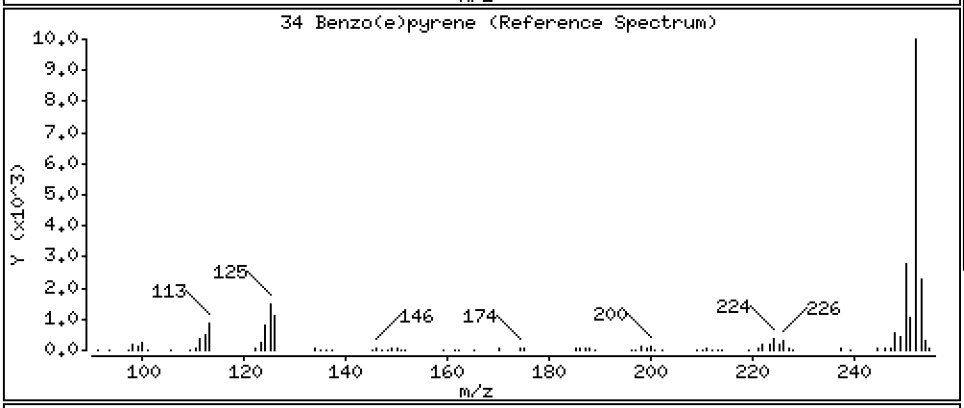
Concentration: 6.113 ug/mL

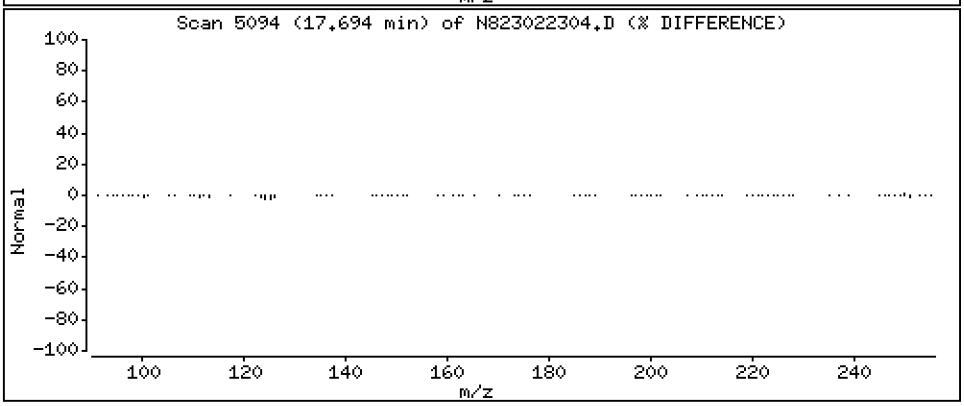












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022304.D

Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

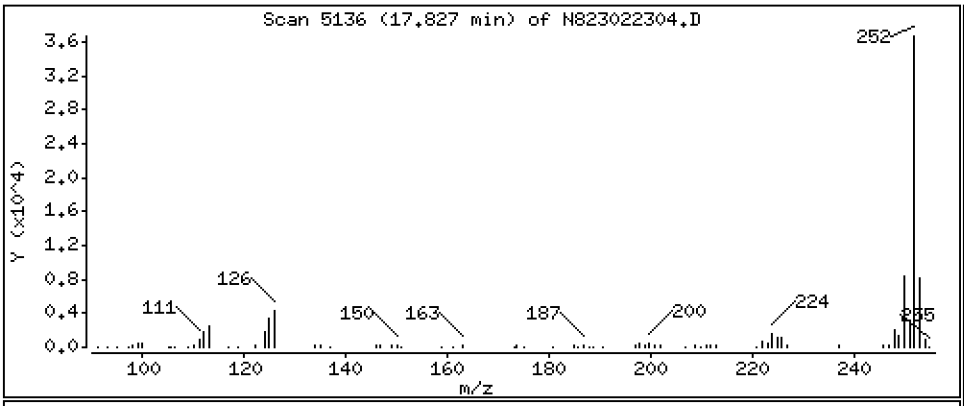
Operator: JZ

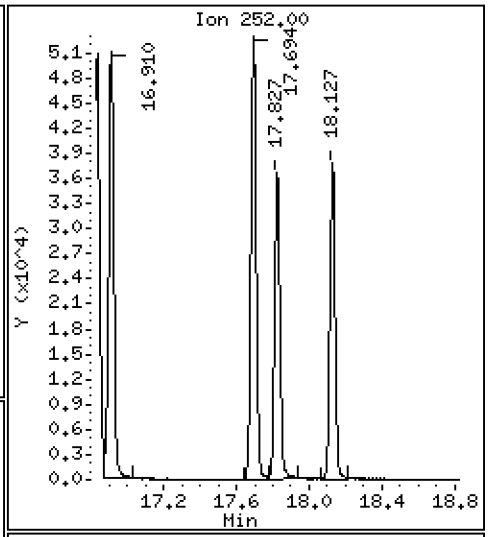
Column phase: Rxi-17sil

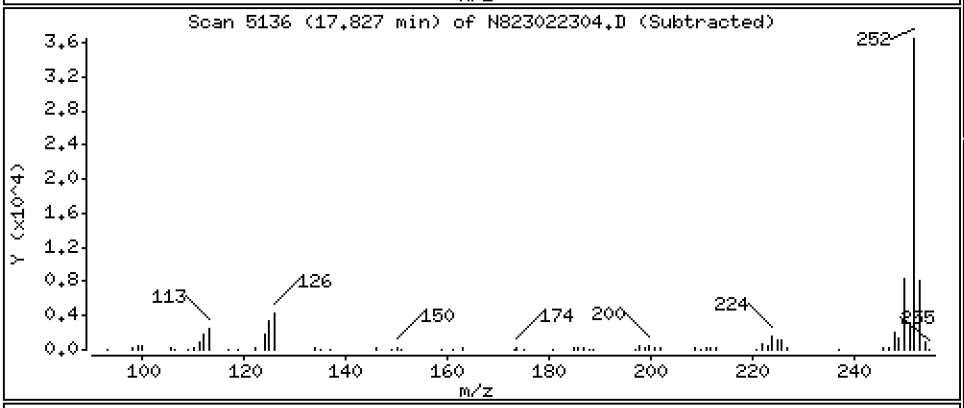
Column diameter: 0.25

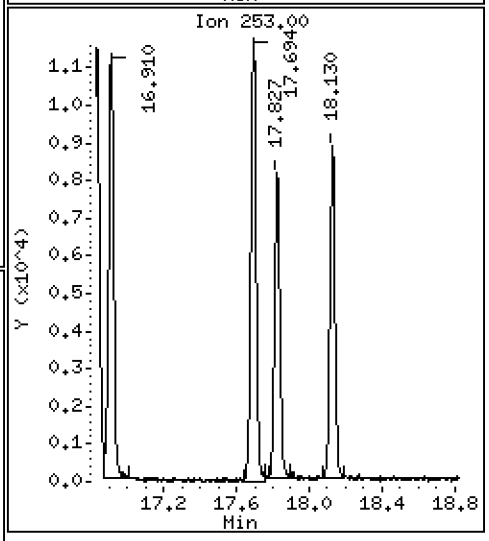
32 Benzo(a)pyrene

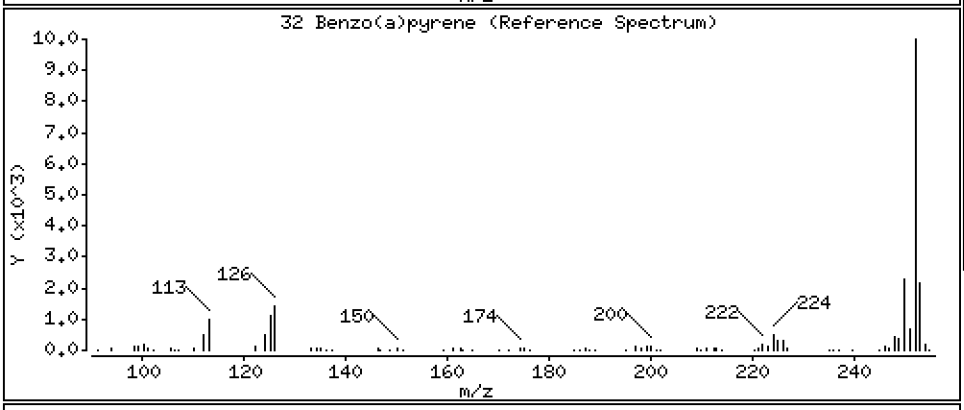
Concentration: 4.902 ug/mL

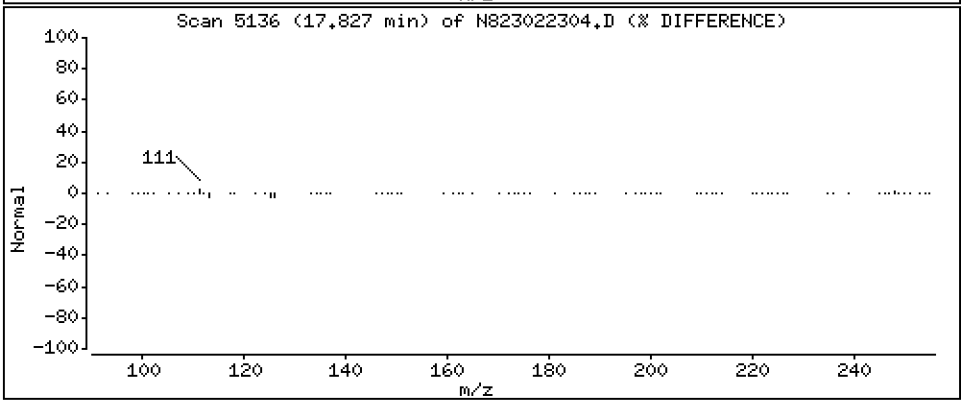












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022304.D

Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

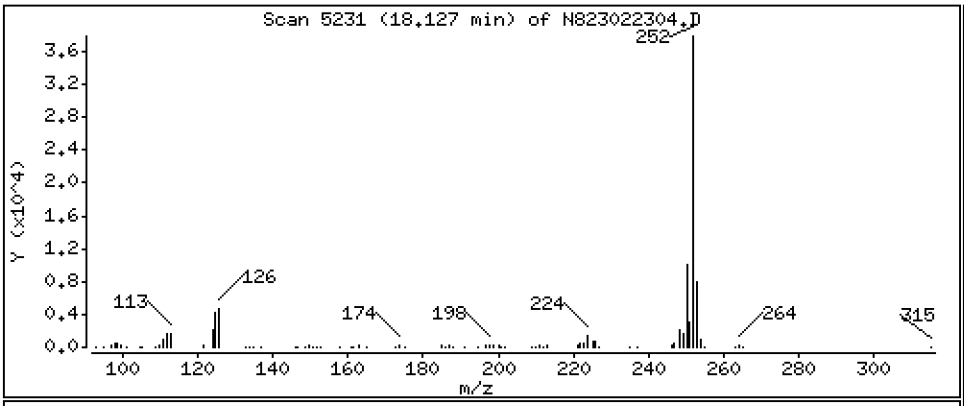
Operator: JZ

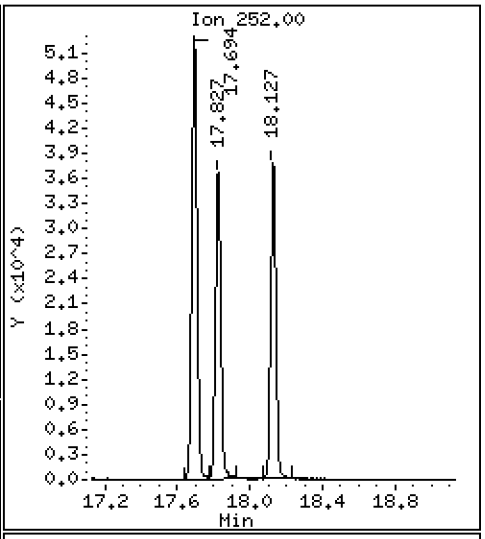
Column phase: Rxi-17sil

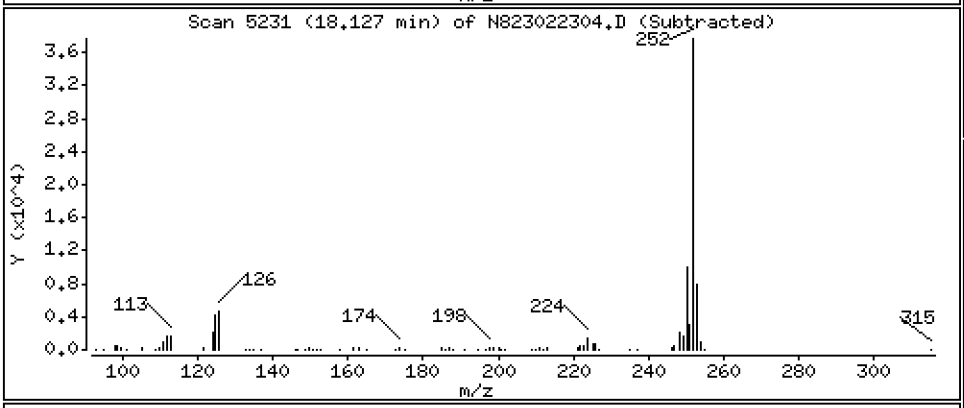
Column diameter: 0.25

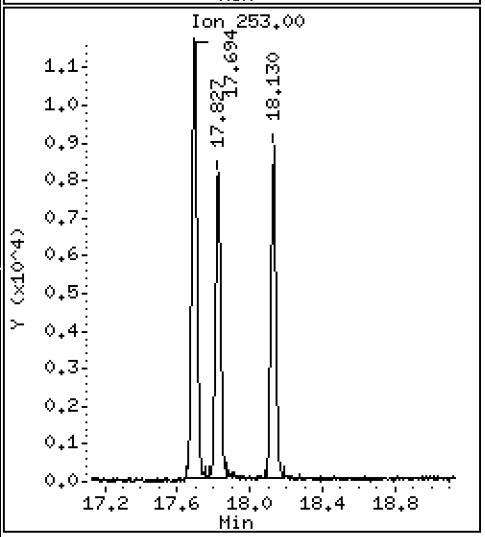
35 Perylene

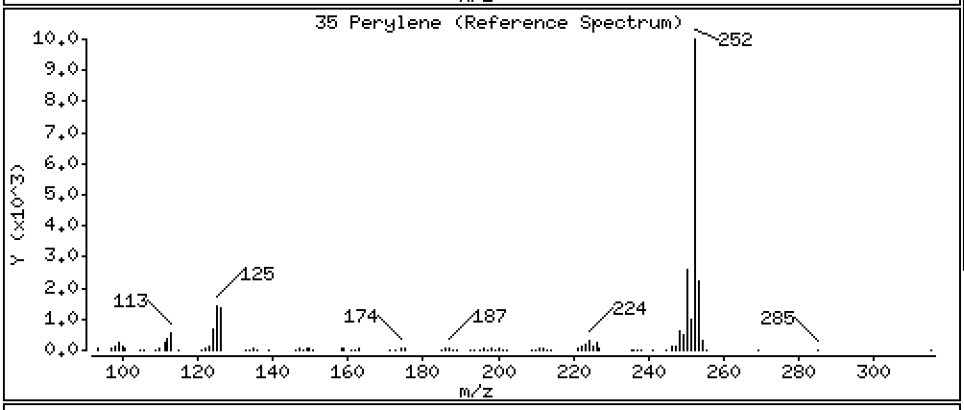
Concentration: 4.571 ug/mL

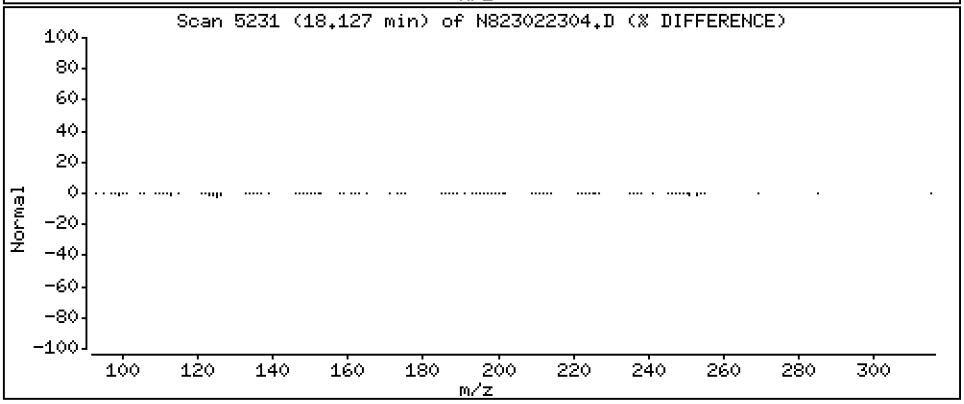












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Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

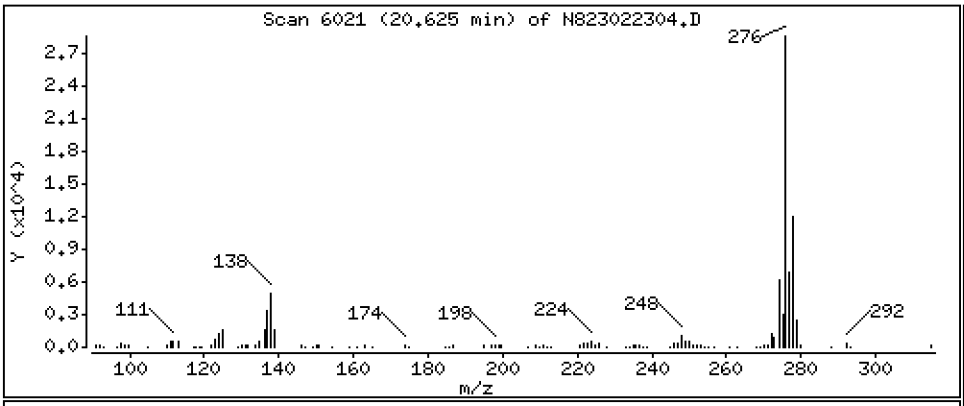
Operator: JZ

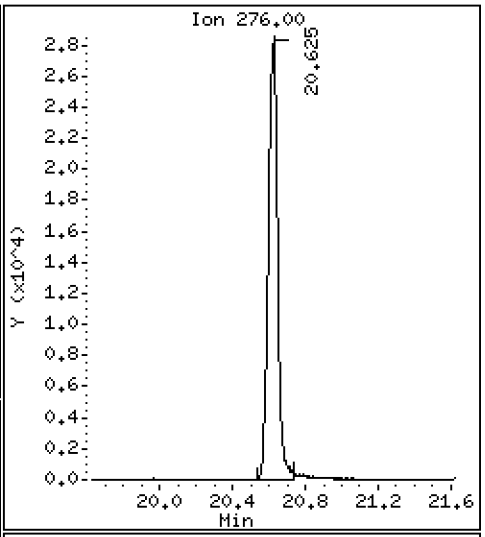
Column phase: Rxi-17sil

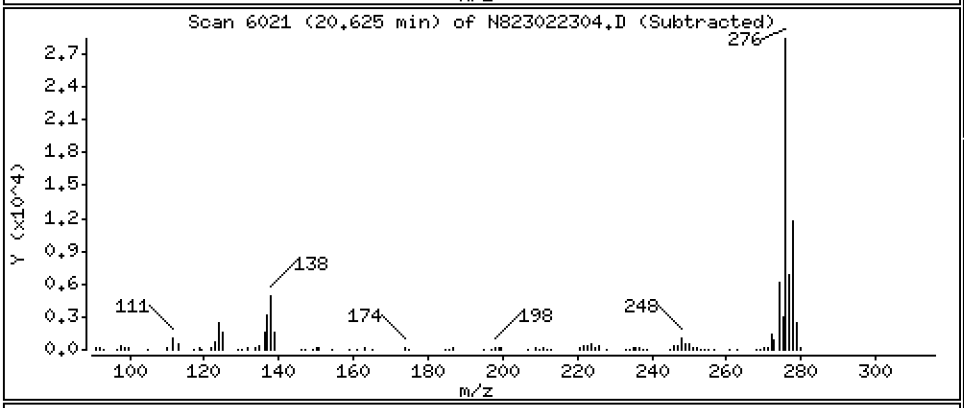
Column diameter: 0.25

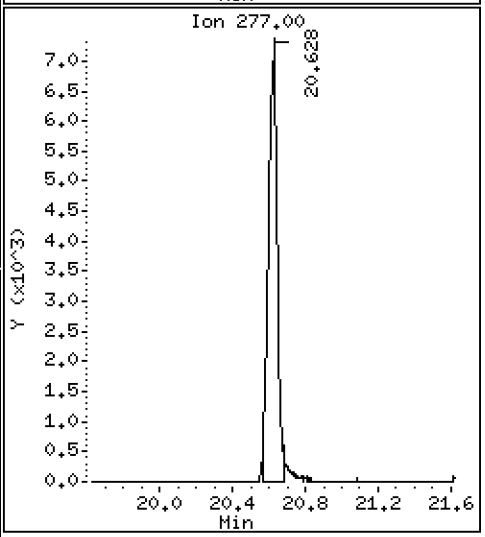
37 Indeno(1,2,3-cd)pyrene

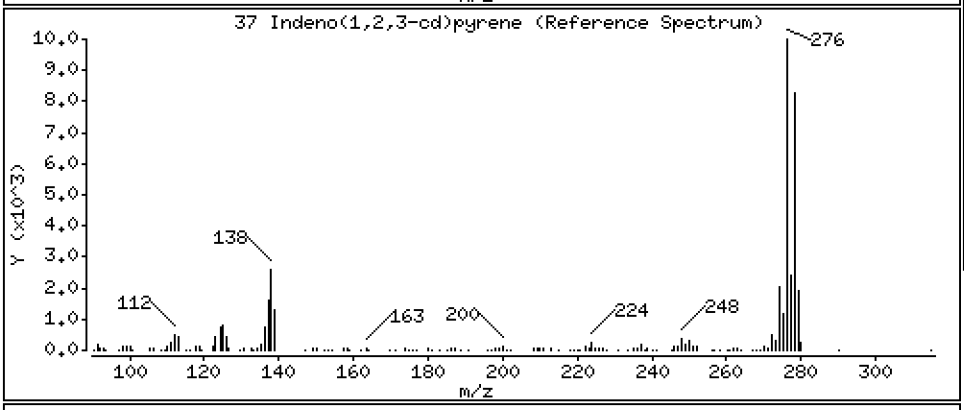
Concentration: 5.826 ug/mL

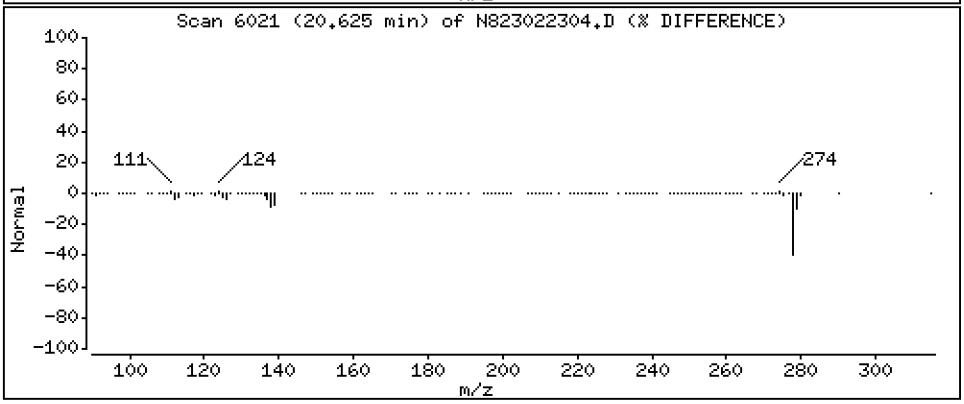












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Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

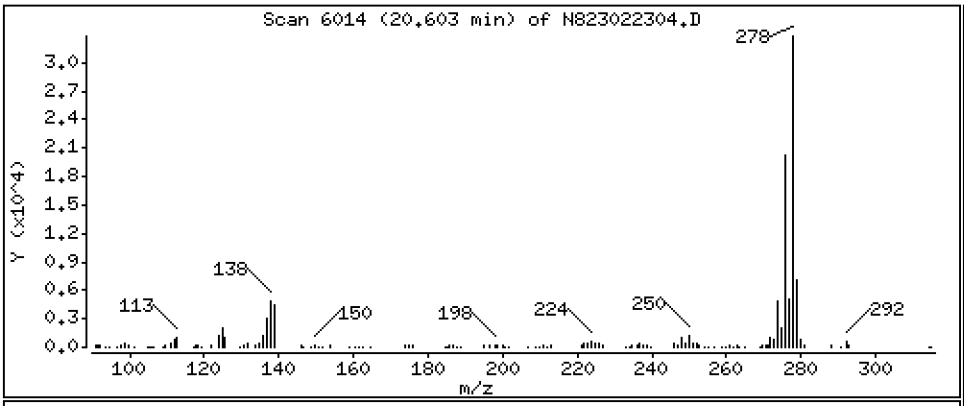
Operator: JZ

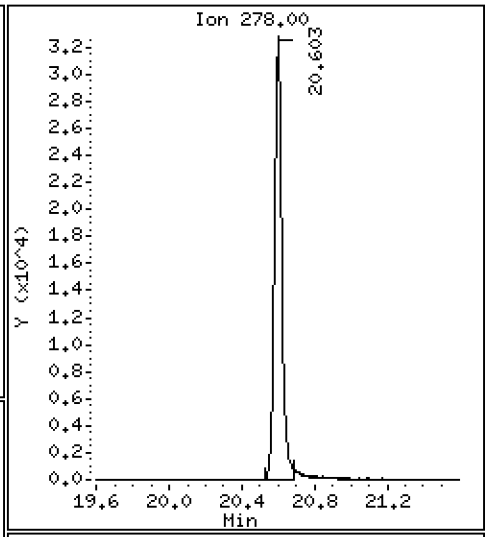
Column phase: Rxi-17sil

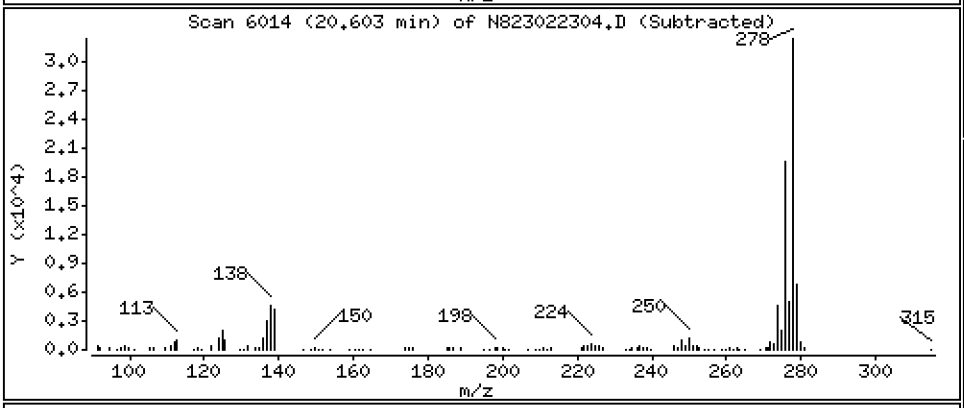
Column diameter: 0.25

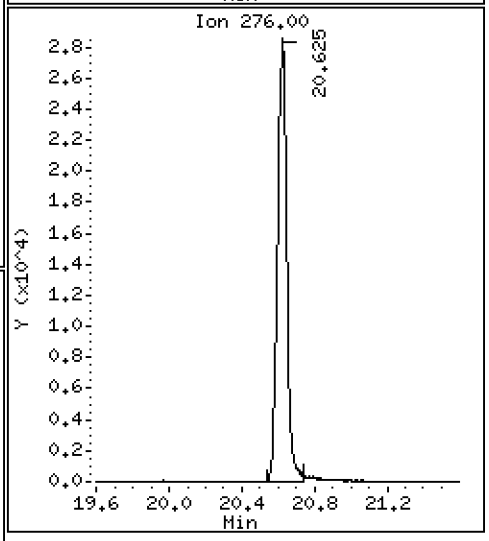
38 Dibenzo(a,h)anthracene

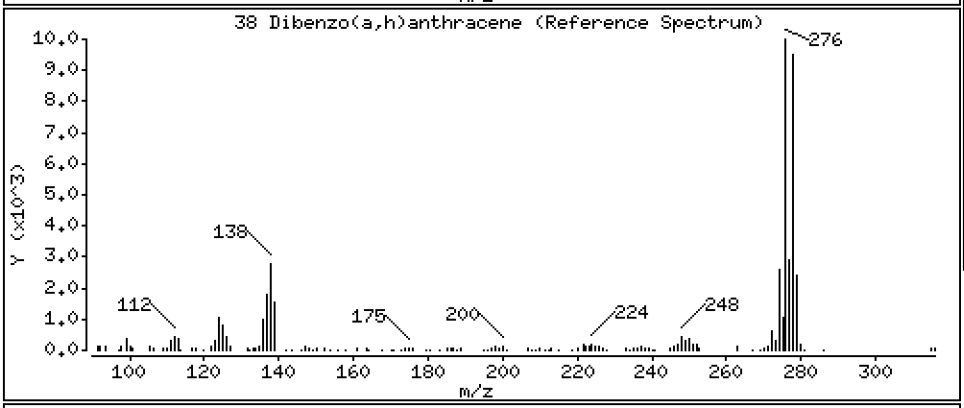
Concentration: 6.199 ug/mL

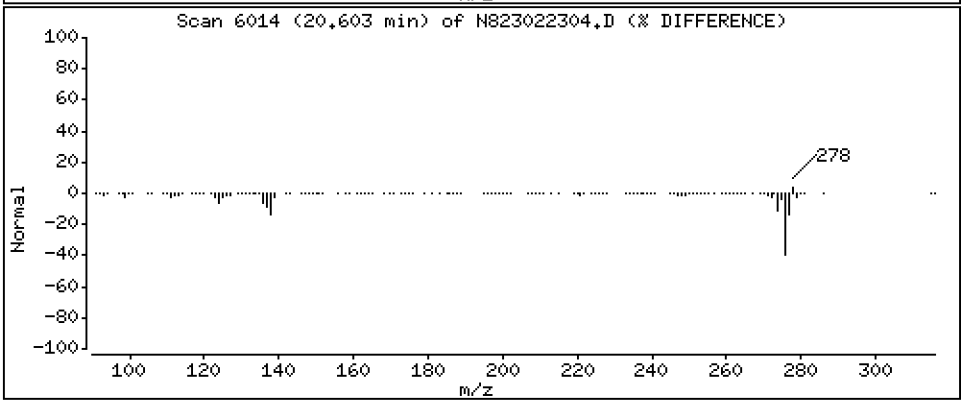












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Date : 23-FEB-2023 12:55

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BS1,

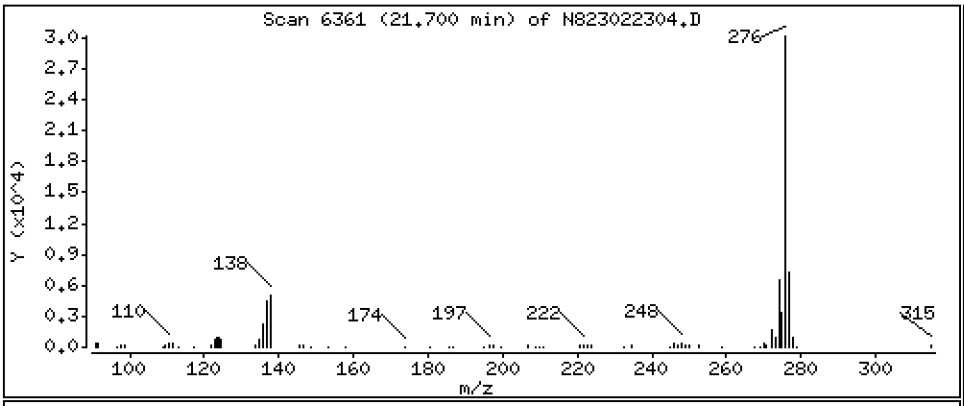
Operator: JZ

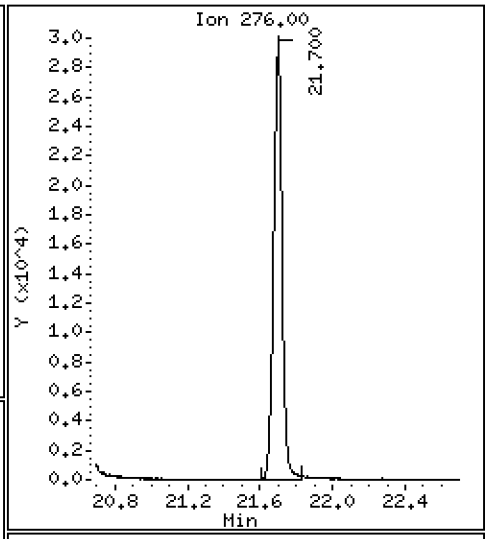
Column phase: Rxi-17sil

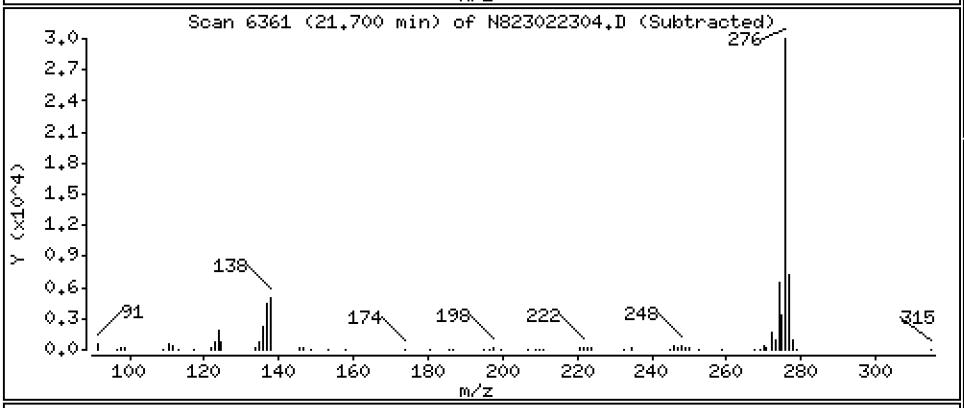
Column diameter: 0.25

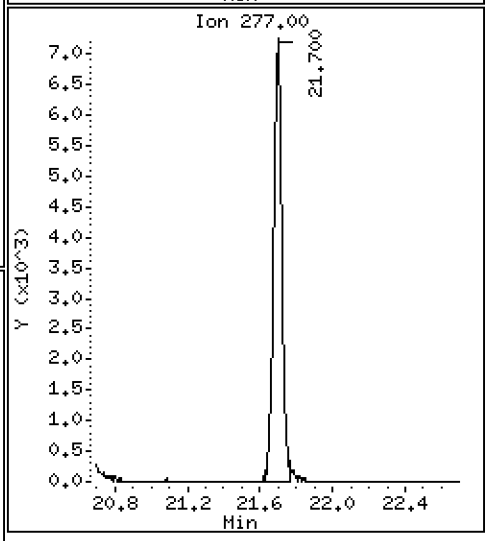
39 Benzo(g,h,i)perylene

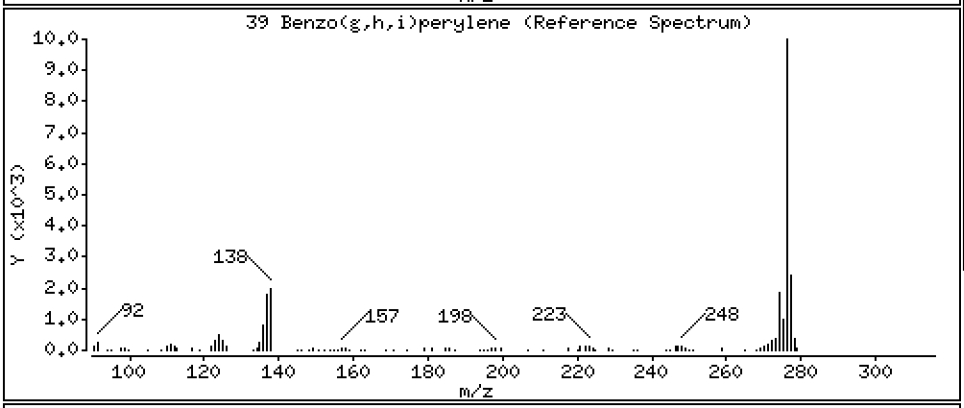
Concentration: 6.144 ug/mL

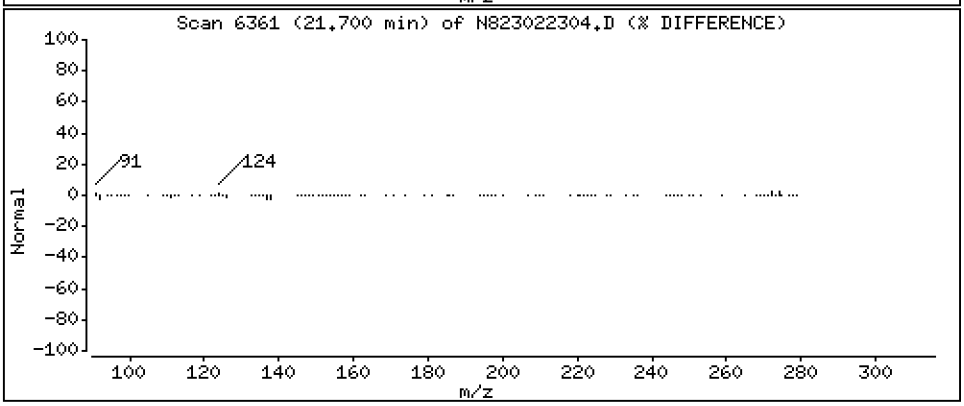












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230223.b\N823022304.D
Lab Smp Id: BLB0386-BS1
Inj Date : 23-FEB-2023 12:55
Operator : JZ Inst ID: nt8.i
Smp Info : BLB0386-BS1,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230223.b\FSIMPNA230119.m
Meth Date : 26-Feb-2023 11:43 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PNAXEMDL.sub
Target Version: 4.14
Processing Host: JIANQING-202105

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.862	4.871	(1.000)	36805	2.00000	
	2 Naphthalene	128	4.890	4.903	(1.006)	73429	4.29088	4.291
$	3 2-Methylnaphthalene-d10	152	5.599	5.605	(1.152)	30331	3.02173	3.022
	4 2-Methylnaphthalene	141	5.646	5.652	(1.161)	42340	4.49806	4.498
	5 1-methylnaphthalene	141	5.842	5.849	(1.202)	42307	4.42851	4.429
	9 Acenaphthylene	152	7.047	7.050	(0.985)	69121	4.03488	4.035
*	10 Acenaphthene-d10	164	7.154	7.158	(1.000)	22686	2.00000	
	11 Acenaphthene	153	7.205	7.208	(1.007)	49414	4.30505	4.305
	12 Dibenzofuran	168	7.357	7.360	(1.028)	76722	4.40075	4.401
	14 Fluorene	166	7.834	7.837	(1.095)	64071	4.73184	4.732
*	15 Phenanthrene-d10	188	9.197	9.197	(1.000)	43305	2.00000	
	16 Phenanthrene	178	9.232	9.235	(1.004)	98529	4.65780	4.658
	17 Anthracene	178	9.273	9.276	(1.008)	86009	4.47579	4.476
	19 Carbazole	167	9.788	9.791	(1.064)	89104	5.05793	5.058
	22 Fluoranthene	202	11.009	11.009	(1.197)	116048	5.03991	5.040
$	21 Fluoranthene-d10	212	10.968	10.971	(1.193)	70517	3.69083	3.691
	23 Pyrene	202	11.524	11.527	(0.815)	121998	5.15282	5.153
	24 Benzo(a)anthracene	228	14.022	14.025	(0.991)	115185	5.36756	5.368
*	25 Chrysene-d12	240	14.146	14.152	(1.000)	38188	2.00000	
	27 Chrysene	228	14.225	14.225	(1.006)	112033	4.90411	4.904
	28 Benzo(b)fluoranthene	252	16.773	16.770	(0.929)	111383	6.32136	6.321
	29 Benzo(k)fluoranthene	252	16.833	16.833	(0.933)	103563	6.00054	6.001
	30 Benzo(j)fluoranthene	252	16.909	16.912	(0.937)	100369	6.45995	6.460
	31 Total Benzofluoranthenes	252	16.773	16.770	(0.929)	312096	18.7028	18.70(M)
	34 Benzo(e)pyrene	252	17.693	17.696	(0.980)	107410	6.11304	6.113
	32 Benzo(a)pyrene	252	17.826	17.826	(0.988)	76015	4.90243	4.902
*	33 Perylene-d12	264	18.051	18.057	(1.000)	30254	2.00000	
	35 Perylene	252	18.127	18.130	(1.004)	76061	4.57123	4.571
$	36 Dibenzo(a,h)anthracene-d14	292	20.482	20.485	(1.135)	54626	4.60817	4.608
	37 Indeno(1,2,3-cd)pyrene	276	20.624	20.624	(1.143)	102908	5.82567	5.826
	38 Dibenzo(a,h)anthracene	278	20.602	20.596	(1.141)	94239	6.19921	6.199
	39 Benzo(g,h,i)perylene	276	21.700	21.696	(1.202)	98337	6.14432	6.144

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823022304.D
Lab Smp Id: BLB0386-BS1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230223.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 23-FEB-2023
Calibration Time: 11:46
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	37022	18511	74044	36805	-0.59
10 Acenaphthene-d10	22454	11227	44908	22686	1.03
15 Phenanthrene-d10	43277	21639	86554	43305	0.06
25 Chrysene-d12	38907	19454	77814	38188	-1.85
33 Perylene-d12	39582	19791	79164	30254	-23.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.87	4.37	5.37	4.86	-0.19
10 Acenaphthene-d10	7.16	6.66	7.66	7.15	-0.04
15 Phenanthrene-d10	9.20	8.70	9.70	9.20	0.00
25 Chrysene-d12	14.15	13.65	14.65	14.15	-0.04
33 Perylene-d12	18.06	17.56	18.56	18.05	-0.03

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

REVIEW SUMMARY FOR FILE - N823022304.D

Lab ID: BLB0386-BS1
nt8.i, 20230223.b\FSIMPNA230119.m,   23-FEB-2023 12:55

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check performed

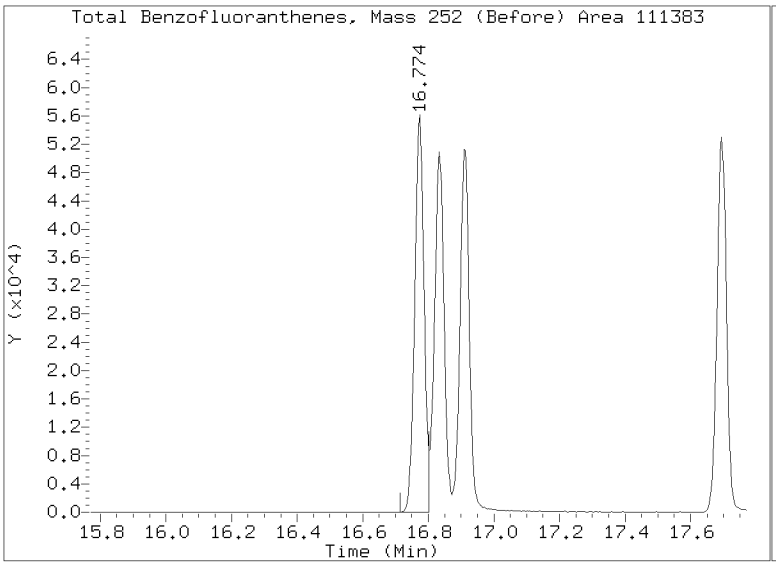
On Column LOD for nt8.i, 20230223.b\FSIMPNA230119.m, PNAXEMDL.sub = 0.0080

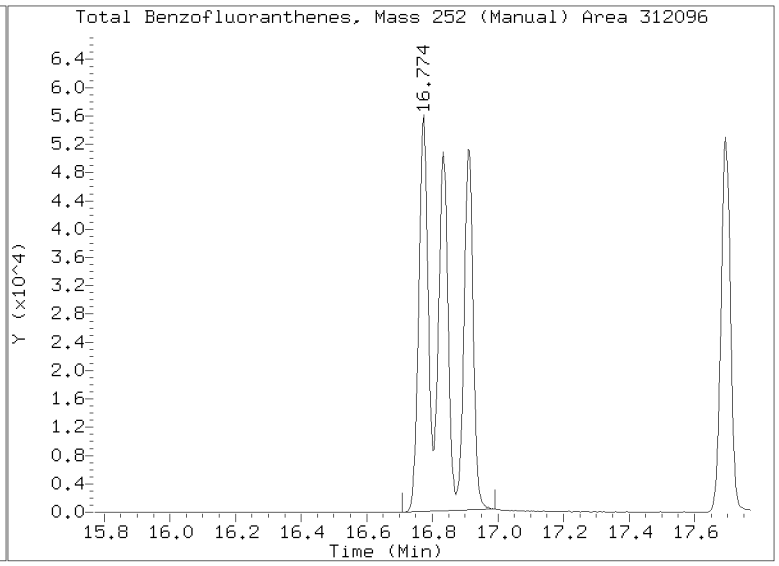
Exception: Benzo(e)pyrene 0.0800

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230223.b/N823022304.D
Injection Date: 23-FEB-2023 12:55
Lab ID:BLB0386-BS1 Client ID:
Report Date: 02/26/2023 12:32





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Page 1

Date : 23-FEB-2023 13:21

Client ID:

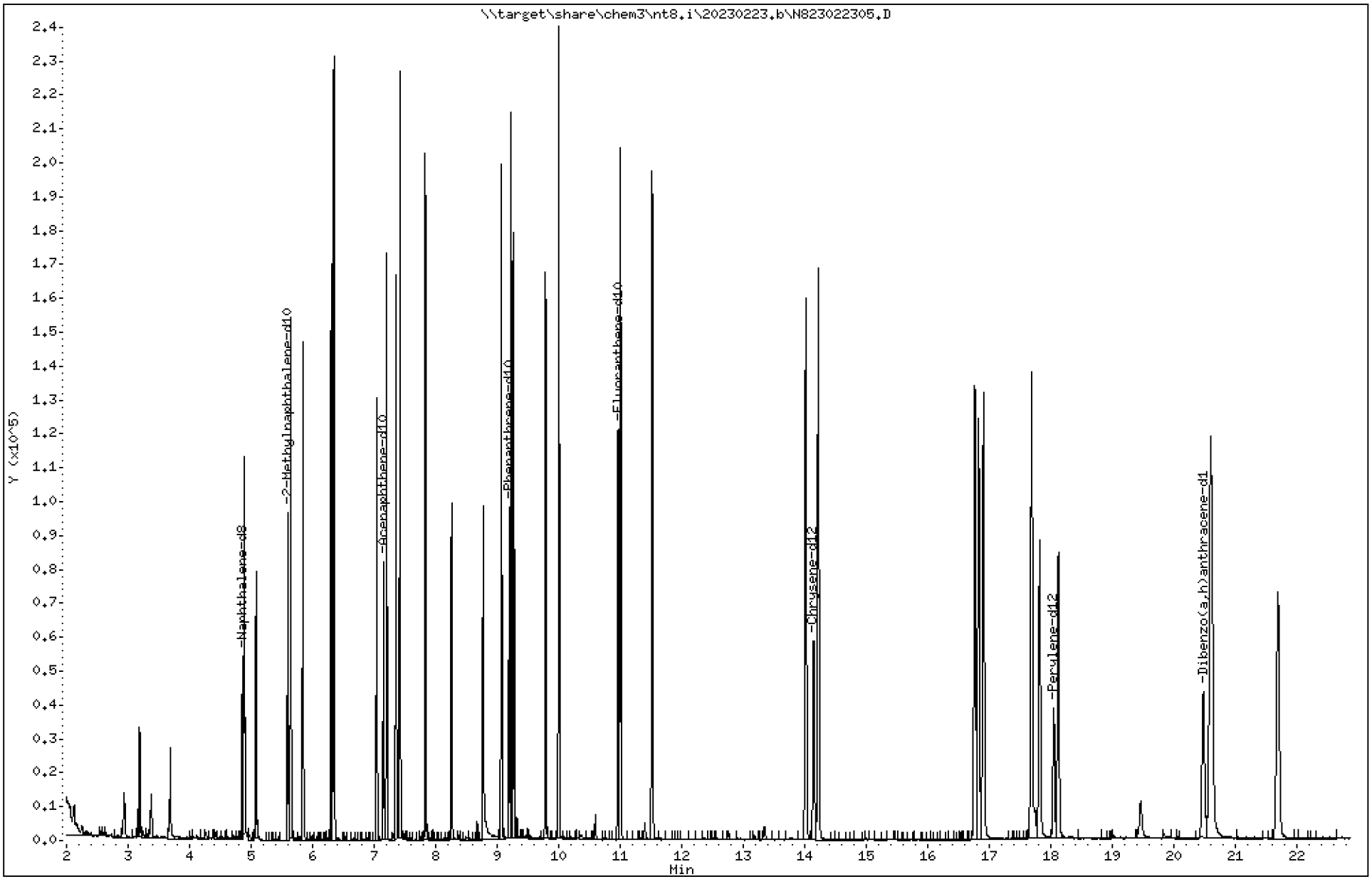
Instrument: nt8.i

Sample Info: BLB0386-BSD1,

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



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Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

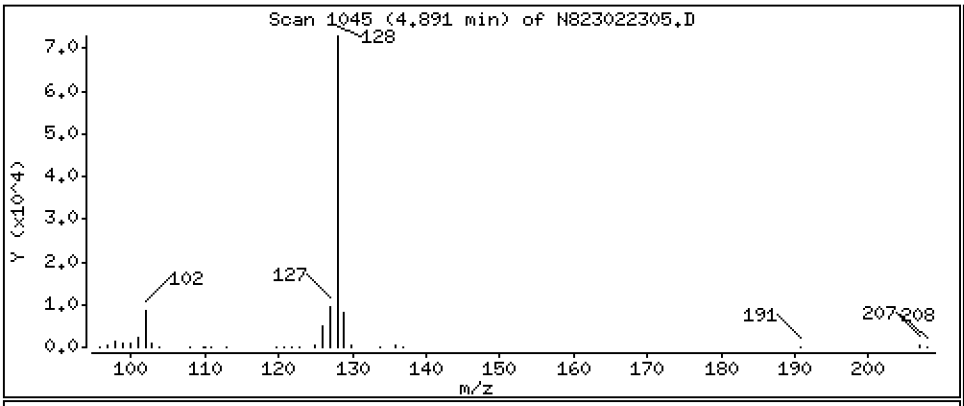
Operator: JZ

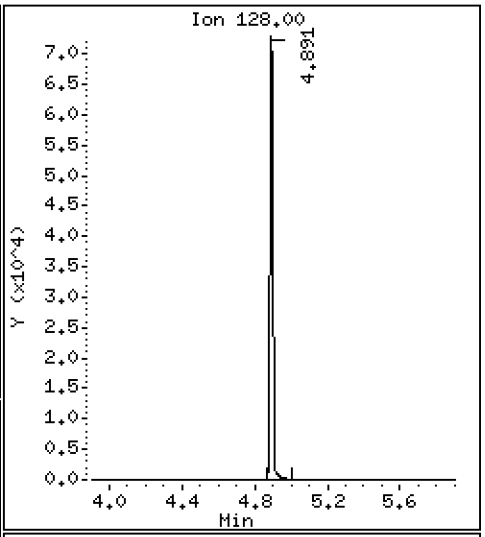
Column phase: Rxi-17sil

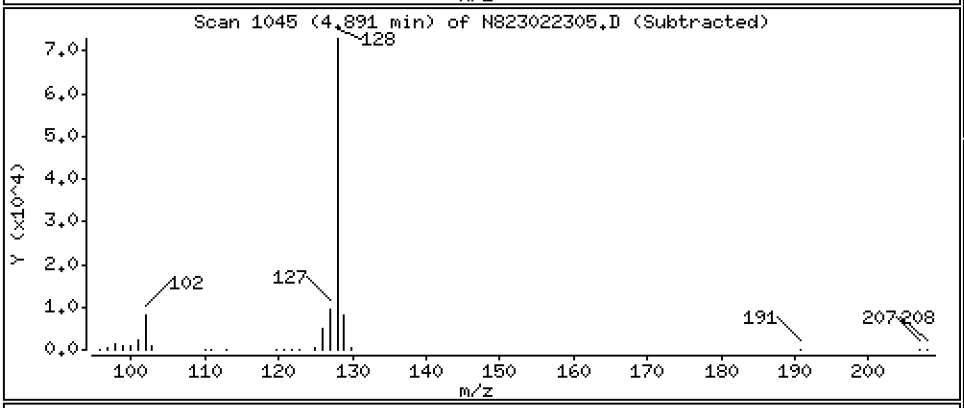
Column diameter: 0.25

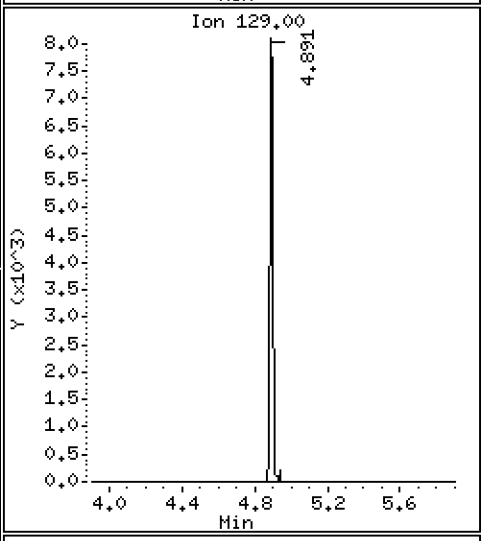
2 Naphthalene

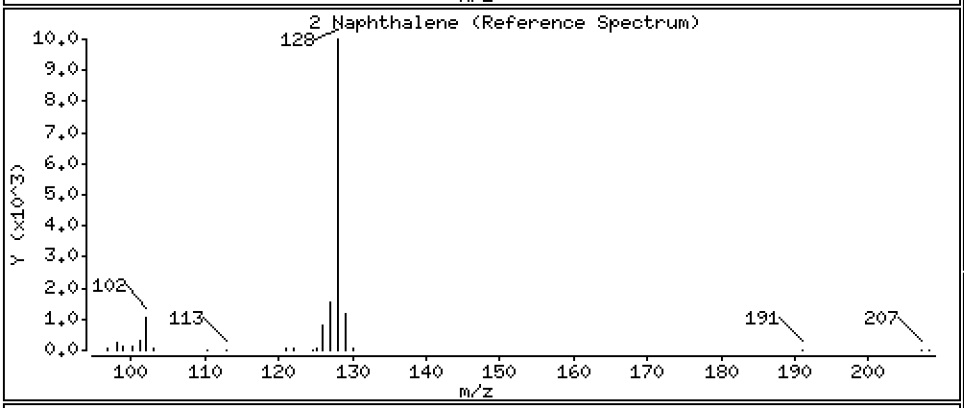
Concentration: 4.451 ug/mL

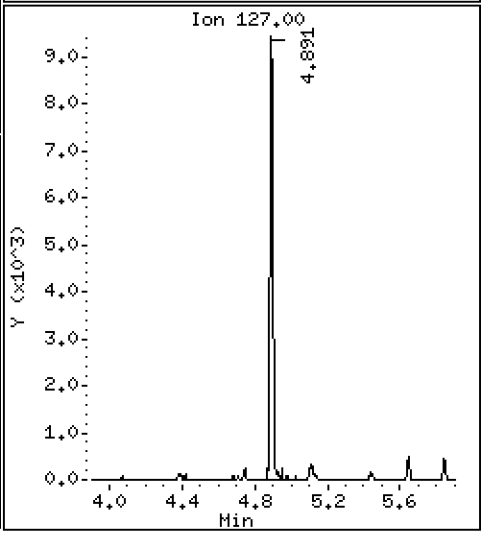


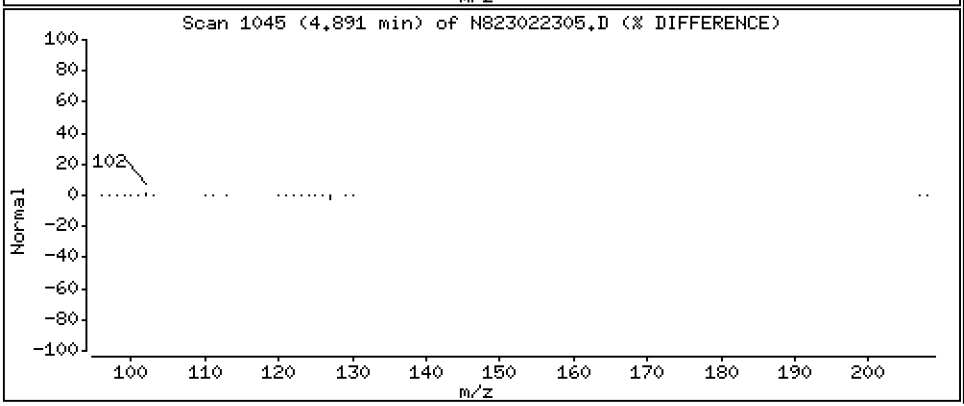












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

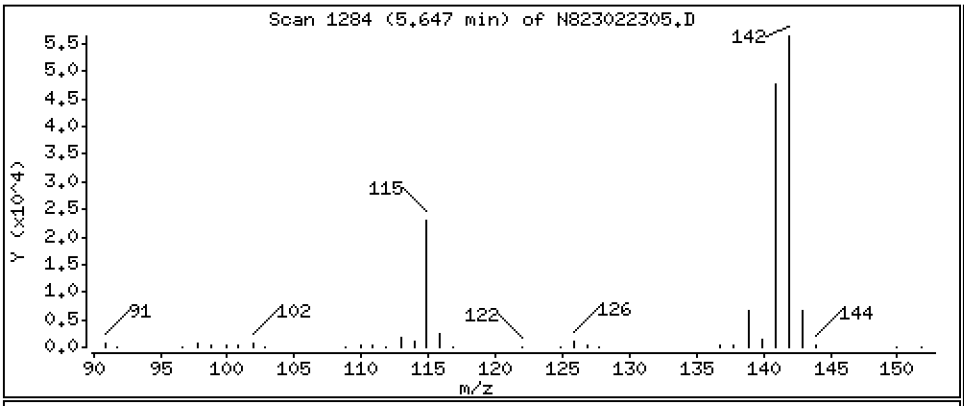
Operator: JZ

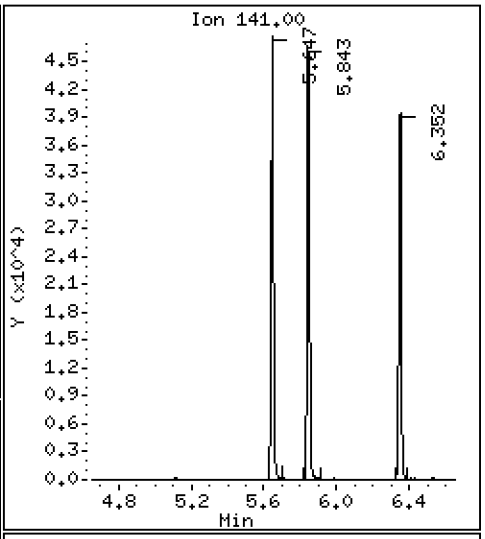
Column phase: Rxi-17sil

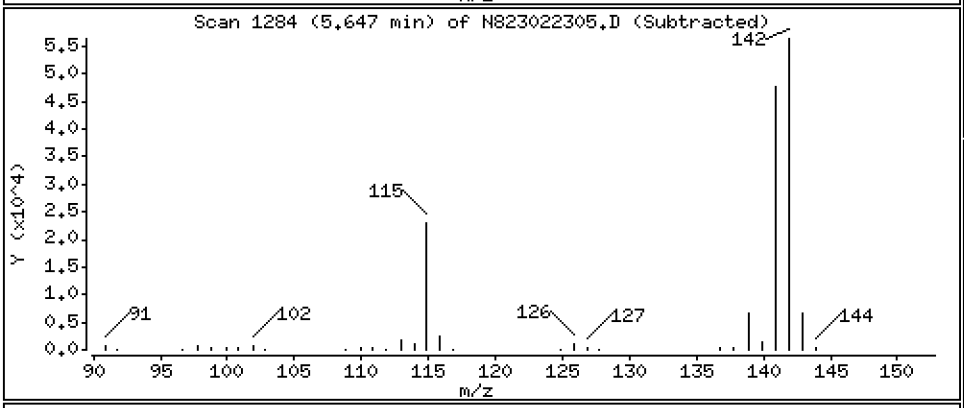
Column diameter: 0.25

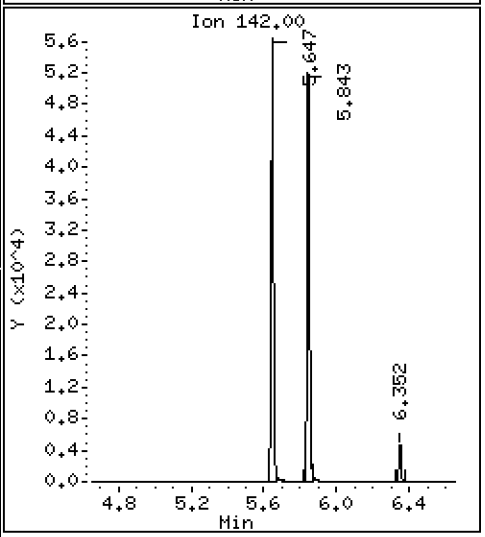
4 2-Methylnaphthalene

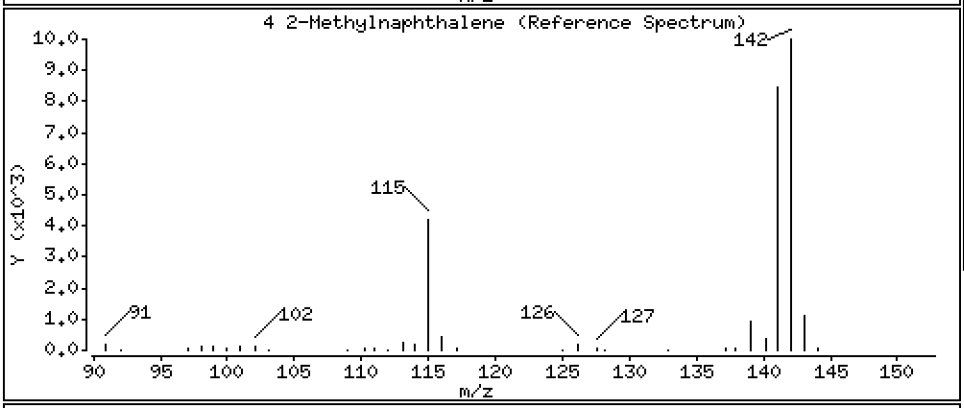
Concentration: 4.644 ug/mL

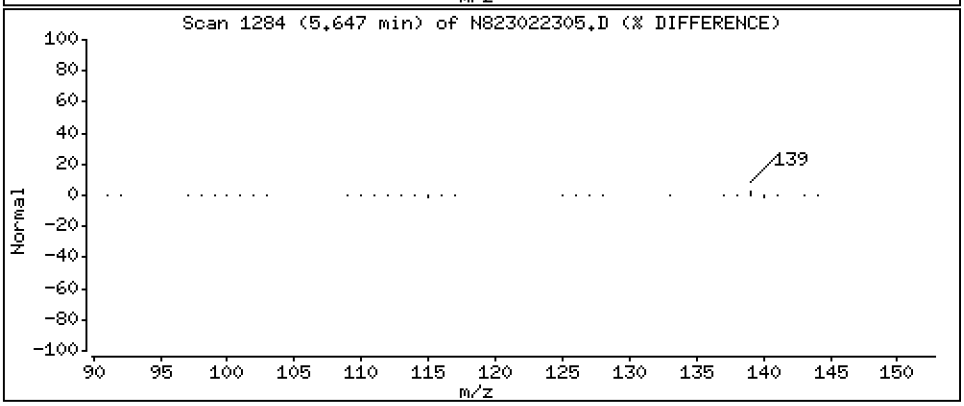












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

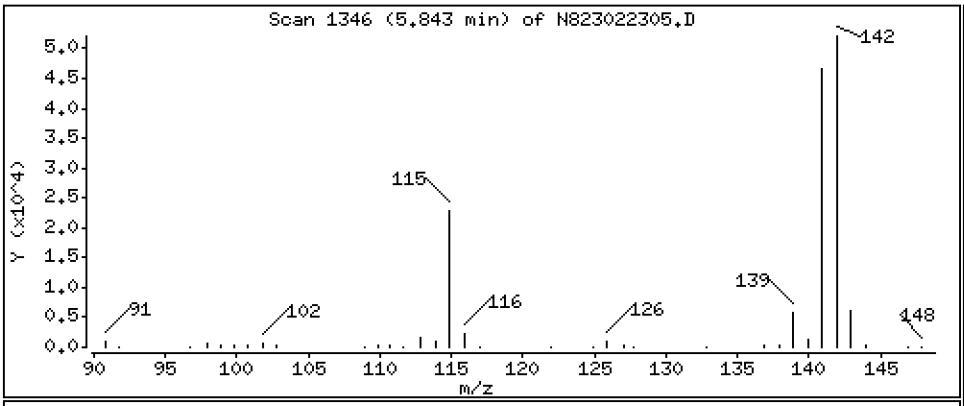
Operator: JZ

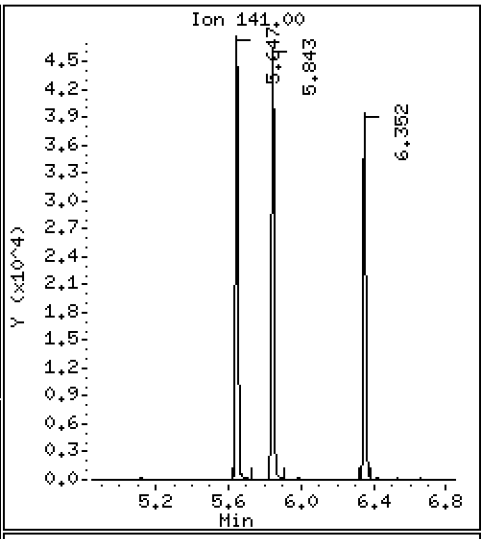
Column phase: Rxi-17sil

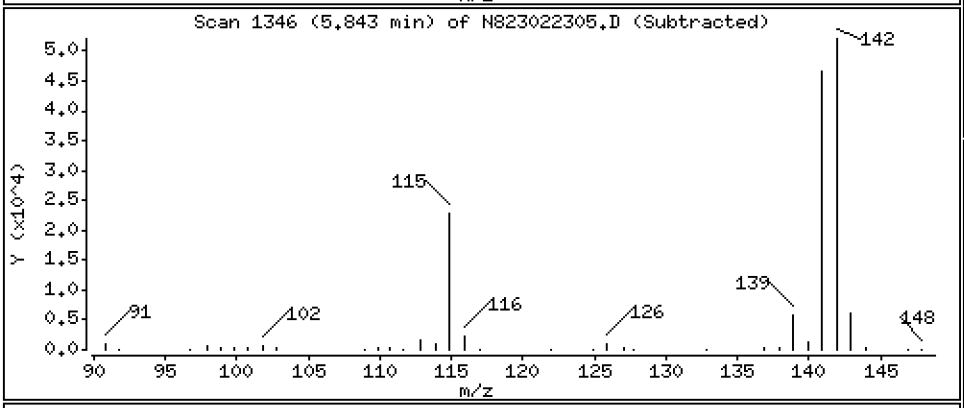
Column diameter: 0.25

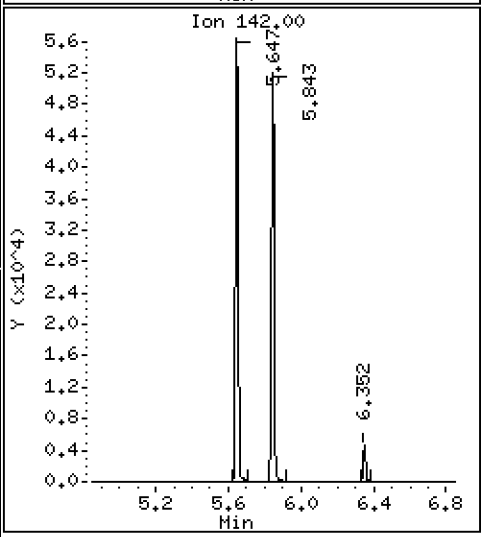
5 1-methylnaphthalene

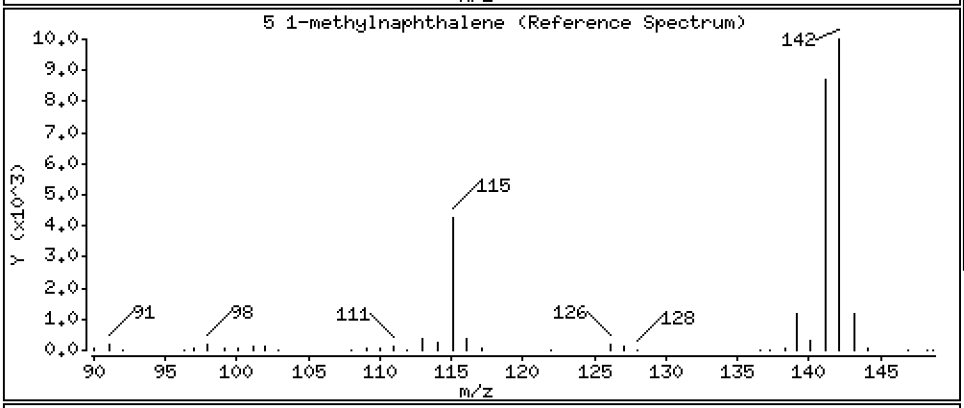
Concentration: 4.616 ug/mL

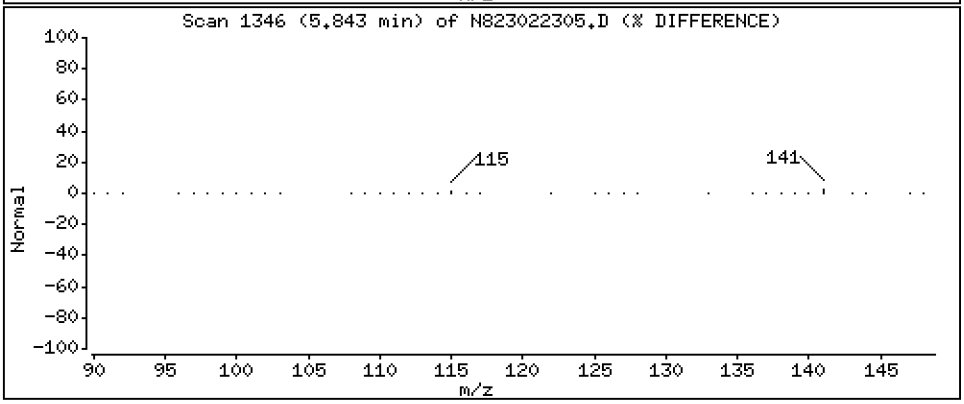












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Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

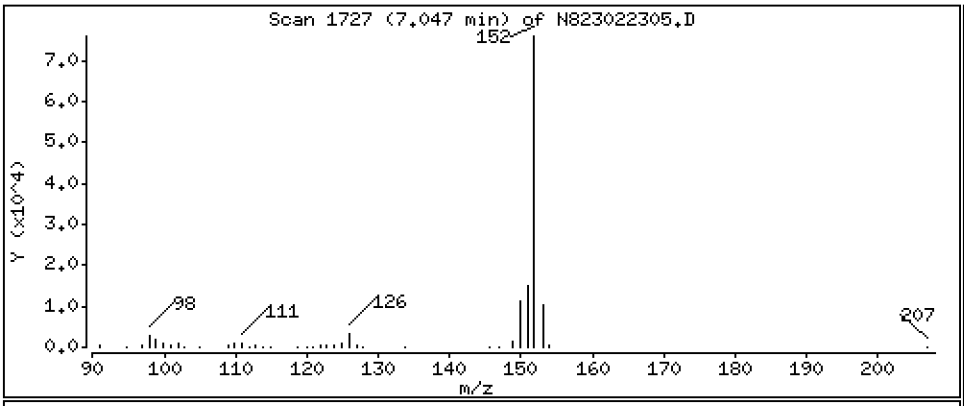
Operator: JZ

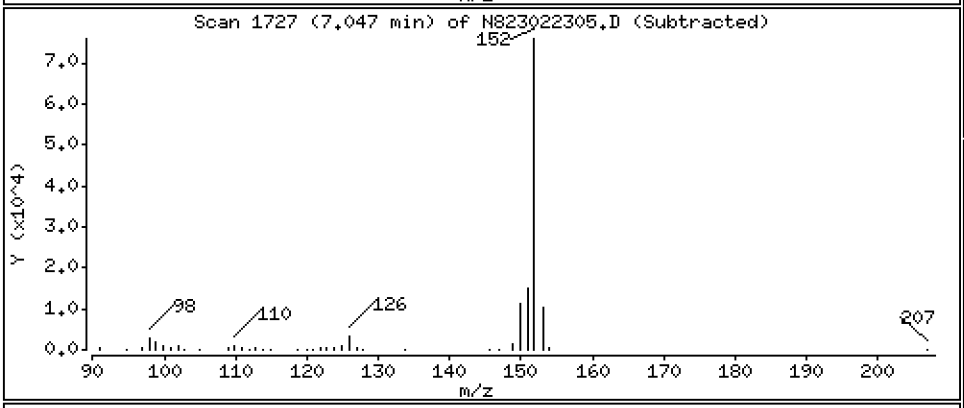
Column phase: Rxi-17sil

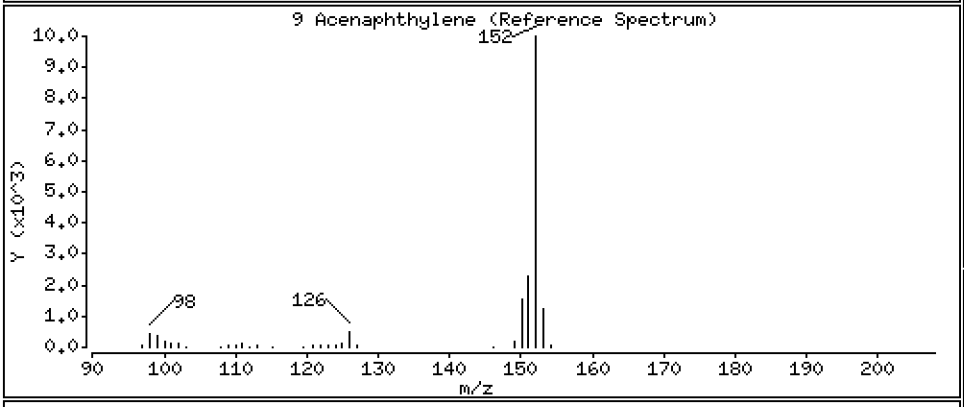
Column diameter: 0.25

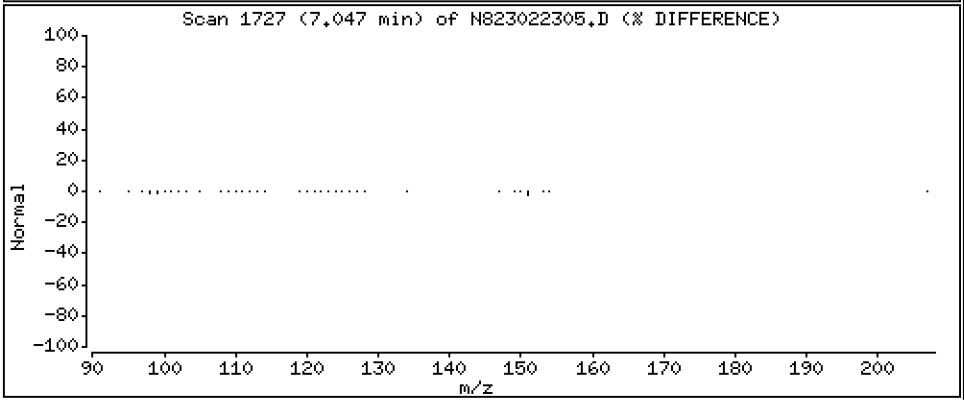
9 Acenaphthylene

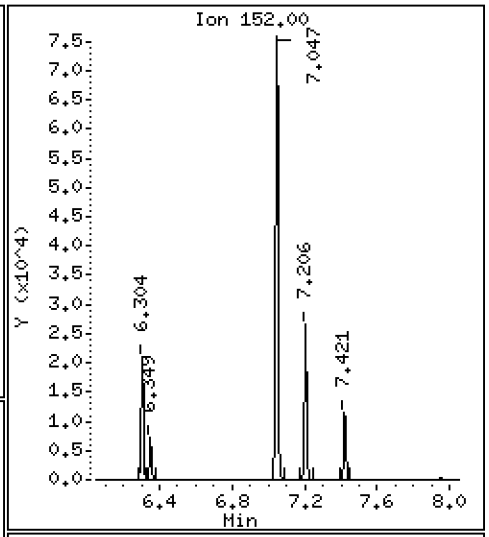
Concentration: 4.112 ug/mL

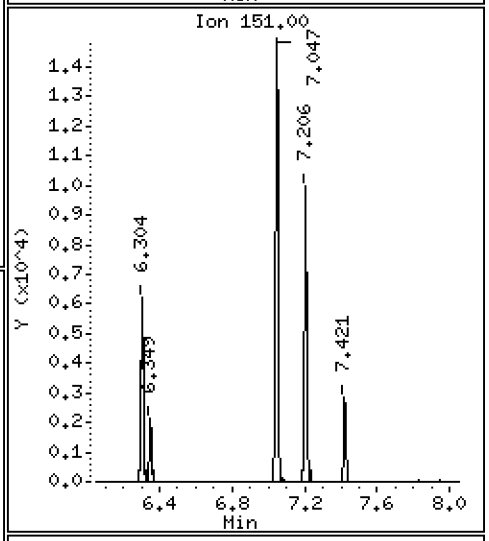


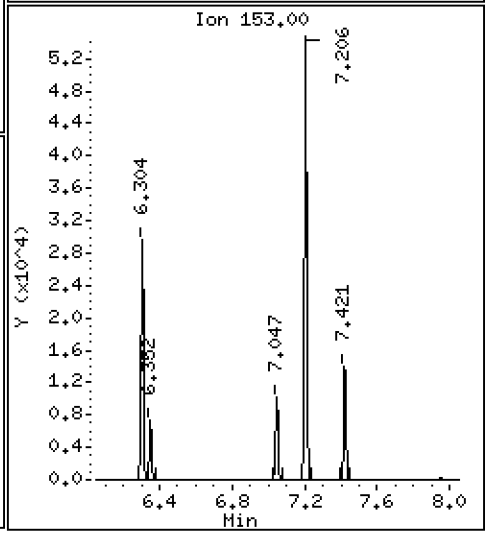












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Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

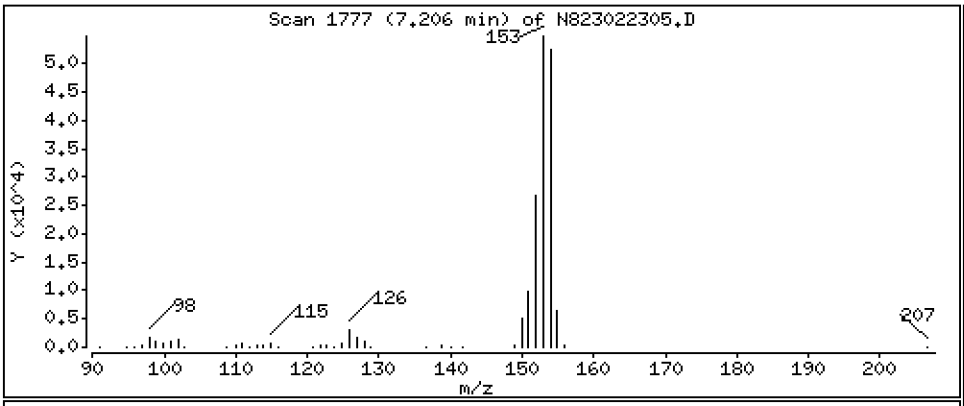
Operator: JZ

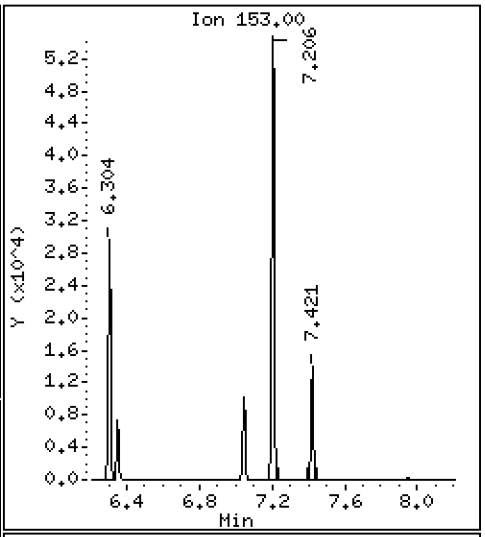
Column phase: Rxi-17sil

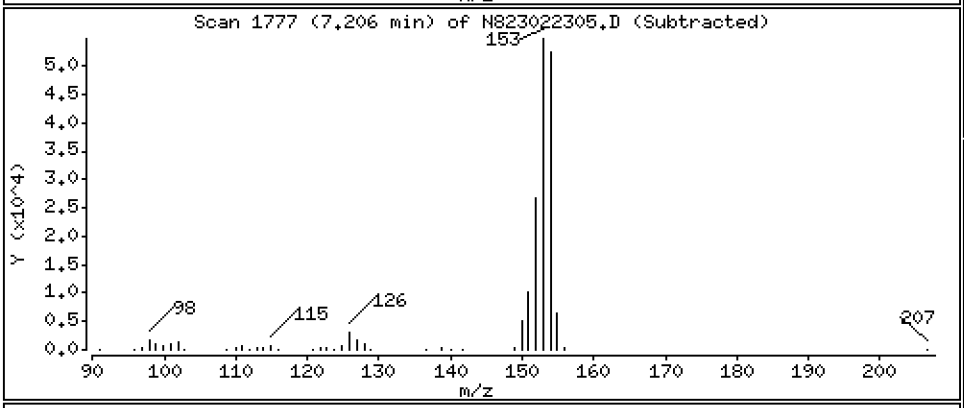
Column diameter: 0.25

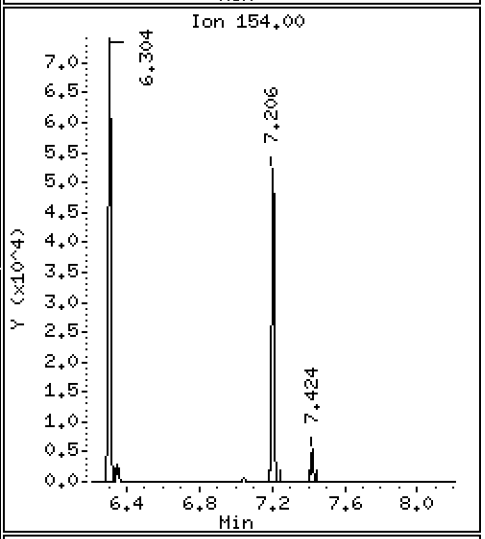
11 Acenaphthene

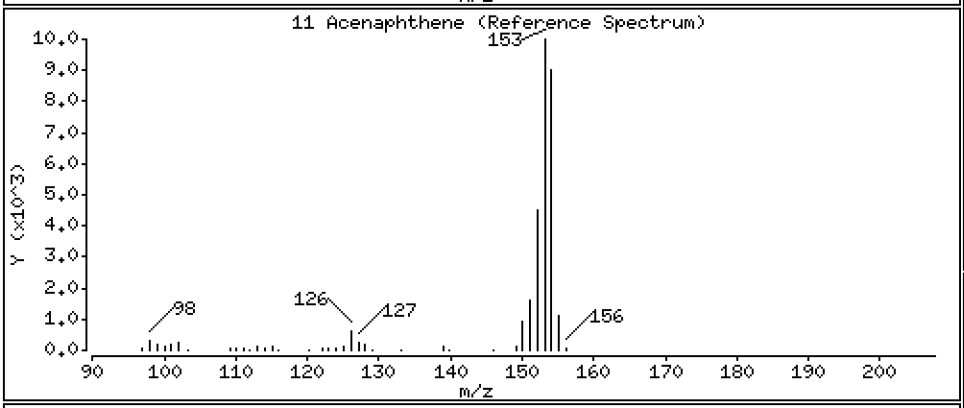
Concentration: 4.382 ug/mL

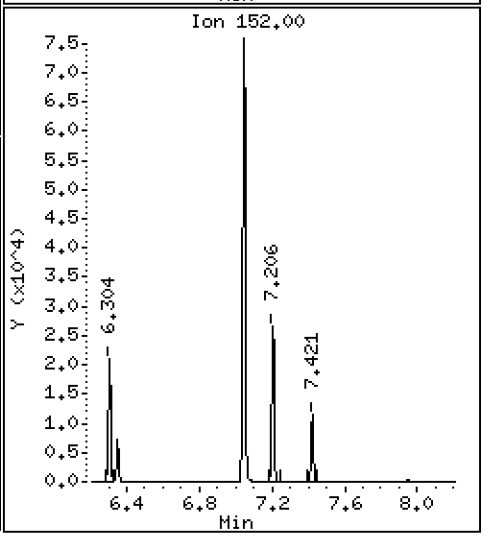


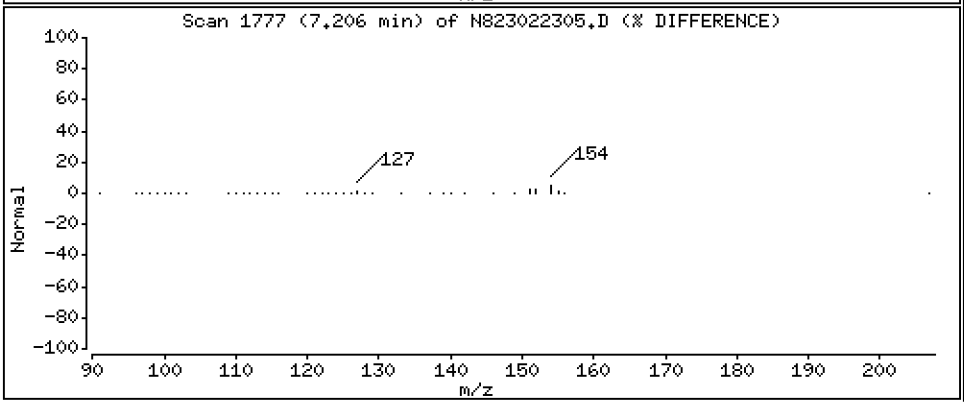












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

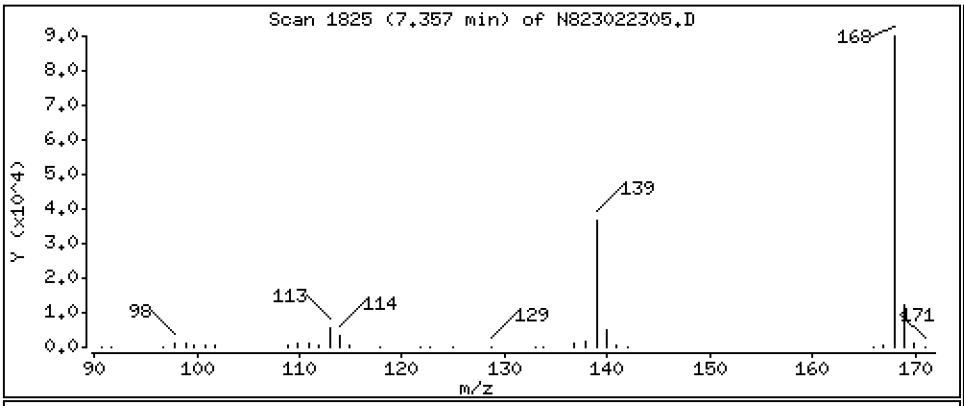
Operator: JZ

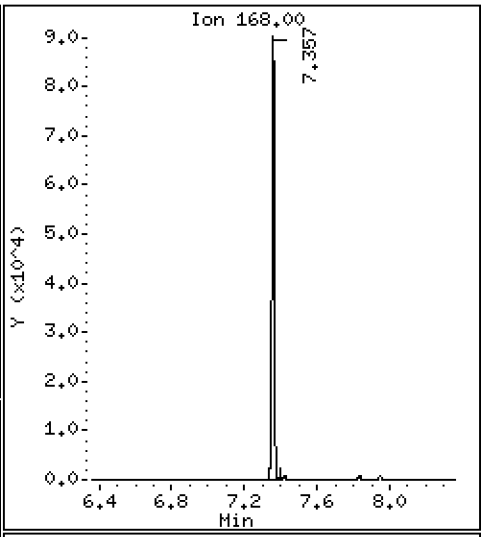
Column phase: Rxi-17sil

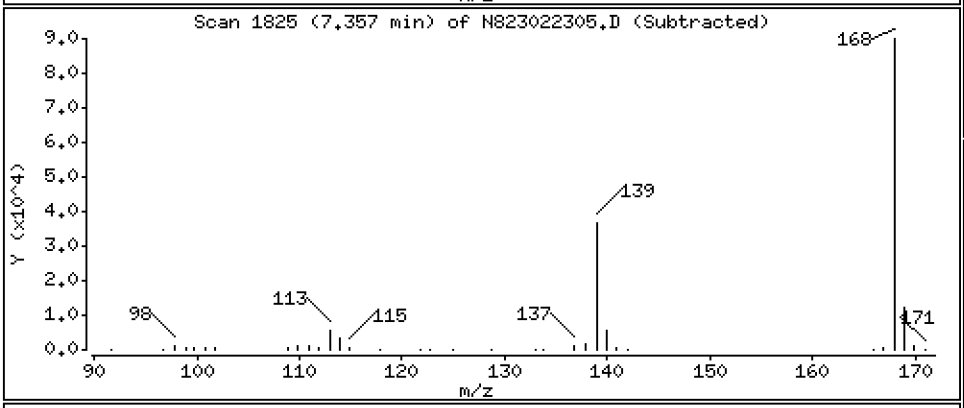
Column diameter: 0.25

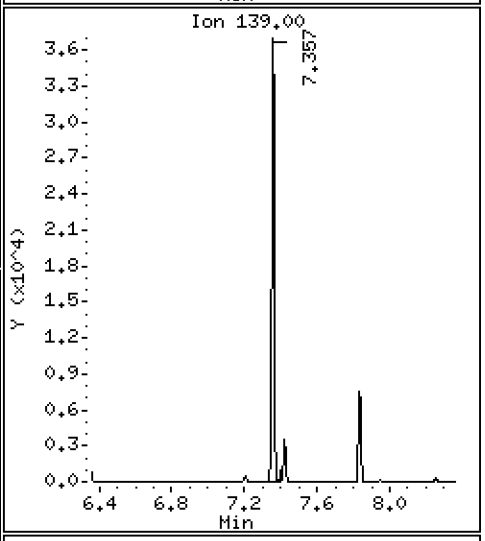
12 Dibenzofuran

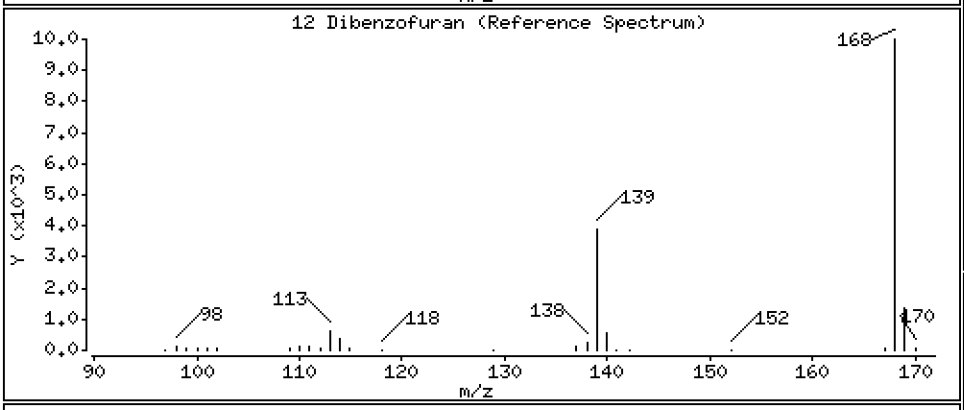
Concentration: 4.520 ug/mL

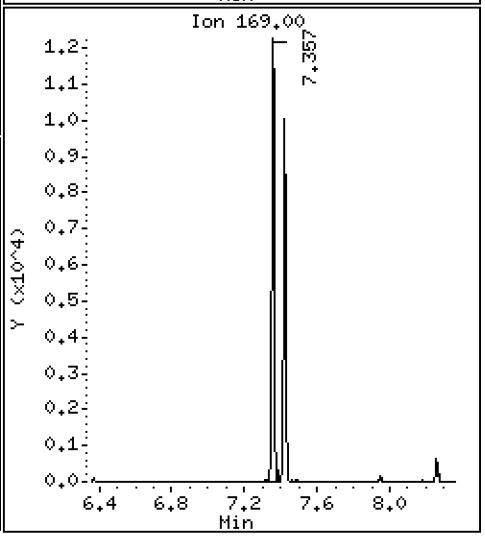


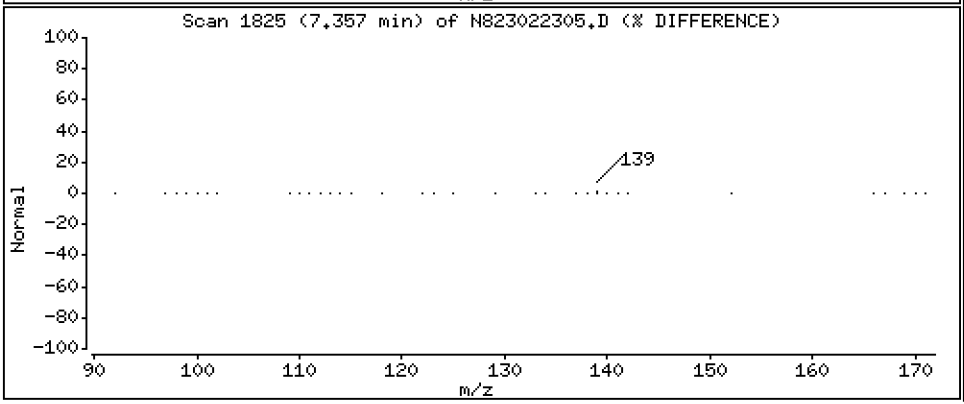












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Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

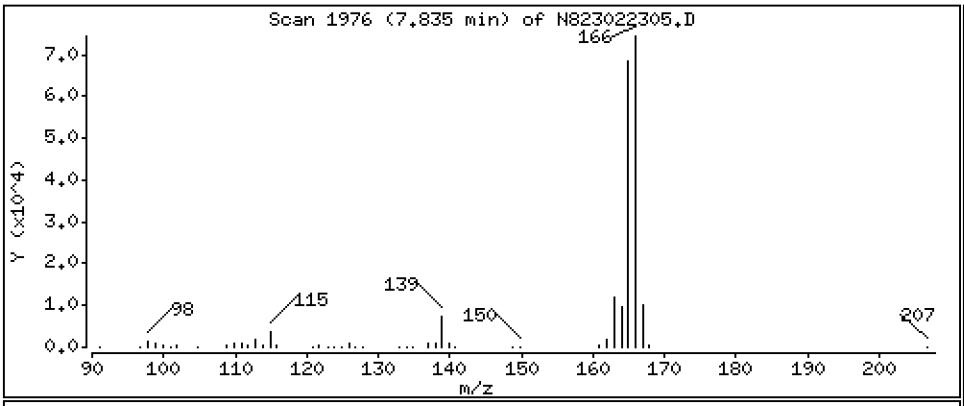
Operator: JZ

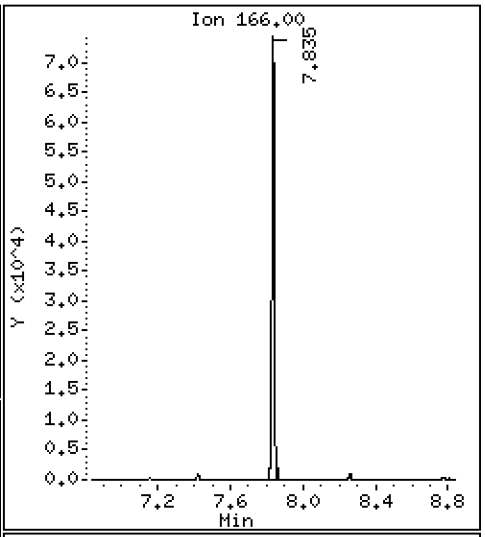
Column phase: Rxi-17sil

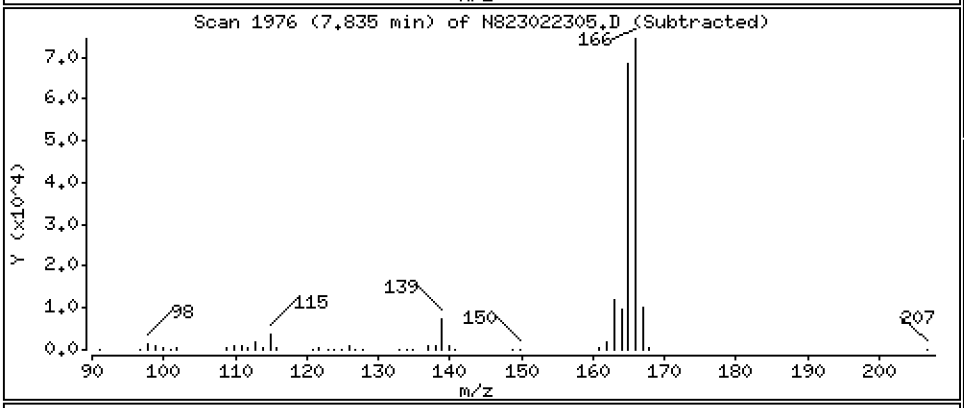
Column diameter: 0.25

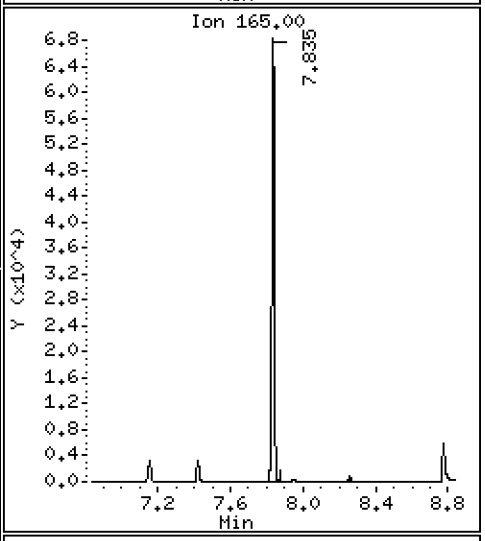
14 Fluorene

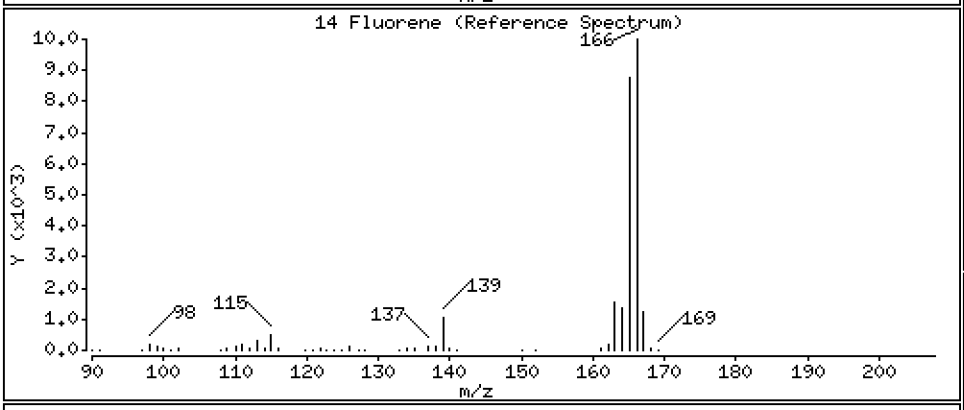
Concentration: 4.814 ug/mL

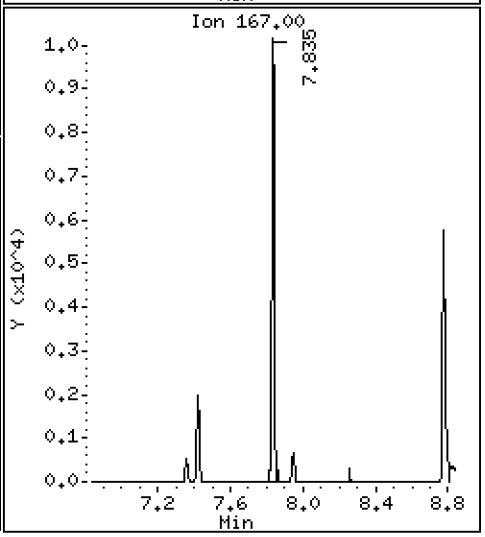


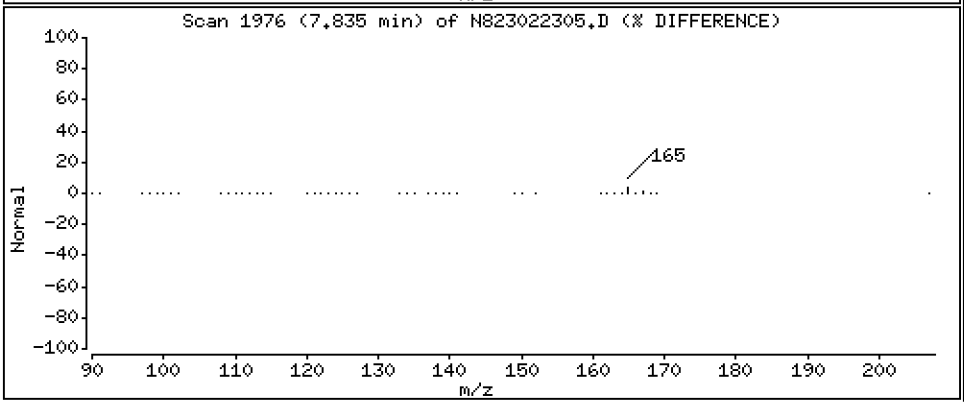












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Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

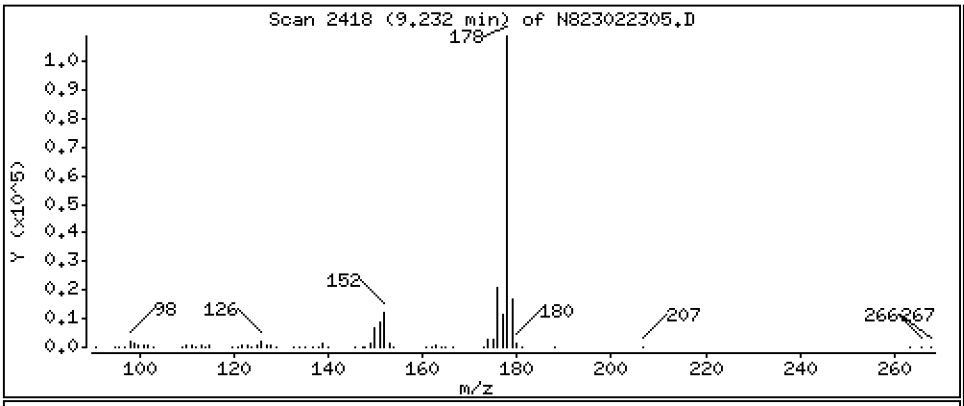
Operator: JZ

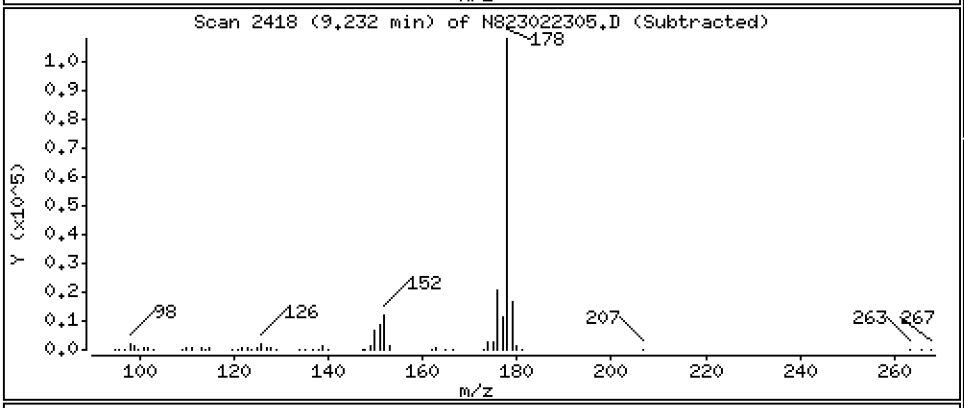
Column phase: Rxi-17sil

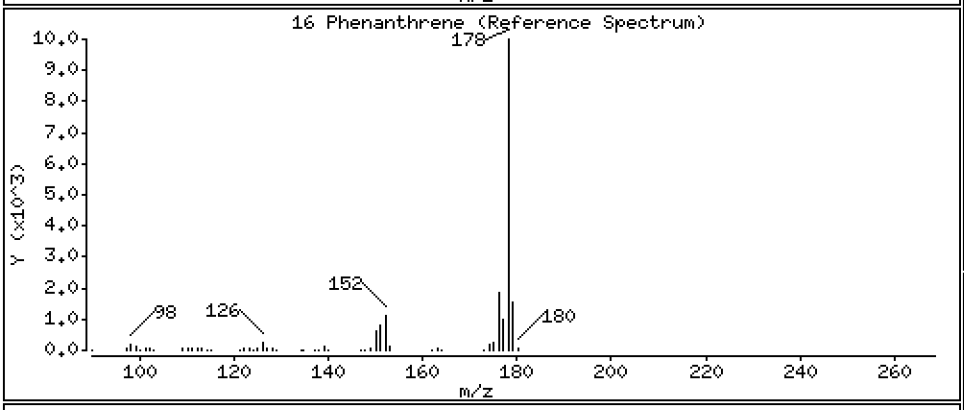
Column diameter: 0.25

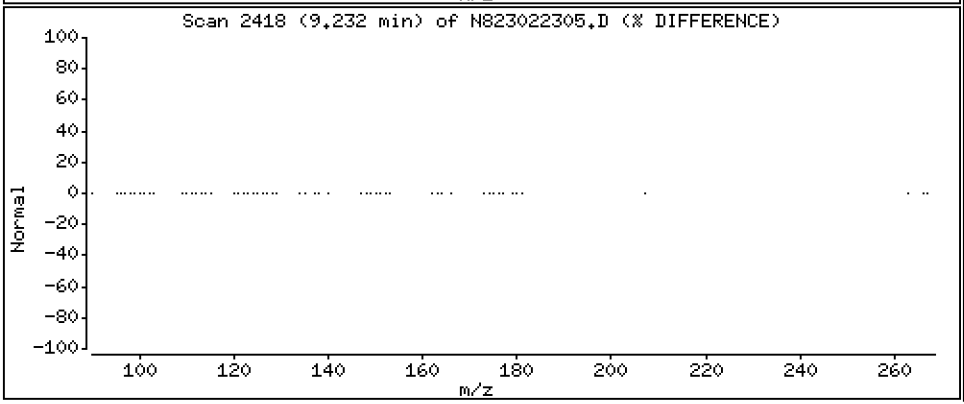
16 Phenanthrene

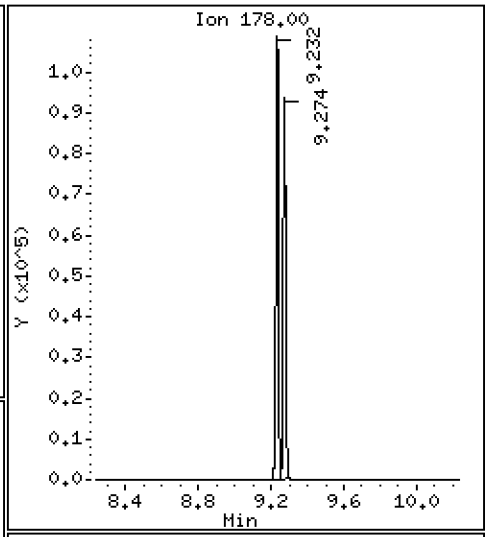
Concentration: 4.634 ug/mL

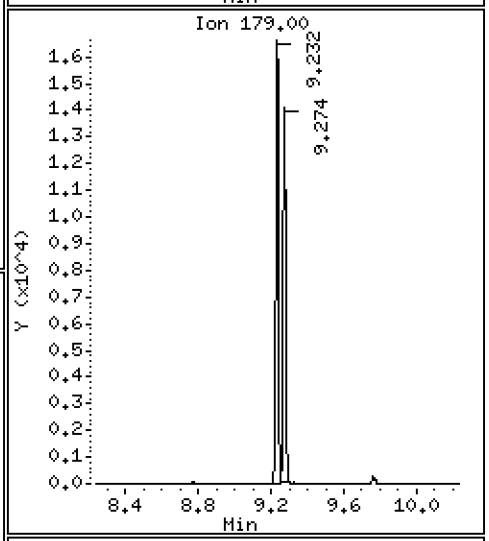


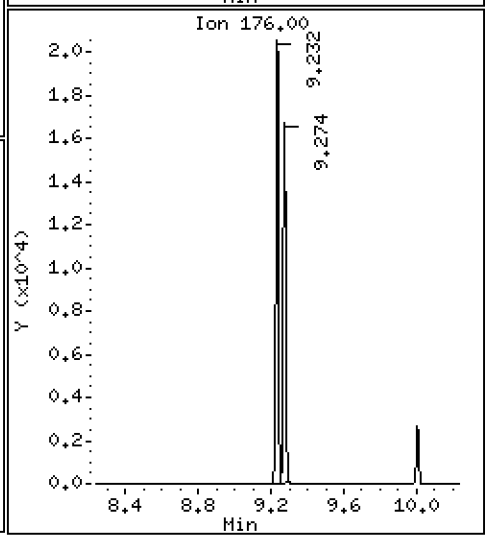












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

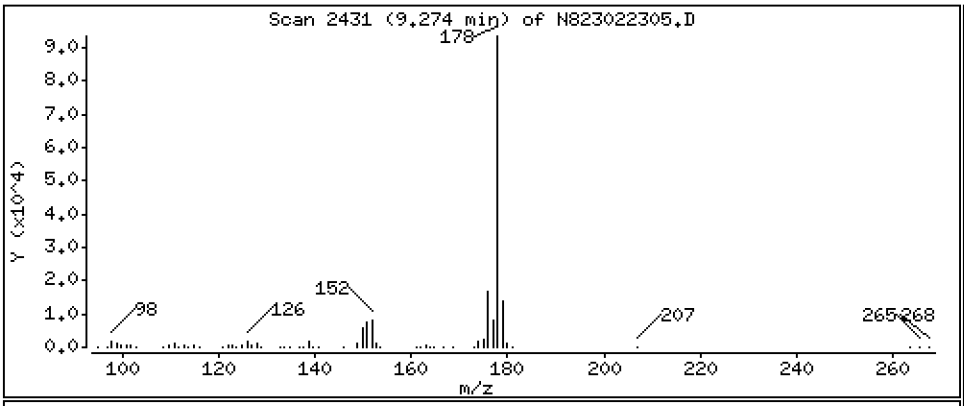
Operator: JZ

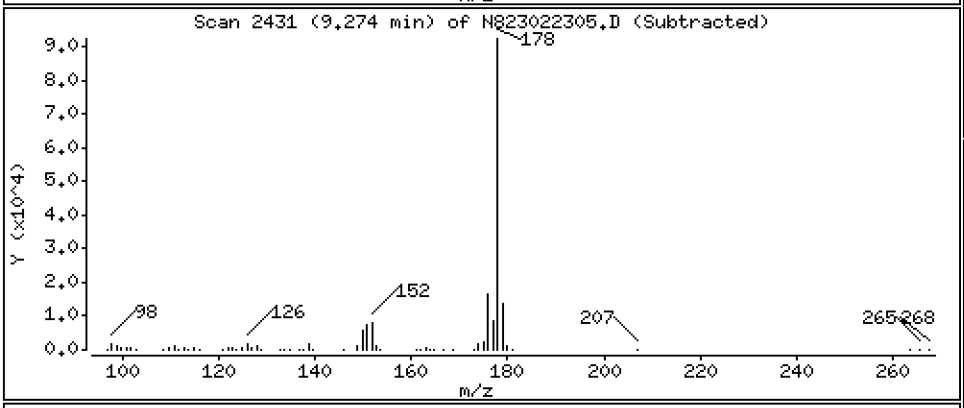
Column phase: Rxi-17sil

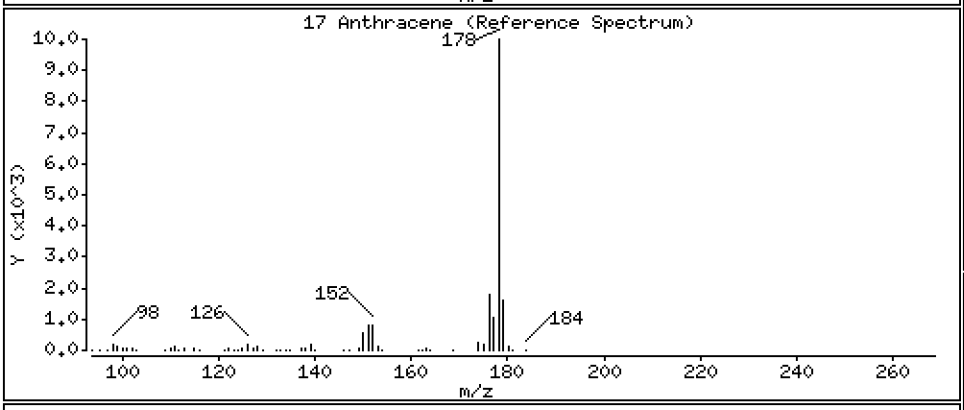
Column diameter: 0.25

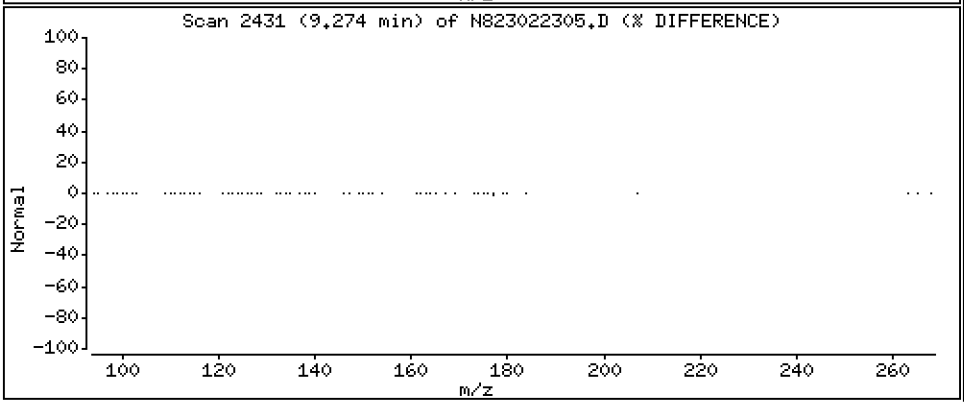
17 Anthracene

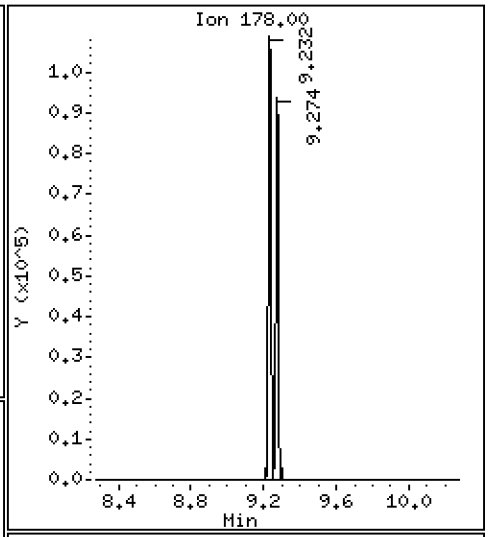
Concentration: 4.352 ug/mL

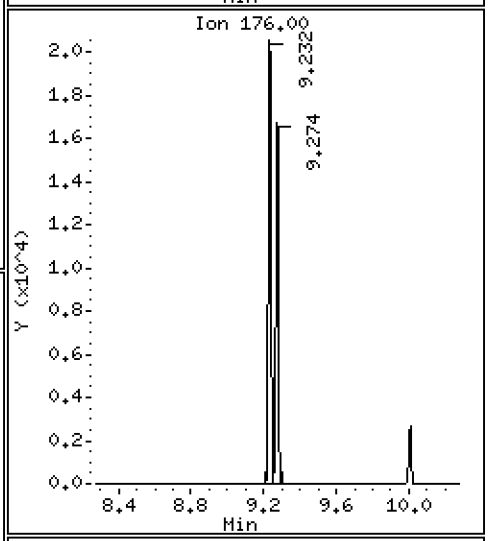


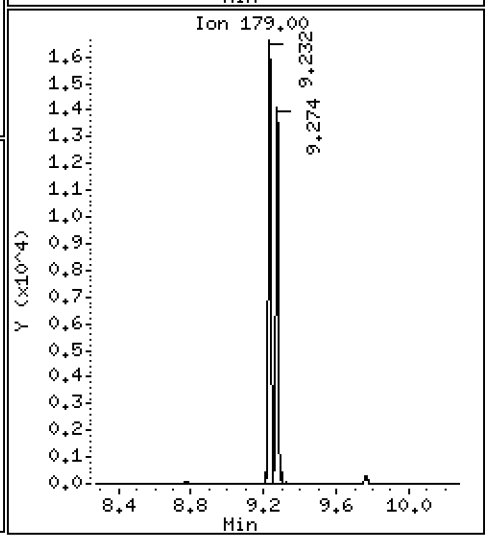












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

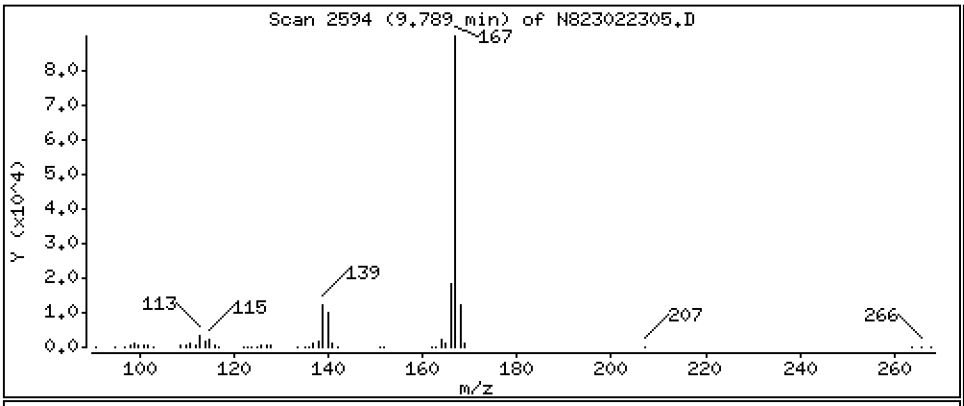
Operator: JZ

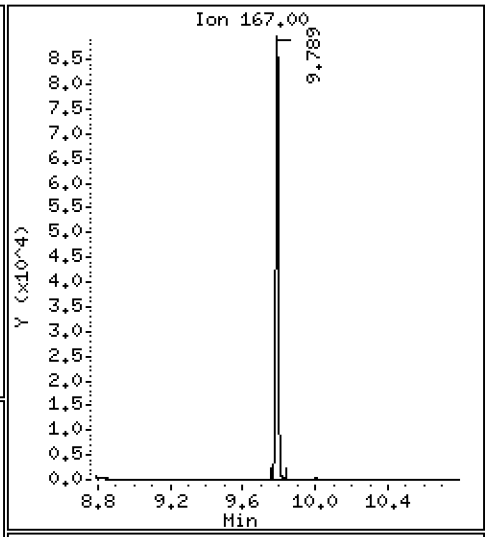
Column phase: Rxi-17sil

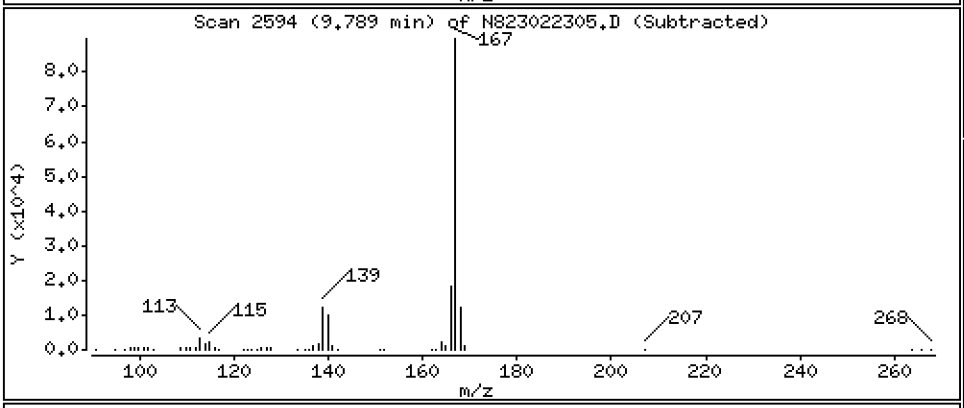
Column diameter: 0.25

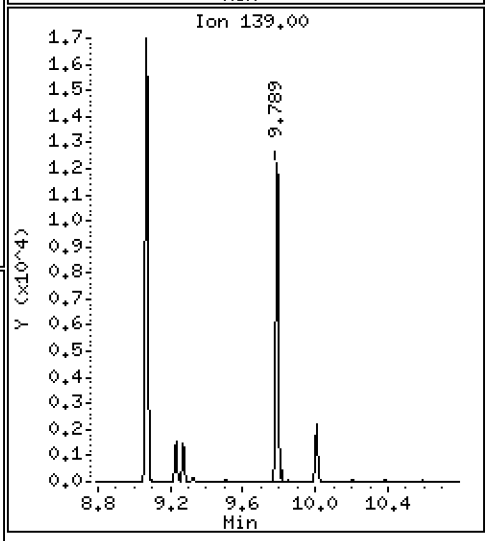
19 Carbazole

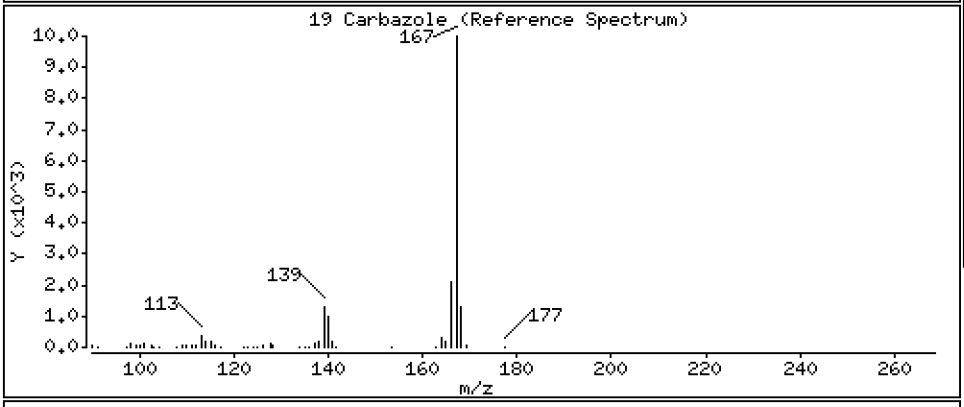
Concentration: 4.938 ug/mL

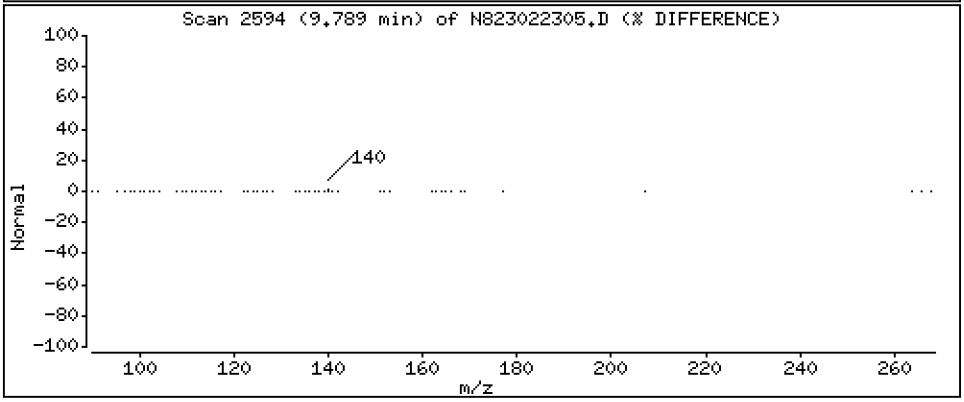












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

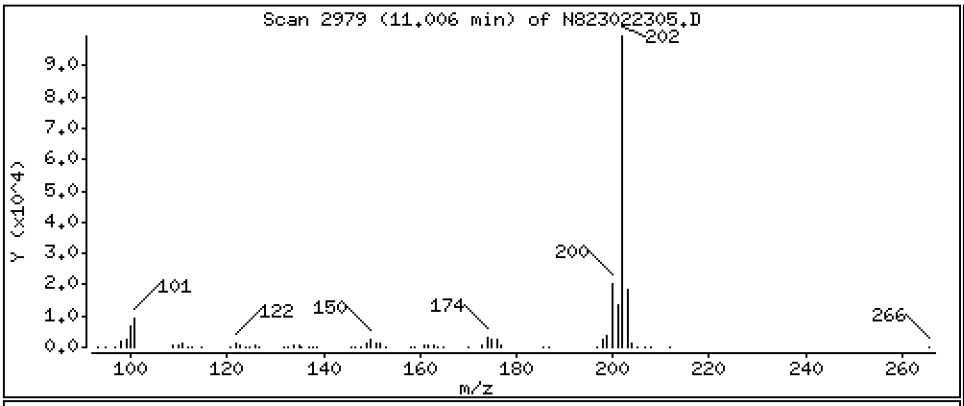
Operator: JZ

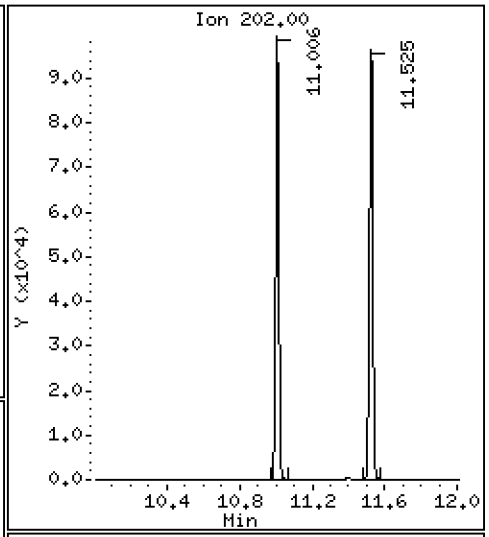
Column phase: Rxi-17sil

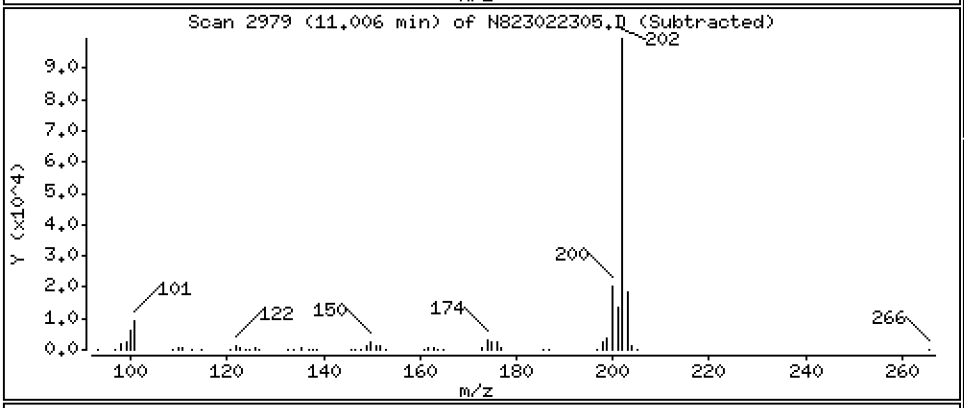
Column diameter: 0.25

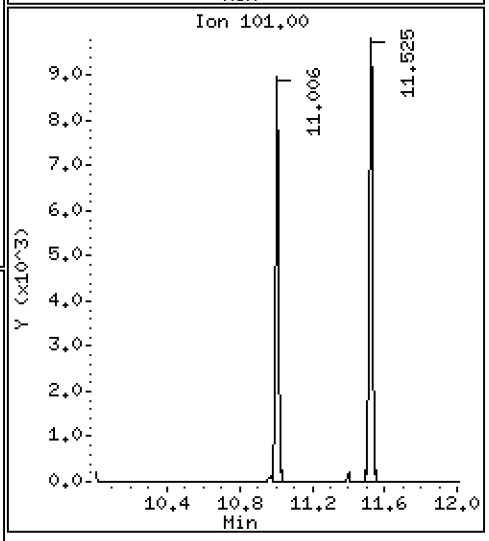
22 Fluoranthene

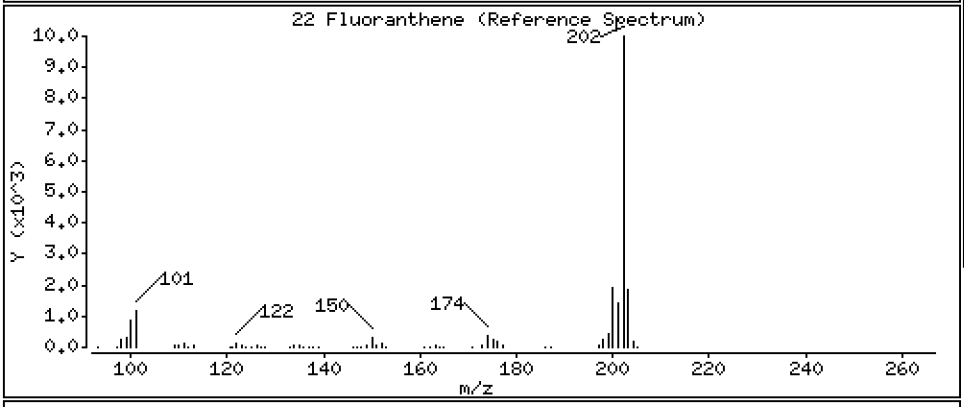
Concentration: 5.048 ug/mL

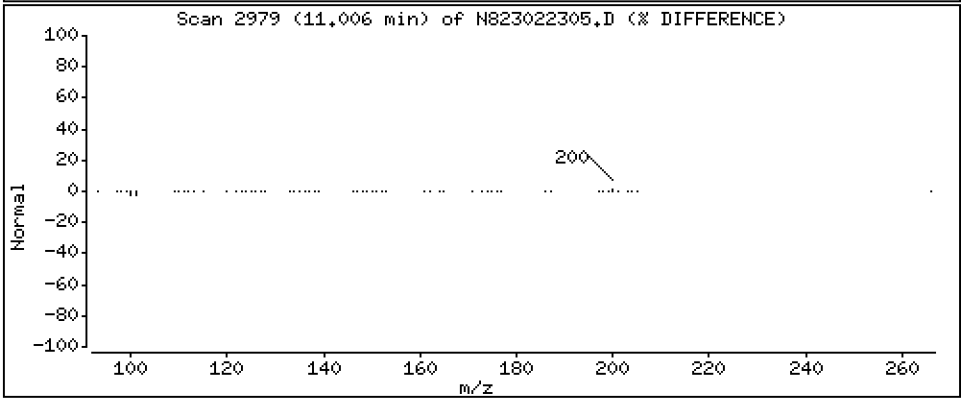












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

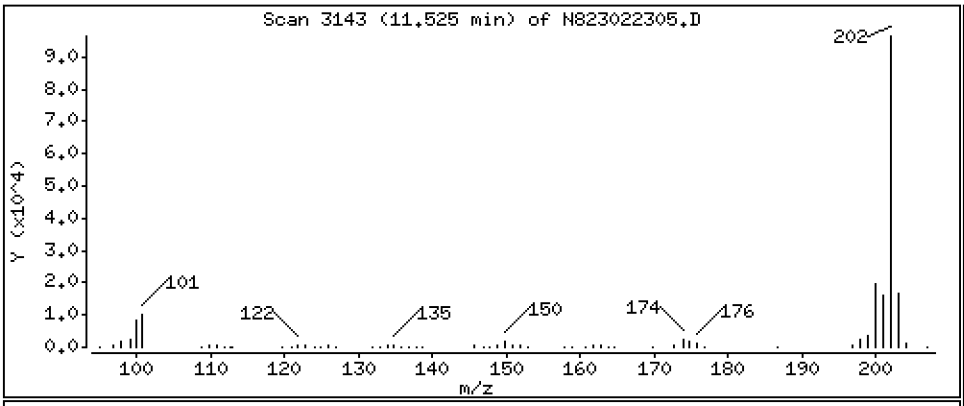
Operator: JZ

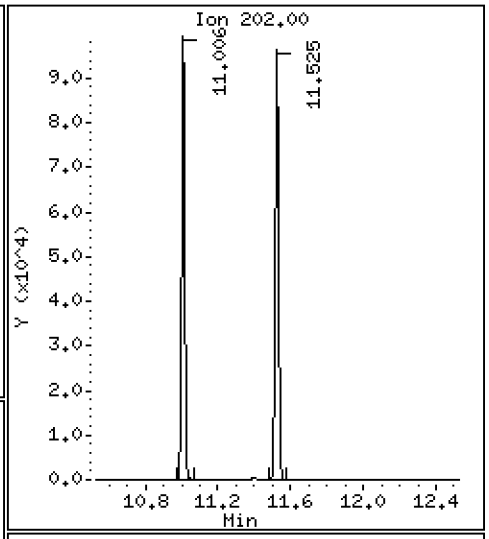
Column phase: Rxi-17sil

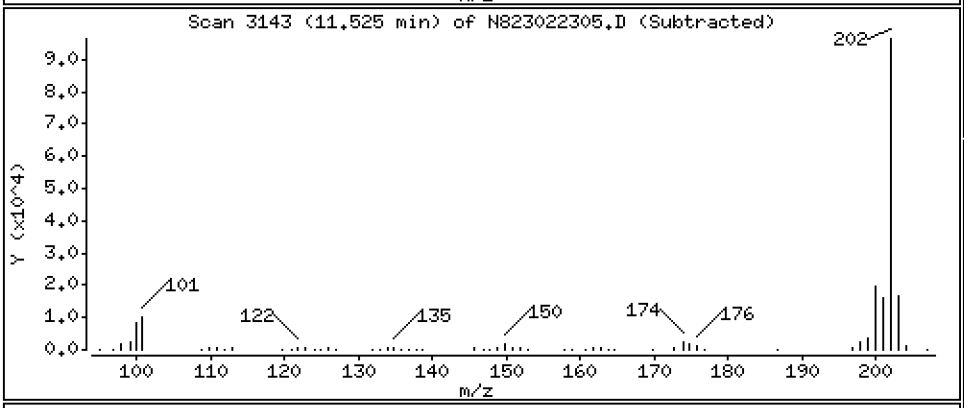
Column diameter: 0.25

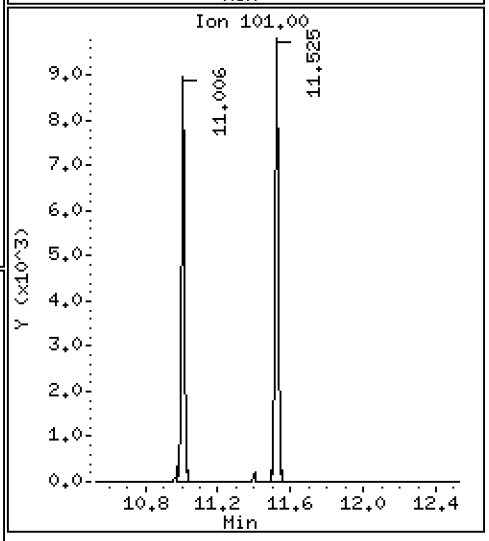
23 Pyrene

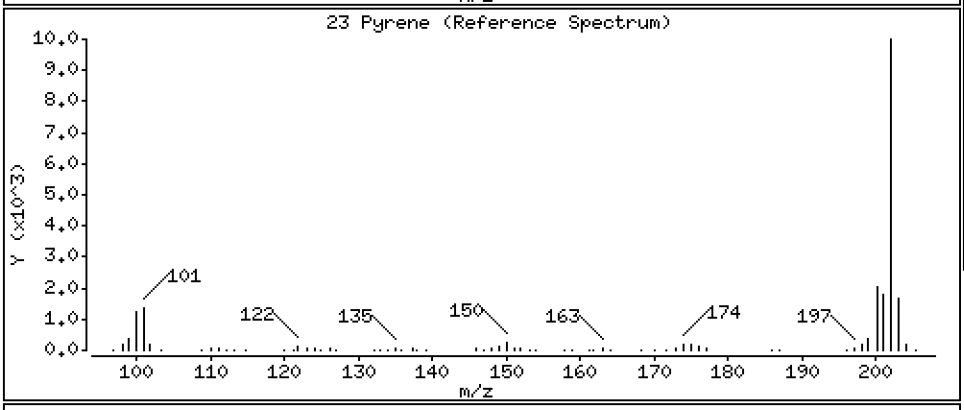
Concentration: 5.088 ug/mL

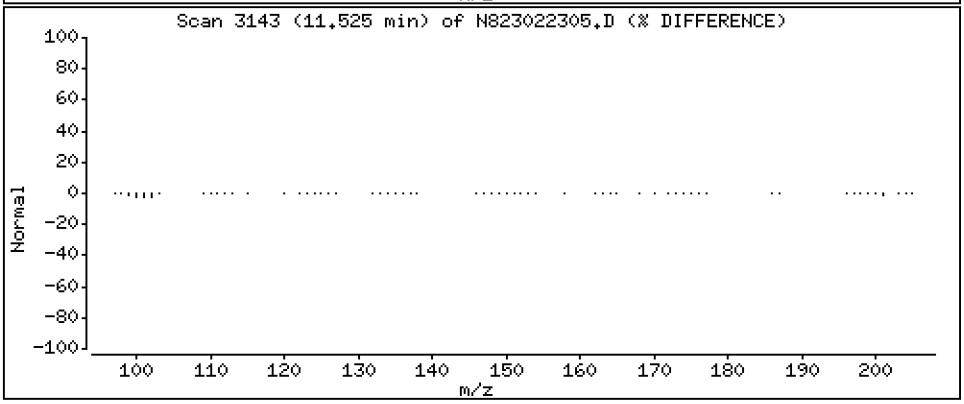












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

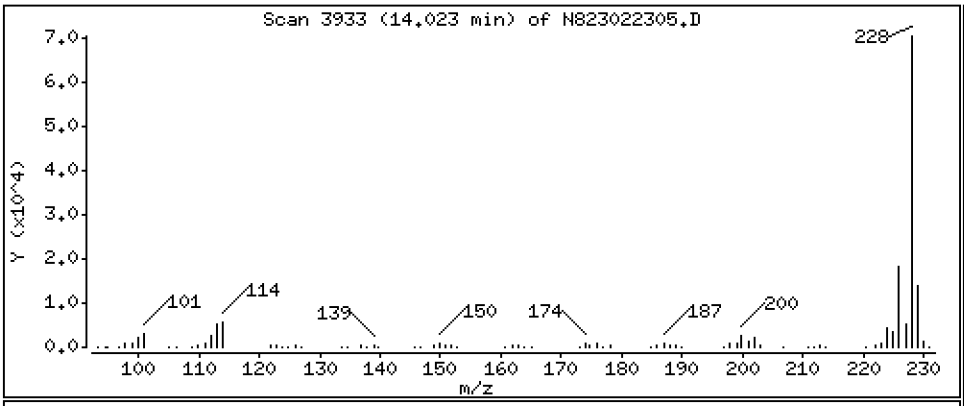
Operator: JZ

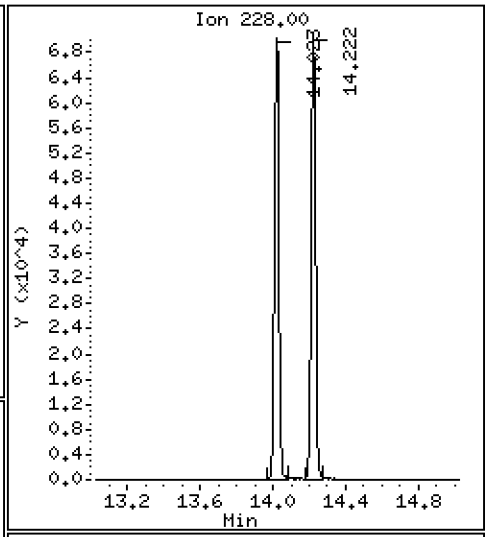
Column phase: Rxi-17sil

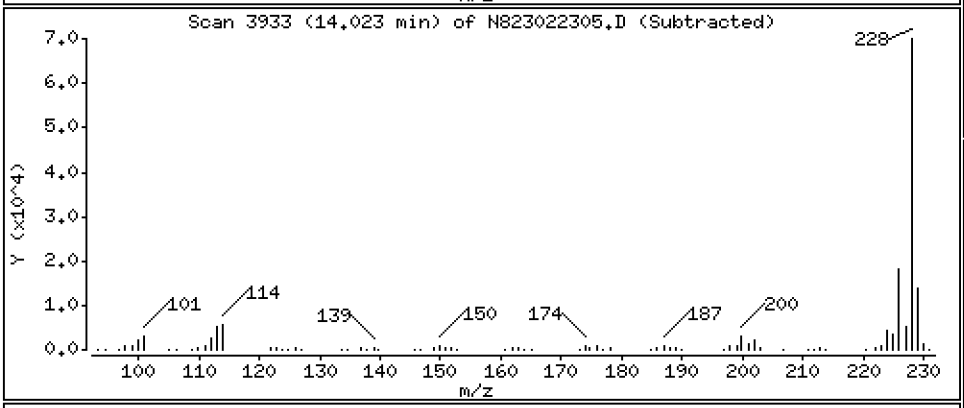
Column diameter: 0.25

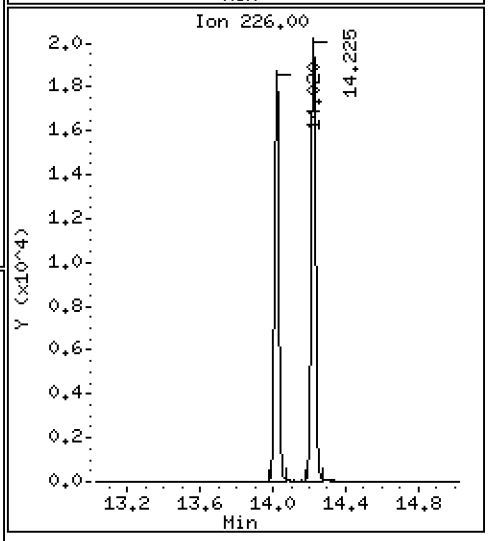
24 Benzo(a)anthracene

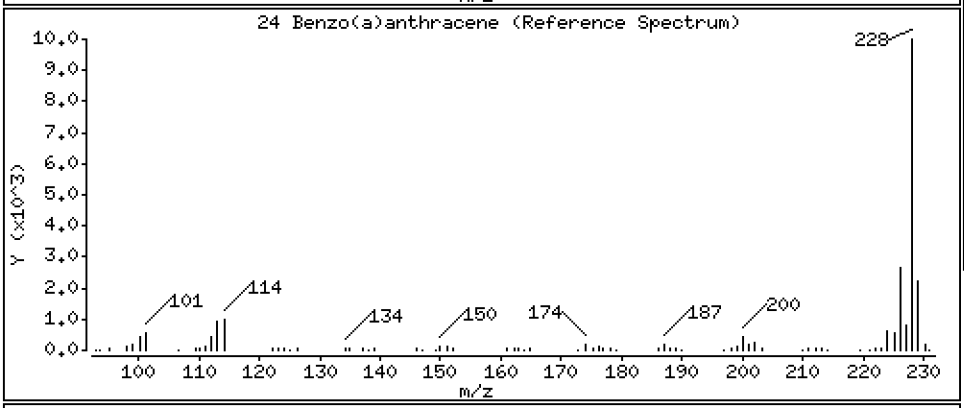
Concentration: 5.324 ug/mL

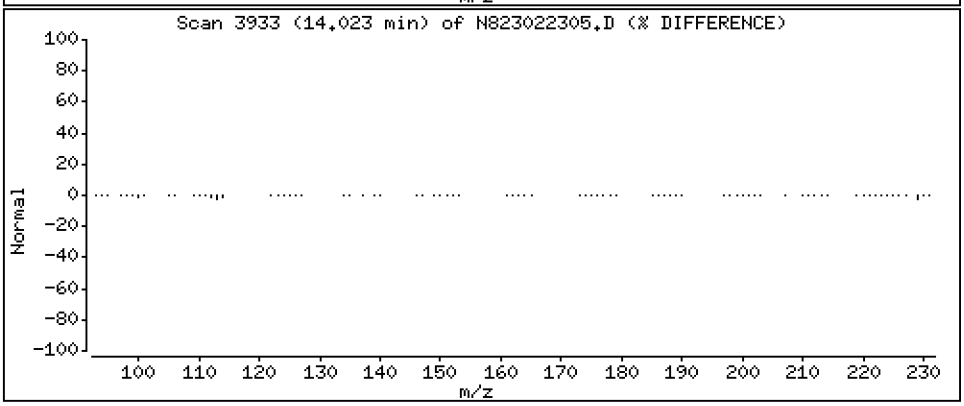












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

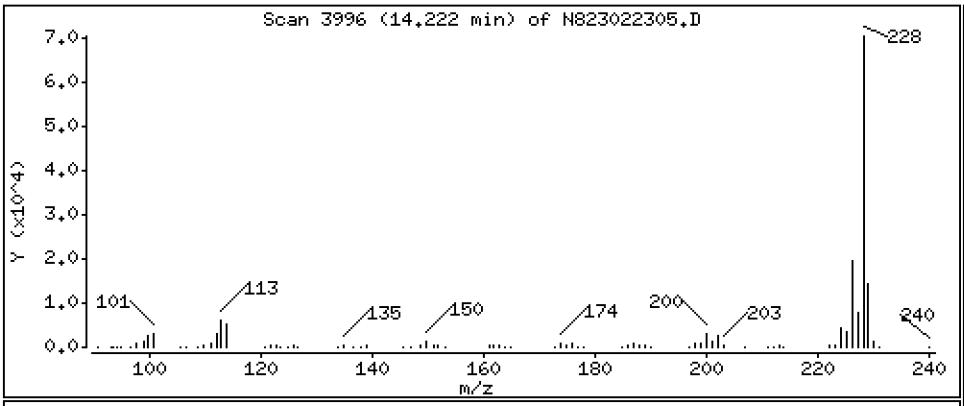
Operator: JZ

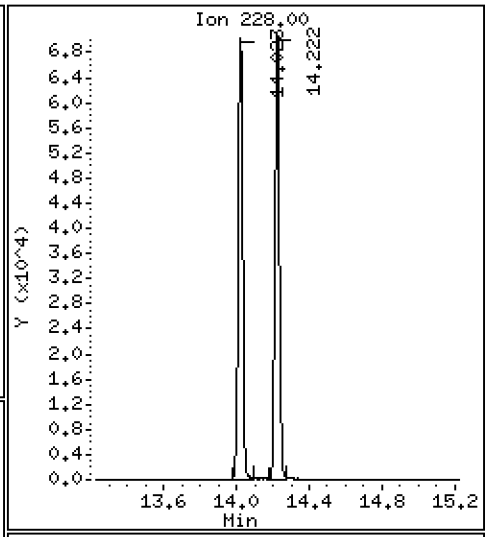
Column phase: Rxi-17sil

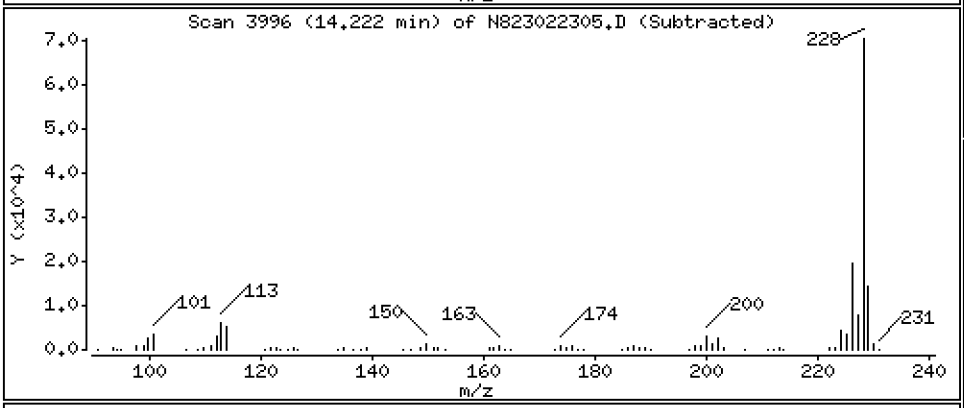
Column diameter: 0.25

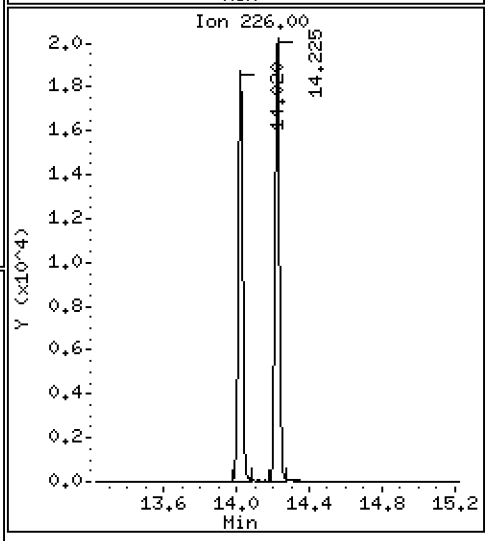
27 Chrysene

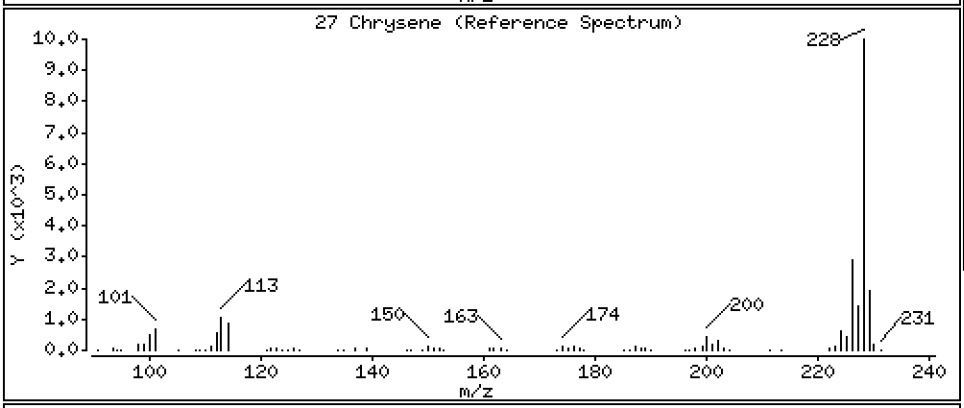
Concentration: 4.967 ug/mL

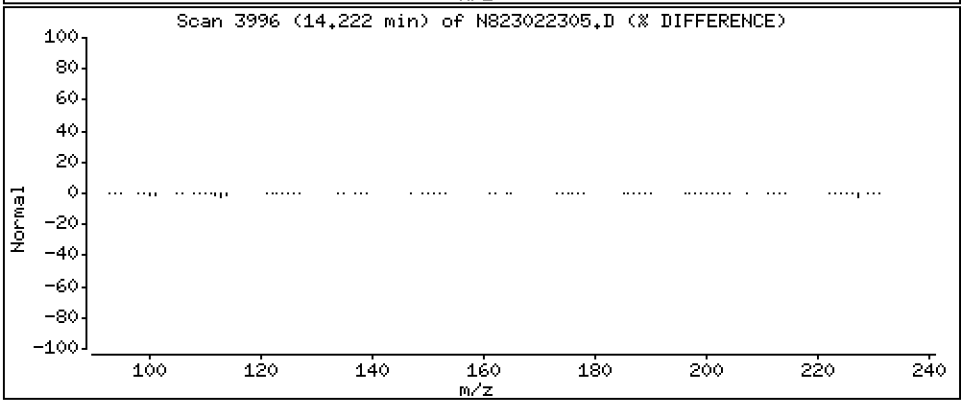












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

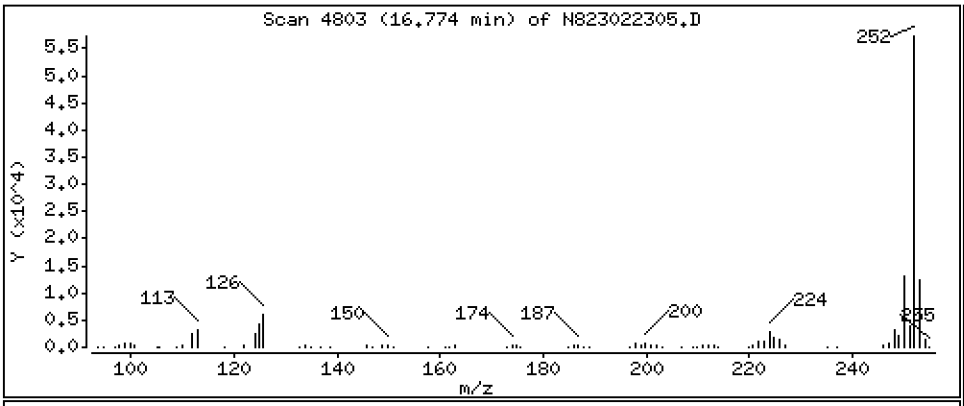
Operator: JZ

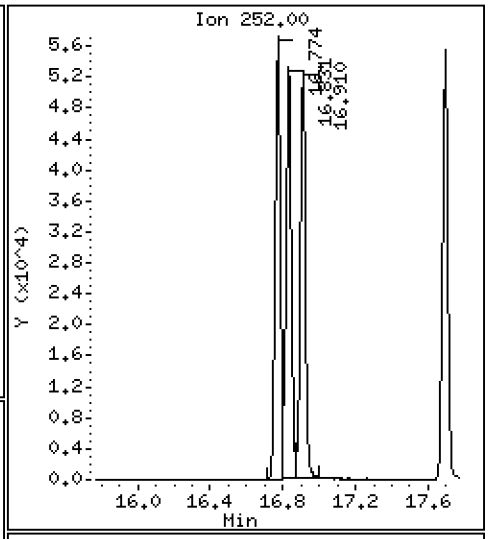
Column phase: Rxi-17sil

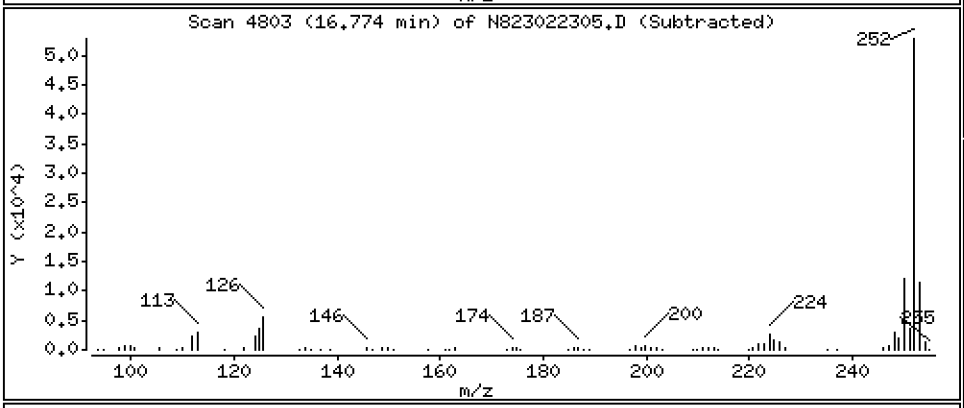
Column diameter: 0.25

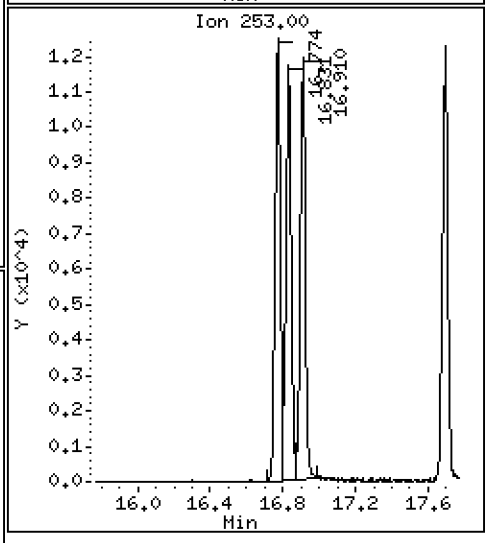
28 Benzo(b)fluoranthene

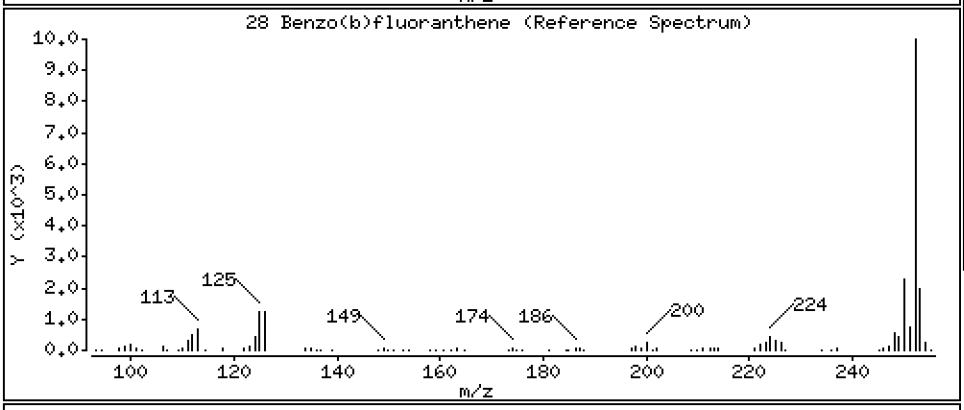
Concentration: 6.282 ug/mL

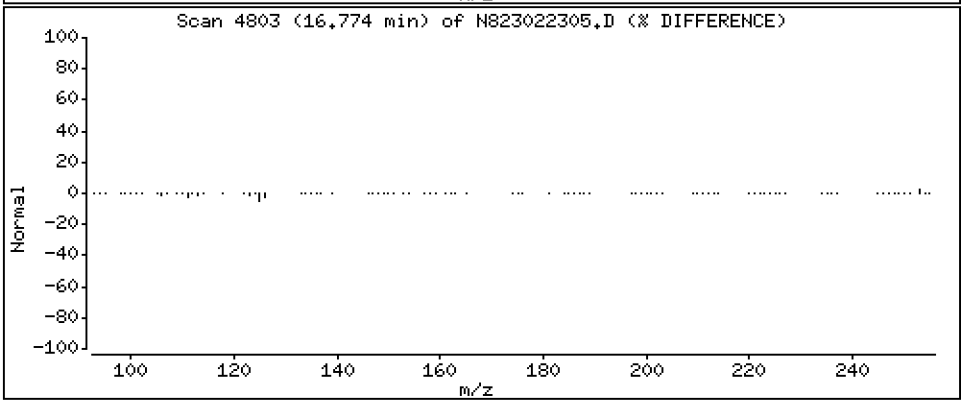












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

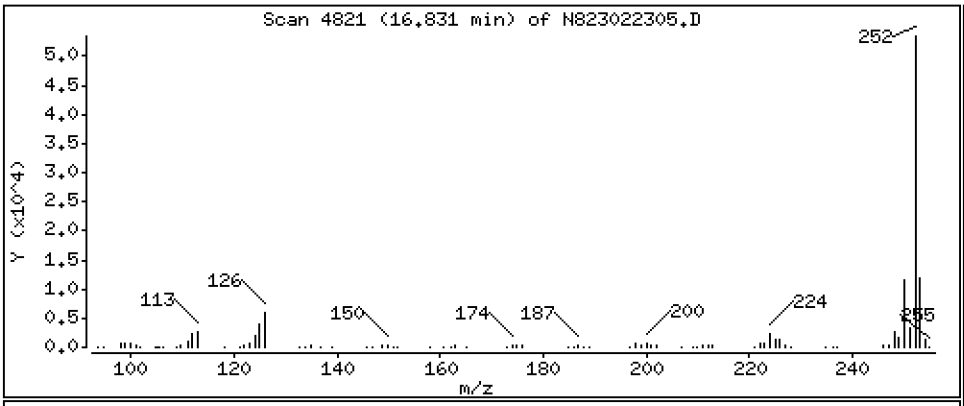
Operator: JZ

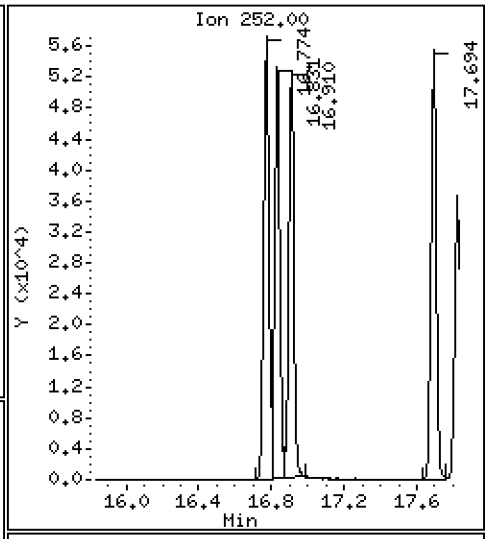
Column phase: Rxi-17sil

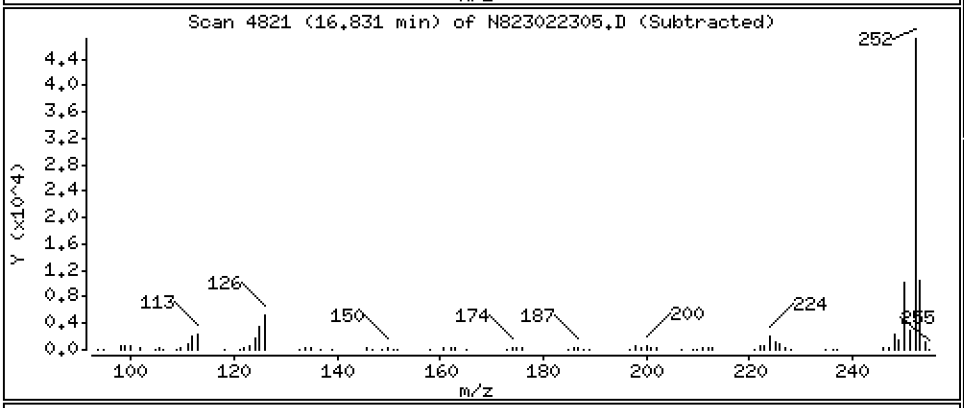
Column diameter: 0.25

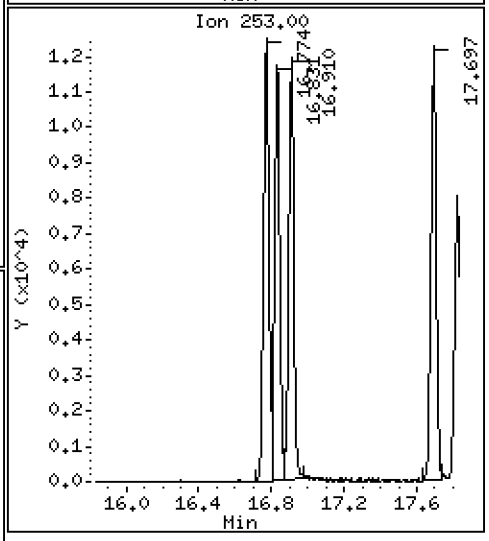
29 Benzo(k)fluoranthene

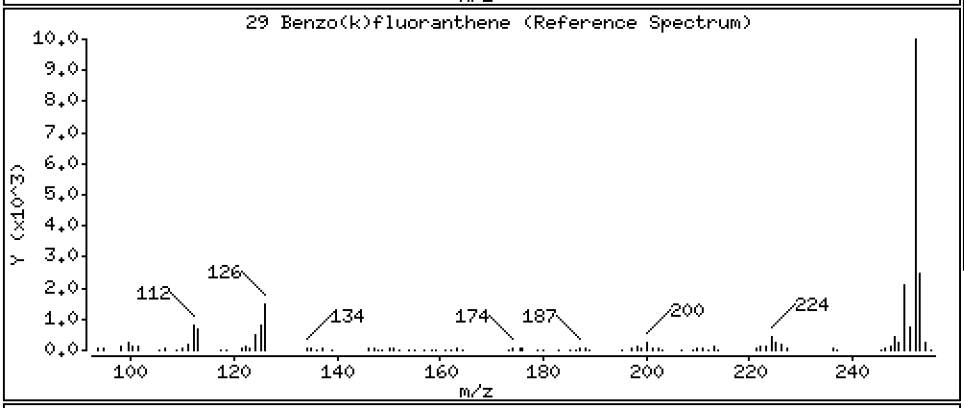
Concentration: 5.999 ug/mL

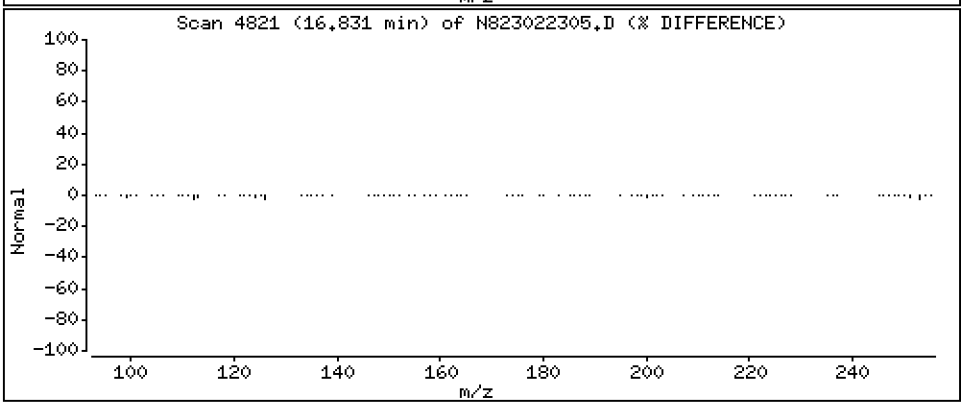












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

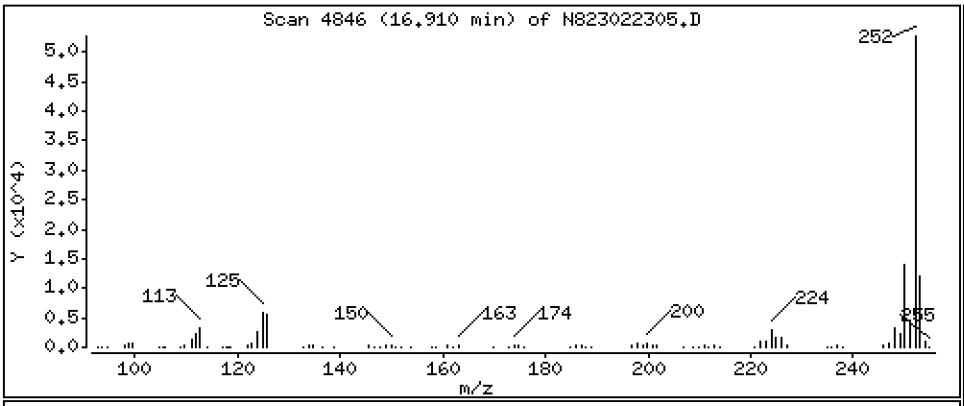
Operator: JZ

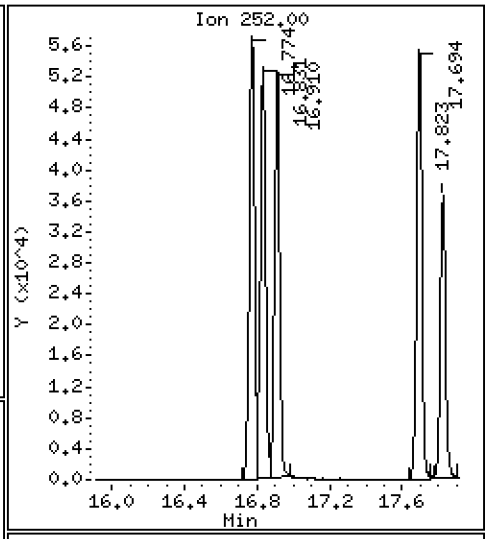
Column phase: Rxi-17sil

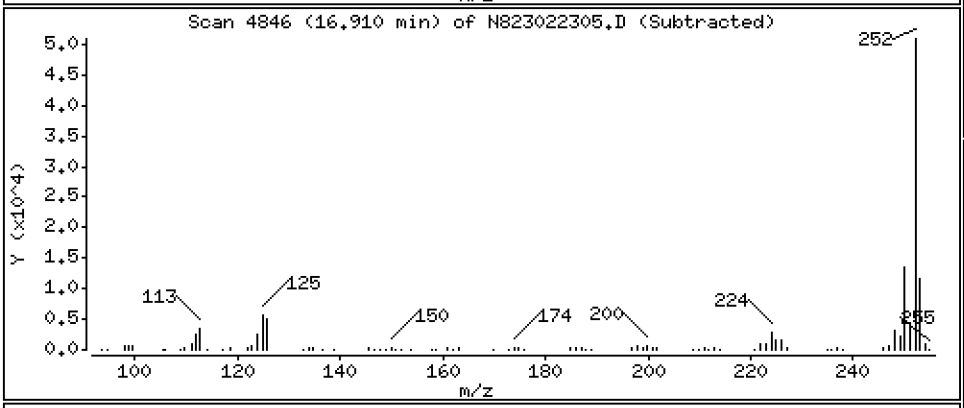
Column diameter: 0.25

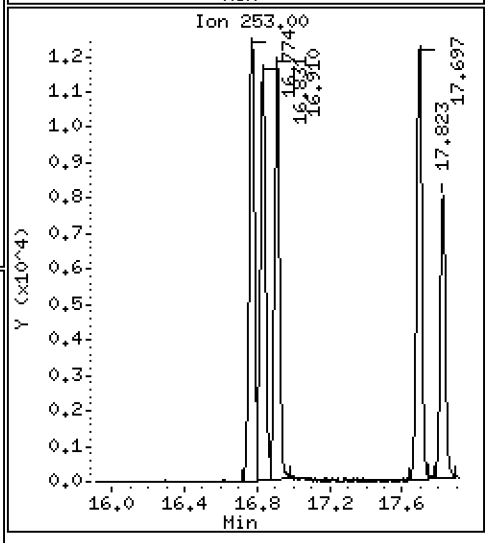
30 Benzo(j)fluoranthene

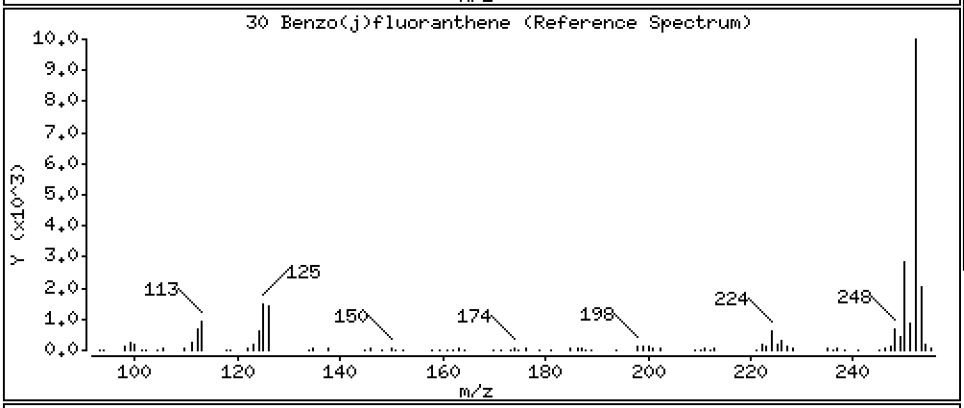
Concentration: 6.405 ug/mL

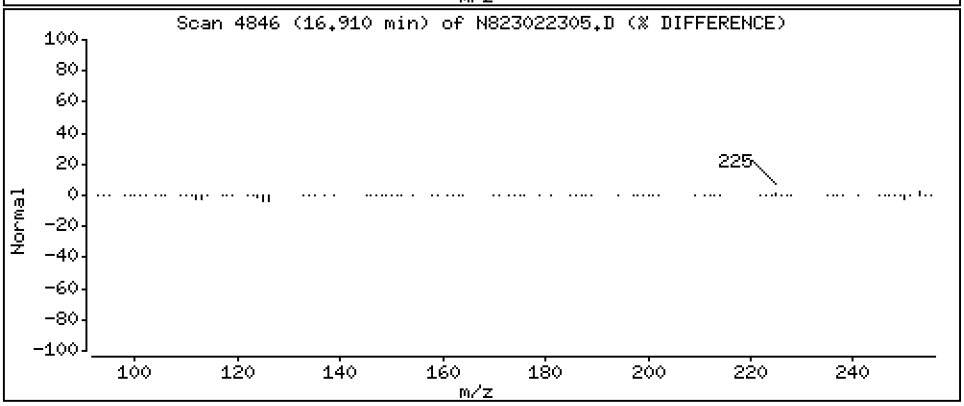












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

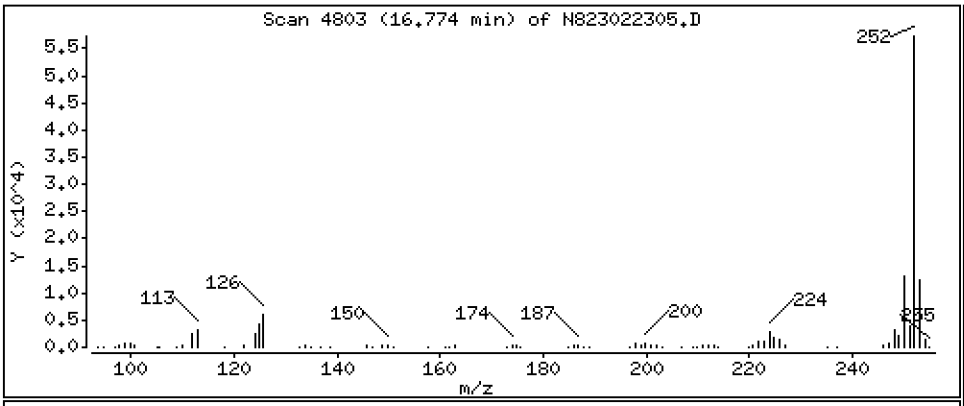
Operator: JZ

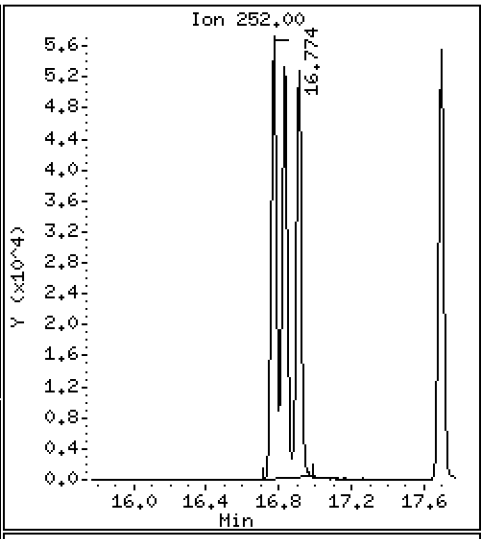
Column phase: Rxi-17sil

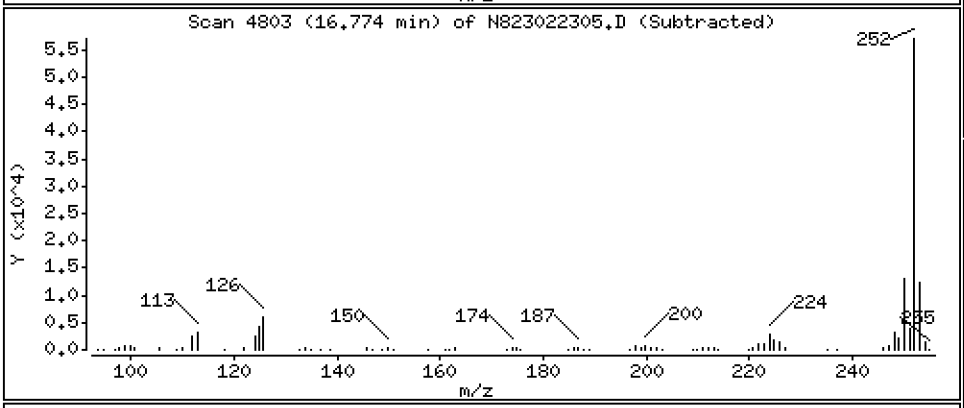
Column diameter: 0.25

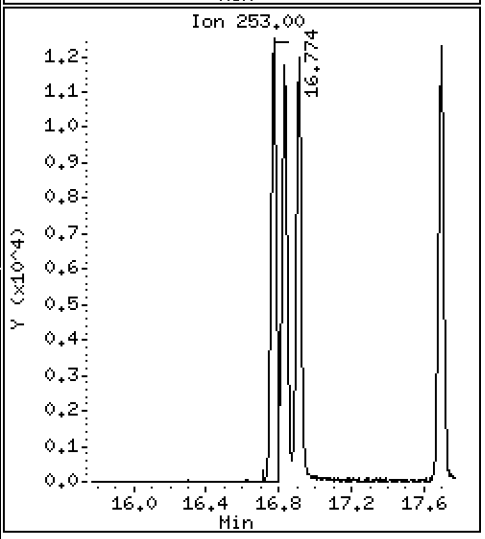
31 Total Benzofluoranthenes

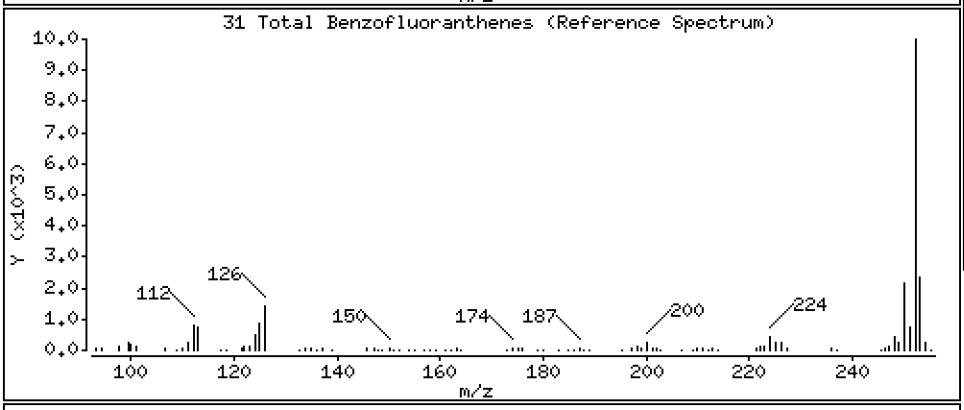
Concentration: 18.75 ug/mL

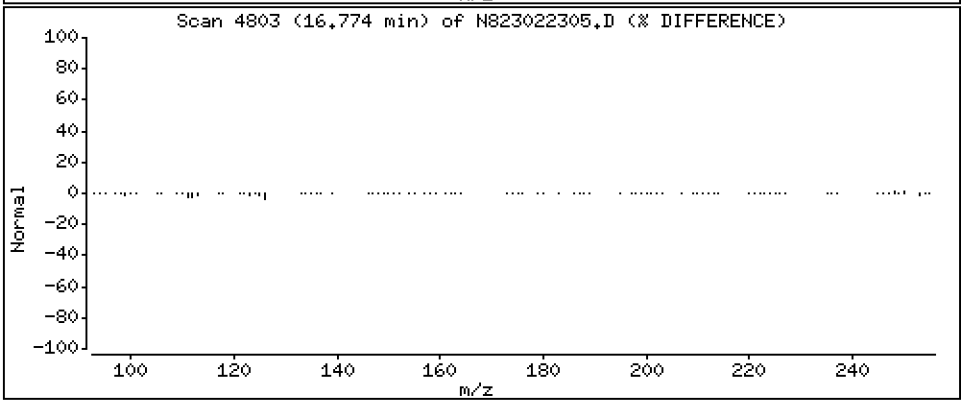












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

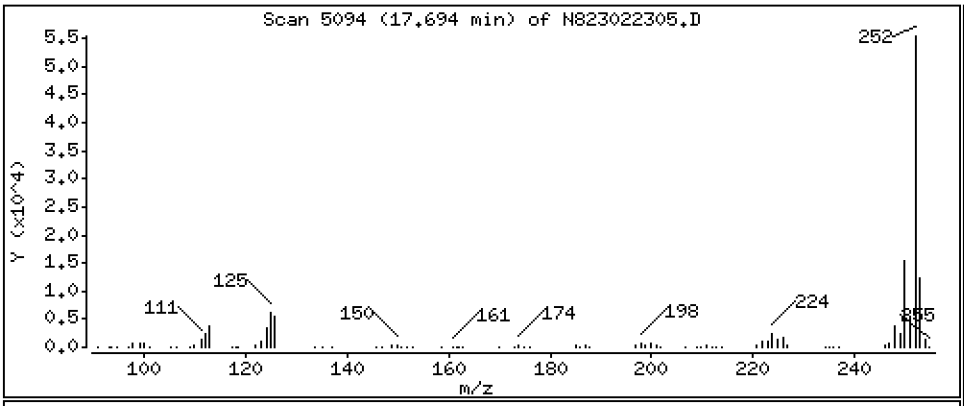
Operator: JZ

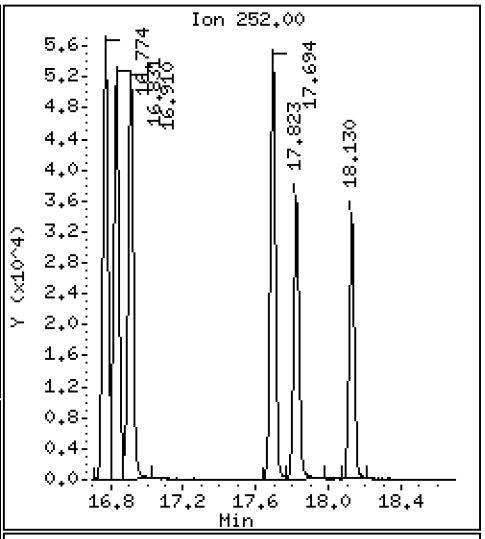
Column phase: Rxi-17sil

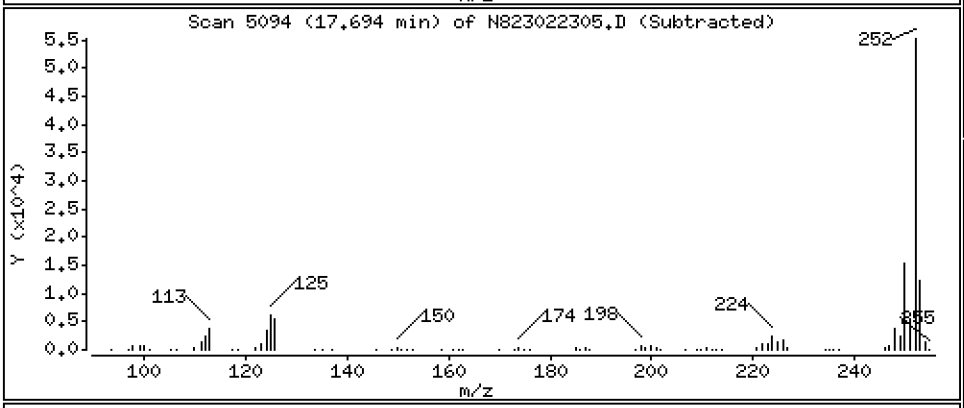
Column diameter: 0.25

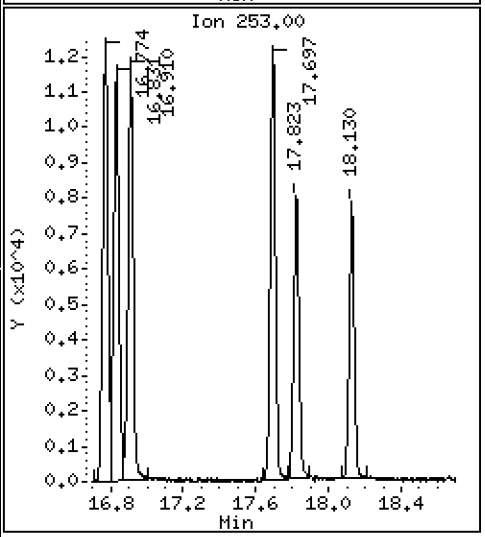
34 Benzo(e)pyrene

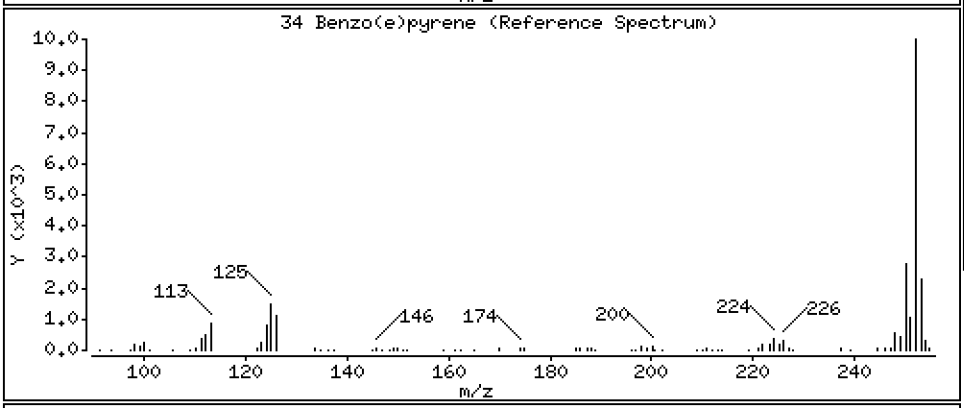
Concentration: 6.193 ug/mL

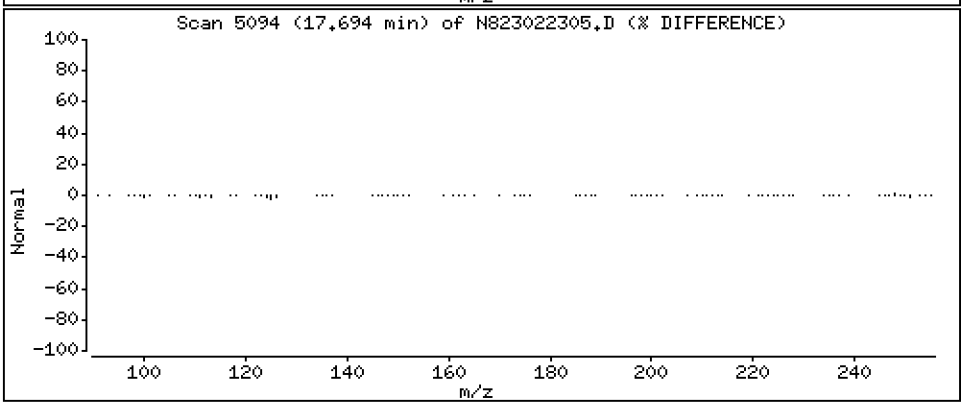












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

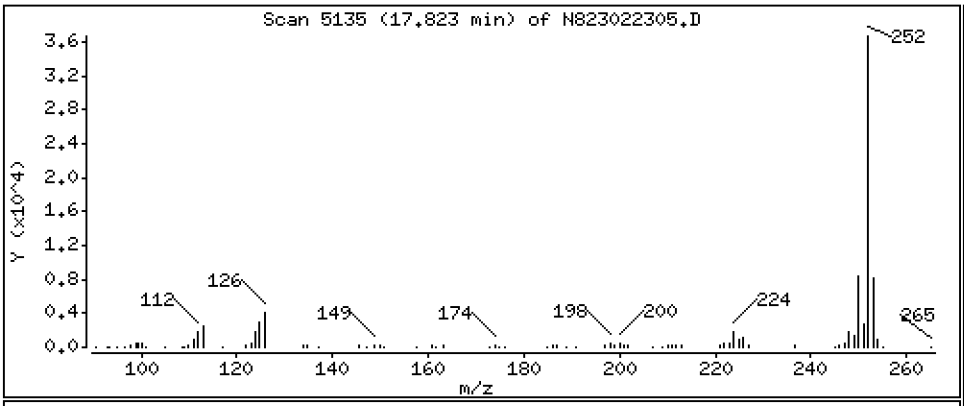
Operator: JZ

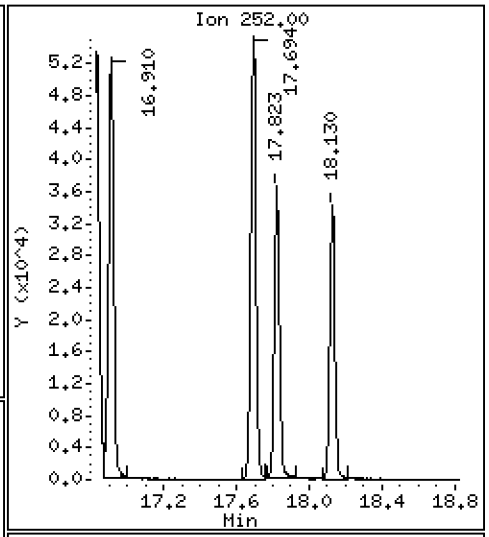
Column phase: Rxi-17sil

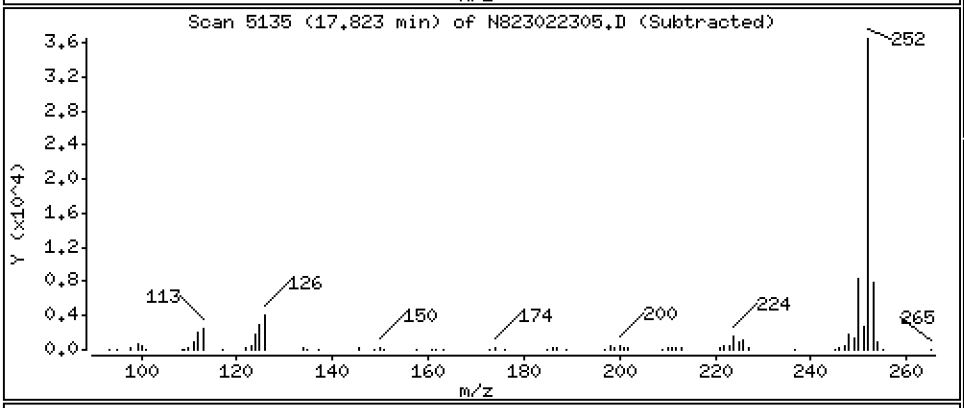
Column diameter: 0.25

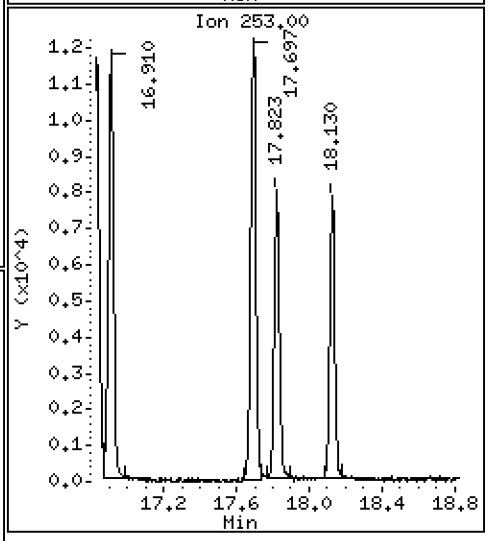
32 Benzo(a)pyrene

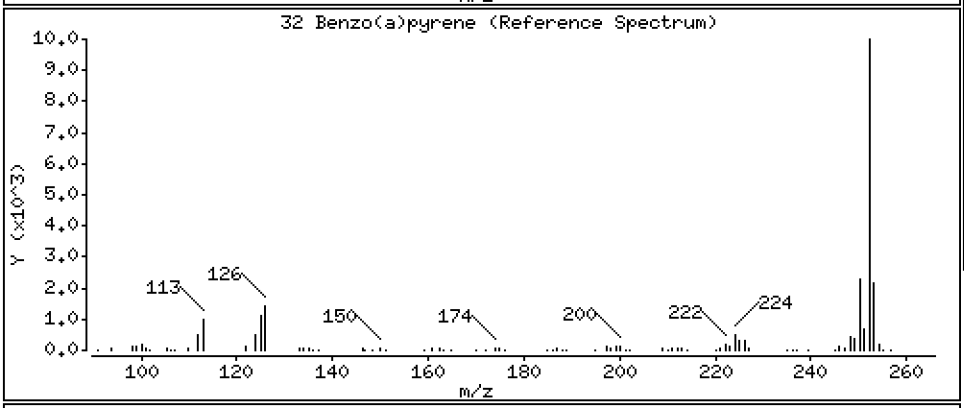
Concentration: 4.632 ug/mL

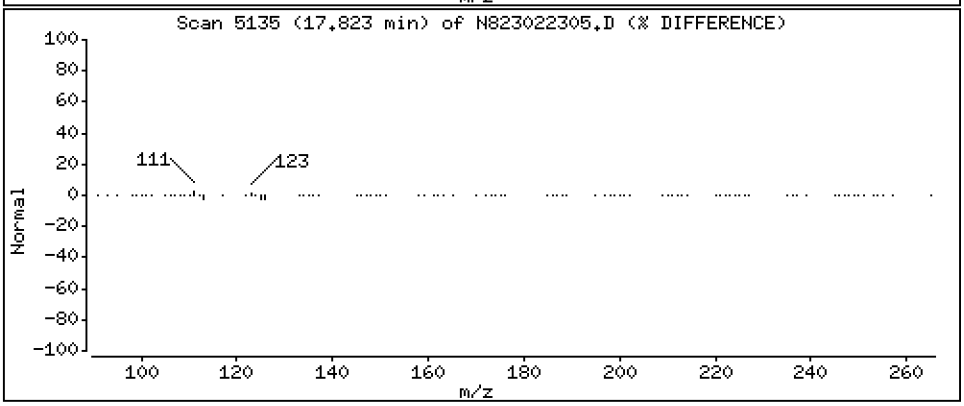












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

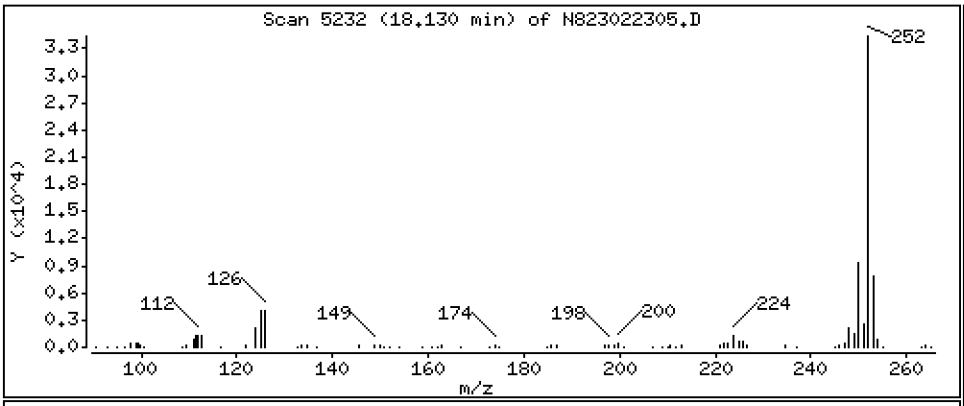
Operator: JZ

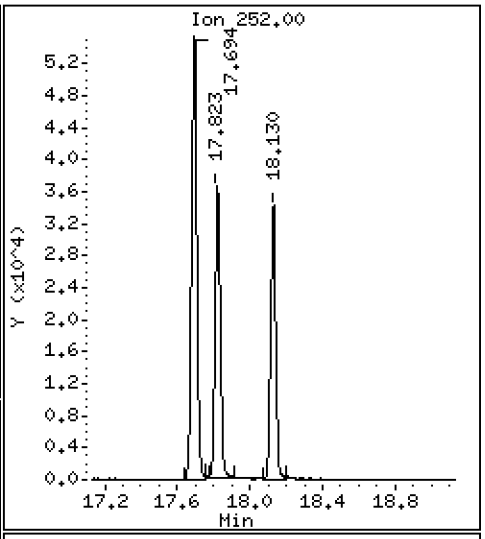
Column phase: Rxi-17sil

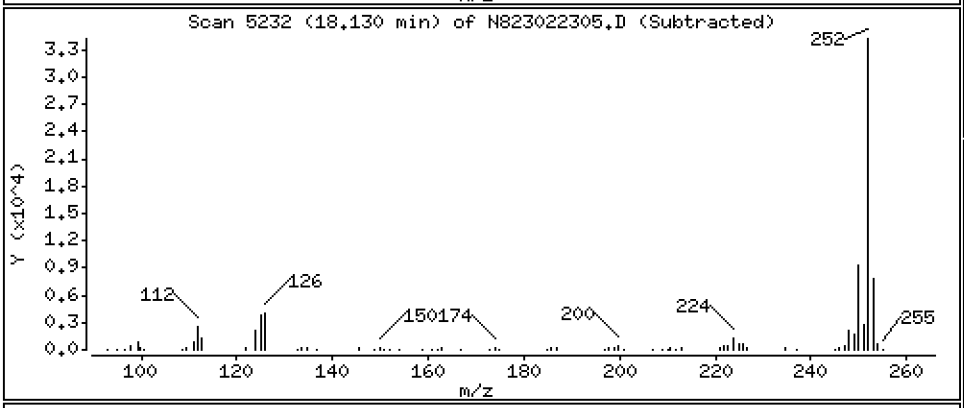
Column diameter: 0.25

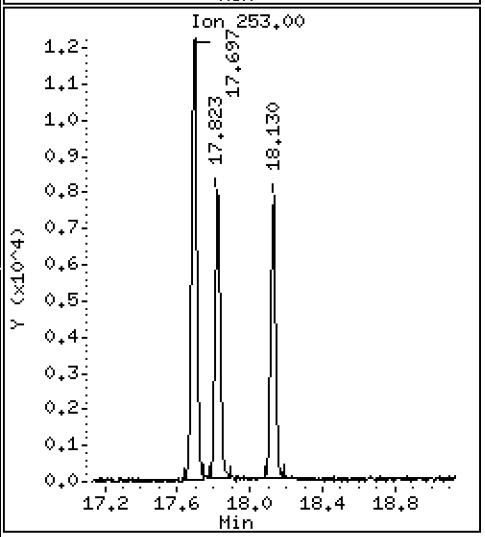
35 Perylene

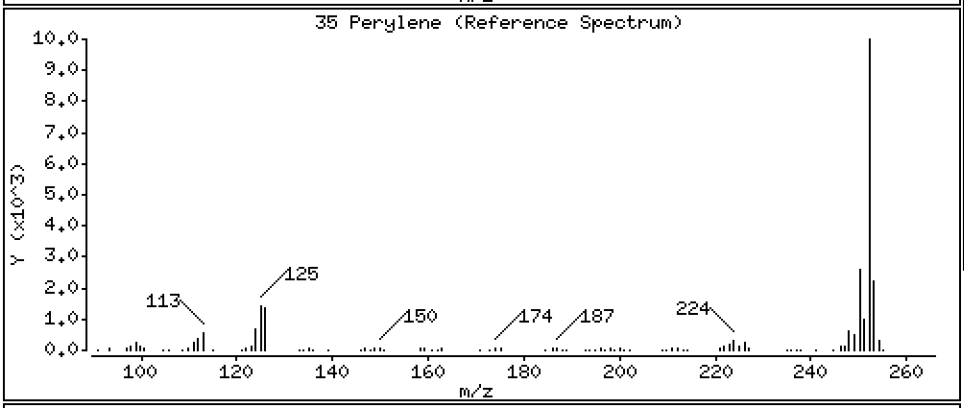
Concentration: 3.898 ug/mL

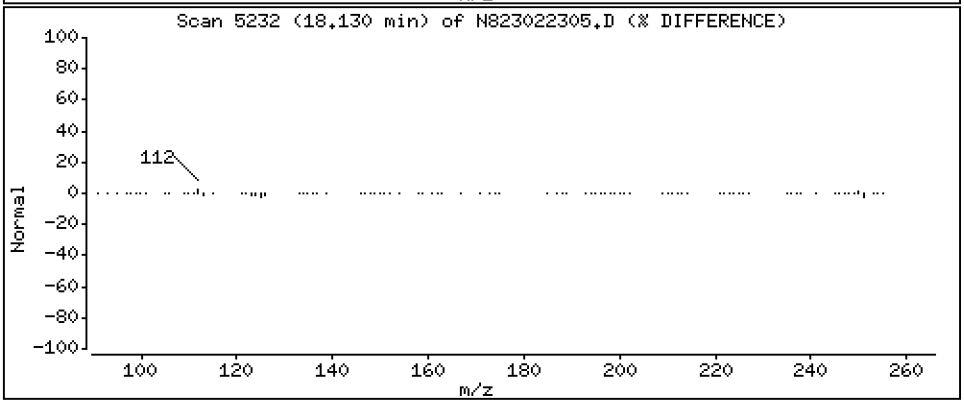












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

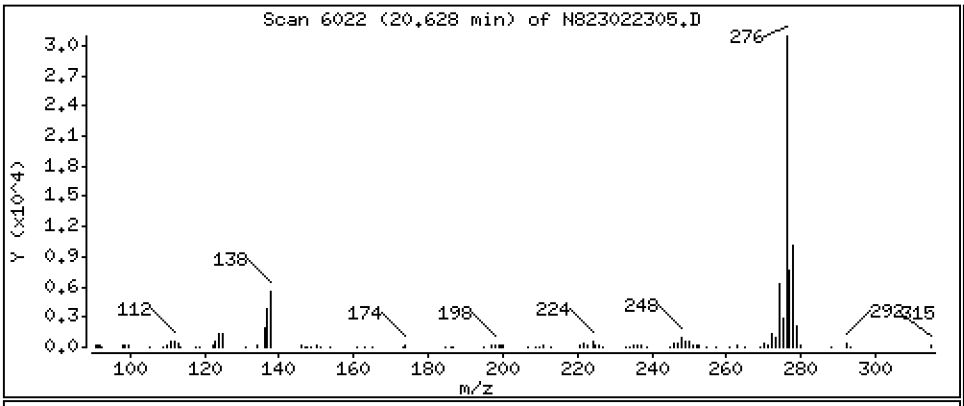
Operator: JZ

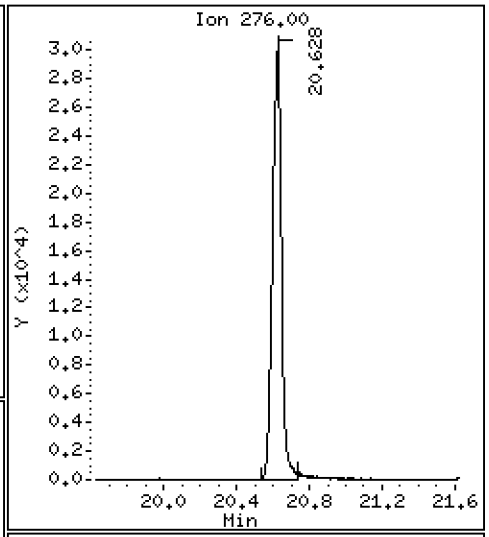
Column phase: Rxi-17sil

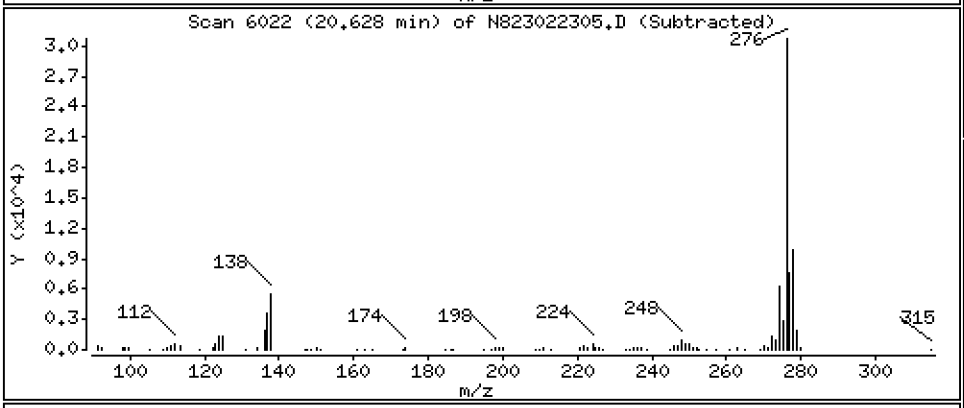
Column diameter: 0.25

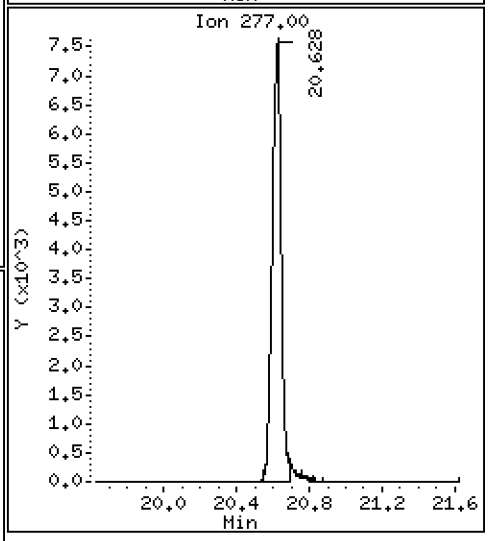
37 Indeno(1,2,3-cd)pyrene

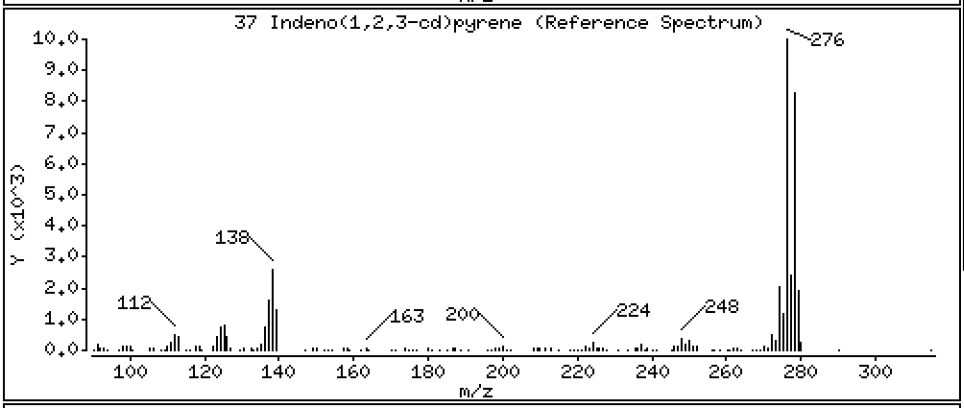
Concentration: 5.814 ug/mL

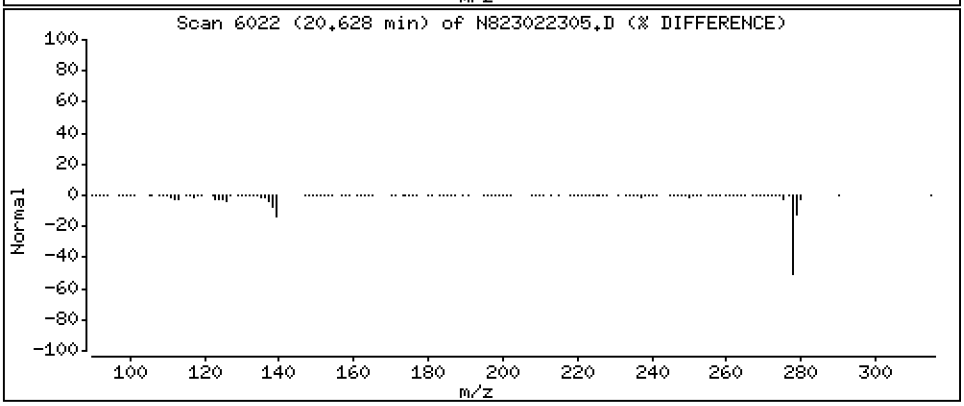












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

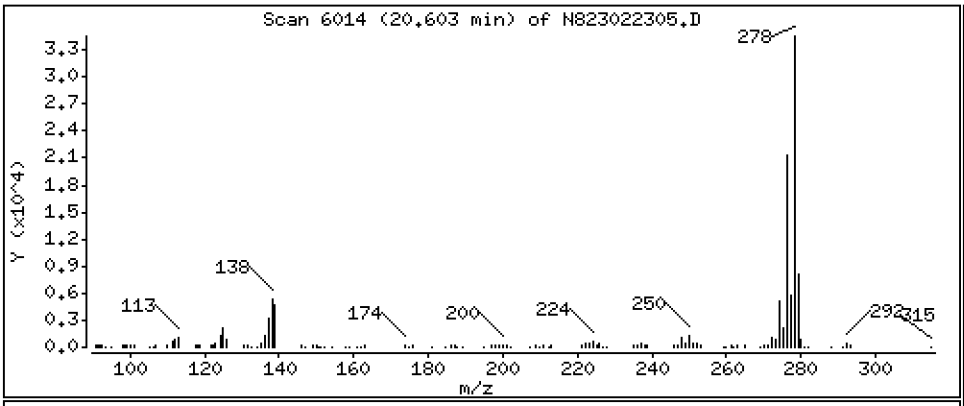
Operator: JZ

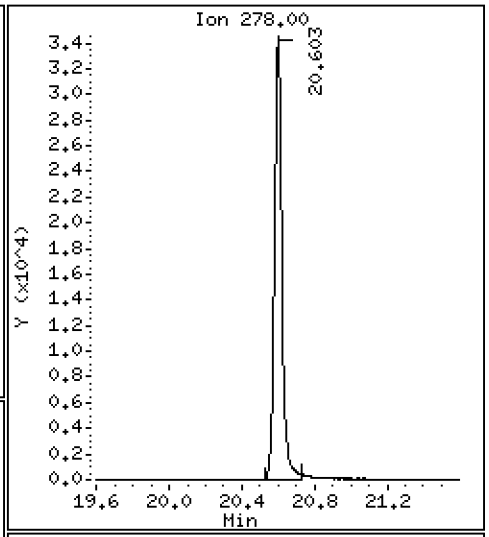
Column phase: Rxi-17sil

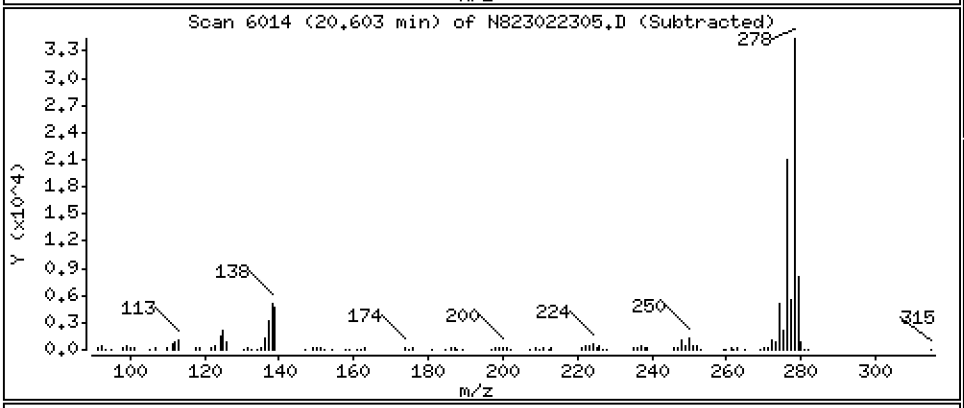
Column diameter: 0.25

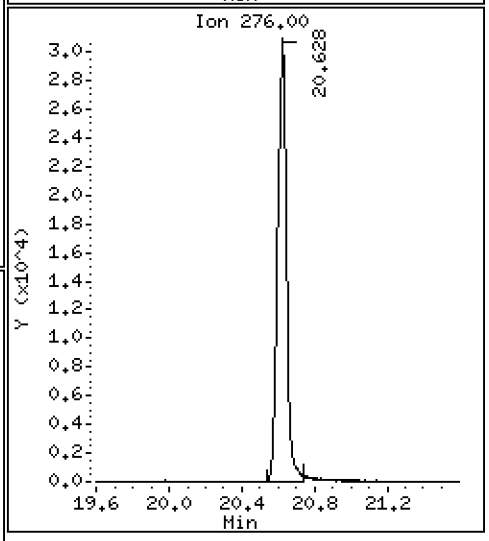
38 Dibenzo(a,h)anthracene

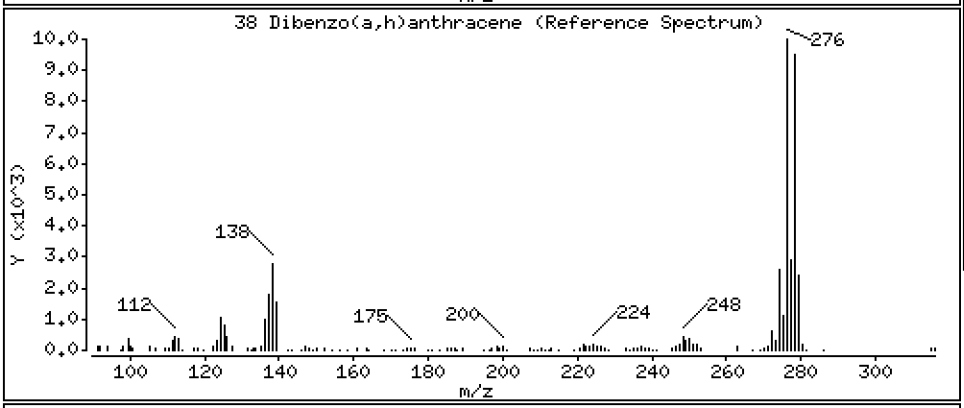
Concentration: 6.349 ug/mL

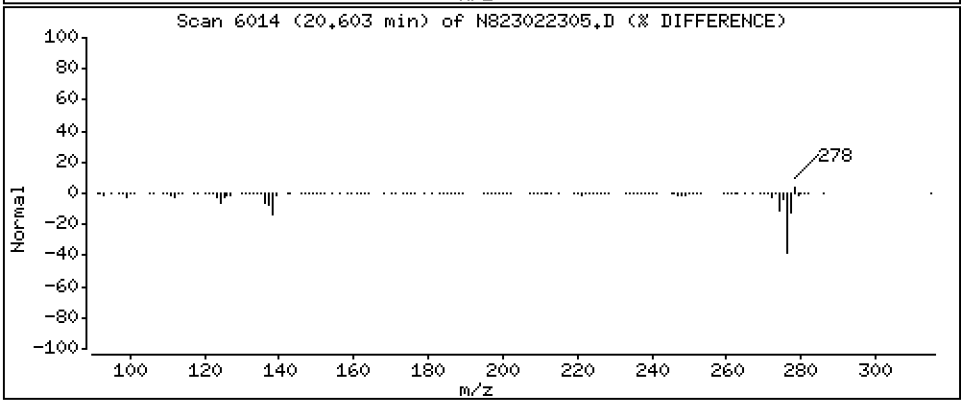












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022305.D

Date : 23-FEB-2023 13:21

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-BSD1,

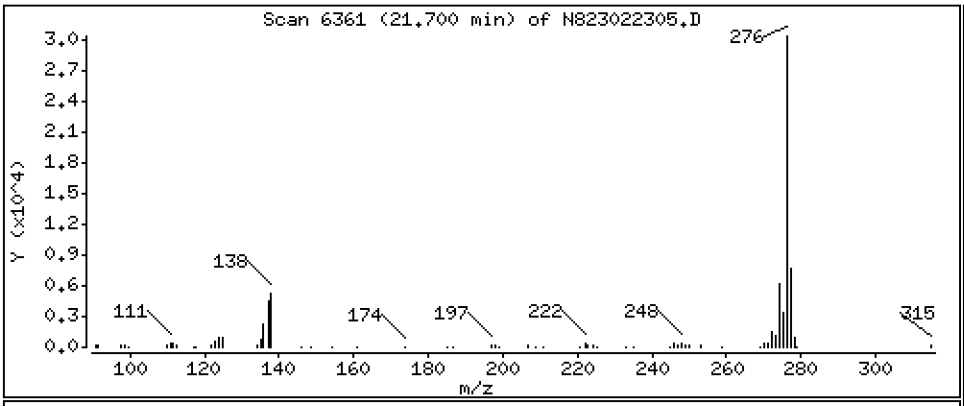
Operator: JZ

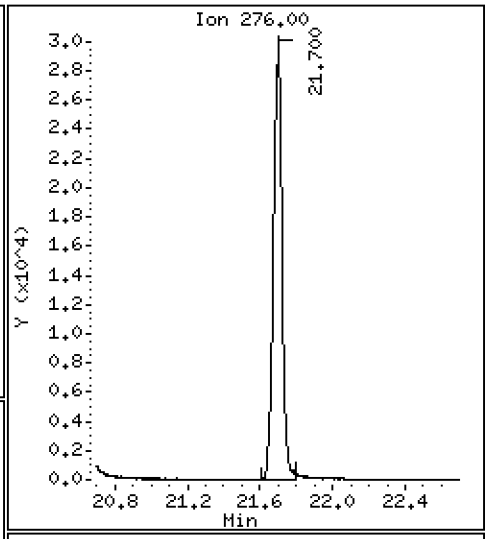
Column phase: Rxi-17sil

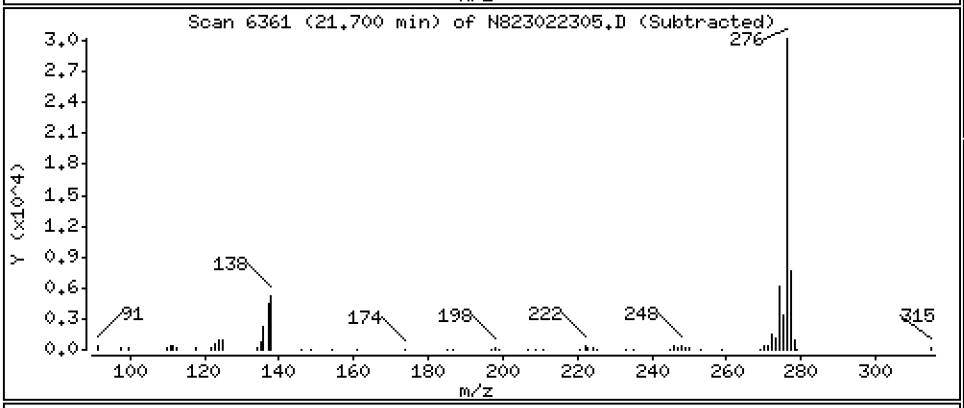
Column diameter: 0.25

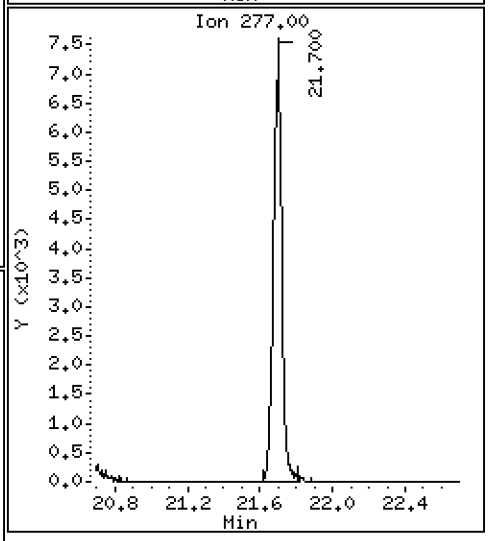
39 Benzo(g,h,i)perylene

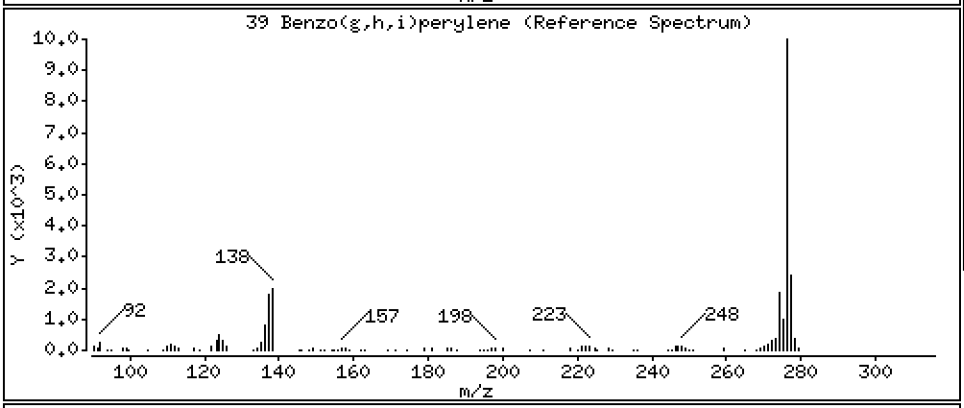
Concentration: 6.078 ug/mL

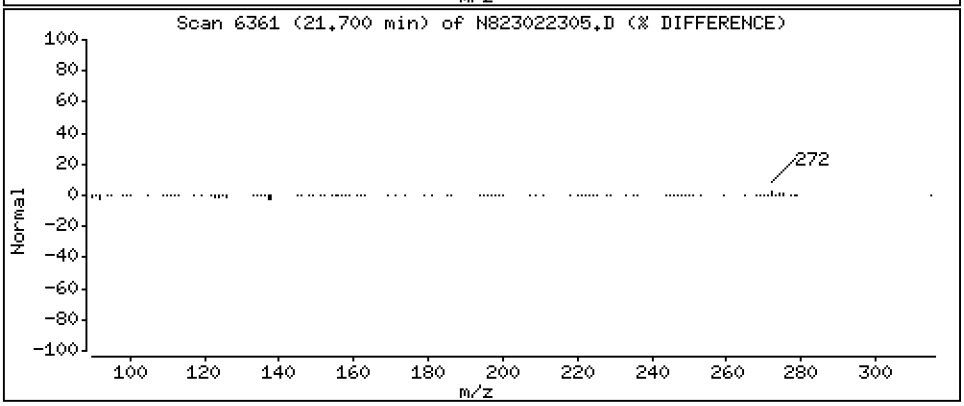












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230223.b\N823022305.D
Lab Smp Id: BLB0386-BSD1
Inj Date : 23-FEB-2023 13:21
Operator : JZ Inst ID: nt8.i
Smp Info : BLB0386-BSD1,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230223.b\FSIMPNA230119.m
Meth Date : 26-Feb-2023 11:43 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PNAXEMDL.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.862	4.871	(1.000)	37656	2.00000	
	2 Naphthalene	128	4.891	4.903	(1.006)	77923	4.45058	4.451
$	3 2-Methylnaphthalene-d10	152	5.599	5.605	(1.152)	31016	3.02014	3.020
	4 2-Methylnaphthalene	141	5.646	5.652	(1.161)	44728	4.64437	4.644
	5 1-methylnaphthalene	141	5.842	5.849	(1.202)	45121	4.61633	4.616
	9 Acenaphthylene	152	7.047	7.050	(0.985)	72258	4.11232	4.112
*	10 Acenaphthene-d10	164	7.154	7.158	(1.000)	23269	2.00000	
	11 Acenaphthene	153	7.205	7.208	(1.007)	51592	4.38218	4.382
	12 Dibenzofuran	168	7.357	7.360	(1.028)	80827	4.52005	4.520
	14 Fluorene	166	7.834	7.837	(1.095)	66860	4.81410	4.814
*	15 Phenanthrene-d10	188	9.197	9.197	(1.000)	44748	2.00000	
	16 Phenanthrene	178	9.232	9.235	(1.004)	101302	4.63446	4.634
	17 Anthracene	178	9.273	9.276	(1.008)	86417	4.35200	4.352
	19 Carbazole	167	9.788	9.791	(1.064)	89889	4.93795	4.938
	22 Fluoranthene	202	11.006	11.009	(1.197)	120110	5.04810	5.048
$	21 Fluoranthene-d10	212	10.968	10.971	(1.193)	69607	3.52572	3.526
	23 Pyrene	202	11.524	11.527	(0.815)	125474	5.08780	5.088
	24 Benzo(a)anthracene	228	14.022	14.025	(0.991)	119017	5.32444	5.324
*	25 Chrysene-d12	240	14.146	14.152	(1.000)	39778	2.00000	
	27 Chrysene	228	14.221	14.225	(1.005)	118194	4.96699	4.967
	28 Benzo(b)fluoranthene	252	16.773	16.770	(0.929)	113817	6.28197	6.282
	29 Benzo(k)fluoranthene	252	16.830	16.833	(0.932)	106458	5.99875	5.999
	30 Benzo(j)fluoranthene	252	16.909	16.912	(0.937)	102326	6.40490	6.405
	31 Total Benzofluoranthenes	252	16.773	16.770	(0.929)	321753	18.7516	18.75(M)
	34 Benzo(e)pyrene	252	17.693	17.696	(0.980)	111893	6.19316	6.193
	32 Benzo(a)pyrene	252	17.823	17.826	(0.987)	73846	4.63165	4.632
*	33 Perylene-d12	264	18.054	18.057	(1.000)	31109	2.00000	
	35 Perylene	252	18.130	18.130	(1.004)	66700	3.89846	3.898
$	36 Dibenzo(a,h)anthracene-d14	292	20.485	20.485	(1.135)	54113	4.43943	4.439
	37 Indeno(1,2,3-cd)pyrene	276	20.628	20.624	(1.143)	105598	5.81365	5.814
	38 Dibenzo(a,h)anthracene	278	20.602	20.596	(1.141)	99239	6.34870	6.349
	39 Benzo(g,h,i)perylene	276	21.700	21.696	(1.202)	100029	6.07826	6.078

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823022305.D
Lab Smp Id: BLB0386-BSD1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230223.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 23-FEB-2023
Calibration Time: 11:46
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	37022	18511	74044	37656	1.71
10 Acenaphthene-d10	22454	11227	44908	23269	3.63
15 Phenanthrene-d10	43277	21639	86554	44748	3.40
25 Chrysene-d12	38907	19454	77814	39778	2.24
33 Perylene-d12	39582	19791	79164	31109	-21.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.87	4.37	5.37	4.86	-0.19
10 Acenaphthene-d10	7.16	6.66	7.66	7.15	-0.04
15 Phenanthrene-d10	9.20	8.70	9.70	9.20	0.00
25 Chrysene-d12	14.15	13.65	14.65	14.15	-0.04
33 Perylene-d12	18.06	17.56	18.56	18.05	-0.02

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

REVIEW SUMMARY FOR FILE - N823022305.D

Lab ID: BLB0386-BSD1
nt8.i, 20230223.b\FSIMPNA230119.m,   23-FEB-2023 13:21

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check performed

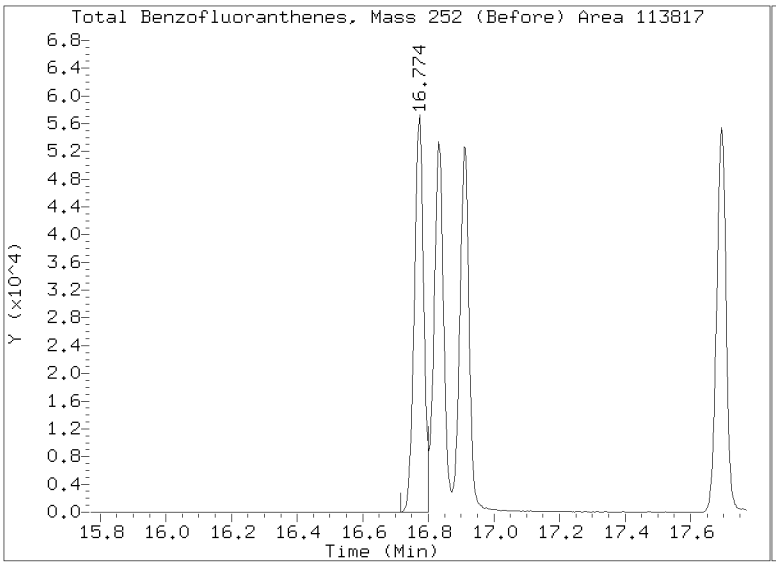
On Column LOD for nt8.i, 20230223.b\FSIMPNA230119.m, PNAXEMDL.sub = 0.0080

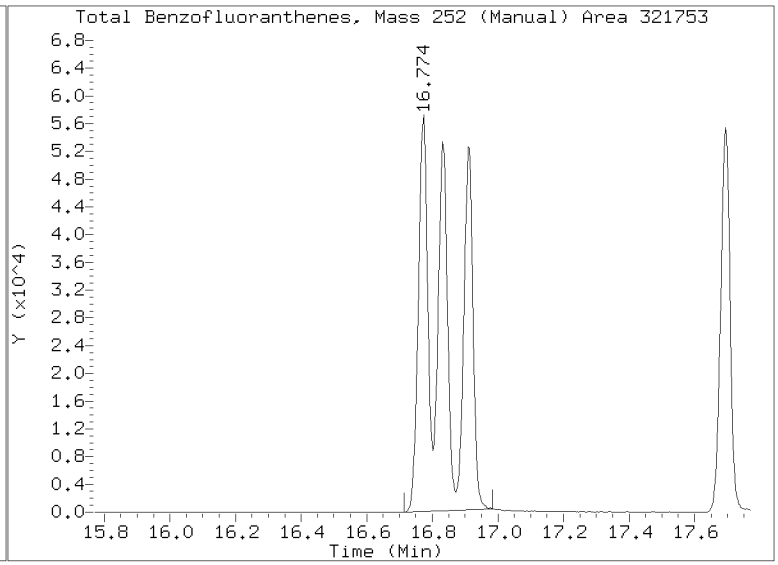
Exception: Benzo(e)pyrene 0.0800

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230223.b/N823022305.D
Injection Date: 23-FEB-2023 13:21
Lab ID:BLB0386-BSD1 Client ID:
Report Date: 02/26/2023 12:32





LCS / LCS DUPLICATE RECOVERY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/17/23 22:14
Batch:	BLB0495	Laboratory ID:	BLB0495-BS2
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 1 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	500	306		61.3	36 - 120
1,2-Dichlorobenzene	500	304		60.7	36 - 120
Benzyl Alcohol	500	328		65.7	25 - 123
Benzoic acid	2300	315	Q	13.7	10 - 160
2,4-Dimethylphenol	1300	277		21.3	10 - 120
1,2,4-Trichlorobenzene	500	308		61.6	35 - 120
N-Nitrosodiphenylamine	500	330		65.9	27 - 120
Pentachlorophenol	1300	1420	Q	110	26 - 120

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	500	356		71.2	15.0	30	36 - 120
1,2-Dichlorobenzene	500	353		70.7	15.1	30	36 - 120
Benzyl Alcohol	500	396		79.2	18.7	30	25 - 123
Benzoic acid	2300	915	*, Q	39.8	97.7 *	30	10 - 160
2,4-Dimethylphenol	1300	584	*	44.9	71.1 *	30	10 - 120
1,2,4-Trichlorobenzene	500	362		72.3	16.1	30	35 - 120
N-Nitrosodiphenylamine	500	412		82.4	22.2	30	27 - 120
Pentachlorophenol	1300	1650	*, Q	127 *	14.6	30	26 - 120

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723075.D

Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

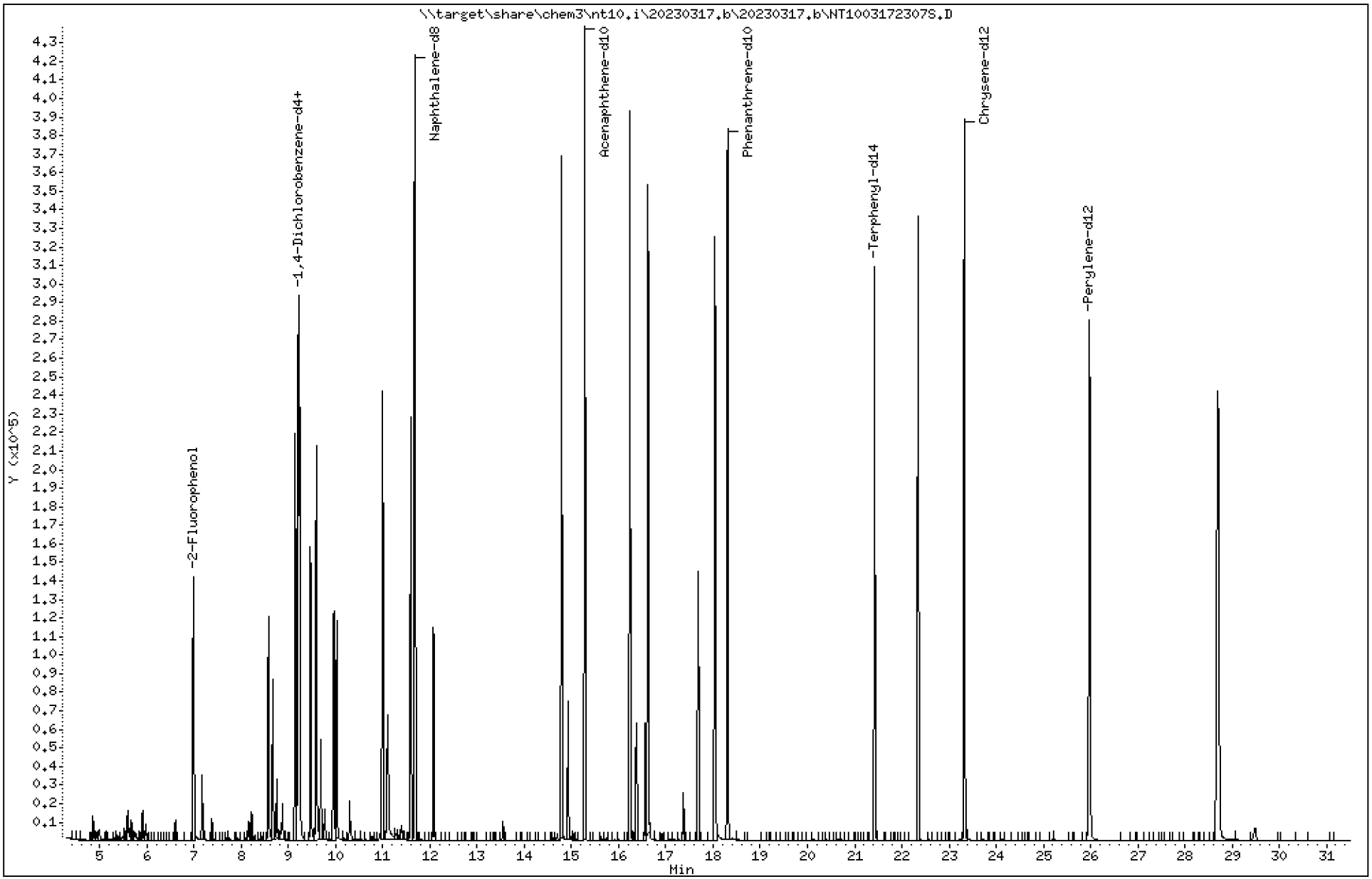
Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

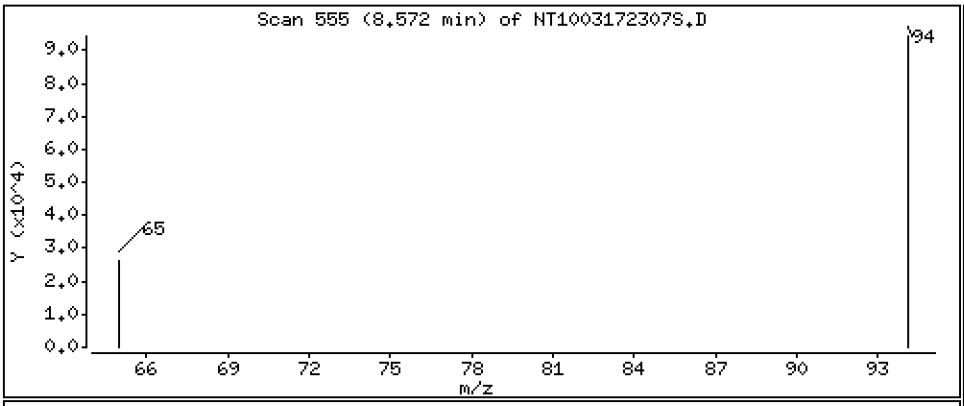
Operator: JGR

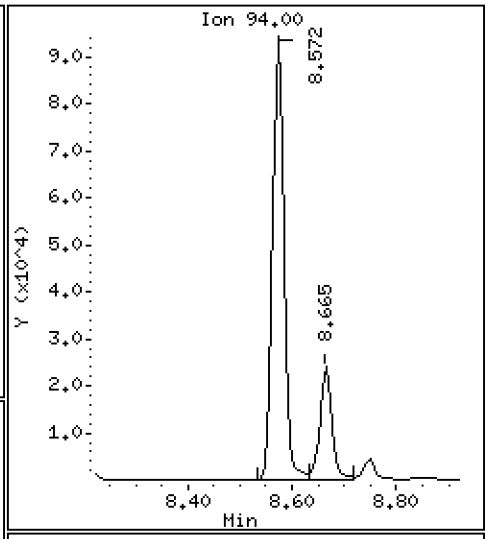
Column phase: ZB-5msi

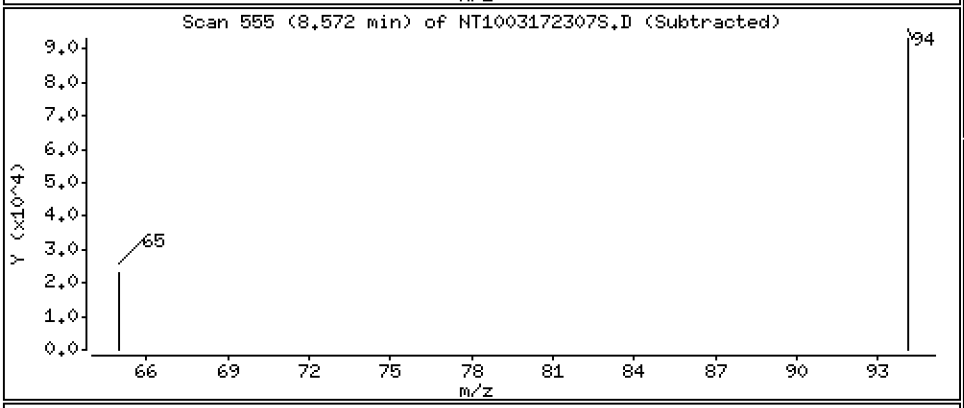
Column diameter: 0.25

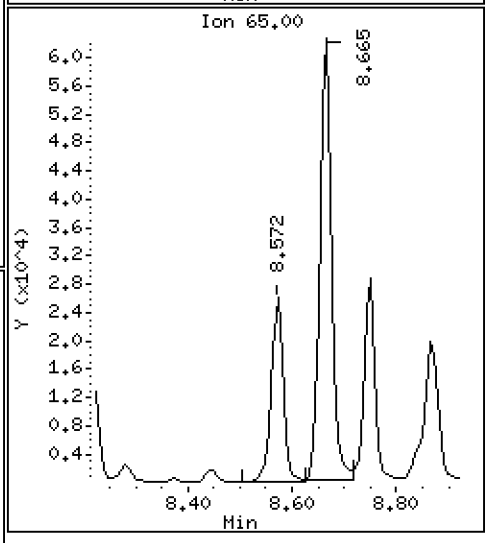
3 Phenol

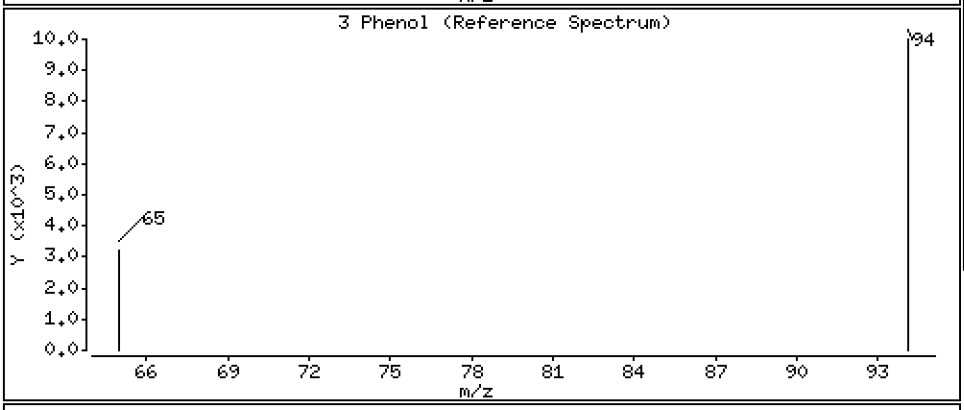
Concentration: 1.806 ug/L

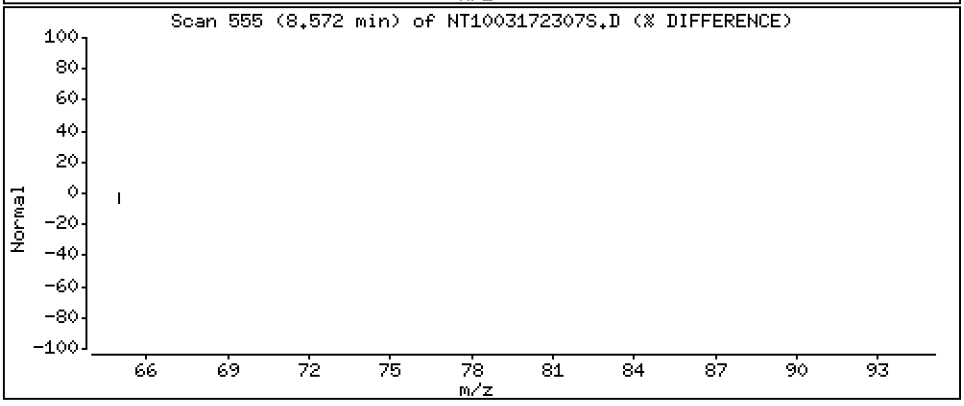












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

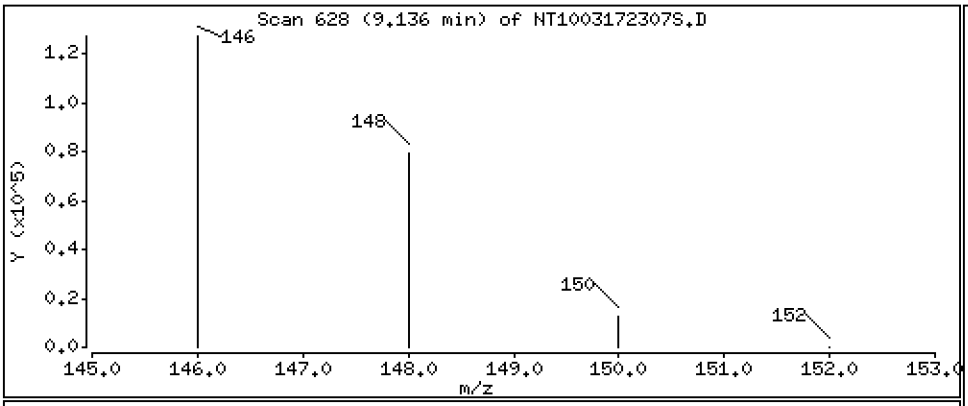
Operator: JGR

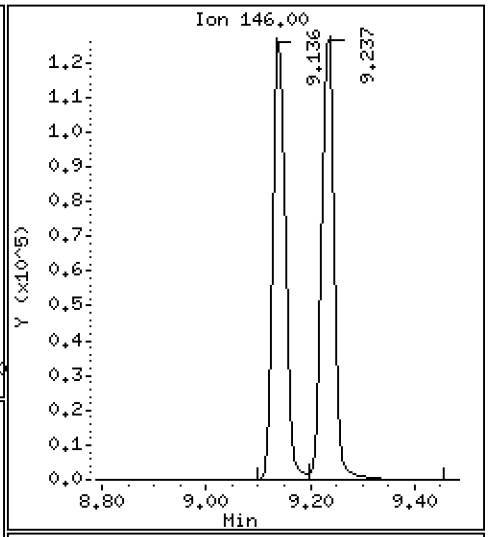
Column phase: ZB-5msi

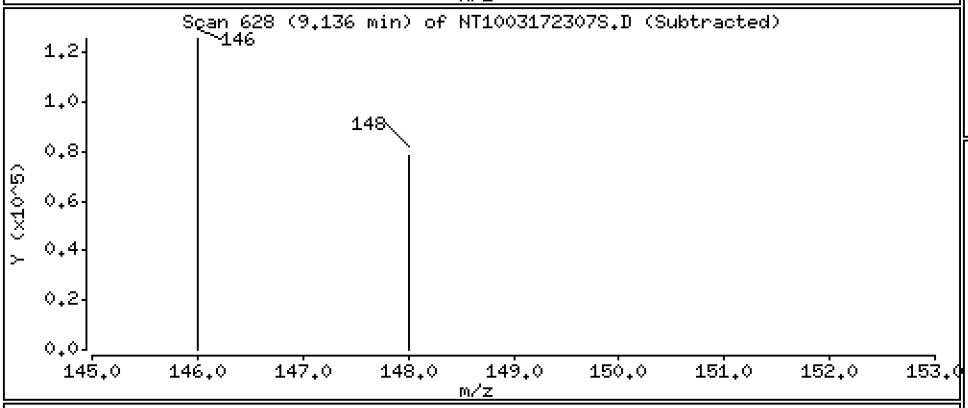
Column diameter: 0.25

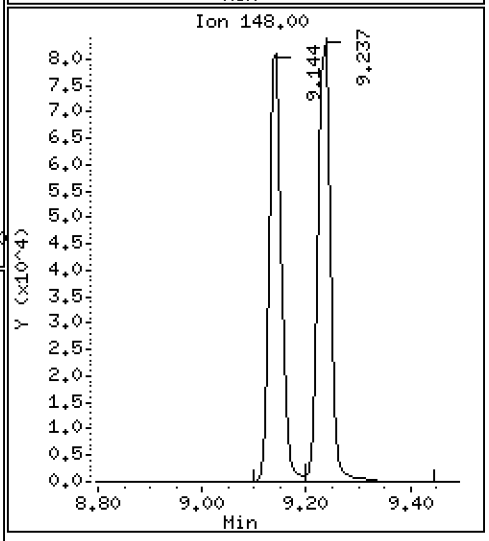
7 1,3-Dichlorobenzene

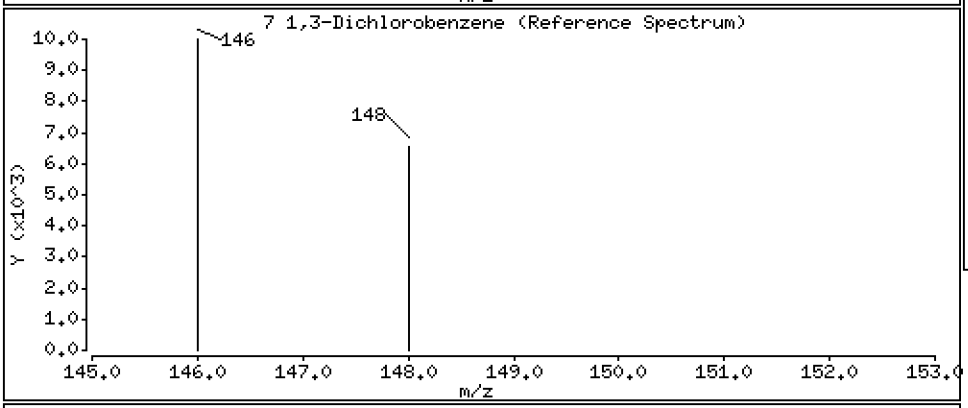
Concentration: 2.950 ug/L

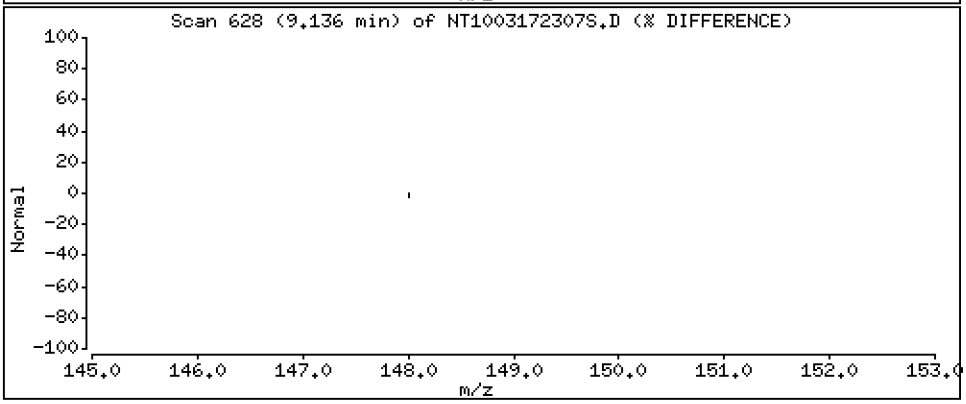












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

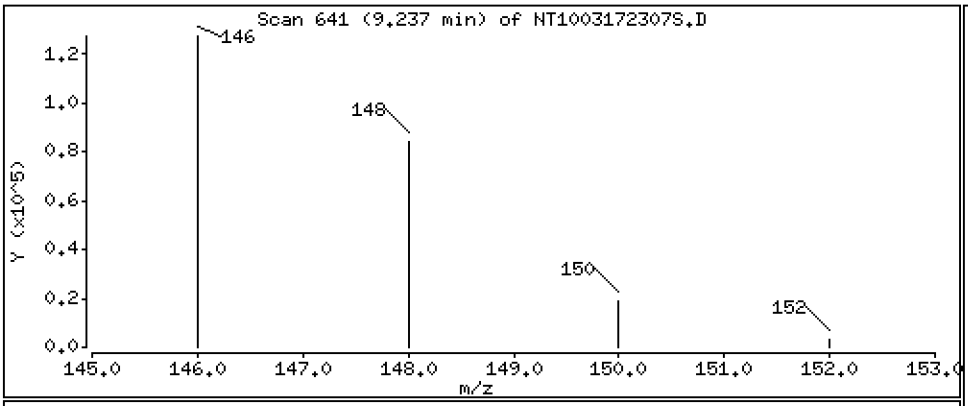
Operator: JGR

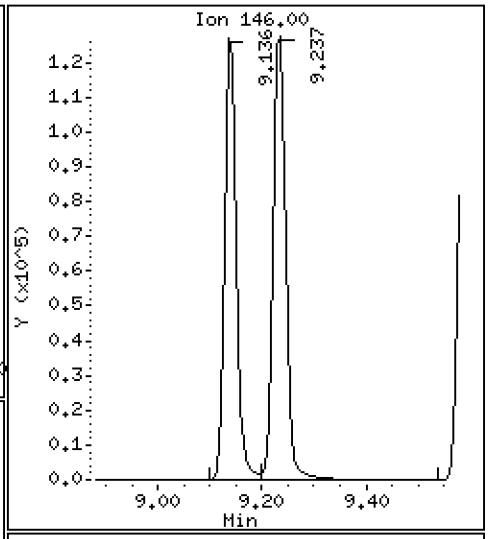
Column phase: ZB-5msi

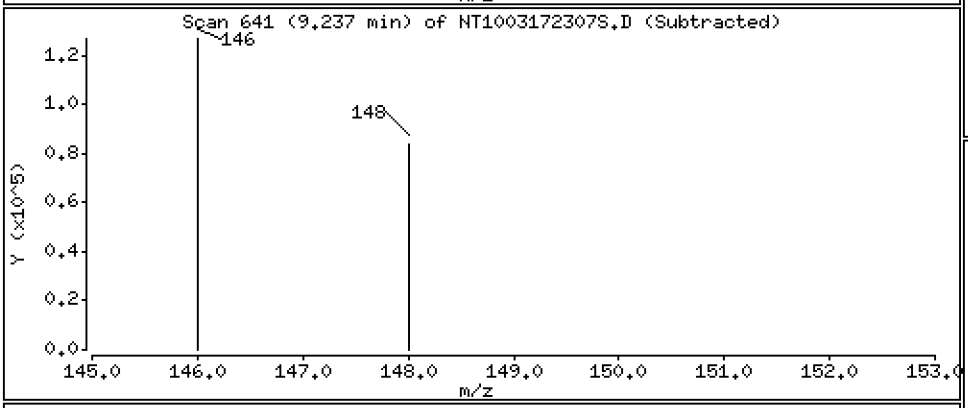
Column diameter: 0.25

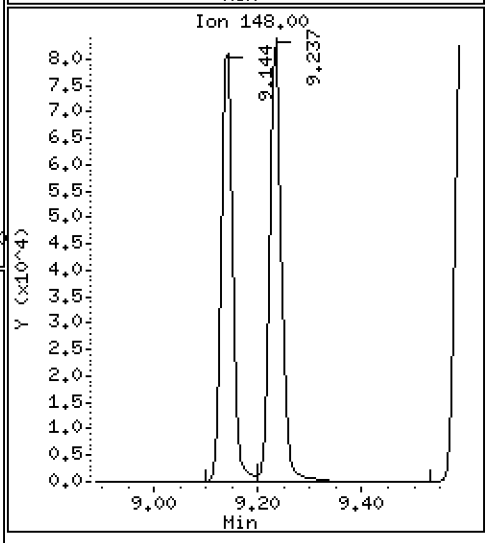
9 1,4-Dichlorobenzene

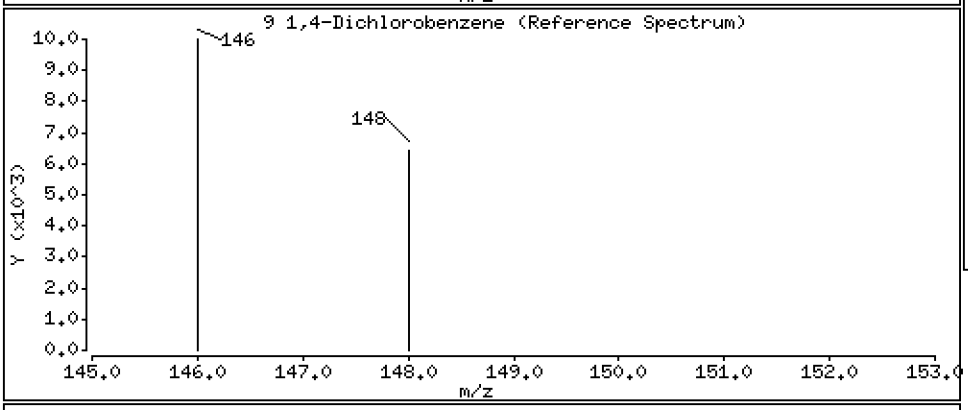
Concentration: 3.063 ug/L

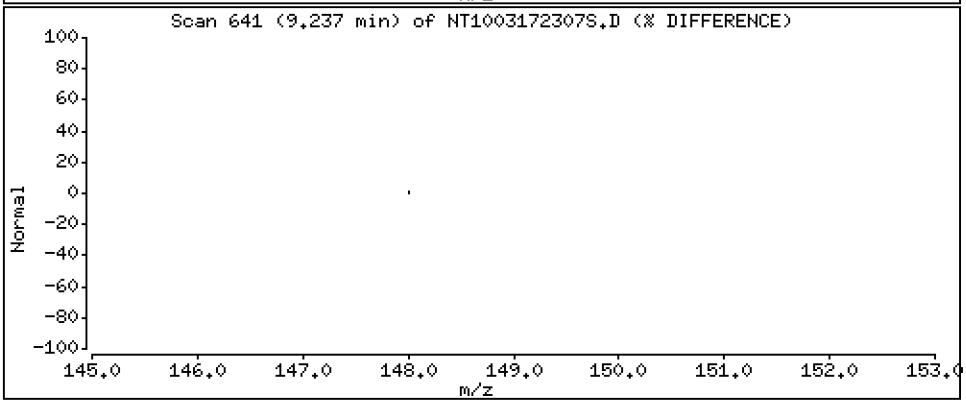












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

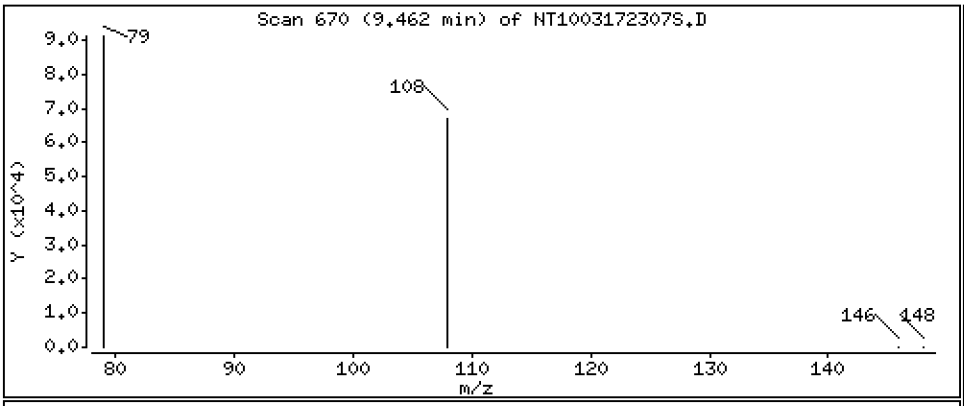
Operator: JGR

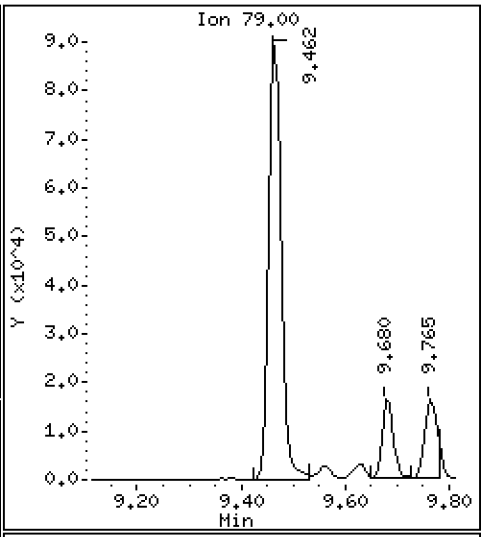
Column phase: ZB-5msi

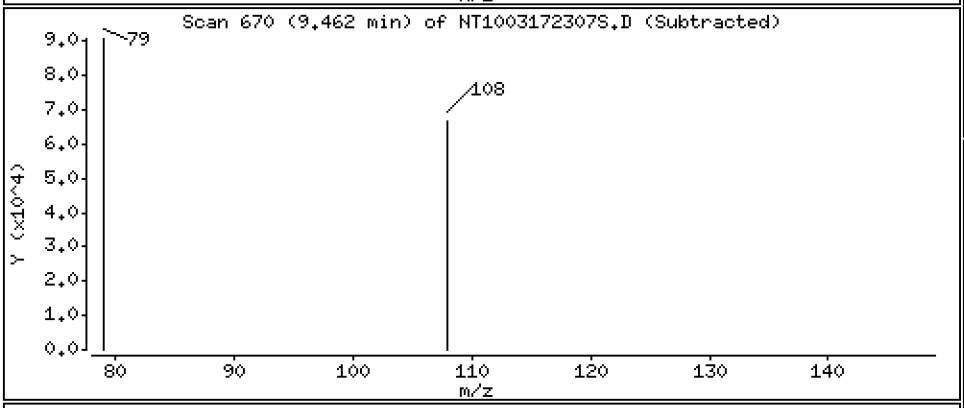
Column diameter: 0.25

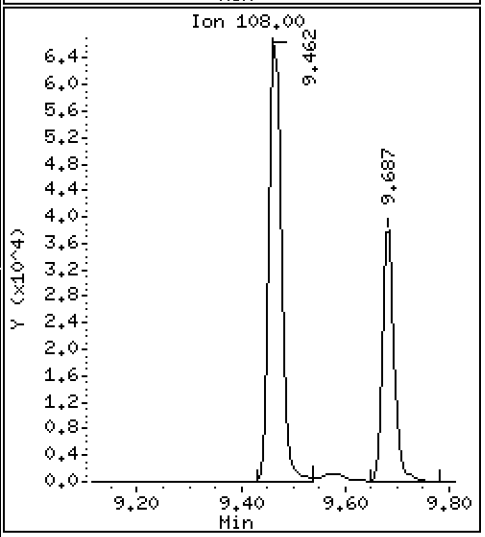
11 Benzyl alcohol

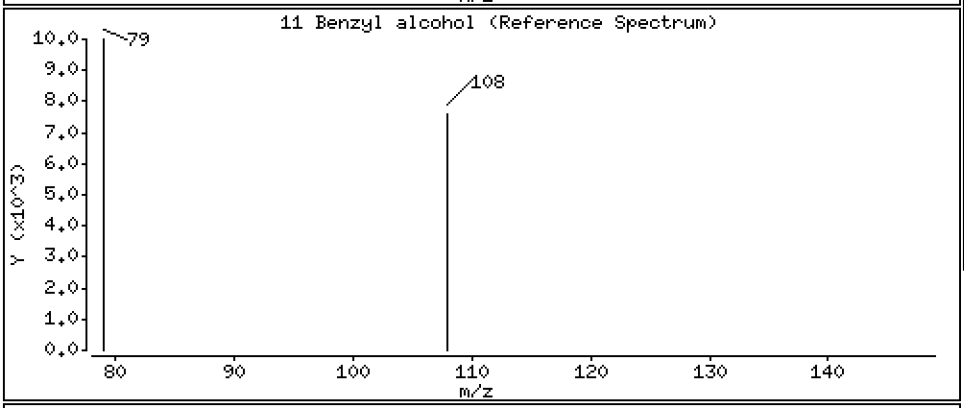
Concentration: 3.284 ug/L

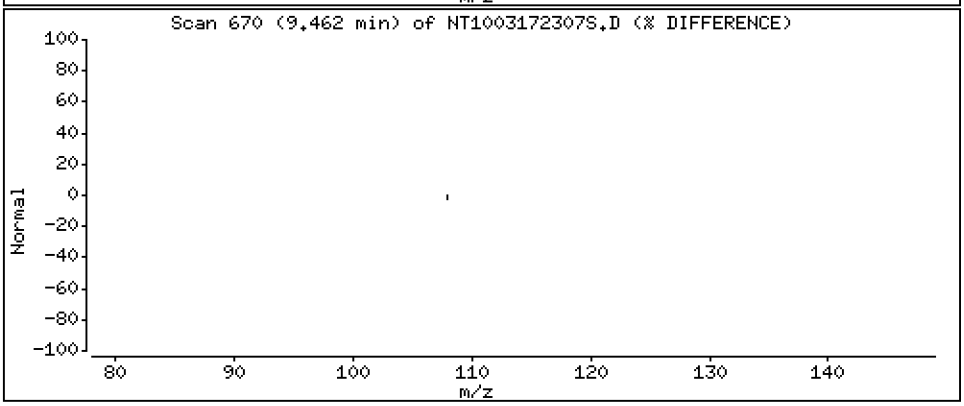












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

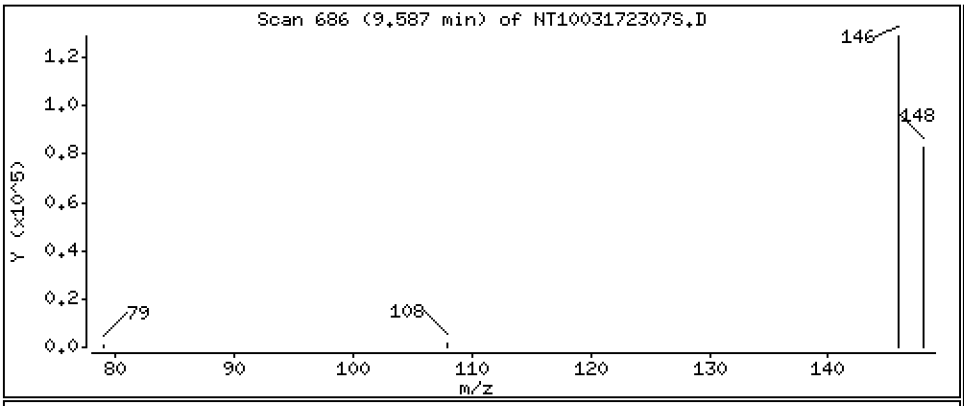
Operator: JGR

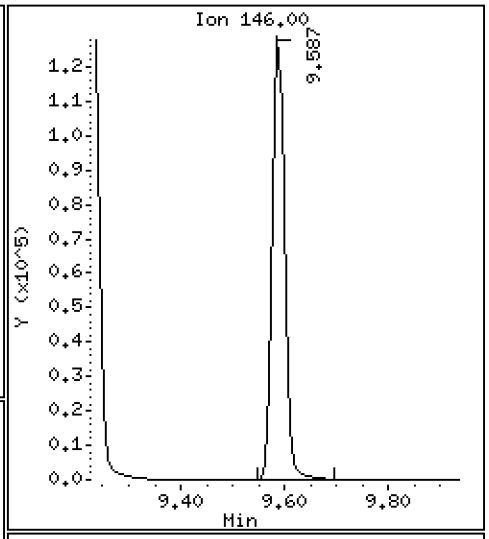
Column phase: ZB-5msi

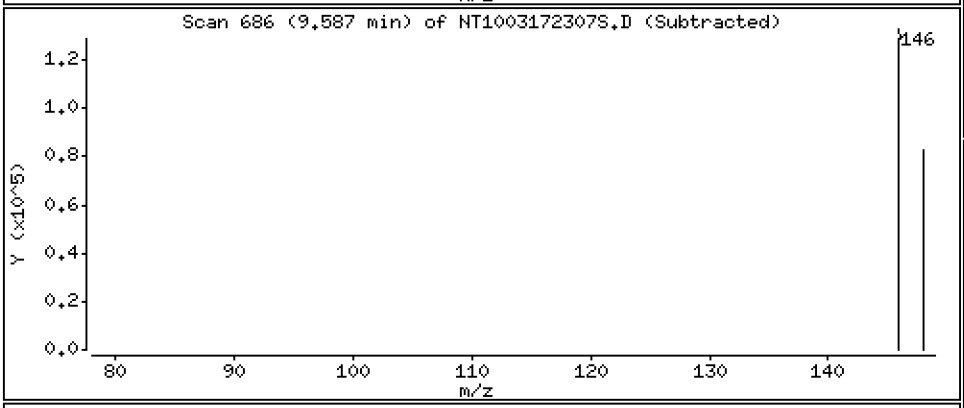
Column diameter: 0.25

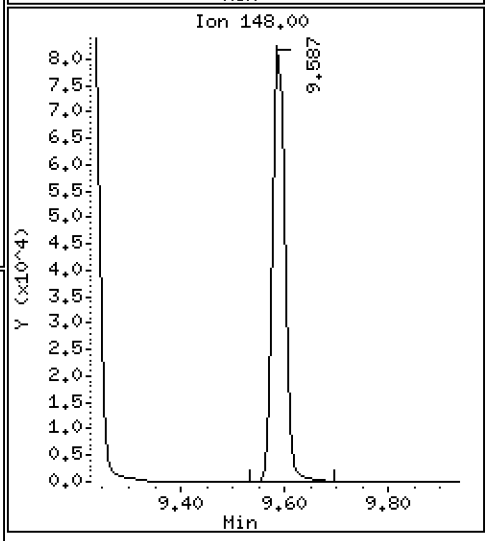
12 1,2-Dichlorobenzene

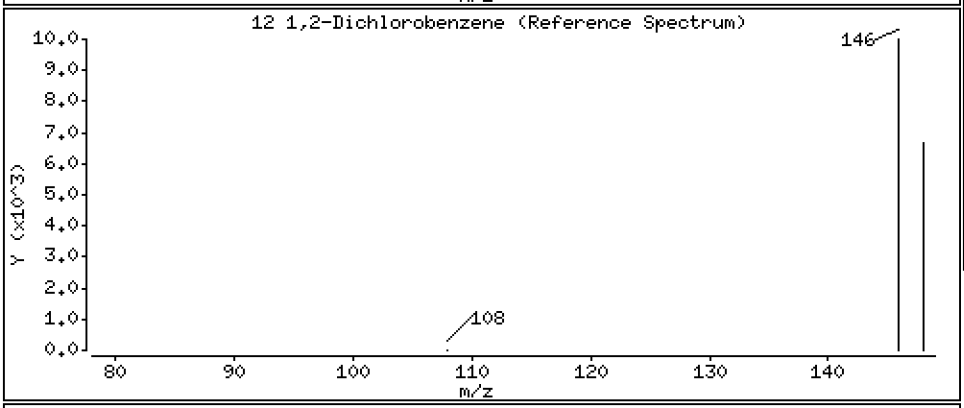
Concentration: 3.037 ug/L

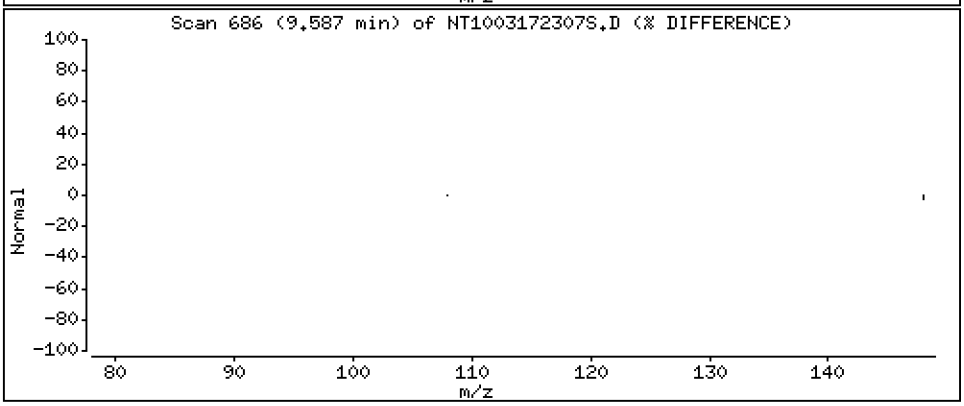












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

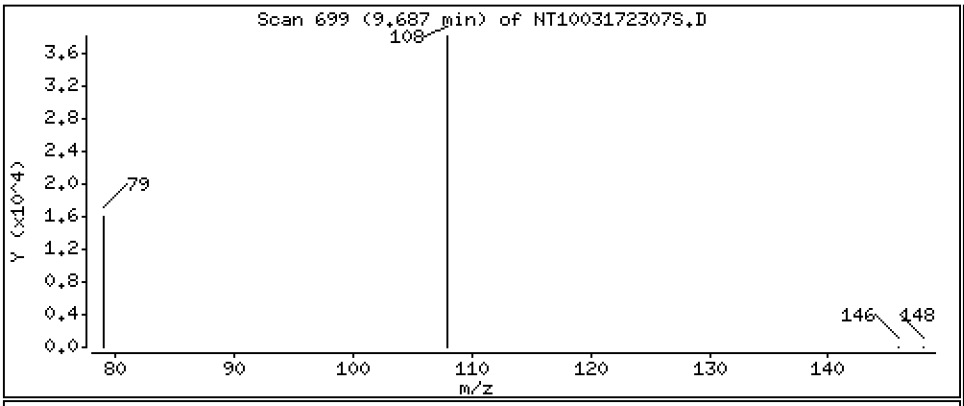
Operator: JGR

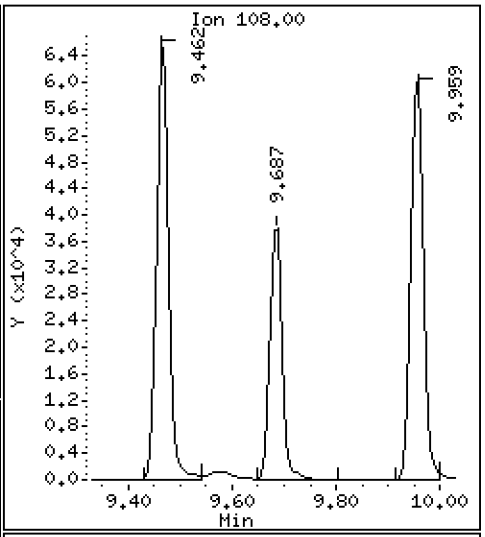
Column phase: ZB-5msi

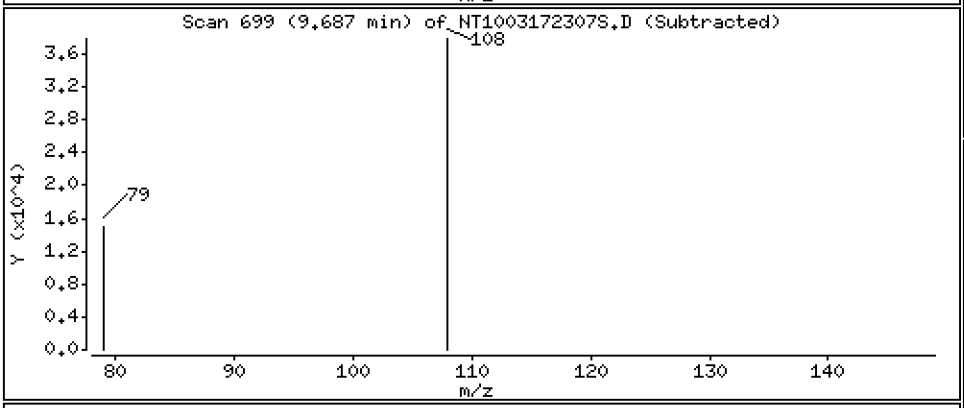
Column diameter: 0.25

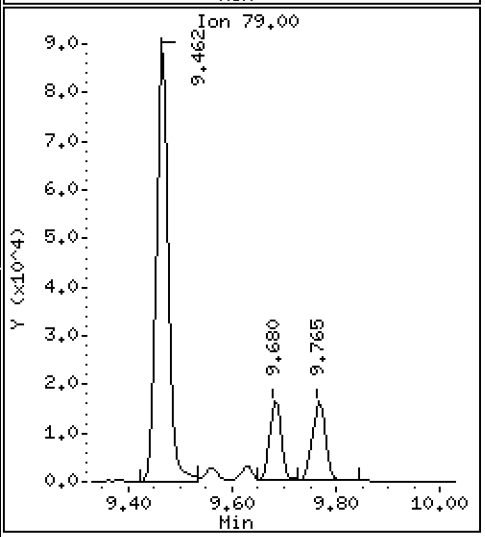
13 2-Methylphenol

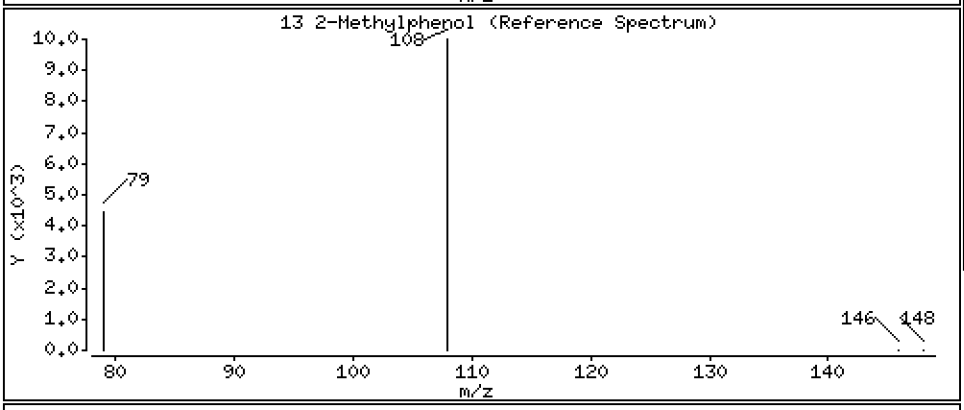
Concentration: 1.153 ug/L

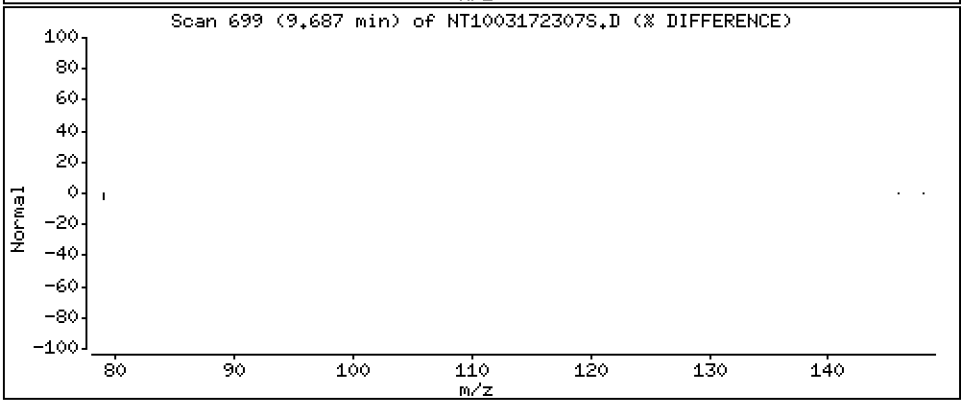












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

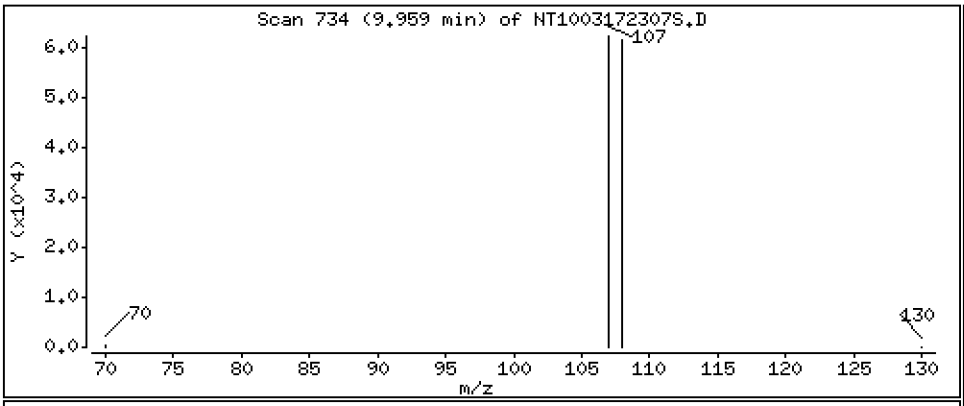
Operator: JGR

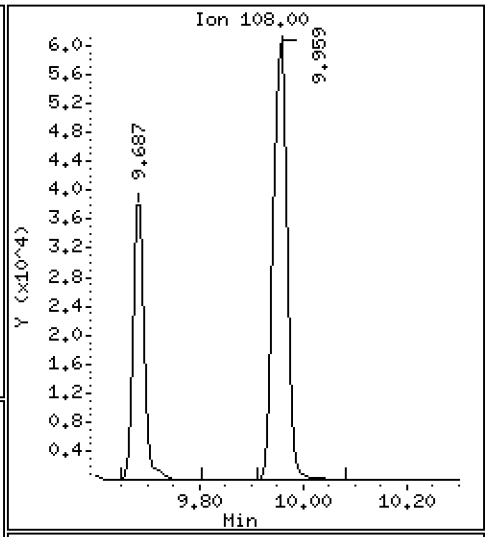
Column phase: ZB-5msi

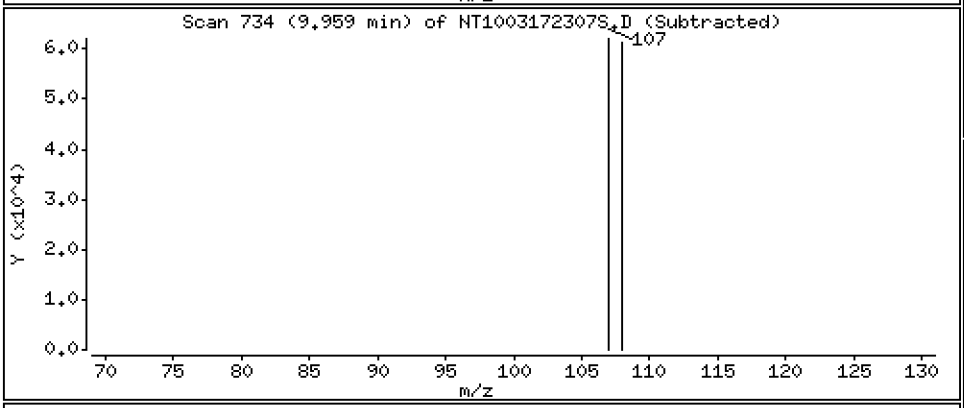
Column diameter: 0.25

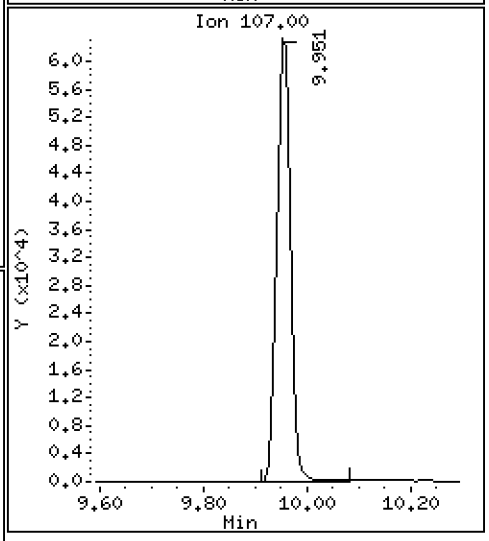
15 4-Methylphenol

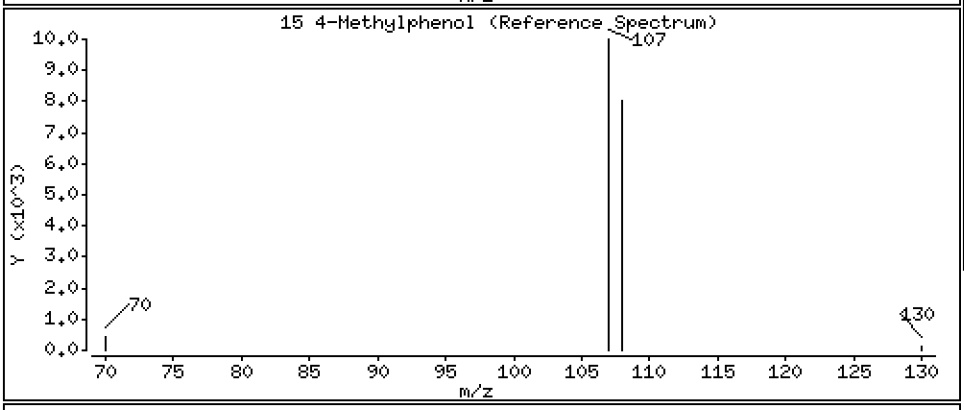
Concentration: 2.035 ug/L

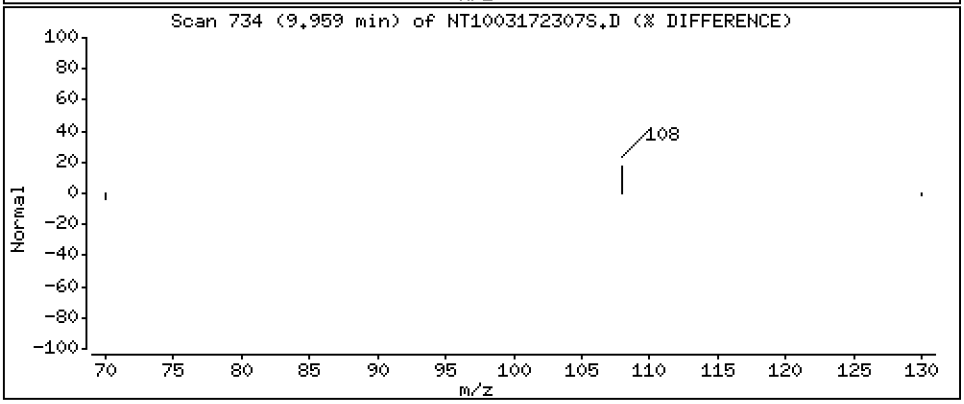












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

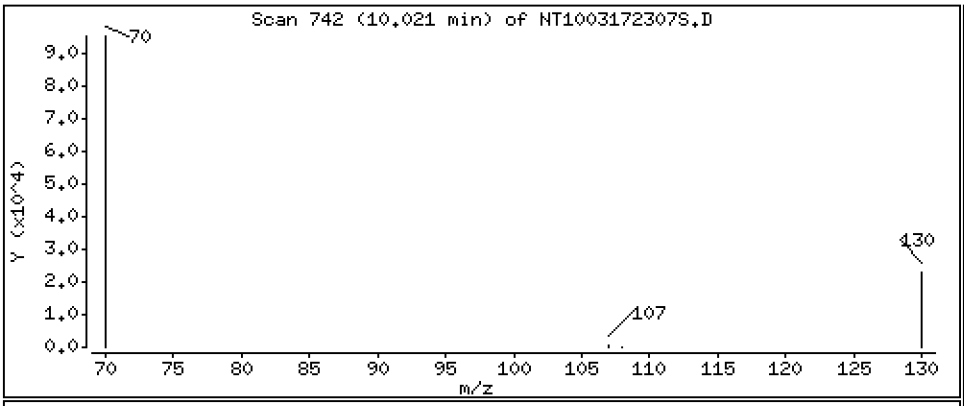
Operator: JGR

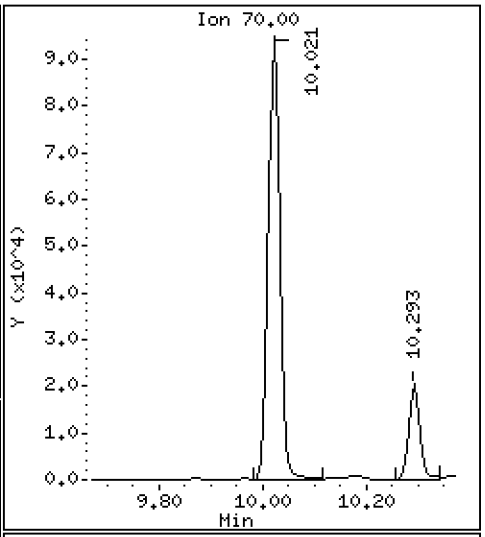
Column phase: ZB-5msi

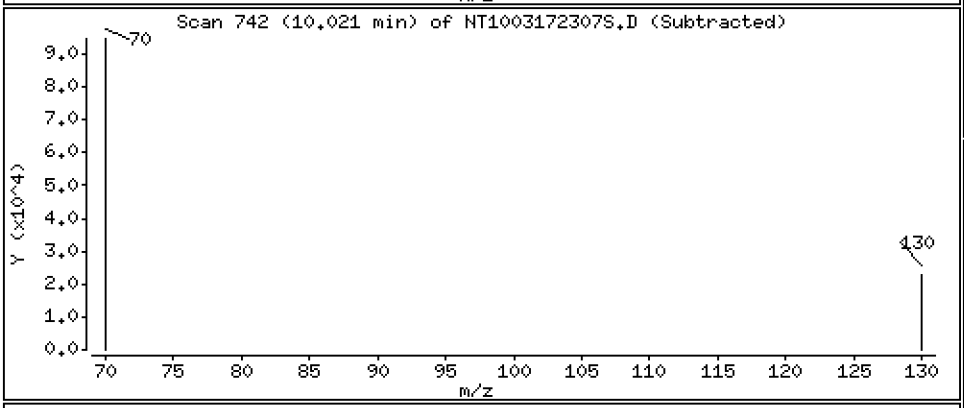
Column diameter: 0.25

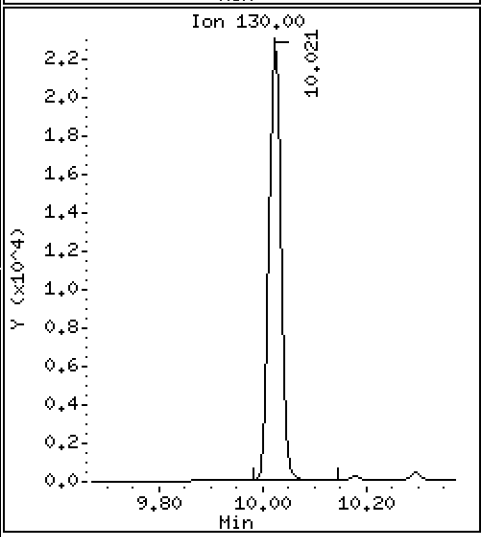
16 N-Nitroso-di-n-propylamine

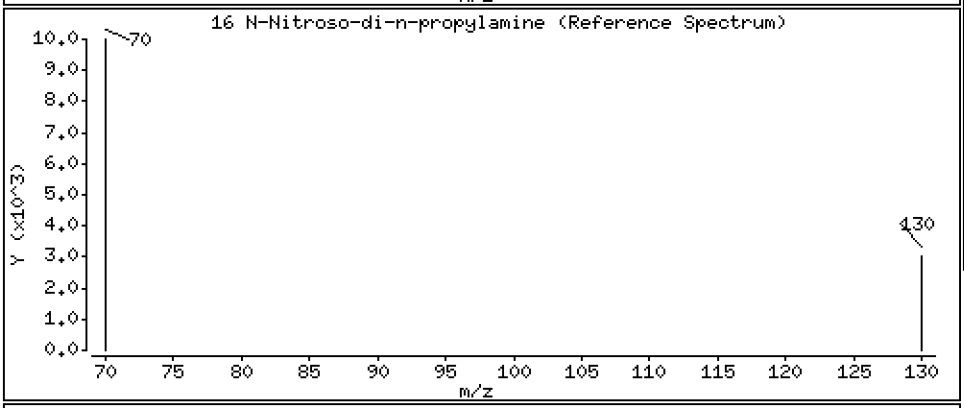
Concentration: 3.652 ug/L

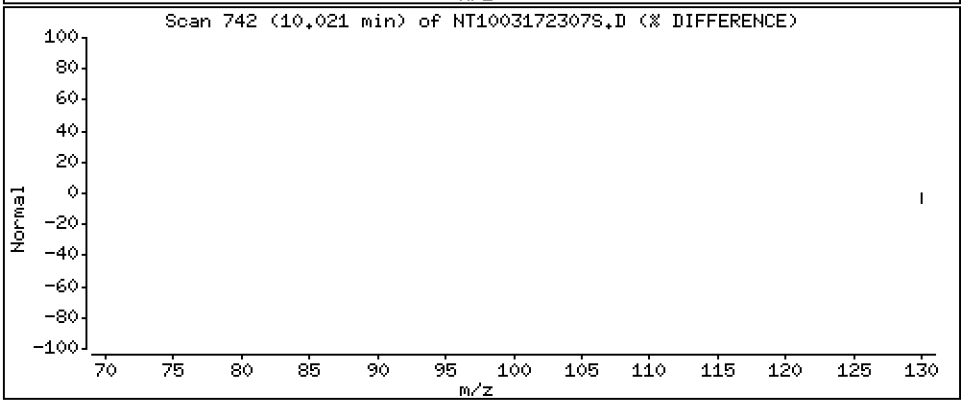












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

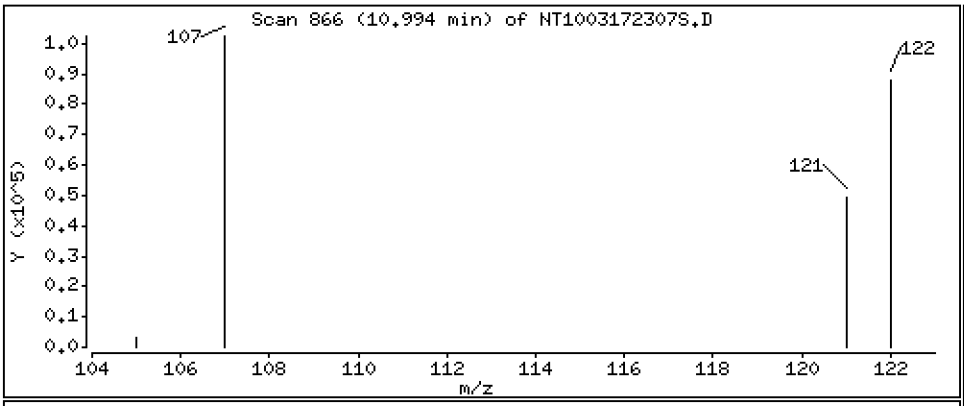
Operator: JGR

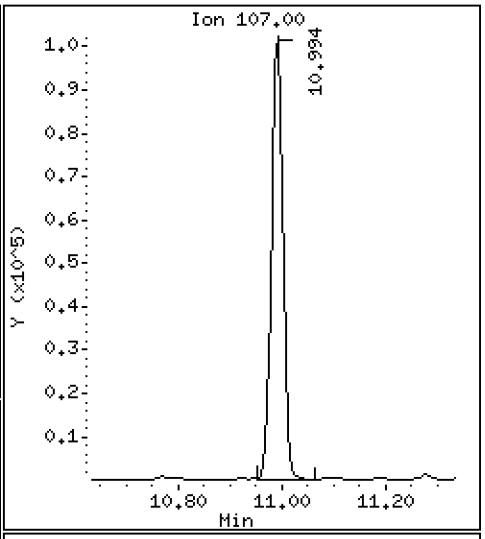
Column phase: ZB-5msi

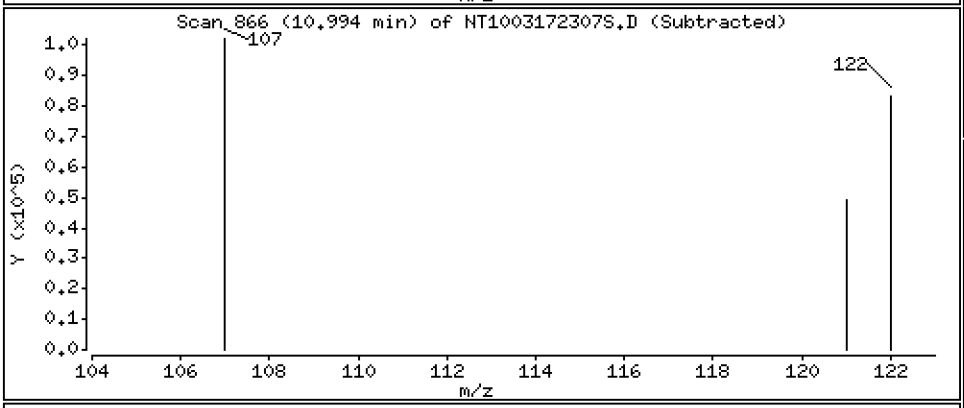
Column diameter: 0.25

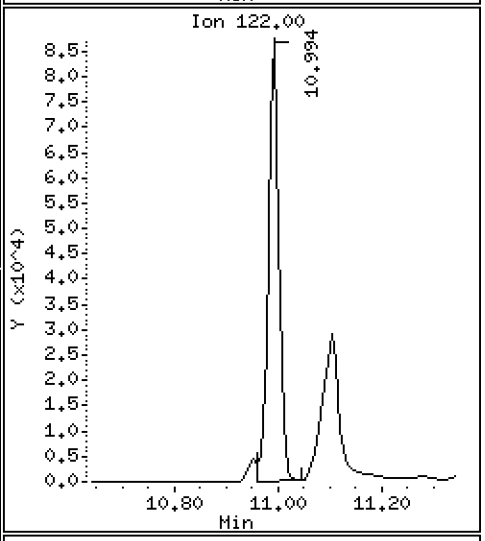
22 2,4-Dimethylphenol

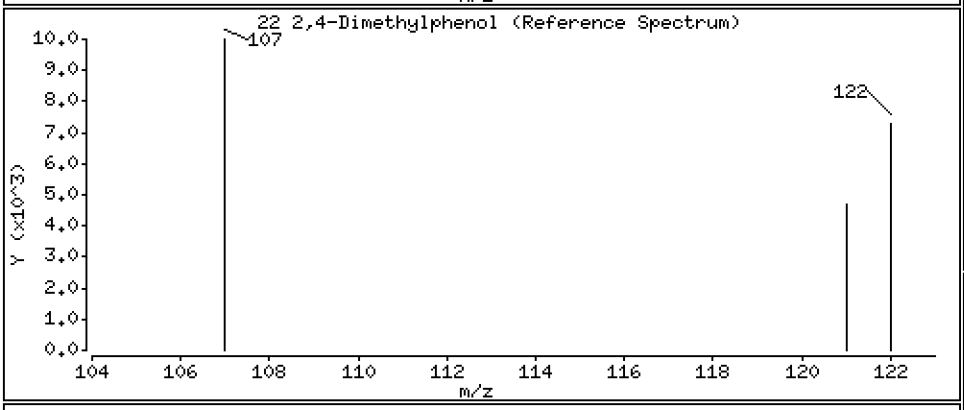
Concentration: 2.775 ug/L

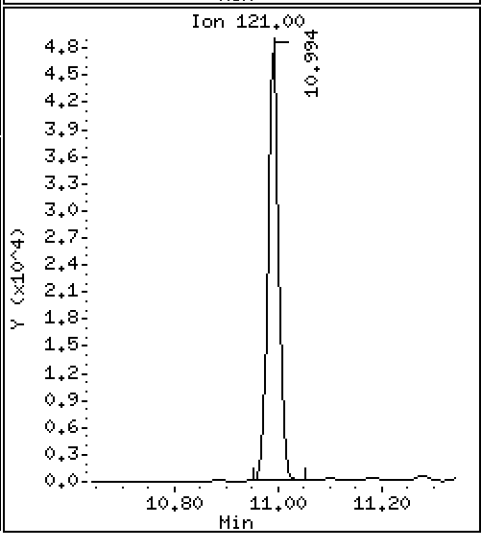


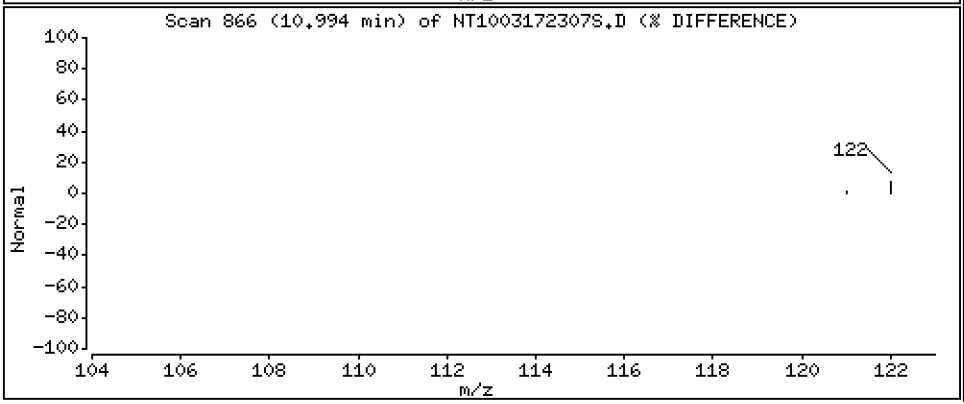












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

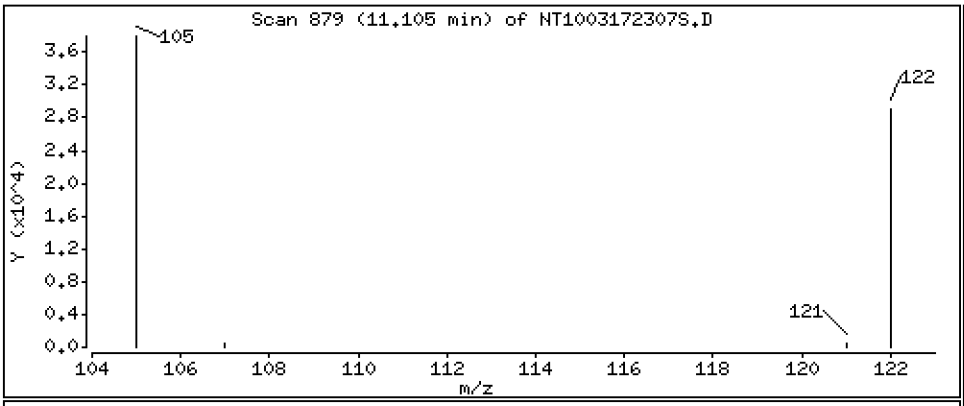
Operator: JGR

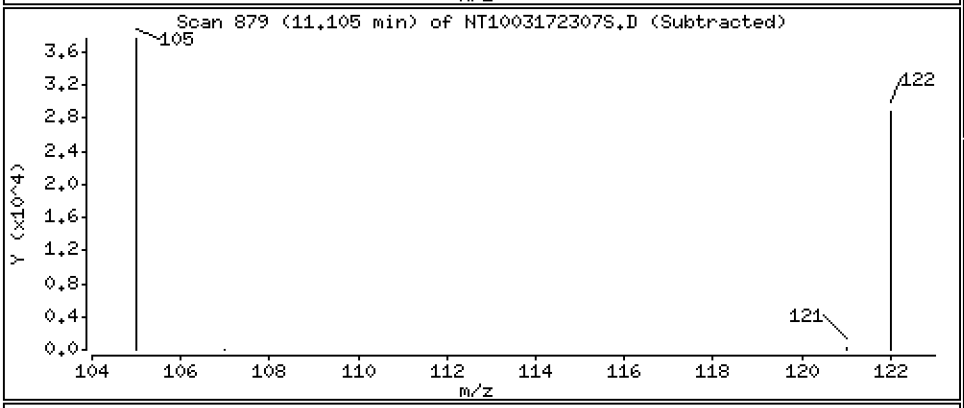
Column phase: ZB-5msi

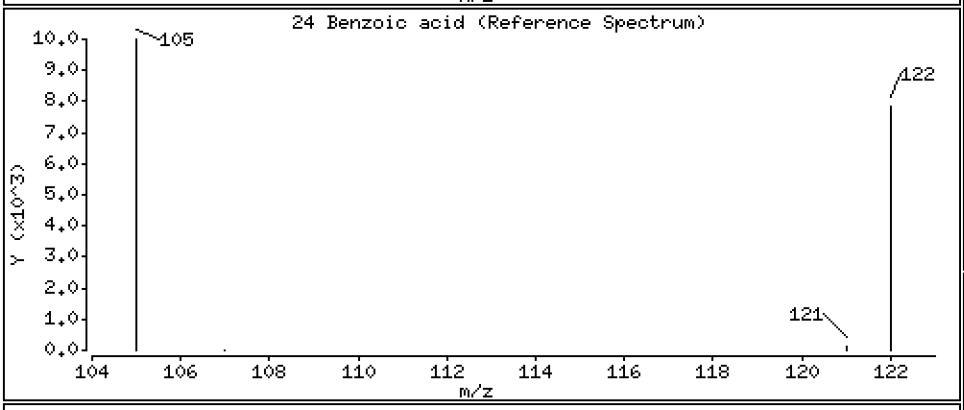
Column diameter: 0.25

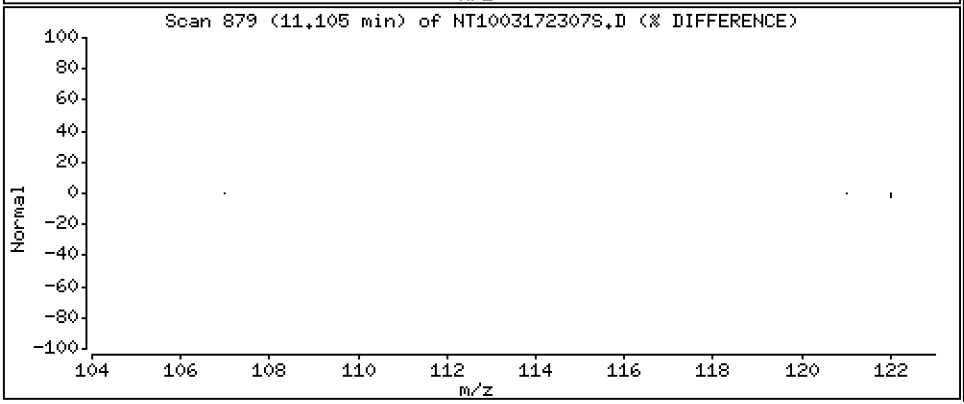
24 Benzoic acid

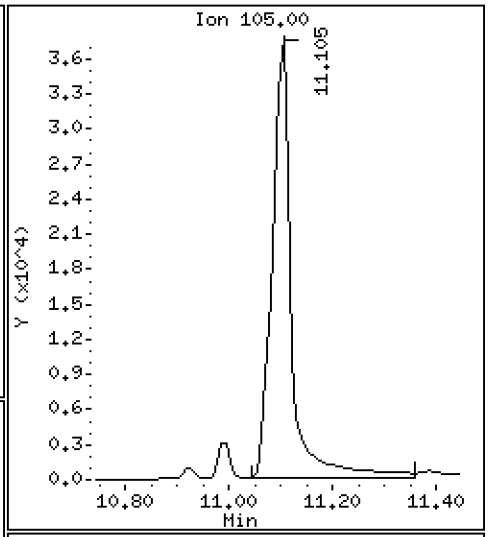
Concentration: 3.146 ug/L

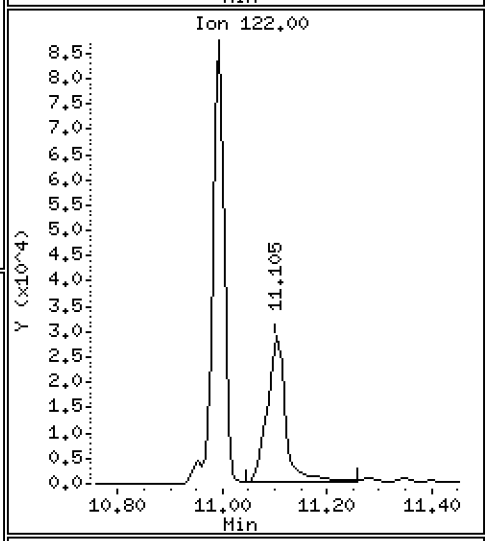


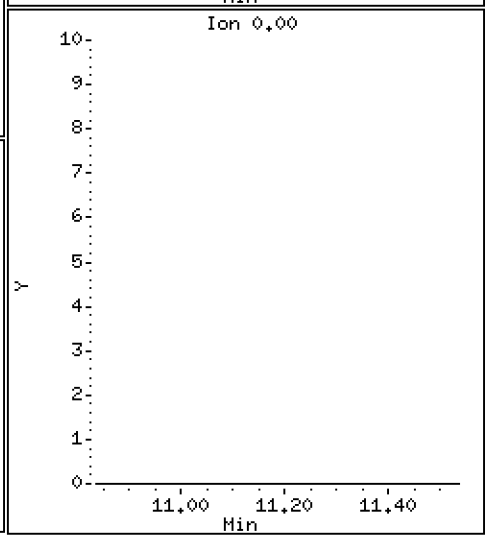












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

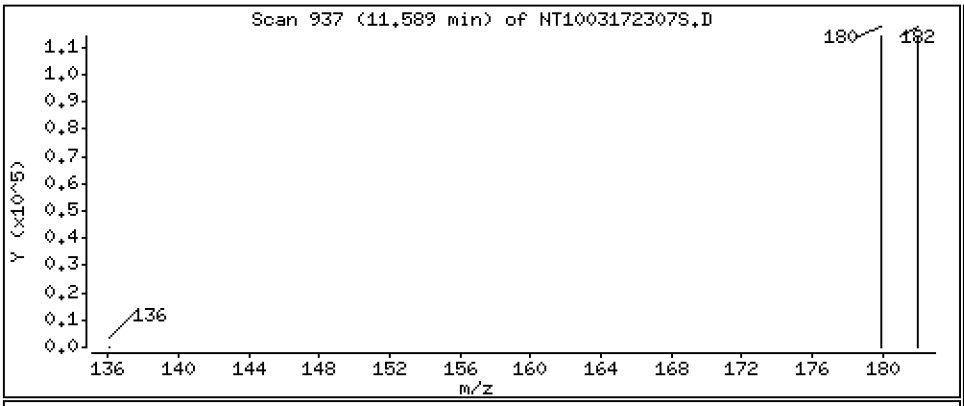
Operator: JGR

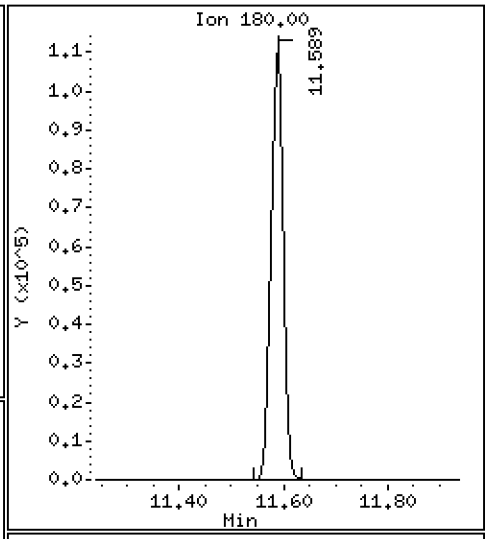
Column phase: ZB-5msi

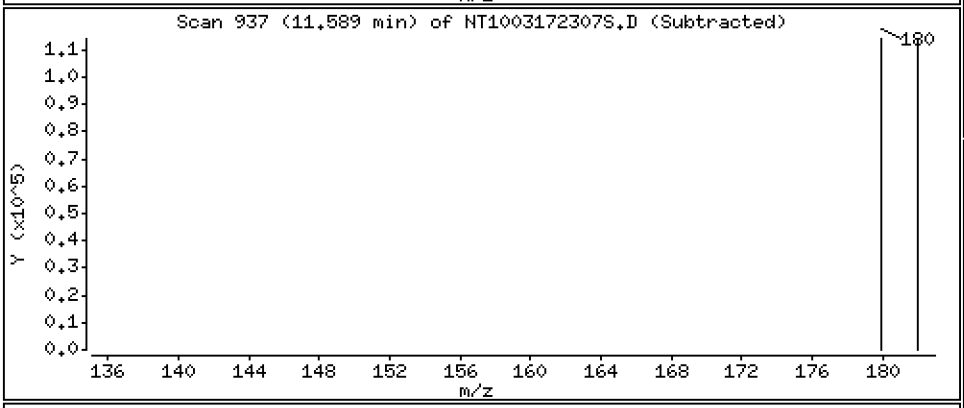
Column diameter: 0.25

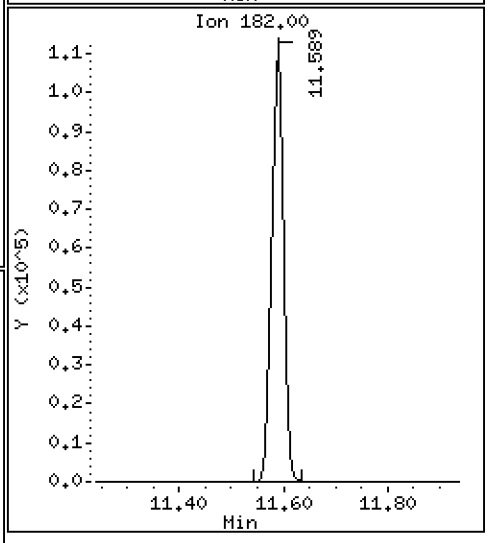
26 1,2,4-Trichlorobenzene

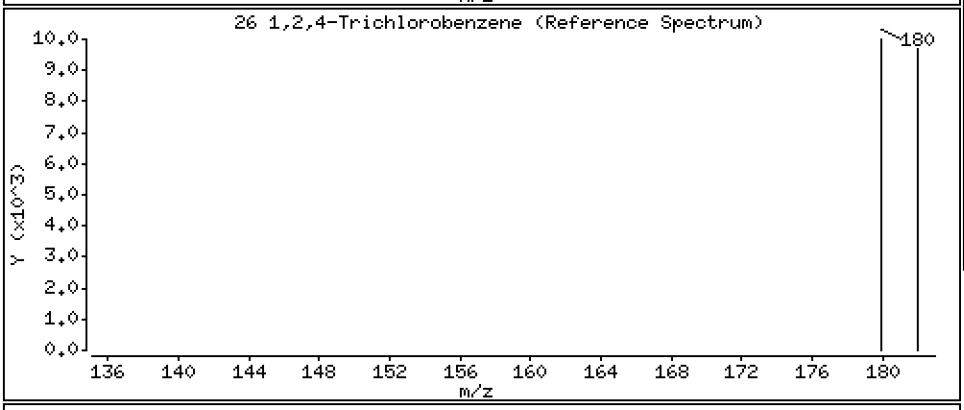
Concentration: 3.078 ug/L

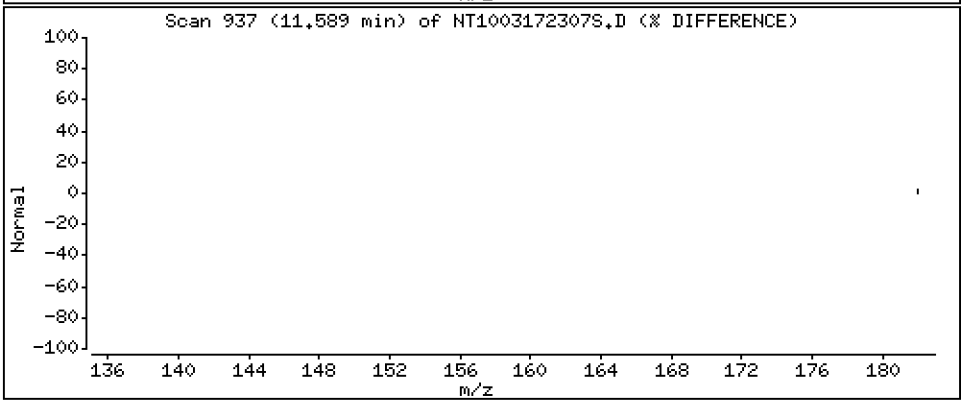












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

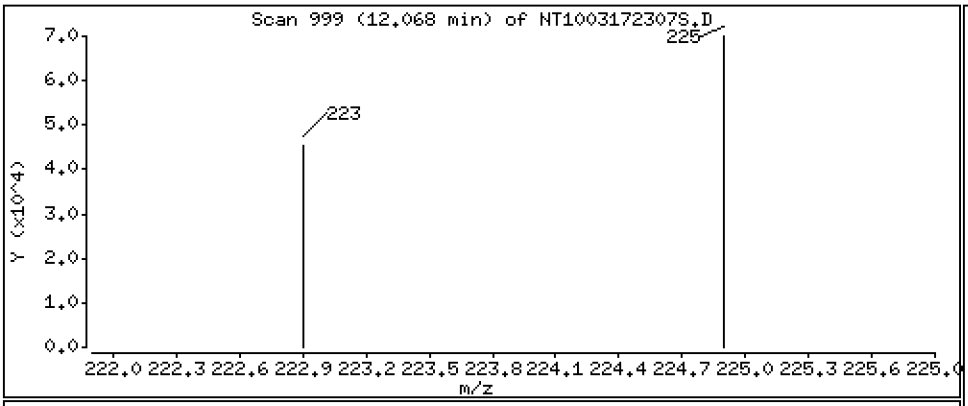
Operator: JGR

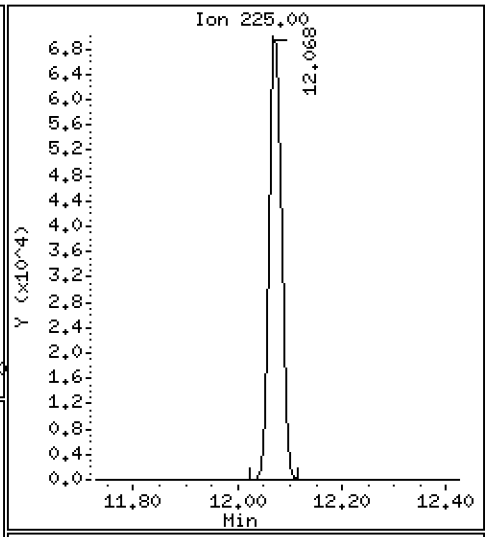
Column phase: ZB-5msi

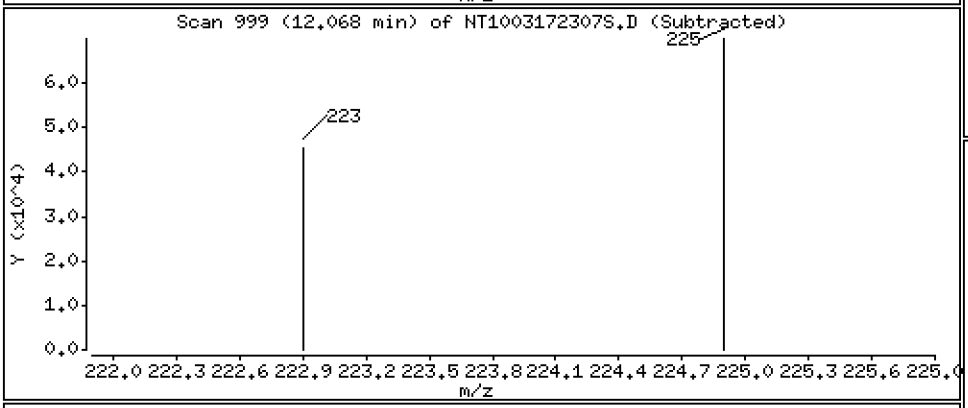
Column diameter: 0.25

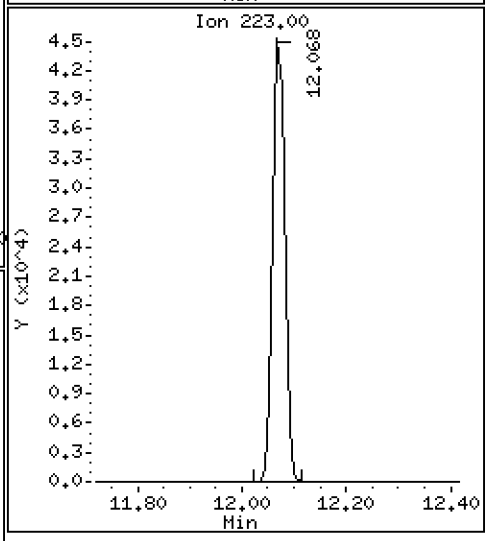
30 Hexachlorobutadiene

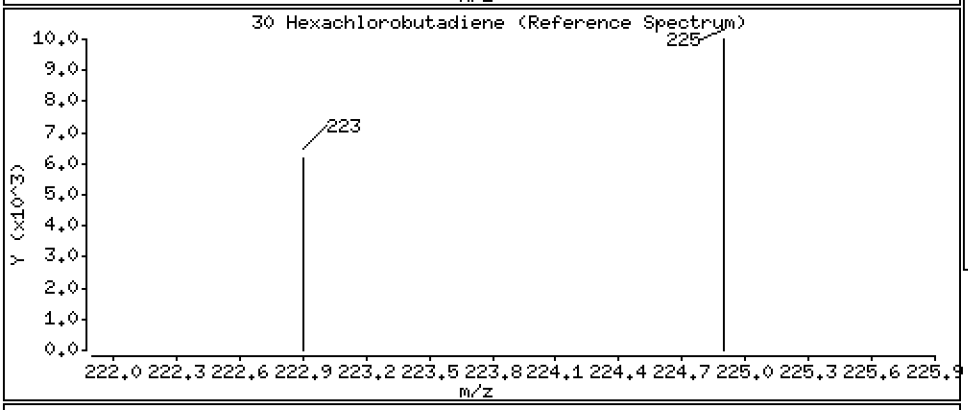
Concentration: 3.228 ug/L

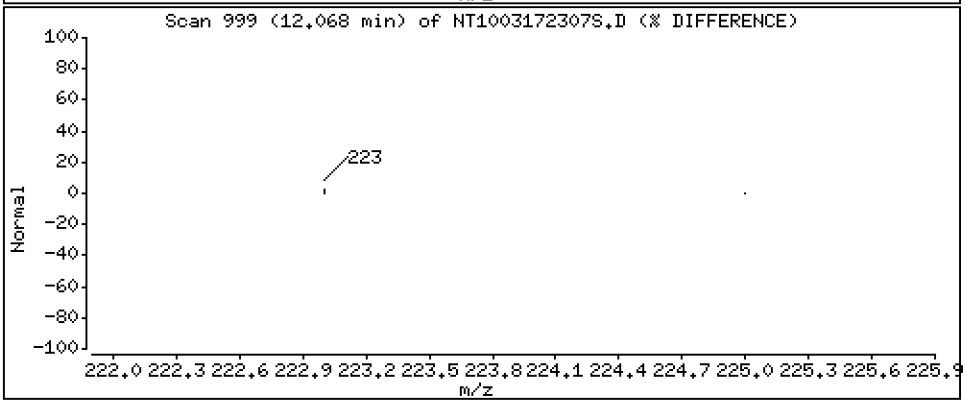












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

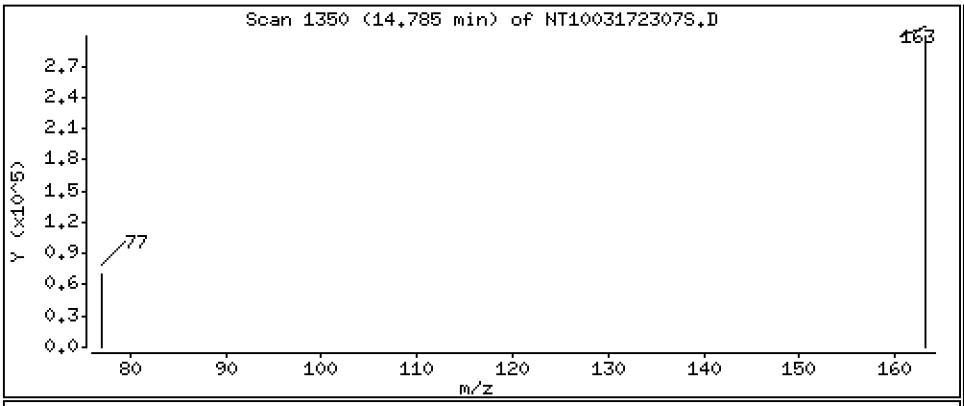
Operator: JGR

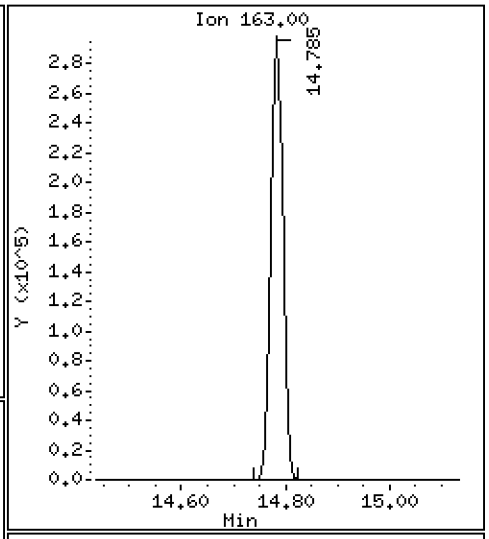
Column phase: ZB-5msi

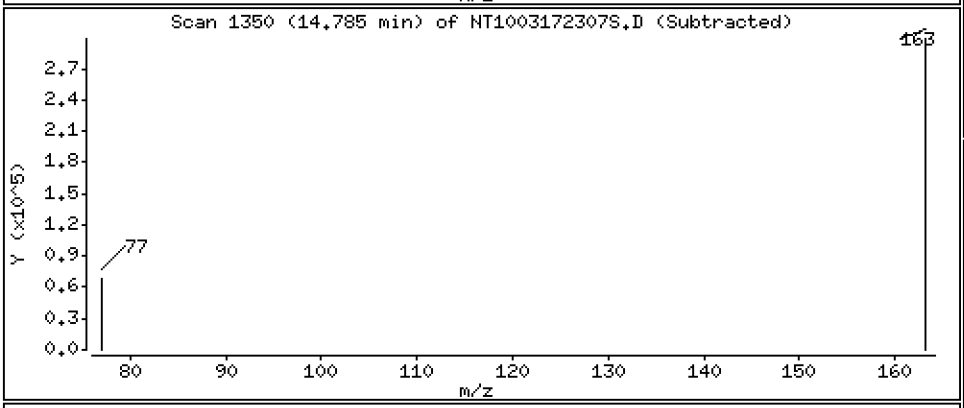
Column diameter: 0.25

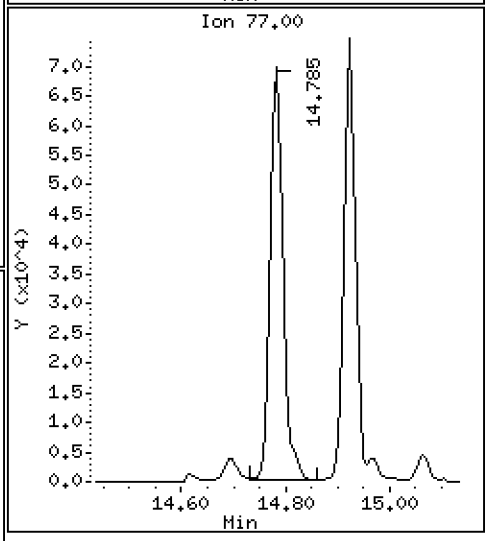
39 Dimethylphthalate

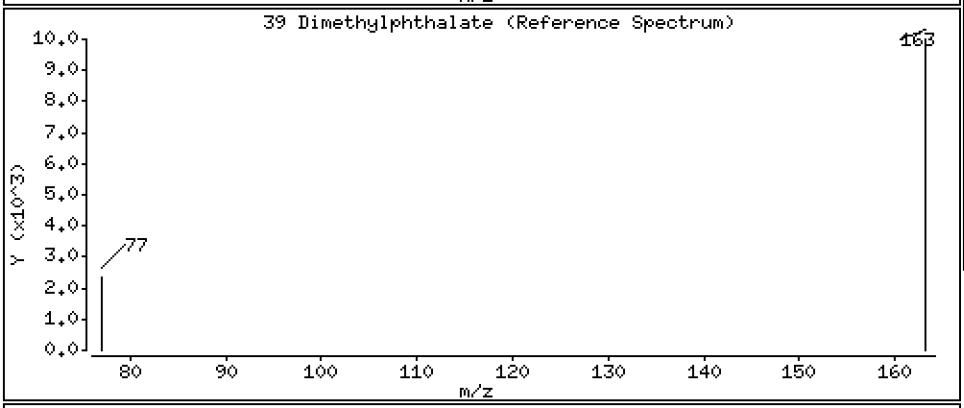
Concentration: 4.401 ug/L

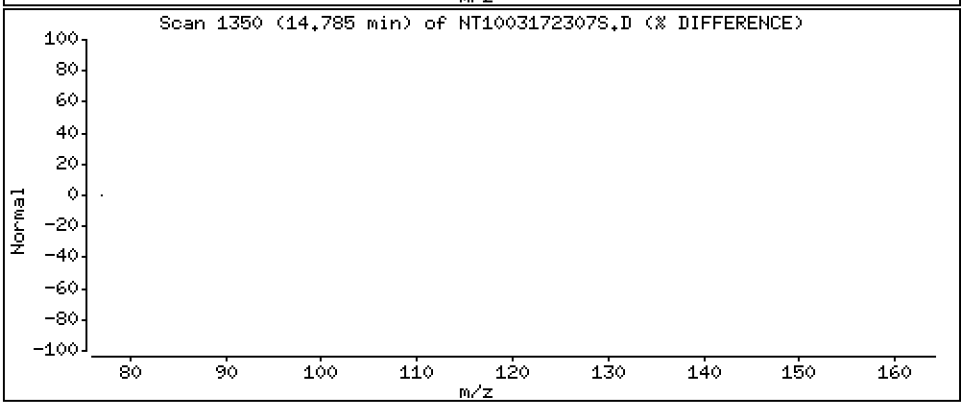












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172307S.D

Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

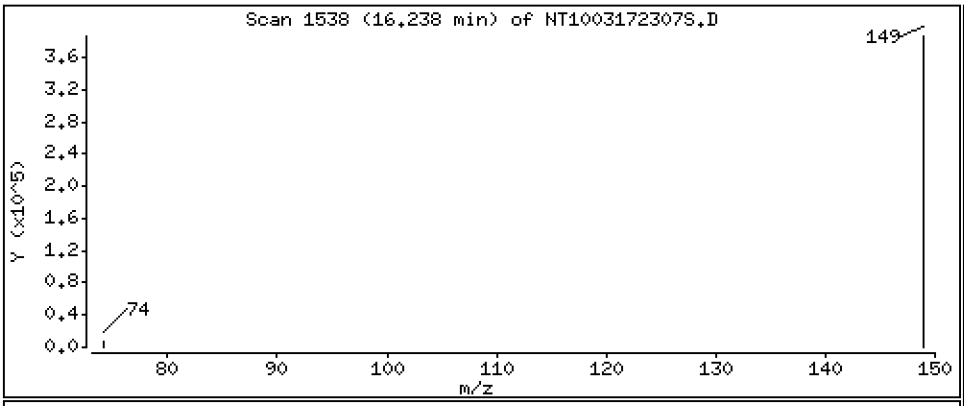
Operator: JGR

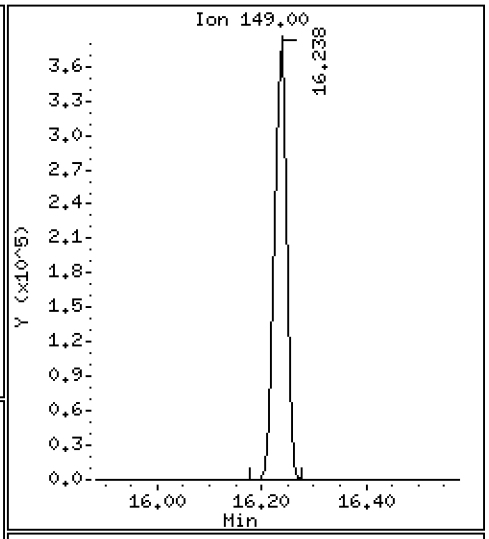
Column phase: ZB-5msi

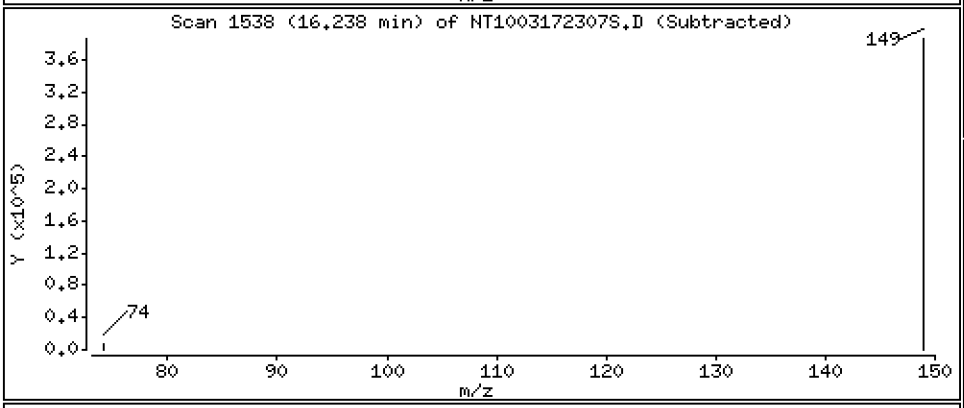
Column diameter: 0.25

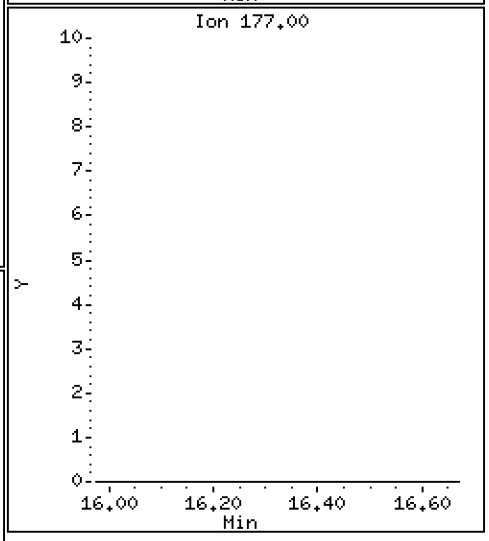
50 Diethylphthalate

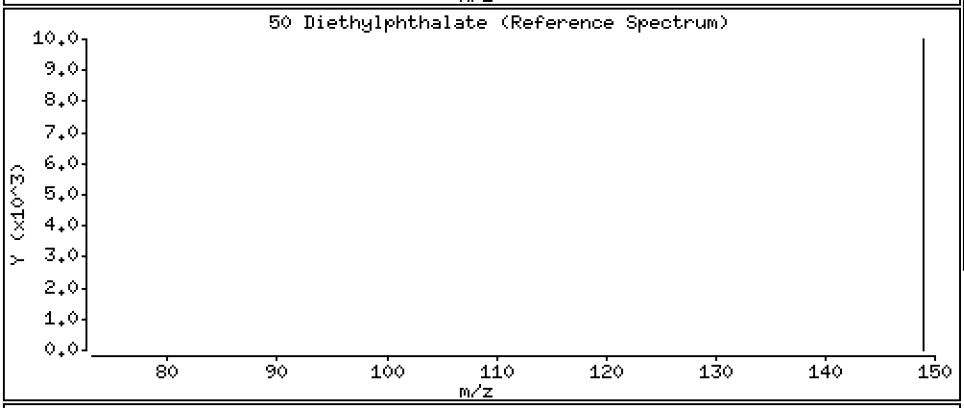
Concentration: 5.655 ug/L

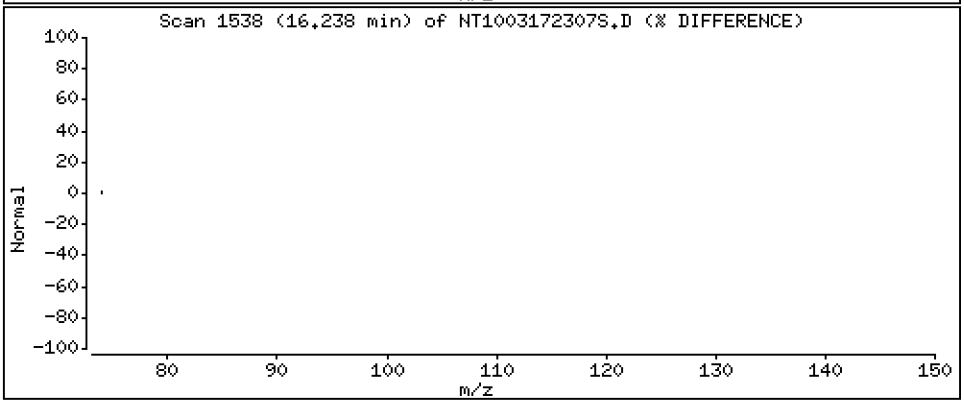












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172307S.D

Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

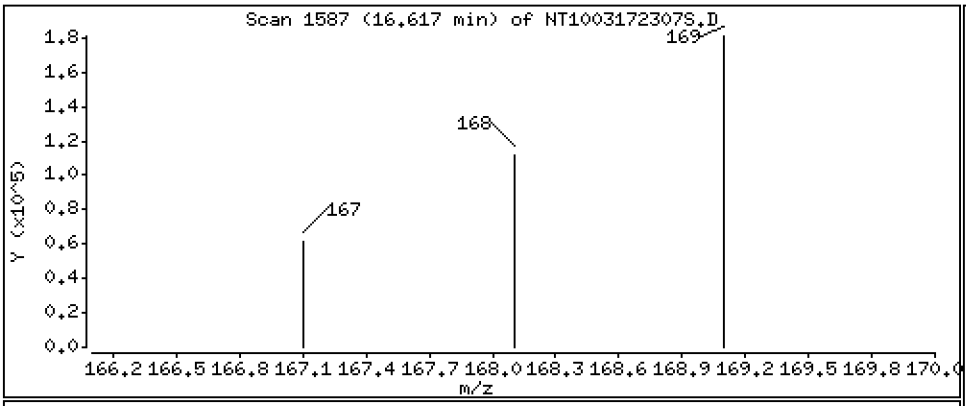
Operator: JGR

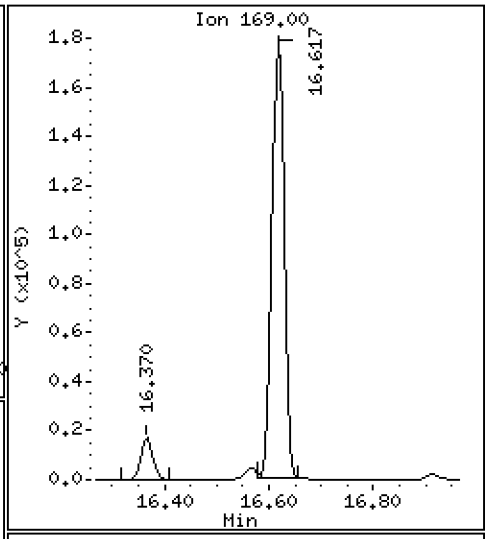
Column phase: ZB-5msi

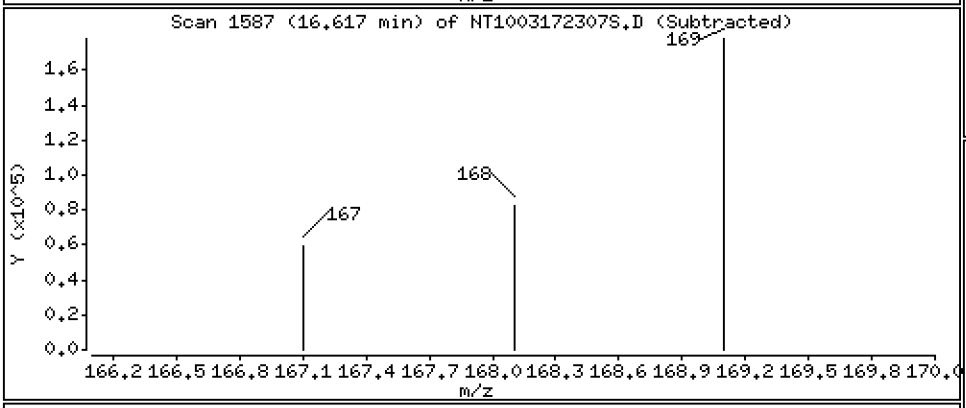
Column diameter: 0.25

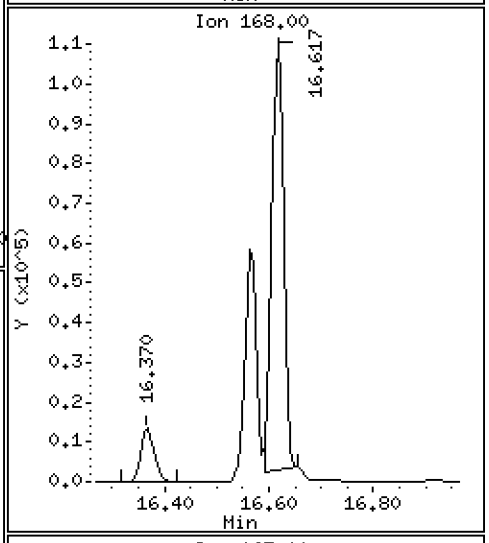
54 N-Nitrosodiphenylamine

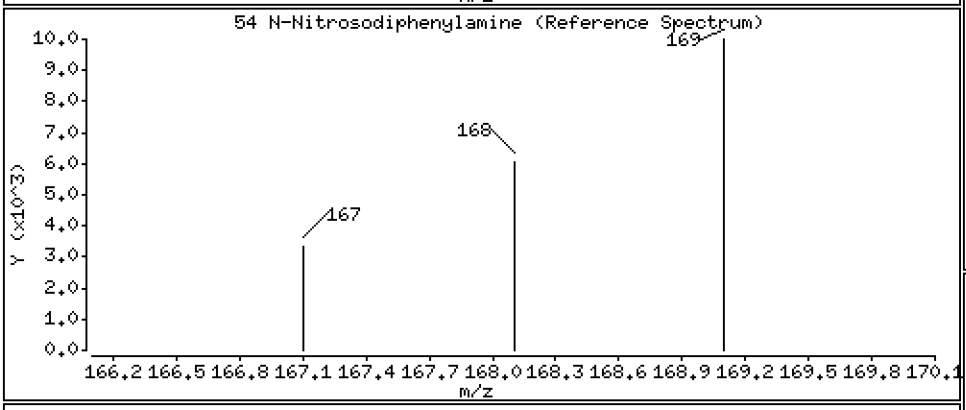
Concentration: 3.296 ug/L

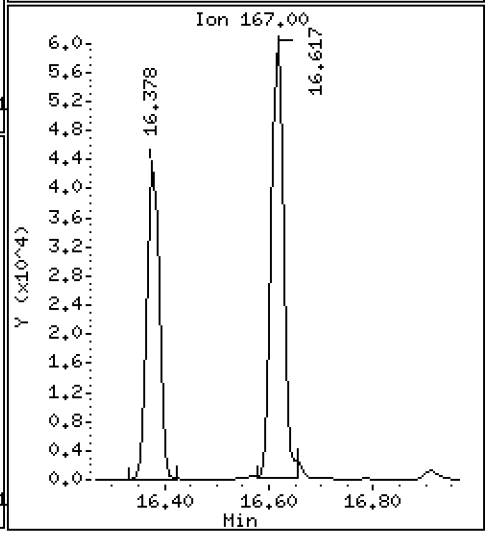


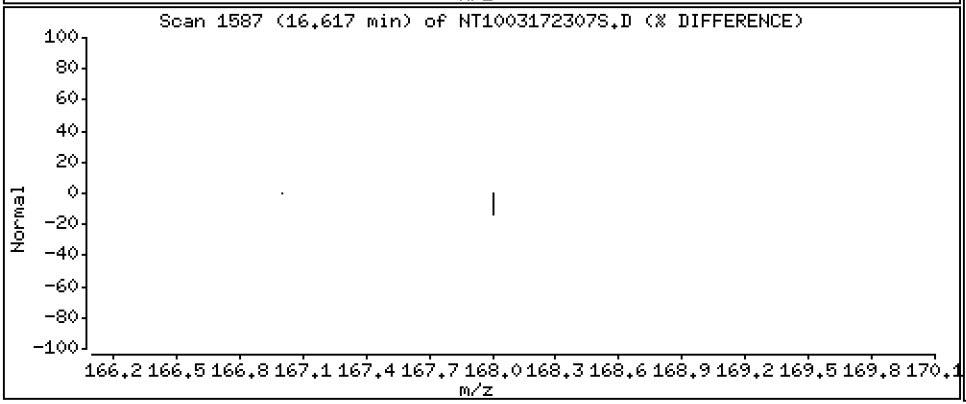












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

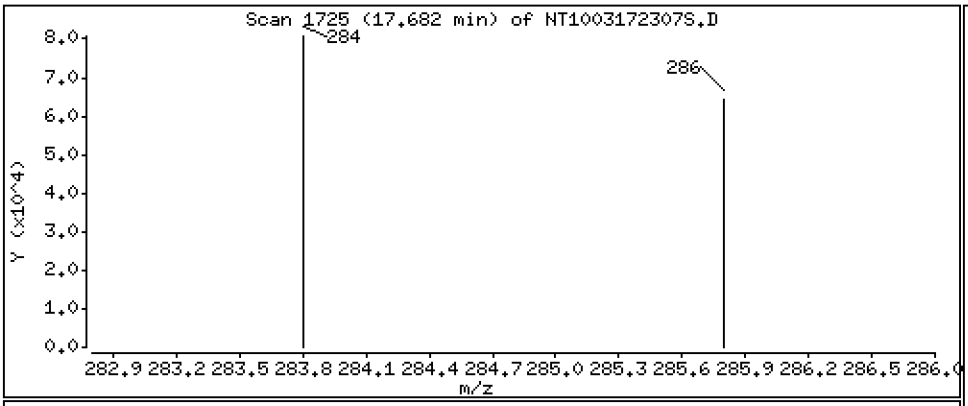
Operator: JGR

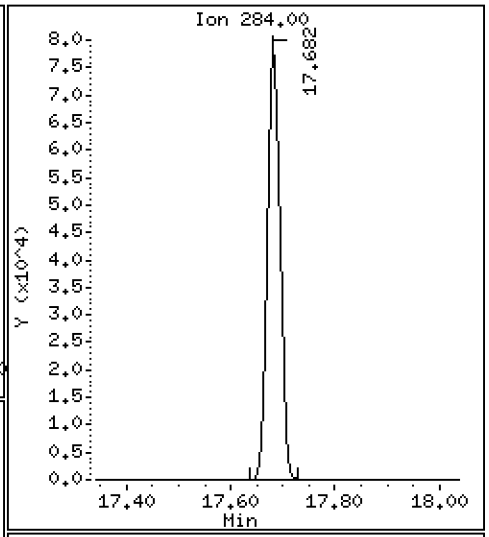
Column phase: ZB-5msi

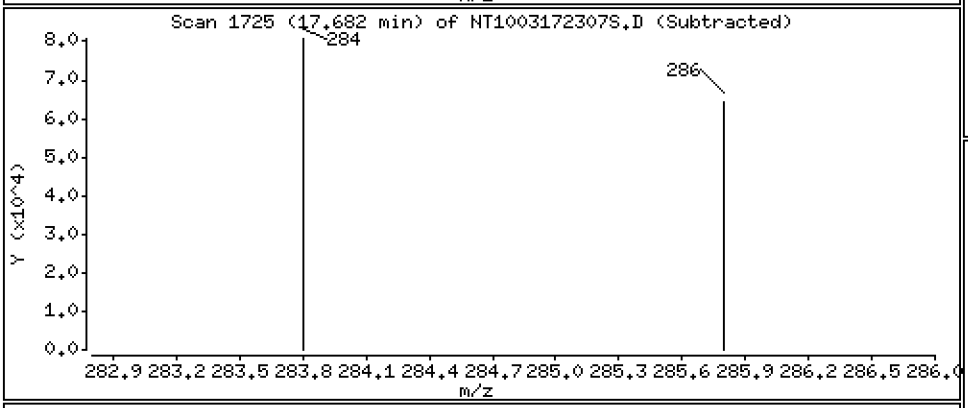
Column diameter: 0.25

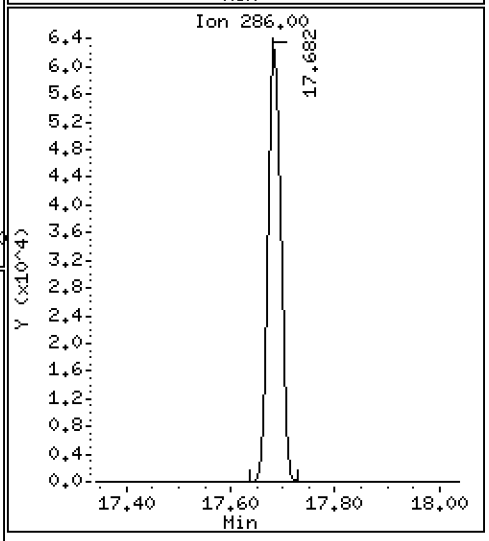
57 Hexachlorobenzene

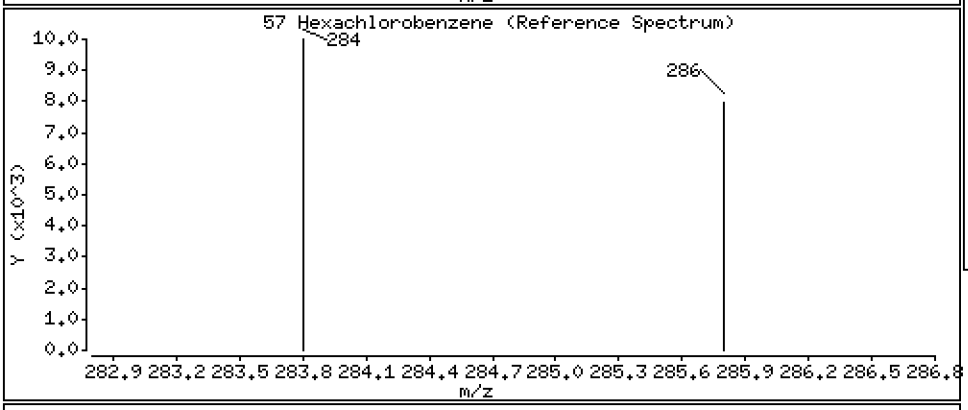
Concentration: 3.486 ug/L

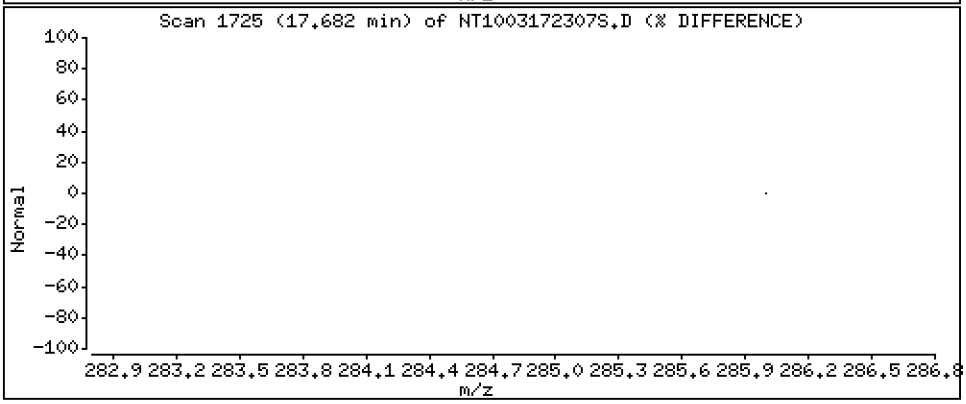












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172307S.D

Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

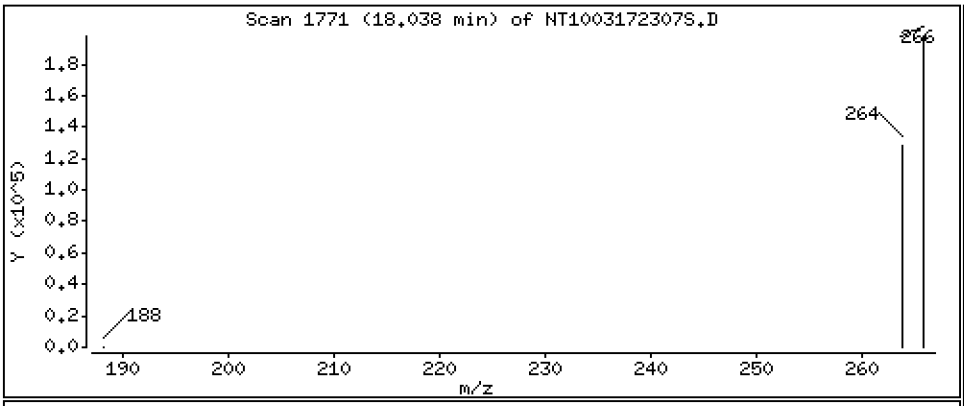
Operator: JGR

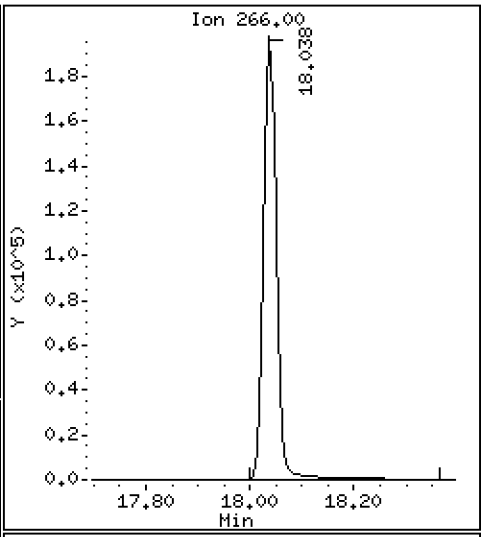
Column phase: ZB-5msi

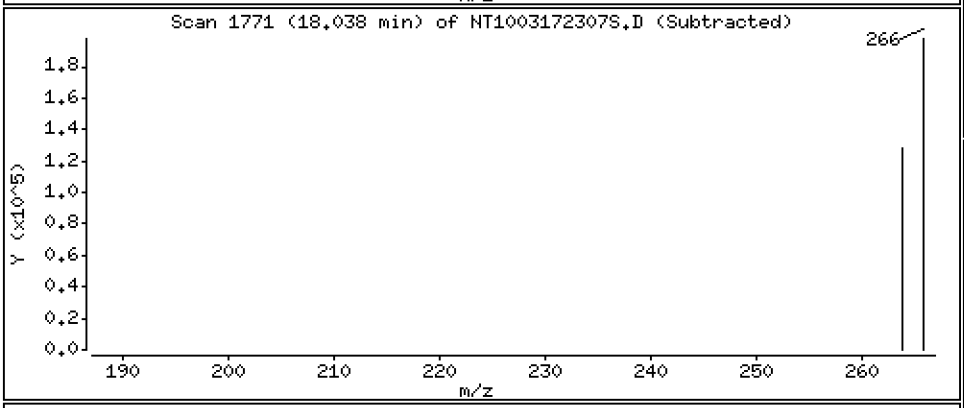
Column diameter: 0.25

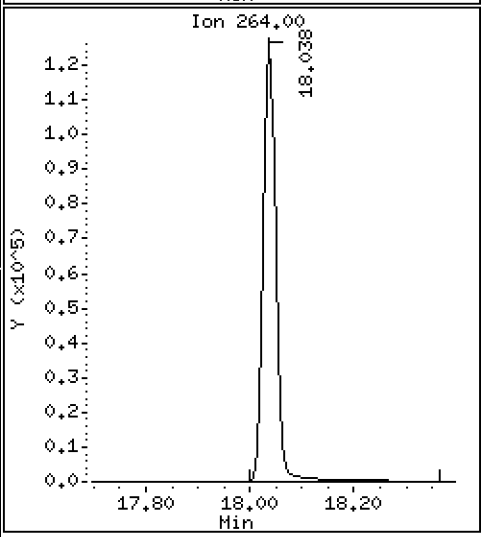
58 Pentachlorophenol

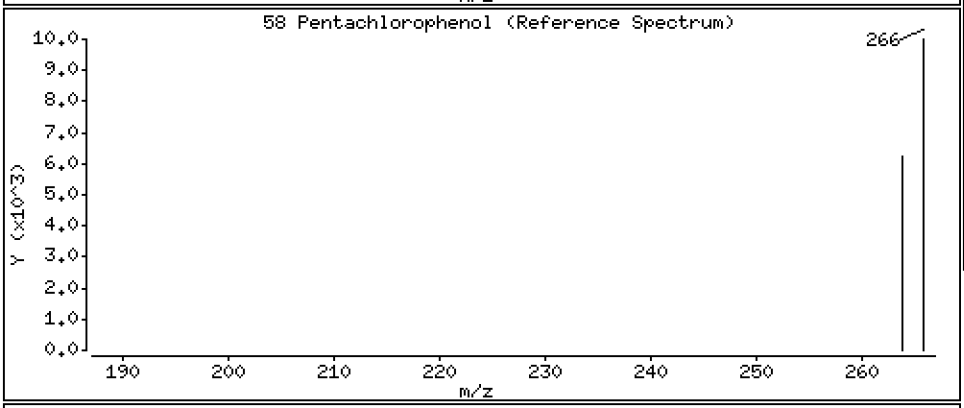
Concentration: 14.25 ug/L

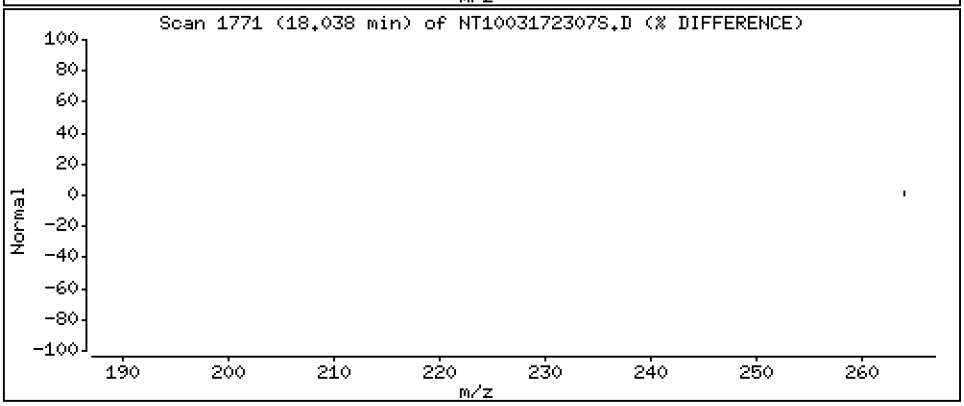












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

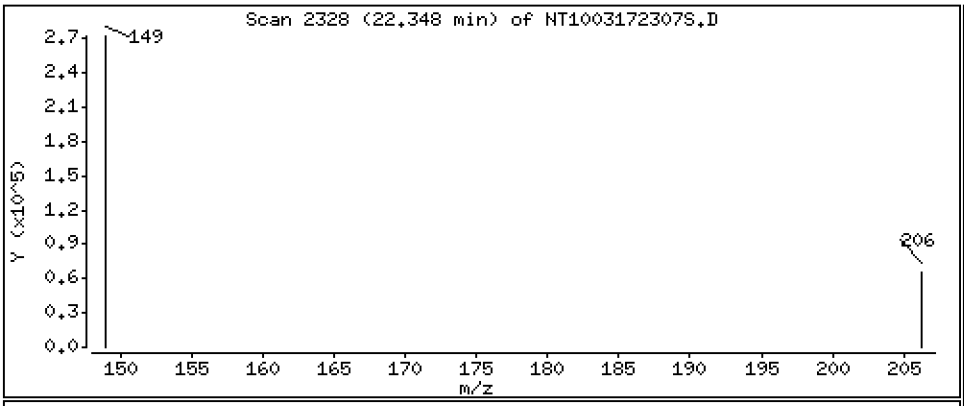
Operator: JGR

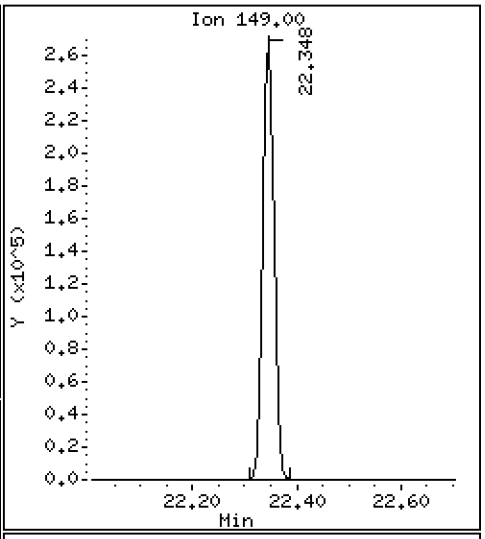
Column phase: ZB-5msi

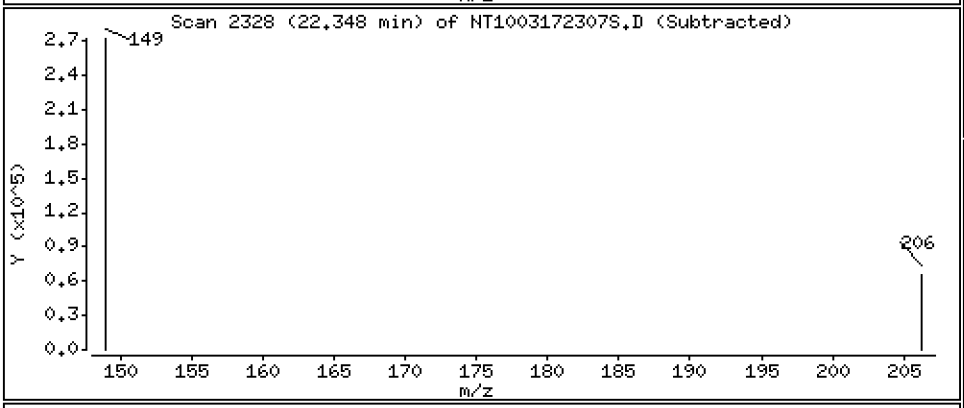
Column diameter: 0.25

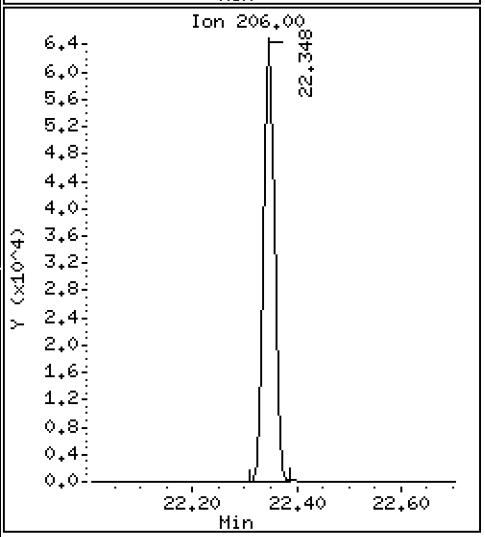
67 Butylbenzylphthalate

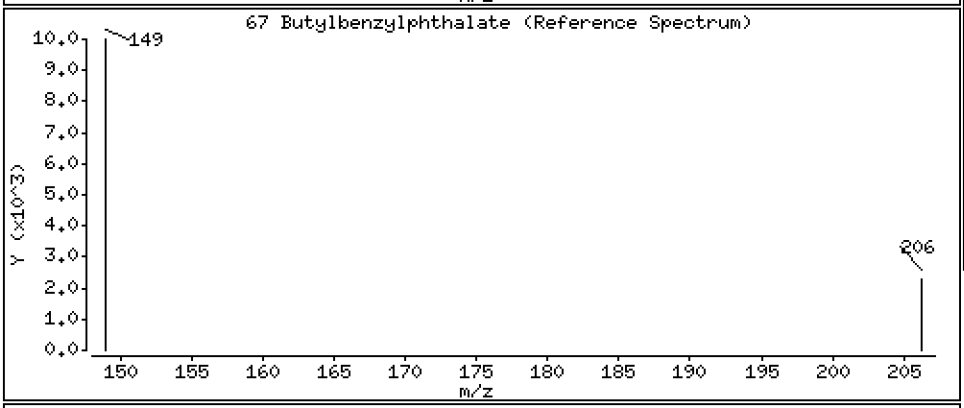
Concentration: 5.375 ug/L

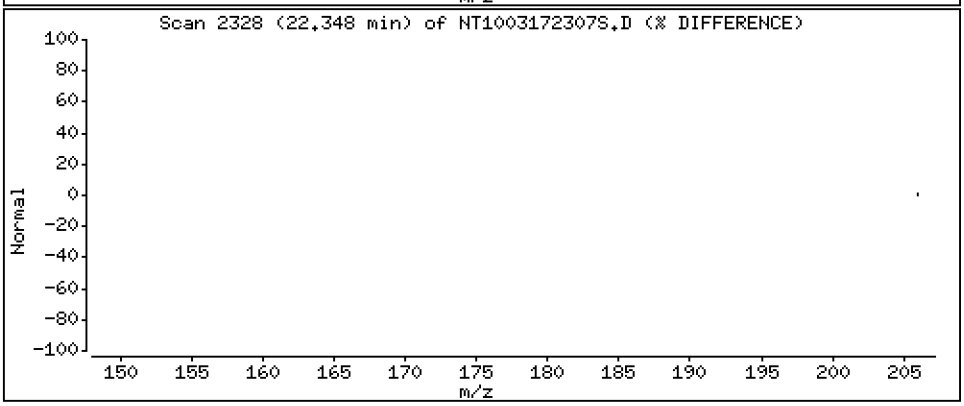












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Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

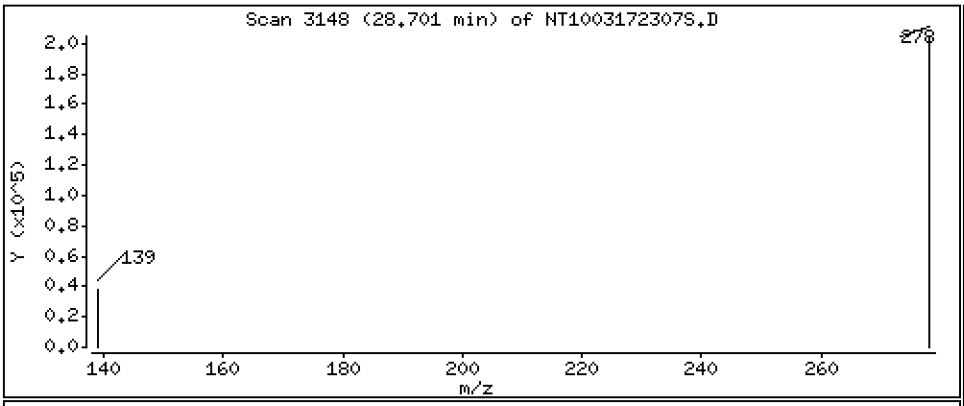
Operator: JGR

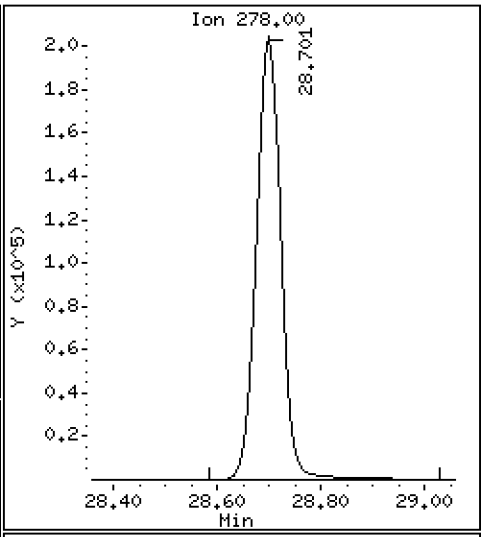
Column phase: ZB-5msi

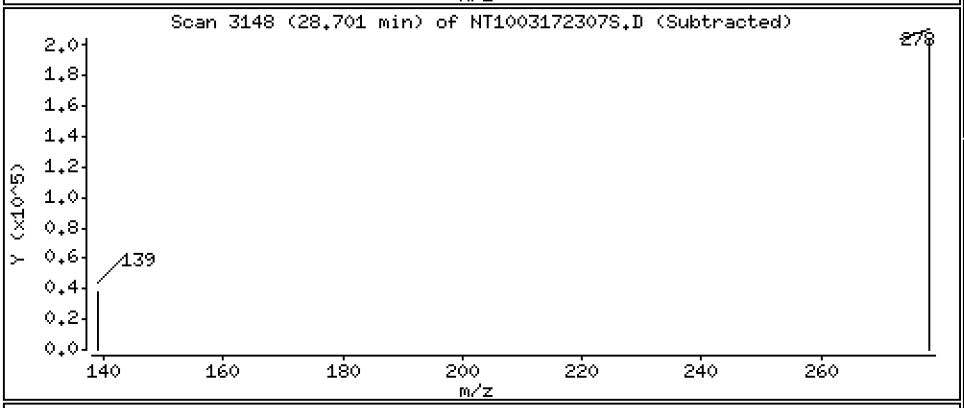
Column diameter: 0.25

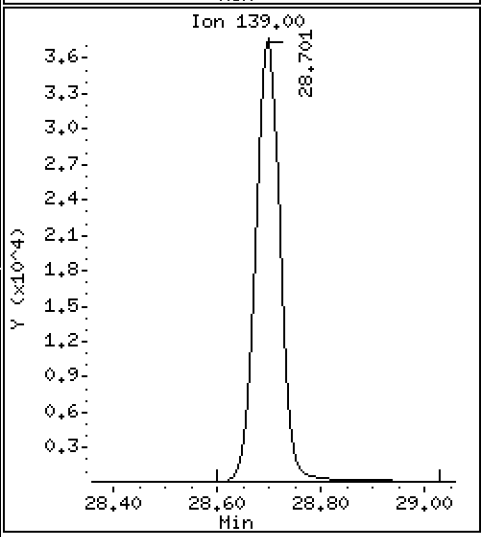
79 Dibenzo(a,h)anthracene

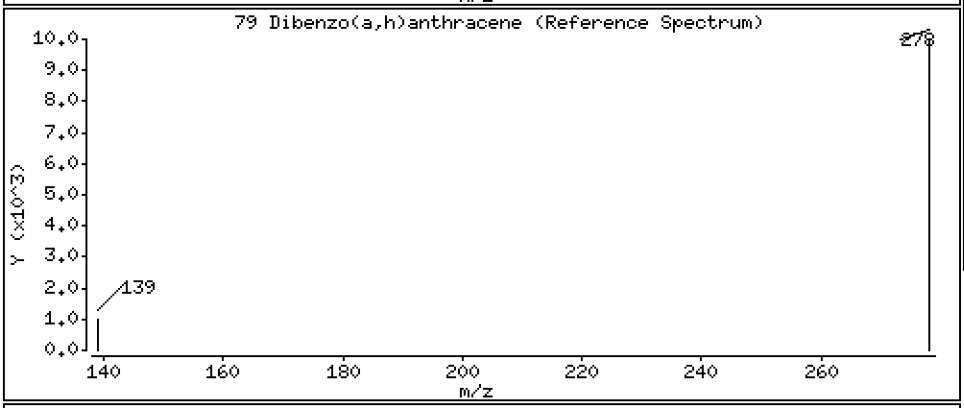
Concentration: 3.949 ug/L

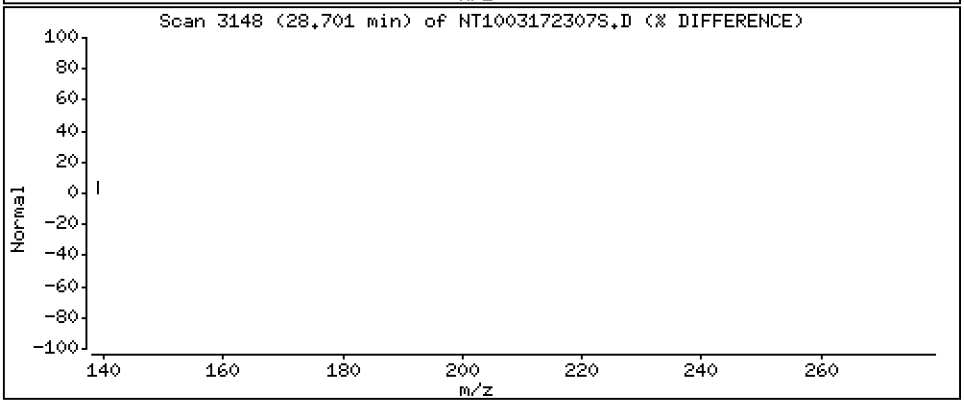












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172307S.D

Date : 17-MAR-2023 22:14

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BS2

Volume Injected (uL): 1.0

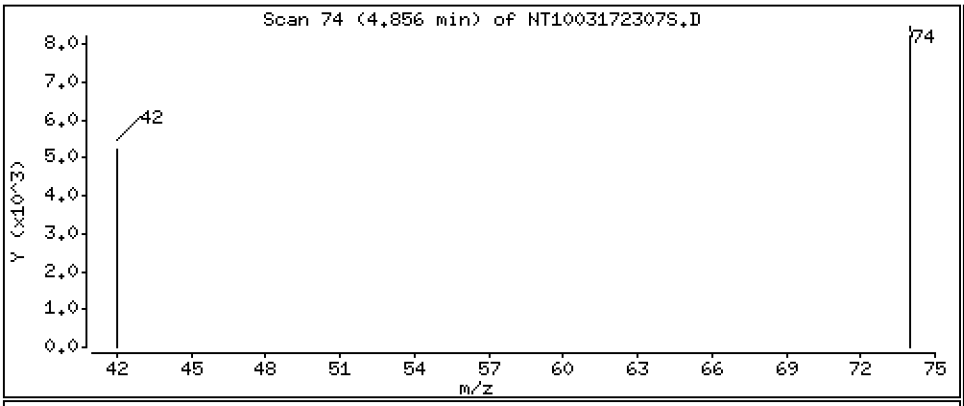
Operator: JGR

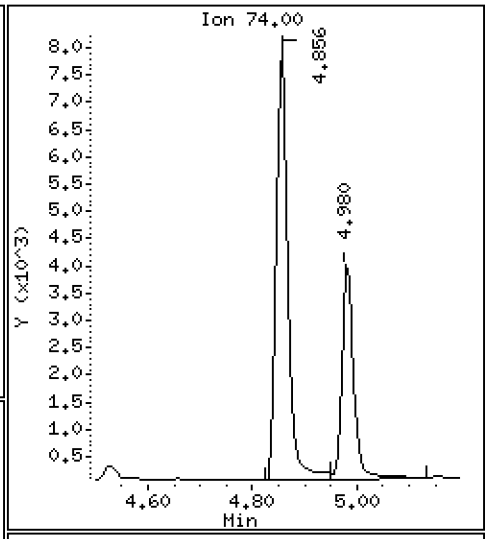
Column phase: ZB-5msi

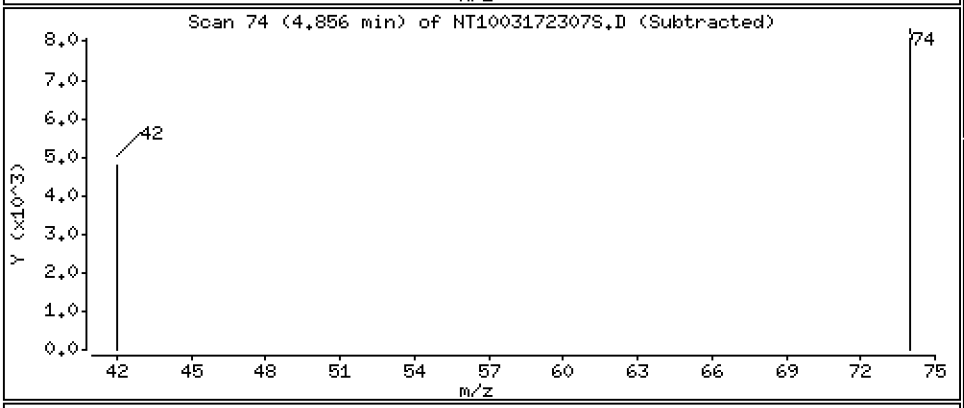
Column diameter: 0.25

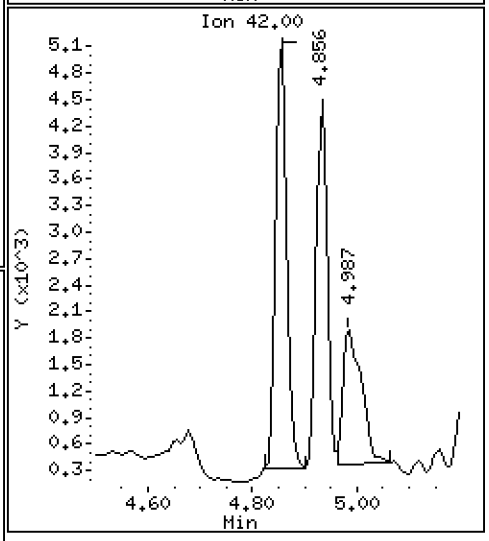
90 N-Nitrosodimethylamine

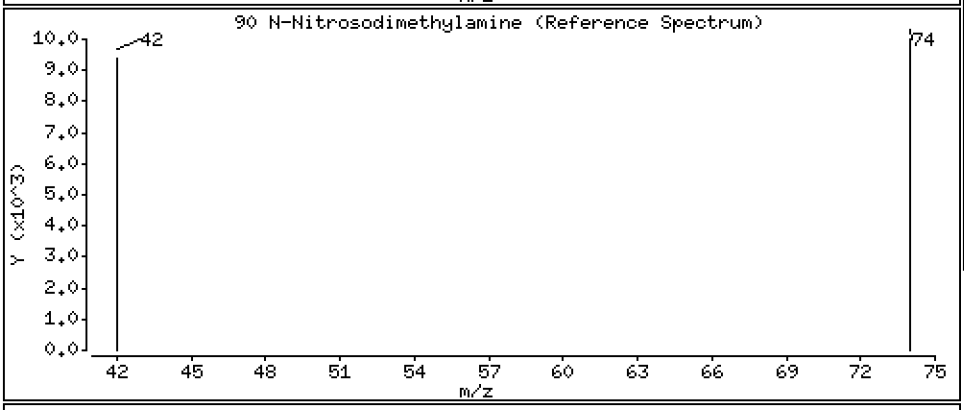
Concentration: 0.3495 ug/L

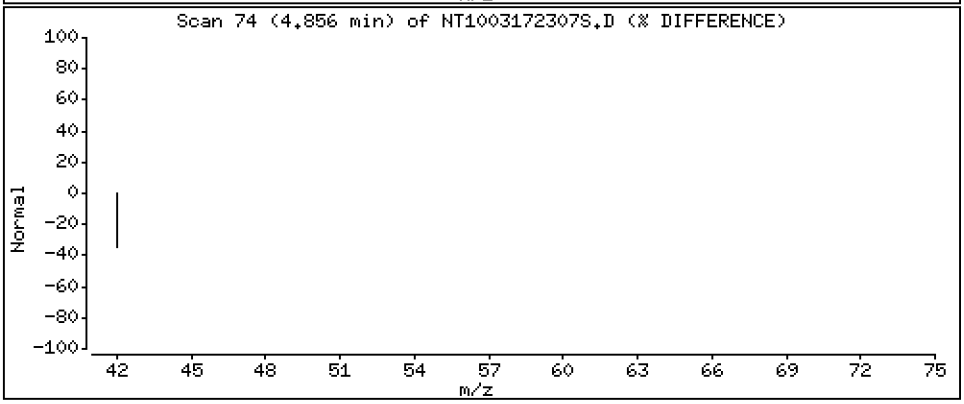












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172307S.D
Lab Smp Id: BLB0495-BS2
Inj Date : 17-MAR-2023 22:14 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLB0495-BS2
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Meth Date : 30-Mar-2023 14:37 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.980	6.980	(0.758)	137956	2.54755	2.548(R)
3	Phenol	94	8.572	8.572	(0.931)	134200	1.80635	1.806
7	1,3-Dichlorobenzene	146	9.136	9.136	(0.992)	205053	2.94959	2.950
* 8	1,4-Dichlorobenzene-d4	152	9.206	9.206	(1.000)	178576	4.00000	
9	1,4-Dichlorobenzene	146	9.237	9.229	(1.003)	205554	3.06300	3.063
11	Benzyl alcohol	79	9.462	9.462	(1.028)	141427	3.28359	3.284
12	1,2-Dichlorobenzene	146	9.586	9.586	(1.041)	200404	3.03652	3.037
13	2-Methylphenol	108	9.687	9.679	(1.052)	59348	1.15286	1.153
15	4-Methylphenol	108	9.959	9.951	(1.082)	108861	2.03507	2.035
16	N-Nitroso-di-n-propylamine	70	10.021	10.021	(1.089)	138170	3.65237	3.652
22	2,4-Dimethylphenol	107	10.994	10.985	(0.942)	155809	2.77462	2.775
24	Benzoic acid	105	11.104	11.096	(0.951)	97758	3.14567	3.146
26	1,2,4-Trichlorobenzene	180	11.589	11.589	(0.993)	173875	3.07796	3.078
* 27	Naphthalene-d8	136	11.674	11.674	(1.000)	649661	4.00000	
30	Hexachlorobutadiene	225	12.068	12.075	(1.034)	110870	3.22814	3.228
39	Dimethylphthalate	163	14.784	14.784	(0.968)	452518	4.40090	4.401
* 42	Acenaphthene-d10	162	15.279	15.279	(1.000)	325836	4.00000	
50	Diethylphthalate	149	16.238	16.230	(1.063)	602368	5.65491	5.655
54	N-Nitrosodiphenylamine	169	16.616	16.616	(0.908)	274164	3.29628	3.296
57	Hexachlorobenzene	284	17.681	17.689	(0.966)	129805	3.48625	3.486

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.037	18.045	(0.985)	321340	14.2464	14.25
*	59 Phenanthrene-d10	188	18.308	18.308	(1.000)	619923	4.00000	
$	66 Terphenyl-d14	244	21.426	21.434	(0.919)	371907	4.52062	4.521(R)
	67 Butylbenzylphthalate	149	22.347	22.355	(0.958)	380291	5.37521	5.375
*	69 Chrysene-d12	240	23.323	23.331	(1.000)	504917	4.00000	
*	77 Perylene-d12	264	25.979	25.986	(1.000)	527797	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.701	28.708	(1.105)	668750	3.94893	3.949
	90 N-Nitrosodimethylamine	74	4.856	4.848	(0.527)	12003	0.34948	0.3495

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172307S.D
Lab Smp Id: BLB0495-BS2
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	184039	92020	368078	178576	-2.97
27 Naphthalene-d8	659935	329968	1319870	649661	-1.56
42 Acenaphthene-d10	325775	162888	651550	325836	0.02
59 Phenanthrene-d10	616249	308125	1232498	619923	0.60
69 Chrysene-d12	526222	263111	1052444	504917	-4.05
77 Perylene-d12	563117	281559	1126234	527797	-6.27

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.21	8.71	9.71	9.21	-0.00
27 Naphthalene-d8	11.67	11.17	12.17	11.67	-0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	-0.00
59 Phenanthrene-d10	18.31	17.81	18.81	18.31	-0.00
69 Chrysene-d12	23.33	22.83	23.83	23.32	-0.03
77 Perylene-d12	25.99	25.49	26.49	25.98	-0.03

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

REVIEW SUMMARY FOR FILE - NT1003172307S.D

Lab ID: BLB0495-BS2
nt10.i, 20230317.b\20230317.b\SIMABN2.m,   17-MAR-2023 22:14

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: 20230317.b/NT1003172303S.D

On Column LOD for nt10.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723085.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

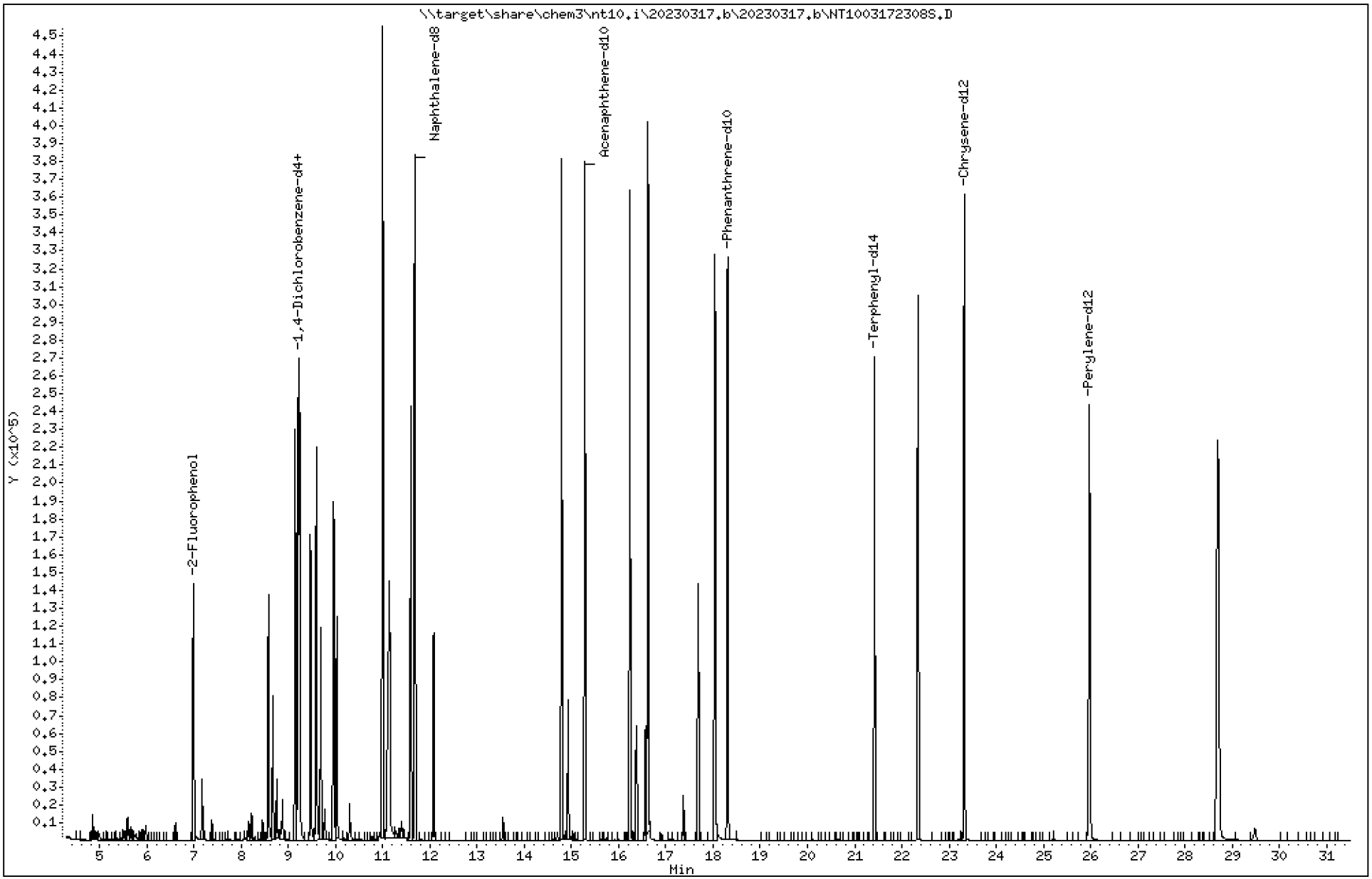
Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723085.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

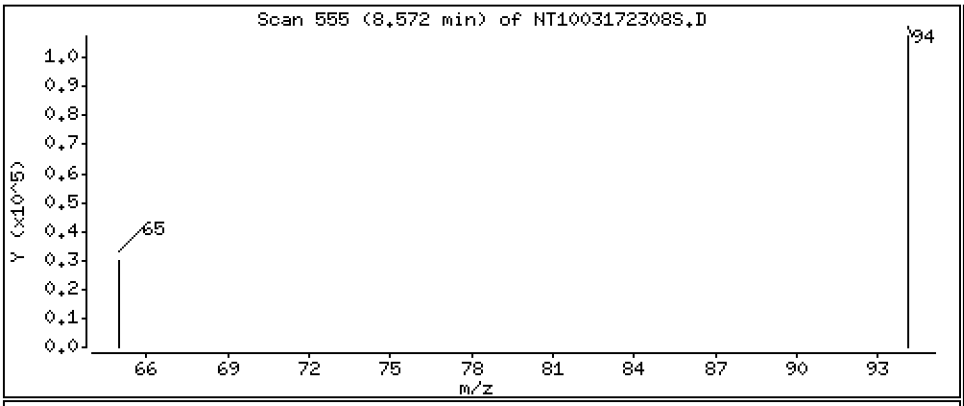
Operator: JGR

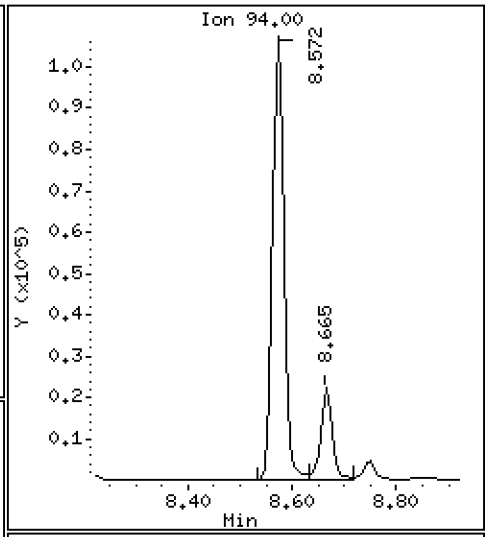
Column phase: ZB-5msi

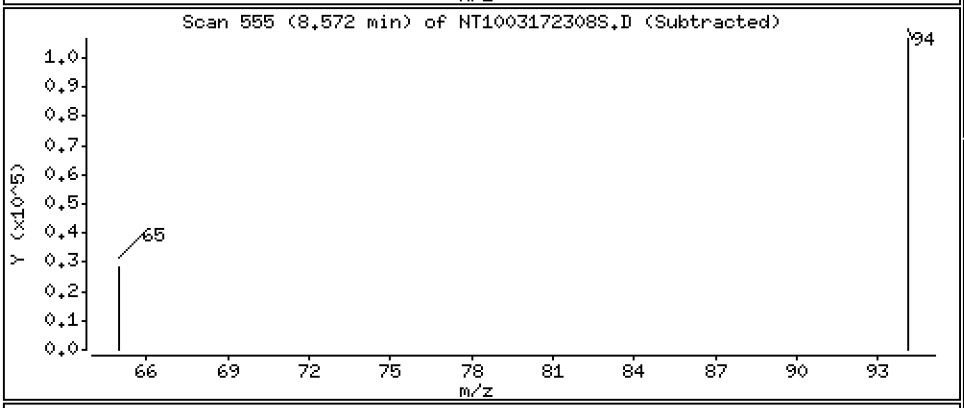
Column diameter: 0.25

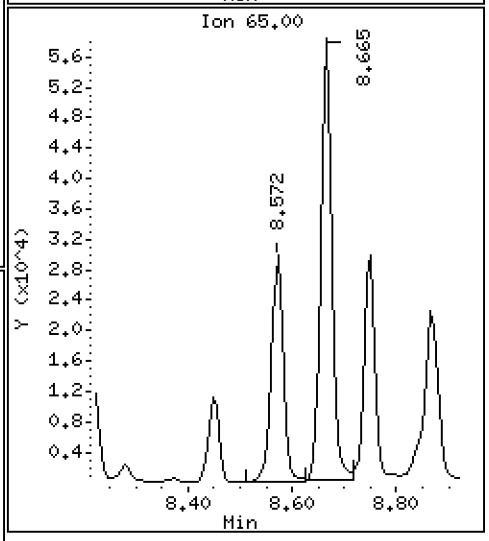
3 Phenol

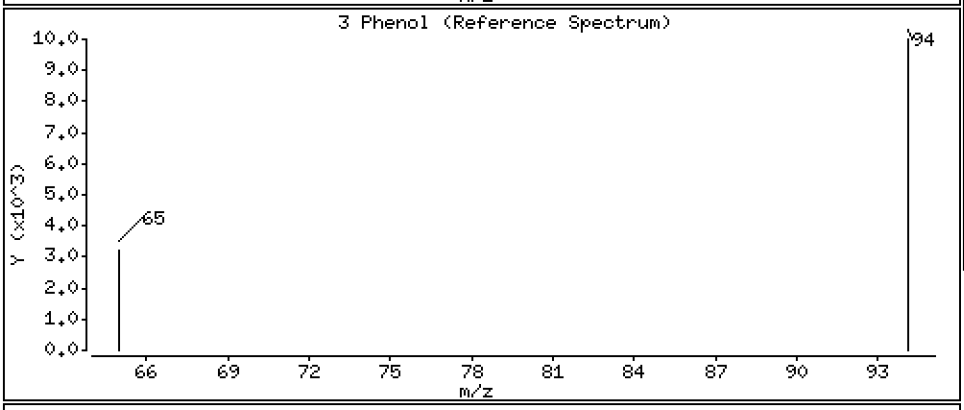
Concentration: 2.285 ug/L

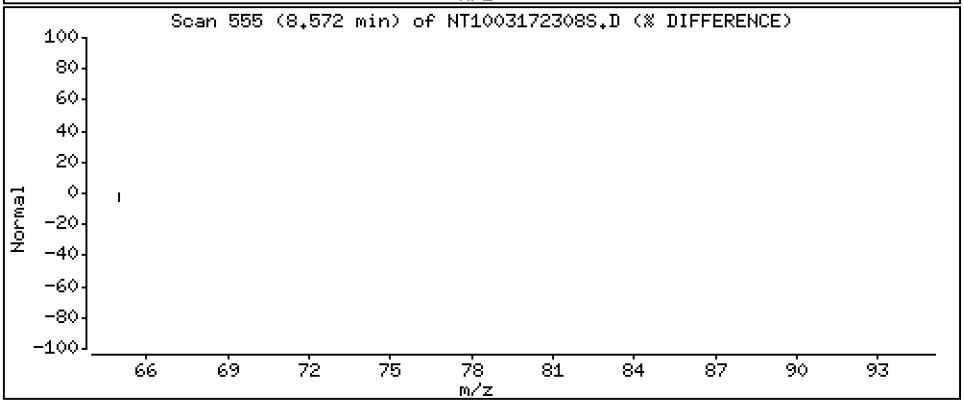












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723085.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

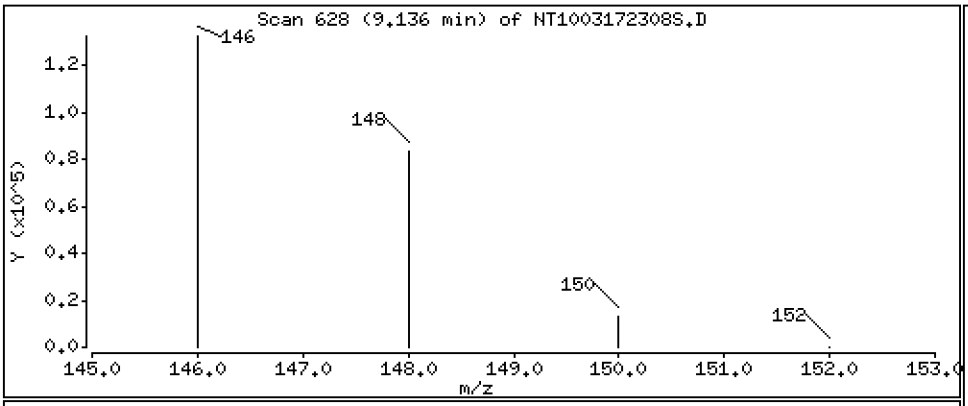
Operator: JGR

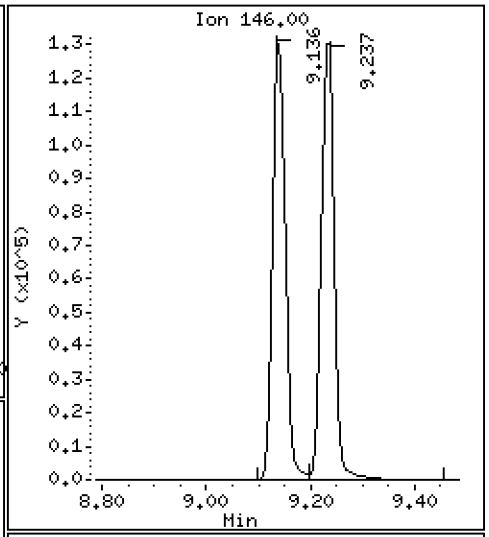
Column phase: ZB-5msi

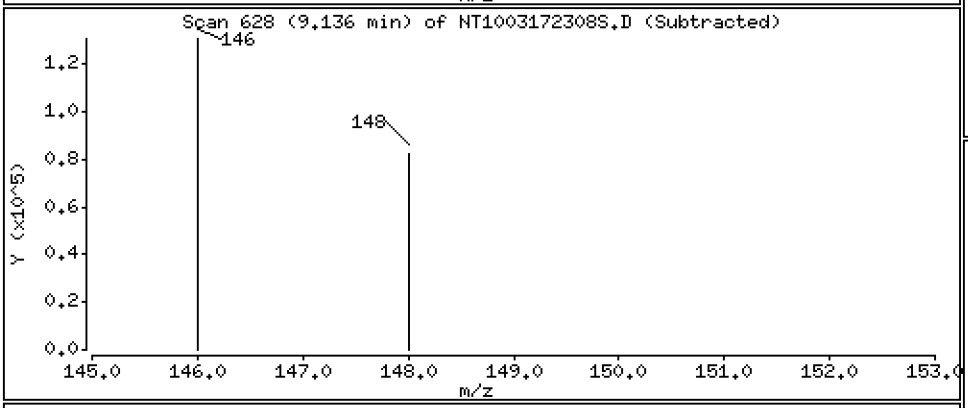
Column diameter: 0.25

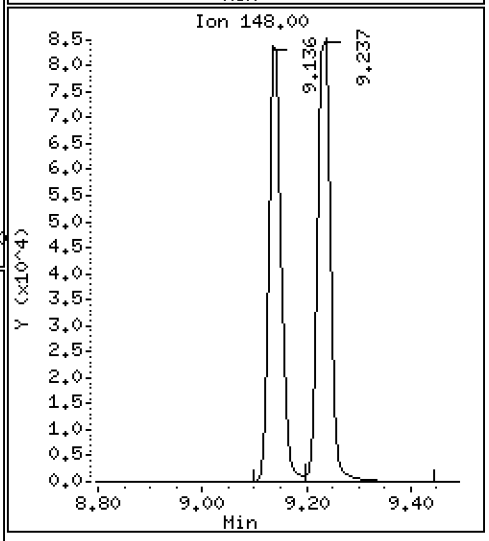
7 1,3-Dichlorobenzene

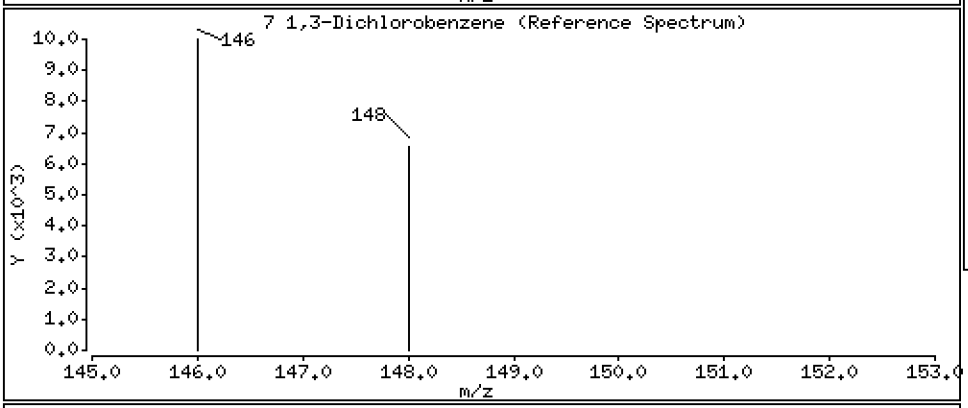
Concentration: 3.429 ug/L

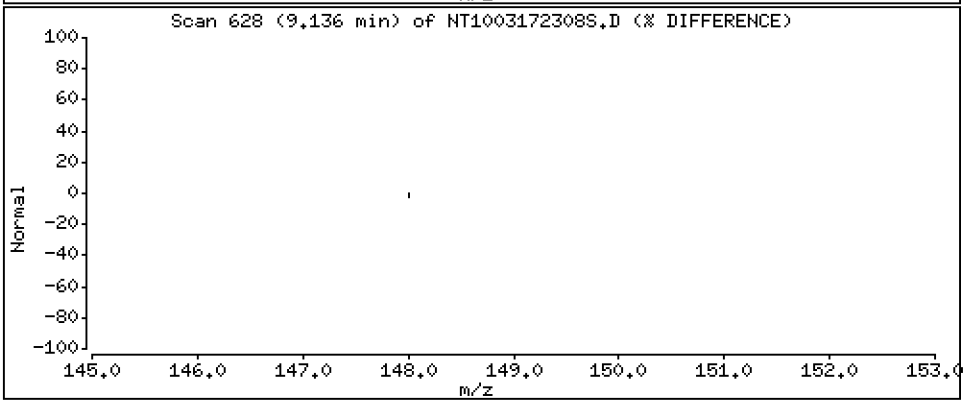












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172308S.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

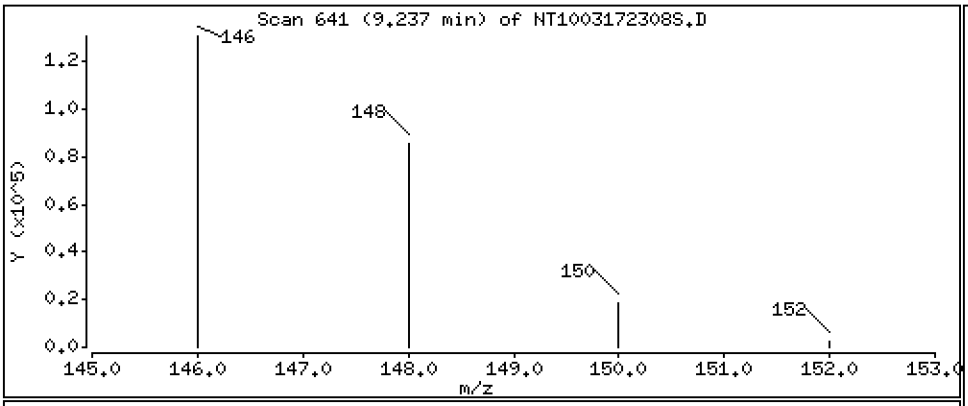
Operator: JGR

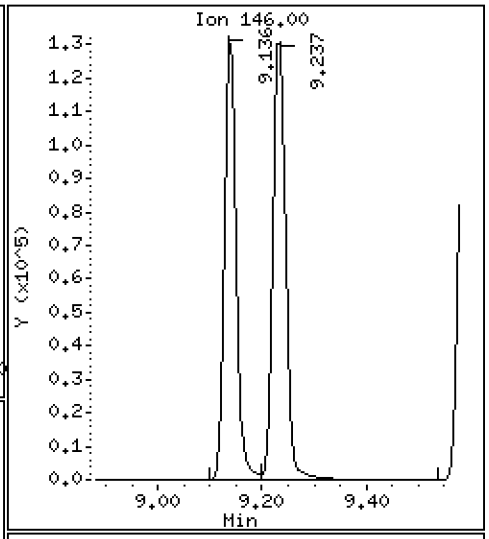
Column phase: ZB-5msi

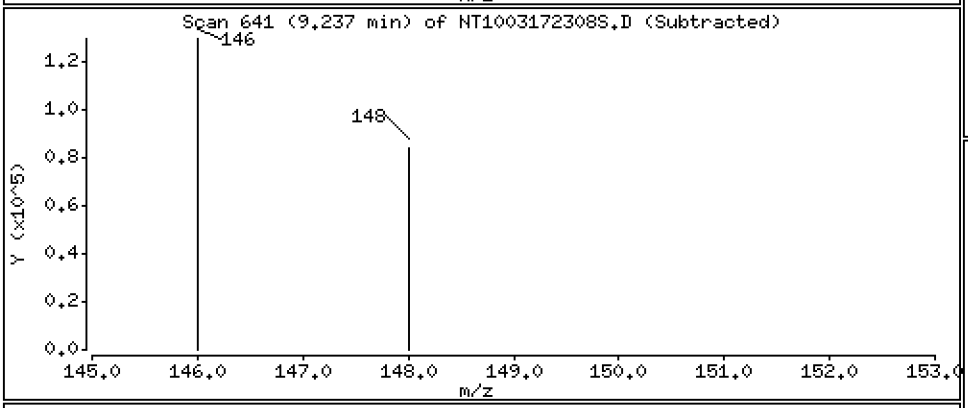
Column diameter: 0.25

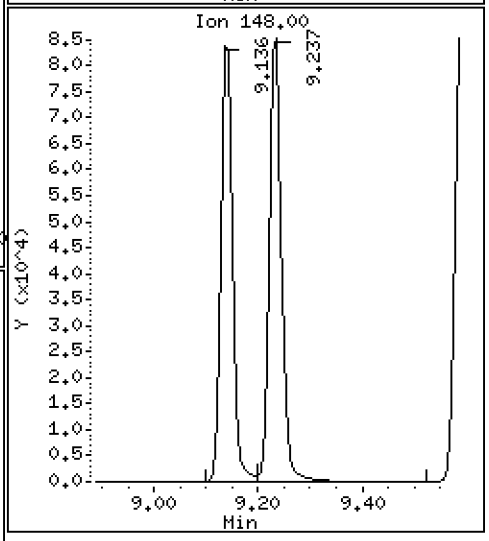
9 1,4-Dichlorobenzene

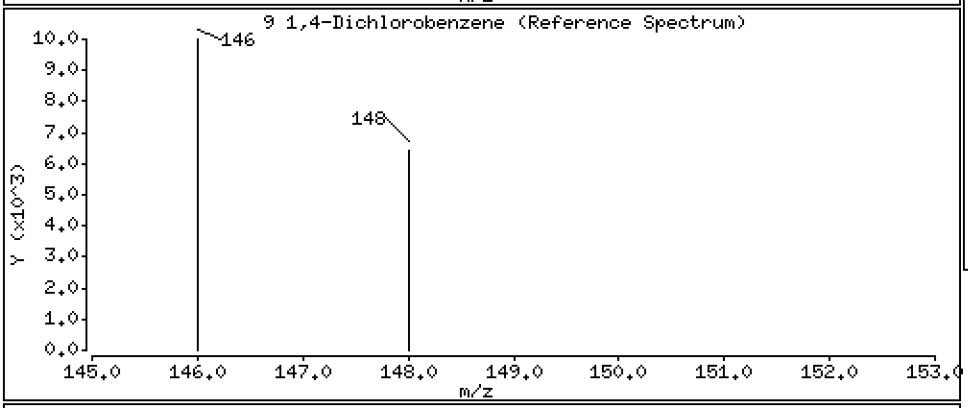
Concentration: 3.560 ug/L

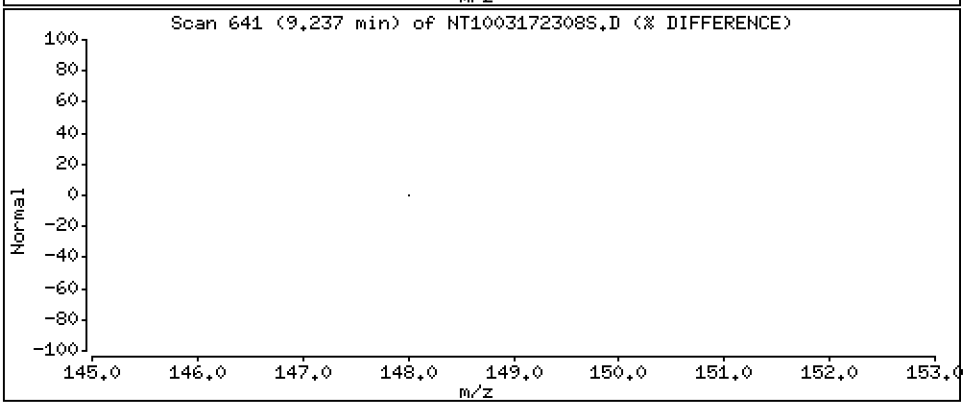












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172308S.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

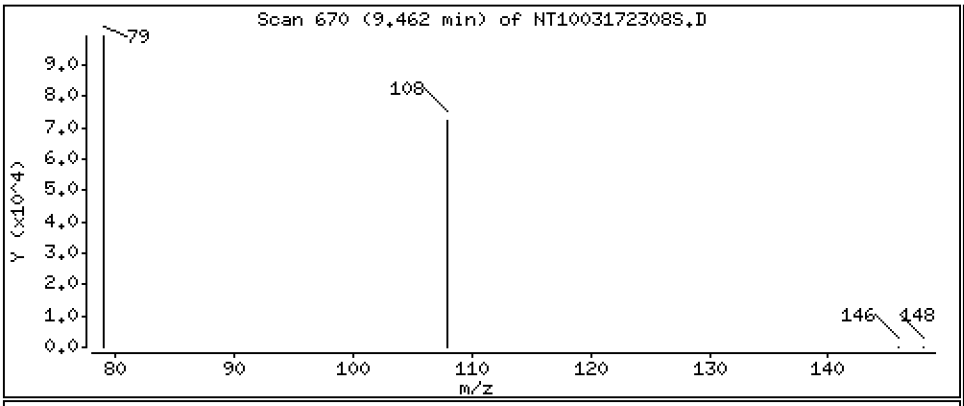
Operator: JGR

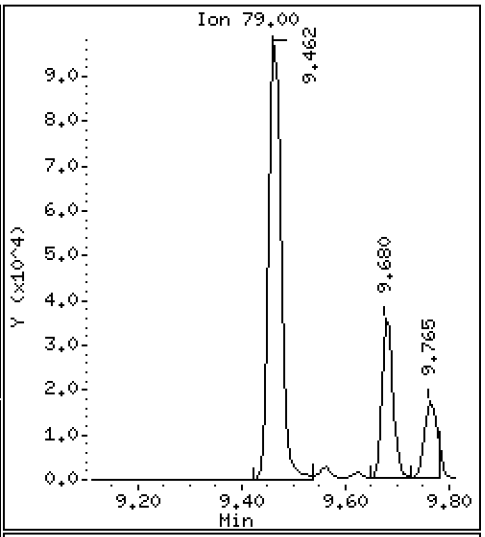
Column phase: ZB-5msi

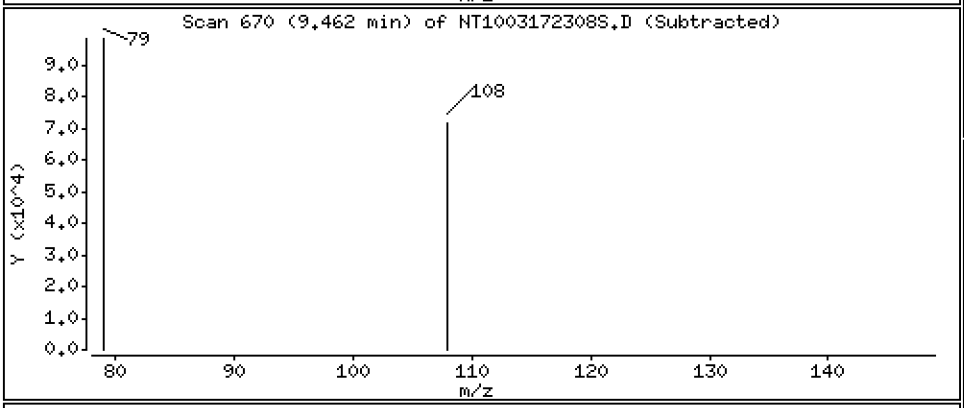
Column diameter: 0.25

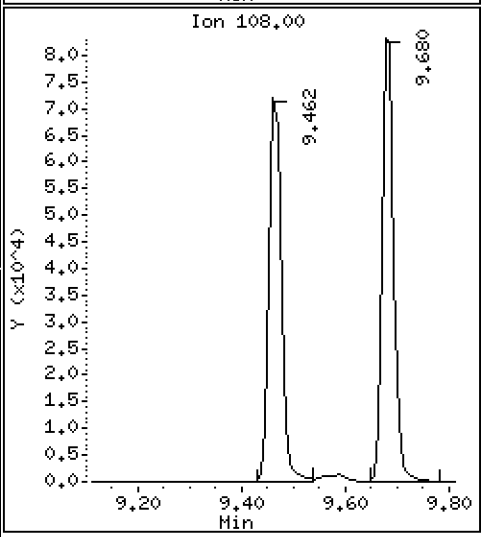
11 Benzyl alcohol

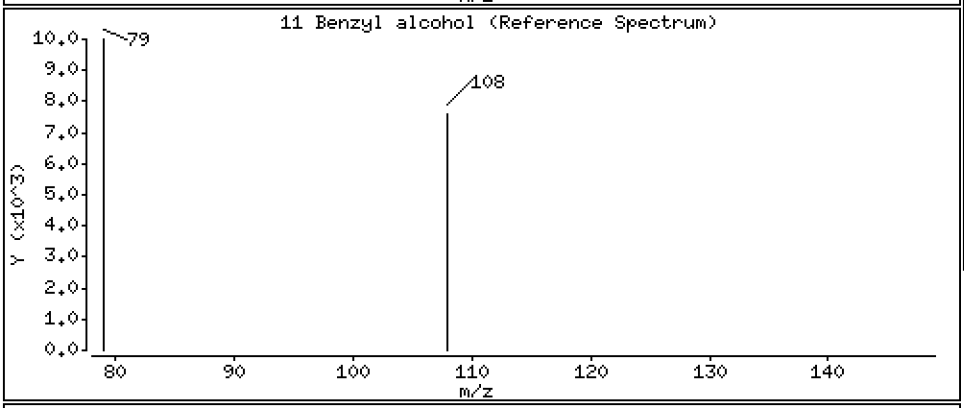
Concentration: 3.962 ug/L

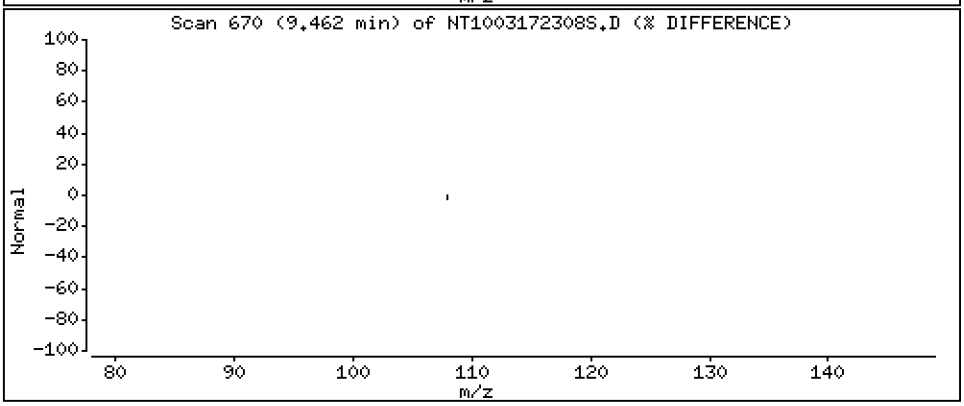












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723085.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

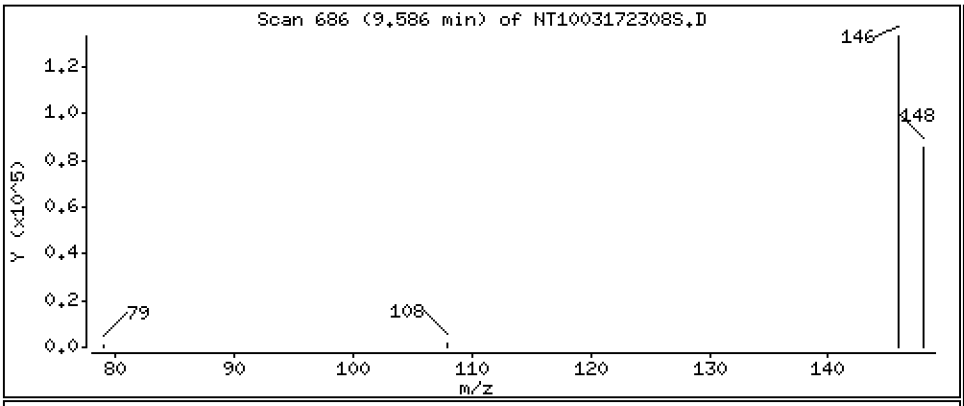
Operator: JGR

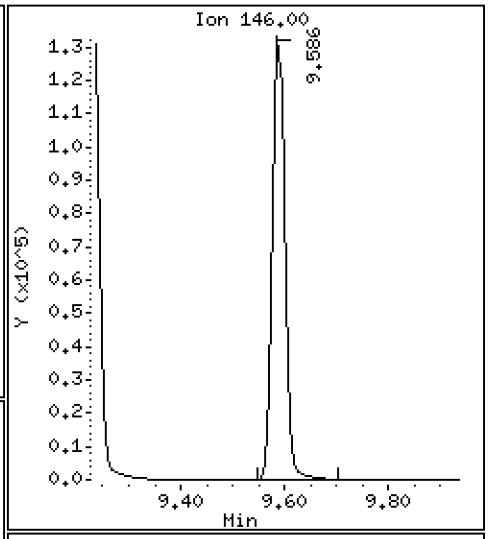
Column phase: ZB-5msi

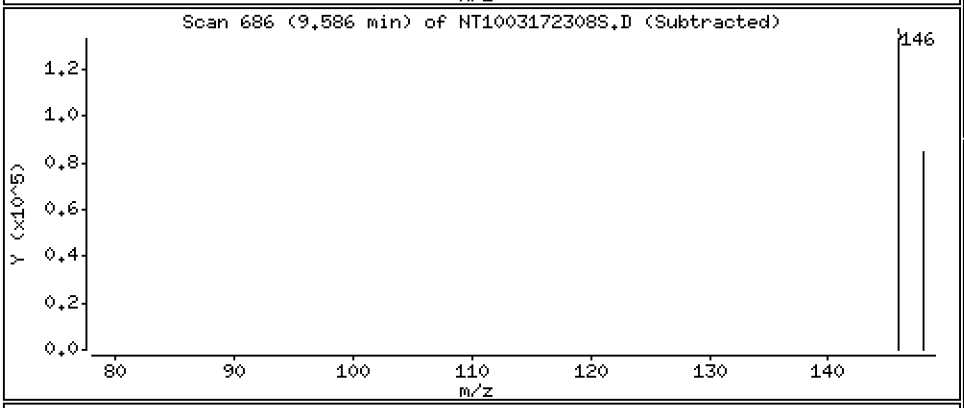
Column diameter: 0.25

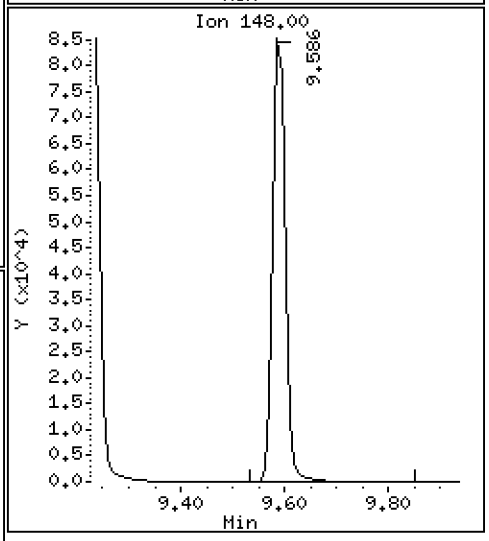
12 1,2-Dichlorobenzene

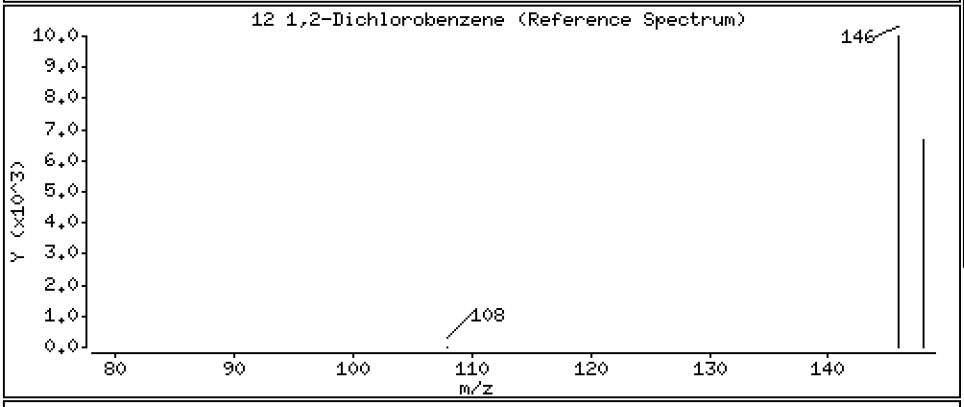
Concentration: 3.534 ug/L

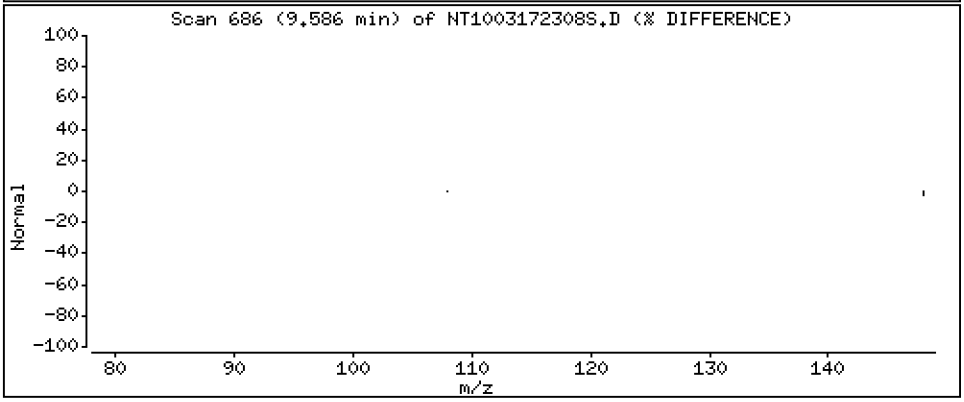












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723085.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

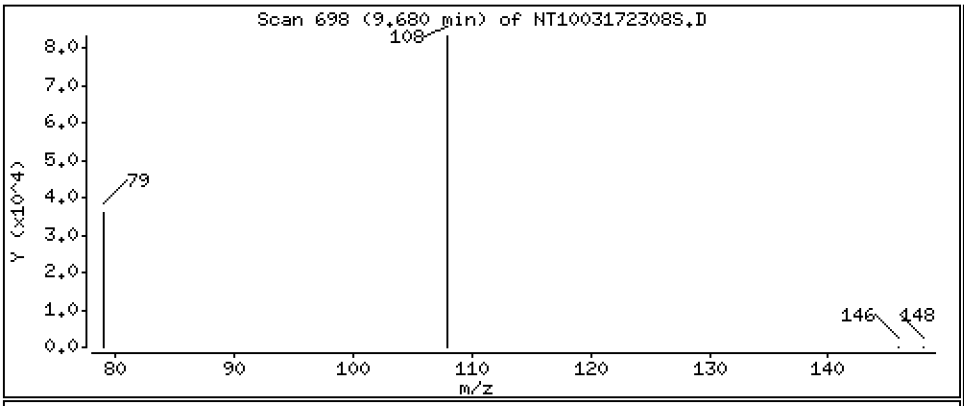
Operator: JGR

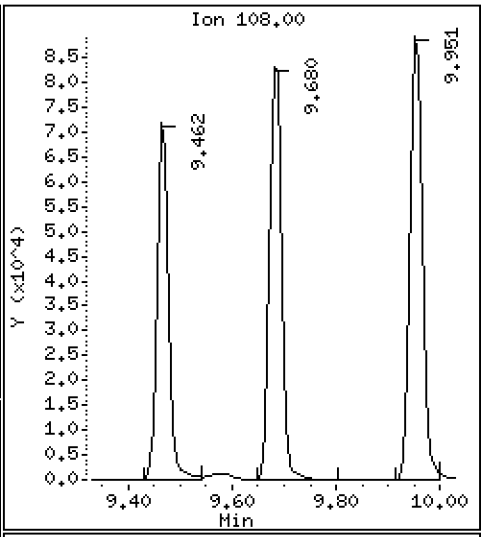
Column phase: ZB-5msi

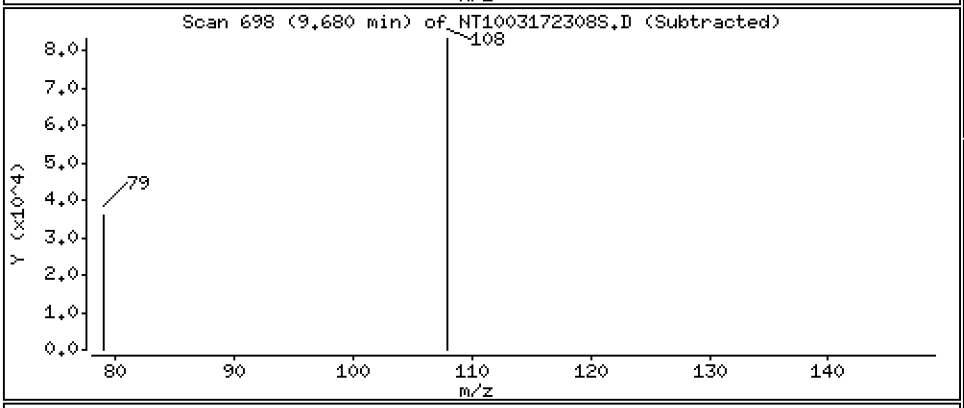
Column diameter: 0.25

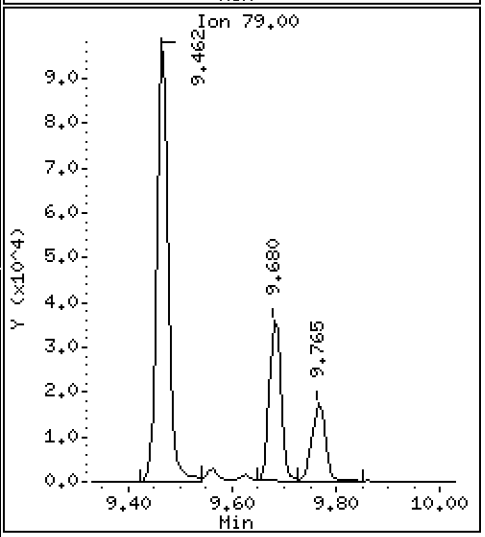
13 2-Methylphenol

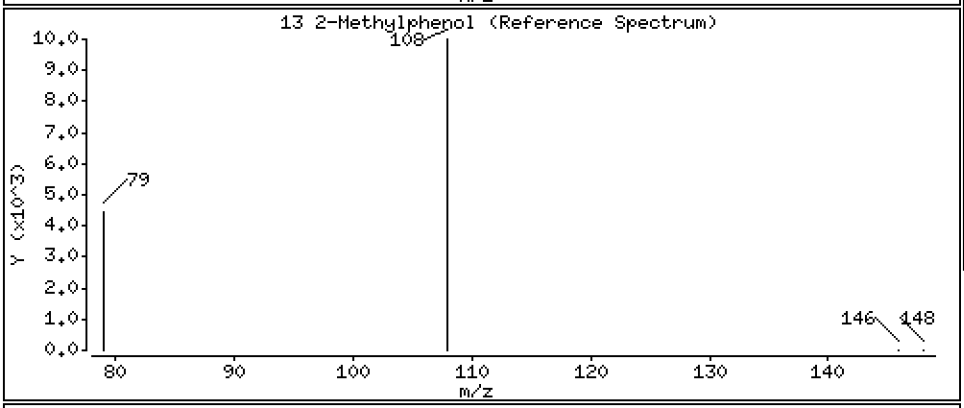
Concentration: 2.778 ug/L

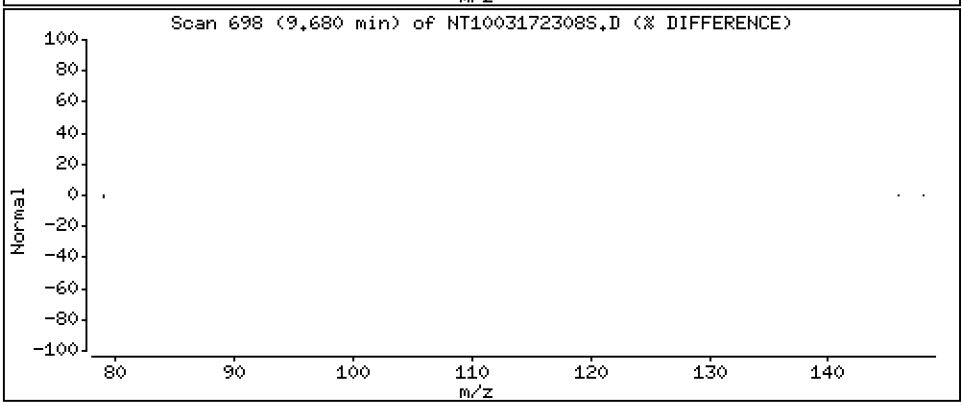












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172308S.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

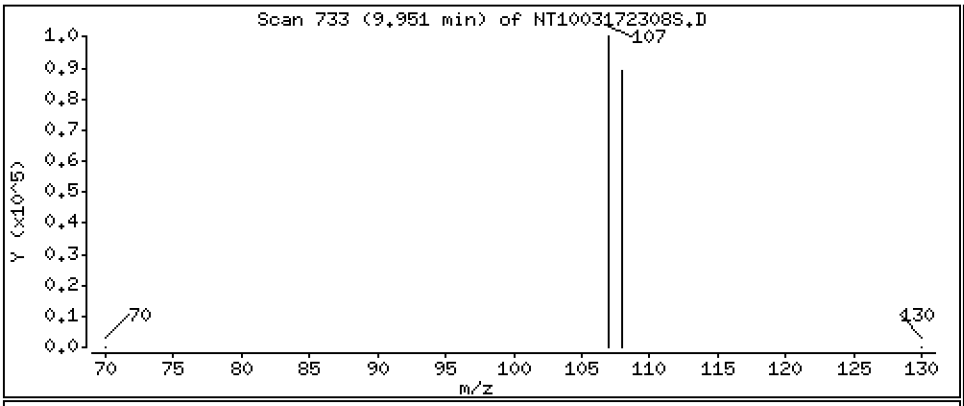
Operator: JGR

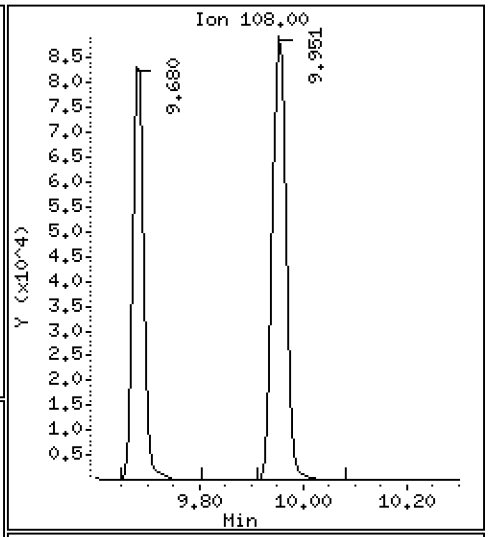
Column phase: ZB-5msi

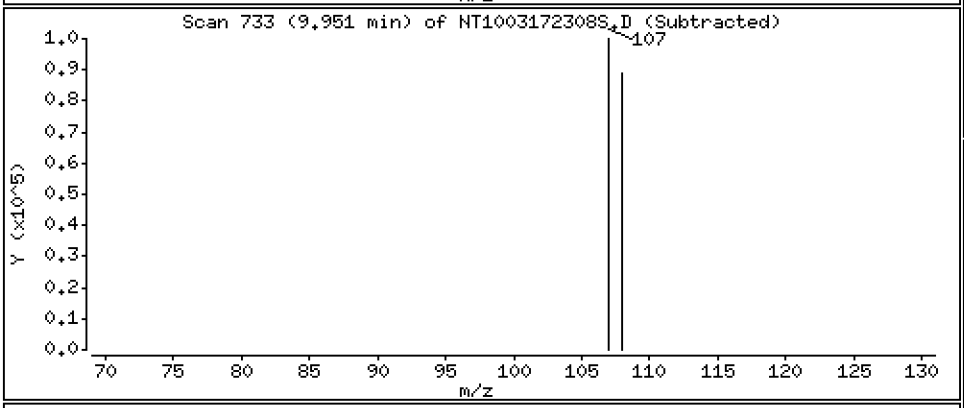
Column diameter: 0.25

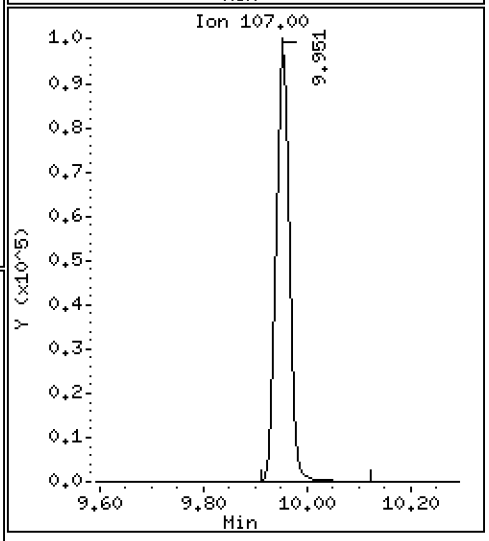
15 4-Methylphenol

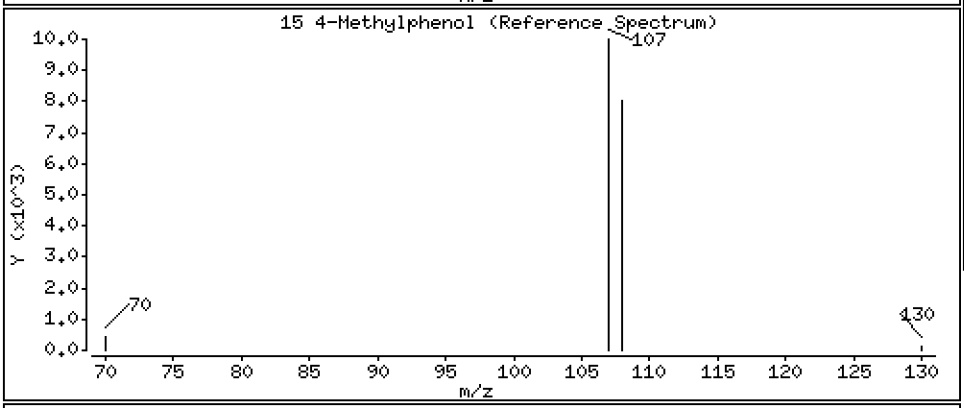
Concentration: 3.276 ug/L

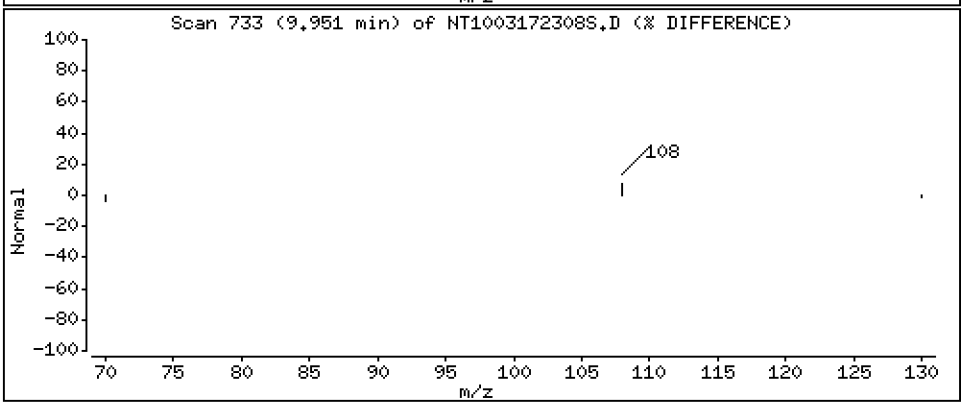












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

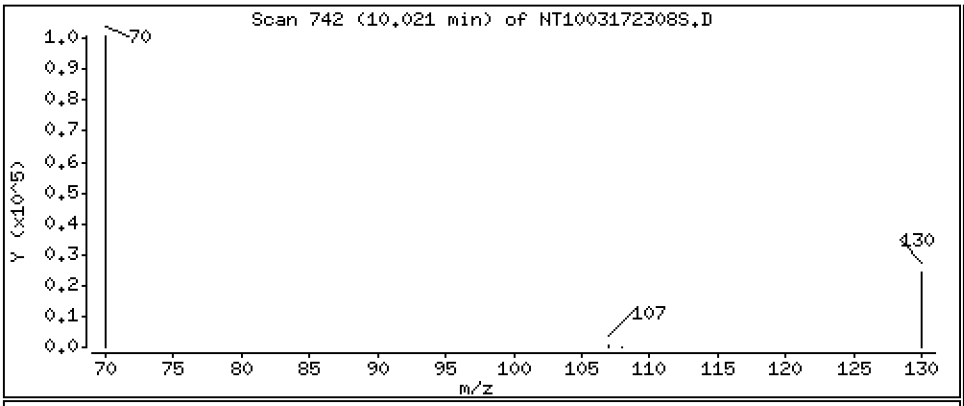
Operator: JGR

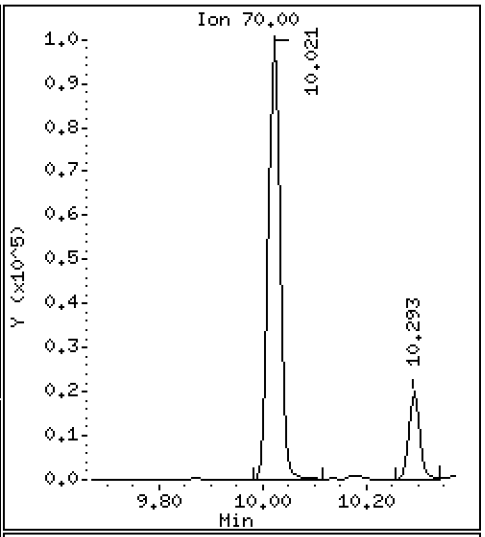
Column phase: ZB-5msi

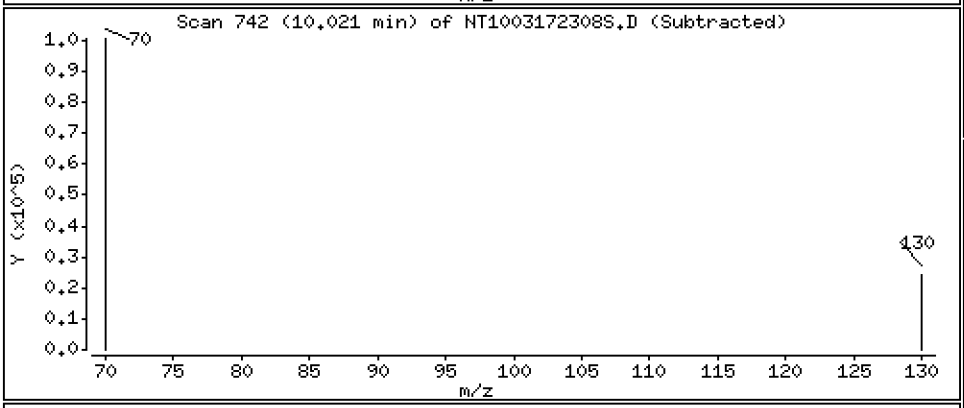
Column diameter: 0.25

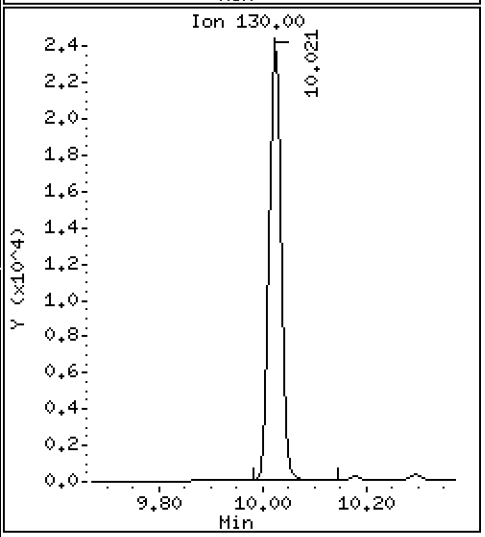
16 N-Nitroso-di-n-propylamine

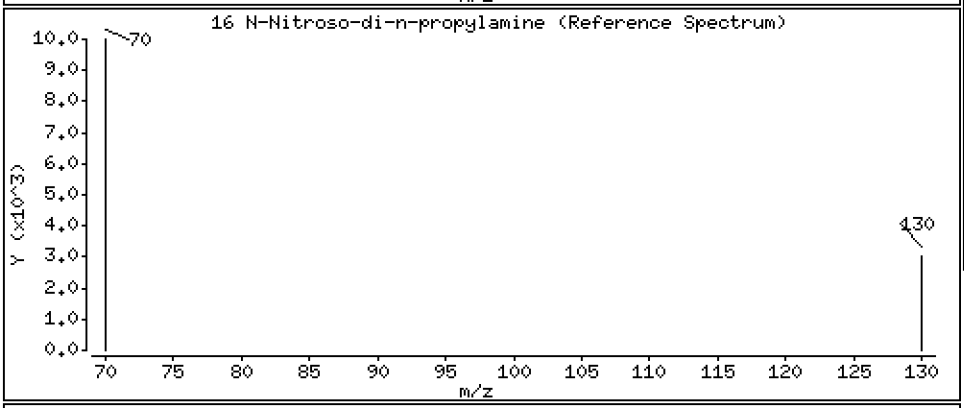
Concentration: 4.347 ug/L

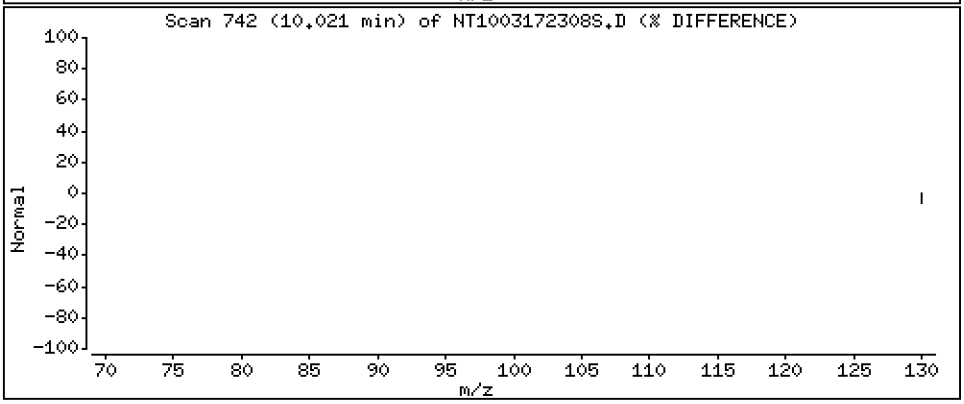












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

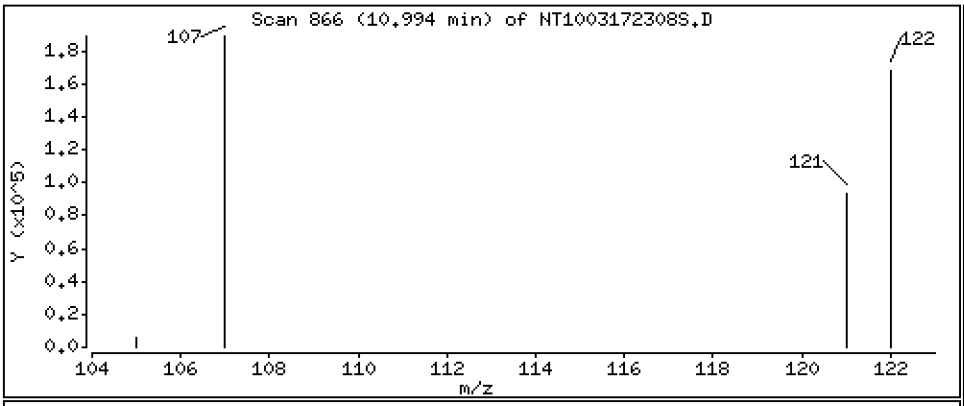
Operator: JGR

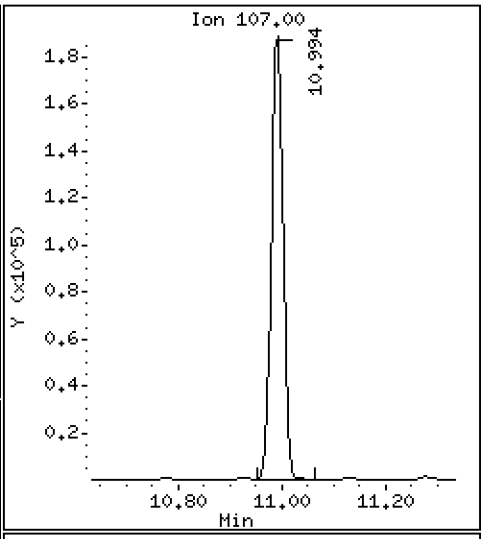
Column phase: ZB-5msi

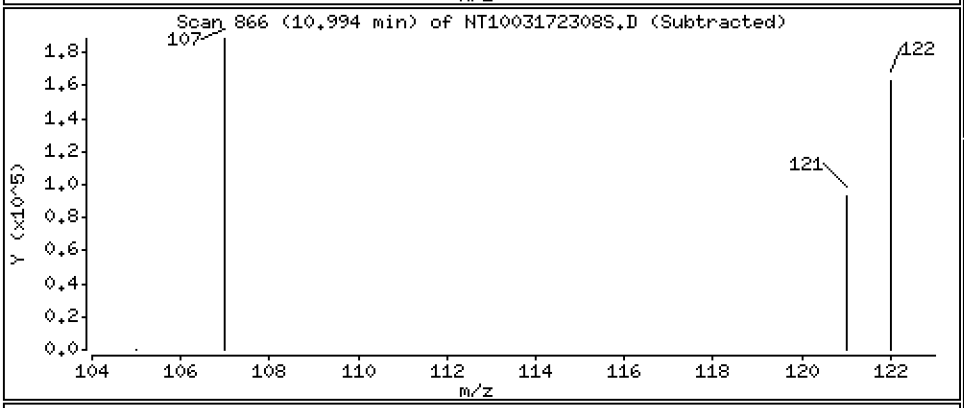
Column diameter: 0.25

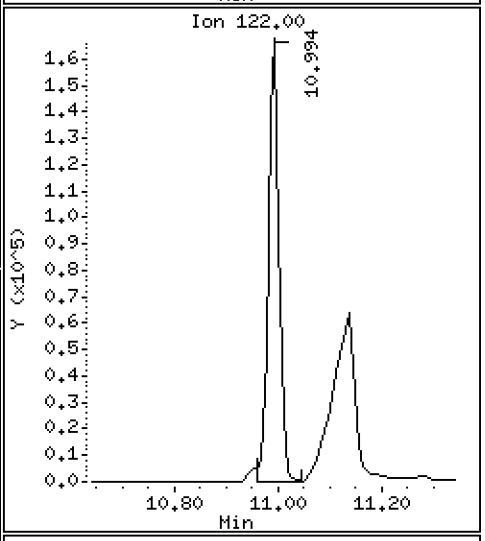
22 2,4-Dimethylphenol

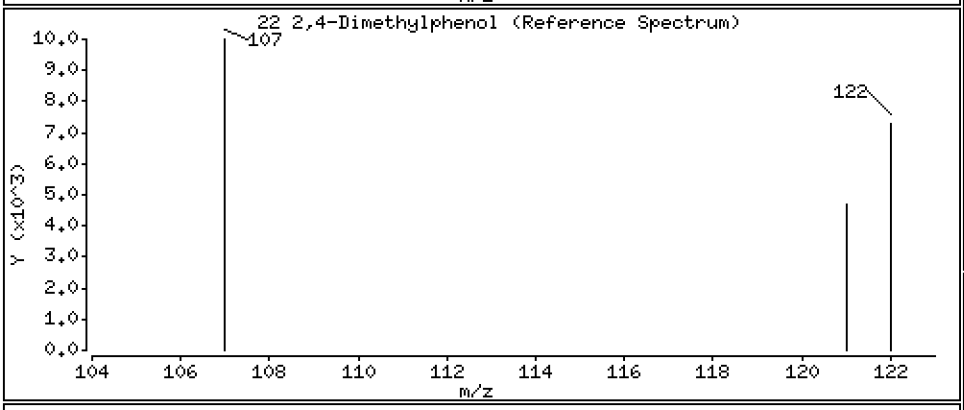
Concentration: 5.838 ug/L

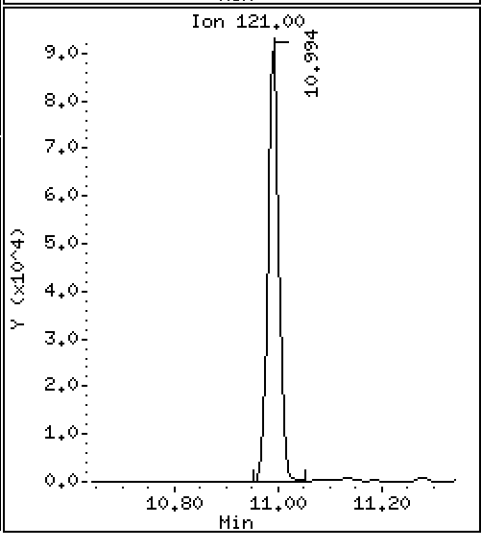


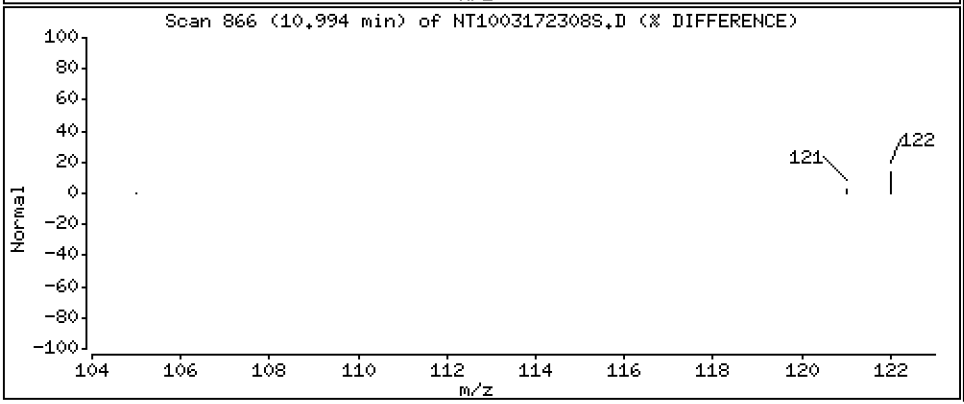












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723085.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

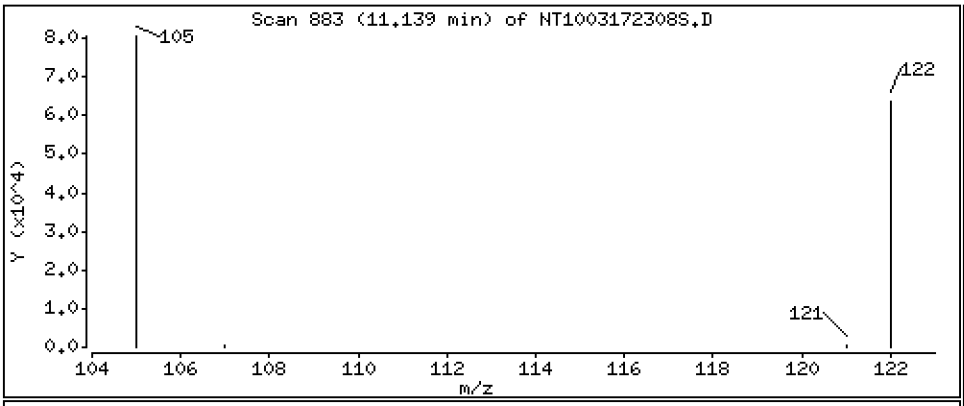
Operator: JGR

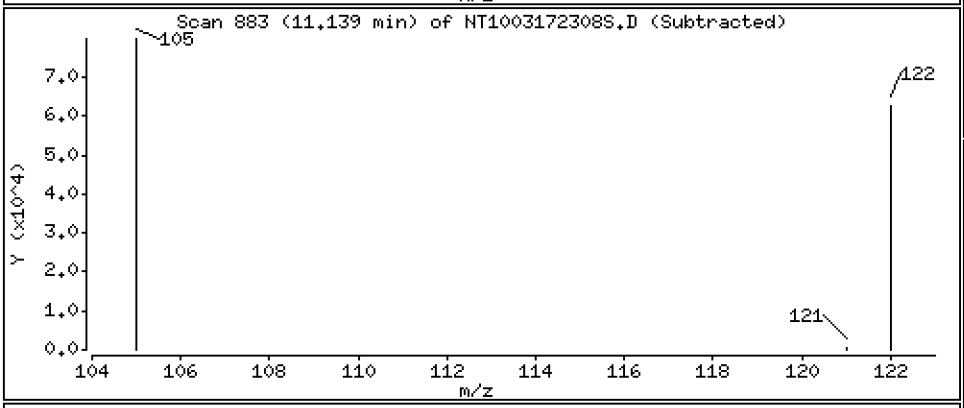
Column phase: ZB-5msi

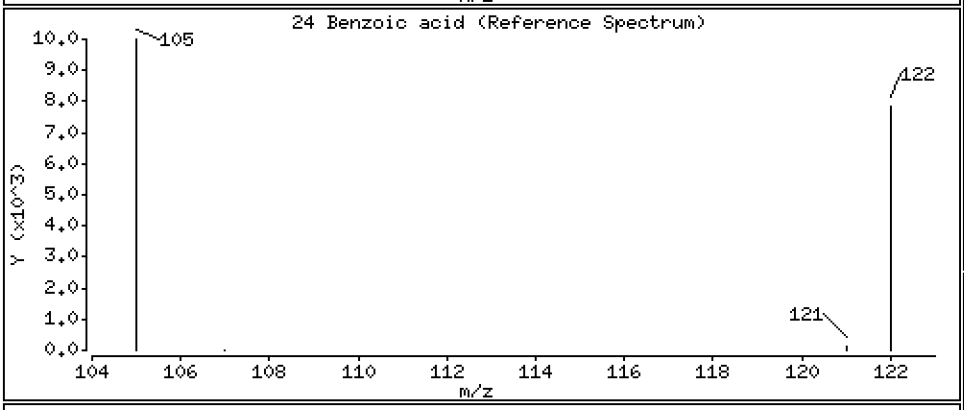
Column diameter: 0.25

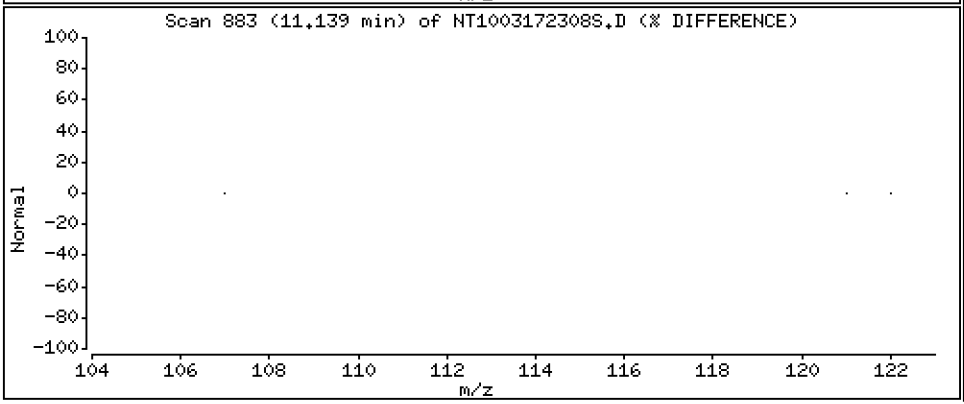
24 Benzoic acid

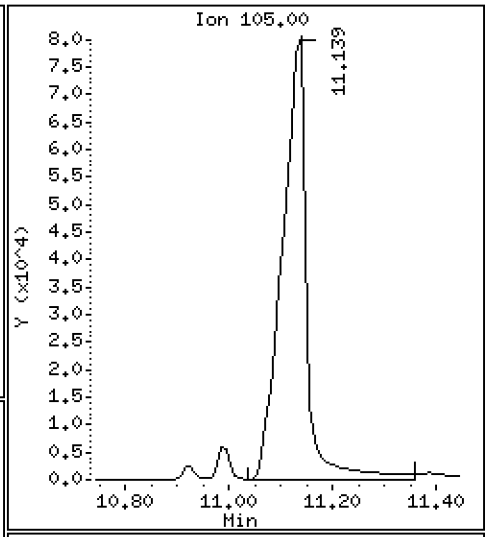
Concentration: 9.155 ug/L

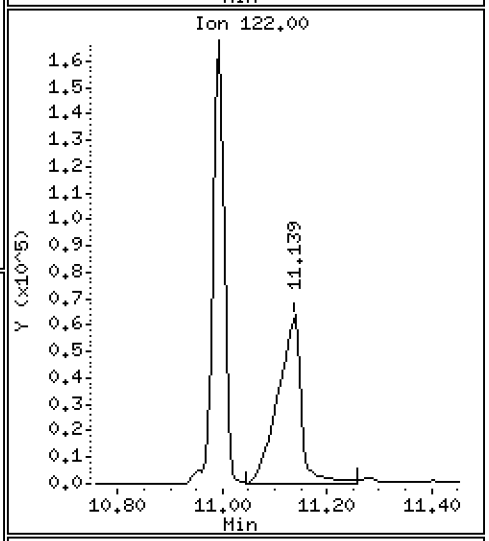


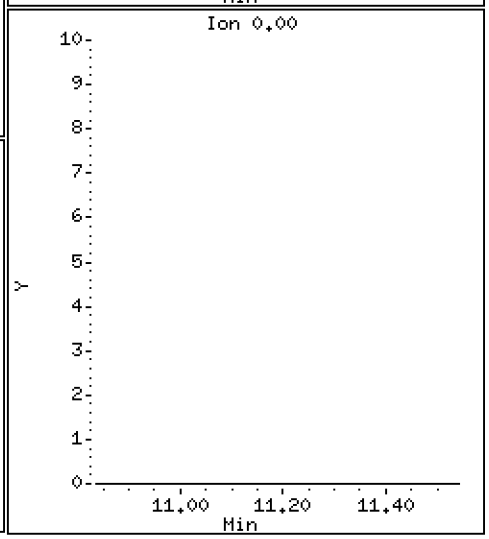












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

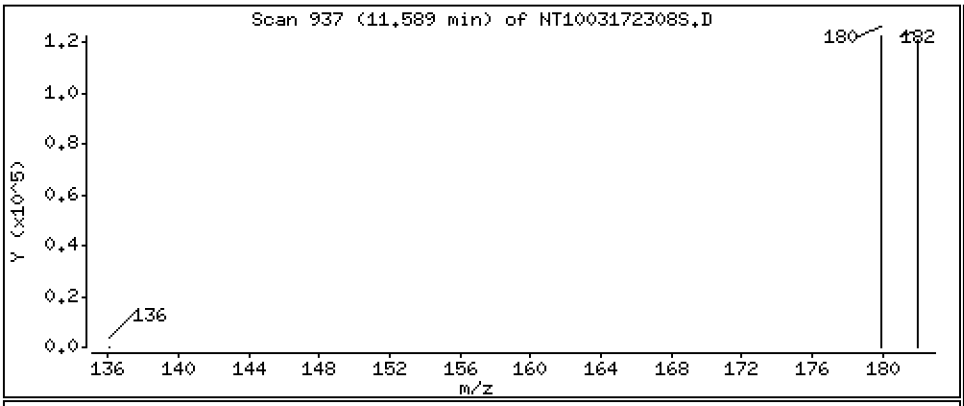
Operator: JGR

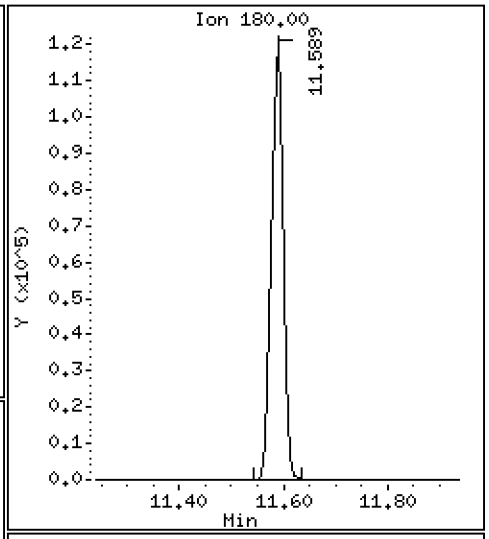
Column phase: ZB-5msi

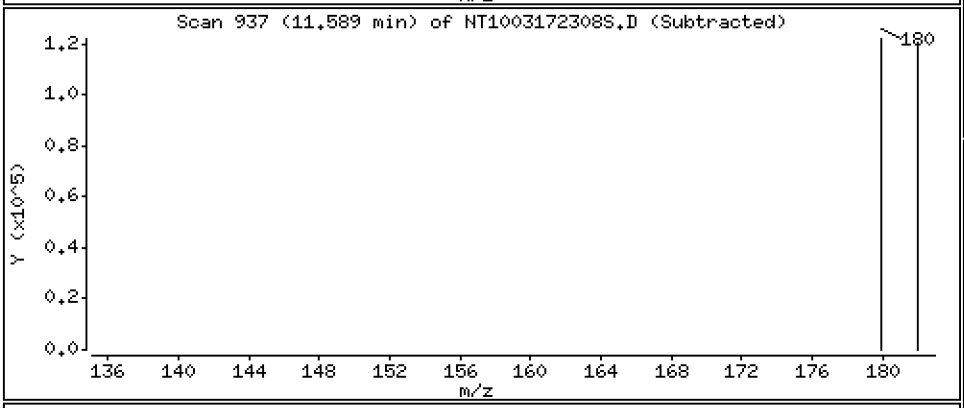
Column diameter: 0.25

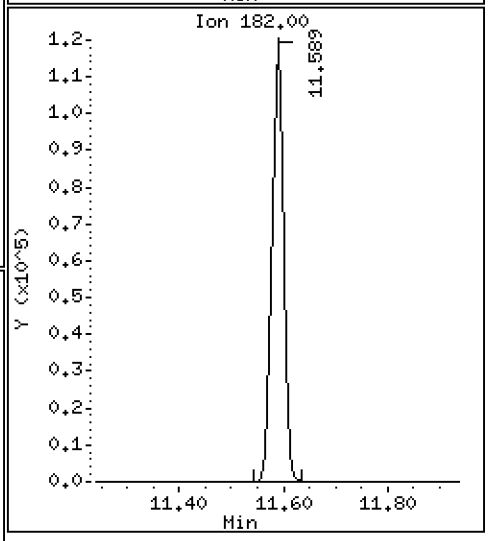
26 1,2,4-Trichlorobenzene

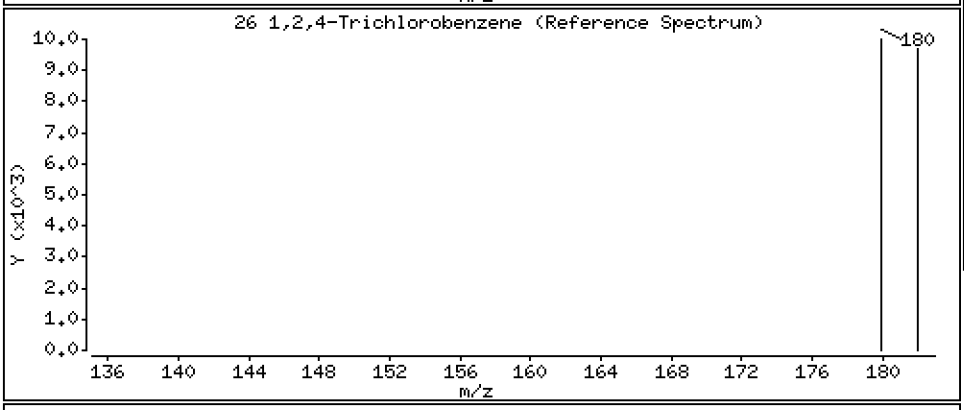
Concentration: 3.617 ug/L

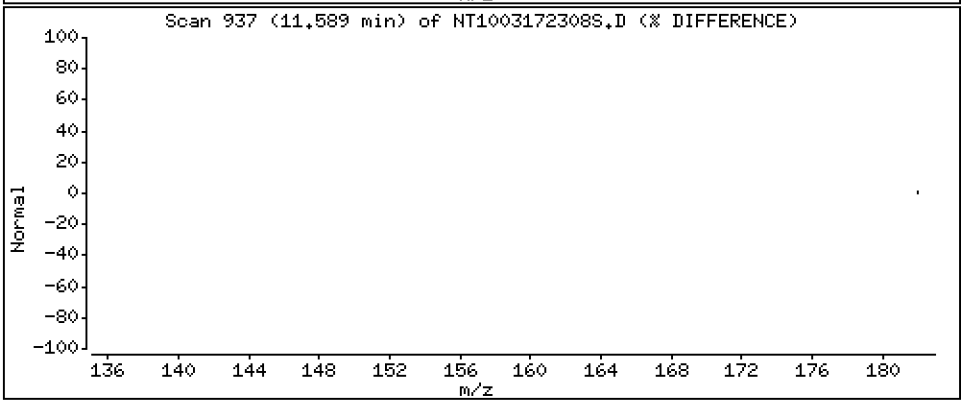












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172308S.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

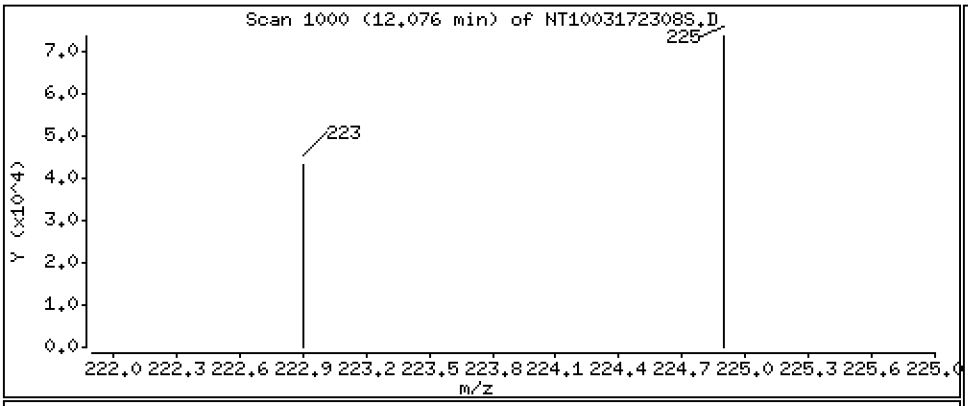
Operator: JGR

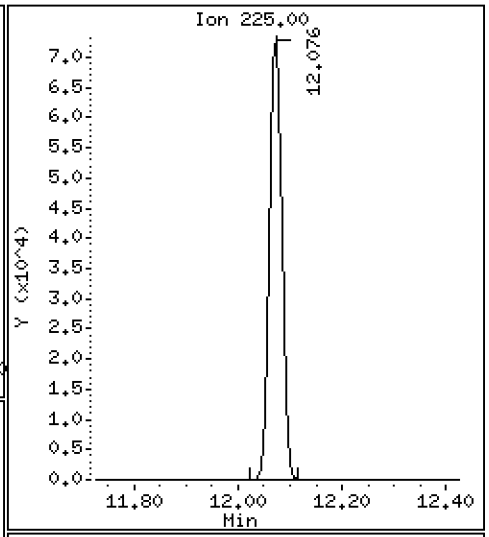
Column phase: ZB-5msi

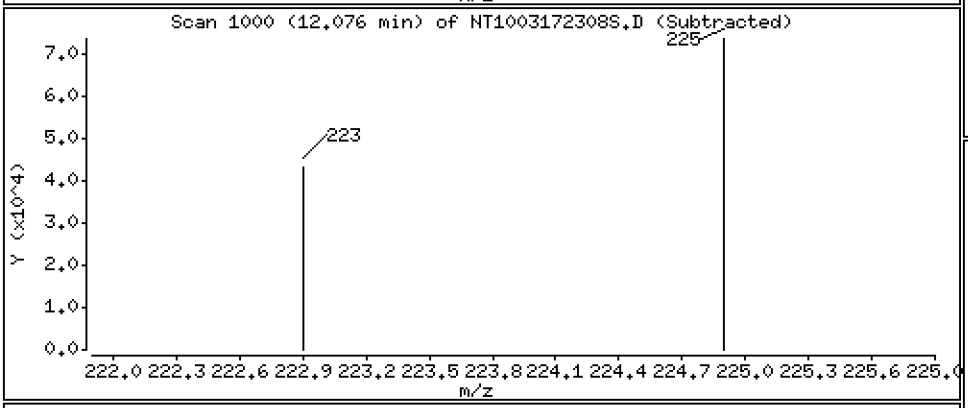
Column diameter: 0.25

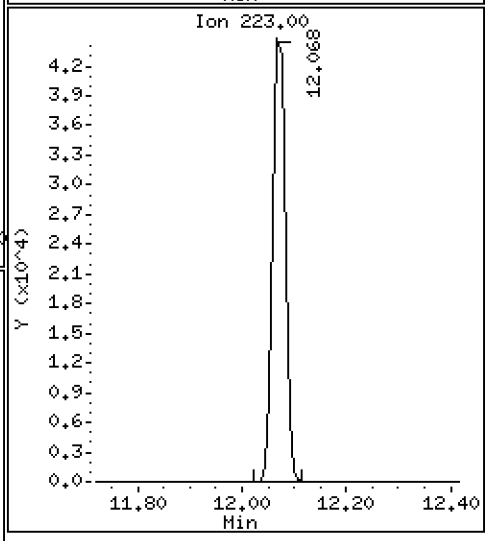
30 Hexachlorobutadiene

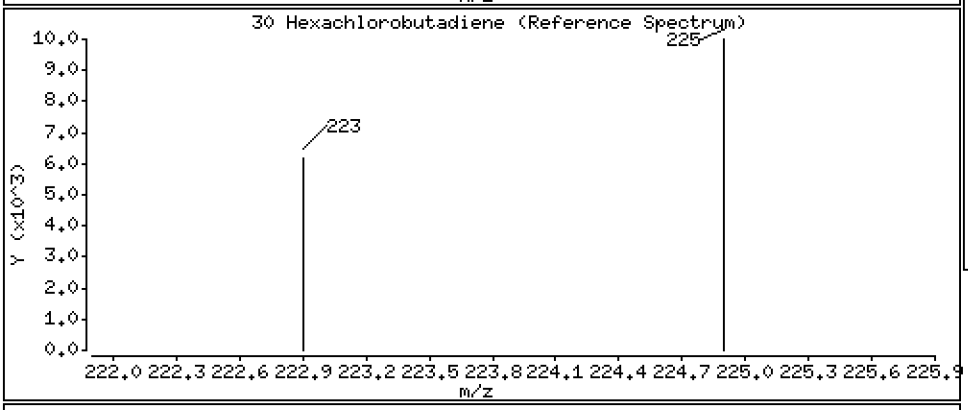
Concentration: 3.746 ug/L

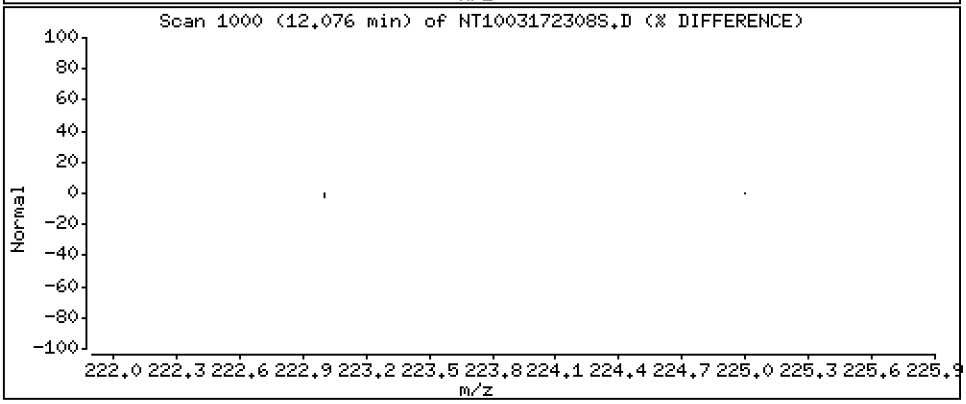












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172308S.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

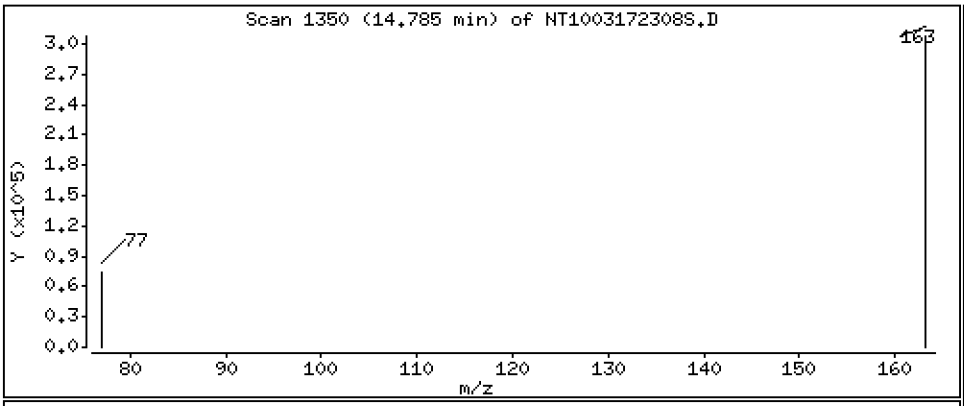
Operator: JGR

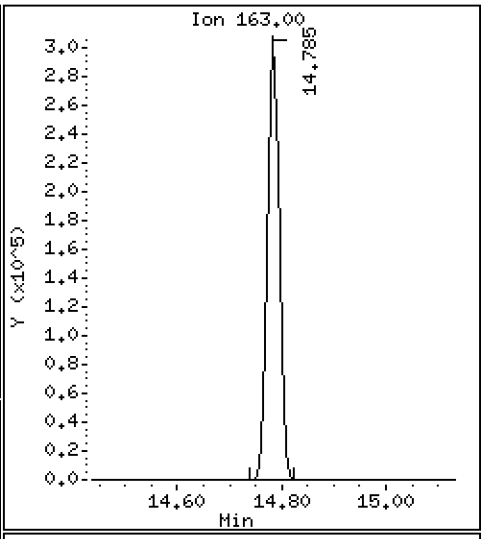
Column phase: ZB-5msi

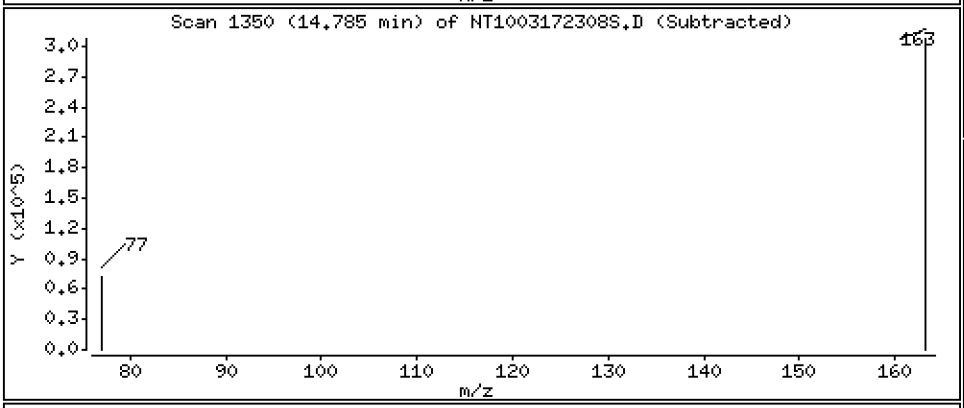
Column diameter: 0.25

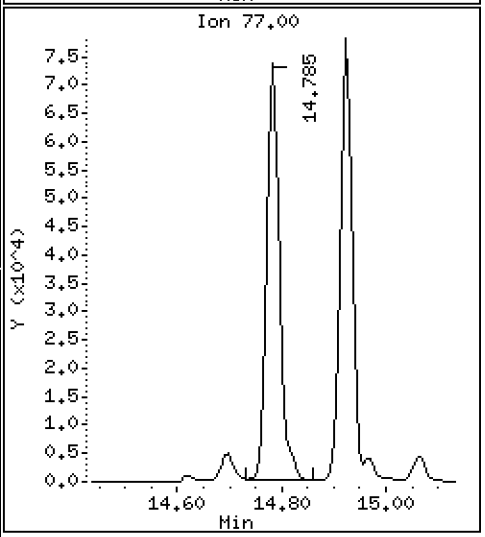
39 Dimethylphthalate

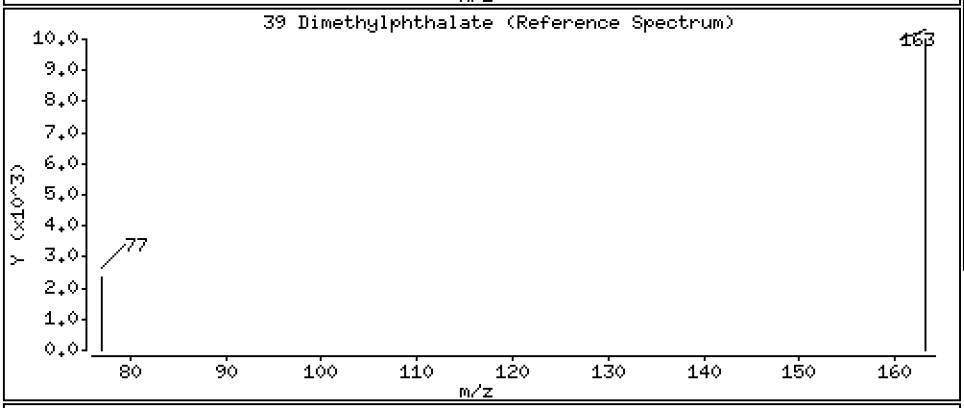
Concentration: 4.972 ug/L

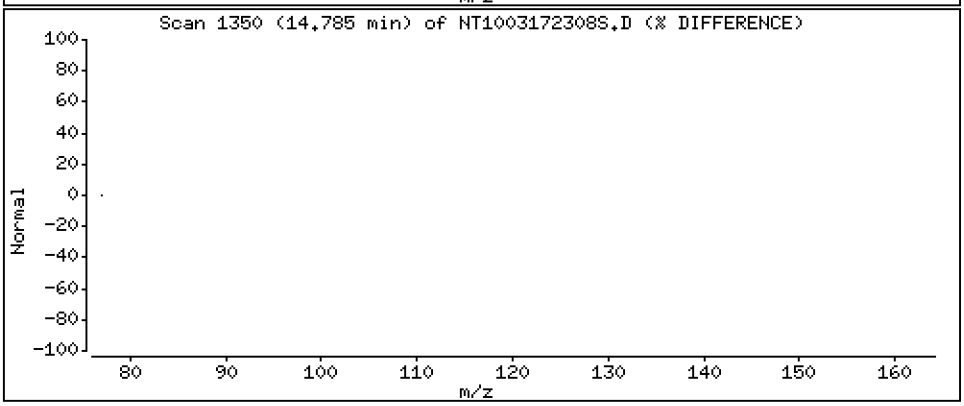












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172308S.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

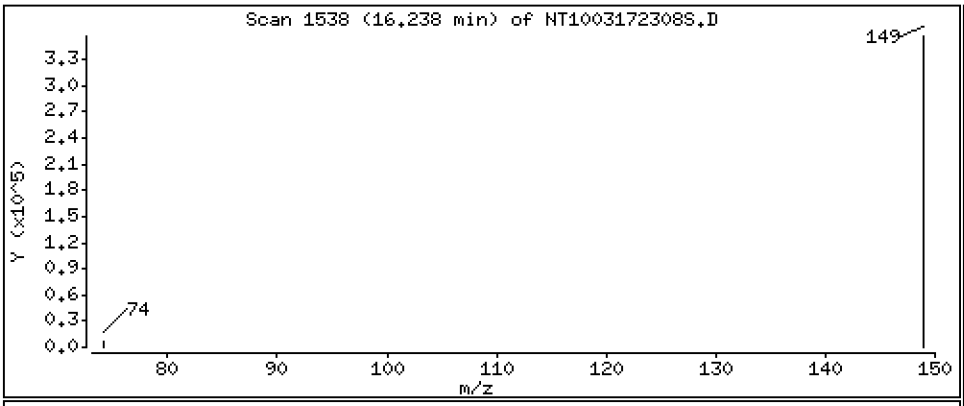
Operator: JGR

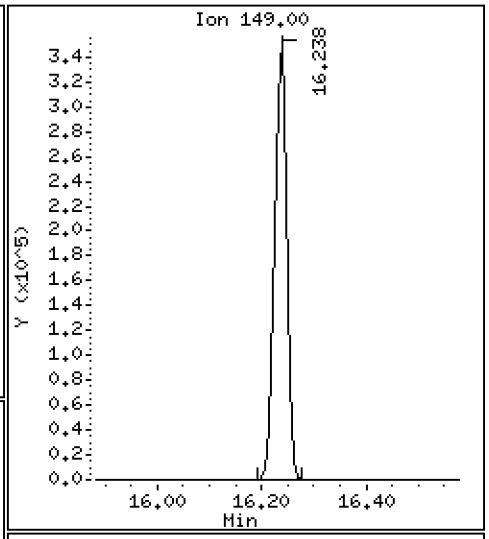
Column phase: ZB-5msi

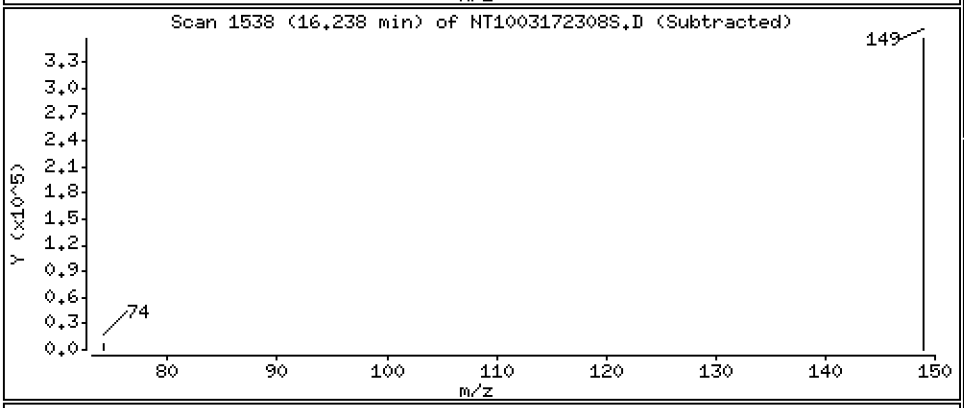
Column diameter: 0.25

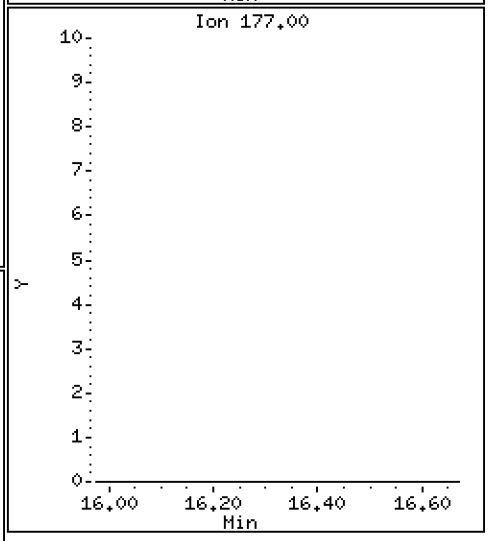
50 Diethylphthalate

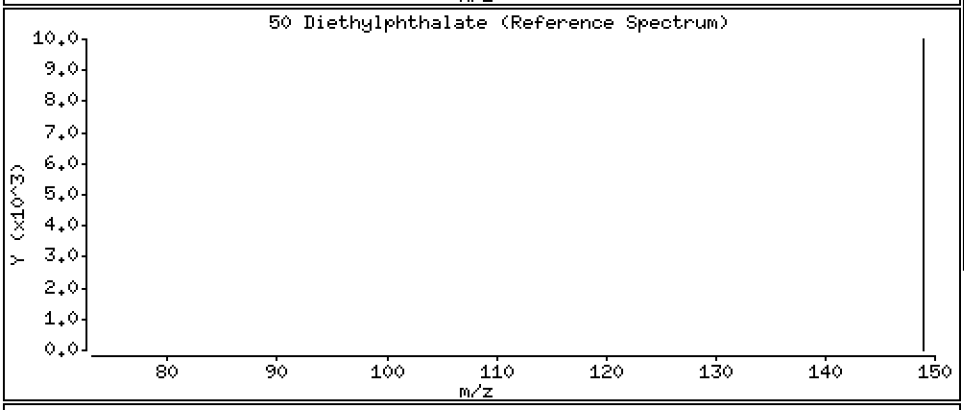
Concentration: 5.813 ug/L

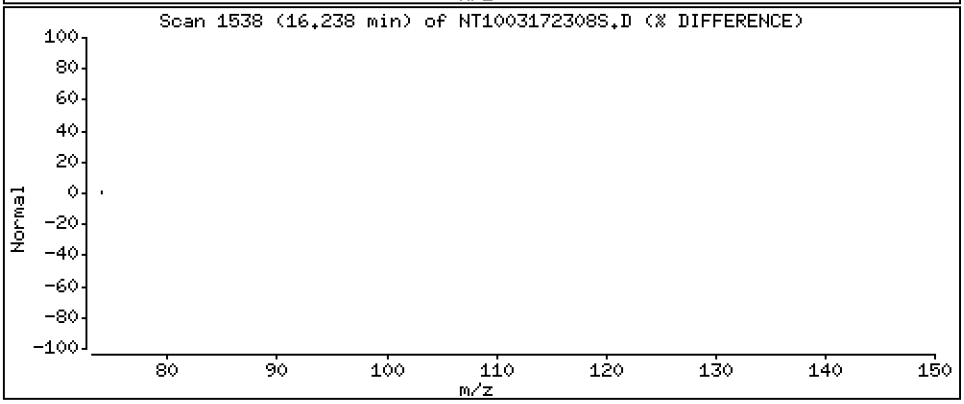












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

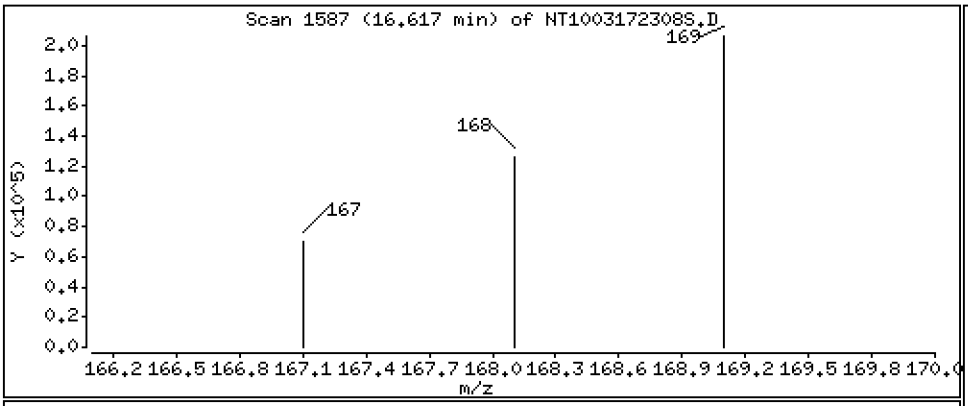
Operator: JGR

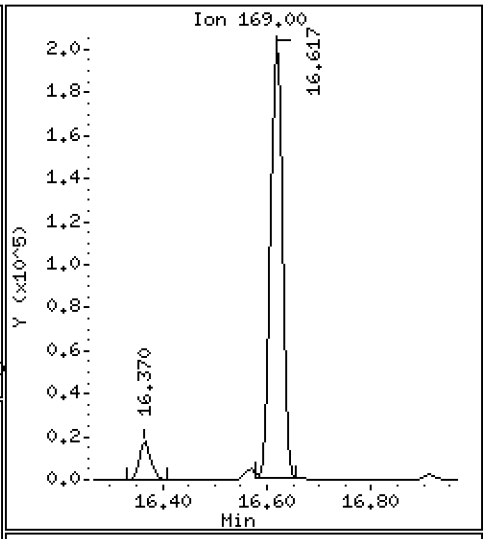
Column phase: ZB-5msi

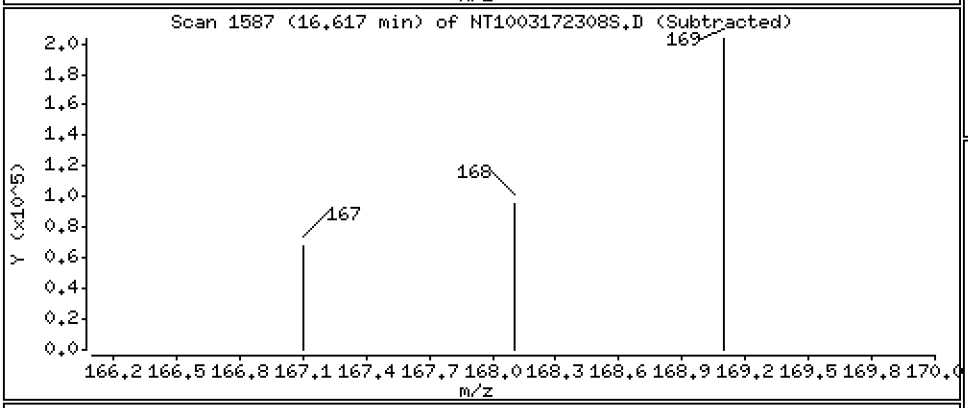
Column diameter: 0.25

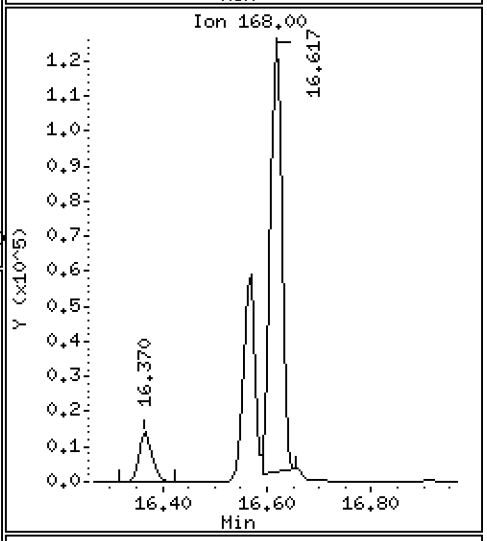
54 N-Nitrosodiphenylamine

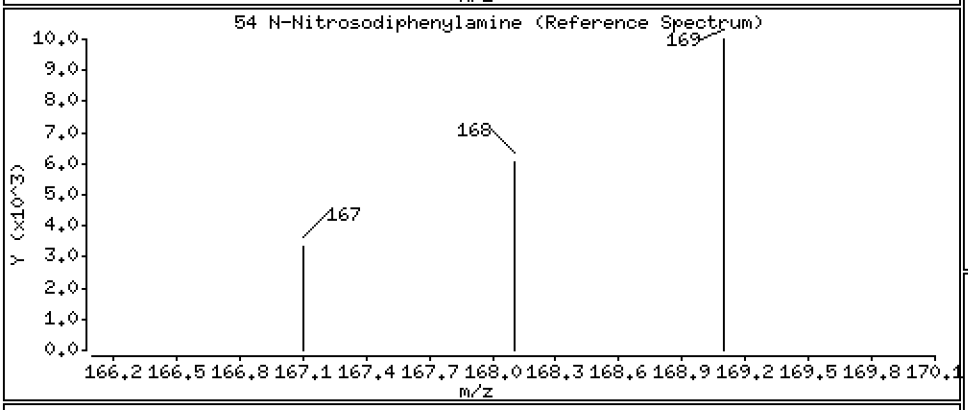
Concentration: 4.121 ug/L

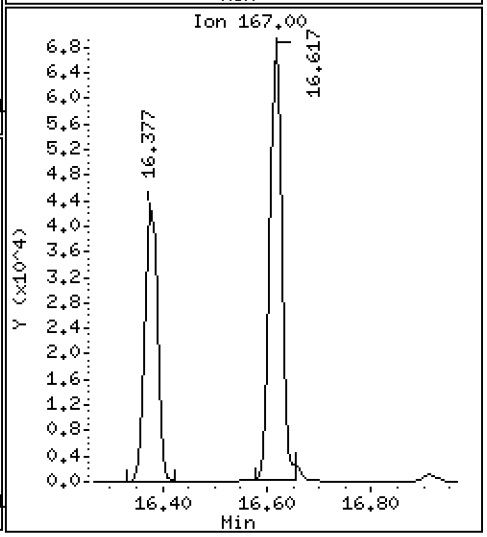


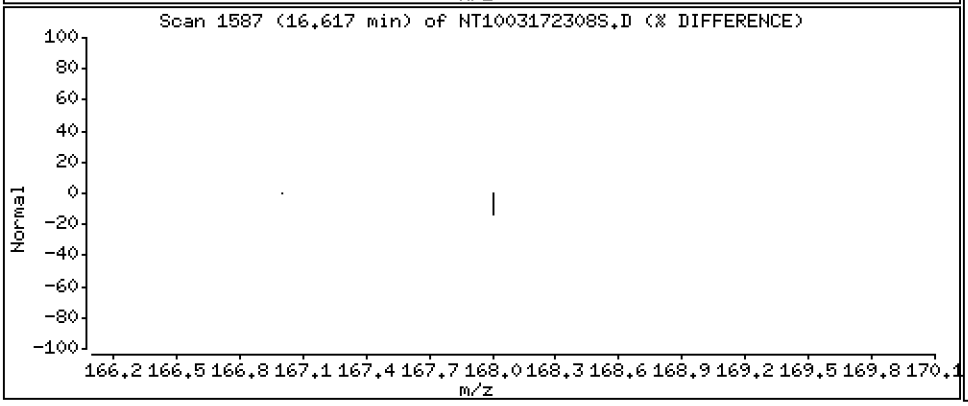












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172308S.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

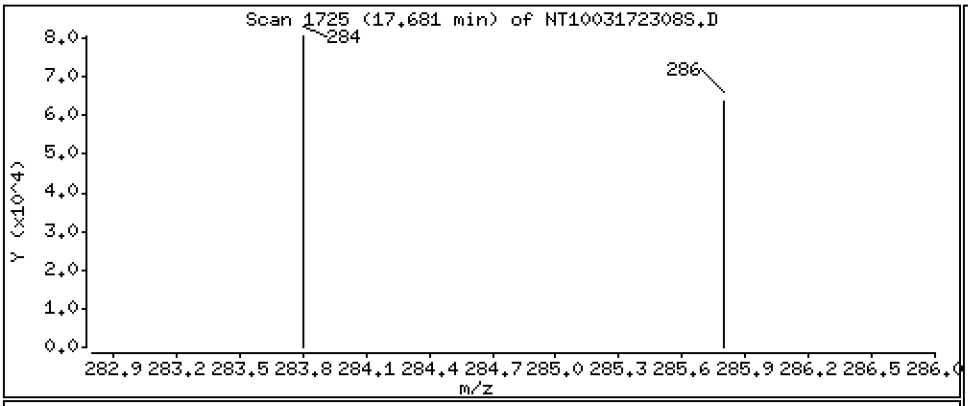
Operator: JGR

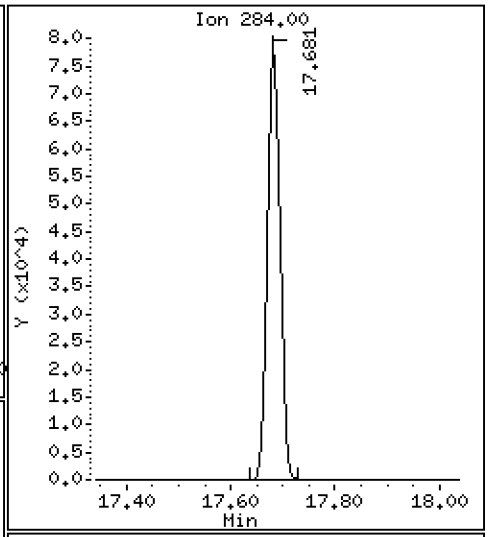
Column phase: ZB-5msi

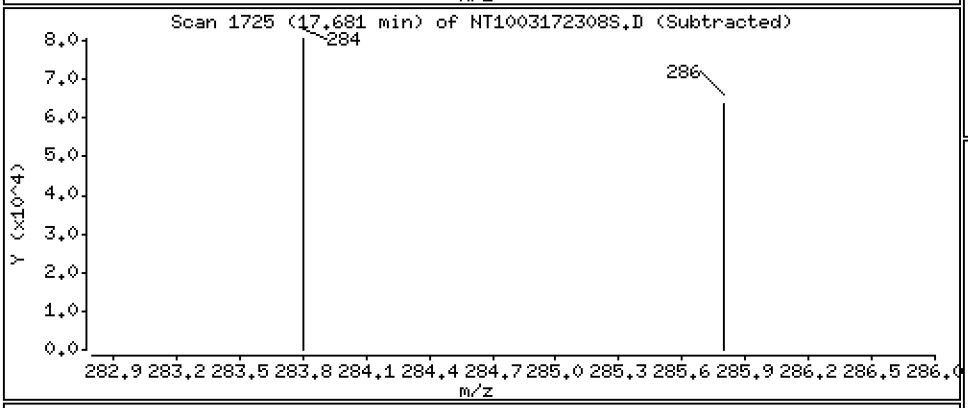
Column diameter: 0.25

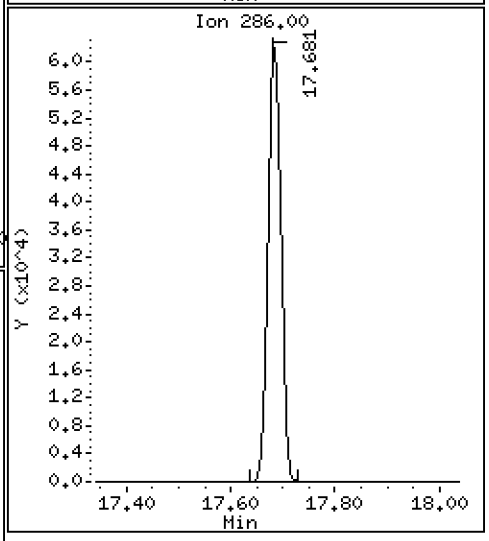
57 Hexachlorobenzene

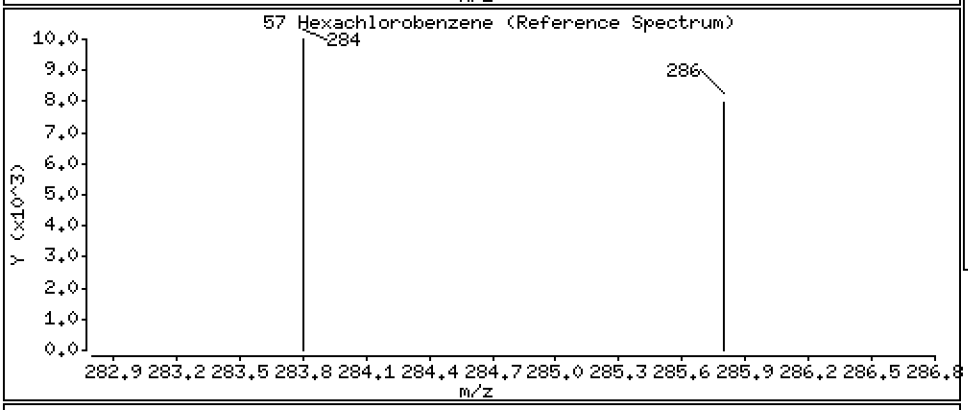
Concentration: 3.931 ug/L

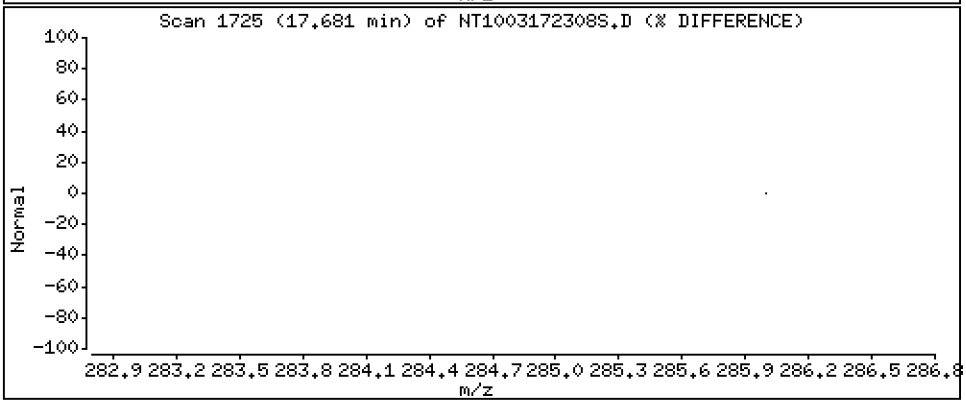












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172308S.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

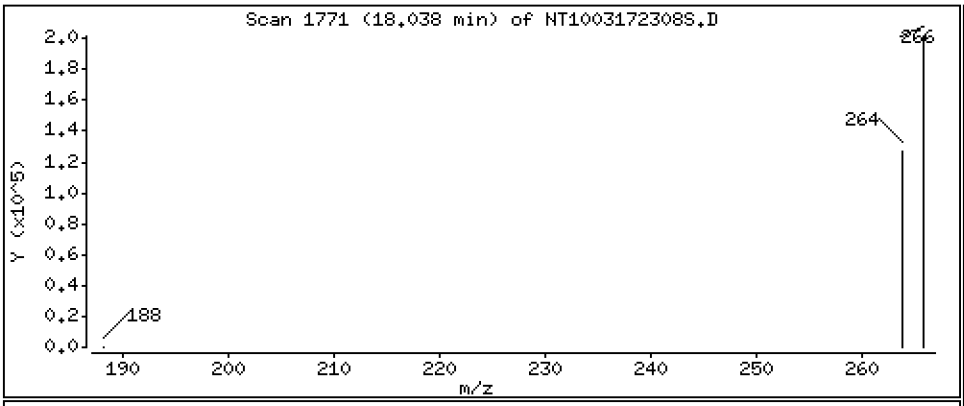
Operator: JGR

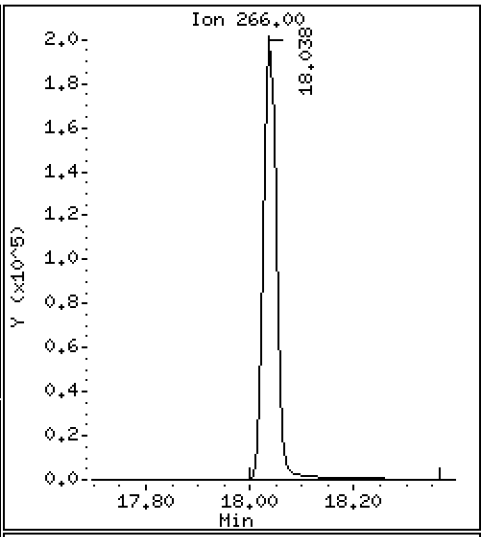
Column phase: ZB-5msi

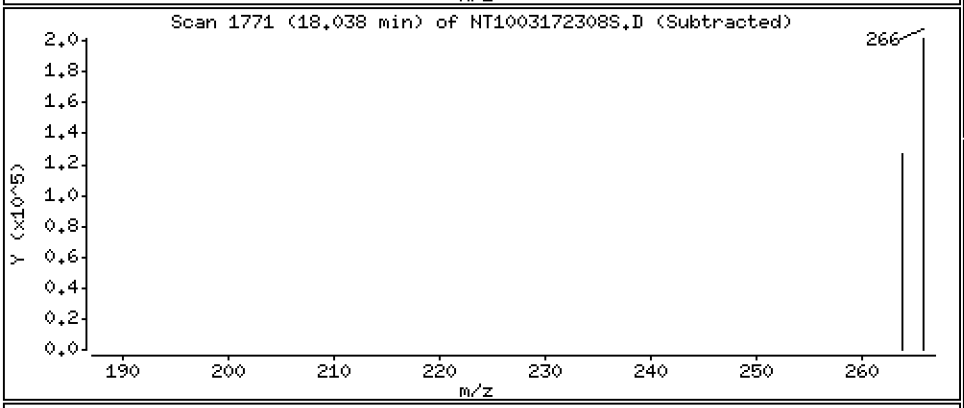
Column diameter: 0.25

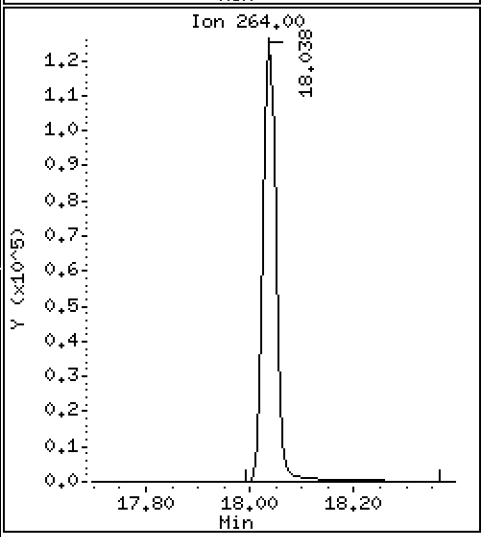
58 Pentachlorophenol

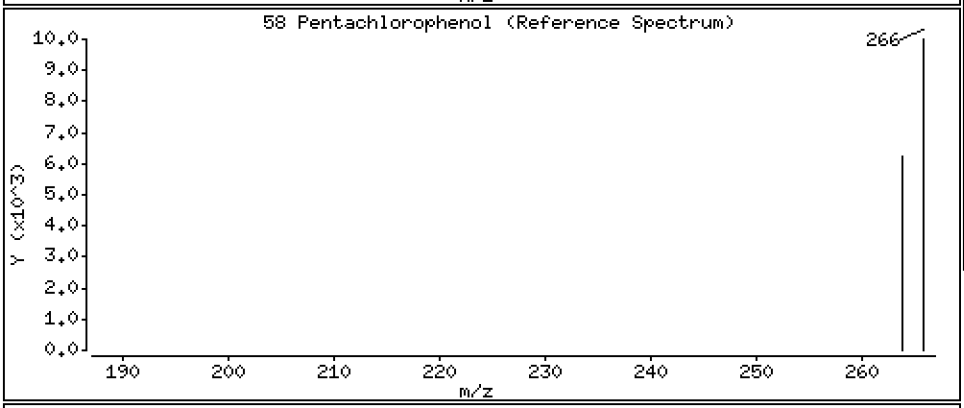
Concentration: 16.49 ug/L

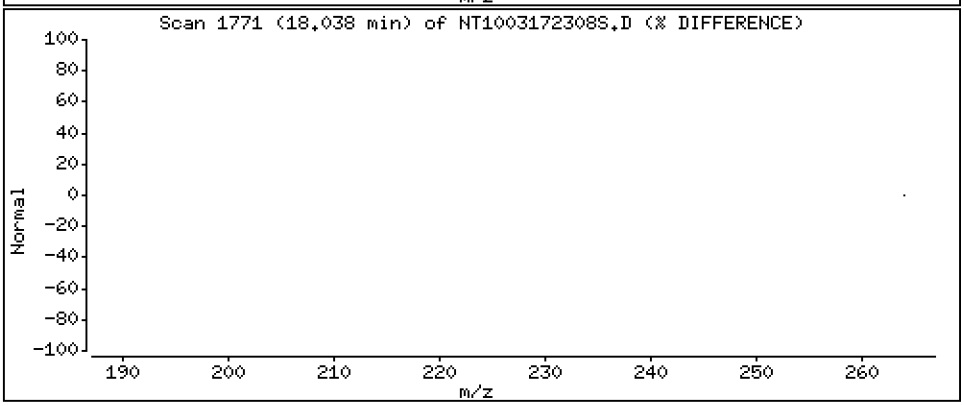












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172308S.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

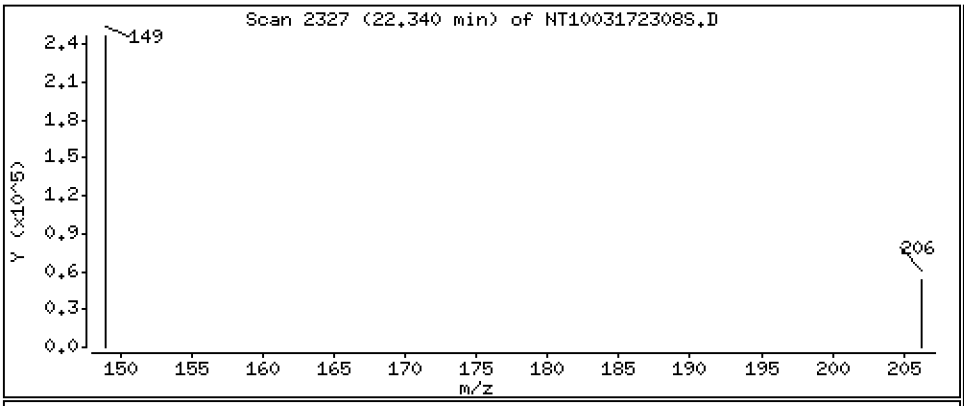
Operator: JGR

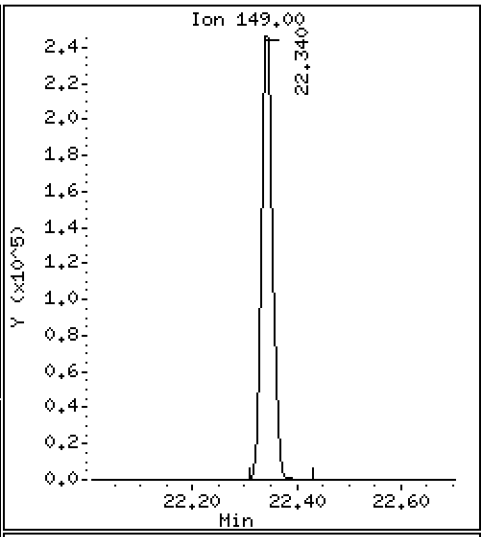
Column phase: ZB-5msi

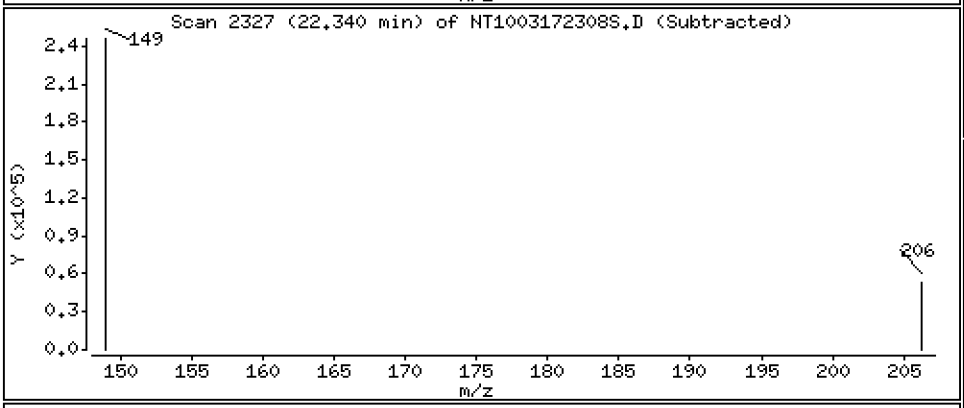
Column diameter: 0.25

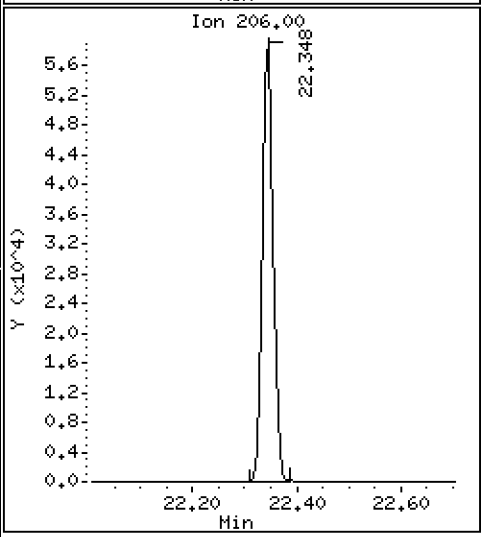
67 Butylbenzylphthalate

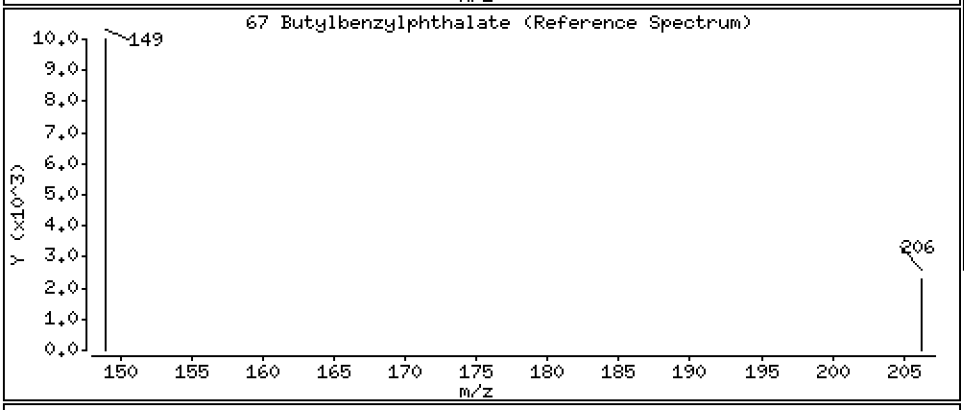
Concentration: 5.995 ug/L

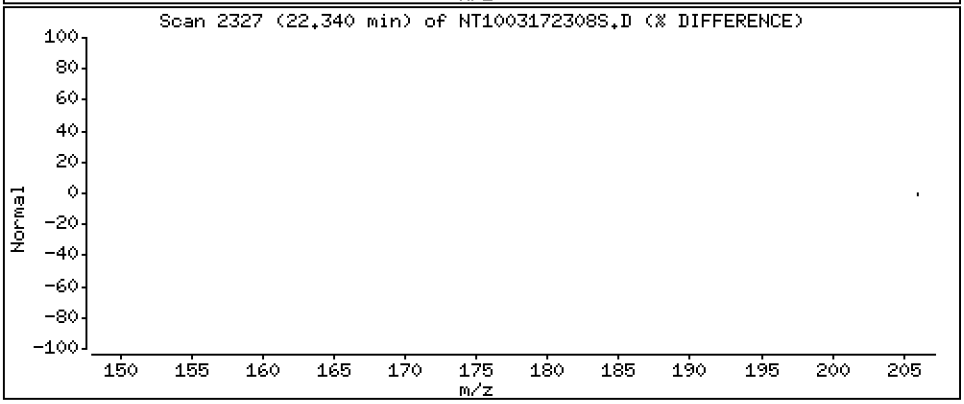












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Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

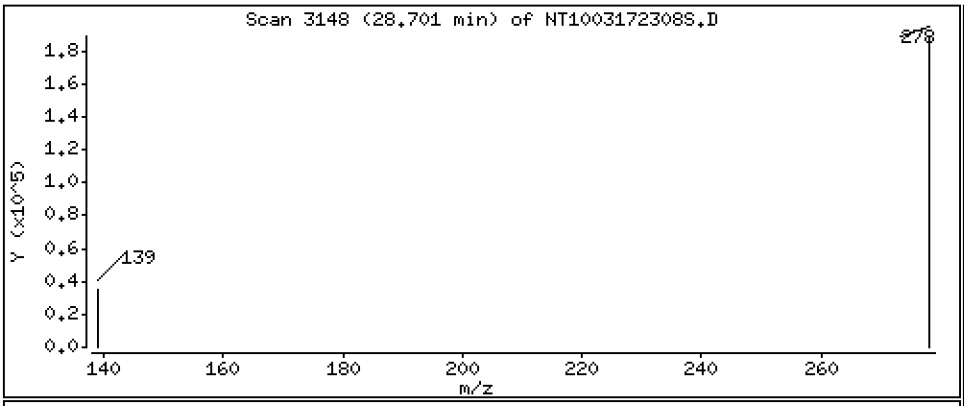
Operator: JGR

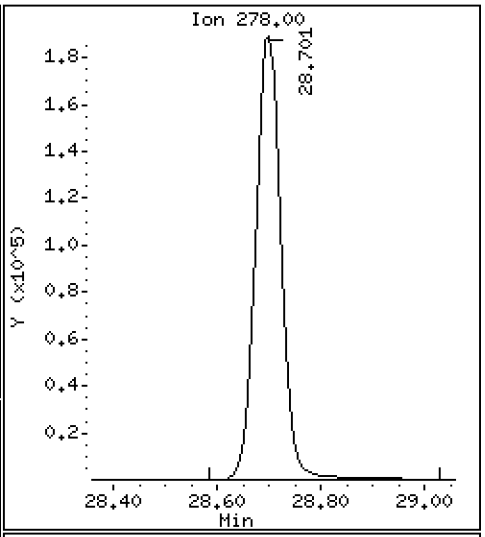
Column phase: ZB-5msi

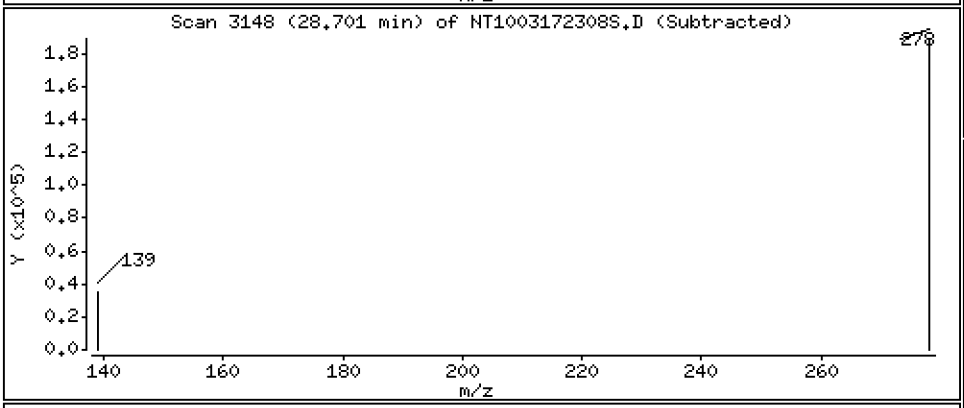
Column diameter: 0.25

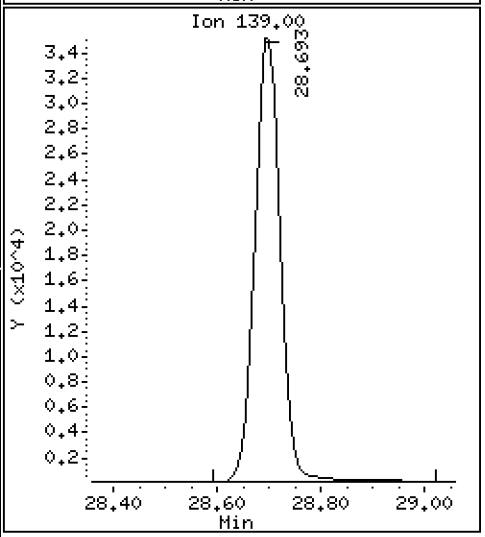
79 Dibenzo(a,h)anthracene

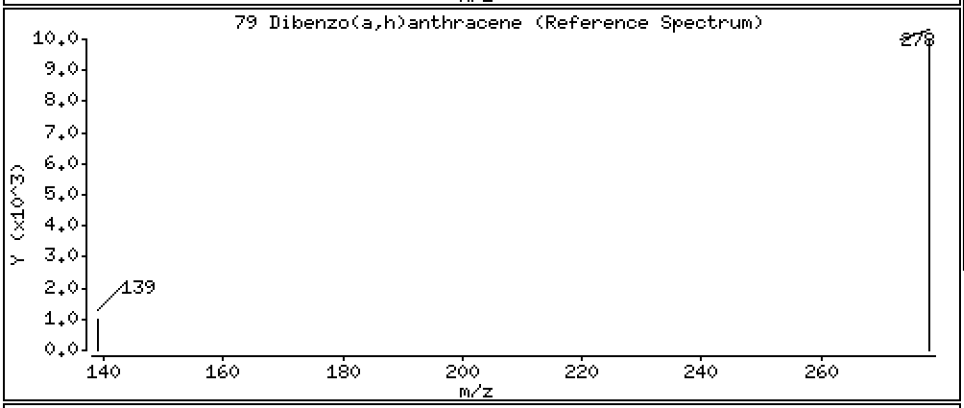
Concentration: 4.502 ug/L

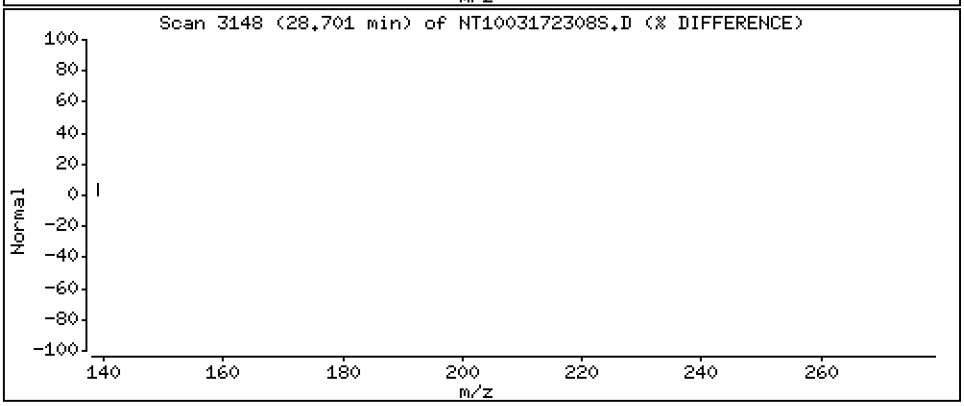












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723085.D

Date : 17-MAR-2023 22:53

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-BSD2

Volume Injected (uL): 1.0

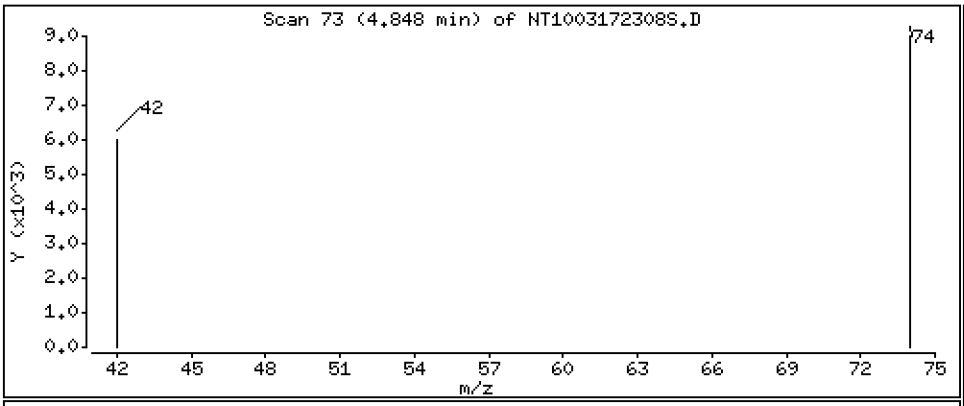
Operator: JGR

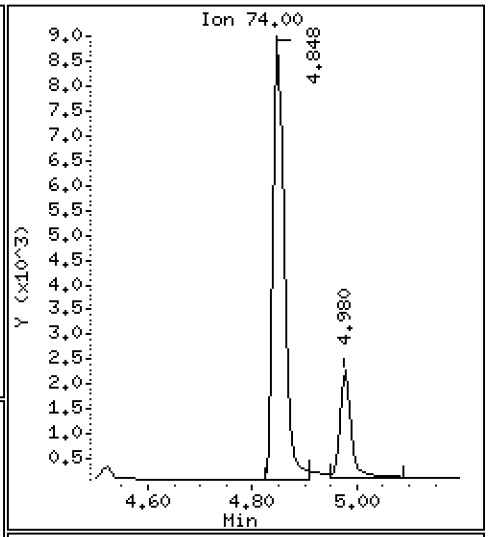
Column phase: ZB-5msi

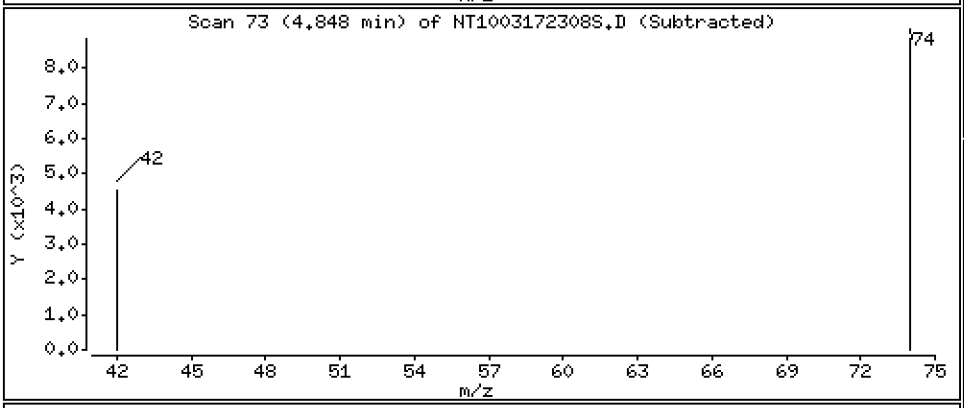
Column diameter: 0.25

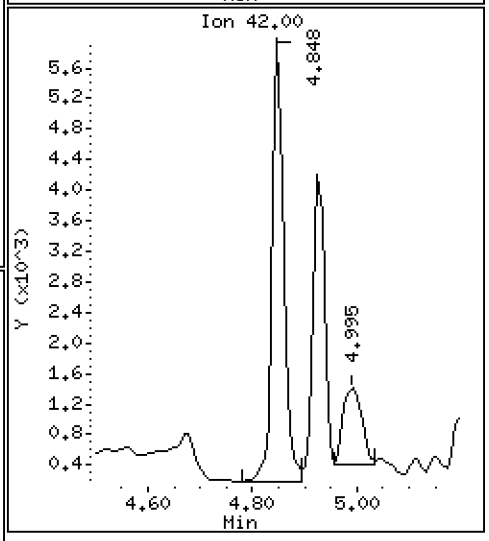
90 N-Nitrosodimethylamine

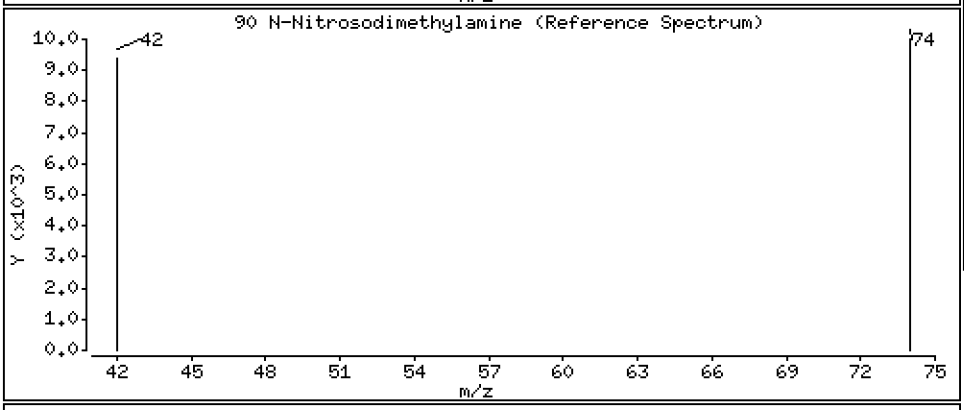
Concentration: 0.4019 ug/L

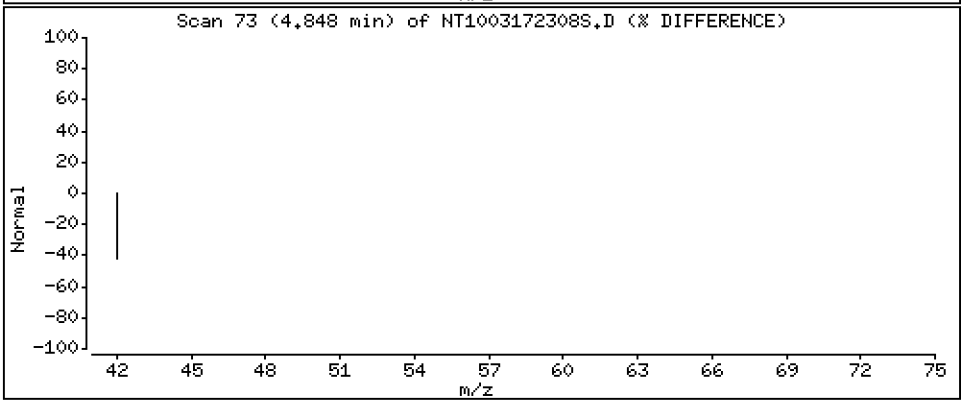












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172308S.D
Lab Smp Id: BLB0495-BSD2
Inj Date : 17-MAR-2023 22:53 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLB0495-BSD2
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Meth Date : 30-Mar-2023 14:37 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.980	6.980	(0.758)	137580	2.82722	2.827(R)
3	Phenol	94	8.572	8.572	(0.931)	152582	2.28546	2.285
7	1,3-Dichlorobenzene	146	9.136	9.136	(0.992)	214189	3.42858	3.429
* 8	1,4-Dichlorobenzene-d4	152	9.206	9.206	(1.000)	160473	4.00000	
9	1,4-Dichlorobenzene	146	9.237	9.229	(1.003)	214682	3.55990	3.560
11	Benzyl alcohol	79	9.462	9.462	(1.028)	153355	3.96220	3.962
12	1,2-Dichlorobenzene	146	9.586	9.586	(1.041)	209591	3.53398	3.534
13	2-Methylphenol	108	9.679	9.679	(1.051)	128522	2.77824	2.778
15	4-Methylphenol	108	9.951	9.951	(1.081)	157482	3.27611	3.276
16	N-Nitroso-di-n-propylamine	70	10.021	10.021	(1.089)	147768	4.34673	4.347
22	2,4-Dimethylphenol	107	10.994	10.985	(0.942)	294850	5.83822	5.838
24	Benzoic acid	105	11.138	11.096	(0.954)	262404	9.15498	9.155
26	1,2,4-Trichlorobenzene	180	11.589	11.589	(0.993)	183737	3.61651	3.617
* 27	Naphthalene-d8	136	11.674	11.674	(1.000)	584277	4.00000	
30	Hexachlorobutadiene	225	12.075	12.075	(1.034)	115705	3.74592	3.746
39	Dimethylphthalate	163	14.784	14.784	(0.968)	452782	4.97247	4.972
* 42	Acenaphthene-d10	162	15.279	15.279	(1.000)	288550	4.00000	
50	Diethylphthalate	149	16.238	16.230	(1.063)	548354	5.81303	5.813
54	N-Nitrosodiphenylamine	169	16.616	16.616	(0.908)	302007	4.12103	4.121
57	Hexachlorobenzene	284	17.681	17.689	(0.966)	128951	3.93068	3.931

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.037	18.045	(0.985)	333572	16.4925	16.49
*	59 Phenanthrene-d10	188	18.308	18.308	(1.000)	546213	4.00000	
$	66 Terphenyl-d14	244	21.426	21.434	(0.919)	329808	4.67360	4.674(R)
	67 Butylbenzylphthalate	149	22.340	22.355	(0.958)	366870	5.99527	5.995
*	69 Chrysene-d12	240	23.323	23.331	(1.000)	433105	4.00000	
*	77 Perylene-d12	264	25.971	25.986	(1.000)	443685	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.701	28.708	(1.105)	638934	4.50211	4.502
	90 N-Nitrosodimethylamine	74	4.848	4.848	(0.527)	12403	0.40186	0.4019

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172308S.D
Lab Smp Id: BLB0495-BSD2
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	184039	92020	368078	160473	-12.80
27 Naphthalene-d8	659935	329968	1319870	584277	-11.46
42 Acenaphthene-d10	325775	162888	651550	288550	-11.43
59 Phenanthrene-d10	616249	308125	1232498	546213	-11.36
69 Chrysene-d12	526222	263111	1052444	433105	-17.70
77 Perylene-d12	563117	281559	1126234	443685	-21.21

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.21	8.71	9.71	9.21	-0.00
27 Naphthalene-d8	11.67	11.17	12.17	11.67	-0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	-0.00
59 Phenanthrene-d10	18.31	17.81	18.81	18.31	-0.00
69 Chrysene-d12	23.33	22.83	23.83	23.32	-0.03
77 Perylene-d12	25.99	25.49	26.49	25.97	-0.06

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

REVIEW SUMMARY FOR FILE - NT1003172308S.D

Lab ID: BLB0495-BSD2
nt10.i, 20230317.b\20230317.b\SIMABN2.m,   17-MAR-2023 22:53

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: 20230317.b/NT1003172303S.D

On Column LOD for nt10.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1004

MS / MS DUPLICATE RECOVERY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/18/23 02:03
Batch:	BLB0495	Laboratory ID:	BLB0495-MS2
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike
Initial/Final:	16.7 g / 1 mL	Source Sample:	LDW23-SC1004

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	Q	MS CONCENTRATION (ug/kg dry)	Q	MS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	500	2.7	J	287		56.9	36 - 120
1,2-Dichlorobenzene	500	1.6	J	287		57.1	36 - 120
Benzyl Alcohol	500	23.3		342		63.7	25 - 123
Benzoic acid	2300	48.4	J	1530	Q	64.2	10 - 160
2,4-Dimethylphenol	1300	2.3	J	726		55.7	10 - 120
1,2,4-Trichlorobenzene	500	ND	U	325		64.9	35 - 120
N-Nitrosodiphenylamine	500	ND	U	414		82.9	27 - 120
Pentachlorophenol	1300	2.4	J	1640	*, Q	126 *	26 - 120

* Values outside of QC limits

MS / MS DUPLICATE RECOVERY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/18/23 02:41
Batch:	BLB0495	Laboratory ID:	BLB0495-MSD2
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike Dup
Initial/Final:	16.7 g / 1 mL	Source Sample:	LDW23-SC1004

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	500	294		58.3	2.27	30	36 - 120
1,2-Dichlorobenzene	500	293		58.3	2.01	30	36 - 120
Benzyl Alcohol	500	349		65.1	1.94	30	25 - 123
Benzoic acid	2300	1340	Q	56.0	13.3	30	10 - 160
2,4-Dimethylphenol	1300	696		53.3	4.30	30	10 - 120
1,2,4-Trichlorobenzene	500	339		67.9	4.42	30	35 - 120
N-Nitrosodiphenylamine	500	440		88.1	6.04	30	27 - 120
Pentachlorophenol	1300	1650	*, Q	127 *	1.08	30	26 - 120

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723135.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

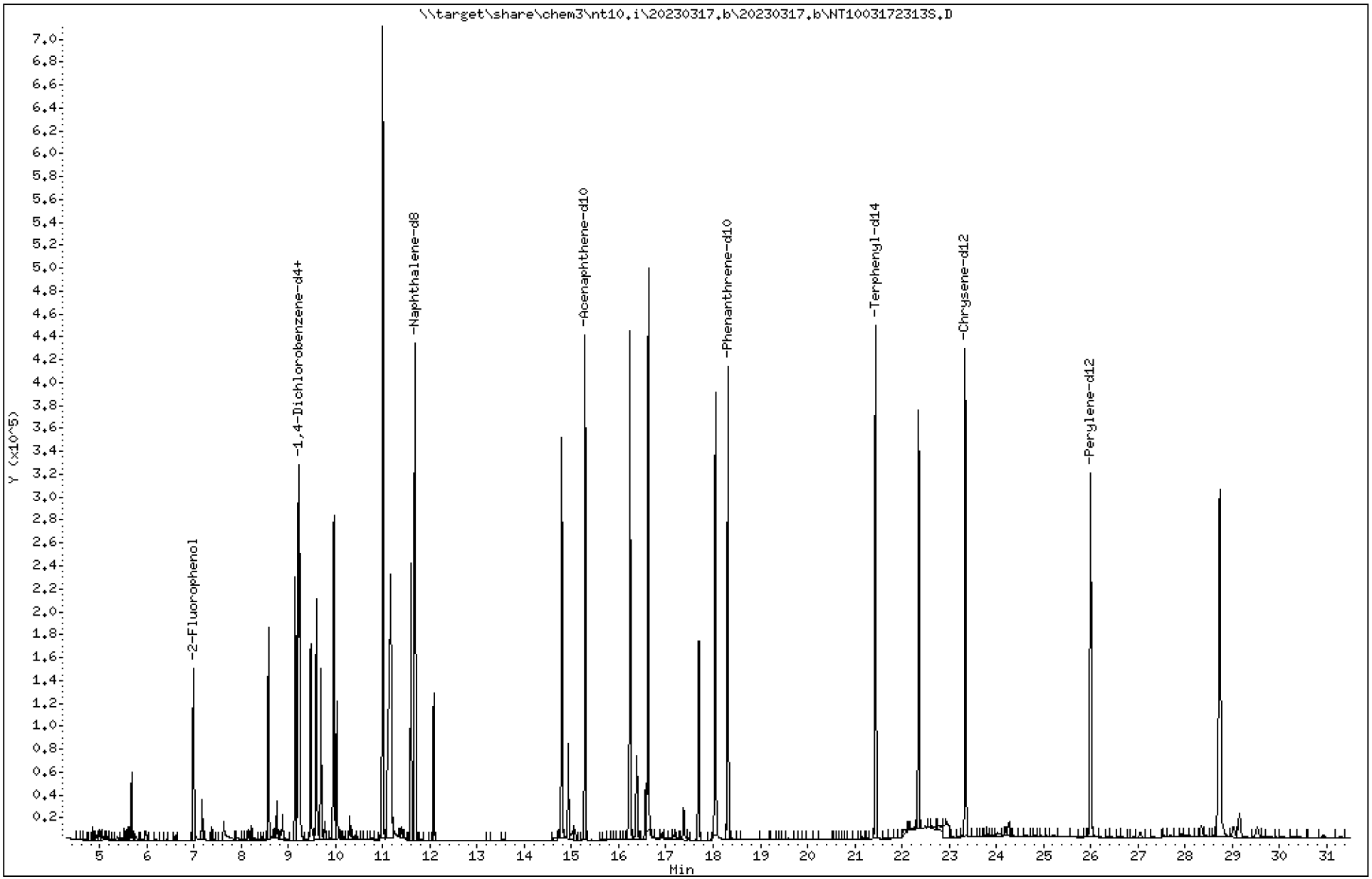
Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172313S.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

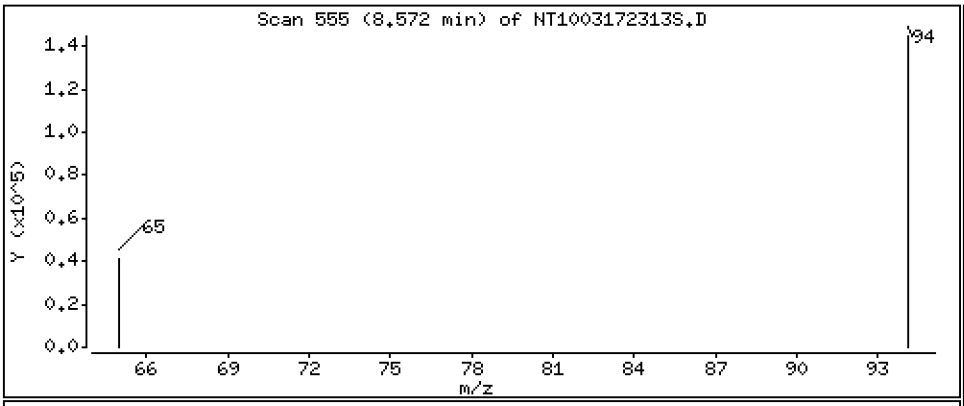
Operator: JGR

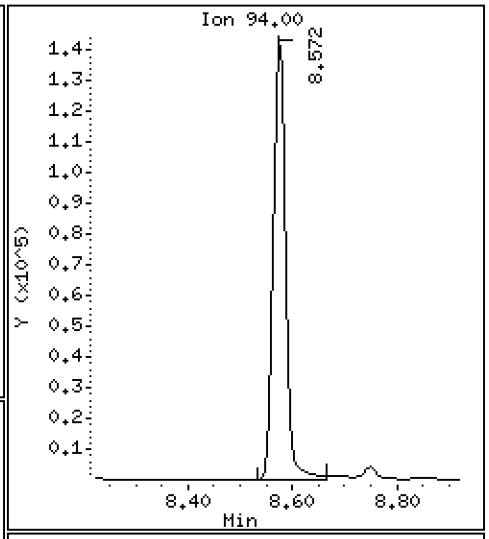
Column phase: ZB-5msi

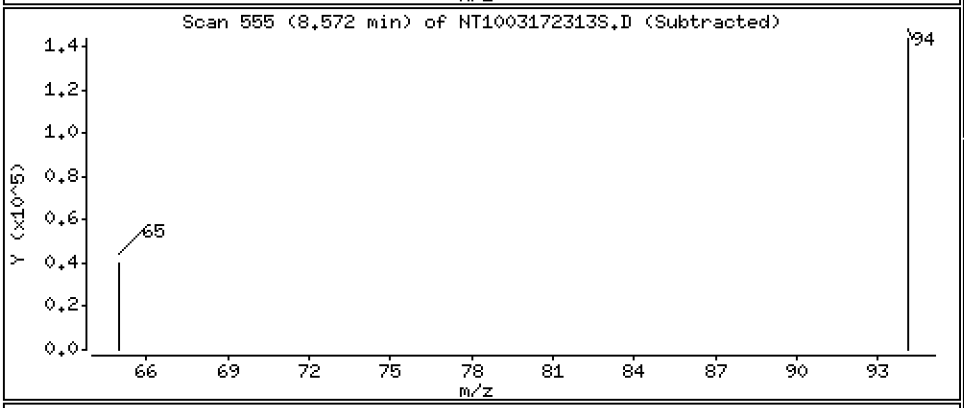
Column diameter: 0.25

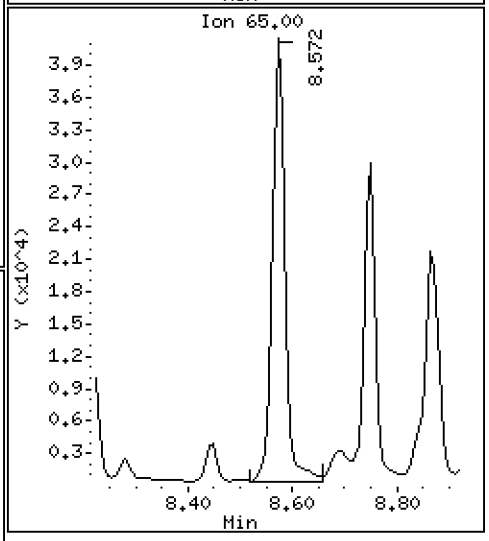
3 Phenol

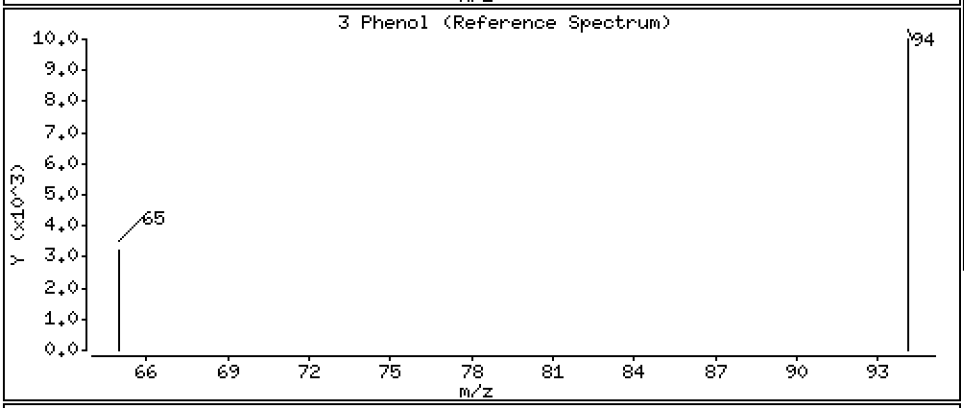
Concentration: 2.748 ug/L

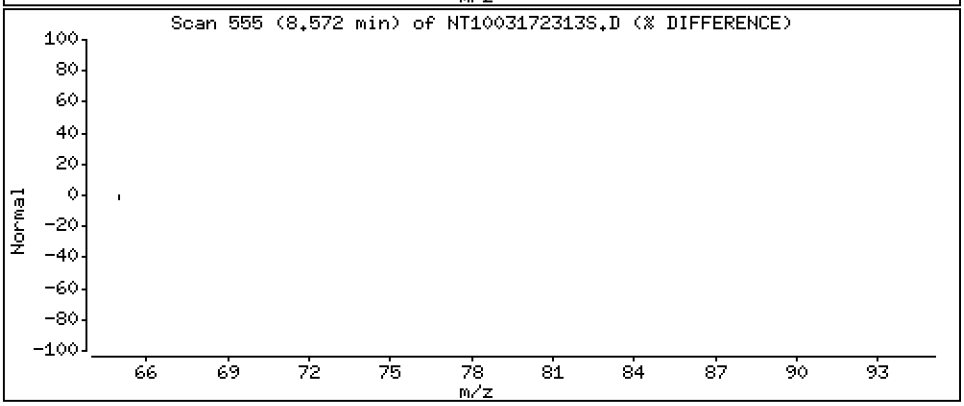












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

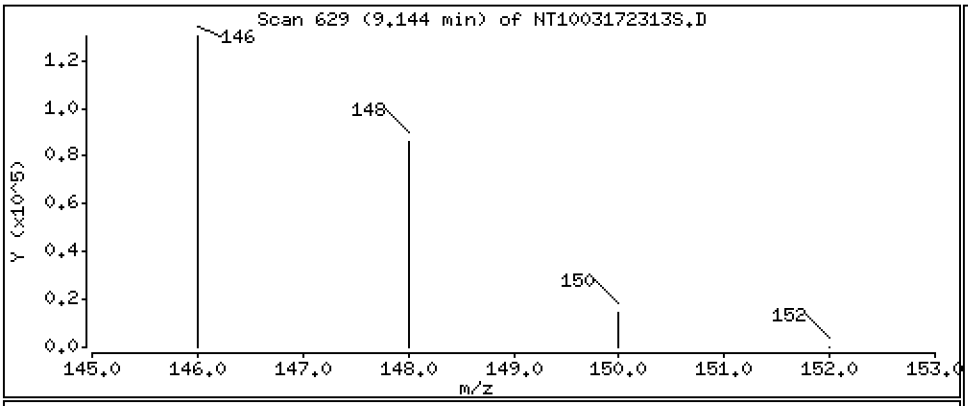
Operator: JGR

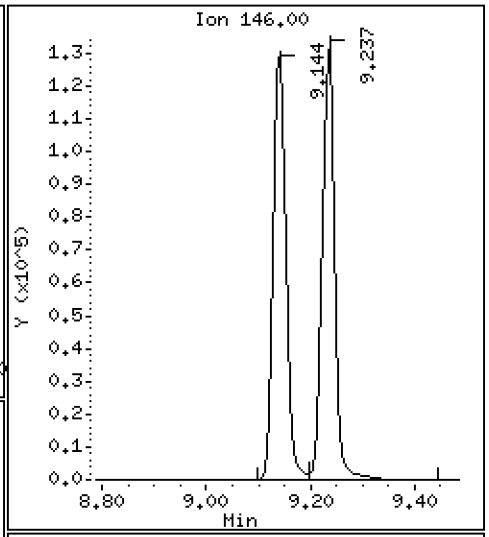
Column phase: ZB-5msi

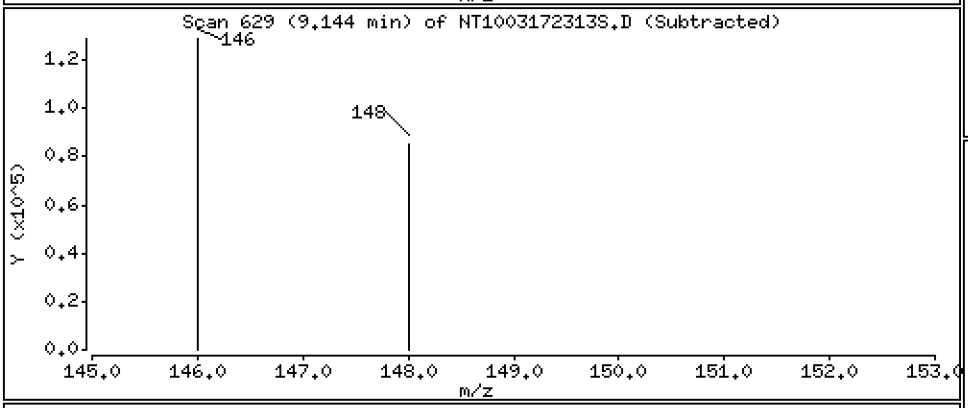
Column diameter: 0.25

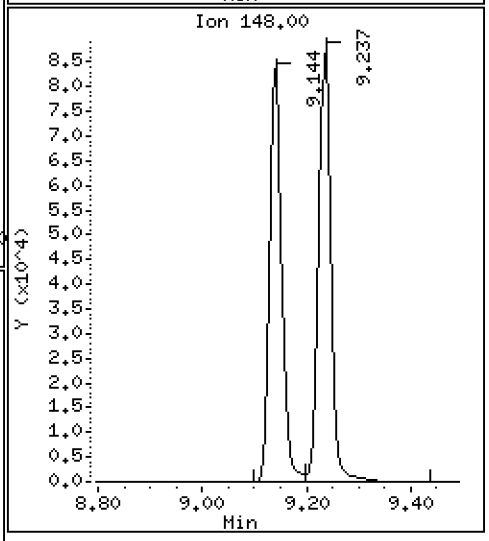
7 1,3-Dichlorobenzene

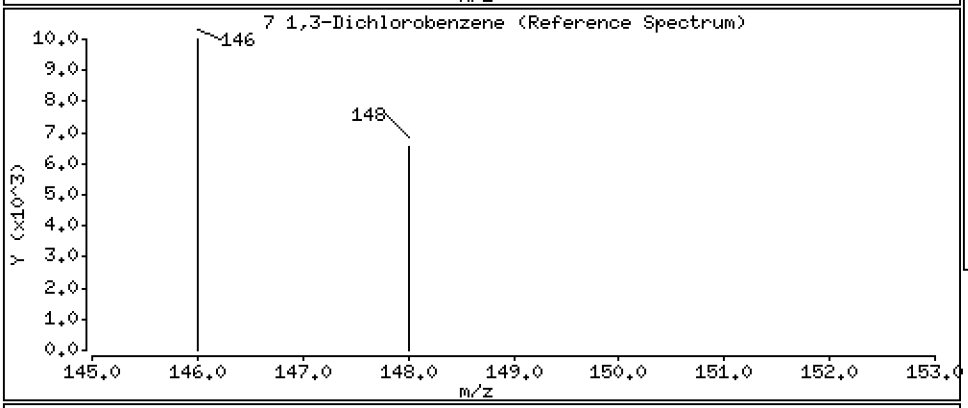
Concentration: 2.790 ug/L

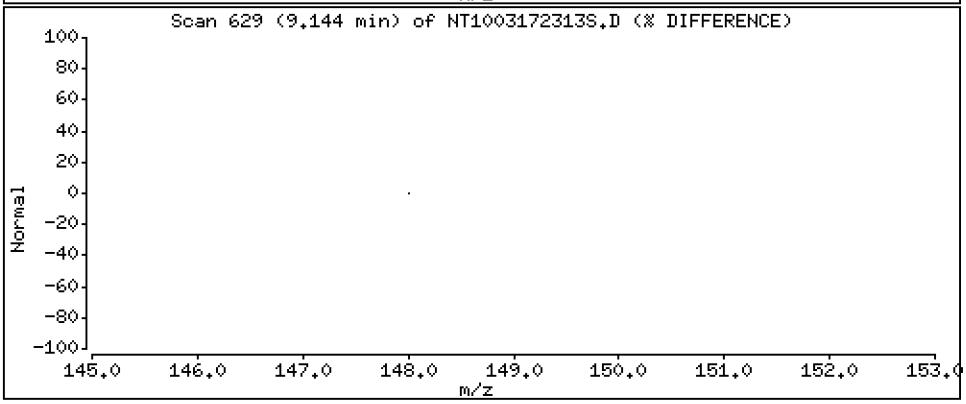












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

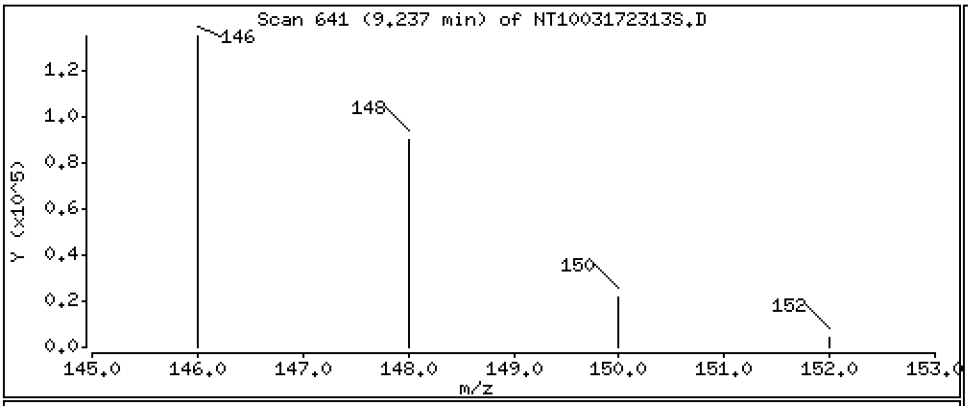
Operator: JGR

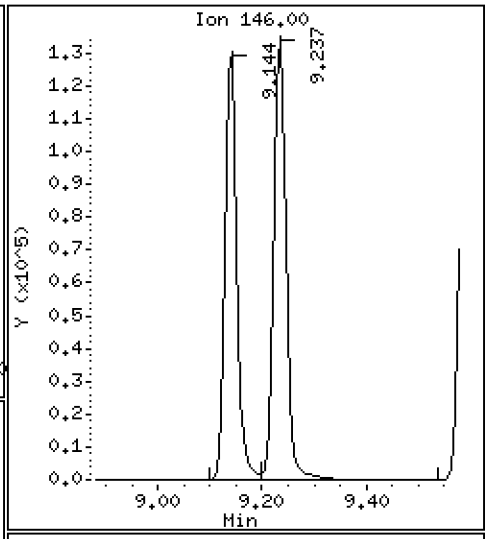
Column phase: ZB-5msi

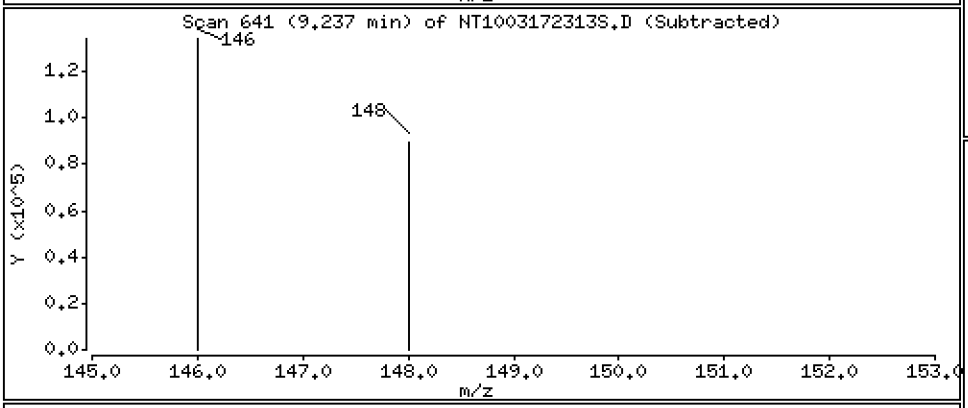
Column diameter: 0.25

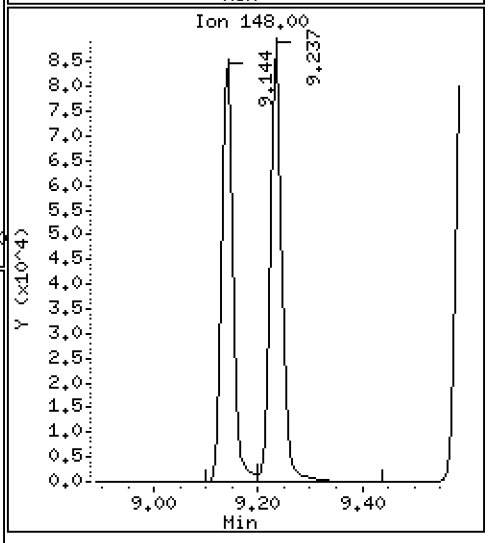
9 1,4-Dichlorobenzene

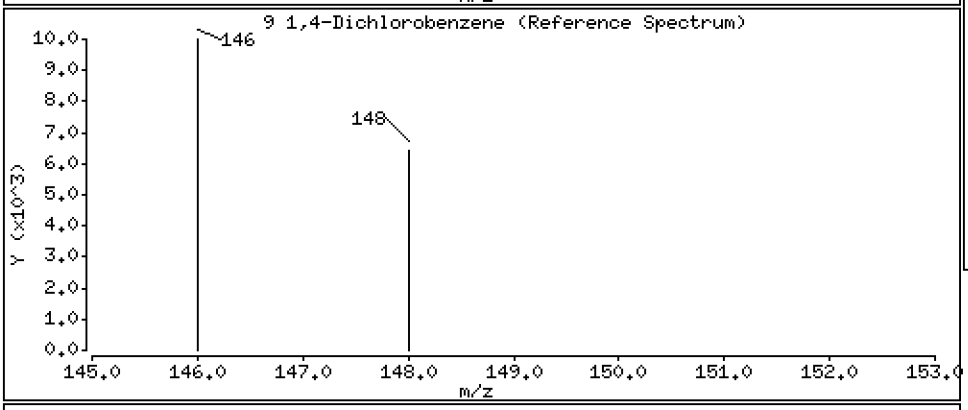
Concentration: 2.874 ug/L

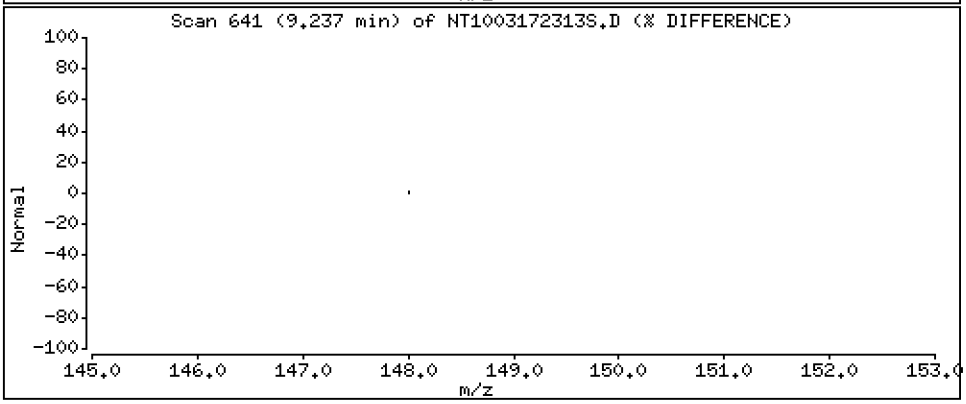












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172313S.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

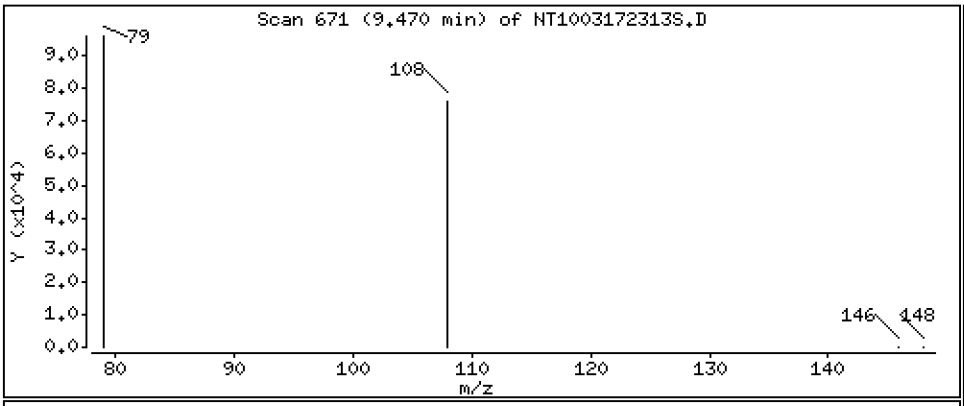
Operator: JGR

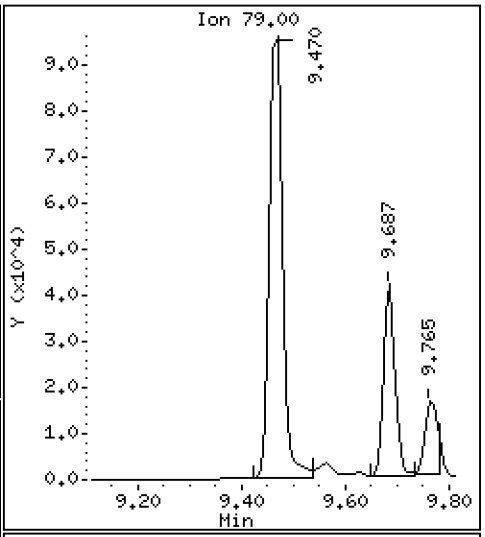
Column phase: ZB-5msi

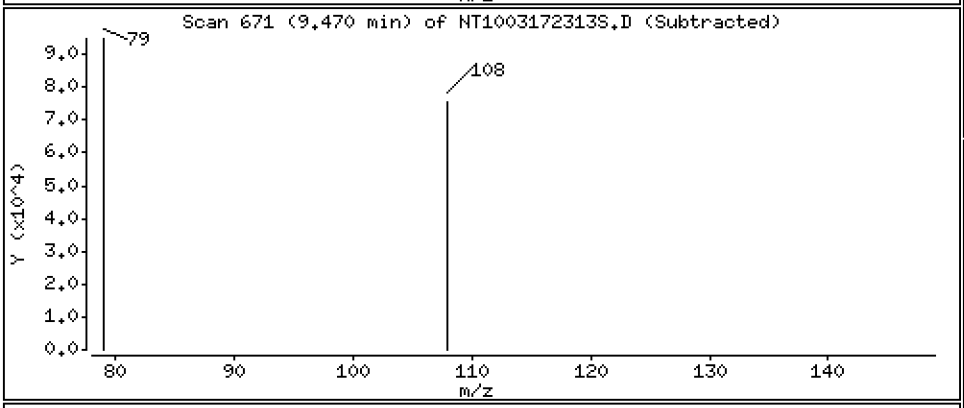
Column diameter: 0.25

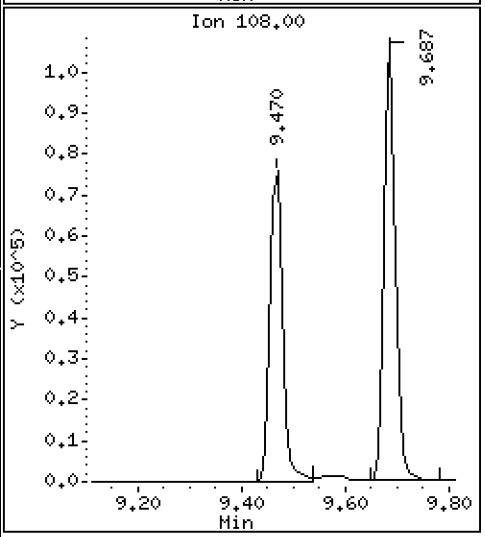
11 Benzyl alcohol

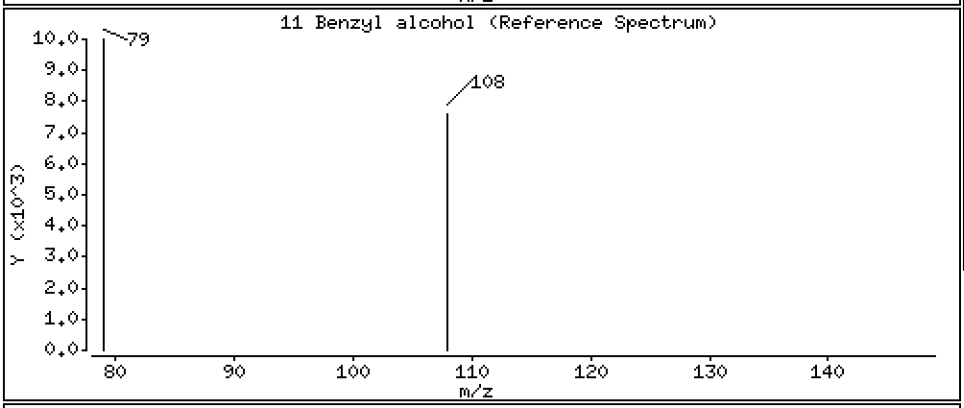
Concentration: 3.420 ug/L

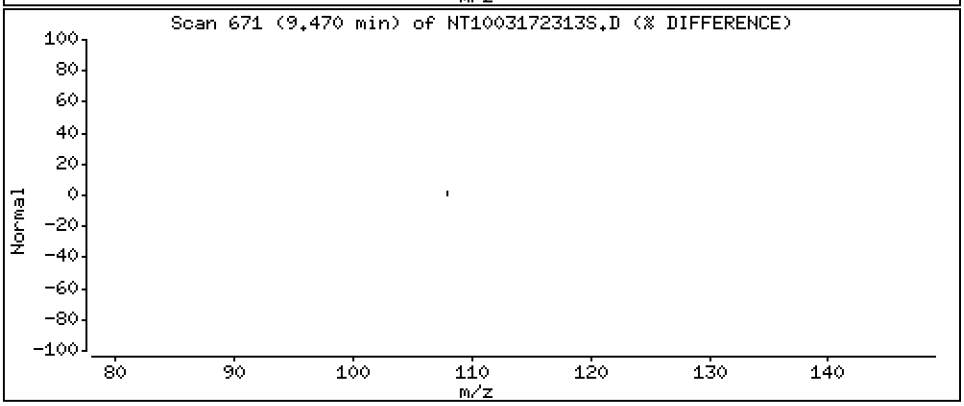












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172313S.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

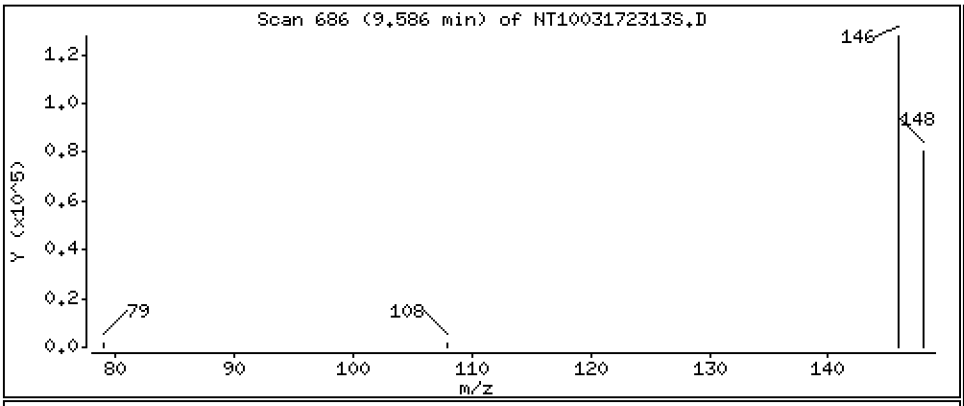
Operator: JGR

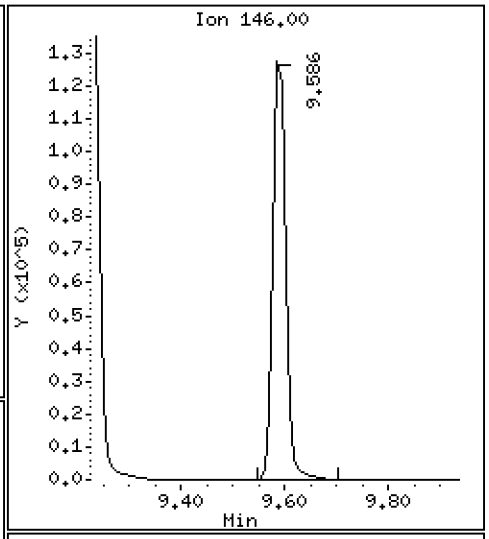
Column phase: ZB-5msi

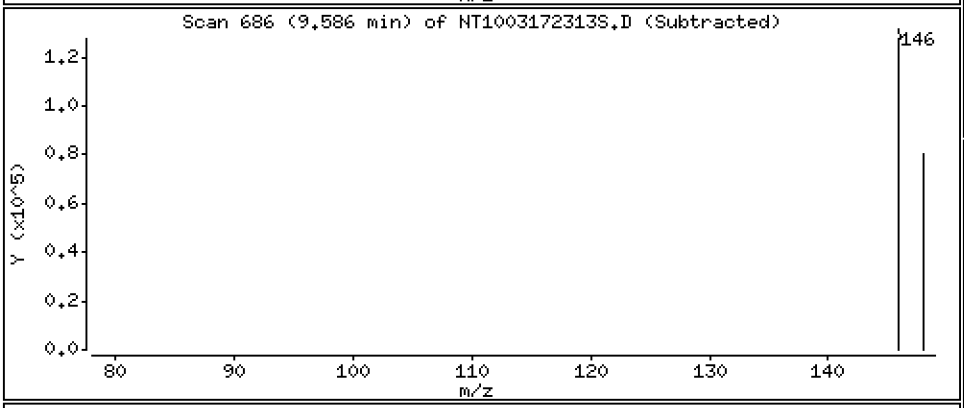
Column diameter: 0.25

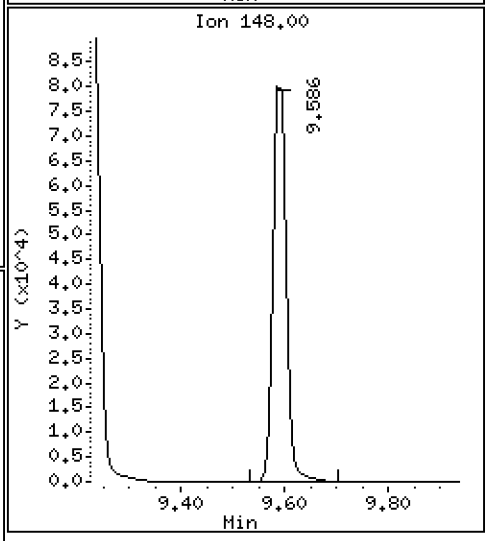
12 1,2-Dichlorobenzene

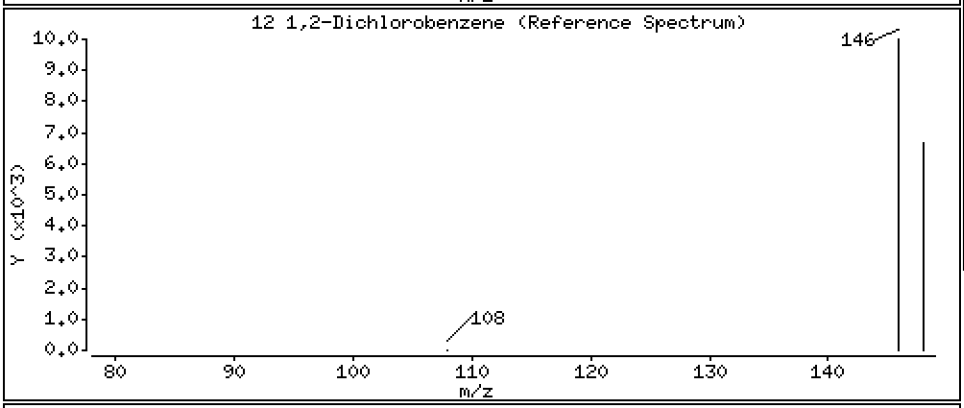
Concentration: 2.872 ug/L

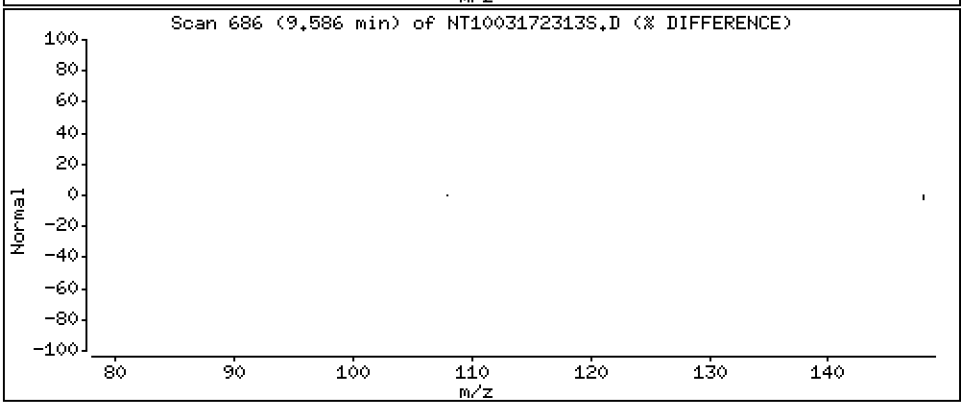












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172313S.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

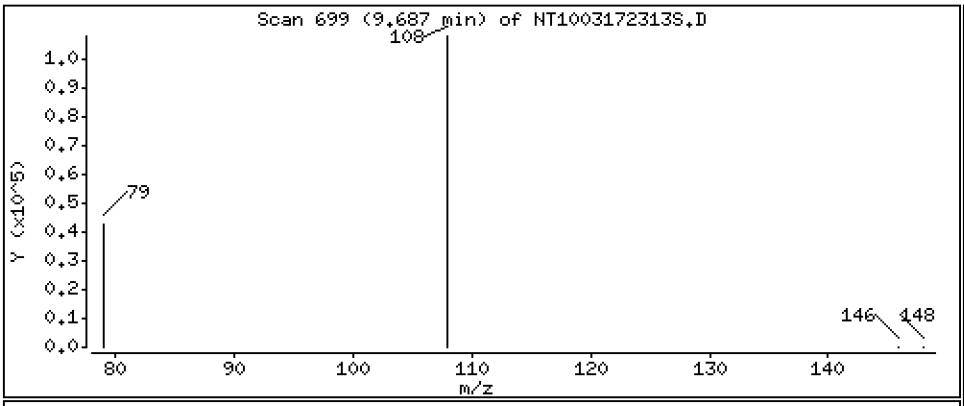
Operator: JGR

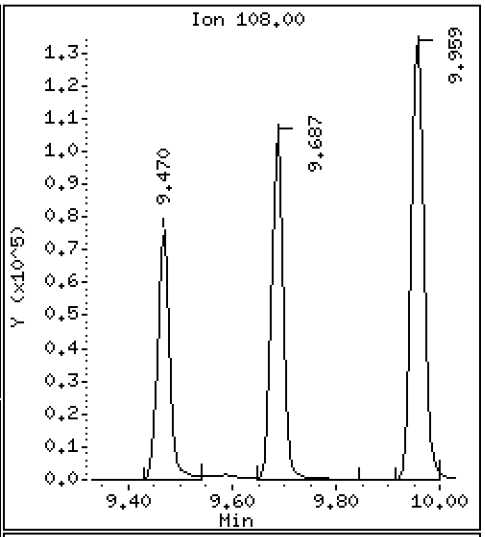
Column phase: ZB-5msi

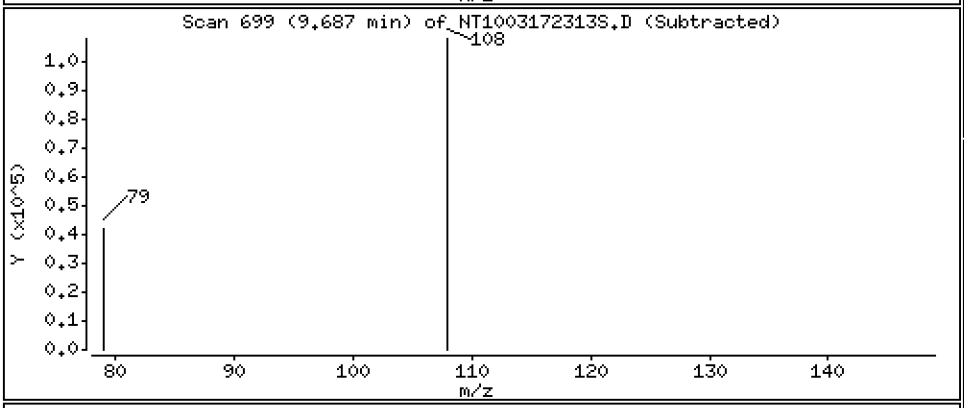
Column diameter: 0.25

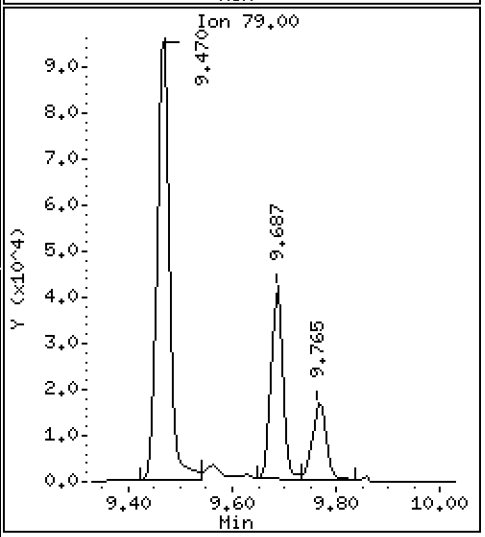
13 2-Methylphenol

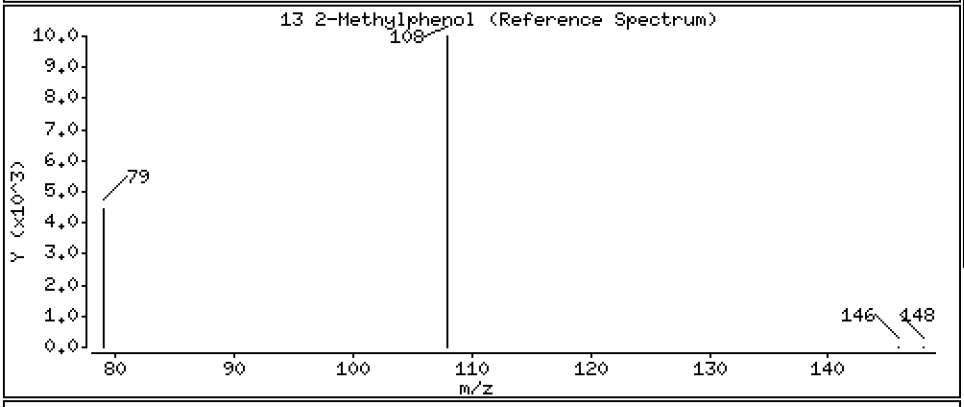
Concentration: 2.844 ug/L

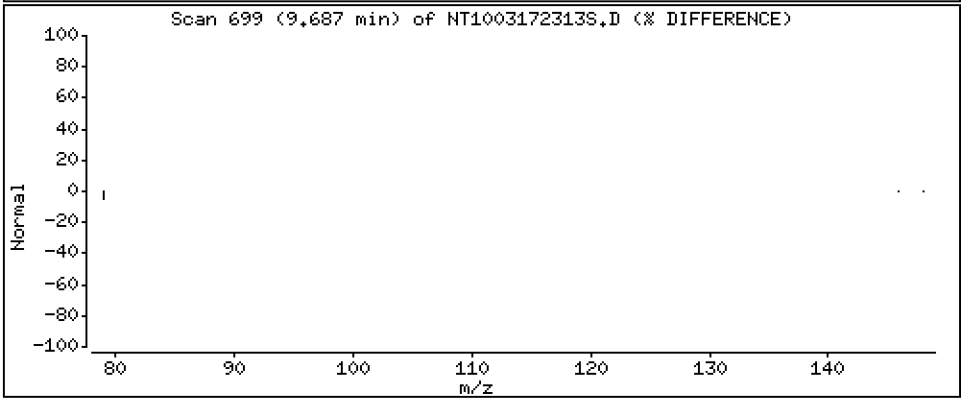












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172313S.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

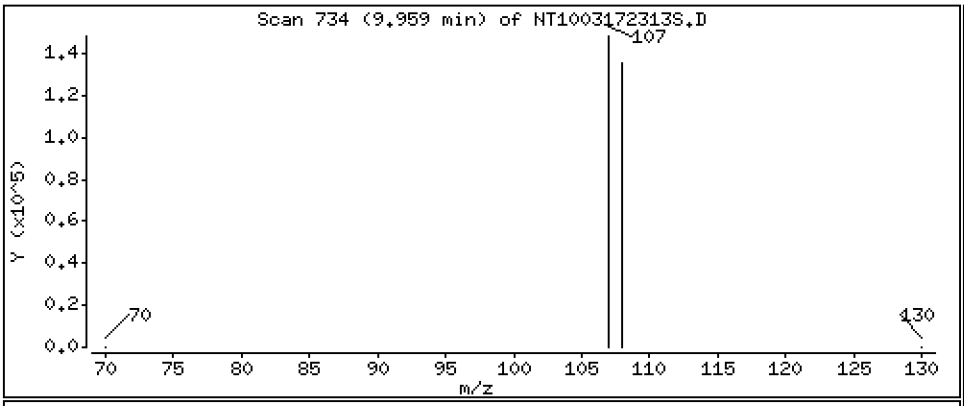
Operator: JGR

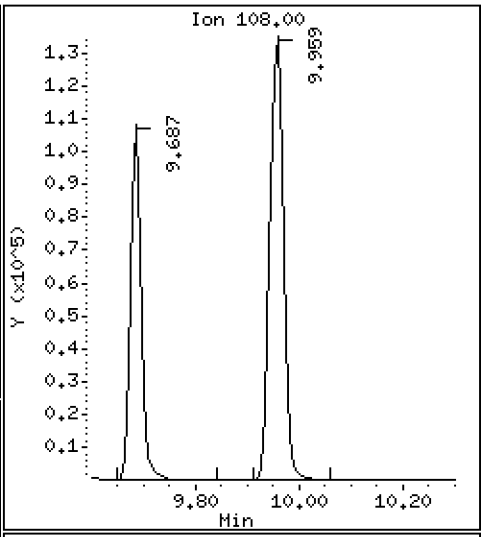
Column phase: ZB-5msi

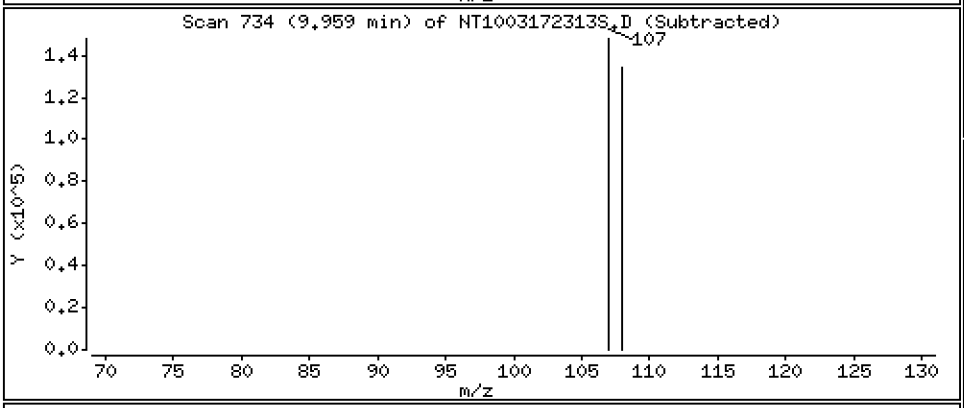
Column diameter: 0.25

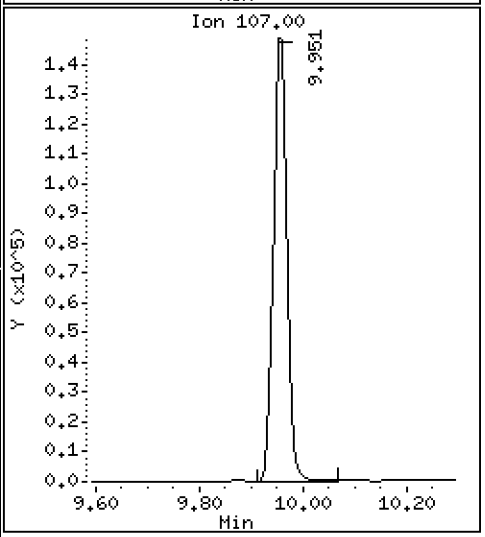
15 4-Methylphenol

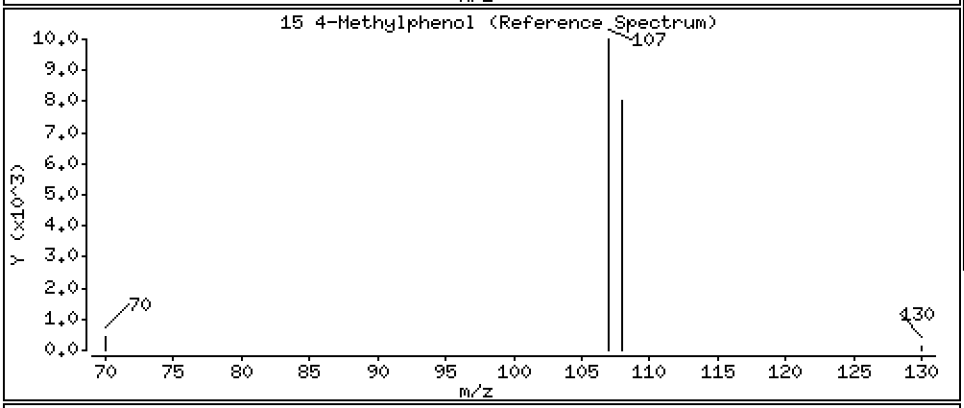
Concentration: 4.095 ug/L

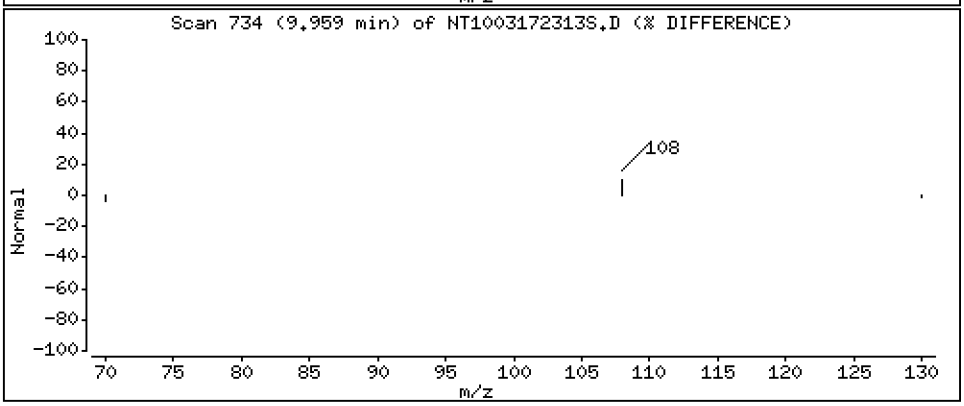












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

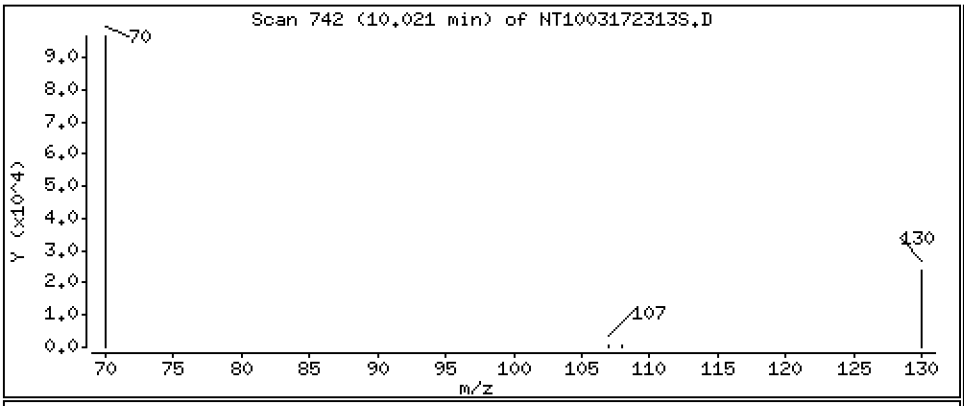
Operator: JGR

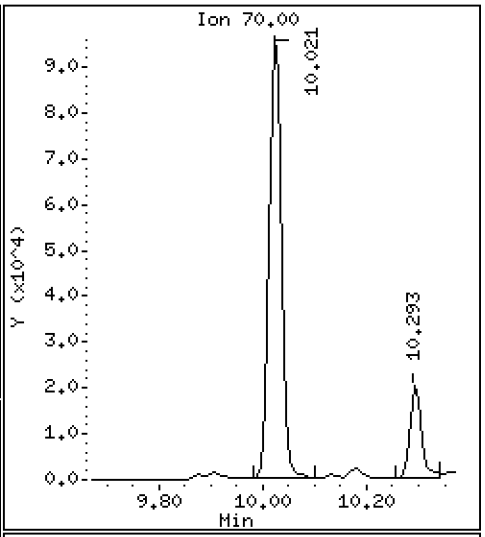
Column phase: ZB-5msi

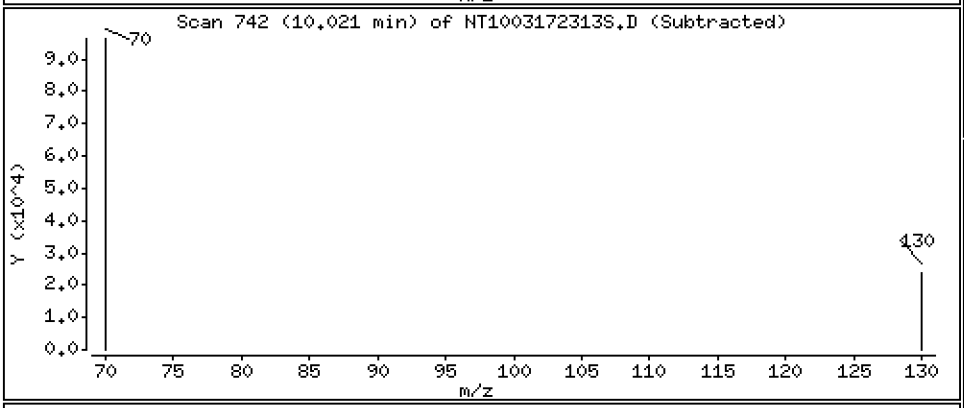
Column diameter: 0.25

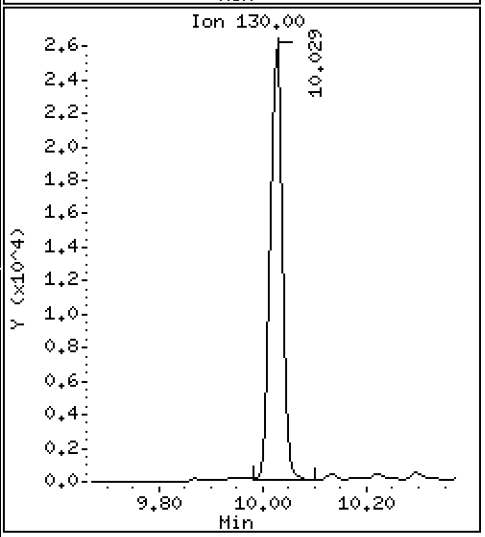
16 N-Nitroso-di-n-propylamine

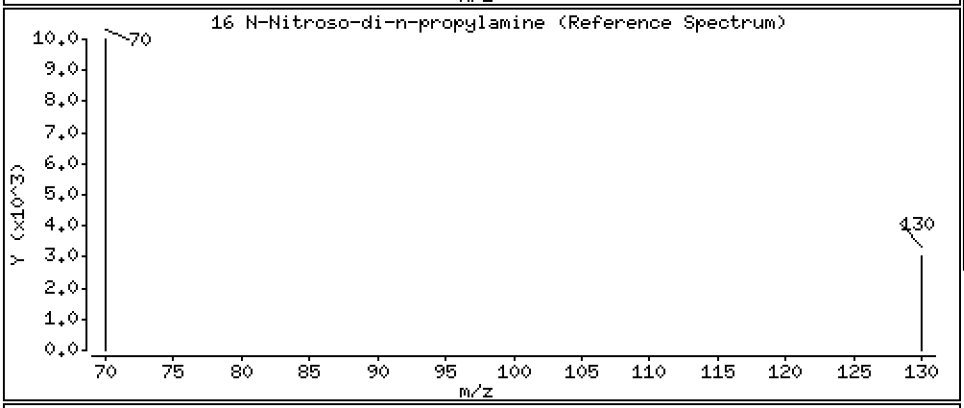
Concentration: 3.621 ug/L

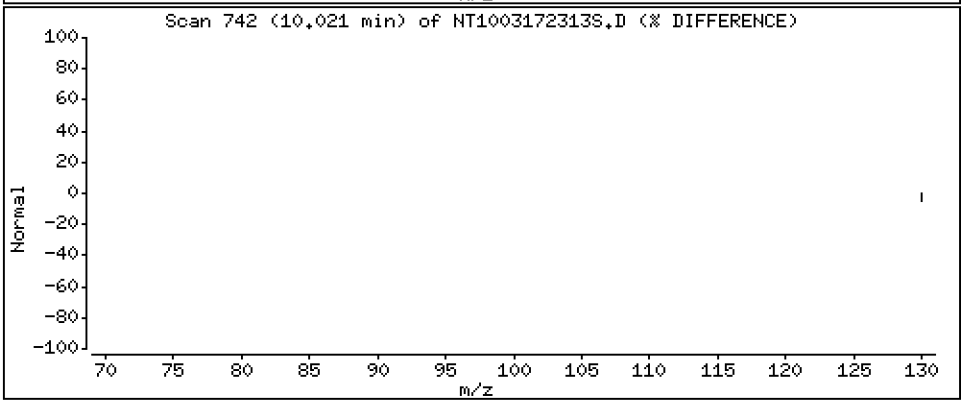












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723135.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

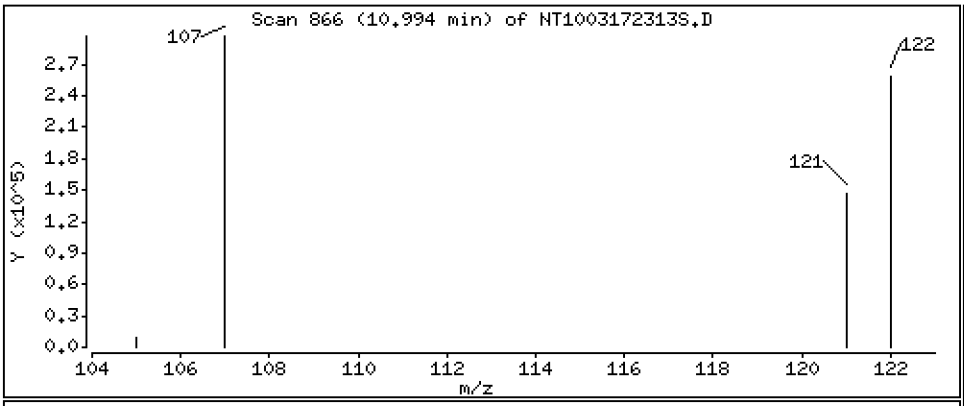
Operator: JGR

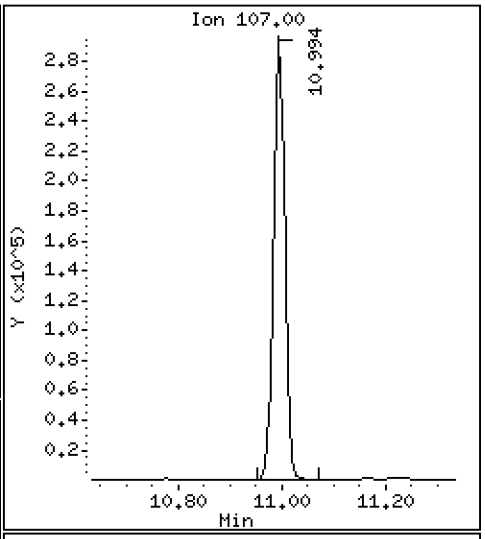
Column phase: ZB-5msi

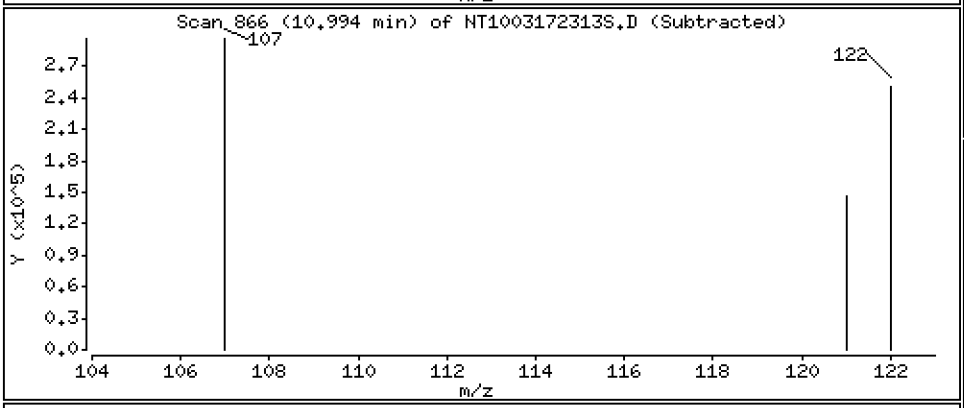
Column diameter: 0.25

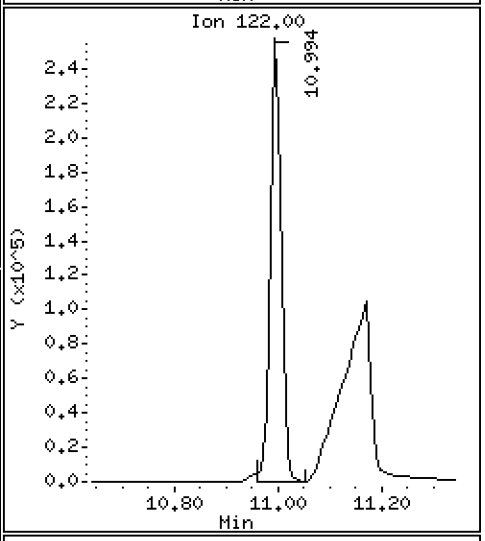
22 2,4-Dimethylphenol

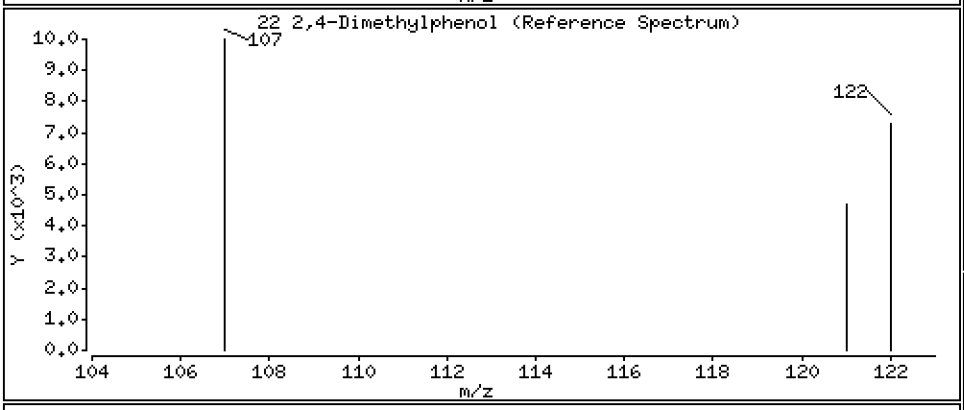
Concentration: 7.264 ug/L

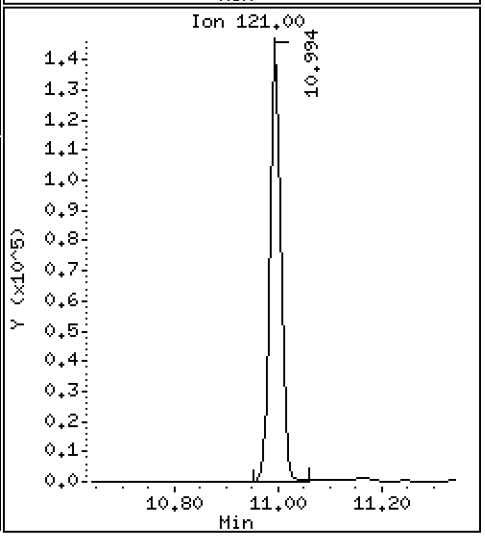


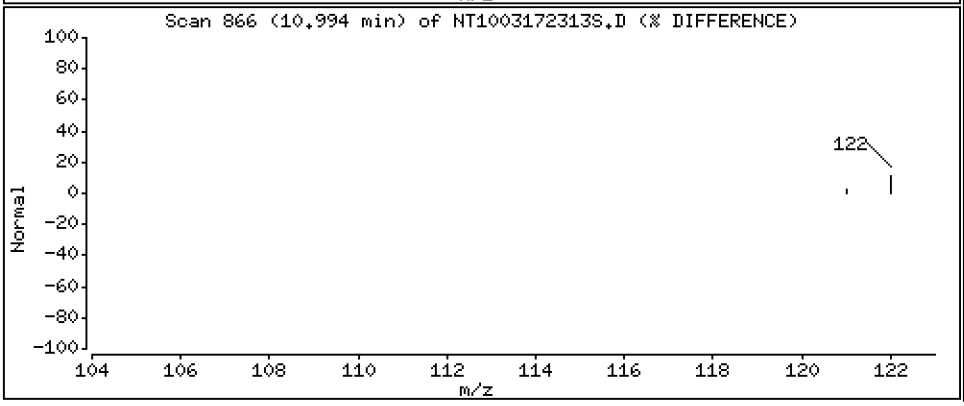












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723135.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

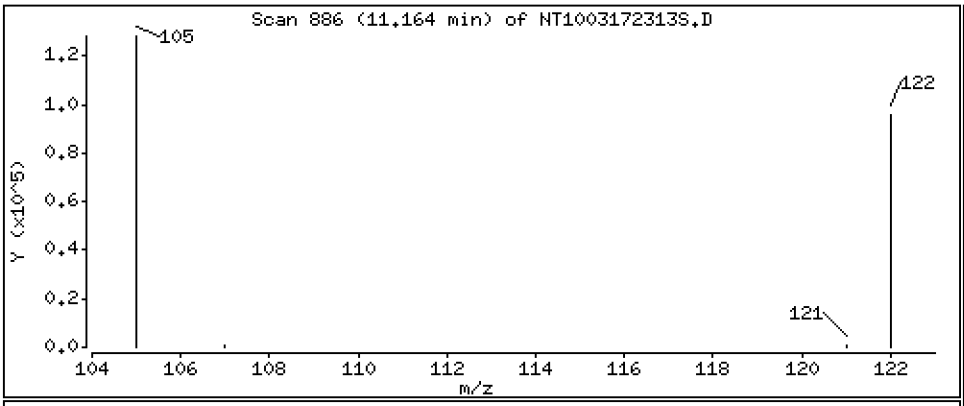
Operator: JGR

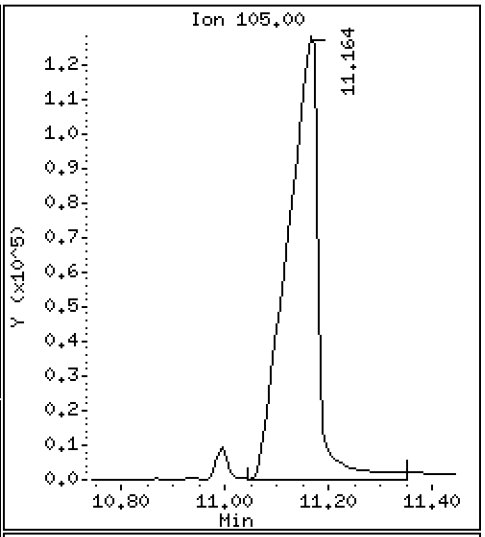
Column phase: ZB-5msi

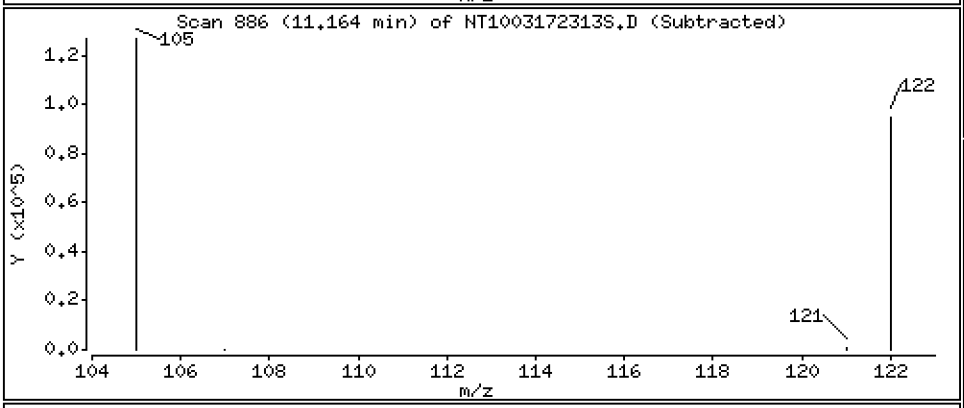
Column diameter: 0.25

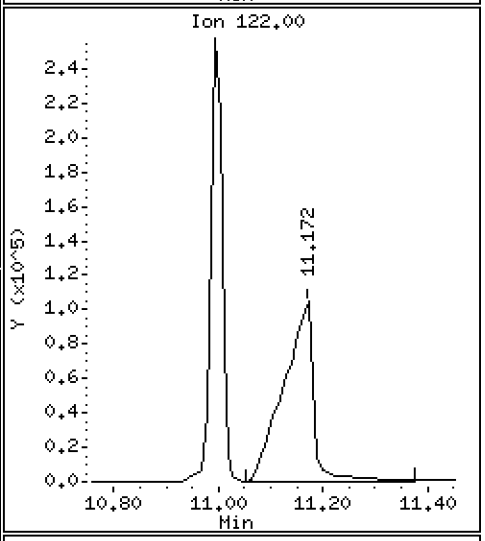
24 Benzoic acid

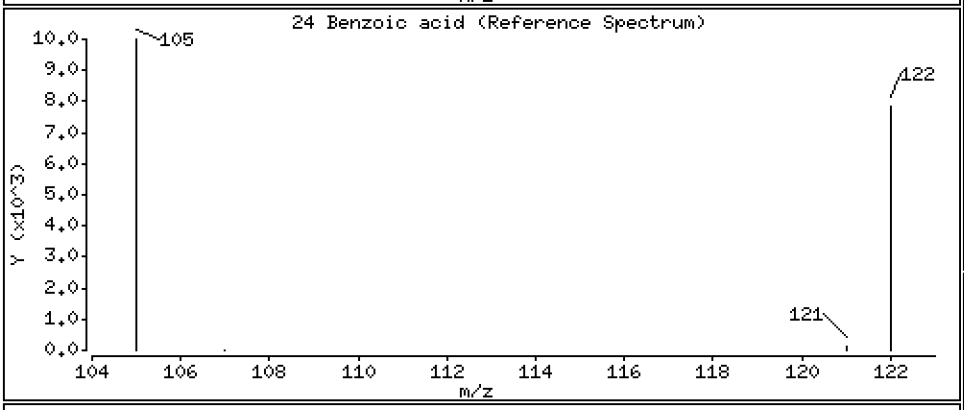
Concentration: 15.26 ug/L

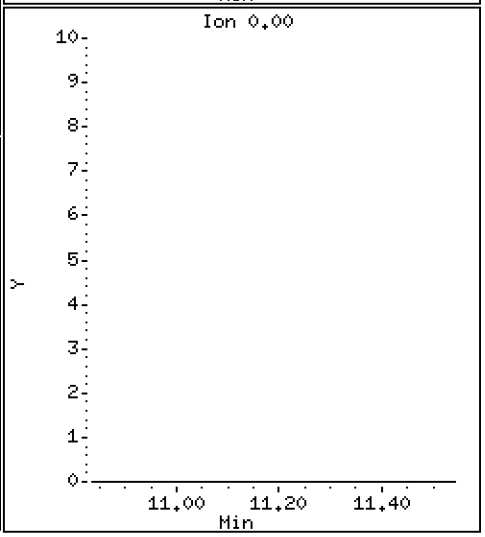


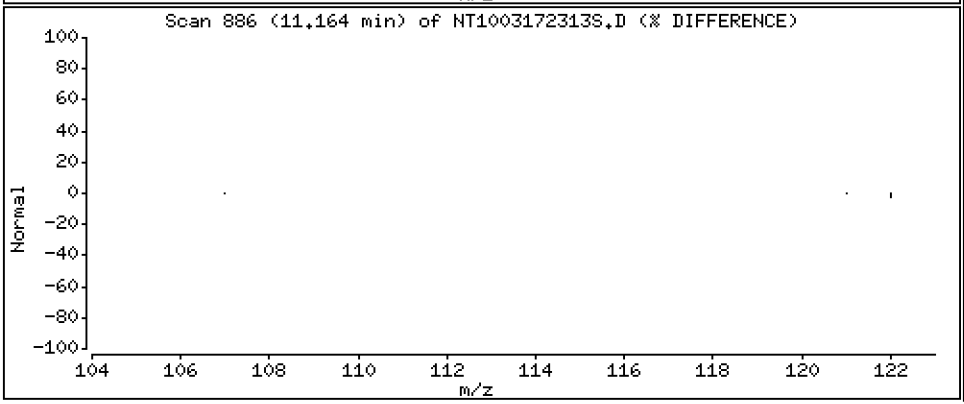












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

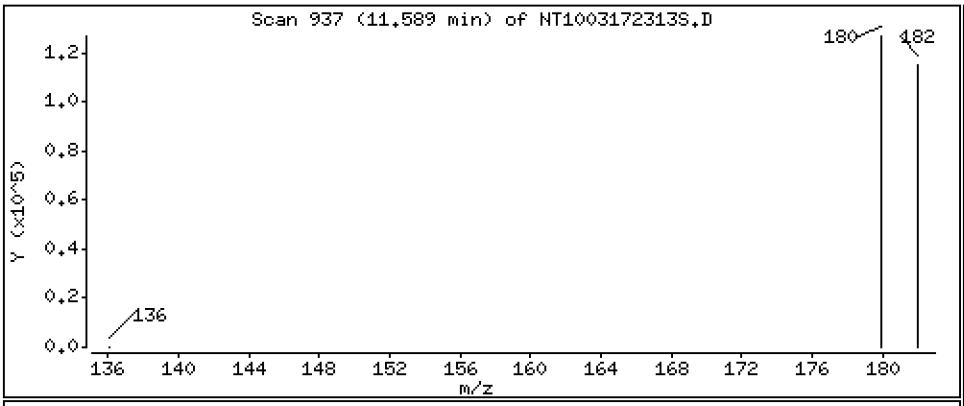
Operator: JGR

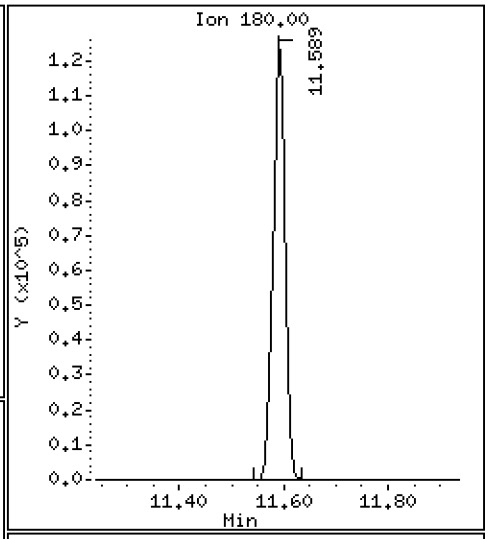
Column phase: ZB-5msi

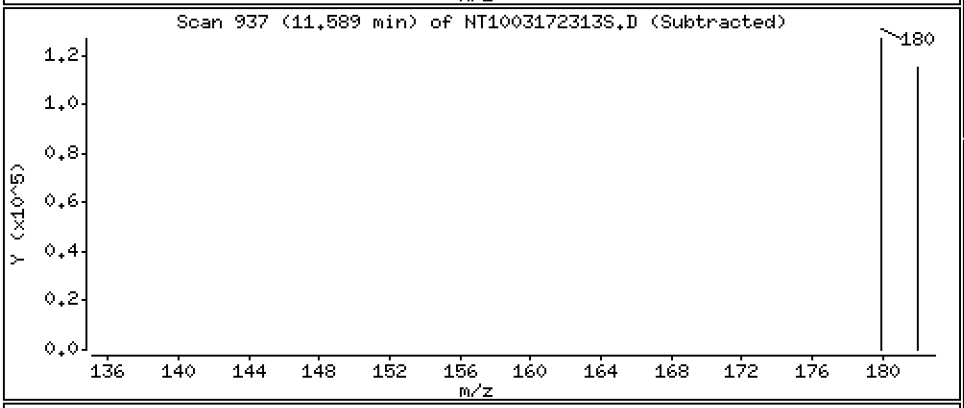
Column diameter: 0.25

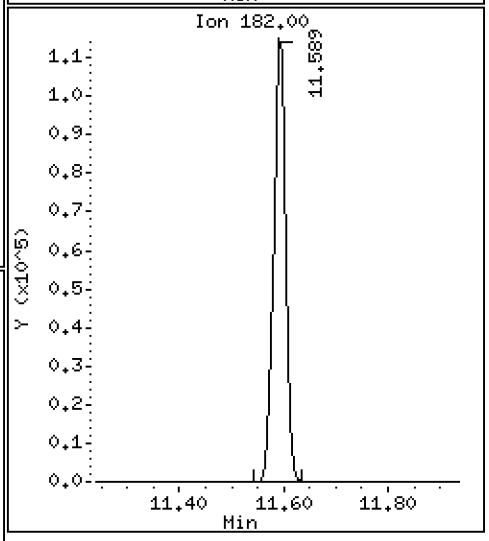
26 1,2,4-Trichlorobenzene

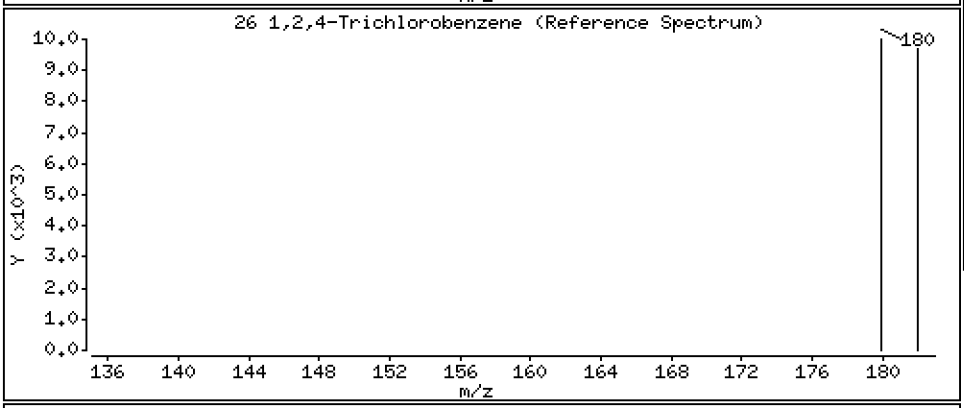
Concentration: 3.246 ug/L

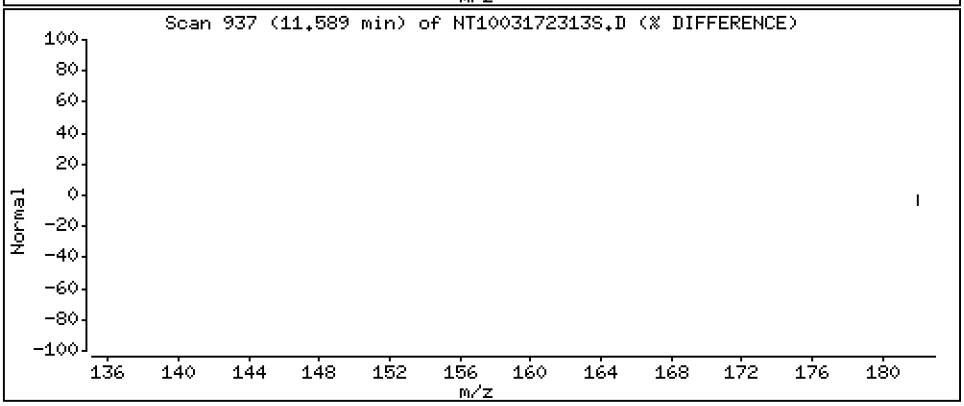












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172313S.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

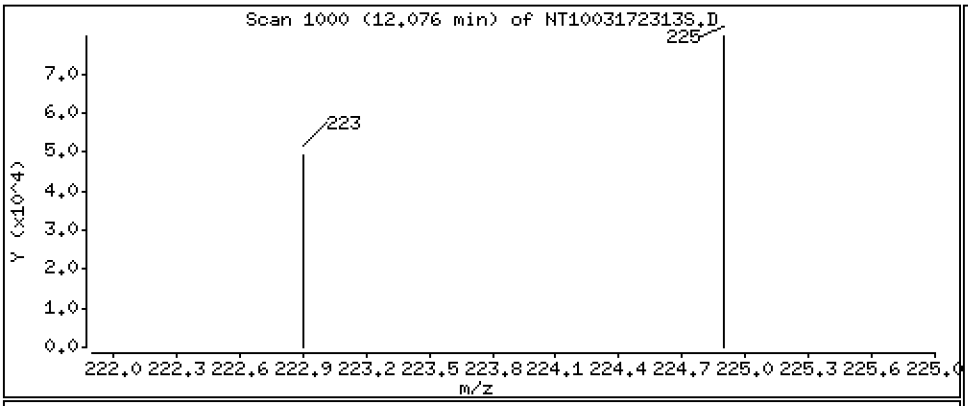
Operator: JGR

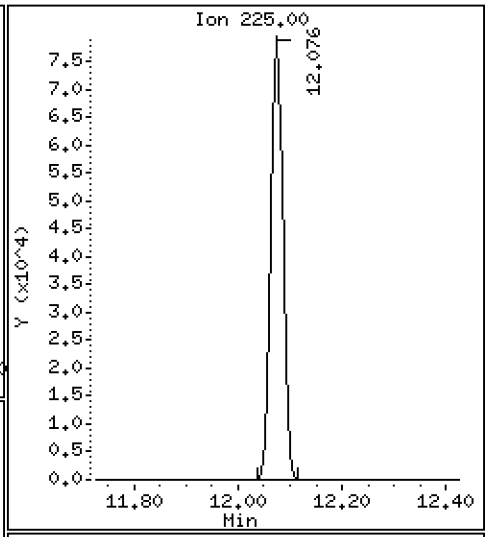
Column phase: ZB-5msi

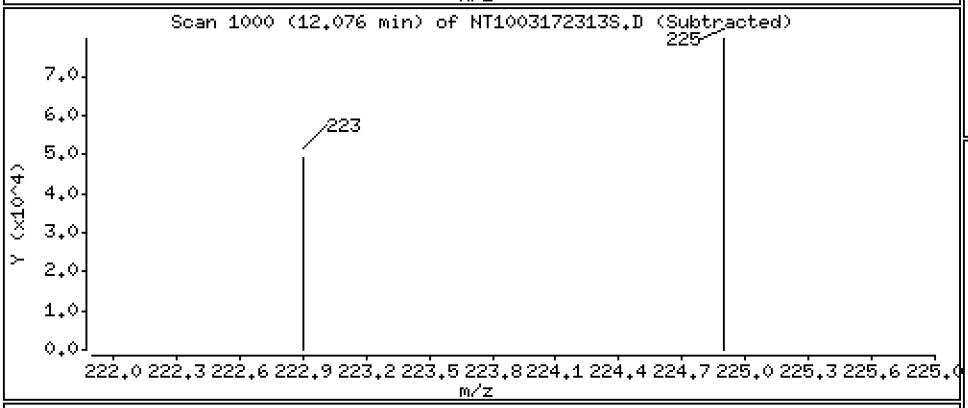
Column diameter: 0.25

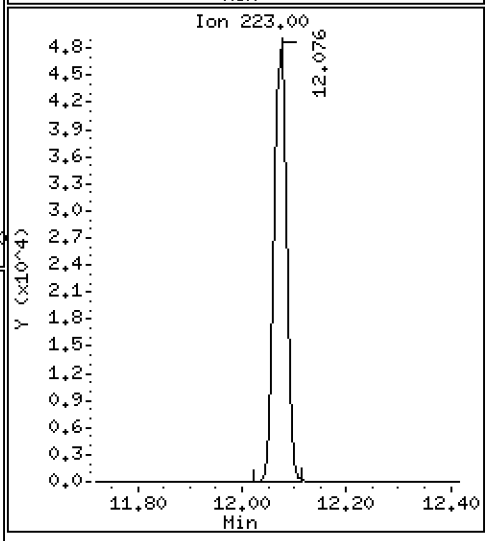
30 Hexachlorobutadiene

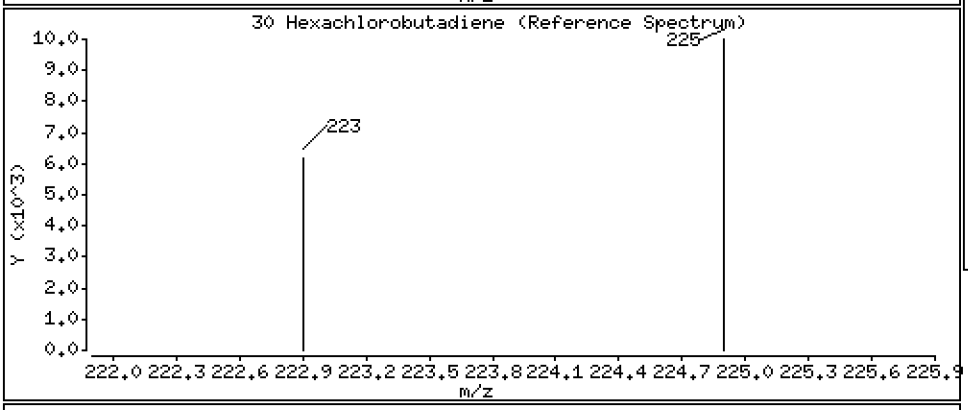
Concentration: 3.290 ug/L

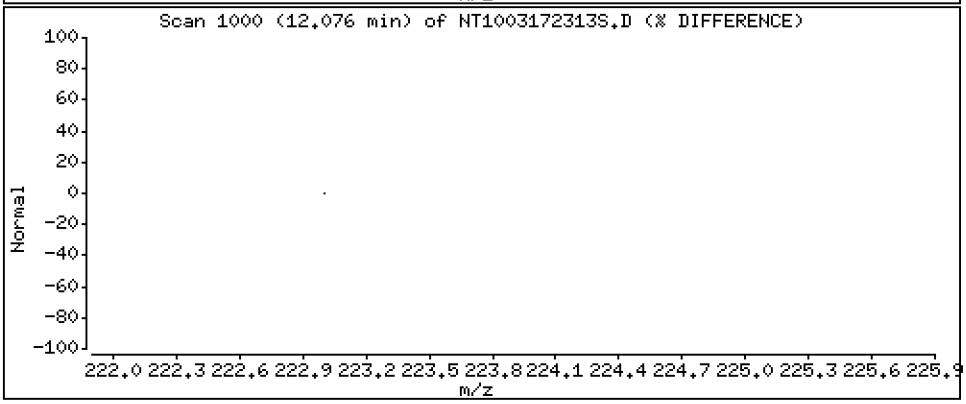












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172313S.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

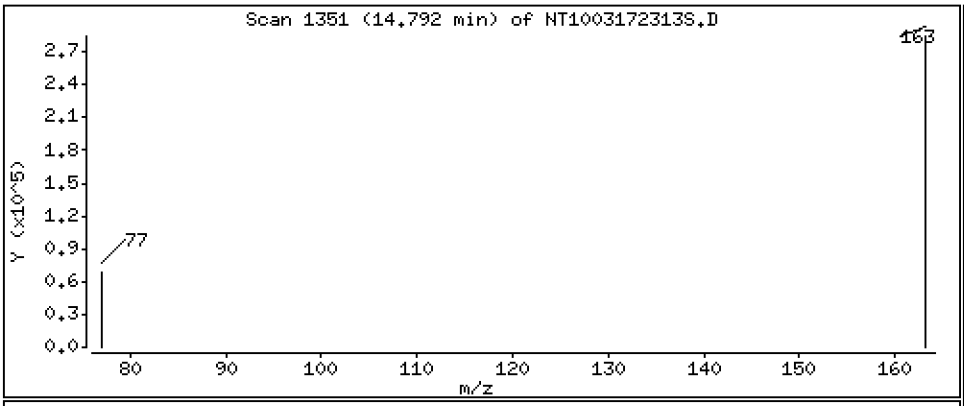
Operator: JGR

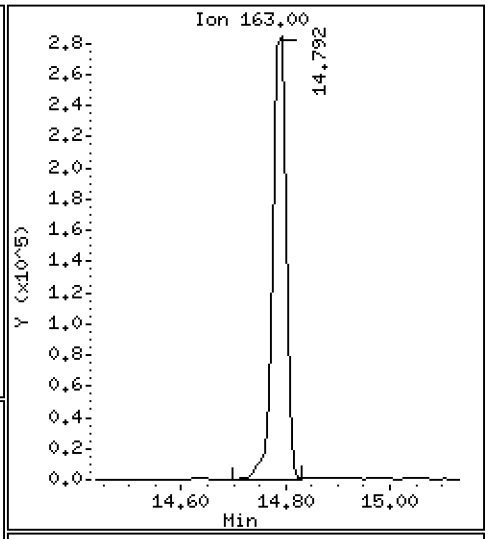
Column phase: ZB-5msi

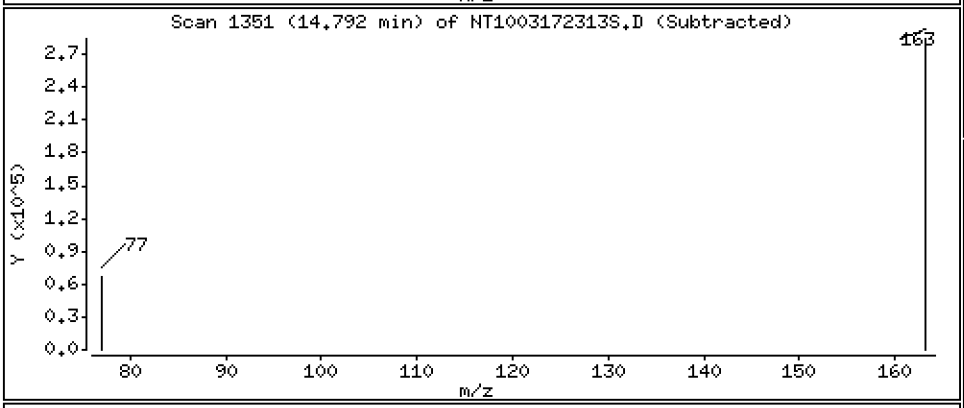
Column diameter: 0.25

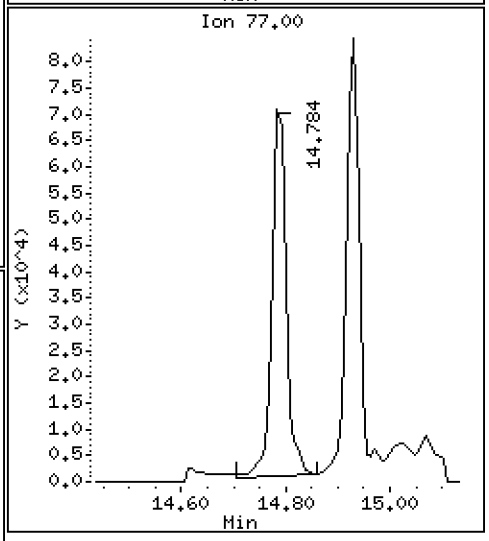
39 Dimethylphthalate

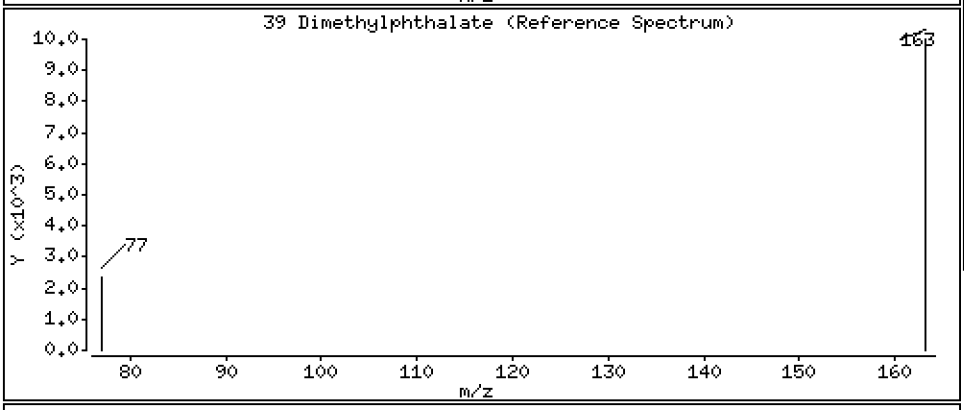
Concentration: 4.461 ug/L

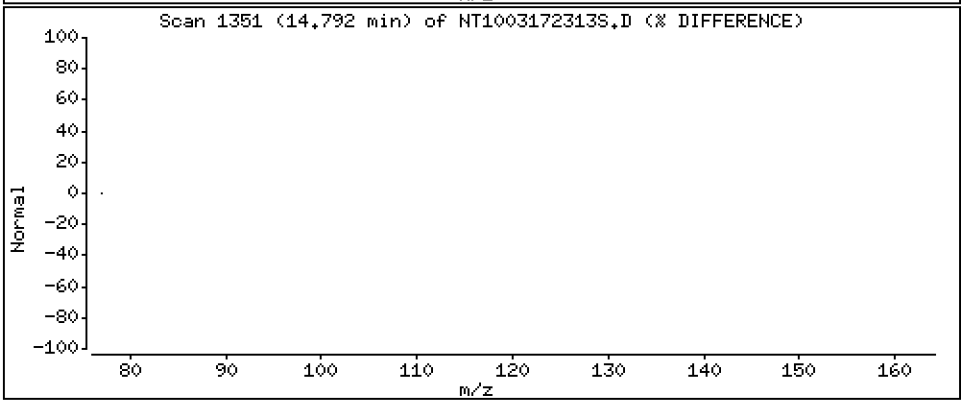












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172313S.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

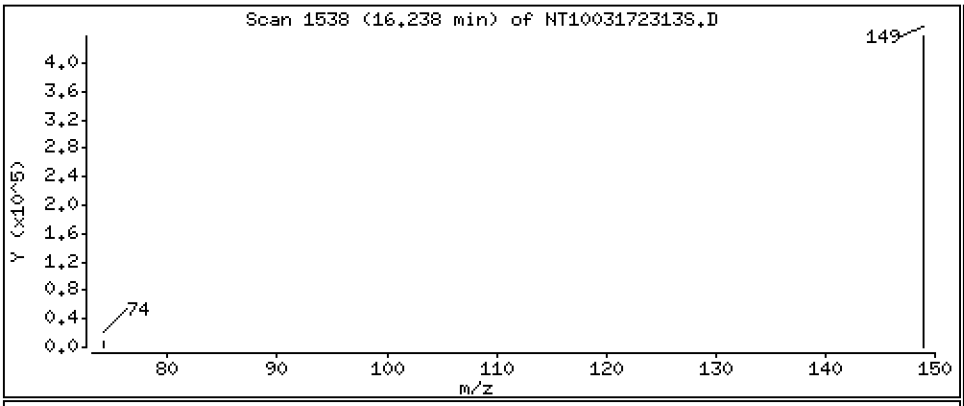
Operator: JGR

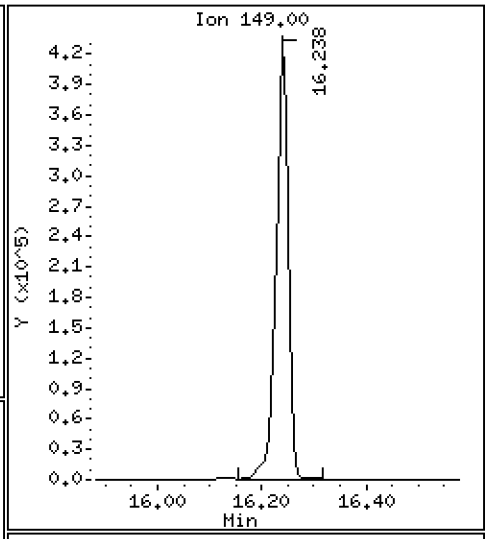
Column phase: ZB-5msi

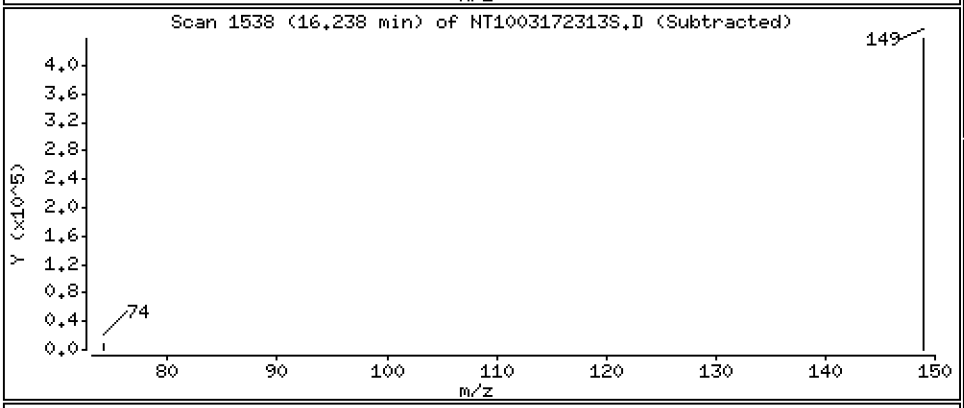
Column diameter: 0.25

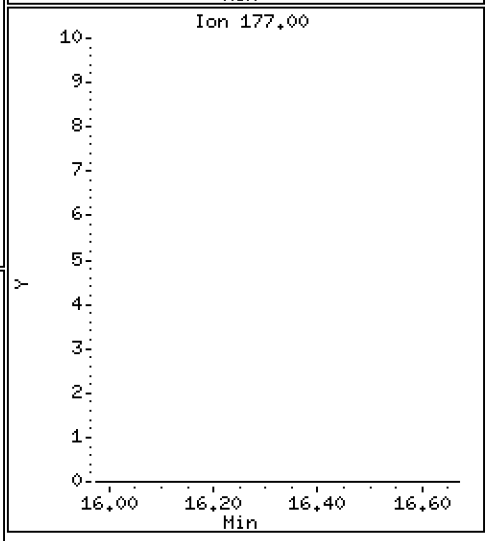
50 Diethylphthalate

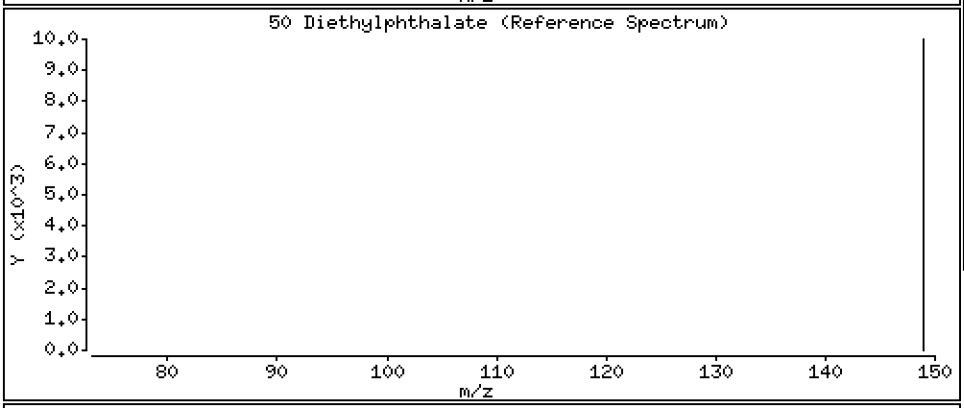
Concentration: 6.301 ug/L

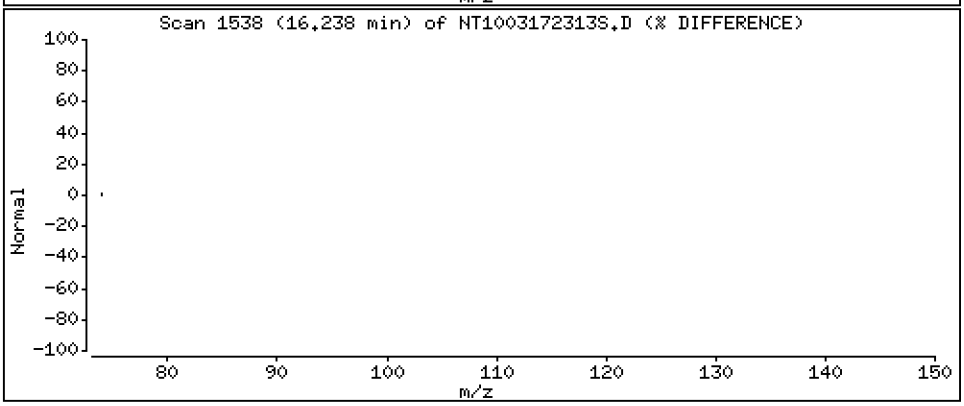












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172313S.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

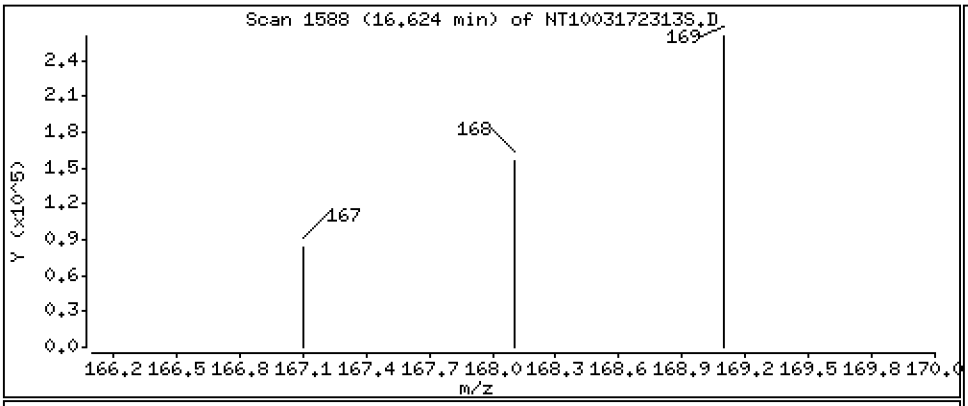
Operator: JGR

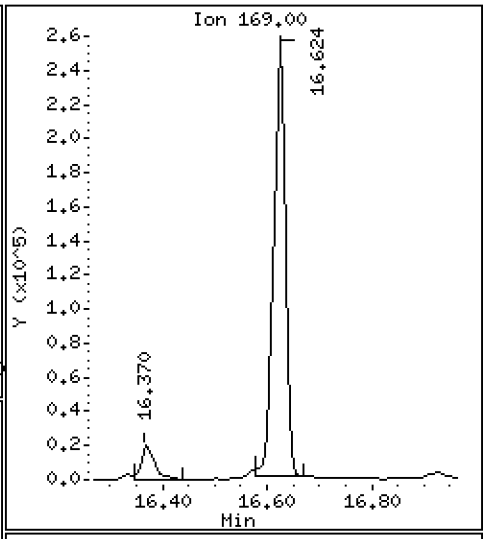
Column phase: ZB-5msi

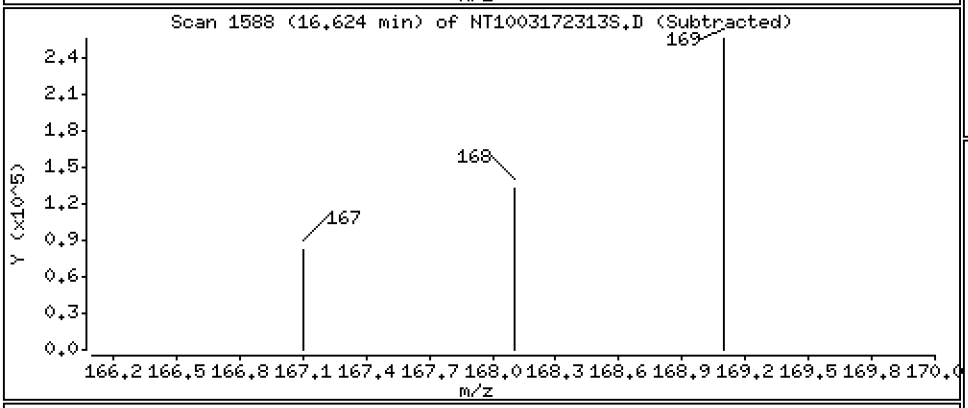
Column diameter: 0.25

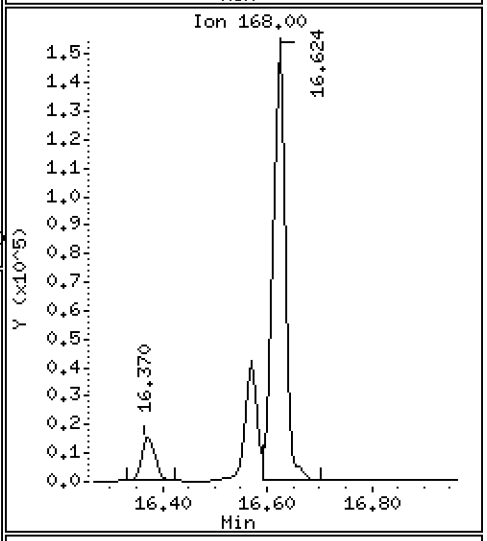
54 N-Nitrosodiphenylamine

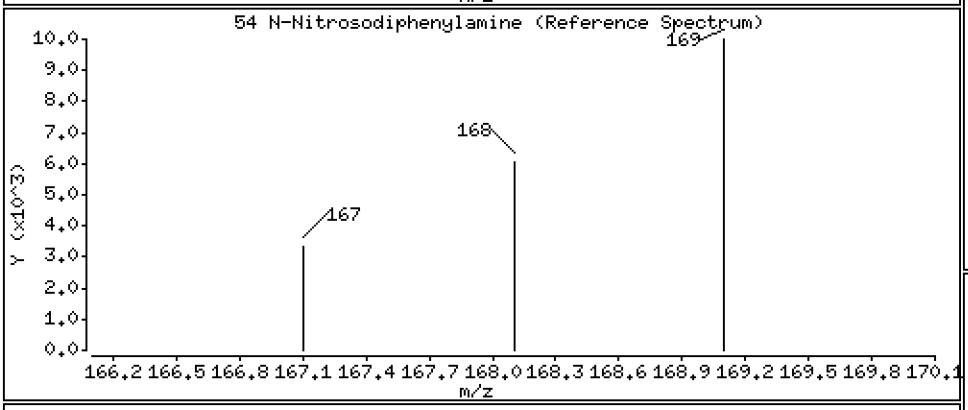
Concentration: 4.145 ug/L

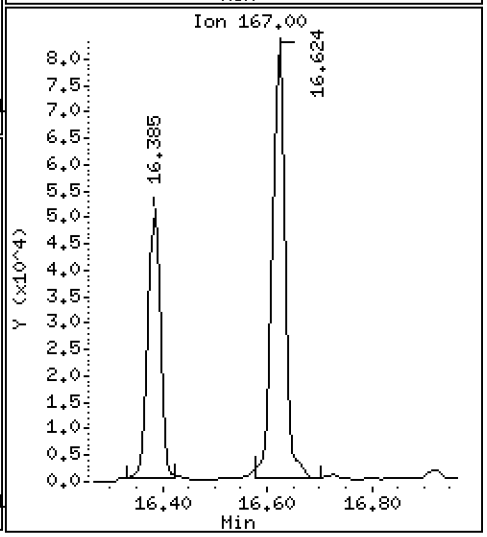


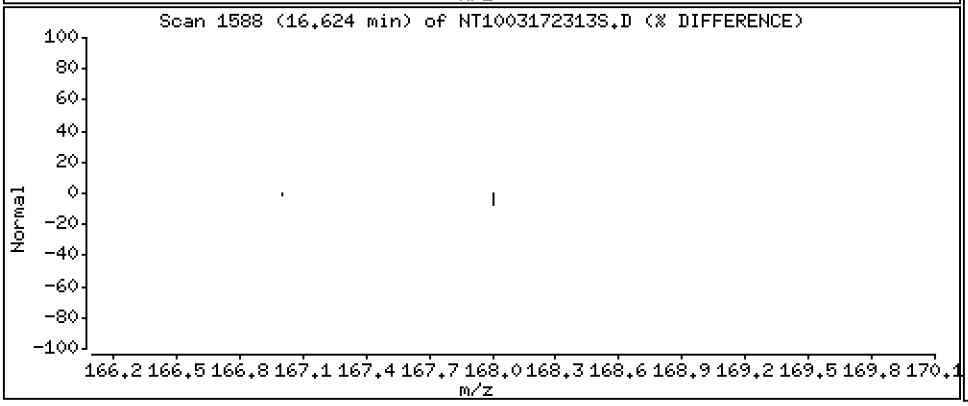












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172313S.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

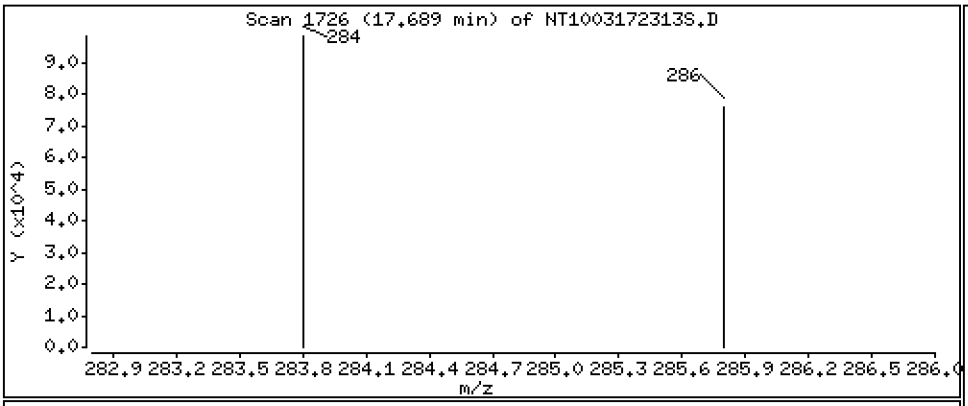
Operator: JGR

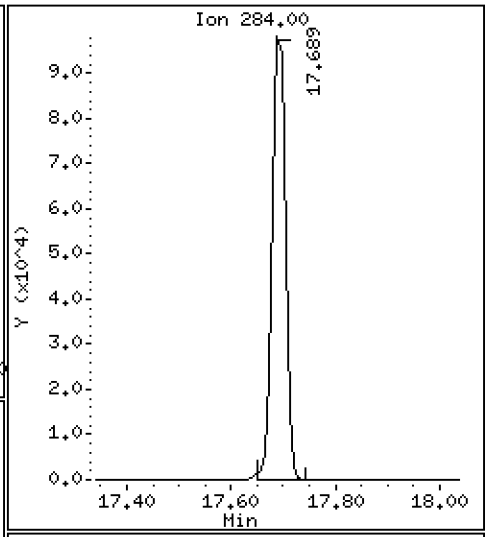
Column phase: ZB-5msi

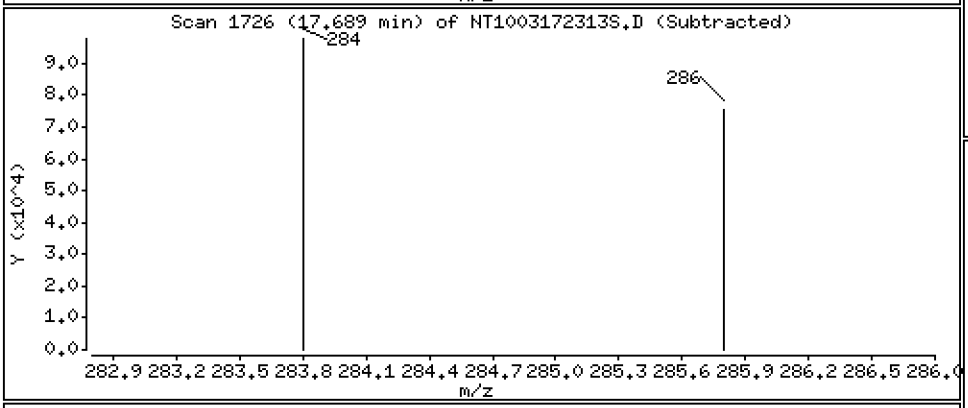
Column diameter: 0.25

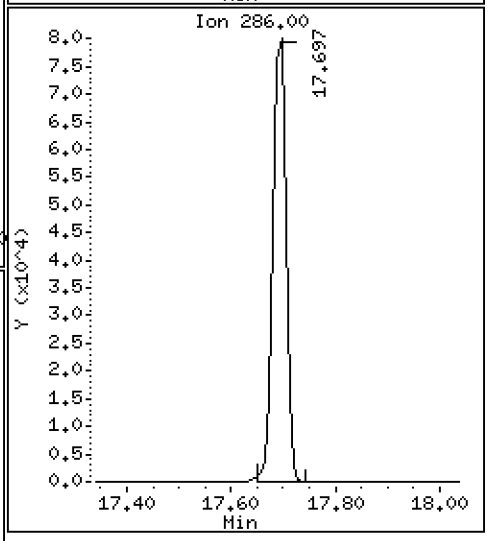
57 Hexachlorobenzene

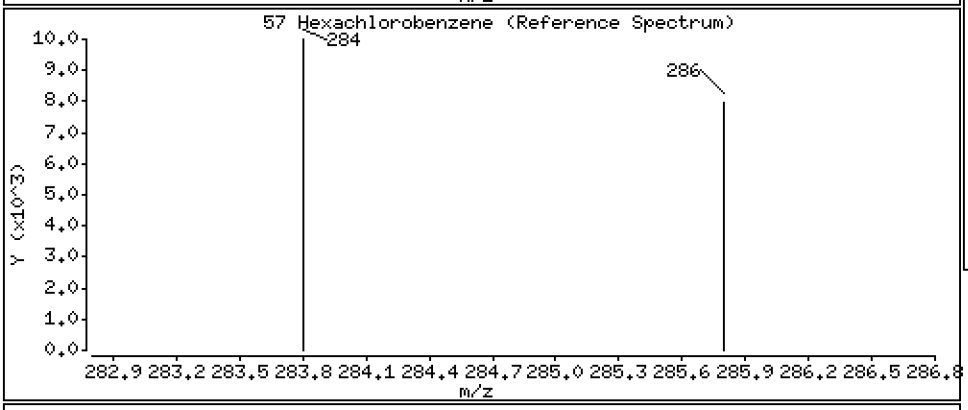
Concentration: 3.923 ug/L

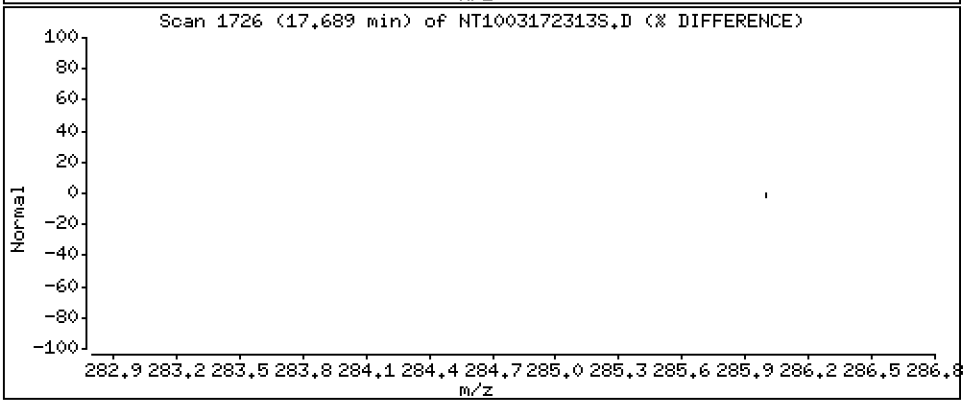












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172313S.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

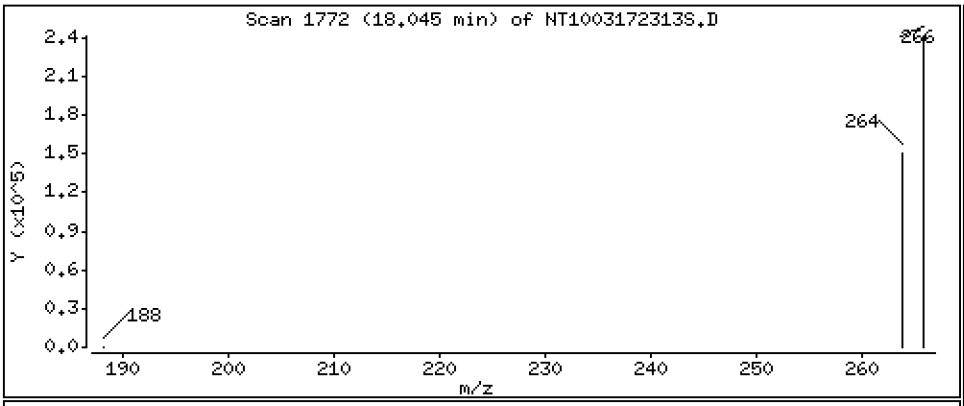
Operator: JGR

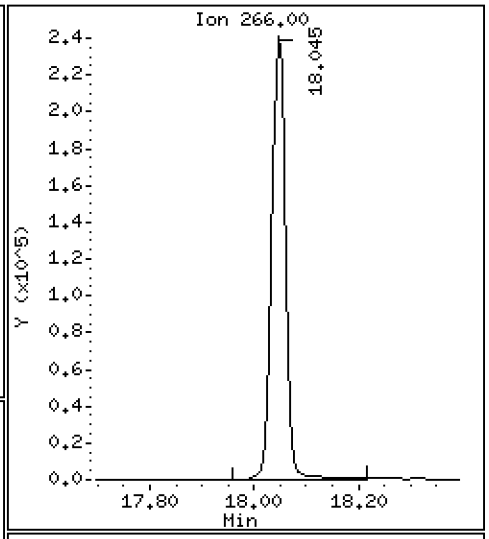
Column phase: ZB-5msi

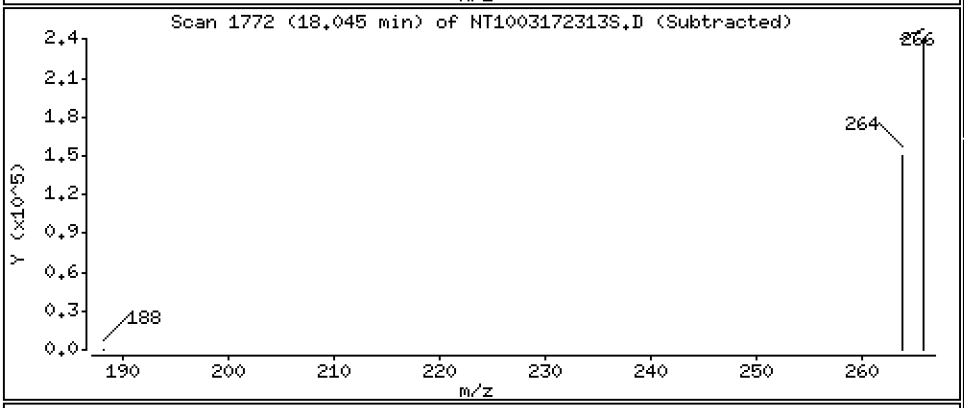
Column diameter: 0.25

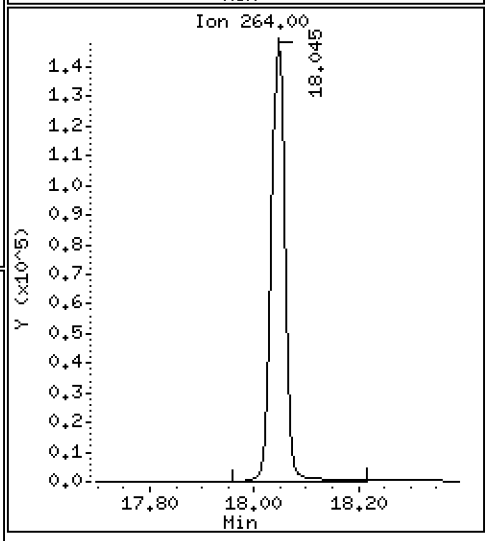
58 Pentachlorophenol

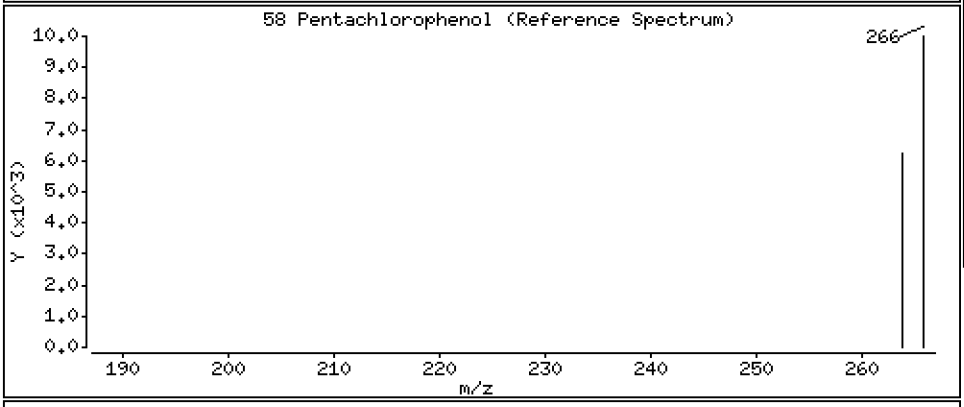
Concentration: 16.37 ug/L

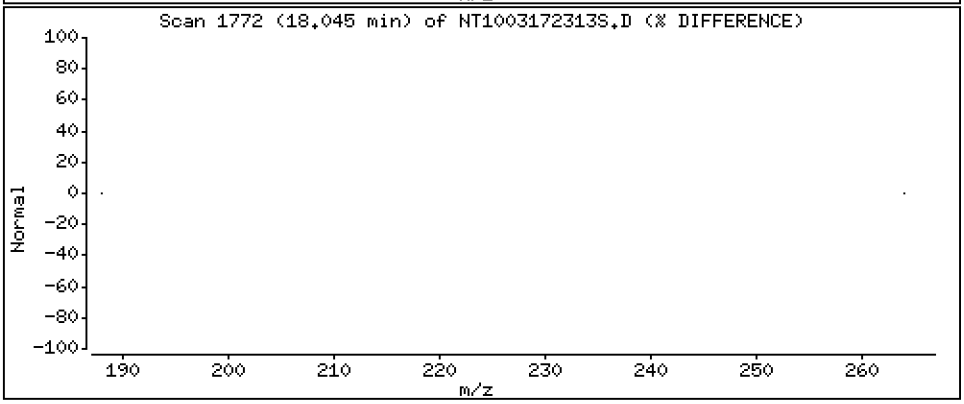












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172313S.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

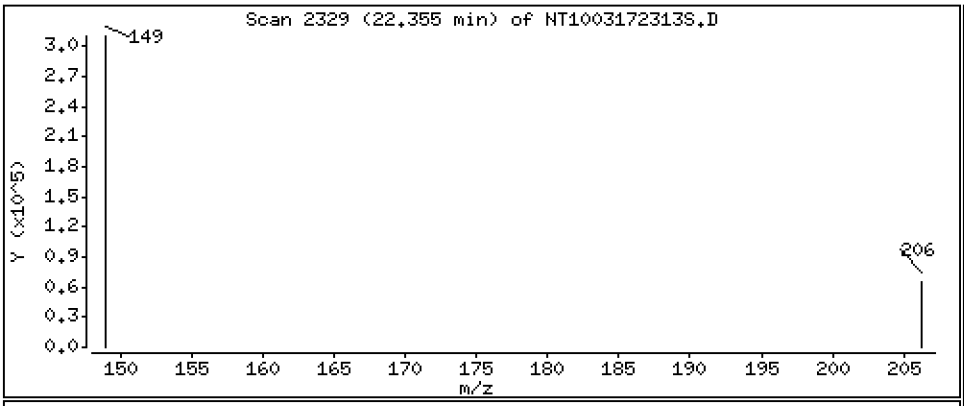
Operator: JGR

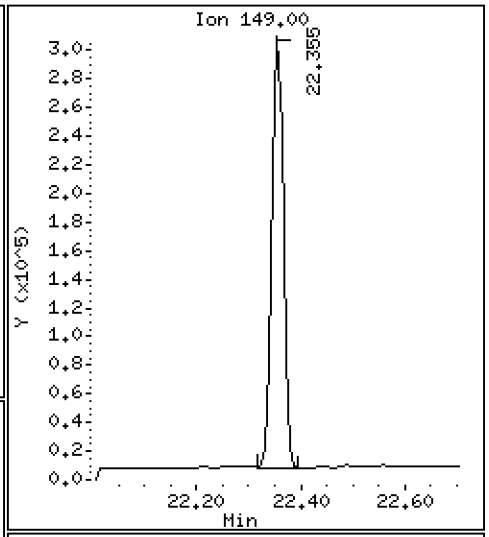
Column phase: ZB-5msi

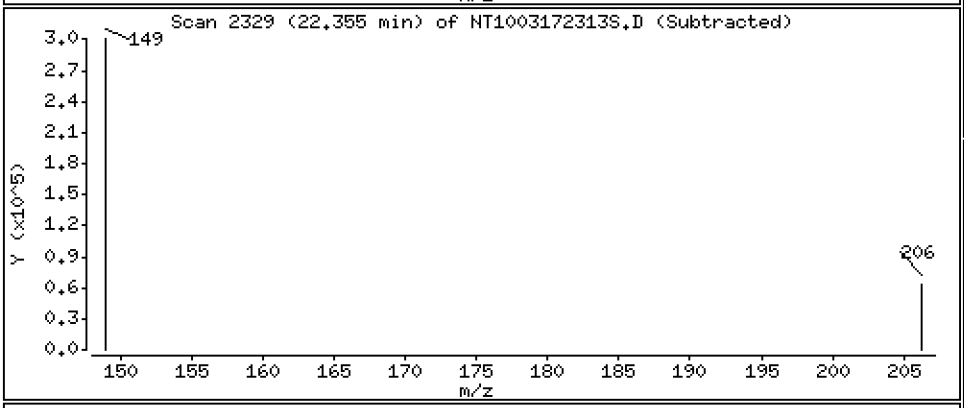
Column diameter: 0.25

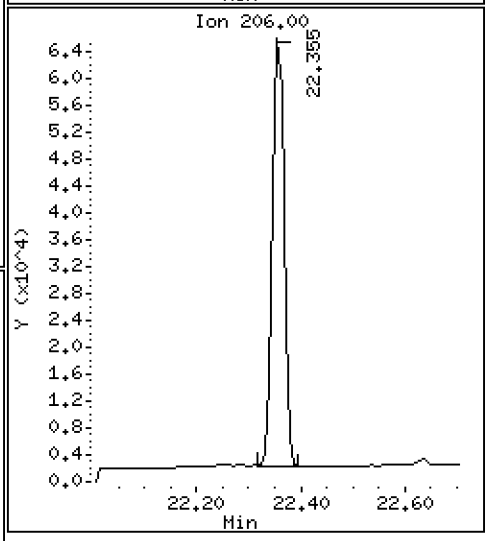
67 Butylbenzylphthalate

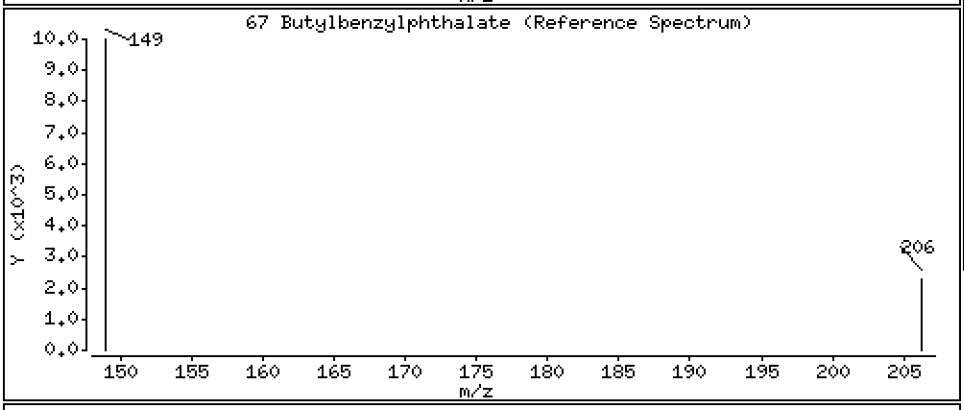
Concentration: 5.785 ug/L

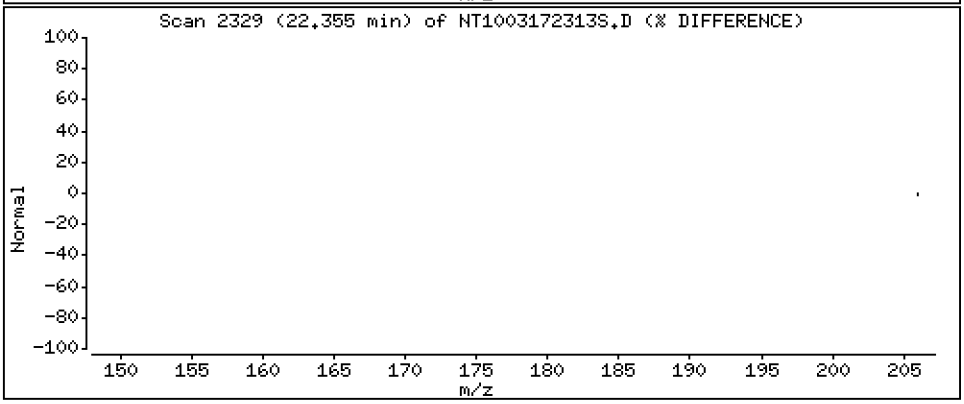












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Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

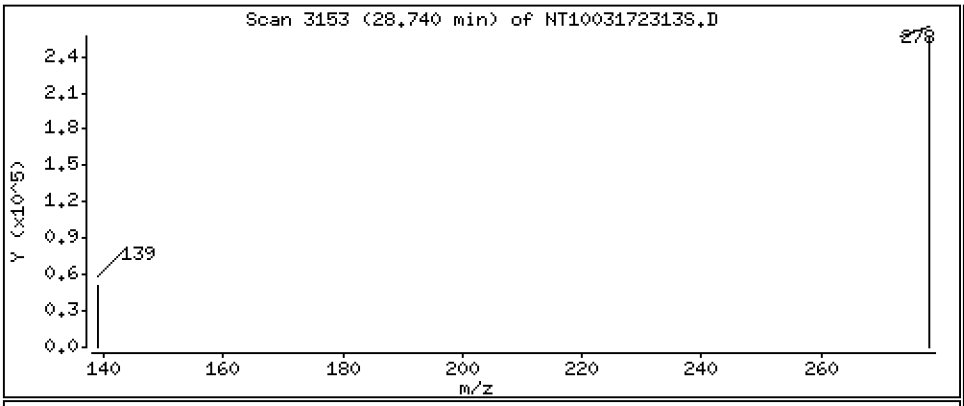
Operator: JGR

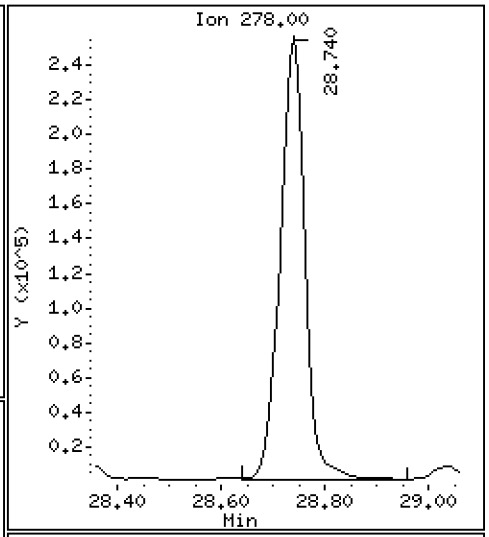
Column phase: ZB-5msi

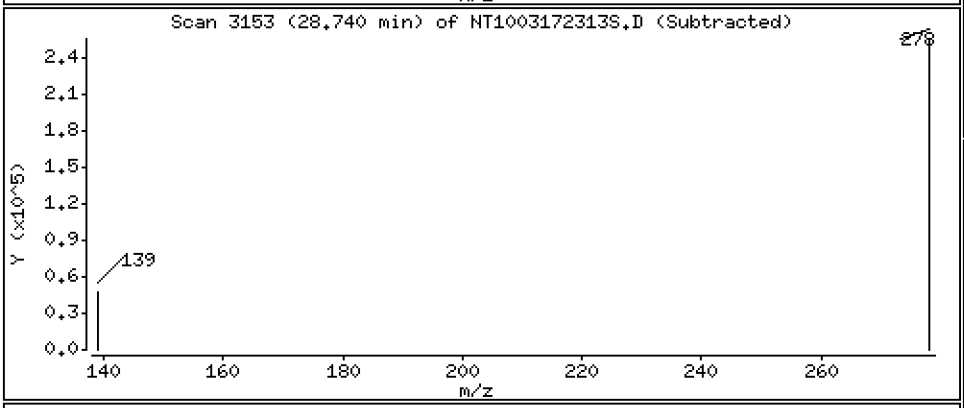
Column diameter: 0.25

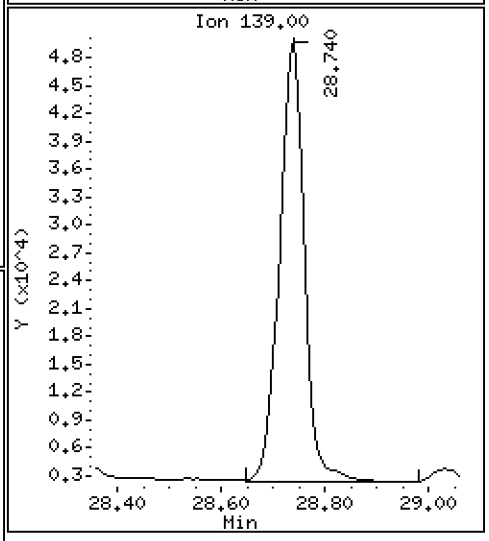
79 Dibenzo(a,h)anthracene

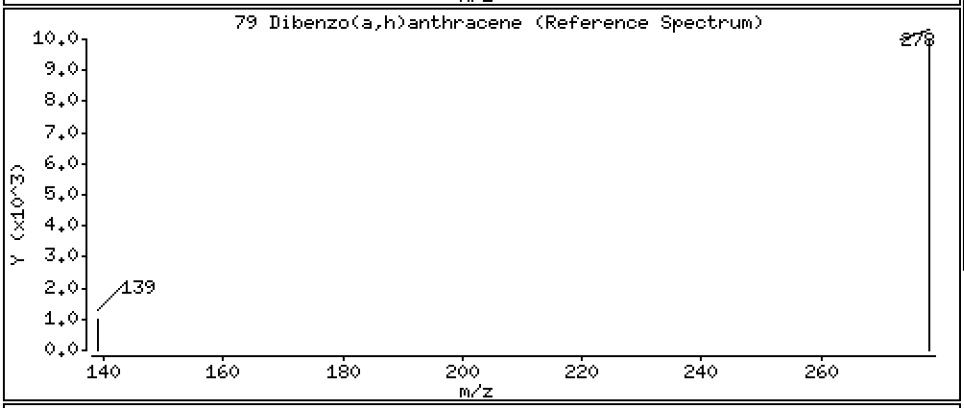
Concentration: 4.374 ug/L

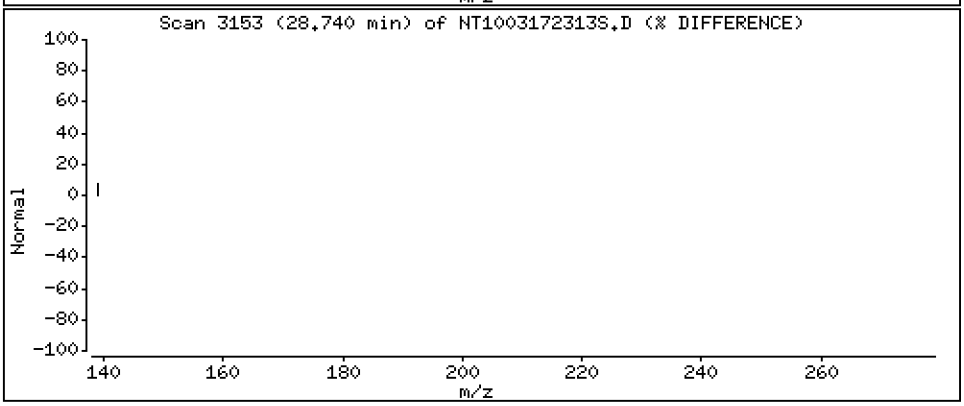












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723135.D

Date : 18-MAR-2023 02:03

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MS2

Volume Injected (uL): 1.0

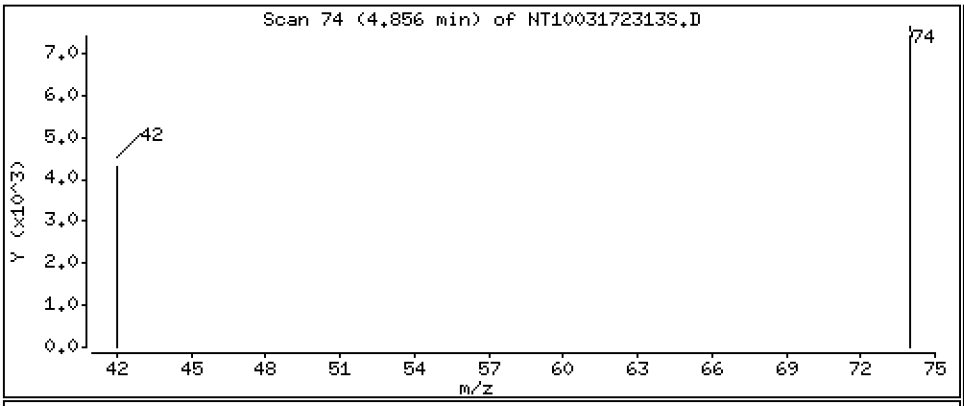
Operator: JGR

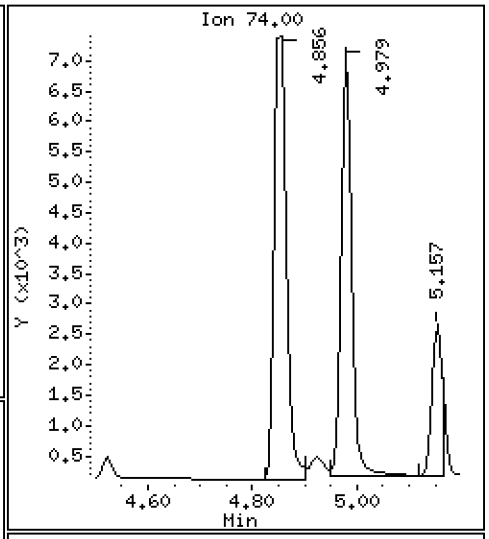
Column phase: ZB-5msi

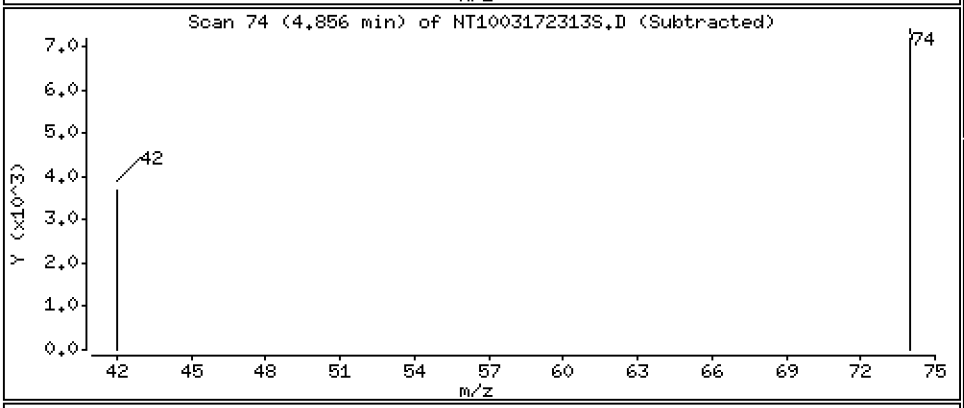
Column diameter: 0.25

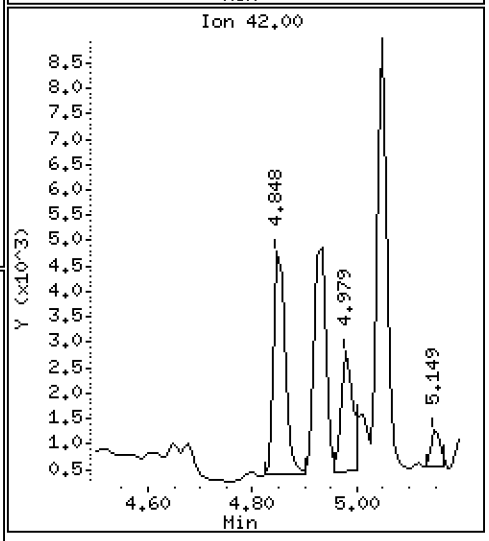
90 N-Nitrosodimethylamine

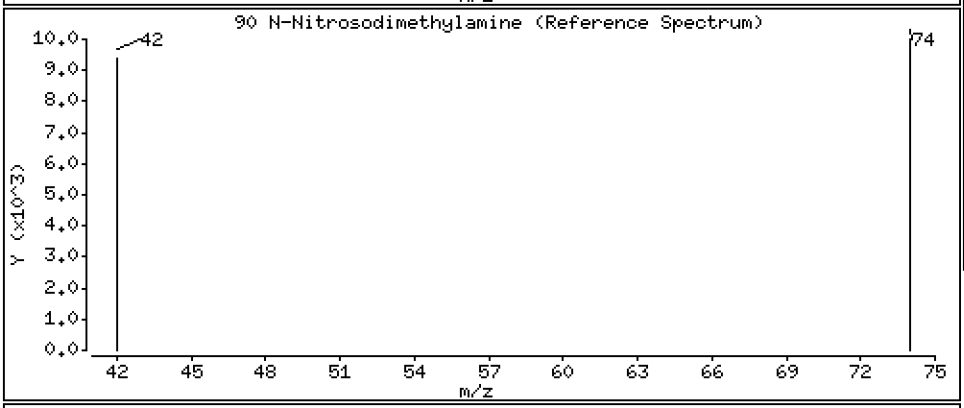
Concentration: 0.2967 ug/L

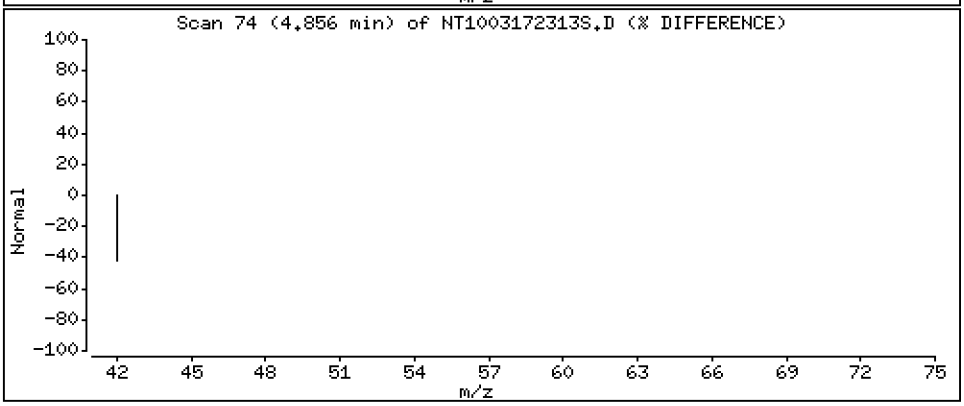












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172313S.D
Lab Smp Id: BLB0495-MS2
Inj Date : 18-MAR-2023 02:03 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLB0495-MS2
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Meth Date : 30-Mar-2023 14:37 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
$	1 2-Fluorophenol	112	6.980	6.980	(0.758)	155591	2.63167	2.632(R)
	3 Phenol	94	8.571	8.572	(0.931)	222893	2.74795	2.748
	7 1,3-Dichlorobenzene	146	9.143	9.136	(0.993)	211735	2.78967	2.790
*	8 1,4-Dichlorobenzene-d4	152	9.206	9.206	(1.000)	194966	4.00000	
	9 1,4-Dichlorobenzene	146	9.237	9.229	(1.003)	210565	2.87390	2.874
	11 Benzyl alcohol	79	9.469	9.462	(1.029)	160805	3.41964	3.420
	12 1,2-Dichlorobenzene	146	9.586	9.586	(1.041)	206959	2.87223	2.872
	13 2-Methylphenol	108	9.687	9.679	(1.052)	159847	2.84407	2.844
	15 4-Methylphenol	108	9.958	9.951	(1.082)	239157	4.09500	4.095
	16 N-Nitroso-di-n-propylamine	70	10.021	10.021	(1.089)	149560	3.62110	3.621
	22 2,4-Dimethylphenol	107	10.994	10.985	(0.941)	437028	7.26402	7.264
	24 Benzoic acid	105	11.163	11.096	(0.956)	535697	15.2593	15.26
	26 1,2,4-Trichlorobenzene	180	11.589	11.589	(0.992)	196444	3.24579	3.246
*	27 Naphthalene-d8	136	11.681	11.674	(1.000)	696034	4.00000	
	30 Hexachlorobutadiene	225	12.075	12.075	(1.034)	121060	3.28999	3.290
	39 Dimethylphthalate	163	14.792	14.784	(0.968)	476672	4.46064	4.461
*	42 Acenaphthene-d10	162	15.287	15.279	(1.000)	338631	4.00000	
	50 Diethylphthalate	149	16.238	16.230	(1.062)	697551	6.30104	6.301
	54 N-Nitrosodiphenylamine	169	16.624	16.616	(0.908)	390456	4.14540	4.145
	57 Hexachlorobenzene	284	17.689	17.689	(0.966)	165428	3.92335	3.923

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.045	18.045	(0.985)	425187	16.3720	16.37
*	59 Phenanthrene-d10	188	18.316	18.308	(1.000)	702031	4.00000	
$	66 Terphenyl-d14	244	21.441	21.434	(0.918)	555615	6.42764	6.428(R)
	67 Butylbenzylphthalate	149	22.355	22.355	(0.958)	432437	5.78547	5.785
*	69 Chrysene-d12	240	23.346	23.331	(1.000)	530525	4.00000	
*	77 Perylene-d12	264	26.002	25.986	(1.000)	614236	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.739	28.708	(1.105)	860024	4.37420	4.374
	90 N-Nitrosodimethylamine	74	4.855	4.848	(0.527)	11126	0.29671	0.2967

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 17-MAR-2023
Lab File ID: NT1003172313S.D Calibration Time: 19:40
Lab Smp Id: BLB0495-MS2
Analysis Type: SV Level: LOW
Quant Type: ISTD Sample Type: AIR
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	184039	92020	368078	194966	5.94
27 Naphthalene-d8	659935	329968	1319870	696034	5.47
42 Acenaphthene-d10	325775	162888	651550	338631	3.95
59 Phenanthrene-d10	616249	308125	1232498	702031	13.92
69 Chrysene-d12	526222	263111	1052444	530525	0.82
77 Perylene-d12	563117	281559	1126234	614236	9.08

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.21	8.71	9.71	9.21	-0.00
27 Naphthalene-d8	11.67	11.17	12.17	11.68	0.06
42 Acenaphthene-d10	15.28	14.78	15.78	15.29	0.05
59 Phenanthrene-d10	18.31	17.81	18.81	18.32	0.04
69 Chrysene-d12	23.33	22.83	23.83	23.35	0.07
77 Perylene-d12	25.99	25.49	26.49	26.00	0.06

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

REVIEW SUMMARY FOR FILE - NT1003172313S.D

Lab ID: BLB0495-MS2
nt10.i, 20230317.b\20230317.b\SIMABN2.m,   18-MAR-2023 02:03

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.956	0.950	0.0052	Benzoic acid

RRT check based on Ccal File: 20230317.b/NT1003172303S.D

On Column LOD for nt10.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723145.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

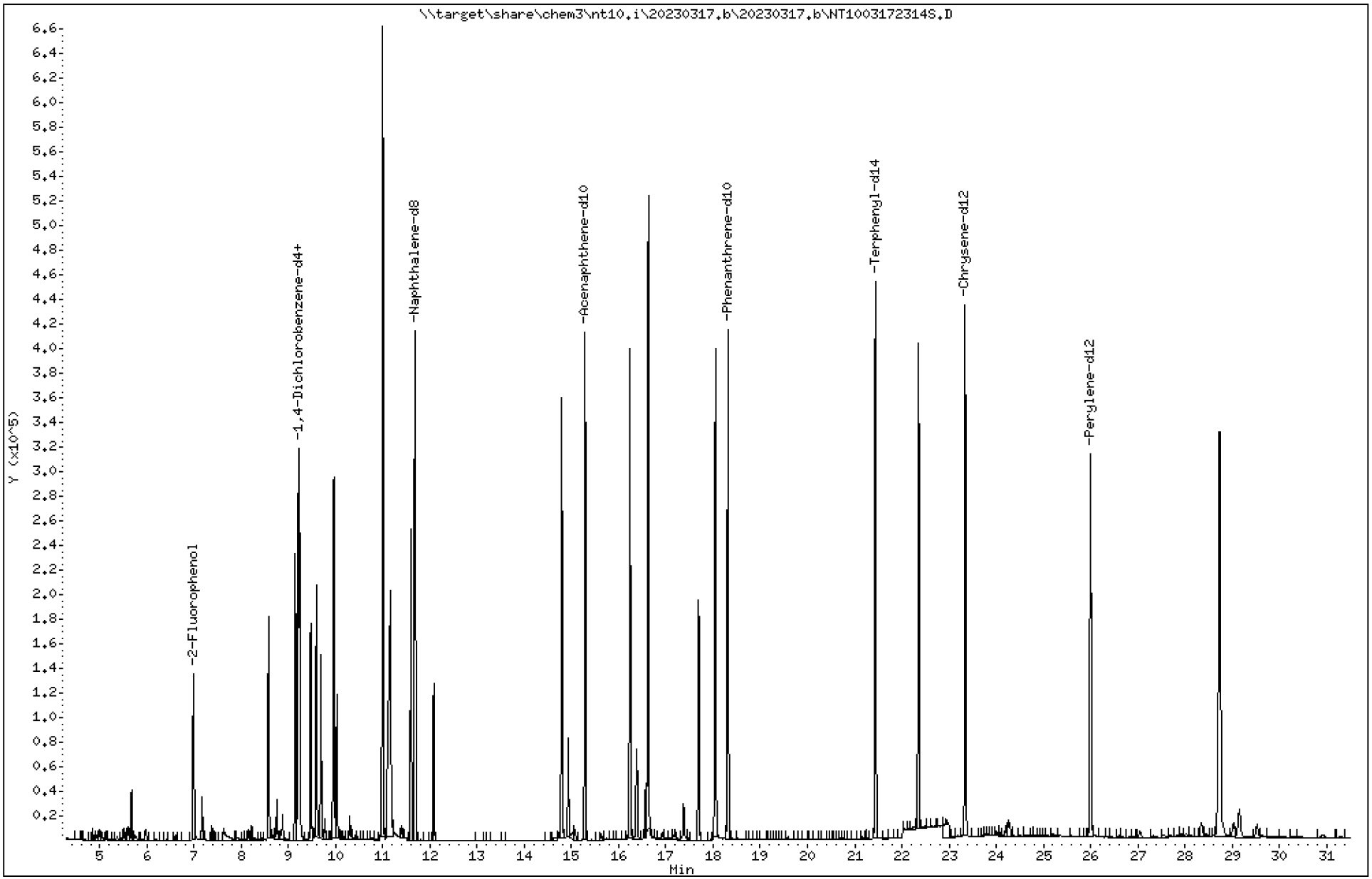
Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172314S.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

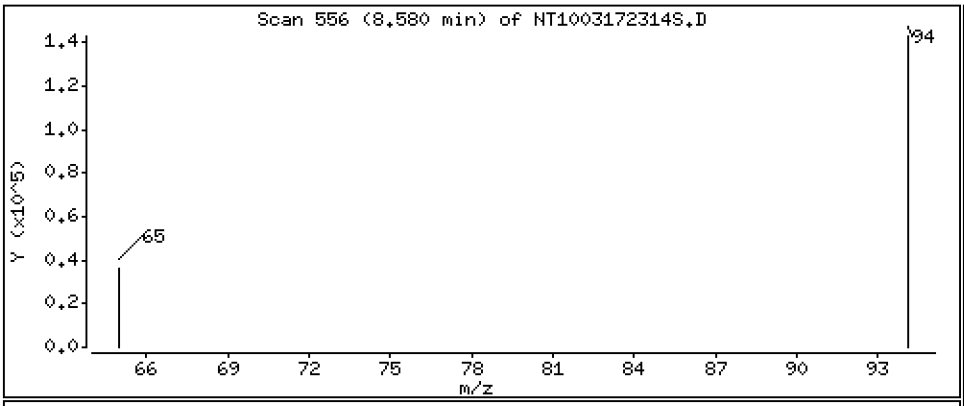
Operator: JGR

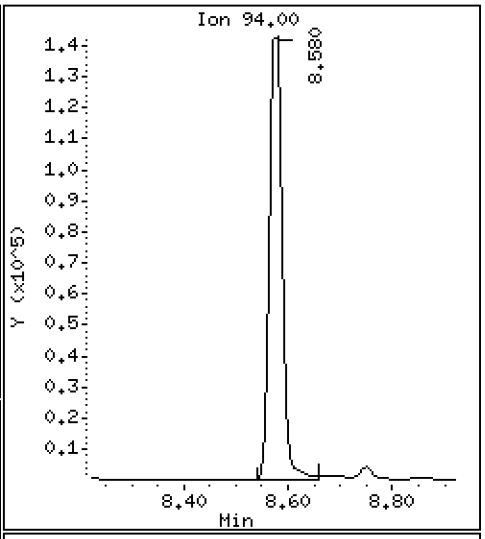
Column phase: ZB-5msi

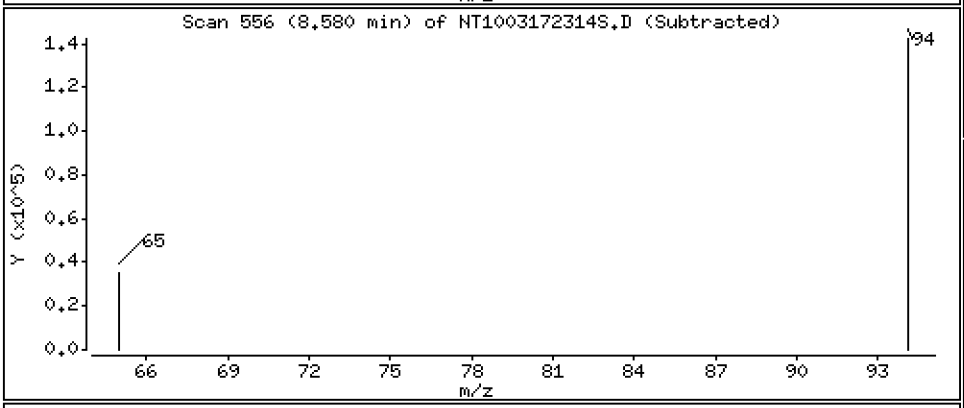
Column diameter: 0.25

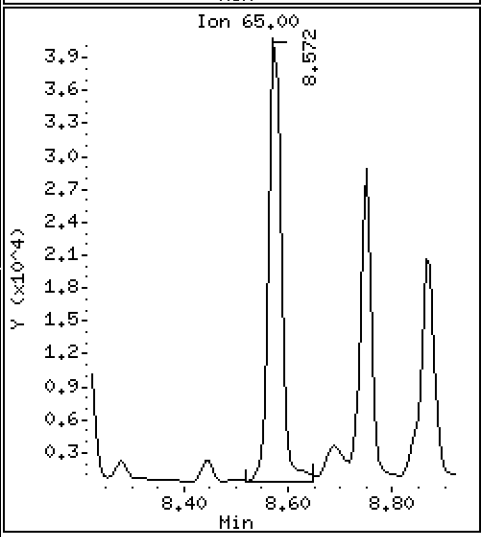
3 Phenol

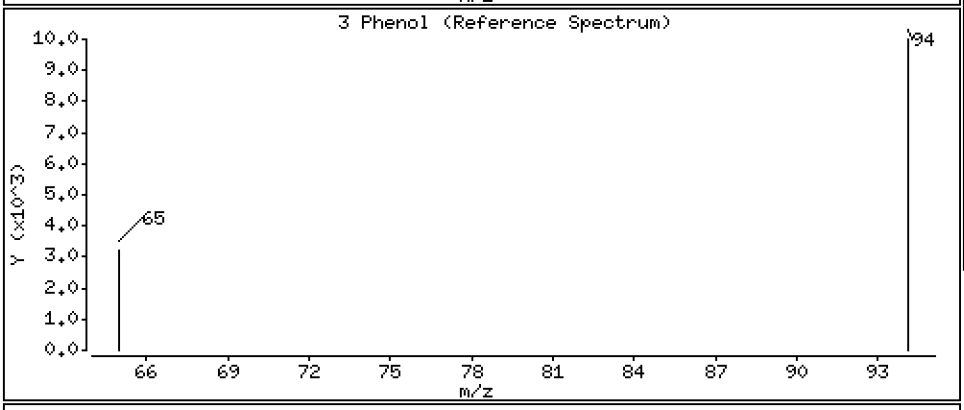
Concentration: 2.893 ug/L

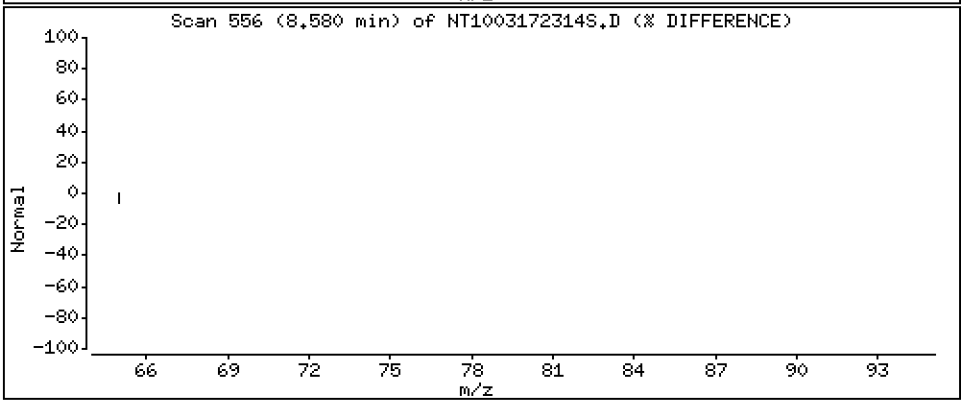












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172314S.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

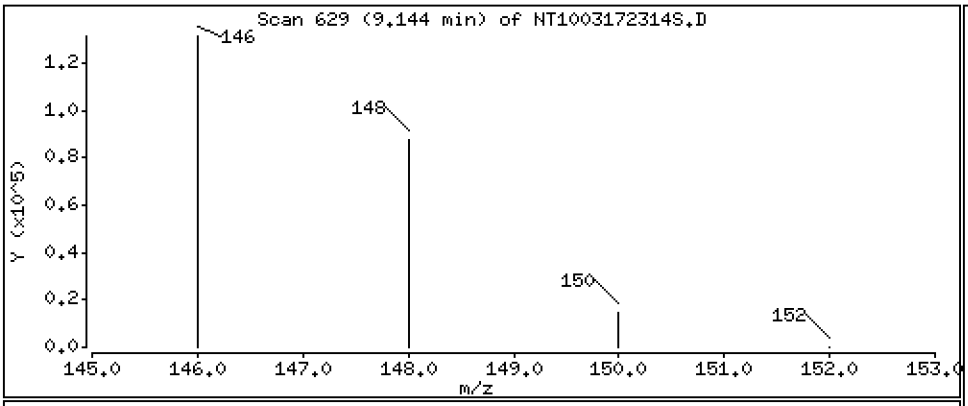
Operator: JGR

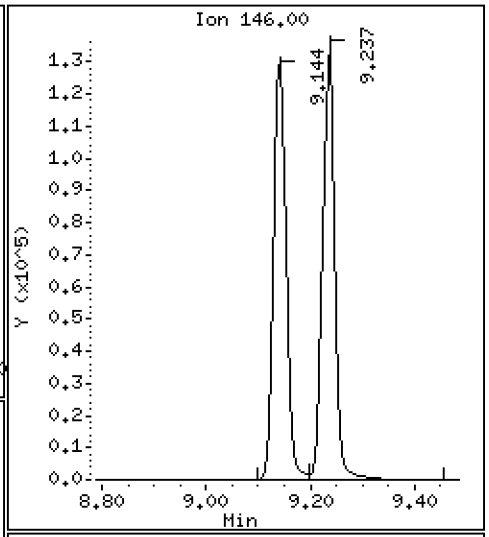
Column phase: ZB-5msi

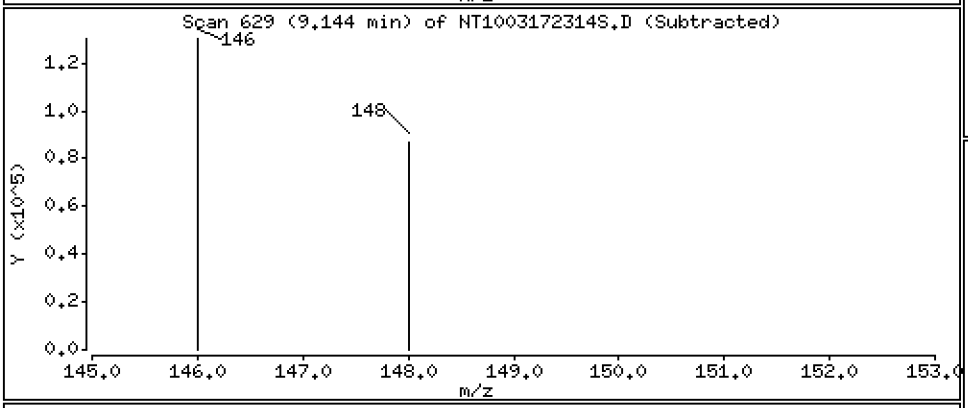
Column diameter: 0.25

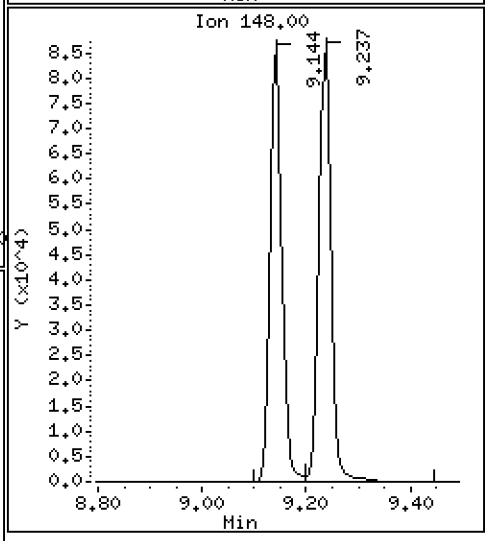
7 1,3-Dichlorobenzene

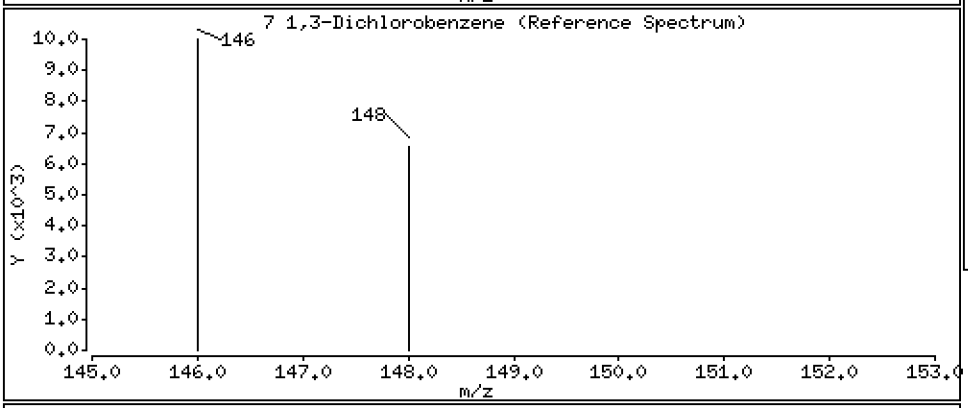
Concentration: 2.849 ug/L

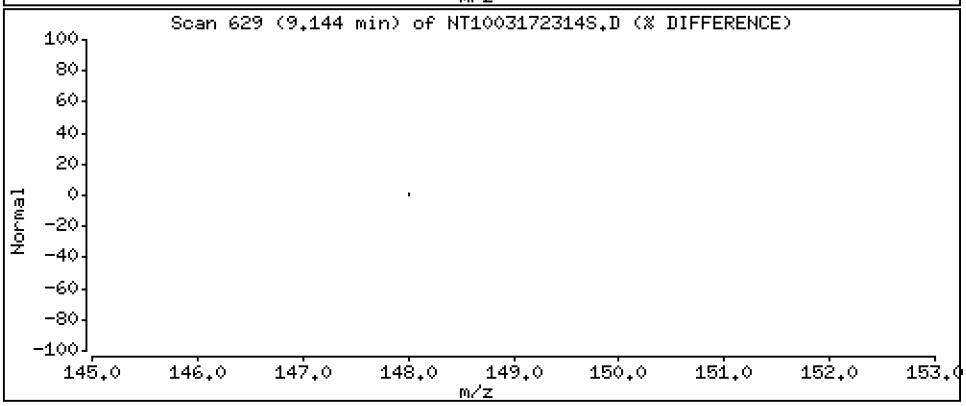












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172314S.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

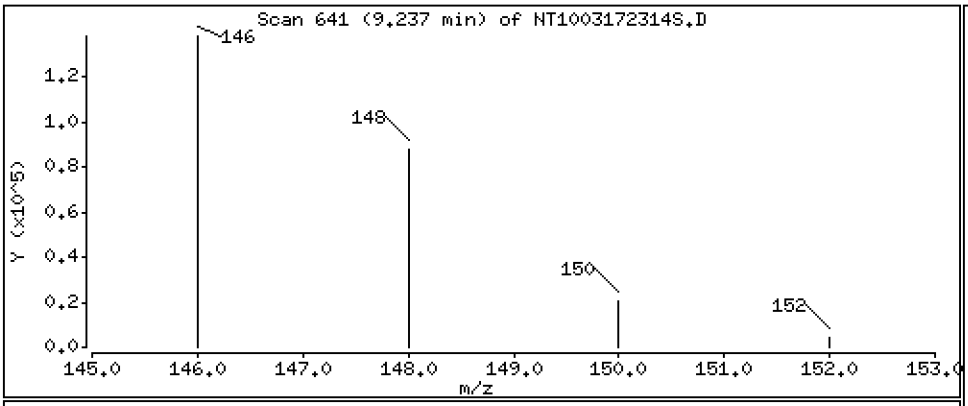
Operator: JGR

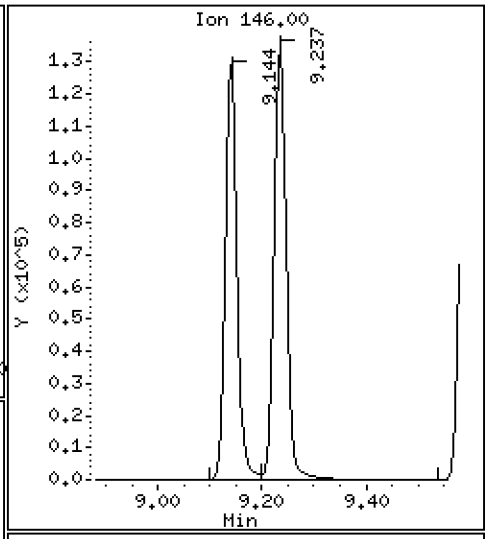
Column phase: ZB-5msi

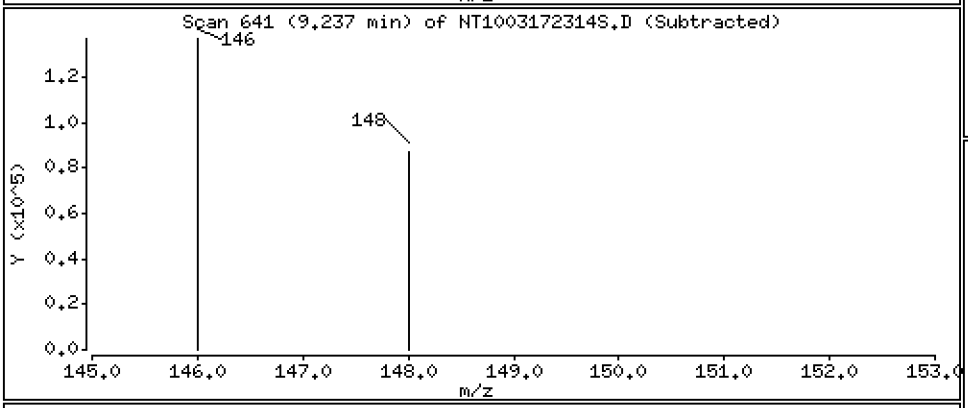
Column diameter: 0.25

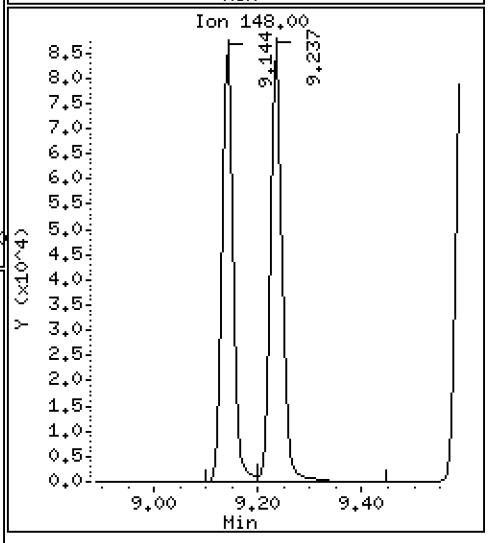
9 1,4-Dichlorobenzene

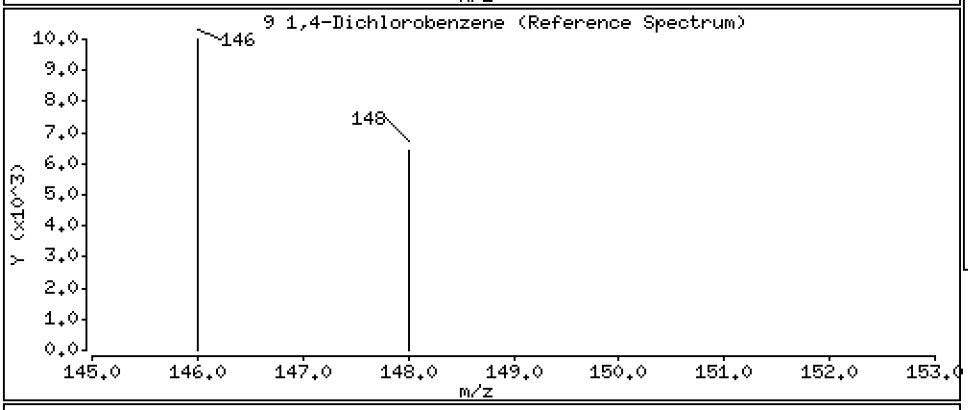
Concentration: 2.940 ug/L

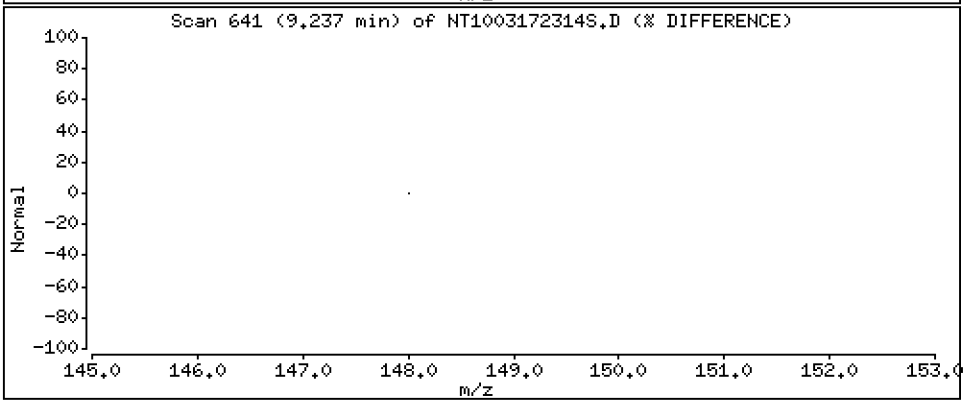












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

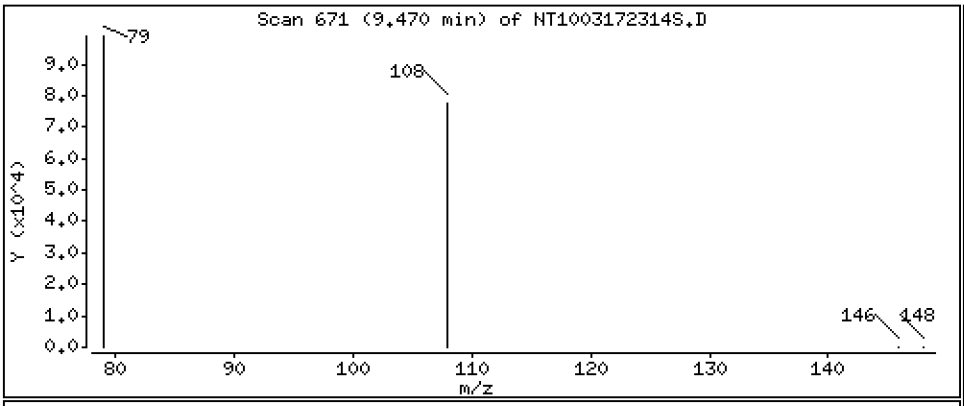
Operator: JGR

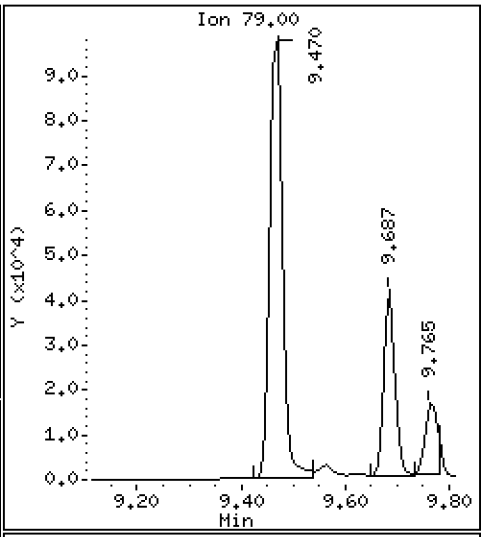
Column phase: ZB-5msi

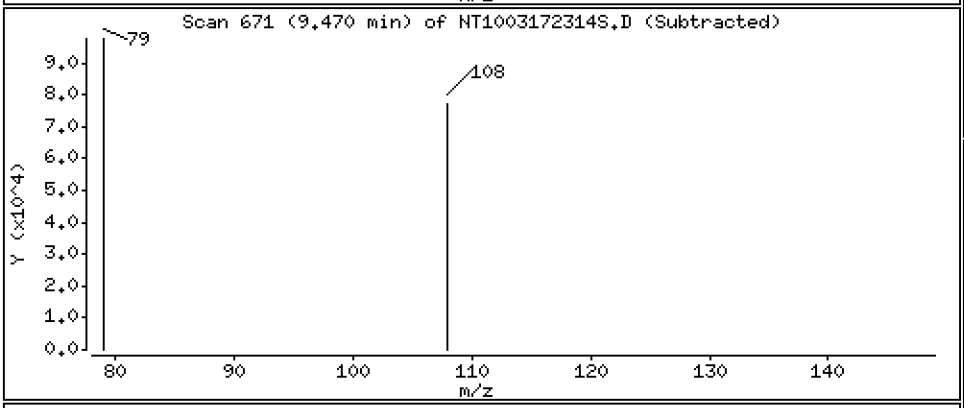
Column diameter: 0.25

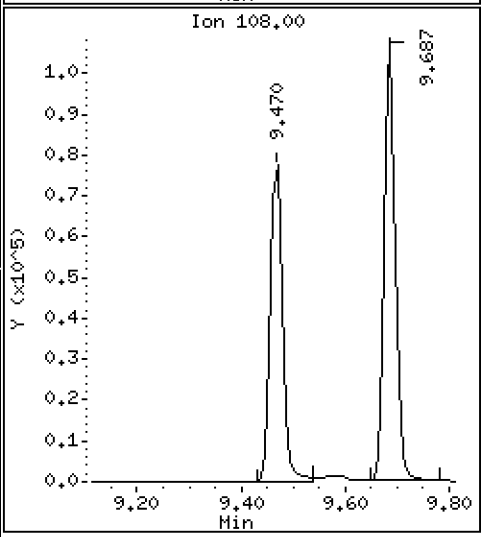
11 Benzyl alcohol

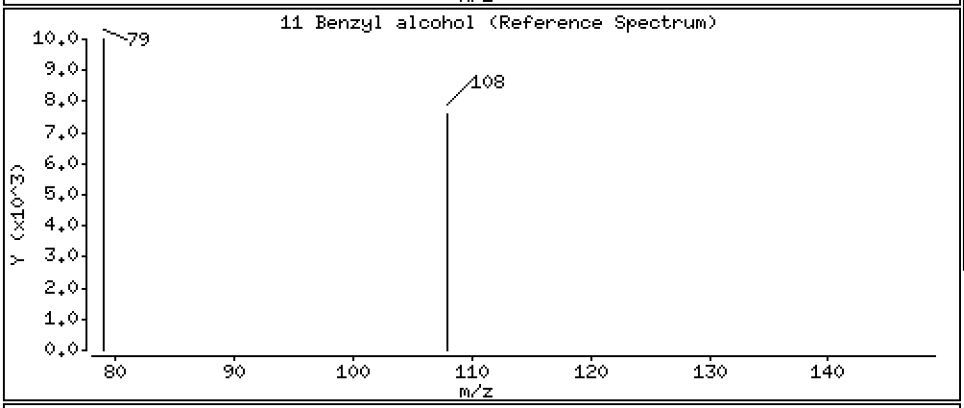
Concentration: 3.487 ug/L

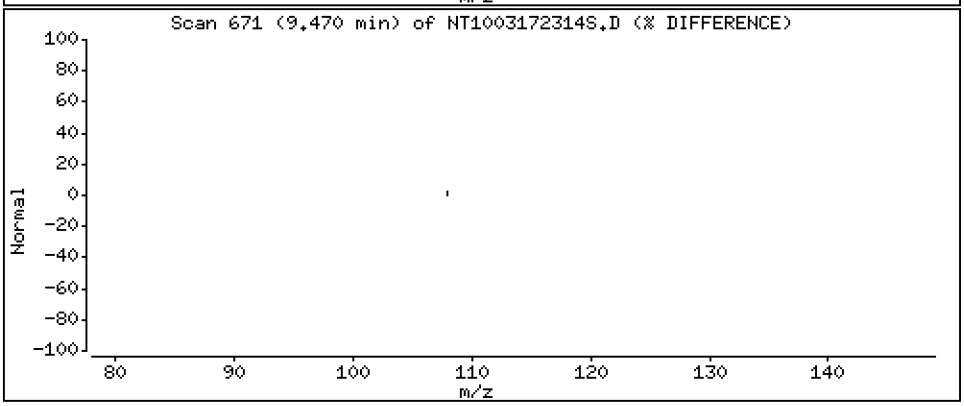












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172314S.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

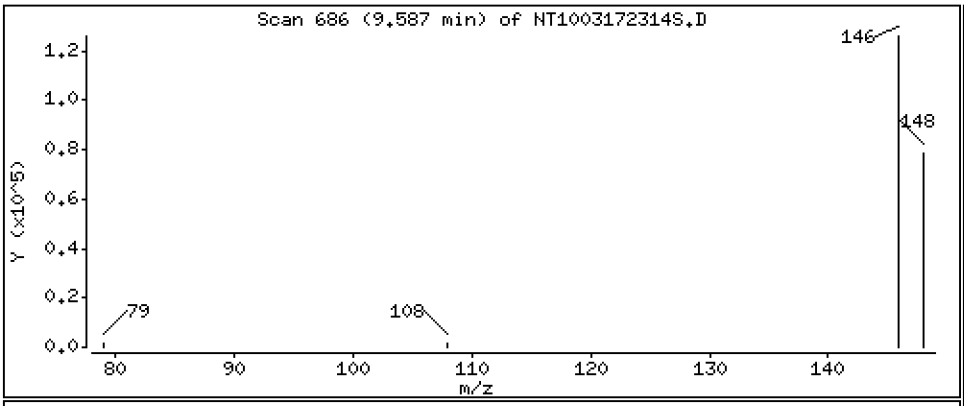
Operator: JGR

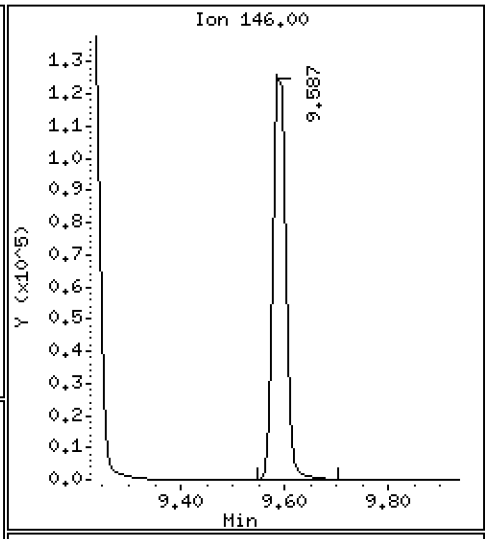
Column phase: ZB-5msi

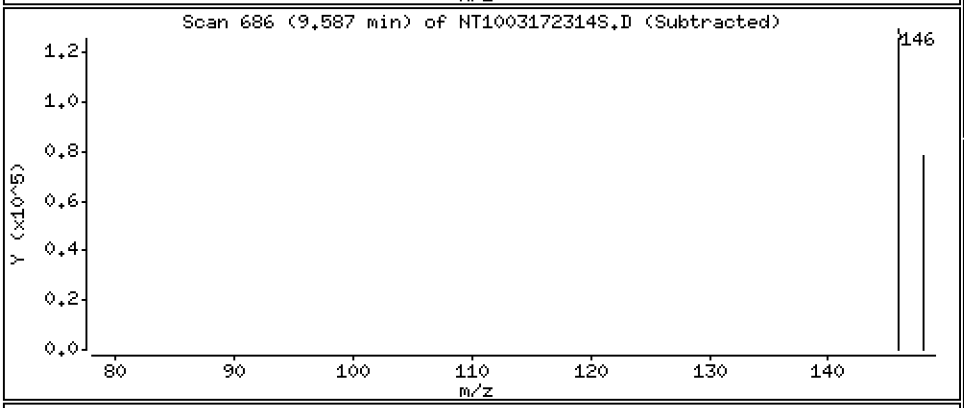
Column diameter: 0.25

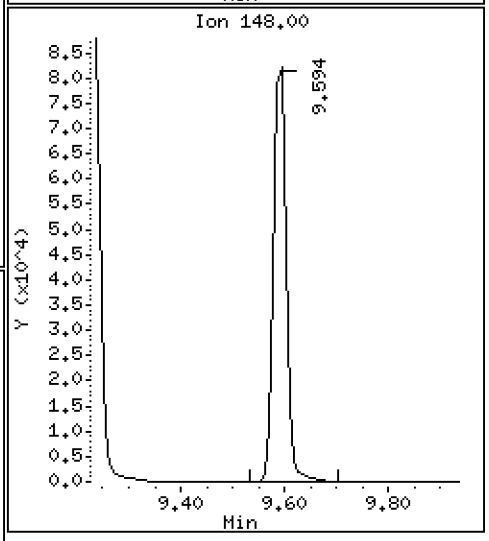
12 1,2-Dichlorobenzene

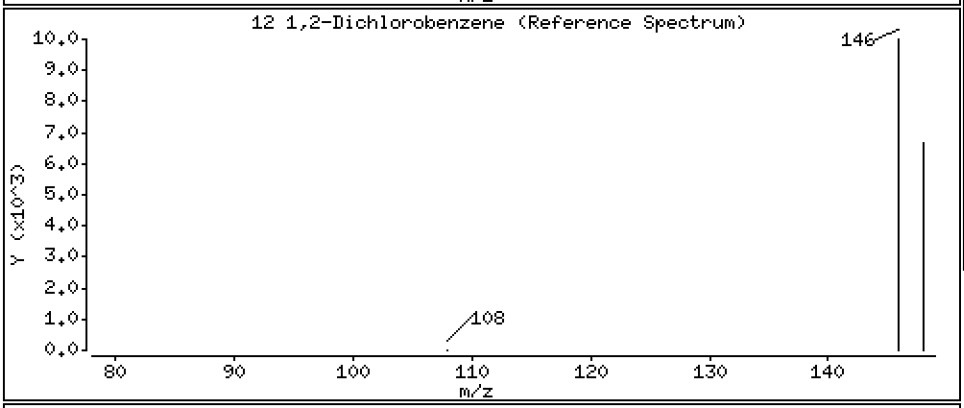
Concentration: 2.931 ug/L

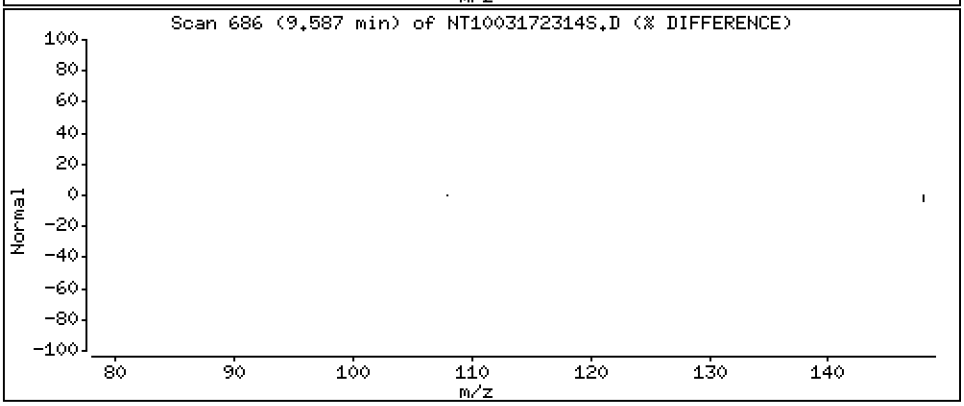












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172314S.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

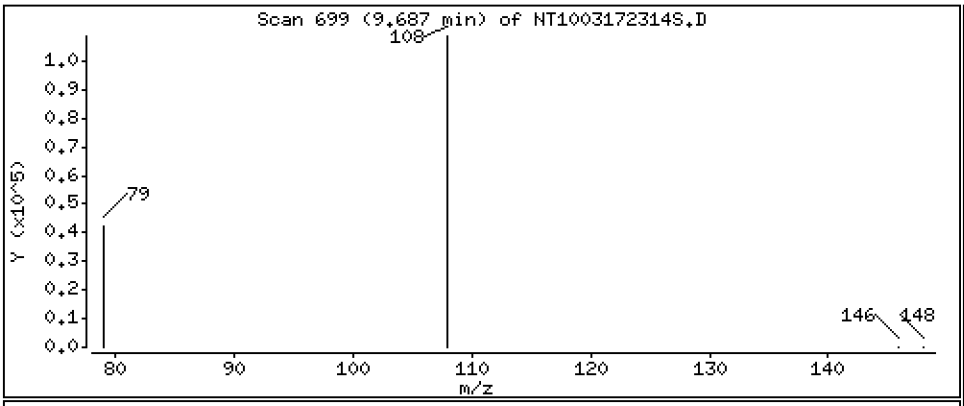
Operator: JGR

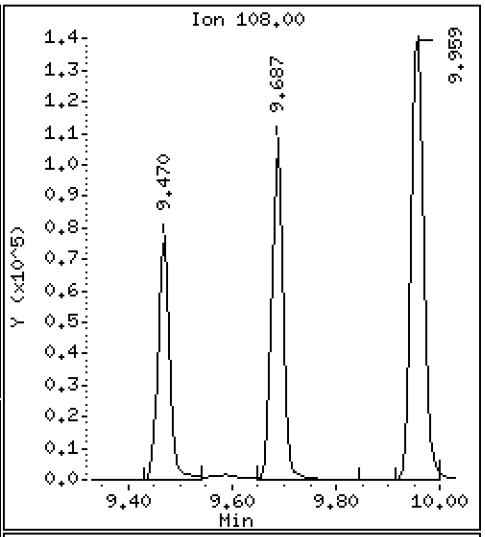
Column phase: ZB-5msi

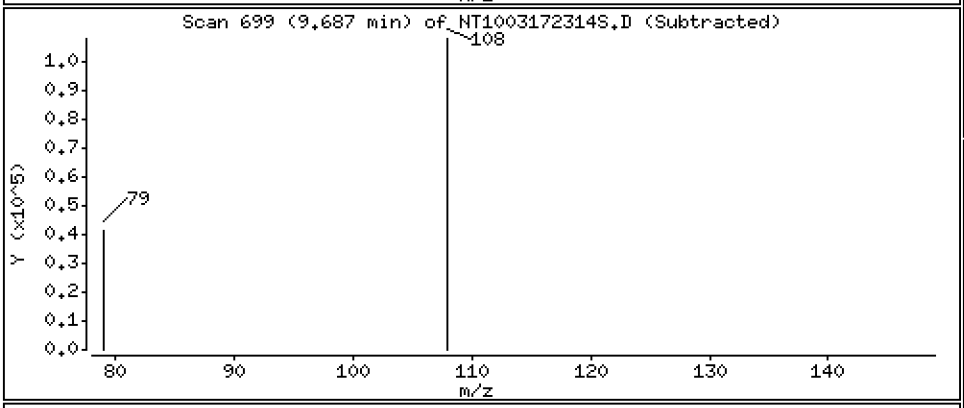
Column diameter: 0.25

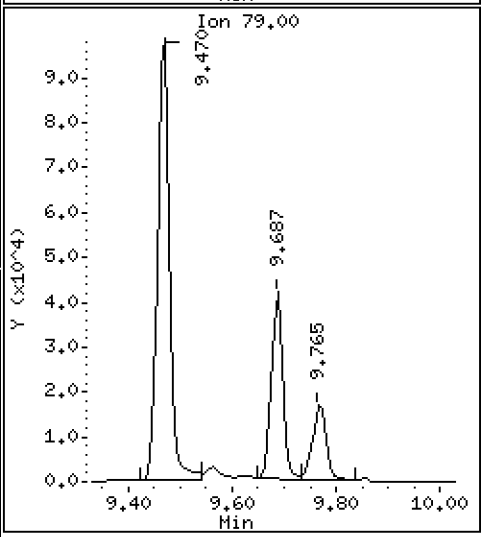
13 2-Methylphenol

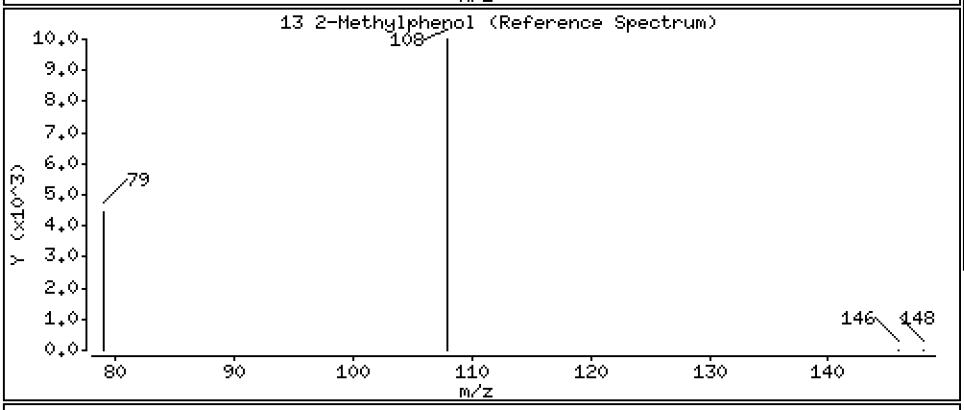
Concentration: 2.890 ug/L

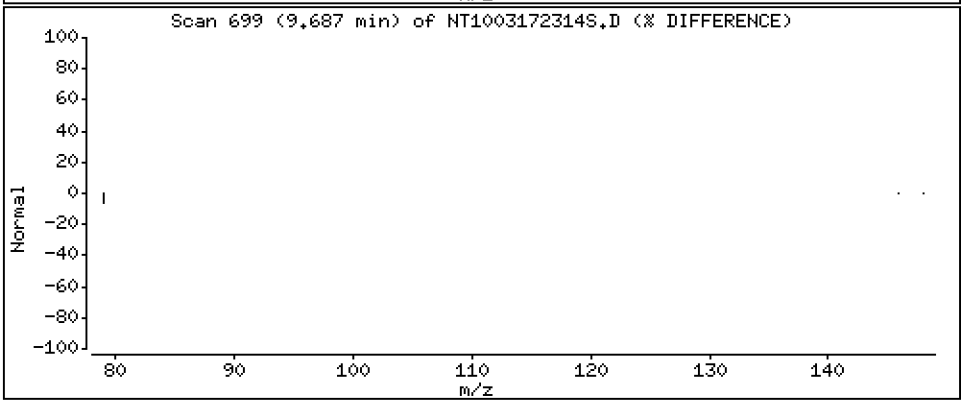












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

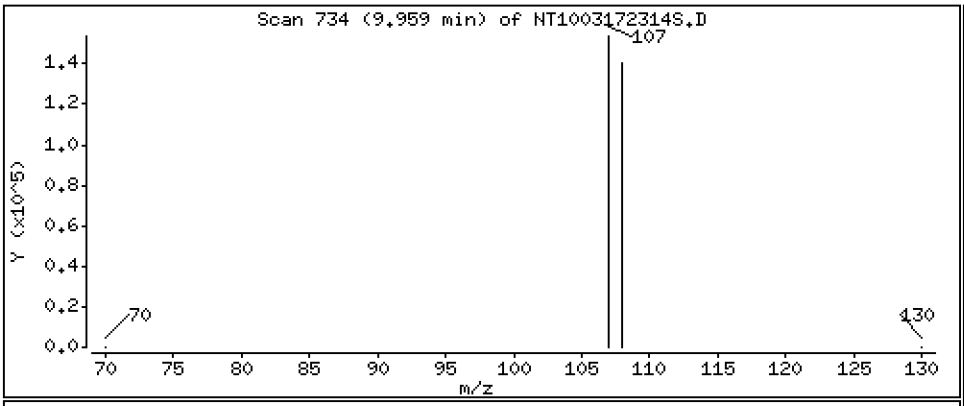
Operator: JGR

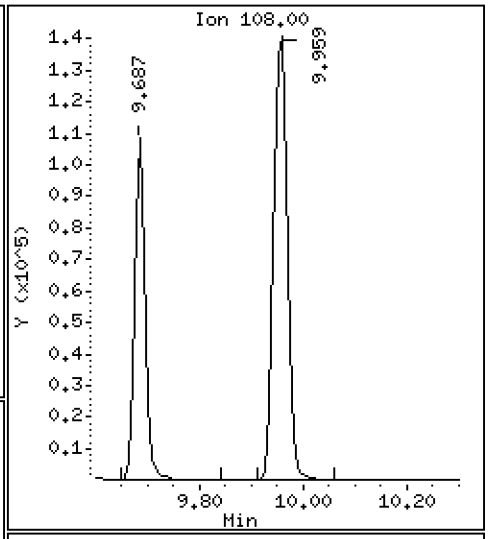
Column phase: ZB-5msi

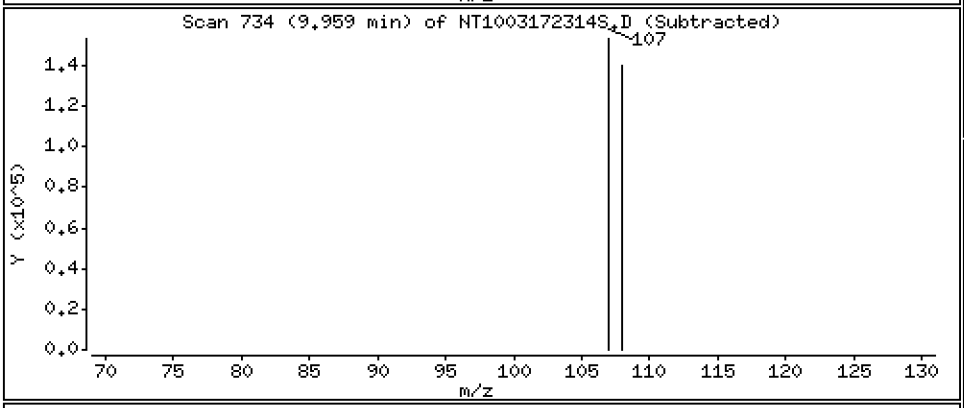
Column diameter: 0.25

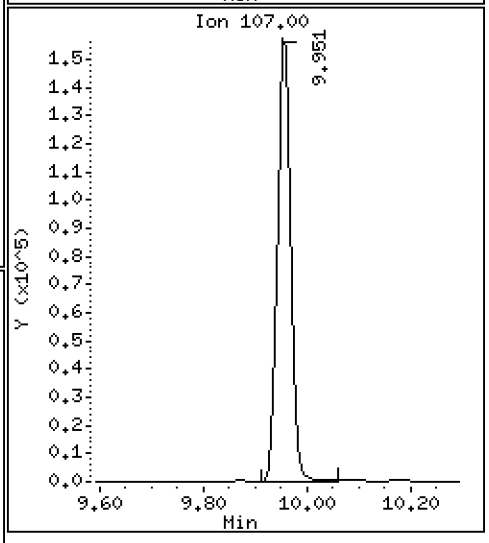
15 4-Methylphenol

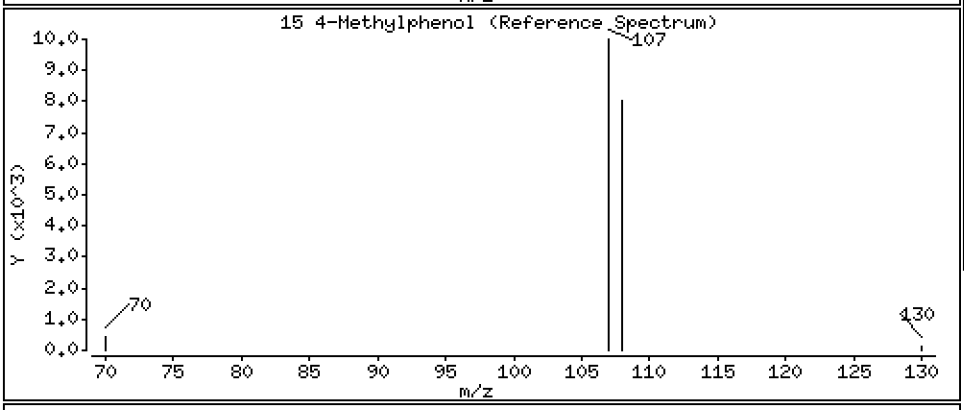
Concentration: 4.437 ug/L

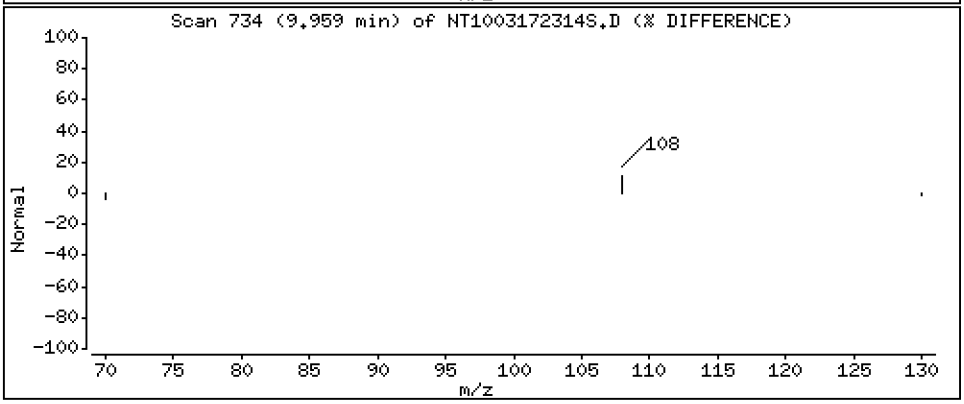












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

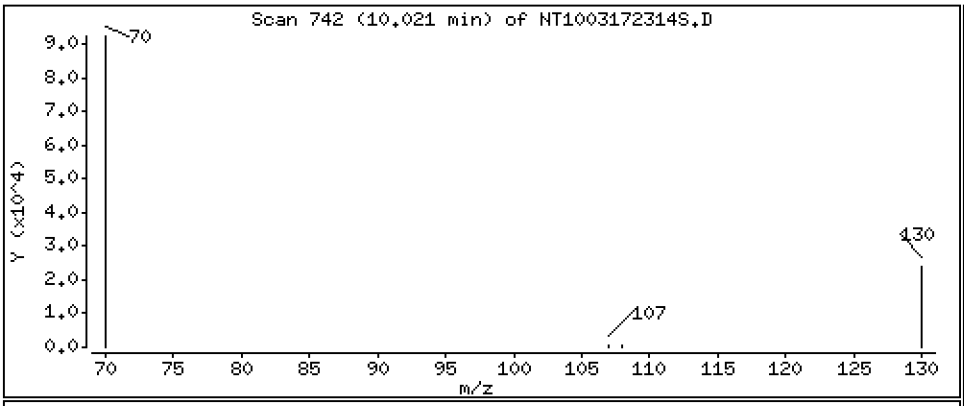
Operator: JGR

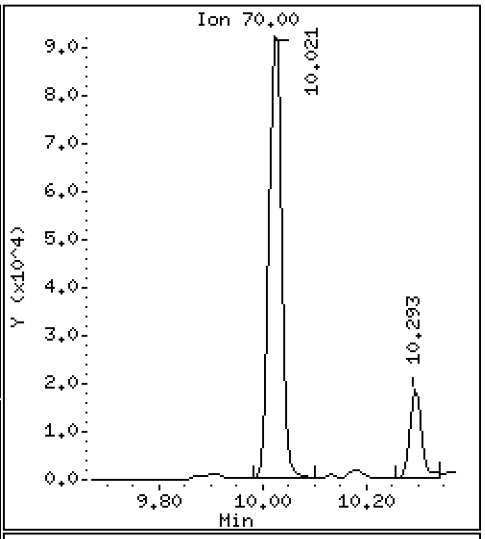
Column phase: ZB-5msi

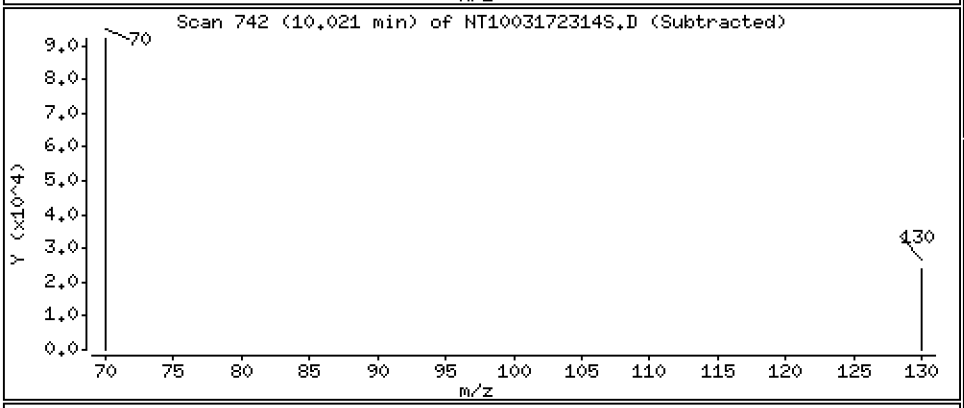
Column diameter: 0.25

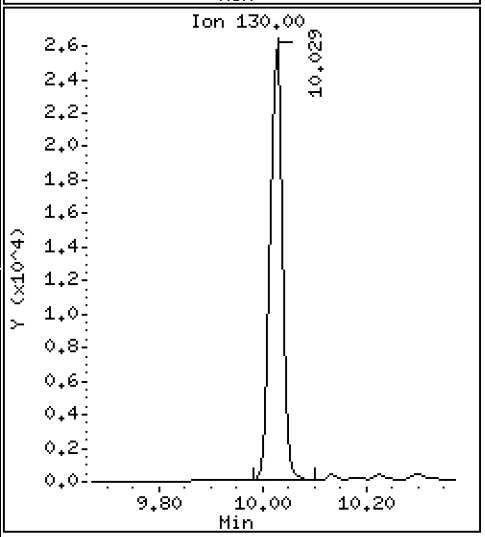
16 N-Nitroso-di-n-propylamine

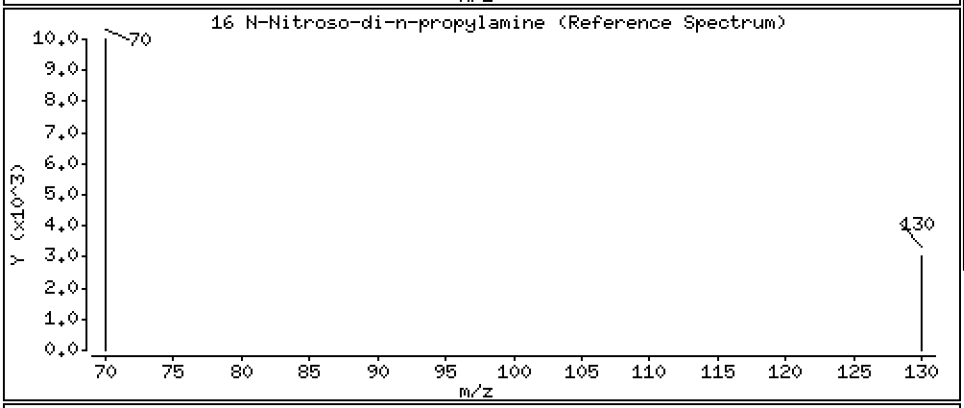
Concentration: 3.730 ug/L

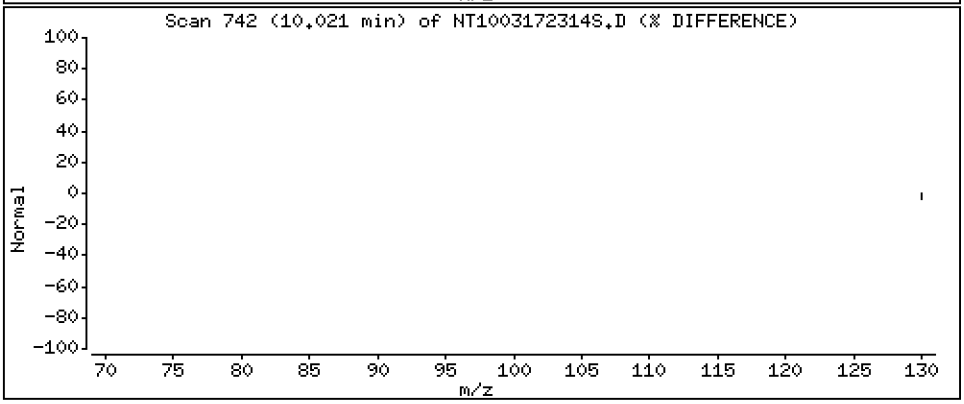












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

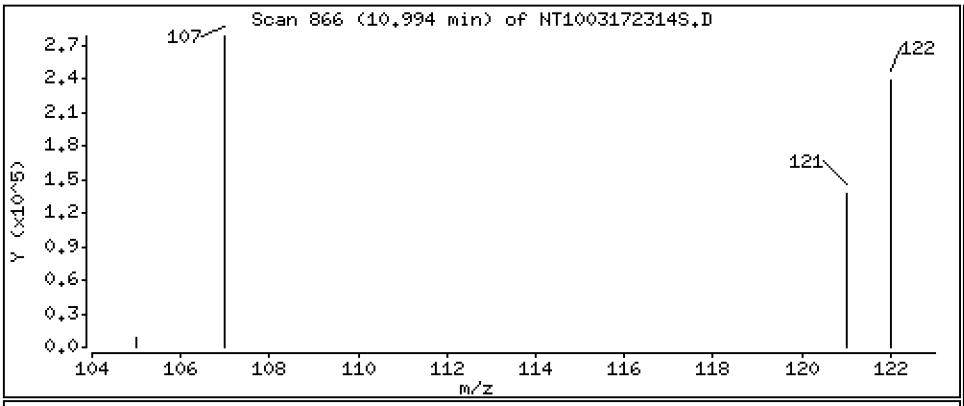
Operator: JGR

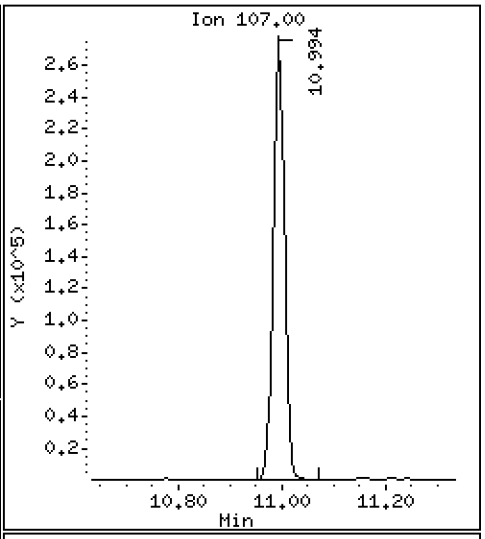
Column phase: ZB-5msi

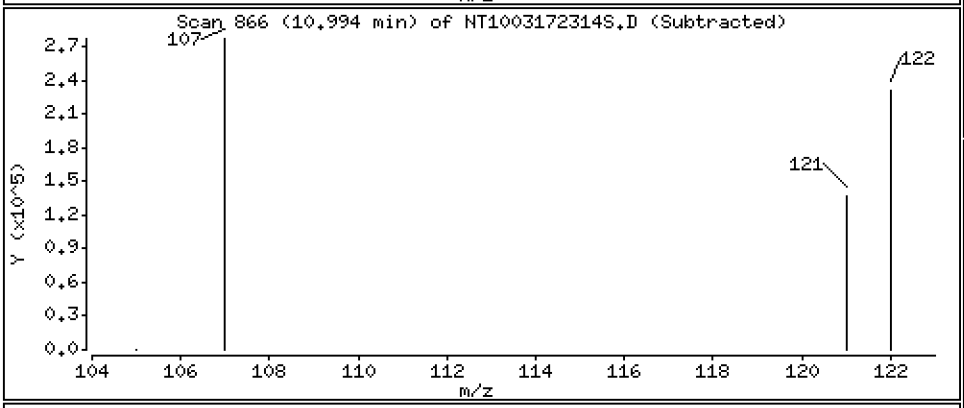
Column diameter: 0.25

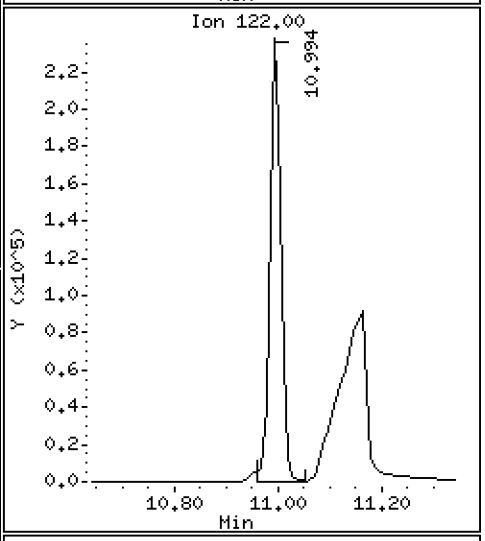
22 2,4-Dimethylphenol

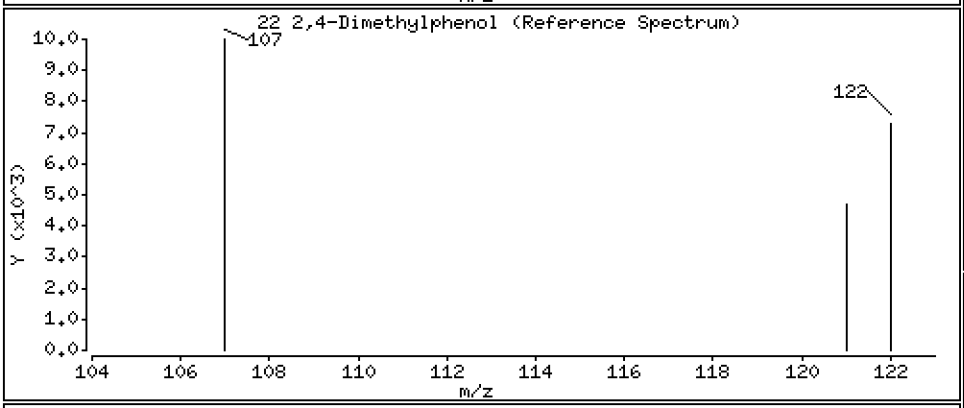
Concentration: 6.958 ug/L

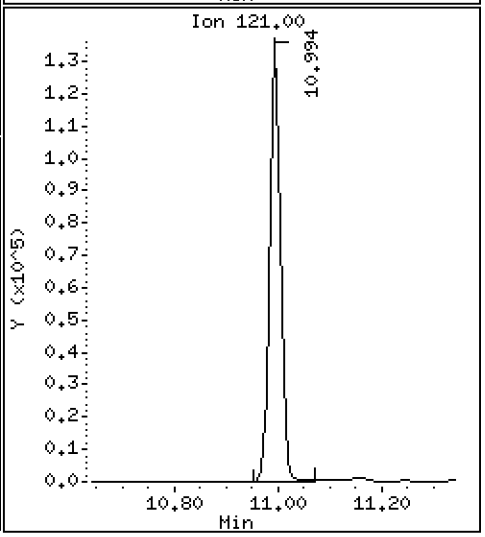


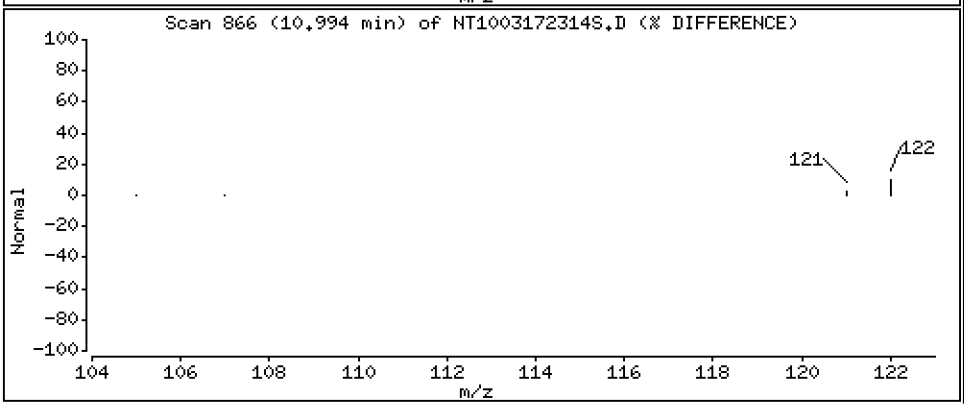












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723145.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

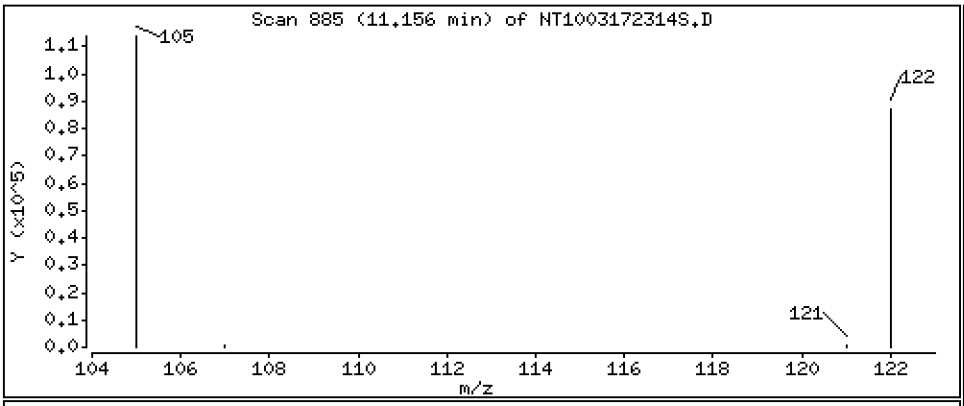
Operator: JGR

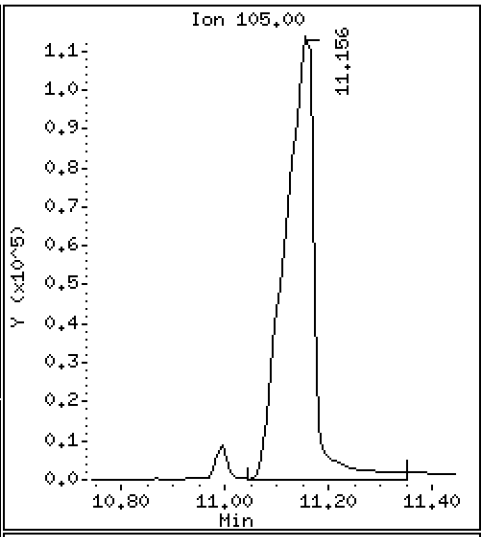
Column phase: ZB-5msi

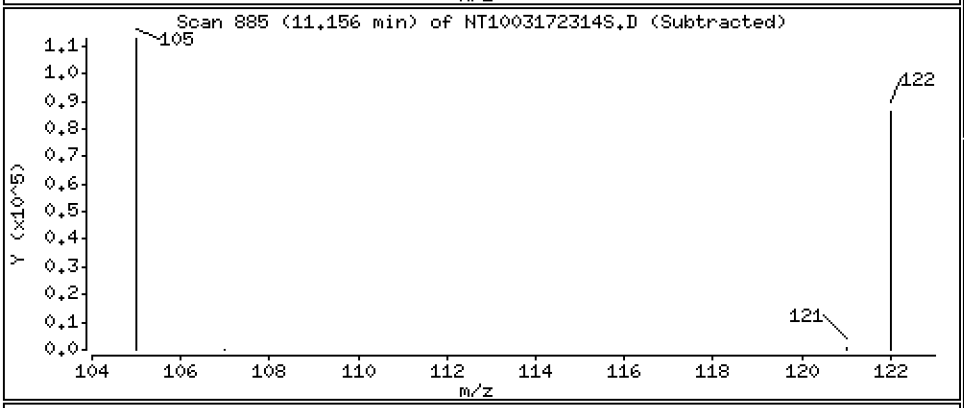
Column diameter: 0.25

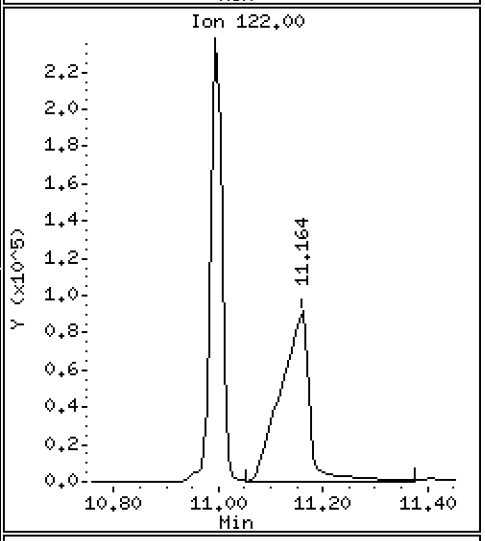
24 Benzoic acid

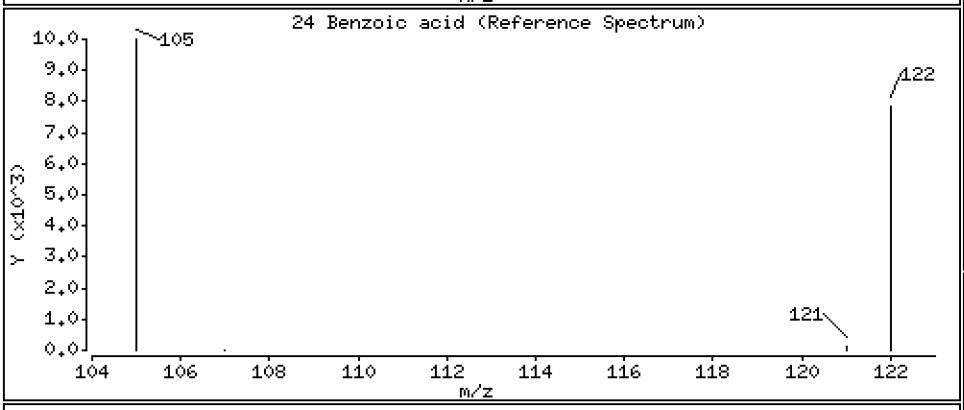
Concentration: 13.36 ug/L

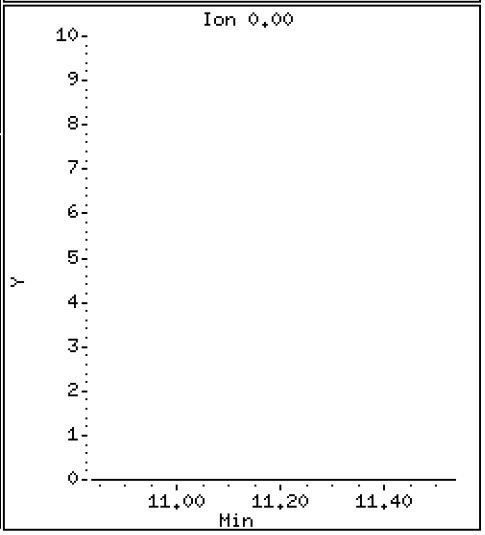


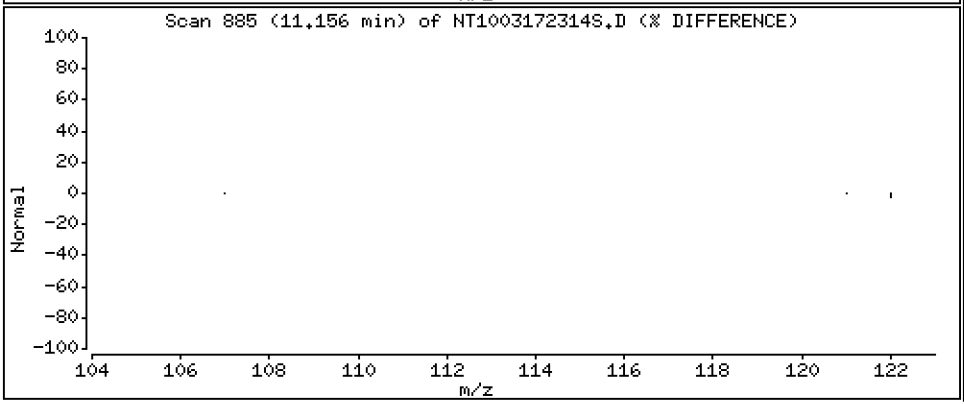












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

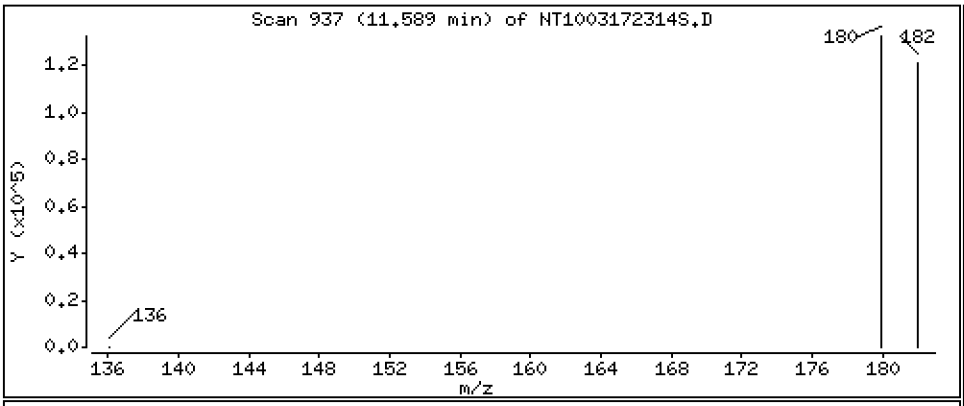
Operator: JGR

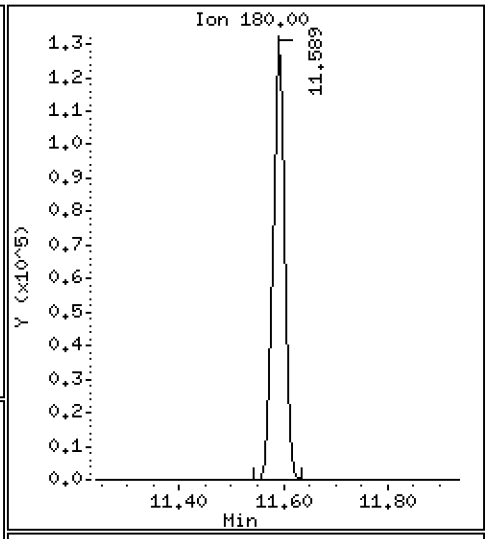
Column phase: ZB-5msi

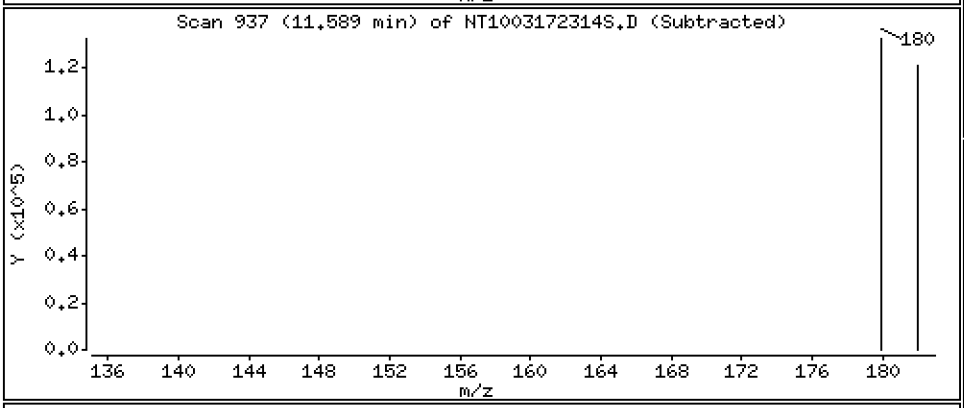
Column diameter: 0.25

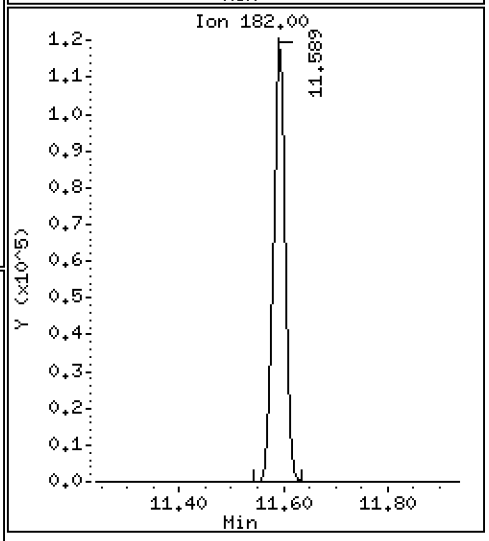
26 1,2,4-Trichlorobenzene

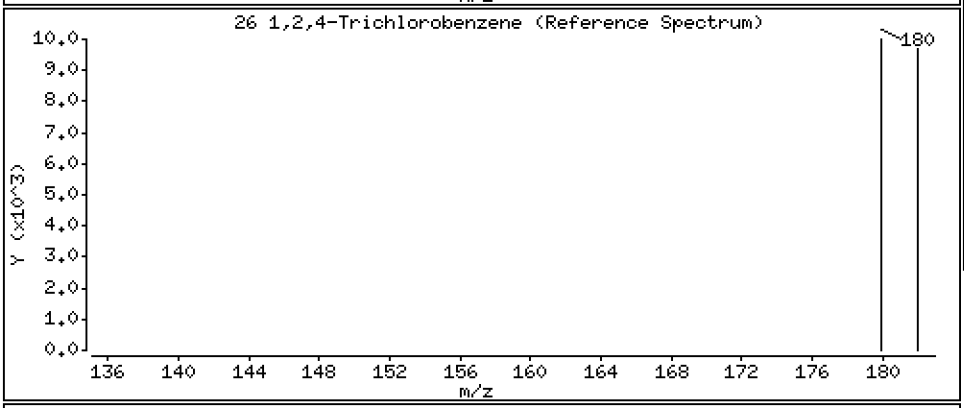
Concentration: 3.393 ug/L

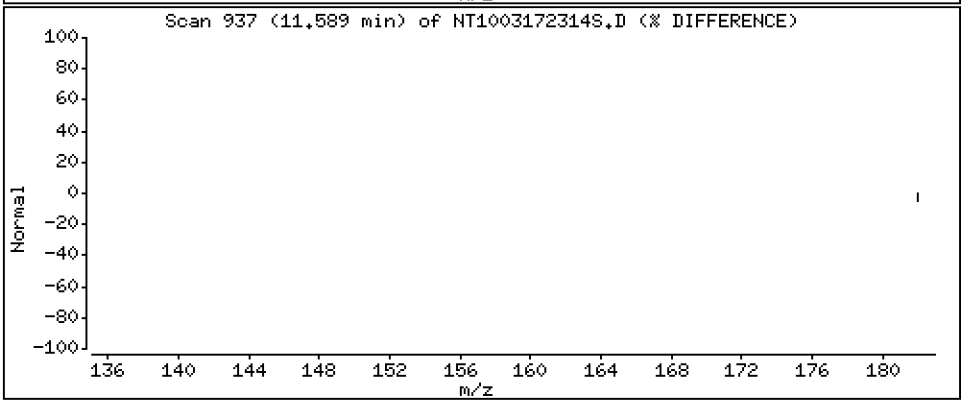












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

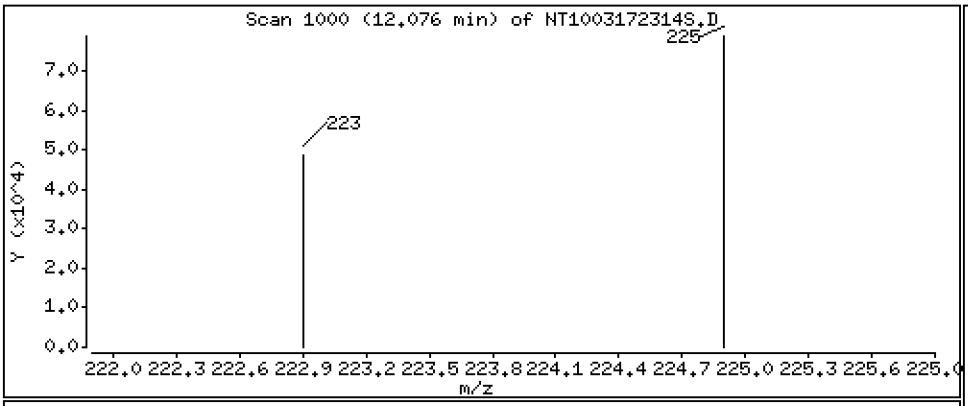
Operator: JGR

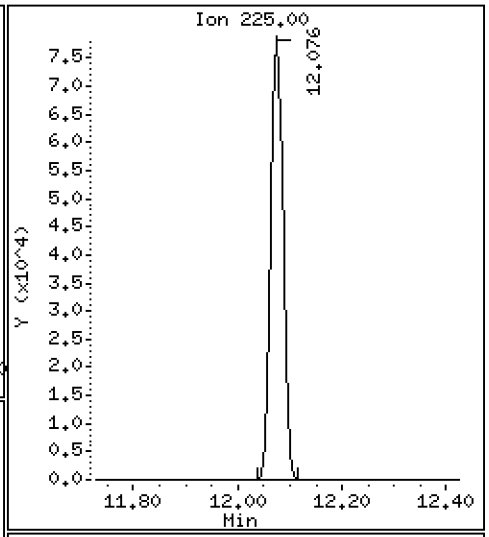
Column phase: ZB-5msi

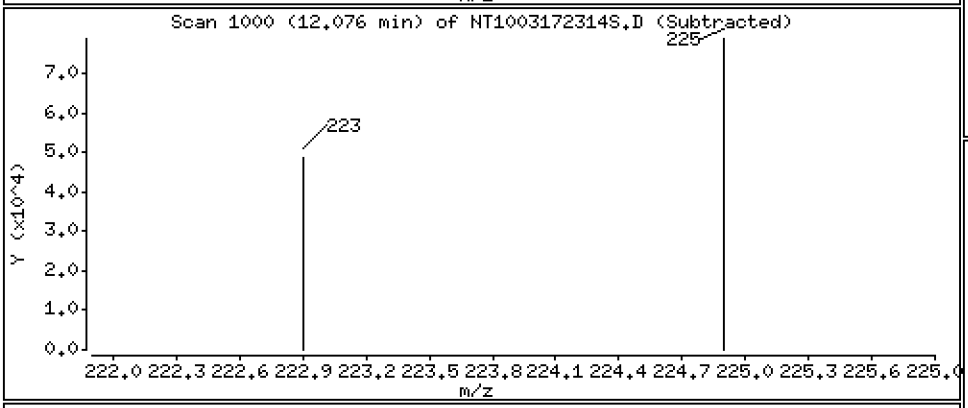
Column diameter: 0.25

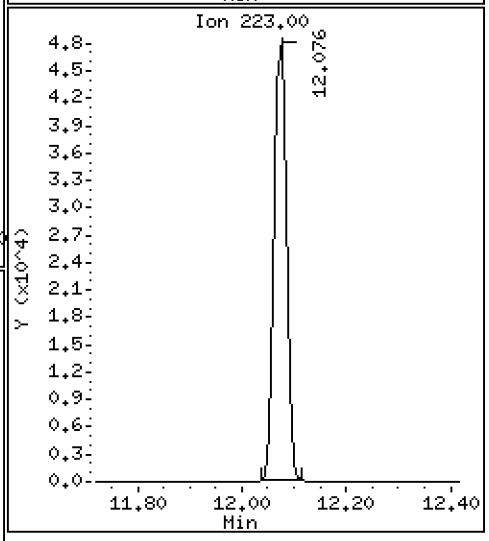
30 Hexachlorobutadiene

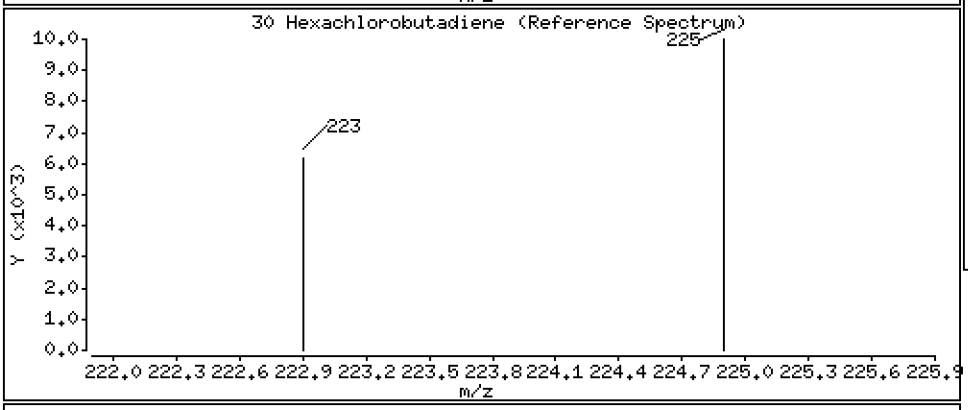
Concentration: 3.412 ug/L

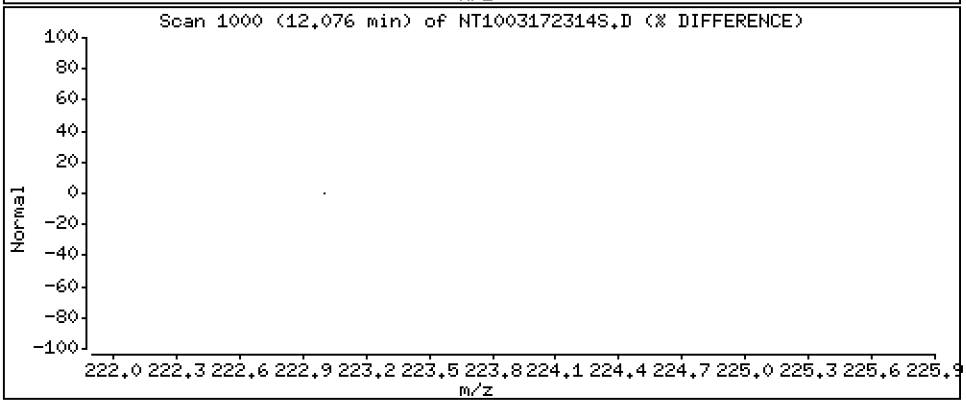












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172314S.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

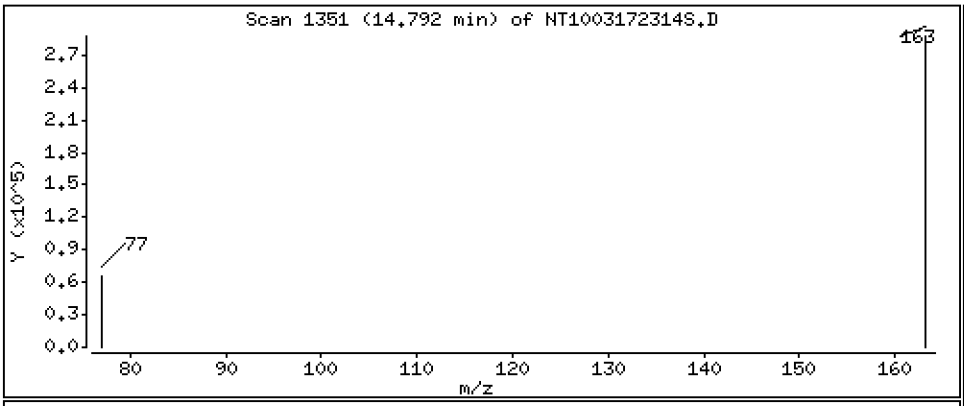
Operator: JGR

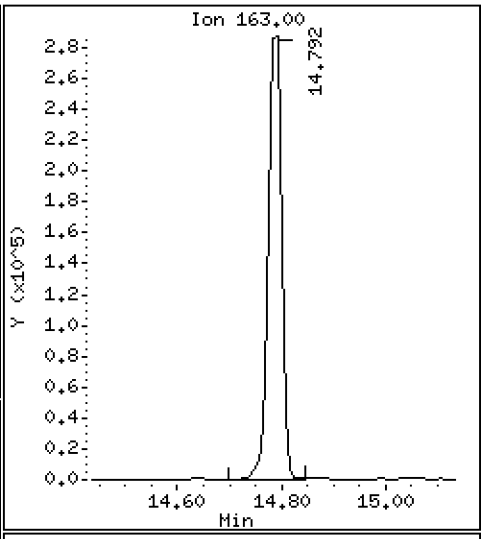
Column phase: ZB-5msi

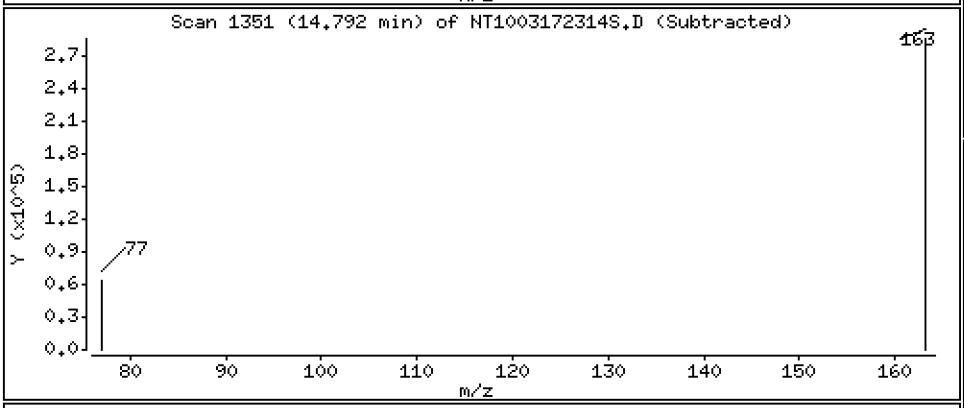
Column diameter: 0.25

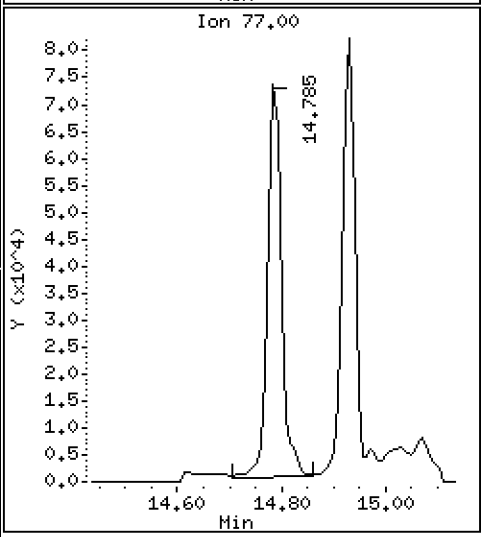
39 Dimethylphthalate

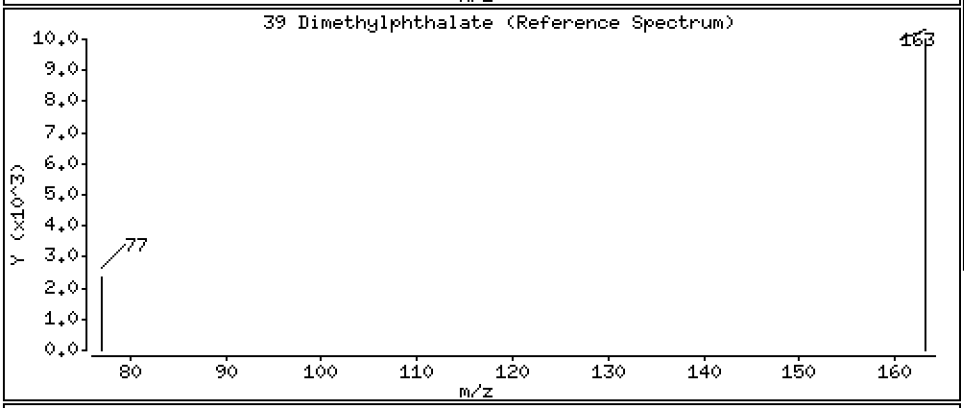
Concentration: 4.653 ug/L

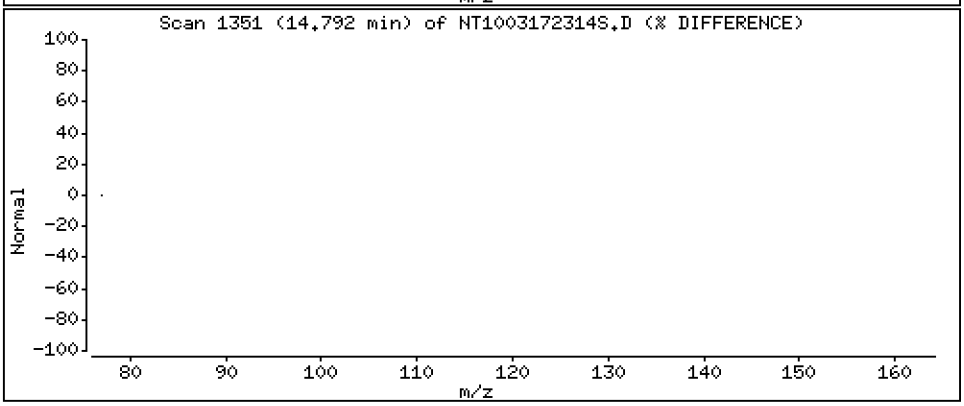












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

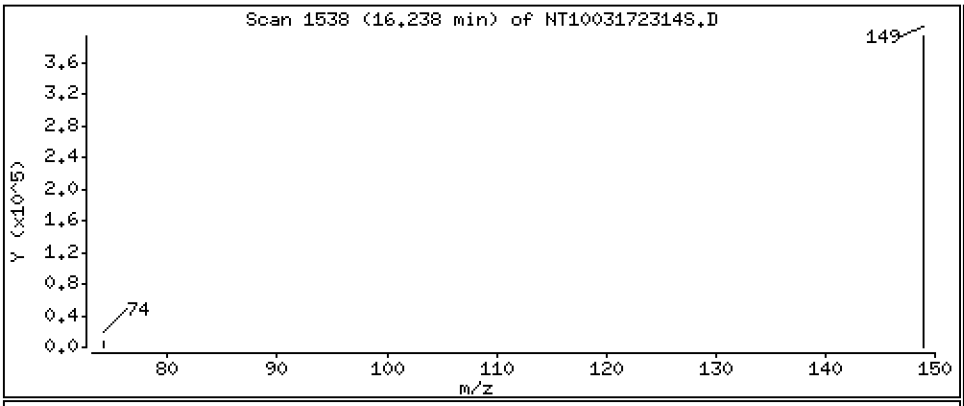
Operator: JGR

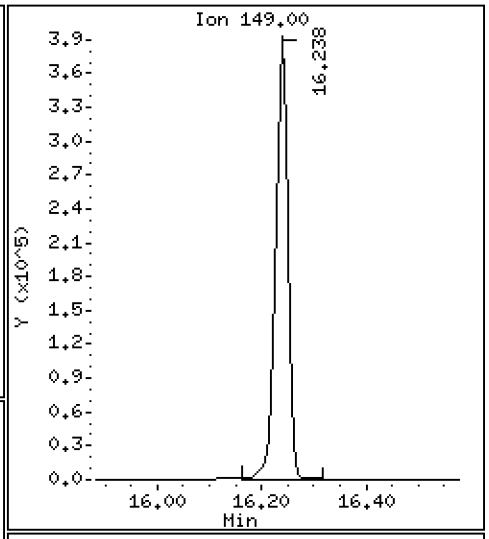
Column phase: ZB-5msi

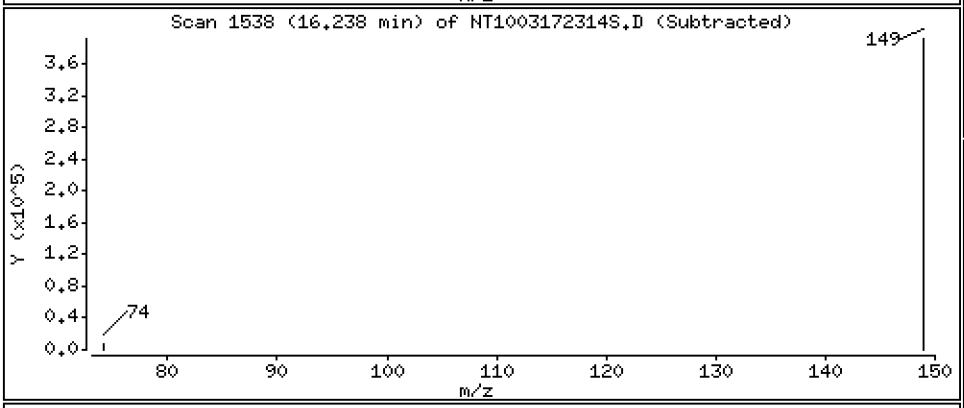
Column diameter: 0.25

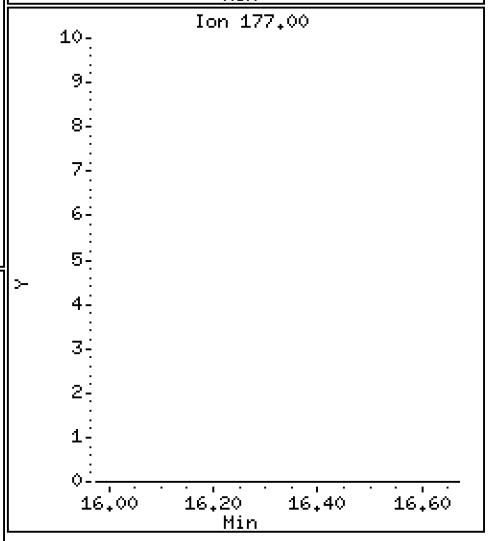
50 Diethylphthalate

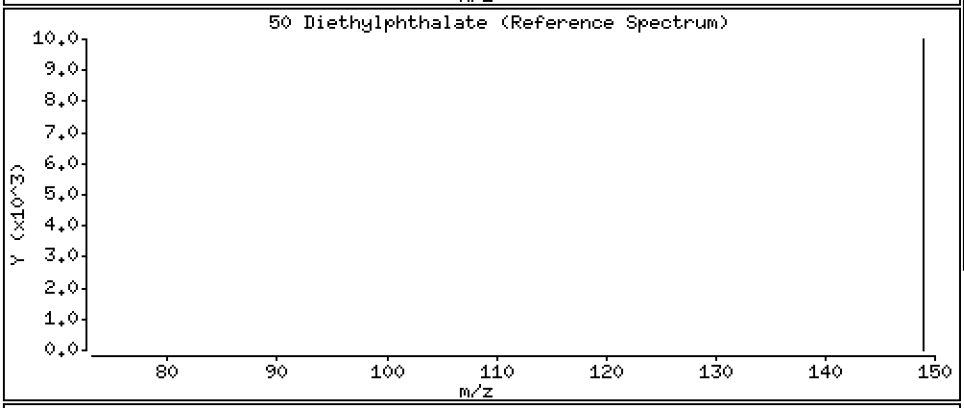
Concentration: 5.855 ug/L

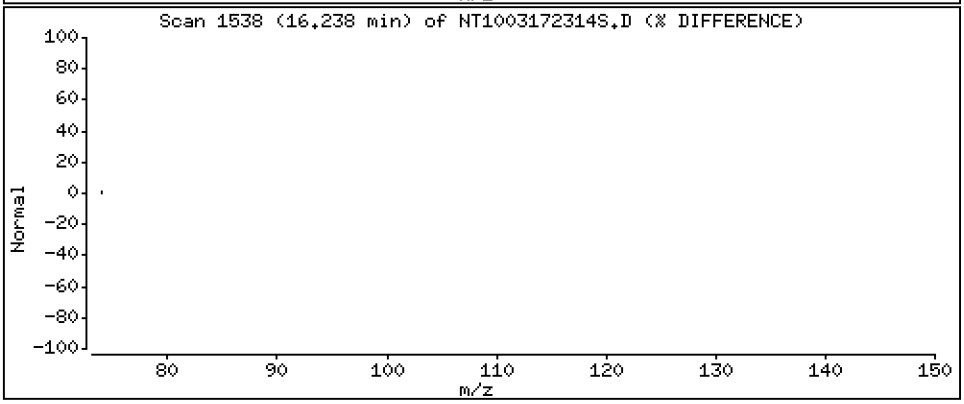












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

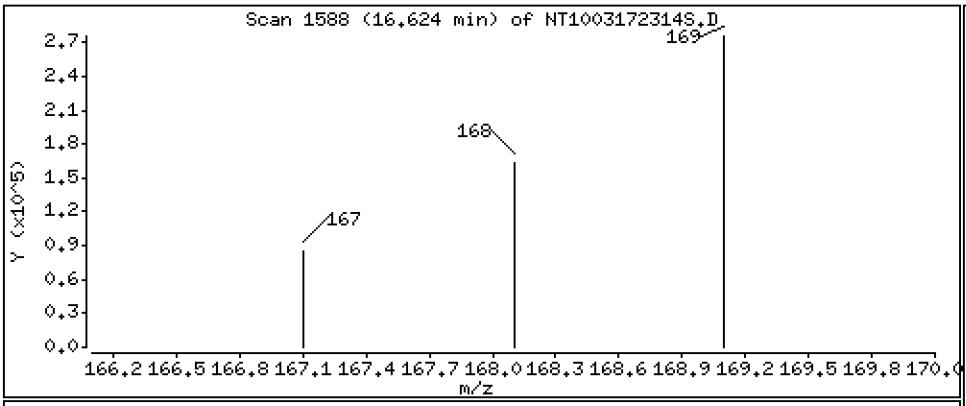
Operator: JGR

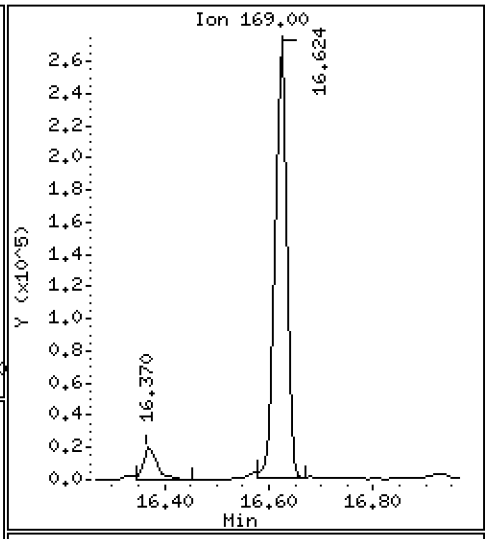
Column phase: ZB-5msi

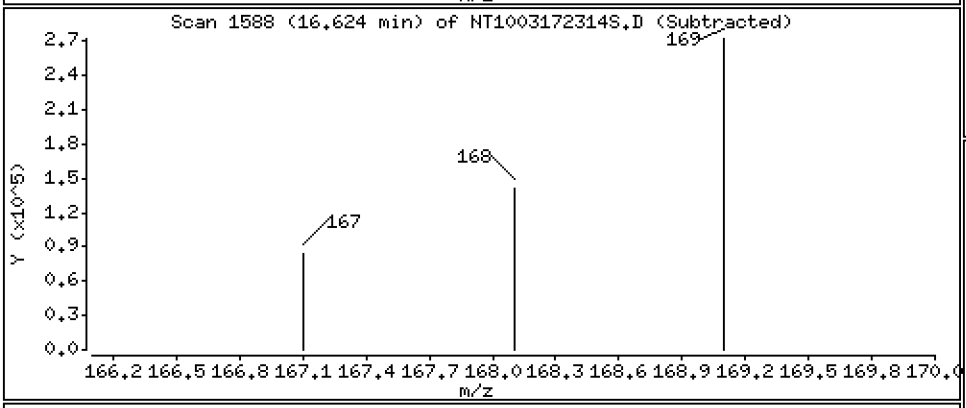
Column diameter: 0.25

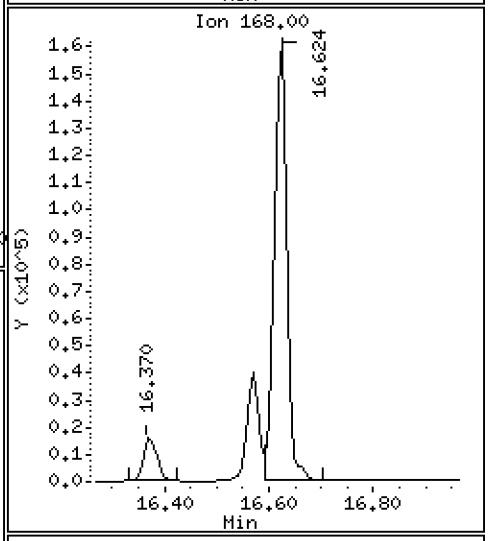
54 N-Nitrosodiphenylamine

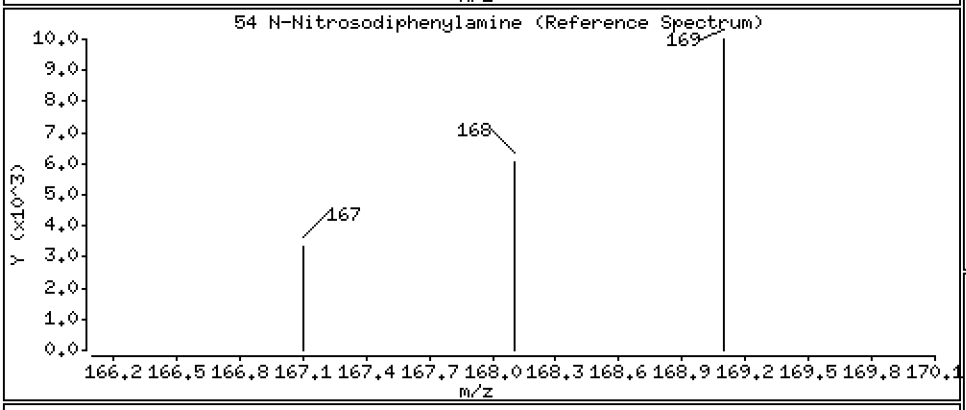
Concentration: 4.403 ug/L

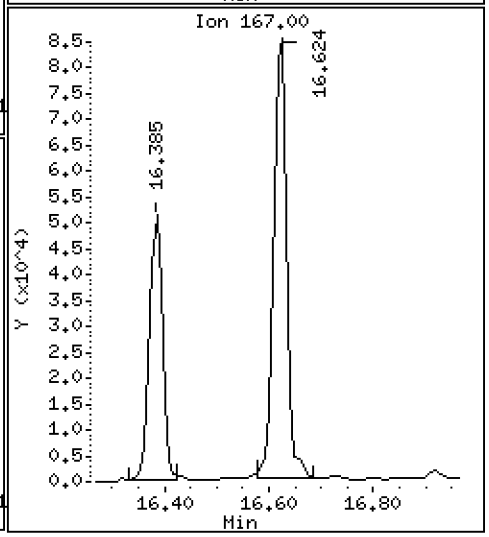


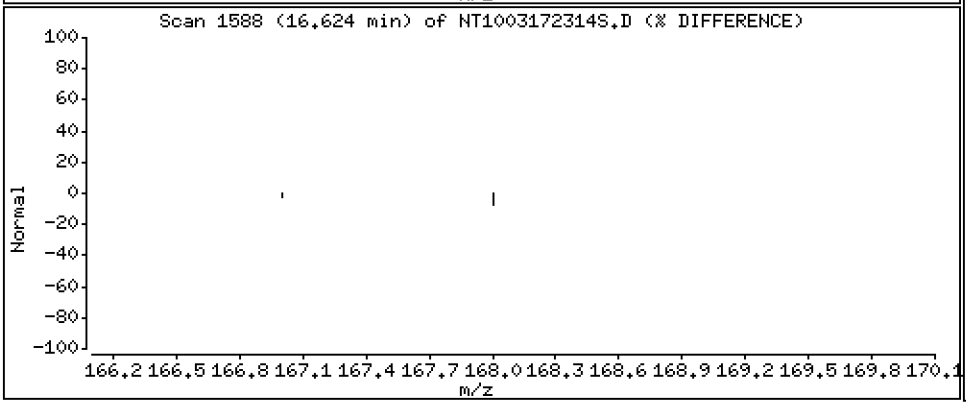












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172314S.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

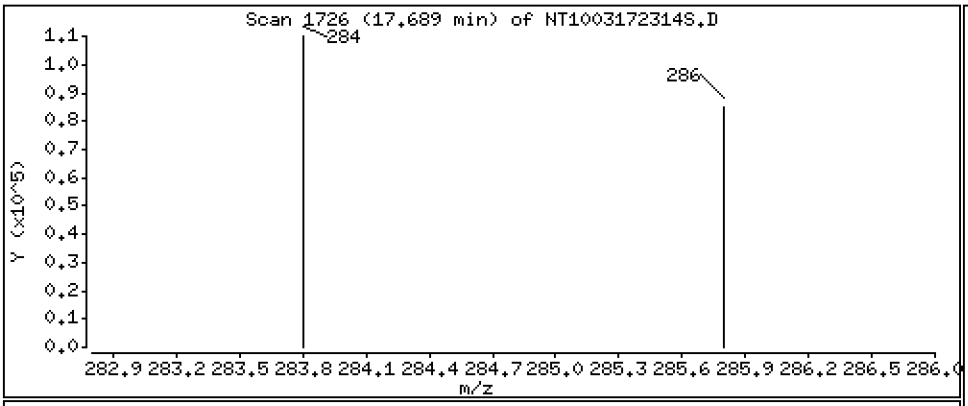
Operator: JGR

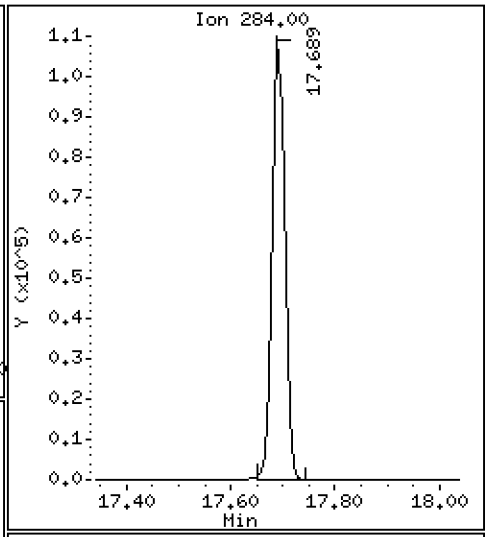
Column phase: ZB-5msi

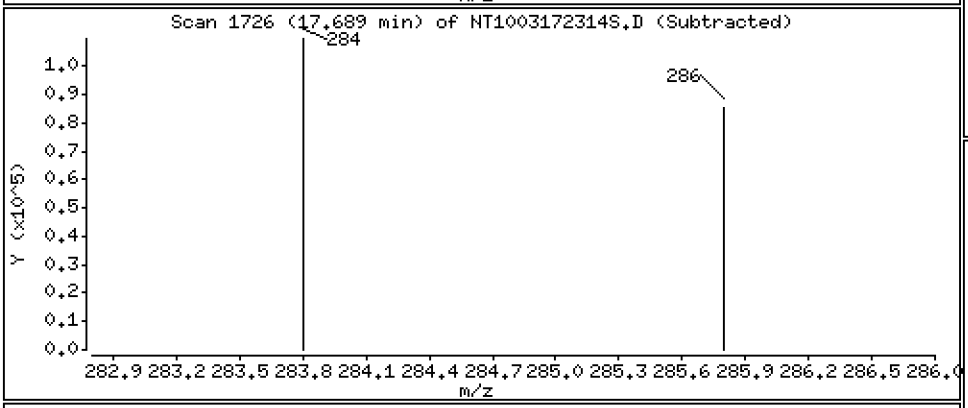
Column diameter: 0.25

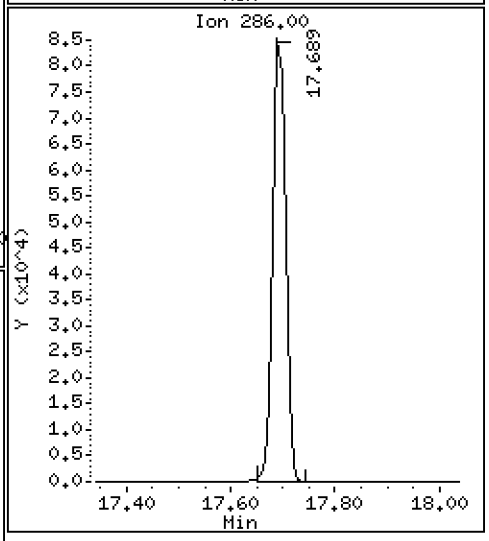
57 Hexachlorobenzene

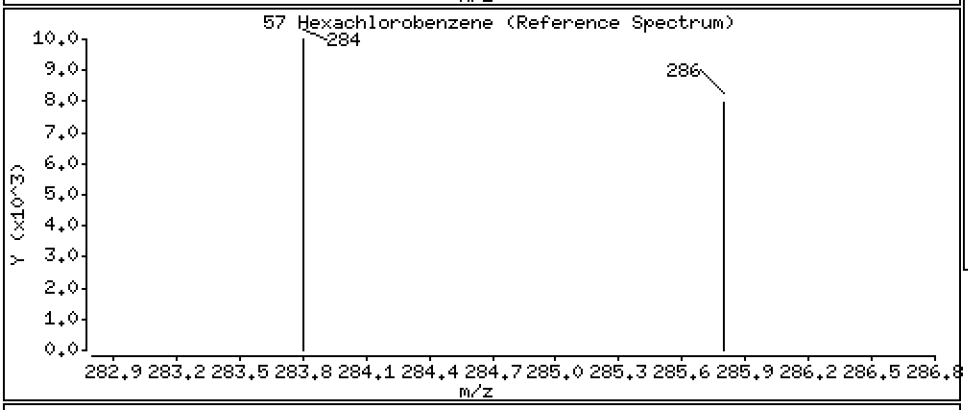
Concentration: 4.160 ug/L

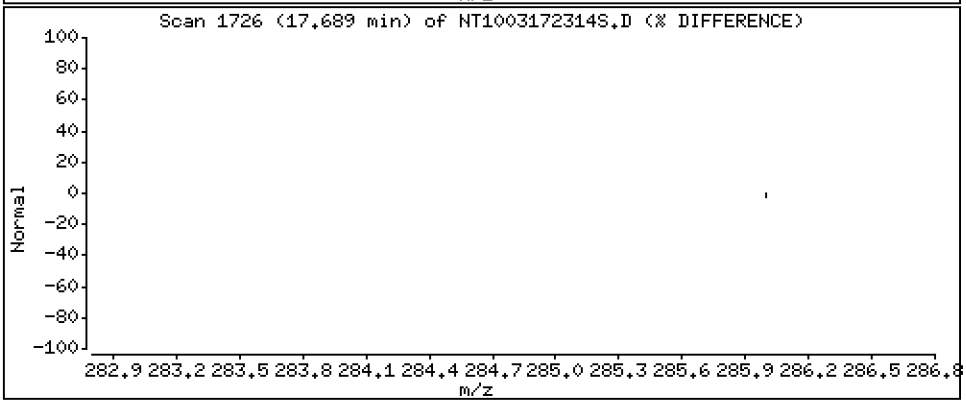












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172314S.D

Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

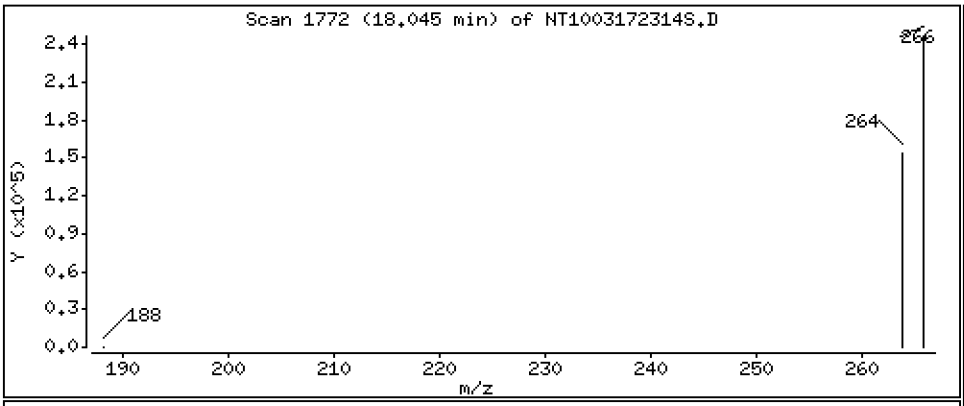
Operator: JGR

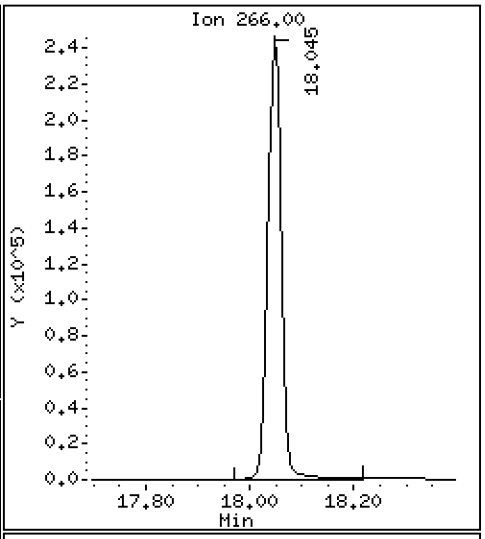
Column phase: ZB-5msi

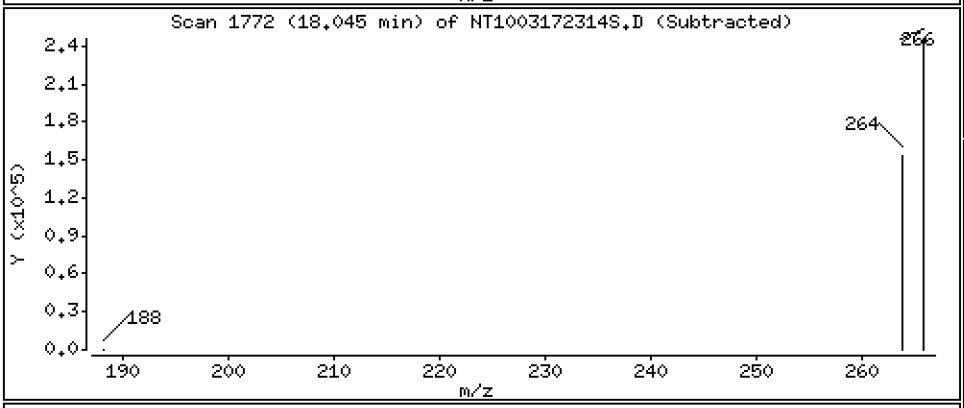
Column diameter: 0.25

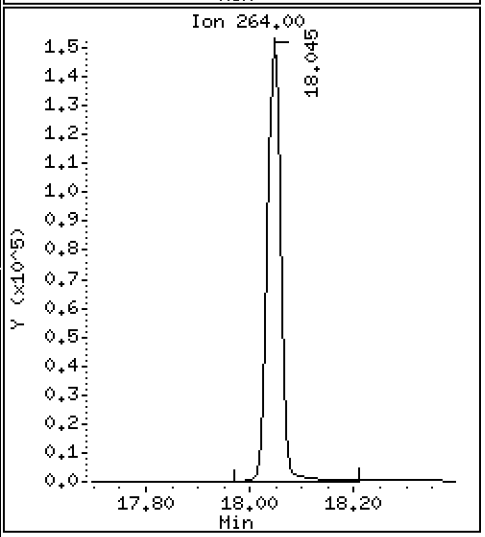
58 Pentachlorophenol

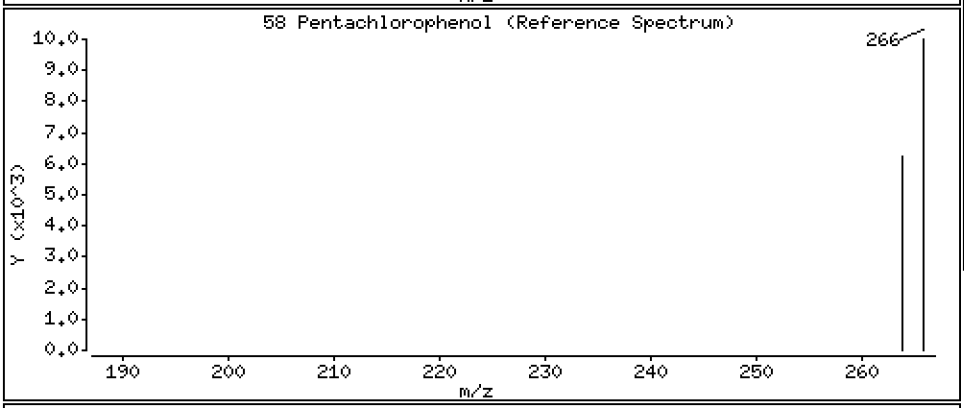
Concentration: 16.55 ug/L

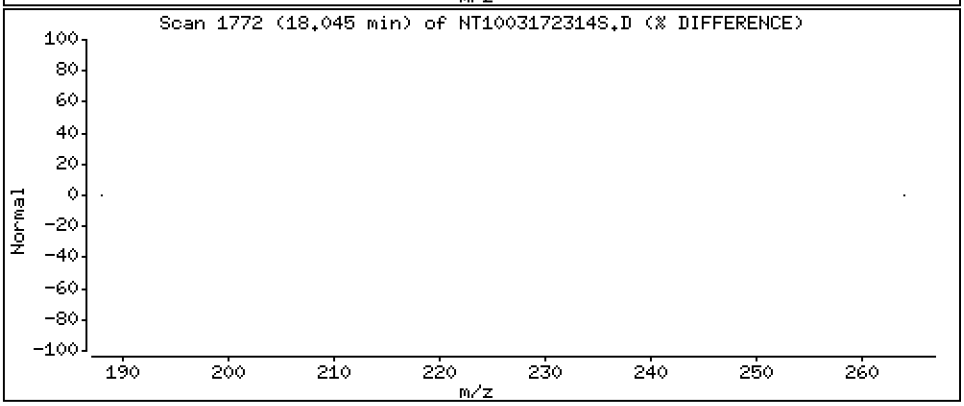












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

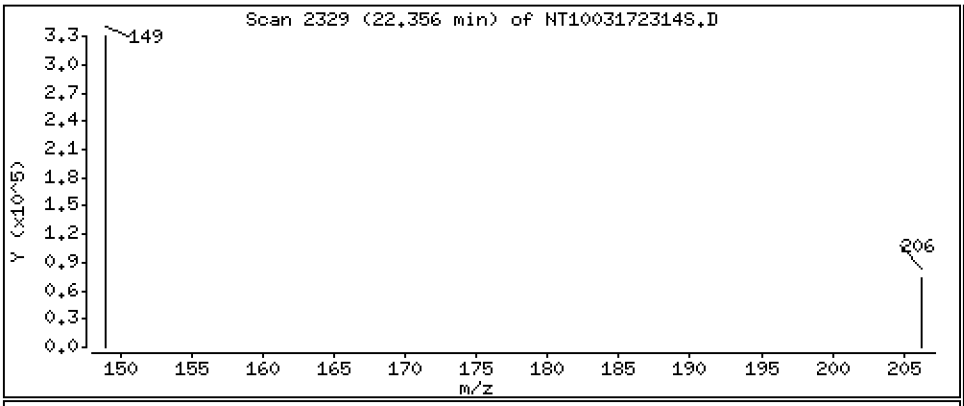
Operator: JGR

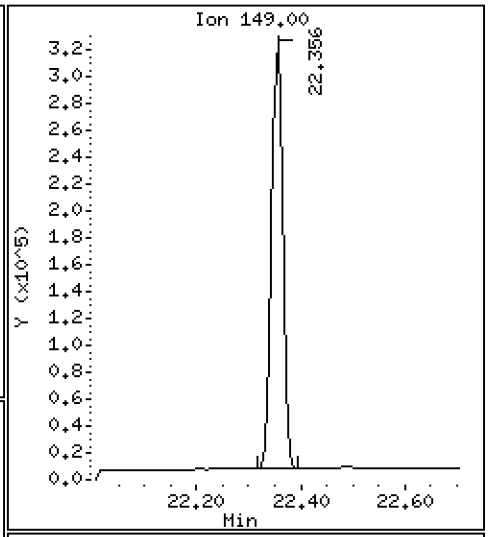
Column phase: ZB-5msi

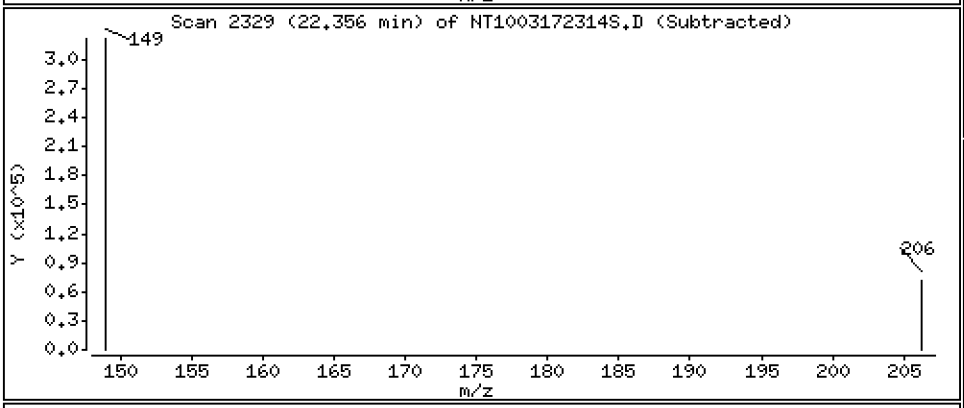
Column diameter: 0.25

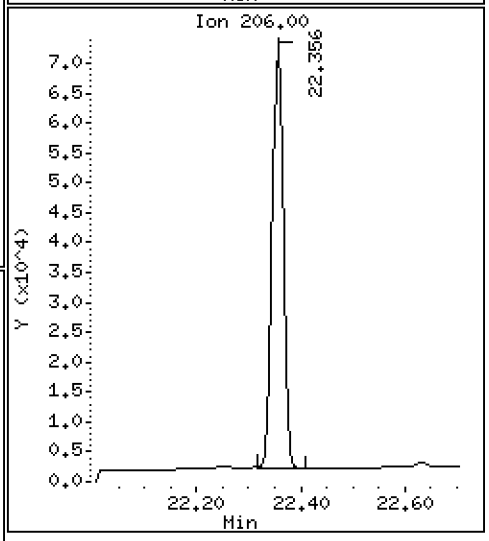
67 Butylbenzylphthalate

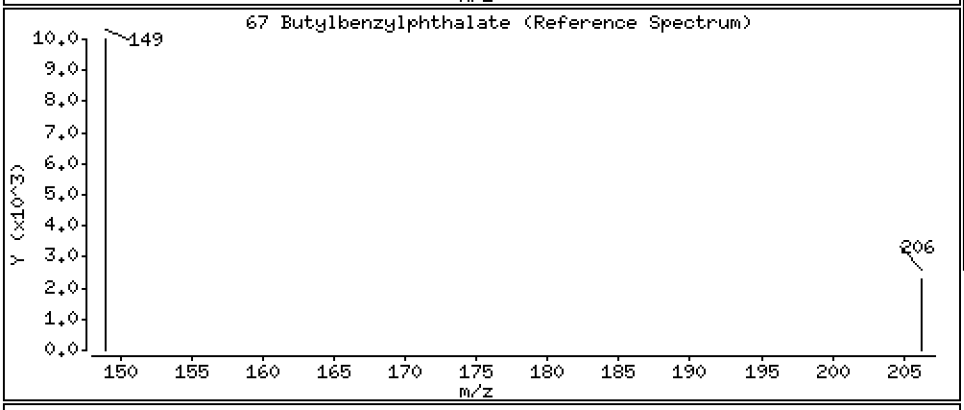
Concentration: 6.083 ug/L

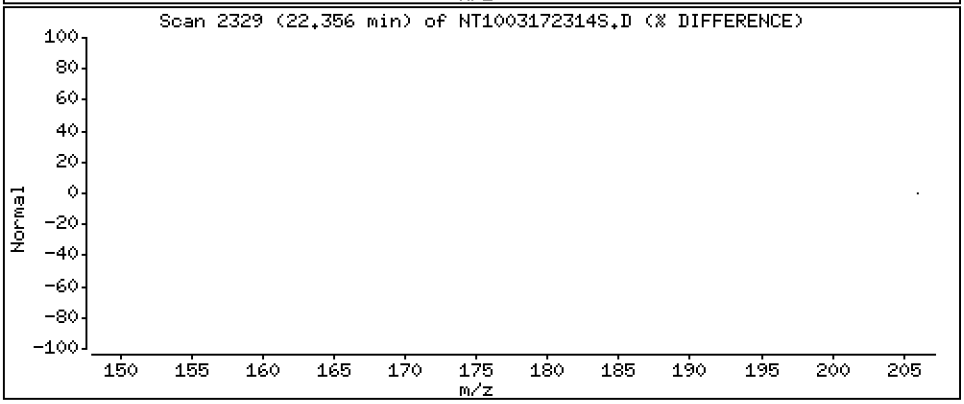












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

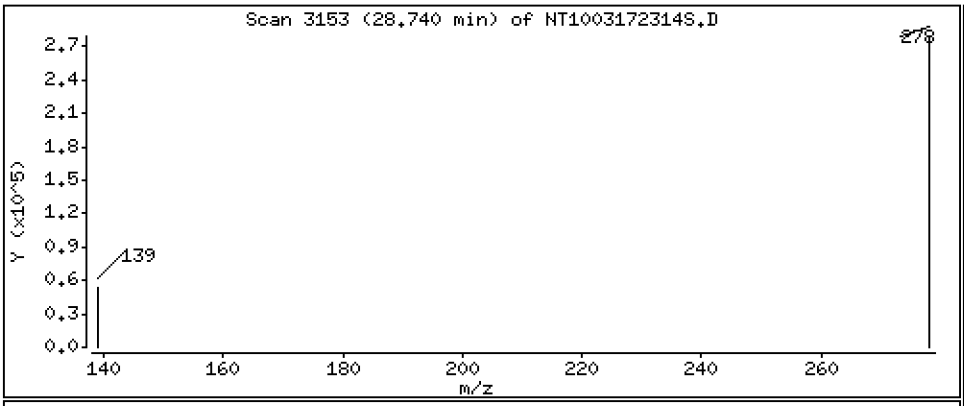
Operator: JGR

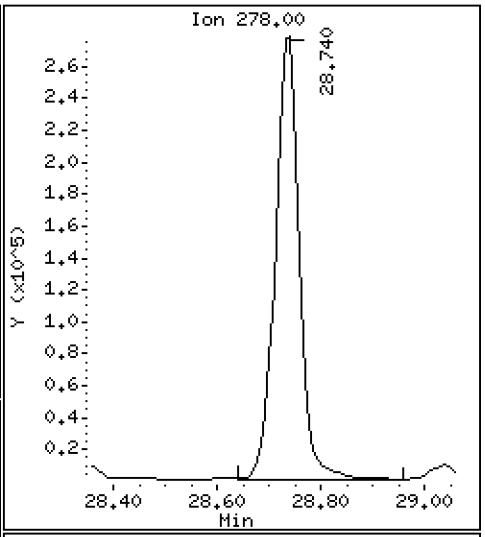
Column phase: ZB-5msi

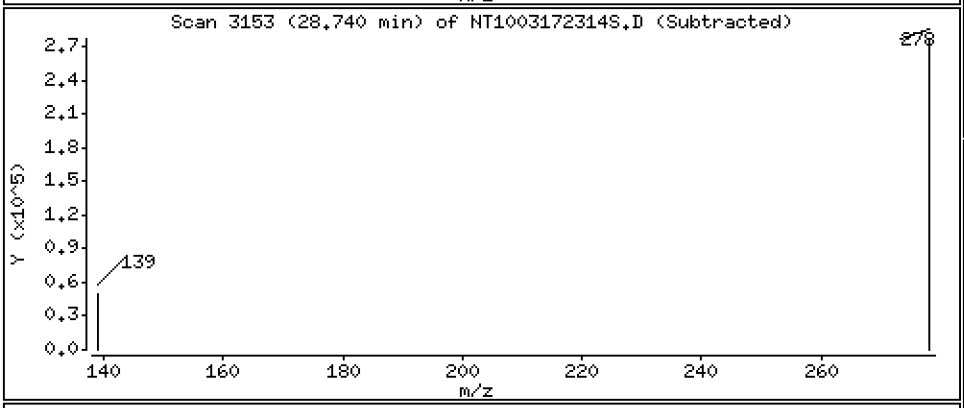
Column diameter: 0.25

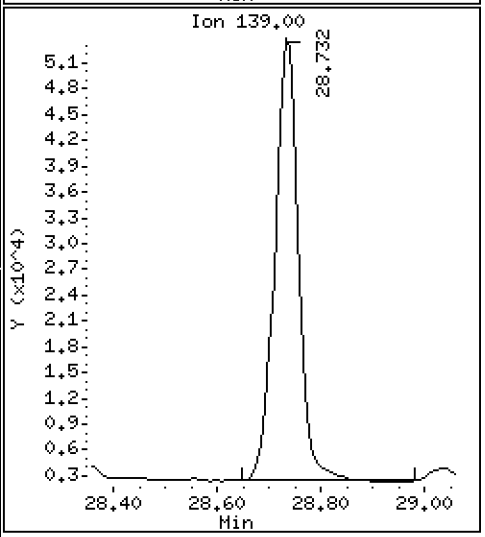
79 Dibenzo(a,h)anthracene

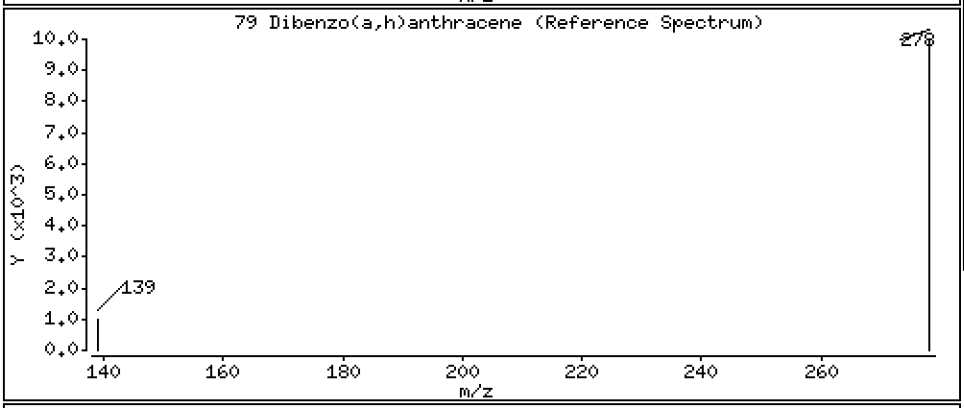
Concentration: 4.679 ug/L

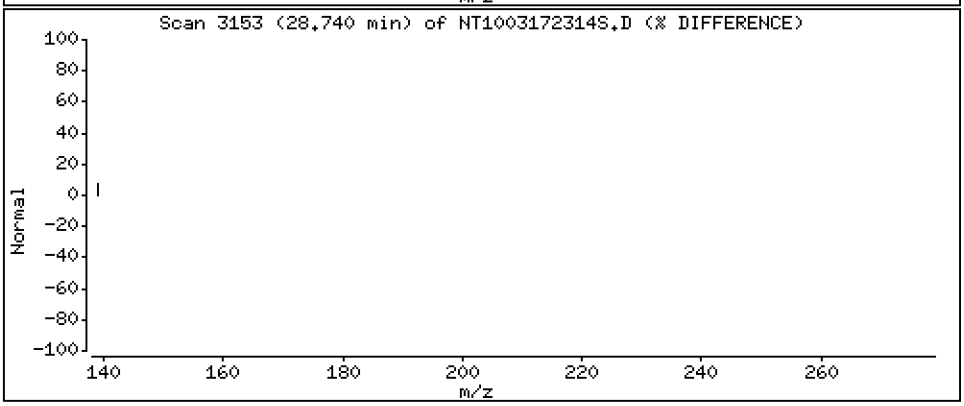












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Date : 18-MAR-2023 02:41

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-MSD2

Volume Injected (uL): 1.0

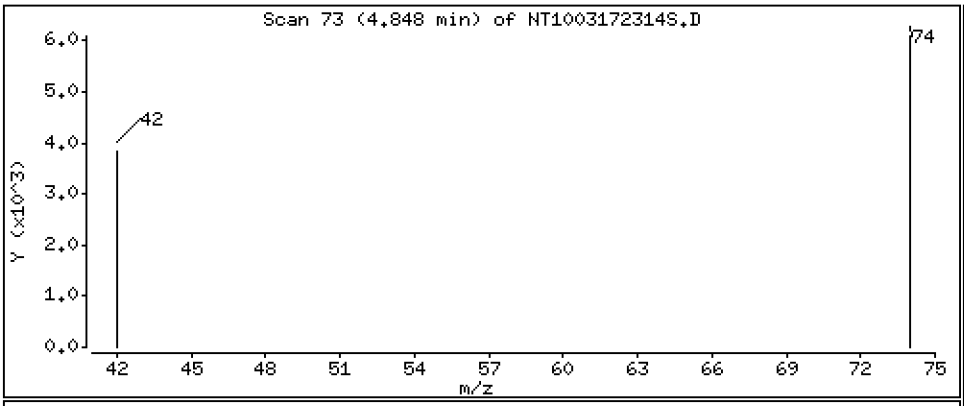
Operator: JGR

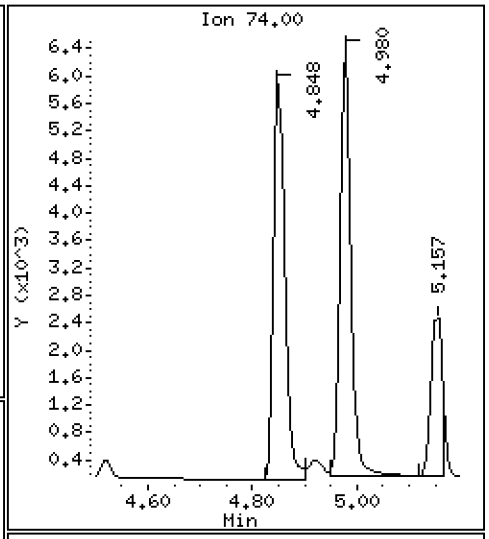
Column phase: ZB-5msi

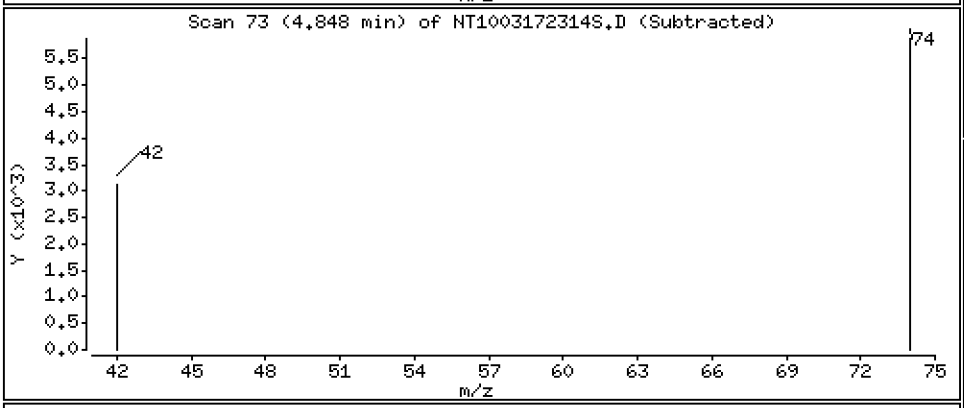
Column diameter: 0.25

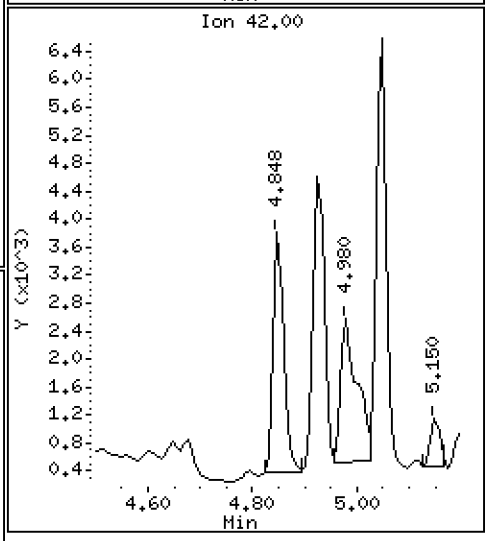
90 N-Nitrosodimethylamine

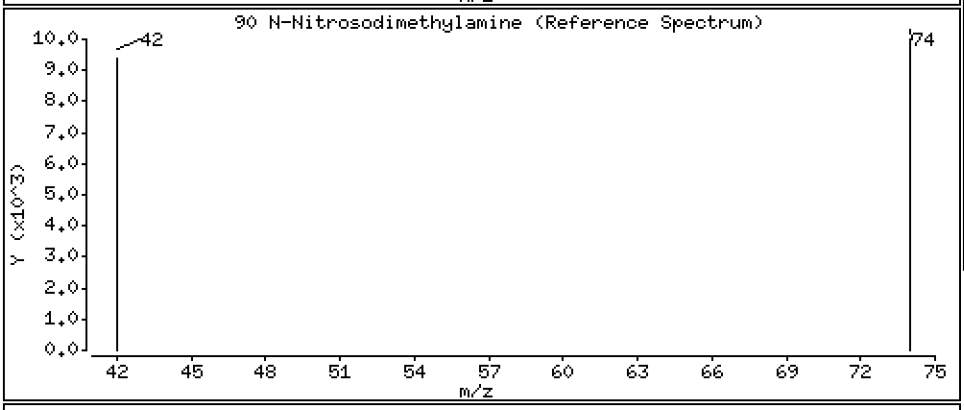
Concentration: 0.2274 ug/L

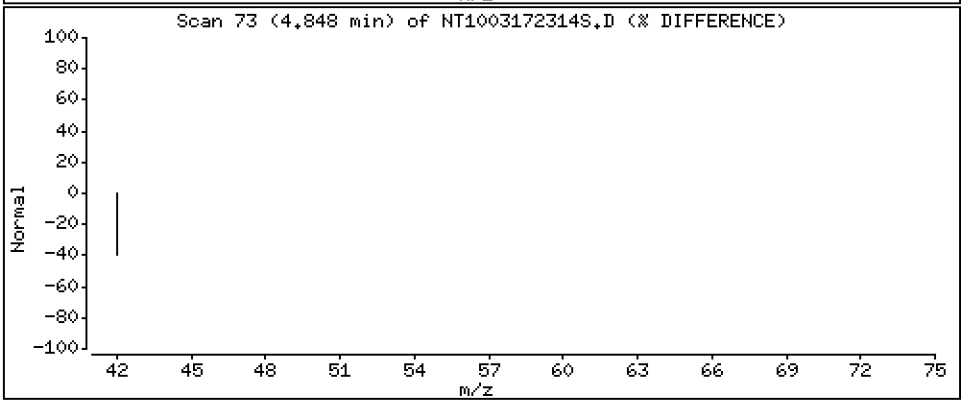












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172314S.D
Lab Smp Id: BLB0495-MSD2
Inj Date : 18-MAR-2023 02:41 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLB0495-MSD2
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Meth Date : 30-Mar-2023 14:37 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.980	6.980	(0.758)	140493	2.45678	2.457(R)
3	Phenol	94	8.579	8.572	(0.932)	226982	2.89314	2.893
7	1,3-Dichlorobenzene	146	9.144	9.136	(0.993)	209140	2.84880	2.849
* 8	1,4-Dichlorobenzene-d4	152	9.206	9.206	(1.000)	188579	4.00000	
9	1,4-Dichlorobenzene	146	9.237	9.229	(1.003)	208351	2.93999	2.940
11	Benzyl alcohol	79	9.470	9.462	(1.029)	158578	3.48650	3.487
12	1,2-Dichlorobenzene	146	9.586	9.586	(1.041)	204245	2.93057	2.931
13	2-Methylphenol	108	9.687	9.679	(1.052)	157099	2.88984	2.890
15	4-Methylphenol	108	9.959	9.951	(1.082)	250659	4.43730	4.437
16	N-Nitroso-di-n-propylamine	70	10.021	10.021	(1.089)	149023	3.73030	3.730
22	2,4-Dimethylphenol	107	10.994	10.985	(0.941)	405763	6.95802	6.958
24	Benzoic acid	105	11.155	11.096	(0.955)	450592	13.3601	13.36
26	1,2,4-Trichlorobenzene	180	11.589	11.589	(0.992)	199026	3.39263	3.393
* 27	Naphthalene-d8	136	11.681	11.674	(1.000)	674660	4.00000	
30	Hexachlorobutadiene	225	12.075	12.075	(1.034)	121693	3.41197	3.412
39	Dimethylphthalate	163	14.792	14.784	(0.968)	484233	4.65269	4.653
* 42	Acenaphthene-d10	162	15.287	15.279	(1.000)	329803	4.00000	
50	Diethylphthalate	149	16.238	16.230	(1.062)	631278	5.85503	5.855
54	N-Nitrosodiphenylamine	169	16.624	16.616	(0.908)	408798	4.40348	4.403
57	Hexachlorobenzene	284	17.689	17.689	(0.966)	172897	4.16033	4.160

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.045	18.045	(0.985)	424223	16.5497	16.55
*	59 Phenanthrene-d10	188	18.316	18.308	(1.000)	691933	4.00000	
$	66 Terphenyl-d14	244	21.442	21.434	(0.918)	548193	6.46447	6.464(R)
	67 Butylbenzylphthalate	149	22.355	22.355	(0.958)	447866	6.08323	6.083
*	69 Chrysene-d12	240	23.346	23.331	(1.000)	520456	4.00000	
*	77 Perylene-d12	264	25.994	25.986	(1.000)	605831	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.739	28.708	(1.106)	905893	4.67941	4.679
	90 N-Nitrosodimethylamine	74	4.848	4.848	(0.527)	8247	0.22738	0.2274

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172314S.D
Lab Smp Id: BLB0495-MSD2
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	184039	92020	368078	188579	2.47
27 Naphthalene-d8	659935	329968	1319870	674660	2.23
42 Acenaphthene-d10	325775	162888	651550	329803	1.24
59 Phenanthrene-d10	616249	308125	1232498	691933	12.28
69 Chrysene-d12	526222	263111	1052444	520456	-1.10
77 Perylene-d12	563117	281559	1126234	605831	7.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.21	8.71	9.71	9.21	-0.00
27 Naphthalene-d8	11.67	11.17	12.17	11.68	0.07
42 Acenaphthene-d10	15.28	14.78	15.78	15.29	0.05
59 Phenanthrene-d10	18.31	17.81	18.81	18.32	0.04
69 Chrysene-d12	23.33	22.83	23.83	23.35	0.07
77 Perylene-d12	25.99	25.49	26.49	25.99	0.03

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

REVIEW SUMMARY FOR FILE - NT1003172314S.D

Lab ID: BLB0495-MSD2
nt10.i, 20230317.b\20230317.b\SIMABN2.m,   18-MAR-2023 02:41

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: 20230317.b/NT1003172303S.D

On Column LOD for nt10.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLB0386-SRM1
Batch: BLB0386
Initial/Final: 5 g / 0.5 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 02/23/2023 13:48
Standard ID: J007238
Expires: 01/09/2026
Standard Lot#: SQC017 (LRAC9745)
Description: SQC017-40G PAHs by HPLC40g

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Benzo(a)anthracene	109.00	98.9	1.65	10.0		90.7	31 - 170
Chrysene	210.00	187	2.11	10.0		89.1	13 - 186
Benzo(b)fluoranthene	295.00	312	2.74	10.0		106	33 - 167
Benzo(k)fluoranthene	259.00	94.1	1.52	10.0		36.3	14 - 186
Benzo(a)pyrene	65.500	112	1.23	10.0		171	24 - 176
Indeno(1,2,3-cd)pyrene	208.00	109	2.10	10.0		52.3	0 - 208
Dibenzo(a,h)anthracene	177.00	201	1.78	10.0		114	0 - 214

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230223.b\N823022306.D

Date : 23-FEB-2023 13:48

Client ID:

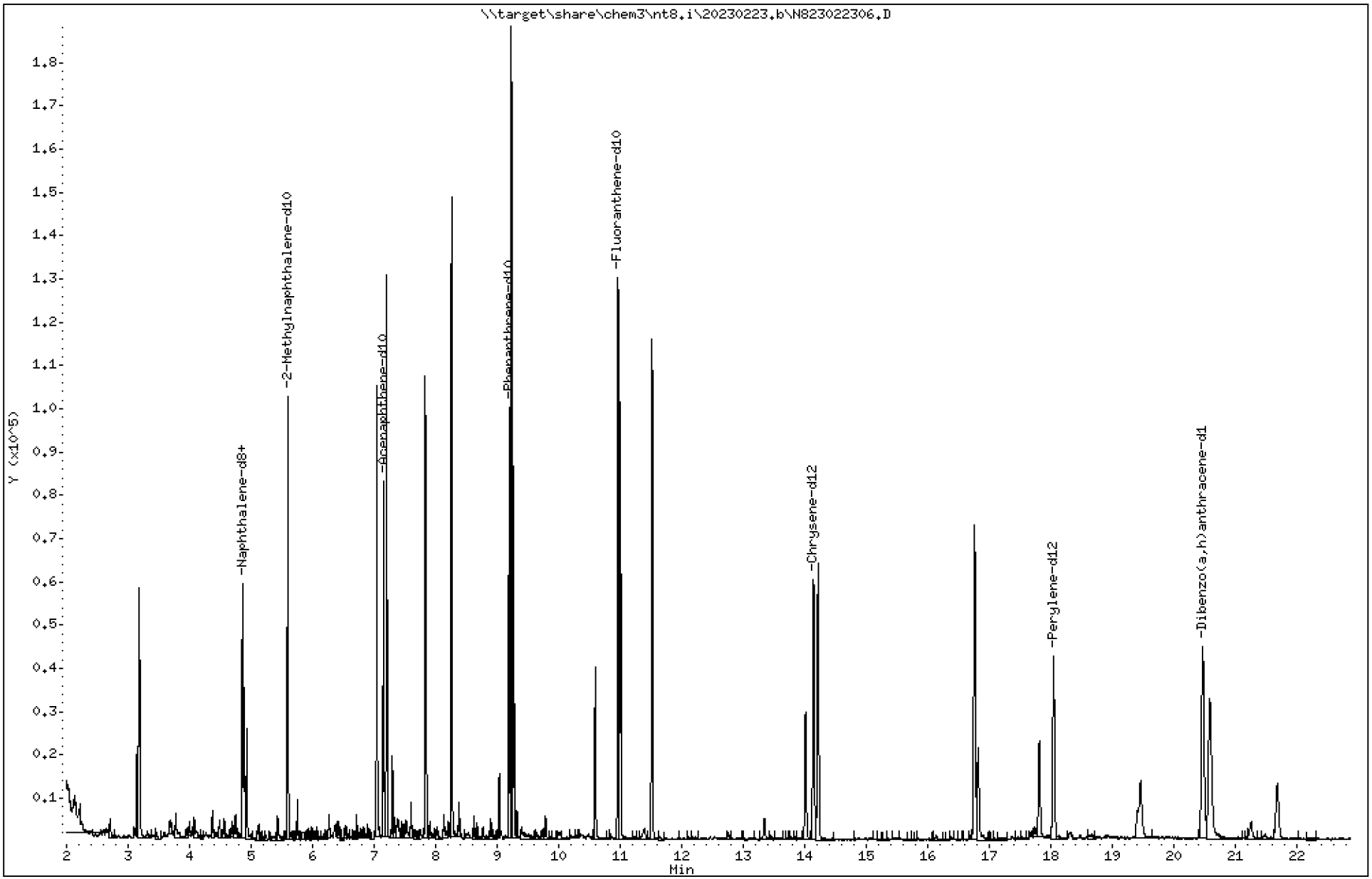
Instrument: nt8.i

Sample Info: BLB0386-SRM1,

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



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Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

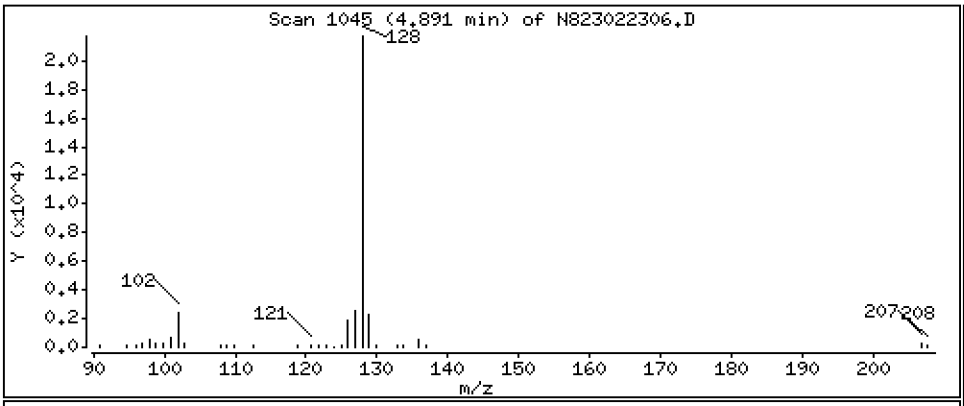
Operator: JZ

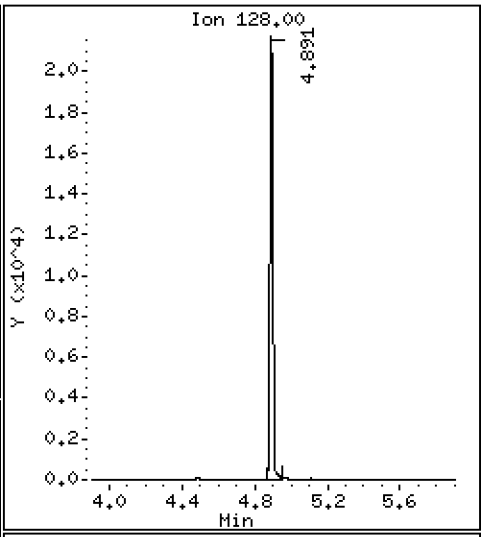
Column phase: Rxi-17sil

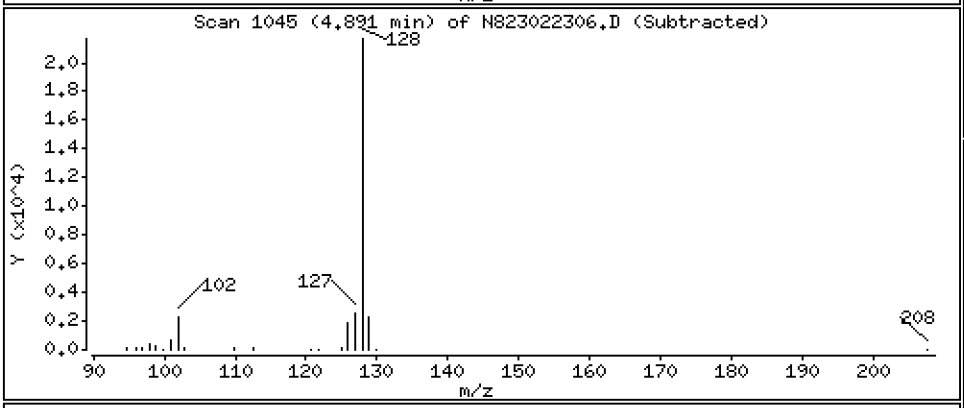
Column diameter: 0.25

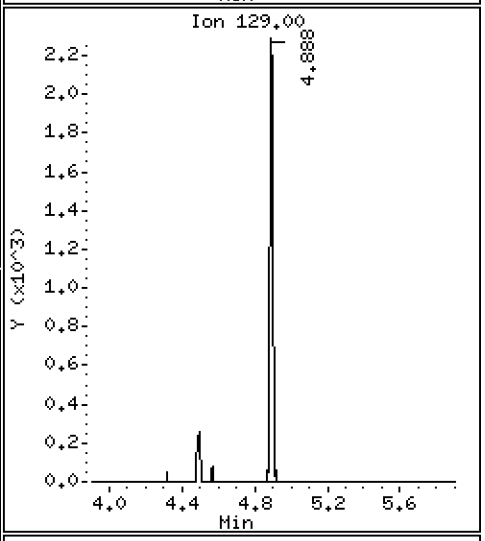
2 Naphthalene

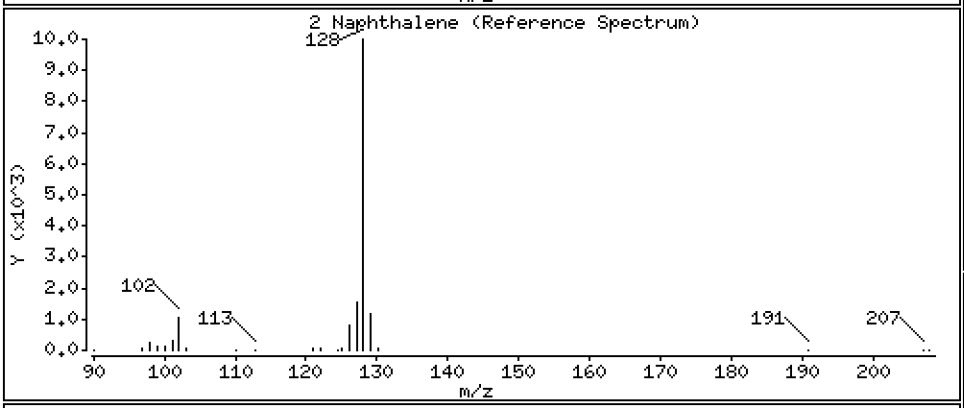
Concentration: 1.354 ug/mL

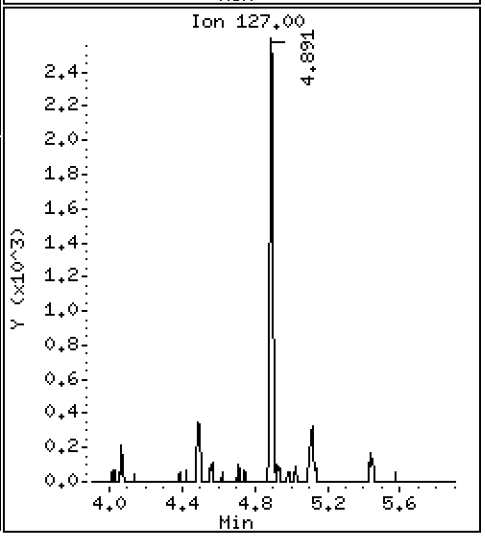


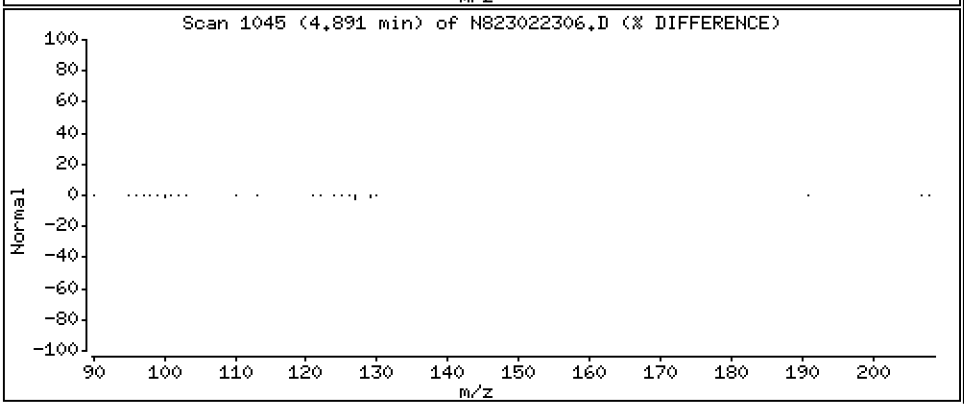












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022306.D

Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

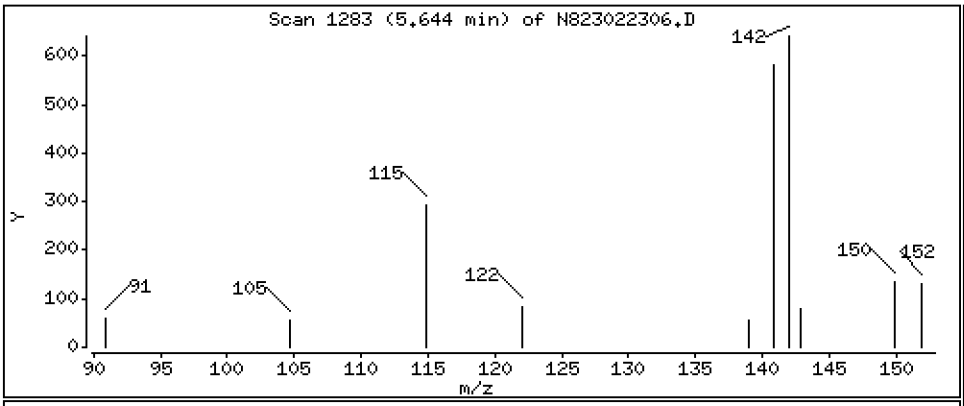
Operator: JZ

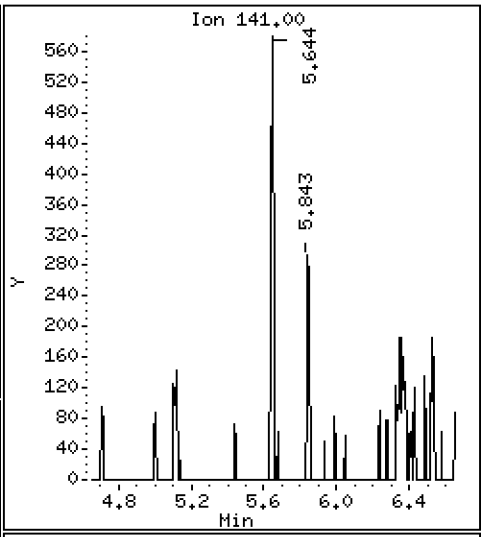
Column phase: Rxi-17sil

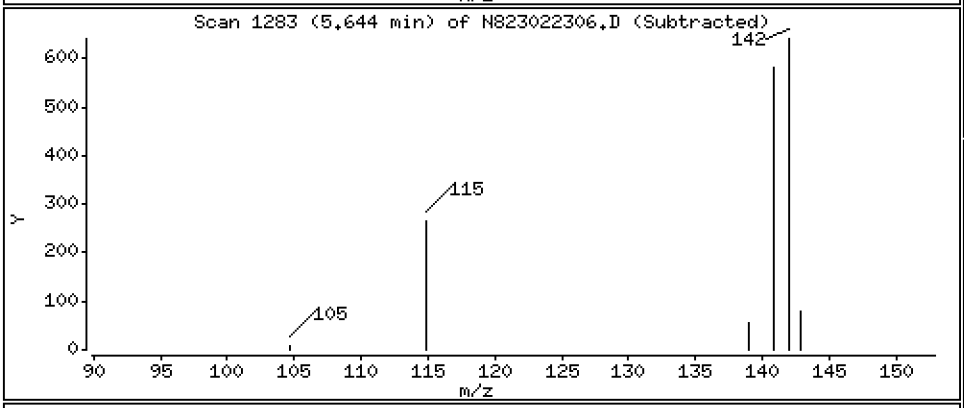
Column diameter: 0.25

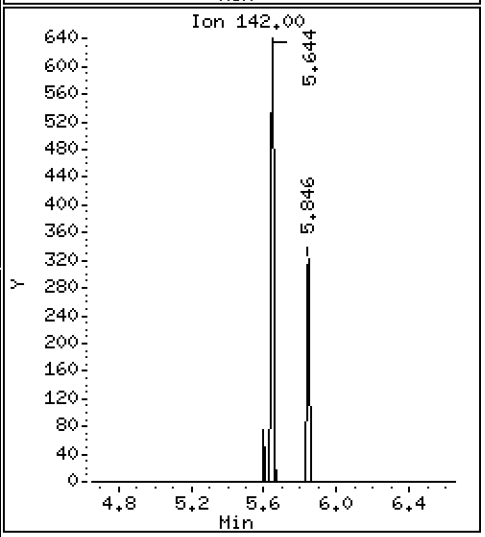
4 2-Methylnaphthalene

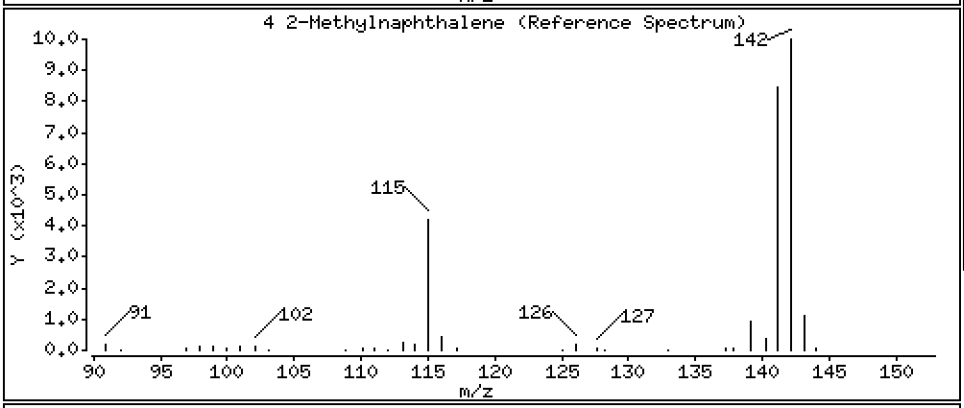
Concentration: 0.05677 ug/mL

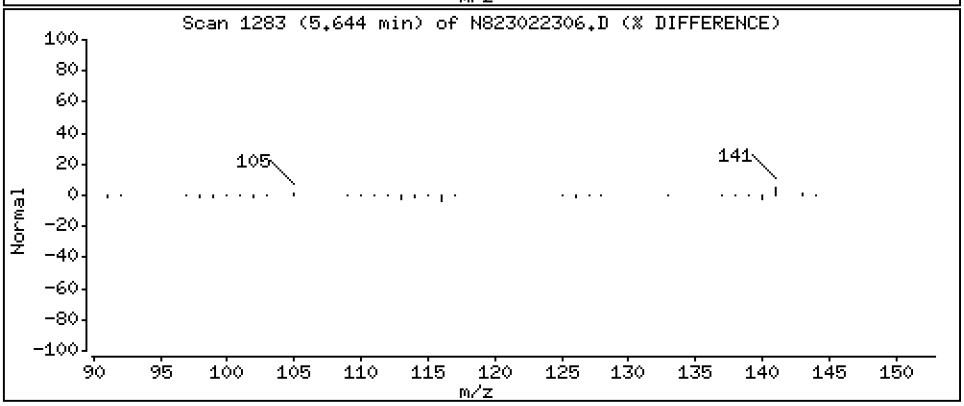












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022306.D

Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

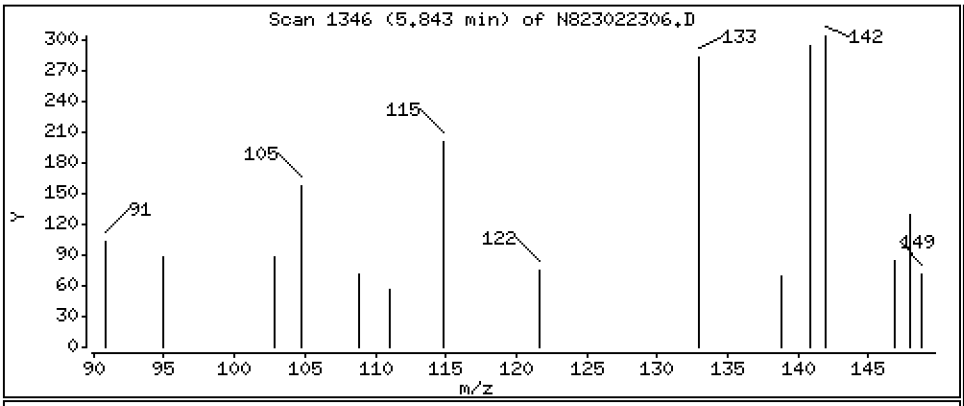
Operator: JZ

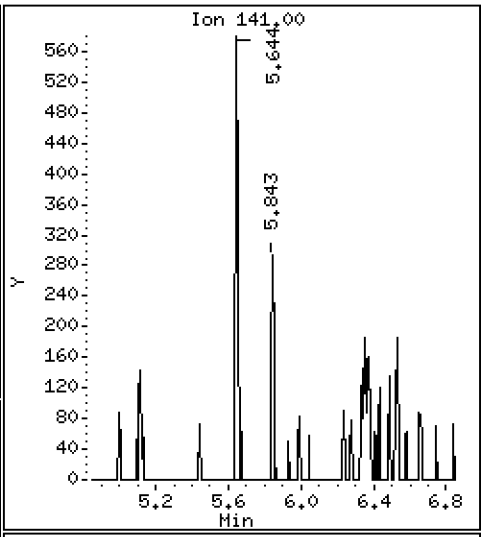
Column phase: Rxi-17sil

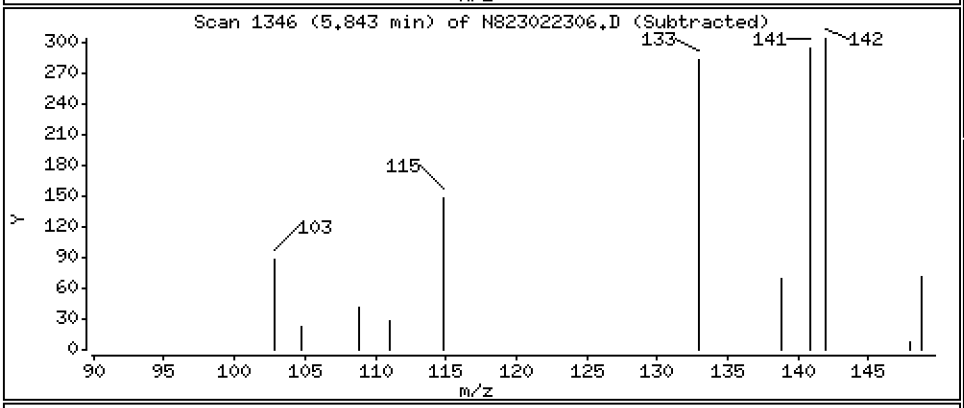
Column diameter: 0.25

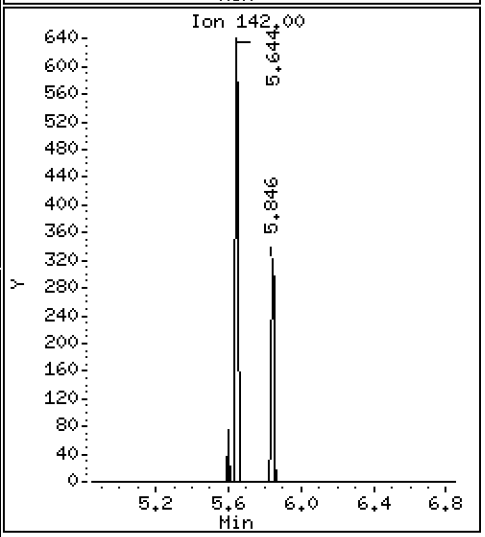
5 1-methylnaphthalene

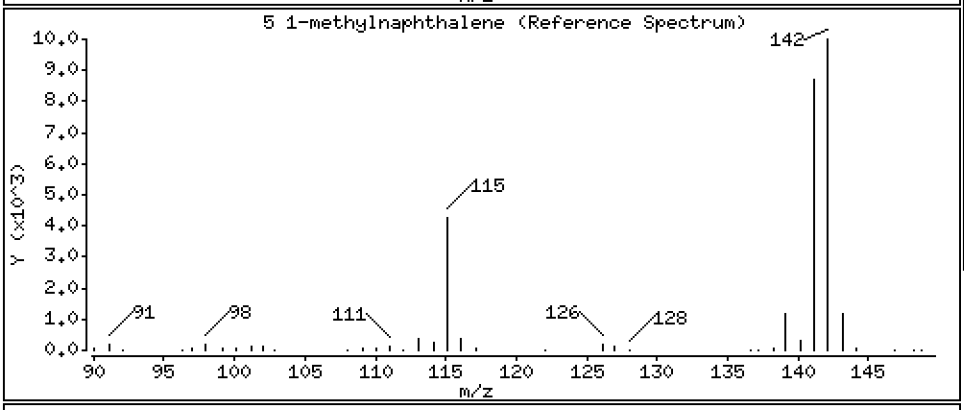
Concentration: 0.02964 ug/mL

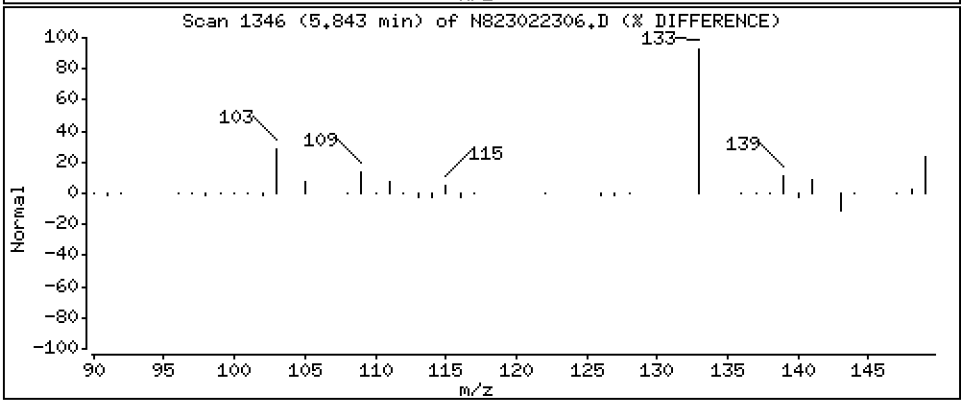












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022306.D

Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

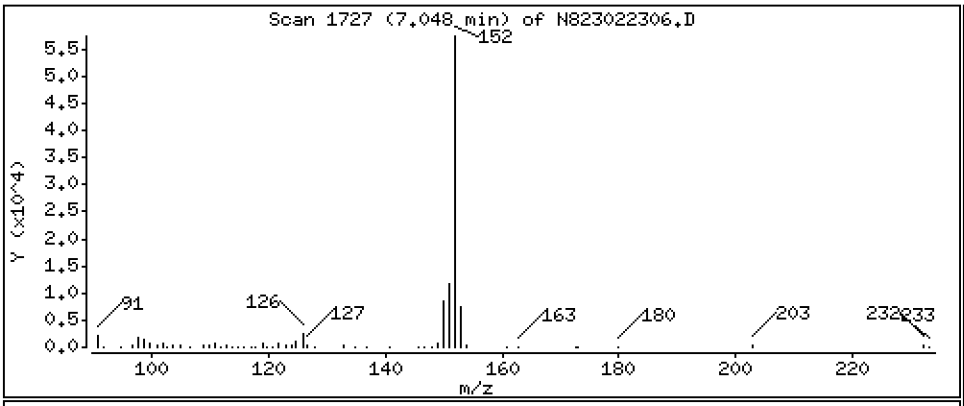
Operator: JZ

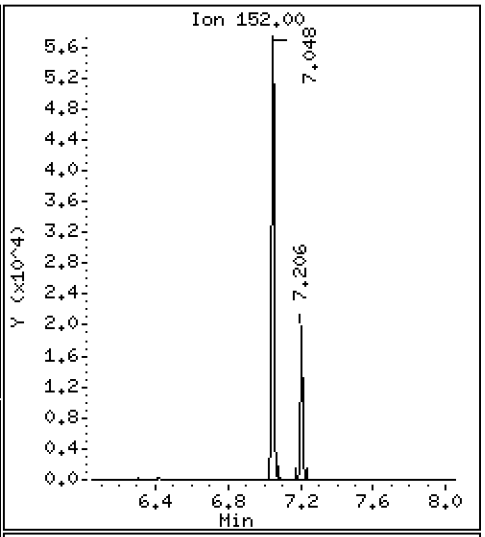
Column phase: Rxi-17sil

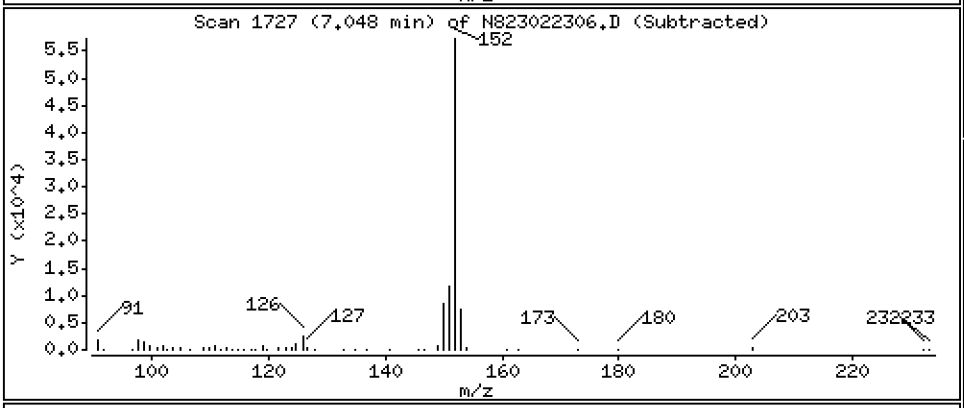
Column diameter: 0.25

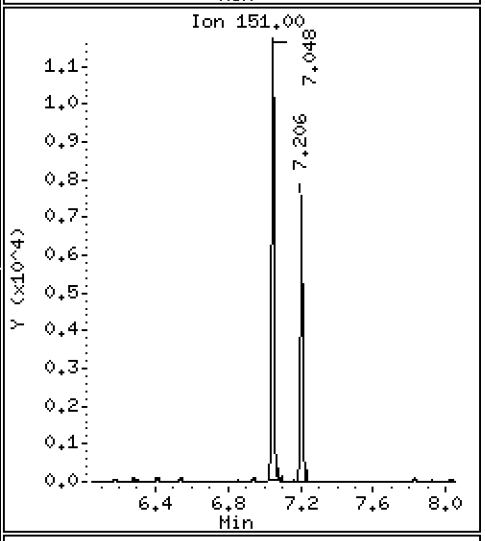
9 Acenaphthylene

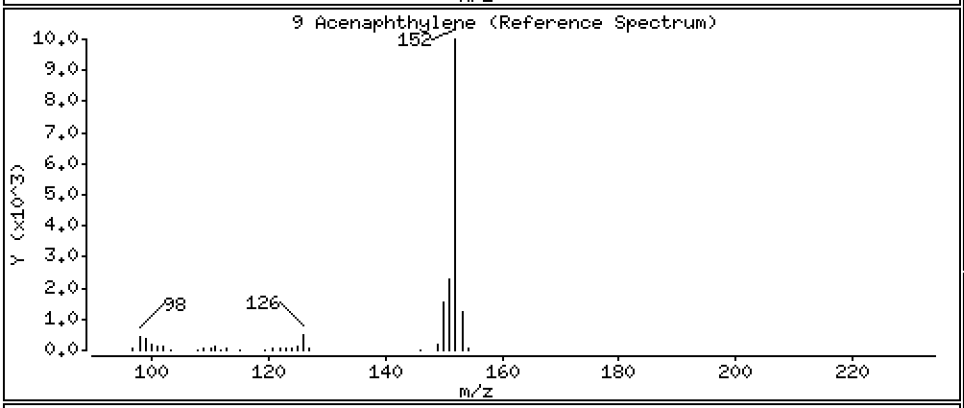
Concentration: 3.176 ug/mL

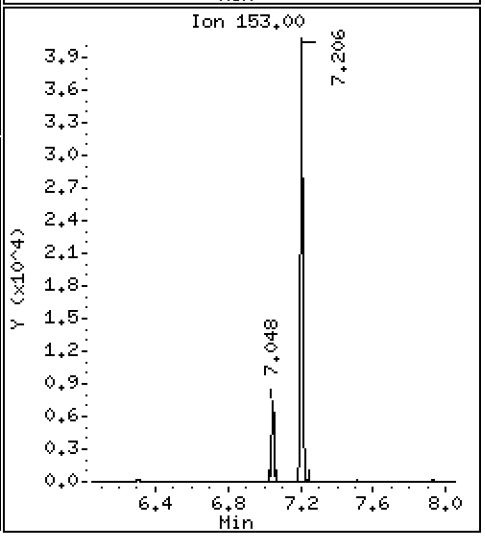


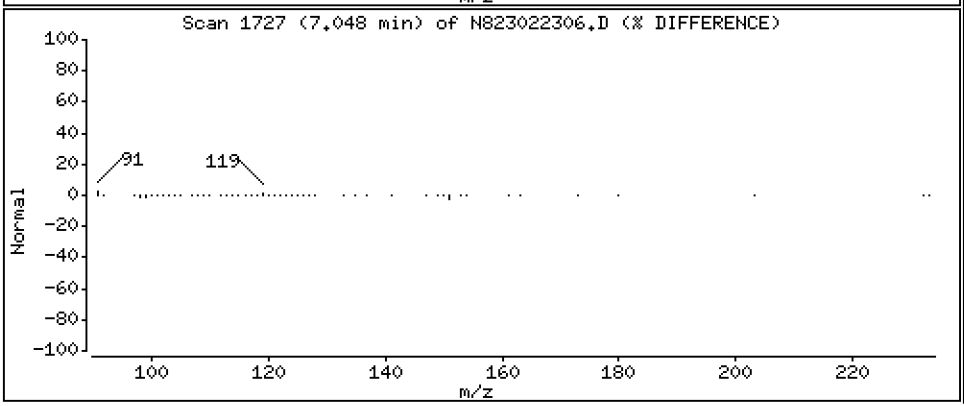












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022306.D

Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

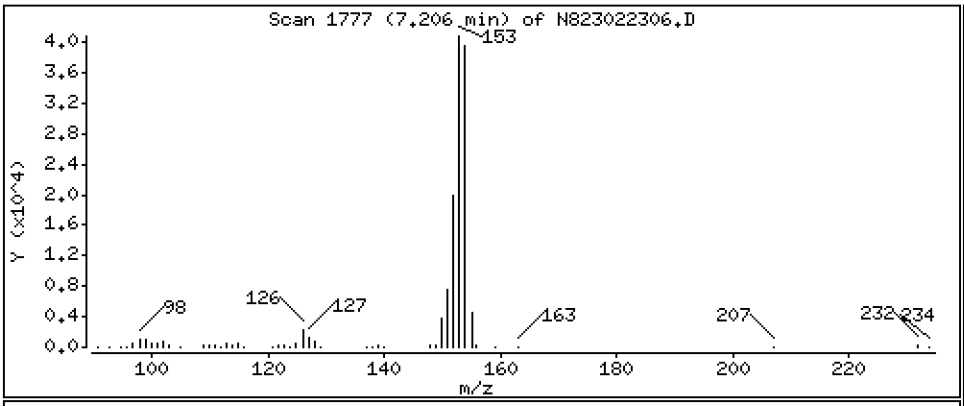
Operator: JZ

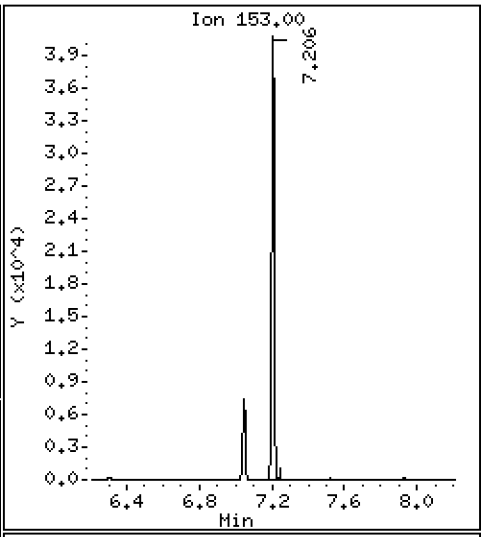
Column phase: Rxi-17sil

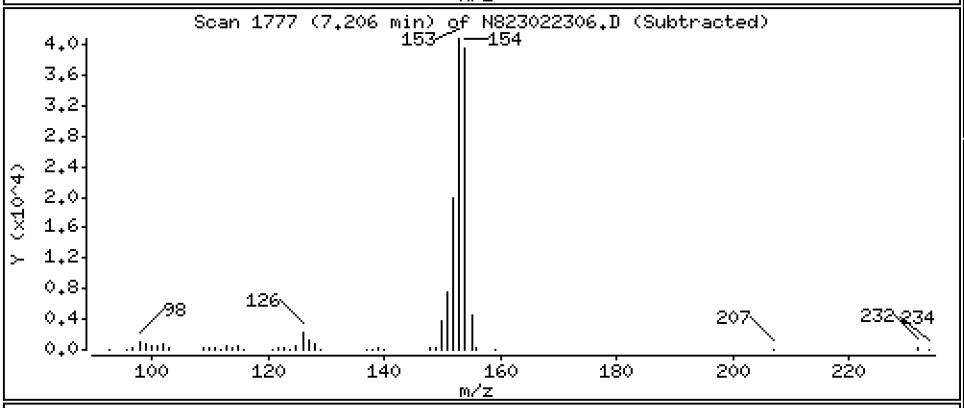
Column diameter: 0.25

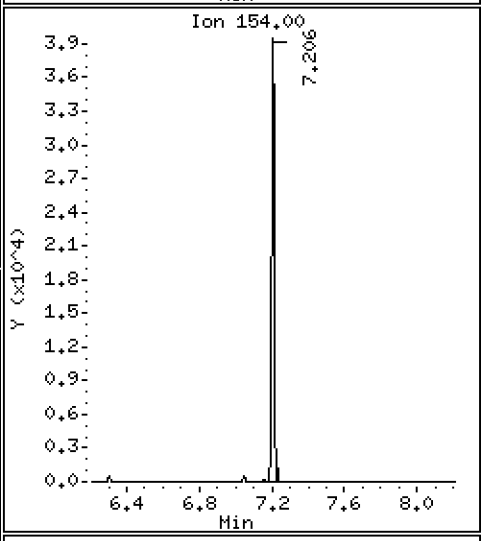
11 Acenaphthene

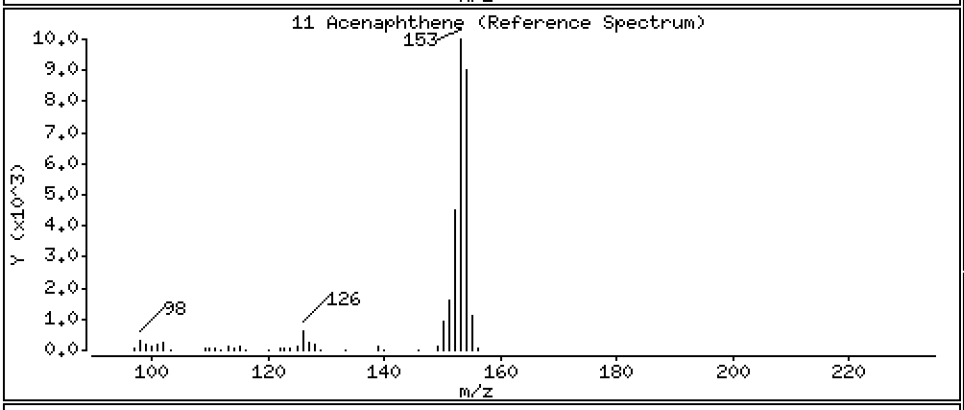
Concentration: 3.330 ug/mL

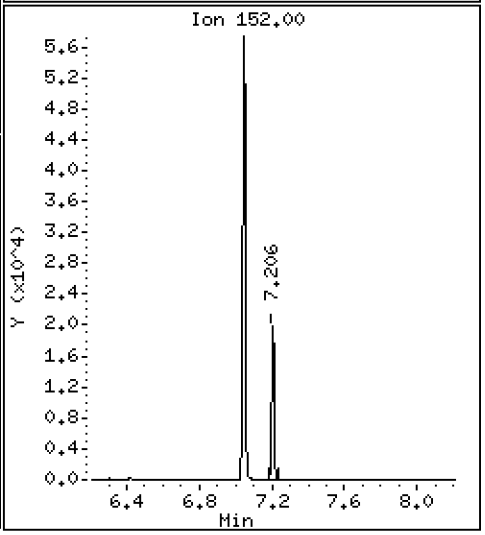


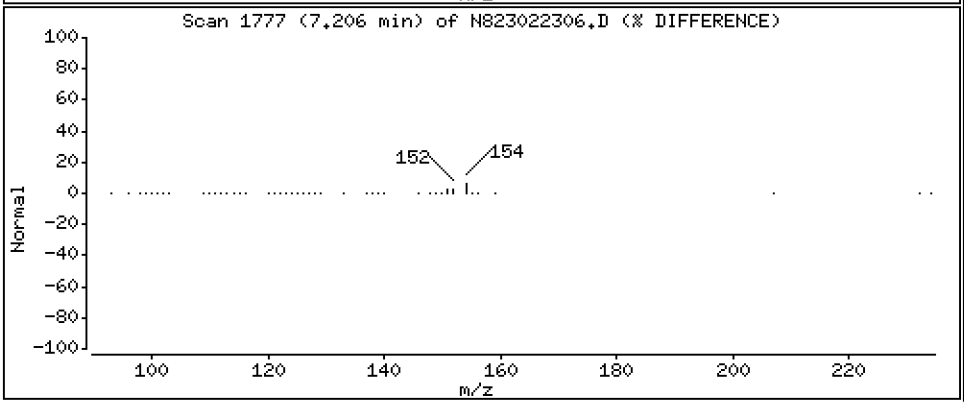












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Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

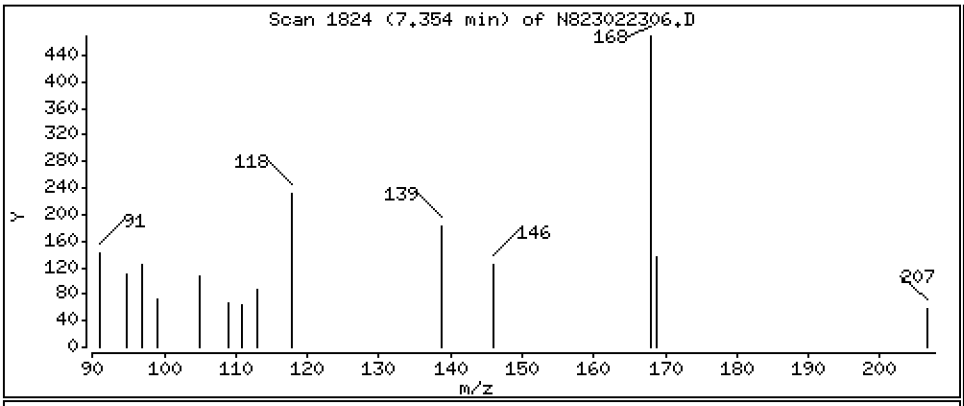
Operator: JZ

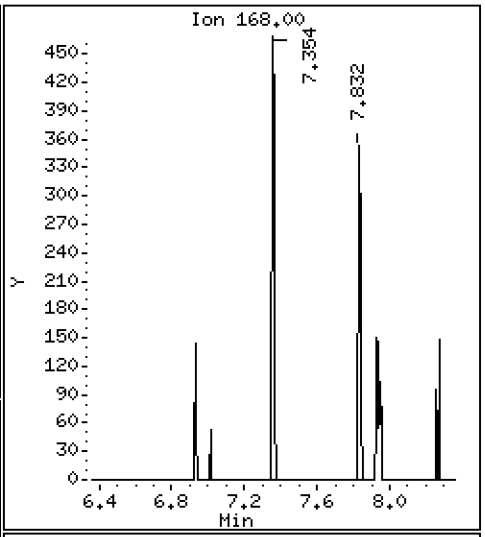
Column phase: Rxi-17sil

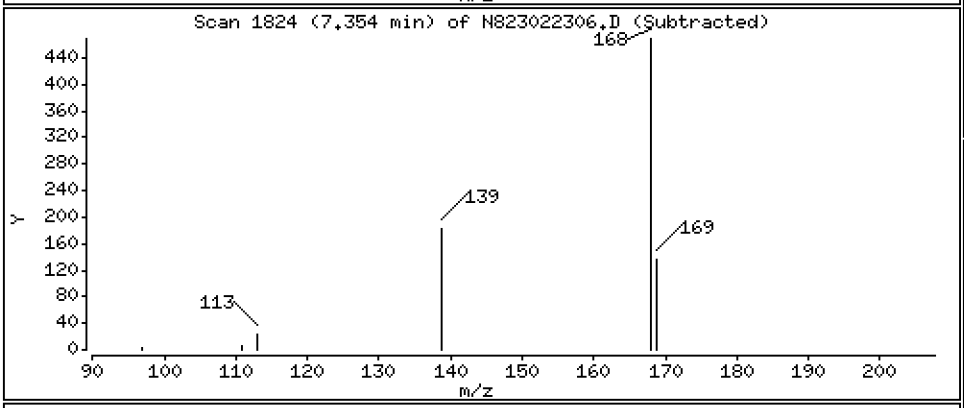
Column diameter: 0.25

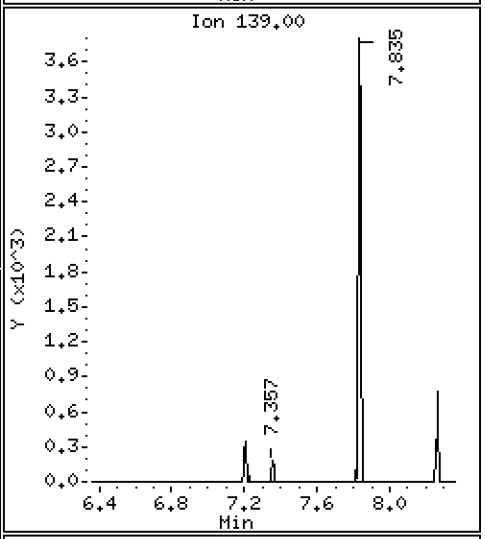
12 Dibenzofuran

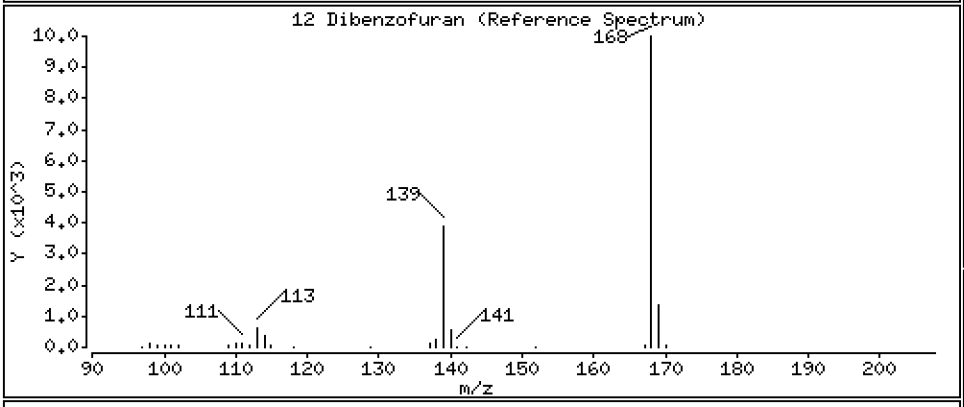
Concentration: 0.02469 ug/mL

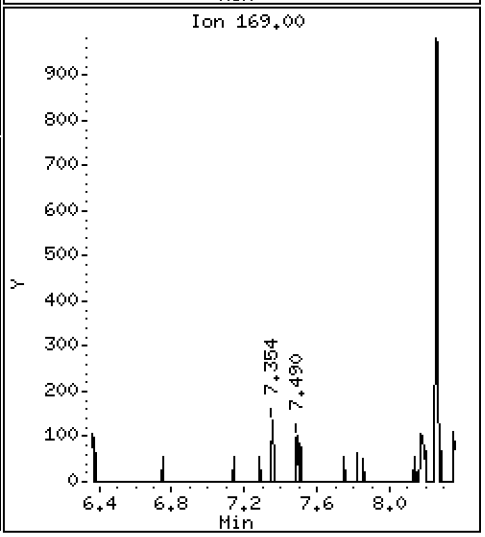


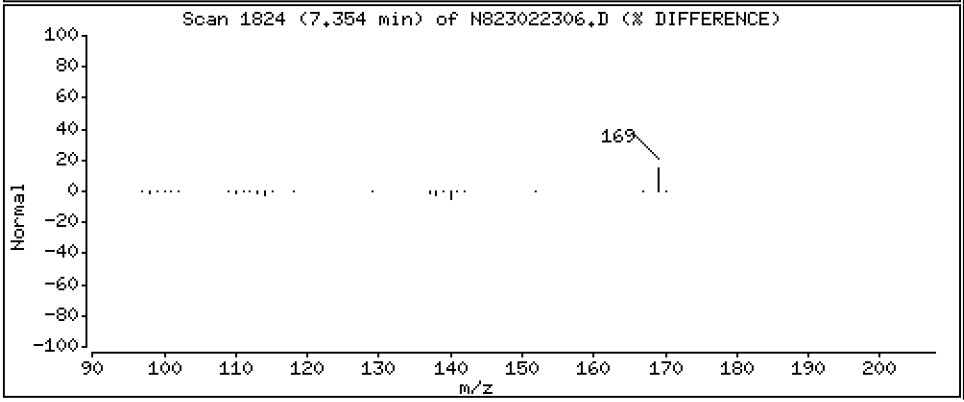












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022306.D

Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

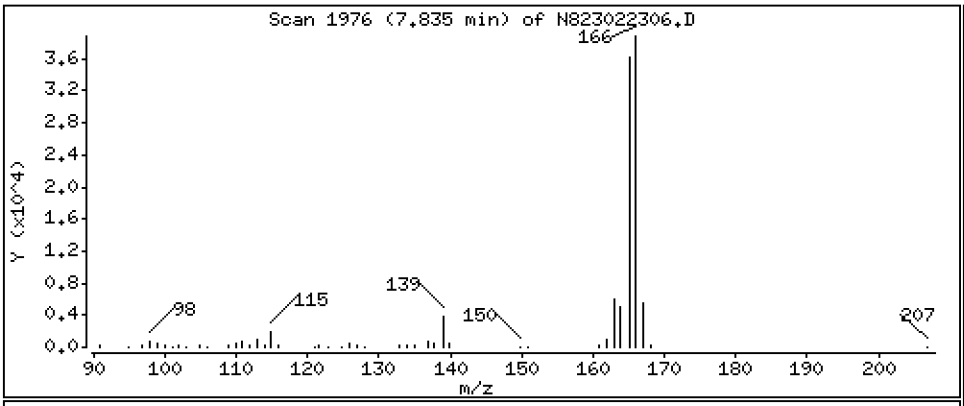
Operator: JZ

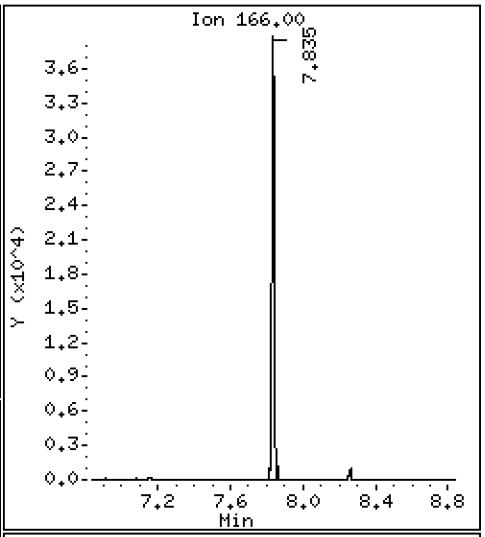
Column phase: Rxi-17sil

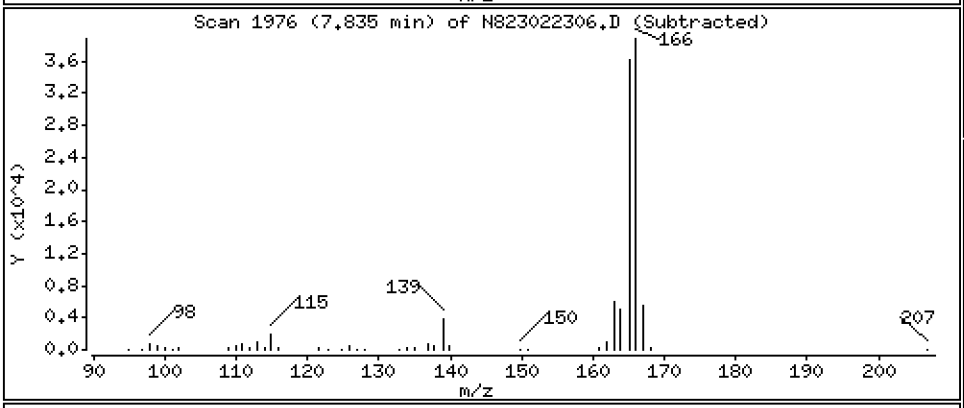
Column diameter: 0.25

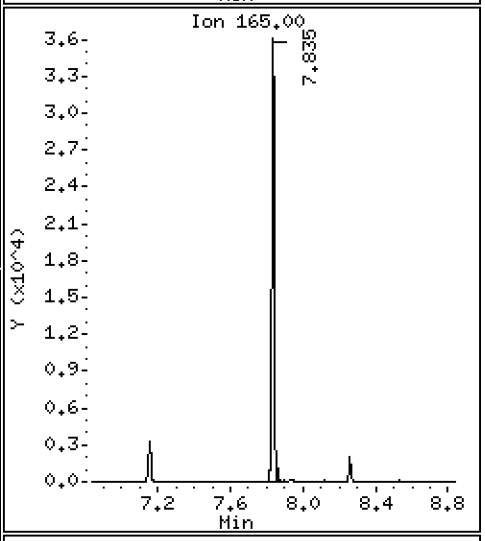
14 Fluorene

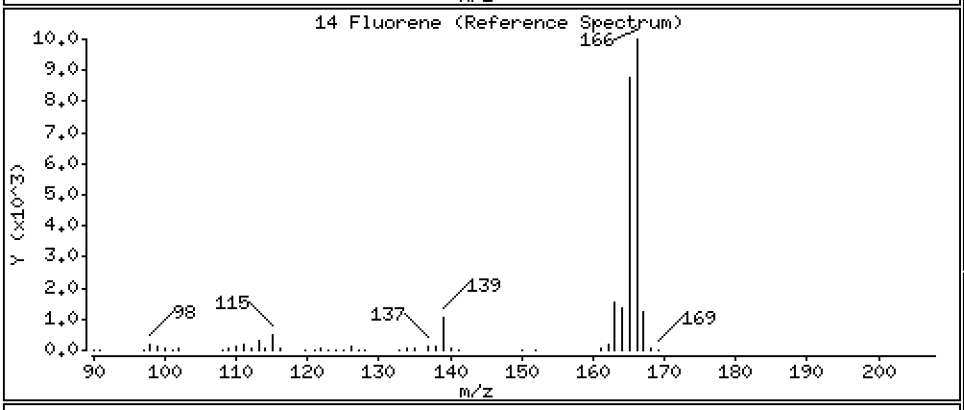
Concentration: 2.515 ug/mL

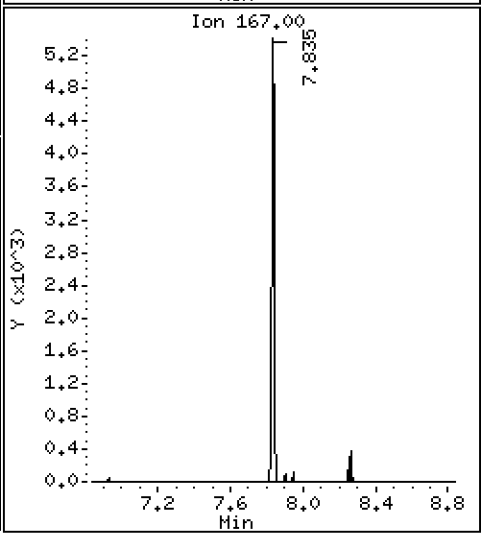


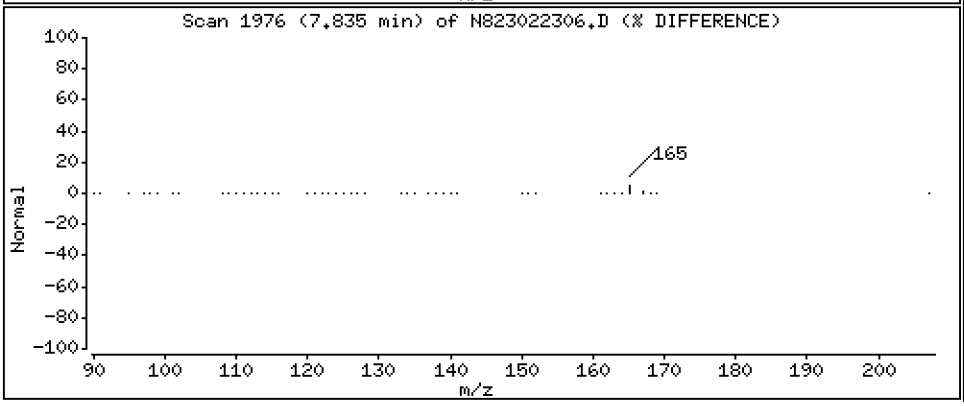












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Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

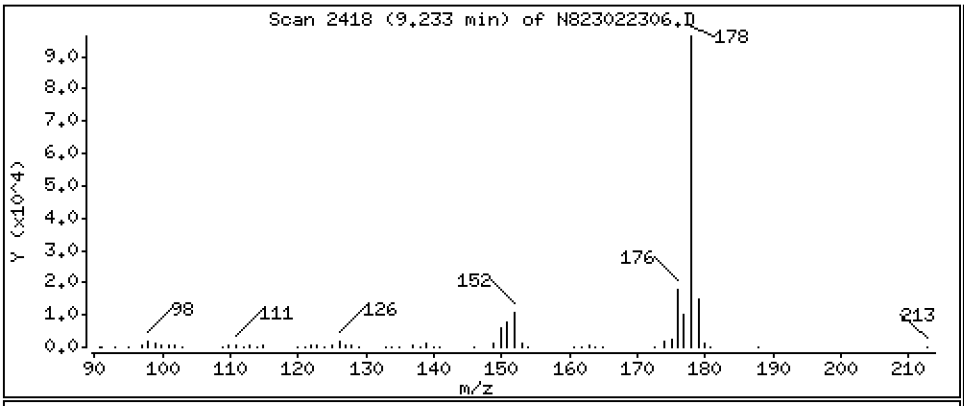
Operator: JZ

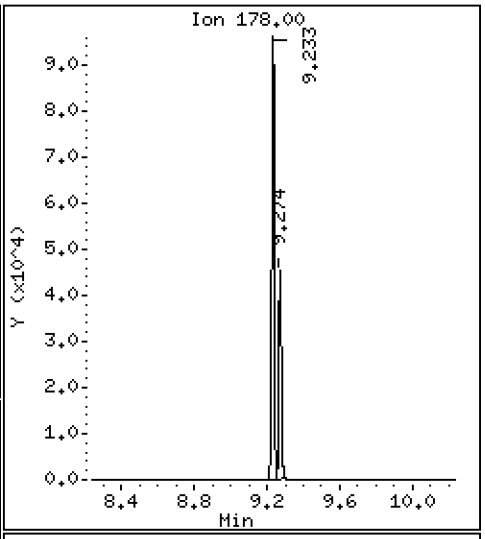
Column phase: Rxi-17sil

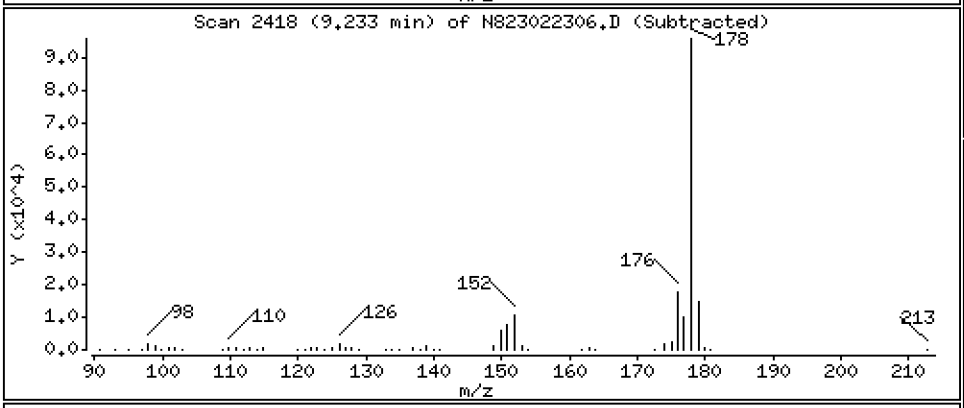
Column diameter: 0.25

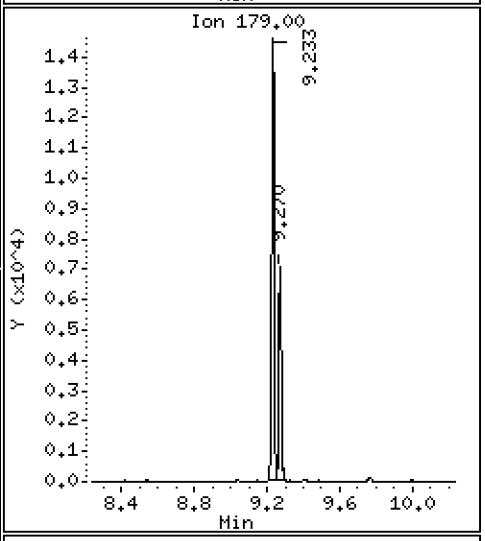
16 Phenanthrene

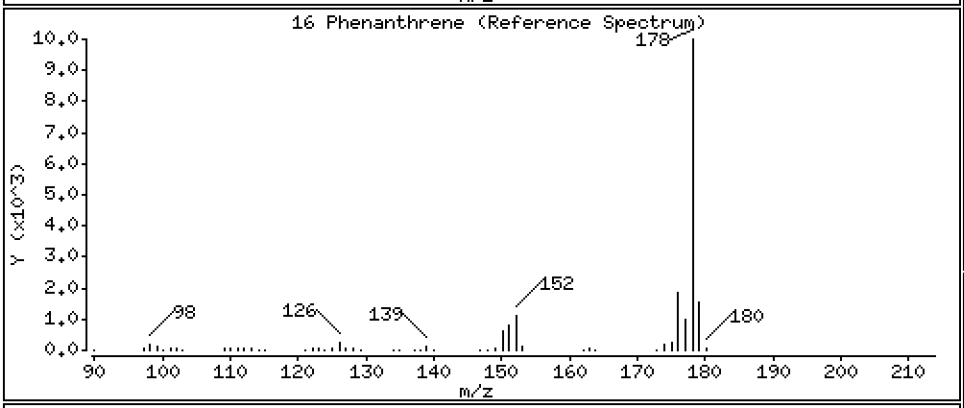
Concentration: 4.118 ug/mL

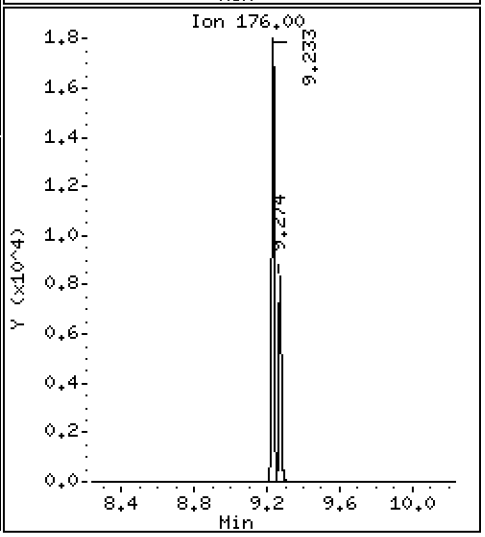


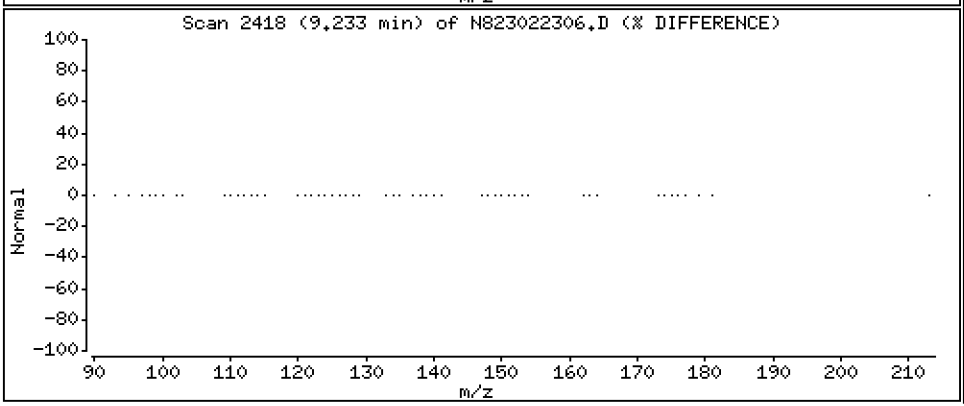












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Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

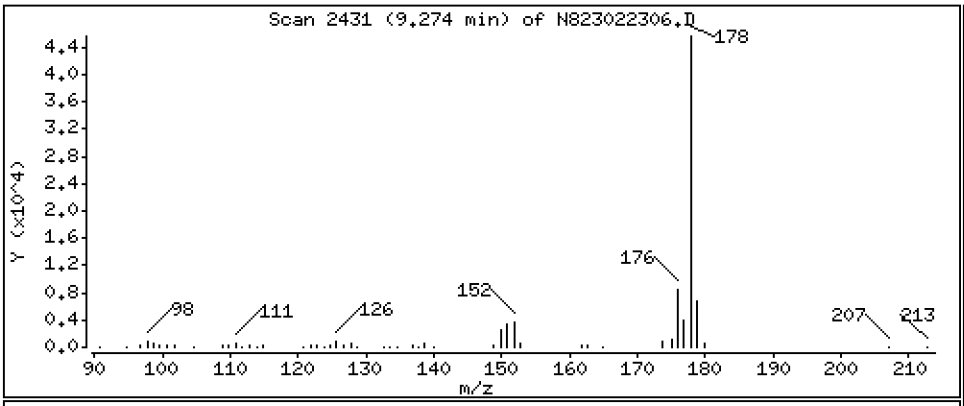
Operator: JZ

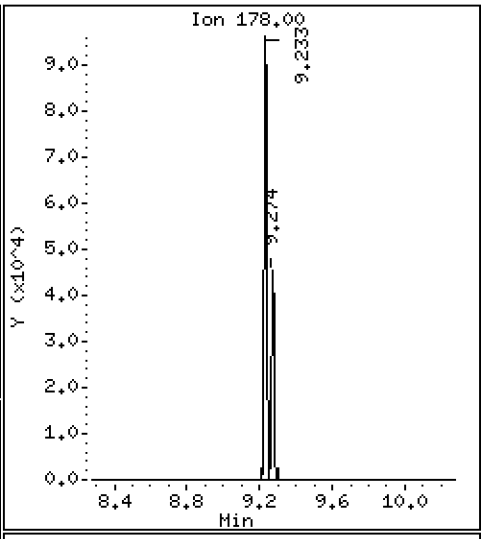
Column phase: Rxi-17sil

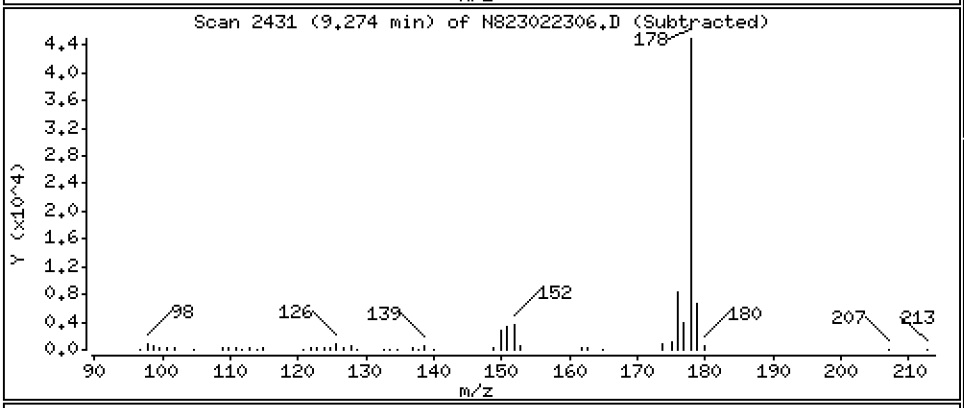
Column diameter: 0.25

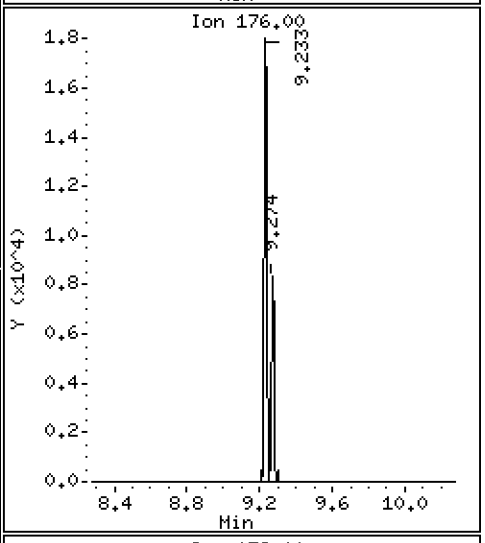
17 Anthracene

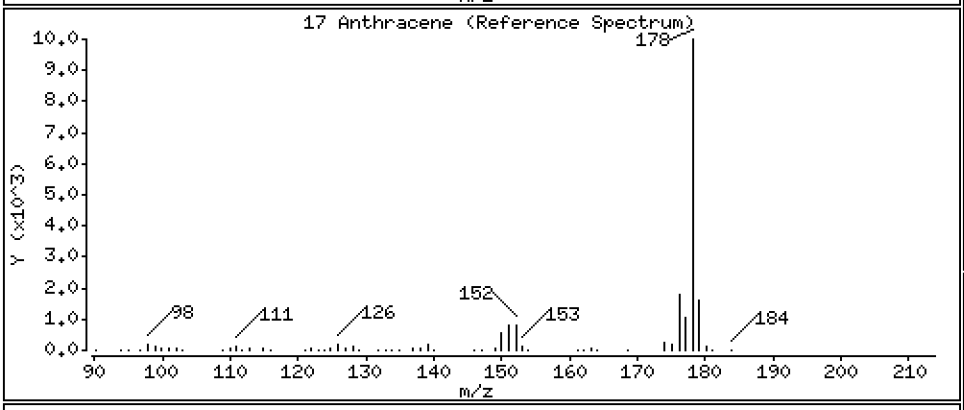
Concentration: 2.200 ug/mL

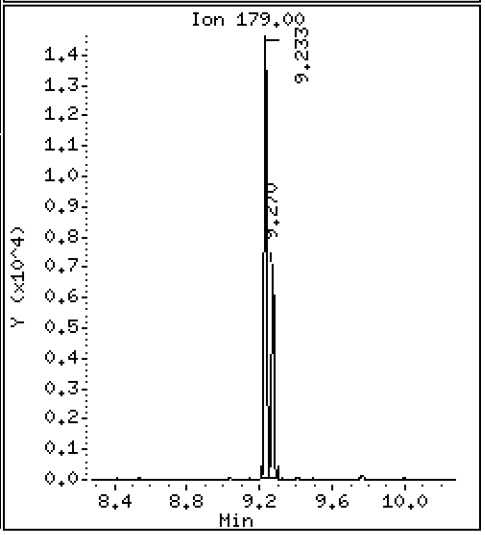


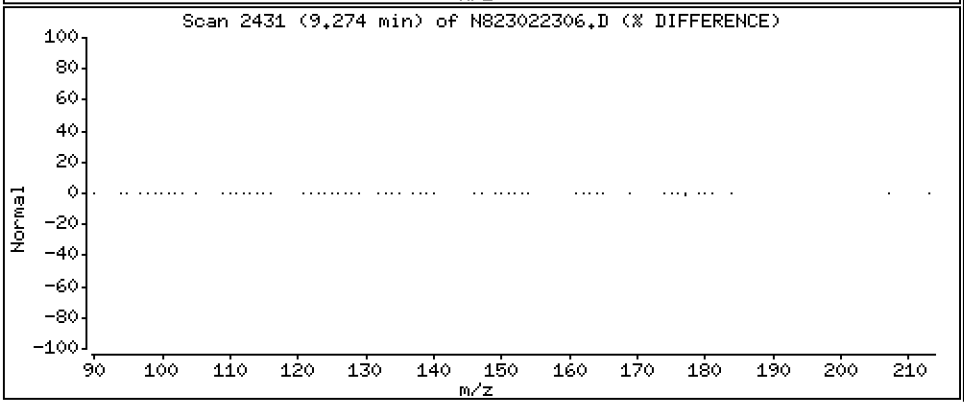












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Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

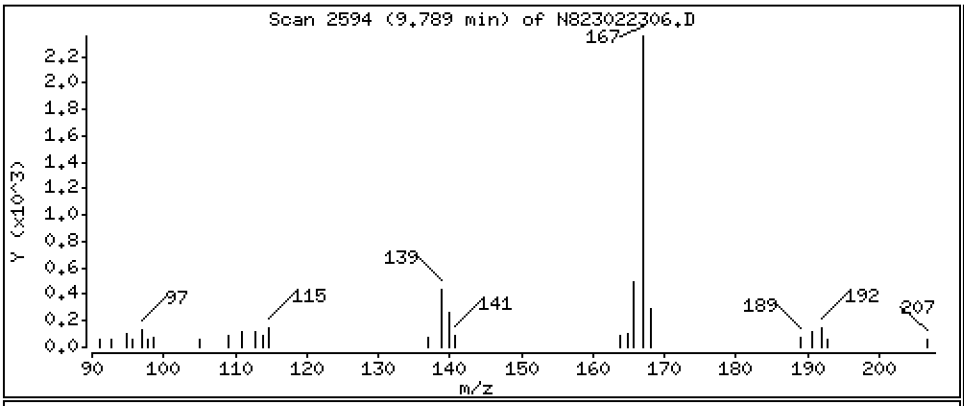
Operator: JZ

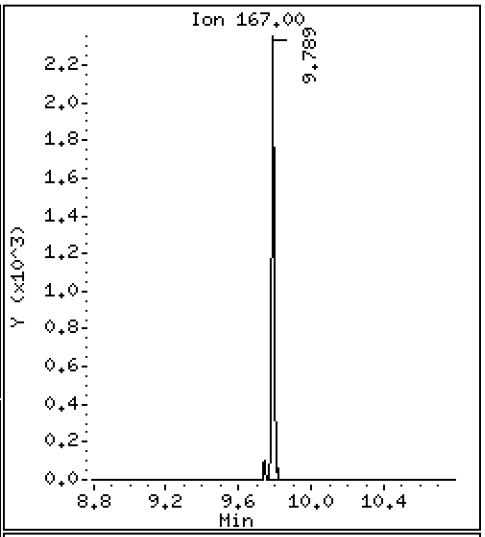
Column phase: Rxi-17sil

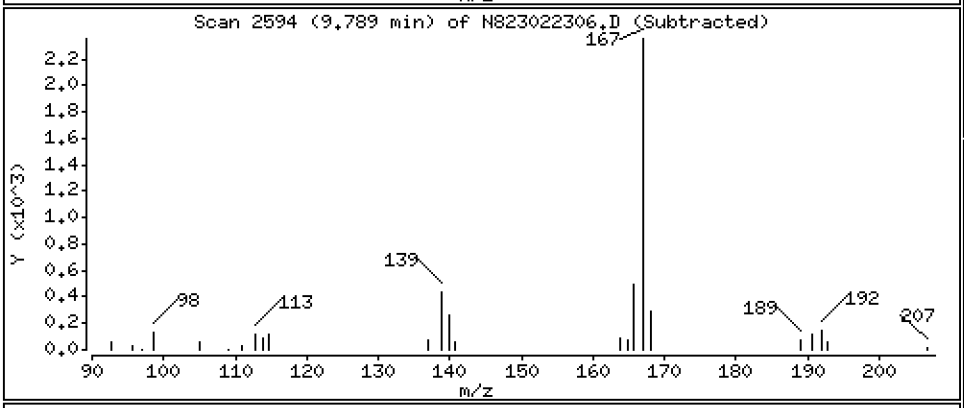
Column diameter: 0.25

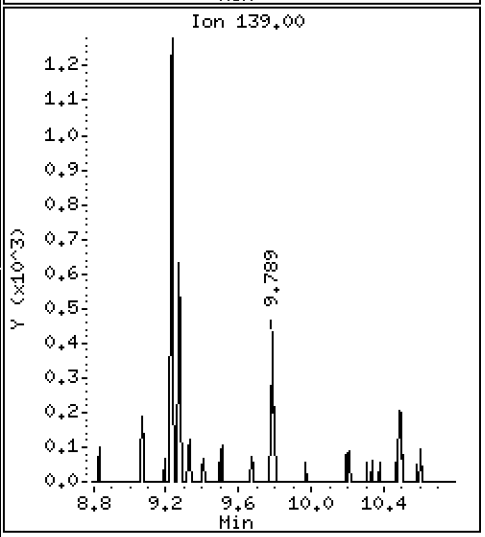
19 Carbazole

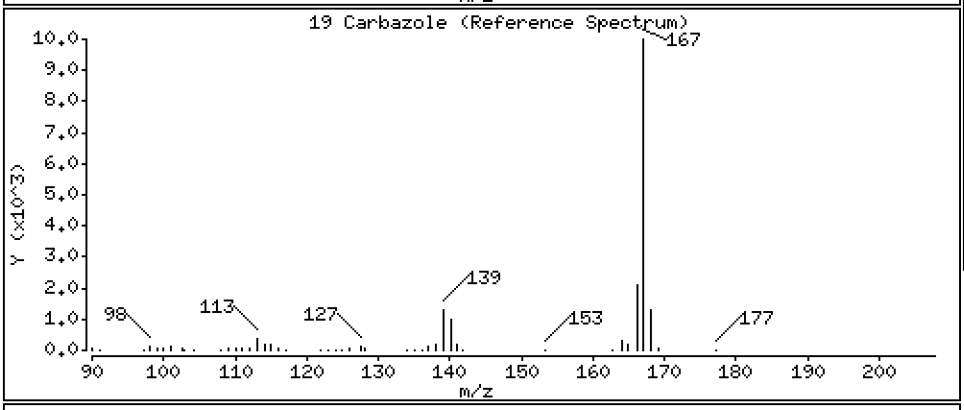
Concentration: 0.1350 ug/mL

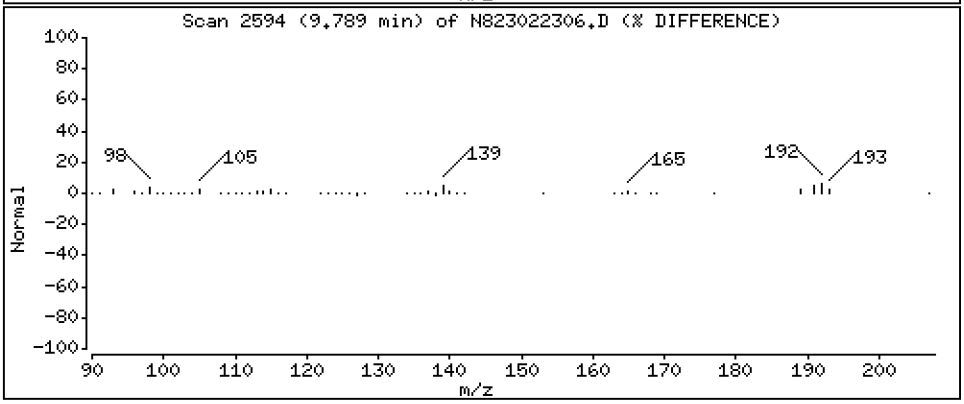












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Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

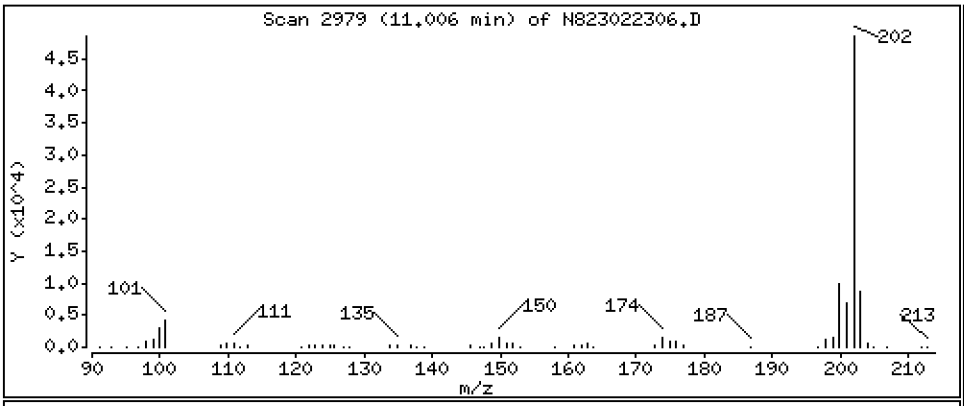
Operator: JZ

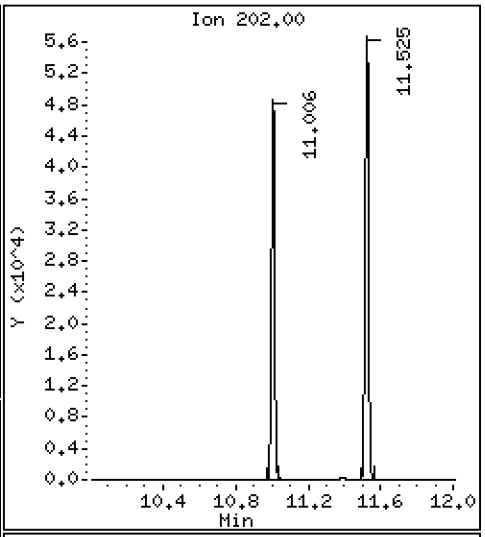
Column phase: Rxi-17sil

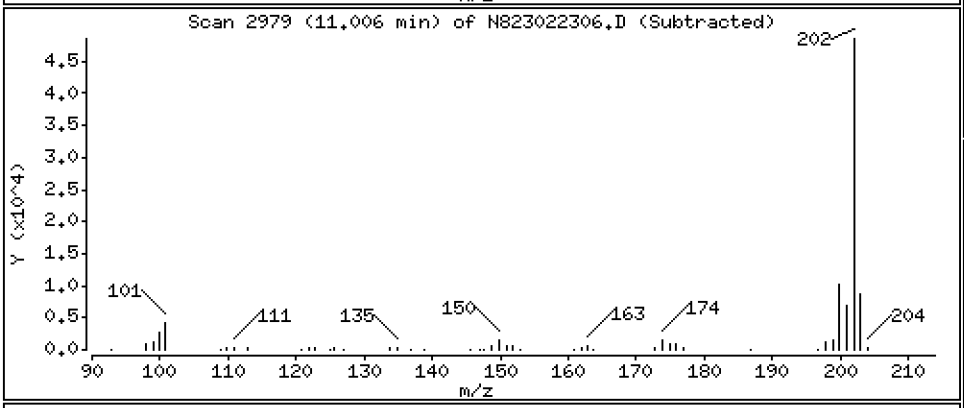
Column diameter: 0.25

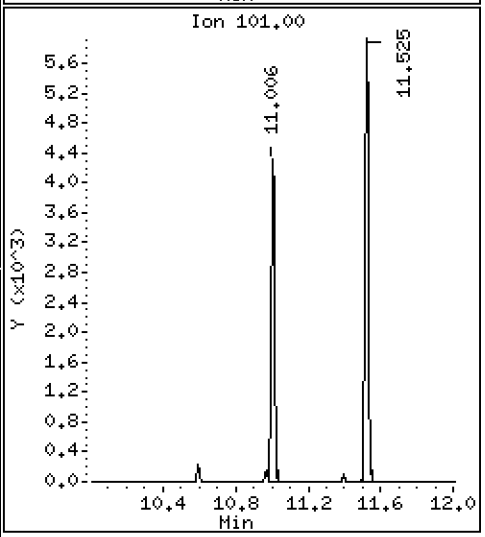
22 Fluoranthene

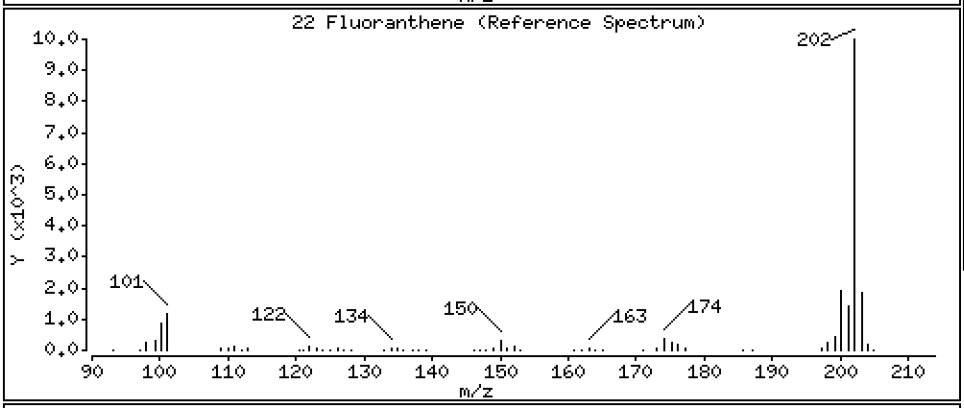
Concentration: 2.488 ug/mL

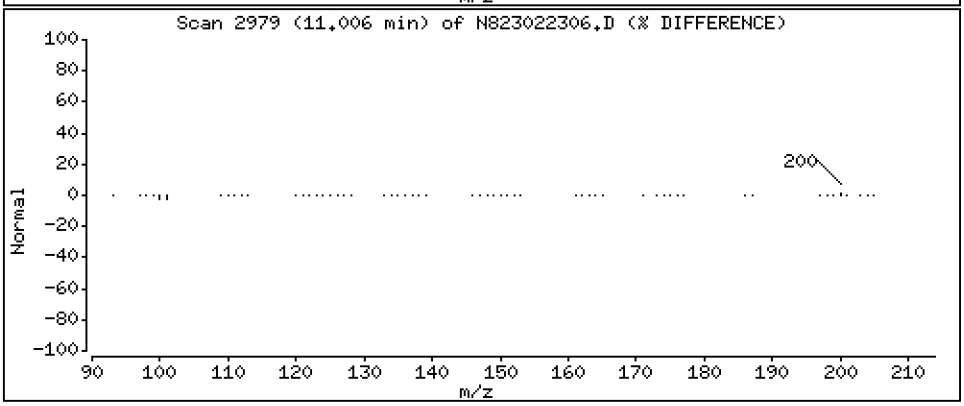












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Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

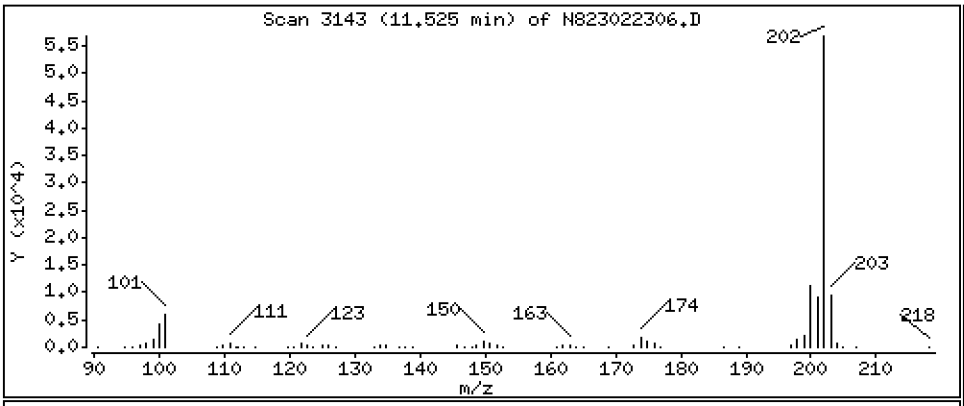
Operator: JZ

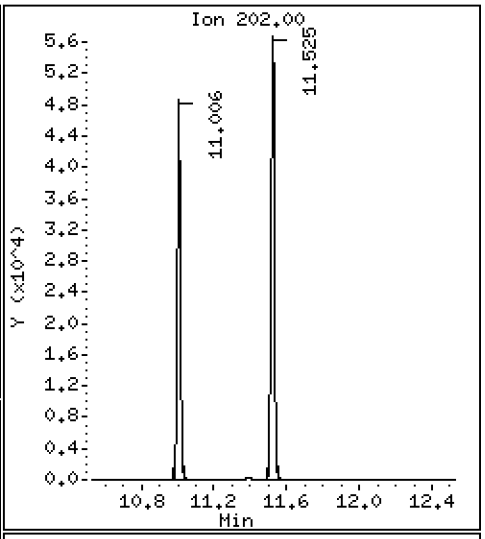
Column phase: Rxi-17sil

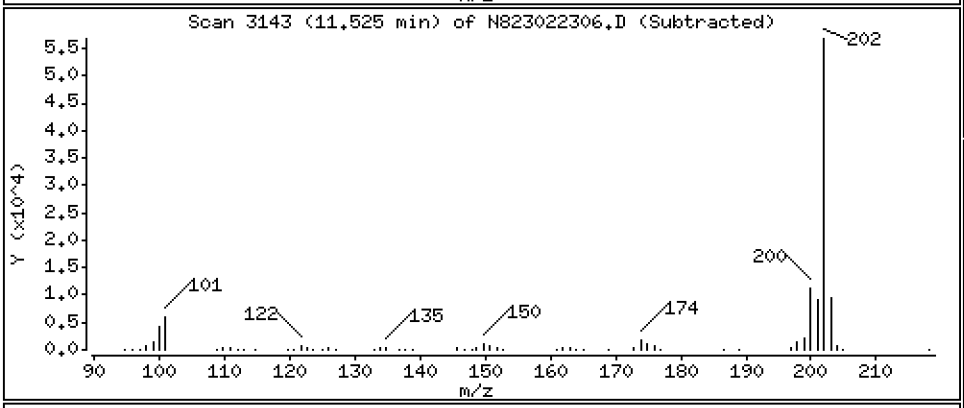
Column diameter: 0.25

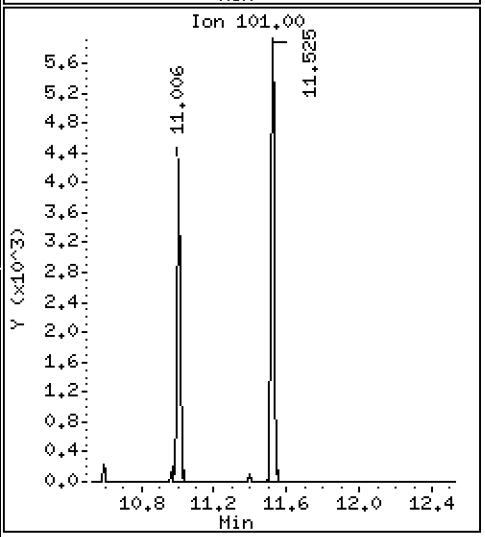
23 Pyrene

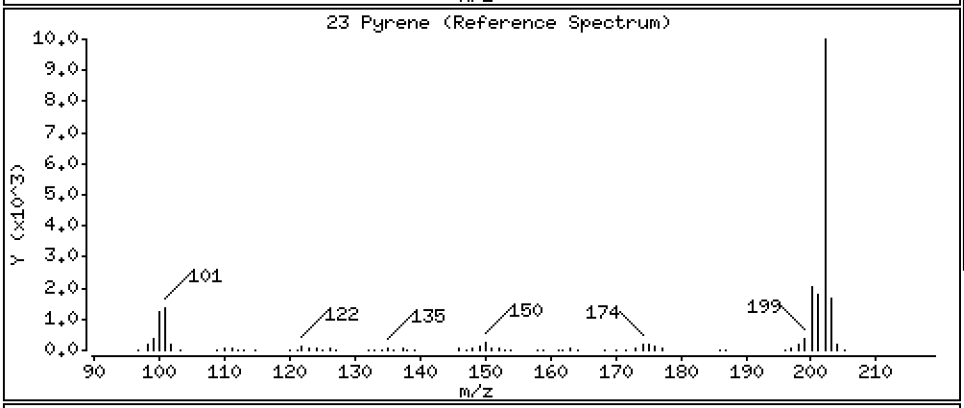
Concentration: 2.952 ug/mL

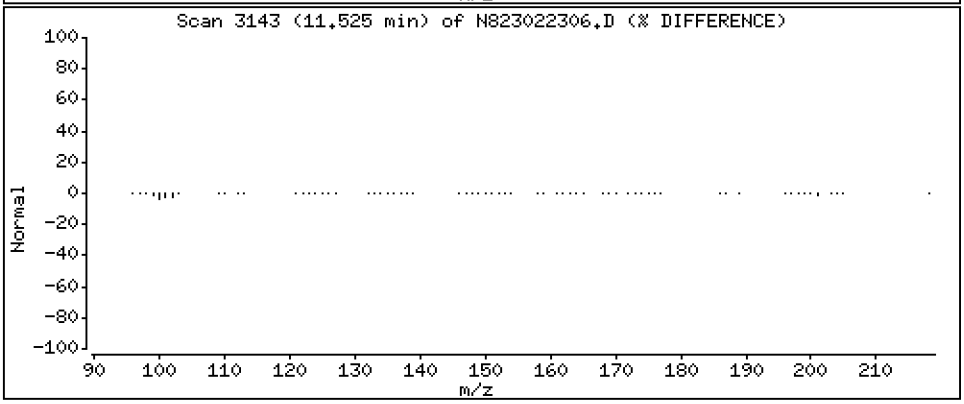












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022306.D

Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

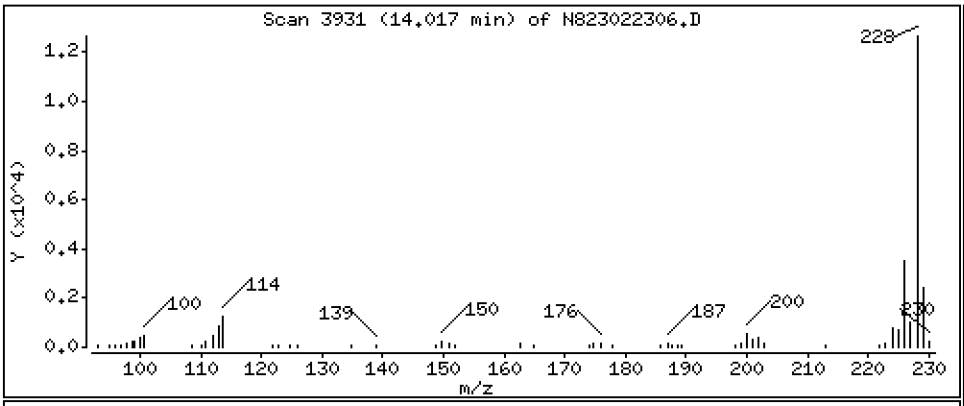
Operator: JZ

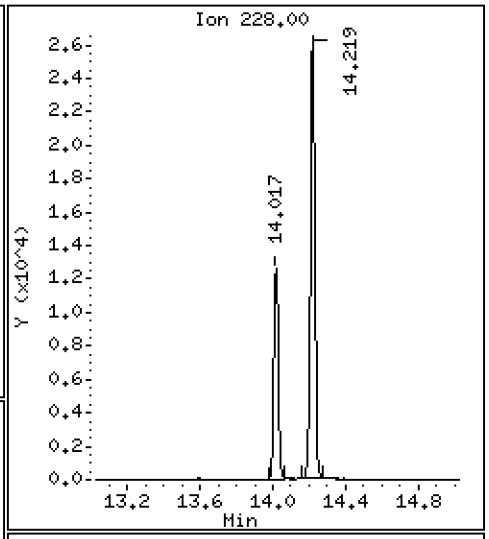
Column phase: Rxi-17sil

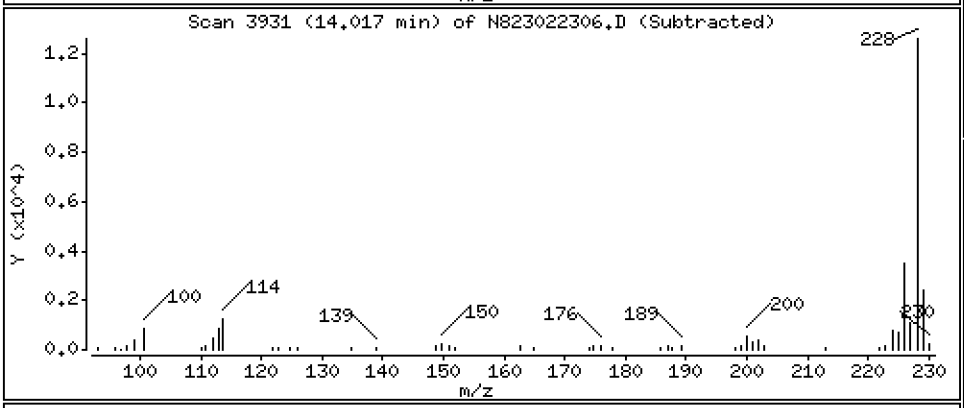
Column diameter: 0.25

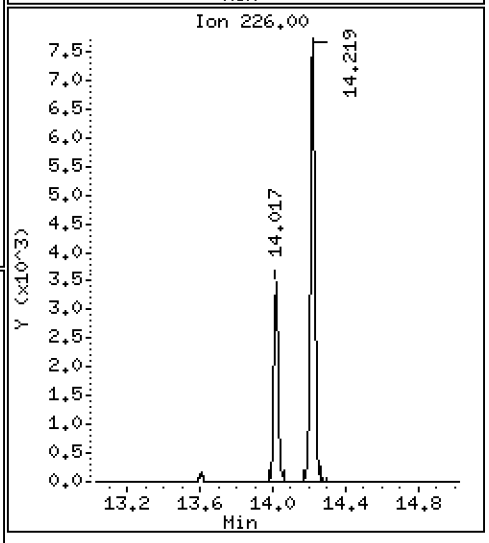
24 Benzo(a)anthracene

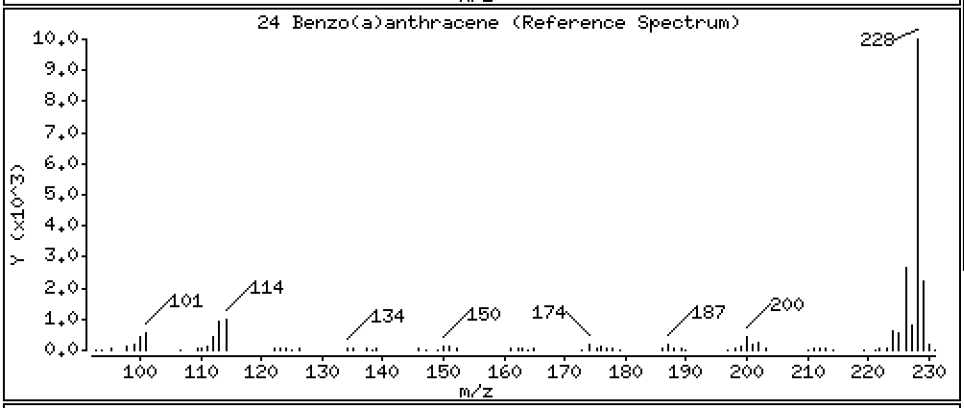
Concentration: 0.9888 ug/mL

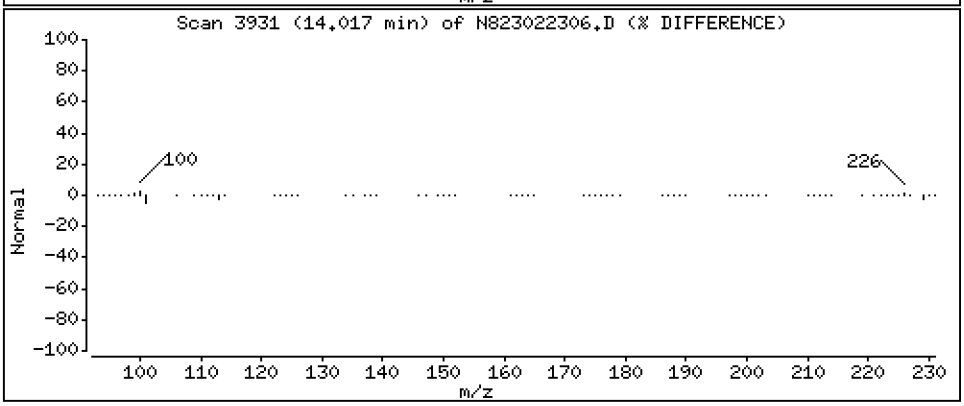












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022306.D

Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

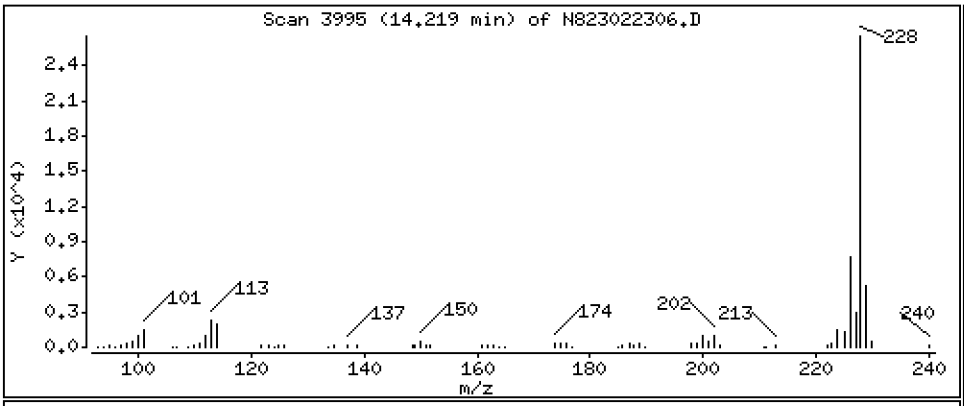
Operator: JZ

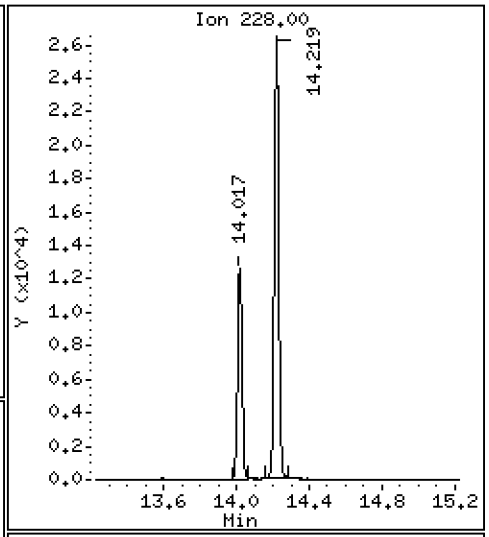
Column phase: Rxi-17sil

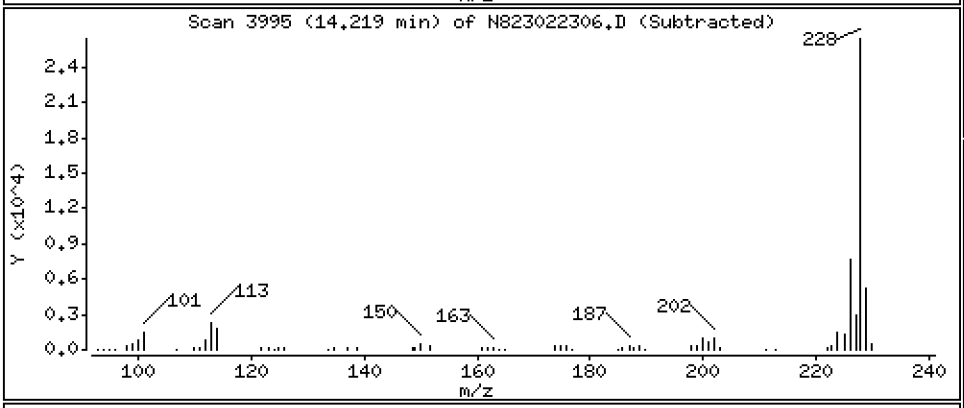
Column diameter: 0.25

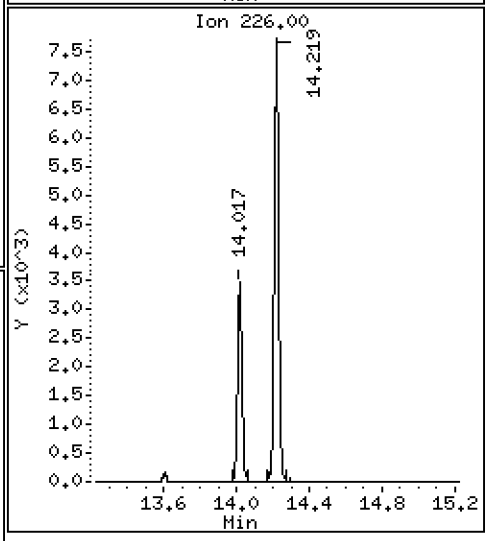
27 Chrysene

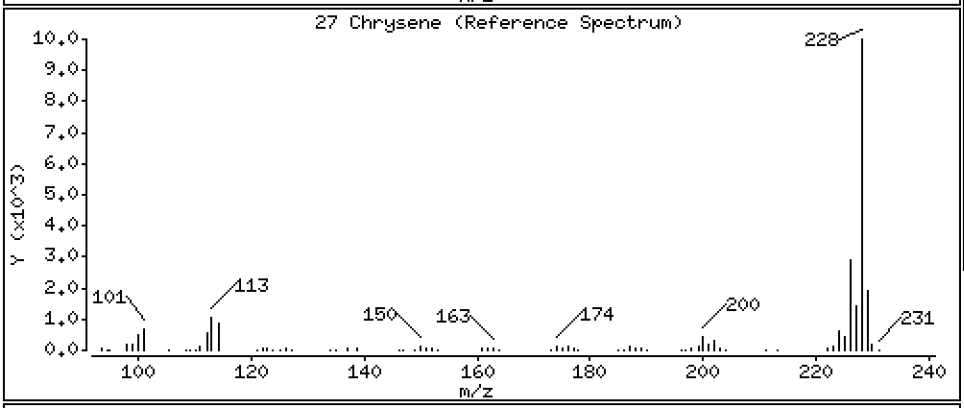
Concentration: 1.870 ug/mL

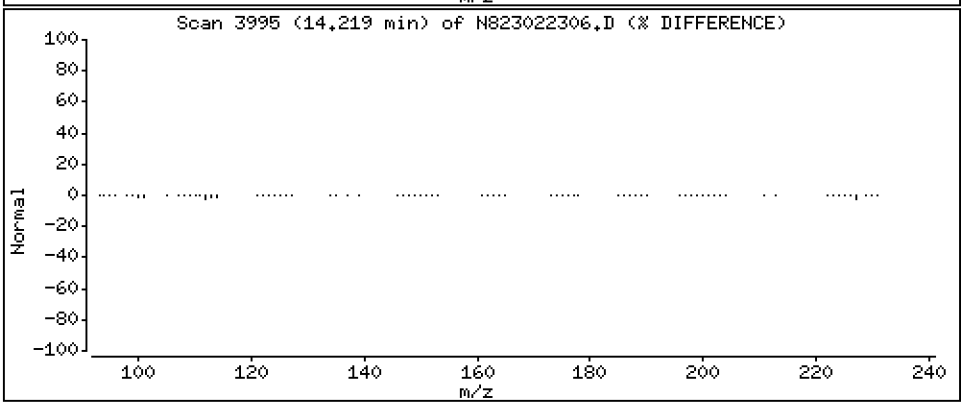












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022306.D

Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

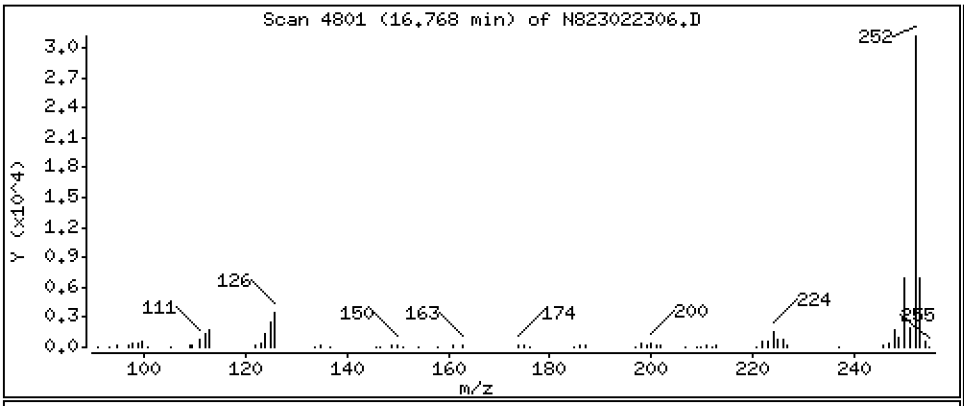
Operator: JZ

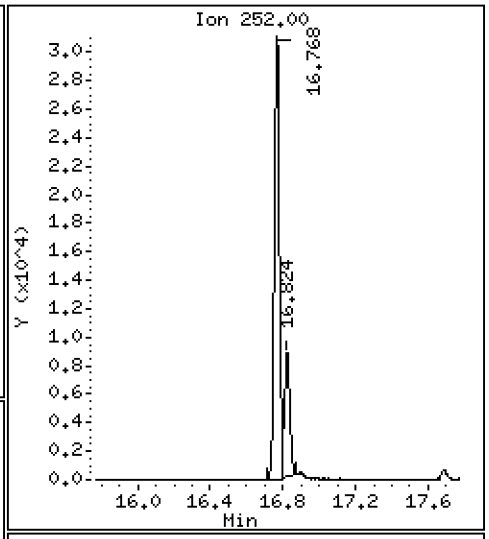
Column phase: Rxi-17sil

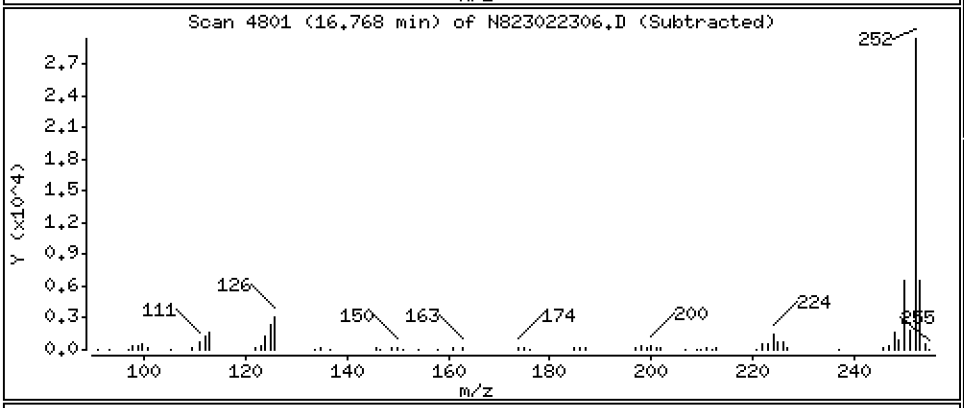
Column diameter: 0.25

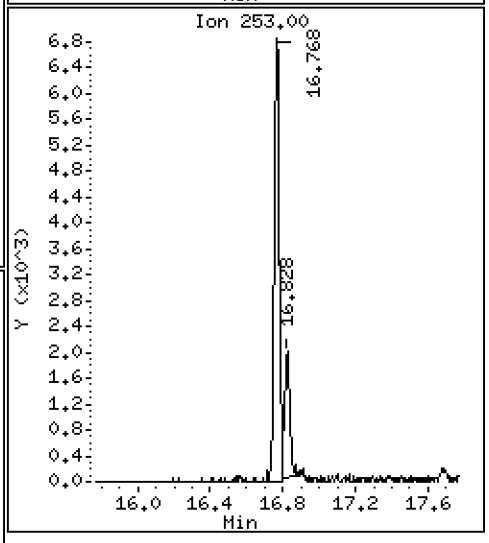
28 Benzo(b)fluoranthene

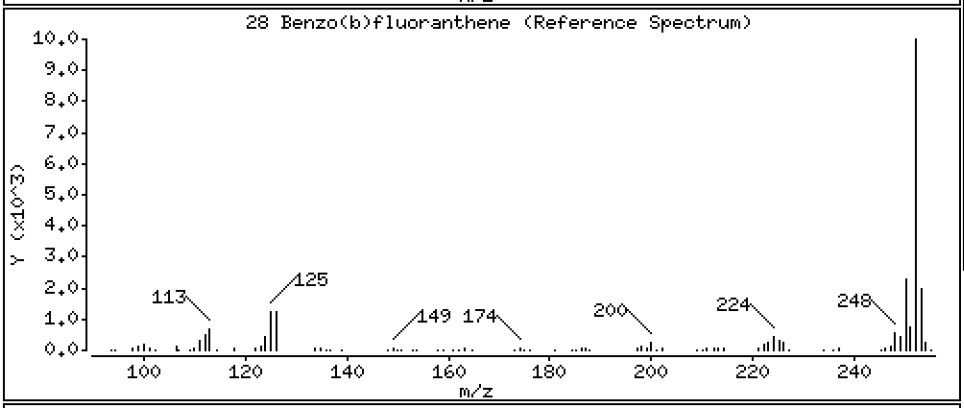
Concentration: 3.124 ug/mL

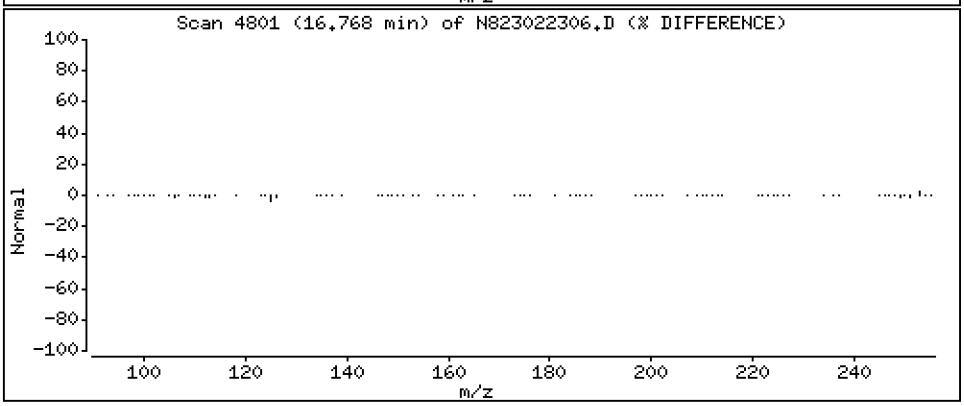












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022306.D

Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

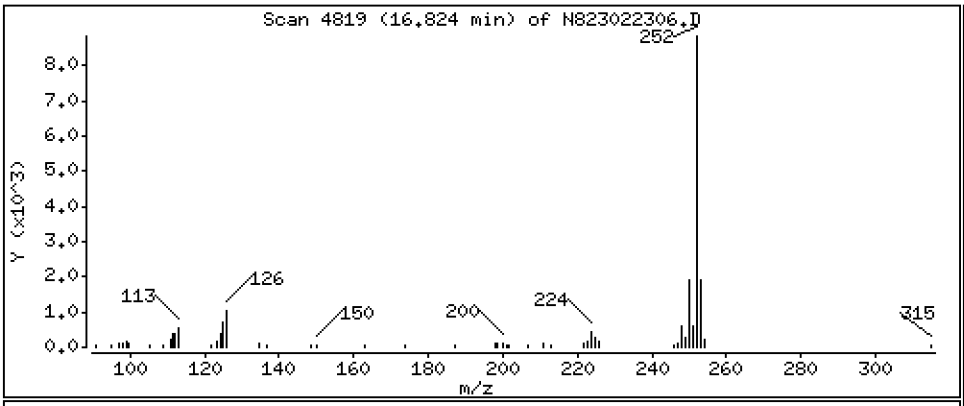
Operator: JZ

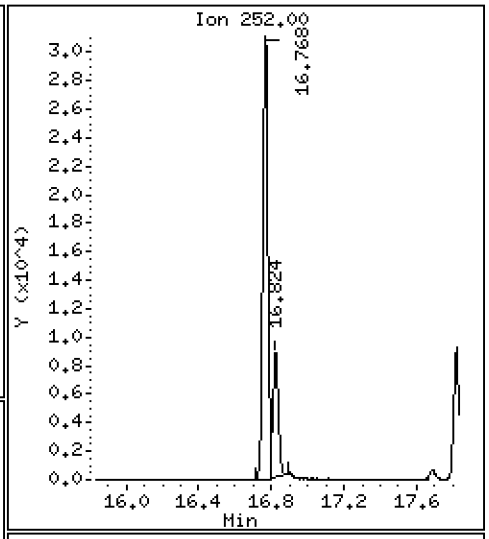
Column phase: Rxi-17sil

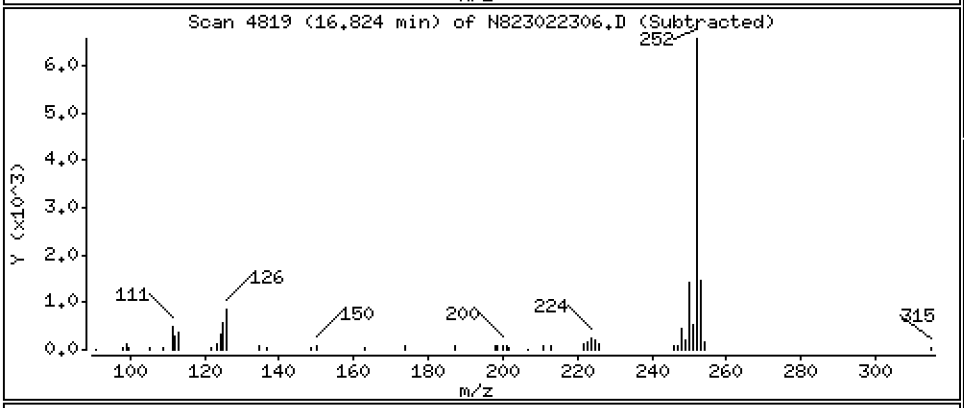
Column diameter: 0.25

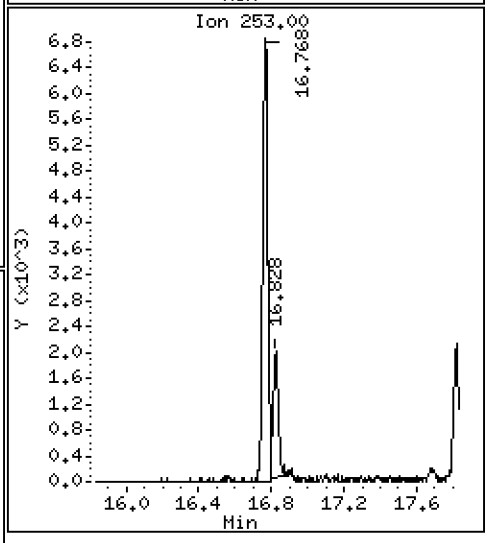
29 Benzo(k)fluoranthene

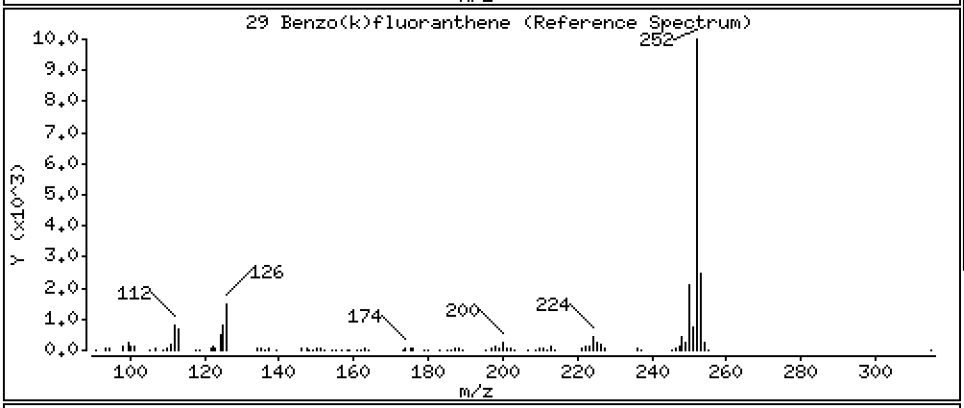
Concentration: 0.9411 ug/mL

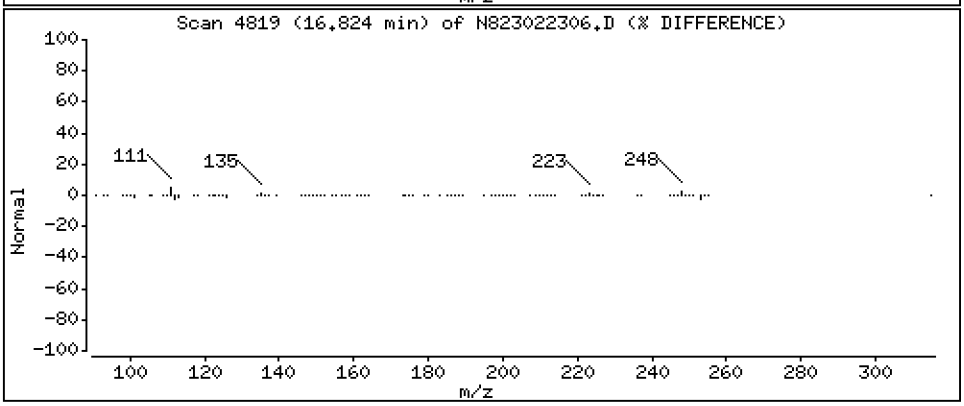












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022306.D

Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

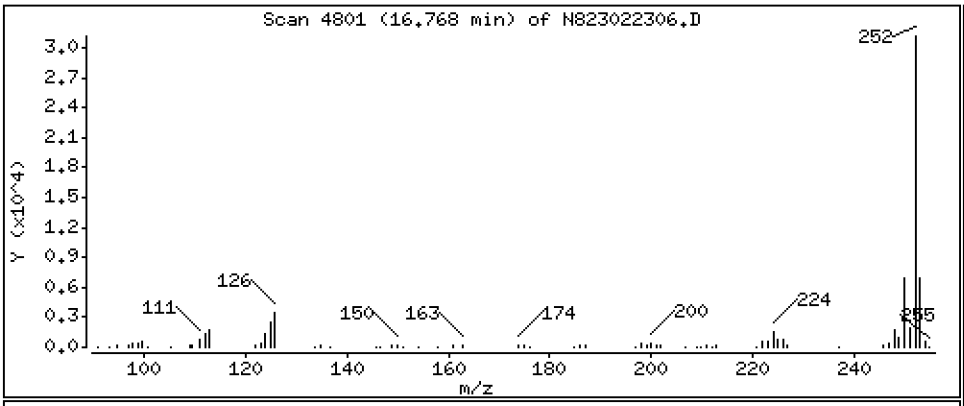
Operator: JZ

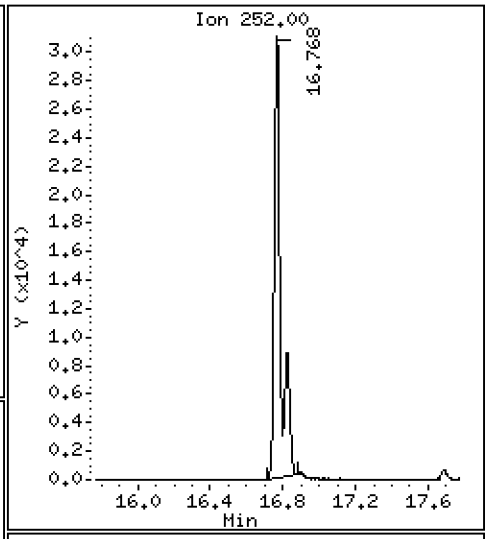
Column phase: Rxi-17sil

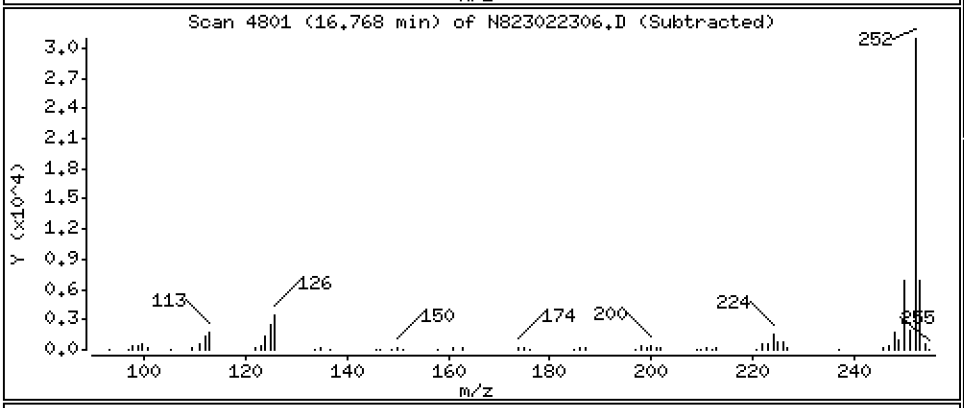
Column diameter: 0.25

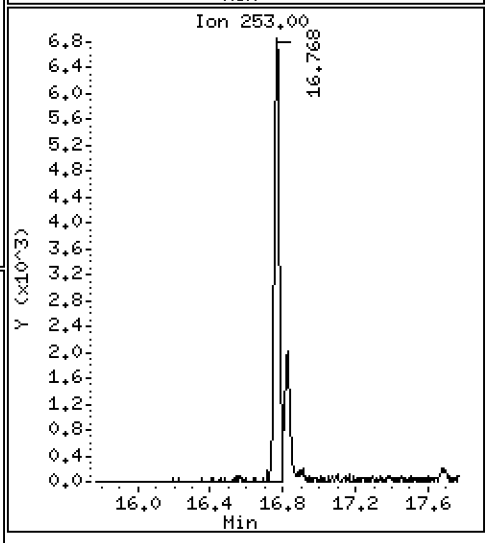
31 Total Benzofluoranthenes

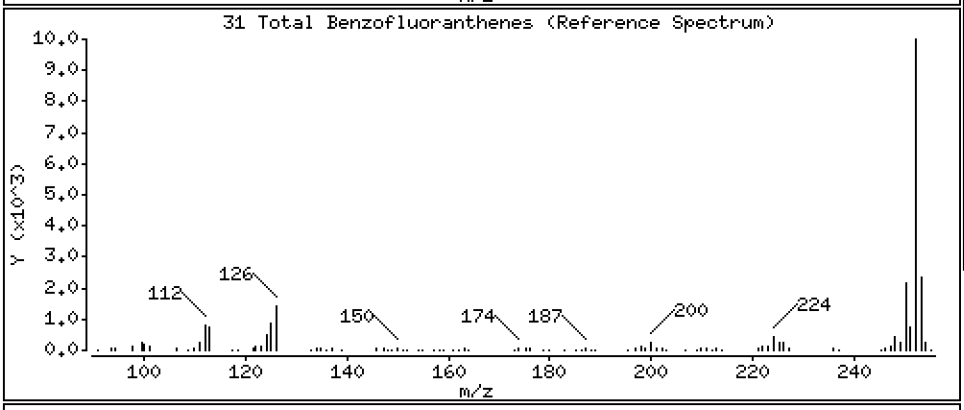
Concentration: 4.213 ug/mL

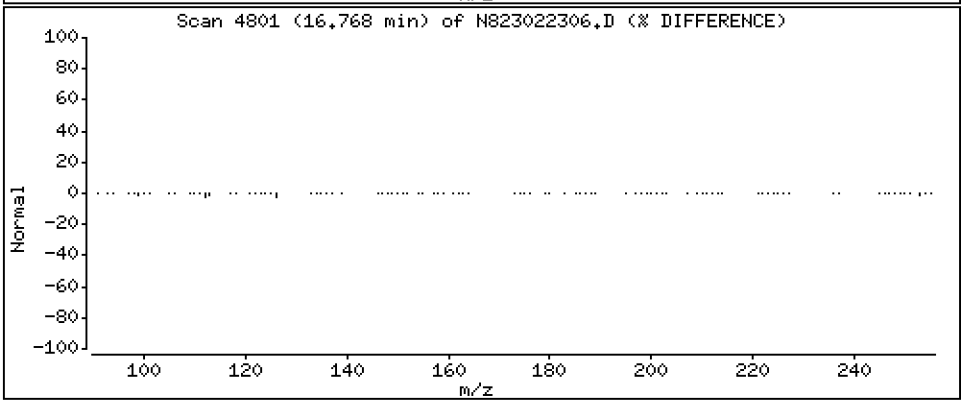












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022306.D

Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

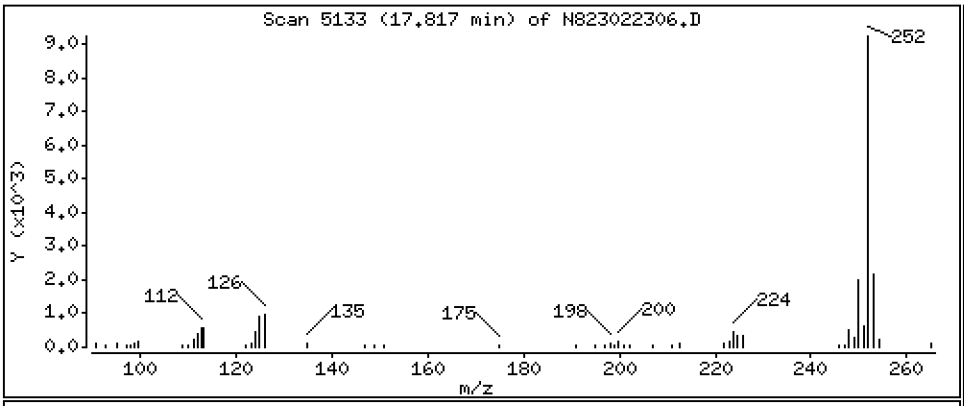
Operator: JZ

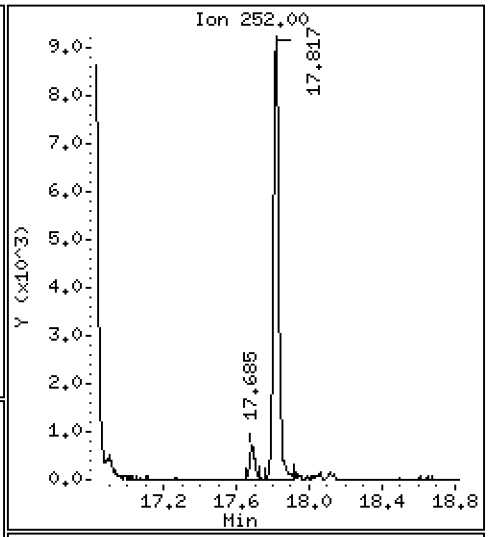
Column phase: Rxi-17sil

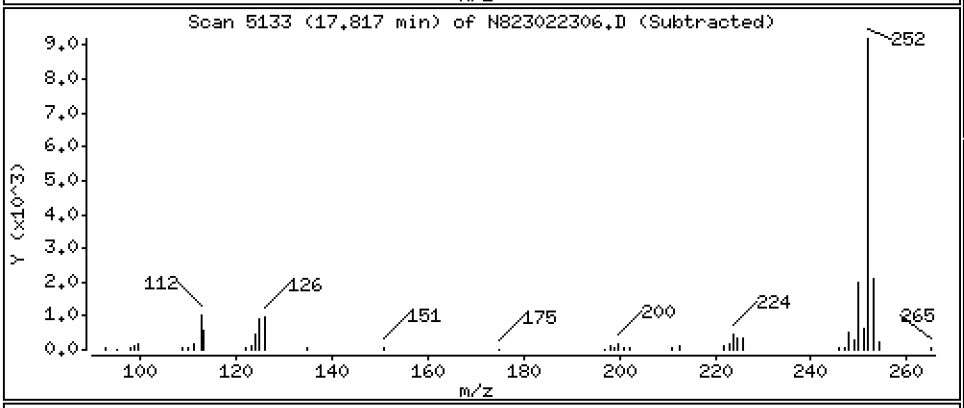
Column diameter: 0.25

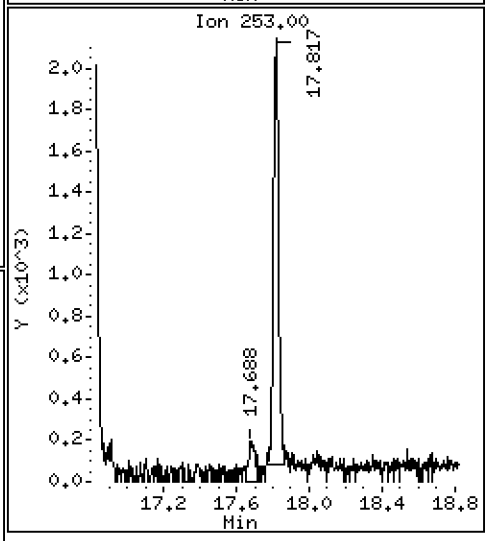
32 Benzo(a)pyrene

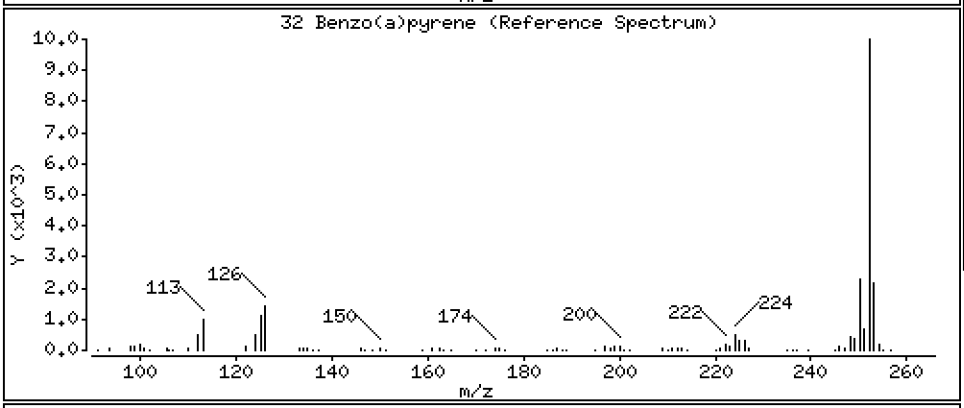
Concentration: 1.120 ug/mL

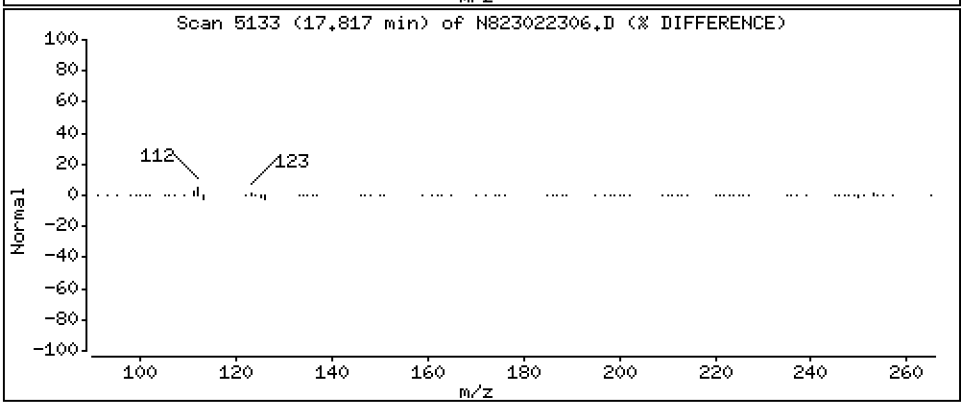












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022306.D

Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

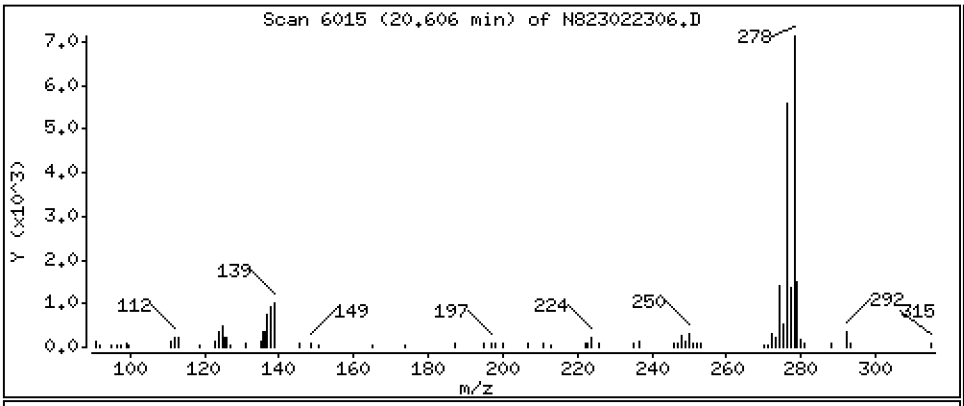
Operator: JZ

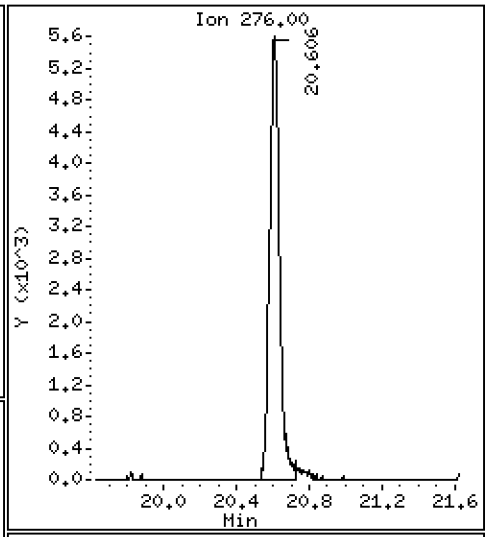
Column phase: Rxi-17sil

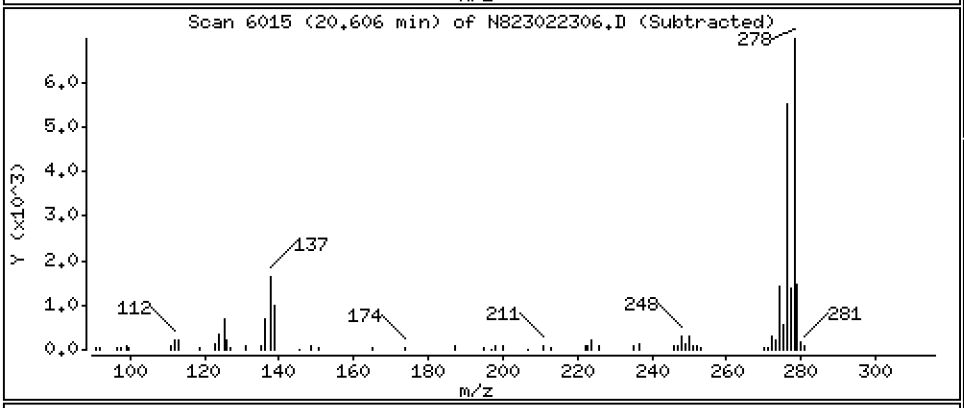
Column diameter: 0.25

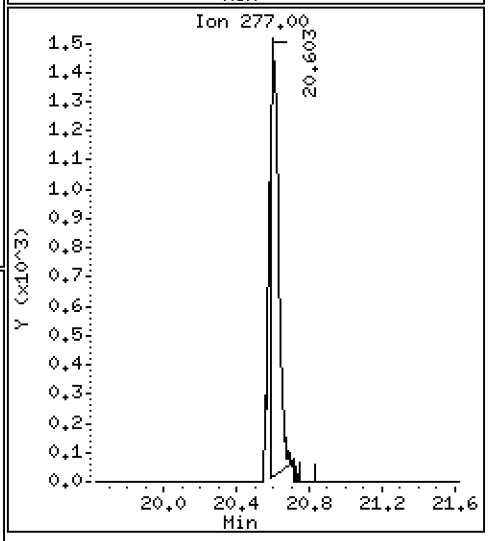
37 Indeno(1,2,3-cd)pyrene

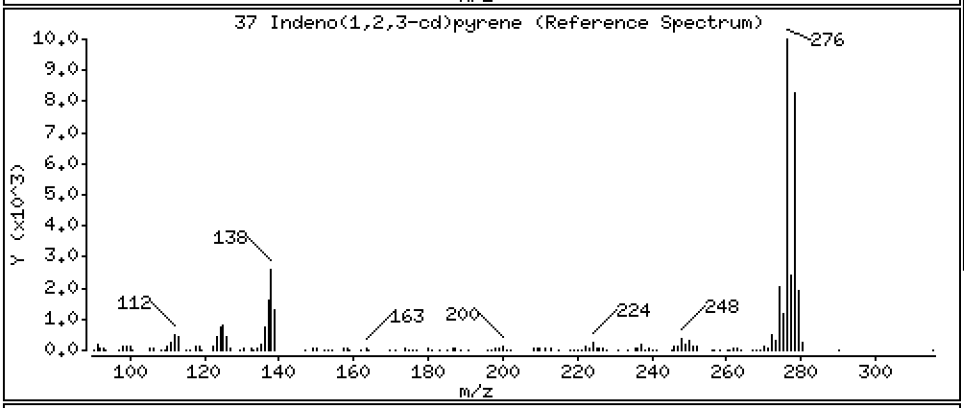
Concentration: 1.087 ug/mL

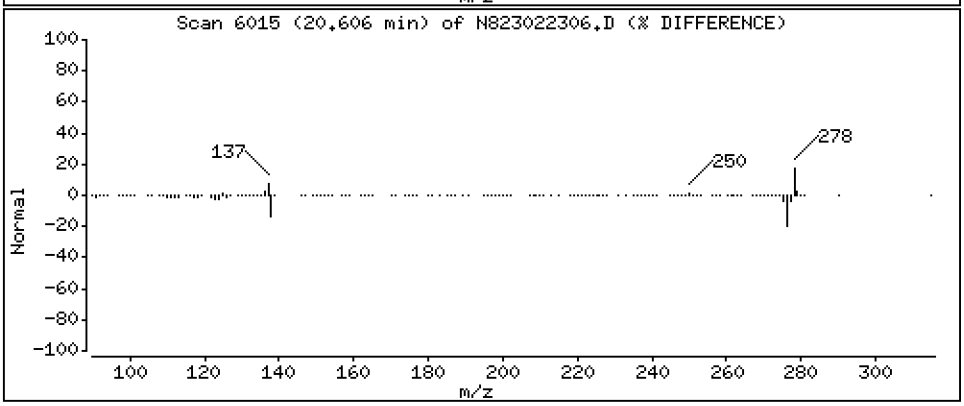












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022306.D

Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

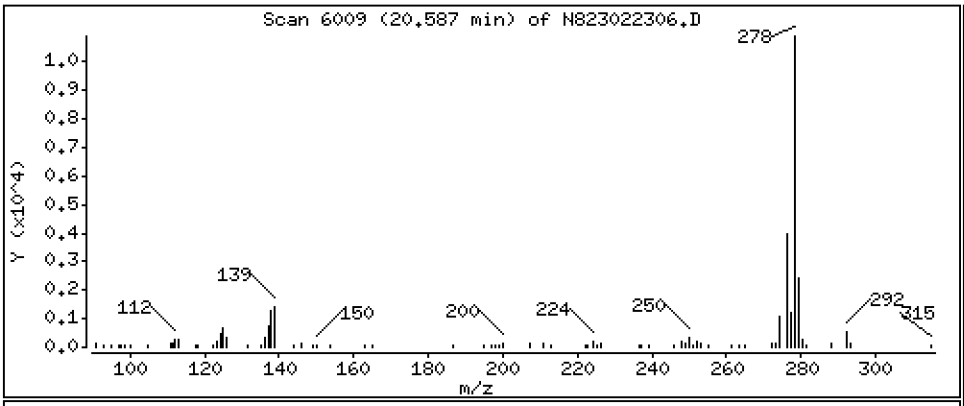
Operator: JZ

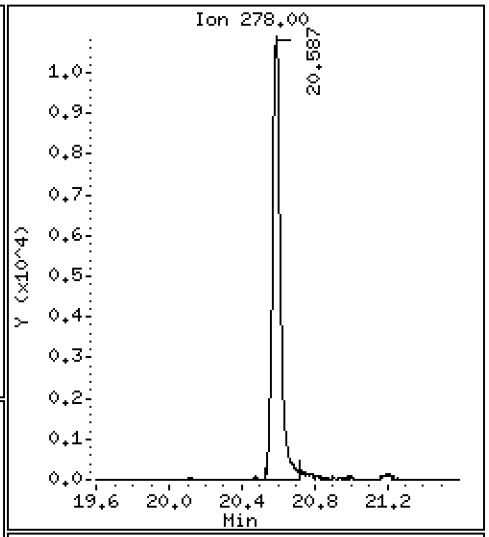
Column phase: Rxi-17sil

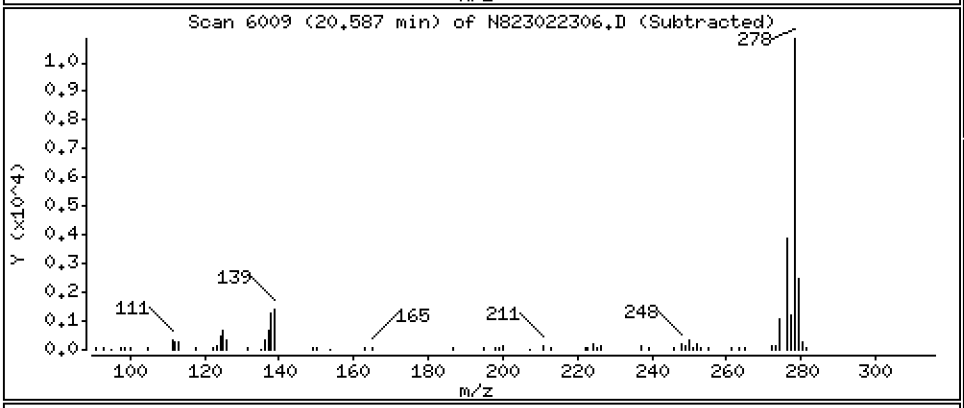
Column diameter: 0.25

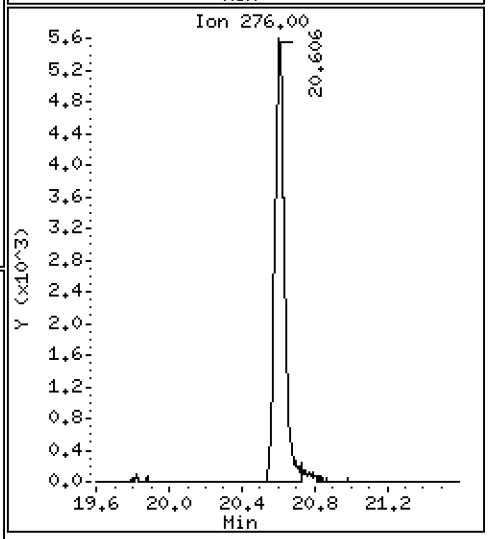
38 Dibenzo(a,h)anthracene

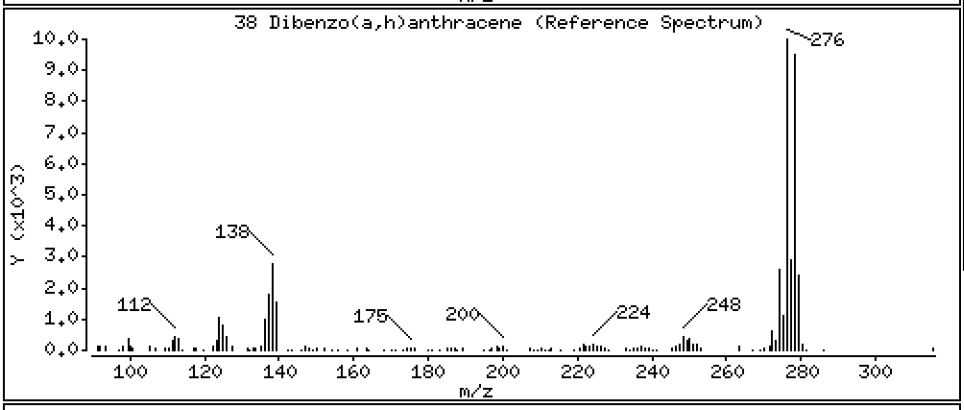
Concentration: 2.011 ug/mL

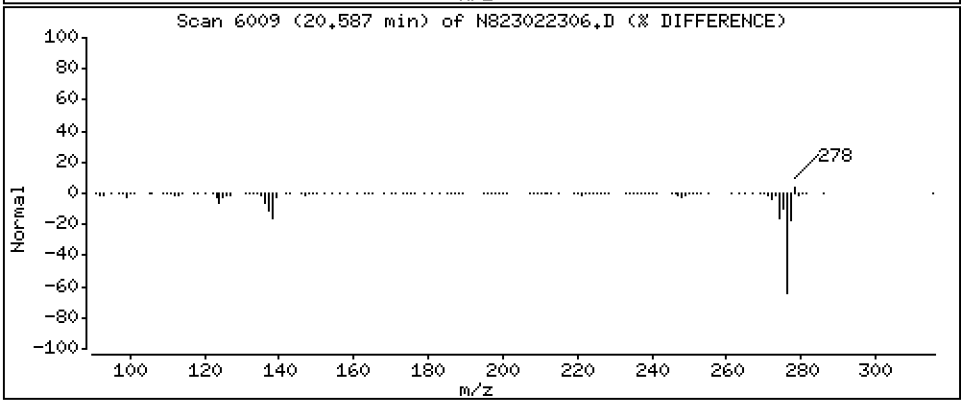












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022306.D

Date : 23-FEB-2023 13:48

Client ID:

Instrument: nt8.i

Sample Info: BLB0386-SRM1,

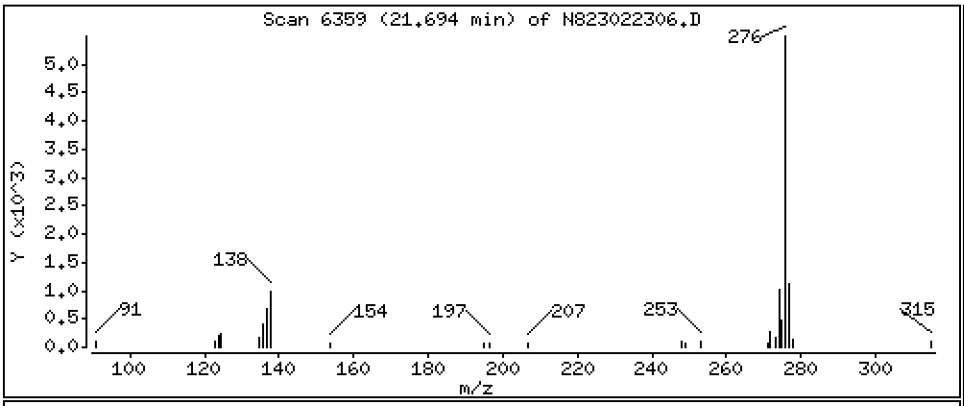
Operator: JZ

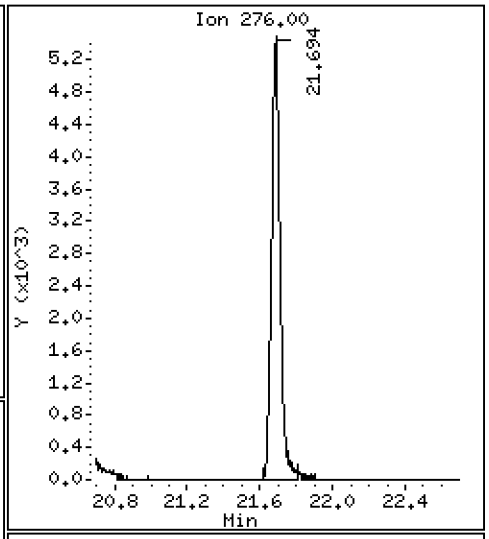
Column phase: Rxi-17sil

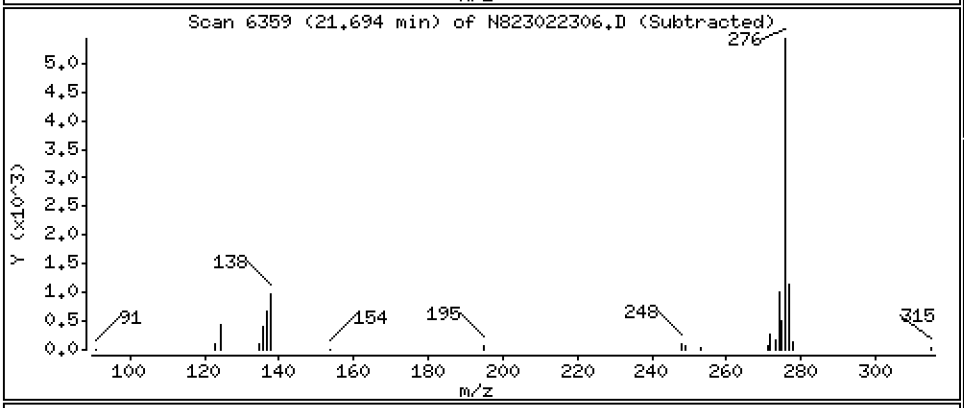
Column diameter: 0.25

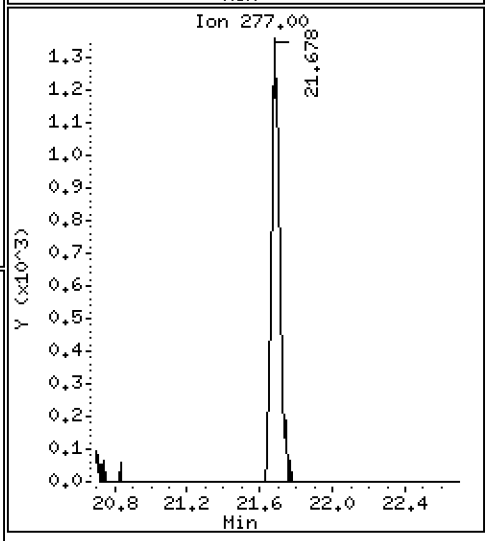
39 Benzo(g,h,i)perylene

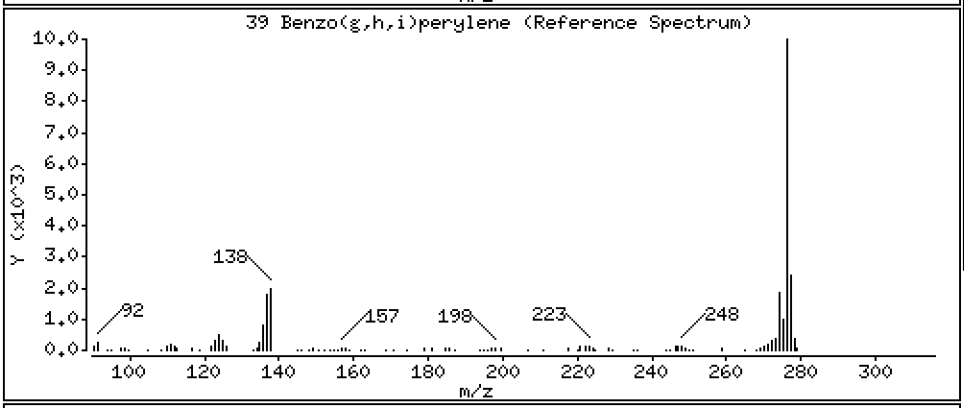
Concentration: 1.024 ug/mL

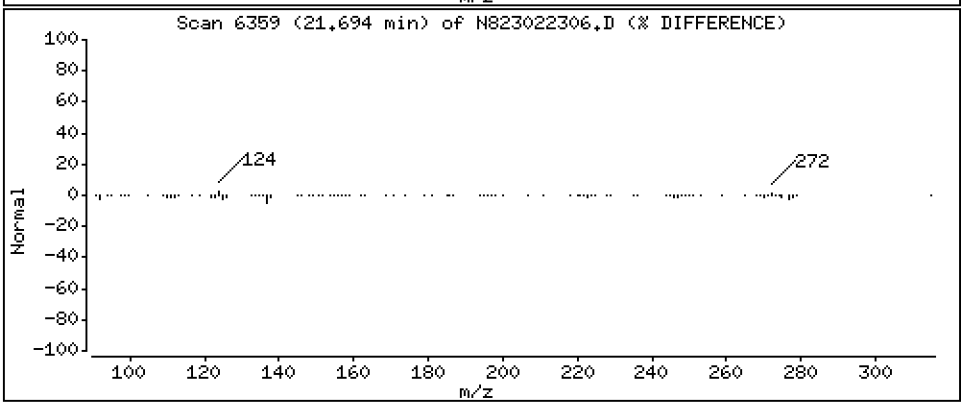












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230223.b\N823022306.D
Lab Smp Id: BLB0386-SRM1
Inj Date : 23-FEB-2023 13:48
Operator : JZ Inst ID: nt8.i
Smp Info : BLB0386-SRM1,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230223.b\FSIMPNA230119.m
Meth Date : 26-Feb-2023 11:43 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PNAXEMDL.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.862	4.871	(1.000)	36781	2.00000	
	2 Naphthalene	128	4.891	4.903	(1.006)	23156	1.35402	1.354
$	3 2-Methylnaphthalene-d10	152	5.599	5.605	(1.152)	31935	3.18360	3.184
	4 2-Methylnaphthalene	141	5.643	5.652	(1.161)	534	0.05677	0.05677
	5 1-methylnaphthalene	141	5.842	5.849	(1.202)	283	0.02964	0.02964
	9 Acenaphthylene	152	7.047	7.050	(0.985)	55362	3.17558	3.176
*	10 Acenaphthene-d10	164	7.155	7.158	(1.000)	23087	2.00000	
	11 Acenaphthene	153	7.205	7.208	(1.007)	38902	3.33035	3.330
	12 Dibenzofuran	168	7.354	7.360	(1.028)	438	0.02469	0.02469
	14 Fluorene	166	7.834	7.837	(1.095)	34652	2.51470	2.515
*	15 Phenanthrene-d10	188	9.197	9.197	(1.000)	44202	2.00000	
	16 Phenanthrene	178	9.232	9.235	(1.004)	88912	4.11787	4.118
	17 Anthracene	178	9.273	9.276	(1.008)	43156	2.20020	2.200
	19 Carbazole	167	9.789	9.791	(1.064)	2427	0.13497	0.1350
	22 Fluoranthene	202	11.006	11.009	(1.197)	58480	2.48822	2.488
$	21 Fluoranthene-d10	212	10.968	10.971	(1.193)	72222	3.70336	3.703
	23 Pyrene	202	11.524	11.527	(0.815)	72398	2.95152	2.952
	24 Benzo(a)anthracene	228	14.016	14.025	(0.991)	21984	0.98881	0.9888
*	25 Chrysene-d12	240	14.146	14.152	(1.000)	39564	2.00000	
	27 Chrysene	228	14.218	14.225	(1.005)	44269	1.87043	1.870
	28 Benzo(b)fluoranthene	252	16.767	16.770	(0.929)	61129	3.12417	3.124
	29 Benzo(k)fluoranthene	252	16.824	16.833	(0.932)	18037	0.94112	0.9411
	30 Benzo(j)fluoranthene	252	Compound Not Detected.					
	31 Total Benzofluoranthenes	252	16.767	16.770	(0.929)	78060	4.21252	4.213(M)
	34 Benzo(e)pyrene	252	Compound Not Detected.					
	32 Benzo(a)pyrene	252	17.817	17.826	(0.987)	19278	1.11962	1.120
*	33 Perylene-d12	264	18.048	18.057	(1.000)	33596	2.00000	
	35 Perylene	252	Compound Not Detected.					
$	36 Dibenzo(a,h)anthracene-d14	292	20.476	20.485	(1.135)	54836	4.16572	4.166
	37 Indeno(1,2,3-cd)pyrene	276	20.606	20.624	(1.142)	21322	1.08698	1.087
	38 Dibenzo(a,h)anthracene	278	20.587	20.596	(1.141)	33941	2.01060	2.011
	39 Benzo(g,h,i)perylene	276	21.693	21.696	(1.202)	18197	1.02389	1.024

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823022306.D
Lab Smp Id: BLB0386-SRM1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230223.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 23-FEB-2023
Calibration Time: 11:46
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	37022	18511	74044	36781	-0.65
10 Acenaphthene-d10	22454	11227	44908	23087	2.82
15 Phenanthrene-d10	43277	21639	86554	44202	2.14
25 Chrysene-d12	38907	19454	77814	39564	1.69
33 Perylene-d12	39582	19791	79164	33596	-15.12

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.87	4.37	5.37	4.86	-0.19
10 Acenaphthene-d10	7.16	6.66	7.66	7.16	-0.04
15 Phenanthrene-d10	9.20	8.70	9.70	9.20	0.00
25 Chrysene-d12	14.15	13.65	14.65	14.15	-0.04
33 Perylene-d12	18.06	17.56	18.56	18.05	-0.05

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

REVIEW SUMMARY FOR FILE - N823022306.D

Lab ID: BLB0386-SRM1
nt8.i, 20230223.b\FSIMPNA230119.m,   23-FEB-2023 13:48

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check performed

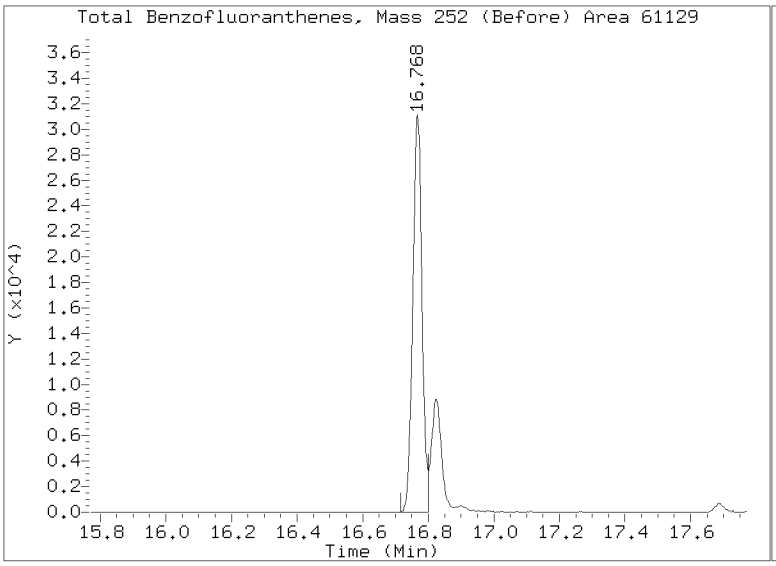
On Column LOD for nt8.i, 20230223.b\FSIMPNA230119.m, PNAXEMDL.sub = 0.0080

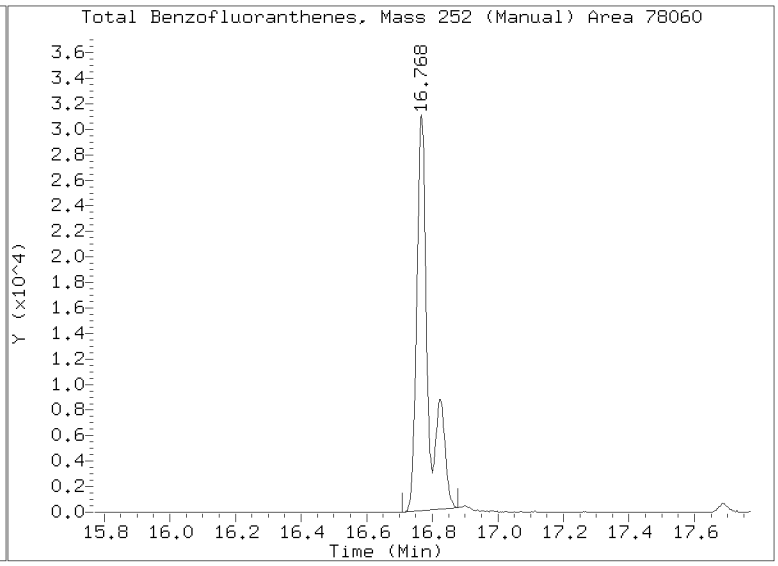
Exception: Benzo(e)pyrene 0.0800

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230223.b/N823022306.D
Injection Date: 23-FEB-2023 13:48
Lab ID:BLB0386-SRM1 Client ID:
Report Date: 02/26/2023 12:32





Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLB0495-SRM2
Batch: BLB0495
Initial/Final: 1 g / 1 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 03/17/2023 23:31
Standard ID: K003477
Expires: 01/31/2024
Standard Lot#: CRM 143 (LRAC8918)
Description: CRM 143 BNAs - Sandy Loam

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
2,4-Dimethylphenol	6357.0	4660	21.7	200		73.4	0 - 220
1,2,4-Trichlorobenzene	1477.0	1120	26.8	50.0		75.6	10 - 193
N-Nitrosodiphenylamine	2854.0	3320	13.1	50.0		116	40 - 160
Pentachlorophenol	3411.0	3160	21.3	200	Q	92.7	10 - 206

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723098.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

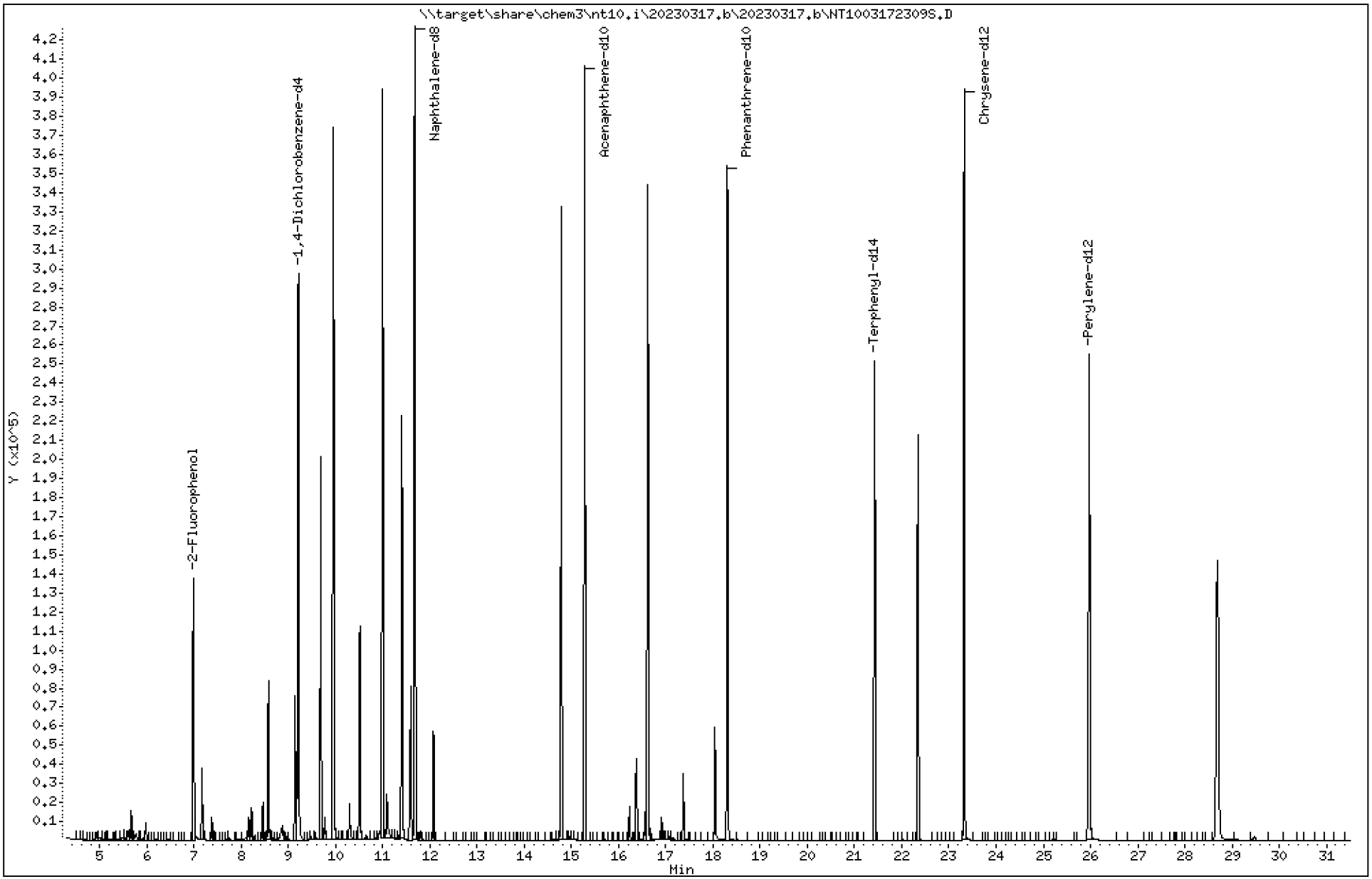
Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

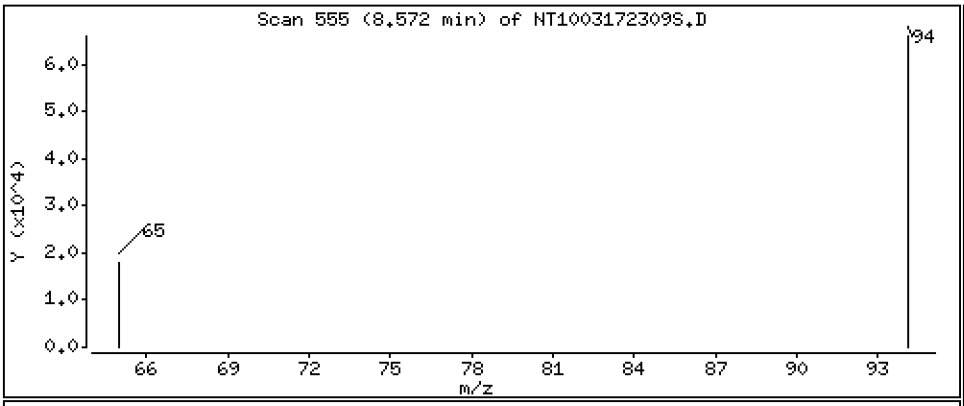
Operator: JGR

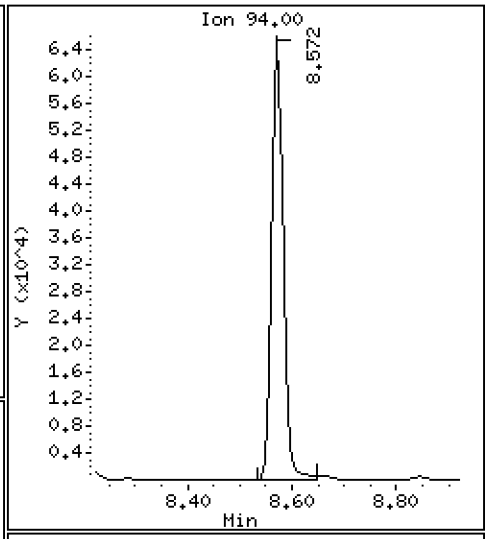
Column phase: ZB-5msi

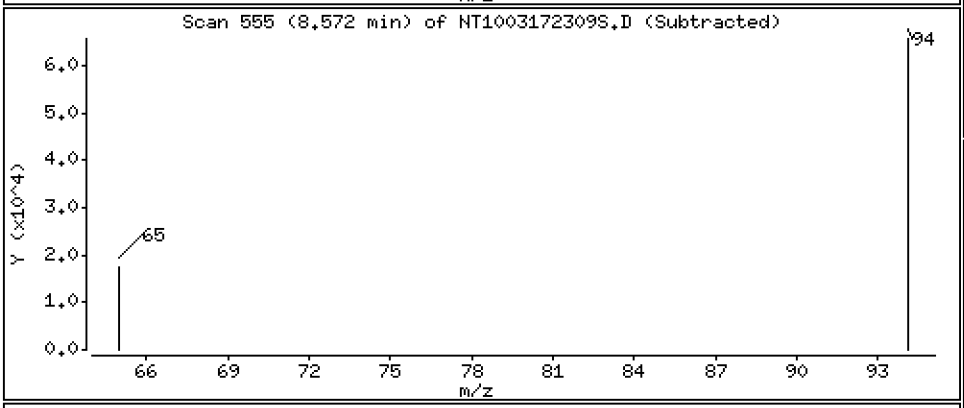
Column diameter: 0.25

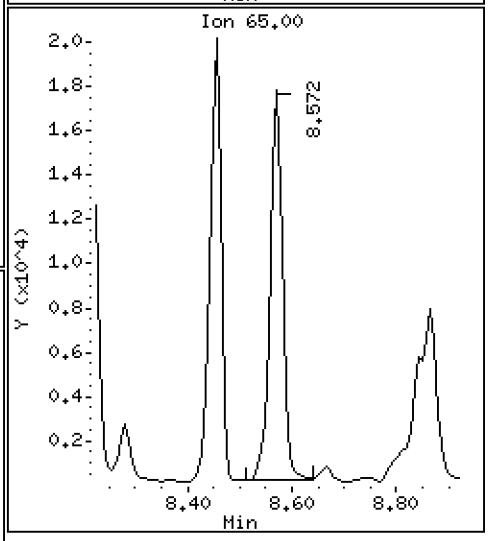
3 Phenol

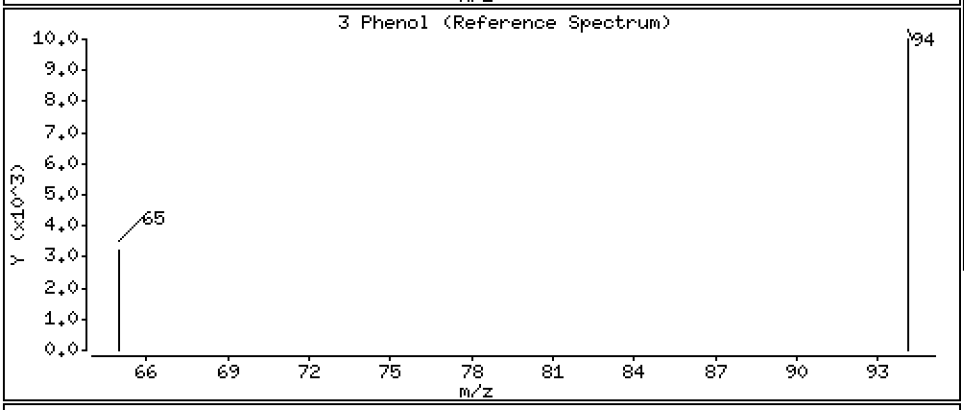
Concentration: 1.216 ug/L

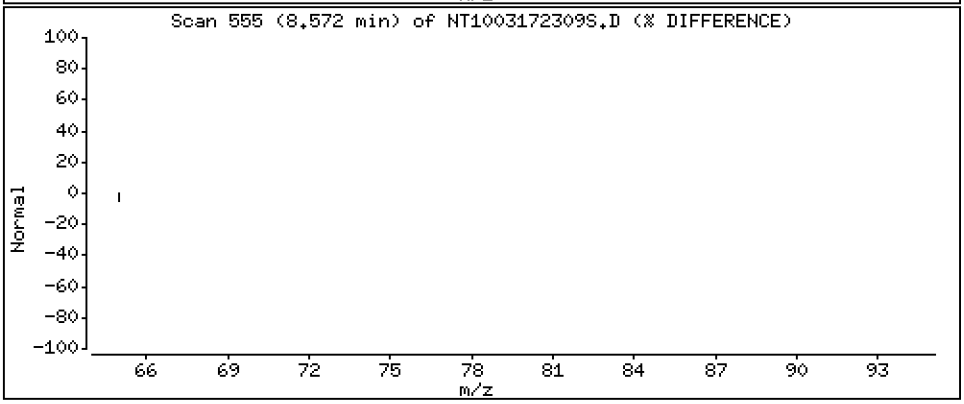












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

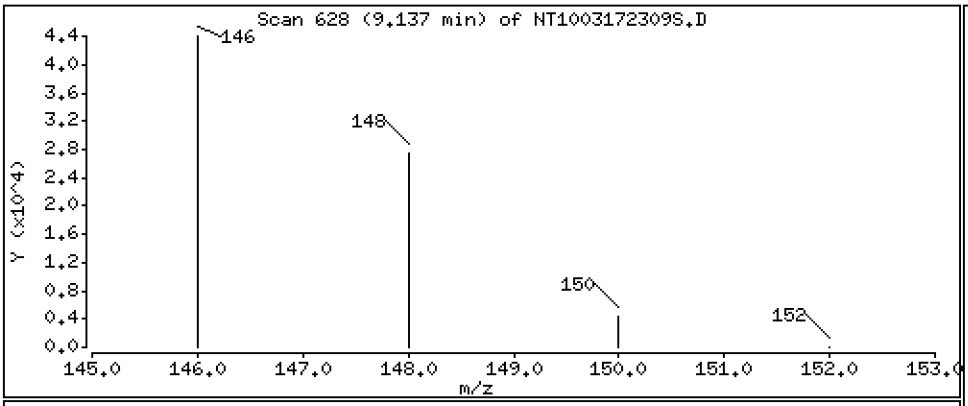
Operator: JGR

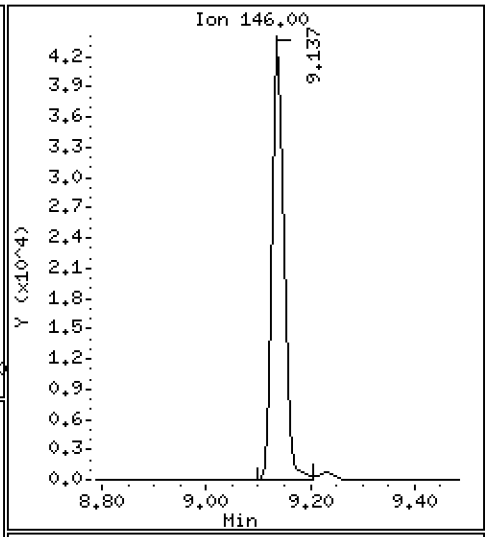
Column phase: ZB-5msi

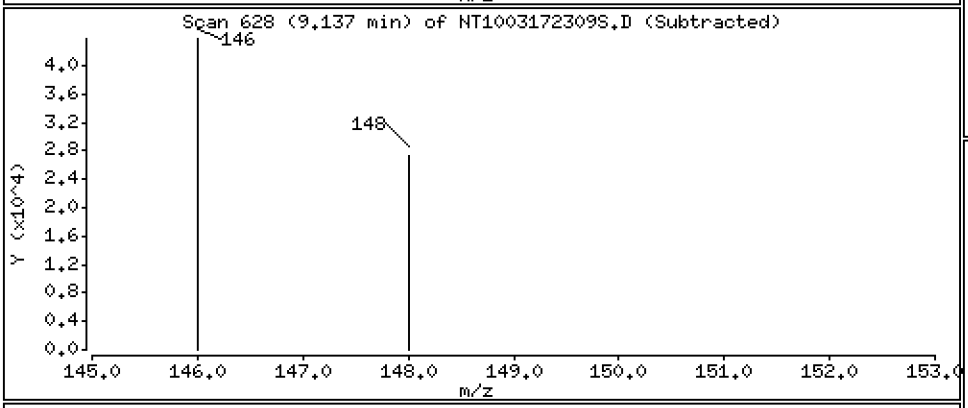
Column diameter: 0.25

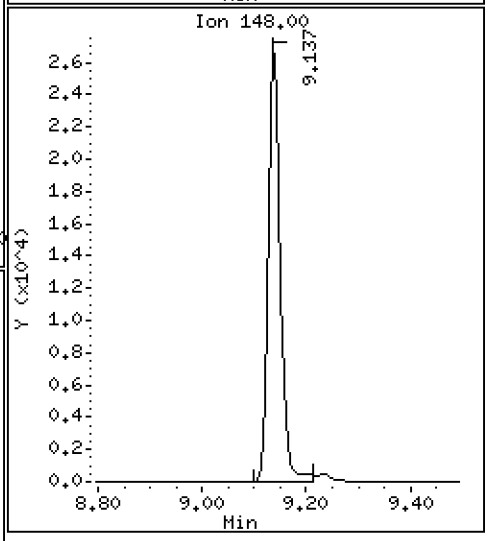
7 1,3-Dichlorobenzene

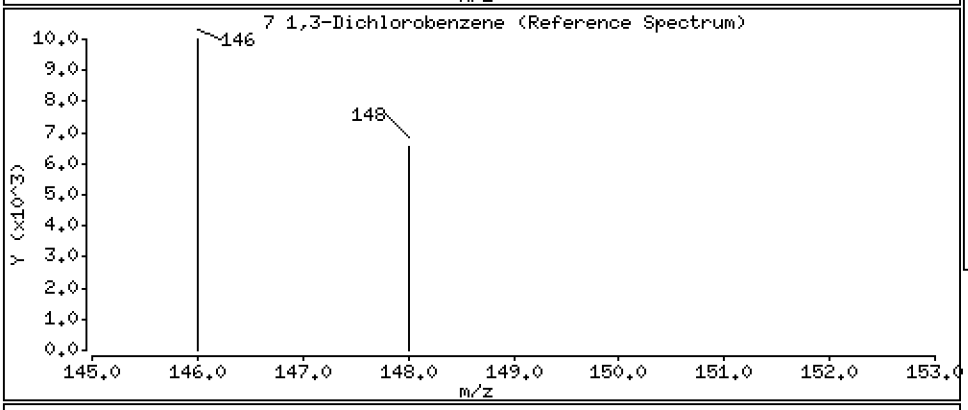
Concentration: 0.9360 ug/L

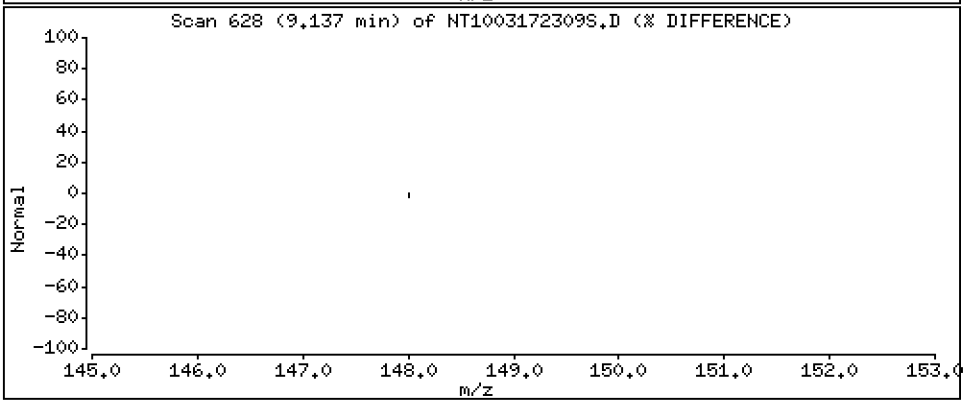












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

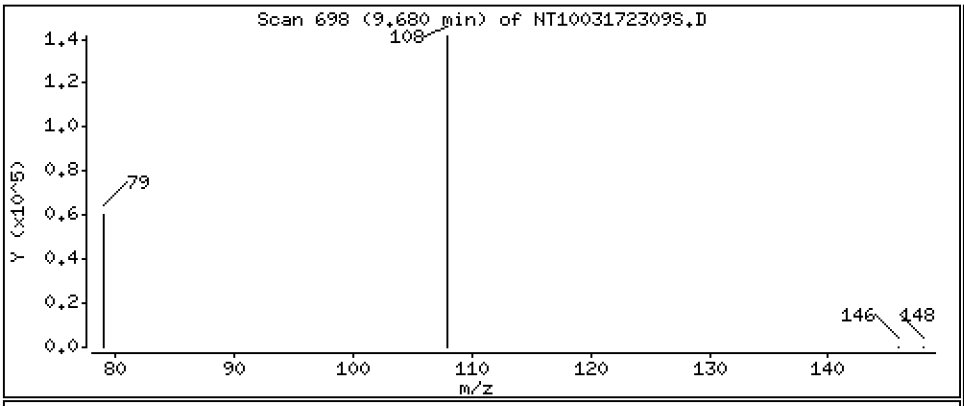
Operator: JGR

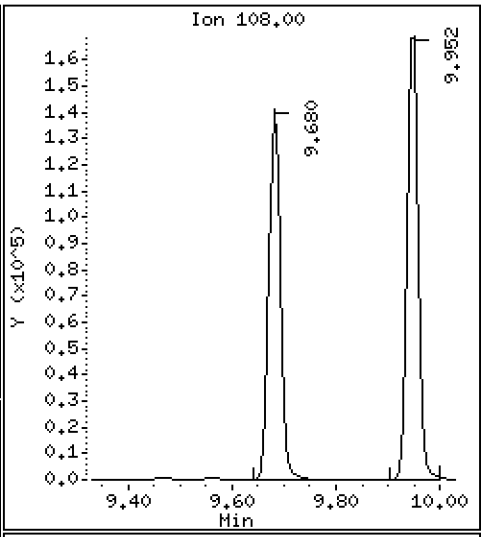
Column phase: ZB-5msi

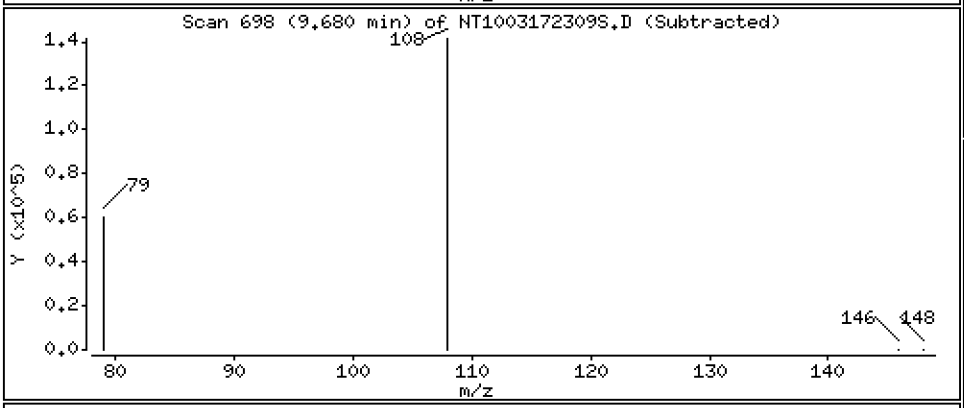
Column diameter: 0.25

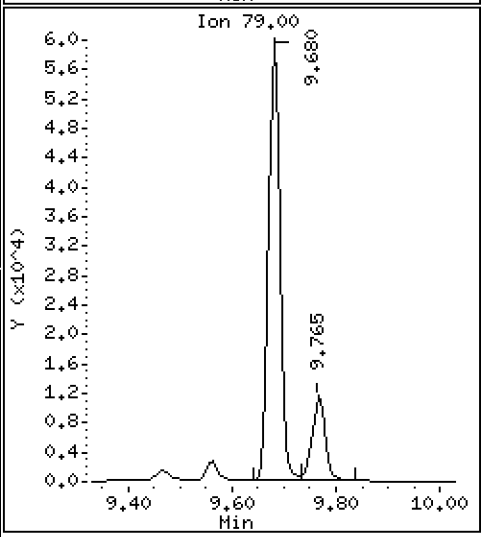
13 2-Methylphenol

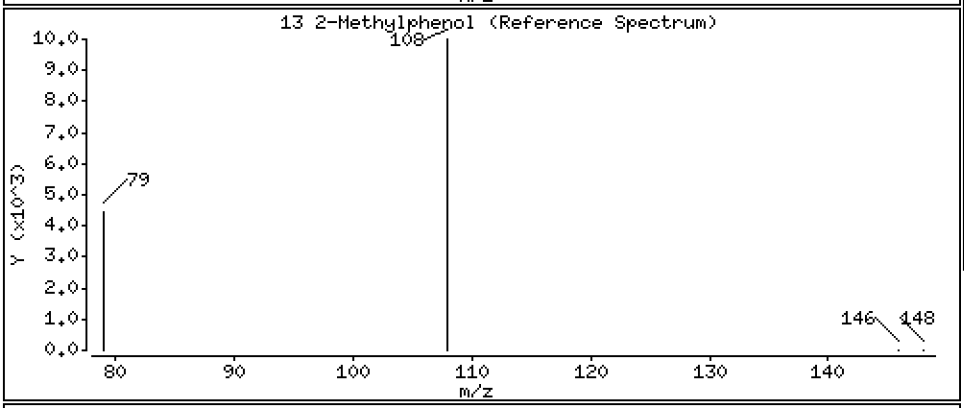
Concentration: 3.887 ug/L

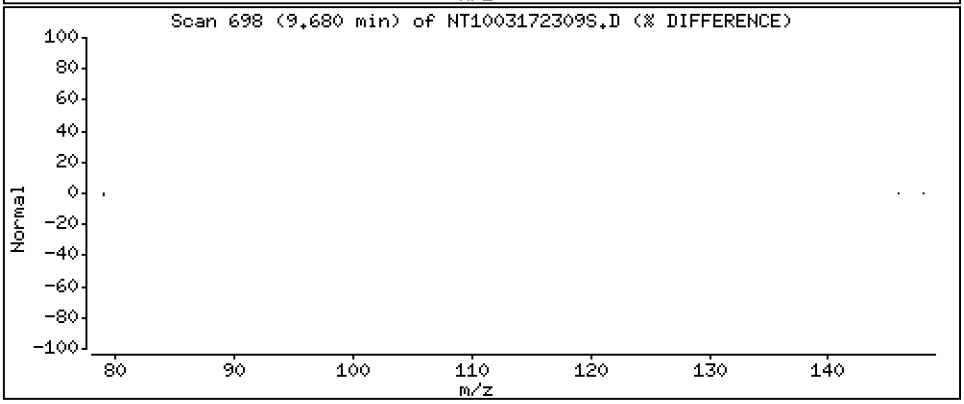












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

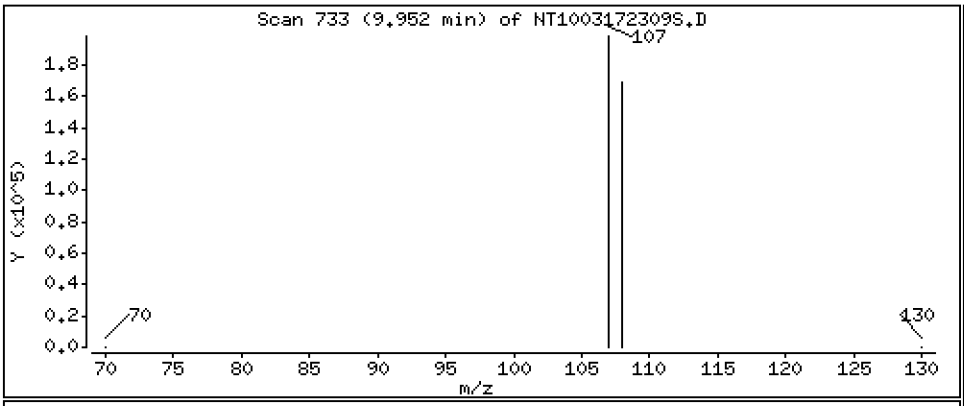
Operator: JGR

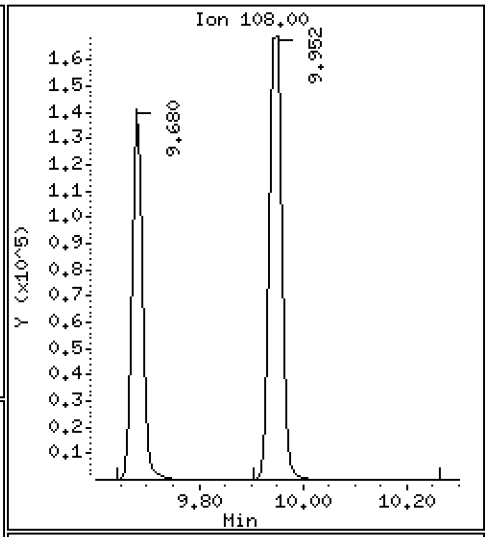
Column phase: ZB-5msi

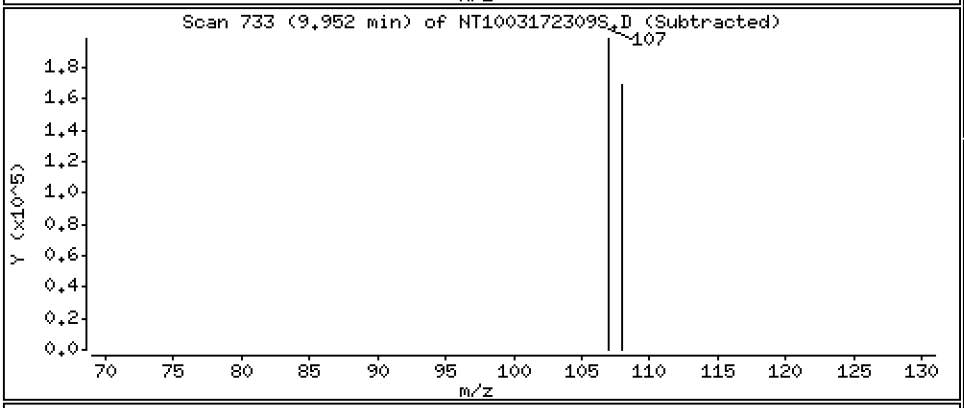
Column diameter: 0.25

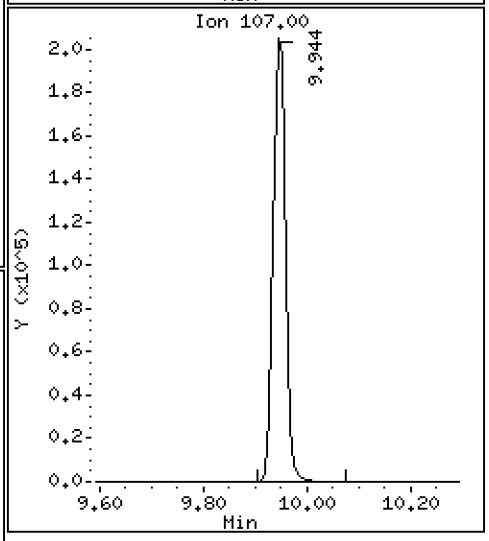
15 4-Methylphenol

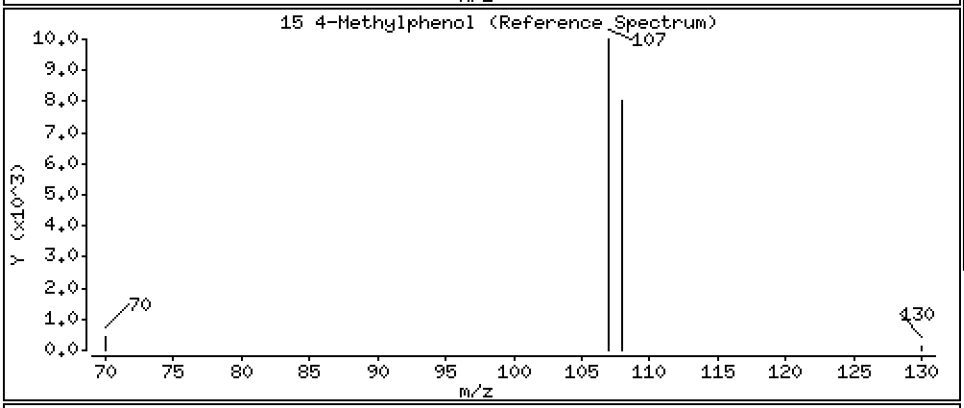
Concentration: 4.826 ug/L

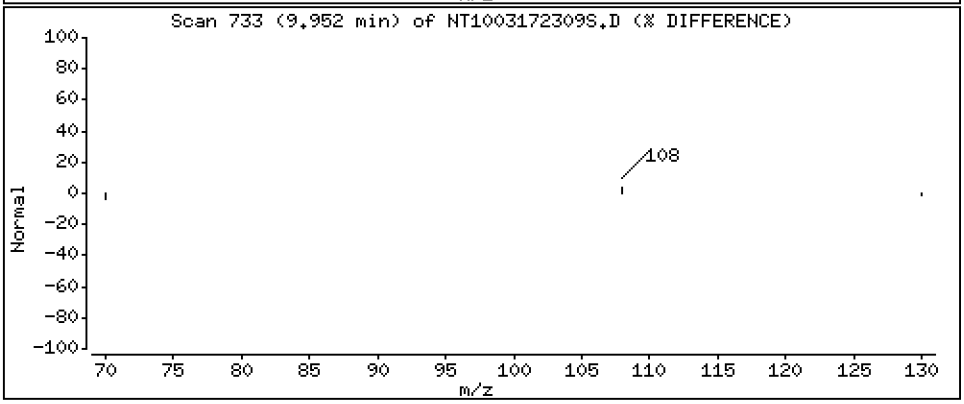












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723095.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

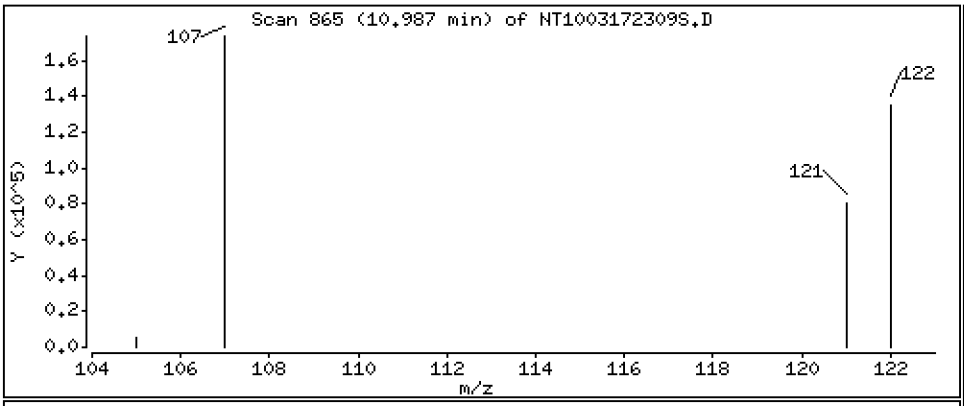
Operator: JGR

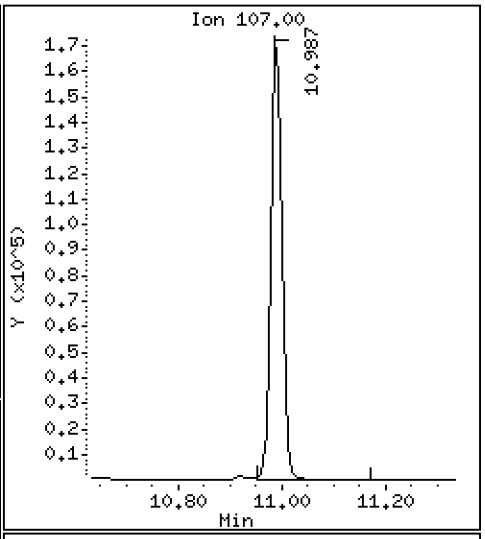
Column phase: ZB-5msi

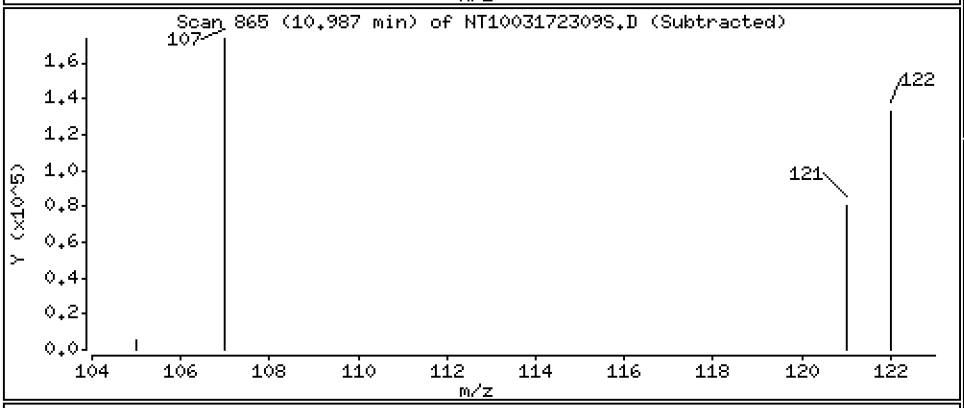
Column diameter: 0.25

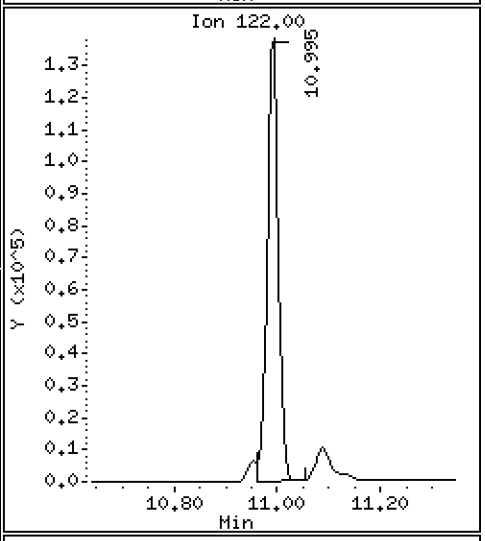
22 2,4-Dimethylphenol

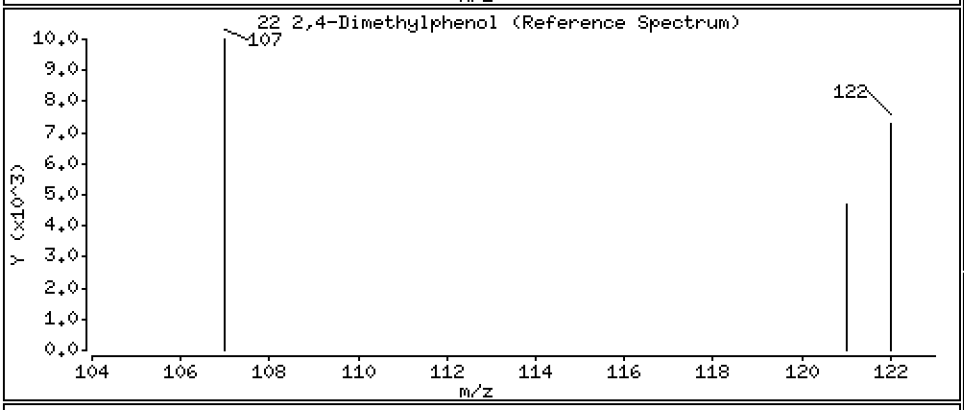
Concentration: 4.664 ug/L

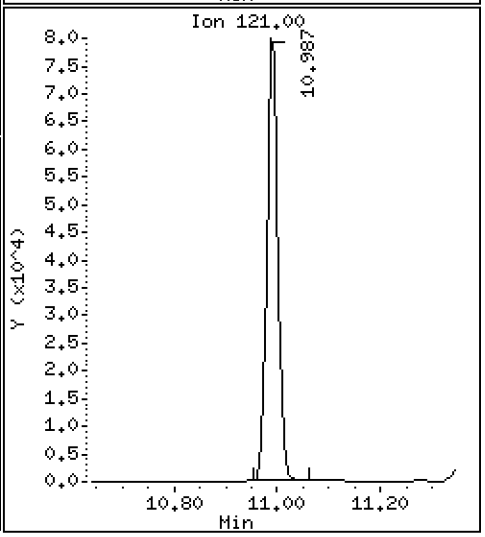


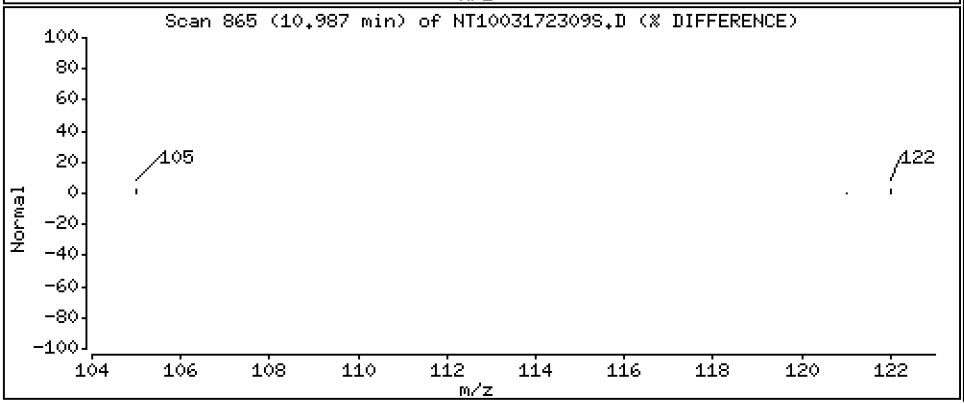












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

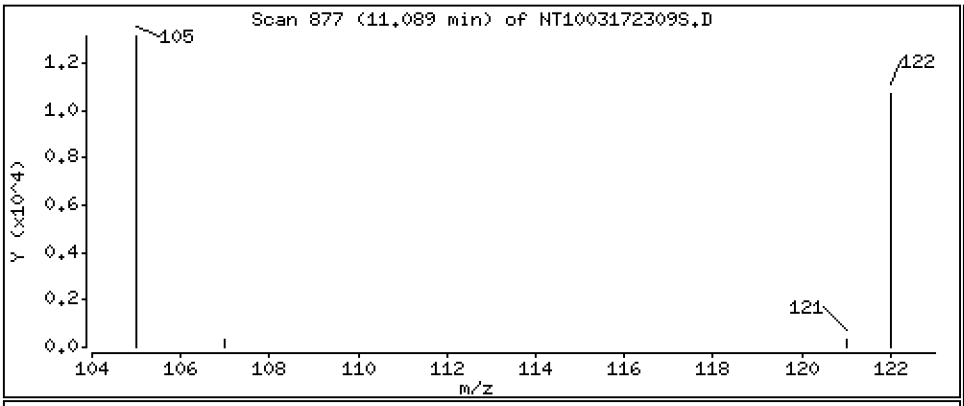
Operator: JGR

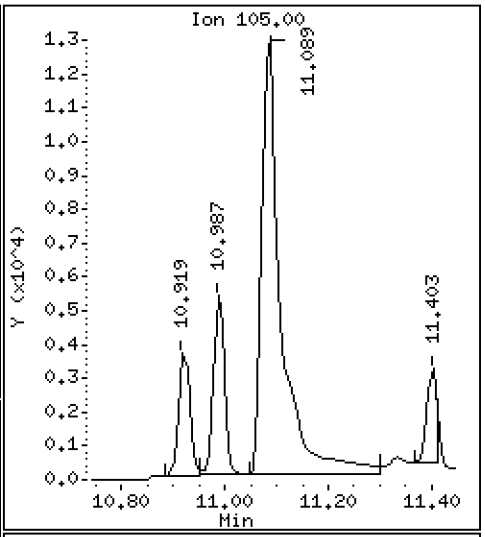
Column phase: ZB-5msi

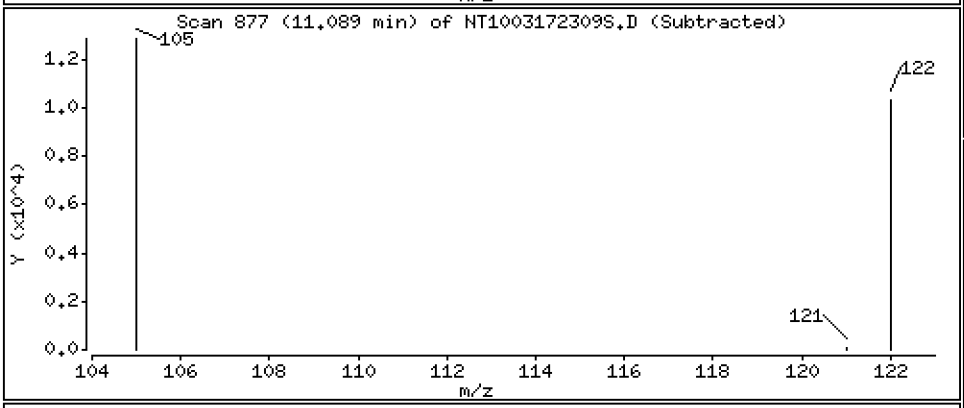
Column diameter: 0.25

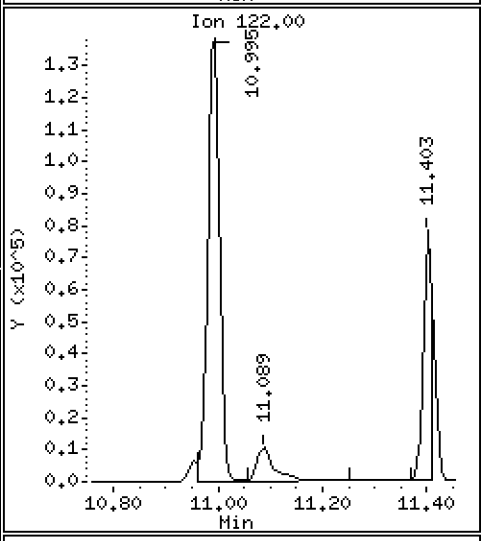
24 Benzoic acid

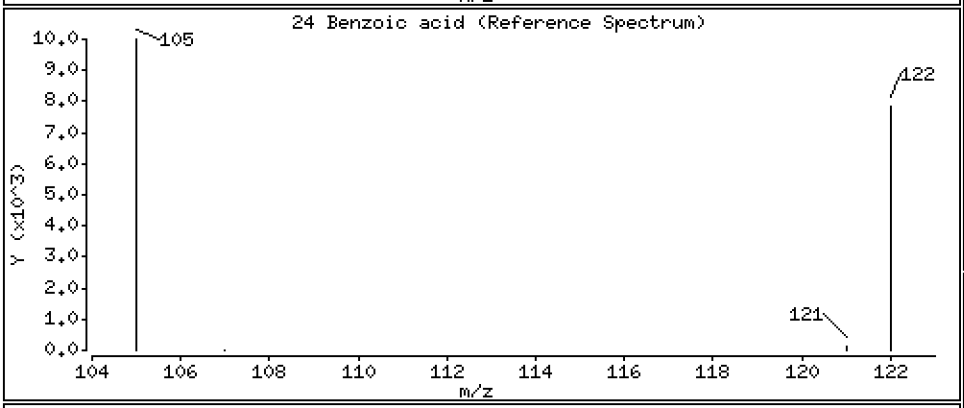
Concentration: 1.096 ug/L

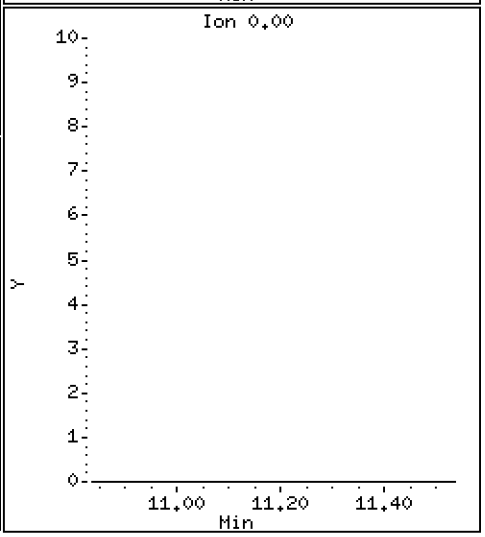


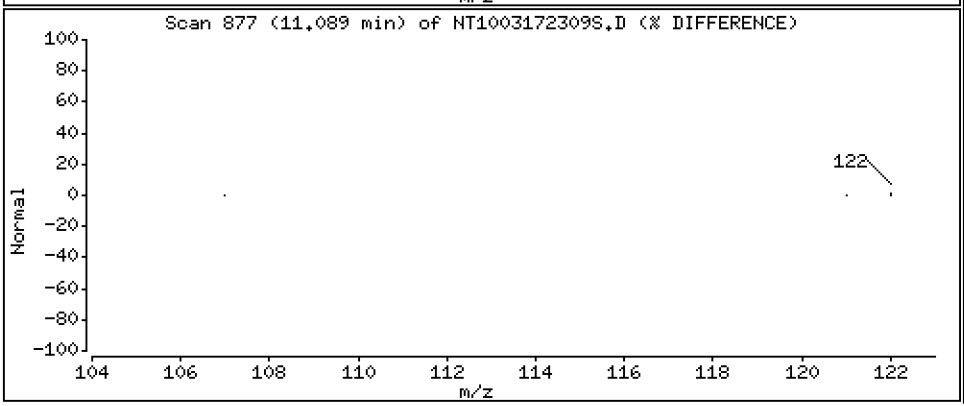












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

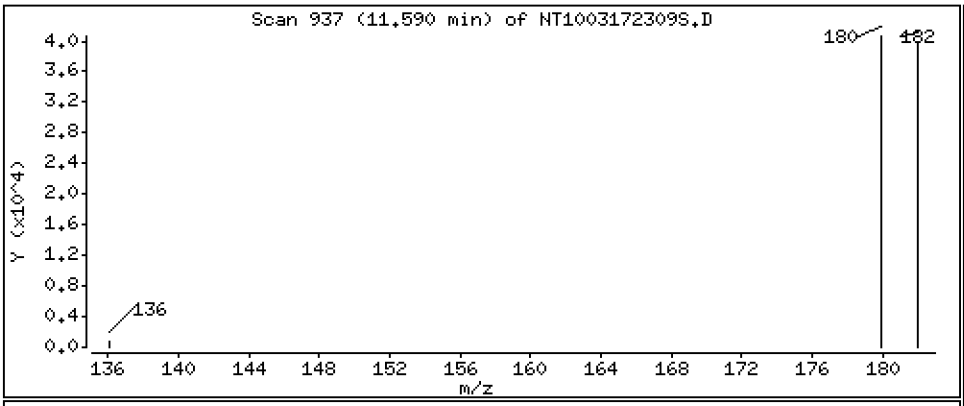
Operator: JGR

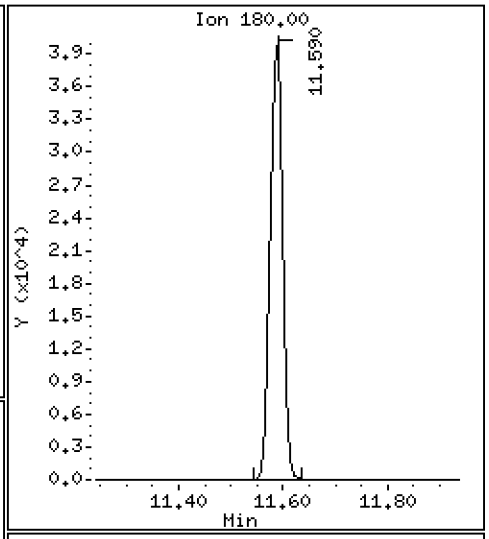
Column phase: ZB-5msi

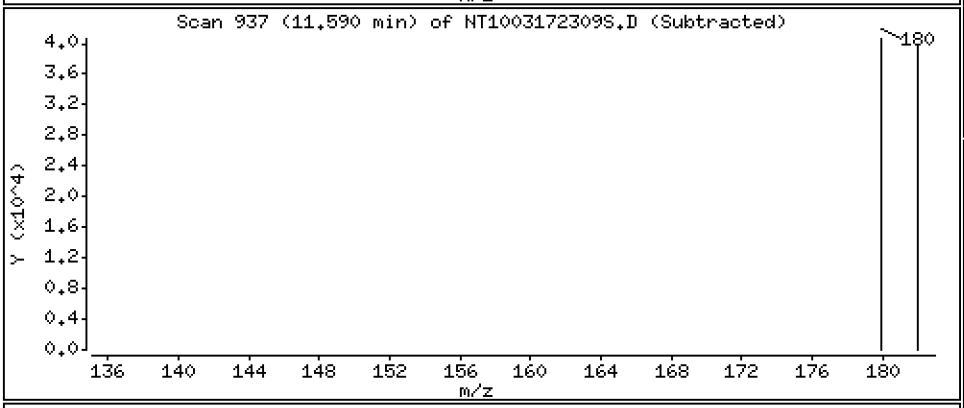
Column diameter: 0.25

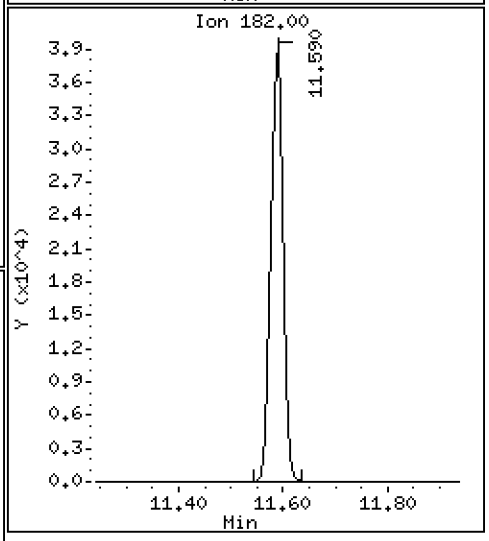
26 1,2,4-Trichlorobenzene

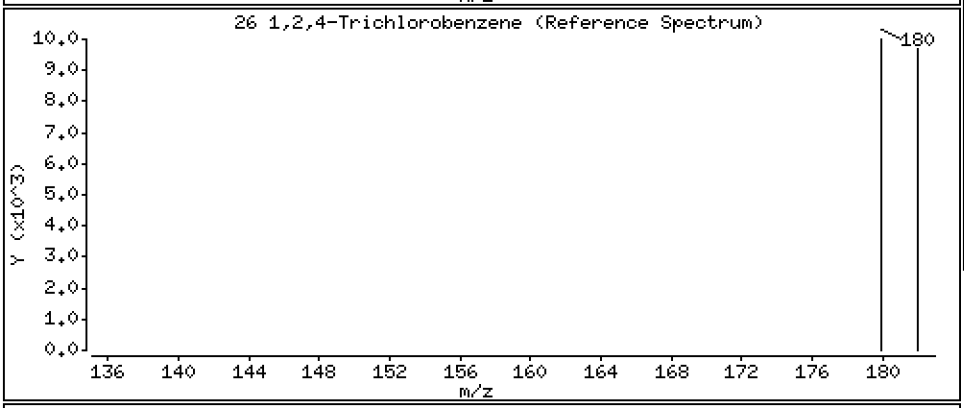
Concentration: 1.117 ug/L

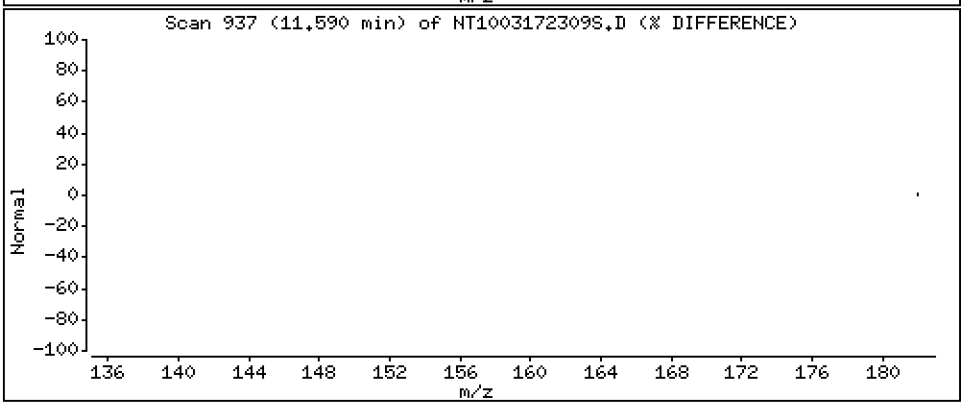












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723095.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

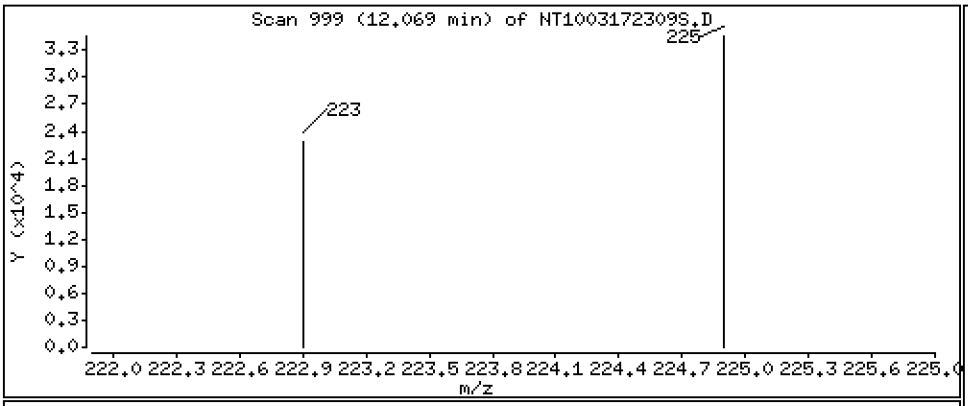
Operator: JGR

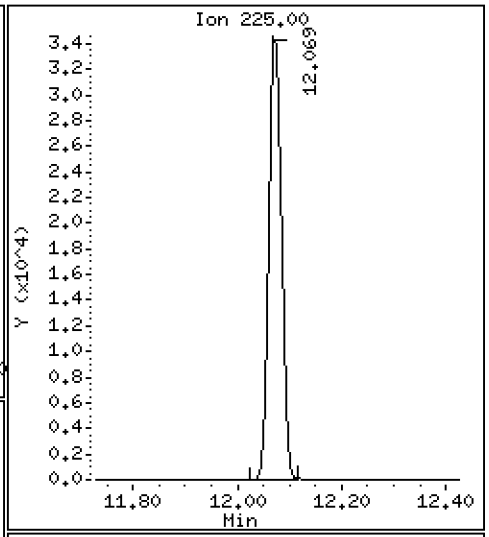
Column phase: ZB-5msi

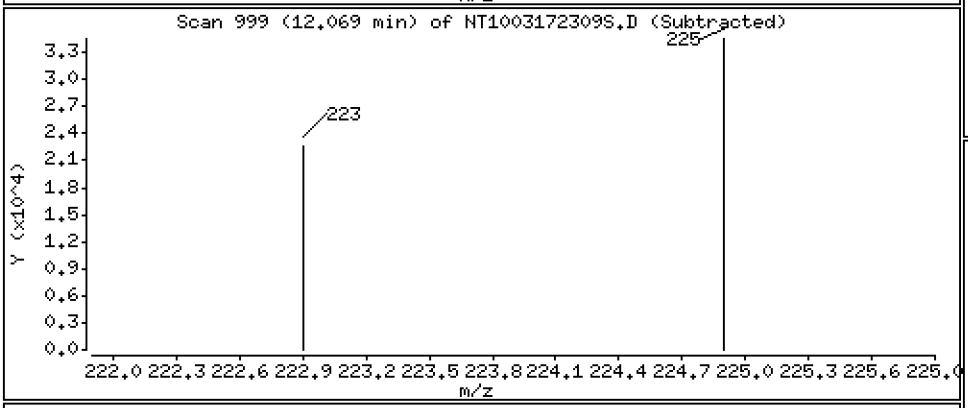
Column diameter: 0.25

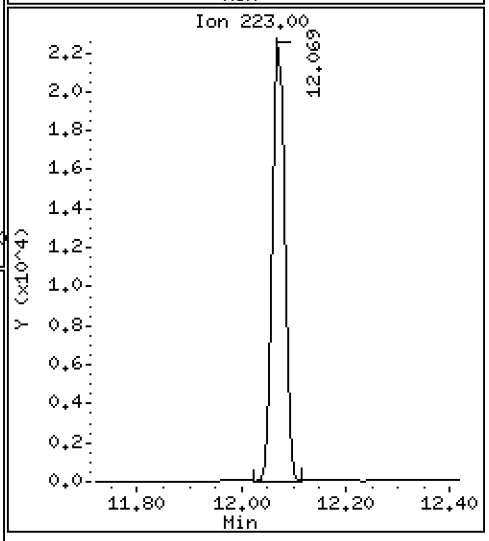
30 Hexachlorobutadiene

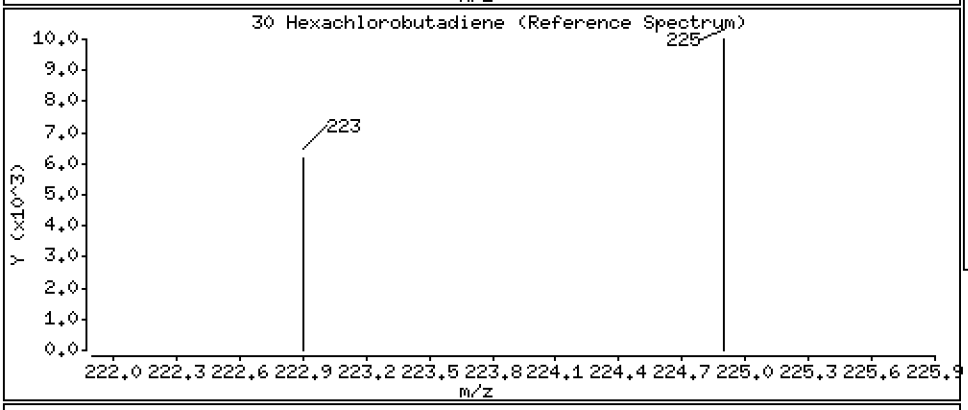
Concentration: 1.609 ug/L

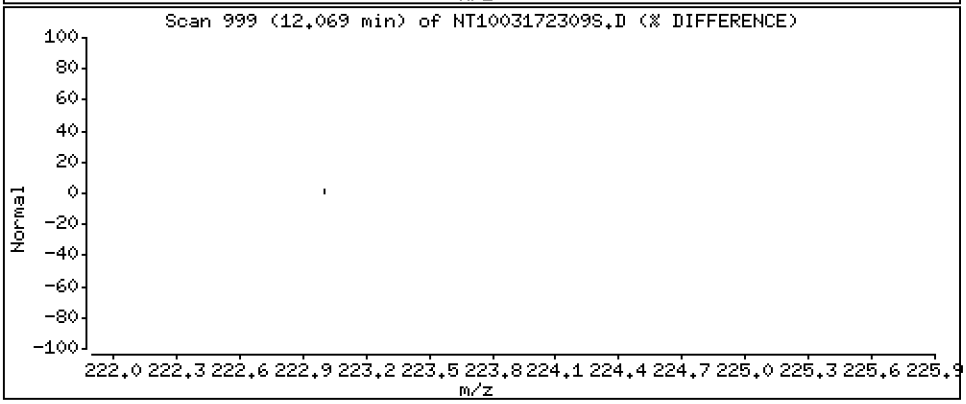












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172309S.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

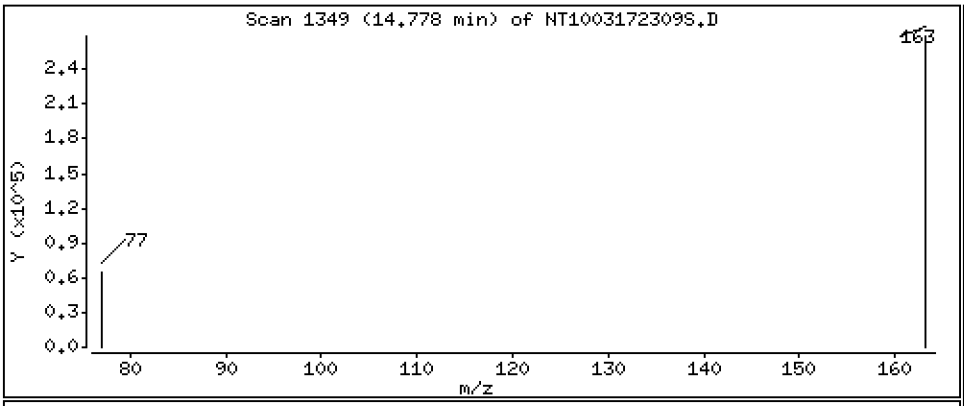
Operator: JGR

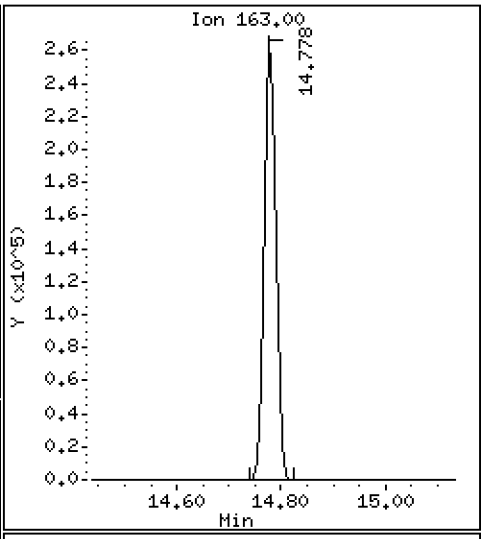
Column phase: ZB-5msi

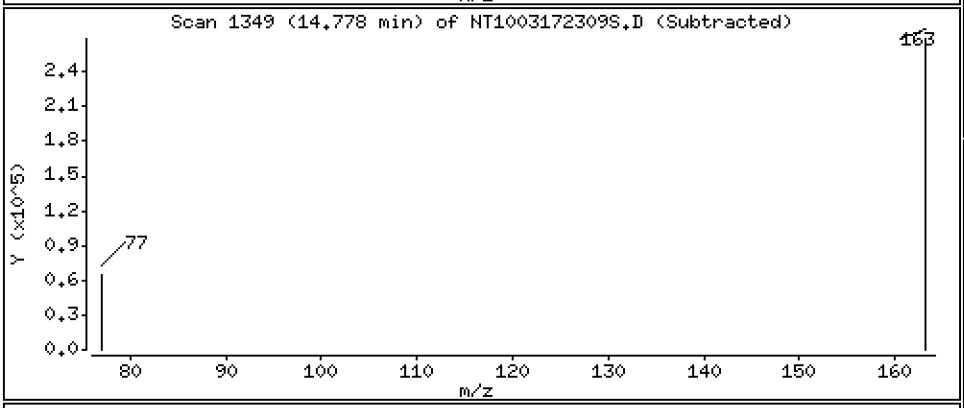
Column diameter: 0.25

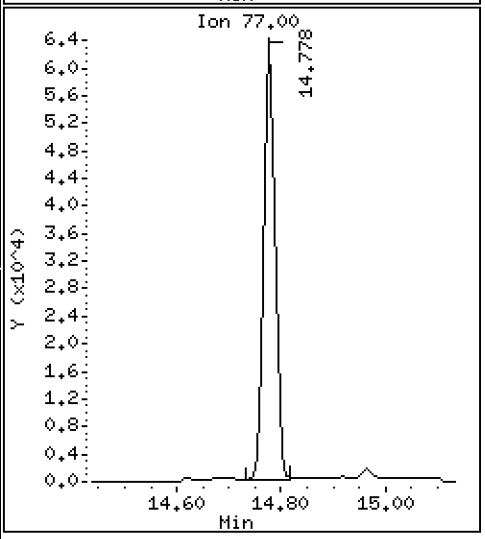
39 Dimethylphthalate

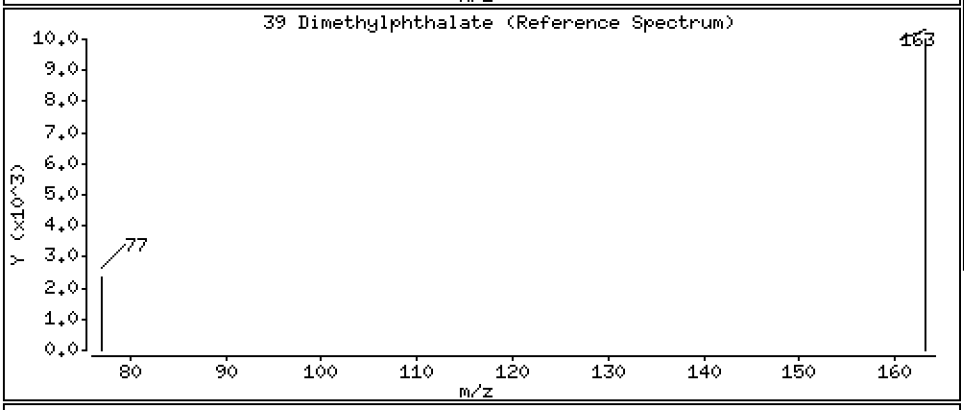
Concentration: 3.963 ug/L

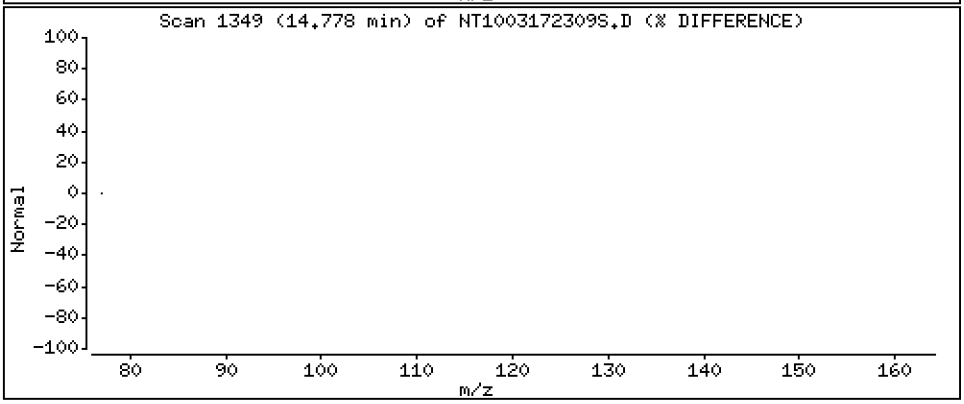












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

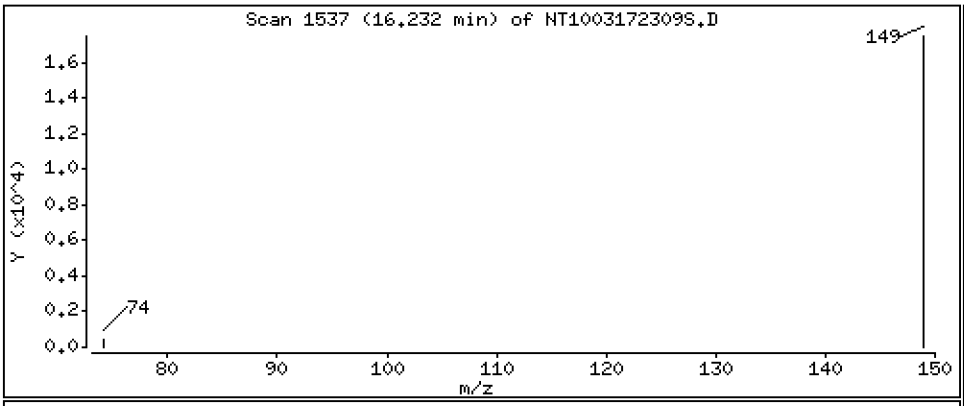
Operator: JGR

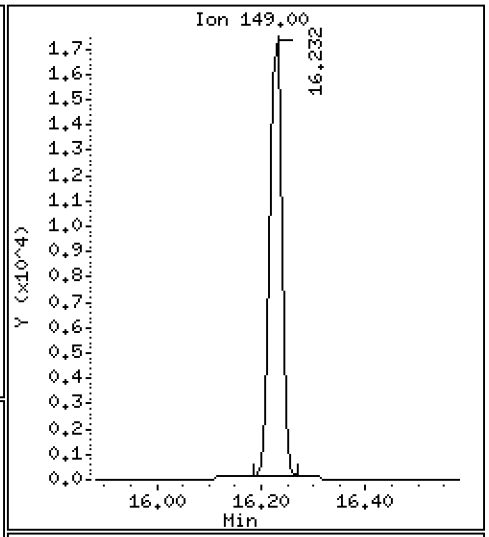
Column phase: ZB-5msi

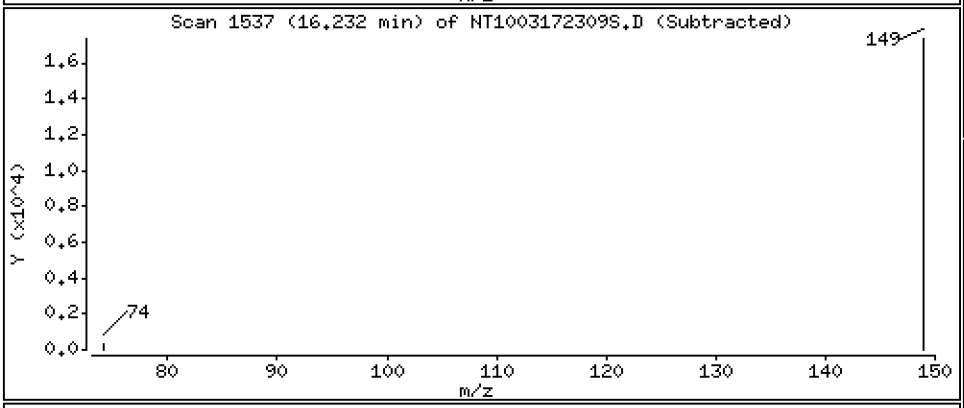
Column diameter: 0.25

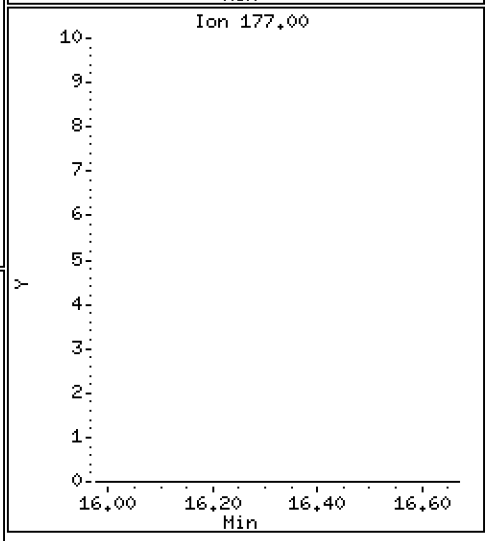
50 Diethylphthalate

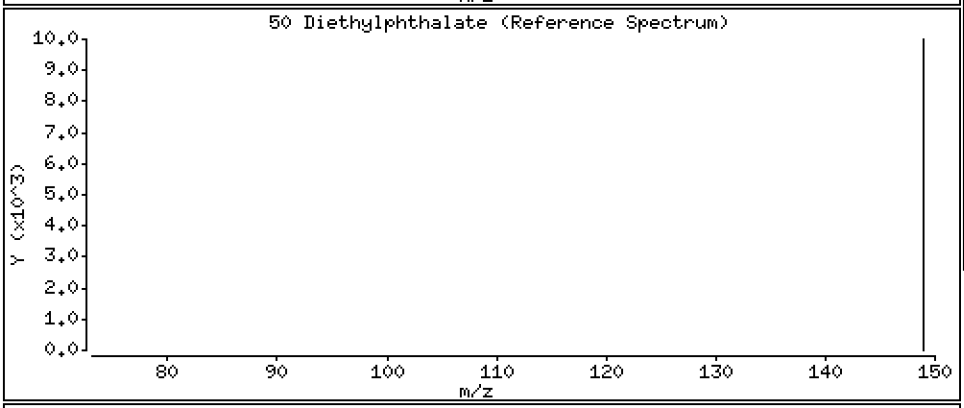
Concentration: 0.2493 ug/L

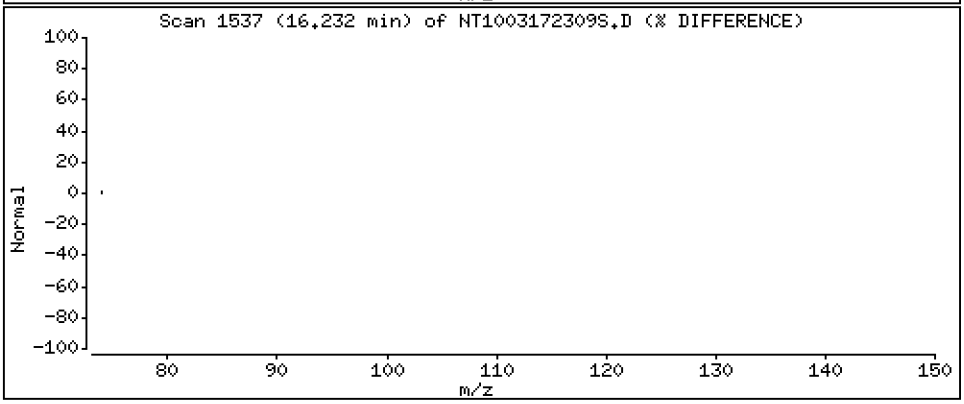












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

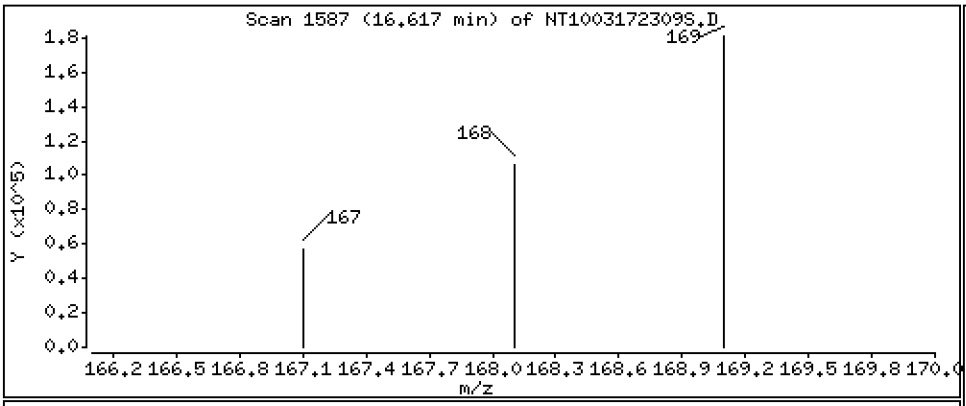
Operator: JGR

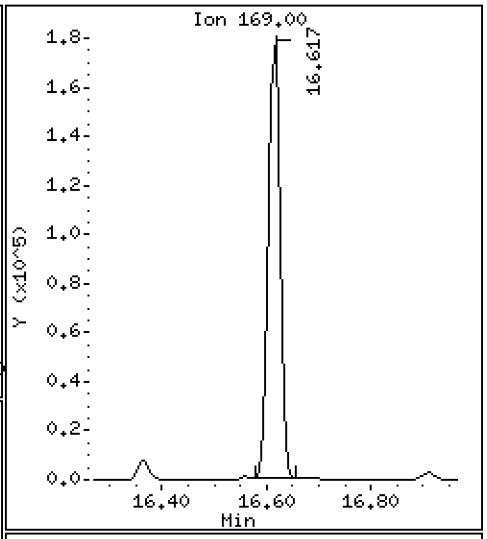
Column phase: ZB-5msi

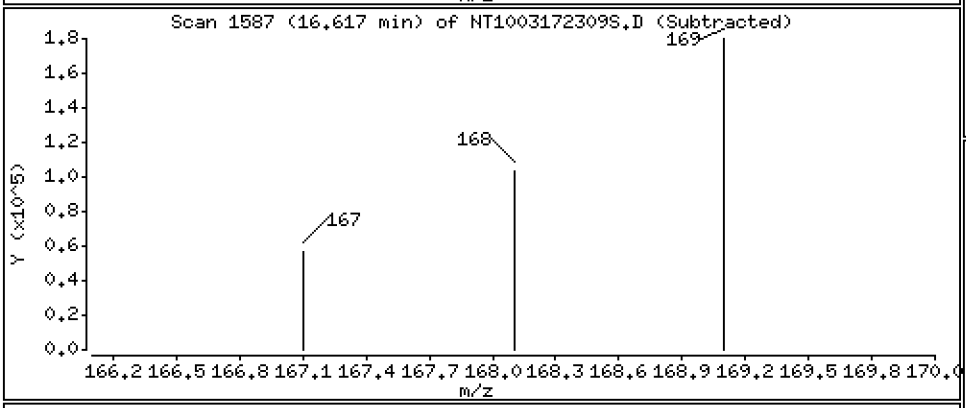
Column diameter: 0.25

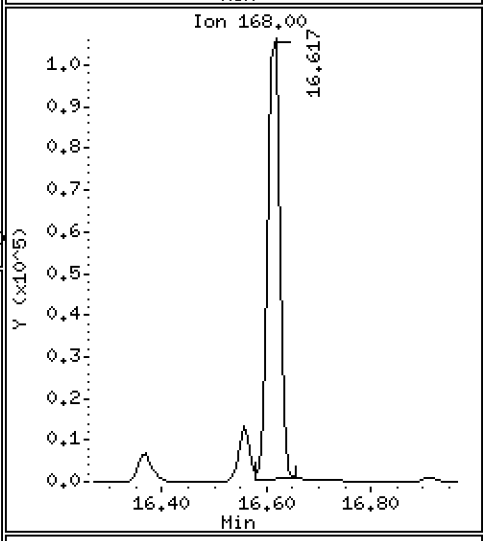
54 N-Nitrosodiphenylamine

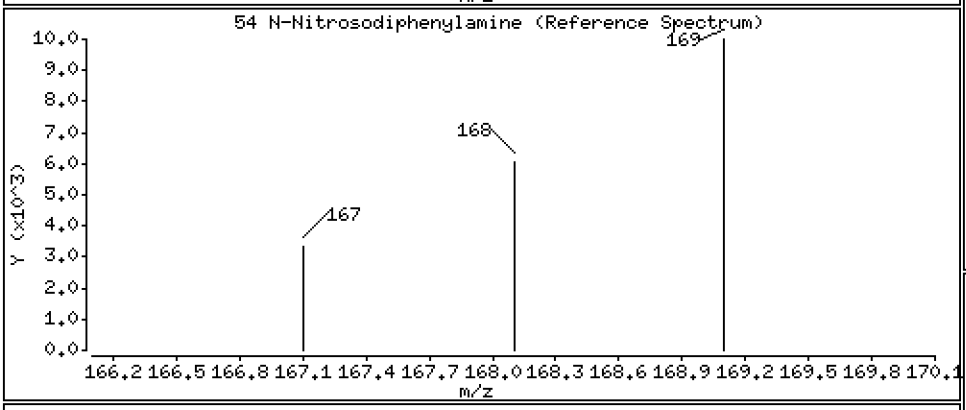
Concentration: 3.322 ug/L

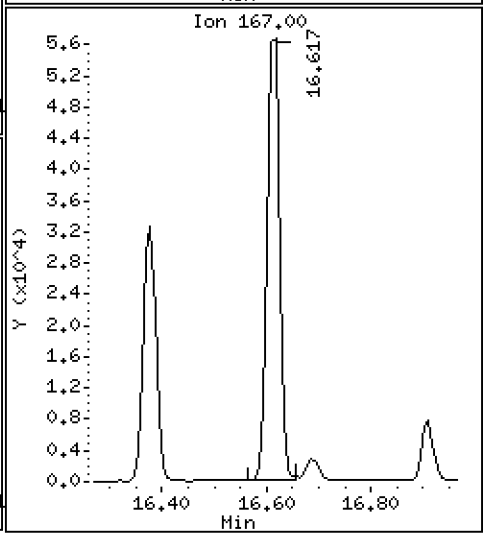


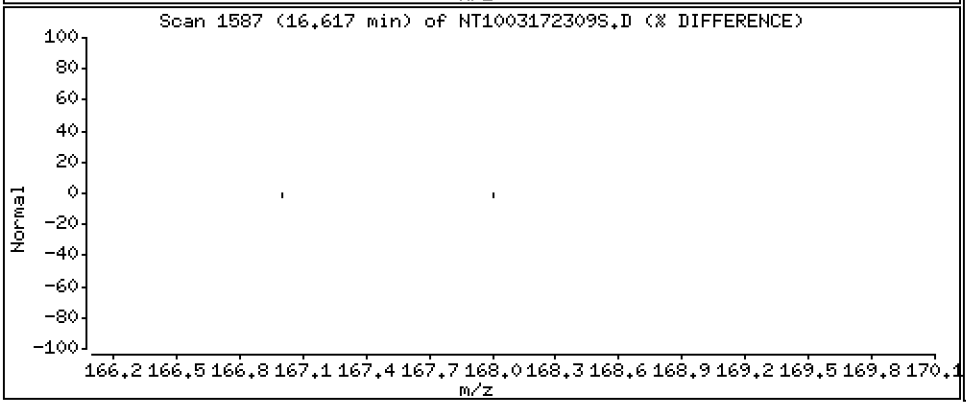












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Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

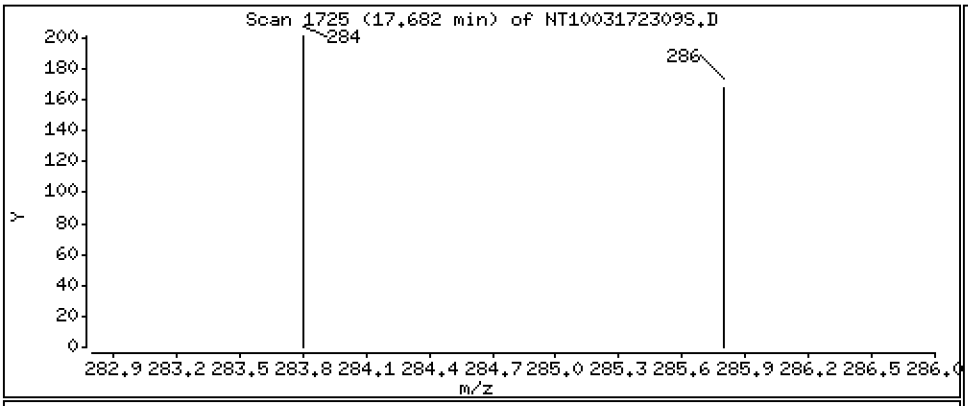
Operator: JGR

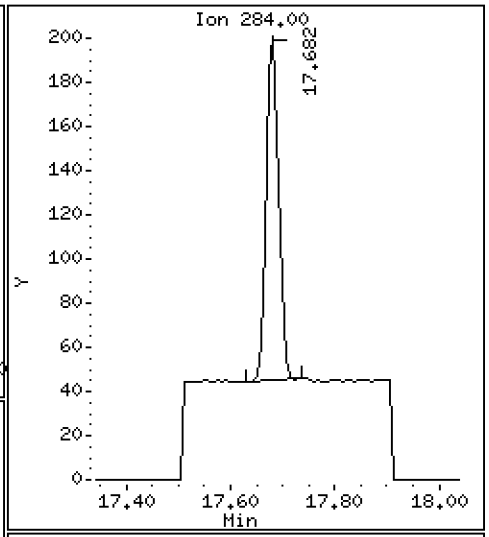
Column phase: ZB-5msi

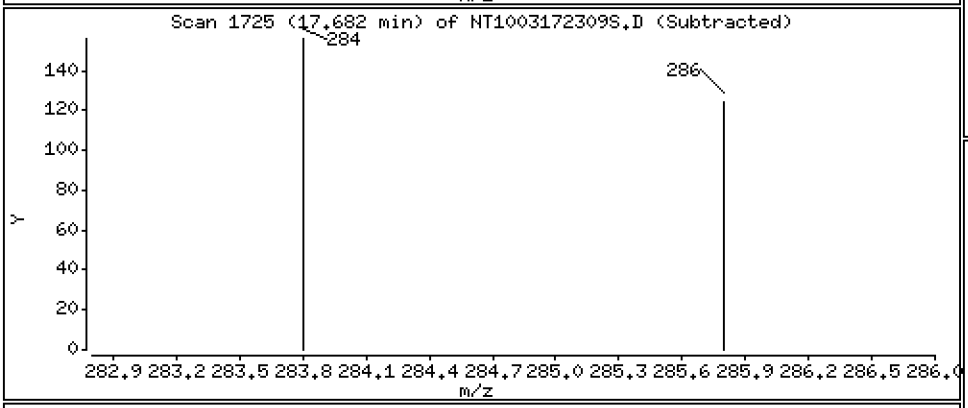
Column diameter: 0.25

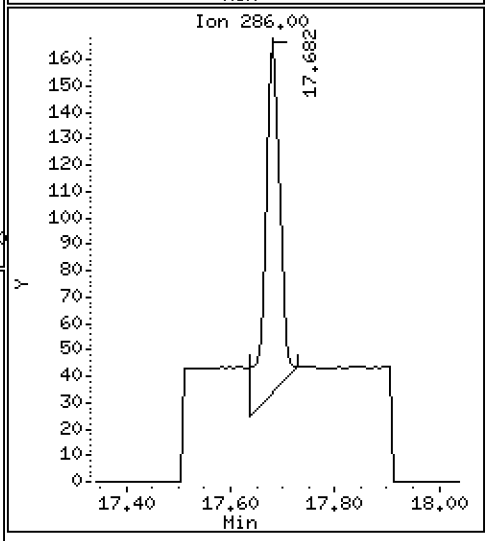
57 Hexachlorobenzene

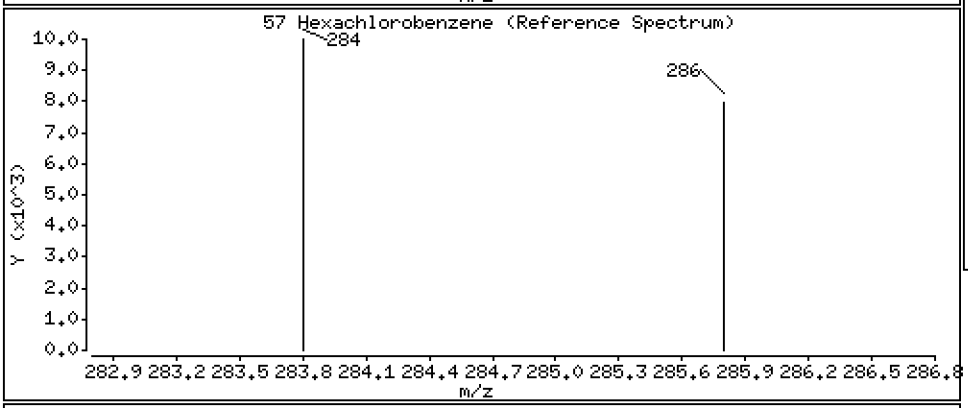
Concentration: 0.007150 ug/L

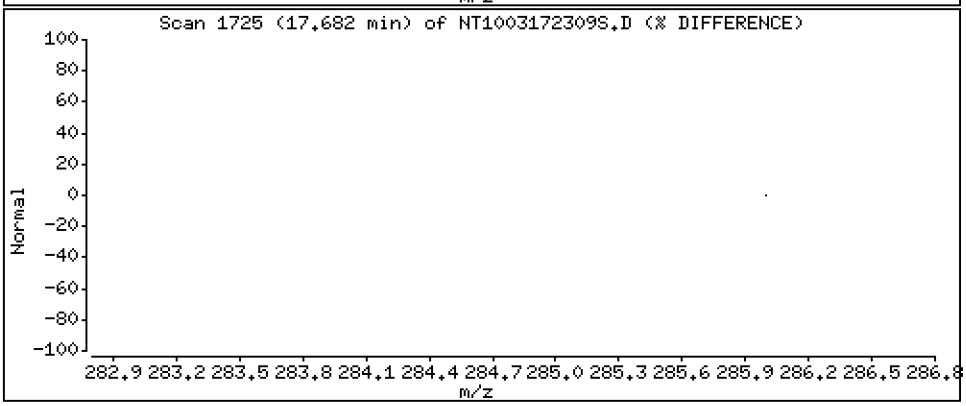












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172309S.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

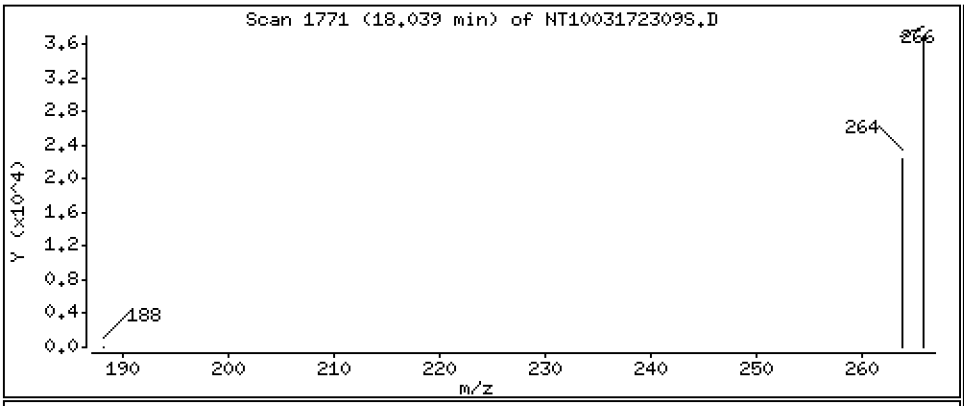
Operator: JGR

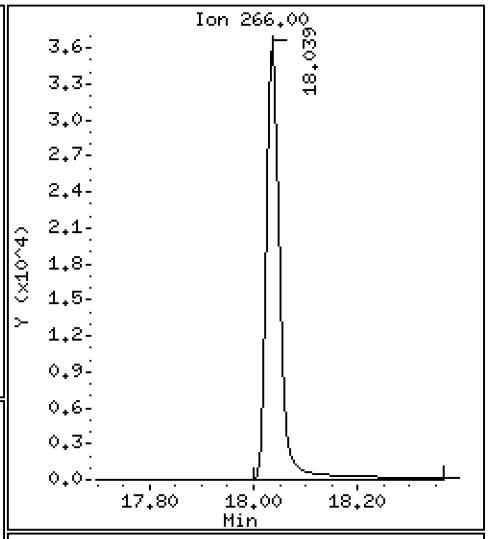
Column phase: ZB-5msi

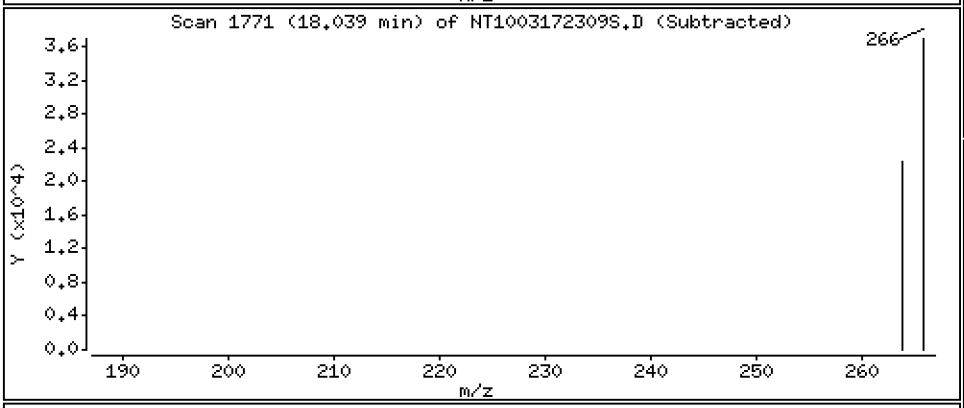
Column diameter: 0.25

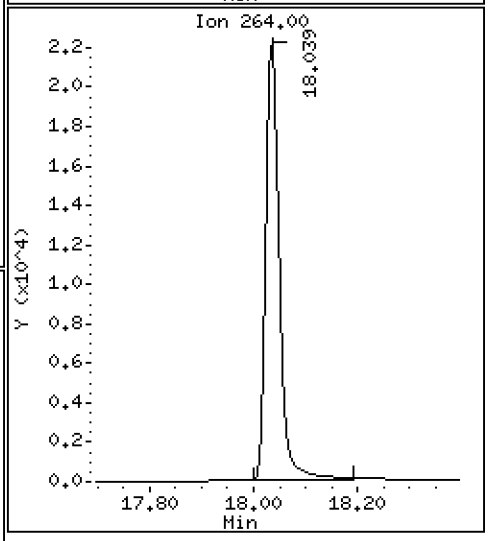
58 Pentachlorophenol

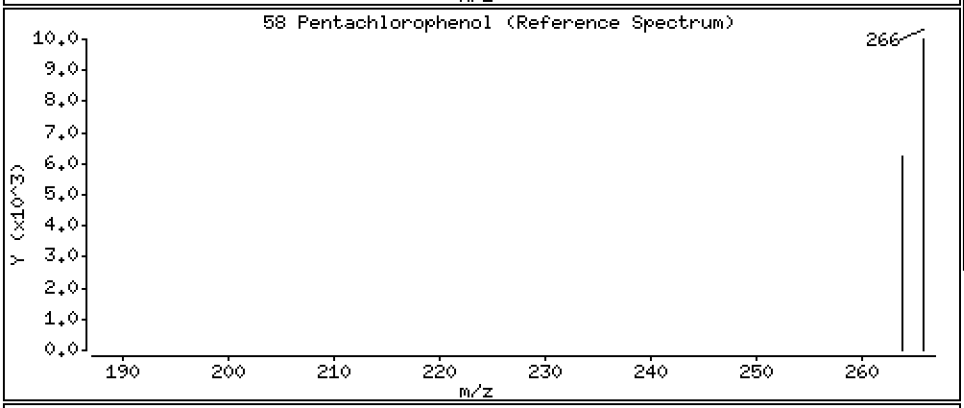
Concentration: 3.161 ug/L

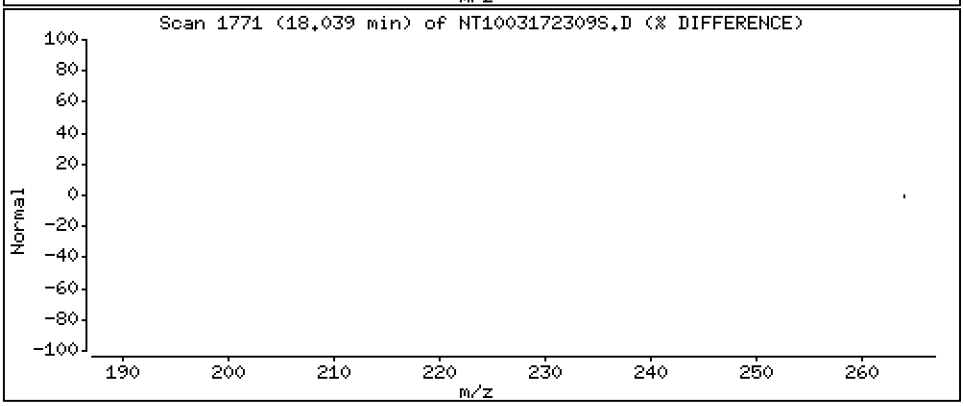












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172309S.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

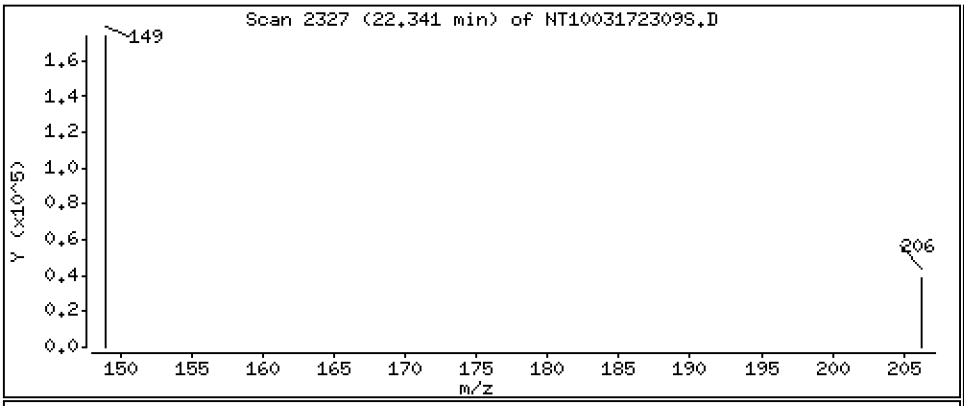
Operator: JGR

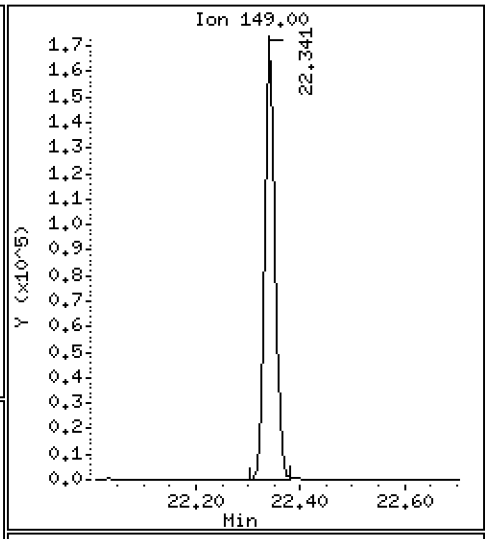
Column phase: ZB-5msi

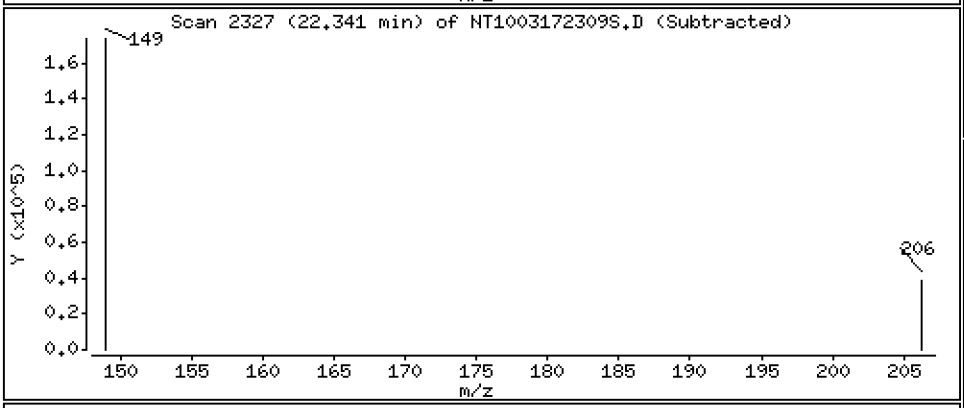
Column diameter: 0.25

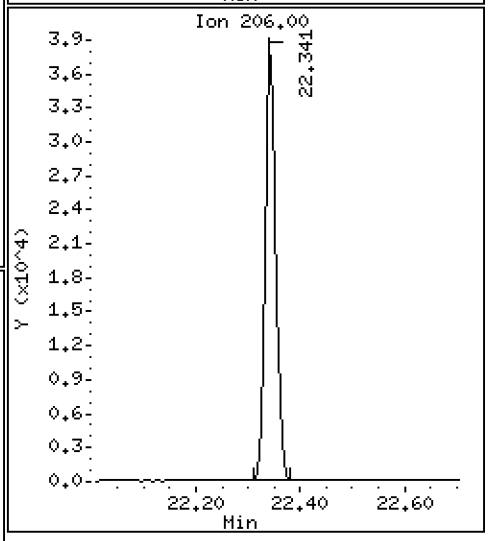
67 Butylbenzylphthalate

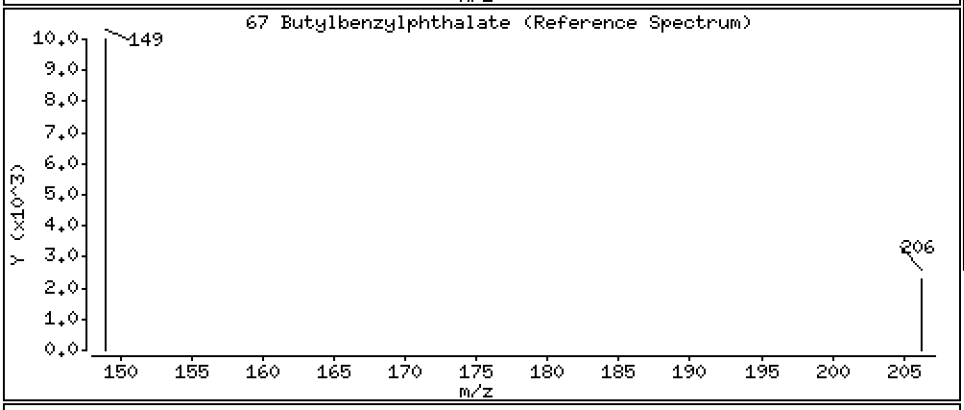
Concentration: 3.825 ug/L

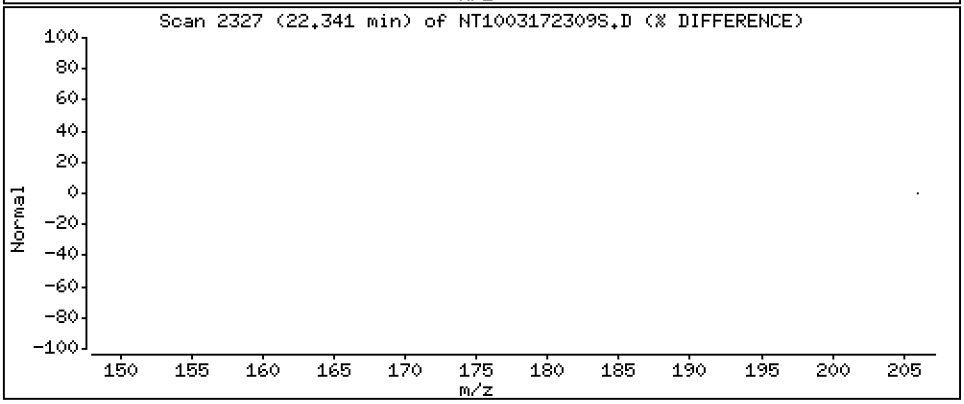












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172309S.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

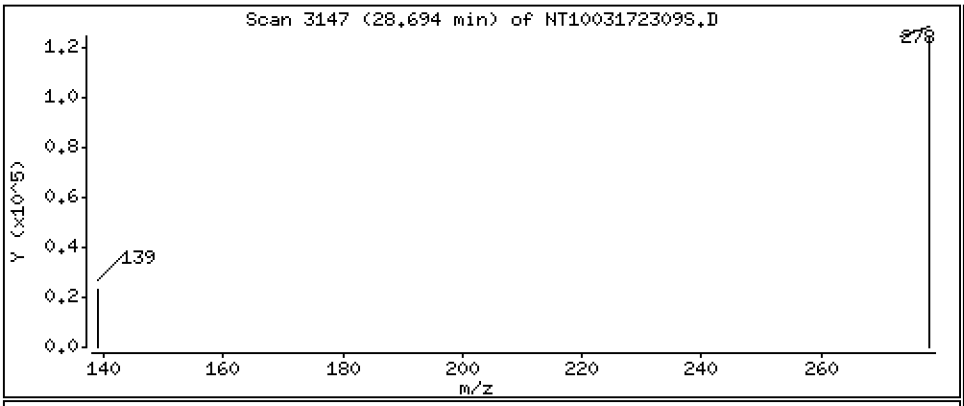
Operator: JGR

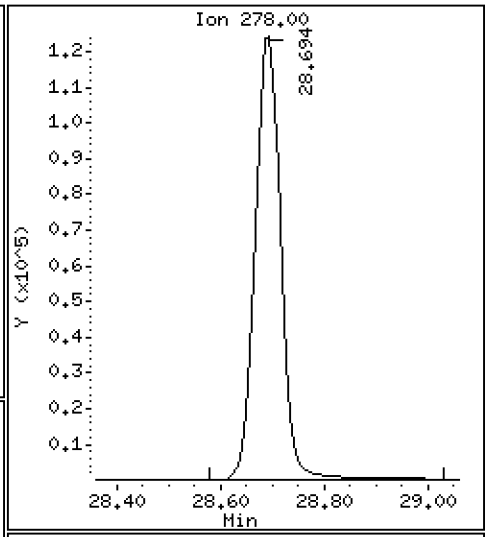
Column phase: ZB-5msi

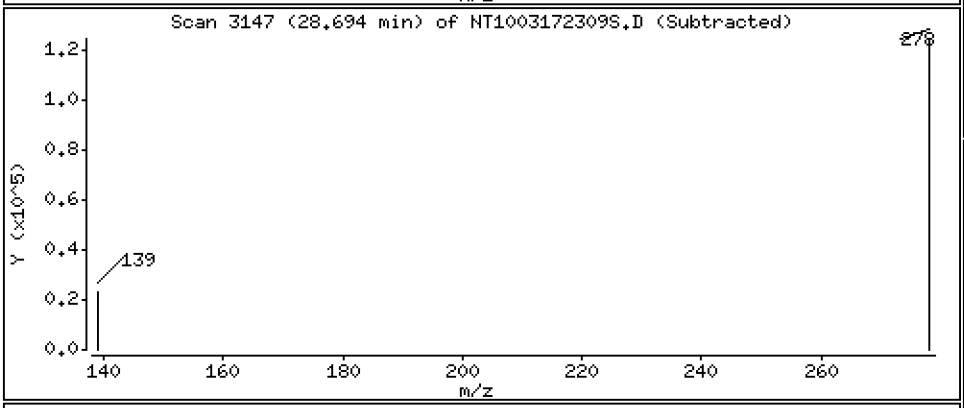
Column diameter: 0.25

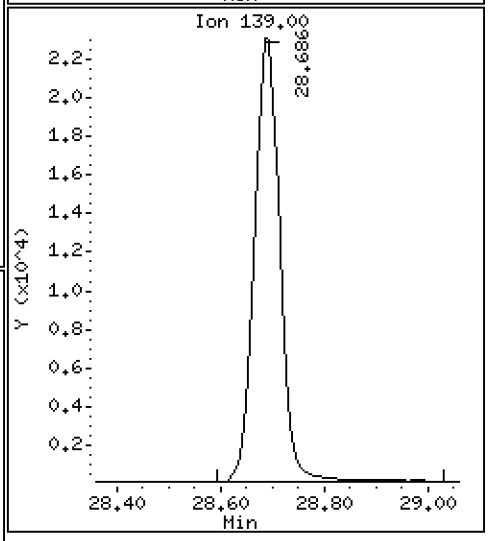
79 Dibenzo(a,h)anthracene

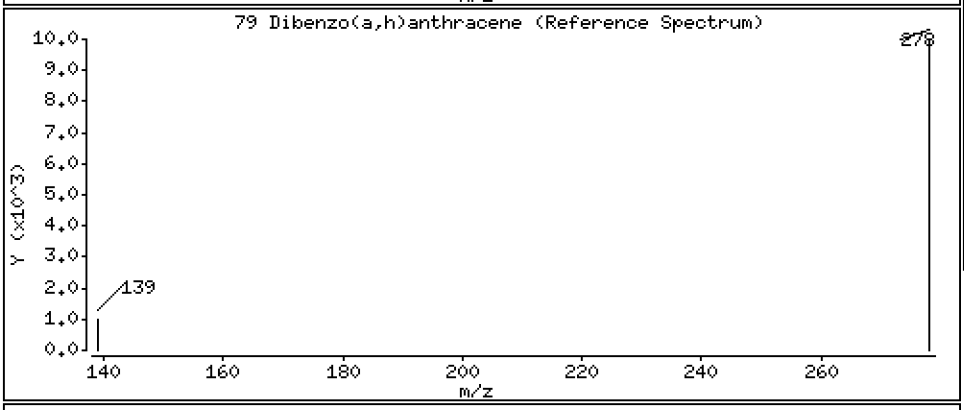
Concentration: 2.840 ug/L

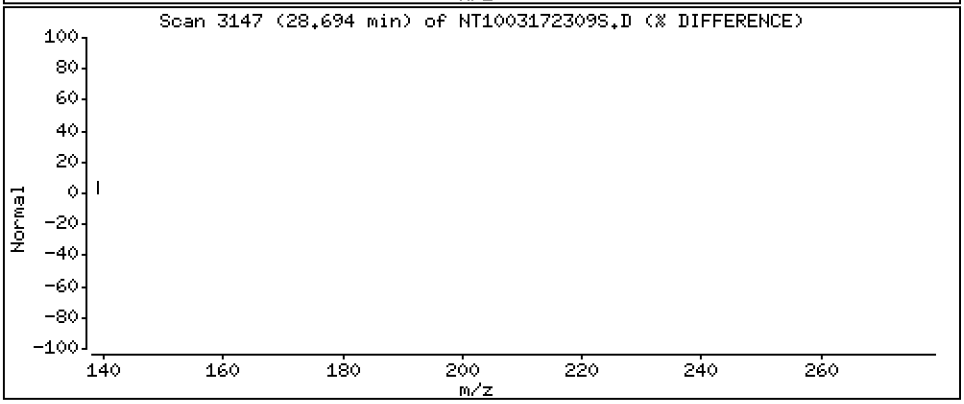












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723095.D

Date : 17-MAR-2023 23:31

Client ID:

Instrument: nt10.i

Sample Info: BLB0495-SRM2

Volume Injected (uL): 1.0

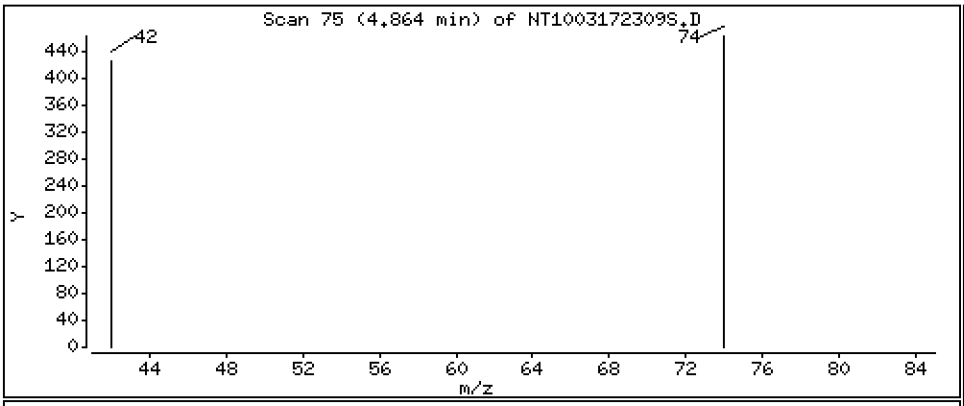
Operator: JGR

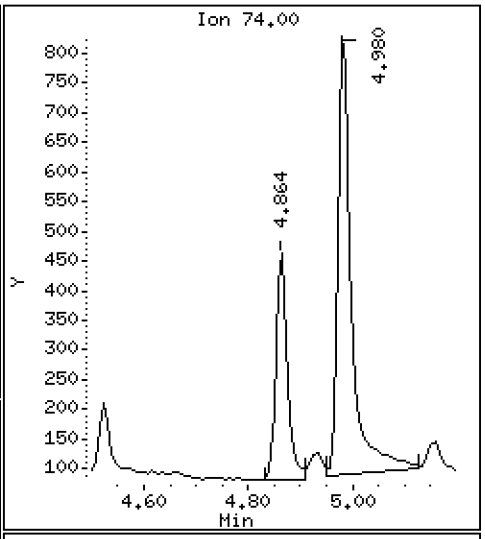
Column phase: ZB-5msi

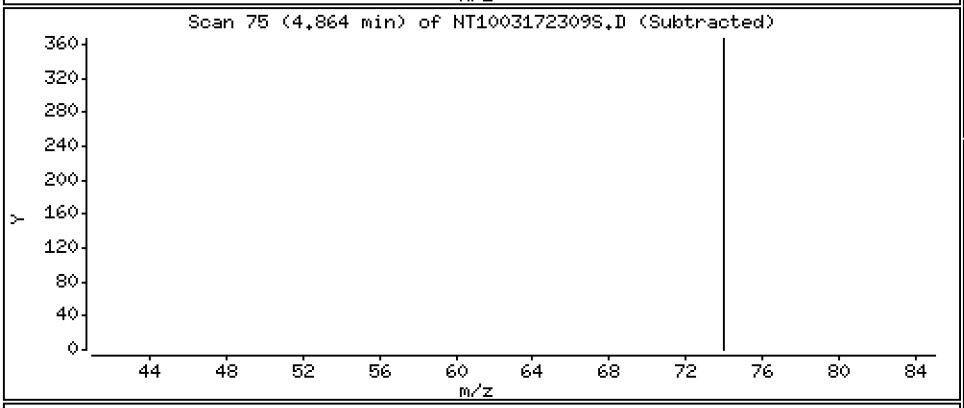
Column diameter: 0.25

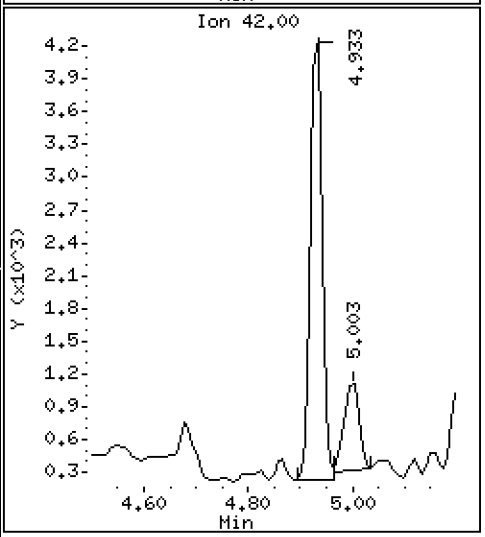
90 N-Nitrosodimethylamine

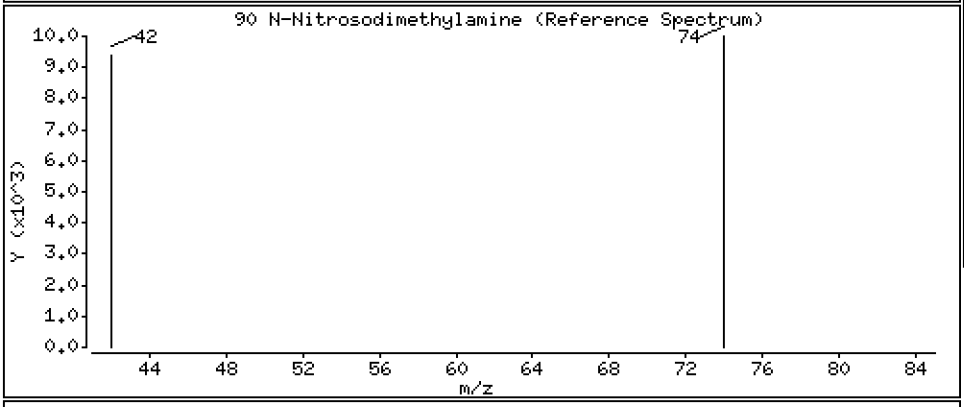
Concentration: 0.01675 ug/L

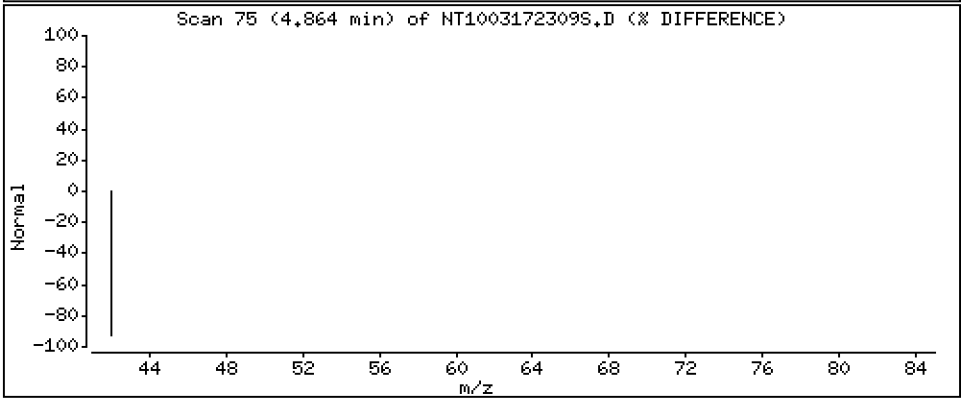












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172309S.D
Lab Smp Id: BLB0495-SRM2
Inj Date : 17-MAR-2023 23:31 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLB0495-SRM2
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Meth Date : 30-Mar-2023 14:37 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.980	6.980	(0.758)	133557	2.38425	2.384(R)
3	Phenol	94	8.572	8.572	(0.931)	93451	1.21600	1.216
7	1,3-Dichlorobenzene	146	9.136	9.136	(0.992)	67310	0.93600	0.9360
* 8	1,4-Dichlorobenzene-d4	152	9.206	9.206	(1.000)	184723	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	108	9.679	9.679	(1.051)	207005	3.88735	3.887
15	4-Methylphenol	108	9.951	9.951	(1.081)	267030	4.82579	4.826
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
22	2,4-Dimethylphenol	107	10.986	10.985	(0.941)	262993	4.66378	4.664
24	Benzoic acid	105	11.088	11.096	(0.950)	33934	1.09629	1.096
26	1,2,4-Trichlorobenzene	180	11.590	11.589	(0.993)	63365	1.11701	1.117
* 27	Naphthalene-d8	136	11.675	11.674	(1.000)	652385	4.00000	
30	Hexachlorobutadiene	225	12.069	12.075	(1.034)	55506	1.60939	1.609
39	Dimethylphthalate	163	14.777	14.784	(0.967)	398508	3.96312	3.963
* 42	Acenaphthene-d10	162	15.280	15.279	(1.000)	318643	4.00000	
50	Diethylphthalate	149	16.231	16.230	(1.062)	25967	0.24928	0.2493
54	N-Nitrosodiphenylamine	169	16.617	16.616	(0.908)	262554	3.32171	3.322
57	Hexachlorobenzene	284	17.682	17.689	(0.966)	253	0.00715	0.007150(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.038	18.045	(0.986)	62884	3.16102	3.161
*	59 Phenanthrene-d10	188	18.301	18.308	(1.000)	589125	4.00000	
$	66 Terphenyl-d14	244	21.419	21.434	(0.918)	321661	4.37240	4.372(R)
	67 Butylbenzylphthalate	149	22.341	22.355	(0.958)	237254	3.82544	3.825
*	69 Chrysene-d12	240	23.324	23.331	(1.000)	451505	4.00000	
*	77 Perylene-d12	264	25.972	25.986	(1.000)	464871	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.694	28.708	(1.105)	426351	2.84033	2.840
	90 N-Nitrosodimethylamine	74	4.863	4.848	(0.528)	595	0.01675	0.01675

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 17-MAR-2023
Lab File ID: NT1003172309S.D Calibration Time: 19:40
Lab Smp Id: BLB0495-SRM2
Analysis Type: SV Level: LOW
Quant Type: ISTD Sample Type: AIR
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	184039	92020	368078	184723	0.37
27 Naphthalene-d8	659935	329968	1319870	652385	-1.14
42 Acenaphthene-d10	325775	162888	651550	318643	-2.19
59 Phenanthrene-d10	616249	308125	1232498	589125	-4.40
69 Chrysene-d12	526222	263111	1052444	451505	-14.20
77 Perylene-d12	563117	281559	1126234	464871	-17.45

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.21	8.71	9.71	9.21	0.00
27 Naphthalene-d8	11.67	11.17	12.17	11.68	0.01
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	0.01
59 Phenanthrene-d10	18.31	17.81	18.81	18.30	-0.04
69 Chrysene-d12	23.33	22.83	23.83	23.32	-0.03
77 Perylene-d12	25.99	25.49	26.49	25.97	-0.06

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

REVIEW SUMMARY FOR FILE - NT1003172309S.D

Lab ID: BLB0495-SRM2
nt10.i, 20230317.b\20230317.b\SIMABN2.m,   17-MAR-2023 23:31

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: 20230317.b/NT1003172303S.D

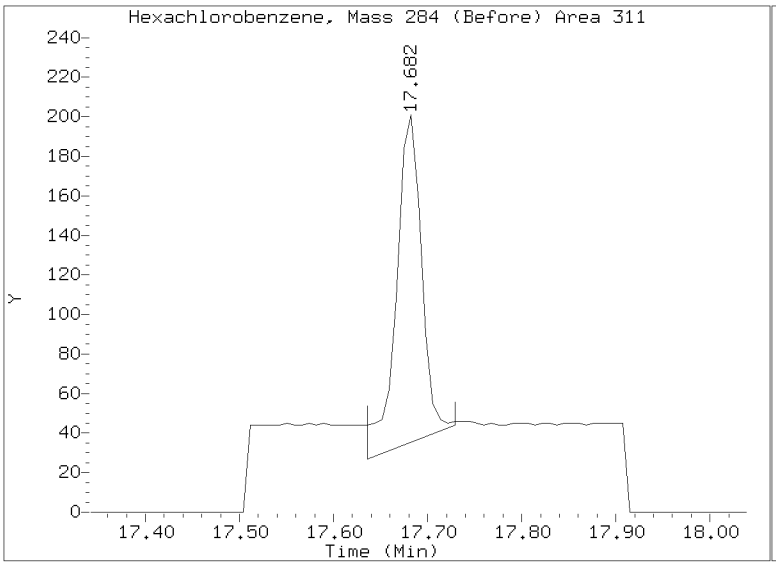
On Column LOD for nt10.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

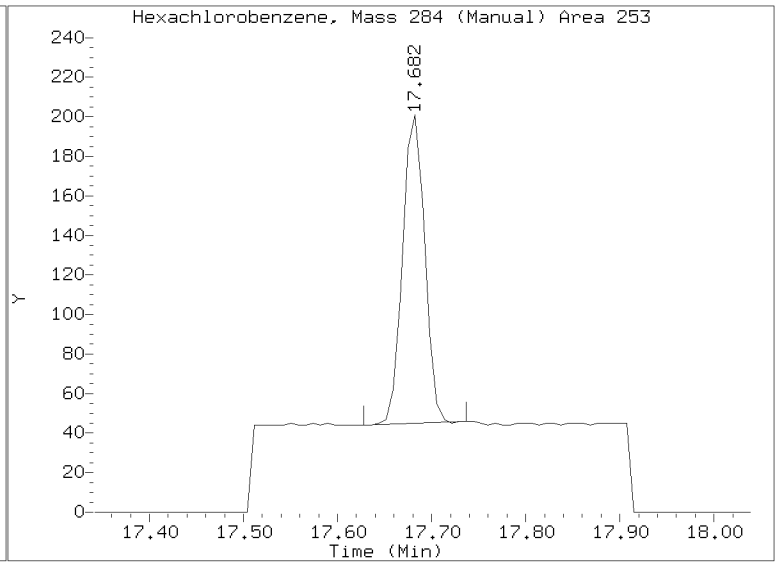
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230317.b/20230317.b/NT1003172309S.D
Injection Date: 17-MAR-2023 23:31
Lab ID:BLB0495-SRM2 Client ID:
Report Date: 03/30/2023 14:55





Analytical Resources, LLC
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E-SIM

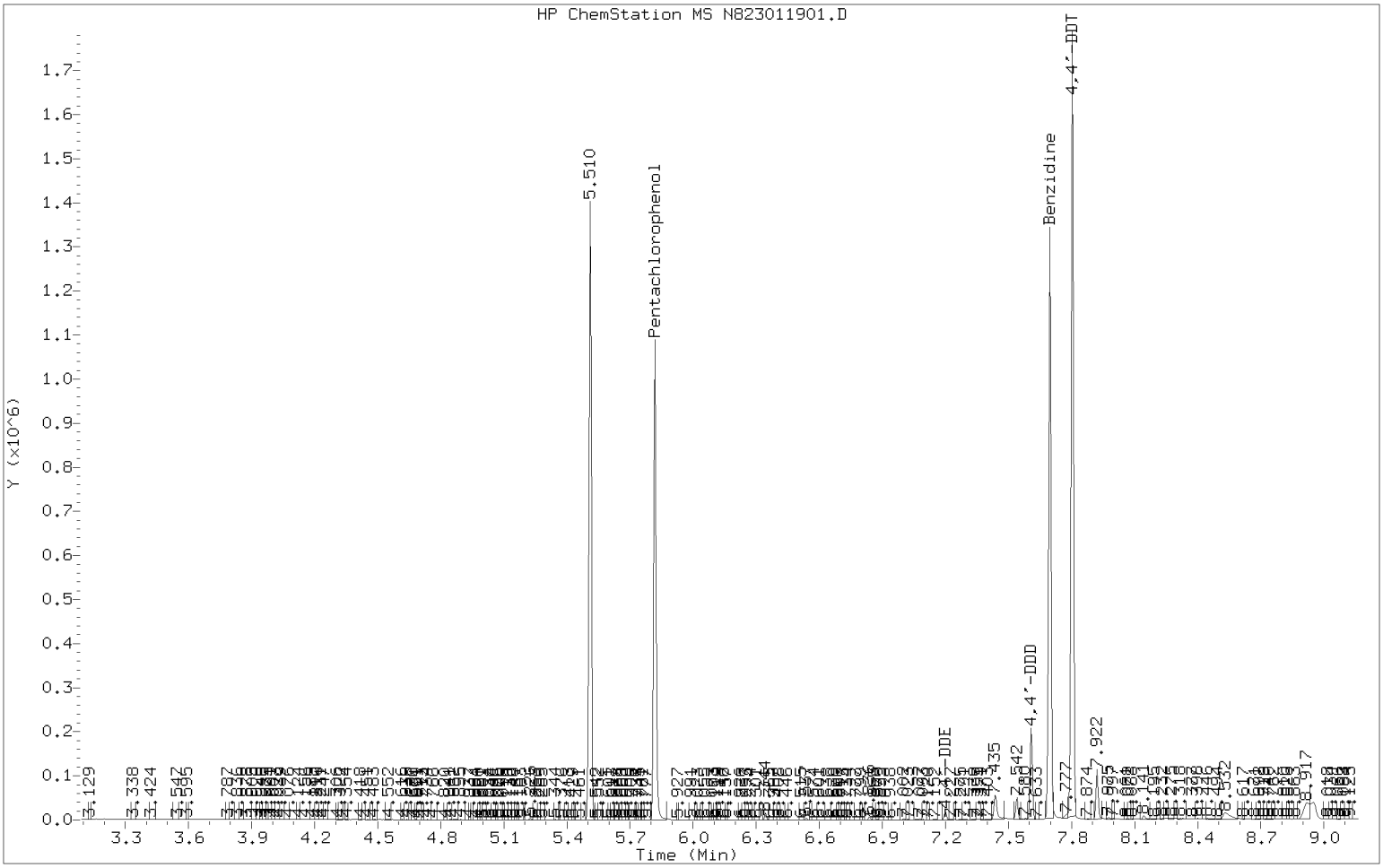
Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Lab File ID:	N823011901.D	Injection Date:	01/19/23
Instrument ID:	NT8	Injection Time:	10:28
Sequence:	SLA0213	Lab Sample ID:	SLA0213-TUN1

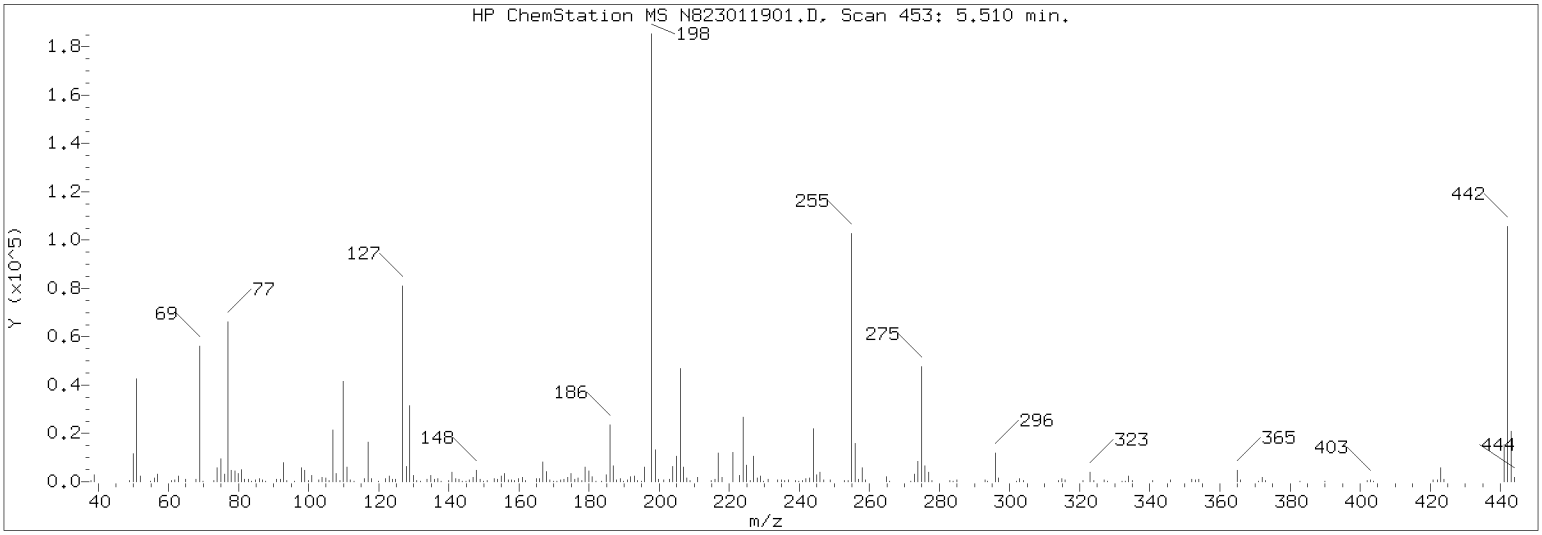
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	1.25	PASS
69	Less than 100% of 198	30.9	PASS
70	Less than 2% of 69	0.208	PASS
197	Less than 2% of 198	0.168	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.89	PASS
365	1 - 100% of 198	2.85	PASS
441	Less than 150% of 443	72.9	PASS
442	1 - 200% of 198	67.9	PASS
443	15 - 24% of 442	19.6	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Base peak, 100% relative abundance		

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLA0213-TUN1	N823011901.D	01/19/2023	10:28
Initial Cal Blank	SLA0213-ICB1	N823011902.D	01/19/2023	10:59
Cal Standard	SLA0213-CAL1	N823011903.D	01/19/2023	11:26
Cal Standard	SLA0213-CAL2	N823011904.D	01/19/2023	11:58
Cal Standard	SLA0213-CAL3	N823011905.D	01/19/2023	12:25
Cal Standard	SLA0213-CAL4	N823011906.D	01/19/2023	12:52
Cal Standard	SLA0213-CAL5	N823011907.D	01/19/2023	13:19
Cal Standard	SLA0213-CAL6	N823011908.D	01/19/2023	13:46
Secondary Cal Check	SLA0213-SCV1	N823011909.D	01/19/2023	14:58

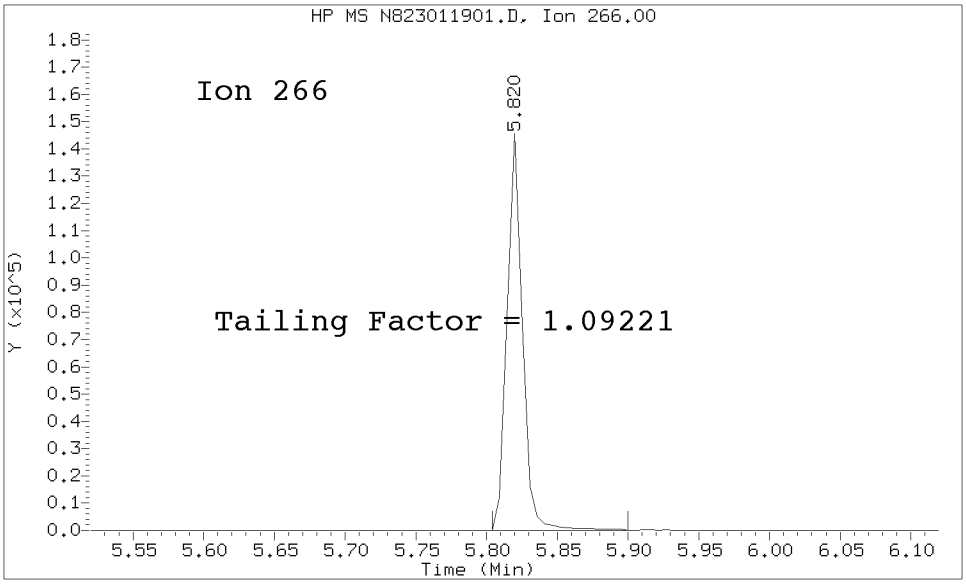
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
Method Used: \20230119.b\tune.b\DFTPP.m Inst: nt8
Injection Date: 19-JAN-2023 10:28 Operator: JZ
Sample Info: SLA0213-TUN1 DFTPP230119
Report Date: 01/19/2023 20:14



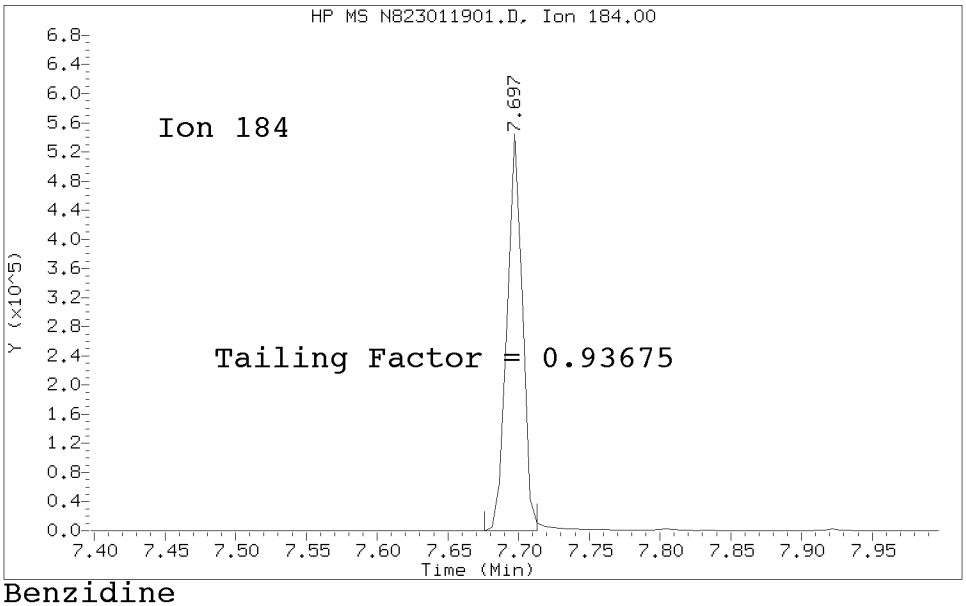


Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
Method Used: \20230119.b\tune.b\DFTPP.m\sw846ddt.m Inst: nt8
Injection Date: 19-JAN-2023 10:28 Operator: JZ
Sample Info: DFTPP230119
Report Date: 01/19/2023 20:14



Pentachlorophenol
==========
Exp. RT = 5.825
Found RT = 5.820

Tail Factor = 1.092 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 7.703
Found RT = 7.697

Tail Factor = 0.937 Maximum Allowed = 2.0

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	23.71
68	Less than 2.00% of mass 69	0.39 (1.25)
69	Mass 69 relative abundance	30.92
70	Less than 2.00% of mass 69	0.06 (0.21)
127	10.00 - 80.00% of mass 198	44.20
197	Less than 2.00% of mass 198	0.17
199	5.00 - 9.00% of mass 198	6.89
275	10.00 - 60.00% of mass 198	26.96
365	Greater than 1.00% of mass 198	2.85
441	0.01 - 24.00% of mass 442	9.72 (14.32)
442	50.00 - 200.00% of mass 198	67.89
443	15.00 - 24.00% of mass 442	13.33 (19.64)

Data File: N823011901.D
Spectrum: Avg. Scans 452-454 (5.51), Background Scan 448
Location of Maximum: 198.00
Number of points: 228

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	424	124.00	727	188.00	466	265.00	1738
39.00	2285	125.00	694	189.00	1088	266.00	231
49.00	389	127.00	59064	190.00	92	272.00	97
50.00	8567	128.00	4618	191.00	538	273.00	2435
51.00	31688	129.00	23208	192.00	1501	274.00	6434
52.00	1694	130.00	1967	193.00	1652	275.00	36032
55.00	89	131.00	387	194.00	339	276.00	4936
56.00	1081	132.00	92	195.00	108	277.00	3133
57.00	2353	134.00	695	196.00	4417	278.00	496
61.00	487	135.00	1887	197.00	224	283.00	243
62.00	511	136.00	770	198.00	133632	284.00	200
63.00	1627	137.00	979	199.00	9210	285.00	536
65.00	865	138.00	101	200.00	711	293.00	678
68.00	518	140.00	220	201.00	653	294.00	83
69.00	41320	141.00	2913	203.00	891	296.00	9364
70.00	86	142.00	931	204.00	4715	297.00	1310
73.00	274	143.00	728	205.00	8070	302.00	96
74.00	4327	144.00	83	206.00	34104	303.00	1146
75.00	6885	145.00	91	207.00	4557	304.00	262
76.00	2362	146.00	508	208.00	1177	314.00	364
77.00	48072	147.00	1540	209.00	387	315.00	1068
78.00	3441	148.00	3391	210.00	236	316.00	588
79.00	3296	149.00	690	211.00	1430	321.00	250
80.00	2464	150.00	90	215.00	376	323.00	3145
81.00	3741	151.00	458	216.00	746	324.00	501
82.00	872	152.00	181	217.00	9085	327.00	540
83.00	845	153.00	893	218.00	1189	328.00	201
84.00	287	154.00	764	221.00	8442	332.00	178
85.00	621	155.00	1756	223.00	2039	333.00	129
86.00	1039	156.00	2503	224.00	19544	334.00	1893
87.00	481	157.00	527	225.00	5122	335.00	518
88.00	91	158.00	516	226.00	502	341.00	275
91.00	866	159.00	410	227.00	8274	346.00	674
92.00	878	160.00	955	228.00	1174	352.00	945
93.00	5816	161.00	1421	229.00	1712	353.00	630
94.00	409	162.00	445	230.00	111	354.00	910
96.00	203	165.00	1085	231.00	685	365.00	3802
98.00	4243	166.00	1023	234.00	538	366.00	580
99.00	3501	167.00	5993	235.00	568	371.00	91
100.00	344	168.00	3082	236.00	394	372.00	1475
101.00	1983	169.00	490	237.00	657	373.00	292
103.00	704	170.00	94	239.00	327	383.00	290
104.00	1275	171.00	194	240.00	187	390.00	177
105.00	1230	172.00	595	241.00	468	402.00	468
106.00	379	173.00	732	242.00	1090	403.00	736
107.00	15826	174.00	1319	243.00	1102	404.00	243
108.00	2447	175.00	2491	244.00	16206	421.00	649
109.00	331	176.00	751	245.00	2245	422.00	226
110.00	30008	177.00	1175	246.00	3000	423.00	4860

111.00	4456	178.00	288	247.00	624	424.00	978
112.00	513	179.00	4561	249.00	587	441.00	12991
113.00	89	180.00	3271	253.00	239	442.00	90720
116.00	935	181.00	1513	254.00	438	443.00	17816
117.00	12513	182.00	106	255.00	76904	444.00	1584
118.00	931	184.00	333	256.00	11699		
120.00	104	185.00	2153	257.00	880		
122.00	1003	186.00	17336	258.00	4539		
123.00	1682	187.00	4916	259.00	746		

Analytical Resources, LLC
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E-SIM

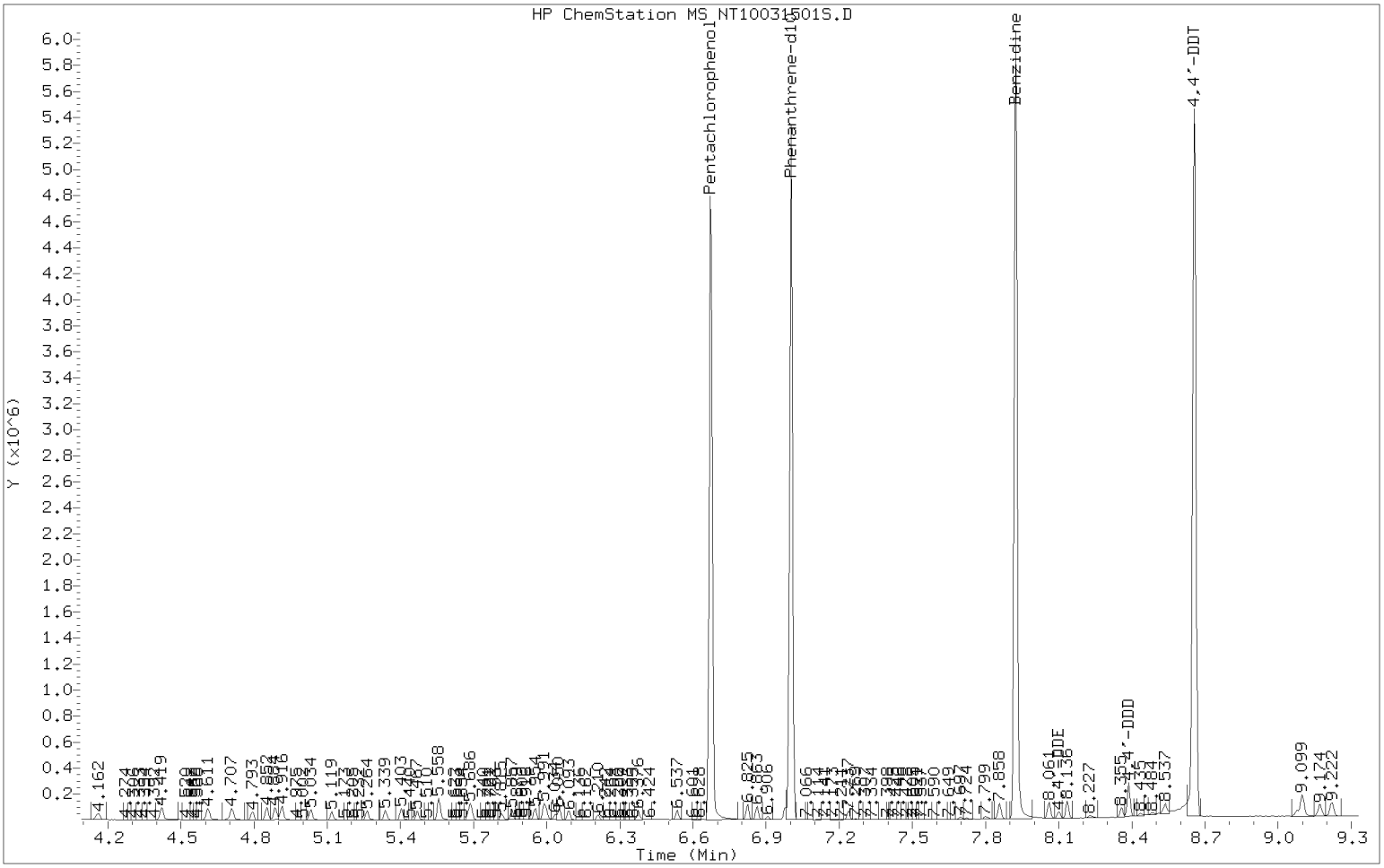
Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Lab File ID:	NT10031501S.D	Injection Date:	03/15/23
Instrument ID:	NT10	Injection Time:	20:19
Sequence:	SLC0238	Lab Sample ID:	SLC0238-TUN1

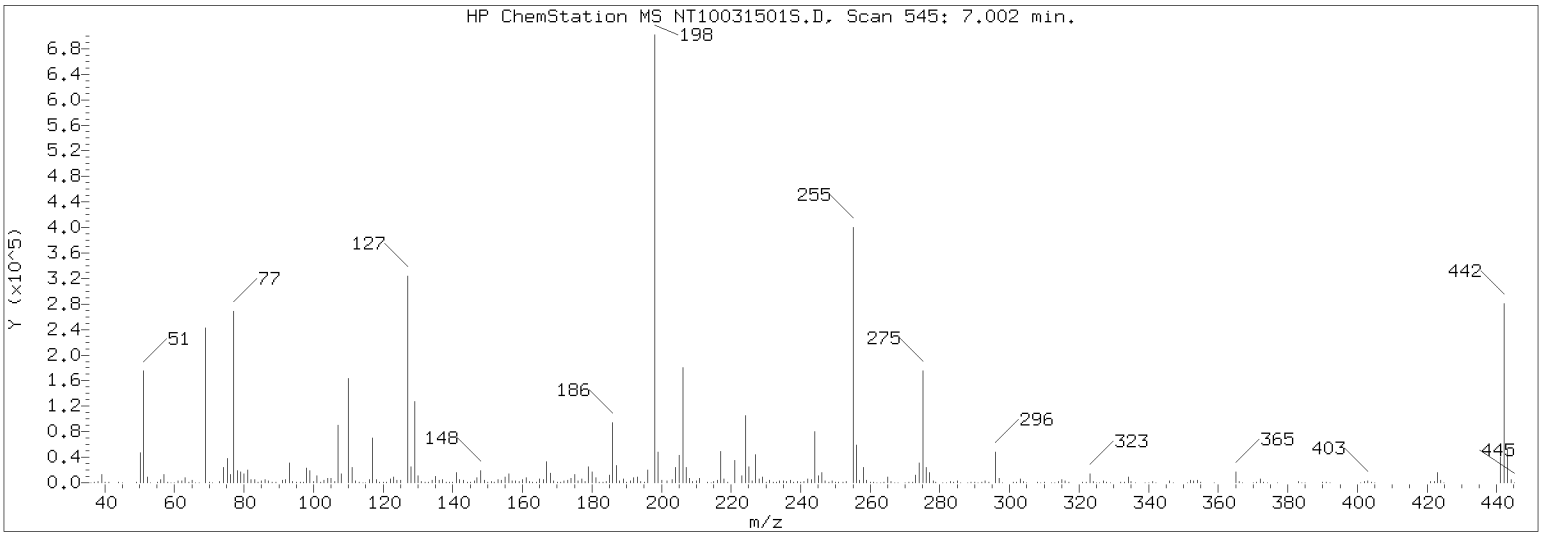
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	0.372	PASS
69	Less than 100% of 198	36.5	PASS
70	Less than 2% of 69	0.498	PASS
197	Less than 2% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.88	PASS
365	1 - 100% of 198	2.52	PASS
441	Less than 150% of 443	77.1	PASS
442	1 - 200% of 198	42.8	PASS
443	15 - 24% of 442	18.5	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Base peak, 100% relative abundance		

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLC0238-TUN1	NT10031501S.D	03/15/2023	20:19
Cal Standard	SLC0238-CAL8	NT10031503S.D	03/15/2023	21:12
Cal Standard	SLC0238-CAL7	NT10031504S.D	03/15/2023	21:50
Cal Standard	SLC0238-CAL6	NT10031505S.D	03/15/2023	22:28
Cal Standard	SLC0238-CAL5	NT10031506S.D	03/15/2023	23:06
Cal Standard	SLC0238-CAL4	NT10031507S.D	03/15/2023	23:44
Cal Standard	SLC0238-CAL3	NT10031508S.D	03/16/2023	0:22
Cal Standard	SLC0238-CAL2	NT10031509S.D	03/16/2023	1:00
Cal Standard	SLC0238-CAL1	NT10031510S.D	03/16/2023	1:38
Secondary Cal Check	SLC0238-SCV1	NT10031511S.D	03/16/2023	2:16
Initial Cal Blank	SLC0238-ICB1	NT10031512S.D	03/16/2023	2:54

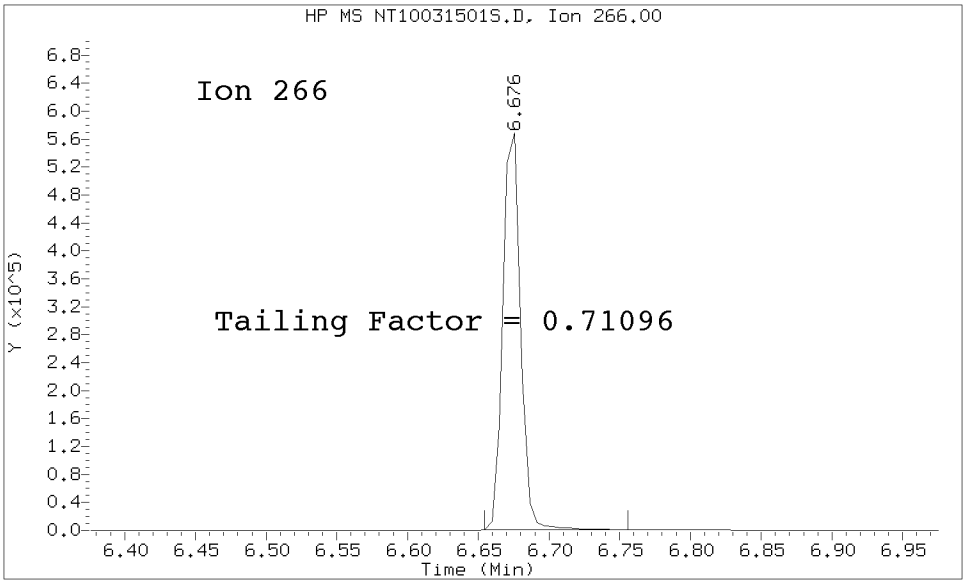
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230315.b/20230315.b/NT10031501S.D/NT10031501S.D
Method Used: \20230315.b\20230315.b\DFTPP8270E.m Inst: nt10
Injection Date: 15-MAR-2023 20:19 Operator: JGR
Sample Info: SLC0238-TUN1 SLC0238-TUN1
Report Date: 03/16/2023 14:49



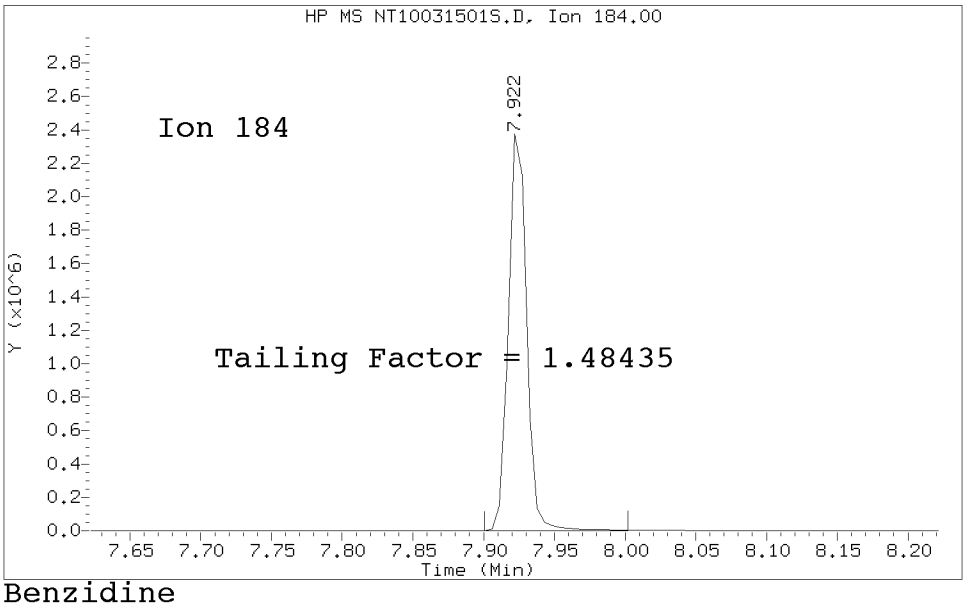


Datafile Analyzed: /20230315.b/20230315.b/NT10031501S.D/NT10031501S.D
Method Used: \20230315.b\20230315.b\DFTPP8270E.m\sw846ddt.m Inst: nt10
Injection Date: 15-MAR-2023 20:19 Operator: JGR
Sample Info: SEQ-TUN1
Report Date: 03/16/2023 14:49



Pentachlorophenol
==========
 Exp. RT = 6.676
Found RT = 6.676

Tail Factor = 0.711 Maximum Allowed = 2.0



Benzidine
==========
 Exp. RT = 7.922
Found RT = 7.922

Tail Factor = 1.484 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.7109557	2.000	PASS
Benzidine	1.4843493	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	962640			N/A
4,4-DDE	5158	0.5	20.0	PASS
4,4-DDD	41277	4.1	20.0	PASS
4,4-DDD + DDE	46435	4.6	20.0	PASS

Tuning Sample, nt10.i/20230315.b/20230315.b/NT10031501S.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.14 (0.37)
69	Mass 69 relative abundance	36.50
70	Less than 2.00% of mass 69	0.18 (0.50)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.88
365	1.00 - 100.00% of mass 198	2.52
441	Less than 150.00% of mass 443	6.11 (77.09)
442	Less than 200.00% of mass 198	42.80
443	15.00 - 24.00% of mass 442	7.92 (18.52)

Data File: NT10031501S.D
Spectrum: Avg. Scans 544-546 (7.00), Background Scan 536
Location of Maximum: 198.00
Number of points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	226	124.00	3185	207.00	17112	293.00	2318
37.00	575	125.00	2909	208.00	4722	294.00	588
38.00	1820	127.00	243264	209.00	1586	295.00	171
39.00	10159	128.00	18696	210.00	2002	296.00	36168
40.00	405	129.00	96304	211.00	5093	297.00	5056
41.00	312	130.00	8257	213.00	371	298.00	351
42.00	59	131.00	1626	214.00	74	301.00	422
45.00	283	132.00	820	215.00	1549	302.00	552
49.00	910	133.00	415	216.00	2822	303.00	4130
50.00	35800	134.00	2800	217.00	36520	304.00	1107
51.00	136000	135.00	7704	218.00	4515	305.00	126
52.00	7201	136.00	3195	219.00	360	308.00	532
53.00	294	137.00	3970	221.00	25672	309.00	330
55.00	668	138.00	948	222.00	2863	310.00	461
56.00	4206	139.00	563	223.00	8094	312.00	63
57.00	9877	140.00	1193	224.00	76160	313.00	360
58.00	478	141.00	12476	225.00	18680	314.00	1762
59.00	106	142.00	3876	226.00	2197	315.00	4011
60.00	125	143.00	2757	227.00	32752	316.00	2200
61.00	1897	144.00	726	228.00	4949	317.00	416
62.00	2103	145.00	710	229.00	6725	321.00	1068
63.00	6654	146.00	2200	230.00	933	322.00	491
64.00	895	147.00	6157	231.00	2854	323.00	10541
65.00	3279	148.00	13642	232.00	574	324.00	1817
66.00	188	149.00	2992	233.00	660	325.00	178
67.00	249	150.00	753	234.00	2022	326.00	218
68.00	704	151.00	1678	235.00	2475	327.00	2103
69.00	189184	152.00	893	236.00	1621	328.00	1092
70.00	943	153.00	4091	237.00	2803	329.00	211
71.00	156	154.00	3154	238.00	375	332.00	739
73.00	1307	155.00	6743	239.00	1387	333.00	975
74.00	18768	156.00	10344	240.00	943	334.00	6536
75.00	30000	157.00	2091	241.00	1718	335.00	1733
76.00	10364	158.00	2204	242.00	4096	336.00	201
77.00	207552	159.00	1689	243.00	3931	339.00	148
78.00	14246	160.00	3864	244.00	58560	340.00	135
79.00	13356	161.00	5891	245.00	7760	341.00	1142
80.00	10539	162.00	1637	246.00	11941	342.00	277
81.00	15173	163.00	475	247.00	2526	346.00	2192
82.00	3906	164.00	608	248.00	602	347.00	346
83.00	3545	165.00	4507	249.00	2169	351.00	182
84.00	178	166.00	3807	250.00	370	352.00	3059
85.00	2559	167.00	24880	251.00	462	353.00	1950
86.00	4226	168.00	11639	252.00	590	354.00	3010
87.00	1998	169.00	2046	253.00	1331	355.00	569
88.00	783	170.00	776	255.00	296384	359.00	242
89.00	418	171.00	1036	256.00	43272	365.00	13085
91.00	3237	172.00	2248	257.00	3394	366.00	1813
92.00	3764	173.00	2906	258.00	18176	367.00	150

93.00	24104	174.00	5113	259.00	2926	370.00	291
94.00	1672	175.00	9851	260.00	520	371.00	690
95.00	503	176.00	2588	261.00	479	372.00	4605
96.00	1130	177.00	4756	262.00	60	373.00	1002
97.00	380	178.00	1657	263.00	151	374.00	50
98.00	17936	179.00	18424	264.00	377	377.00	67
99.00	14658	180.00	12975	265.00	6992	383.00	1157
100.00	1303	181.00	6000	266.00	984	384.00	328
101.00	8724	182.00	963	267.00	105	385.00	50
102.00	480	183.00	493	268.00	248	390.00	595
103.00	2859	184.00	1456	270.00	285	391.00	401
104.00	5461	185.00	9317	271.00	631	392.00	204
105.00	5056	186.00	70384	272.00	750	401.00	211
106.00	1781	187.00	20112	273.00	8749	402.00	1564
107.00	67936	188.00	2185	274.00	23296	403.00	2292
108.00	10471	189.00	4453	275.00	129008	404.00	796
109.00	595	190.00	772	276.00	17320	405.00	237
110.00	122760	191.00	2090	277.00	11470	421.00	1827
111.00	18400	192.00	5915	278.00	2005	422.00	1658
112.00	2357	193.00	6863	279.00	468	423.00	12304
113.00	756	194.00	1470	281.00	147	424.00	2795
114.00	128	195.00	841	282.00	368	425.00	263
115.00	298	196.00	14341	283.00	1453	441.00	31664
116.00	3871	198.00	518272	284.00	874	442.00	221824
117.00	54088	199.00	35680	285.00	2012	443.00	41072
118.00	3919	200.00	2830	286.00	333	444.00	3778
119.00	531	201.00	2302	288.00	146	445.00	177
120.00	920	203.00	3657	289.00	446		
121.00	362	204.00	18200	290.00	444		
122.00	4396	205.00	31664	291.00	199		
123.00	6778	206.00	132736	292.00	486		

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00050	Instrument:	NT8
Calibration Date:	01/19/2023	Column (1):	RXI-17Sil ms

Calibration Comments: SS, Dibenzo(a,h)anthracene-d14, highest point included. Changed curve fit from "AVG" to "LRO" on 1/25/23 by JZ.

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
Naphthalene	0.1	1.051331	0.5	0.8804155	1	0.9140738	2.5	0.9442377	5	0.9059688	10	0.8834817
2-Methylnaphthalene	0.1	0.5583976	0.5	0.483576	1	0.4966087	2.5	0.5321582	5	0.5081776	10	0.490102
1-Methylnaphthalene	0.1	0.567502	0.5	0.4881925	1	0.5073336	2.5	0.5386185	5	0.5123544	10	0.5007901
Acenaphthylene	0.1	1.569275	0.5	1.288567	1	1.419627	2.5	1.612722	5	1.573862	10	1.597505
Acenaphthene	0.1	1.159165	0.5	0.9399536	1	0.9690137	2.5	1.040021	5	0.9826181	10	0.9807186
Dibenzofuran	0.1	1.856131	0.5	1.449189	1	1.468766	2.5	1.539056	5	1.458398	10	1.450275
Fluorene	0.1	1.333774	0.5	1.066627	1	1.134936	2.5	1.226731	5	1.19285	10	1.207426
Phenanthrene	0.1	1.200199	0.5	0.9068737	1	0.925967	2.5	0.9922048	5	0.9288855	10	0.90761
Anthracene	0.1	0.9900686	0.5	0.7891408	1	0.8362482	2.5	0.9415647	5	0.895227	10	0.8727266
Fluoranthene	0.1	1.200966	0.5	0.9720444	1	1.022937	2.5	1.114343	5	1.05358	10	1.016684
Pyrene	0.1	1.416146	0.5	1.066416	1	1.156217	2.5	1.294823	5	1.256828	10	1.249389
Benzo(a)anthracene	0.1	1.200365	0.5	0.9419141	1	1.006861	2.5	1.18718	5	1.184592	10	1.222407
Chrysene	0.1	1.382333	0.5	1.081643	1	1.128342	2.5	1.227241	5	1.185771	10	1.173282
Benzo(b)fluoranthene	0.1	1.335895	0.5	0.9774708	1	1.022944	2.5	1.220494	5	1.192377	10	1.239686
Benzo(k)fluoranthene	0.1	1.327249	0.5	0.9937275	1	1.005899	2.5	1.178993	5	1.164539	10	1.175213
Benzo(j)fluoranthene	0.1	1.092831	0.5	0.9205253	1	0.9228699	2.5	1.084778	5	1.075203	10	1.066465
Benzofluoranthenes, Total	0.3	1.255354	1.5	0.9344954	3	0.9716584	7.5	1.159079	15	1.142352	30	1.155882
Benzo(a)pyrene	0.1	1.139906	0.5	0.8777692	1	0.8951488	2.5	1.077374	5	1.063086	10	1.096879
Indeno(1,2,3-cd)pyrene	0.1	1.208599	0.5	0.995325	1	1.072555	2.5	1.257473	5	1.228578	10	1.24398
Dibenzo(a,h)anthracene	0.1	1.049117	0.5	0.8348251	1	0.8950591	2.5	1.081382	5	1.068557	10	1.100721
Benzo(g,h,i)perylene	0.1	1.162964	0.5	0.9102826	1	0.9409469	2.5	1.106673	5	1.088733	10	1.138469
2-Methylnaphthalene-d10	0.1	0.5857106	0.5	0.4932528	1	0.5345061	2.5	0.5674481	5	0.5504276	10	0.5413545
Dibenzo[a,h]anthracene-d14	0.1	0.580281	0.5	0.5471844	1	0.6076211	2.5	0.7324975	5	0.7420675	10	0.7980029
Fluoranthene-d10	0.1	0.9007247	0.5	0.754546	1	0.8247891	2.5	0.9550254	5	0.9291815	10	0.930087

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00050	Instrument:	NT8
Calibration Date:	01/19/2023	Column (1):	RXI-17Sil ms

Calibration Comments: SS, Dibenzo(a,h)anthracene-d14, highest point included. Changed curve fit from "AVG" to "LRO" on 1/25/23 by JZ.

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Naphthalene	0.9299181	6.9			RSD (15)	
2-Methylnaphthalene	0.5115033	5.6			RSD (15)	
1-Methylnaphthalene	0.5191318	5.6			RSD (15)	
Acenaphthylene	1.51026	8.5			RSD (15)	
Acenaphthene	1.011915	7.8			RSD (15)	
Dibenzofuran	1.536969	10.4			RSD (15)	
Fluorene	1.193724	7.5			RSD (15)	
Phenanthrene	0.9769567	11.6			RSD (15)	
Anthracene	0.887496	8.1			RSD (15)	
Fluoranthene	1.063426	7.7			RSD (15)	
Pyrene	1.23997	9.6			RSD (15)	
Benzo(a)anthracene	1.123887	10.5			RSD (15)	
Chrysene	1.196435	8.7			RSD (15)	
Benzo(b)fluoranthene	1.164811	11.8			RSD (15)	
Benzo(k)fluoranthene	1.140937	10.9			RSD (15)	
Benzo(j)fluoranthene	1.027112	8.0			RSD (15)	
Benzofluoranthenes, Total	1.103137	11.2			RSD (15)	
Benzo(a)pyrene	1.025027	10.8			RSD (15)	
Indeno(1,2,3-cd)pyrene	1.167752	9.2			RSD (15)	
Dibenzo(a,h)anthracene	1.004944	11.1			RSD (15)	
Benzo(g,h,i)perylene	1.058011	10.0			RSD (15)	
2-Methylnaphthalene-d10	0.5454499	5.8			RSD (15)	
Dibenzo[a,h]anthracene-d14	0.6679424	15.3	0.9971		LCOD (0.99)	
Fluoranthene-d10	0.8823923	8.7			RSD (15)	

Printed: 1/19/2023 8:45:16PM

ANALYSIS SEQUENCE

SLA0213

Instrument: NT8 Element Column ID: J006458
Calibration ID: GA00050

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SLA0213-TUN1	MS Tune	QC		1	K004775			
SLA0213-ICB1	Initial Cal Blank	QC		2		K008540		
SLA0213-CAL1	8270 SIM PNA 0.1	QC		3	L000603	K008540		
SLA0213-CAL2	8270 SIM PNA 0.5	QC		4	L000604	K008540		
SLA0213-CAL3	8270 SIM PNA 1.0	QC		5	L000605	K008540		
SLA0213-CAL4	8270 SIM PNA 2.5	QC		6	L000606	K008540		
SLA0213-CAL5	8270 SIM PNA 5	QC		7	L000607	K008540		
SLA0213-CAL6	8270 SIM PNA 10	QC		8	L000608	K008540		
SLA0213-SCV1	8270 SIM PNA SCV	QC		9	L000686	K008540		

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

	Time	Filename	LabID	ClientId	DF									
1	1028	N823011901.D	SLA0213-TUN1		1	NO ISTDS FOUND								
2	1059	N823011902.D	SLA0213-ICB1		1	4.92	52082	7.20	30936	9.24	59030	14.22	50944	18.12	47418
3	1126	N823011903.D	SLA0213-CAL1		1	4.91	46132	7.20	27261	9.24	52158	14.20	44953	18.11	41635
4	1158	N823011904.D	SLA0213-CAL2		1	4.91	45056	7.20	26746	9.24	50759	14.21	44658	18.11	42567
5	1225	N823011905.D	SLA0213-CAL3		1	4.91	47180	7.20	28206	9.24	53233	14.20	46493	18.11	44587
6	1252	N823011906.D	SLA0213-CAL4		1	4.91	44704	7.20	26411	9.24	49210	14.20	42994	18.11	40520
7	1319	N823011907.D	SLA0213-CAL5		1	4.91	46542	7.20	27638	9.23	51351	14.20	44781	18.11	42187
8	1346	N823011908.D	SLA0213-CAL6		1	4.91	46070	7.20	26689	9.24	50683	14.21	43880	18.11	40659
9	1458	N823011909.D	SLA0213-SCV1		1	4.91	46346	7.20	27709	9.24	51685	14.21	46582	18.12	41743

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

ARI Job No.: SLA0 Method: FSIMPNA230119.m Instrument: nt8.i Date: 19-JAN-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1059	N823011902.D	SLA0213-ICB1		1	NO MANUAL INTEGRATION
1126	N823011903.D	SLA0213-CAL1		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene-d14,
1158	N823011904.D	SLA0213-CAL2		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene, Dibenzo(a,h)anthracene-d14,
1225	N823011905.D	SLA0213-CAL3		1	Total Benzofluoranthenes,
1252	N823011906.D	SLA0213-CAL4		1	Total Benzofluoranthenes,
1319	N823011907.D	SLA0213-CAL5		1	Total Benzofluoranthenes,
1346	N823011908.D	SLA0213-CAL6		1	Total Benzofluoranthenes,
1458	N823011909.D	SLA0213-SCV1		1	Total Benzofluoranthenes,

Security Status Report

Date: 19-Jan-2023 20:43

N823011901.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011902.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011903.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011904.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011905.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011906.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011907.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011908.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011909.D	Data Locked	jianqing, 19-Jan-2023 20:43

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JAN-2023 11:26
End Cal Date : 19-JAN-2023 13:46
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Last Edit : 19-Jan-2023 20:20 jianqing
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem3\nt8.i\20230119.b\N823011903.D
Level 2: \\target\share\chem3\nt8.i\20230119.b\N823011904.D
Level 3: \\target\share\chem3\nt8.i\20230119.b\N823011905.D
Level 4: \\target\share\chem3\nt8.i\20230119.b\N823011906.D
Level 5: \\target\share\chem3\nt8.i\20230119.b\N823011907.D
Level 6: \\target\share\chem3\nt8.i\20230119.b\N823011908.D

	0.10000	0.50000	1.000	2.500	5.000	10.000	___	
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	% RSD
2 Naphthalene	1.05133	0.88042	0.91407	0.94424	0.90597	0.88348	0.92992	6.865
4 2-Methylnaphthalene	0.55840	0.48358	0.49661	0.53216	0.50818	0.49010	0.51150	5.596
5 1-methylnaphthalene	0.56750	0.48819	0.50733	0.53862	0.51235	0.50079	0.51913	5.582
6 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 Biphenyl	1.53553	1.22381	1.26186	1.35447	1.27381	1.26708	1.31943	8.655
8 2,6-Dimethylnaphthalene	1.00657	0.84902	0.90342	0.98129	0.93327	0.92936	0.93382	5.997
9 Acenaphthylene	1.56927	1.28857	1.41963	1.61272	1.57386	1.59750	1.51026	8.531
11 Acenaphthene	1.15917	0.93995	0.96901	1.04002	0.98262	0.98072	1.01192	7.822
12 Dibenzofuran	1.85613	1.44919	1.46877	1.53906	1.45840	1.45028	1.53697	10.407
13 1,6,7-Trimethylnaphthalene	1.10194	0.88028	0.91555	1.00758	0.95392	0.95592	0.96920	8.030
14 Fluorene	1.33377	1.06663	1.13494	1.22673	1.19285	1.20743	1.19372	7.540
16 Phenanthrene	1.20020	0.90687	0.92597	0.99220	0.92889	0.90761	0.97696	11.644
17 Anthracene	0.99007	0.78914	0.83625	0.94156	0.89523	0.87273	0.88750	8.129
18 Dibenzothiophene	1.00464	0.81097	0.83858	0.91687	0.87432	0.85731	0.88378	7.813
19 Carbazole	0.89689	0.71317	0.75168	0.85950	0.83159	0.82882	0.81361	8.430
20 1-Methylphenanthrene	0.79489	0.62625	0.65095	0.73891	0.70849	0.70462	0.70402	8.607

22 Fluoranthene	1.20097	0.97204	1.02294	1.11434	1.05358	1.01668	1.06343	7.729
23 Pyrene	1.41615	1.06642	1.15622	1.29482	1.25683	1.24939	1.23997	9.648
24 Benzo(a)anthracene	1.20036	0.94191	1.00686	1.18718	1.18459	1.22241	1.12389	10.532
27 Chrysene	1.38233	1.08164	1.12834	1.22724	1.18577	1.17328	1.19644	8.684
28 Benzo(b)fluoranthene	1.33590	0.97747	1.02294	1.22049	1.19238	1.23969	1.16481	11.769
29 Benzo(k)fluoranthene	1.32725	0.99373	1.00590	1.17899	1.16454	1.17521	1.14094	10.933
30 Benzo(j)fluoranthene	1.09283	0.92053	0.92287	1.08478	1.07520	1.06646	1.02711	7.997
31 Total Benzofluoranthenes	1.25535	0.93450	0.97166	1.15908	1.14235	1.15588	1.10314	11.202
32 Benzo(a)pyrene	1.13991	0.87777	0.89515	1.07737	1.06309	1.09688	1.02503	10.785
34 Benzo(e)pyrene	1.38633	1.02276	1.03286	1.18813	1.15641	1.18275	1.16154	11.391
35 Perylene	1.28978	0.96103	0.98751	1.14448	1.10241	1.11455	1.09996	10.771
37 Indeno(1,2,3-cd)pyrene	1.20860	0.99533	1.07255	1.25747	1.22858	1.24398	1.16775	9.225

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JAN-2023 11:26
End Cal Date : 19-JAN-2023 13:46
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Last Edit : 19-Jan-2023 20:20 jianqing
Curve Type : Average

Compound	0.10000 Level 1	0.50000 Level 2	1.000 Level 3	2.500 Level 4	5.000 Level 5	10.000 Level 6	___ RRF	% RSD
38 Dibenzo(a,h)anthracene	1.04912	0.83483	0.89506	1.08138	1.06856	1.10072	1.00494	11.083
39 Benzo(g,h,i)perylene	1.16296	0.91028	0.94095	1.10667	1.08873	1.13847	1.05801	10.032
$ 3 2-Methylnaphthalene-d10	0.58571	0.49325	0.53451	0.56745	0.55043	0.54135	0.54545	5.792
$ 21 Fluoranthene-d10	0.90072	0.75455	0.82479	0.95503	0.92918	0.93009	0.88239	8.740
$ 36 Dibenzo(a,h)anthracene-d14	0.58028	0.54718	0.60762	0.73250	0.74207	+++++	0.64193	13.973

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Batch File: \\target\share\chem3\nt8.i\20230119.b
Inst ID: nt8.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	N823011903	N823011904	N823011905	N823011906	N823011907	N823011908
INJ.DATE:	19-JAN-2023	19-JAN-2023	19-JAN-2023	19-JAN-2023	19-JAN-2023	19-JAN-2023
INJ.TIME:	11:26	11:58	12:25	12:52	13:19	13:46

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 1 Naphthalene-d8	4.907	4.913	4.907	4.907	4.910	4.907	4.907	1.907-7.907	4.908	0.003
2 Naphthalene	4.939	4.942	4.939	4.938	4.938	4.938	4.938	1.938-7.938	4.939	0.001
$ 3 2-Methylnaphthalene-d1	5.644	5.647	5.640	5.640	5.640	5.640	5.640	2.640-8.640	5.642	0.003
4 2-Methylnaphthalene	5.691	5.694	5.688	5.688	5.688	5.688	5.688	2.688-8.688	5.689	0.003
5 1-methylnaphthalene	5.884	5.890	5.887	5.884	5.887	5.887	5.887	2.887-8.887	5.887	0.002
6 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	6.377	3.377-9.377	+++++	+++++
7 Biphenyl	6.346	6.352	6.346	6.345	6.346	6.349	6.349	3.349-9.349	6.347	0.003
8 2,6-Dimethylnaphthalen	6.390	6.396	6.390	6.390	6.390	6.393	6.393	3.393-9.393	6.391	0.003
9 Acenaphthylene	7.086	7.092	7.085	7.085	7.085	7.089	7.089	4.089-10.089	7.087	0.003
* 10 Acenaphthene-d10	7.196	7.199	7.196	7.196	7.196	7.196	7.196	4.196-10.196	7.197	0.001
11 Acenaphthene	7.247	7.250	7.247	7.247	7.247	7.247	7.247	4.247-10.247	7.247	0.001
12 Dibenzofuran	7.395	7.402	7.395	7.395	7.395	7.398	7.398	4.398-10.398	7.397	0.003
13 1,6,7-Trimethylnaphtha	7.462	7.465	7.462	7.462	7.462	7.465	7.465	4.465-10.465	7.463	0.002
14 Fluorene	7.876	7.879	7.876	7.873	7.876	7.876	7.876	4.876-10.876	7.876	0.002
* 15 Phenanthrene-d10	9.236	9.239	9.236	9.236	9.232	9.236	9.236	6.236-12.236	9.236	0.002
16 Phenanthrene	9.270	9.273	9.270	9.270	9.270	9.274	9.274	6.274-12.274	9.271	0.002
17 Anthracene	9.312	9.315	9.312	9.311	9.311	9.315	9.315	6.315-12.315	9.313	0.002

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

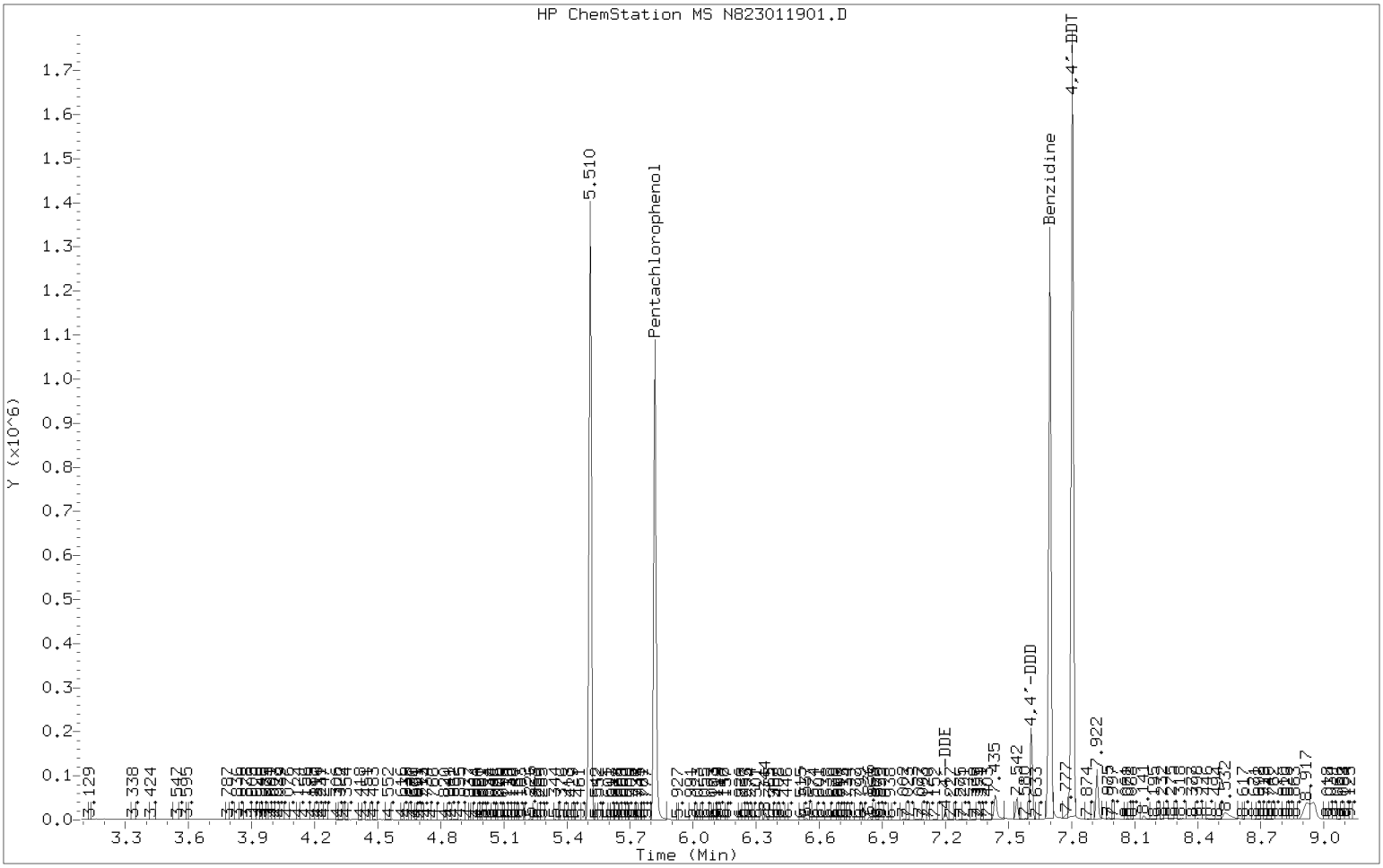
ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

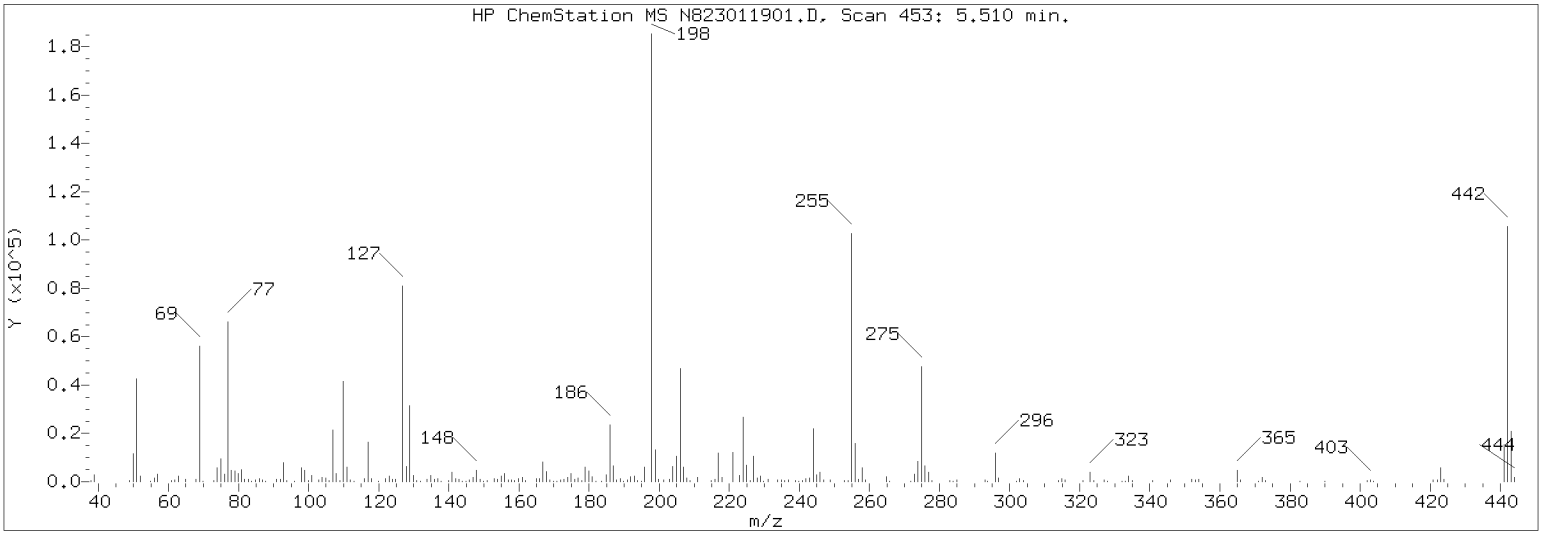
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Batch File: \\target\share\chem3\nt8.i\20230119.b
Inst ID: nt8.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 Dibenzothiophene	9.109	9.112	9.109	9.109	9.109	9.112	9.112	6.112-12.112	9.110	0.002
	19 Carbazole	9.824	9.830	9.824	9.824	9.824	9.827	9.827	6.827-12.827	9.825	0.003
	20 1-Methylphenanthrene	10.048	10.051	10.048	10.048	10.048	10.051	10.051	7.051-13.051	10.049	0.002
$	21 Fluoranthene-d10	11.016	11.019	11.016	11.016	11.016	11.019	11.019	8.019-14.019	11.017	0.002
	22 Fluoranthene	11.054	11.057	11.051	11.054	11.054	11.057	11.057	8.057-14.057	11.054	0.002
	23 Pyrene	11.572	11.575	11.572	11.572	11.572	11.575	11.575	8.575-14.575	11.573	0.002
	24 Benzo(a)anthracene	14.073	14.080	14.077	14.077	14.077	14.080	14.080	11.080-17.080	14.077	0.002
*	25 Chrysene-d12	14.203	14.209	14.203	14.203	14.203	14.206	14.206	11.206-17.206	14.205	0.003
	27 Chrysene	14.276	14.279	14.276	14.279	14.279	14.282	14.282	11.282-17.282	14.278	0.002
	28 Benzo(b)fluoranthene	16.821	16.827	16.824	16.821	16.827	16.834	16.834	13.834-19.834	16.826	0.005
	29 Benzo(k)fluoranthene	16.881	16.887	16.881	16.884	16.888	16.897	16.897	13.897-19.897	16.886	0.006
	30 Benzo(j)fluoranthene	16.960	16.963	16.960	16.963	16.967	16.973	16.973	13.973-19.973	16.964	0.005
	31 Total Benzofluoranthen	16.821	16.827	16.824	16.821	16.827	16.834	16.834	13.834-19.834	16.826	0.005
	32 Benzo(a)pyrene	17.874	17.883	17.877	17.877	17.884	17.890	17.890	14.890-20.890	17.881	0.006
*	33 Perylene-d12	18.111	18.114	18.111	18.111	18.111	18.114	18.114	15.114-21.114	18.112	0.002
	34 Benzo(e)pyrene	17.748	17.754	17.751	17.748	17.751	17.760	17.760	14.760-20.760	17.752	0.005
	35 Perylene	18.184	18.187	18.184	18.184	18.187	18.193	18.193	15.193-21.193	18.187	0.004
$	36 Dibenzo(a,h)anthracene	20.546	20.549	20.549	20.552	20.555	20.565	20.565	17.565-23.565	20.553	0.007
	37 Indeno(1,2,3-cd)pyrene	20.666	20.676	20.672	20.676	20.682	20.691	20.691	17.691-23.691	20.677	0.009
	38 Dibenzo(a,h)anthracene	20.666	20.666	20.657	20.663	20.669	20.685	20.685	17.685-23.685	20.668	0.010
	39 Benzo(g,h,i)perylene	21.757	21.760	21.748	21.757	21.763	21.782	21.782	18.782-24.782	21.761	0.012

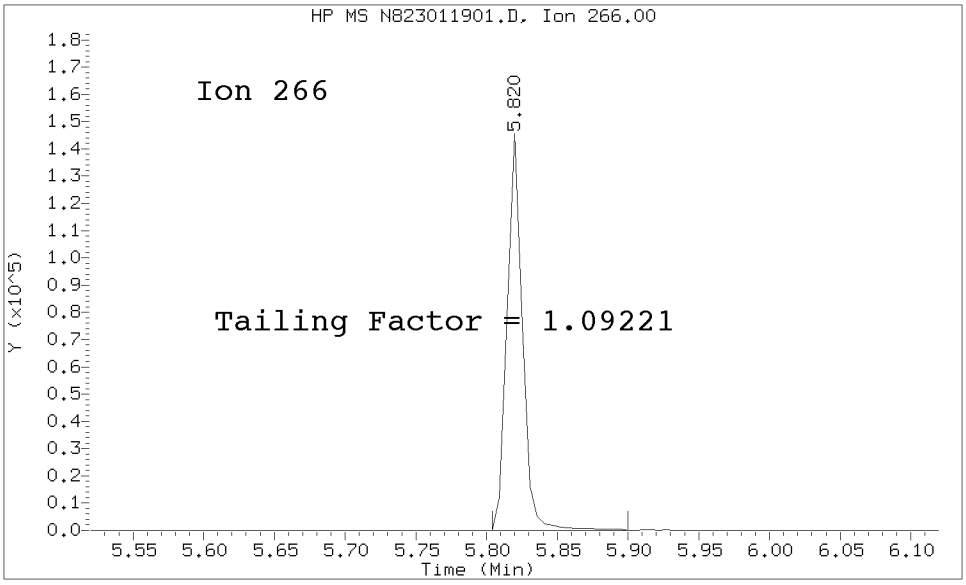
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
Method Used: \20230119.b\tune.b\DFTPP.m Inst: nt8
Injection Date: 19-JAN-2023 10:28 Operator: JZ
Sample Info: SLA0213-TUN1 DFTPP230119
Report Date: 01/19/2023 20:14



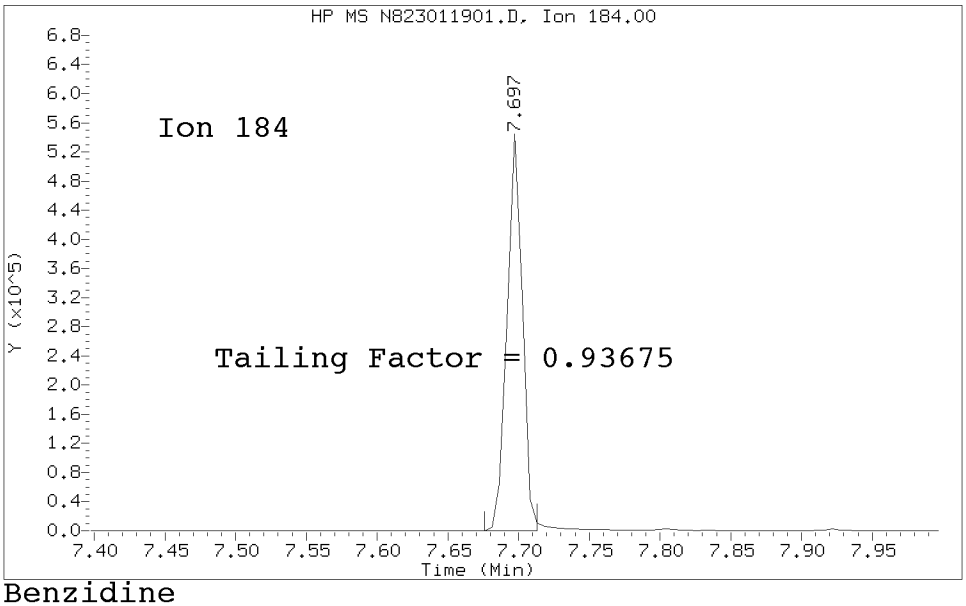


Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
Method Used: \20230119.b\tune.b\DFTPP.m\sw846ddt.m Inst: nt8
Injection Date: 19-JAN-2023 10:28 Operator: JZ
Sample Info: DFTPP230119
Report Date: 01/19/2023 20:14



Pentachlorophenol
==========
Exp. RT = 5.825
Found RT = 5.820

Tail Factor = 1.092 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 7.703
Found RT = 7.697

Tail Factor = 0.937 Maximum Allowed = 2.0

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	23.71
68	Less than 2.00% of mass 69	0.39 (1.25)
69	Mass 69 relative abundance	30.92
70	Less than 2.00% of mass 69	0.06 (0.21)
127	10.00 - 80.00% of mass 198	44.20
197	Less than 2.00% of mass 198	0.17
199	5.00 - 9.00% of mass 198	6.89
275	10.00 - 60.00% of mass 198	26.96
365	Greater than 1.00% of mass 198	2.85
441	0.01 - 24.00% of mass 442	9.72 (14.32)
442	50.00 - 200.00% of mass 198	67.89
443	15.00 - 24.00% of mass 442	13.33 (19.64)

Data File: N823011901.D
Spectrum: Avg. Scans 452-454 (5.51), Background Scan 448
Location of Maximum: 198.00
Number of points: 228

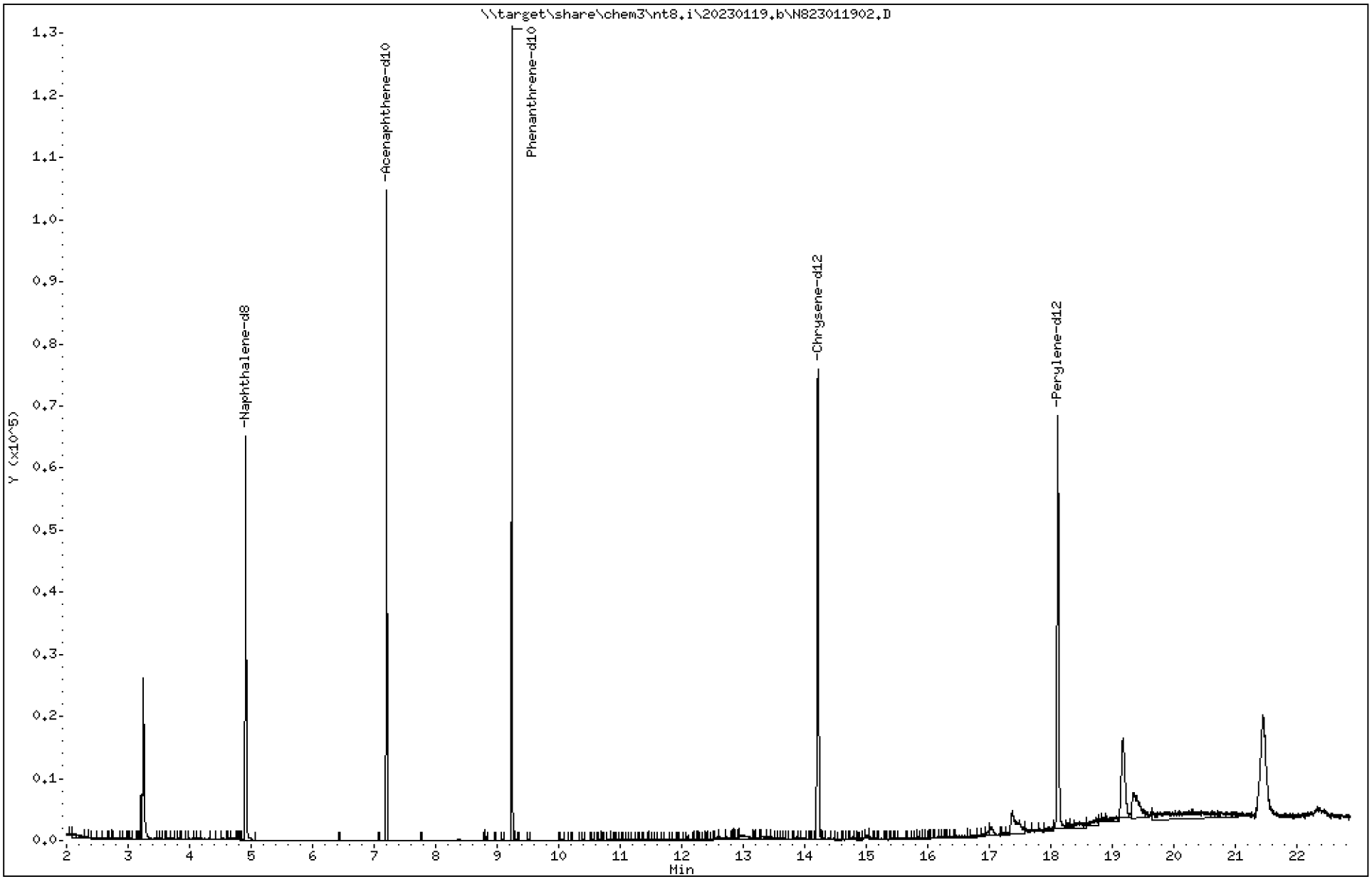
m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	424	124.00	727	188.00	466	265.00	1738
39.00	2285	125.00	694	189.00	1088	266.00	231
49.00	389	127.00	59064	190.00	92	272.00	97
50.00	8567	128.00	4618	191.00	538	273.00	2435
51.00	31688	129.00	23208	192.00	1501	274.00	6434
52.00	1694	130.00	1967	193.00	1652	275.00	36032
55.00	89	131.00	387	194.00	339	276.00	4936
56.00	1081	132.00	92	195.00	108	277.00	3133
57.00	2353	134.00	695	196.00	4417	278.00	496
61.00	487	135.00	1887	197.00	224	283.00	243
62.00	511	136.00	770	198.00	133632	284.00	200
63.00	1627	137.00	979	199.00	9210	285.00	536
65.00	865	138.00	101	200.00	711	293.00	678
68.00	518	140.00	220	201.00	653	294.00	83
69.00	41320	141.00	2913	203.00	891	296.00	9364
70.00	86	142.00	931	204.00	4715	297.00	1310
73.00	274	143.00	728	205.00	8070	302.00	96
74.00	4327	144.00	83	206.00	34104	303.00	1146
75.00	6885	145.00	91	207.00	4557	304.00	262
76.00	2362	146.00	508	208.00	1177	314.00	364
77.00	48072	147.00	1540	209.00	387	315.00	1068
78.00	3441	148.00	3391	210.00	236	316.00	588
79.00	3296	149.00	690	211.00	1430	321.00	250
80.00	2464	150.00	90	215.00	376	323.00	3145
81.00	3741	151.00	458	216.00	746	324.00	501
82.00	872	152.00	181	217.00	9085	327.00	540
83.00	845	153.00	893	218.00	1189	328.00	201
84.00	287	154.00	764	221.00	8442	332.00	178
85.00	621	155.00	1756	223.00	2039	333.00	129
86.00	1039	156.00	2503	224.00	19544	334.00	1893
87.00	481	157.00	527	225.00	5122	335.00	518
88.00	91	158.00	516	226.00	502	341.00	275
91.00	866	159.00	410	227.00	8274	346.00	674
92.00	878	160.00	955	228.00	1174	352.00	945
93.00	5816	161.00	1421	229.00	1712	353.00	630
94.00	409	162.00	445	230.00	111	354.00	910
96.00	203	165.00	1085	231.00	685	365.00	3802
98.00	4243	166.00	1023	234.00	538	366.00	580
99.00	3501	167.00	5993	235.00	568	371.00	91
100.00	344	168.00	3082	236.00	394	372.00	1475
101.00	1983	169.00	490	237.00	657	373.00	292
103.00	704	170.00	94	239.00	327	383.00	290
104.00	1275	171.00	194	240.00	187	390.00	177
105.00	1230	172.00	595	241.00	468	402.00	468
106.00	379	173.00	732	242.00	1090	403.00	736
107.00	15826	174.00	1319	243.00	1102	404.00	243
108.00	2447	175.00	2491	244.00	16206	421.00	649
109.00	331	176.00	751	245.00	2245	422.00	226
110.00	30008	177.00	1175	246.00	3000	423.00	4860

111.00	4456	178.00	288	247.00	624	424.00	978
112.00	513	179.00	4561	249.00	587	441.00	12991
113.00	89	180.00	3271	253.00	239	442.00	90720
116.00	935	181.00	1513	254.00	438	443.00	17816
117.00	12513	182.00	106	255.00	76904	444.00	1584
118.00	931	184.00	333	256.00	11699		
120.00	104	185.00	2153	257.00	880		
122.00	1003	186.00	17336	258.00	4539		
123.00	1682	187.00	4916	259.00	746		

Data File: \\target\share\chem3\nt8.i\20230119.b\N823011902.D
Date : 19-JAN-2023 10:59
Client ID:
Sample Info: ICB230119

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011902.D
Lab Smp Id: SLA0213-ICB1
Inj Date : 19-JAN-2023 10:59
Operator : JZ Inst ID: nt8.i
Smp Info : ICB230119
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:20 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.916	4.906	(1.000)	52082	2.00000	
	2 Naphthalene	128	Compound Not Detected.					
$	3 2-Methylnaphthalene-d10	152	Compound Not Detected.					
	4 2-Methylnaphthalene	141	Compound Not Detected.					
	5 1-methylnaphthalene	141	Compound Not Detected.					
	7 Biphenyl	154	Compound Not Detected.					
	8 2,6-Dimethylnaphthalene	156	Compound Not Detected.					
	9 Acenaphthylene	152	Compound Not Detected.					
*	10 Acenaphthene-d10	164	7.202	7.196	(1.000)	30936	2.00000	
	11 Acenaphthene	153	Compound Not Detected.					
	12 Dibenzofuran	168	Compound Not Detected.					
	13 1,6,7-Trimethylnaphthalene	170	Compound Not Detected.					
	14 Fluorene	166	Compound Not Detected.					
	18 Dibenzothiophene	184	Compound Not Detected.					
*	15 Phenanthrene-d10	188	9.241	9.235	(1.000)	59030	2.00000	
	16 Phenanthrene	178	Compound Not Detected.					
	17 Anthracene	178	Compound Not Detected.					
	19 Carbazole	167	Compound Not Detected.					
	20 1-Methylphenanthrene	192	Compound Not Detected.					
	22 Fluoranthene	202	Compound Not Detected.					
$	21 Fluoranthene-d10	212	Compound Not Detected.					
	23 Pyrene	202	Compound Not Detected.					
	24 Benzo(a)anthracene	228	Compound Not Detected.					
*	25 Chrysene-d12	240	14.215	14.202	(1.000)	50944	2.00000	
	27 Chrysene	228	Compound Not Detected.					
	28 Benzo(b)fluoranthene	252	Compound Not Detected.					
	29 Benzo(k)fluoranthene	252	Compound Not Detected.					
	30 Benzo(j)fluoranthene	252	Compound Not Detected.					
	31 Total Benzofluoranthenes	252	Compound Not Detected.					
	34 Benzo(e)pyrene	252	Compound Not Detected.					
	32 Benzo(a)pyrene	252	Compound Not Detected.					
*	33 Perylene-d12	264	18.120	18.111	(1.000)	47418	2.00000	
	35 Perylene	252	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011902.D
Lab Smp Id: SLA0213-ICB1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	52082	16.50
10 Acenaphthene-d10	26411	13206	52822	30936	17.13
15 Phenanthrene-d10	49210	24605	98420	59030	19.96
25 Chrysene-d12	42994	21497	85988	50944	18.49
33 Perylene-d12	40520	20260	81040	47418	17.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.92	0.19
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.07
25 Chrysene-d12	14.20	13.70	14.70	14.22	0.09
33 Perylene-d12	18.11	17.61	18.61	18.12	0.05

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

REVIEW SUMMARY FOR FILE - N823011902.D

Lab ID: SLA0213-ICB1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 10:59

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

No RRT check performed

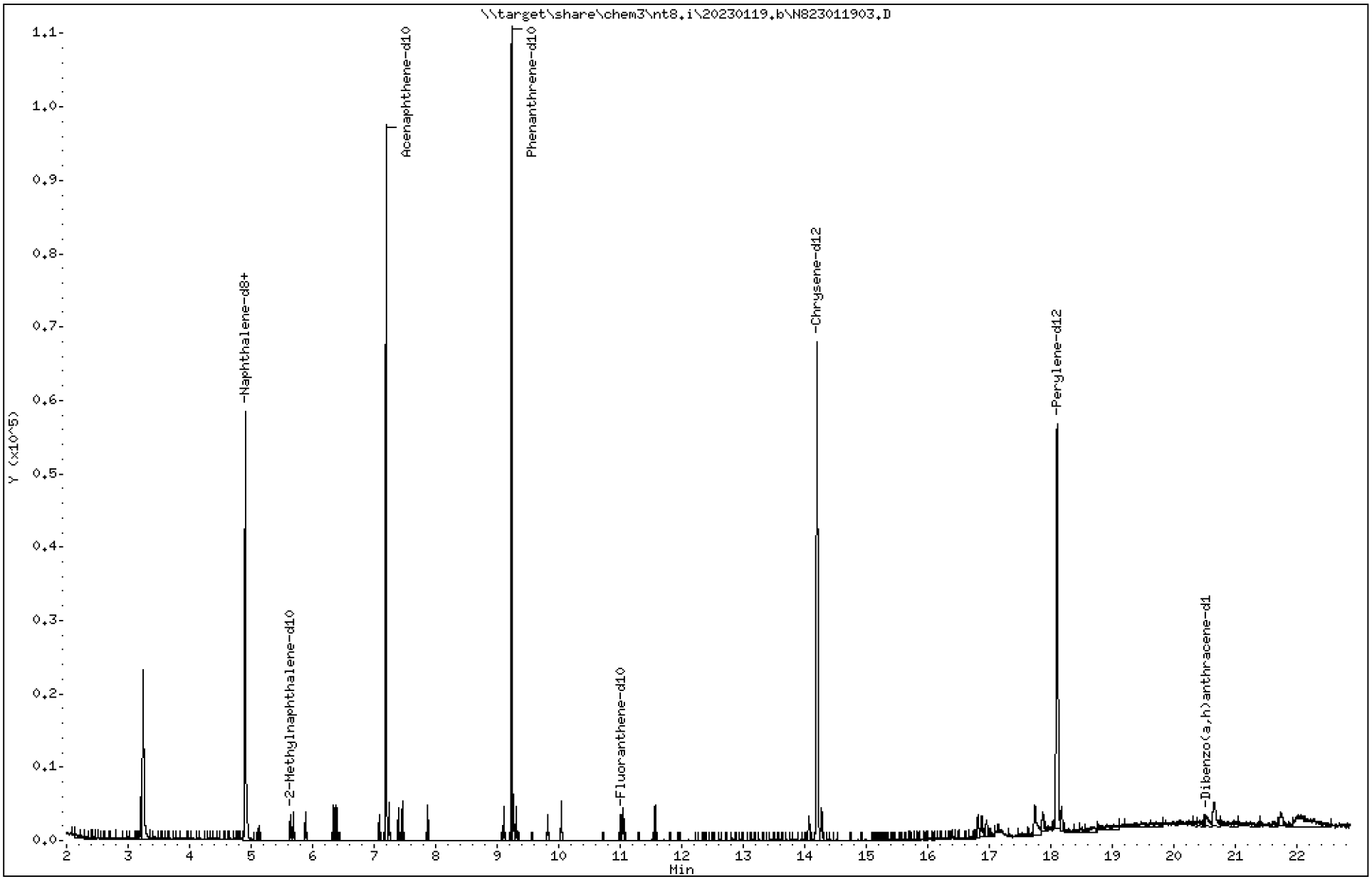
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Data File: \\target\share\chem3\nt8.i\20230119.b\N823011903.D
Date : 19-JAN-2023 11:26
Client ID:
Sample Info: IC01230119,

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011903.D
Lab Smp Id: SLA0213-CAL1
Inj Date : 19-JAN-2023 11:26
Operator : JZ Inst ID: nt8.i
Smp Info : IC01230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	46132	2.00000	
	2 Naphthalene	128	4.938	4.938	(1.006)	2425	0.10000	0.1131
$	3 2-Methylnaphthalene-d10	152	5.643	5.640	(1.150)	1351	0.10000	0.1074
	4 2-Methylnaphthalene	141	5.691	5.687	(1.160)	1288	0.10000	0.1092
	5 1-methylnaphthalene	141	5.883	5.887	(1.199)	1309	0.10000	0.1093
	7 Biphenyl	154	6.345	6.348	(0.882)	2093	0.10000	0.1164
	8 2,6-Dimethylnaphthalene	156	6.389	6.392	(0.888)	1372	0.10000	0.1078
	9 Acenaphthylene	152	7.085	7.088	(0.985)	2139	0.10000	0.1039
*	10 Acenaphthene-d10	164	7.196	7.196	(1.000)	27261	2.00000	
	11 Acenaphthene	153	7.246	7.246	(1.007)	1580	0.10000	0.1146
	12 Dibenzofuran	168	7.395	7.398	(1.028)	2530	0.10000	0.1208
	13 1,6,7-Trimethylnaphthalene	170	7.461	7.464	(1.037)	1502	0.10000	0.1137
	14 Fluorene	166	7.876	7.875	(1.094)	1818	0.10000	0.1117
	18 Dibenzothiophene	184	9.109	9.112	(0.986)	2620	0.10000	0.1137
*	15 Phenanthrene-d10	188	9.235	9.235	(1.000)	52158	2.00000	
	16 Phenanthrene	178	9.270	9.273	(1.004)	3130	0.10000	0.1229
	17 Anthracene	178	9.311	9.314	(1.008)	2582	0.10000	0.1116
	19 Carbazole	167	9.823	9.826	(1.064)	2339	0.10000	0.1102
	20 1-Methylphenanthrene	192	10.048	10.051	(1.088)	2073	0.10000	0.1129
	22 Fluoranthene	202	11.053	11.056	(1.197)	3132	0.10000	0.1129
$	21 Fluoranthene-d10	212	11.015	11.018	(1.193)	2349	0.10000	0.1021
	23 Pyrene	202	11.572	11.575	(0.815)	3183	0.10000	0.1142
	24 Benzo(a)anthracene	228	14.073	14.079	(0.991)	2698	0.10000	0.1068
*	25 Chrysene-d12	240	14.203	14.206	(1.000)	44953	2.00000	
	27 Chrysene	228	14.275	14.282	(1.005)	3107	0.10000	0.1155
	28 Benzo(b)fluoranthene	252	16.821	16.833	(0.929)	2781	0.10000	0.1147
	29 Benzo(k)fluoranthene	252	16.881	16.897	(0.932)	2763	0.10000	0.1163
	30 Benzo(j)fluoranthene	252	16.960	16.972	(0.936)	2275	0.10000	0.1064
	31 Total Benzofluoranthenes	252	16.821	16.833	(0.929)	7840	0.30000	0.3414(M)
	34 Benzo(e)pyrene	252	17.747	17.760	(0.980)	2886	0.10000	0.1194
	32 Benzo(a)pyrene	252	17.874	17.889	(0.987)	2373	0.10000	0.1112
*	33 Perylene-d12	264	18.111	18.114	(1.000)	41635	2.00000	
	35 Perylene	252	18.184	18.193	(1.004)	2685	0.10000	0.1173

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.546	20.565	(1.134)	1208	0.10000	0.09040(M)
37 Indeno(1,2,3-cd)pyrene	276	20.666	20.691	(1.141)	2516	0.10000	0.1035
38 Dibenzo(a,h)anthracene	278	20.666	20.685	(1.141)	2184	0.10000	0.1044
39 Benzo(g,h,i)perylene	276	21.757	21.782	(1.201)	2421	0.10000	0.1099

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011903.D
Lab Smp Id: SLA0213-CAL1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46132	3.19
10 Acenaphthene-d10	26411	13206	52822	27261	3.22
15 Phenanthrene-d10	49210	24605	98420	52158	5.99
25 Chrysene-d12	42994	21497	85988	44953	4.56
33 Perylene-d12	40520	20260	81040	41635	2.75

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

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

REVIEW SUMMARY FOR FILE - N823011903.D

Lab ID: SLA0213-CAL1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 11:26

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

Quant Method: ICAL

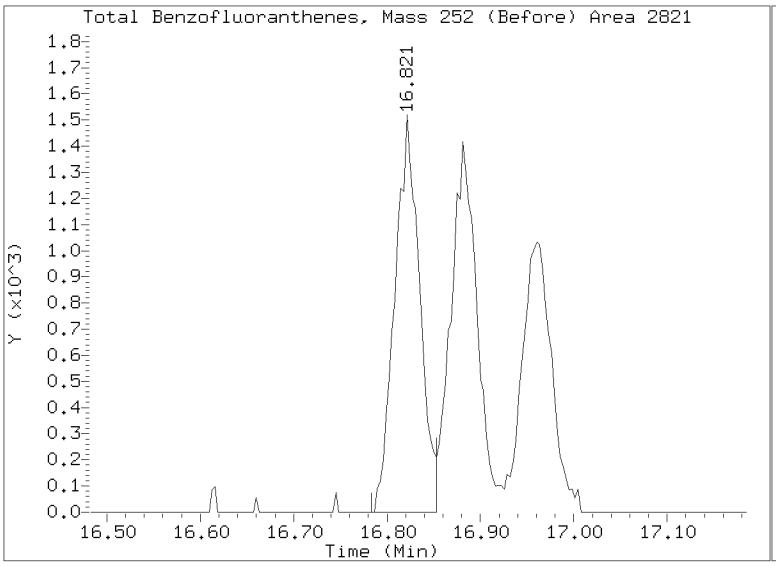
No RRT check performed

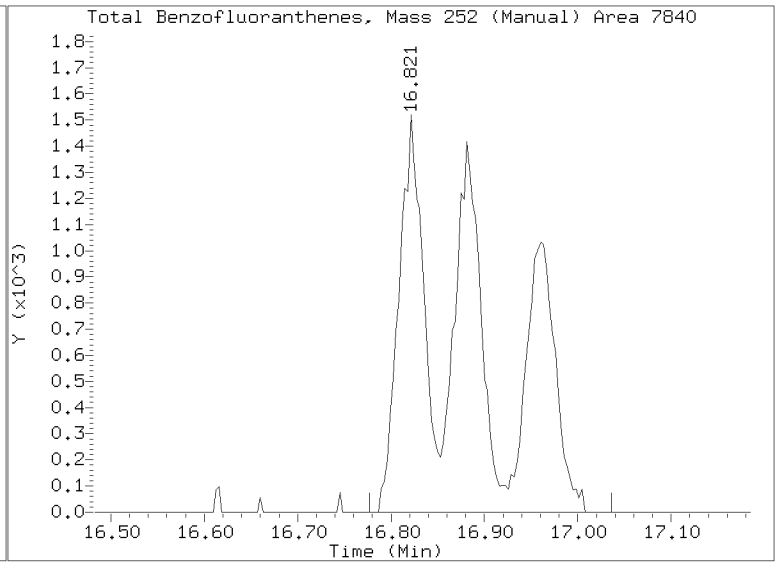
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

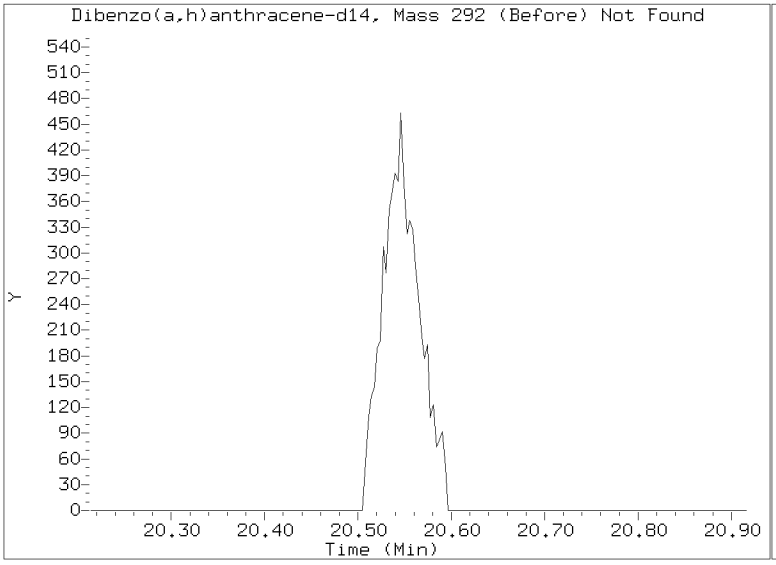
* Only compounds listed in the work order have been verified by the analyst *

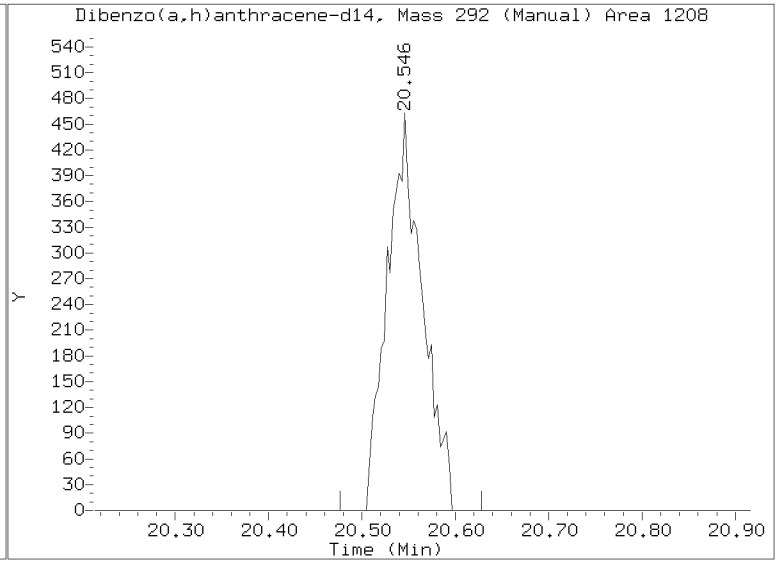
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011903.D
Injection Date: 19-JAN-2023 11:26
Lab ID:SLA0213-CAL1 Client ID:
Report Date: 01/19/2023 20:12









Data File: \\target\share\chem3\nt8.i\20230119.b\N823011904.D

Date : 19-JAN-2023 11:58

Client ID:

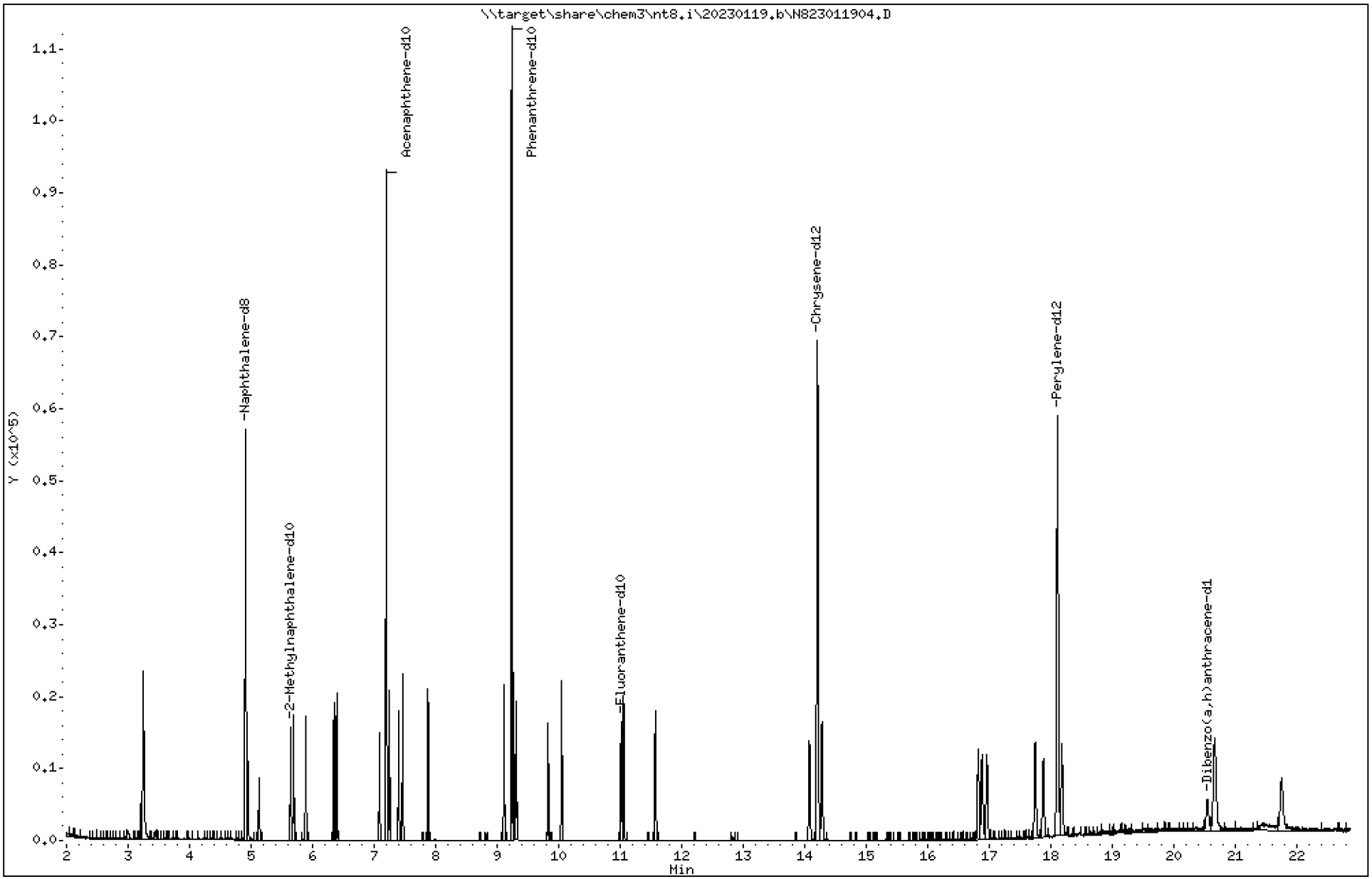
Instrument: nt8.i

Sample Info: IC05230119,

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011904.D
Lab Smp Id: SLA0213-CAL2
Inj Date : 19-JAN-2023 11:58
Operator : JZ Inst ID: nt8.i
Smp Info : IC05230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.913	4.906	(1.000)	45056	2.00000	
	2 Naphthalene	128	4.941	4.938	(1.006)	9917	0.50000	0.4734
$	3 2-Methylnaphthalene-d10	152	5.646	5.640	(1.149)	5556	0.50000	0.4522
	4 2-Methylnaphthalene	141	5.694	5.687	(1.159)	5447	0.50000	0.4727
	5 1-methylnaphthalene	141	5.890	5.887	(1.199)	5499	0.50000	0.4702
	7 Biphenyl	154	6.351	6.348	(0.882)	8183	0.50000	0.4638
	8 2,6-Dimethylnaphthalene	156	6.396	6.392	(0.888)	5677	0.50000	0.4546
	9 Acenaphthylene	152	7.091	7.088	(0.985)	8616	0.50000	0.4266
*	10 Acenaphthene-d10	164	7.199	7.196	(1.000)	26746	2.00000	
	11 Acenaphthene	153	7.249	7.246	(1.007)	6285	0.50000	0.4644
	12 Dibenzofuran	168	7.401	7.398	(1.028)	9690	0.50000	0.4714
	13 1,6,7-Trimethylnaphthalene	170	7.464	7.464	(1.037)	5886	0.50000	0.4541
	14 Fluorene	166	7.879	7.875	(1.094)	7132	0.50000	0.4468
	18 Dibenzothiophene	184	9.112	9.112	(0.986)	10291	0.50000	0.4588
*	15 Phenanthrene-d10	188	9.238	9.235	(1.000)	50759	2.00000	
	16 Phenanthrene	178	9.273	9.273	(1.004)	11508	0.50000	0.4641
	17 Anthracene	178	9.314	9.314	(1.008)	10014	0.50000	0.4446
	19 Carbazole	167	9.829	9.826	(1.064)	9050	0.50000	0.4383
	20 1-Methylphenanthrene	192	10.051	10.051	(1.088)	7947	0.50000	0.4448
	22 Fluoranthene	202	11.056	11.056	(1.197)	12335	0.50000	0.4570
$	21 Fluoranthene-d10	212	11.018	11.018	(1.193)	9575	0.50000	0.4276
	23 Pyrene	202	11.575	11.575	(0.815)	11906	0.50000	0.4300
	24 Benzo(a)anthracene	228	14.079	14.079	(0.991)	10516	0.50000	0.4190
*	25 Chrysene-d12	240	14.209	14.206	(1.000)	44658	2.00000	
	27 Chrysene	228	14.278	14.282	(1.005)	12076	0.50000	0.4520
	28 Benzo(b)fluoranthene	252	16.827	16.833	(0.929)	10402	0.50000	0.4196
	29 Benzo(k)fluoranthene	252	16.887	16.897	(0.932)	10575	0.50000	0.4355
	30 Benzo(j)fluoranthene	252	16.963	16.972	(0.936)	9796	0.50000	0.4481
	31 Total Benzofluoranthenes	252	16.827	16.833	(0.929)	29834	1.50000	1.271(M)
	34 Benzo(e)pyrene	252	17.753	17.760	(0.980)	10884	0.50000	0.4403
	32 Benzo(a)pyrene	252	17.883	17.889	(0.987)	9341	0.50000	0.4282
*	33 Perylene-d12	264	18.114	18.114	(1.000)	42567	2.00000	
	35 Perylene	252	18.187	18.193	(1.004)	10227	0.50000	0.4368

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.549	20.565	(1.134)	5823	0.50000	0.4262(M)
37 Indeno(1,2,3-cd)pyrene	276	20.675	20.691	(1.141)	10592	0.50000	0.4262
38 Dibenzo(a,h)anthracene	278	20.666	20.685	(1.141)	8884	0.50000	0.4154(M)
39 Benzo(g,h,i)perylene	276	21.760	21.782	(1.201)	9687	0.50000	0.4302

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011904.D
Lab Smp Id: SLA0213-CAL2
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	45056	0.79
10 Acenaphthene-d10	26411	13206	52822	26746	1.27
15 Phenanthrene-d10	49210	24605	98420	50759	3.15
25 Chrysene-d12	42994	21497	85988	44658	3.87
33 Perylene-d12	40520	20260	81040	42567	5.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.04
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.04
33 Perylene-d12	18.11	17.61	18.61	18.11	0.02

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

REVIEW SUMMARY FOR FILE - N823011904.D

Lab ID: SLA0213-CAL2
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 11:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

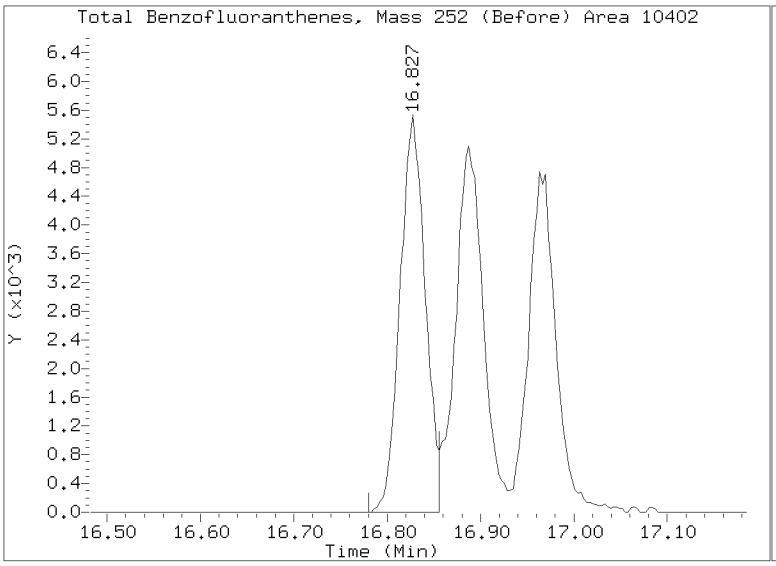
No RRT check performed

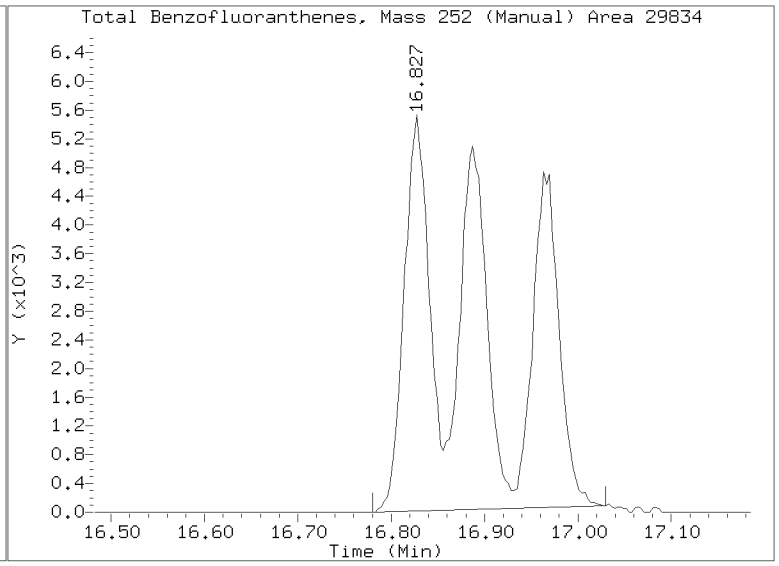
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

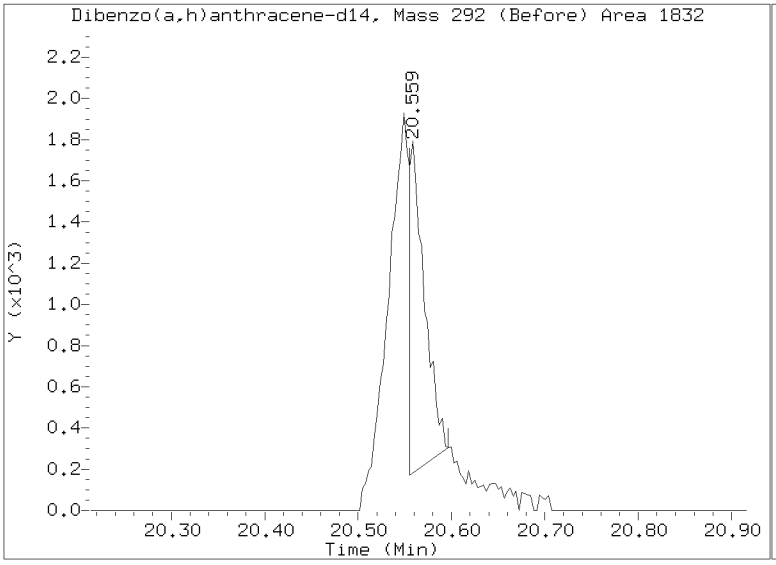
* Only compounds listed in the work order have been verified by the analyst *

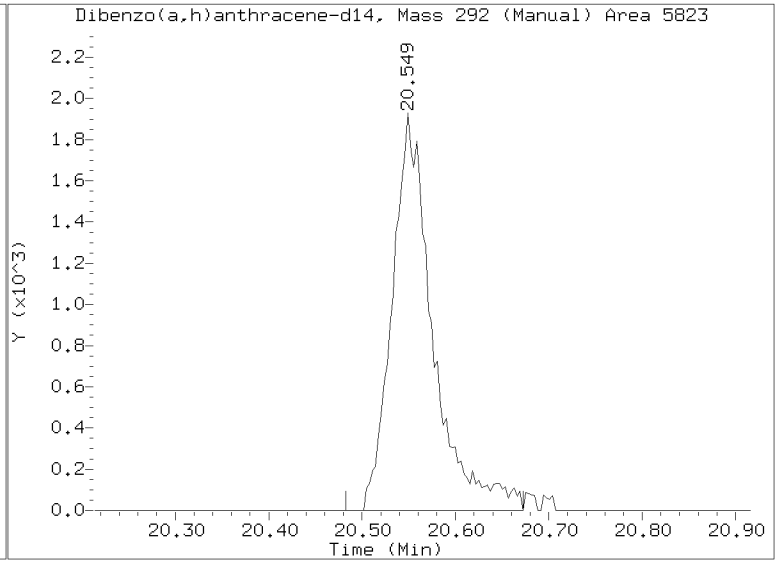
Quant Ion Manual Peak Adjustment Report

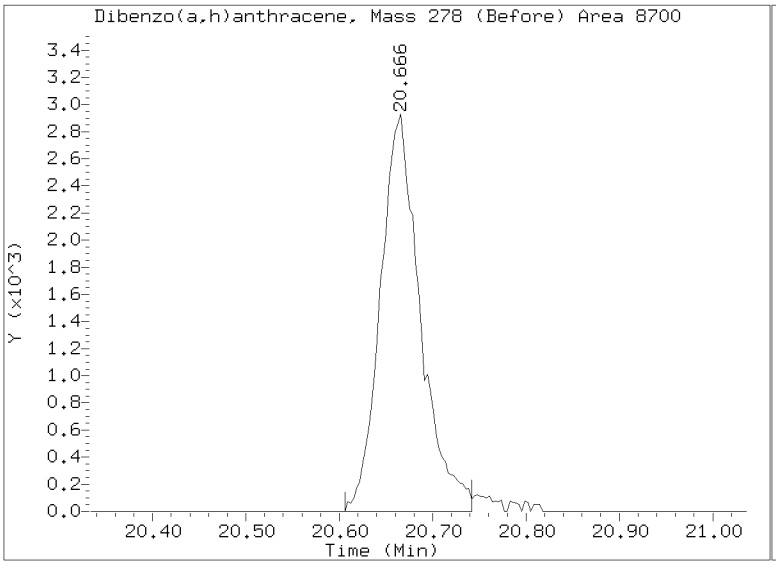
Datafile: //target/share/chem3/nt8.i/20230119.b/N823011904.D
Injection Date: 19-JAN-2023 11:58
Lab ID:SLA0213-CAL2 Client ID:
Report Date: 01/19/2023 20:12

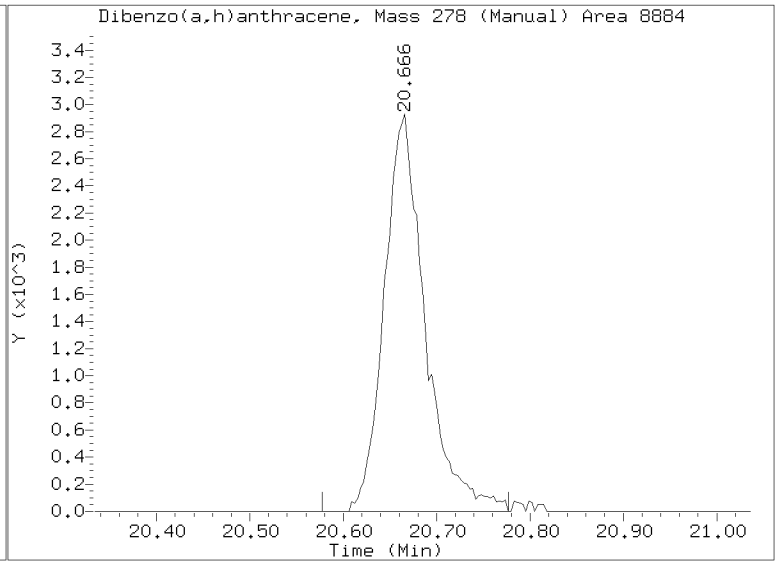












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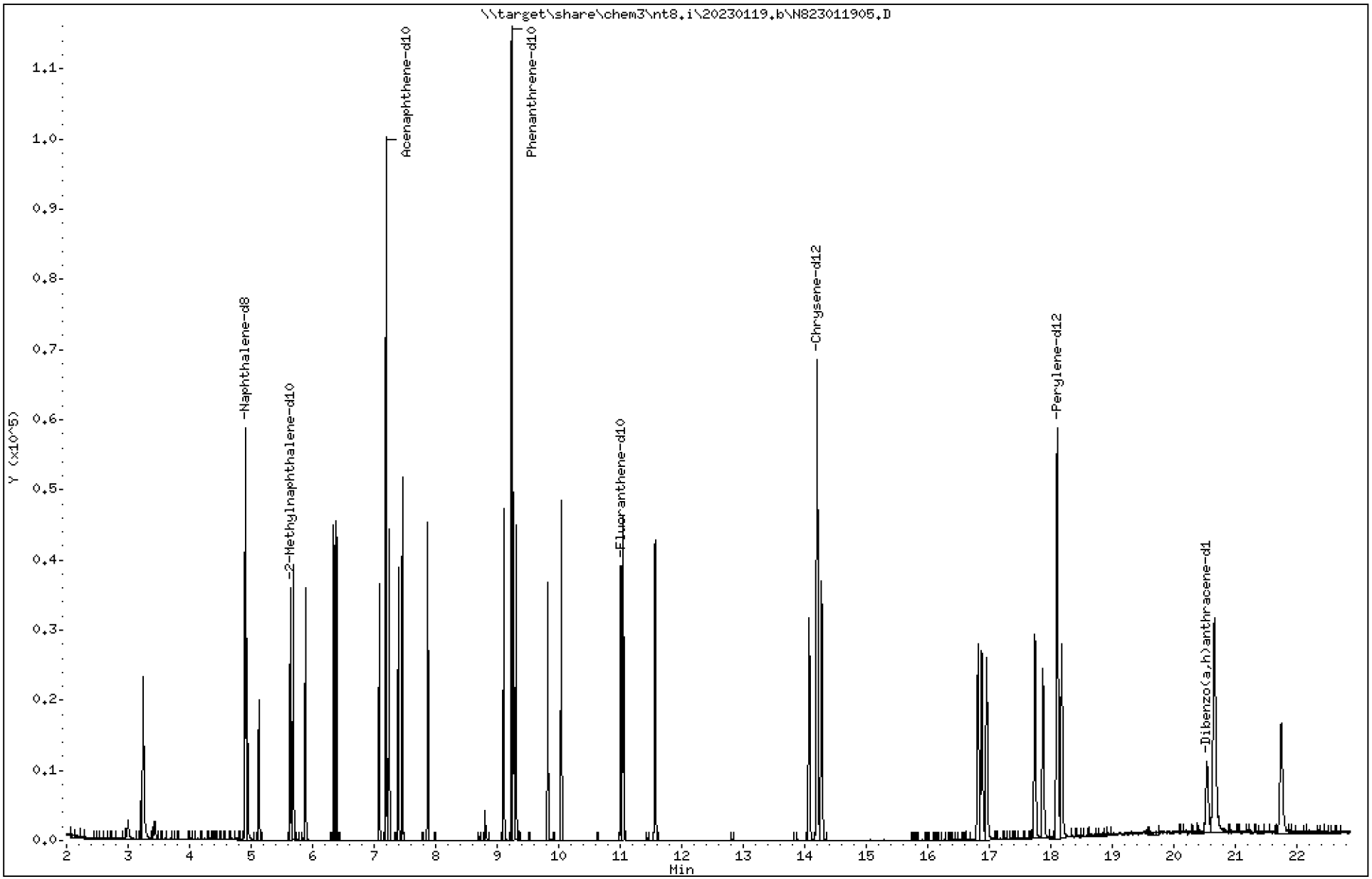
Date : 19-JAN-2023 12:25
Client ID:
Sample Info: IC1230119,

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011905.D
Lab Smp Id: SLA0213-CAL3
Inj Date : 19-JAN-2023 12:25
Operator : JZ Inst ID: nt8.i
Smp Info : IC1230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	47180	2.00000	
	2 Naphthalene	128	4.938	4.938	(1.006)	21563	1.00000	0.9830
$	3 2-Methylnaphthalene-d10	152	5.640	5.640	(1.150)	12609	1.00000	0.9799
	4 2-Methylnaphthalene	141	5.687	5.687	(1.159)	11715	1.00000	0.9709
	5 1-methylnaphthalene	141	5.887	5.887	(1.200)	11968	1.00000	0.9773
	7 Biphenyl	154	6.345	6.348	(0.882)	17796	1.00000	0.9564
	8 2,6-Dimethylnaphthalene	156	6.389	6.392	(0.888)	12741	1.00000	0.9674
	9 Acenaphthylene	152	7.085	7.088	(0.985)	20021	1.00000	0.9400
*	10 Acenaphthene-d10	164	7.196	7.196	(1.000)	28206	2.00000	
	11 Acenaphthene	153	7.246	7.246	(1.007)	13666	1.00000	0.9576
	12 Dibenzofuran	168	7.395	7.398	(1.028)	20714	1.00000	0.9556
	13 1,6,7-Trimethylnaphthalene	170	7.461	7.464	(1.037)	12912	1.00000	0.9446
	14 Fluorene	166	7.875	7.875	(1.094)	16006	1.00000	0.9508
	18 Dibenzothiophene	184	9.109	9.112	(0.986)	22320	1.00000	0.9489
*	15 Phenanthrene-d10	188	9.235	9.235	(1.000)	53233	2.00000	
	16 Phenanthrene	178	9.270	9.273	(1.004)	24646	1.00000	0.9478
	17 Anthracene	178	9.311	9.314	(1.008)	22258	1.00000	0.9423
	19 Carbazole	167	9.823	9.826	(1.064)	20007	1.00000	0.9239
	20 1-Methylphenanthrene	192	10.048	10.051	(1.088)	17326	1.00000	0.9246
	22 Fluoranthene	202	11.050	11.056	(1.197)	27227	1.00000	0.9619
$	21 Fluoranthene-d10	212	11.015	11.018	(1.193)	21953	1.00000	0.9347
	23 Pyrene	202	11.572	11.575	(0.815)	26878	1.00000	0.9325
	24 Benzo(a)anthracene	228	14.076	14.079	(0.991)	23406	1.00000	0.8959
*	25 Chrysene-d12	240	14.203	14.206	(1.000)	46493	2.00000	
	27 Chrysene	228	14.275	14.282	(1.005)	26230	1.00000	0.9431
	28 Benzo(b)fluoranthene	252	16.824	16.833	(0.929)	22805	1.00000	0.8782
	29 Benzo(k)fluoranthene	252	16.881	16.897	(0.932)	22425	1.00000	0.8816
	30 Benzo(j)fluoranthene	252	16.960	16.972	(0.936)	20574	1.00000	0.8985
	31 Total Benzofluoranthenes	252	16.824	16.833	(0.929)	64985	3.00000	2.642(M)
	34 Benzo(e)pyrene	252	17.750	17.760	(0.980)	23026	1.00000	0.8892
	32 Benzo(a)pyrene	252	17.877	17.889	(0.987)	19956	1.00000	0.8733
*	33 Perylene-d12	264	18.111	18.114	(1.000)	44587	2.00000	
	35 Perylene	252	18.184	18.193	(1.004)	22015	1.00000	0.8978

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.549	20.565	(1.135)	13546	1.00000	0.9466
37 Indeno(1,2,3-cd)pyrene	276	20.672	20.691	(1.141)	23911	1.00000	0.9185
38 Dibenzo(a,h)anthracene	278	20.656	20.685	(1.141)	19954	1.00000	0.8907
39 Benzo(g,h,i)perylene	276	21.747	21.782	(1.201)	20977	1.00000	0.8894

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011905.D
Lab Smp Id: SLA0213-CAL3
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	47180	5.54
10 Acenaphthene-d10	26411	13206	52822	28206	6.80
15 Phenanthrene-d10	49210	24605	98420	53233	8.18
25 Chrysene-d12	42994	21497	85988	46493	8.14
33 Perylene-d12	40520	20260	81040	44587	10.04

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

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

REVIEW SUMMARY FOR FILE - N823011905.D

Lab ID: SLA0213-CAL3
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 12:25

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

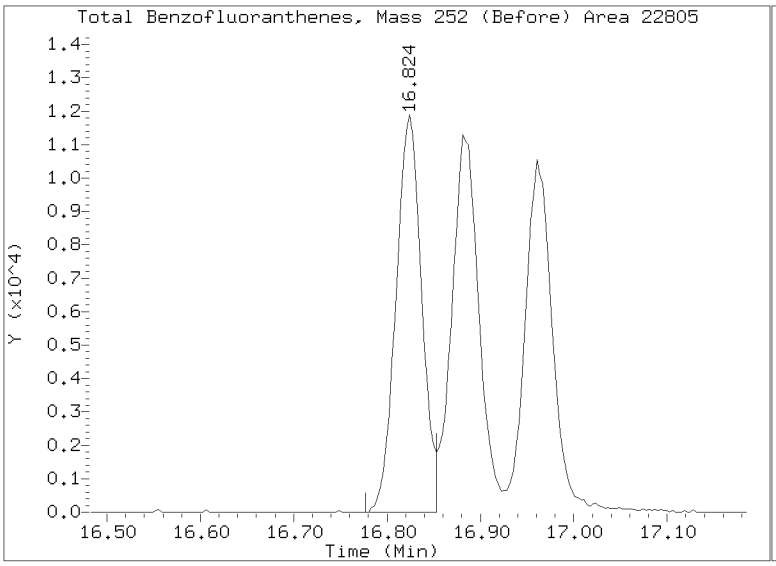
No RRT check performed

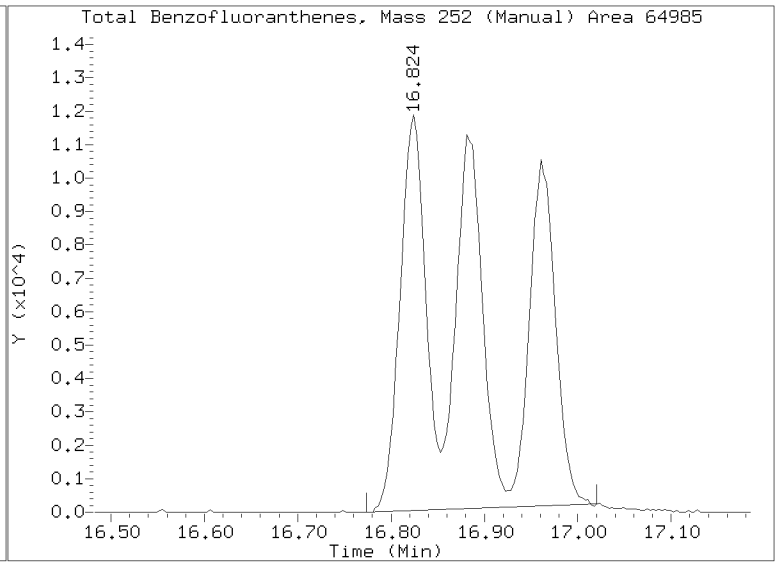
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011905.D
Injection Date: 19-JAN-2023 12:25
Lab ID:SLA0213-CAL3 Client ID:
Report Date: 01/19/2023 20:12

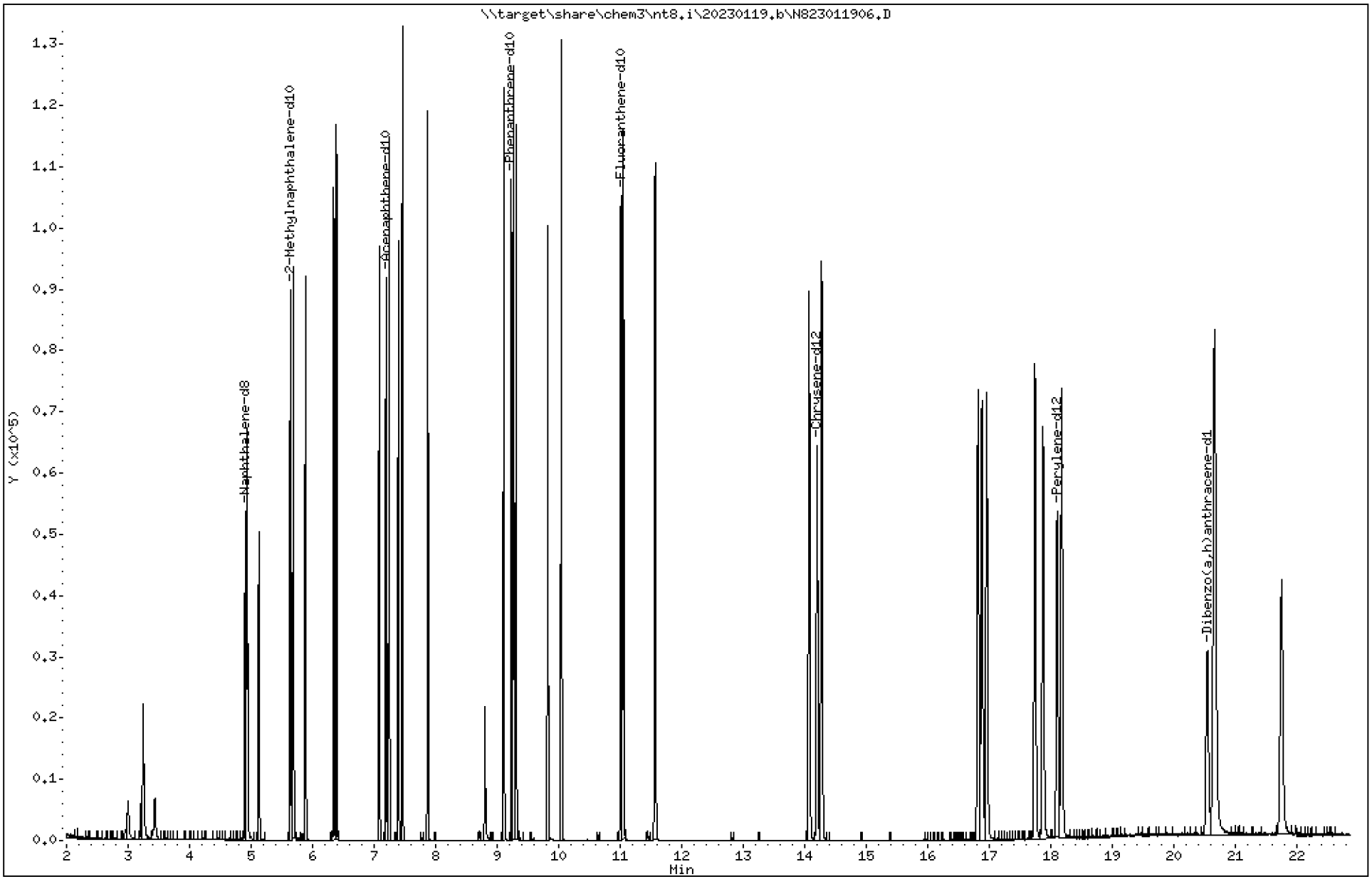




Data File: \\target\share\chem3\nt8.i\20230119.b\N823011906.D
Date : 19-JAN-2023 12:52
Client ID:
Sample Info: IC25230119,

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011906.D
Lab Smp Id: SLA0213-CAL4
Inj Date : 19-JAN-2023 12:52
Operator : JZ Inst ID: nt8.i
Smp Info : IC25230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	44704	2.00000	
	2 Naphthalene	128	4.938	4.938	(1.006)	52764	2.50000	2.538
$	3 2-Methylnaphthalene-d10	152	5.640	5.640	(1.150)	31709	2.50000	2.601
	4 2-Methylnaphthalene	141	5.687	5.687	(1.159)	29737	2.50000	2.601
	5 1-methylnaphthalene	141	5.883	5.887	(1.199)	30098	2.50000	2.594
	7 Biphenyl	154	6.345	6.348	(0.882)	44716	2.50000	2.566
	8 2,6-Dimethylnaphthalene	156	6.389	6.392	(0.888)	32396	2.50000	2.627
	9 Acenaphthylene	152	7.085	7.088	(0.985)	53242	2.50000	2.670
*	10 Acenaphthene-d10	164	7.196	7.196	(1.000)	26411	2.00000	
	11 Acenaphthene	153	7.246	7.246	(1.007)	34335	2.50000	2.569
	12 Dibenzofuran	168	7.395	7.398	(1.028)	50810	2.50000	2.503
	13 1,6,7-Trimethylnaphthalene	170	7.461	7.464	(1.037)	33264	2.50000	2.599
	14 Fluorene	166	7.872	7.875	(1.094)	40499	2.50000	2.569
	18 Dibenzothiophene	184	9.109	9.112	(0.986)	56399	2.50000	2.594
*	15 Phenanthrene-d10	188	9.235	9.235	(1.000)	49210	2.00000	
	16 Phenanthrene	178	9.270	9.273	(1.004)	61033	2.50000	2.539
	17 Anthracene	178	9.311	9.314	(1.008)	57918	2.50000	2.652
	19 Carbazole	167	9.823	9.826	(1.064)	52870	2.50000	2.641
	20 1-Methylphenanthrene	192	10.048	10.051	(1.088)	45452	2.50000	2.624
	22 Fluoranthene	202	11.053	11.056	(1.197)	68546	2.50000	2.620
$	21 Fluoranthene-d10	212	11.015	11.018	(1.193)	58746	2.50000	2.706
	23 Pyrene	202	11.572	11.575	(0.815)	69587	2.50000	2.611
	24 Benzo(a)anthracene	228	14.076	14.079	(0.991)	63802	2.50000	2.641
*	25 Chrysene-d12	240	14.202	14.206	(1.000)	42994	2.00000	
	27 Chrysene	228	14.278	14.282	(1.005)	65955	2.50000	2.564
	28 Benzo(b)fluoranthene	252	16.821	16.833	(0.929)	61818	2.50000	2.620
	29 Benzo(k)fluoranthene	252	16.884	16.897	(0.932)	59716	2.50000	2.583
	30 Benzo(j)fluoranthene	252	16.963	16.972	(0.937)	54944	2.50000	2.640
	31 Total Benzofluoranthenes	252	16.821	16.833	(0.929)	176122	7.50000	7.880(M)
	34 Benzo(e)pyrene	252	17.747	17.760	(0.980)	60179	2.50000	2.557
	32 Benzo(a)pyrene	252	17.877	17.889	(0.987)	54569	2.50000	2.628
*	33 Perylene-d12	264	18.111	18.114	(1.000)	40520	2.00000	
	35 Perylene	252	18.183	18.193	(1.004)	57968	2.50000	2.601

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.552	20.565	(1.135)	37101	2.50000	2.853
37 Indeno(1,2,3-cd)pyrene	276	20.675	20.691	(1.142)	63691	2.50000	2.692
38 Dibenzo(a,h)anthracene	278	20.662	20.685	(1.141)	54772	2.50000	2.690
39 Benzo(g,h,i)perylene	276	21.756	21.782	(1.201)	56053	2.50000	2.615

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011906.D
Lab Smp Id: SLA0213-CAL4
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	44704	0.00
10 Acenaphthene-d10	26411	13206	52822	26411	0.00
15 Phenanthrene-d10	49210	24605	98420	49210	0.00
25 Chrysene-d12	42994	21497	85988	42994	0.00
33 Perylene-d12	40520	20260	81040	40520	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

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

REVIEW SUMMARY FOR FILE - N823011906.D

Lab ID: SLA0213-CAL4
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 12:52

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

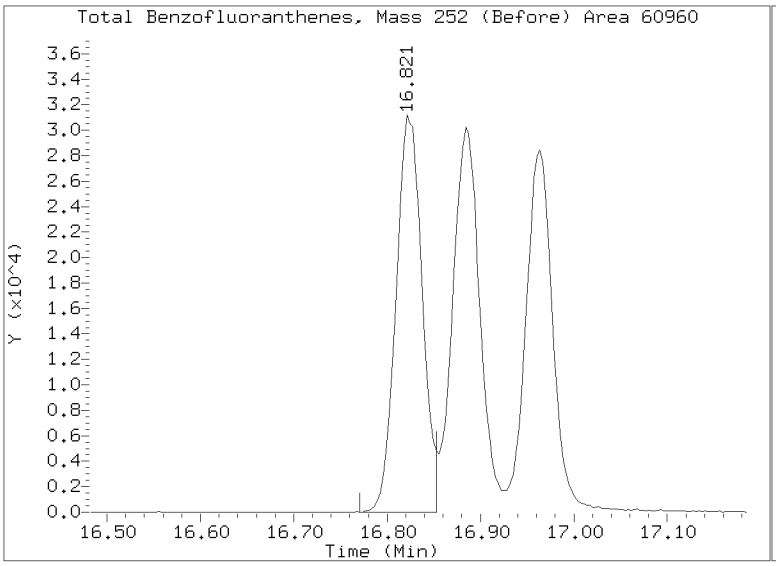
No RRT check performed

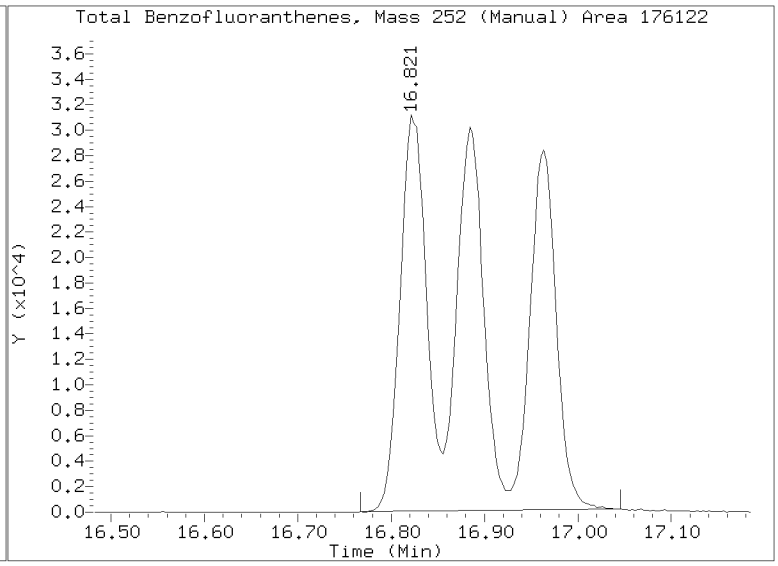
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011906.D
Injection Date: 19-JAN-2023 12:52
Lab ID:SLA0213-CAL4 Client ID:
Report Date: 01/19/2023 20:12

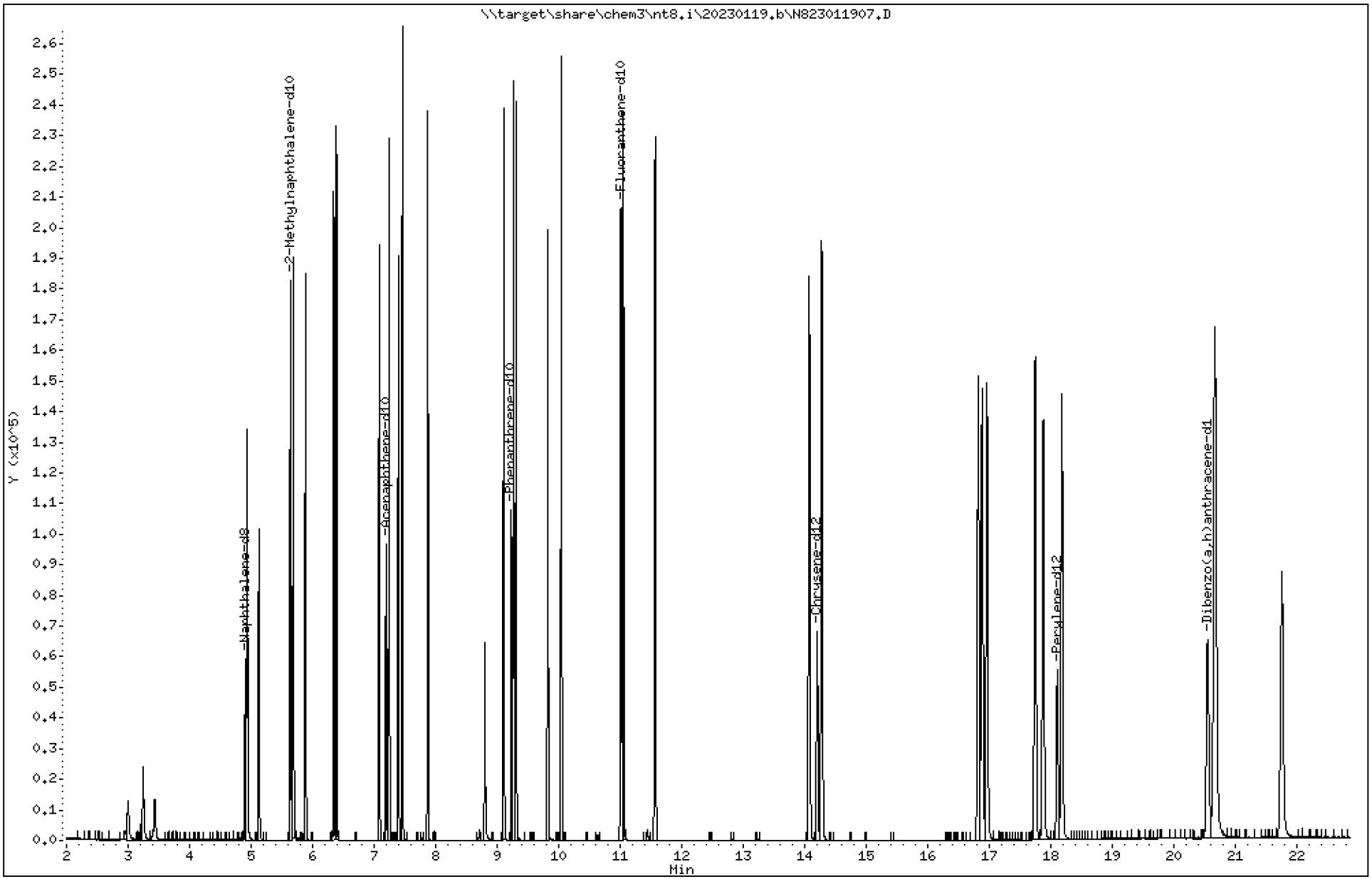




Data File: \\target\share\chem3\nt8.i\20230119.b\N823011907.D
Date : 19-JAN-2023 13:19
Client ID:
Sample Info: IC5230119,

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011907.D
Lab Smp Id: SLA0213-CAL5
Inj Date : 19-JAN-2023 13:19
Operator : JZ Inst ID: nt8.i
Smp Info : IC5230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1	Naphthalene-d8	136	4.909	4.906	(1.000)	46542	2.00000	
	2	Naphthalene	128	4.938	4.938	(1.006)	105414	5.00000	4.871
$	3	2-Methylnaphthalene-d10	152	5.640	5.640	(1.149)	64045	5.00000	5.046
	4	2-Methylnaphthalene	141	5.687	5.687	(1.158)	59129	5.00000	4.967
	5	1-methylnaphthalene	141	5.887	5.887	(1.199)	59615	5.00000	4.935
	7	Biphenyl	154	6.345	6.348	(0.882)	88014	5.00000	4.827
	8	2,6-Dimethylnaphthalene	156	6.389	6.392	(0.888)	64484	5.00000	4.997
	9	Acenaphthylene	152	7.085	7.088	(0.985)	108746	5.00000	5.211
*	10	Acenaphthene-d10	164	7.196	7.196	(1.000)	27638	2.00000	
	11	Acenaphthene	153	7.246	7.246	(1.007)	67894	5.00000	4.855
	12	Dibenzofuran	168	7.395	7.398	(1.028)	100768	5.00000	4.744
	13	1,6,7-Trimethylnaphthalene	170	7.461	7.464	(1.037)	65911	5.00000	4.921
	14	Fluorene	166	7.875	7.875	(1.094)	82420	5.00000	4.996
	18	Dibenzothiophene	184	9.109	9.112	(0.987)	112243	5.00000	4.946
*	15	Phenanthrene-d10	188	9.232	9.235	(1.000)	51351	2.00000	
	16	Phenanthrene	178	9.270	9.273	(1.004)	119248	5.00000	4.754
	17	Anthracene	178	9.311	9.314	(1.009)	114927	5.00000	5.044
	19	Carbazole	167	9.823	9.826	(1.064)	106758	5.00000	5.111
	20	1-Methylphenanthrene	192	10.048	10.051	(1.088)	90954	5.00000	5.032
	22	Fluoranthene	202	11.053	11.056	(1.197)	135256	5.00000	4.954
$	21	Fluoranthene-d10	212	11.015	11.018	(1.193)	119286	5.00000	5.265
	23	Pyrene	202	11.572	11.575	(0.815)	140705	5.00000	5.068
	24	Benzo(a)anthracene	228	14.076	14.079	(0.991)	132618	5.00000	5.270
*	25	Chrysene-d12	240	14.203	14.206	(1.000)	44781	2.00000	
	27	Chrysene	228	14.278	14.282	(1.005)	132750	5.00000	4.955
	28	Benzo(b)fluoranthene	252	16.827	16.833	(0.929)	125757	5.00000	5.118
	29	Benzo(k)fluoranthene	252	16.887	16.897	(0.932)	122821	5.00000	5.103
	30	Benzo(j)fluoranthene	252	16.966	16.972	(0.937)	113399	5.00000	5.234
	31	Total Benzofluoranthenes	252	16.827	16.833	(0.929)	361443	15.0000	15.53(M)
	34	Benzo(e)pyrene	252	17.750	17.760	(0.980)	121964	5.00000	4.978
	32	Benzo(a)pyrene	252	17.883	17.889	(0.987)	112121	5.00000	5.186
*	33	Perylene-d12	264	18.111	18.114	(1.000)	42187	2.00000	
	35	Perylene	252	18.187	18.193	(1.004)	116268	5.00000	5.011

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.555	20.565	(1.135)	78264	5.00000	5.780
37 Indeno(1,2,3-cd)pyrene	276	20.681	20.691	(1.142)	129575	5.00000	5.260
38 Dibenzo(a,h)anthracene	278	20.669	20.685	(1.141)	112698	5.00000	5.317
39 Benzo(g,h,i)perylene	276	21.763	21.782	(1.202)	114826	5.00000	5.145

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011907.D
Lab Smp Id: SLA0213-CAL5
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46542	4.11
10 Acenaphthene-d10	26411	13206	52822	27638	4.65
15 Phenanthrene-d10	49210	24605	98420	51351	4.35
25 Chrysene-d12	42994	21497	85988	44781	4.16
33 Perylene-d12	40520	20260	81040	42187	4.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.06
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.23	-0.03
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

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

REVIEW SUMMARY FOR FILE - N823011907.D

Lab ID: SLA0213-CAL5
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 13:19

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

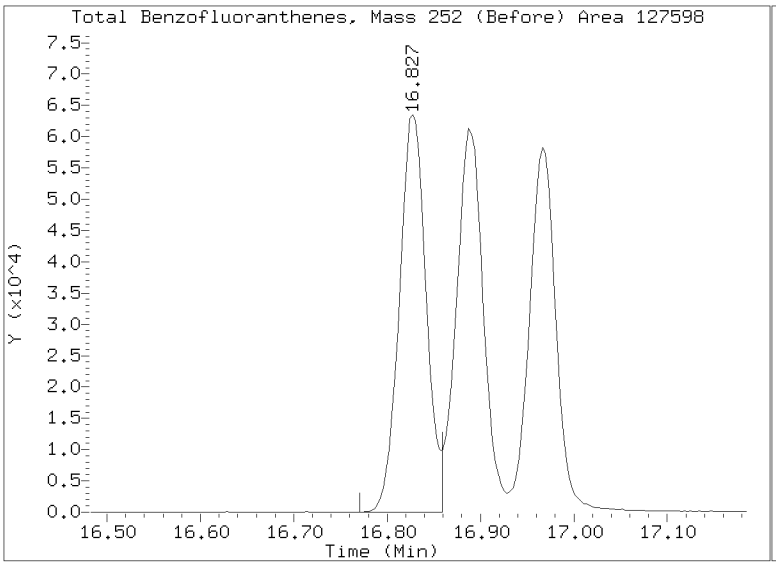
No RRT check performed

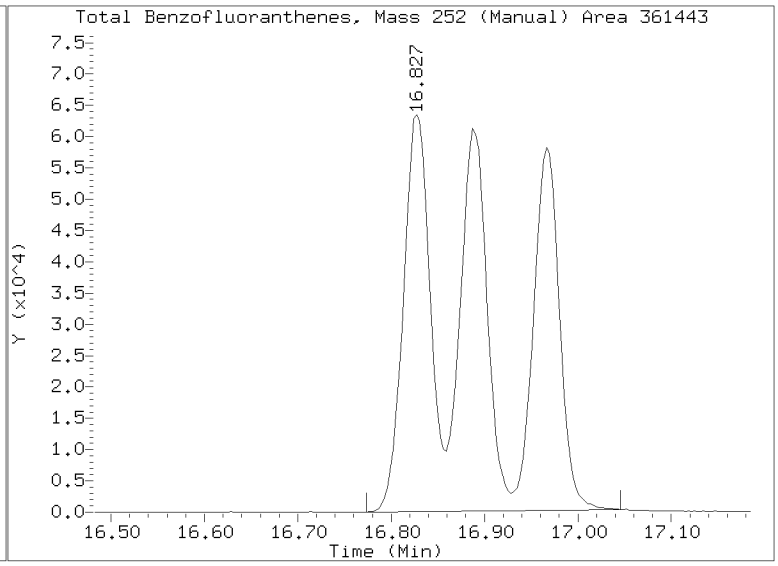
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

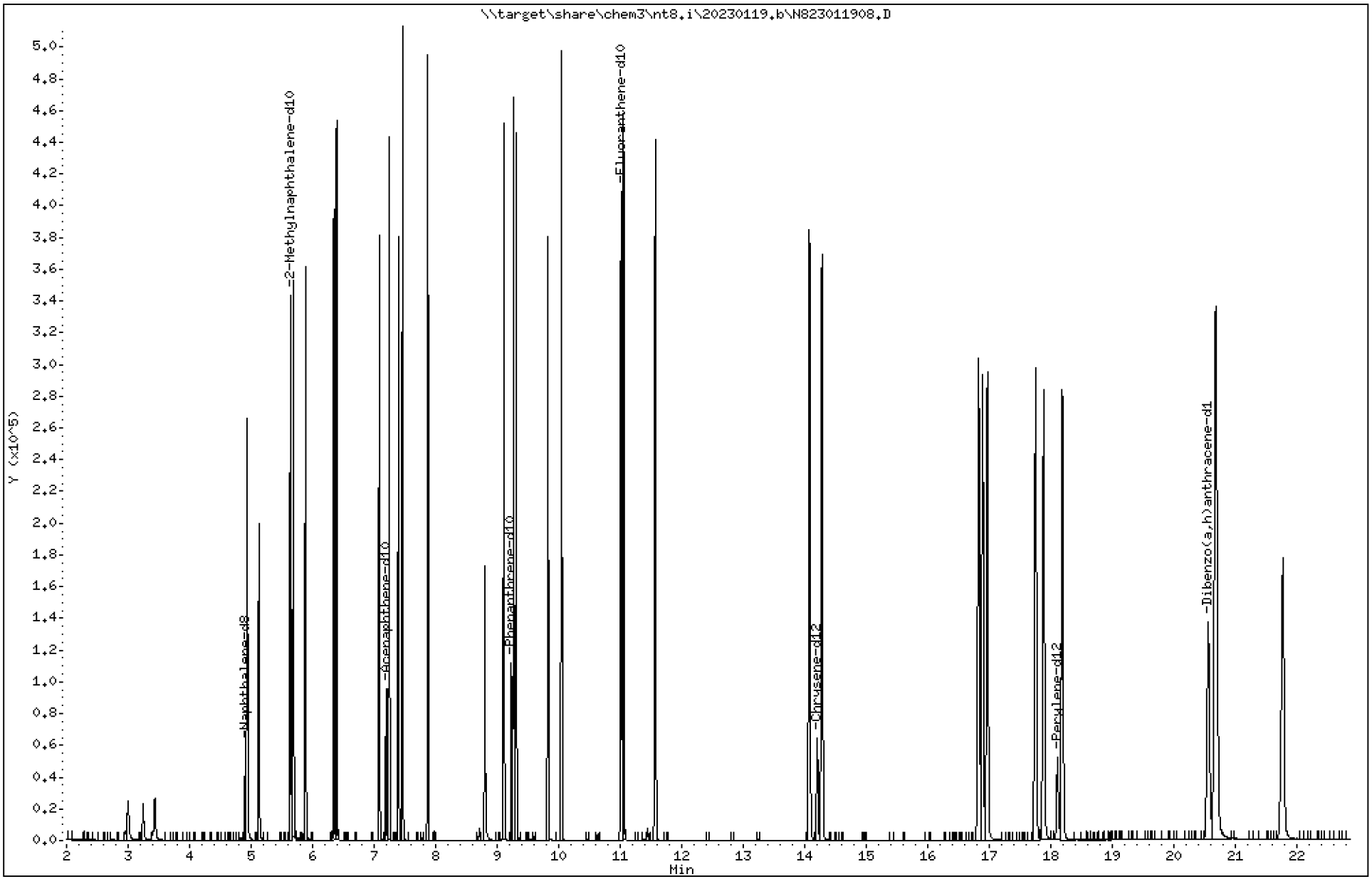
Datafile: //target/share/chem3/nt8.i/20230119.b/N823011907.D
Injection Date: 19-JAN-2023 13:19
Lab ID:SLA0213-CAL5 Client ID:
Report Date: 01/19/2023 20:12





Data File: \\target\share\chem3\nt8.i\20230119.b\N823011908.D
Date : 19-JAN-2023 13:46
Client ID:
Sample Info: IC10230119,

Instrument: nt8.i
Operator: JZ
Column phase: Rxi-17sil
Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011908.D
Lab Smp Id: SLA0213-CAL6
Inj Date : 19-JAN-2023 13:46
Operator : JZ Inst ID: nt8.i
Smp Info : IC10230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	46070	2.00000	
	2 Naphthalene	128	4.938	4.938	(1.006)	203510	10.0000	9.501
$	3 2-Methylnaphthalene-d10	152	5.640	5.640	(1.149)	124701	10.0000	9.925
	4 2-Methylnaphthalene	141	5.687	5.687	(1.159)	112895	10.0000	9.582
	5 1-methylnaphthalene	141	5.887	5.887	(1.200)	115357	10.0000	9.647
	7 Biphenyl	154	6.348	6.348	(0.882)	169086	10.0000	9.603
	8 2,6-Dimethylnaphthalene	156	6.392	6.392	(0.888)	124019	10.0000	9.952
	9 Acenaphthylene	152	7.088	7.088	(0.985)	213179	10.0000	10.58
*	10 Acenaphthene-d10	164	7.196	7.196	(1.000)	26689	2.00000	
	11 Acenaphthene	153	7.246	7.246	(1.007)	130872	10.0000	9.692
	12 Dibenzofuran	168	7.398	7.398	(1.028)	193532	10.0000	9.436
	13 1,6,7-Trimethylnaphthalene	170	7.464	7.464	(1.037)	127563	10.0000	9.863
	14 Fluorene	166	7.875	7.875	(1.094)	161125	10.0000	10.11
	18 Dibenzothiophene	184	9.112	9.112	(0.987)	217256	10.0000	9.701
*	15 Phenanthrene-d10	188	9.235	9.235	(1.000)	50683	2.00000	
	16 Phenanthrene	178	9.273	9.273	(1.004)	230002	10.0000	9.290
	17 Anthracene	178	9.314	9.314	(1.009)	221162	10.0000	9.834
	19 Carbazole	167	9.826	9.826	(1.064)	210036	10.0000	10.19
	20 1-Methylphenanthrene	192	10.051	10.051	(1.088)	178561	10.0000	10.01
	22 Fluoranthene	202	11.056	11.056	(1.197)	257643	10.0000	9.560
$	21 Fluoranthene-d10	212	11.018	11.018	(1.193)	235698	10.0000	10.54
	23 Pyrene	202	11.575	11.575	(0.815)	274116	10.0000	10.08
	24 Benzo(a)anthracene	228	14.079	14.079	(0.991)	268196	10.0000	10.88
*	25 Chrysene-d12	240	14.206	14.206	(1.000)	43880	2.00000	
	27 Chrysene	228	14.282	14.282	(1.005)	257418	10.0000	9.806
	28 Benzo(b)fluoranthene	252	16.833	16.833	(0.929)	252022	10.0000	10.64
	29 Benzo(k)fluoranthene	252	16.897	16.897	(0.933)	238915	10.0000	10.30
	30 Benzo(j)fluoranthene	252	16.972	16.972	(0.937)	216807	10.0000	10.38
	31 Total Benzofluoranthenes	252	16.833	16.833	(0.929)	704955	30.0000	31.43(M)
	34 Benzo(e)pyrene	252	17.760	17.760	(0.980)	240447	10.0000	10.18
	32 Benzo(a)pyrene	252	17.889	17.889	(0.988)	222990	10.0000	10.70
*	33 Perylene-d12	264	18.114	18.114	(1.000)	40659	2.00000	
	35 Perylene	252	18.193	18.193	(1.004)	226582	10.0000	10.13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.564	20.565	(1.135)	162230	10.0000	12.43
37 Indeno(1,2,3-cd)pyrene	276	20.691	20.691	(1.142)	252895	10.0000	10.65
38 Dibenzo(a,h)anthracene	278	20.685	20.685	(1.142)	223771	10.0000	10.95
39 Benzo(g,h,i)perylene	276	21.782	21.782	(1.202)	231445	10.0000	10.76

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011908.D
Lab Smp Id: SLA0213-CAL6
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46070	3.06
10 Acenaphthene-d10	26411	13206	52822	26689	1.05
15 Phenanthrene-d10	49210	24605	98420	50683	2.99
25 Chrysene-d12	42994	21497	85988	43880	2.06
33 Perylene-d12	40520	20260	81040	40659	0.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.02
33 Perylene-d12	18.11	17.61	18.61	18.11	0.02

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

REVIEW SUMMARY FOR FILE - N823011908.D

Lab ID: SLA0213-CAL6
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 13:46

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

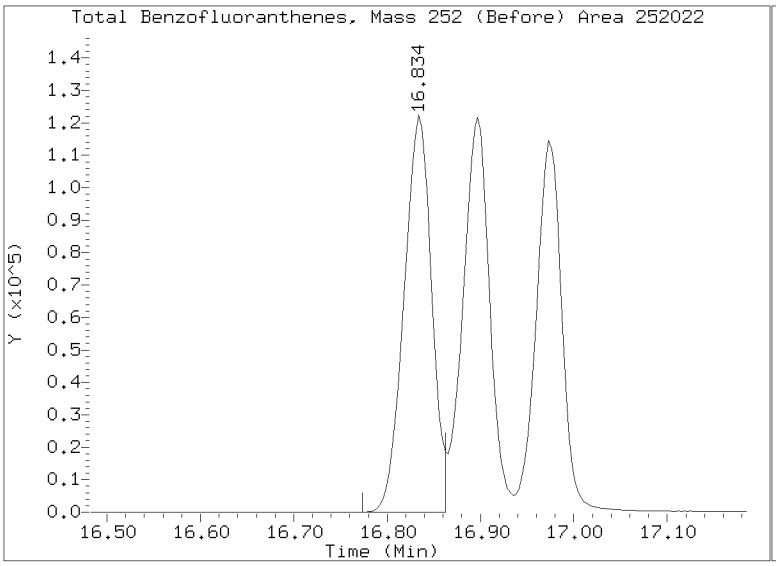
No RRT check performed

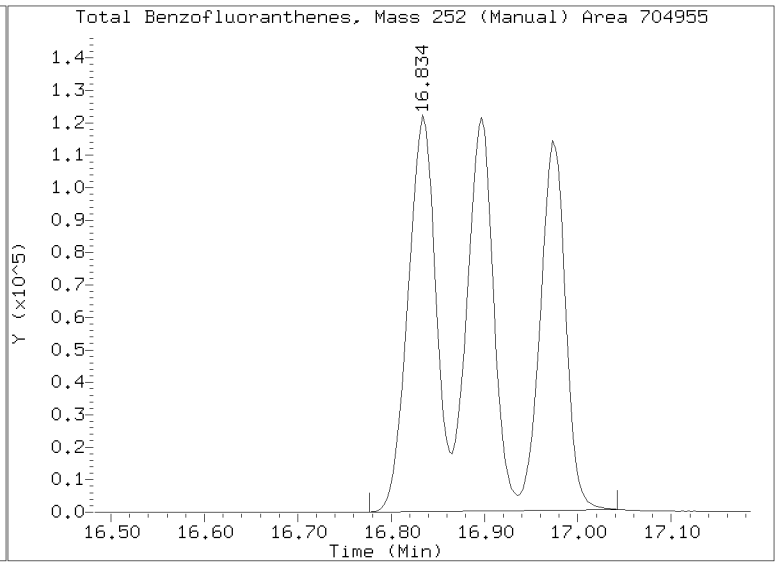
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011908.D
Injection Date: 19-JAN-2023 13:46
Lab ID:SLA0213-CAL6 Client ID:
Report Date: 01/19/2023 20:12





Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

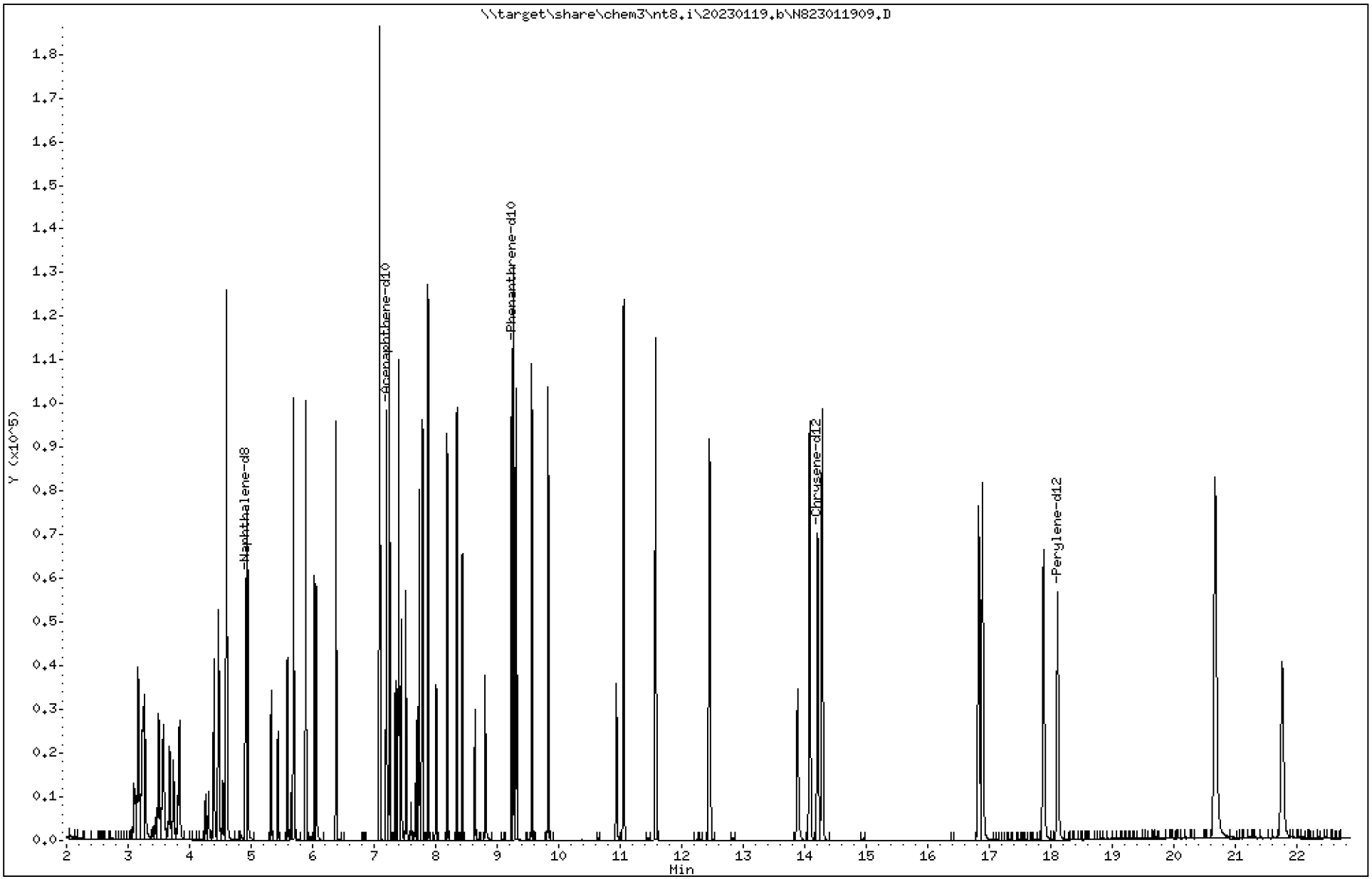
Sample Info: SCV230119

Volume Injected (uL): 1.0

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

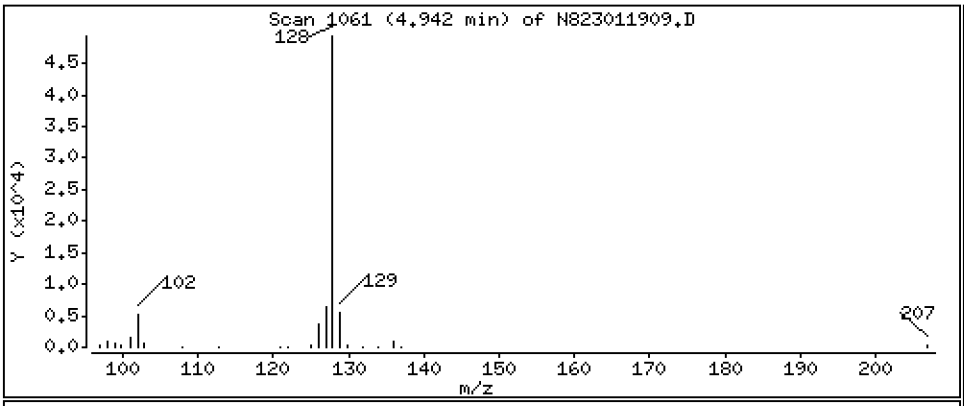
Operator: JZ

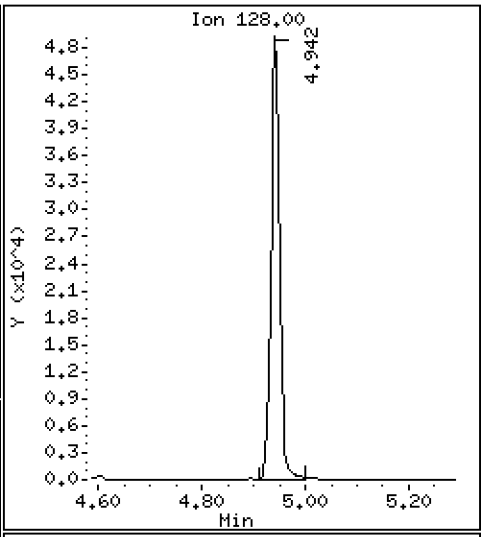
Column phase: Rxi-17sil

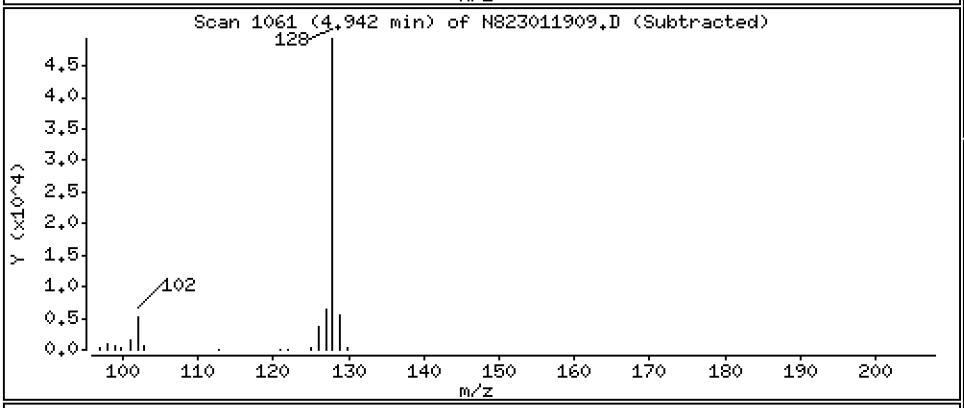
Column diameter: 0.25

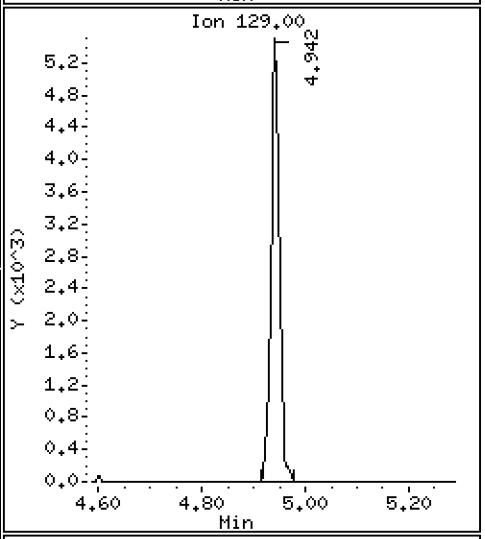
2 Naphthalene

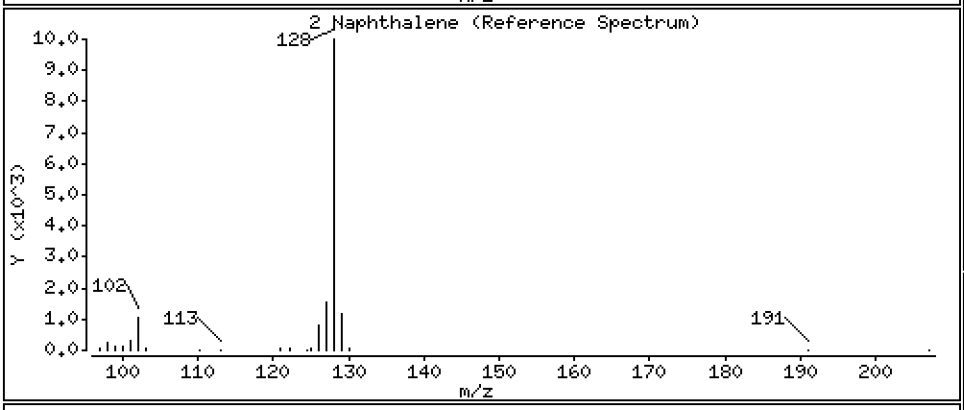
Concentration: 2.626 ug/L

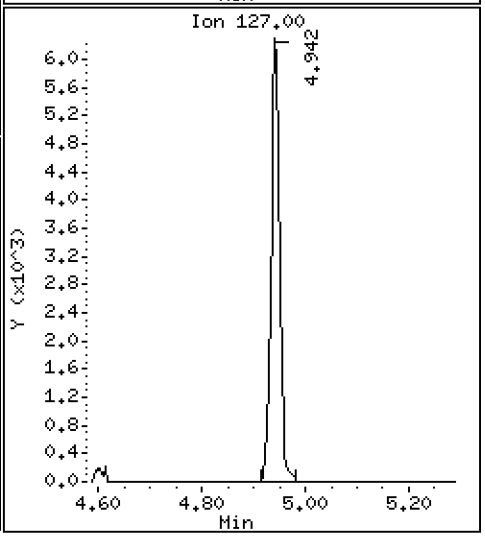


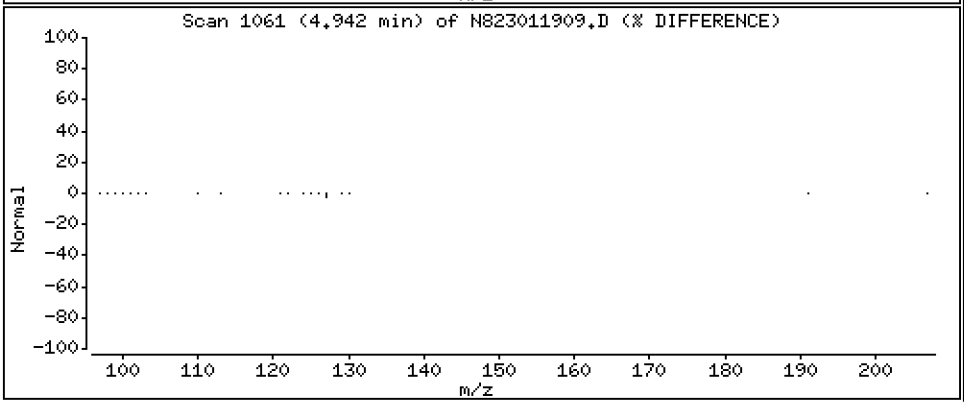












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

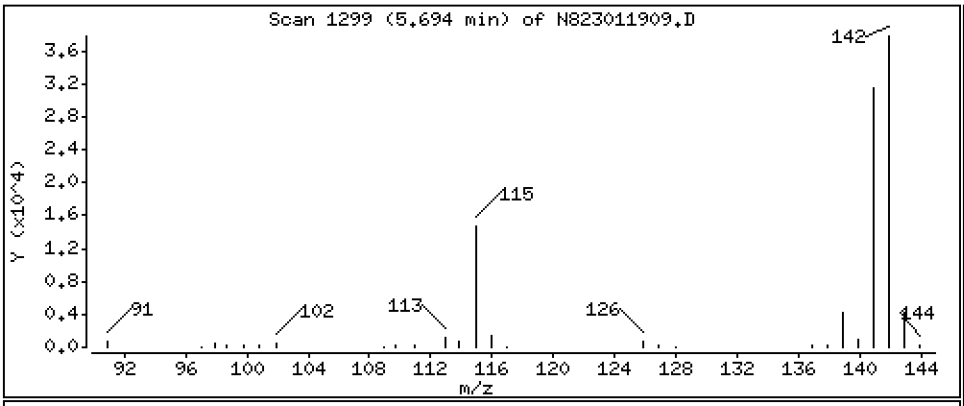
Operator: JZ

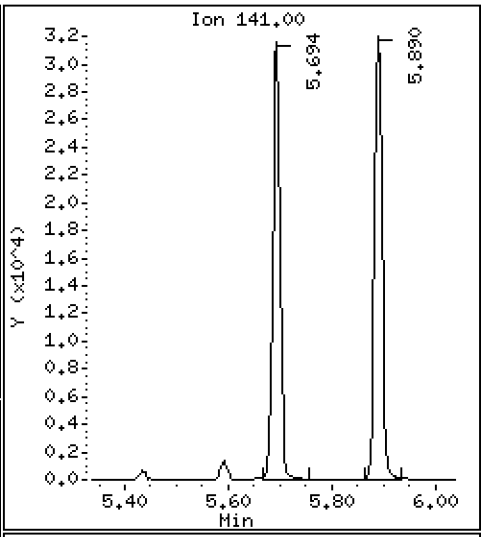
Column phase: Rxi-17sil

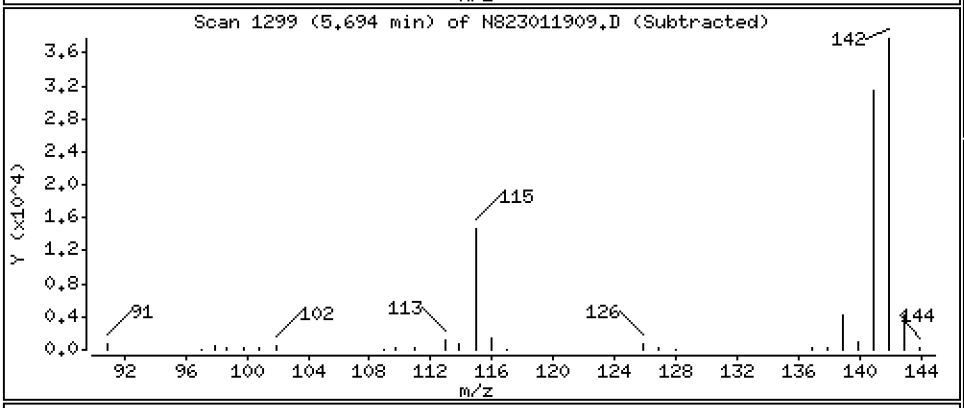
Column diameter: 0.25

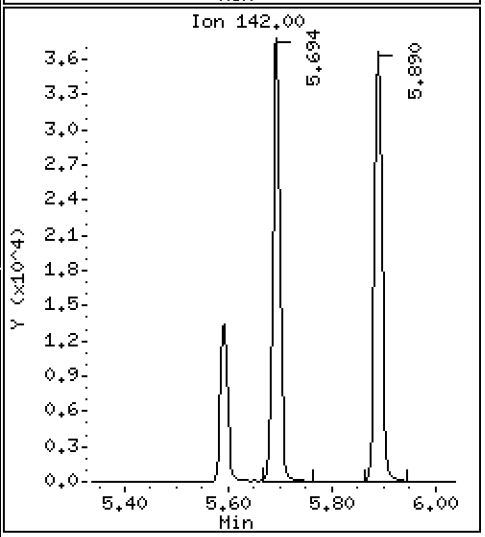
4 2-Methylnaphthalene

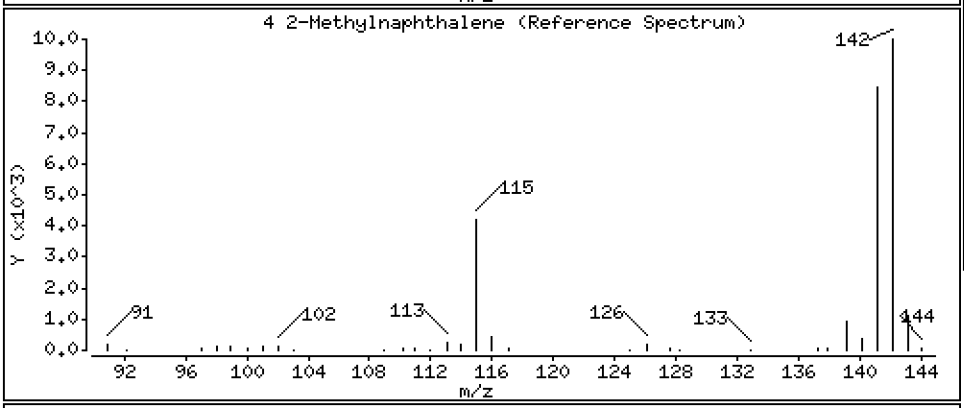
Concentration: 2.670 ug/L

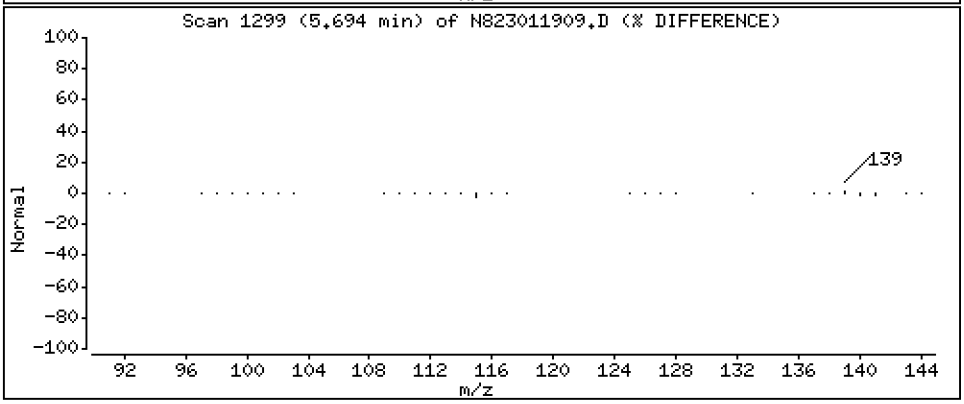












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

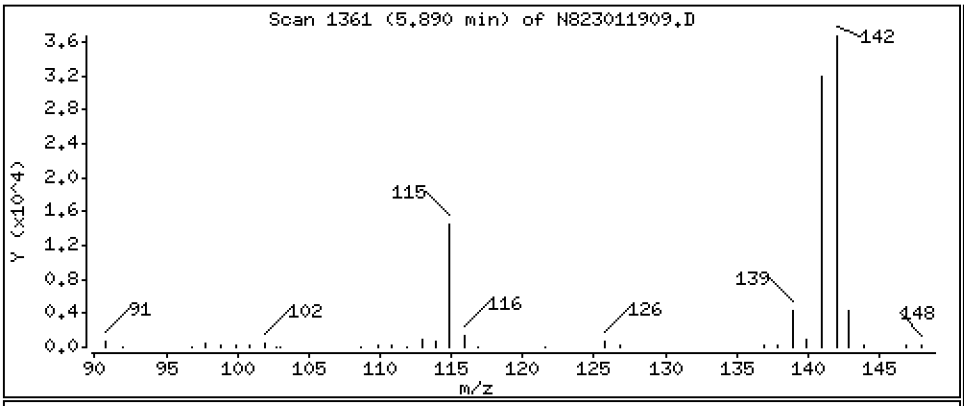
Operator: JZ

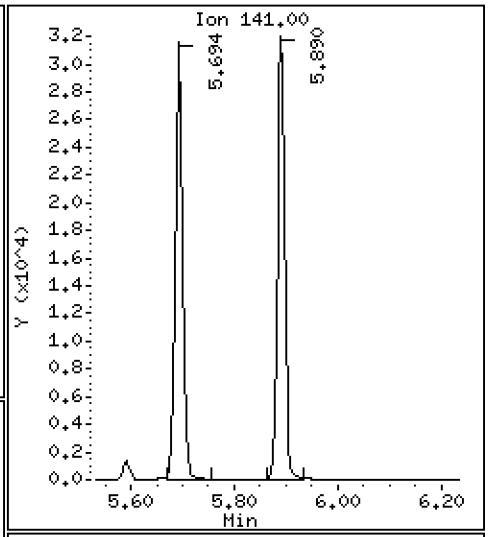
Column phase: Rxi-17sil

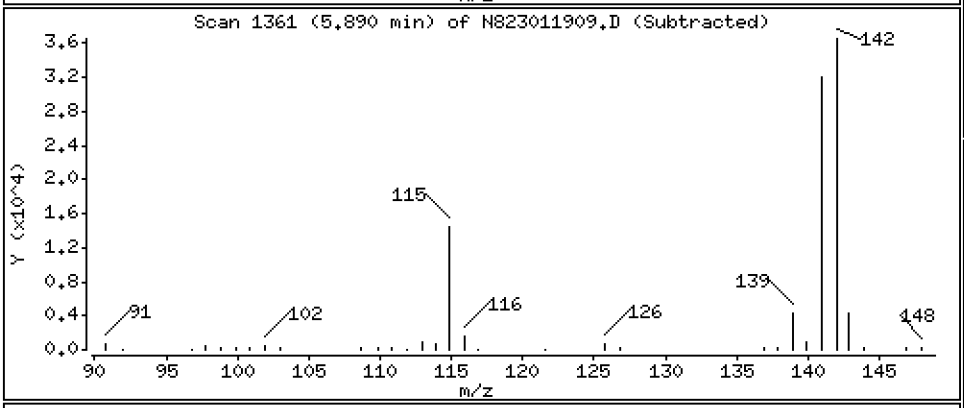
Column diameter: 0.25

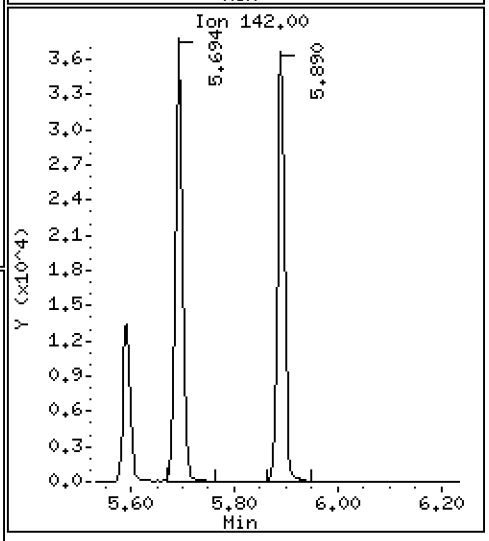
5 1-methylnaphthalene

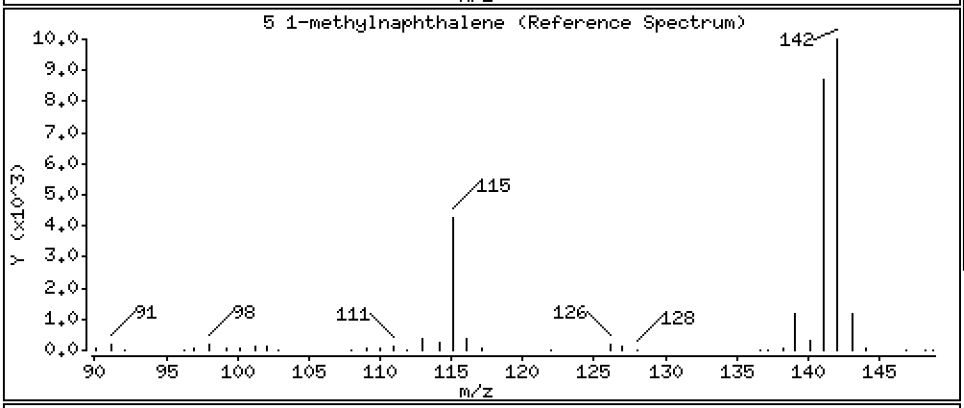
Concentration: 2.649 ug/L

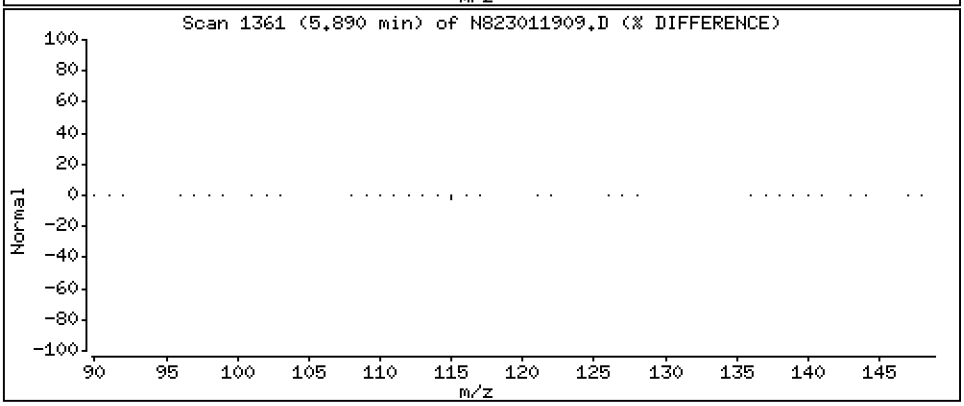












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

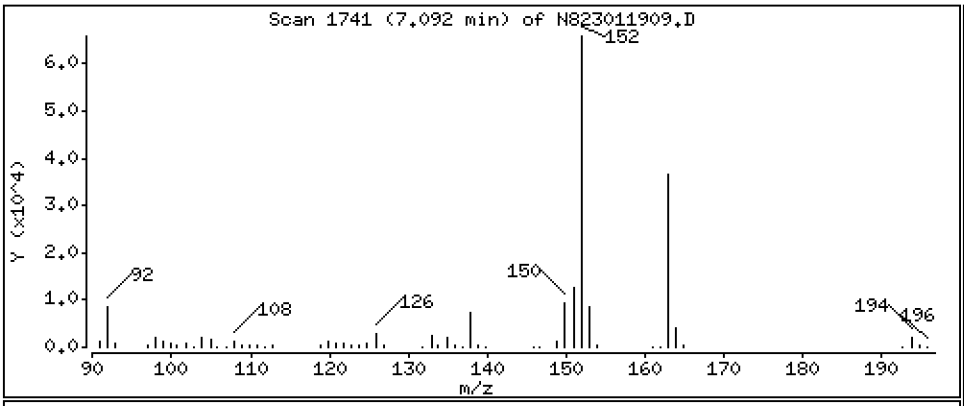
Operator: JZ

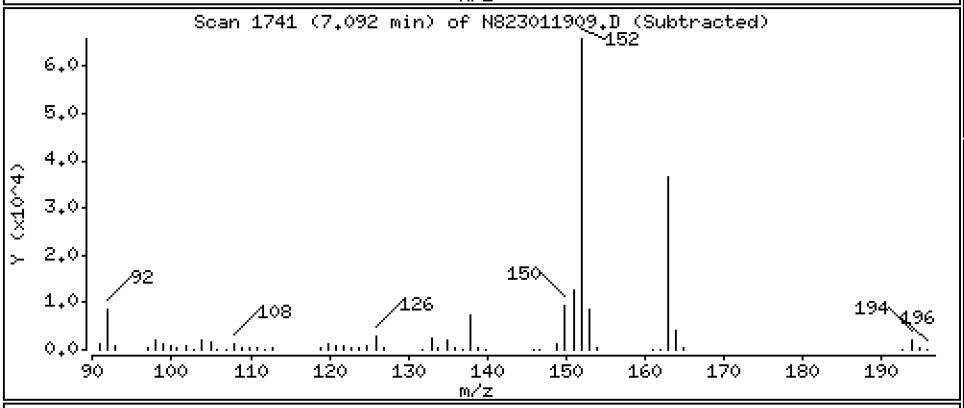
Column phase: Rxi-17sil

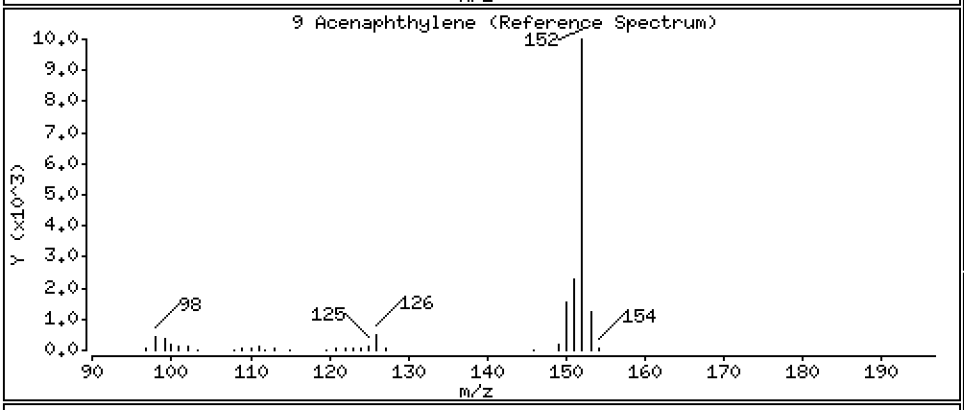
Column diameter: 0.25

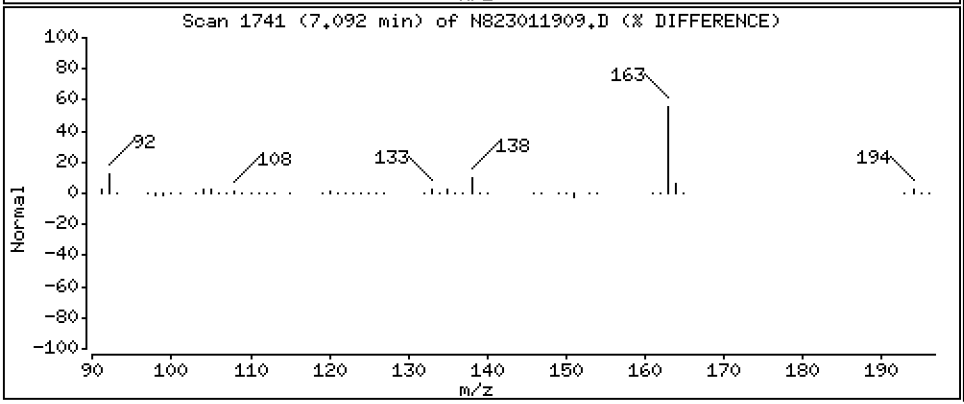
9 Acenaphthylene

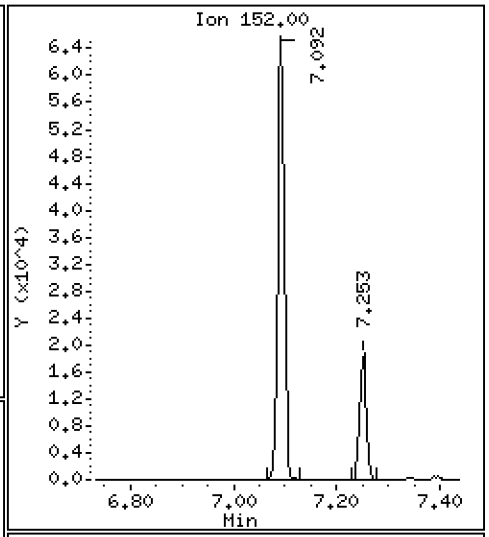
Concentration: 2.821 ug/L

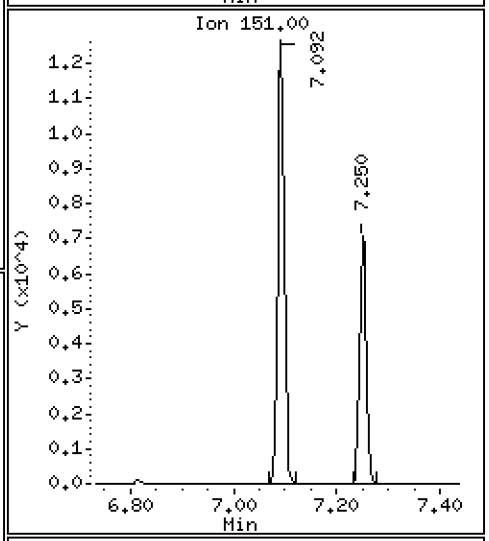


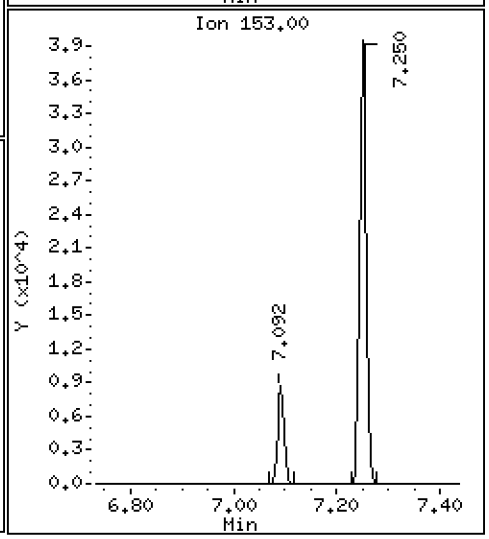












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

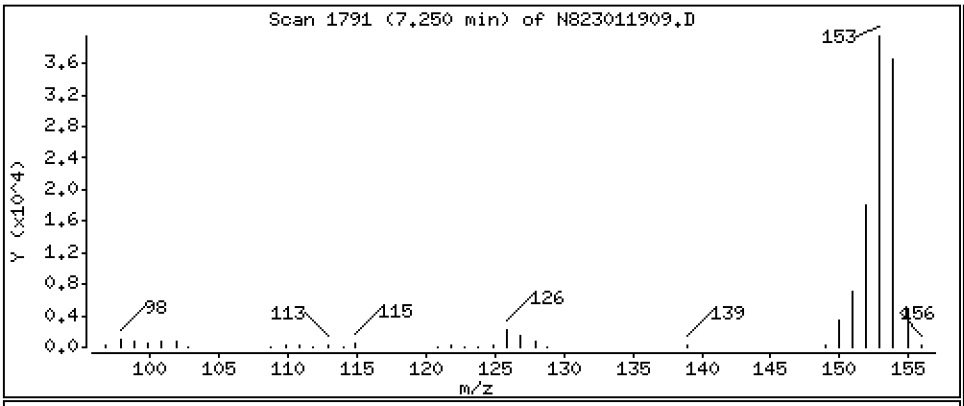
Operator: JZ

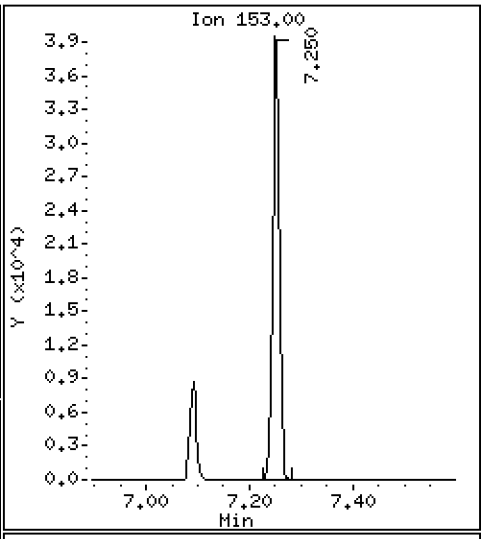
Column phase: Rxi-17sil

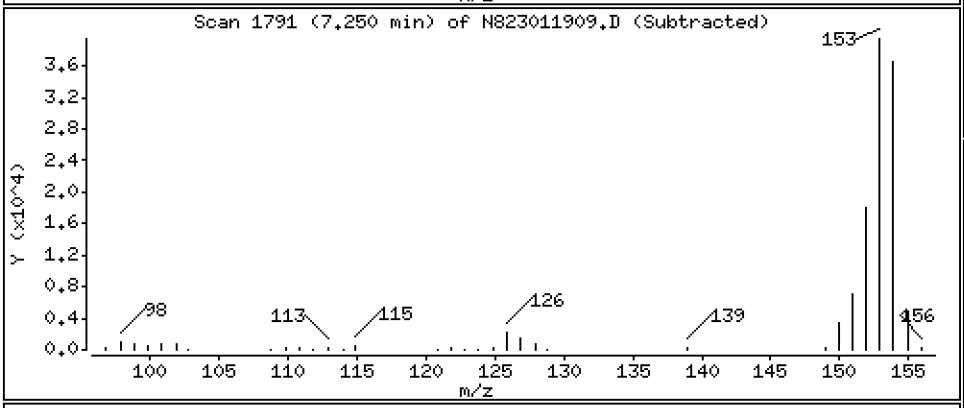
Column diameter: 0.25

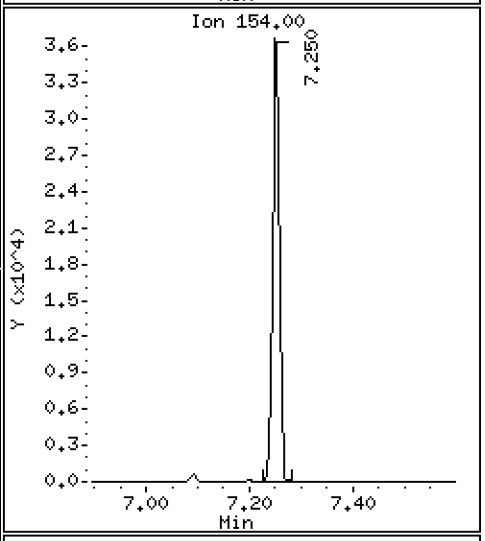
11 Acenaphthene

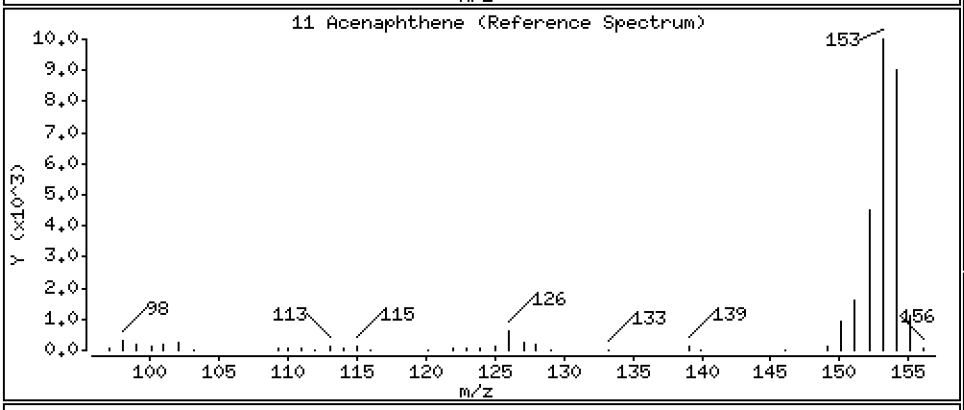
Concentration: 2.600 ug/L

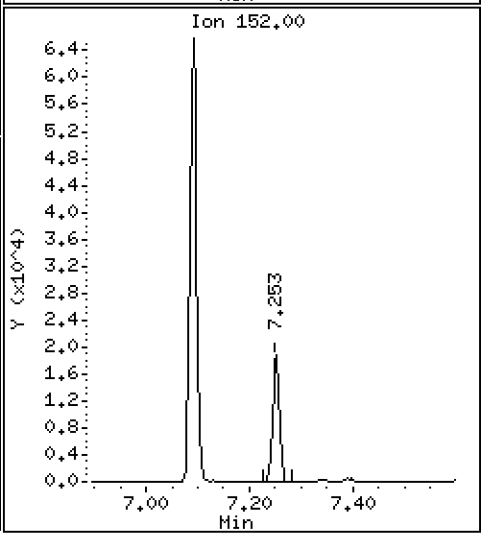


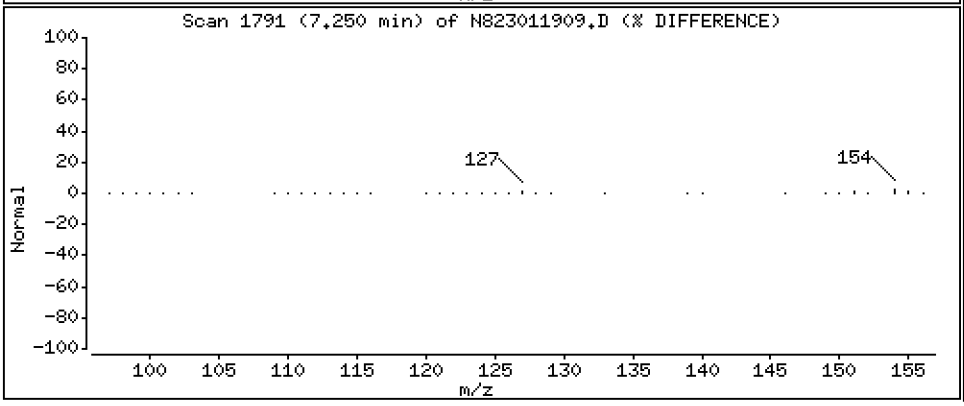












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

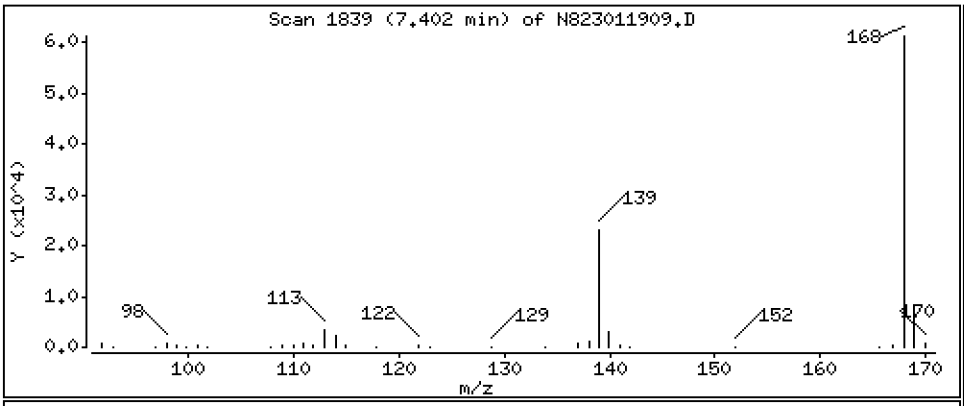
Operator: JZ

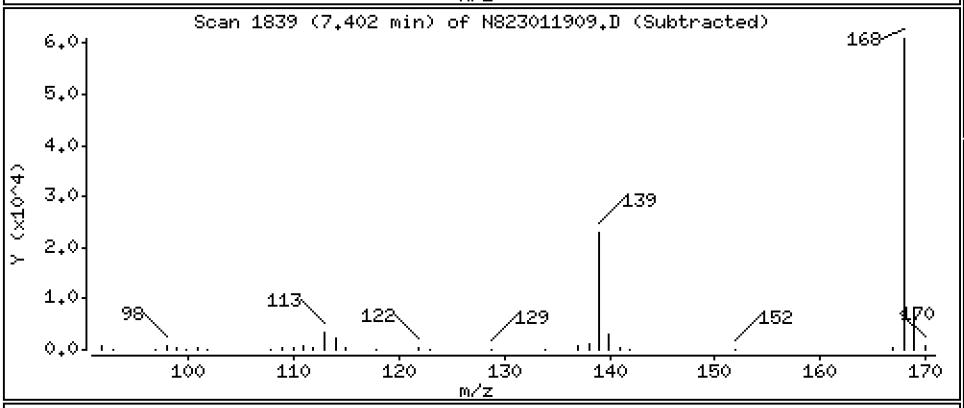
Column phase: Rxi-17sil

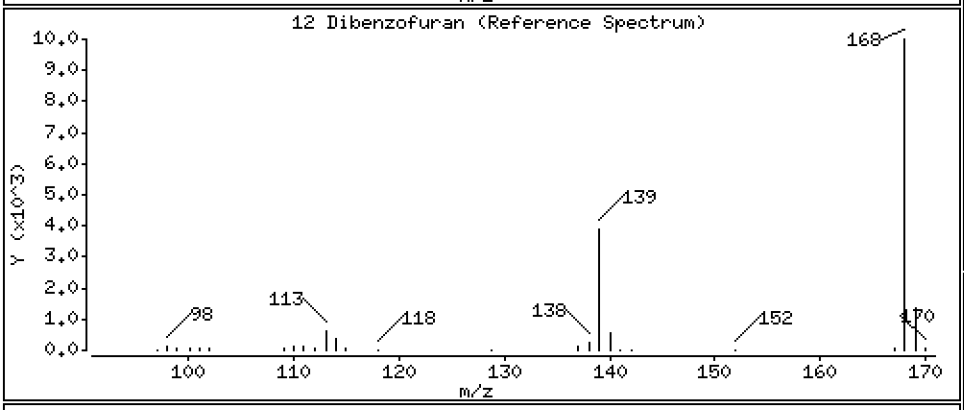
Column diameter: 0.25

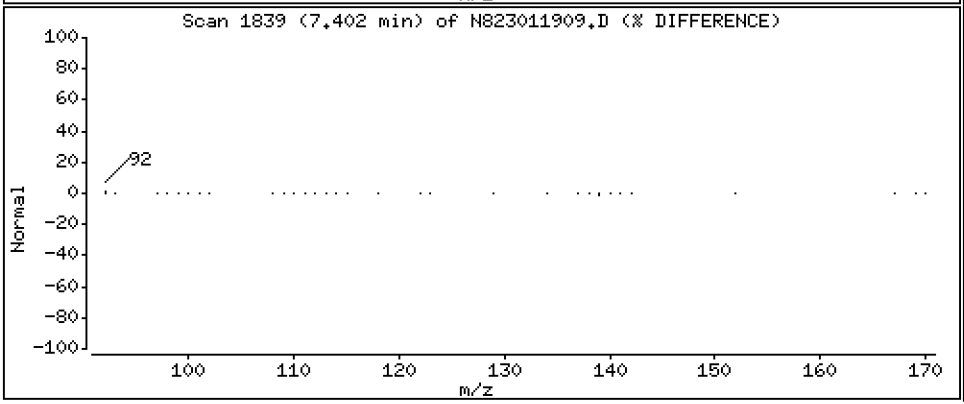
12 Dibenzofuran

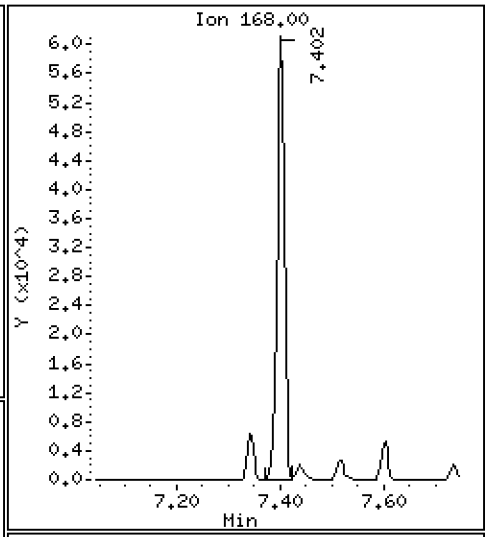
Concentration: 2.860 ug/L

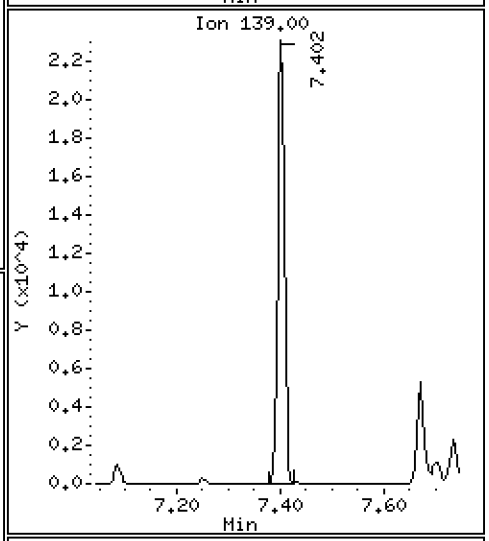


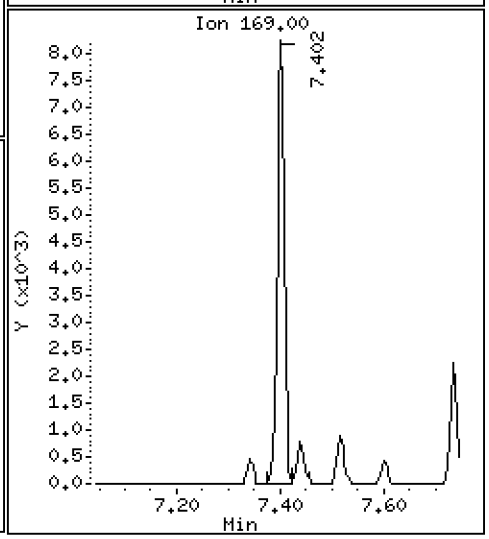












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

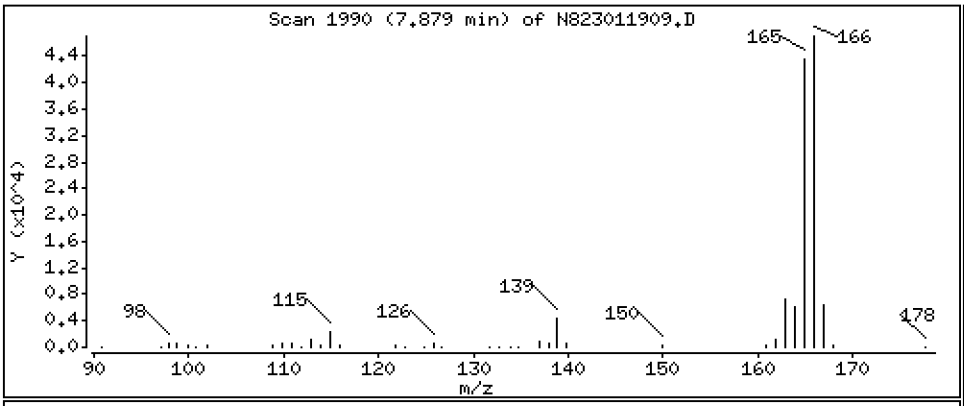
Operator: JZ

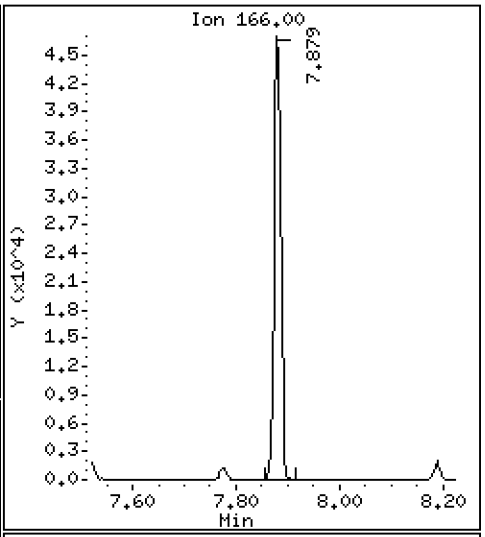
Column phase: Rxi-17sil

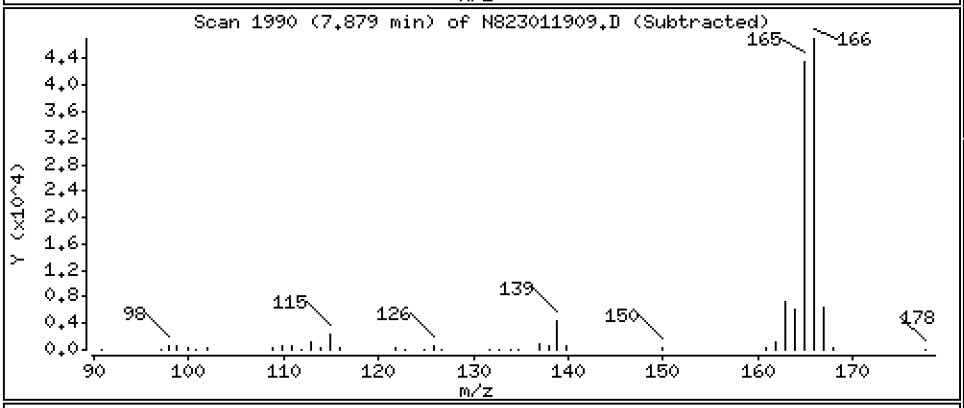
Column diameter: 0.25

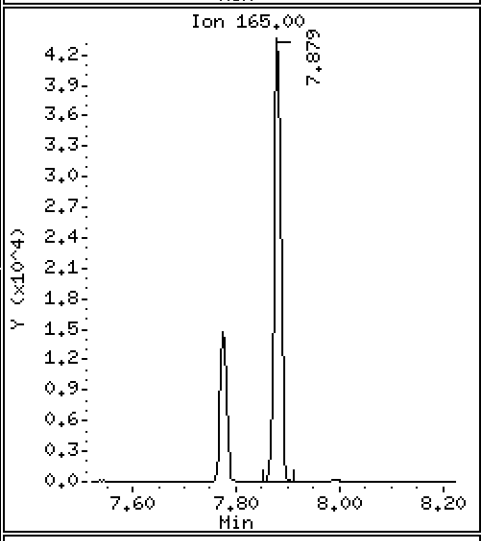
14 Fluorene

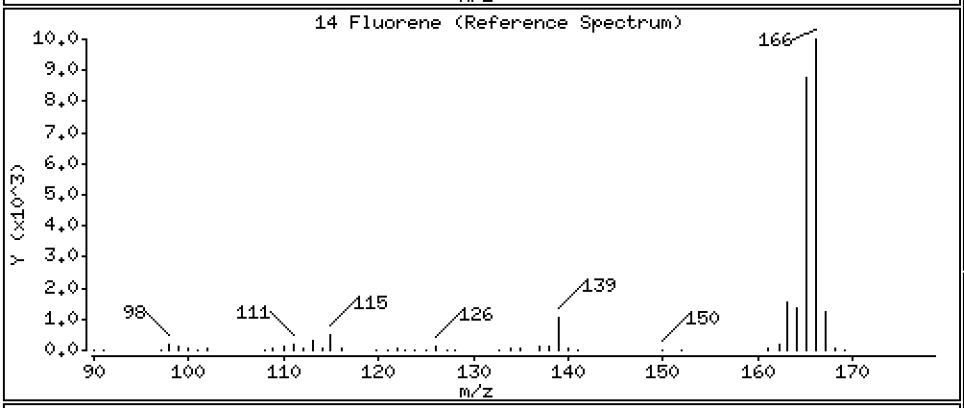
Concentration: 2.631 ug/L

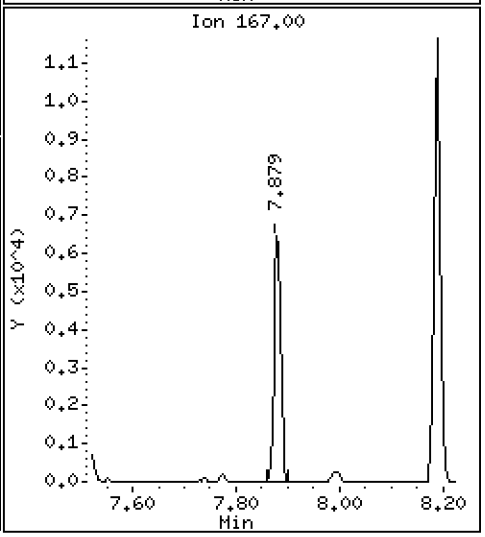


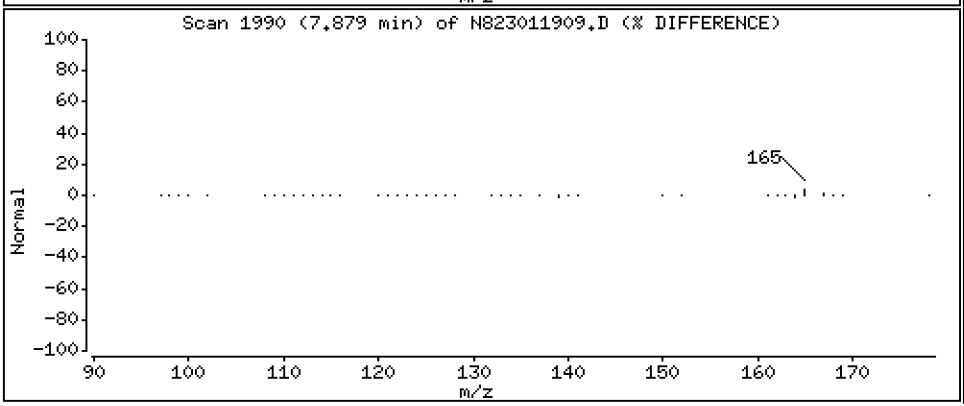












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

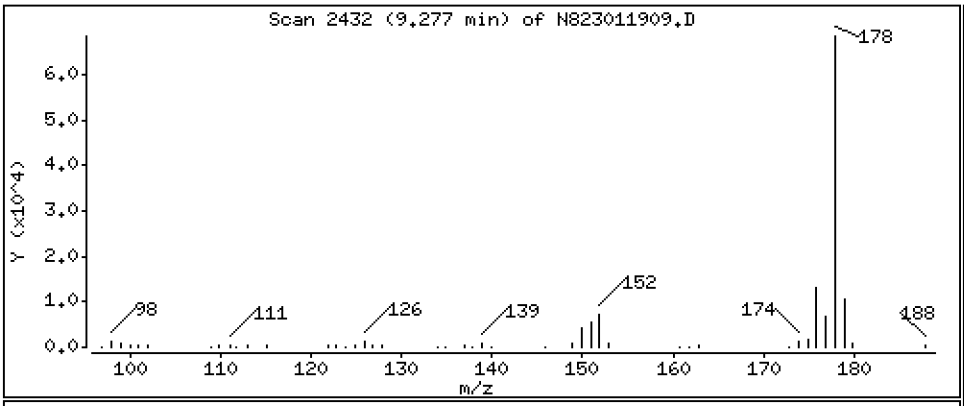
Operator: JZ

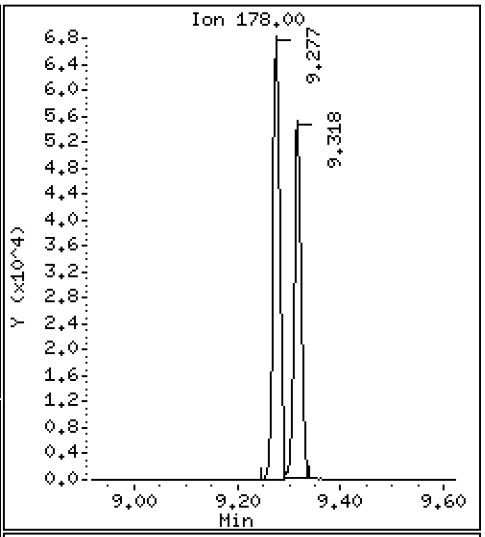
Column phase: Rxi-17sil

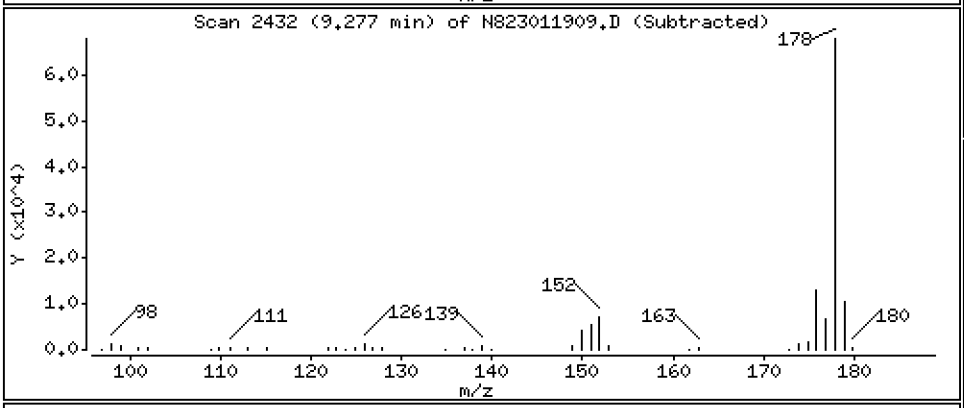
Column diameter: 0.25

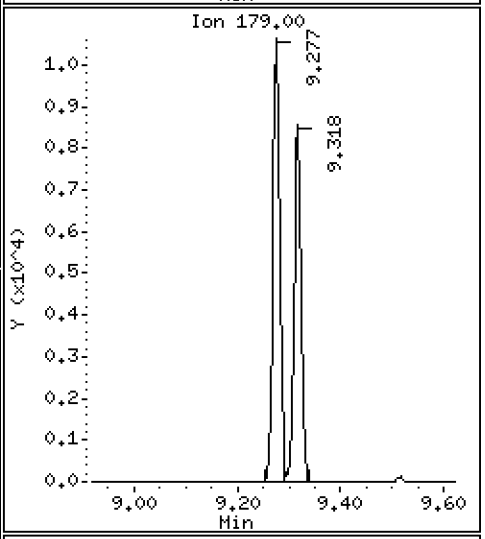
16 Phenanthrene

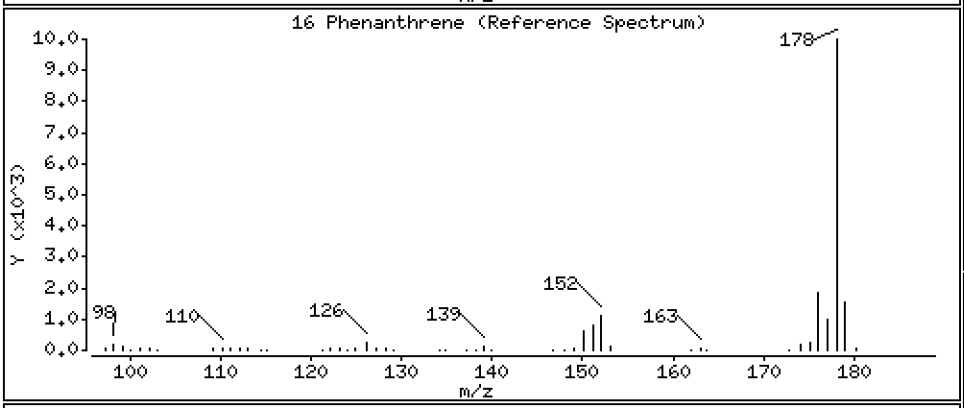
Concentration: 2.448 ug/L

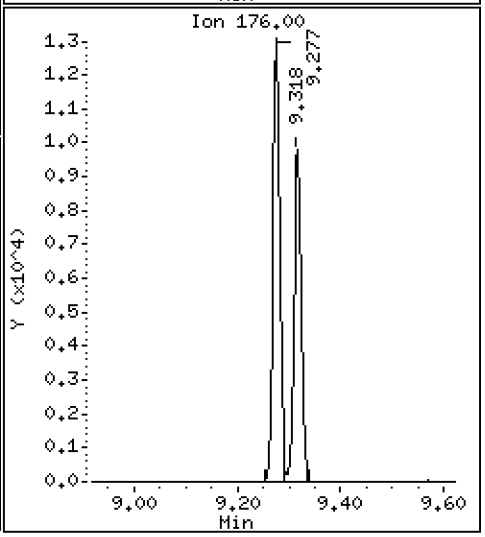


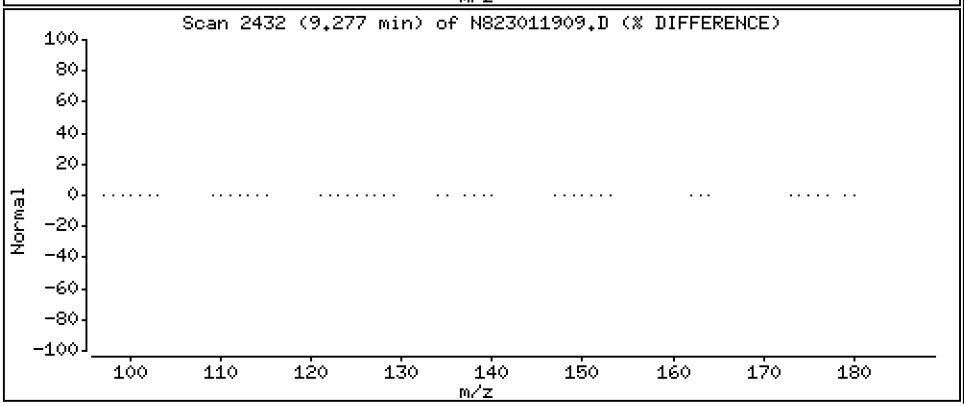












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

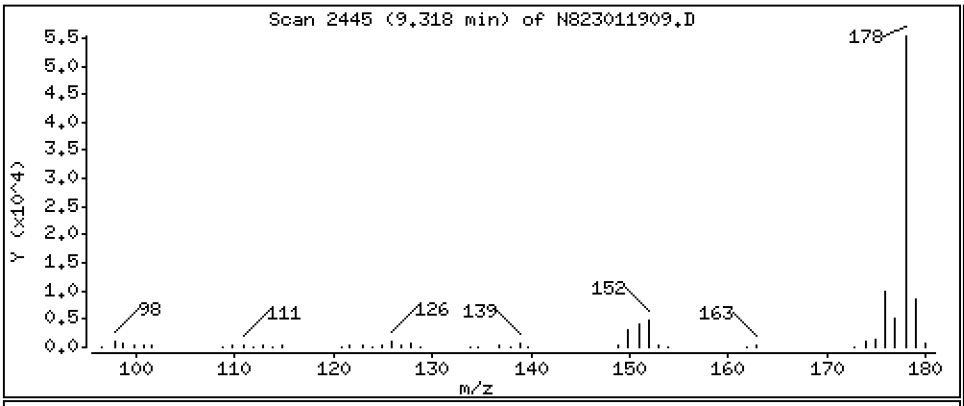
Operator: JZ

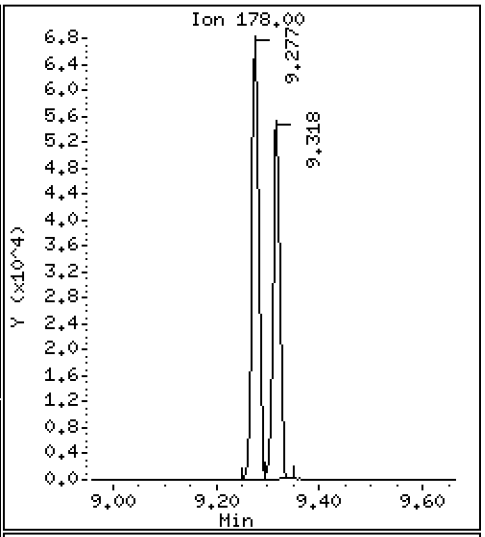
Column phase: Rxi-17sil

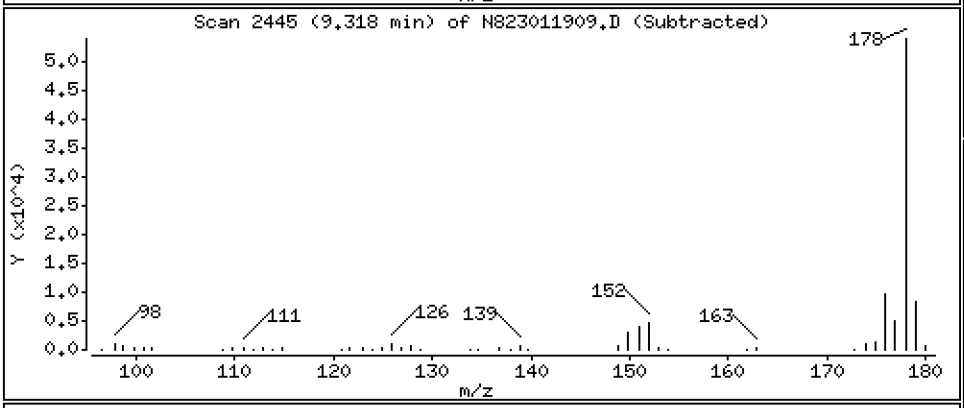
Column diameter: 0.25

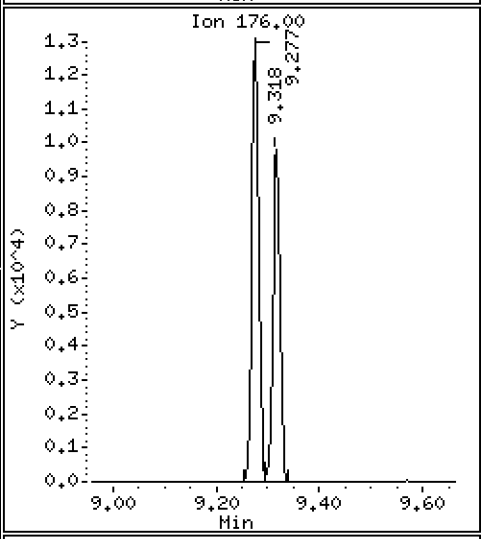
17 Anthracene

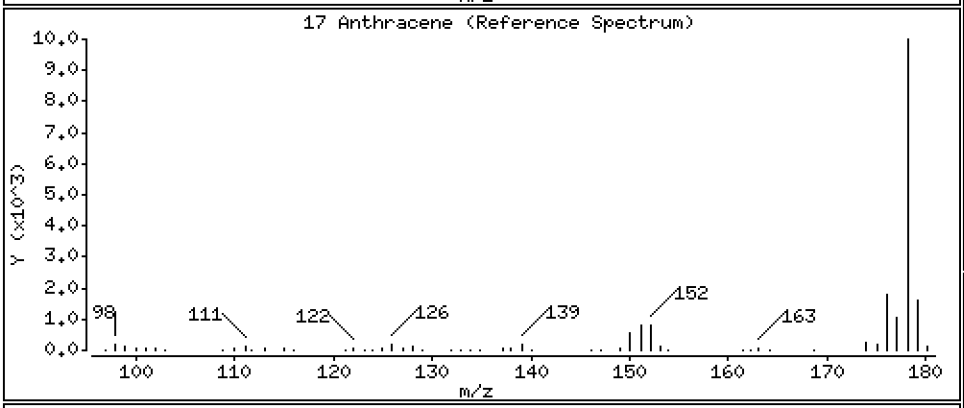
Concentration: 2.270 ug/L

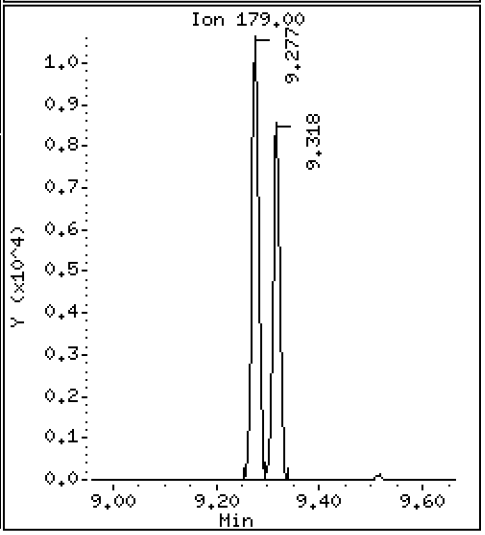


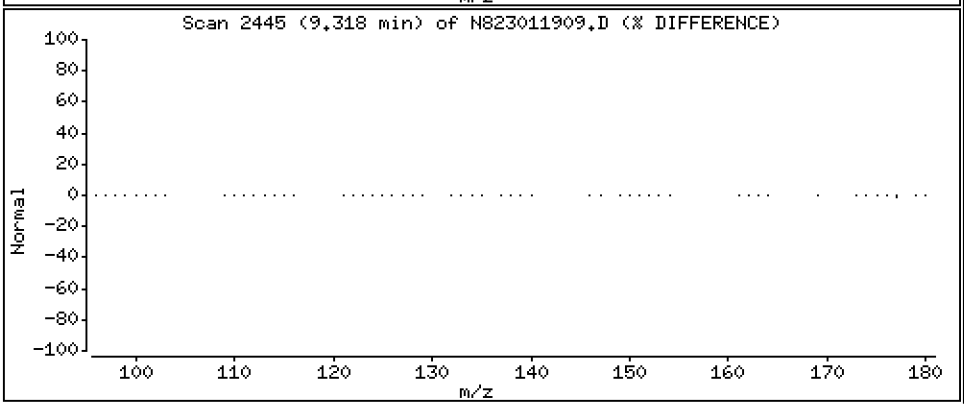












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

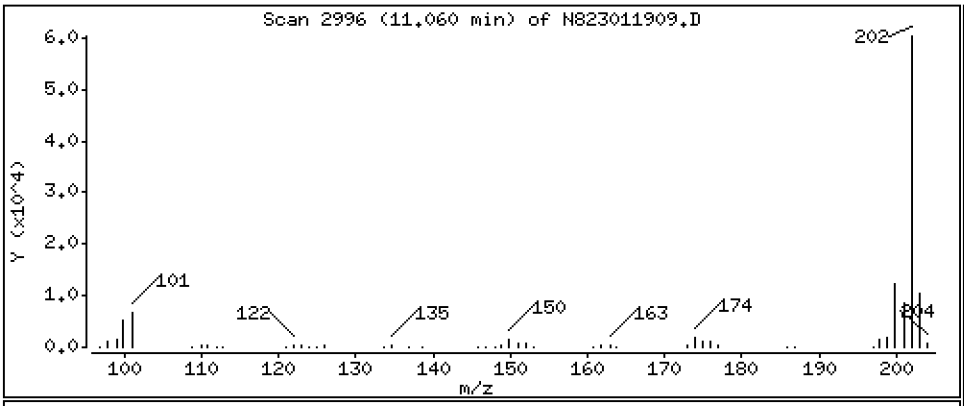
Operator: JZ

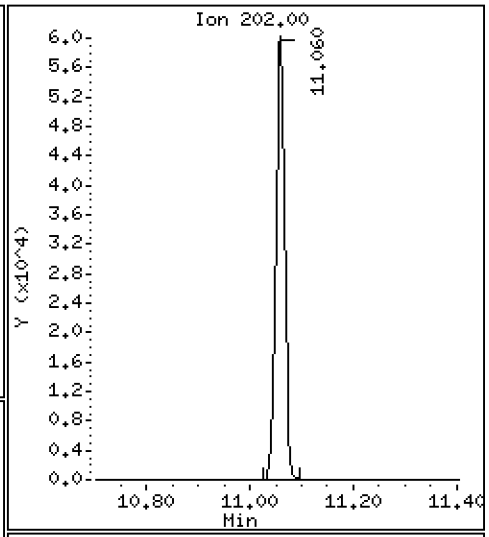
Column phase: Rxi-17sil

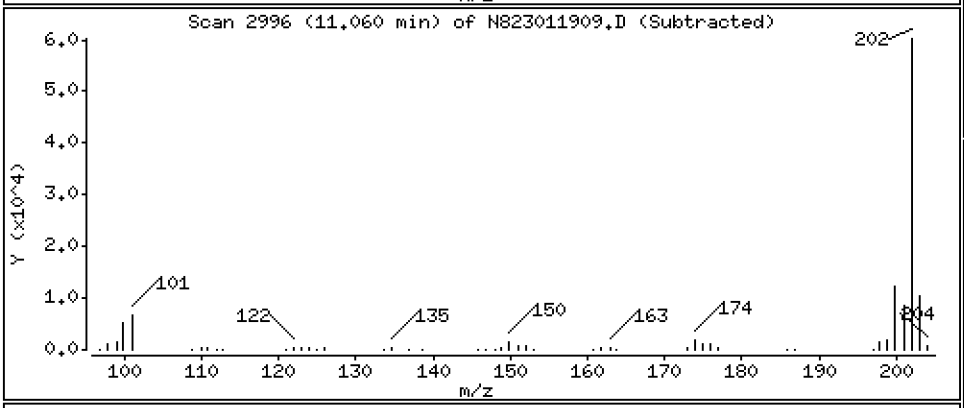
Column diameter: 0.25

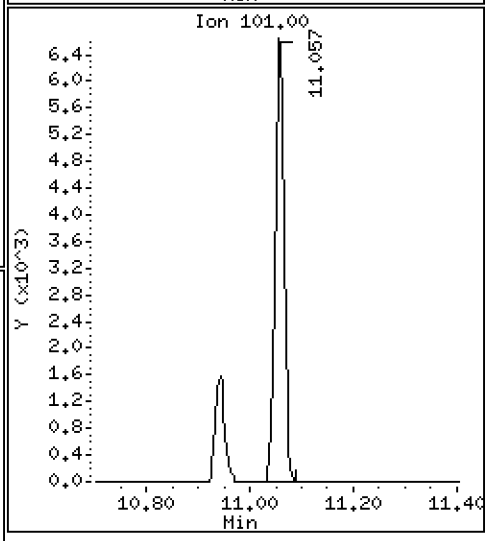
22 Fluoranthene

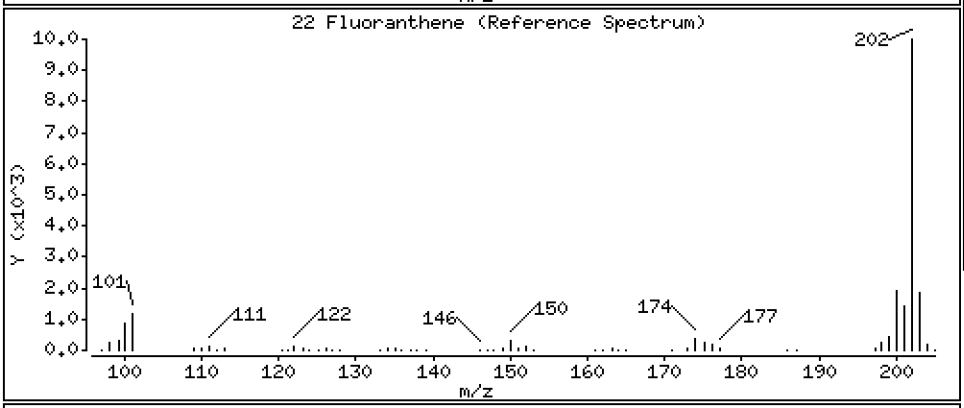
Concentration: 2.653 ug/L

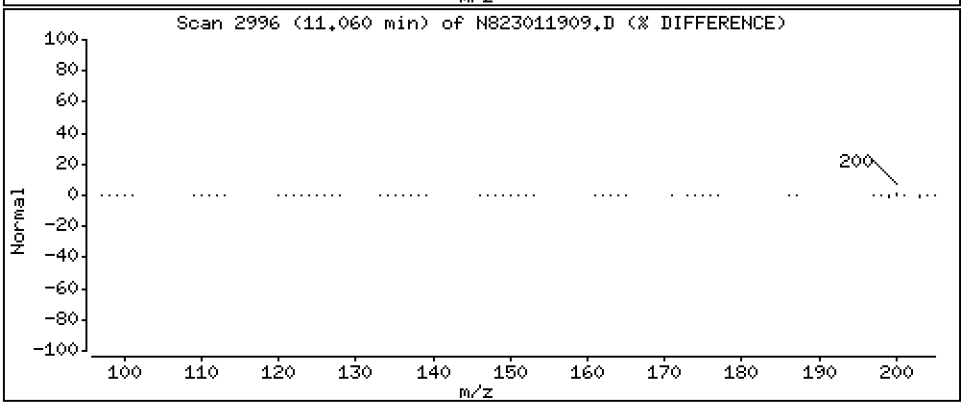












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

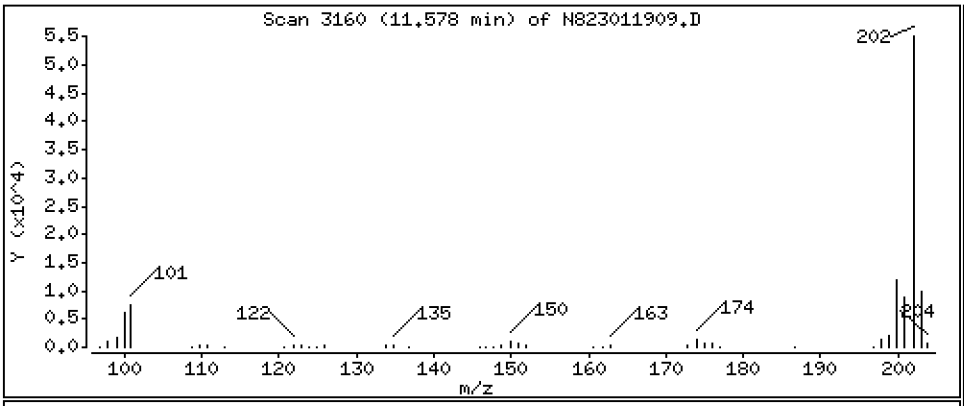
Operator: JZ

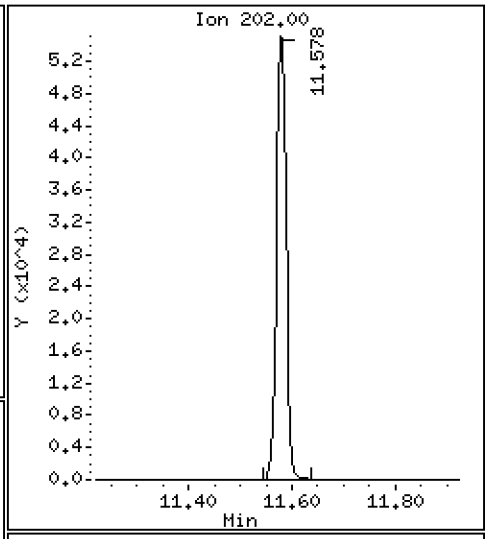
Column phase: Rxi-17sil

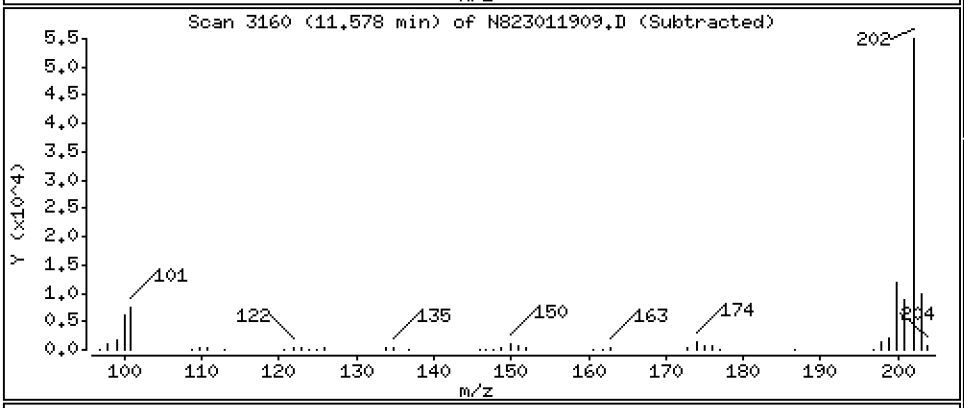
Column diameter: 0.25

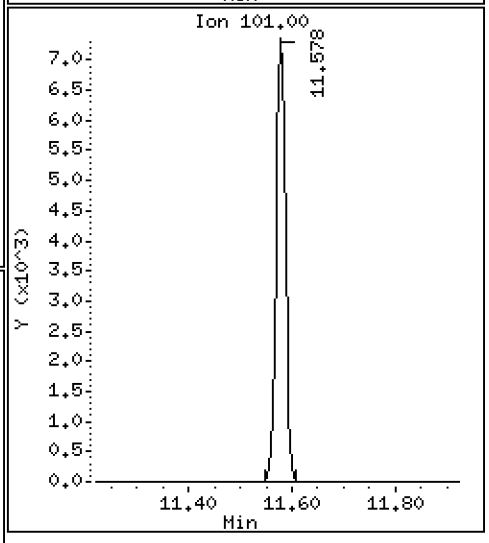
23 Pyrene

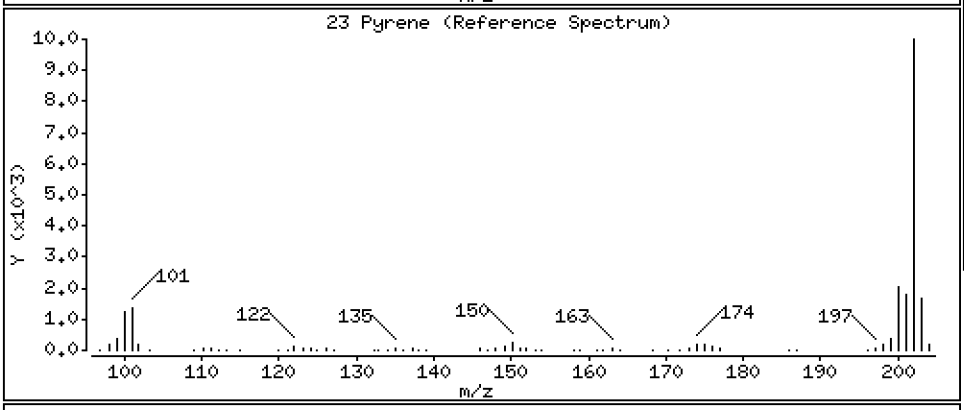
Concentration: 2.462 ug/L

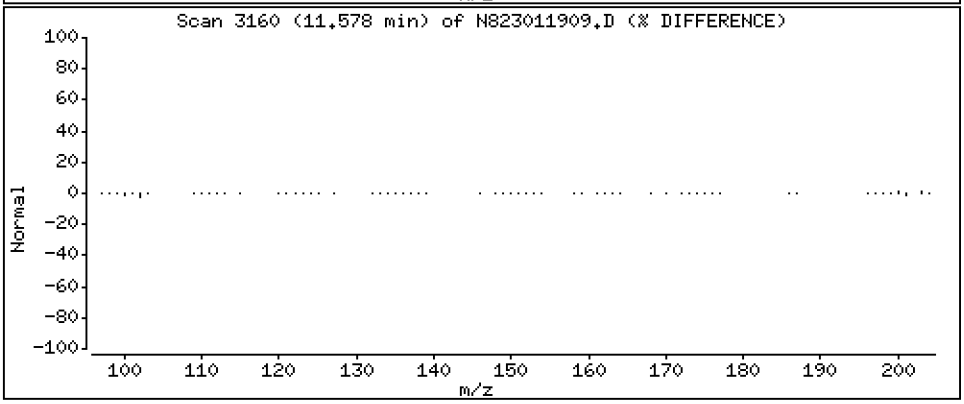












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

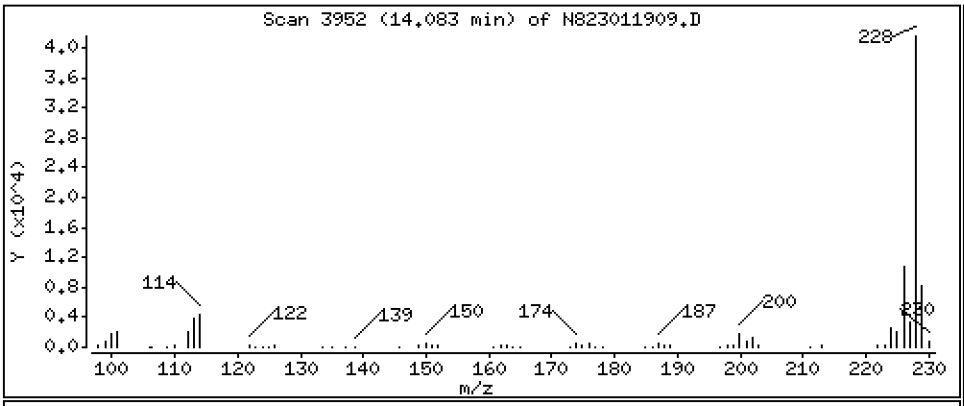
Operator: JZ

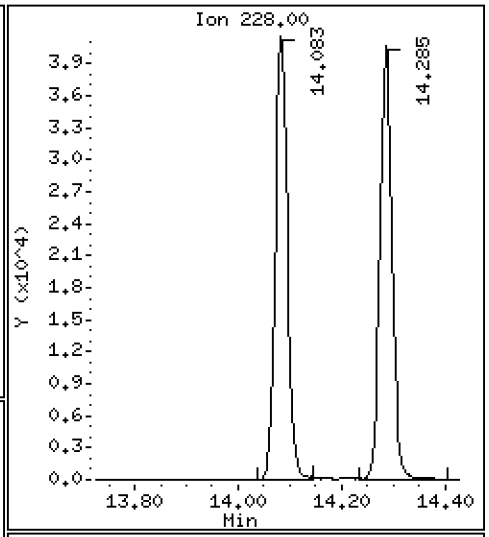
Column phase: Rxi-17sil

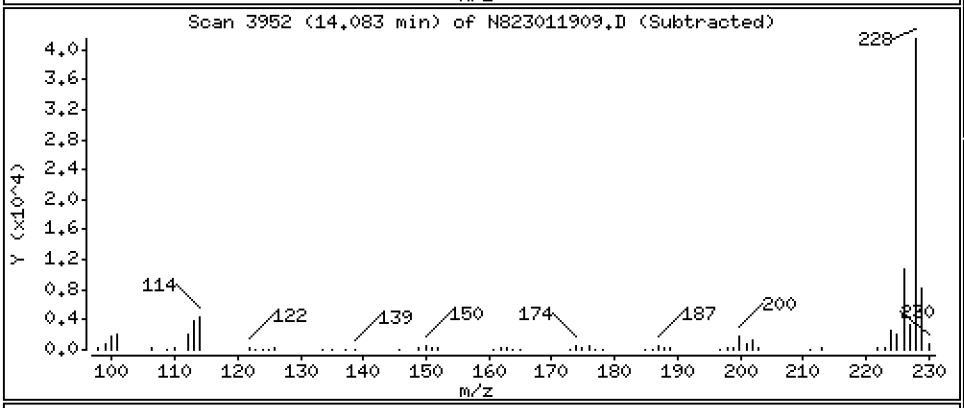
Column diameter: 0.25

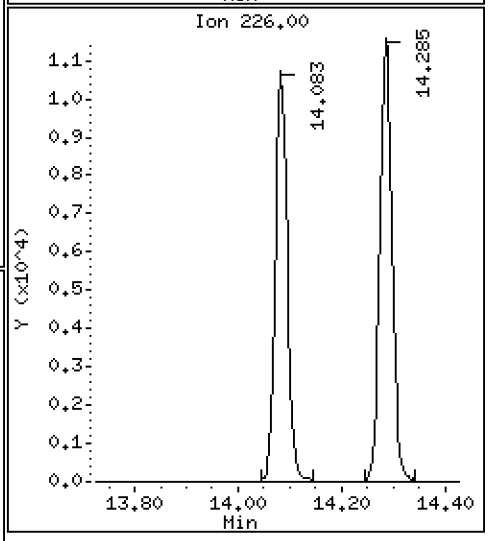
24 Benzo(a)anthracene

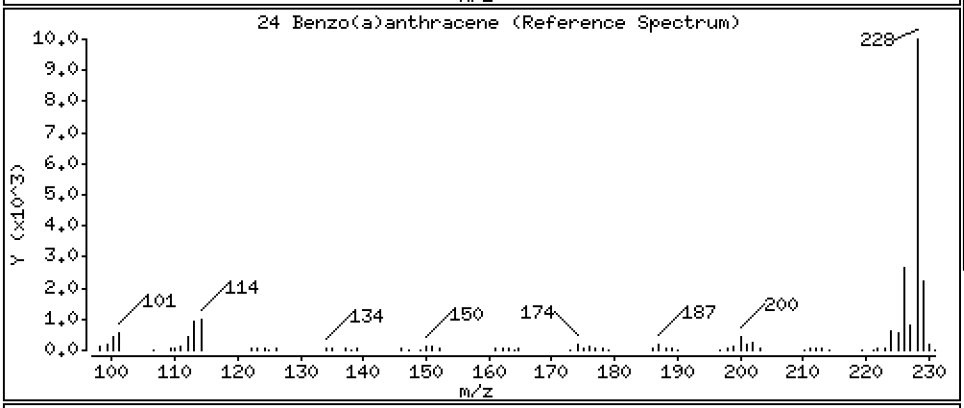
Concentration: 2.587 ug/L

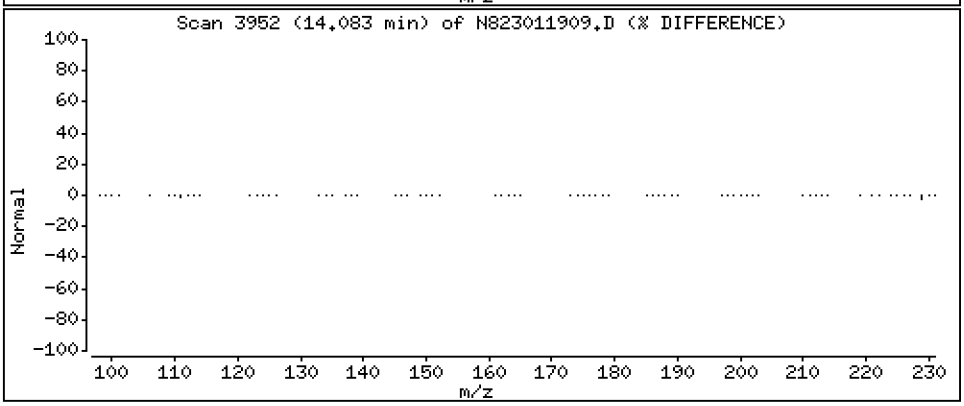












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

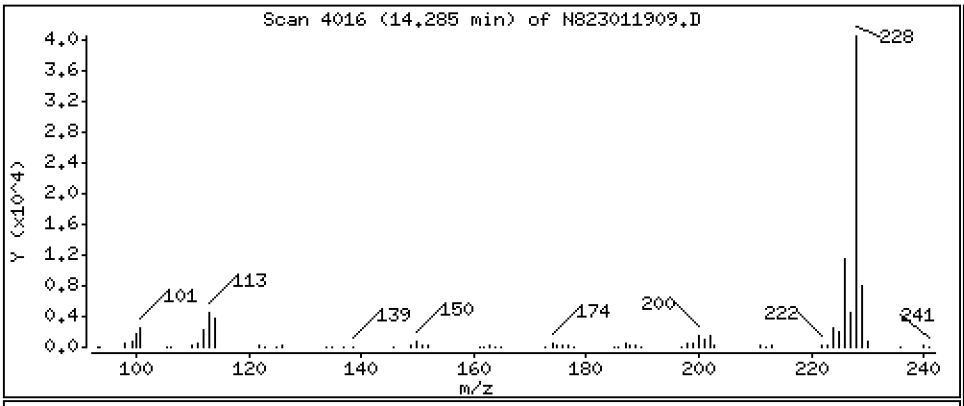
Operator: JZ

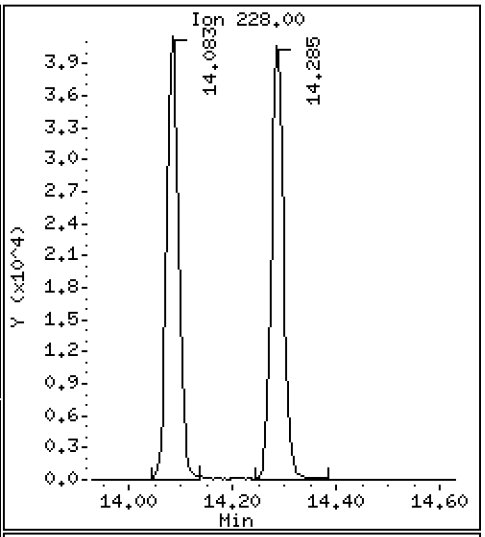
Column phase: Rxi-17sil

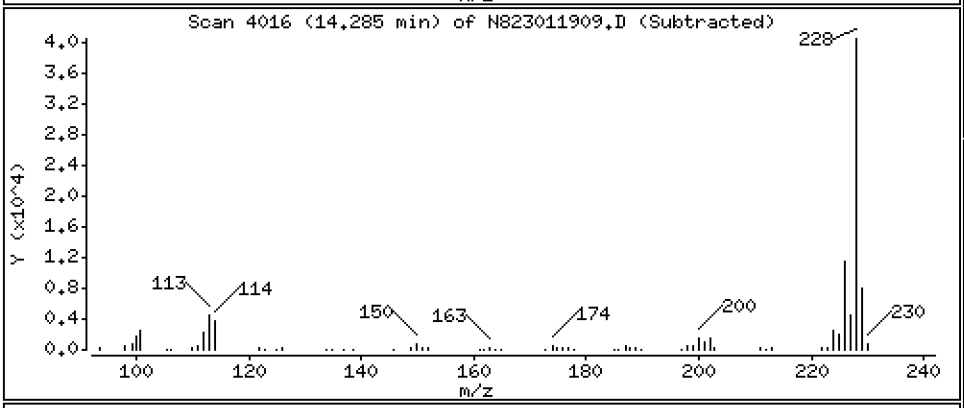
Column diameter: 0.25

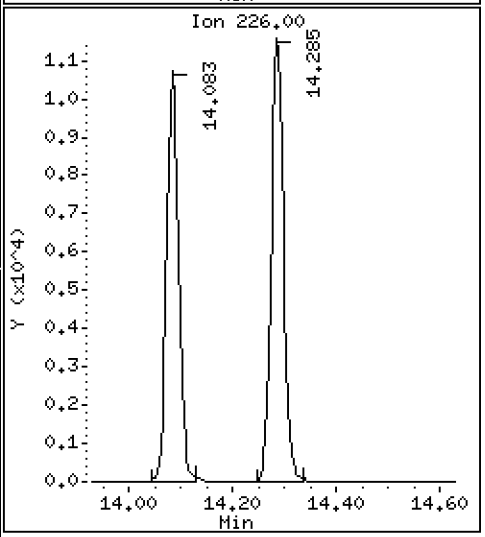
27 Chrysene

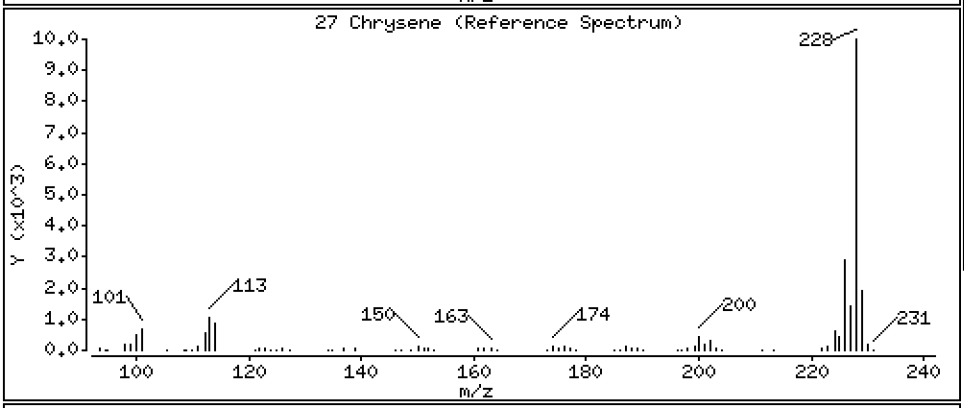
Concentration: 2.400 ug/L

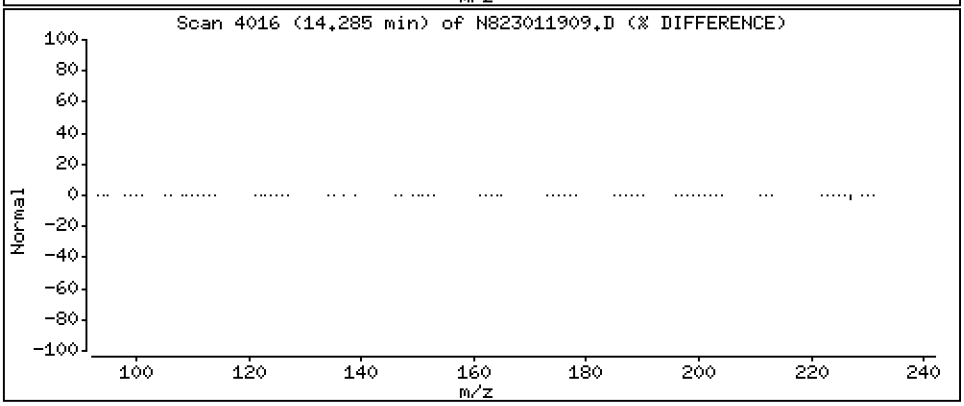












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

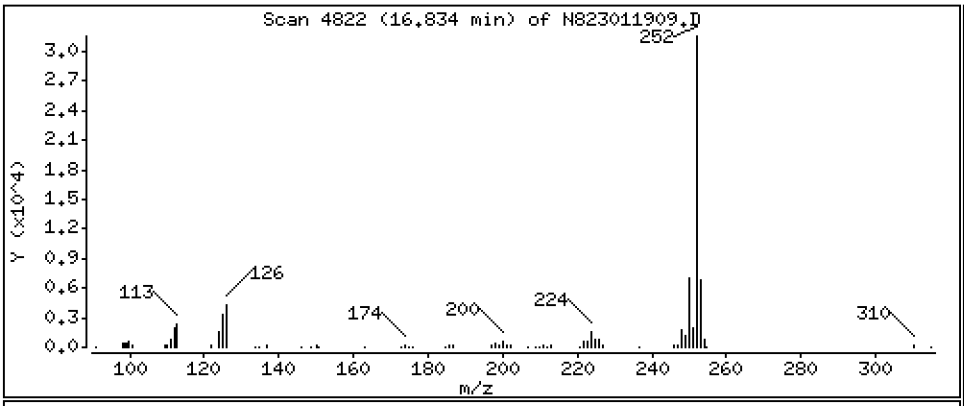
Operator: JZ

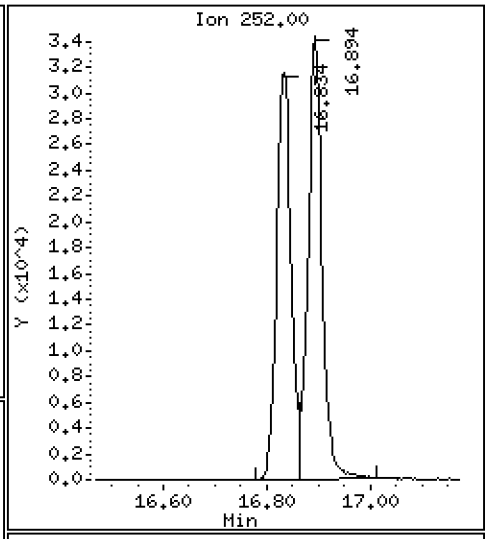
Column phase: Rxi-17sil

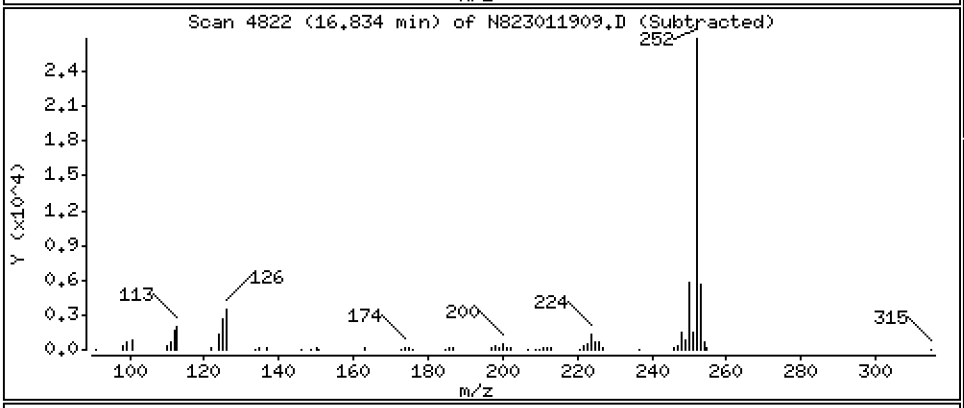
Column diameter: 0.25

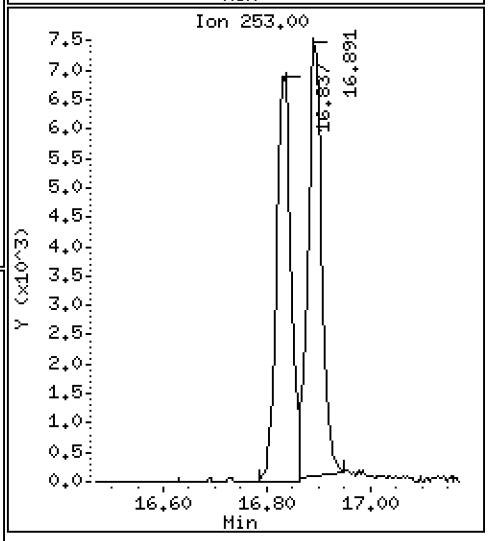
28 Benzo(b)fluoranthene

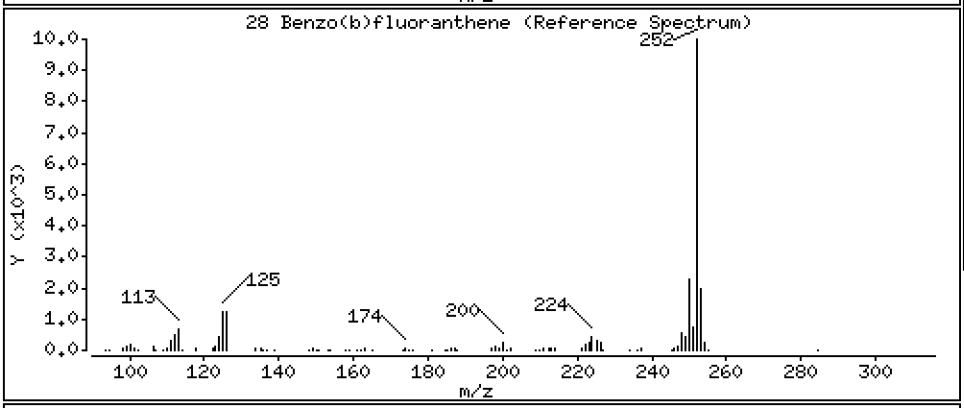
Concentration: 2.507 ug/L

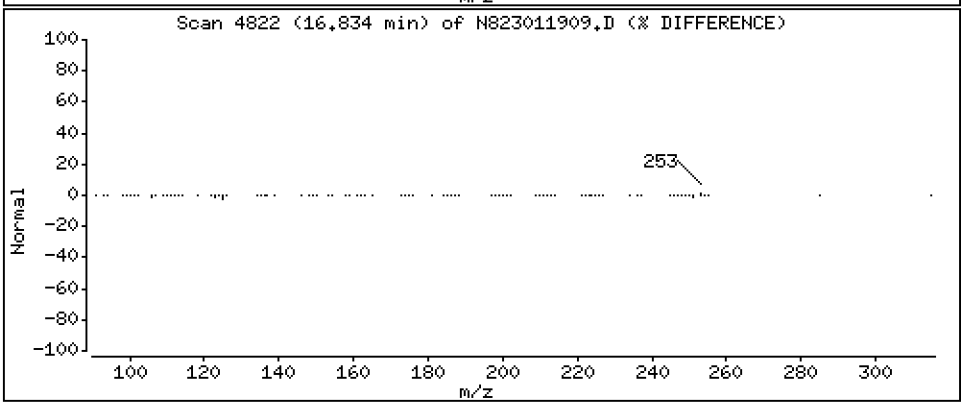












Date : 19-JAN-2023 14:58

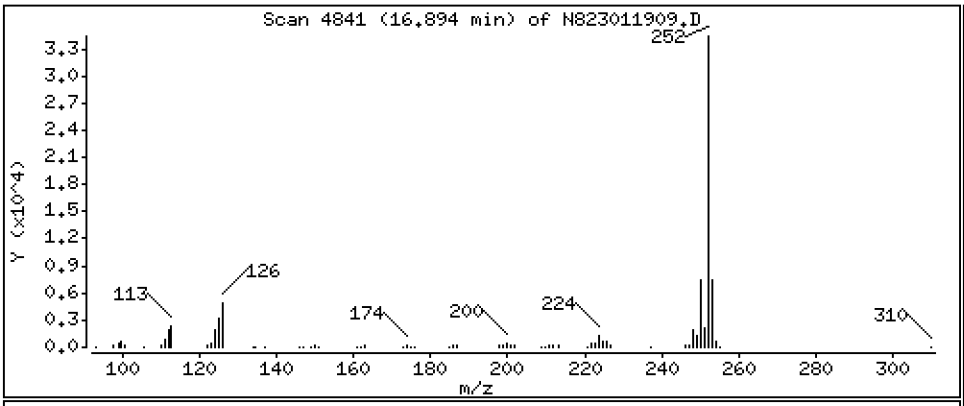
Client ID: Instrument: nt8.i

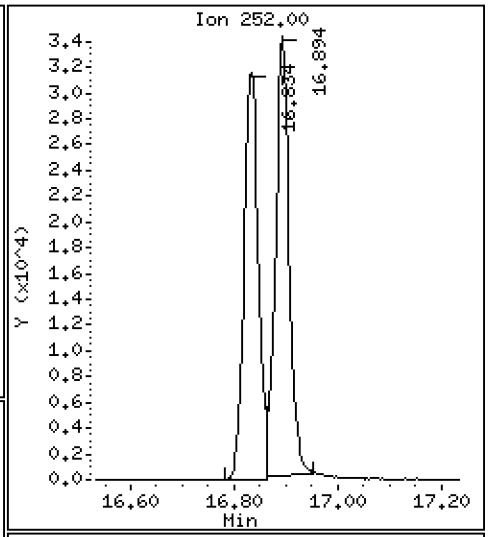
Sample Info: SCV230119

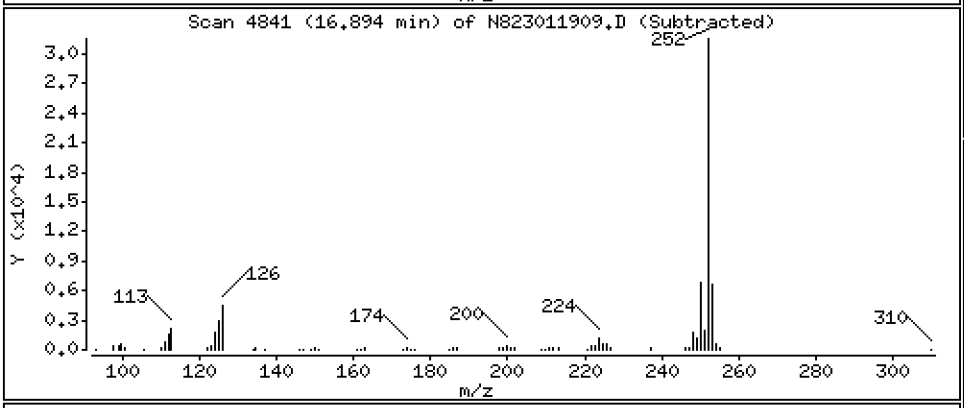
Volume Injected (uL): 1.0 Operator: JZ

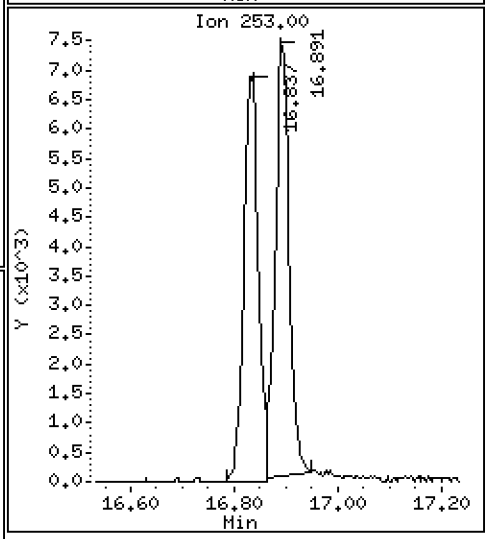
Column phase: Rxi-17sil Column diameter: 0.25

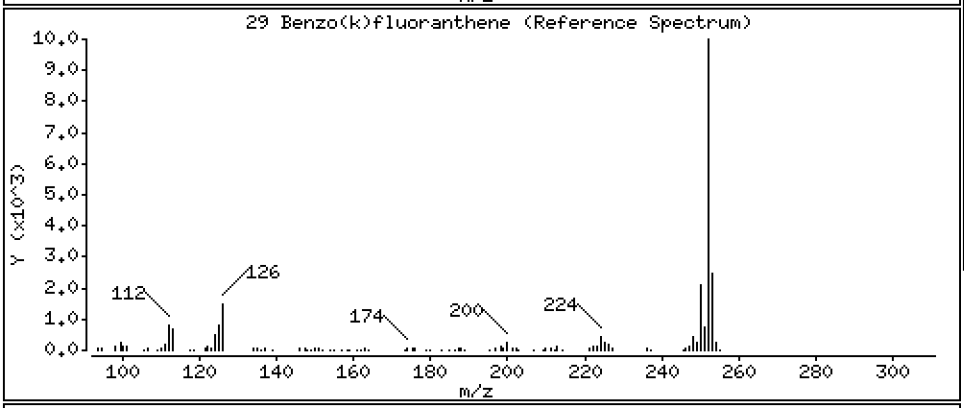
29 Benzo(k)fluoranthene Concentration: 2.656 ug/L

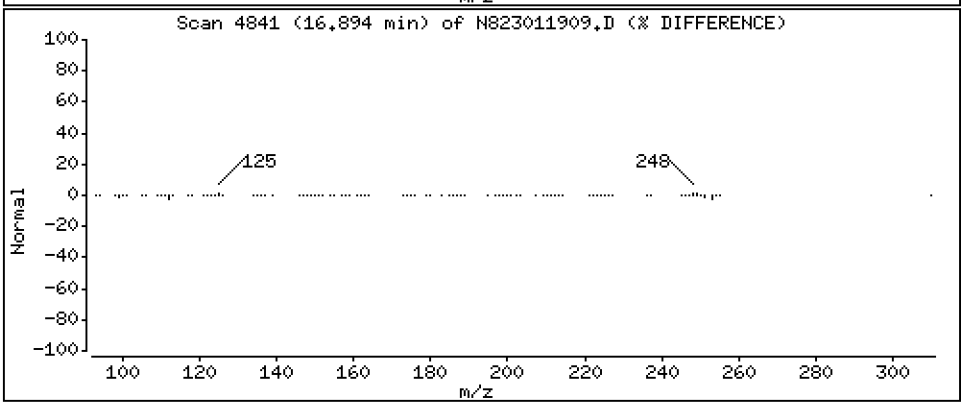












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

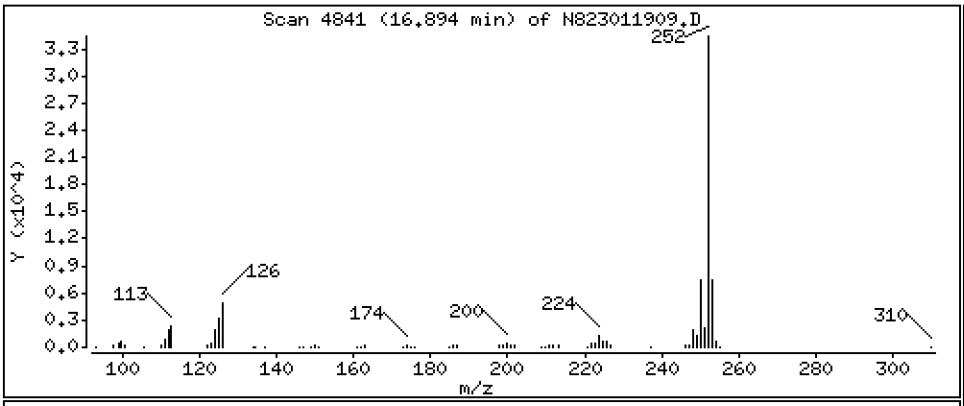
Operator: JZ

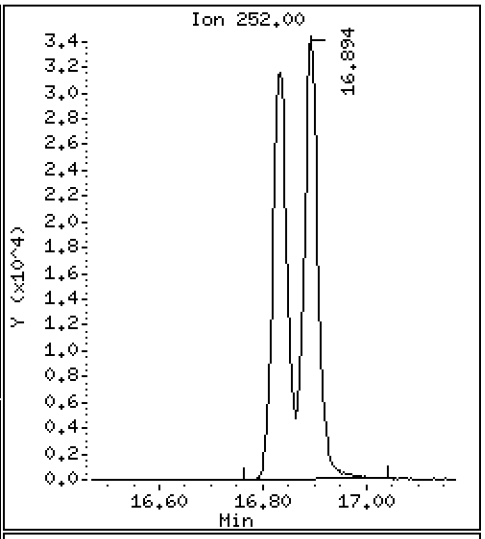
Column phase: Rxi-17sil

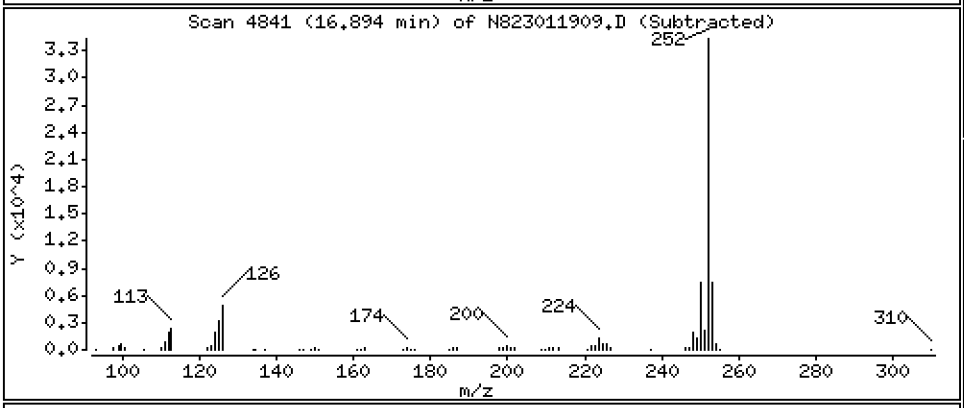
Column diameter: 0.25

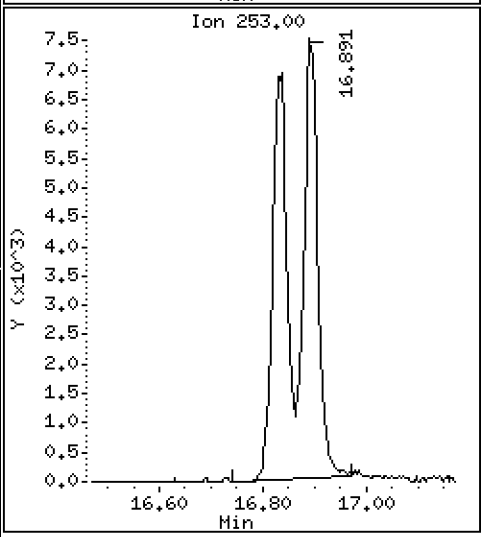
31 Total Benzofluoranthenes

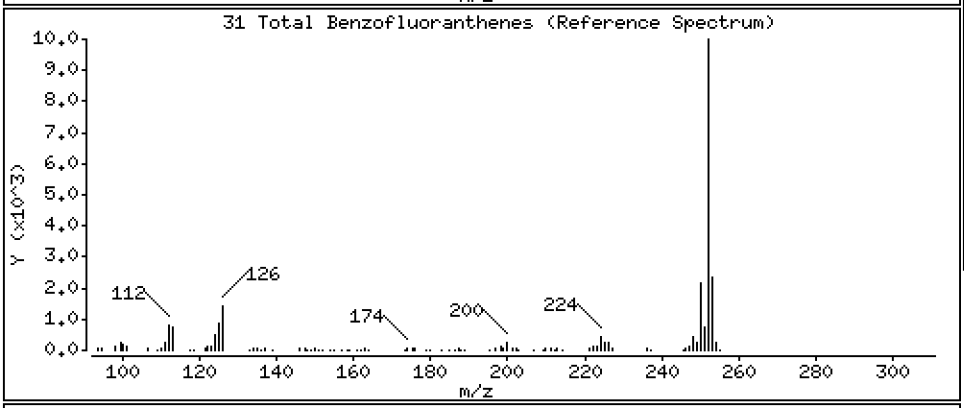
Concentration: 5.480 ug/L

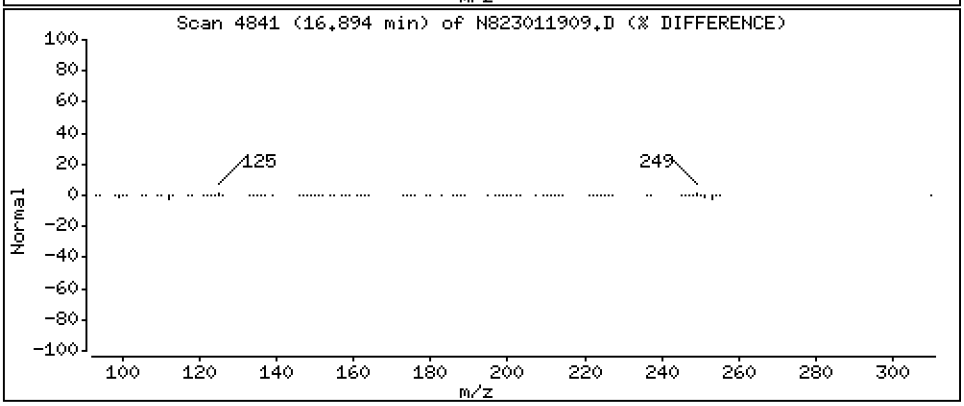












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

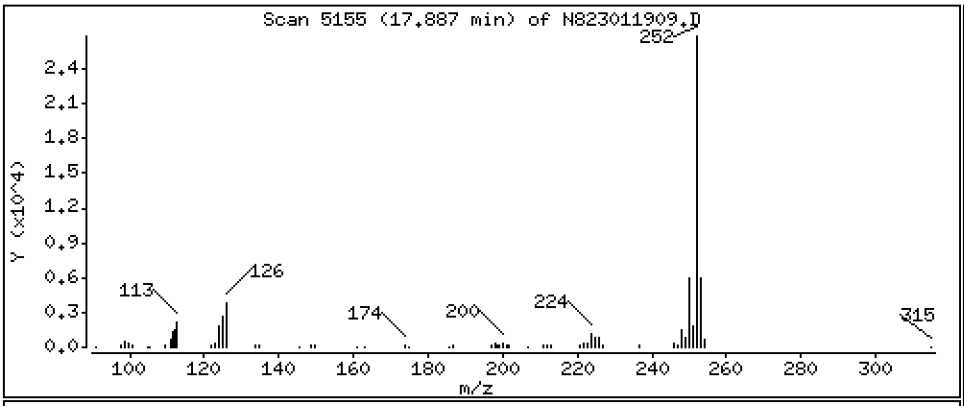
Operator: JZ

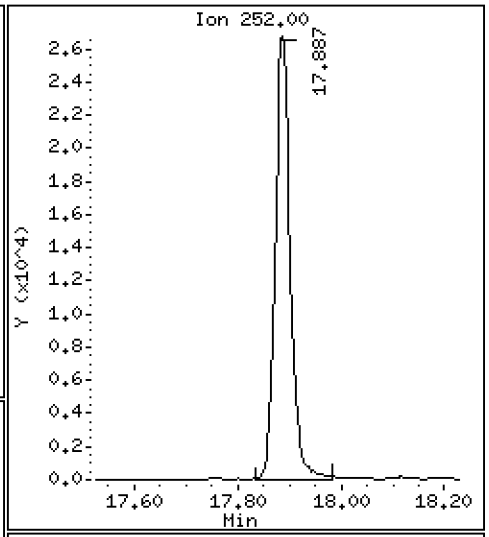
Column phase: Rxi-17sil

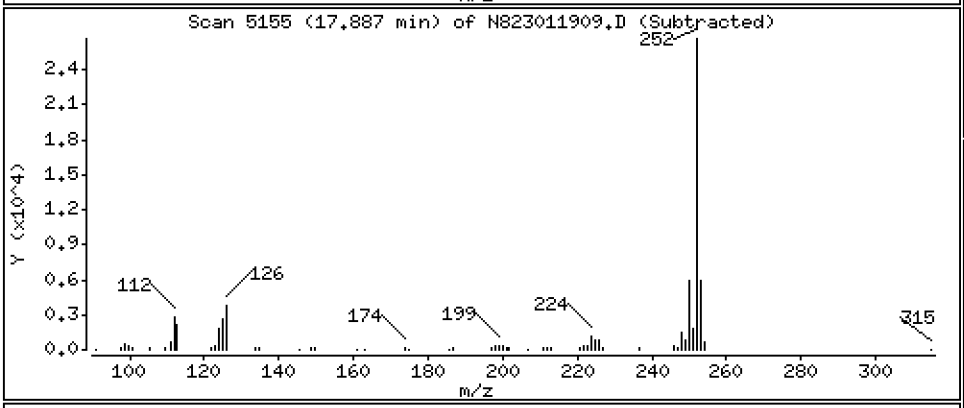
Column diameter: 0.25

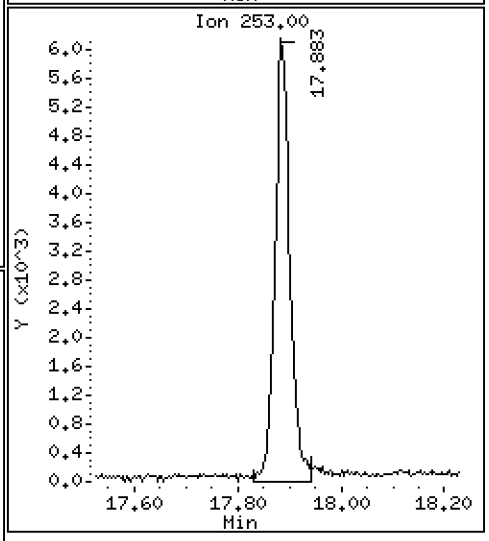
32 Benzo(a)pyrene

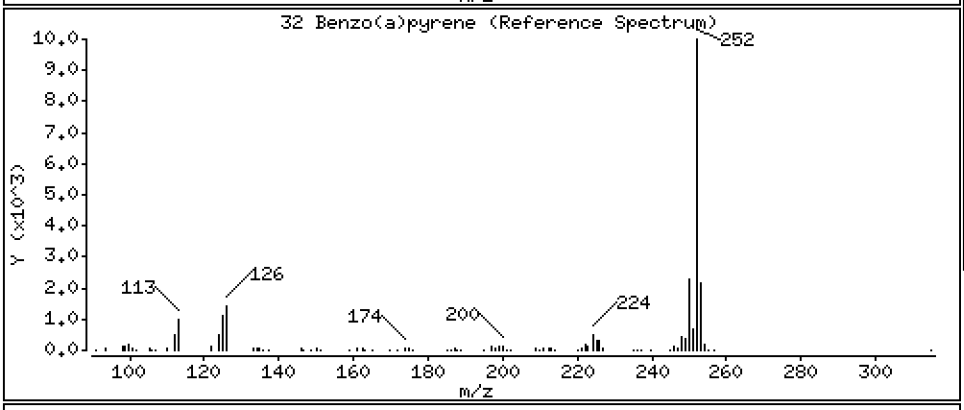
Concentration: 2.572 ug/L

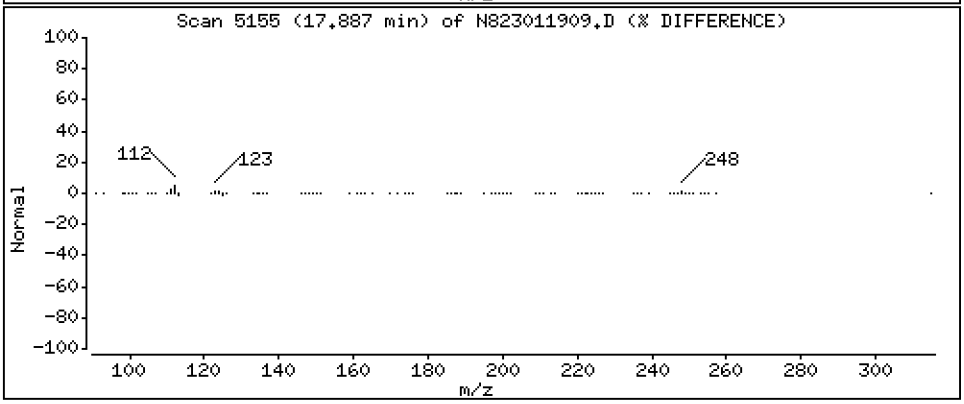












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

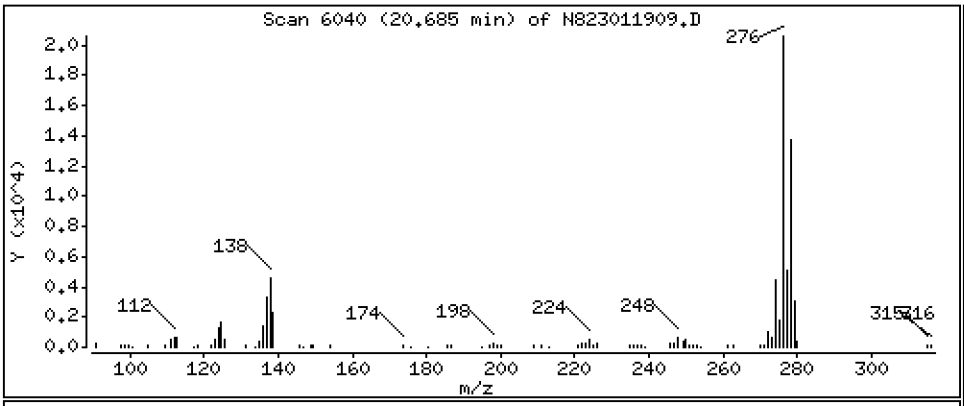
Operator: JZ

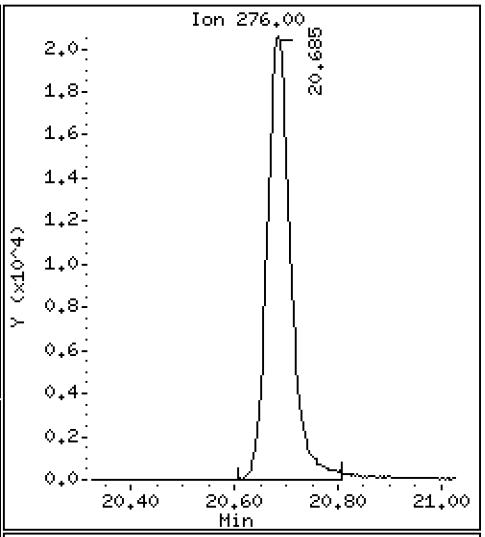
Column phase: Rxi-17sil

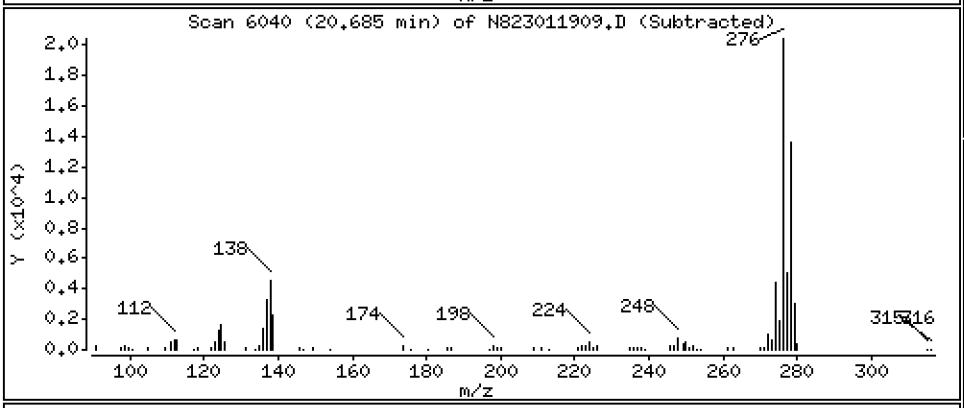
Column diameter: 0.25

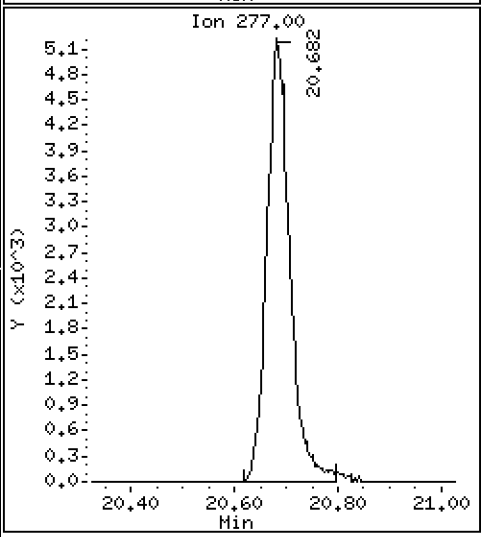
37 Indeno(1,2,3-cd)pyrene

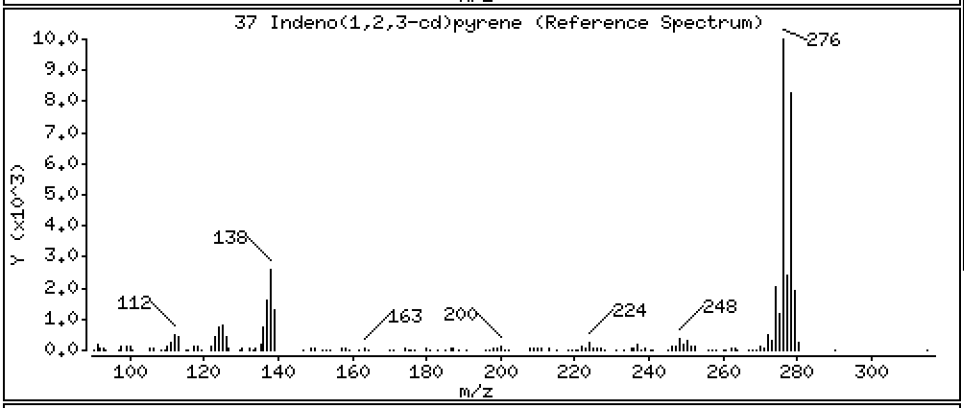
Concentration: 2.689 ug/L

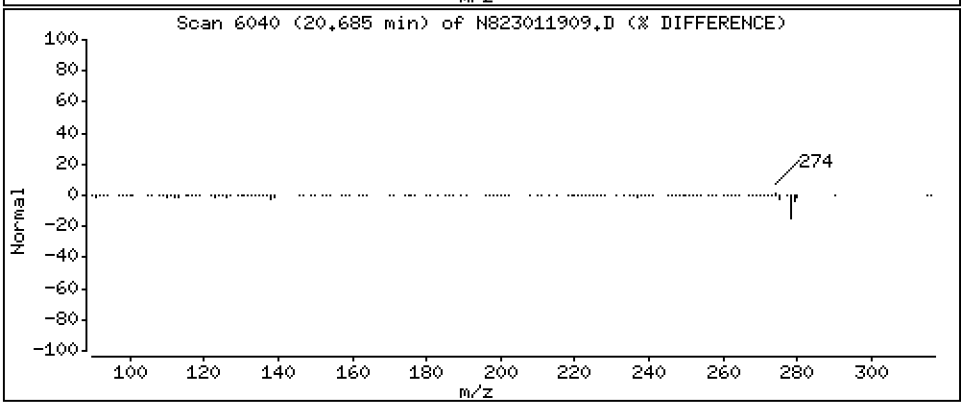












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

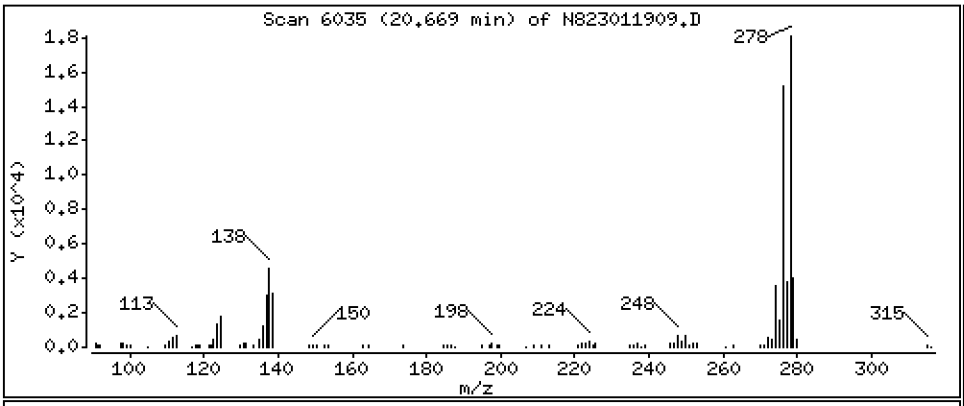
Operator: JZ

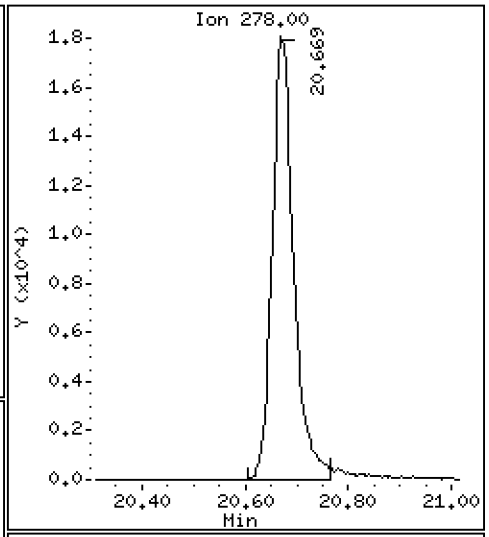
Column phase: Rxi-17sil

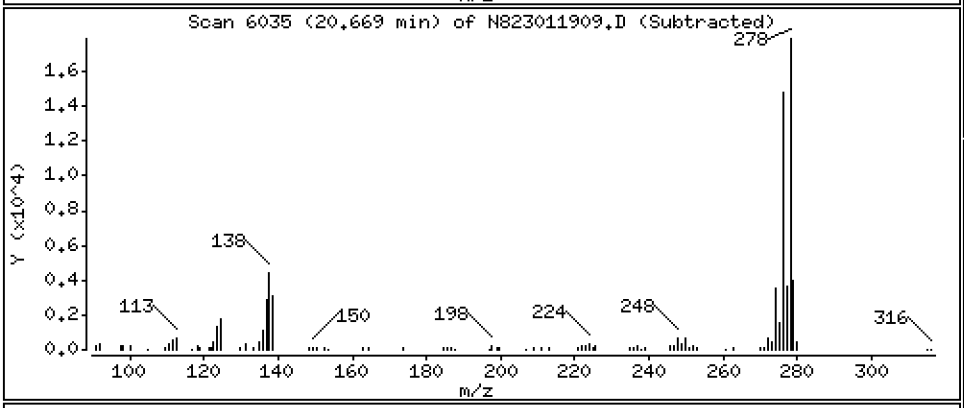
Column diameter: 0.25

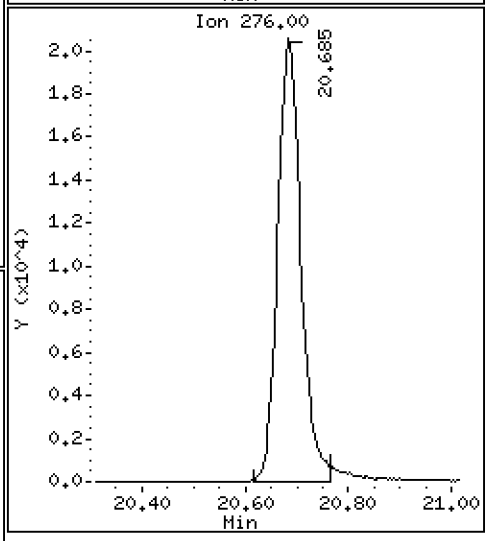
38 Dibenzo(a,h)anthracene

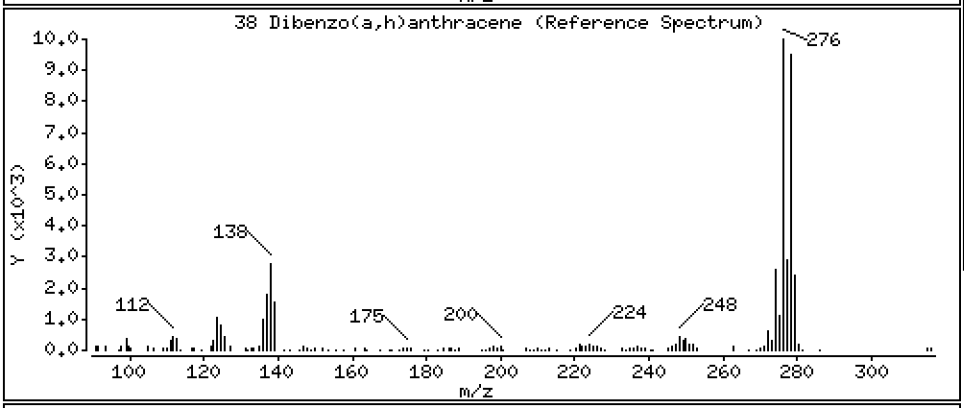
Concentration: 2.493 ug/L

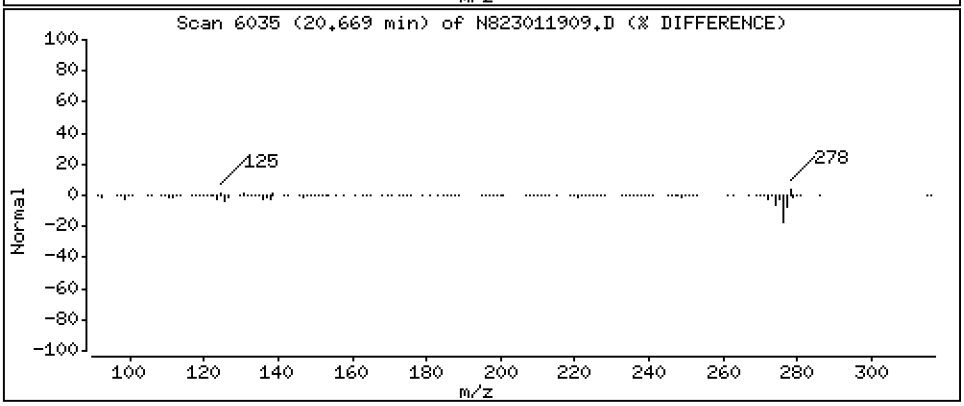












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

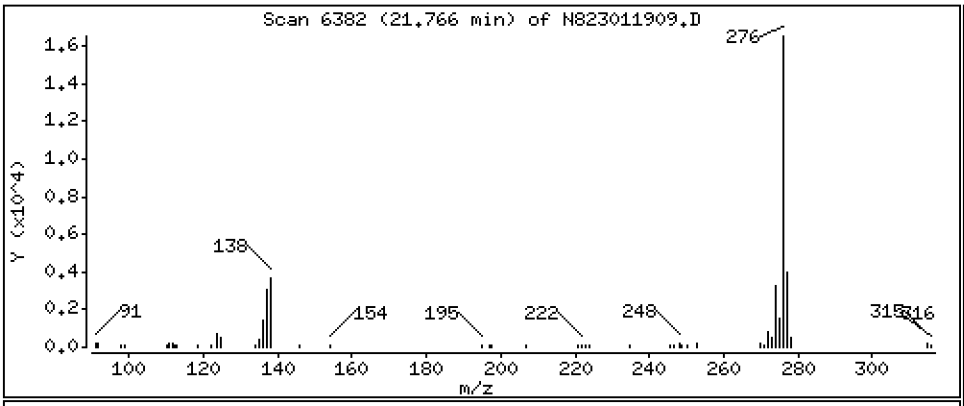
Operator: JZ

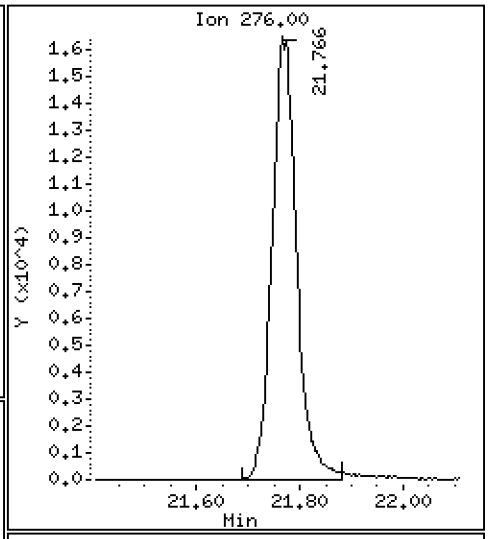
Column phase: Rxi-17sil

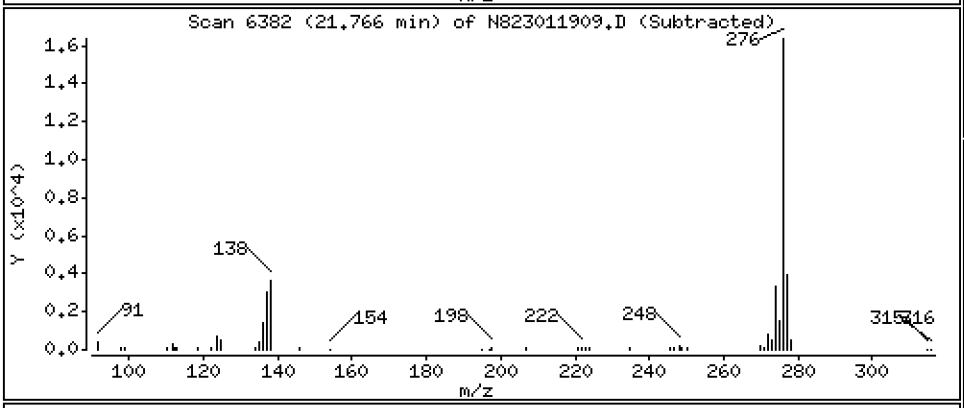
Column diameter: 0.25

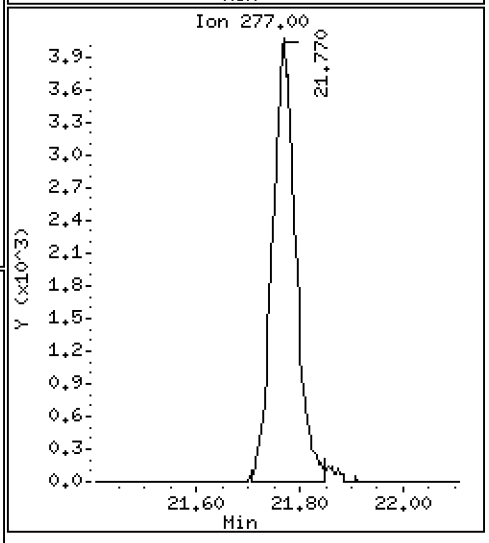
39 Benzo(g,h,i)perylene

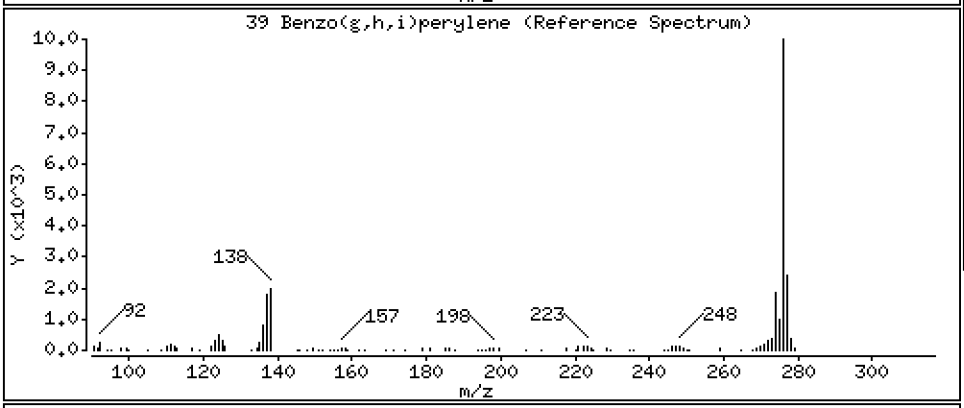
Concentration: 2.483 ug/L

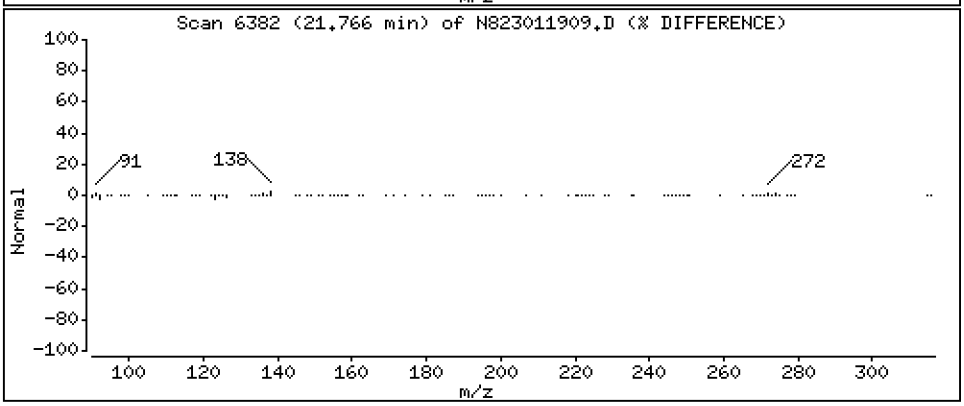












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Lab Smp Id: SLA0213-SCV1
Inj Date : 19-JAN-2023 14:58
Operator : JZ Inst ID: nt8.i
Smp Info : SCV230119
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:20 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnascv.sub
Target Version: 4.14
Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 1 Naphthalene-d8	136	4.913	4.906	(1.000)	46346	2.00000	
2 Naphthalene	128	4.941	4.938	(1.006)	56587	2.62597	2.626
$ 3 2-Methylnaphthalene-d10	152	Compound Not Detected.					
4 2-Methylnaphthalene	141	5.694	5.687	(1.159)	31650	2.67019	2.670
5 1-methylnaphthalene	141	5.890	5.883	(1.199)	31873	2.64949	2.649
9 Acenaphthylene	152	7.091	7.085	(0.985)	59018	2.82060	2.821
* 10 Acenaphthene-d10	164	7.202	7.196	(1.000)	27709	2.00000	
11 Acenaphthene	153	7.249	7.246	(1.007)	36454	2.60022	2.600
12 Dibenzofuran	168	7.401	7.395	(1.028)	60898	2.85987	2.860
14 Fluorene	166	7.878	7.872	(1.094)	43507	2.63066	2.631
* 15 Phenanthrene-d10	188	9.238	9.235	(1.000)	51685	2.00000	
16 Phenanthrene	178	9.276	9.270	(1.004)	61815	2.44841	2.448
17 Anthracene	178	9.317	9.311	(1.009)	52064	2.27006	2.270
22 Fluoranthene	202	11.059	11.053	(1.197)	72902	2.65276	2.653
$ 21 Fluoranthene-d10	212	Compound Not Detected.					
23 Pyrene	202	11.578	11.572	(0.815)	71115	2.46242	2.462
24 Benzo(a)anthracene	228	14.082	14.076	(0.991)	67725	2.58725	2.587
* 25 Chrysene-d12	240	14.212	14.202	(1.000)	46582	2.00000	
27 Chrysene	228	14.285	14.278	(1.005)	66872	2.39976	2.400
28 Benzo(b)fluoranthene	252	16.833	16.821	(0.929)	60946	2.50689	2.507
29 Benzo(k)fluoranthene	252	16.893	16.884	(0.932)	63249	2.65606	2.656
31 Total Benzofluoranthenes	252	16.893	16.821	(0.932)	126178	5.48025	5.480(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572
*	33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000	
	37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689
$	36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
	38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493
	39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483
	35 Perylene	252	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011909.D
Lab Smp Id: SLA0213-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

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

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 14:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

No RRT check performed

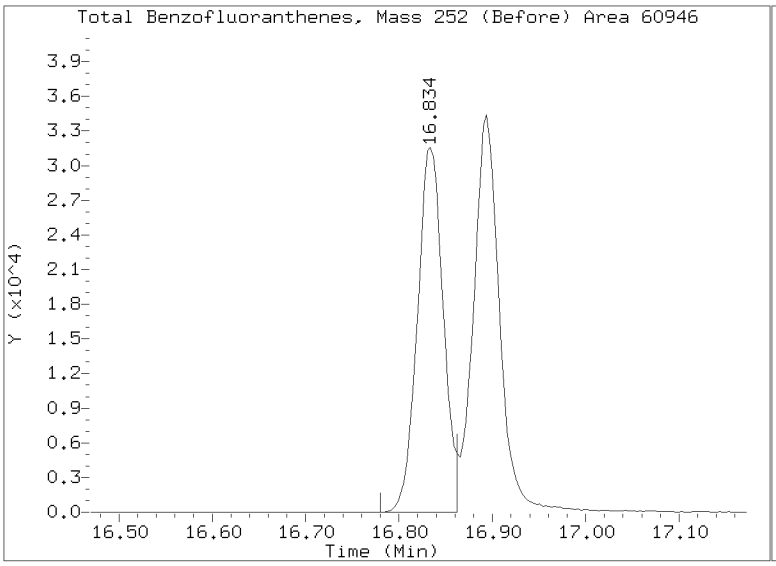
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

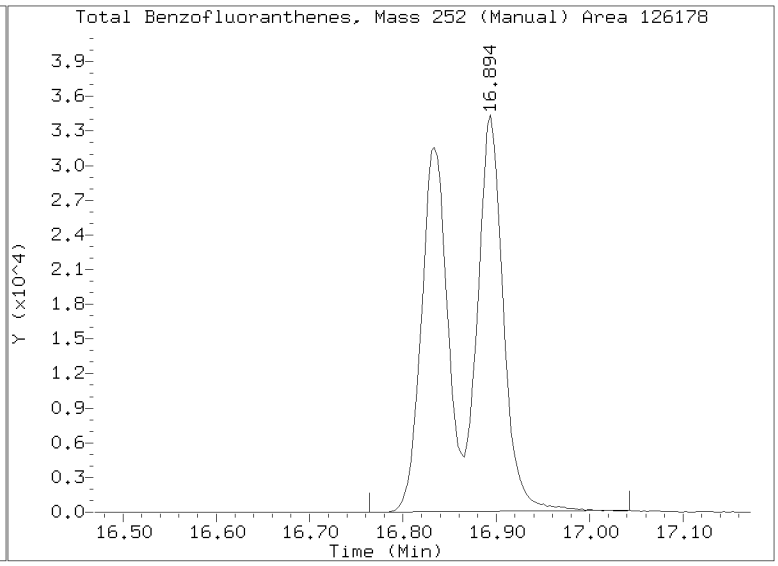
Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D
Injection Date: 19-JAN-2023 14:58
Lab ID:SLA0213-SCV1 Client ID:
Report Date: 01/19/2023 20:27





INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00049	Instrument:	NT10
Calibration Date:	03/15/2023	Column (1):	ZB-5MSi

Calibration Comments: SIM ABN ICAL

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
1,4-Dichlorobenzene	0.05	1.592272	0.1	1.586931	0.2	1.531032	0.5	1.525923	1	1.515432	2.5	1.504782
1,2-Dichlorobenzene	0.05	1.56064	0.1	1.560751	0.2	1.516719	0.5	1.51987	1	1.490507	2.5	1.472424
Benzyl Alcohol	0.05	0.782671	0.1	0.8201691	0.2	0.8740273	0.5	1.001336	1	1.030407	2.5	1.109109
Benzoic acid	0.2		0.4		0.8	6.708155E-03	2	6.190403E-02	4	0.1152489	10	0.1827842
2,4-Dimethylphenol	0.1	0.3036003	0.2	0.3286116	0.4	0.3508719	1	0.3747964	2	0.3711962	5	0.3672727
1,2,4-Trichlorobenzene	0.05	0.3845889	0.1	0.3611836	0.2	0.3536726	0.5	0.3564226	1	0.3477346	2.5	0.3419587
N-Nitrosodiphenylamine	0.05	0.4535426	0.1	0.5106592	0.2	0.5366733	0.5	0.5716845	1	0.5845597	2.5	0.5722409
Pentachlorophenol	0.1	2.310914E-02	0.2	3.752894E-02	0.4	5.531502E-02	1	8.792089E-02	2	0.1125666	5	0.1349126
2-Fluorophenol	0.075	1.096851	0.15	1.182501	0.3	1.198448	0.75	1.278705	1.5	1.28736	3.75	1.294114
p-Terphenyl-d14	0.05	0.6363201	0.1	0.6085315	0.2	0.6174532	0.5	0.6484741	1	0.6506625	2.5	0.6938122

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00049	Instrument:	NT10
Calibration Date:	03/15/2023	Column (1):	ZB-5MSi

Calibration Comments: SIM ABN ICAL

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
1,4-Dichlorobenzene	5	1.407857	10	1.361355								
1,2-Dichlorobenzene	5	1.378422	10	1.327177								
Benzyl Alcohol	5	1.078683	10	1.021686								
Benzoic acid	20	0.2157908	40	0.2329458								
2,4-Dimethylphenol	10	0.3419758	20	0.3276736								
1,2,4-Trichlorobenzene	5	0.3213898	10	0.3155673								
N-Nitrosodiphenylamine	5	0.5475779	10	0.5164376								
Pentachlorophenol	10	0.1437906	20	0.1522559								
2-Fluorophenol	7.5	1.204517	15	1.16136								
p-Terphenyl-d14	5	0.6837	10	0.6749908								

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00049	Instrument:	NT10
Calibration Date:	03/15/2023	Column (1):	ZB-5MSi

Calibration Comments: SIM ABN ICAL

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
1,4-Dichlorobenzene	1.503198	5.4			RSD (15)	
1,2-Dichlorobenzene	1.478314	5.7			RSD (15)	
Benzyl Alcohol	0.964761	12.7			RSD (15)	
Benzoic acid	0.135897	66.3		0.9947	QCOD (0.99)	
2,4-Dimethylphenol	0.3457498	7.2			RSD (15)	
1,2,4-Trichlorobenzene	0.3478148	6.3			RSD (15)	
N-Nitrosodiphenylamine	0.536672	8.0			RSD (15)	
Pentachlorophenol	9.342496E-02	53.7		0.9990	QCOD (0.99)	
2-Fluorophenol	1.212982	5.7			RSD (15)	
p-Terphenyl-d14	0.651743	4.7			RSD (15)	

ANALYSIS SEQUENCE

SLC0238

Instrument ID: NT10
Calibration ID: GC00049
MS EM Level: 1271 EV

GCMS Description: Agilent 5975/MS http://bi
GCMS Column ID: L002830

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0238-TUN1	MS Tune	QC		1	L002618		03/15/2023 20:19	NT10031501S.D	JGR	
SLC0238-CAL8	ABN 10.0	QC		2	K011110	K010831	03/15/2023 21:12	NT10031503S.D	JGR	
SLC0238-CAL7	ABN 5.0	QC		3	K011109	K010831	03/15/2023 21:50	NT10031504S.D	JGR	
SLC0238-CAL6	ABN 2.5	QC		4	K011108	K010831	03/15/2023 22:28	NT10031505S.D	JGR	
SLC0238-CAL5	ABN 1.0	QC		5	K011107	K010831	03/15/2023 23:06	NT10031506S.D	JGR	
SLC0238-CAL4	ABN 0.5	QC		6	K011106	K010831	03/15/2023 23:44	NT10031507S.D	JGR	
SLC0238-CAL3	ABN 0.2	QC		7	K011105	K010831	03/16/2023 00:22	NT10031508S.D	JGR	
SLC0238-CAL2	ABN 0.1	QC		8	L002877	K010831	03/16/2023 01:00	NT10031509S.D	JGR	
SLC0238-CAL1	ABN 0.05	QC		9	L002878	K010831	03/16/2023 01:38	NT10031510S.D	JGR	
SLC0238-SCV1	SCV 5.0	QC		10	K010066	K010831	03/16/2023 02:16	NT10031511S.D	JGR	
SLC0238-ICB1	Initial Cal Blank	QC		11	K005156	K010831	03/16/2023 02:54	NT10031512S.D	JGR	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230315.b\20230315.b

	Time	Filename	LabID	ClientId	DF											
1	2019	NT10031501S.D	SLC0238-TUN1		1	|NO ISTDS FOUND||										
2	2034	NT10031502S.D	FULL SCAN ONLY		1	9.31	193857||	11.78	709633||	15.39	344841||	18.43	635594||	23.46	392013||	26.19	449978|
3	2112	NT10031503S.D	SLC0238-CAL8		1	9.31	192425||	11.78	689875||	15.39	341663||	18.42	651934||	23.45	482051||	26.19	502718|
4	2150	NT10031504S.D	SLC0238-CAL7		1	9.30	187419||	11.77	682446||	15.38	331603||	18.42	598629||	23.45	389338||	26.19	466441|
5	2228	NT10031505S.D	SLC0238-CAL6		1	9.30	173412||	11.78	624286||	15.38	310309||	18.43	554860||	23.46	385144||	26.19	456369|
6	2306	NT10031506S.D	SLC0238-CAL5		1	9.30	188081||	11.77	674549||	15.39	328275||	18.42	597140||	23.45	466503||	26.19	518203|
7	2344	NT10031507S.D	SLC0238-CAL4		1	9.30	191648||	11.77	679665||	15.39	335786||	18.42	613961||	23.45	464623||	26.19	521317|
8	0022	NT10031508S.D	SLC0238-CAL3		1	9.30	188644||	11.78	664117||	15.38	328147||	18.42	603272||	23.46	468991||	26.18	525052|
9	0100	NT10031509S.D	SLC0238-CAL2		1	9.30	190985||	11.77	684638||	15.39	328366||	18.42	602202||	23.45	451316||	26.19	517188|
10	0138	NT10031510S.D	SLC0238-CAL1		1	9.30	187154||	11.78	654413||	15.38	318969||	18.42	583319||	23.46	440533||	26.19	488759|
11	0216	NT10031511S.D	SLC0238-SCV1		1	9.31	166866||	11.78	612104||	15.39	302524||	18.43	553619||	23.46	465428||	26.19	532593|
12	0254	NT10031512S.D	SLC0238-ICB1		1	9.31	189475||	11.77	676186||	15.38	328650||	18.42	617605||	23.45	473513||	26.19	534734|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230315.b\20230315.b

Instrument: nt10.i Date: 15-MAR-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
2019	NT10031501S.D	SLC0238-TUN1	1	NO MANUAL INTEGRATION
2034	NT10031502S.D	FULL SCAN ONLY	1	NO MANUAL INTEGRATION
2112	NT10031503S.D	SLC0238-CAL8	1	NO MANUAL INTEGRATION
2150	NT10031504S.D	SLC0238-CAL7	1	NO MANUAL INTEGRATION
2228	NT10031505S.D	SLC0238-CAL6	1	NO MANUAL INTEGRATION
2306	NT10031506S.D	SLC0238-CAL5	1	NO MANUAL INTEGRATION
2344	NT10031507S.D	SLC0238-CAL4	1	NO MANUAL INTEGRATION
0022	NT10031508S.D	SLC0238-CAL3	1	Benzoic acid,
0100	NT10031509S.D	SLC0238-CAL2	1	Pentachlorophenol,
0138	NT10031510S.D	SLC0238-CAL1	1	Pentachlorophenol,
0216	NT10031511S.D	SLC0238-SCV1	1	Terphenyl-d14,
0254	NT10031512S.D	SLC0238-ICB1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 16-Mar-2023 14:47

NT10031501S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031502S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031503S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031504S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031505S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031506S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031507S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031508S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031509S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031510S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031511S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031512S.D	Data Locked	van, 16-Mar-2023 14:47

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 21:12
End Cal Date : 16-MAR-2023 01:38
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Last Edit : 16-Mar-2023 14:34 van

Calibration File Names:
Level 1: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031510S.D
Level 2: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031509S.D
Level 3: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031508S.D
Level 4: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031507S.D
Level 5: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031506S.D
Level 6: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031505S.D
Level 7: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031504S.D
Level 8: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031503S.D

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 21:12
End Cal Date : 16-MAR-2023 01:38
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Last Edit : 16-Mar-2023 14:34 van

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
141 Diallate B	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
142 1,2-Dibromo-3-Chloropropane	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
135 2,3,5,6-Tetrachlorophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
136 2,3,4,5-tetrachlorophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
137 NewCpnd_131	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
133 Butylatedhydroxytoluene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
132 3,6-Dimethylphenanthrene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 21:12
End Cal Date : 16-MAR-2023 01:38
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Last Edit : 16-Mar-2023 14:34 van

Compound	0.0500000 Level 1 / 5.0000 Level 7	0.1000000 Level 2 / 10.0000 Level 8	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
131 1-Methylphenanthrene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
146 Benzo(j)fluoranthene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
130 Dibenzothiophene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
129 1-Methylfluorene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
128 N-Hexadecane	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
127 2-Isopropylnaphthalene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
126 N-Tetradecane	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 21:12
End Cal Date : 16-MAR-2023 01:38
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Last Edit : 16-Mar-2023 14:34 van

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
144 alpha-Terpineol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
125 Safrole	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
124 3,4-Dimethylphenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
123 Acetophenone	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
122 Furfuraldehyde	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
143 1,4-Dioxane	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
121 Quinoline	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 21:12
End Cal Date : 16-MAR-2023 01:38
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Last Edit : 16-Mar-2023 14:34 van

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
120 2,3,4,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
117 Butyl Diphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
116 Dibutyl Phenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 21:12
End Cal Date : 16-MAR-2023 01:38
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Last Edit : 16-Mar-2023 14:34 van

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
113 Diphenyl Oxide	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
112 Biphenyl	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
111 Azobenzene (1,2-DP-Hydrazine)	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
110 Tetrachloroguaiacol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
109 3,4,5-Trichloroguaiacol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
108 4,5,6-Trichloroguaiacol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
107 4,5-Dichloro-2-Methoxyphenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

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Start Cal Date : 15-MAR-2023 21:12
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Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Last Edit : 16-Mar-2023 14:34 van

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
106 Guaiacol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
105 1-methylnaphthalene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
3 Phenol	1.56149	1.65772	1.68063	1.76515	1.75148	1.75667					
	1.62297	1.51697					AVRG		1.66414		5.59099
4 Bis(2-Chloroethyl)ether	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
6 2-Chlorophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
7 1,3-Dichlorobenzene	1.66537	1.66694	1.59369	1.58637	1.56403	1.55057					
	1.44651	1.38404					AVRG		1.55719		6.34113
9 1,4-Dichlorobenzene	1.59227	1.58693	1.53103	1.52592	1.51543	1.50478					
	1.40786	1.36136					AVRG		1.50320		5.36917

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
11 Benzyl alcohol	0.78267	0.82017	0.87403	1.00134	1.03041	1.10911					
	1.07868	1.02169					AVRG		0.96476		12.69470
12 1,2-Dichlorobenzene	1.56064	1.56075	1.51672	1.51987	1.49051	1.47242					
	1.37842	1.32718					AVRG		1.47831		5.70440
13 2-Methylphenol	1.10796	1.06982	1.09063	1.18375	1.19440	1.23938					
	1.18782	1.15101					AVRG		1.15310		5.09645
14 2,2'-oxybis(1-Chloropropane)	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
15 4-Methylphenol	1.03102	1.10647	1.13727	1.24194	1.26988	1.30504					
	1.27388	1.22012					AVRG		1.19820		8.02665
16 N-Nitroso-di-n-propylamine	0.74420	0.77640	0.80427	0.88191	0.89897	0.92866					
	0.89355	0.85105					AVRG		0.84738		7.74495
17 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1 / 5.0000 Level 7	0.1000000 Level 2 / 10.0000 Level 8	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
19 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
20 Isophorone	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
21 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
22 2,4-Dimethylphenol	0.30360	0.32861	0.35087	0.37480	0.37120	0.36727					
	0.34198	0.32767					AVRG		0.34575		7.24468
23 Bis(2-Chloroethoxy)methane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
24 Benzoic acid	+++++	+++++	891	21037	77741	285274					
	736328	1607035					QUAD	0.000e+000	5.29174	-0.43541	0.99817
25 2,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
26 1,2,4-Trichlorobenzene	0.38459	0.36118	0.35367	0.35642	0.34773	0.34196					
	0.32139	0.31557					AVRG		0.34781		6.34752
28 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
29 4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
30 Hexachlorobutadiene	0.23044	0.21302	0.21319	0.21525	0.21116	0.21214					
	0.19866	0.19786					AVRG		0.21146		4.82681
31 4-Chloro-3-methylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
32 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
33 Hexachlorocyclopentadiene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
39 Dimethylphthalate	1.27787	1.27224	1.24048	1.29313	1.32502	1.28149					
	1.22328	1.18473					AVRG		1.26228		3.49321
40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
43 3-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
44 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
45 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
46 Dibenzofuran	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
47 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
48 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
49 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
50 Diethylphthalate	1.09879	1.17308	1.27815	1.36289	1.42716	1.41289					
	1.35423	1.35415					AVRG		1.30767		8.92477
51 4-Chlorophenyl-phenylether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
53 4,6-Dinitro-2-methylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
54 N-Nitrosodiphenylamine	0.45354	0.51066	0.53667	0.57168	0.58456	0.57224					
	0.54758	0.51644					AVRG		0.53667		7.99896
56 4-Bromophenyl-phenylether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
57 Hexachlorobenzene	0.25043	0.25088	0.24115	0.24237	0.24203	0.24151					
	0.23339	0.22020					AVRG		0.24025		4.08944

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Last Edit : 16-Mar-2023 14:34 van

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
58 Pentachlorophenol	+++++	1130	3337	13495	33609	93572					
	215193	496304					QUAD	0.000e+000	7.54154	-1.29368	0.99963
60 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
61 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
62 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
63 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
64 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
65 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
67 Butylbenzylphthalate	1336	3284	7787	24470	56297	133147					
	271734	722761					QUAD	0.000e+000	1.90264	-0.15728	0.99983
68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
72 bis(2-Ethylhexyl)phthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1 / 5.0000 Level 7	0.1000000 Level 2 / 10.0000 Level 8	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
75 Benzo(k)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
76 Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
78 Indeno(1,2,3-cd)pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
79 Dibenzo(a,h)anthracene	4785	11218	24266	72052	155363	368157					
	751404	1559411					QUAD	0.000e+000	0.76135	0.01405	0.99989
80 Benzo(g,h,i)perylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
90 N-Nitrosodimethylamine	0.74719	0.78006	0.77776	0.82263	0.80430	0.80649					
	0.73835	0.67774					AVRG		0.76932		6.11057
91 Aniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
101 Cholesterol	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
102 beta-Sitosterol	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
103 Pyridine	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
$ 1 2-Fluorophenol	1.09685	1.18250	1.19845	1.27871	1.28736	1.29411					
	1.20452	1.16136					AVRG		1.21298		5.72847
$ 145 d8-1,4-Dioxane	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
$ 2 Phenol-d5	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
$ 5 2-Chlorophenol-d4	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
$ 10 1,2-Dichlorobenzene-d4	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 18 Nitrobenzene-d5	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 36 2-Fluorobiphenyl	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 55 2,4,6-Tribromophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 66 Terphenyl-d14	0.63632	0.60853	0.61745	0.64847	0.65066	0.69381					
	0.68370	0.67499					AVRG		0.65174		4.72002
$ 85 p-Cresol-d4	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 86 Anthracene-d10	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 21:12
End Cal Date : 16-MAR-2023 01:38
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Last Edit : 16-Mar-2023 14:34 van

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 88 Dibenz(a,h)anthracene-d14	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 95 D10-1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2023 21:12
End Cal Date : 16-MAR-2023 01:38
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Last Edit : 16-Mar-2023 14:34 van

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230315.b\20230315.b
Inst ID: nt10.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08
FILENAME:	NT10031503S	NT10031504S	NT10031505S	NT10031506S	NT10031507S	NT10031508S	NT10031509S	NT10031510S
INJ.DATE:	15-MAR-2023	15-MAR-2023	15-MAR-2023	15-MAR-2023	15-MAR-2023	16-MAR-2023	16-MAR-2023	16-MAR-2023
INJ.TIME:	21:12	21:50	22:28	23:06	23:44	00:22	01:00	01:38

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	7.073	7.073	7.066	7.073	7.073	7.073	7.073	7.073	7.073	6.573-7.573	7.072	0.003
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	33.580	33.080-34.080	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.873	30.373-31.373	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.300	30.800-31.800	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.300	30.800-31.800	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.496	14.996-15.996	+++++	+++++
135 2,3,5,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.428	19.928-20.928	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.471	19.971-20.971	+++++	+++++
137 NewCpnd_131	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.828	7.328-8.328	+++++	+++++
* 134 Di-n-octylphthalate-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.768	23.268-24.268	+++++	+++++
133 Butylatedhydroxytoluen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.190	13.690-14.690	+++++	+++++
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.262	30.762-31.762	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.954	29.454-30.454	+++++	+++++
146 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.752	23.252-24.252	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.717	27.217-28.217	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.566	20.066-21.066	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.796	19.296-20.296	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230315.b\20230315.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.349	22.849-23.849	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.474	21.974-22.974	+++++	+++++
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.191	10.691-11.691	+++++	+++++
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.779	17.279-18.279	+++++	+++++
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.310	15.810-16.810	+++++	+++++
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.707	17.207-18.207	+++++	+++++
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.921	8.421-9.421	+++++	+++++
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.736	3.236-4.236	+++++	+++++
$ 145 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.914	2.414-3.414	+++++	+++++
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.148	19.648-20.648	+++++	+++++
120 2,3,4,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.588	15.088-16.088	+++++	+++++
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.587	38.087-39.087	+++++	+++++
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.382	19.882-20.882	+++++	+++++
117 Butyl Diphenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.734	18.234-19.234	+++++	+++++
116 Dibutyl Phenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.987	16.487-17.487	+++++	+++++
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.204	14.704-15.704	+++++	+++++
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.540	14.040-15.040	+++++	+++++
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.586	21.086-22.086	+++++	+++++
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.692	17.192-18.192	+++++	+++++
111 Azobenzene (1,2-DP-Hyd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.268	15.768-16.768	+++++	+++++
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.055	17.555-18.555	+++++	+++++
109 3,4,5-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.228	16.728-17.728	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

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Batch File: \\target\share\chem3\nt10.i\20230315.b\20230315.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
108	4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.517	16.017-17.017	+++++	+++++
107	4,5-Dichloro-2-Methoxy	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.803	14.303-15.303	+++++	+++++
106	Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.843	11.343-12.343	+++++	+++++
105	1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.927	12.427-13.427	+++++	+++++
$ 2	Phenol-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.235	7.735-8.735	+++++	+++++
3	Phenol	8.664	8.665	8.657	8.657	8.657	8.657	8.657	8.665	8.665	8.165-9.165	8.660	0.004
4	Bis(2-Chloroethyl)ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.397	7.897-8.897	+++++	+++++
$ 5	2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.490	7.990-8.990	+++++	+++++
6	2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.521	8.021-9.021	+++++	+++++
7	1,3-Dichlorobenzene	9.236	9.237	9.237	9.237	9.237	9.237	9.237	9.237	9.237	8.737-9.737	9.237	0.000
* 8	1,4-Dichlorobenzene-d4	9.306	9.299	9.299	9.299	9.299	9.299	9.299	9.299	9.299	8.799-9.799	9.300	0.003
9	1,4-Dichlorobenzene	9.330	9.330	9.330	9.330	9.330	9.330	9.330	9.330	9.330	8.830-9.830	9.330	0.000
$ 10	1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.230	8.730-9.730	+++++	+++++
11	Benzyl alcohol	9.562	9.563	9.563	9.563	9.563	9.563	9.563	9.570	9.570	9.070-10.070	9.564	0.003
12	1,2-Dichlorobenzene	9.687	9.687	9.687	9.687	9.687	9.687	9.687	9.687	9.687	9.187-10.187	9.687	0.000
13	2-Methylphenol	9.780	9.772	9.772	9.772	9.772	9.772	9.772	9.772	9.772	9.272-10.272	9.773	0.003
14	2,2'-oxybis(1-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.413	8.913-9.913	+++++	+++++
15	4-Methylphenol	10.044	10.036	10.036	10.036	10.036	10.036	10.036	10.036	10.036	9.536-10.536	10.037	0.003
16	N-Nitroso-di-n-propyla	10.121	10.114	10.114	10.114	10.114	10.114	10.114	10.114	10.114	9.614-10.614	10.115	0.003
17	Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.809	9.309-10.309	+++++	+++++
$ 18	Nitrobenzene-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.917	9.417-10.417	+++++	+++++
19	Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.948	9.448-10.448	+++++	+++++
20	Isophorone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.399	9.899-10.899	+++++	+++++
21	2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.575	10.075-11.075	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230315.b\20230315.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	22 2,4-Dimethylphenol	11.086	11.086	11.079	11.078	11.086	11.079	11.086	11.087	11.087	10.587-11.587	11.083	0.004
	23 Bis(2-Chloroethoxy)met	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.830	10.330-11.330	+++++	+++++
	24 Benzoic acid	11.332	11.273	11.223	11.188	11.171	11.189	+++++	+++++	11.189	10.689-11.689	11.229	0.062
	25 2,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.033	10.533-11.533	+++++	+++++
	26 1,2,4-Trichlorobenzene	11.689	11.690	11.691	11.689	11.690	11.691	11.690	11.690	11.690	11.190-12.190	11.690	0.001
*	27 Naphthalene-d8	11.782	11.775	11.775	11.774	11.775	11.775	11.775	11.775	11.775	11.275-12.275	11.776	0.003
	28 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.326	10.826-11.826	+++++	+++++
	29 4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.457	10.957-11.957	+++++	+++++
	30 Hexachlorobutadiene	12.176	12.169	12.169	12.176	12.176	12.169	12.176	12.169	12.169	11.669-12.669	12.173	0.004
	31 4-Chloro-3-methylpheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.432	11.932-12.932	+++++	+++++
	32 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.710	12.210-13.210	+++++	+++++
	33 Hexachlorocyclopentadi	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.182	12.682-13.682	+++++	+++++
	34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.330	12.830-13.830	+++++	+++++
	35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.415	12.915-13.915	+++++	+++++
$	36 2-Fluorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.484	12.984-13.984	+++++	+++++
	37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.686	13.186-14.186	+++++	+++++
	38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.941	13.441-14.441	+++++	+++++
	39 Dimethylphthalate	14.885	14.877	14.878	14.877	14.877	14.878	14.877	14.878	14.878	14.378-15.378	14.878	0.003
	40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.545	14.045-15.045	+++++	+++++
	41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.506	14.006-15.006	+++++	+++++
*	42 Acenaphthene-d10	15.388	15.380	15.381	15.388	15.388	15.381	15.388	15.381	15.381	14.881-15.881	15.384	0.004
	43 3-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.785	14.285-15.285	+++++	+++++
	44 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.924	14.424-15.424	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230315.b\20230315.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	45 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.001	14.501-15.501	+++++	+++++
	46 Dibenzofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.248	14.748-15.748	+++++	+++++
	47 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.171	14.671-15.671	+++++	+++++
	48 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.302	14.802-15.802	+++++	+++++
	49 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.952	15.452-16.452	+++++	+++++
	50 Diethylphthalate	16.339	16.331	16.332	16.331	16.331	16.324	16.331	16.324	16.324	15.824-16.824	16.330	0.005
	51 4-Chlorophenyl-phenyle	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.952	15.452-16.452	+++++	+++++
	52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.037	15.537-16.537	+++++	+++++
	53 4,6-Dinitro-2-methylph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.145	15.645-16.645	+++++	+++++
	54 N-Nitrosodiphenylamine	16.724	16.717	16.718	16.724	16.717	16.718	16.717	16.718	16.718	16.218-17.218	16.719	0.003
$	55 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.477	15.977-16.977	+++++	+++++
	56 4-Bromophenyl-phenylet	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.939	16.439-17.439	+++++	+++++
	57 Hexachlorobenzene	17.797	17.797	17.798	17.797	17.797	17.790	17.797	17.798	17.798	17.298-18.298	17.797	0.003
	58 Pentachlorophenol	18.153	18.146	18.154	18.153	18.154	18.154	18.154	18.154	18.154	17.654-18.654	18.153	0.003
*	59 Phenanthrene-d10	18.424	18.417	18.425	18.424	18.424	18.418	18.424	18.417	18.417	17.917-18.917	18.422	0.004
	60 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.899	17.399-18.399	+++++	+++++
	61 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.991	17.491-18.491	+++++	+++++
	62 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.324	17.824-18.824	+++++	+++++
	63 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.152	18.652-19.652	+++++	+++++
	64 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.289	19.789-20.789	+++++	+++++
	65 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.715	20.215-21.215	+++++	+++++
$	66 Terphenyl-d14	21.542	21.542	21.543	21.542	21.542	21.543	21.542	21.543	21.543	21.043-22.043	21.543	0.000
	67 Butylbenzylphthalate	22.464	22.456	22.465	22.464	22.464	22.465	22.464	22.465	22.465	21.965-22.965	22.463	0.003
	68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.875	22.375-23.375	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

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Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
*	69 Chrysene-d12	23.455	23.455	23.456	23.455	23.455	23.456	23.455	23.456	23.456	22.956-23.956	23.455	0.000
	70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.844	22.344-23.344	+++++	+++++
	71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.952	22.452-23.452	+++++	+++++
	72 bis(2-Ethylhexyl)phtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.007	22.507-23.507	+++++	+++++
	73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.990	23.490-24.490	+++++	+++++
	74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.687	24.187-25.187	+++++	+++++
	75 Benzo(k)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.725	24.225-25.225	+++++	+++++
	76 Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.283	24.783-25.783	+++++	+++++
*	77 Perylene-d12	26.188	26.188	26.189	26.188	26.188	26.181	26.188	26.189	26.189	25.689-26.689	26.187	0.003
	78 Indeno(1,2,3-cd)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.794	27.294-28.294	+++++	+++++
	79 Dibenzo(a,h)anthracene	29.033	29.018	29.019	29.010	29.010	29.003	29.010	29.019	29.019	28.519-29.519	29.015	0.009
	80 Benzo(g,h,i)perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	28.494	27.994-28.994	+++++	+++++
$	85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.238	16.738-17.738	+++++	+++++
$	86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.316	28.816-29.816	+++++	+++++
$	87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.007	25.507-26.507	+++++	+++++
$	88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	44.609	44.109-45.109	+++++	+++++
$	89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.085	15.585-16.585	+++++	+++++
	90 N-Nitrosodimethylamine	4.941	4.933	4.926	4.941	4.941	4.941	4.941	4.949	4.949	4.449-5.449	4.939	0.007
	91 Aniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.305	7.805-8.805	+++++	+++++
	92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.615	21.115-22.115	+++++	+++++
	93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.529	20.029-21.029	+++++	+++++
$	95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.686	17.186-18.186	+++++	+++++
	96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.540	14.040-15.040	+++++	+++++
	97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.957	26.457-27.457	+++++	+++++

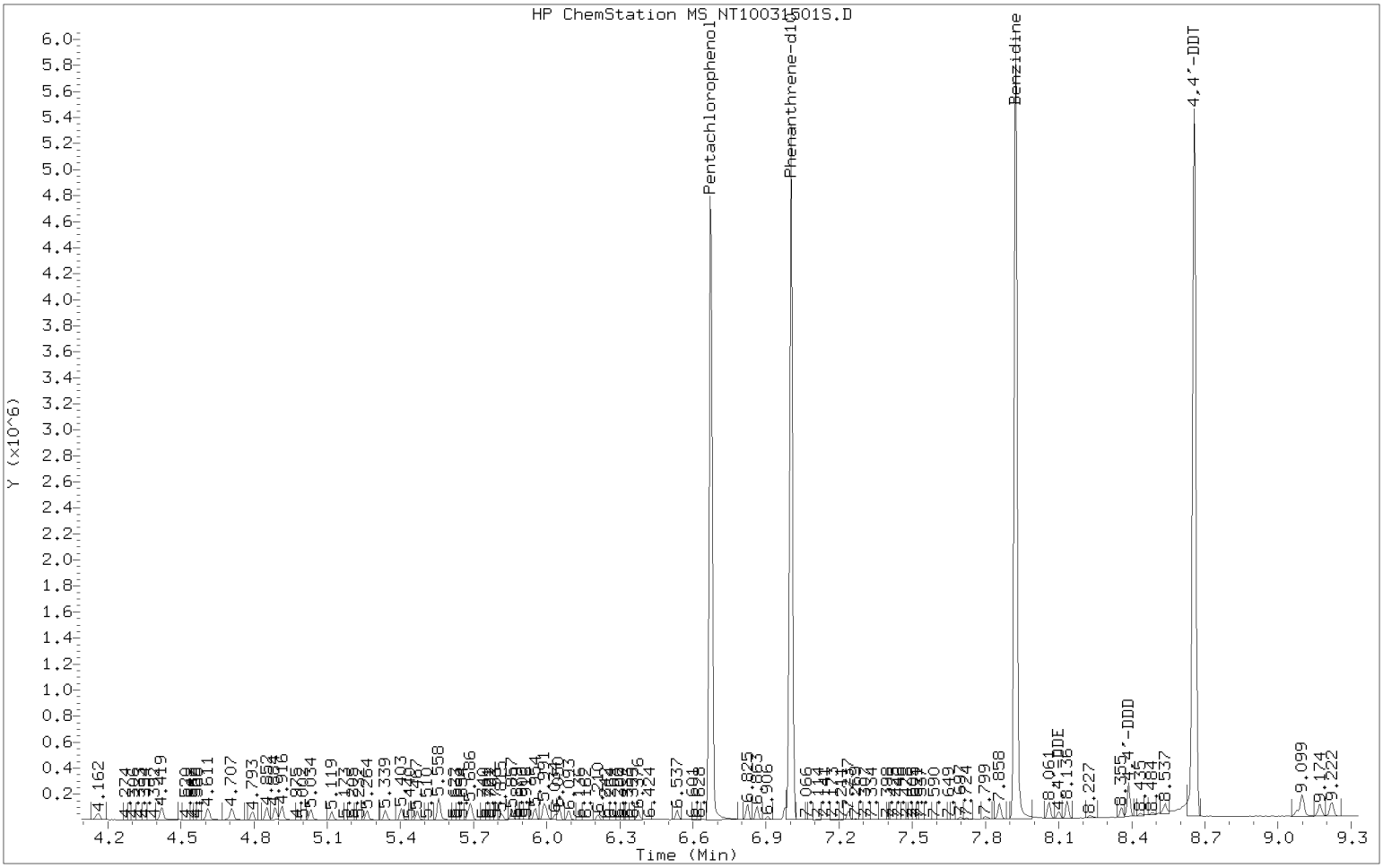
ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

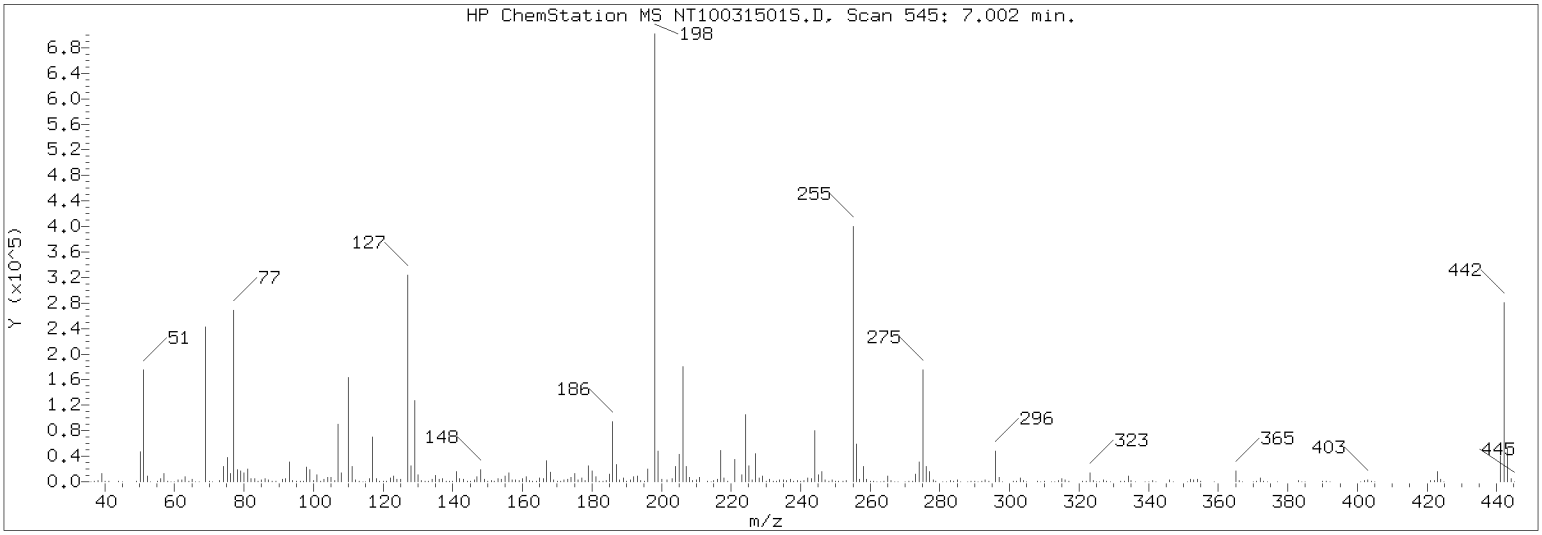
Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230315.b\20230315.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.609	19.109-20.109	+++++	+++++
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.438	24.938-25.938	+++++	+++++
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.384	25.884-26.884	+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.881	43.381-44.381	+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	45.573	45.073-46.073	+++++	+++++
103 Pyridine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.535	4.035-5.035	+++++	+++++

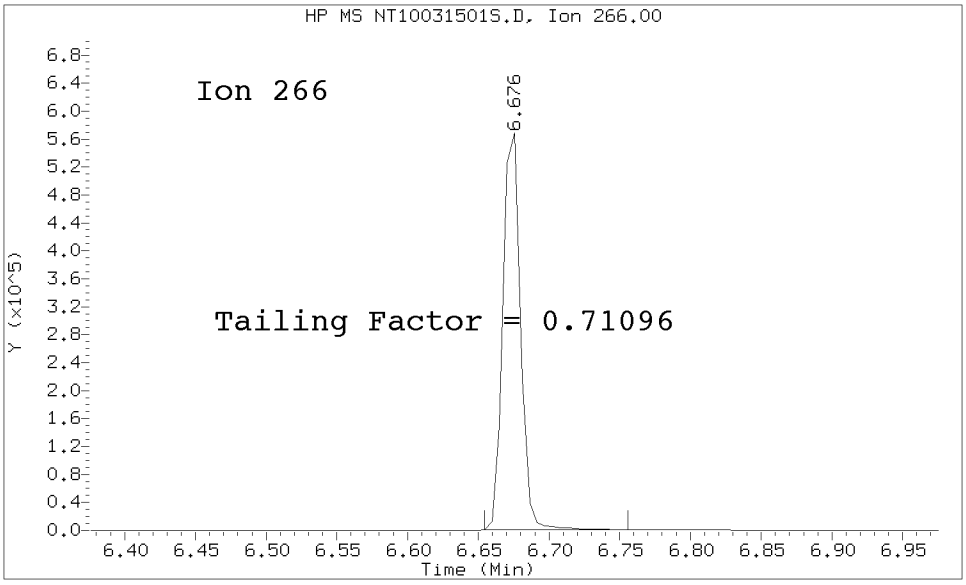
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230315.b/20230315.b/NT10031501S.D/NT10031501S.D
Method Used: \20230315.b\20230315.b\DFTPP8270E.m Inst: nt10
Injection Date: 15-MAR-2023 20:19 Operator: JGR
Sample Info: SLC0238-TUN1 SLC0238-TUN1
Report Date: 03/16/2023 14:49



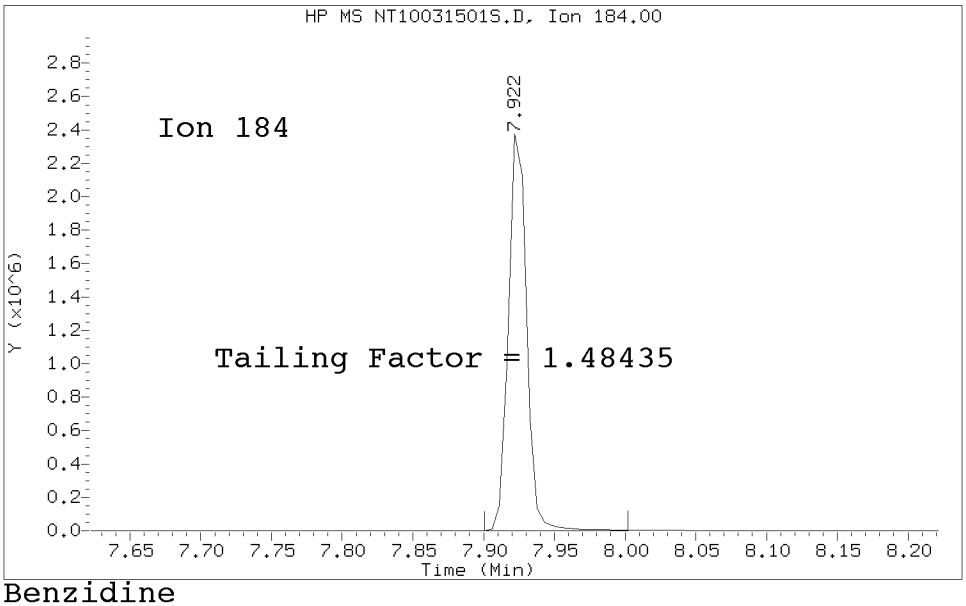


Datafile Analyzed: /20230315.b/20230315.b/NT10031501S.D/NT10031501S.D
Method Used: \20230315.b\20230315.b\DFTPP8270E.m\sw846ddt.m Inst: nt10
Injection Date: 15-MAR-2023 20:19 Operator: JGR
Sample Info: SEQ-TUN1
Report Date: 03/16/2023 14:49



Pentachlorophenol
==========
 Exp. RT = 6.676
Found RT = 6.676

Tail Factor = 0.711 Maximum Allowed = 2.0



Benzidine
==========
 Exp. RT = 7.922
Found RT = 7.922

Tail Factor = 1.484 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.7109557	2.000	PASS
Benzidine	1.4843493	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	962640			N/A
4,4-DDE	5158	0.5	20.0	PASS
4,4-DDD	41277	4.1	20.0	PASS
4,4-DDD + DDE	46435	4.6	20.0	PASS

Tuning Sample, nt10.i/20230315.b/20230315.b/NT10031501S.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.14 (0.37)
69	Mass 69 relative abundance	36.50
70	Less than 2.00% of mass 69	0.18 (0.50)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.88
365	1.00 - 100.00% of mass 198	2.52
441	Less than 150.00% of mass 443	6.11 (77.09)
442	Less than 200.00% of mass 198	42.80
443	15.00 - 24.00% of mass 442	7.92 (18.52)

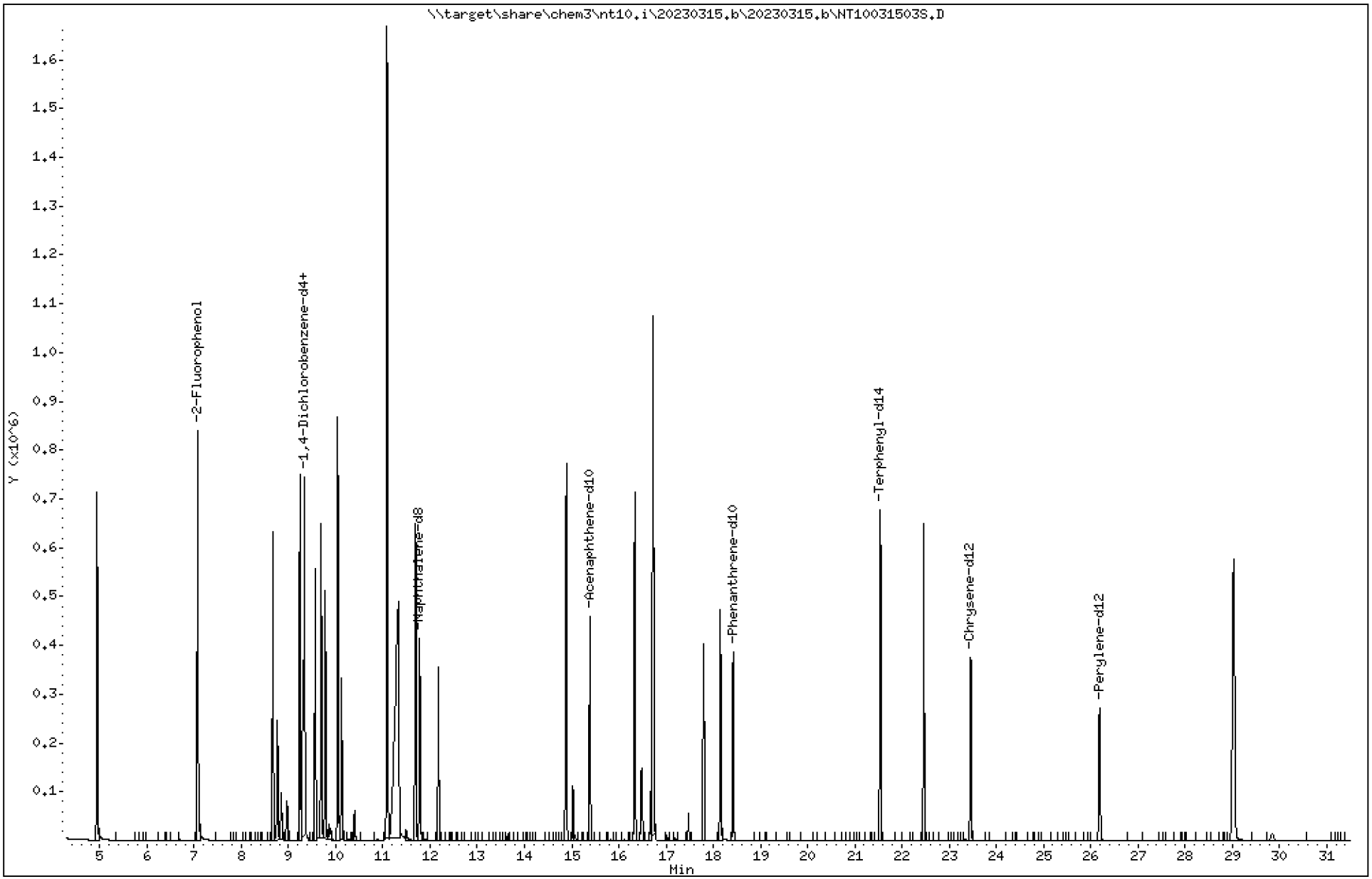
Data File: NT10031501S.D
Spectrum: Avg. Scans 544-546 (7.00), Background Scan 536
Location of Maximum: 198.00
Number of points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	226	124.00	3185	207.00	17112	293.00	2318
37.00	575	125.00	2909	208.00	4722	294.00	588
38.00	1820	127.00	243264	209.00	1586	295.00	171
39.00	10159	128.00	18696	210.00	2002	296.00	36168
40.00	405	129.00	96304	211.00	5093	297.00	5056
41.00	312	130.00	8257	213.00	371	298.00	351
42.00	59	131.00	1626	214.00	74	301.00	422
45.00	283	132.00	820	215.00	1549	302.00	552
49.00	910	133.00	415	216.00	2822	303.00	4130
50.00	35800	134.00	2800	217.00	36520	304.00	1107
51.00	136000	135.00	7704	218.00	4515	305.00	126
52.00	7201	136.00	3195	219.00	360	308.00	532
53.00	294	137.00	3970	221.00	25672	309.00	330
55.00	668	138.00	948	222.00	2863	310.00	461
56.00	4206	139.00	563	223.00	8094	312.00	63
57.00	9877	140.00	1193	224.00	76160	313.00	360
58.00	478	141.00	12476	225.00	18680	314.00	1762
59.00	106	142.00	3876	226.00	2197	315.00	4011
60.00	125	143.00	2757	227.00	32752	316.00	2200
61.00	1897	144.00	726	228.00	4949	317.00	416
62.00	2103	145.00	710	229.00	6725	321.00	1068
63.00	6654	146.00	2200	230.00	933	322.00	491
64.00	895	147.00	6157	231.00	2854	323.00	10541
65.00	3279	148.00	13642	232.00	574	324.00	1817
66.00	188	149.00	2992	233.00	660	325.00	178
67.00	249	150.00	753	234.00	2022	326.00	218
68.00	704	151.00	1678	235.00	2475	327.00	2103
69.00	189184	152.00	893	236.00	1621	328.00	1092
70.00	943	153.00	4091	237.00	2803	329.00	211
71.00	156	154.00	3154	238.00	375	332.00	739
73.00	1307	155.00	6743	239.00	1387	333.00	975
74.00	18768	156.00	10344	240.00	943	334.00	6536
75.00	30000	157.00	2091	241.00	1718	335.00	1733
76.00	10364	158.00	2204	242.00	4096	336.00	201
77.00	207552	159.00	1689	243.00	3931	339.00	148
78.00	14246	160.00	3864	244.00	58560	340.00	135
79.00	13356	161.00	5891	245.00	7760	341.00	1142
80.00	10539	162.00	1637	246.00	11941	342.00	277
81.00	15173	163.00	475	247.00	2526	346.00	2192
82.00	3906	164.00	608	248.00	602	347.00	346
83.00	3545	165.00	4507	249.00	2169	351.00	182
84.00	178	166.00	3807	250.00	370	352.00	3059
85.00	2559	167.00	24880	251.00	462	353.00	1950
86.00	4226	168.00	11639	252.00	590	354.00	3010
87.00	1998	169.00	2046	253.00	1331	355.00	569
88.00	783	170.00	776	255.00	296384	359.00	242
89.00	418	171.00	1036	256.00	43272	365.00	13085
91.00	3237	172.00	2248	257.00	3394	366.00	1813
92.00	3764	173.00	2906	258.00	18176	367.00	150

93.00	24104	174.00	5113	259.00	2926	370.00	291
94.00	1672	175.00	9851	260.00	520	371.00	690
95.00	503	176.00	2588	261.00	479	372.00	4605
96.00	1130	177.00	4756	262.00	60	373.00	1002
97.00	380	178.00	1657	263.00	151	374.00	50
98.00	17936	179.00	18424	264.00	377	377.00	67
99.00	14658	180.00	12975	265.00	6992	383.00	1157
100.00	1303	181.00	6000	266.00	984	384.00	328
101.00	8724	182.00	963	267.00	105	385.00	50
102.00	480	183.00	493	268.00	248	390.00	595
103.00	2859	184.00	1456	270.00	285	391.00	401
104.00	5461	185.00	9317	271.00	631	392.00	204
105.00	5056	186.00	70384	272.00	750	401.00	211
106.00	1781	187.00	20112	273.00	8749	402.00	1564
107.00	67936	188.00	2185	274.00	23296	403.00	2292
108.00	10471	189.00	4453	275.00	129008	404.00	796
109.00	595	190.00	772	276.00	17320	405.00	237
110.00	122760	191.00	2090	277.00	11470	421.00	1827
111.00	18400	192.00	5915	278.00	2005	422.00	1658
112.00	2357	193.00	6863	279.00	468	423.00	12304
113.00	756	194.00	1470	281.00	147	424.00	2795
114.00	128	195.00	841	282.00	368	425.00	263
115.00	298	196.00	14341	283.00	1453	441.00	31664
116.00	3871	198.00	518272	284.00	874	442.00	221824
117.00	54088	199.00	35680	285.00	2012	443.00	41072
118.00	3919	200.00	2830	286.00	333	444.00	3778
119.00	531	201.00	2302	288.00	146	445.00	177
120.00	920	203.00	3657	289.00	446		
121.00	362	204.00	18200	290.00	444		
122.00	4396	205.00	31664	291.00	199		
123.00	6778	206.00	132736	292.00	486		

Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031503S.D
Date : 15-MAR-2023 21:12
Client ID:
Sample Info: SLC0238-CAL8
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.i
Operator: JGR
Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031503S.D
Lab Smp Id: SLC0238-CAL8
Inj Date : 15-MAR-2023 21:12 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0238-CAL8
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Meth Date : 16-Mar-2023 14:39 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	7.072	7.073	(0.760)	838030	15.0000	14.36
3	Phenol	94	8.664	8.664	(0.931)	729755	10.0000	9.116
7	1,3-Dichlorobenzene	146	9.236	9.236	(0.992)	665810	10.0000	8.888
* 8	1,4-Dichlorobenzene-d4	152	9.306	9.298	(1.000)	192425	4.00000	
9	1,4-Dichlorobenzene	146	9.329	9.329	(1.002)	654897	10.0000	9.056
11	Benzyl alcohol	79	9.562	9.570	(1.028)	491495	10.0000	10.59
12	1,2-Dichlorobenzene	146	9.686	9.686	(1.041)	638455	10.0000	8.978
13	2-Methylphenol	108	9.779	9.772	(1.051)	553708	10.0000	9.982
15	4-Methylphenol	108	10.043	10.036	(1.079)	586952	10.0000	10.18
16	N-Nitroso-di-n-propylamine	70	10.121	10.113	(1.088)	409406	10.0000	10.04
22	2,4-Dimethylphenol	107	11.085	11.087	(0.941)	1130269	20.0000	18.95
24	Benzoic acid	105	11.332	11.189	(0.962)	1607035	40.0000	39.86
26	1,2,4-Trichlorobenzene	180	11.689	11.690	(0.992)	544255	10.0000	9.073
* 27	Naphthalene-d8	136	11.781	11.775	(1.000)	689875	4.00000	
30	Hexachlorobutadiene	225	12.175	12.169	(1.033)	341241	10.0000	9.357
39	Dimethylphthalate	163	14.884	14.877	(0.967)	1011946	10.0000	9.386
* 42	Acenaphthene-d10	162	15.387	15.380	(1.000)	341663	4.00000	
50	Diethylphthalate	149	16.338	16.324	(1.062)	1156658	10.0000	10.36
54	N-Nitrosodiphenylamine	169	16.724	16.717	(0.908)	841708	10.0000	9.623
57	Hexachlorobenzene	284	17.797	17.798	(0.966)	358890	10.0000	9.166

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	58 Pentachlorophenol	266	18.153	18.154	(0.985)	496304	20.0000	19.97
*	59 Phenanthrene-d10	188	18.424	18.417	(1.000)	651934	4.00000	
$	66 Terphenyl-d14	244	21.542	21.543	(0.918)	813450	10.0000	10.36
	67 Butylbenzylphthalate	149	22.463	22.465	(0.958)	722761	10.0000	9.997
*	69 Chrysene-d12	240	23.454	23.455	(1.000)	482051	4.00000	
*	77 Perylene-d12	264	26.187	26.188	(1.000)	502718	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.033	29.019	(1.109)	1559411	10.0000	9.987
	90 N-Nitrosodimethylamine	74	4.940	4.948	(0.531)	652075	20.0000	17.62

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031503S.D
Lab Smp Id: SLC0238-CAL8
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 23:06
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	188081	94041	376162	192425	2.31
27 Naphthalene-d8	674549	337275	1349098	689875	2.27
42 Acenaphthene-d10	328275	164138	656550	341663	4.08
59 Phenanthrene-d10	597140	298570	1194280	651934	9.18
69 Chrysene-d12	466503	233252	933006	482051	3.33
77 Perylene-d12	518203	259102	1036406	502718	-2.99

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.31	0.08
27 Naphthalene-d8	11.77	11.27	12.27	11.78	0.06
42 Acenaphthene-d10	15.39	14.89	15.89	15.39	-0.00
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	-0.00
69 Chrysene-d12	23.45	22.95	23.95	23.45	-0.00
77 Perylene-d12	26.19	25.69	26.69	26.19	-0.00

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

REVIEW SUMMARY FOR FILE - NT10031503S.D

Lab ID: SLC0238-CAL8
nt10.i, 20230315.b\20230315.b\SIMABN2.m,   15-MAR-2023 21:12

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.962	0.000	0.9618	Benzoic acid

RRT check based on Ccal File: 20230315.b/NT10031510S.D

On Column LOD for nt10.i, 20230315.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031504S.D

Date : 15-MAR-2023 21:50

Client ID:

Instrument: nt10.i

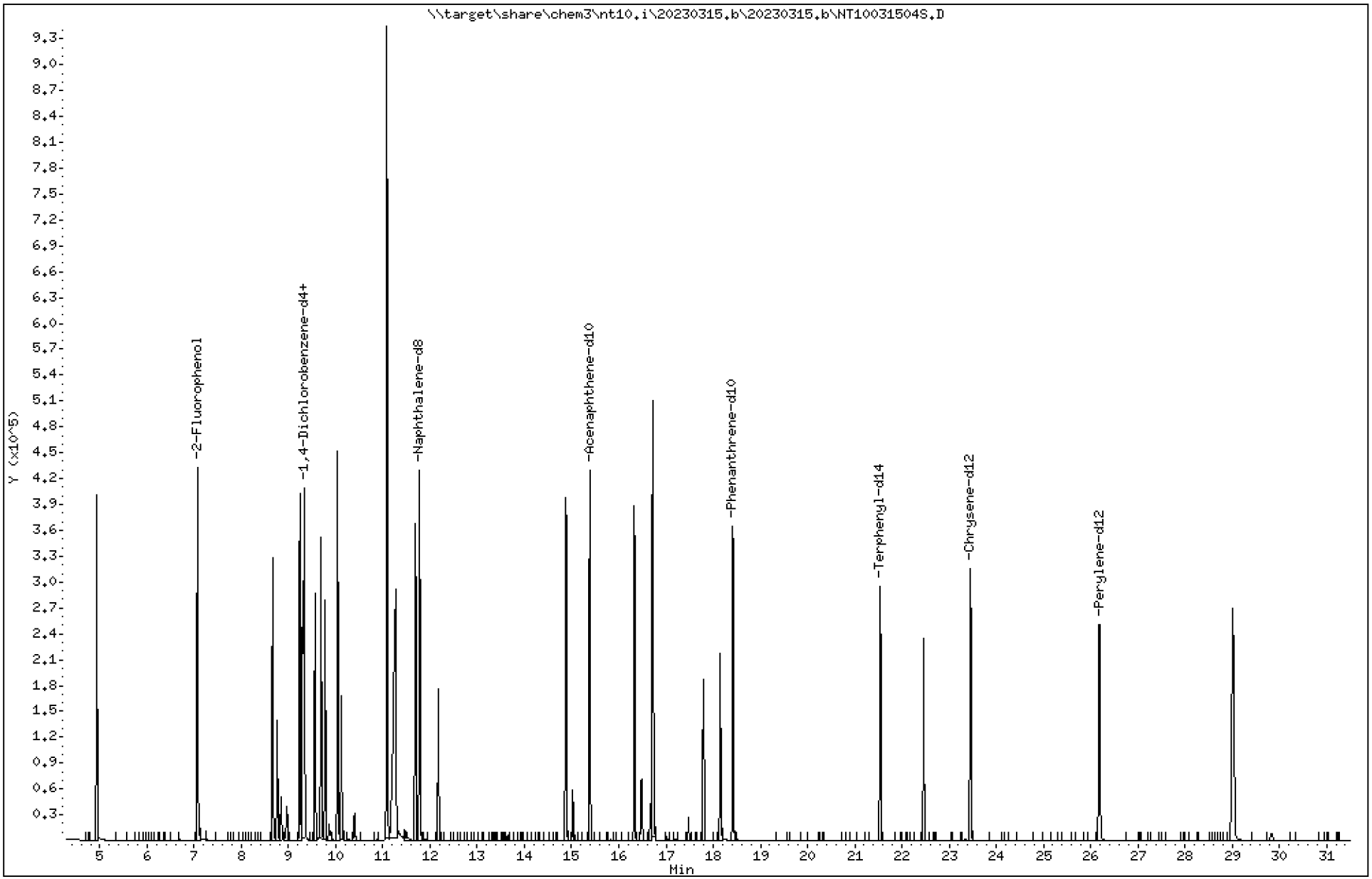
Sample Info: SLC0238-CAL7

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031504S.D
Lab Smp Id: SLC0238-CAL7
Inj Date : 15-MAR-2023 21:50 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0238-CAL7
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Meth Date : 16-Mar-2023 14:39 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.073	7.073	(0.761)	423280	7.50000	7.448
	3 Phenol	94	8.664	8.664	(0.932)	380220	5.00000	4.876
	7 1,3-Dichlorobenzene	146	9.236	9.236	(0.993)	338879	5.00000	4.645
*	8 1,4-Dichlorobenzene-d4	152	9.298	9.298	(1.000)	187419	4.00000	
	9 1,4-Dichlorobenzene	146	9.329	9.329	(1.003)	329824	5.00000	4.683
	11 Benzyl alcohol	79	9.562	9.570	(1.028)	252707	5.00000	5.590
	12 1,2-Dichlorobenzene	146	9.686	9.686	(1.042)	322928	5.00000	4.662
	13 2-Methylphenol	108	9.772	9.772	(1.051)	278276	5.00000	5.151
	15 4-Methylphenol	108	10.036	10.036	(1.079)	298436	5.00000	5.316
	16 N-Nitroso-di-n-propylamine	70	10.113	10.113	(1.088)	209335	5.00000	5.272
	22 2,4-Dimethylphenol	107	11.086	11.087	(0.942)	583450	10.0000	9.891
	24 Benzoic acid	105	11.272	11.189	(0.957)	736328	20.0000	20.81
	26 1,2,4-Trichlorobenzene	180	11.689	11.690	(0.993)	274164	5.00000	4.620
*	27 Naphthalene-d8	136	11.774	11.775	(1.000)	682446	4.00000	
	30 Hexachlorobutadiene	225	12.168	12.169	(1.033)	169468	5.00000	4.697
	39 Dimethylphthalate	163	14.877	14.877	(0.967)	507054	5.00000	4.846
*	42 Acenaphthene-d10	162	15.380	15.380	(1.000)	331603	4.00000	
	50 Diethylphthalate	149	16.331	16.324	(1.062)	561334	5.00000	5.178
	54 N-Nitrosodiphenylamine	169	16.716	16.717	(0.908)	409745	5.00000	5.102
	57 Hexachlorobenzene	284	17.797	17.798	(0.966)	174645	5.00000	4.857

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
58	Pentachlorophenol	266	18.145	18.154	(0.985)	215193	10.0000	10.18
* 59	Phenanthrene-d10	188	18.416	18.417	(1.000)	598629	4.00000	
$ 66	Terphenyl-d14	244	21.542	21.543	(0.918)	332738	5.00000	5.245
67	Butylbenzylphthalate	149	22.456	22.465	(0.957)	271734	5.00000	5.005
* 69	Chrysene-d12	240	23.454	23.455	(1.000)	389338	4.00000	
* 77	Perylene-d12	264	26.187	26.188	(1.000)	466441	4.00000	
79	Dibenzo(a,h)anthracene	278	29.017	29.019	(1.108)	751404	5.00000	5.052
90	N-Nitrosodimethylamine	74	4.933	4.948	(0.531)	345951	10.0000	9.597

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031504S.D
Lab Smp Id: SLC0238-CAL7
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 23:06
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	188081	94041	376162	187419	-0.35
27 Naphthalene-d8	674549	337275	1349098	682446	1.17
42 Acenaphthene-d10	328275	164138	656550	331603	1.01
59 Phenanthrene-d10	597140	298570	1194280	598629	0.25
69 Chrysene-d12	466503	233252	933006	389338	-16.54
77 Perylene-d12	518203	259102	1036406	466441	-9.99

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	0.00
27 Naphthalene-d8	11.77	11.27	12.27	11.77	0.00
42 Acenaphthene-d10	15.39	14.89	15.89	15.38	-0.05
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	-0.04
69 Chrysene-d12	23.45	22.95	23.95	23.45	0.00
77 Perylene-d12	26.19	25.69	26.69	26.19	0.00

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

REVIEW SUMMARY FOR FILE - NT10031504S.D

Lab ID: SLC0238-CAL7
nt10.i, 20230315.b\20230315.b\SIMABN2.m,   15-MAR-2023 21:50

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.000	0.9574	Benzoic acid

RRT check based on Ccal File: 20230315.b/NT10031510S.D

On Column LOD for nt10.i, 20230315.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031505S.D

Date : 15-MAR-2023 22:28

Client ID:

Instrument: nt10.i

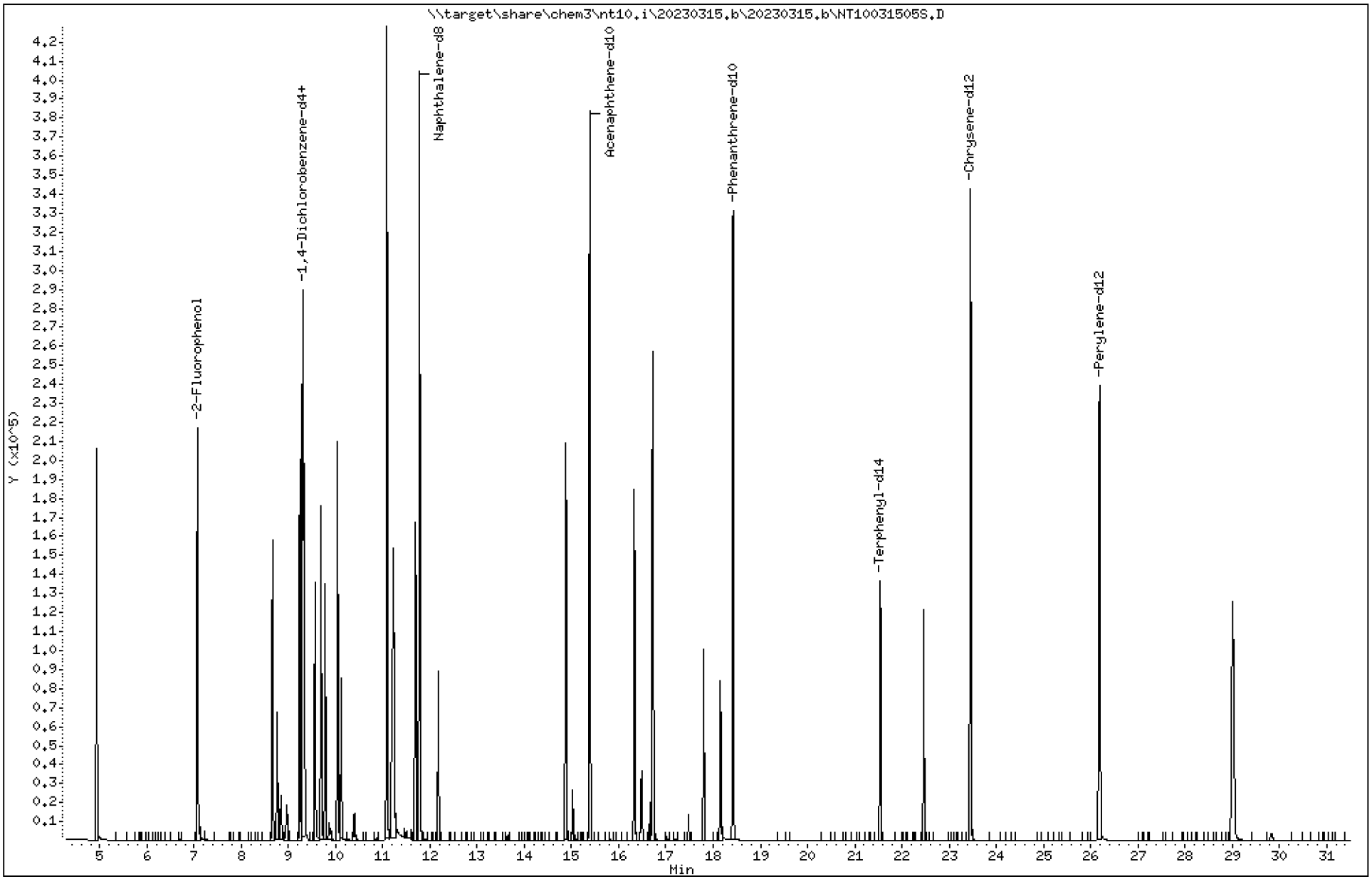
Sample Info: SLC0238-CAL6

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031505S.D
Lab Smp Id: SLC0238-CAL6
Inj Date : 15-MAR-2023 22:28 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0238-CAL6
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Meth Date : 16-Mar-2023 14:39 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	7.065	7.073	(0.760)	210389	3.75000	4.001
3	Phenol	94	8.657	8.664	(0.931)	190392	2.50000	2.639
7	1,3-Dichlorobenzene	146	9.236	9.236	(0.993)	168055	2.50000	2.489
* 8	1,4-Dichlorobenzene-d4	152	9.299	9.298	(1.000)	173412	4.00000	
9	1,4-Dichlorobenzene	146	9.330	9.329	(1.003)	163092	2.50000	2.503
11	Benzyl alcohol	79	9.562	9.570	(1.028)	120208	2.50000	2.874
12	1,2-Dichlorobenzene	146	9.687	9.686	(1.042)	159585	2.50000	2.490
13	2-Methylphenol	108	9.772	9.772	(1.051)	134327	2.50000	2.687
15	4-Methylphenol	108	10.036	10.036	(1.079)	141444	2.50000	2.723
16	N-Nitroso-di-n-propylamine	70	10.114	10.113	(1.088)	100651	2.50000	2.740
22	2,4-Dimethylphenol	107	11.078	11.087	(0.941)	286604	5.00000	5.311
24	Benzoic acid	105	11.222	11.189	(0.953)	285274	10.0000	9.309
26	1,2,4-Trichlorobenzene	180	11.690	11.690	(0.993)	133425	2.50000	2.458
* 27	Naphthalene-d8	136	11.775	11.775	(1.000)	624286	4.00000	
30	Hexachlorobutadiene	225	12.169	12.169	(1.033)	82773	2.50000	2.508
39	Dimethylphthalate	163	14.878	14.877	(0.967)	248536	2.50000	2.538
* 42	Acenaphthene-d10	162	15.381	15.380	(1.000)	310309	4.00000	
50	Diethylphthalate	149	16.332	16.324	(1.062)	274020	2.50000	2.701
54	N-Nitrosodiphenylamine	169	16.717	16.717	(0.907)	198446	2.50000	2.666
57	Hexachlorobenzene	284	17.798	17.798	(0.966)	83753	2.50000	2.513

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	58 Pentachlorophenol	266	18.154	18.154	(0.985)	93572	5.00000	4.940
*	59 Phenanthrene-d10	188	18.425	18.417	(1.000)	554860	4.00000	
$	66 Terphenyl-d14	244	21.543	21.543	(0.918)	167011	2.50000	2.661
	67 Butylbenzylphthalate	149	22.464	22.465	(0.958)	133147	2.50000	2.556
*	69 Chrysene-d12	240	23.455	23.455	(1.000)	385144	4.00000	
*	77 Perylene-d12	264	26.188	26.188	(1.000)	456369	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.018	29.019	(1.108)	368157	2.50000	2.493
	90 N-Nitrosodimethylamine	74	4.925	4.948	(0.530)	174819	5.00000	5.242

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031505S.D
Lab Smp Id: SLC0238-CAL6
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 23:06
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	188081	94041	376162	173412	-7.80
27 Naphthalene-d8	674549	337275	1349098	624286	-7.45
42 Acenaphthene-d10	328275	164138	656550	310309	-5.47
59 Phenanthrene-d10	597140	298570	1194280	554860	-7.08
69 Chrysene-d12	466503	233252	933006	385144	-17.44
77 Perylene-d12	518203	259102	1036406	456369	-11.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	0.00
27 Naphthalene-d8	11.77	11.27	12.27	11.78	0.01
42 Acenaphthene-d10	15.39	14.89	15.89	15.38	-0.04
59 Phenanthrene-d10	18.42	17.92	18.92	18.43	0.01
69 Chrysene-d12	23.45	22.95	23.95	23.46	0.00
77 Perylene-d12	26.19	25.69	26.69	26.19	0.00

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

REVIEW SUMMARY FOR FILE - NT10031505S.D

Lab ID: SLC0238-CAL6
nt10.i, 20230315.b\20230315.b\SIMABN2.m,   15-MAR-2023 22:28

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.953	0.000	0.9531	Benzoic acid

RRT check based on Ccal File: 20230315.b/NT10031510S.D

On Column LOD for nt10.i, 20230315.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031506S.D

Date : 15-MAR-2023 23:06

Client ID:

Instrument: nt10.i

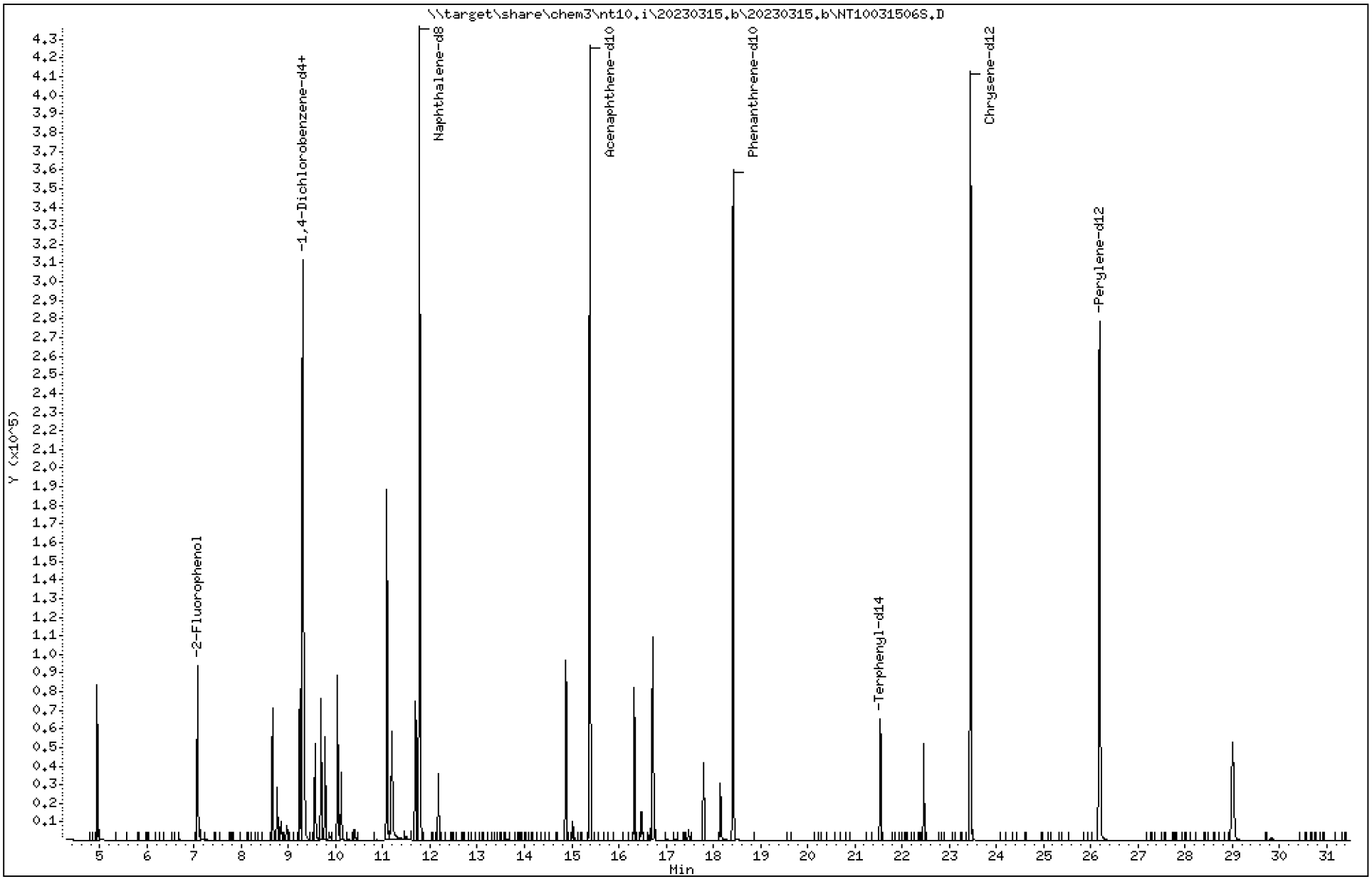
Sample Info: SLC0238-CAL5

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031506S.D
Lab Smp Id: SLC0238-CAL5
Inj Date : 15-MAR-2023 23:06 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0238-CAL5
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Meth Date : 16-Mar-2023 14:39 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	7.072	7.073	(0.761)	90798	1.50000	1.592
3	Phenol	94	8.656	8.664	(0.931)	82355	1.00000	1.052
7	1,3-Dichlorobenzene	146	9.236	9.236	(0.993)	73541	1.00000	1.004
* 8	1,4-Dichlorobenzene-d4	152	9.298	9.298	(1.000)	188081	4.00000	
9	1,4-Dichlorobenzene	146	9.329	9.329	(1.003)	71256	1.00000	1.008
11	Benzyl alcohol	79	9.562	9.570	(1.028)	48450	1.00000	1.068
12	1,2-Dichlorobenzene	146	9.686	9.686	(1.042)	70084	1.00000	1.008
13	2-Methylphenol	108	9.772	9.772	(1.051)	56161	1.00000	1.036
15	4-Methylphenol	108	10.036	10.036	(1.079)	59710	1.00000	1.060
16	N-Nitroso-di-n-propylamine	70	10.113	10.113	(1.088)	42270	1.00000	1.061
22	2,4-Dimethylphenol	107	11.077	11.087	(0.941)	125195	2.00000	2.147
24	Benzoic acid	105	11.187	11.189	(0.950)	77741	4.00000	2.416
26	1,2,4-Trichlorobenzene	180	11.689	11.690	(0.993)	58641	1.00000	0.9998
* 27	Naphthalene-d8	136	11.774	11.775	(1.000)	674549	4.00000	
30	Hexachlorobutadiene	225	12.176	12.169	(1.034)	35610	1.00000	0.9986
39	Dimethylphthalate	163	14.877	14.877	(0.967)	108743	1.00000	1.050
* 42	Acenaphthene-d10	162	15.387	15.380	(1.000)	328275	4.00000	
50	Diethylphthalate	149	16.330	16.324	(1.061)	117125	1.00000	1.091
54	N-Nitrosodiphenylamine	169	16.724	16.717	(0.908)	87266	1.00000	1.089
57	Hexachlorobenzene	284	17.797	17.798	(0.966)	36131	1.00000	1.007

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	58 Pentachlorophenol	266	18.153	18.154	(0.985)	33609	2.00000	1.681
*	59 Phenanthrene-d10	188	18.424	18.417	(1.000)	597140	4.00000	
$	66 Terphenyl-d14	244	21.542	21.543	(0.918)	75884	1.00000	0.9983
	67 Butylbenzylphthalate	149	22.463	22.465	(0.958)	56297	1.00000	0.9093
*	69 Chrysene-d12	240	23.454	23.455	(1.000)	466503	4.00000	
*	77 Perylene-d12	264	26.187	26.188	(1.000)	518203	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.009	29.019	(1.108)	155363	1.00000	0.9181
	90 N-Nitrosodimethylamine	74	4.940	4.948	(0.531)	75637	2.00000	2.091

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031506S.D
Lab Smp Id: SLC0238-CAL5
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 23:06
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	188081	94041	376162	188081	0.00
27 Naphthalene-d8	674549	337275	1349098	674549	0.00
42 Acenaphthene-d10	328275	164138	656550	328275	0.00
59 Phenanthrene-d10	597140	298570	1194280	597140	0.00
69 Chrysene-d12	466503	233252	933006	466503	0.00
77 Perylene-d12	518203	259102	1036406	518203	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	0.00
27 Naphthalene-d8	11.77	11.27	12.27	11.77	0.00
42 Acenaphthene-d10	15.39	14.89	15.89	15.39	0.00
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.45	0.00
77 Perylene-d12	26.19	25.69	26.69	26.19	0.00

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

REVIEW SUMMARY FOR FILE - NT10031506S.D

Lab ID: SLC0238-CAL5
nt10.i, 20230315.b\20230315.b\SIMABN2.m,   15-MAR-2023 23:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.950	0.000	0.9502	Benzoic acid

RRT check based on Ccal File: 20230315.b/NT10031510S.D

On Column LOD for nt10.i, 20230315.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031507S.D

Date : 15-MAR-2023 23:44

Client ID:

Instrument: nt10.i

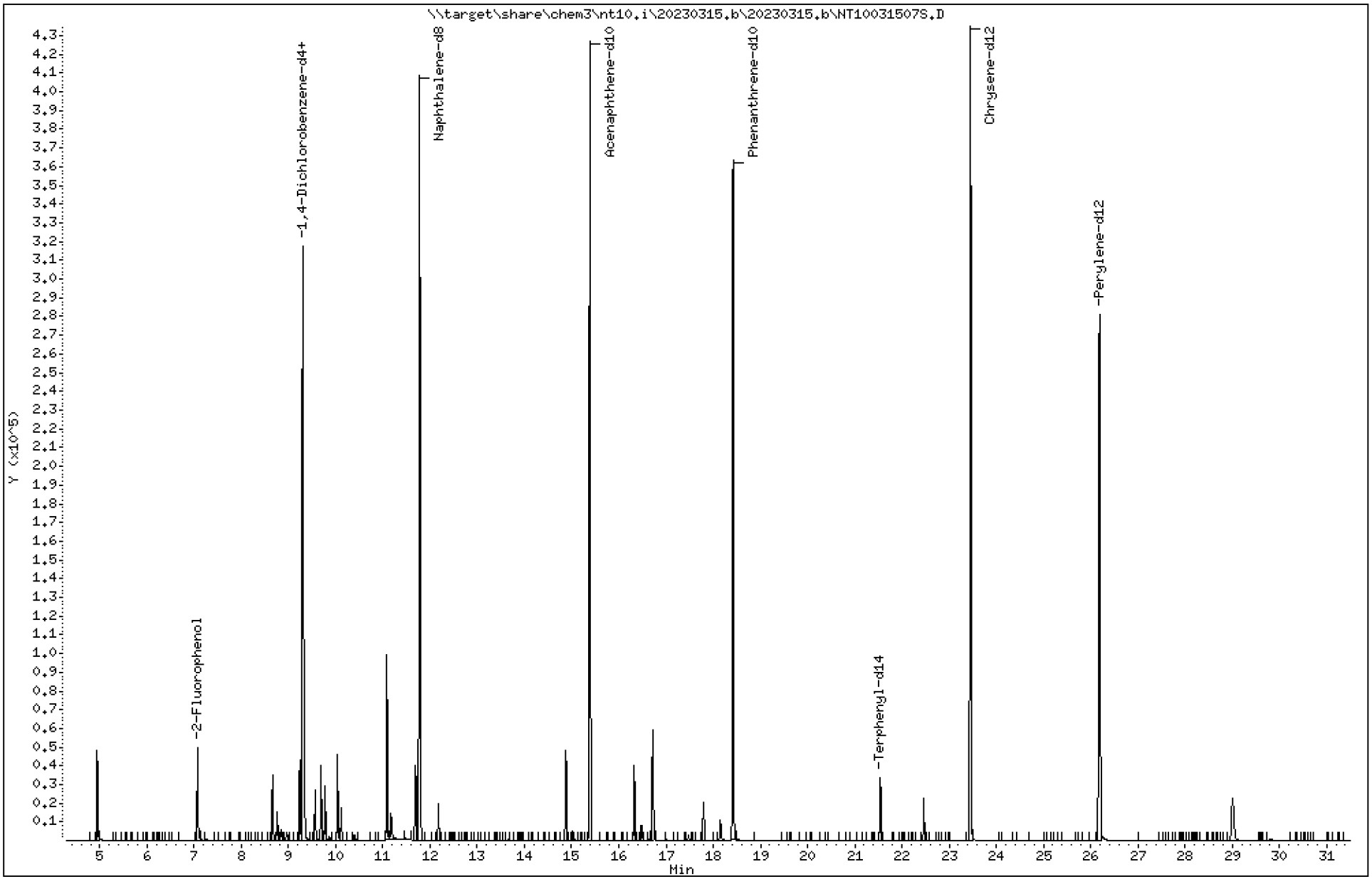
Sample Info: SLC0238-CAL4

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031507S.D
Lab Smp Id: SLC0238-CAL4
Inj Date : 15-MAR-2023 23:44 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0238-CAL4
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Meth Date : 16-Mar-2023 14:39 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	7.073	7.073	(0.761)	45949	0.75000	0.7906
3	Phenol	94	8.657	8.664	(0.931)	42286	0.50000	0.5304
7	1,3-Dichlorobenzene	146	9.236	9.236	(0.993)	38003	0.50000	0.5094
* 8	1,4-Dichlorobenzene-d4	152	9.298	9.298	(1.000)	191648	4.00000	
9	1,4-Dichlorobenzene	146	9.329	9.329	(1.003)	36555	0.50000	0.5076
11	Benzyl alcohol	79	9.562	9.570	(1.028)	23988	0.50000	0.5190
12	1,2-Dichlorobenzene	146	9.686	9.686	(1.042)	36410	0.50000	0.5141
13	2-Methylphenol	108	9.772	9.772	(1.051)	28358	0.50000	0.5133
15	4-Methylphenol	108	10.036	10.036	(1.079)	29752	0.50000	0.5183
16	N-Nitroso-di-n-propylamine	70	10.113	10.113	(1.088)	21127	0.50000	0.5204
22	2,4-Dimethylphenol	107	11.086	11.087	(0.942)	63684	1.00000	1.084
24	Benzoic acid	105	11.171	11.189	(0.949)	21037	2.00000	0.6535
26	1,2,4-Trichlorobenzene	180	11.689	11.690	(0.993)	30281	0.50000	0.5124
* 27	Naphthalene-d8	136	11.774	11.775	(1.000)	679665	4.00000	
30	Hexachlorobutadiene	225	12.176	12.169	(1.034)	18287	0.50000	0.5089
39	Dimethylphthalate	163	14.877	14.877	(0.967)	54277	0.50000	0.5122
* 42	Acenaphthene-d10	162	15.387	15.380	(1.000)	335786	4.00000	
50	Diethylphthalate	149	16.331	16.324	(1.061)	57205	0.50000	0.5211
54	N-Nitrosodiphenylamine	169	16.716	16.717	(0.907)	43874	0.50000	0.5326
57	Hexachlorobenzene	284	17.797	17.798	(0.966)	18601	0.50000	0.5044

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	58 Pentachlorophenol	266	18.153	18.154	(0.985)	13495	1.00000	0.6606
*	59 Phenanthrene-d10	188	18.424	18.417	(1.000)	613961	4.00000	
$	66 Terphenyl-d14	244	21.542	21.543	(0.918)	37662	0.50000	0.4975
	67 Butylbenzylphthalate	149	22.463	22.465	(0.958)	24470	0.50000	0.3991
*	69 Chrysene-d12	240	23.454	23.455	(1.000)	464623	4.00000	
*	77 Perylene-d12	264	26.187	26.188	(1.000)	521317	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.010	29.019	(1.108)	72052	0.50000	0.4220
	90 N-Nitrosodimethylamine	74	4.941	4.948	(0.531)	39414	1.00000	1.069

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031507S.D
Lab Smp Id: SLC0238-CAL4
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 23:06
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	188081	94041	376162	191648	1.90
27 Naphthalene-d8	674549	337275	1349098	679665	0.76
42 Acenaphthene-d10	328275	164138	656550	335786	2.29
59 Phenanthrene-d10	597140	298570	1194280	613961	2.82
69 Chrysene-d12	466503	233252	933006	464623	-0.40
77 Perylene-d12	518203	259102	1036406	521317	0.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	0.00
27 Naphthalene-d8	11.77	11.27	12.27	11.77	0.00
42 Acenaphthene-d10	15.39	14.89	15.89	15.39	0.00
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.45	0.00
77 Perylene-d12	26.19	25.69	26.69	26.19	0.00

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

REVIEW SUMMARY FOR FILE - NT10031507S.D

Lab ID: SLC0238-CAL4
nt10.i, 20230315.b\20230315.b\SIMABN2.m,   15-MAR-2023 23:44

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.949	0.000	0.9487	Benzoic acid

RRT check based on Ccal File: 20230315.b/NT10031510S.D

On Column LOD for nt10.i, 20230315.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT100315085.D

Date : 16-MAR-2023 00:22

Client ID:

Instrument: nt10.i

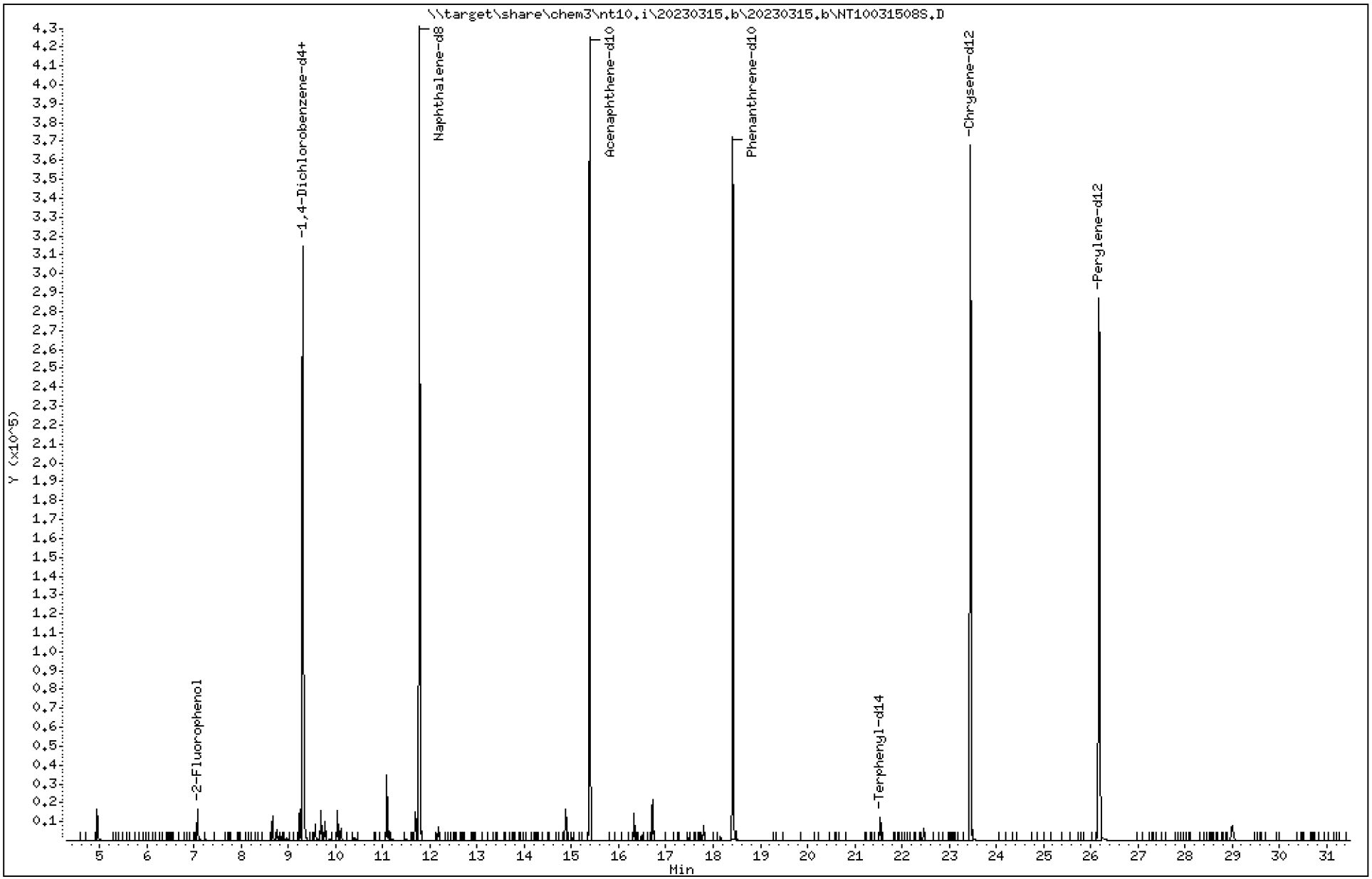
Sample Info: SLC0238-CAL3

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031508S.D
Lab Smp Id: SLC0238-CAL3
Inj Date : 16-MAR-2023 00:22 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0238-CAL3
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Meth Date : 16-Mar-2023 14:39 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.073	7.073	(0.761)	16956	0.30000	0.2964
	3 Phenol	94	8.657	8.664	(0.931)	15852	0.20000	0.2020
	7 1,3-Dichlorobenzene	146	9.236	9.236	(0.993)	15032	0.20000	0.2047
*	8 1,4-Dichlorobenzene-d4	152	9.299	9.298	(1.000)	188644	4.00000	
	9 1,4-Dichlorobenzene	146	9.330	9.329	(1.003)	14441	0.20000	0.2037
	11 Benzyl alcohol	79	9.562	9.570	(1.028)	8244	0.20000	0.1812
	12 1,2-Dichlorobenzene	146	9.687	9.686	(1.042)	14306	0.20000	0.2052
	13 2-Methylphenol	108	9.772	9.772	(1.051)	10287	0.20000	0.1892
	15 4-Methylphenol	108	10.036	10.036	(1.079)	10727	0.20000	0.1898
	16 N-Nitroso-di-n-propylamine	70	10.114	10.113	(1.088)	7586	0.20000	0.1898
	22 2,4-Dimethylphenol	107	11.078	11.087	(0.941)	23302	0.40000	0.4059
	24 Benzoic acid	105	11.189	11.189	(0.950)	891	0.80000	0.02840(M)
	26 1,2,4-Trichlorobenzene	180	11.690	11.690	(0.993)	11744	0.20000	0.2034
*	27 Naphthalene-d8	136	11.775	11.775	(1.000)	664117	4.00000	
	30 Hexachlorobutadiene	225	12.169	12.169	(1.033)	7079	0.20000	0.2016
	39 Dimethylphthalate	163	14.878	14.877	(0.967)	20353	0.20000	0.1965
*	42 Acenaphthene-d10	162	15.381	15.380	(1.000)	328147	4.00000	
	50 Diethylphthalate	149	16.324	16.324	(1.061)	20971	0.20000	0.1955
	54 N-Nitrosodiphenylamine	169	16.717	16.717	(0.908)	16188	0.20000	0.2000
	57 Hexachlorobenzene	284	17.790	17.798	(0.966)	7274	0.20000	0.2008

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	58 Pentachlorophenol	266	18.154	18.154	(0.986)	3337	0.40000	0.1667
*	59 Phenanthrene-d10	188	18.417	18.417	(1.000)	603272	4.00000	
$	66 Terphenyl-d14	244	21.543	21.543	(0.918)	14479	0.20000	0.1895
	67 Butylbenzylphthalate	149	22.464	22.465	(0.958)	7787	0.20000	0.1262
*	69 Chrysene-d12	240	23.455	23.455	(1.000)	468991	4.00000	
*	77 Perylene-d12	264	26.181	26.188	(1.000)	525052	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.003	29.019	(1.108)	24266	0.20000	0.1409
	90 N-Nitrosodimethylamine	74	4.941	4.948	(0.531)	14672	0.40000	0.4044

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031508S.D
Lab Smp Id: SLC0238-CAL3
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 23:06
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	188081	94041	376162	188644	0.30
27 Naphthalene-d8	674549	337275	1349098	664117	-1.55
42 Acenaphthene-d10	328275	164138	656550	328147	-0.04
59 Phenanthrene-d10	597140	298570	1194280	603272	1.03
69 Chrysene-d12	466503	233252	933006	468991	0.53
77 Perylene-d12	518203	259102	1036406	525052	1.32

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	0.00
27 Naphthalene-d8	11.77	11.27	12.27	11.78	0.01
42 Acenaphthene-d10	15.39	14.89	15.89	15.38	-0.04
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	-0.04
69 Chrysene-d12	23.45	22.95	23.95	23.46	0.00
77 Perylene-d12	26.19	25.69	26.69	26.18	-0.03

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

REVIEW SUMMARY FOR FILE - NT10031508S.D

Lab ID: SLC0238-CAL3
nt10.i, 20230315.b\20230315.b\SIMABN2.m,   16-MAR-2023 00:22

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.950	0.000	0.9502	Benzoic acid

RRT check based on Ccal File: 20230315.b/NT10031510S.D

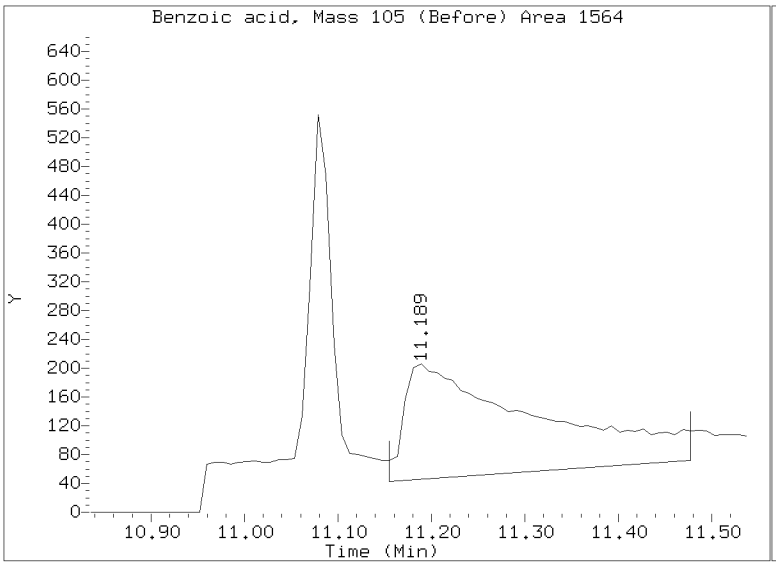
On Column LOD for nt10.i, 20230315.b\SIMABN2.m, PSDDA.sub = 0.0000

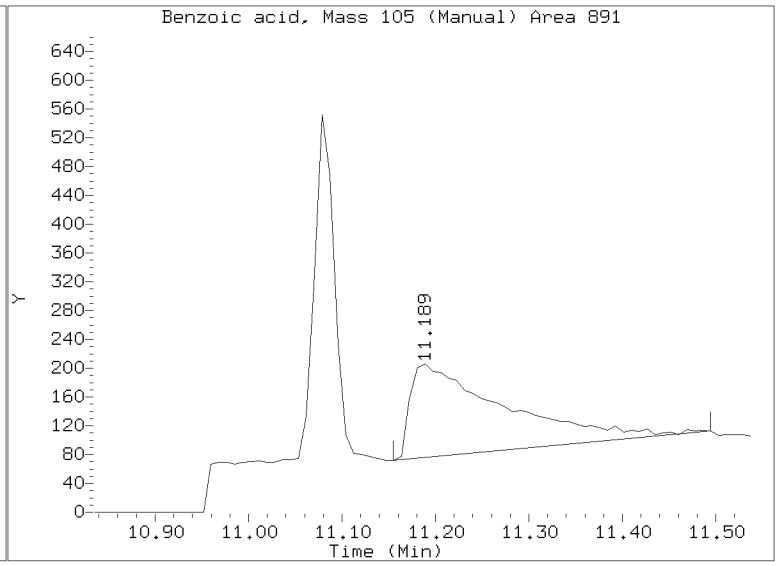
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230315.b/20230315.b/NT10031508S.D
Injection Date: 16-MAR-2023 00:22
Lab ID:SLC0238-CAL3 Client ID:
Report Date: 03/16/2023 14:49





Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031509S.D

Date : 16-MAR-2023 01:00

Client ID:

Instrument: nt10.i

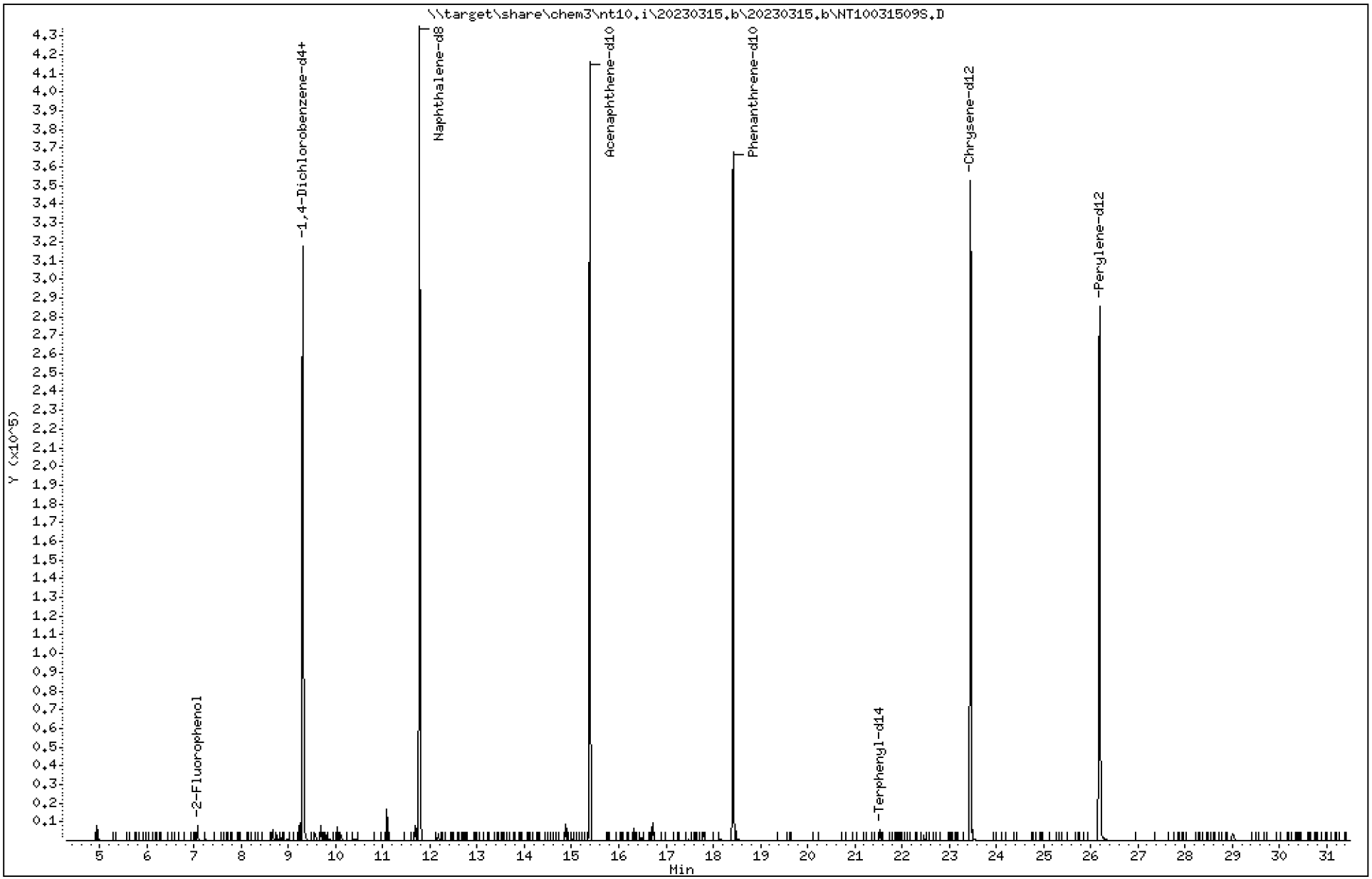
Sample Info: SLC0238-CAL2

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031509S.D
Lab Smp Id: SLC0238-CAL2
Inj Date : 16-MAR-2023 01:00 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0238-CAL2
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Meth Date : 16-Mar-2023 14:39 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	7.073	7.073	(0.761)	8469	0.15000	0.1462
3	Phenol	94	8.657	8.664	(0.931)	7915	0.10000	0.09961
7	1,3-Dichlorobenzene	146	9.236	9.236	(0.993)	7959	0.10000	0.1070
* 8	1,4-Dichlorobenzene-d4	152	9.298	9.298	(1.000)	190985	4.00000	
9	1,4-Dichlorobenzene	146	9.329	9.329	(1.003)	7577	0.10000	0.1056
11	Benzyl alcohol	79	9.562	9.570	(1.028)	3916	0.10000	0.08501
12	1,2-Dichlorobenzene	146	9.686	9.686	(1.042)	7452	0.10000	0.1056
13	2-Methylphenol	108	9.772	9.772	(1.051)	5108	0.10000	0.09278
15	4-Methylphenol	108	10.036	10.036	(1.079)	5283	0.10000	0.09234
16	N-Nitroso-di-n-propylamine	70	10.113	10.113	(1.088)	3707	0.10000	0.09162
22	2,4-Dimethylphenol	107	11.086	11.087	(0.942)	11249	0.20000	0.1901
24	Benzoic acid	105	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	11.689	11.690	(0.993)	6182	0.10000	0.1038
* 27	Naphthalene-d8	136	11.774	11.775	(1.000)	684638	4.00000	
30	Hexachlorobutadiene	225	12.176	12.169	(1.034)	3646	0.10000	0.1007
39	Dimethylphthalate	163	14.877	14.877	(0.967)	10444	0.10000	0.1008
* 42	Acenaphthene-d10	162	15.387	15.380	(1.000)	328366	4.00000	
50	Diethylphthalate	149	16.331	16.324	(1.061)	9630	0.10000	0.08971
54	N-Nitrosodiphenylamine	169	16.716	16.717	(0.907)	7688	0.10000	0.09515
57	Hexachlorobenzene	284	17.797	17.798	(0.966)	3777	0.10000	0.1044

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	58 Pentachlorophenol	266	18.153	18.154	(0.985)	1130	0.20000	0.05659(M)
*	59 Phenanthrene-d10	188	18.424	18.417	(1.000)	602202	4.00000	
$	66 Terphenyl-d14	244	21.542	21.543	(0.918)	6866	0.10000	0.09337
	67 Butylbenzylphthalate	149	22.463	22.465	(0.958)	3284	0.10000	0.05534
*	69 Chrysene-d12	240	23.454	23.455	(1.000)	451316	4.00000	
*	77 Perylene-d12	264	26.187	26.188	(1.000)	517188	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.010	29.019	(1.108)	11218	0.10000	0.06608
	90 N-Nitrosodimethylamine	74	4.941	4.948	(0.531)	7449	0.20000	0.2028

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031509S.D
Lab Smp Id: SLC0238-CAL2
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 23:06
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	188081	94041	376162	190985	1.54
27 Naphthalene-d8	674549	337275	1349098	684638	1.50
42 Acenaphthene-d10	328275	164138	656550	328366	0.03
59 Phenanthrene-d10	597140	298570	1194280	602202	0.85
69 Chrysene-d12	466503	233252	933006	451316	-3.26
77 Perylene-d12	518203	259102	1036406	517188	-0.20

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	0.00
27 Naphthalene-d8	11.77	11.27	12.27	11.77	0.00
42 Acenaphthene-d10	15.39	14.89	15.89	15.39	0.00
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.45	0.00
77 Perylene-d12	26.19	25.69	26.69	26.19	0.00

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

REVIEW SUMMARY FOR FILE - NT10031509S.D

Lab ID: SLC0238-CAL2
nt10.i, 20230315.b\20230315.b\SIMABN2.m,   16-MAR-2023 01:00

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: 20230315.b/NT10031510S.D

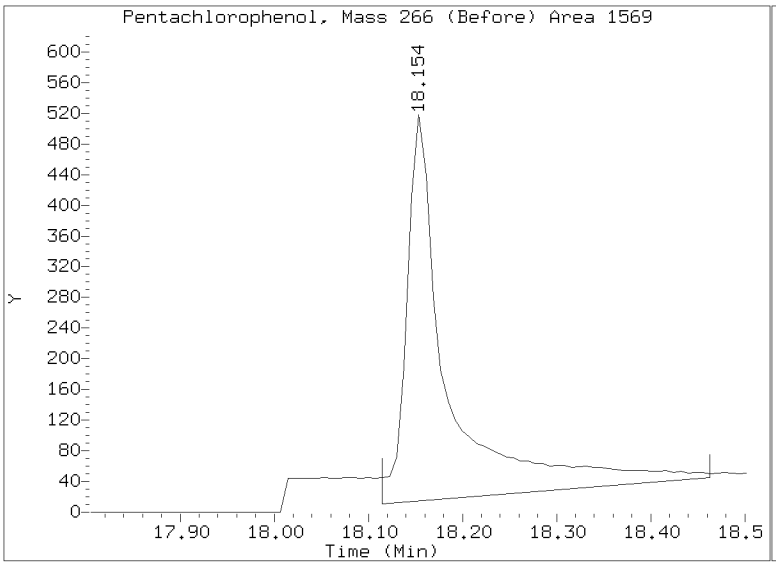
On Column LOD for nt10.i, 20230315.b\SIMABN2.m, PSDDA.sub = 0.0000

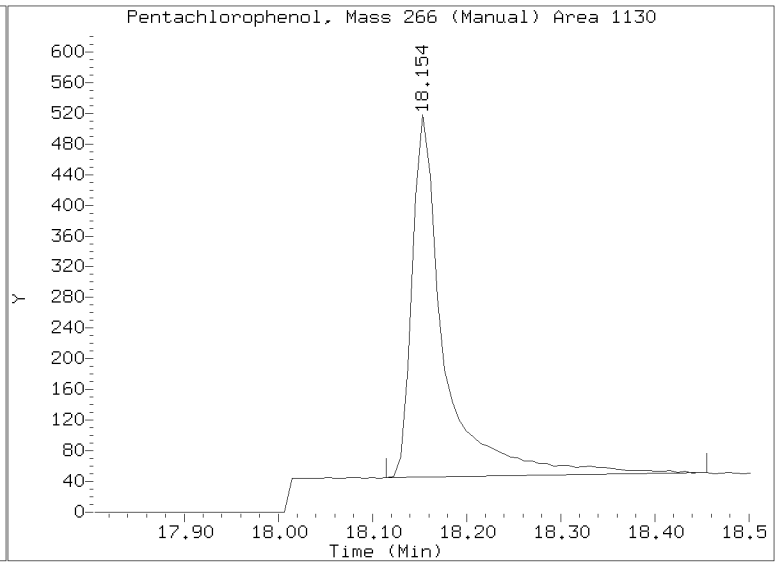
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230315.b/20230315.b/NT10031509S.D
Injection Date: 16-MAR-2023 01:00
Lab ID:SLC0238-CAL2 Client ID:
Report Date: 03/16/2023 14:49





Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031510S.D

Date : 16-MAR-2023 01:38

Client ID:

Instrument: nt10.i

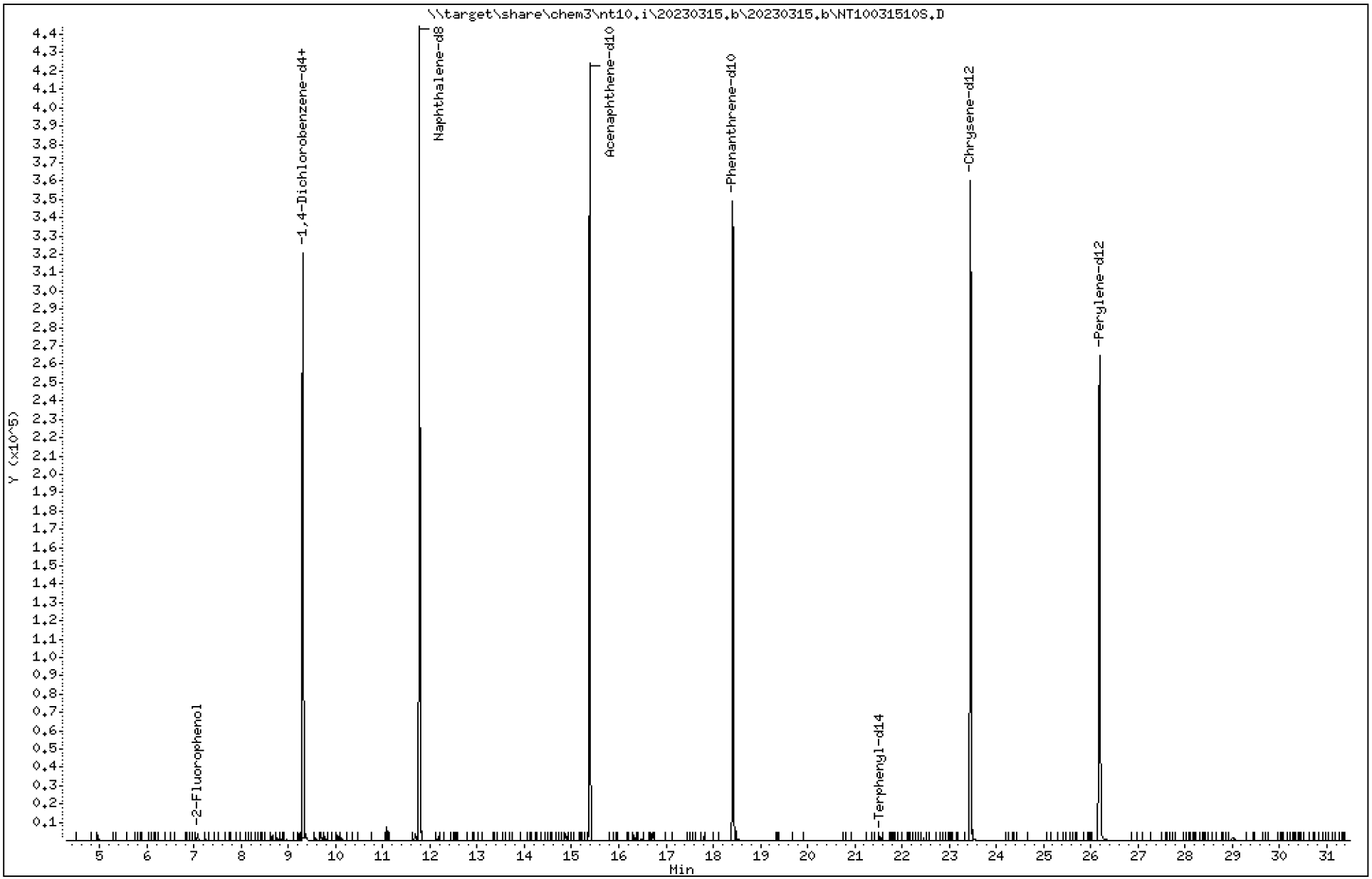
Sample Info: SLC0238-CAL1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031510S.D
Lab Smp Id: SLC0238-CAL1
Inj Date : 16-MAR-2023 01:38 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0238-CAL1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Meth Date : 16-Mar-2023 14:39 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 10 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	7.073	7.073	(0.761)	3849	0.07500	0.06782
3	Phenol	94	8.664	8.664	(0.932)	3653	0.05000	0.04692
7	1,3-Dichlorobenzene	146	9.236	9.236	(0.993)	3896	0.05000	0.05347
* 8	1,4-Dichlorobenzene-d4	152	9.298	9.298	(1.000)	187154	4.00000	
9	1,4-Dichlorobenzene	146	9.329	9.329	(1.003)	3725	0.05000	0.05296
11	Benzyl alcohol	79	9.570	9.570	(1.029)	1831	0.05000	0.04056
12	1,2-Dichlorobenzene	146	9.686	9.686	(1.042)	3651	0.05000	0.05278
13	2-Methylphenol	108	9.772	9.772	(1.051)	2592	0.05000	0.04804
15	4-Methylphenol	108	10.036	10.036	(1.079)	2412	0.05000	0.04302
16	N-Nitroso-di-n-propylamine	70	10.113	10.113	(1.088)	1741	0.05000	0.04391
22	2,4-Dimethylphenol	107	11.087	11.087	(0.942)	4967	0.10000	0.08781
24	Benzoic acid	105	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	11.690	11.690	(0.993)	3146	0.05000	0.05529
* 27	Naphthalene-d8	136	11.775	11.775	(1.000)	654413	4.00000	
30	Hexachlorobutadiene	225	12.169	12.169	(1.033)	1885	0.05000	0.05449
39	Dimethylphthalate	163	14.877	14.877	(0.967)	5095	0.05000	0.05062
* 42	Acenaphthene-d10	162	15.380	15.380	(1.000)	318969	4.00000	
50	Diethylphthalate	149	16.324	16.324	(1.061)	4381	0.05000	0.04201
54	N-Nitrosodiphenylamine	169	16.717	16.717	(0.908)	3307	0.05000	0.04226
57	Hexachlorobenzene	284	17.798	17.798	(0.966)	1826	0.05000	0.05212

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
58	Pentachlorophenol	266	18.154	18.154	(0.986)	337	0.10000	0.01743(M)
* 59	Phenanthrene-d10	188	18.417	18.417	(1.000)	583319	4.00000	
$ 66	Terphenyl-d14	244	21.543	21.543	(0.918)	3504	0.05000	0.04882
67	Butylbenzylphthalate	149	22.464	22.465	(0.958)	1336	0.05000	0.02307
* 69	Chrysene-d12	240	23.455	23.455	(1.000)	440533	4.00000	
* 77	Perylene-d12	264	26.188	26.188	(1.000)	488759	4.00000	
79	Dibenzo(a,h)anthracene	278	29.018	29.019	(1.108)	4785	0.05000	0.02982
90	N-Nitrosodimethylamine	74	4.948	4.948	(0.532)	3496	0.10000	0.09712

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031510S.D
Lab Smp Id: SLC0238-CAL1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 23:06
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	188081	94041	376162	187154	-0.49
27 Naphthalene-d8	674549	337275	1349098	654413	-2.99
42 Acenaphthene-d10	328275	164138	656550	318969	-2.83
59 Phenanthrene-d10	597140	298570	1194280	583319	-2.31
69 Chrysene-d12	466503	233252	933006	440533	-5.57
77 Perylene-d12	518203	259102	1036406	488759	-5.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.30	0.00
27 Naphthalene-d8	11.77	11.27	12.27	11.78	0.01
42 Acenaphthene-d10	15.39	14.89	15.89	15.38	-0.04
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	-0.04
69 Chrysene-d12	23.45	22.95	23.95	23.46	0.00
77 Perylene-d12	26.19	25.69	26.69	26.19	0.00

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

REVIEW SUMMARY FOR FILE - NT10031510S.D

Lab ID: SLC0238-CAL1
nt10.i, 20230315.b\20230315.b\SIMABN2.m,   16-MAR-2023 01:38

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: 20230315.b/NT10031510S.D

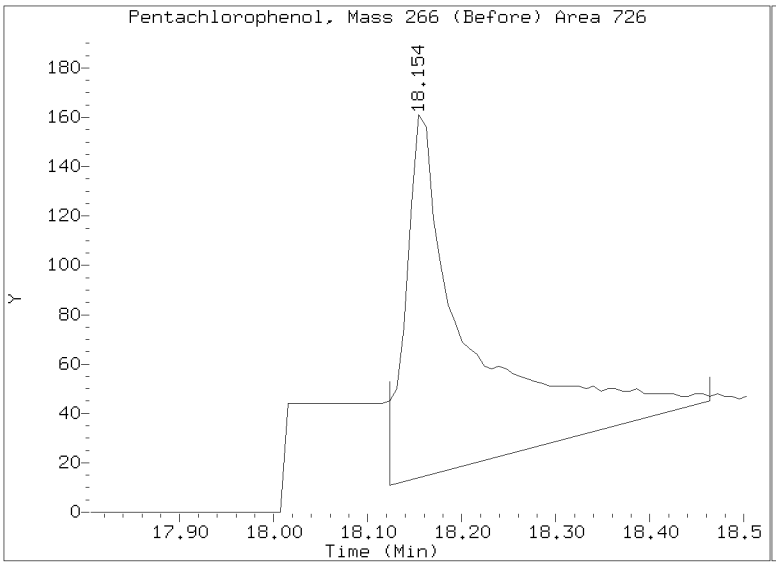
On Column LOD for nt10.i, 20230315.b\SIMABN2.m, PSDDA.sub = 0.0000

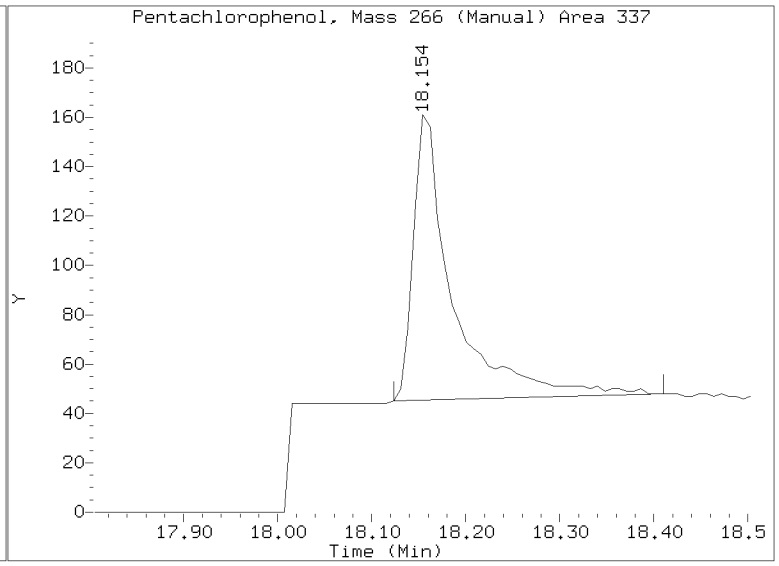
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230315.b/20230315.b/NT10031510S.D
Injection Date: 16-MAR-2023 01:38
Lab ID:SLC0238-CAL1 Client ID:
Report Date: 03/16/2023 14:49





Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

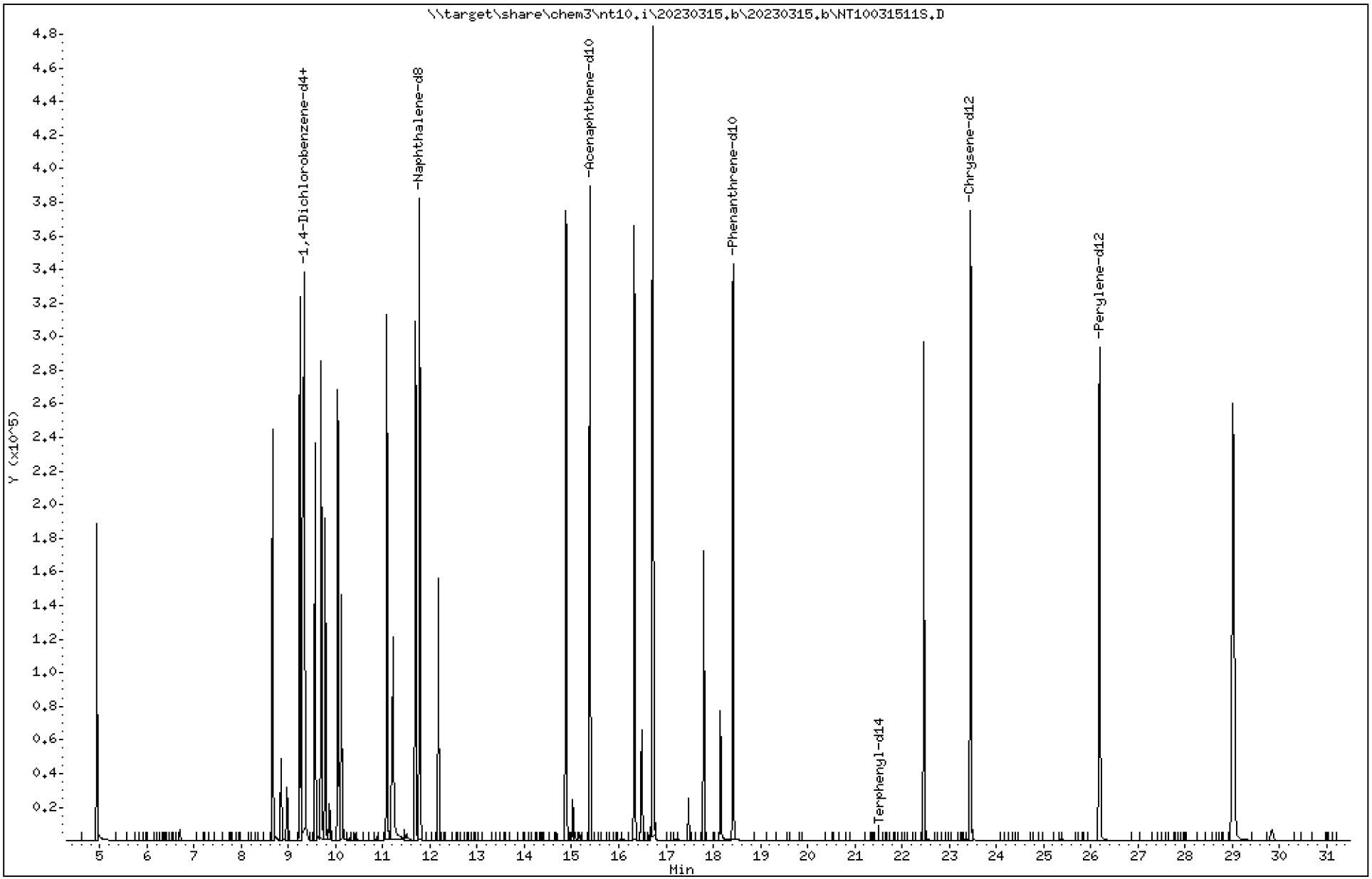
Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

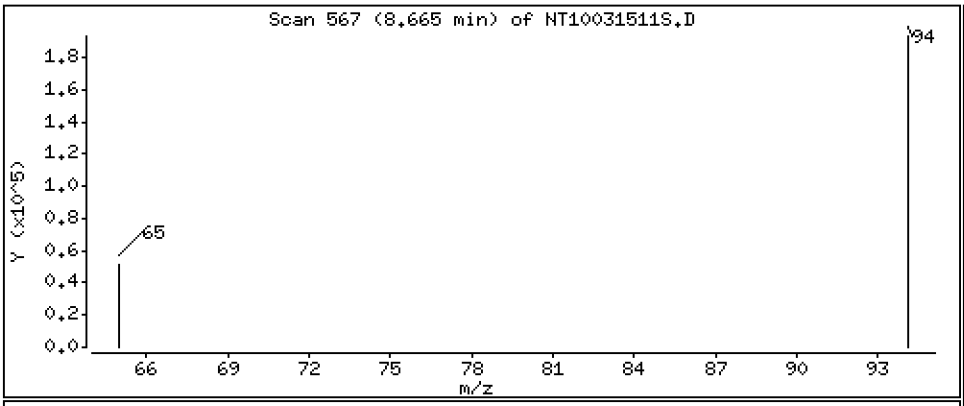
Operator: JGR

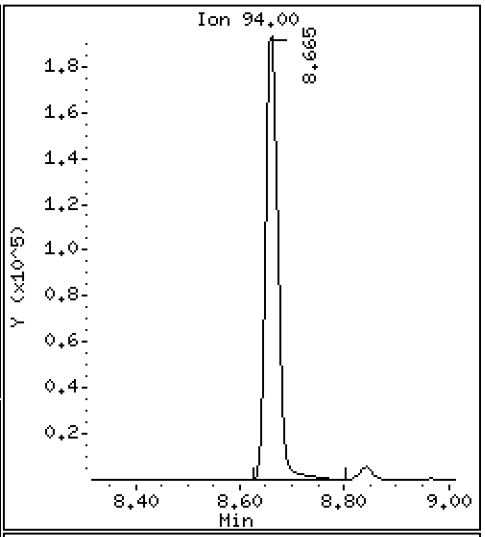
Column phase: ZB-5msi

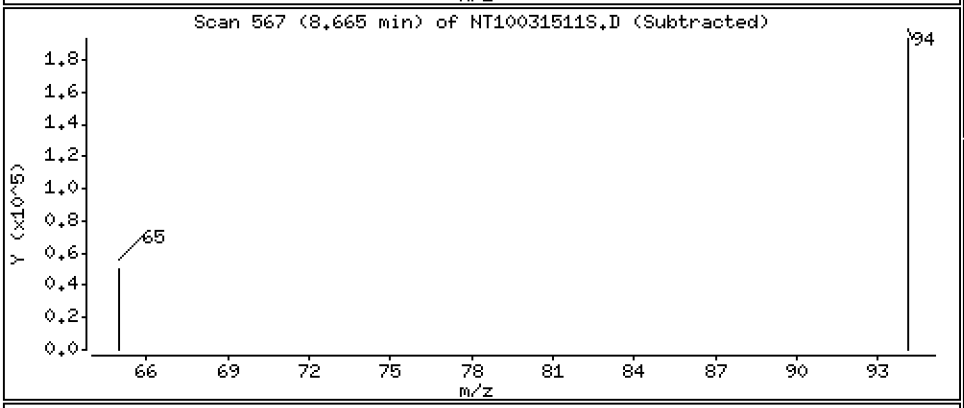
Column diameter: 0.25

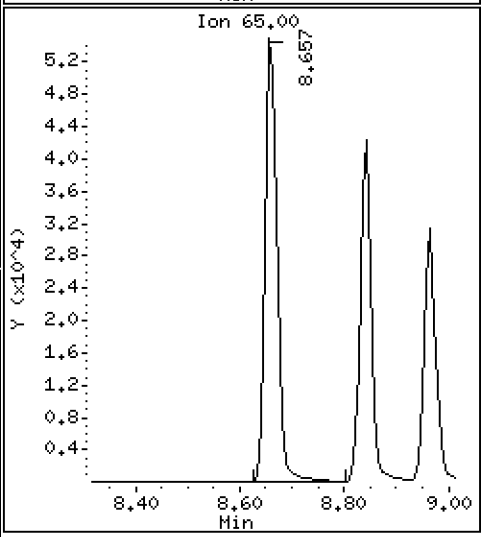
3 Phenol

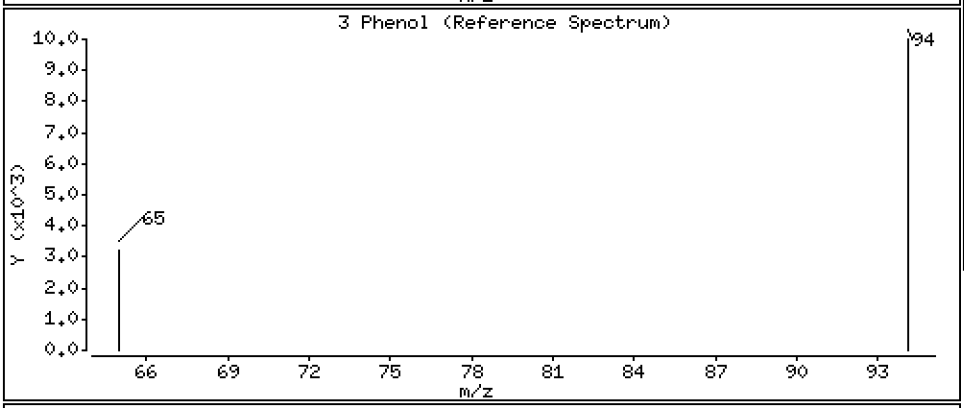
Concentration: 4.373 ug/L

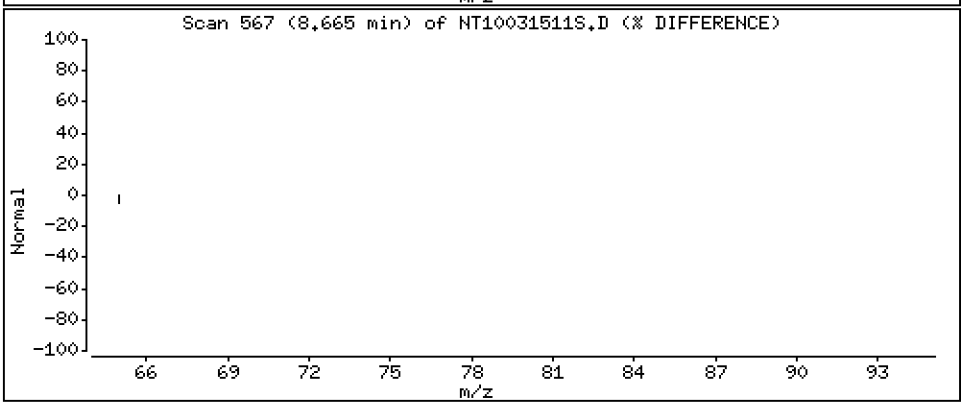












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

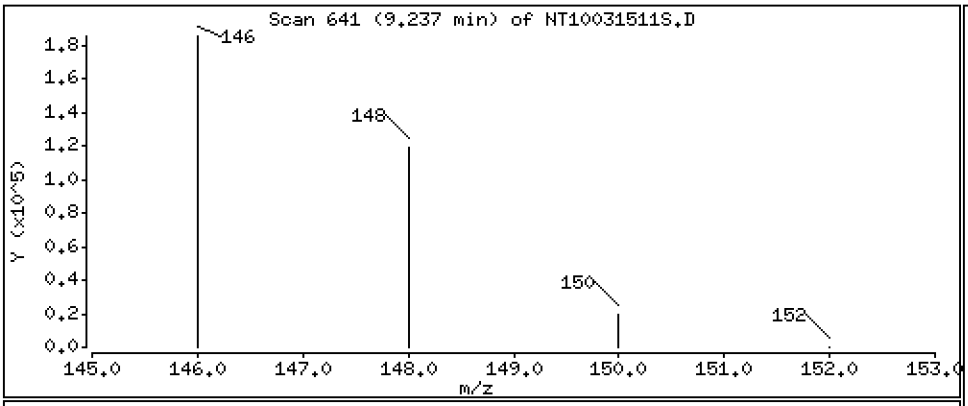
Operator: JGR

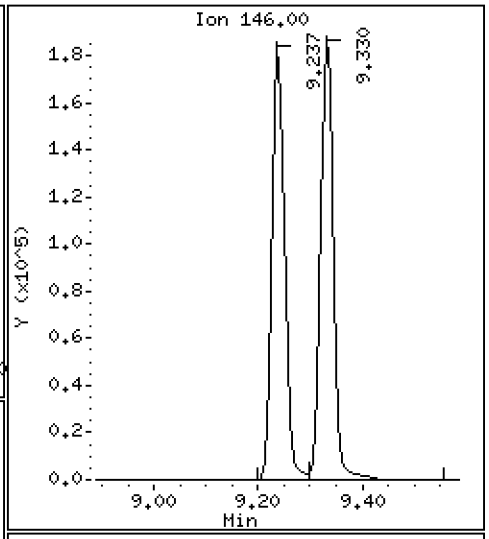
Column phase: ZB-5msi

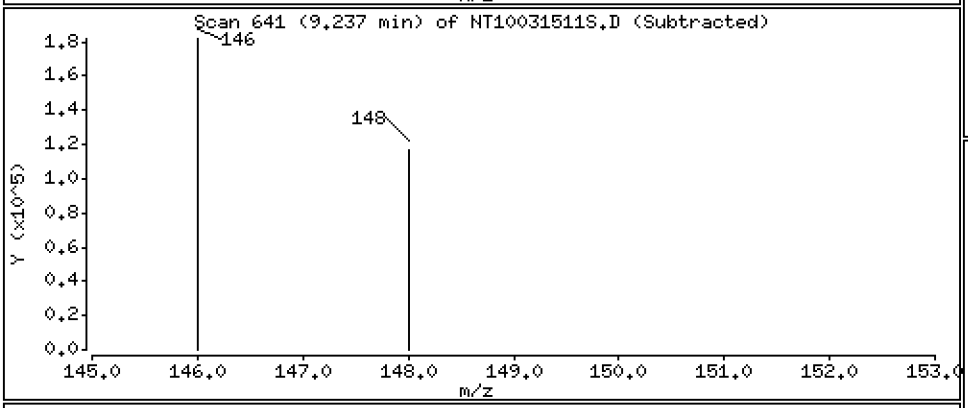
Column diameter: 0.25

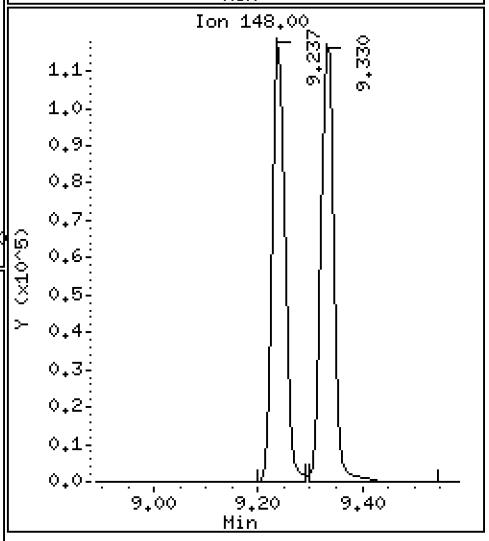
7 1,3-Dichlorobenzene

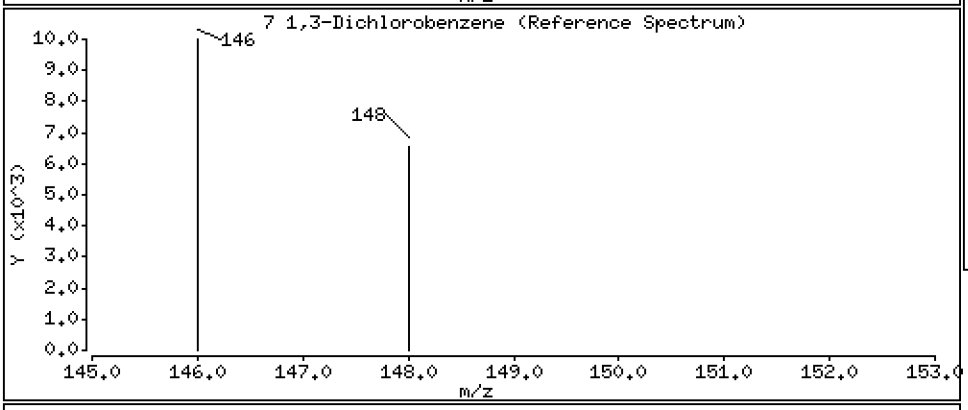
Concentration: 4.643 ug/L

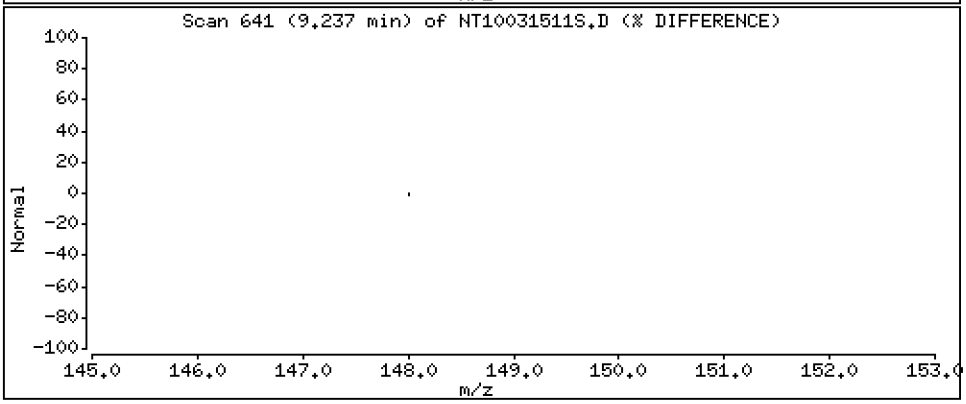












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

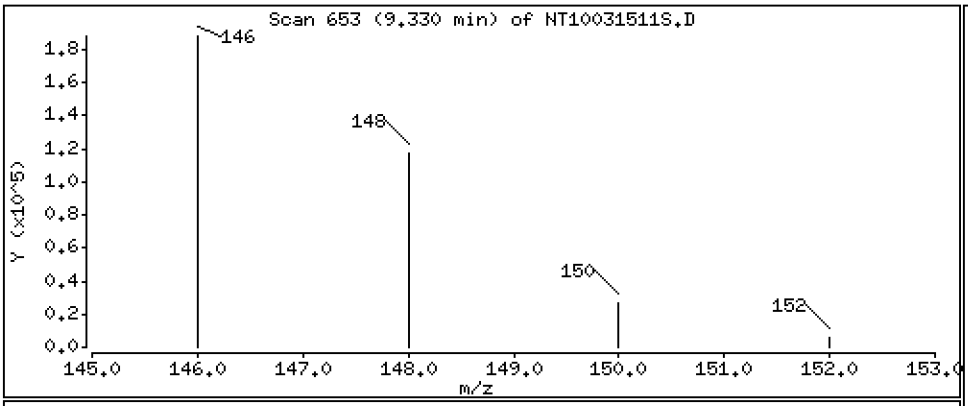
Operator: JGR

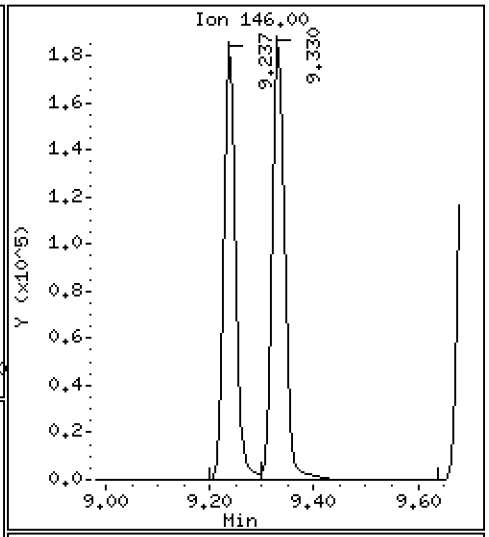
Column phase: ZB-5msi

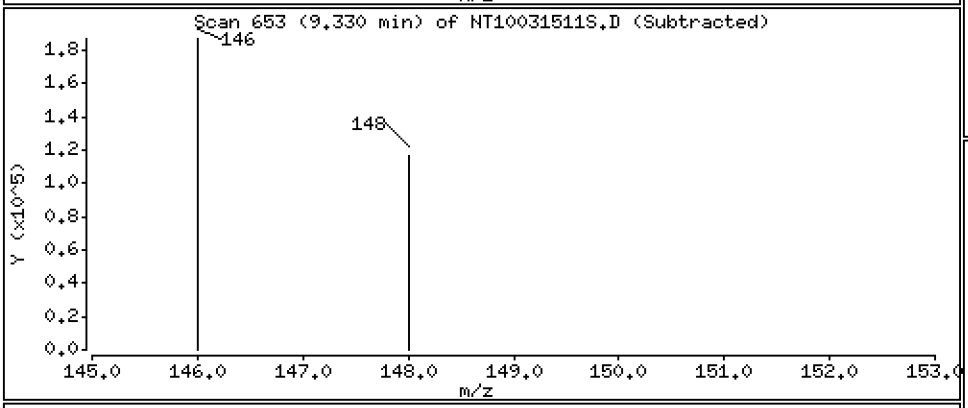
Column diameter: 0.25

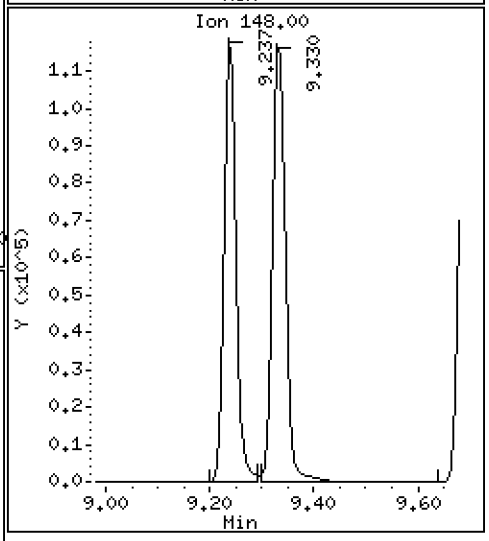
9 1,4-Dichlorobenzene

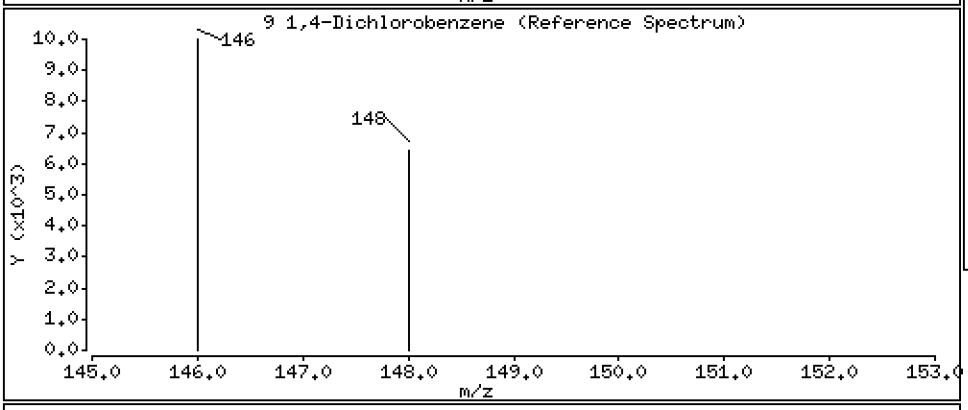
Concentration: 4.838 ug/L

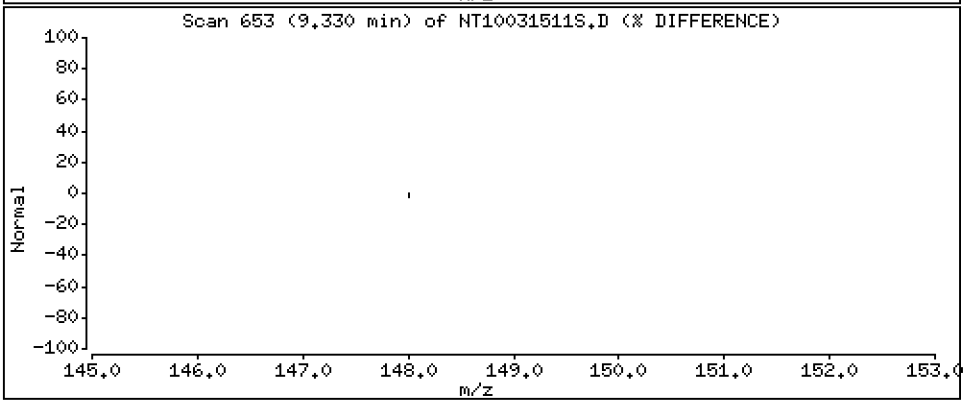












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

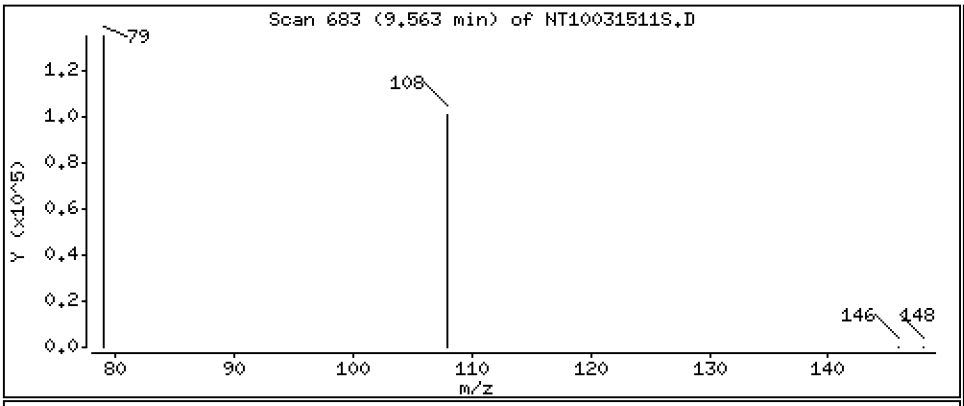
Operator: JGR

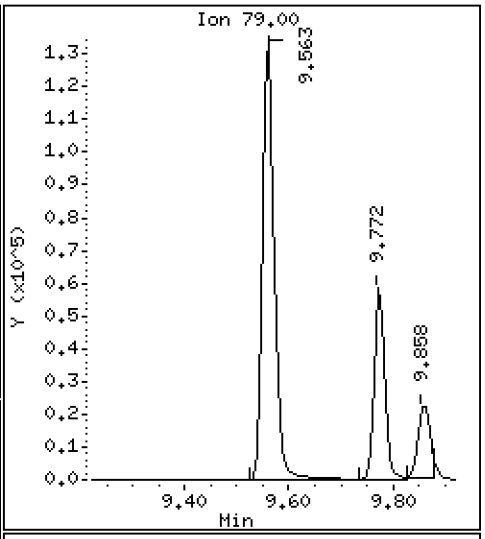
Column phase: ZB-5msi

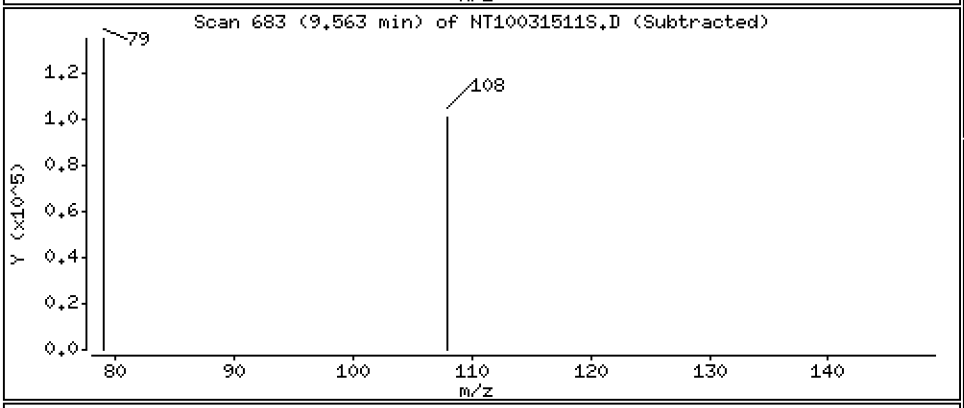
Column diameter: 0.25

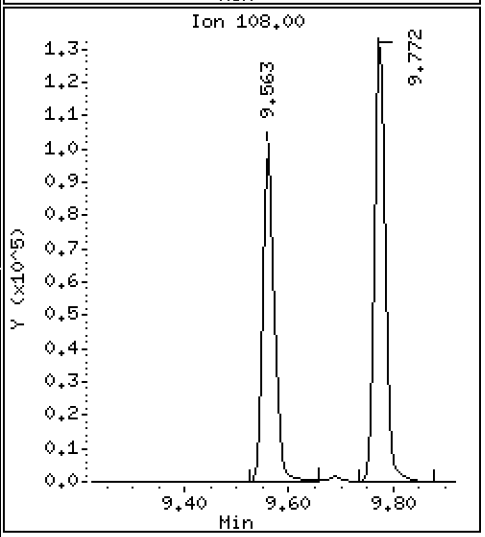
11 Benzyl alcohol

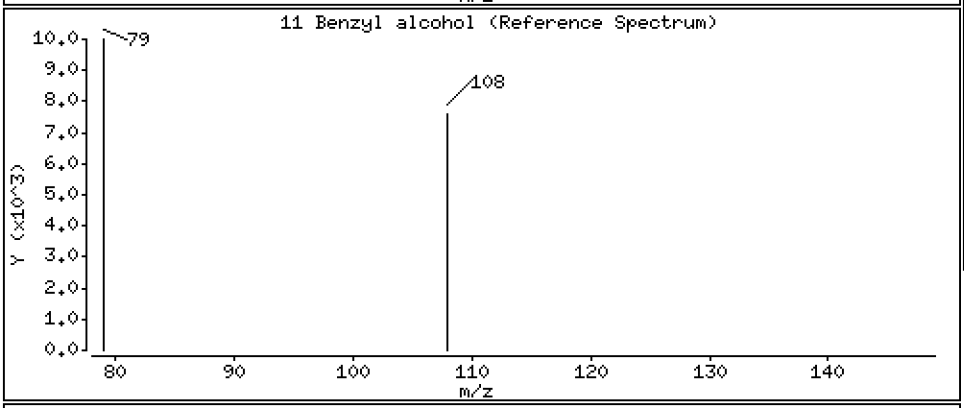
Concentration: 5.181 ug/L

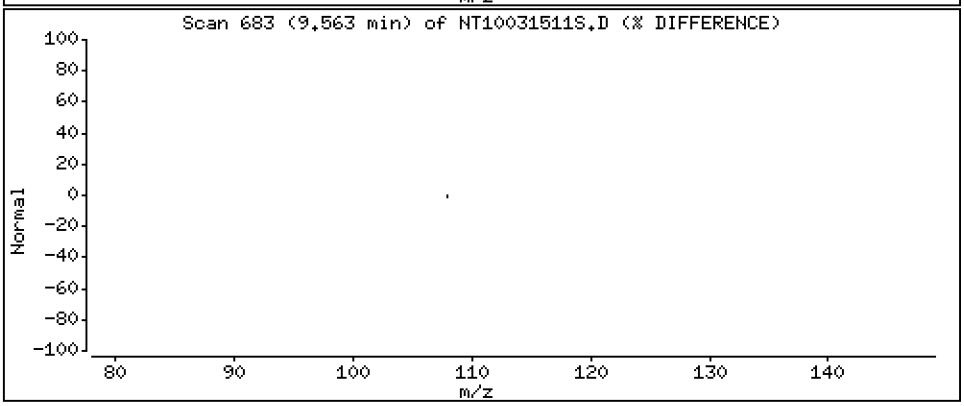












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

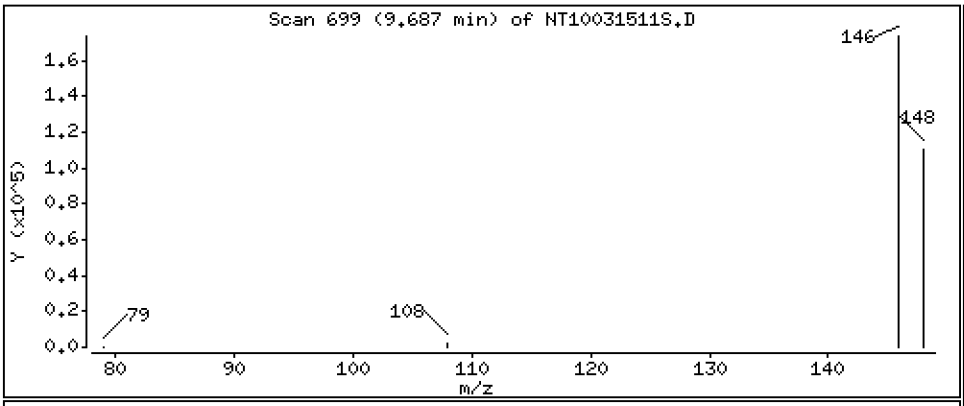
Operator: JGR

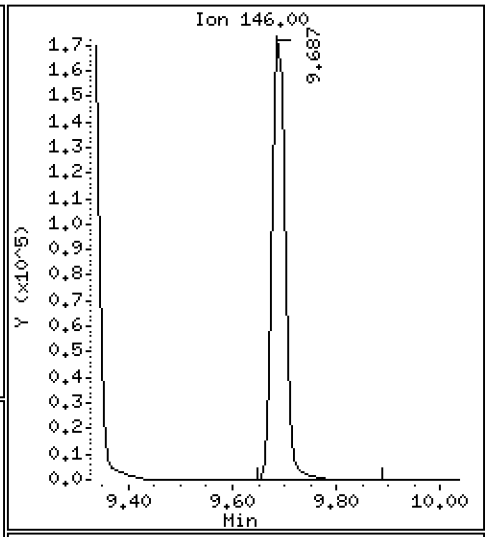
Column phase: ZB-5msi

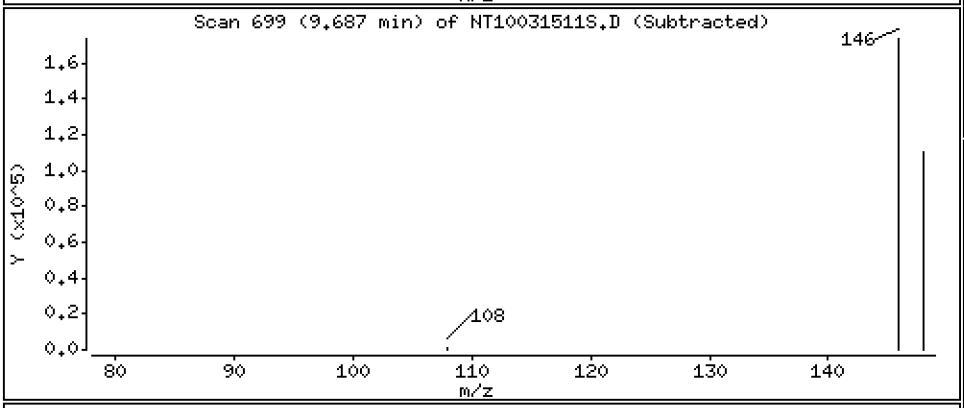
Column diameter: 0.25

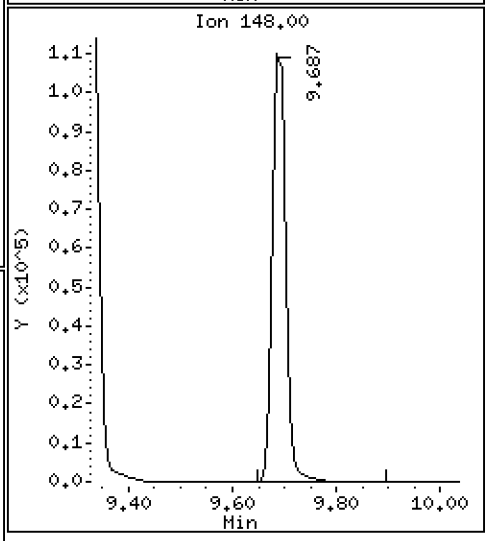
12 1,2-Dichlorobenzene

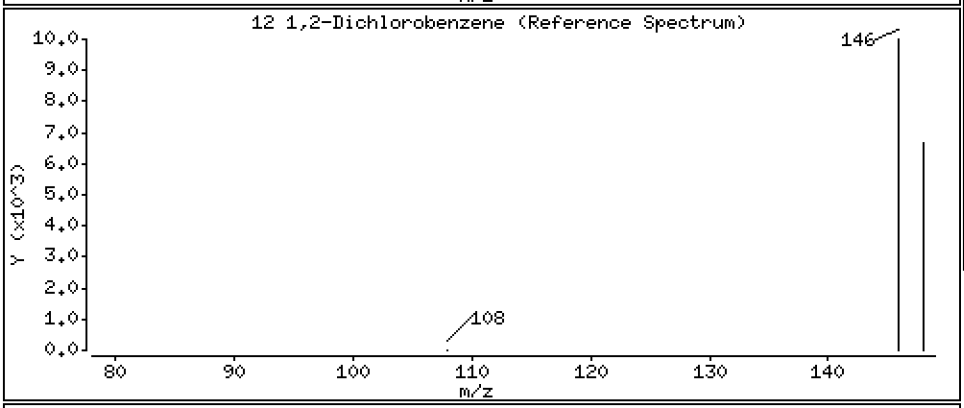
Concentration: 4.679 ug/L

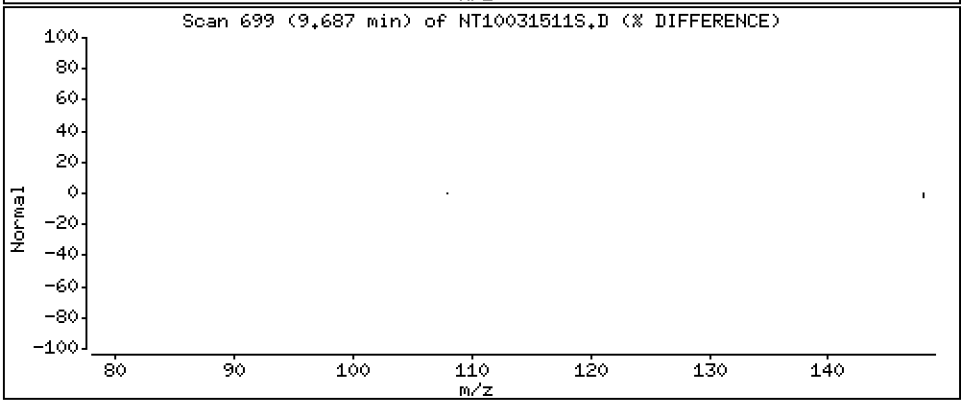












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

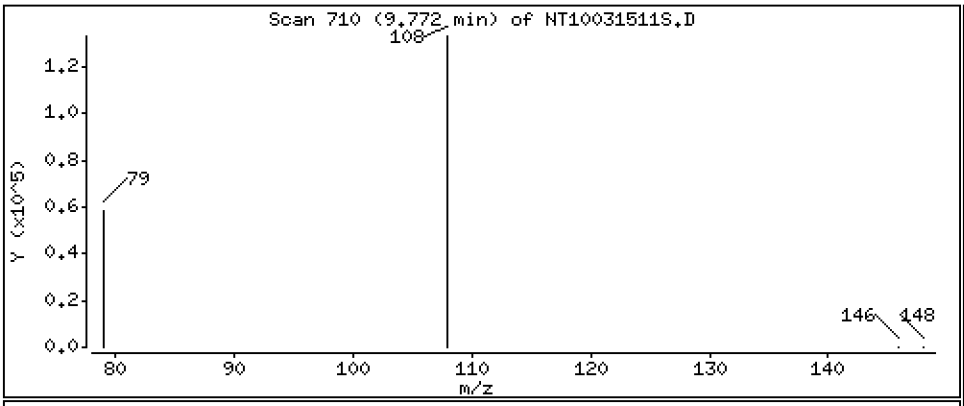
Operator: JGR

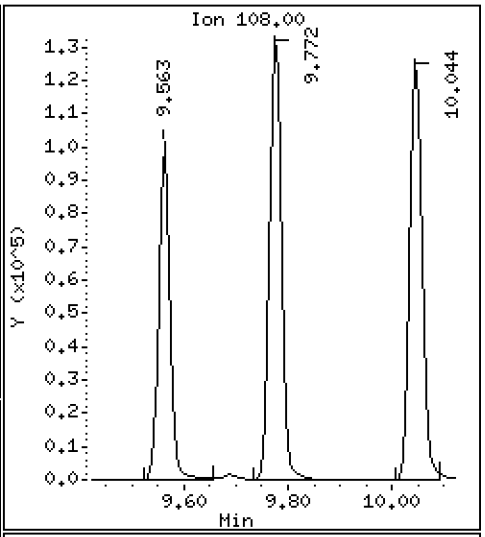
Column phase: ZB-5msi

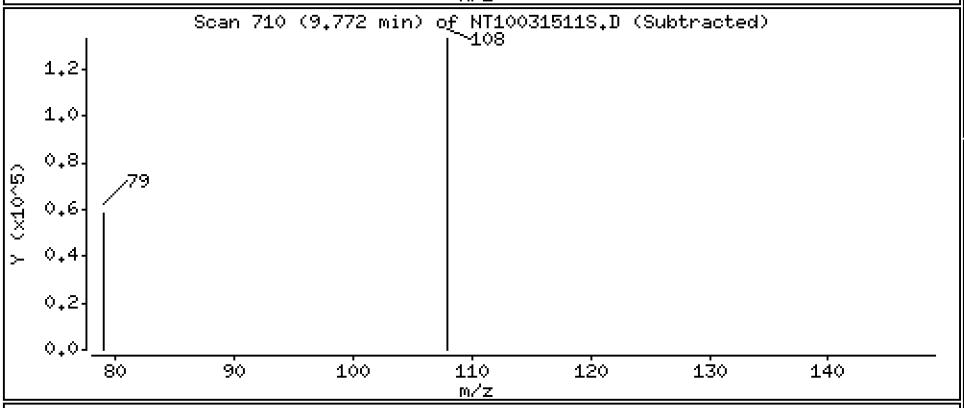
Column diameter: 0.25

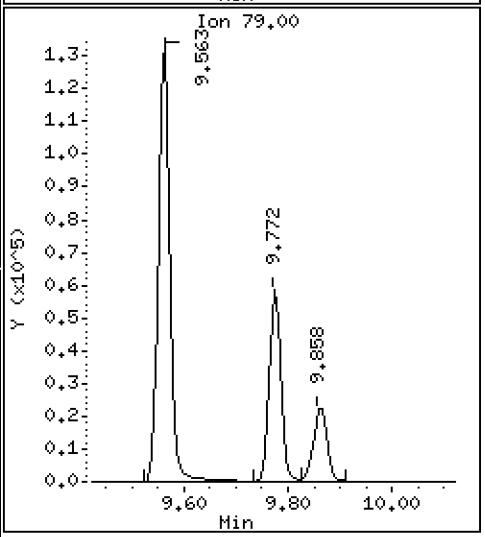
13 2-Methylphenol

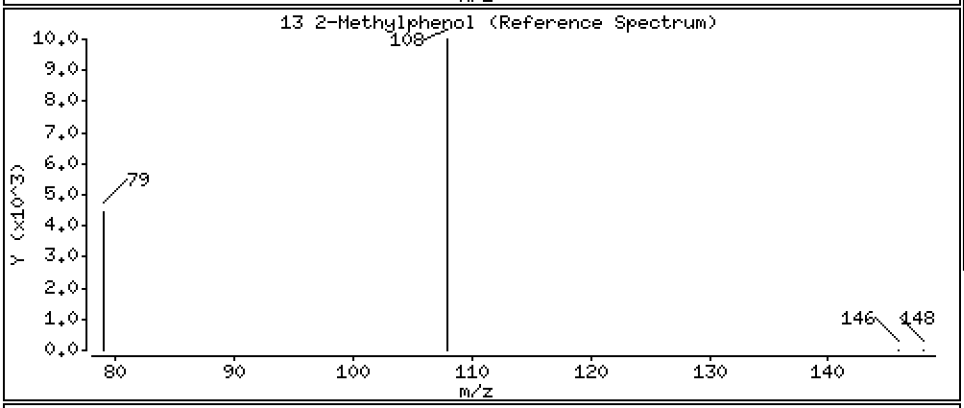
Concentration: 4.197 ug/L

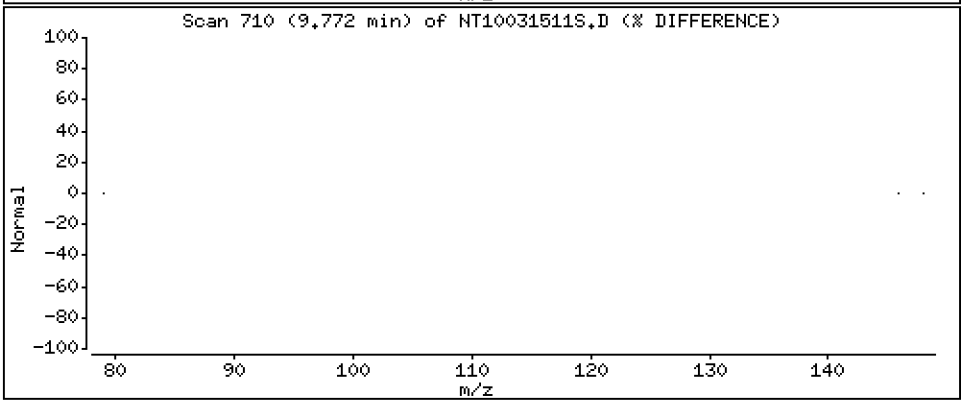












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

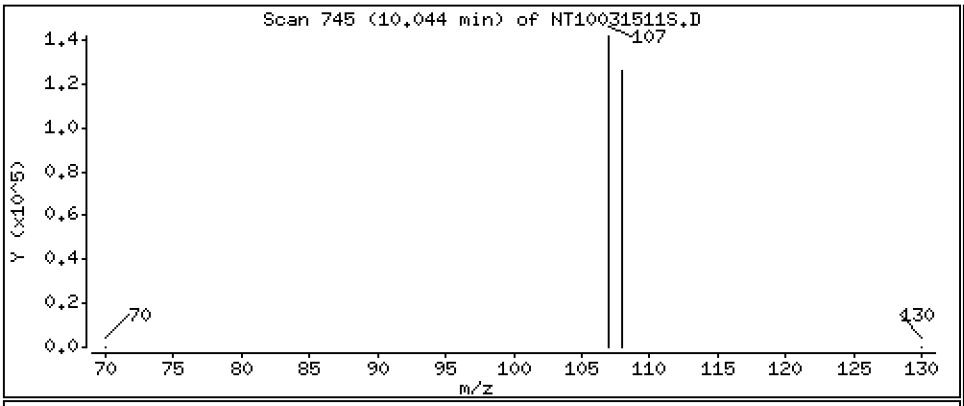
Operator: JGR

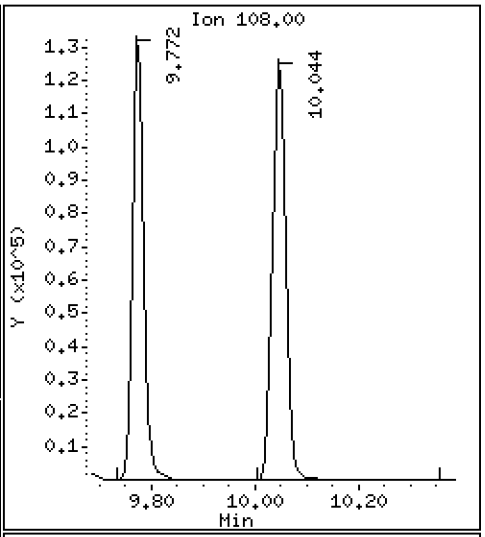
Column phase: ZB-5msi

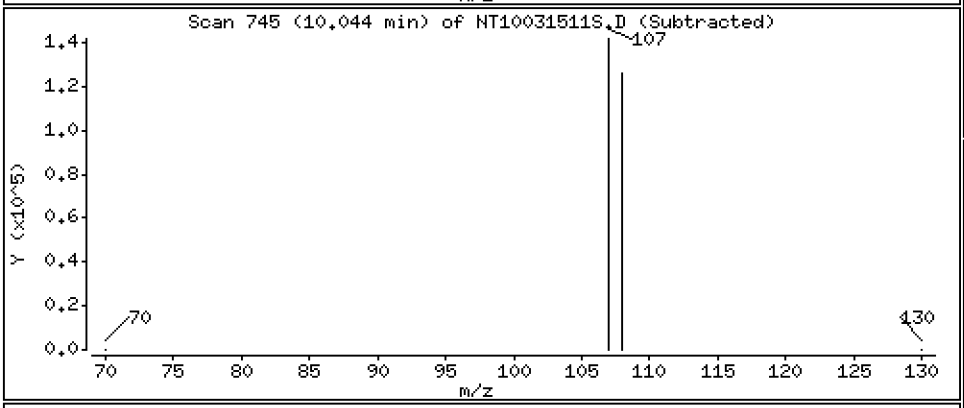
Column diameter: 0.25

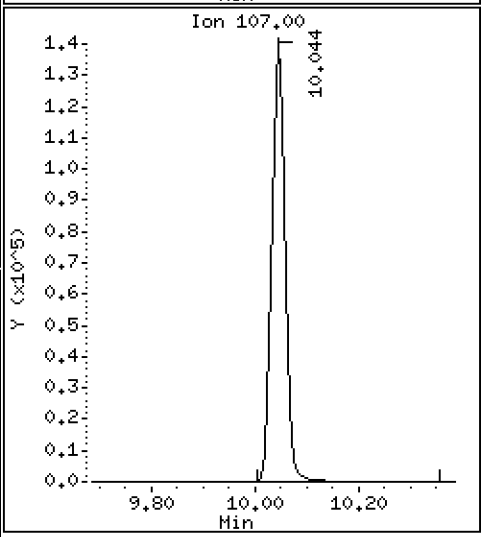
15 4-Methylphenol

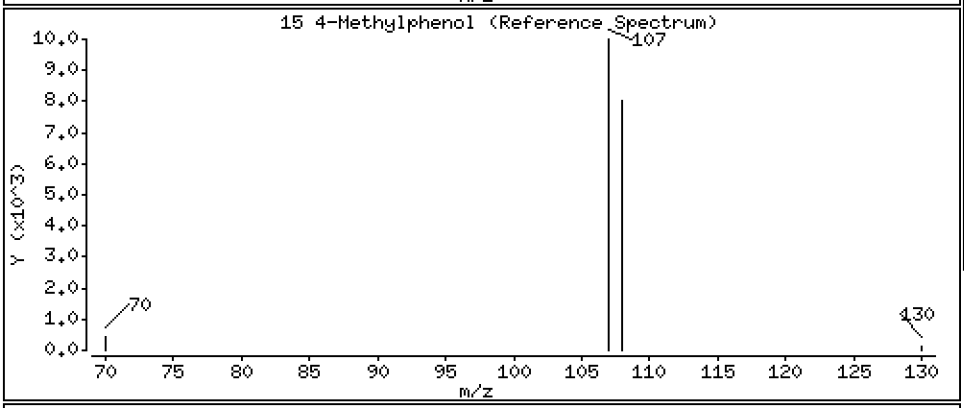
Concentration: 4.463 ug/L

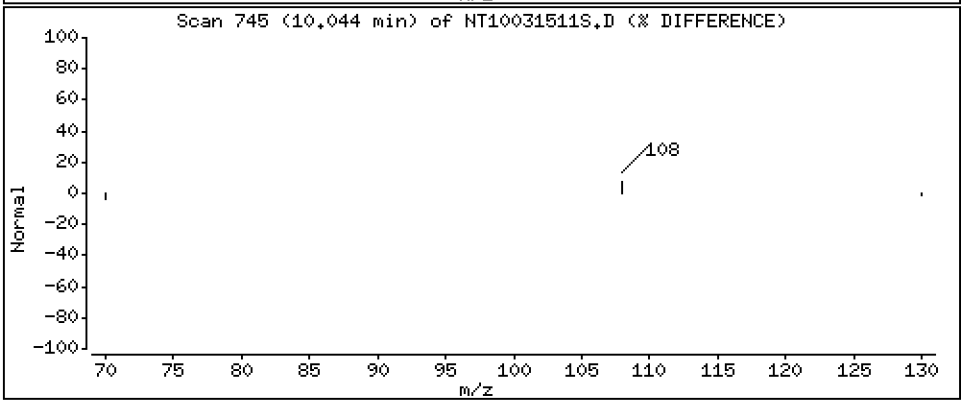












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

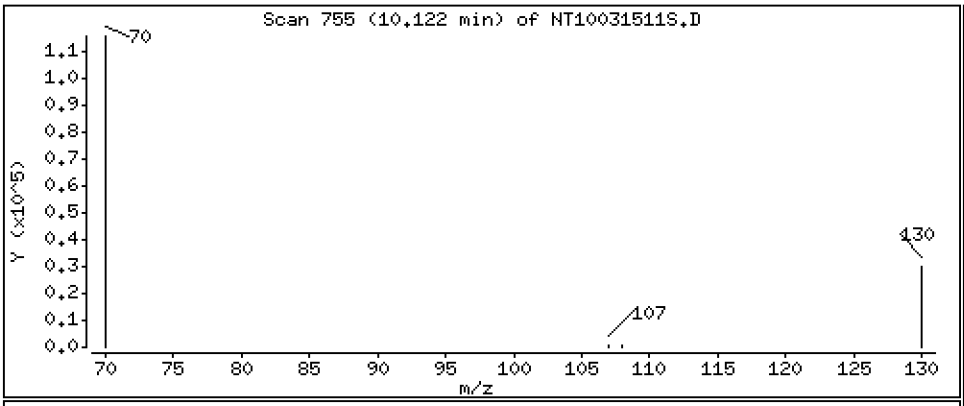
Operator: JGR

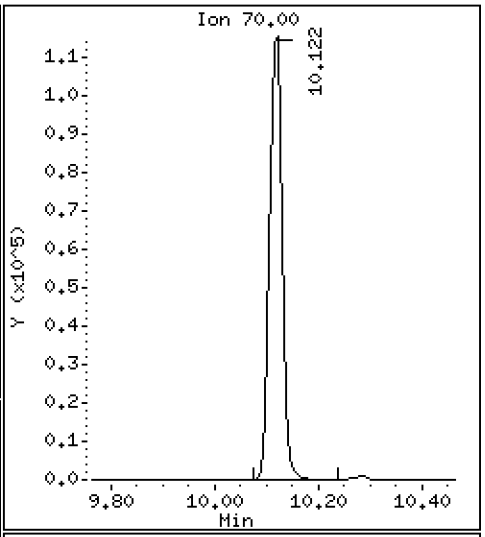
Column phase: ZB-5msi

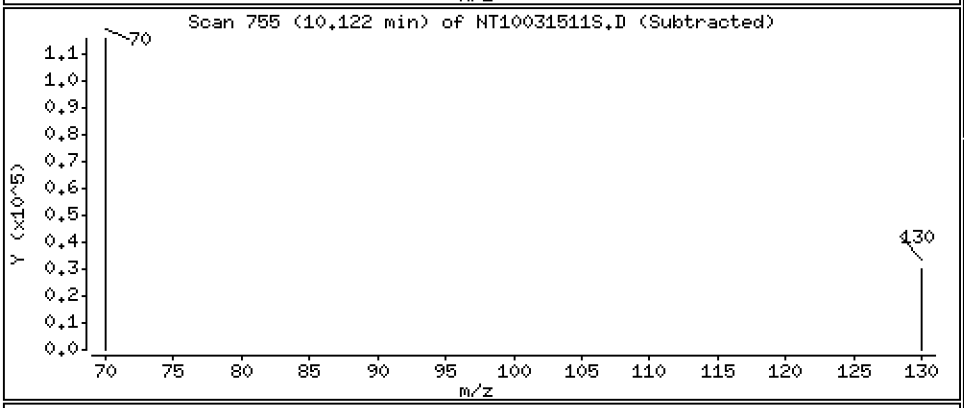
Column diameter: 0.25

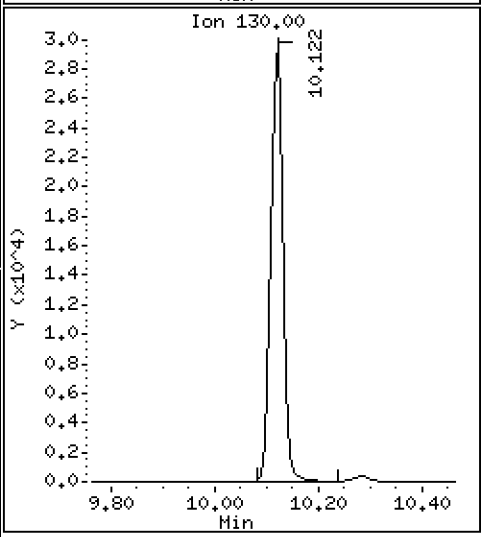
16 N-Nitroso-di-n-propylamine

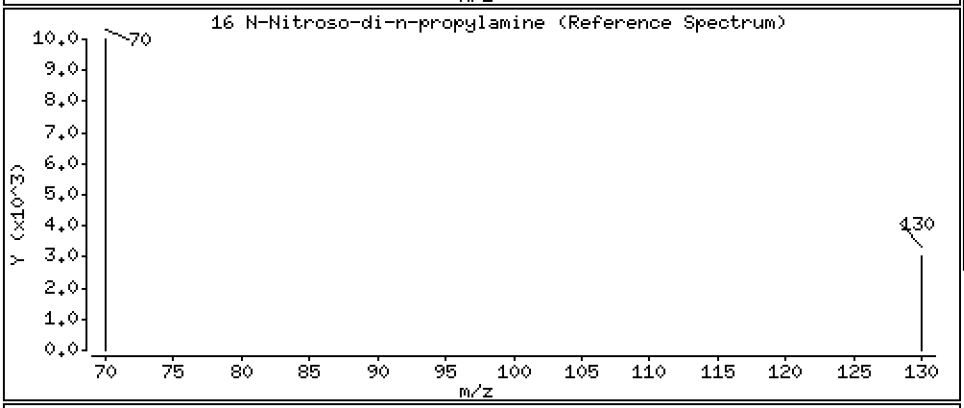
Concentration: 5.282 ug/L

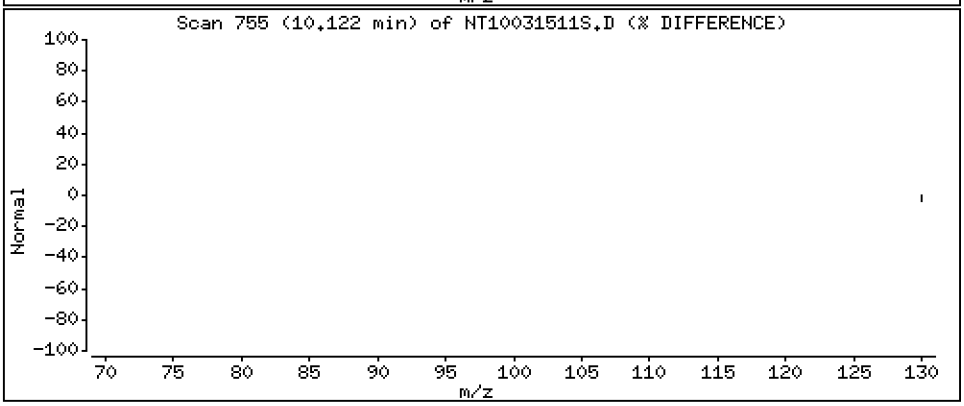












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

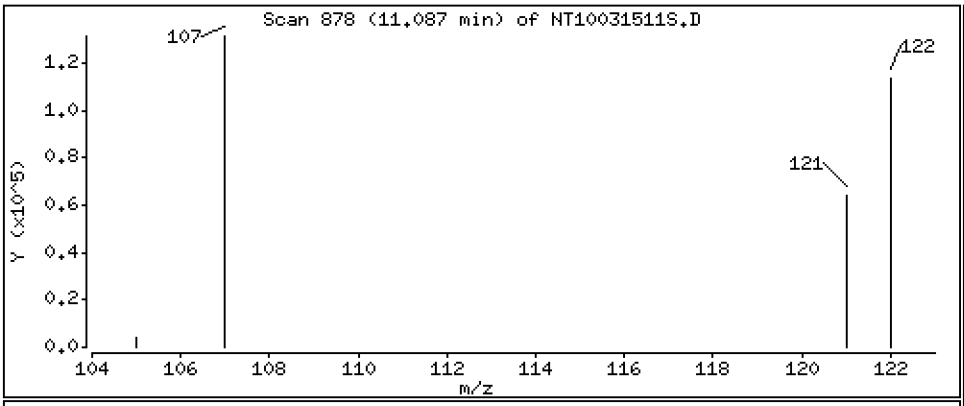
Operator: JGR

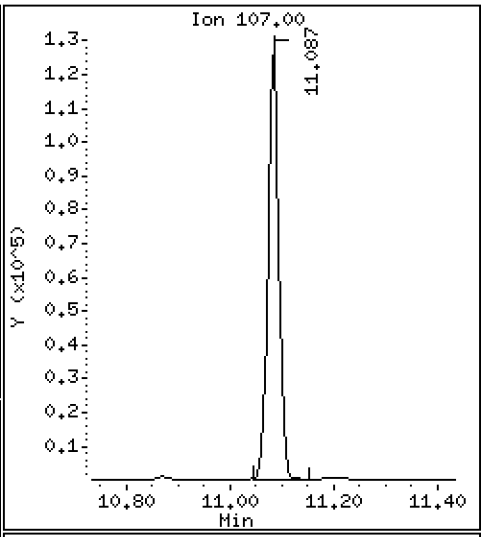
Column phase: ZB-5msi

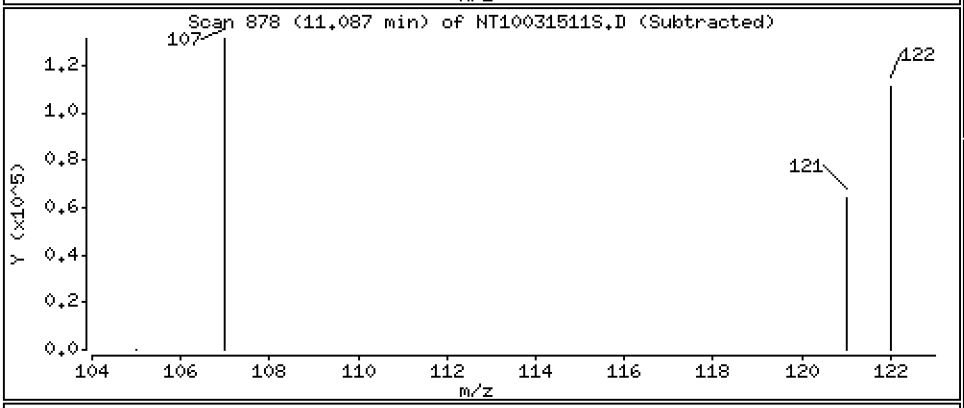
Column diameter: 0.25

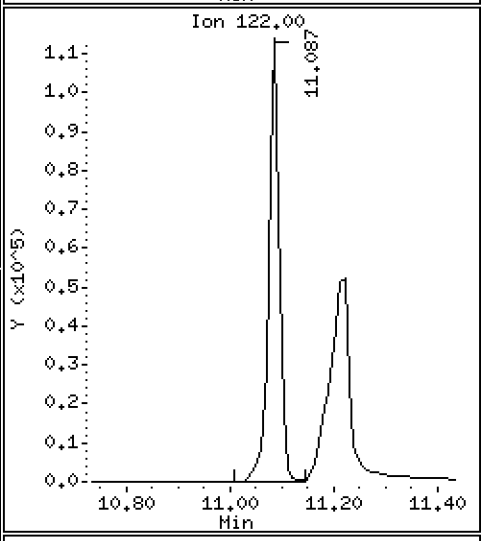
22 2,4-Dimethylphenol

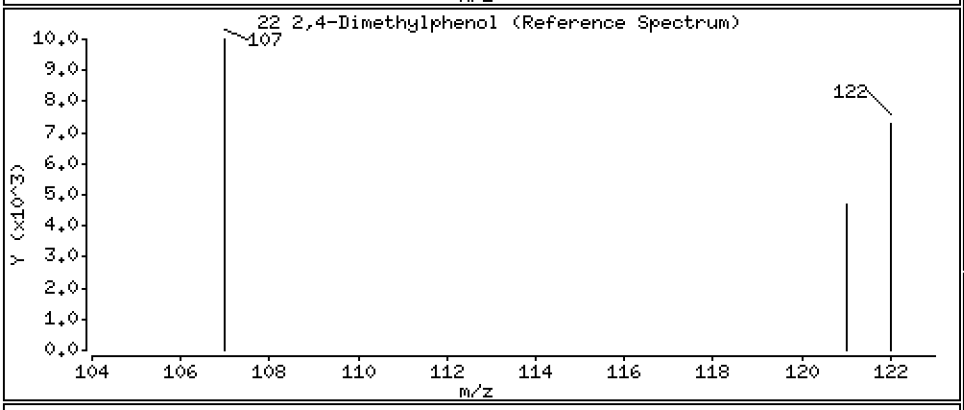
Concentration: 3.660 ug/L

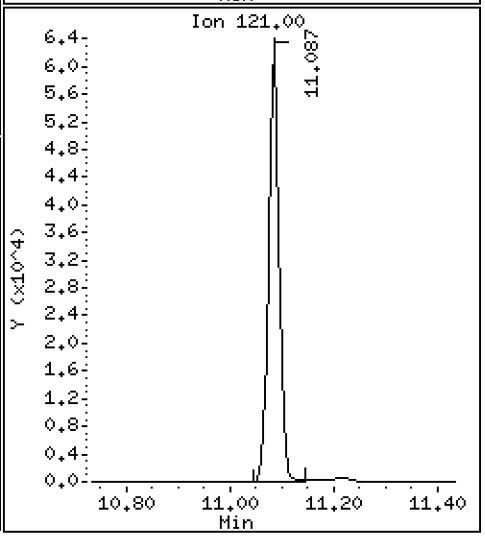


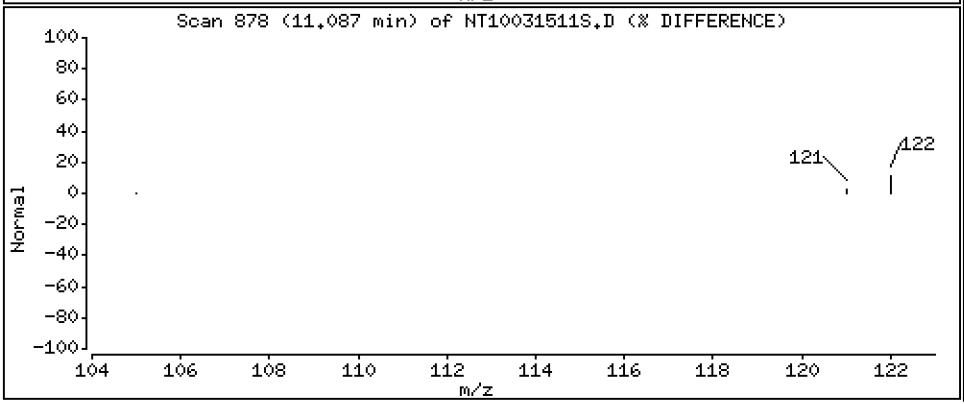












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

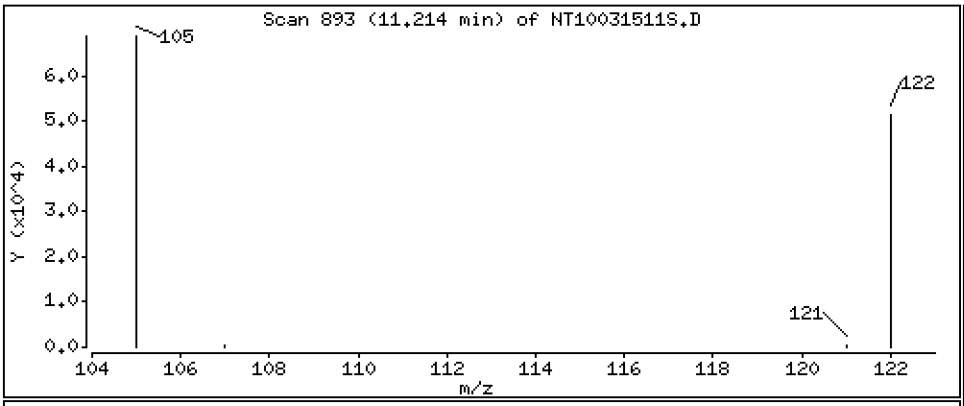
Operator: JGR

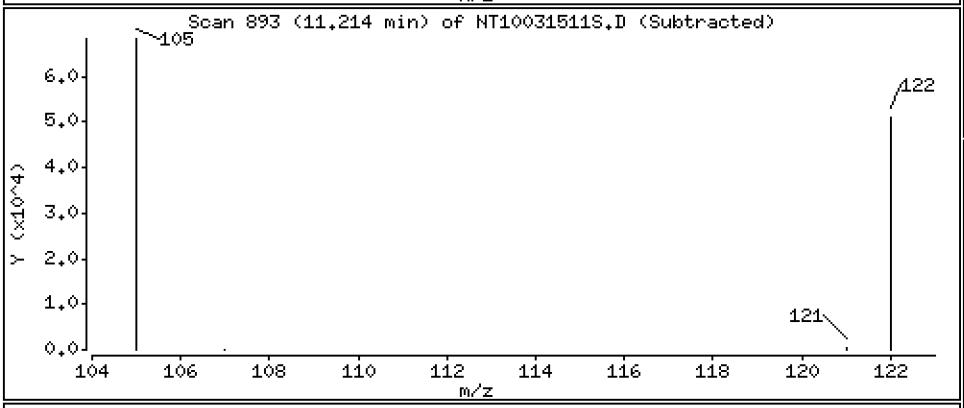
Column phase: ZB-5msi

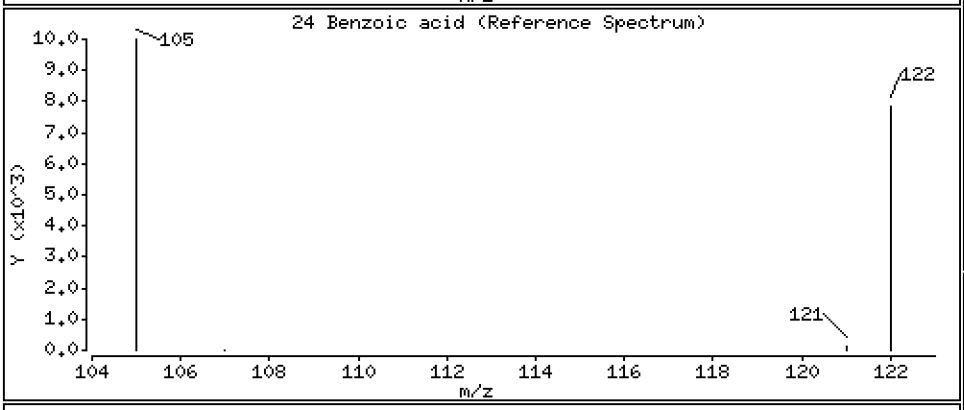
Column diameter: 0.25

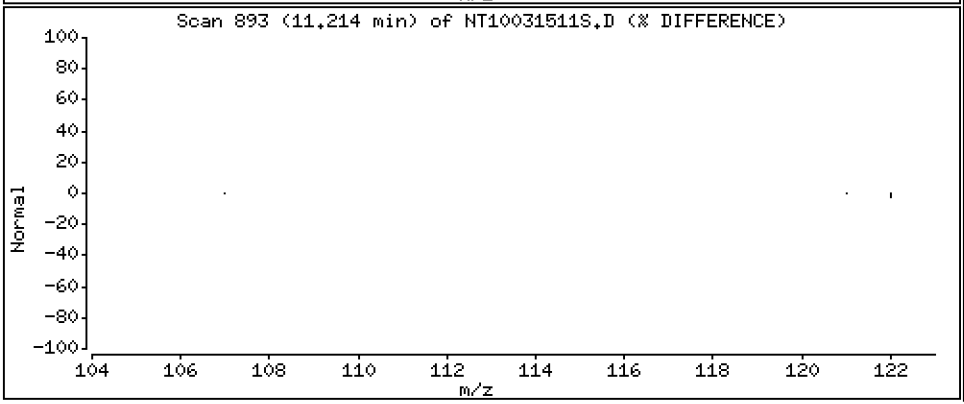
24 Benzoic acid

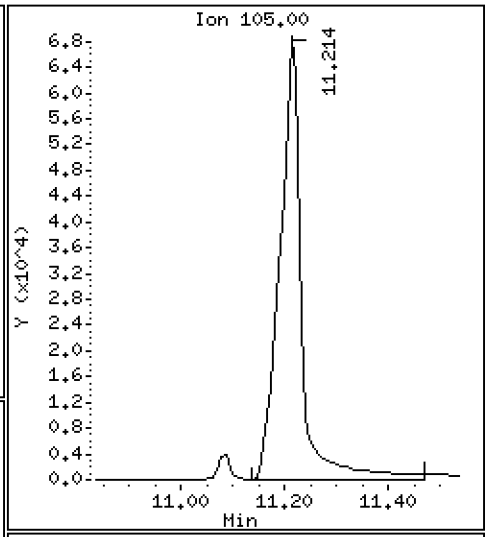
Concentration: 6.746 ug/L

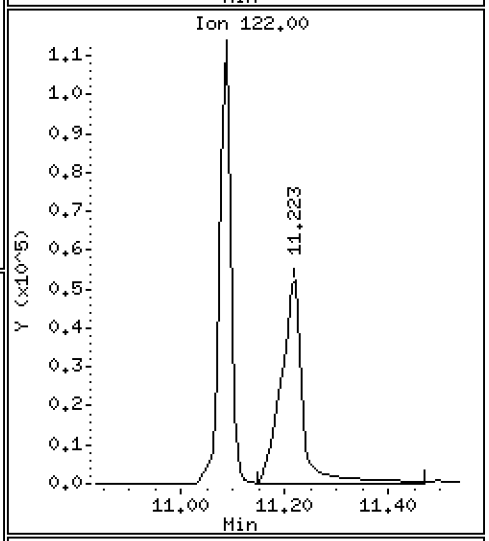


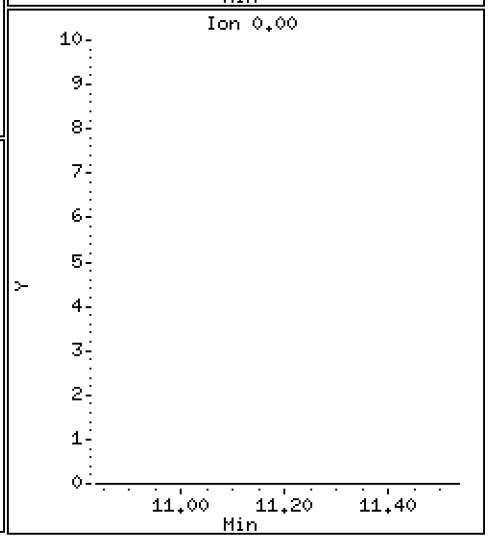












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

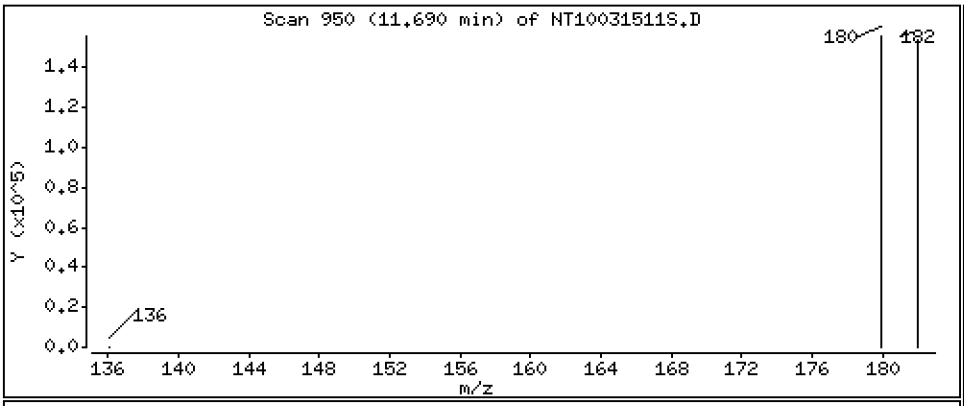
Operator: JGR

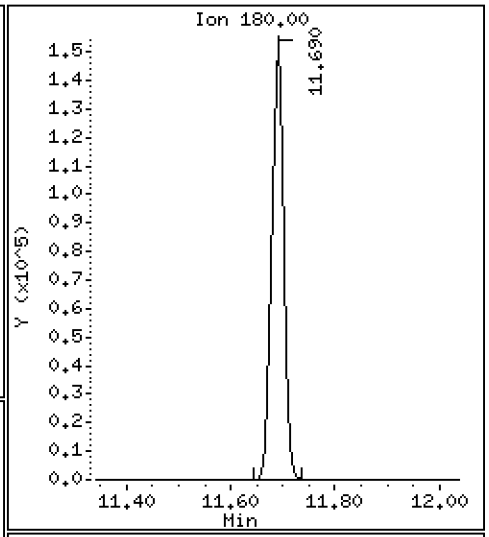
Column phase: ZB-5msi

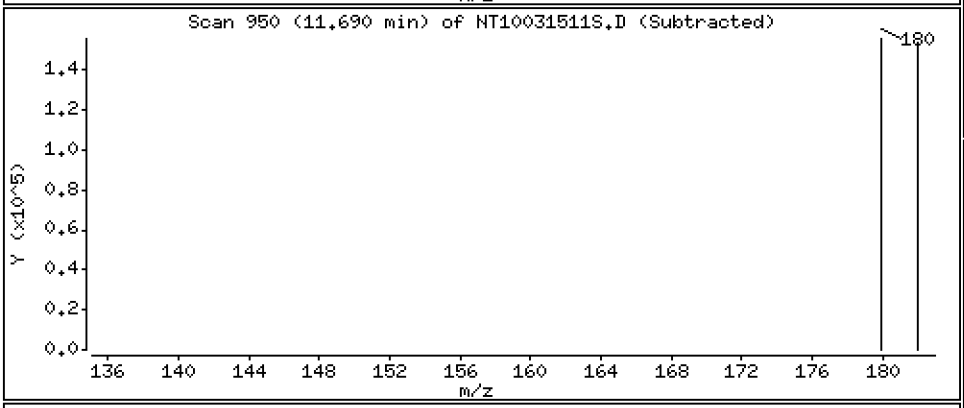
Column diameter: 0.25

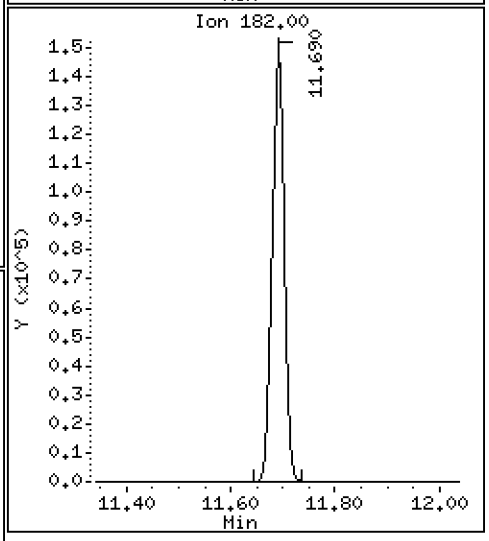
26 1,2,4-Trichlorobenzene

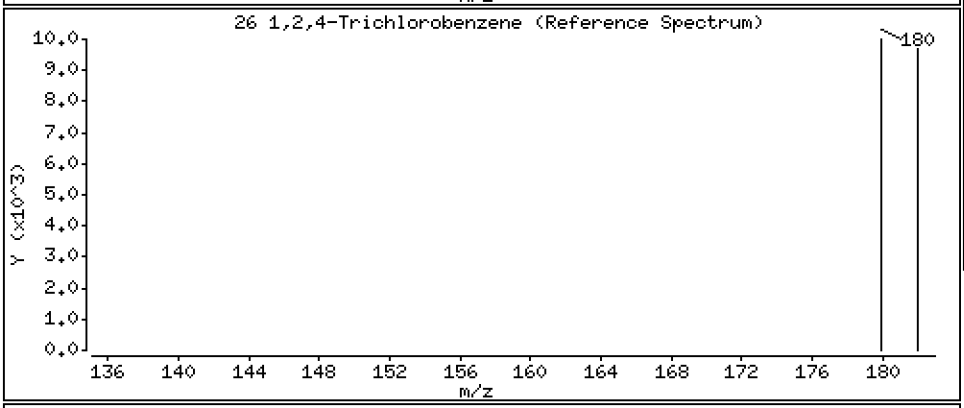
Concentration: 4.445 ug/L

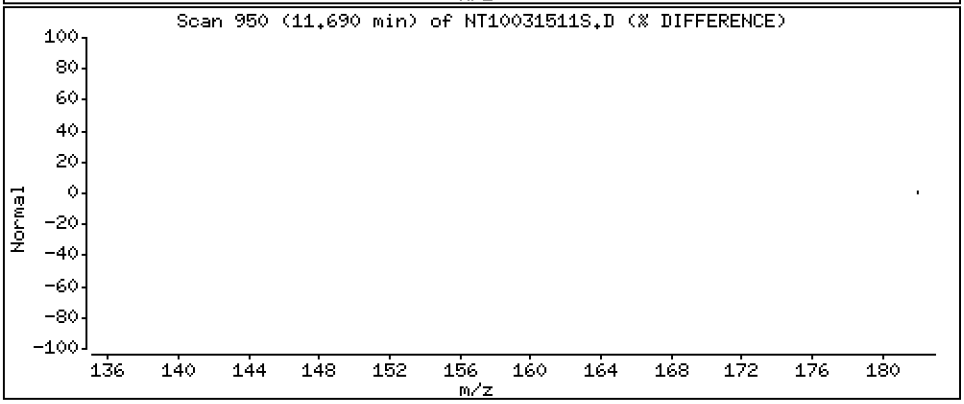












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

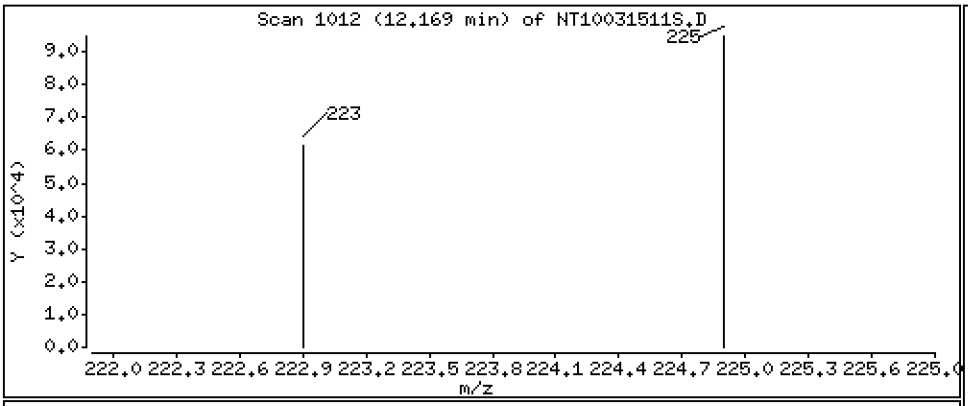
Operator: JGR

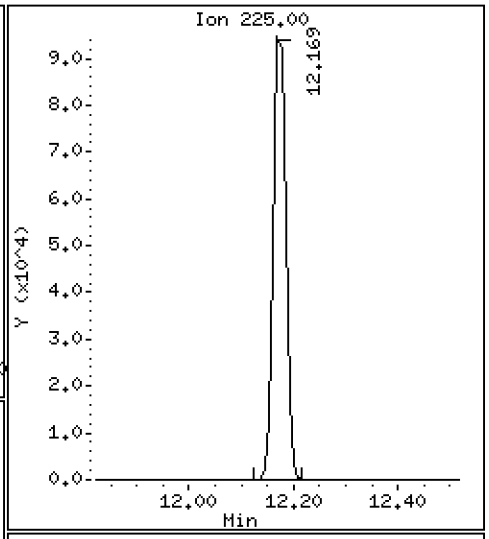
Column phase: ZB-5msi

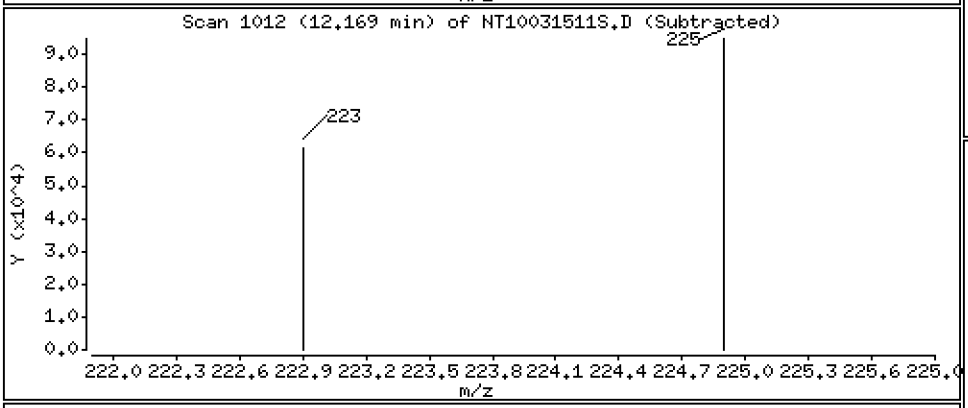
Column diameter: 0.25

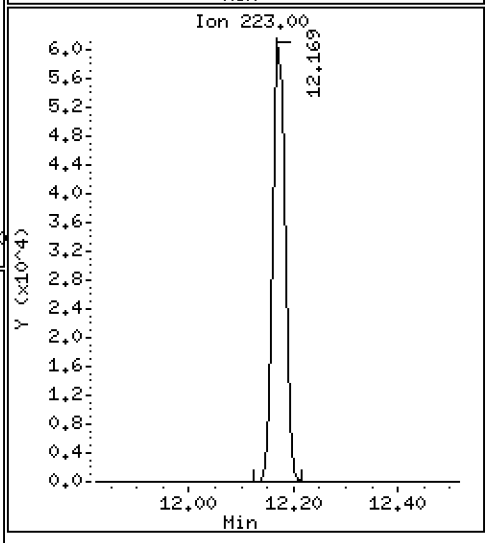
30 Hexachlorobutadiene

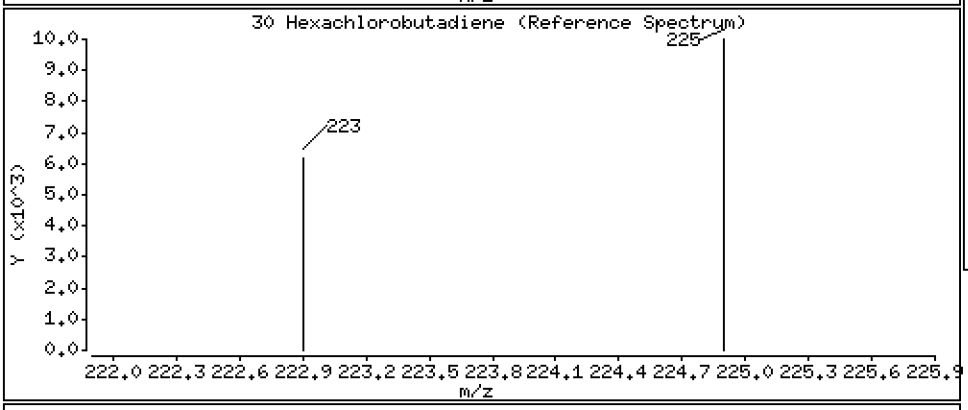
Concentration: 4.653 ug/L

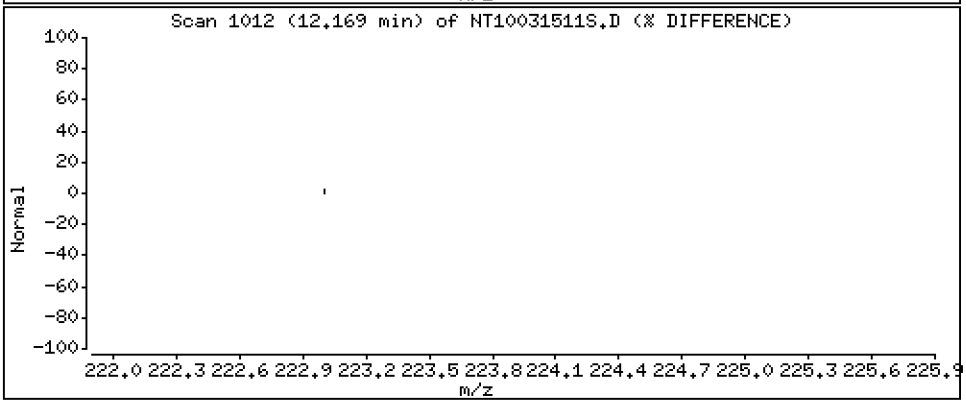












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

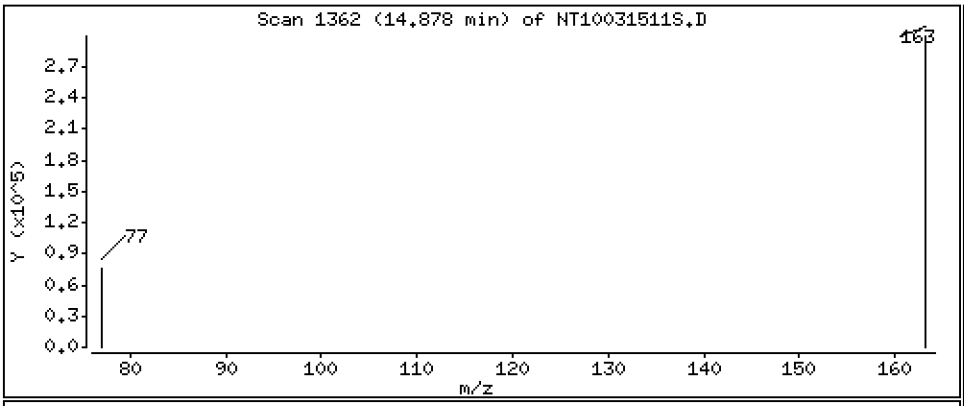
Operator: JGR

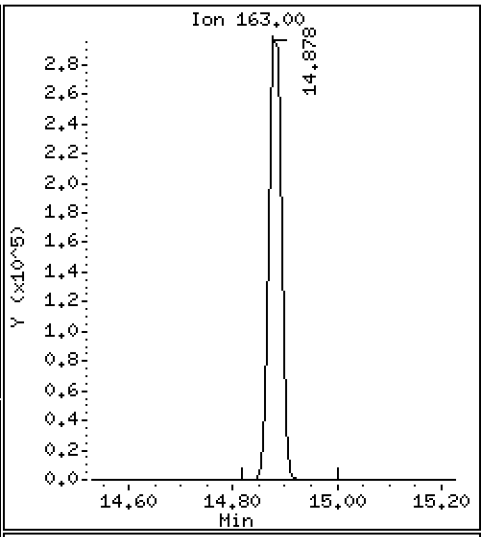
Column phase: ZB-5msi

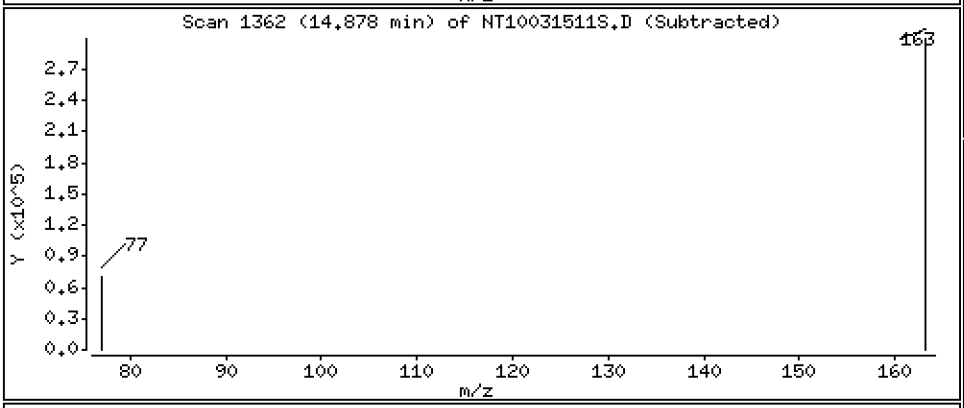
Column diameter: 0.25

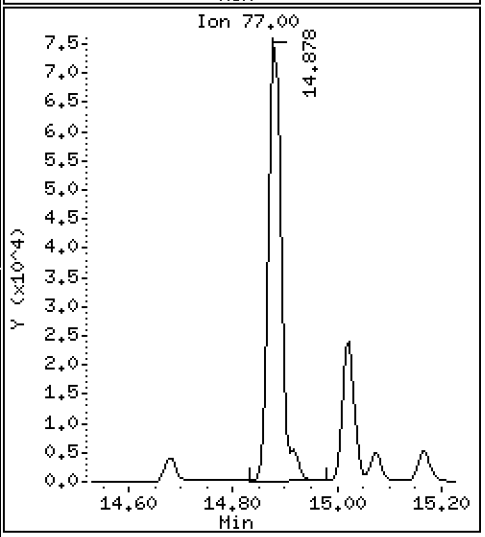
39 Dimethylphthalate

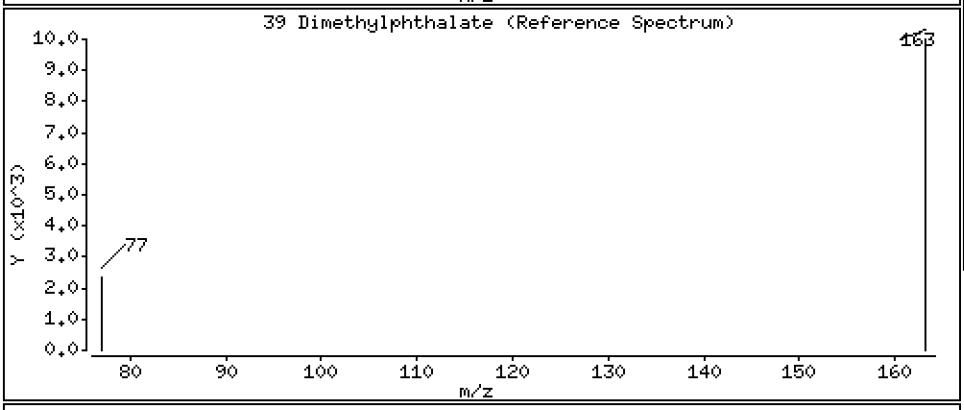
Concentration: 4.948 ug/L

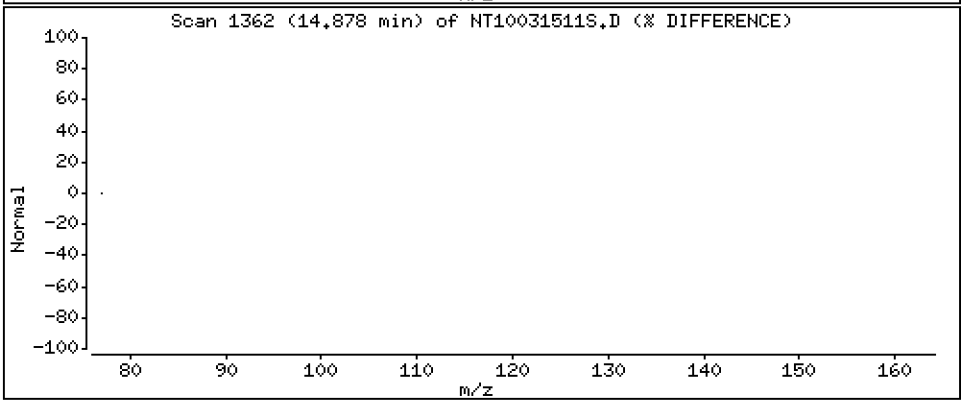












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

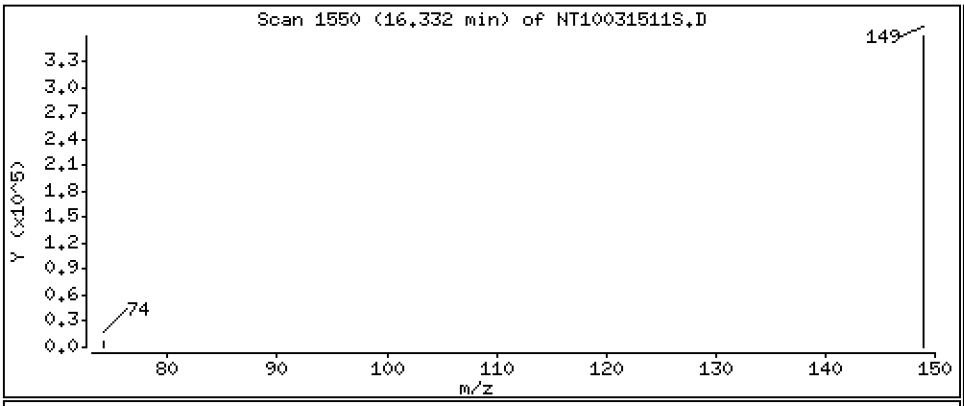
Operator: JGR

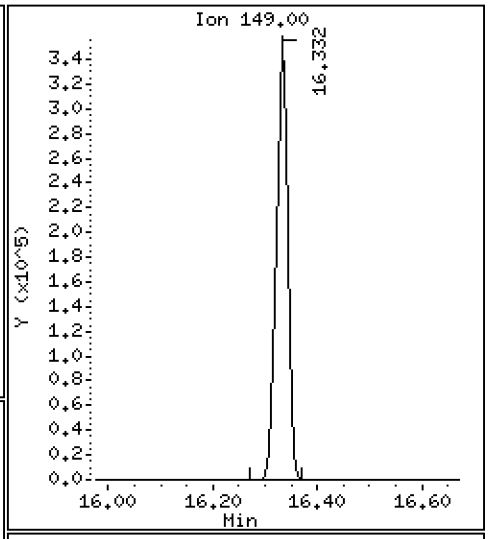
Column phase: ZB-5msi

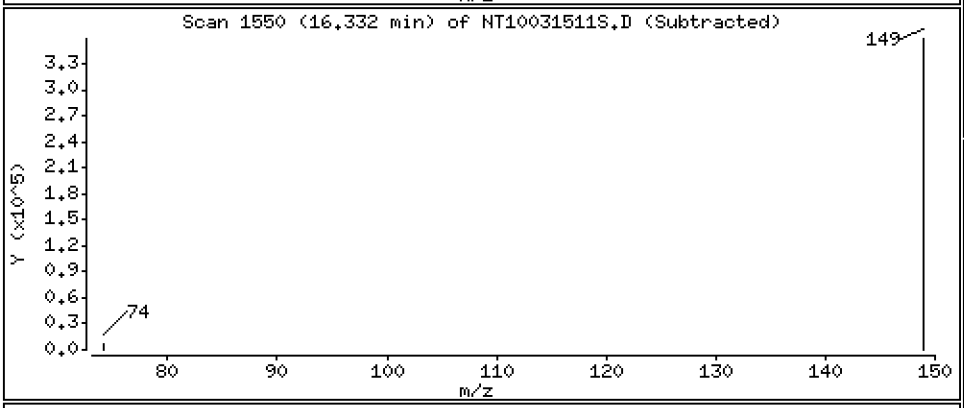
Column diameter: 0.25

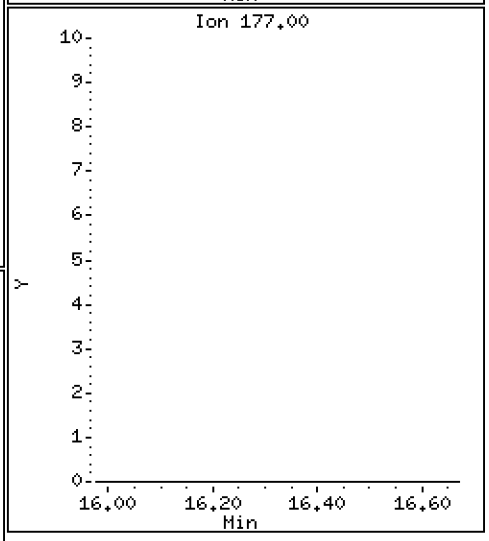
50 Diethylphthalate

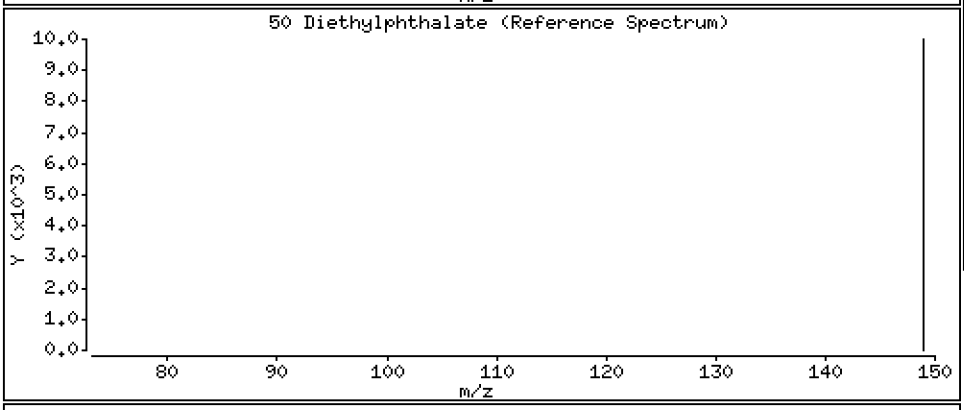
Concentration: 5.364 ug/L

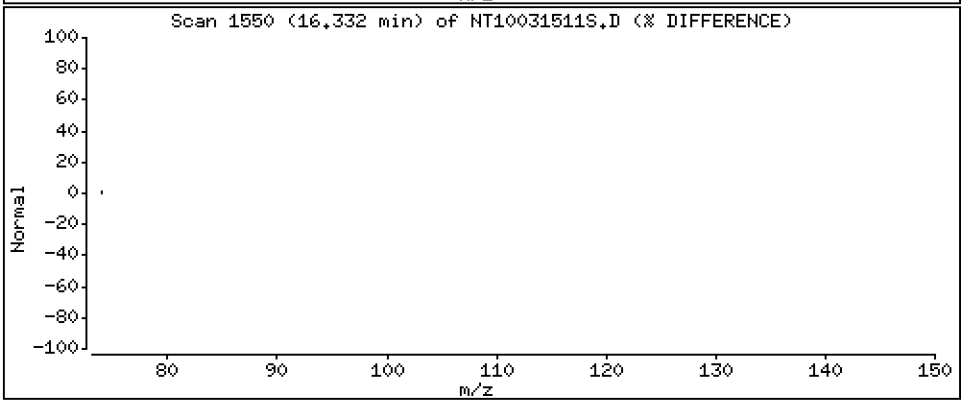












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

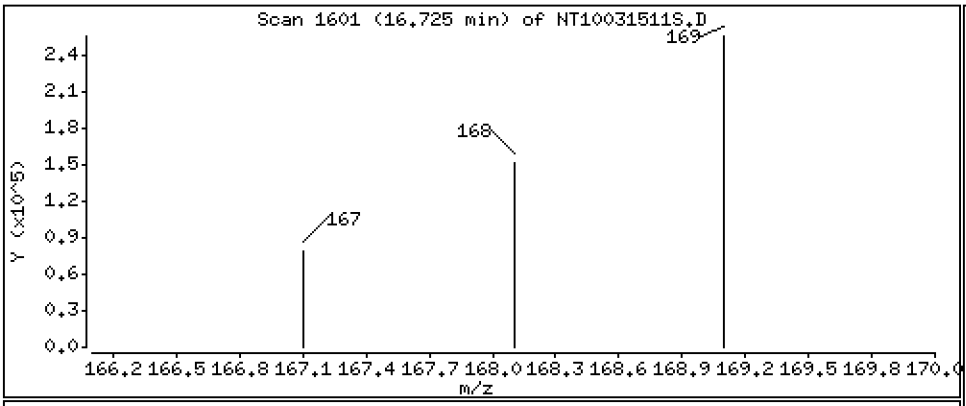
Operator: JGR

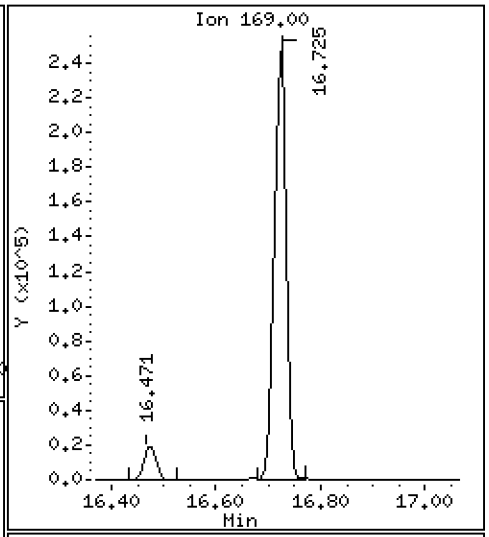
Column phase: ZB-5msi

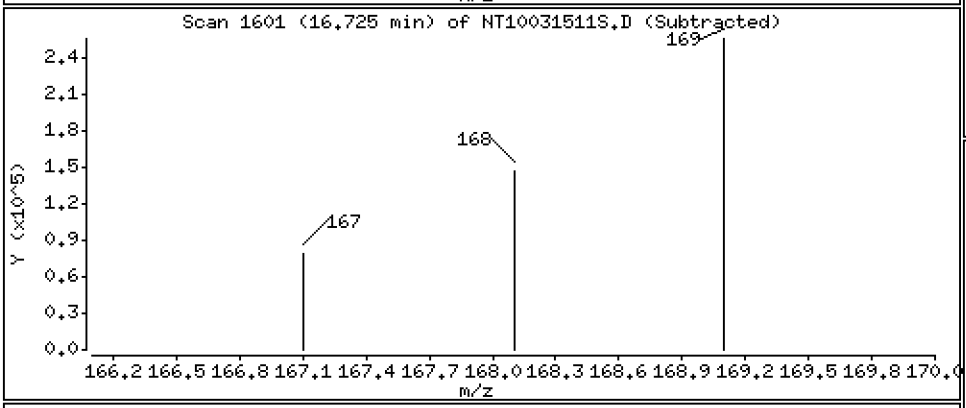
Column diameter: 0.25

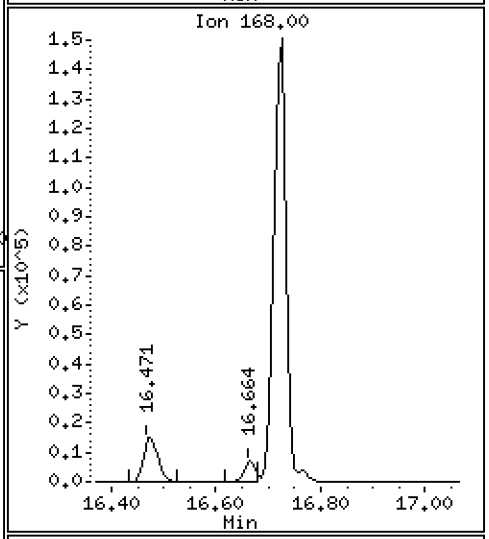
54 N-Nitrosodiphenylamine

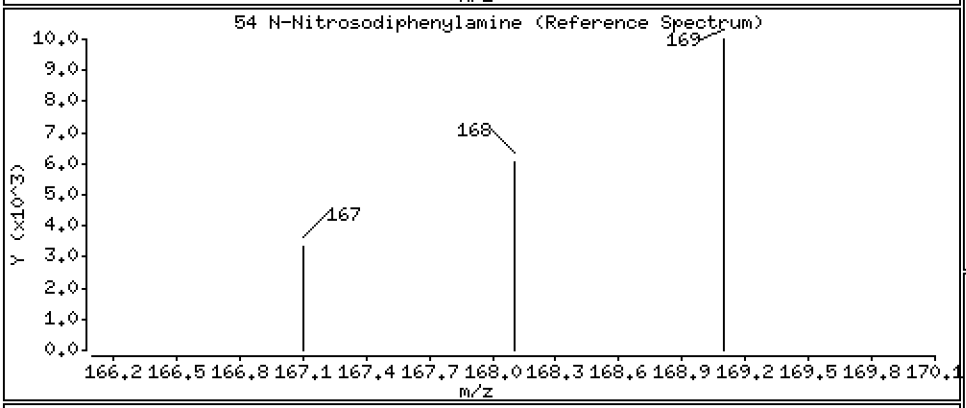
Concentration: 5.080 ug/L

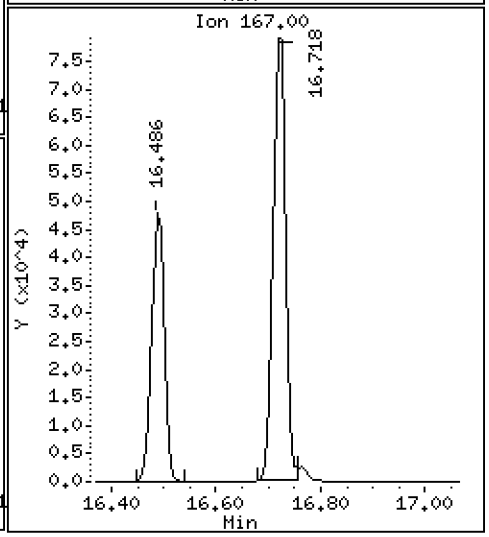


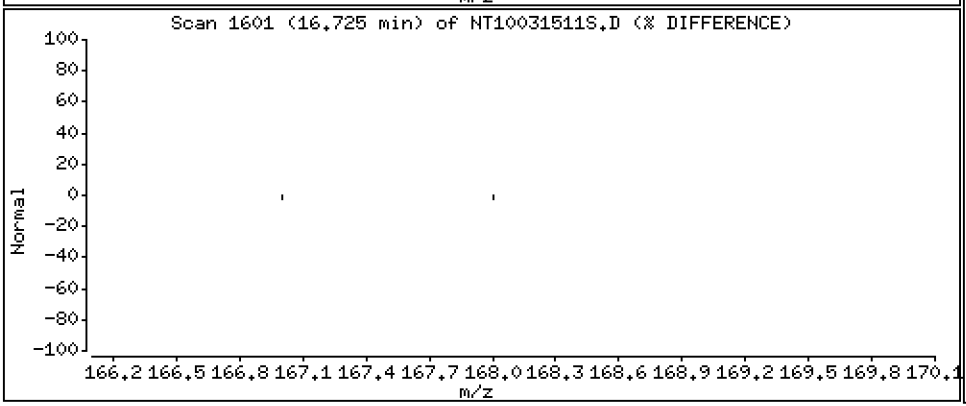












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

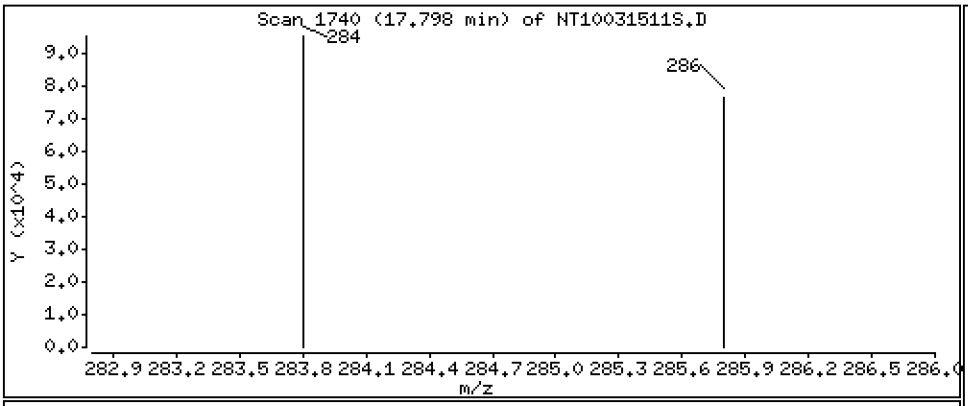
Operator: JGR

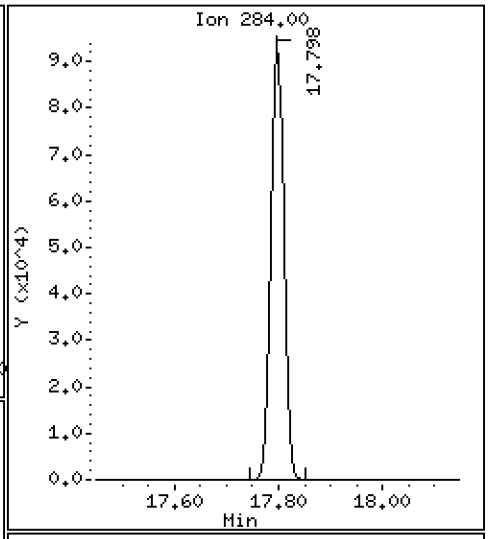
Column phase: ZB-5msi

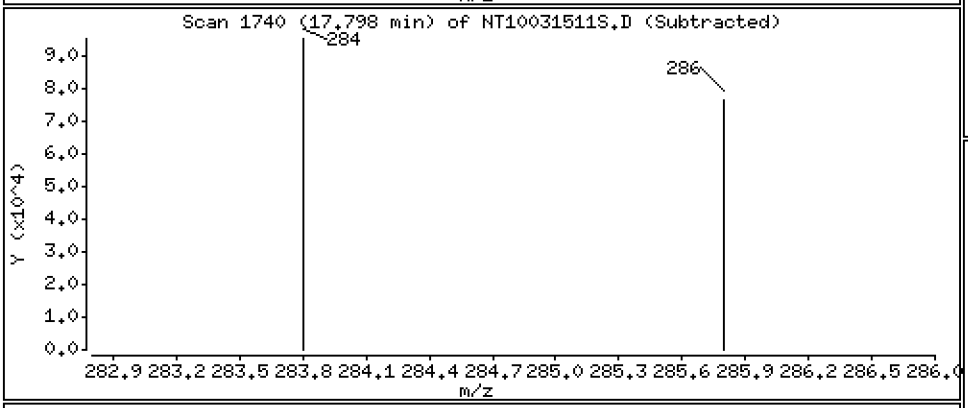
Column diameter: 0.25

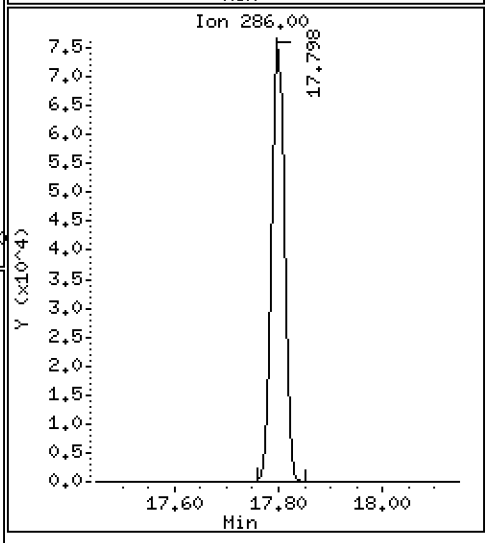
57 Hexachlorobenzene

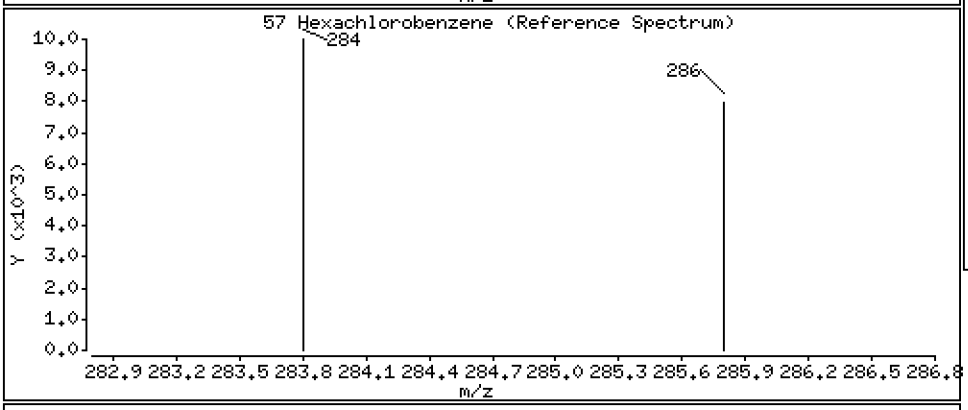
Concentration: 4.614 ug/L

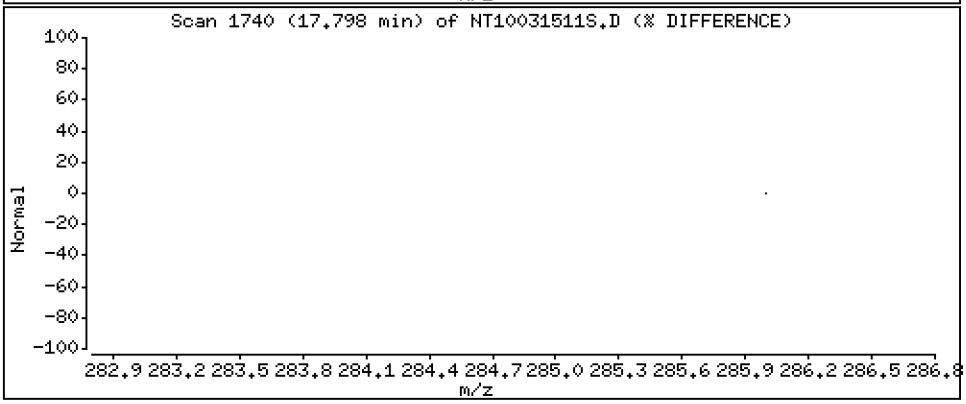












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

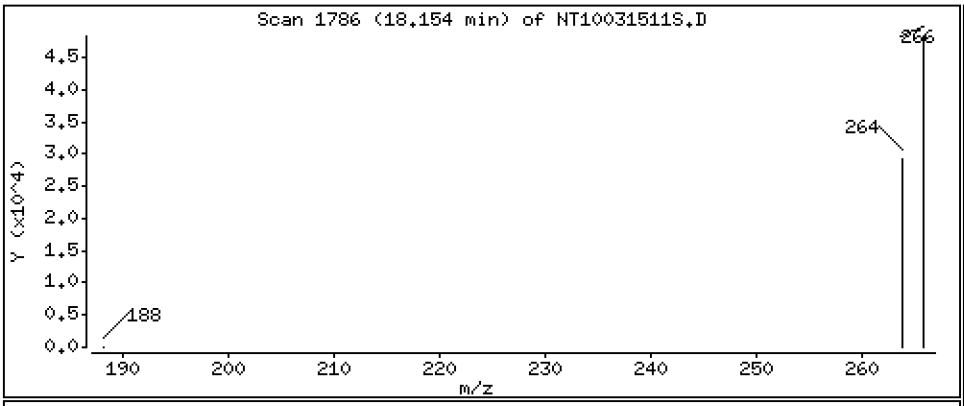
Operator: JGR

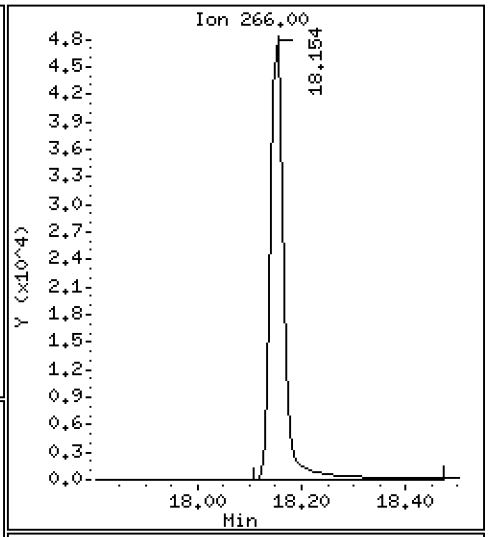
Column phase: ZB-5msi

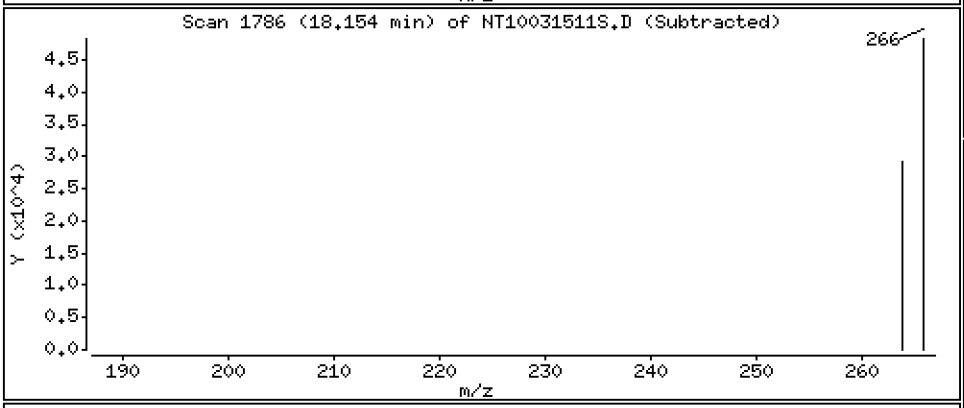
Column diameter: 0.25

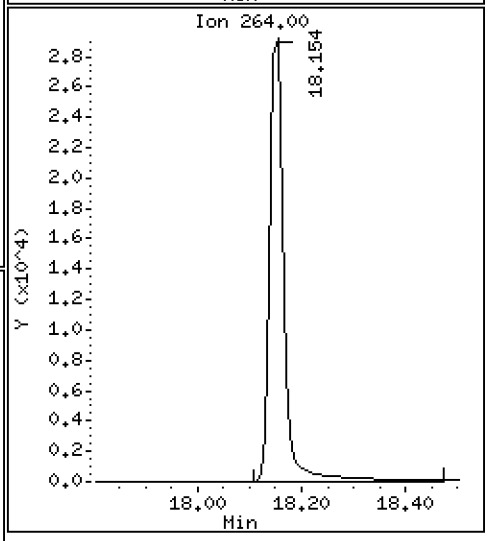
58 Pentachlorophenol

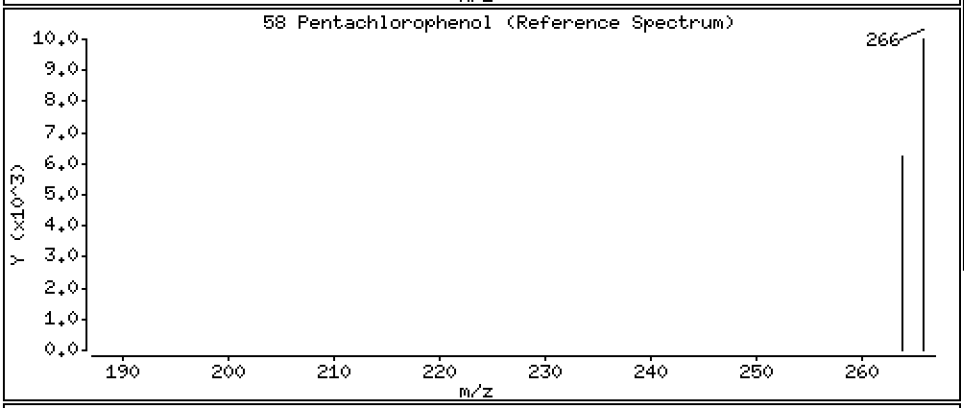
Concentration: 4.418 ug/L

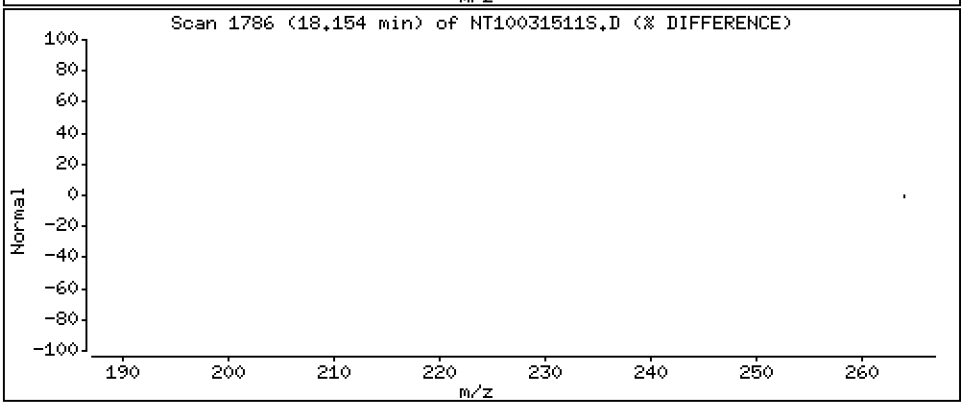












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

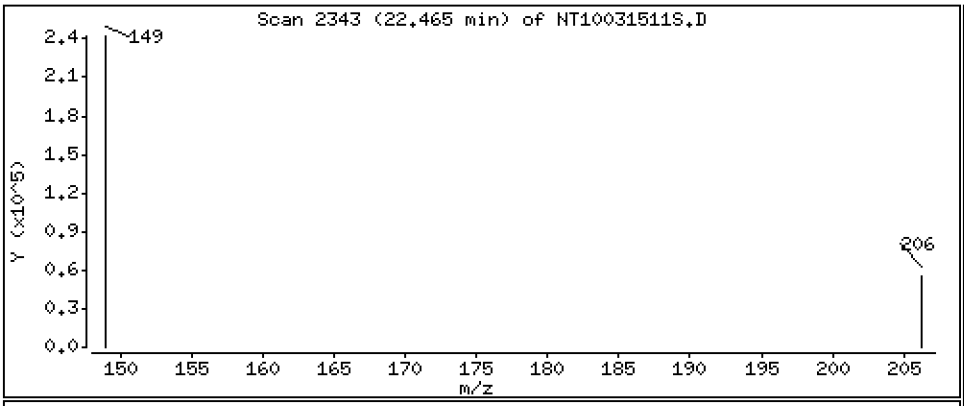
Operator: JGR

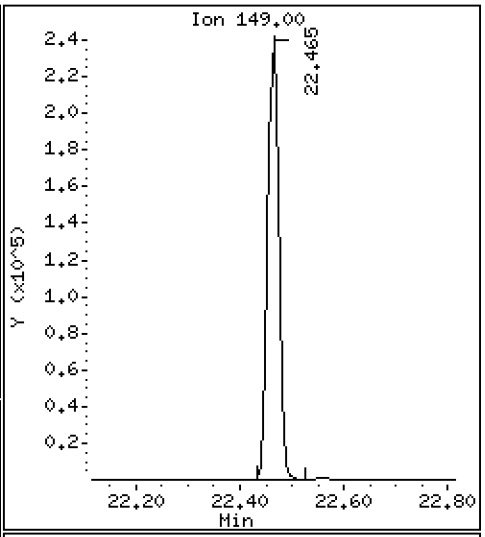
Column phase: ZB-5msi

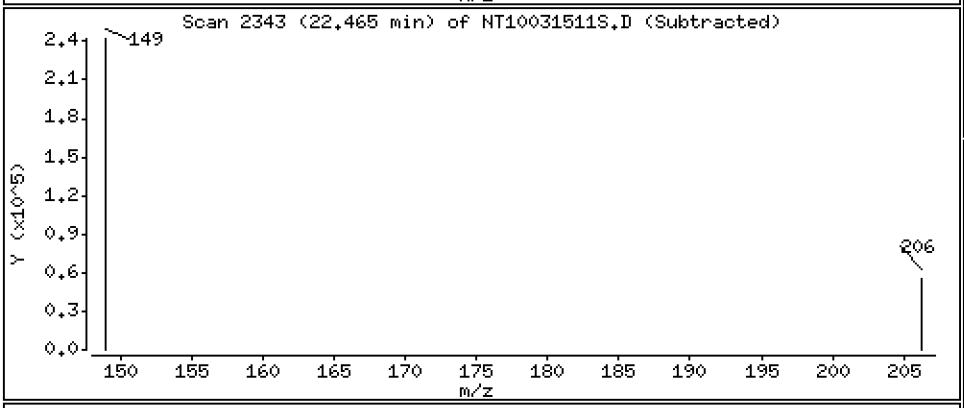
Column diameter: 0.25

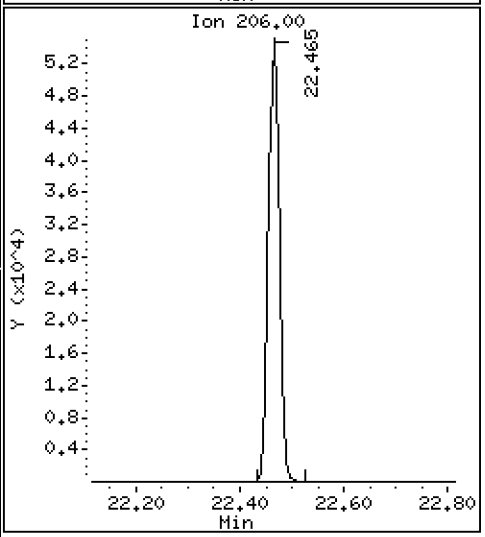
67 Butylbenzylphthalate

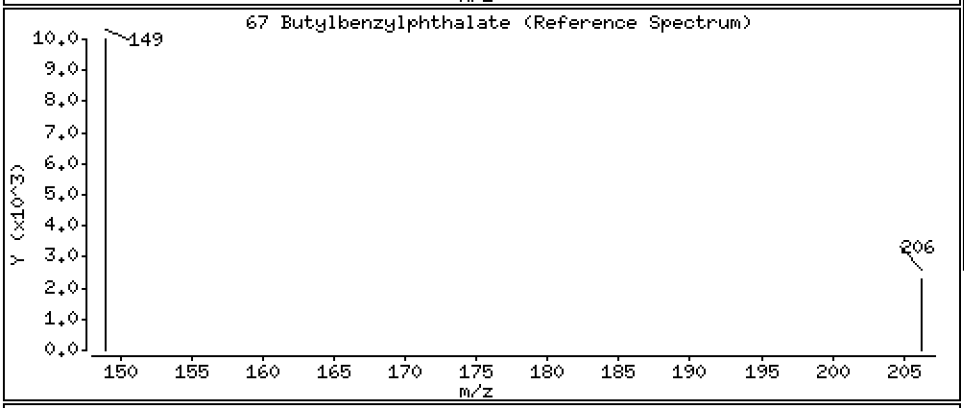
Concentration: 5.121 ug/L

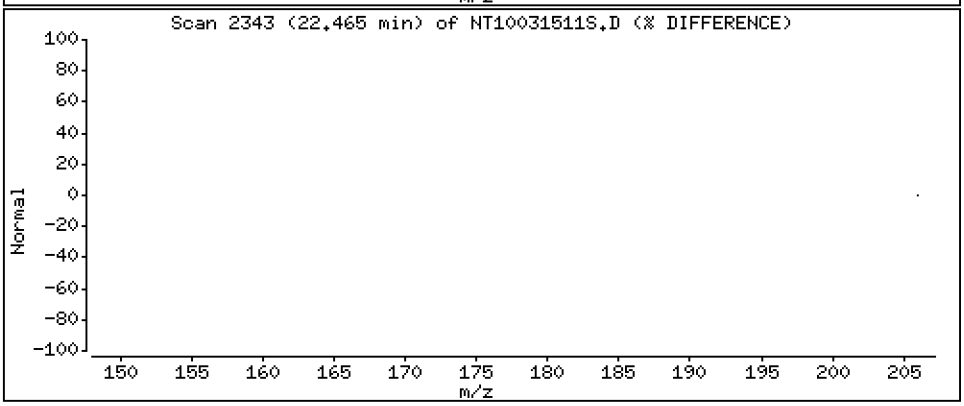












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

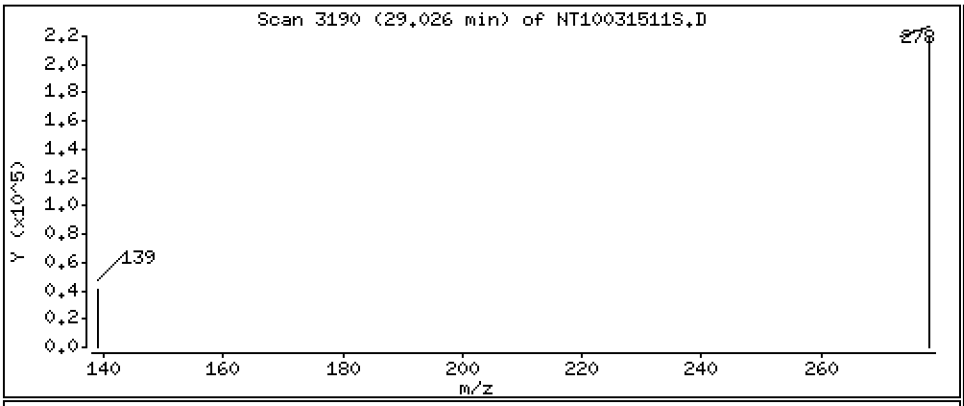
Operator: JGR

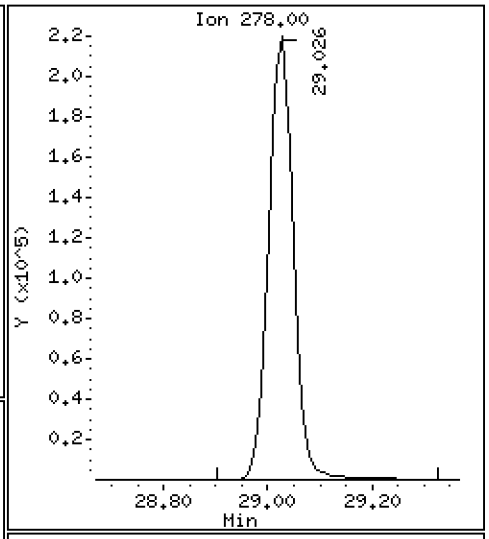
Column phase: ZB-5msi

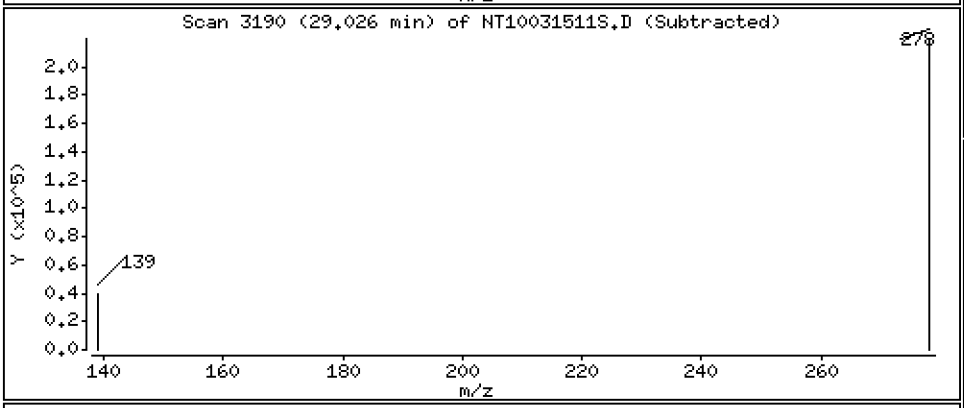
Column diameter: 0.25

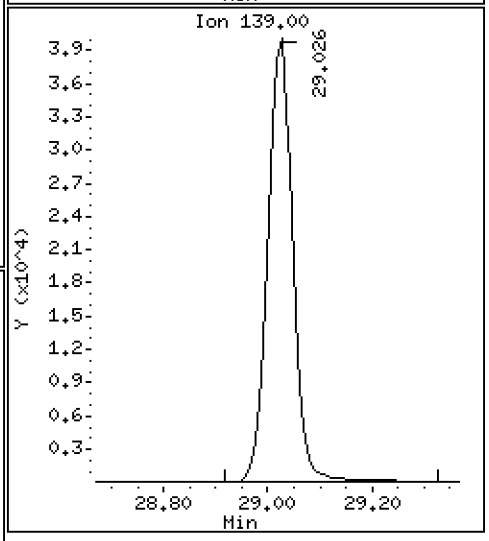
79 Dibenzo(a,h)anthracene

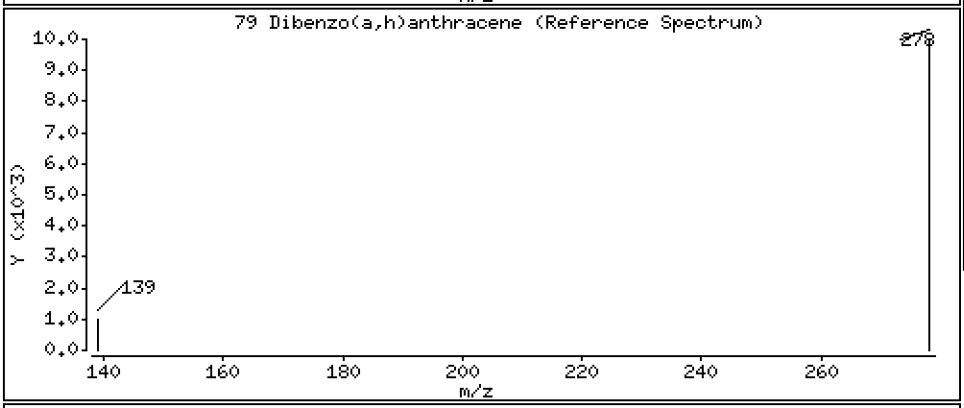
Concentration: 4.238 ug/L

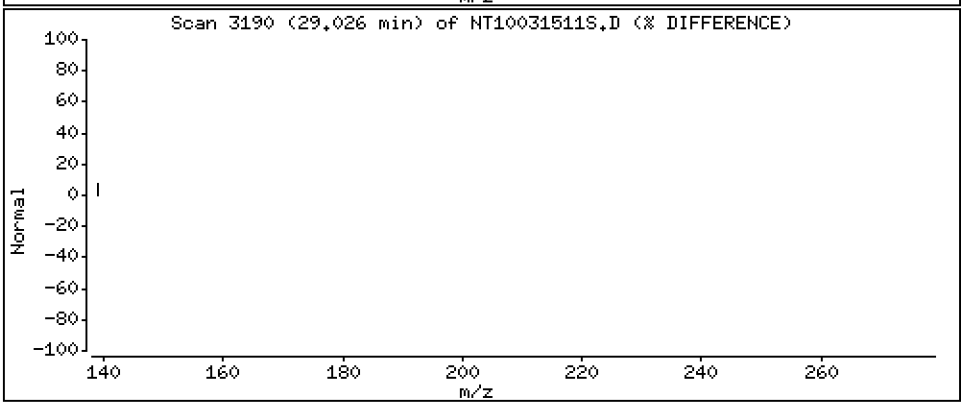












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

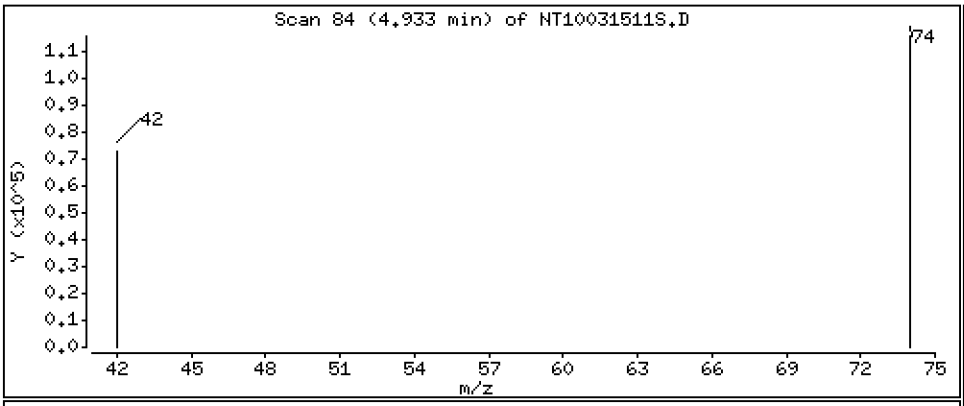
Operator: JGR

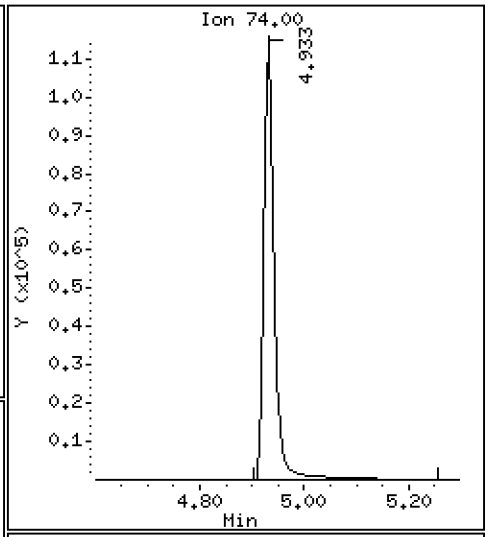
Column phase: ZB-5msi

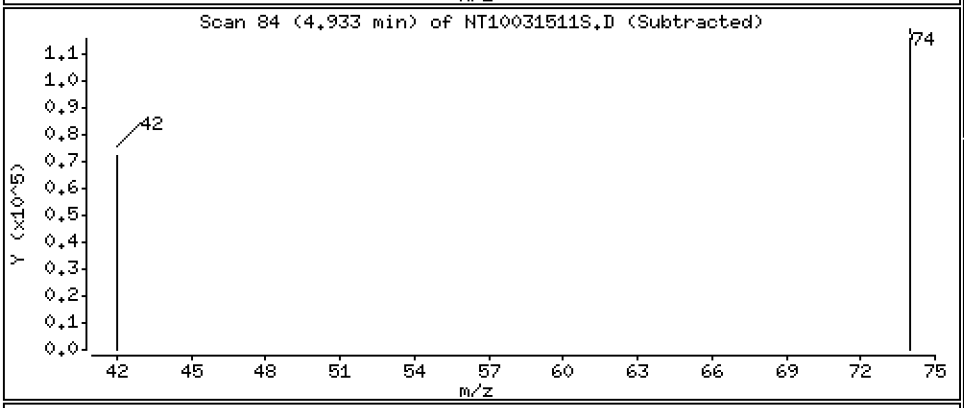
Column diameter: 0.25

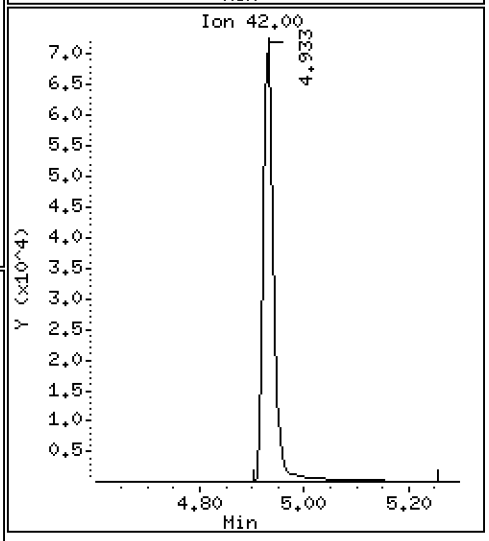
90 N-Nitrosodimethylamine

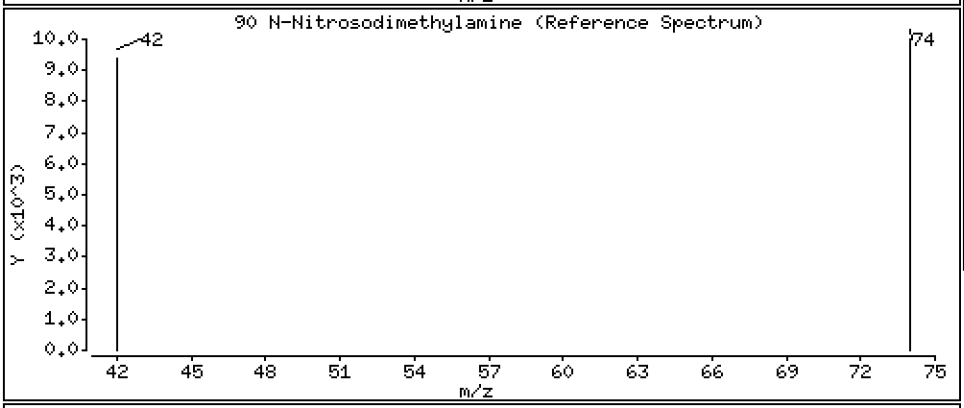
Concentration: 5.096 ug/L

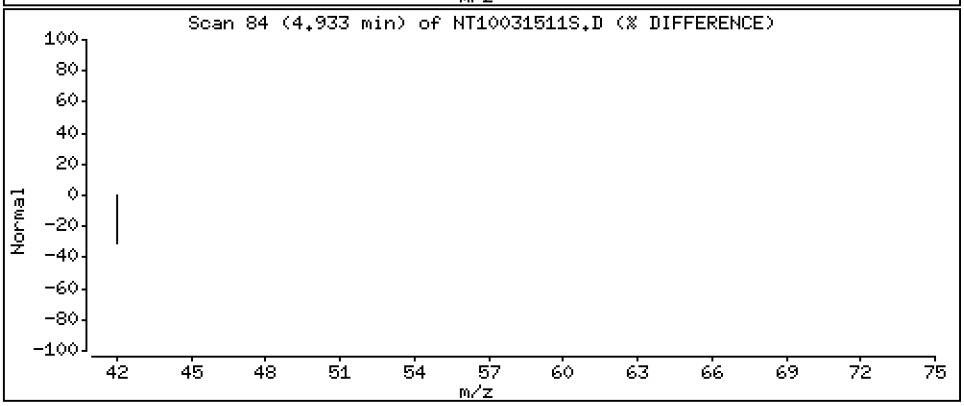












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D
Lab Smp Id: SLC0238-SCV1
Inj Date : 16-MAR-2023 02:16 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0238-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Meth Date : 16-Mar-2023 14:39 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	Compound Not Detected.					
3	Phenol	94	8.664	8.664	(0.931)	303581	4.37299	4.373
7	1,3-Dichlorobenzene	146	9.236	9.236	(0.992)	301605	4.64290	4.643
* 8	1,4-Dichlorobenzene-d4	152	9.306	9.298	(1.000)	166866	4.00000	
9	1,4-Dichlorobenzene	146	9.329	9.329	(1.002)	303390	4.83813	4.838
11	Benzyl alcohol	79	9.562	9.570	(1.028)	208505	5.18071	5.181
12	1,2-Dichlorobenzene	146	9.686	9.686	(1.041)	288539	4.67875	4.679
13	2-Methylphenol	108	9.772	9.772	(1.050)	201888	4.19698	4.197
15	4-Methylphenol	108	10.043	10.036	(1.079)	223083	4.46301	4.463
16	N-Nitroso-di-n-propylamine	70	10.121	10.113	(1.088)	186707	5.28174	5.282
22	2,4-Dimethylphenol	107	11.086	11.087	(0.942)	193654	3.66015	3.660
24	Benzoic acid	105	11.214	11.189	(0.952)	200487	6.74612	6.746
26	1,2,4-Trichlorobenzene	180	11.690	11.690	(0.993)	236605	4.44540	4.445
* 27	Naphthalene-d8	136	11.775	11.775	(1.000)	612104	4.00000	
30	Hexachlorobutadiene	225	12.169	12.169	(1.033)	150581	4.65339	4.653
39	Dimethylphthalate	163	14.877	14.877	(0.967)	472341	4.94766	4.948
* 42	Acenaphthene-d10	162	15.388	15.380	(1.000)	302524	4.00000	
50	Diethylphthalate	149	16.331	16.324	(1.061)	530540	5.36440	5.364
54	N-Nitrosodiphenylamine	169	16.725	16.717	(0.908)	377357	5.08034	5.080
57	Hexachlorobenzene	284	17.798	17.798	(0.966)	153405	4.61353	4.614

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.154	18.154	(0.985)	83223	4.41780	4.418
*	59 Phenanthrene-d10	188	18.425	18.417	(1.000)	553619	4.00000	
$	66 Terphenyl-d14	244	21.543	21.543	(0.918)	117	0.00154	0.001543(RM)
	67 Butylbenzylphthalate	149	22.464	22.465	(0.958)	332887	5.12147	5.121
*	69 Chrysene-d12	240	23.455	23.455	(1.000)	465428	4.00000	
*	77 Perylene-d12	264	26.188	26.188	(1.000)	532593	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.026	29.019	(1.108)	722983	4.23762	4.238
	90 N-Nitrosodimethylamine	74	4.933	4.948	(0.530)	163555	5.09625	5.096

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031511S.D
Lab Smp Id: SLC0238-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 23:06
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	188081	94041	376162	166866	-11.28
27 Naphthalene-d8	674549	337275	1349098	612104	-9.26
42 Acenaphthene-d10	328275	164138	656550	302524	-7.84
59 Phenanthrene-d10	597140	298570	1194280	553619	-7.29
69 Chrysene-d12	466503	233252	933006	465428	-0.23
77 Perylene-d12	518203	259102	1036406	532593	2.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.31	0.08
27 Naphthalene-d8	11.77	11.27	12.27	11.78	0.01
42 Acenaphthene-d10	15.39	14.89	15.89	15.39	0.01
59 Phenanthrene-d10	18.42	17.92	18.92	18.43	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.46	0.00
77 Perylene-d12	26.19	25.69	26.69	26.19	0.00

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

REVIEW SUMMARY FOR FILE - NT10031511S.D

Lab ID: SLC0238-SCV1
nt10.i, 20230315.b\20230315.b\SIMABN2.m,   16-MAR-2023 02:16

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.000	0.9524	Benzoic acid

RRT check based on Ccal File: 20230315.b/NT10031510S.D

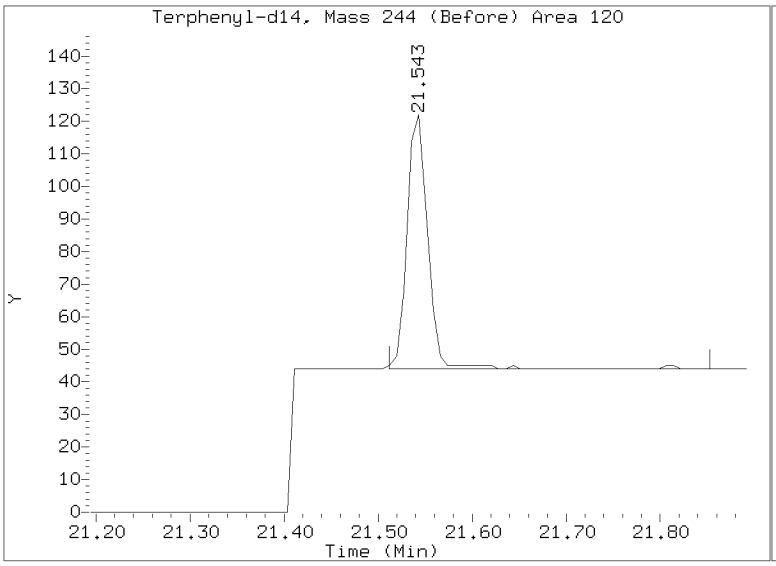
On Column LOD for nt10.i, 20230315.b\SIMABN2.m, PSDDA.sub = 0.0000

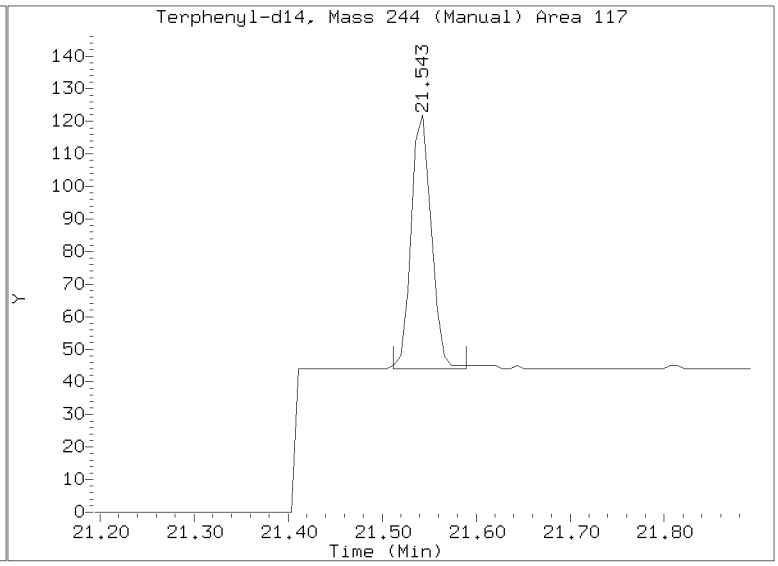
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230315.b/20230315.b/NT10031511S.D
Injection Date: 16-MAR-2023 02:16
Lab ID:SLC0238-SCV1 Client ID:
Report Date: 03/16/2023 14:49





Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT100315128.D

Date : 16-MAR-2023 02:54

Client ID:

Instrument: nt10.i

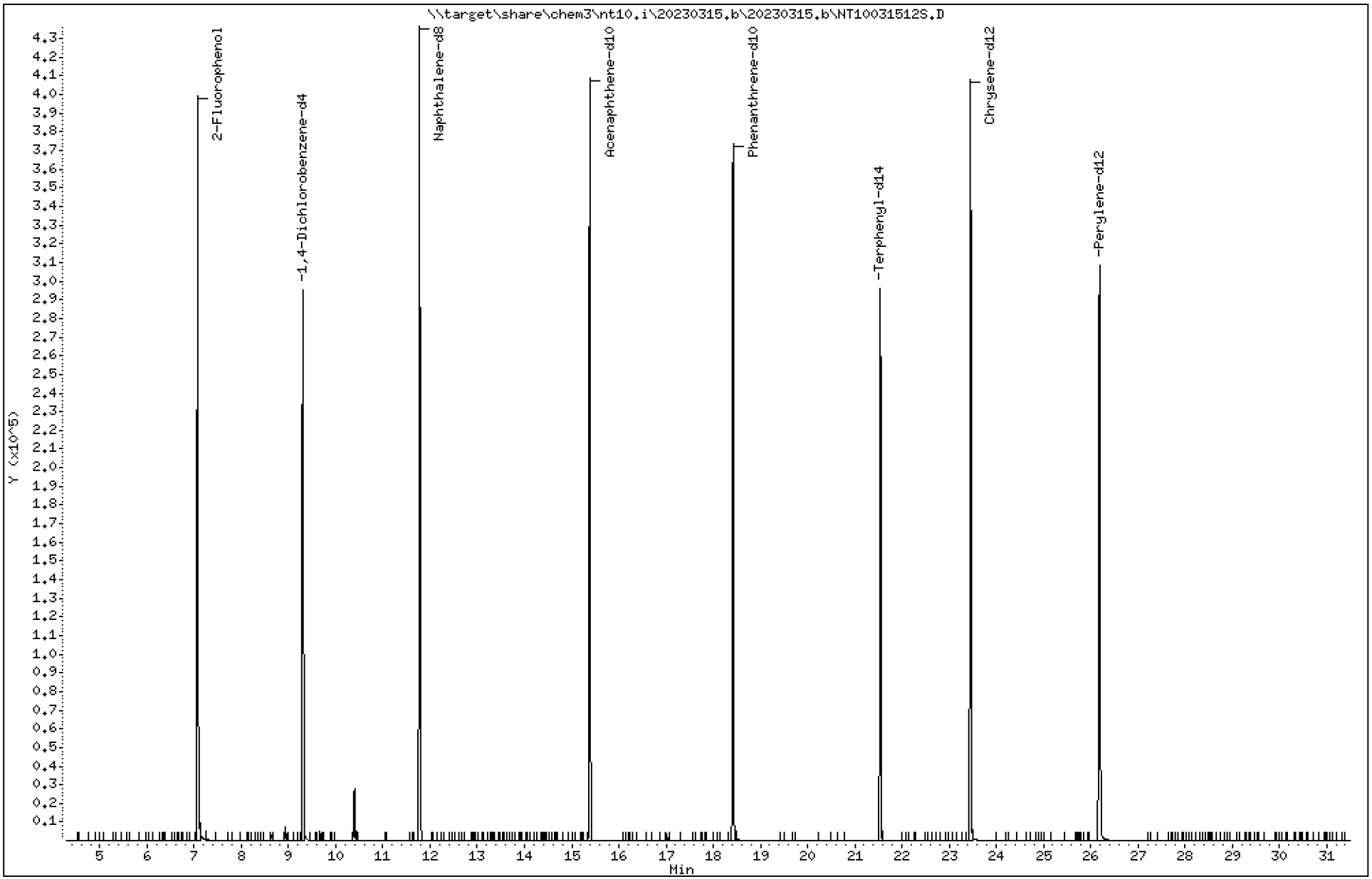
Sample Info: SLC0238-ICB1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031512S.D
Lab Smp Id: SLC0238-ICB1
Inj Date : 16-MAR-2023 02:54 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0238-ICB1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Meth Date : 16-Mar-2023 14:39 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
$ 1	2-Fluorophenol	112	7.072	7.073	(0.760)	392056	6.82342	6.823(R)
3	Phenol	94	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	9.306	9.298	(1.000)	189475	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					
24	Benzoic acid	105	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.774	11.775	(1.000)	676186	4.00000	
30	Hexachlorobutadiene	225	Compound Not Detected.					
39	Dimethylphthalate	163	Compound Not Detected.					
* 42	Acenaphthene-d10	162	15.379	15.380	(1.000)	328650	4.00000	
50	Diethylphthalate	149	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	18.424	18.417	(1.000)	617605	4.00000	
$ 66	Terphenyl-d14	244	21.542	21.543	(0.918)	340833	4.41767	4.418(R)
67	Butylbenzylphthalate	149	Compound Not Detected.					
* 69	Chrysene-d12	240	23.454	23.455	(1.000)	473513	4.00000	
* 77	Perylene-d12	264	26.187	26.188	(1.000)	534734	4.00000	
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
90	N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031512S.D
Lab Smp Id: SLC0238-ICB1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 23:06
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	188081	94041	376162	189475	0.74
27 Naphthalene-d8	674549	337275	1349098	676186	0.24
42 Acenaphthene-d10	328275	164138	656550	328650	0.11
59 Phenanthrene-d10	597140	298570	1194280	617605	3.43
69 Chrysene-d12	466503	233252	933006	473513	1.50
77 Perylene-d12	518203	259102	1036406	534734	3.19

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.31	0.08
27 Naphthalene-d8	11.77	11.27	12.27	11.77	-0.00
42 Acenaphthene-d10	15.39	14.89	15.89	15.38	-0.05
59 Phenanthrene-d10	18.42	17.92	18.92	18.42	-0.00
69 Chrysene-d12	23.45	22.95	23.95	23.45	-0.00
77 Perylene-d12	26.19	25.69	26.69	26.19	-0.00

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

REVIEW SUMMARY FOR FILE - NT10031512S.D

Lab ID: SLC0238-ICB1
nt10.i, 20230315.b\20230315.b\SIMABN2.m,   16-MAR-2023 02:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: 20230315.b/NT10031510S.D

On Column LOD for nt10.i, 20230315.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

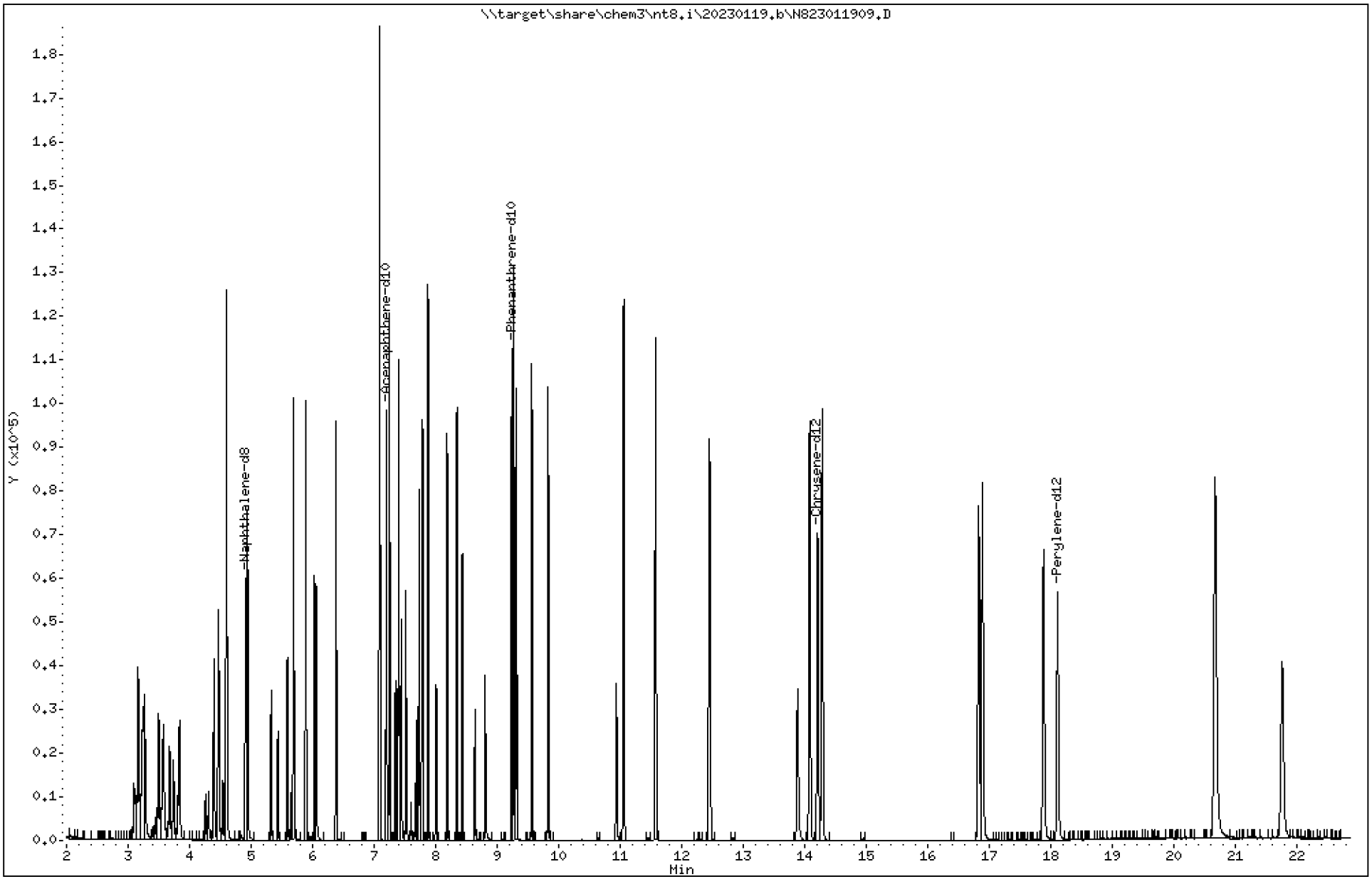
Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00050
Laboratory ID: SLA0213-SCV1
Sequence: SLA0213
Sequence Name: 8270 SIM PNA SCV
Standard ID: L000686

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Naphthalene	2.5000	2.63	5.0	
2-Methylnaphthalene	2.5000	2.67	6.8	
1-Methylnaphthalene	2.5000	2.65	6.0	
Acenaphthylene	2.5000	2.82	12.8	
Acenaphthene	2.5000	2.60	4.0	
Dibenzofuran	2.5000	2.86	14.4	
Fluorene	2.5000	2.63	5.2	
Phenanthrene	2.5000	2.45	-2.1	
Anthracene	2.5000	2.27	-9.2	
Fluoranthene	2.5000	2.65	6.1	
Pyrene	2.5000	2.46	-1.5	
Benzo(a)anthracene	2.5000	2.59	3.5	
Chrysene	2.5000	2.40	-4.0	
Benzo(b)fluoranthene	2.5000	2.51	0.3	
Benzo(k)fluoranthene	2.5000	2.66	6.2	
Benzofluoranthenes, Total	5.0000	5.48	9.6	
Benzo(a)pyrene	2.5000	2.57	2.9	
Indeno(1,2,3-cd)pyrene	2.5000	2.69	7.6	
Dibenzo(a,h)anthracene	2.5000	2.49	-0.3	
Benzo(g,h,i)perylene	2.5000	2.48	-0.7	

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Date : 19-JAN-2023 14:58
Client ID:
Sample Info: SCV230119
Volume Injected (uL): 1.0
Column phase: Rxi-17sil

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25



Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

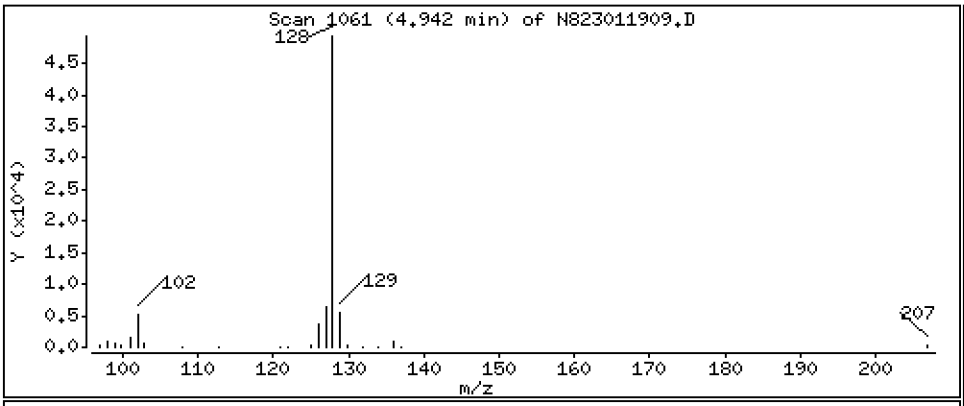
Operator: JZ

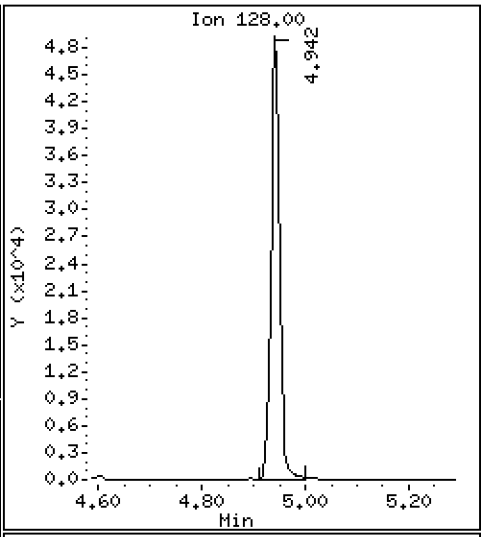
Column phase: Rxi-17sil

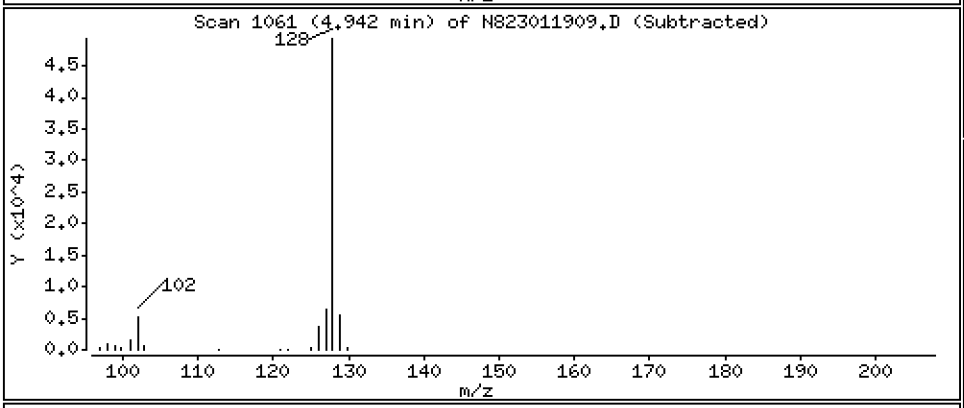
Column diameter: 0.25

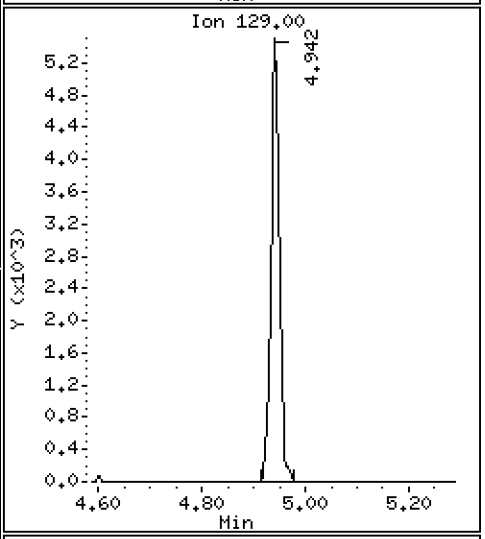
2 Naphthalene

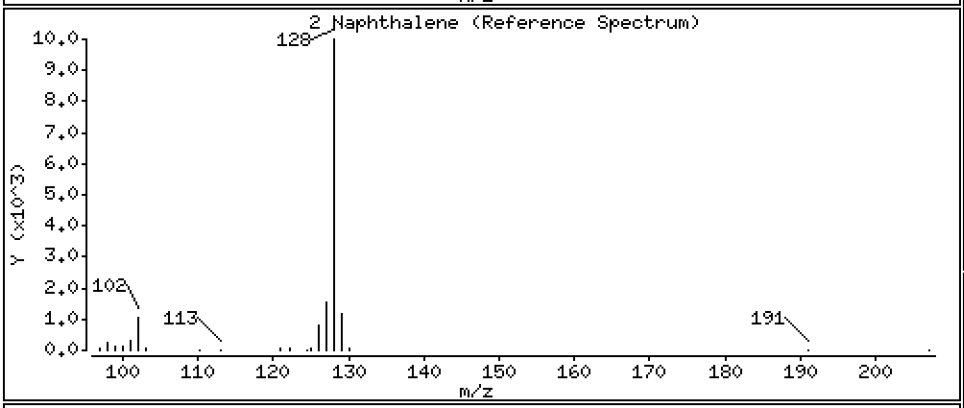
Concentration: 2.626 ug/L

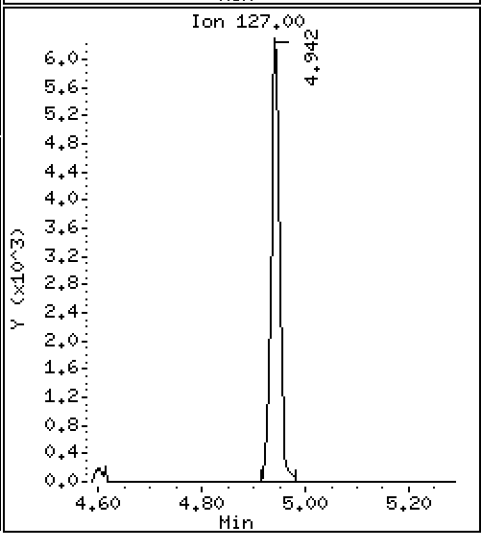


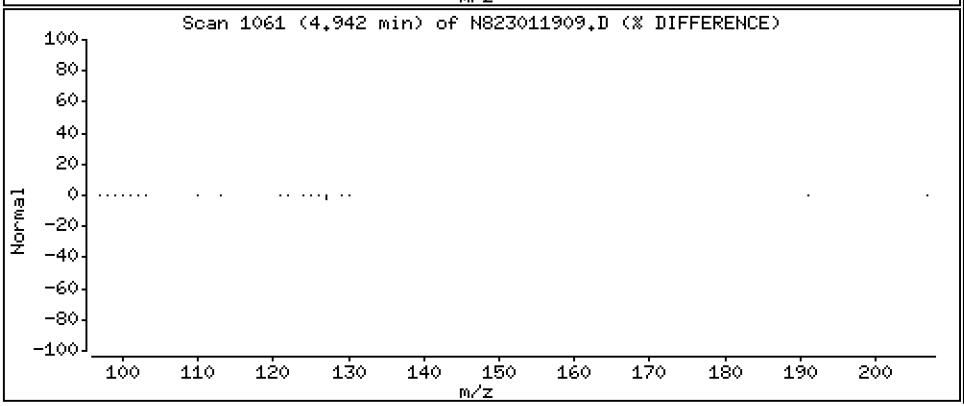












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

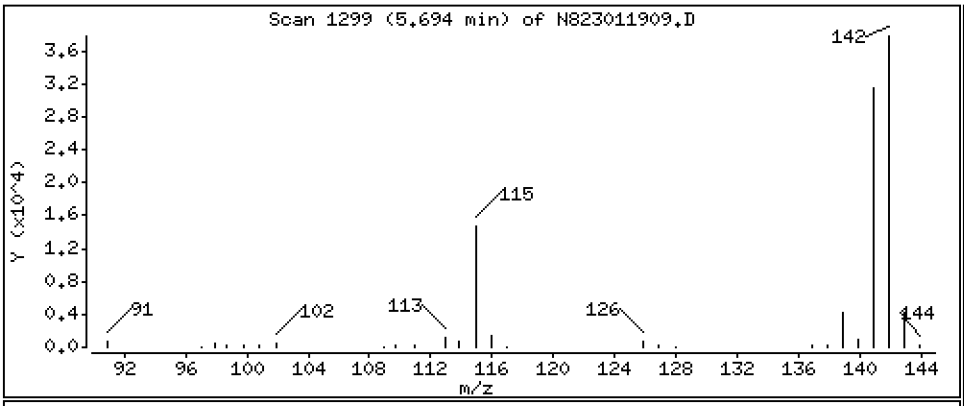
Operator: JZ

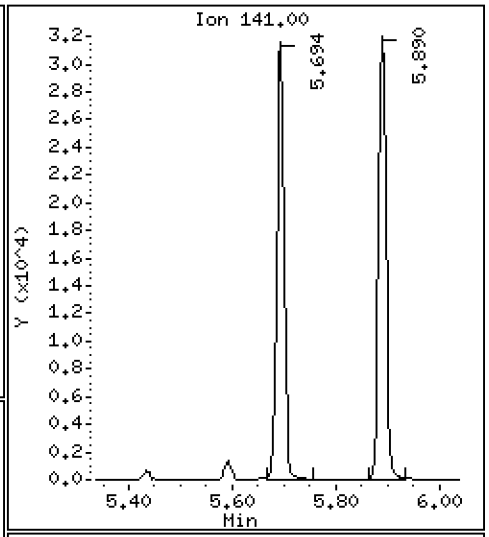
Column phase: Rxi-17sil

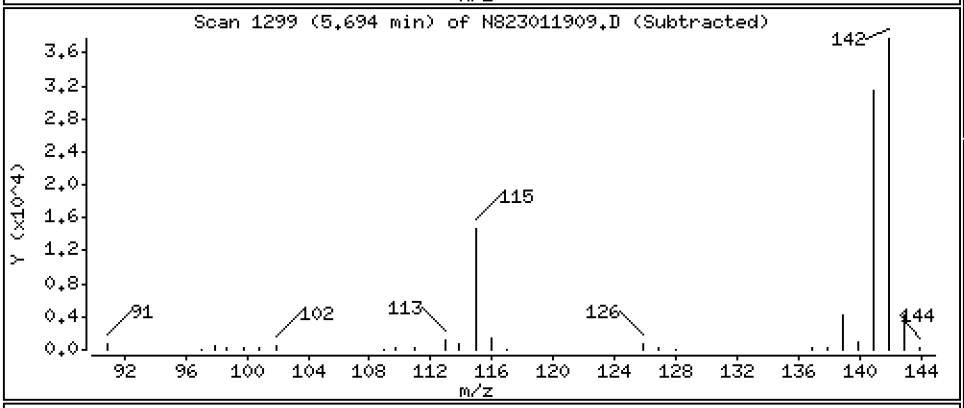
Column diameter: 0.25

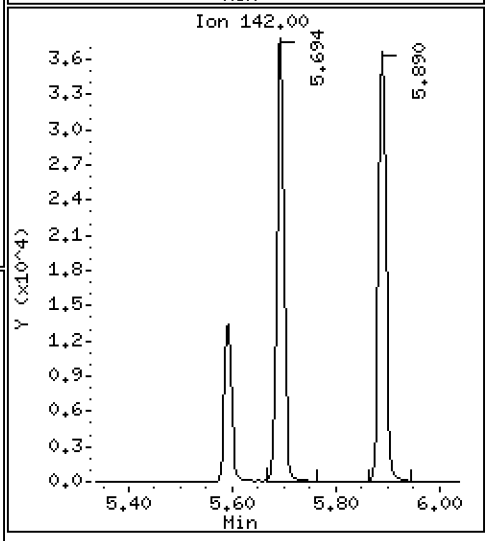
4 2-Methylnaphthalene

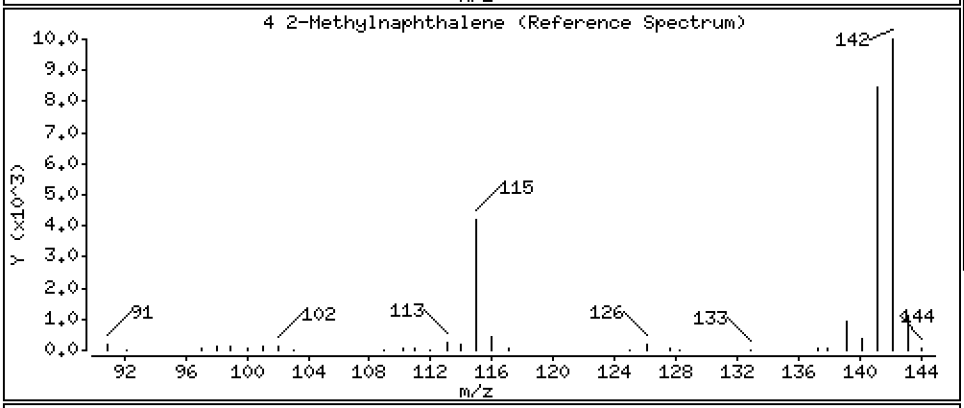
Concentration: 2.670 ug/L

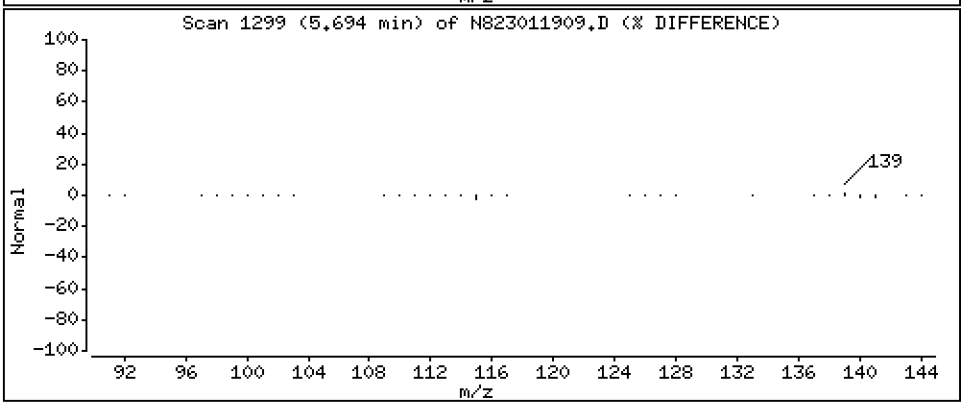












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

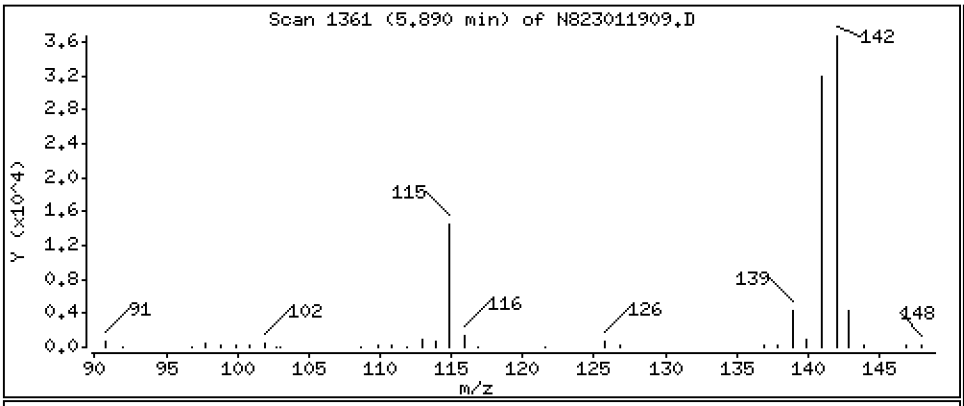
Operator: JZ

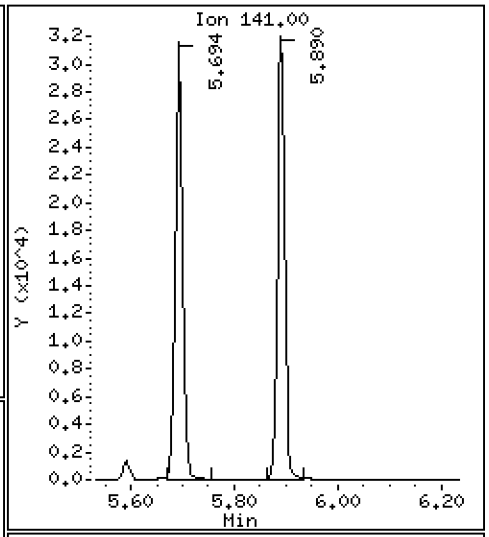
Column phase: Rxi-17sil

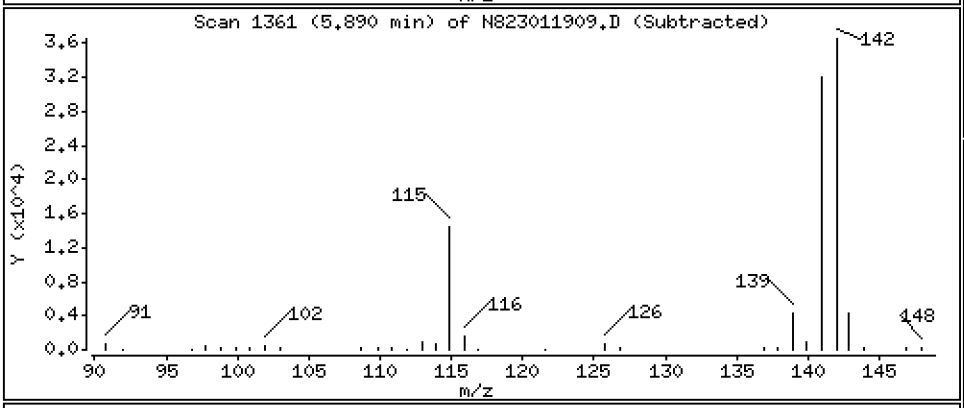
Column diameter: 0.25

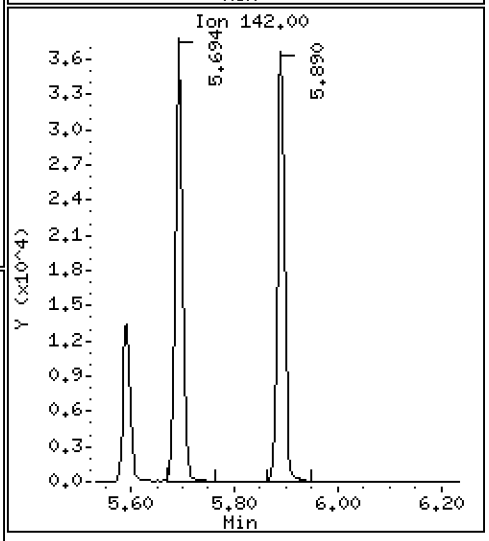
5 1-methylnaphthalene

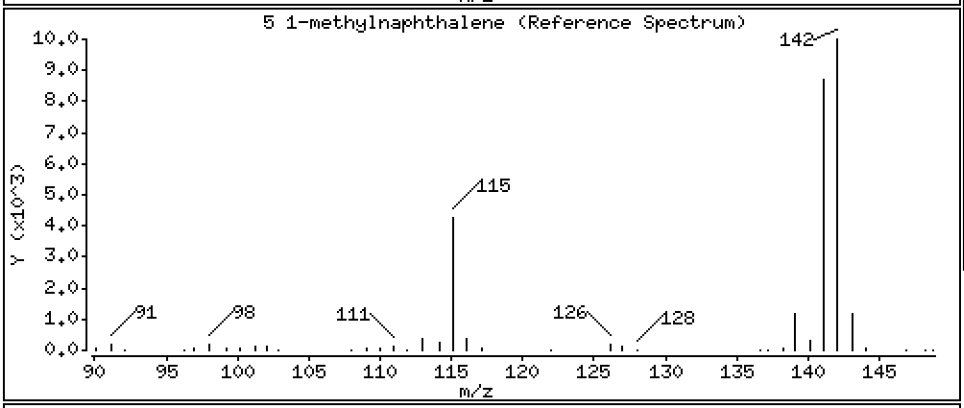
Concentration: 2.649 ug/L

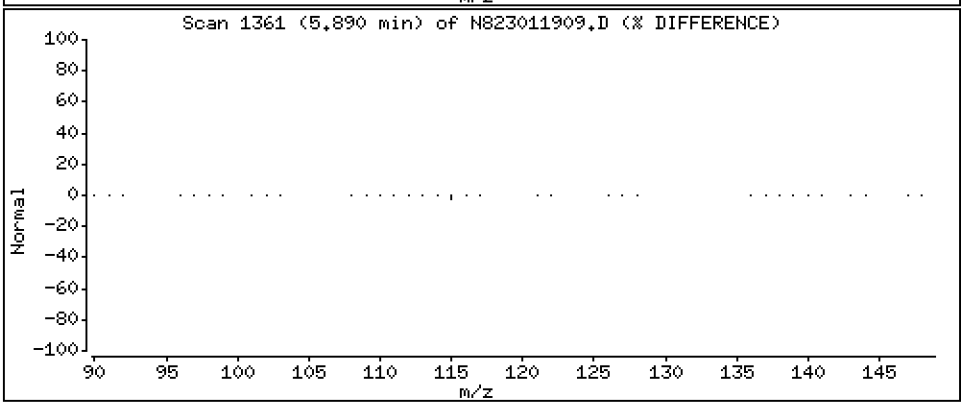












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

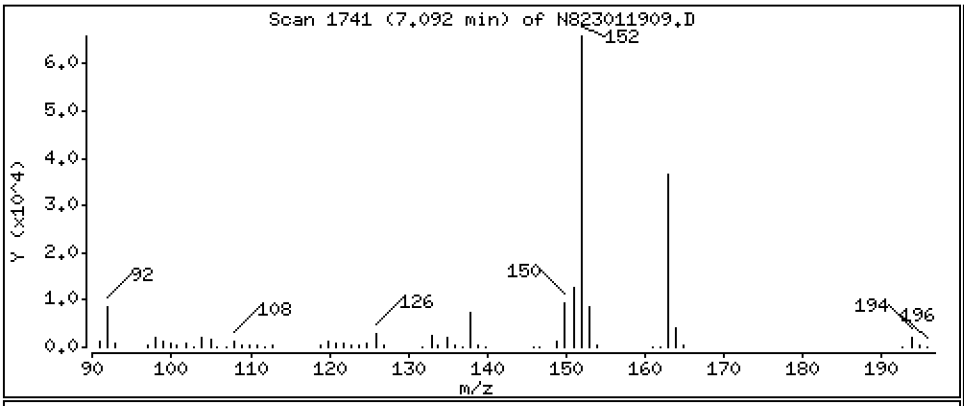
Operator: JZ

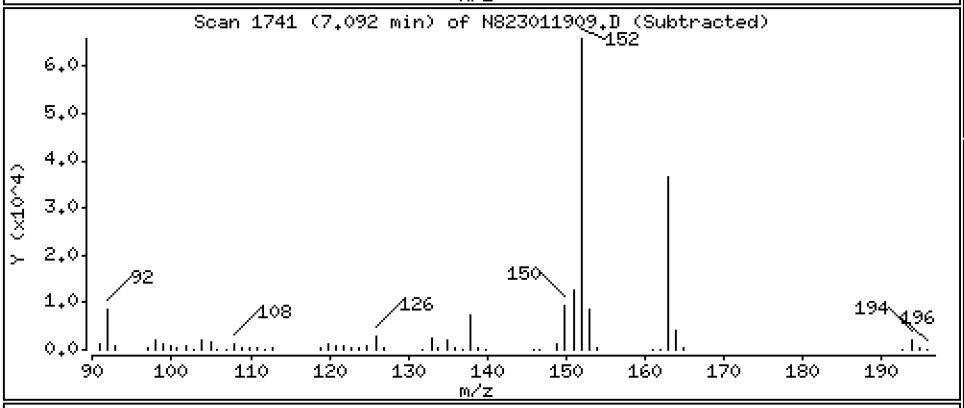
Column phase: Rxi-17sil

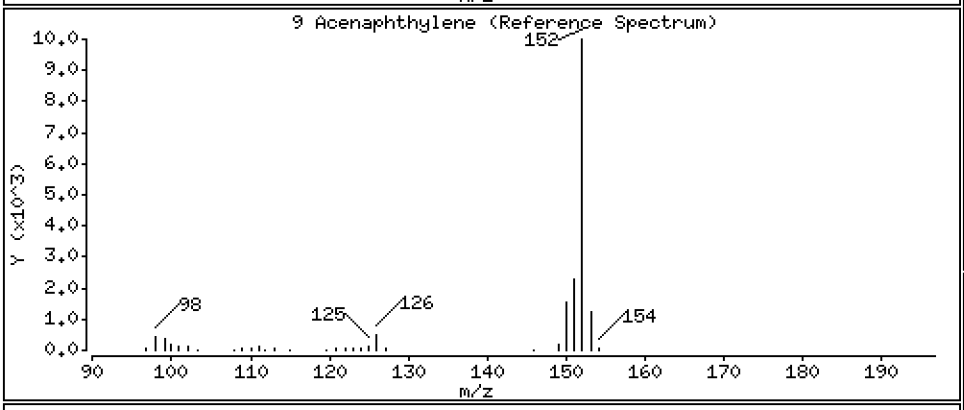
Column diameter: 0.25

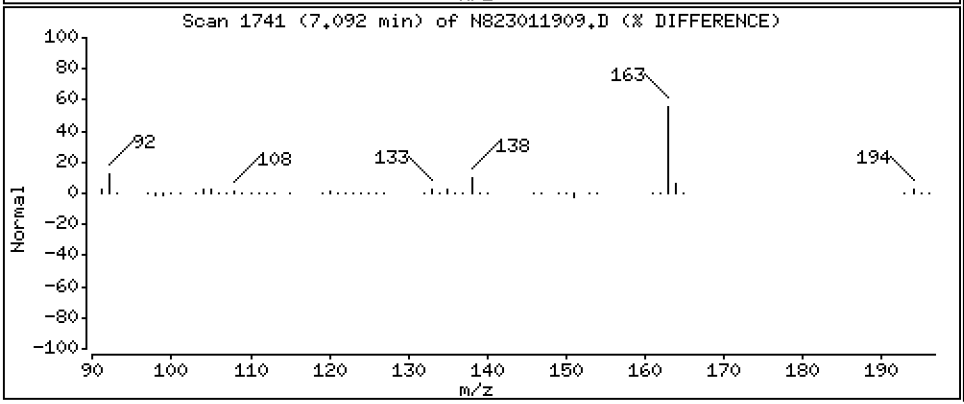
9 Acenaphthylene

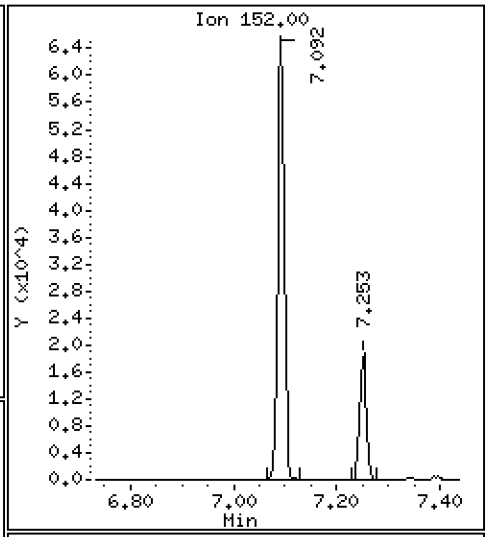
Concentration: 2.821 ug/L

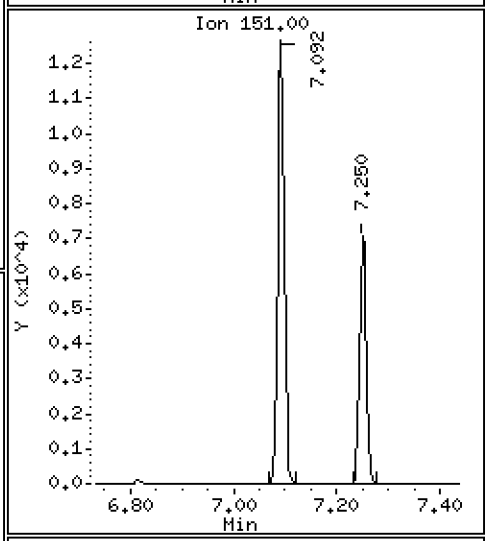


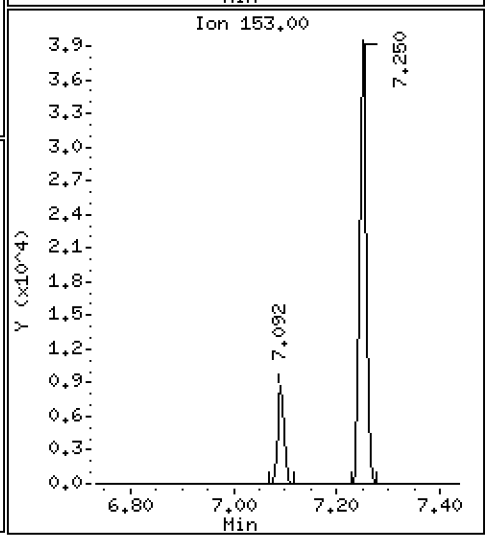












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

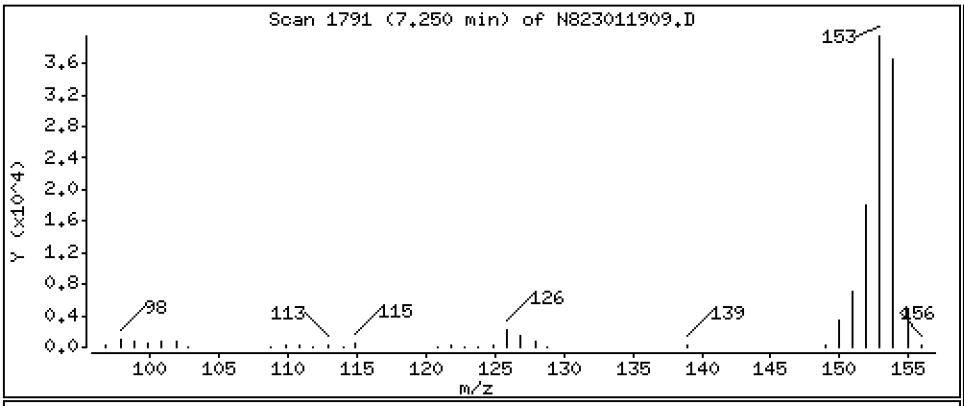
Operator: JZ

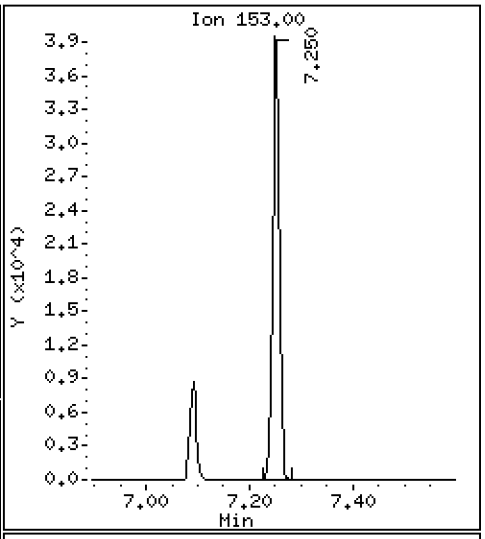
Column phase: Rxi-17sil

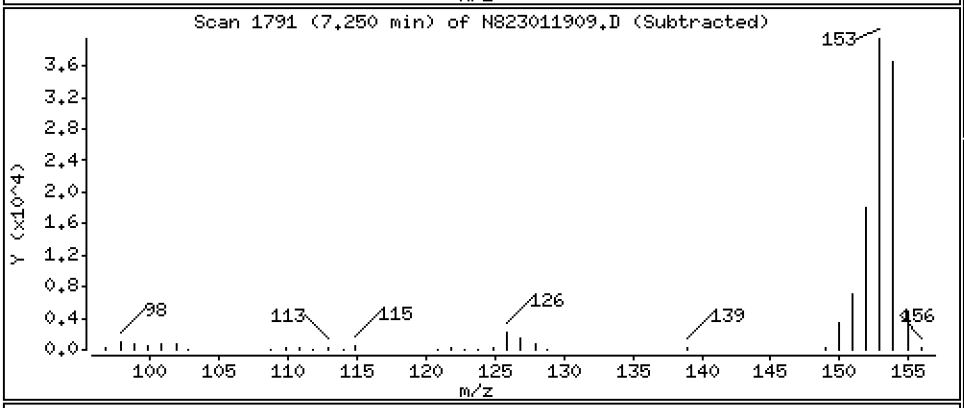
Column diameter: 0.25

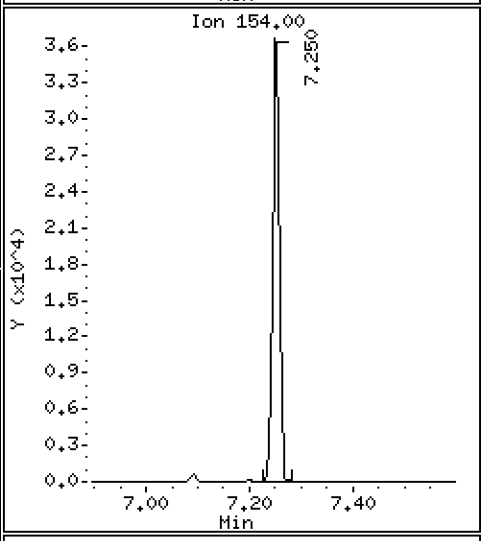
11 Acenaphthene

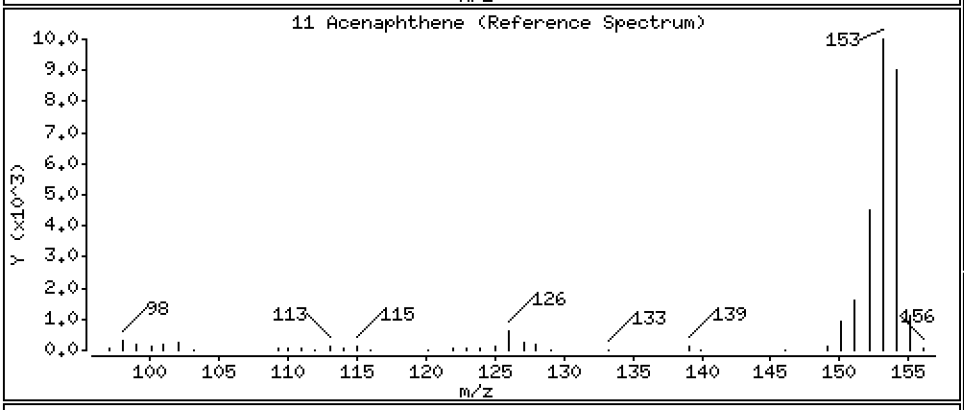
Concentration: 2.600 ug/L

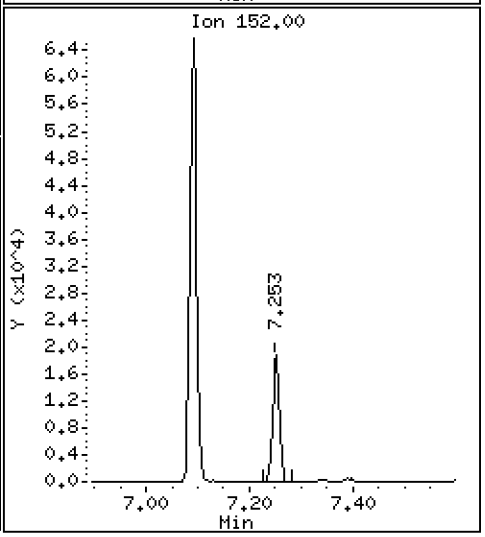


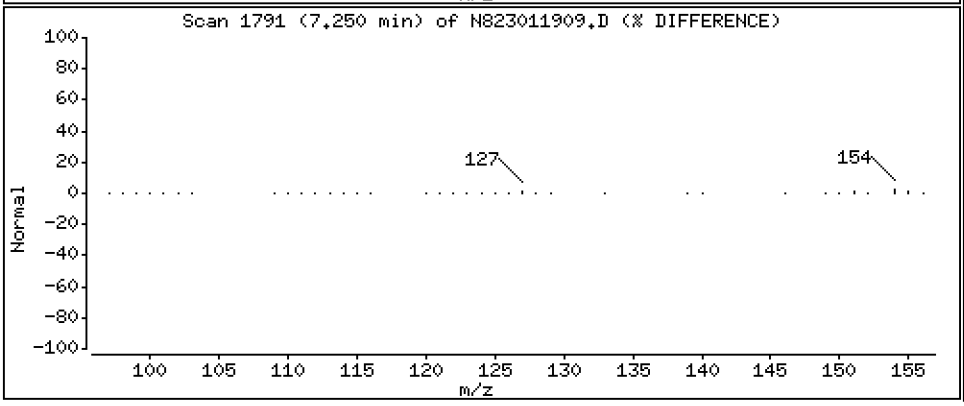












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

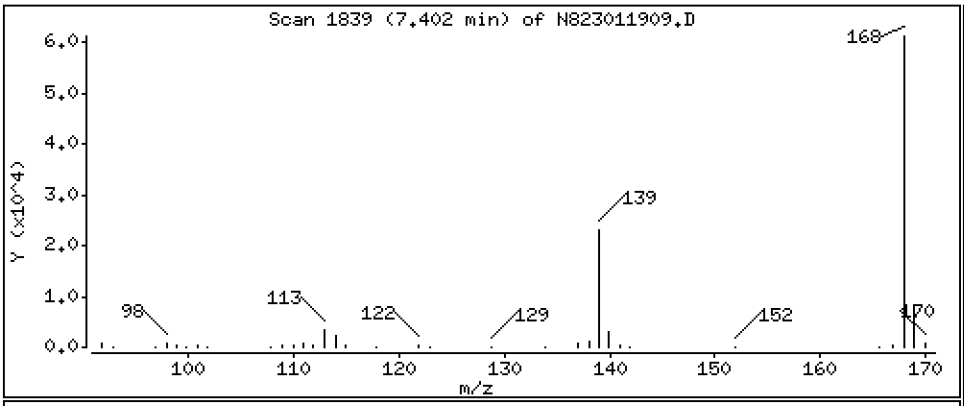
Operator: JZ

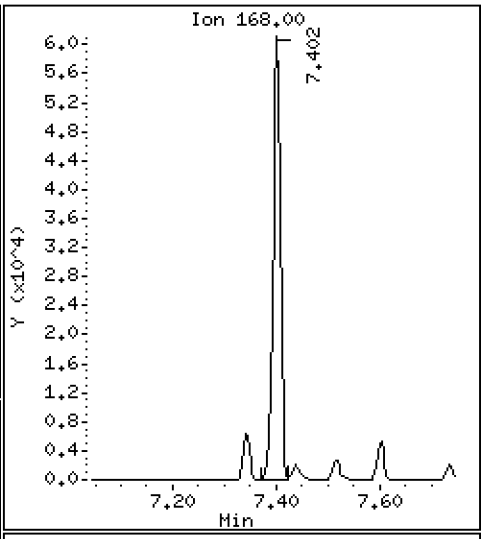
Column phase: Rxi-17sil

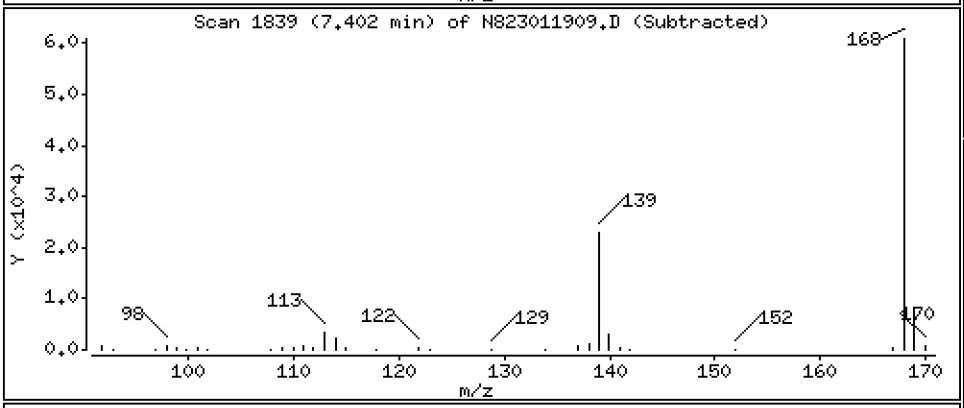
Column diameter: 0.25

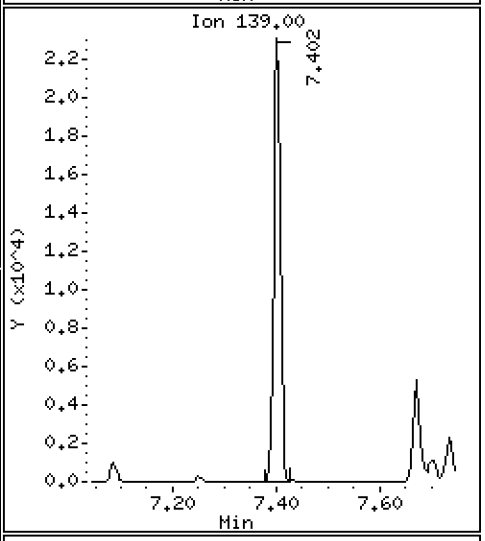
12 Dibenzofuran

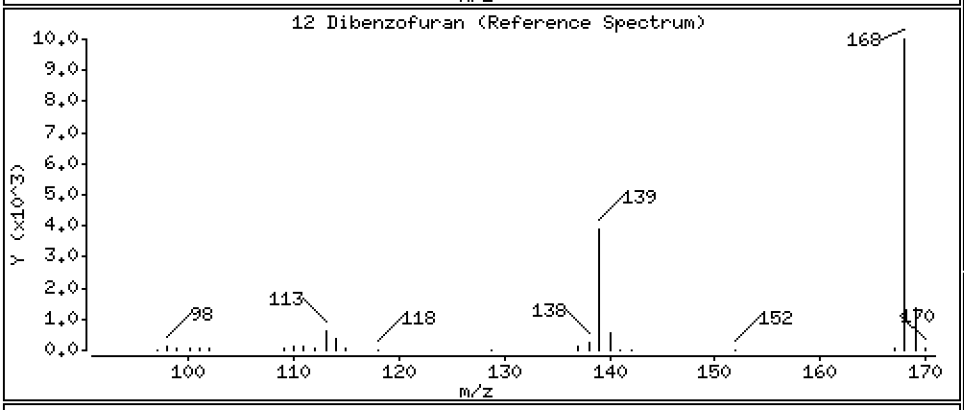
Concentration: 2.860 ug/L

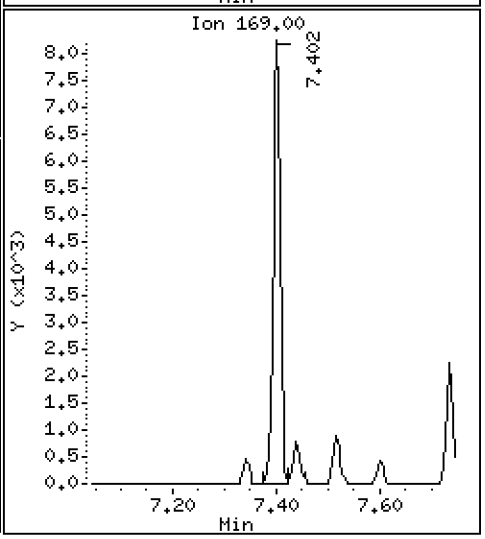


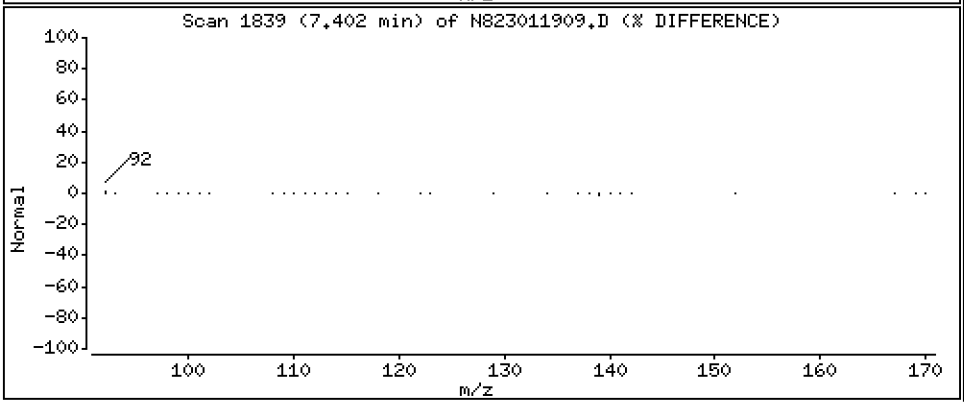












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

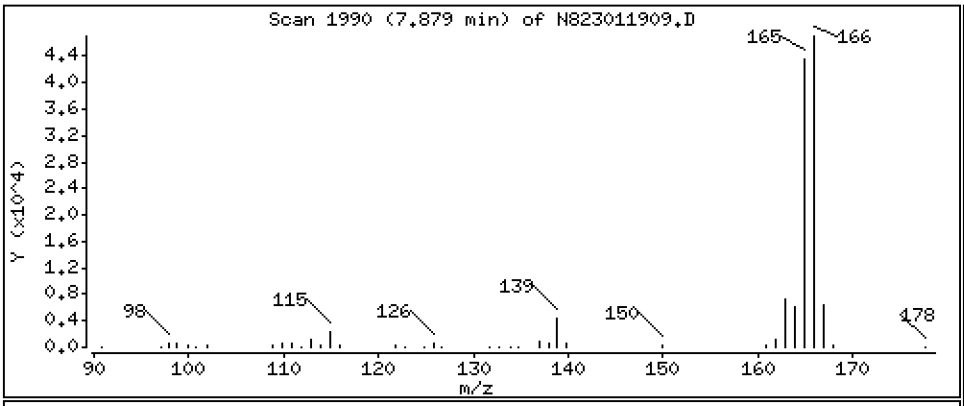
Operator: JZ

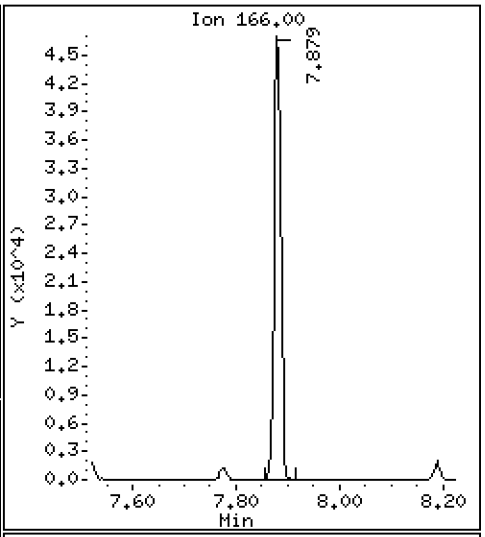
Column phase: Rxi-17sil

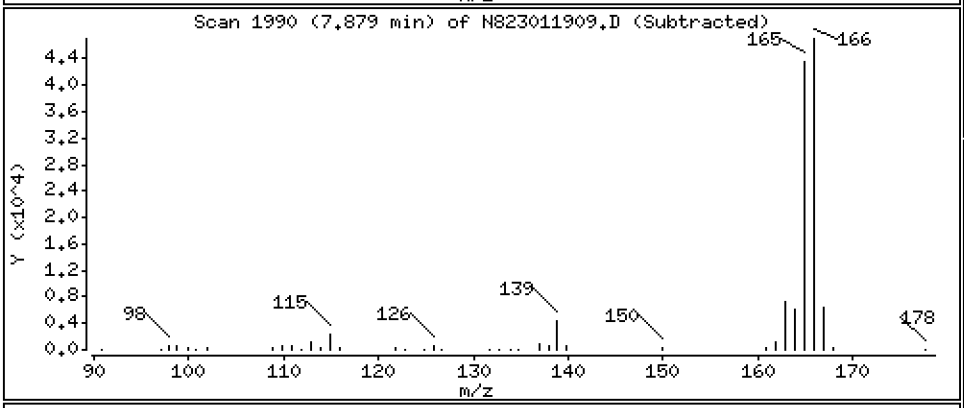
Column diameter: 0.25

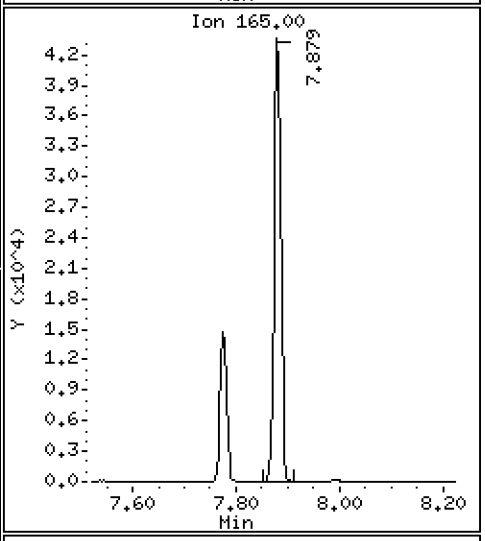
14 Fluorene

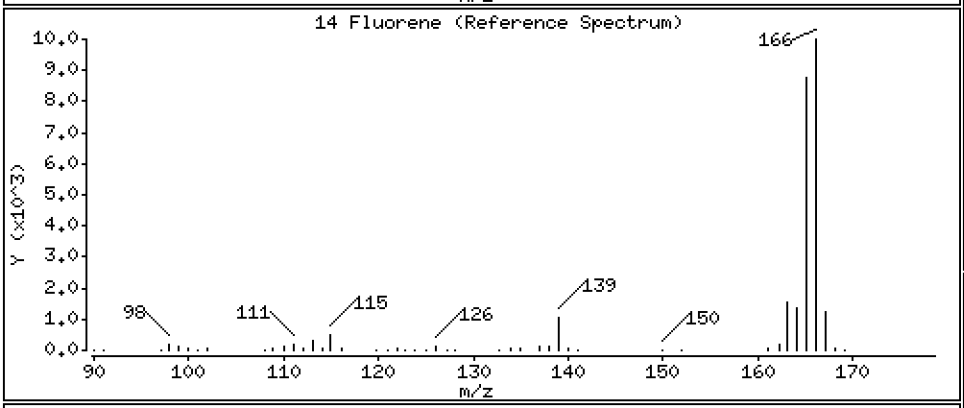
Concentration: 2.631 ug/L

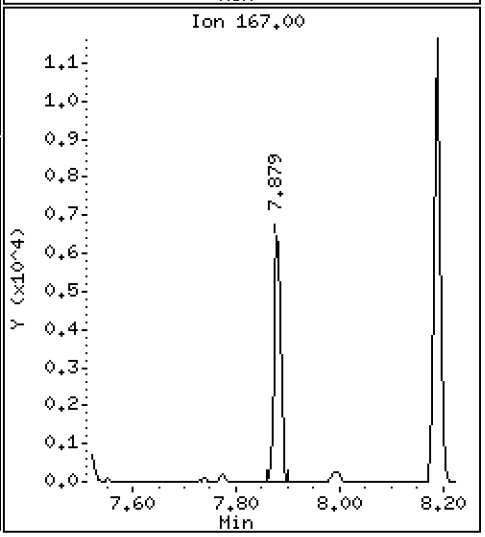


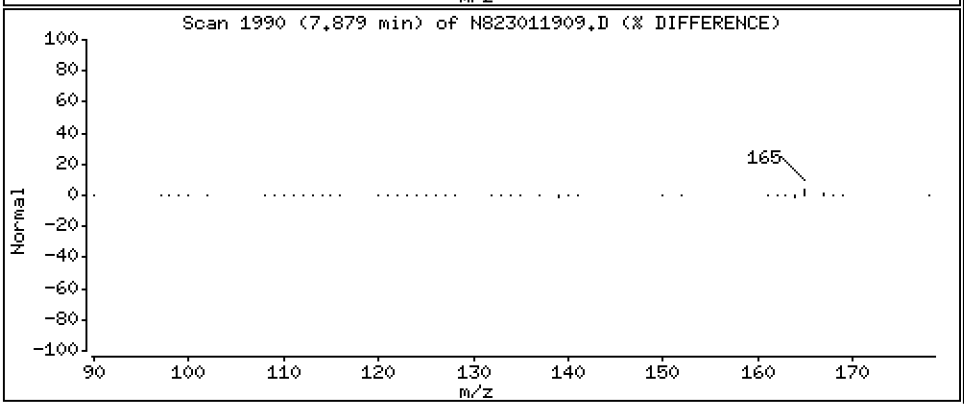












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

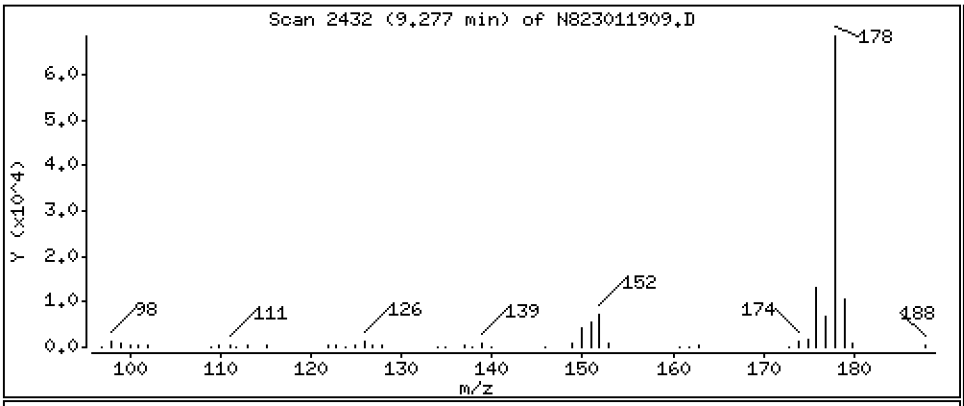
Operator: JZ

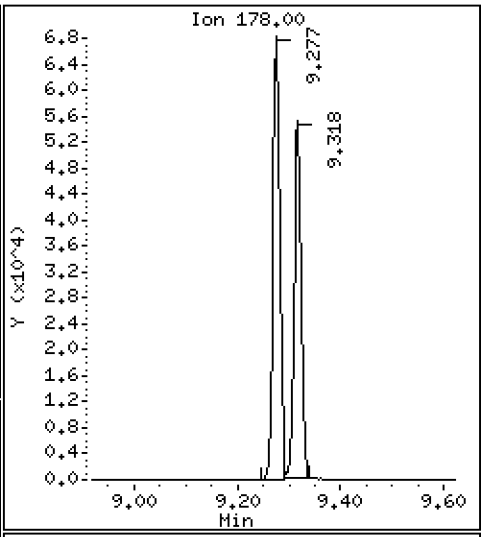
Column phase: Rxi-17sil

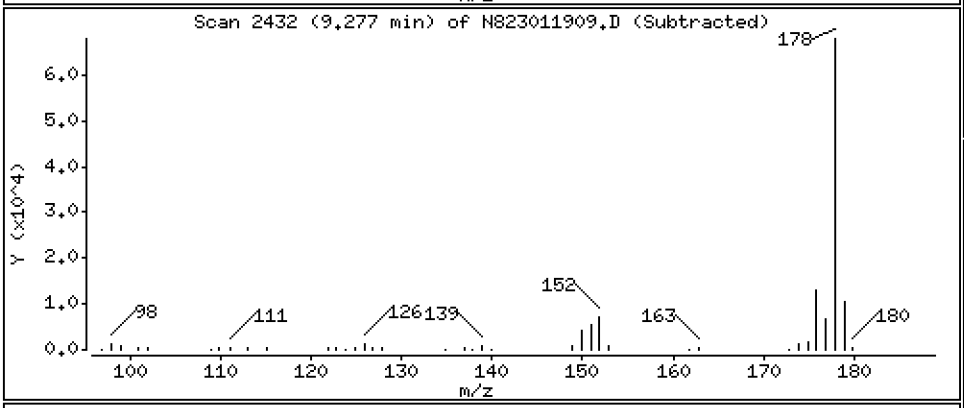
Column diameter: 0.25

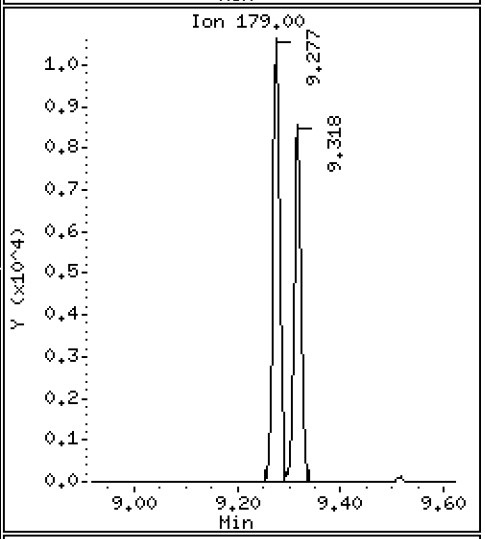
16 Phenanthrene

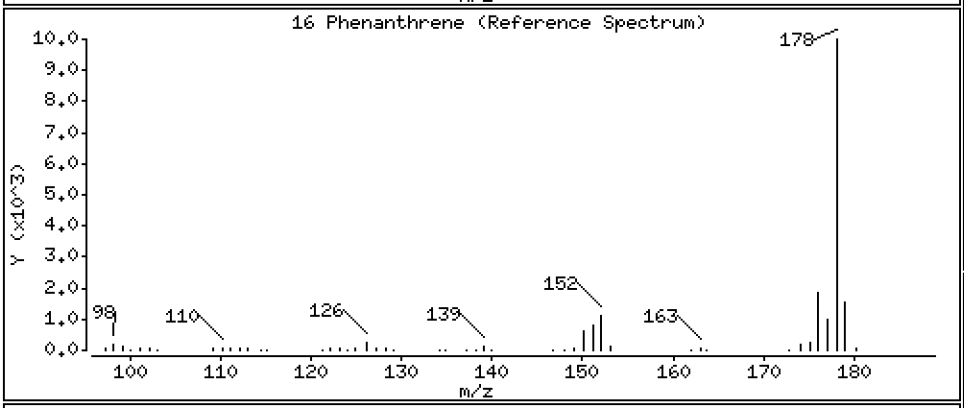
Concentration: 2.448 ug/L

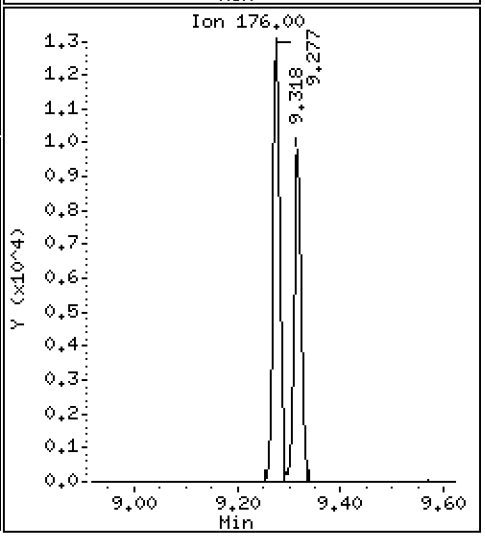


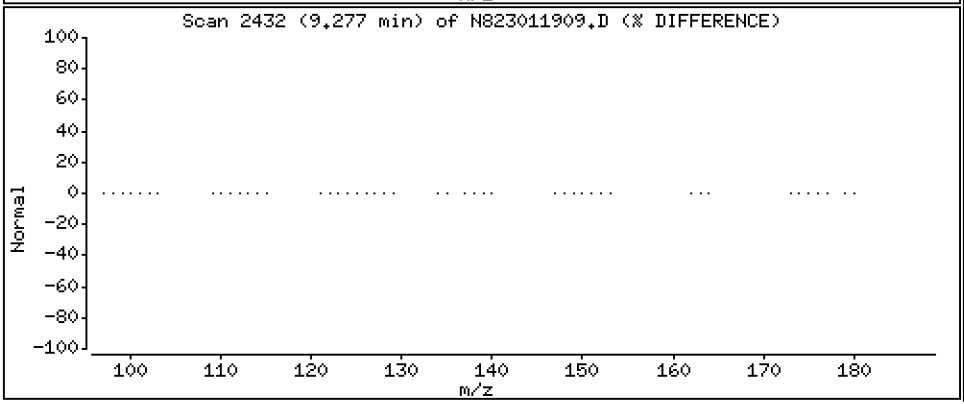












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

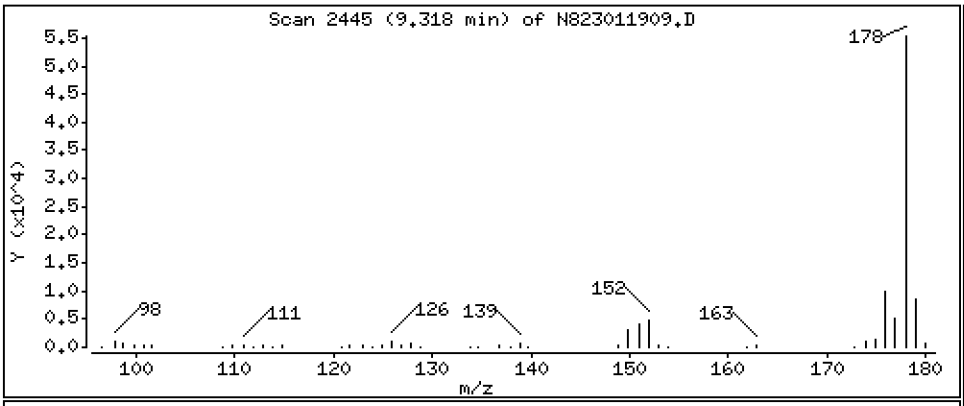
Operator: JZ

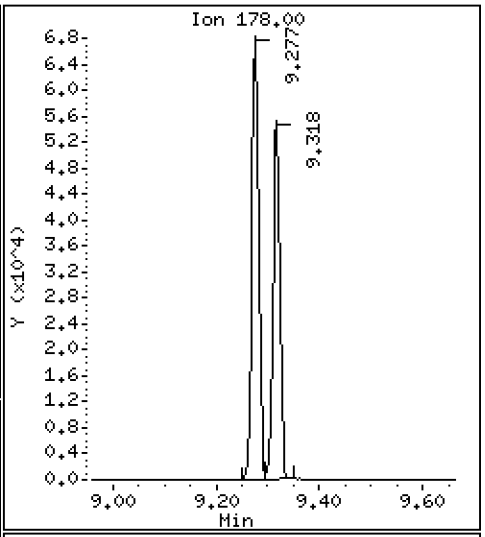
Column phase: Rxi-17sil

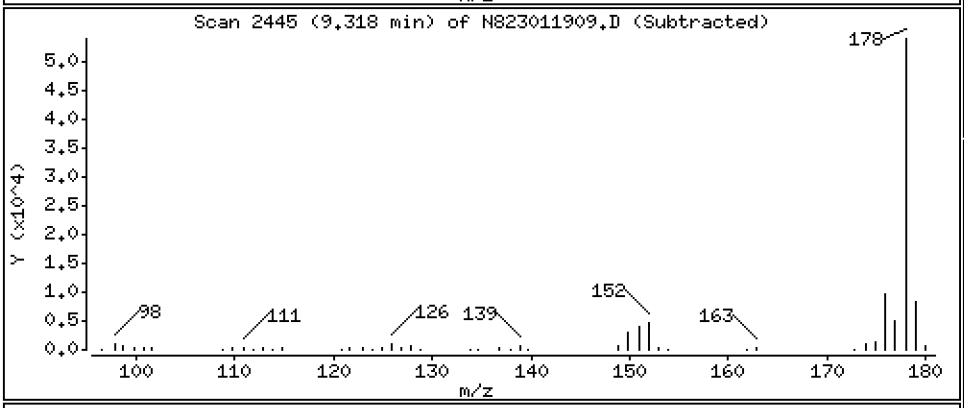
Column diameter: 0.25

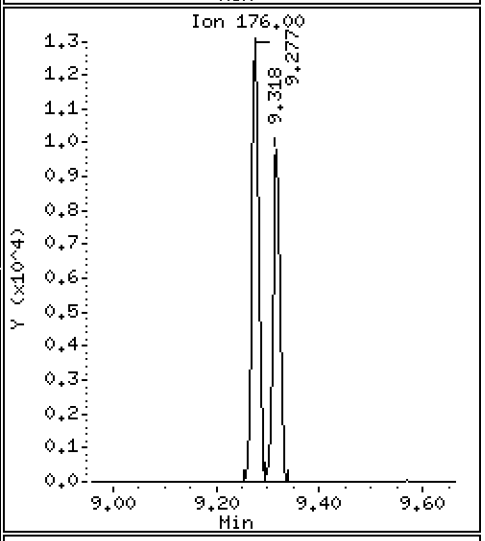
17 Anthracene

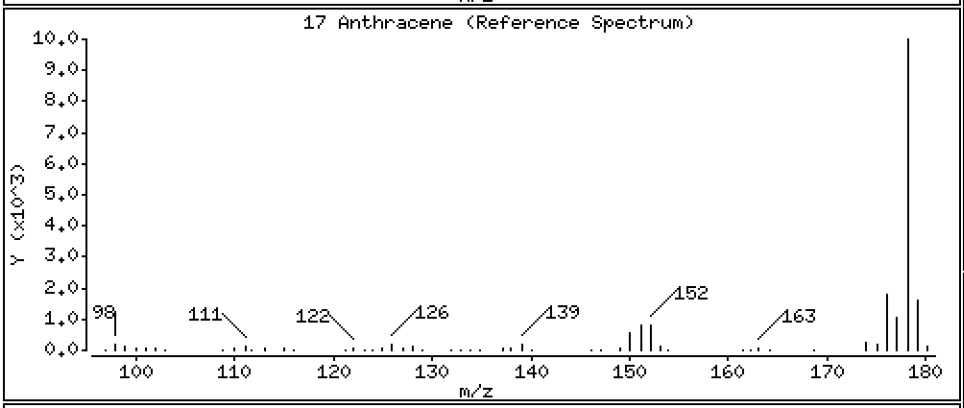
Concentration: 2.270 ug/L

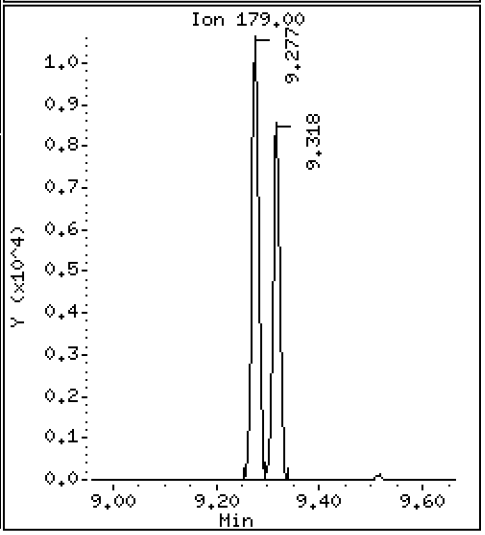


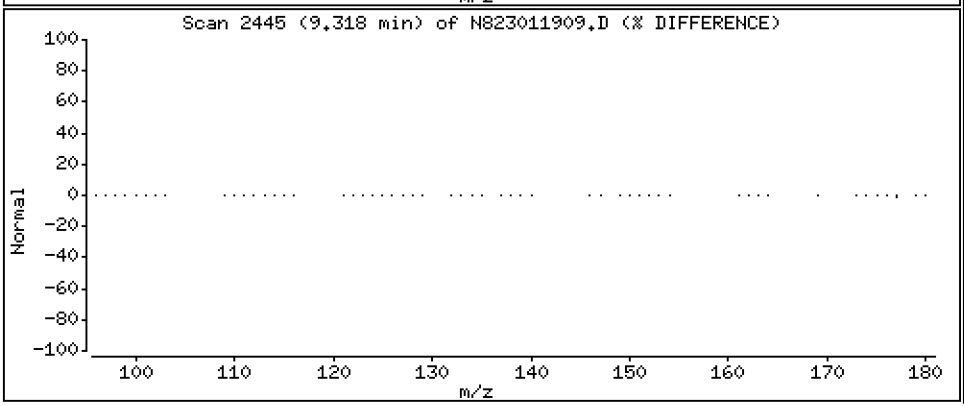












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

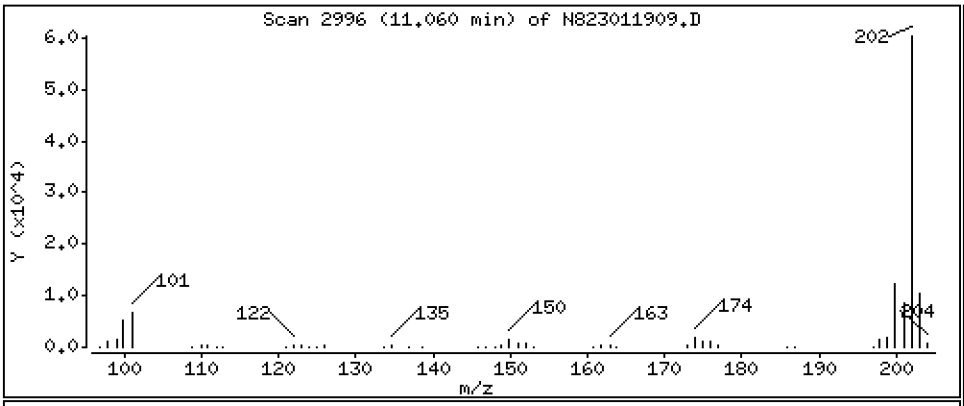
Operator: JZ

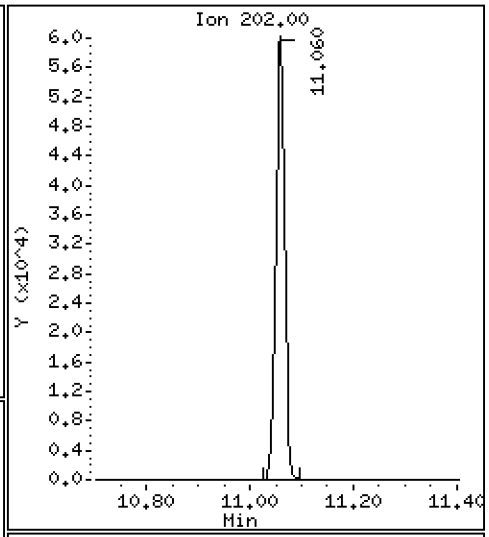
Column phase: Rxi-17sil

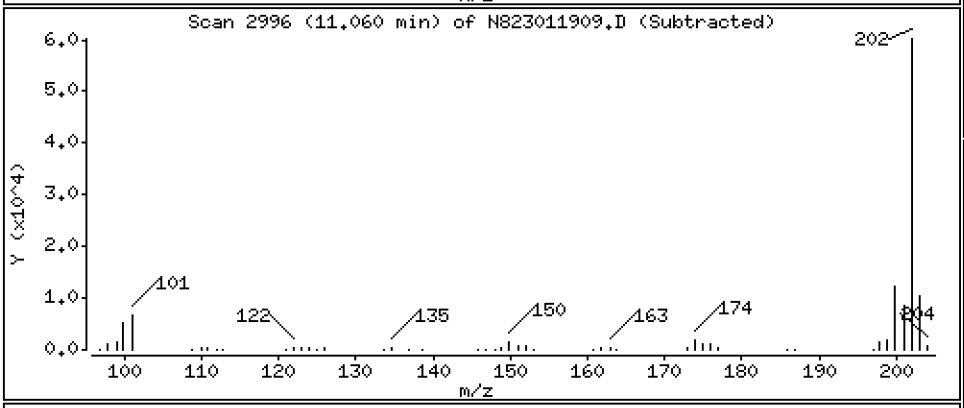
Column diameter: 0.25

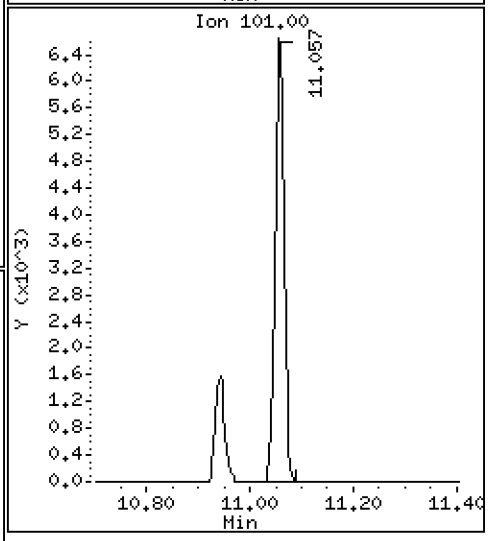
22 Fluoranthene

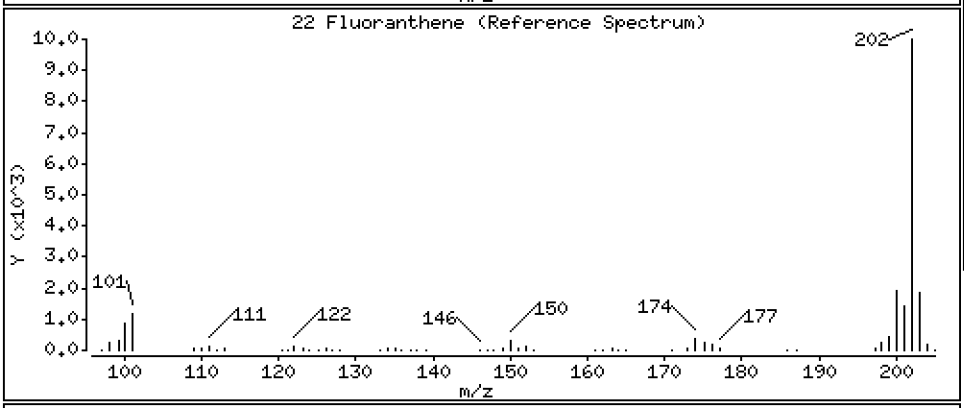
Concentration: 2.653 ug/L

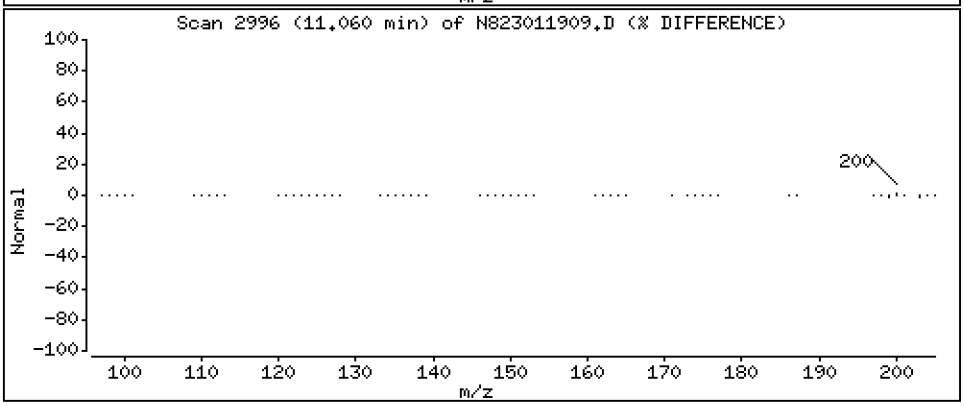












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

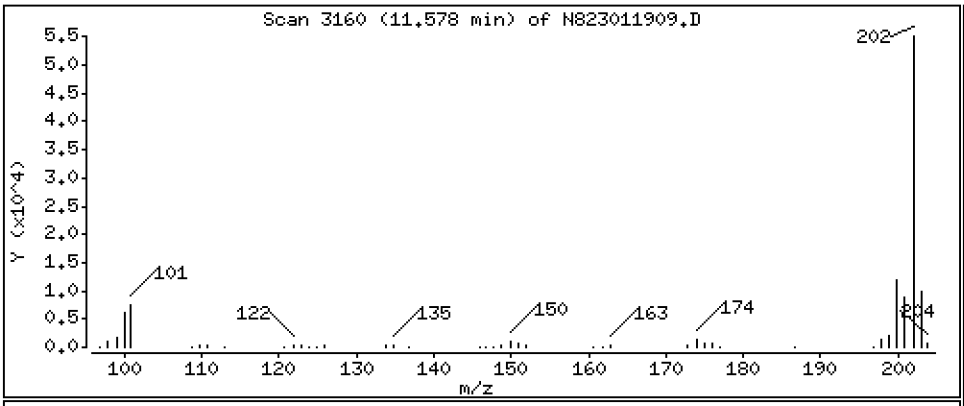
Operator: JZ

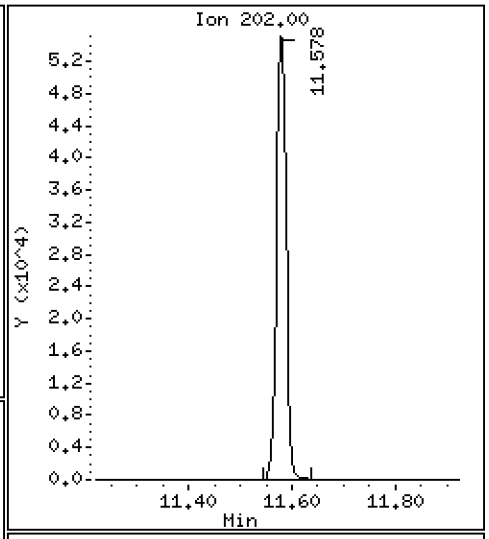
Column phase: Rxi-17sil

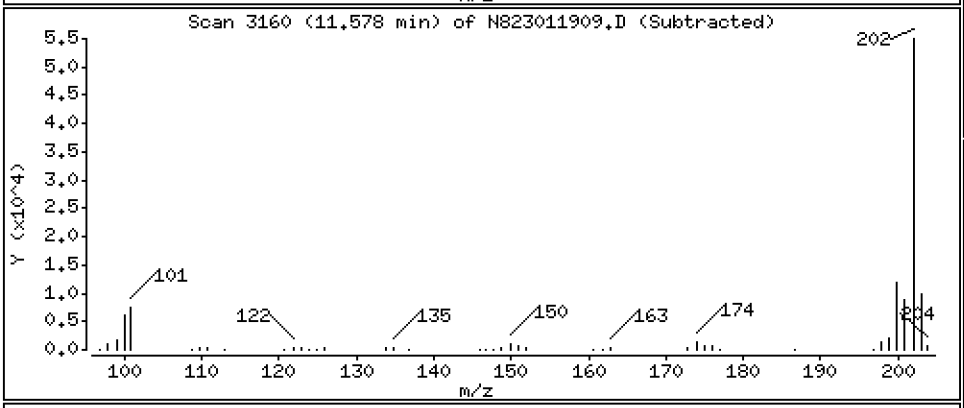
Column diameter: 0.25

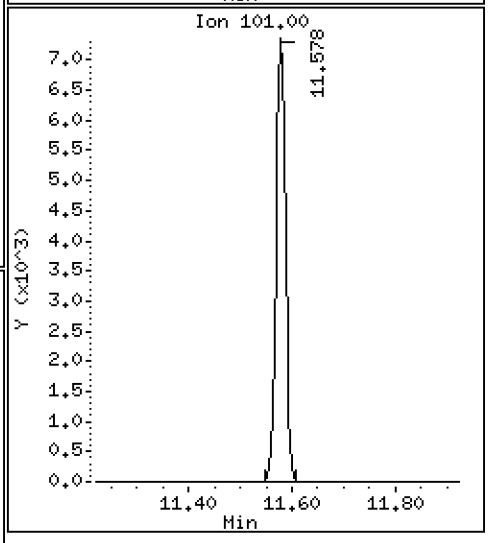
23 Pyrene

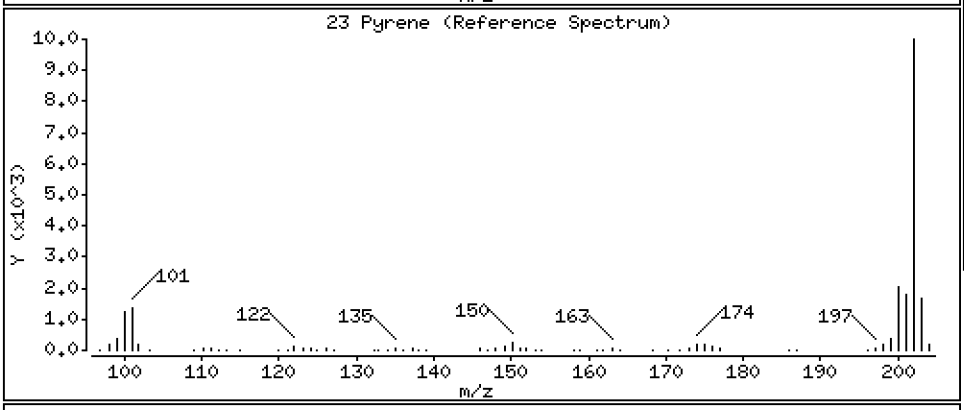
Concentration: 2.462 ug/L

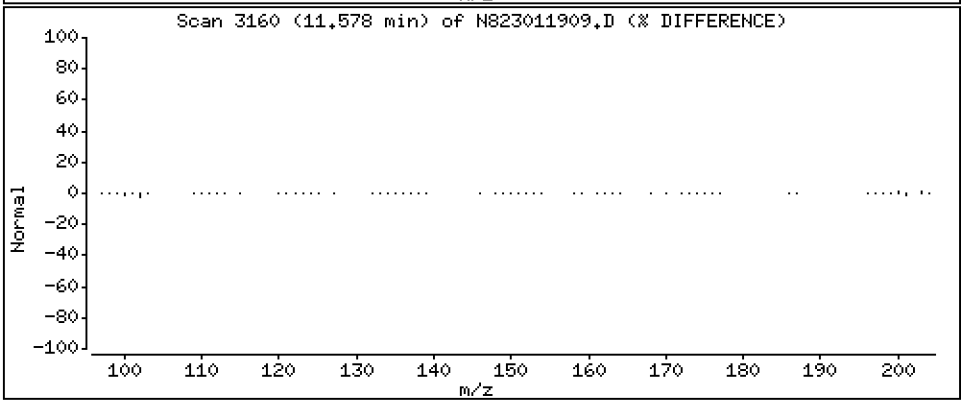












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

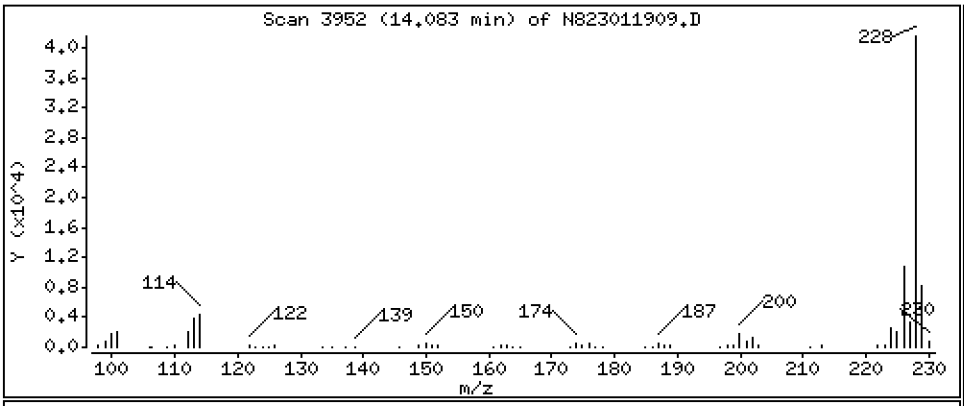
Operator: JZ

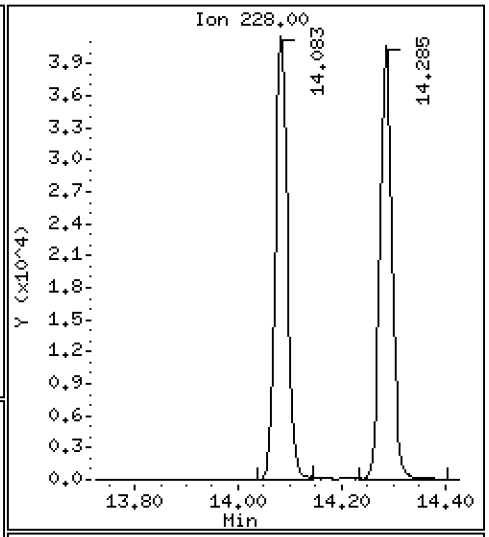
Column phase: Rxi-17sil

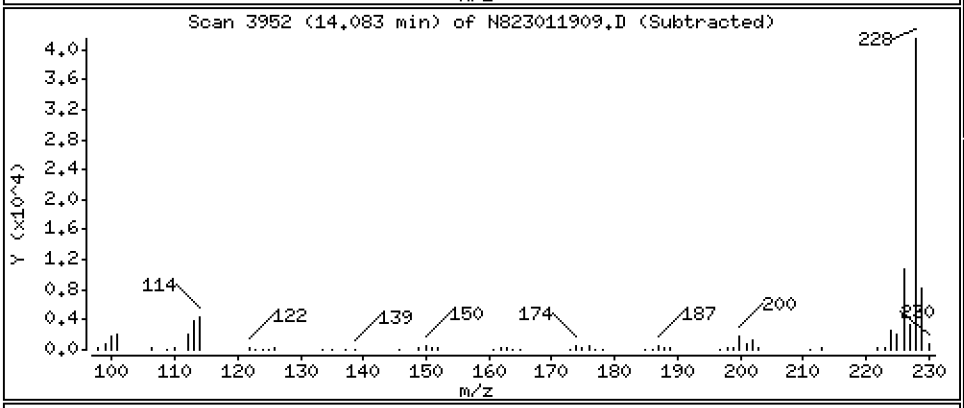
Column diameter: 0.25

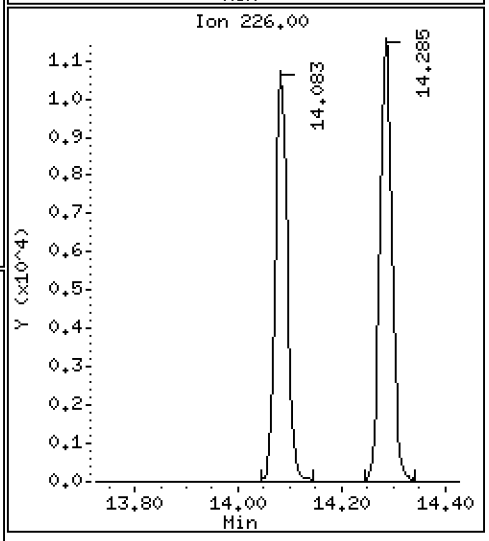
24 Benzo(a)anthracene

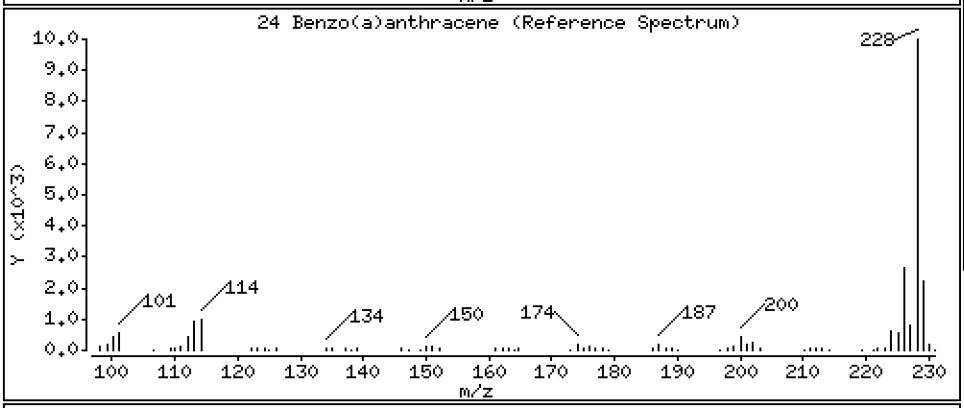
Concentration: 2.587 ug/L

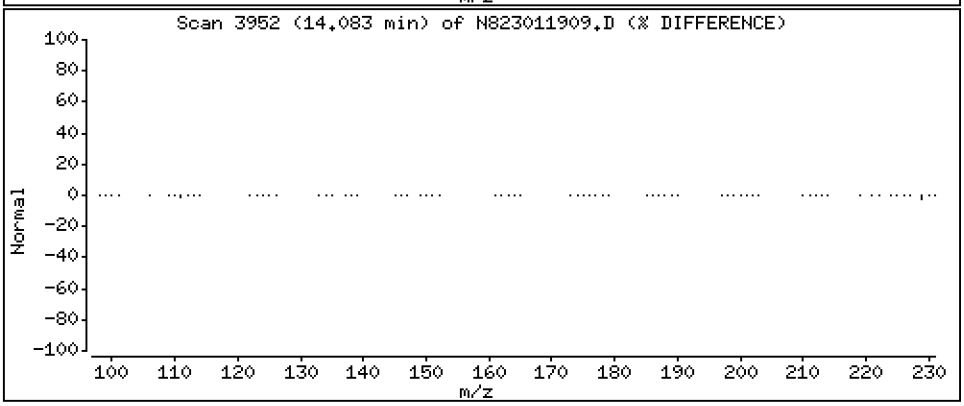












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

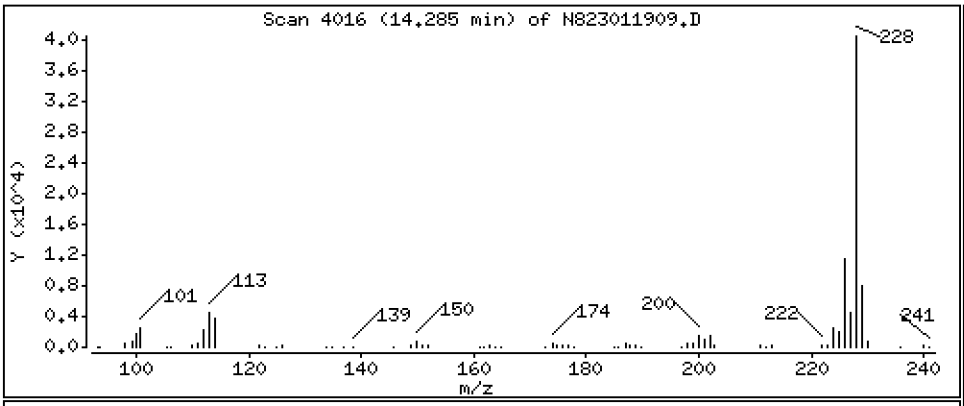
Operator: JZ

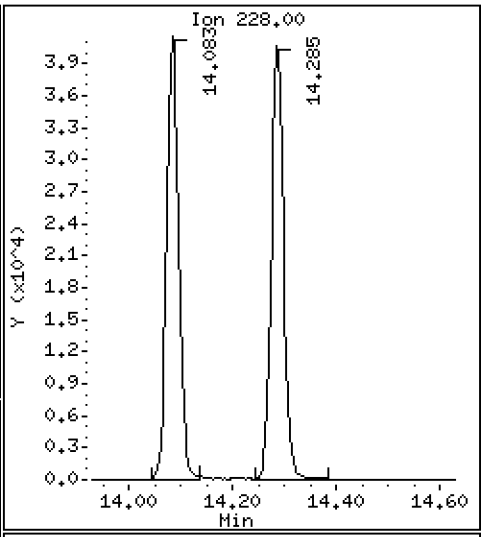
Column phase: Rxi-17sil

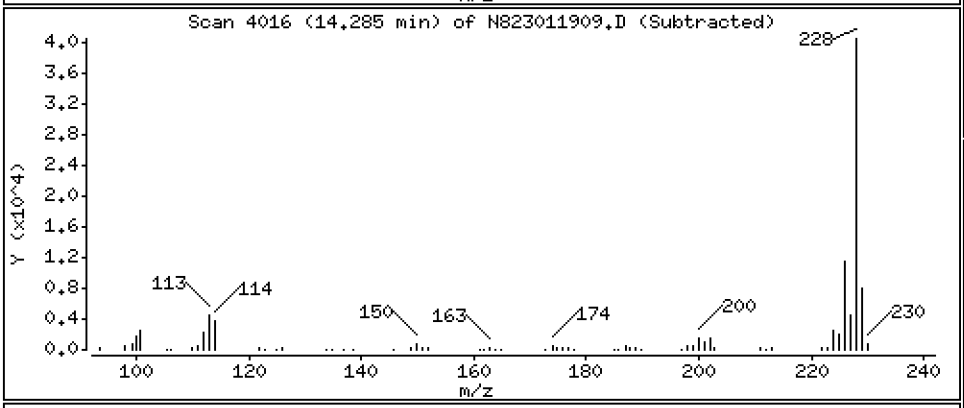
Column diameter: 0.25

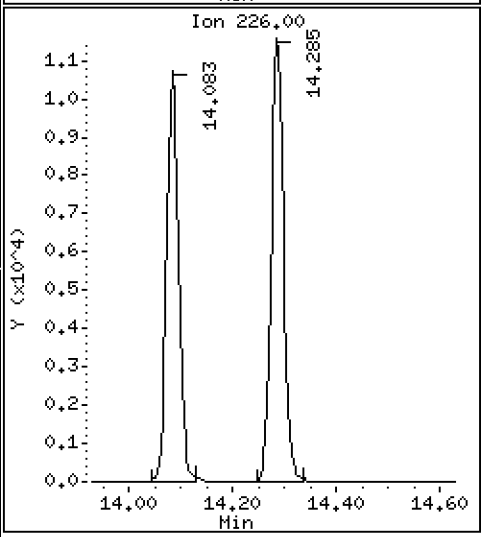
27 Chrysene

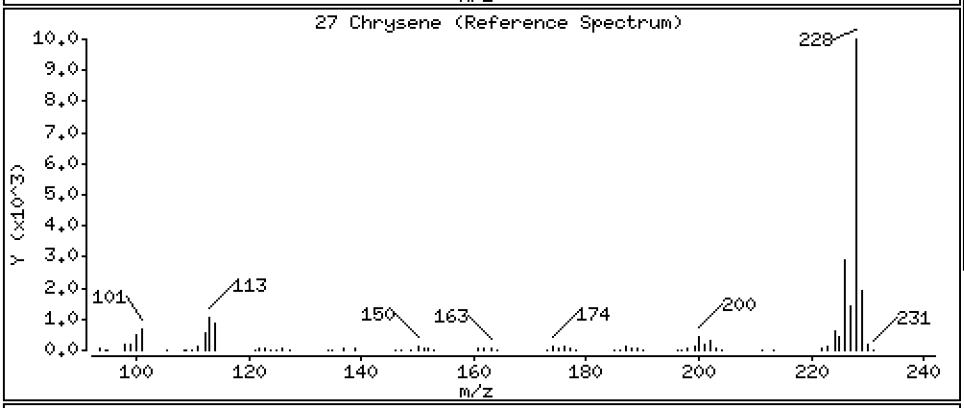
Concentration: 2.400 ug/L

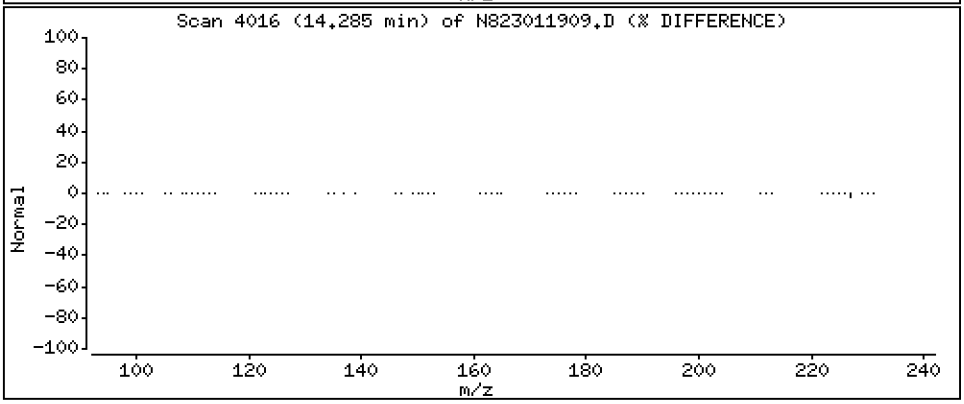












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

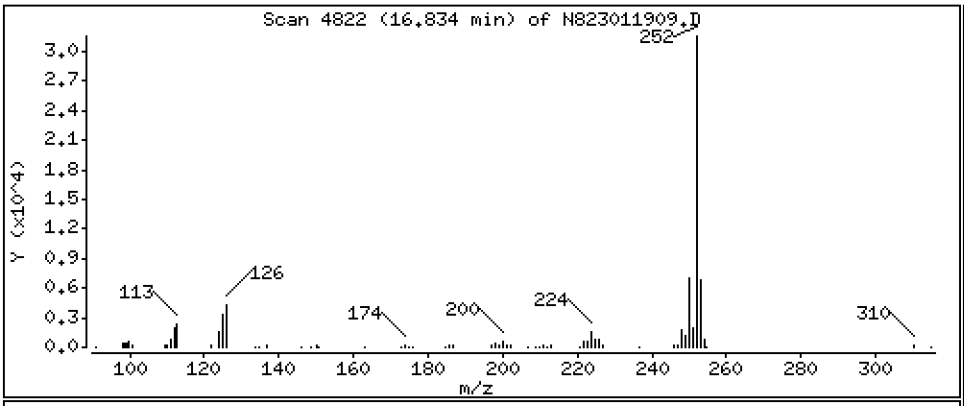
Operator: JZ

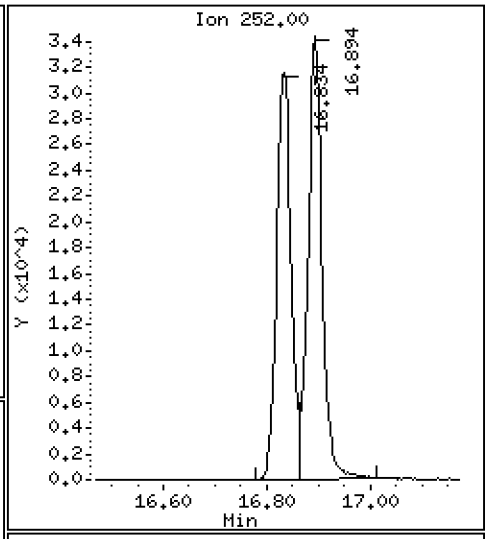
Column phase: Rxi-17sil

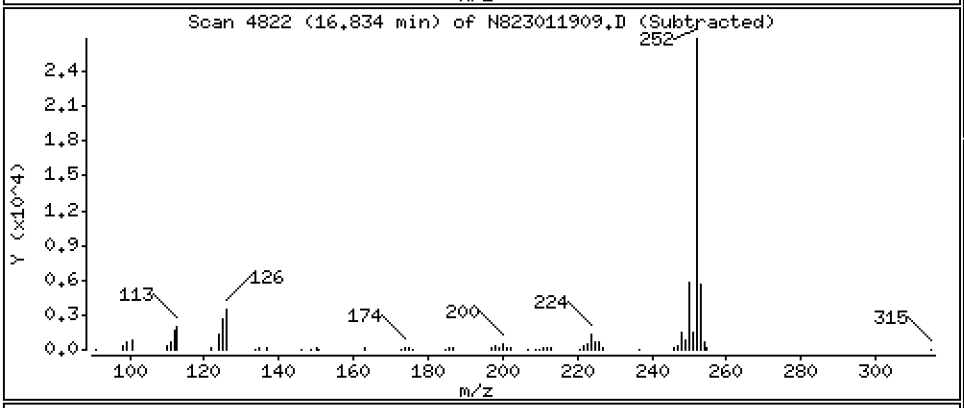
Column diameter: 0.25

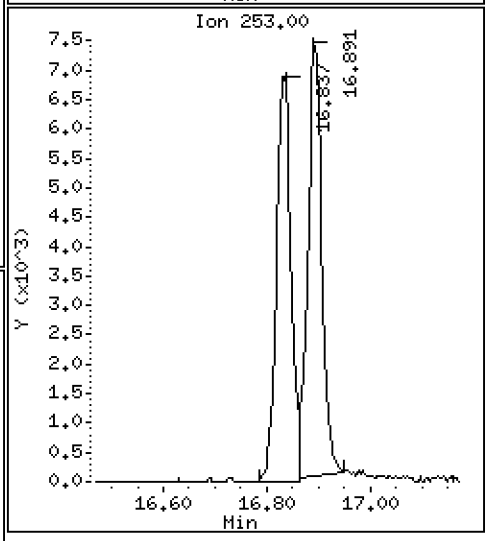
28 Benzo(b)fluoranthene

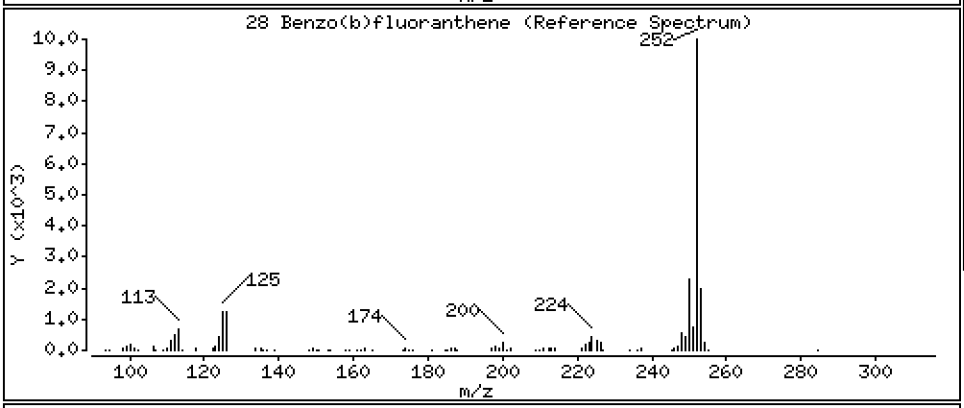
Concentration: 2.507 ug/L

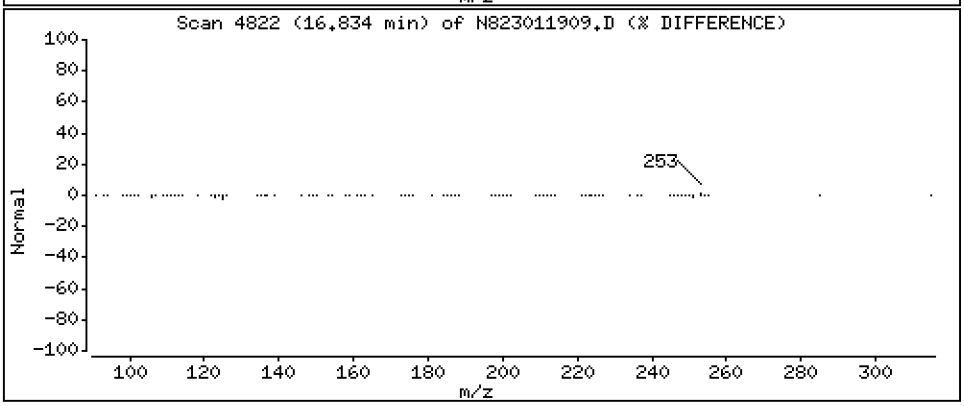












Date : 19-JAN-2023 14:58

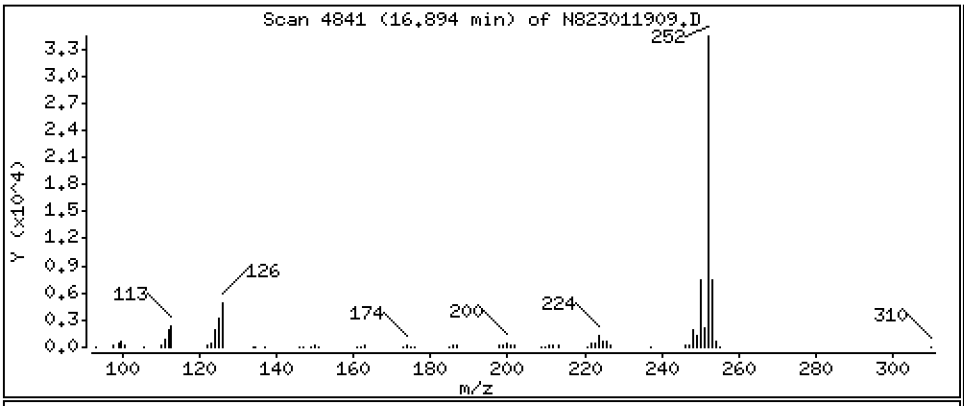
Client ID: Instrument: nt8.i

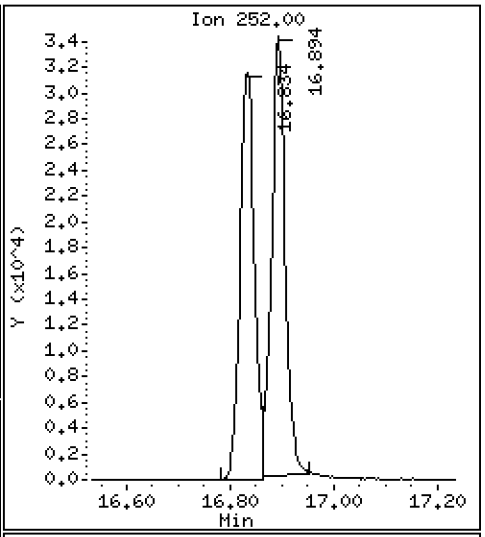
Sample Info: SCV230119

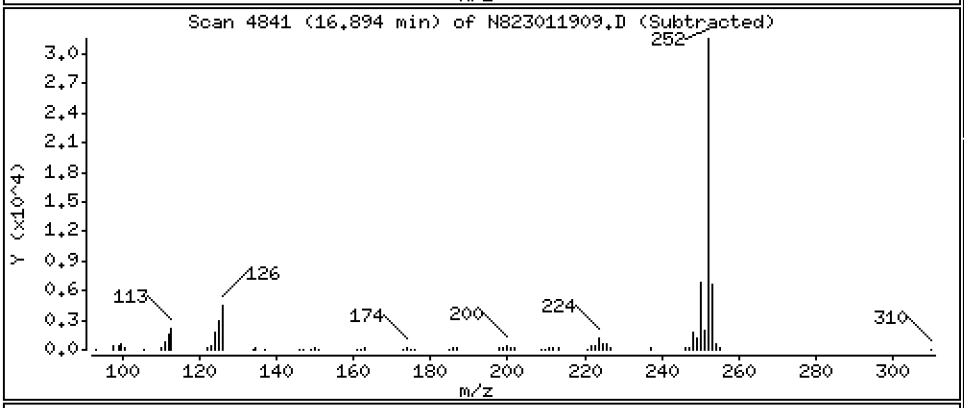
Volume Injected (uL): 1.0 Operator: JZ

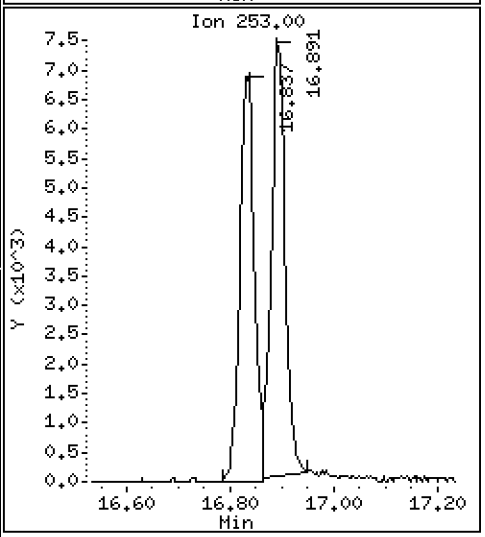
Column phase: Rxi-17sil Column diameter: 0.25

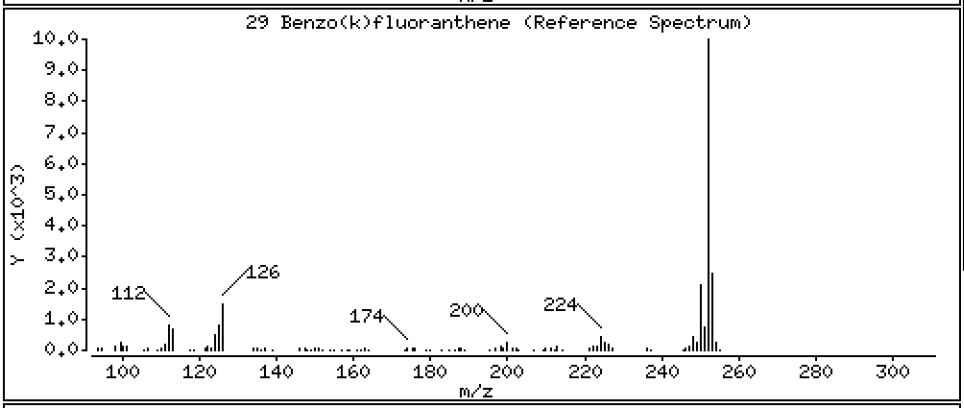
29 Benzo(k)fluoranthene Concentration: 2.656 ug/L

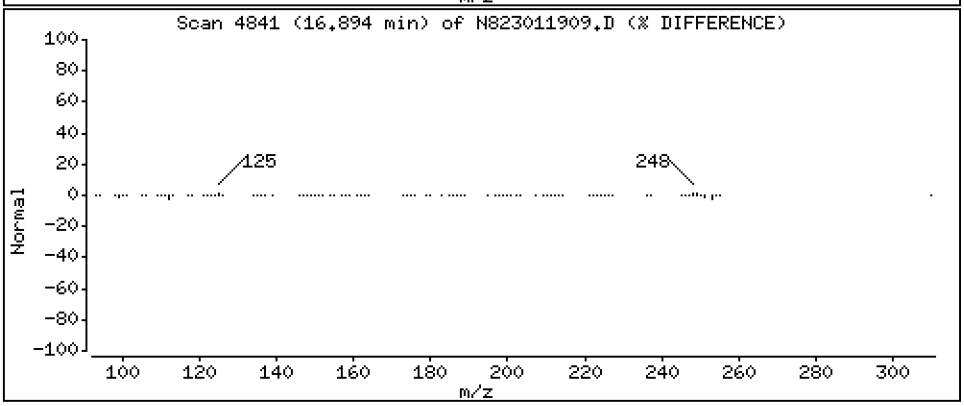












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

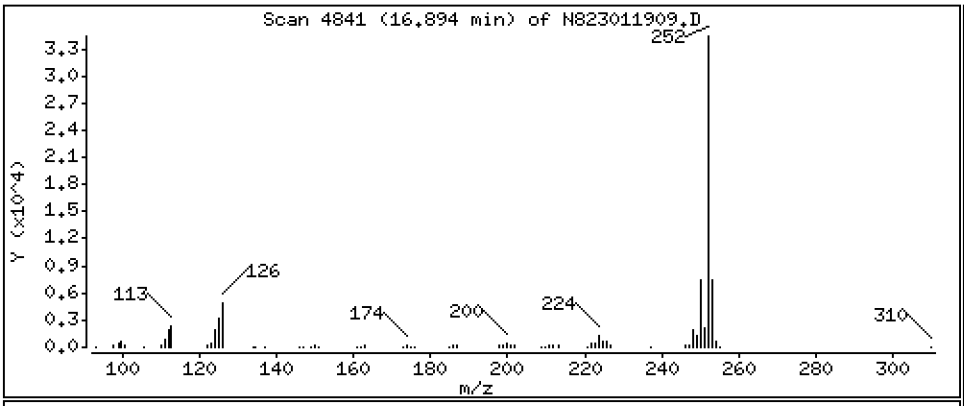
Operator: JZ

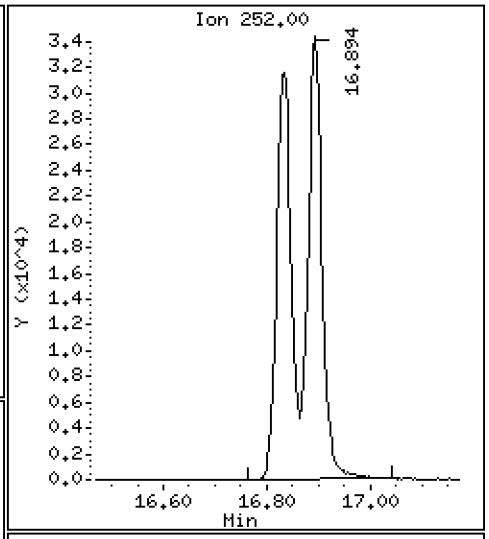
Column phase: Rxi-17sil

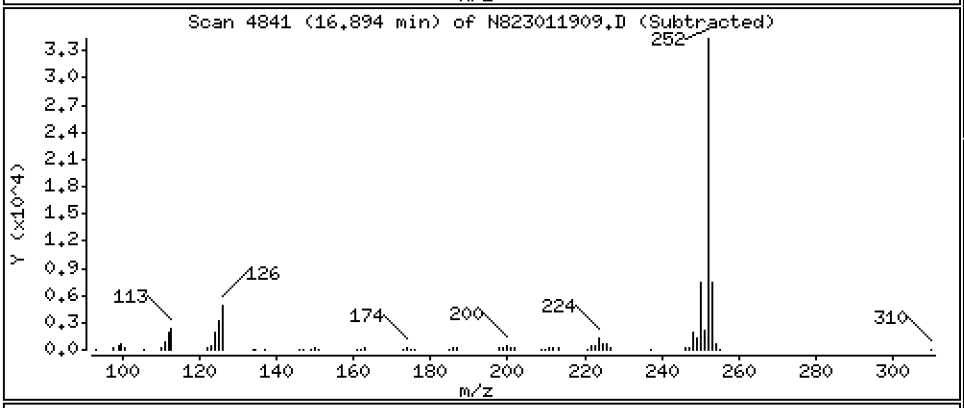
Column diameter: 0.25

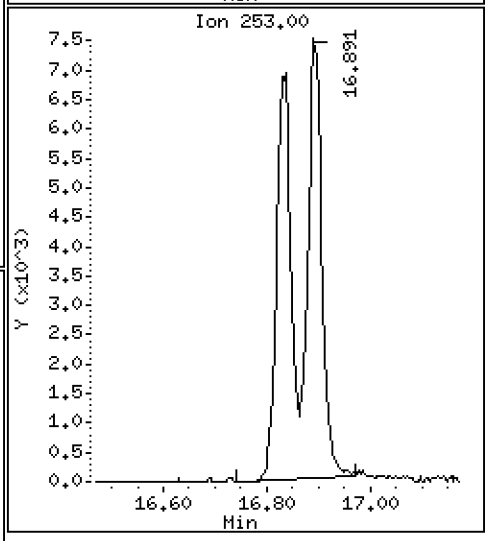
31 Total Benzofluoranthenes

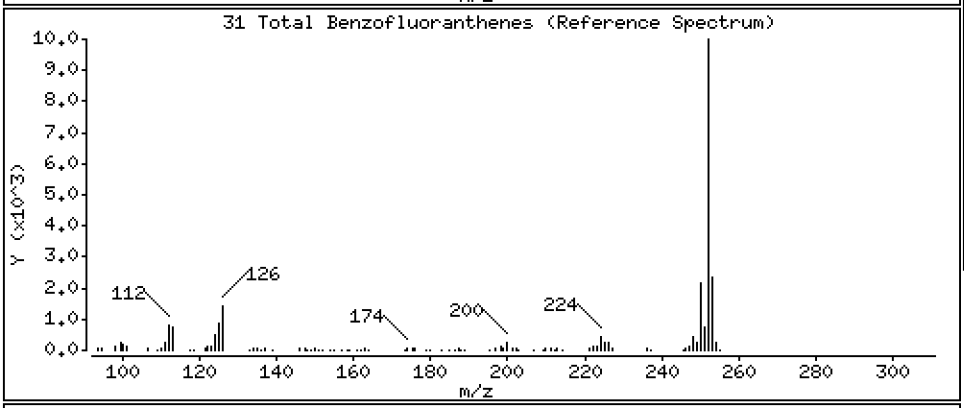
Concentration: 5.480 ug/L

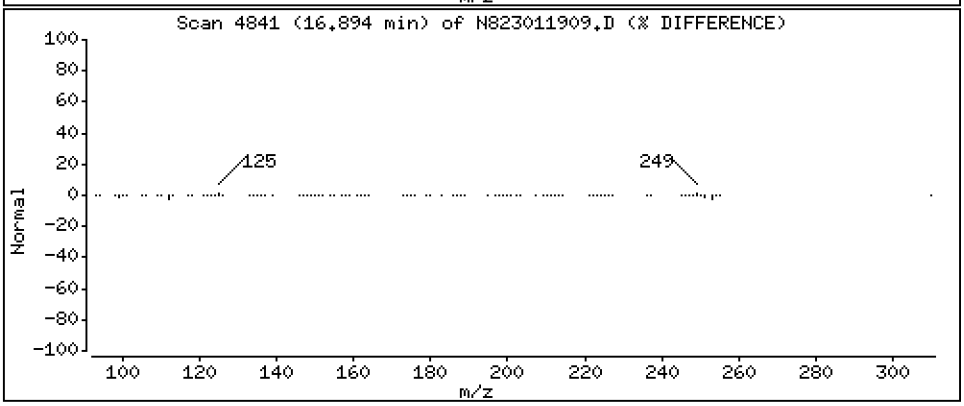












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

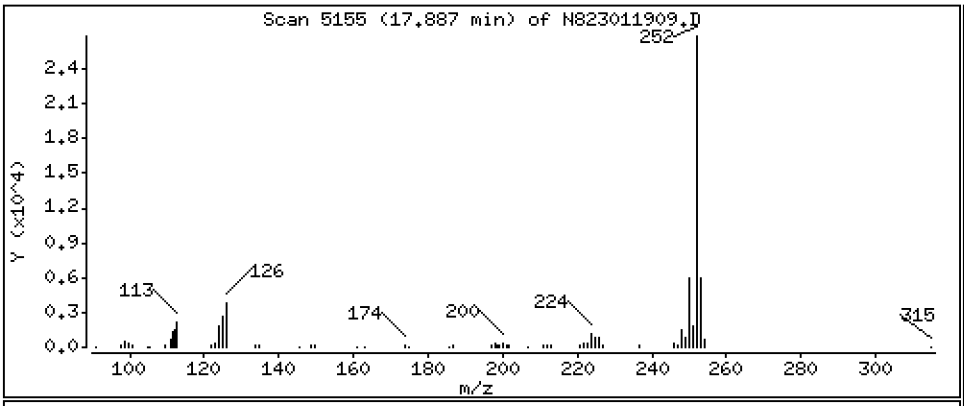
Operator: JZ

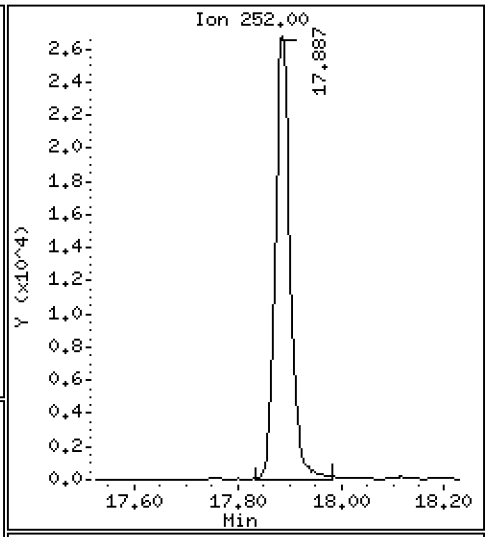
Column phase: Rxi-17sil

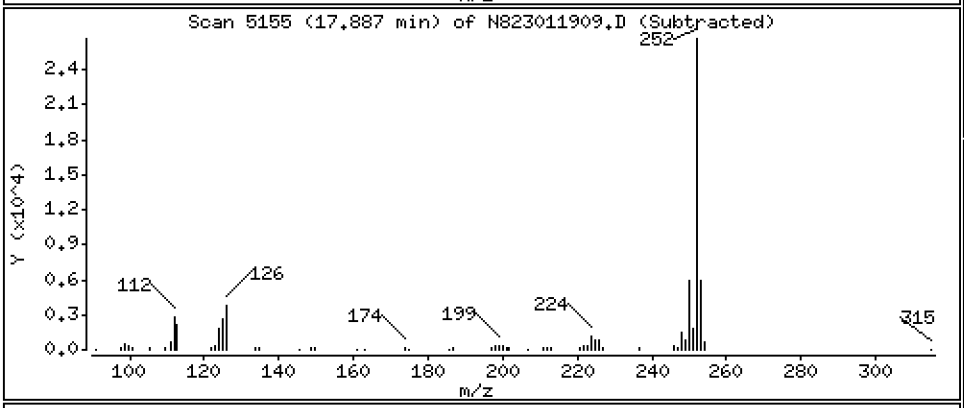
Column diameter: 0.25

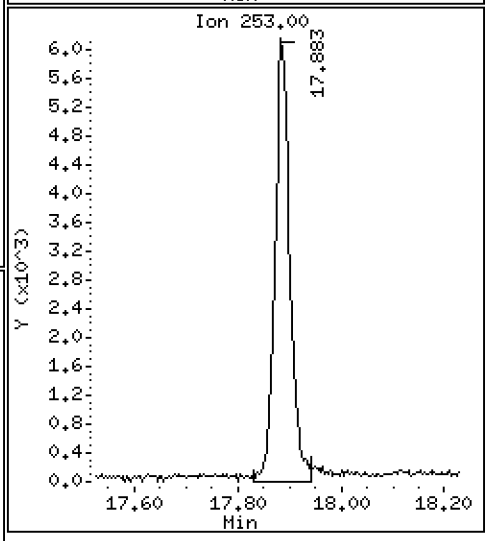
32 Benzo(a)pyrene

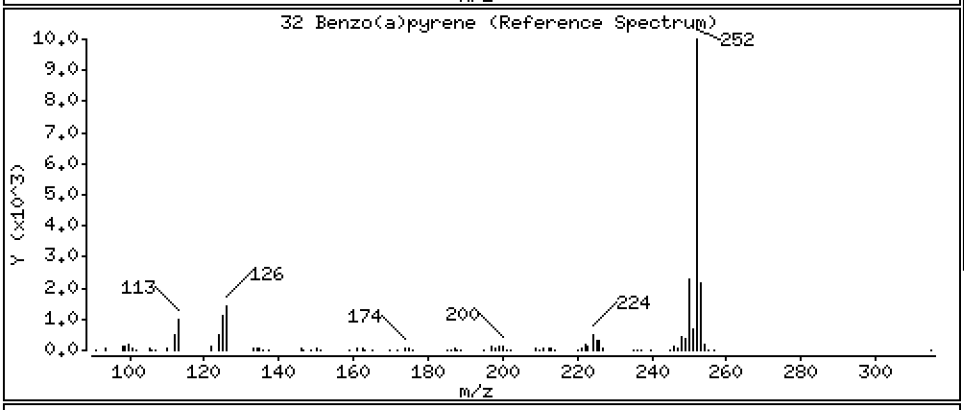
Concentration: 2.572 ug/L

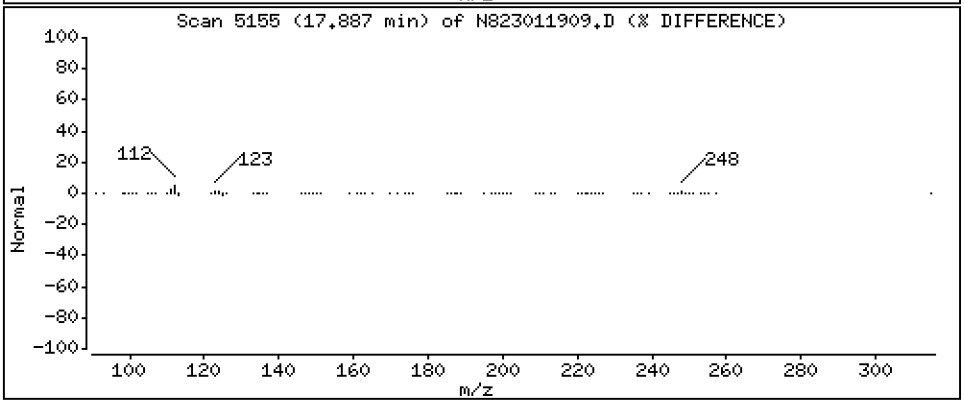












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

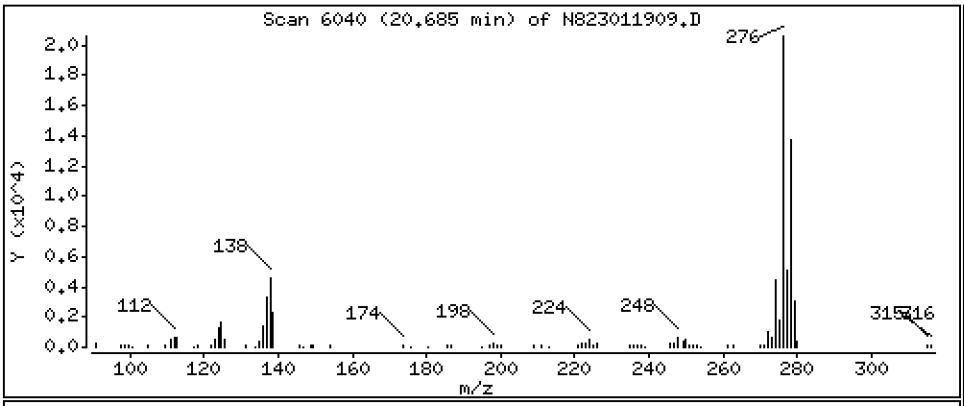
Operator: JZ

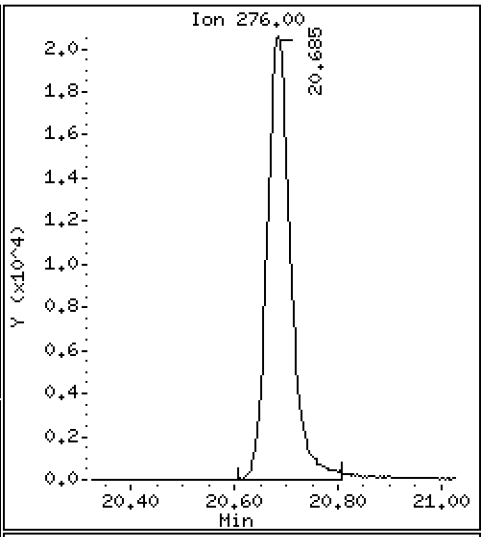
Column phase: Rxi-17sil

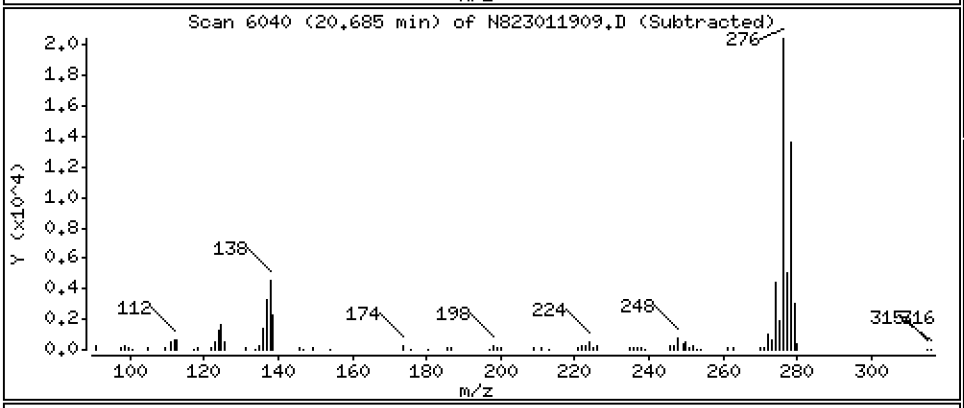
Column diameter: 0.25

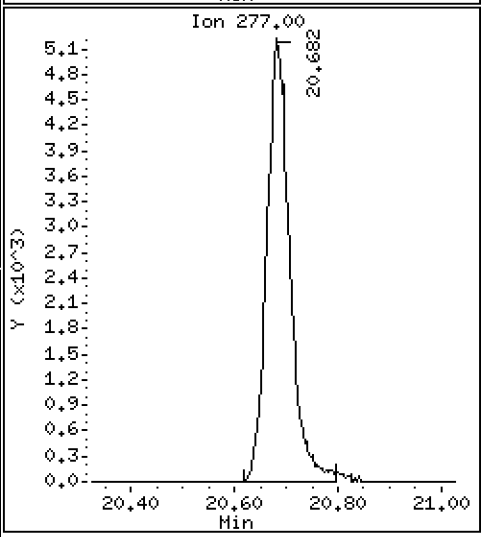
37 Indeno(1,2,3-cd)pyrene

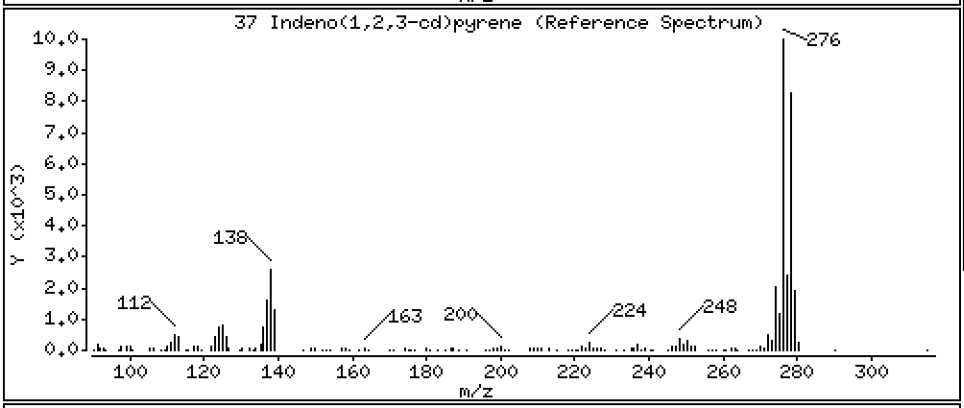
Concentration: 2.689 ug/L

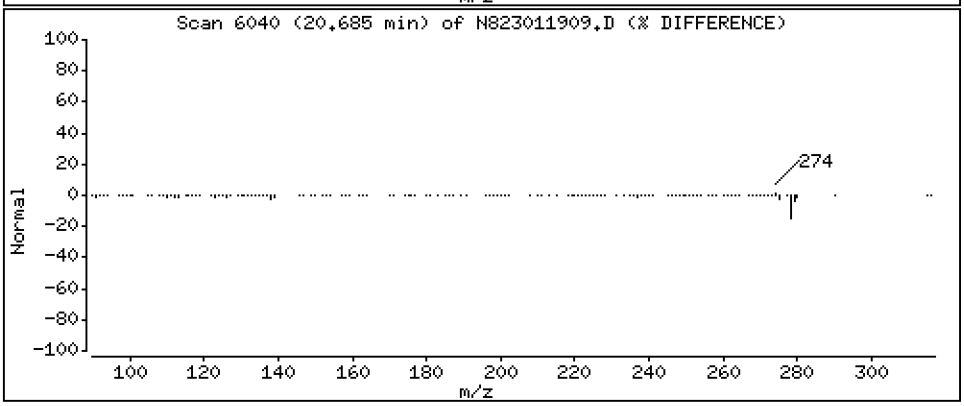












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

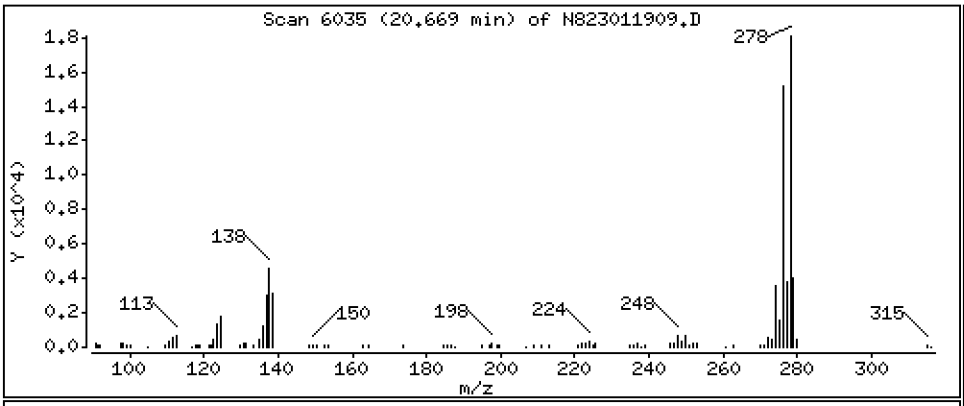
Operator: JZ

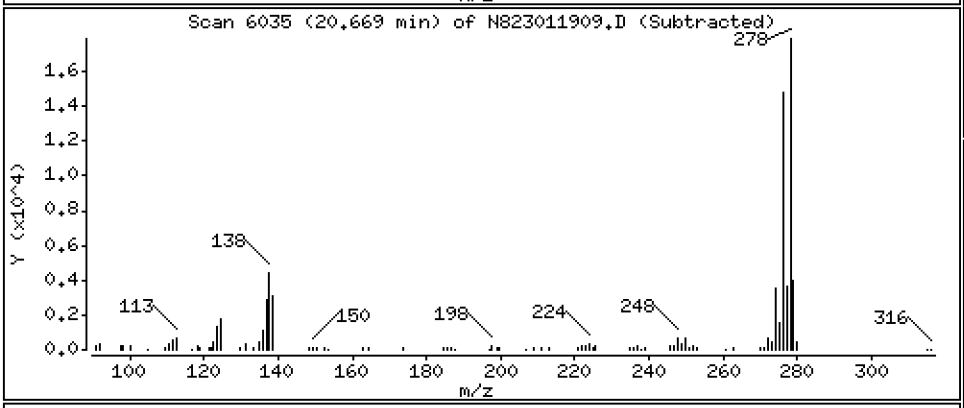
Column phase: Rxi-17sil

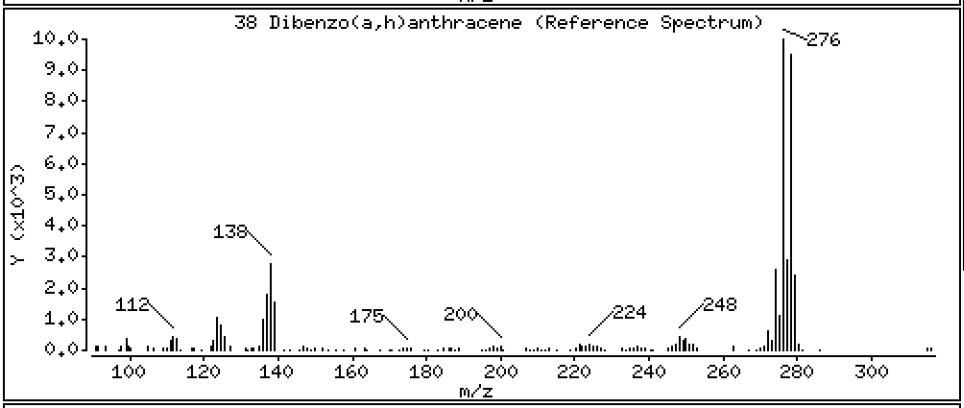
Column diameter: 0.25

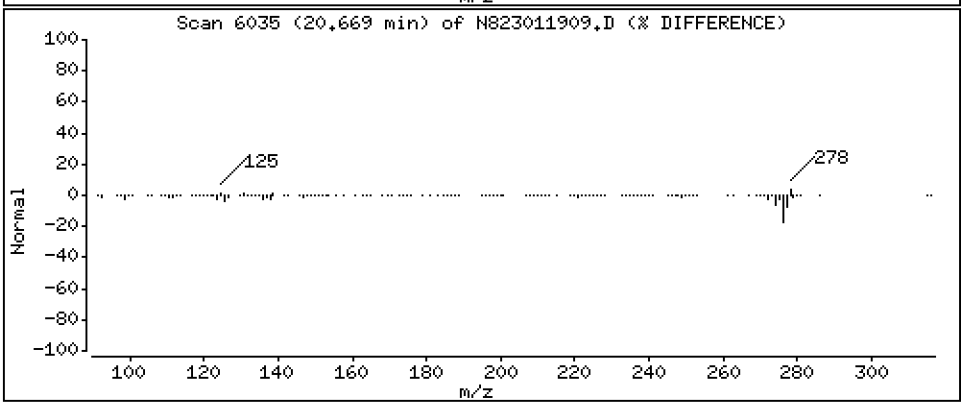
38 Dibenzo(a,h)anthracene

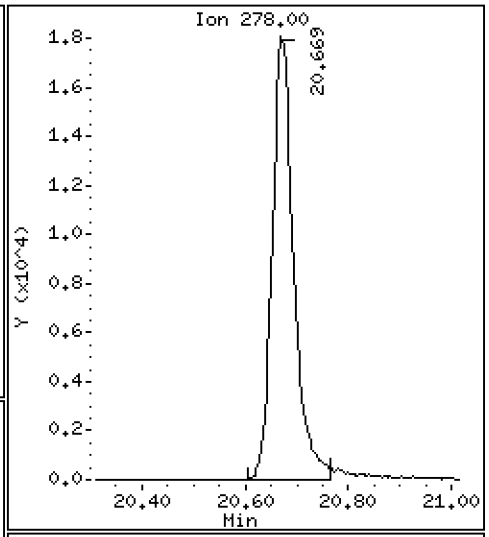
Concentration: 2.493 ug/L

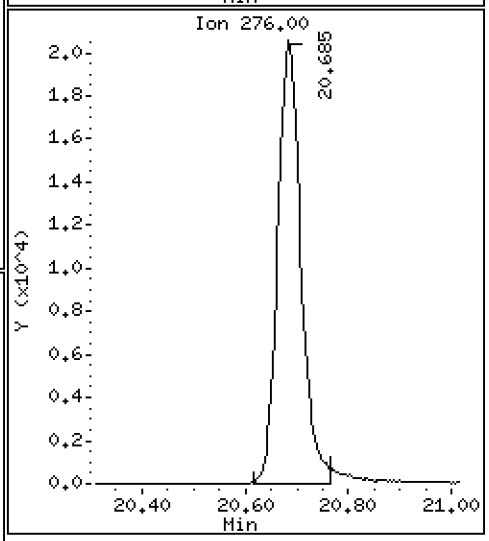












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

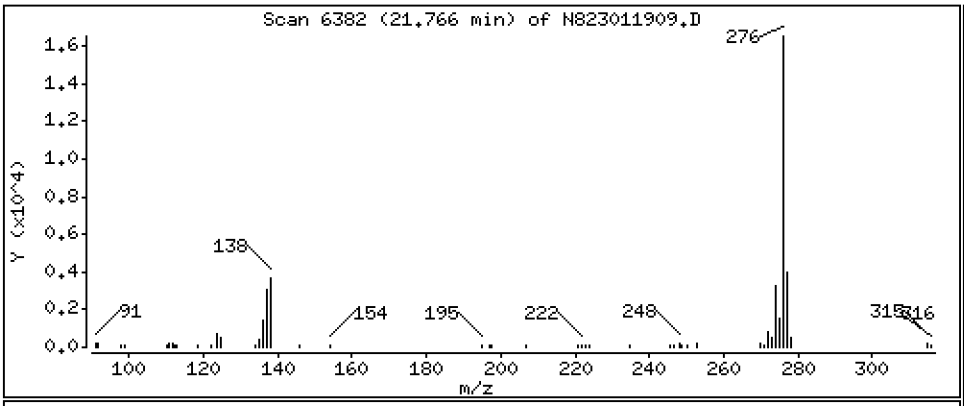
Operator: JZ

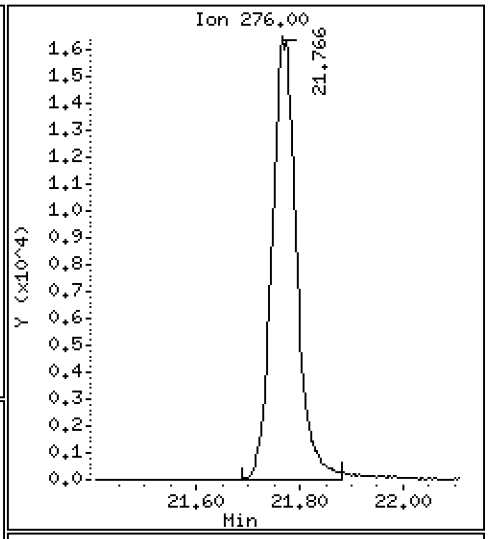
Column phase: Rxi-17sil

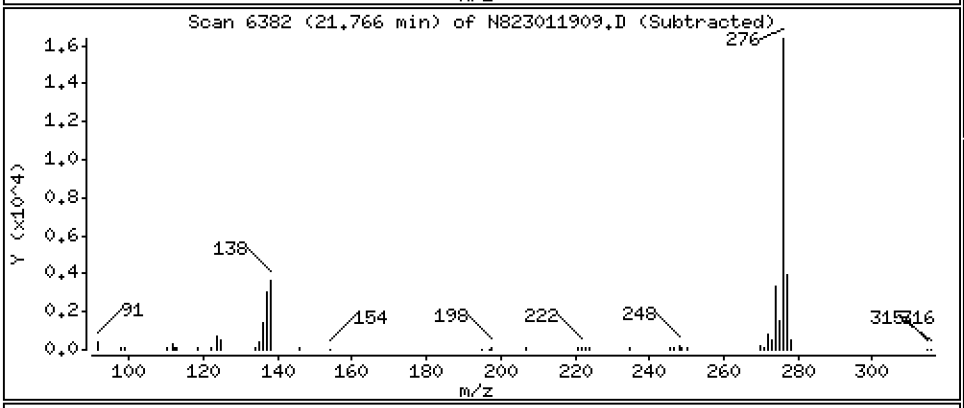
Column diameter: 0.25

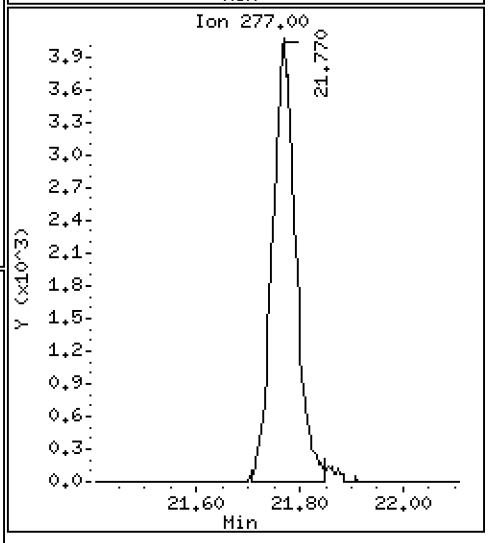
39 Benzo(g,h,i)perylene

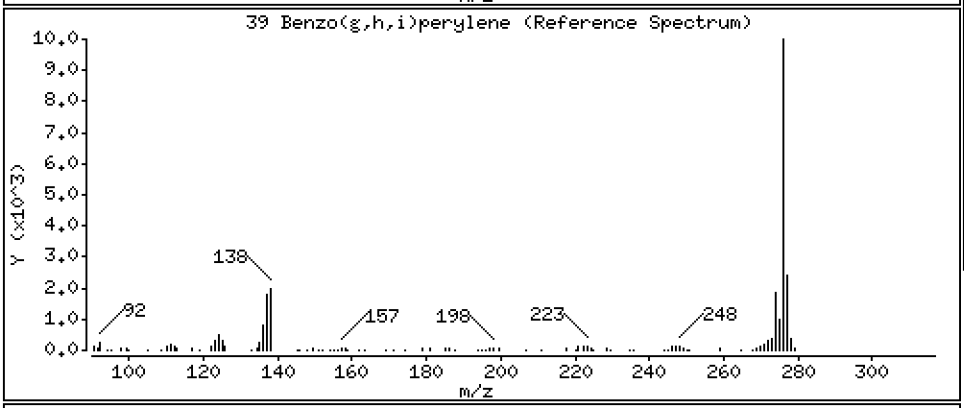
Concentration: 2.483 ug/L

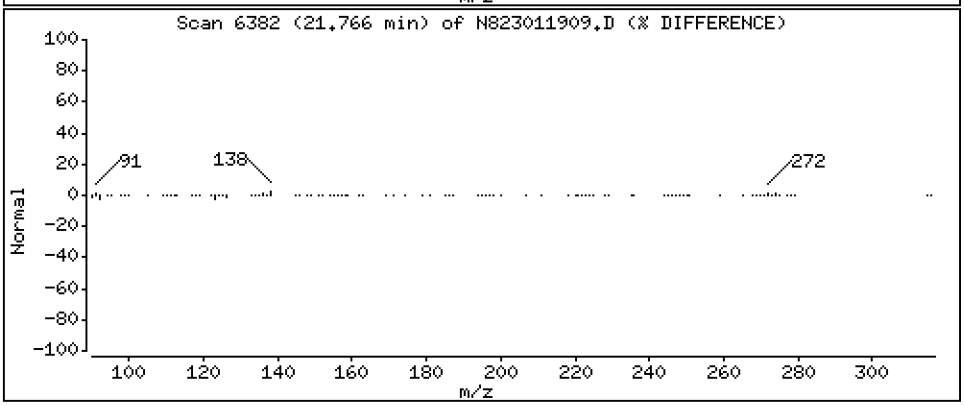












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Lab Smp Id: SLA0213-SCV1
Inj Date : 19-JAN-2023 14:58
Operator : JZ Inst ID: nt8.i
Smp Info : SCV230119
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 25-Jan-2023 21:57 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnascv.sub
Target Version: 4.14
Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 1 Naphthalene-d8	136	4.913	4.906	(1.000)	46346	2.00000	
2 Naphthalene	128	4.941	4.938	(1.006)	56587	2.62597	2.626
$ 3 2-Methylnaphthalene-d10	152	Compound Not Detected.					
4 2-Methylnaphthalene	141	5.694	5.687	(1.159)	31650	2.67019	2.670
5 1-methylnaphthalene	141	5.890	5.883	(1.199)	31873	2.64949	2.649
9 Acenaphthylene	152	7.091	7.085	(0.985)	59018	2.82060	2.821
* 10 Acenaphthene-d10	164	7.202	7.196	(1.000)	27709	2.00000	
11 Acenaphthene	153	7.249	7.246	(1.007)	36454	2.60022	2.600
12 Dibenzofuran	168	7.401	7.395	(1.028)	60898	2.85987	2.860
14 Fluorene	166	7.878	7.872	(1.094)	43507	2.63066	2.631
* 15 Phenanthrene-d10	188	9.238	9.235	(1.000)	51685	2.00000	
16 Phenanthrene	178	9.276	9.270	(1.004)	61815	2.44841	2.448
17 Anthracene	178	9.317	9.311	(1.009)	52064	2.27006	2.270
22 Fluoranthene	202	11.059	11.053	(1.197)	72902	2.65276	2.653
$ 21 Fluoranthene-d10	212	Compound Not Detected.					
23 Pyrene	202	11.578	11.572	(0.815)	71115	2.46242	2.462
24 Benzo(a)anthracene	228	14.082	14.076	(0.991)	67725	2.58725	2.587
* 25 Chrysene-d12	240	14.212	14.202	(1.000)	46582	2.00000	
27 Chrysene	228	14.285	14.278	(1.005)	66872	2.39976	2.400
28 Benzo(b)fluoranthene	252	16.833	16.821	(0.929)	60946	2.50689	2.507
29 Benzo(k)fluoranthene	252	16.893	16.884	(0.932)	63249	2.65606	2.656
31 Total Benzofluoranthenes	252	16.893	16.821	(0.932)	126178	5.48025	5.480(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572
*	33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000	
	37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689
$	36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
	38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493
	39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483
	35 Perylene	252	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011909.D
Lab Smp Id: SLA0213-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

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

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 14:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

No RRT check performed

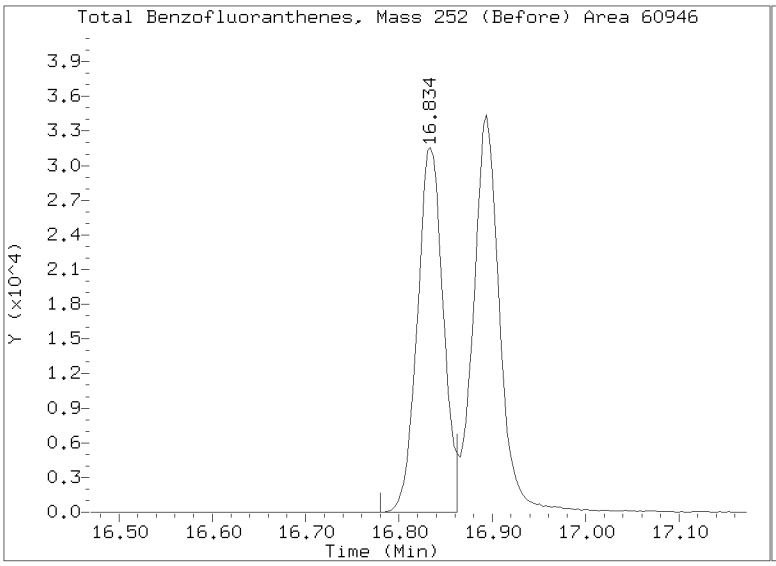
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

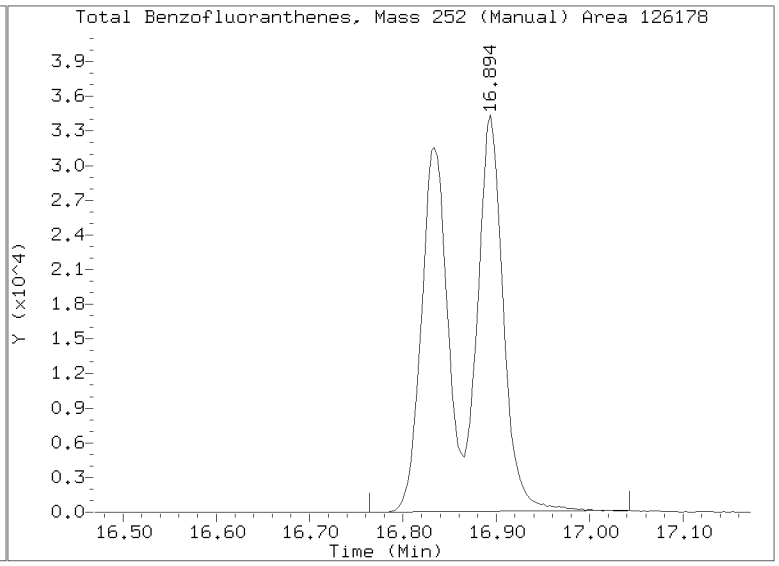
Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D
Injection Date: 19-JAN-2023 14:58
Lab ID:SLA0213-SCV1 Client ID:
Report Date: 01/25/2023 22:00





SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00049
Laboratory ID: SLC0238-SCV1
Sequence: SLC0238
Sequence Name: SCV 5.0
Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
1,4-Dichlorobenzene	5.0000	4.8	-3.2	20.00
1,2-Dichlorobenzene	5.0000	4.7	-6.4	20.00
Benzyl Alcohol	5.0000	5.2	3.6	20.00
Benzoic acid	10.000	6.7	-32.5 *	20.00
2,4-Dimethylphenol	5.0000	3.7	-26.8 *	20.00
1,2,4-Trichlorobenzene	5.0000	4.4	-11.1	20.00
N-Nitrosodiphenylamine	5.0000	5.1	1.6	20.00
Pentachlorophenol	5.0000	4.4	-11.6	20.00
2-Fluorophenol	7.5000	0.00		
p-Terphenyl-d14	5.0000	0.00154	-100	

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

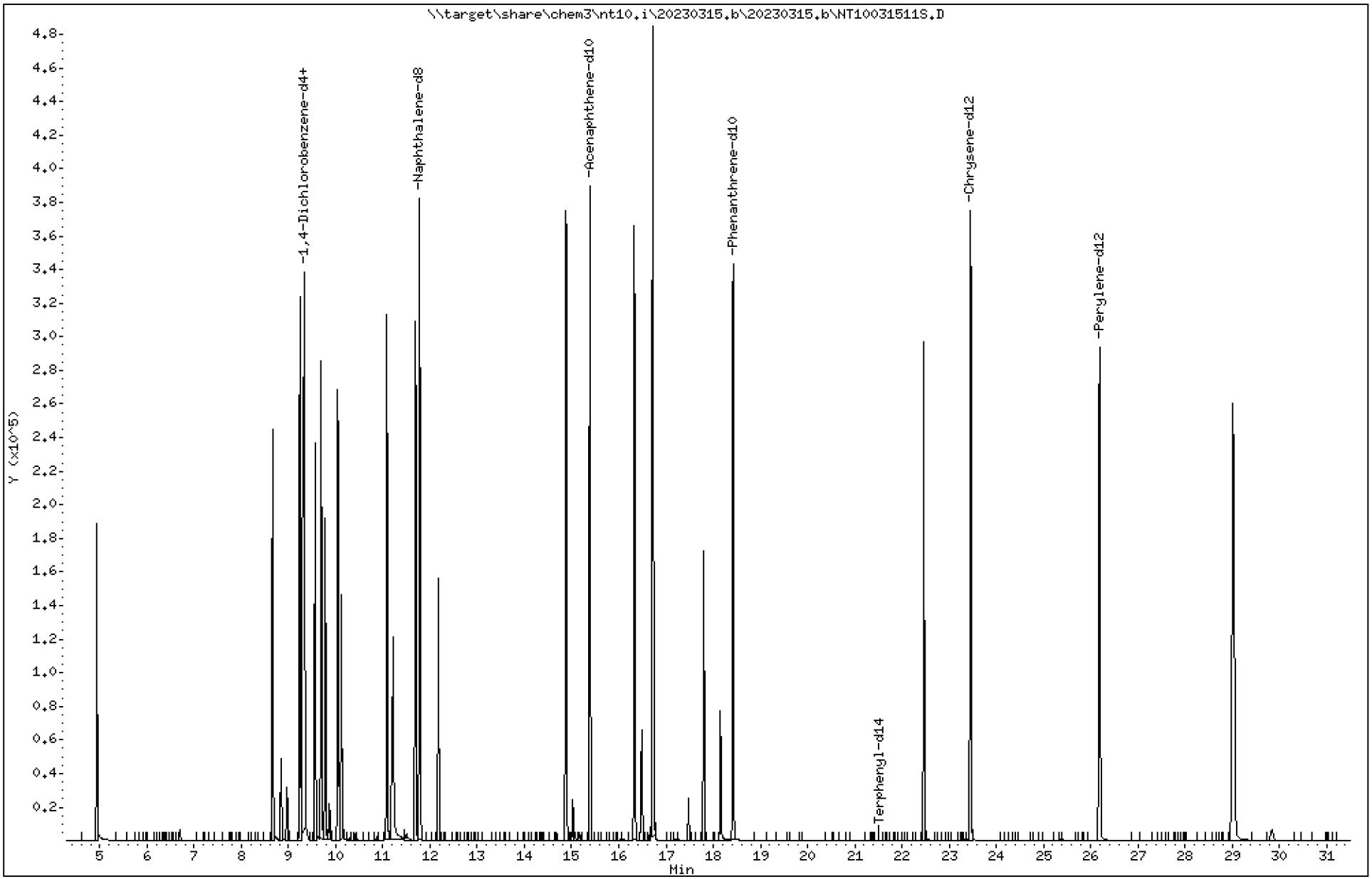
Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

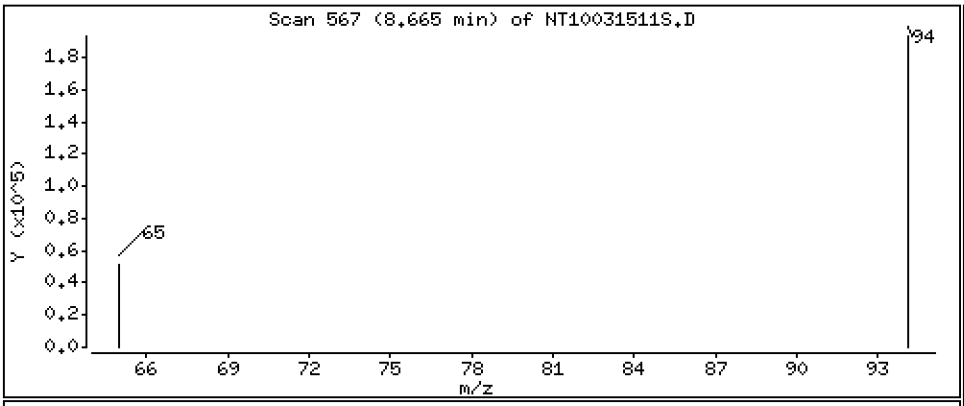
Operator: JGR

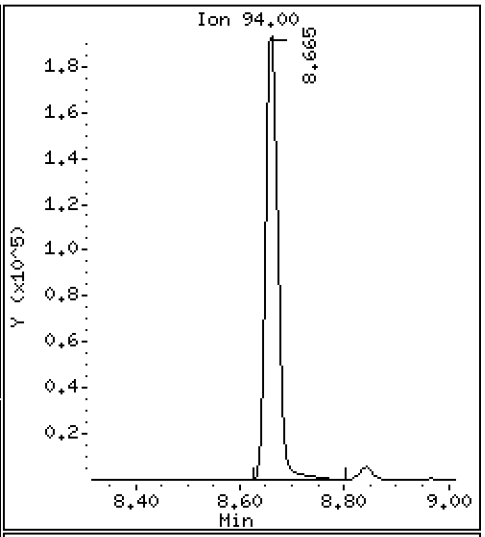
Column phase: ZB-5msi

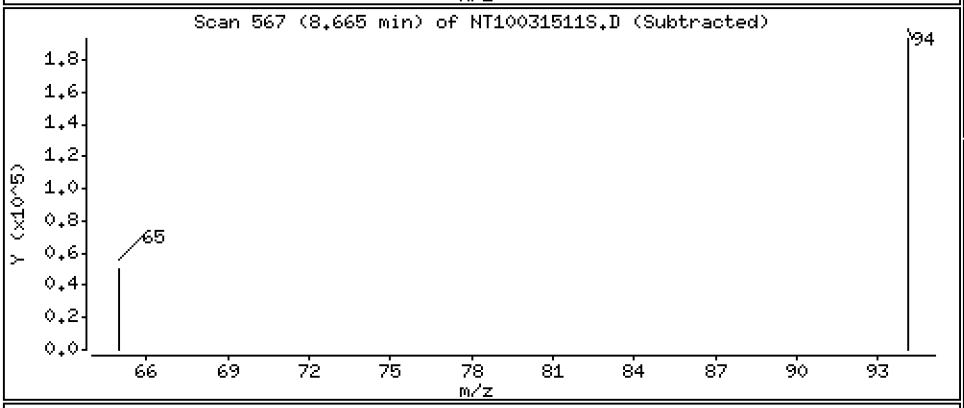
Column diameter: 0.25

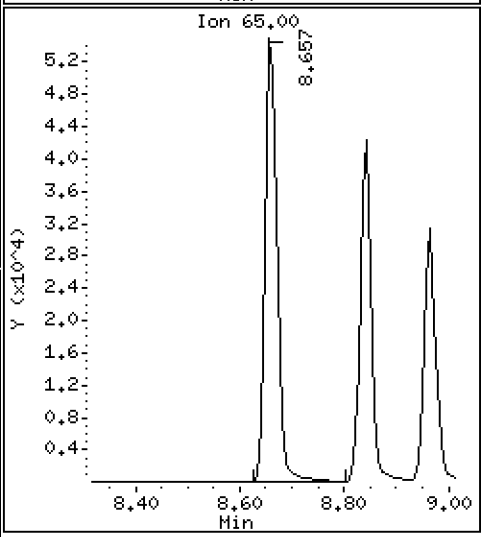
3 Phenol

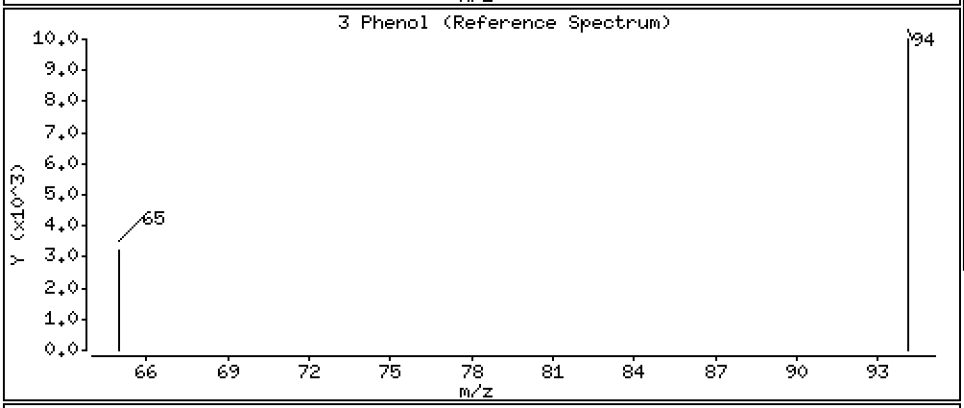
Concentration: 4.373 ug/L

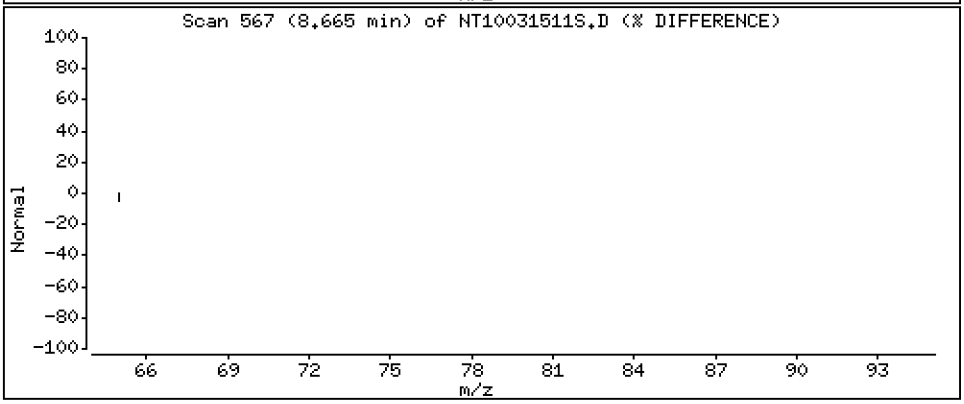












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

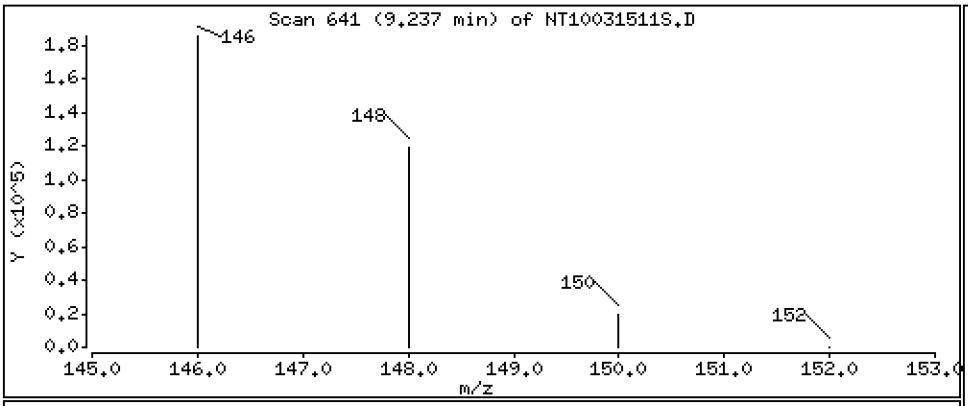
Operator: JGR

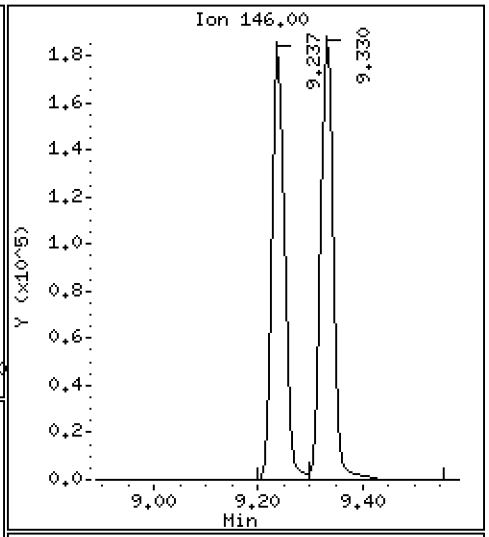
Column phase: ZB-5msi

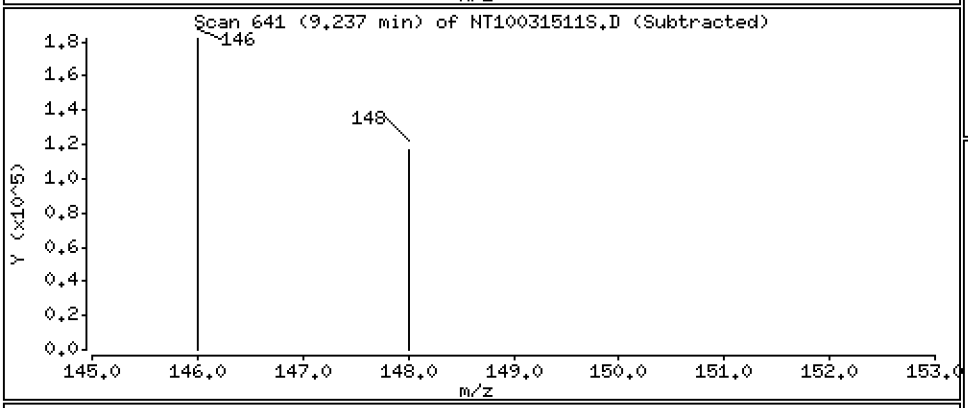
Column diameter: 0.25

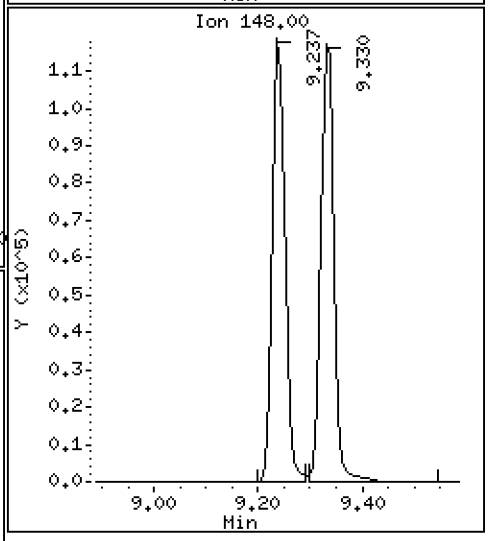
7 1,3-Dichlorobenzene

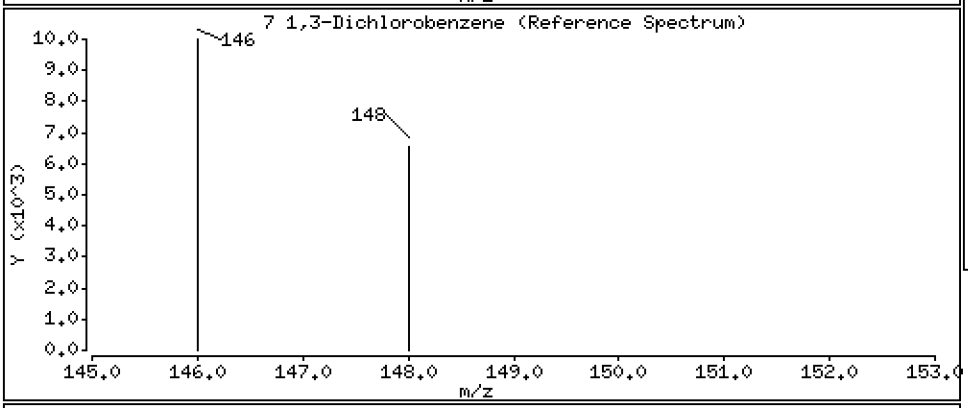
Concentration: 4.643 ug/L

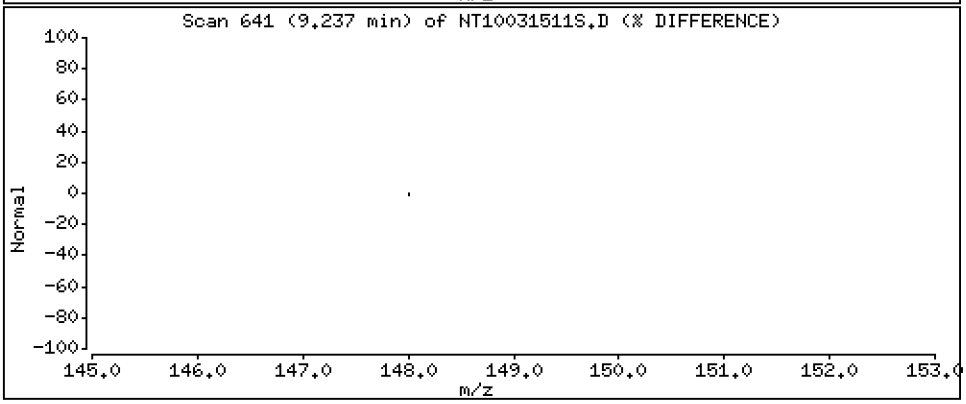












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

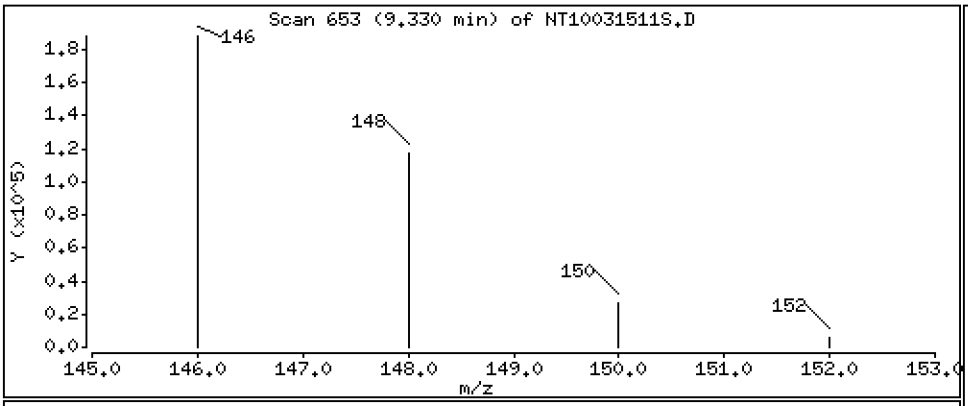
Operator: JGR

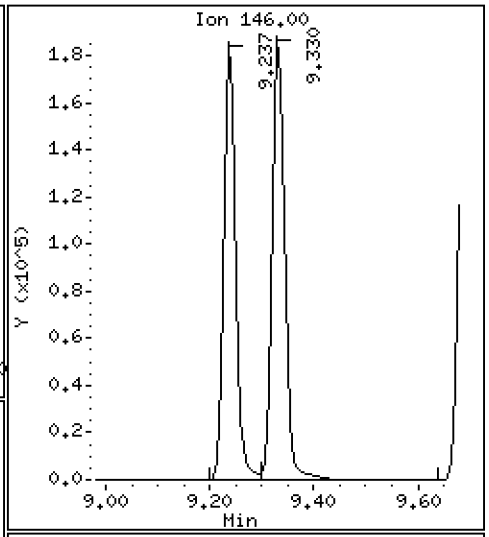
Column phase: ZB-5msi

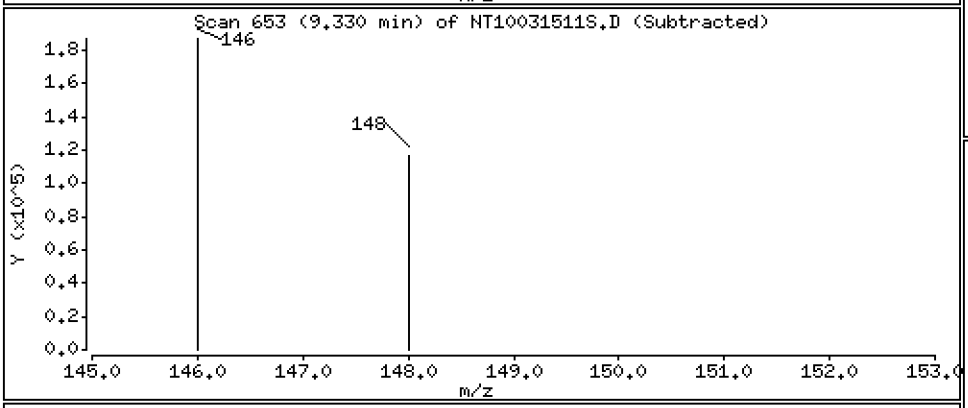
Column diameter: 0.25

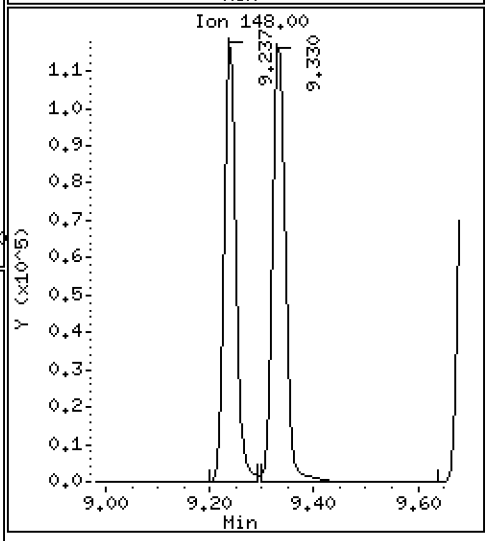
9 1,4-Dichlorobenzene

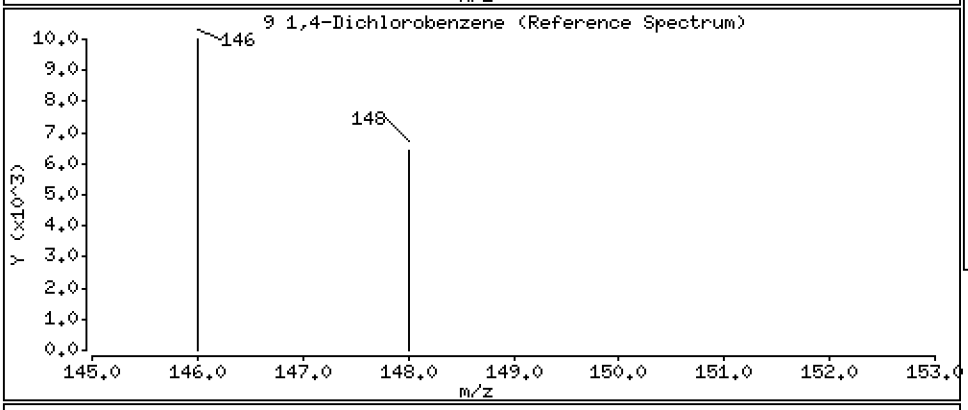
Concentration: 4.838 ug/L

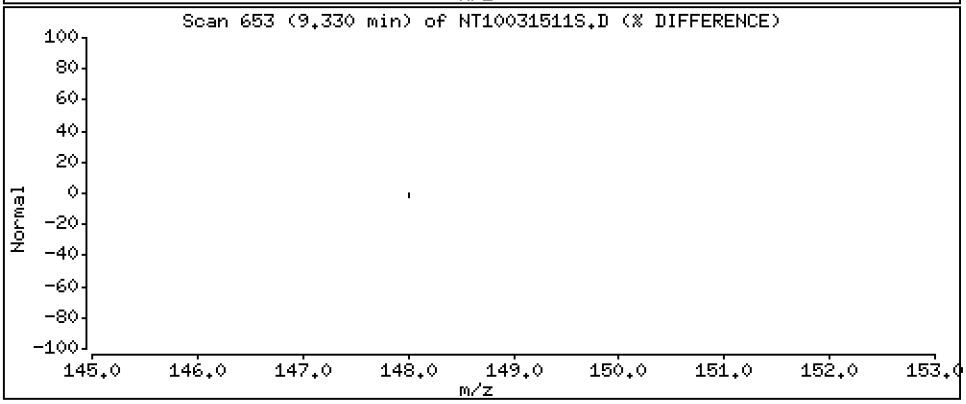












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

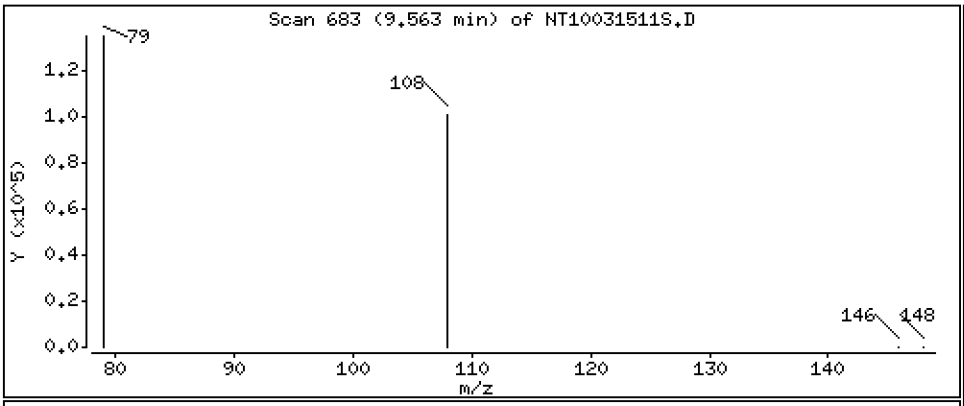
Operator: JGR

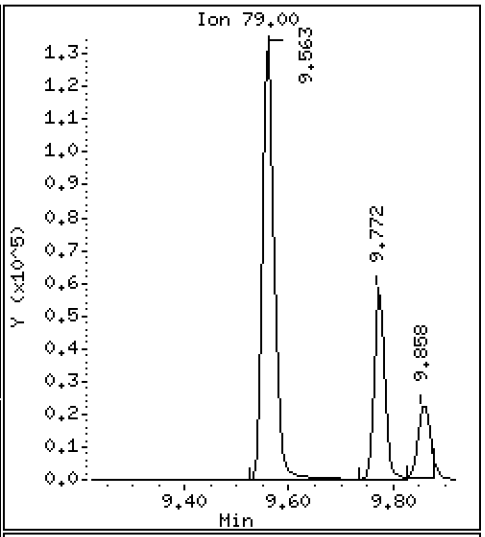
Column phase: ZB-5msi

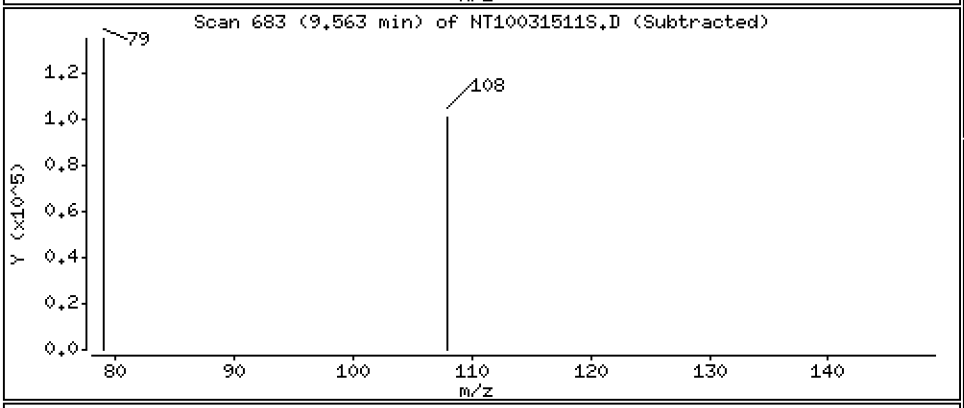
Column diameter: 0.25

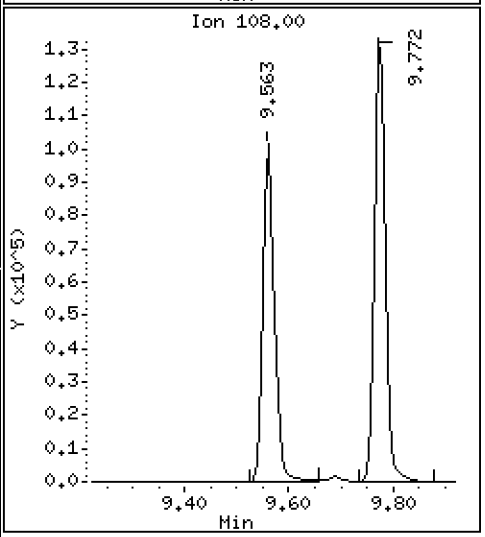
11 Benzyl alcohol

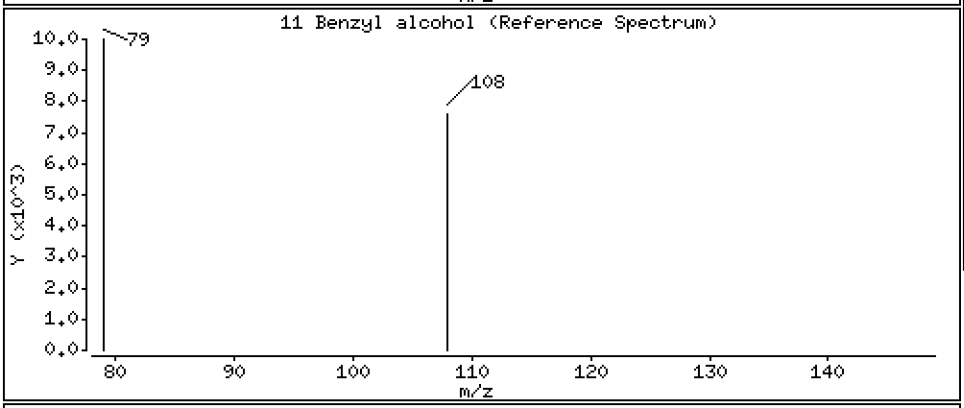
Concentration: 5.181 ug/L

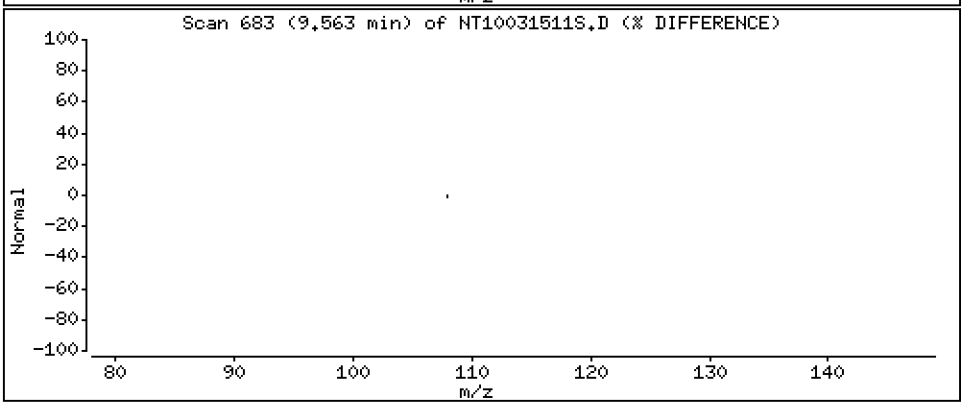












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

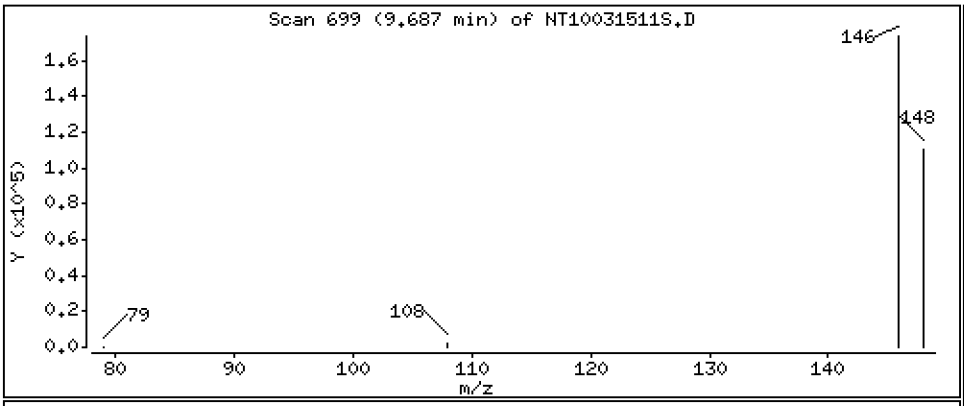
Operator: JGR

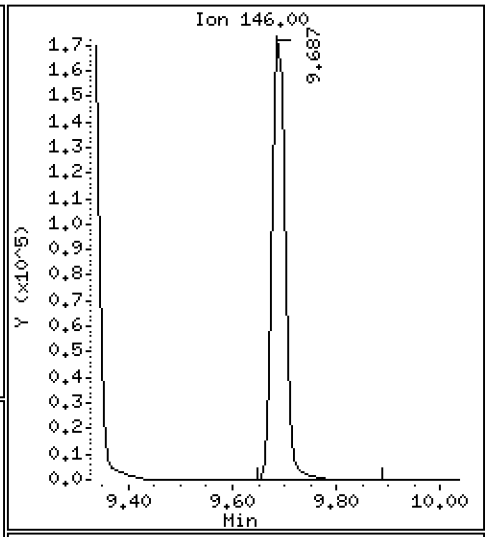
Column phase: ZB-5msi

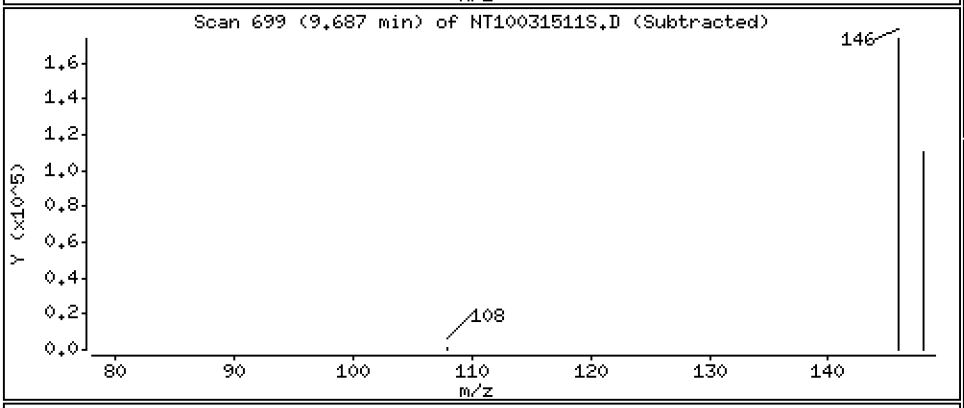
Column diameter: 0.25

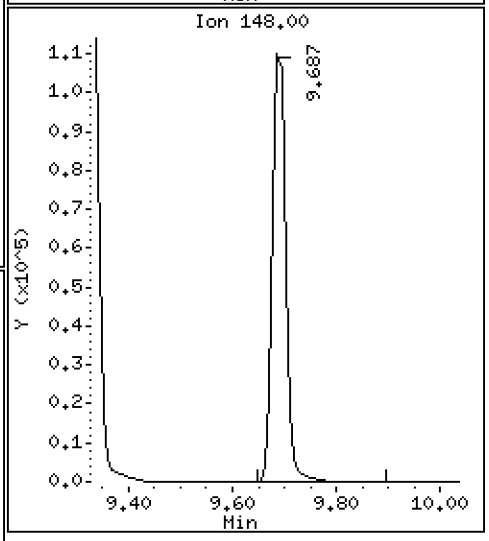
12 1,2-Dichlorobenzene

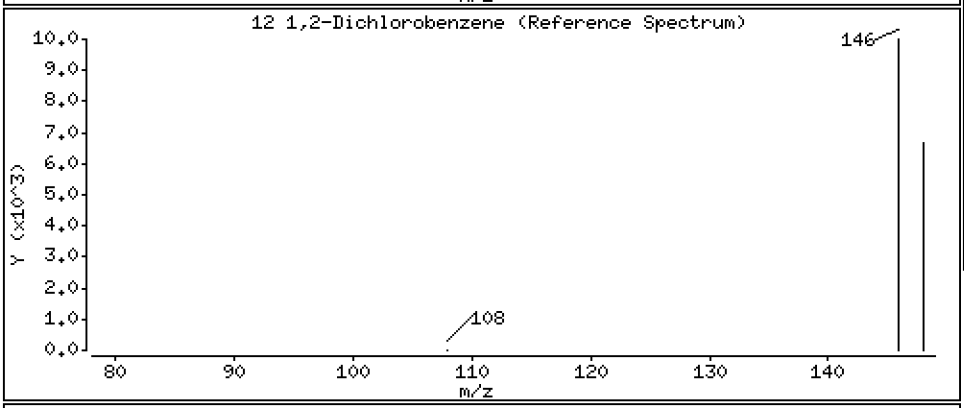
Concentration: 4.679 ug/L

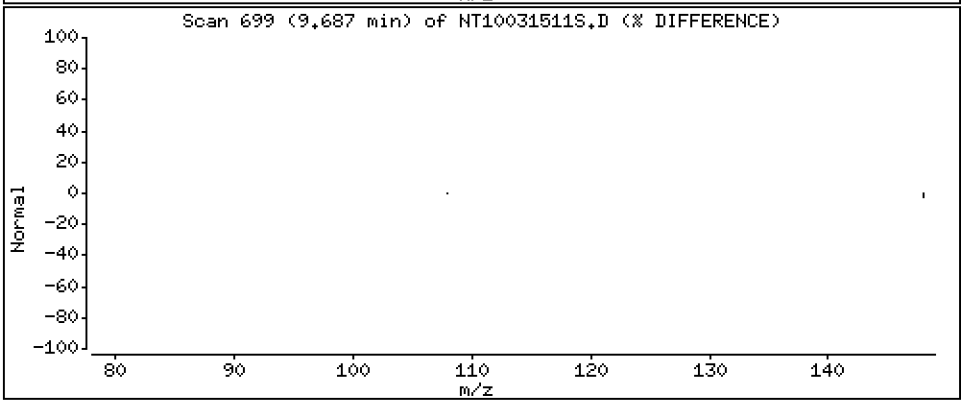












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

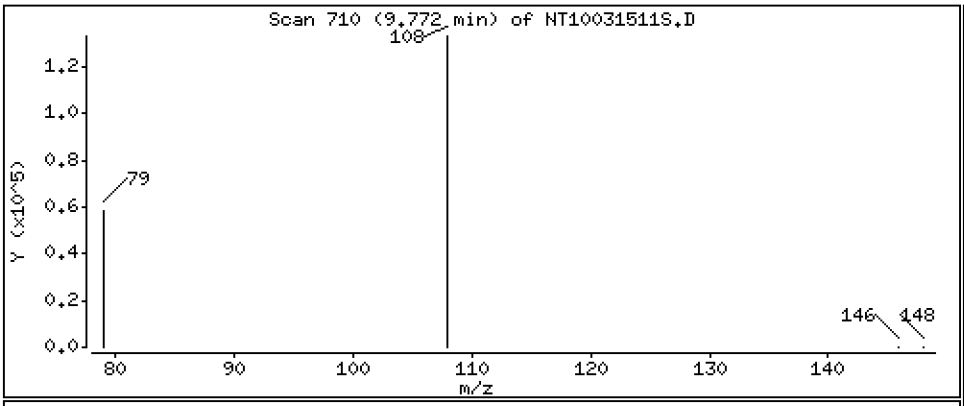
Operator: JGR

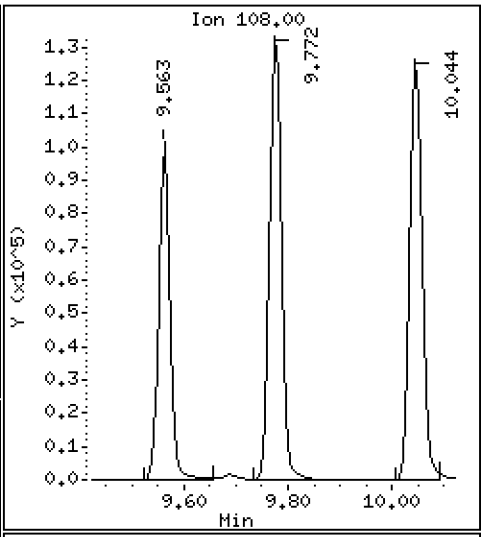
Column phase: ZB-5msi

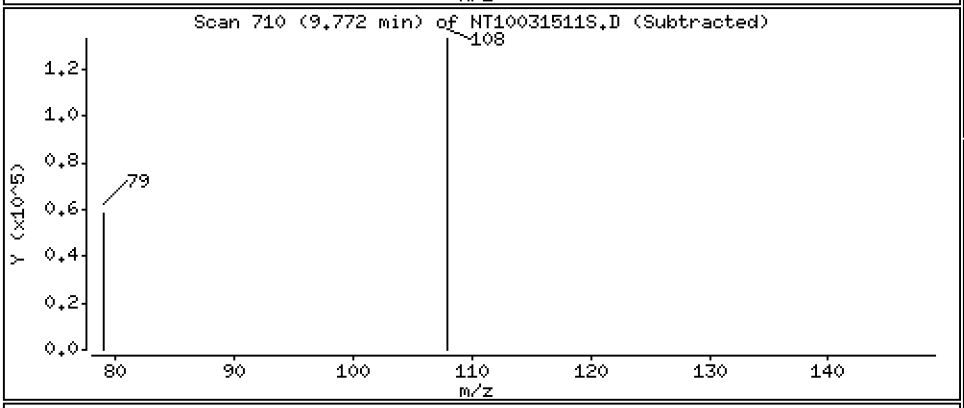
Column diameter: 0.25

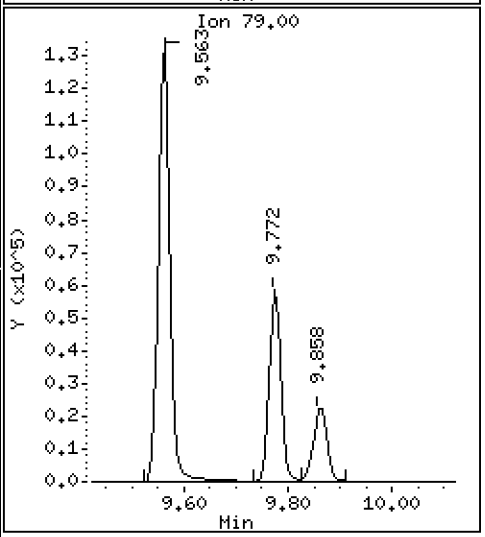
13 2-Methylphenol

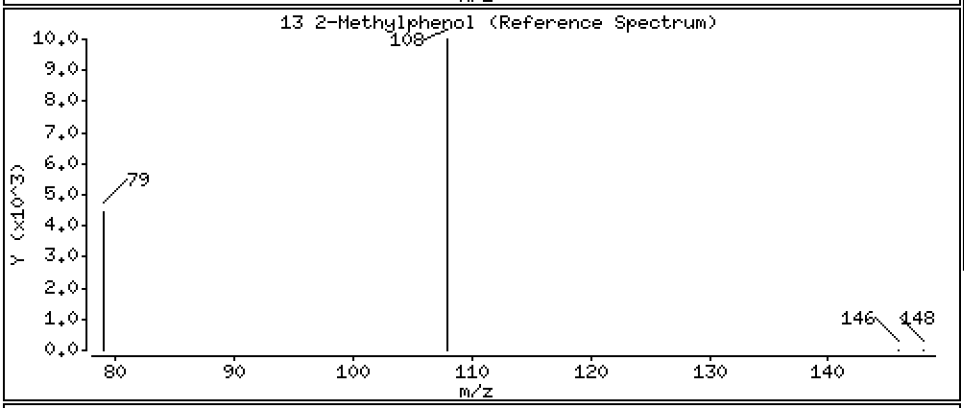
Concentration: 4.197 ug/L

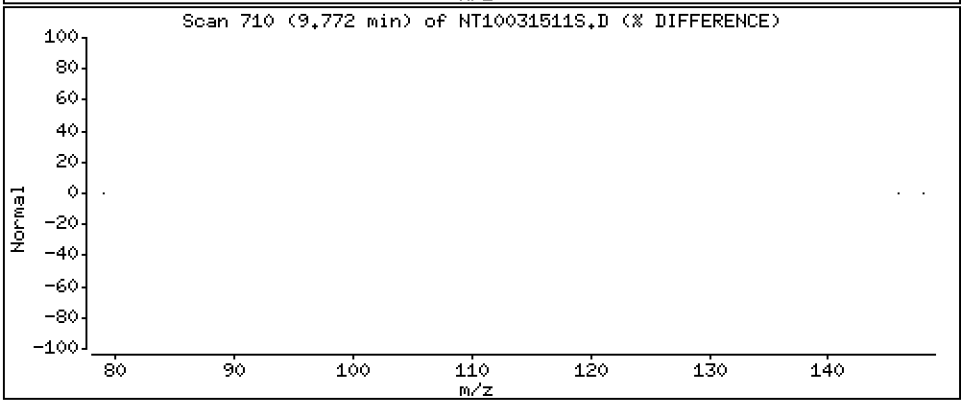












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

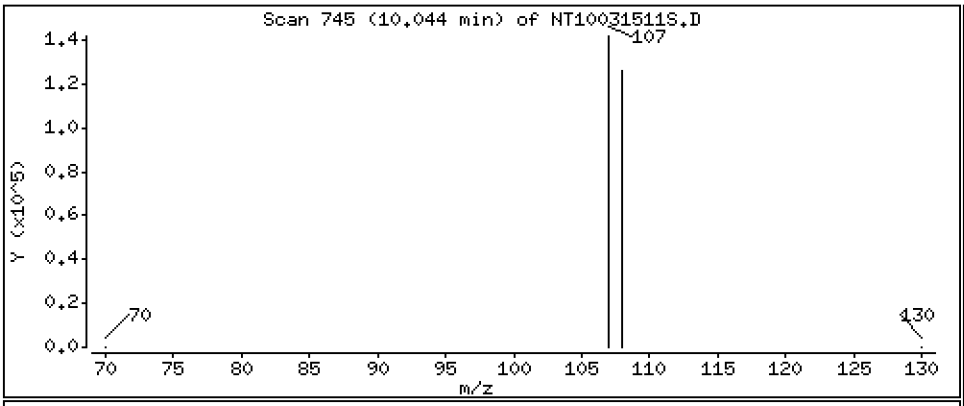
Operator: JGR

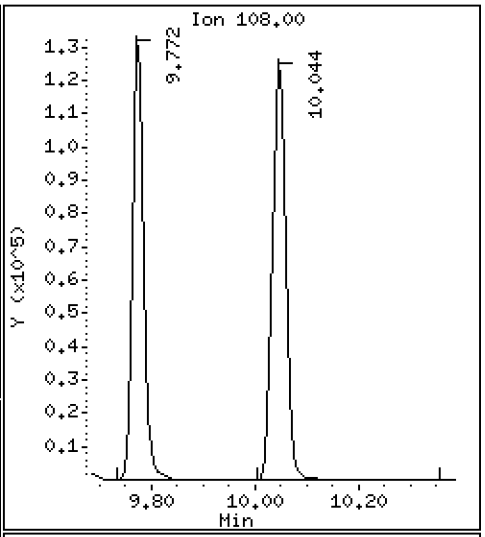
Column phase: ZB-5msi

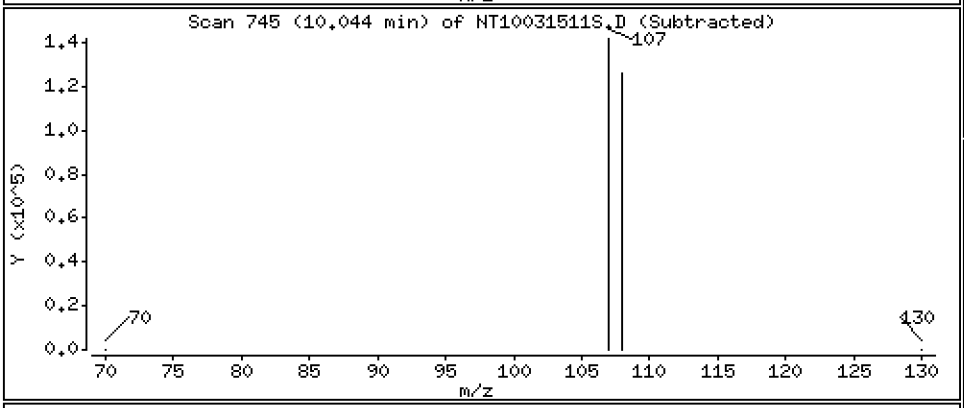
Column diameter: 0.25

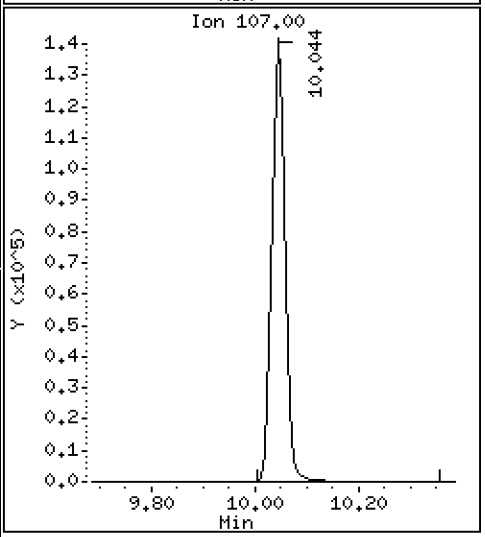
15 4-Methylphenol

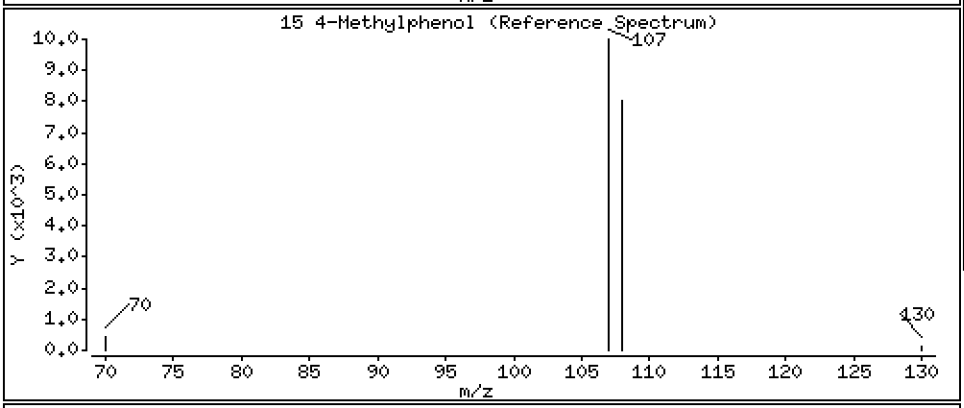
Concentration: 4.463 ug/L

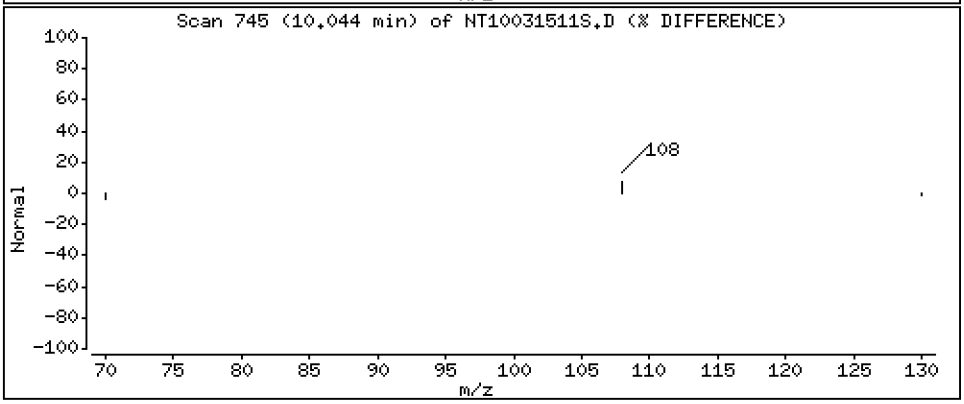












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

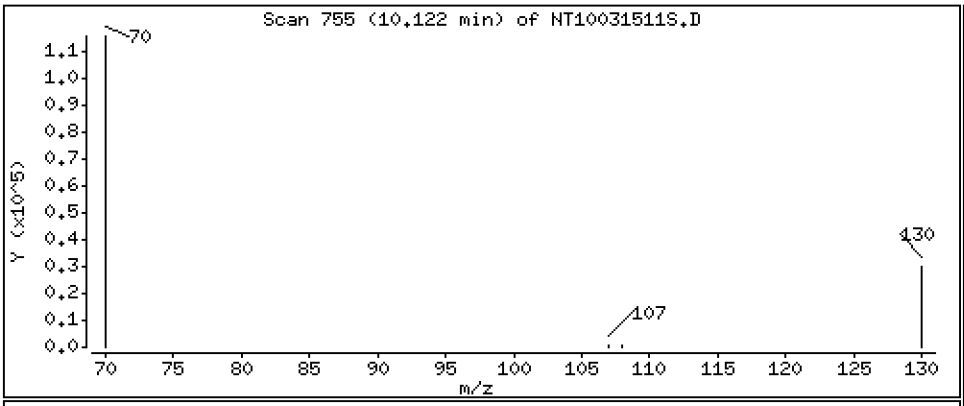
Operator: JGR

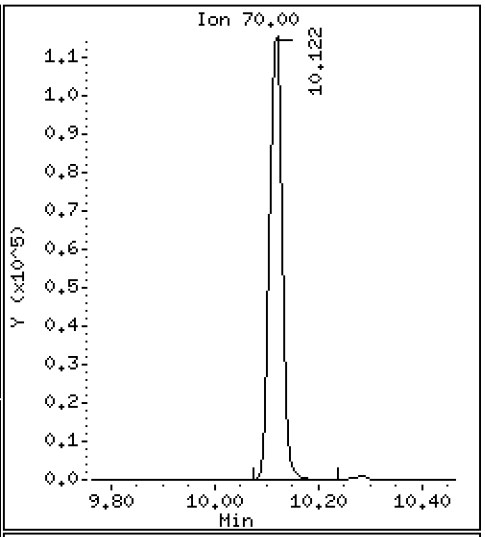
Column phase: ZB-5msi

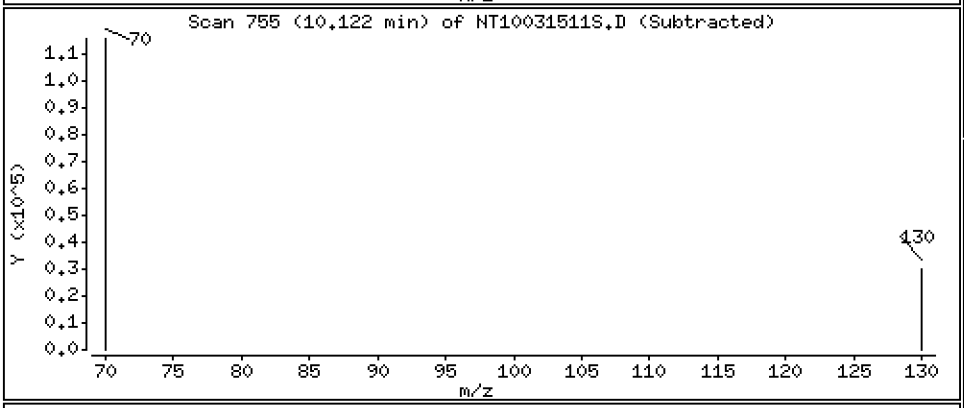
Column diameter: 0.25

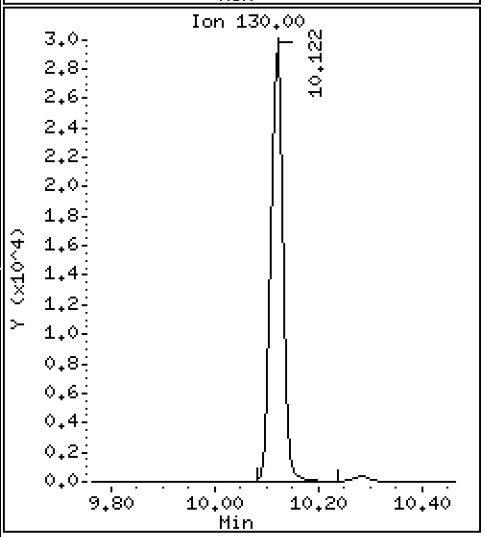
16 N-Nitroso-di-n-propylamine

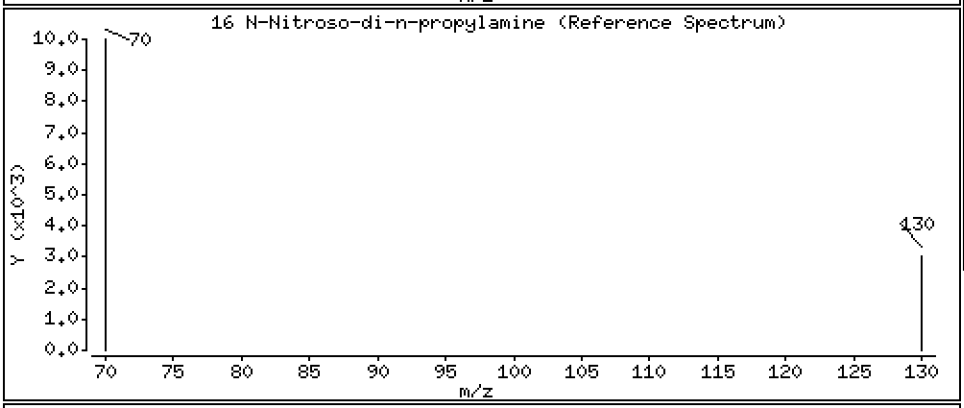
Concentration: 5.282 ug/L

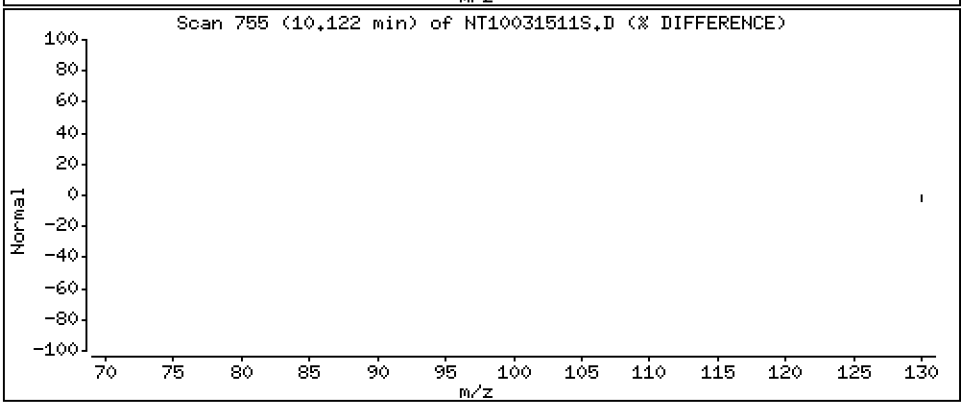












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

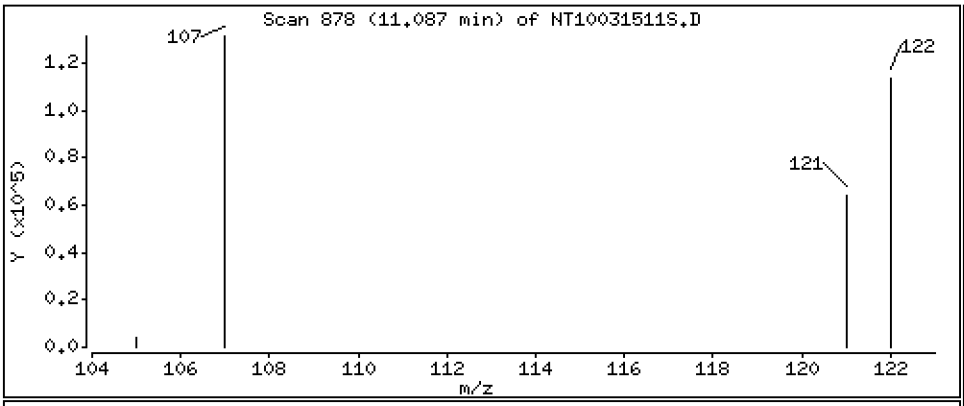
Operator: JGR

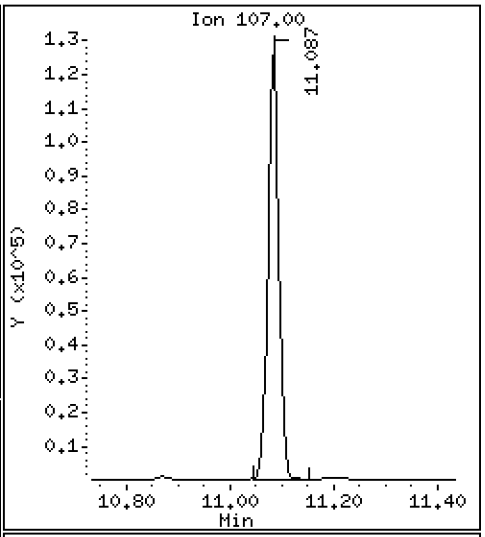
Column phase: ZB-5msi

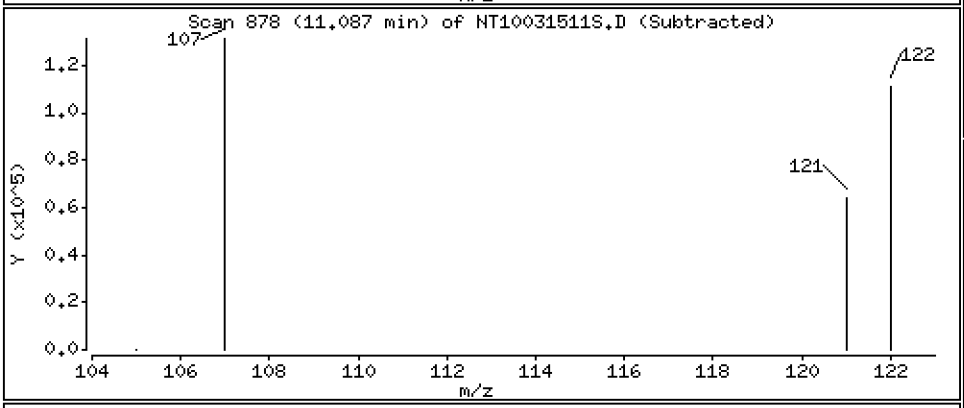
Column diameter: 0.25

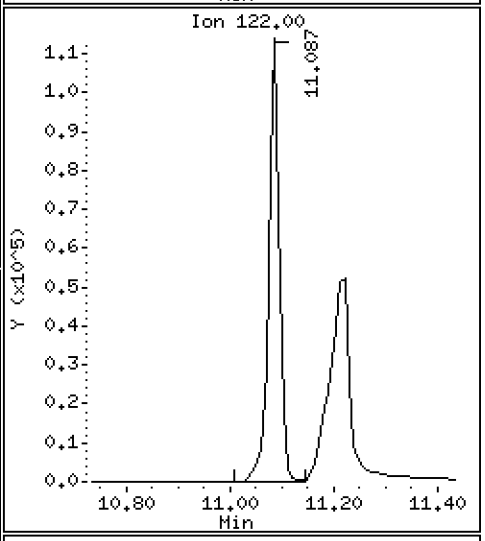
22 2,4-Dimethylphenol

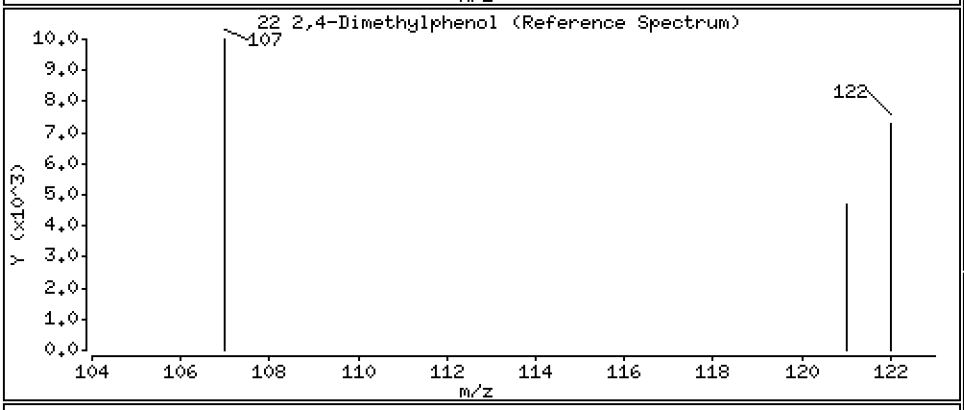
Concentration: 3.660 ug/L

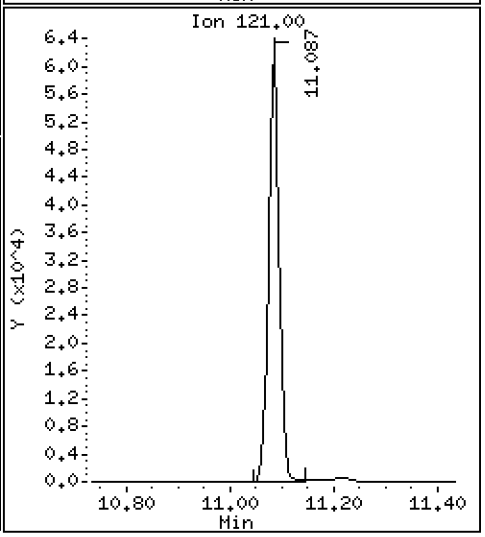


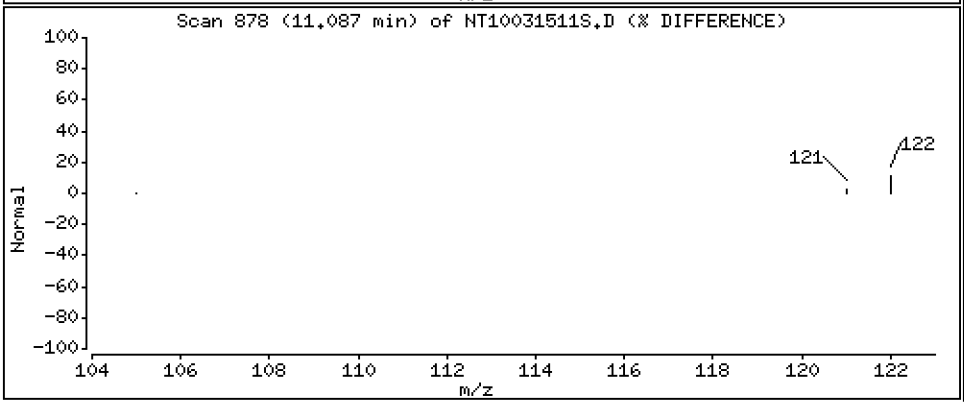












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

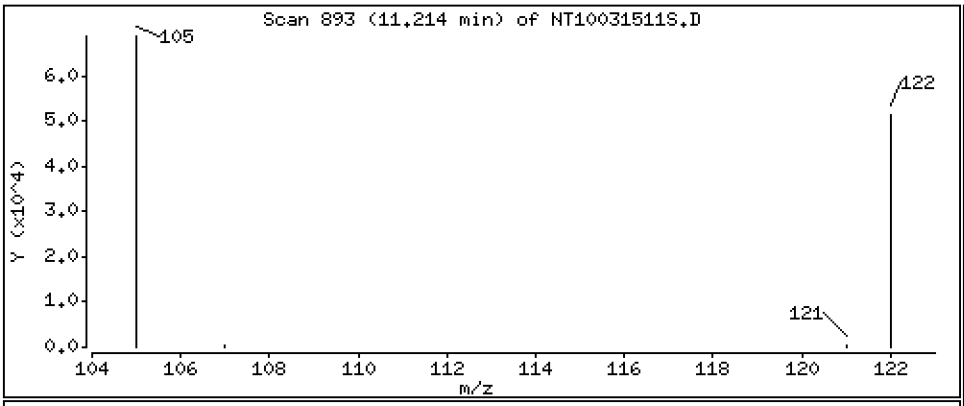
Operator: JGR

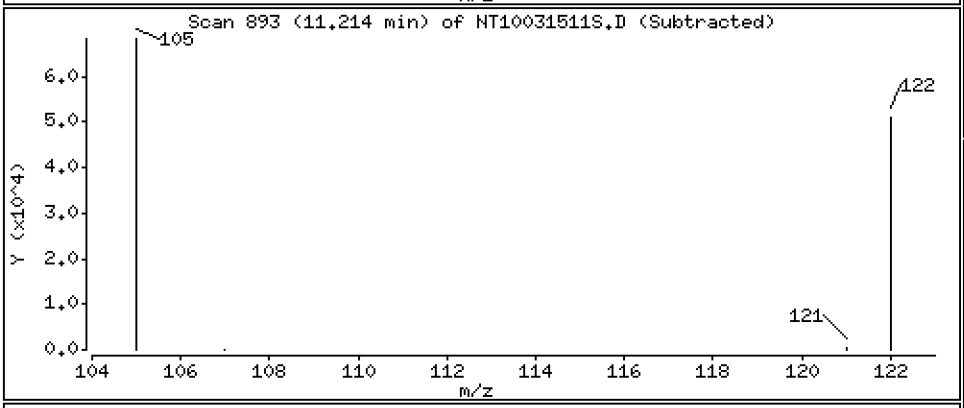
Column phase: ZB-5msi

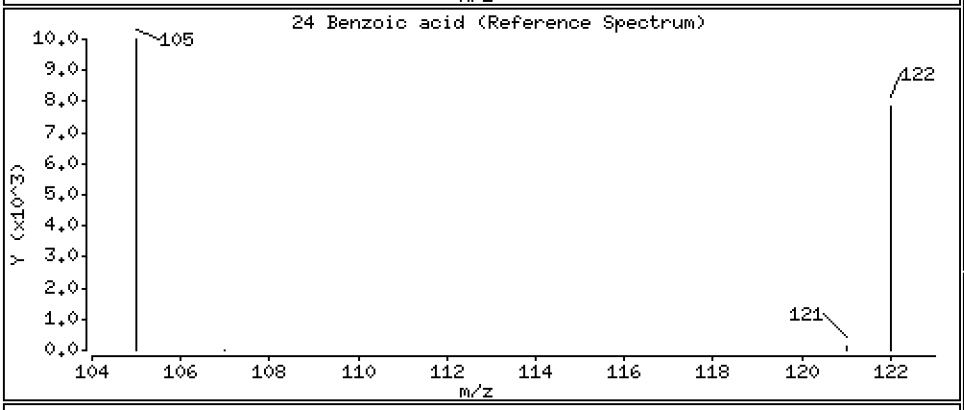
Column diameter: 0.25

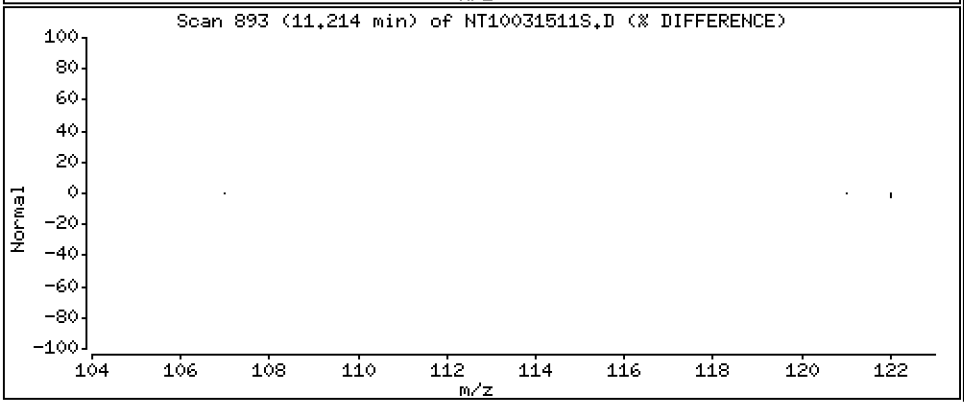
24 Benzoic acid

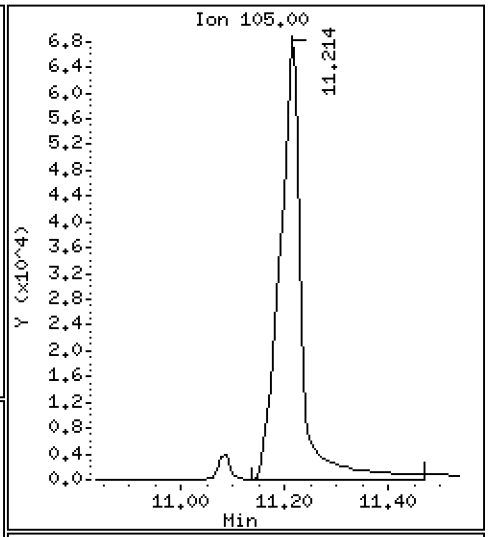
Concentration: 6.746 ug/L

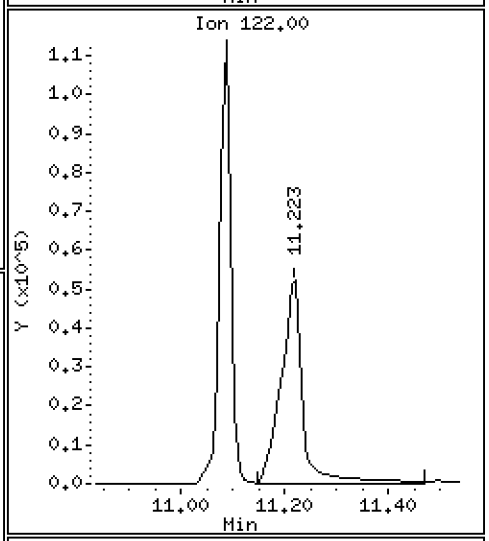


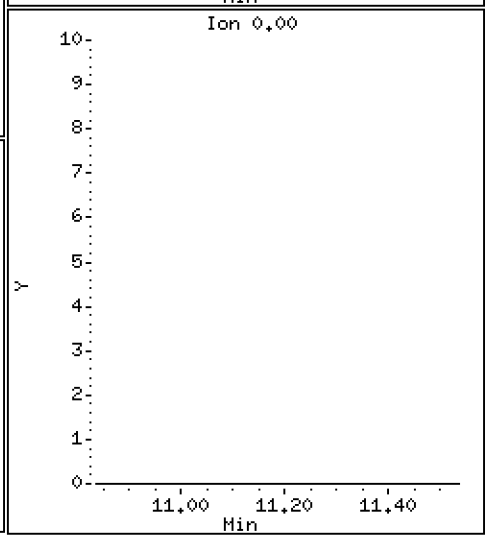












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

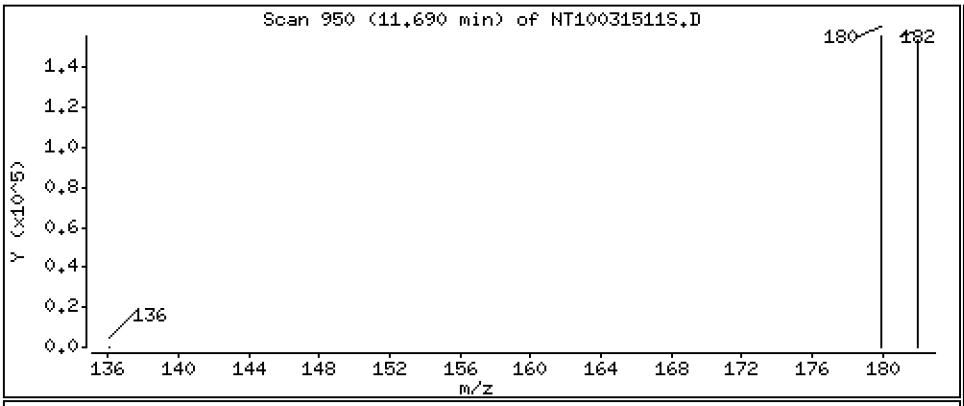
Operator: JGR

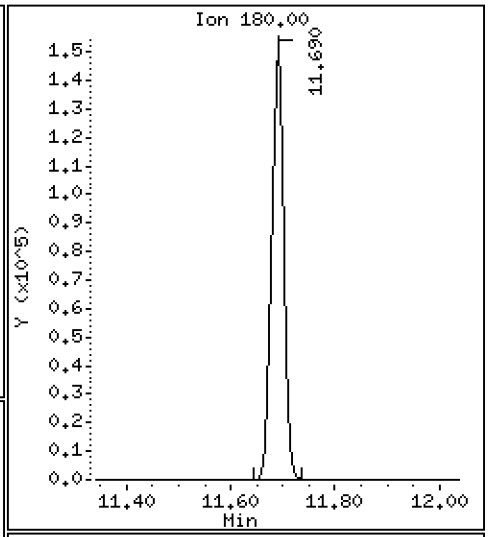
Column phase: ZB-5msi

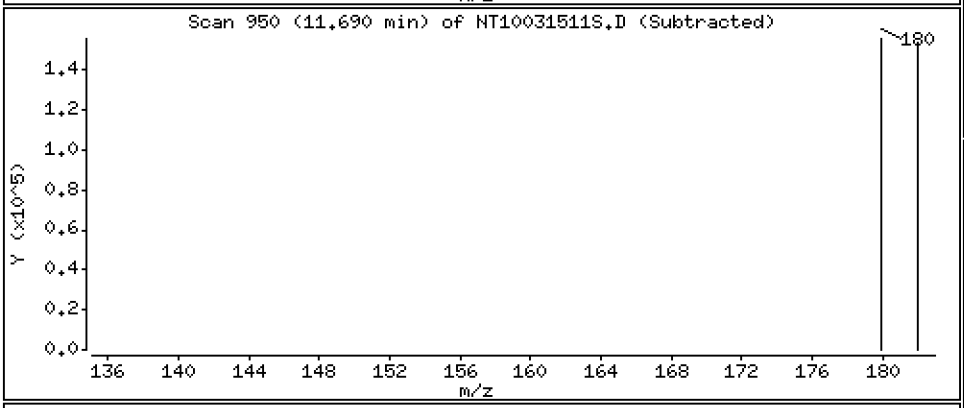
Column diameter: 0.25

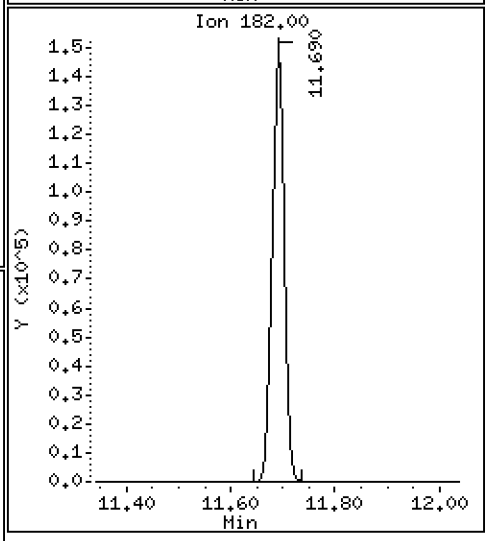
26 1,2,4-Trichlorobenzene

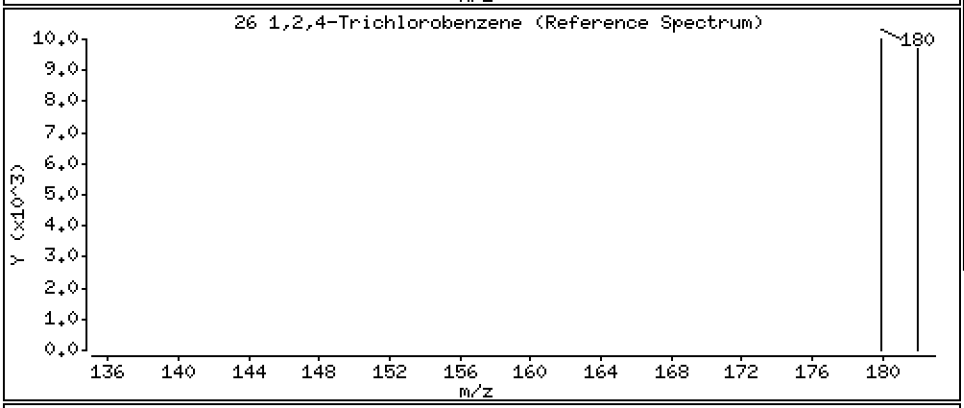
Concentration: 4.445 ug/L

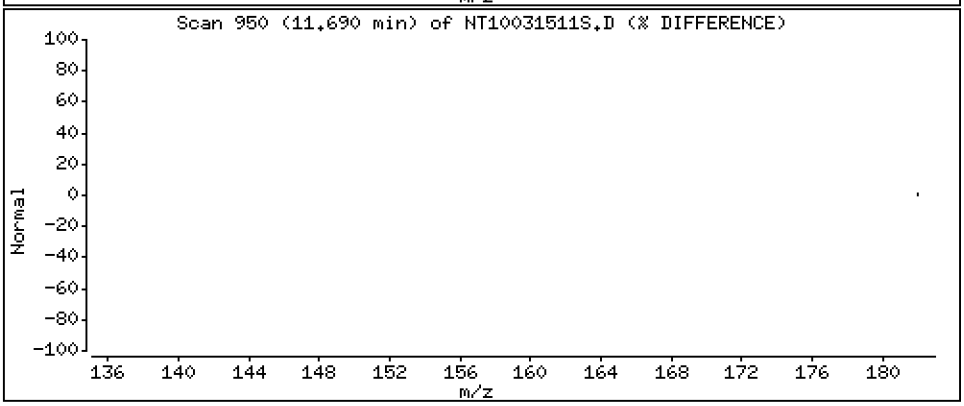












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

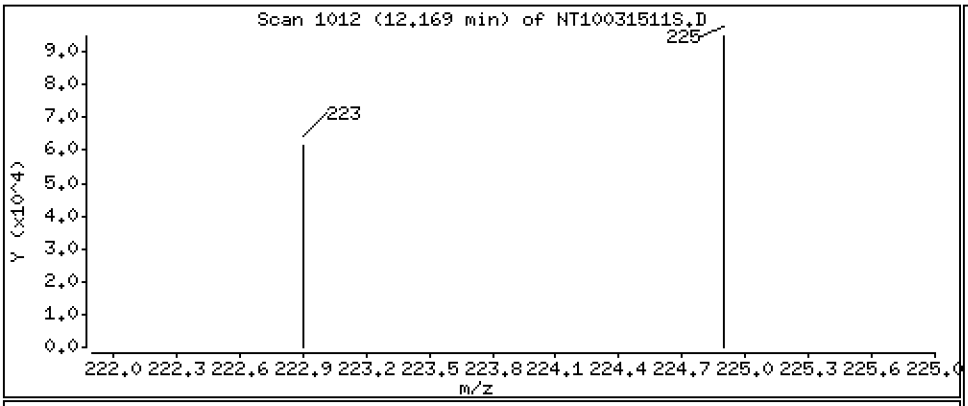
Operator: JGR

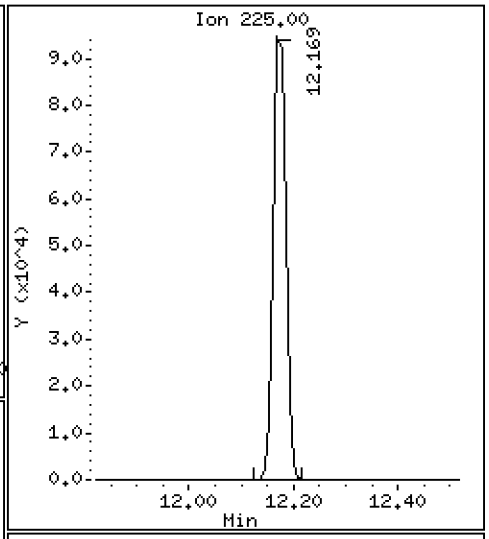
Column phase: ZB-5msi

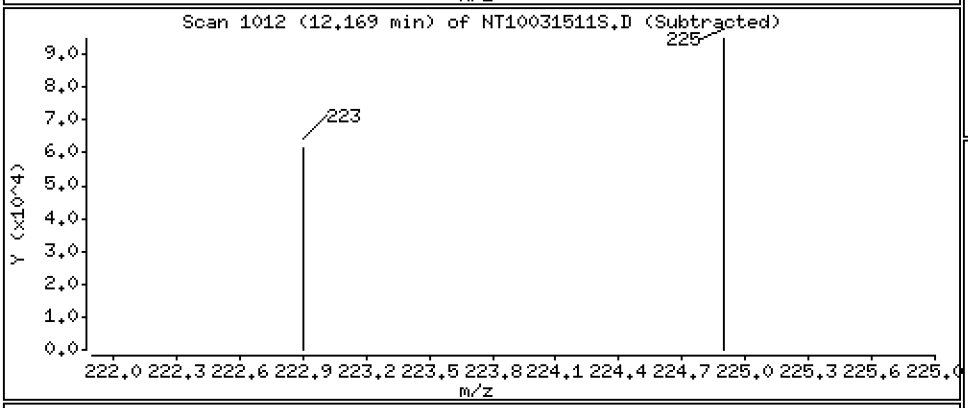
Column diameter: 0.25

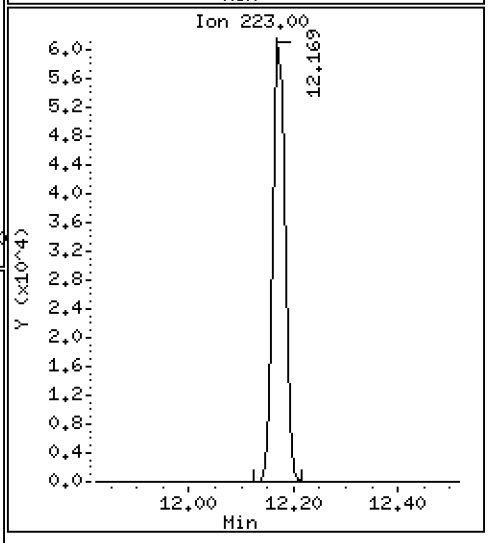
30 Hexachlorobutadiene

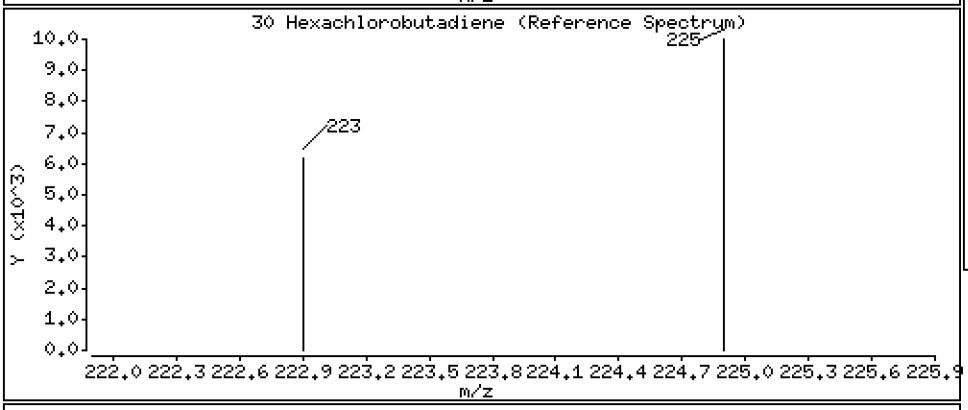
Concentration: 4.653 ug/L

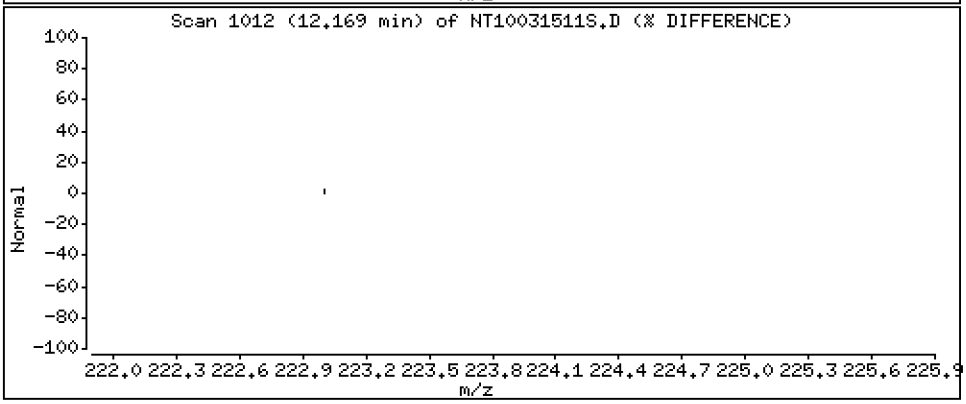












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

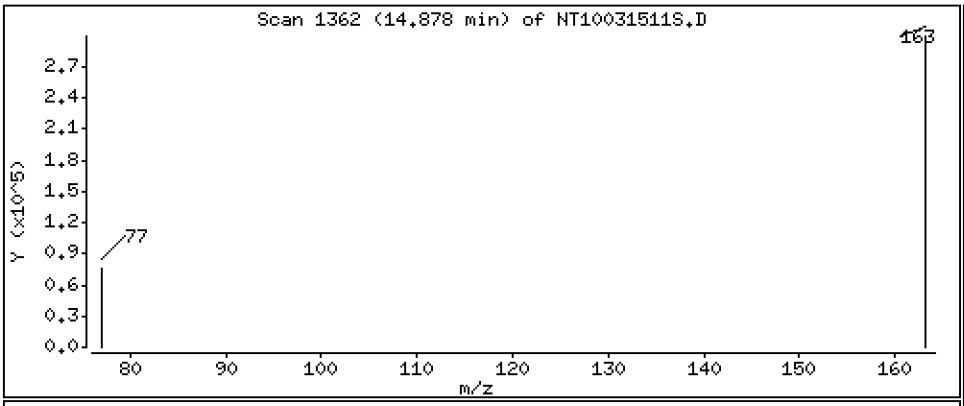
Operator: JGR

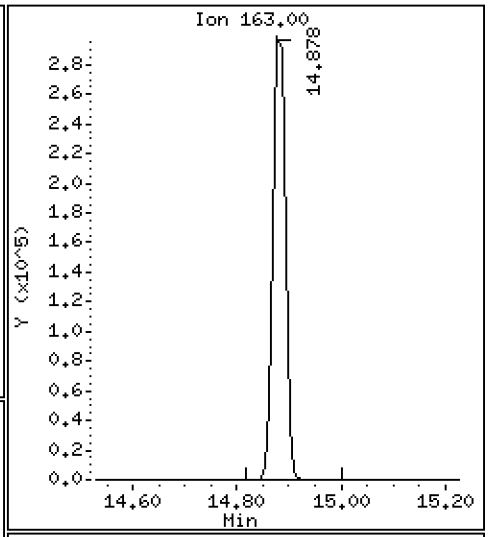
Column phase: ZB-5msi

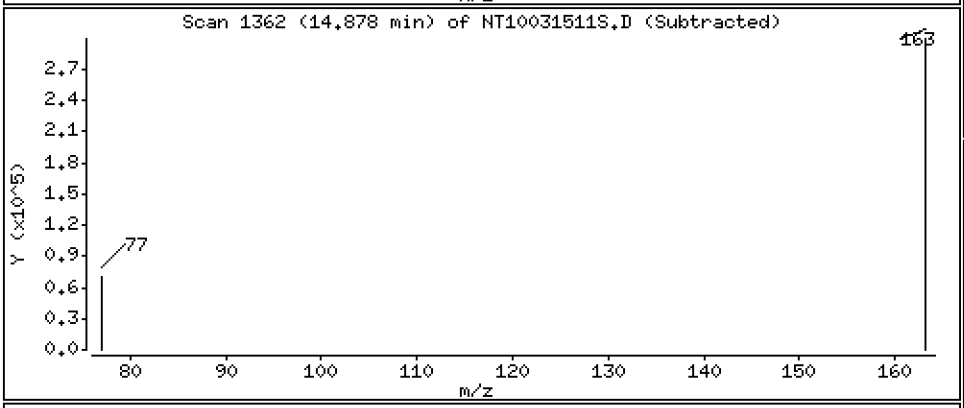
Column diameter: 0.25

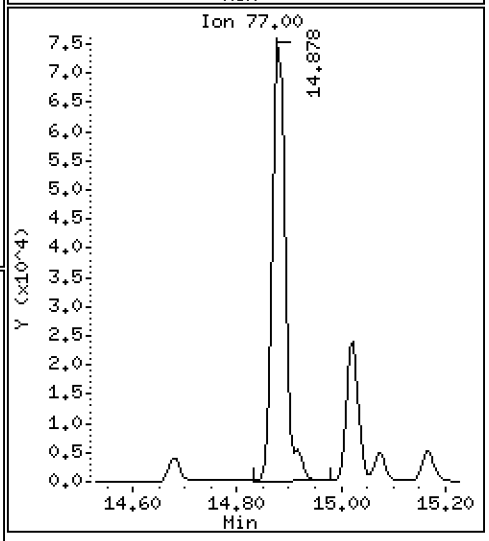
39 Dimethylphthalate

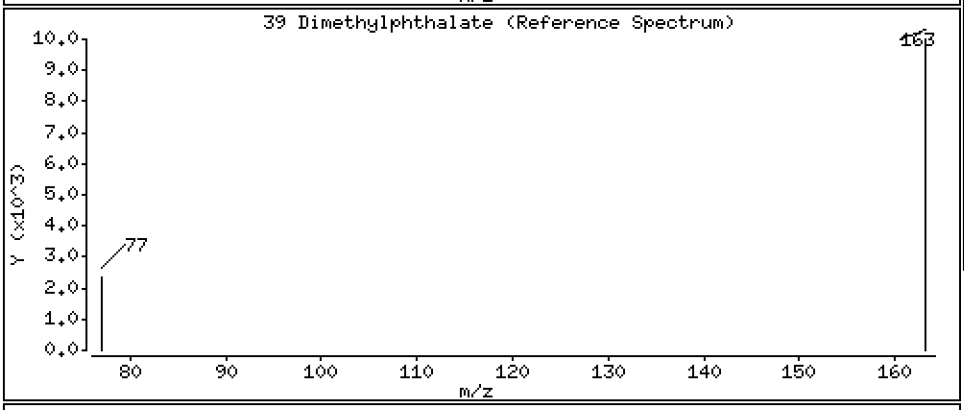
Concentration: 4.948 ug/L

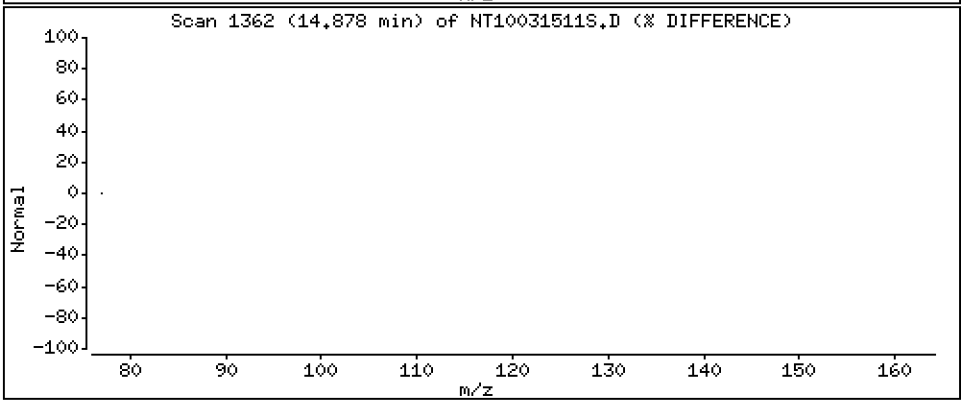












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

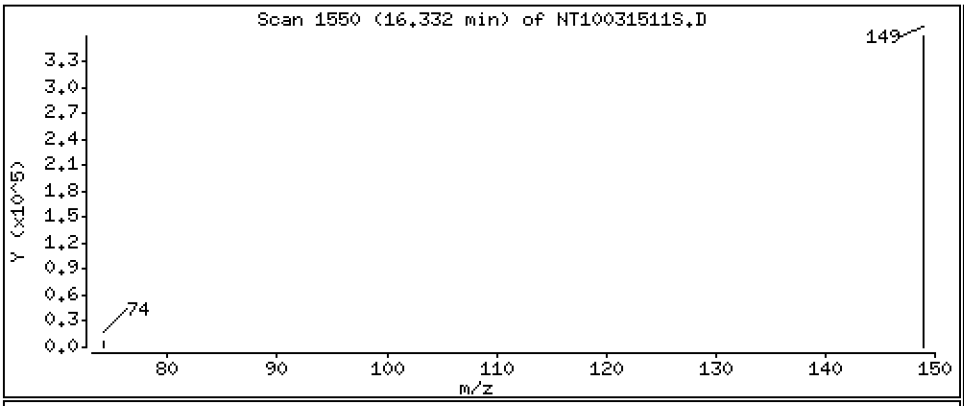
Operator: JGR

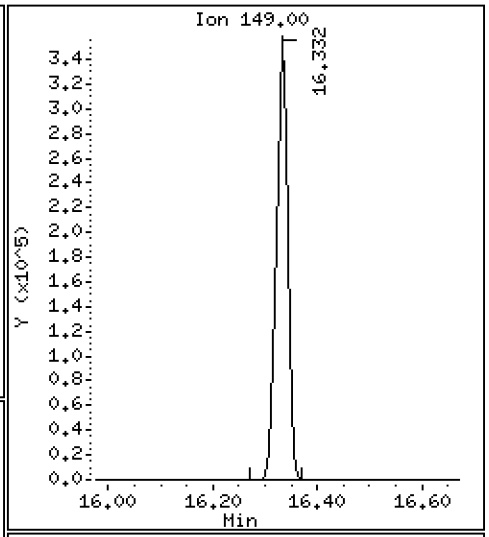
Column phase: ZB-5msi

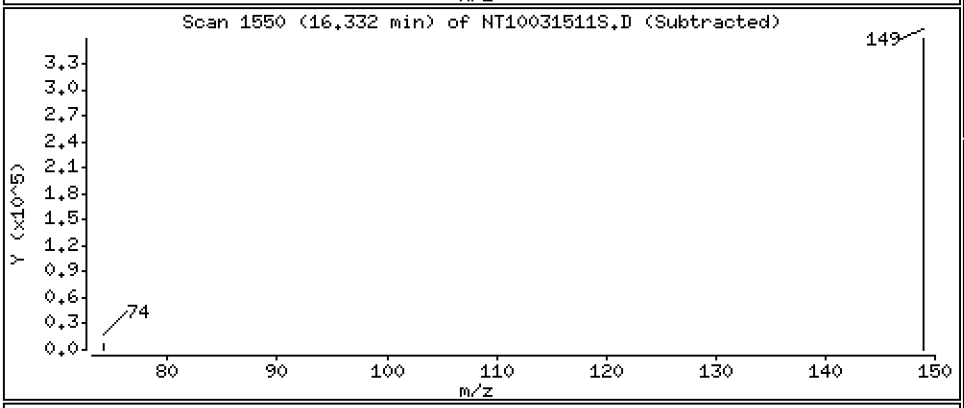
Column diameter: 0.25

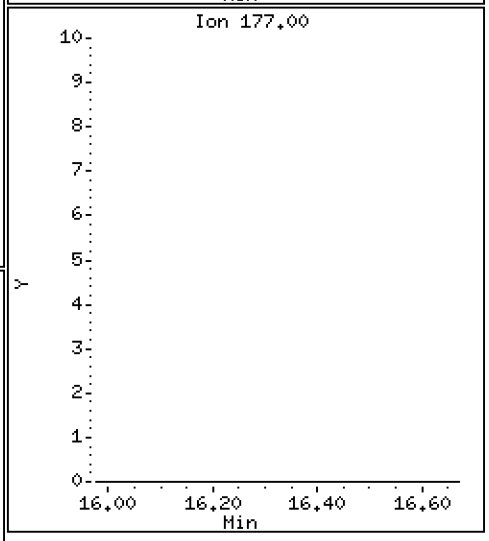
50 Diethylphthalate

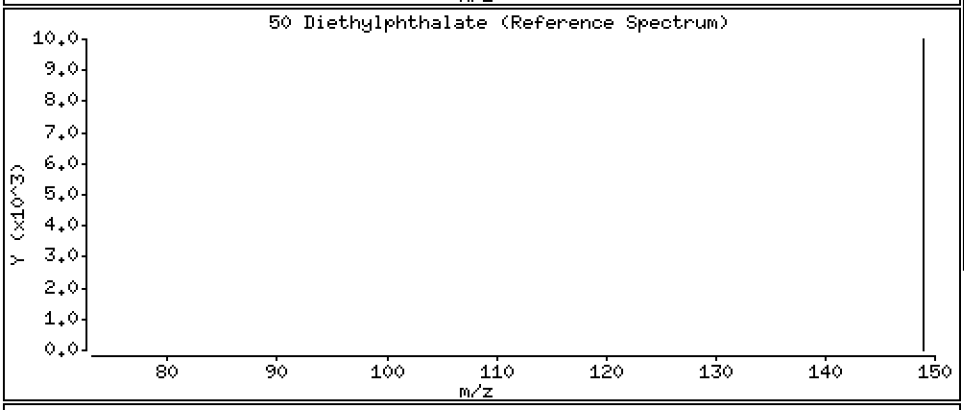
Concentration: 5.364 ug/L

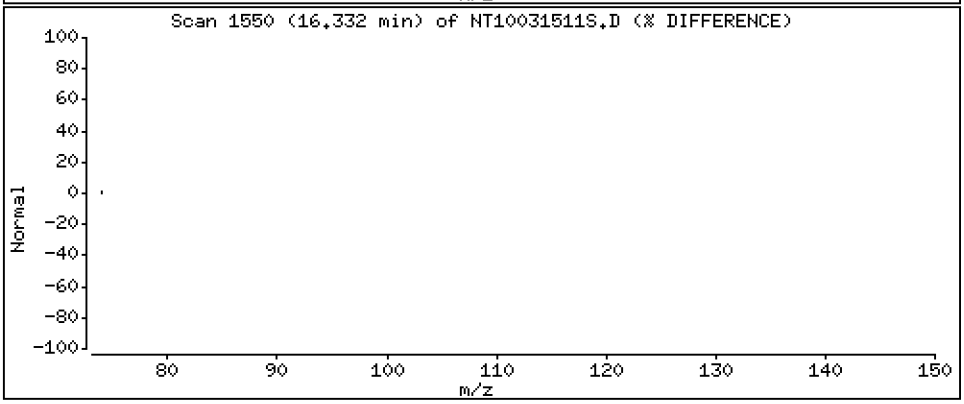












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

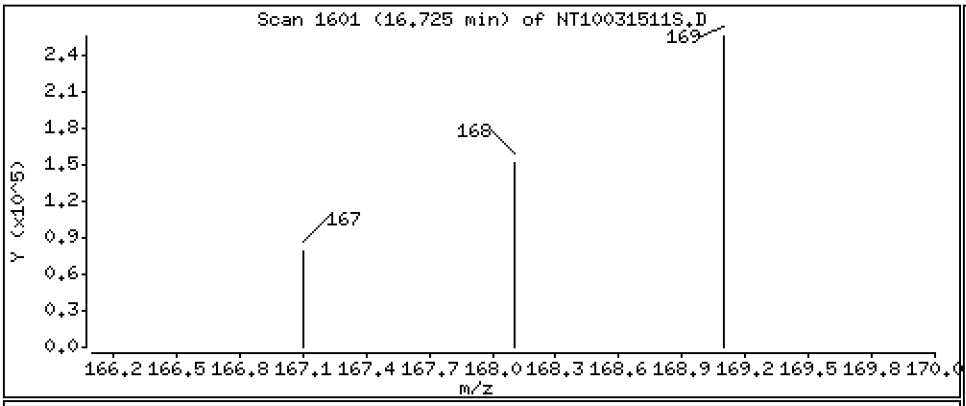
Operator: JGR

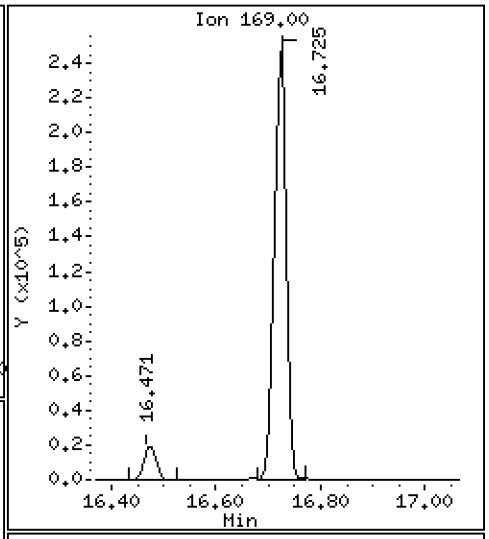
Column phase: ZB-5msi

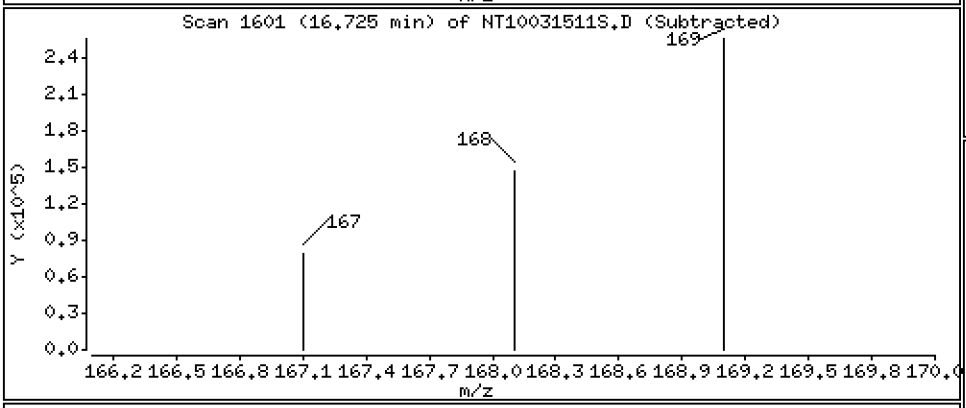
Column diameter: 0.25

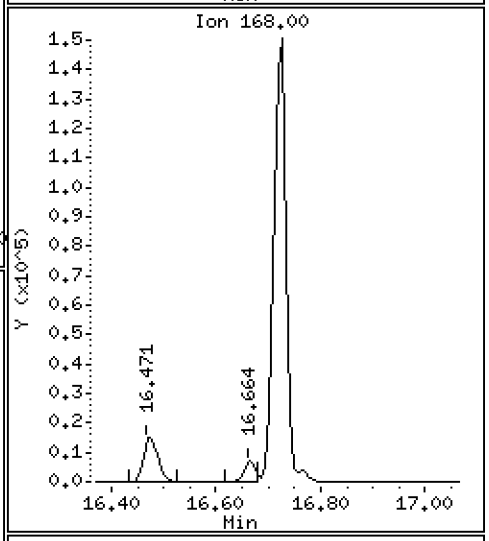
54 N-Nitrosodiphenylamine

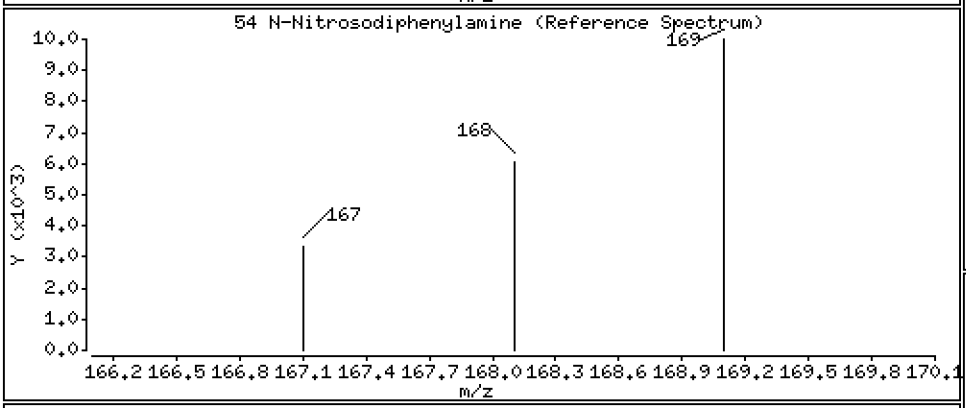
Concentration: 5.080 ug/L

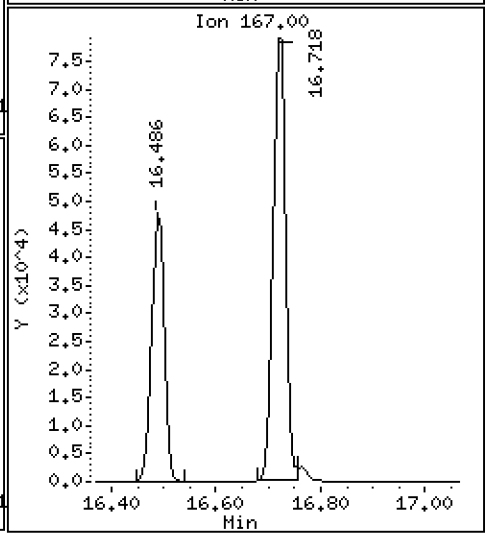


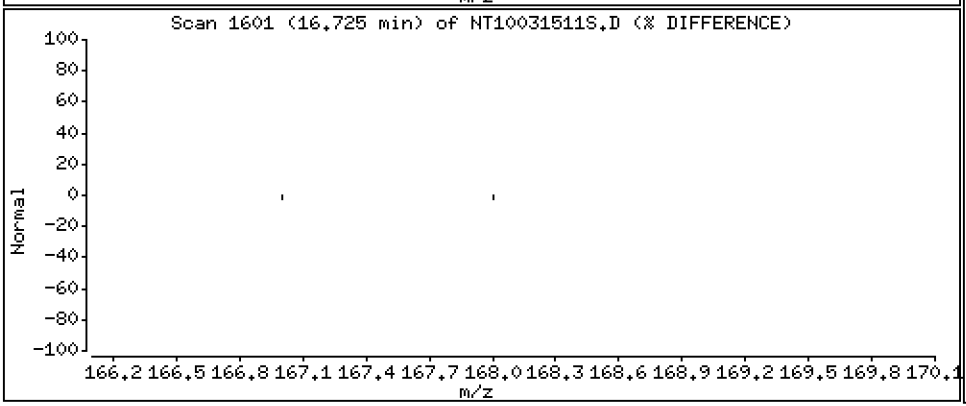












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

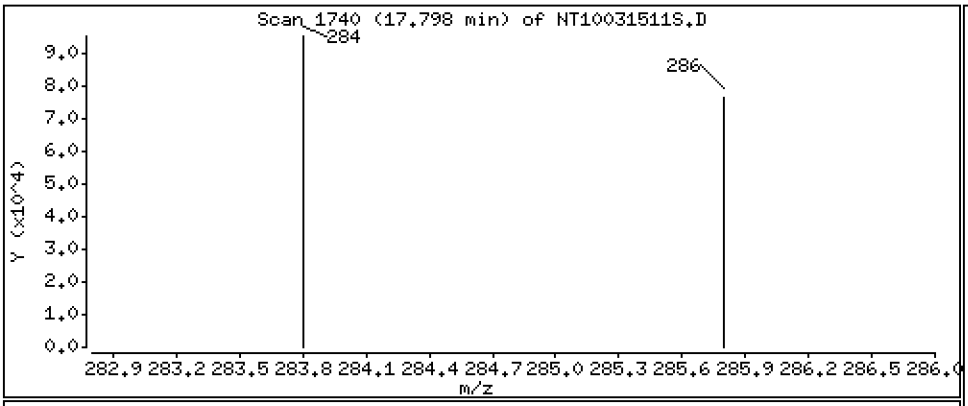
Operator: JGR

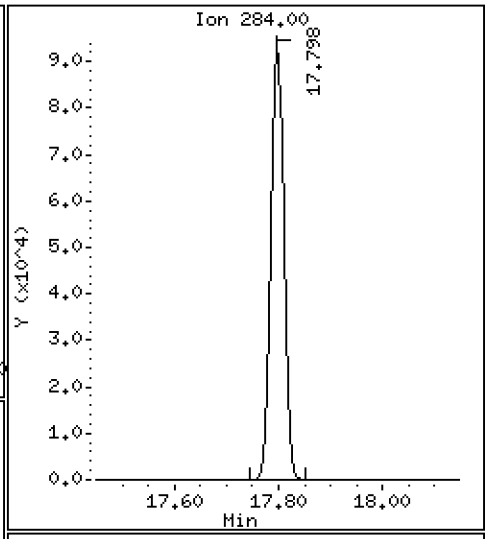
Column phase: ZB-5msi

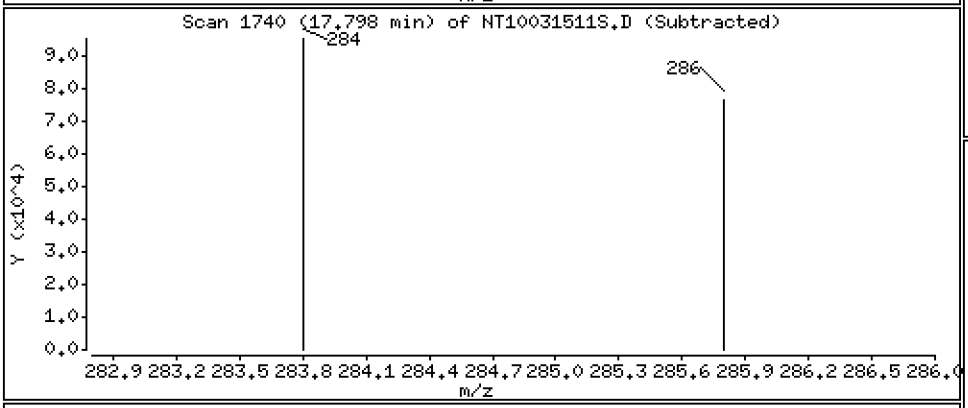
Column diameter: 0.25

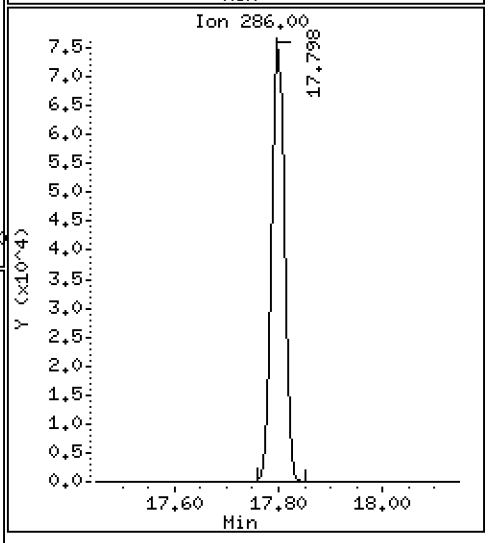
57 Hexachlorobenzene

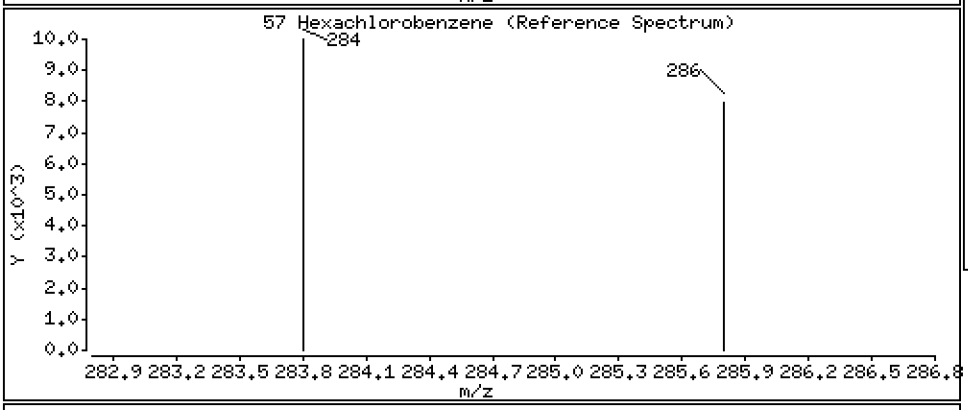
Concentration: 4.614 ug/L

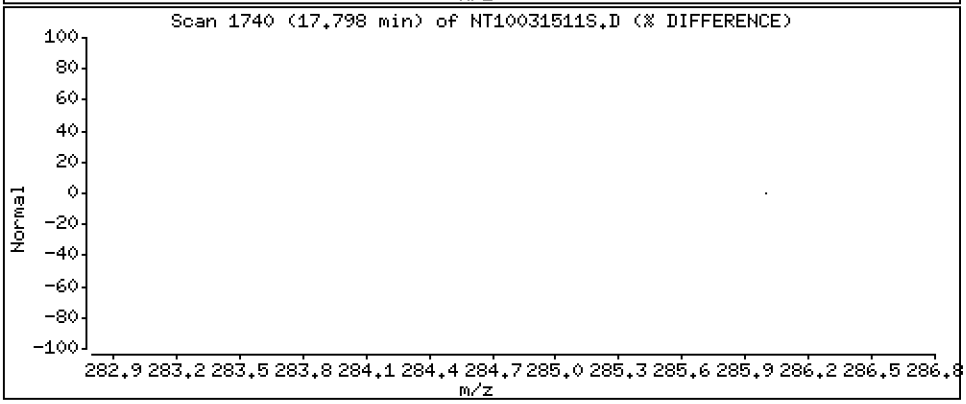












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

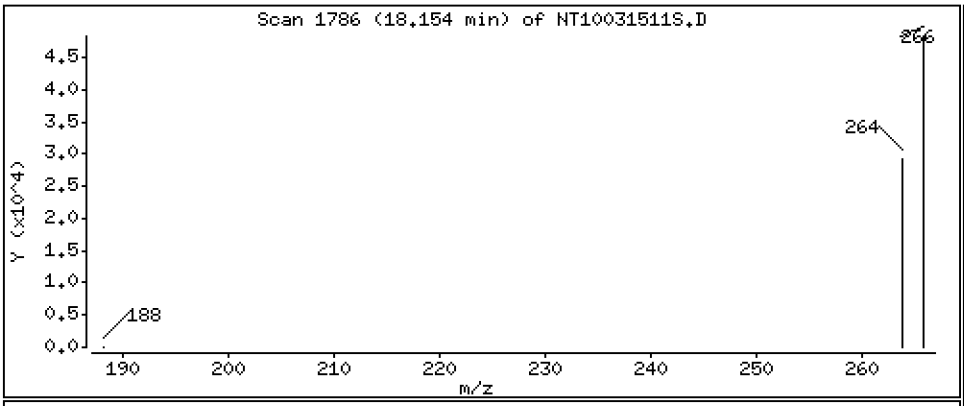
Operator: JGR

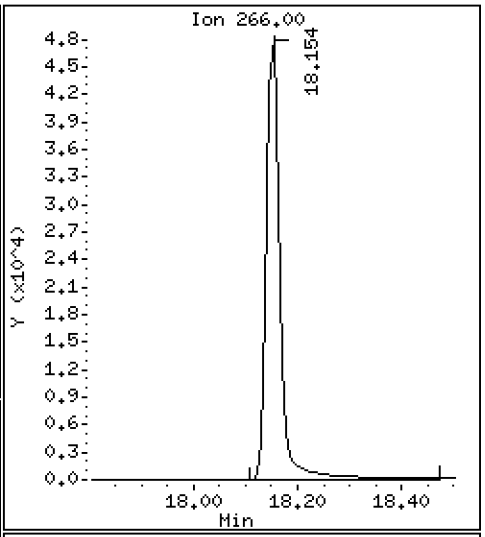
Column phase: ZB-5msi

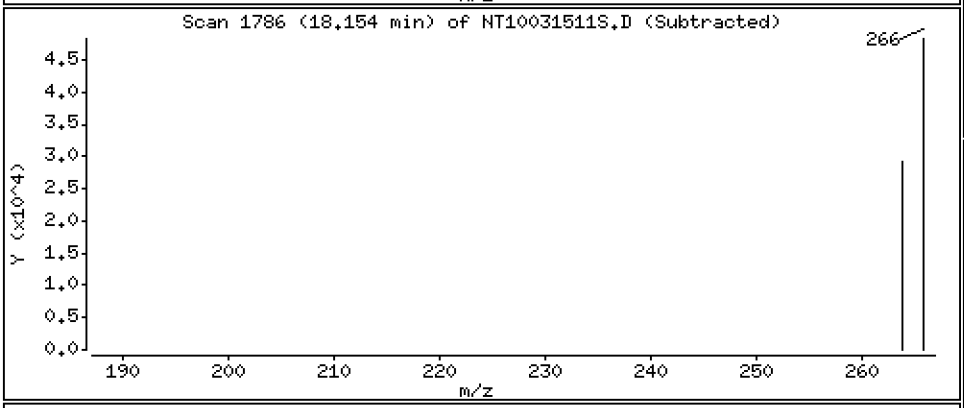
Column diameter: 0.25

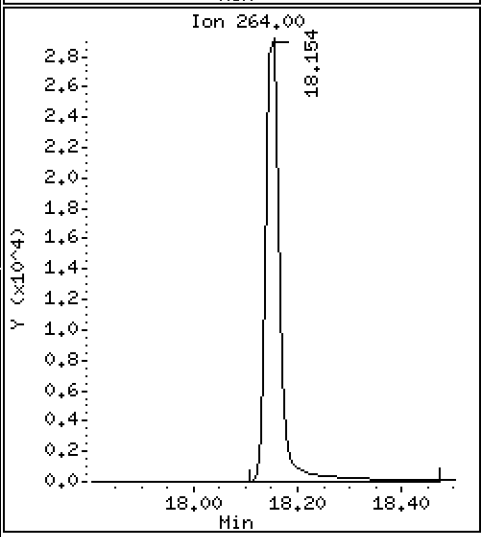
58 Pentachlorophenol

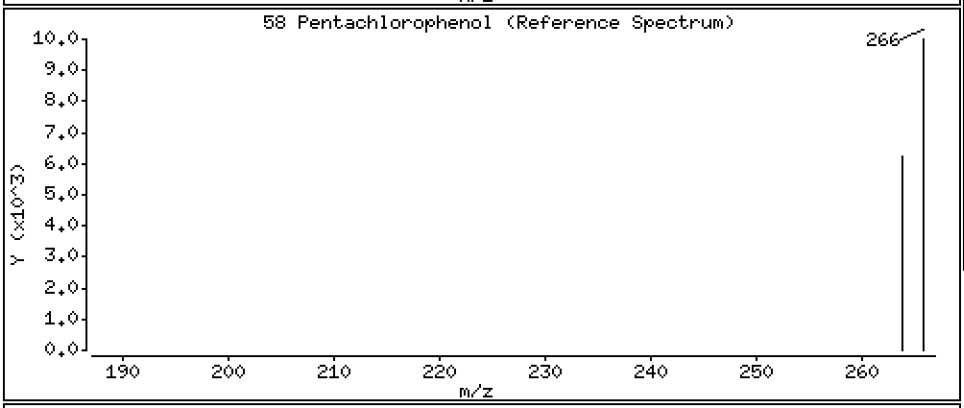
Concentration: 4.418 ug/L

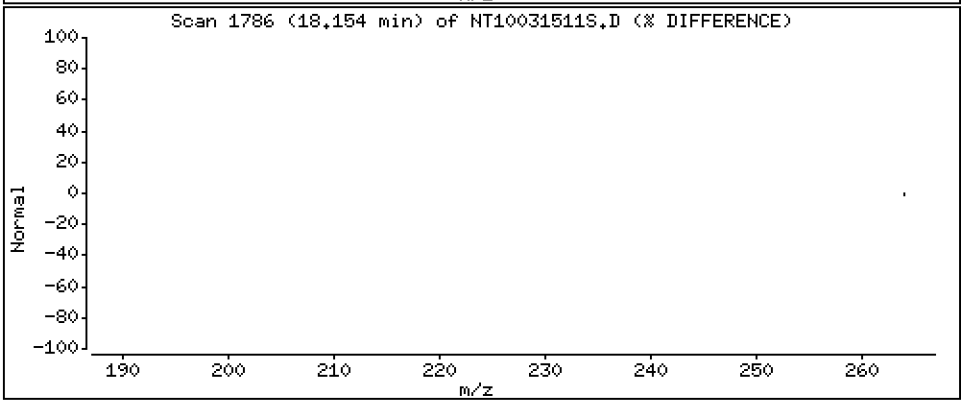












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

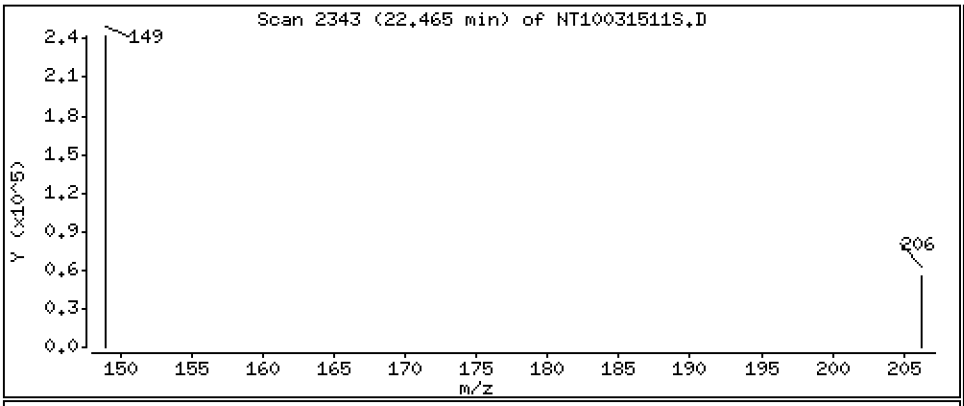
Operator: JGR

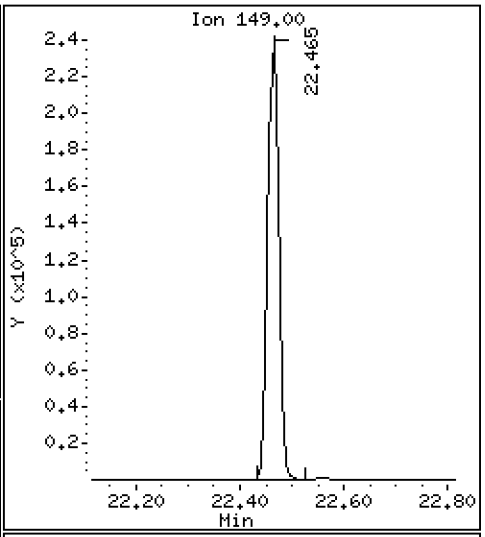
Column phase: ZB-5msi

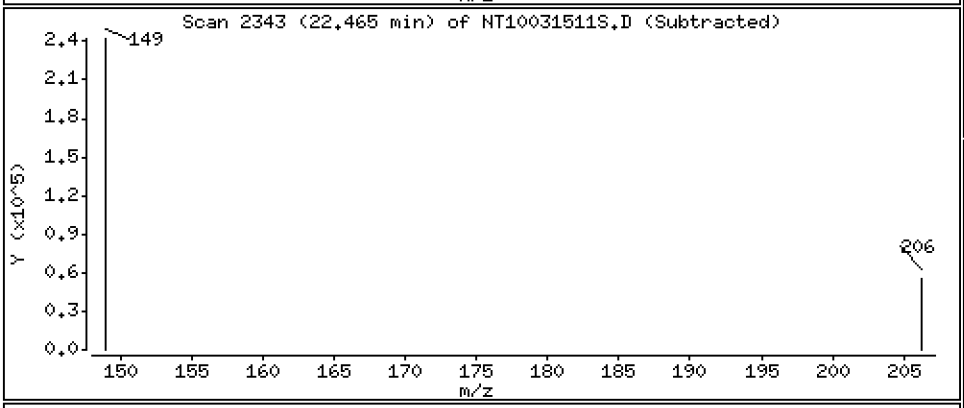
Column diameter: 0.25

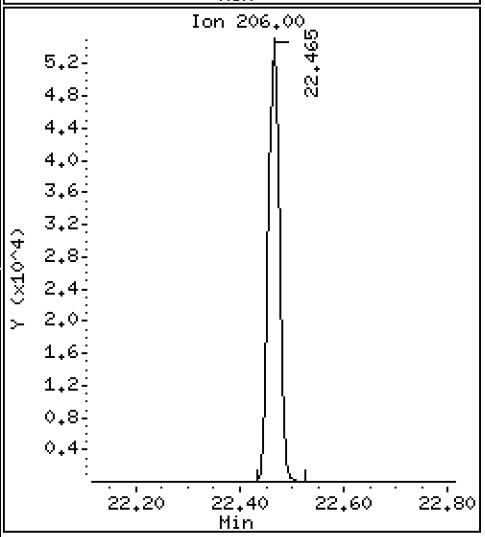
67 Butylbenzylphthalate

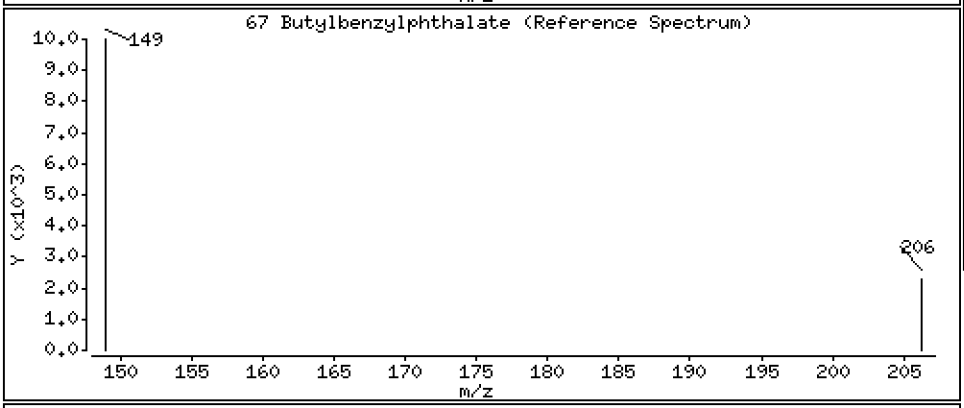
Concentration: 5.121 ug/L

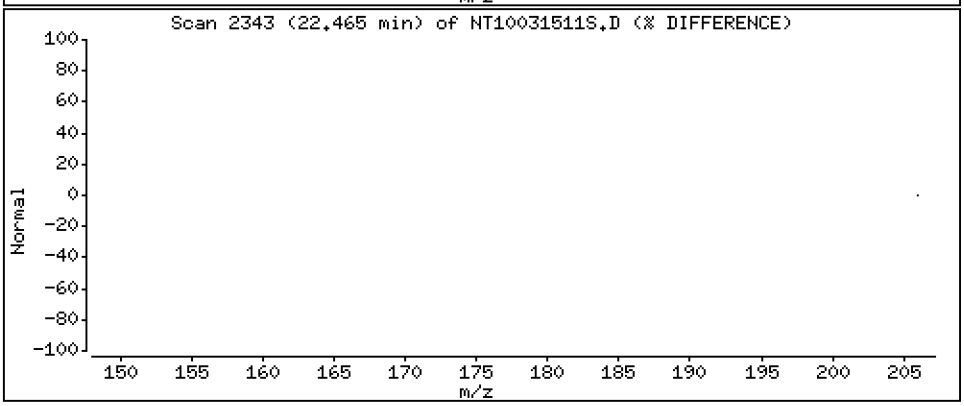












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

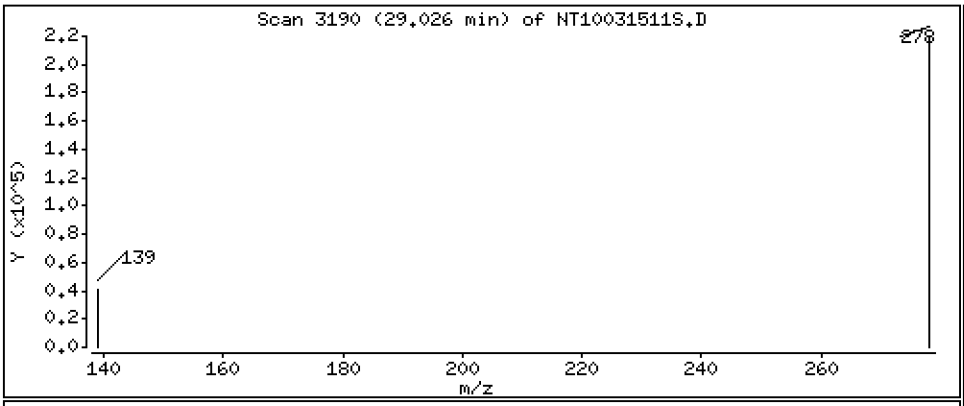
Operator: JGR

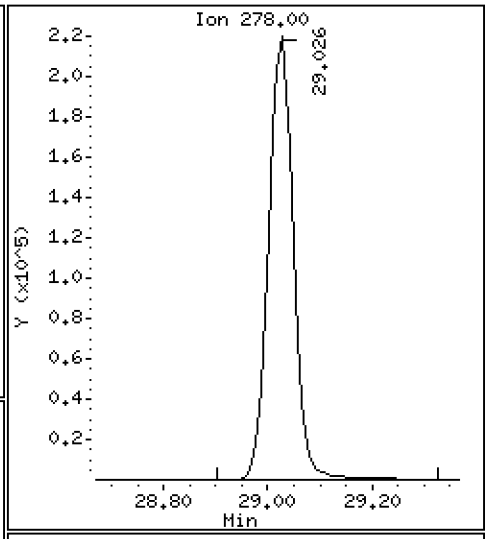
Column phase: ZB-5msi

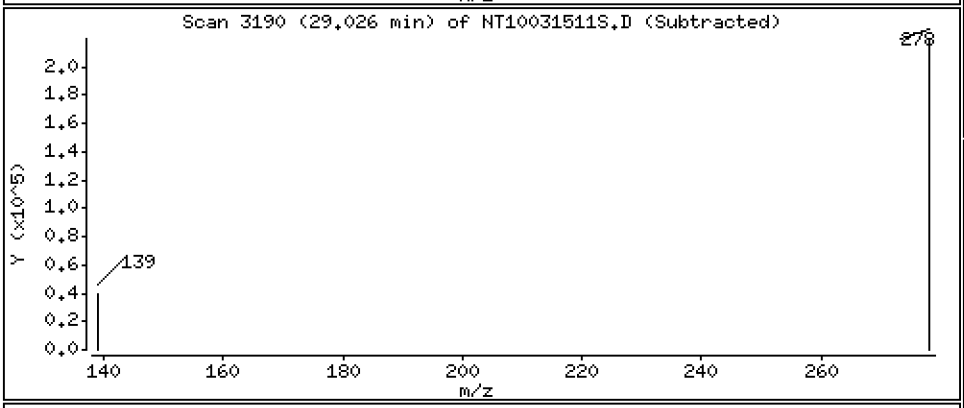
Column diameter: 0.25

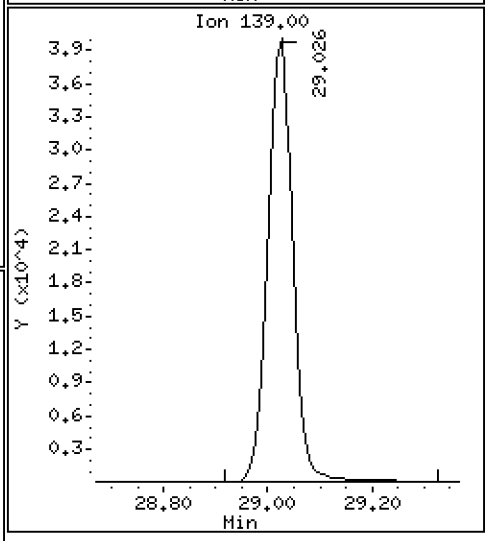
79 Dibenzo(a,h)anthracene

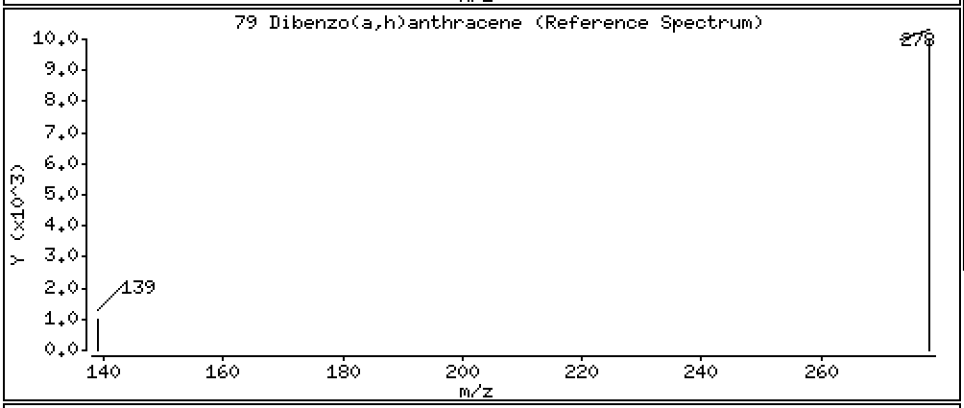
Concentration: 4.238 ug/L

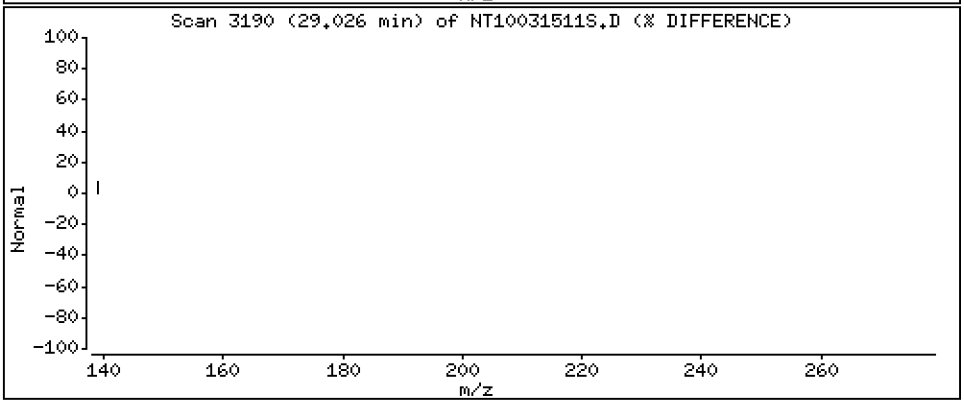












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

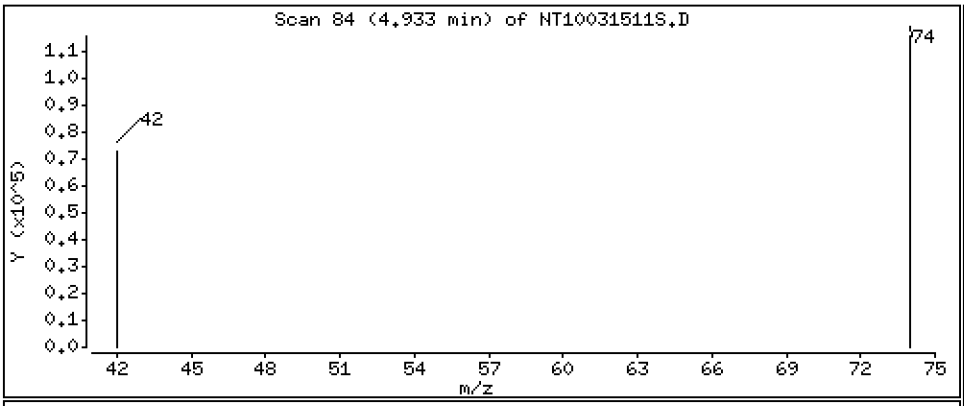
Operator: JGR

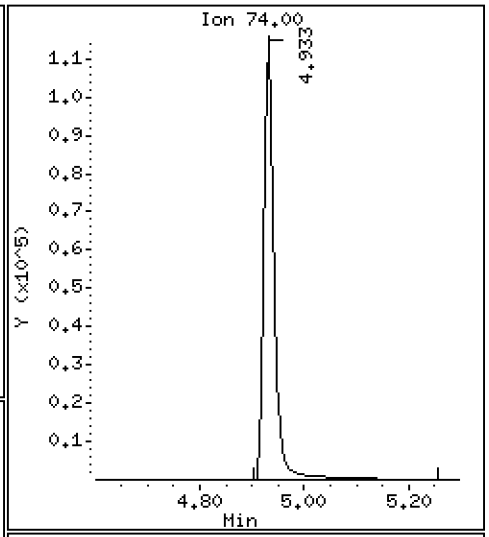
Column phase: ZB-5msi

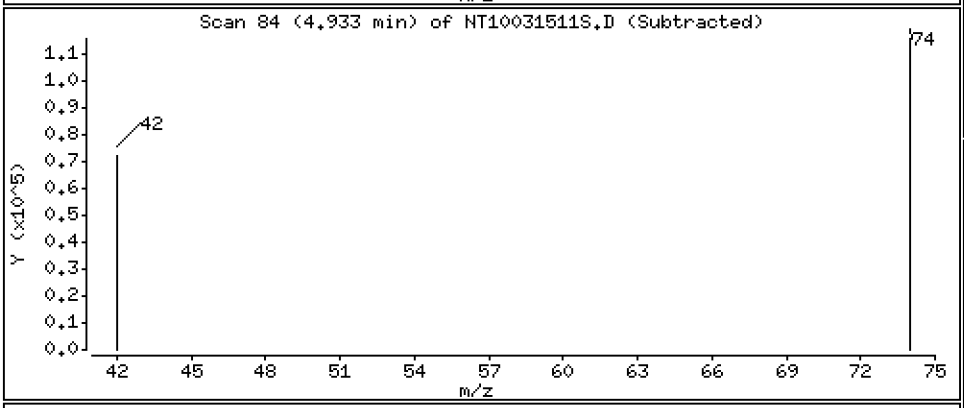
Column diameter: 0.25

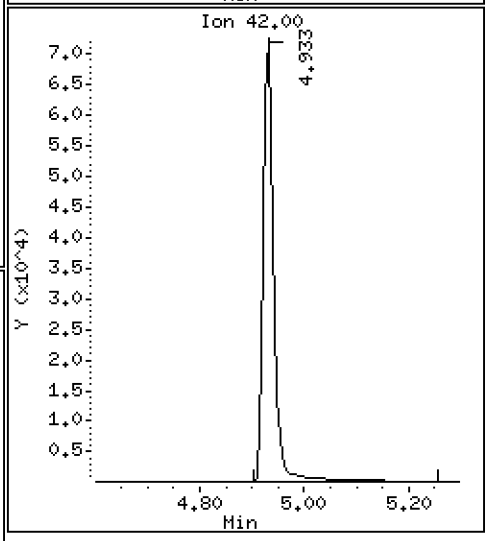
90 N-Nitrosodimethylamine

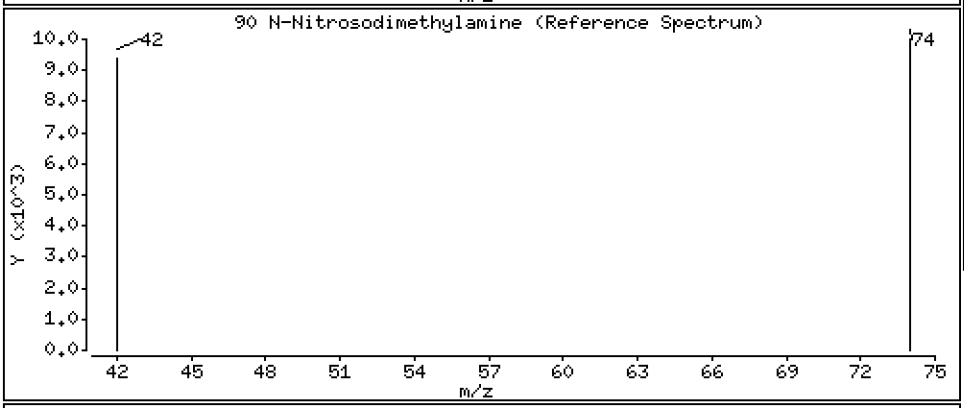
Concentration: 5.096 ug/L

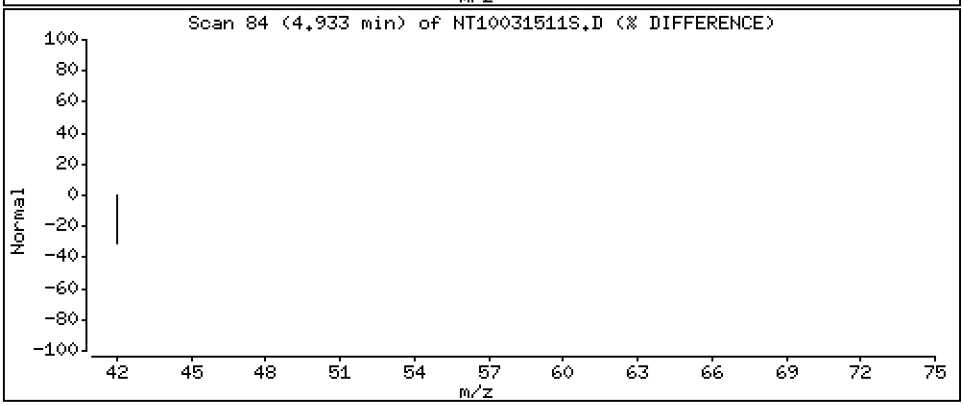












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D
Lab Smp Id: SLC0238-SCV1
Inj Date : 16-MAR-2023 02:16 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0238-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Meth Date : 16-Mar-2023 14:39 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	Compound Not Detected.					
3	Phenol	94	8.664	8.664	(0.931)	303581	4.37299	4.373
7	1,3-Dichlorobenzene	146	9.236	9.236	(0.992)	301605	4.64290	4.643
* 8	1,4-Dichlorobenzene-d4	152	9.306	9.298	(1.000)	166866	4.00000	
9	1,4-Dichlorobenzene	146	9.329	9.329	(1.002)	303390	4.83813	4.838
11	Benzyl alcohol	79	9.562	9.570	(1.028)	208505	5.18071	5.181
12	1,2-Dichlorobenzene	146	9.686	9.686	(1.041)	288539	4.67875	4.679
13	2-Methylphenol	108	9.772	9.772	(1.050)	201888	4.19698	4.197
15	4-Methylphenol	108	10.043	10.036	(1.079)	223083	4.46301	4.463
16	N-Nitroso-di-n-propylamine	70	10.121	10.113	(1.088)	186707	5.28174	5.282
22	2,4-Dimethylphenol	107	11.086	11.087	(0.942)	193654	3.66015	3.660
24	Benzoic acid	105	11.214	11.189	(0.952)	200487	6.74612	6.746
26	1,2,4-Trichlorobenzene	180	11.690	11.690	(0.993)	236605	4.44540	4.445
* 27	Naphthalene-d8	136	11.775	11.775	(1.000)	612104	4.00000	
30	Hexachlorobutadiene	225	12.169	12.169	(1.033)	150581	4.65339	4.653
39	Dimethylphthalate	163	14.877	14.877	(0.967)	472341	4.94766	4.948
* 42	Acenaphthene-d10	162	15.388	15.380	(1.000)	302524	4.00000	
50	Diethylphthalate	149	16.331	16.324	(1.061)	530540	5.36440	5.364
54	N-Nitrosodiphenylamine	169	16.725	16.717	(0.908)	377357	5.08034	5.080
57	Hexachlorobenzene	284	17.798	17.798	(0.966)	153405	4.61353	4.614

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.154	18.154	(0.985)	83223	4.41780	4.418
*	59 Phenanthrene-d10	188	18.425	18.417	(1.000)	553619	4.00000	
$	66 Terphenyl-d14	244	21.543	21.543	(0.918)	117	0.00154	0.001543(RM)
	67 Butylbenzylphthalate	149	22.464	22.465	(0.958)	332887	5.12147	5.121
*	69 Chrysene-d12	240	23.455	23.455	(1.000)	465428	4.00000	
*	77 Perylene-d12	264	26.188	26.188	(1.000)	532593	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.026	29.019	(1.108)	722983	4.23762	4.238
	90 N-Nitrosodimethylamine	74	4.933	4.948	(0.530)	163555	5.09625	5.096

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031511S.D
Lab Smp Id: SLC0238-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 23:06
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	188081	94041	376162	166866	-11.28
27 Naphthalene-d8	674549	337275	1349098	612104	-9.26
42 Acenaphthene-d10	328275	164138	656550	302524	-7.84
59 Phenanthrene-d10	597140	298570	1194280	553619	-7.29
69 Chrysene-d12	466503	233252	933006	465428	-0.23
77 Perylene-d12	518203	259102	1036406	532593	2.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.31	0.08
27 Naphthalene-d8	11.77	11.27	12.27	11.78	0.01
42 Acenaphthene-d10	15.39	14.89	15.89	15.39	0.01
59 Phenanthrene-d10	18.42	17.92	18.92	18.43	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.46	0.00
77 Perylene-d12	26.19	25.69	26.69	26.19	0.00

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

REVIEW SUMMARY FOR FILE - NT10031511S.D

Lab ID: SLC0238-SCV1
nt10.i, 20230315.b\20230315.b\SIMABN2.m,   16-MAR-2023 02:16

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.000	0.9524	Benzoic acid

RRT check based on Ccal File: 20230315.b/NT10031510S.D

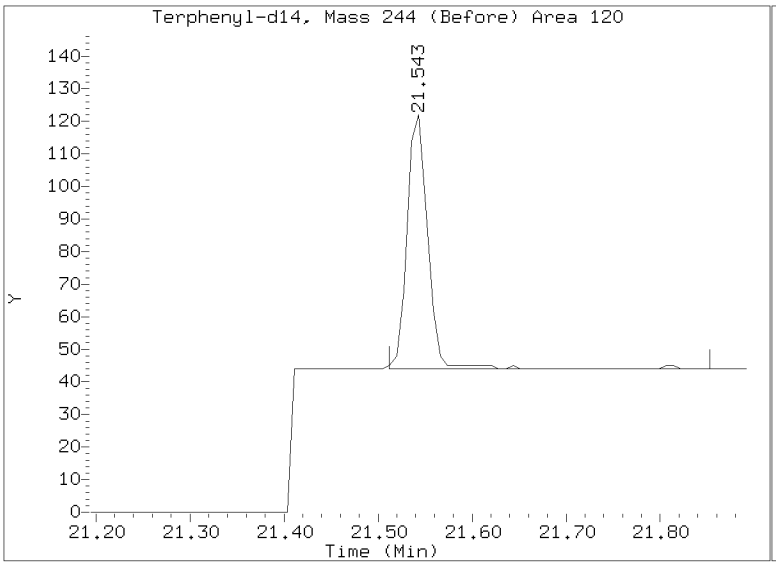
On Column LOD for nt10.i, 20230315.b\SIMABN2.m, PSDDA.sub = 0.0000

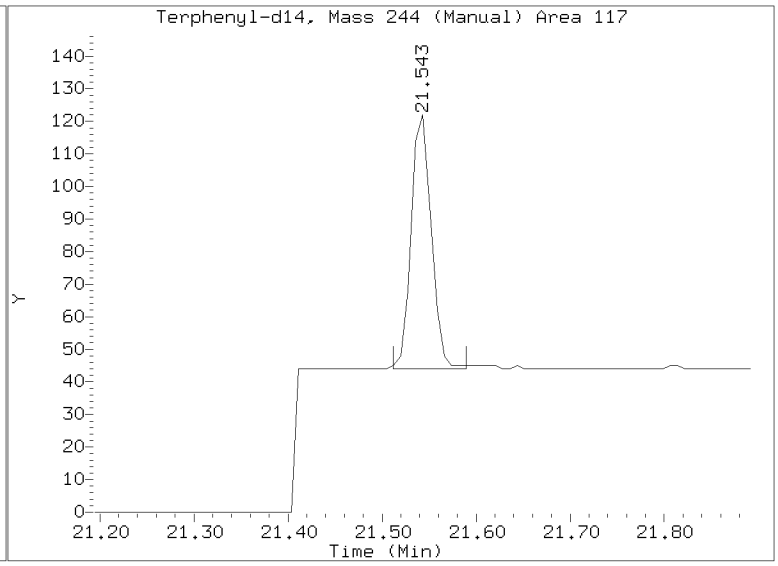
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230315.b/20230315.b/NT10031511S.D
Injection Date: 16-MAR-2023 02:16
Lab ID:SLC0238-SCV1 Client ID:
Report Date: 03/16/2023 14:49





SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

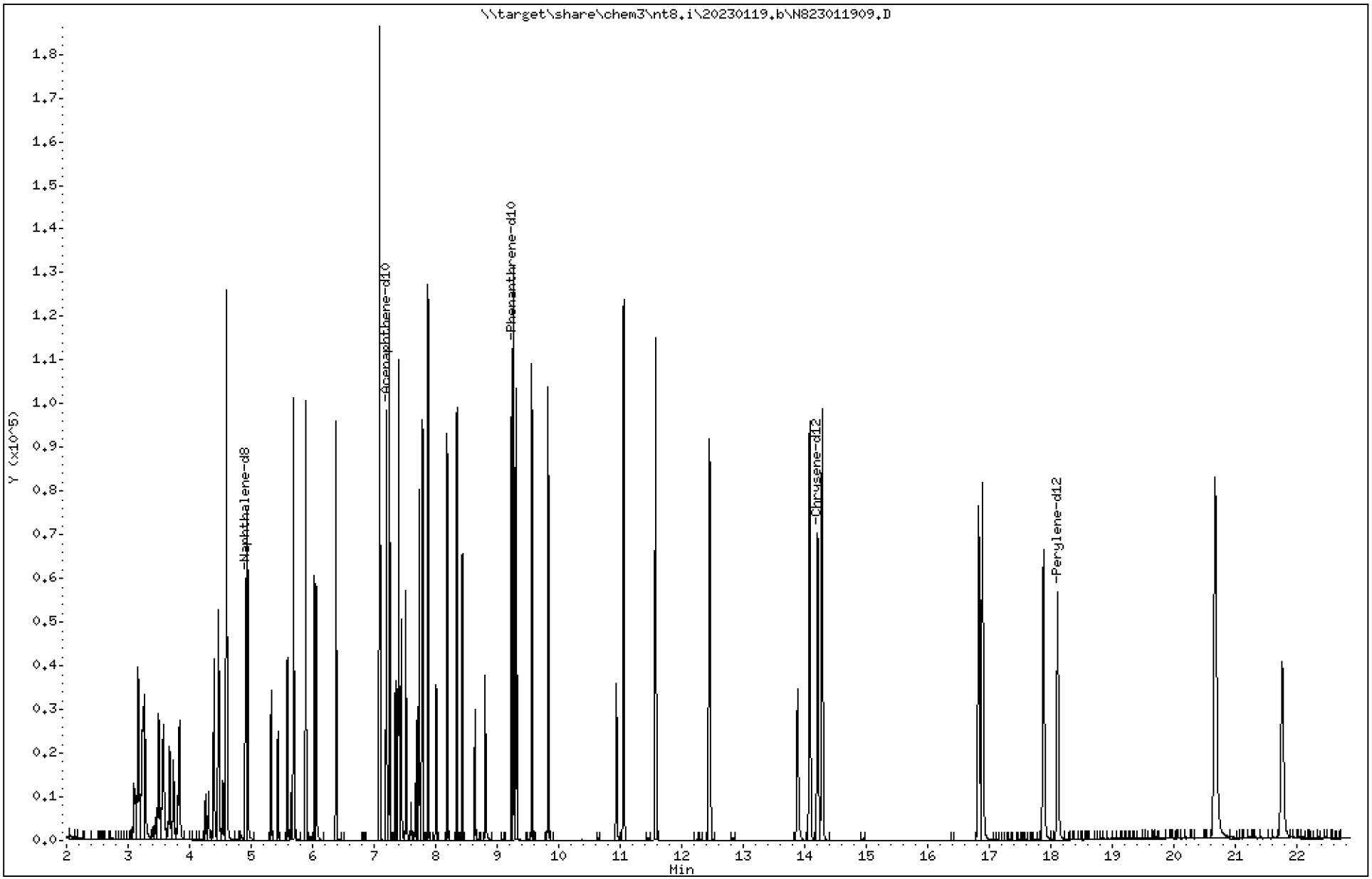
Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00050
Laboratory ID: SLA0213-SCV1
Sequence: SLA0213
Standard ID: L000686

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Naphthalene	2.5000	2.63	5.0	
2-Methylnaphthalene	2.5000	2.67	6.8	
1-Methylnaphthalene	2.5000	2.65	6.0	
Acenaphthylene	2.5000	2.82	12.8	
Acenaphthene	2.5000	2.60	4.0	
Dibenzofuran	2.5000	2.86	14.4	
Fluorene	2.5000	2.63	5.2	
Phenanthrene	2.5000	2.45	-2.1	
Anthracene	2.5000	2.27	-9.2	
Fluoranthene	2.5000	2.65	6.1	
Pyrene	2.5000	2.46	-1.5	
Benzo(a)anthracene	2.5000	2.59	3.5	
Chrysene	2.5000	2.40	-4.0	
Benzo(b)fluoranthene	2.5000	2.51	0.3	
Benzo(k)fluoranthene	2.5000	2.66	6.2	
Benzofluoranthenes, Total	5.0000	5.48	9.6	
Benzo(a)pyrene	2.5000	2.57	2.9	
Indeno(1,2,3-cd)pyrene	2.5000	2.69	7.6	
Dibenzo(a,h)anthracene	2.5000	2.49	-0.3	
Benzo(g,h,i)perylene	2.5000	2.48	-0.7	

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Date : 19-JAN-2023 14:58
Client ID:
Sample Info: SCV230119
Volume Injected (uL): 1.0
Column phase: Rxi-17sil

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25



Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

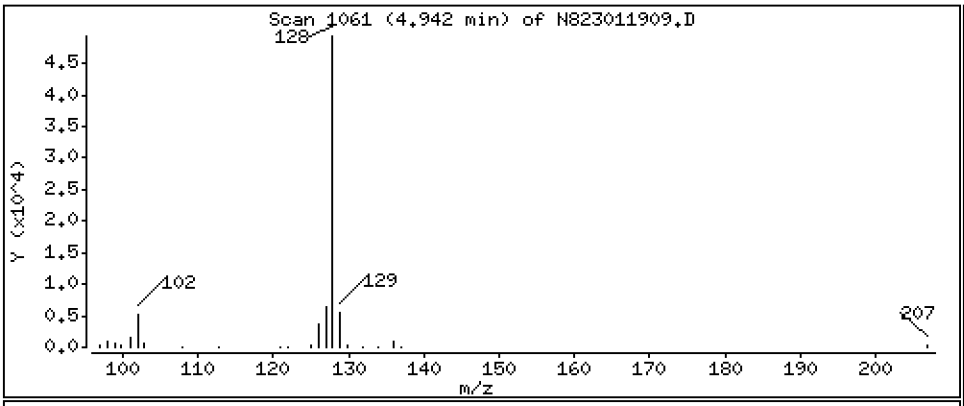
Operator: JZ

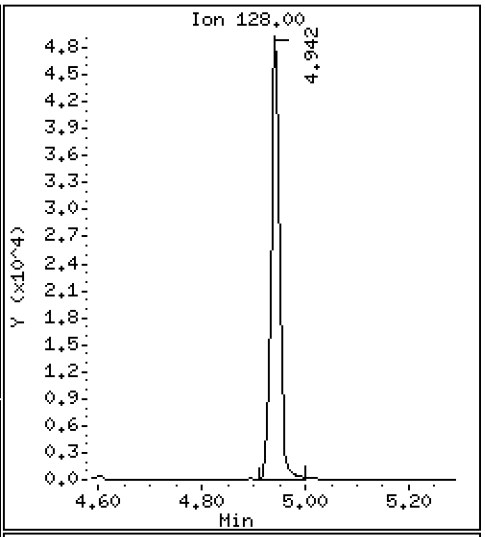
Column phase: Rxi-17sil

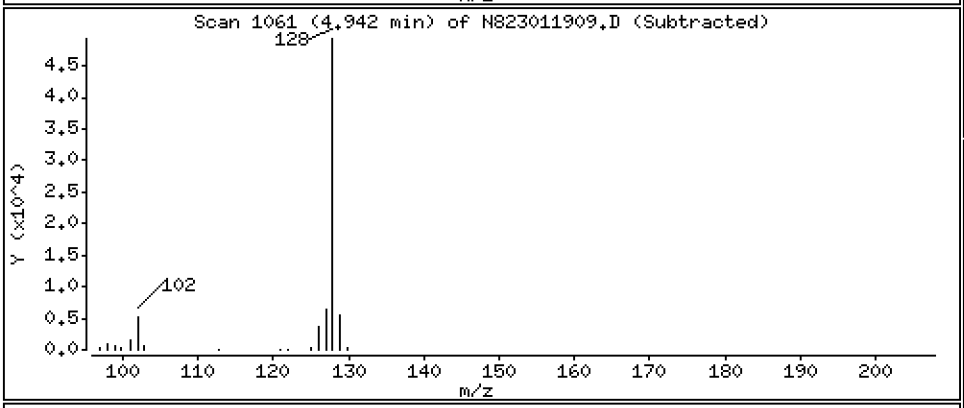
Column diameter: 0.25

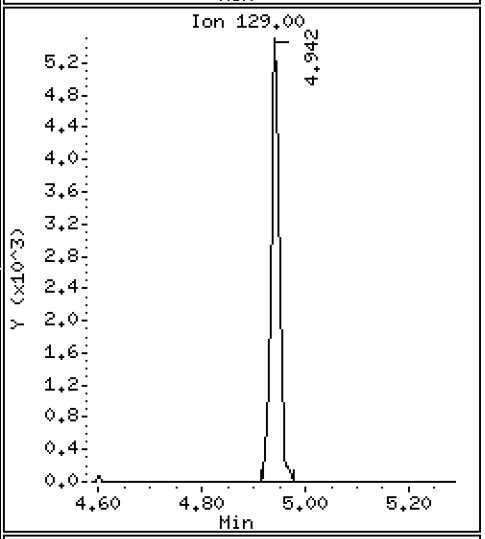
2 Naphthalene

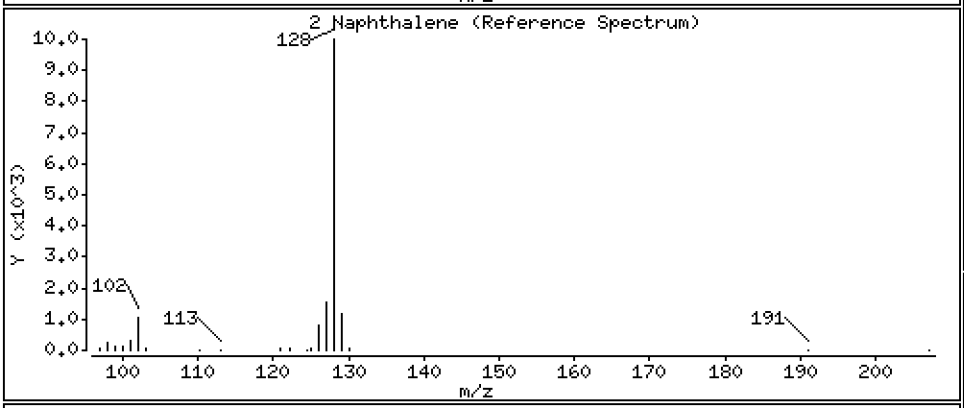
Concentration: 2.626 ug/L

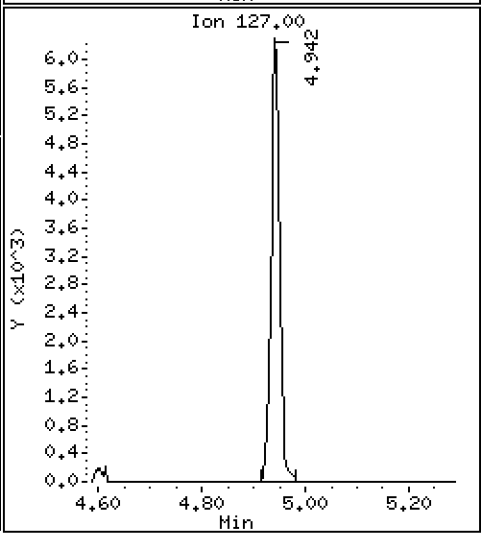


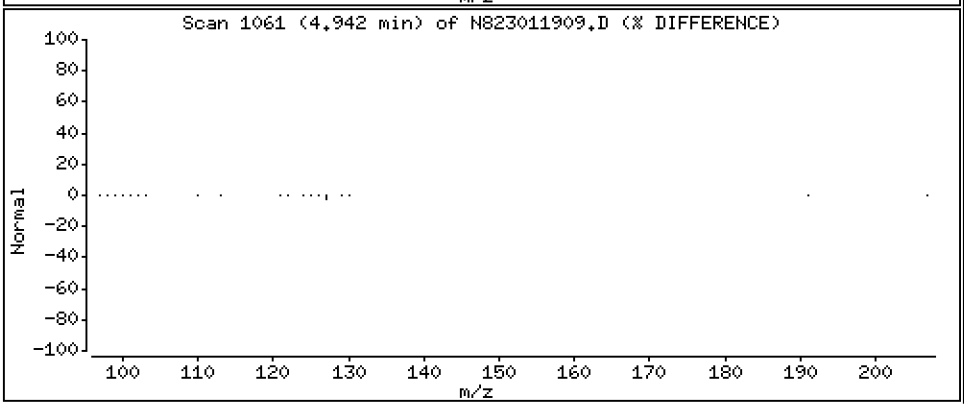












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

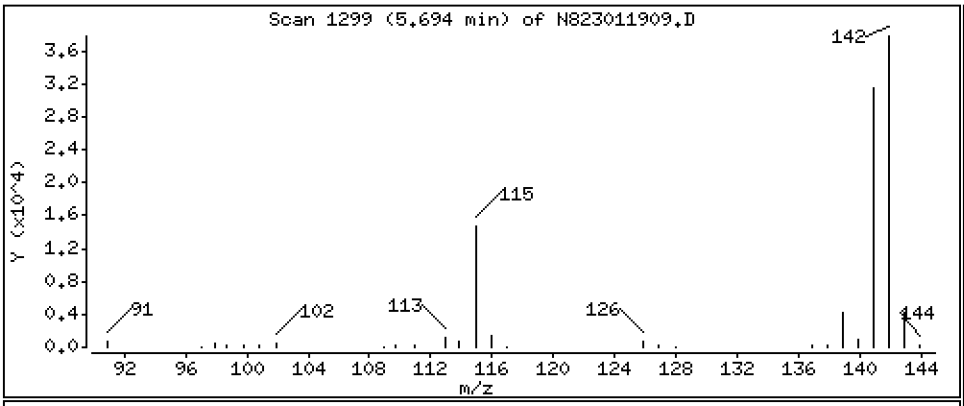
Operator: JZ

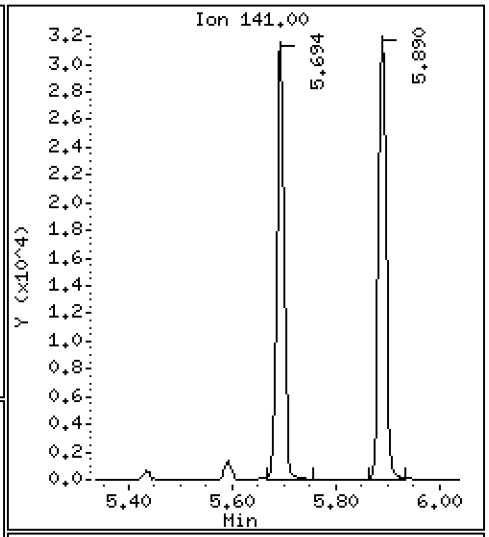
Column phase: Rxi-17sil

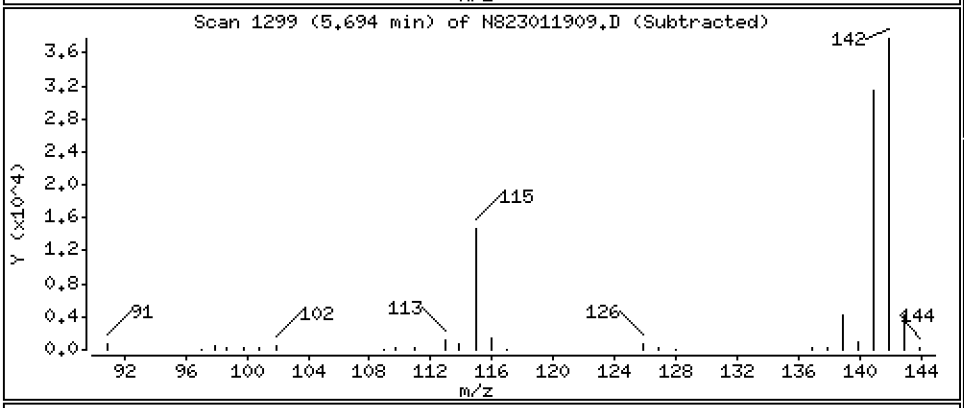
Column diameter: 0.25

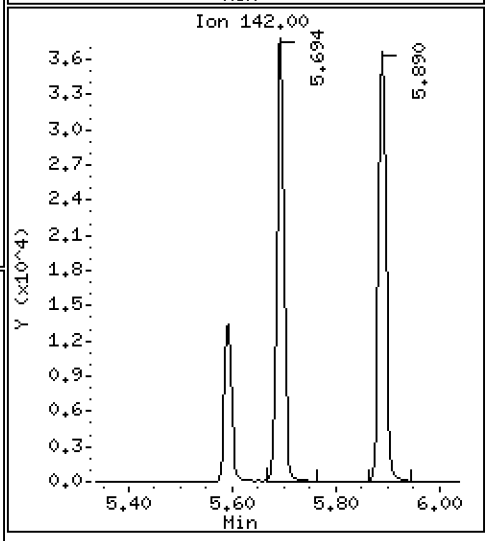
4 2-Methylnaphthalene

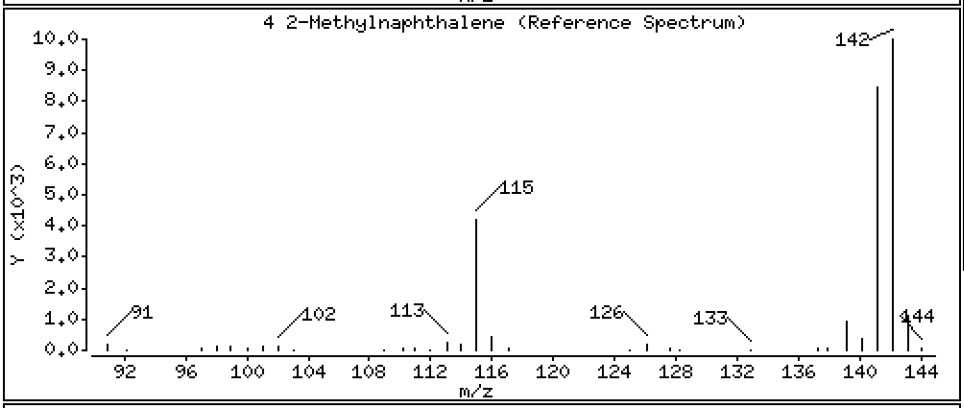
Concentration: 2.670 ug/L

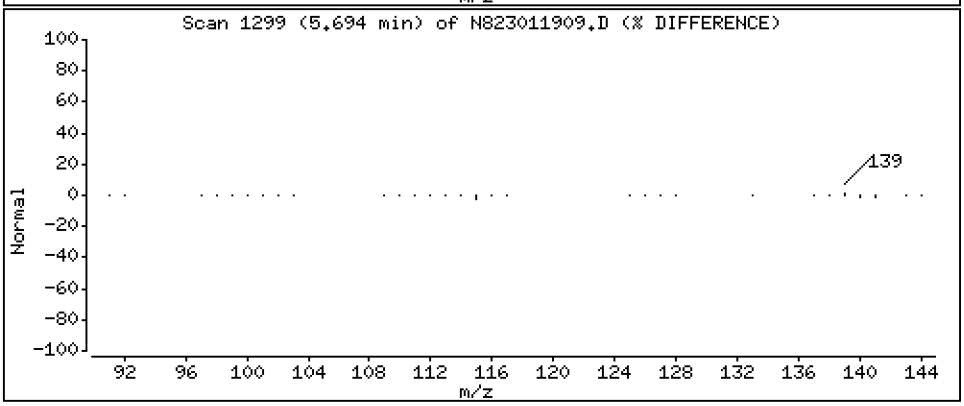












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

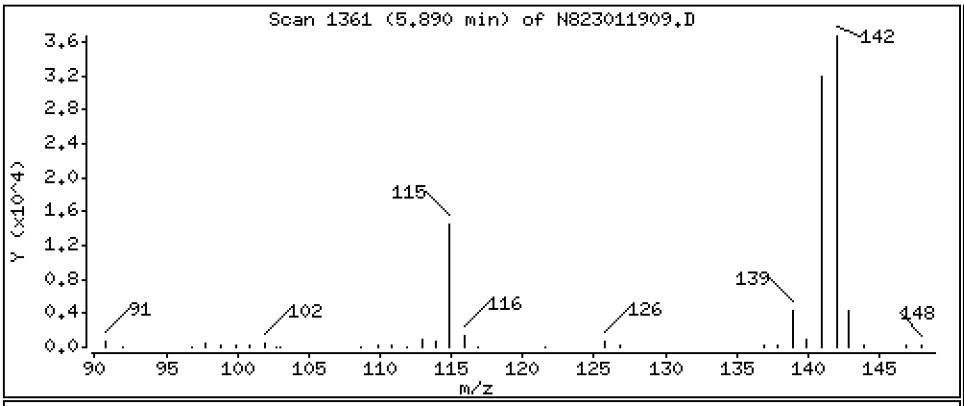
Operator: JZ

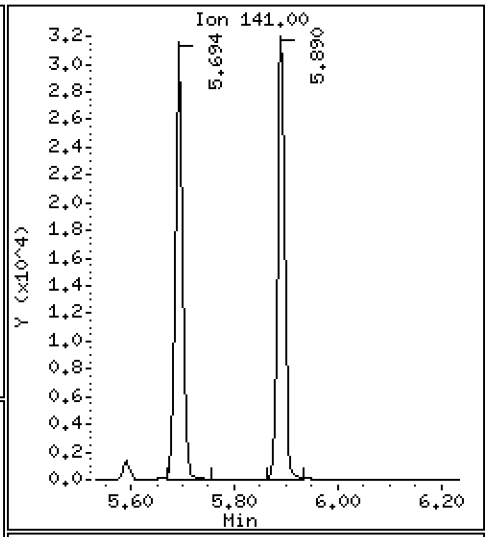
Column phase: Rxi-17sil

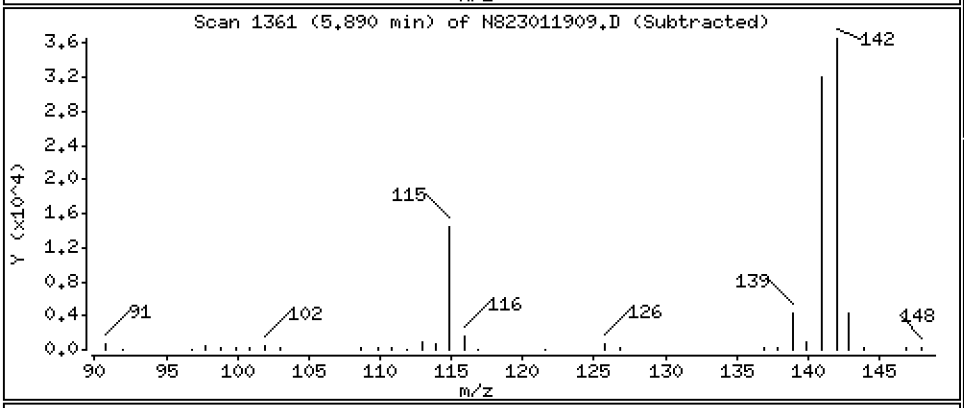
Column diameter: 0.25

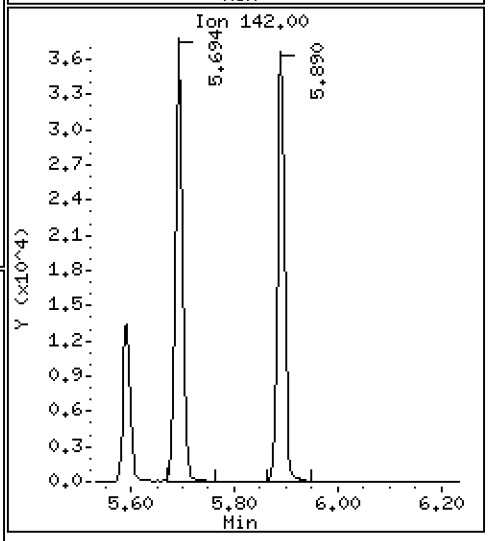
5 1-methylnaphthalene

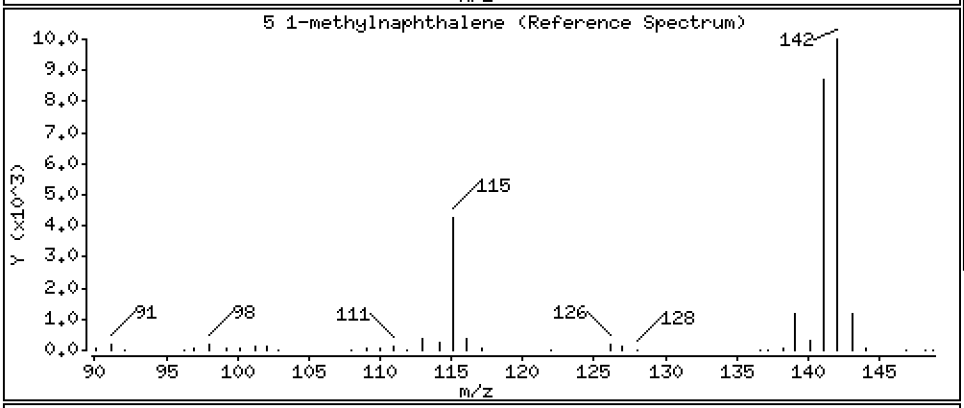
Concentration: 2.649 ug/L

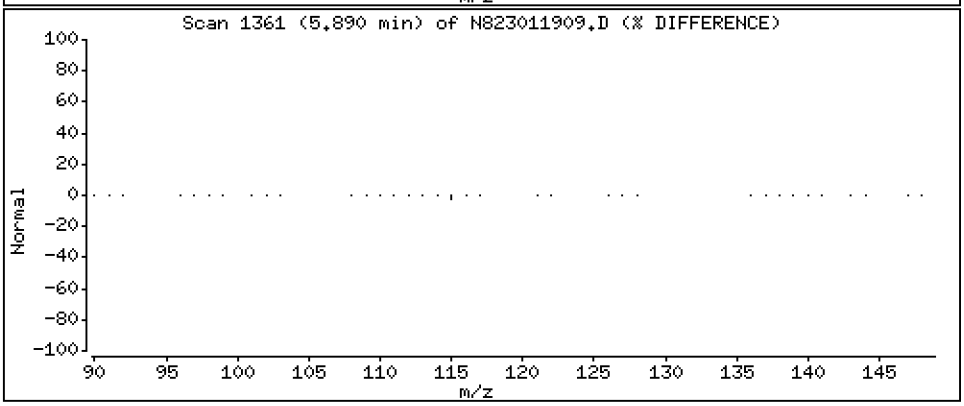












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

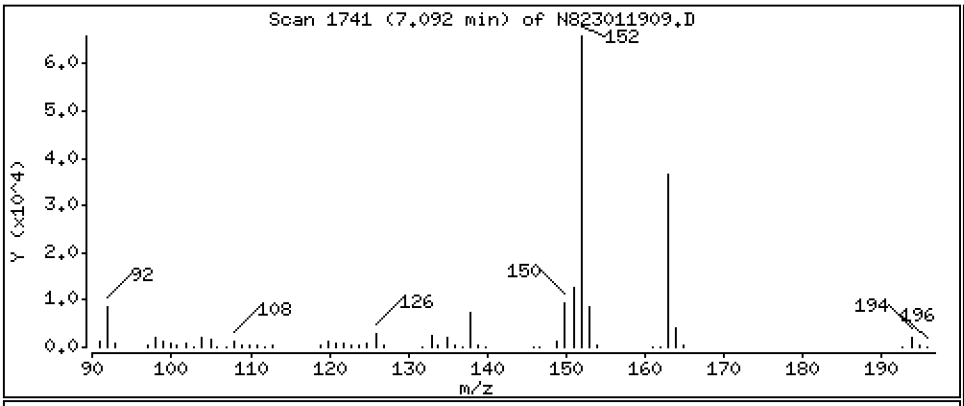
Operator: JZ

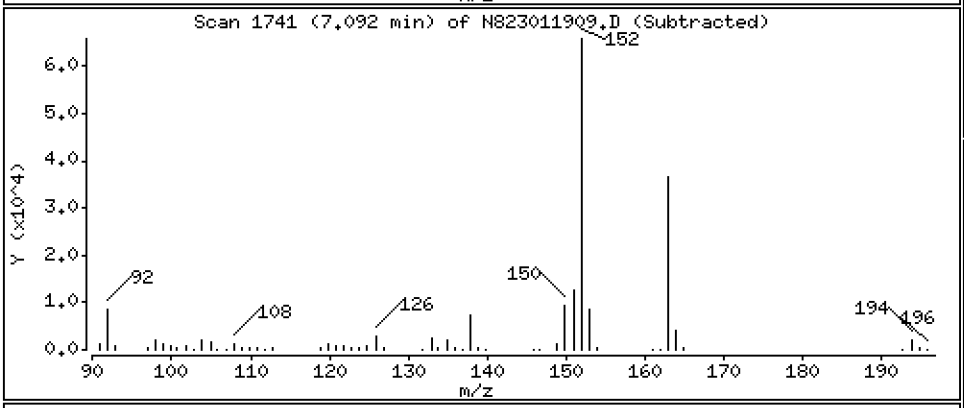
Column phase: Rxi-17sil

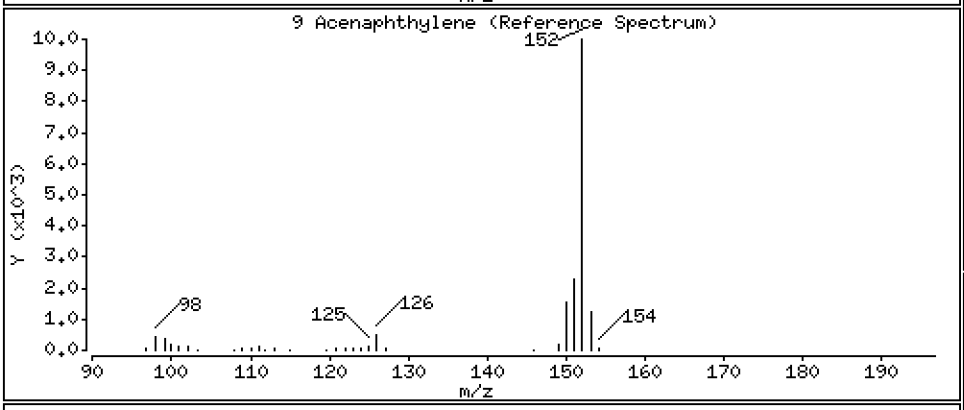
Column diameter: 0.25

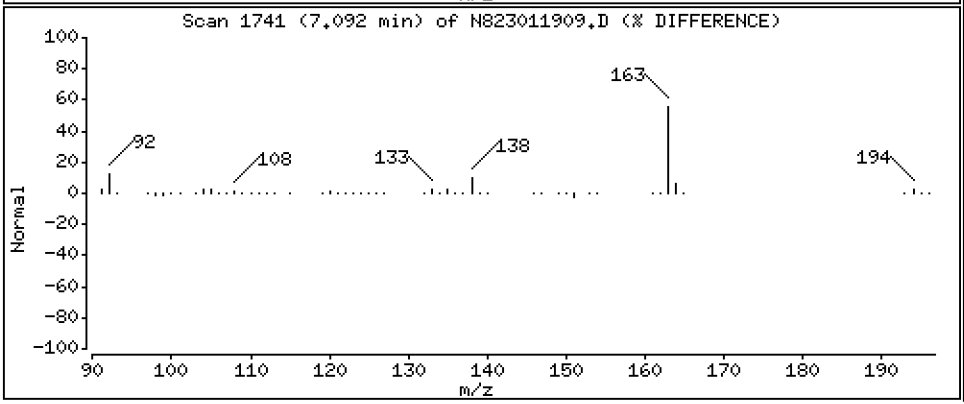
9 Acenaphthylene

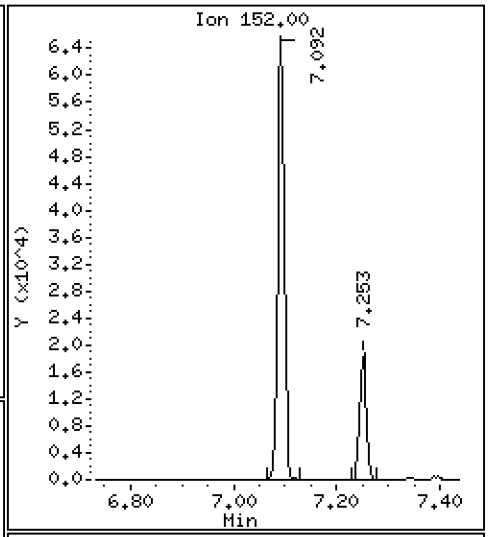
Concentration: 2.821 ug/L

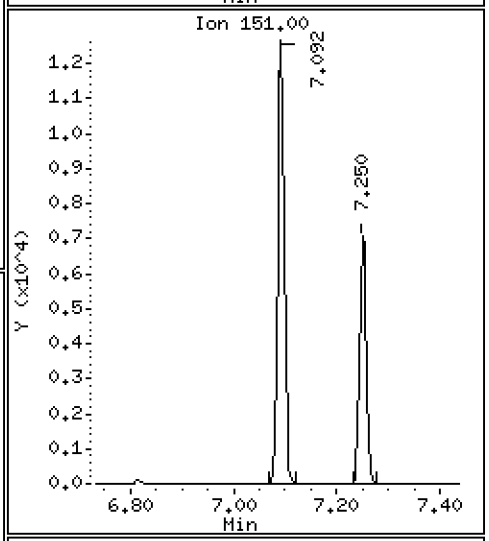


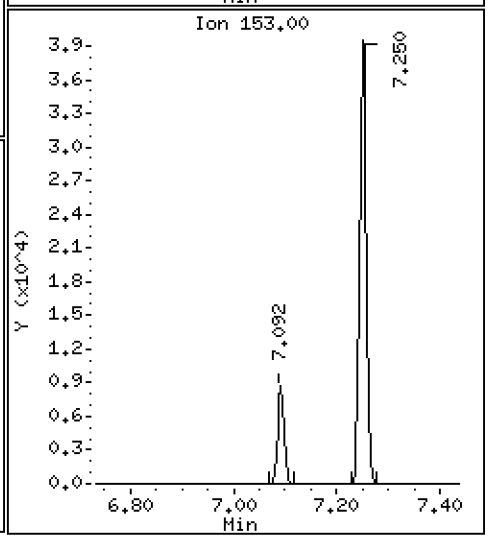












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

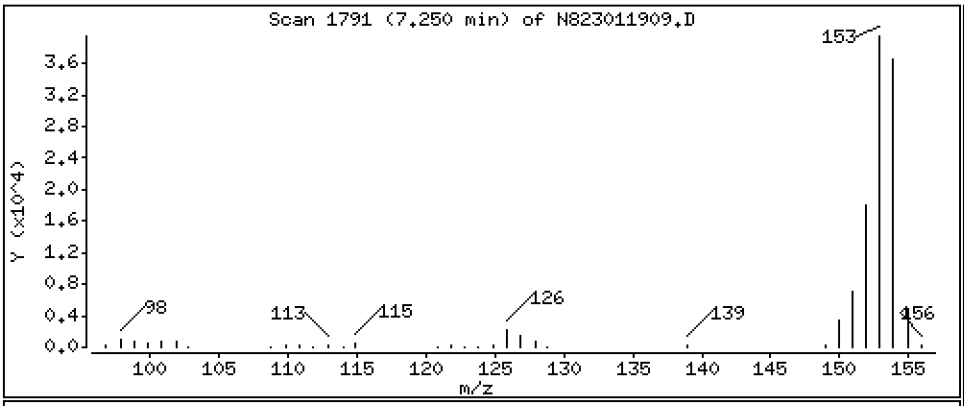
Operator: JZ

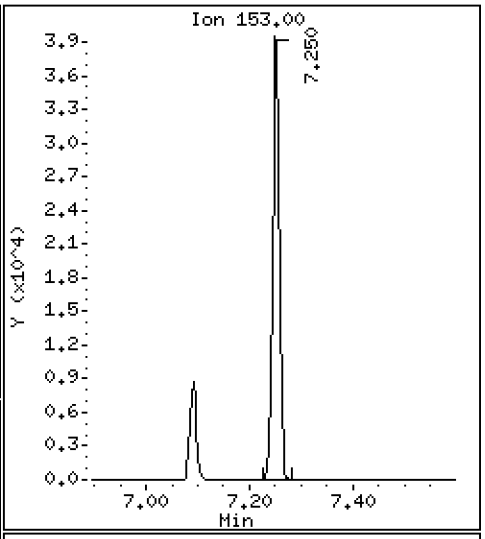
Column phase: Rxi-17sil

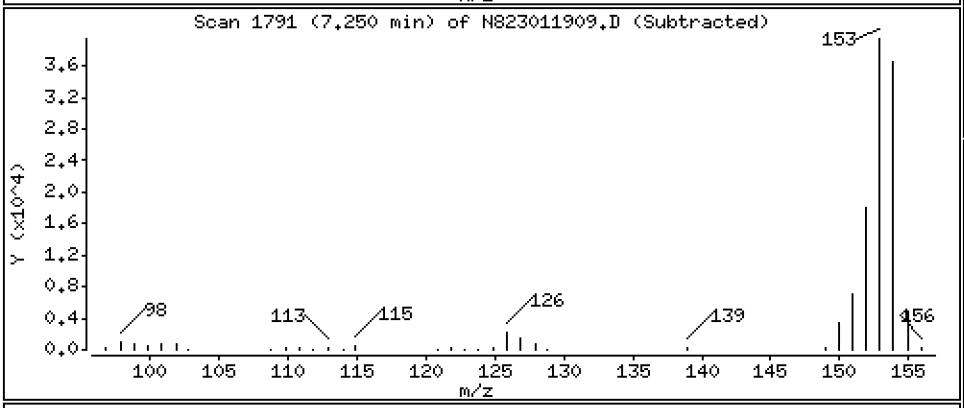
Column diameter: 0.25

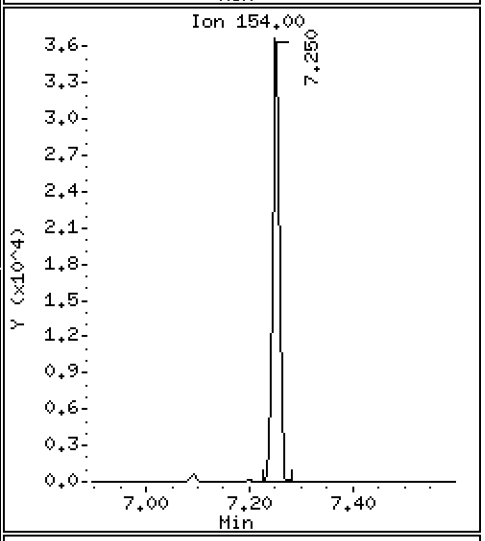
11 Acenaphthene

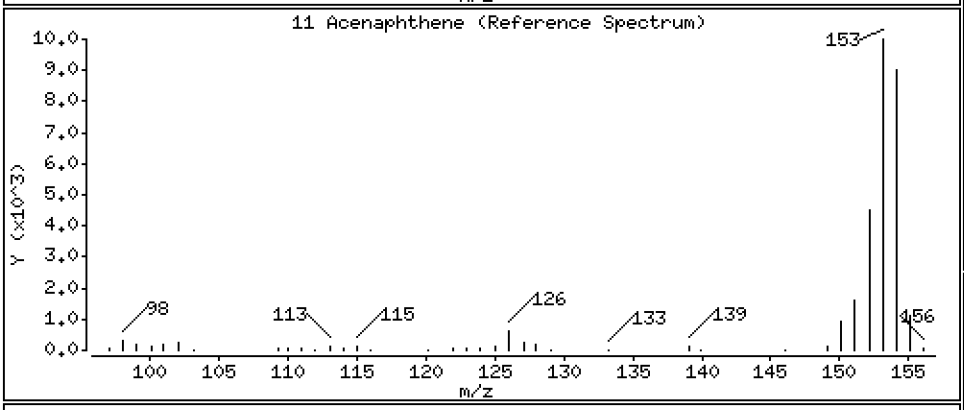
Concentration: 2.600 ug/L

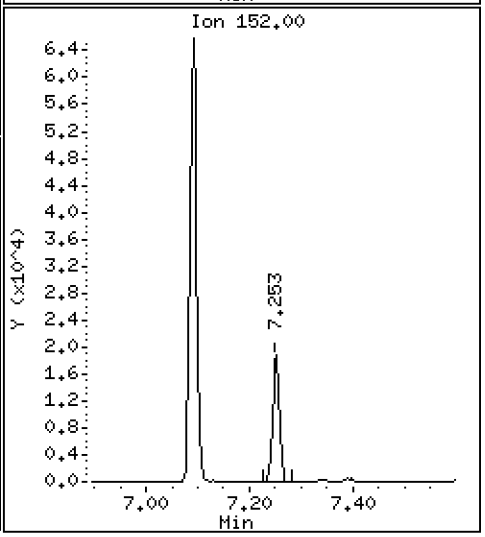


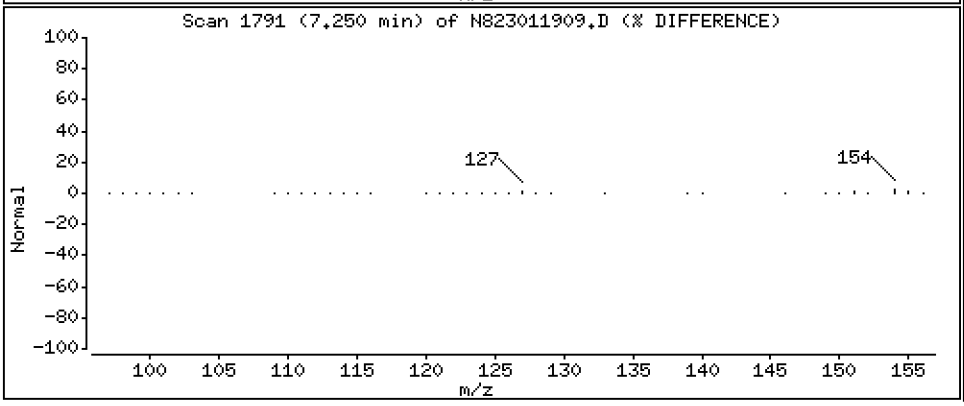












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

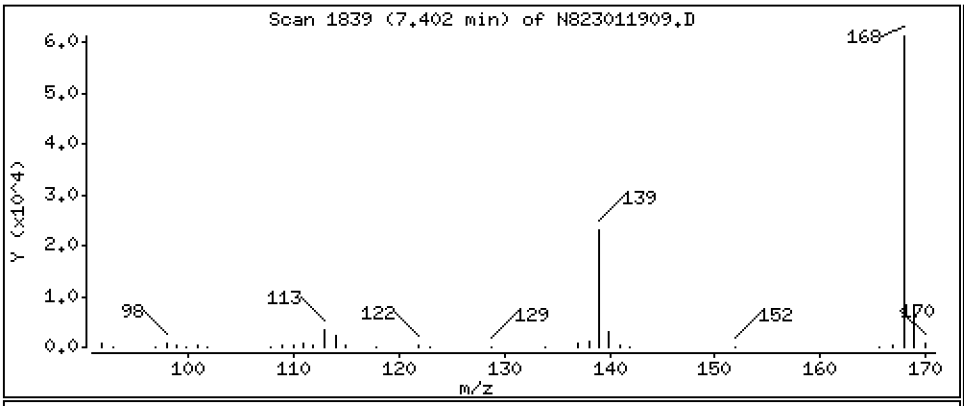
Operator: JZ

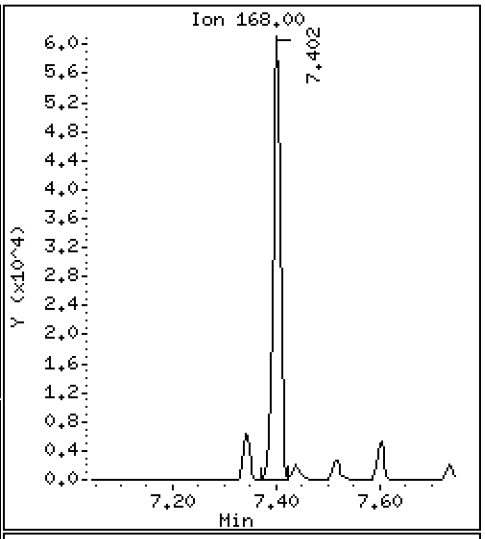
Column phase: Rxi-17sil

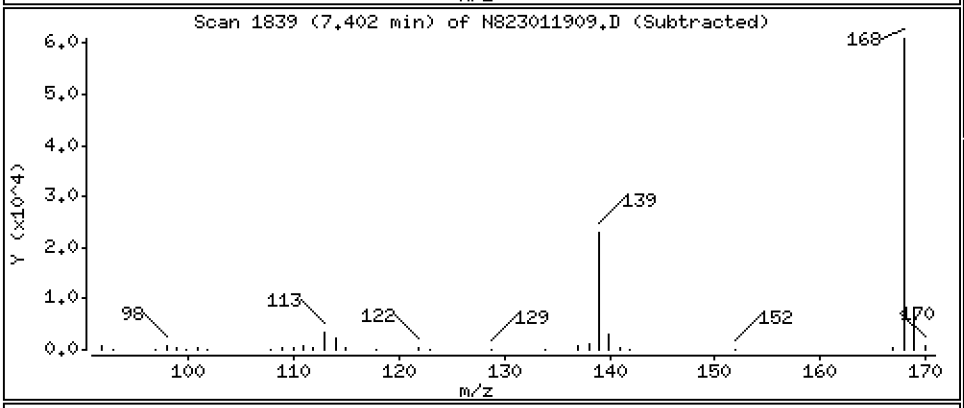
Column diameter: 0.25

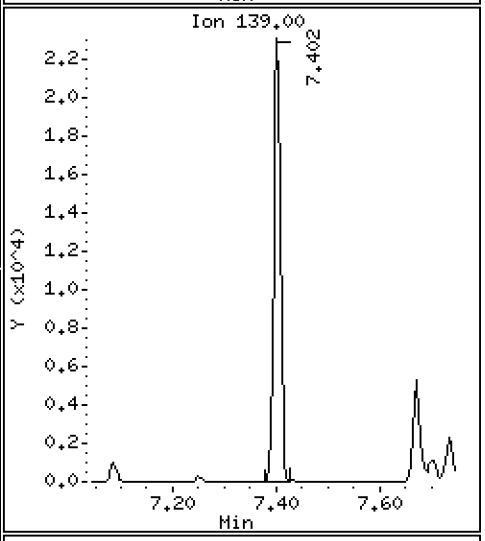
12 Dibenzofuran

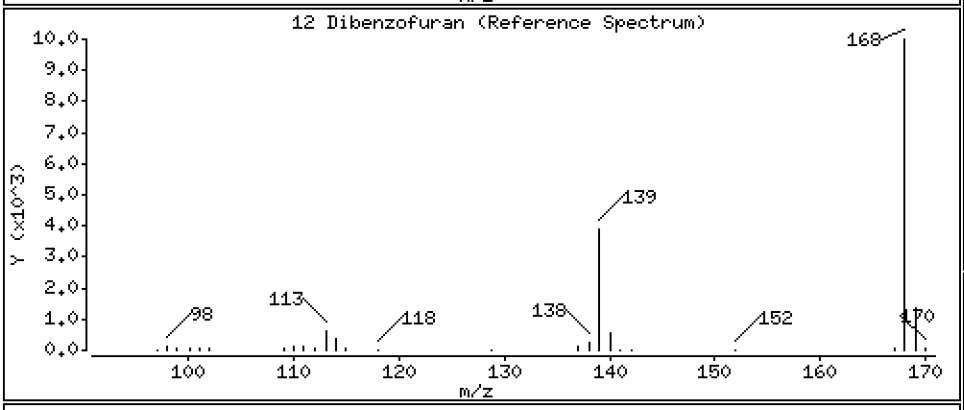
Concentration: 2.860 ug/L

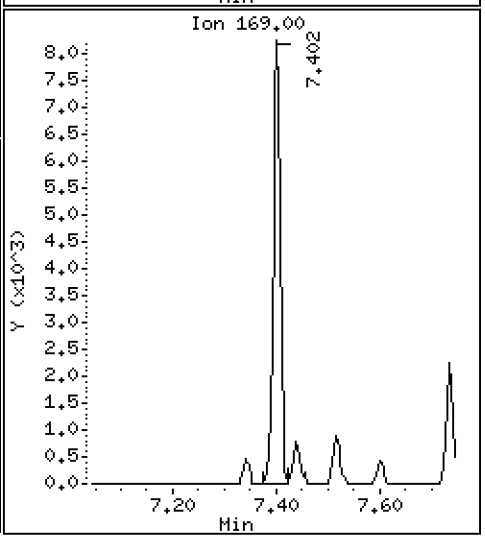


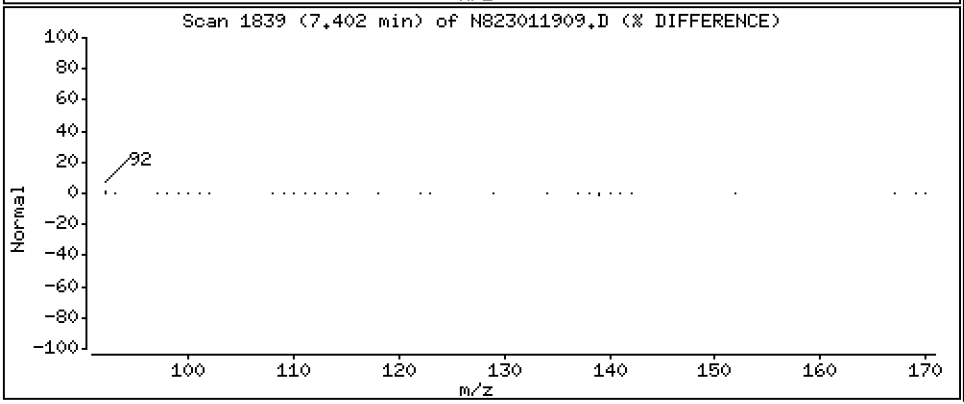












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

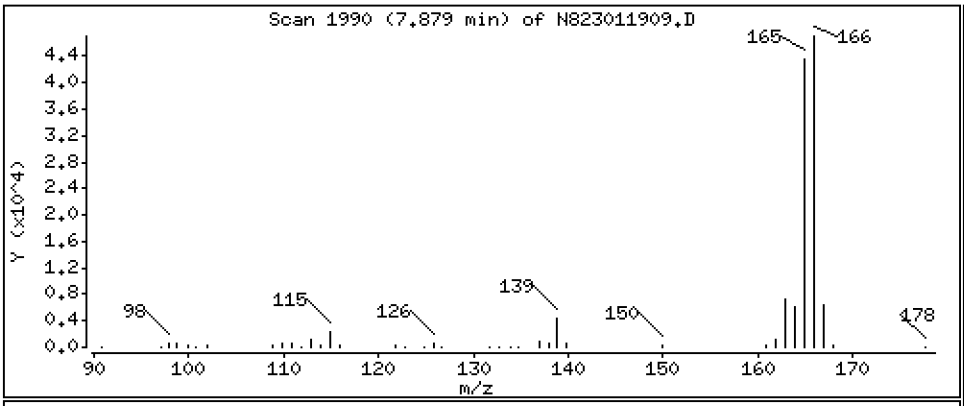
Operator: JZ

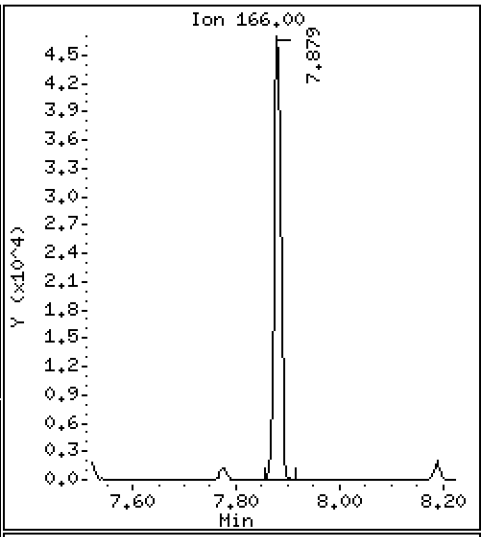
Column phase: Rxi-17sil

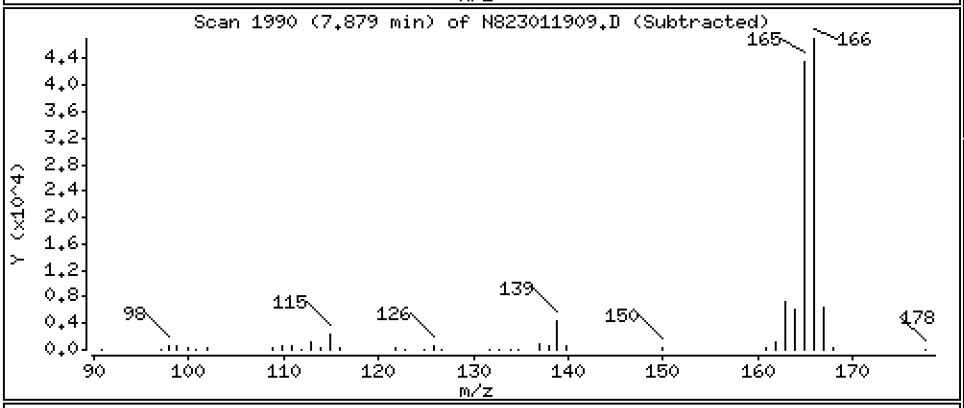
Column diameter: 0.25

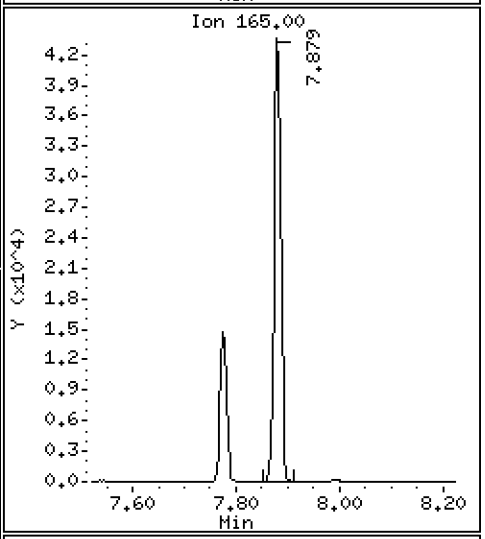
14 Fluorene

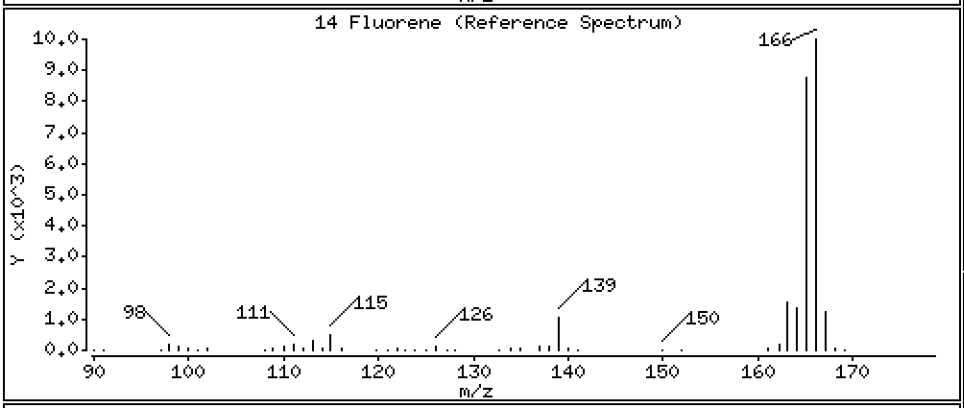
Concentration: 2.631 ug/L

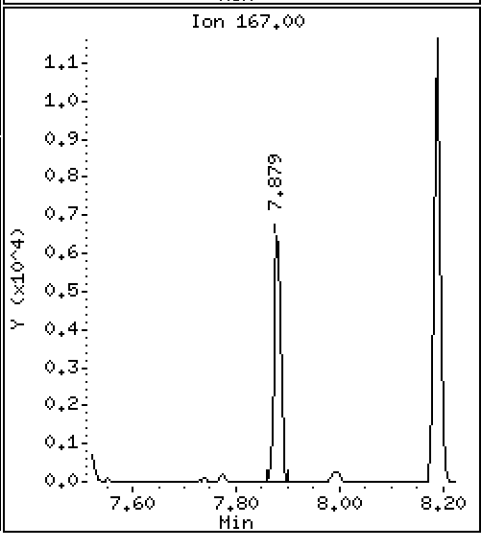


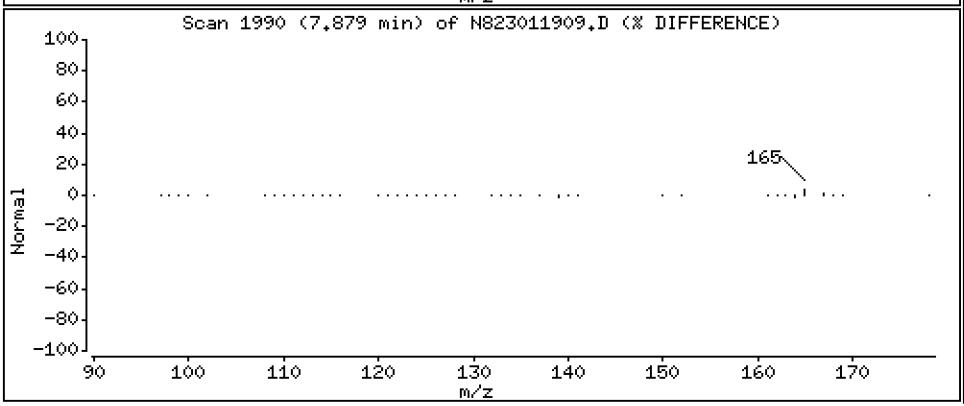












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

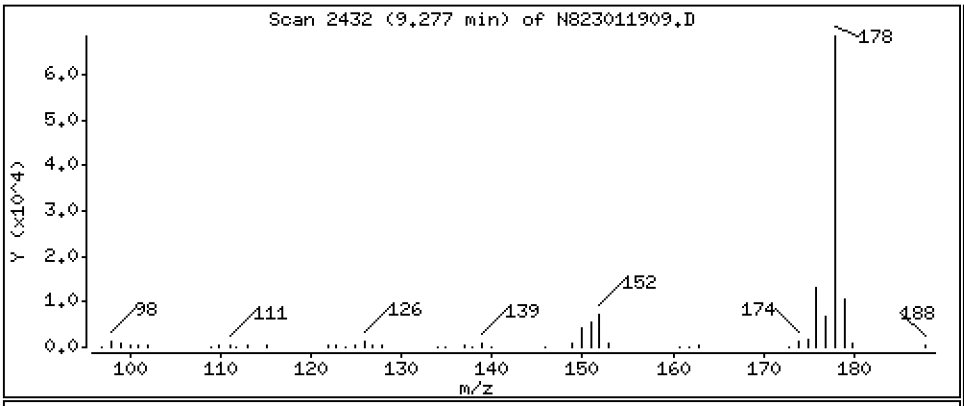
Operator: JZ

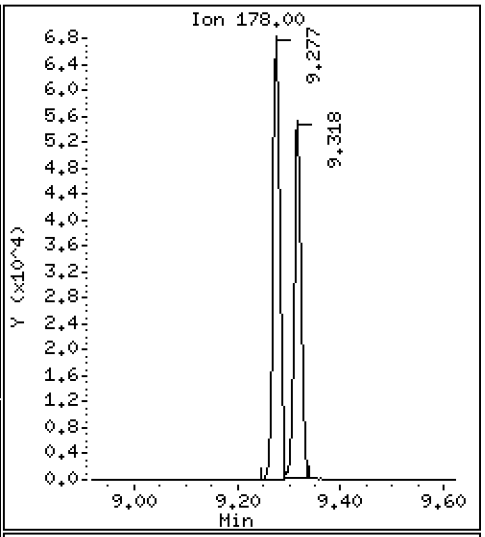
Column phase: Rxi-17sil

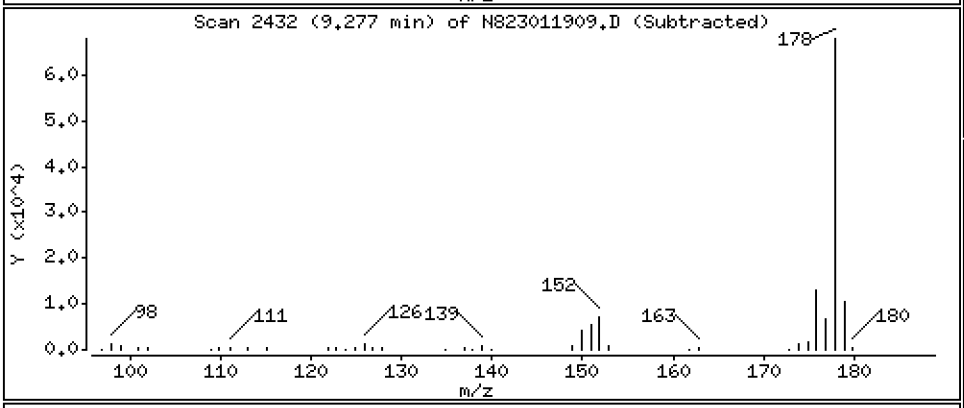
Column diameter: 0.25

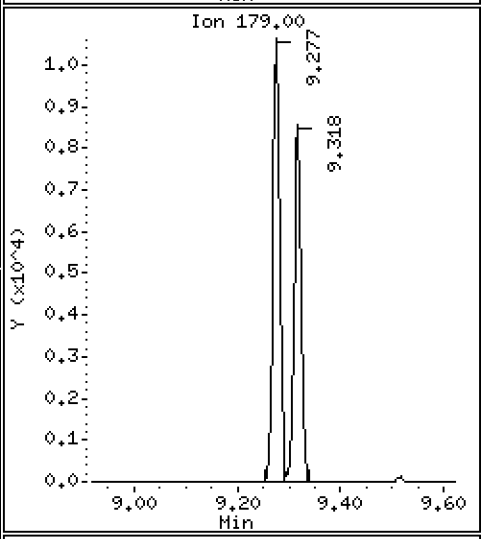
16 Phenanthrene

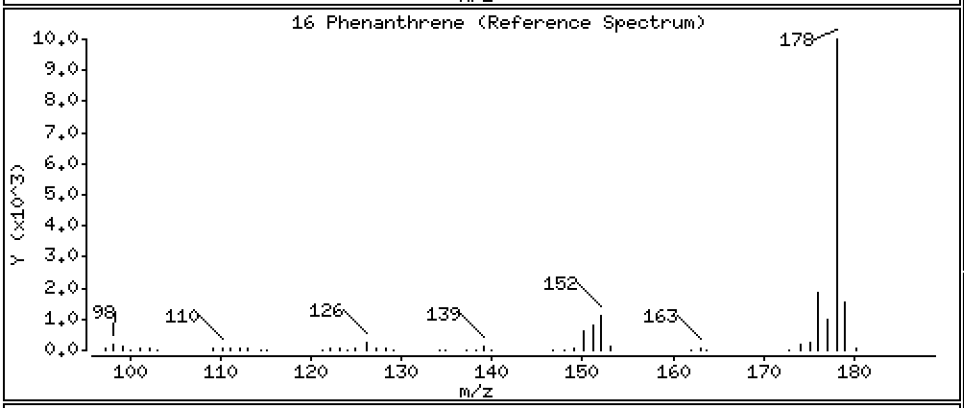
Concentration: 2.448 ug/L

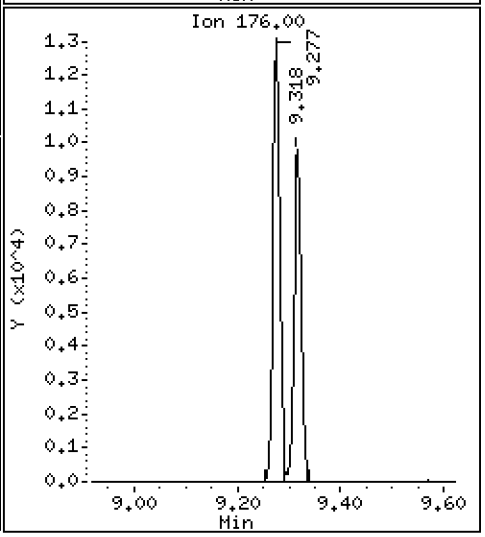


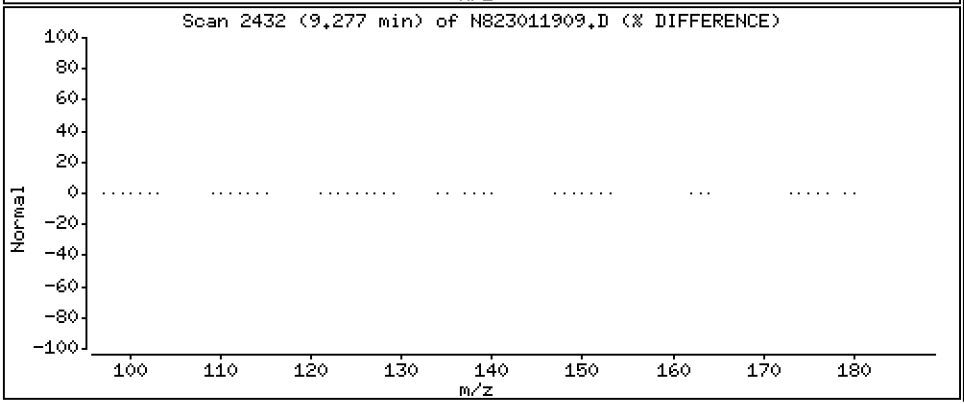












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

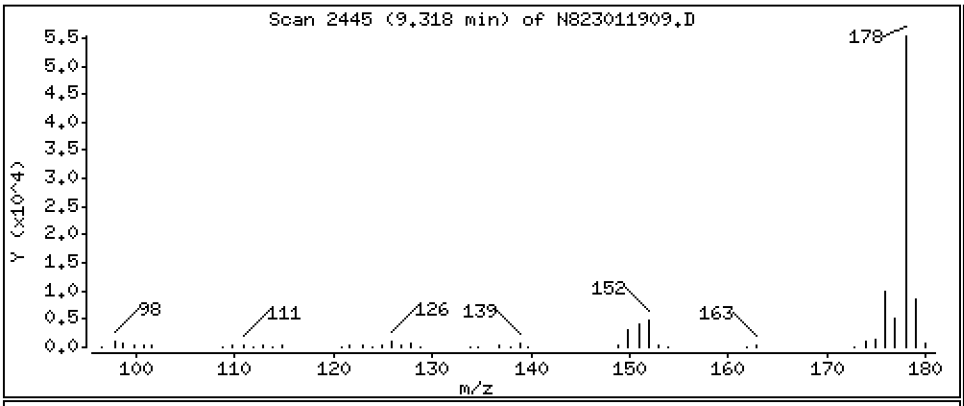
Operator: JZ

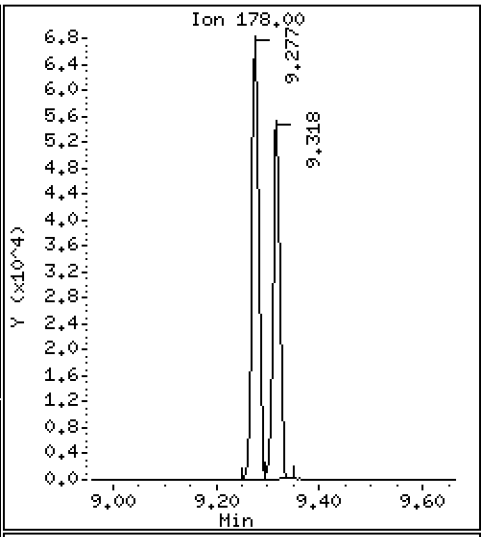
Column phase: Rxi-17sil

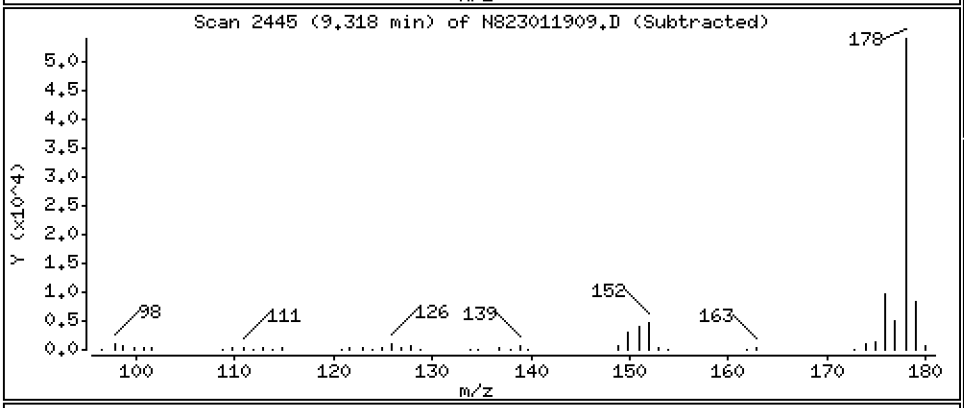
Column diameter: 0.25

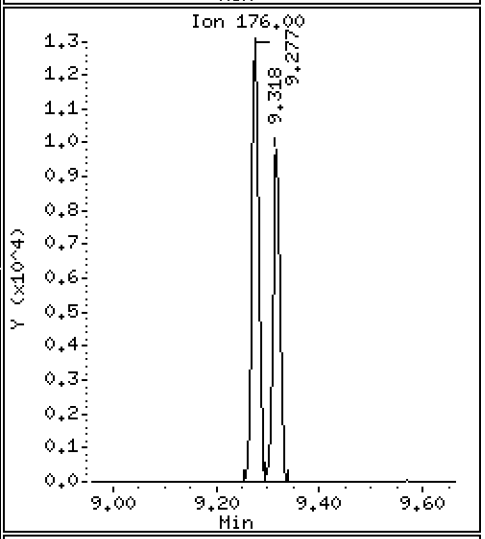
17 Anthracene

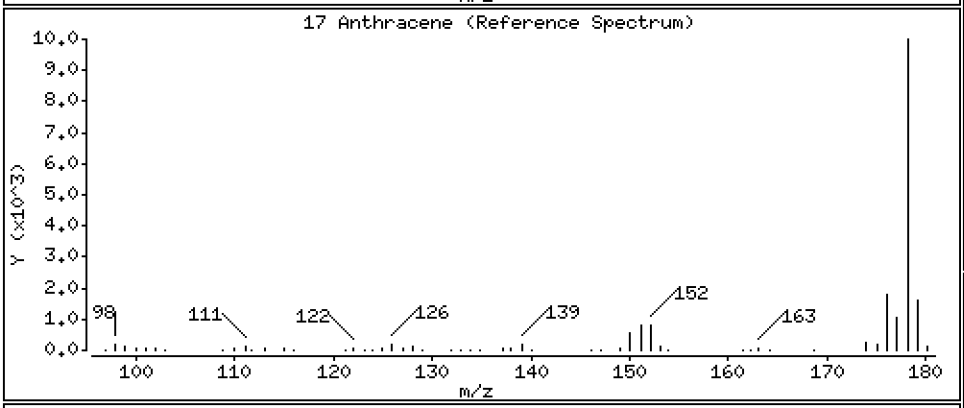
Concentration: 2.270 ug/L

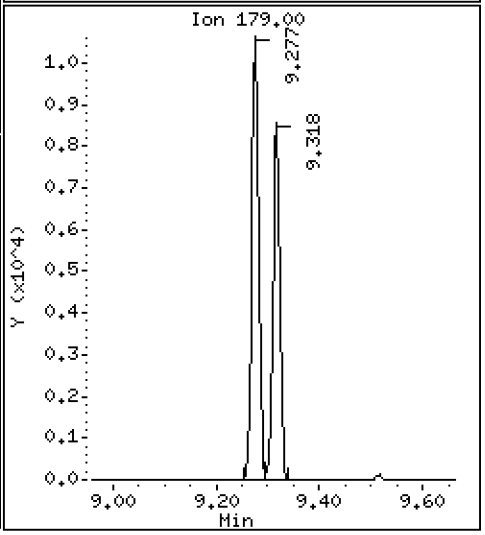


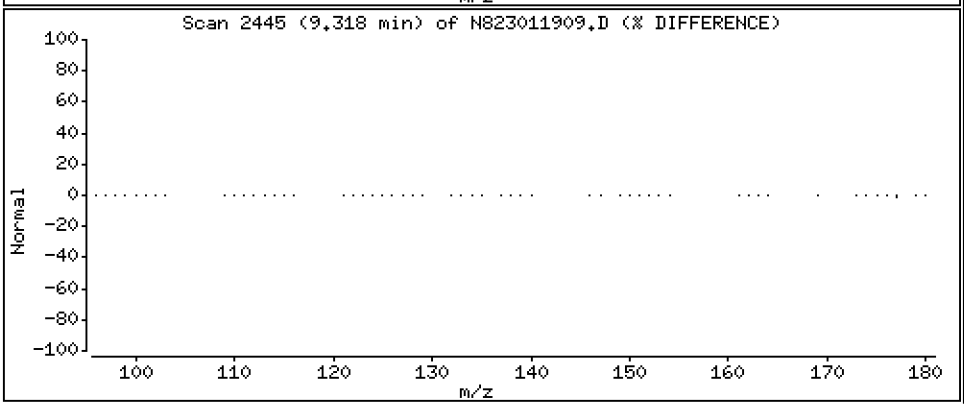












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

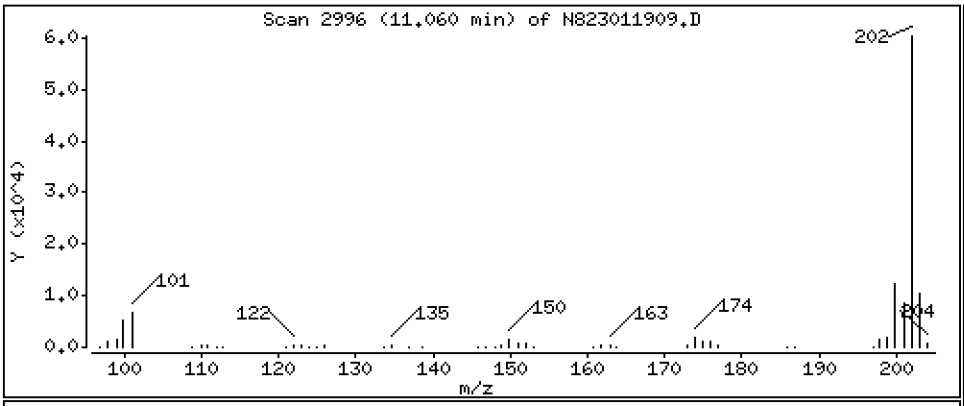
Operator: JZ

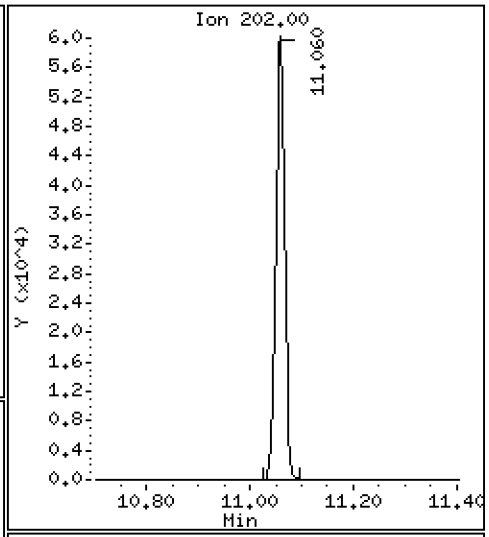
Column phase: Rxi-17sil

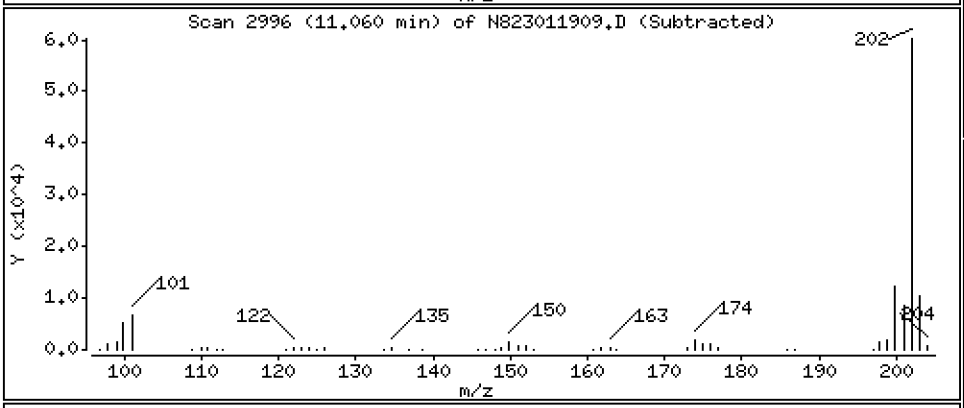
Column diameter: 0.25

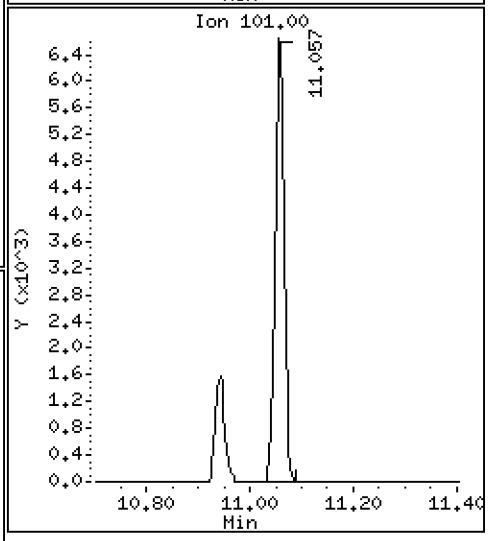
22 Fluoranthene

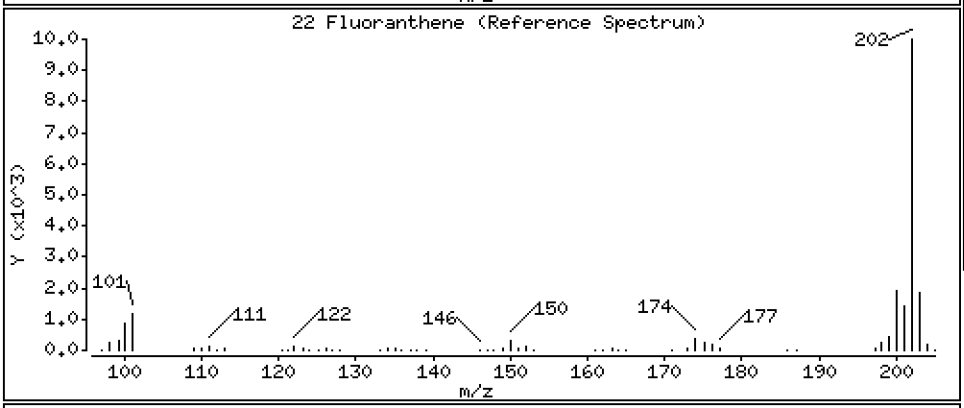
Concentration: 2.653 ug/L

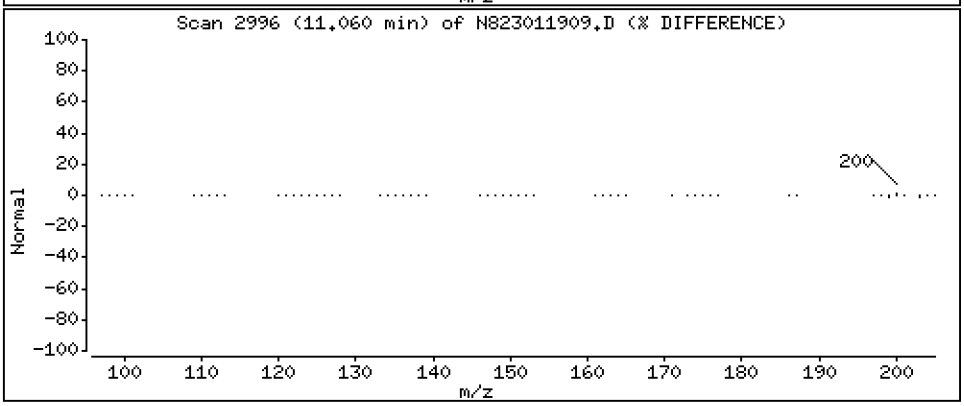












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

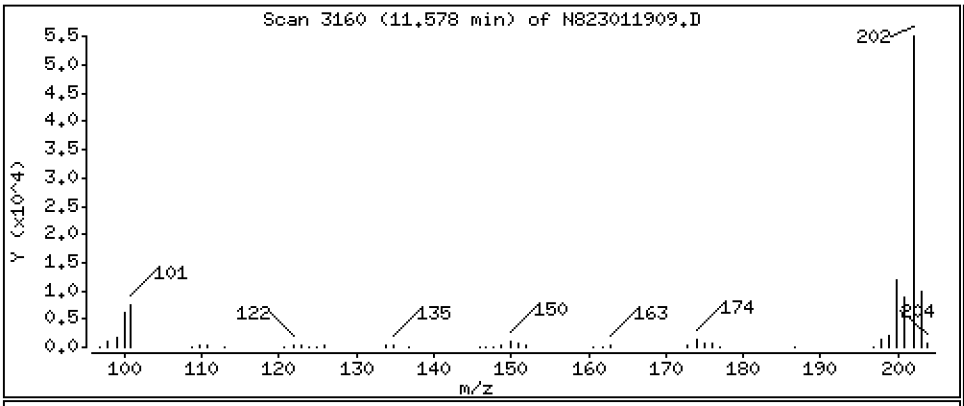
Operator: JZ

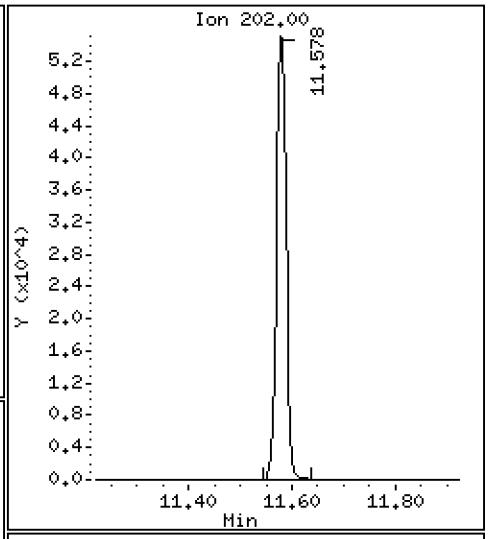
Column phase: Rxi-17sil

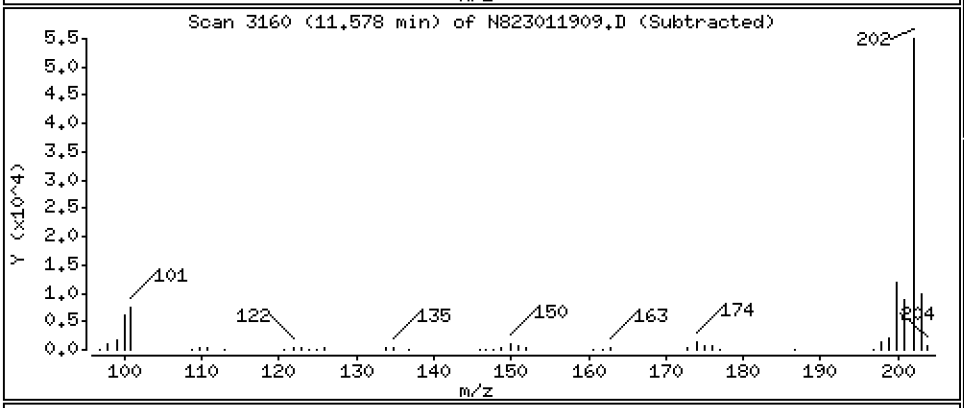
Column diameter: 0.25

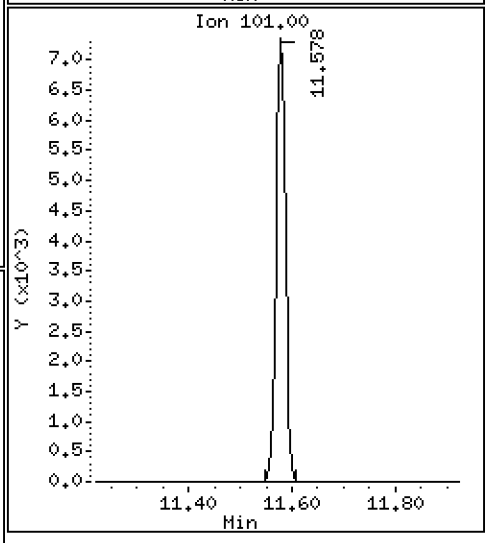
23 Pyrene

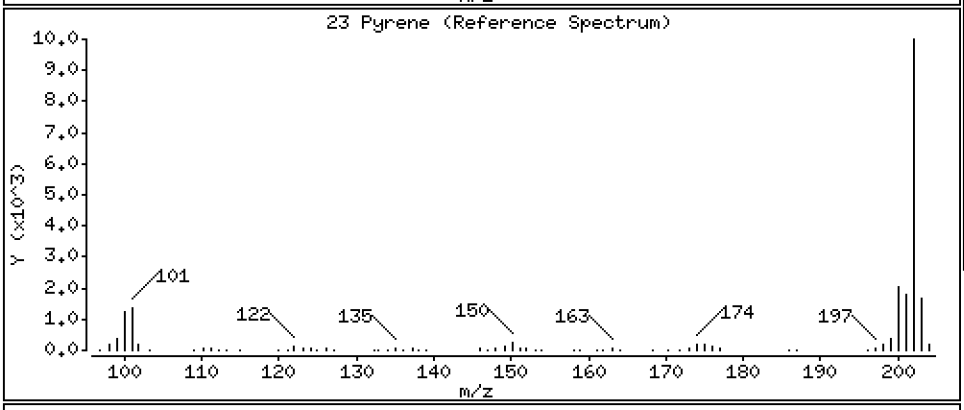
Concentration: 2.462 ug/L

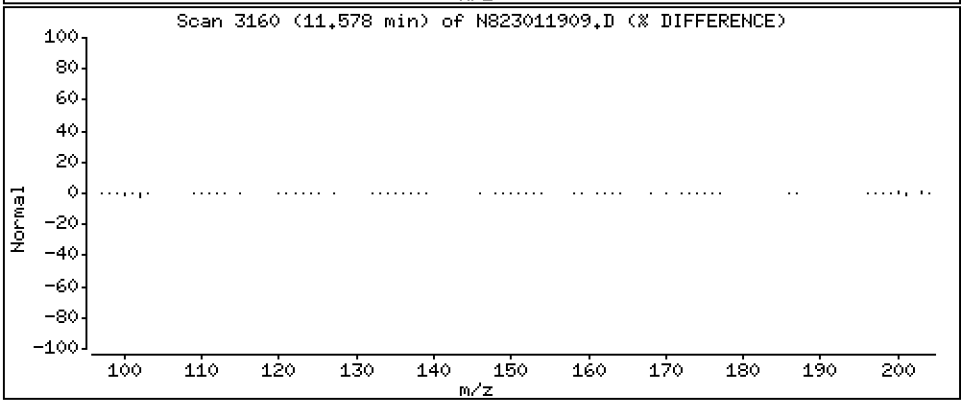












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

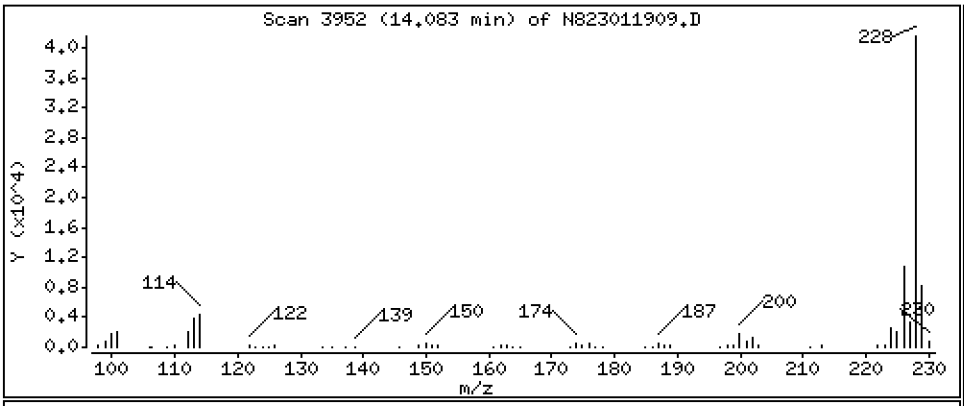
Operator: JZ

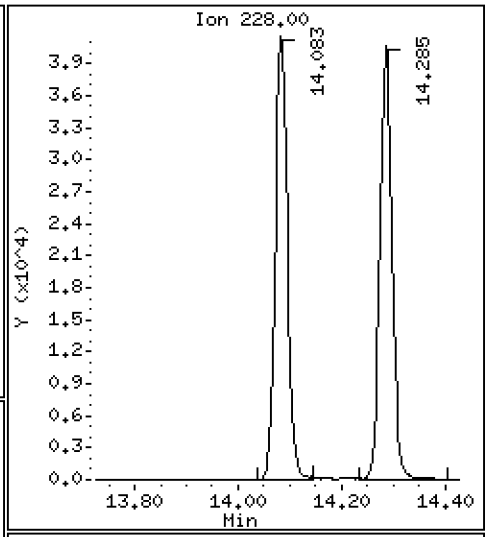
Column phase: Rxi-17sil

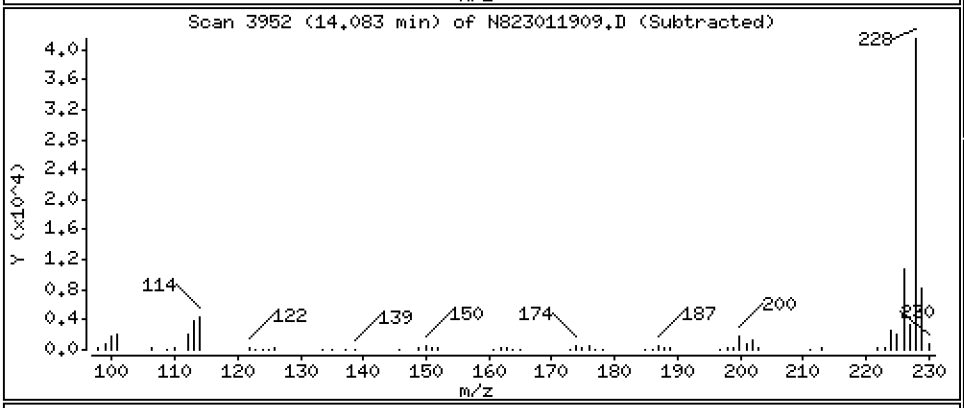
Column diameter: 0.25

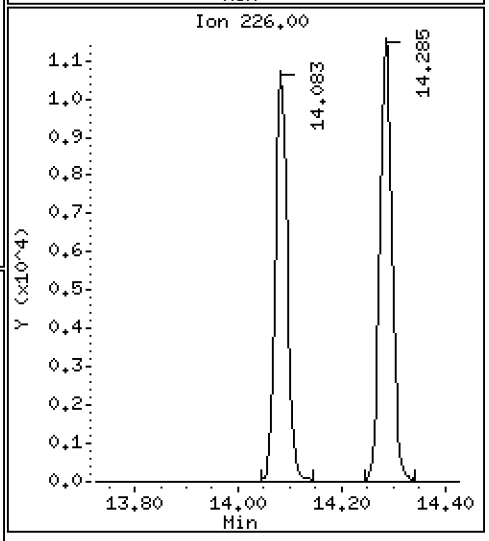
24 Benzo(a)anthracene

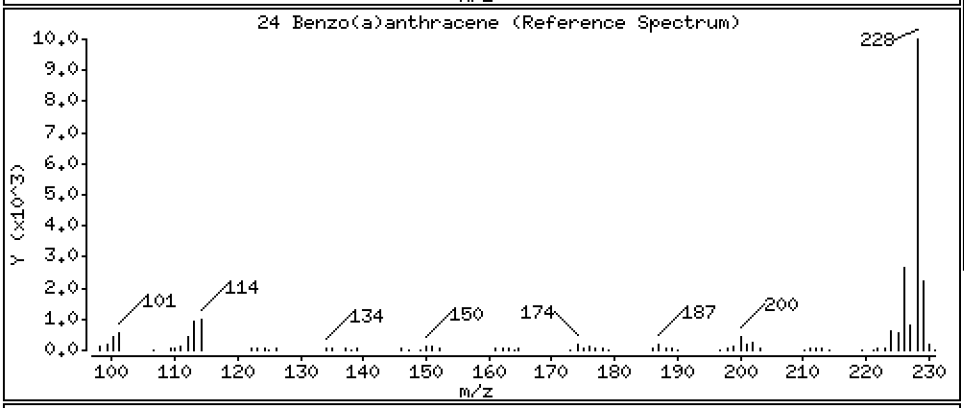
Concentration: 2.587 ug/L

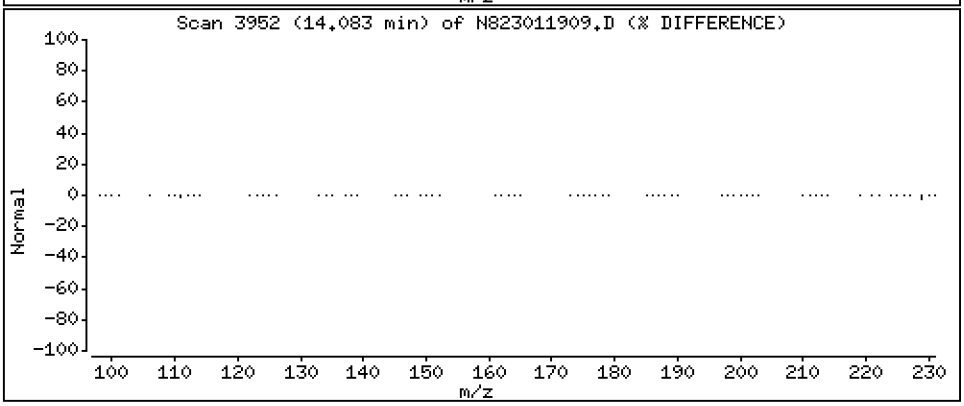












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

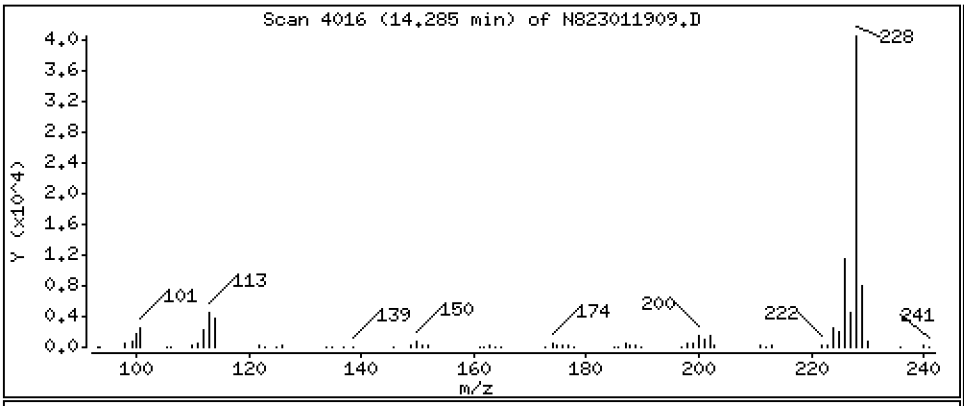
Operator: JZ

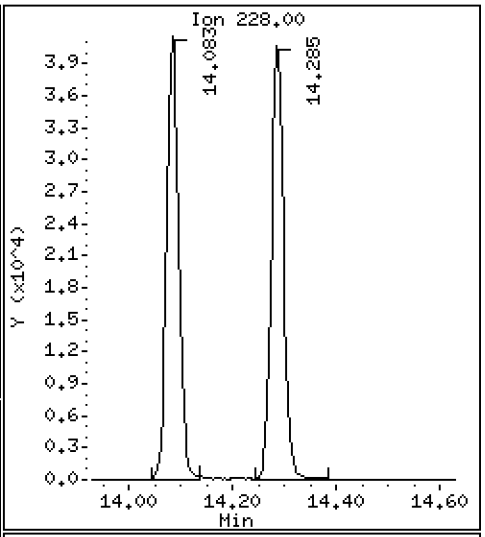
Column phase: Rxi-17sil

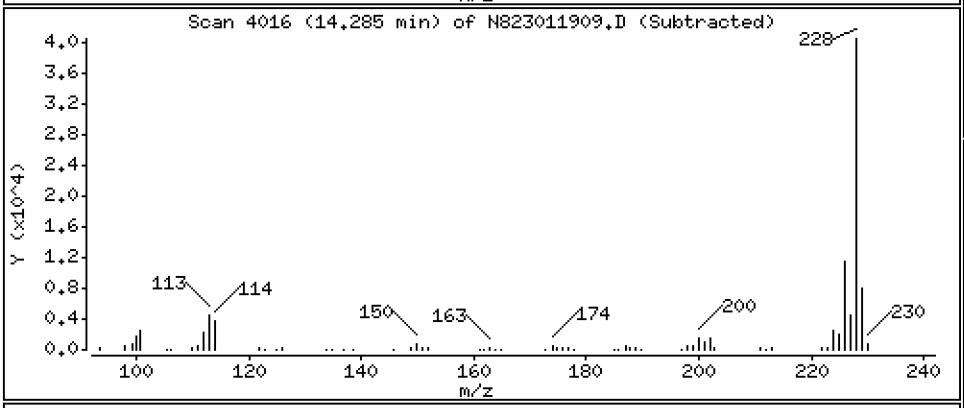
Column diameter: 0.25

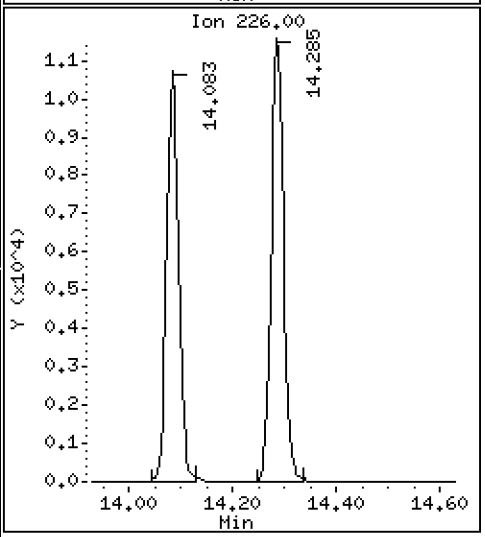
27 Chrysene

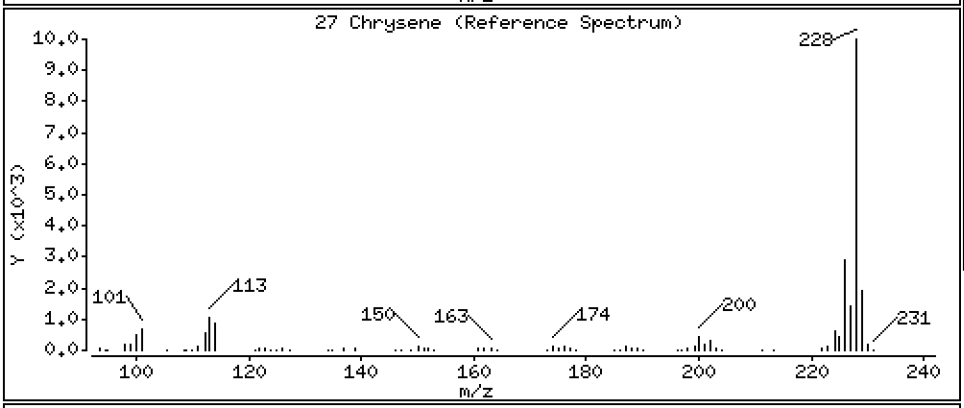
Concentration: 2.400 ug/L

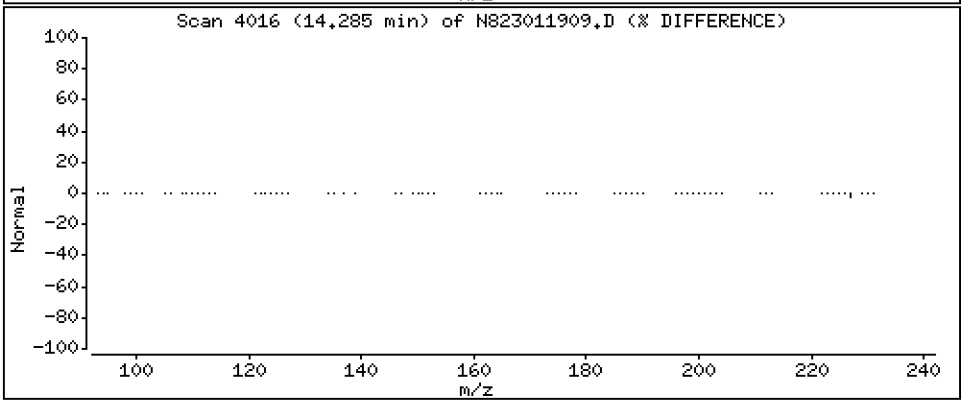












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

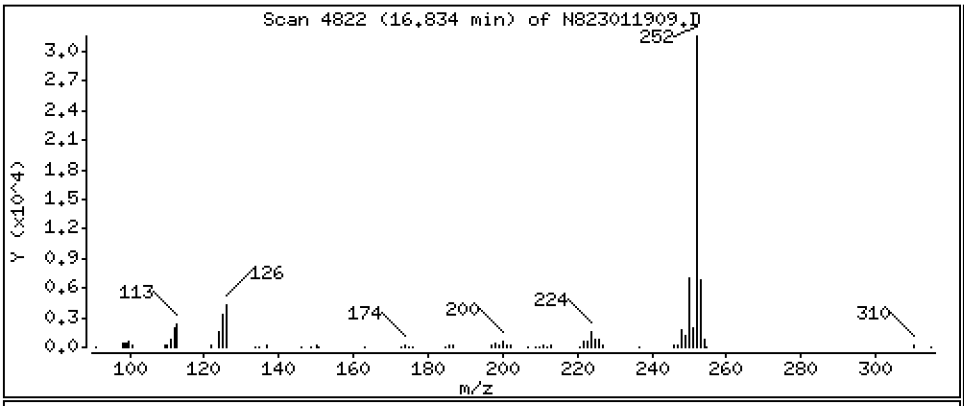
Operator: JZ

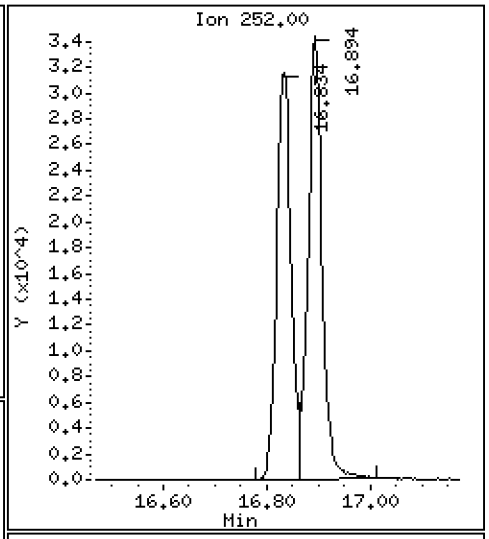
Column phase: Rxi-17sil

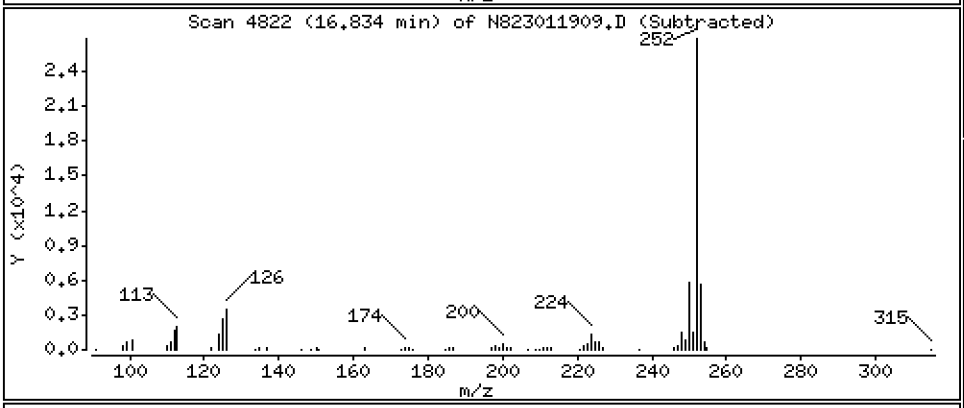
Column diameter: 0.25

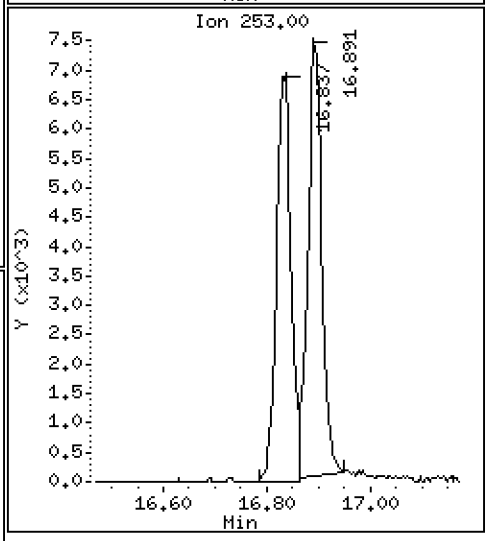
28 Benzo(b)fluoranthene

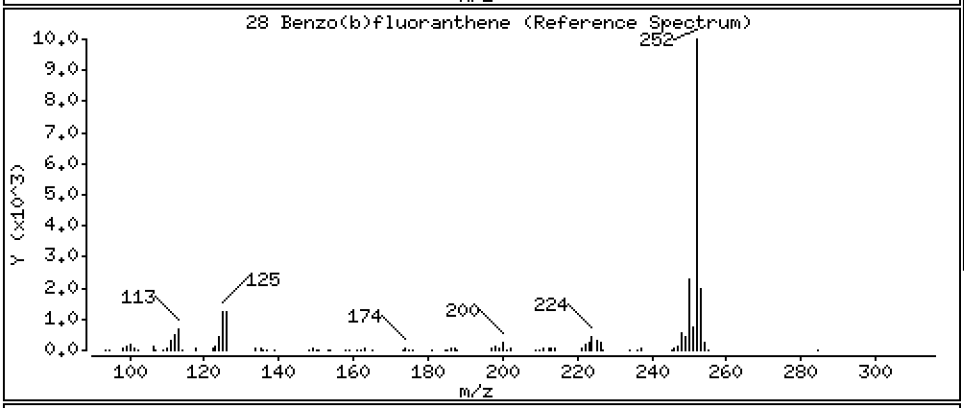
Concentration: 2.507 ug/L

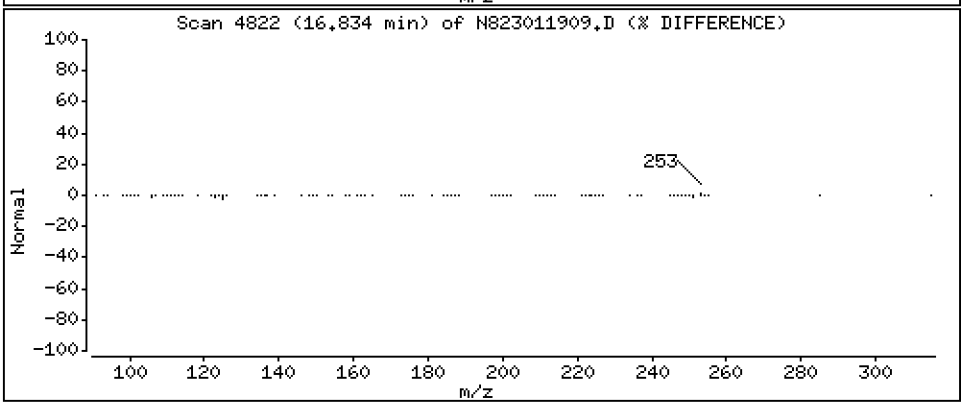












Date : 19-JAN-2023 14:58

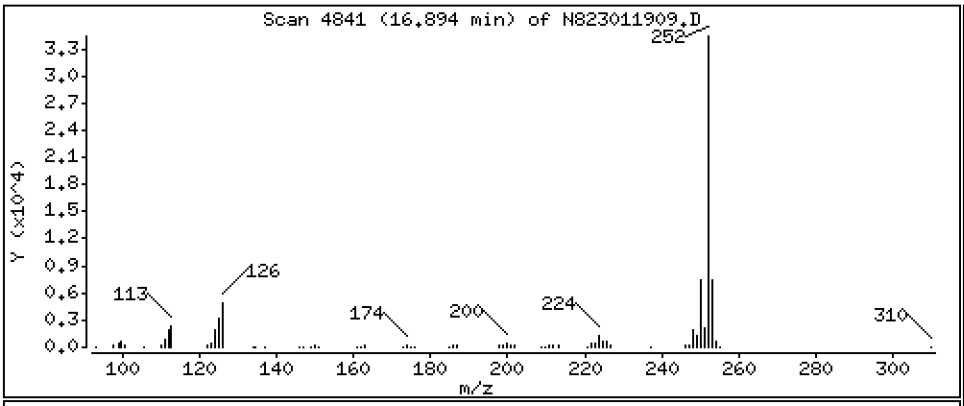
Client ID: Instrument: nt8.i

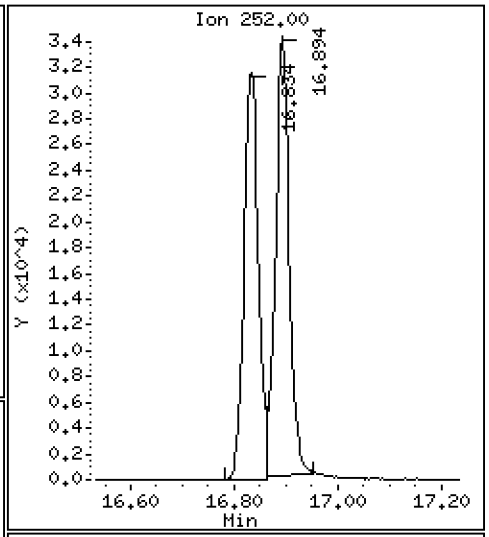
Sample Info: SCV230119

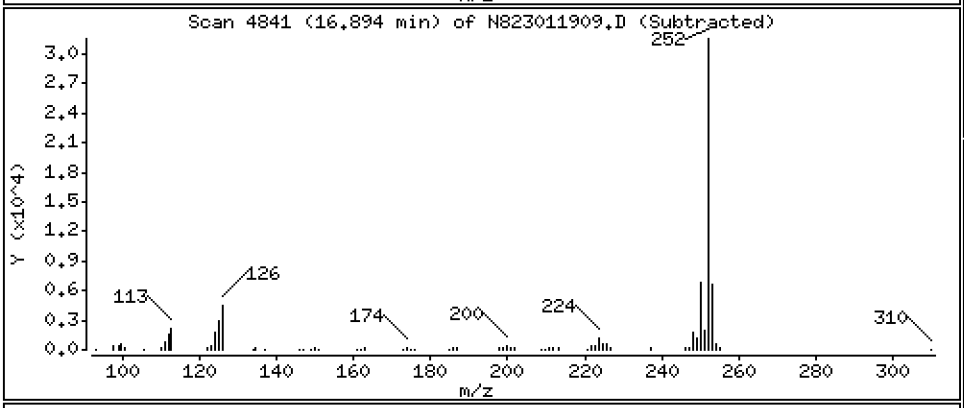
Volume Injected (uL): 1.0 Operator: JZ

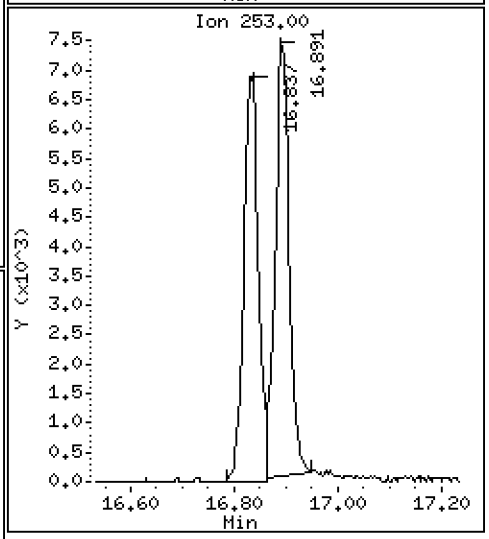
Column phase: Rxi-17sil Column diameter: 0.25

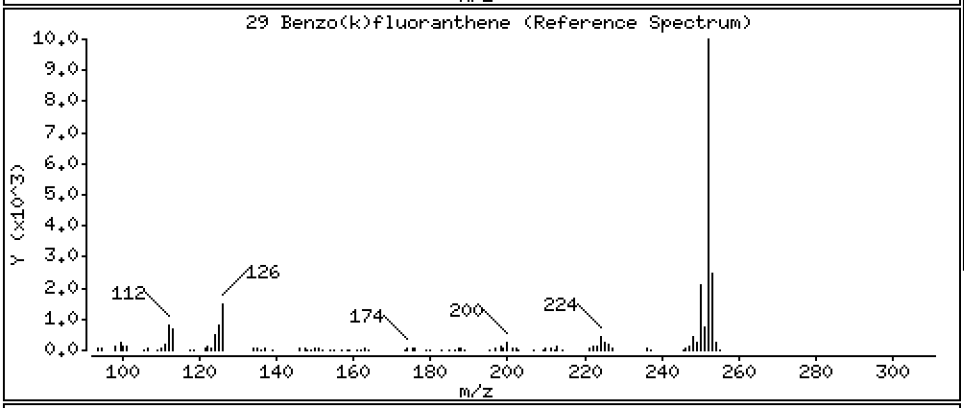
29 Benzo(k)fluoranthene Concentration: 2.656 ug/L

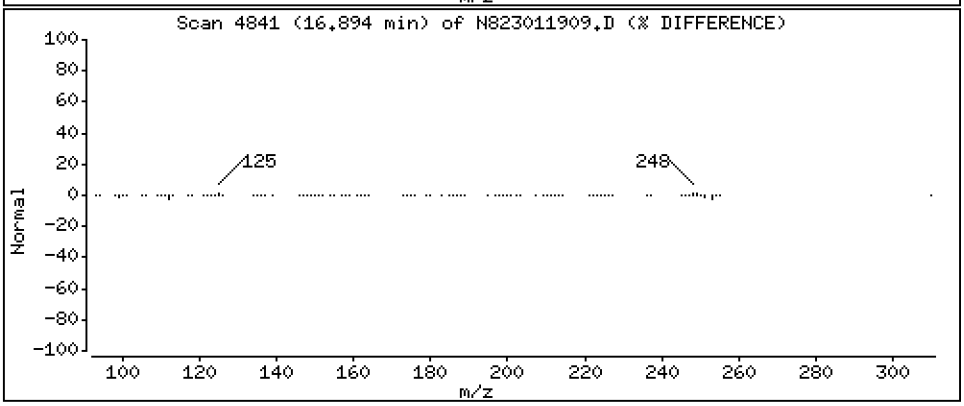












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

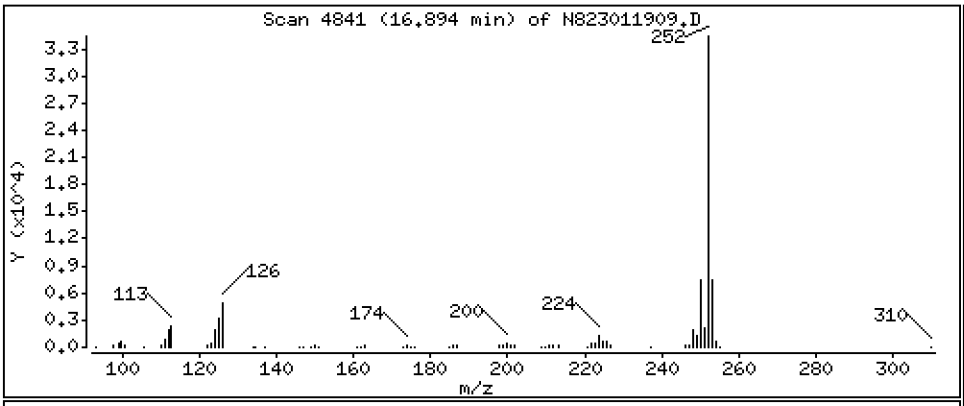
Operator: JZ

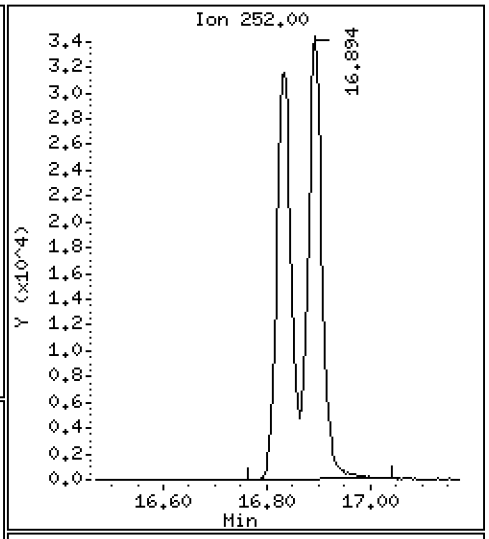
Column phase: Rxi-17sil

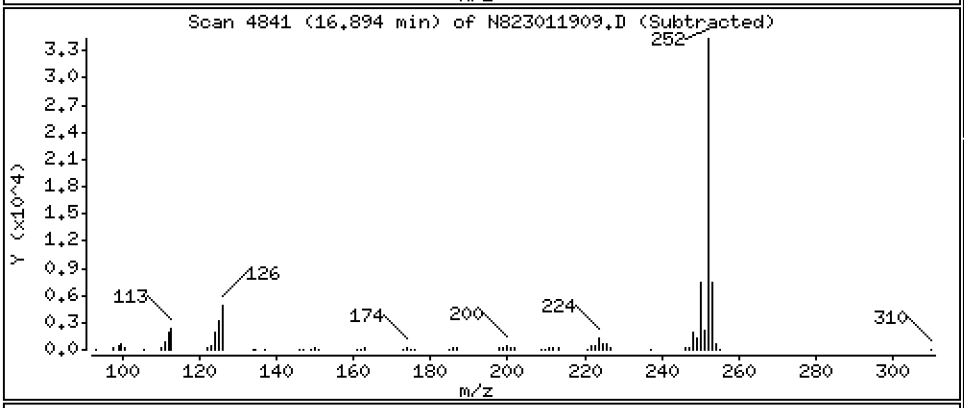
Column diameter: 0.25

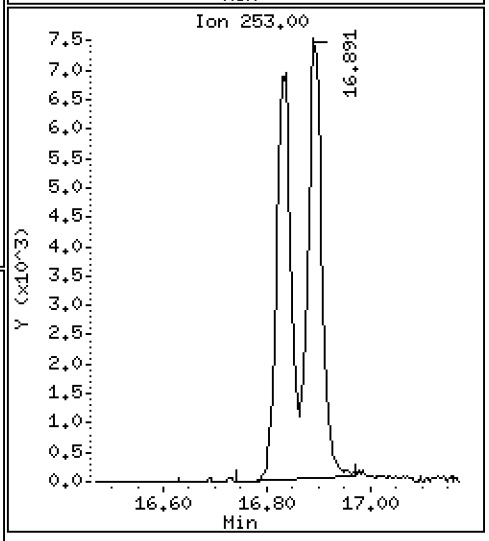
31 Total Benzofluoranthenes

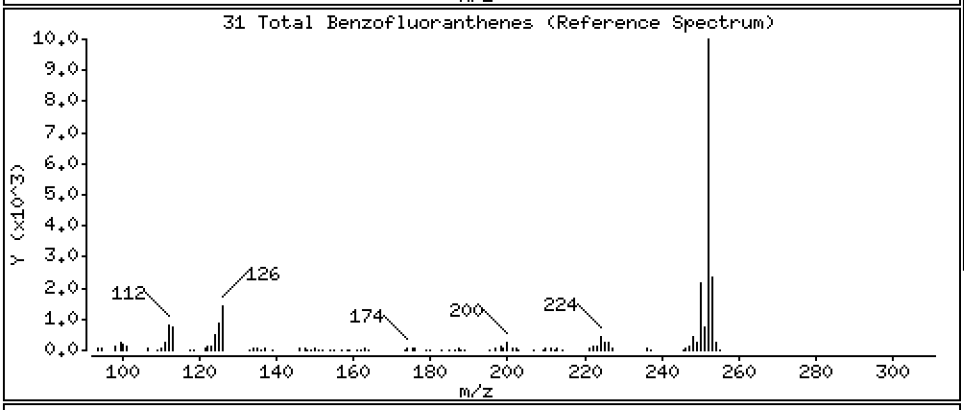
Concentration: 5.480 ug/L

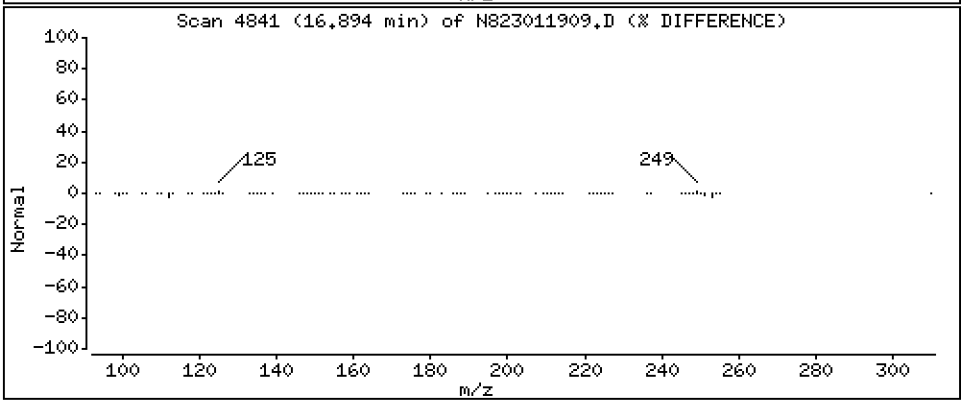












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

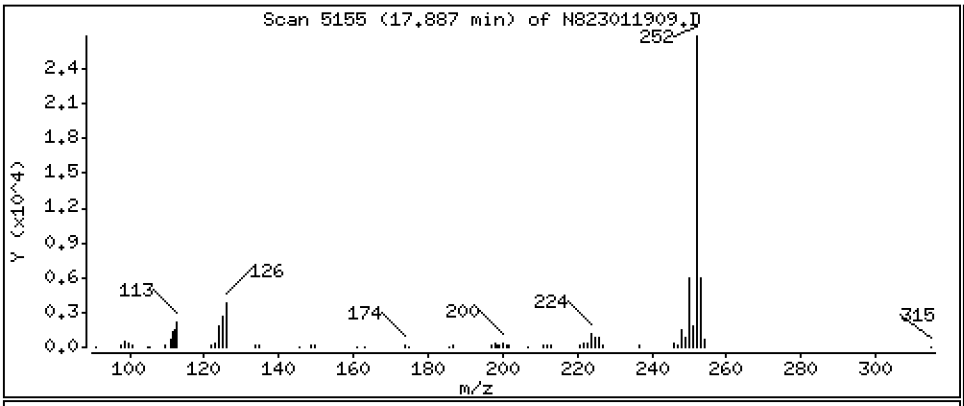
Operator: JZ

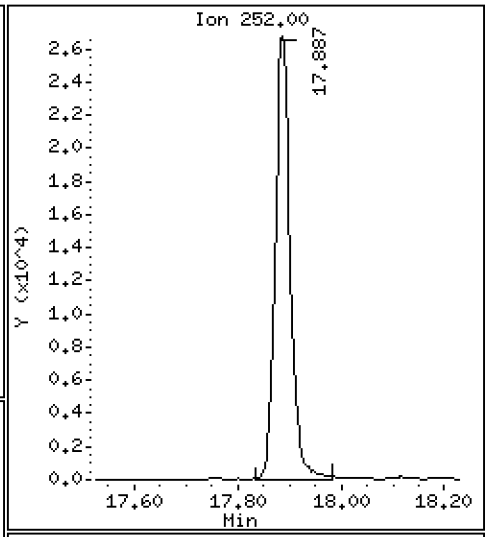
Column phase: Rxi-17sil

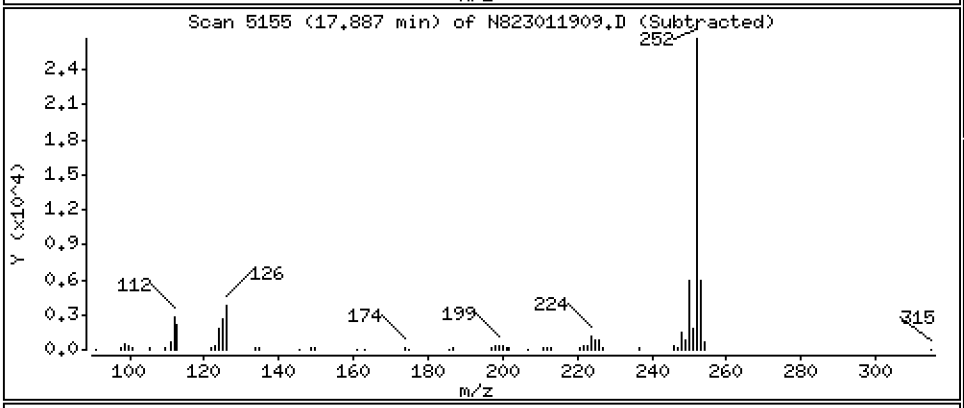
Column diameter: 0.25

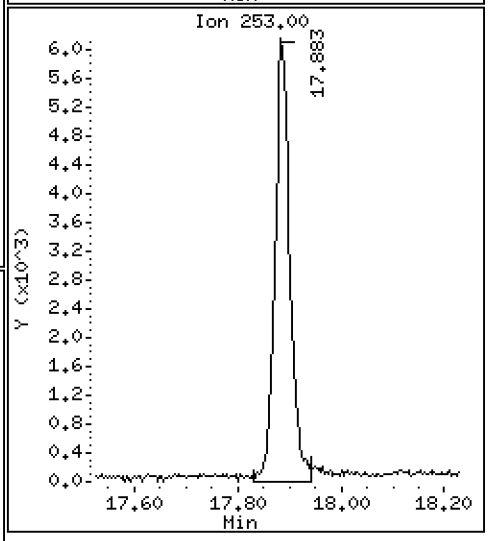
32 Benzo(a)pyrene

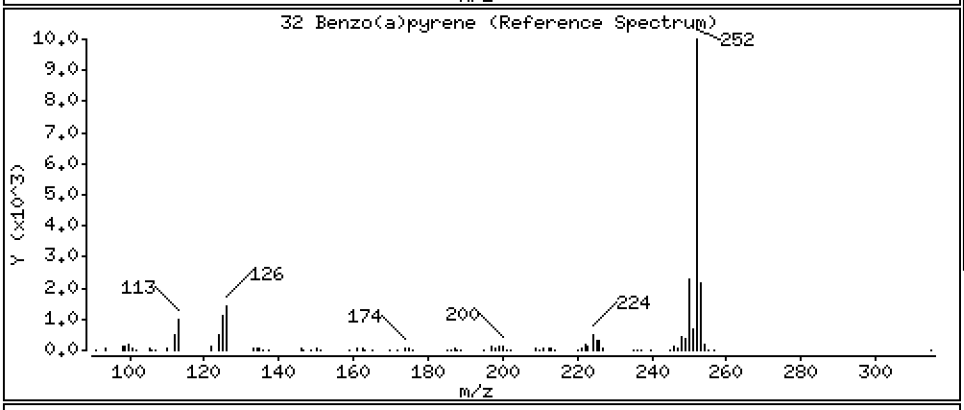
Concentration: 2.572 ug/L

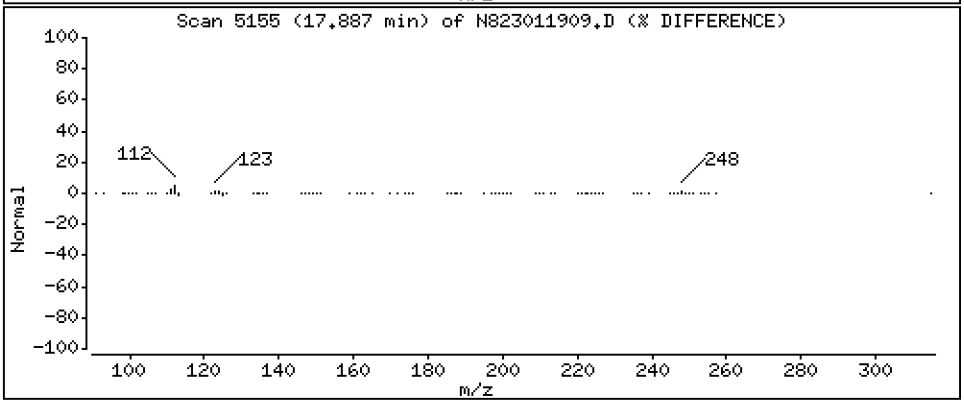












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

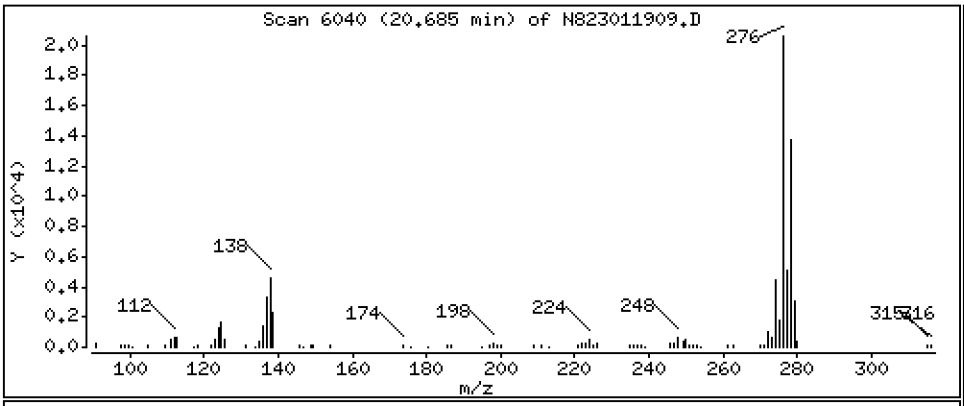
Operator: JZ

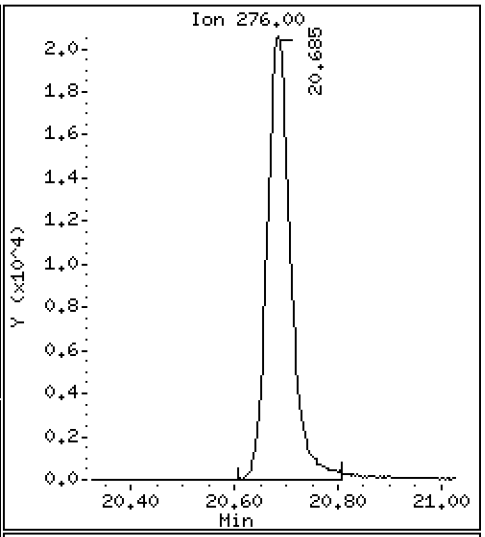
Column phase: Rxi-17sil

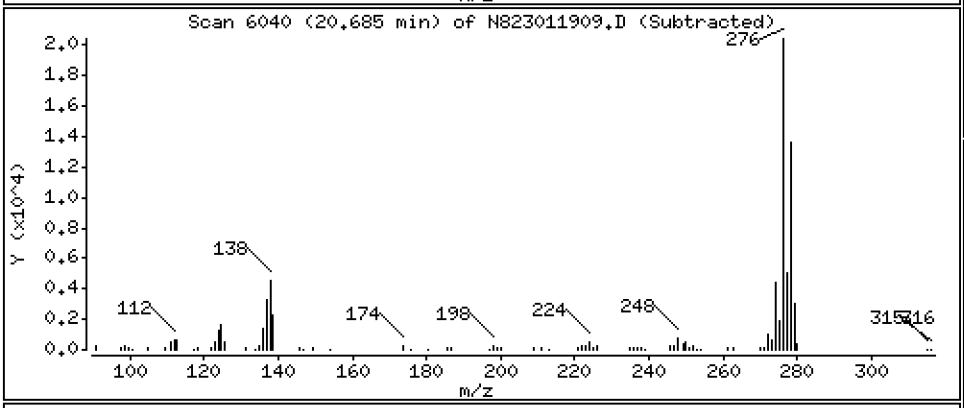
Column diameter: 0.25

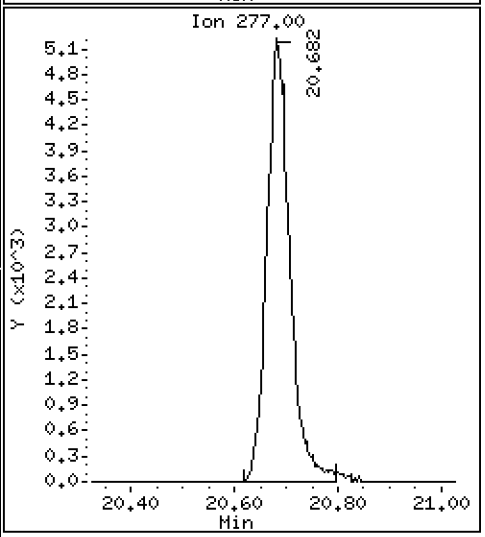
37 Indeno(1,2,3-cd)pyrene

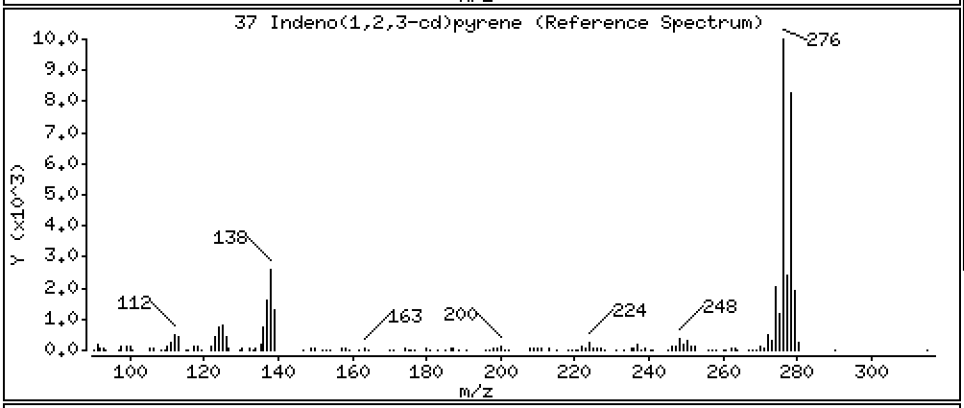
Concentration: 2.689 ug/L

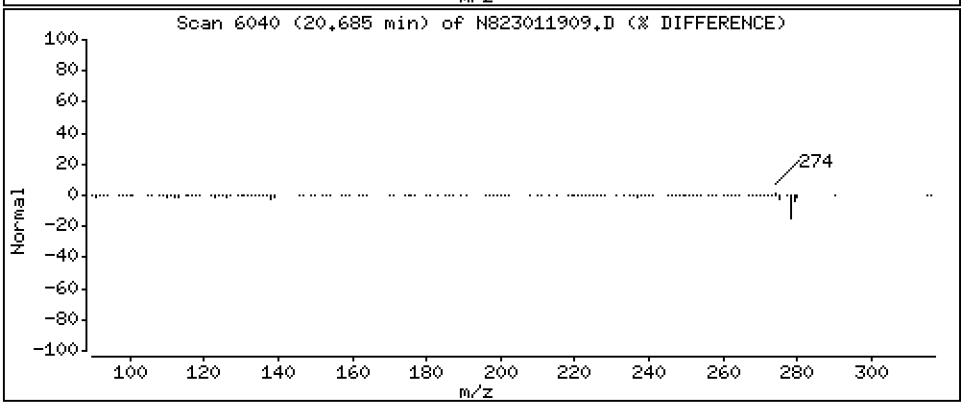












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

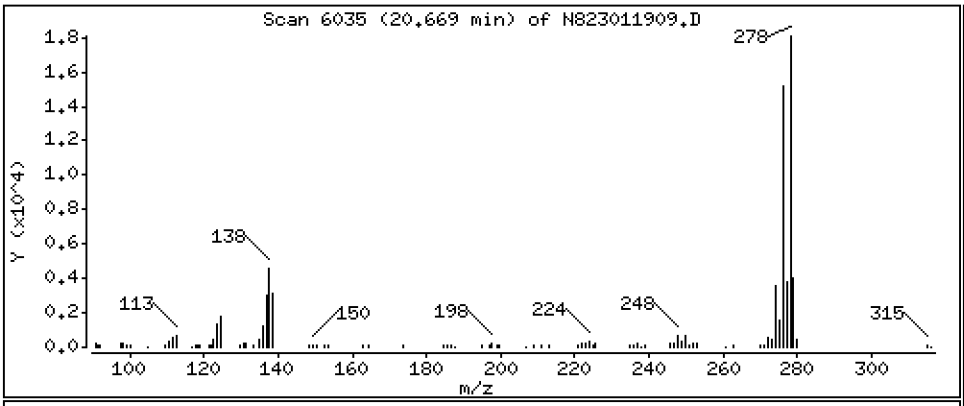
Operator: JZ

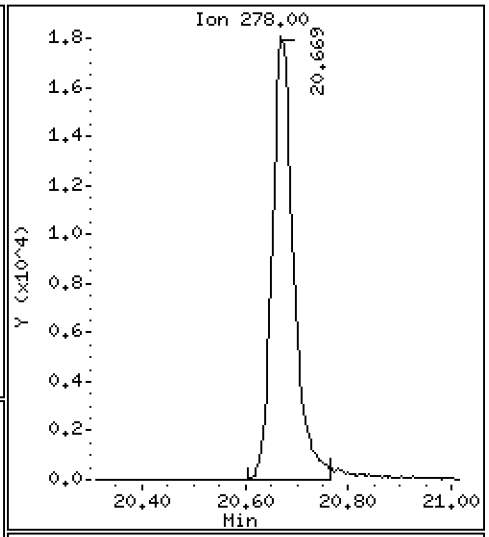
Column phase: Rxi-17sil

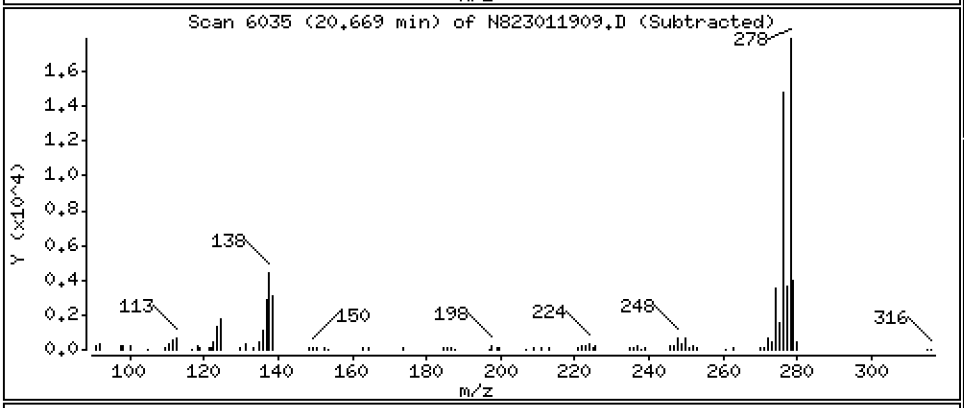
Column diameter: 0.25

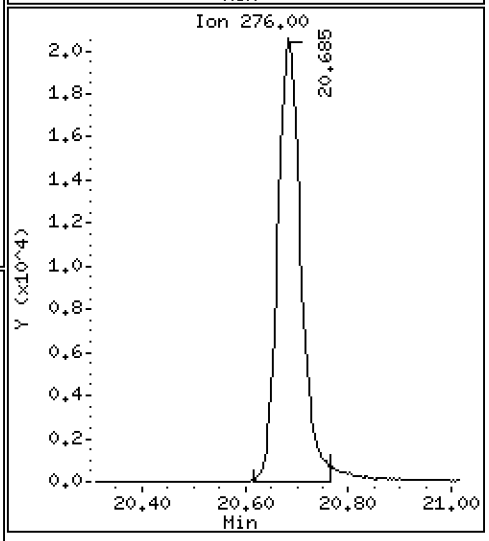
38 Dibenzo(a,h)anthracene

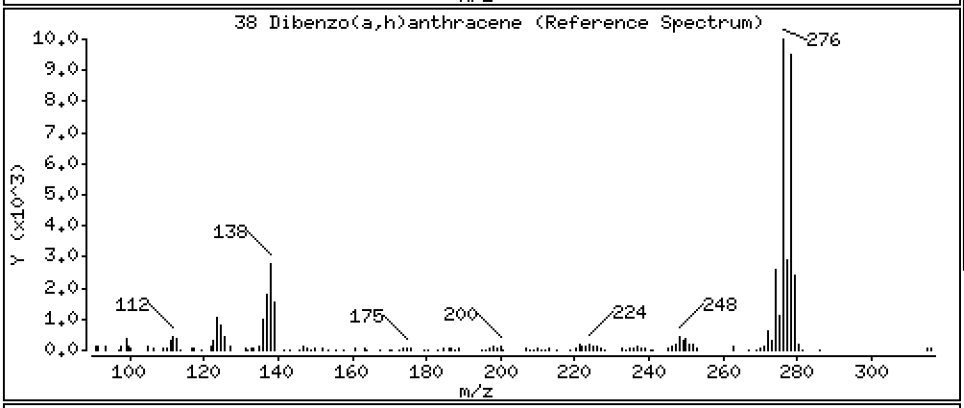
Concentration: 2.493 ug/L

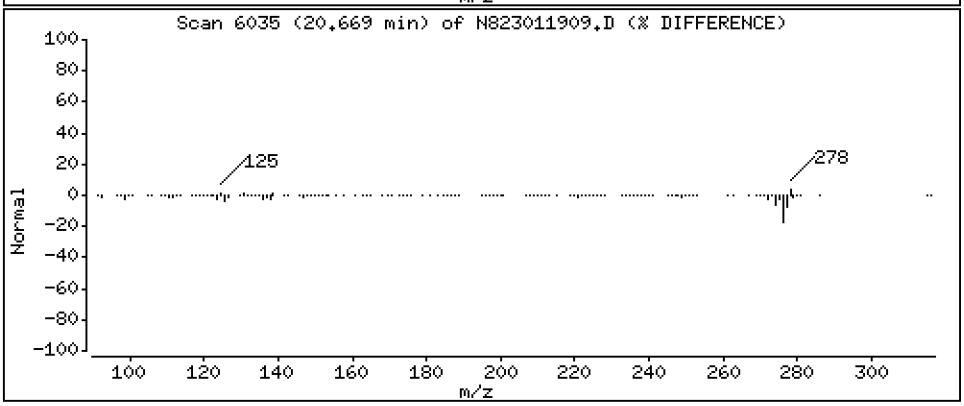












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

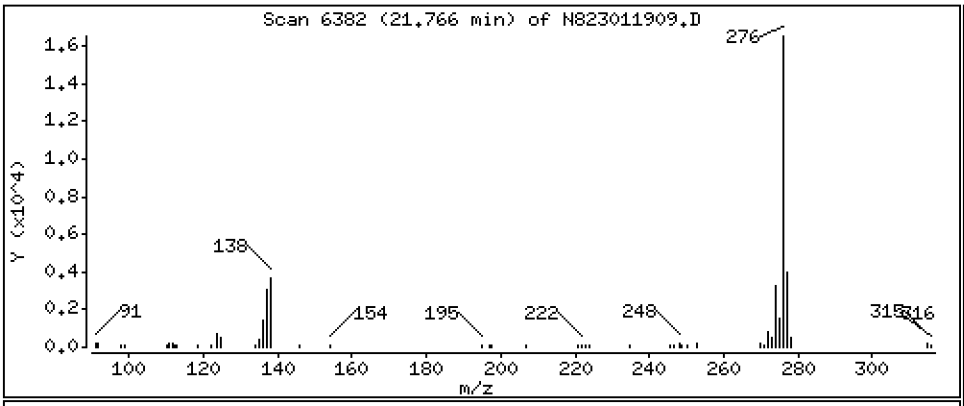
Operator: JZ

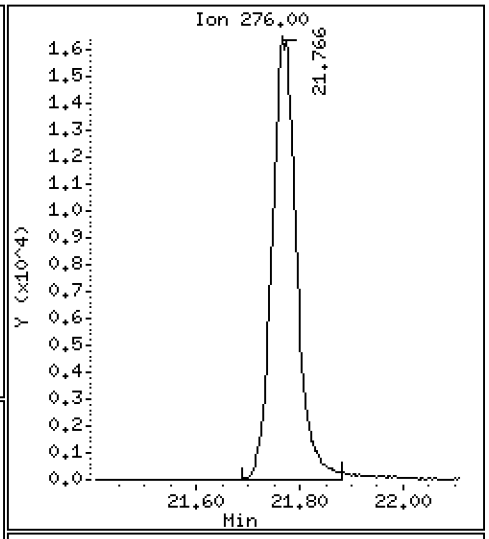
Column phase: Rxi-17sil

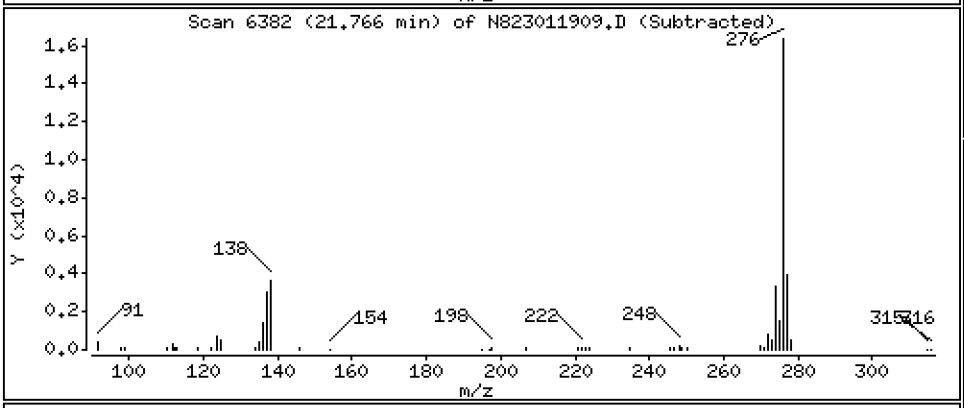
Column diameter: 0.25

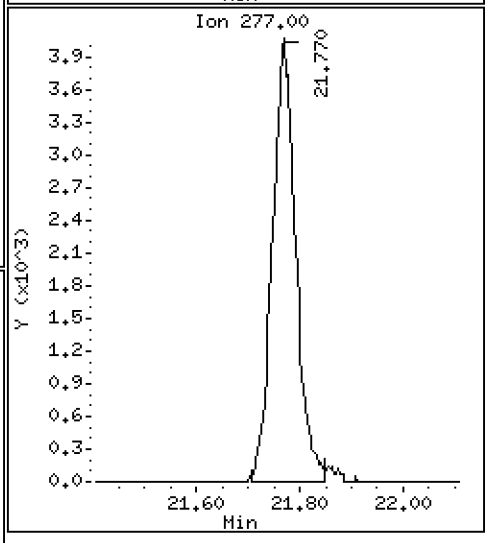
39 Benzo(g,h,i)perylene

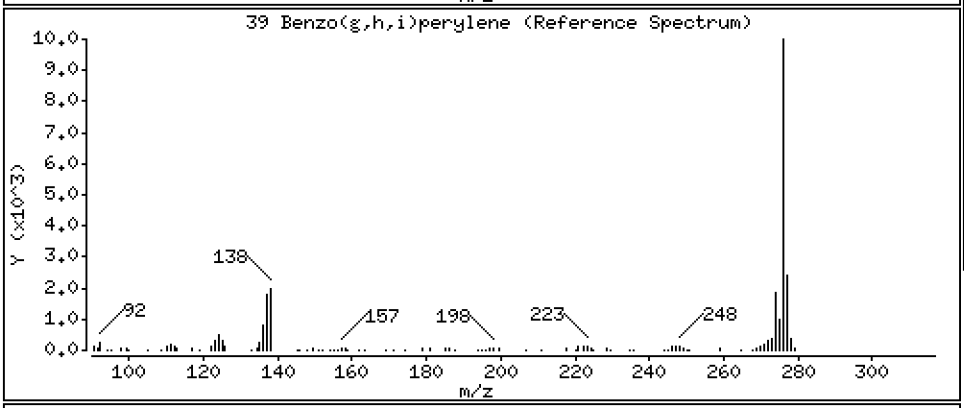
Concentration: 2.483 ug/L

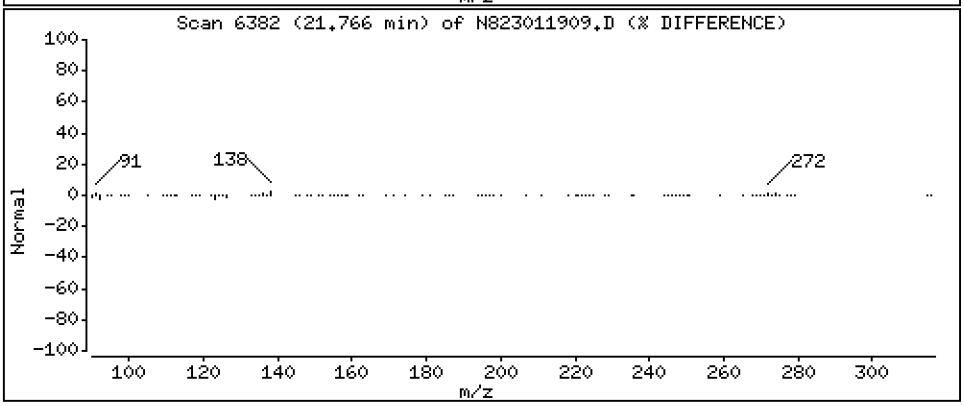












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Lab Smp Id: SLA0213-SCV1
Inj Date : 19-JAN-2023 14:58
Operator : JZ Inst ID: nt8.i
Smp Info : SCV230119
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 25-Jan-2023 21:57 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnascv.sub
Target Version: 4.14
Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 1 Naphthalene-d8	136	4.913	4.906	(1.000)	46346	2.00000	
2 Naphthalene	128	4.941	4.938	(1.006)	56587	2.62597	2.626
$ 3 2-Methylnaphthalene-d10	152	Compound Not Detected.					
4 2-Methylnaphthalene	141	5.694	5.687	(1.159)	31650	2.67019	2.670
5 1-methylnaphthalene	141	5.890	5.883	(1.199)	31873	2.64949	2.649
9 Acenaphthylene	152	7.091	7.085	(0.985)	59018	2.82060	2.821
* 10 Acenaphthene-d10	164	7.202	7.196	(1.000)	27709	2.00000	
11 Acenaphthene	153	7.249	7.246	(1.007)	36454	2.60022	2.600
12 Dibenzofuran	168	7.401	7.395	(1.028)	60898	2.85987	2.860
14 Fluorene	166	7.878	7.872	(1.094)	43507	2.63066	2.631
* 15 Phenanthrene-d10	188	9.238	9.235	(1.000)	51685	2.00000	
16 Phenanthrene	178	9.276	9.270	(1.004)	61815	2.44841	2.448
17 Anthracene	178	9.317	9.311	(1.009)	52064	2.27006	2.270
22 Fluoranthene	202	11.059	11.053	(1.197)	72902	2.65276	2.653
$ 21 Fluoranthene-d10	212	Compound Not Detected.					
23 Pyrene	202	11.578	11.572	(0.815)	71115	2.46242	2.462
24 Benzo(a)anthracene	228	14.082	14.076	(0.991)	67725	2.58725	2.587
* 25 Chrysene-d12	240	14.212	14.202	(1.000)	46582	2.00000	
27 Chrysene	228	14.285	14.278	(1.005)	66872	2.39976	2.400
28 Benzo(b)fluoranthene	252	16.833	16.821	(0.929)	60946	2.50689	2.507
29 Benzo(k)fluoranthene	252	16.893	16.884	(0.932)	63249	2.65606	2.656
31 Total Benzofluoranthenes	252	16.893	16.821	(0.932)	126178	5.48025	5.480(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572
*	33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000	
	37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689
$	36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
	38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493
	39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483
	35 Perylene	252	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011909.D
Lab Smp Id: SLA0213-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

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

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 14:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

No RRT check performed

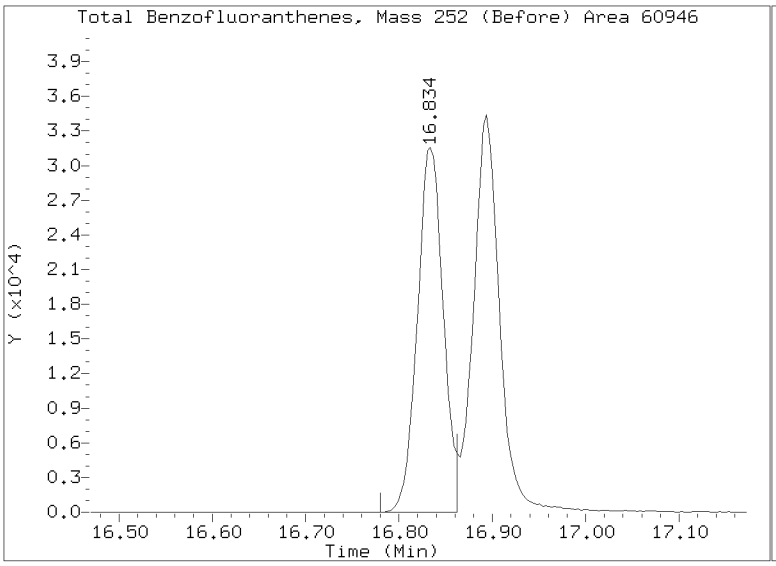
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

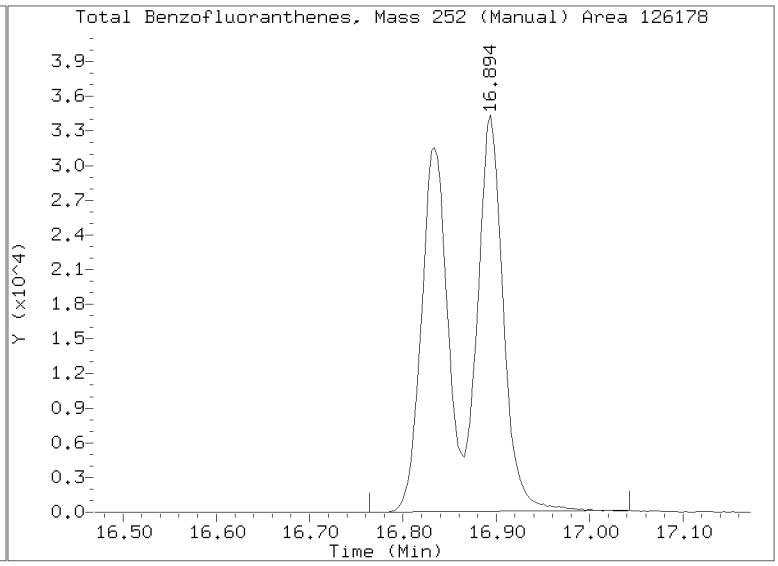
Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D
Injection Date: 19-JAN-2023 14:58
Lab ID:SLA0213-SCV1 Client ID:
Report Date: 01/25/2023 22:00





SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00049
Laboratory ID: SLC0238-SCV1
Sequence: SLC0238
Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
1,4-Dichlorobenzene	5.0000	4.8	-3.2	20.00
1,2-Dichlorobenzene	5.0000	4.7	-6.4	20.00
Benzyl Alcohol	5.0000	5.2	3.6	20.00
Benzoic acid	10.000	6.7	-32.5 *	20.00
2,4-Dimethylphenol	5.0000	3.7	-26.8 *	20.00
1,2,4-Trichlorobenzene	5.0000	4.4	-11.1	20.00
N-Nitrosodiphenylamine	5.0000	5.1	1.6	20.00
Pentachlorophenol	5.0000	4.4	-11.6	20.00
2-Fluorophenol	7.5000	0.00		
p-Terphenyl-d14	5.0000	0.00154	-100	

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

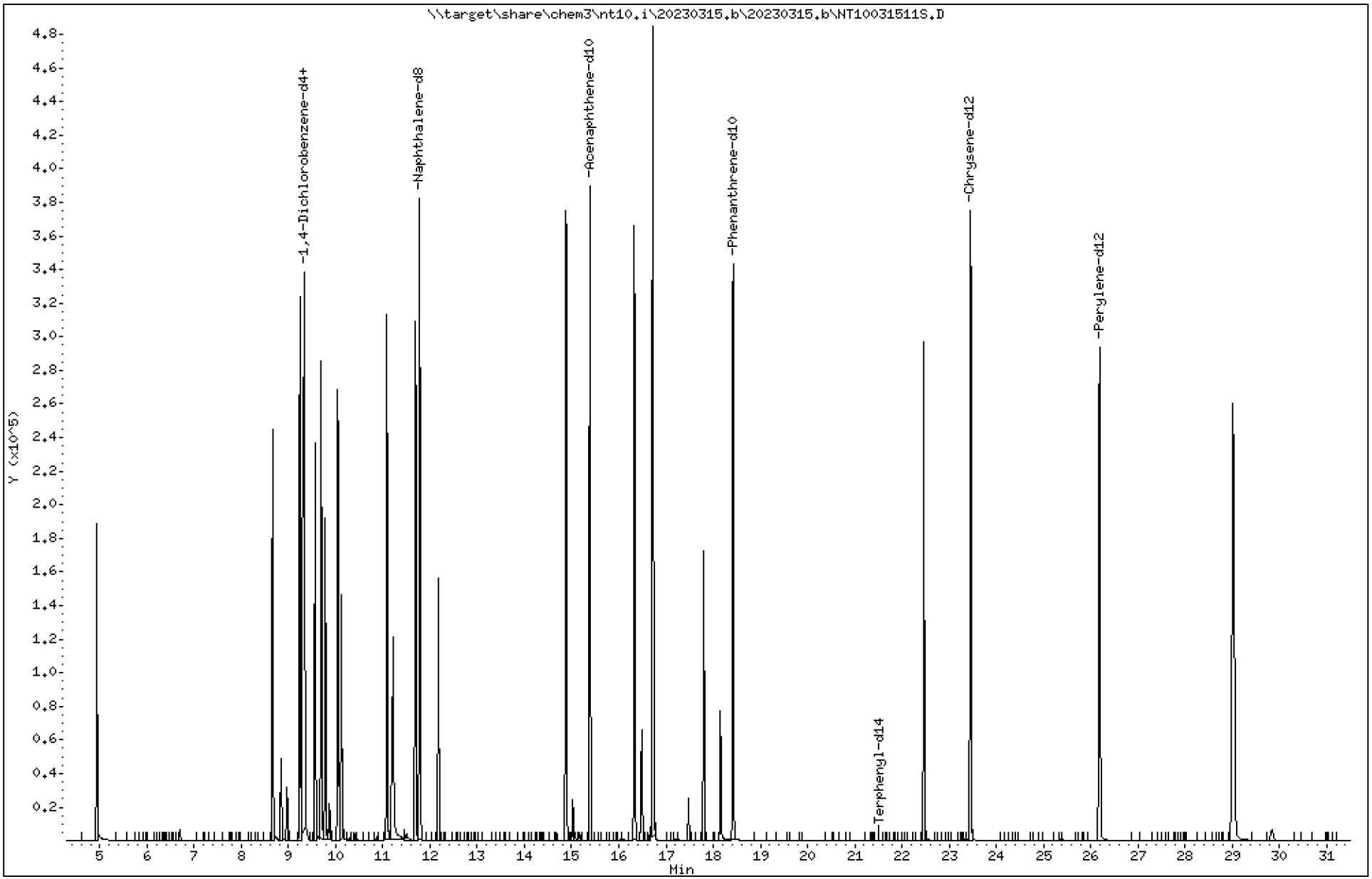
Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

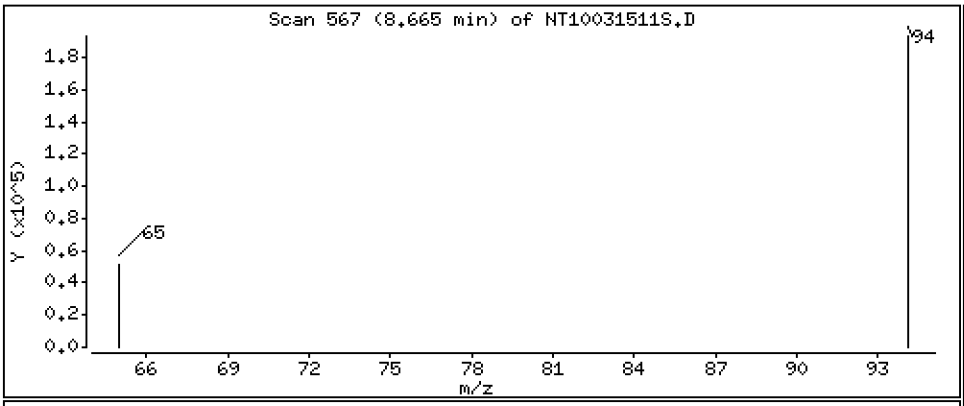
Operator: JGR

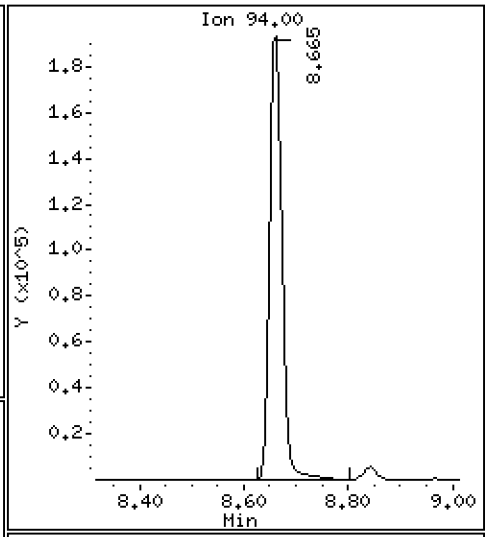
Column phase: ZB-5msi

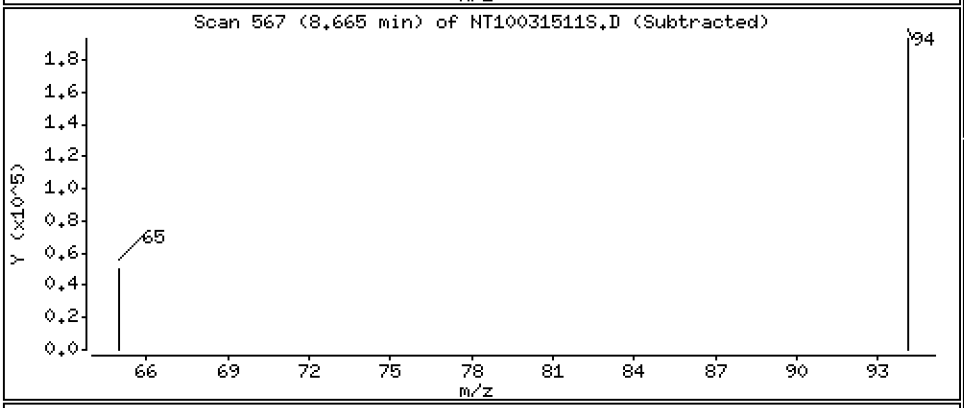
Column diameter: 0.25

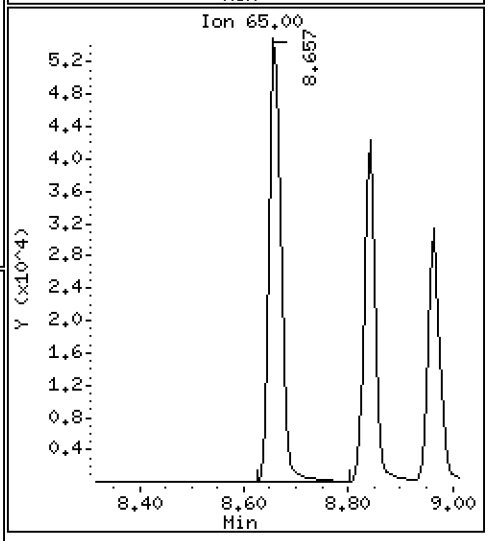
3 Phenol

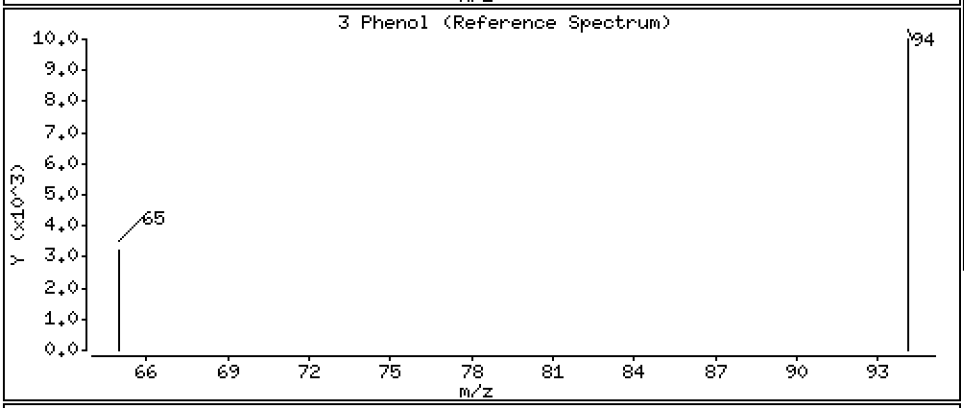
Concentration: 4.373 ug/L

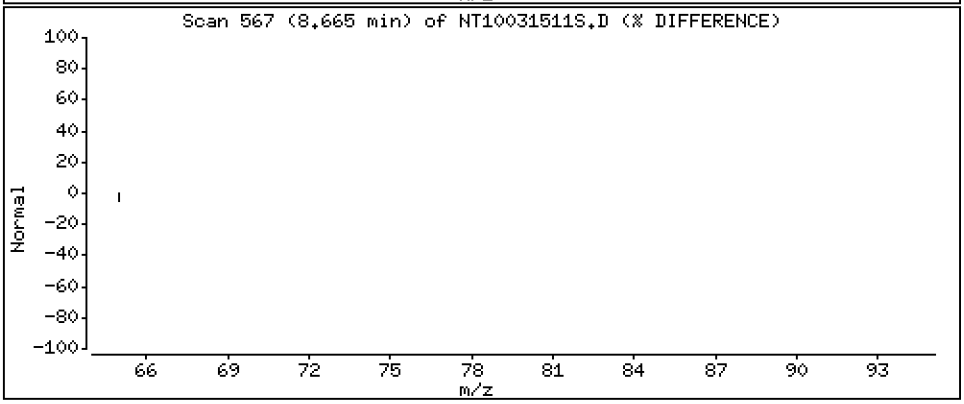












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

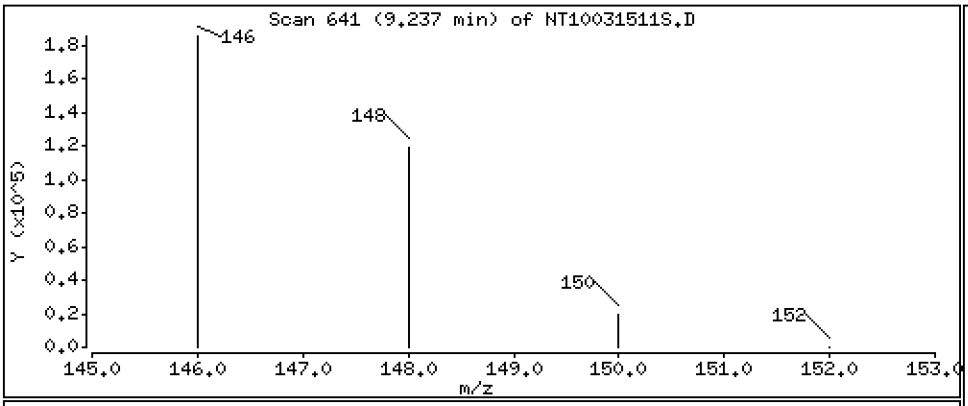
Operator: JGR

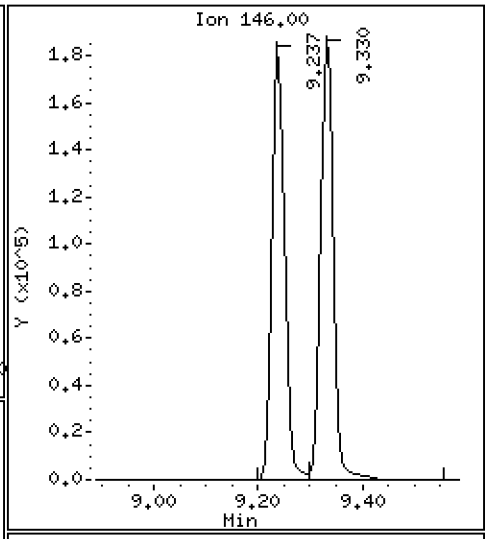
Column phase: ZB-5msi

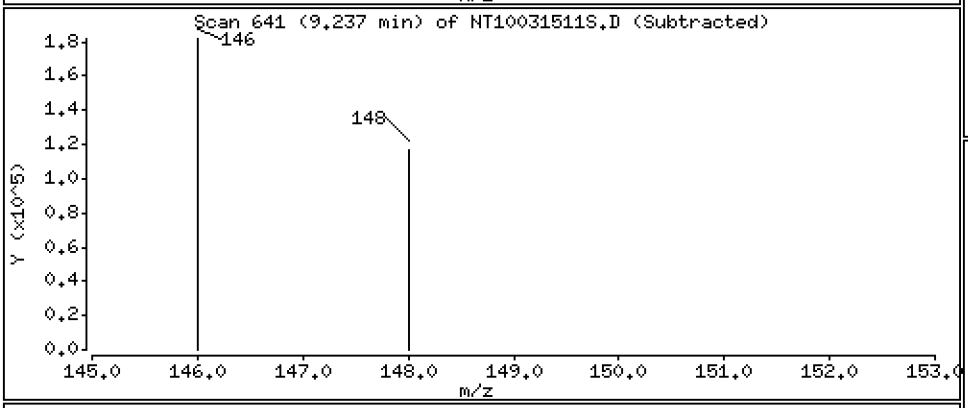
Column diameter: 0.25

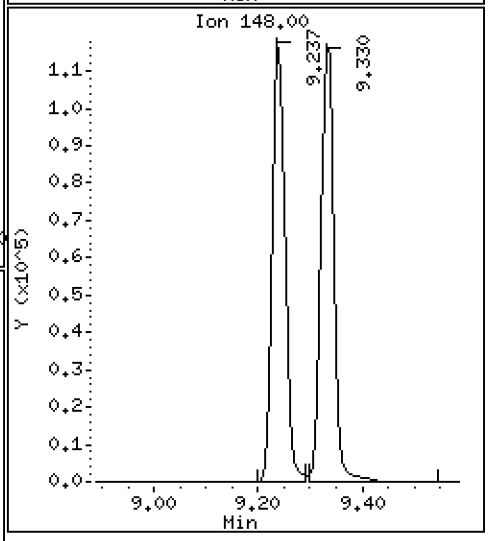
7 1,3-Dichlorobenzene

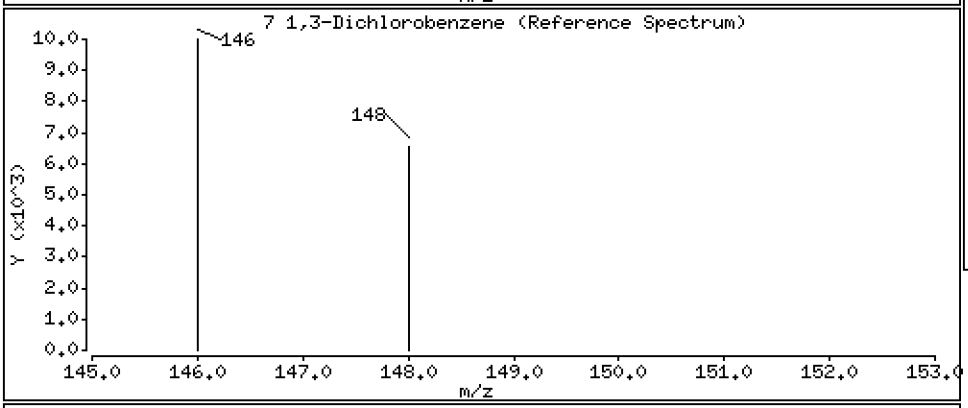
Concentration: 4.643 ug/L

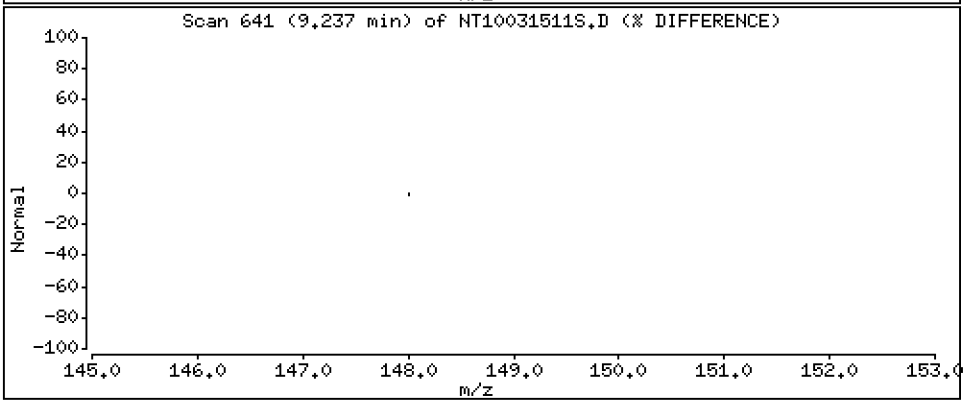












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

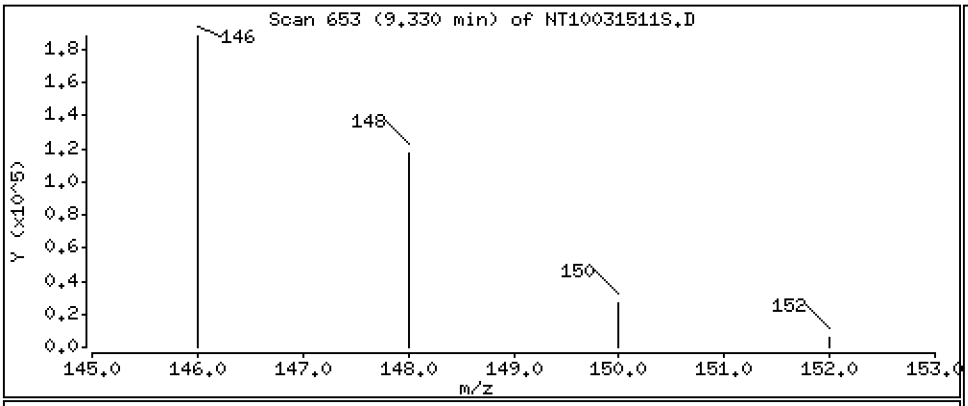
Operator: JGR

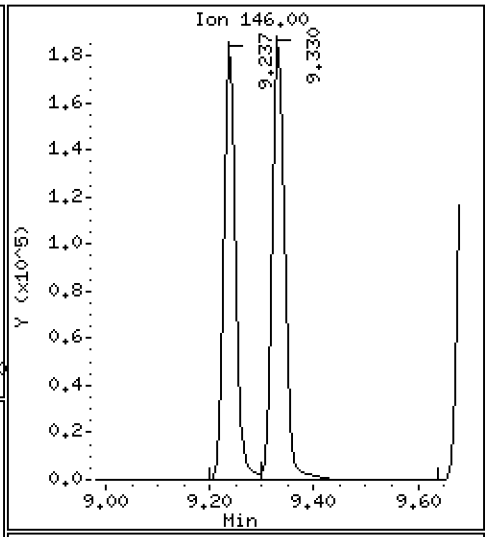
Column phase: ZB-5msi

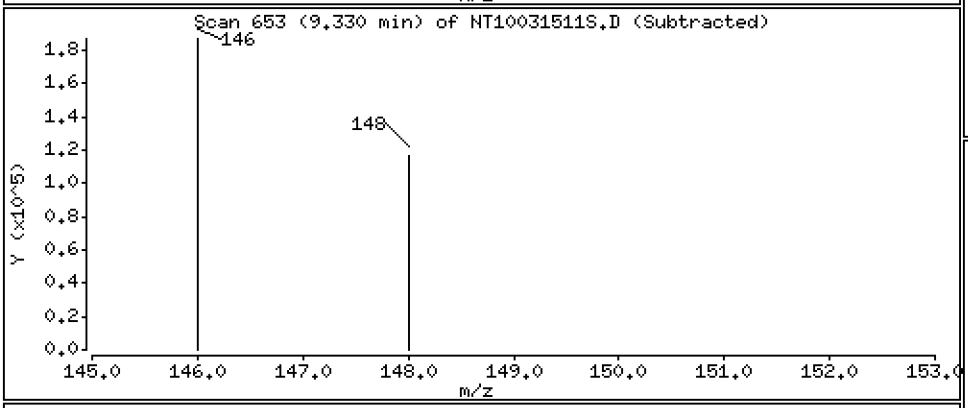
Column diameter: 0.25

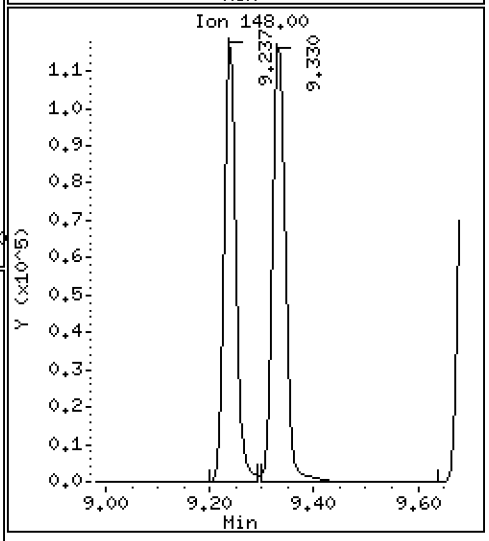
9 1,4-Dichlorobenzene

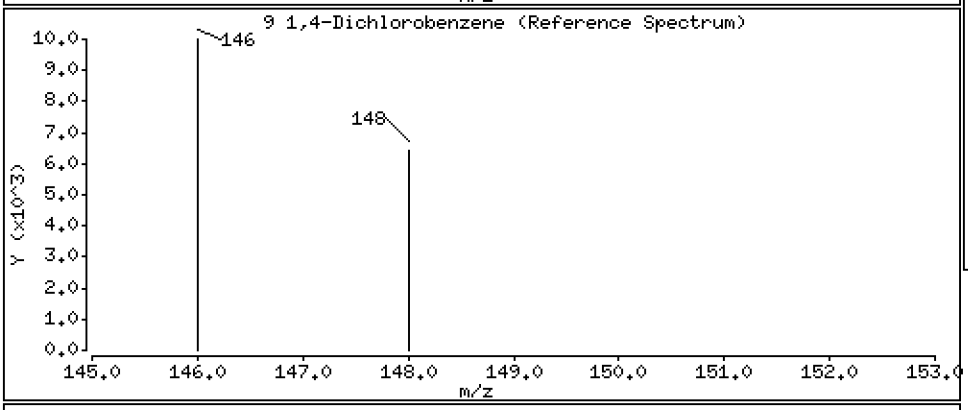
Concentration: 4.838 ug/L

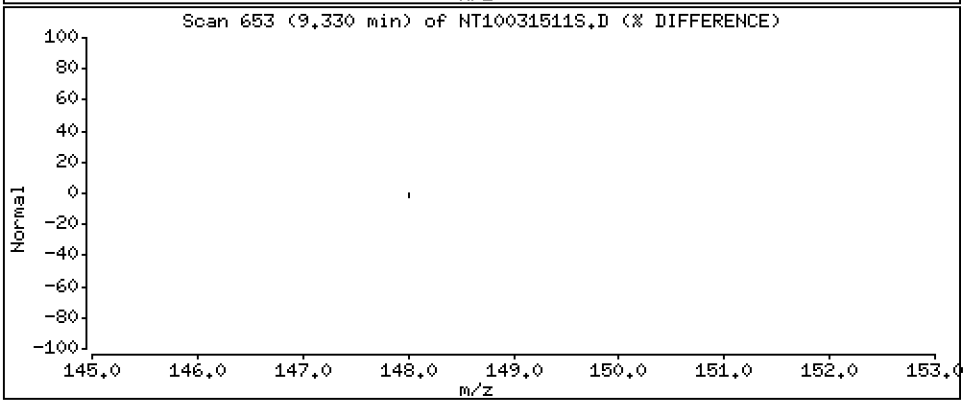












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

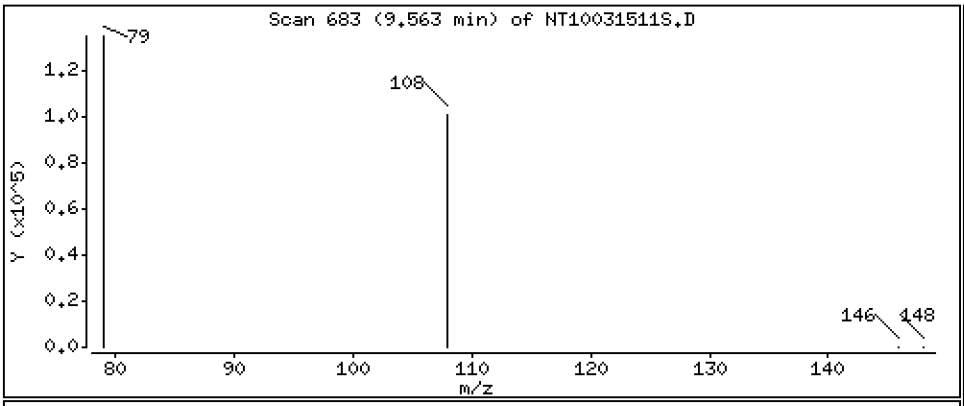
Operator: JGR

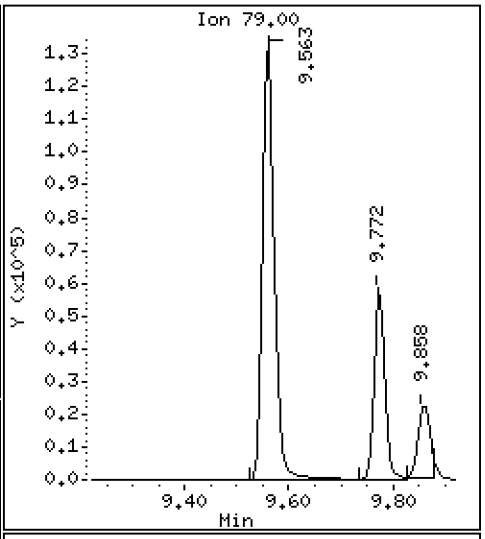
Column phase: ZB-5msi

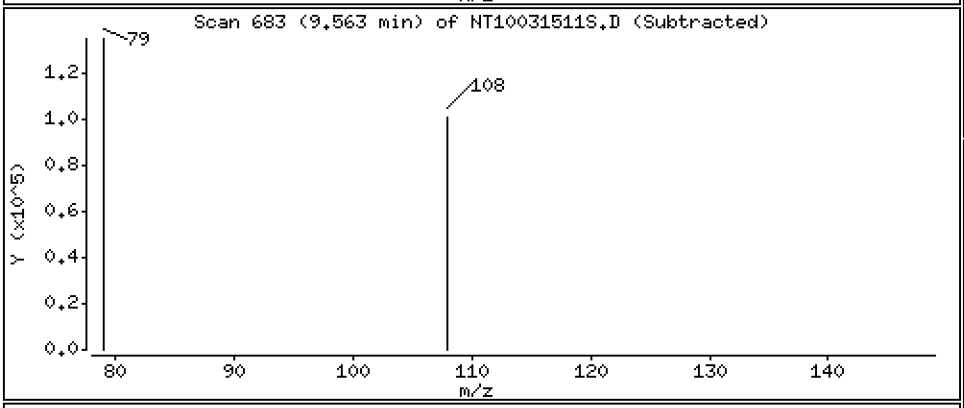
Column diameter: 0.25

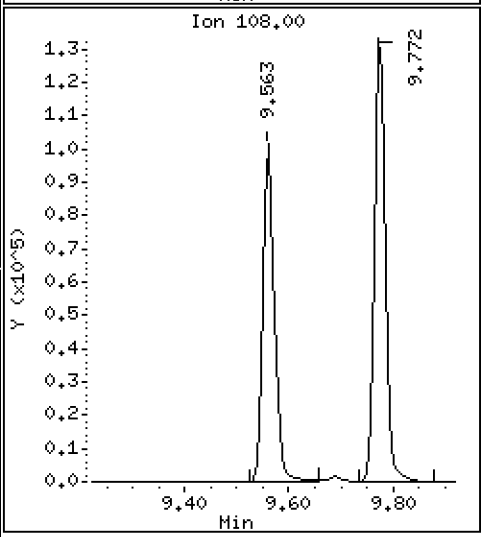
11 Benzyl alcohol

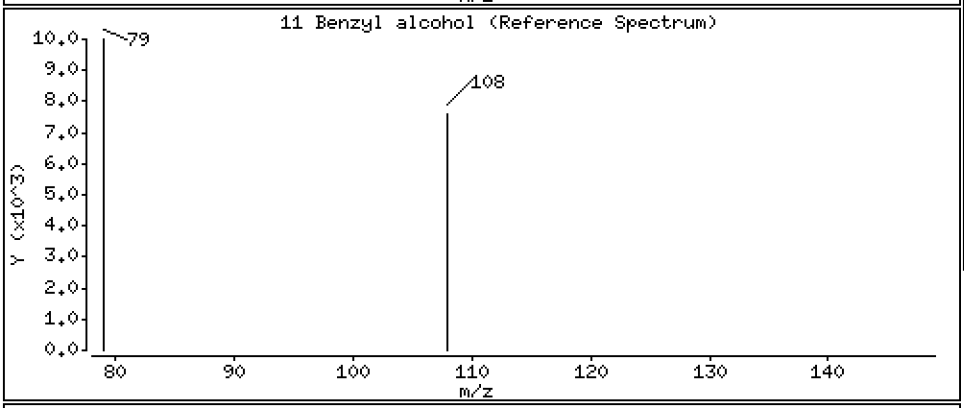
Concentration: 5.181 ug/L

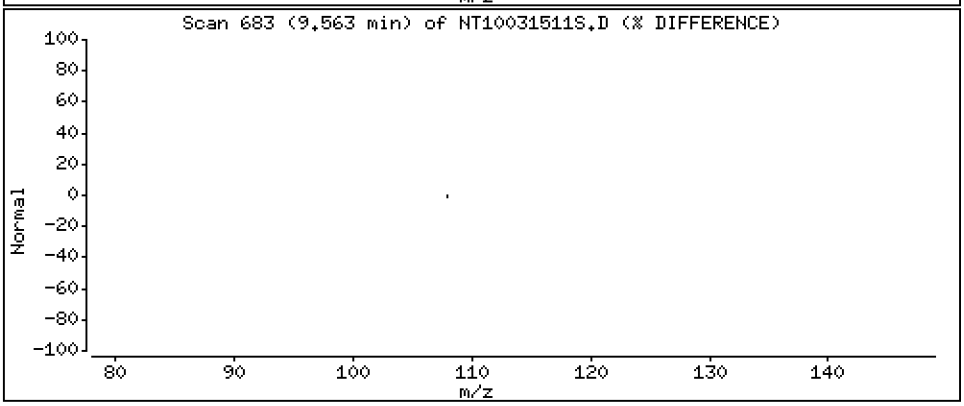












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

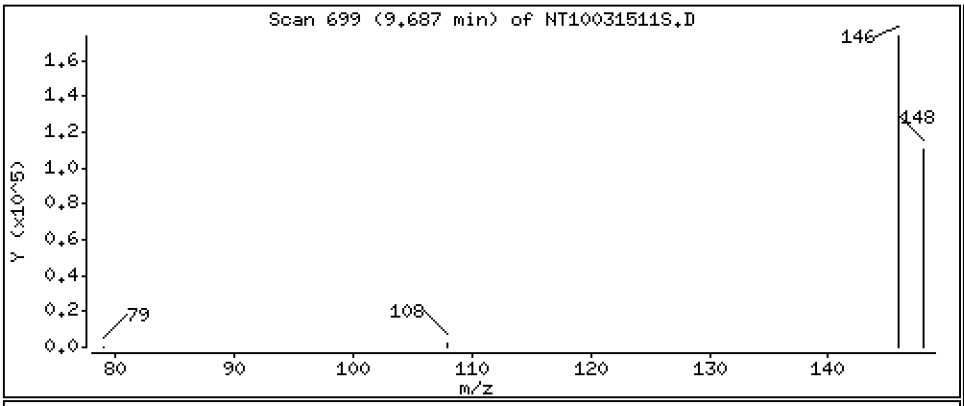
Operator: JGR

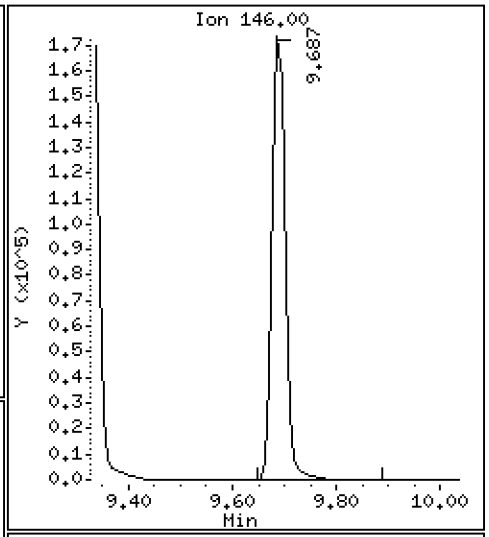
Column phase: ZB-5msi

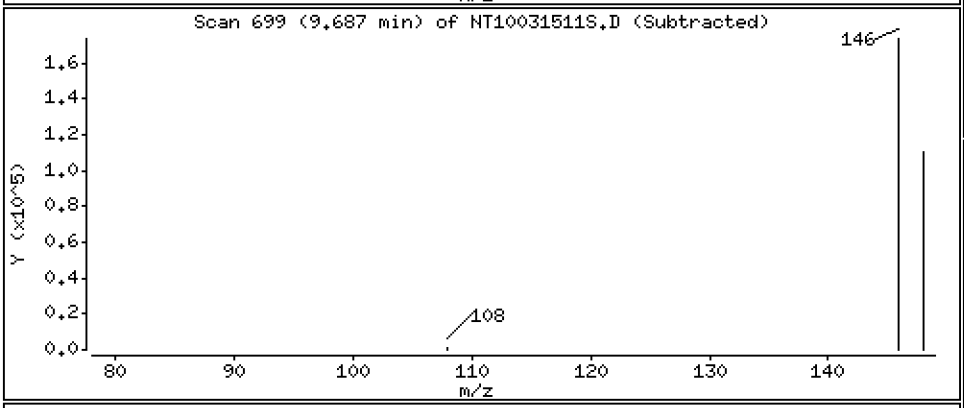
Column diameter: 0.25

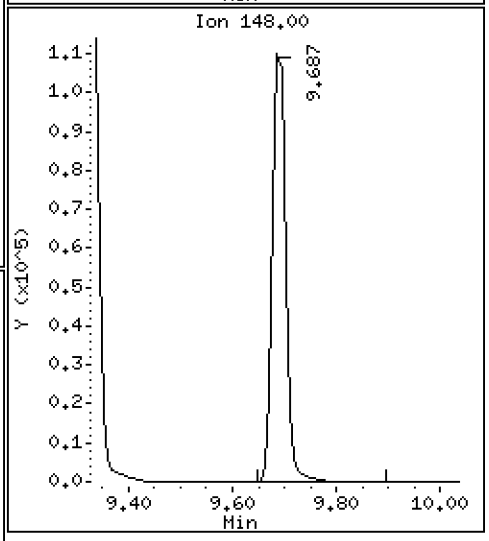
12 1,2-Dichlorobenzene

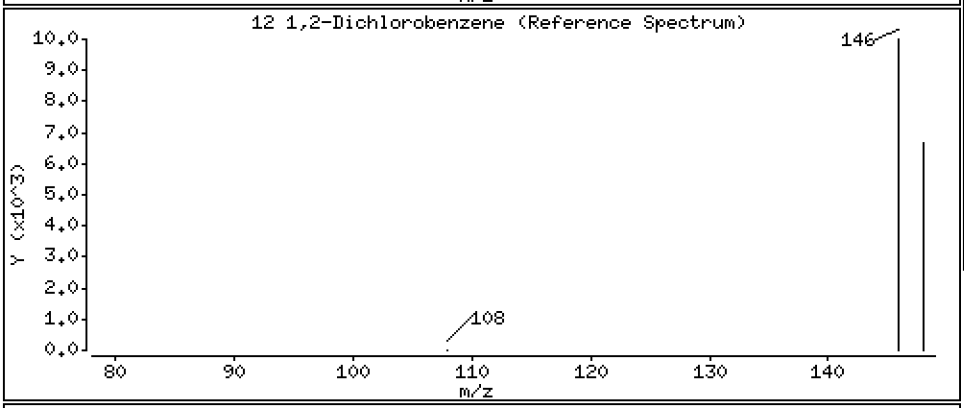
Concentration: 4.679 ug/L

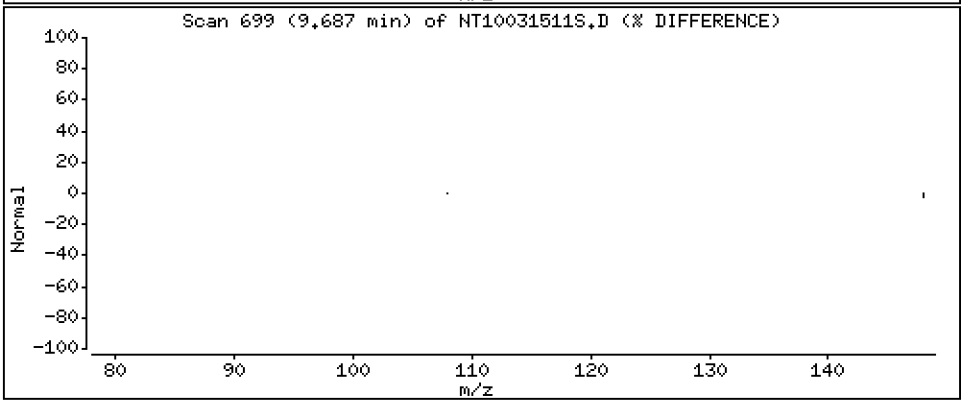












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

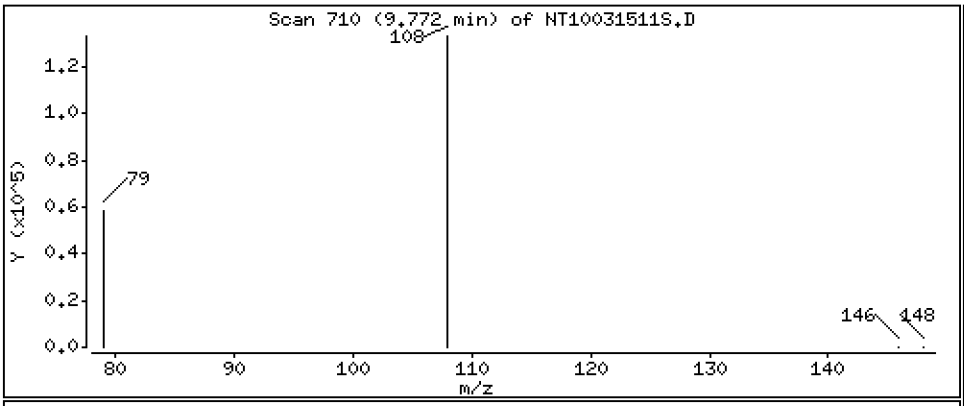
Operator: JGR

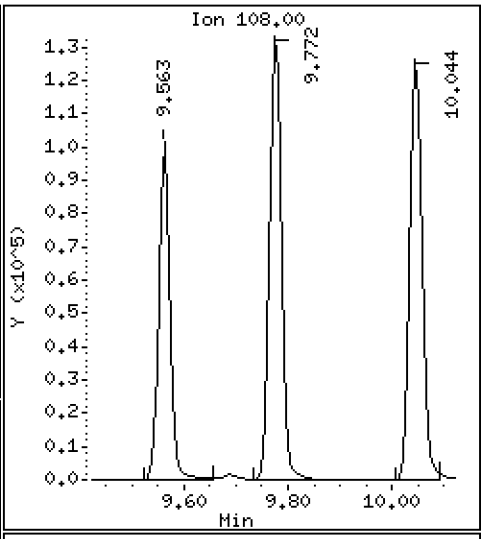
Column phase: ZB-5msi

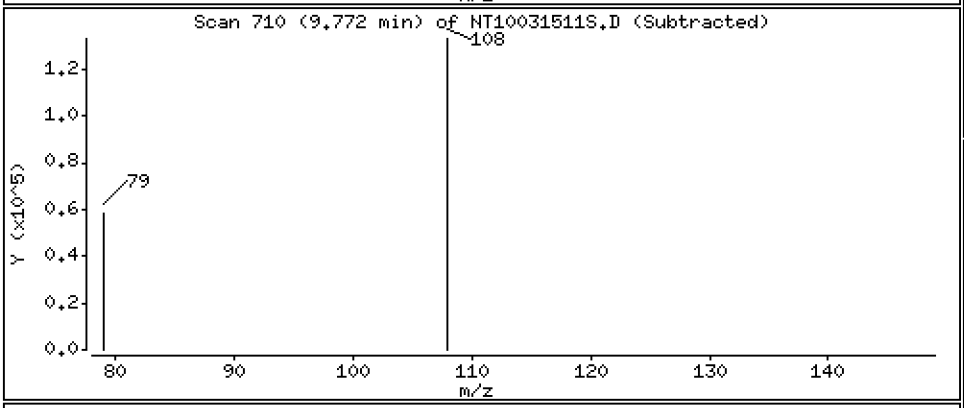
Column diameter: 0.25

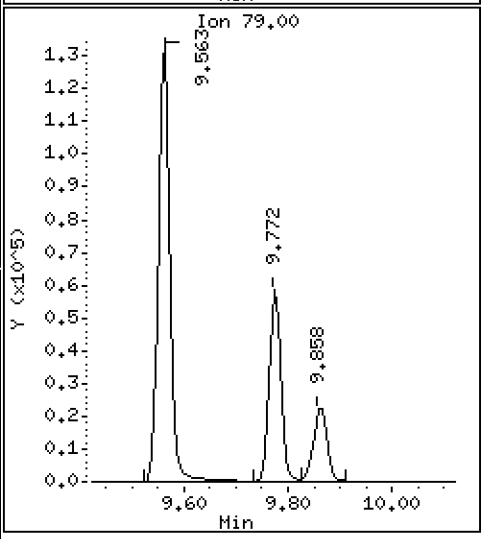
13 2-Methylphenol

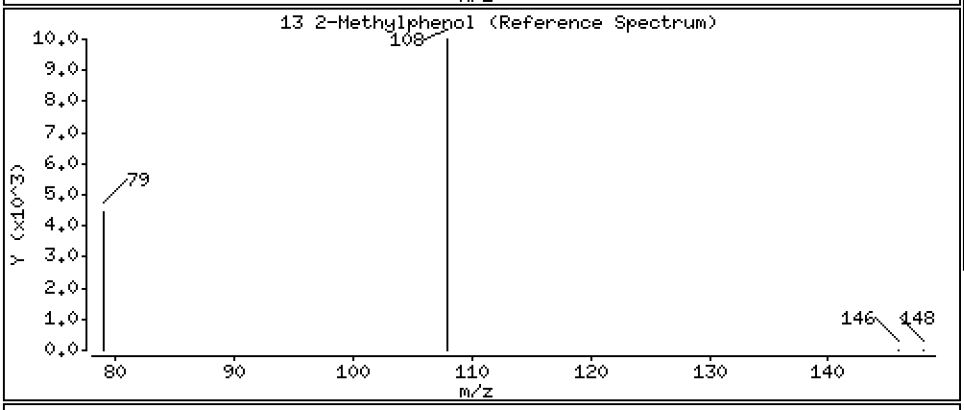
Concentration: 4.197 ug/L

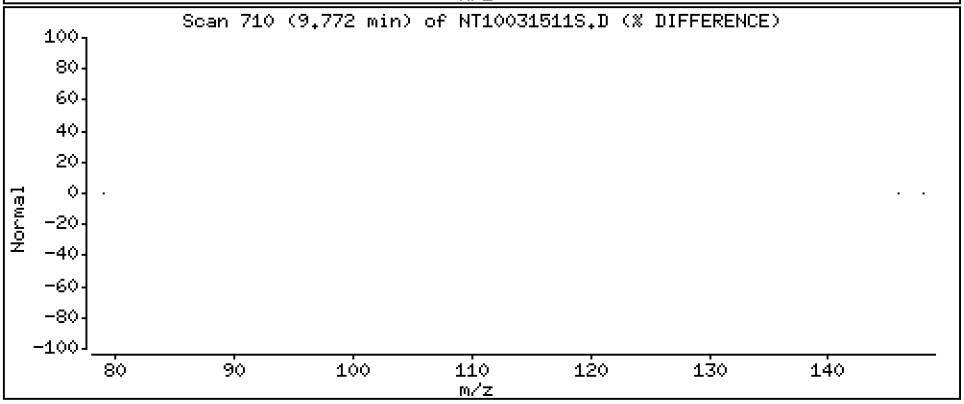












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

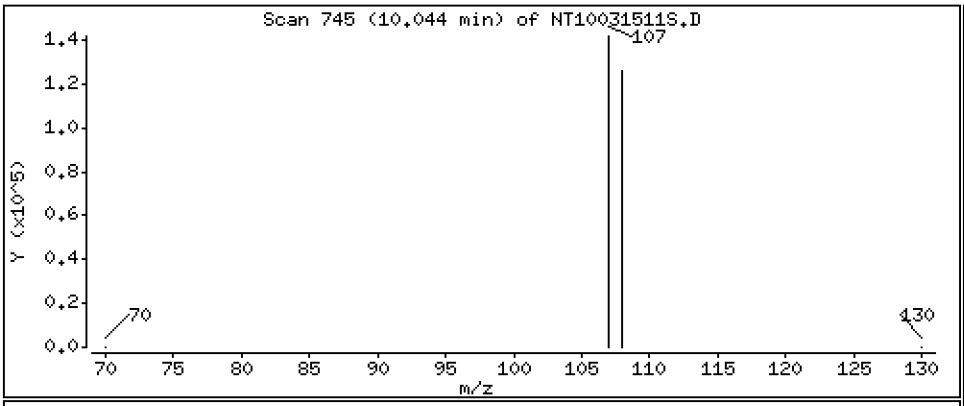
Operator: JGR

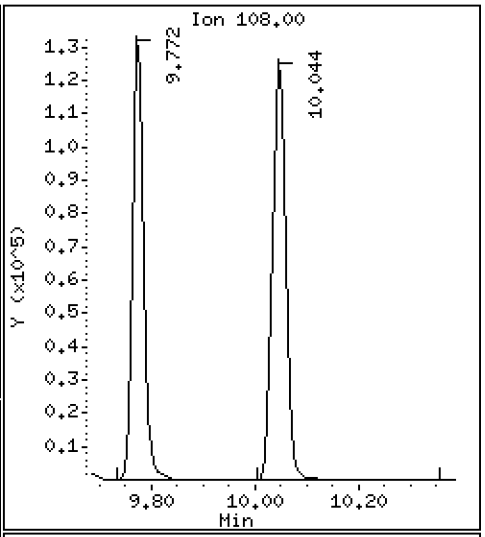
Column phase: ZB-5msi

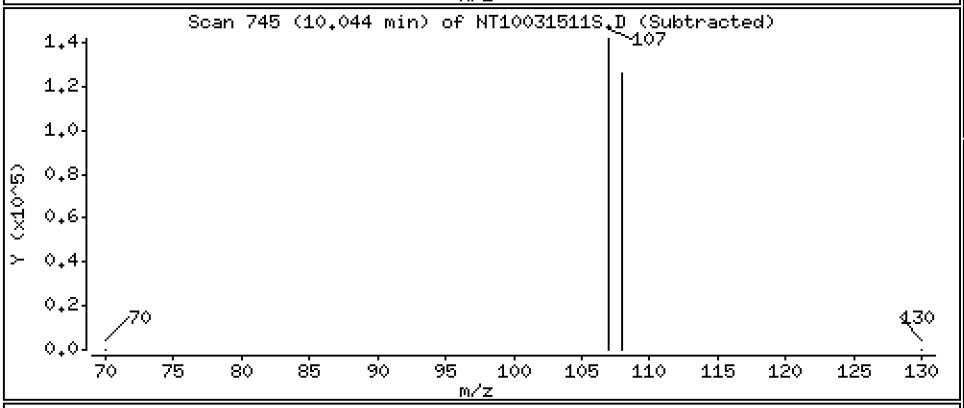
Column diameter: 0.25

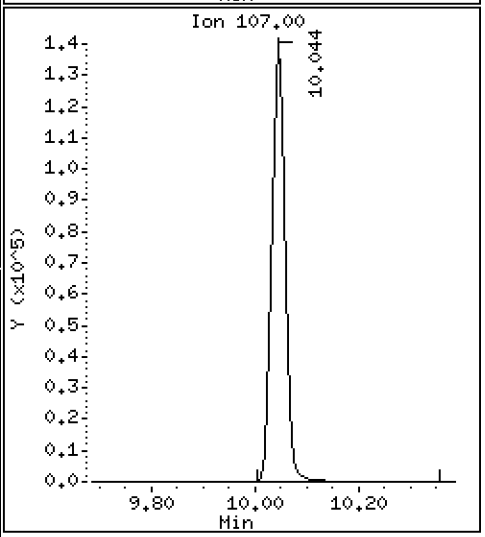
15 4-Methylphenol

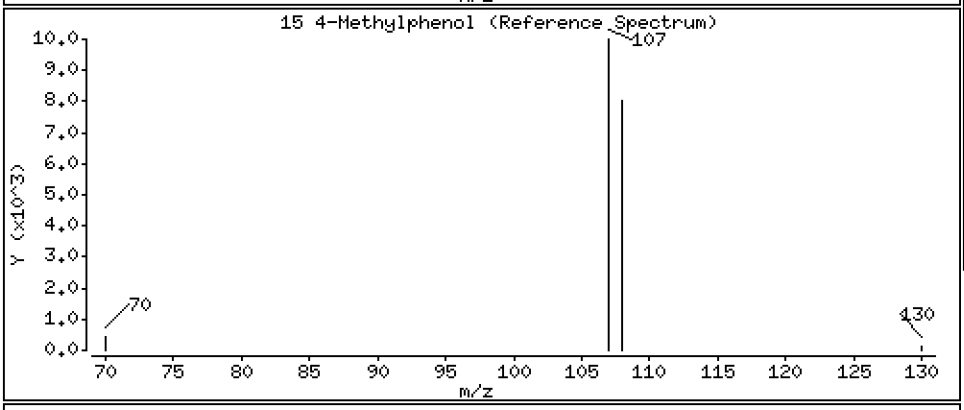
Concentration: 4.463 ug/L

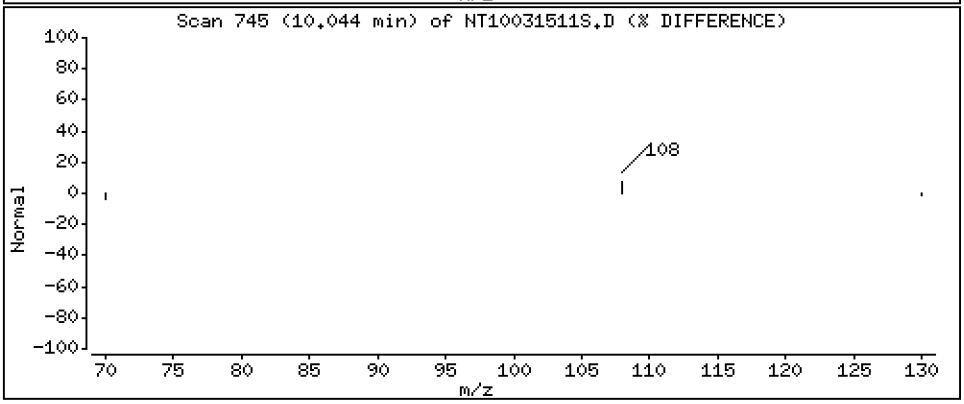












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

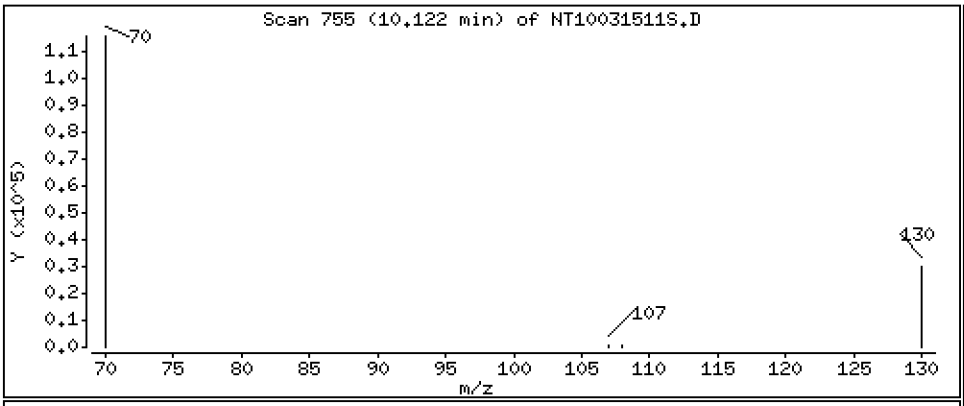
Operator: JGR

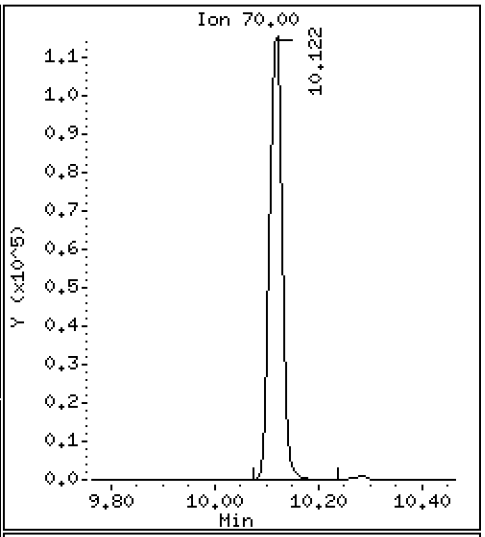
Column phase: ZB-5msi

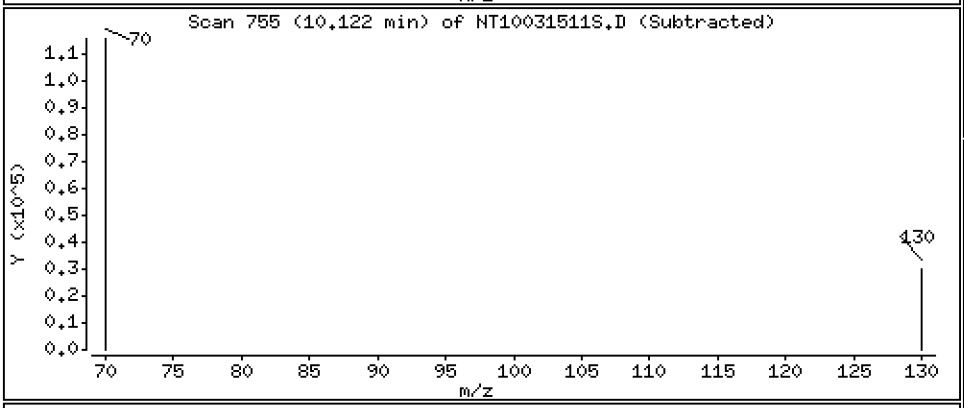
Column diameter: 0.25

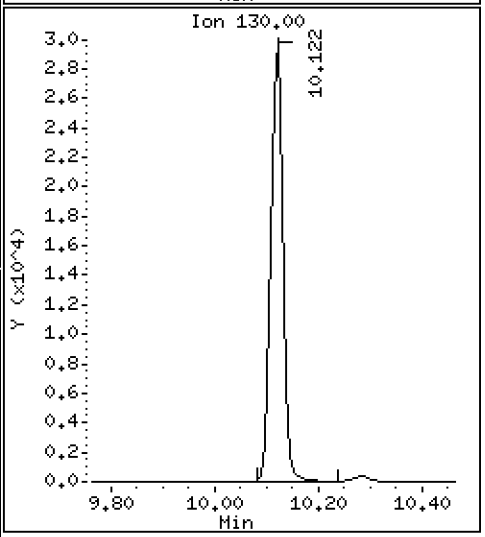
16 N-Nitroso-di-n-propylamine

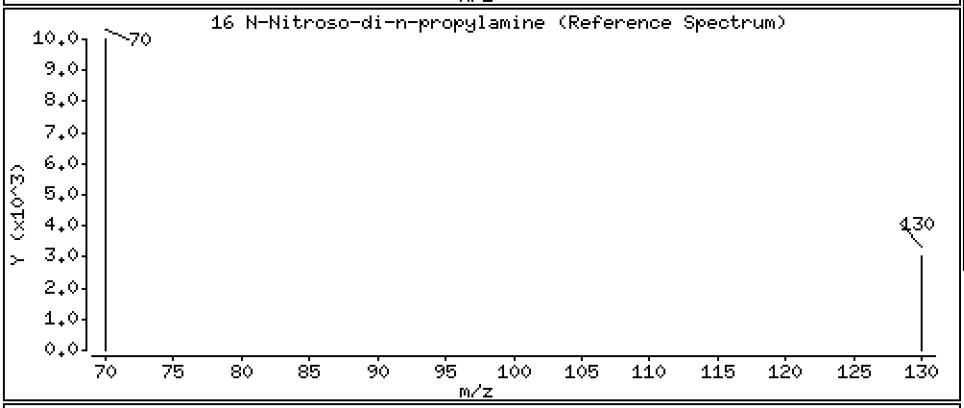
Concentration: 5.282 ug/L

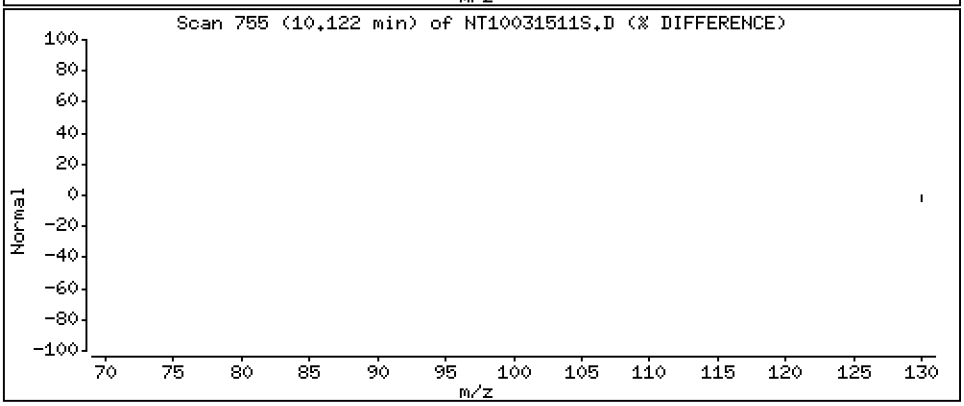












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

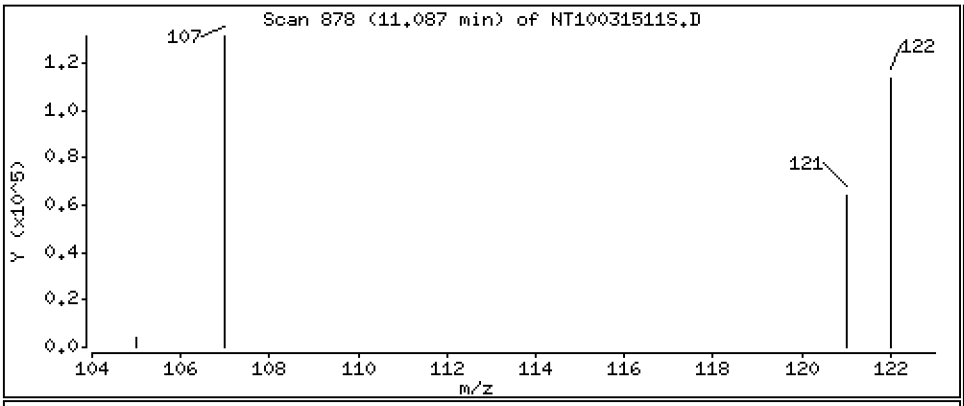
Operator: JGR

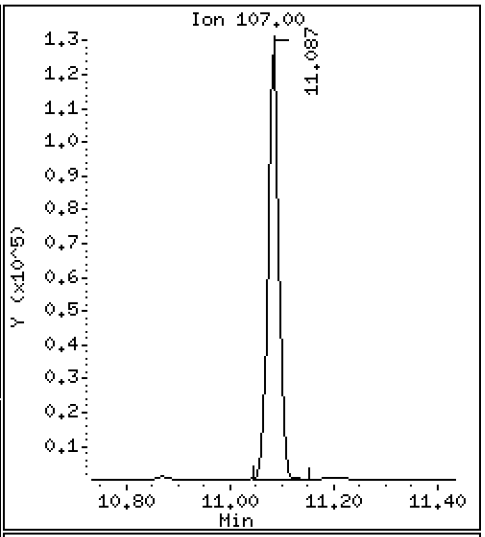
Column phase: ZB-5msi

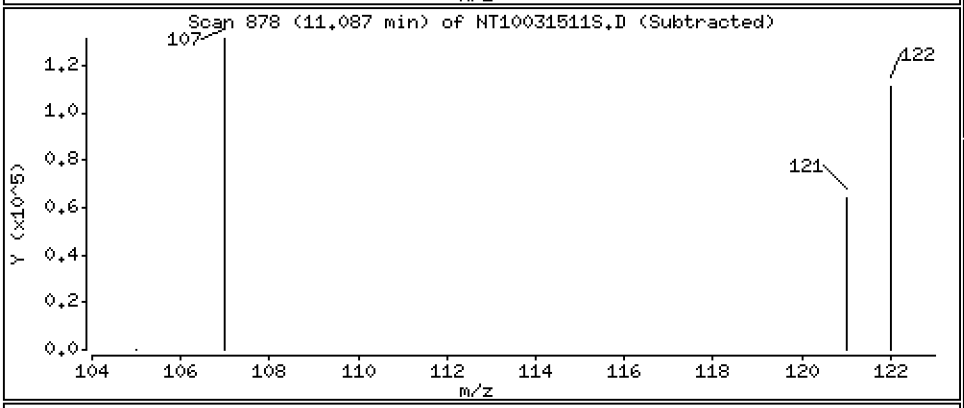
Column diameter: 0.25

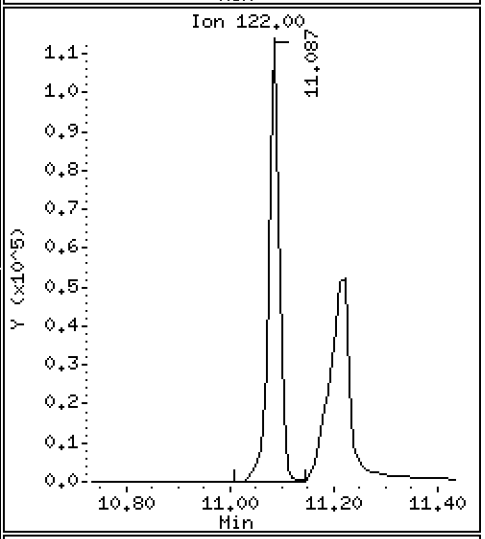
22 2,4-Dimethylphenol

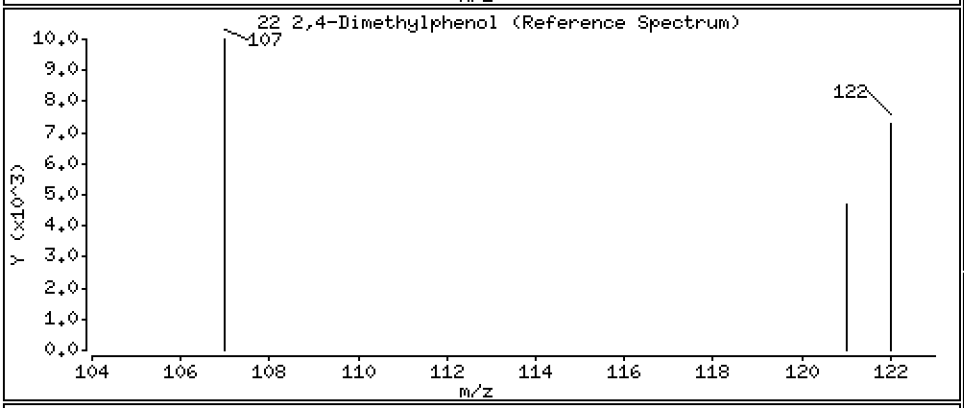
Concentration: 3.660 ug/L

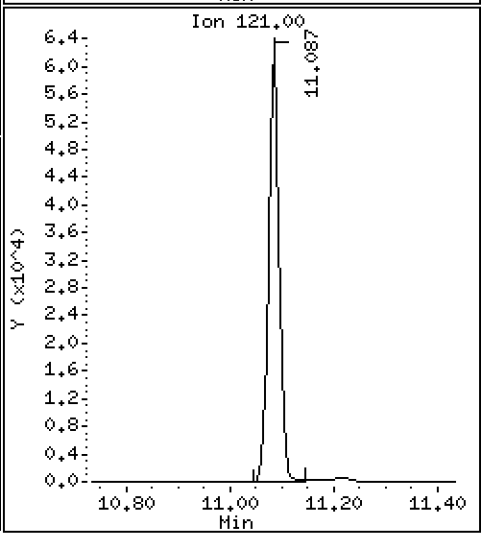


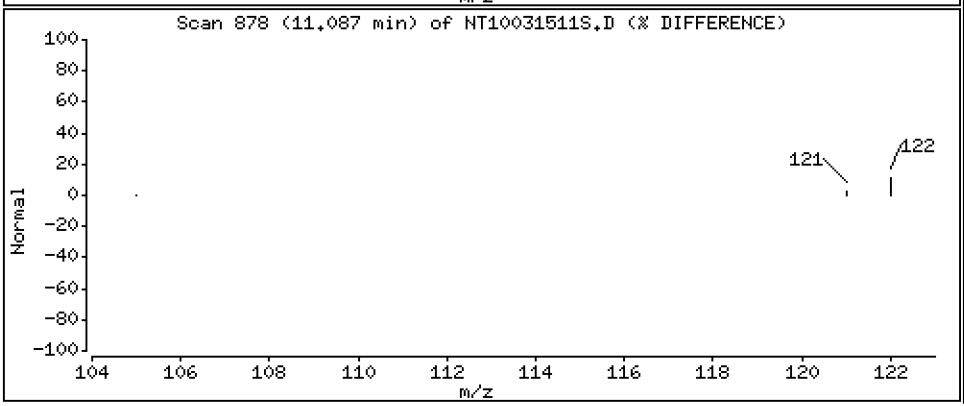












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

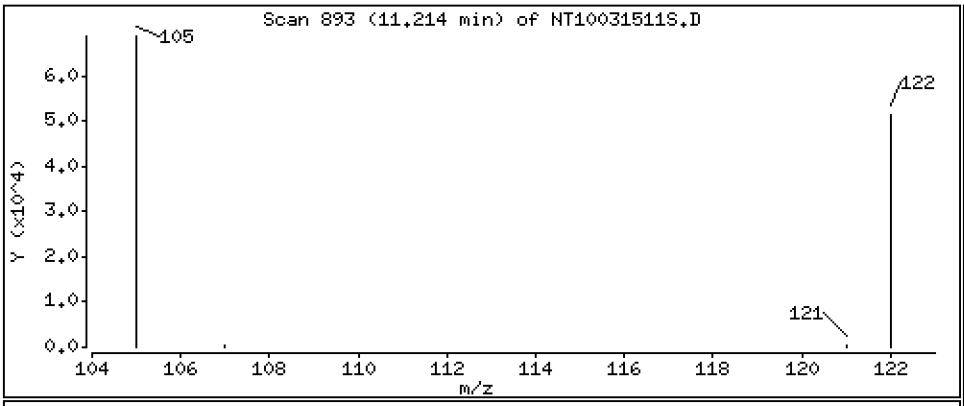
Operator: JGR

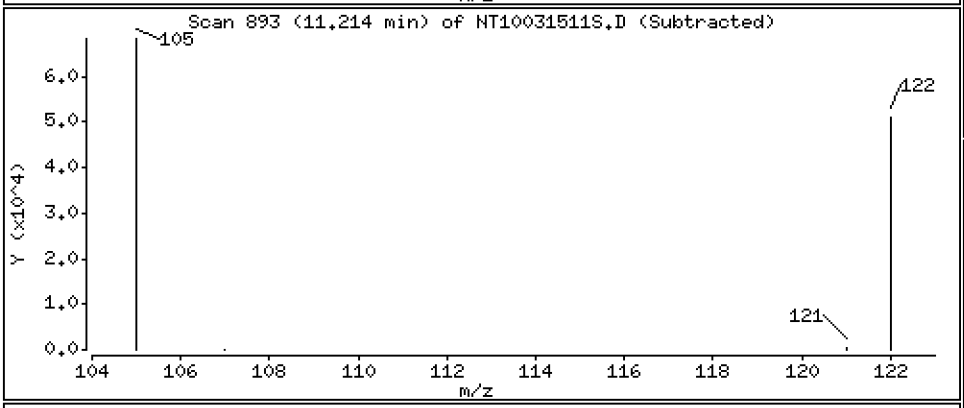
Column phase: ZB-5msi

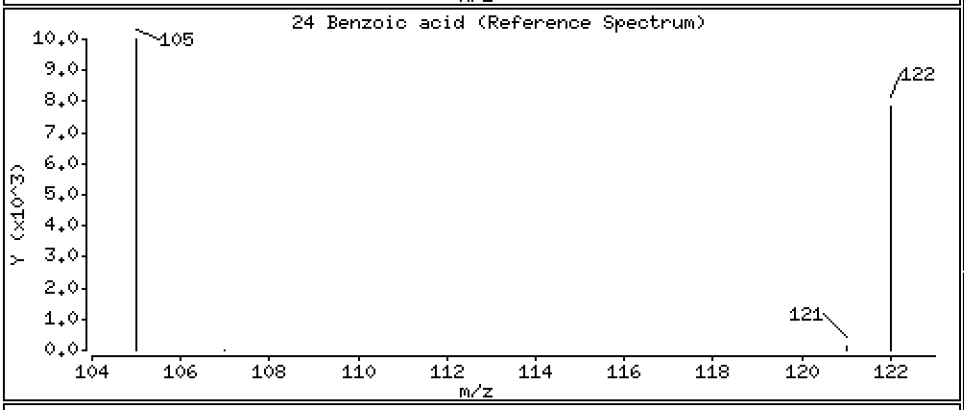
Column diameter: 0.25

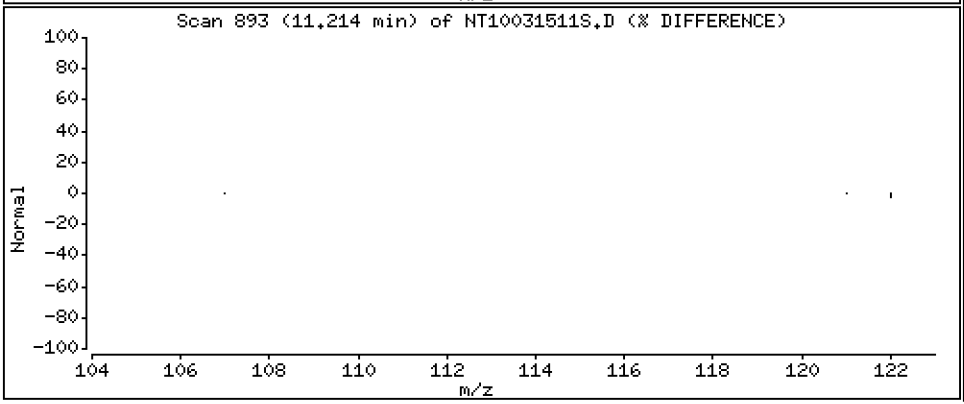
24 Benzoic acid

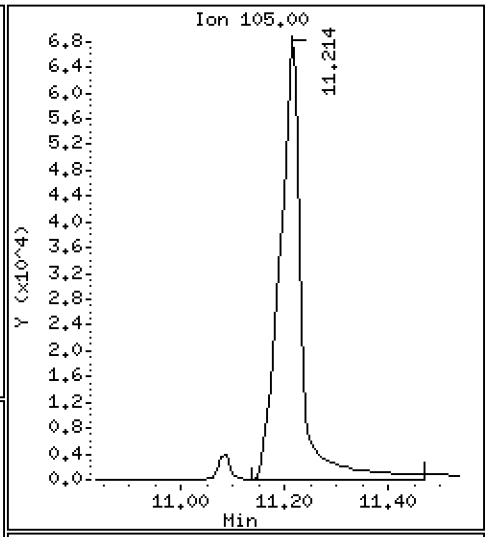
Concentration: 6.746 ug/L

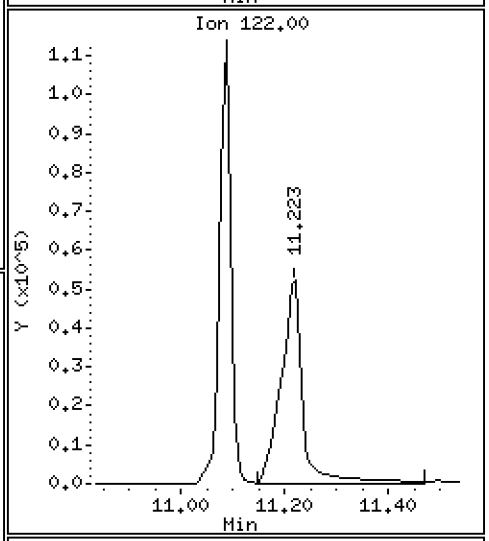


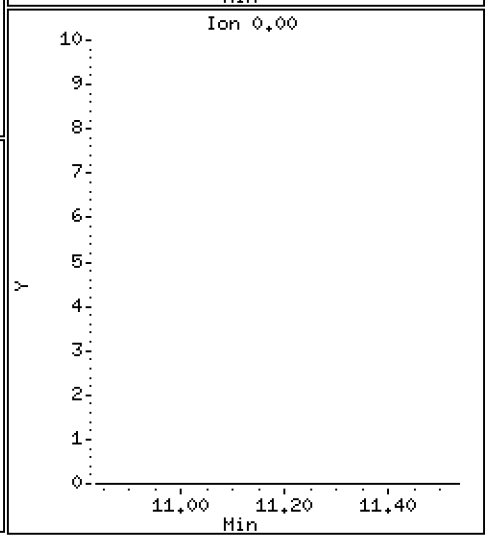












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

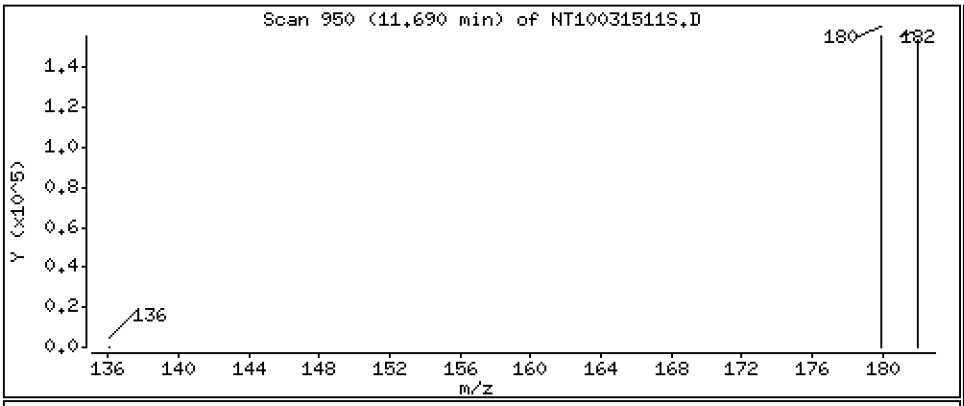
Operator: JGR

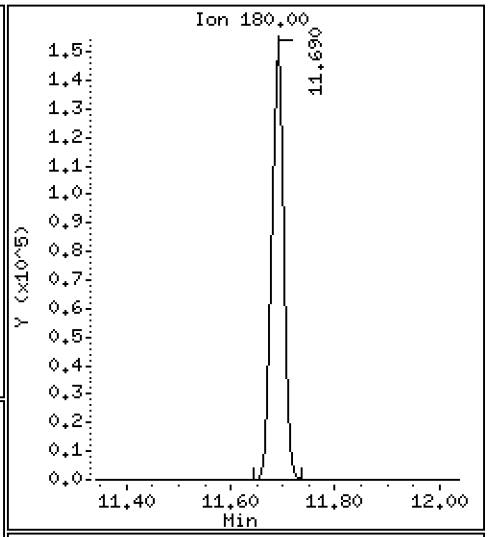
Column phase: ZB-5msi

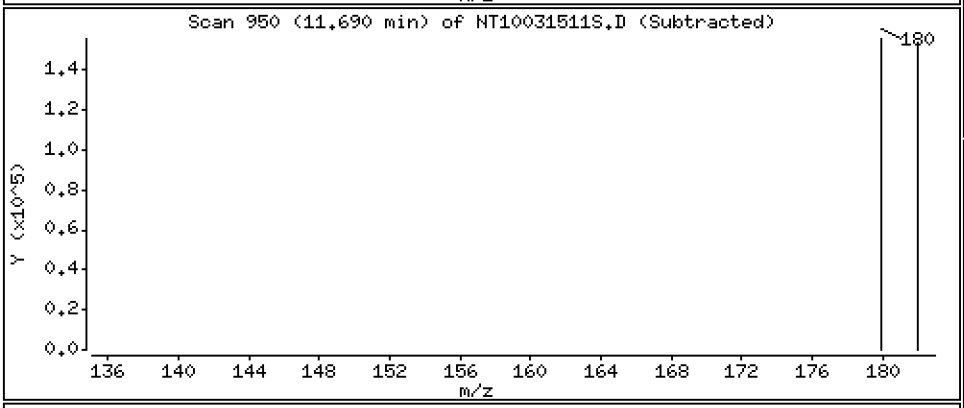
Column diameter: 0.25

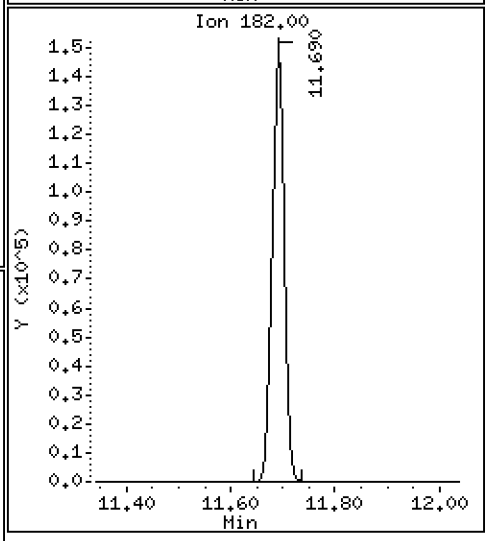
26 1,2,4-Trichlorobenzene

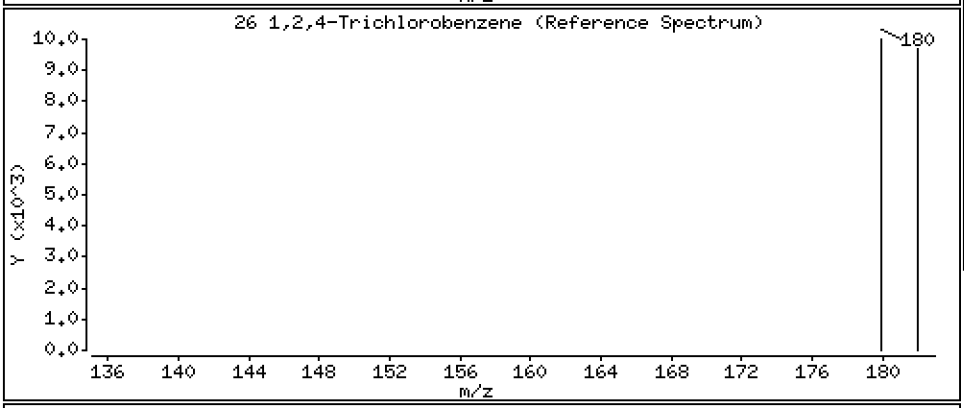
Concentration: 4.445 ug/L

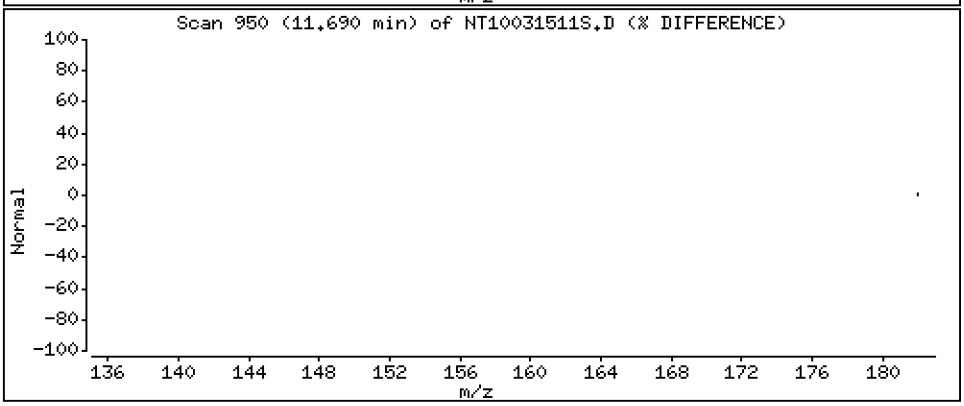












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

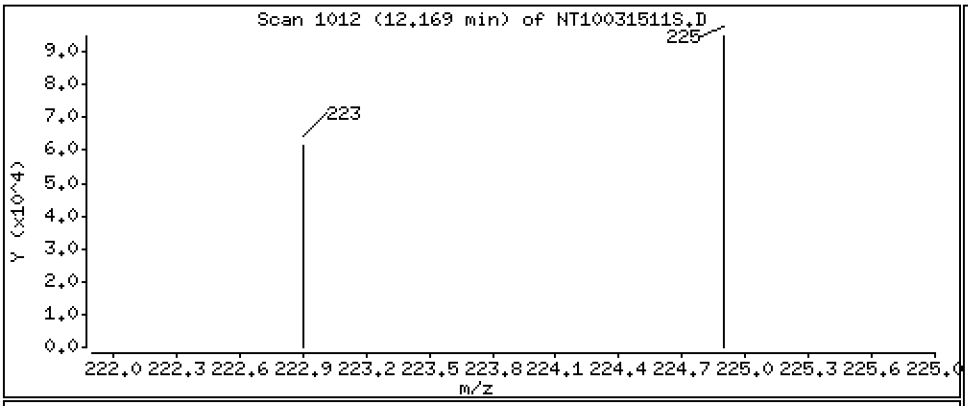
Operator: JGR

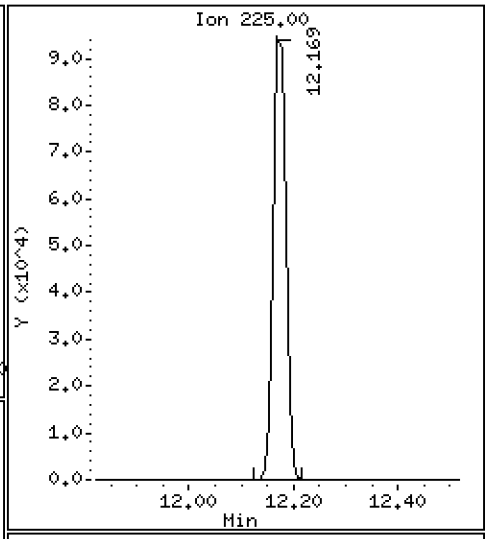
Column phase: ZB-5msi

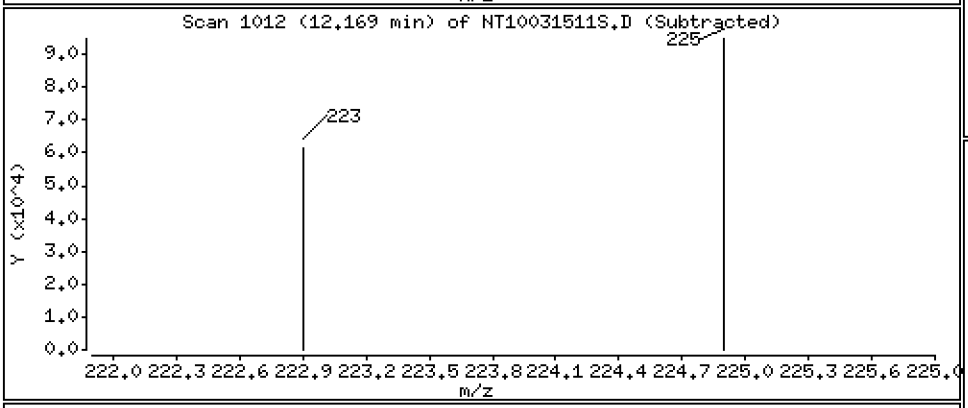
Column diameter: 0.25

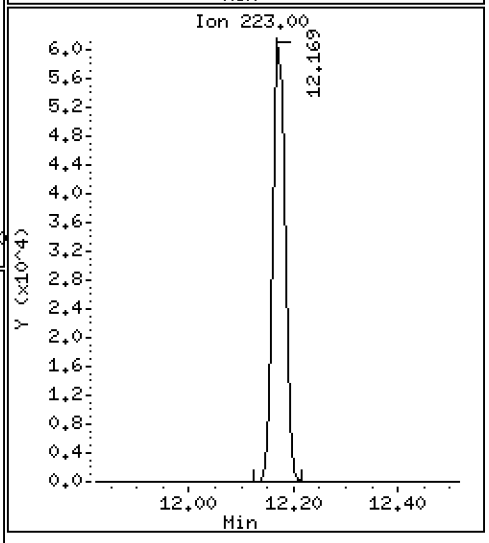
30 Hexachlorobutadiene

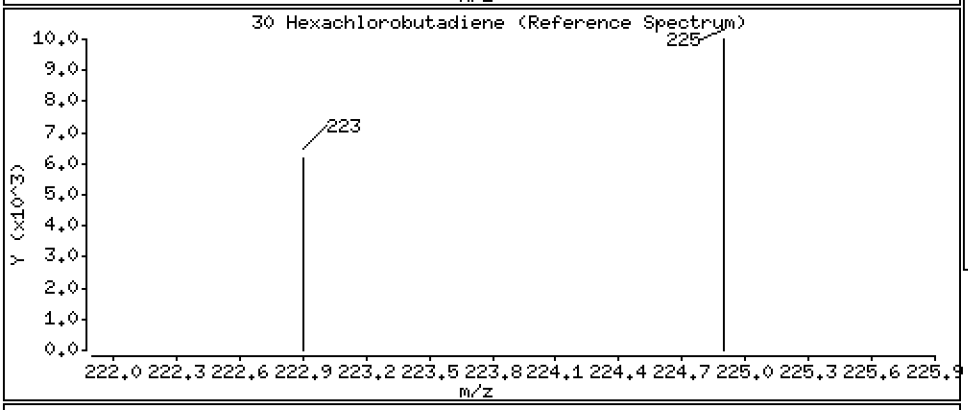
Concentration: 4.653 ug/L

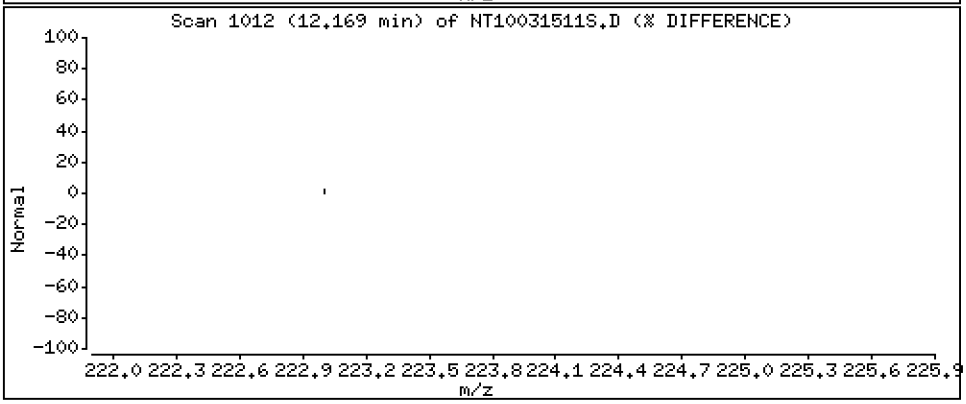












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

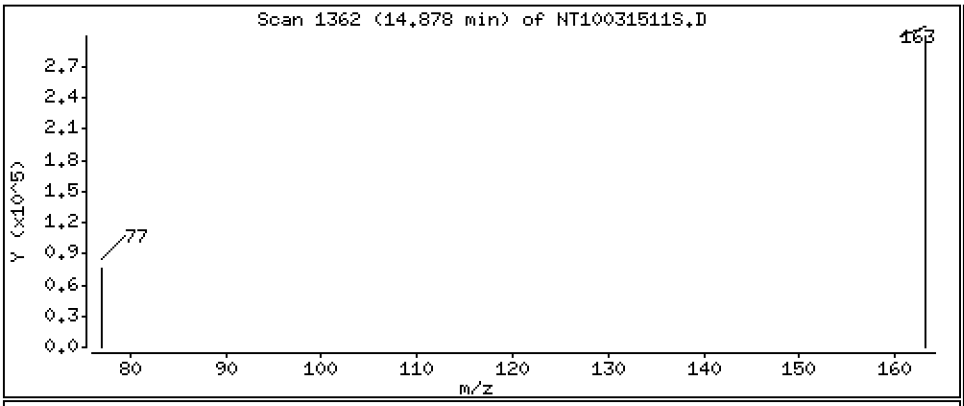
Operator: JGR

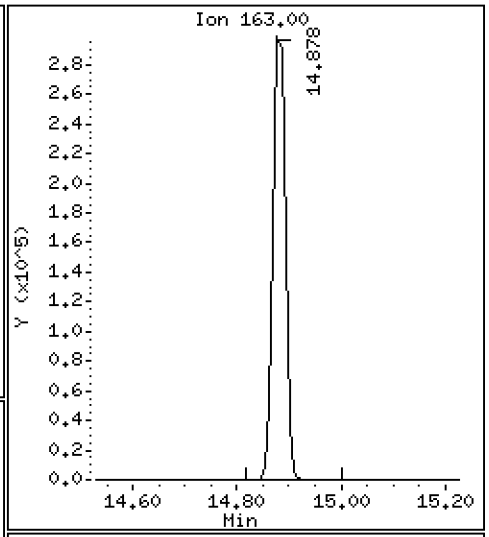
Column phase: ZB-5msi

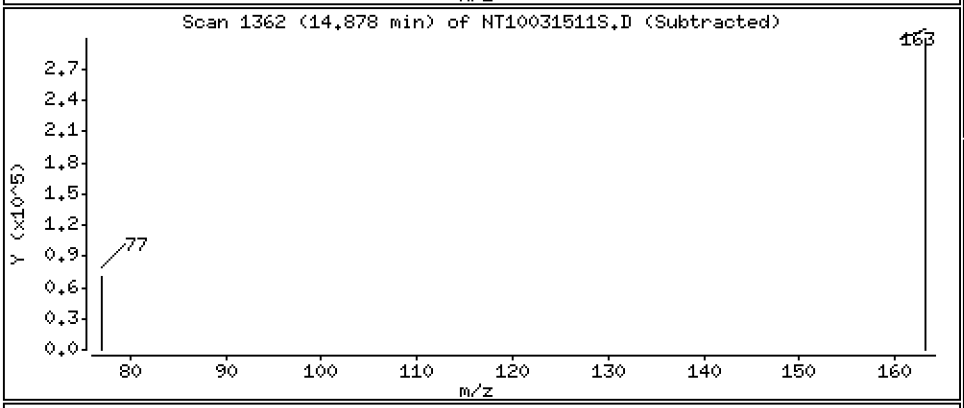
Column diameter: 0.25

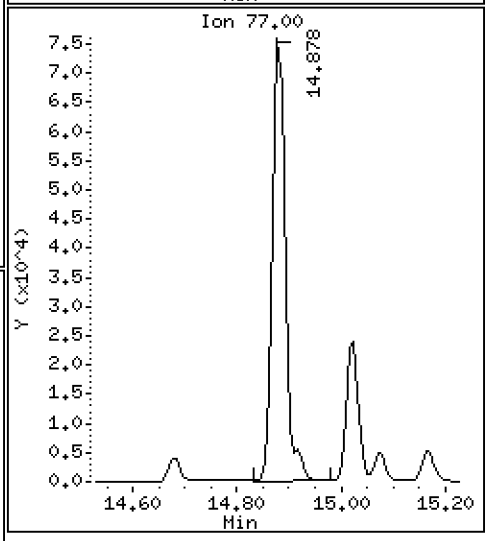
39 Dimethylphthalate

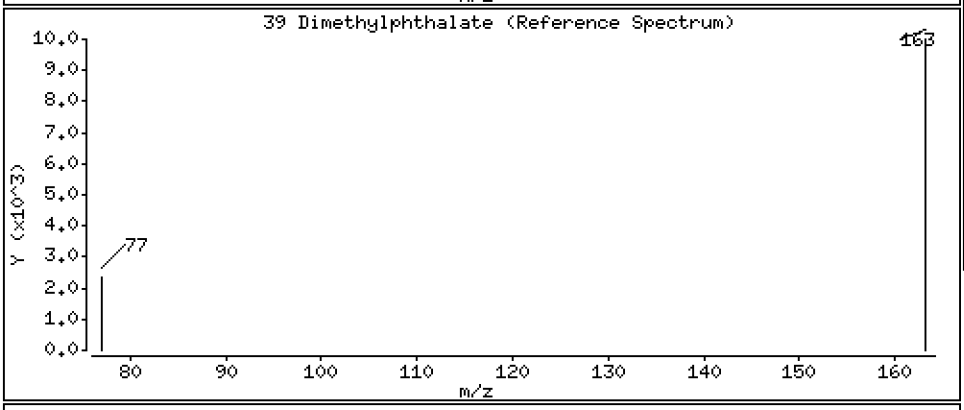
Concentration: 4.948 ug/L

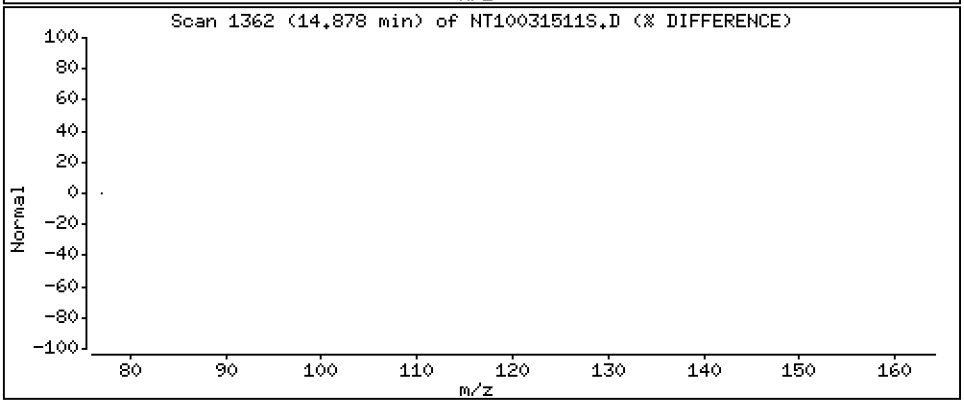












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

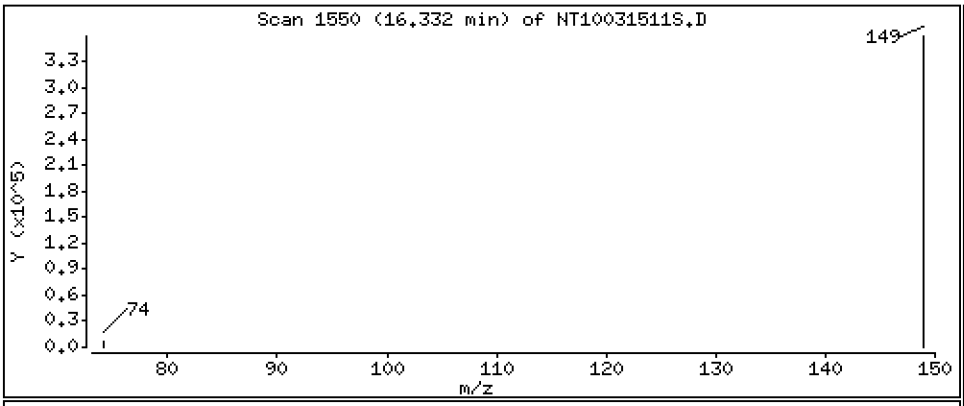
Operator: JGR

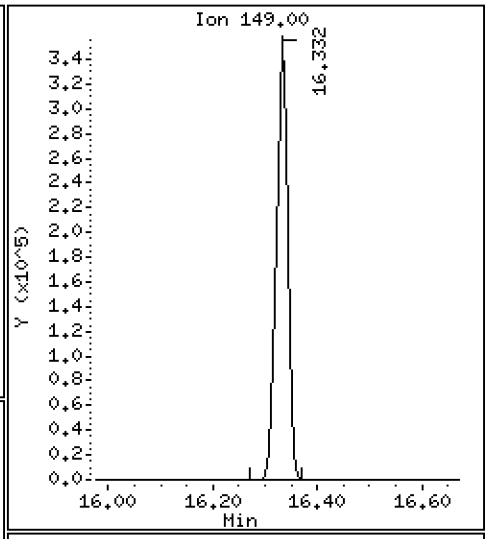
Column phase: ZB-5msi

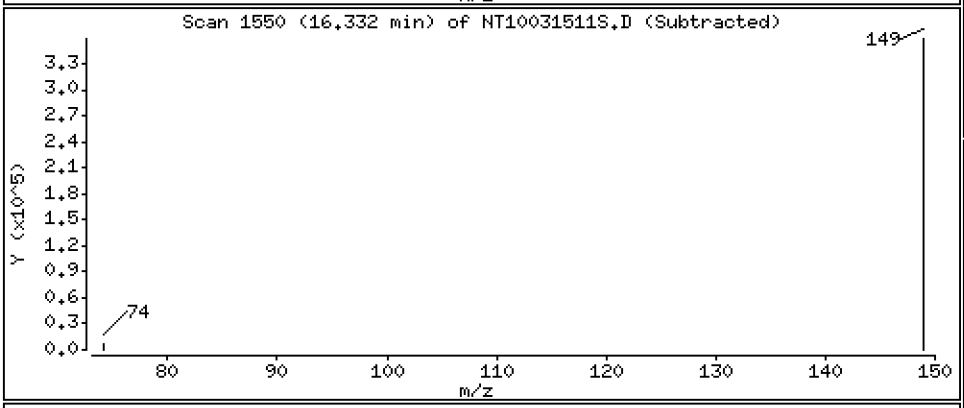
Column diameter: 0.25

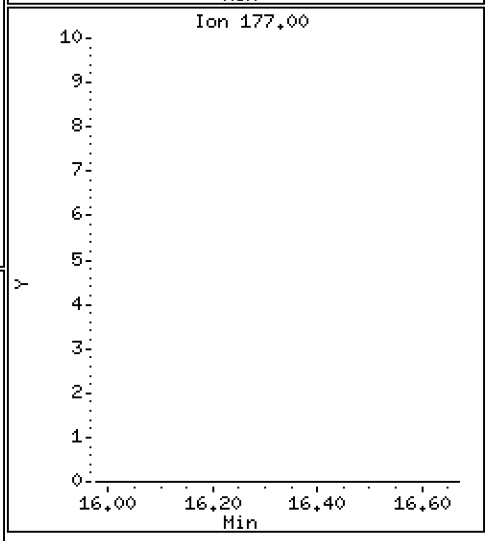
50 Diethylphthalate

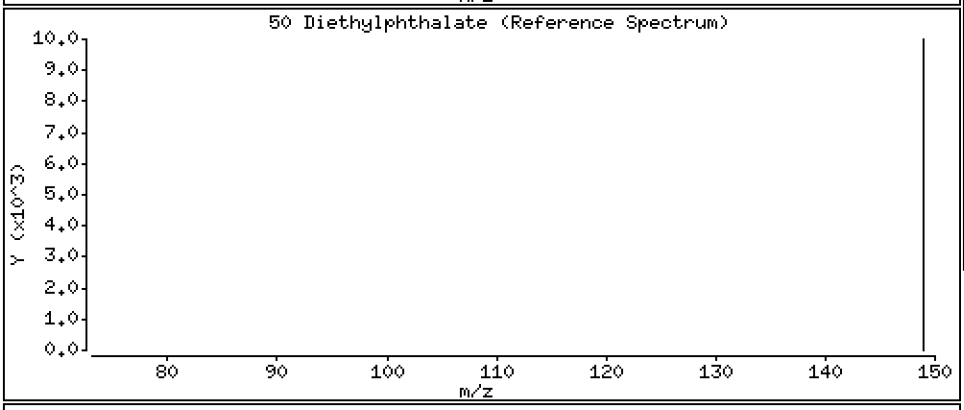
Concentration: 5.364 ug/L

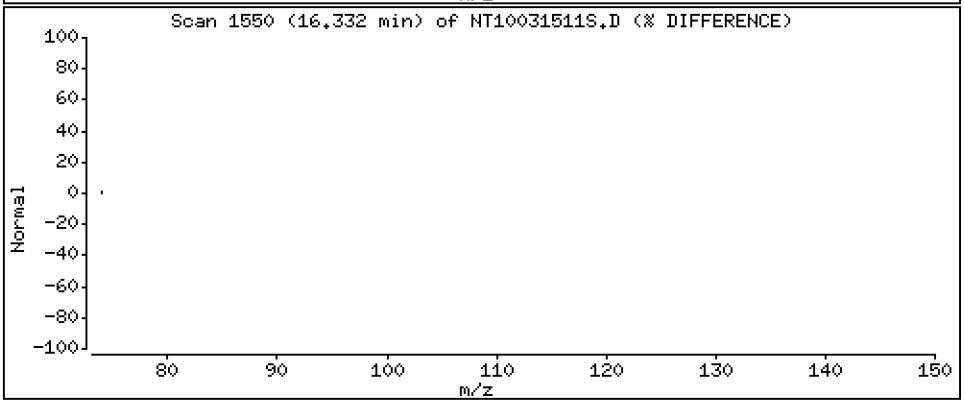












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

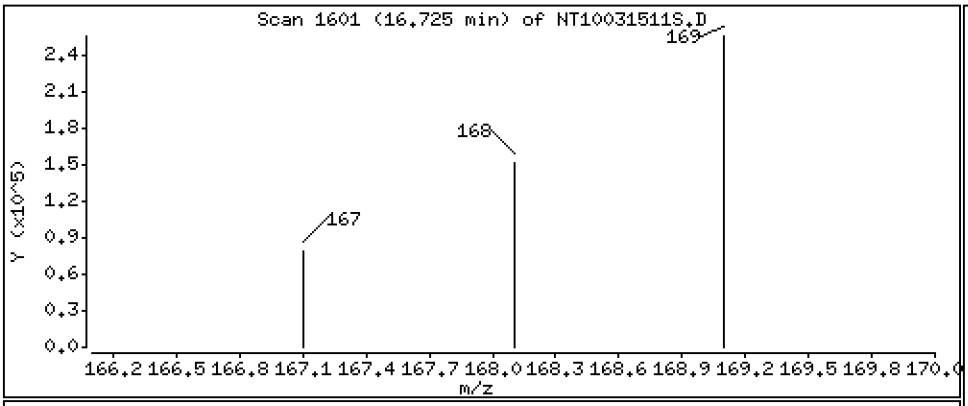
Operator: JGR

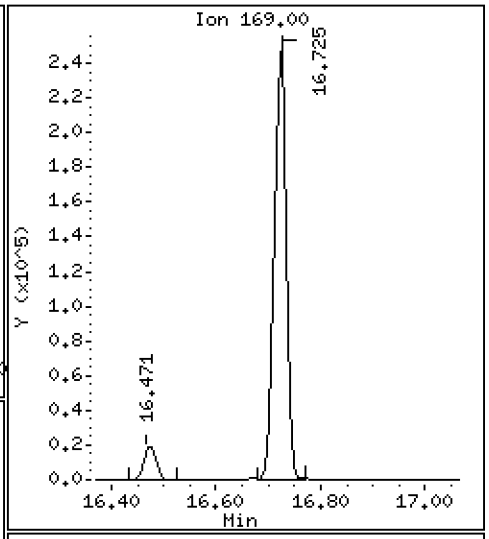
Column phase: ZB-5msi

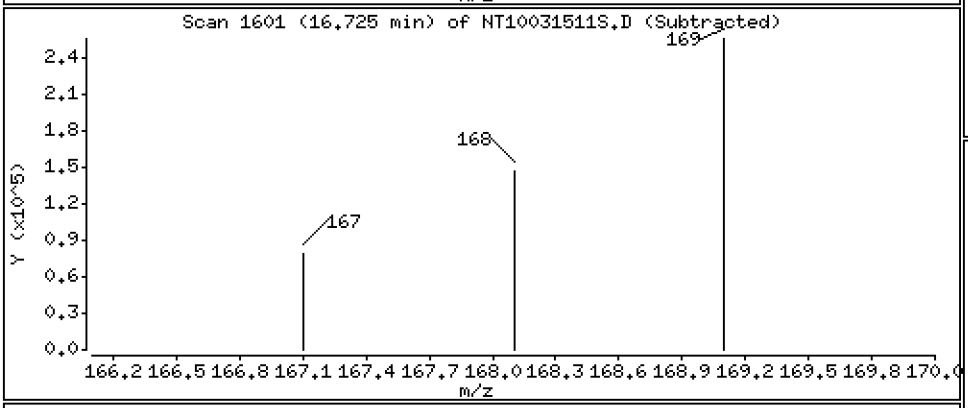
Column diameter: 0.25

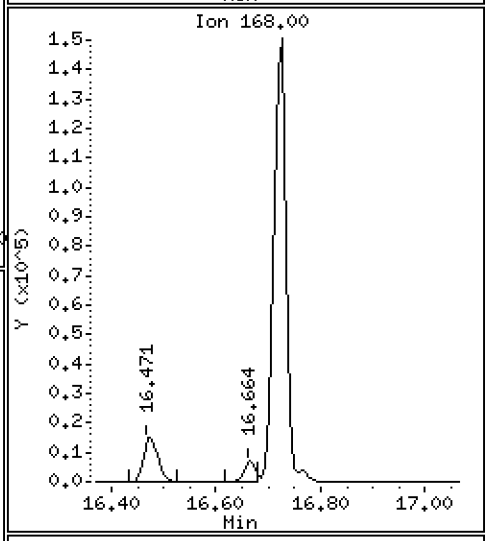
54 N-Nitrosodiphenylamine

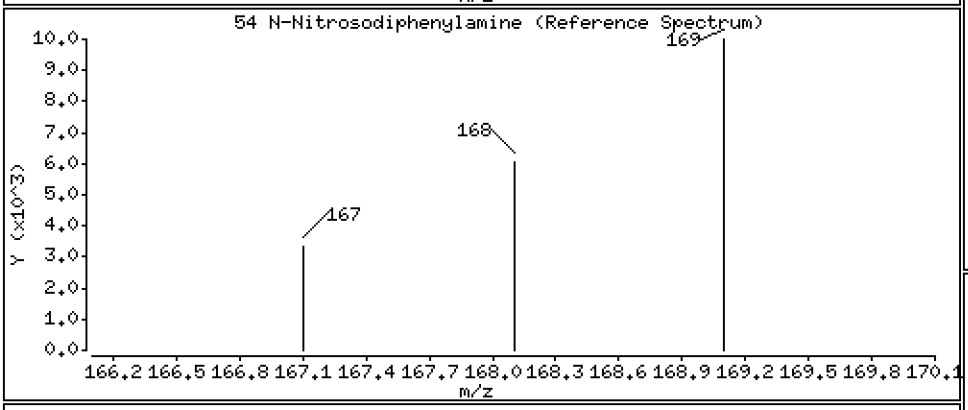
Concentration: 5.080 ug/L

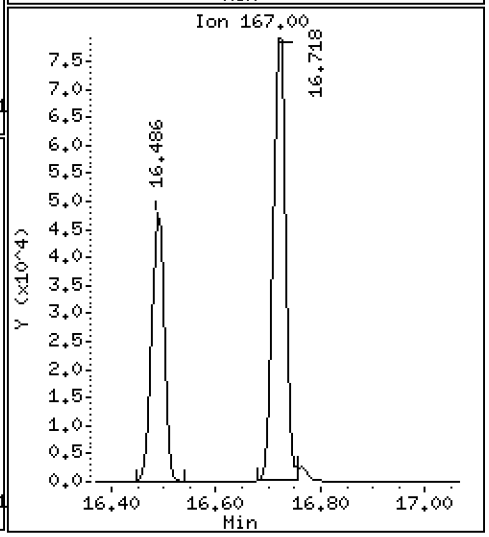


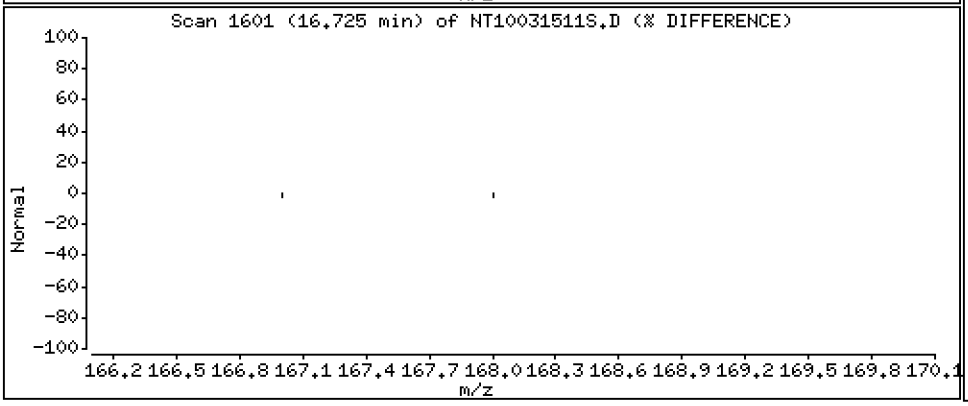












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

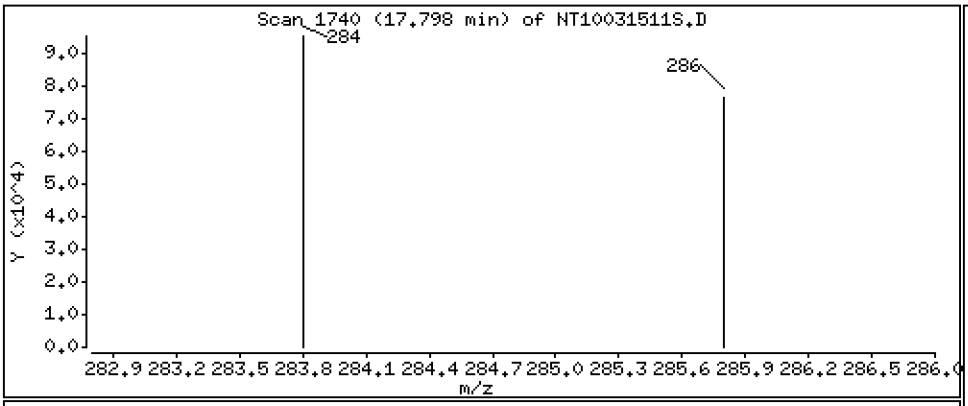
Operator: JGR

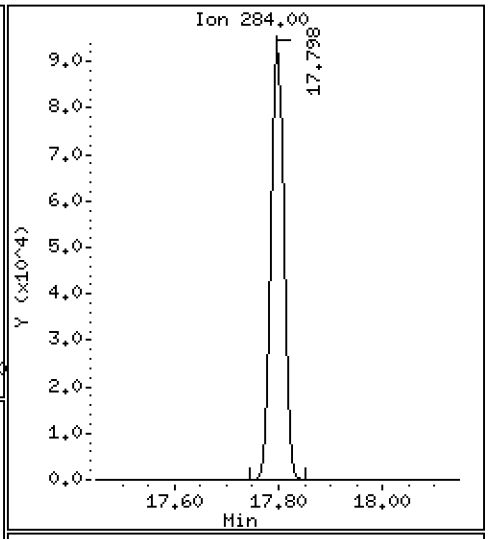
Column phase: ZB-5msi

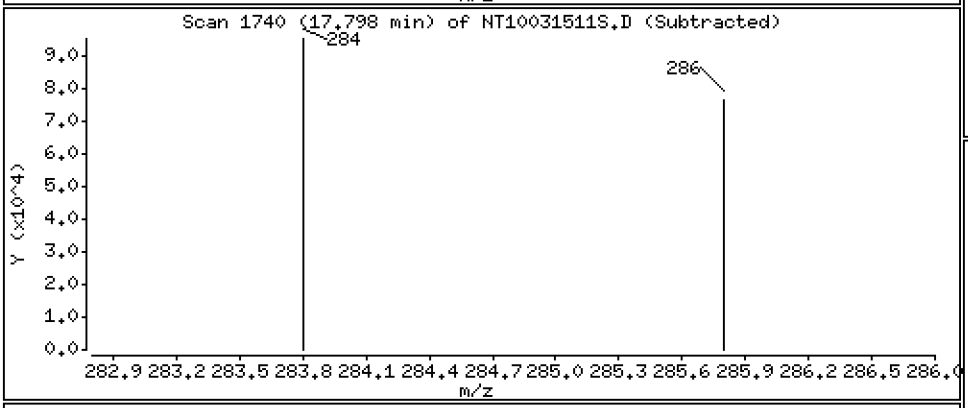
Column diameter: 0.25

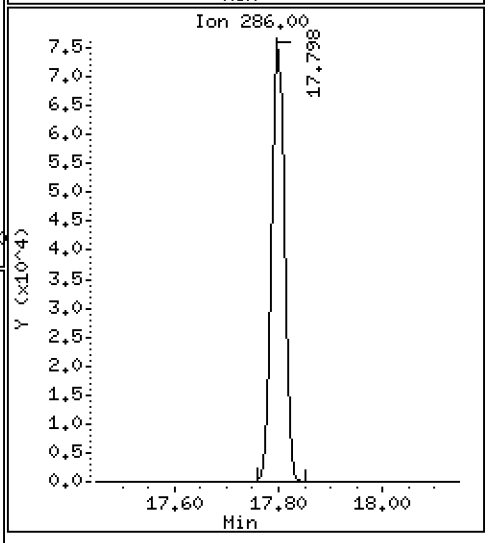
57 Hexachlorobenzene

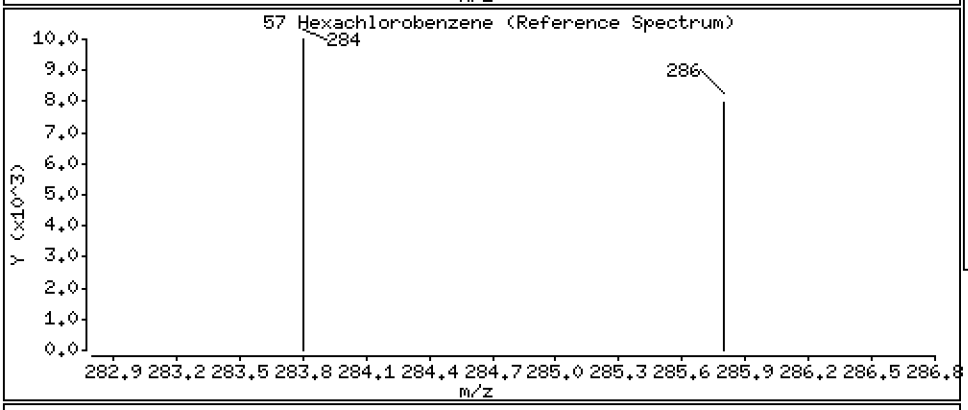
Concentration: 4.614 ug/L

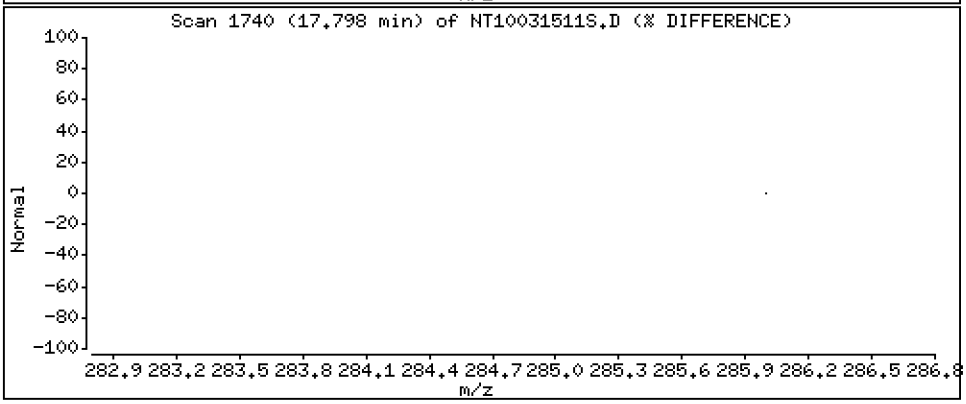












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

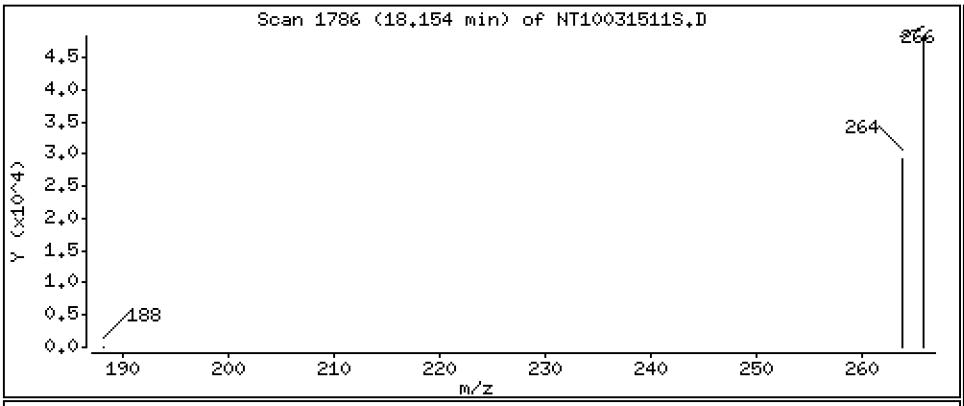
Operator: JGR

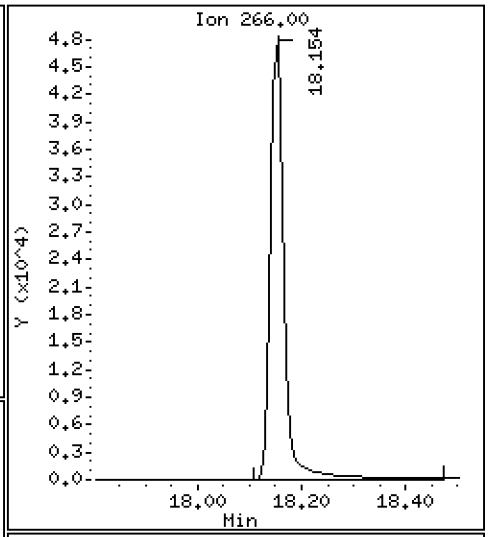
Column phase: ZB-5msi

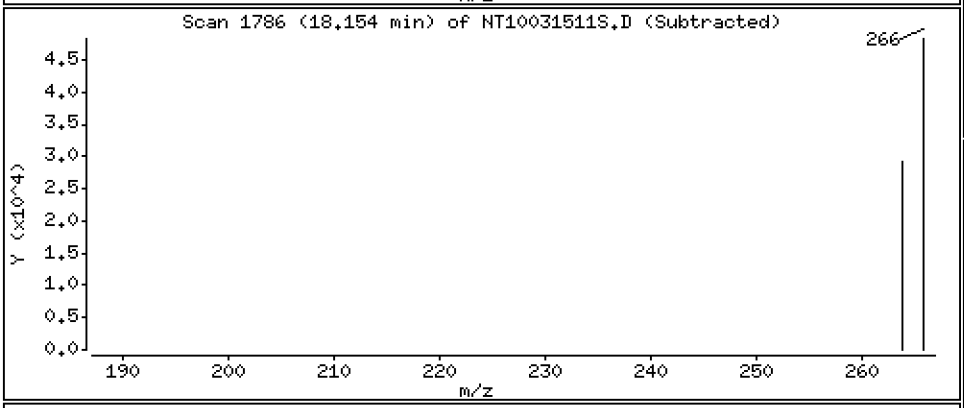
Column diameter: 0.25

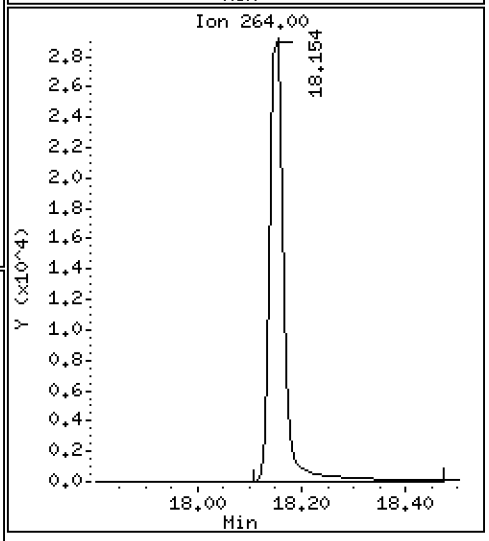
58 Pentachlorophenol

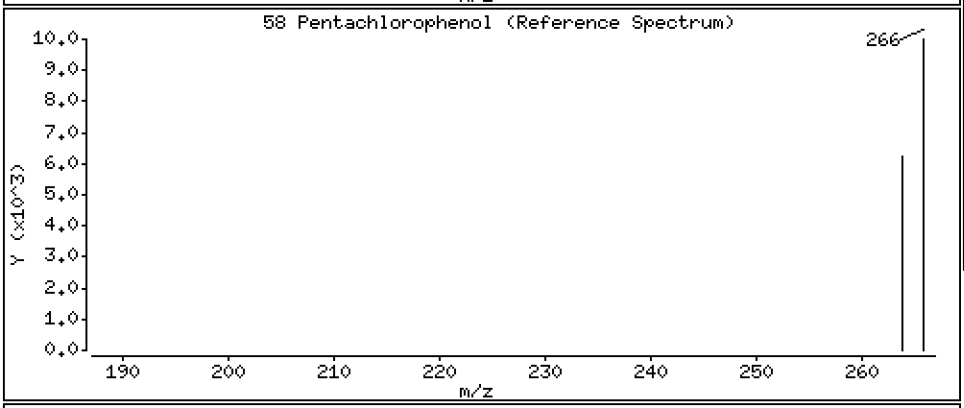
Concentration: 4.418 ug/L

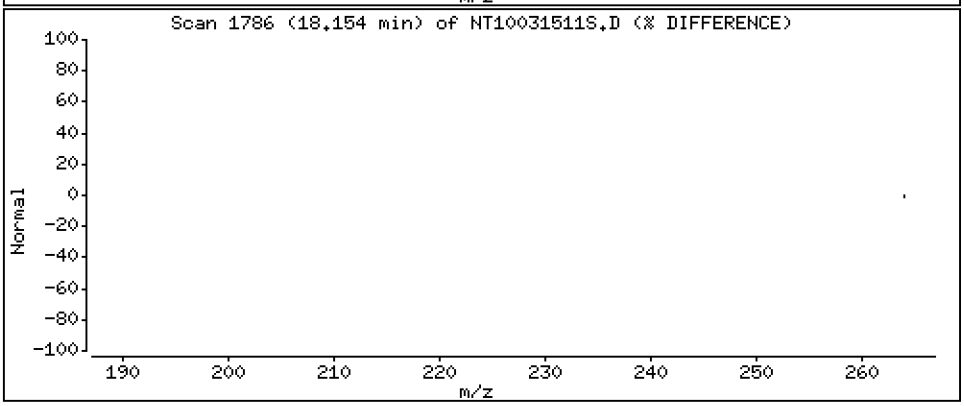












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

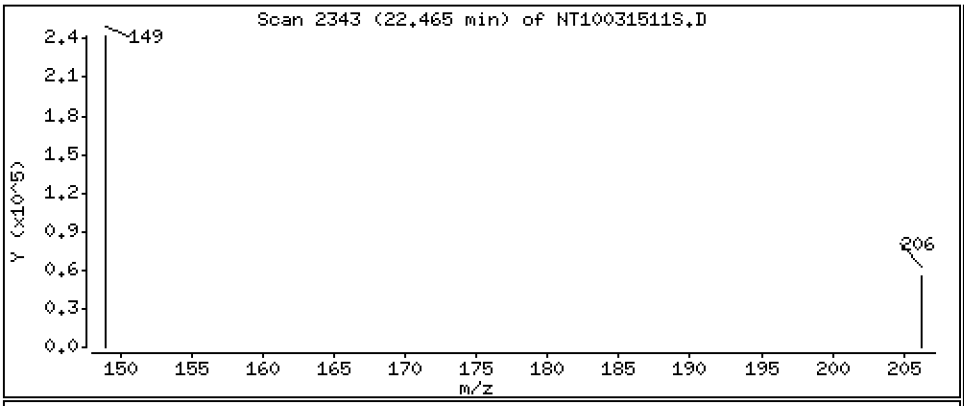
Operator: JGR

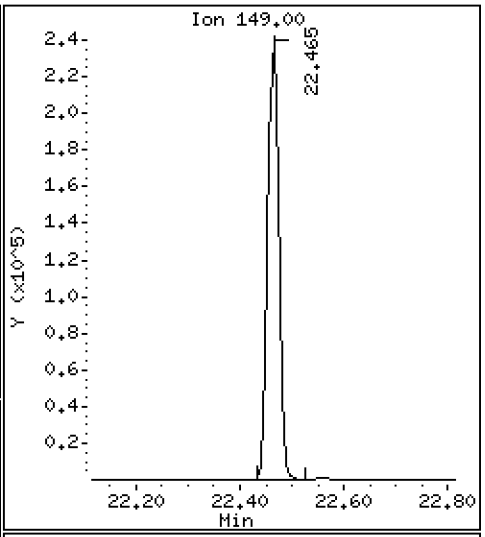
Column phase: ZB-5msi

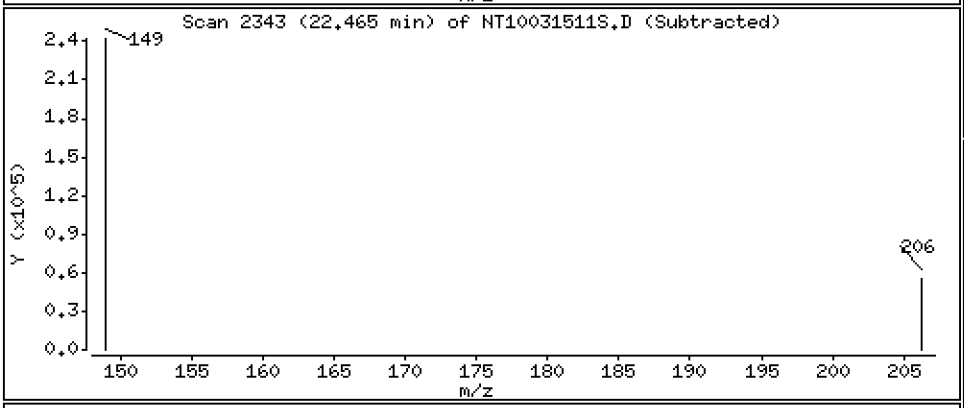
Column diameter: 0.25

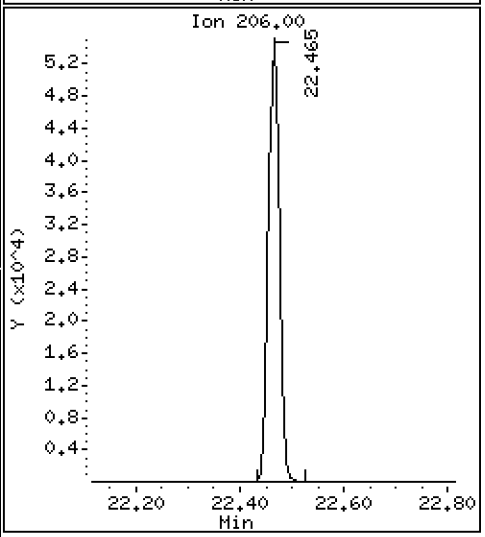
67 Butylbenzylphthalate

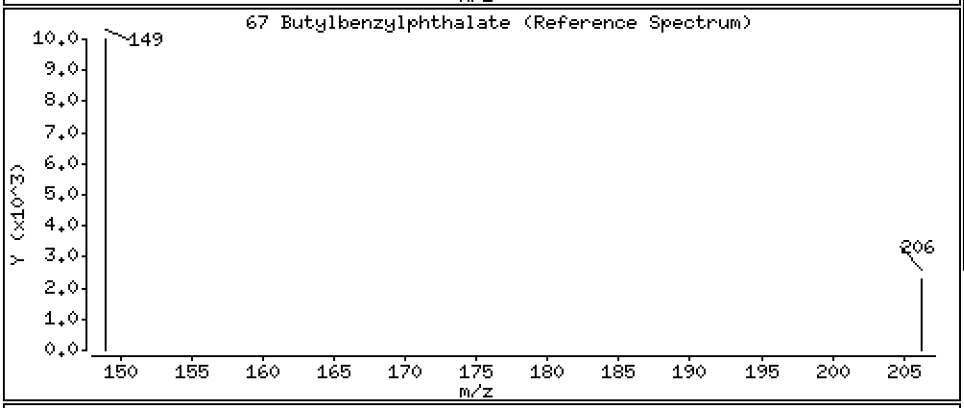
Concentration: 5.121 ug/L

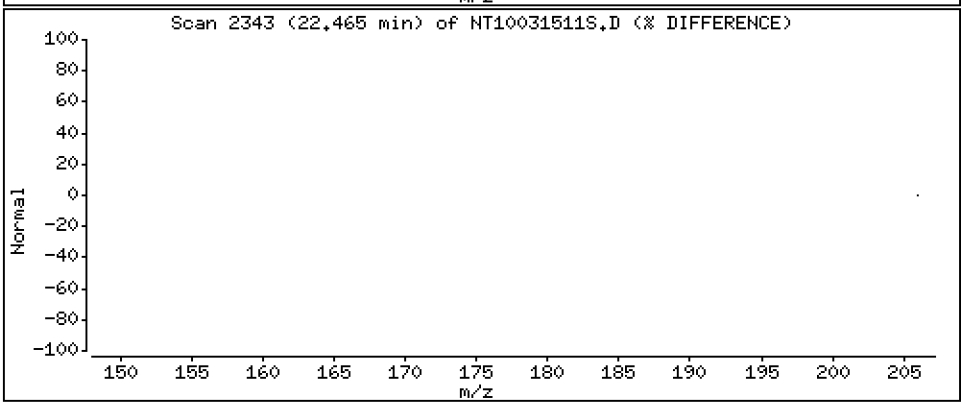












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

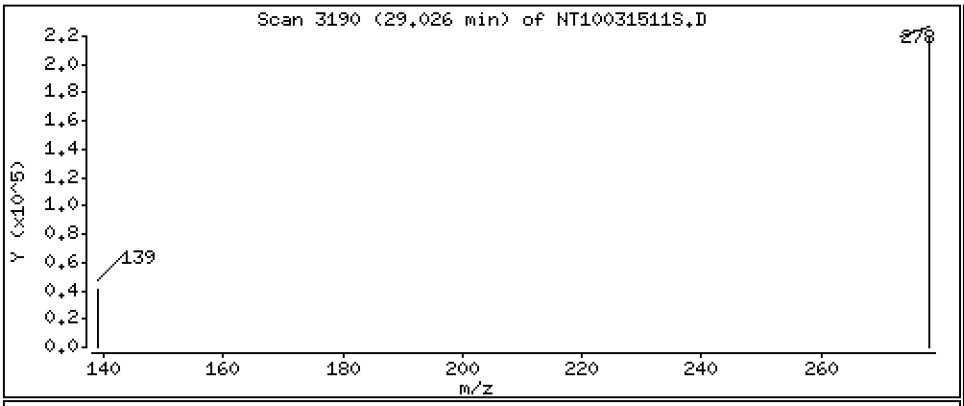
Operator: JGR

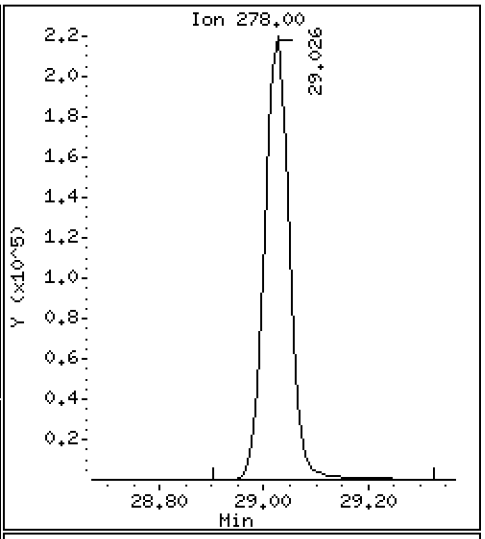
Column phase: ZB-5msi

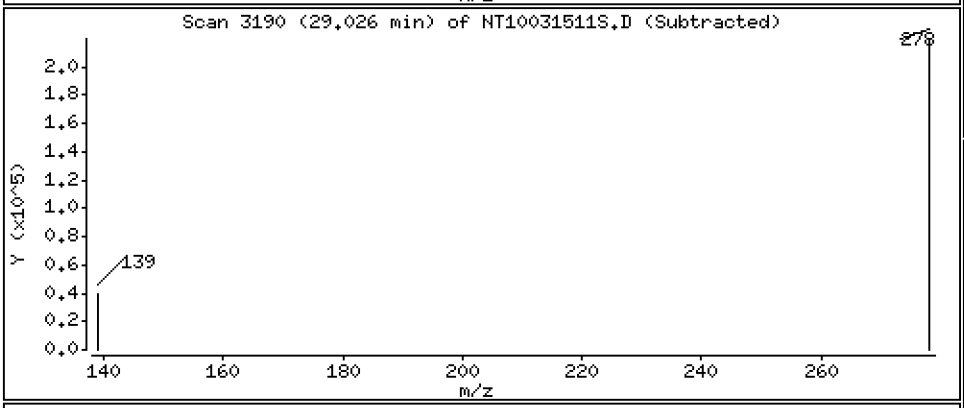
Column diameter: 0.25

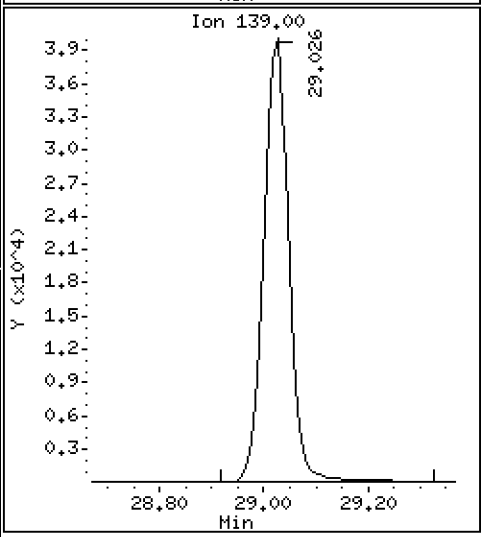
79 Dibenzo(a,h)anthracene

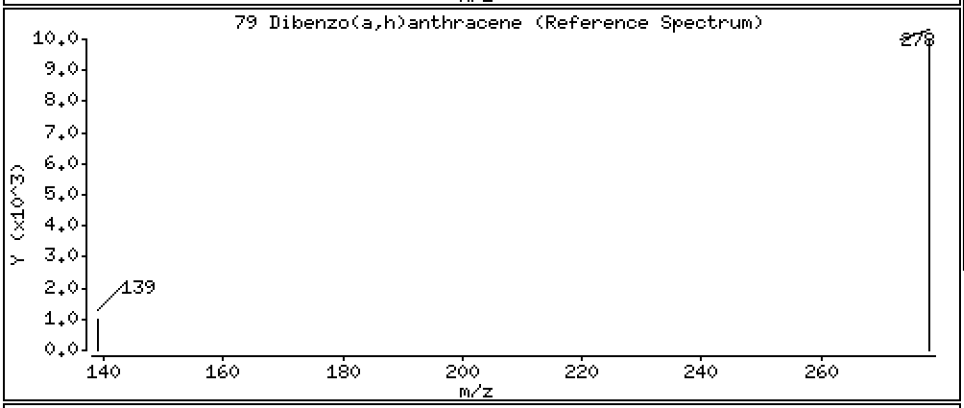
Concentration: 4.238 ug/L

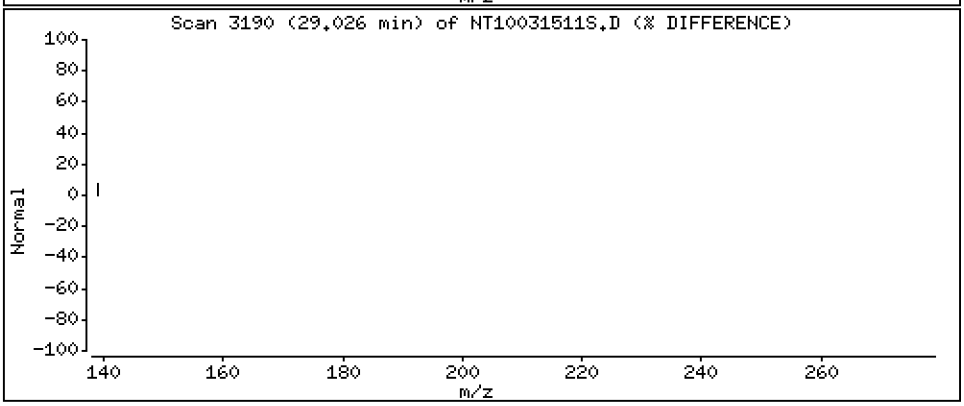












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

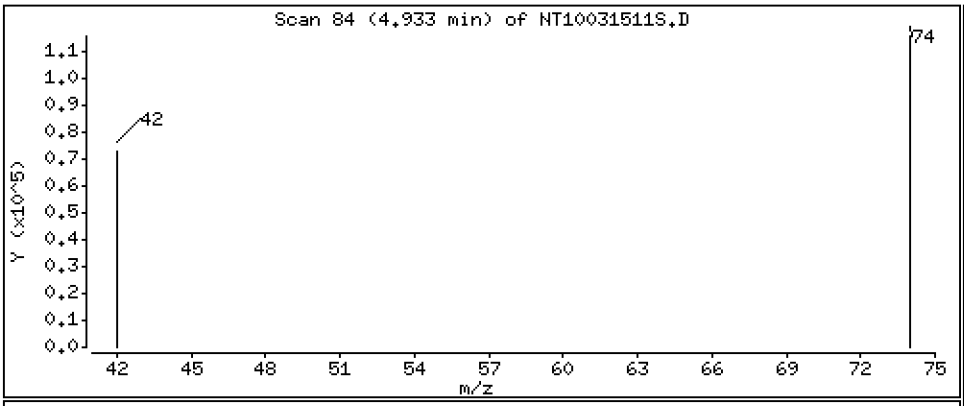
Operator: JGR

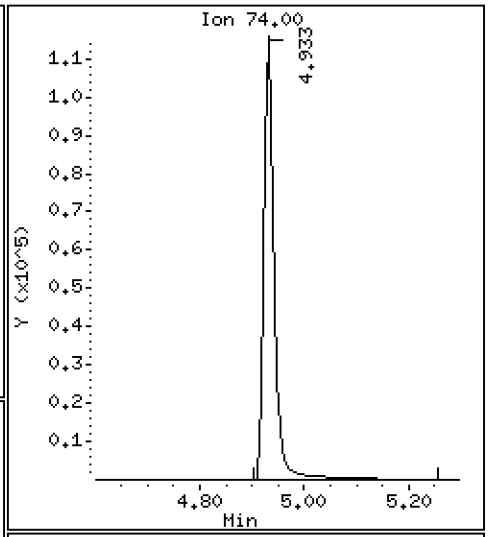
Column phase: ZB-5msi

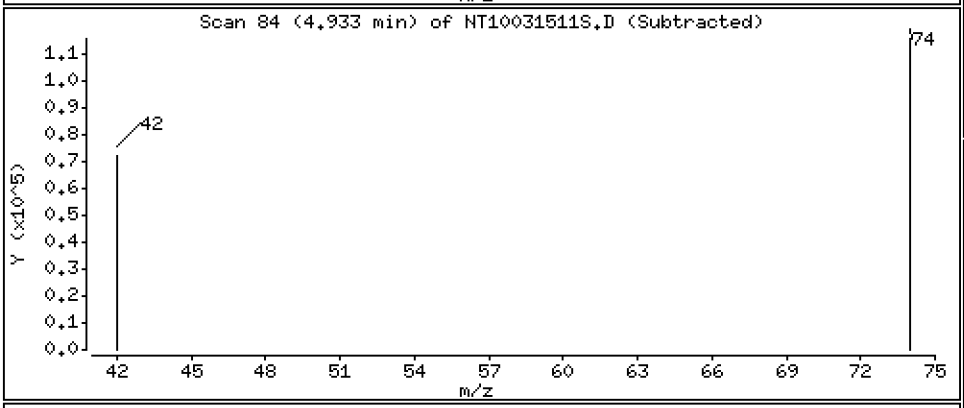
Column diameter: 0.25

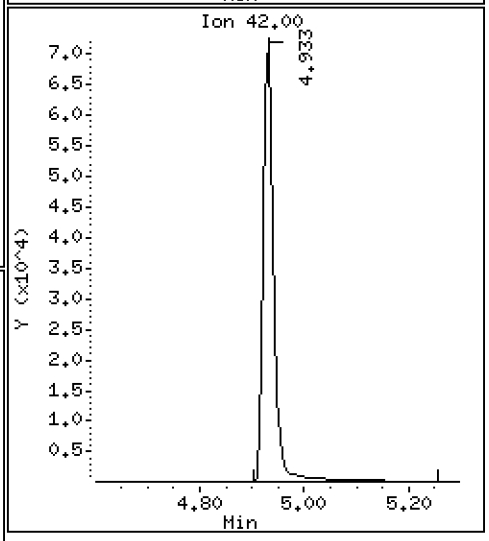
90 N-Nitrosodimethylamine

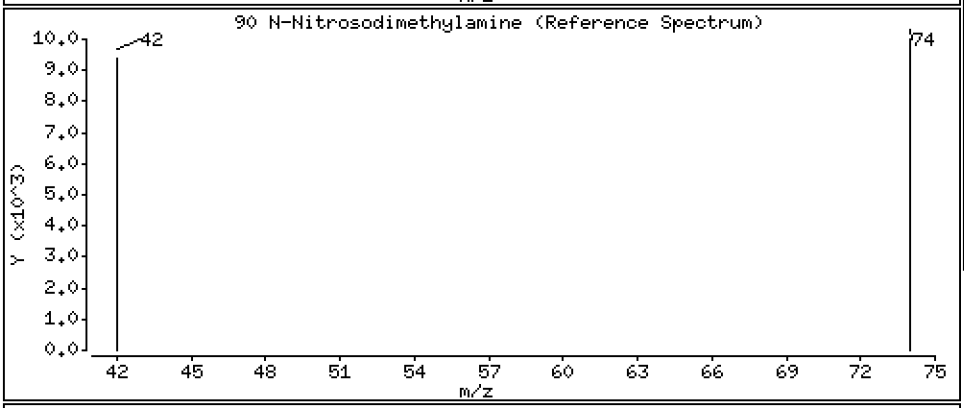
Concentration: 5.096 ug/L

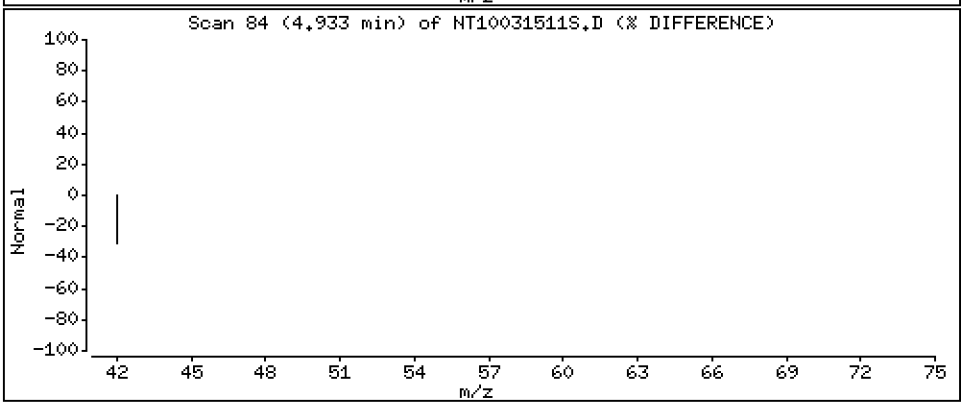












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D
Lab Smp Id: SLC0238-SCV1
Inj Date : 16-MAR-2023 02:16 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0238-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Meth Date : 16-Mar-2023 14:39 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
$ 1	2-Fluorophenol	112	Compound Not Detected.					
3	Phenol	94	8.664	8.664	(0.931)	303581	4.37299	4.373
7	1,3-Dichlorobenzene	146	9.236	9.236	(0.992)	301605	4.64290	4.643
* 8	1,4-Dichlorobenzene-d4	152	9.306	9.298	(1.000)	166866	4.00000	
9	1,4-Dichlorobenzene	146	9.329	9.329	(1.002)	303390	4.83813	4.838
11	Benzyl alcohol	79	9.562	9.570	(1.028)	208505	5.18071	5.181
12	1,2-Dichlorobenzene	146	9.686	9.686	(1.041)	288539	4.67875	4.679
13	2-Methylphenol	108	9.772	9.772	(1.050)	201888	4.19698	4.197
15	4-Methylphenol	108	10.043	10.036	(1.079)	223083	4.46301	4.463
16	N-Nitroso-di-n-propylamine	70	10.121	10.113	(1.088)	186707	5.28174	5.282
22	2,4-Dimethylphenol	107	11.086	11.087	(0.942)	193654	3.66015	3.660
24	Benzoic acid	105	11.214	11.189	(0.952)	200487	6.74612	6.746
26	1,2,4-Trichlorobenzene	180	11.690	11.690	(0.993)	236605	4.44540	4.445
* 27	Naphthalene-d8	136	11.775	11.775	(1.000)	612104	4.00000	
30	Hexachlorobutadiene	225	12.169	12.169	(1.033)	150581	4.65339	4.653
39	Dimethylphthalate	163	14.877	14.877	(0.967)	472341	4.94766	4.948
* 42	Acenaphthene-d10	162	15.388	15.380	(1.000)	302524	4.00000	
50	Diethylphthalate	149	16.331	16.324	(1.061)	530540	5.36440	5.364
54	N-Nitrosodiphenylamine	169	16.725	16.717	(0.908)	377357	5.08034	5.080
57	Hexachlorobenzene	284	17.798	17.798	(0.966)	153405	4.61353	4.614

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.154	18.154	(0.985)	83223	4.41780	4.418
*	59 Phenanthrene-d10	188	18.425	18.417	(1.000)	553619	4.00000	
$	66 Terphenyl-d14	244	21.543	21.543	(0.918)	117	0.00154	0.001543(RM)
	67 Butylbenzylphthalate	149	22.464	22.465	(0.958)	332887	5.12147	5.121
*	69 Chrysene-d12	240	23.455	23.455	(1.000)	465428	4.00000	
*	77 Perylene-d12	264	26.188	26.188	(1.000)	532593	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.026	29.019	(1.108)	722983	4.23762	4.238
	90 N-Nitrosodimethylamine	74	4.933	4.948	(0.530)	163555	5.09625	5.096

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031511S.D
Lab Smp Id: SLC0238-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 23:06
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	188081	94041	376162	166866	-11.28
27 Naphthalene-d8	674549	337275	1349098	612104	-9.26
42 Acenaphthene-d10	328275	164138	656550	302524	-7.84
59 Phenanthrene-d10	597140	298570	1194280	553619	-7.29
69 Chrysene-d12	466503	233252	933006	465428	-0.23
77 Perylene-d12	518203	259102	1036406	532593	2.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.31	0.08
27 Naphthalene-d8	11.77	11.27	12.27	11.78	0.01
42 Acenaphthene-d10	15.39	14.89	15.89	15.39	0.01
59 Phenanthrene-d10	18.42	17.92	18.92	18.43	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.46	0.00
77 Perylene-d12	26.19	25.69	26.69	26.19	0.00

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

REVIEW SUMMARY FOR FILE - NT10031511S.D

Lab ID: SLC0238-SCV1
nt10.i, 20230315.b\20230315.b\SIMABN2.m,   16-MAR-2023 02:16

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.000	0.9524	Benzoic acid

RRT check based on Ccal File: 20230315.b/NT10031510S.D

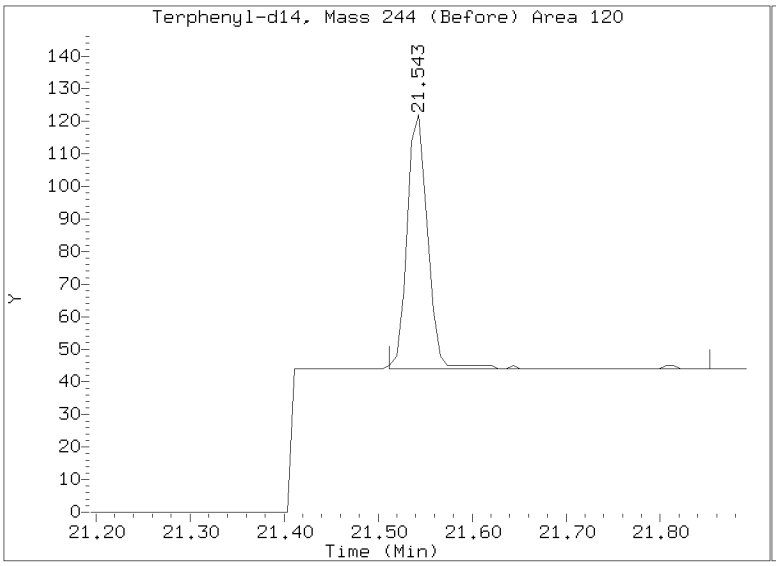
On Column LOD for nt10.i, 20230315.b\SIMABN2.m, PSDDA.sub = 0.0000

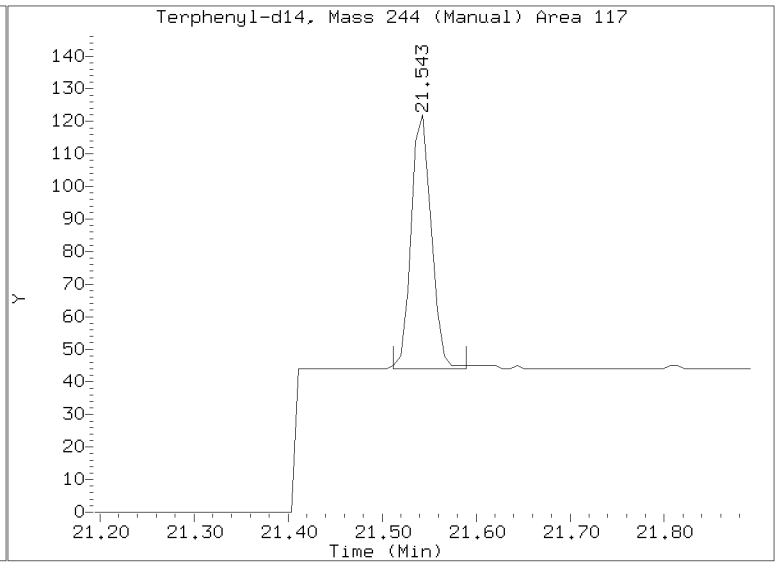
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230315.b/20230315.b/NT10031511S.D
Injection Date: 16-MAR-2023 02:16
Lab ID:SLC0238-SCV1 Client ID:
Report Date: 03/16/2023 14:49





Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT8	Calibration:	GA00050
Lab File ID:	N823022302.D	Calibration Date:	01/19/2023
Sequence:	SLB0310	Injection Date:	02/23/23
Lab Sample ID:	SLB0310-ICV1	Injection Time:	11:46
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Benzo(a)anthracene	A	2.5000	2.71	1.1238870	1.2191740		8.5	+/-20
Chrysene	A	2.5000	2.52	1.1964350	1.2051920		0.7	+/-20
Benzo(b)fluoranthene	A	2.5000	2.52	1.1648110	1.1750190		0.9	+/-20
Benzo(k)fluoranthene	A	2.5000	2.48	1.1409370	1.1335460		-0.6	+/-20
Benzo(a)pyrene	A	2.5000	2.53	1.0250270	1.0385730		1.3	+/-20
Indeno(1,2,3-cd)pyrene	A	2.5000	2.67	1.1677520	1.2447480		6.6	+/-20
Dibenzo(a,h)anthracene	A	2.5000	2.66	1.0049440	1.0678190		6.2	+/-20
2-Methylnaphthalene-d10	A	2.5000	2.67	0.5454499	0.5832208		6.9	+/-20
Dibenzo[a,h]anthracene-d14	A	2.5000	2.41	0.6679424	0.7561215		-3.5	+/-20
Fluoranthene-d10	A	2.5000	2.80	0.8823923	0.9891443		12.1	+/-20
Naphthalene-d8	A	2.0000	2.00	22973.6700	1.0000		0.0	
Acenaphthene-d10	A	2.0000	2.00	13579.2500	1.0000		0.0	
Phenanthrene-d10	A	2.0000	2.00	25616.1700	1.0000		0.0	
Chrysene-d12	A	2.0000	2.00	22313.2500	1.0000		0.0	
Perylene-d12	A	2.0000	2.00	21012.9200	1.0000		0.0	

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230223.b\N823022302.D

Page 1

Date : 23-FEB-2023 11:46

Client ID:

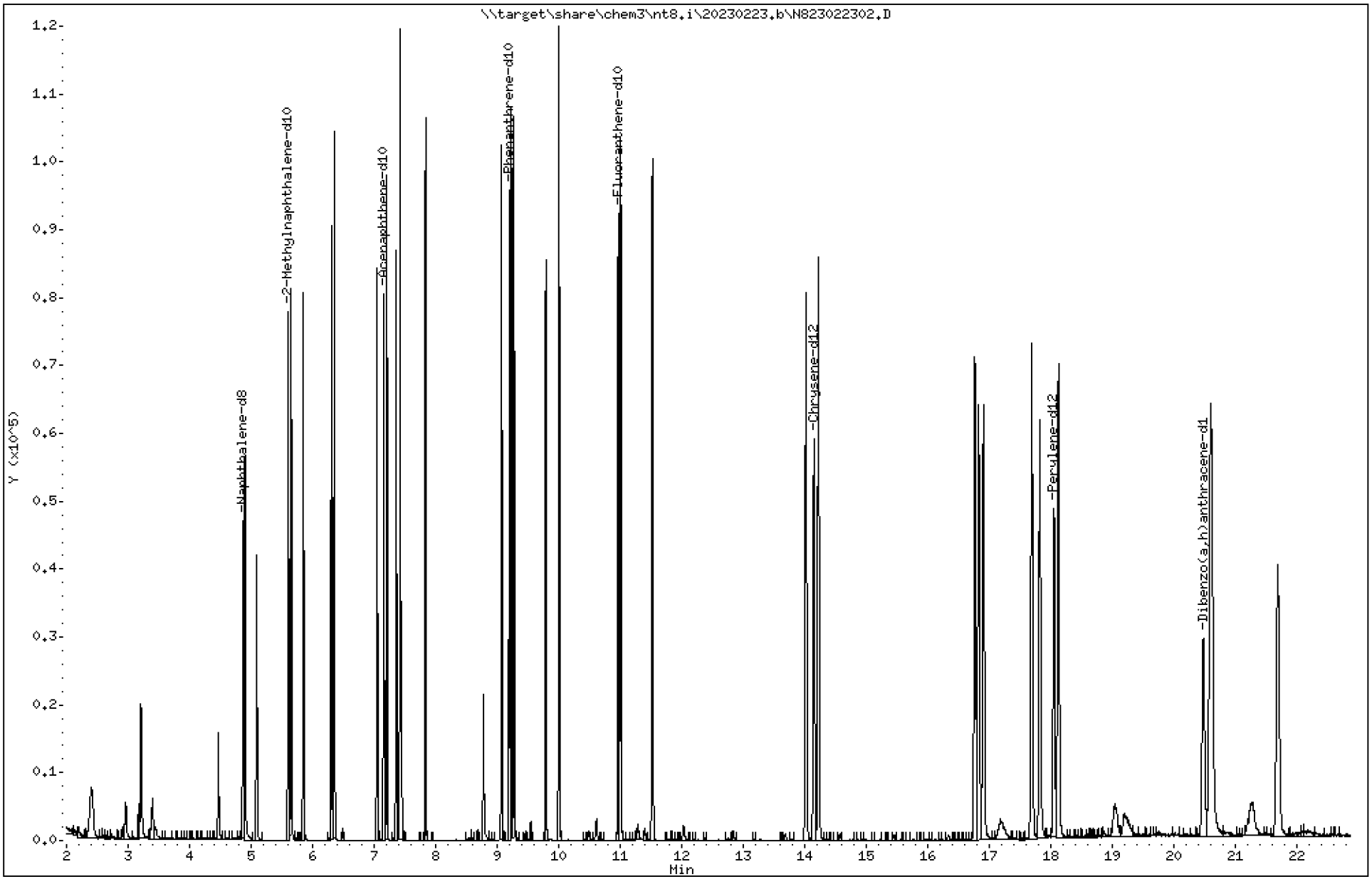
Instrument: nt8.i

Sample Info: ICV230223

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230223.b\N823022302.D
Lab Smp Id: SLB0310-ICV1
Inj Date : 23-FEB-2023 11:46
Operator : JZ Inst ID: nt8.i
Smp Info : ICV230223
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230223.b\FSIMPNA230119.m
Meth Date : 26-Feb-2023 11:31 Jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.871	4.871	(1.000)	37022	2.00000	
	2 Naphthalene	128	4.903	4.903	(1.006)	44406	2.50000	2.580
$	3 2-Methylnaphthalene-d10	152	5.605	5.605	(1.151)	26990	2.50000	2.673
	4 2-Methylnaphthalene	141	5.652	5.652	(1.160)	24939	2.50000	2.634
	5 1-methylnaphthalene	141	5.849	5.849	(1.201)	24816	2.50000	2.582
	7 Biphenyl	154	6.310	6.310	(0.882)	37052	2.50000	2.501
	8 2,6-Dimethylnaphthalene	156	6.354	6.354	(0.888)	27578	2.50000	2.630
	9 Acenaphthylene	152	7.050	7.050	(0.985)	45358	2.50000	2.675
*	10 Acenaphthene-d10	164	7.158	7.158	(1.000)	22454	2.00000	
	11 Acenaphthene	153	7.208	7.208	(1.007)	28890	2.50000	2.543
	12 Dibenzofuran	168	7.360	7.360	(1.028)	43204	2.50000	2.504
	13 1,6,7-Trimethylnaphthalene	170	7.423	7.423	(1.037)	28527	2.50000	2.622
	14 Fluorene	166	7.837	7.837	(1.095)	35442	2.50000	2.645
	18 Dibenzothiophene	184	9.074	9.074	(0.987)	49261	2.50000	2.576
*	15 Phenanthrene-d10	188	9.197	9.197	(1.000)	43277	2.00000	
	16 Phenanthrene	178	9.235	9.235	(1.004)	51988	2.50000	2.459
	17 Anthracene	178	9.276	9.276	(1.009)	50413	2.50000	2.625
	19 Carbazole	167	9.791	9.791	(1.065)	45533	2.50000	2.586
	20 1-Methylphenanthrene	192	10.010	10.010	(1.088)	40291	2.50000	2.645
	22 Fluoranthene	202	11.009	11.009	(1.197)	60798	2.50000	2.642
$	21 Fluoranthene-d10	212	10.971	10.971	(1.193)	53509	2.50000	2.802
	23 Pyrene	202	11.527	11.527	(0.815)	62612	2.50000	2.596
	24 Benzo(a)anthracene	228	14.025	14.025	(0.991)	59293	2.50000	2.712
*	25 Chrysene-d12	240	14.152	14.152	(1.000)	38907	2.00000	
	27 Chrysene	228	14.225	14.225	(1.005)	58613	2.50000	2.518
	28 Benzo(b)fluoranthene	252	16.770	16.770	(0.929)	58137	2.50000	2.522
	29 Benzo(k)fluoranthene	252	16.833	16.833	(0.932)	56085	2.50000	2.484
	30 Benzo(j)fluoranthene	252	16.912	16.912	(0.937)	51296	2.50000	2.523
	31 Total Benzofluoranthenes	252	16.770	16.770	(0.929)	160650	7.50000	7.358(M)
	34 Benzo(e)pyrene	252	17.696	17.696	(0.980)	56189	2.50000	2.444
	32 Benzo(a)pyrene	252	17.826	17.826	(0.987)	51386	2.50000	2.533
*	33 Perylene-d12	264	18.057	18.057	(1.000)	39582	2.00000	
	35 Perylene	252	18.130	18.130	(1.004)	53836	2.50000	2.473

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.485	20.485	(1.134)	37411	2.50000	2.412
37 Indeno(1,2,3-cd)pyrene	276	20.624	20.624	(1.142)	61587	2.50000	2.665
38 Dibenzo(a,h)anthracene	278	20.596	20.596	(1.141)	52833	2.50000	2.656
39 Benzo(g,h,i)perylene	276	21.696	21.696	(1.202)	54924	2.50000	2.623

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823022302.D
Lab Smp Id: SLB0310-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230223.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 22-FEB-2023
Calibration Time: 11:14
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	37022	-17.18
10 Acenaphthene-d10	26411	13206	52822	22454	-14.98
15 Phenanthrene-d10	49210	24605	98420	43277	-12.06
25 Chrysene-d12	42994	21497	85988	38907	-9.51
33 Perylene-d12	40520	20260	81040	39582	-2.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.87	4.37	5.37	4.87	0.00
10 Acenaphthene-d10	7.16	6.66	7.66	7.16	0.00
15 Phenanthrene-d10	9.20	8.70	9.70	9.20	0.00
25 Chrysene-d12	14.15	13.65	14.65	14.15	0.00
33 Perylene-d12	18.06	17.56	18.56	18.06	0.00

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

REVIEW SUMMARY FOR FILE - N823022302.D

Lab ID: SLB0310-ICV1
nt8.i, 20230223.b\FSIMPNA230119.m,   23-FEB-2023 11:46

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

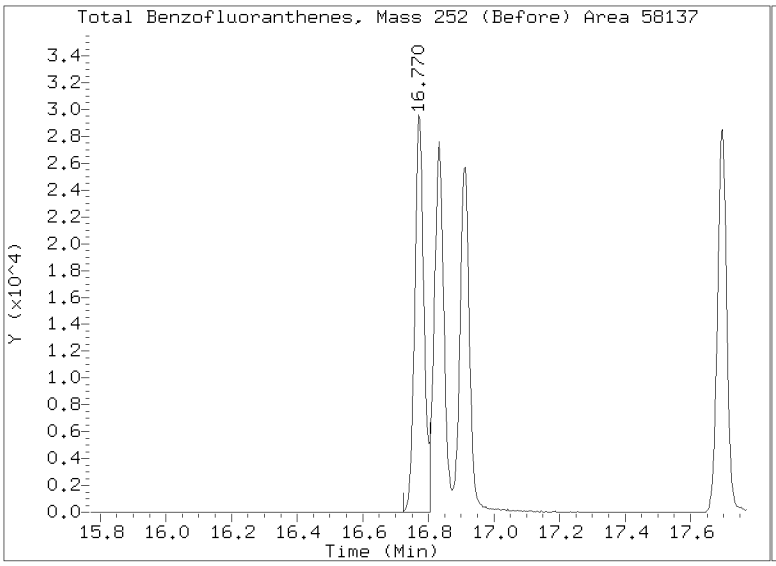
No RRT check performed

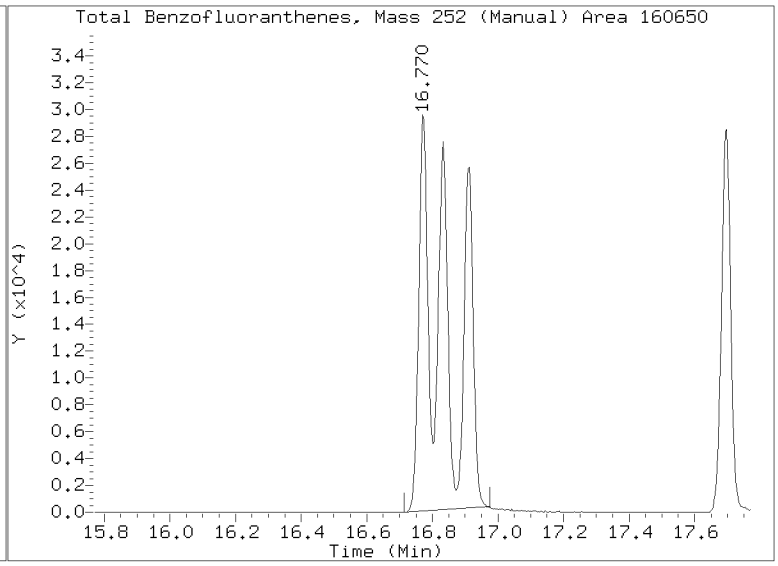
On Column LOD for nt8.i, 20230223.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230223.b/N823022302.D
Injection Date: 23-FEB-2023 11:46
Lab ID:SLB0310-ICV1 Client ID:
Report Date: 02/26/2023 11:31





Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230223.b

Instrument: nt8.i Date: 23-FEB-2023 Method: 20230223.b\FSIMPNA230119.m

INITIAL CAL: 19-JAN-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: N823022302.D 23-FEB-2023 11:46

Compound	%D
NO Q-FLAGS	

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00049
Lab File ID:	NT1003172303S.D	Calibration Date:	03/15/2023
Sequence:	SLC0475	Injection Date:	03/17/23
Lab Sample ID:	SLC0475-ICV1	Injection Time:	19:40
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
1,4-Dichlorobenzene	A	1.0000	1.0	1.5031980	1.5060070		0.2	+/-20	
1,2-Dichlorobenzene	A	1.0000	1.0	1.4783140	1.4956830		1.2	+/-20	
Benzyl Alcohol	A	1.0000	1.1	0.9647610	1.0722730		11.1	+/-20	
Benzoic acid	A	4.0000	2.6	0.1358970	0.1257048		-34.2	+/-20	*
2,4-Dimethylphenol	A	2.0000	2.1	0.3457498	0.3656027		5.8	+/-20	
1,2,4-Trichlorobenzene	A	1.0000	1.0	0.3478148	0.3491859		0.4	+/-20	
N-Nitrosodiphenylamine	A	1.0000	1.1	0.5366720	0.5790516		7.9	+/-20	
Pentachlorophenol	A	2.0000	1.6	0.0934250	0.1063174		-20.6	+/-20	*
2-Fluorophenol	A	1.5000	1.66	1.2129820	1.3392670		10.4	+/-20	
p-Terphenyl-d14	A	1.0000	1.03	0.6517430	0.6727123		3.2	+/-20	
1,4-Dichlorobenzene-d4	A	4.0000	4.0	46867.7500	1.0000		0.0		
Naphthalene-d8	A	4.0000	4.0	167312.2000	1.0000		0.0		
Acenaphthene-d10	A	4.0000	4.0	81972.4400	1.0000		0.0		
Phenanthrene-d10	A	4.0000	4.0	150166.2000	1.0000		0.0		
Chrysene-d12	A	4.0000	4.0	110890.6000	1.0000		0.0		
Perylene-d12	A	4.0000	4.0	124876.5000	1.0000		0.0		

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723035.D

Date : 17-MAR-2023 19:40

Client ID:

Instrument: nt10.i

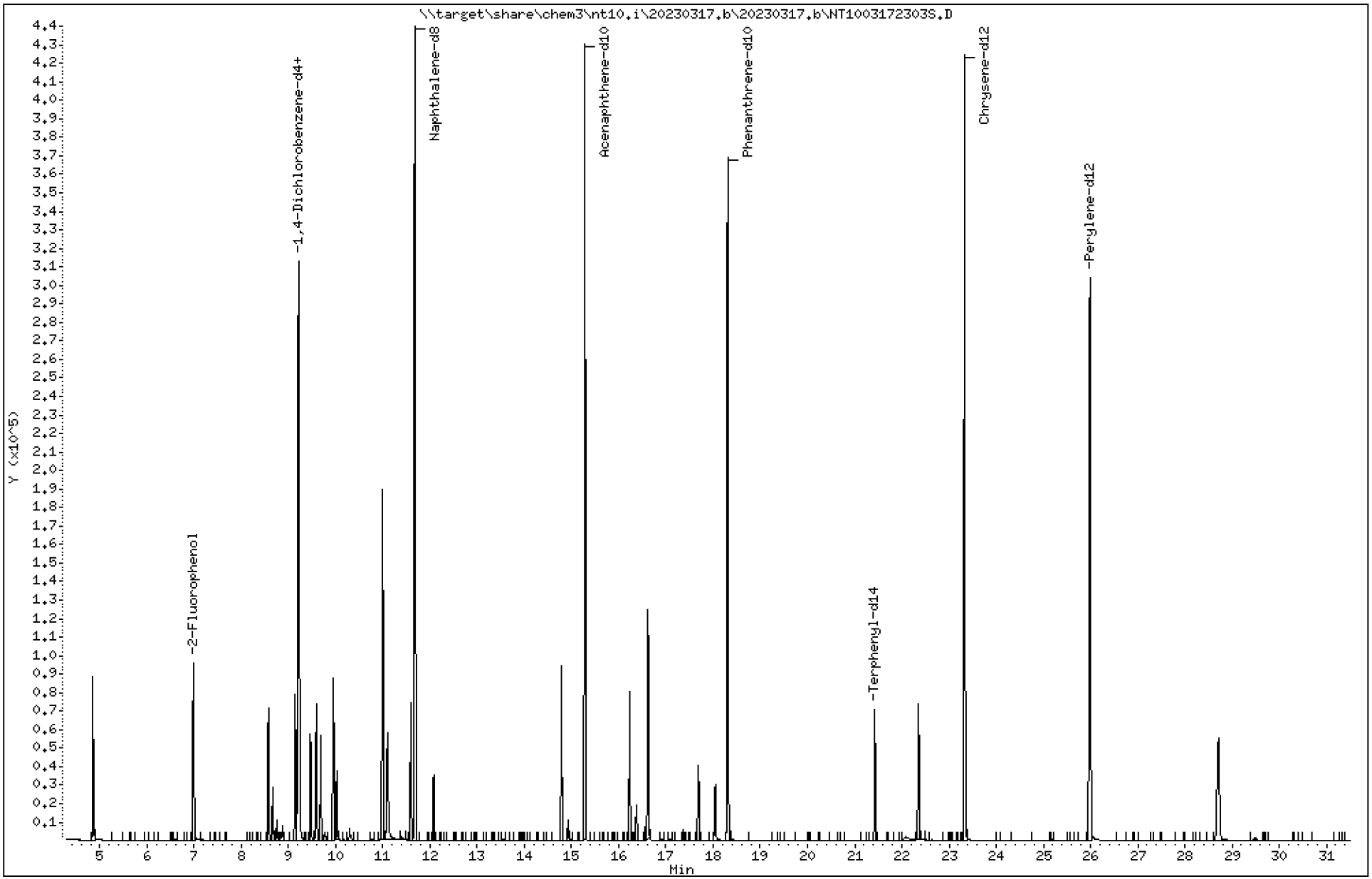
Sample Info: SLC0475-ICV1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172303S.D
Lab Smp Id: SLC0475-ICV1
Inj Date : 17-MAR-2023 19:40 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0475-ICV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Meth Date : 30-Mar-2023 14:37 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.980	6.980	(0.758)	92429	1.50000	1.656
	3 Phenol	94	8.572	8.572	(0.931)	82050	1.00000	1.072
	7 1,3-Dichlorobenzene	146	9.136	9.136	(0.992)	72421	1.00000	1.011
*	8 1,4-Dichlorobenzene-d4	152	9.206	9.206	(1.000)	184039	4.00000	
	9 1,4-Dichlorobenzene	146	9.229	9.229	(1.003)	69291	1.00000	1.002
	11 Benzyl alcohol	79	9.462	9.462	(1.028)	49335	1.00000	1.111
	12 1,2-Dichlorobenzene	146	9.586	9.586	(1.041)	68816	1.00000	1.012
	13 2-Methylphenol	108	9.679	9.679	(1.051)	55948	1.00000	1.055
	15 4-Methylphenol	108	9.951	9.951	(1.081)	59960	1.00000	1.088
	16 N-Nitroso-di-n-propylamine	70	10.021	10.021	(1.089)	41400	1.00000	1.062
	22 2,4-Dimethylphenol	107	10.985	10.985	(0.941)	120637	2.00000	2.115
	24 Benzoic acid	105	11.096	11.096	(0.950)	82957	4.00000	2.633
	26 1,2,4-Trichlorobenzene	180	11.589	11.589	(0.993)	57610	1.00000	1.004
*	27 Naphthalene-d8	136	11.674	11.674	(1.000)	659935	4.00000	
	30 Hexachlorobutadiene	225	12.075	12.075	(1.034)	34761	1.00000	0.9964
	39 Dimethylphthalate	163	14.784	14.784	(0.968)	111019	1.00000	1.080
*	42 Acenaphthene-d10	162	15.279	15.279	(1.000)	325775	4.00000	
	50 Diethylphthalate	149	16.230	16.230	(1.062)	118103	1.00000	1.109
	54 N-Nitrosodiphenylamine	169	16.616	16.616	(0.908)	89210	1.00000	1.079
	57 Hexachlorobenzene	284	17.689	17.689	(0.966)	34782	1.00000	0.9397

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	58 Pentachlorophenol	266	18.045	18.045	(0.986)	32759	2.00000	1.589
*	59 Phenanthrene-d10	188	18.308	18.308	(1.000)	616249	4.00000	
$	66 Terphenyl-d14	244	21.434	21.434	(0.919)	88499	1.00000	1.032
	67 Butylbenzylphthalate	149	22.355	22.355	(0.958)	86790	1.00000	1.238
*	69 Chrysene-d12	240	23.331	23.331	(1.000)	526222	4.00000	
*	77 Perylene-d12	264	25.986	25.986	(1.000)	563117	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.708	28.708	(1.105)	163056	1.00000	0.8865
	90 N-Nitrosodimethylamine	74	4.848	4.848	(0.527)	77353	2.00000	2.185

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172303S.D
Lab Smp Id: SLC0475-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 15:44
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	184039	92020	368078	184039	0.00
27 Naphthalene-d8	659935	329968	1319870	659935	0.00
42 Acenaphthene-d10	325775	162888	651550	325775	0.00
59 Phenanthrene-d10	616249	308125	1232498	616249	0.00
69 Chrysene-d12	526222	263111	1052444	526222	0.00
77 Perylene-d12	563117	281559	1126234	563117	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.21	8.71	9.71	9.21	0.00
27 Naphthalene-d8	11.67	11.17	12.17	11.67	0.00
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	0.00
59 Phenanthrene-d10	18.31	17.81	18.81	18.31	0.00
69 Chrysene-d12	23.33	22.83	23.83	23.33	0.00
77 Perylene-d12	25.99	25.49	26.49	25.99	0.00

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

REVIEW SUMMARY FOR FILE - NT1003172303S.D

Lab ID: SLC0475-ICV1
nt10.i, 20230317.b\20230317.b\SIMABN2.m,   17-MAR-2023 19:40

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt10.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230317.b\20230317.b

Instrument: nt10.i Date: 17-MAR-2023 Method: 20230317.b\SIMABN2.m

INITIAL CAL: 15-MAR-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1003172303S.D 17-MAR-2023 19:40

Compound	%D
Benzoic acid	-34.2
Pentachlorophenol	-20.6
Butylbenzylphthalate	23.8

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT8	Calibration:	GA00050
Lab File ID:	N823011909.D	Calibration Date:	01/19/2023
Sequence:	SLA0213	Injection Date:	01/19/23
Lab Sample ID:	SLA0213-SCV1	Injection Time:	14:58
Sequence Name:	8270 SIM PNA SCV		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Naphthalene	A	2.5000	2.63	0.9299181	0.9767747		5.0	
2-Methylnaphthalene	A	2.5000	2.67	0.5115033	0.5463255		6.8	
1-Methylnaphthalene	A	2.5000	2.65	0.5191318	0.5501748		6.0	
Acenaphthylene	A	2.5000	2.82	1.5102600	1.7039370		12.8	
Acenaphthene	A	2.5000	2.60	1.0119150	1.0524810		4.0	
Dibenzofuran	A	2.5000	2.86	1.5369690	1.7582160		14.4	
Fluorene	A	2.5000	2.63	1.1937240	1.2561120		5.2	
Phenanthrene	A	2.5000	2.45	0.9769567	0.9567960		-2.1	
Anthracene	A	2.5000	2.27	0.8874960	0.8058663		-9.2	
Fluoranthene	A	2.5000	2.65	1.0634260	1.1284050		6.1	
Pyrene	A	2.5000	2.46	1.2399700	1.2213300		-1.5	
Benzo(a)anthracene	A	2.5000	2.59	1.1238870	1.1631100		3.5	
Chrysene	A	2.5000	2.40	1.1964350	1.1484610		-4.0	
Benzo(b)fluoranthene	A	2.5000	2.51	1.1648110	1.1680230		0.3	
Benzo(k)fluoranthene	A	2.5000	2.66	1.1409370	1.2121600		6.2	
Benzofluoranthenes, Total	A	5.0000	5.48	1.1031370	1.2090940		9.6	
Benzo(a)pyrene	A	2.5000	2.57	1.0250270	1.0545670		2.9	
Indeno(1,2,3-cd)pyrene	A	2.5000	2.69	1.1677520	1.2561630		7.6	
Dibenzo(a,h)anthracene	A	2.5000	2.49	1.0049440	1.0021900		-0.3	
Benzo(g,h,i)perylene	A	2.5000	2.48	1.0580110	1.0506380		-0.7	

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

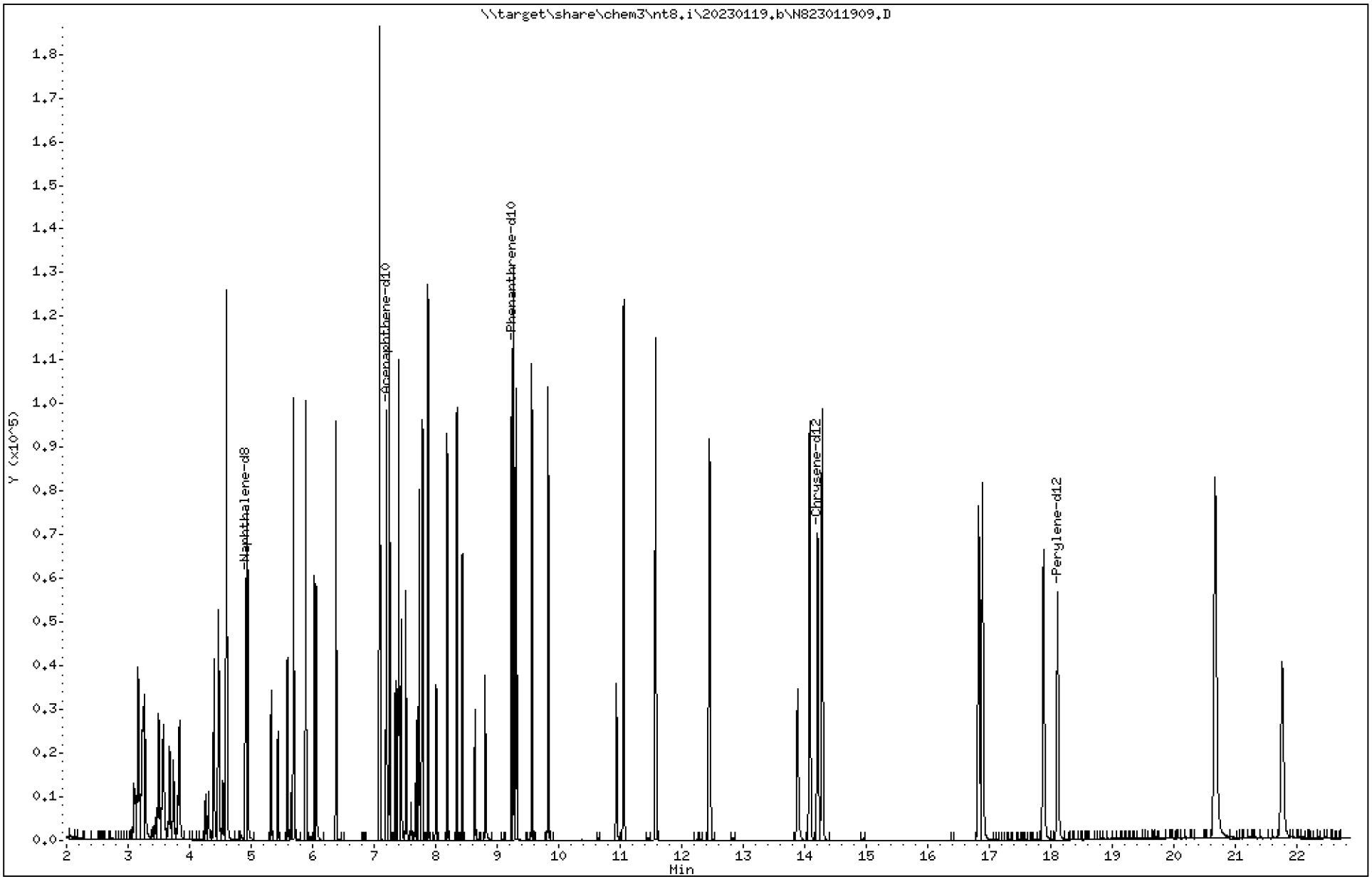
Sample Info: SCV230119

Volume Injected (uL): 1.0

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

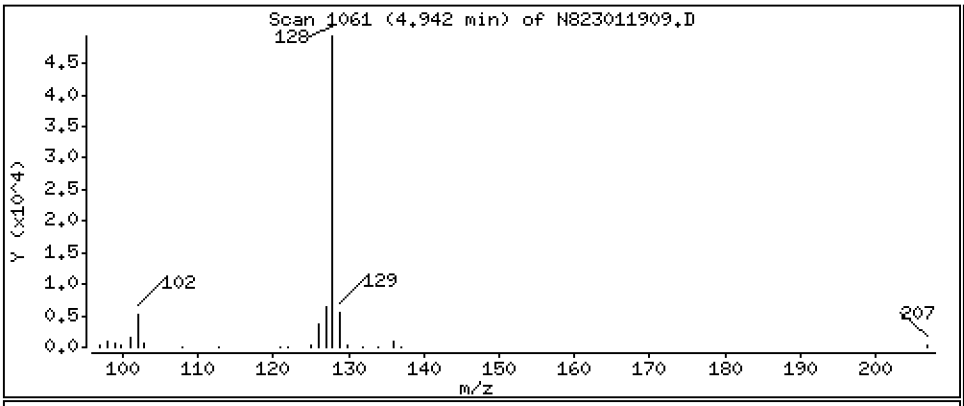
Operator: JZ

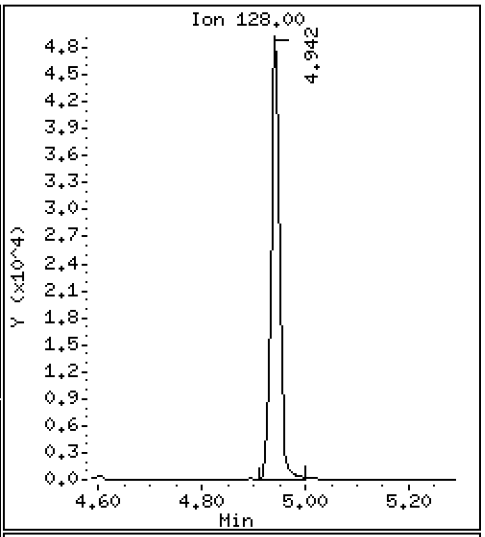
Column phase: Rxi-17sil

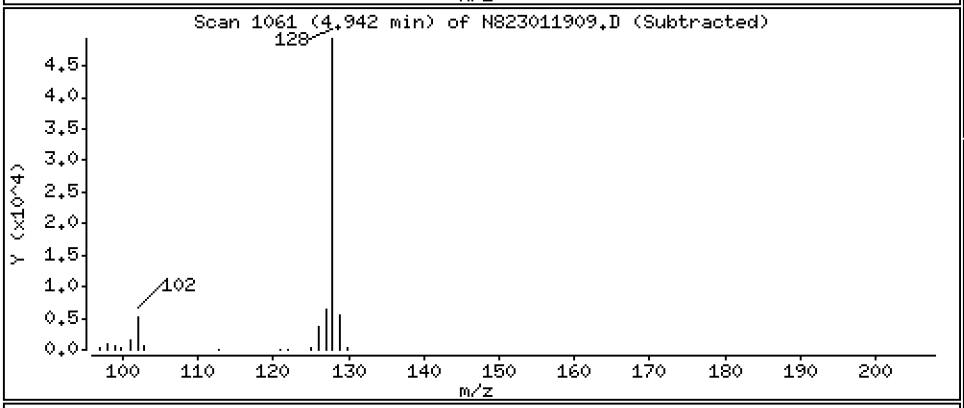
Column diameter: 0.25

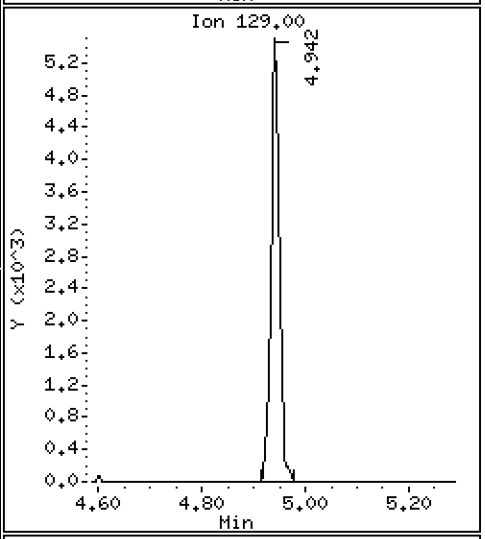
2 Naphthalene

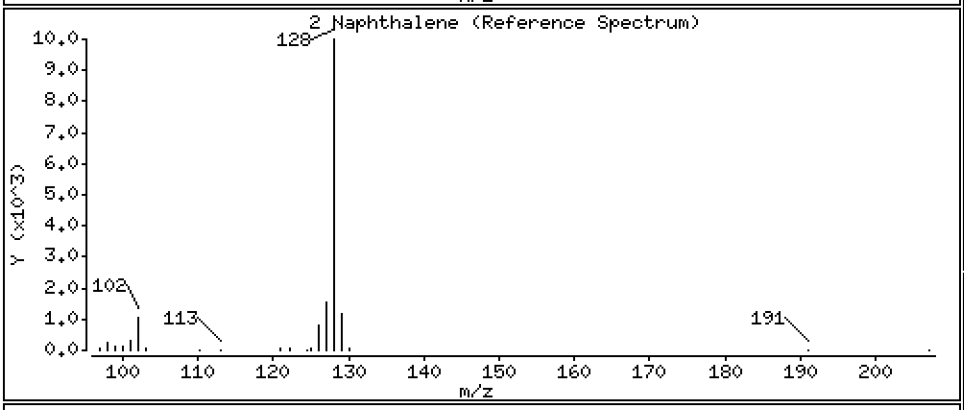
Concentration: 2.626 ug/L

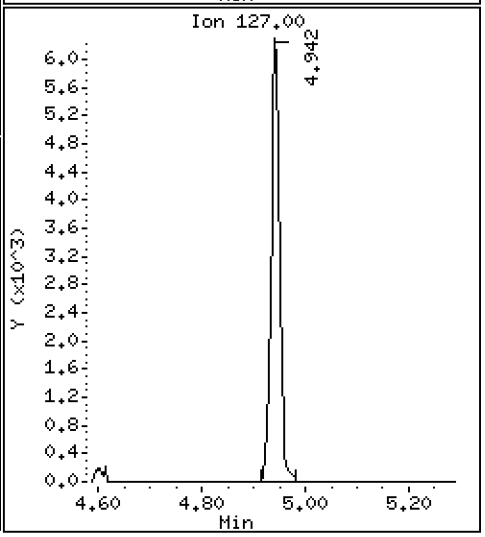


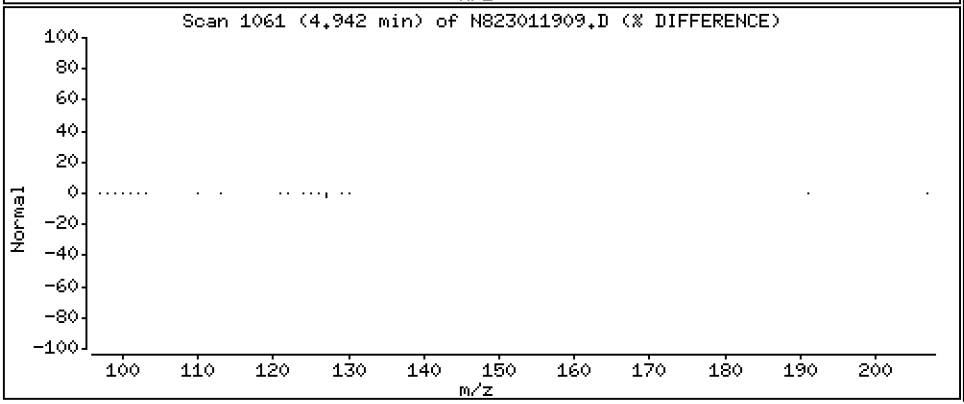












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

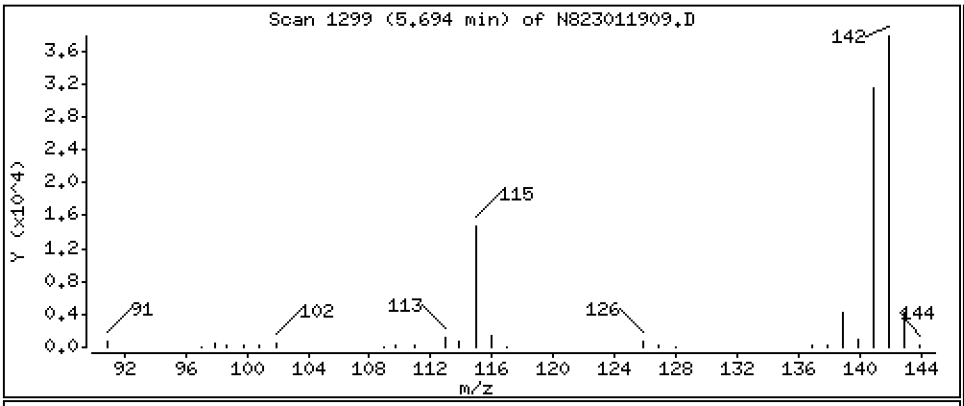
Operator: JZ

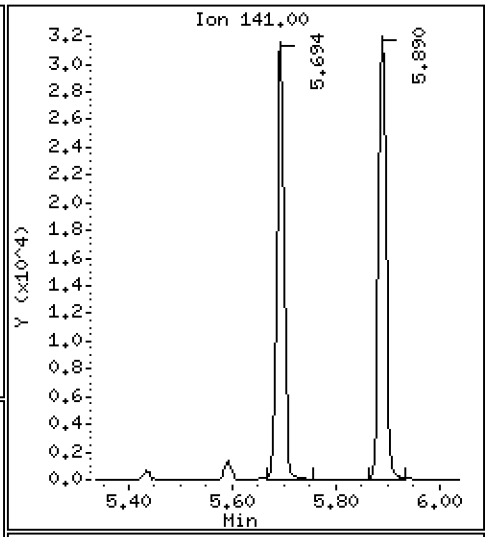
Column phase: Rxi-17sil

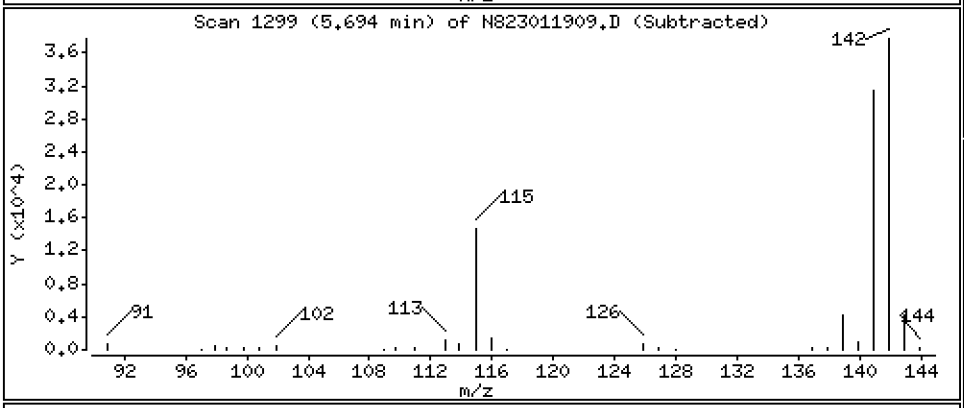
Column diameter: 0.25

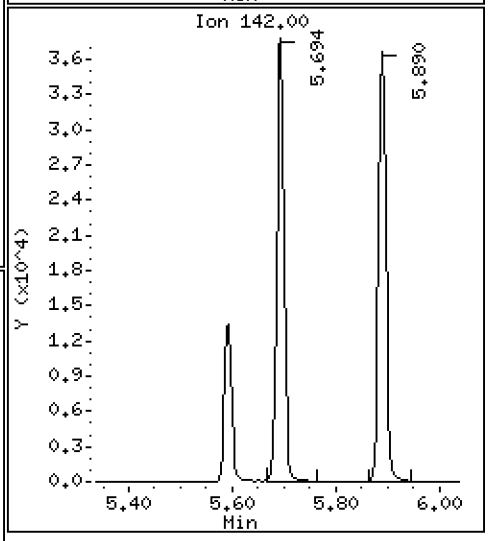
4 2-Methylnaphthalene

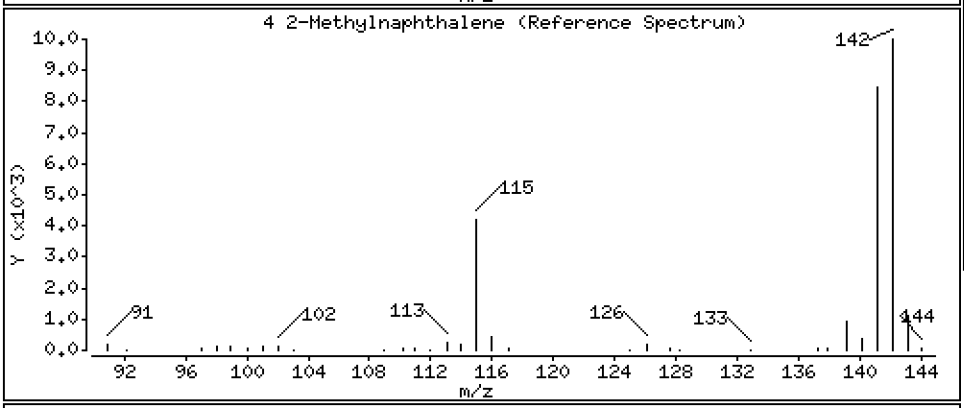
Concentration: 2.670 ug/L

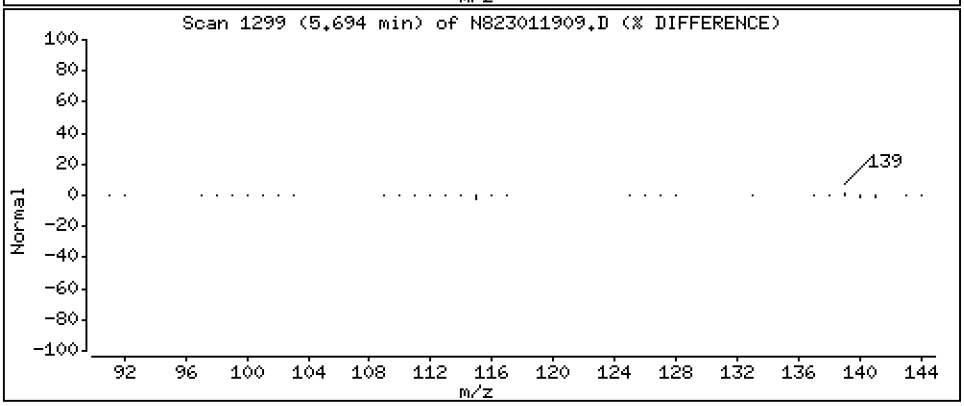












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

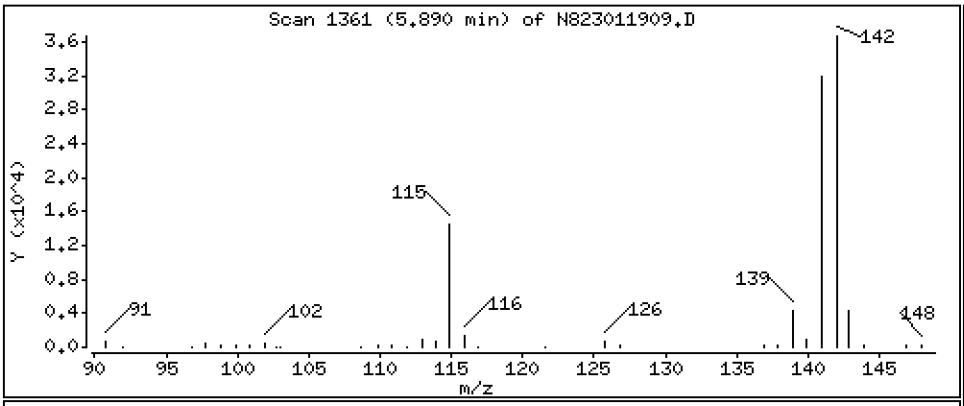
Operator: JZ

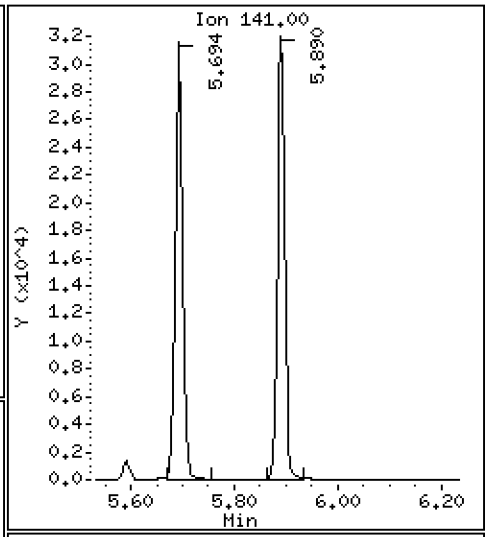
Column phase: Rxi-17sil

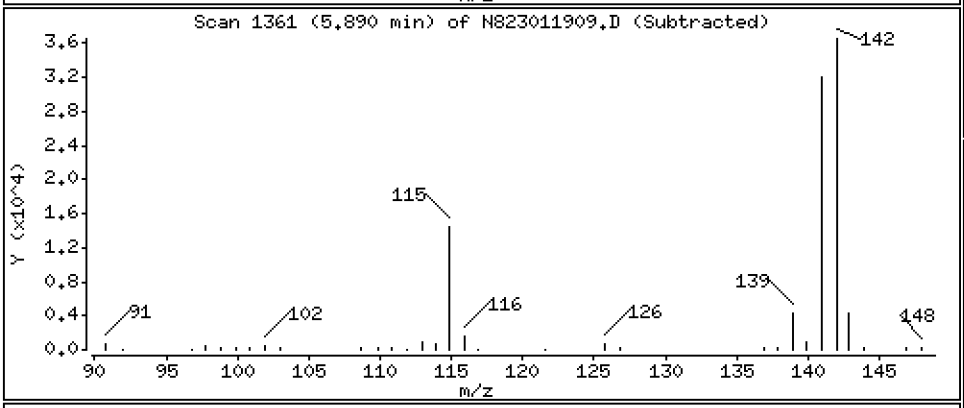
Column diameter: 0.25

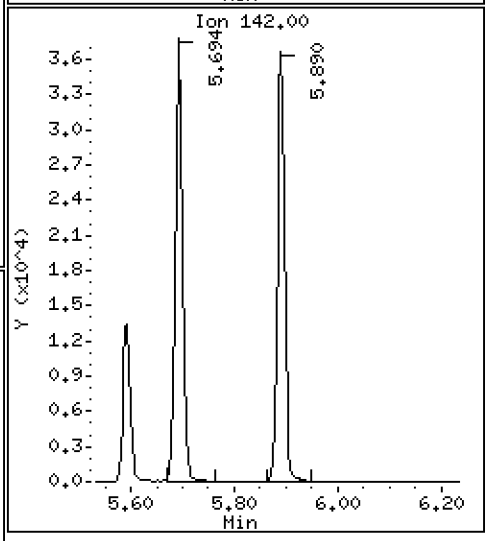
5 1-methylnaphthalene

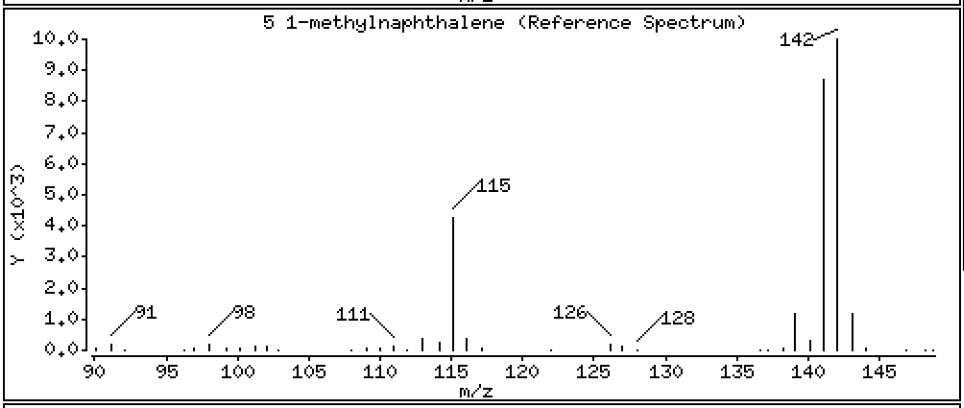
Concentration: 2.649 ug/L

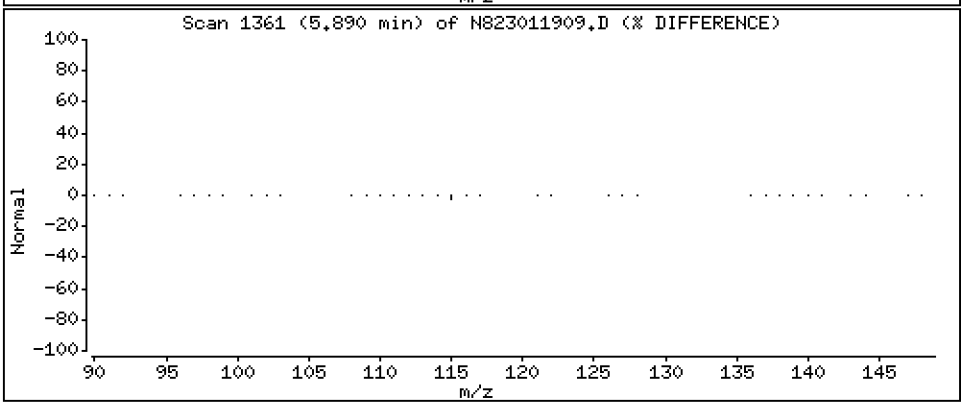












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

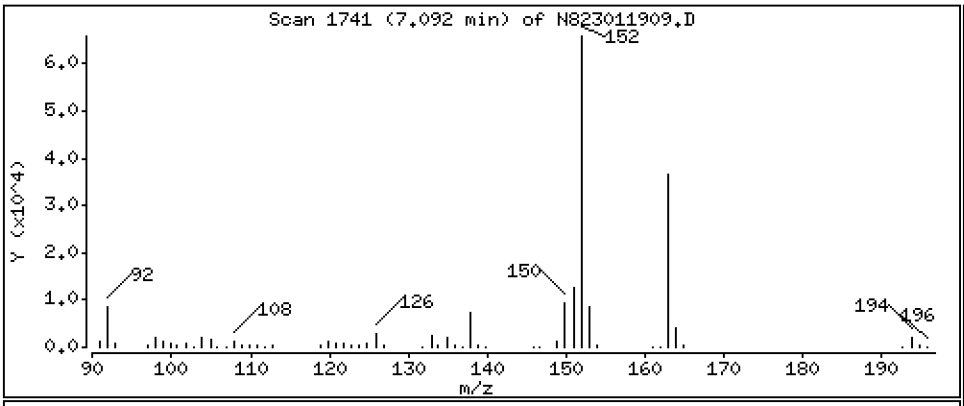
Operator: JZ

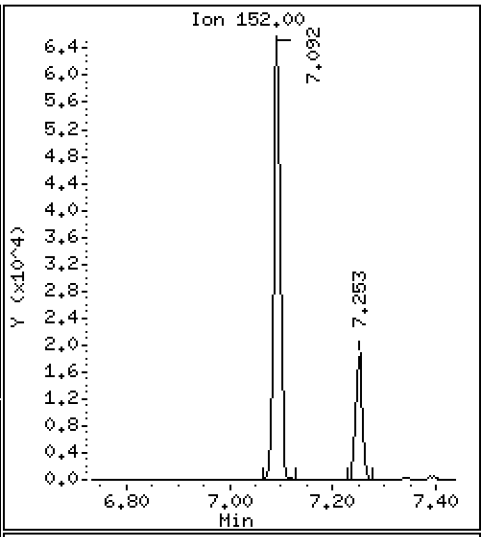
Column phase: Rxi-17sil

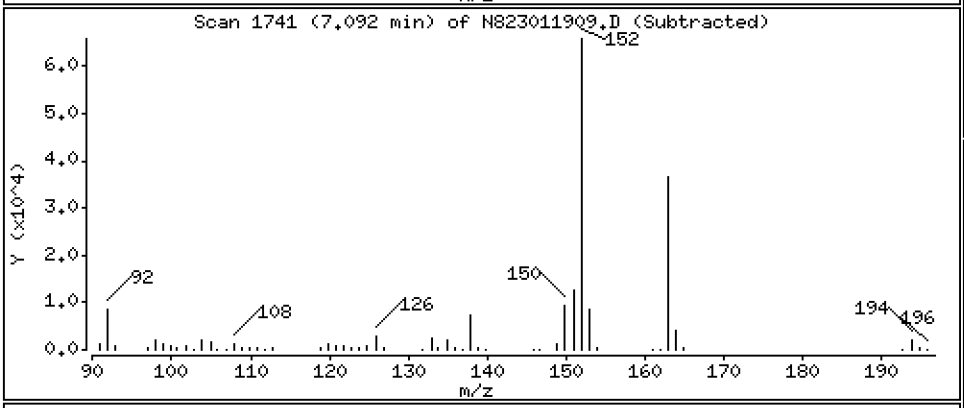
Column diameter: 0.25

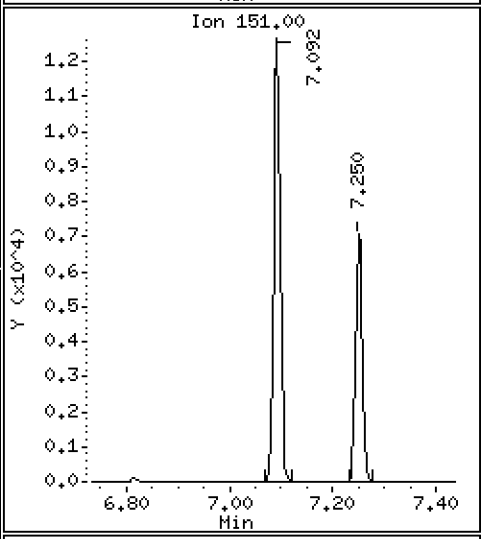
9 Acenaphthylene

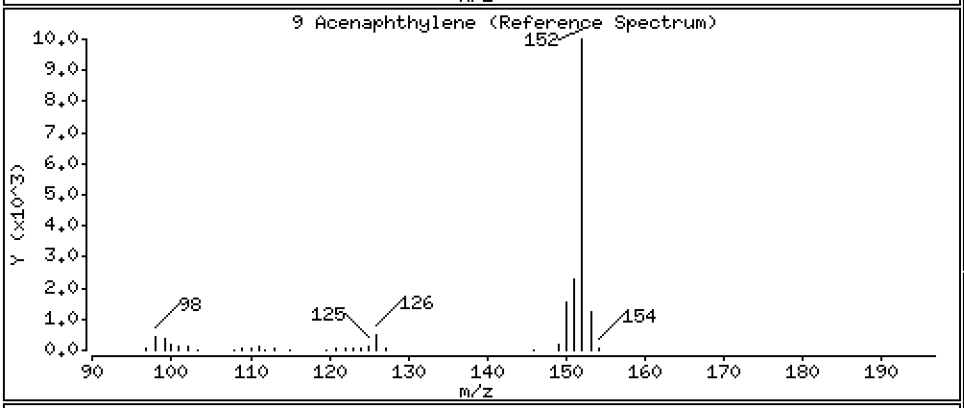
Concentration: 2.821 ug/L

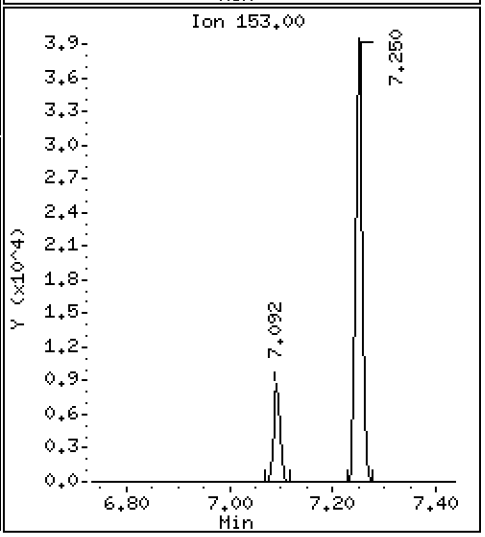


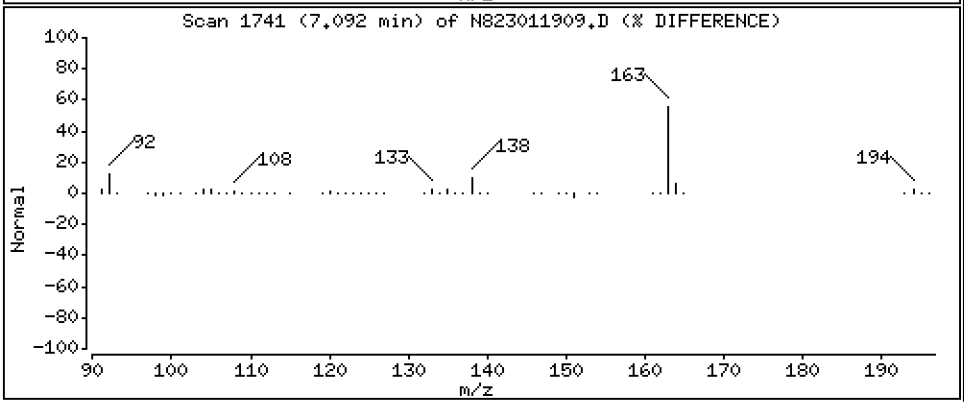












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

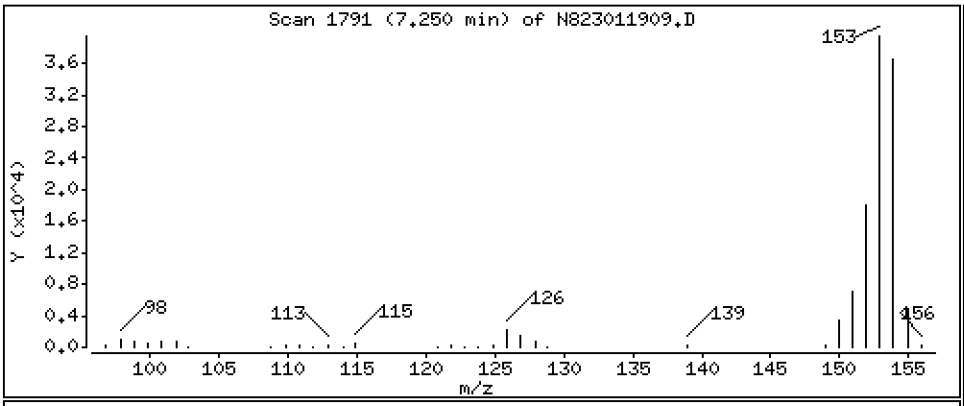
Operator: JZ

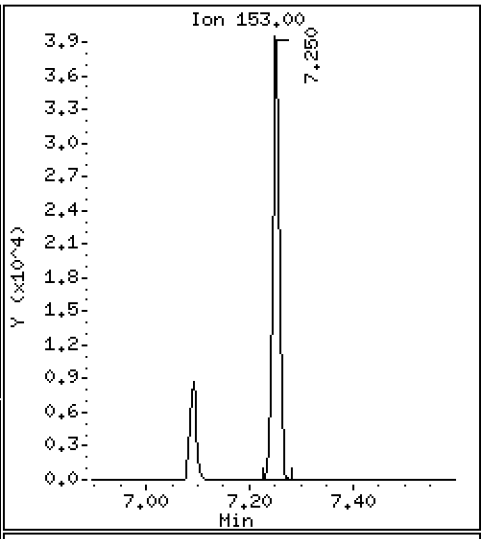
Column phase: Rxi-17sil

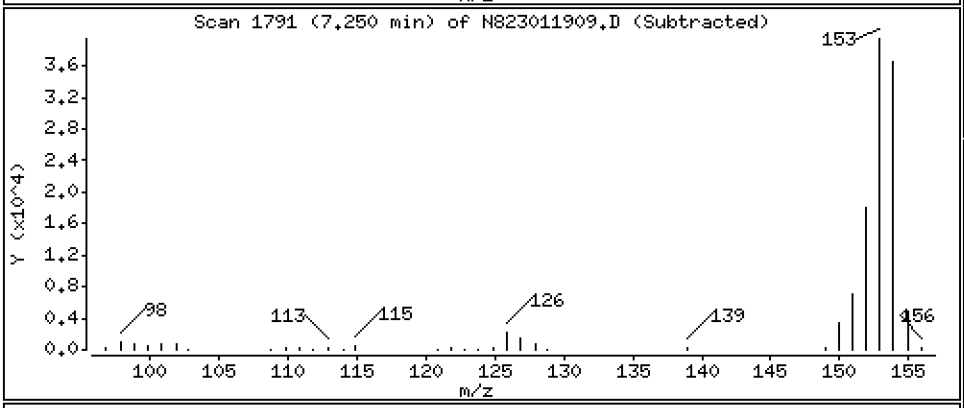
Column diameter: 0.25

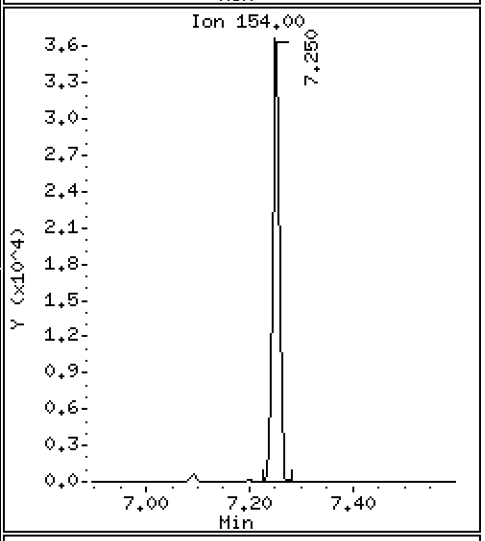
11 Acenaphthene

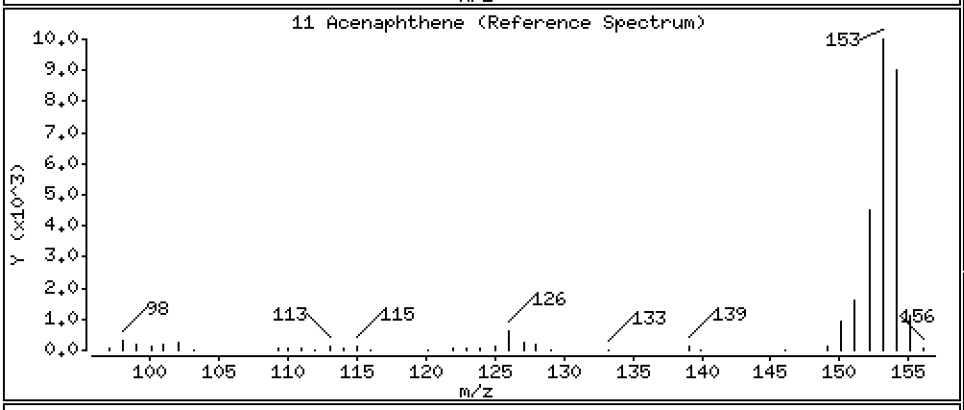
Concentration: 2.600 ug/L

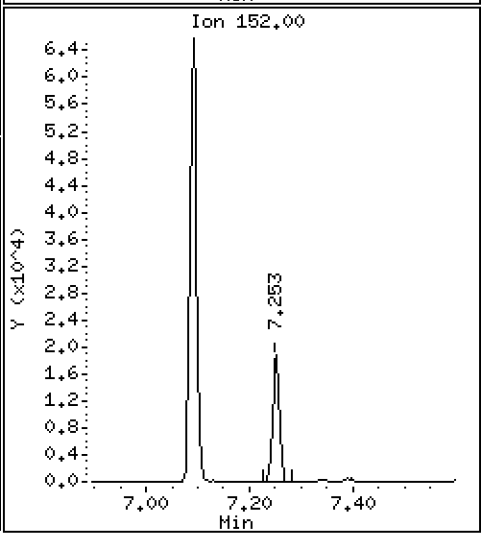


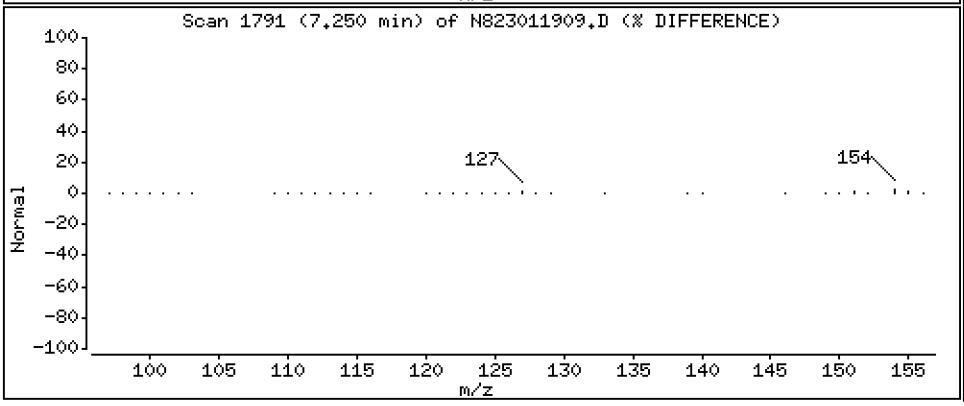












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

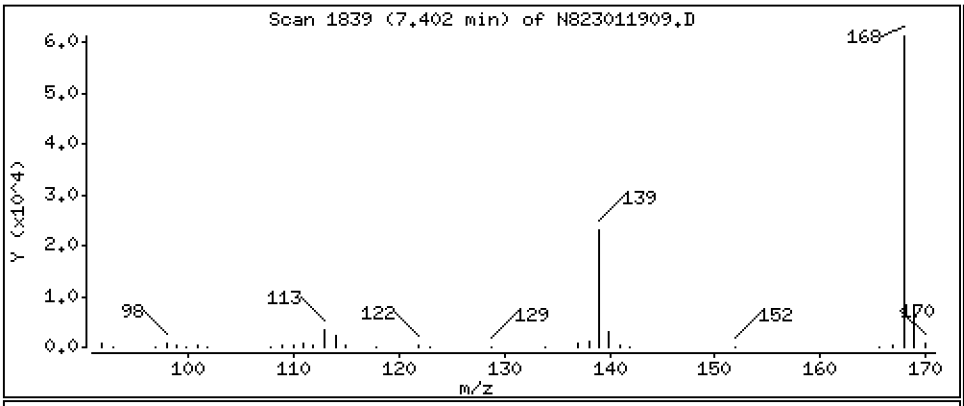
Operator: JZ

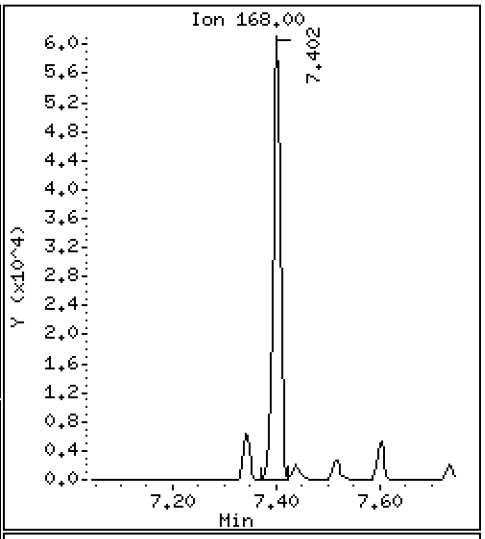
Column phase: Rxi-17sil

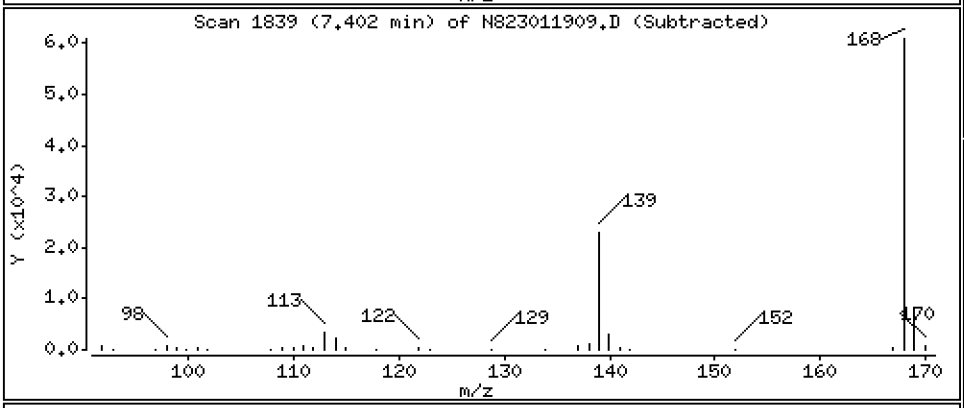
Column diameter: 0.25

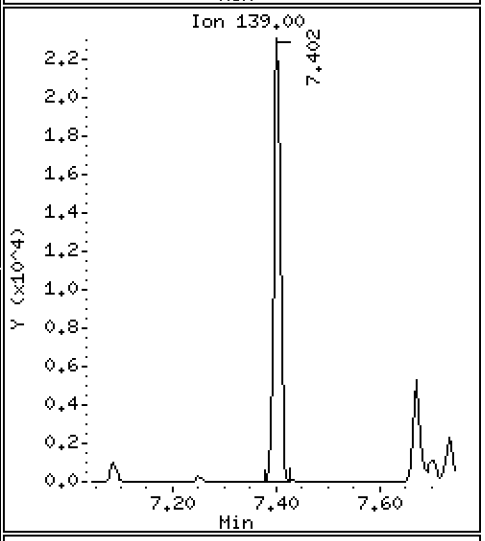
12 Dibenzofuran

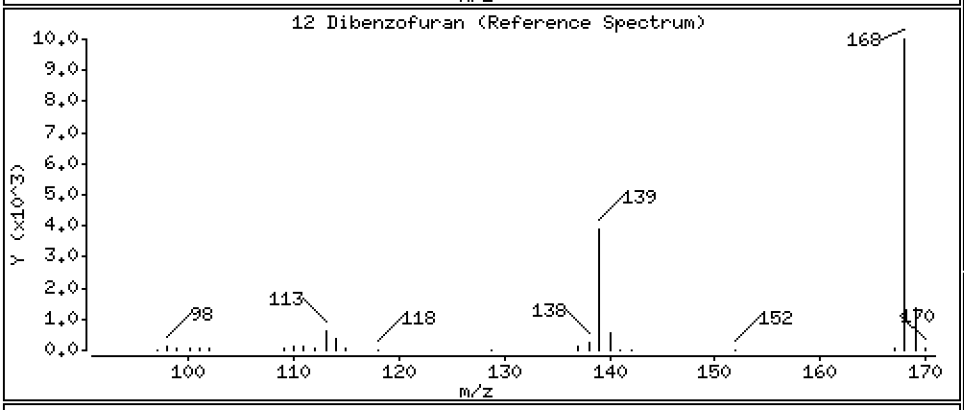
Concentration: 2.860 ug/L

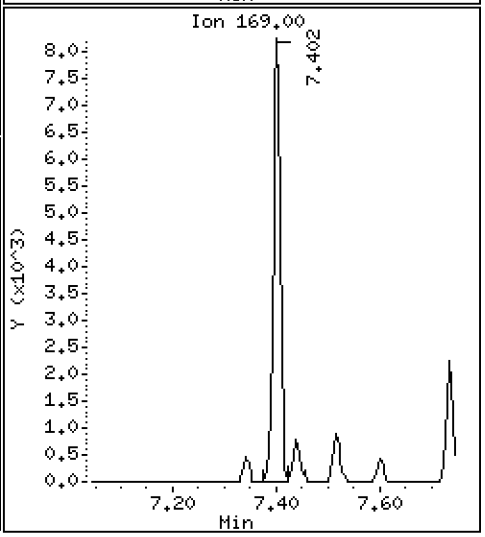


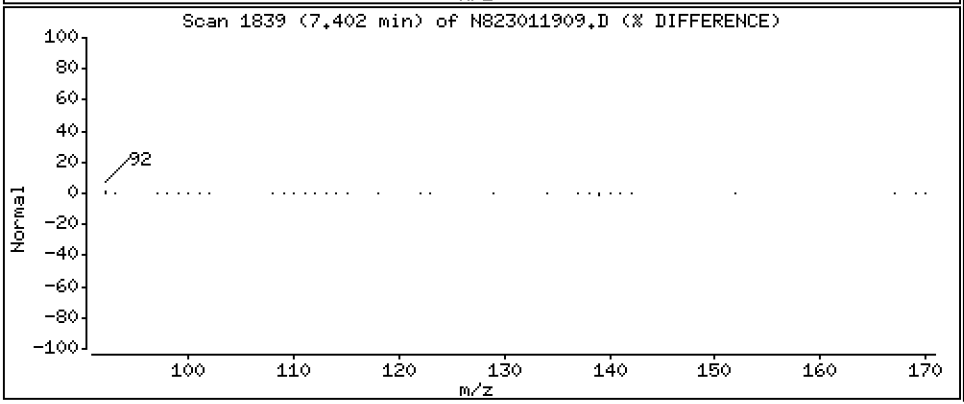












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

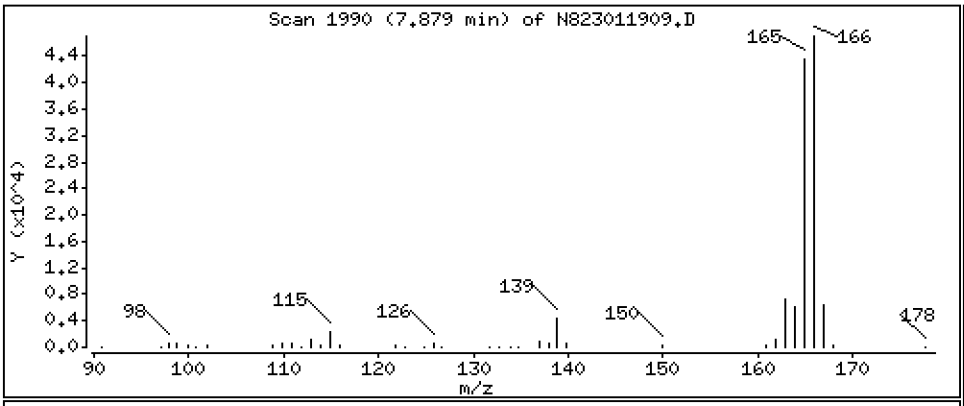
Operator: JZ

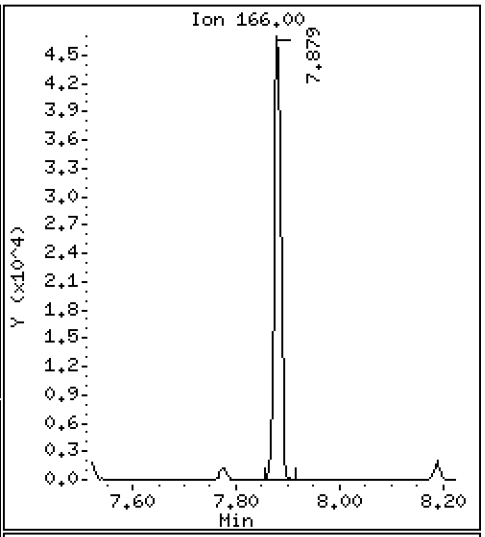
Column phase: Rxi-17sil

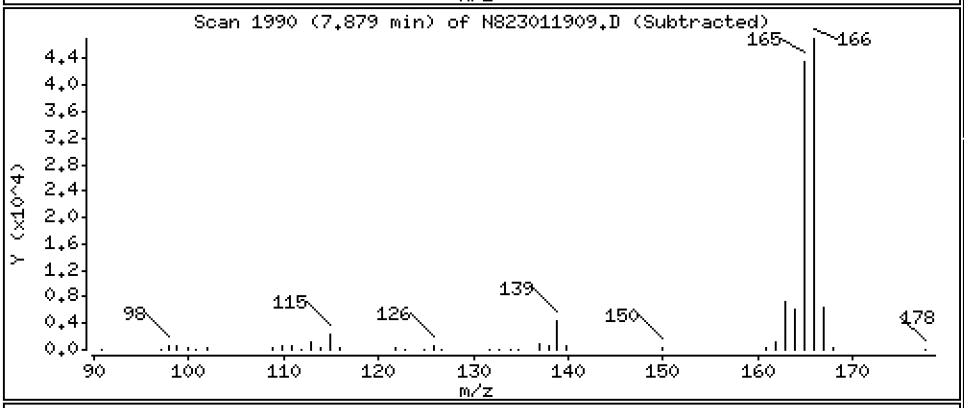
Column diameter: 0.25

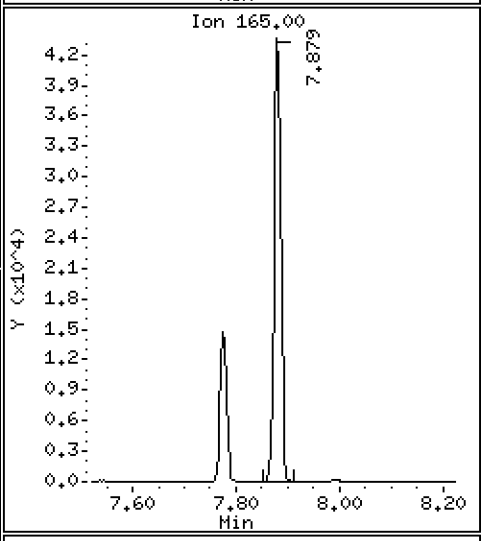
14 Fluorene

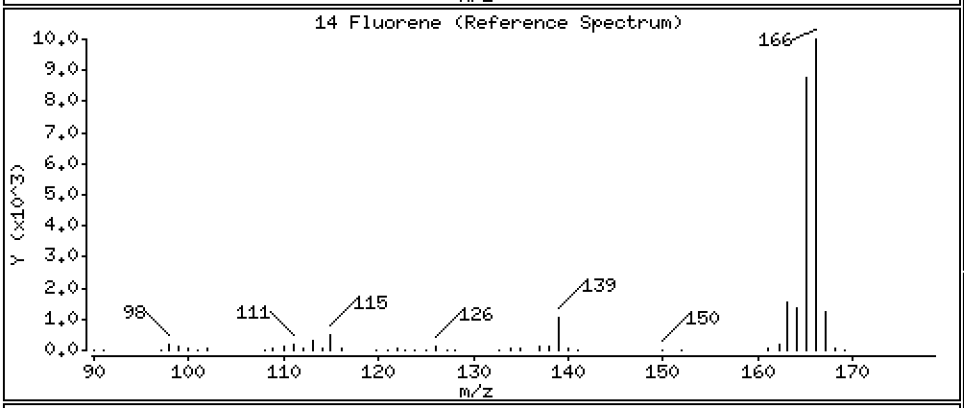
Concentration: 2.631 ug/L

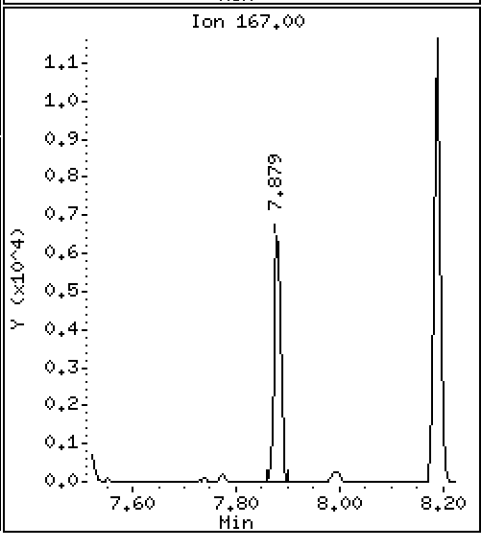


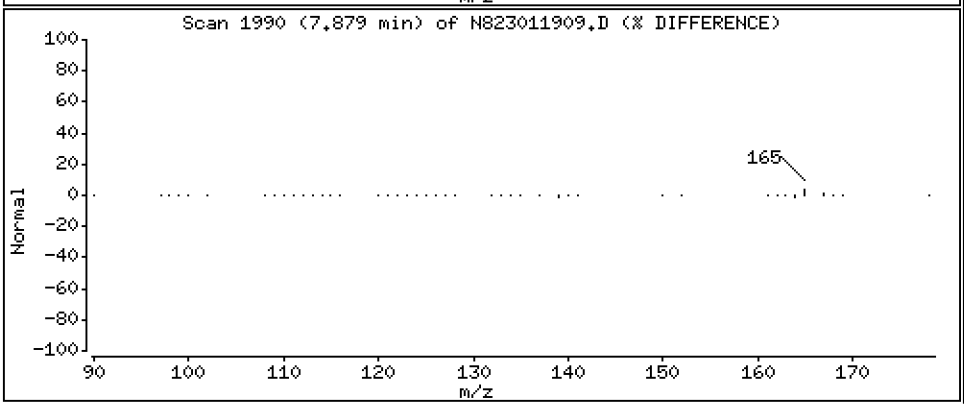












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

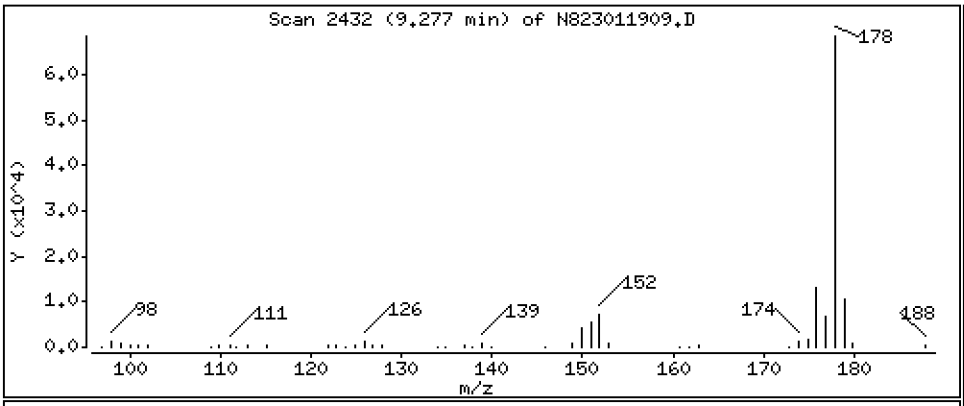
Operator: JZ

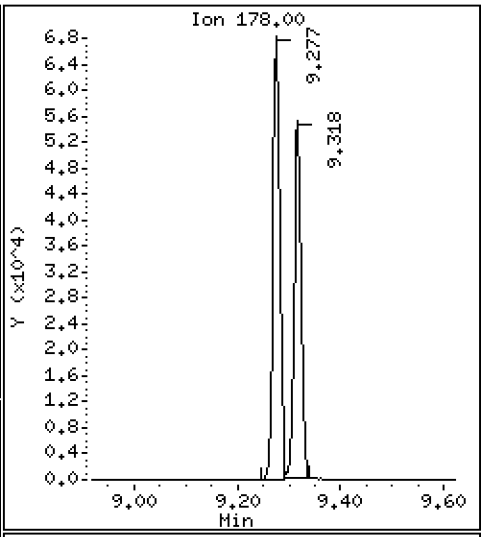
Column phase: Rxi-17sil

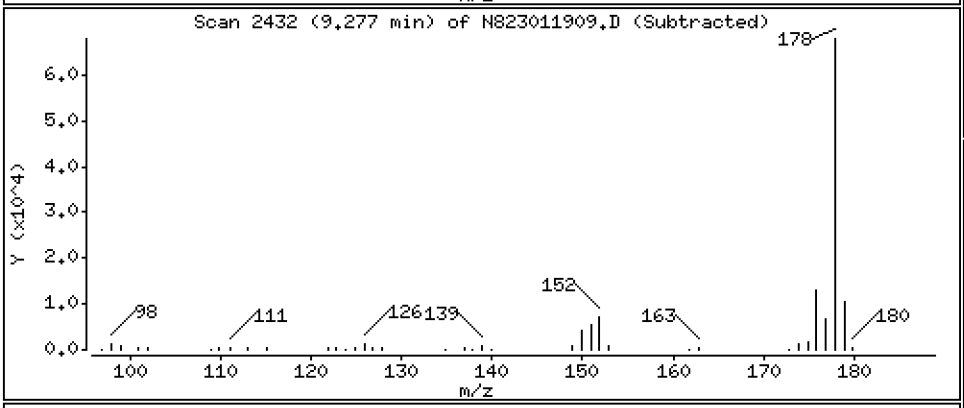
Column diameter: 0.25

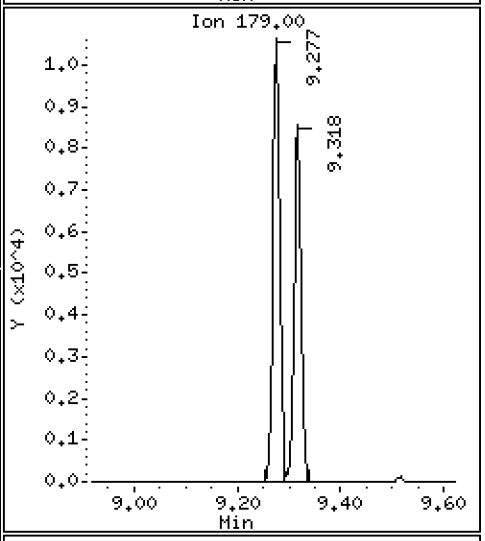
16 Phenanthrene

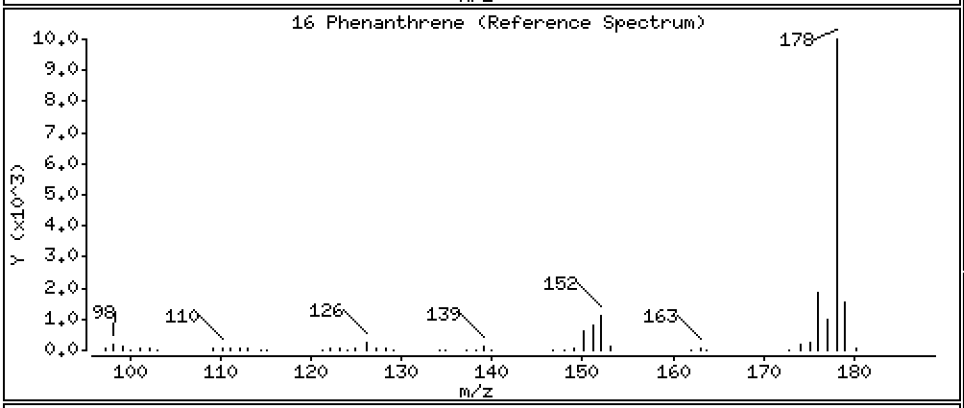
Concentration: 2.448 ug/L

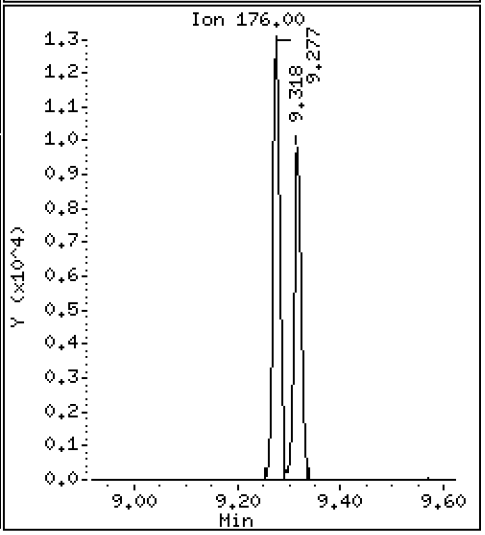


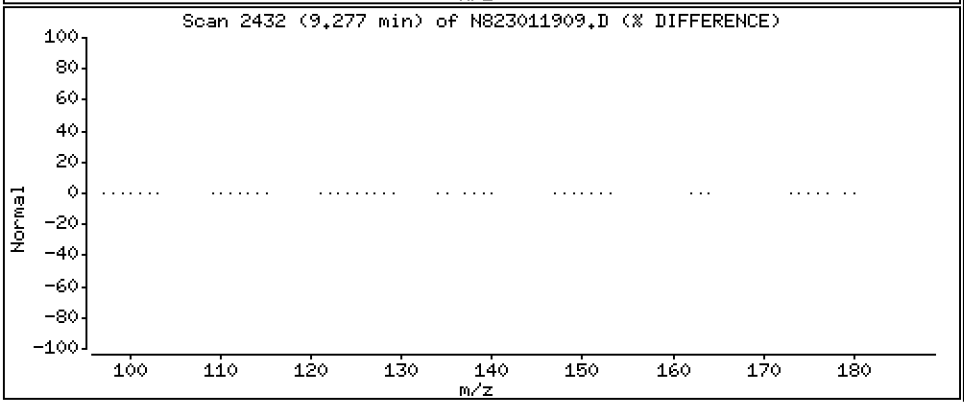












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

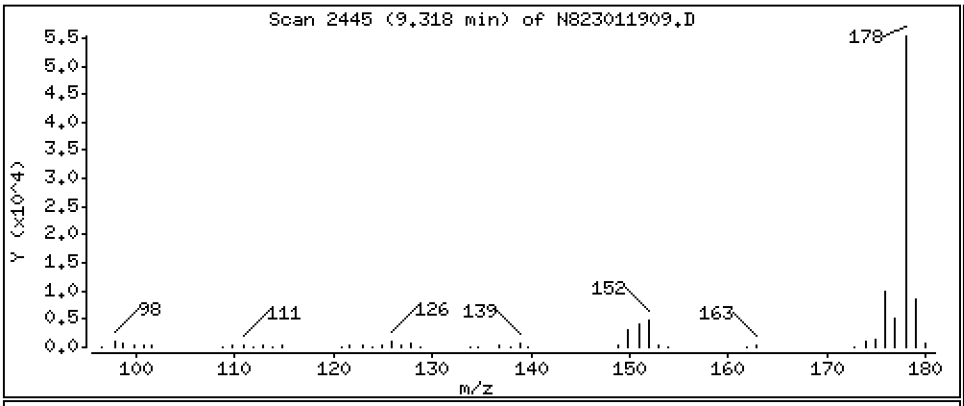
Operator: JZ

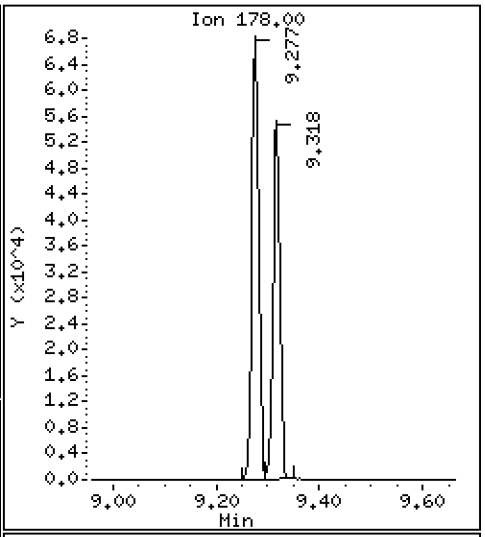
Column phase: Rxi-17sil

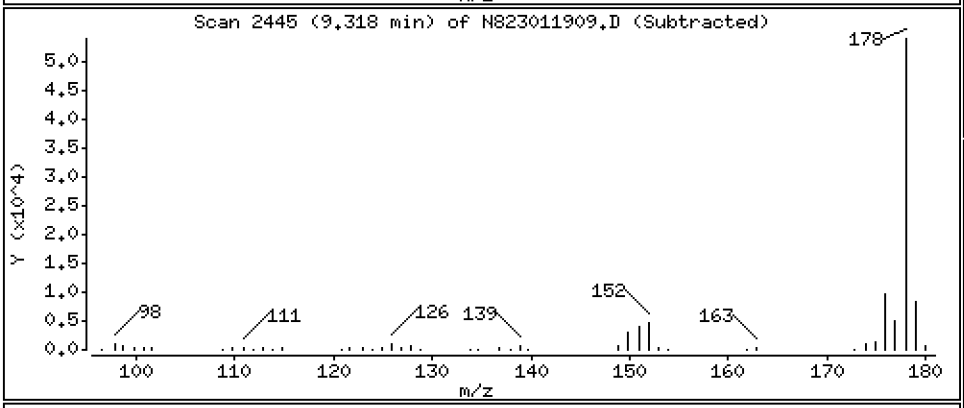
Column diameter: 0.25

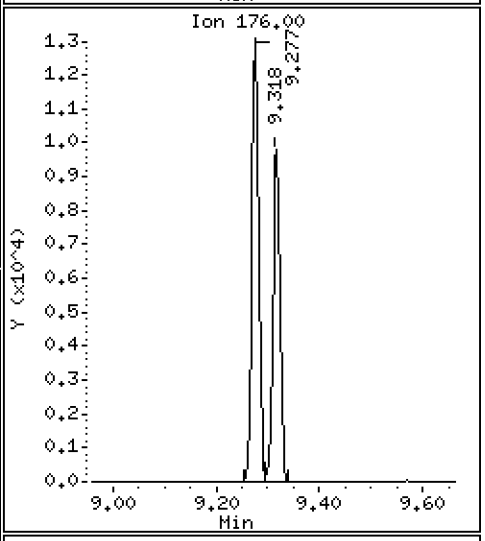
17 Anthracene

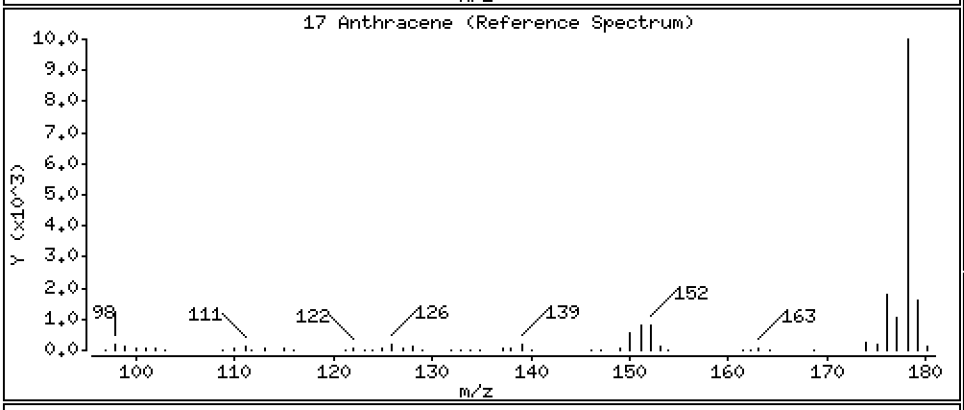
Concentration: 2.270 ug/L

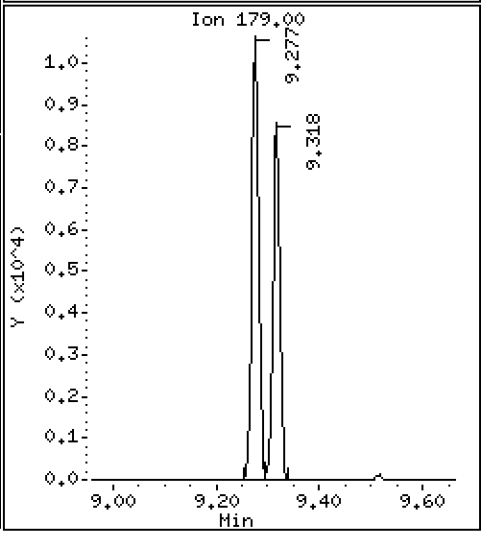


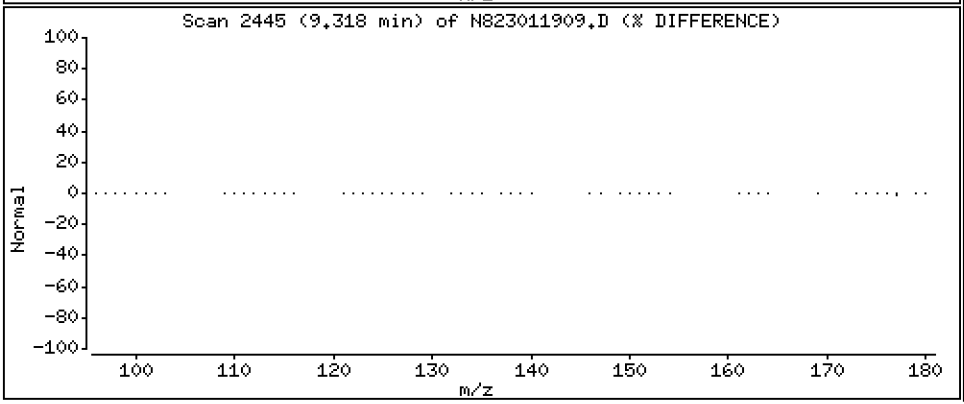












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

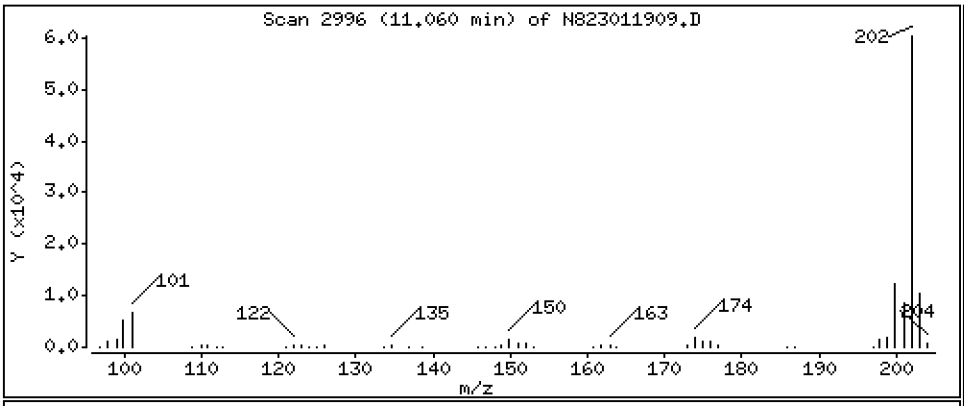
Operator: JZ

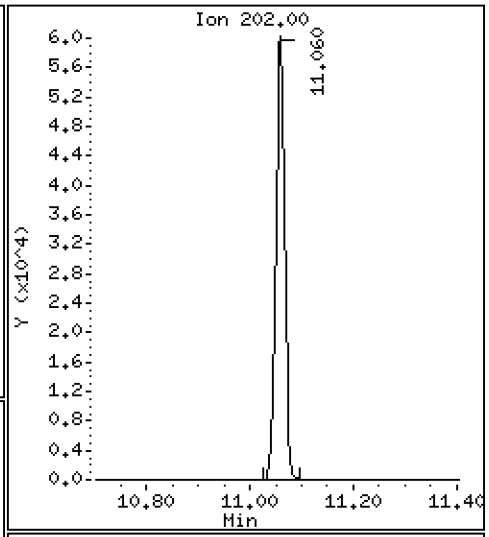
Column phase: Rxi-17sil

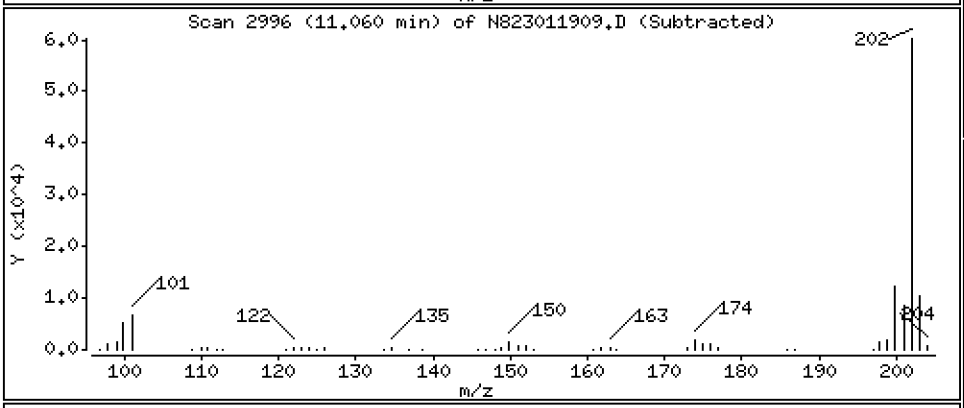
Column diameter: 0.25

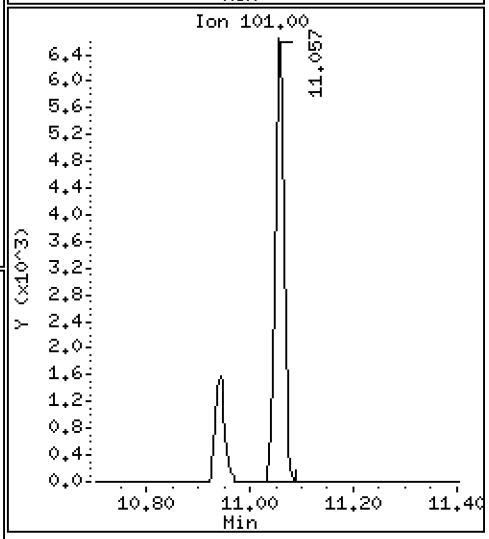
22 Fluoranthene

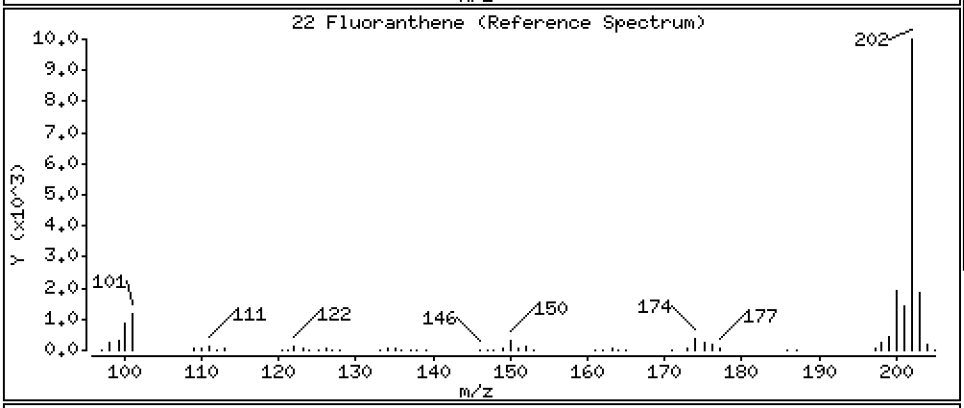
Concentration: 2.653 ug/L

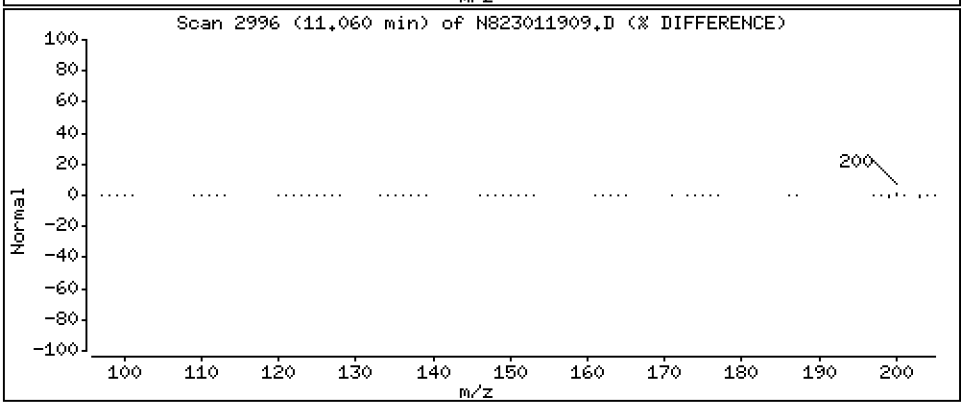












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

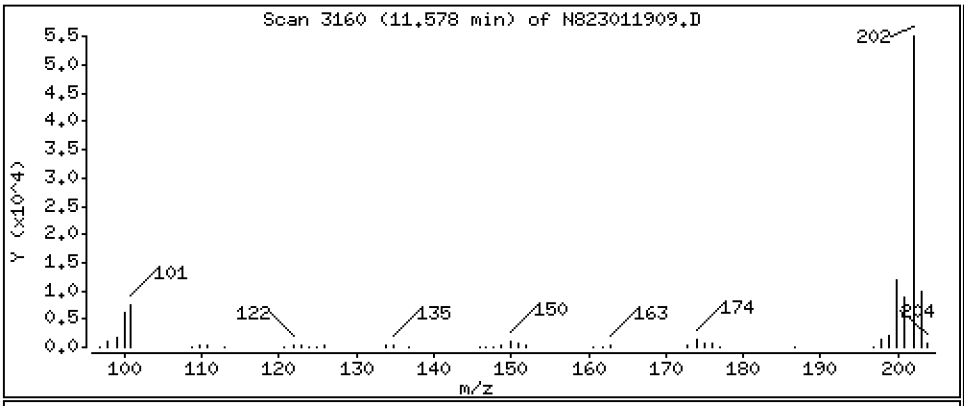
Operator: JZ

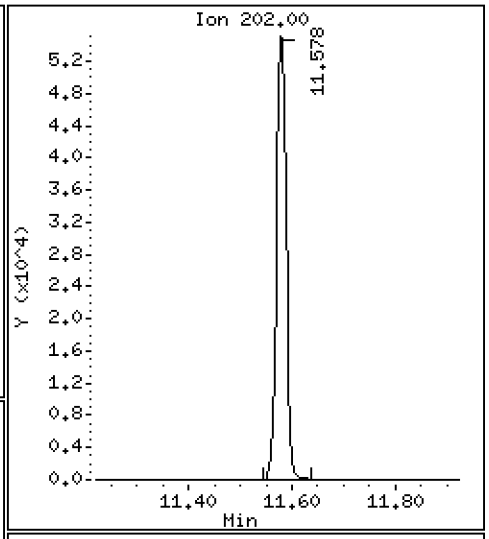
Column phase: Rxi-17sil

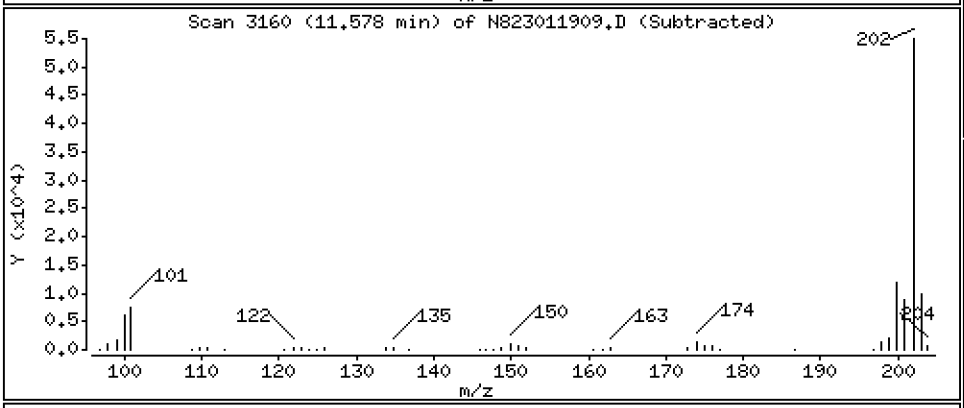
Column diameter: 0.25

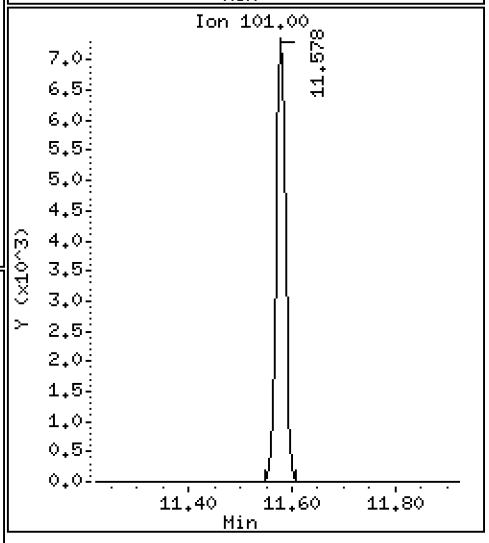
23 Pyrene

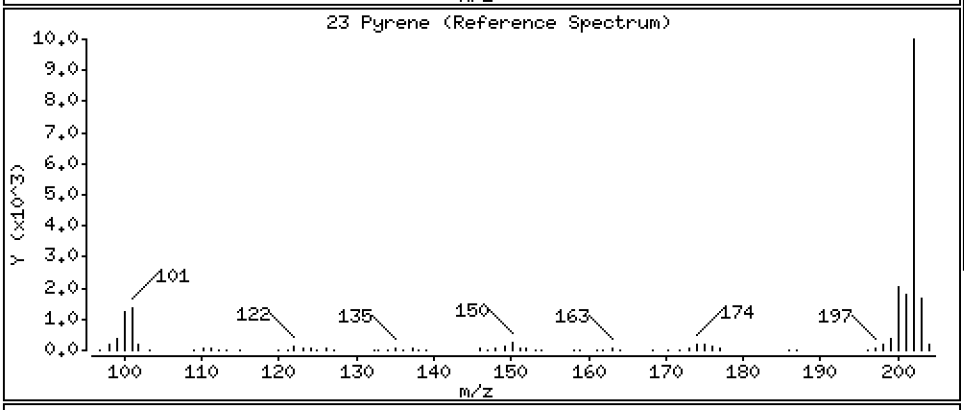
Concentration: 2.462 ug/L

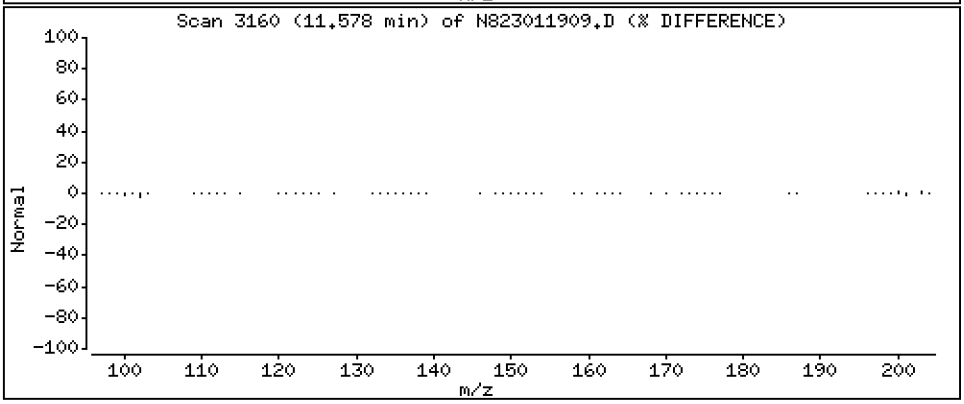












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

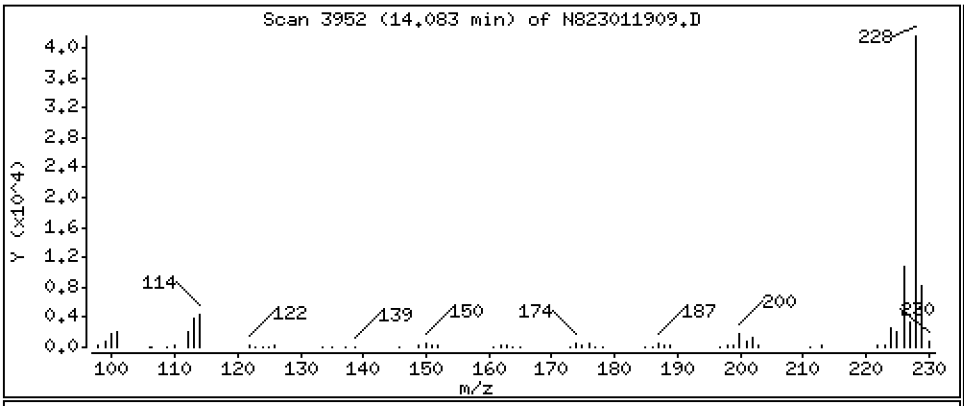
Operator: JZ

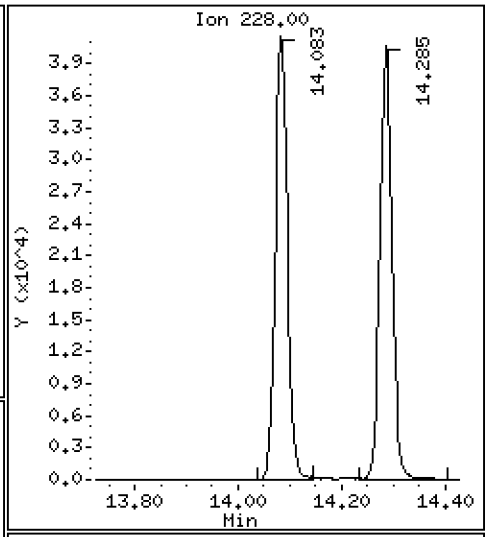
Column phase: Rxi-17sil

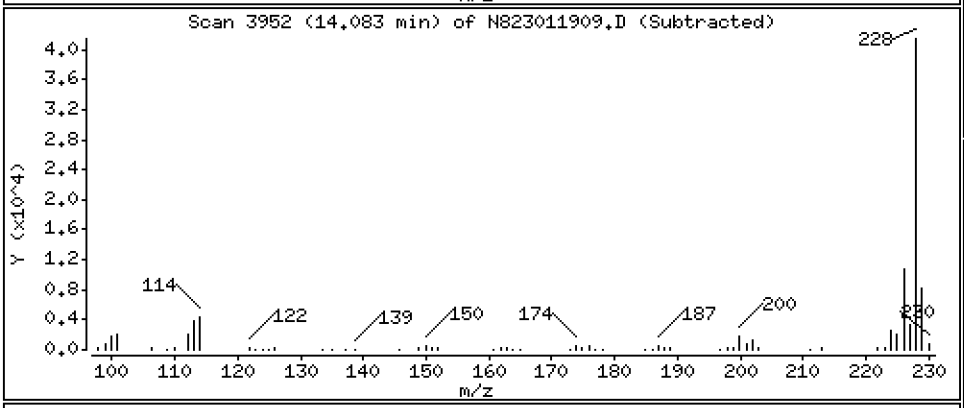
Column diameter: 0.25

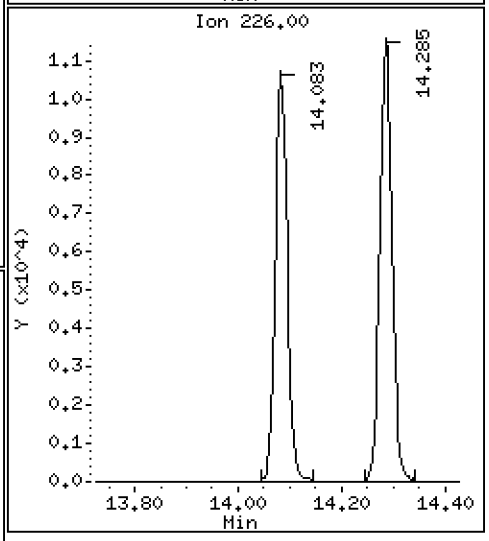
24 Benzo(a)anthracene

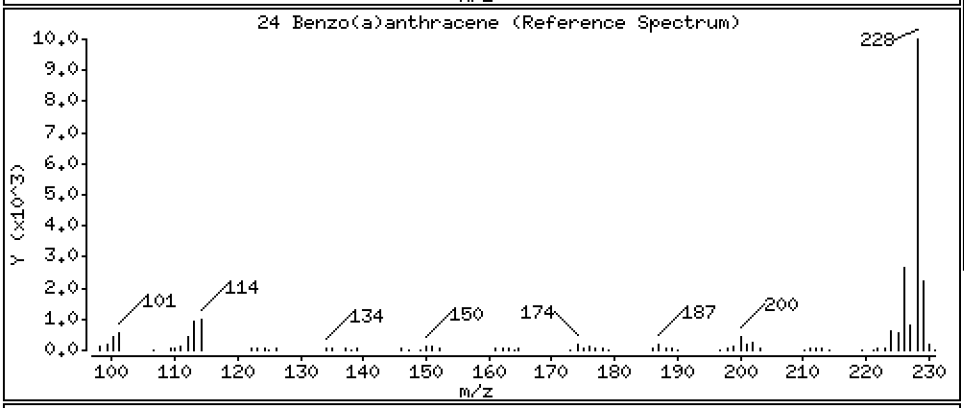
Concentration: 2.587 ug/L

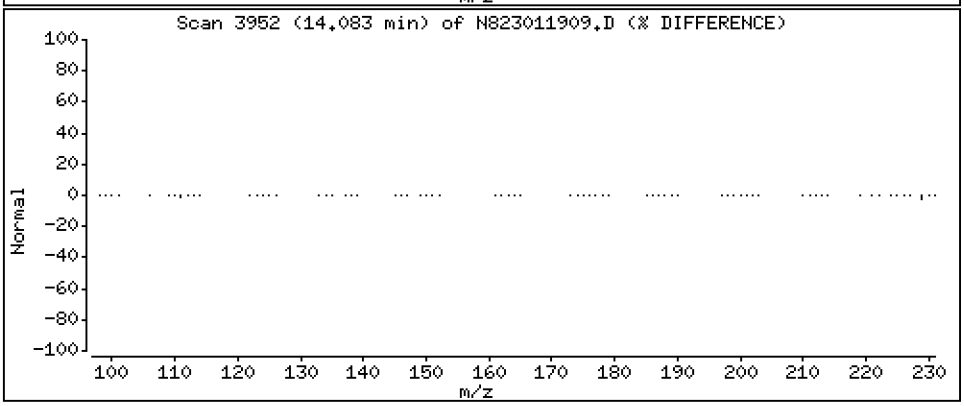












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

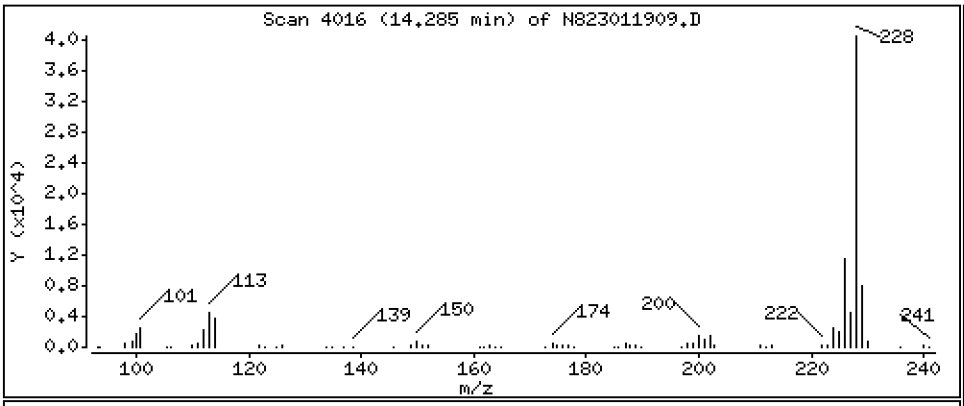
Operator: JZ

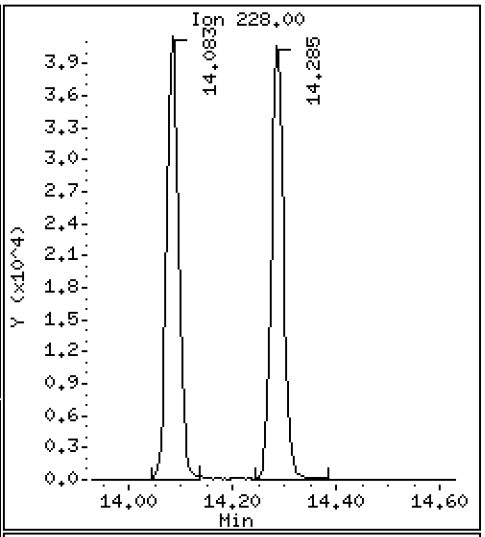
Column phase: Rxi-17sil

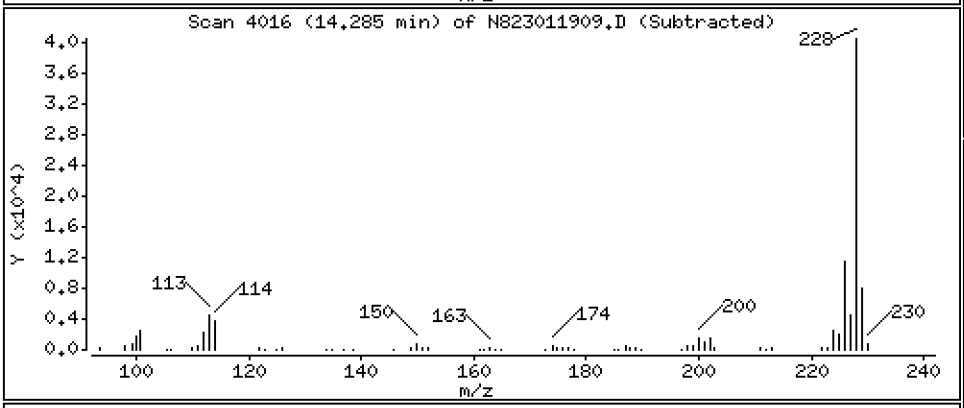
Column diameter: 0.25

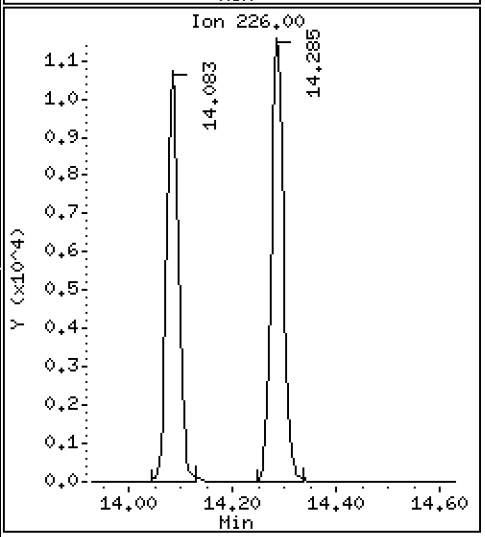
27 Chrysene

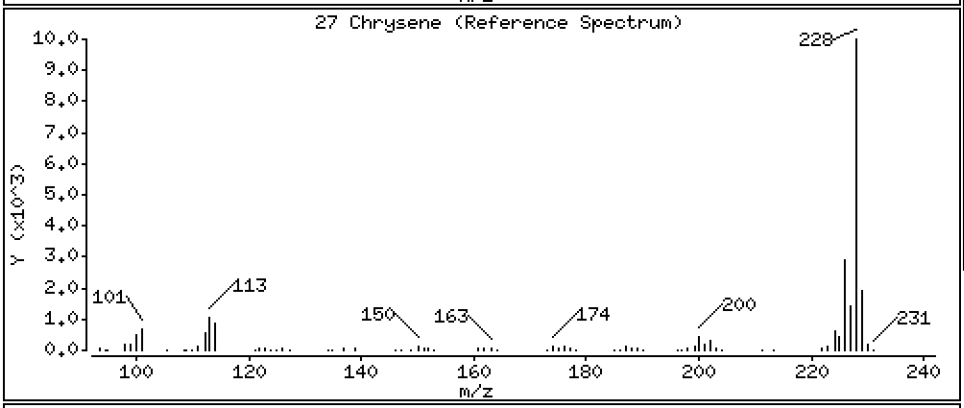
Concentration: 2.400 ug/L

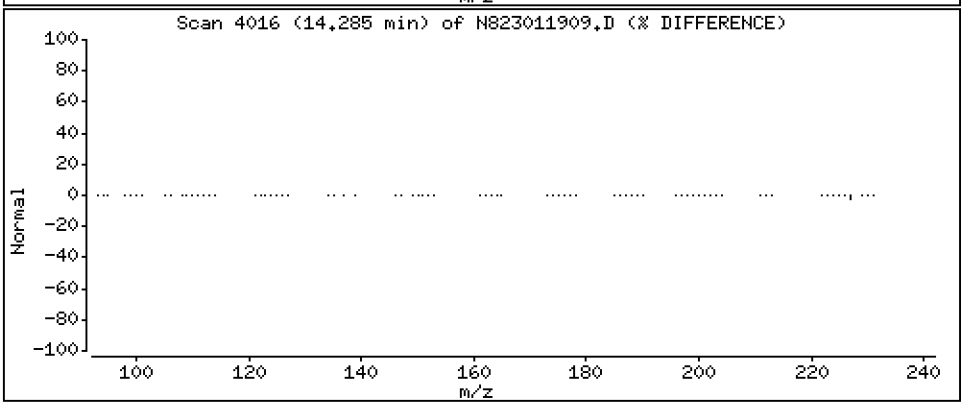












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

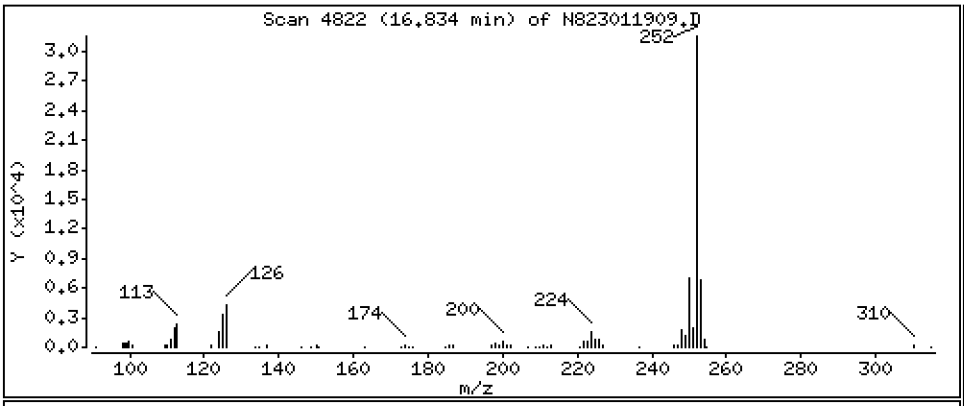
Operator: JZ

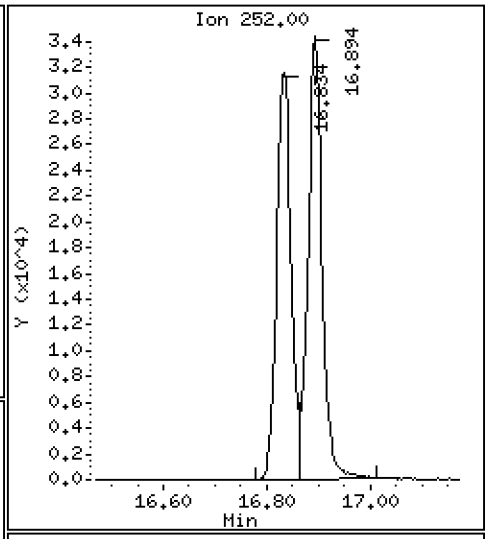
Column phase: Rxi-17sil

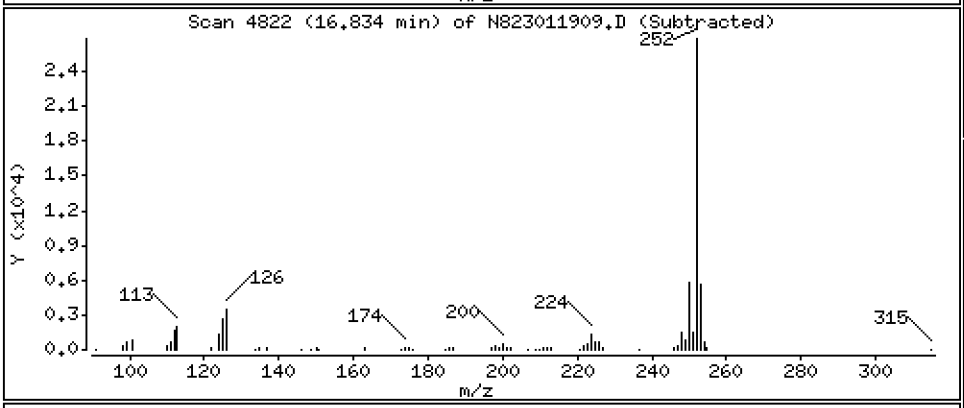
Column diameter: 0.25

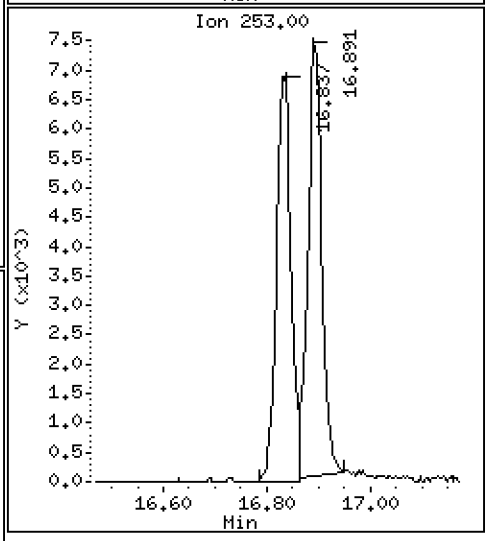
28 Benzo(b)fluoranthene

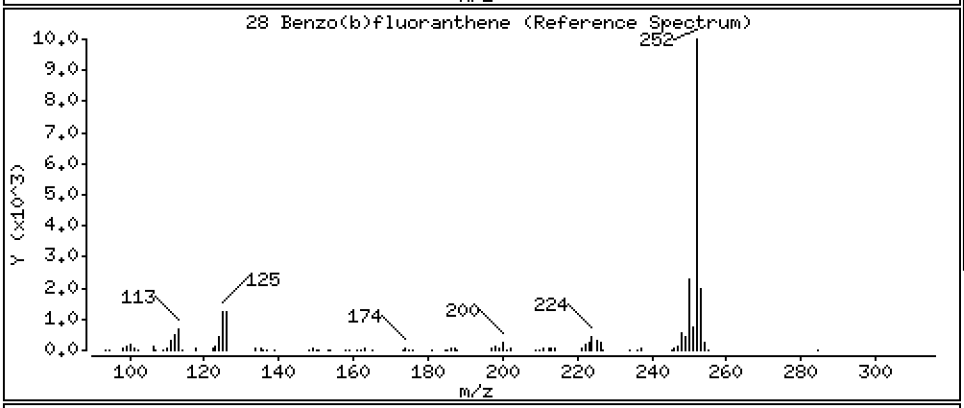
Concentration: 2.507 ug/L

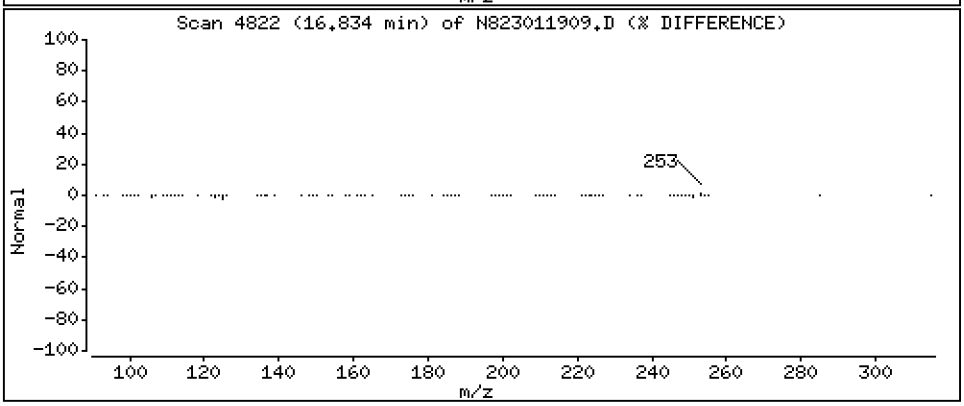












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

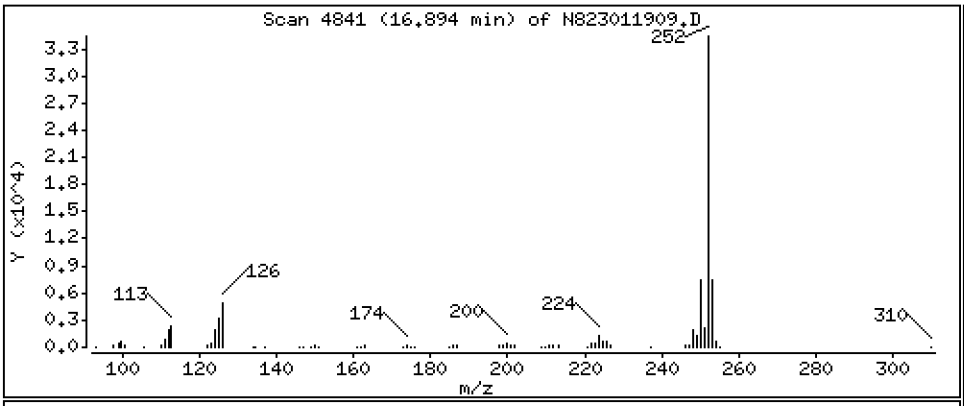
Operator: JZ

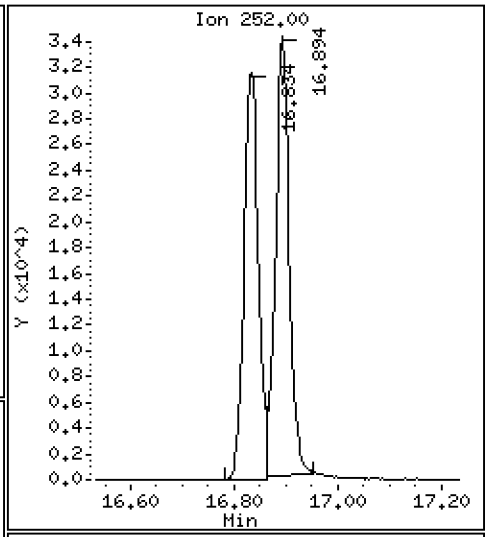
Column phase: Rxi-17sil

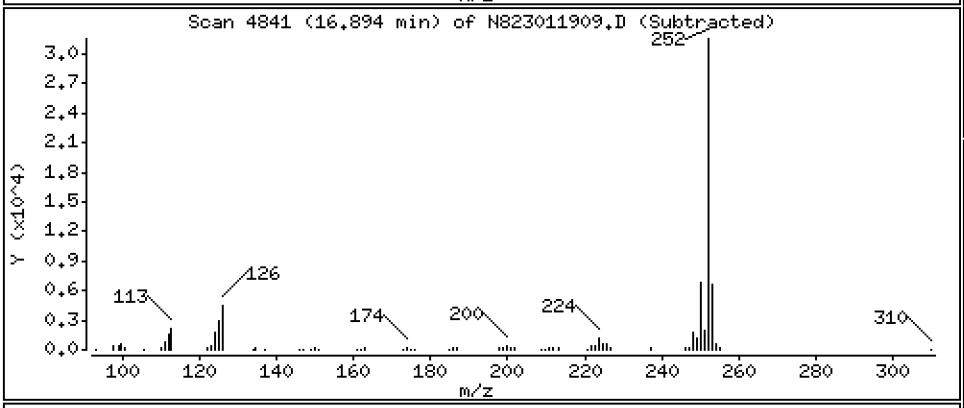
Column diameter: 0.25

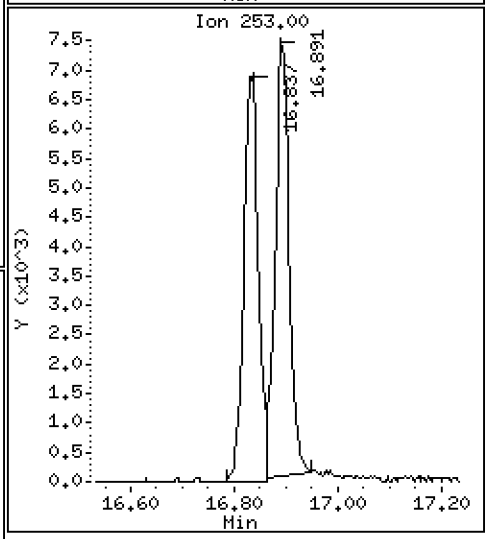
29 Benzo(k)fluoranthene

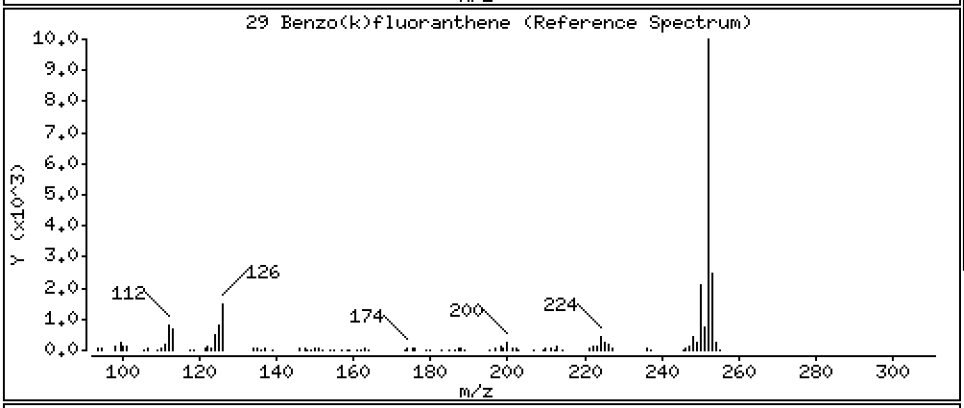
Concentration: 2.656 ug/L

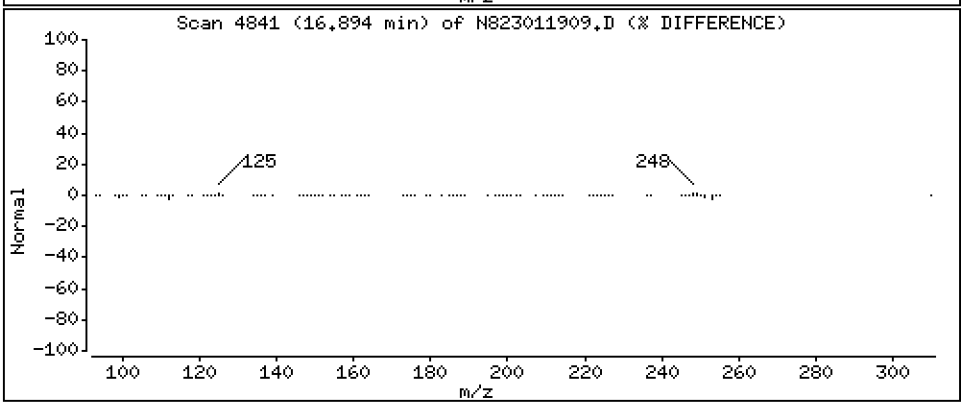












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

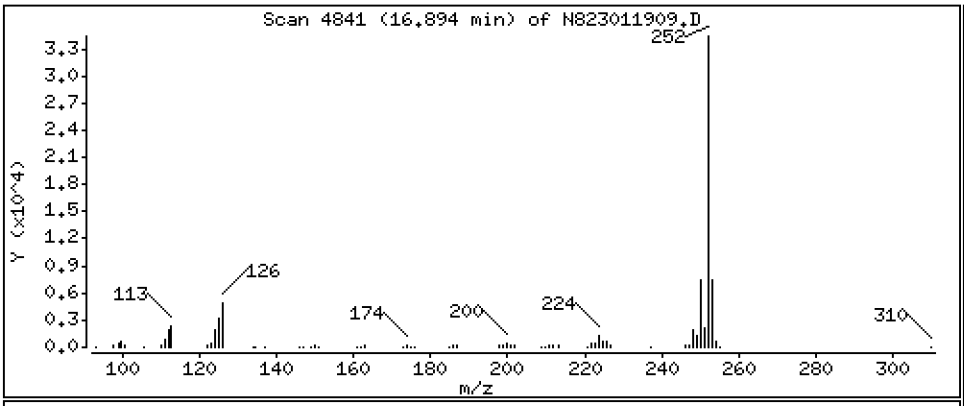
Operator: JZ

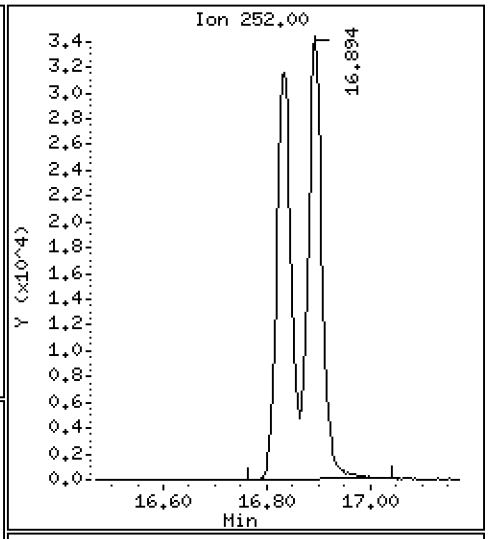
Column phase: Rxi-17sil

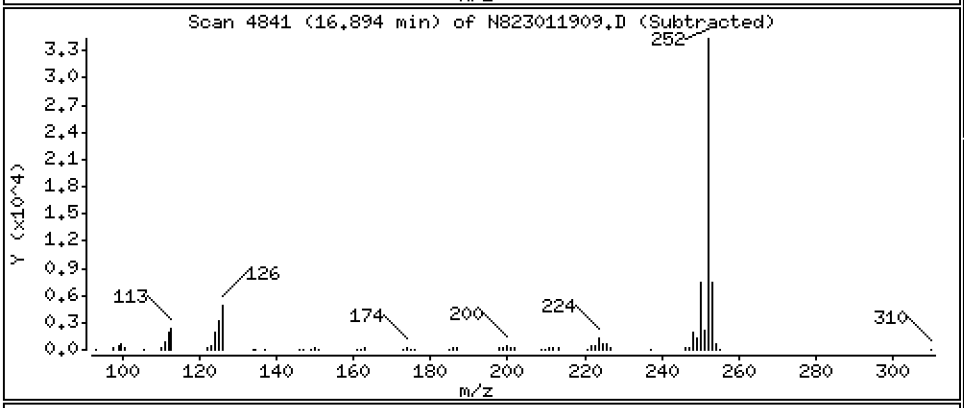
Column diameter: 0.25

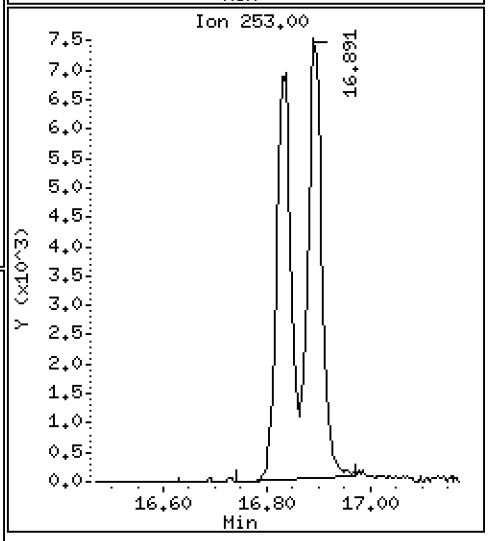
31 Total Benzofluoranthenes

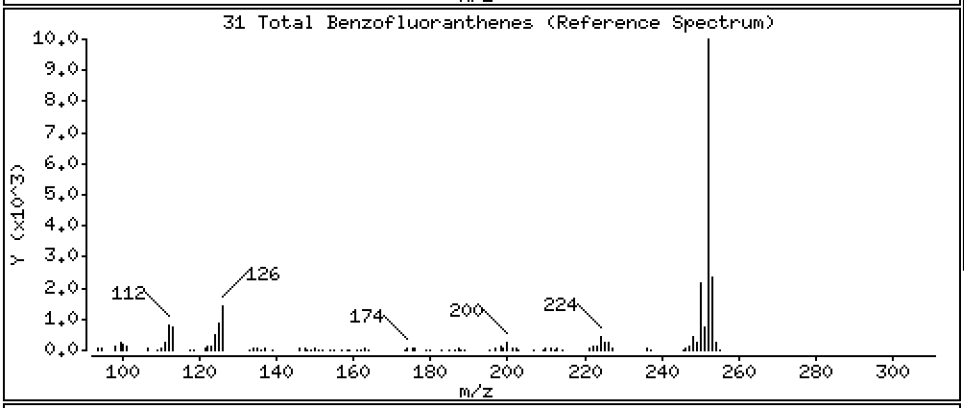
Concentration: 5.480 ug/L

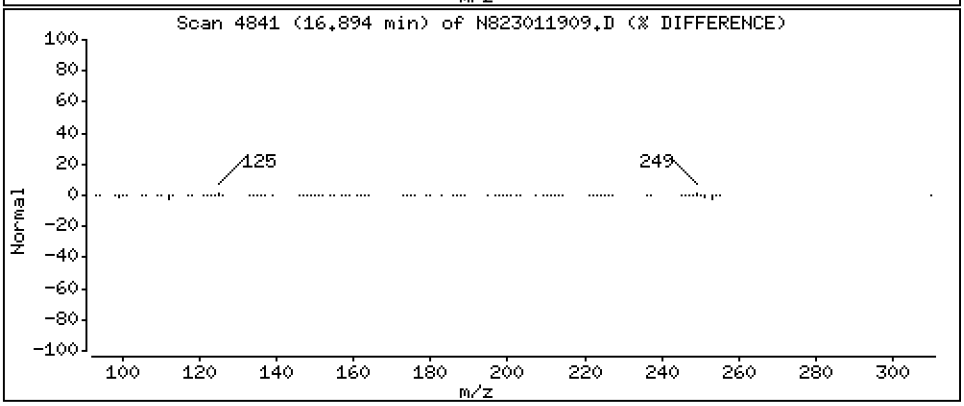












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

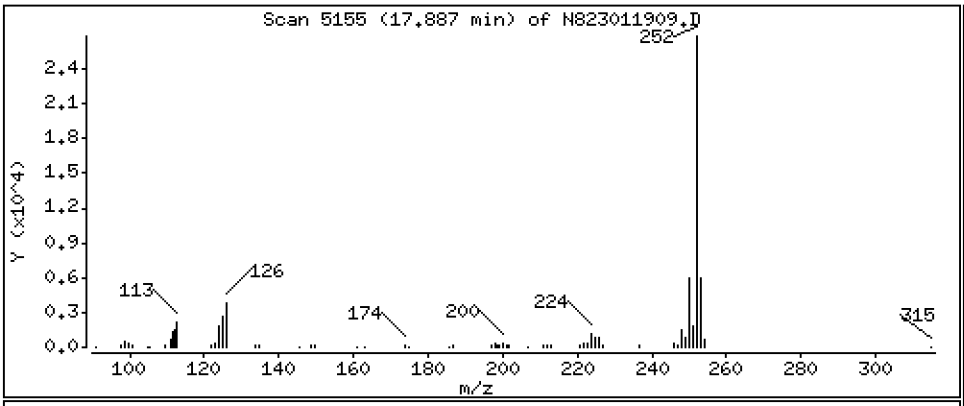
Operator: JZ

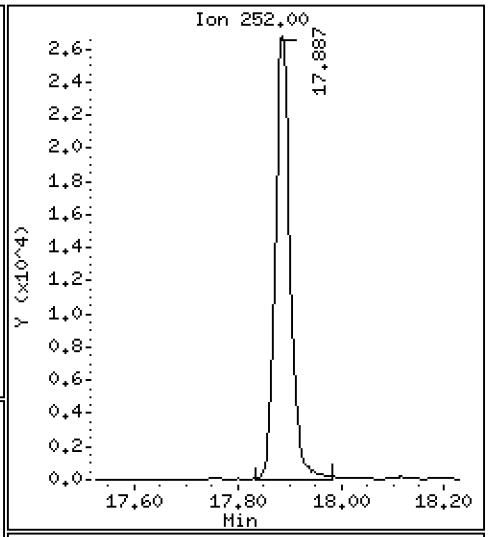
Column phase: Rxi-17sil

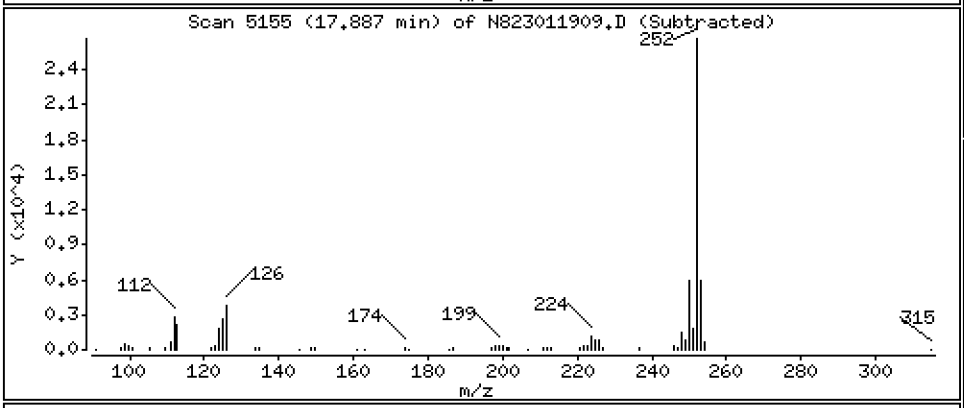
Column diameter: 0.25

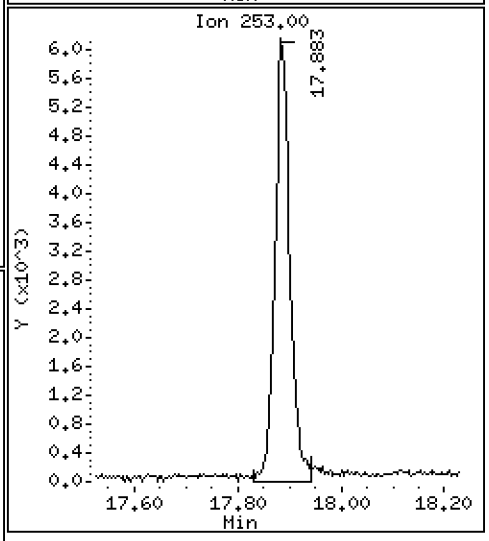
32 Benzo(a)pyrene

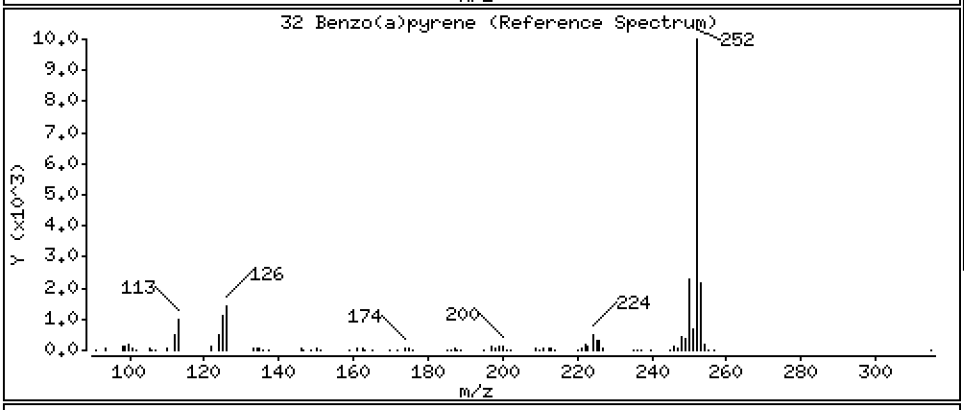
Concentration: 2.572 ug/L

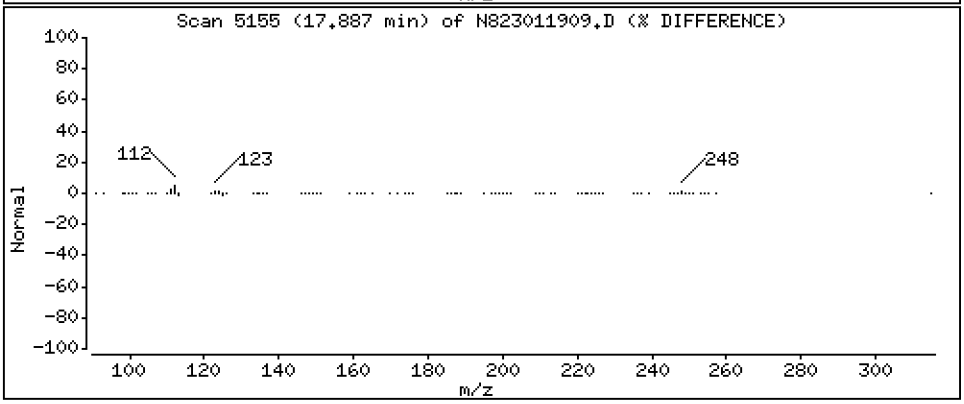












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

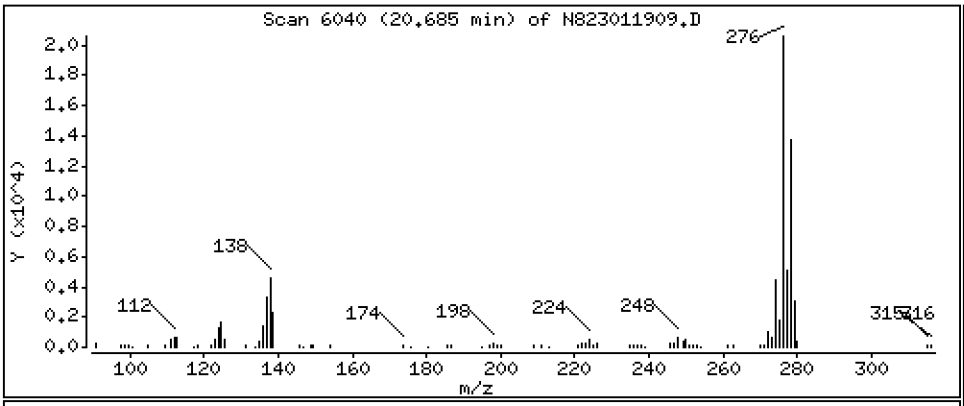
Operator: JZ

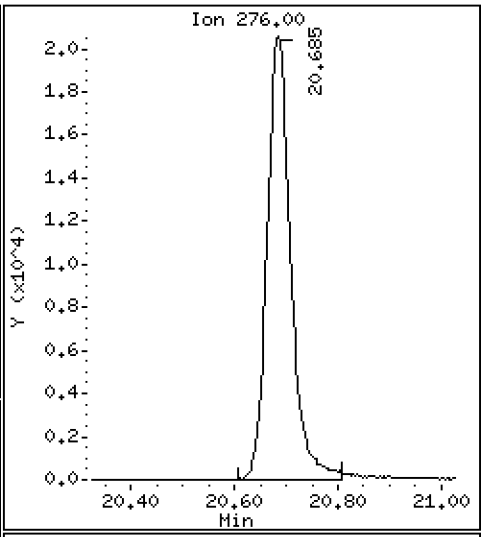
Column phase: Rxi-17sil

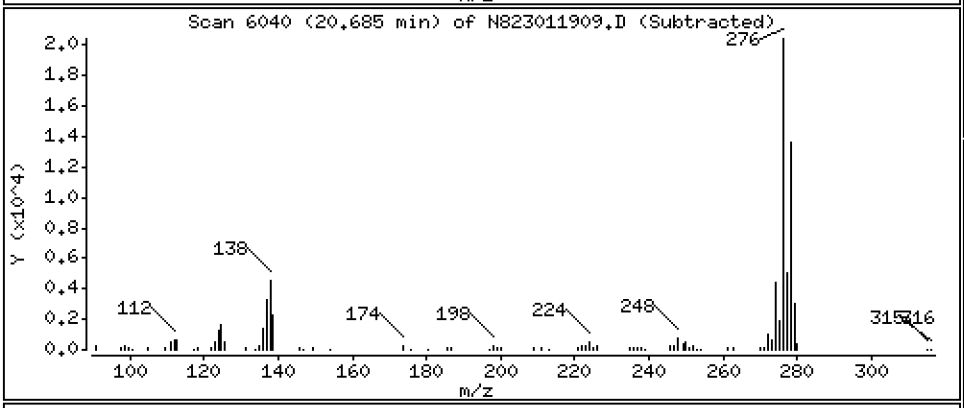
Column diameter: 0.25

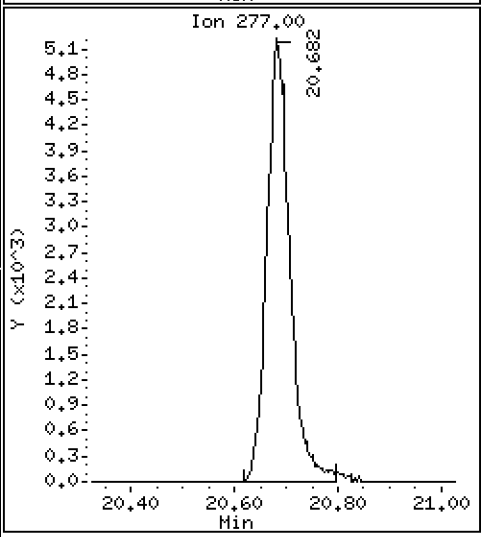
37 Indeno(1,2,3-cd)pyrene

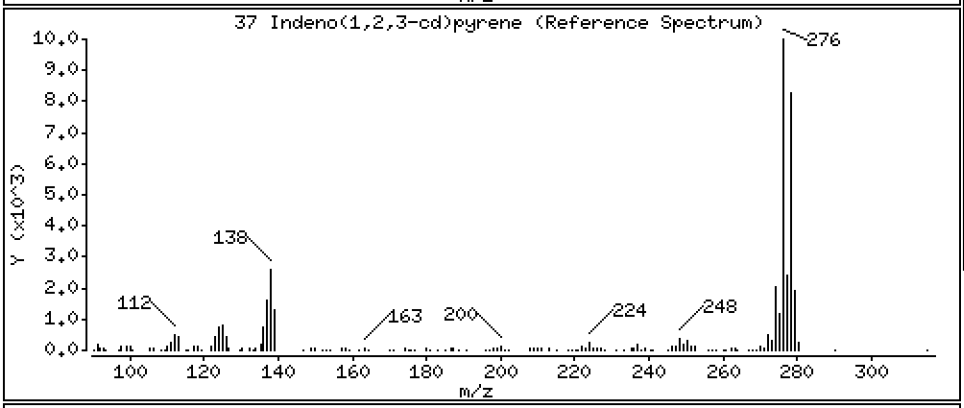
Concentration: 2.689 ug/L

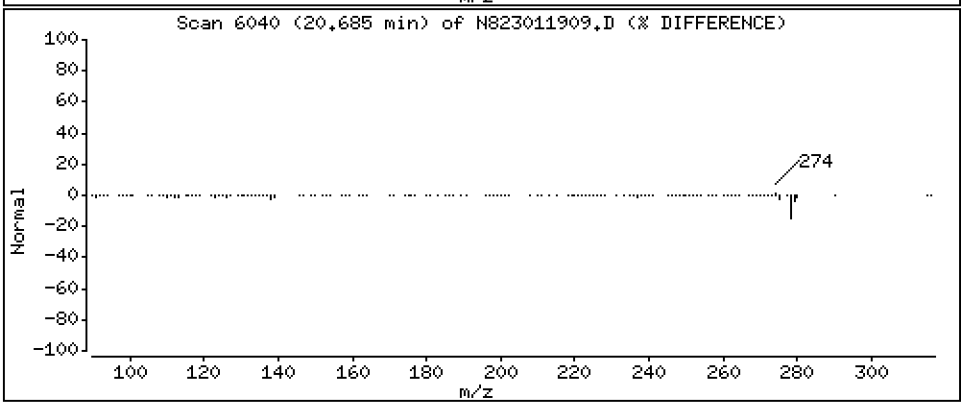












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

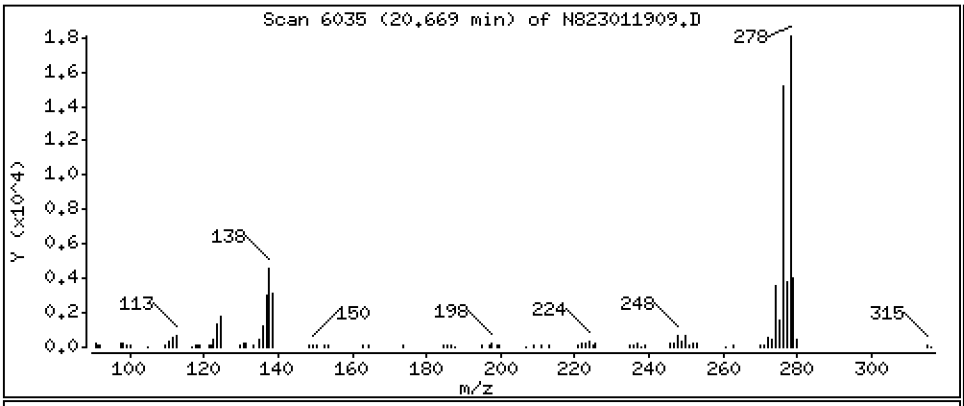
Operator: JZ

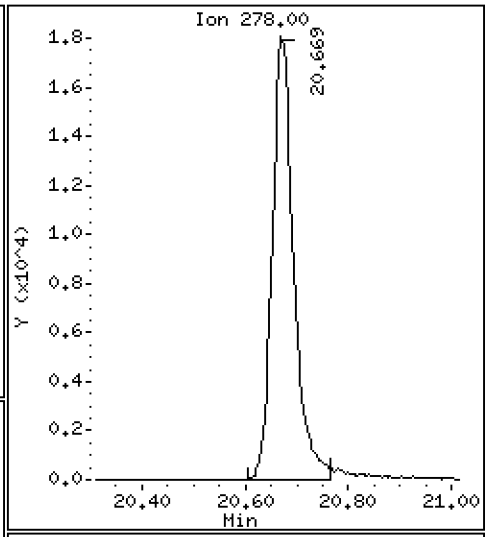
Column phase: Rxi-17sil

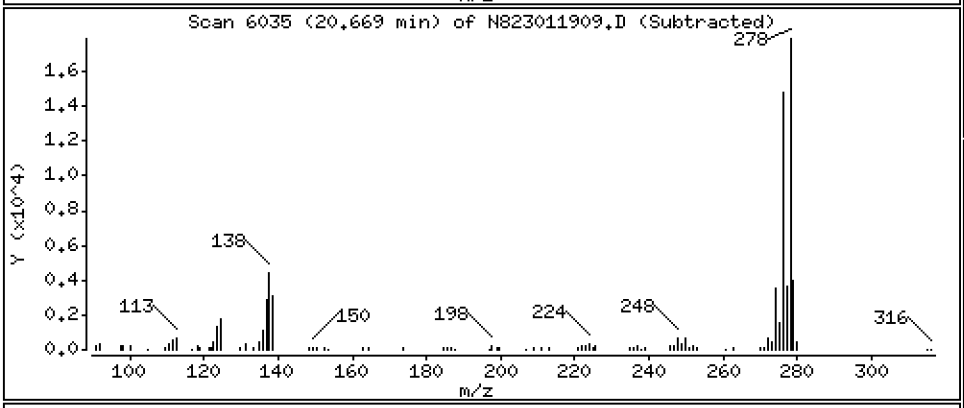
Column diameter: 0.25

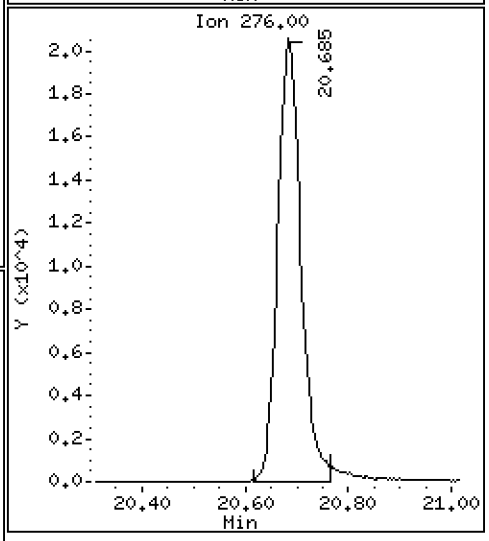
38 Dibenzo(a,h)anthracene

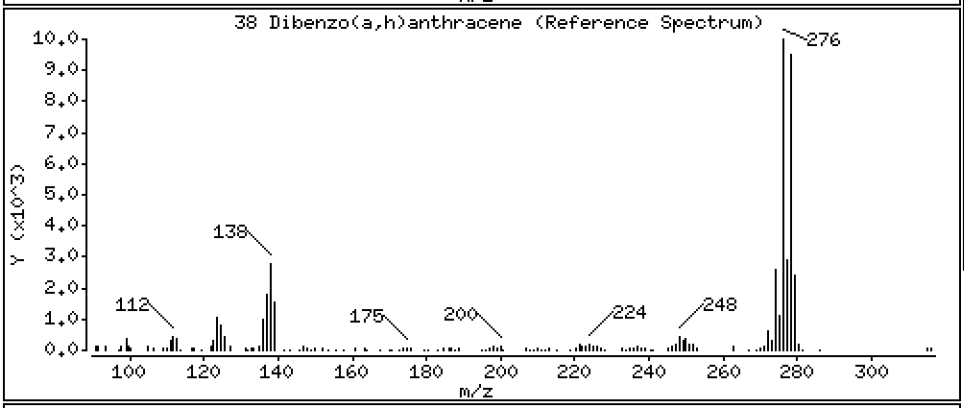
Concentration: 2.493 ug/L

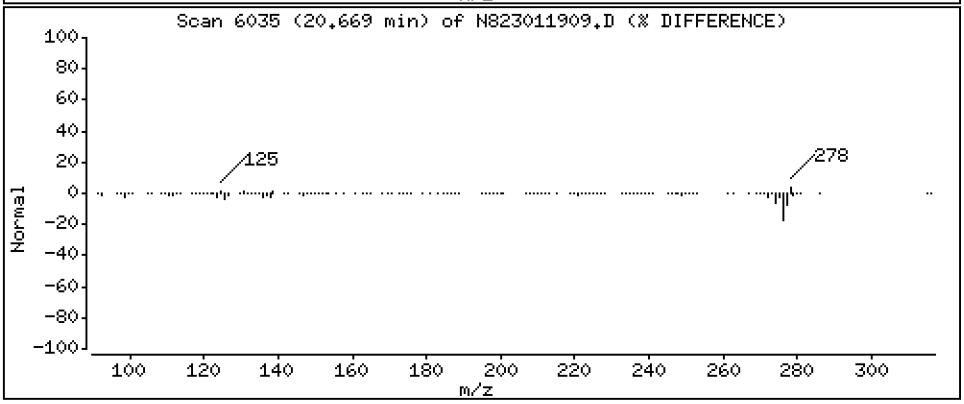












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

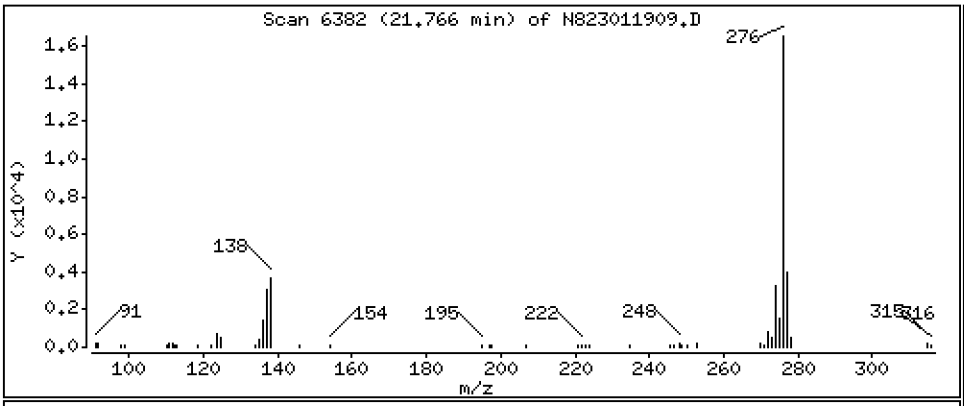
Operator: JZ

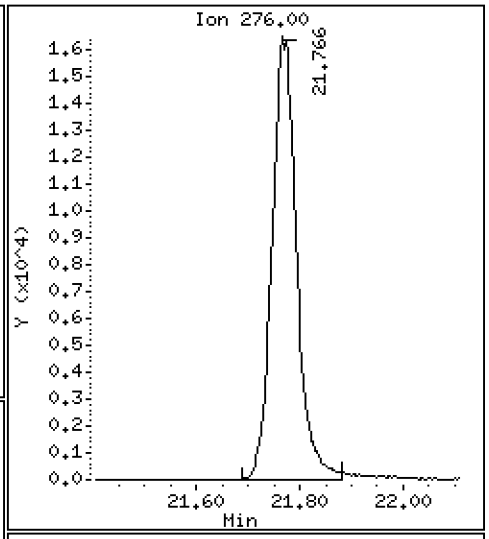
Column phase: Rxi-17sil

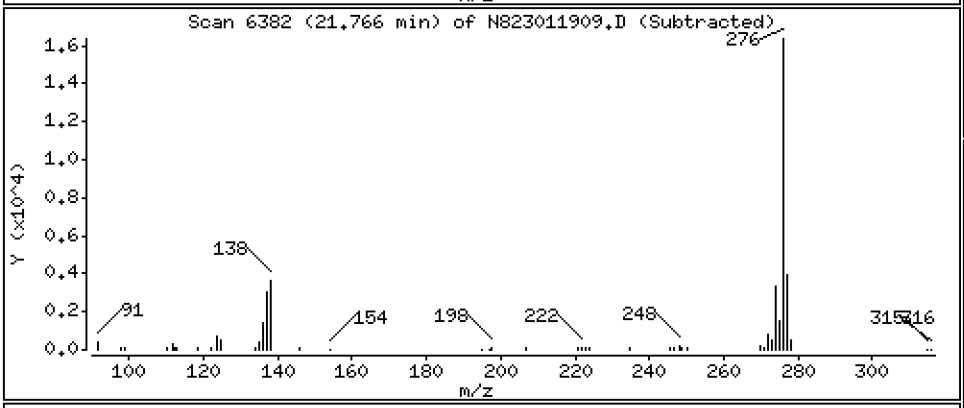
Column diameter: 0.25

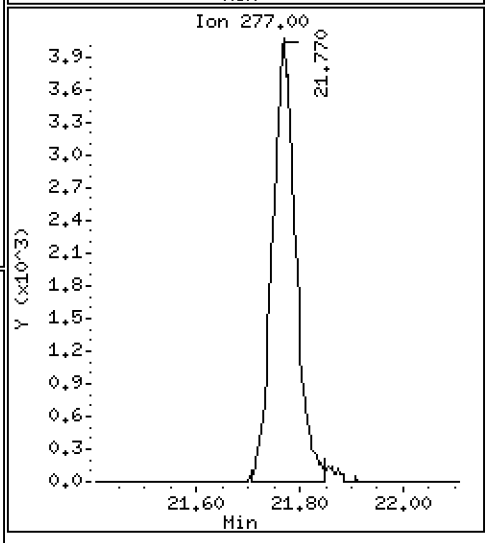
39 Benzo(g,h,i)perylene

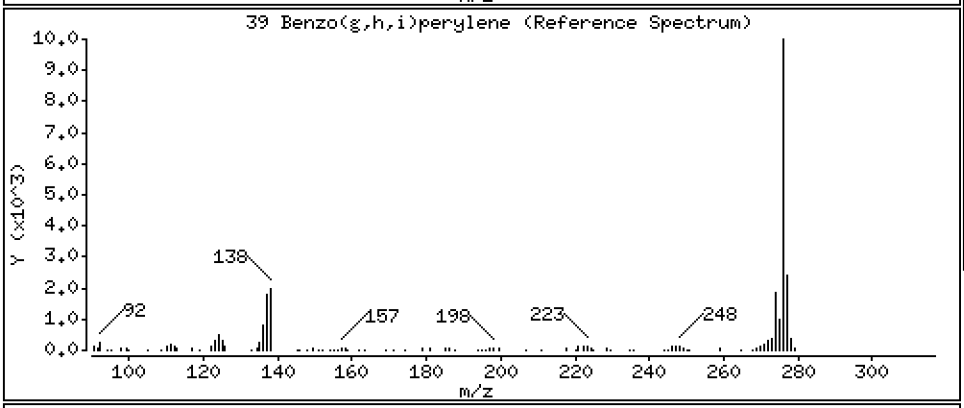
Concentration: 2.483 ug/L

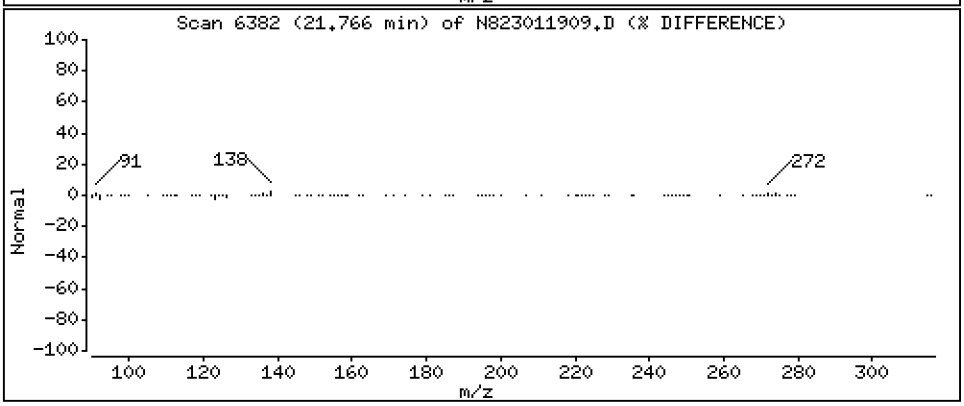












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Lab Smp Id: SLA0213-SCV1
Inj Date : 19-JAN-2023 14:58
Operator : JZ Inst ID: nt8.i
Smp Info : SCV230119
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 25-Jan-2023 21:57 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnascv.sub
Target Version: 4.14
Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 1 Naphthalene-d8	136	4.913	4.906	(1.000)	46346	2.00000	
2 Naphthalene	128	4.941	4.938	(1.006)	56587	2.62597	2.626
$ 3 2-Methylnaphthalene-d10	152	Compound Not Detected.					
4 2-Methylnaphthalene	141	5.694	5.687	(1.159)	31650	2.67019	2.670
5 1-methylnaphthalene	141	5.890	5.883	(1.199)	31873	2.64949	2.649
9 Acenaphthylene	152	7.091	7.085	(0.985)	59018	2.82060	2.821
* 10 Acenaphthene-d10	164	7.202	7.196	(1.000)	27709	2.00000	
11 Acenaphthene	153	7.249	7.246	(1.007)	36454	2.60022	2.600
12 Dibenzofuran	168	7.401	7.395	(1.028)	60898	2.85987	2.860
14 Fluorene	166	7.878	7.872	(1.094)	43507	2.63066	2.631
* 15 Phenanthrene-d10	188	9.238	9.235	(1.000)	51685	2.00000	
16 Phenanthrene	178	9.276	9.270	(1.004)	61815	2.44841	2.448
17 Anthracene	178	9.317	9.311	(1.009)	52064	2.27006	2.270
22 Fluoranthene	202	11.059	11.053	(1.197)	72902	2.65276	2.653
$ 21 Fluoranthene-d10	212	Compound Not Detected.					
23 Pyrene	202	11.578	11.572	(0.815)	71115	2.46242	2.462
24 Benzo(a)anthracene	228	14.082	14.076	(0.991)	67725	2.58725	2.587
* 25 Chrysene-d12	240	14.212	14.202	(1.000)	46582	2.00000	
27 Chrysene	228	14.285	14.278	(1.005)	66872	2.39976	2.400
28 Benzo(b)fluoranthene	252	16.833	16.821	(0.929)	60946	2.50689	2.507
29 Benzo(k)fluoranthene	252	16.893	16.884	(0.932)	63249	2.65606	2.656
31 Total Benzofluoranthenes	252	16.893	16.821	(0.932)	126178	5.48025	5.480(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572
*	33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000	
	37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689
$	36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
	38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493
	39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483
	35 Perylene	252	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011909.D
Lab Smp Id: SLA0213-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

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

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 14:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

No RRT check performed

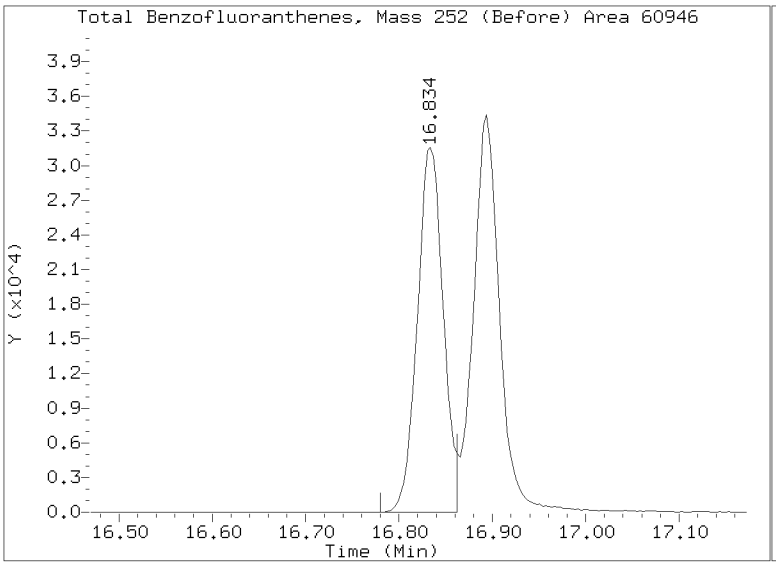
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

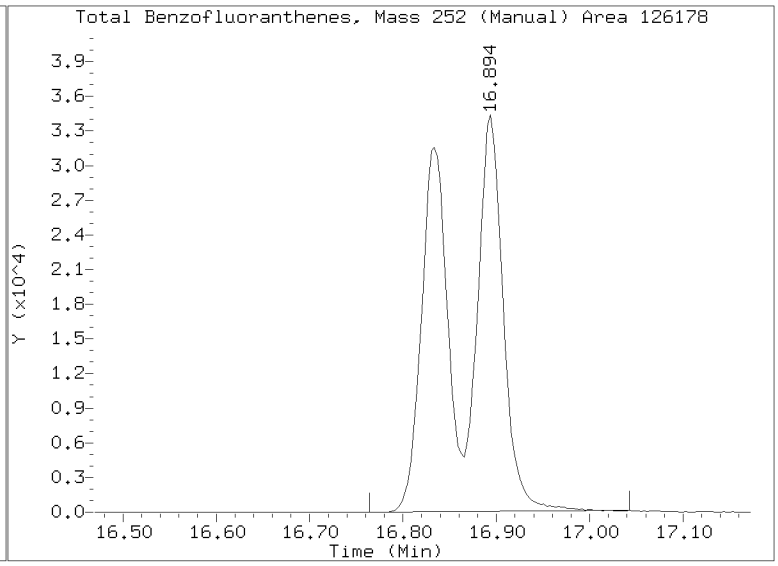
Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D
Injection Date: 19-JAN-2023 14:58
Lab ID:SLA0213-SCV1 Client ID:
Report Date: 01/25/2023 22:00





Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT8	Calibration:	GA00050
Lab File ID:	N823022321.D	Calibration Date:	01/19/2023
Sequence:	SLB0310	Injection Date:	02/23/23
Lab Sample ID:	SLB0310-CCV1	Injection Time:	20:32
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Benzo(a)anthracene	A	2.5000	2.75	1.1238870	1.2347510		9.9	+/-50
Chrysene	A	2.5000	2.49	1.1964350	1.1923090		-0.3	+/-50
Benzo(b)fluoranthene	A	2.5000	2.50	1.1648110	1.1668950		0.2	+/-50
Benzo(k)fluoranthene	A	2.5000	2.49	1.1409370	1.1353920		-0.5	+/-50
Benzo(a)pyrene	A	2.5000	2.59	1.0250270	1.0600750		3.4	+/-50
Indeno(1,2,3-cd)pyrene	A	2.5000	2.50	1.1677520	1.1657140		-0.2	+/-50
Dibenzo(a,h)anthracene	A	2.5000	2.53	1.0049440	1.0153210		1.0	+/-50
2-Methylnaphthalene-d10	A	2.5000	2.65	0.5454499	0.5790486		6.2	+/-50
Dibenzo[a,h]anthracene-d14	A	2.5000	2.39	0.6679424	0.7493820		-4.4	+/-50
Fluoranthene-d10	A	2.5000	2.81	0.8823923	0.9915547		12.4	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Page 1

Date : 23-FEB-2023 20:32

Client ID:

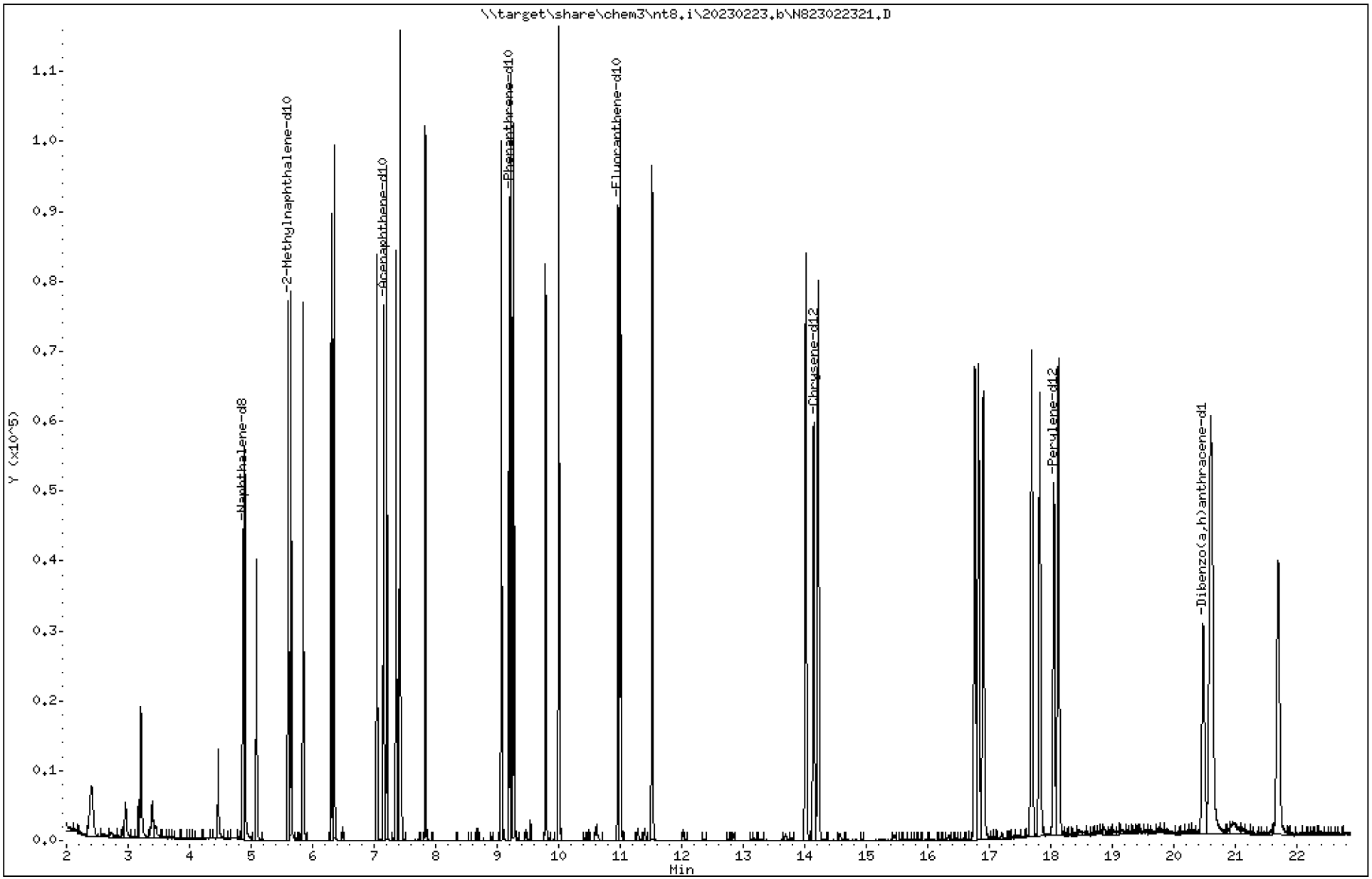
Instrument: nt8.i

Sample Info: CCV230223,

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



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Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

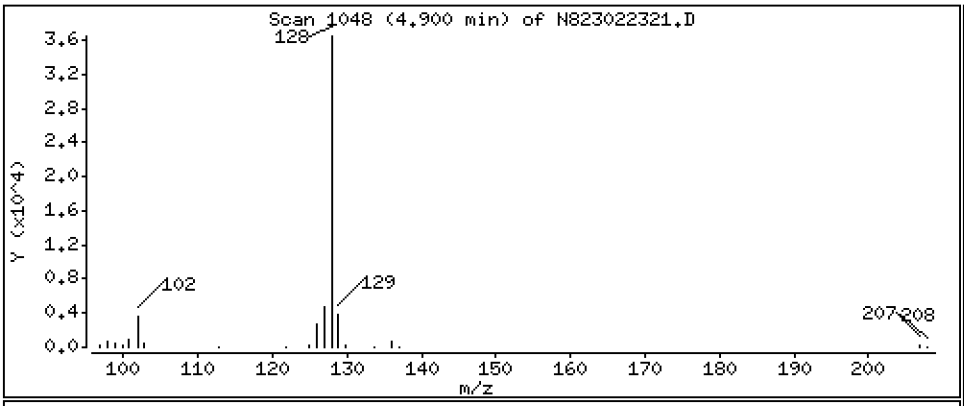
Operator: JZ

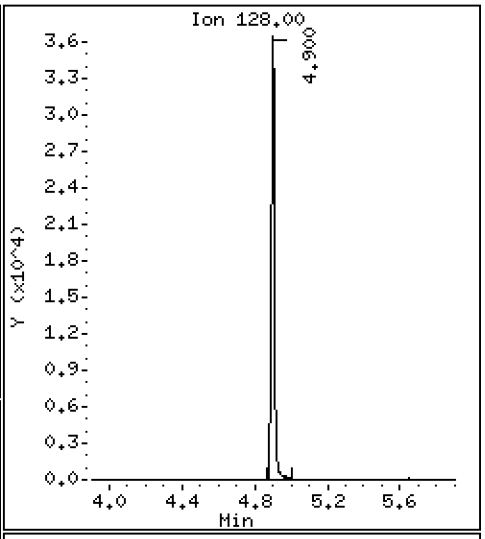
Column phase: Rxi-17sil

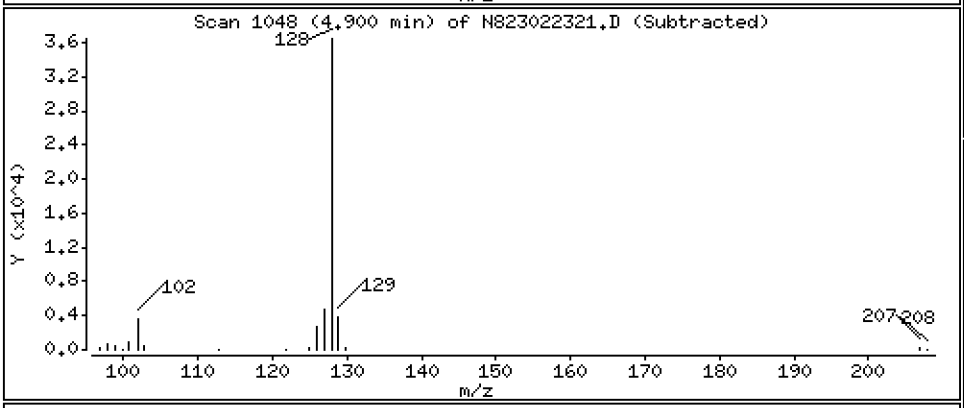
Column diameter: 0.25

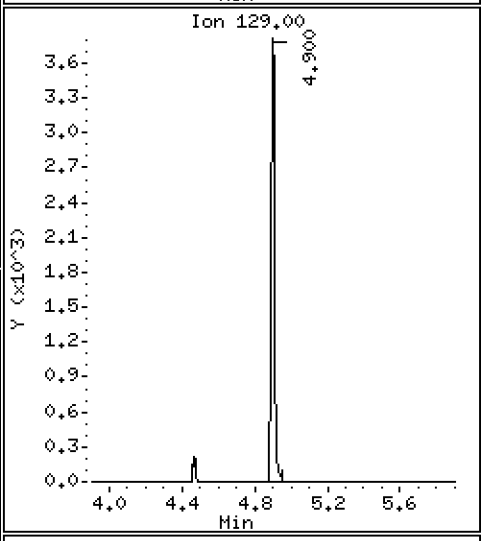
2 Naphthalene

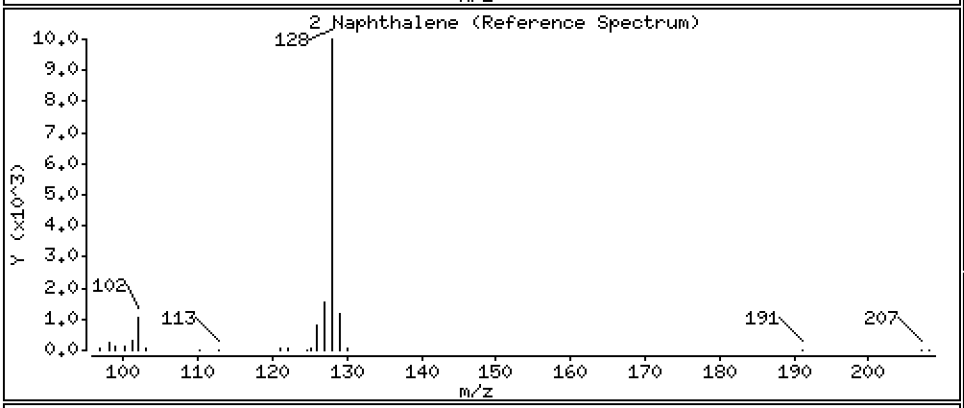
Concentration: 2.538 ug/mL

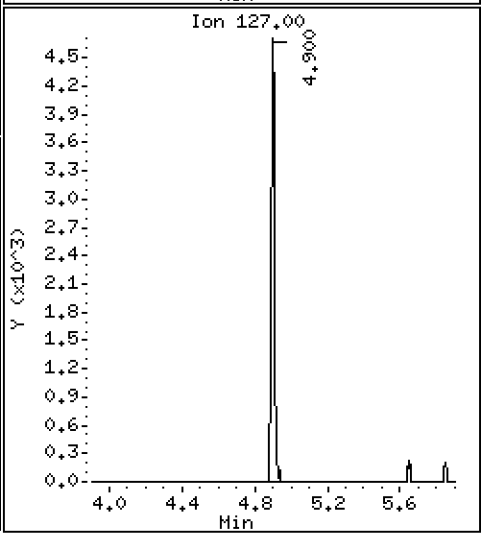


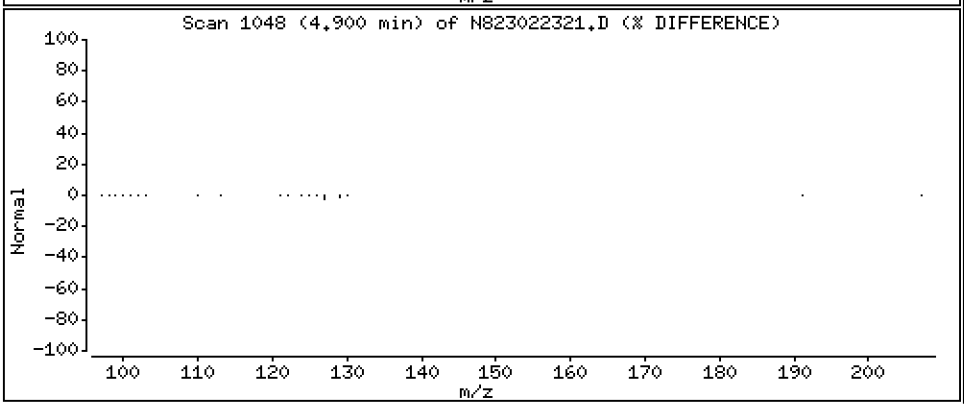












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Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

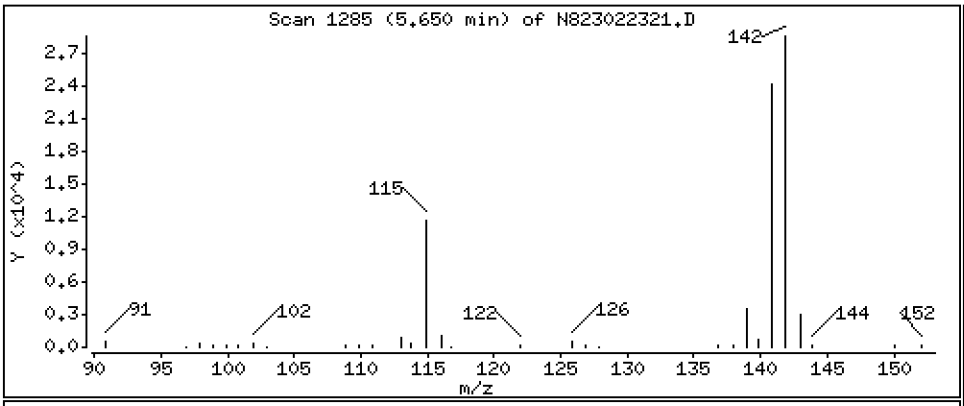
Operator: JZ

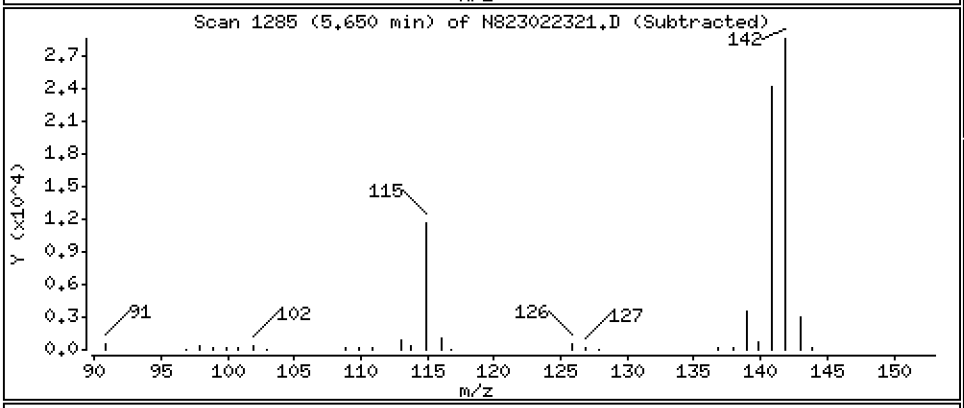
Column phase: Rxi-17sil

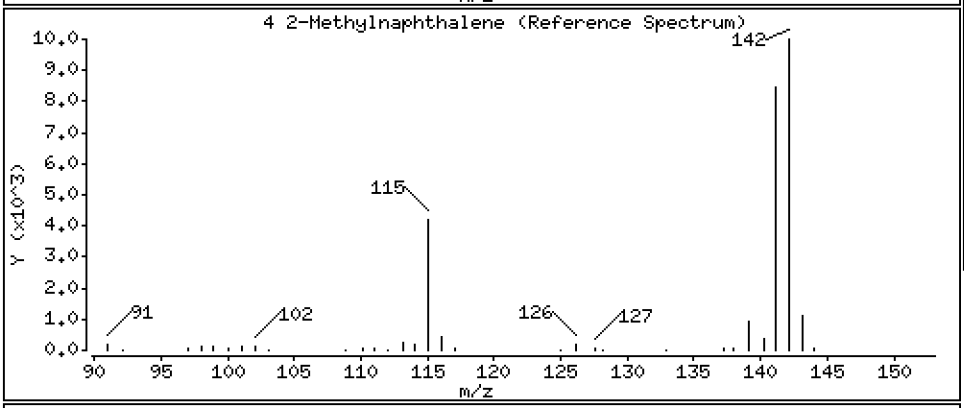
Column diameter: 0.25

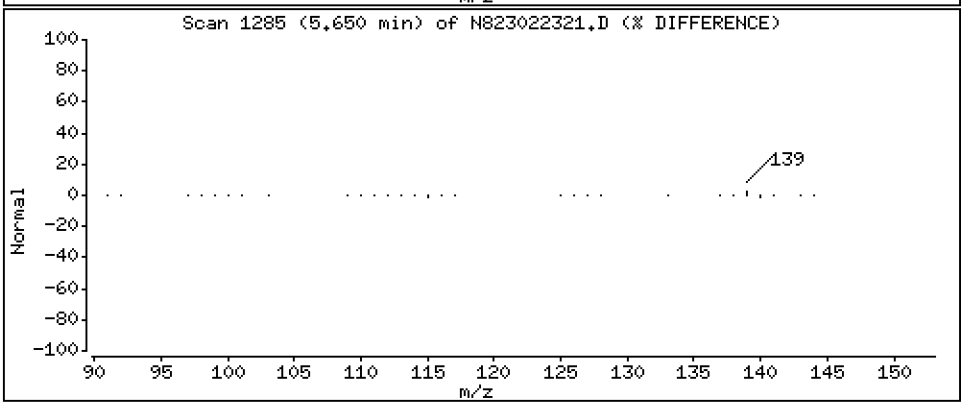
4 2-Methylnaphthalene

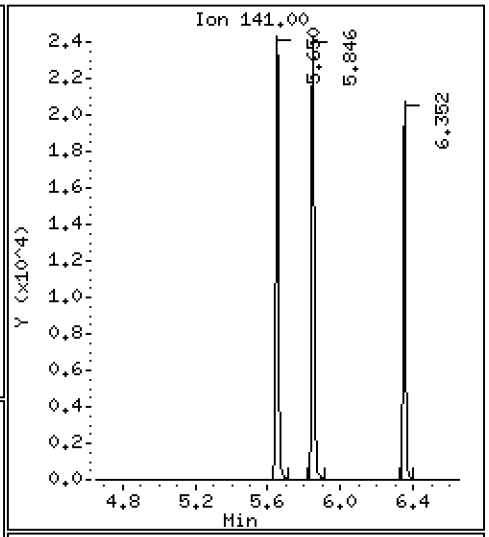
Concentration: 2.641 ug/mL

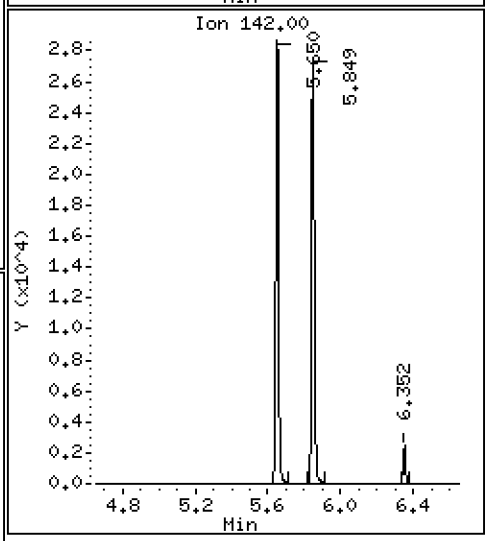












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Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

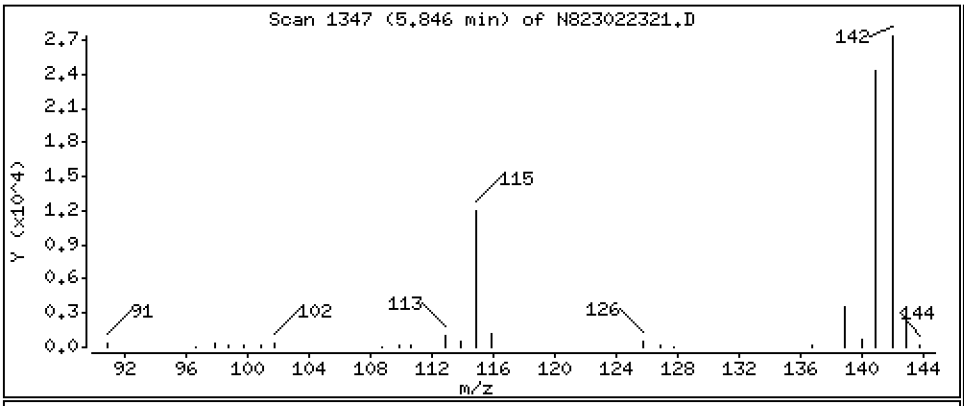
Operator: JZ

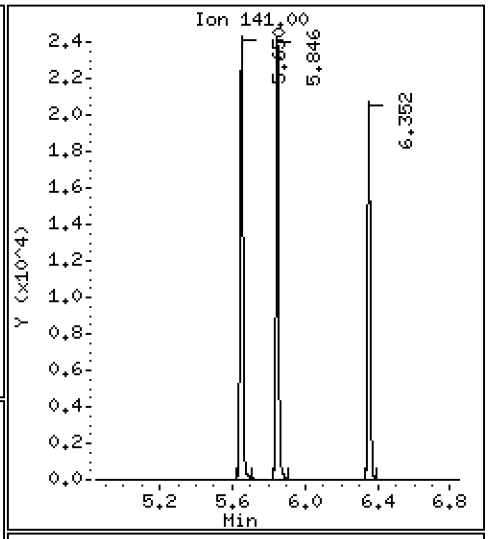
Column phase: Rxi-17sil

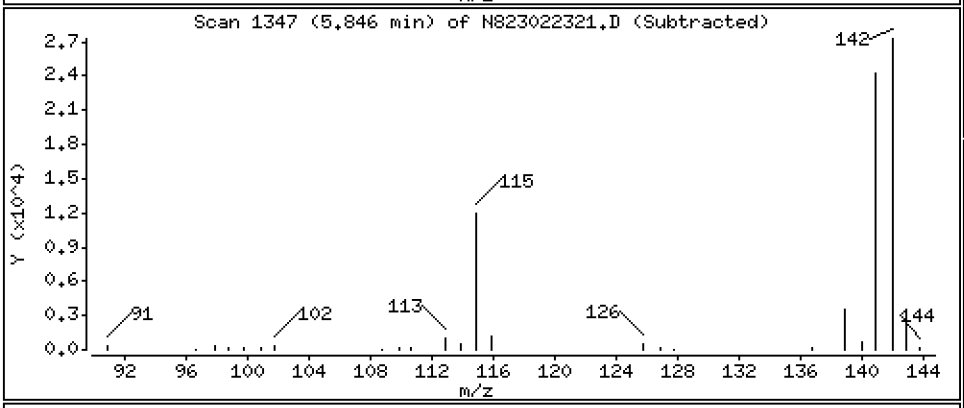
Column diameter: 0.25

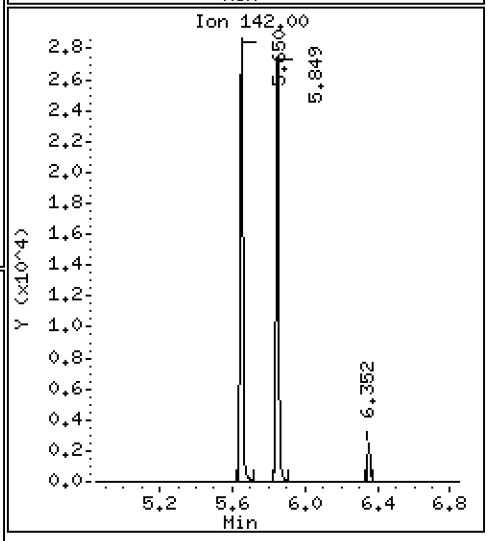
5 1-methylnaphthalene

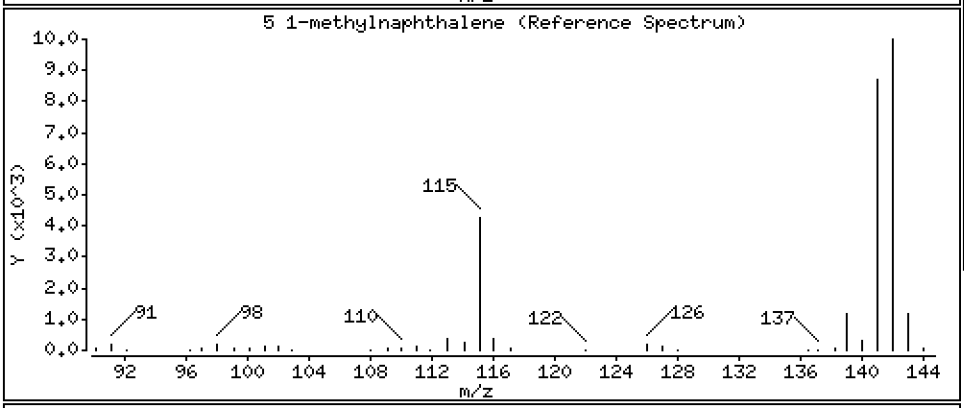
Concentration: 2.599 ug/mL

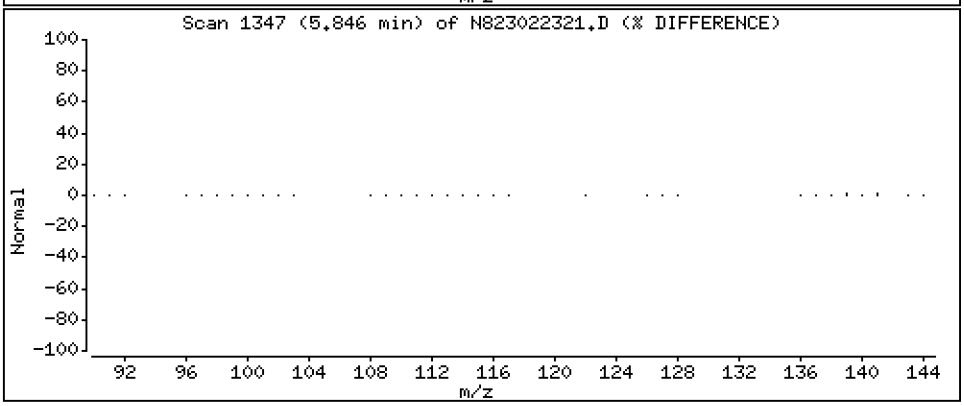












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Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

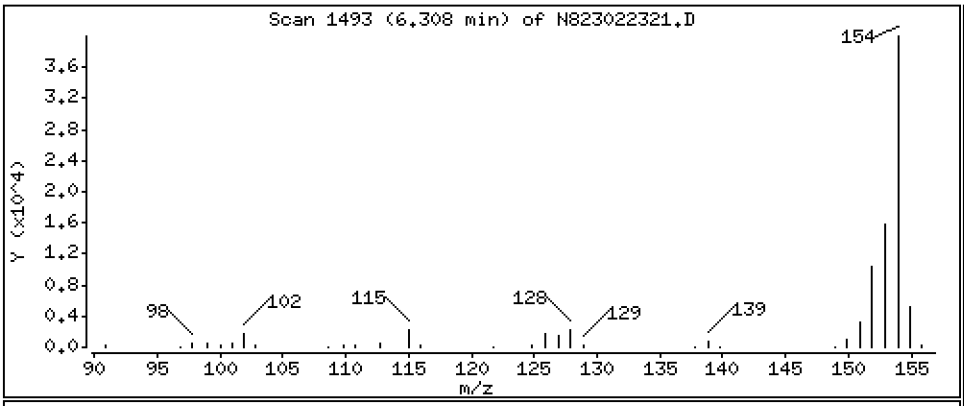
Operator: JZ

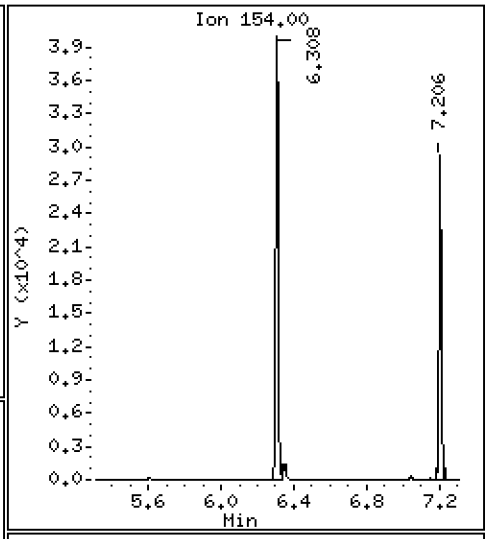
Column phase: Rxi-17sil

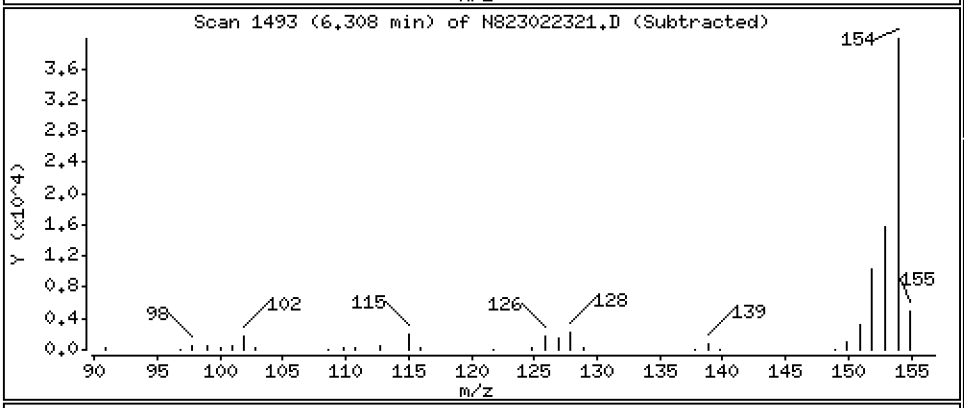
Column diameter: 0.25

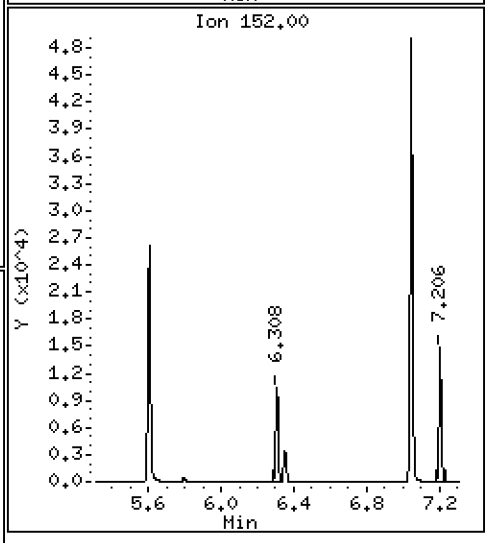
7 Biphenyl

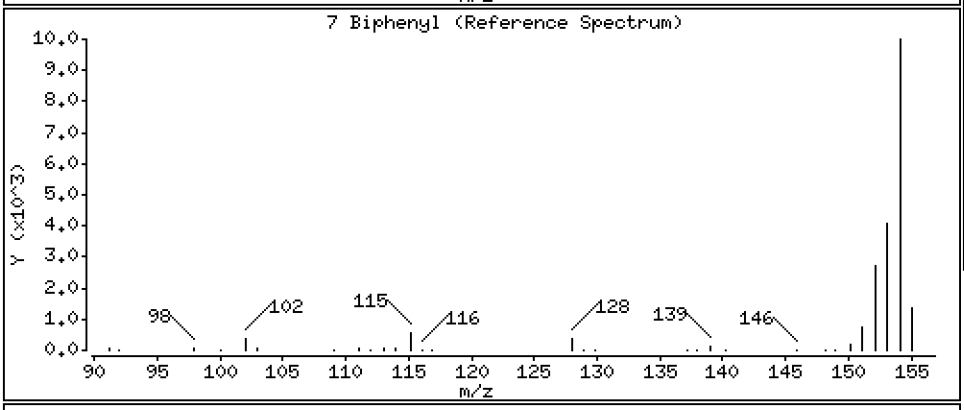
Concentration: 2.496 ug/mL

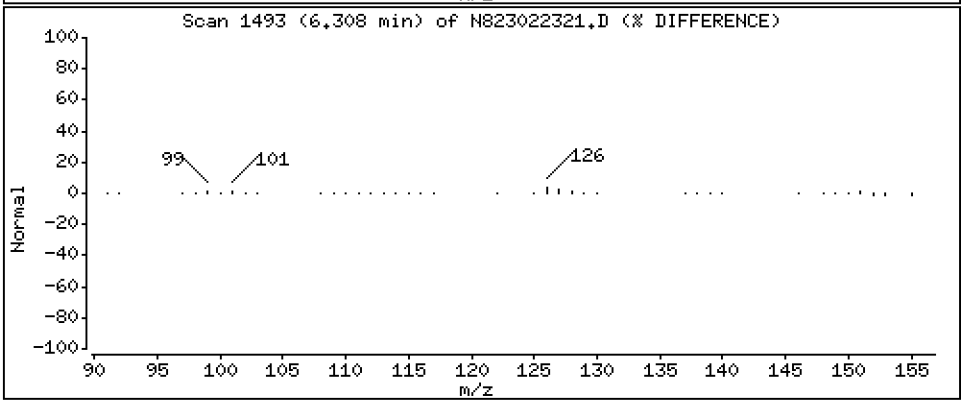












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Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

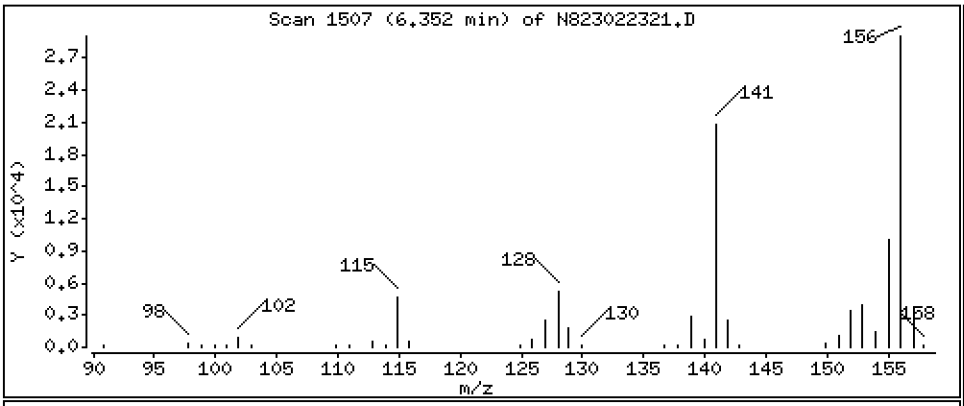
Operator: JZ

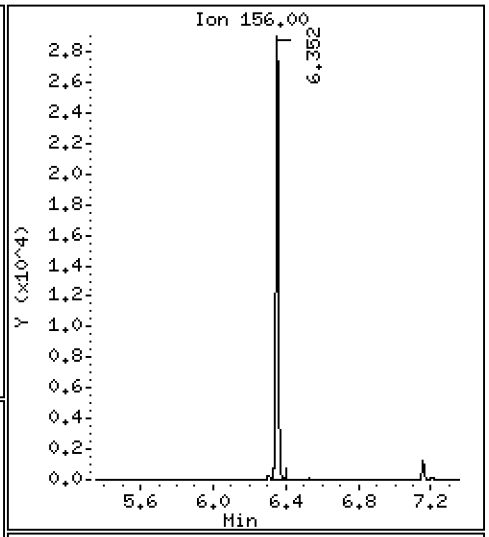
Column phase: Rxi-17sil

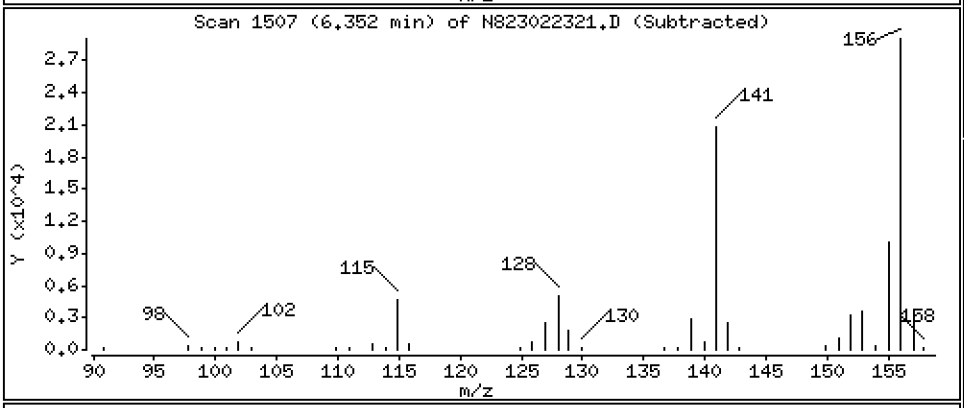
Column diameter: 0.25

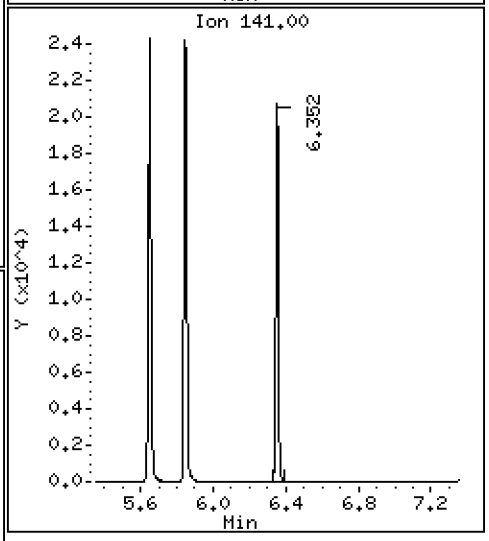
8 2,6-Dimethylnaphthalene

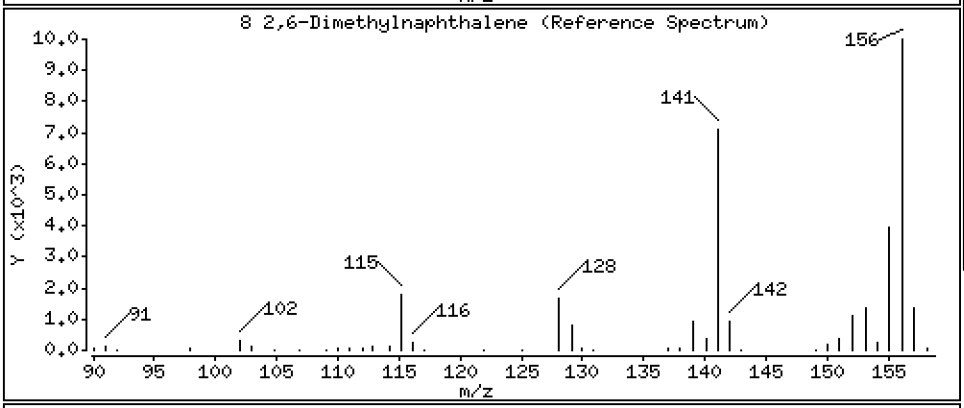
Concentration: 2.607 ug/mL

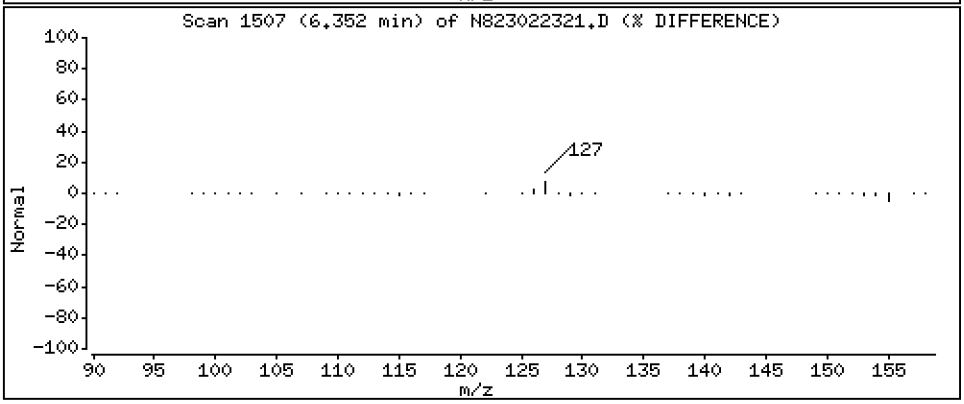












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Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

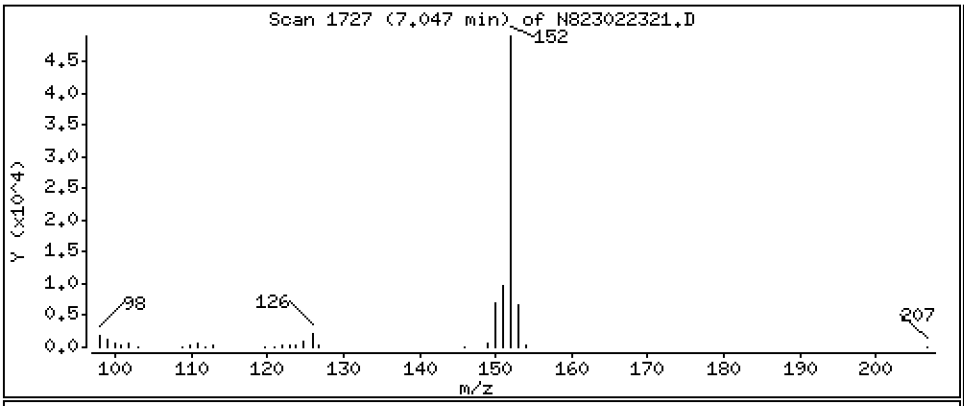
Operator: JZ

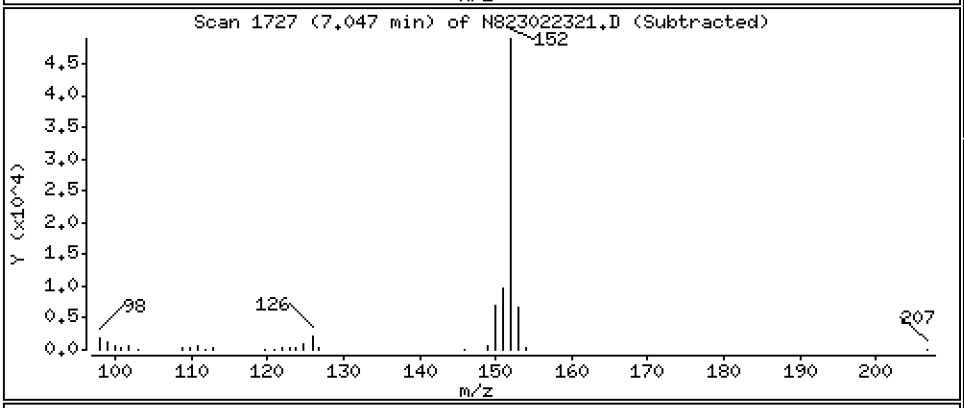
Column phase: Rxi-17sil

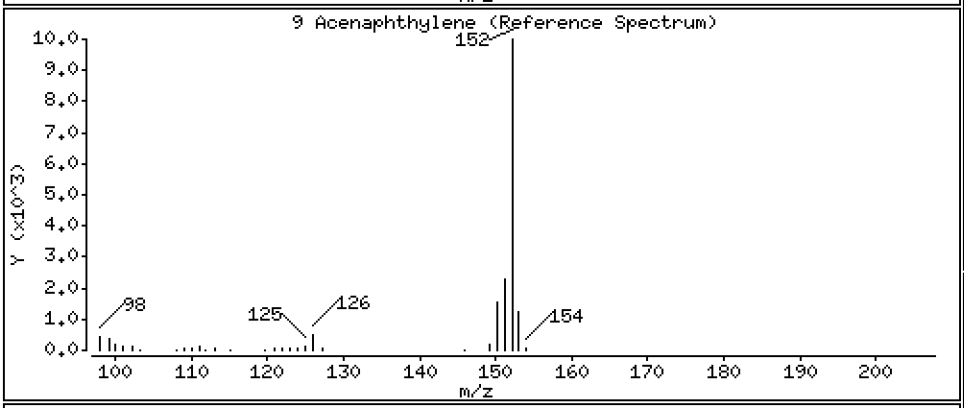
Column diameter: 0.25

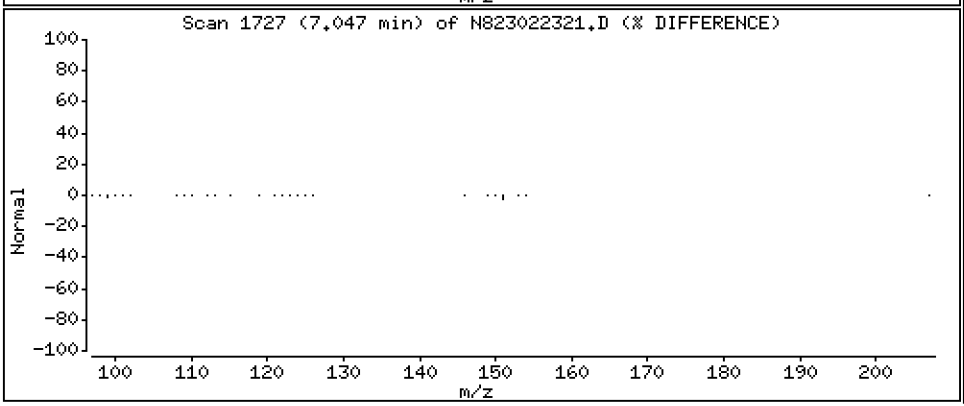
9 Acenaphthylene

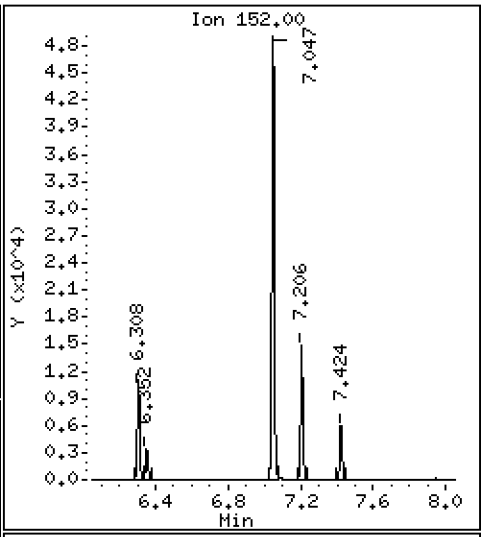
Concentration: 2.675 ug/mL

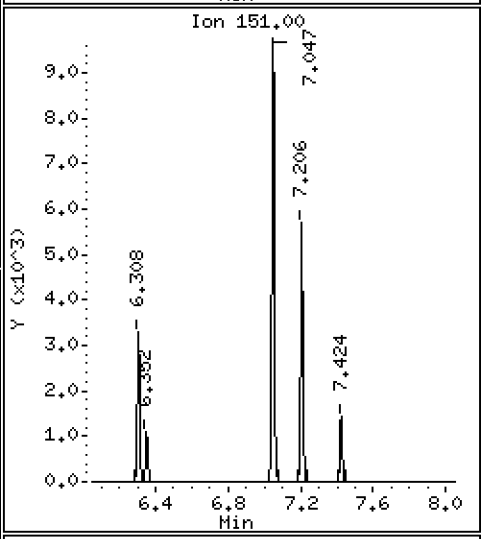


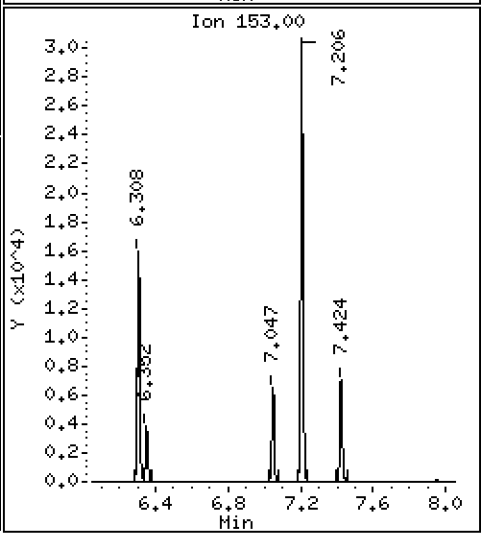












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Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

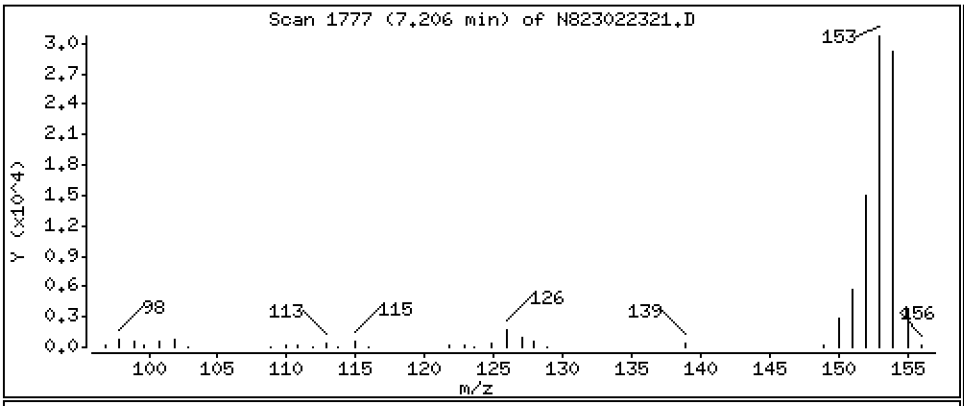
Operator: JZ

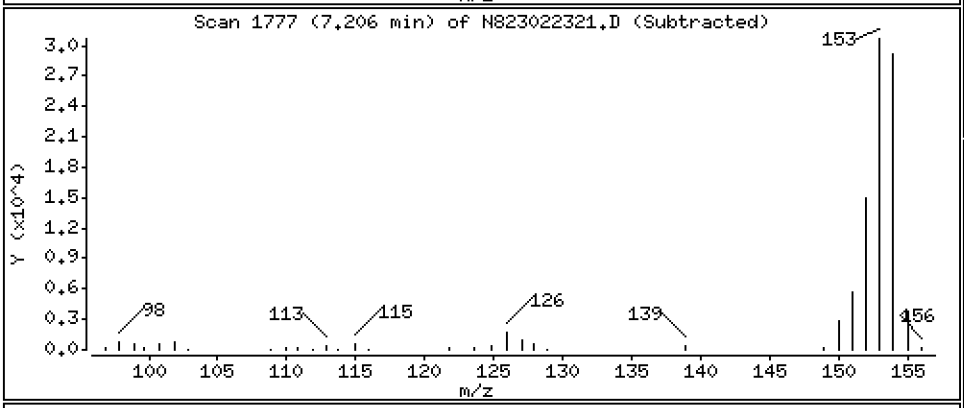
Column phase: Rxi-17sil

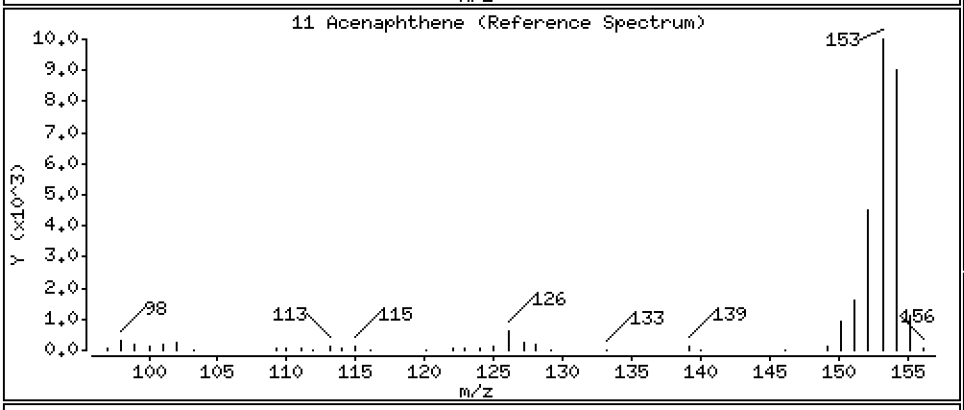
Column diameter: 0.25

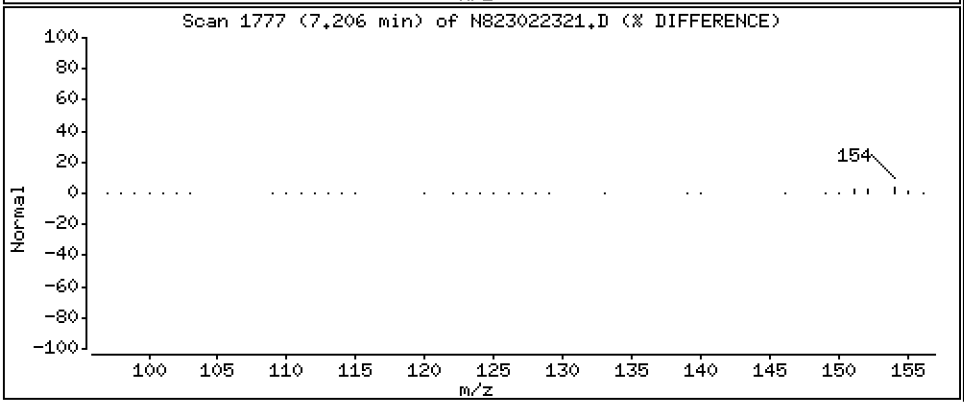
11 Acenaphthene

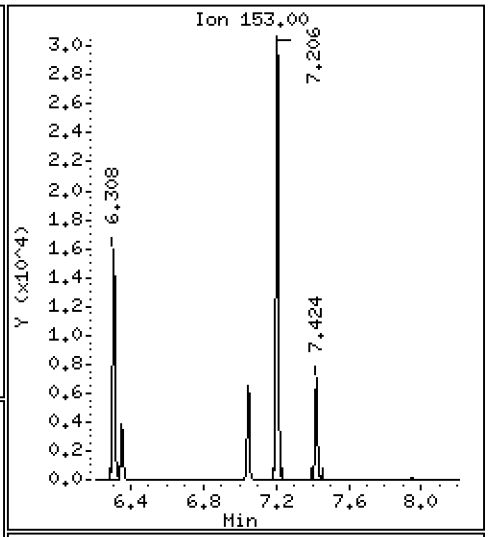
Concentration: 2.533 ug/mL

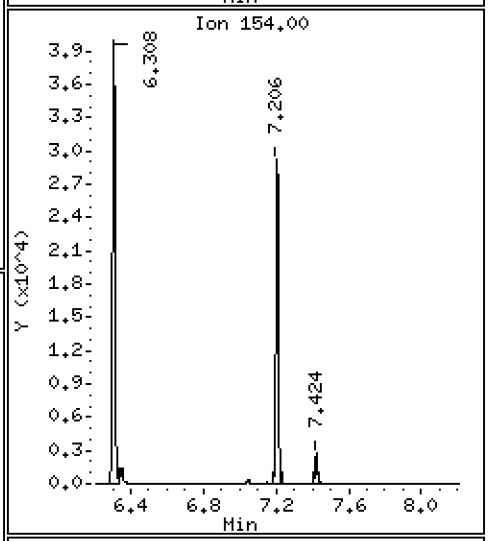


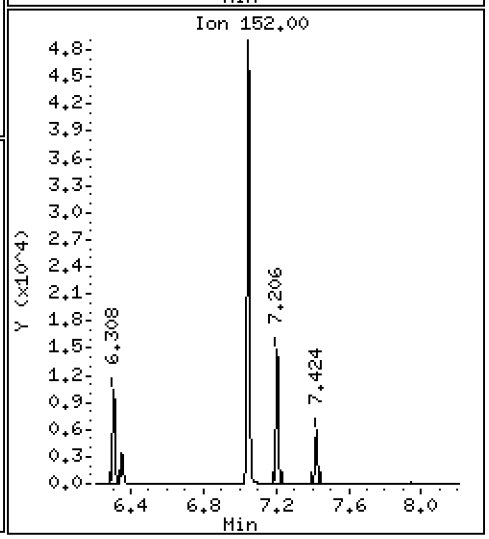












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

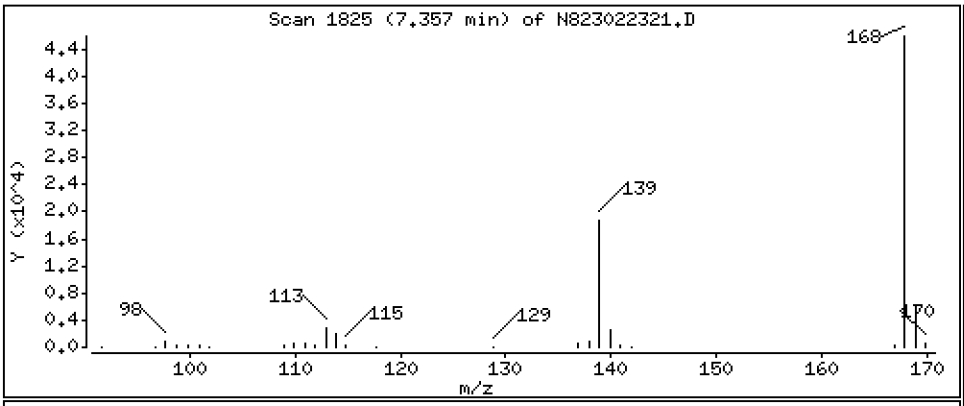
Operator: JZ

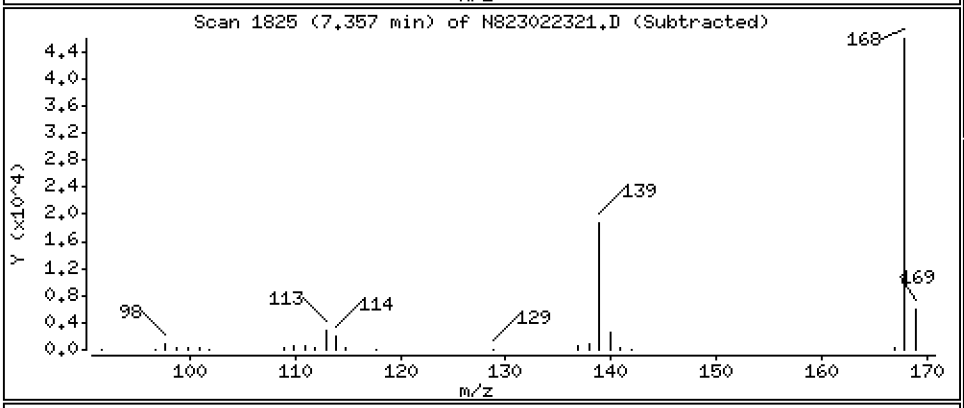
Column phase: Rxi-17sil

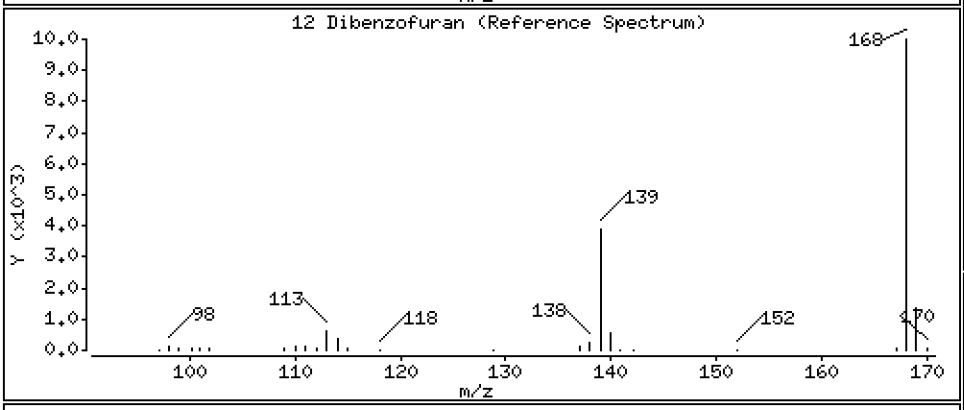
Column diameter: 0.25

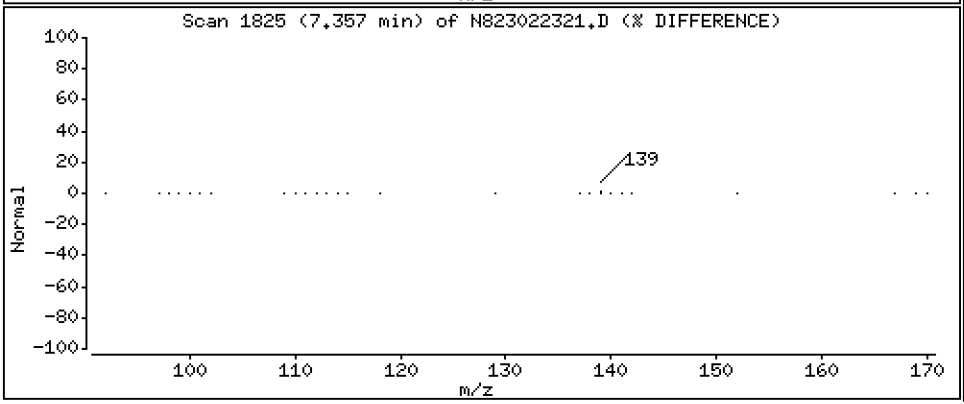
12 Dibenzofuran

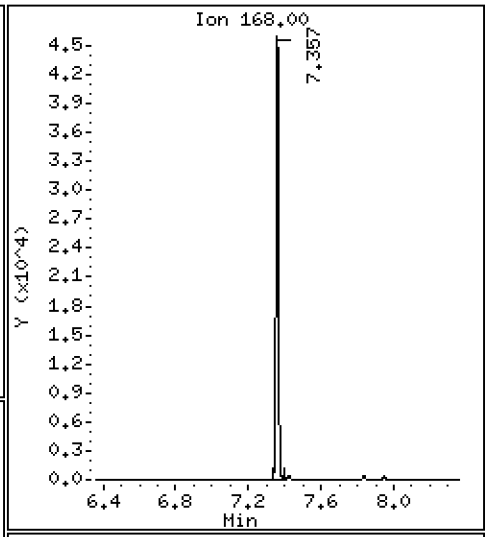
Concentration: 2.508 ug/mL

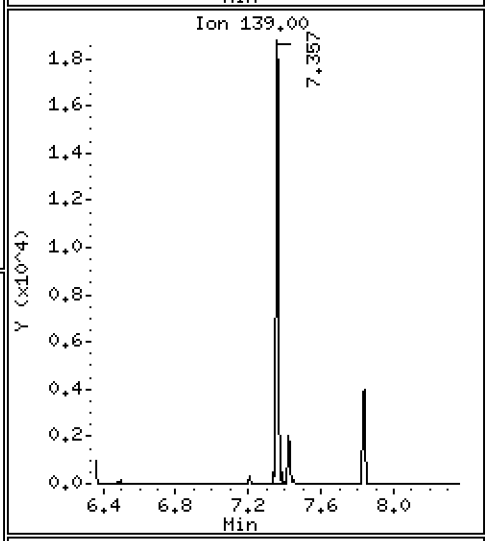


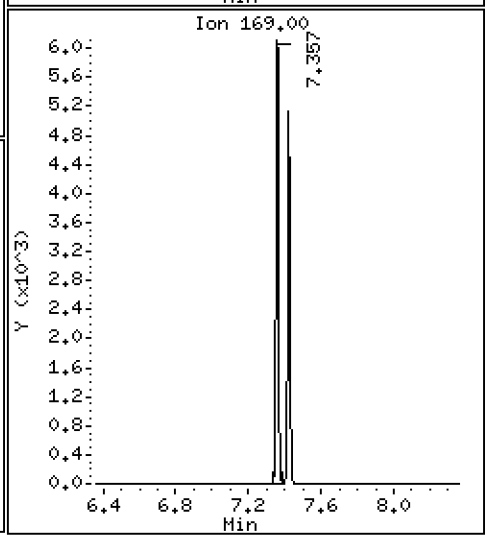












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Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

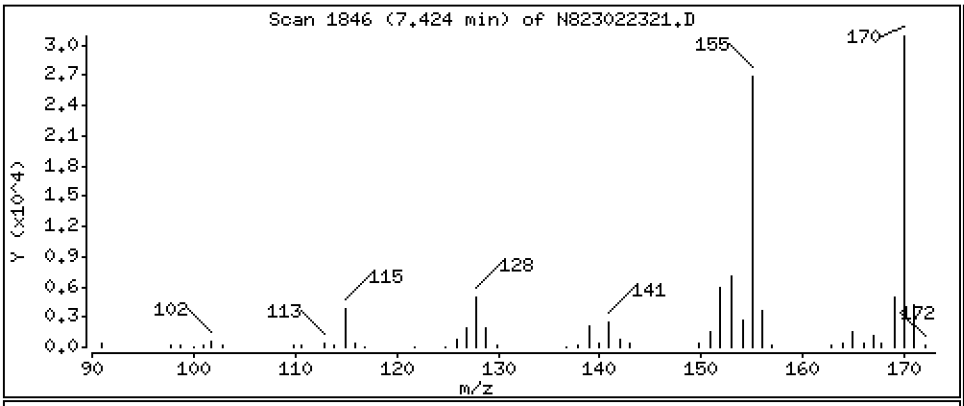
Operator: JZ

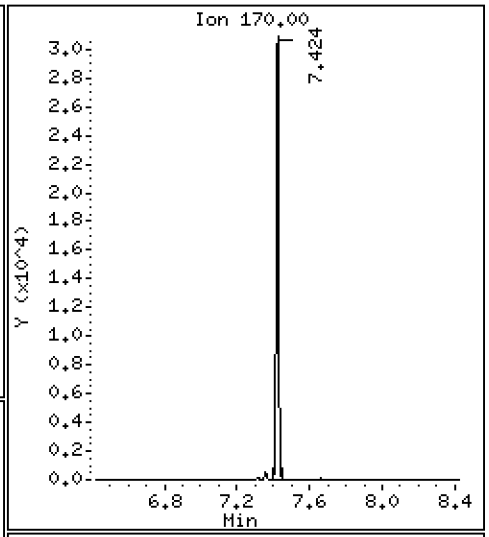
Column phase: Rxi-17sil

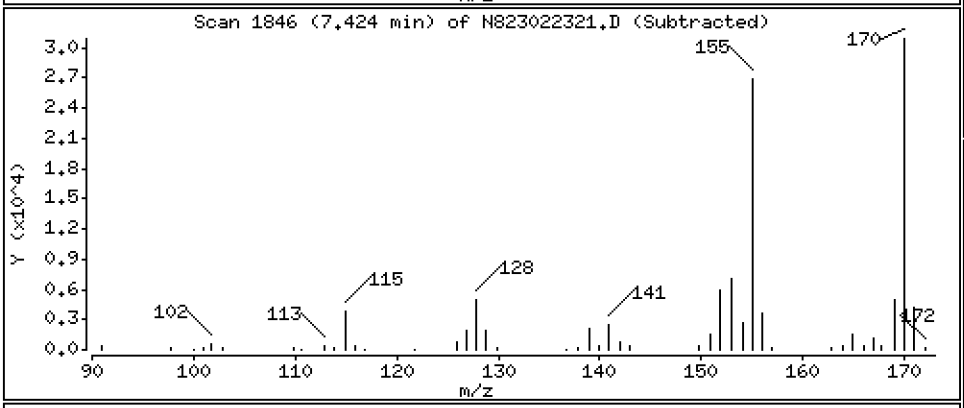
Column diameter: 0.25

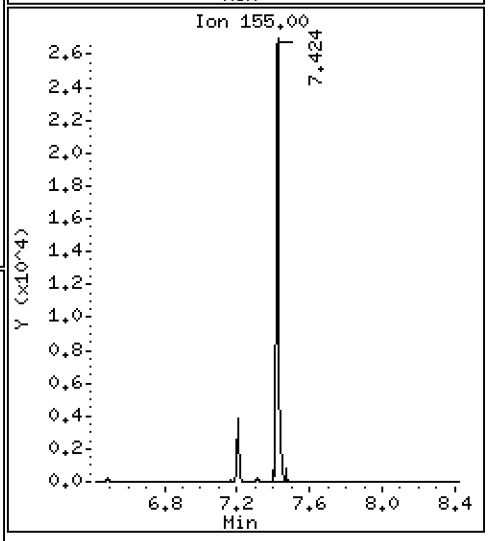
13 1,6,7-Trimethylnaphthalene

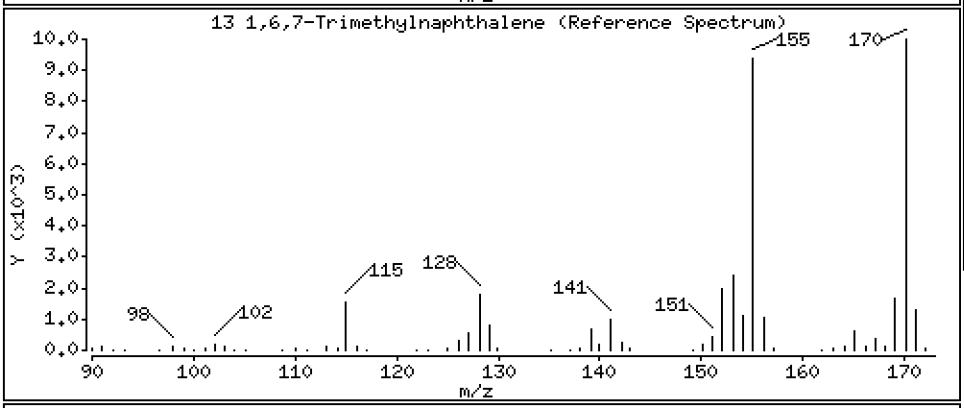
Concentration: 2.625 ug/mL

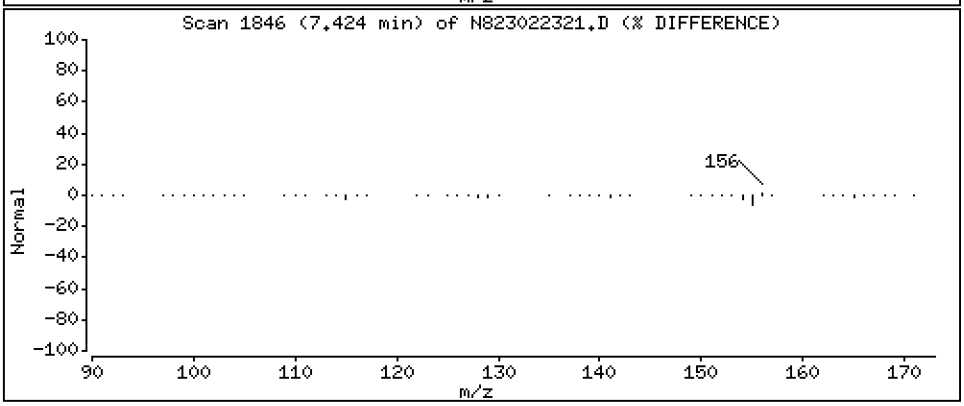












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

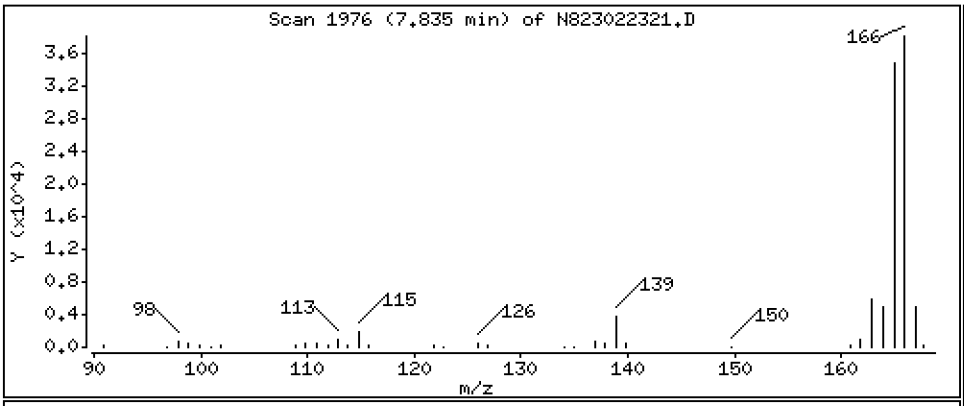
Operator: JZ

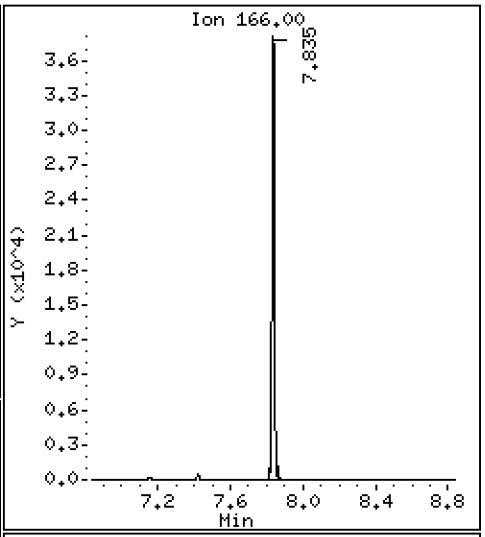
Column phase: Rxi-17sil

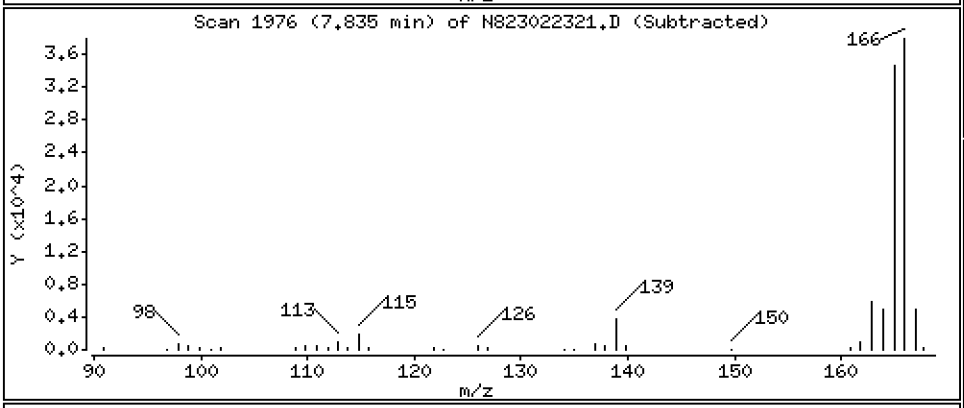
Column diameter: 0.25

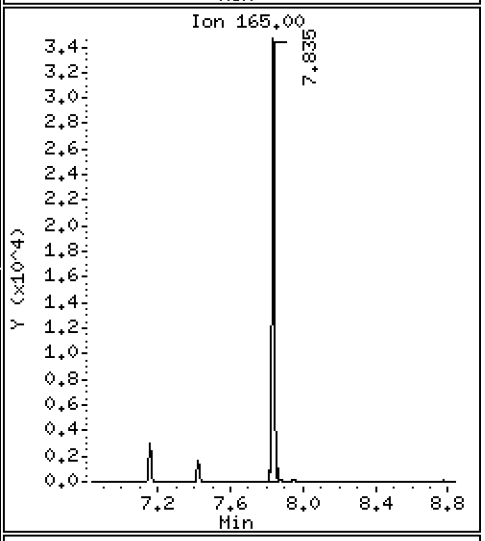
14 Fluorene

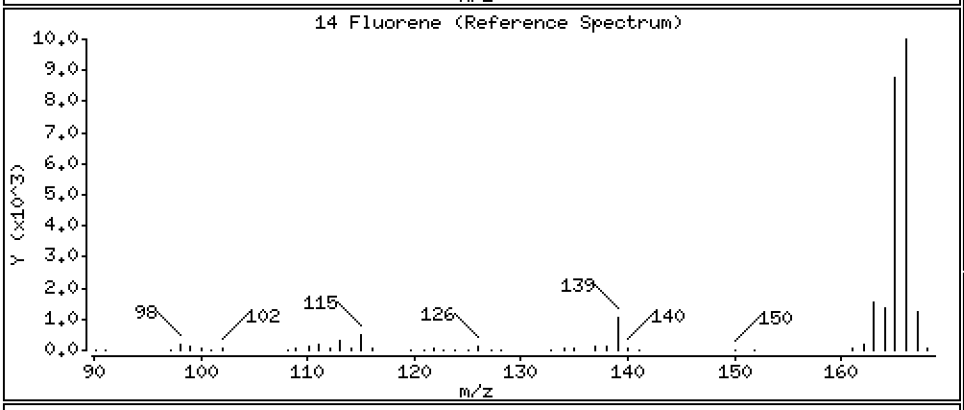
Concentration: 2.639 ug/mL

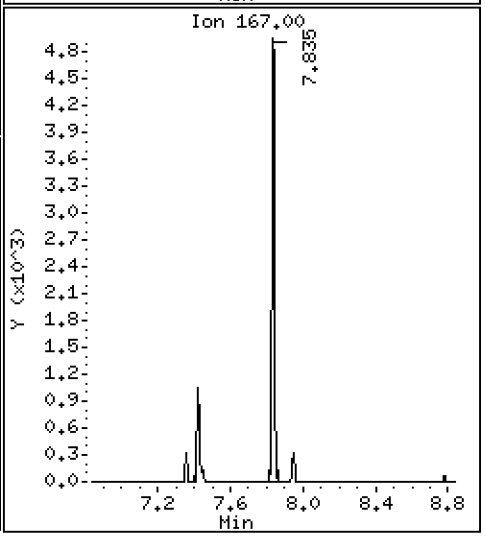


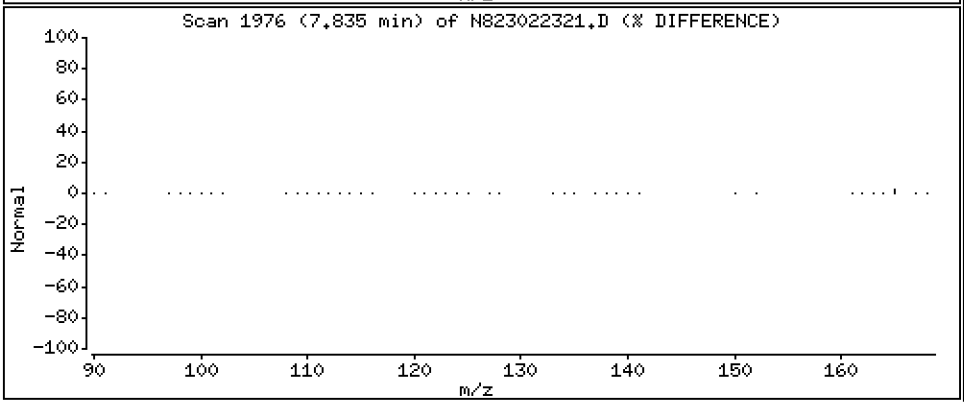












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Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

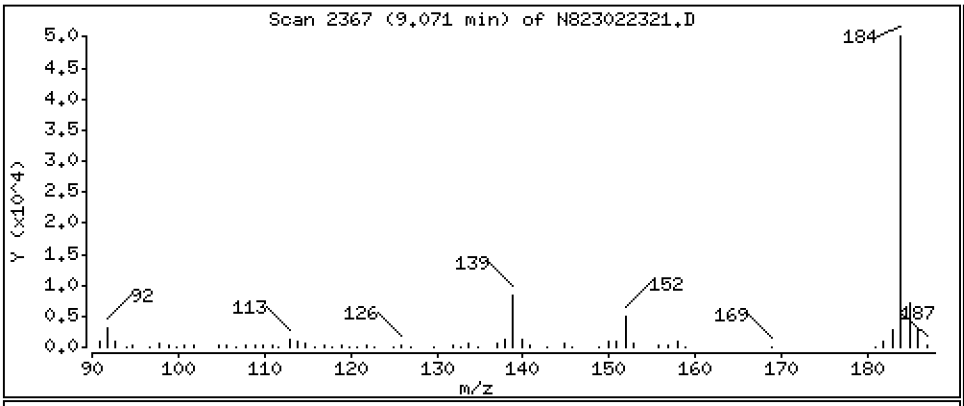
Operator: JZ

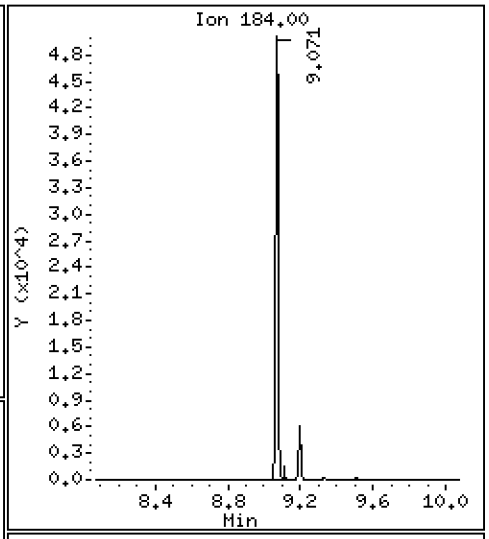
Column phase: Rxi-17sil

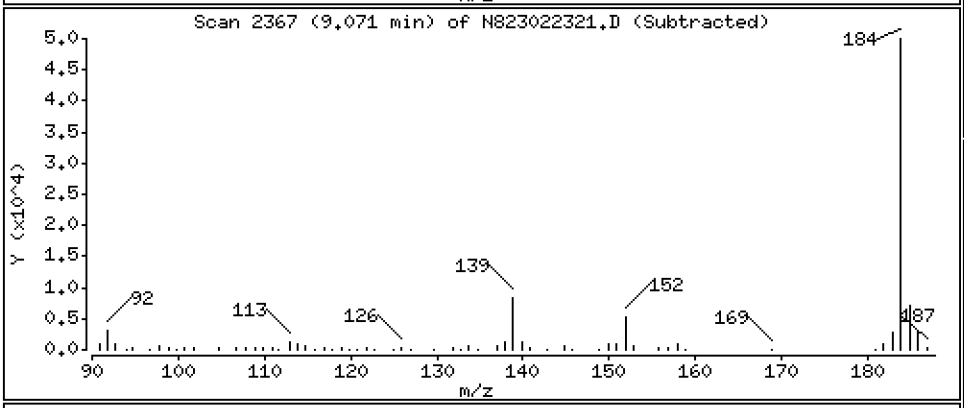
Column diameter: 0.25

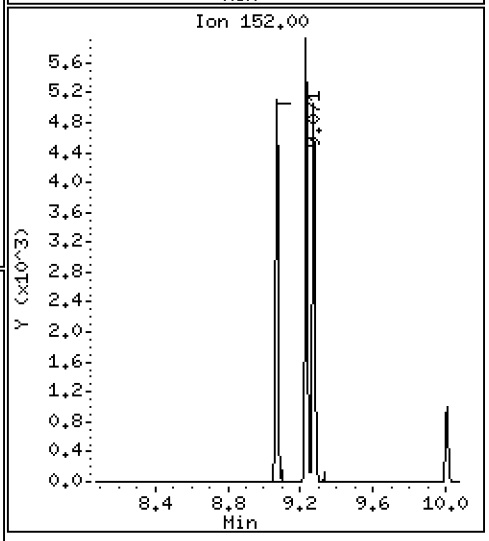
18 Dibenzothiophene

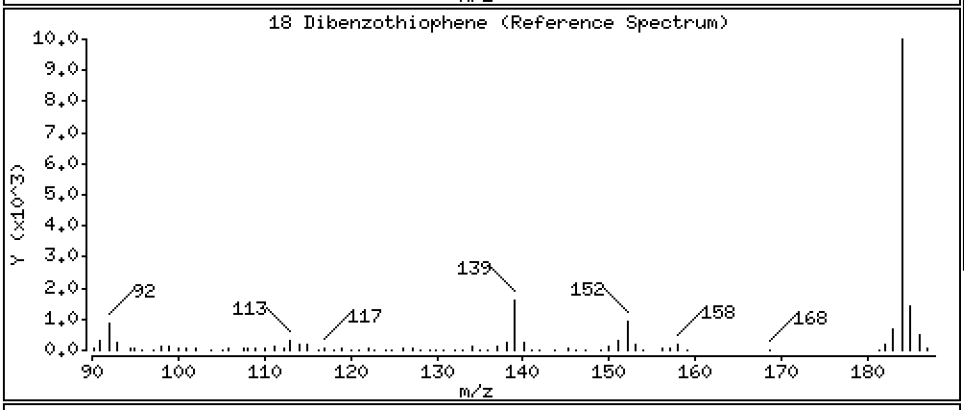
Concentration: 2.539 ug/mL

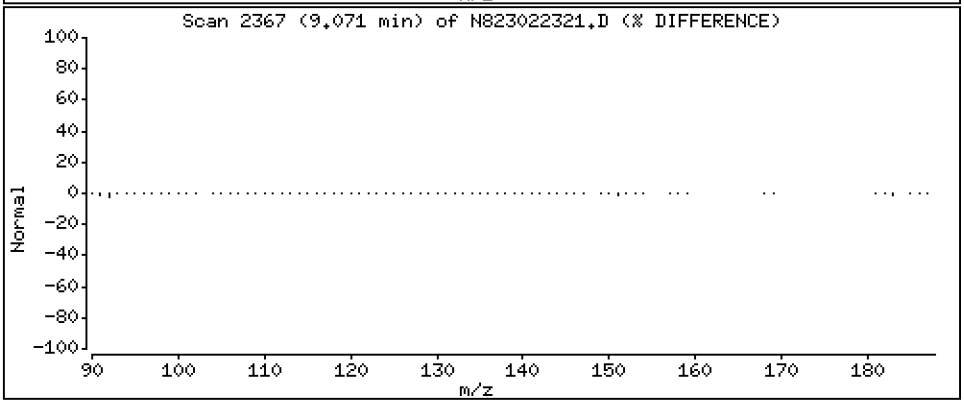












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

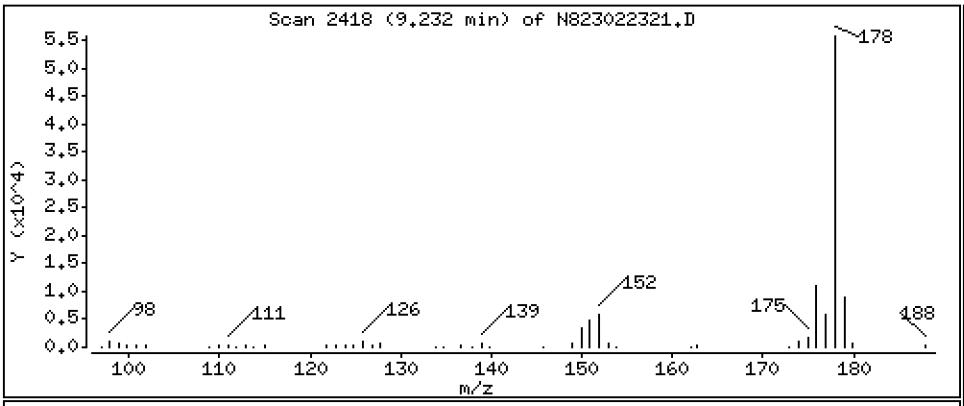
Operator: JZ

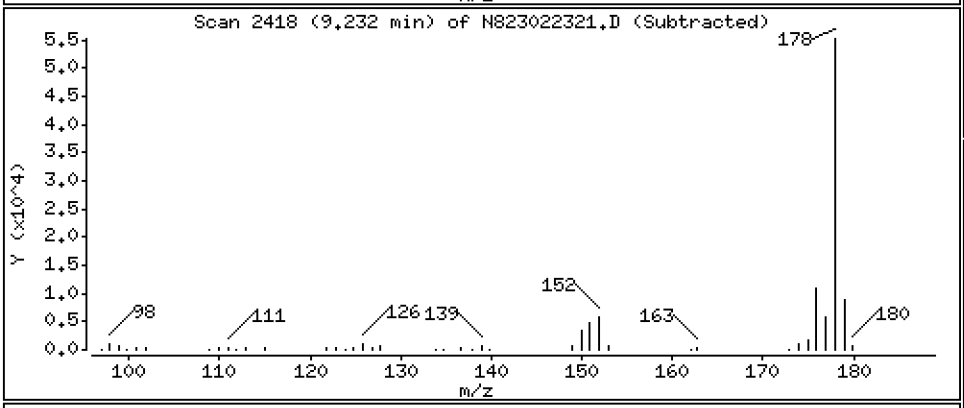
Column phase: Rxi-17sil

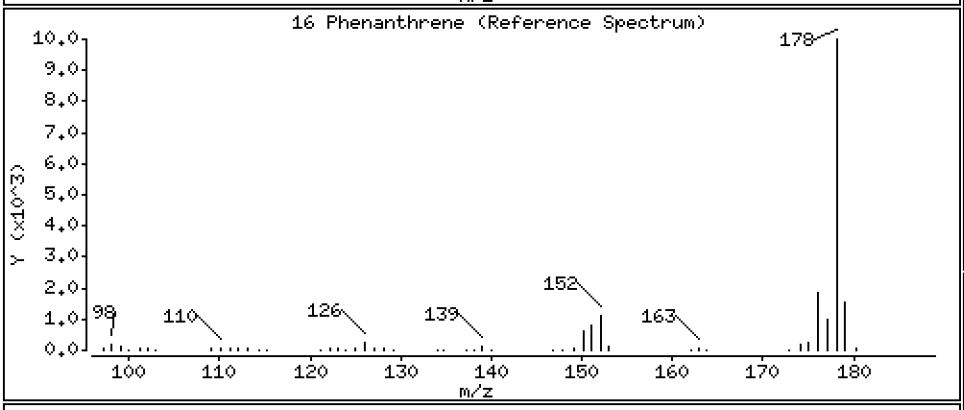
Column diameter: 0.25

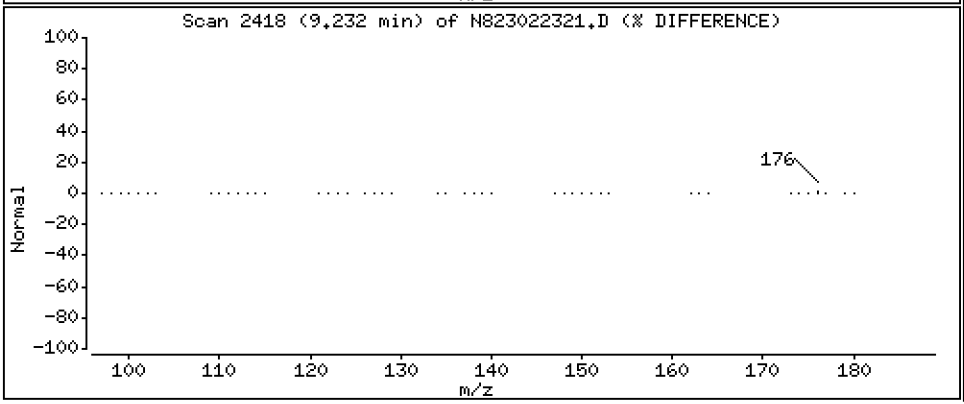
16 Phenanthrene

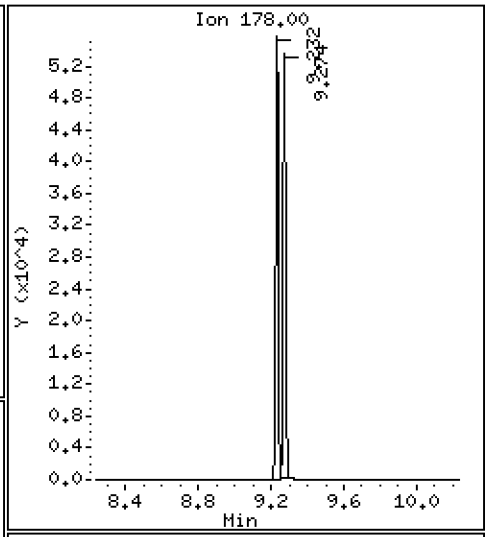
Concentration: 2.466 ug/mL

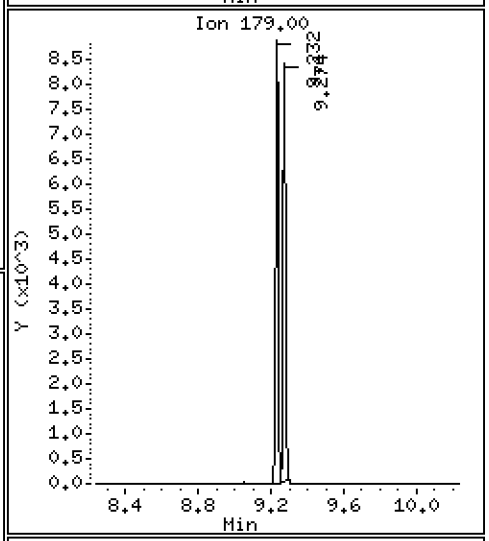


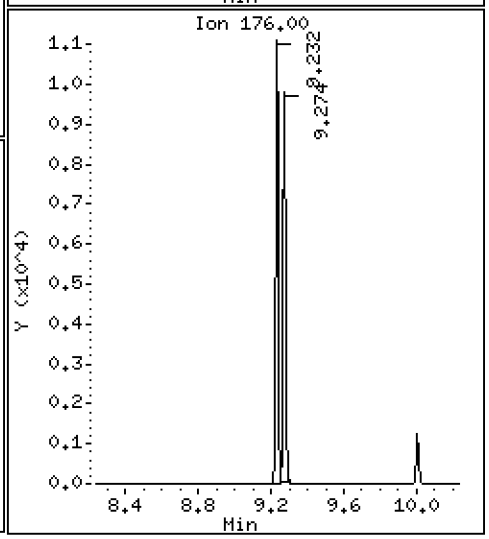












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Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

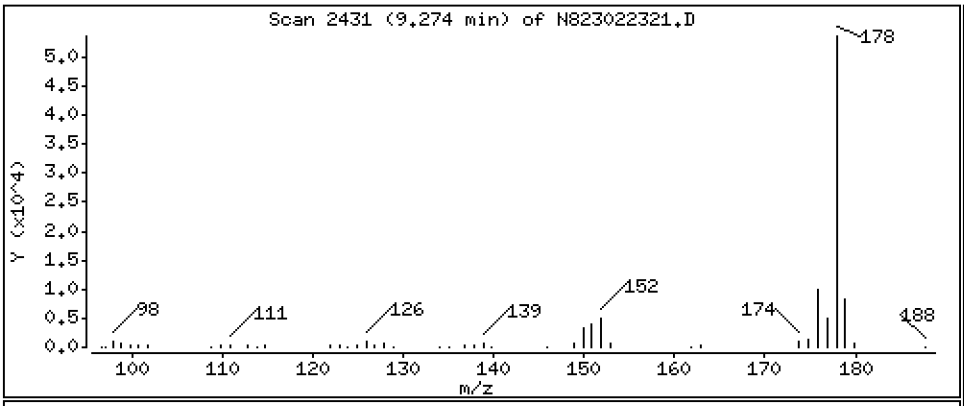
Operator: JZ

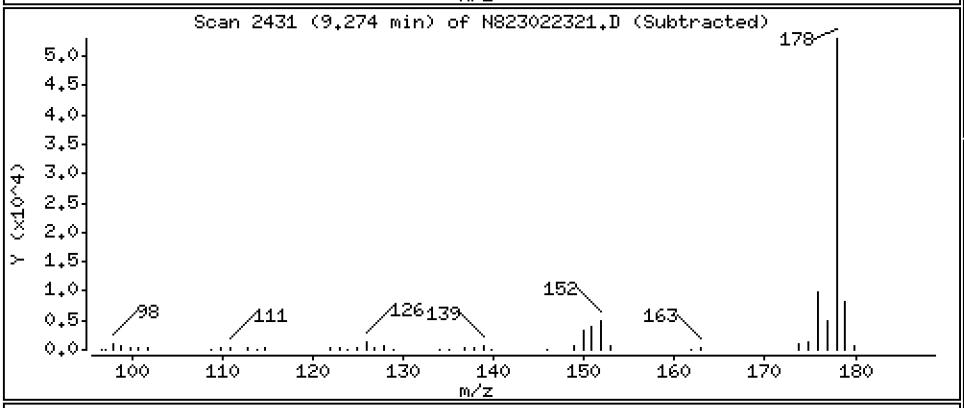
Column phase: Rxi-17sil

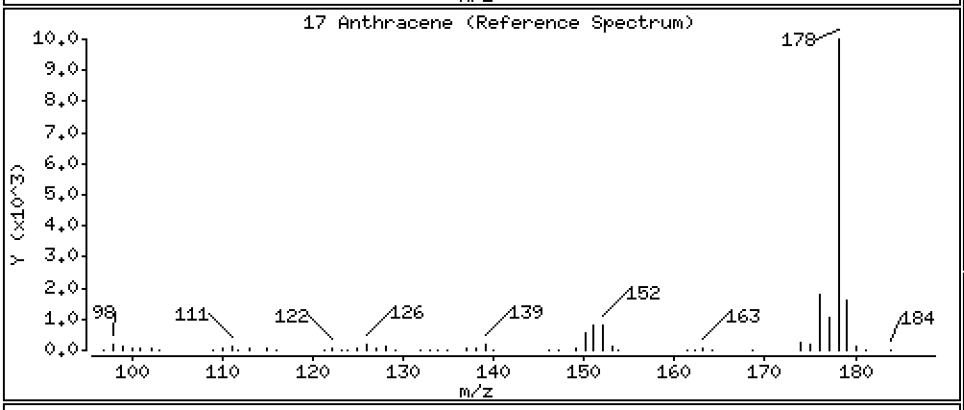
Column diameter: 0.25

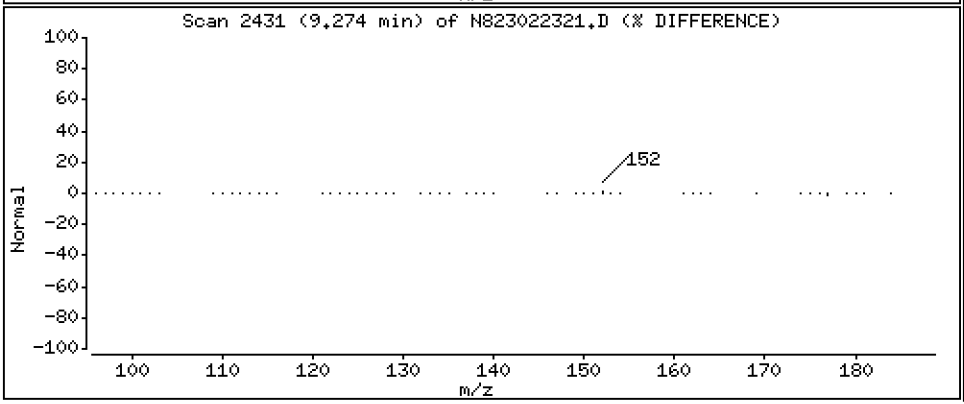
17 Anthracene

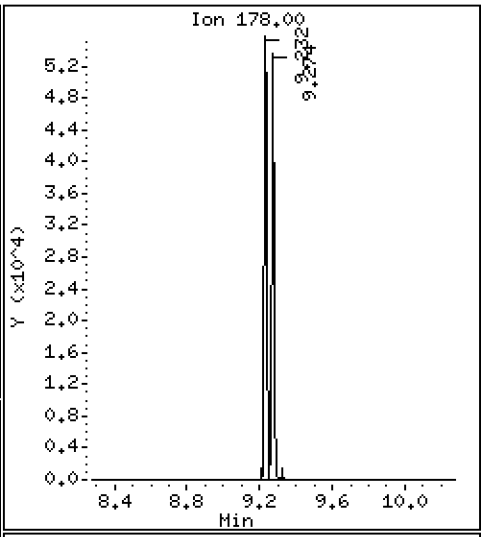
Concentration: 2.660 ug/mL

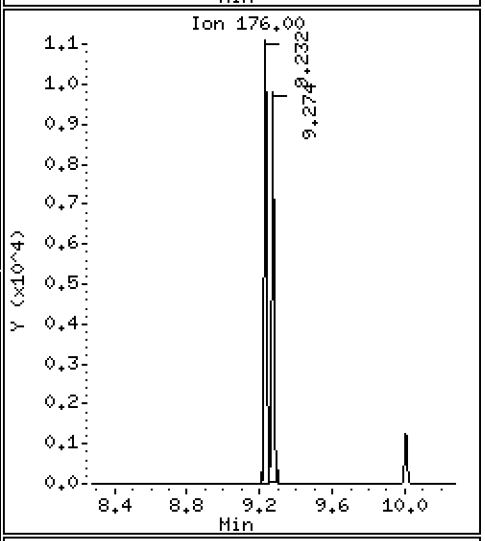


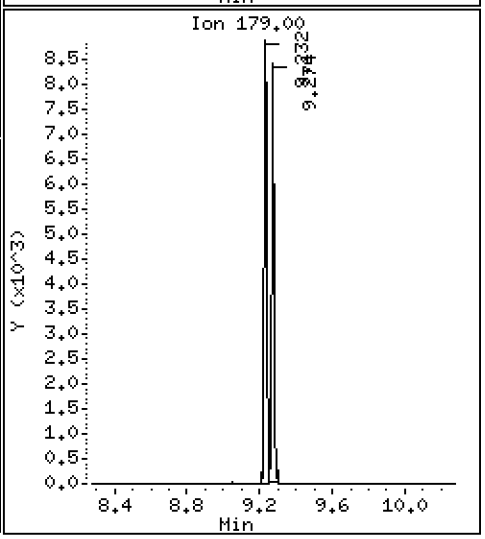












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

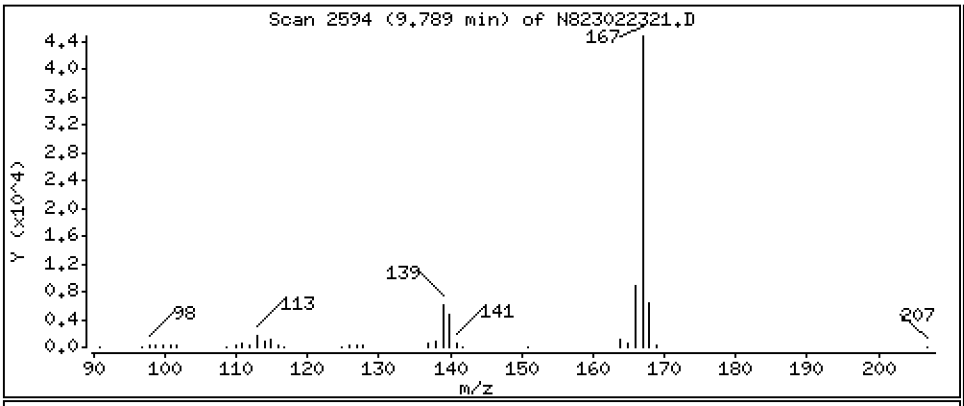
Operator: JZ

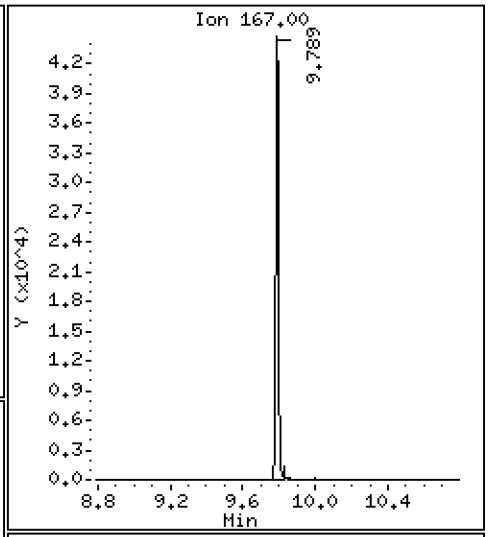
Column phase: Rxi-17sil

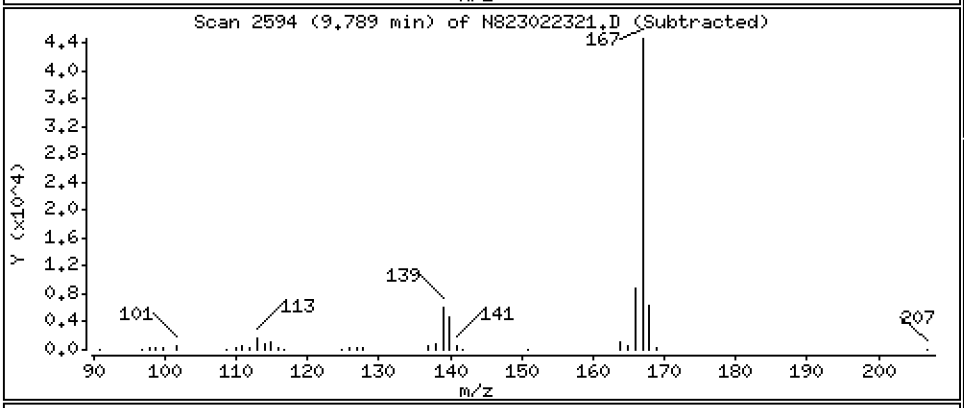
Column diameter: 0.25

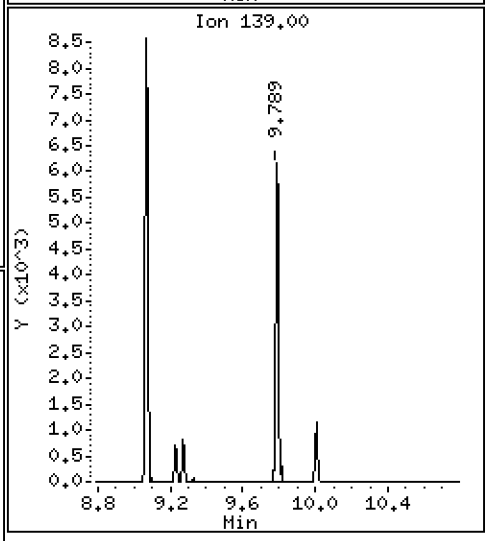
19 Carbazole

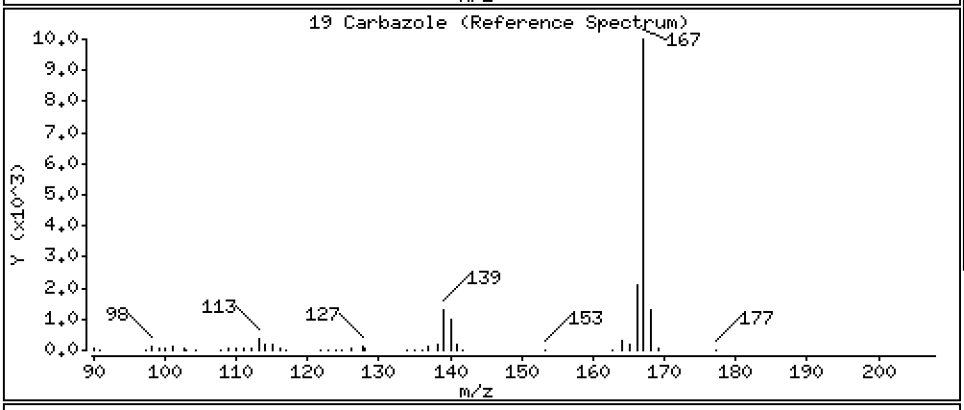
Concentration: 2.593 ug/mL

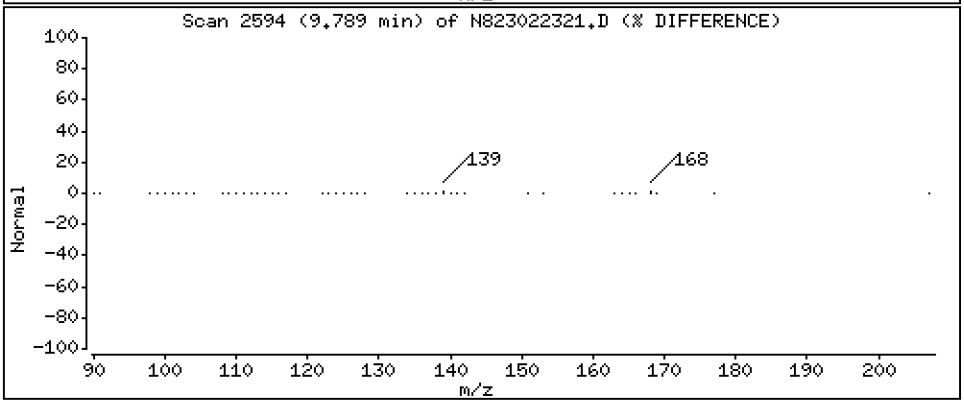












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

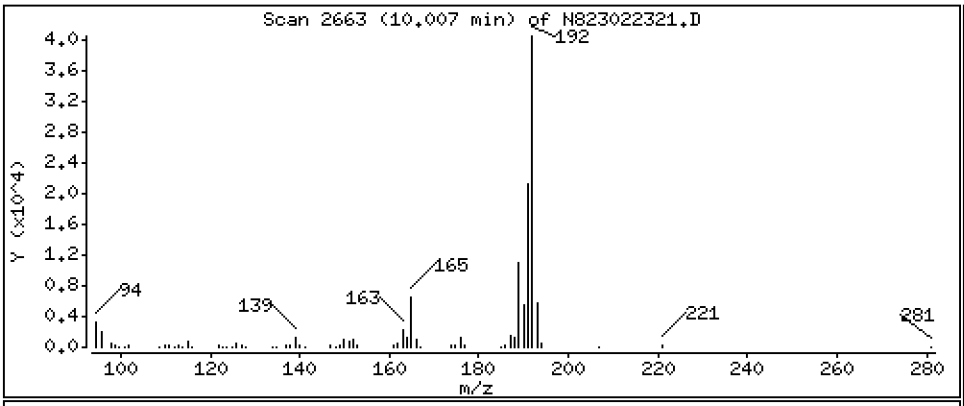
Operator: JZ

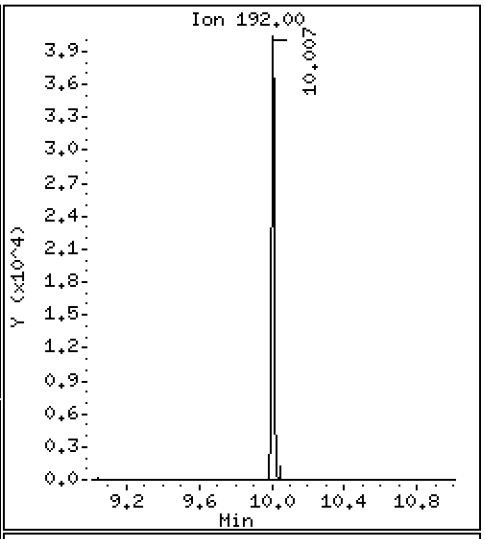
Column phase: Rxi-17sil

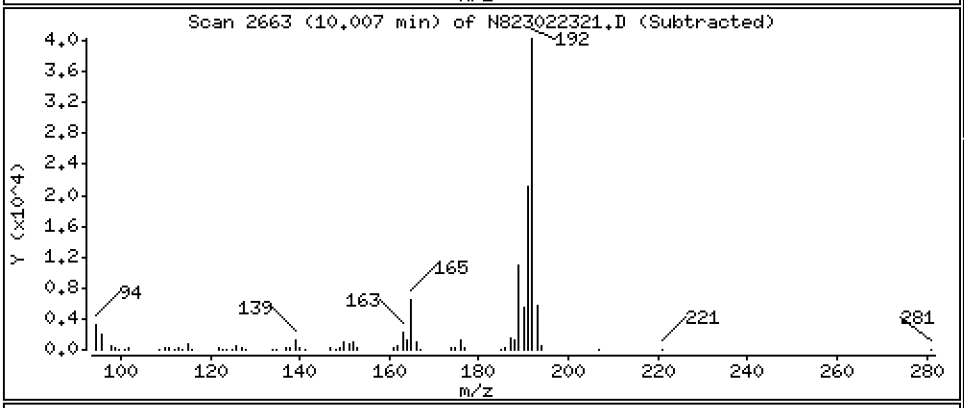
Column diameter: 0.25

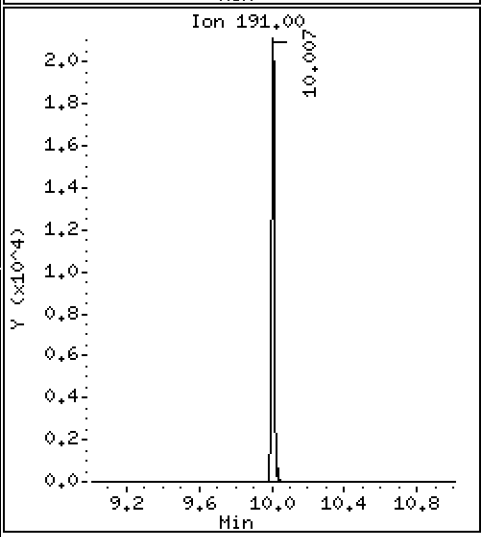
20 1-Methylphenanthrene

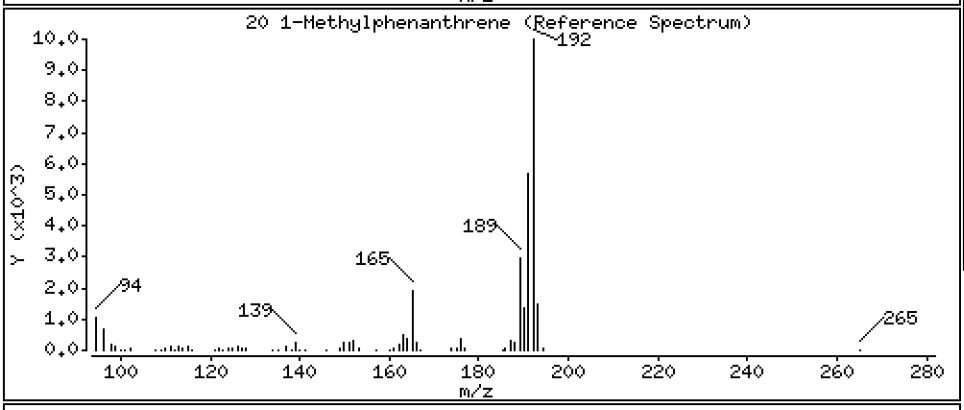
Concentration: 2.686 ug/mL

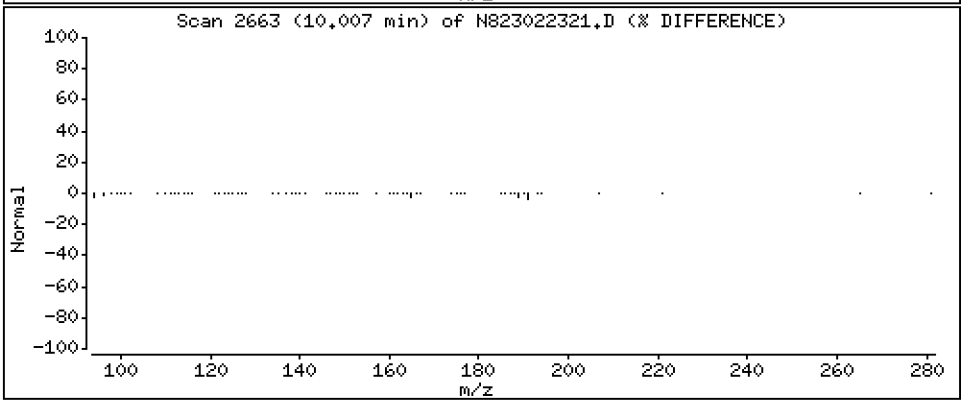












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

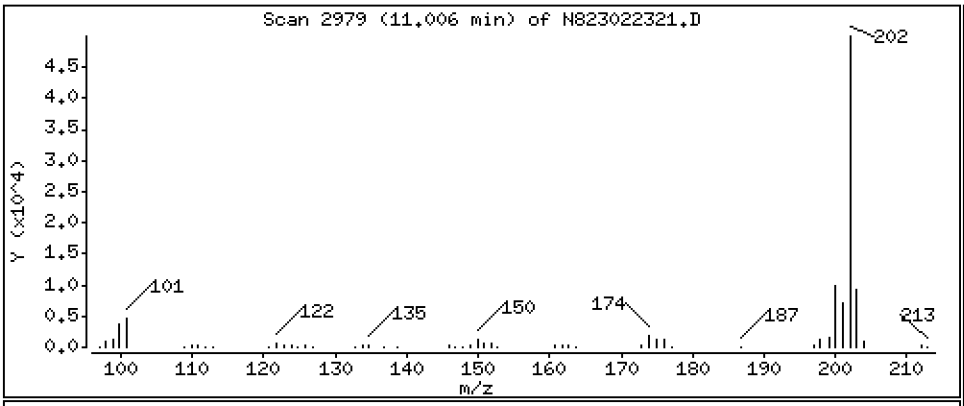
Operator: JZ

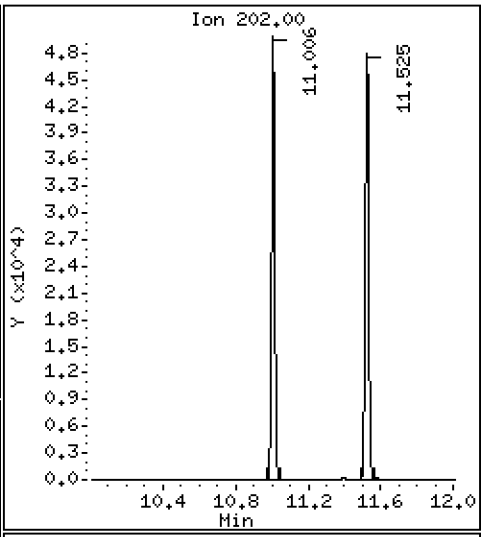
Column phase: Rxi-17sil

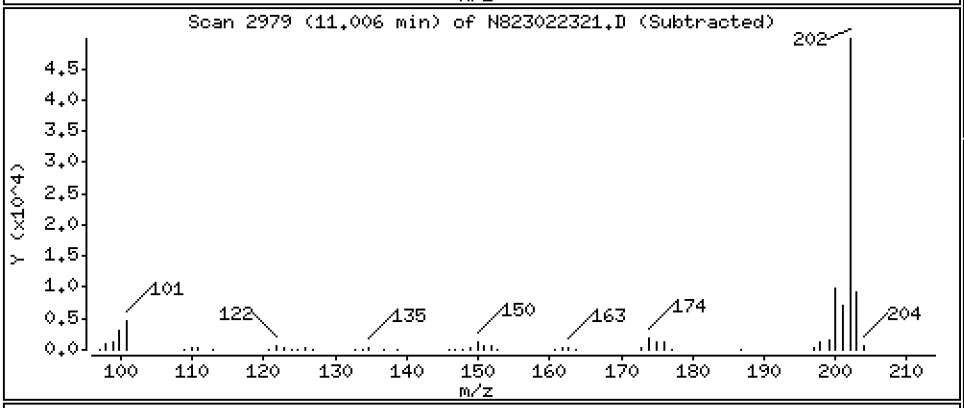
Column diameter: 0.25

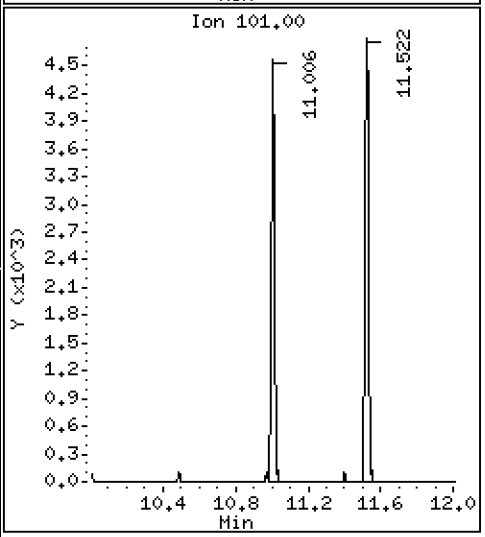
22 Fluoranthene

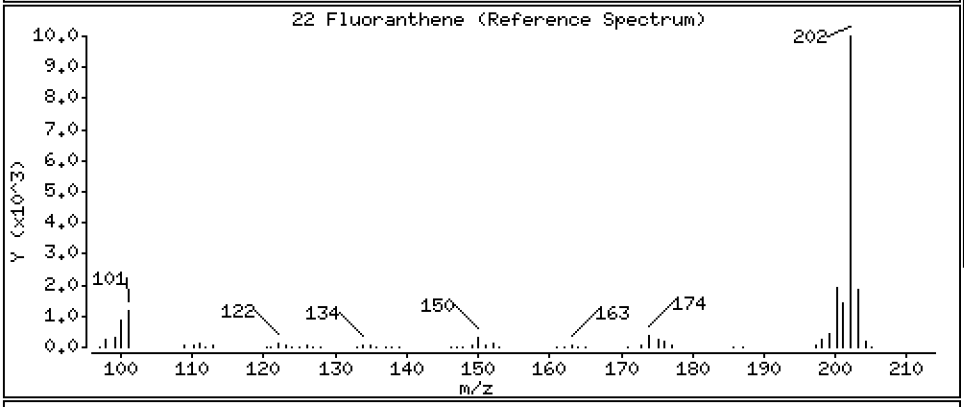
Concentration: 2.655 ug/mL

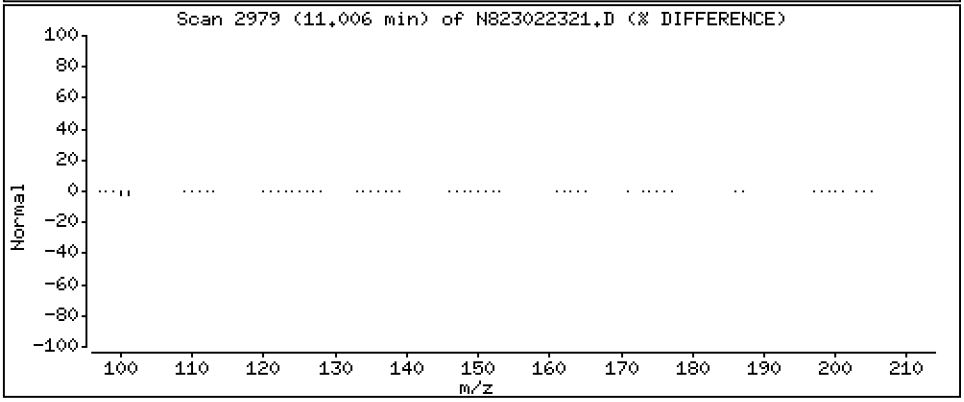












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

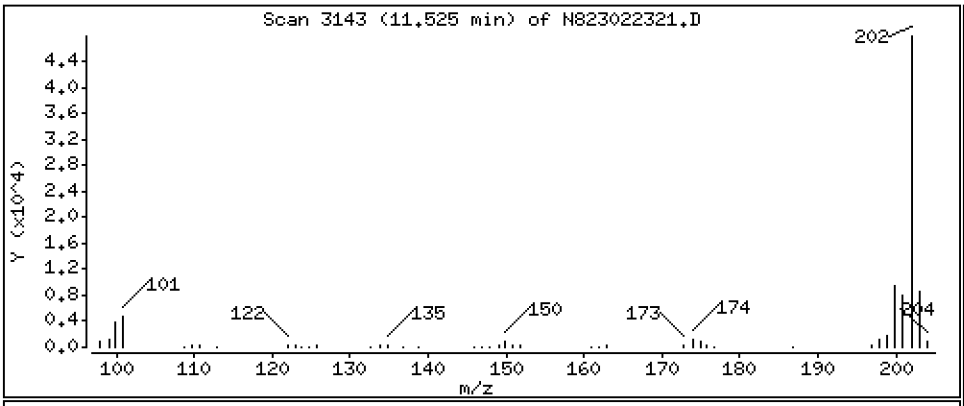
Operator: JZ

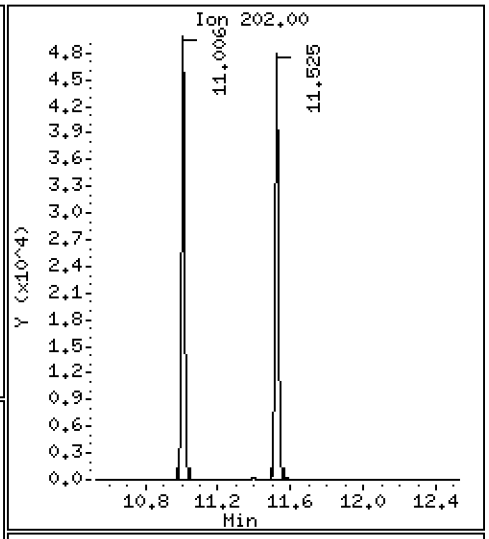
Column phase: Rxi-17sil

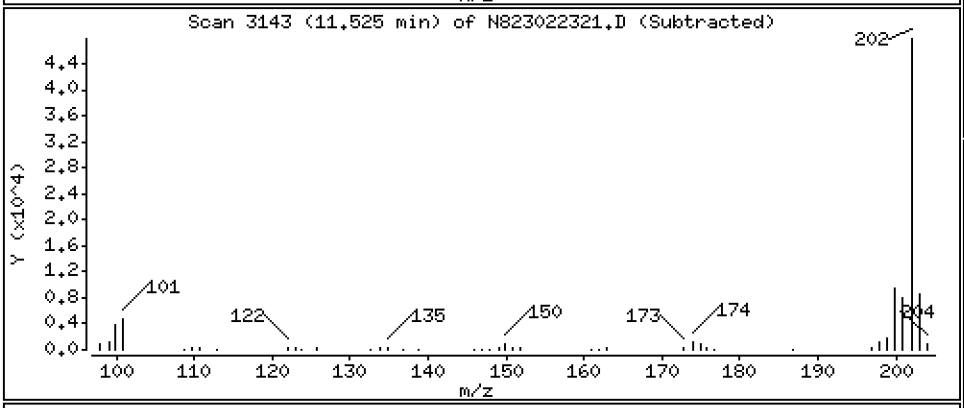
Column diameter: 0.25

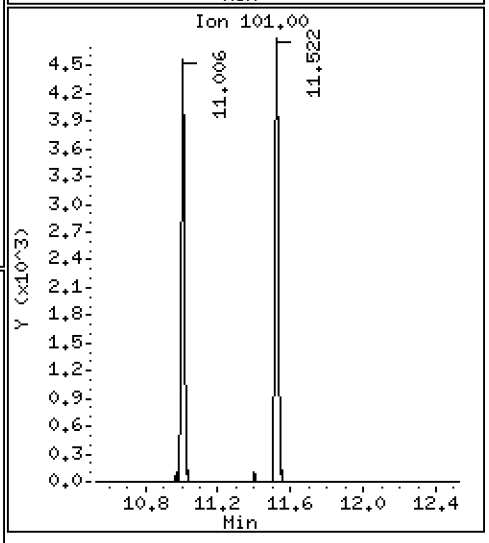
23 Pyrene

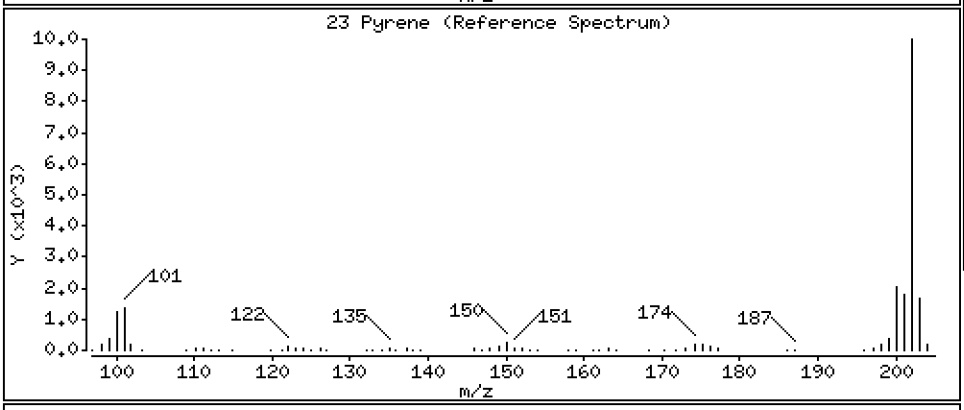
Concentration: 2.590 ug/mL

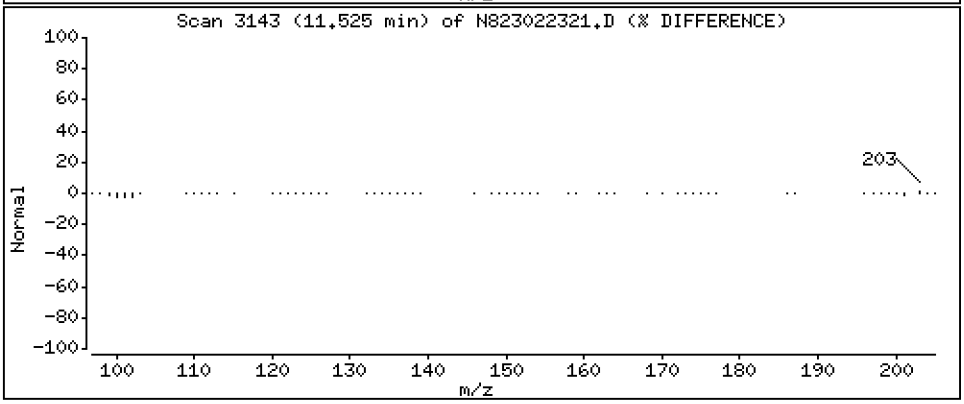












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

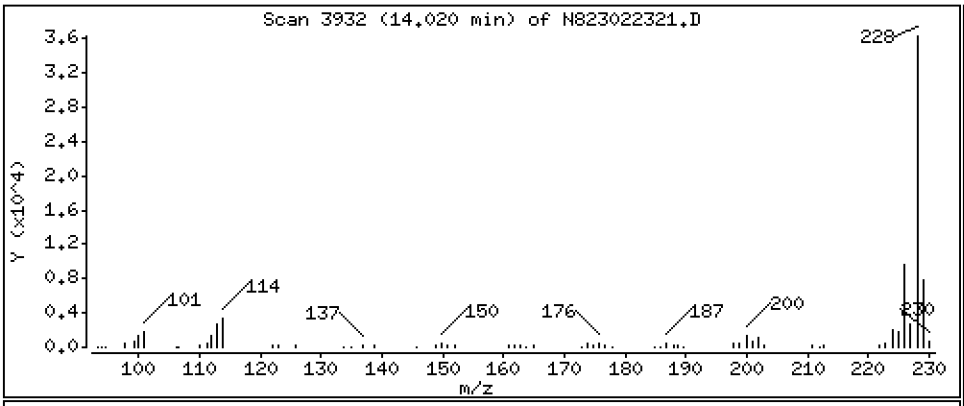
Operator: JZ

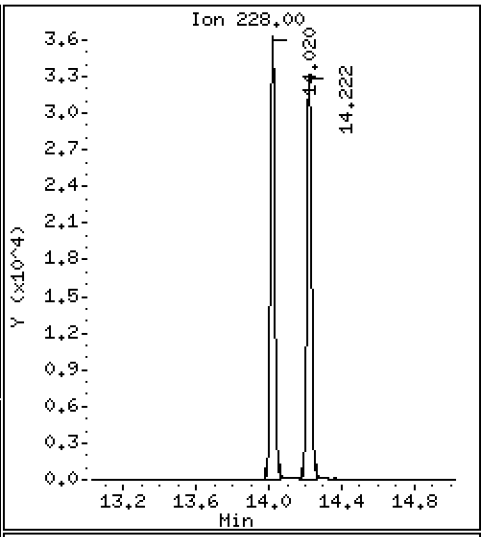
Column phase: Rxi-17sil

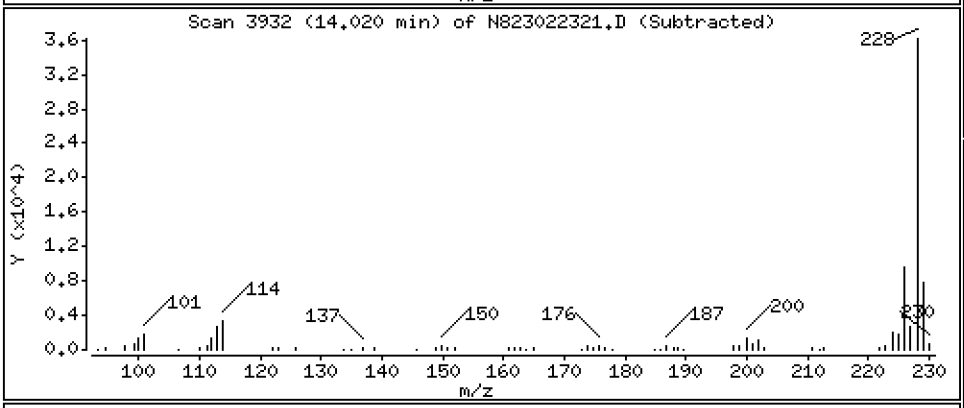
Column diameter: 0.25

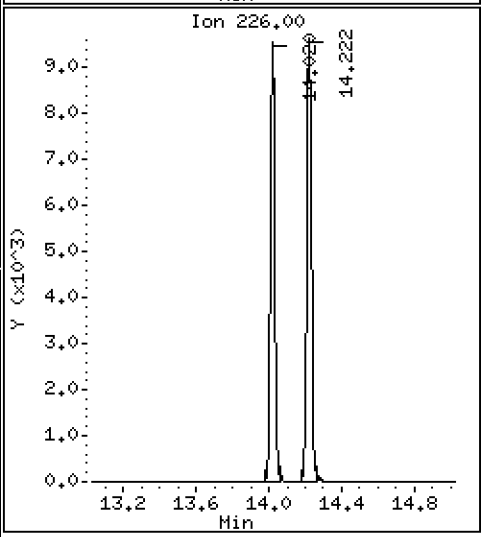
24 Benzo(a)anthracene

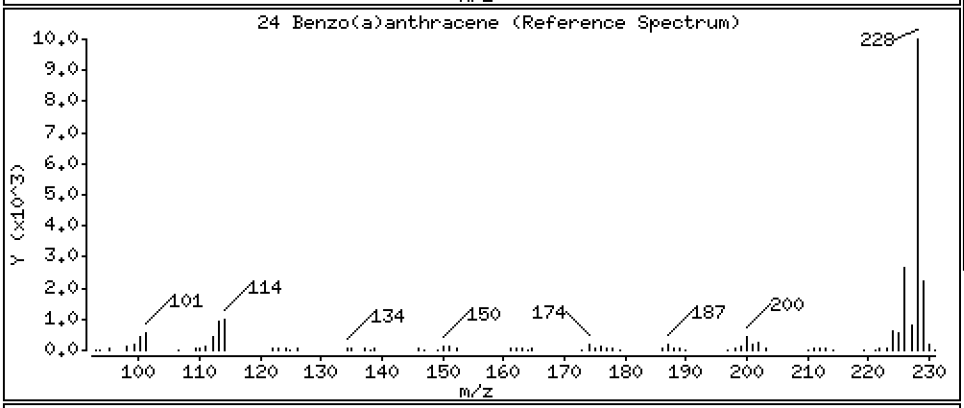
Concentration: 2.747 ug/mL

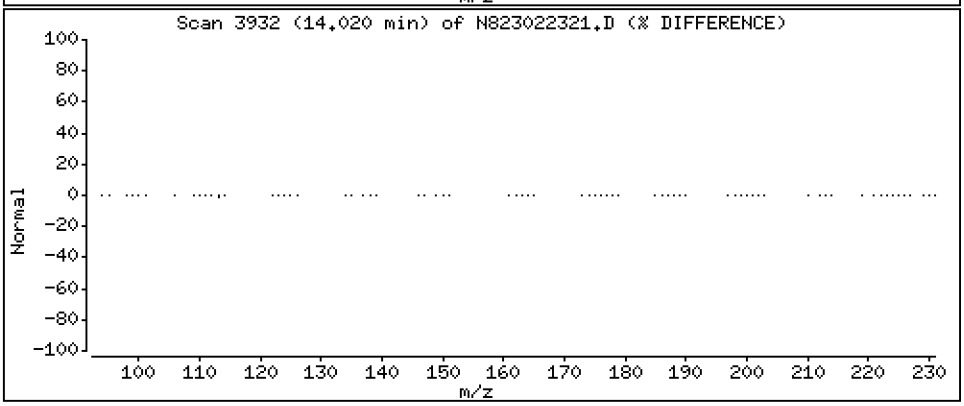












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

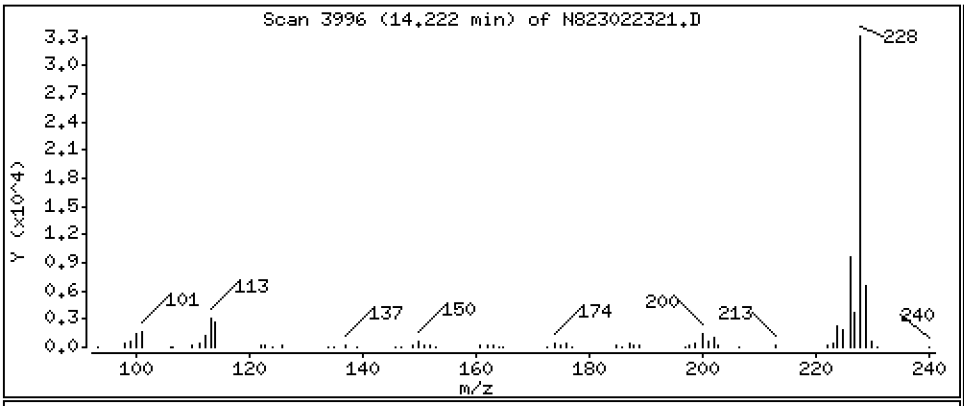
Operator: JZ

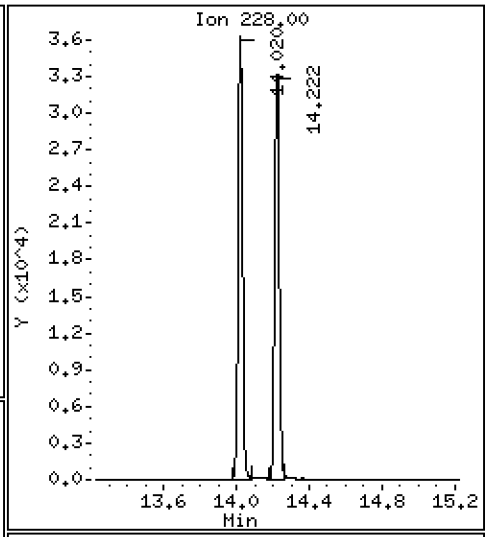
Column phase: Rxi-17sil

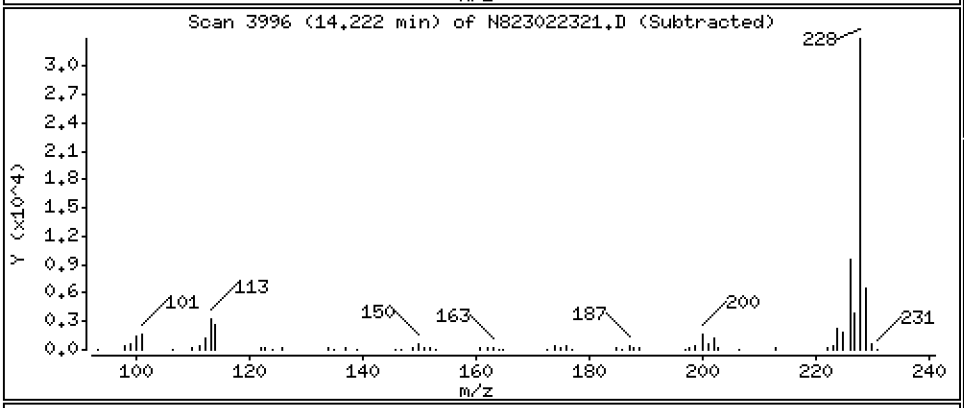
Column diameter: 0.25

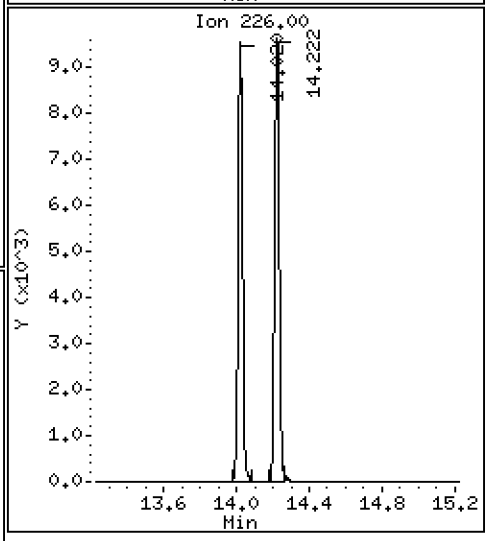
27 Chrysene

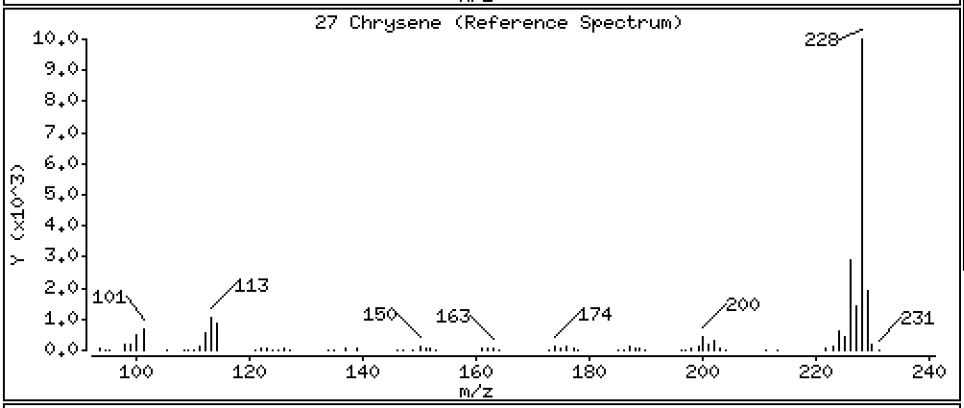
Concentration: 2.491 ug/mL

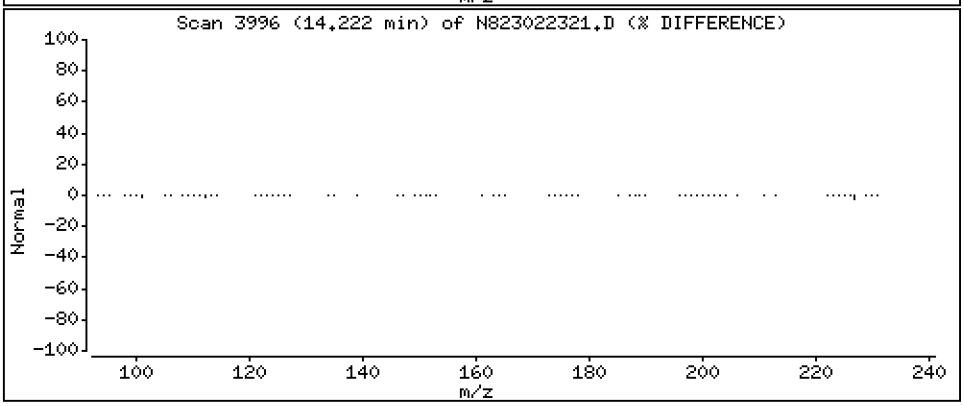












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

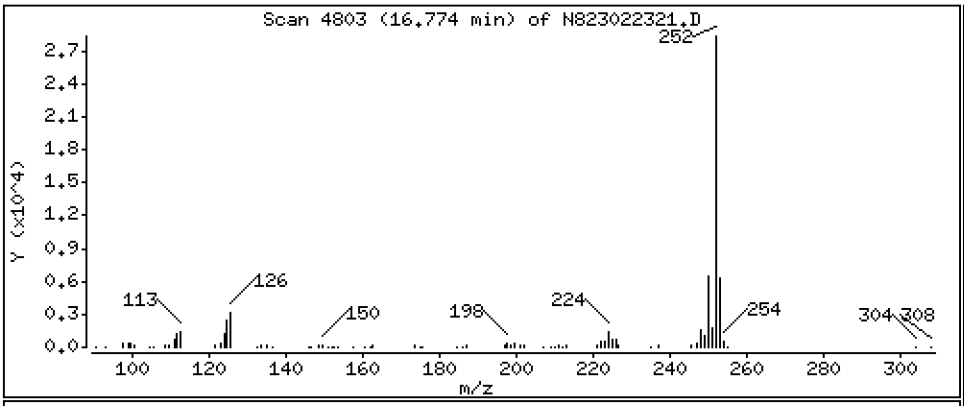
Operator: JZ

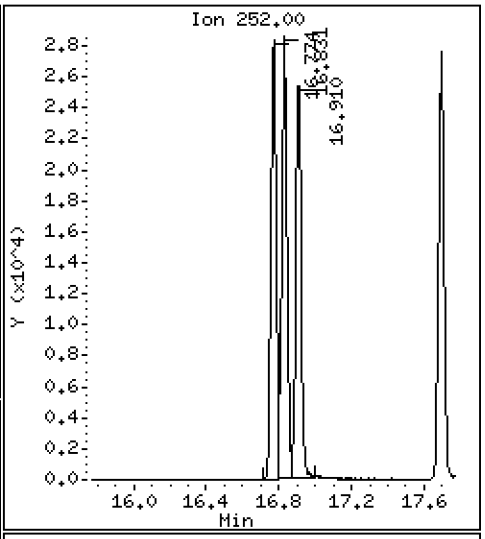
Column phase: Rxi-17sil

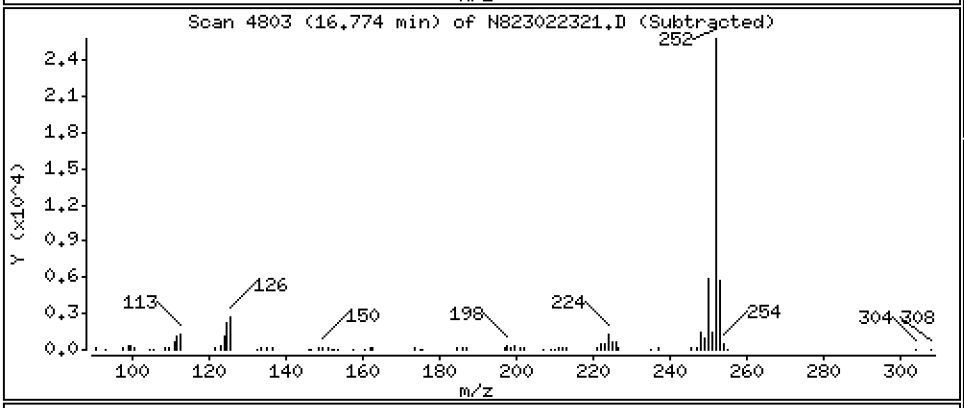
Column diameter: 0.25

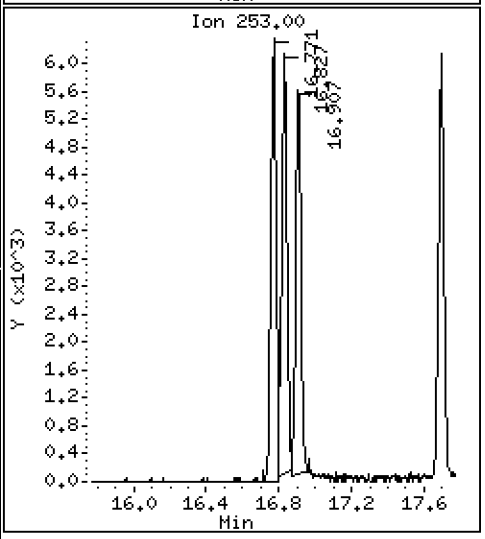
28 Benzo(b)fluoranthene

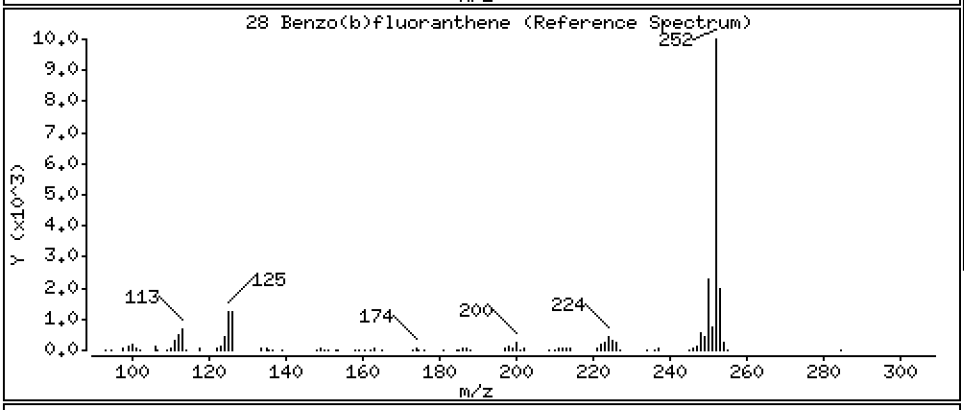
Concentration: 2.504 ug/mL

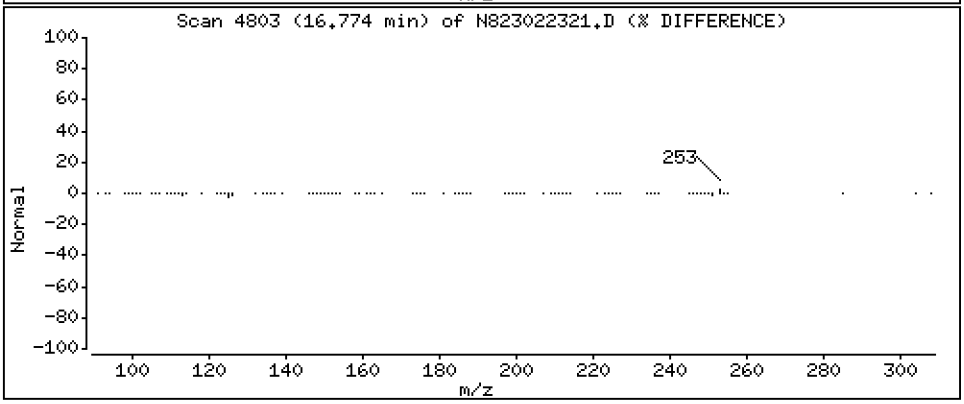












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

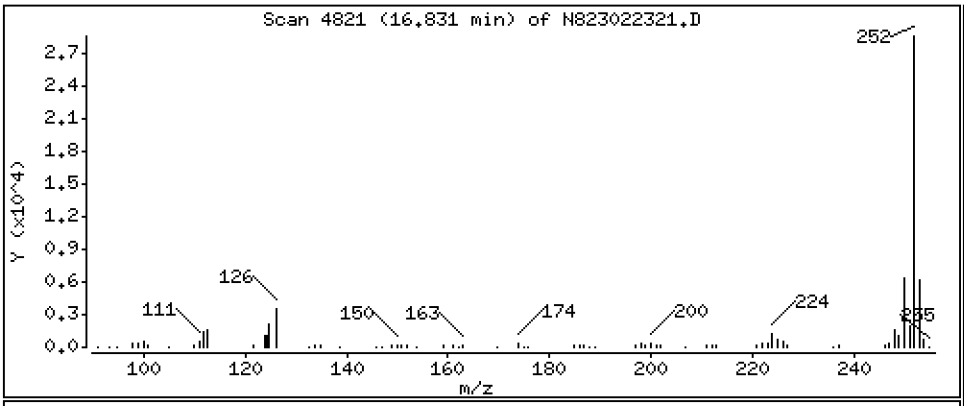
Operator: JZ

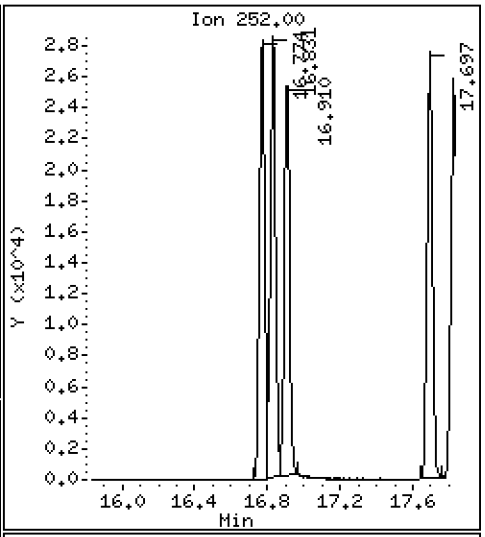
Column phase: Rxi-17sil

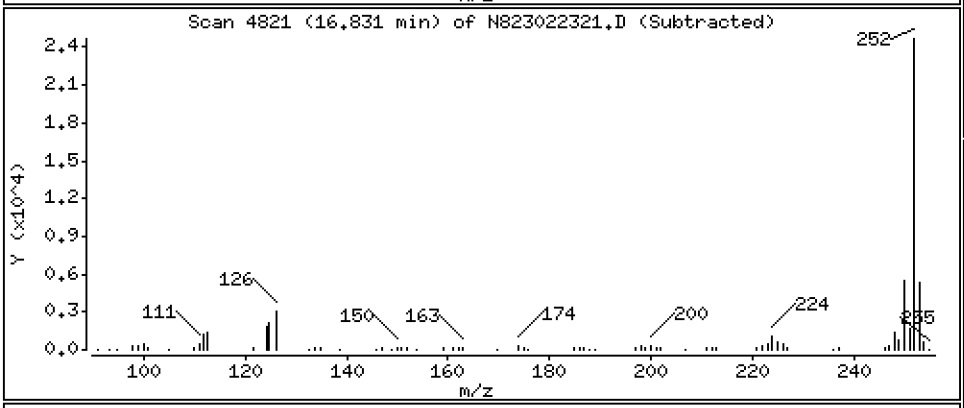
Column diameter: 0.25

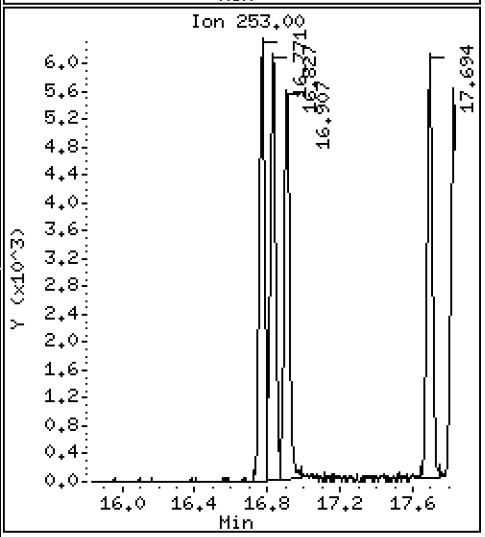
29 Benzo(k)fluoranthene

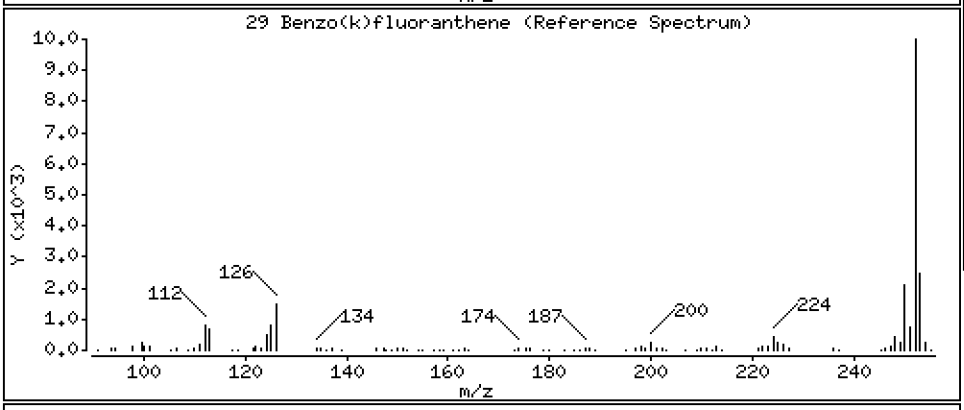
Concentration: 2.488 ug/mL

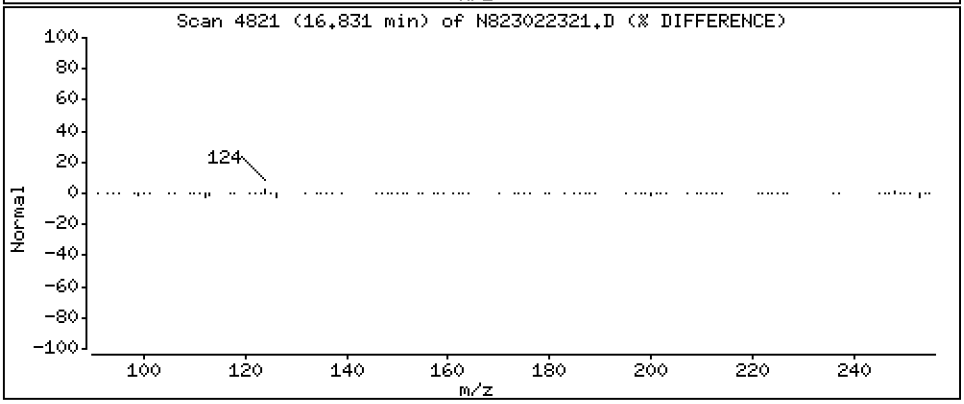












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

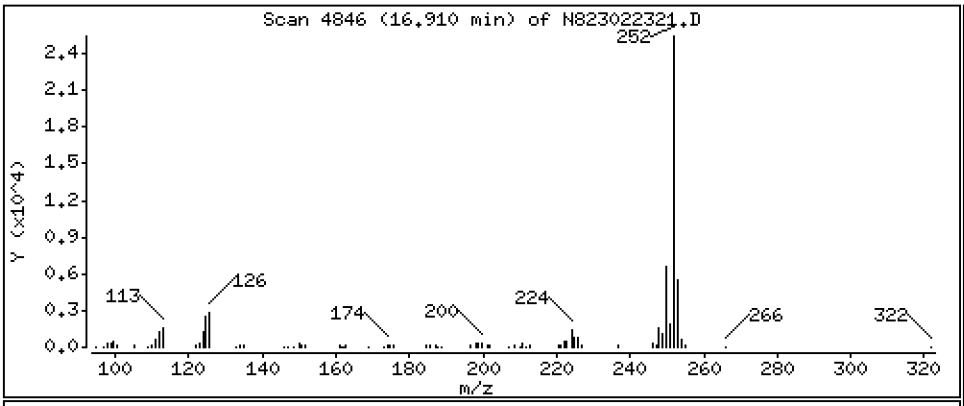
Operator: JZ

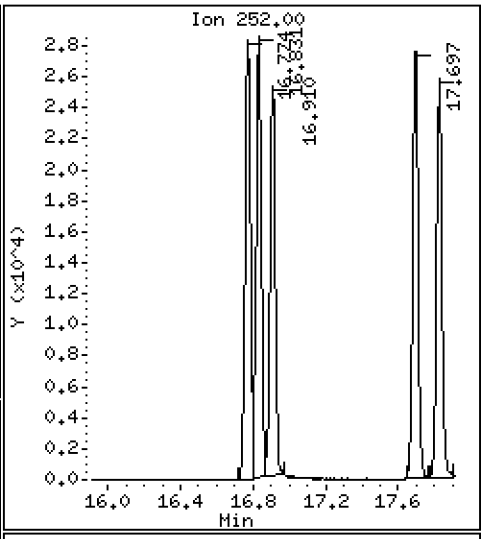
Column phase: Rxi-17sil

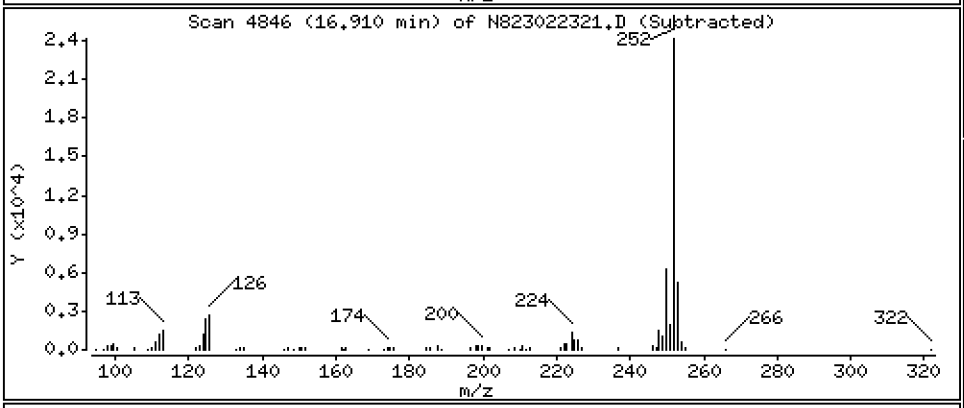
Column diameter: 0.25

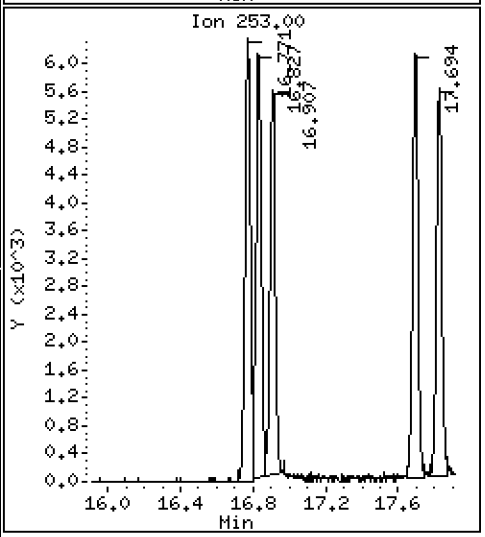
30 Benzo(j)fluoranthene

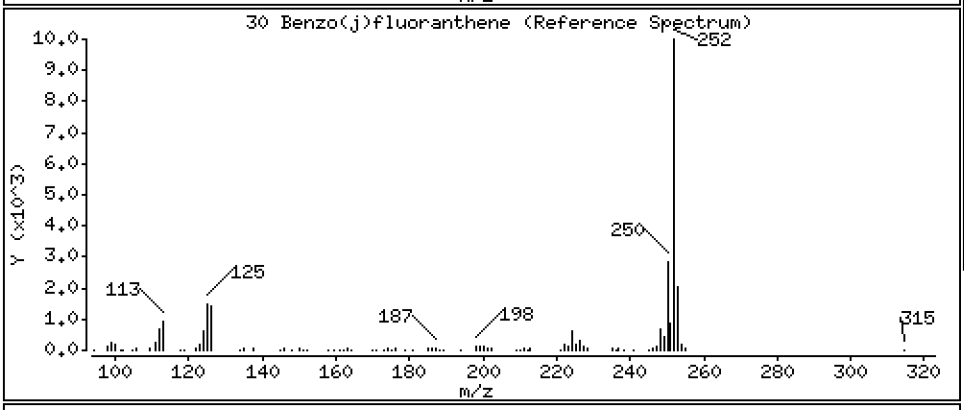
Concentration: 2.486 ug/mL

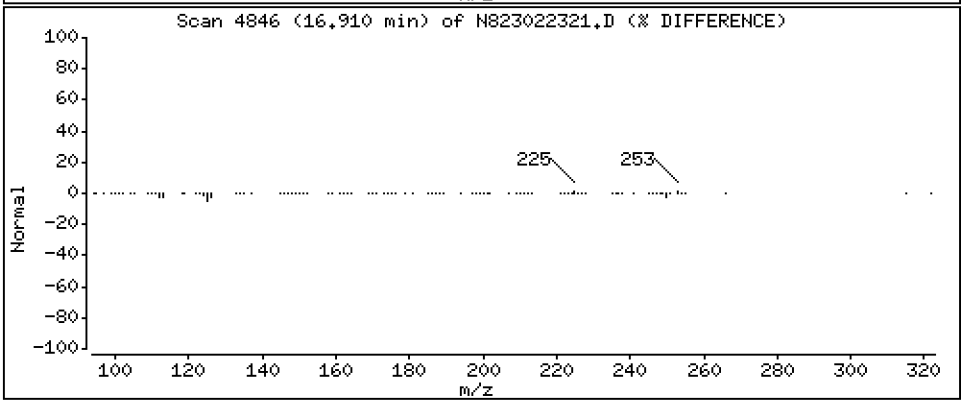












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

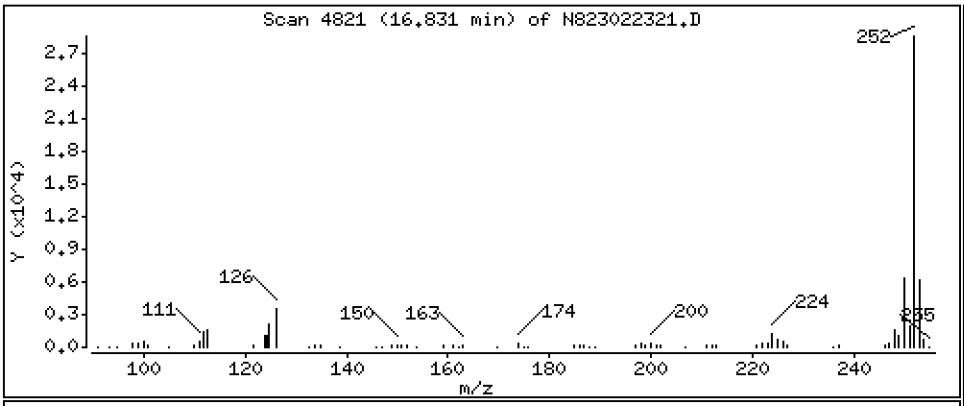
Operator: JZ

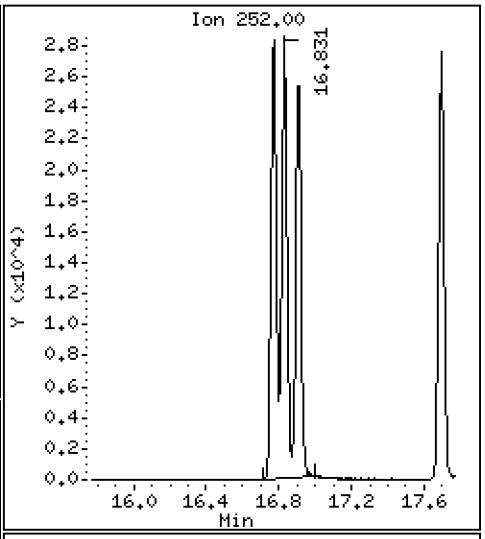
Column phase: Rxi-17sil

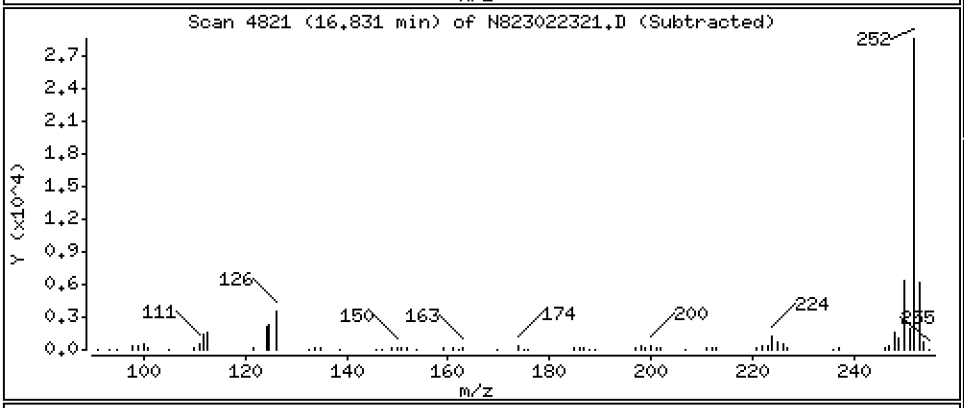
Column diameter: 0.25

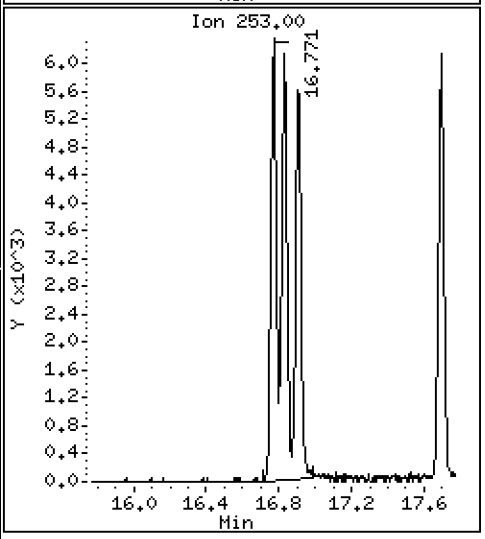
31 Total Benzofluoranthenes

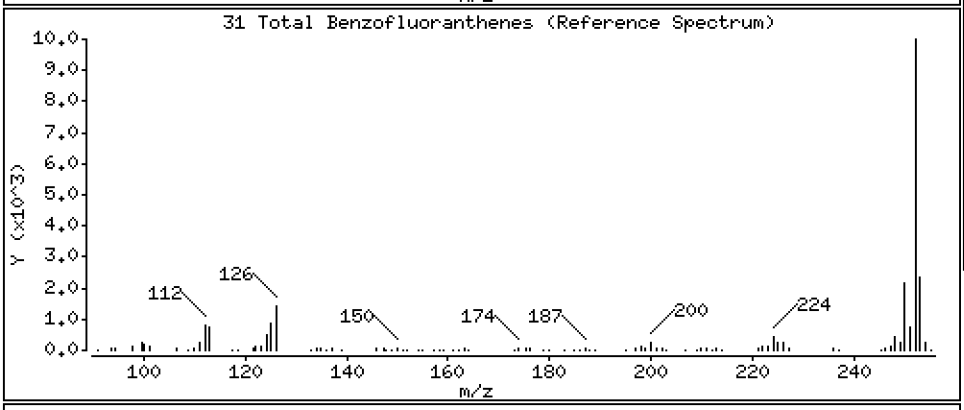
Concentration: 7.512 ug/mL

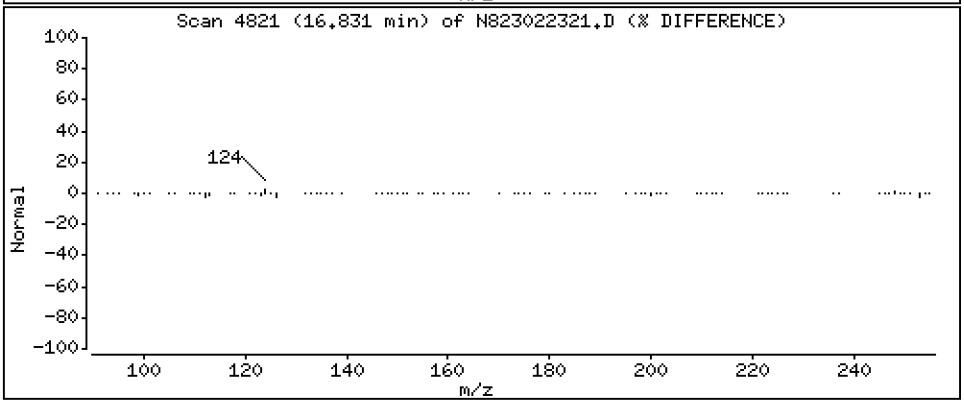












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

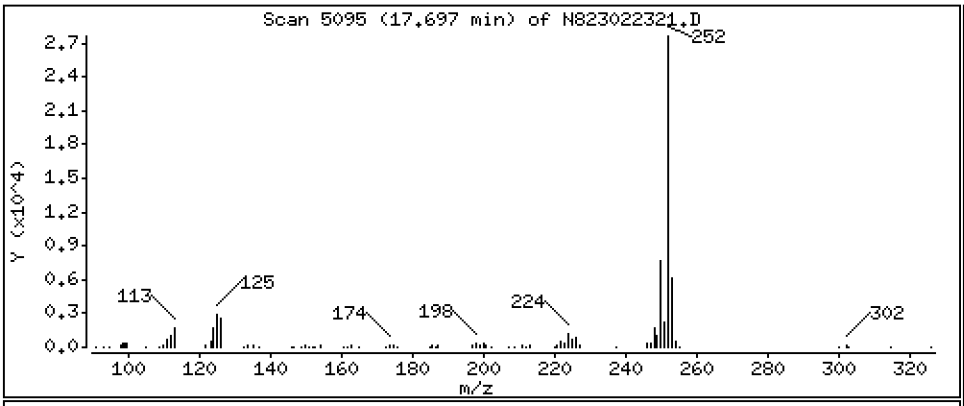
Operator: JZ

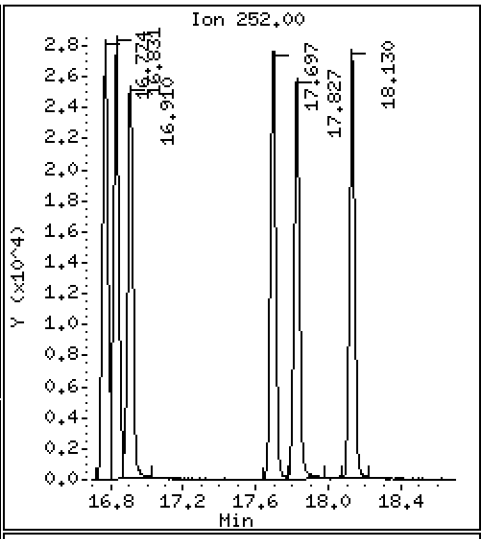
Column phase: Rxi-17sil

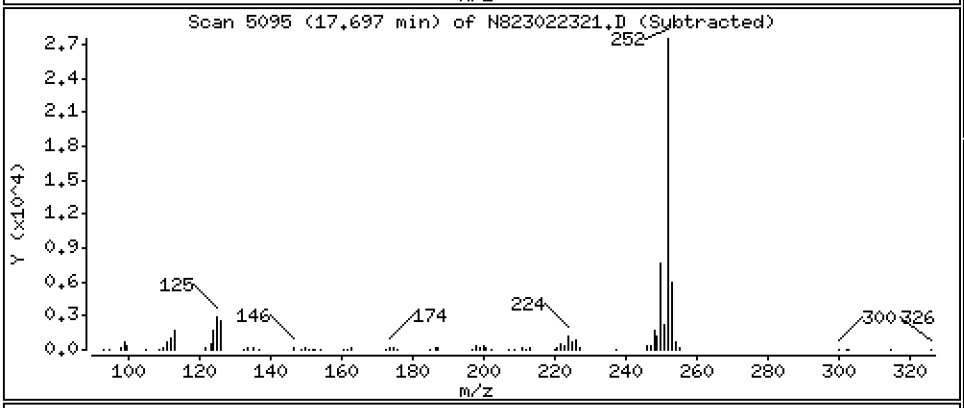
Column diameter: 0.25

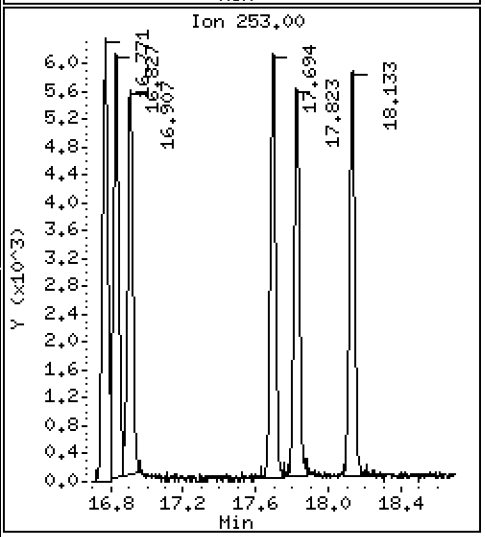
34 Benzo(e)pyrene

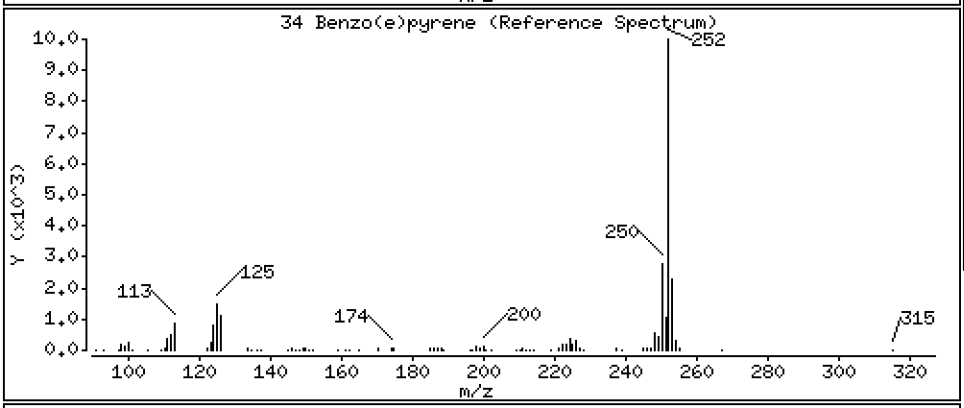
Concentration: 2.472 ug/mL

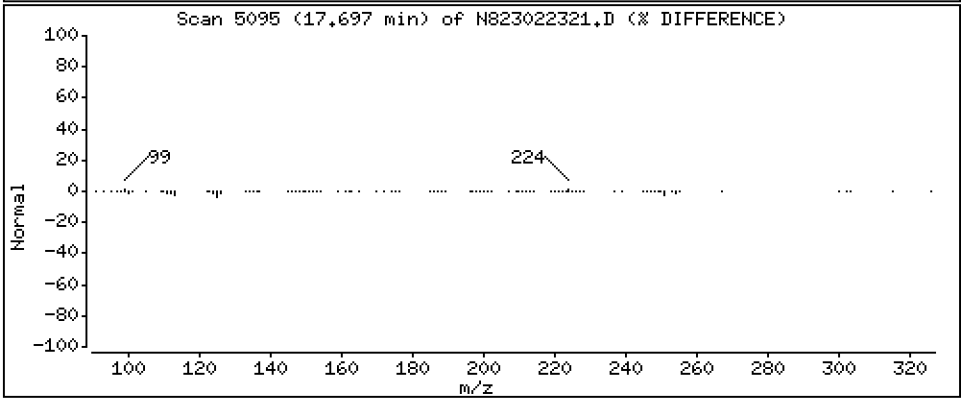












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

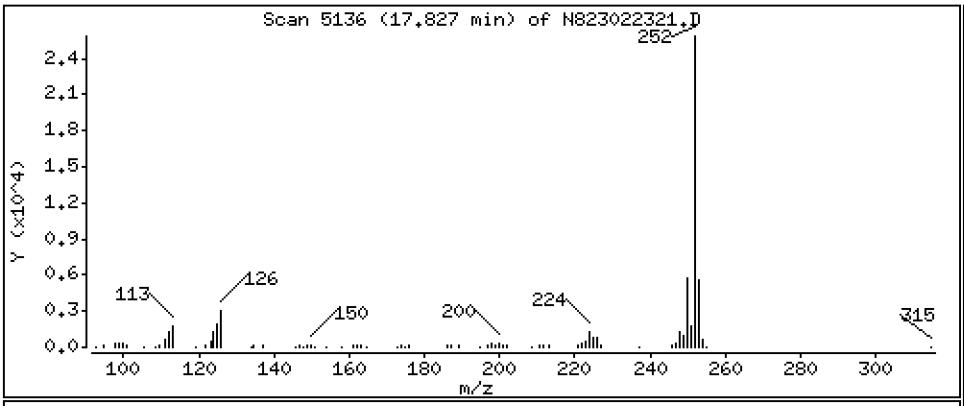
Operator: JZ

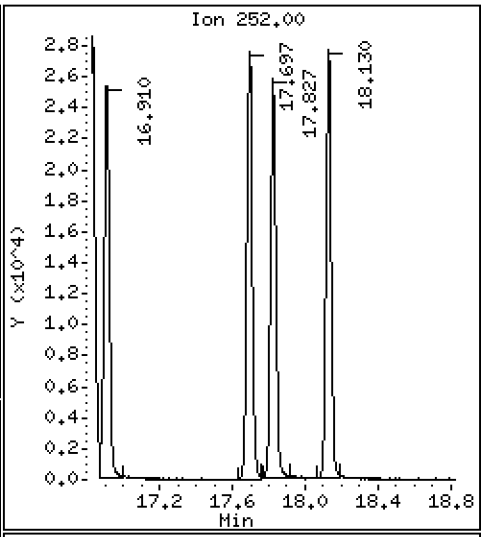
Column phase: Rxi-17sil

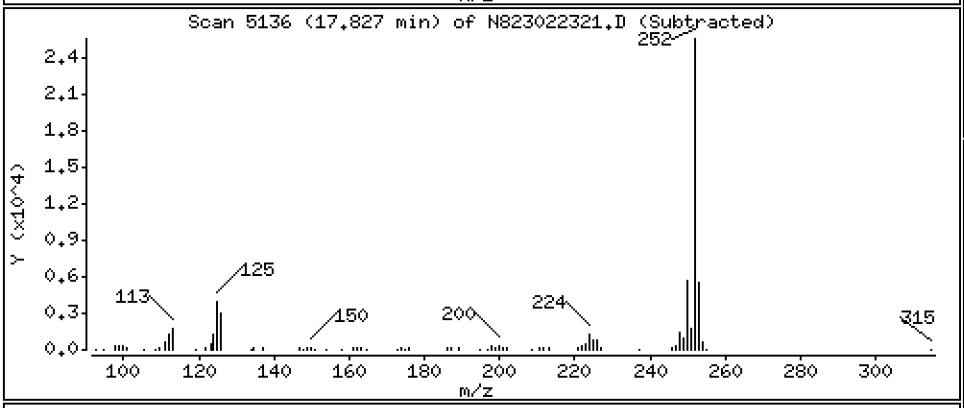
Column diameter: 0.25

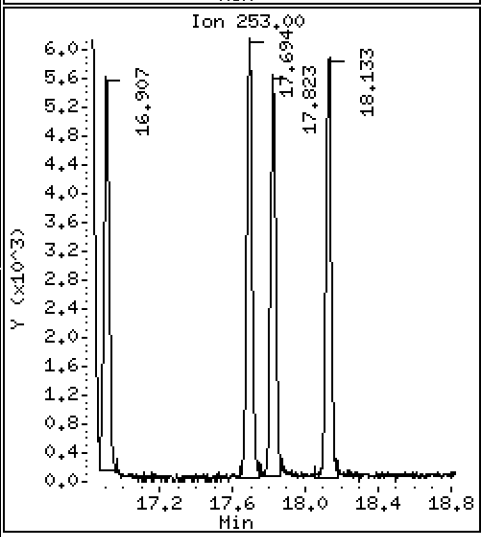
32 Benzo(a)pyrene

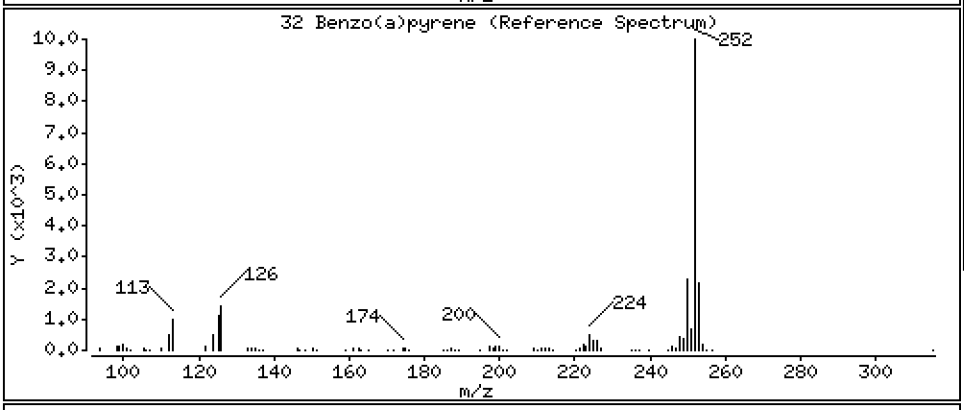
Concentration: 2.585 ug/mL

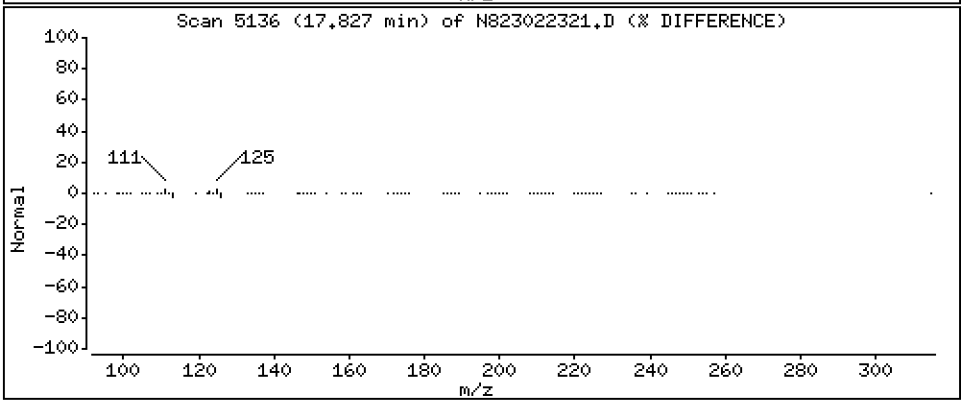












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

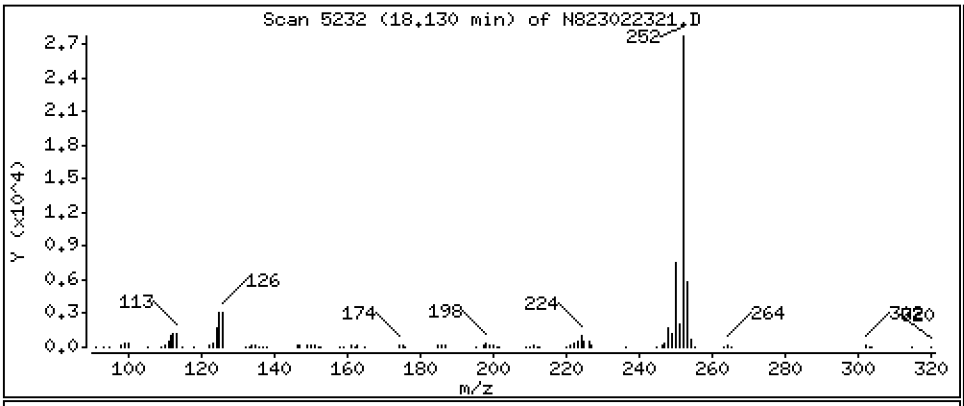
Operator: JZ

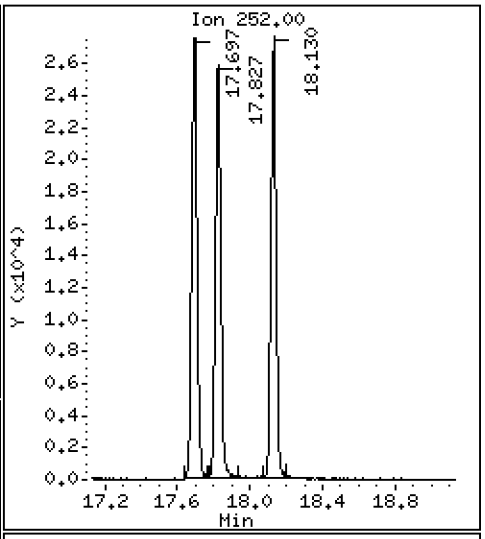
Column phase: Rxi-17sil

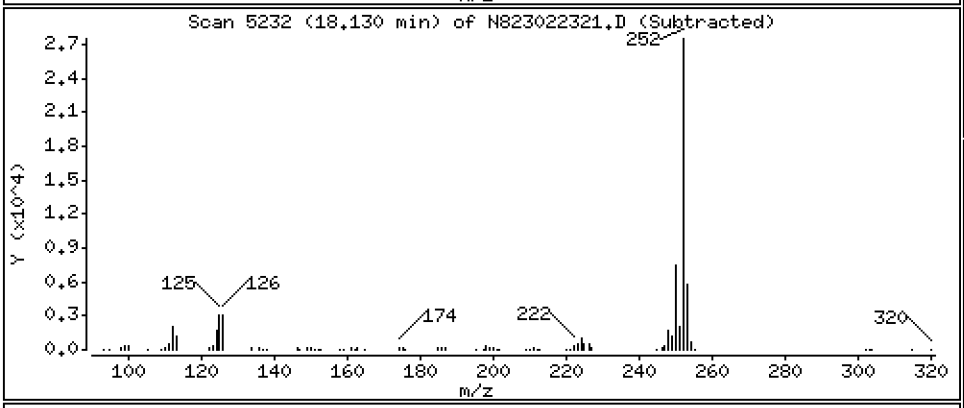
Column diameter: 0.25

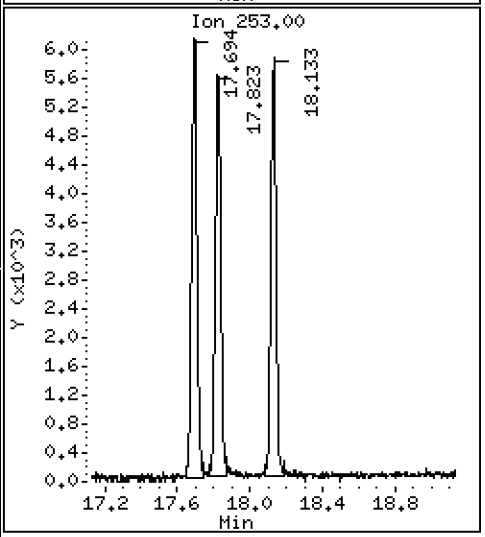
35 Perylene

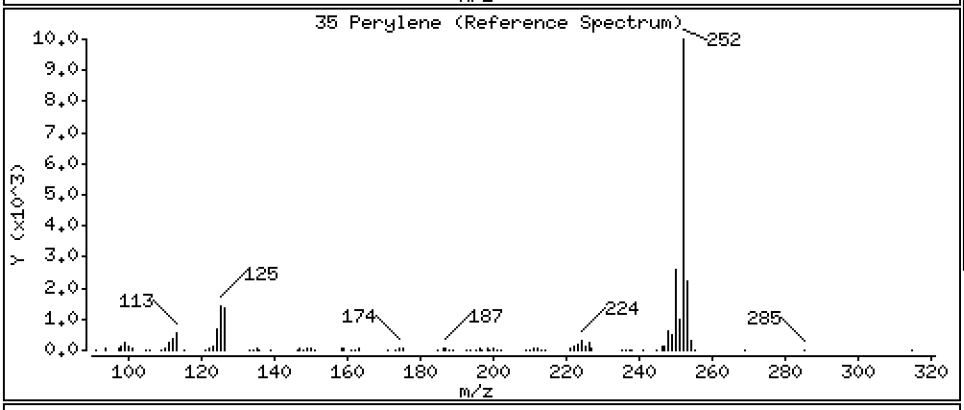
Concentration: 2.454 ug/mL

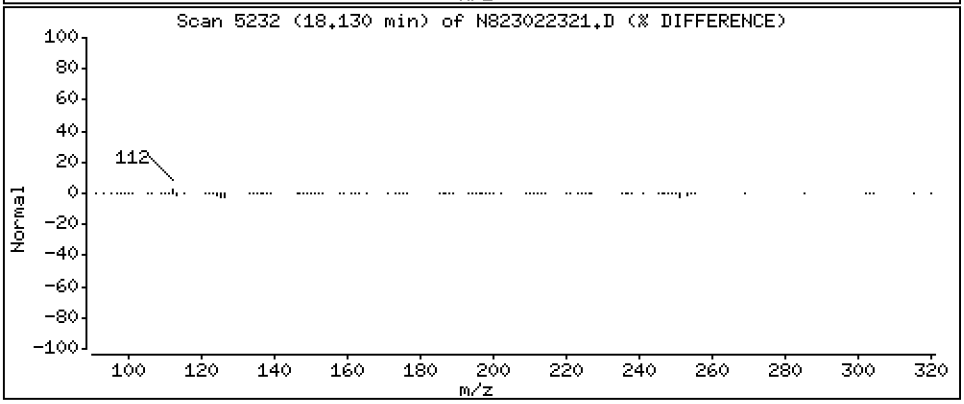












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

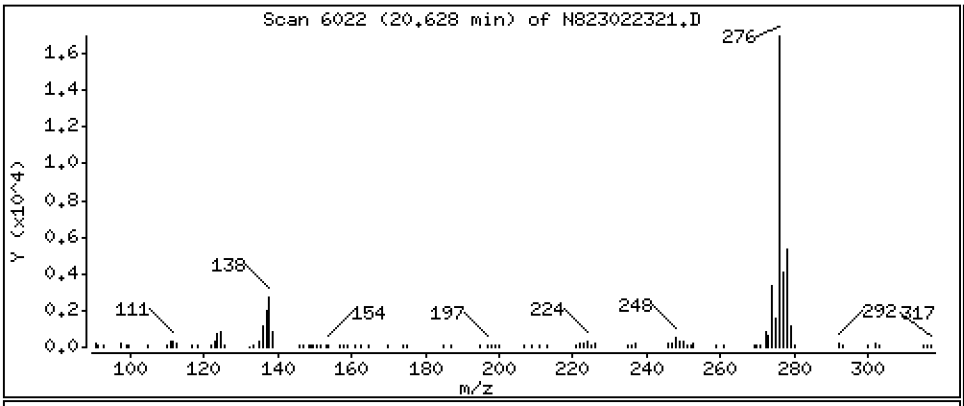
Operator: JZ

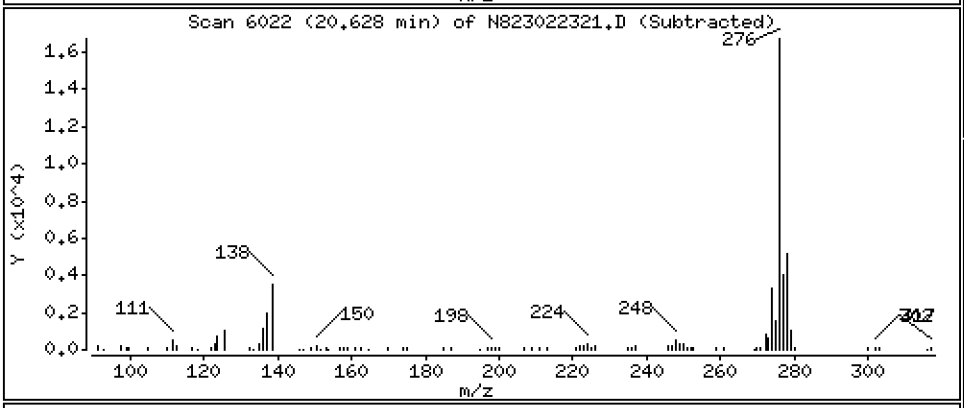
Column phase: Rxi-17sil

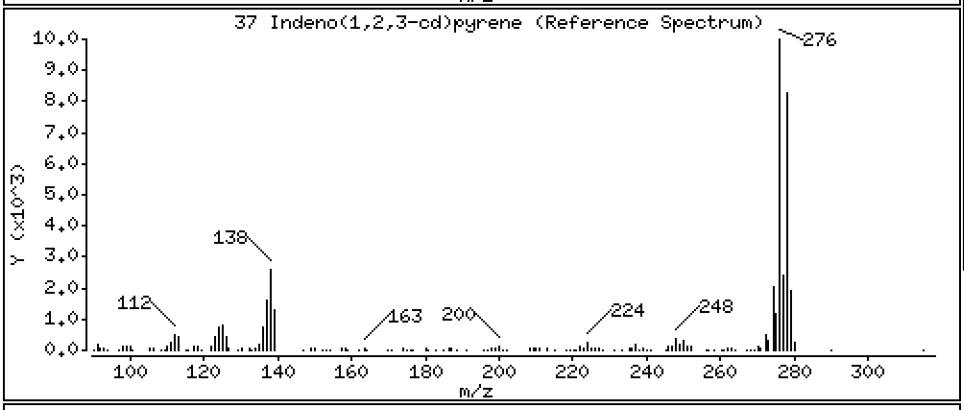
Column diameter: 0.25

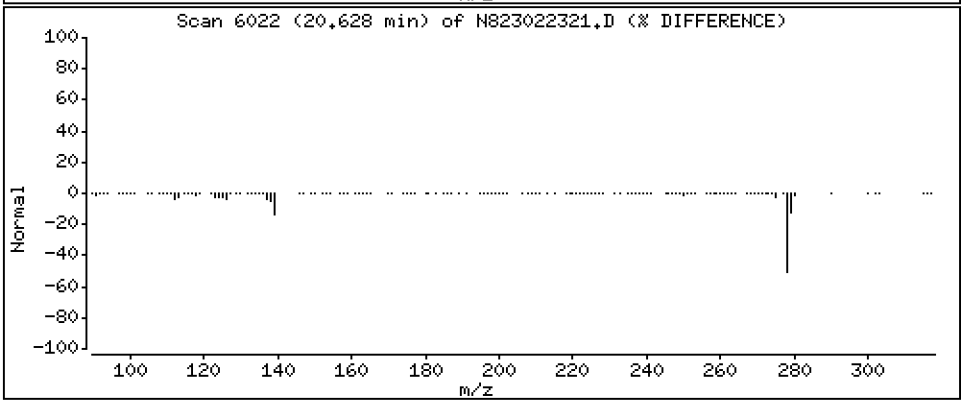
37 Indeno(1,2,3-cd)pyrene

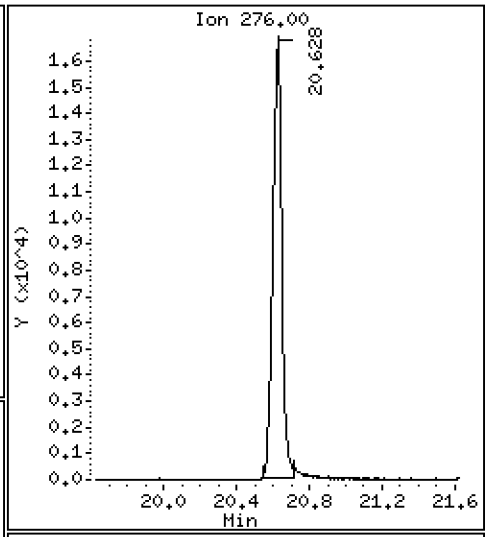
Concentration: 2.496 ug/mL

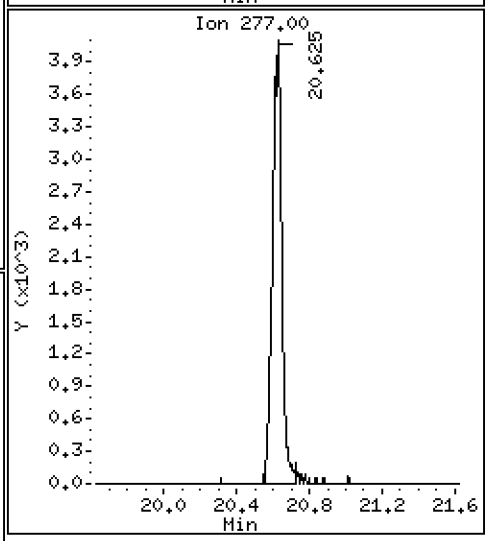












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

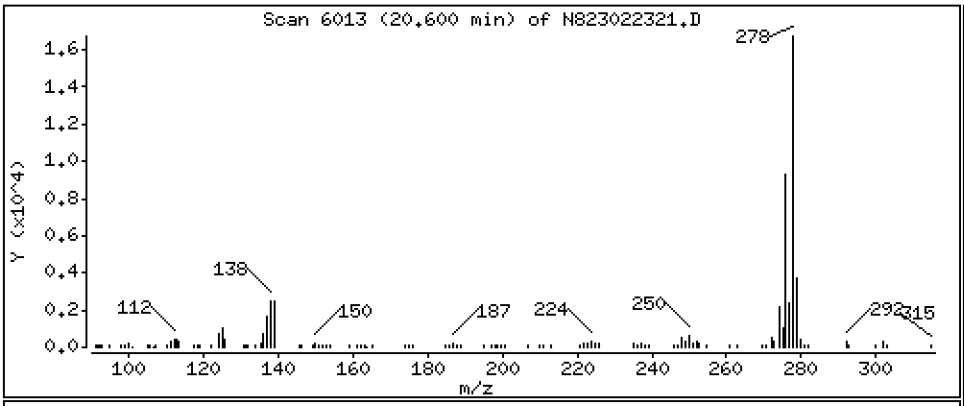
Operator: JZ

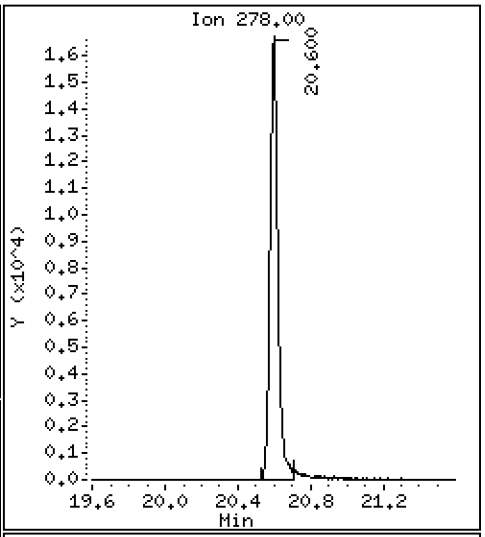
Column phase: Rxi-17sil

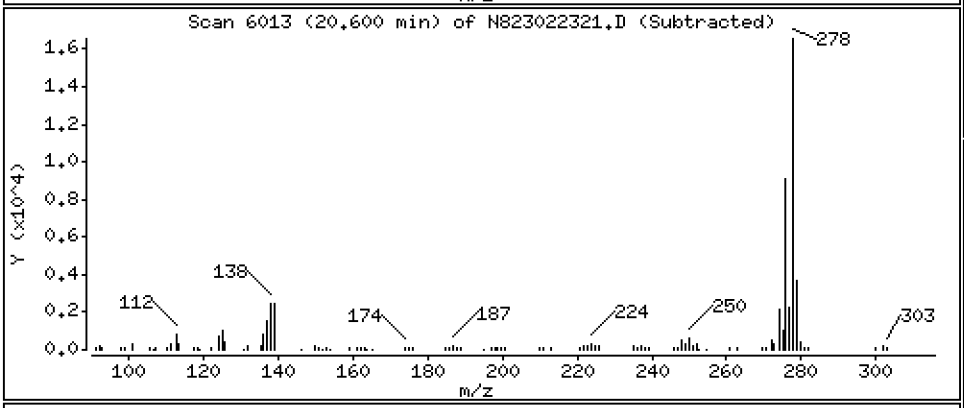
Column diameter: 0.25

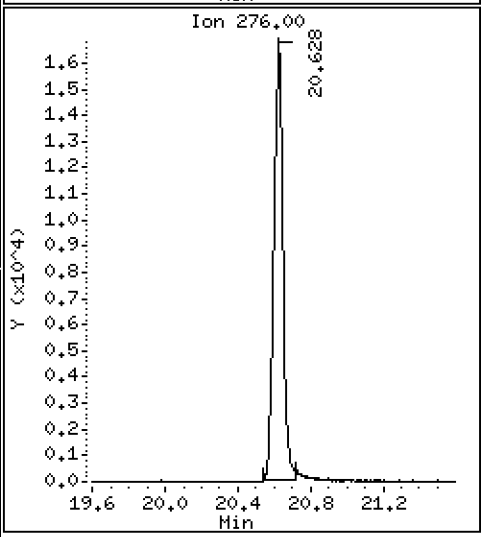
38 Dibenzo(a,h)anthracene

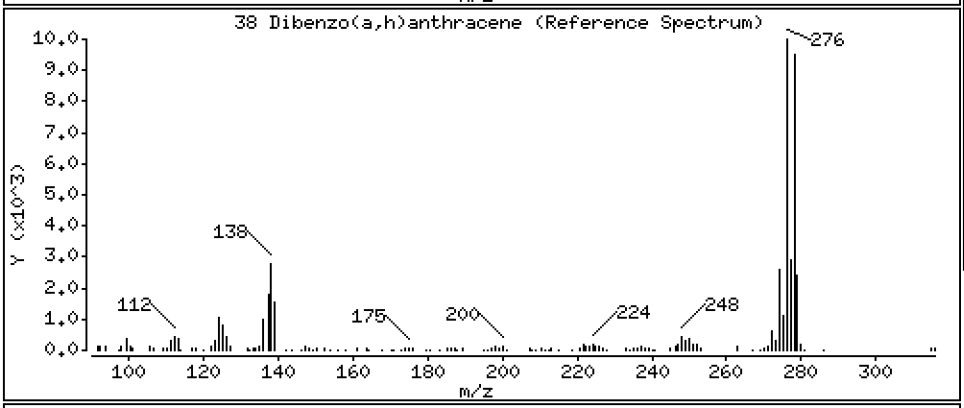
Concentration: 2.526 ug/mL

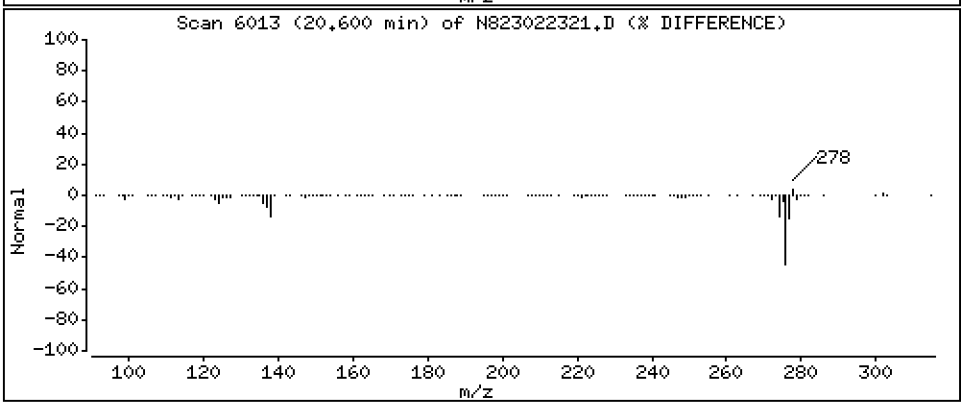












Data File: \\target\share\chem3\nt8.i\20230223.b\N823022321.D

Date : 23-FEB-2023 20:32

Client ID:

Instrument: nt8.i

Sample Info: CCV230223,

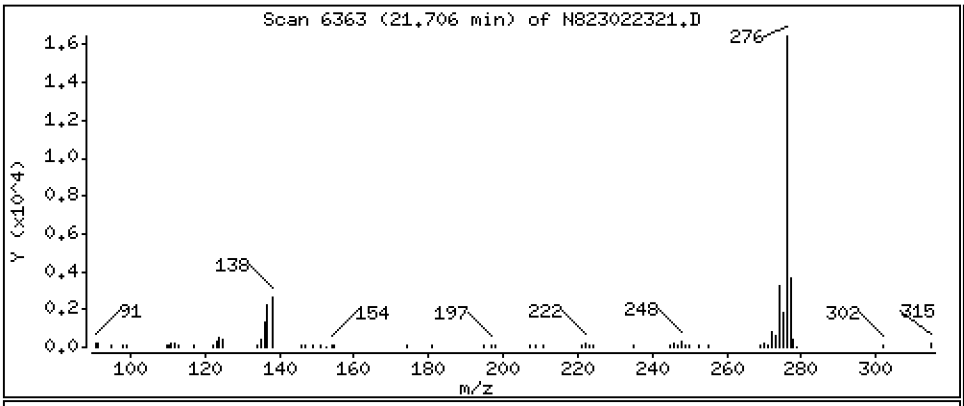
Operator: JZ

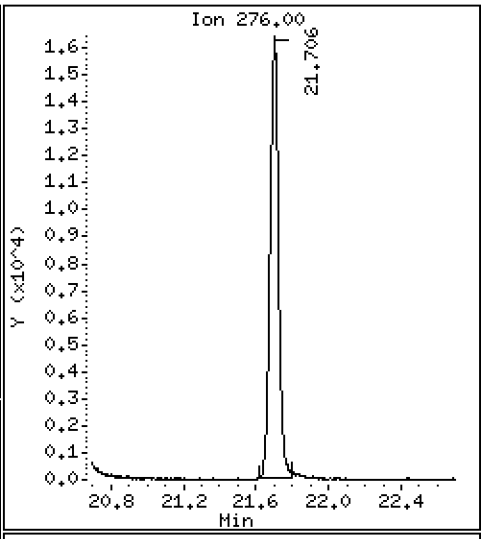
Column phase: Rxi-17sil

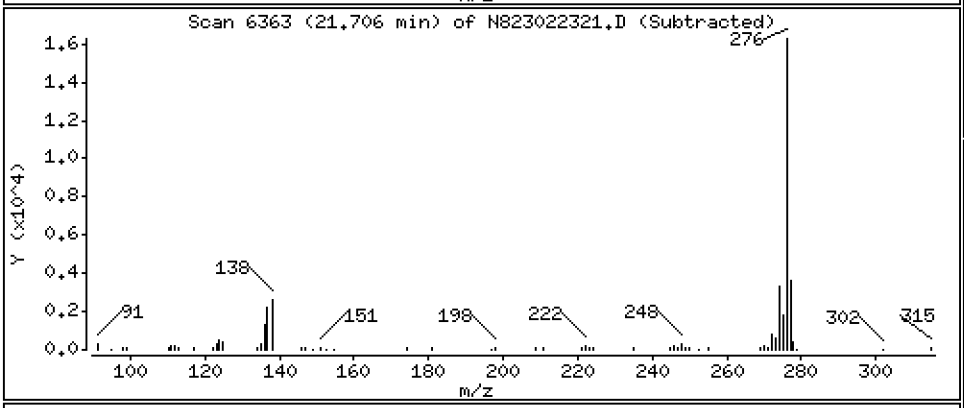
Column diameter: 0.25

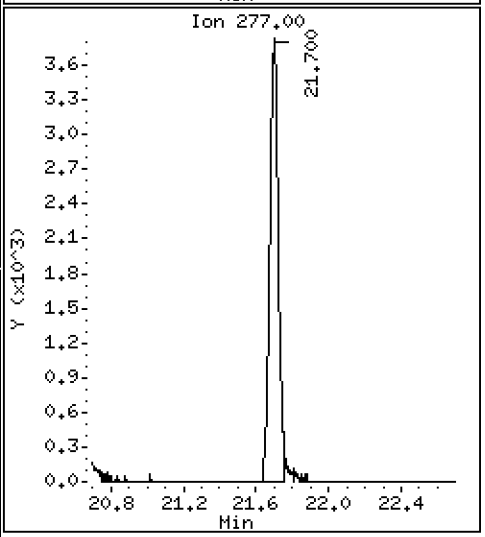
39 Benzo(g,h,i)perylene

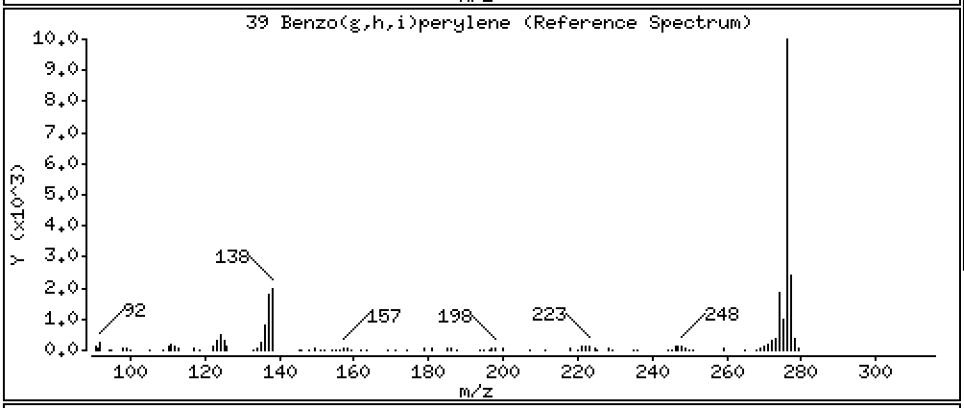
Concentration: 2.540 ug/mL

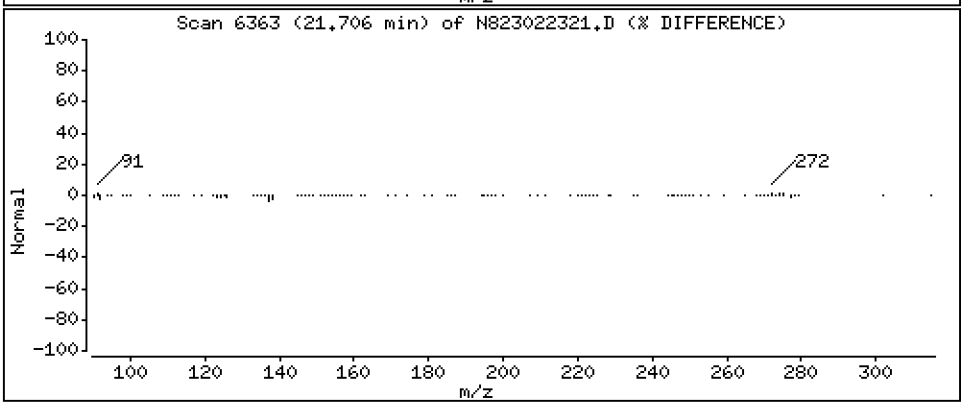












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230223.b\N823022321.D
Lab Smp Id: SLB0310-CCV1
Inj Date : 23-FEB-2023 20:32
Operator : JZ Inst ID: nt8.i
Smp Info : CCV230223,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230223.b\FSIMPNA230119.m
Meth Date : 26-Feb-2023 12:40 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.868	4.871	(1.000)	37105	2.00000	
	2 Naphthalene	128	4.900	4.903	(1.006)	43782	2.53775	2.538
$	3 2-Methylnaphthalene-d10	152	5.602	5.605	(1.151)	26857	2.65400	2.654
	4 2-Methylnaphthalene	141	5.649	5.652	(1.160)	25058	2.64056	2.641
	5 1-methylnaphthalene	141	5.845	5.849	(1.201)	25034	2.59926	2.599
	7 Biphenyl	154	6.307	6.310	(0.882)	37394	2.49569	2.496
	8 2,6-Dimethylnaphthalene	156	6.351	6.354	(0.888)	27645	2.60692	2.607
	9 Acenaphthylene	152	7.047	7.050	(0.985)	45882	2.67526	2.675
*	10 Acenaphthene-d10	164	7.154	7.158	(1.000)	22712	2.00000	
	11 Acenaphthene	153	7.205	7.208	(1.007)	29105	2.53278	2.533
	12 Dibenzofuran	168	7.357	7.360	(1.028)	43766	2.50753	2.508
	13 1,6,7-Trimethylnaphthalene	170	7.423	7.423	(1.038)	28890	2.62488	2.625
	14 Fluorene	166	7.834	7.837	(1.095)	35769	2.63862	2.639
	18 Dibenzothiophene	184	9.071	9.074	(0.986)	48712	2.53946	2.539
*	15 Phenanthrene-d10	188	9.197	9.197	(1.000)	43409	2.00000	
	16 Phenanthrene	178	9.232	9.235	(1.004)	52284	2.46572	2.466
	17 Anthracene	178	9.273	9.276	(1.008)	51238	2.65997	2.660
	19 Carbazole	167	9.788	9.791	(1.064)	45797	2.59341	2.593
	20 1-Methylphenanthrene	192	10.007	10.010	(1.088)	41040	2.68580	2.686
	22 Fluoranthene	202	11.006	11.009	(1.197)	61280	2.65498	2.655
$	21 Fluoranthene-d10	212	10.971	10.971	(1.193)	53803	2.80928	2.809
	23 Pyrene	202	11.524	11.527	(0.815)	63135	2.58986	2.590
	24 Benzo(a)anthracene	228	14.019	14.025	(0.991)	60688	2.74661	2.747
*	25 Chrysene-d12	240	14.146	14.152	(1.000)	39320	2.00000	
	27 Chrysene	228	14.221	14.225	(1.005)	58602	2.49138	2.491
	28 Benzo(b)fluoranthene	252	16.773	16.770	(0.929)	58301	2.50447	2.504
	29 Benzo(k)fluoranthene	252	16.830	16.833	(0.932)	56727	2.48785	2.488
	30 Benzo(j)fluoranthene	252	16.909	16.912	(0.937)	51036	2.48631	2.486
	31 Total Benzofluoranthenes	252	16.830	16.770	(0.932)	165600	7.51150	7.512(M)
	34 Benzo(e)pyrene	252	17.696	17.696	(0.980)	57380	2.47185	2.472
	32 Benzo(a)pyrene	252	17.826	17.826	(0.987)	52964	2.58548	2.585
*	33 Perylene-d12	264	18.054	18.057	(1.000)	39970	2.00000	
	35 Perylene	252	18.130	18.130	(1.004)	53941	2.45380	2.454

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.479	20.485	(1.134)	37441	2.39070	2.391
37 Indeno(1,2,3-cd)pyrene	276	20.628	20.624	(1.143)	58242	2.49564	2.496
38 Dibenzo(a,h)anthracene	278	20.599	20.596	(1.141)	50728	2.52582	2.526
39 Benzo(g,h,i)perylene	276	21.706	21.696	(1.202)	53701	2.53973	2.540

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823022321.D
Lab Smp Id: SLB0310-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230223.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 23-FEB-2023
Calibration Time: 11:46
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	37022	18511	74044	37105	0.22
10 Acenaphthene-d10	22454	11227	44908	22712	1.15
15 Phenanthrene-d10	43277	21639	86554	43409	0.31
25 Chrysene-d12	38907	19454	77814	39320	1.06
33 Perylene-d12	39582	19791	79164	39970	0.98

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.87	4.37	5.37	4.87	-0.06
10 Acenaphthene-d10	7.16	6.66	7.66	7.15	-0.04
15 Phenanthrene-d10	9.20	8.70	9.70	9.20	0.00
25 Chrysene-d12	14.15	13.65	14.65	14.15	-0.04
33 Perylene-d12	18.06	17.56	18.56	18.05	-0.02

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

REVIEW SUMMARY FOR FILE - N823022321.D

Lab ID: SLB0310-CCV1
nt8.i, 20230223.b\FSIMPNA230119.m,   23-FEB-2023 20:32

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

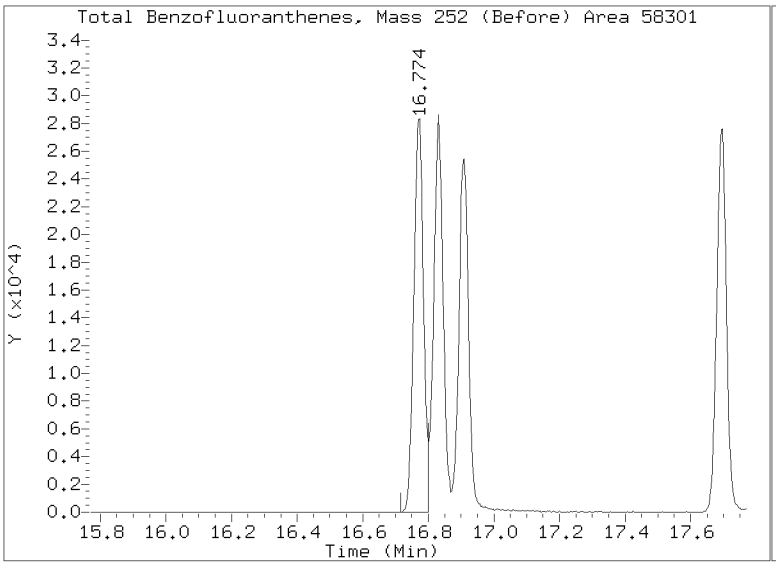
No RRT check performed

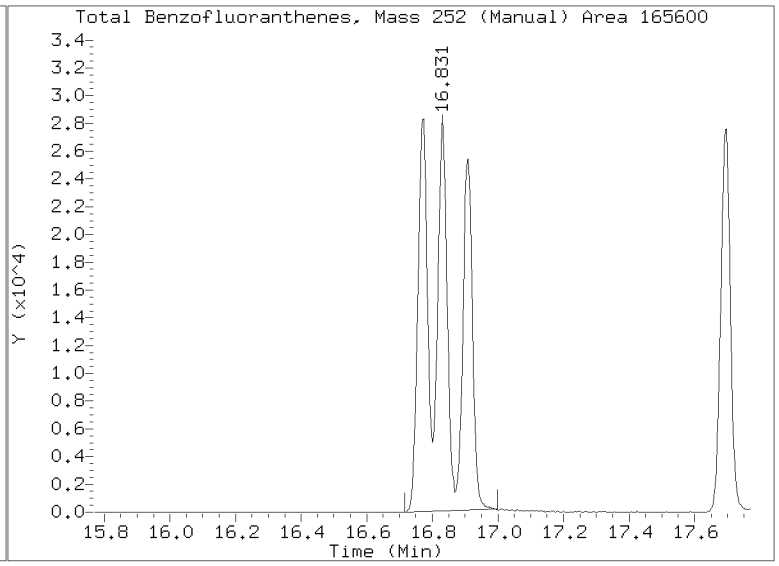
On Column LOD for nt8.i, 20230223.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230223.b/N823022321.D
Injection Date: 23-FEB-2023 20:32
Lab ID:SLB0310-CCV1 Client ID:
Report Date: 02/26/2023 14:18





Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00049
Lab File ID:	NT10031511S.D	Calibration Date:	03/15/2023
Sequence:	SLC0238	Injection Date:	03/16/23
Lab Sample ID:	SLC0238-SCV1	Injection Time:	02:16
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
1,4-Dichlorobenzene	A	5.0000	4.8	1.5031980	1.4545320		-3.2	+/-20	
1,2-Dichlorobenzene	A	5.0000	4.7	1.4783140	1.3833330		-6.4	+/-20	
Benzyl Alcohol	A	5.0000	5.2	0.9647610	0.9996284		3.6	+/-20	
Benzoic acid	A	10.000	6.7	0.1358970	0.1310150		-32.5	+/-20	*
2,4-Dimethylphenol	A	5.0000	3.7	0.3457498	0.2530995		-26.8	+/-20	*
1,2,4-Trichlorobenzene	A	5.0000	4.4	0.3478148	0.3092350		-11.1	+/-20	
N-Nitrosodiphenylamine	A	5.0000	5.1	0.5366720	0.5452949		1.6	+/-20	
Pentachlorophenol	A	5.0000	4.4	0.0934250	0.1202603		-11.6	+/-20	
2-Fluorophenol	A	7.5000	0.00	1.2129820					
p-Terphenyl-d14	A	5.0000	0.00154	0.6517430	0.0002011		-100		

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

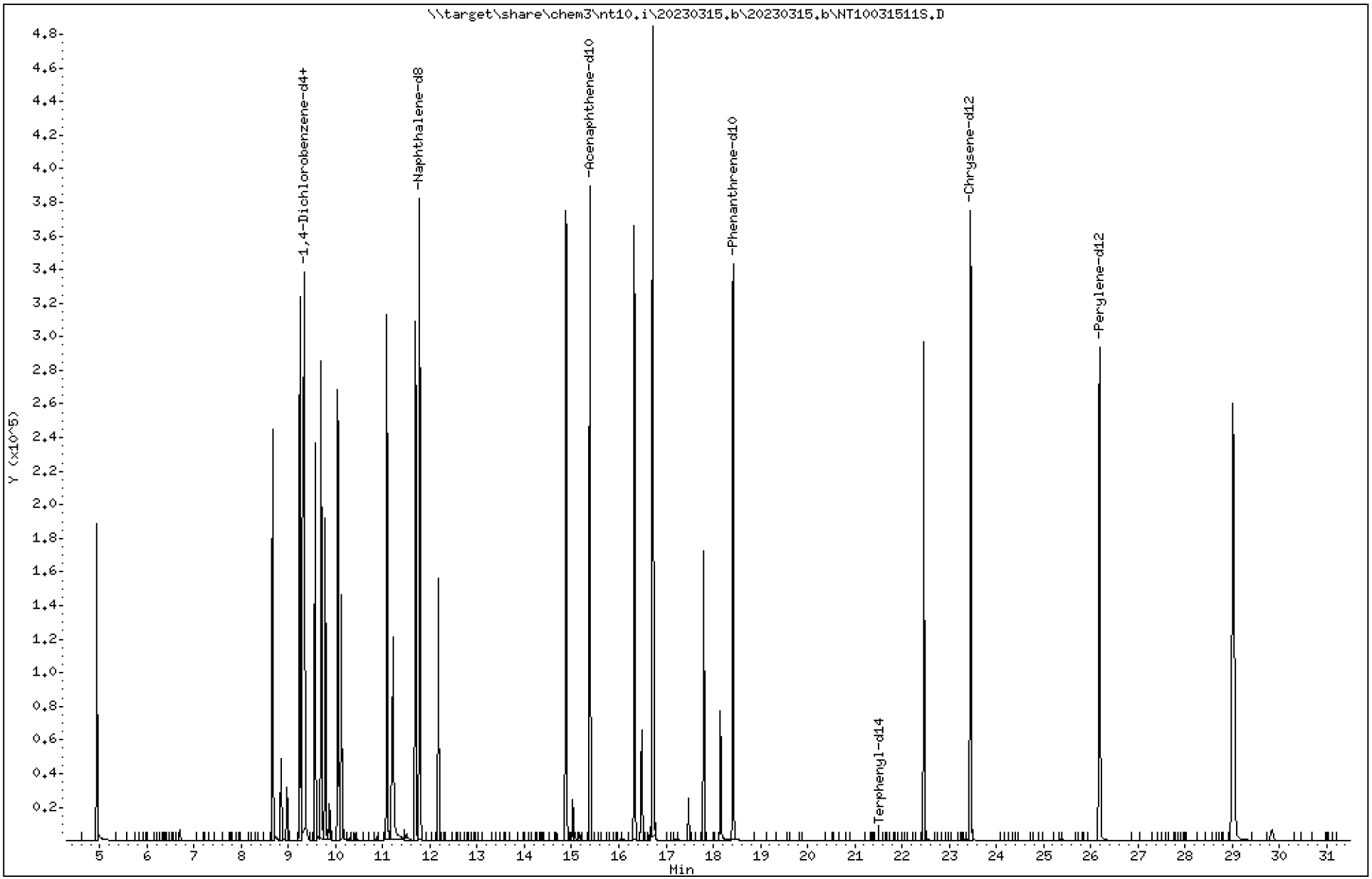
Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

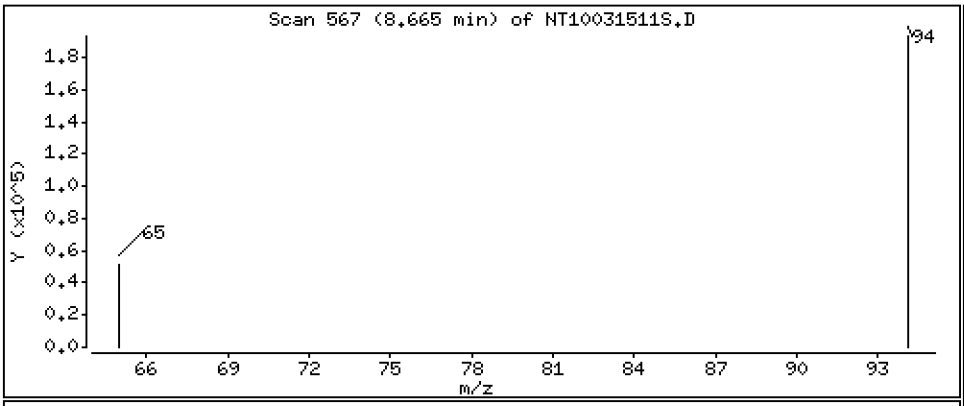
Operator: JGR

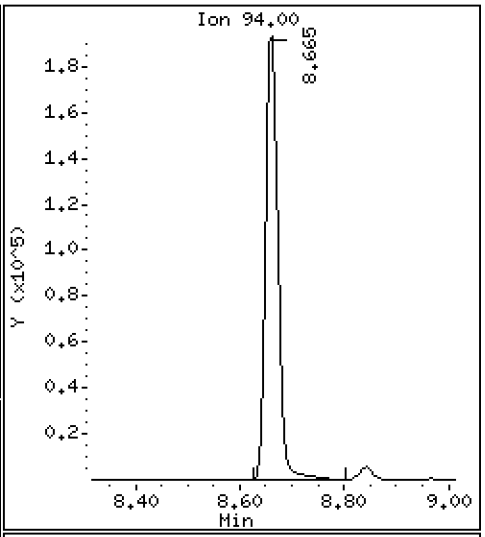
Column phase: ZB-5msi

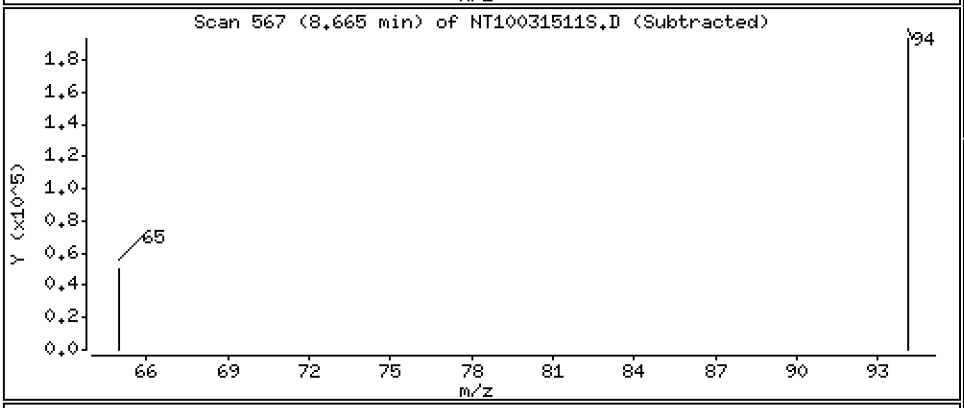
Column diameter: 0.25

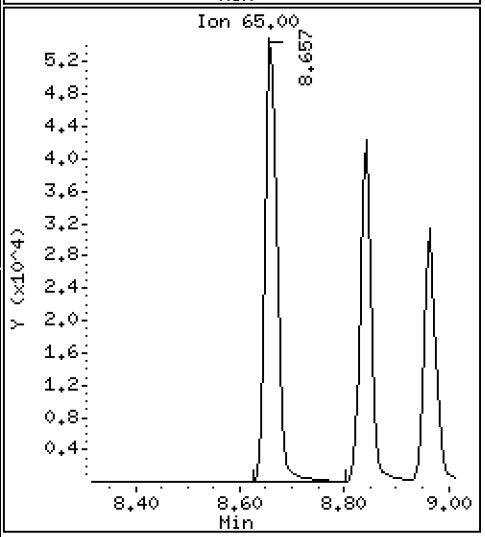
3 Phenol

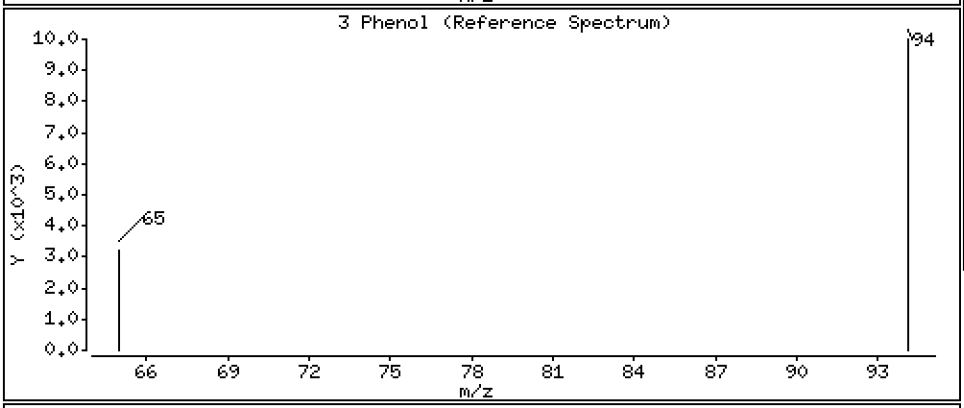
Concentration: 4.373 ug/L

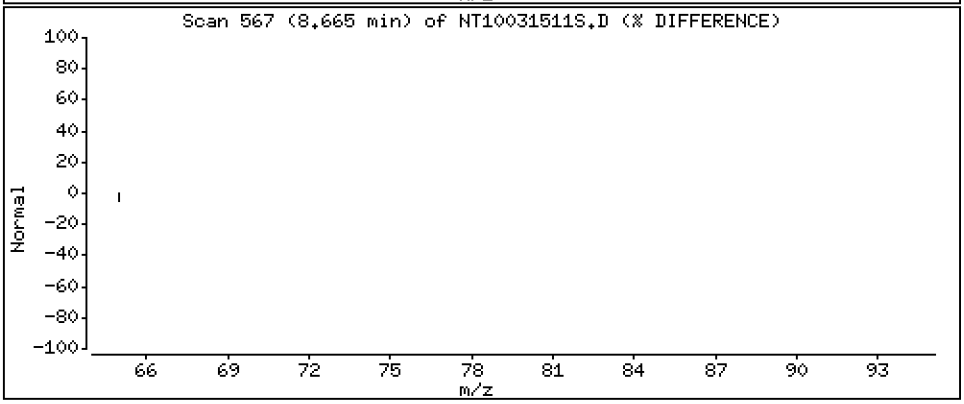












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

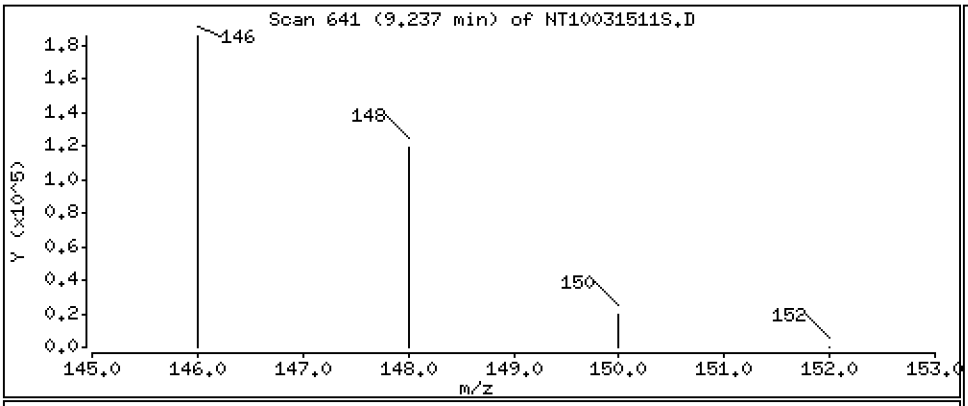
Operator: JGR

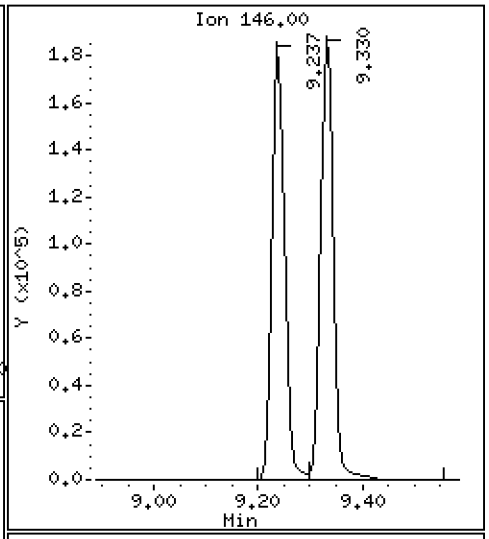
Column phase: ZB-5msi

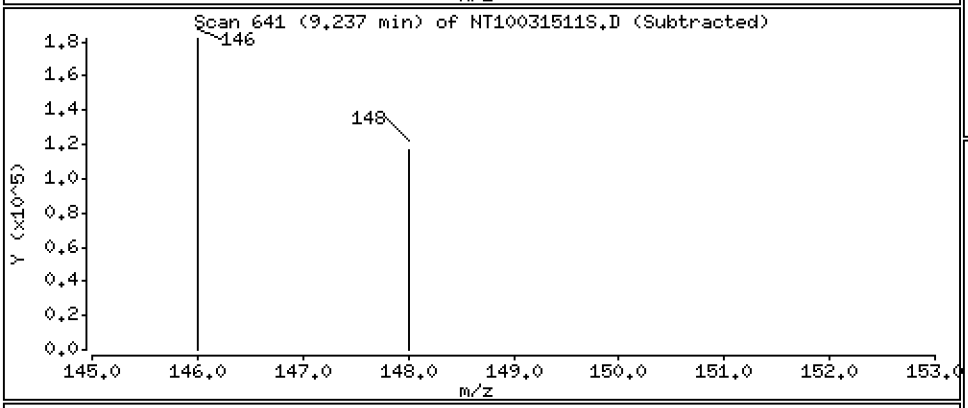
Column diameter: 0.25

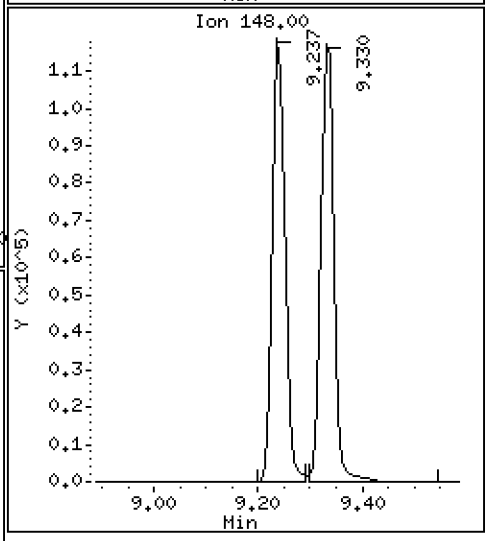
7 1,3-Dichlorobenzene

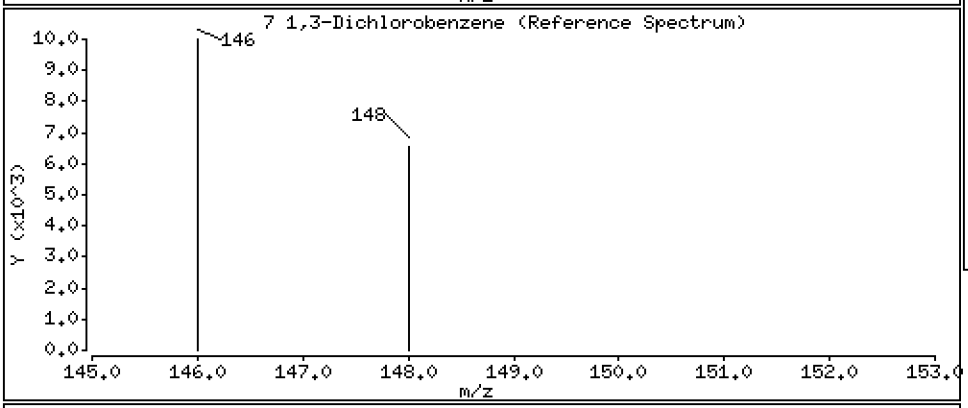
Concentration: 4.643 ug/L

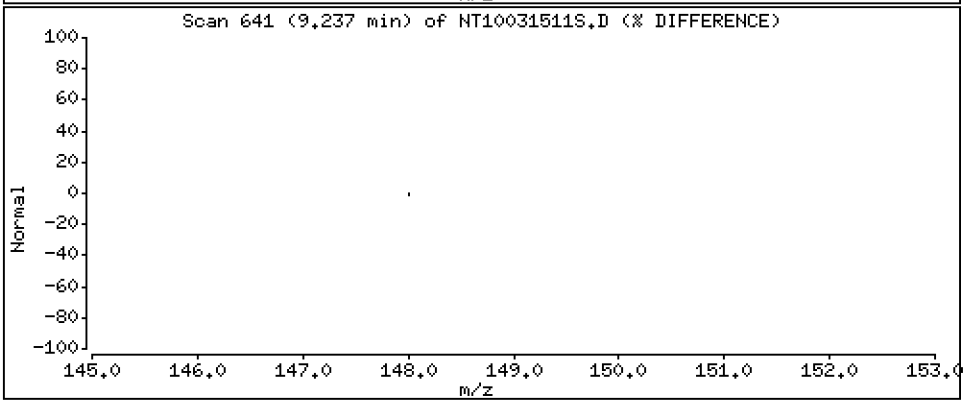












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

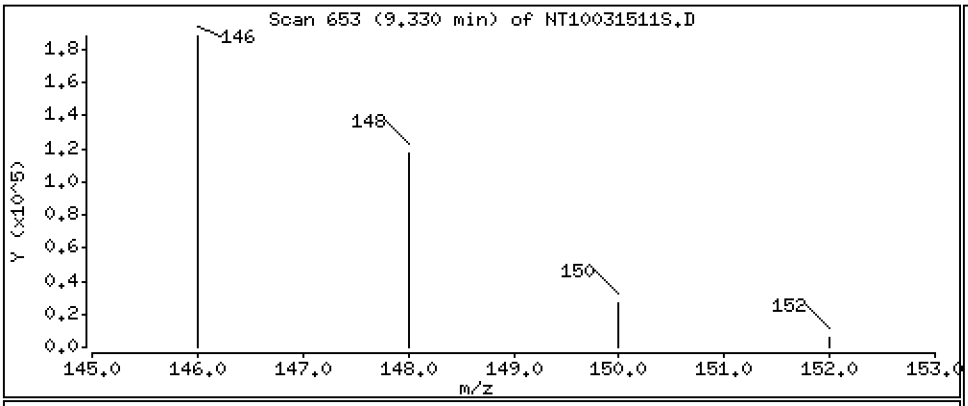
Operator: JGR

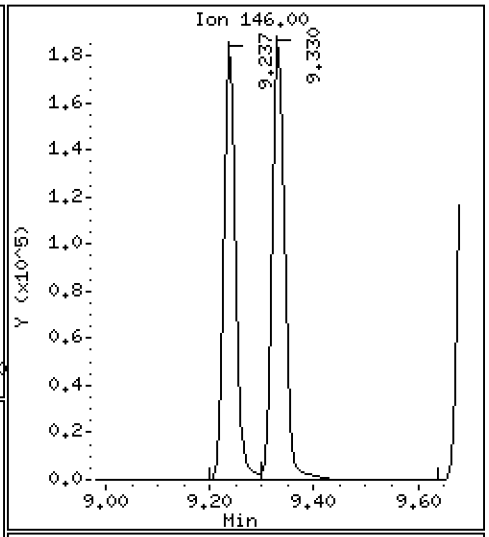
Column phase: ZB-5msi

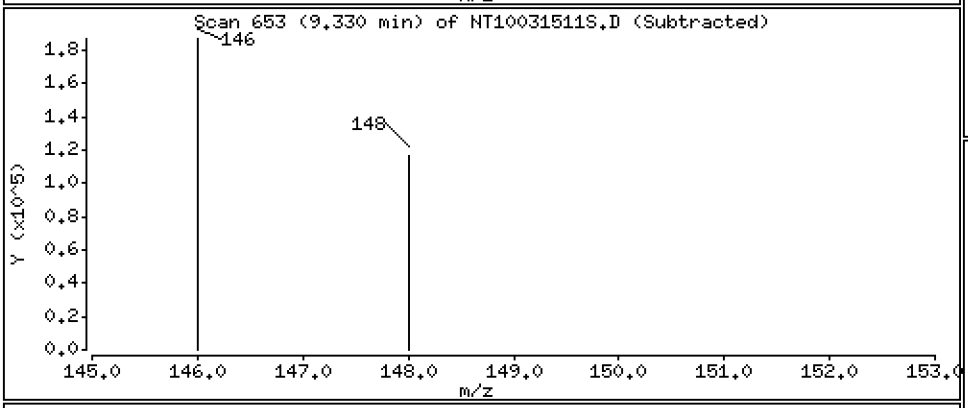
Column diameter: 0.25

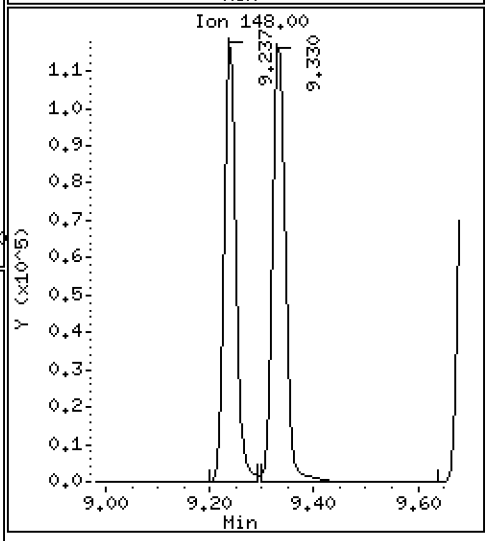
9 1,4-Dichlorobenzene

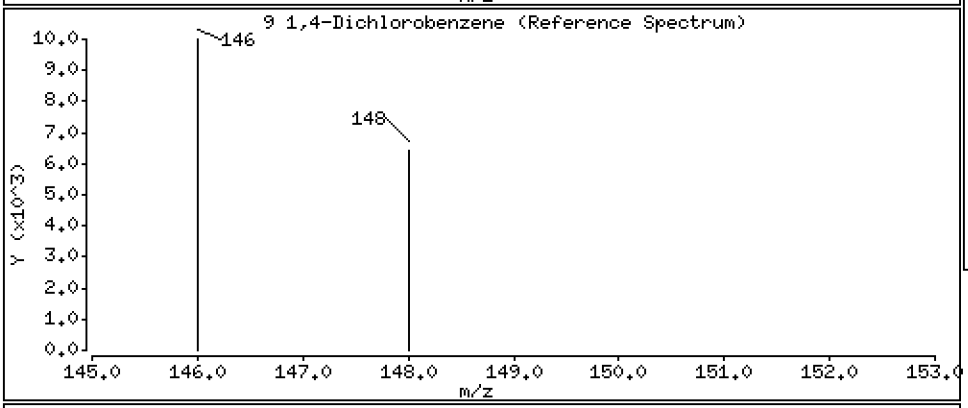
Concentration: 4.838 ug/L

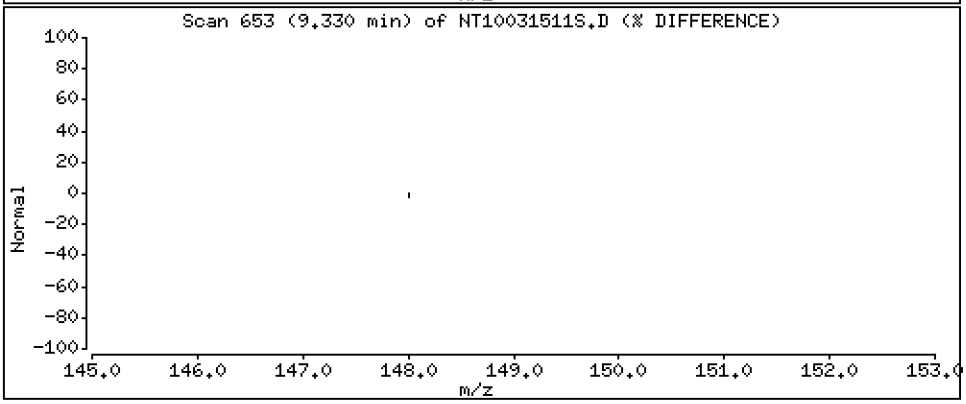












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

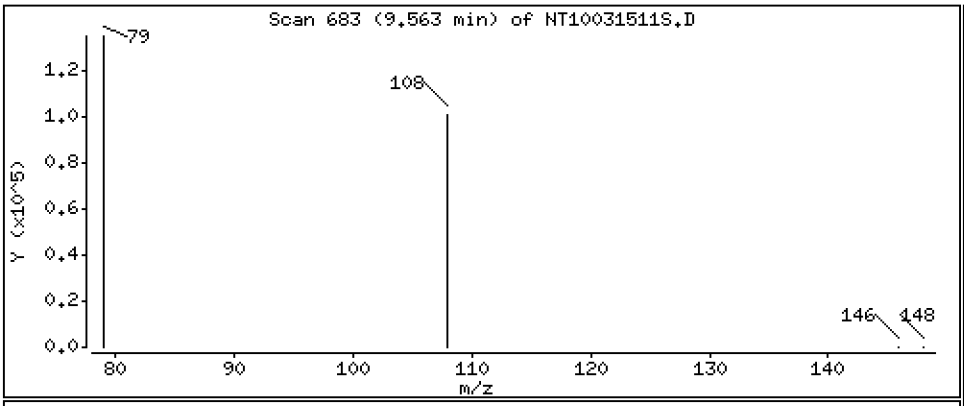
Operator: JGR

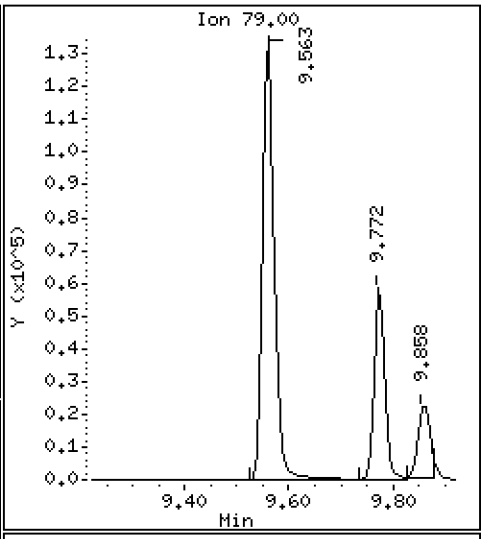
Column phase: ZB-5msi

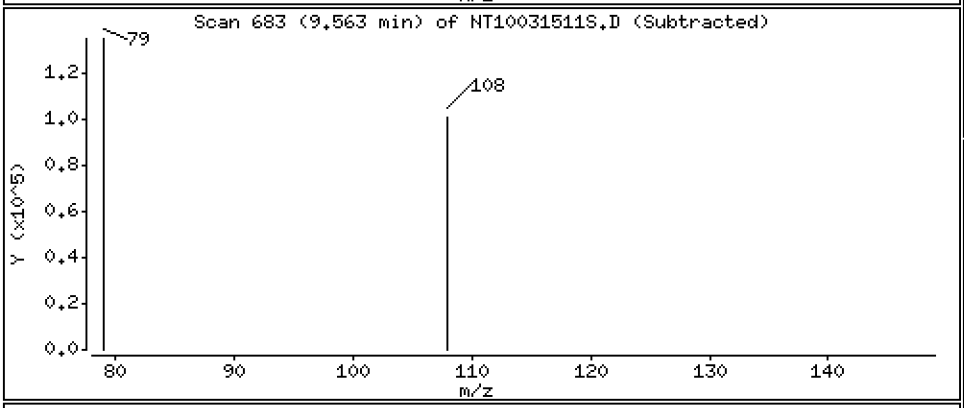
Column diameter: 0.25

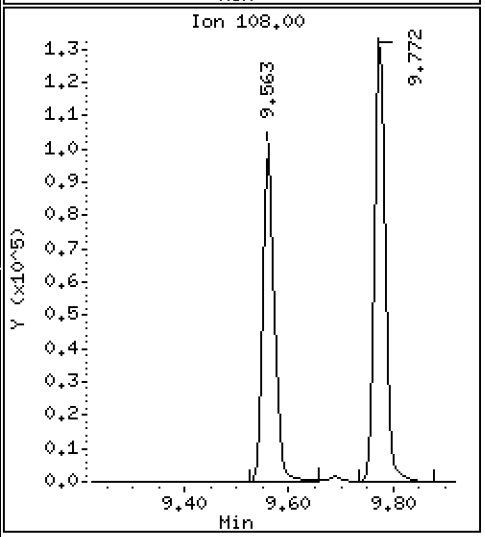
11 Benzyl alcohol

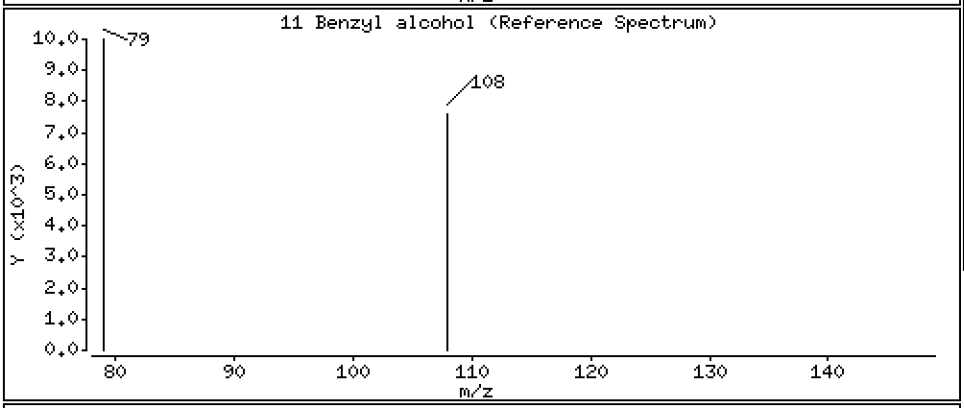
Concentration: 5.181 ug/L

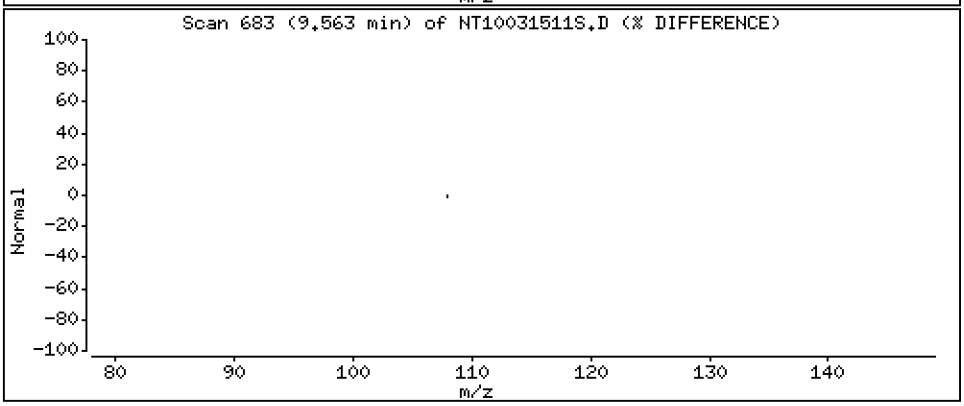












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

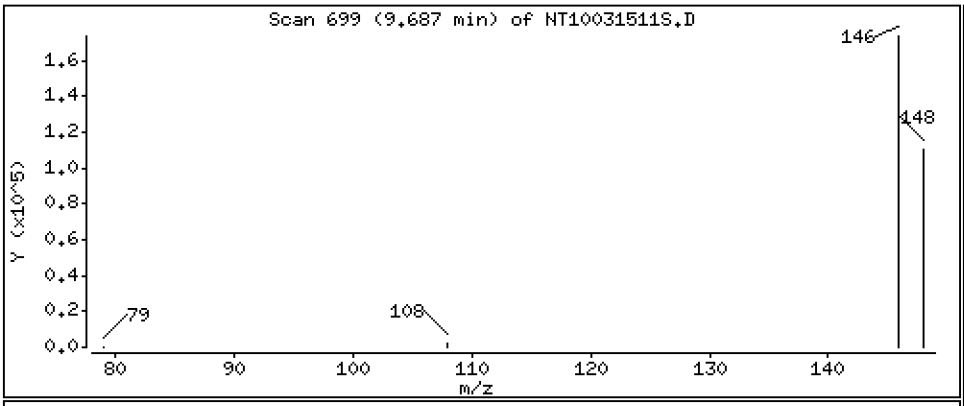
Operator: JGR

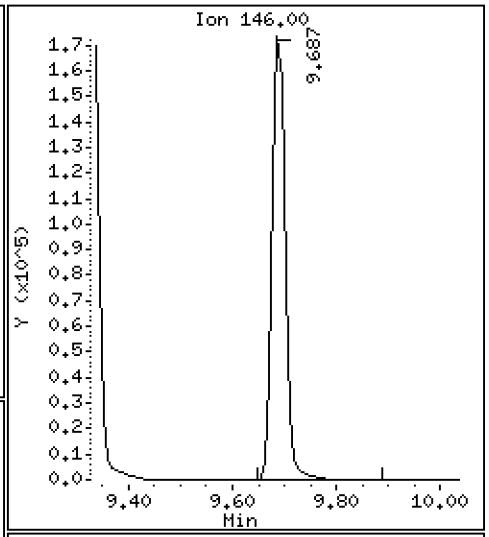
Column phase: ZB-5msi

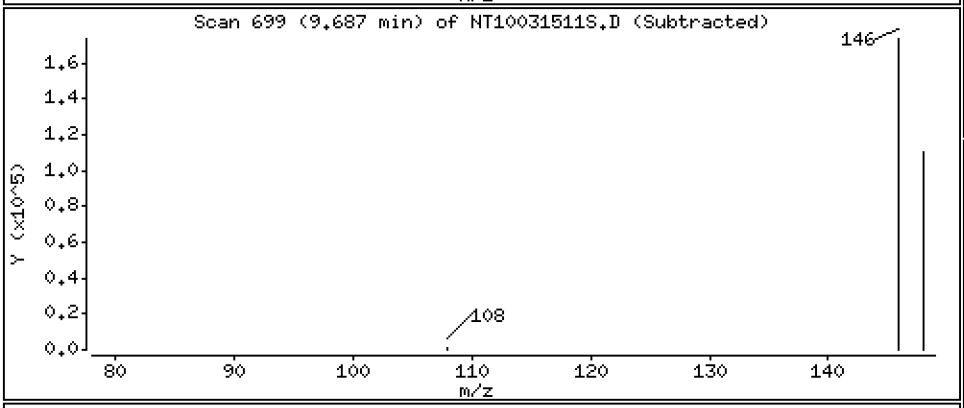
Column diameter: 0.25

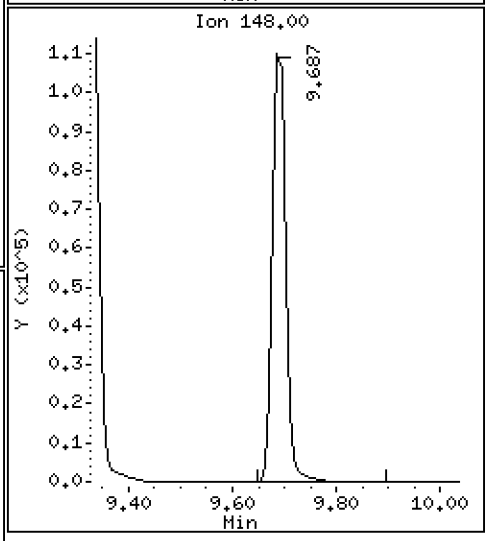
12 1,2-Dichlorobenzene

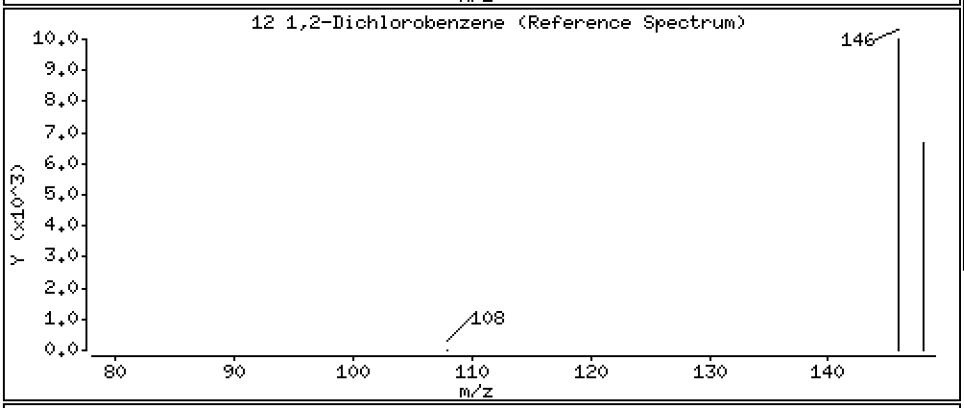
Concentration: 4.679 ug/L

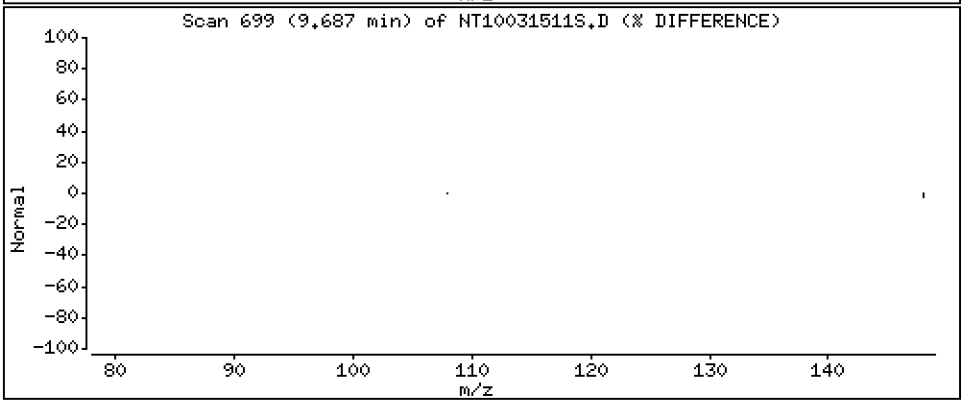












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

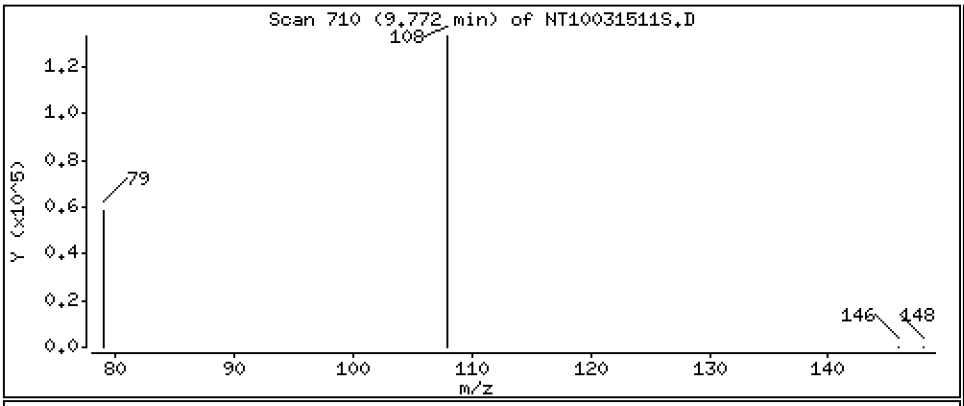
Operator: JGR

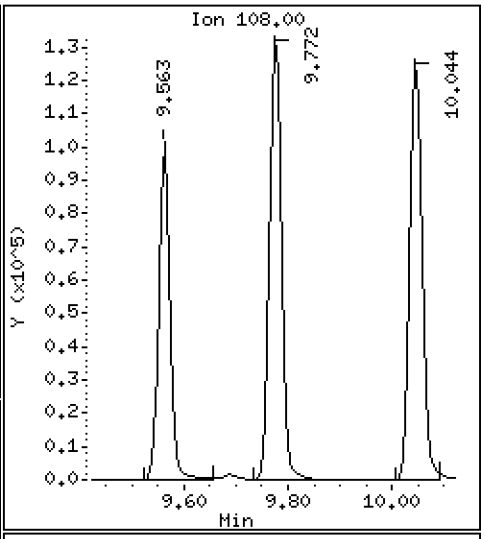
Column phase: ZB-5msi

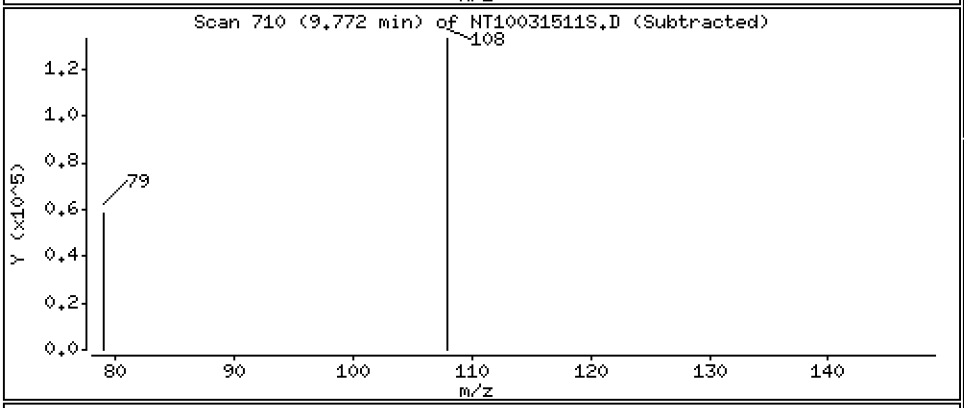
Column diameter: 0.25

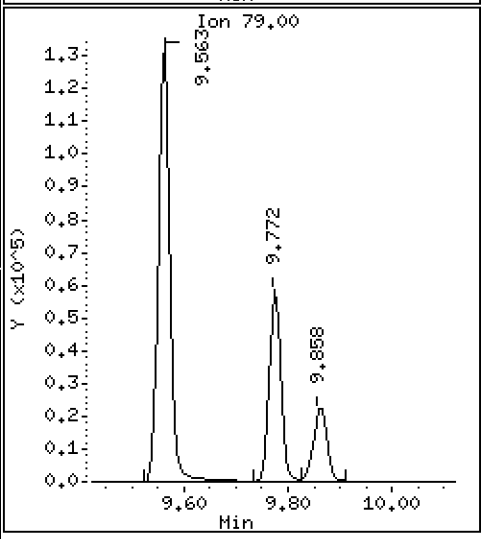
13 2-Methylphenol

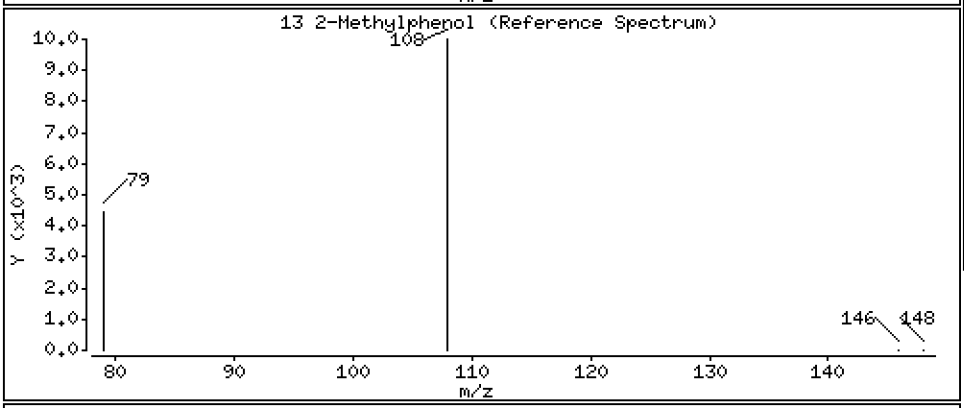
Concentration: 4.197 ug/L

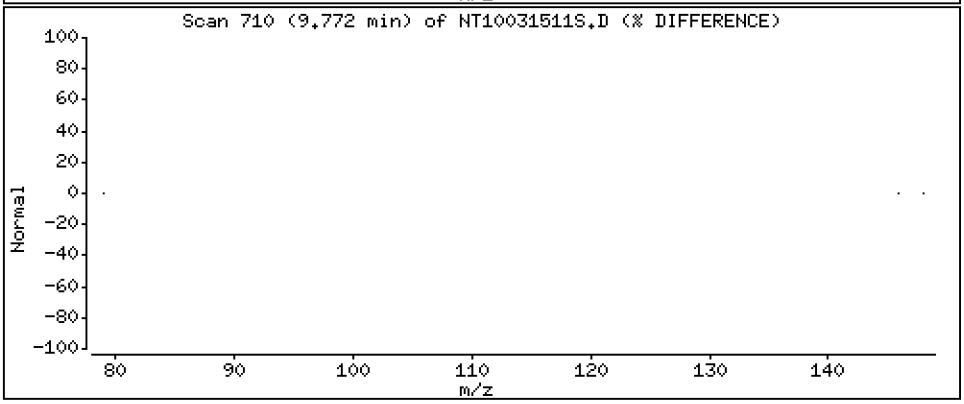












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

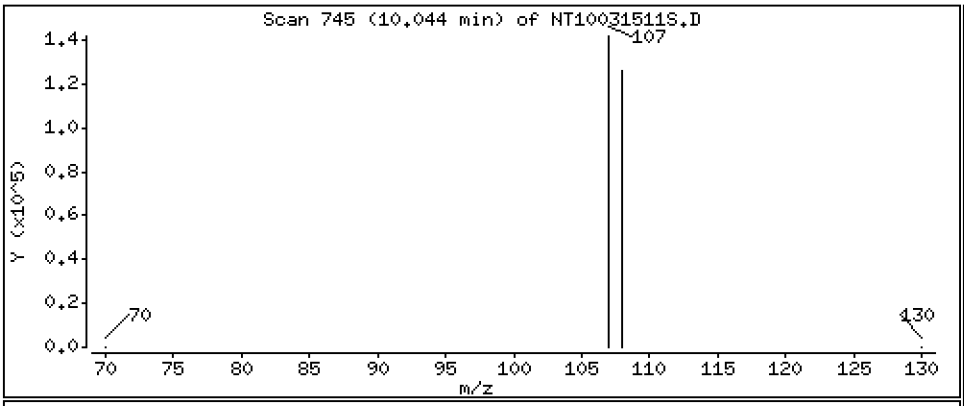
Operator: JGR

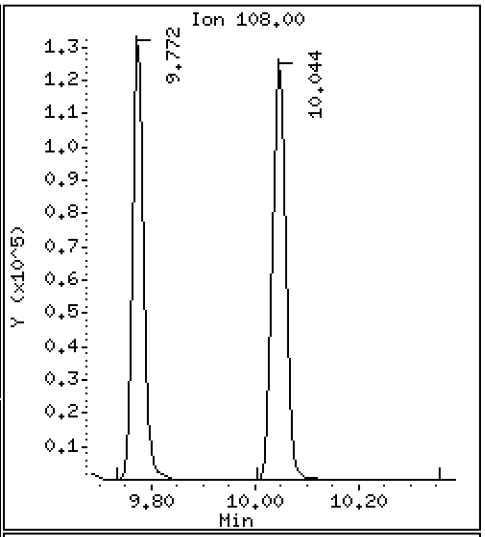
Column phase: ZB-5msi

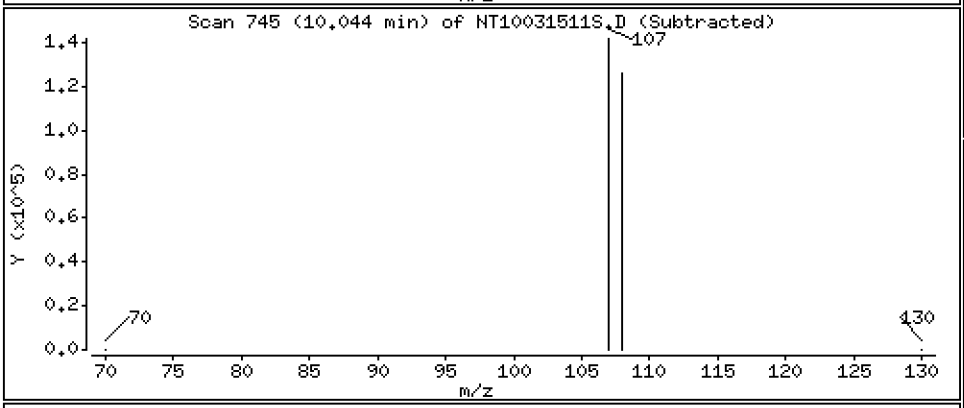
Column diameter: 0.25

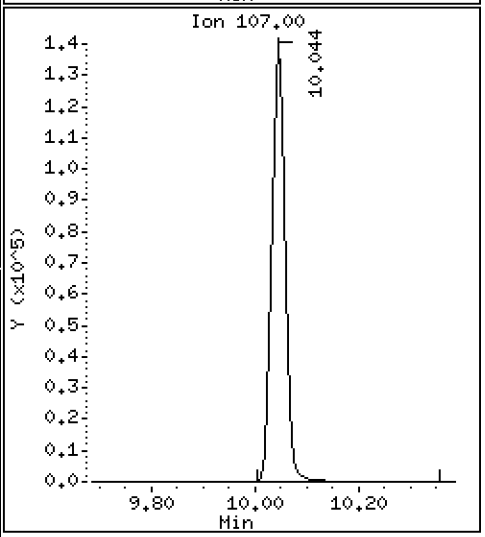
15 4-Methylphenol

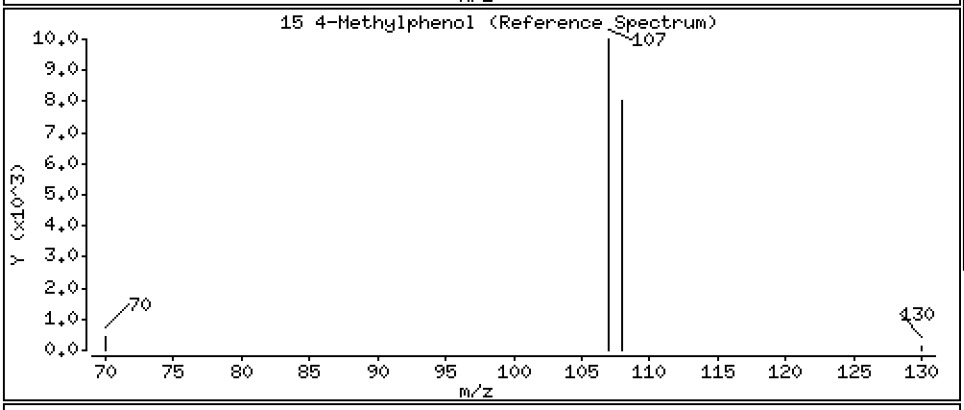
Concentration: 4.463 ug/L

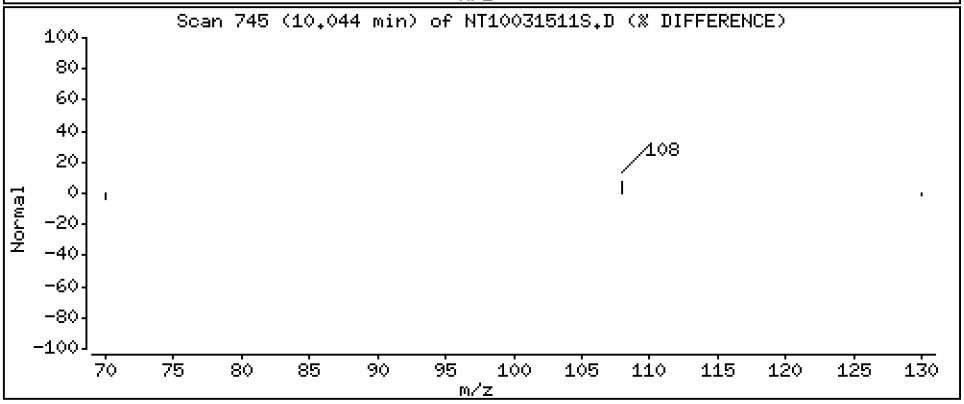












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

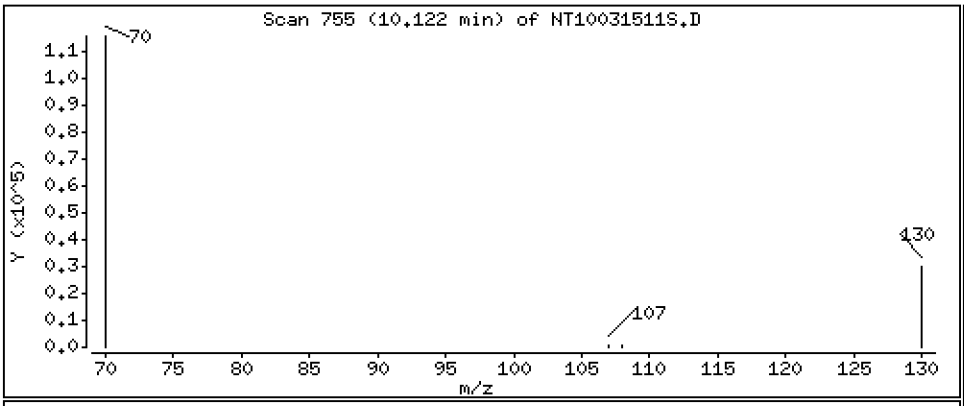
Operator: JGR

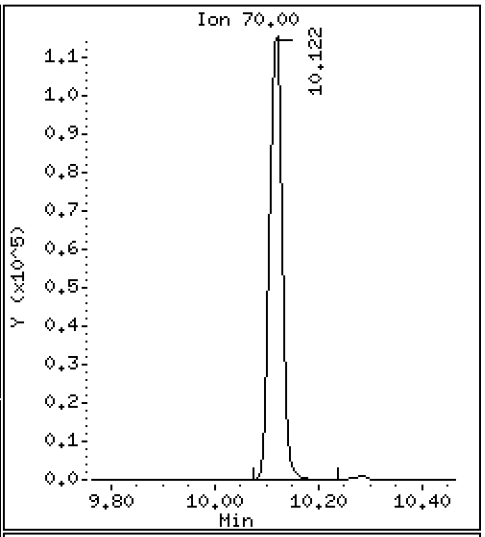
Column phase: ZB-5msi

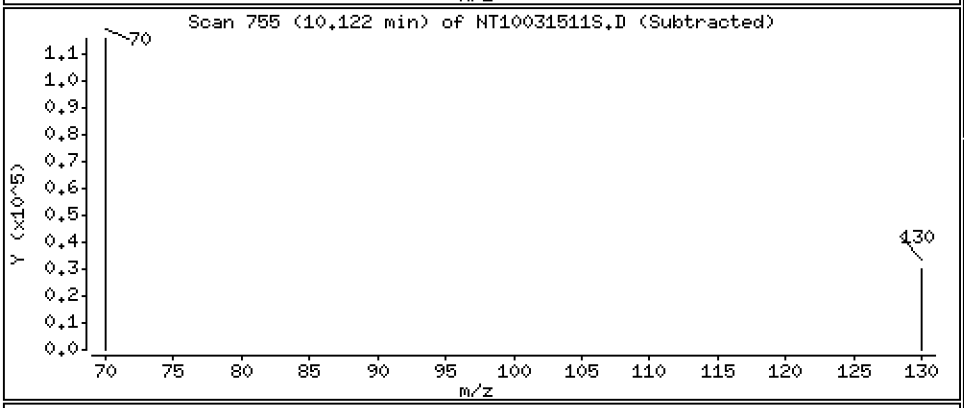
Column diameter: 0.25

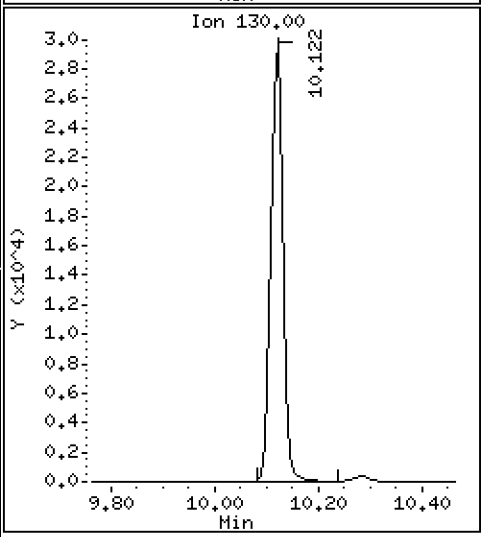
16 N-Nitroso-di-n-propylamine

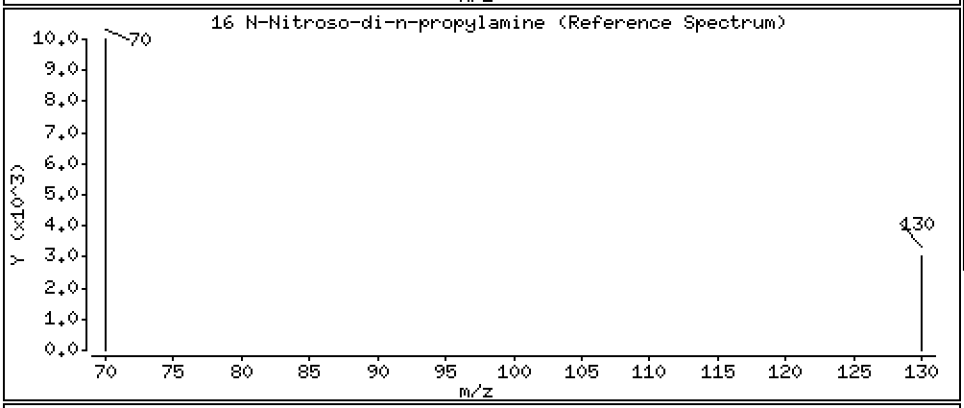
Concentration: 5.282 ug/L

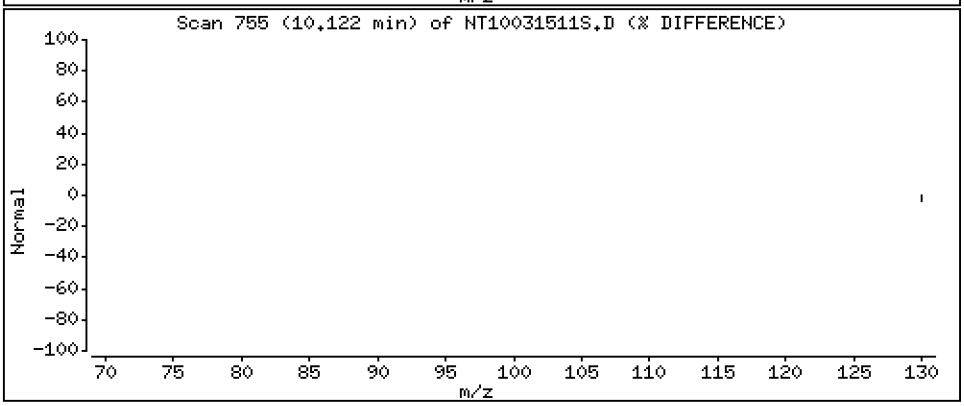












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

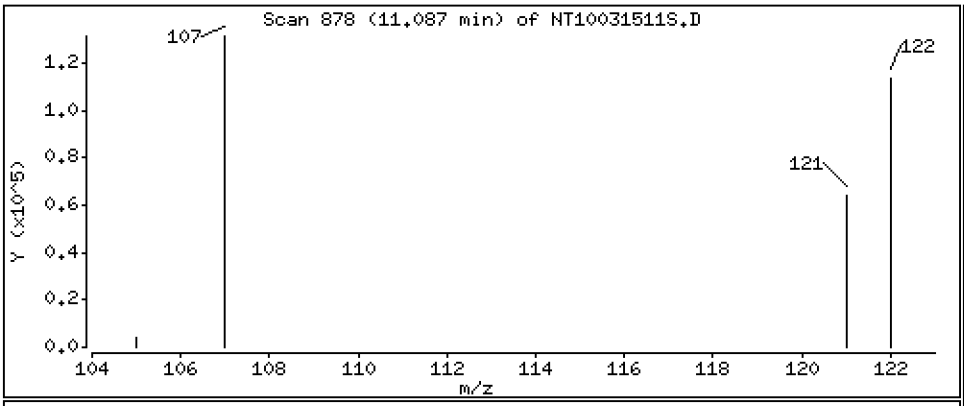
Operator: JGR

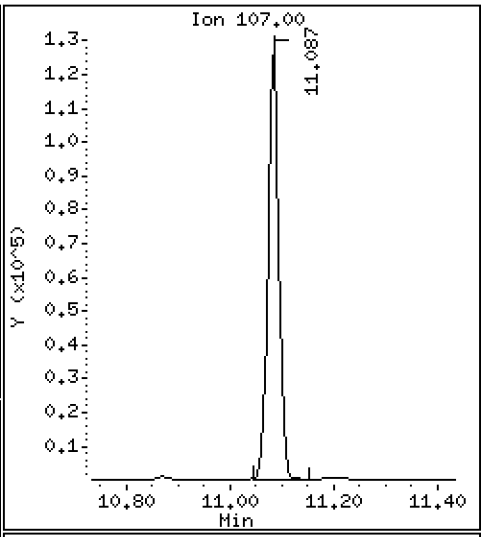
Column phase: ZB-5msi

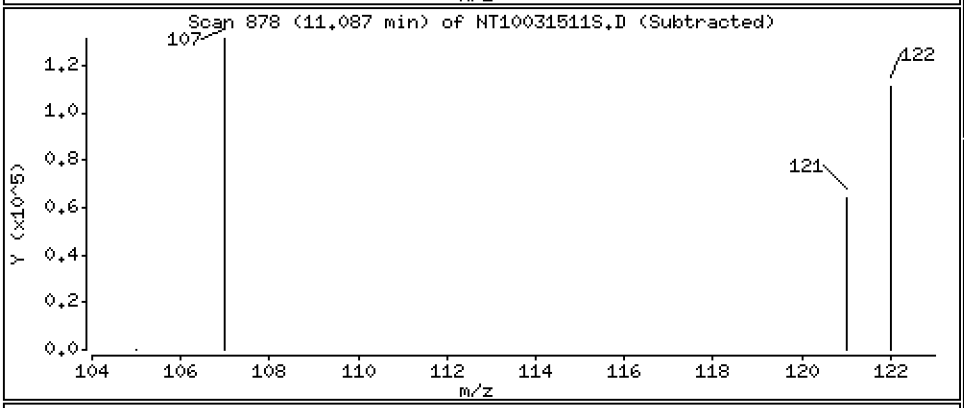
Column diameter: 0.25

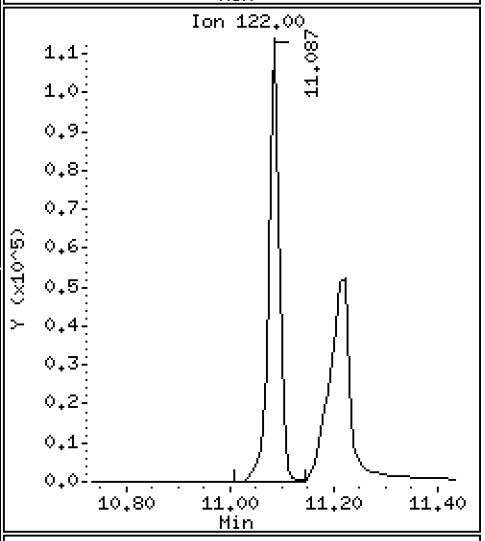
22 2,4-Dimethylphenol

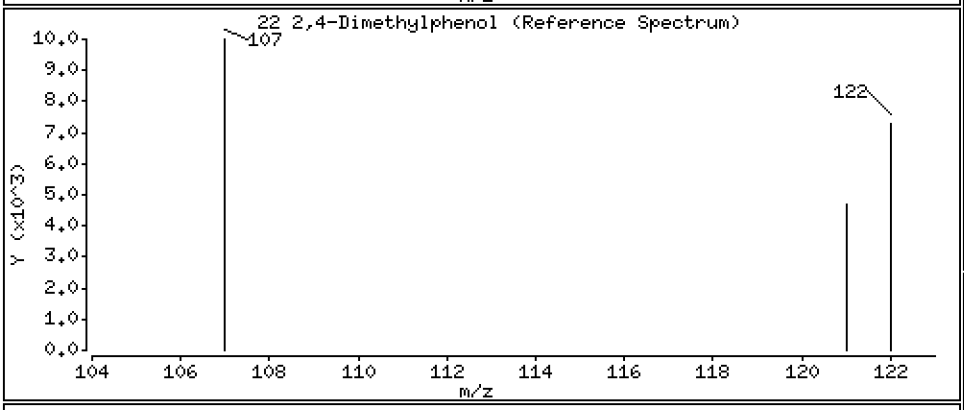
Concentration: 3.660 ug/L

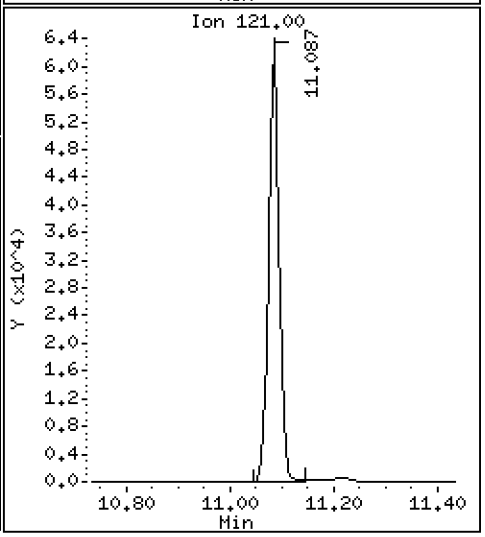


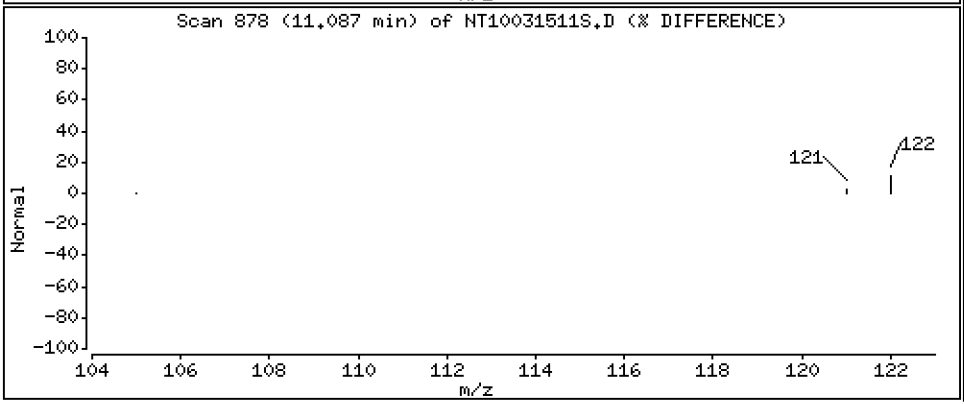












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

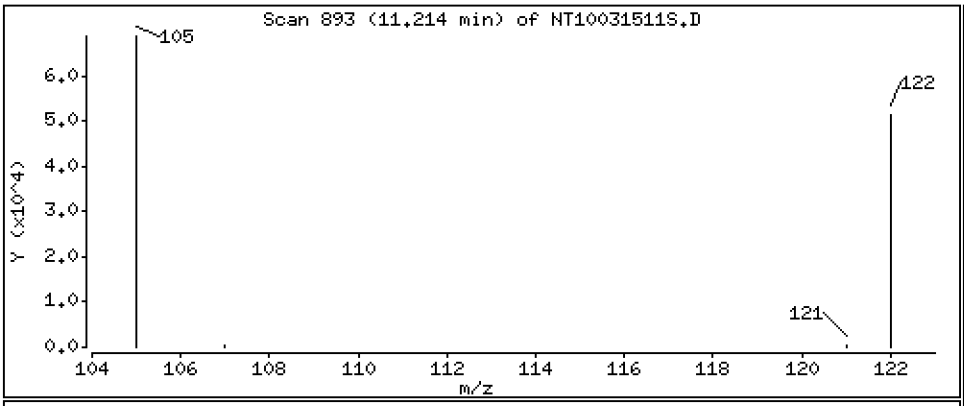
Operator: JGR

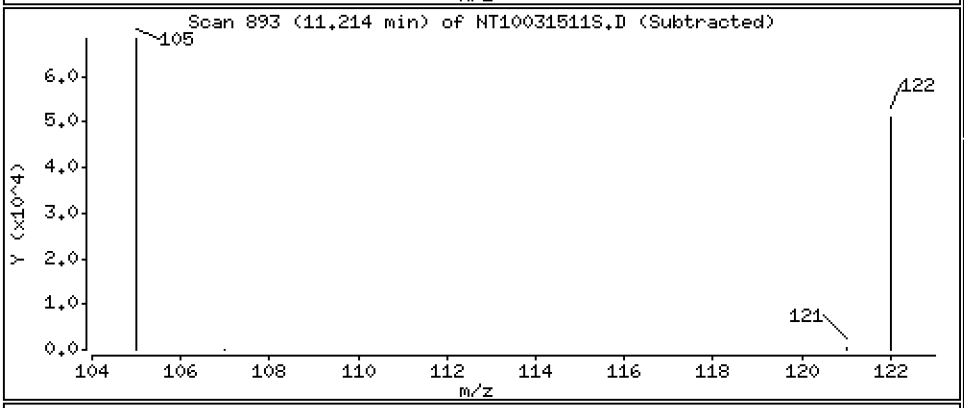
Column phase: ZB-5msi

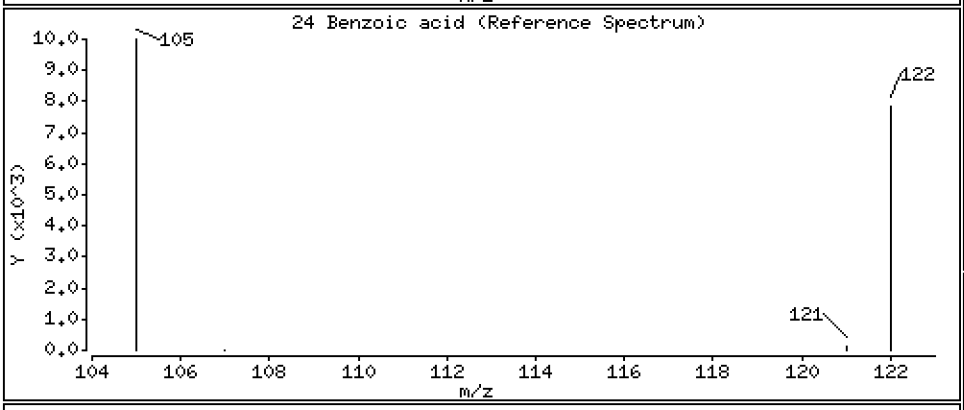
Column diameter: 0.25

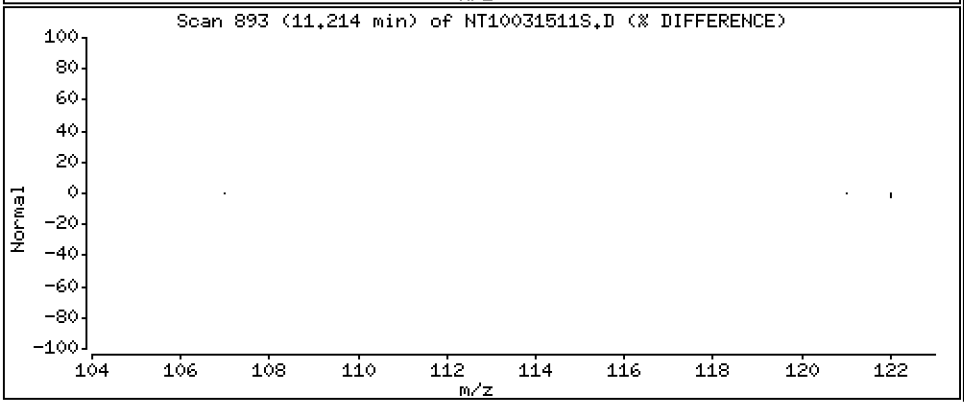
24 Benzoic acid

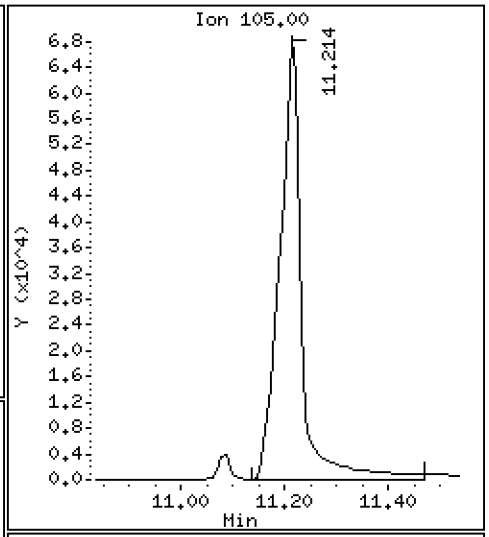
Concentration: 6.746 ug/L

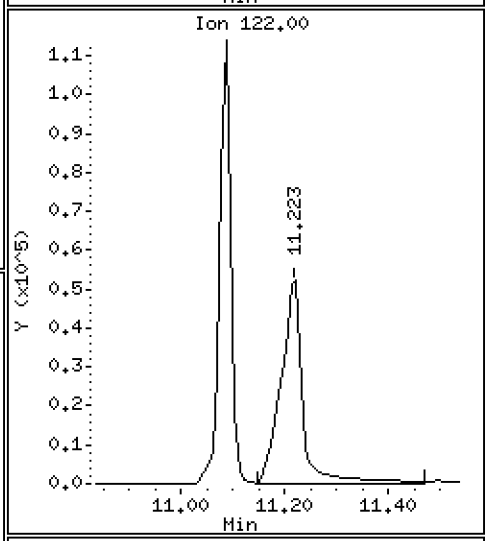


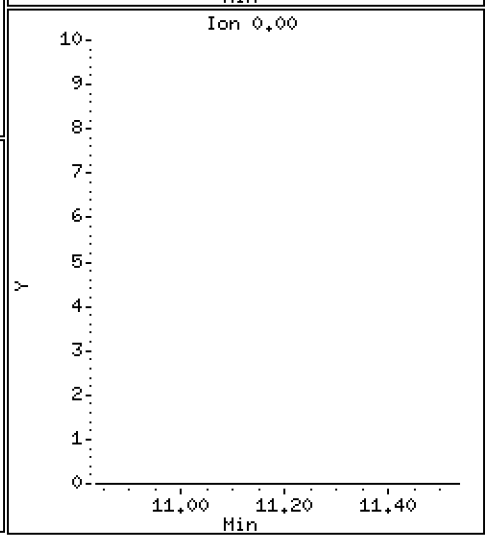












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

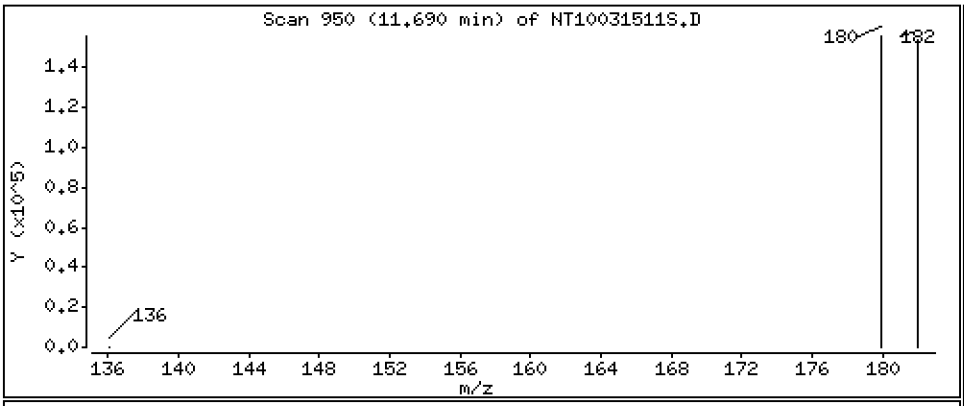
Operator: JGR

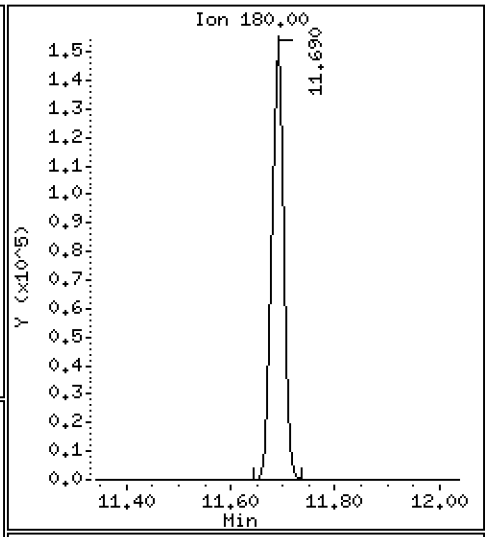
Column phase: ZB-5msi

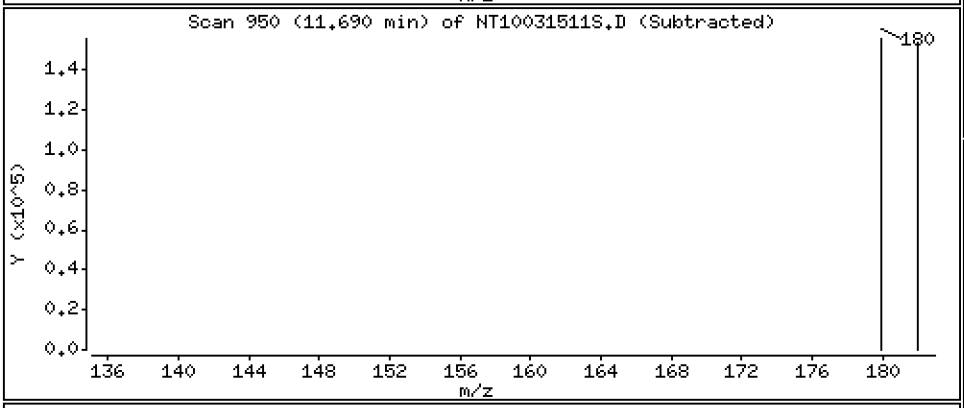
Column diameter: 0.25

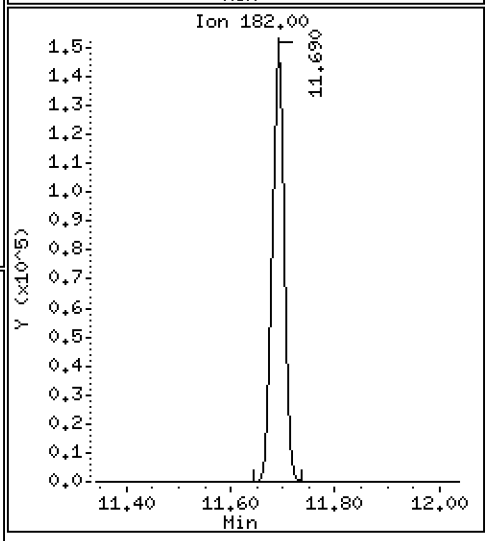
26 1,2,4-Trichlorobenzene

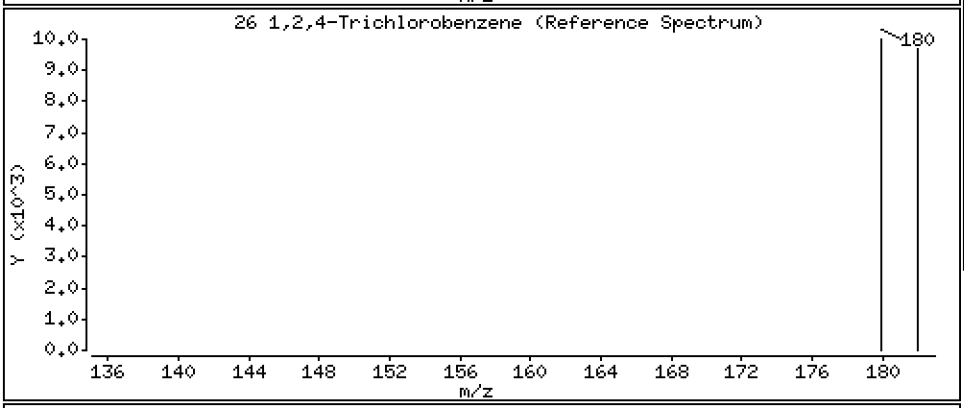
Concentration: 4.445 ug/L

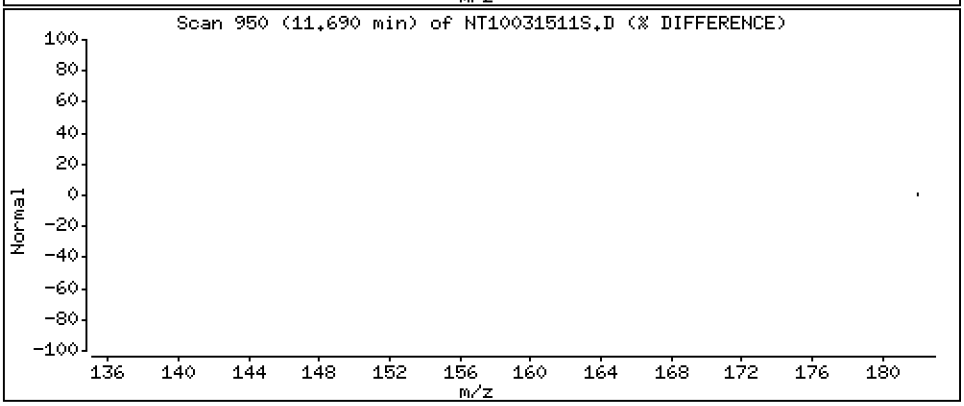












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

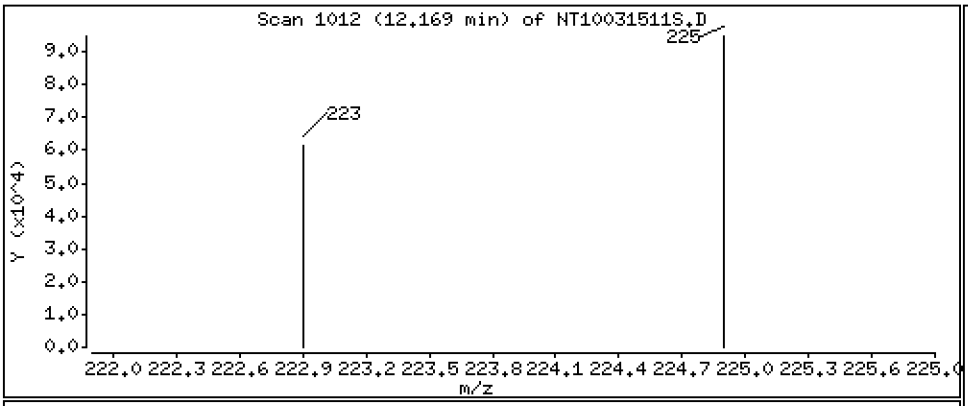
Operator: JGR

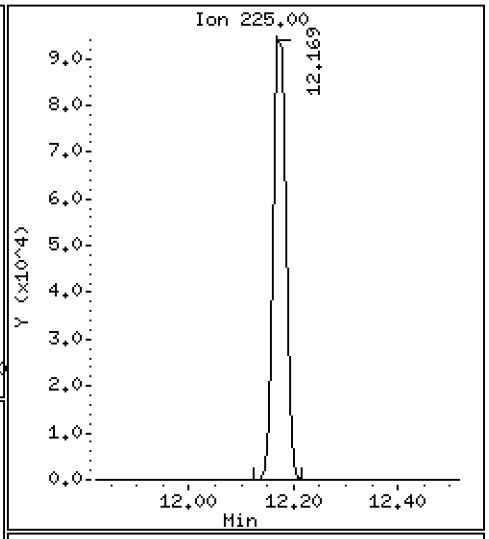
Column phase: ZB-5msi

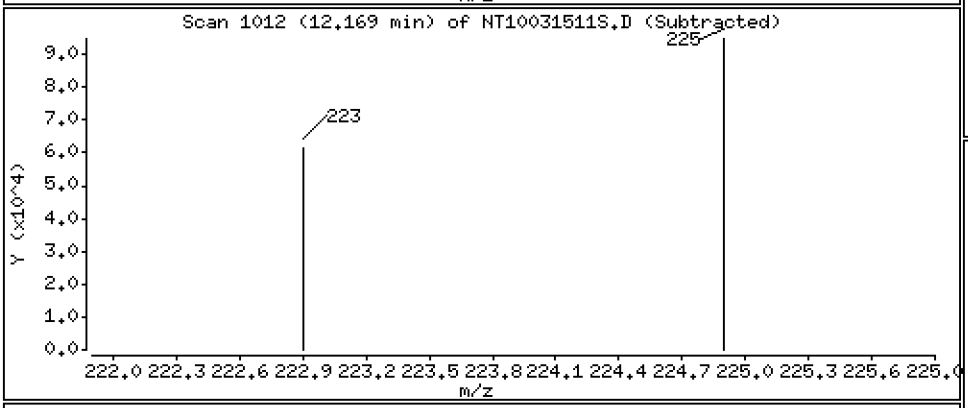
Column diameter: 0.25

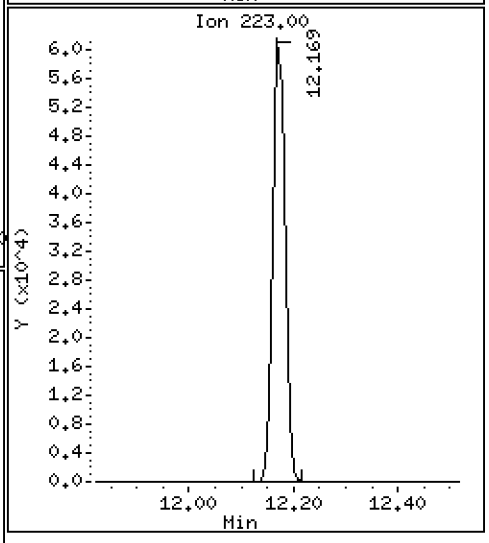
30 Hexachlorobutadiene

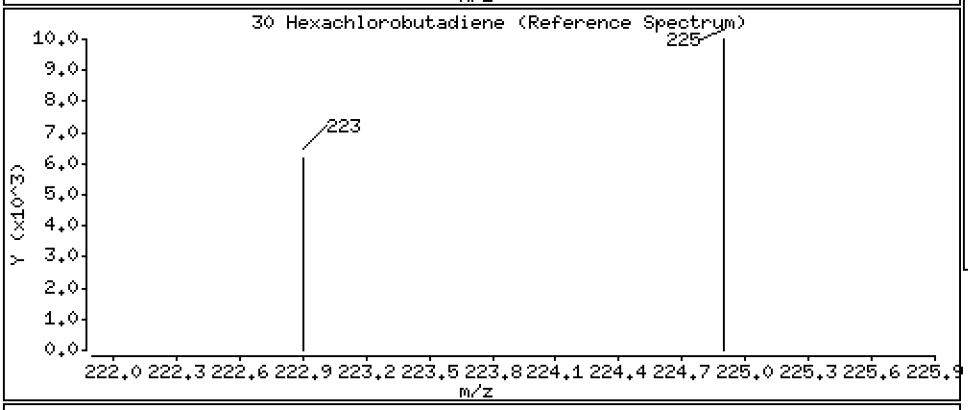
Concentration: 4.653 ug/L

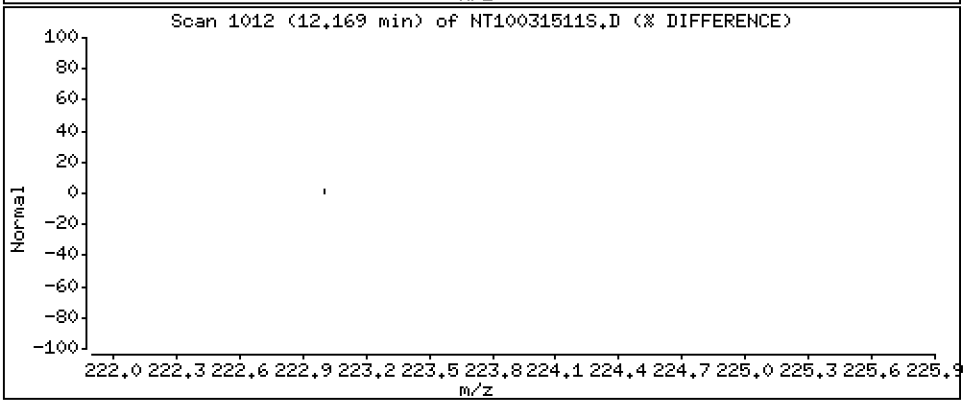












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

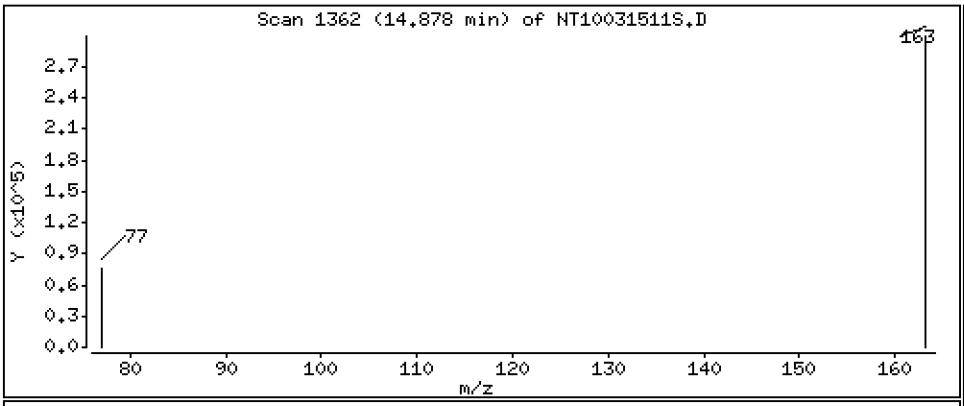
Operator: JGR

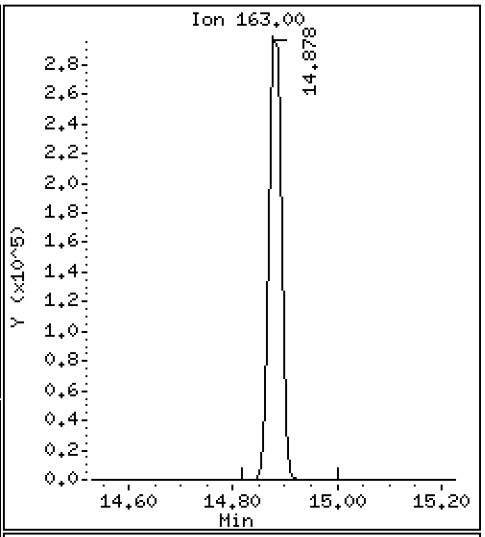
Column phase: ZB-5msi

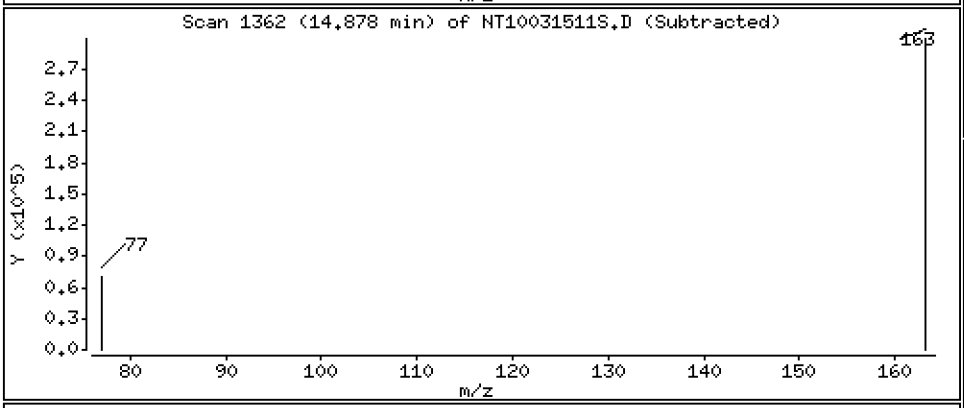
Column diameter: 0.25

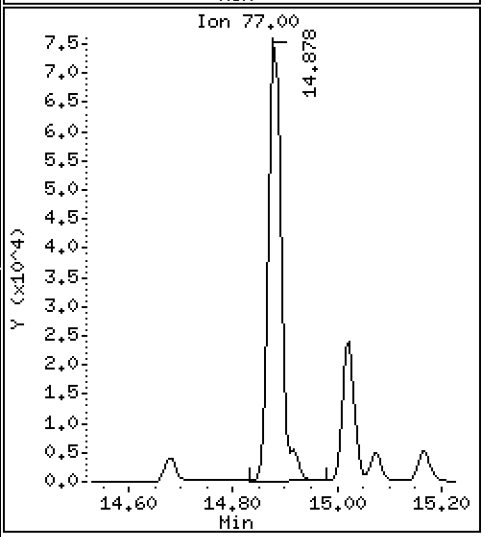
39 Dimethylphthalate

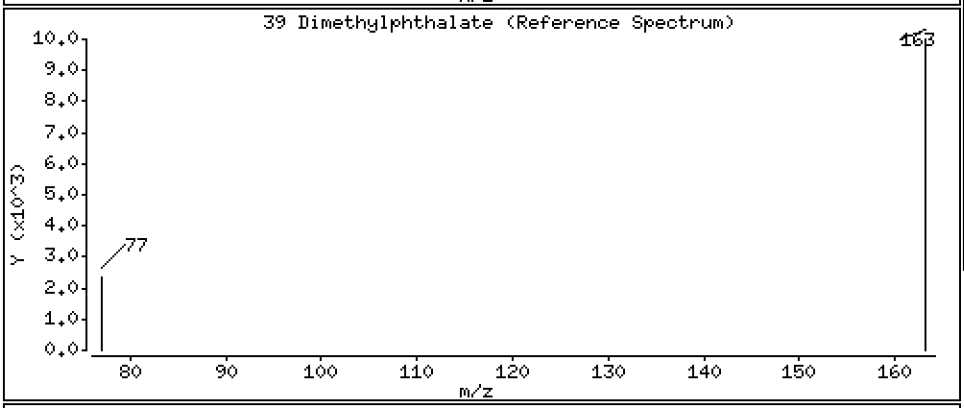
Concentration: 4.948 ug/L

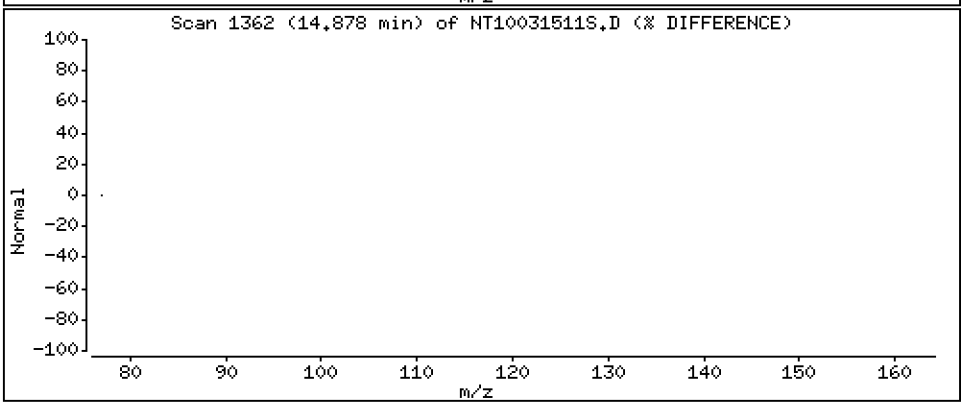












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

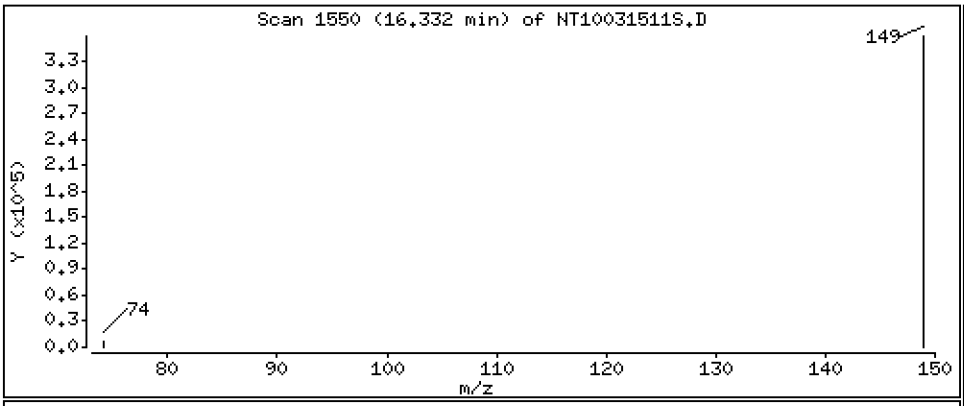
Operator: JGR

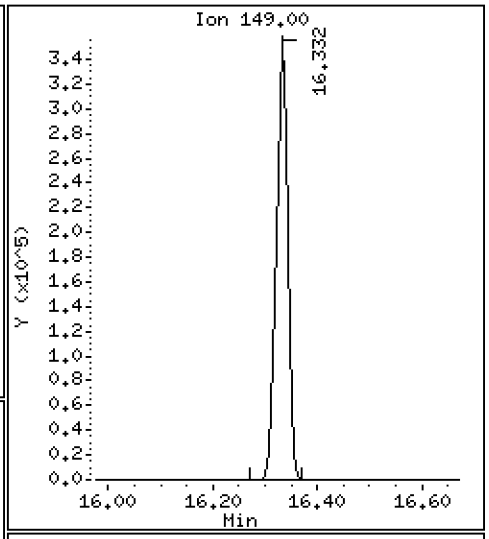
Column phase: ZB-5msi

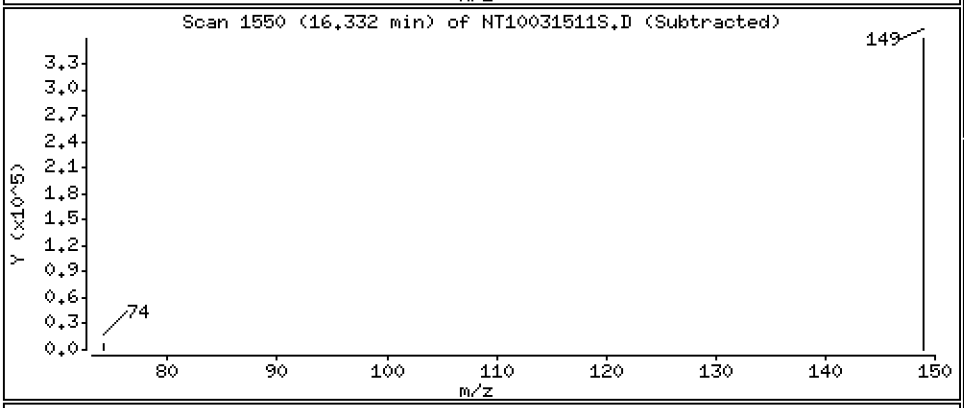
Column diameter: 0.25

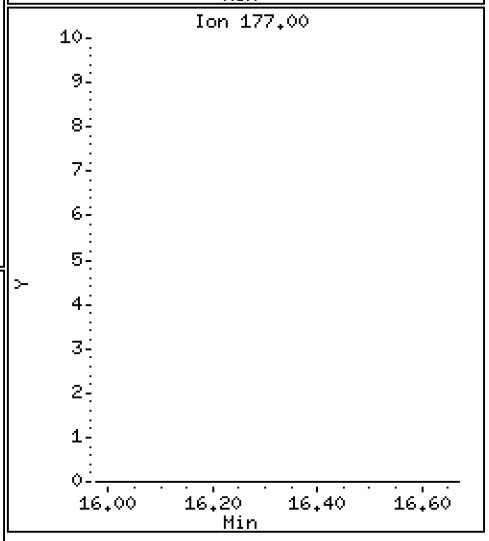
50 Diethylphthalate

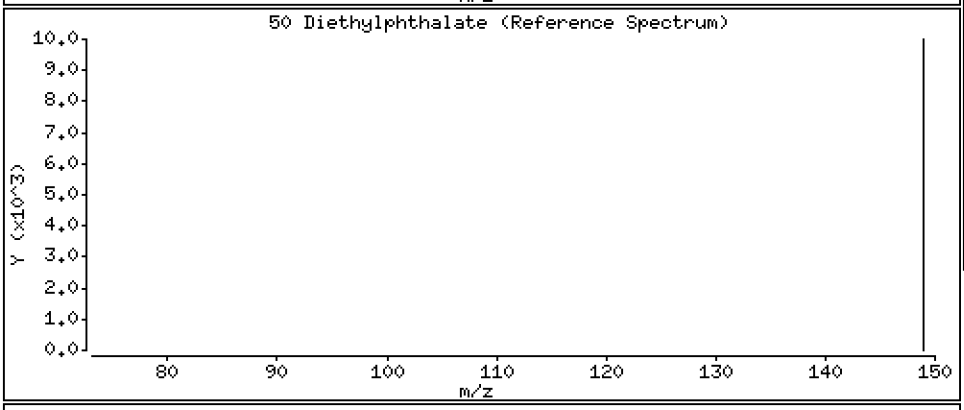
Concentration: 5.364 ug/L

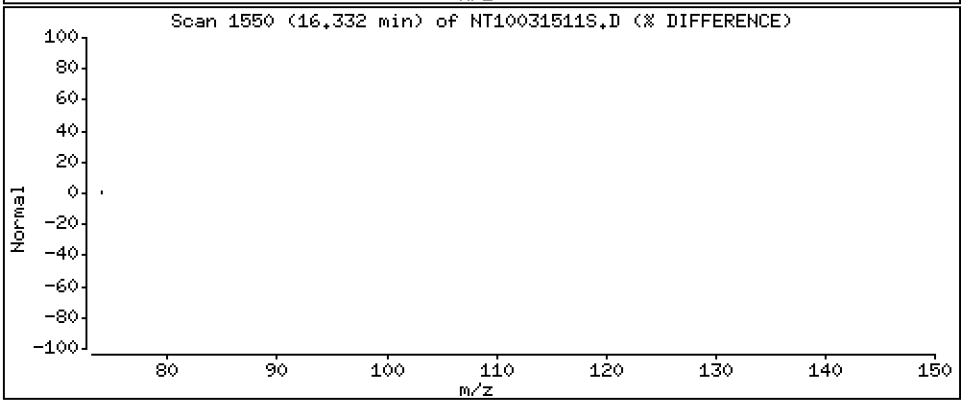












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

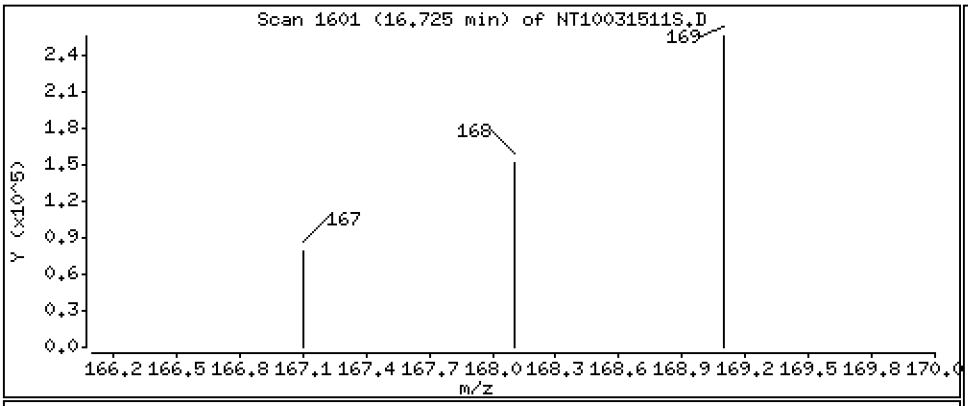
Operator: JGR

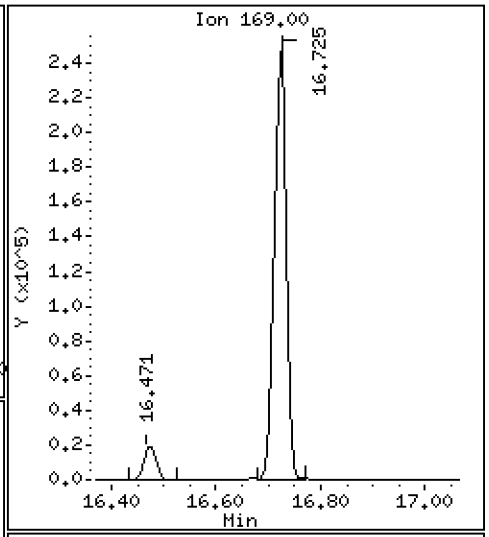
Column phase: ZB-5msi

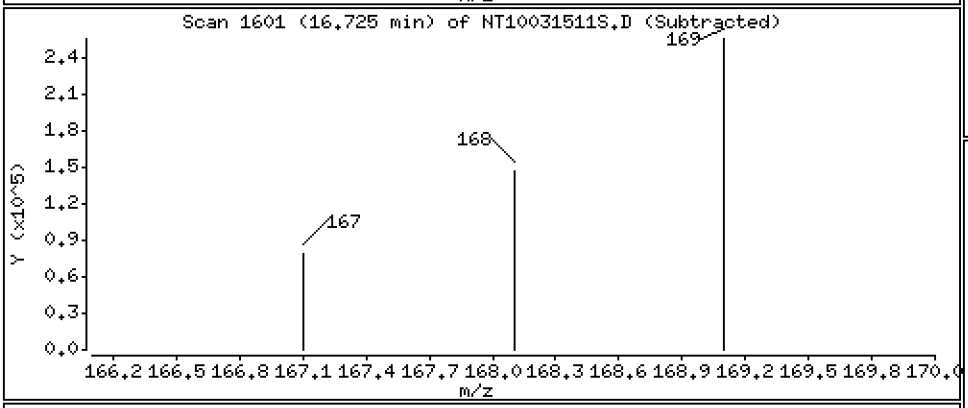
Column diameter: 0.25

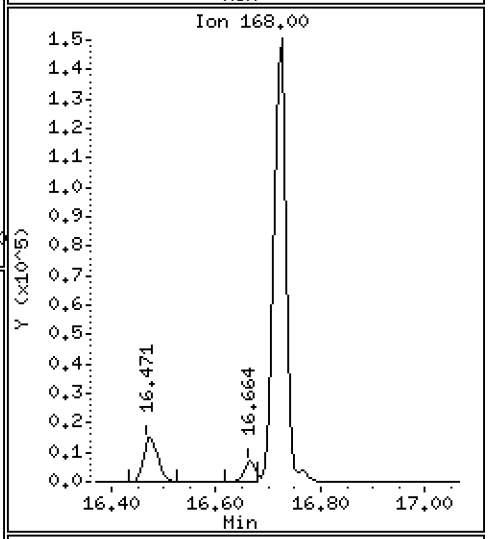
54 N-Nitrosodiphenylamine

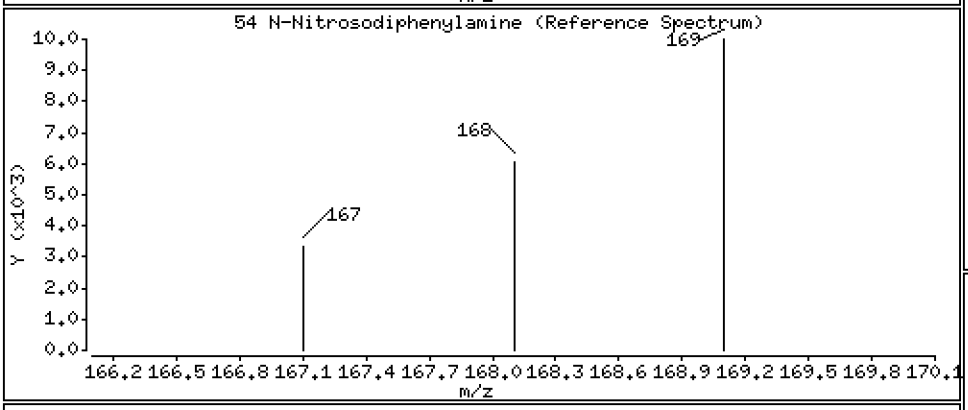
Concentration: 5.080 ug/L

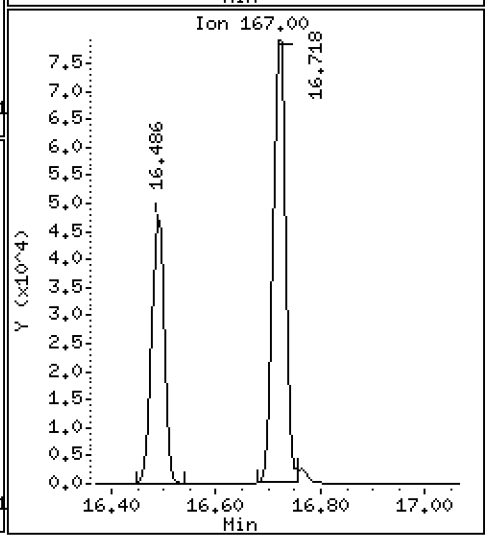


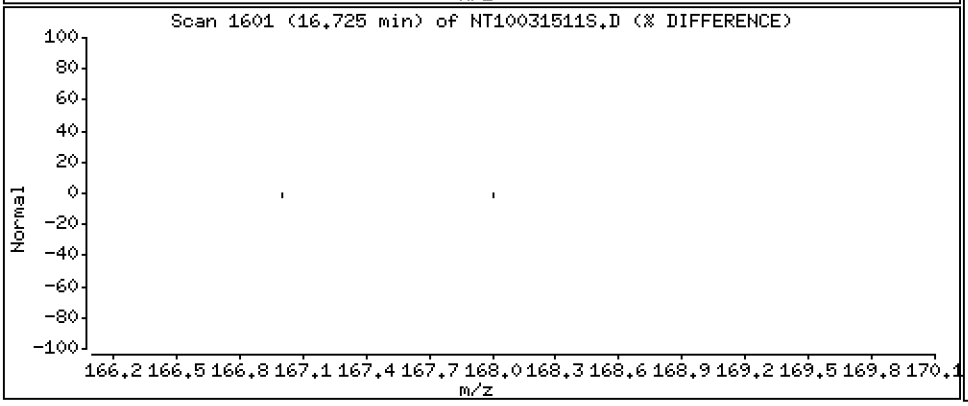












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

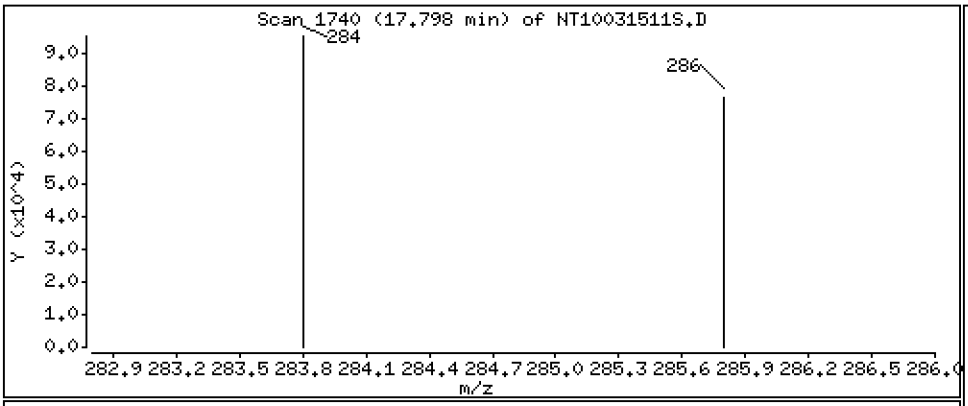
Operator: JGR

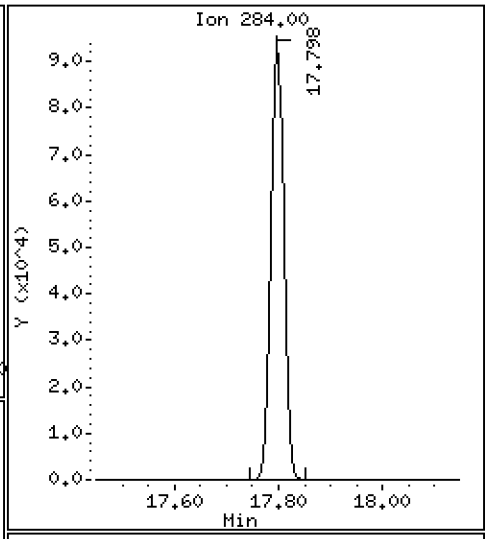
Column phase: ZB-5msi

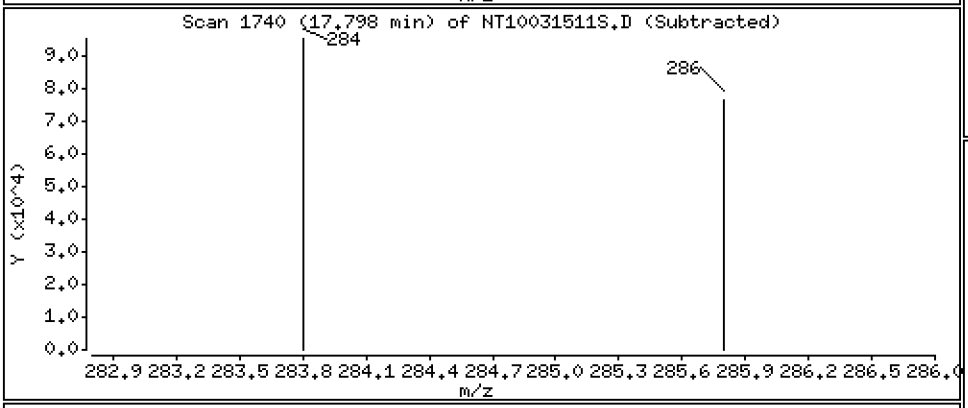
Column diameter: 0.25

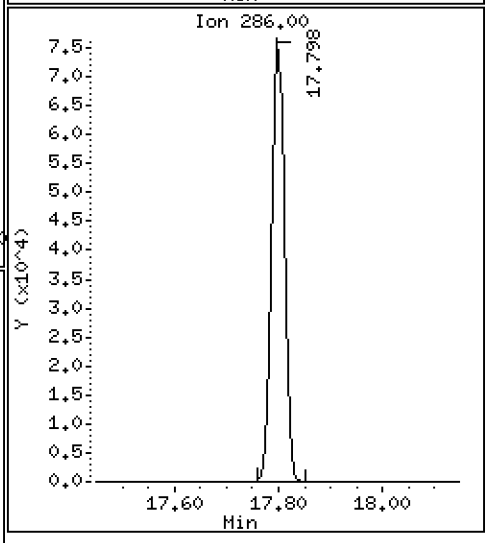
57 Hexachlorobenzene

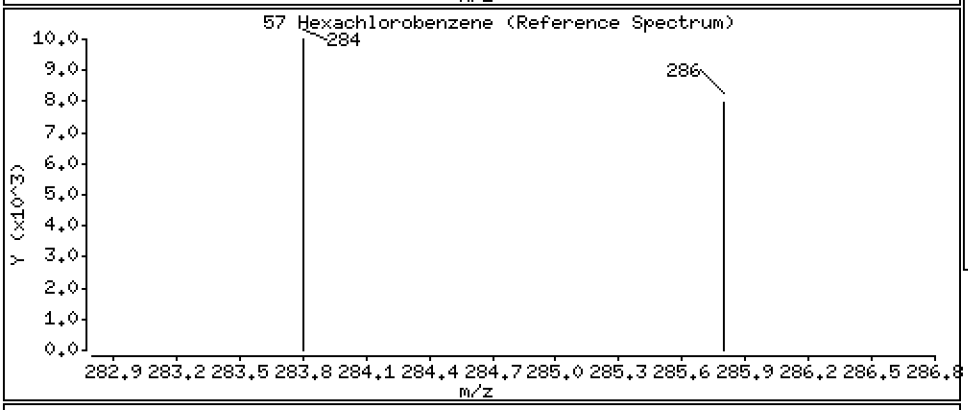
Concentration: 4.614 ug/L

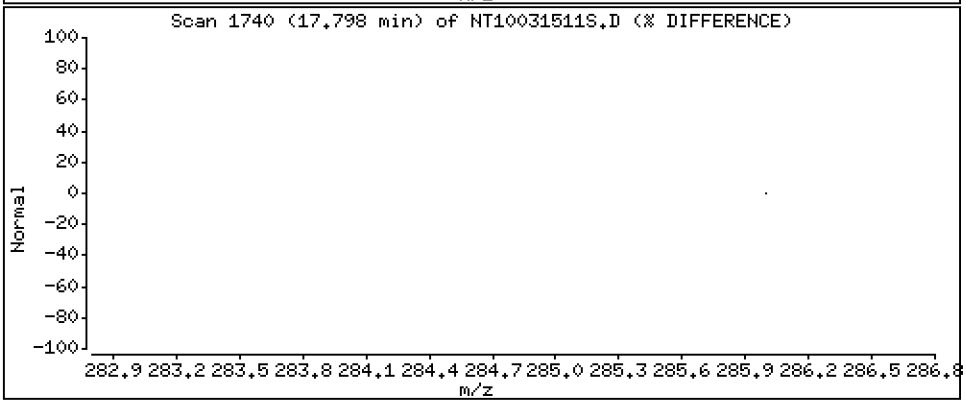












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

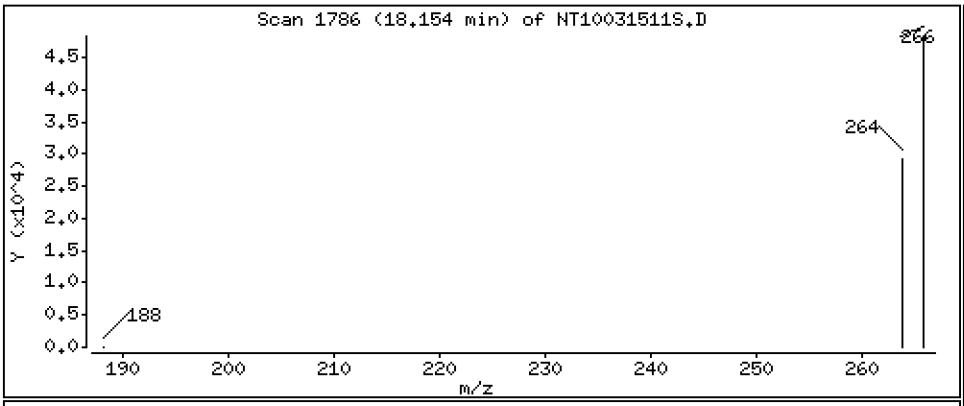
Operator: JGR

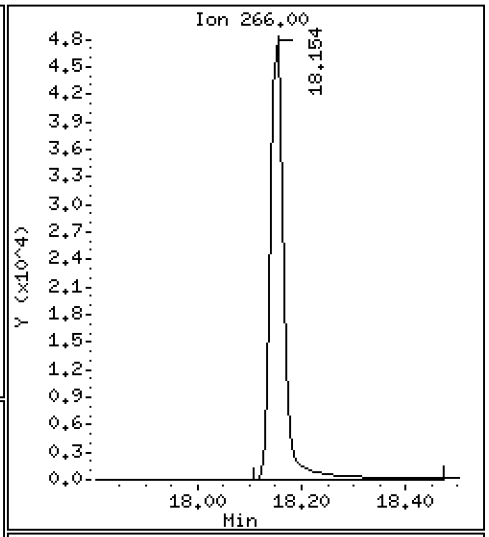
Column phase: ZB-5msi

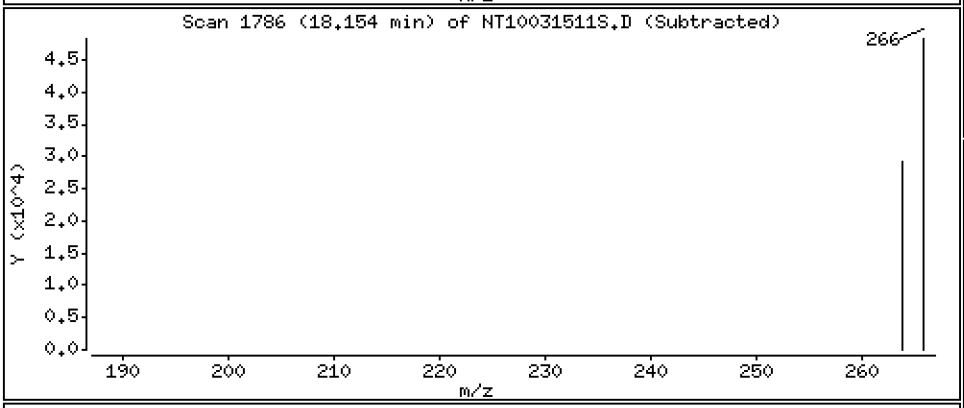
Column diameter: 0.25

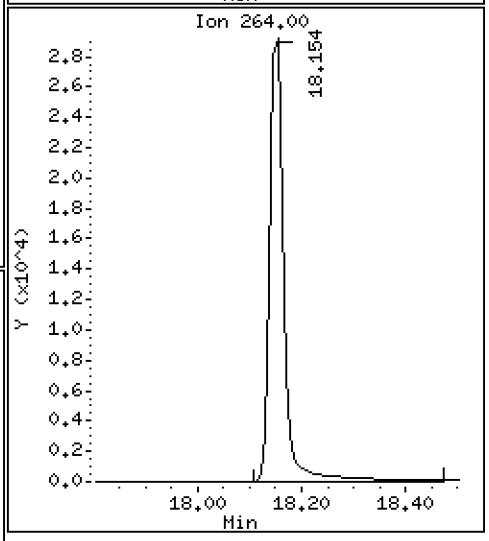
58 Pentachlorophenol

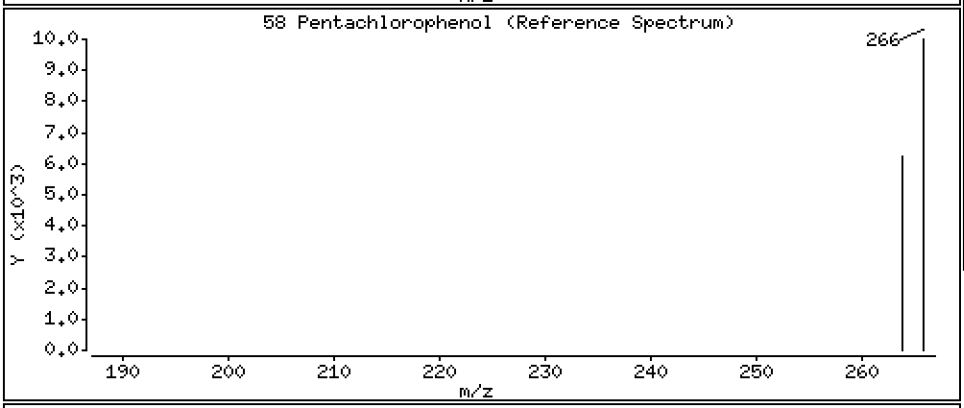
Concentration: 4.418 ug/L

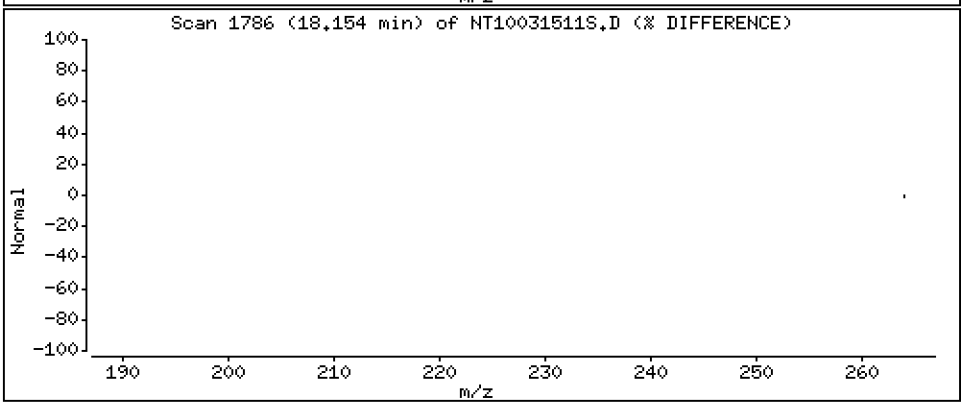












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

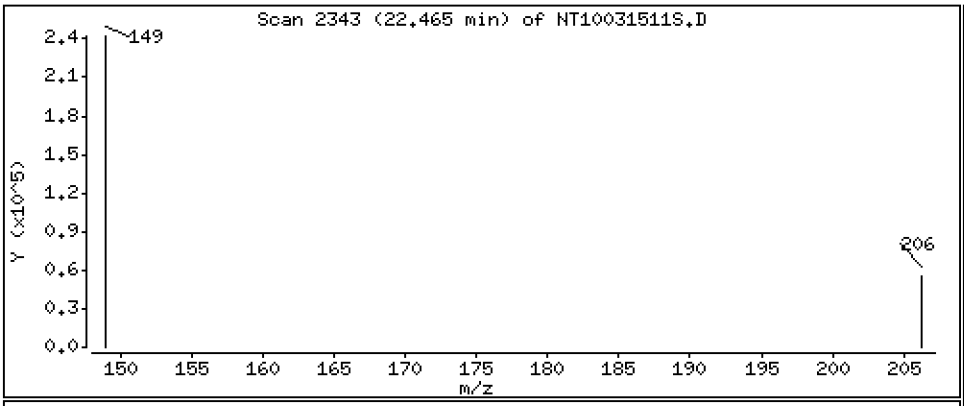
Operator: JGR

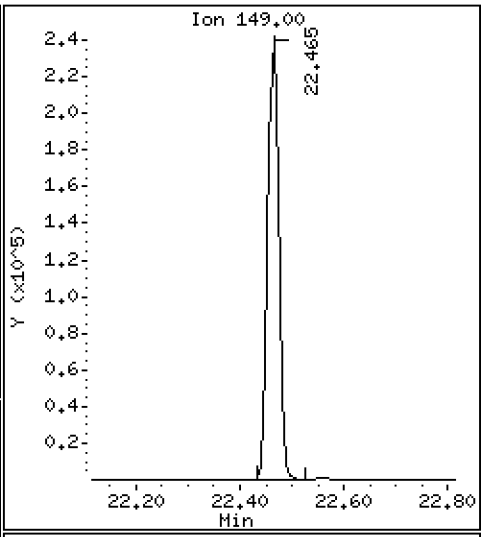
Column phase: ZB-5msi

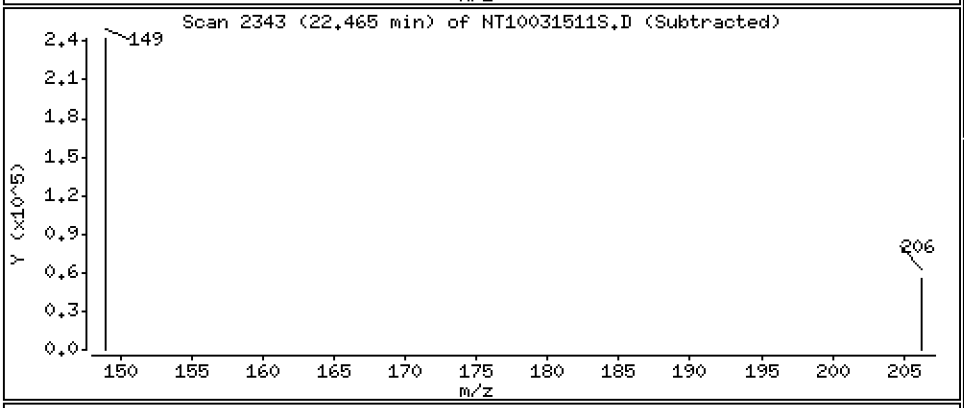
Column diameter: 0.25

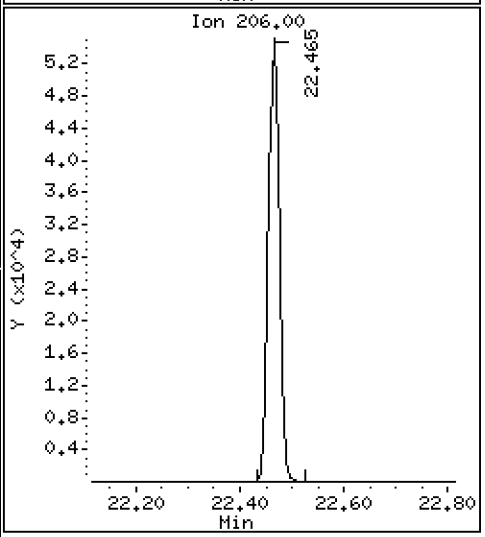
67 Butylbenzylphthalate

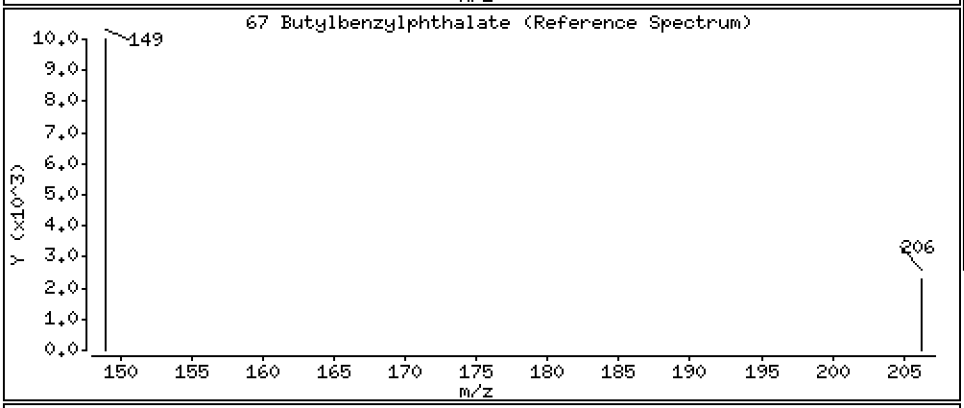
Concentration: 5.121 ug/L

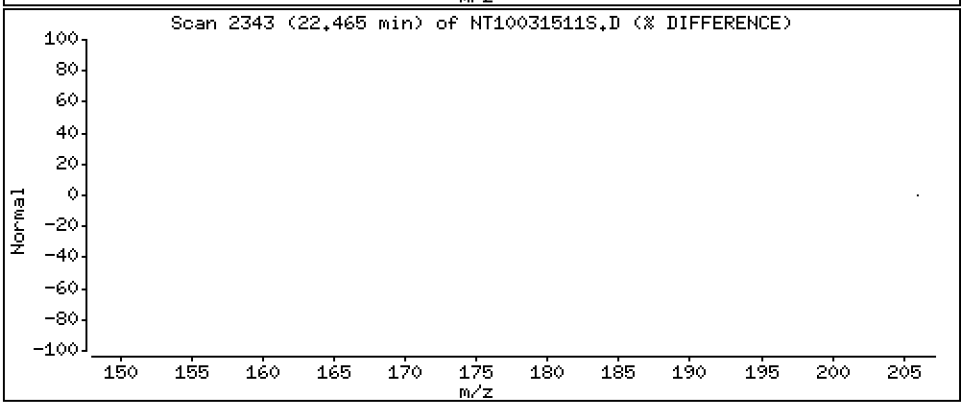












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Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

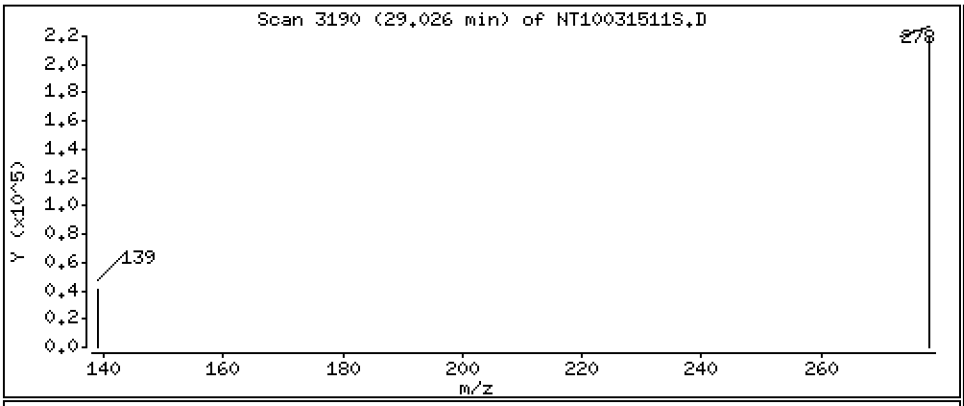
Operator: JGR

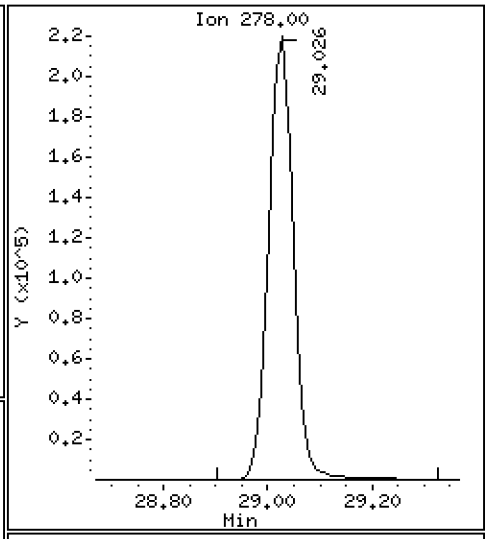
Column phase: ZB-5msi

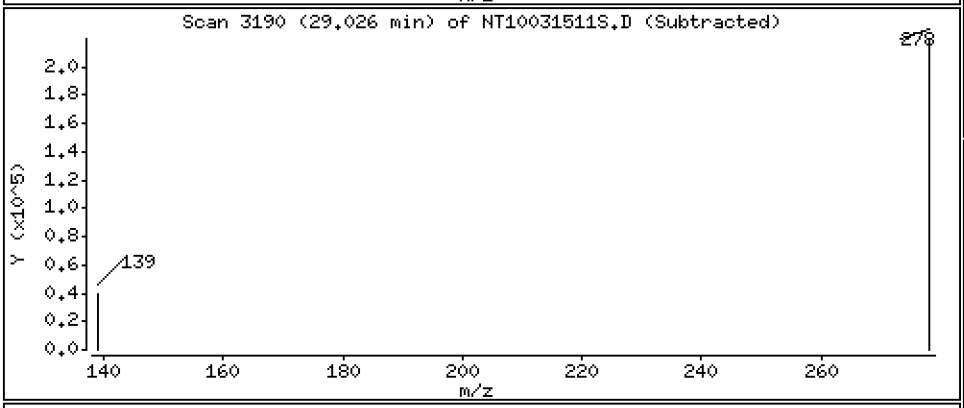
Column diameter: 0.25

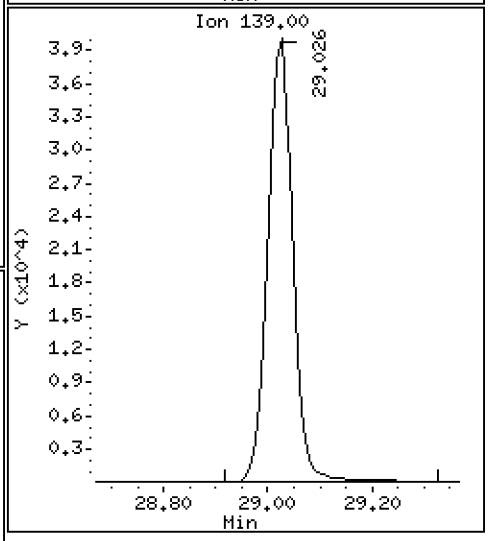
79 Dibenzo(a,h)anthracene

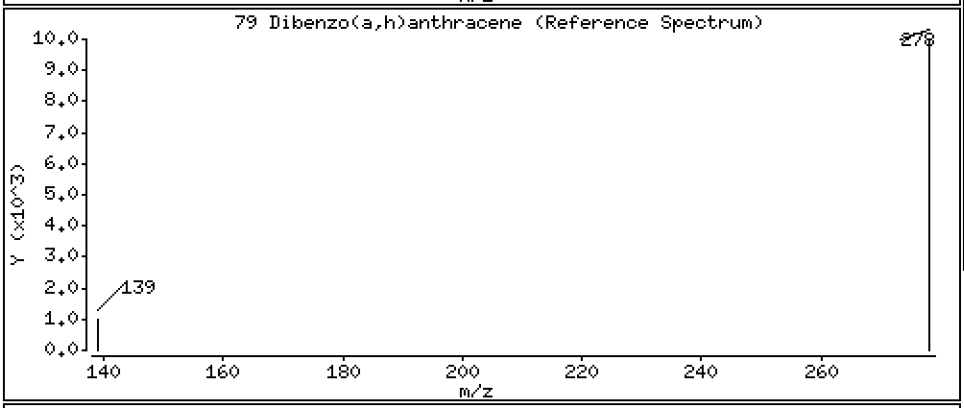
Concentration: 4.238 ug/L

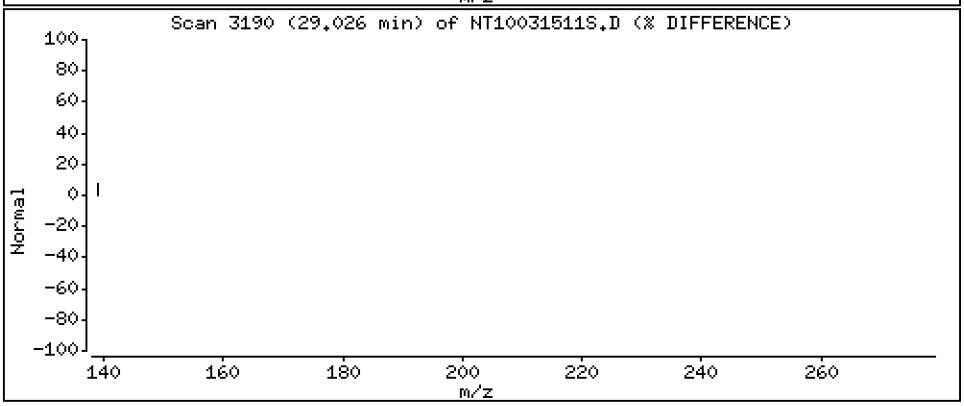












Data File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D

Date : 16-MAR-2023 02:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0238-SCV1

Volume Injected (uL): 1.0

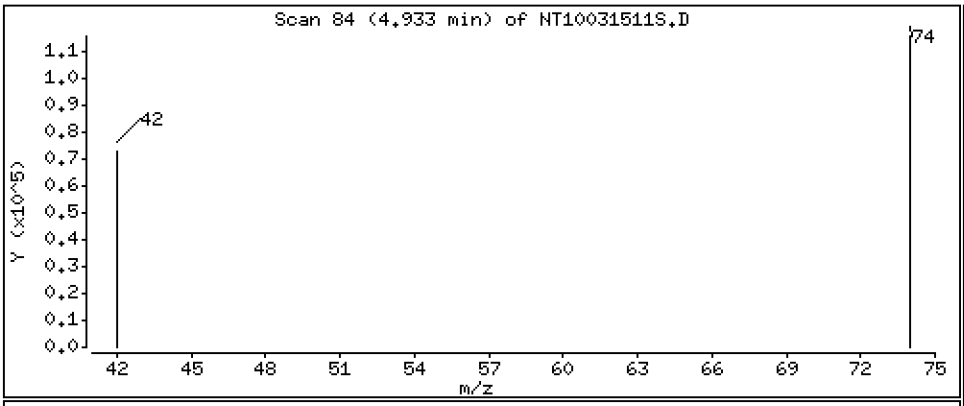
Operator: JGR

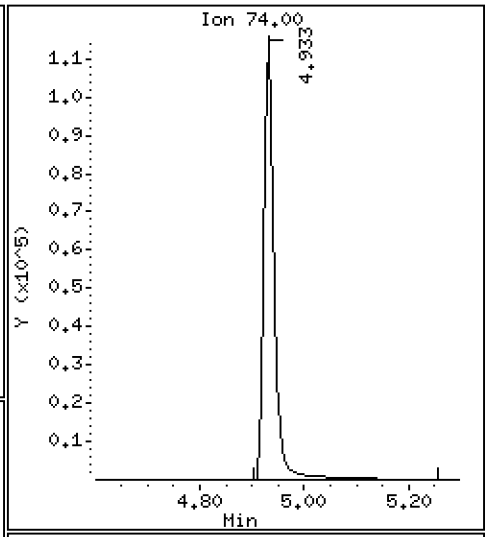
Column phase: ZB-5msi

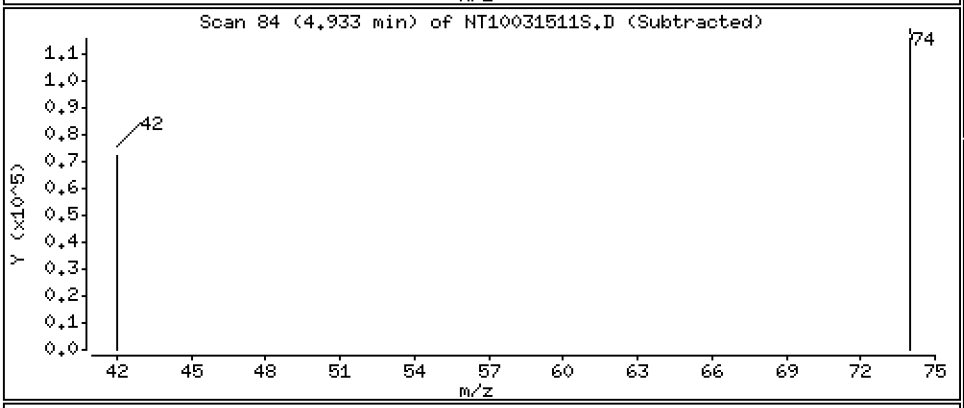
Column diameter: 0.25

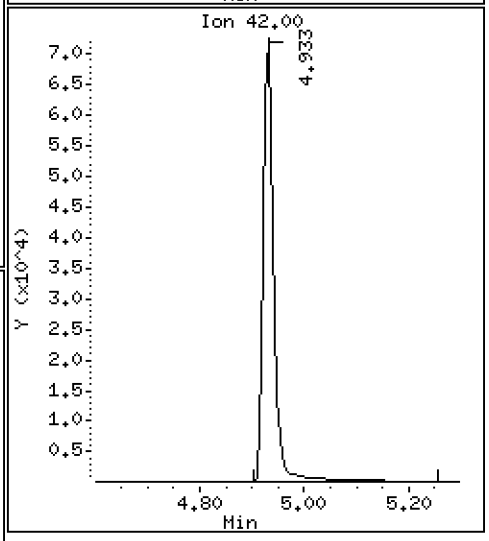
90 N-Nitrosodimethylamine

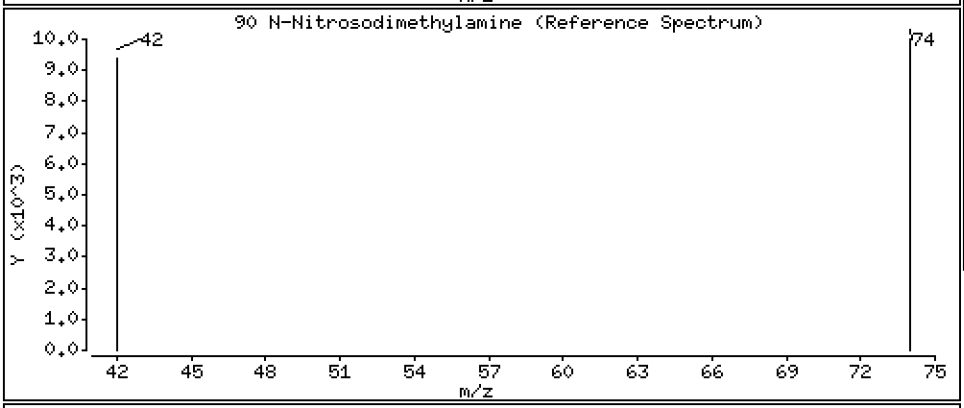
Concentration: 5.096 ug/L

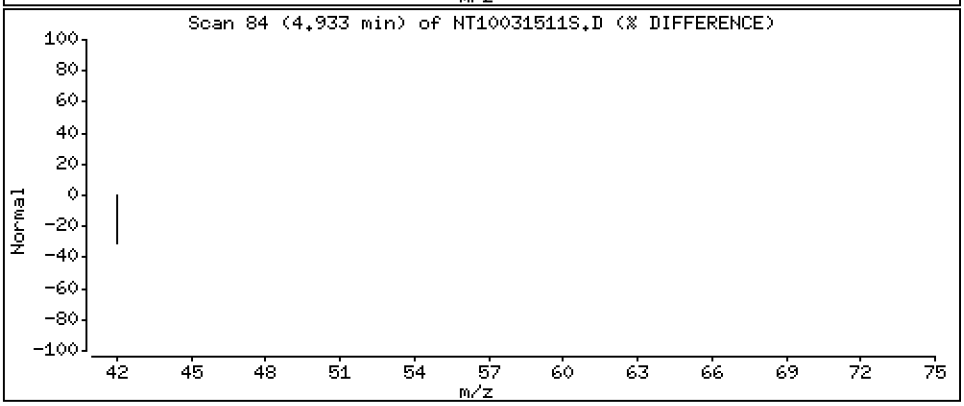












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230315.b\20230315.b\NT10031511S.D
Lab Smp Id: SLC0238-SCV1
Inj Date : 16-MAR-2023 02:16 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0238-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Meth Date : 16-Mar-2023 14:39 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
$ 1	2-Fluorophenol	112	Compound Not Detected.					
3	Phenol	94	8.664	8.664	(0.931)	303581	4.37299	4.373
7	1,3-Dichlorobenzene	146	9.236	9.236	(0.992)	301605	4.64290	4.643
* 8	1,4-Dichlorobenzene-d4	152	9.306	9.298	(1.000)	166866	4.00000	
9	1,4-Dichlorobenzene	146	9.329	9.329	(1.002)	303390	4.83813	4.838
11	Benzyl alcohol	79	9.562	9.570	(1.028)	208505	5.18071	5.181
12	1,2-Dichlorobenzene	146	9.686	9.686	(1.041)	288539	4.67875	4.679
13	2-Methylphenol	108	9.772	9.772	(1.050)	201888	4.19698	4.197
15	4-Methylphenol	108	10.043	10.036	(1.079)	223083	4.46301	4.463
16	N-Nitroso-di-n-propylamine	70	10.121	10.113	(1.088)	186707	5.28174	5.282
22	2,4-Dimethylphenol	107	11.086	11.087	(0.942)	193654	3.66015	3.660
24	Benzoic acid	105	11.214	11.189	(0.952)	200487	6.74612	6.746
26	1,2,4-Trichlorobenzene	180	11.690	11.690	(0.993)	236605	4.44540	4.445
* 27	Naphthalene-d8	136	11.775	11.775	(1.000)	612104	4.00000	
30	Hexachlorobutadiene	225	12.169	12.169	(1.033)	150581	4.65339	4.653
39	Dimethylphthalate	163	14.877	14.877	(0.967)	472341	4.94766	4.948
* 42	Acenaphthene-d10	162	15.388	15.380	(1.000)	302524	4.00000	
50	Diethylphthalate	149	16.331	16.324	(1.061)	530540	5.36440	5.364
54	N-Nitrosodiphenylamine	169	16.725	16.717	(0.908)	377357	5.08034	5.080
57	Hexachlorobenzene	284	17.798	17.798	(0.966)	153405	4.61353	4.614

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.154	18.154	(0.985)	83223	4.41780	4.418
*	59 Phenanthrene-d10	188	18.425	18.417	(1.000)	553619	4.00000	
$	66 Terphenyl-d14	244	21.543	21.543	(0.918)	117	0.00154	0.001543(RM)
	67 Butylbenzylphthalate	149	22.464	22.465	(0.958)	332887	5.12147	5.121
*	69 Chrysene-d12	240	23.455	23.455	(1.000)	465428	4.00000	
*	77 Perylene-d12	264	26.188	26.188	(1.000)	532593	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.026	29.019	(1.108)	722983	4.23762	4.238
	90 N-Nitrosodimethylamine	74	4.933	4.948	(0.530)	163555	5.09625	5.096

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT10031511S.D
Lab Smp Id: SLC0238-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230315.b\20230315.b\SIMABN2.m
Misc Info:

Calibration Date: 15-MAR-2023
Calibration Time: 23:06
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	188081	94041	376162	166866	-11.28
27 Naphthalene-d8	674549	337275	1349098	612104	-9.26
42 Acenaphthene-d10	328275	164138	656550	302524	-7.84
59 Phenanthrene-d10	597140	298570	1194280	553619	-7.29
69 Chrysene-d12	466503	233252	933006	465428	-0.23
77 Perylene-d12	518203	259102	1036406	532593	2.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.30	8.80	9.80	9.31	0.08
27 Naphthalene-d8	11.77	11.27	12.27	11.78	0.01
42 Acenaphthene-d10	15.39	14.89	15.89	15.39	0.01
59 Phenanthrene-d10	18.42	17.92	18.92	18.43	0.00
69 Chrysene-d12	23.45	22.95	23.95	23.46	0.00
77 Perylene-d12	26.19	25.69	26.69	26.19	0.00

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

REVIEW SUMMARY FOR FILE - NT10031511S.D

Lab ID: SLC0238-SCV1
nt10.i, 20230315.b\20230315.b\SIMABN2.m,   16-MAR-2023 02:16

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.000	0.9524	Benzoic acid

RRT check based on Ccal File: 20230315.b/NT10031510S.D

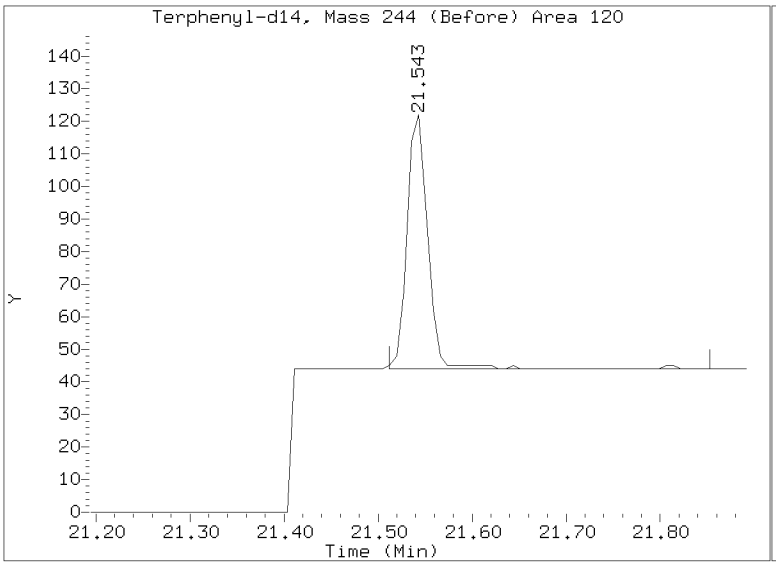
On Column LOD for nt10.i, 20230315.b\SIMABN2.m, PSDDA.sub = 0.0000

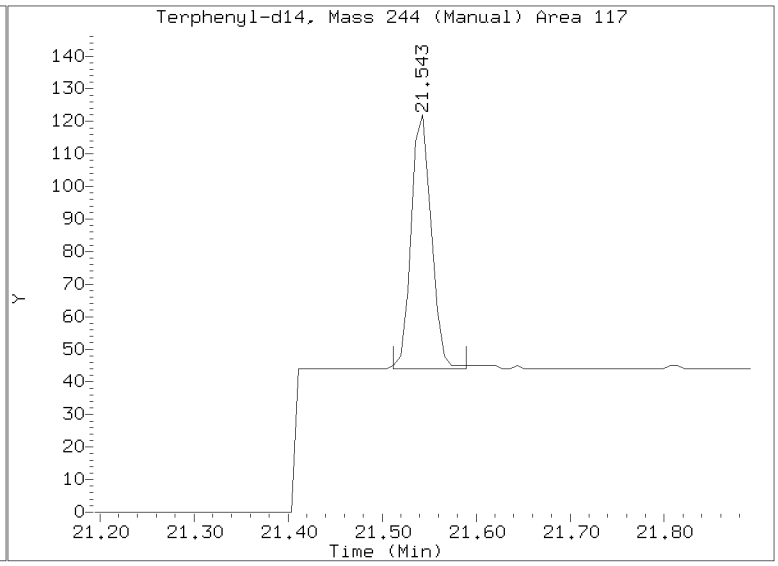
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230315.b/20230315.b/NT10031511S.D
Injection Date: 16-MAR-2023 02:16
Lab ID:SLC0238-SCV1 Client ID:
Report Date: 03/16/2023 14:49





Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00049
Lab File ID:	NT1003172317S.D	Calibration Date:	03/15/2023
Sequence:	SLC0475	Injection Date:	03/18/23
Lab Sample ID:	SLC0475-CCV1	Injection Time:	04:35
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	1.0000	1.0	1.5031980	1.4764300		-1.8	+/-50
1,2-Dichlorobenzene	A	1.0000	1.0	1.4783140	1.4744750		-0.3	+/-50
Benzyl Alcohol	A	1.0000	1.2	0.9647610	1.1198940		16.1	+/-50
Benzoic acid	A	4.0000	3.0	0.1358970	0.1427255		-25.4	+/-50
2,4-Dimethylphenol	A	2.0000	2.1	0.3457498	0.3655248		5.7	+/-50
1,2,4-Trichlorobenzene	A	1.0000	1.0	0.3478148	0.3585693		3.1	+/-50
N-Nitrosodiphenylamine	A	1.0000	1.1	0.5366720	0.5713137		6.5	+/-50
Pentachlorophenol	A	2.0000	1.4	0.0934250	0.0933945		-30.1	+/-50
2-Fluorophenol	A	1.5000	1.70	1.2129820	1.3728420		13.2	+/-50
p-Terphenyl-d14	A	1.0000	1.20	0.6517430	0.7821597		20.0	+/-50

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723178.D

Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

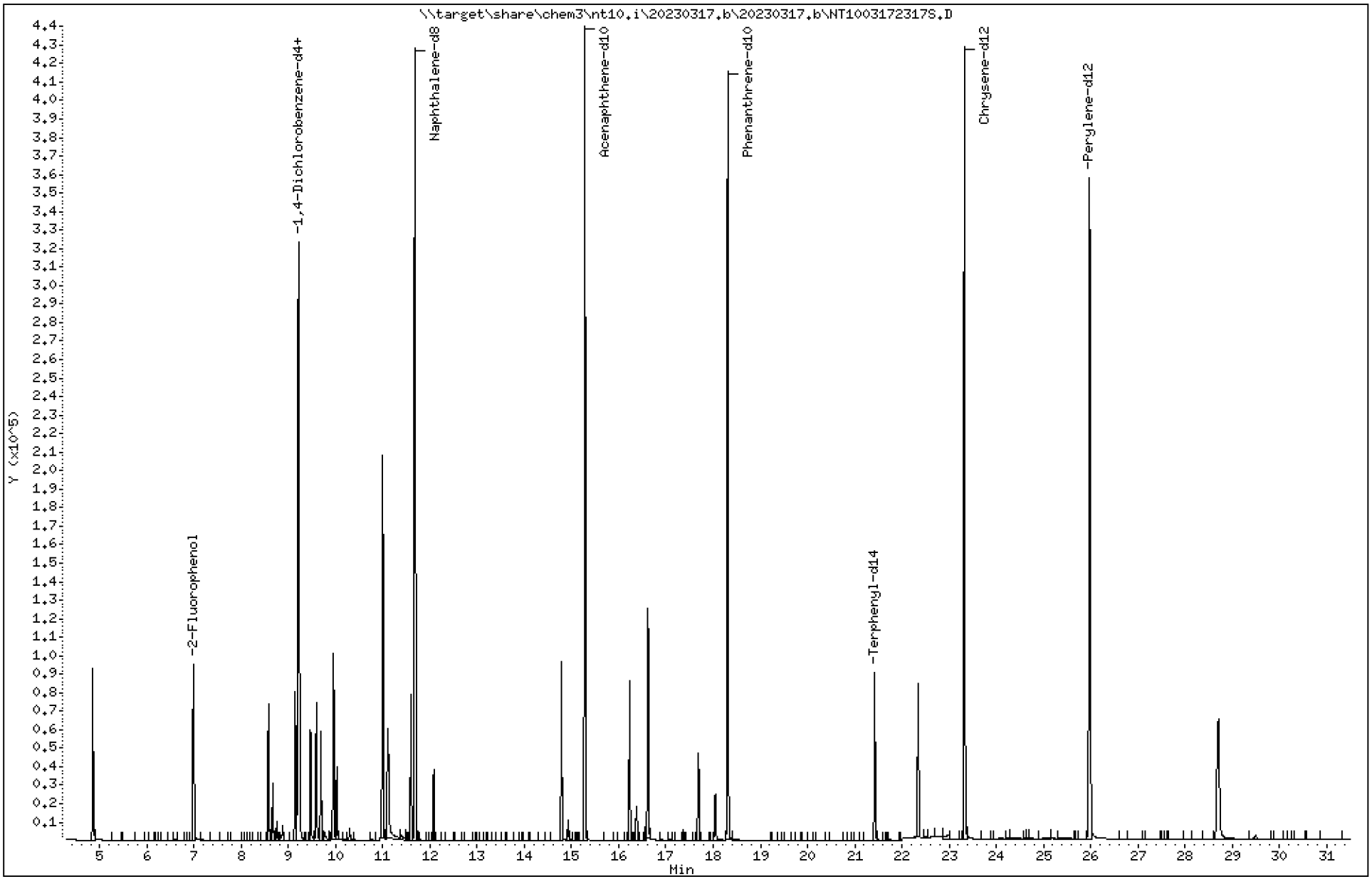
Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

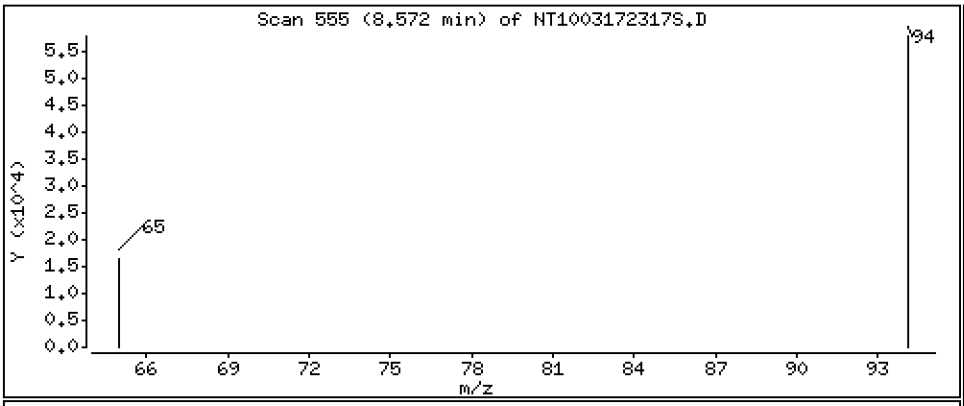
Operator: JGR

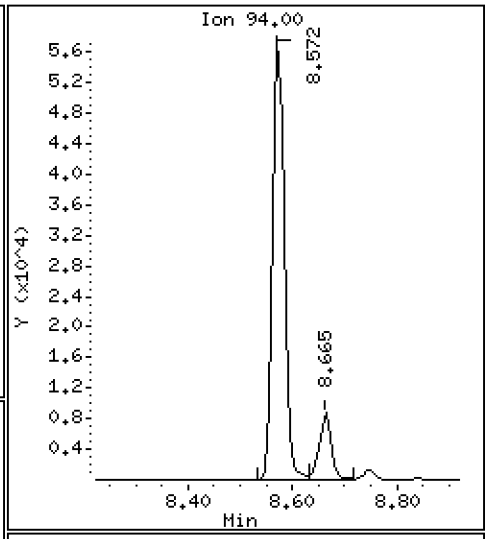
Column phase: ZB-5msi

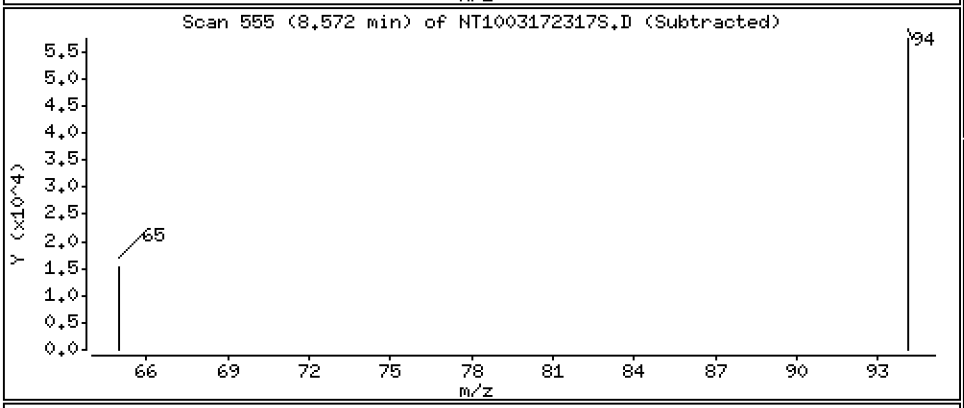
Column diameter: 0.25

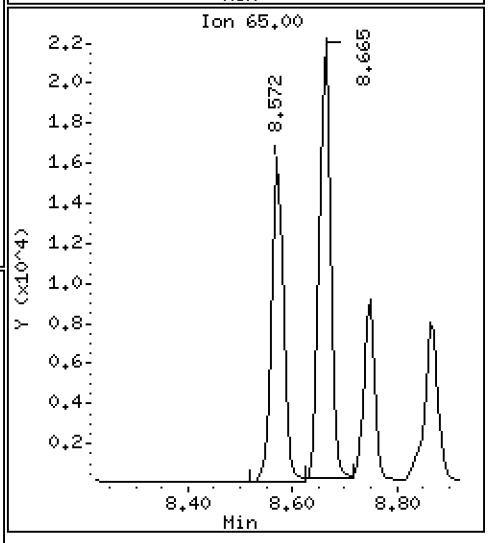
3 Phenol

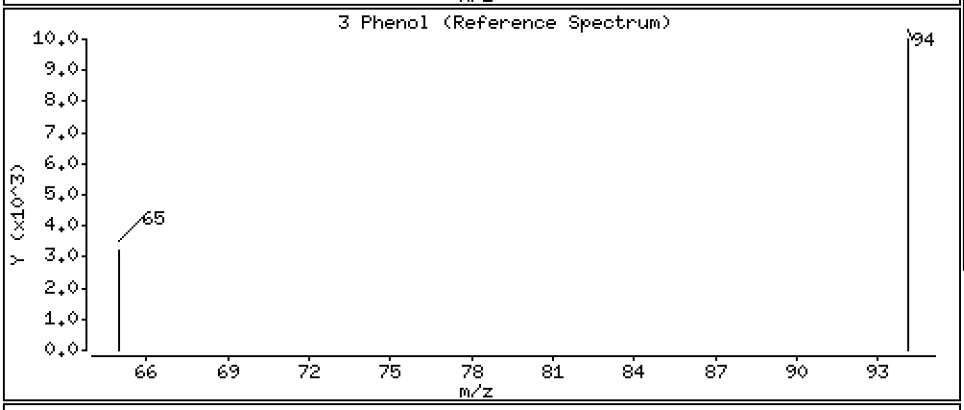
Concentration: 1.050 ug/L

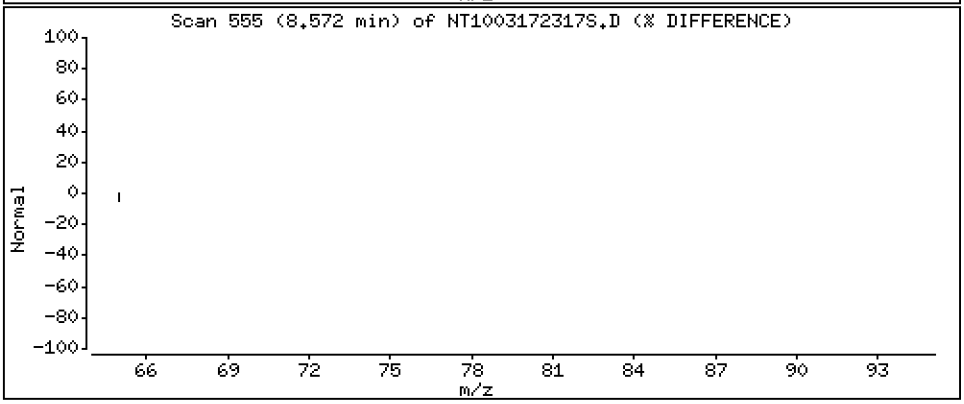












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Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

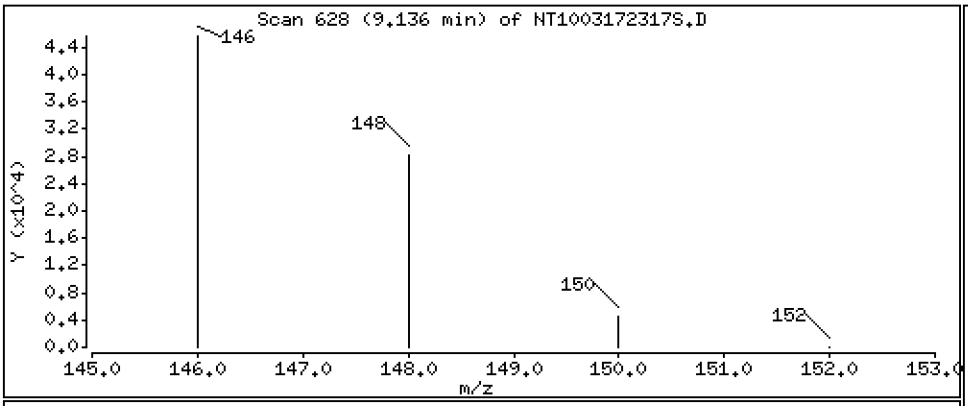
Operator: JGR

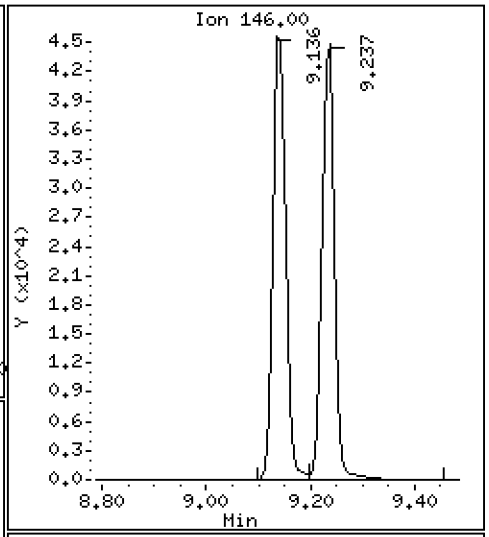
Column phase: ZB-5msi

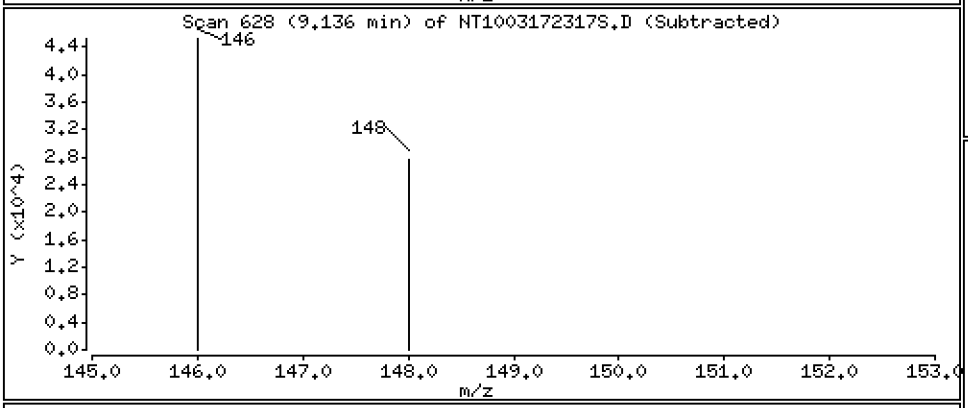
Column diameter: 0.25

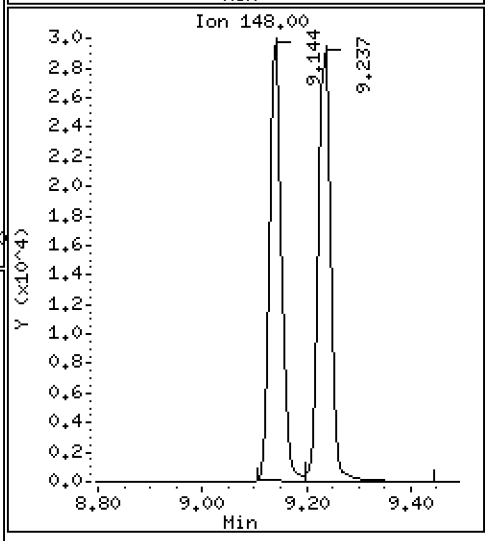
7 1,3-Dichlorobenzene

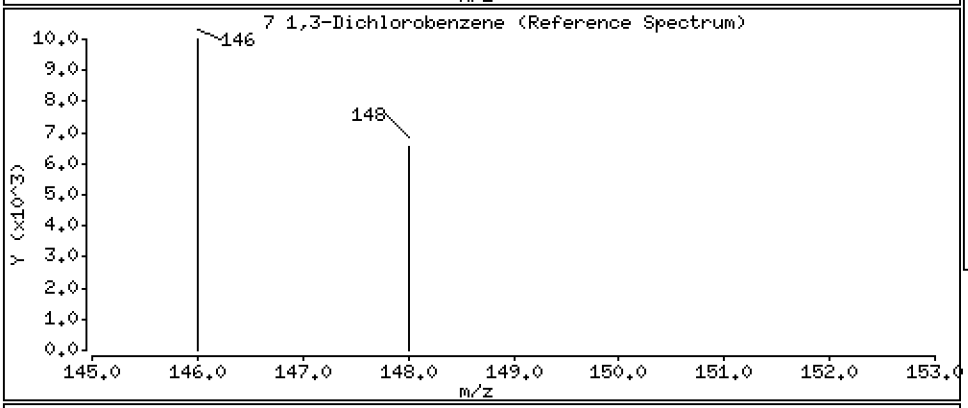
Concentration: 0.9918 ug/L

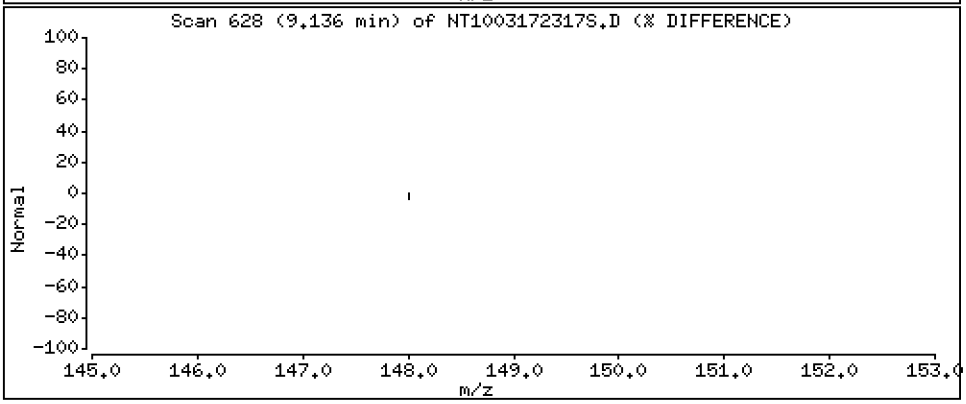












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Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

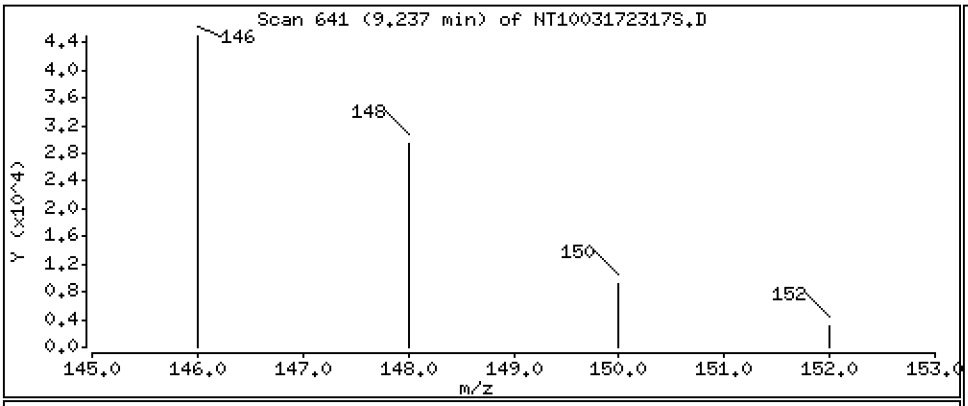
Operator: JGR

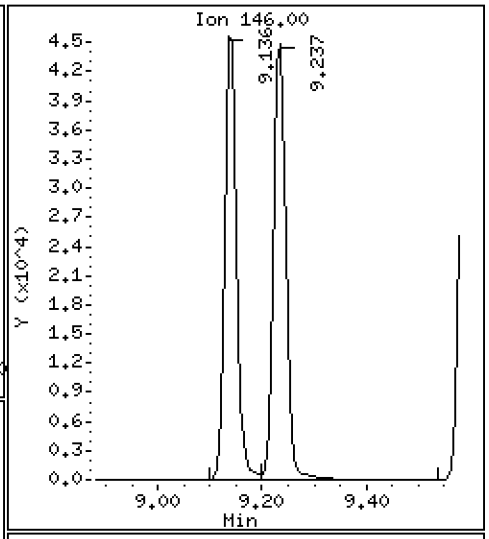
Column phase: ZB-5msi

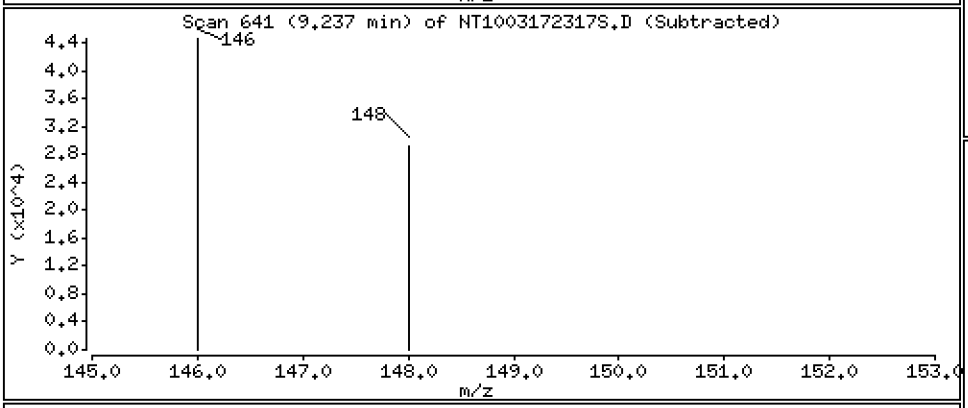
Column diameter: 0.25

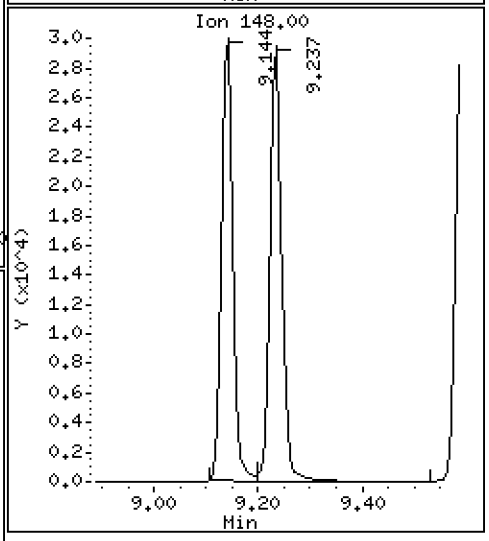
9 1,4-Dichlorobenzene

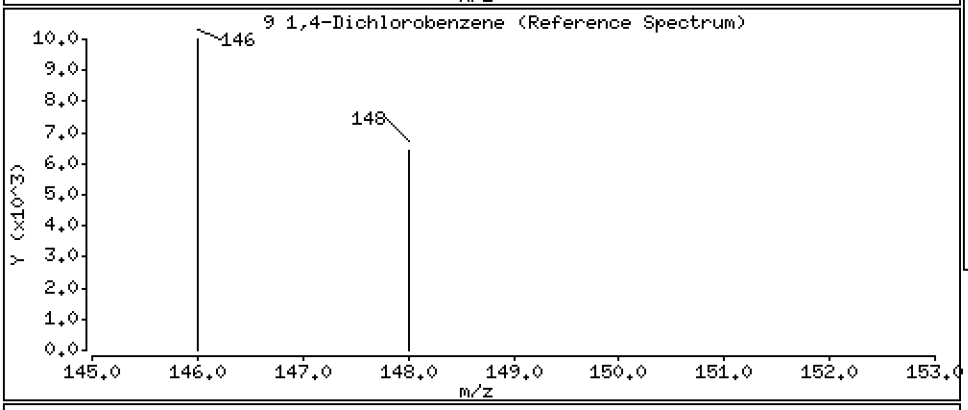
Concentration: 0.9822 ug/L

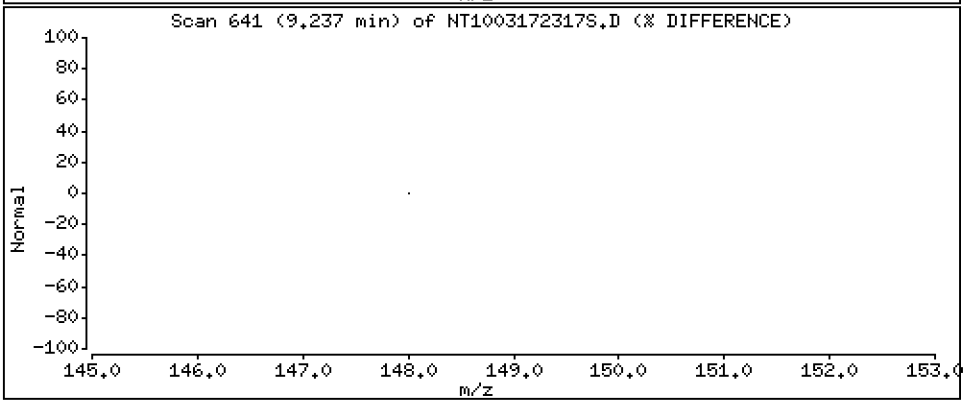












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723175.D

Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

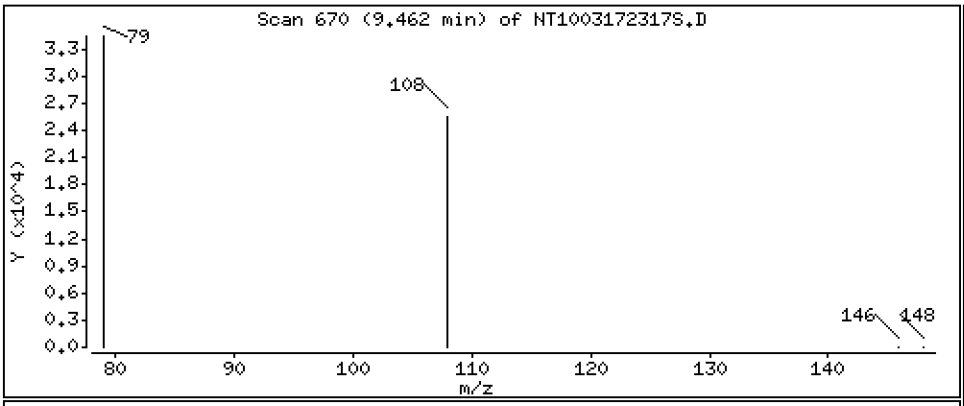
Operator: JGR

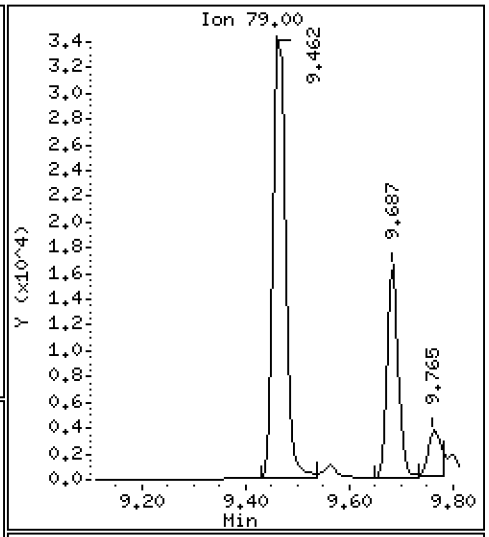
Column phase: ZB-5msi

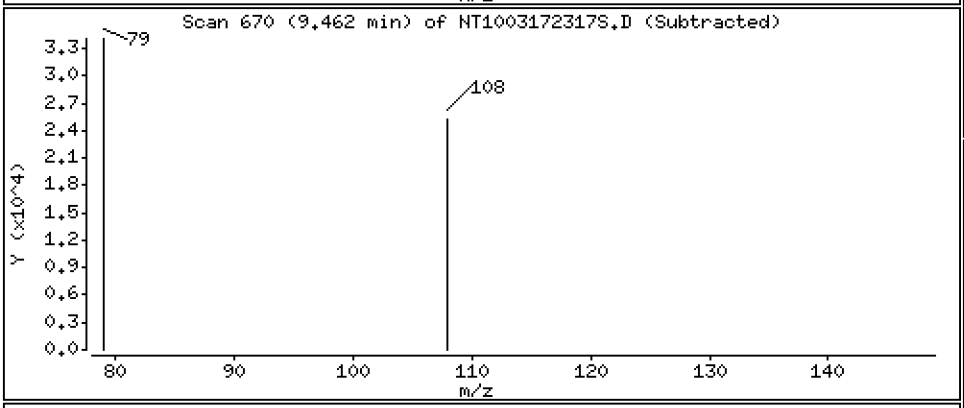
Column diameter: 0.25

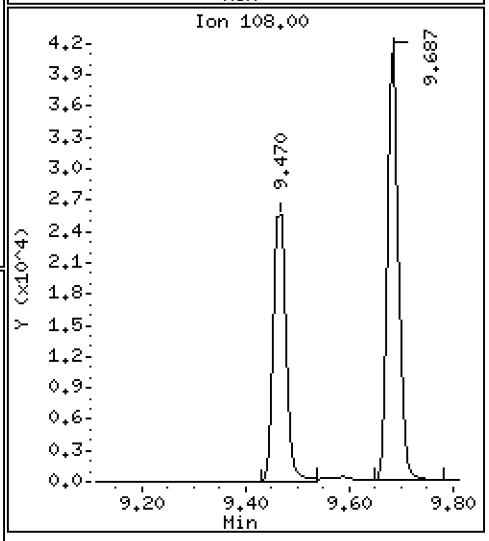
11 Benzyl alcohol

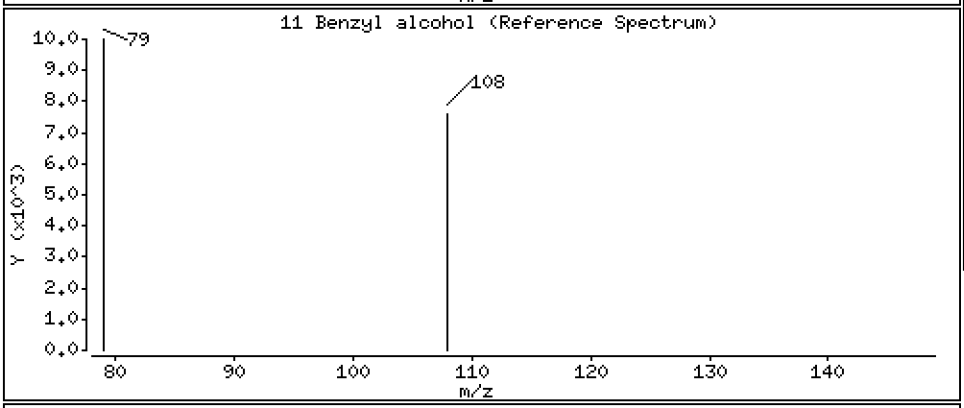
Concentration: 1.161 ug/L

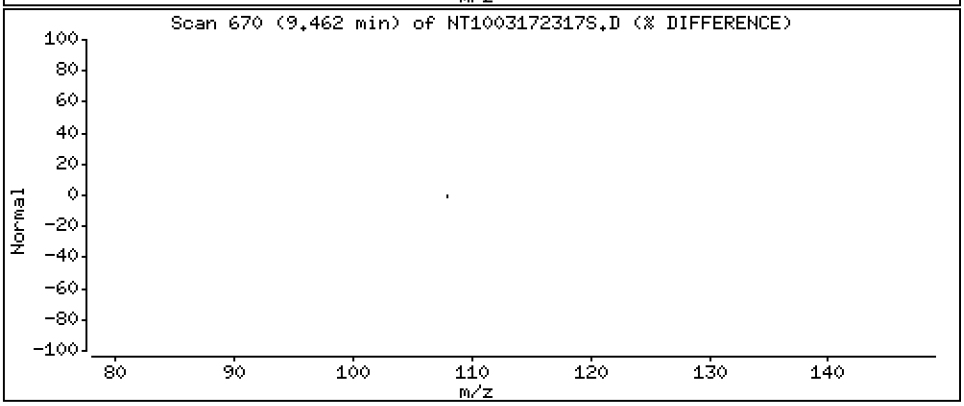












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172317S.D

Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

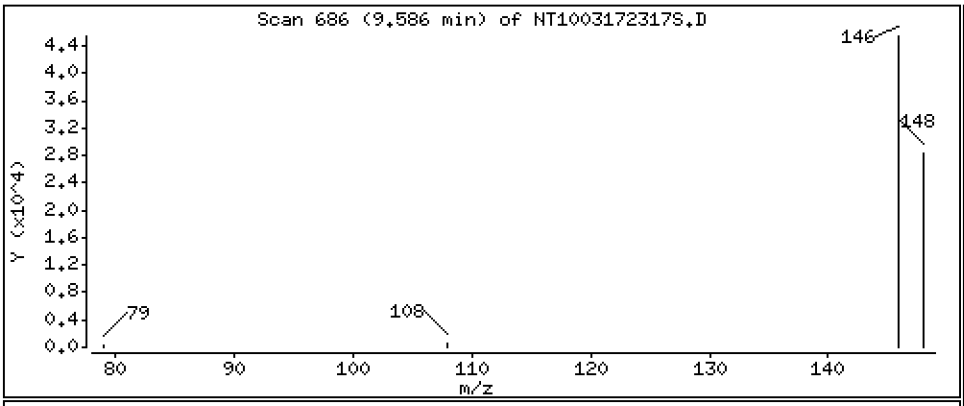
Operator: JGR

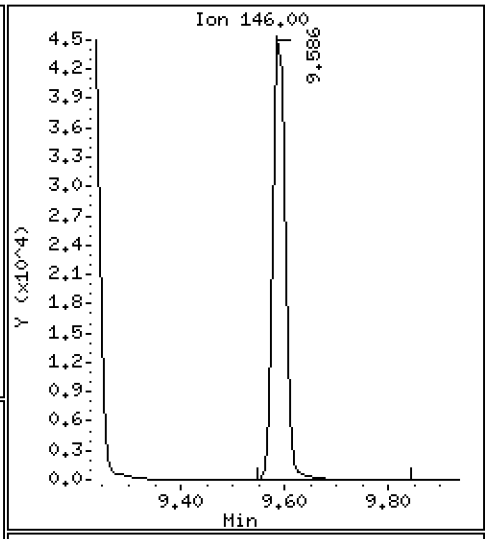
Column phase: ZB-5msi

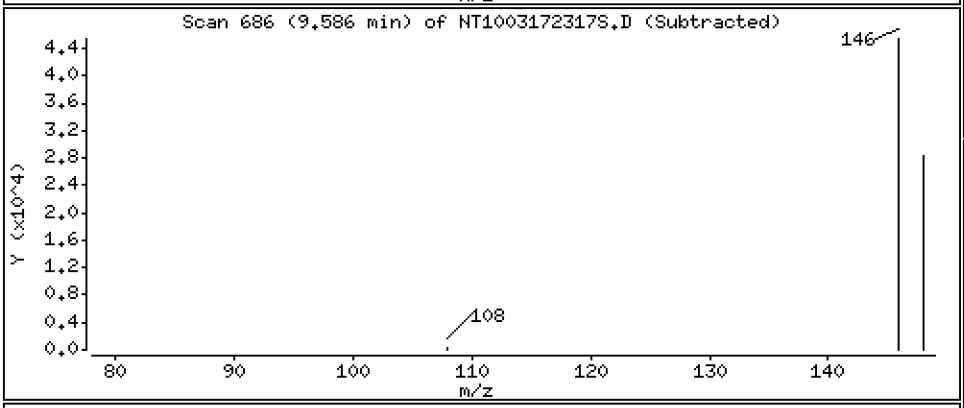
Column diameter: 0.25

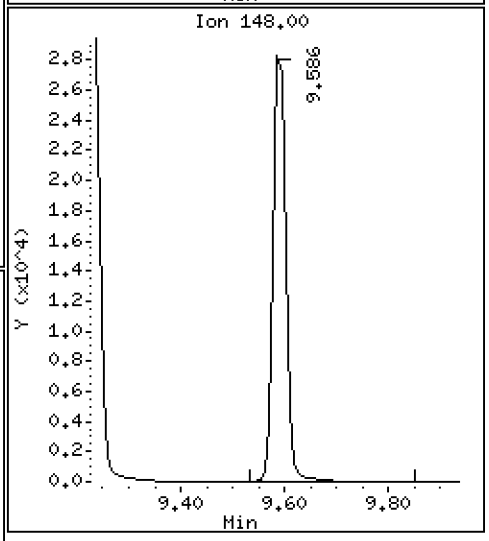
12 1,2-Dichlorobenzene

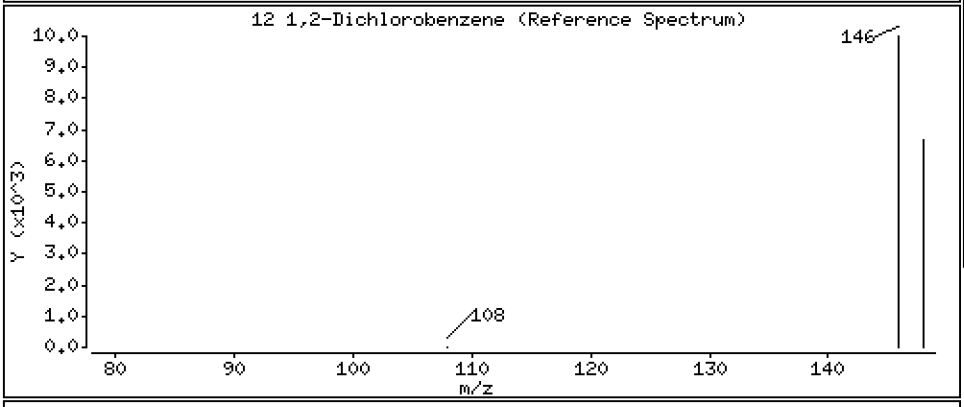
Concentration: 0.9974 ug/L

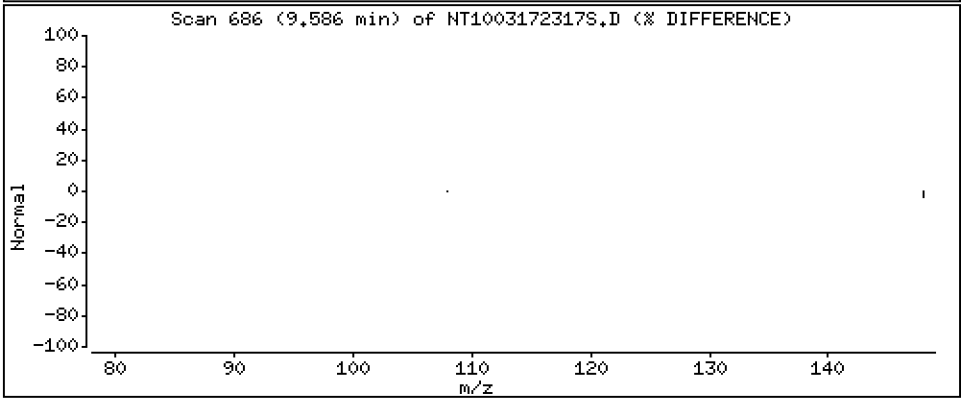












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723175.D

Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

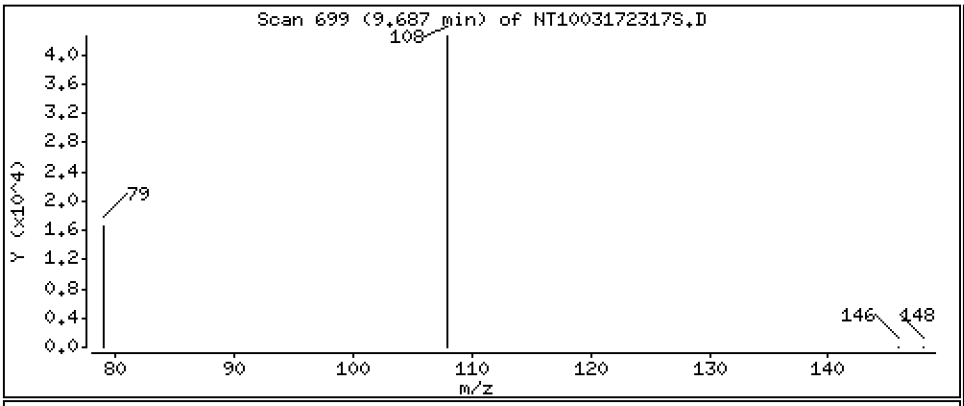
Operator: JGR

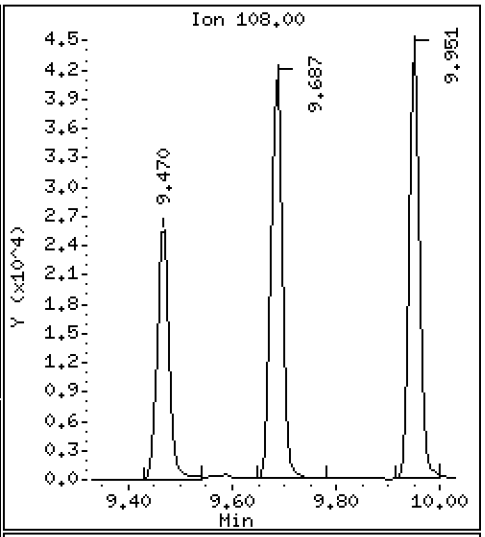
Column phase: ZB-5msi

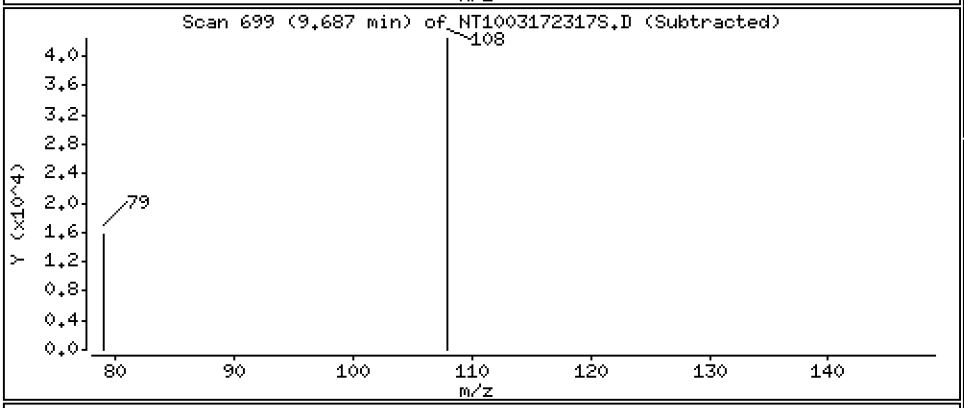
Column diameter: 0.25

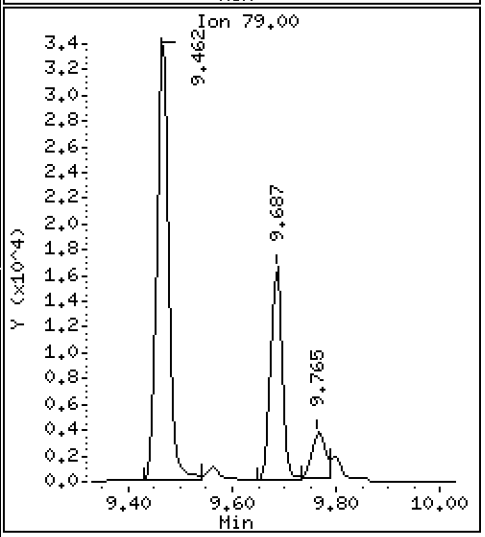
13 2-Methylphenol

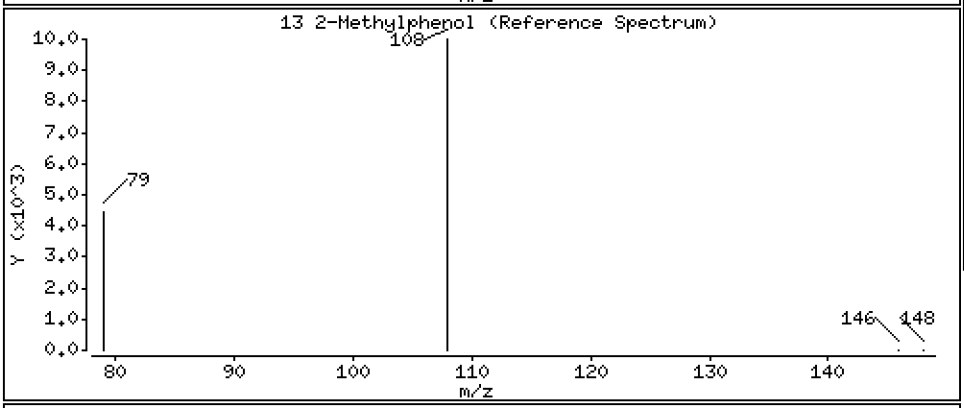
Concentration: 1.111 ug/L

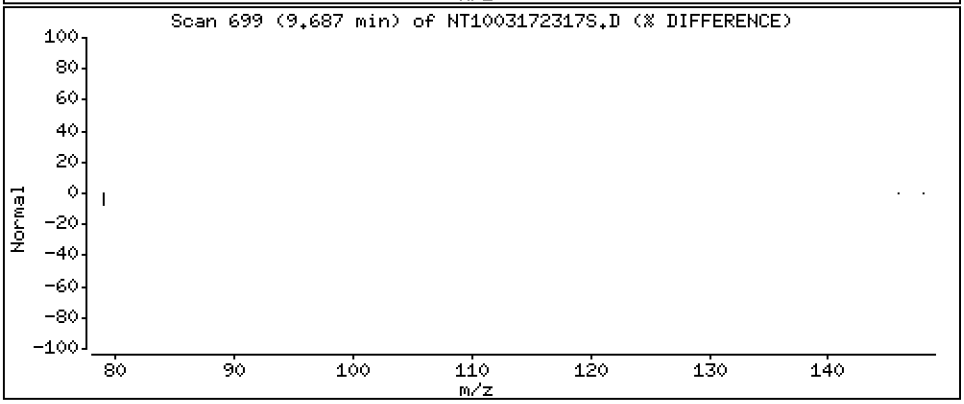












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Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

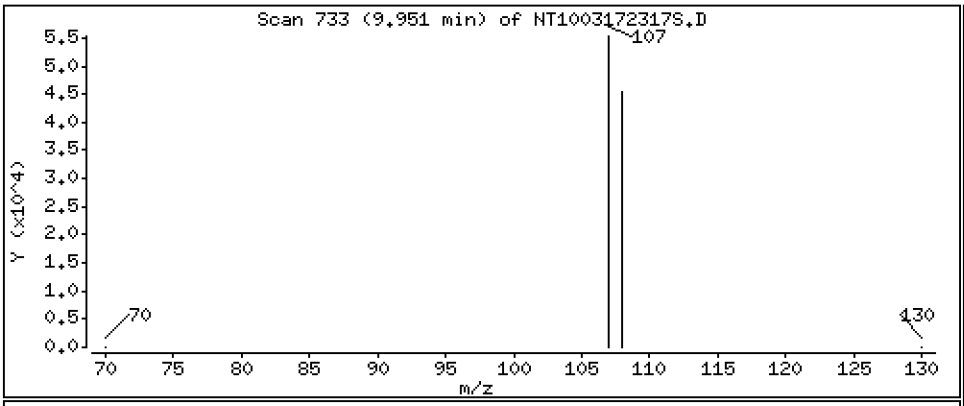
Operator: JGR

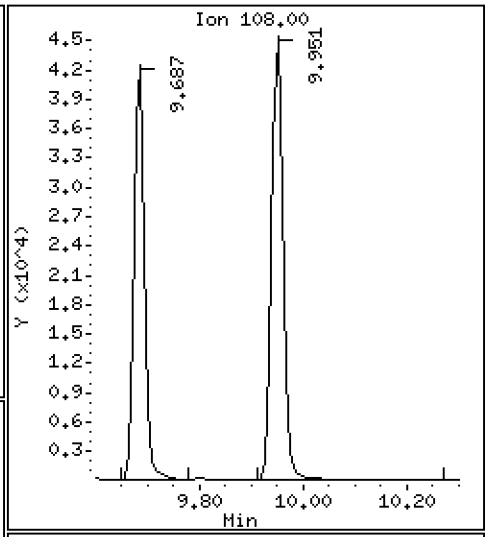
Column phase: ZB-5msi

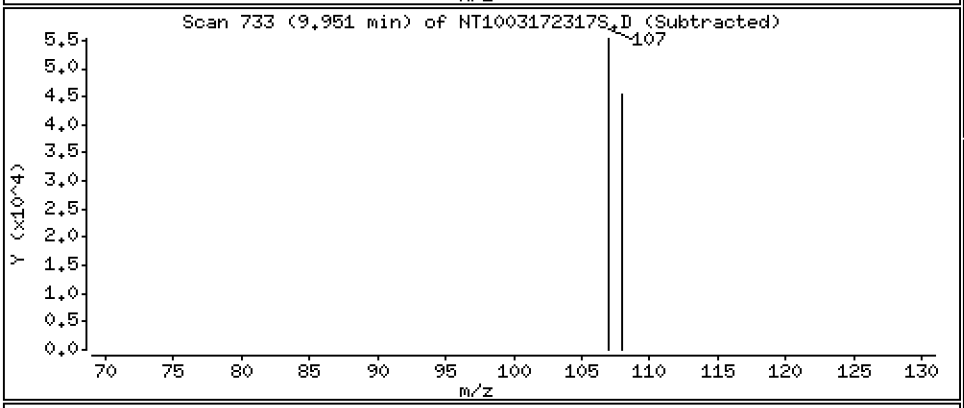
Column diameter: 0.25

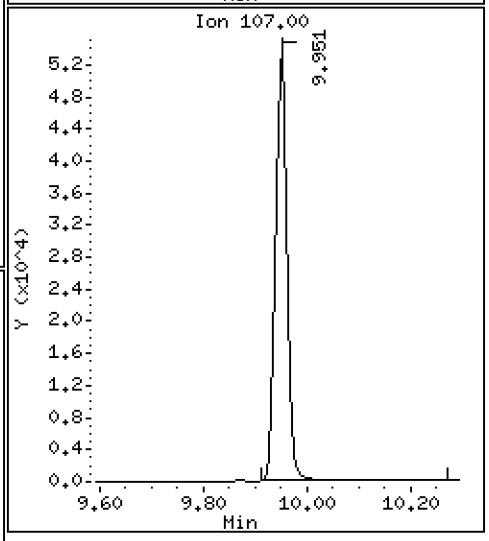
15 4-Methylphenol

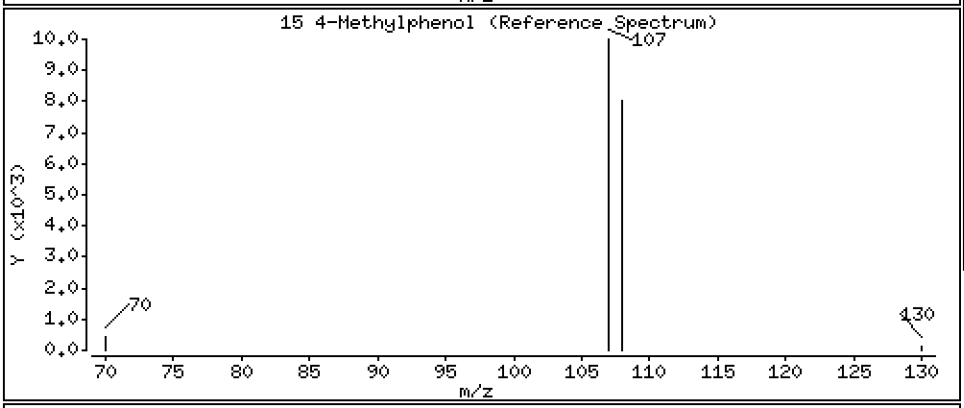
Concentration: 1.138 ug/L

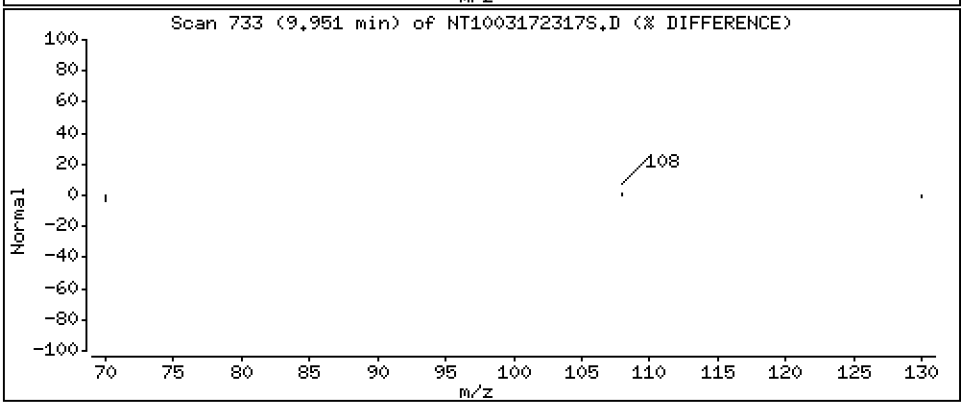












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Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

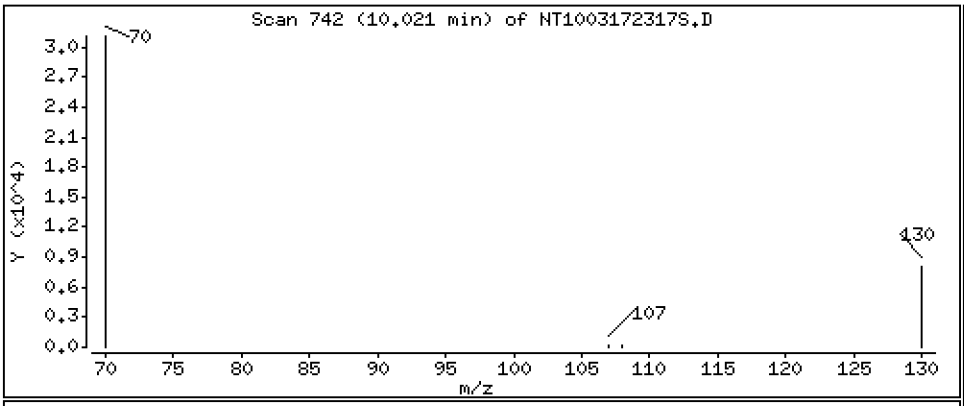
Operator: JGR

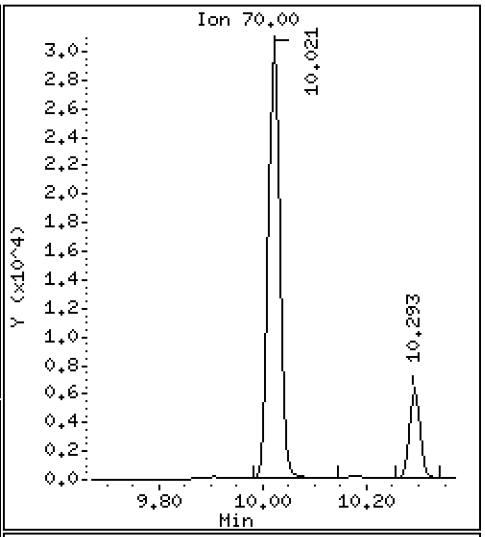
Column phase: ZB-5msi

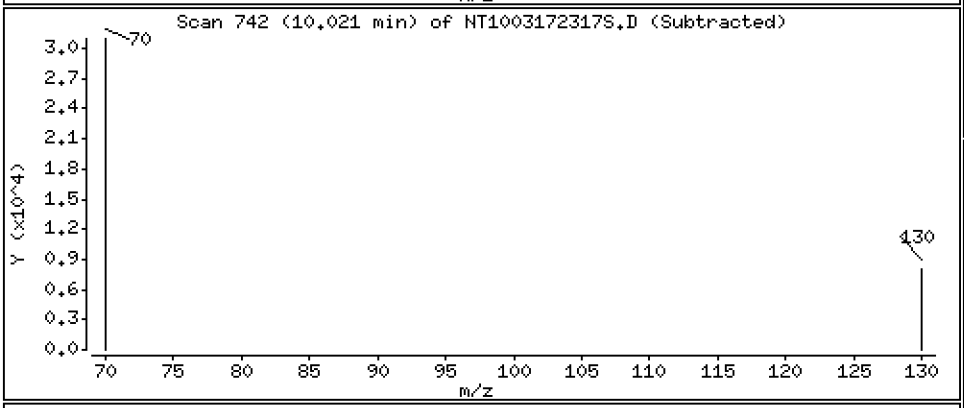
Column diameter: 0.25

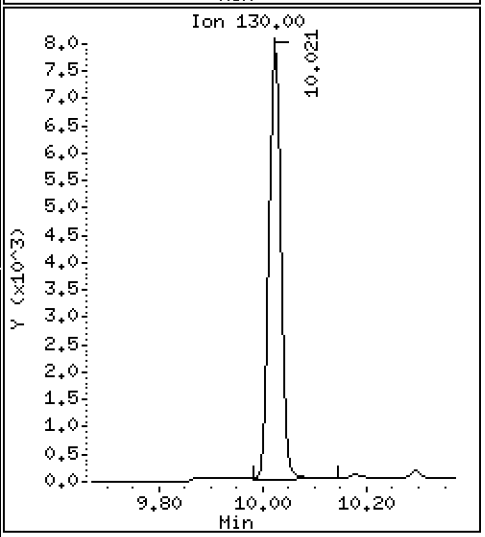
16 N-Nitroso-di-n-propylamine

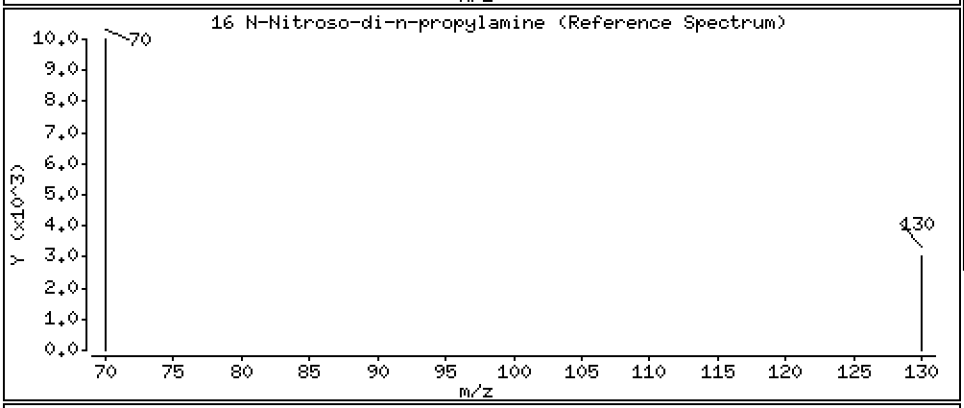
Concentration: 1.090 ug/L

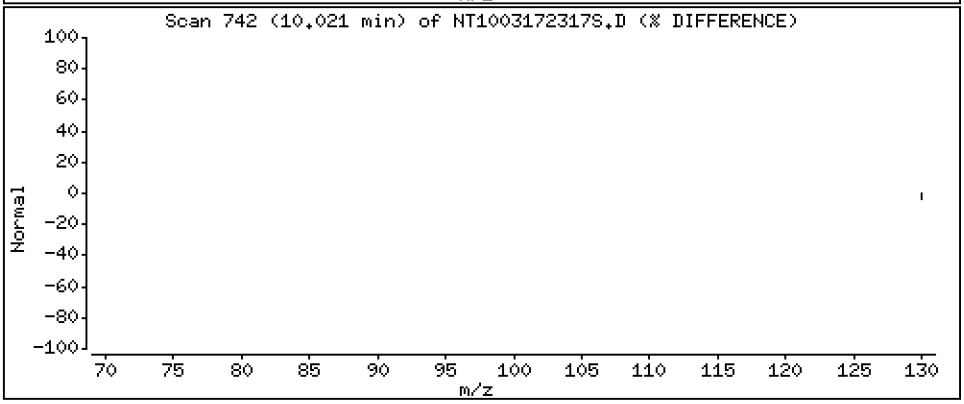












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723175.D

Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

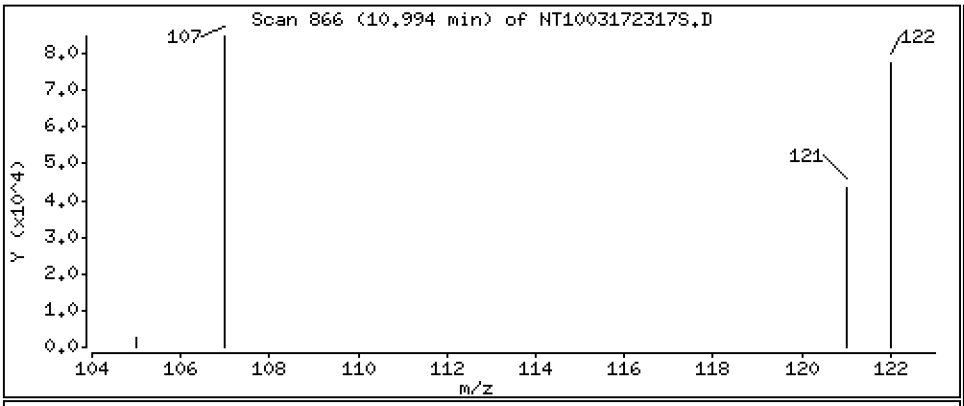
Operator: JGR

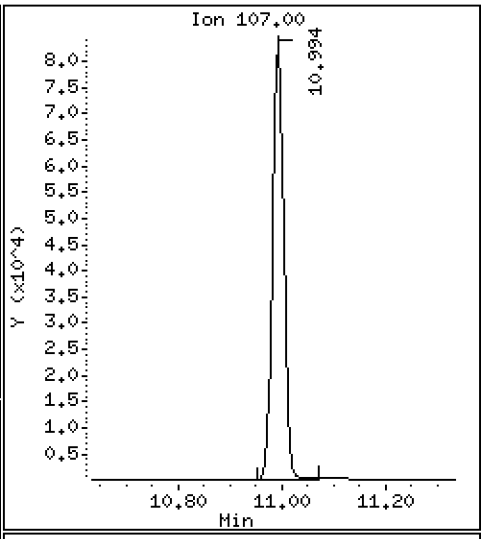
Column phase: ZB-5msi

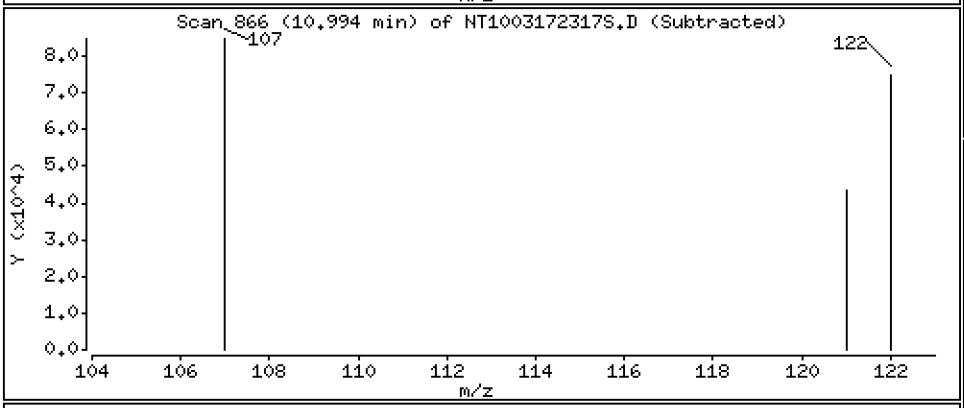
Column diameter: 0.25

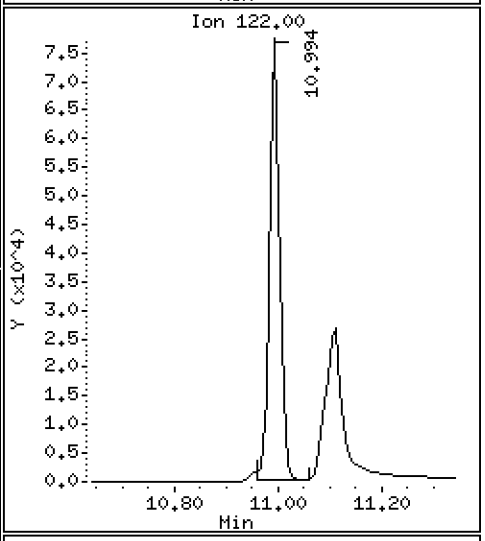
22 2,4-Dimethylphenol

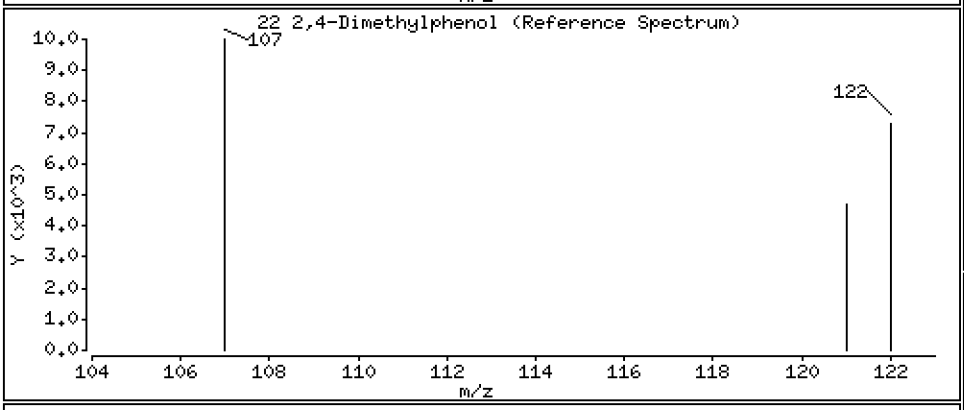
Concentration: 2.114 ug/L

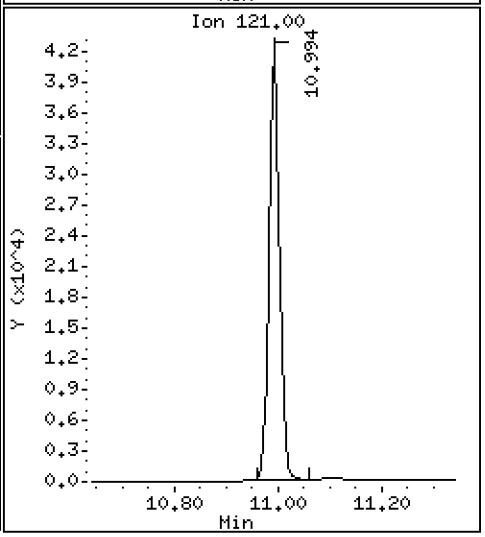


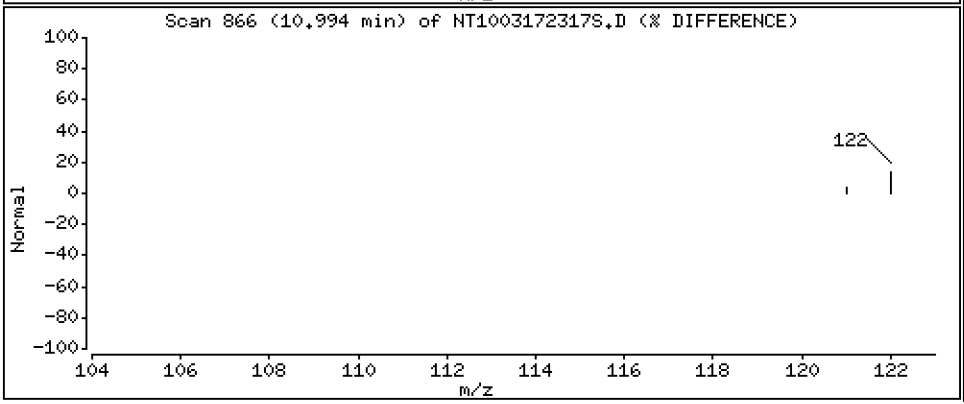












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Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

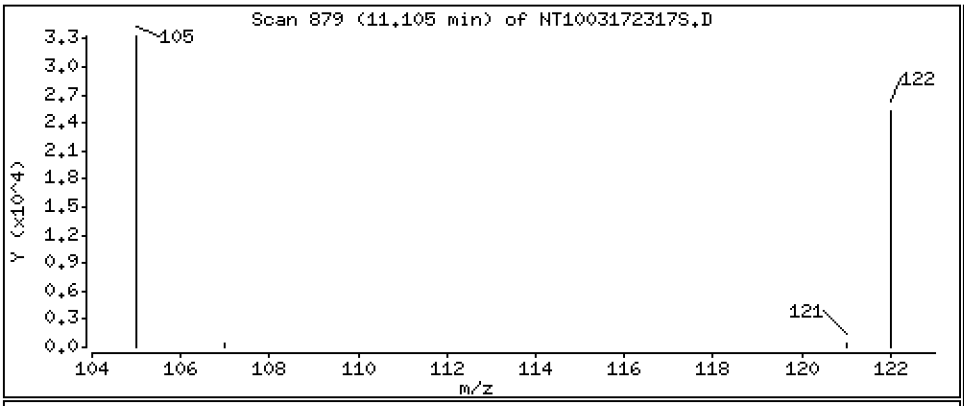
Operator: JGR

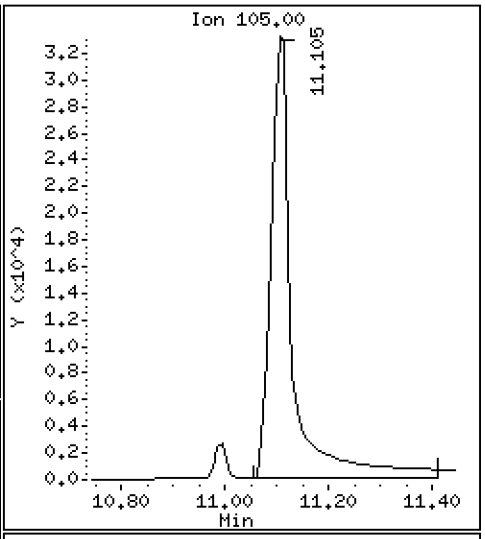
Column phase: ZB-5msi

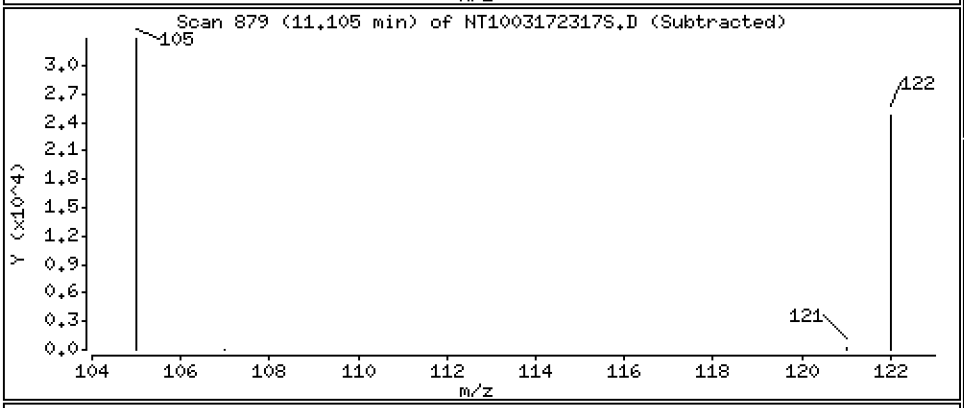
Column diameter: 0.25

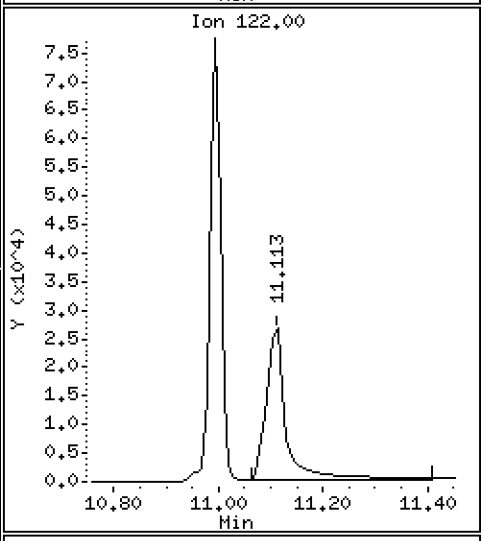
24 Benzoic acid

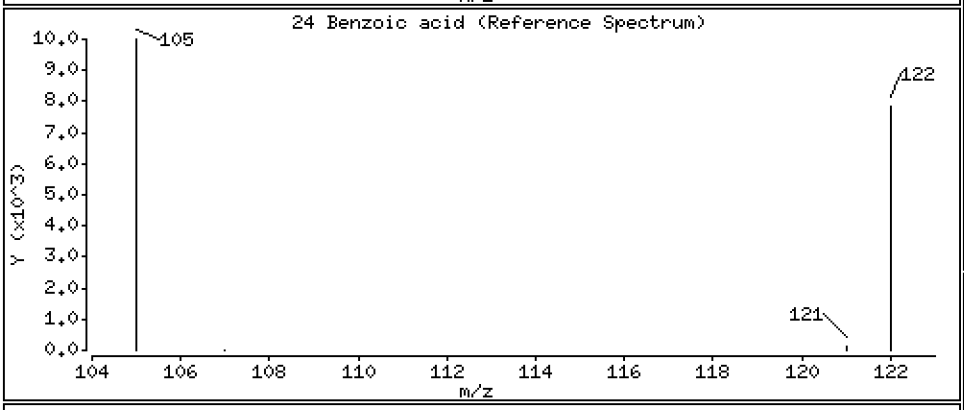
Concentration: 2.986 ug/L

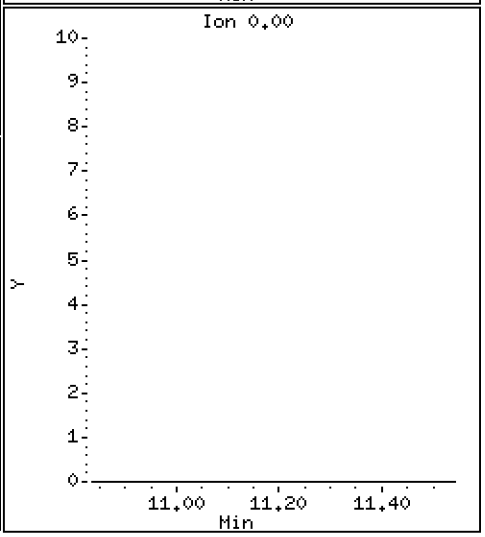


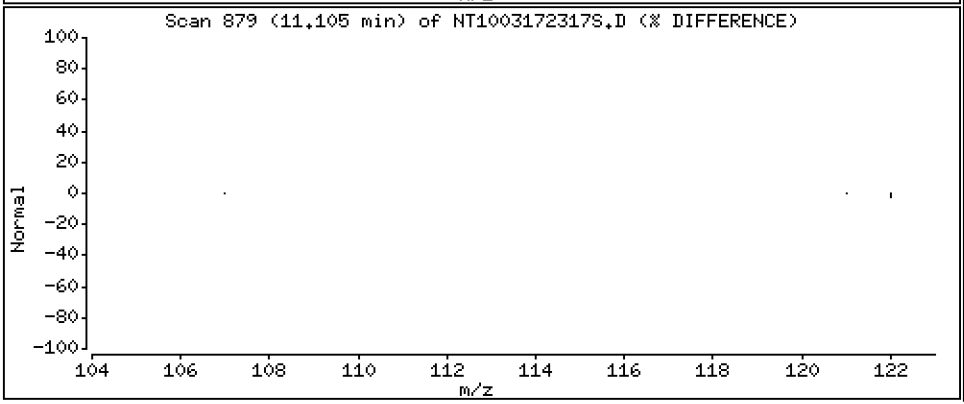












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Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

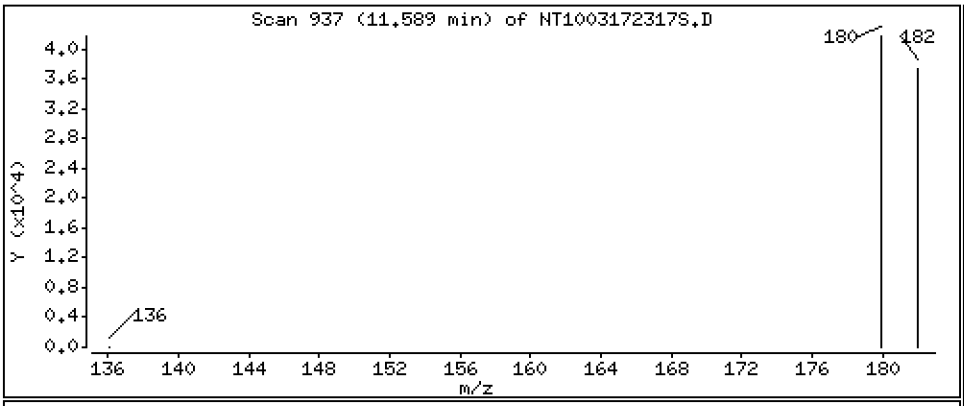
Operator: JGR

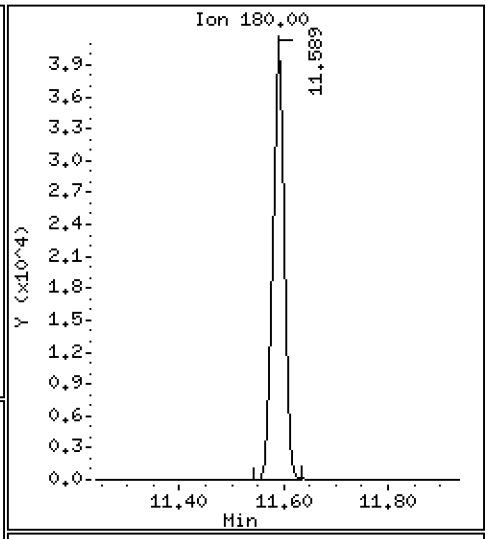
Column phase: ZB-5msi

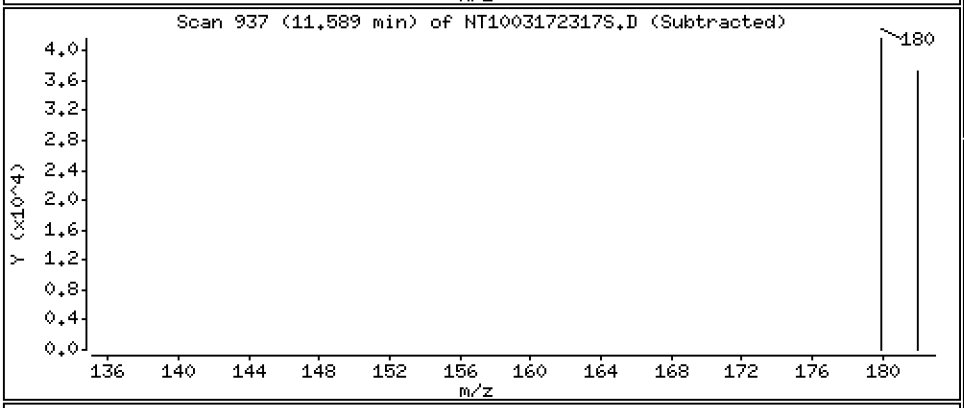
Column diameter: 0.25

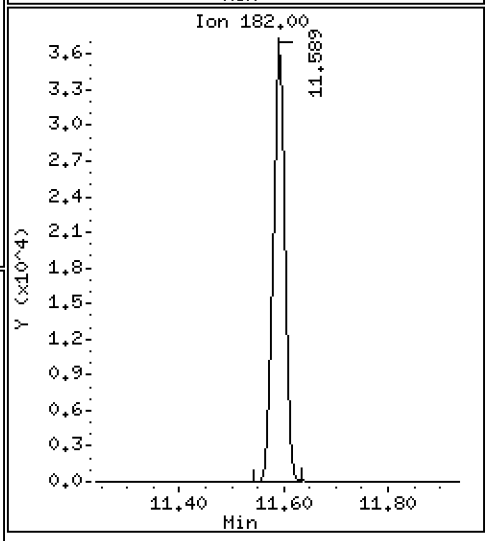
26 1,2,4-Trichlorobenzene

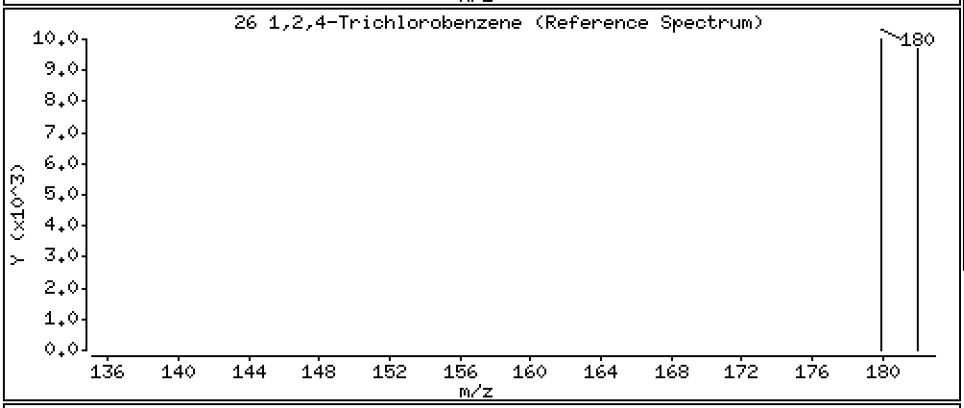
Concentration: 1.031 ug/L

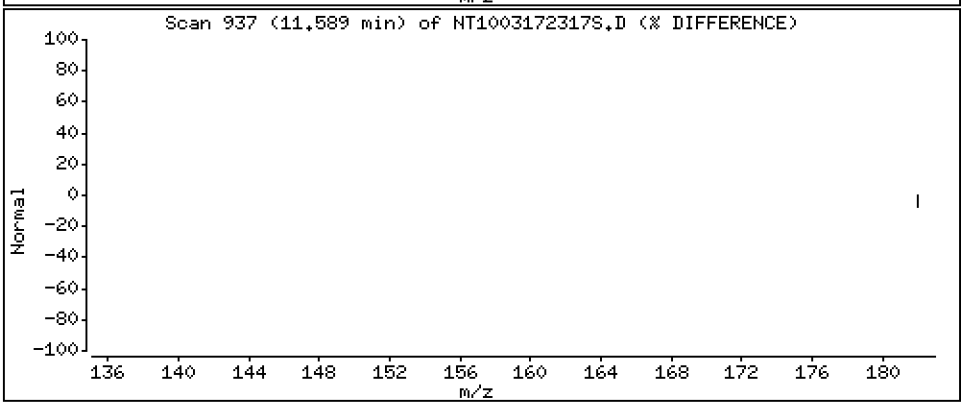












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Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

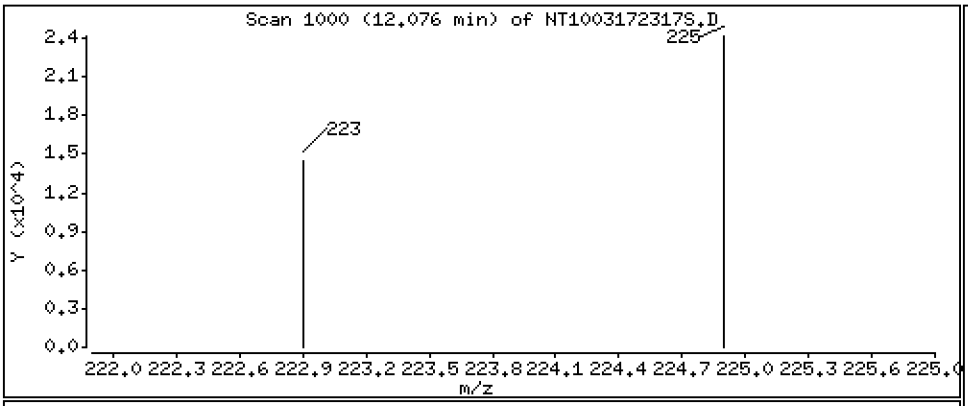
Operator: JGR

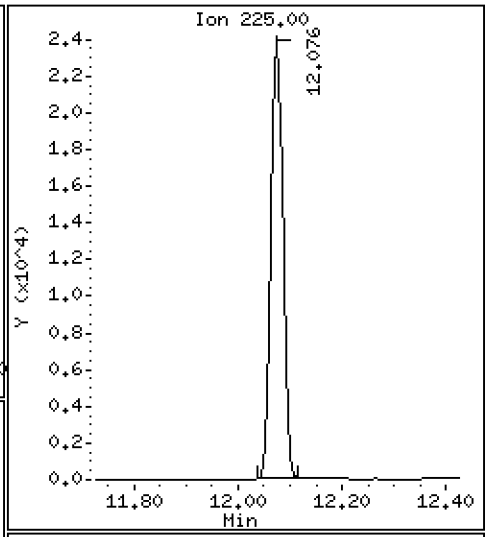
Column phase: ZB-5msi

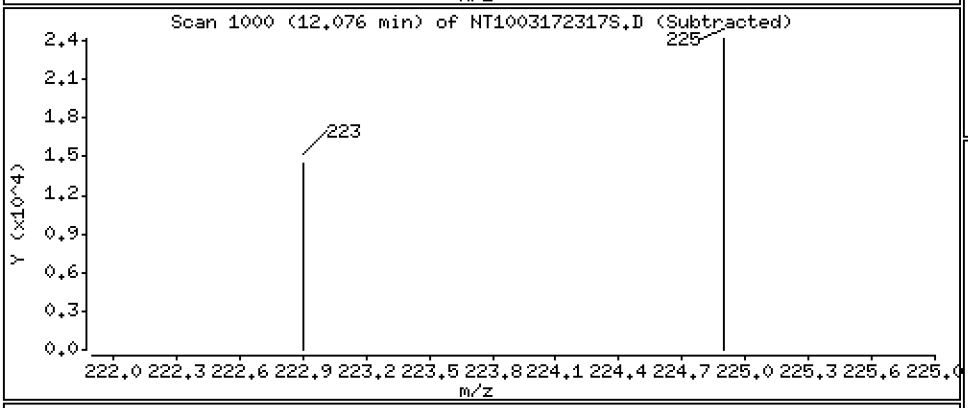
Column diameter: 0.25

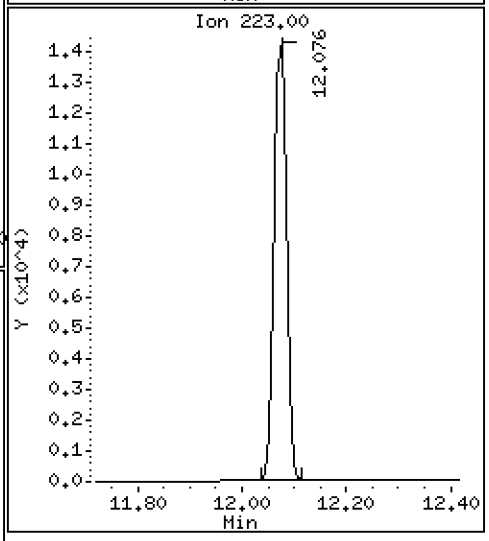
30 Hexachlorobutadiene

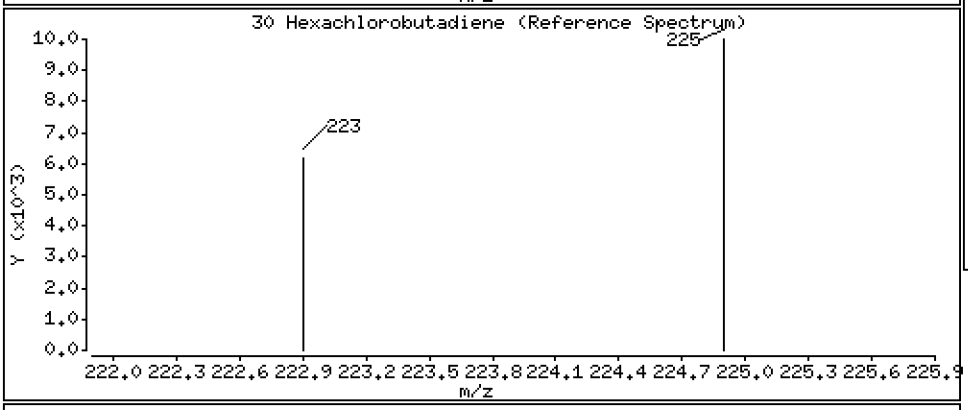
Concentration: 1.000 ug/L

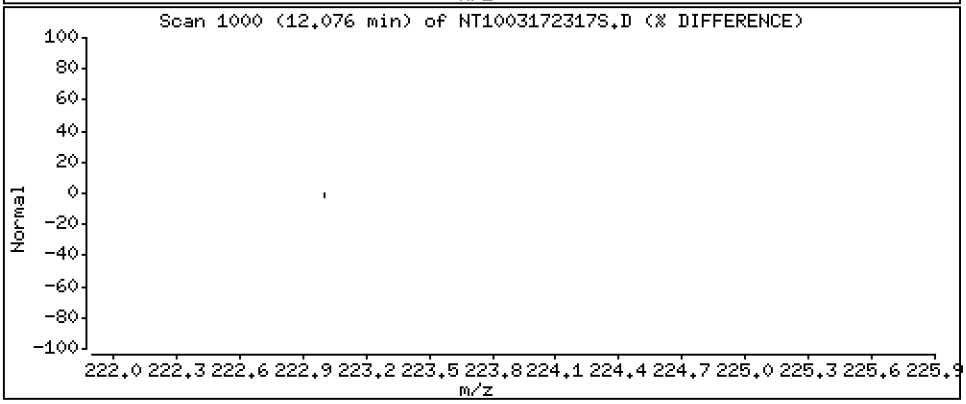












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172317S.D

Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

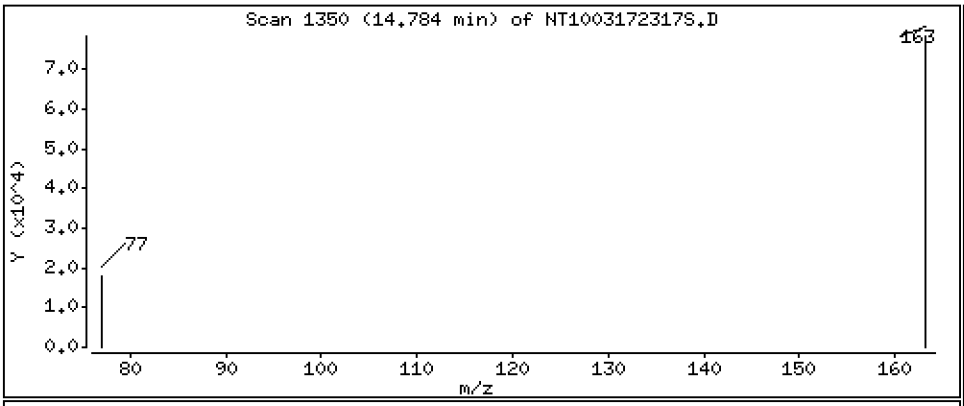
Operator: JGR

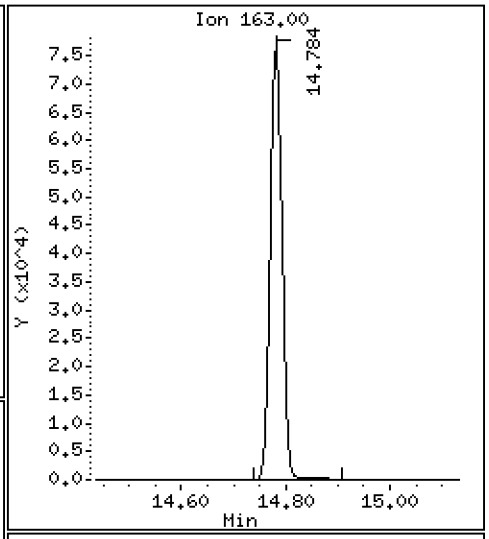
Column phase: ZB-5msi

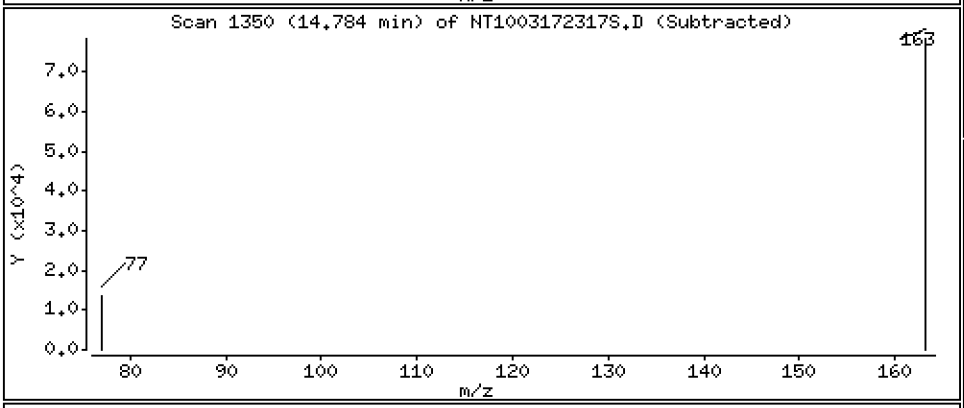
Column diameter: 0.25

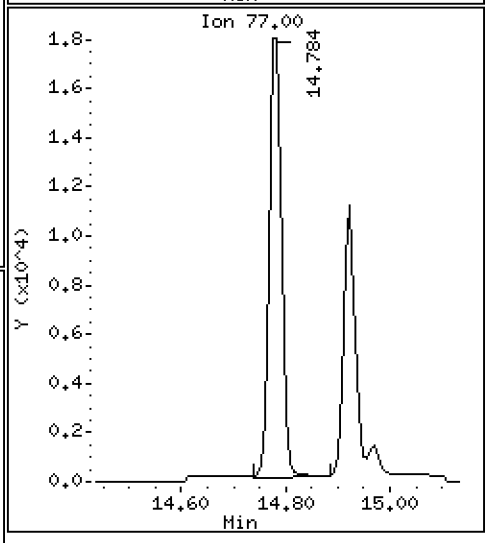
39 Dimethylphthalate

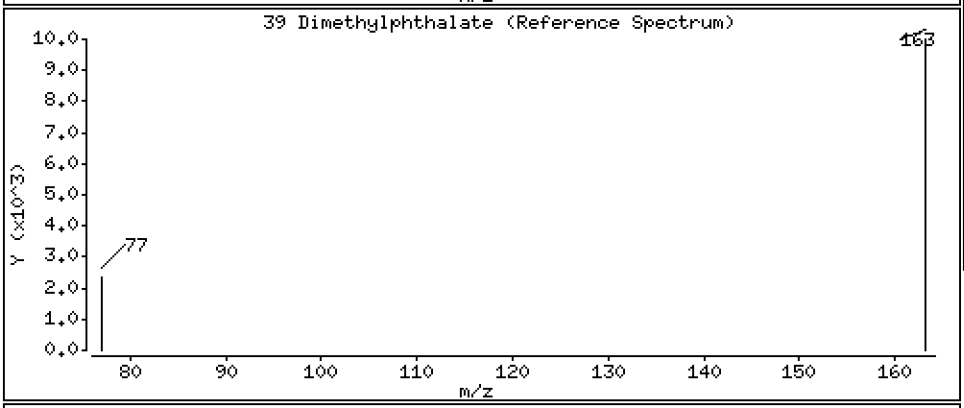
Concentration: 1.098 ug/L

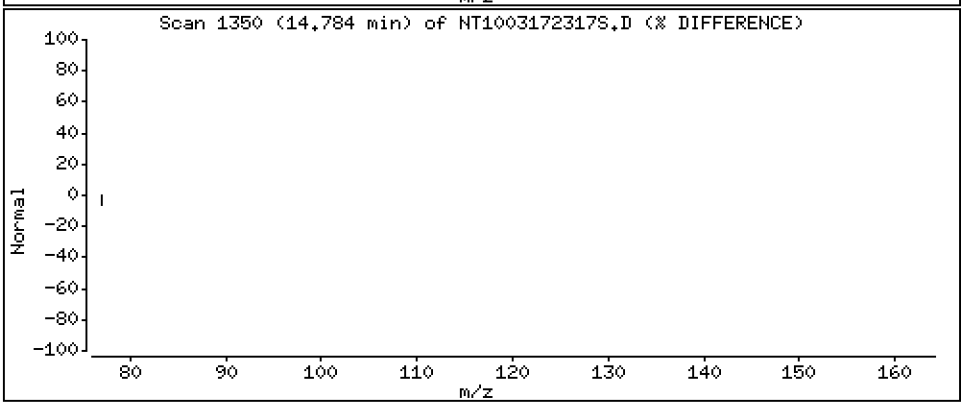












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172317S.D

Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

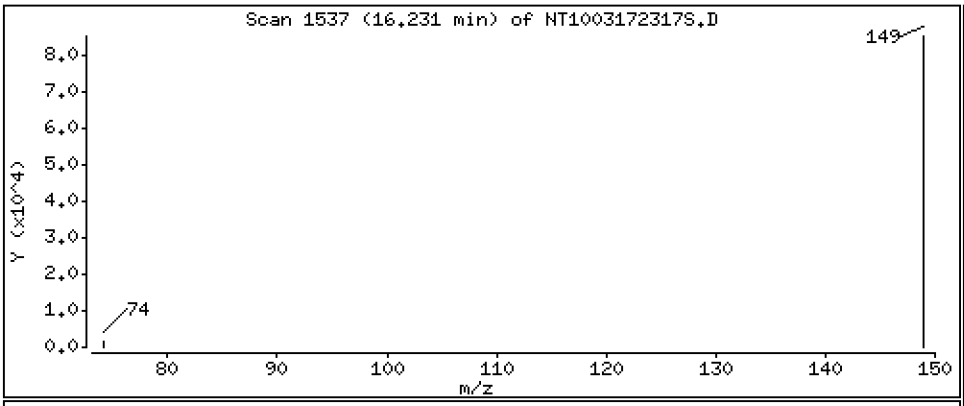
Operator: JGR

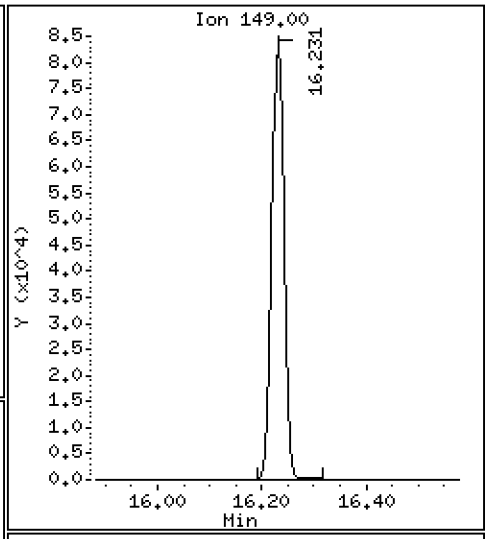
Column phase: ZB-5msi

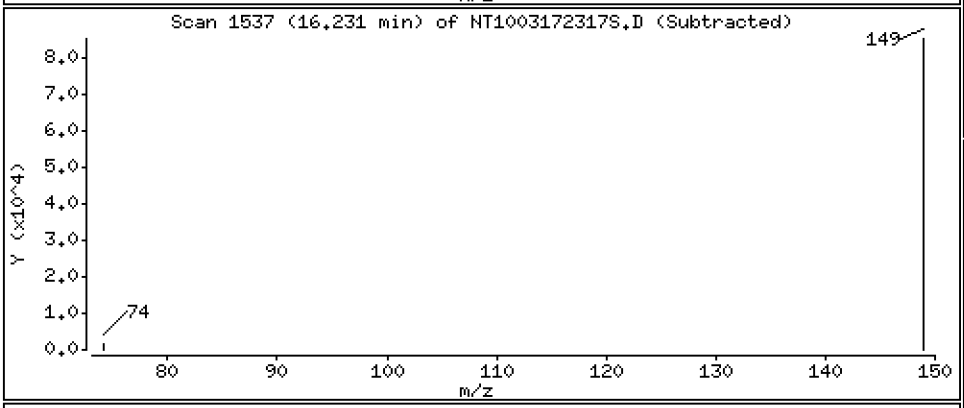
Column diameter: 0.25

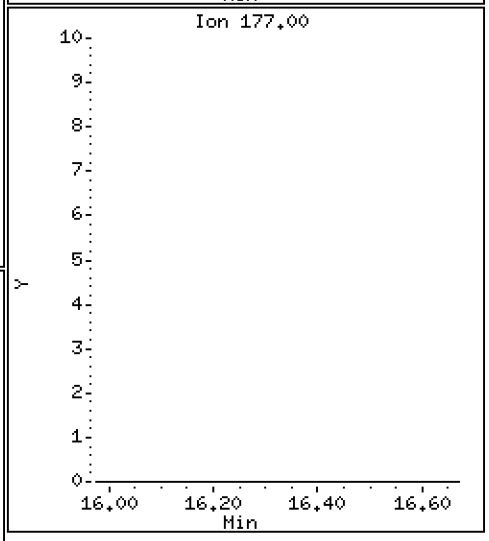
50 Diethylphthalate

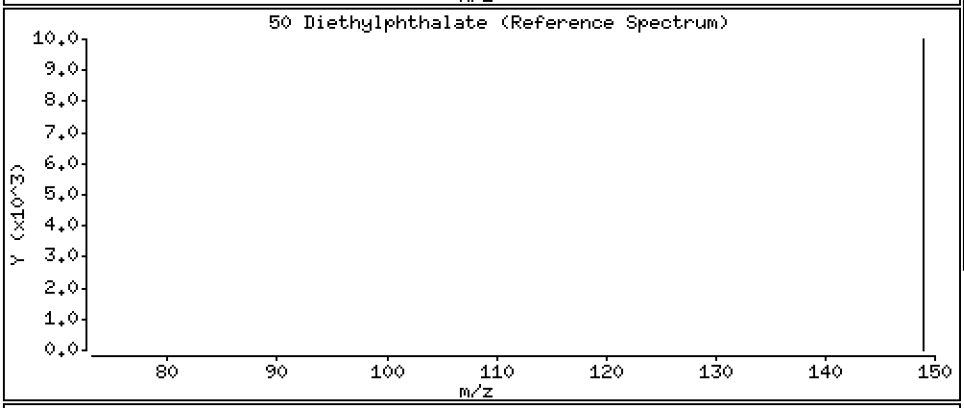
Concentration: 1.210 ug/L

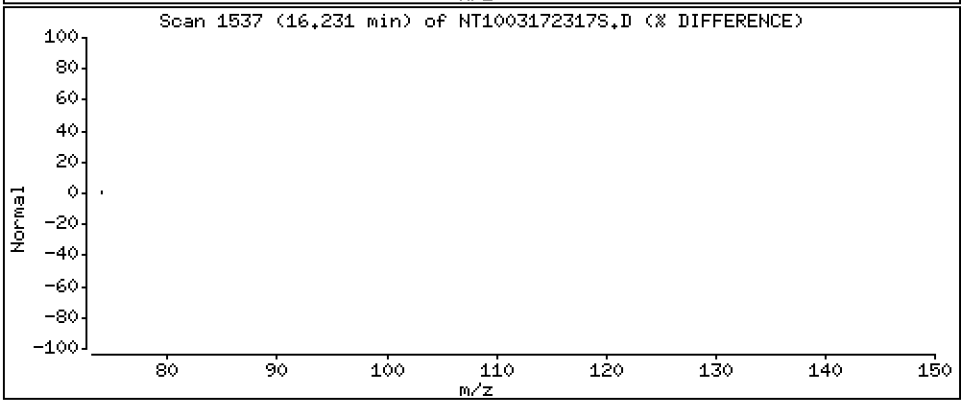












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723175.D

Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

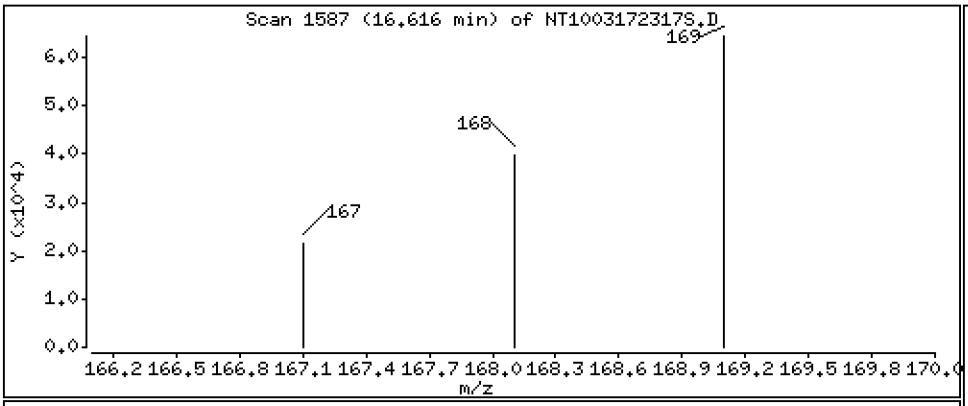
Operator: JGR

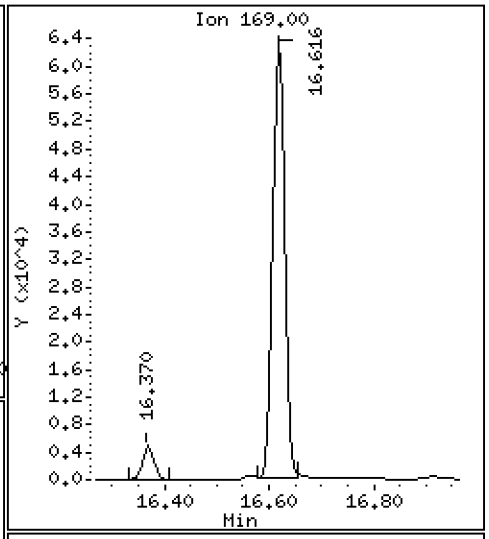
Column phase: ZB-5msi

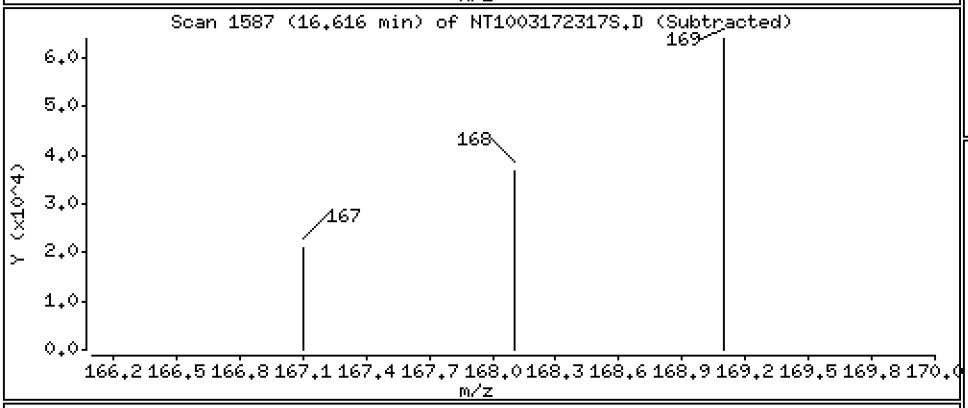
Column diameter: 0.25

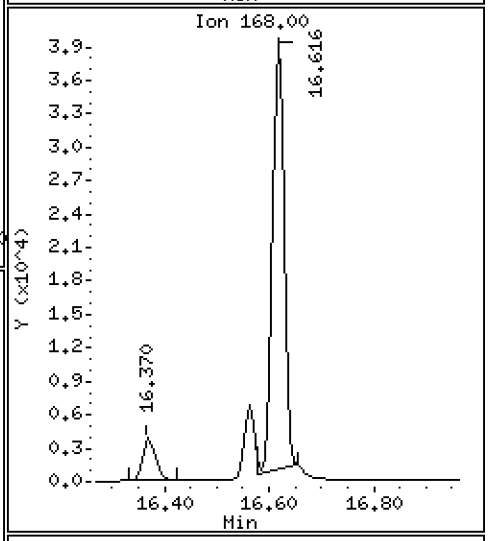
54 N-Nitrosodiphenylamine

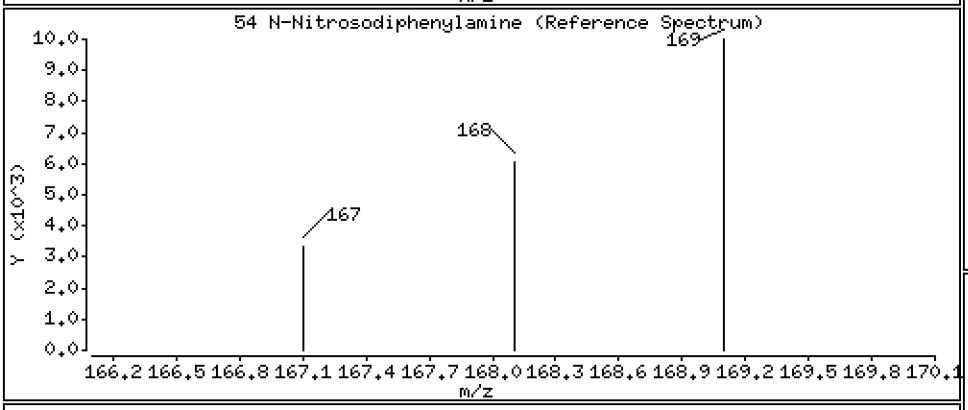
Concentration: 1.065 ug/L

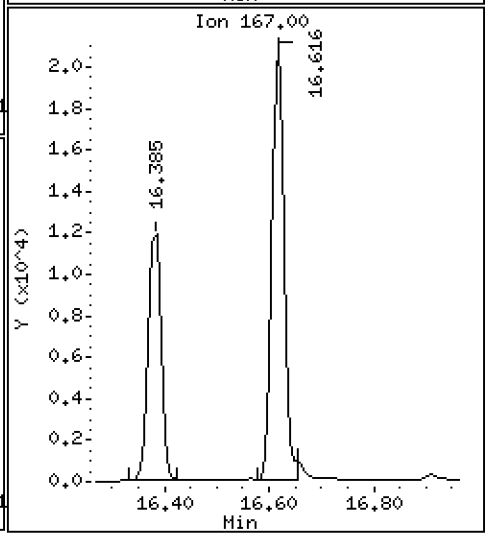


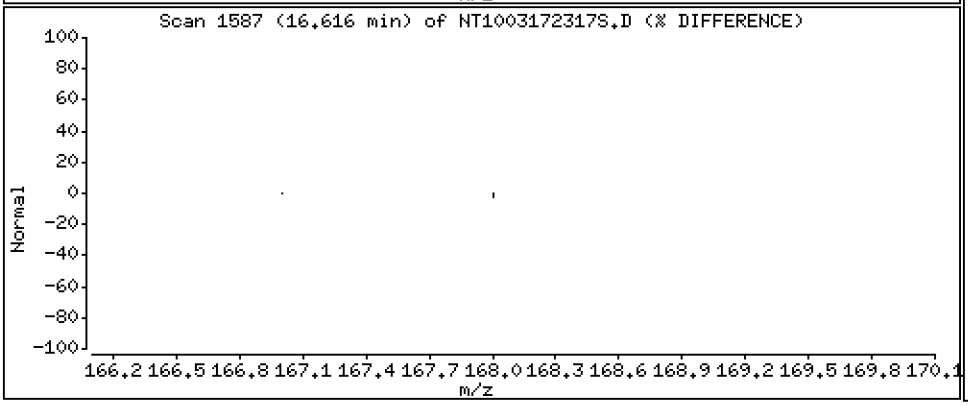












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172317S.D

Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

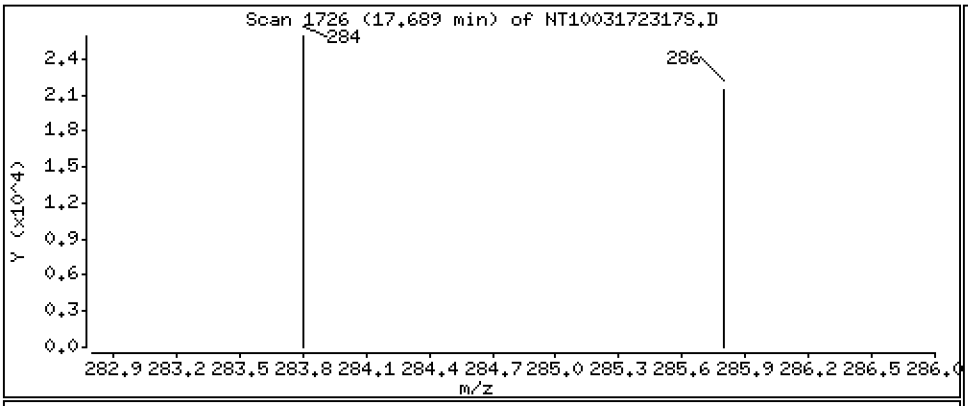
Operator: JGR

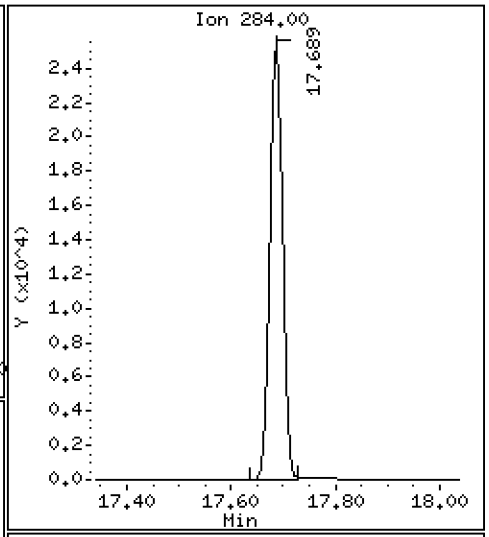
Column phase: ZB-5msi

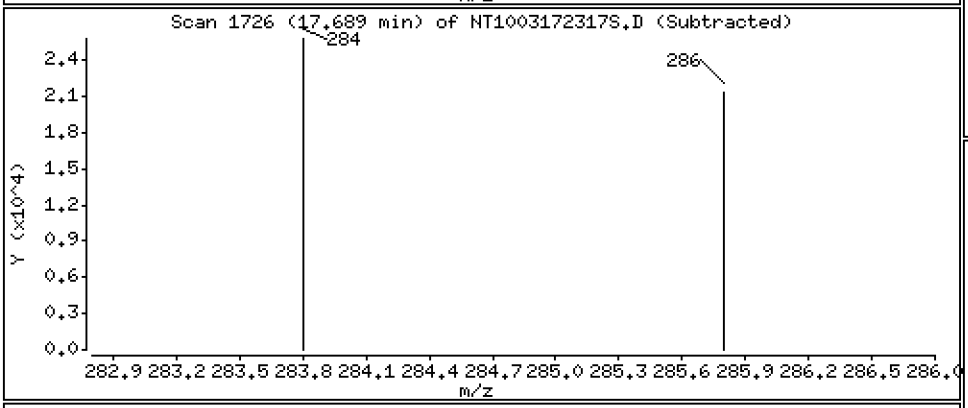
Column diameter: 0.25

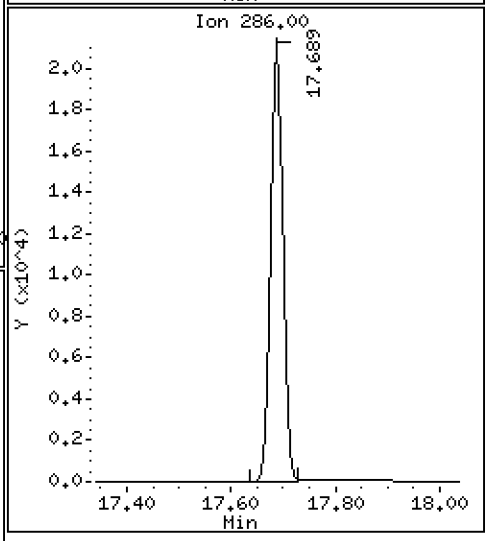
57 Hexachlorobenzene

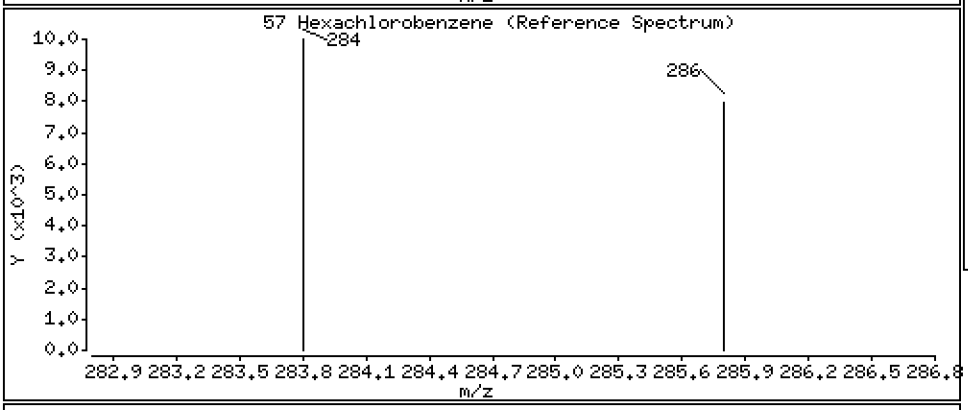
Concentration: 1.021 ug/L

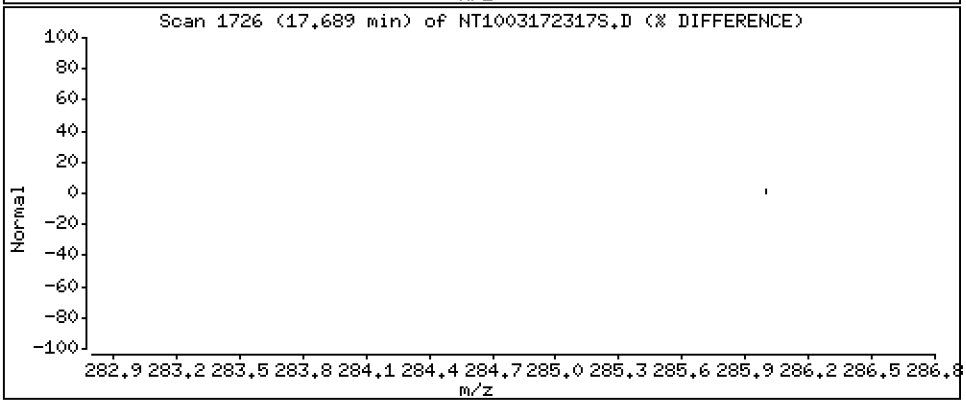












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172317S.D

Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

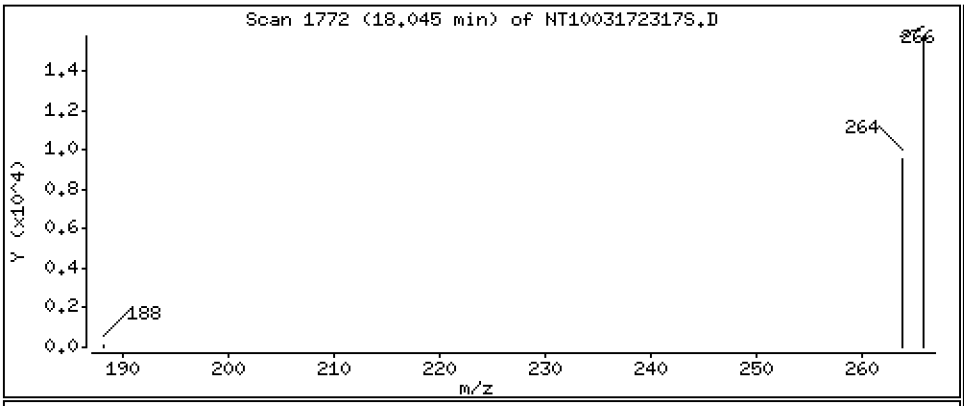
Operator: JGR

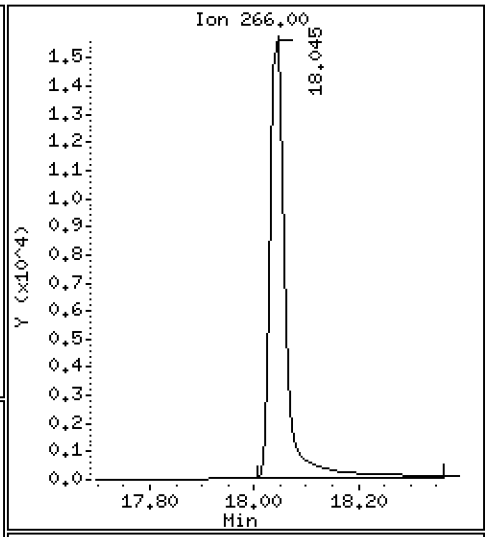
Column phase: ZB-5msi

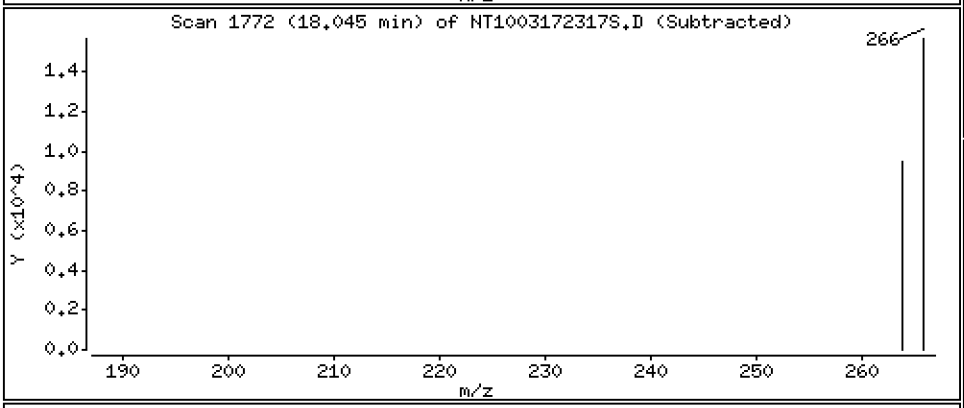
Column diameter: 0.25

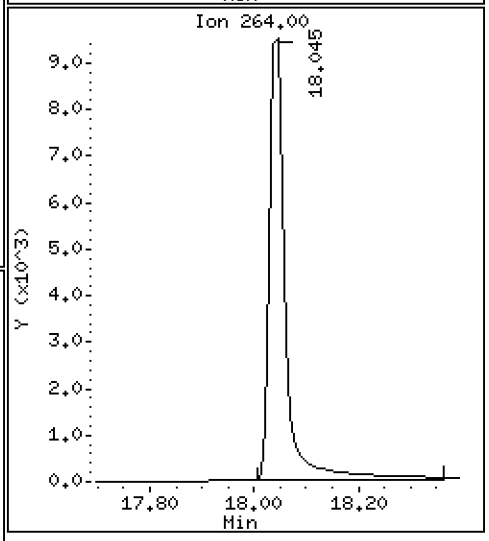
58 Pentachlorophenol

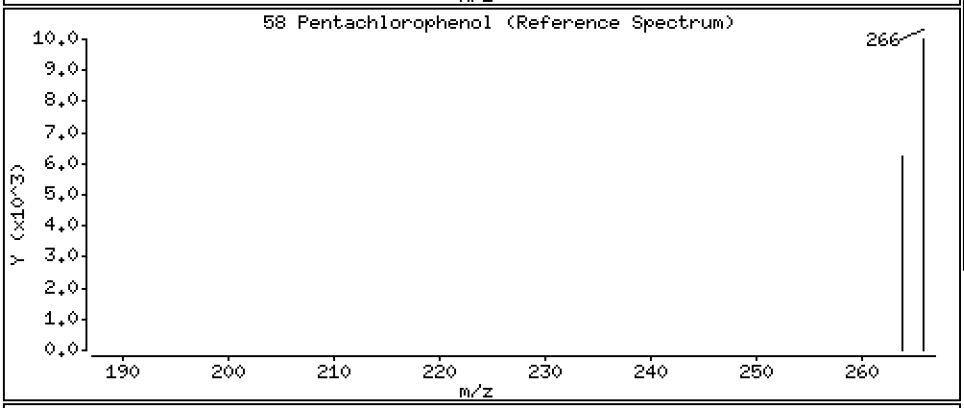
Concentration: 1.397 ug/L

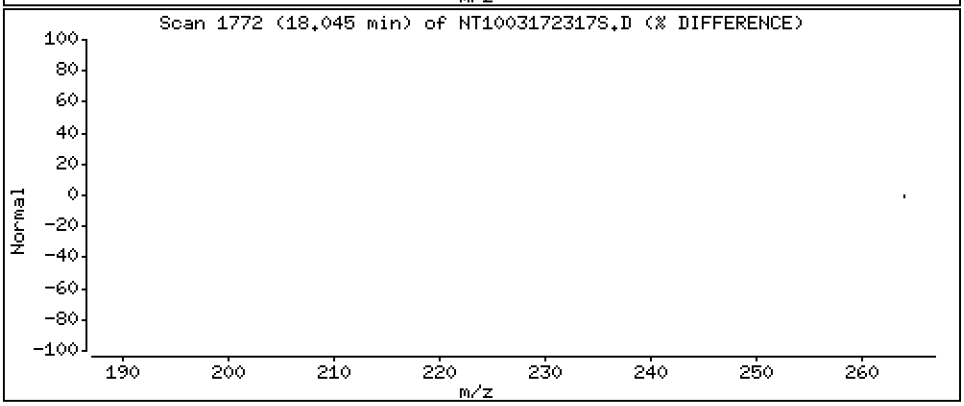












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172317S.D

Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

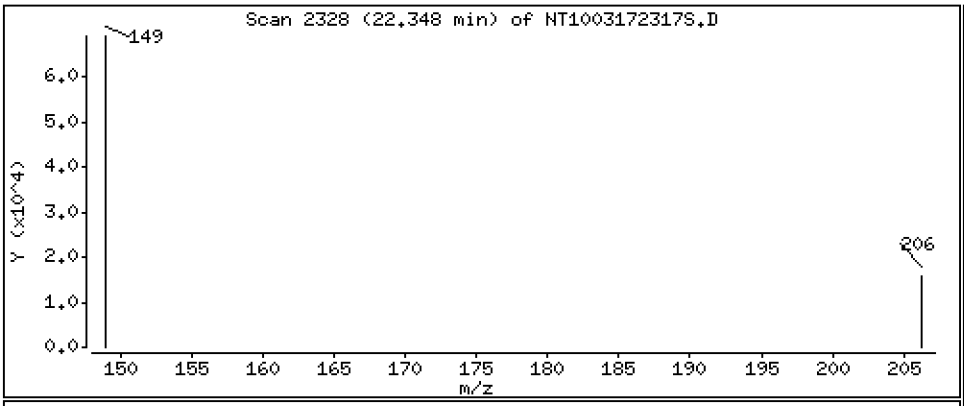
Operator: JGR

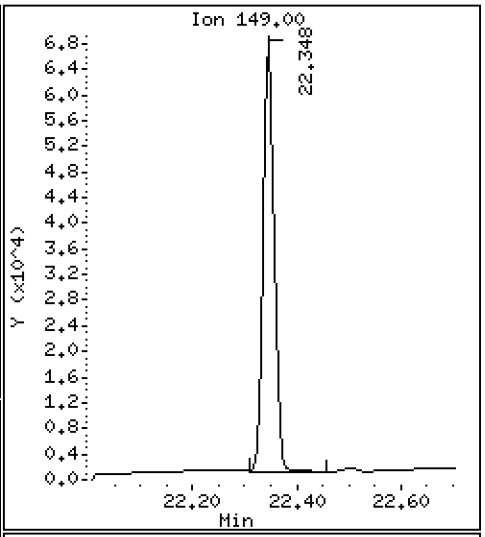
Column phase: ZB-5msi

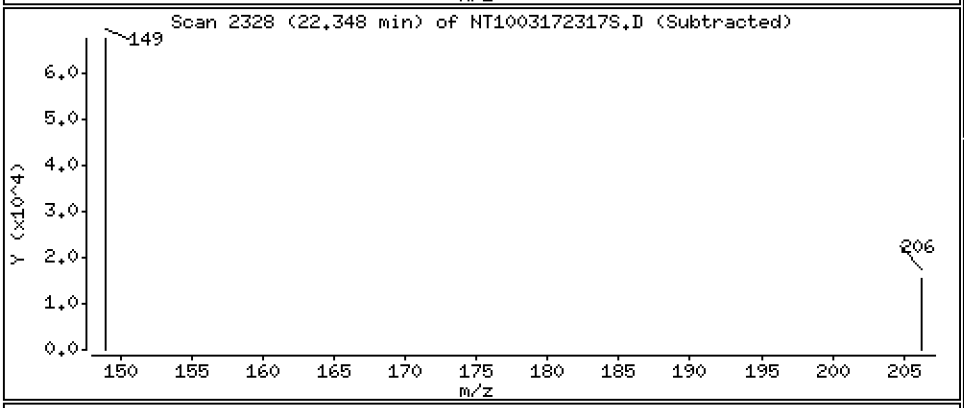
Column diameter: 0.25

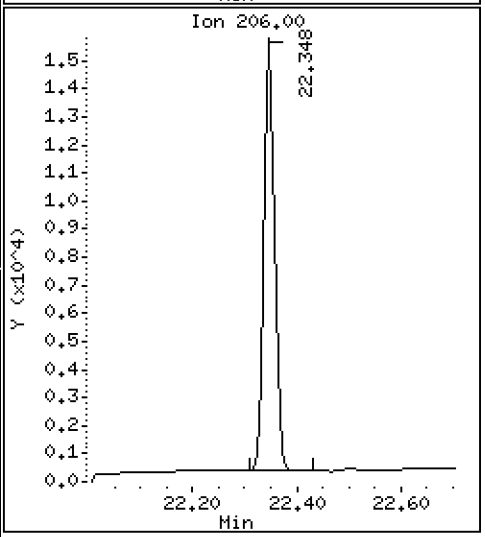
67 Butylbenzylphthalate

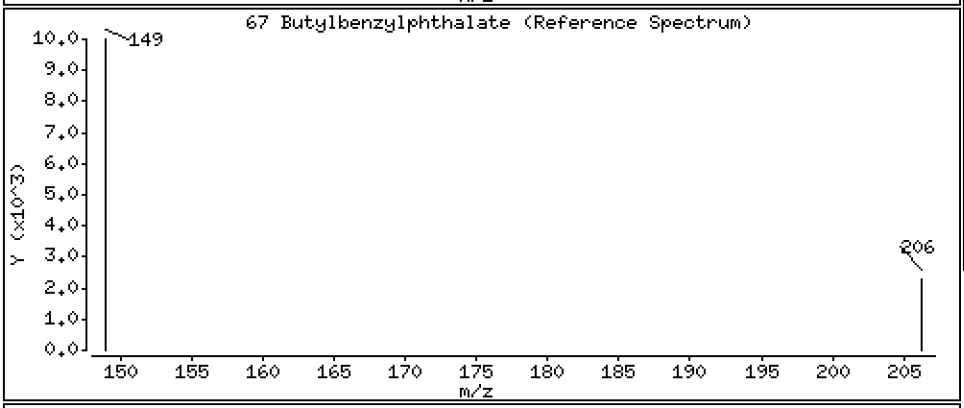
Concentration: 1.303 ug/L

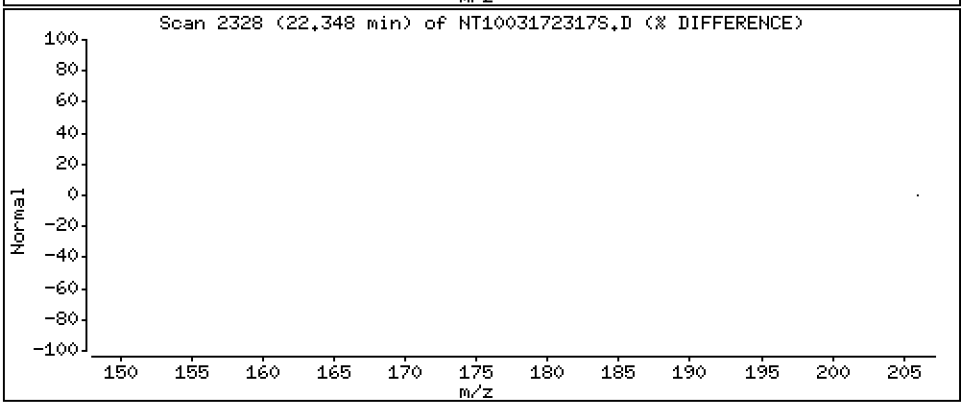












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Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

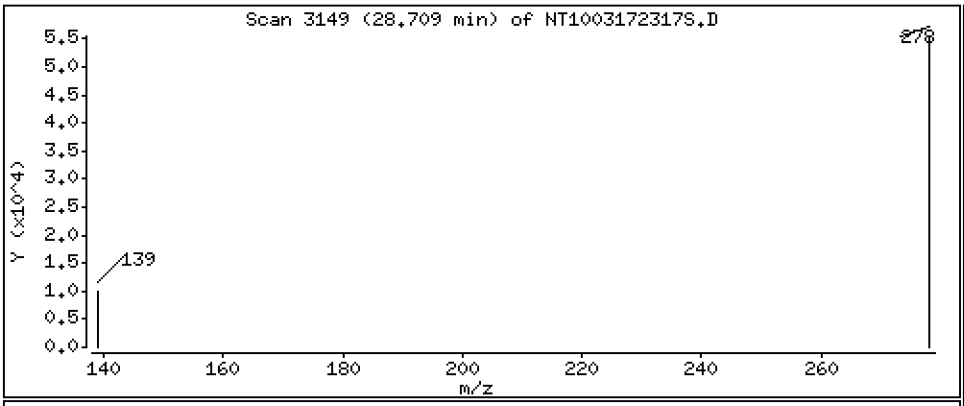
Operator: JGR

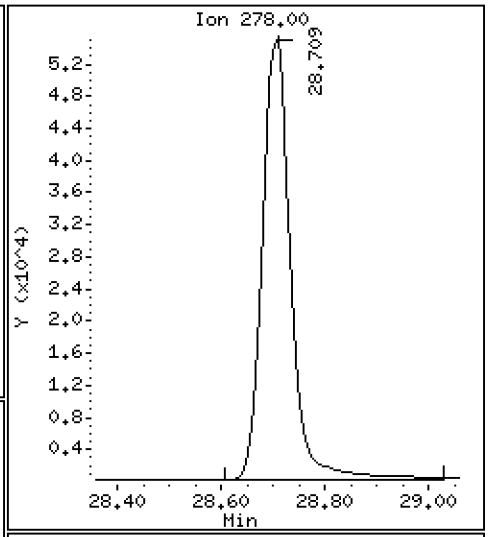
Column phase: ZB-5msi

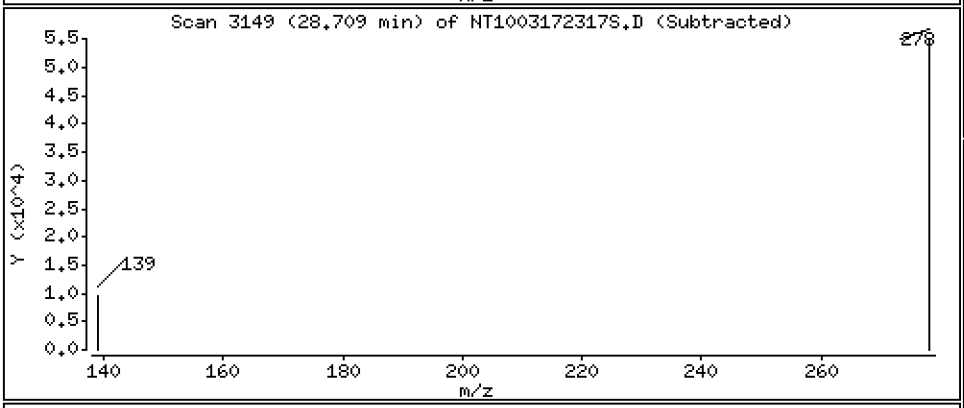
Column diameter: 0.25

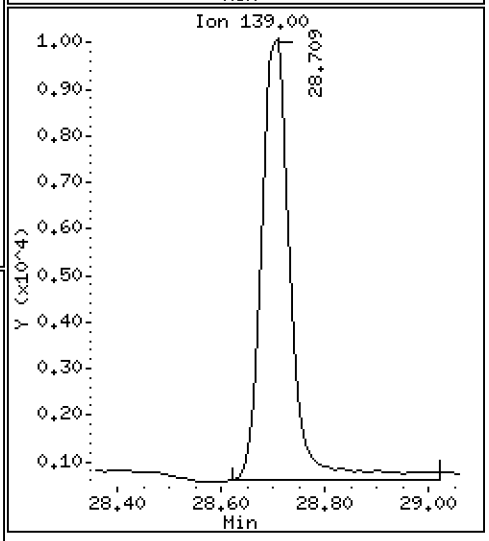
79 Dibenzo(a,h)anthracene

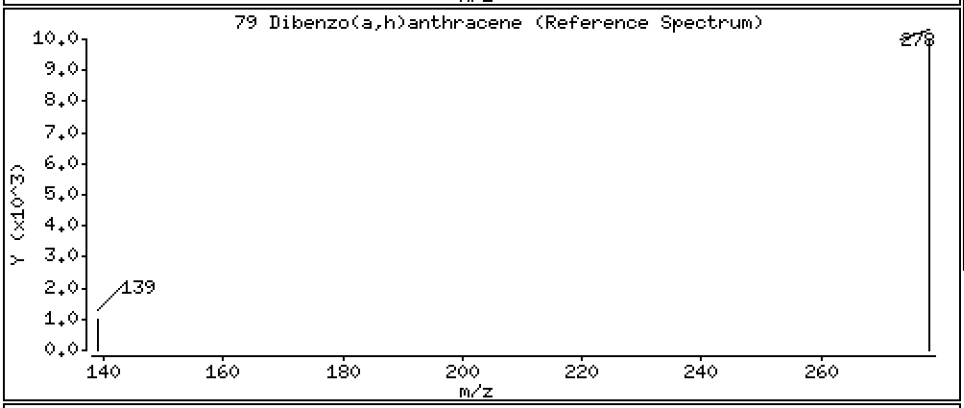
Concentration: 0.9855 ug/L

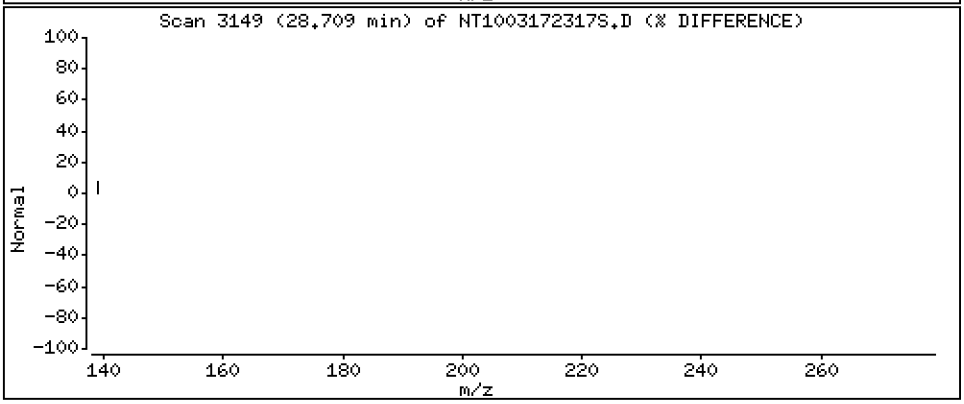












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723175.D

Date : 18-MAR-2023 04:35

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-CCV1

Volume Injected (uL): 1.0

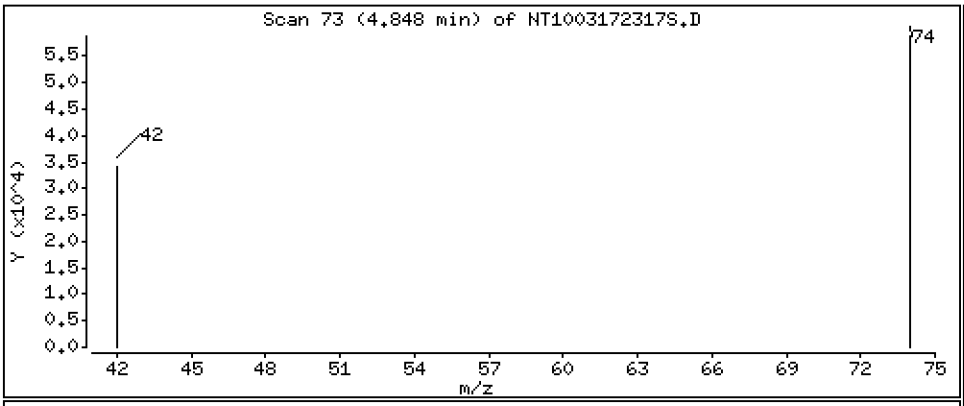
Operator: JGR

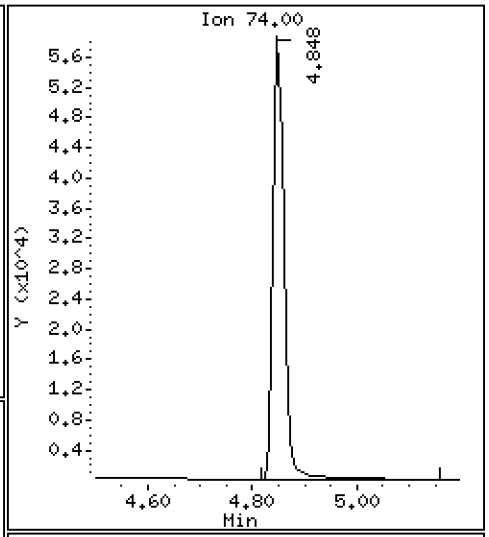
Column phase: ZB-5msi

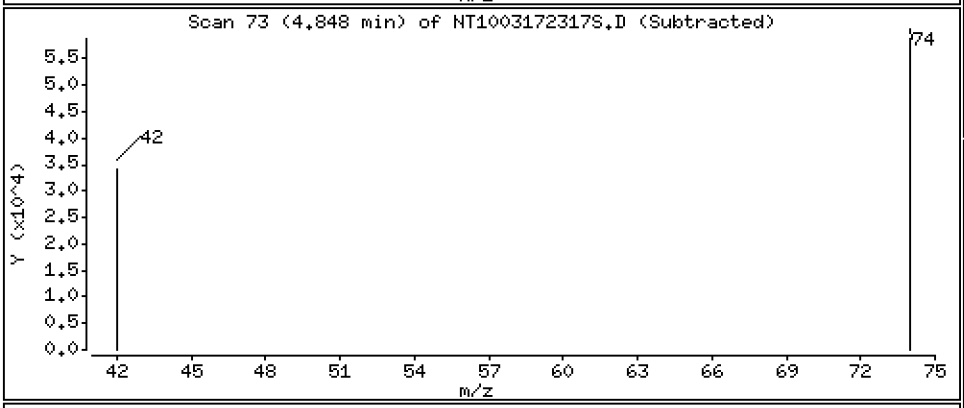
Column diameter: 0.25

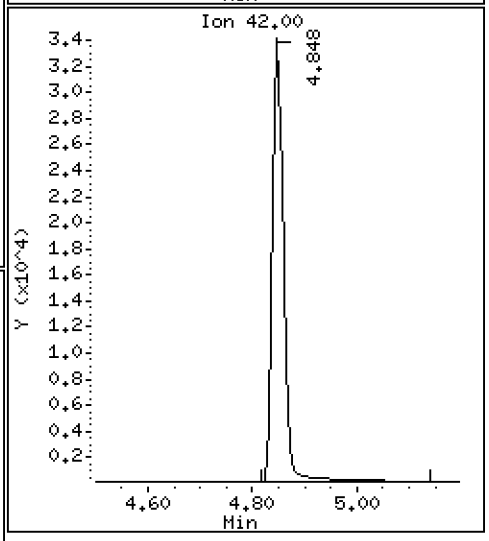
90 N-Nitrosodimethylamine

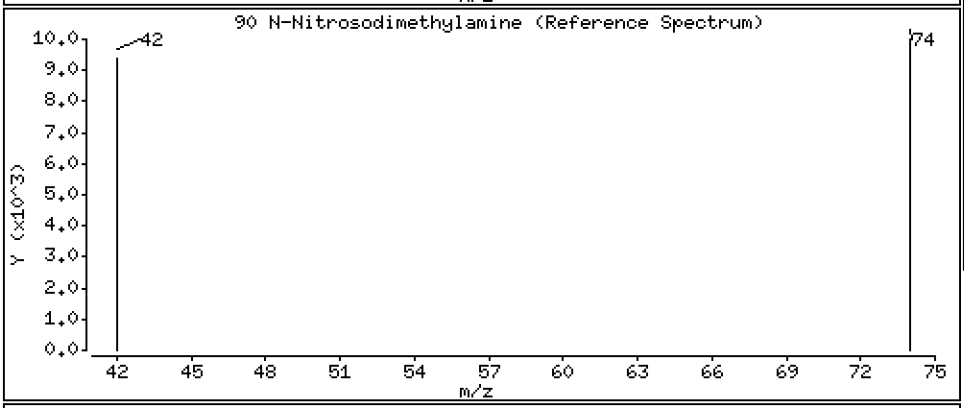
Concentration: 2.215 ug/L

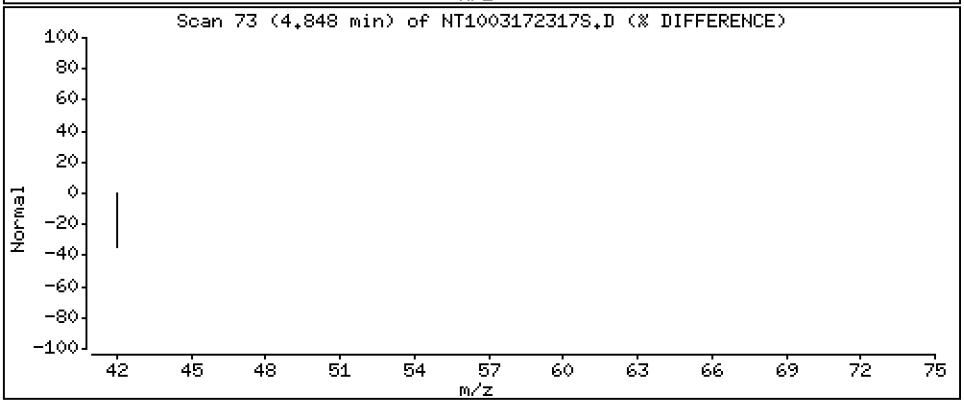












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172317S.D
Lab Smp Id: SLC0475-CCV1
Inj Date : 18-MAR-2023 04:35 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0475-CCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Meth Date : 30-Mar-2023 14:37 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.987	6.980	(0.759)	98979	1.69769	1.698(R)
3	Phenol	94	8.571	8.572	(0.931)	84003	1.05021	1.050
7	1,3-Dichlorobenzene	146	9.136	9.136	(0.992)	74230	0.99176	0.9918
* 8	1,4-Dichlorobenzene-d4	152	9.206	9.206	(1.000)	192261	4.00000	
9	1,4-Dichlorobenzene	146	9.237	9.229	(1.003)	70965	0.98219	0.9822
11	Benzyl alcohol	79	9.462	9.462	(1.028)	53828	1.16080	1.161
12	1,2-Dichlorobenzene	146	9.586	9.586	(1.041)	70871	0.99740	0.9974
13	2-Methylphenol	108	9.687	9.679	(1.052)	61555	1.11062	1.111
15	4-Methylphenol	108	9.951	9.951	(1.081)	65533	1.13788	1.138
16	N-Nitroso-di-n-propylamine	70	10.021	10.021	(1.089)	44378	1.08958	1.090
22	2,4-Dimethylphenol	107	10.994	10.985	(0.941)	124707	2.11439	2.114
24	Benzoic acid	105	11.104	11.096	(0.951)	97388	2.98558	2.986
26	1,2,4-Trichlorobenzene	180	11.589	11.589	(0.992)	61167	1.03092	1.031
* 27	Naphthalene-d8	136	11.681	11.674	(1.000)	682345	4.00000	
30	Hexachlorobutadiene	225	12.075	12.075	(1.034)	36089	1.00045	1.000
39	Dimethylphthalate	163	14.784	14.784	(0.968)	114005	1.09752	1.098
* 42	Acenaphthene-d10	162	15.279	15.279	(1.000)	329166	4.00000	
50	Diethylphthalate	149	16.230	16.230	(1.062)	130259	1.21047	1.210
54	N-Nitrosodiphenylamine	169	16.616	16.616	(0.908)	94514	1.06455	1.065
57	Hexachlorobenzene	284	17.689	17.689	(0.966)	40594	1.02137	1.021

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.045	18.045	(0.986)	30901	1.39739	1.397
*	59 Phenanthrene-d10	188	18.308	18.308	(1.000)	661731	4.00000	
$	66 Terphenyl-d14	244	21.426	21.434	(0.918)	108948	1.20010	1.200(R)
	67 Butylbenzylphthalate	149	22.347	22.355	(0.958)	96786	1.30306	1.303
*	69 Chrysene-d12	240	23.331	23.331	(1.000)	557165	4.00000	
*	77 Perylene-d12	264	25.978	25.986	(1.000)	642069	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.708	28.708	(1.105)	206540	0.98546	0.9855
	90 N-Nitrosodimethylamine	74	4.848	4.848	(0.527)	81912	2.21519	2.215

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003172317S.D
Lab Smp Id: SLC0475-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Misc Info:

Calibration Date: 17-MAR-2023
Calibration Time: 19:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	184039	92020	368078	192261	4.47
27 Naphthalene-d8	659935	329968	1319870	682345	3.40
42 Acenaphthene-d10	325775	162888	651550	329166	1.04
59 Phenanthrene-d10	616249	308125	1232498	661731	7.38
69 Chrysene-d12	526222	263111	1052444	557165	5.88
77 Perylene-d12	563117	281559	1126234	642069	14.02

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.21	8.71	9.71	9.21	-0.00
27 Naphthalene-d8	11.67	11.17	12.17	11.68	0.06
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	-0.00
59 Phenanthrene-d10	18.31	17.81	18.81	18.31	-0.00
69 Chrysene-d12	23.33	22.83	23.83	23.33	-0.00
77 Perylene-d12	25.99	25.49	26.49	25.98	-0.03

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

REVIEW SUMMARY FOR FILE - NT1003172317S.D

Lab ID: SLC0475-CCV1
nt10.i, 20230317.b\20230317.b\SIMABN2.m,   18-MAR-2023 04:35

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: 20230317.b/NT1003172303S.D

On Column LOD for nt10.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00049
Lab File ID:	NT1003172305S.D	Calibration Date:	03/15/2023
Sequence:	SLC0475	Injection Date:	03/17/23
Lab Sample ID:	SLC0475-LCV1	Injection Time:	20:57
Sequence Name:	Low Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.10000	0.1	1.5031980	1.7013970		13.2	
1,2-Dichlorobenzene	A	0.10000	0.1	1.4783140	1.5687660		6.1	
Benzyl Alcohol	A	0.10000	0.1	0.9647610	0.9585594		-0.6	
Benzoic acid	A	0.40000	0.03	0.1358970	0.0129716		-93.1	
2,4-Dimethylphenol	A	0.20000	0.2	0.3457498	0.3369230		-2.6	
1,2,4-Trichlorobenzene	A	0.10000	0.1	0.3478148	0.3721666		7.0	
N-Nitrosodiphenylamine	A	0.10000	0.1	0.5366720	0.5223771		-2.7	
Pentachlorophenol	A	0.20000	0.03	0.0934250	0.0188244		-85.8	
2-Fluorophenol	A	0.15000	0.161	1.2129820	1.3007960		7.2	
p-Terphenyl-d14	A	0.10000	0.101	0.6517430	0.6593389		1.2	

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT10031723058.D

Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

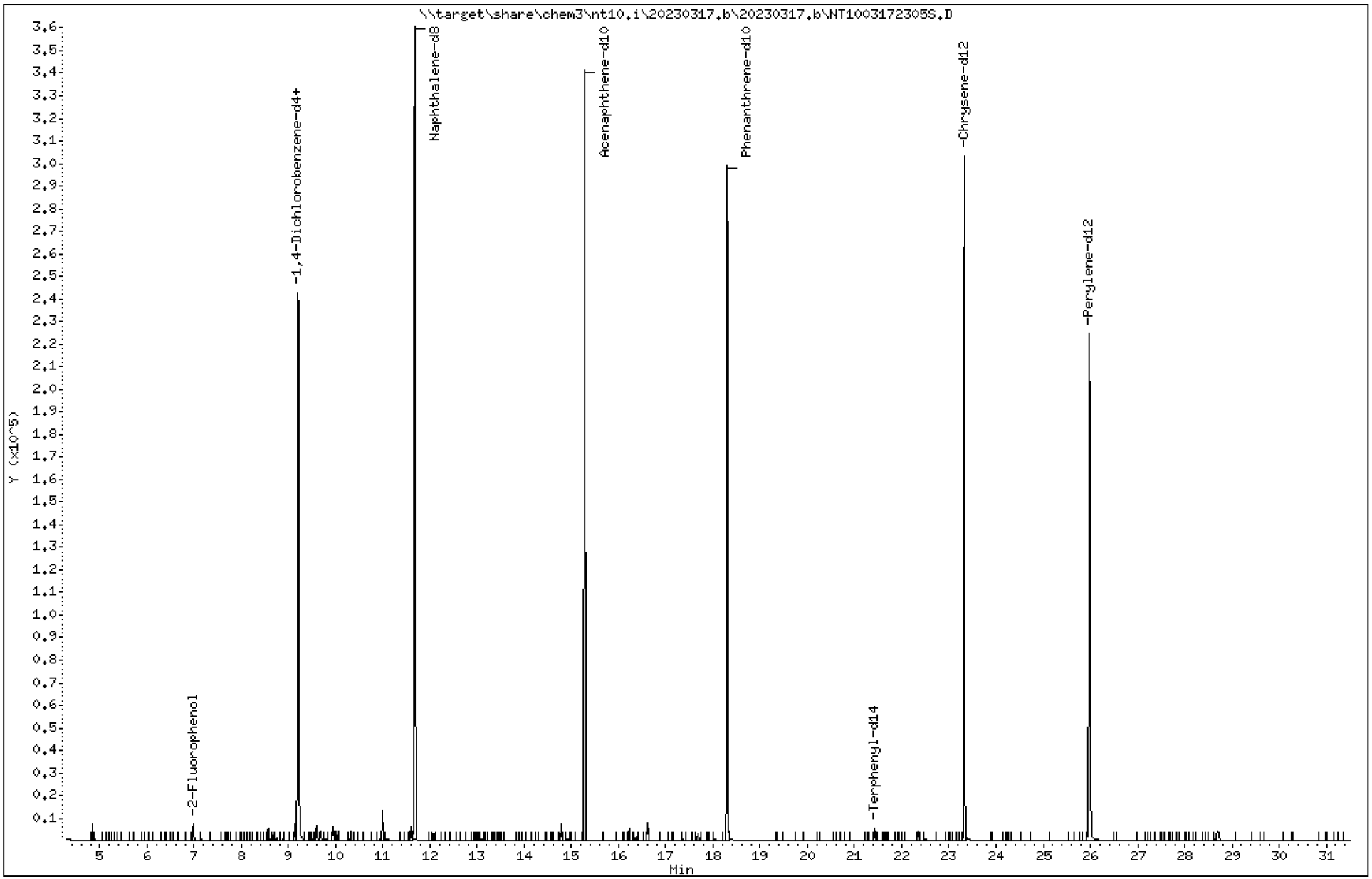
Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172305S.D

Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

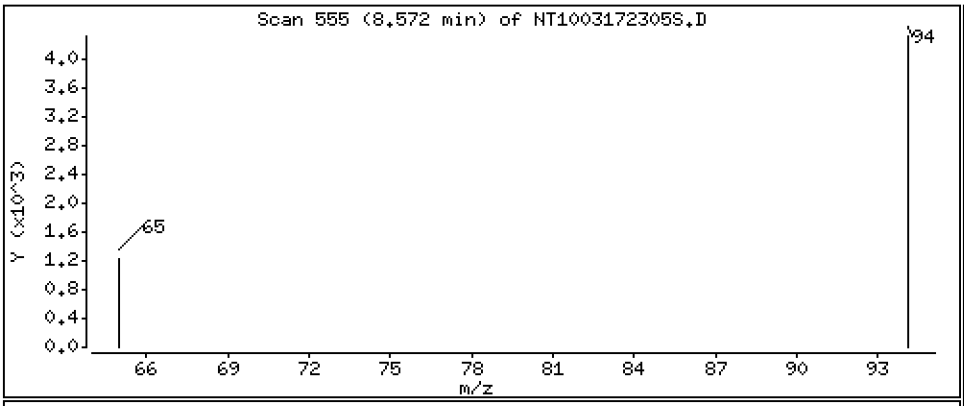
Operator: JGR

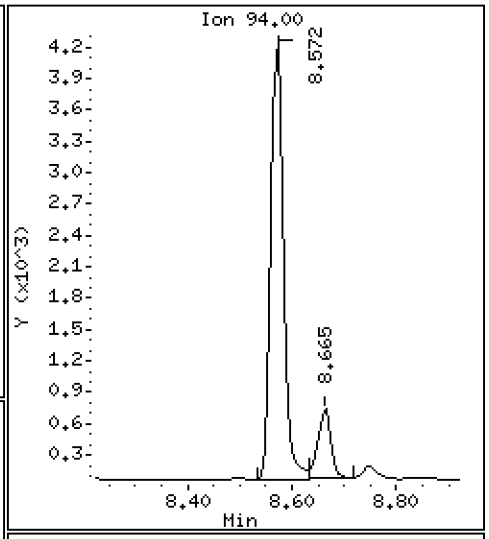
Column phase: ZB-5msi

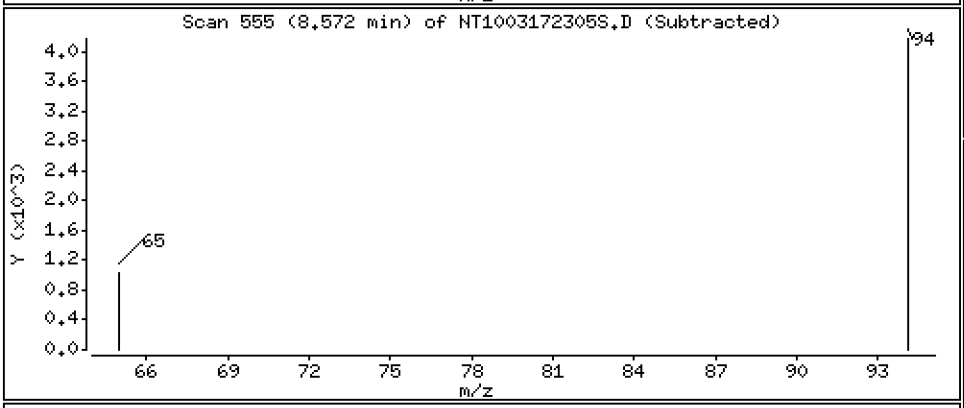
Column diameter: 0.25

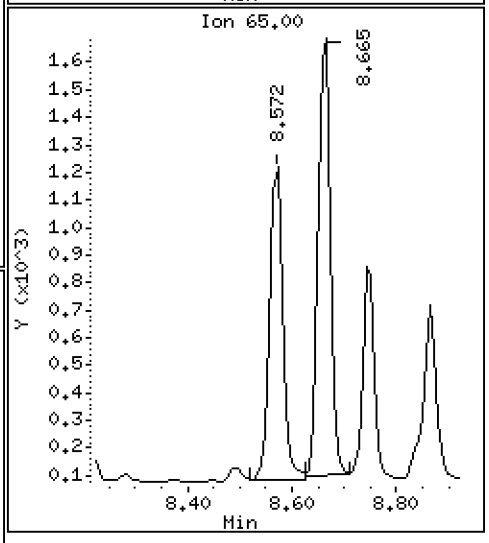
3 Phenol

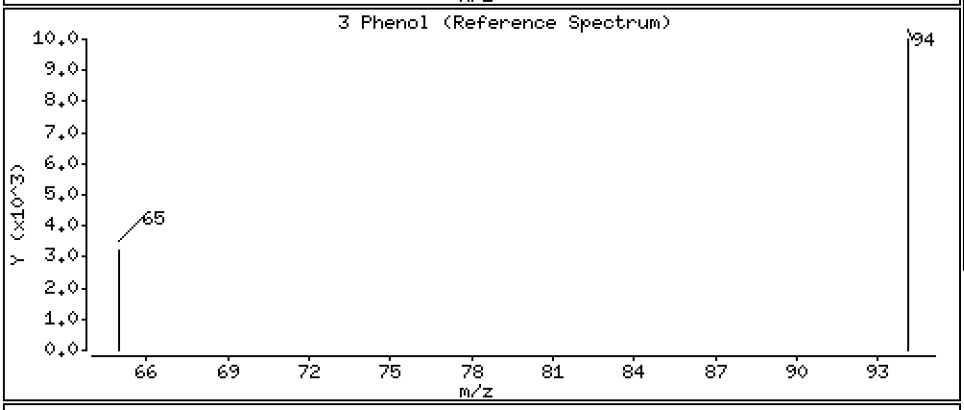
Concentration: 0.1056 ug/L

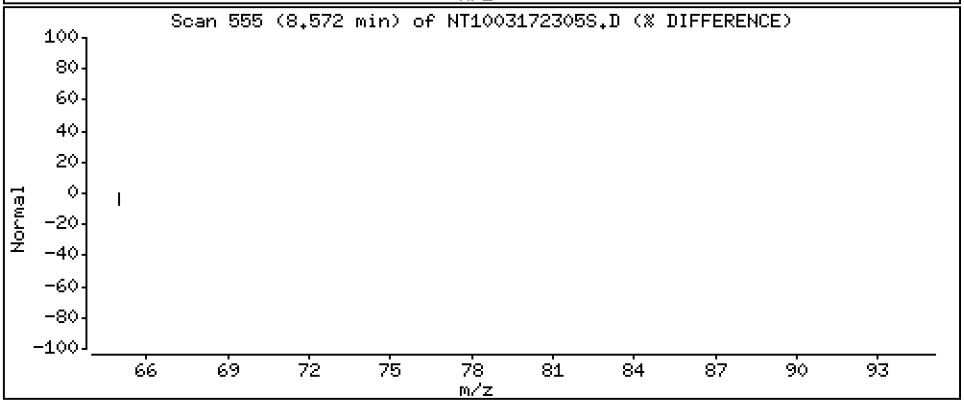












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172305S.D

Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

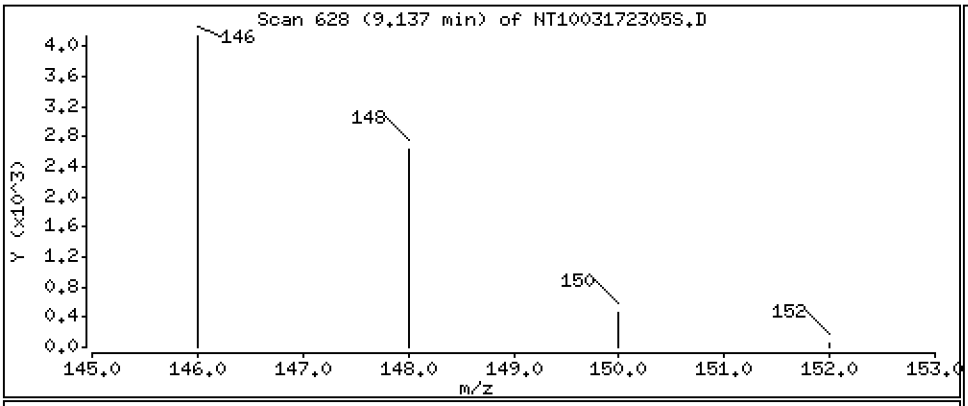
Operator: JGR

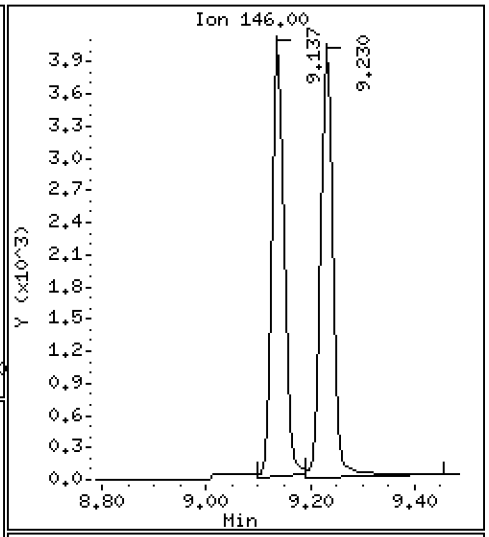
Column phase: ZB-5msi

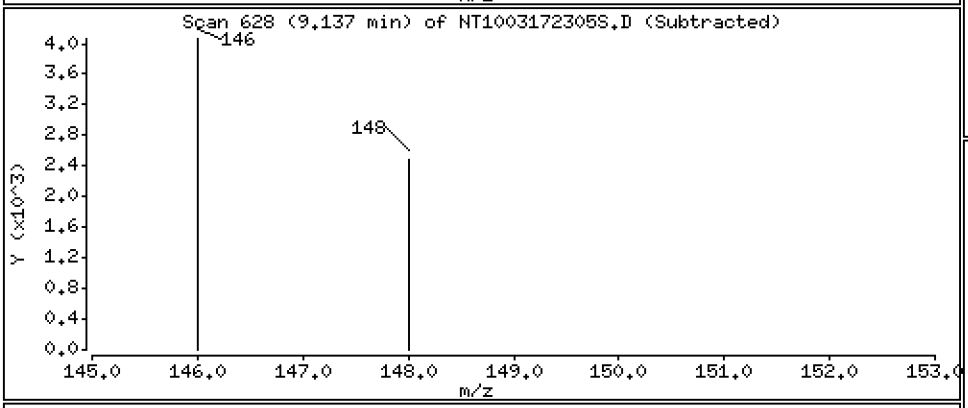
Column diameter: 0.25

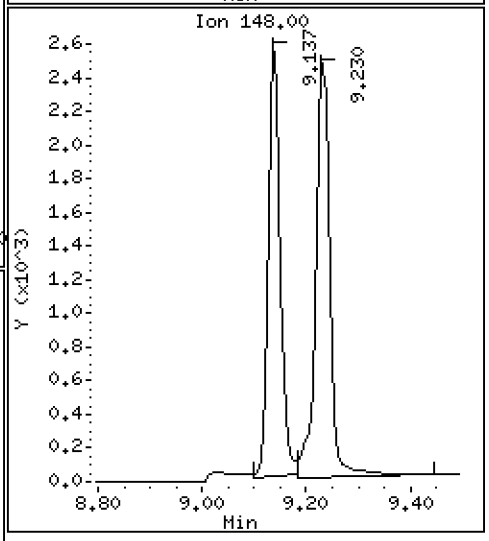
7 1,3-Dichlorobenzene

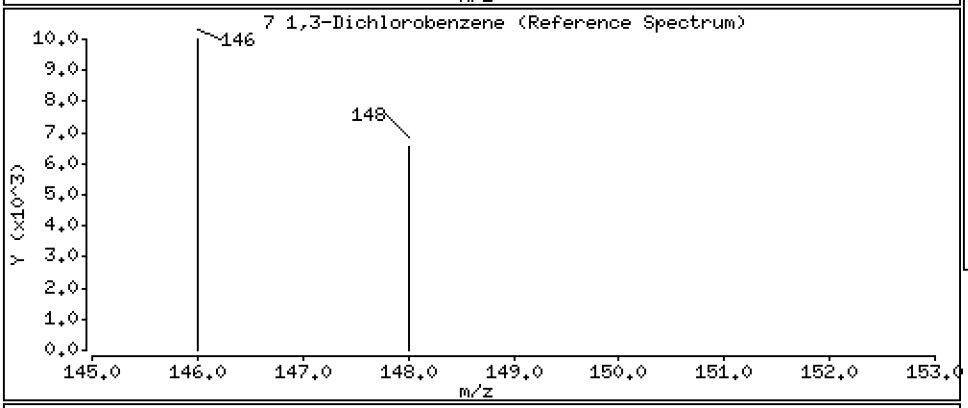
Concentration: 0.1081 ug/L

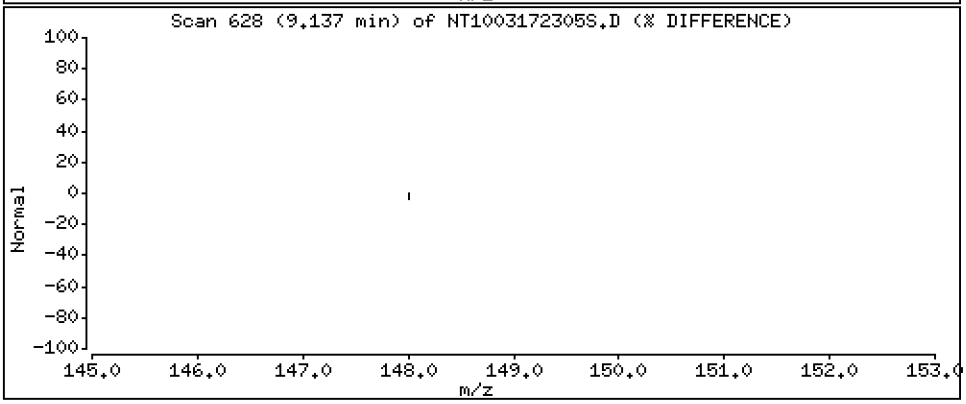












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Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

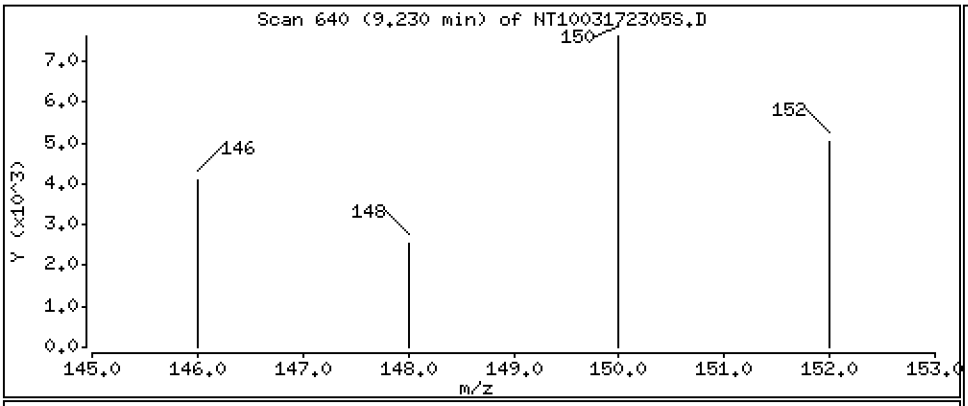
Operator: JGR

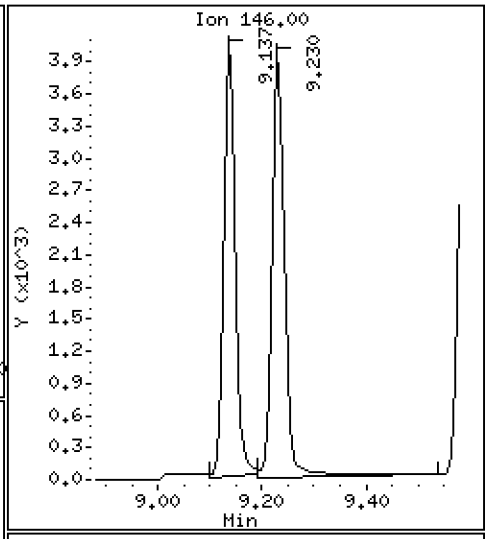
Column phase: ZB-5msi

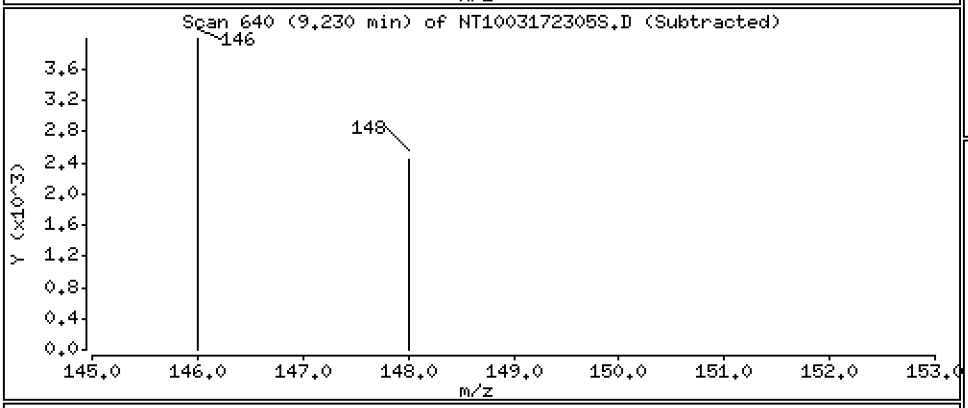
Column diameter: 0.25

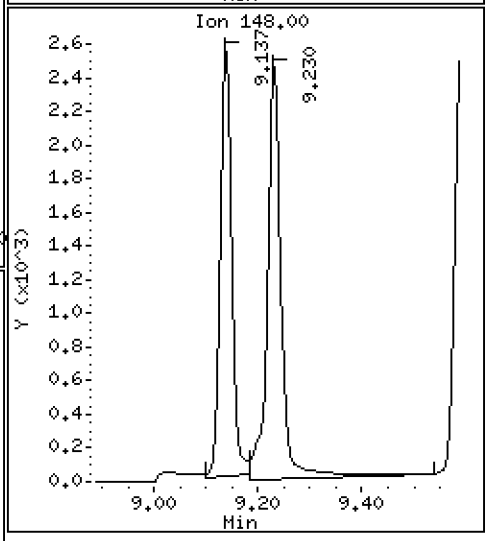
9 1,4-Dichlorobenzene

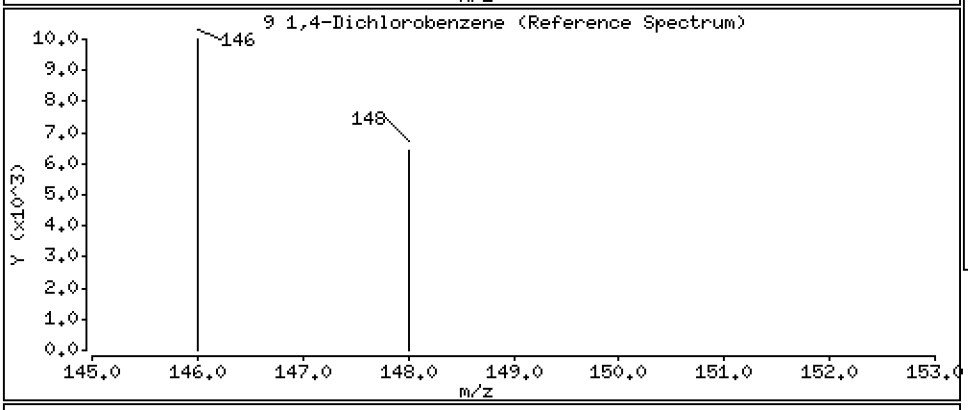
Concentration: 0.1132 ug/L

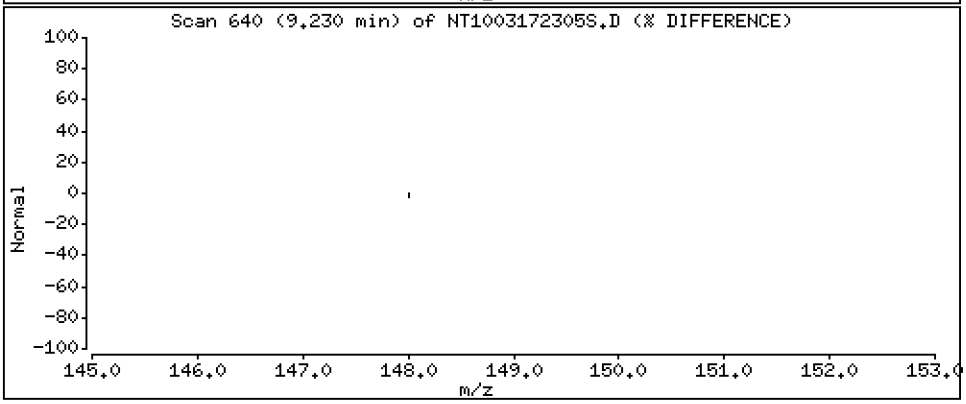












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172305S.D

Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

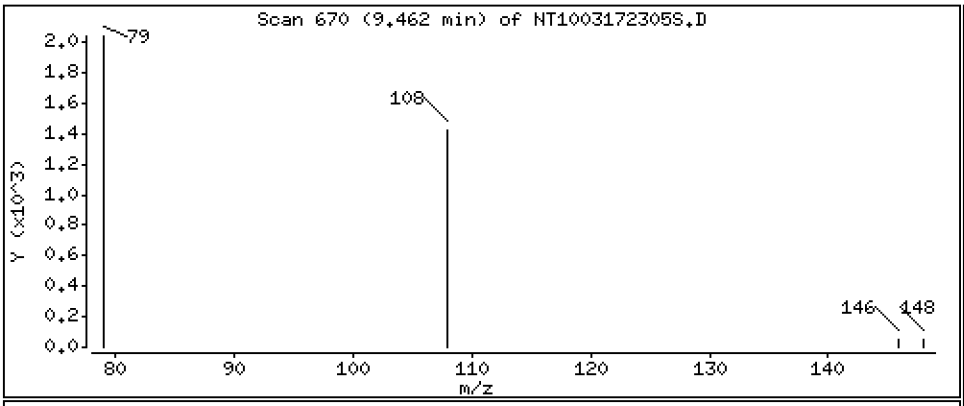
Operator: JGR

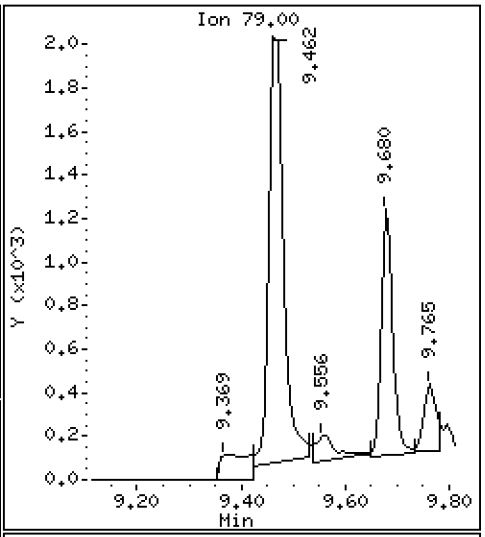
Column phase: ZB-5msi

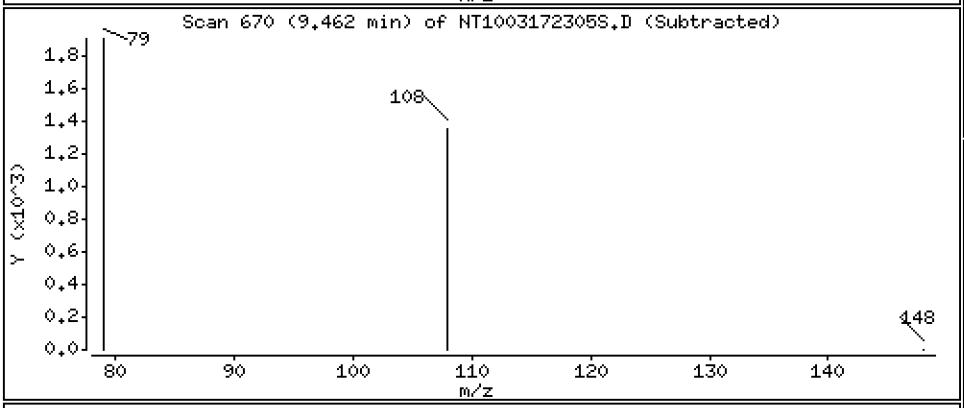
Column diameter: 0.25

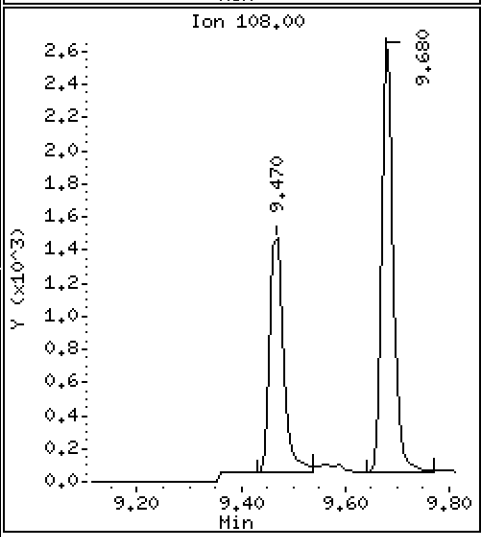
11 Benzyl alcohol

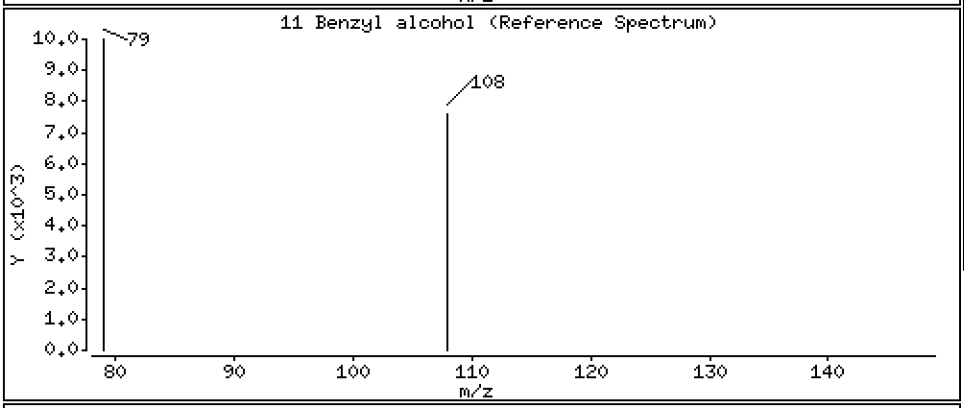
Concentration: 0.09936 ug/L

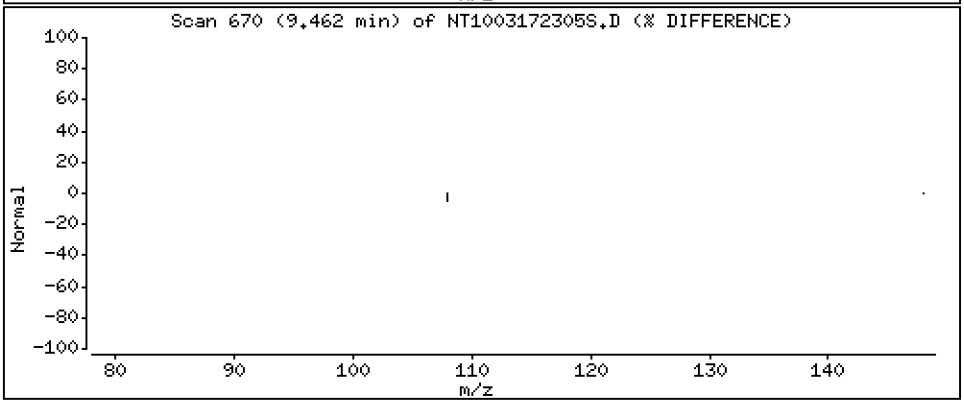












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172305S.D

Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

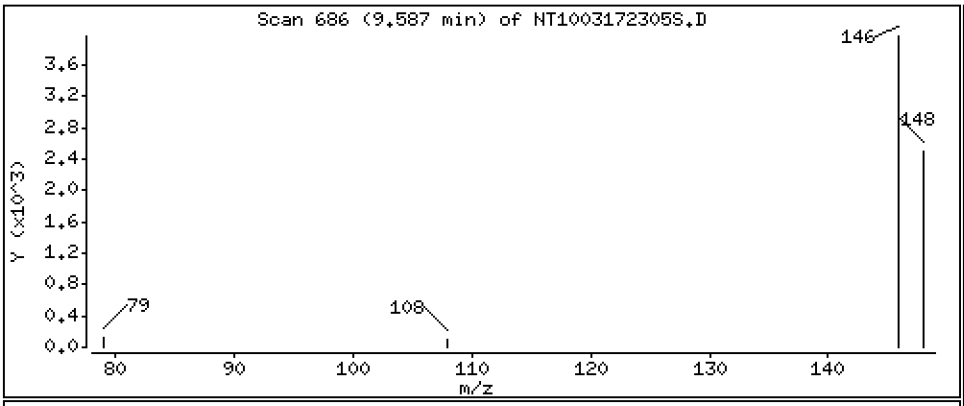
Operator: JGR

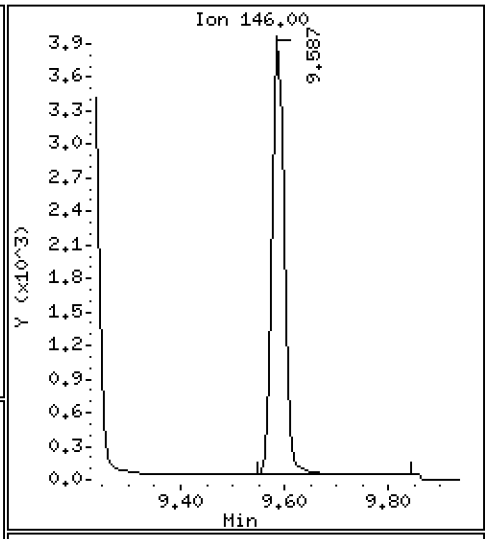
Column phase: ZB-5msi

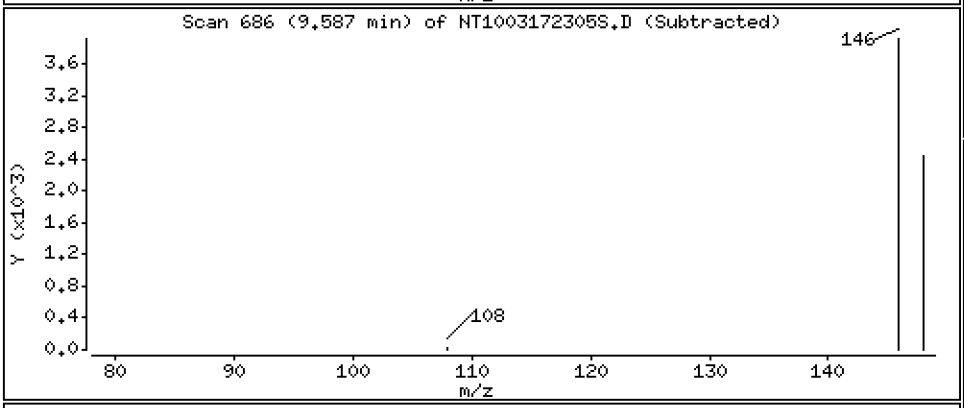
Column diameter: 0.25

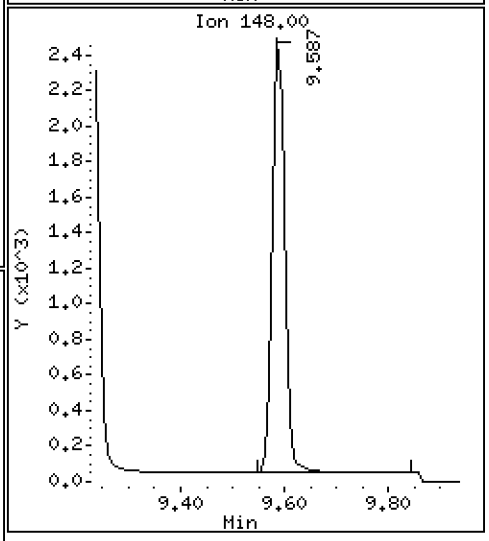
12 1,2-Dichlorobenzene

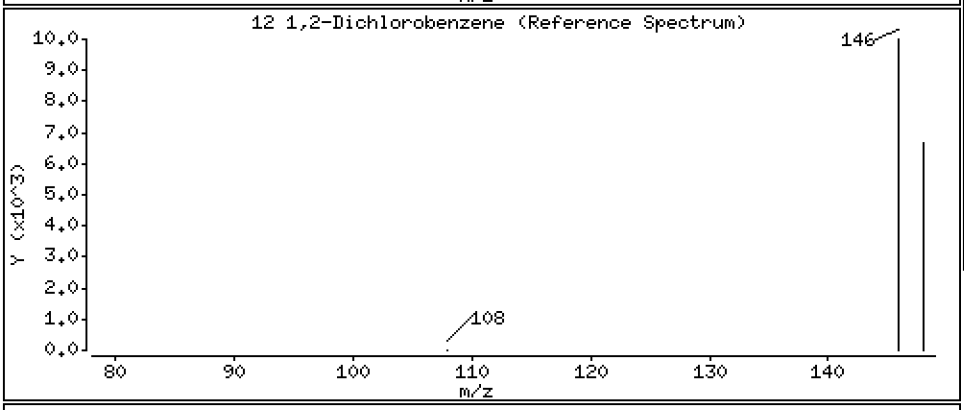
Concentration: 0.1061 ug/L

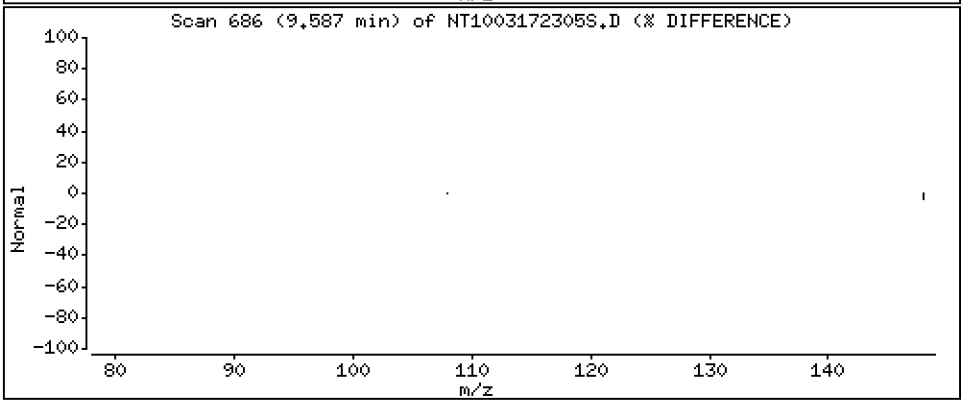












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172305S.D

Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

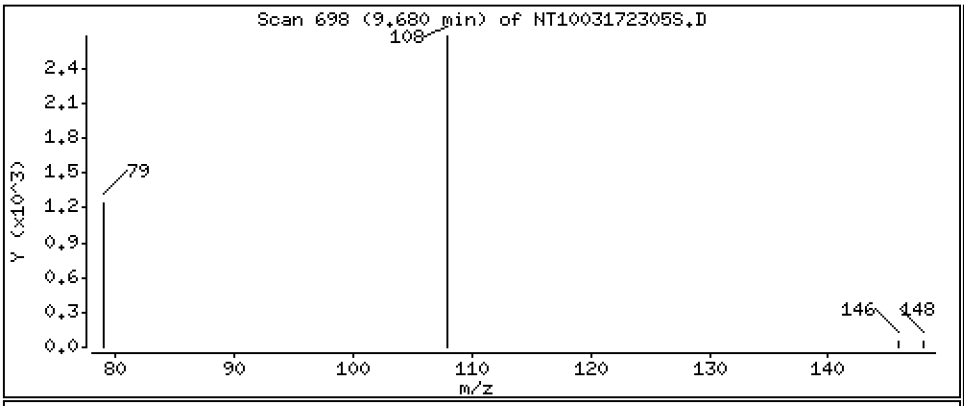
Operator: JGR

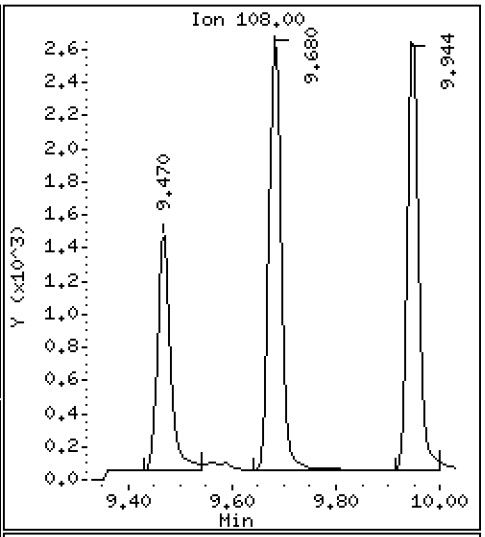
Column phase: ZB-5msi

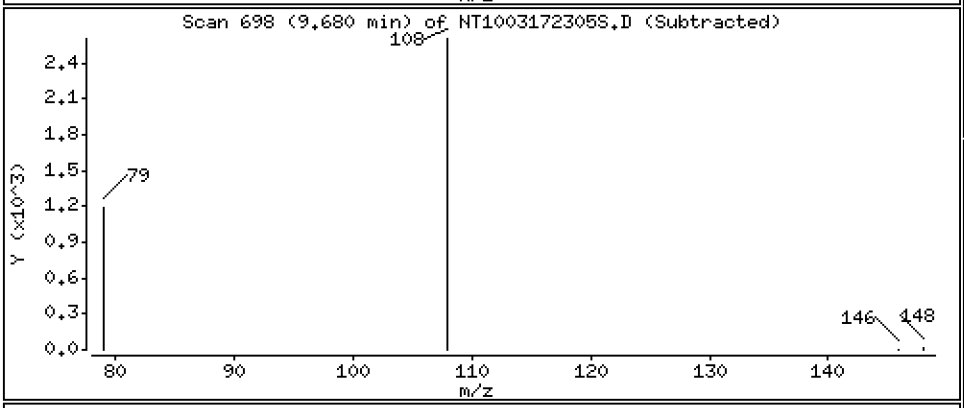
Column diameter: 0.25

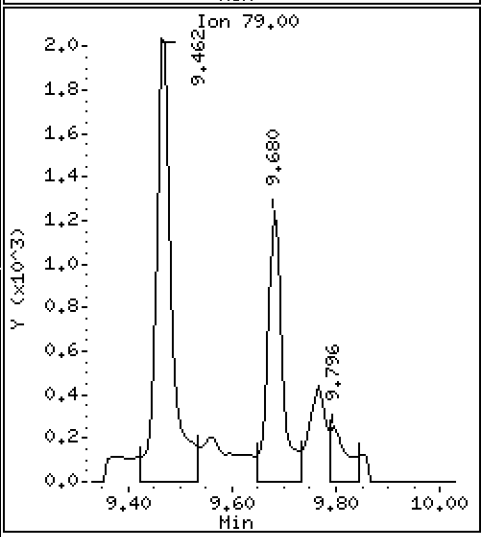
13 2-Methylphenol

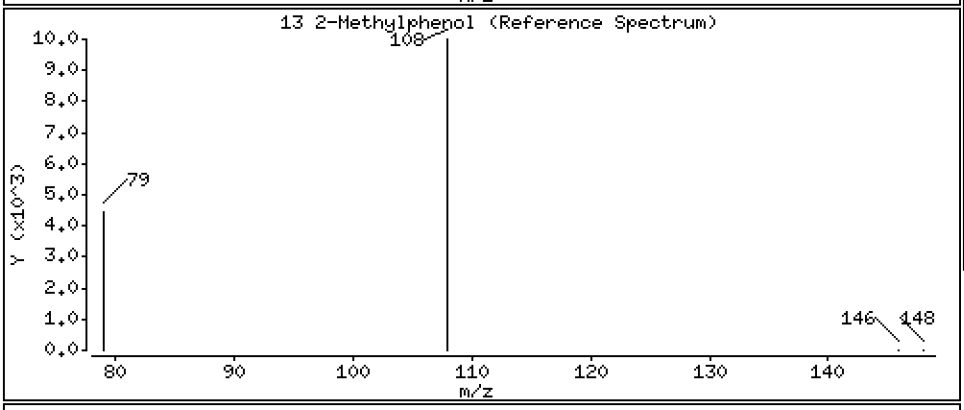
Concentration: 0.09265 ug/L

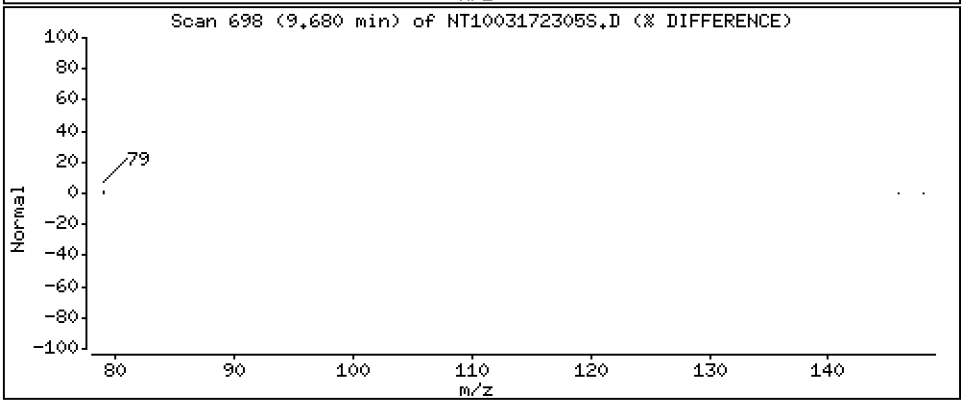












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172305S.D

Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

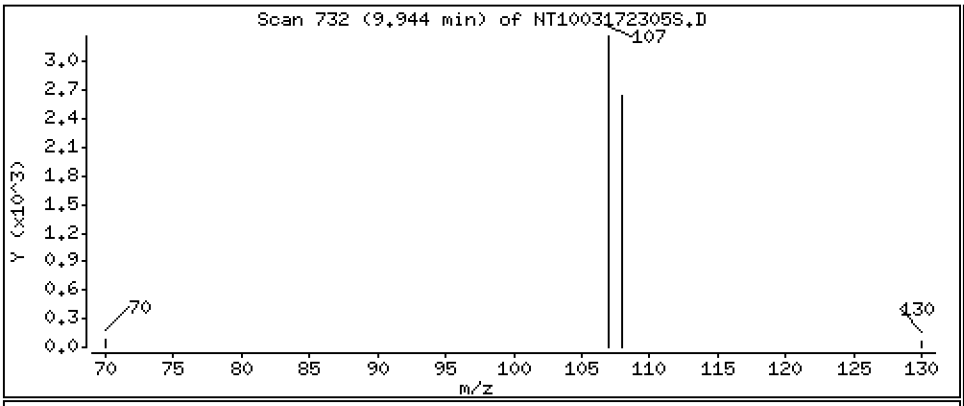
Operator: JGR

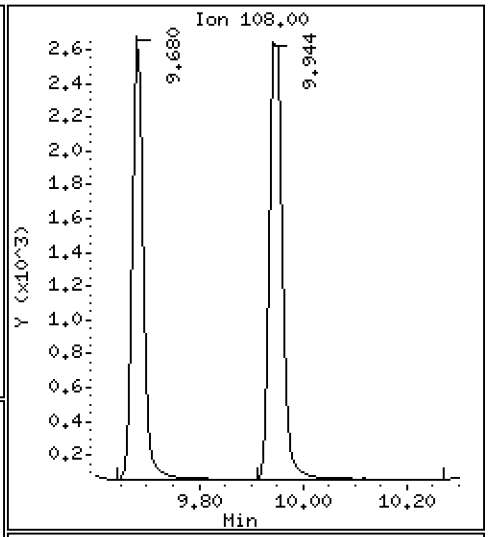
Column phase: ZB-5msi

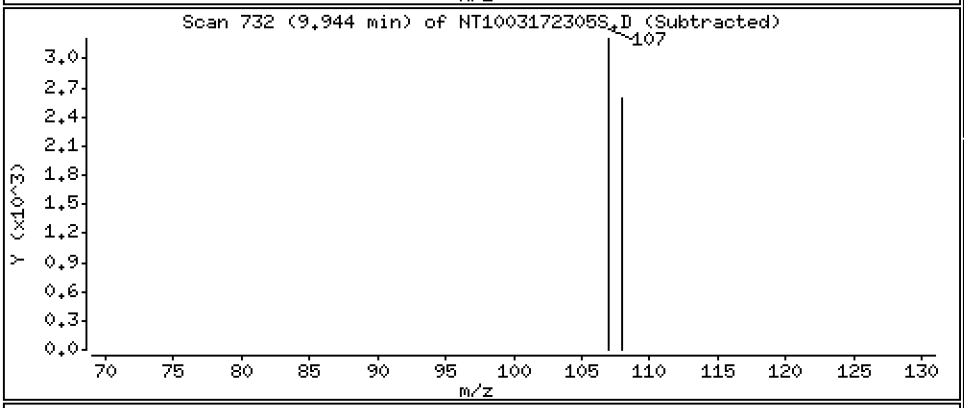
Column diameter: 0.25

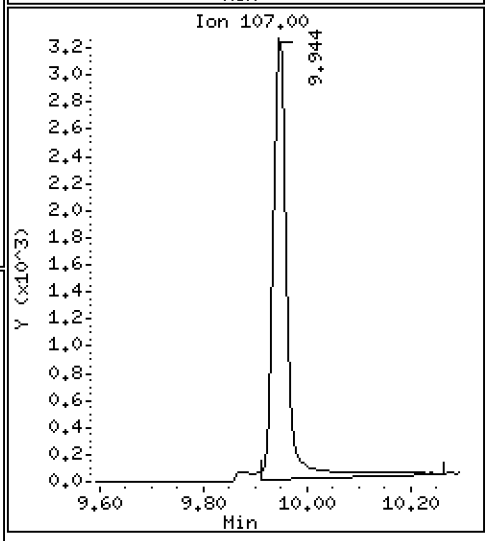
15 4-Methylphenol

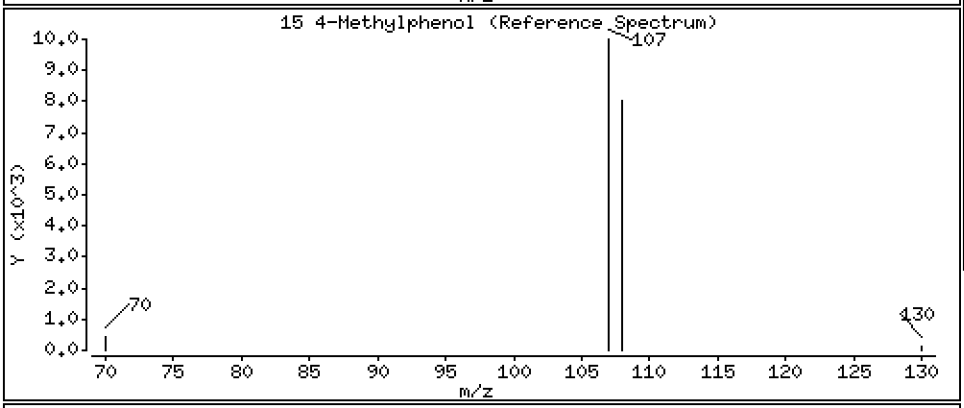
Concentration: 0.09365 ug/L

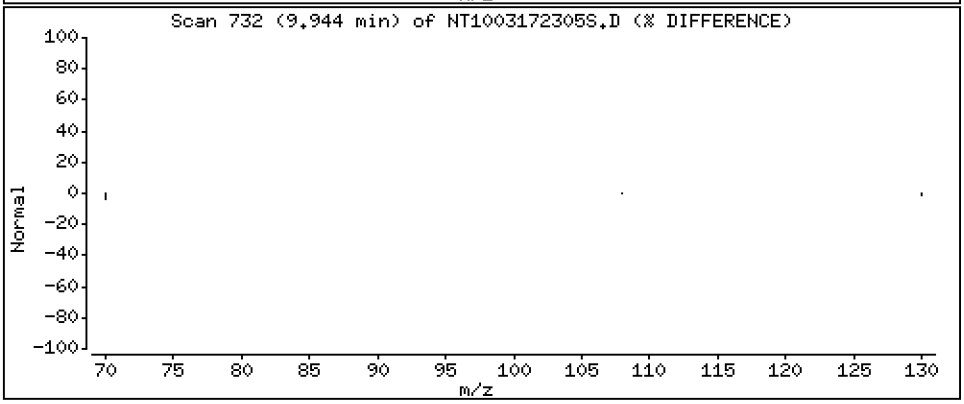












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172305S.D

Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

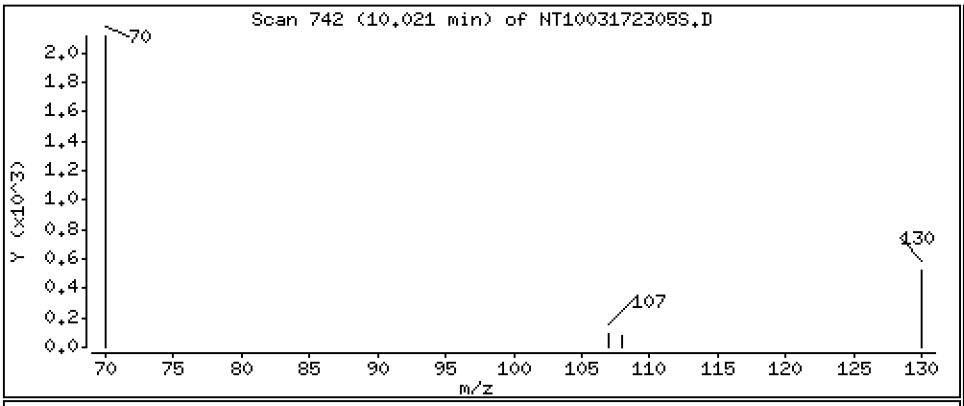
Operator: JGR

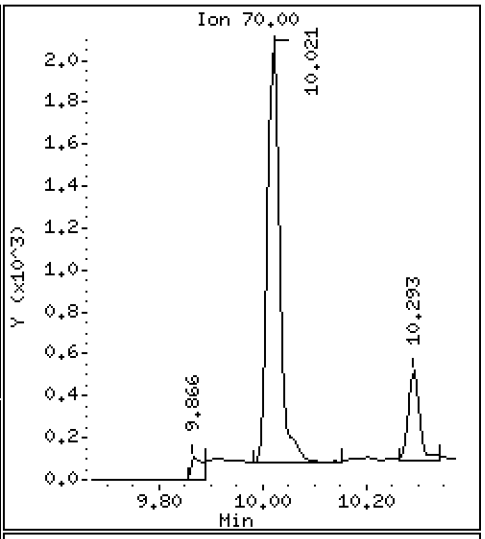
Column phase: ZB-5msi

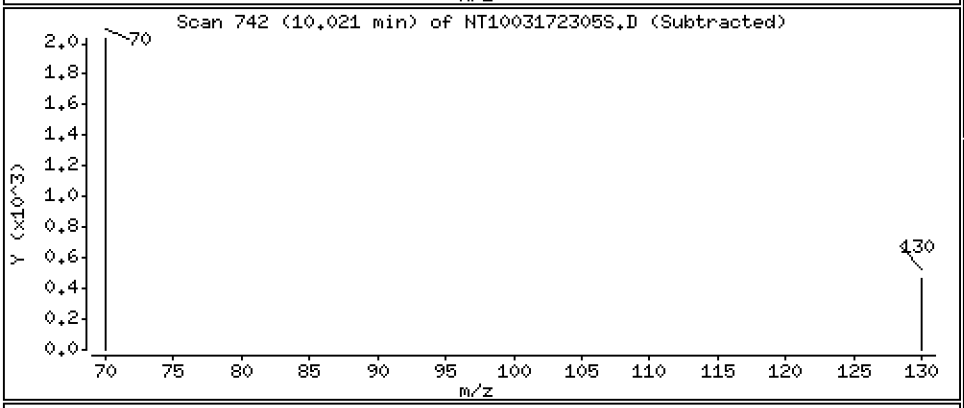
Column diameter: 0.25

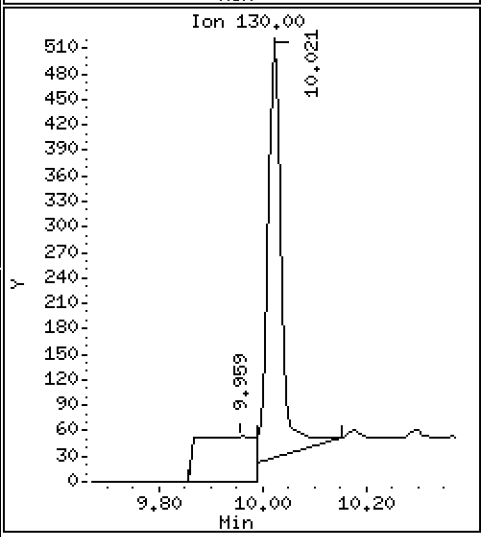
16 N-Nitroso-di-n-propylamine

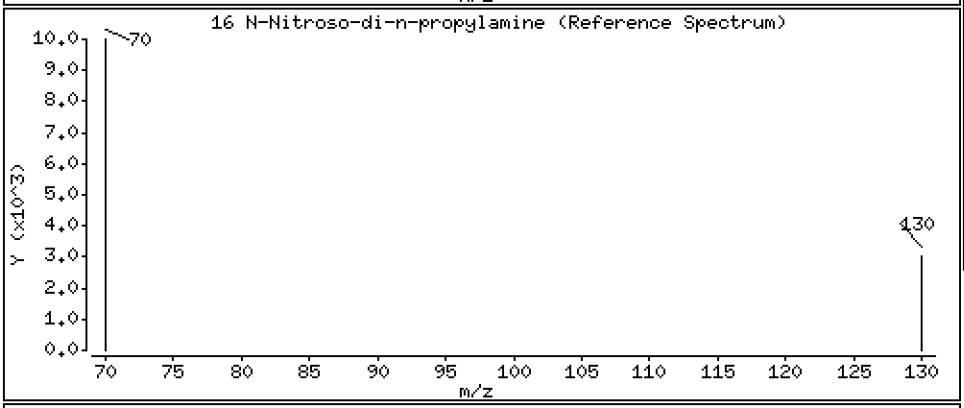
Concentration: 0.09611 ug/L

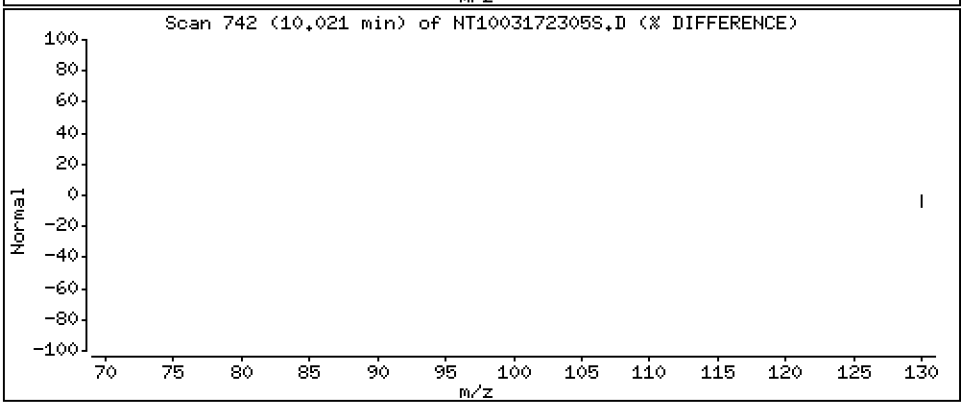












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Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

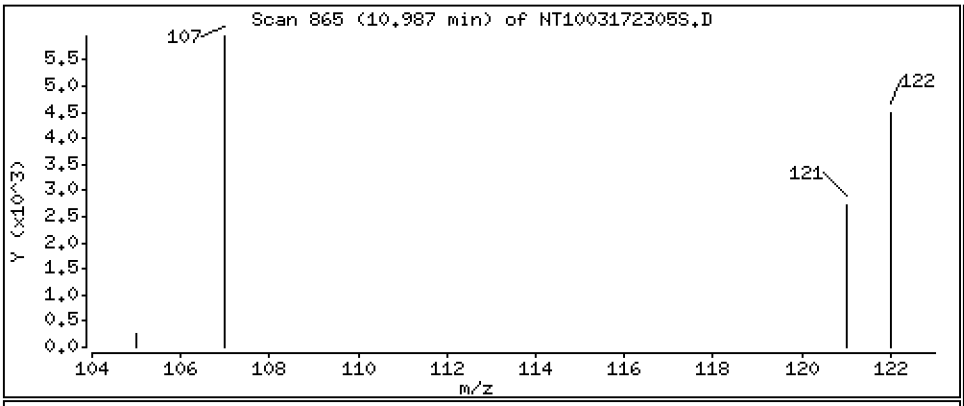
Operator: JGR

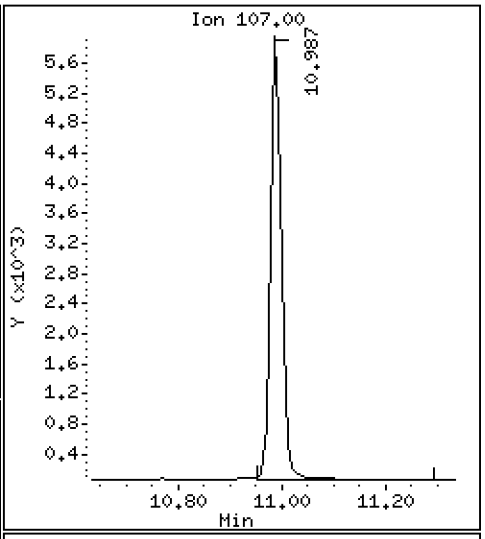
Column phase: ZB-5msi

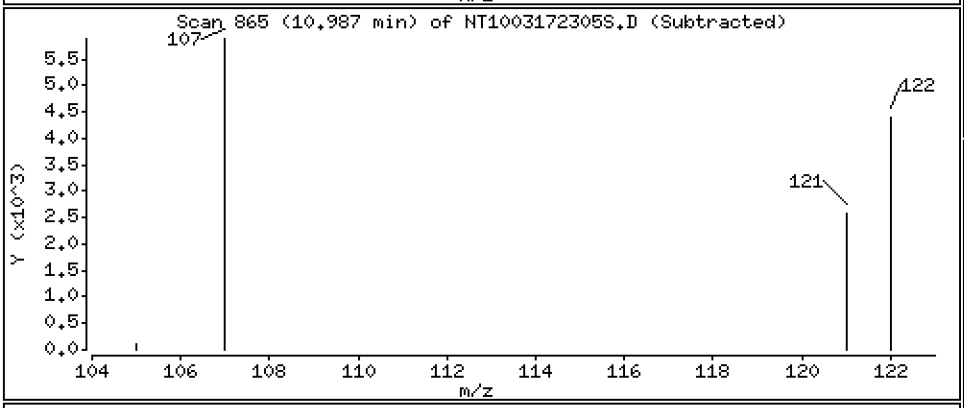
Column diameter: 0.25

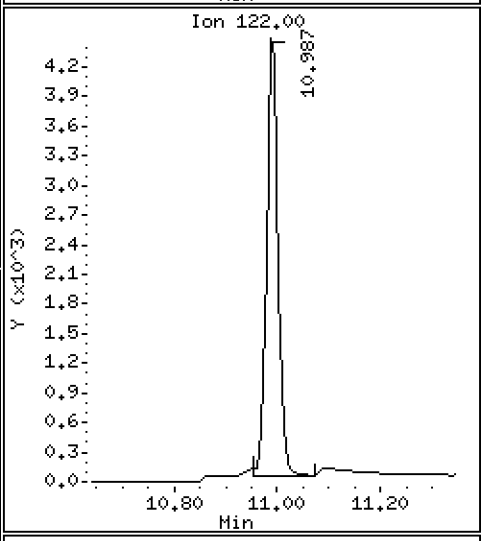
22 2,4-Dimethylphenol

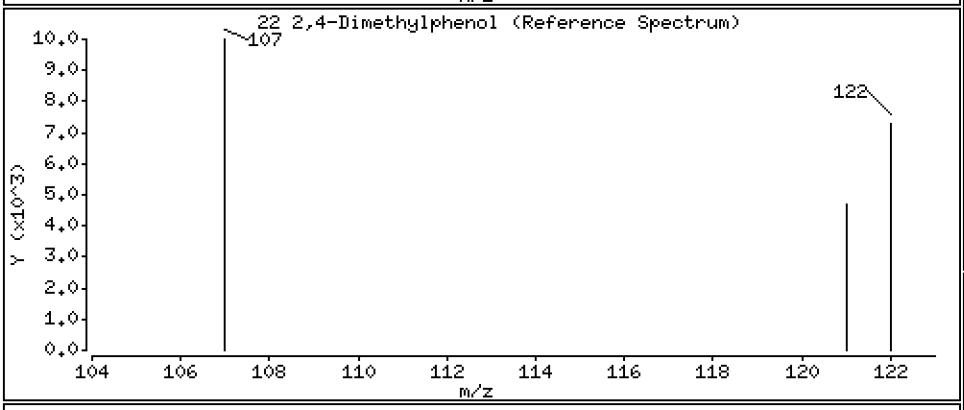
Concentration: 0.1949 ug/L

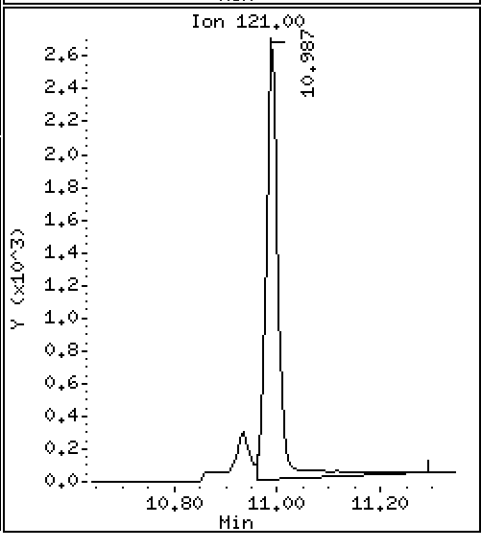


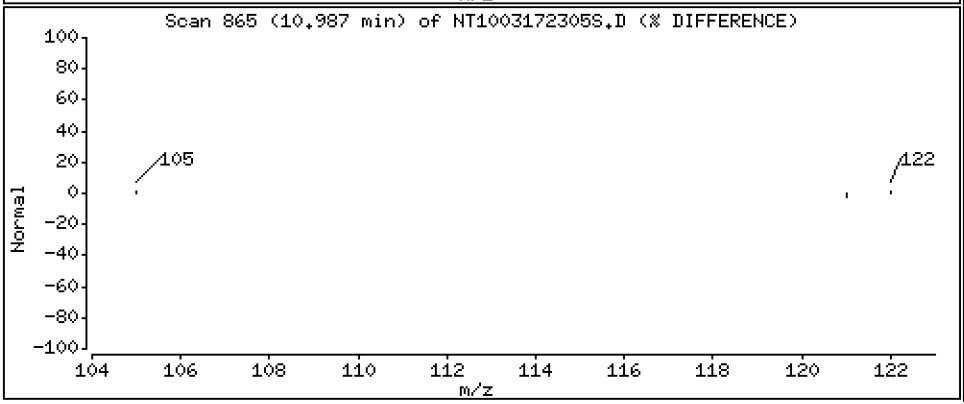












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Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

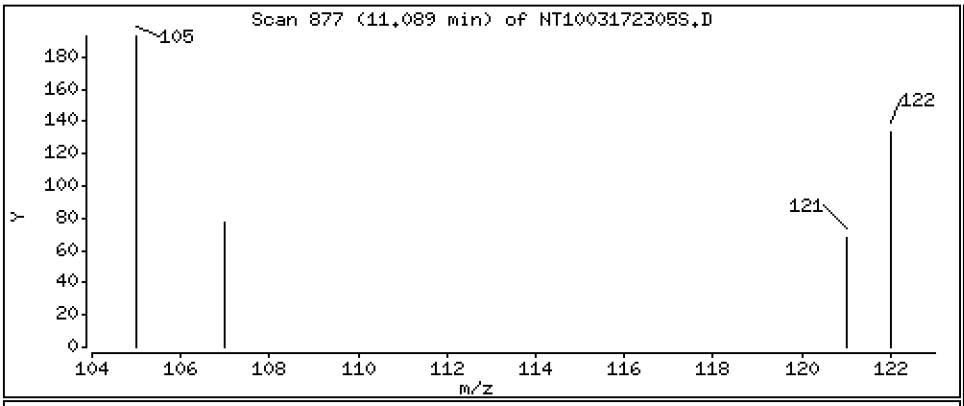
Operator: JGR

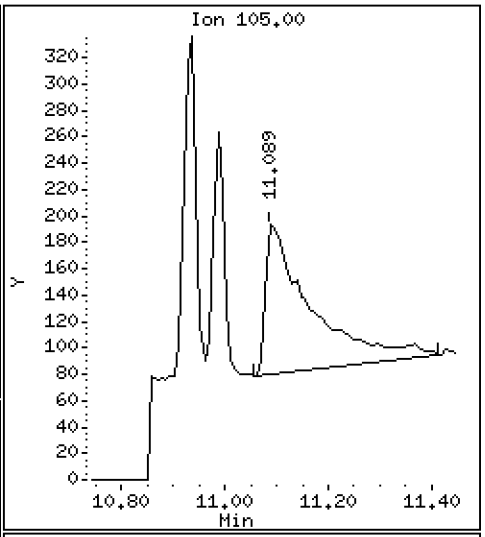
Column phase: ZB-5msi

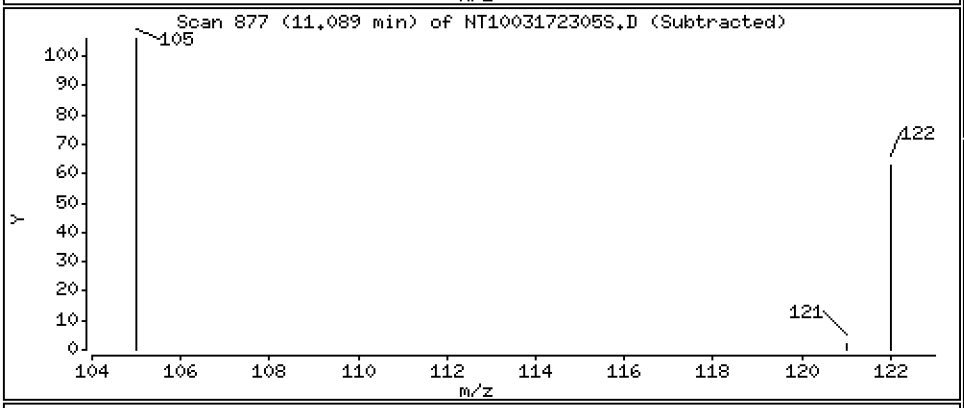
Column diameter: 0.25

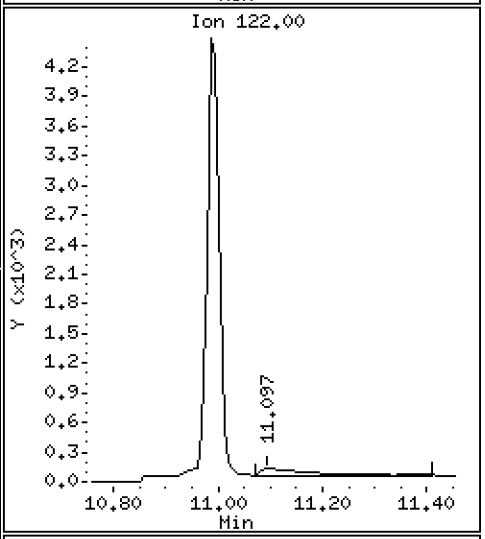
24 Benzoic acid

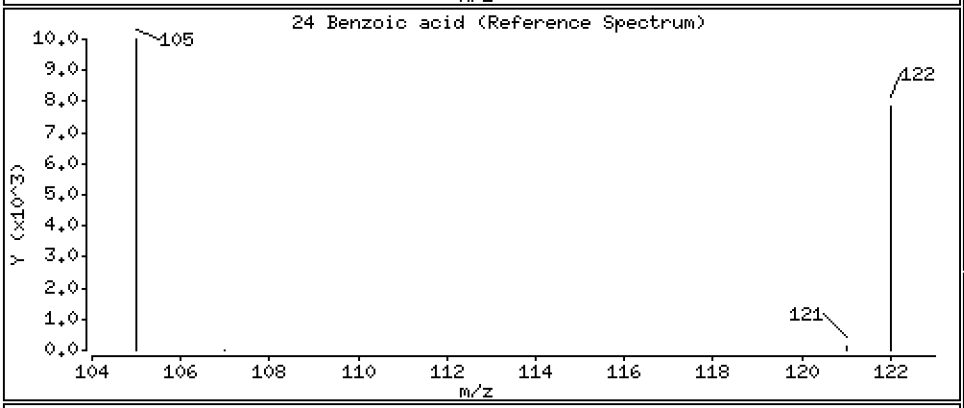
Concentration: 0.02745 ug/L

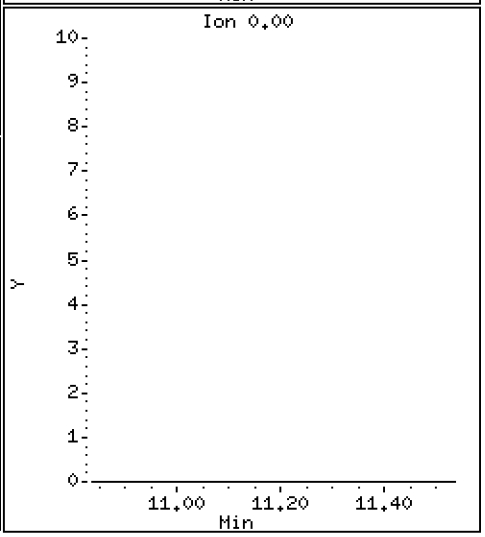


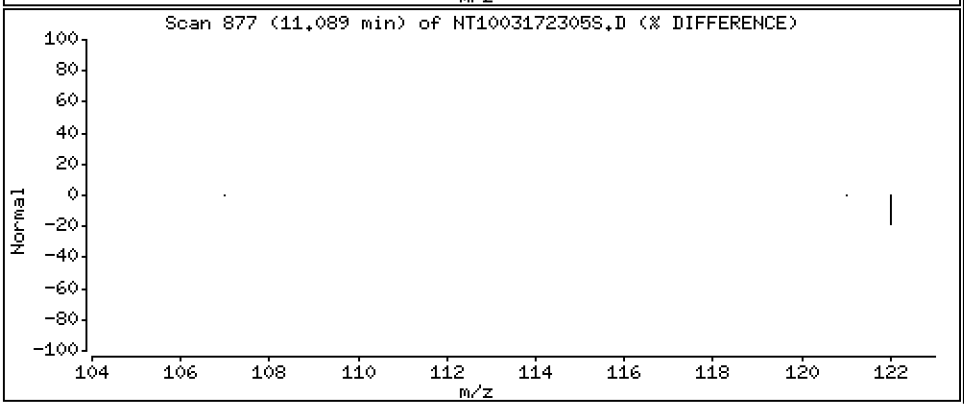












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Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

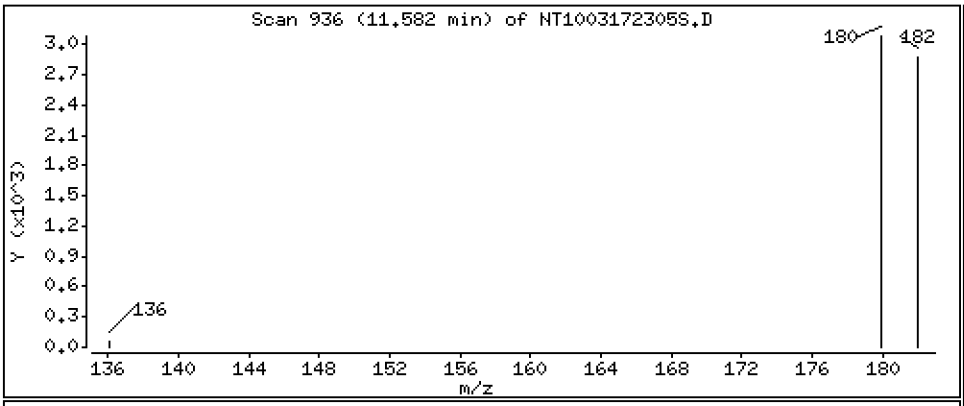
Operator: JGR

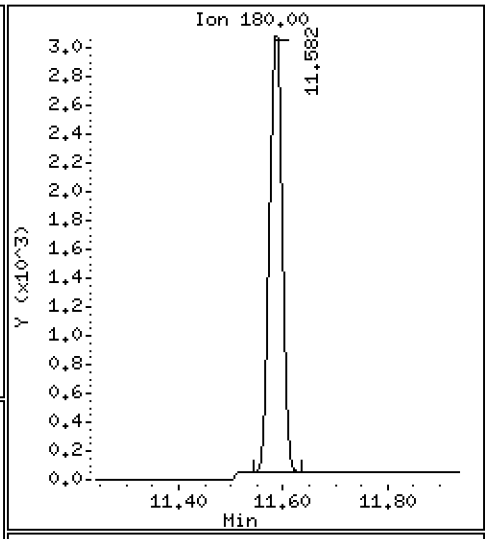
Column phase: ZB-5msi

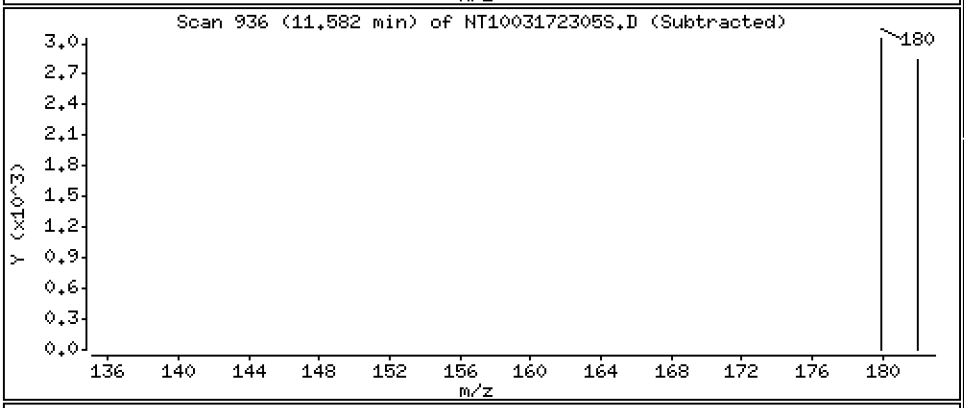
Column diameter: 0.25

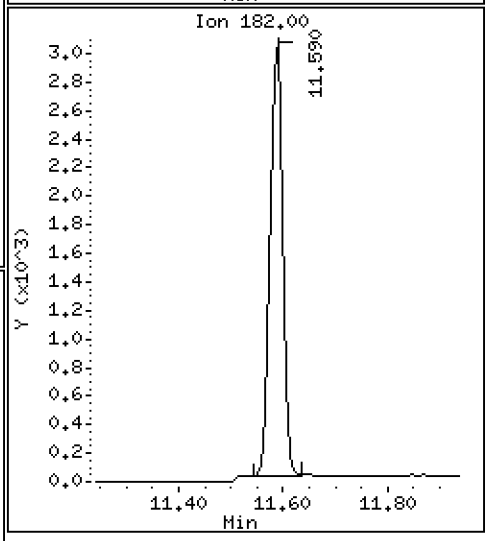
26 1,2,4-Trichlorobenzene

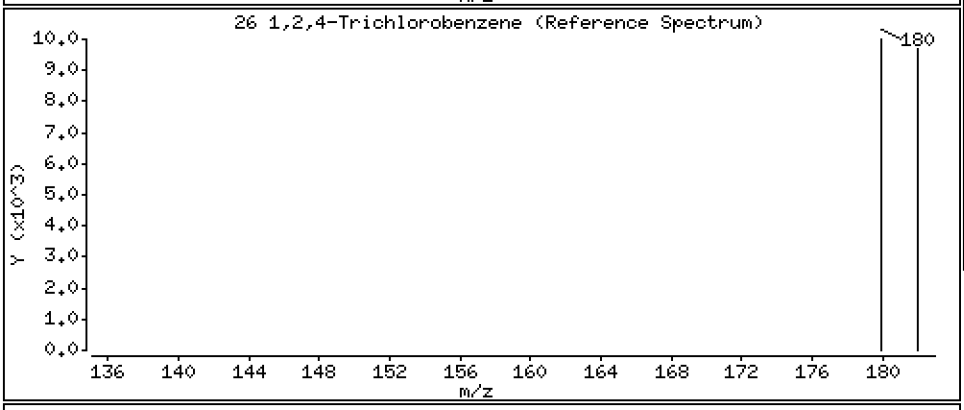
Concentration: 0.1070 ug/L

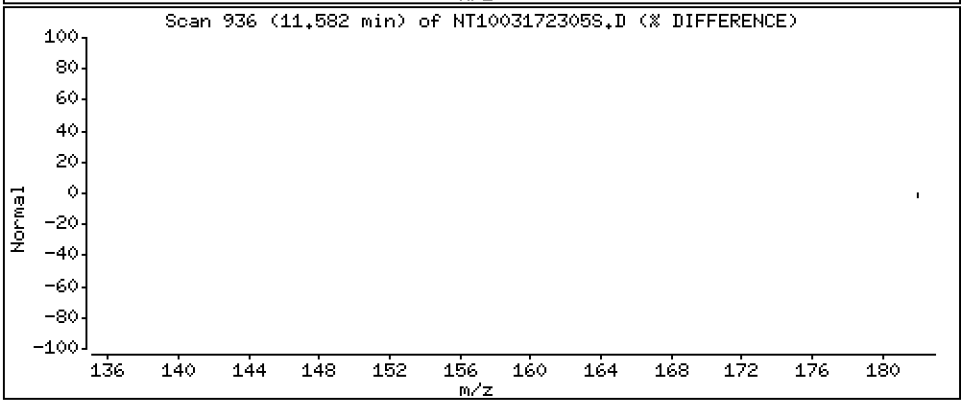












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172305S.D

Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

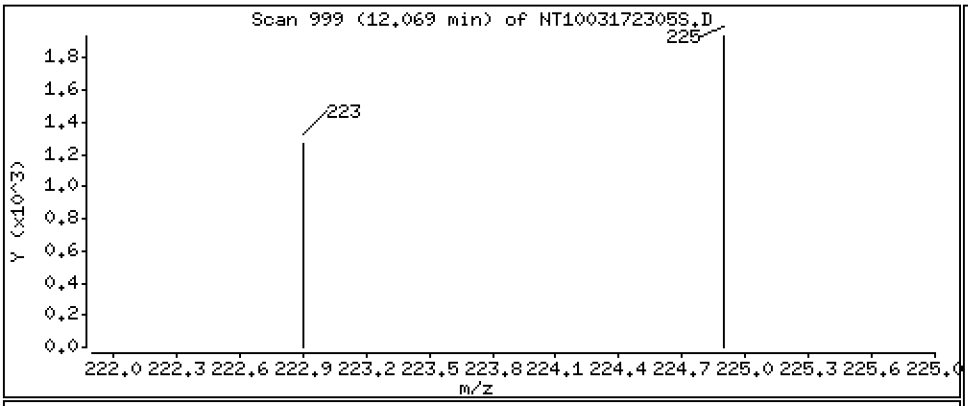
Operator: JGR

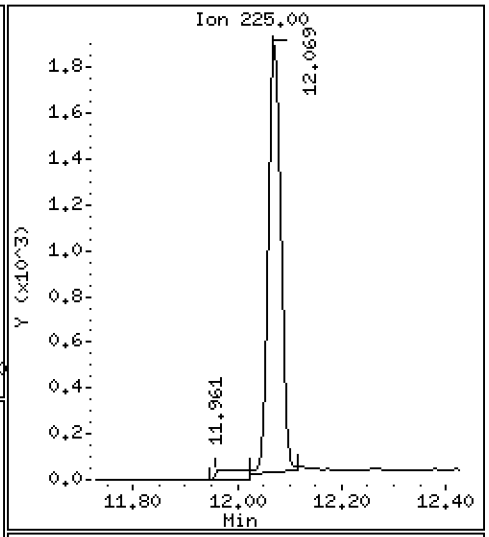
Column phase: ZB-5msi

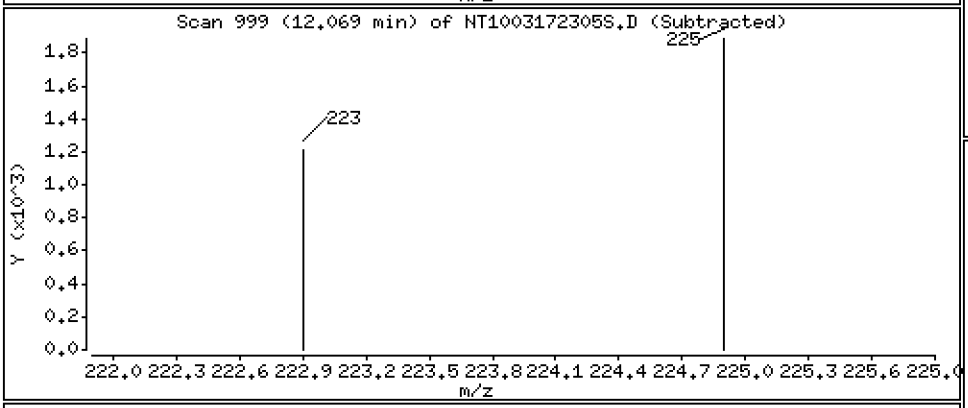
Column diameter: 0.25

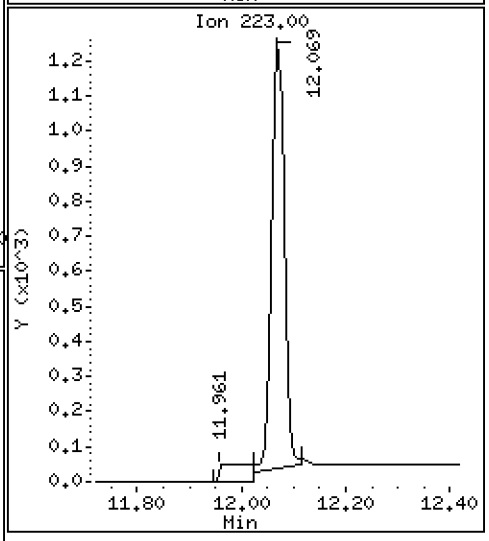
30 Hexachlorobutadiene

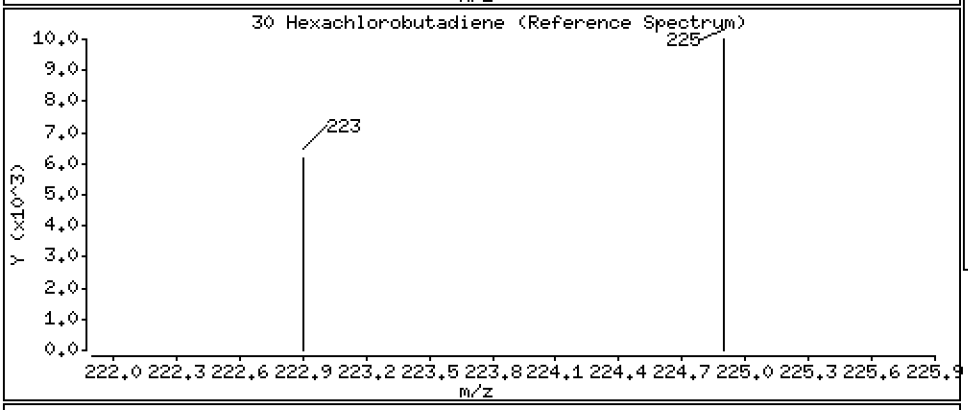
Concentration: 0.1075 ug/L

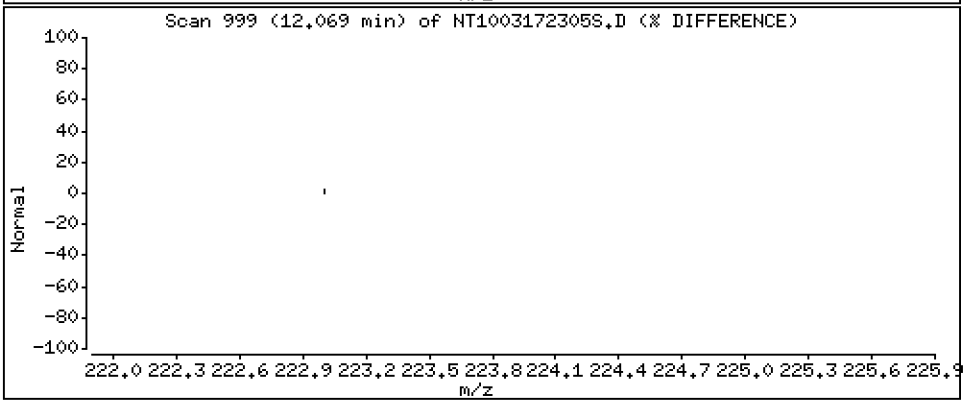












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172305S.D

Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

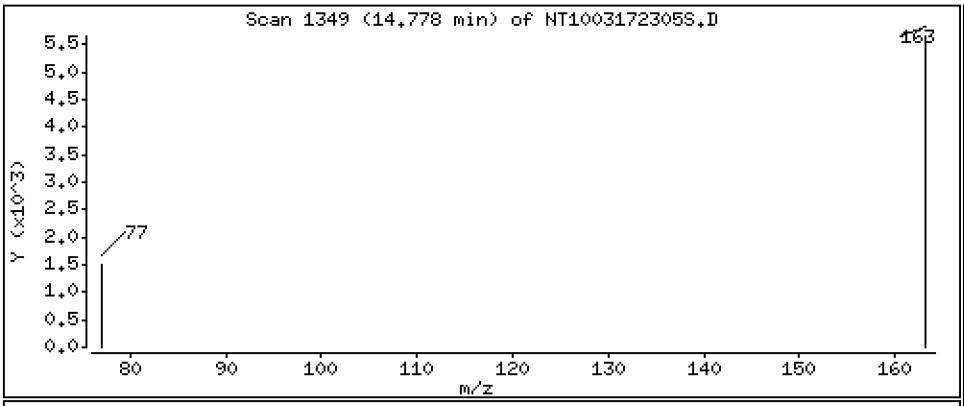
Operator: JGR

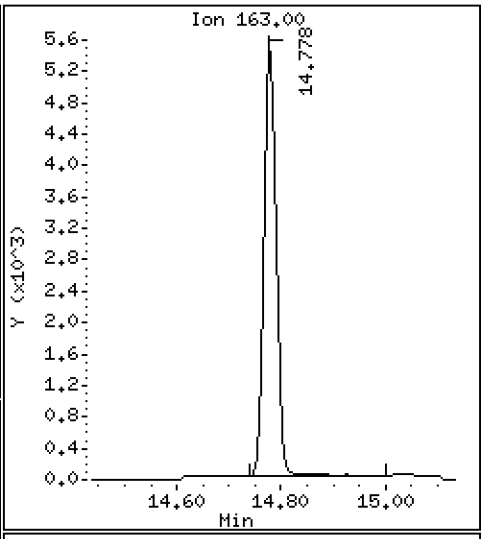
Column phase: ZB-5msi

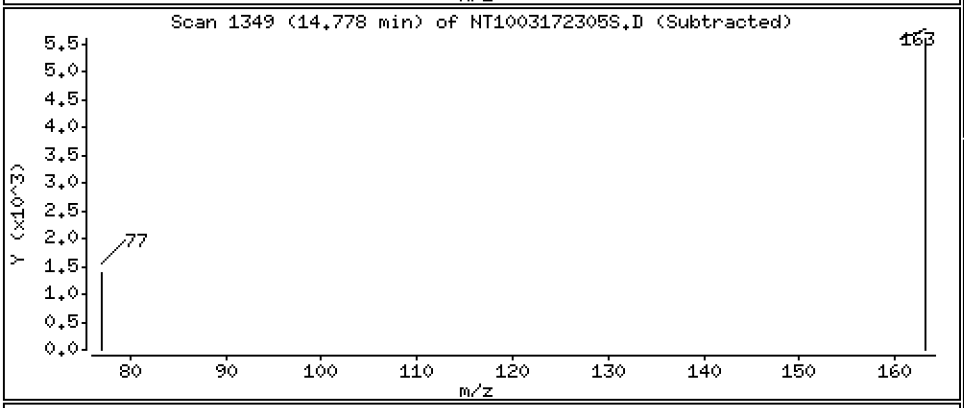
Column diameter: 0.25

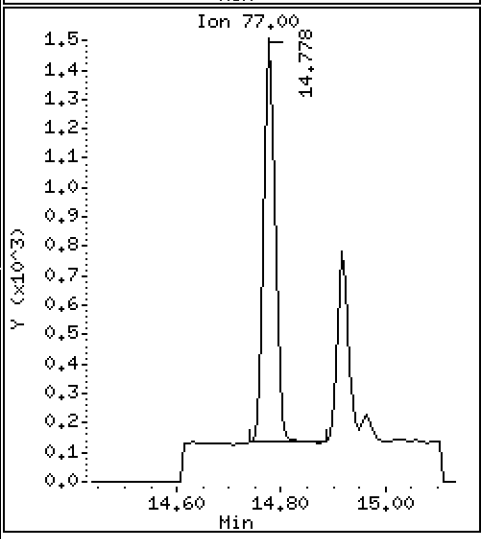
39 Dimethylphthalate

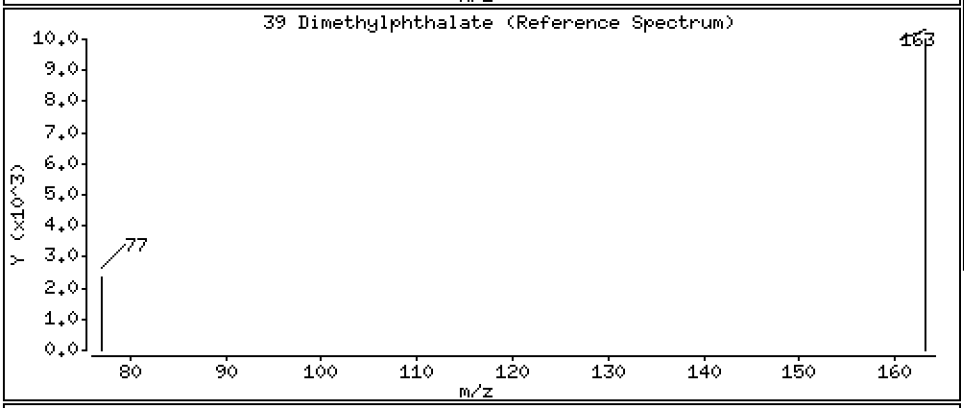
Concentration: 0.1040 ug/L

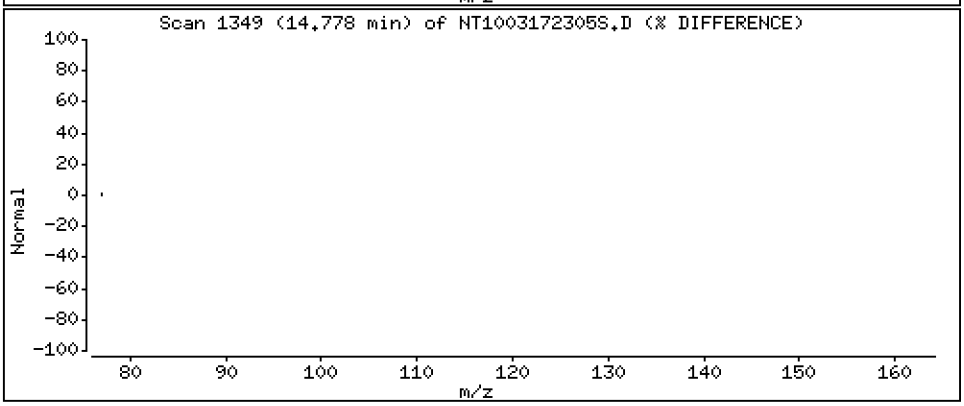












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172305S.D

Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

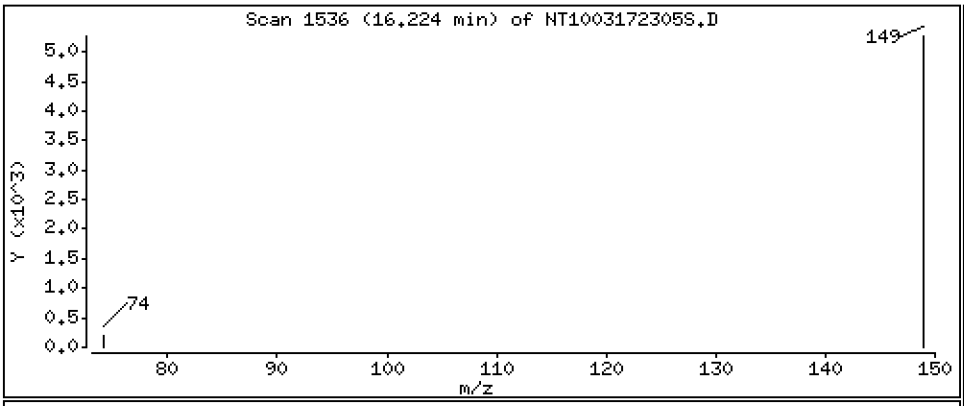
Operator: JGR

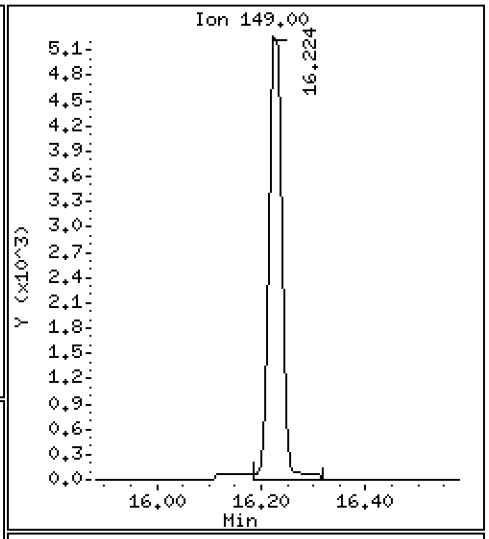
Column phase: ZB-5msi

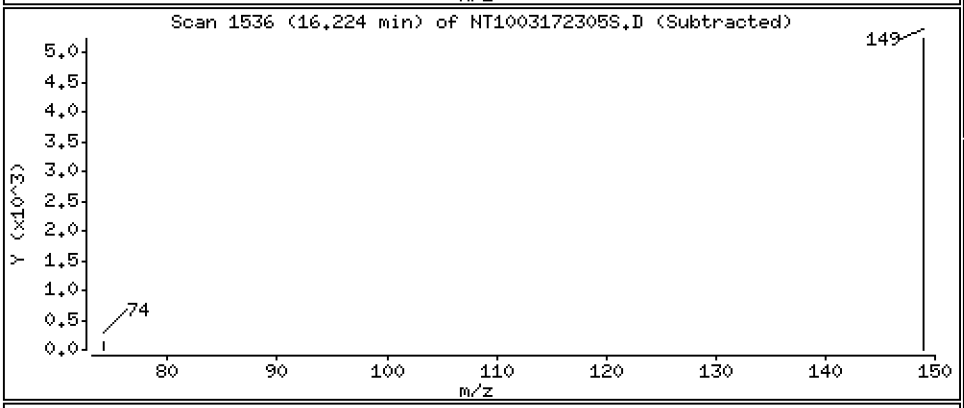
Column diameter: 0.25

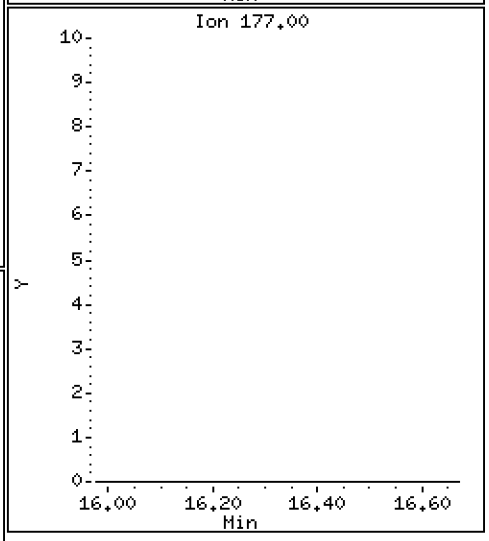
50 Diethylphthalate

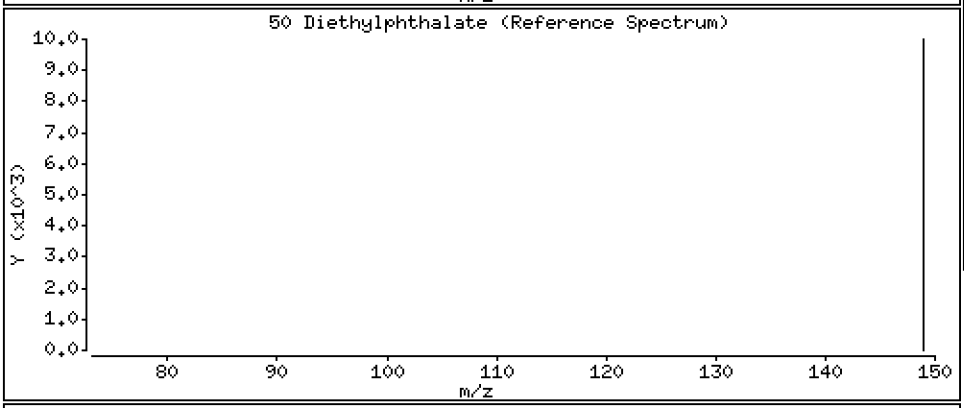
Concentration: 0.1015 ug/L

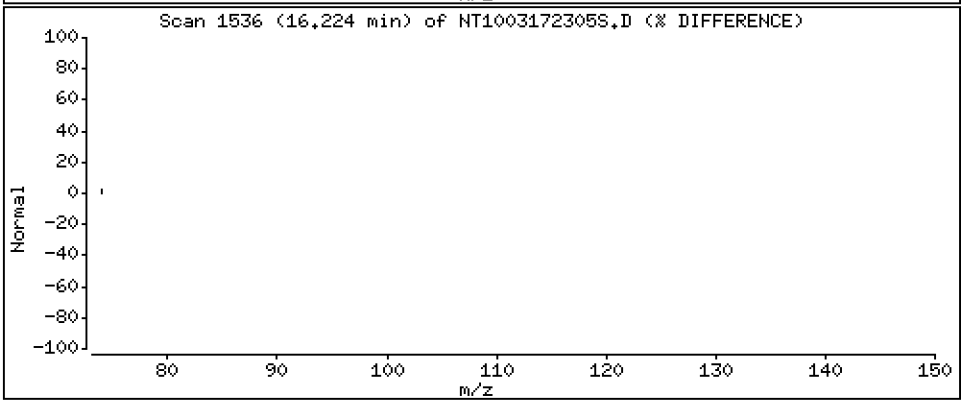












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172305S.D

Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

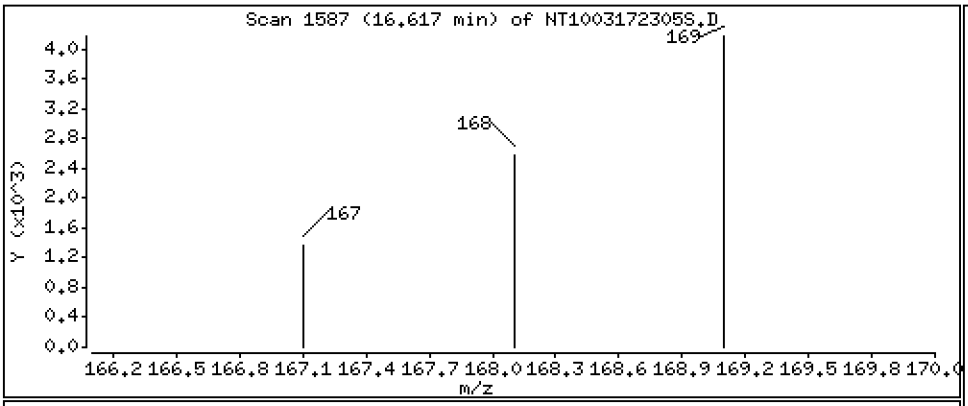
Operator: JGR

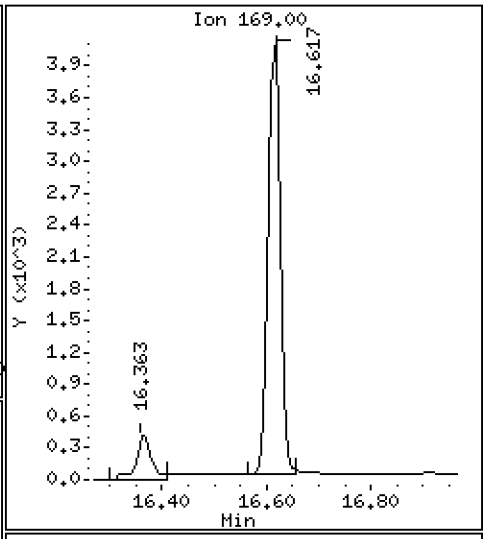
Column phase: ZB-5msi

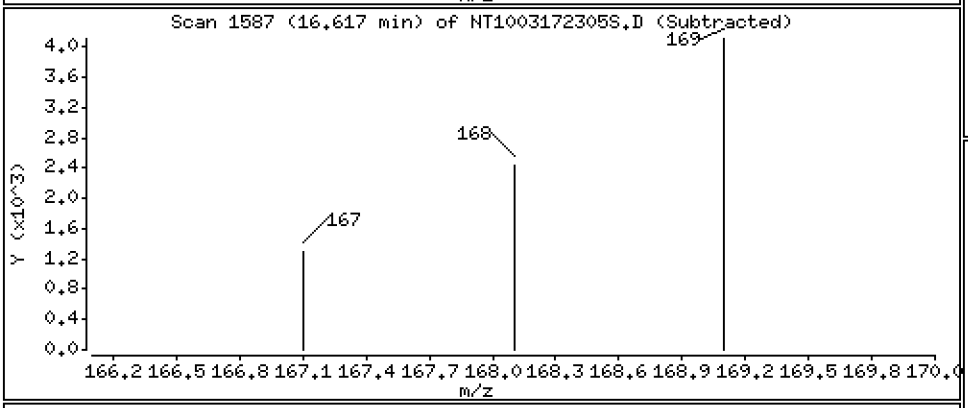
Column diameter: 0.25

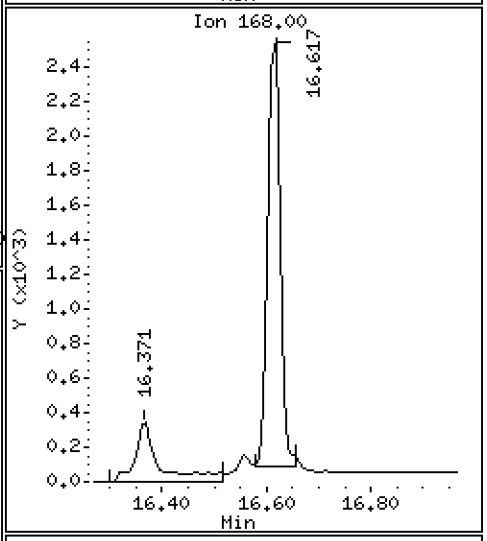
54 N-Nitrosodiphenylamine

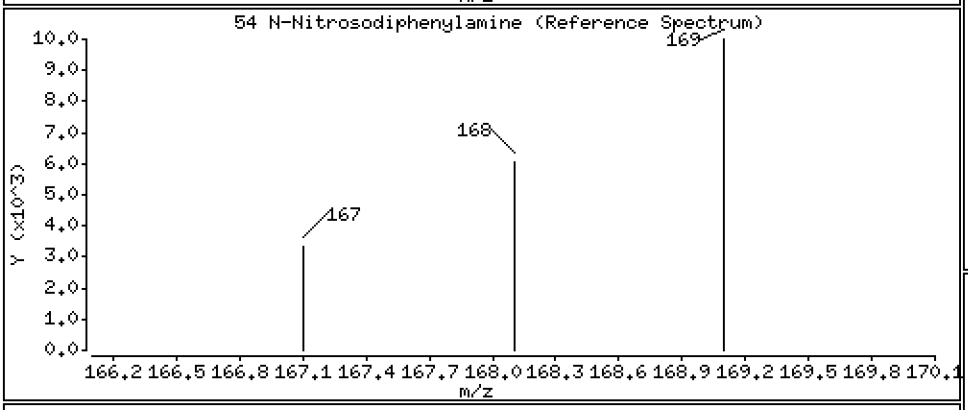
Concentration: 0.09734 ug/L

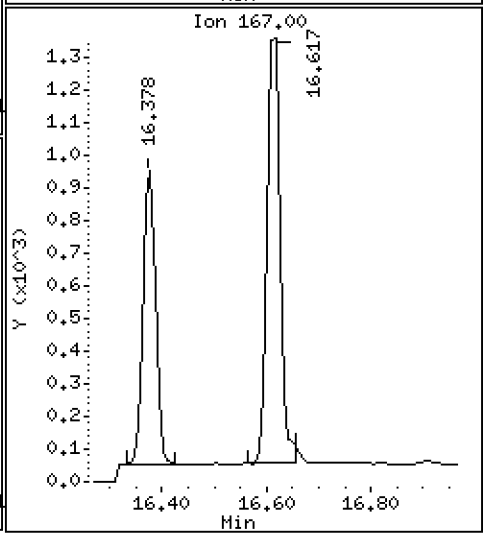


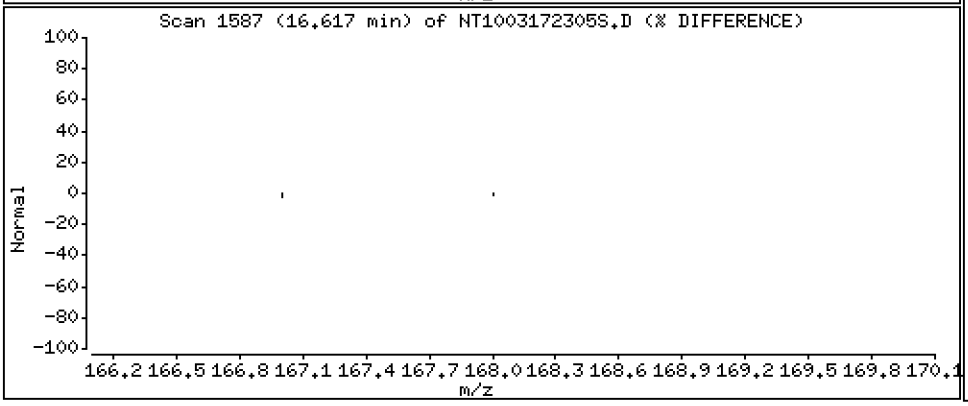












Date : 17-MAR-2023 20:57

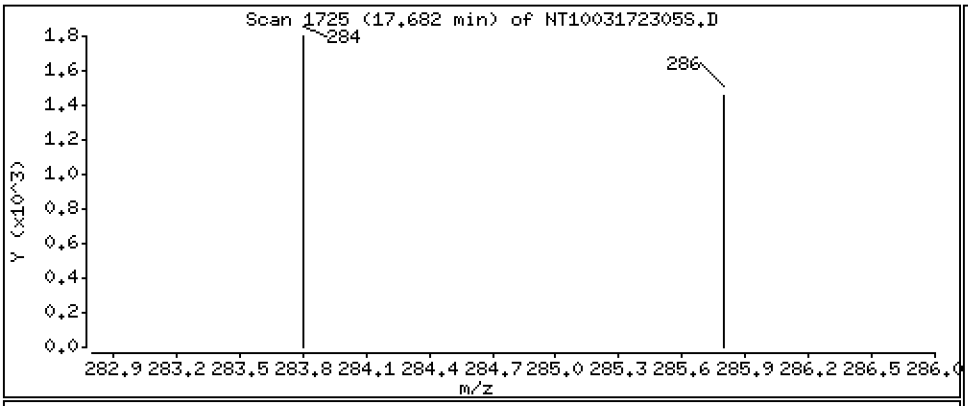
Client ID: Instrument: nt10.i

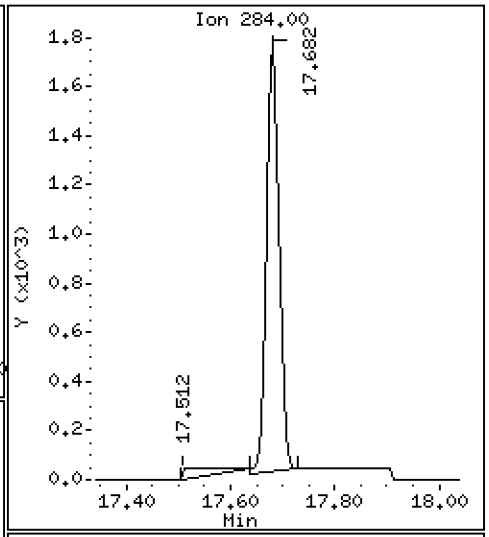
Sample Info: SLC0475-LCV1

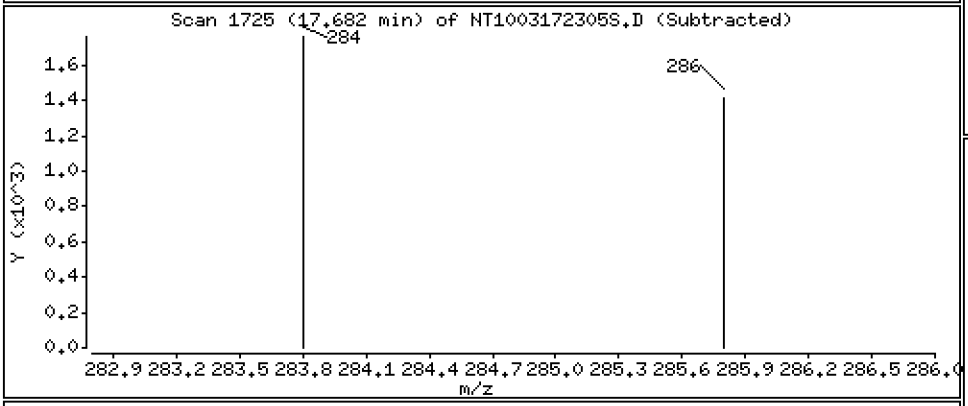
Volume Injected (uL): 1.0 Operator: JGR

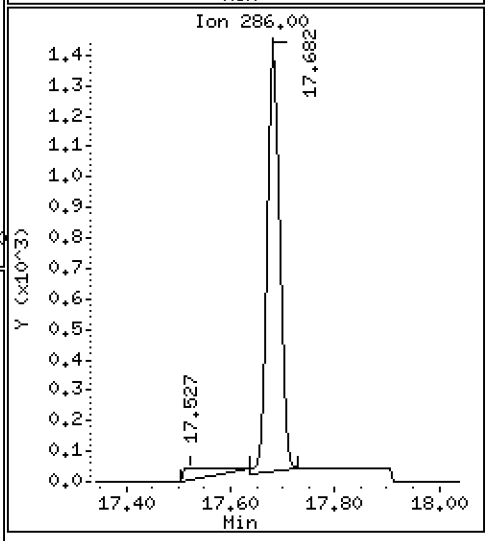
Column phase: ZB-5msi Column diameter: 0.25

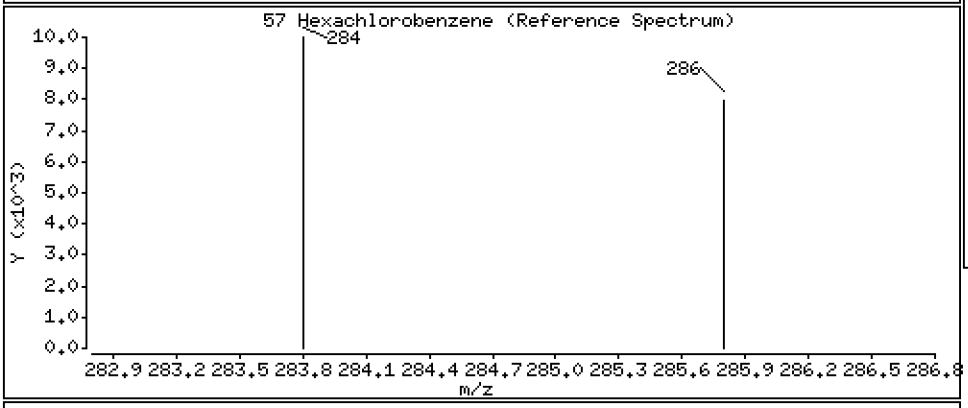
57 Hexachlorobenzene Concentration: 0.09990 ug/L

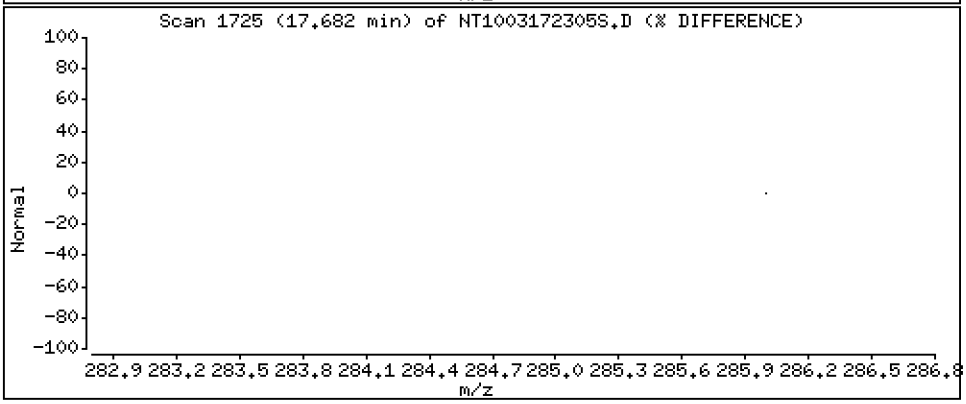












Data File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172305S.D

Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

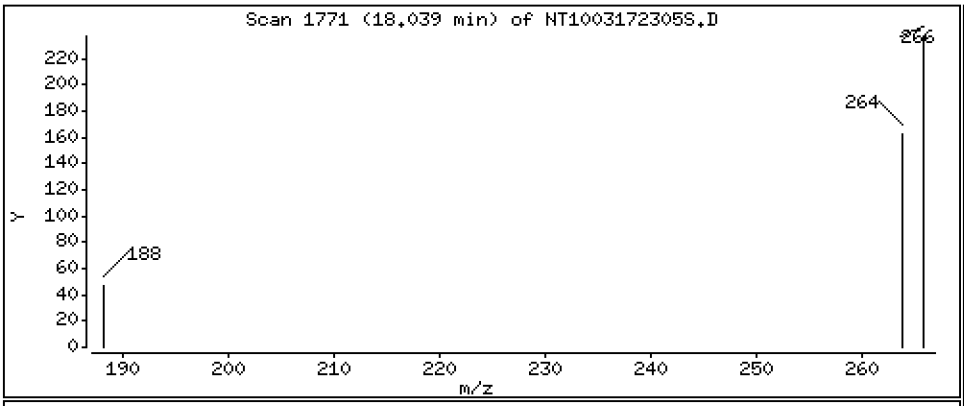
Operator: JGR

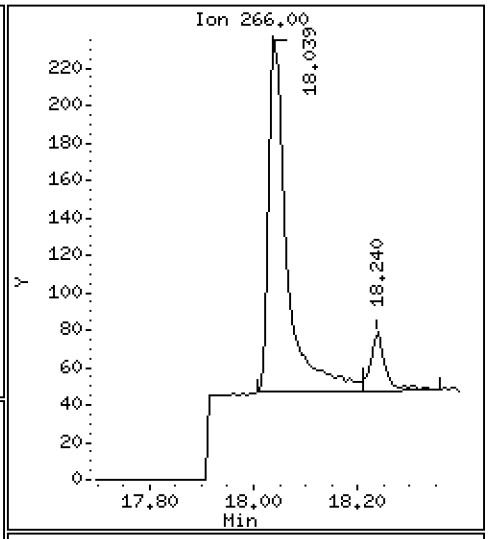
Column phase: ZB-5msi

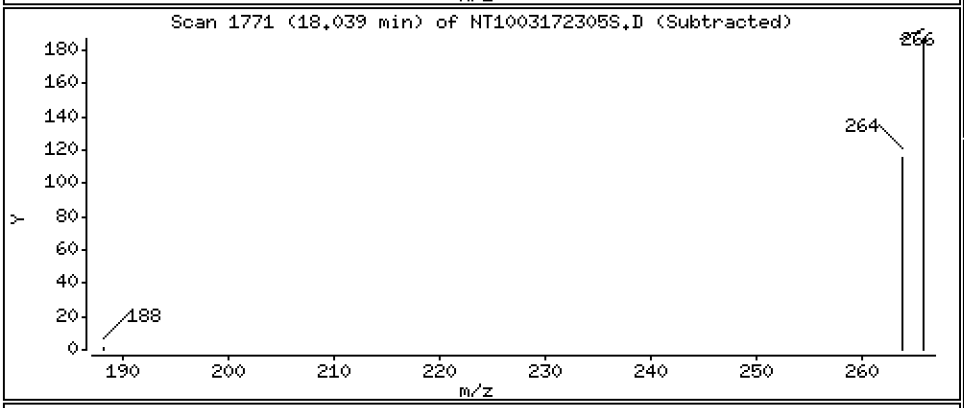
Column diameter: 0.25

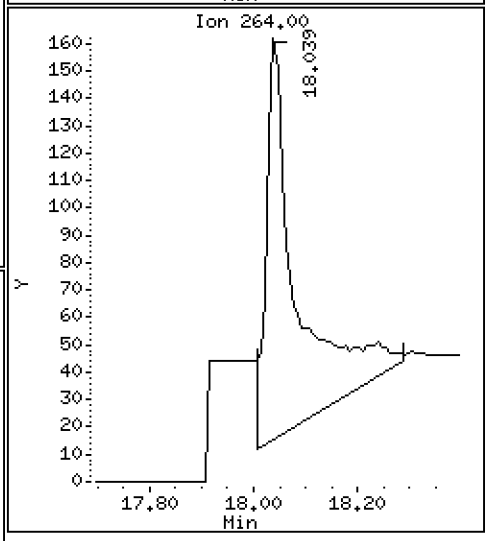
58 Pentachlorophenol

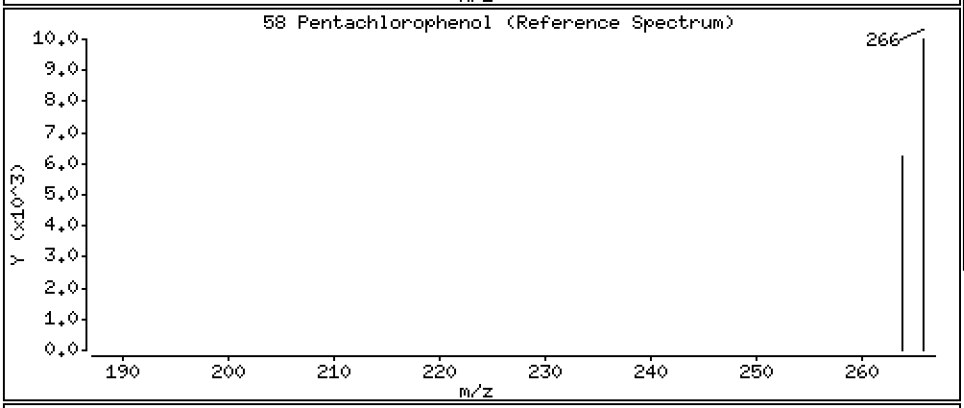
Concentration: 0.02839 ug/L

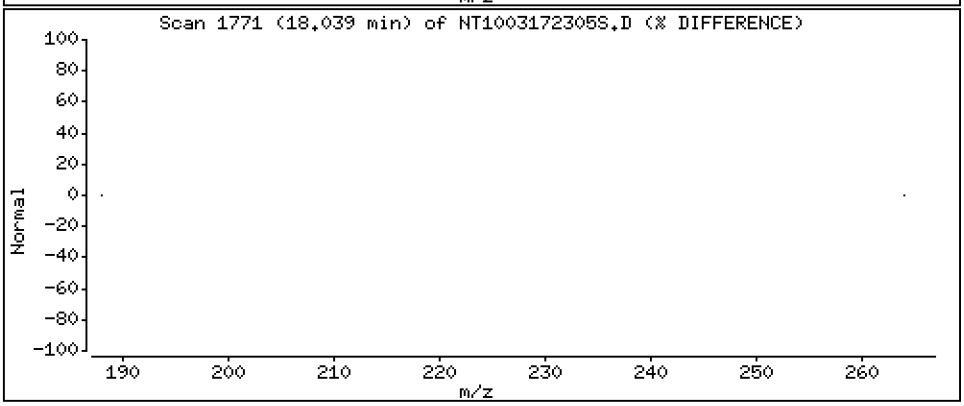












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Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

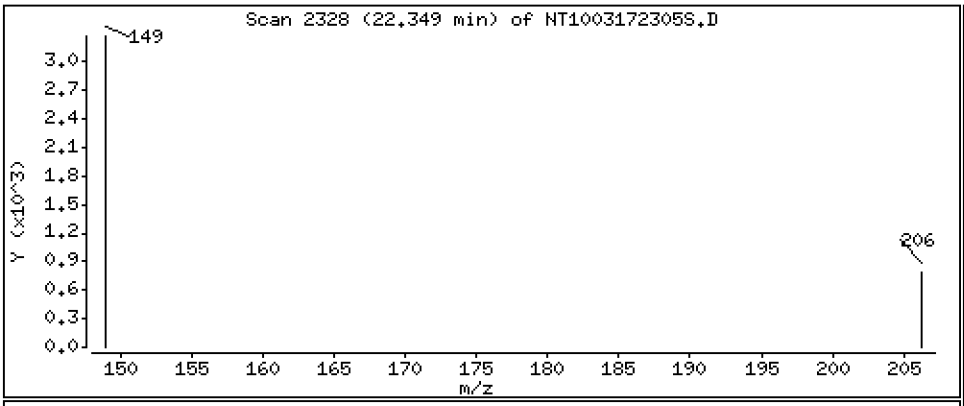
Operator: JGR

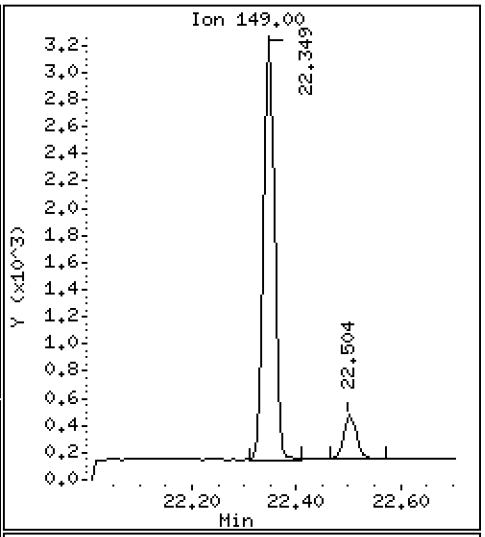
Column phase: ZB-5msi

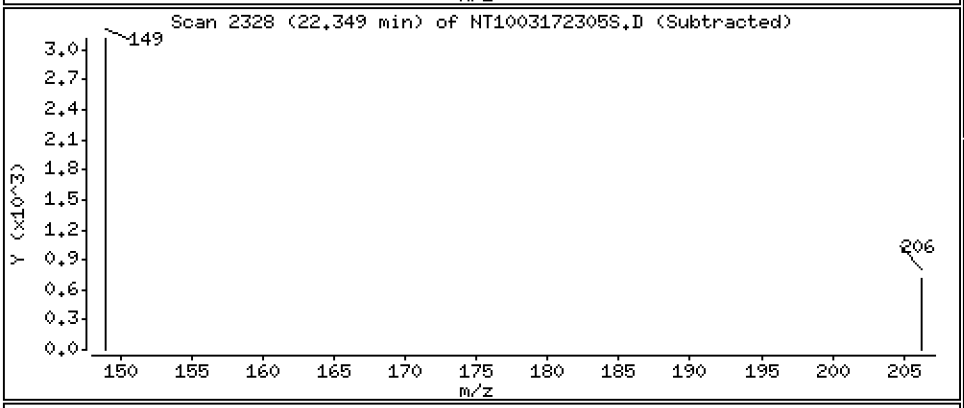
Column diameter: 0.25

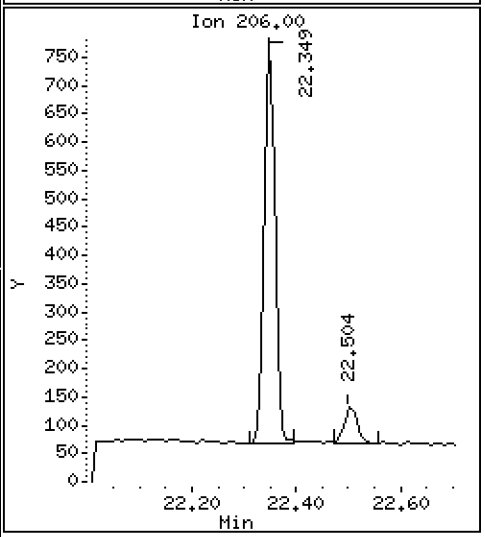
67 Butylbenzylphthalate

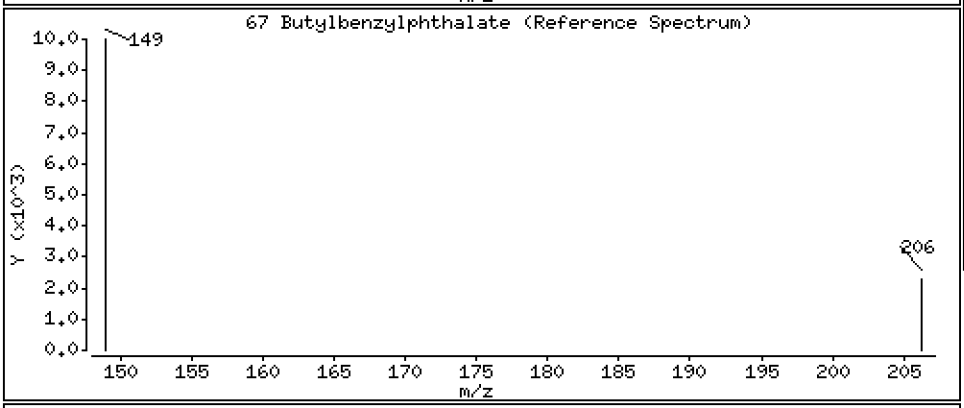
Concentration: 0.08599 ug/L

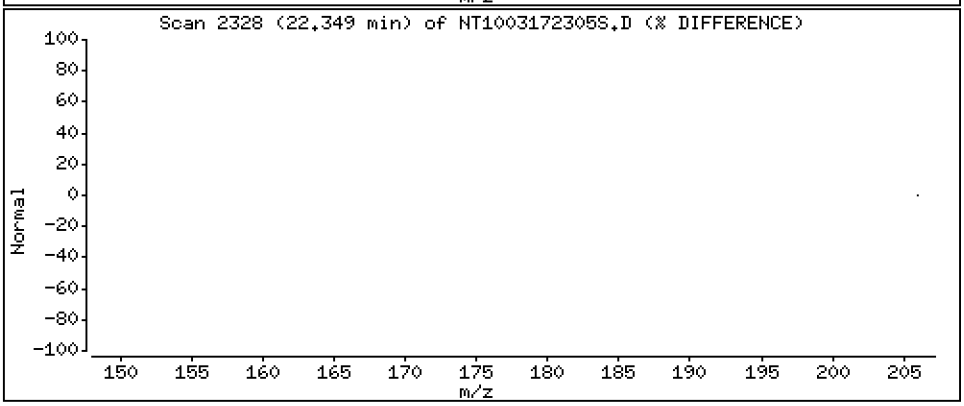












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Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

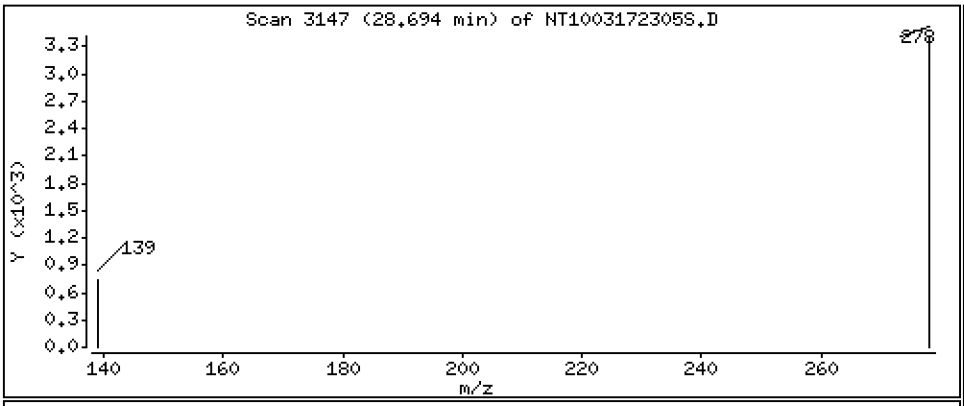
Operator: JGR

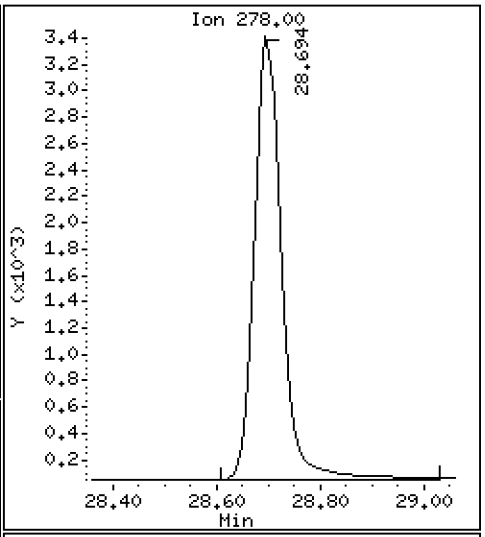
Column phase: ZB-5msi

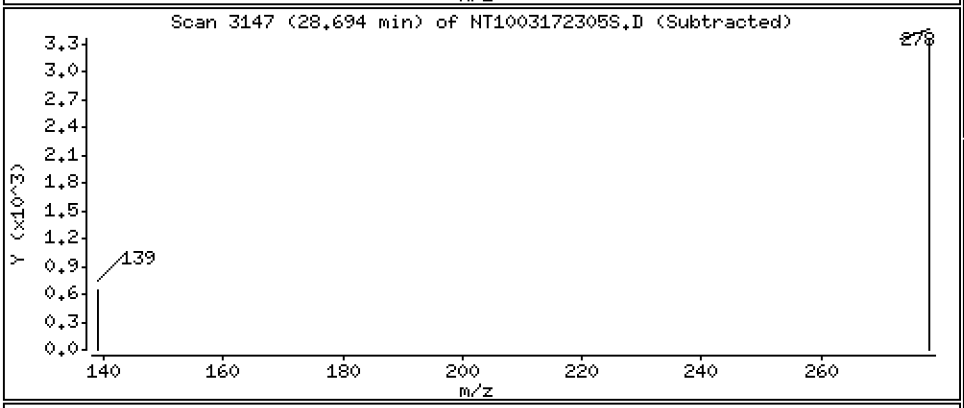
Column diameter: 0.25

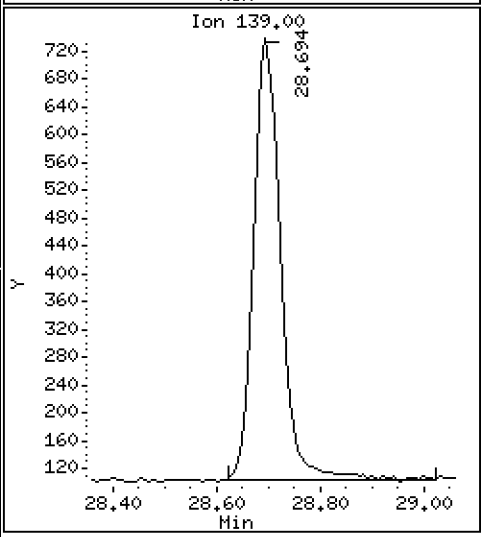
79 Dibenzo(a,h)anthracene

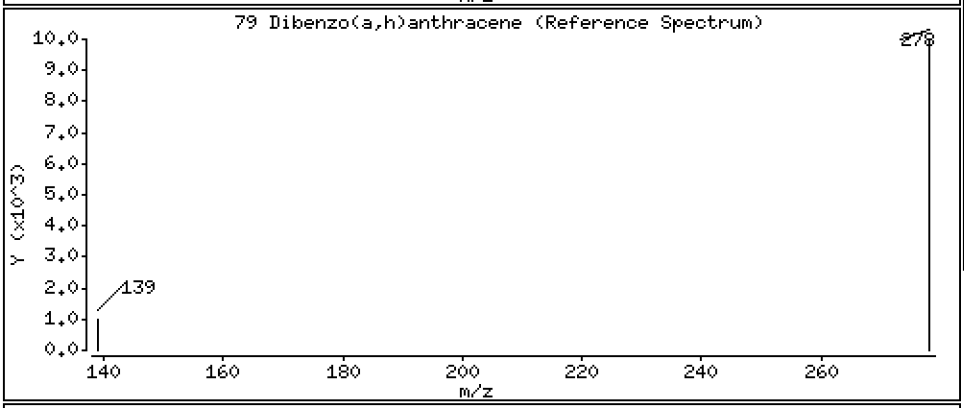
Concentration: 0.09241 ug/L

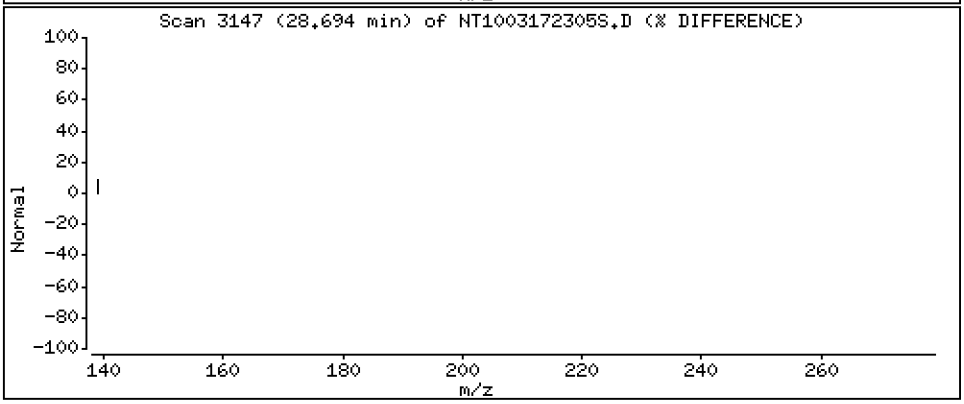












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Date : 17-MAR-2023 20:57

Client ID:

Instrument: nt10.i

Sample Info: SLC0475-LCV1

Volume Injected (uL): 1.0

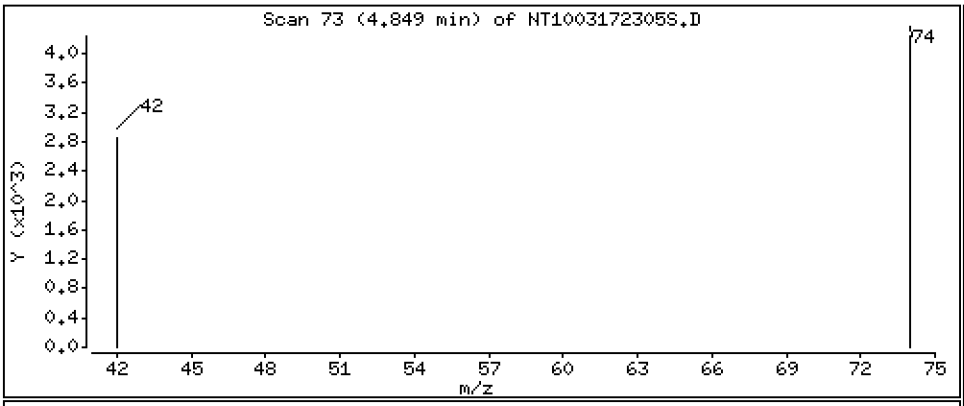
Operator: JGR

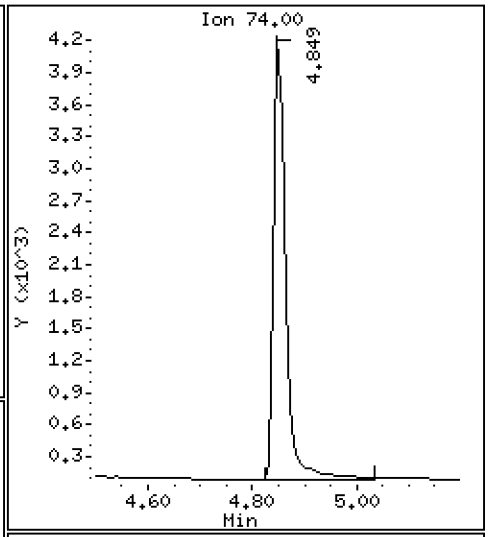
Column phase: ZB-5msi

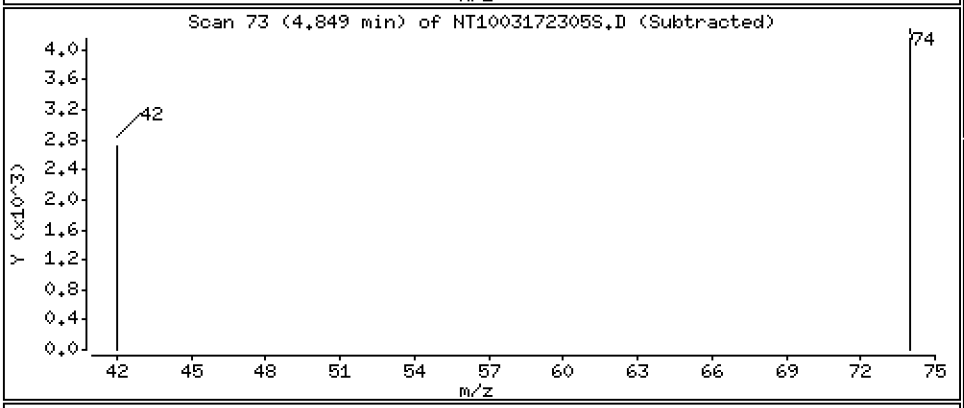
Column diameter: 0.25

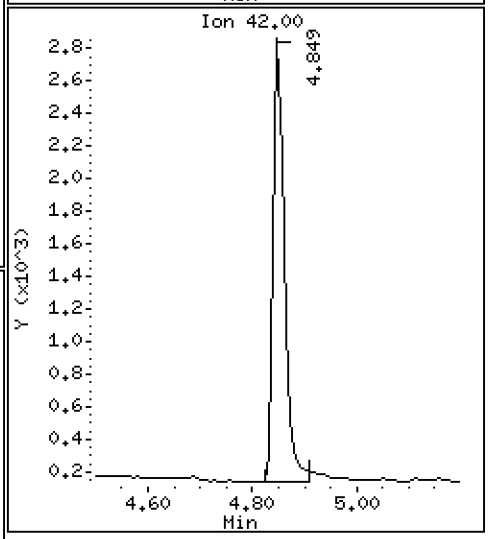
90 N-Nitrosodimethylamine

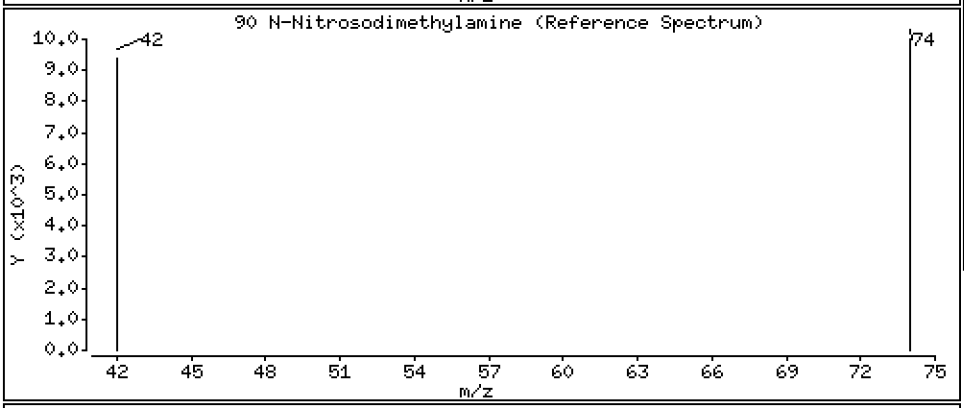
Concentration: 0.2102 ug/L

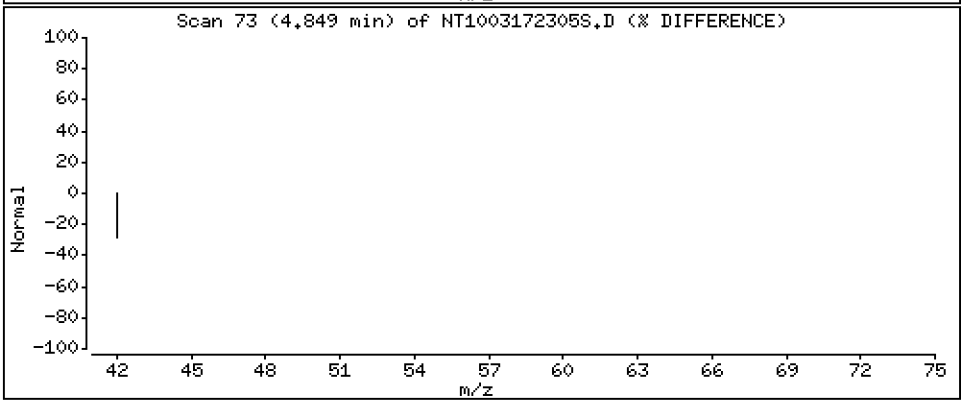












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230317.b\20230317.b\NT1003172305S.D
Lab Smp Id: SLC0475-LCV1
Inj Date : 17-MAR-2023 20:57 MS Autotune Date: 16-JAN-2023 17:42
Operator : JGR Inst ID: nt10.i
Smp Info : SLC0475-LCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Meth Date : 30-Mar-2023 14:37 van Quant Type: ISTD
Cal Date : 16-MAR-2023 01:38 Cal File: NT10031510S.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$	1 2-Fluorophenol	112	6.980	6.980	(0.759)	7444	0.16086	0.1609(R)
	3 Phenol	94	8.572	8.572	(0.932)	6706	0.10563	0.1056
	7 1,3-Dichlorobenzene	146	9.136	9.136	(0.993)	6421	0.10808	0.1081
*	8 1,4-Dichlorobenzene-d4	152	9.198	9.206	(1.000)	152604	4.00000	
	9 1,4-Dichlorobenzene	146	9.229	9.229	(1.003)	6491	0.11319	0.1132
	11 Benzyl alcohol	79	9.462	9.462	(1.029)	3657	0.09936	0.09936
	12 1,2-Dichlorobenzene	146	9.586	9.586	(1.042)	5985	0.10612	0.1061
	13 2-Methylphenol	108	9.679	9.679	(1.052)	4076	0.09265	0.09265
	15 4-Methylphenol	108	9.943	9.951	(1.081)	4281	0.09365	0.09365
	16 N-Nitroso-di-n-propylamine	70	10.021	10.021	(1.089)	3107	0.09611	0.09611
	22 2,4-Dimethylphenol	107	10.986	10.985	(0.941)	8948	0.19489	0.1949
	24 Benzoic acid	105	11.088	11.096	(0.950)	689	0.02745	0.02745(M)
	26 1,2,4-Trichlorobenzene	180	11.582	11.589	(0.992)	4942	0.10700	0.1070
*	27 Naphthalene-d8	136	11.675	11.674	(1.000)	531160	4.00000	
	30 Hexachlorobutadiene	225	12.069	12.075	(1.034)	3020	0.10755	0.1075
	39 Dimethylphthalate	163	14.777	14.784	(0.967)	8558	0.10401	0.1040
*	42 Acenaphthene-d10	162	15.280	15.279	(1.000)	260740	4.00000	
	50 Diethylphthalate	149	16.223	16.230	(1.062)	8655	0.10154	0.1015
	54 N-Nitrosodiphenylamine	169	16.617	16.616	(0.908)	6216	0.09734	0.09734
	57 Hexachlorobenzene	284	17.682	17.689	(0.966)	2856	0.09990	0.09990

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.038	18.045	(0.986)	448	0.02839	0.02839
*	59 Phenanthrene-d10	188	18.301	18.308	(1.000)	475978	4.00000	
$	66 Terphenyl-d14	244	21.427	21.434	(0.919)	6213	0.10117	0.1012(R)
	67 Butylbenzylphthalate	149	22.348	22.355	(0.958)	4263	0.08599	0.08599
*	69 Chrysene-d12	240	23.324	23.331	(1.000)	376923	4.00000	
*	77 Perylene-d12	264	25.980	25.986	(1.000)	403069	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.694	28.708	(1.104)	12224	0.09241	0.09241
	90 N-Nitrosodimethylamine	74	4.848	4.848	(0.527)	6170	0.21022	0.2102

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 17-MAR-2023
Lab File ID: NT1003172305S.D Calibration Time: 19:40
Lab Smp Id: SLC0475-LCV1
Analysis Type: SV Level: LOW
Quant Type: ISTD Sample Type: AIR
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230317.b\20230317.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	184039	92020	368078	152604	-17.08
27 Naphthalene-d8	659935	329968	1319870	531160	-19.51
42 Acenaphthene-d10	325775	162888	651550	260740	-19.96
59 Phenanthrene-d10	616249	308125	1232498	475978	-22.76
69 Chrysene-d12	526222	263111	1052444	376923	-28.37
77 Perylene-d12	563117	281559	1126234	403069	-28.42

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.21	8.71	9.71	9.20	-0.08
27 Naphthalene-d8	11.67	11.17	12.17	11.68	0.01
42 Acenaphthene-d10	15.28	14.78	15.78	15.28	0.01
59 Phenanthrene-d10	18.31	17.81	18.81	18.30	-0.04
69 Chrysene-d12	23.33	22.83	23.83	23.32	-0.03
77 Perylene-d12	25.99	25.49	26.49	25.98	-0.03

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

REVIEW SUMMARY FOR FILE - NT1003172305S.D

Lab ID: SLC0475-LCV1
nt10.i, 20230317.b\20230317.b\SIMABN2.m,   17-MAR-2023 20:57

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: 20230317.b/NT1003172303S.D

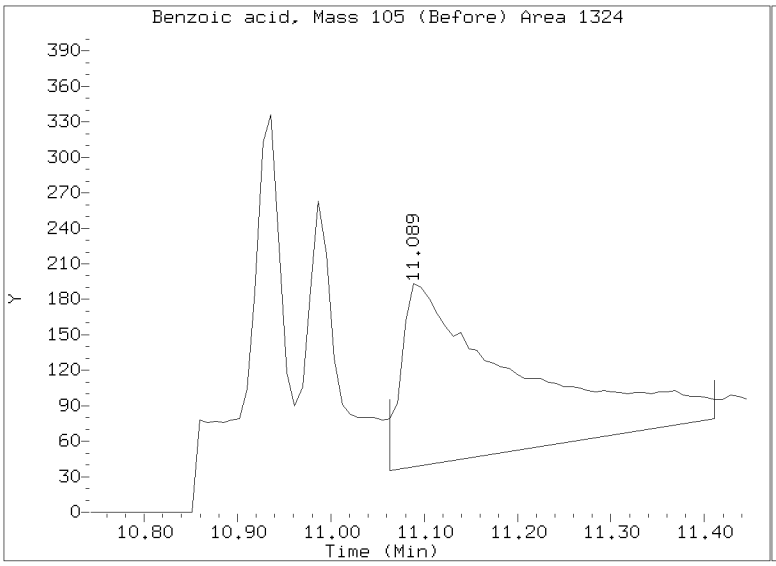
On Column LOD for nt10.i, 20230317.b\SIMABN2.m, PSDDA.sub = 0.0000

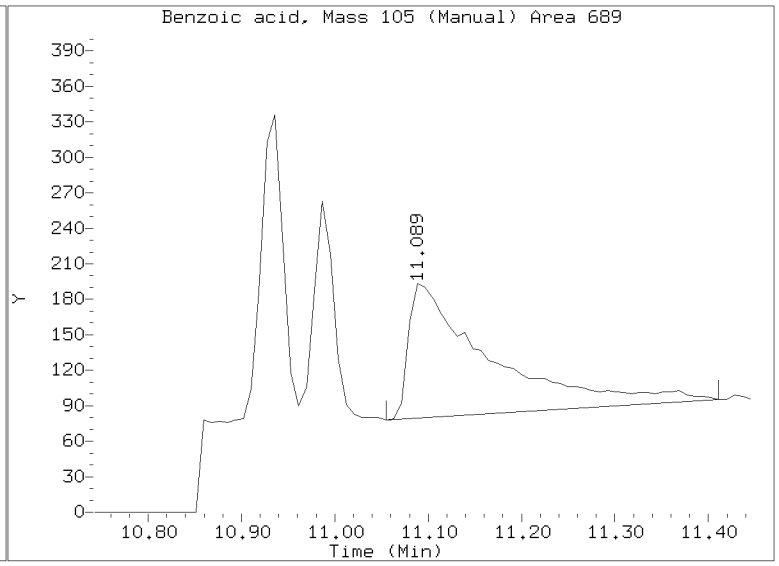
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230317.b/20230317.b/NT1003172305S.D
Injection Date: 17-MAR-2023 20:57
Lab ID:SLC0475-LCV1 Client ID:
Report Date: 03/30/2023 14:55





Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0213	Instrument:	NT8
		Calibration:	GA00050

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLA0213-TUN1	N823011901.D	NA	01/19/23 10:28
Initial Cal Blank	SLA0213-ICB1	N823011902.D	NA	01/19/23 10:59
8270 SIM PNA 0.1	SLA0213-CAL1	N823011903.D	NA	01/19/23 11:26
8270 SIM PNA 0.5	SLA0213-CAL2	N823011904.D	NA	01/19/23 11:58
8270 SIM PNA 1.0	SLA0213-CAL3	N823011905.D	NA	01/19/23 12:25
8270 SIM PNA 2.5	SLA0213-CAL4	N823011906.D	NA	01/19/23 12:52
8270 SIM PNA 5	SLA0213-CAL5	N823011907.D	NA	01/19/23 13:19
8270 SIM PNA 10	SLA0213-CAL6	N823011908.D	NA	01/19/23 13:46
8270 SIM PNA SCV	SLA0213-SCV1	N823011909.D	NA	01/19/23 14:58

Printed: 1/19/2023 8:45:16PM

ANALYSIS SEQUENCE

SLA0213

Instrument: NT8 Element Column ID: J006458
Calibration ID: GA00050

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SLA0213-TUN1	MS Tune	QC		1	K004775			
SLA0213-ICB1	Initial Cal Blank	QC		2		K008540		
SLA0213-CAL1	8270 SIM PNA 0.1	QC		3	L000603	K008540		
SLA0213-CAL2	8270 SIM PNA 0.5	QC		4	L000604	K008540		
SLA0213-CAL3	8270 SIM PNA 1.0	QC		5	L000605	K008540		
SLA0213-CAL4	8270 SIM PNA 2.5	QC		6	L000606	K008540		
SLA0213-CAL5	8270 SIM PNA 5	QC		7	L000607	K008540		
SLA0213-CAL6	8270 SIM PNA 10	QC		8	L000608	K008540		
SLA0213-SCV1	8270 SIM PNA SCV	QC		9	L000686	K008540		

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

	Time	Filename	LabID	ClientId	DF											
1	1028	N823011901.D	SLA0213-TUN1		1	|NO ISTDS FOUND||										
2	1059	N823011902.D	SLA0213-ICB1		1	| 4.92	52082||	7.20	30936||	9.24	59030||	14.22	50944||	18.12	47418|
3	1126	N823011903.D	SLA0213-CAL1		1	| 4.91	46132||	7.20	27261||	9.24	52158||	14.20	44953||	18.11	41635|
4	1158	N823011904.D	SLA0213-CAL2		1	| 4.91	45056||	7.20	26746||	9.24	50759||	14.21	44658||	18.11	42567|
5	1225	N823011905.D	SLA0213-CAL3		1	| 4.91	47180||	7.20	28206||	9.24	53233||	14.20	46493||	18.11	44587|
6	1252	N823011906.D	SLA0213-CAL4		1	| 4.91	44704||	7.20	26411||	9.24	49210||	14.20	42994||	18.11	40520|
7	1319	N823011907.D	SLA0213-CAL5		1	| 4.91	46542||	7.20	27638||	9.23	51351||	14.20	44781||	18.11	42187|
8	1346	N823011908.D	SLA0213-CAL6		1	| 4.91	46070||	7.20	26689||	9.24	50683||	14.21	43880||	18.11	40659|
9	1458	N823011909.D	SLA0213-SCV1		1	| 4.91	46346||	7.20	27709||	9.24	51685||	14.21	46582||	18.12	41743|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

ARI Job No.: SLA0 Method: FSIMPNA230119.m Instrument: nt8.i Date: 19-JAN-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1059	N823011902.D	SLA0213-ICB1		1	NO MANUAL INTEGRATION
1126	N823011903.D	SLA0213-CAL1		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene-d14,
1158	N823011904.D	SLA0213-CAL2		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene, Dibenzo(a,h)anthracene-d14,
1225	N823011905.D	SLA0213-CAL3		1	Total Benzofluoranthenes,
1252	N823011906.D	SLA0213-CAL4		1	Total Benzofluoranthenes,
1319	N823011907.D	SLA0213-CAL5		1	Total Benzofluoranthenes,
1346	N823011908.D	SLA0213-CAL6		1	Total Benzofluoranthenes,
1458	N823011909.D	SLA0213-SCV1		1	Total Benzofluoranthenes,

Security Status Report

Date: 19-Jan-2023 20:43

N823011901.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011902.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011903.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011904.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011905.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011906.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011907.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011908.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011909.D	Data Locked	jianqing, 19-Jan-2023 20:43

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0310	Instrument:	NT8
		Calibration:	GA00050

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLB0310-TUN1	N823022301.D	NA	02/23/23 11:33
Initial Cal Check	SLB0310-ICV1	N823022302.D	NA	02/23/23 11:46
Blank	BLB0386-BLK1	N823022303.D	Solid	02/23/23 12:28
LCS	BLB0386-BS1	N823022304.D	Solid	02/23/23 12:55
LCS Dup	BLB0386-BSD1	N823022305.D	Solid	02/23/23 13:21
Reference	BLB0386-SRM1	N823022306.D	Solid	02/23/23 13:48
ZZZZZ	23A0418-01	N823022307.D	Solid	02/23/23 14:15
ZZZZZ	23A0418-02	N823022308.D	Solid	02/23/23 14:42
ZZZZZ	23A0418-04	N823022309.D	Solid	02/23/23 15:09
ZZZZZ	23A0418-05	N823022310.D	Solid	02/23/23 15:36
ZZZZZ	23A0418-06	N823022311.D	Solid	02/23/23 16:03
ZZZZZ	23A0418-07	N823022312.D	Solid	02/23/23 16:30
ZZZZZ	23A0418-08	N823022313.D	Solid	02/23/23 16:57
ZZZZZ	23A0418-09	N823022316.D	Solid	02/23/23 18:18
ZZZZZ	23A0418-10	N823022317.D	Solid	02/23/23 18:44
ZZZZZ	23A0418-11	N823022318.D	Solid	02/23/23 19:11
ZZZZZ	23A0418-12	N823022319.D	Solid	02/23/23 19:38
LDW23-IT1051	23A0420-04	N823022320.D	Solid	02/23/23 20:05
Calibration Check	SLB0310-CCV1	N823022321.D	NA	02/23/23 20:32

Printed: 2/26/2023 6:22:47PM

ANALYSIS SEQUENCE

SLB0310

Instrument: NT8
Calibration ID: GA00050
GC Description: Agilent 6890N/MS
GC Column 1 ID: RXI-17Sil ms
GC Column 2 ID:

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLB0310-TUN1	MS Tune	QC		1	K004775		02/23/2023 11:33	N823022301.D	JZ	
SLB0310-ICV1	Initial Cal Check	QC		2	L000606	K008540	02/23/2023 11:46	N823022302.D	JZ	
BLB0386-BLK1	Blank	QC		3		K008540	02/23/2023 12:28	N823022303.D	JZ	
BLB0386-BS1	LCS	QC		4		K008540	02/23/2023 12:55	N823022304.D	JZ	
BLB0386-BSD1	LCS Dup	QC		5		K008540	02/23/2023 13:21	N823022305.D	JZ	
BLB0386-SRM1	Reference	QC		6		K008540	02/23/2023 13:48	N823022306.D	JZ	
23A0418-01	LDW23-IT1136	E-SIM PAH (0.1ug/L or 5u	A 02	7		K008540	02/23/2023 14:15	N823022307.D	JZ	
23A0418-02	LDW23-IT1142	E-SIM PAH (0.1ug/L or 5u	A 02	8		K008540	02/23/2023 14:42	N823022308.D	JZ	
23A0418-04	LDW23-IT1141	E-SIM PAH (0.1ug/L or 5u	A 02	9		K008540	02/23/2023 15:09	N823022309.D	JZ	
23A0418-05	LDW23-IT1133	E-SIM PAH (0.1ug/L or 5u	A 02	10		K008540	02/23/2023 15:36	N823022310.D	JZ	
23A0418-06	LDW23-IT1133-FD	E-SIM PAH (0.1ug/L or 5u	A 02	11		K008540	02/23/2023 16:03	N823022311.D	JZ	
23A0418-07	LDW23-IT1180	E-SIM PAH (0.1ug/L or 5u	A 02	12		K008540	02/23/2023 16:30	N823022312.D	JZ	
23A0418-08	LDW23-IT1218	E-SIM PAH (0.1ug/L or 5u	A 02	13		K008540	02/23/2023 16:57	N823022313.D	JZ	
BLB0386-MS1	Matrix Spike	QC		14		K008540	02/23/2023 17:24	N823022314.D	JZ	
BLB0386-MSD1	Matrix Spike Dup	QC		15		K008540	02/23/2023 17:51	N823022315.D	JZ	
23A0418-09	LDW23-IT1216	E-SIM PAH (0.1ug/L or 5u	A 02	16		K008540	02/23/2023 18:18	N823022316.D	JZ	
23A0418-10	LDW23-IT1135	E-SIM PAH (0.1ug/L or 5u	A 02	17		K008540	02/23/2023 18:44	N823022317.D	JZ	
23A0418-11	LDW23-IT1140	E-SIM PAH (0.1ug/L or 5u	A 02	18		K008540	02/23/2023 19:11	N823022318.D	JZ	
23A0418-12	LDW23-IT1275	E-SIM PAH (0.1ug/L or 5u	A 02	19		K008540	02/23/2023 19:38	N823022319.D	JZ	
23A0420-04	LDW23-IT1051	E-SIM PAH (0.1ug/L or 5u	A 02	20		K008540	02/23/2023 20:05	N823022320.D	JZ	
SLB0310-CCV1	Calibration Check	QC		21	L000606	K008540	02/23/2023 20:32	N823022321.D	JZ	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230223.b

	Time	Filename	LabID	ClientId	DF											
1	1133	N823022301.D	SLB0310-TUN1		1	NO ISTDS FOUND										
2	1146	N823022302.D	SLB0310-ICV1		1	4.87	37022	7.16	22454	9.20	43277	14.15	38907	18.06	39582	
3	1228	N823022303.D	BLB0386-BLK1		1	4.87	36588	7.16	22657	9.20	43370	14.15	37533	18.06	38522	
4	1255	N823022304.D	BLB0386-BS1		1	4.86	36805	7.15	22686	9.20	43305	14.15	38188	18.05	30254	
5	1321	N823022305.D	BLB0386-BSD1		1	4.86	37656	7.15	23269	9.20	44748	14.15	39778	18.05	31109	
6	1348	N823022306.D	BLB0386-SRM1		1	4.86	36781	7.16	23087	9.20	44202	14.15	39564	18.05	33596	
7	1415	N823022307.D	23A0418-01		1	4.86	34909	7.15	21723	9.20	42015	14.15	36420	18.05	30625	
8	1442	N823022308.D	23A0418-02		3	4.87	39912	7.15	24830	9.20	47393	14.15	27515	18.05	26898	
9	1509	N823022309.D	23A0418-04		1	4.86	40283	7.15	24794	9.20	46052	14.16	27196	18.06	27771	
10	1536	N823022310.D	23A0418-05		1	4.86	38607	7.16	23678	9.20	45069	14.16	25346	18.06	25404	
11	1603	N823022311.D	23A0418-06		3	4.87	37337	7.16	22199	9.20	42144	14.16	24006	18.06	23503	
12	1630	N823022312.D	23A0418-07		1	4.86	36376	7.16	22491	9.20	42544	14.16	26277	18.06	27027	
13	1657	N823022313.D	23A0418-08		1	4.86	40119	7.16	23154	9.20	41927	14.17	21633	18.07	21156	
14	1724	N823022314.D	BLB0386-MS1		1	4.86	39215	7.16	22683	9.20	40075	14.17	20596	18.07	20230	
15	1751	N823022315.D	BLB0386-MSD1		1	4.86	40625	7.16	24116	9.21	43556	14.17	21468	18.07	21995	
16	1818	N823022316.D	23A0418-09		1	4.86	40358	7.16	23127	9.20	40697	14.15	28585	18.06	30181	
17	1844	N823022317.D	23A0418-10		1	4.86	38644	7.15	24337	9.20	46427	14.15	39684	18.05	37490	
18	1911	N823022318.D	23A0418-11		1	4.86	40470	7.15	24867	9.20	45442	14.15	27221	18.06	30286	
19	1938	N823022319.D	23A0418-12		1	4.86	40111	7.15	24513	9.20	47710	14.15	42597	18.05	38662	
20	2005	N823022320.D	23A0420-04		3	4.87	39884	7.16	24554	9.20	46229	14.16	23780	18.06	27597	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230223.b

	Time	Filename	LabID	ClientId	DF										
21	2032	N823022321.D	SLB0310-CCV1		1	4.87	37105	7.15	22712	9.20	43409	14.15	39320	18.05	39970

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230223.b

ARI Job No.: SLB0 Method: FSIMPNA230119.m Instrument: nt8.i Date: 23-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1146	N823022302.D	SLB0310-ICV1		1	Total Benzofluoranthenes,
1228	N823022303.D	BLB0386-BLK1		1	NO MANUAL INTEGRATION
1255	N823022304.D	BLB0386-BS1		1	Total Benzofluoranthenes,
1321	N823022305.D	BLB0386-BSD1		1	Total Benzofluoranthenes,
1348	N823022306.D	BLB0386-SRM1		1	Total Benzofluoranthenes,
1415	N823022307.D	23A0418-01		1	Indeno(1,2,3-cd)pyrene, Anthracene, Total Benzofluoranthenes, Benzo(g,h,i)perylene, Chrysene,
1442	N823022308.D	23A0418-02		3	Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Fluorene, Total Benzofluoranthenes, Benzo(e)pyrene,
1509	N823022309.D	23A0418-04		1	Dibenzo(a,h)anthracene, Acenaphthylene, Acenaphthene, Fluorene, Total Benzofluoranthenes,
1536	N823022310.D	23A0418-05		1	Dibenzo(a,h)anthracene, Total Benzofluoranthenes, Carbazole,
1603	N823022311.D	23A0418-06		3	Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Fluorene, Total Benzofluoranthenes, Dibenzo(a,h)anthracene-d14,
1630	N823022312.D	23A0418-07		1	Dibenzo(a,h)anthracene, Acenaphthylene, Acenaphthene, Fluorene, Total Benzofluoranthenes,
1657	N823022313.D	23A0418-08		1	Acenaphthene, Dibenzofuran, Fluorene, Total Benzofluoranthenes,
1724	N823022314.D	BLB0386-MS1		1	Dibenzo(a,h)anthracene, Total Benzofluoranthenes, Benzo(g,h,i)perylene, Dibenzo(a,h)anthracene-d14,
1751	N823022315.D	BLB0386-MSD1		1	Dibenzo(a,h)anthracene, Total Benzofluoranthenes,
1818	N823022316.D	23A0418-09		1	Dibenzo(a,h)anthracene, 2-Methylnaphthalene, Acenaphthene, Dibenzofuran, Fluorene, Total Benzofluoranthenes, Benzo(g,h,i)perylene, Benzo(j)fluoranthene, Benzo(e)pyrene,
1844	N823022317.D	23A0418-10		1	Pyrene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Anthracene, Benzo(a)pyrene, Fluoranthene, Total Benzofluoranthenes, Benzo(g,h,i)perylene, Benzo(a)anthracene, Benzo(j)fluoranthene, Chrysene, Benzo(k)fluoranthene,
1911	N823022318.D	23A0418-11		1	Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Acenaphthene, Benzo(a)pyrene, Total Benzofluoranthenes, Benzo(e)pyrene,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230223.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1938	N823022319.D	23A0418-12		1	Indeno(1,2,3-cd)pyrene, Anthracene, Total Benzofluoranthenes, Benzo(g,h,i)perylene,
2005	N823022320.D	23A0420-04		3	Dibenzo(a,h)anthracene, Acenaphthylene, Acenaphthene, Fluorene, Total Benzofluoranthenes, Benzo(g,h,i)perylene, Benzo(a)anthracene, Carbazole, Benzo(e)pyrene,
2032	N823022321.D	SLB0310-CCV1		1	Total Benzofluoranthenes,

Security Status Report

Date: 26-Feb-2023 18:24

N823022301.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022302.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022303.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022304.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022305.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022306.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022307.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022308.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022309.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022310.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022311.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022312.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022313.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022314.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022315.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022316.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022317.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022318.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022319.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022320.D	Data Locked	jianqing, 26-Feb-2023 18:24
N823022321.D	Data Locked	jianqing, 26-Feb-2023 18:24

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Extract Dilution Bench Sheet

Sequence: SLB0310
Analyst: JZ Date: 2/23/23

Sample ID	Primary Dilution				Secondary Dilution			
	Extract Volume (uL)	Diluent ID	Diluent Volume (uL)	Dilution Factor	Extract Volume (uL)	Diluent ID	Diluent Volume (uL)	Dilution Factor
23A0418-02	100	L000808	200	3				
23A0418-06	100		200	3				
23A0420-04	100		200	3				

Form 12010F Version 002 03/01/2018

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0238	Instrument:	NT10
		Calibration:	GC00049

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0238-TUN1	NT10031501S.D	NA	03/15/23 20:19
ABN 10.0	SLC0238-CAL8	NT10031503S.D	NA	03/15/23 21:12
ABN 5.0	SLC0238-CAL7	NT10031504S.D	NA	03/15/23 21:50
ABN 2.5	SLC0238-CAL6	NT10031505S.D	NA	03/15/23 22:28
ABN 1.0	SLC0238-CAL5	NT10031506S.D	NA	03/15/23 23:06
ABN 0.5	SLC0238-CAL4	NT10031507S.D	NA	03/15/23 23:44
ABN 0.2	SLC0238-CAL3	NT10031508S.D	NA	03/16/23 00:22
ABN 0.1	SLC0238-CAL2	NT10031509S.D	NA	03/16/23 01:00
ABN 0.05	SLC0238-CAL1	NT10031510S.D	NA	03/16/23 01:38
SCV 5.0	SLC0238-SCV1	NT10031511S.D	NA	03/16/23 02:16
Initial Cal Blank	SLC0238-ICB1	NT10031512S.D	NA	03/16/23 02:54

ANALYSIS SEQUENCE

SLC0238

Instrument ID: NT10
Calibration ID: GC00049
MS EM Level: 1271 EV

GCMS Description: Agilent 5975/MS http://bi
GCMS Column ID: L002830

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0238-TUN1	MS Tune	QC		1	L002618		03/15/2023 20:19	NT10031501S.D	JGR	
SLC0238-CAL8	ABN 10.0	QC		2	K011110	K010831	03/15/2023 21:12	NT10031503S.D	JGR	
SLC0238-CAL7	ABN 5.0	QC		3	K011109	K010831	03/15/2023 21:50	NT10031504S.D	JGR	
SLC0238-CAL6	ABN 2.5	QC		4	K011108	K010831	03/15/2023 22:28	NT10031505S.D	JGR	
SLC0238-CAL5	ABN 1.0	QC		5	K011107	K010831	03/15/2023 23:06	NT10031506S.D	JGR	
SLC0238-CAL4	ABN 0.5	QC		6	K011106	K010831	03/15/2023 23:44	NT10031507S.D	JGR	
SLC0238-CAL3	ABN 0.2	QC		7	K011105	K010831	03/16/2023 00:22	NT10031508S.D	JGR	
SLC0238-CAL2	ABN 0.1	QC		8	L002877	K010831	03/16/2023 01:00	NT10031509S.D	JGR	
SLC0238-CAL1	ABN 0.05	QC		9	L002878	K010831	03/16/2023 01:38	NT10031510S.D	JGR	
SLC0238-SCV1	SCV 5.0	QC		10	K010066	K010831	03/16/2023 02:16	NT10031511S.D	JGR	
SLC0238-ICB1	Initial Cal Blank	QC		11	K005156	K010831	03/16/2023 02:54	NT10031512S.D	JGR	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230315.b\20230315.b

	Time	Filename	LabID	ClientId	DF											
1	2019	NT10031501S.D	SLC0238-TUN1		1	|NO ISTDS FOUND||										
2	2034	NT10031502S.D	FULL SCAN ONLY		1	9.31	193857||	11.78	709633||	15.39	344841||	18.43	635594||	23.46	392013||	26.19	449978|
3	2112	NT10031503S.D	SLC0238-CAL8		1	9.31	192425||	11.78	689875||	15.39	341663||	18.42	651934||	23.45	482051||	26.19	502718|
4	2150	NT10031504S.D	SLC0238-CAL7		1	9.30	187419||	11.77	682446||	15.38	331603||	18.42	598629||	23.45	389338||	26.19	466441|
5	2228	NT10031505S.D	SLC0238-CAL6		1	9.30	173412||	11.78	624286||	15.38	310309||	18.43	554860||	23.46	385144||	26.19	456369|
6	2306	NT10031506S.D	SLC0238-CAL5		1	9.30	188081||	11.77	674549||	15.39	328275||	18.42	597140||	23.45	466503||	26.19	518203|
7	2344	NT10031507S.D	SLC0238-CAL4		1	9.30	191648||	11.77	679665||	15.39	335786||	18.42	613961||	23.45	464623||	26.19	521317|
8	0022	NT10031508S.D	SLC0238-CAL3		1	9.30	188644||	11.78	664117||	15.38	328147||	18.42	603272||	23.46	468991||	26.18	525052|
9	0100	NT10031509S.D	SLC0238-CAL2		1	9.30	190985||	11.77	684638||	15.39	328366||	18.42	602202||	23.45	451316||	26.19	517188|
10	0138	NT10031510S.D	SLC0238-CAL1		1	9.30	187154||	11.78	654413||	15.38	318969||	18.42	583319||	23.46	440533||	26.19	488759|
11	0216	NT10031511S.D	SLC0238-SCV1		1	9.31	166866||	11.78	612104||	15.39	302524||	18.43	553619||	23.46	465428||	26.19	532593|
12	0254	NT10031512S.D	SLC0238-ICB1		1	9.31	189475||	11.77	676186||	15.38	328650||	18.42	617605||	23.45	473513||	26.19	534734|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230315.b\20230315.b

Instrument: nt10.i Date: 15-MAR-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
2019	NT10031501S.D	SLC0238-TUN1	1	NO MANUAL INTEGRATION
2034	NT10031502S.D	FULL SCAN ONLY	1	NO MANUAL INTEGRATION
2112	NT10031503S.D	SLC0238-CAL8	1	NO MANUAL INTEGRATION
2150	NT10031504S.D	SLC0238-CAL7	1	NO MANUAL INTEGRATION
2228	NT10031505S.D	SLC0238-CAL6	1	NO MANUAL INTEGRATION
2306	NT10031506S.D	SLC0238-CAL5	1	NO MANUAL INTEGRATION
2344	NT10031507S.D	SLC0238-CAL4	1	NO MANUAL INTEGRATION
0022	NT10031508S.D	SLC0238-CAL3	1	Benzoic acid,
0100	NT10031509S.D	SLC0238-CAL2	1	Pentachlorophenol,
0138	NT10031510S.D	SLC0238-CAL1	1	Pentachlorophenol,
0216	NT10031511S.D	SLC0238-SCV1	1	Terphenyl-d14,
0254	NT10031512S.D	SLC0238-ICB1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 16-Mar-2023 14:47

NT10031501S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031502S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031503S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031504S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031505S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031506S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031507S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031508S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031509S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031510S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031511S.D	Data Locked	van, 16-Mar-2023 14:47
NT10031512S.D	Data Locked	van, 16-Mar-2023 14:47

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0475	Instrument:	NT10
		Calibration:	GC00049

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0475-TUN1	NT1003172301S.D	NA	03/17/23 18:47
Initial Cal Check	SLC0475-ICV1	NT1003172303S.D	NA	03/17/23 19:40
Low Cal Check	SLC0475-LCV1	NT1003172305S.D	NA	03/17/23 20:57
Blank	BLB0495-BLK2	NT1003172306S.D	Solid	03/17/23 21:36
LCS	BLB0495-BS2	NT1003172307S.D	Solid	03/17/23 22:14
LCS Dup	BLB0495-BSD2	NT1003172308S.D	Solid	03/17/23 22:53
Reference	BLB0495-SRM2	NT1003172309S.D	Solid	03/17/23 23:31
LDW23-SC1045	23A0420-01	NT1003172310S.D	Solid	03/18/23 00:09
LDW23-SC1003	23A0420-07	NT1003172311S.D	Solid	03/18/23 00:47
LDW23-SC1004	23A0420-08	NT1003172312S.D	Solid	03/18/23 01:25
LDW23-SC1004	BLB0495-MS2	NT1003172313S.D	Solid	03/18/23 02:03
LDW23-SC1004	BLB0495-MSD2	NT1003172314S.D	Solid	03/18/23 02:41
LDW23-SC1082	23A0420-09	NT1003172315S.D	Solid	03/18/23 03:19
Calibration Check	SLC0475-CCV1	NT1003172317S.D	NA	03/18/23 04:35

Printed: 3/30/2023 2:58:15PM

ANALYSIS SEQUENCE

SLC0475

Instrument ID: NT10
Calibration ID: GC00049
MS EM Level: 1271 EV

GCMS Description: Agilent 5975/MS http://bi
GCMS Column ID: L002830

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0475-TUN1	MS Tune	QC		1	L002618		03/17/2023 18:47	NT1003172301S.D	JGR	
SLC0475-ICV1	Initial Cal Check	QC		2	K011107	K010831	03/17/2023 19:40	NT1003172303S.D	JGR	
SLC0475-LCV1	Low Cal Check	QC		3	L002877	K010831	03/17/2023 20:57	NT1003172305S.D	JGR	
BLB0495-BLK2	Blank	QC		4		K010831	03/17/2023 21:36	NT1003172306S.D	JGR	
BLB0495-BS2	LCS	QC		5		K010831	03/17/2023 22:14	NT1003172307S.D	JGR	
BLB0495-BSD2	LCS Dup	QC		6		K010831	03/17/2023 22:53	NT1003172308S.D	JGR	
BLB0495-SRM2	Reference	QC		7		K010831	03/17/2023 23:31	NT1003172309S.D	JGR	
23A0420-01	LDW23-SC1045	270E-SIM Dual Scan SVO	A 03	8		K010831	03/18/2023 00:09	NT1003172310S.D	JGR	
23A0420-07	LDW23-SC1003	270E-SIM Dual Scan SVO	A 03	9		K010831	03/18/2023 00:47	NT1003172311S.D	JGR	
23A0420-08	LDW23-SC1004	270E-SIM Dual Scan SVO	A 03	10		K010831	03/18/2023 01:25	NT1003172312S.D	JGR	
BLB0495-MS2	Matrix Spike	QC		11		K010831	03/18/2023 02:03	NT1003172313S.D	JGR	
BLB0495-MSD2	Matrix Spike Dup	QC		12		K010831	03/18/2023 02:41	NT1003172314S.D	JGR	
23A0420-09	LDW23-SC1082	270E-SIM Dual Scan SVO	A 03	13		K010831	03/18/2023 03:19	NT1003172315S.D	JGR	
SLC0475-CCV1	Calibration Check	QC		14	K011107	K010831	03/18/2023 04:35	NT1003172317S.D	JGR	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230317.b\20230317.b

	Time	Filename	LabID	ClientId	DF												
1	1847	NT1003172301S.D	SLC0473-TUN1		1	|NO ISTDS FOUND||											
2	1902	NT1003172302S.D	SEQ-ICVFULL		1	| 9.21	145290||11.67	542404||15.29	270559||18.32	525953||23.34	423806||25.99	449364|					
3	1940	NT1003172303S.D	SLC0475-ICV1		1	| 9.21	184039||11.67	659935||15.28	325775||18.31	616249||23.33	526222||25.99	563117|					
4	2019	NT1003172304S.D	SLC0475-LCV2		1	| 9.21	166299||11.67	582512||15.28	287426||18.31	543771||23.32	445360||25.98	492252|					
5	2057	NT1003172305S.D	SLC0475-LCV1		1	| 9.20	152604||11.68	531160||15.28	260740||18.30	475978||23.32	376923||25.98	403069|					
6	2136	NT1003172306S.D	BLB0495-BLK2		1	| 9.21	175983||11.67	622812||15.28	300088||18.30	551891||23.32	436488||25.97	422256|					
7	2214	NT1003172307S.D	BLB0495-BS2		1	| 9.21	178576||11.67	649661||15.28	325836||18.31	619923||23.32	504917||25.98	527797|					
8	2253	NT1003172308S.D	BLB0495-BSD2		1	| 9.21	160473||11.67	584277||15.28	288550||18.31	546213||23.32	433105||25.97	443685|					
9	2331	NT1003172309S.D	BLB0495-SRM2		1	| 9.21	184723||11.68	652385||15.28	318643||18.30	589125||23.32	451505||25.97	464871|					
10	0009	NT1003172310S.D	23A0420-01		1	| 9.21	172554||11.67	614904||15.28	305283||18.31	634546||23.34	503522||25.99	583864|					
11	0047	NT1003172311S.D	23A0420-07		1	| 9.21	195352||11.67	691638||15.28	337728||18.31	708203||23.35	541040||26.00	610661|					
12	0125	NT1003172312S.D	23A0420-08		1	| 9.21	199576||11.67	714790||15.28	340987||18.31	713877||23.35	549689||26.00	613046|					
13	0203	NT1003172313S.D	BLB0495-MS2		1	| 9.21	194966||11.68	696034||15.29	338631||18.32	702031||23.35	530525||26.00	614236|					
14	0241	NT1003172314S.D	BLB0495-MSD2		1	| 9.21	188579||11.68	674660||15.29	329803||18.32	691933||23.35	520456||25.99	605831|					
15	0319	NT1003172315S.D	23A0420-09		1	| 9.21	189780||11.68	672714||15.28	326746||18.32	701004||23.37	541338||26.04	583991|					
16	0357	NT1003172316S.D	SEQ-CCVFULL		1	| 9.21	161691||11.68	590373||15.29	290570||18.31	598612||23.33	497448||25.99	560414|					
17	0435	NT1003172317S.D	SLC0475-CCV1		1	| 9.21	192261||11.68	682345||15.28	329166||18.31	661731||23.33	557165||25.98	642069|					

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230317.b\20230317.b

Instrument: nt10.i Date: 17-MAR-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1847	NT1003172301S.D	SLC0473-TUN1	1	NO MANUAL INTEGRATION
1902	NT1003172302S.D	SEQ-ICVFULL	1	NO MANUAL INTEGRATION
1940	NT1003172303S.D	SLC0475-ICV1	1	NO MANUAL INTEGRATION
2019	NT1003172304S.D	SLC0475-LCV2	1	NO MANUAL INTEGRATION
2057	NT1003172305S.D	SLC0475-LCV1	1	Benzoic acid,
2136	NT1003172306S.D	BLB0495-BLK2	1	1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 2-Methylphenol, Dimethylphthalate, Hexachlorobe Dibenzo(a,h)anthracene,
2214	NT1003172307S.D	BLB0495-BS2	1	NO MANUAL INTEGRATION
2253	NT1003172308S.D	BLB0495-BSD2	1	NO MANUAL INTEGRATION
2331	NT1003172309S.D	BLB0495-SRM2	1	Hexachlorobenzene,
0009	NT1003172310S.D	23A0420-01	1	Hexachlorobutadiene, 1,4-Dichlorobenzene, Benzyl alcohol, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, Diethyl Pentachlorophenol,
0047	NT1003172311S.D	23A0420-07	1	Hexachlorobutadiene, 1,4-Dichlorobenzene, Benzyl alcohol, 2-Methylphenol, Benzoic acid, 1,2,4-Trichlorobenzene Diethylphthalate, Hexachlorobenzene,
0125	NT1003172312S.D	23A0420-08	1	Hexachlorobutadiene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzyl alcohol, 2-Methylphenol, Benzoic acid, 1,2,4-Trichlorobenzene, Diethylphthalate, Pentachlorophenol,
0203	NT1003172313S.D	BLB0495-MS2	1	NO MANUAL INTEGRATION
0241	NT1003172314S.D	BLB0495-MSD2	1	NO MANUAL INTEGRATION
0319	NT1003172315S.D	23A0420-09	1	Benzyl alcohol, Benzoic acid, 1,2,4-Trichlorobenzene, Diethylphthalate, Pentachlorophenol,
0357	NT1003172316S.D	SEQ-CCVFULL	1	NO MANUAL INTEGRATION
0435	NT1003172317S.D	SLC0475-CCV1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 30-Mar-2023 14:54

NT1003172301S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172302S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172303S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172304S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172305S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172306S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172307S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172308S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172309S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172310S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172311S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172312S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172313S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172314S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172315S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172316S.D	Data Locked	van, 30-Mar-2023 14:54
NT1003172317S.D	Data Locked	van, 30-Mar-2023 14:54

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0213	Instrument:	NT8
Calibration:	GA00050	Calibration Date:	01/19/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLA0213-ICB1 (Water)			Lab File ID: N823011902.D			Analyzed: 01/19/23 10:59		
2-Methylnaphthalene-d10			31 - 120		5.6415	-5.6415	N/A	
Dibenzo[a,h]anthracene-d14			10 - 125		20.5525	-20.5525	N/A	
Fluoranthene-d10			46 - 121		11.016	-11.0160	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0310
Instrument: NT8
Calibration: GA00050
Calibration Date: 01/19/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0310-ICV1 (Solid)				Lab File ID: N823022302.D			Analyzed: 02/23/23 11:46	
2-Methylnaphthalene-d10	2.5000	107	80 - 120	5.605	5.6415	-0.0365	N/A	
Dibenzo[a,h]anthracene-d14	2.5000	96.5	80 - 120	20.485	20.5525	-0.0675	N/A	
Fluoranthene-d10	2.5000	112	80 - 120	10.971	11.016	-0.0450	N/A	
BLB0386-BLK1 (Solid)				Lab File ID: N823022303.D			Analyzed: 02/23/23 12:28	
2-Methylnaphthalene-d10	150.00	80.5	32 - 120	5.602	5.6415	-0.0395	N/A	
Dibenzo[a,h]anthracene-d14	150.00	97.2	21 - 133	20.486	20.5525	-0.0665	N/A	
Fluoranthene-d10	150.00	99.3	36 - 134	10.974	11.016	-0.0420	N/A	
BLB0386-BS1 (Solid)				Lab File ID: N823022304.D			Analyzed: 02/23/23 12:55	
2-Methylnaphthalene-d10	150.00	101	32 - 120	5.599	5.6415	-0.0425	N/A	
Dibenzo[a,h]anthracene-d14	150.00	154	21 - 133	20.482	20.5525	-0.0705	N/A	*
Fluoranthene-d10	150.00	123	36 - 134	10.968	11.016	-0.0480	N/A	
BLB0386-BSD1 (Solid)				Lab File ID: N823022305.D			Analyzed: 02/23/23 13:21	
2-Methylnaphthalene-d10	150.00	101	32 - 120	5.599	5.6415	-0.0425	N/A	
Dibenzo[a,h]anthracene-d14	150.00	148	21 - 133	20.485	20.5525	-0.0675	N/A	*
Fluoranthene-d10	150.00	118	36 - 134	10.968	11.016	-0.0480	N/A	
BLB0386-SRM1 (Solid)				Lab File ID: N823022306.D			Analyzed: 02/23/23 13:48	
2-Methylnaphthalene-d10	300.00	106	32 - 120	5.599	5.6415	-0.0425	N/A	
Dibenzo[a,h]anthracene-d14	300.00	139	21 - 133	20.476	20.5525	-0.0765	N/A	*
Fluoranthene-d10	300.00	123	36 - 134	10.968	11.016	-0.0480	N/A	
23A0420-04 (Solid)				Lab File ID: N823022320.D			Analyzed: 02/23/23 20:05	
2-Methylnaphthalene-d10	149.77	64.7	32 - 120	5.602	5.6415	-0.0395	N/A	
Dibenzo[a,h]anthracene-d14	149.77	76.6	21 - 133	20.492	20.5525	-0.0605	N/A	
Fluoranthene-d10	149.77	66.4	36 - 134	10.977	11.016	-0.0390	N/A	
SLB0310-CCV1 (Solid)				Lab File ID: N823022321.D			Analyzed: 02/23/23 20:32	
2-Methylnaphthalene-d10	2.5000	106	50 - 150	5.602	5.6415	-0.0395	N/A	
Dibenzo[a,h]anthracene-d14	2.5000	95.6	50 - 150	20.479	20.5525	-0.0735	N/A	
Fluoranthene-d10	2.5000	112	50 - 150	10.971	11.016	-0.0450	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0238	Instrument:	NT10
Calibration:	GC00049	Calibration Date:	03/16/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0238-SCV1 (Solid)			Lab File ID: NT10031511S.D			Analyzed: 03/16/23 02:16		
2-Fluorophenol	7.5000		0 - 200		7.07175	-7.0718	N/A	
p-Terphenyl-d14	5.0000	0.0308	0 - 200	21.543	21.54237	0.0006	N/A	
SLC0238-ICB1 (Solid)			Lab File ID: NT10031512S.D			Analyzed: 03/16/23 02:54		
2-Fluorophenol	7.5000	91.0	27 - 120	7.072	7.07175	0.0003	N/A	
p-Terphenyl-d14	5.0000	88.4	37 - 120	21.542	21.54237	-0.0004	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0475
Instrument: NT10
Calibration: GC00049
Calibration Date: 03/16/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0475-ICV1 (Solid)			Lab File ID: NT1003172303S.D			Analyzed: 03/17/23 19:40		
2-Fluorophenol	1.5000	110	80 - 120	6.98	7.07175	-0.0917	N/A	
p-Terphenyl-d14	1.0000	103	80 - 120	21.434	21.54237	-0.1084	N/A	
SLC0475-LCV1 (Solid)			Lab File ID: NT1003172305S.D			Analyzed: 03/17/23 20:57		
2-Fluorophenol	0.15000	107	0 - 200	6.98	7.07175	-0.0917	N/A	
p-Terphenyl-d14	0.10000	101	0 - 200	21.427	21.54237	-0.1154	N/A	
BLB0495-BLK2 (Solid)			Lab File ID: NT1003172306S.D			Analyzed: 03/17/23 21:36		
2-Fluorophenol	750.00	37.6	27 - 120	6.987	7.07175	-0.0847	N/A	
p-Terphenyl-d14	500.00	87.6	37 - 120	21.426	21.54237	-0.1164	N/A	
BLB0495-BS2 (Solid)			Lab File ID: NT1003172307S.D			Analyzed: 03/17/23 22:14		
2-Fluorophenol	750.00	34.0	27 - 120	6.98	7.07175	-0.0917	N/A	
p-Terphenyl-d14	500.00	90.4	37 - 120	21.426	21.54237	-0.1164	N/A	
BLB0495-BSD2 (Solid)			Lab File ID: NT1003172308S.D			Analyzed: 03/17/23 22:53		
2-Fluorophenol	750.00	37.7	27 - 120	6.98	7.07175	-0.0917	N/A	
p-Terphenyl-d14	500.00	93.5	37 - 120	21.426	21.54237	-0.1164	N/A	
BLB0495-SRM2 (Solid)			Lab File ID: NT1003172309S.D			Analyzed: 03/17/23 23:31		
2-Fluorophenol	7500.0	31.8	27 - 120	6.98	7.07175	-0.0917	N/A	
p-Terphenyl-d14	5000.0	87.4	37 - 120	21.419	21.54237	-0.1234	N/A	
23A0420-01 (Solid)			Lab File ID: NT1003172310S.D			Analyzed: 03/18/23 00:09		
2-Fluorophenol	749.52	34.2	27 - 120	6.98	7.07175	-0.0917	N/A	
p-Terphenyl-d14	499.68	125	37 - 120	21.441	21.54237	-0.1014	N/A	*
23A0420-07 (Solid)			Lab File ID: NT1003172311S.D			Analyzed: 03/18/23 00:47		
2-Fluorophenol	749.65	31.9	27 - 120	6.98	7.07175	-0.0917	N/A	
p-Terphenyl-d14	499.76	124	37 - 120	21.442	21.54237	-0.1004	N/A	*
23A0420-08 (Solid)			Lab File ID: NT1003172312S.D			Analyzed: 03/18/23 01:25		
2-Fluorophenol	748.53	36.2	27 - 120	6.98	7.07175	-0.0917	N/A	
p-Terphenyl-d14	499.02	123	37 - 120	21.441	21.54237	-0.1014	N/A	*

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0475	Instrument:	NT10
Calibration:	GC00049	Calibration Date:	03/16/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLB0495-MS2 (Solid)			Lab File ID: NT1003172313S.D				Analyzed: 03/18/23 02:03	
2-Fluorophenol	749.88	35.1	27 - 120	6.98	7.07175	-0.0917	N/A	
p-Terphenyl-d14	499.92	129	37 - 120	21.441	21.54237	-0.1014	N/A	*
BLB0495-MSD2 (Solid)			Lab File ID: NT1003172314S.D				Analyzed: 03/18/23 02:41	
2-Fluorophenol	749.88	32.8	27 - 120	6.98	7.07175	-0.0917	N/A	
p-Terphenyl-d14	499.92	129	37 - 120	21.442	21.54237	-0.1004	N/A	*
23A0420-09 (Solid)			Lab File ID: NT1003172315S.D				Analyzed: 03/18/23 03:19	
2-Fluorophenol	749.85	34.2	27 - 120	6.98	7.07175	-0.0917	N/A	
p-Terphenyl-d14	499.90	126	37 - 120	21.458	21.54237	-0.0844	N/A	*
SLC0475-CCV1 (Solid)			Lab File ID: NT1003172317S.D				Analyzed: 03/18/23 04:35	
2-Fluorophenol	1.5000	113	50 - 150	6.987	7.07175	-0.0847	N/A	
p-Terphenyl-d14	1.0000	120	50 - 150	21.426	21.54237	-0.1164	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0213	Instrument:	NT8
		Calibration:	GA00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Blank (SLA0213-ICB1)		(Water)		Lab File ID: N823011902.D				Analyzed: 01/19/23 10:59	
Naphthalene-d8	52082	4.916	44704	4.906	117	50 - 200	0.010	+/-0.50	
Acenaphthene-d10	30936	7.202	26411	7.196	117	50 - 200	0.006	+/-0.50	
Phenanthrene-d10	59030	9.241	49210	9.235	120	50 - 200	0.006	+/-0.50	
Chrysene-d12	50944	14.215	42994	14.202	118	50 - 200	0.013	+/-0.50	
Perylene-d12	47418	18.12	40520	18.111	117	50 - 200	0.009	+/-0.50	
Secondary Cal Check (SLA0213-SCV1)		(Water)		Lab File ID: N823011909.D				Analyzed: 01/19/23 14:58	
Naphthalene-d8	46346	4.913	44704	4.906	104	50 - 200	0.007	+/-0.50	
Acenaphthene-d10	27709	7.202	26411	7.196	105	50 - 200	0.006	+/-0.50	
Phenanthrene-d10	51685	9.238	49210	9.235	105	50 - 200	0.003	+/-0.50	
Chrysene-d12	46582	14.212	42994	14.202	108	50 - 200	0.010	+/-0.50	
Perylene-d12	41743	18.117	40520	18.111	103	50 - 200	0.006	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0310	Instrument:	NT8
		Calibration:	GA00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLB0310-ICV1)		(Solid)		Lab File ID: N823022302.D				Analyzed: 02/23/23 11:46	
Naphthalene-d8	37022	4.871	37022	4.871	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	22454	7.158	22454	7.158	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	43277	9.197	43277	9.197	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	38907	14.152	38907	14.152	100	50 - 200	0.000	+/-0.50	
Perylene-d12	39582	18.057	39582	18.057	100	50 - 200	0.000	+/-0.50	
Blank (BLB0386-BLK1)		(Solid)		Lab File ID: N823022303.D				Analyzed: 02/23/23 12:28	
Naphthalene-d8	36588	4.865	37022	4.871	99	50 - 200	-0.006	+/-0.50	
Acenaphthene-d10	22657	7.161	22454	7.158	101	50 - 200	0.003	+/-0.50	
Phenanthrene-d10	43370	9.2	43277	9.197	100	50 - 200	0.003	+/-0.50	
Chrysene-d12	37533	14.152	38907	14.152	96	50 - 200	0.000	+/-0.50	
Perylene-d12	38522	18.06	39582	18.057	97	50 - 200	0.003	+/-0.50	
LCS (BLB0386-BS1)		(Solid)		Lab File ID: N823022304.D				Analyzed: 02/23/23 12:55	
Naphthalene-d8	36805	4.862	37022	4.871	99	50 - 200	-0.009	+/-0.50	
Acenaphthene-d10	22686	7.154	22454	7.158	101	50 - 200	-0.004	+/-0.50	
Phenanthrene-d10	43305	9.197	43277	9.197	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	38188	14.146	38907	14.152	98	50 - 200	-0.006	+/-0.50	
Perylene-d12	30254	18.051	39582	18.057	76	50 - 200	-0.006	+/-0.50	
LCS Dup (BLB0386-BSD1)		(Solid)		Lab File ID: N823022305.D				Analyzed: 02/23/23 13:21	
Naphthalene-d8	37656	4.862	37022	4.871	102	50 - 200	-0.009	+/-0.50	
Acenaphthene-d10	23269	7.154	22454	7.158	104	50 - 200	-0.004	+/-0.50	
Phenanthrene-d10	44748	9.197	43277	9.197	103	50 - 200	0.000	+/-0.50	
Chrysene-d12	39778	14.146	38907	14.152	102	50 - 200	-0.006	+/-0.50	
Perylene-d12	31109	18.054	39582	18.057	79	50 - 200	-0.003	+/-0.50	
Reference (BLB0386-SRM1)		(Solid)		Lab File ID: N823022306.D				Analyzed: 02/23/23 13:48	
Naphthalene-d8	36781	4.862	37022	4.871	99	50 - 200	-0.009	+/-0.50	
Acenaphthene-d10	23087	7.155	22454	7.158	103	50 - 200	-0.003	+/-0.50	
Phenanthrene-d10	44202	9.197	43277	9.197	102	50 - 200	0.000	+/-0.50	
Chrysene-d12	39564	14.146	38907	14.152	102	50 - 200	-0.006	+/-0.50	
Perylene-d12	33596	18.048	39582	18.057	85	50 - 200	-0.009	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0310	Instrument:	NT8
		Calibration:	GA00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-IT1051 (23A0420-04)		(Solid)		Lab File ID: N823022320.D				Analyzed: 02/23/23 20:05	
Naphthalene-d8	39884	4.865	37022	4.871	108	50 - 200	-0.006	+/-0.50	
Acenaphthene-d10	24554	7.155	22454	7.158	109	50 - 200	-0.003	+/-0.50	
Phenanthrene-d10	46229	9.197	43277	9.197	107	50 - 200	0.000	+/-0.50	
Chrysene-d12	23780	14.155	38907	14.152	61	50 - 200	0.003	+/-0.50	
Perylene-d12	27597	18.063	39582	18.057	70	50 - 200	0.006	+/-0.50	
Calibration Check (SLB0310-CCV1)		(Water)		Lab File ID: N823022321.D				Analyzed: 02/23/23 20:32	
Naphthalene-d8	37105	4.868	37022	4.871	100	50 - 200	-0.003	+/-0.50	
Acenaphthene-d10	22712	7.154	22454	7.158	101	50 - 200	-0.004	+/-0.50	
Phenanthrene-d10	43409	9.197	43277	9.197	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	39320	14.146	38907	14.152	101	50 - 200	-0.006	+/-0.50	
Perylene-d12	39970	18.054	39582	18.057	101	50 - 200	-0.003	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0238	Instrument:	NT10
		Calibration:	GC00049

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLC0238-SCV1)		(Solid)		Lab File ID: NT10031511S.D				Analyzed: 03/16/23 02:16	
1,4-Dichlorobenzene-d4	166866	9.306	188081	9.298	89	50 - 200	0.008	+/-0.50	
Naphthalene-d8	612104	11.775	674549	11.774	91	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	302524	15.388	328275	15.387	92	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	553619	18.425	597140	18.424	93	50 - 200	0.001	+/-0.50	
Chrysene-d12	465428	23.455	466503	23.454	100	50 - 200	0.001	+/-0.50	
Perylene-d12	532593	26.188	518203	26.187	103	50 - 200	0.001	+/-0.50	
Initial Cal Blank (SLC0238-ICB1)		(Solid)		Lab File ID: NT10031512S.D				Analyzed: 03/16/23 02:54	
1,4-Dichlorobenzene-d4	189475	9.306	188081	9.298	101	50 - 200	0.008	+/-0.50	
Naphthalene-d8	676186	11.774	674549	11.774	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	328650	15.379	328275	15.387	100	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	617605	18.424	597140	18.424	103	50 - 200	0.000	+/-0.50	
Chrysene-d12	473513	23.454	466503	23.454	102	50 - 200	0.000	+/-0.50	
Perylene-d12	534734	26.187	518203	26.187	103	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0475	Instrument:	NT10
		Calibration:	GC00049

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0475-ICV1)		(Solid)	Lab File ID: NT1003172303S.D				Analyzed: 03/17/23 19:40		
1,4-Dichlorobenzene-d4	184039	9.206	184039	9.206	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	659935	11.674	659935	11.674	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	325775	15.279	325775	15.279	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	616249	18.308	616249	18.308	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	526222	23.331	526222	23.331	100	50 - 200	0.000	+/-0.50	
Perylene-d12	563117	25.986	563117	25.986	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0475-LCV1)		(Solid)	Lab File ID: NT1003172305S.D				Analyzed: 03/17/23 20:57		
1,4-Dichlorobenzene-d4	152604	9.198	184039	9.206	83	50 - 200	-0.008	+/-0.50	
Naphthalene-d8	531160	11.675	659935	11.674	80	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	260740	15.28	325775	15.279	80	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	475978	18.301	616249	18.308	77	50 - 200	-0.007	+/-0.50	
Chrysene-d12	376923	23.324	526222	23.331	72	50 - 200	-0.007	+/-0.50	
Perylene-d12	403069	25.98	563117	25.986	72	50 - 200	-0.006	+/-0.50	
Blank (BLB0495-BLK2)		(Solid)	Lab File ID: NT1003172306S.D				Analyzed: 03/17/23 21:36		
1,4-Dichlorobenzene-d4	175983	9.206	184039	9.206	96	50 - 200	0.000	+/-0.50	
Naphthalene-d8	622812	11.673	659935	11.674	94	50 - 200	-0.001	+/-0.50	
Acenaphthene-d10	300088	15.279	325775	15.279	92	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	551891	18.3	616249	18.308	90	50 - 200	-0.008	+/-0.50	
Chrysene-d12	436488	23.323	526222	23.331	83	50 - 200	-0.008	+/-0.50	
Perylene-d12	422256	25.971	563117	25.986	75	50 - 200	-0.015	+/-0.50	
LCS (BLB0495-BS2)		(Solid)	Lab File ID: NT1003172307S.D				Analyzed: 03/17/23 22:14		
1,4-Dichlorobenzene-d4	178576	9.206	184039	9.206	97	50 - 200	0.000	+/-0.50	
Naphthalene-d8	649661	11.674	659935	11.674	98	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	325836	15.279	325775	15.279	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	619923	18.308	616249	18.308	101	50 - 200	0.000	+/-0.50	
Chrysene-d12	504917	23.323	526222	23.331	96	50 - 200	-0.008	+/-0.50	
Perylene-d12	527797	25.979	563117	25.986	94	50 - 200	-0.007	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0475	Instrument:	NT10
		Calibration:	GC00049

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (BLB0495-BSD2)		(Solid)	Lab File ID: NT1003172308S.D				Analyzed: 03/17/23 22:53		
1,4-Dichlorobenzene-d4	160473	9.206	184039	9.206	87	50 - 200	0.000	+/-0.50	
Naphthalene-d8	584277	11.674	659935	11.674	89	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	288550	15.279	325775	15.279	89	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	546213	18.308	616249	18.308	89	50 - 200	0.000	+/-0.50	
Chrysene-d12	433105	23.323	526222	23.331	82	50 - 200	-0.008	+/-0.50	
Perylene-d12	443685	25.971	563117	25.986	79	50 - 200	-0.015	+/-0.50	
Reference (BLB0495-SRM2)		(Solid)	Lab File ID: NT1003172309S.D				Analyzed: 03/17/23 23:31		
1,4-Dichlorobenzene-d4	184723	9.206	184039	9.206	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	652385	11.675	659935	11.674	99	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	318643	15.28	325775	15.279	98	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	589125	18.301	616249	18.308	96	50 - 200	-0.007	+/-0.50	
Chrysene-d12	451505	23.324	526222	23.331	86	50 - 200	-0.007	+/-0.50	
Perylene-d12	464871	25.972	563117	25.986	83	50 - 200	-0.014	+/-0.50	
LDW23-SC1045 (23A0420-01)		(Solid)	Lab File ID: NT1003172310S.D				Analyzed: 03/18/23 00:09		
1,4-Dichlorobenzene-d4	172554	9.205	184039	9.206	94	50 - 200	-0.001	+/-0.50	
Naphthalene-d8	614904	11.673	659935	11.674	93	50 - 200	-0.001	+/-0.50	
Acenaphthene-d10	305283	15.279	325775	15.279	94	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	634546	18.308	616249	18.308	103	50 - 200	0.000	+/-0.50	
Chrysene-d12	503522	23.338	526222	23.331	96	50 - 200	0.007	+/-0.50	
Perylene-d12	583864	25.994	563117	25.986	104	50 - 200	0.008	+/-0.50	
LDW23-SC1003 (23A0420-07)		(Solid)	Lab File ID: NT1003172311S.D				Analyzed: 03/18/23 00:47		
1,4-Dichlorobenzene-d4	195352	9.206	184039	9.206	106	50 - 200	0.000	+/-0.50	
Naphthalene-d8	691638	11.674	659935	11.674	105	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	337728	15.28	325775	15.279	104	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	708203	18.309	616249	18.308	115	50 - 200	0.001	+/-0.50	
Chrysene-d12	541040	23.347	526222	23.331	103	50 - 200	0.016	+/-0.50	
Perylene-d12	610661	26.003	563117	25.986	108	50 - 200	0.017	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0475
SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: NT10
Calibration: GC00049

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1004 (23A0420-08)		(Solid)	Lab File ID: NT1003172312S.D				Analyzed: 03/18/23 01:25		
1,4-Dichlorobenzene-d4	199576	9.206	184039	9.206	108	50 - 200	0.000	+/-0.50	
Naphthalene-d8	714790	11.674	659935	11.674	108	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	340987	15.279	325775	15.279	105	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	713877	18.308	616249	18.308	116	50 - 200	0.000	+/-0.50	
Chrysene-d12	549689	23.346	526222	23.331	104	50 - 200	0.015	+/-0.50	
Perylene-d12	613046	26.002	563117	25.986	109	50 - 200	0.016	+/-0.50	
Matrix Spike (BLB0495-MS2)		(Solid)	Lab File ID: NT1003172313S.D				Analyzed: 03/18/23 02:03		
1,4-Dichlorobenzene-d4	194966	9.206	184039	9.206	106	50 - 200	0.000	+/-0.50	
Naphthalene-d8	696034	11.681	659935	11.674	105	50 - 200	0.007	+/-0.50	
Acenaphthene-d10	338631	15.287	325775	15.279	104	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	702031	18.316	616249	18.308	114	50 - 200	0.008	+/-0.50	
Chrysene-d12	530525	23.346	526222	23.331	101	50 - 200	0.015	+/-0.50	
Perylene-d12	614236	26.002	563117	25.986	109	50 - 200	0.016	+/-0.50	
Matrix Spike Dup (BLB0495-MSD2)		(Solid)	Lab File ID: NT1003172314S.D				Analyzed: 03/18/23 02:41		
1,4-Dichlorobenzene-d4	188579	9.206	184039	9.206	102	50 - 200	0.000	+/-0.50	
Naphthalene-d8	674660	11.681	659935	11.674	102	50 - 200	0.007	+/-0.50	
Acenaphthene-d10	329803	15.287	325775	15.279	101	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	691933	18.316	616249	18.308	112	50 - 200	0.008	+/-0.50	
Chrysene-d12	520456	23.346	526222	23.331	99	50 - 200	0.015	+/-0.50	
Perylene-d12	605831	25.994	563117	25.986	108	50 - 200	0.008	+/-0.50	
LDW23-SC1082 (23A0420-09)		(Solid)	Lab File ID: NT1003172315S.D				Analyzed: 03/18/23 03:19		
1,4-Dichlorobenzene-d4	189780	9.206	184039	9.206	103	50 - 200	0.000	+/-0.50	
Naphthalene-d8	672714	11.675	659935	11.674	102	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	326746	15.28	325775	15.279	100	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	701004	18.317	616249	18.308	114	50 - 200	0.009	+/-0.50	
Chrysene-d12	541338	23.37	526222	23.331	103	50 - 200	0.039	+/-0.50	
Perylene-d12	583991	26.041	563117	25.986	104	50 - 200	0.055	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0475	Instrument:	NT10
		Calibration:	GC00049

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (SLC0475-CCV1)		(Solid)	Lab File ID: NT1003172317S.D					Analyzed: 03/18/23 04:35	
1,4-Dichlorobenzene-d4	192261	9.206	184039	9.206	104	50 - 200	0.000	+/-0.50	
Naphthalene-d8	682345	11.681	659935	11.674	103	50 - 200	0.007	+/-0.50	
Acenaphthene-d10	329166	15.279	325775	15.279	101	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	661731	18.308	616249	18.308	107	50 - 200	0.000	+/-0.50	
Chrysene-d12	557165	23.331	526222	23.331	106	50 - 200	0.000	+/-0.50	
Perylene-d12	642069	25.978	563117	25.986	114	50 - 200	-0.008	+/-0.50	

HOLDING TIME SUMMARY

Analysis: EPA 8270E-SIM

Laboratory: Analytical Resources, LLC SDG: 23A0420

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1045 23A0420-01	01/19/23 08:10	01/19/23 15:55	02/20/23 16:23	32	365	03/18/23 00:09	25	40	
LDW23-IT1051 23A0420-04	01/19/23 09:55	01/19/23 15:55	02/16/23 14:32	28	365	02/23/23 20:05	7	40	
LDW23-SC1003 23A0420-07	01/19/23 12:25	01/19/23 15:55	02/20/23 16:23	32	365	03/18/23 00:47	25	40	
LDW23-SC1004 23A0420-08	01/19/23 11:55	01/19/23 15:55	02/20/23 16:23	32	365	03/18/23 01:25	25	40	
LDW23-SC1082 23A0420-09	01/19/23 13:40	01/19/23 15:55	02/20/23 16:23	32	365	03/18/23 03:19	25	40	
Matrix Spike BLB0495-MS2	01/19/23 11:55	01/19/23 15:55	02/20/23 16:23	32	365	03/18/23 02:03	25	40	
Matrix Spike Dup BLB0495-MSD2	01/19/23 11:55	01/19/23 15:55	02/20/23 16:23	32	365	03/18/23 02:41	25	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: NT10

Analyte	MDL	RL	Units
1,4-Dichlorobenzene	0.6	5.0	ug/kg
1,2-Dichlorobenzene	0.7	5.0	ug/kg
Benzyl Alcohol	2.5	20.0	ug/kg
Benzoic acid	13.4	100	ug/kg
2,4-Dimethylphenol	2.2	20.0	ug/kg
1,2,4-Trichlorobenzene	2.7	5.0	ug/kg
N-Nitrosodiphenylamine	1.3	5.0	ug/kg
Pentachlorophenol	2.1	20.0	ug/kg

METHOD DETECTION AND REPORTING LIMITS

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: NT8

Analyte	MDL	RL	Units
Benzo(a)anthracene	0.82	5.00	ug/kg
Chrysene	1.05	5.00	ug/kg
Benzo(b)fluoranthene	1.37	5.00	ug/kg
Benzo(k)fluoranthene	0.76	5.00	ug/kg
Benzo(a)pyrene	0.61	5.00	ug/kg
Indeno(1,2,3-cd)pyrene	1.05	5.00	ug/kg
Dibenzo(a,h)anthracene	0.89	5.00	ug/kg

I-8227

Certificate of Analysis

SIGMA-ALDRICH

Product Name	Pentachlorophenol, 97%
Product Number	P2604
Product Brand	ALDRICH
CAS Number	87-86-5
Molecular Formula	C_6Cl_5OH
Molecular Weight	266.34

TEST	SPECIFICATION	LOT 07119HO RESULTS
APPEARANCE	WHITE TO OFF-WHITE OR LIGHT BLUE POWDER	OFF-WHITE POWDER
INFRARED SPECTRUM	CONFORMS TO STRUCTURE.	CONFORMS TO STRUCTURE AND STANDARD
TITRATION	97.5% - 102.5% (WITH AGNO3 AFTER OXYGEN	100.5 % (WITH AGNO3 AFTER OXYGEN COMBUSTION)
GAS LIQUID CHROMATOGRAPHY	97.5% (MINIMUM)	99.9 %
SOLUBILITY		100 MG/ML, 95% ETOH: VERY HAZY, FAINT YELLOW SOLUTION
QUALITY CONTROL ACCEPTANCE DATE		JUNE 2001

Barbara Rajzer

Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: NA

Chemical: Tributyl Phosphate

Manufacturer: Chemservice

Product #: O-916

Lot #: 59-57A

Purity: 99%

Analyst: VB

Element: B000954

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001873

Printed: 9/23/2013 11:47:03AM

Description:	SVOC 4,4 DDT	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	23-Sep-13
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 11:46 by JZ
Vendor:	Chem Service	Lot #:	198-128A
Vendor Catalog #:			

Comments

Neat, Purity @ 99.2%. (ARI#: 790A)

Analyte	CAS Number	Concentration	Units
4,4'-DDT	50-29-3	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,4' DDT

Manufacturer: Chem Service

Product #: _____

Lot #: 198-128A

Purity: 99.2%

Analyst: AB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001875

Printed: 9/23/2013 12:13:55PM

Description:	SVOC alpha-Terpineol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 12:13 by JZ
Vendor:	ACROS Organics	Lot #:	AD16481201
Vendor Catalog #:			

Comments

Neat, Purity @ 98%. (ARI#: I1582A)

Analyte	CAS Number	Concentration	Units
alpha-Terpineol	98-55-5	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: alpha-Terpineol

Manufacturer: Acros Organics

Product #: _____

Lot #: A0648170 1

Purity: 98%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001885

Printed: 9/23/2013 3:45:57PM

Description:	SVOA Dibutyl Phenyl phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 15:45 by JZ
Vendor:	Monsanto	Lot #:	N/A
Vendor Catalog #:			

Comments

Neat, Purity @ 98.9%.

Analyte	CAS Number	Concentration	Units
Dibutyl Phenyl Phosphate	2528-36-1	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Dibutyl Phenyl Phosphate

Manufacturer: Monsanto

Product #: N/A

Lot #: N/A

Purity: 98.9%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001886

Printed: 9/23/2013 3:59:35PM

Description:	SVOC Triphenyl Phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 15:59 by JZ
Vendor:	Aldrich	Lot #:	04902CM
Vendor Catalog #:			

Comments

Neat, Purity @ 99%.

Analyte	CAS Number	Concentration	Units
Triphenyl Phosphate	115-86-6	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Triphenyl Phosphate

Manufacturer: Aldrich

Product #: _____

Lot #: 04907CM

Purity: 99%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001887

Printed: 9/23/2013 4:18:55PM

Description:	SVOC Butylated Hydroxytoluene	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 16:18 by JZ
Vendor:	SIGMA	Lot #:	39F-0197
Vendor Catalog #:			

Comments

neat,Purity @ 99.9%.

Analyte	CAS Number	Concentration	Units
Butylated Hydroxytoluene	128-37-0	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Butylated Hydroxytoluene

Manufacturer: Sigma

Product #: _____

Lot #: 39F-0197

Purity: 99.8%

Analyst: AR

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001890

Printed: 9/23/2013 5:02:53PM

Description:	SVOC Butyl Diphenyl Phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 17:02 by JZ
Vendor:	Monsanto	Lot #:	N/A
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Butyl Diphenyl Phosphate	2752-95-6	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Butyl Diphenyl Phosphate

Manufacturer: Monsanto

Product #: NA

Lot #: NA

Purity: 98%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001941

Printed: 9/25/2013 1:45:31PM

Description:	SVOC 2,4-Dinitrophenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 13:45 by JZ
Vendor:	SIGMA	Lot #:	65H5021
Vendor Catalog #:			

Comments

Neat, Purity @ 90-95%. (ARI#: 0466)

Analyte	CAS Number	Concentration	Units
2,4-Dinitrophenol	51-28-5	1000000	ug/mL

B001941
SVOA 2,4-Dinitrophenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 2,4-Dinitrophenol

Manufacturer: Sigma

Product #: _____

Lot #: bEH 502 I

Purity: 90 ~ 94%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001945

Printed: 9/25/2013 3:23:22PM

Description:	SVOC Benzoic Acid	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:23 by JZ
Vendor:	ACROS Organics	Lot #:	A0224339
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Benzoic acid	65-85-0	1000000	ug/mL

B001945
SVOC Benzoic Acid
Expires 12/31/2029
Prepared By Jianqing Zhou 12/31/2012

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzoic Acid

Manufacturer: Acros Organics

Product #: _____

Lot #: A0214339

Purity: 98%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001948

Printed: 9/25/2013 3:37:51PM

Description:	SVOC 4,6-Dinitro-2-Methylphenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:37 by JZ
Vendor:	Chem Service	Lot #:	179-31A
Vendor Catalog #:			

Comments

Neat, Purity @ 99%. (ARI#: 009A)

Analyte	CAS Number	Concentration	Units
4,6-Dinitro-2-methylphenol	534-52-1	1000000	ug/mL

B001948
SVOA 4,6-Dinitro-2-Methylphenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,6-Dinitro-2-Methylphenol

Manufacturer: Chem Service

Product #: _____

Lot #: 179-31A

Purity: 99%

Analyst: KB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002054

Printed: 10/4/2013 6:32:21PM

Description:	SVOA 1-Methylnaphthalene	Expires:	02-Apr-14
Standard Type:	Analyte Spike	Prepared:	13-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	04-Oct-13 18:32 by JZ
Vendor:	Chem Service	Lot #:	62-5B
Vendor Catalog #:			

Comments

Neat, Purity @ 99%

Analyte	CAS Number	Concentration	Units
1-Methylnaphthalene	90-12-0	1000000	ug/mL

B002054
SVOA 1-Methylnaphthalene
Solvent / Lot: NA
Prep: 12/13/2012 by JZ
Exp: 12/31/2029
Location:

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 1-Methyl naphthalene

Manufacturer: Chem Service

Product #: 0787

Lot #: 67-53

Purity: 99%

Analyst: AZ

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002135

Printed: 10/15/2013 12:07:39PM

Description:	SVOA Benzidine	Expires:	31-Dec-29
Standard Type:	Analyte Spike	Prepared:	15-Oct-13
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	15-Oct-13 12:07 by JZ
Vendor:	SIGMA	Lot #:	18C0024
Vendor Catalog #:			

Comments

Purity @ 95%. ARI#: 0467.

Analyte	CAS Number	Concentration	Units
Benzidine	92-87-5	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzidine

Manufacturer: Sigma

Product #: B-3503

Lot #: 18C0024

Purity: 98%

Analyst: [signature]

Cambridge Isotope Laboratories, Inc.

50 Frontage Road, Andover, MA 01810-5413 USA
800.322.1174 (N.AMERICA) 978.749.8000 (INTERNATIONAL)
www.isotope.com

CERTIFICATE OF ANALYSIS

Product Name: DIBENZ[A,H]ANTHRACENE
(Isotopic Label & Enrichment Specification) (D14, 97%)

Lot Number: PR-14764/09163DA2

Catalog Number: DLM-677-0

I295

Product Information

Chemical Purity Specification:	≥ 98%
Labeled CAS Number:	NA
Unlabeled CAS Number:	53-70-3
Molecular Weight:	292.5
Chemical Formula:	C22D14
Storage:	Store at room temperature away from light and moisture.
Stability:	Stable if stored under recommended conditions.

Certification

Cambridge Isotope Laboratories, Inc. guarantees that this material meets or exceeds the specifications stated. Absolute identity as well as chemical and isotopic purities are assured by the use of unambiguous synthetic routes and multiple chemical analyses whenever possible.

Approved by: Deborah E. Costa

Deborah E. Costa, Quality Assurance

Quality Control Tests and Results

GC/MS for Chemical Purity	99.3%
GC/MS for Isotopic Enrichment	97.4%
Melting Point Range Determination	263-265°C
1H NMR for Chemical Purity	Pass

E006466

SVOA-d14-Dibenz(a,h)anthracene-NEAT
Solvent / Lot: NA
Prep: 11/9/2016 by VS
Exp: 5/8/2030
Location:

Certificate of Analysis

Product Name:	1,2,4,5-Tetrachlorobenzene
Product Description:	98%
Product Brand:	Sigma-Aldrich
Product Number:	131857
Molecular Weight:	215.89
CAS Number:	95-94-3

TEST	SPECIFICATION	LOT 19309JR RESULTS
APPEARANCE	WHITE POWDER, CHIPS OR CRYSTALS	WHITE CHIPS
INFRARED SPECTRUM	CONFORMS TO STRUCTURE.	CONFORMS TO STRUCTURE AND STANDARD AS
** **		ILLUSTRATED ON PAGE 1011C OF EDITION I,
** **		VOLUME 1 OF "THE ALDRICH LIBRARY OF FT-IR
** **		SPECTRA".
GAS LIQUID	97.5% (MINIMUM)	99.9 %
QUALITY CONTROL		JULY 1997

Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

F009172
SVOC 1,2,4,5-Tetrachlorobenzene
Expires 12/31/2079
Prepared By Joshua Rains 10/6/2017

H000691

Data File: \\target\share\chem2\fid4a.i\20230317.b\423C1703.D

Page 1

Date : 17-MAR-2023 10:46

Client ID:

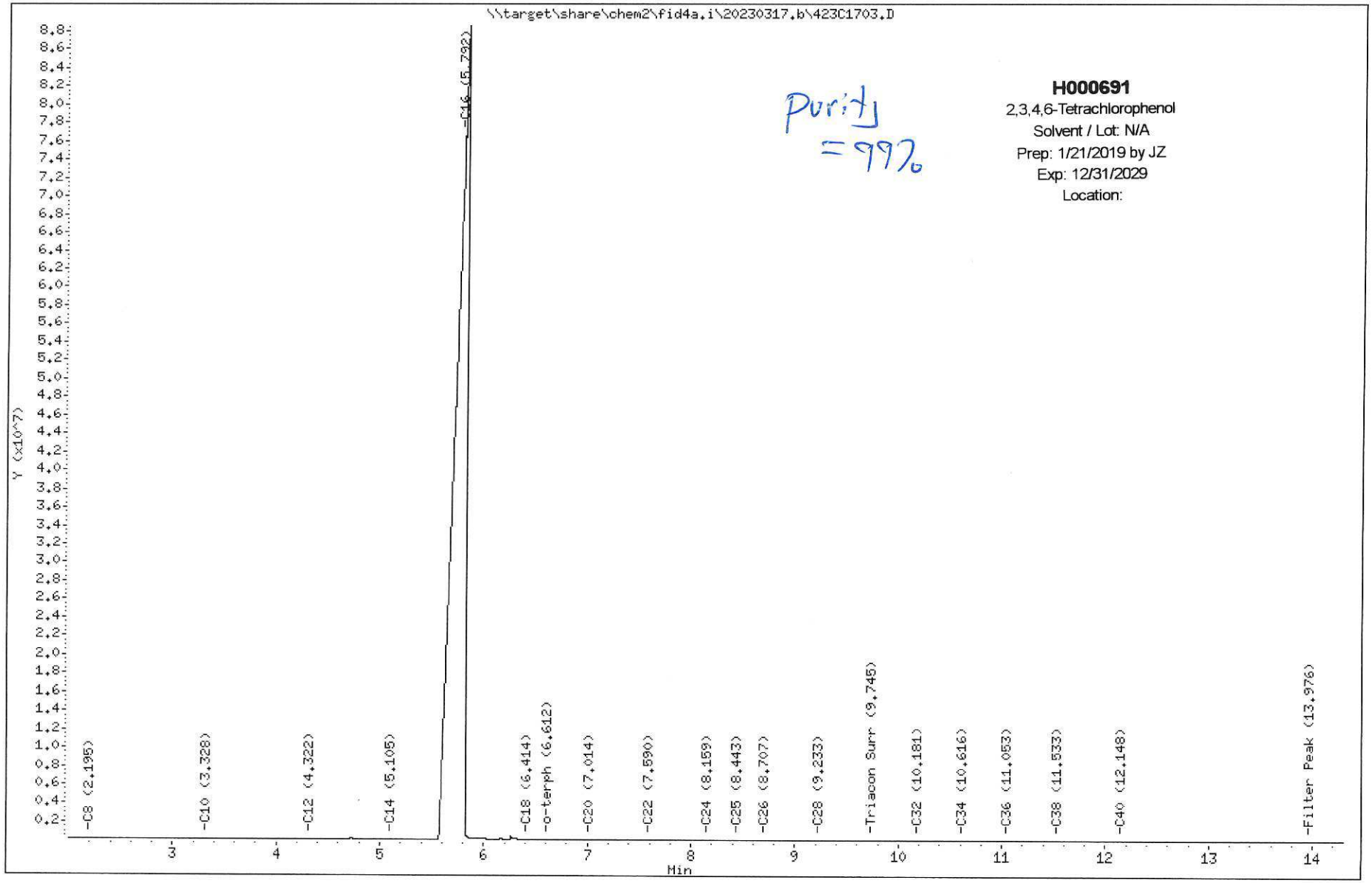
Instrument: fid4a.i

Sample Info: K007226

Operator: AA

Column phase: RTX-1

Column diameter: 0.25



Purity = 99%

H000691
2,3,4,6-Tetrachlorophenol
Solvent / Lot: N/A
Prep: 1/21/2019 by JZ
Exp: 12/31/2029
Location:

ARI Labs, Inc.

Data file : \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
Lab Smp Id: K007226
Inj Date : 17-MAR-2023 10:46
Operator : AA Inst ID: fid4a.i
Smp Info : K007226
Misc Info :
Comment   :
Method   : \\target\share\chem2\fid4a.i\20230317.b\FID4TPH.m
Meth Date : 17-Mar-2023 16:58 alfonso Quant Type: AREA%
Cal Date : 18-AUG-2022 11:51 Cal File: 422H1803.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: tph.sub
Target Version: 4.14
Processing Host: ALFONSO-201901

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.043	81395	55677	0.684	0.012	1 Toluene
2.074	68503	39991	0.584	0.010	
2.104	85451	37158	0.435	0.012	
2.146	59381	25207	0.424	0.008	
2.181	11414	22862	2.003	0.001	
2.195	34939	23199	0.664	0.005	2 C8
2.218	8679	21808	2.513	0.001	
2.224	21070	21832	1.036	0.003	
2.243	45086	20191	0.448	0.006	
2.286	3130	15677	5.009	0.000	
2.291	12615	15880	1.259	0.001	
2.313	20979	15888	0.757	0.003	
2.333	7621	15373	2.017	0.001	
2.348	31874	17112	0.537	0.004	
2.373	4619	13267	2.872	0.000	
2.380	12003	13446	1.120	0.001	
2.393	10327	13347	1.292	0.001	
2.408	9963	12697	1.274	0.001	
2.446	24366	11882	0.488	0.003	
2.498	24898	10214	0.410	0.003	
2.557	1592	6395	4.017	0.000	
2.570	4427	6384	1.442	0.000	
2.583	4275	6215	1.454	0.000	
2.595	1208	6068	5.024	0.000	
2.602	3076	6230	2.025	0.000	
2.607	1560	6270	4.019	0.000	
2.631	17195	8933	0.520	0.002	
2.654	17386	7637	0.439	0.002	
2.703	4531	5468	1.207	0.000	
2.717	9156	5741	0.627	0.001	
2.740	3955	5045	1.275	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.768	1029	4134	4.017	0.000	
2.771	830	4189	5.050	0.000	
2.778	1924	4438	2.307	0.000	
2.784	5498	4564	0.830	0.000	
2.846	25970	8400	0.323	0.003	
2.880	939	3165	3.370	0.000	
2.884	1885	3183	1.688	0.000	
2.901	4805	3504	0.729	0.000	
2.938	581	1990	3.423	0.000	
2.944	1450	2016	1.390	0.000	
2.955	449	1816	4.043	0.000	
2.967	1234	2009	1.629	0.000	
2.982	712	2087	2.931	0.000	
2.988	1000	2338	2.337	0.000	
3.001	3475	3541	1.019	0.000	
3.018	3528	3705	1.050	0.000	
3.033	983	2521	2.564	0.000	
3.038	1297	2686	2.070	0.000	
3.044	2547	2541	0.997	0.000	
3.069	389	1330	3.418	0.000	
3.078	728	1545	2.123	0.000	
3.085	1244	1637	1.316	0.000	
3.098	1115	1624	1.457	0.000	
3.108	926	1475	1.593	0.000	
3.119	239	1202	5.036	0.000	
3.125	540	1251	2.315	0.000	
3.133	409	1219	2.978	0.000	
3.144	2600	1886	0.725	0.000	
3.165	620	1604	2.588	0.000	
3.173	554	1647	2.972	0.000	
3.192	2423	2273	0.938	0.000	
3.197	582	2418	4.158	0.000	
3.204	1161	2723	2.346	0.000	
3.208	825	2777	3.364	0.000	
3.228	4472	3391	0.758	0.000	
3.246	1586	2676	1.688	0.000	
3.279	1194	2070	1.734	0.000	
3.293	854	1951	2.285	0.000	
3.298	595	2029	3.408	0.000	
3.315	2640	2597	0.984	0.000	
3.320	1015	2542	2.504	0.000	
3.328	1549	2593	1.674	0.000	3 C10
3.338	1314	2533	1.928	0.000	
3.350	523	2159	4.130	0.000	
3.358	1776	2105	1.185	0.000	
3.371	356	1797	5.043	0.000	
3.378	914	1880	2.057	0.000	
3.383	380	1927	5.068	0.000	
3.387	595	2023	3.399	0.000	
3.395	1390	2270	1.633	0.000	
3.405	1490	1994	1.338	0.000	
3.423	690	1601	2.321	0.000	
3.435	821	1554	1.894	0.000	
3.441	387	1583	4.087	0.000	
3.444	401	1625	4.051	0.000	
3.448	403	1636	4.060	0.000	
3.455	1216	1700	1.398	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
3.478	235	1185	5.047	0.000	
3.482	412	1229	2.986	0.000	
3.488	695	1177	1.694	0.000	
3.501	239	969	4.063	0.000	
3.509	914	1149	1.258	0.000	
3.520	1078	1069	0.992	0.000	
3.540	301	927	3.079	0.000	
3.556	406	849	2.089	0.000	
3.567	370	873	2.359	0.000	
3.572	178	939	5.270	0.000	
3.578	591	1171	1.981	0.000	
3.591	869	1353	1.556	0.000	
3.596	741	1352	1.826	0.000	
3.606	471	1401	2.976	0.000	
3.613	548	1411	2.577	0.000	
3.618	433	1521	3.511	0.000	
3.625	710	1635	2.303	0.000	
3.630	910	1667	1.832	0.000	
3.652	661	1562	2.362	0.000	
3.670	462	1214	2.627	0.000	
3.686	1036	1453	1.403	0.000	
3.690	829	1374	1.658	0.000	
3.702	531	1191	2.241	0.000	
3.712	452	1355	3.001	0.000	
3.716	820	1423	1.736	0.000	
3.736	2685	2093	0.780	0.000	
3.752	689	2030	2.946	0.000	
3.760	4109	2349	0.572	0.000	
3.805	3183	2036	0.640	0.000	
3.823	496	1686	3.401	0.000	
3.835	1641	2314	1.410	0.000	
3.859	9243	4616	0.499	0.001	
3.897	851	1745	2.051	0.000	
3.904	503	1721	3.419	0.000	
3.927	3866	3293	0.852	0.000	
3.941	5520	3558	0.645	0.000	
3.980	573	1715	2.991	0.000	
3.992	1027	1794	1.748	0.000	
3.995	1494	1860	1.245	0.000	
4.010	887	1639	1.847	0.000	
4.021	663	1724	2.602	0.000	
4.026	1380	1776	1.287	0.000	
4.045	306	1546	5.059	0.000	
4.053	1001	1758	1.757	0.000	
4.061	1137	1804	1.586	0.000	
4.072	779	1773	2.275	0.000	
4.080	989	1896	1.917	0.000	
4.087	561	1905	3.396	0.000	
4.098	1956	2156	1.103	0.000	
4.106	1168	2044	1.750	0.000	
4.127	1049	1627	1.551	0.000	
4.142	587	1545	2.633	0.000	
4.148	1155	1572	1.361	0.000	
4.173	3682	2398	0.651	0.000	
4.189	1023	1738	1.700	0.000	
4.204	549	1627	2.961	0.000	
4.213	628	1658	2.641	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
4.221	1039	1830	1.761	0.000	
4.227	447	1814	4.058	0.000	
4.248	2703	2638	0.976	0.000	
4.256	1387	2945	2.123	0.000	
4.260	743	2988	4.022	0.000	
4.265	912	3081	3.378	0.000	
4.268	779	3140	4.031	0.000	
4.275	1736	3217	1.853	0.000	
4.289	2688	3495	1.300	0.000	
4.295	3466	3448	0.995	0.000	
4.322	1054	2680	2.543	0.000	4 C12
4.330	1686	2627	1.558	0.000	
4.358	1066	1974	1.852	0.000	
4.378	434	1758	4.054	0.000	
4.384	1324	1879	1.419	0.000	
4.403	860	1608	1.869	0.000	
4.414	457	1567	3.431	0.000	
4.421	1117	1675	1.499	0.000	
4.433	910	1538	1.690	0.000	
4.439	865	1534	1.774	0.000	
4.449	764	1302	1.705	0.000	
4.471	433	1123	2.593	0.000	
4.476	734	1135	1.546	0.000	
4.490	385	1005	2.610	0.000	
4.498	555	1186	2.137	0.000	
4.502	695	1166	1.677	0.000	
4.518	587	949	1.618	0.000	
4.526	316	925	2.924	0.000	
4.533	560	989	1.765	0.000	
4.543	469	1001	2.135	0.000	
4.548	222	916	4.130	0.000	
4.553	188	980	5.207	0.000	
4.558	255	1038	4.076	0.000	
4.568	652	1157	1.775	0.000	
4.573	338	1151	3.409	0.000	
4.580	487	1283	2.636	0.000	
4.596	3801	1950	0.513	0.000	
4.631	531	1429	2.692	0.000	
4.663	4548	3737	0.822	0.000	
4.667	2815	3822	1.358	0.000	
4.679	2199	3760	1.710	0.000	
4.688	1068	3585	3.356	0.000	
4.694	2166	3742	1.727	0.000	
4.723	372603	172476	0.463	0.055	
4.894	47034	21828	0.464	0.006	
4.956	80510	28154	0.350	0.011	
4.999	54273	16950	0.312	0.008	
5.068	1137	5713	5.027	0.000	
5.072	8415	5792	0.688	0.001	
5.105	4203	4316	1.027	0.000	5 C14
5.146	660	2685	4.070	0.000	
5.153	2524	2649	1.050	0.000	
5.170	1076	2437	2.265	0.000	
5.174	2371	2438	1.028	0.000	
5.201	1013	2011	1.986	0.000	
5.210	2064	2332	1.130	0.000	
5.224	1083	2304	2.127	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
5.228	2027	2354	1.162	0.000	
5.276	4673	2682	0.574	0.000	
5.322	195	844	4.328	0.000	
5.331	977	1203	1.231	0.000	
5.356	490	993	2.027	0.000	
5.361	814	1044	1.283	0.000	
5.382	115	387	3.351	0.000	
5.399	619	960	1.551	0.000	
5.406	402	1035	2.576	0.000	
5.410	378	1122	2.968	0.000	
5.423	1663	1555	0.935	0.000	
5.452	5951	5020	0.844	0.000	
5.501	290	797	2.753	0.000	
5.523	2317	2472	1.067	0.000	
5.538	5946	6823	1.147	0.000	
5.792	501855376	76456669	0.152	74.449	6 C16
5.807	79757019	82319946	1.032	11.775	
5.823	77929961	88539160	1.136	11.505	
5.962	75333	84828	1.126	0.011	
5.986	474748	124326	0.262	0.070	
6.070	17103	57180	3.343	0.002	
6.074	120761	57565	0.477	0.017	
6.113	90233	47140	0.522	0.013	
6.165	407438	218439	0.536	0.060	
6.263	944101	374166	0.396	0.139	
6.414	114839	39498	0.344	0.016	7 C18
6.464	53190	31177	0.586	0.007	
6.523	31509	25870	0.821	0.004	
6.551	4785	23963	5.008	0.000	
6.559	51194	25409	0.496	0.007	
6.590	21354	21666	1.015	0.003	
6.612	35061	21127	0.603	0.005	$ 8 o-terph
6.638	17712	19934	1.125	0.002	
6.672	22159	19651	0.887	0.003	
6.683	26846	19268	0.718	0.003	
6.708	5413	18142	3.351	0.000	
6.713	24941	18247	0.732	0.003	
6.747	50657	18478	0.365	0.007	
6.795	23973	17444	0.728	0.003	
6.814	28457	17895	0.629	0.004	
6.837	10746	15445	1.437	0.001	
6.871	29974	21406	0.714	0.004	
6.874	4287	21471	5.009	0.000	
6.882	20520	21675	1.056	0.003	
6.944	32864	17445	0.531	0.004	
6.978	9138	15347	1.679	0.001	
7.014	4130	13830	3.348	0.000	9 C20
7.025	12567	14083	1.121	0.001	
7.038	4952	14274	2.882	0.000	
7.044	6508	14578	2.240	0.000	
7.050	25344	14736	0.581	0.003	
7.099	5531	12365	2.236	0.000	
7.108	16440	12371	0.752	0.002	
7.129	9415	11275	1.198	0.001	
7.175	3589	10327	2.878	0.000	
7.182	7285	10474	1.438	0.001	
7.212	11252	10002	0.889	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.227	5193	9506	1.830	0.000	
7.237	5172	9476	1.832	0.000	
7.247	4652	9357	2.011	0.000	
7.254	3258	9369	2.875	0.000	
7.259	7003	9455	1.350	0.001	
7.272	5540	9252	1.670	0.000	
7.283	4511	9087	2.014	0.000	
7.296	5828	9031	1.550	0.000	
7.308	4850	8866	1.828	0.000	
7.318	3111	9014	2.897	0.000	
7.324	3191	9168	2.873	0.000	
7.328	2775	9325	3.360	0.000	
7.339	6190	9713	1.569	0.000	
7.344	2920	9761	3.343	0.000	
7.350	17091	9874	0.578	0.002	
7.379	7217	8616	1.194	0.001	
7.395	5430	8408	1.548	0.000	
7.404	2492	8342	3.348	0.000	
7.409	1666	8354	5.014	0.000	
7.415	2955	8500	2.877	0.000	
7.423	3887	8782	2.259	0.000	
7.465	28160	14253	0.506	0.004	
7.471	6466	14499	2.242	0.000	
7.480	6649	15111	2.273	0.000	
7.484	26595	15197	0.571	0.003	
7.514	13964	13621	0.975	0.002	
7.539	8118	12614	1.554	0.001	
7.553	10540	12495	1.185	0.001	
7.584	2820	11307	4.010	0.000	
7.590	4522	11429	2.527	0.000	10 C22
7.620	16634	10435	0.627	0.002	
7.653	6793	9783	1.440	0.001	
7.663	8606	9666	1.123	0.001	
7.675	2827	9464	3.347	0.000	
7.683	9373	9620	1.026	0.001	
7.699	3657	9205	2.517	0.000	
7.708	5071	9290	1.832	0.000	
7.713	10483	9274	0.885	0.001	
7.735	10686	9257	0.866	0.001	
7.752	4732	8664	1.831	0.000	
7.765	5624	8765	1.558	0.000	
7.773	5614	8686	1.547	0.000	
7.784	3375	8506	2.520	0.000	
7.793	2118	8517	4.021	0.000	
7.799	10086	8544	0.847	0.001	
7.817	7761	8325	1.073	0.001	
7.833	2415	8088	3.350	0.000	
7.838	2838	8160	2.875	0.000	
7.844	3649	8173	2.240	0.000	
7.858	2009	8069	4.017	0.000	
7.864	4482	8197	1.829	0.000	
7.871	3688	8223	2.230	0.000	
7.879	4875	8269	1.696	0.000	
7.889	2009	8061	4.013	0.000	
7.897	4080	8308	2.036	0.000	
7.916	17828	10103	0.567	0.002	
7.935	4052	9086	2.242	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.940	2229	8948	4.015	0.000	
7.945	5765	8973	1.556	0.000	
7.954	6458	8765	1.357	0.000	
7.976	2099	8428	4.016	0.000	
7.984	10213	8807	0.862	0.001	
7.999	4897	8282	1.691	0.000	
8.013	8782	8112	0.924	0.001	
8.028	5860	7858	1.341	0.000	
8.040	3929	7871	2.003	0.000	
8.054	9161	8146	0.889	0.001	
8.067	2701	7766	2.876	0.000	
8.074	3069	7702	2.510	0.000	
8.081	2694	7742	2.874	0.000	
8.088	2705	7793	2.881	0.000	
8.095	5842	7832	1.341	0.000	
8.104	5419	7841	1.447	0.000	
8.119	5740	7735	1.348	0.000	
8.134	4986	7768	1.558	0.000	
8.141	5893	8009	1.359	0.000	
8.159	9098	8027	0.882	0.001	11 C24
8.174	3156	7971	2.526	0.000	
8.185	2376	7967	3.353	0.000	
8.190	4739	7937	1.675	0.000	
8.202	5181	8028	1.549	0.000	
8.212	1994	8027	4.025	0.000	
8.223	6137	8270	1.348	0.000	
8.236	6864	8171	1.190	0.001	
8.248	2383	7986	3.351	0.000	
8.253	2405	8059	3.351	0.000	
8.259	5294	8207	1.550	0.000	
8.268	2866	8235	2.874	0.000	
8.280	6583	8312	1.263	0.000	
8.289	4538	8296	1.828	0.000	
8.295	2060	8300	4.029	0.000	
8.300	2063	8291	4.020	0.000	
8.313	7062	8400	1.189	0.001	
8.318	1667	8375	5.023	0.000	
8.332	11362	9100	0.801	0.001	
8.343	4357	8741	2.006	0.000	
8.358	1267	8458	6.676	0.000	
8.363	2991	8621	2.882	0.000	
8.371	3980	8983	2.257	0.000	
8.379	6330	9083	1.435	0.000	
8.385	3111	8963	2.881	0.000	
8.393	6706	9050	1.349	0.000	
8.404	4903	8943	1.824	0.000	
8.417	8437	8972	1.063	0.001	
8.438	7166	9103	1.270	0.001	
8.443	3211	9227	2.873	0.000	12 C25
8.450	3688	9295	2.521	0.000	
8.455	2313	9276	4.010	0.000	
8.475	30054	13714	0.456	0.004	
8.504	5760	9733	1.690	0.000	
8.519	2799	9376	3.350	0.000	
8.529	4766	9710	2.037	0.000	
8.537	4875	9815	2.013	0.000	
8.543	8411	9973	1.186	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
8.555	2969	9916	3.340	0.000	
8.560	3974	9987	2.513	0.000	
8.568	2483	9997	4.026	0.000	
8.572	5007	10043	2.006	0.000	
8.591	14074	10725	0.762	0.002	
8.602	2648	10665	4.028	0.000	
8.606	2159	10862	5.032	0.000	
8.609	2183	10952	5.017	0.000	
8.633	7361	10561	1.435	0.001	
8.647	6774	10495	1.549	0.001	
8.658	2596	10420	4.014	0.000	
8.663	4723	10573	2.239	0.000	
8.669	3156	10589	3.355	0.000	
8.687	15405	11334	0.736	0.002	
8.699	6103	11158	1.828	0.000	
8.707	2223	11136	5.009	0.000	13 C26
8.730	28697	12536	0.437	0.004	
8.754	8658	11553	1.334	0.001	
8.763	2896	11612	4.010	0.000	
8.780	15029	12352	0.822	0.002	
8.788	1833	12243	6.680	0.000	
8.798	11854	12679	1.070	0.001	
8.806	1873	12509	6.677	0.000	
8.809	3133	12565	4.011	0.000	
8.813	2506	12550	5.008	0.000	
8.819	7588	12757	1.681	0.001	
8.829	4418	12679	2.870	0.000	
8.835	6988	12762	1.826	0.001	
8.848	13711	13258	0.967	0.002	
8.872	26625	13656	0.513	0.003	
8.894	4575	13127	2.869	0.000	
8.898	2631	13188	5.013	0.000	
8.902	5918	13262	2.241	0.000	
8.914	8577	13313	1.552	0.001	
8.922	4011	13433	3.349	0.000	
8.926	4724	13546	2.867	0.000	
8.933	6787	13651	2.011	0.001	
8.946	9614	13923	1.448	0.001	
8.951	6274	14004	2.232	0.000	
8.960	5592	14036	2.510	0.000	
8.966	3513	14090	4.011	0.000	
8.969	2829	14171	5.009	0.000	
8.973	4976	14233	2.860	0.000	
8.980	4289	14365	3.350	0.000	
8.996	27708	16441	0.593	0.004	
9.013	8129	14847	1.827	0.001	
9.025	8129	14840	1.826	0.001	
9.036	7503	15229	2.030	0.001	
9.040	4559	15225	3.340	0.000	
9.057	14920	16251	1.089	0.002	
9.067	9915	16831	1.698	0.001	
9.076	8535	17331	2.031	0.001	
9.081	5250	17596	3.352	0.000	
9.084	10558	17675	1.674	0.001	
9.095	4386	17601	4.013	0.000	
9.111	30564	19262	0.630	0.004	
9.128	8346	18722	2.243	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.139	15095	18986	1.258	0.002	
9.149	6655	19050	2.862	0.000	
9.158	23240	19719	0.848	0.003	
9.171	1903	19042	10.005	0.000	
9.175	4773	19156	4.013	0.000	
9.187	23630	19927	0.843	0.003	
9.199	4925	19763	4.013	0.000	
9.208	14115	20394	1.445	0.002	
9.219	12303	20691	1.682	0.001	
9.226	7266	20831	2.867	0.001	
9.233	15622	21000	1.344	0.002	14 C28
9.247	9280	20714	2.232	0.001	
9.262	45057	27849	0.618	0.006	
9.281	22651	23200	1.024	0.003	
9.304	13489	22820	1.692	0.001	
9.307	18038	22862	1.267	0.002	
9.328	8656	21778	2.516	0.001	
9.334	8635	21650	2.507	0.001	
9.343	16240	21738	1.339	0.002	
9.354	5409	21709	4.013	0.000	
9.367	16481	22234	1.349	0.002	
9.370	6683	22346	3.344	0.000	
9.382	14775	23166	1.568	0.002	
9.390	11679	23531	2.015	0.001	
9.394	12888	23584	1.830	0.001	
9.408	18752	23645	1.261	0.002	
9.416	4675	23396	5.004	0.000	
9.428	25138	24392	0.970	0.003	
9.438	20233	24095	1.191	0.002	
9.468	67429	26696	0.396	0.009	
9.496	8413	24122	2.867	0.001	
9.507	12049	24259	2.013	0.001	
9.527	36362	25771	0.709	0.005	
9.538	12891	25911	2.010	0.001	
9.543	6452	25853	4.007	0.000	
9.551	10420	26202	2.515	0.001	
9.557	29750	26593	0.894	0.004	
9.574	6252	25071	4.010	0.000	
9.593	29143	27655	0.949	0.004	
9.599	40783	27905	0.684	0.006	
9.620	13159	26364	2.004	0.001	
9.632	17259	26799	1.553	0.002	
9.640	13210	26592	2.013	0.001	
9.664	35362	28170	0.797	0.005	
9.672	27890	28134	1.009	0.004	
9.696	26737	28634	1.071	0.003	
9.711	53475	30848	0.577	0.007	
9.745	33266	29504	0.887	0.004	$ 15 Triacon Surr
9.752	7348	29501	4.015	0.001	
9.756	20542	29565	1.439	0.003	
9.768	7255	29059	4.005	0.001	
9.773	7275	29173	4.010	0.001	
9.785	31543	30611	0.970	0.004	
9.803	46804	32832	0.701	0.006	
9.821	10456	30060	2.875	0.001	
9.833	30772	31156	1.012	0.004	
9.860	77784	33514	0.431	0.011	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.881	12779	32069	2.510	0.001	
9.892	14531	32668	2.248	0.002	
9.896	8201	32902	4.012	0.001	
9.908	23357	33882	1.451	0.003	
9.912	27050	34095	1.260	0.003	
9.939	14585	32570	2.233	0.002	
9.951	23032	33095	1.437	0.003	
9.956	11596	33292	2.871	0.001	
9.966	16544	33271	2.011	0.002	
9.971	11660	33391	2.864	0.001	
9.975	10051	33617	3.345	0.001	
9.983	15209	33983	2.234	0.002	
9.988	15177	33830	2.229	0.002	
9.996	10128	33907	3.348	0.001	
10.018	43348	35629	0.822	0.006	
10.021	7133	35693	5.004	0.001	
10.025	8960	35988	4.016	0.001	
10.034	42064	36944	0.878	0.006	
10.063	65447	38699	0.591	0.009	
10.077	7375	36906	5.004	0.001	
10.083	16743	37428	2.235	0.002	
10.095	34467	38665	1.122	0.005	
10.118	90921	40621	0.447	0.013	
10.151	37738	38047	1.008	0.005	
10.158	11383	38037	3.342	0.001	
10.168	36074	38274	1.061	0.005	
10.181	15072	37809	2.509	0.002	16 C32
10.185	5655	37746	6.675	0.000	
10.198	43905	38471	0.876	0.006	
10.208	24771	38177	1.541	0.003	
10.218	19031	38113	2.003	0.002	
10.228	13353	38279	2.867	0.001	
10.237	21225	38826	1.829	0.003	
10.243	30946	38929	1.258	0.004	
10.266	43064	39733	0.923	0.006	
10.275	11912	39784	3.340	0.001	
10.278	19932	39886	2.001	0.002	
10.293	46366	40725	0.878	0.006	
10.318	46465	41024	0.883	0.006	
10.328	24720	41353	1.673	0.003	
10.334	10308	41278	4.005	0.001	
10.343	29100	41866	1.439	0.004	
10.354	22822	41695	1.827	0.003	
10.360	16568	41490	2.504	0.002	
10.376	31388	42321	1.348	0.004	
10.384	36478	43119	1.182	0.005	
10.393	21427	43144	2.014	0.003	
10.416	82339	44731	0.543	0.012	
10.434	23173	42257	1.824	0.003	
10.455	42801	43684	1.021	0.006	
10.459	19648	44004	2.240	0.002	
10.469	19632	43883	2.235	0.002	
10.492	56113	45807	0.816	0.008	
10.497	20626	45915	2.226	0.003	
10.503	27439	45837	1.671	0.004	
10.513	31833	45842	1.440	0.004	
10.523	6773	45190	6.672	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
10.529	22697	45513	2.005	0.003	
10.543	39087	46432	1.188	0.005	
10.552	16284	46719	2.869	0.002	
10.558	18796	47158	2.509	0.002	
10.576	69878	48769	0.698	0.010	
10.586	12085	48384	4.004	0.001	
10.592	21757	48469	2.228	0.003	
10.609	46960	50482	1.075	0.006	
10.616	40486	50812	1.255	0.005	17 C34
10.628	52392	50284	0.960	0.007	
10.665	99744	52644	0.528	0.014	
10.680	20832	52264	2.509	0.003	
10.699	126137	55939	0.443	0.018	
10.723	18258	52316	2.865	0.002	
10.733	65550	52928	0.807	0.009	
10.751	49102	51903	1.057	0.007	
10.765	10288	51490	5.005	0.001	
10.777	73220	52877	0.722	0.010	
10.791	15621	52150	3.338	0.002	
10.799	46819	52190	1.115	0.006	
10.817	52000	52328	1.006	0.007	
10.828	13014	52167	4.008	0.001	
10.833	18275	52280	2.861	0.002	
10.838	67284	52271	0.777	0.009	
10.860	15395	51401	3.339	0.002	
10.867	15366	51252	3.335	0.002	
10.874	25712	51608	2.007	0.003	
10.885	59363	52064	0.877	0.008	
10.901	33199	51247	1.544	0.004	
10.911	35859	51446	1.435	0.005	
10.925	15150	50526	3.335	0.002	
10.936	27761	50508	1.819	0.004	
10.954	40634	51235	1.261	0.005	
10.958	17973	51428	2.861	0.002	
10.982	101216	54997	0.543	0.014	
10.999	80380	54264	0.675	0.011	
11.022	15822	52869	3.342	0.002	
11.029	23878	53171	2.227	0.003	
11.032	23908	53219	2.226	0.003	
11.044	39793	53228	1.338	0.005	
11.053	13218	52959	4.007	0.001	19 C36
11.057	26491	53088	2.004	0.003	
11.069	47933	53454	1.115	0.007	
11.079	78088	52997	0.679	0.011	
11.132	4853	48537	10.002	0.000	
11.138	21933	48845	2.227	0.003	
11.148	46678	49317	1.057	0.006	
11.158	12248	49060	4.006	0.001	
11.164	14711	49102	3.338	0.002	
11.179	64473	49939	0.775	0.009	
11.192	19751	49439	2.503	0.002	
11.197	14848	49541	3.337	0.002	
11.202	17336	49566	2.859	0.002	
11.206	12400	49639	4.003	0.001	
11.212	56808	49881	0.878	0.008	
11.230	26830	48794	1.819	0.003	
11.263	19014	47590	2.503	0.002	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
11.267	11927	47790	4.007	0.001	
11.285	66432	50042	0.753	0.009	
11.308	17214	49235	2.860	0.002	
11.312	19684	49285	2.504	0.002	
11.322	19740	49570	2.511	0.002	
11.331	27467	50208	1.828	0.004	
11.334	12565	50301	4.003	0.001	
11.338	17617	50367	2.859	0.002	
11.356	50450	50688	1.005	0.007	
11.383	31641	48774	1.541	0.004	
11.392	14562	48589	3.337	0.002	
11.398	14566	48593	3.336	0.002	
11.405	21947	48858	2.226	0.003	
11.418	36961	49602	1.342	0.005	
11.428	52174	49838	0.955	0.007	
11.438	46900	49605	1.058	0.006	
11.456	66003	49218	0.746	0.009	
11.481	84312	48818	0.579	0.012	
11.518	39837	46996	1.180	0.005	
11.533	55836	46822	0.839	0.008	20 C38
11.560	30101	46465	1.544	0.004	
11.568	20916	46512	2.224	0.003	
11.573	11637	46596	4.004	0.001	
11.579	23274	46598	2.002	0.003	
11.586	13953	46531	3.335	0.002	
11.591	9318	46631	5.004	0.001	
11.623	97892	48831	0.499	0.014	
11.631	17107	48984	2.863	0.002	
11.638	22090	49260	2.230	0.003	
11.642	32050	49351	1.540	0.004	
11.669	95446	50981	0.534	0.014	
11.685	95822	49865	0.520	0.014	
11.788	8918	44609	5.002	0.001	
11.791	35704	44768	1.254	0.005	
11.804	11082	44350	4.002	0.001	
11.813	22172	44403	2.003	0.003	
11.823	19993	44543	2.228	0.002	
11.829	13395	44754	3.341	0.001	
11.837	20184	44981	2.228	0.002	
11.852	26933	44942	1.669	0.003	
11.866	36041	45224	1.255	0.005	
11.877	15835	45355	2.864	0.002	
11.883	18222	45726	2.509	0.002	
11.889	15985	45741	2.861	0.002	
11.896	20679	46117	2.230	0.003	
11.905	23259	46896	2.016	0.003	
11.929	70146	49826	0.710	0.010	
11.936	52288	50085	0.958	0.007	
11.951	14787	49369	3.339	0.002	
11.957	17313	49595	2.865	0.002	
11.961	32199	49647	1.542	0.004	
11.971	19578	49063	2.506	0.002	
11.980	34244	49065	1.433	0.005	
12.019	96987	51133	0.527	0.014	
12.025	48685	51499	1.058	0.007	
12.053	38386	51386	1.339	0.005	
12.062	38575	51549	1.336	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
12.070	17923	51300	2.862	0.002	
12.078	45780	51141	1.117	0.006	
12.105	31495	48817	1.550	0.004	
12.118	85510	48295	0.565	0.012	
12.148	55474	46657	0.841	0.008	21 C40
12.172	34299	45899	1.338	0.005	
12.181	18286	45754	2.502	0.002	
12.188	20565	45727	2.223	0.003	
12.198	29701	45787	1.542	0.004	
12.212	11377	45530	4.002	0.001	
12.218	29576	45566	1.541	0.004	
12.237	41054	45750	1.114	0.006	
12.243	13695	45701	3.337	0.002	
12.253	27528	46122	1.675	0.004	
12.260	16149	46201	2.861	0.002	
12.272	32473	46571	1.434	0.004	
12.347	231342	54259	0.235	0.034	
12.355	96470	54322	0.563	0.014	
12.383	13155	52687	4.005	0.001	
12.389	52817	52930	1.002	0.007	
12.434	117936	55204	0.468	0.017	
12.440	19323	55283	2.861	0.002	
12.448	22049	55156	2.502	0.003	
12.460	127044	56114	0.442	0.018	
12.500	63536	55700	0.877	0.009	
12.519	44746	56237	1.257	0.006	
12.523	16928	56556	3.341	0.002	
12.528	14154	56666	4.003	0.002	
12.532	14154	56644	4.002	0.002	
12.538	25607	57089	2.229	0.003	
12.543	31284	57010	1.822	0.004	
12.560	76588	57084	0.745	0.011	
12.574	22463	56167	2.500	0.003	
12.583	192414	56305	0.293	0.028	
12.668	201456	54098	0.269	0.029	
12.722	63529	49368	0.777	0.009	
12.744	14574	48683	3.340	0.002	
12.757	68233	49046	0.719	0.010	
12.777	29106	48653	1.672	0.004	
12.802	69072	49884	0.722	0.010	
12.805	19947	49915	2.502	0.002	
12.813	12457	49907	4.006	0.001	
12.826	42860	50672	1.182	0.006	
12.830	15192	50711	3.338	0.002	
12.835	63121	50727	0.804	0.009	
12.856	30109	50299	1.671	0.004	
12.871	12459	49875	4.003	0.001	
12.876	24950	49913	2.001	0.003	
12.883	12458	49860	4.002	0.001	
12.892	24999	50091	2.004	0.003	
12.904	37682	50442	1.339	0.005	
12.918	60965	51059	0.838	0.009	
12.929	15268	50972	3.338	0.002	
12.950	101236	52476	0.518	0.014	
12.991	32619	50285	1.542	0.004	
13.030	23826	47690	2.002	0.003	
13.047	49429	47410	0.959	0.007	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.072	11668	46709	4.003	0.001	
13.077	14056	46964	3.341	0.002	
13.083	21201	47214	2.227	0.003	
13.092	45034	47490	1.055	0.006	
13.103	33139	47401	1.430	0.004	
13.119	58622	47300	0.807	0.008	
13.136	61979	46406	0.749	0.009	
13.163	36232	45399	1.253	0.005	
13.172	13552	45219	3.337	0.002	
13.178	13550	45211	3.337	0.002	
13.183	13581	45318	3.337	0.002	
13.188	15867	45365	2.859	0.002	
13.193	11350	45433	4.003	0.001	
13.206	54879	45909	0.837	0.008	
13.233	74220	46899	0.632	0.010	
13.246	18724	46923	2.506	0.002	
13.250	14089	47028	3.338	0.002	
13.254	9392	46999	5.004	0.001	
13.261	35241	47103	1.337	0.005	
13.270	21093	46884	2.223	0.003	
13.278	16404	46889	2.858	0.002	
13.284	28108	46937	1.670	0.004	
13.309	27777	46575	1.677	0.004	
13.313	11643	46617	4.004	0.001	
13.323	30391	46938	1.544	0.004	
13.337	49696	47554	0.957	0.007	
13.345	11906	47686	4.005	0.001	
13.352	21499	47921	2.229	0.003	
13.358	14416	48133	3.339	0.002	
13.366	24163	48487	2.007	0.003	
13.391	108474	49842	0.459	0.016	
13.411	39818	49922	1.254	0.005	
13.421	140245	49882	0.356	0.020	
13.468	75433	46221	0.613	0.011	
13.519	59701	44435	0.744	0.008	
13.538	26345	44021	1.671	0.003	
13.553	17475	43727	2.502	0.002	
13.559	19699	43828	2.225	0.002	
13.566	15324	43832	2.860	0.002	
13.574	28519	43956	1.541	0.004	
13.585	21950	43943	2.002	0.003	
13.595	26497	44341	1.673	0.003	
13.603	22230	44574	2.005	0.003	
13.608	11135	44585	4.004	0.001	
13.633	100703	46371	0.460	0.014	
13.650	25255	45974	1.820	0.003	
13.663	20511	45675	2.227	0.003	
13.670	15945	45584	2.859	0.002	
13.677	40973	45642	1.114	0.006	
13.688	4544	45448	10.002	0.000	
13.693	29520	45508	1.542	0.004	
13.718	24720	44995	1.820	0.003	
13.727	11216	44890	4.002	0.001	
13.735	29185	45025	1.543	0.004	
13.752	17874	44782	2.505	0.002	
13.767	35874	45020	1.255	0.005	
13.775	36036	45104	1.252	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.785	11226	44939	4.003	0.001	
13.790	47016	44953	0.956	0.006	
13.813	11118	44516	4.004	0.001	
13.818	37641	44507	1.182	0.005	
13.832	15424	44192	2.865	0.002	
13.838	17564	43967	2.503	0.002	
13.844	26339	43892	1.666	0.003	
13.855	30567	43821	1.434	0.004	
13.865	23854	43526	1.825	0.003	
13.882	28266	43639	1.544	0.004	
13.886	30418	43629	1.434	0.004	
13.901	34702	43472	1.253	0.005	
13.920	48162	44005	0.914	0.007	
13.928	17577	43956	2.501	0.002	
13.941	15410	44084	2.861	0.002	
13.946	11045	44251	4.006	0.001	
13.949	24369	44341	1.820	0.003	
13.959	22103	44264	2.003	0.003	
13.967	22088	44195	2.001	0.003	
13.976	33207	44336	1.335	0.004	18 Filter Peak
13.998	24195	44018	1.819	0.003	
14.007	15335	43888	2.862	0.002	
14.014	17519	43863	2.504	0.002	
14.019	54335	43870	0.807	0.008	
14.046	10722	42915	4.003	0.001	
14.052	19305	42955	2.225	0.002	
14.058	8568	42864	5.003	0.001	
14.067	38739	43159	1.114	0.005	
14.077	15012	42931	2.860	0.002	
14.083	25753	42977	1.669	0.003	
14.102	25682	42913	1.671	0.003	
14.108	19267	42865	2.225	0.002	
14.116	12834	42815	3.336	0.001	
14.126	25874	43369	1.676	0.003	
14.133	56339	43595	0.774	0.008	
14.161	32503	43582	1.341	0.004	
14.165	10909	43696	4.006	0.001	
14.170	15313	43822	2.862	0.002	
14.175	10960	43911	4.007	0.001	
14.178	13176	43945	3.335	0.001	
14.183	19785	43976	2.223	0.002	
14.191	8796	44018	5.005	0.001	
14.197	17636	44177	2.505	0.002	
14.208	28815	44459	1.543	0.004	
14.219	8873	44379	5.002	0.001	
14.223	13318	44445	3.337	0.001	
14.229	28860	44456	1.540	0.004	
14.247	15436	44194	2.863	0.002	
14.260	37147	43758	1.178	0.005	
14.274	45685	43705	0.957	0.006	
	677340272	268782821		100.000	

Total unknown % area = 25.478

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
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CERTIFICATE OF ANALYSIS

2-Chloronaphthalene

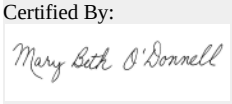
CATALOG NUMBER	N-10323-100MG
LOT NUMBER	10816400
DATE CERTIFIED	05/22/18
EXPIRATION DATE	05/31/24
CAS NUMBER	91-58-7
MOLECULAR FORMULA	C10H7Cl
MOLECULAR WEIGHT	162.62
STORAGE	Store at room temperature (20 - 25 °C).
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.

I010152
2-Chloronaphthalene NEAT
Expires 12/31/2079
Prepared By Joshua Rains 10/29/2020

Analytical Test	Value
% PURITY (GC/FID)	99.5

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:



Mary Beth O'Donnell
CSM/TC

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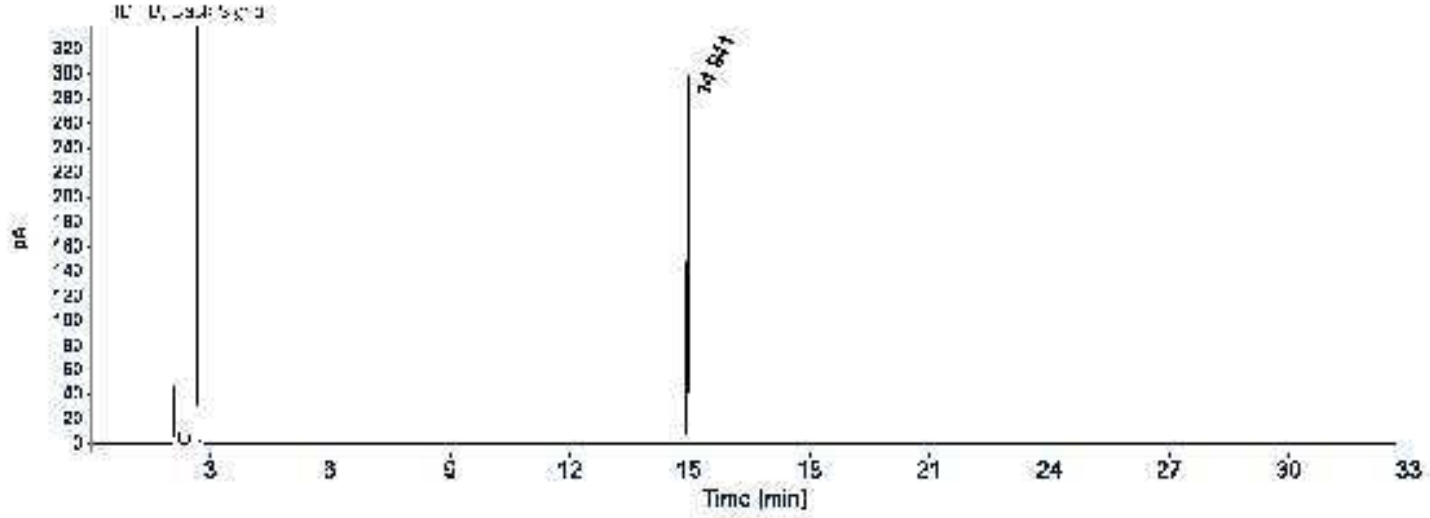
CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\Chem32\1\Data\2018 Data\0518\2-Chloronaphtthalene.D
Sample name: 2-Chloronaphthalene

Instrument: GC3
Injection date: 5/22/2018 1:12:52 PM
Acq. method: REAR_SCREEN.M
Location: 209
Injection volume: 1.0uL
Col Type: pn# 7HG-G006-17-C **Diameter** 250.000 **Length** 30.000



Signal: FID1 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
14.941	BB	0.0410	808.8124	308.5675	100.0000
		Sum	808.8124		

Supelco®

www.sigmaaldrich.com

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAC9813
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9813.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005199
SVOA-ABN BASE STOCK-200-800ug/ml
Expires 5/31/2023
Prepared By Jianqing Zhou 5/18/2021

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE CAS# 91-94-1	802	µg/mL	99.9	LC27068
2,4-DINITROTOLUENE CAS# 121-14-2	802	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	801	µg/mL	99.9	LB79891
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	802	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	801	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	201	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	803	µg/mL	100.0	10126MG
4-CHLOROANILINE CAS# 106-47-8	803	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	802	µg/mL	99.9	LC05068
3-NITROANILINE CAS# 99-09-2	802	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	802	µg/mL	99.9	LC11400
PYRIDINE (LOW WATER) CAS# 110-86-1	802	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 12-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9813.01	12-May-2021	Original Release Date

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Certificate of Composition - Analytical Standard

ACID STOC"

Product no.: 22523046
Lot no.: LRAC9812
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9812.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005200
SVOA-ABN ACID STOCK-200-800ug/ml
Solvent / Lot: DCM
Prep: 5/18/2021 by JZ
Exp: 5/31/2023
Location:

JZ 5/18/21

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2,4-DIMETHYLPHENOL CAS# 105-67-9	802	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	802	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	802	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1806	µg/mL	75.9	MKBP5833V
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	803	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	801	µg/mL	99.9	JS00013
4-NITROPHENOL CAS# 100-02-7	801	µg/mL	99.9	LC10889
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1804	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	803	µg/mL	98.7	MKCK8156
BENZOIC ACID CAS# 65-85-0	1805	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

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Certificate of Analysis - Certified Reference Material

PAHs by HPLC

Product no.: SQC017-40G
Lot no.: LRAC9745
Expiry Date: April 2024
Manufacturing Date: April 2021
Storage: REFRIGERATE
Solvent/Matrix: SOIL
Certificate version: LRAC9745.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Certified Values:

Analyte	*Units*	*Certified Value*
Dibenzo(a,h)anthracene	µg/Kg	177 ± 21
Acenaphthylene	µg/Kg	609 ± 49
Anthracene	µg/Kg	239 ± 22
Benzo(a)anthracene	µg/Kg	109 ± 8
Benzo(a)pyrene	µg/Kg	65.5 ± 5.2
Benzo(b)fluoranthene	µg/Kg	295 ± 20
Benzo(g,h,i)perylene	µg/Kg	176 ± 17
Naphthalene	µg/Kg	566 ± 47
Chrysene	µg/Kg	210 ± 19
Benzo(b+k)fluoranthene	µg/Kg	662 ± 81
Fluoranthene	µg/Kg	273 ± 17
Fluorene	µg/Kg	326 ± 20
Indeno(1,2,3-cd) pyrene	µg/Kg	208 ± 23
Phenanthrene	µg/Kg	220 ± 13
Pyrene	µg/Kg	380 ± 25
Acenaphthene	µg/Kg	459 ± 33
Benzo(k)fluoranthene	µg/Kg	259 ± 23

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Informational Values:

Analyte	*Units*	*Suggested Acceptance Windows*	*Standard Deviation*
Dibenzo(a,h)anthracene	µg/Kg	0.00 to 379	67.4
Acenaphthylene	µg/Kg	140 to 1078	156
Anthracene	µg/Kg	26.0 to 452	71.1
Benzo(a)anthracene	µg/Kg	33.4 to 185	25.3
Benzo(a)pyrene	µg/Kg	15.6 to 115	16.6
Benzo(b)fluoranthene	µg/Kg	98.7 to 492	65.6
Benzo(g,h,i)perylene	µg/Kg	16.5 to 336	53.3
Naphthalene	µg/Kg	99.8 to 1032	155
Chrysene	µg/Kg	27.9 to 391	60.6
Benzo(b+k)fluoranthene	µg/Kg	265 to 1059	132
Fluoranthene	µg/Kg	113 to 433	53.3
Fluorene	µg/Kg	135 to 517	63.6
Indeno(1,2,3-cd) pyrene	µg/Kg	0.00 to 432	74.5
Phenanthrene	µg/Kg	92.8 to 346	42.2
Pyrene	µg/Kg	138 to 622	80.7
Acenaphthene	µg/Kg	154 to 764	102
Benzo(k)fluoranthene	µg/Kg	36.2 to 482	74.3

Additional Information:

DESCRIPTION

This product consist of a 4 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested show homogeneity.

Four samples have been provided for your convenience (multiple methods, multiple analysts, etc.)

The soil has been chemically stabilized with 1 mL of acetone to minimize degradation of the sample.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Note: Sample extracts and calibration solutions should be in the same solvent.

All values are based on a wet weight basis, do not correct for moisture.

Assume a 10g sample size for all calculations.

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: Package of 4 units of 10 g in amber jar

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 19-Apr-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9745.01	19-Apr-2021	Original Release Date

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Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: **70476**
Lot Number: 092220
Description: Benzo(j)fluoranthene

Expiration Date: 092225
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 23060

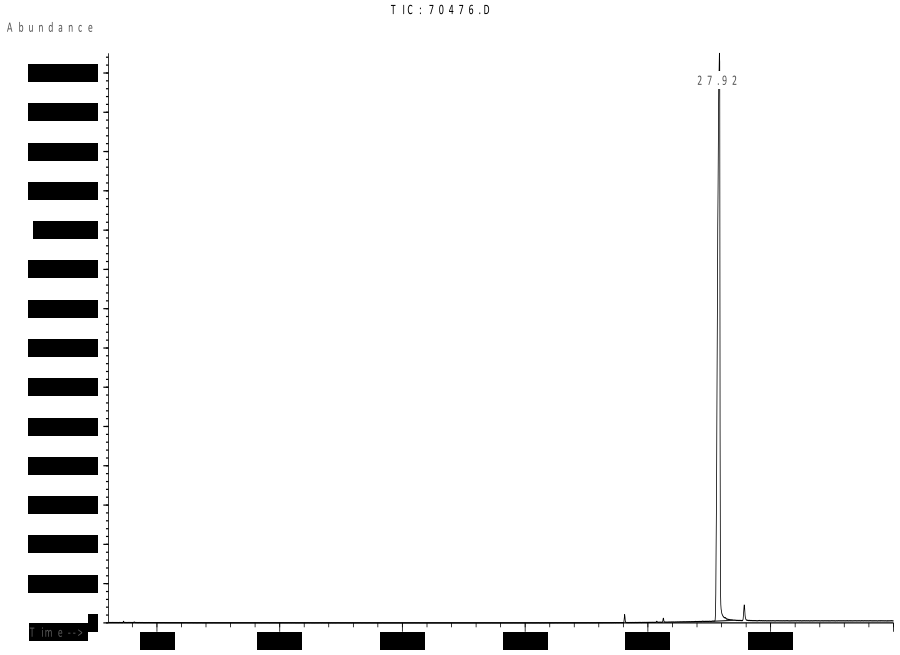
Solvent(s): **Lot#**
Methylene chloride 104929

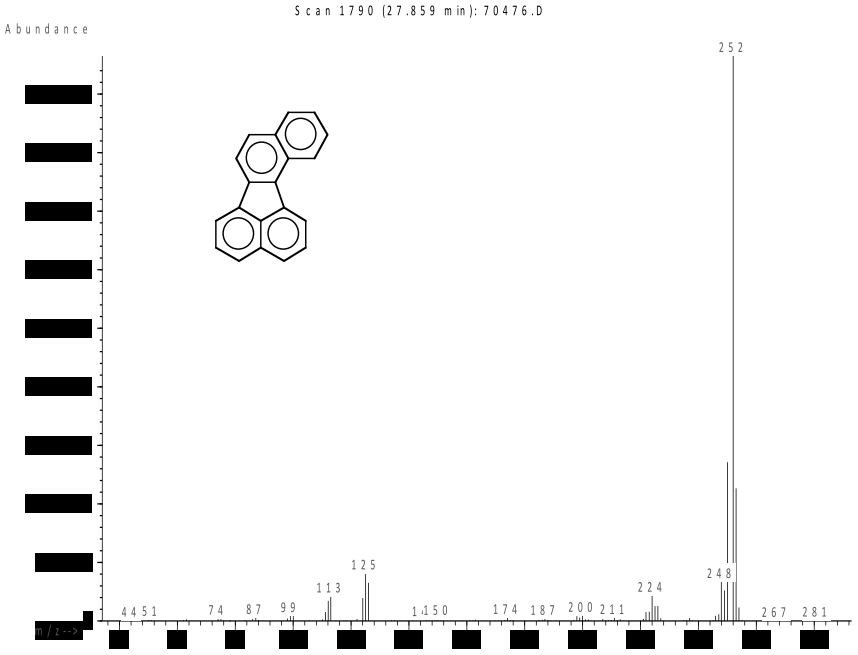
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty

	092220
Formulated By: Benson Chan	DATE
	092220
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Benzo(j)fluoranthene	476	3-CSZ-153-20	1000	98.1	0.2	0.02547	0.02552	1001.8	5.7	205-82-3	0.2mg/m3	N/A

Method GC8MSD1M: Column:SBB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9 min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 290°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Candice Warren.





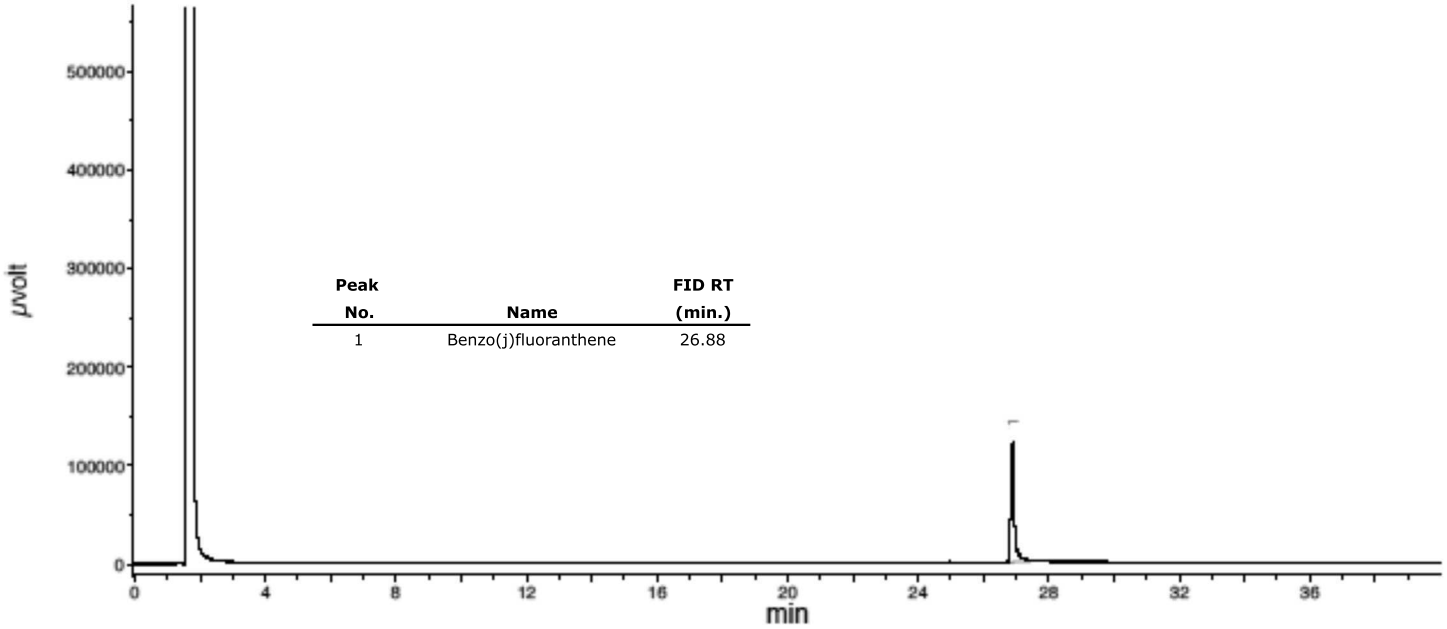
- **The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.**
- **Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).**
- **Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.**
- **All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.**
- **Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).**

Run 31, "P70476 L092220 [1000µg/mL in MeCl2]"

Run Length: 40.00 min, 23999 points at 10 points/second.
Created: Thu, Sep 24, 2020 at 2:33:43 AM.
Sampled: Sequence "092120-GC9M2", Method "GC9-M2".
Analyzed using Method "GC9-M2".

Comments

GC9-M2 Analysis by Melissa Stonier
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates; Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) =360 mLOven Temp 1 = 50°C (1 min).
Rate = 10°C/min, Oven Temp 2 = 300°C (14 min), Total Run Time = 40 Minutes. Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = eDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 uL, Range = 3



Peak No.	Name	FID RT (min.)
1	Benzo(j)fluoranthene	26.88

Agilent

Certificate of Analysis

J008074

SVOA PAH STD 2000ug/ml
Expires 6/30/2023
Prepared By Joshua Rains 8/5/2021

Product Name: PAH Standard

Product Number: US-106N-1

Lot Number: 0006540449

Lot Issue Date: 11-Jun-2020

Expiration Date: 30-Jun-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
acenaphthene	000083-32-9	RM10879	2008 ± 10 µg/mL
acenaphthylene	000208-96-8	RM10891	2003 ± 10 µg/mL
anthracene	000120-12-7	RM14212	2006 ± 10 µg/mL
benz[a]anthracene	000056-55-3	RM16072	2006 ± 10 µg/mL
benzo[b]fluoranthene	000205-99-2	RM14571	2005 ± 10 µg/mL
benzo[k]fluoranthene	000207-08-9	RM14321	2009 ± 10 µg/mL
benzo[ghi]perylene	000191-24-2	RM15761	2008 ± 10 µg/mL
benzo[a]pyrene	000050-32-8	RM12669	2009 ± 10 µg/mL
chrysene	000218-01-9	RM12260	2009 ± 10 µg/mL
dibenz[a,h]anthracene	000053-70-3	RM06786	2009 ± 10 µg/mL
fluoranthene	000206-44-0	RM12277	2004 ± 10 µg/mL
fluorene	000086-73-7	RM09441	2009 ± 10 µg/mL
indeno[1,2,3-cd]pyrene	000193-39-5	RM14192	2009 ± 10 µg/mL
naphthalene	000091-20-3	NT00970	2008 ± 10 µg/mL
phenanthrene	000085-01-8	RM10495	2009 ± 10 µg/mL
pyrene	000129-00-0	RM03479	2008 ± 10 µg/mL

Matrix: methylene chloride/benzene (1:1)

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 17025 Cert No. AT-1937

Certificate of Analysis

Product Number: US-106N-1 **Lot Number:** 0006540449

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ISO 17025 Cert
No. AT-1937

Certificate of Analysis

Produced by Phenova
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Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16062
Certification Date: November 19, 2020
Expiration Date: November 30, 2030

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 2.740%
3,3'-Dichlorobenzidine	91-94-1	2000	± 3.229%

J008310
Benzidines std @2000ug/ml
Expires 11/30/2030
Prepared By Van Spohn 8/12/2021

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018_us

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Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

Sigma-Aldrich

Product Name:	2,4,6-Tribromophenol
Product Description:	99%
Product Brand:	Sigma-Aldrich
Product Number:	137715
Molecular Weight:	330.80
Molecular Formula:	$Br_3C_6H_2OH$
CAS Number:	118-79-6

TEST	SPECIFICATION	LOT 05110PD RESULTS
APPEARANCE:	WHITE TO OFF-WHITE TO PINK FLAKES, CHUNKS,	PINK BEADS
INFRARED SPECTRUM:		CONFORMS TO STRUCTURE.
GAS LIQUID:	98.5% (MINIMUM)	99.9%
QUALITY CONTROL:		NOVEMBER 2005

Barbara Rajzer

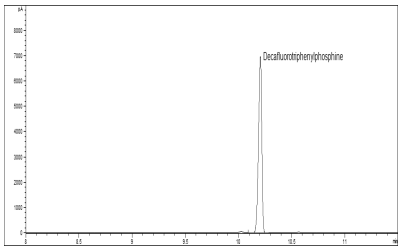
Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

J010541
SVOA-Tribromophenol-NEAT
Solvent / Lot: 05110PD
Prep: 10/1/2021 by VS
Exp: 3/30/2040
Location: voa freezer

Certificate of Analysis - Certified Reference Material

Decafluorotriphenylphosphine solution

Product no.: 48724-U
Lot no.: LRAD0628
Expiry Date: October 2024
Manufacturing Date: September 2021
Storage: ROOM TEMPERATURE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0628.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

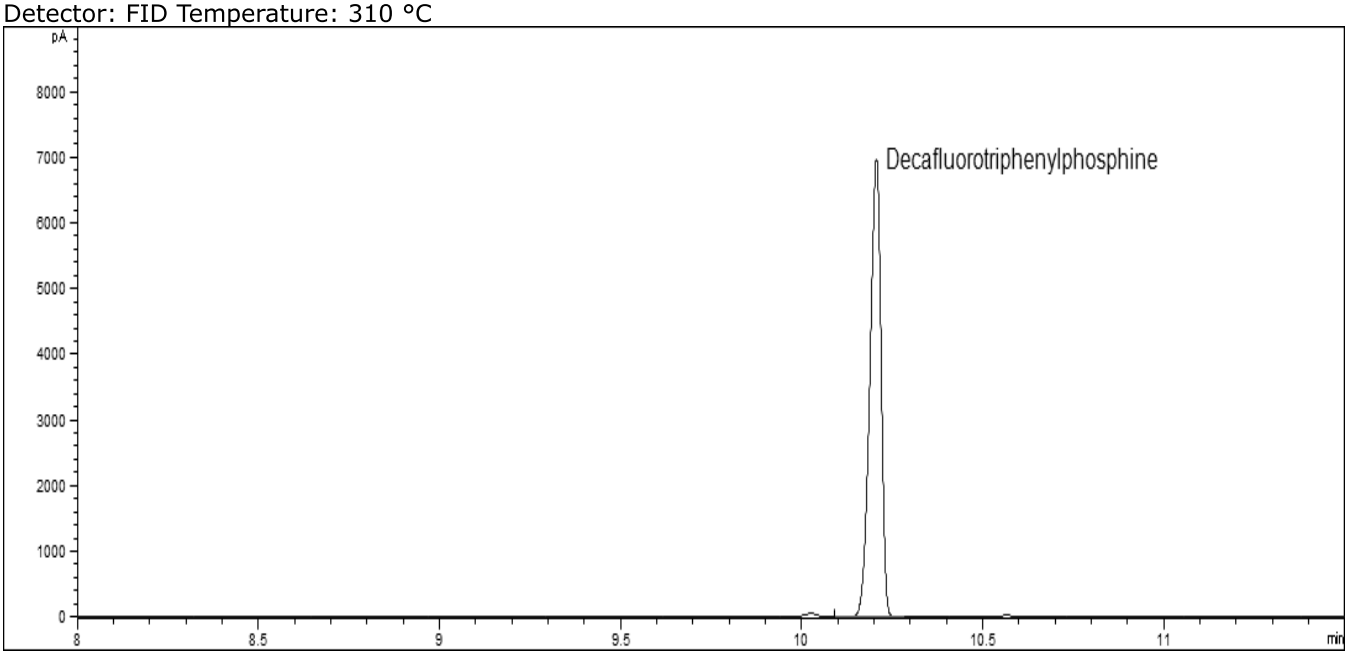


Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
DFTPP CAS# 5074-71-5	25.2 ± 2.6	mg/mL	97.0	10220909

ASSAY Method

METHOD: GC (BELLEFONTE)
Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.3 mL/min
Inlet Temperature: 250 °C Injection Volume: 1 µL
Injection Mode: 25:1
Temperature Program: 120 °C (Hold 0 min) @ 12 °C/min to 260 °C (Hold 0 min)
Detector: FID Temperature: 310 °C



Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Elution details:

EO	RT(MIN)	ANALYTE
1	10.206	Decafluorotriphenylphosphine

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Minimum sample size: 1 µL

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 30-Sep-2021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0628.01	30-Sep-2021	Original Release Date

.

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

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Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246
Description: Benzoic Acid
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16693
Certification Date: May 6, 2021
Expiration Date: April 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 4.383%

K3238

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

phenova Certified Reference Materials | A Phenomenex Company

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018_us

Certificate of Analysis

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Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 25 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101443
Description: Aniline
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17696
Certification Date: December 14, 2021
Expiration Date: December 31, 2029

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aniline	62-53-3	1000	± 0.760%

K 3239

Certificate of Analysis

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Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Certified Values

Analyte	*Units*	*Certified Value* [1,4]
1,2,4-Trichlorobenzene	µg/Kg	1477 ± 181
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	1625 ± 292
1-Chloronaphthalene	µg/Kg	2809 ± 84
2,3-Dimethylphenol	µg/Kg	4552 ± 137
2,4,5-Trichlorophenol	µg/Kg	3438 ± 245
2,4,6-Trichlorophenol	µg/Kg	2194 ± 251
2,4-Dichlorophenol	µg/Kg	6991 ± 394
2,4-Dimethylphenol	µg/Kg	6357 ± 879
2,4-Dinitrophenol	µg/Kg	2922 ± 523
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	3318 ± 442
2,6-Dichlorophenol	µg/Kg	4578 ± 874
2,6-Dimethylphenol	µg/Kg	7582 ± 228
2-Chloronaphthalene	µg/Kg	2223 ± 168
2-Chlorophenol	µg/Kg	1678 ± 202
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	5148 ± 685
2-Methylphenol (o-Cresol)	µg/Kg	6004 ± 573
2-Nitrophenol	µg/Kg	6456 ± 383
3,4-Dimethylphenol	µg/Kg	7185 ± 216
3+4-Methylphenol (m+p-Cresol)	µg/Kg	8033 ± 1613
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	7169 ± 310
4-Chloro-3-methylphenol	µg/Kg	2071 ± 110
4-Chlorophenyl phenylether	µg/Kg	2052 ± 113
4-Methylphenol (p-Cresol)	µg/Kg	6617 ± 1371
4-Nitrophenol	µg/Kg	6812 ± 595
Acenaphthene	µg/Kg	5489 ± 380

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Acenaphthylene	µg/Kg	1948 ± 240
Anthracene	µg/Kg	2866 ± 237
Benzo(a)anthracene	µg/Kg	5751 ± 552
Benzo(a)pyrene	µg/Kg	5902 ± 612
Benzo(b)fluoranthene	µg/Kg	3010 ± 409
Benzo(b+k)fluoranthene	µg/Kg	6534 ± 196
Benzo(g,h,i)perylene	µg/Kg	1380 ± 136
Benzo(k)fluoranthene	µg/Kg	2215 ± 237
Butyl benzyl phthalate	µg/Kg	3511 ± 384
Carbazole	µg/Kg	5412 ± 407
Chrysene	µg/Kg	1477 ± 72
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	2905 ± 321
Dibenzo(a,h)anthracene	µg/Kg	3420 ± 302
Dibenzofuran	µg/Kg	6130 ± 253
Dimethyl phthalate	µg/Kg	4537 ± 250
Di-n-butyl phthalate	µg/Kg	1721 ± 154
Di-n-octyl phthalate	µg/Kg	2744 ± 288
Fluoranthene	µg/Kg	2497 ± 222
Fluorene	µg/Kg	3724 ± 222
Hexachlorobutadiene	µg/Kg	1877 ± 245
Indeno(1,2,3-cd) pyrene	µg/Kg	3914 ± 409
Isophorone	µg/Kg	1615 ± 170
Naphthalene	µg/Kg	4458 ± 480
Nitrobenzene	µg/Kg	3539 ± 266
n-Nitrosodimethylamine	µg/Kg	1580 ± 402
n-Nitrosodiphenylamine	µg/Kg	2854 ± 379
Pentachlorophenol	µg/Kg	3411 ± 358
Phenanthrene	µg/Kg	5052 ± 385
Phenol	µg/Kg	2660 ± 184
Pyrene	µg/Kg	2964 ± 256
Pyridine	µg/Kg	1008 ± 30

Informational Values

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Analyte	*Units*	*Suggested Acceptance Windows*	*Standard Deviation*
1,2,4-Trichlorobenzene	µg/Kg	148 to 2853	459
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	163 to 3440	605
1-Chloronaphthalene	µg/Kg	1123 to 4494	562
2,3-Dimethylphenol	µg/Kg	1821 to 7284	910
2,4,5-Trichlorophenol	µg/Kg	1003 to 5872	811
2,4,6-Trichlorophenol	µg/Kg	640 to 3748	518
2,4-Dichlorophenol	µg/Kg	2391 to 11591	1533
2,4-Dimethylphenol	µg/Kg	0.00 to 13959	2534
2,4-Dinitrophenol	µg/Kg	1169 to 4675	584
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	1248 to 5388	690
2,6-Dichlorophenol	µg/Kg	1831 to 7324	916
2,6-Dimethylphenol	µg/Kg	3033 to 12132	1516
2-Chloronaphthalene	µg/Kg	748 to 3699	492
2-Chlorophenol	µg/Kg	415 to 2942	421
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	0.00 to 10347	1733
2-Methylphenol (o-Cresol)	µg/Kg	1306 to 10702	1566
2-Nitrophenol	µg/Kg	1534 to 11379	1641
3,4-Dimethylphenol	µg/Kg	2874 to 11495	1437
3+4-Methylphenol (m+p-Cresol)	µg/Kg	4054 to 16218	2027
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	2901 to 11437	1423
4-Chloro-3-methylphenol	µg/Kg	677 to 3464	464
4-Chlorophenyl phenylether	µg/Kg	756 to 3348	432
4-Methylphenol (p-Cresol)	µg/Kg	2647 to 10587	1323
4-Nitrophenol	µg/Kg	681 to 14762	2650
Acenaphthene	µg/Kg	2243 to 8736	1082
Acenaphthylene	µg/Kg	712 to 3183	412
Anthracene	µg/Kg	1218 to 4515	550
Benzo(a)anthracene	µg/Kg	2806 to 8696	982
Benzo(a)pyrene	µg/Kg	2512 to 9292	1130
Benzo(b)fluoranthene	µg/Kg	1197 to 4822	604
Benzo(b+k)fluoranthene	µg/Kg	2614 to 10454	1307

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Benzo(g,h,i)perylene	µg/Kg	489 to 2271	297
Benzo(k)fluoranthene	µg/Kg	892 to 3537	441
Butyl benzyl phthalate	µg/Kg	1255 to 5766	752
Carbazole	µg/Kg	2032 to 8792	1127
Chrysene	µg/Kg	669 to 2284	269
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	765 to 5045	713
Dibenzo(a,h)anthracene	µg/Kg	1257 to 5583	721
Dibenzofuran	µg/Kg	2766 to 9493	1121
Dimethyl phthalate	µg/Kg	1842 to 7231	898
Di-n-butyl phthalate	µg/Kg	495 to 2947	409
Di-n-octyl phthalate	µg/Kg	690 to 4798	685
Fluoranthene	µg/Kg	984 to 4009	504
Fluorene	µg/Kg	1638 to 5810	695
Hexachlorobutadiene	µg/Kg	425 to 3329	484
Indeno(1,2,3-cd) pyrene	µg/Kg	870 to 6957	1015
Isophorone	µg/Kg	437 to 2792	392
Naphthalene	µg/Kg	1131 to 7784	1109
Nitrobenzene	µg/Kg	1024 to 6054	838
n-Nitrosodimethylamine	µg/Kg	632 to 2528	316
n-Nitrosodiphenylamine	µg/Kg	1142 to 4567	571
Pentachlorophenol	µg/Kg	341 to 7037	1209
Phenanthrene	µg/Kg	2307 to 7798	915
Phenol	µg/Kg	681 to 4639	660
Pyrene	µg/Kg	1118 to 4810	615
Pyridine	µg/Kg	403 to 1613	202

Additional Information:

DESCRIPTION

The organic sample is a soil containing extractable BNAs for analysis by 8100, 8270, 8310 or equivalent methods.

This product consist of a 5 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested how homogeneity. Only one vial is need for test the remaining vials are to be used for multiple methods or routine testing.

The soil has been sterilized to minimize degradation of the sample.

The sample has been sized to 100 mesh.

Required storage condition is 4ºC.

The sample has been intentionally prepared with an apparent headspace.

STORAGE

The sample should be stored at 4ºC. It has been determined to be stable for the duration of the expiration date.

After sub-sampling replace cap securely and store remaining sample at 4ºC.

The shelf life of the product was determined by historic stability of similar CRM's. The expiration date may be extended based on stock and popularity upon successful stability testing by a 17025 accredited laboratory.

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID	CRM143-50G
Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

Stability and shelf life after opening must be determined by the user, taking into account sampling frequency/volume and all local conditions.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Assume a 10g sample size for all calculations.

Note: Sample extracts and calibration solutions should be in the same solvent.

Report all results on a wet weight basis, do not correct for moisture.

NOTE: For method 8100 and using a packed column gas chromatographic method or cannot adequately resolve the following may coelute in four pairs of compounds: anthracene and phenanthrene; chrysene and benzo(a)anthracene; benzo(b)fluoranthene and benzo(k)fluoranthene; and dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

SCOPE AND APPLICATION

The BNAs in Soil Certified Reference Material (CRM) consists of 5 10mL VOA vials, with a Teflon lined closures containing approximately 10 grams of soil, fortified with BNAs. Being a natural matrix waste sample the analyst is challenged by the same preparation problems, analytical interferences, etc. as is typical for similar matrices received by the laboratory for analysis.

Description

Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

1 **Metrological traceability:** Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

***k*:** Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470).**

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certification Date	January 05, 2021
Version	0-152021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 93462
Lot Number: 081021
Description: PAH Standard
30 components
Expiration Date: 081026
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

Solvent(s): Methylene chloride **Lot#** 105345

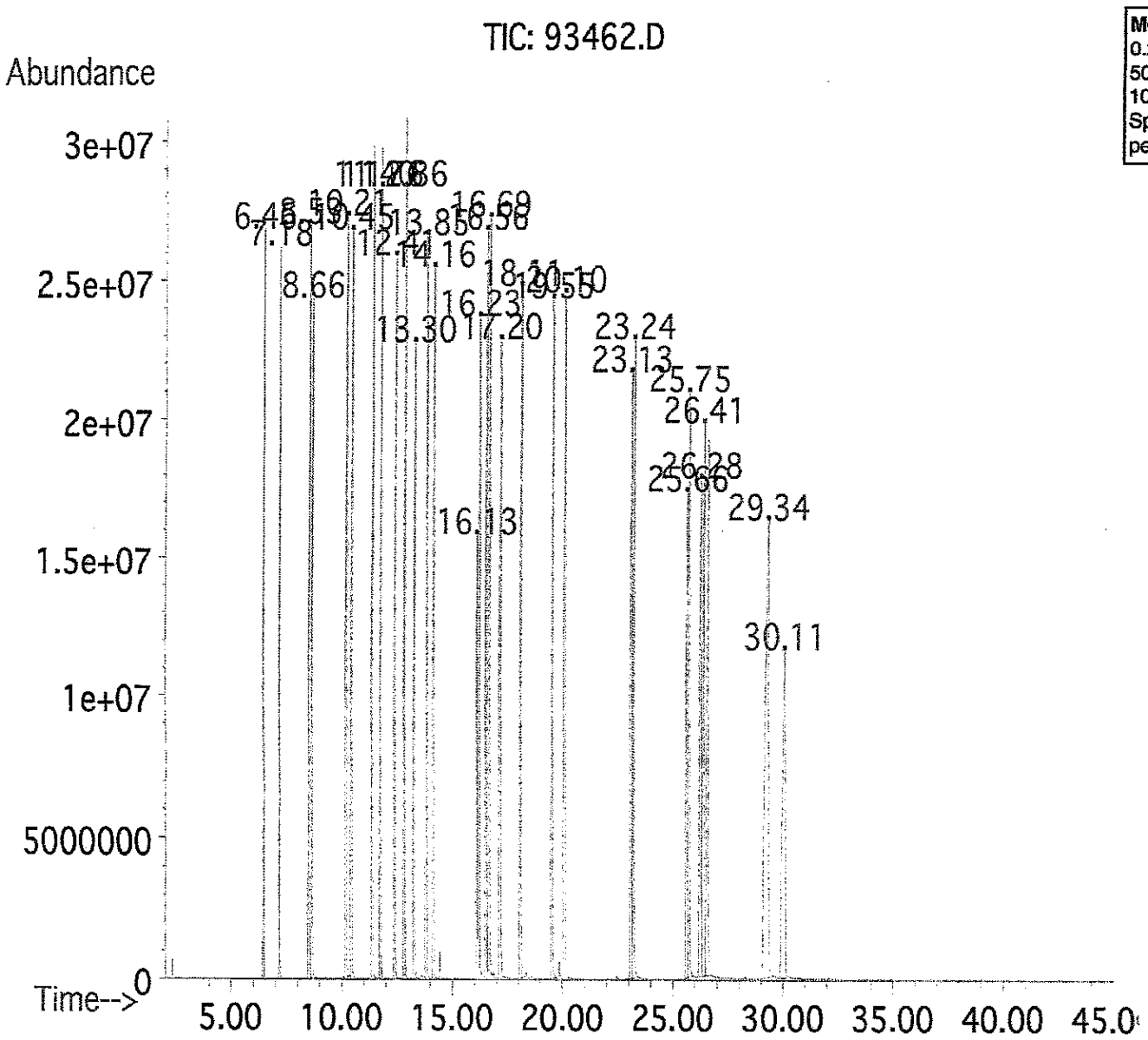
K3587

5E-05 Balance Uncertainty
Volume(s) shown below were combined and diluted to (mL): 20.0 0.001 Flask Uncertainty

Formulated By:	Prashant Chauhan	081021 DATE
Reviewed By:	Pedro L. Rentas	081021 DATE

Compound	Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Initial Conc.(ug/mL)	Final Conc.(ug/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acenaphthene	10007	042420	0.50	10.00	0.042	2001.2	1000.4	9.4	83-32-9	N/A	ipr-rat 600mg/kg
2. Acenaphthylene	10007	042420	0.50	10.00	0.042	2000.2	999.9	9.4	208-96-8	N/A	N/A
3. Anthracene	10007	042420	0.50	10.00	0.042	2000.3	999.9	9.3	120-12-7	0.2mg/m3 (8H)	ipr-mus 430mg/kg
4. Benzo(a)anthracene	10007	042420	0.50	10.00	0.042	2001.3	1000.4	9.4	56-55-3	N/A	N/A
5. Benzo(a)pyrene	10007	042420	0.50	10.00	0.042	2000.0	999.8	9.3	50-32-8	0.2mg/m3 (8H)	scu-rat 50mg/kg
6. Benzo(b)fluoranthene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.3	205-99-2	N/A	N/A
7. Benzo(k)fluoranthene	10007	042420	0.50	10.00	0.042	2001.2	1000.4	9.4	207-08-9	N/A	N/A
8. Benzo(g,h,i)perylene	10007	042420	0.50	10.00	0.042	2000.0	999.8	9.3	191-24-2	N/A	N/A
9. Carbazole	10007	042420	0.50	10.00	0.042	2000.3	999.9	9.4	86-74-8	N/A	ipr-mus 200mg/kg
10. Chrysene	10007	042420	0.50	10.00	0.042	2000.8	1000.2	9.4	218-01-9	0.2mg/m3	N/A
11. Dibenzo(a,h)anthracene	10007	042420	0.50	10.00	0.042	2000.8	1000.2	9.4	53-70-3	0.2mg/m3	N/A
12. Fluoranthene	10007	042420	0.50	10.00	0.042	2000.3	999.9	9.4	206-44-0	N/A	orl-rat 2000mg/kg
13. Fluorene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.4	86-73-7	N/A	ipr-mus 2 g/kg
14. Indeno(1,2,3-cd)pyrene	10007	042420	0.50	10.00	0.042	2000.1	999.8	9.3	193-39-5	N/A	N/A
15. Naphthalene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.3	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
16. Phenanthrene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.4	85-01-8	0.2mg/m3/8H	orl-mus 700mg/kg
17. Pyrene	10007	042420	0.50	10.00	0.042	2001.0	1000.3	9.4	129-00-0	0.2mg/m3/8H	orl-rat 2700mg/kg
18. Benzo(e)pyrene	94851	081021	0.50	10.00	0.042	2002.1	1000.8	9.4	192-97-2	N/A	N/A
19. Biphenyl	94851	081021	0.50	10.00	0.042	2001.5	1000.5	9.4	92-52-4	0.2 ppm(1mg/m3/8H)	orl-rat 2400mg/kg
20. Decalin (49% cis, 51% trans)	94851	081021	0.50	10.00	0.042	2002.5	1001.0	9.4	91-17-8	N/A	N/A
21. Dibenzofuran	94851	081021	0.50	10.00	0.042	2002.3	1000.9	9.4	132-64-9	N/A	N/A
22. Dibenzothiophene	94851	081021	0.50	10.00	0.042	2002.5	1001.0	9.4	132-65-0	N/A	orl-mus 470 mg/kg
23. 2,6-Dimethylnaphthalene	94851	081021	0.50	10.00	0.042	2001.9	1000.7	9.4	581-42-0	N/A	N/A
24. 1-Methylnaphthalene	94851	081021	0.50	10.00	0.042	2002.2	1000.9	9.4	90-12-0	N/A	orl-rat 1840mg/kg
25. 2-Methylnaphthalene	94851	081021	0.50	10.00	0.042	2000.6	1000.1	9.4	91-57-6	N/A	orl-rat 1630mg/kg
26. 1-Methylphenanthrene	94851	081021	0.50	10.00	0.042	2002.3	1000.9	13.2	832-69-9	N/A	N/A
27. Pentachlorophenol	94851	081021	0.50	10.00	0.042	3961.5	1980.3	18.6	87-86-5	0.5mg/m3/8H (skin)	orl-rat 27mg/kg
28. Perylene	94851	081021	0.50	10.00	0.042	2001.9	1000.7	9.4	198-55-0	N/A	N/A
29. Thianaphthene	94851	081021	0.50	10.00	0.042	2003.1	1001.3	9.4	95-15-8	N/A	N/A
30. 2,3,5-Trimethylnaphthalene	94851	081021	0.50	10.00	0.042	2003.1	1001.3	9.5	2245-38-7	N/A	N/A

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



Method GC8MSD-2Long: Column:SPB-5 (30m X 0.25mm ID X 0.25μm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (14min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Gina McLane.

Retention Time (min.)	
Decahydronaphthalene (Decalin) (isomer)	6.46
Decahydronaphthalene (Decalin) (isomer)	7.18
Naphthalene	8.53
Thianaphthene	8.66
2-Methylnaphthalene	10.21
1-Methylnaphthalene	10.45
Biphenyl	11.4
2,6-Dimethylnaphthalene	11.76
Acenaphthylene	12.41
Acenaphthene	12.86
Dibenzofuran	13.3
2,3,5-Trimethylnaphthalene	13.85
Fluorene	14.16
Pentachlorophenol	16.13
Dibenzothiophene	16.23
Phenanthrene	16.56
Anthracene	16.69
Carbazole	17.2
1-Methylphenanthrene	18.11
Fluoranthene	19.55
Pyrene	20.1
Benzo(a)anthracene	23.13
Chrysene	23.24
Benzo(b)fluoranthene	25.66
Benzo(k)fluoranthene	25.75
Perylene	26.28
Benzo(a)pyrene	26.41
Benzo(e)pyrene	26.61
Indeno(1,2,3-cd)pyrene	29.34
Dibenzo(a,h)anthracene	29.34
Benzo(g,h,i)perylene	30.11

Certificate of Analysis

Phenova Certified Reference Materials are sold by Phenomenex.
411 Madrid Ave., Torrance, CA 90501 USA ▪ Tel: 310-212-0555 ▪ Fax: 310-328-7768 ▪ info@phenomenex.com
Access your MSDS and digital C of A at **www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards**

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101291	**Lot Number:**	CL11000
Description:	GC/MS Tuning Mix	**Certification Date:**	May 9, 2014
Storage:	4 °C	**Expiration Date:**	December 31, 2023
Provided As:	1 mL in 2 mL Ampoule in Methylene chloride	**Revision Date:**	August 5, 2015

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 0.208%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

K003891
GC/MS Tune solution-1000ug/ml
Solvent / Lot: CL11000
Prep: 4/22/2022 by VS
Exp: 12/31/2023
Location:

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

IL111106131.us

Agilent

Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-103N-1 **Lot Issue Date:** 25-May-2021

Lot Number: 0006609664 **Expiration Date:** 30-Jun-2024

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
benzoic acid	000065-85-0	RM01884	2005 ± 10 µg/mL
o-cresol	000095-48-7	RM12877	2005 ± 10 µg/mL
p-cresol	000106-44-5	RM01988	2005 ± 10 µg/mL
2,4,5-trichlorophenol	000095-95-4	NT00344	2004 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

5/11/22

K004539
toxic sub mix#1
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 6/30/2024
Location:

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: Phenols Standard
Product Number: US-107N-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006648297
Lot Issue Date: 17-Nov-2021
Expiration Date: 31-Dec-2024

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
4-chloro-3-methylphenol	2006 ±	10 µg/mL	000059-50-7	RM01885
2-chlorophenol	2007 ±	10 µg/mL	000095-57-8	RM01871
2,4-dichlorophenol	2005 ±	10 µg/mL	000120-83-2	RM13878
2,4-dimethylphenol	2006 ±	10 µg/mL	000105-67-9	RM13009
2,4-dinitrophenol	2006 ±	10 µg/mL	000051-28-5	RM02112
2-methyl-4,6-dinitrophenol	2005 ±	10 µg/mL	000534-52-1	RM02292
2-nitrophenol	2007 ±	10 µg/mL	000088-75-5	RM13445
4-nitrophenol	2006 ±	10 µg/mL	000100-02-7	RM03752
pentachlorophenol	2006 ±	10 µg/mL	000087-86-5	RM02474
phenol	2006 ±	10 µg/mL	000108-95-2	RM11471
2,4,6-trichlorophenol	2006 ±	10 µg/mL	000088-06-2	RM18096

Matrix: methylene chloride (dichloromethane)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

5/11/22

CSD-QA-015.1

K004540
phenols mix
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 12/31/2024
Location:

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: PAH Standard
Product Number: US-106N-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006627349
Lot Issue Date: 17-Sep-2021
Expiration Date: 31-Oct-2024

Component Name	CERTIFIED VALUES Concentration		Expanded Uncertainty	CAS#	Analyte Lot
acenaphthene	2007	±	10 µg/mL	000083-32-9	RM10879
acenaphthylene	2004	±	10 µg/mL	000208-96-8	RM10891
anthracene	2006	±	10 µg/mL	000120-12-7	RM14212
benz[a]anthracene	2006	±	10 µg/mL	000056-55-3	RM16072
benzo[b]fluoranthene	2006	±	10 µg/mL	000205-99-2	RM14571
benzo[k]fluoranthene	2006	±	10 µg/mL	000207-08-9	RM18376
benzo[ghi]perylene	2006	±	10 µg/mL	000191-24-2	RM15761
benzo[a]pyrene	2006	±	10 µg/mL	000050-32-8	RM17573
chrysene	2007	±	10 µg/mL	000218-01-9	RM13771
dibenz[a,h]anthracene	2006	±	10 µg/mL	000053-70-3	RM06786
fluoranthene	2006	±	10 µg/mL	000206-44-0	RM12277
fluorene	2006	±	10 µg/mL	000086-73-7	RM09441
indeno[1,2,3-cd]pyrene	2006	±	10 µg/mL	000193-39-5	RM14192
naphthalene	2007	±	10 µg/mL	000091-20-3	RM10445
phenanthrene	2005	±	10 µg/mL	000085-01-8	RM10495
pyrene	2005	±	10 µg/mL	000129-00-0	RM16126

Matrix: methylene chloride/benzene (1:1)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

K004541
SVOA PAH STD 2000ug/ml
Solvent / Lot: DCM/BENZENE
Prep: 5/11/2022 by JZ
Exp: 10/31/2024
Location: Fridge 19

CSD-QA-015.1

11/22

Reference Materials Producer
Cert #2495.01

Certificate of Analysis

Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics**® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021 Certifying Officer: Shannon Mora

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory , please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i, where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Accredited to 17025 & Guide 34 ISO Certified to 9001

ACCREDITED
Reference Materials Producer
Cert #2495.01

ECS

Certificate of Analysis

ilac-MRA ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

K004542

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021 Certifying Officer: Shannon Nave

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Agilent

Certificate of Analysis

Product Name: 1-Methylnaphthalene Standard

Product Number: EPA-1225-1 **Lot Issue Date:** 19-Jul-2021

Lot Number: 0006624769 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-methylnaphthalene	000090-12-0	RM07712	999.3 ± 5.0 µg/mL

Matrix: methanol (methyl alcohol)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

K004543
1-Methylnaphthalene
Solvent / Lot: MEOH
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

5/11/22

Sample lot approver:
Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026
Page: 1 of 1
www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert
No. AT-1937

Agilent

Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-104N-1 **Lot Issue Date:** 02-Jul-2021

Lot Number: 0006620643 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
aniline	000062-53-3	RM12853	2005 ± 10 µg/mL
benzyl alcohol	000100-51-6	RM10547	2004 ± 10 µg/mL
4-chloroaniline	000106-47-8	RM01886	2002 ± 10 µg/mL
dibenzofuran	000132-64-9	RM02077	2002 ± 10 µg/mL
2-methylnaphthalene	000091-57-6	RM01258	2006 ± 10 µg/mL
2-nitroaniline	000088-74-4	RM02402	2003 ± 10 µg/mL
3-nitroaniline	000099-09-2	RM02424	2003 ± 10 µg/mL
4-nitroaniline	000100-01-6	RM02425	2003 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

K004544
toxic sub mix#2
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

05/11/22

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0181243

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

05/11/22

K004545
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO175316
Prep: 5/11/2022 by JZ
Exp: 10/20/2025
Location:

Elution Order	Compound	Gr (weig					
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBJ2508) **Purity** 99%	1,50					
				+/-	53.3632	µg/mL	Stressed
2	Phenol-d6 **CAS #** 13127-88-3 (Lot PR-31262) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,510.0	µg/mL	+/-	8.9689	µg/mL	Gravimetric
				+/-	44.1050	µg/mL	Unstressed
				+/-	53.5049	µg/mL	Stressed
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot PR-32542/022621DB1 **Purity** 99%	1,004.0	µg/mL	+/-	5.9635	µg/mL	Gravimetric
				+/-	29.3255	µg/mL	Unstressed
				+/-	35.5754	µg/mL	Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	1,008.0	µg/mL	+/-	5.9872	µg/mL	Gravimetric
				+/-	29.4423	µg/mL	Unstressed
				+/-	35.7172	µg/mL	Stressed
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 19169) **Purity** 99%	1,006.0	µg/mL	+/-	5.9753	µg/mL	Gravimetric
				+/-	29.3839	µg/mL	Unstressed
				+/-	35.6463	µg/mL	Stressed
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot MKCJ7664) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246
Description: Benzoic Acid
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17953
Certification Date: January 31, 2022
Expiration Date: January 31, 2032

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 2.714%

K004603
Benzoic Acid @2000ug/ml
Solvent / Lot: N/A
Prep: 5/13/2022 by JZ
Exp: 1/31/2032
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17662
Certification Date: December 2, 2021
Expiration Date: November 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K004604
Benzidines std @2000ug/ml
Solvent / Lot: MeCl2
Prep: 5/13/2022 by JZ
Exp: 11/30/2031
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
Certicate No. 2427.03

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 33913 **Lot No.:** A0183500

Description : SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 29, 2028 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Methylnaphthalene-d10	2,003.5 µg/mL	+/- 11.7578 µg/mL	Gravimetric
	CAS # 7297-45-2 (Lot EF-135)		+/- 90.2539 µg/mL	Unstressed
	Purity 96%		+/- 100.1449 µg/mL	Stressed
2	Fluoranthene-d10	2,006.0 µg/mL	+/- 11.7723 µg/mL	Gravimetric
	CAS # 93951-69-0 (Lot PR-20668)		+/- 90.3656 µg/mL	Unstressed
	Purity 99%		+/- 100.2689 µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

K004605
SOMO 1.0 SIM DMC
Solvent / Lot: A0183500
Prep: 5/14/2022 by VS
Exp: 2/29/2028
Location:

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

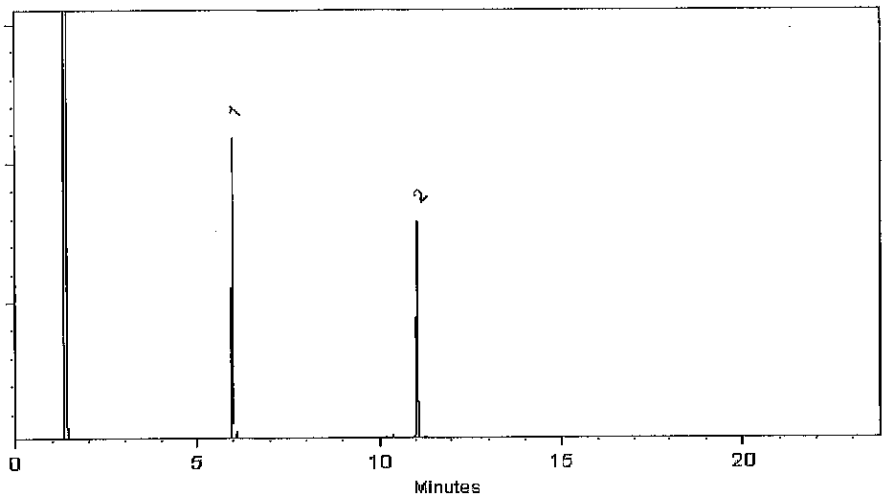
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cathleen Soltis - Mix Technician

Date Mixed: 29-Mar-2022 **Balance:** B345965662

Clara Windle - Operations Technician I

Date Passed: 01-Apr-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

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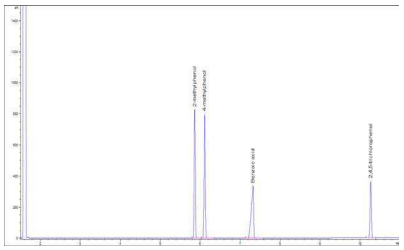
Certificate of Analysis - Certified Reference Material

EPA TCL Hazardous Substances Mix 1

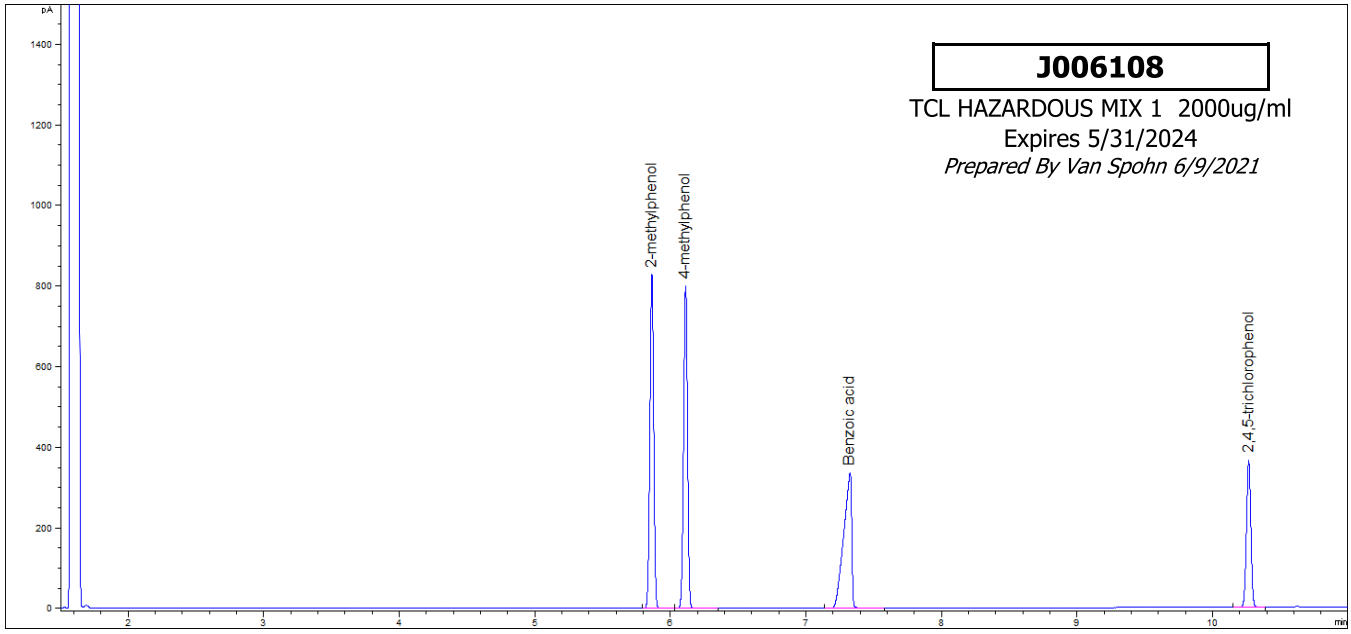
Product no.: 48907
Lot no.: LRAC9610
Expiry Date: May 2024
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAC9610.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Elution order*	*Raw Material Lot*
2-METHYLPHENOL CAS# 95-48-7	2004 ± 9	µg/mL	99.0	1	G1735A
4-METHYLPHENOL CAS# 106-44-5	2004 ± 13	µg/mL	98.9	2	06921MG
BENZOIC ACID CAS# 65-85-0	2012 ± 6	µg/mL	99.9	3	LC16514
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	2003 ± 6	µg/mL	99.9	4	JS00008

Informational Values:



Additional Information:
Analytical Method Parameters:
Column: Equity-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #98)
Carrier Gas: H2, Flow: 4.5 mL/min
Inlet Temperature: 170 °C, Injection Volume: 1 µL
Injection Mode: Split, Split Ratio: 20:1

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Temperature Program: 80 °C @ 10 °C/min to 190 °C (Hold 5 min)
Detector: FID
Detector Temperature: 310 °C

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 20-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom}\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9610.01	20-May-2021	Original Release Date

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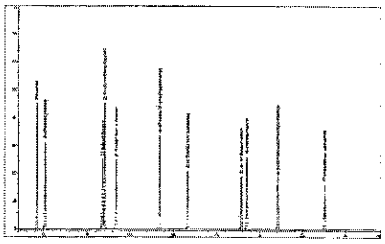
Certificate of Analysis - Certified Reference Material

EPA TCL Phenols Mix

Product no.: 48904
Lot no.: LRAD0139
Expiry Date: July 2024
Manufacturing Date: July 2021
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0139.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



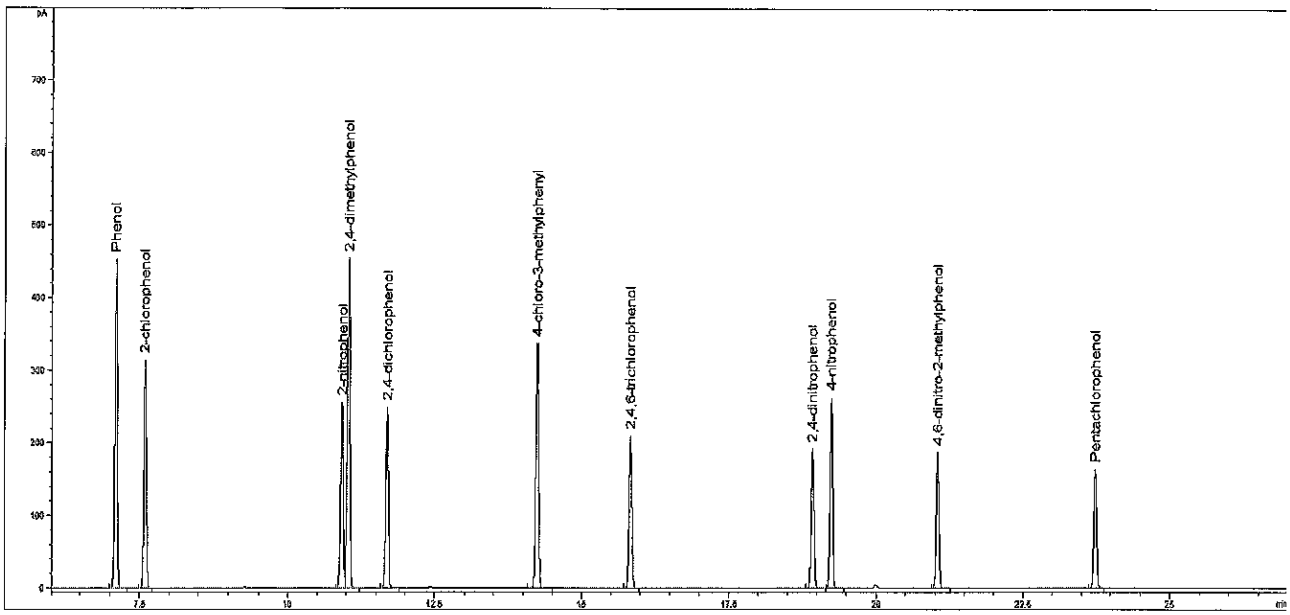
Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2-CHLOROPHENOL CAS# 95-57-8	2001 ± 25	µg/mL	99.9	STBG3033V
2-NITROPHENOL CAS# 88-75-5	1999 ± 18	µg/mL	99.3	15905BB
2,4-DIMETHYLPHENOL CAS# 105-67-9	2000 ± 14	µg/mL	99.2	05421CO
2,4-DICHLOROPHENOL CAS# 120-83-2	2000 ± 17	µg/mL	99.5	03221TN
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	2000 ± 5	µg/mL	99.9	JS00013
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	2002 ± 5	µg/mL	99.5	04212PS
2,4-DINITROPHENOL CAS# 51-28-5	2000 ± 28	µg/mL	66.9	STBJ5751
4-NITROPHENOL CAS# 100-02-7	2000 ± 33	µg/mL	99.0	04628LT
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	2000 ± 27	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	1999 ± 25	µg/mL	97.9	MKCD2150

ASSAY Method

J013597
TCL Phenols Mix 2000ug/ml
Solvent / Lot: LRAD0139
Prep: 12/30/2021 by VS
Exp: 7/31/2024
Location:

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.



METHOD: GC (Bellefonte Method)

Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.5 mL/min
Inlet Temperature: 200 °C Injection Volume: 1.0 µL
Injection Mode: 25:1
Temperature Program: 80 °C (Hold 2 min) @ 6 °C/min to 260 °C (Hold 5 min)
Detector: FID Temperature: 310 °C

Elution details:

EO	RT(MIN)	ANALYTE
1	7.095	Phenol
2	7.585	2-chlorophenol
3	10.925	2-nitrophenol
4	11.037	2,4-dimethylphenol
5	11.696	2,4-dichlorphenol
6	14.242	4-chloro-3-m3thylphenol
7	15.842	2,4,6-trichlorophenol
8	18.93	2,4-dinitrophenol
9	19.25	4-nitrophenol
10	21.05	4,6-dinitro-2-methylphenol
11	23.752	Pentachlorophenol

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 12-Jul-2021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{hom\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0139.01	12-Jul-2021	Original Release Date

.

RESTEK® C

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

K007194
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO187400
Prep: 8/5/2022 by VS
Exp: 4/30/2026
Location:

Certificate of Analysis

IAL

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0187400

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2026 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBJ3299) **Purity** 99%	1,508.0 µg/mL	+/- 8.9571 µg/mL +/- 44.0466 µg/mL +/- 53.4340 µg/mL	Gravimetric Unstressed Stressed
2	Phenol-d6 **CAS #** 13127-88-3 (Lot SL210831) **Purity** 99%	1,510.0 µg/mL	+/- 8.9689 µg/mL +/- 44.1050 µg/mL +/- 53.5049 µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,512.0 µg/mL	+/- 8.9808 µg/mL +/- 44.1635 µg/mL +/- 53.5758 µg/mL	Gravimetric Unstressed Stressed
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot PR-32597) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 29.3255 µg/mL +/- 35.5754 µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 29.3255 µg/mL +/- 35.5754 µg/mL	Gravimetric Unstressed Stressed
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 00021384) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 29.3255 µg/mL +/- 35.5754 µg/mL	Gravimetric Unstressed Stressed
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot MKCJ7664) **Purity** 99%	1,502.0 µg/mL	+/- 8.9214 µg/mL +/- 43.8714 µg/mL +/- 53.2214 µg/mL	Gravimetric Unstressed Stressed

8	p-Terphenyl-d14		1,002.0	µg/mL	+/-	5.9516	µg/mL	Gravimetric
	CAS # 1718-51-0	(Lot PR-30504)			+/-	29.2671	µg/mL	Unstressed
	Purity 99%				+/-	35.5046	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

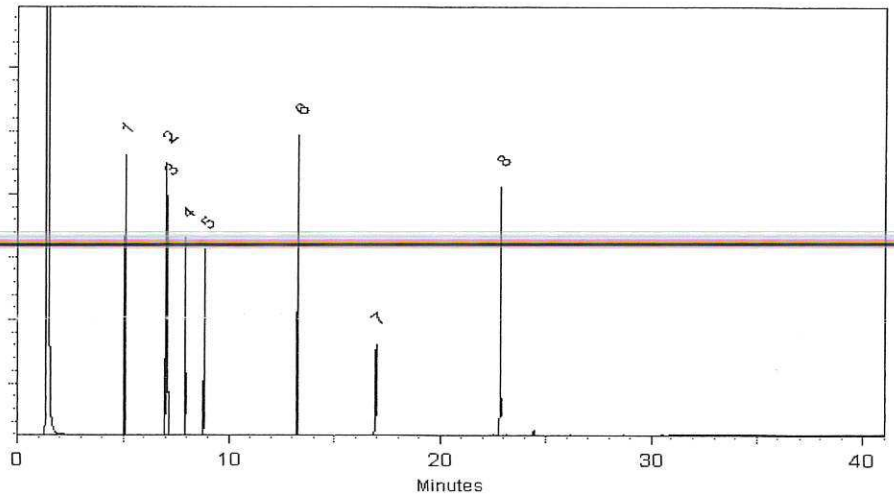
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bryan Snyder - Operations Tech I

Date Mixed: 17-Jul-2022 **Balance:** 1128353505

Christie Mills - Operations Tech II - ARM QC

Date Passed: 21-Jul-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18355
Certification Date: July 25, 2022
Expiration Date: August 31, 2023

K007995
SVOA-8270 LCS MIX 1000ug/ml
Solvent / Lot: N/A
Prep: 8/29/2022 by JZ
Exp: 8/31/2023
Location: FREEZER 44

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.300%
Acenaphthylene	208-96-8	1000	± 0.225%
Anthracene	120-12-7	1000	± 6.858%
Azobenzene	103-33-3	1000	± 0.224%
Benzo(a)anthracene	56-55-3	1000	± 0.247%
Benzo(a)pyrene	50-32-8	1000	± 0.270%
Benzo(b)fluoranthene	205-99-2	1000	± 0.635%
Benzo(k)fluoranthene	207-08-9	1000	± 0.682%
Benzo(g,h,i)perylene	191-24-2	1000	± 0.272%
Benzyl alcohol	100-51-6	1000	± 0.231%
Benzyl butyl phthalate	85-68-7	1000	± 0.480%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.479%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.479%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.550%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 0.479%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.479%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.479%
Carbazole	86-74-8	1000	± 0.146%

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Certified Reference Material

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Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 0.300%
4-Chloro-3-methylphenol	59-50-7	1000	± 0.545%
2-Chloronaphthalene	91-58-7	1000	± 0.224%
2-Chlorophenol	95-57-8	1000	± 0.507%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 0.479%
Chrysene	218-01-9	1000	± 0.145%
Dibenz(a,h)anthracene	53-70-3	1000	± 1.058%
Dibenzofuran	132-64-9	1000	± 0.302%
Di-n-butyl phthalate	84-74-2	1000	± 0.518%
1,2-Dichlorobenzene	95-50-1	1000	± 0.247%
1,3-Dichlorobenzene	541-73-1	1000	± 0.225%
1,4-Dichlorobenzene	106-46-7	1000	± 0.224%
2,4-Dichlorophenol	120-83-2	1000	± 0.545%
Diethyl phthalate	84-66-2	1000	± 0.518%
2,4-Dimethylphenol	105-67-9	1000	± 0.507%
Dimethyl phthalate	131-11-3	1000	± 0.518%
1,2-Dinitrobenzene	528-29-0	1000	± 0.361%
1,3-Dinitrobenzene	99-65-0	1000	± 0.300%
1,4-Dinitrobenzene	100-25-4	1000	± 0.242%
2,4-Dinitrophenol	51-28-5	1000	± 0.545%
2,4-Dinitrotoluene	121-14-2	1000	± 1.128%

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This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.224%
Di-n-octyl phthalate	117-84-0	1000	± 0.486%
Fluoranthene	206-44-0	1000	± 0.224%
Fluorene	86-73-7	1000	± 0.224%
Hexachlorobenzene	118-74-1	1000	± 0.152%
Hexachlorobutadiene	87-68-3	1000	± 0.746%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.153%
Hexachloroethane	67-72-1	1000	± 0.300%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 0.883%
Isophorone	78-59-1	1000	± 0.145%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.508%
1-Methylnaphthalene	90-12-0	1000	± 0.479%
2-Methylnaphthalene	91-57-6	1000	± 0.487%
2-Methylphenol	95-48-7	1000	± 0.545%
3-Methylphenol	108-39-4	500	± 0.279%
4-Methylphenol	106-44-5	500	± 0.399%
Naphthalene	91-20-3	1000	± 0.226%
2-Nitroaniline	88-74-4	1000	± 0.224%
3-Nitroaniline	99-09-2	1000	± 0.235%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 0.300%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 0.514%
4-Nitrophenol	100-02-7	1000	± 0.519%
N-Nitrosodimethylamine	62-75-9	1000	± 0.503%
N-Nitrosodiphenylamine	86-30-6	1000	± 0.476%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.461%
Pentachlorophenol	87-86-5	1000	± 0.202%
Phenanthrene	85-01-8	1000	± 0.145%
Phenol	108-95-2	1000	± 0.545%
Pyrene	129-00-0	1000	± 0.147%
Pyridine	110-86-1	1000	± 0.503%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 0.247%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 0.247%
1,2,4-Trichlorobenzene	120-82-1	1000	± 0.224%
2,4,5-Trichlorophenol	95-95-4	1000	± 0.507%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.509%

Notes: The proper chemical name for Bis(2-Chloroiospropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Supelco®

www.sigmaaldrich.com

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAD2751
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2751.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at:* www.sigma-aldrich.com *for the most current version.)*

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE, 100MG, NEAT CAS# 91-94-1	799	µg/mL	99.8	LRAD2376
2,4-DINITROTOLUENE CAS# 121-14-2	801	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	800	µg/mL	99.2	11231AN
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	800	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	800	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	200	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	800	µg/mL	99.9	LA41596
4-CHLOROANILINE CAS# 106-47-8	800	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	799	µg/mL	99.9	07411KN
3-NITROANILINE CAS# 99-09-2	800	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	800	µg/mL	99.9	15609AA
PYRIDINE (LOW WATER) CAS# 110-86-1	800	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 03 JUN 2022

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2751.01	03 JUN 2022	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1045

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0420-01 A	File ID:	058F6701.D
Sampled:	01/19/23 08:10	Prepared:	02/16/23 11:56	Analyzed:	03/03/23 19:43
% Solids:	54.71	Preparation:	EPA 3546 (Microwave)	Initial/Final:	22.87 g Wet / 2.5 mL
Batch:	BLB0382	Sequence:	SLC0093	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9922*	*4.92*	*61.6*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.9922*	*5.03*	*62.9*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9922*	*3.64*	*45.5*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.9922*	*3.97*	*49.7*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/058F6701.D
Data file 2: /20230302.b/B20230302.b/058F6701.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23A0420-01
Client ID:
Injection Date: 03-MAR-2023 19:43
Report Date: 03/09/2023 11:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.409	0.018	44680	4.828	-0.001	10574	1.78	0.29	143.6*	alpha-BHC MN
4.774	-0.005	7736	5.327	0.025	11174	0.80	0.81	1.4	beta-BHC MN
4.976	0.010	70016	5.686	0.031	42945	3.42	1.44	81.3*	delta-BHC MN
4.717	0.019	75652	----			3.48	0.00	---	gamma-BHC (Lindane)
5.172	-0.019	31271	5.758	0.009	31557	1.62	1.14	35.0	Heptachlor MN
5.535	0.015	48954	6.151	-0.000	14033	2.26	0.44	134.5*	Aldrin M
6.185	-0.014	23197	6.784	-0.023	145087	1.24	5.54	127.0*	Heptachlor epoxide b MN
----			7.236	-0.014	13171	0.00	0.57	---	Endosulfan I
6.880	-0.021	76073	7.521	-0.022	52660	4.11	2.06	66.3*	Dieldrin MN
6.555	-0.006	130059	7.328	-0.003	67703	7.57	2.89	89.4*	4,4'-DDE MN
7.172	0.022	221786	7.892	0.026	155254	18.71	10.61	55.2*	Endrin MN
7.413	0.025	11580	8.083	0.006	83685	1.09	5.58	134.9*	Endosulfan II MN
----			7.933	-0.003	97158	0.00	6.83	---	4,4'-DDD
8.237	-0.012	2370	----			0.23	0.00	---	Endosulfan sulfate
7.496	-0.004	301251	8.256	0.002	450182	27.92	32.78	16.0	4,4'-DDT MN
8.015	0.029	24611	----			5.15	0.00	---	Methoxychlor
----			9.211	0.015	103008	0.00	7.24	---	Endrin ketone
7.839	0.023	37617	8.397	-0.010	43379	4.42	4.10	7.5	Endrin aldehyde MN
----			7.049	0.032	116763	0.00	4.47	---	trans-Chlordane
6.504	0.018	53619	7.174	-0.003	14802	2.80	0.58	131.5*	cis-Chlordane MN
2.324	-0.021	8652	2.519	0.028	3616	0.33	0.11	103.1*	Hexachlorobutadiene
----			----			0.00	0.00	---	Hexachlorobenzene
3.868	-0.003	322188	4.192	-0.003	504164	18.21	19.88	8.8	Tetrachloro-m-xylene MN
9.437	-0.000	225663	10.402	0.000	286069	24.64	25.16	2.1	Decachlorobiphenyl MN

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

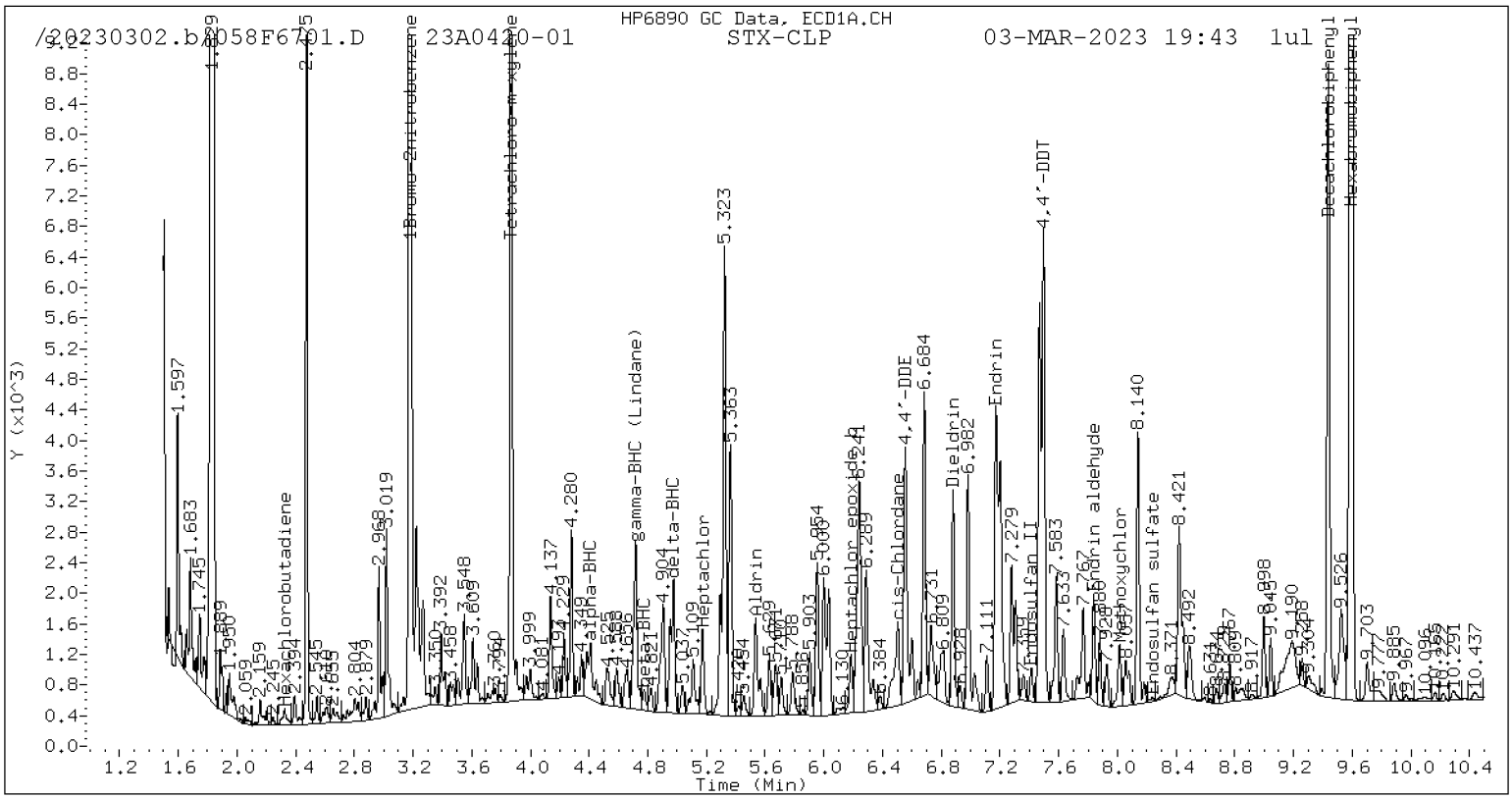
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	1300686	93.4
Hexabromobiphenyl	609723	904003	48.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1801442	79.0
Hexabromobiphenyl	769764	1028911	33.7

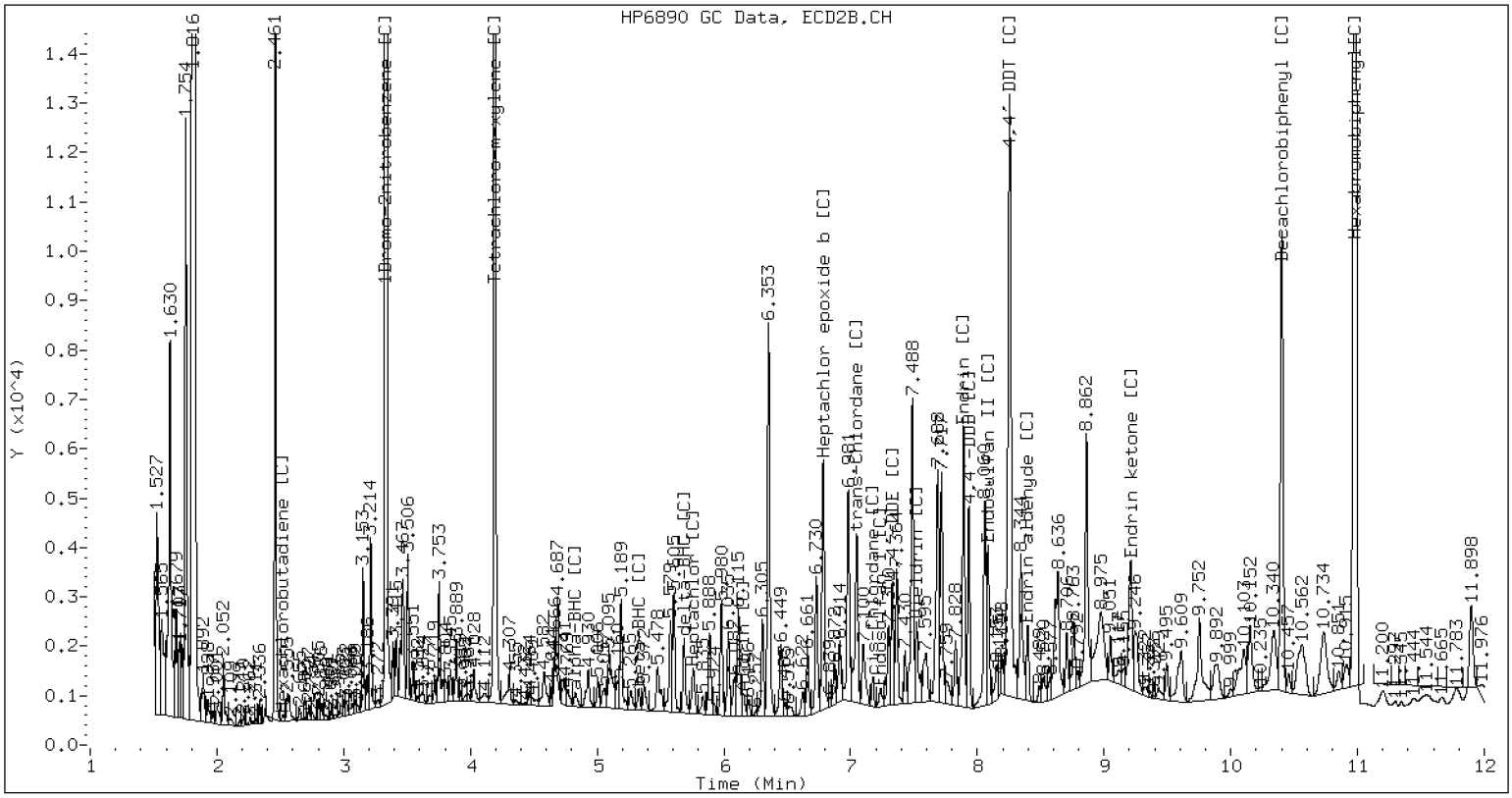
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

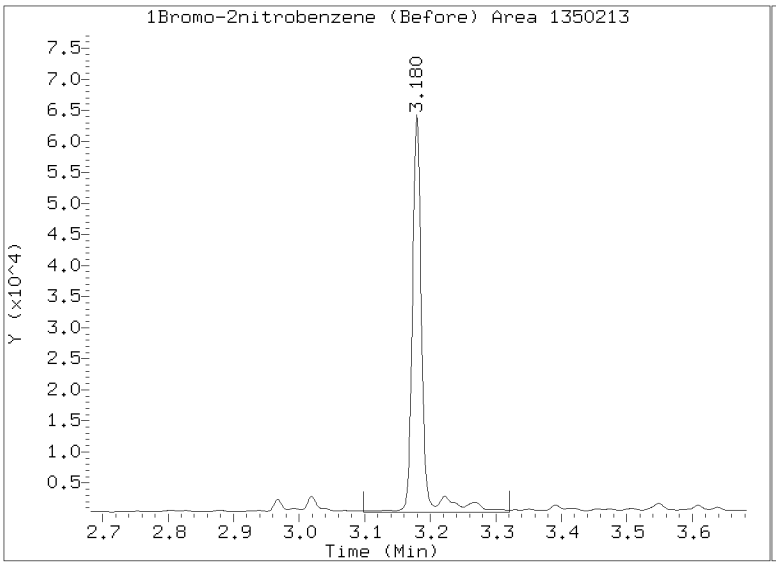
/20230302.b/B20230302.b/058F6701.D 23A0420-01 CLP2

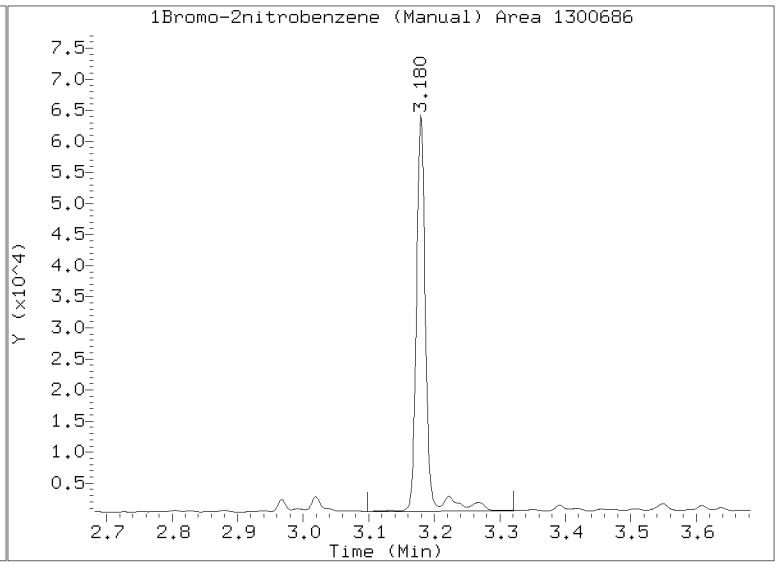


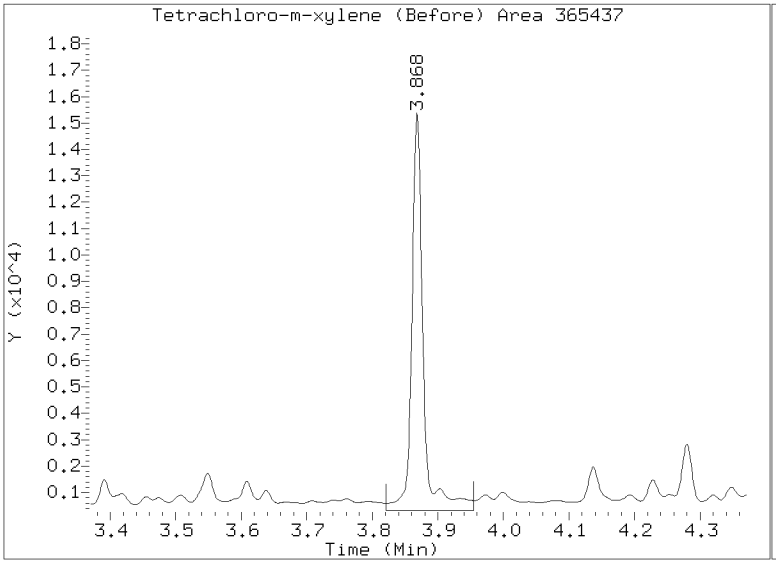
CLP-2 Manual Integration: YES

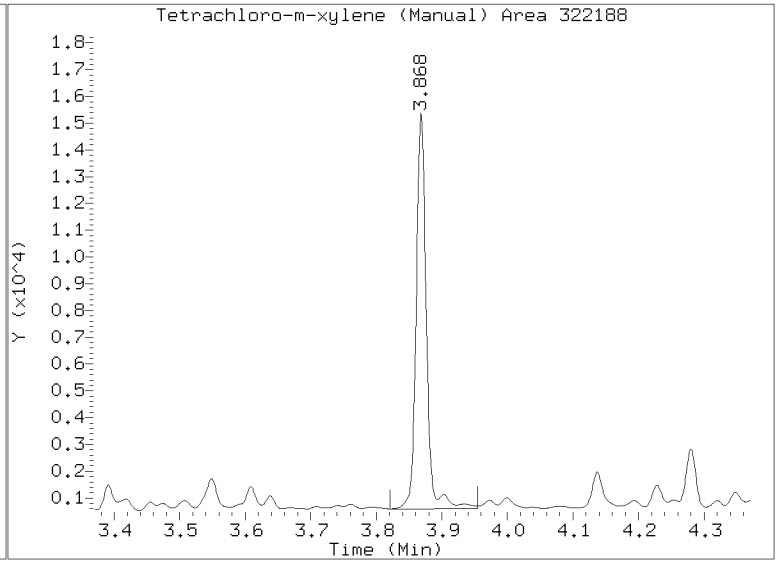
Manual Peak Adjustment Report, STX-CLP

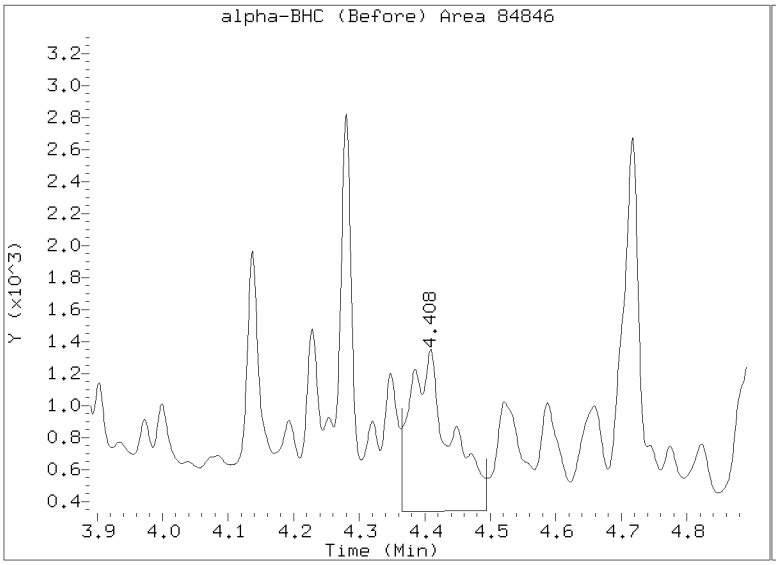
Datafile: /20230302.b/058F6701.D
Injection Date: 03-MAR-2023 19:43
Lab ID:23A0420-01 Client ID:
Report Date: 03/09/2023 11:19

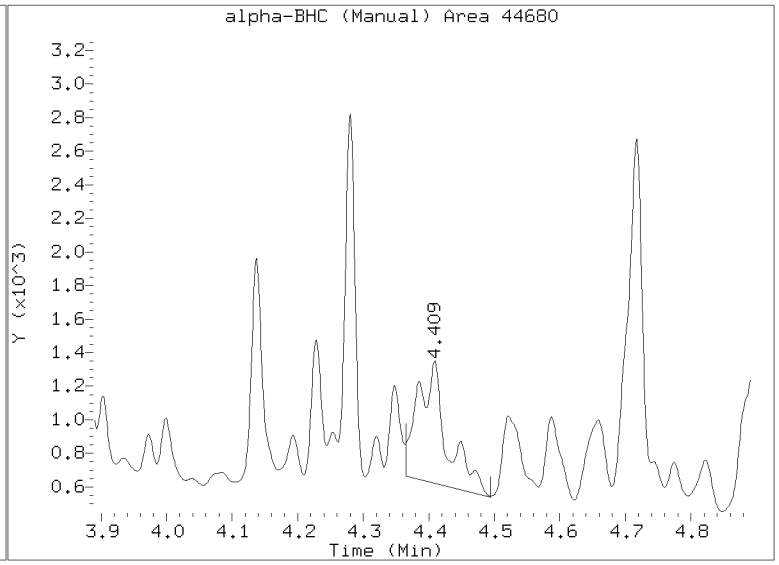












Manual Peak Adjustment Report, STX-CLP

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Lab ID:23A0420-01 Client ID:
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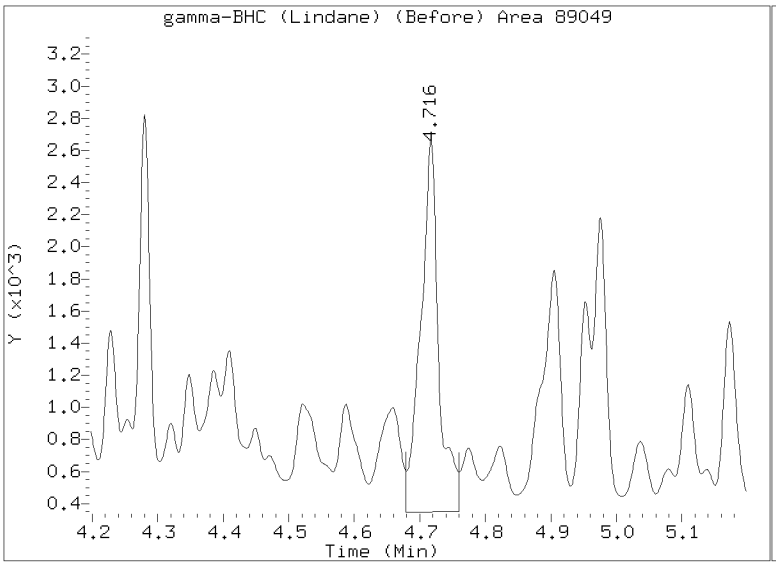

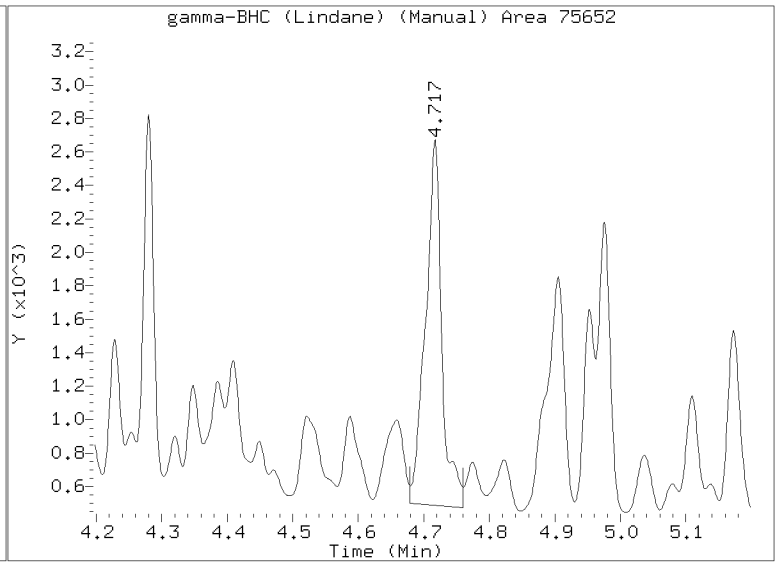

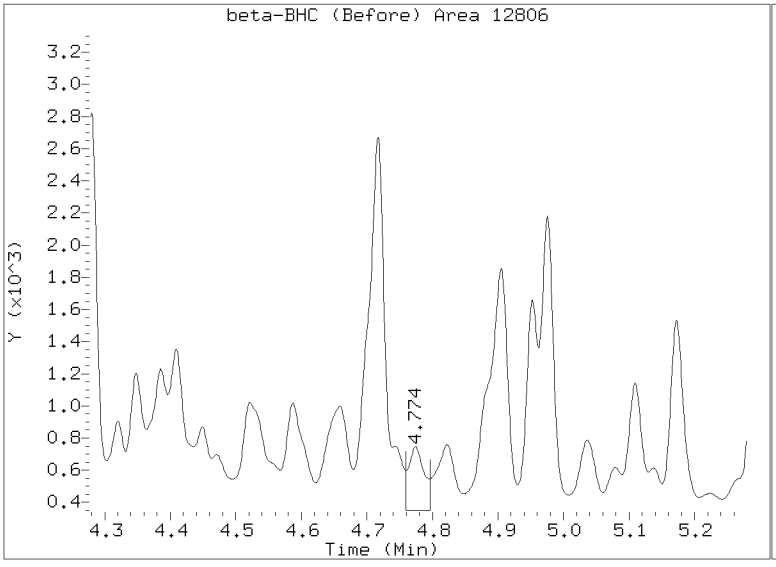

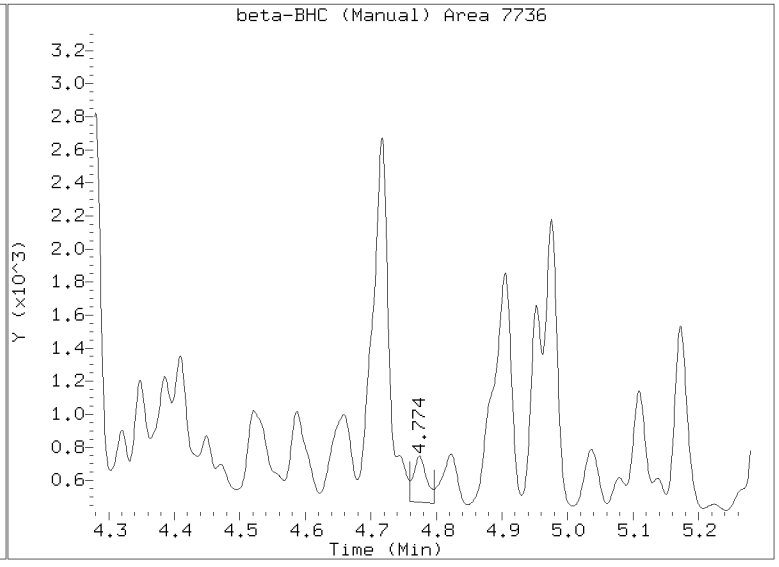

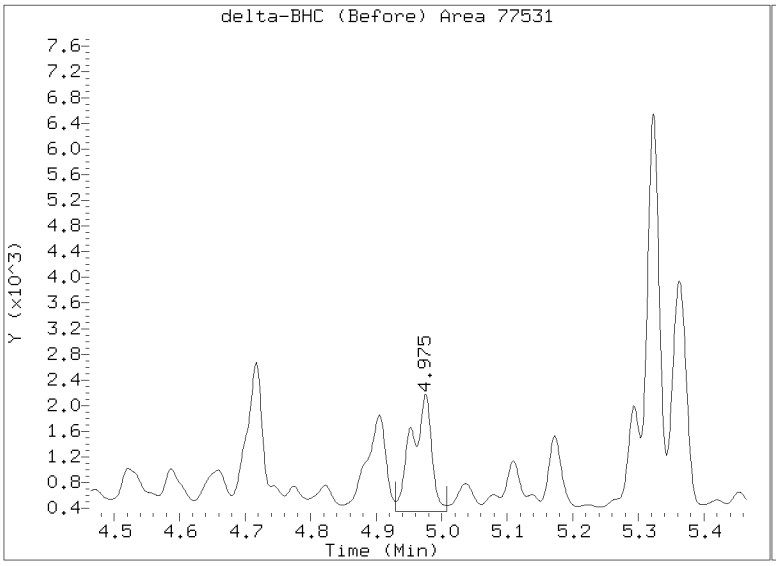

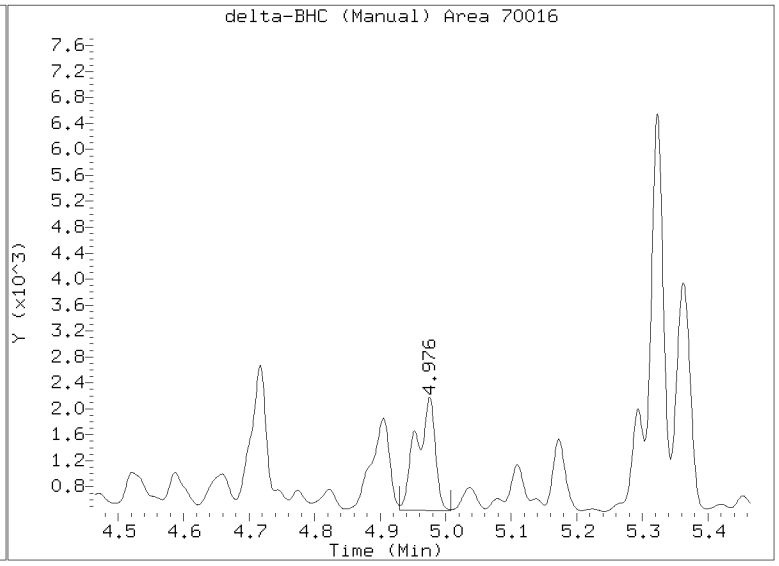

Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/058F6701.D
Injection Date: 03-MAR-2023 19:43
Lab ID:23A0420-01 Client ID:
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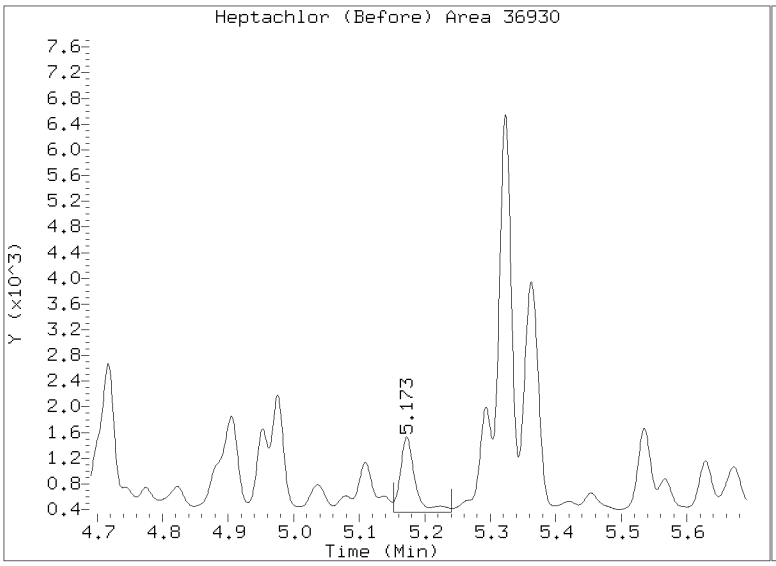
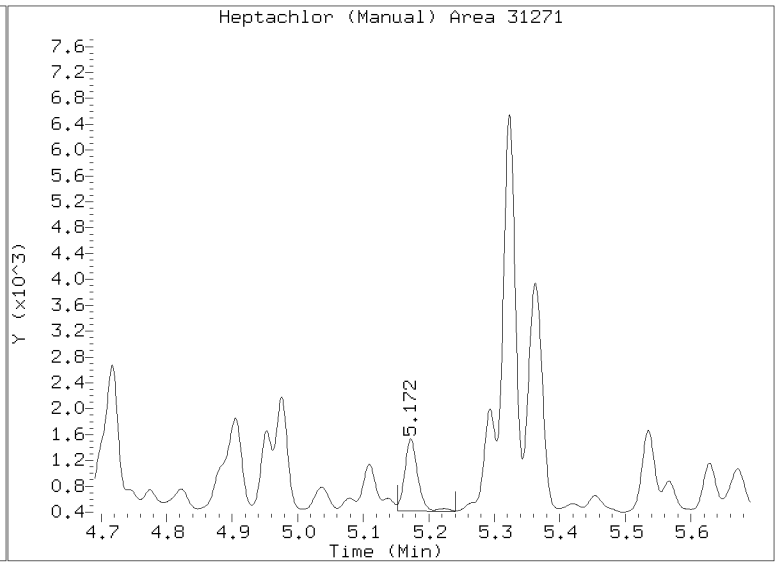
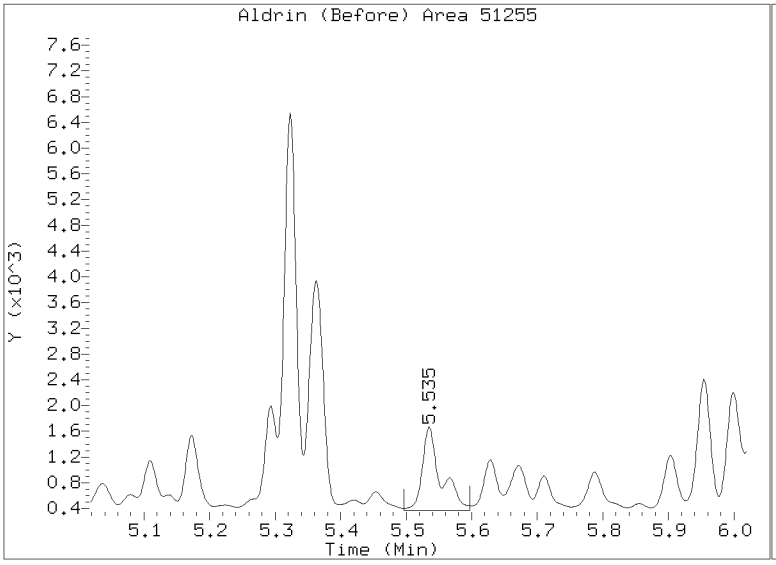
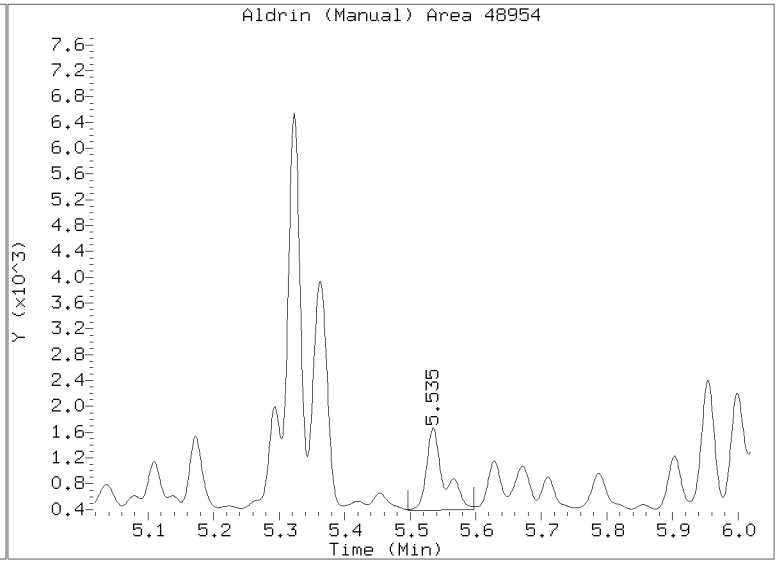
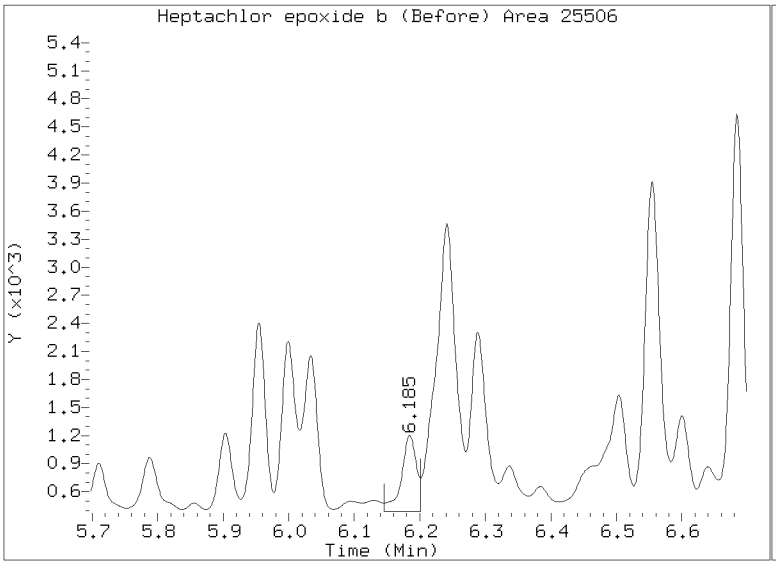
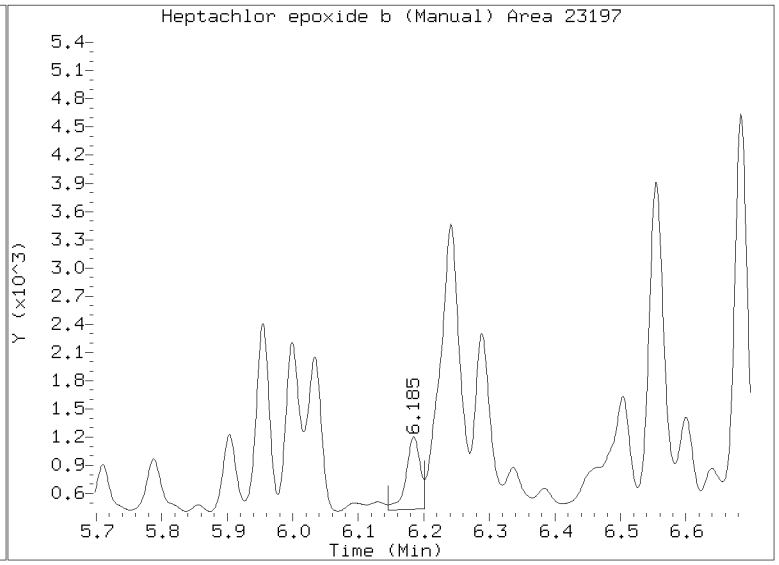






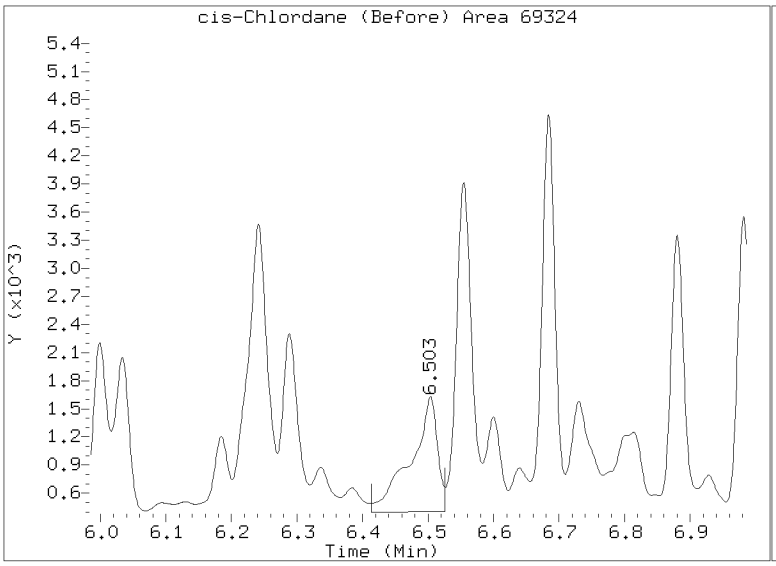


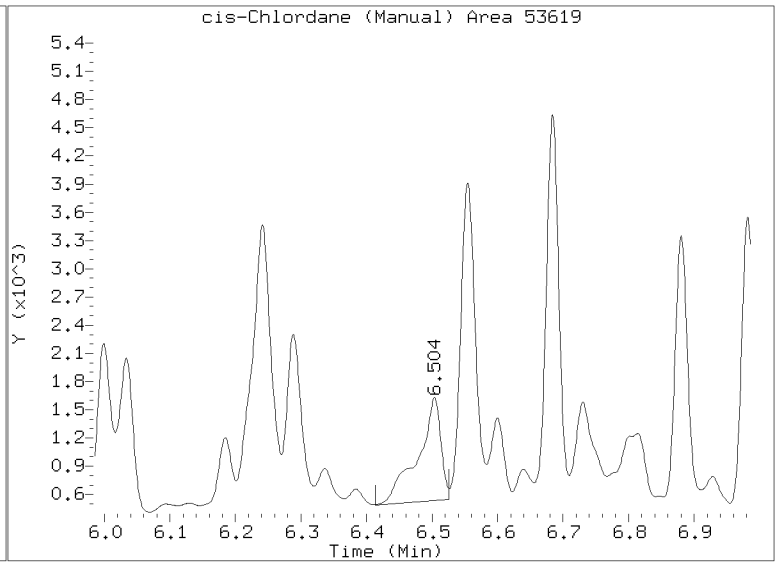


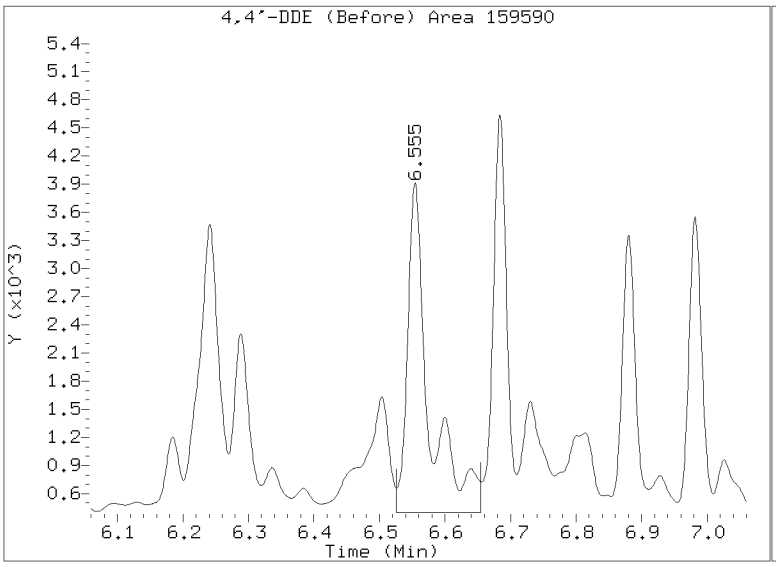


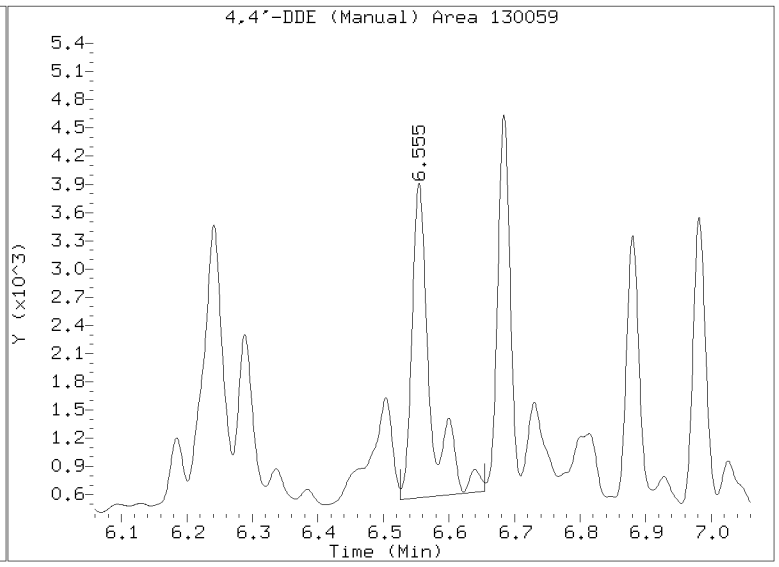
Manual Peak Adjustment Report, STX-CLP

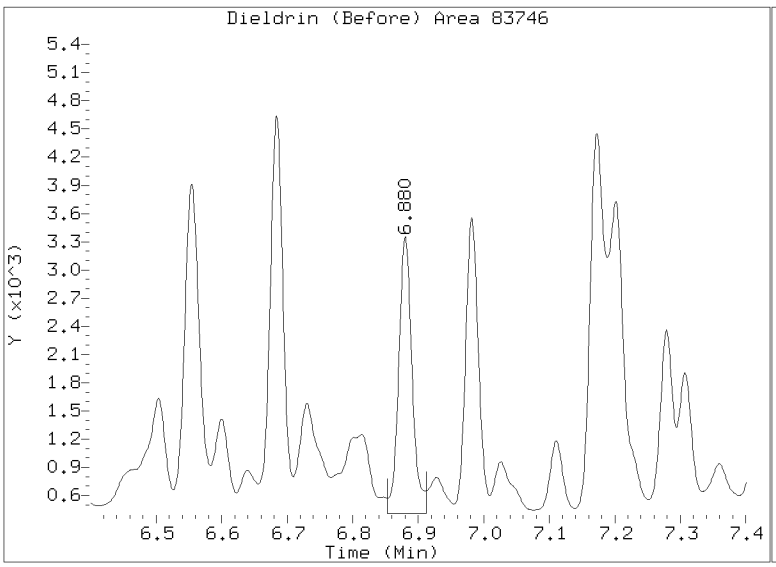
Datafile: /20230302.b/058F6701.D
Injection Date: 03-MAR-2023 19:43
Lab ID:23A0420-01 Client ID:
Report Date: 03/09/2023 11:19

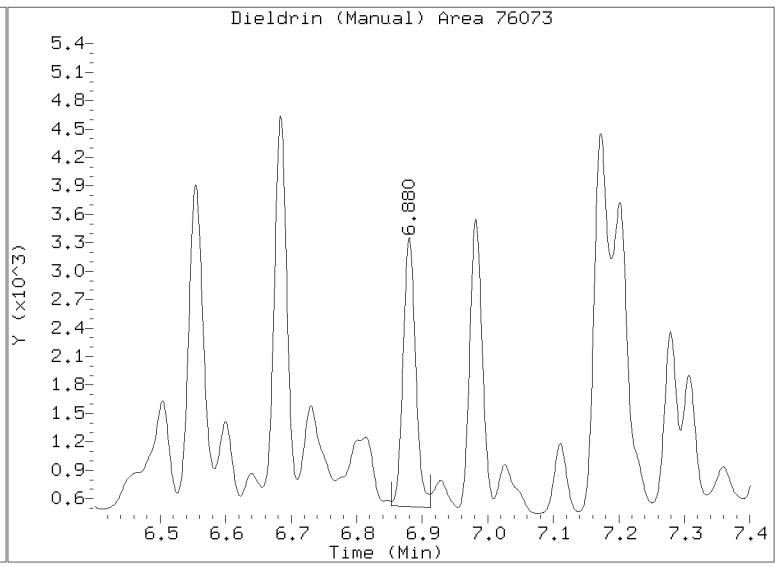






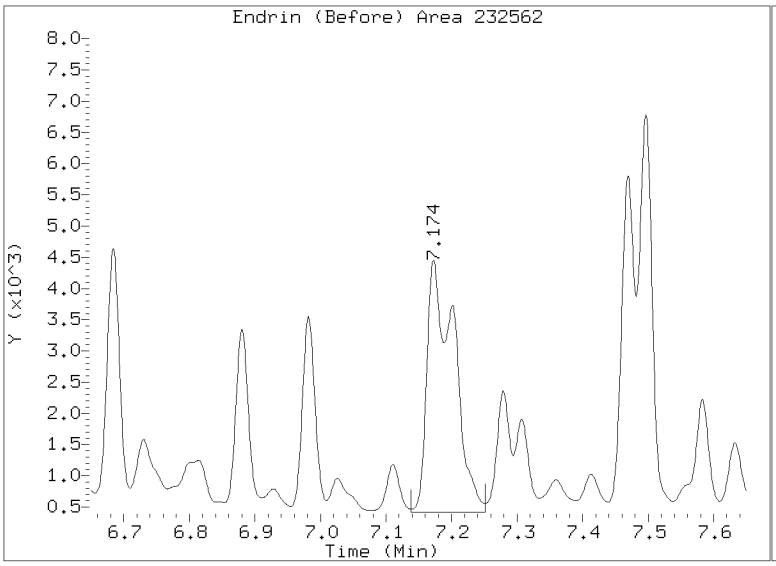


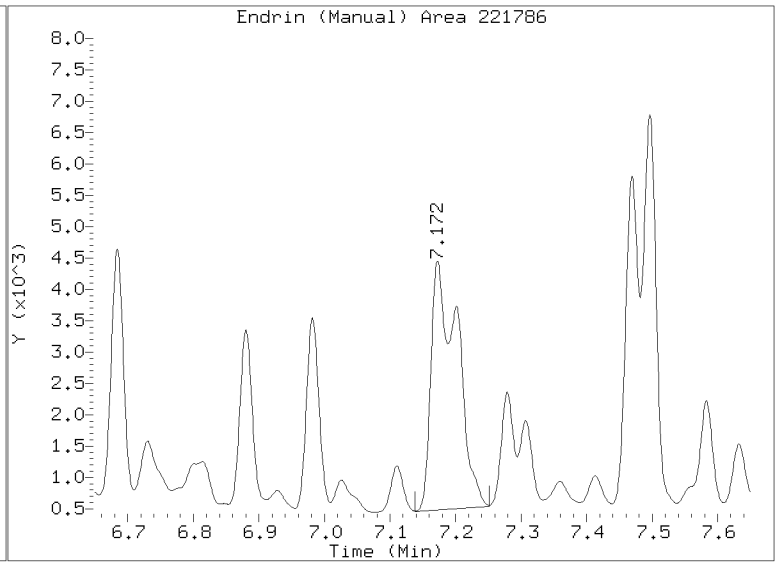


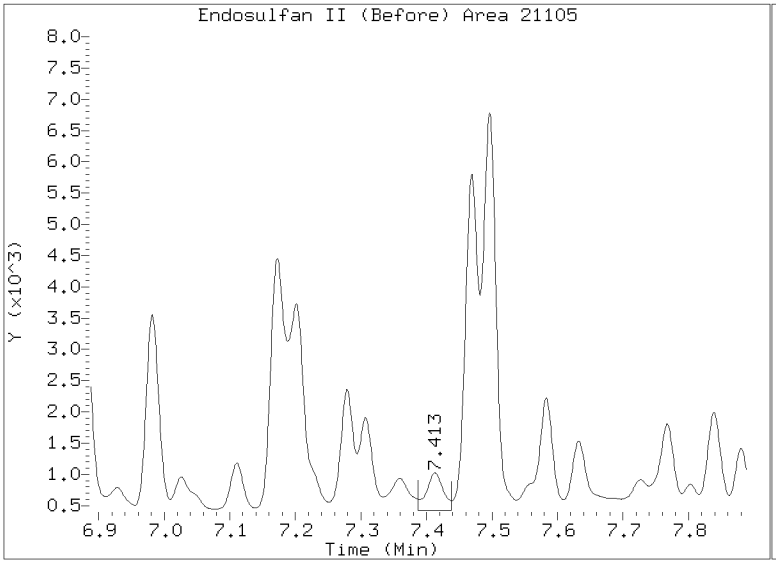


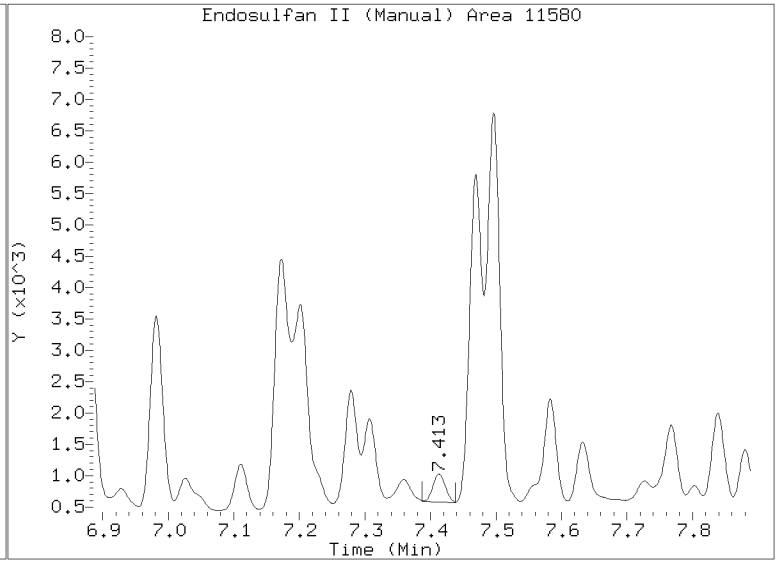
Manual Peak Adjustment Report, STX-CLP

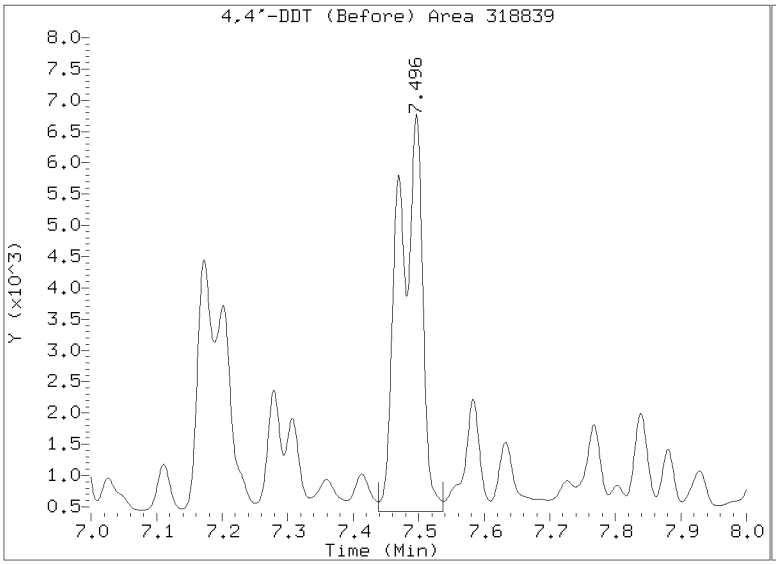
Datafile: /20230302.b/058F6701.D
Injection Date: 03-MAR-2023 19:43
Lab ID:23A0420-01 Client ID:
Report Date: 03/09/2023 11:19

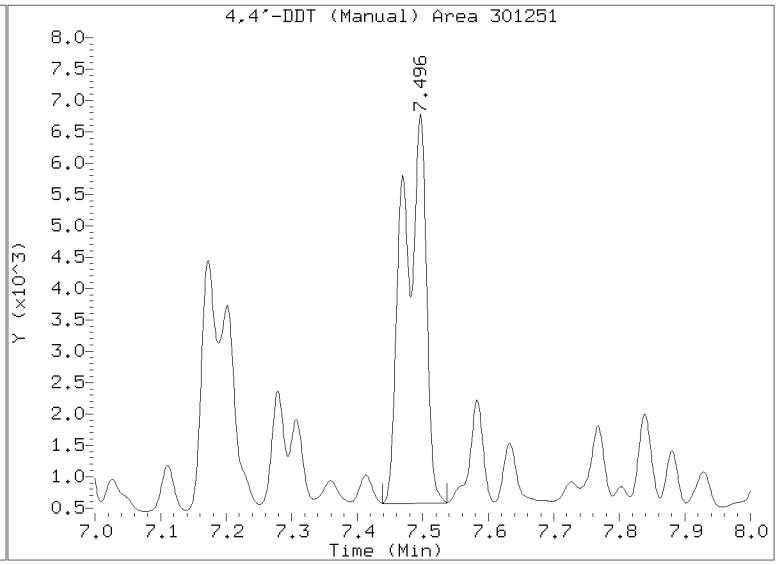












Manual Peak Adjustment Report, STX-CLP

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Injection Date: 03-MAR-2023 19:43
Lab ID:23A0420-01 Client ID:
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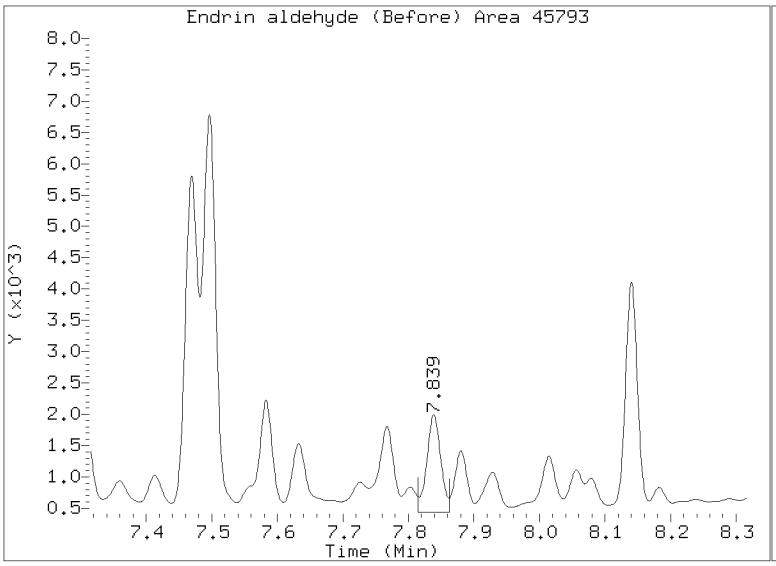

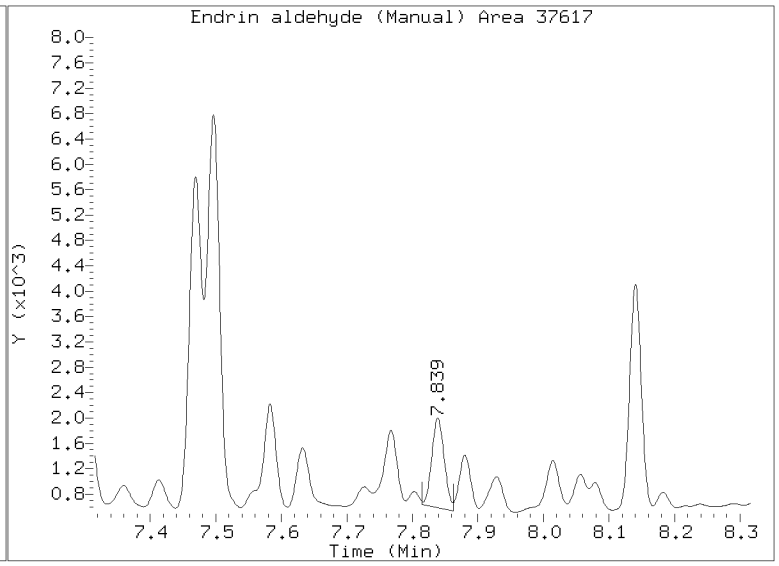

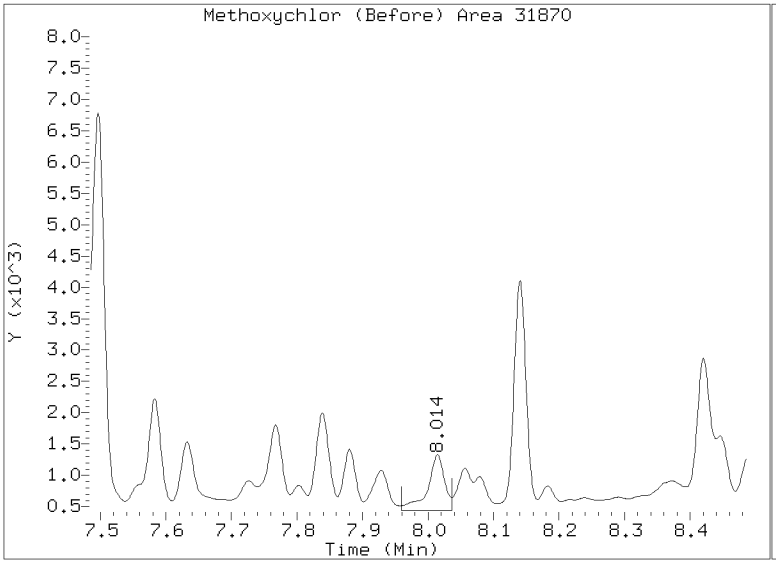

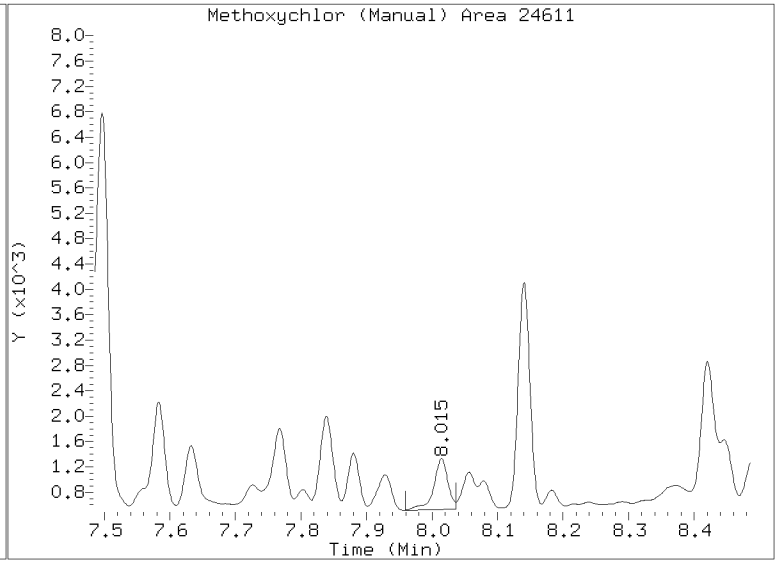

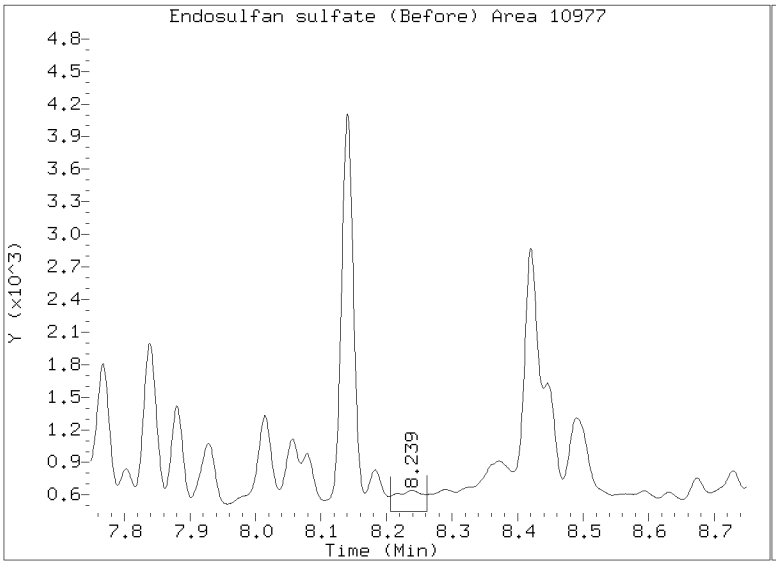

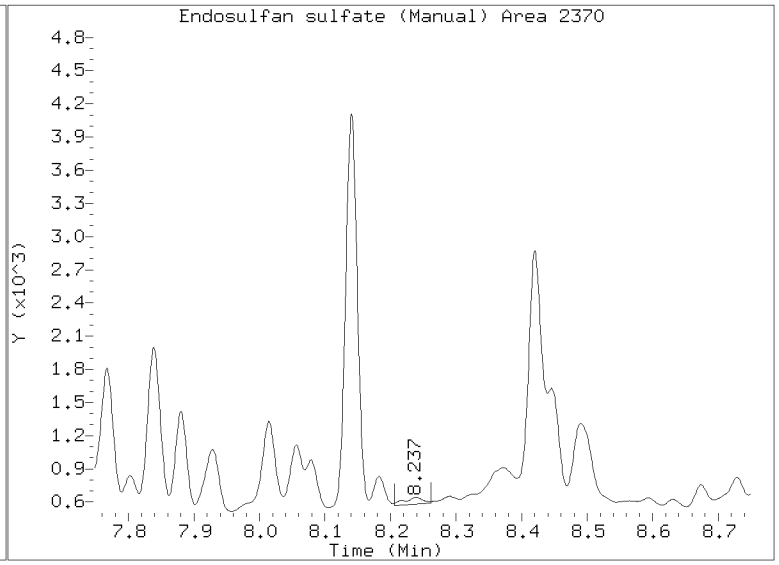

Manual Peak Adjustment Report, STX-CLP

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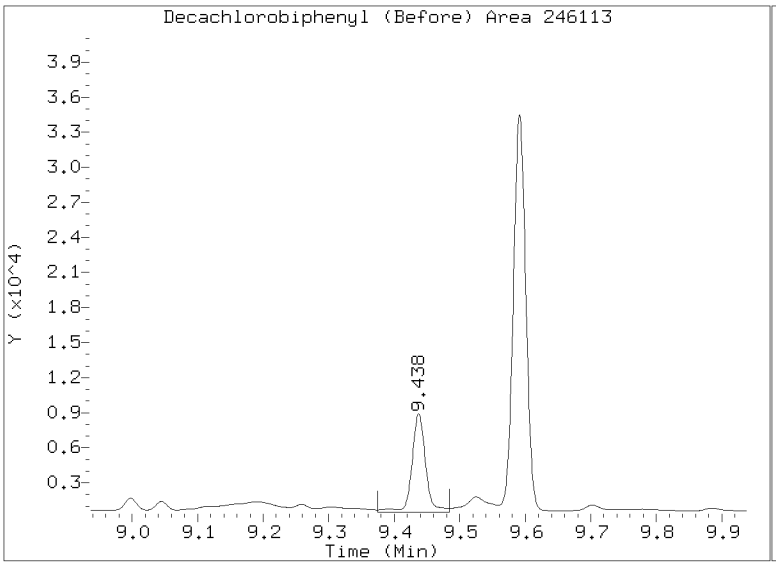
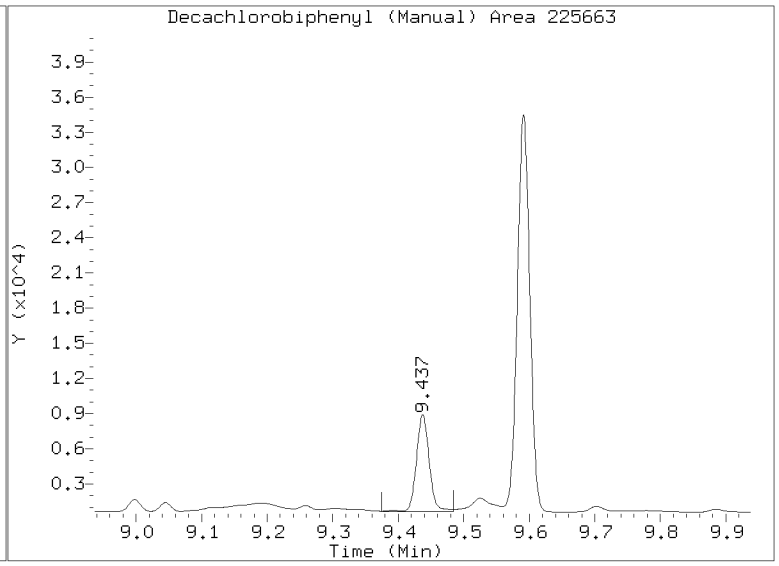
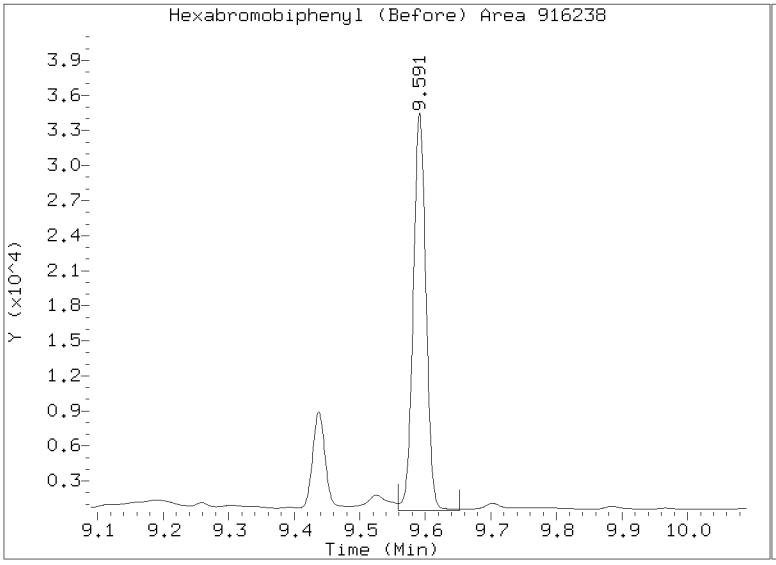
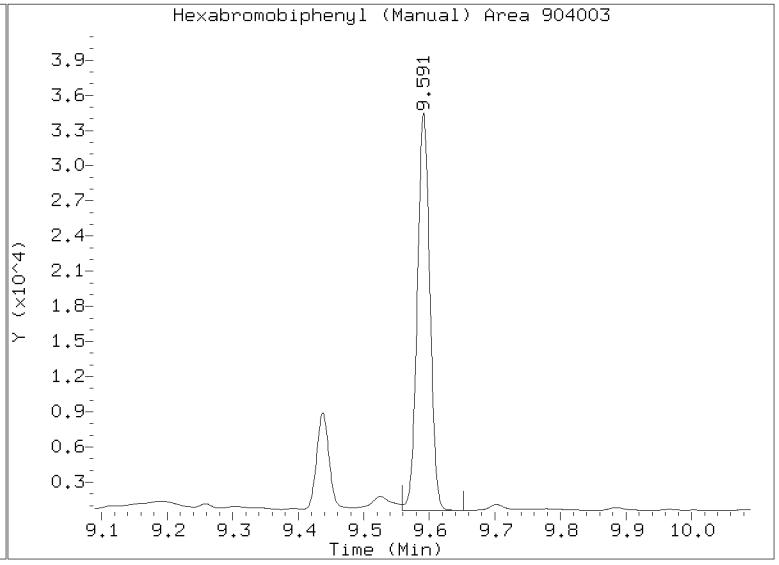
Lab ID:23A0420-01 Client ID:
Report Date: 03/09/2023 11:19









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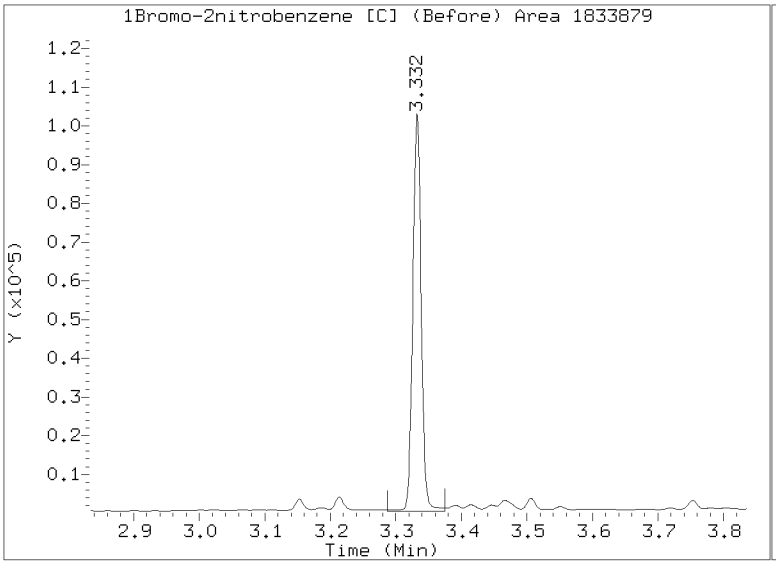

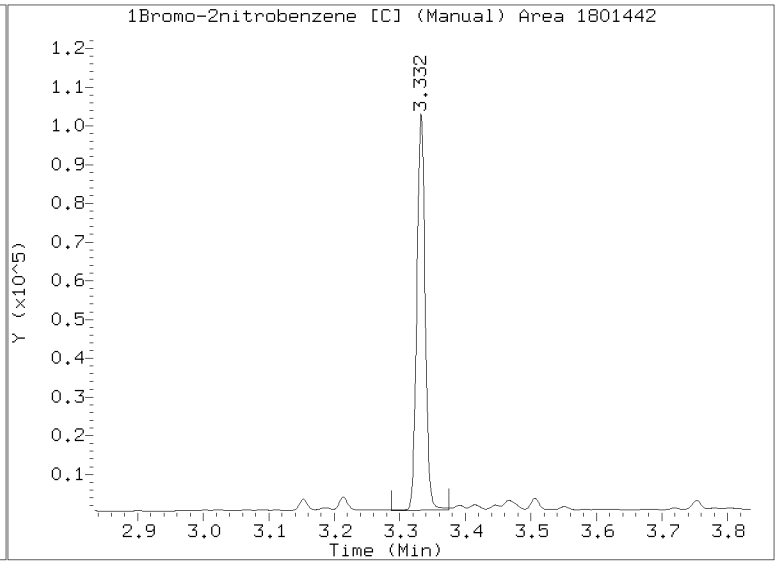

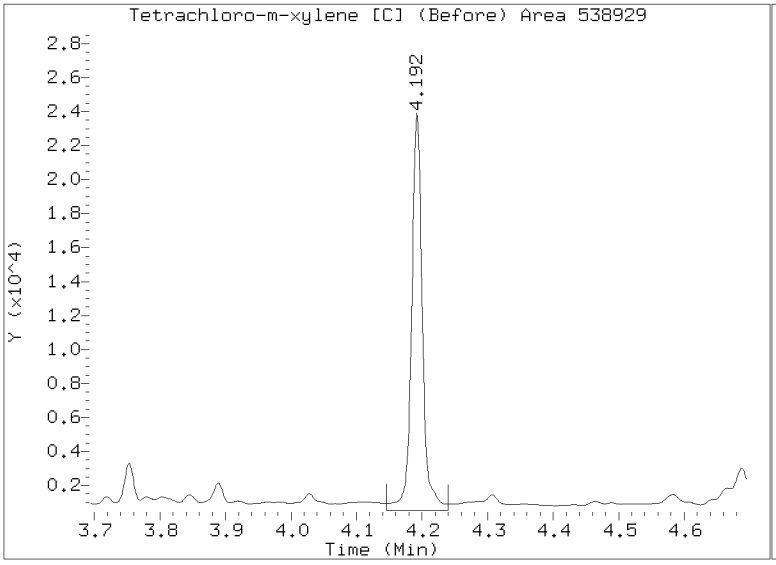

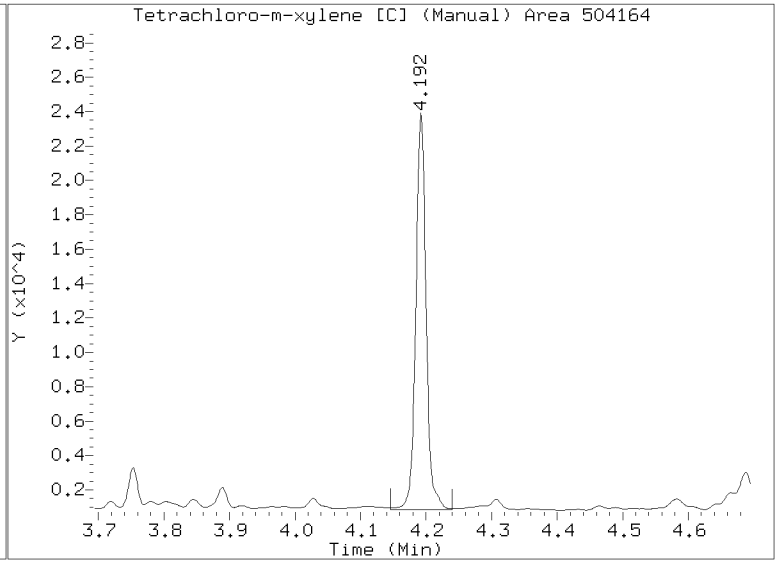

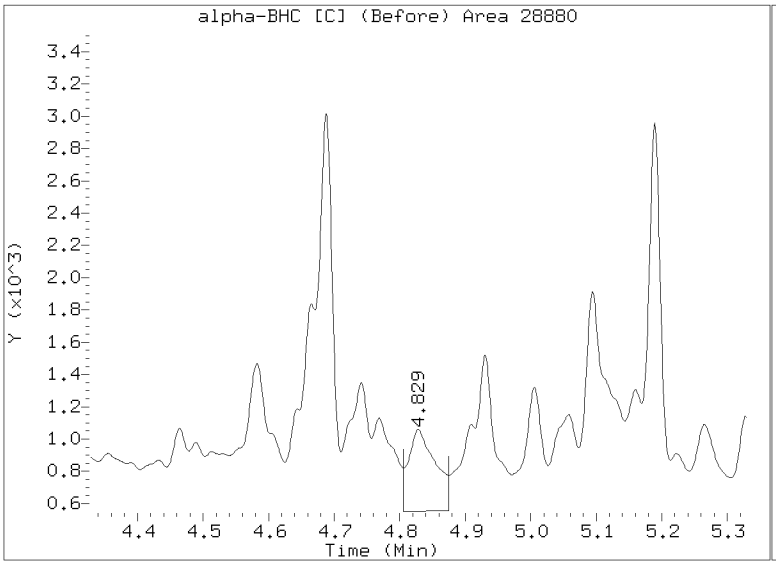

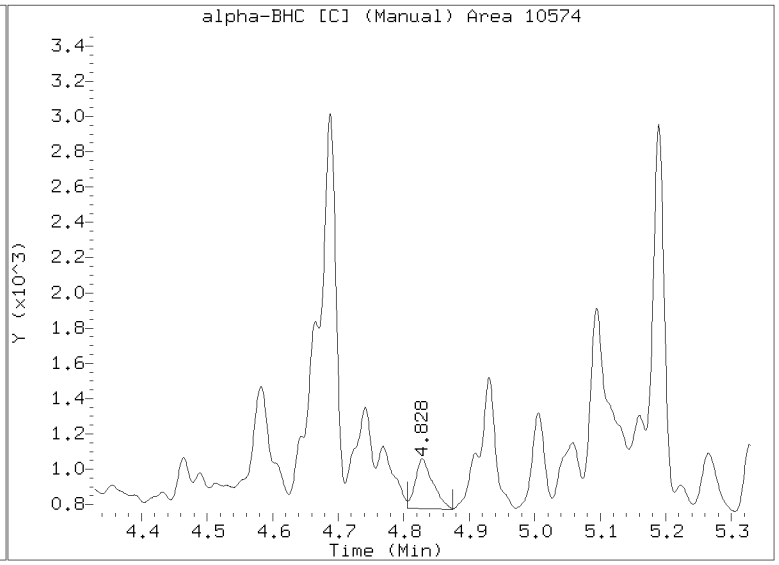

Manual Peak Adjustment Report, CLP-2

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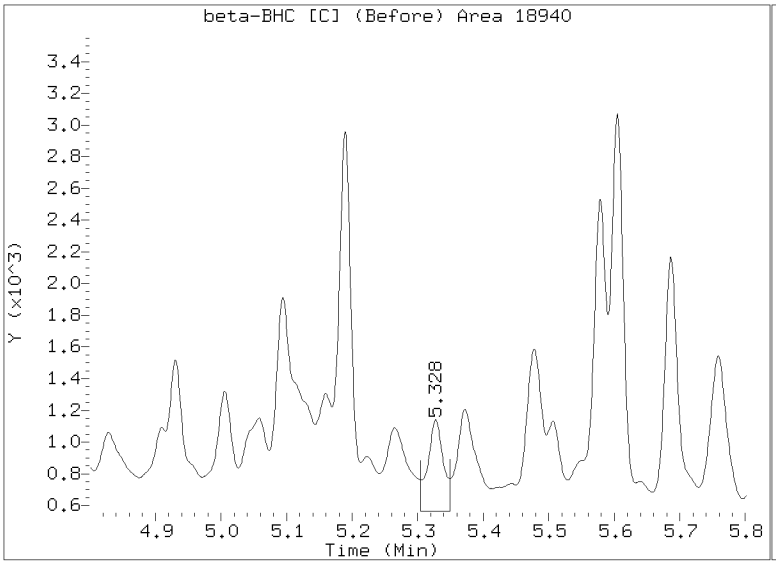

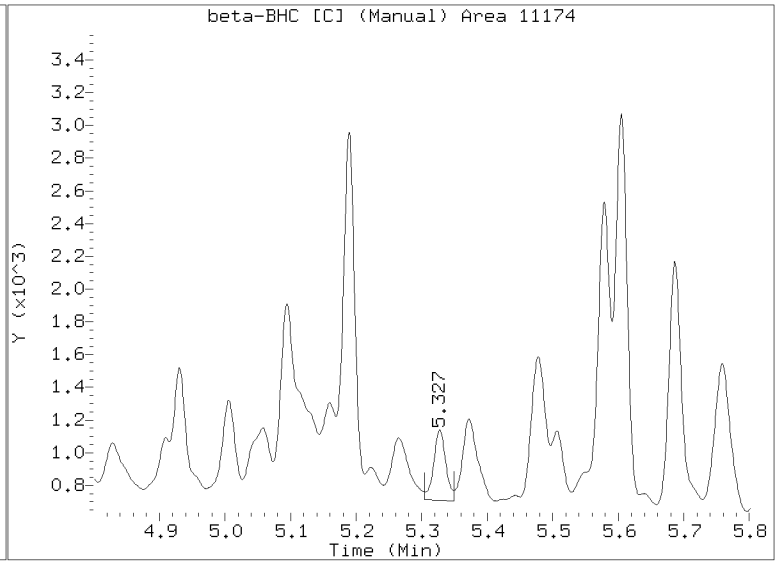

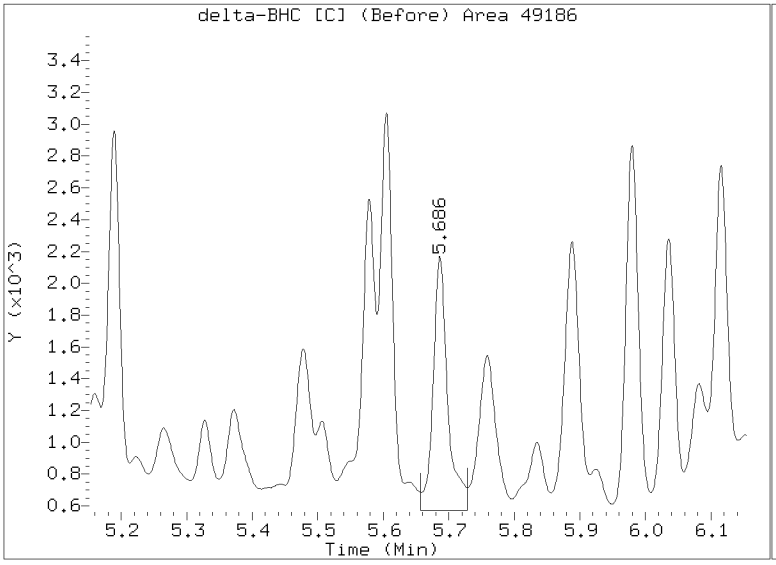

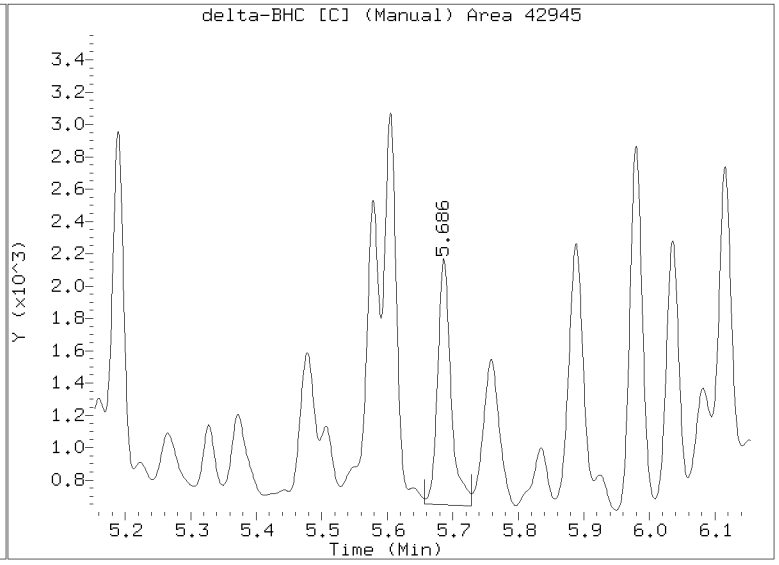

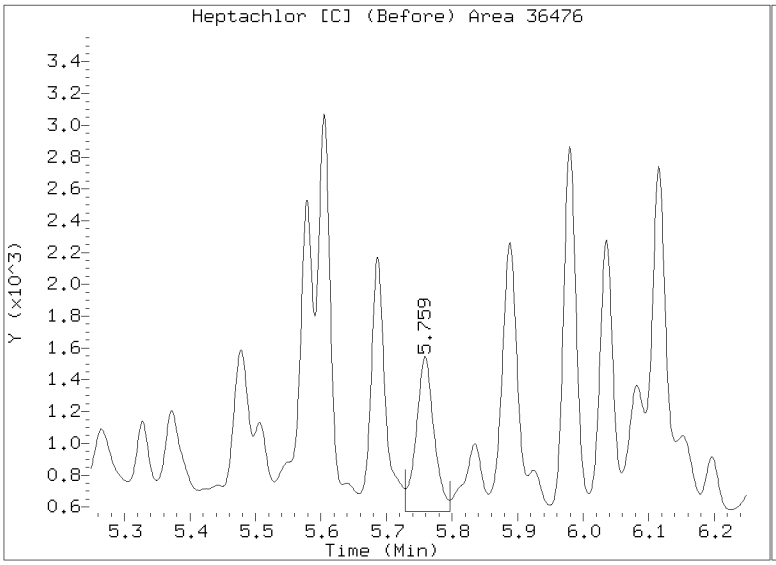

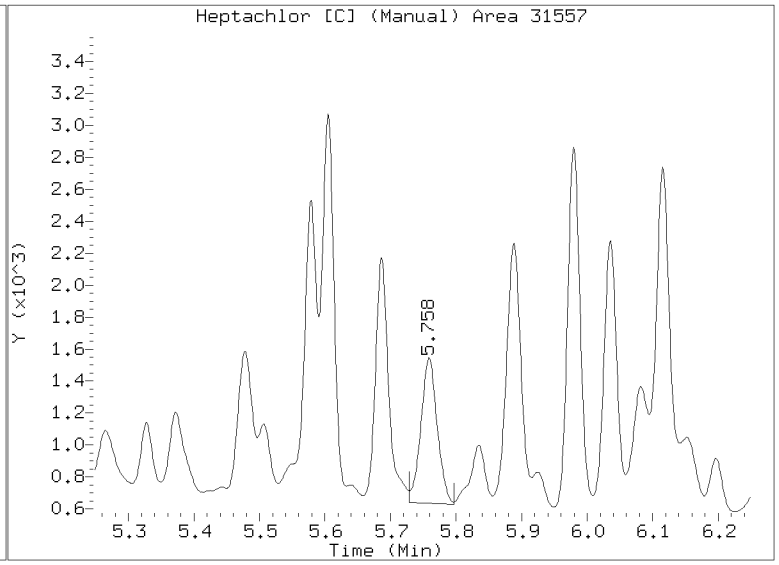

Manual Peak Adjustment Report, CLP-2

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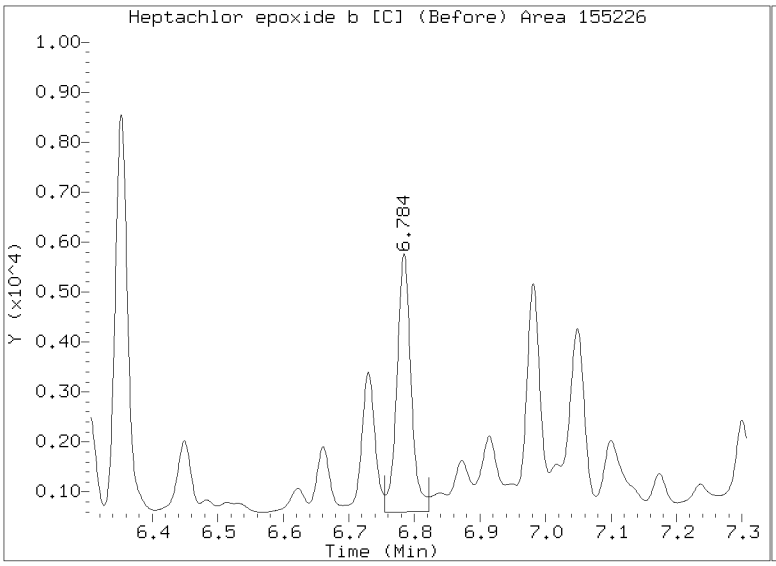

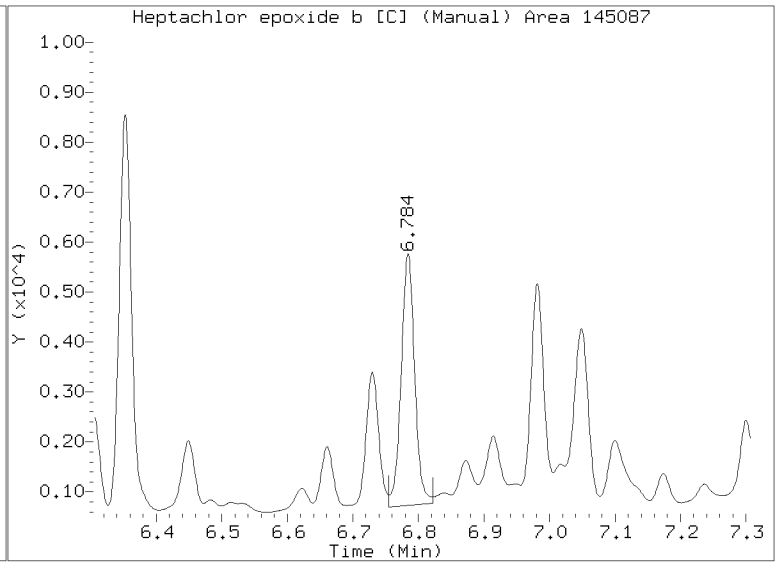

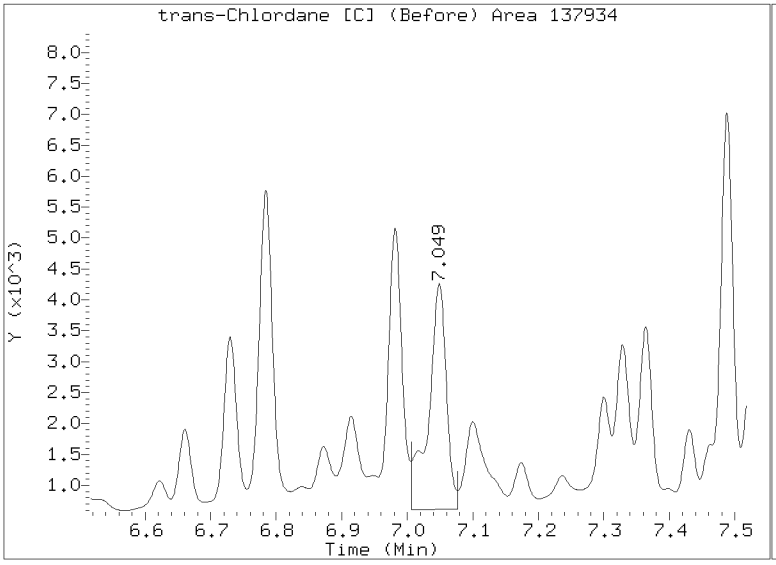

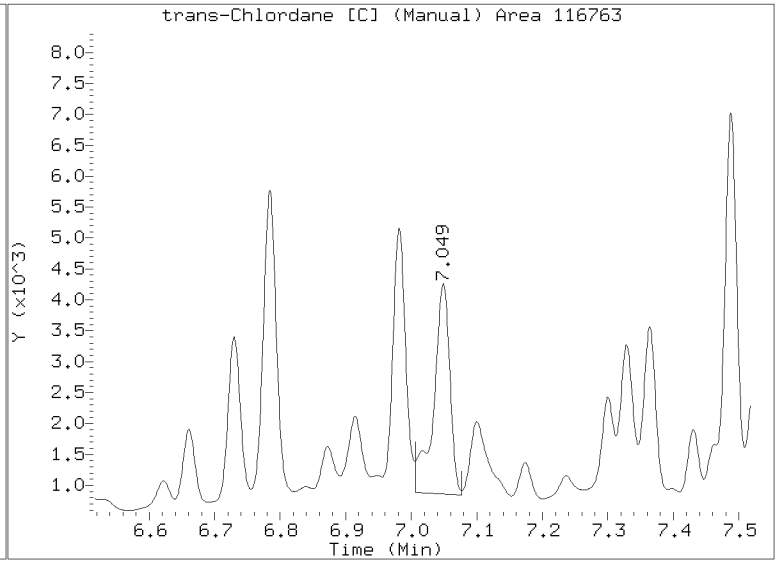

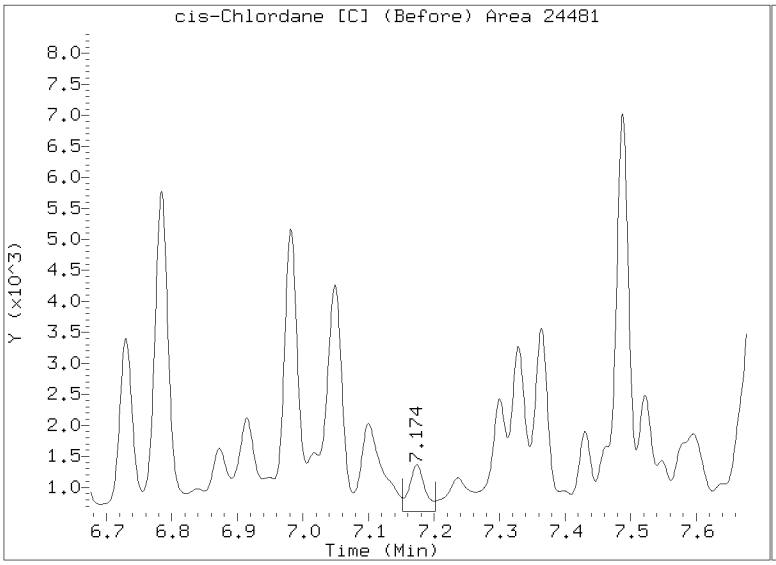

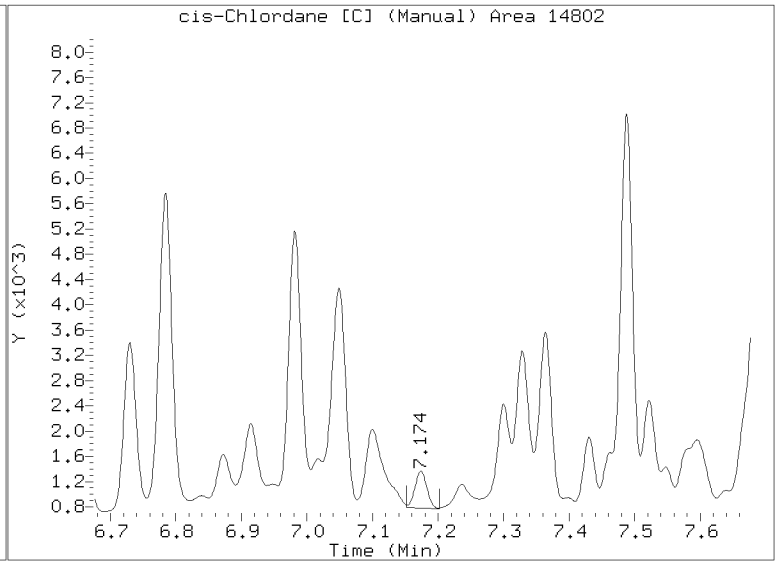

Manual Peak Adjustment Report, CLP-2

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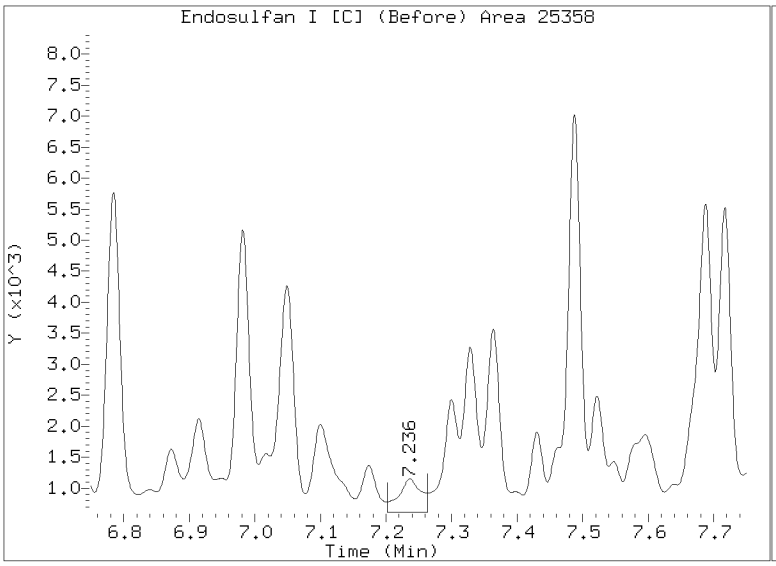

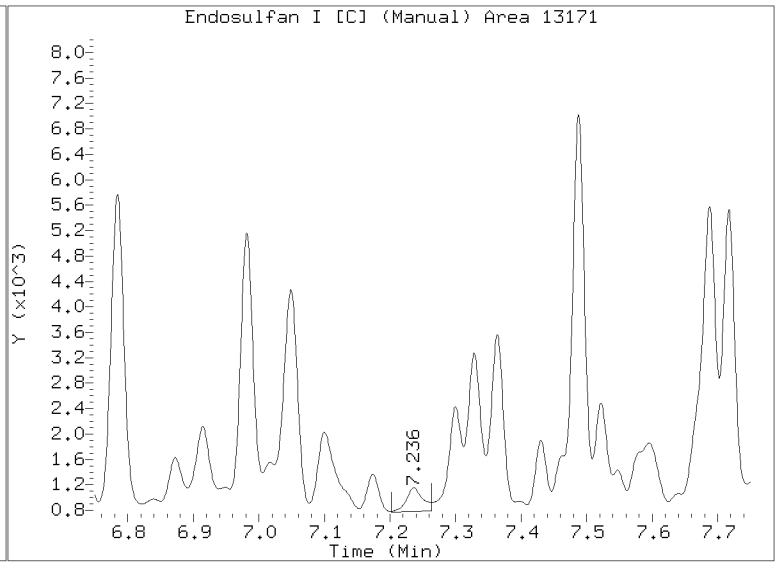

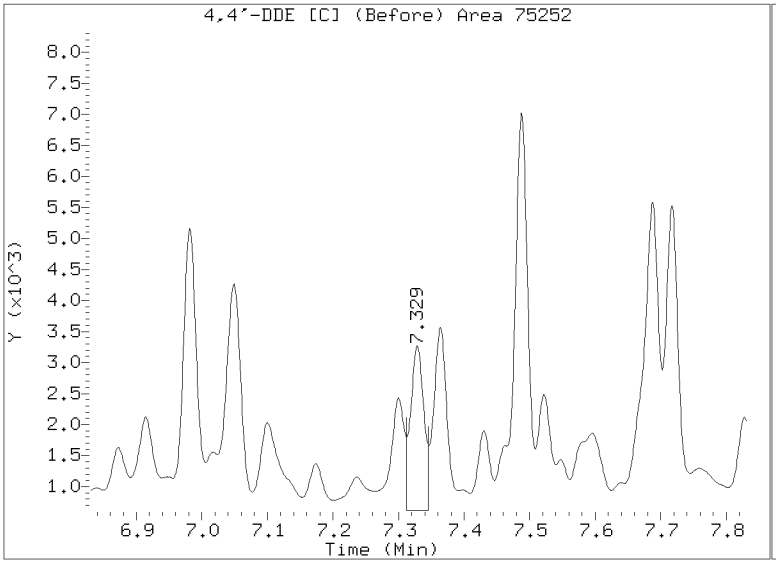

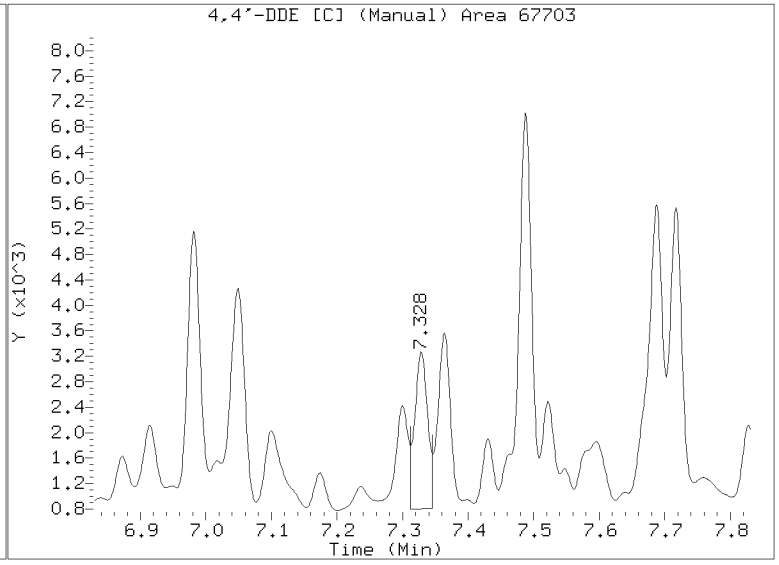

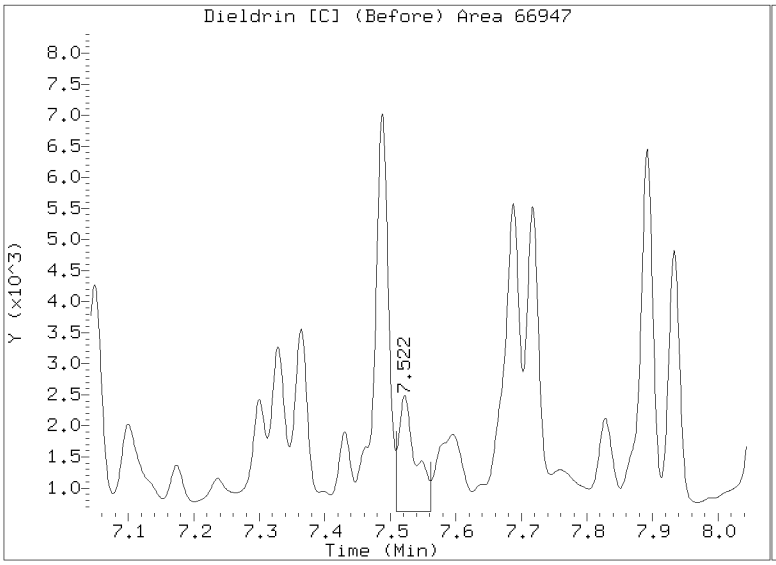

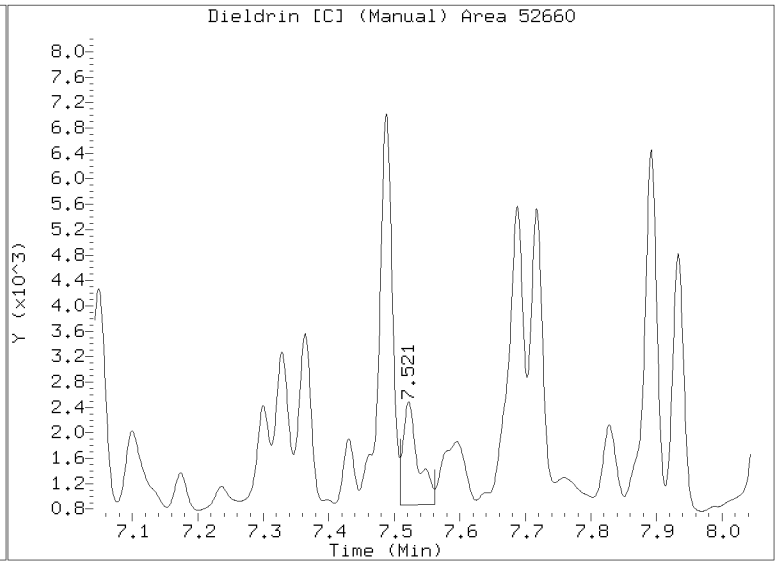

Manual Peak Adjustment Report, CLP-2

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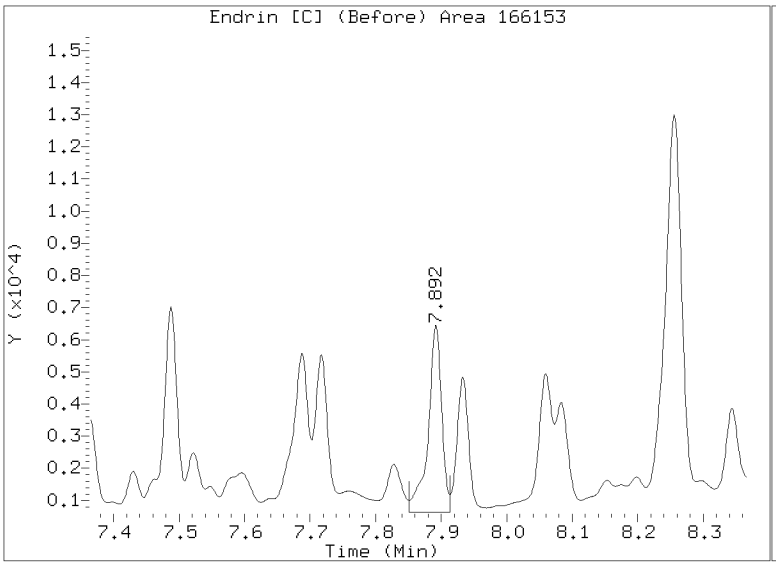

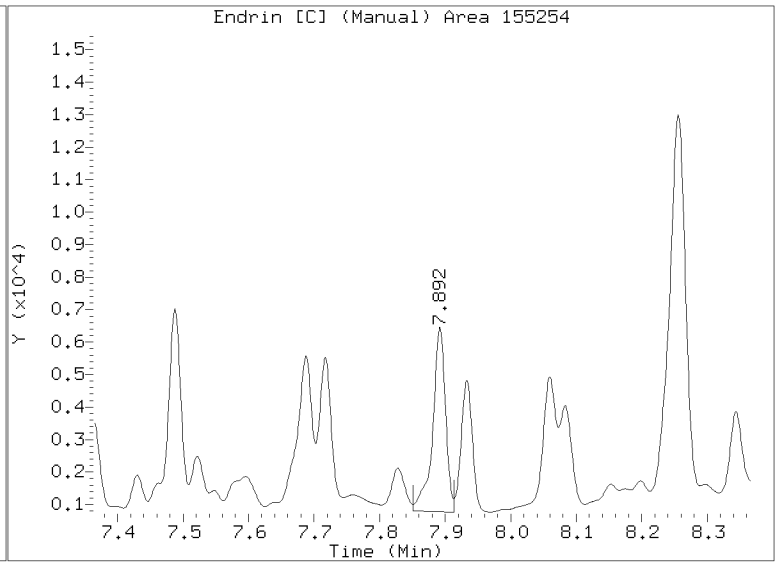

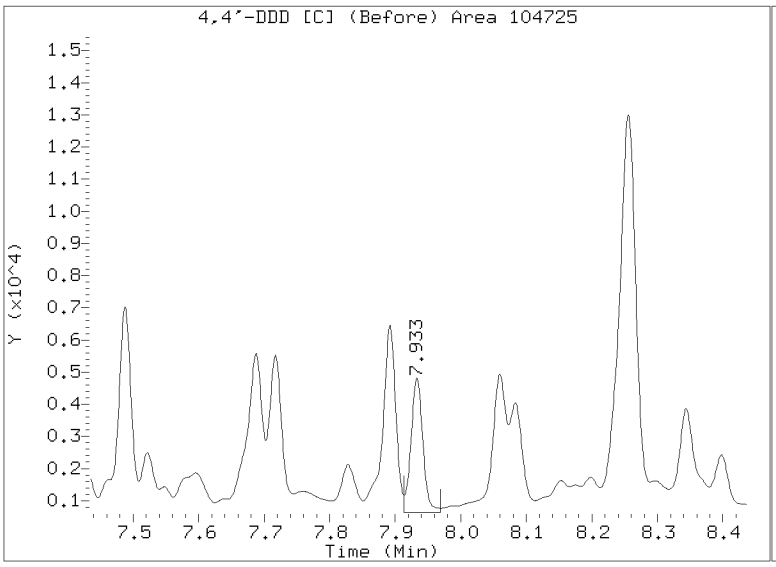

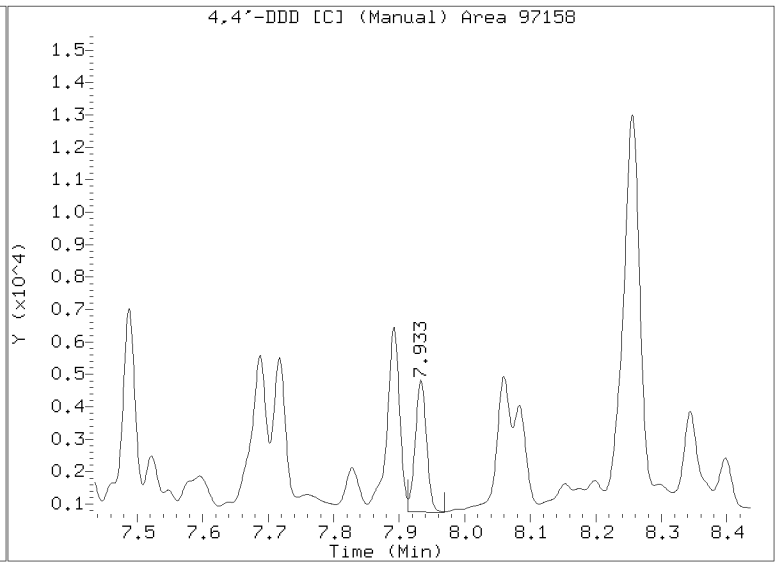

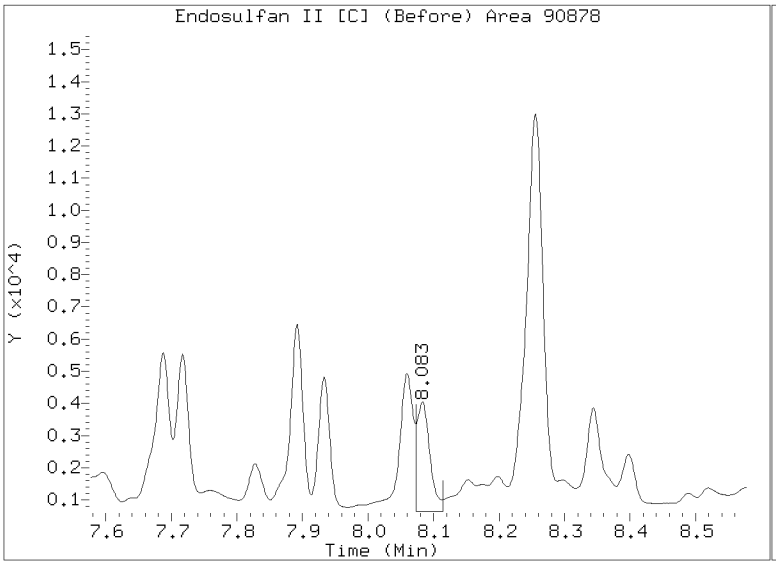

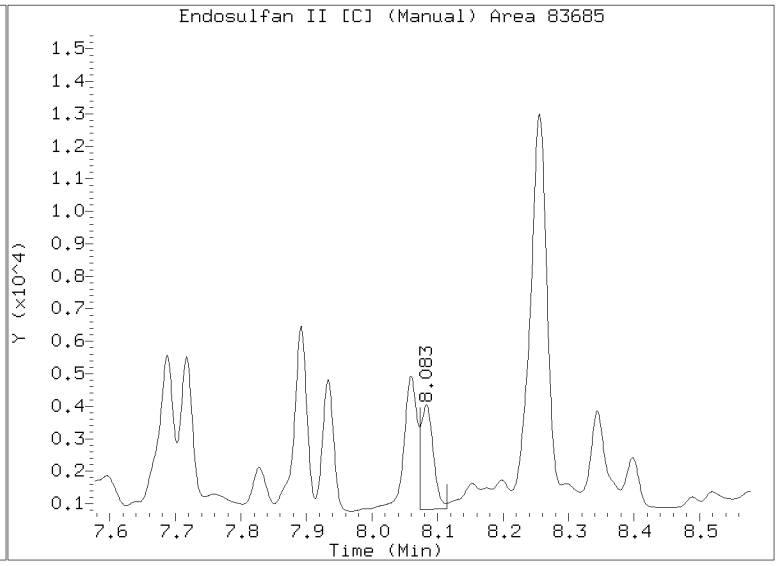

Manual Peak Adjustment Report, CLP-2

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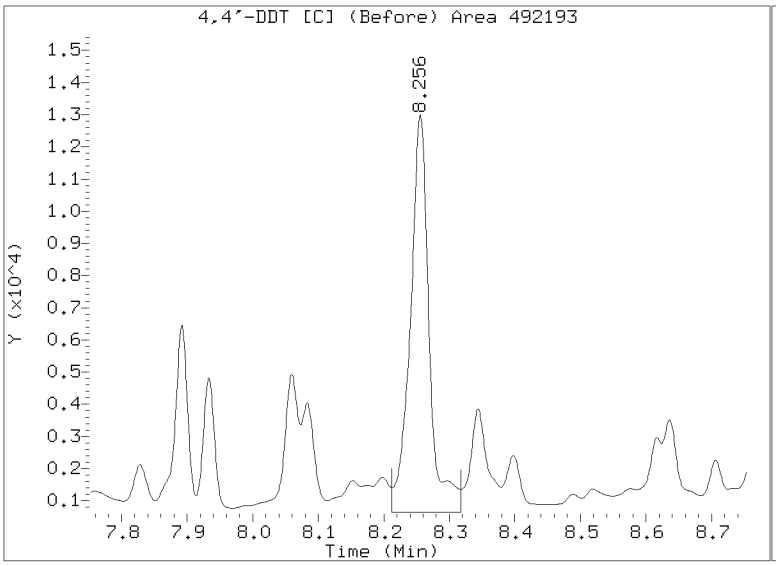

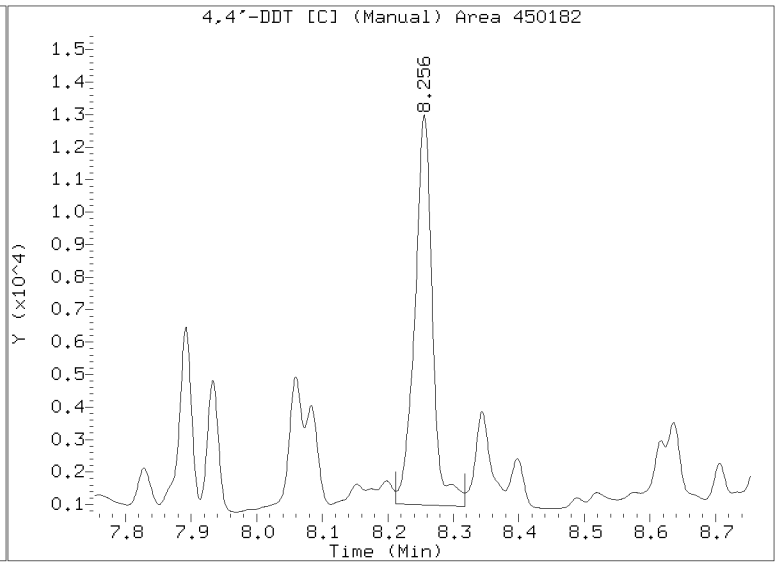

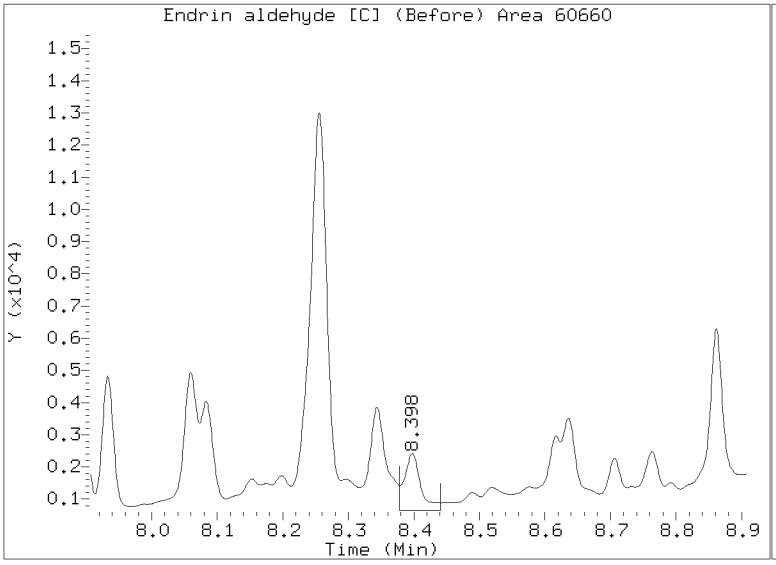

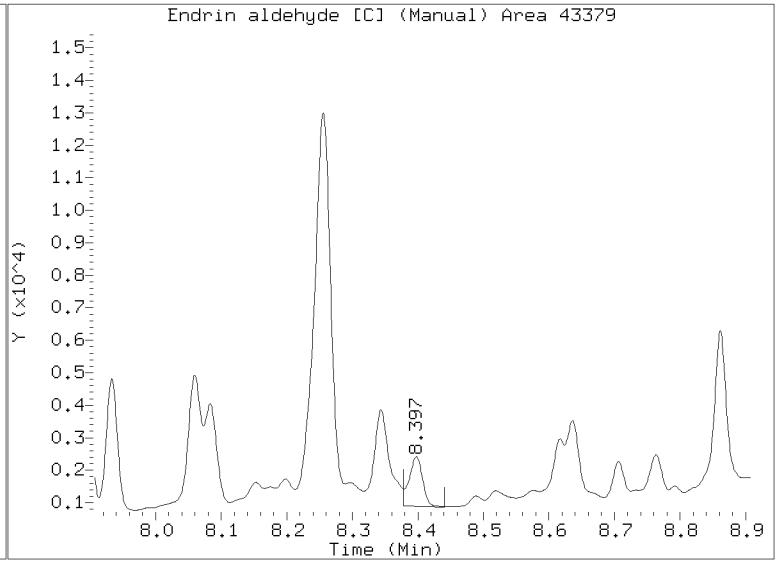

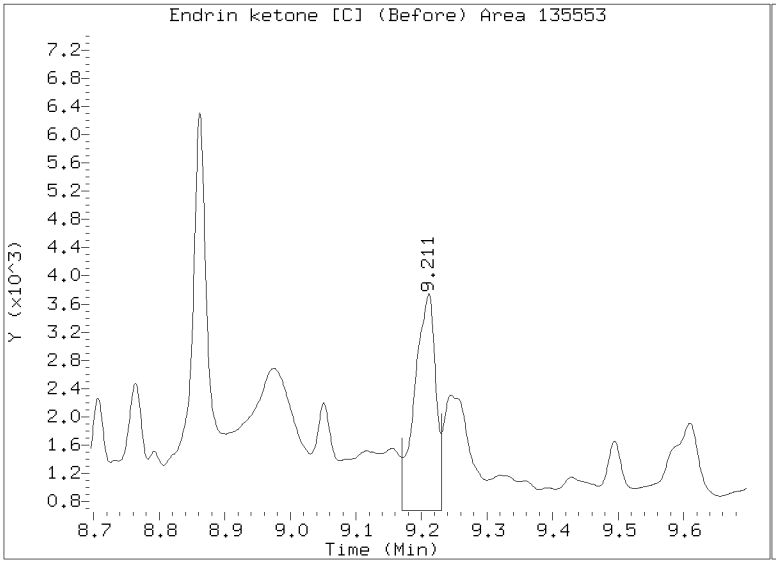

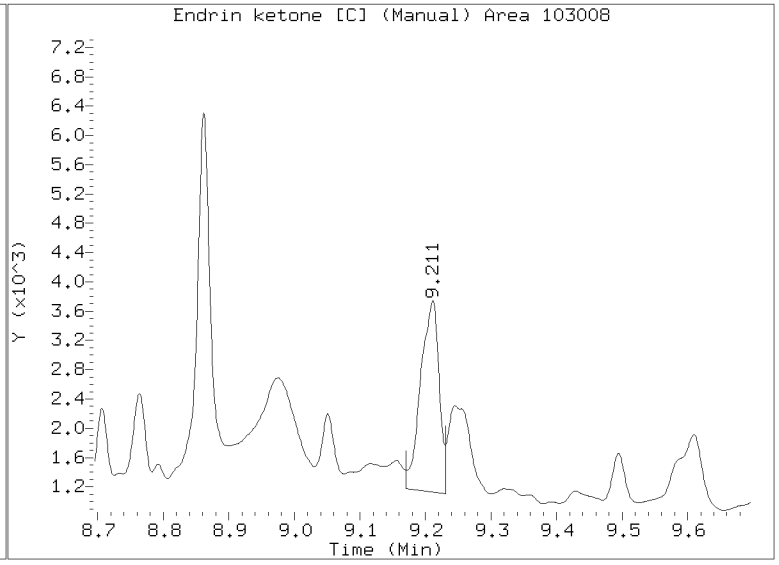

Manual Peak Adjustment Report, CLP-2

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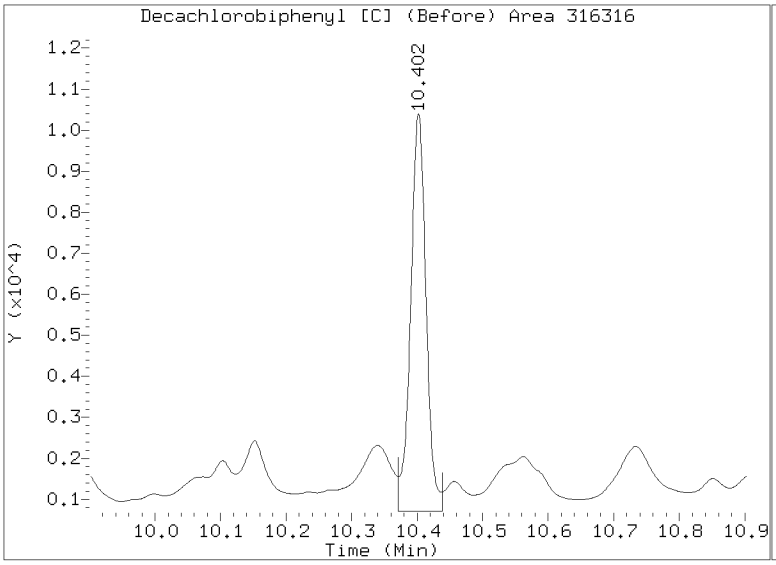
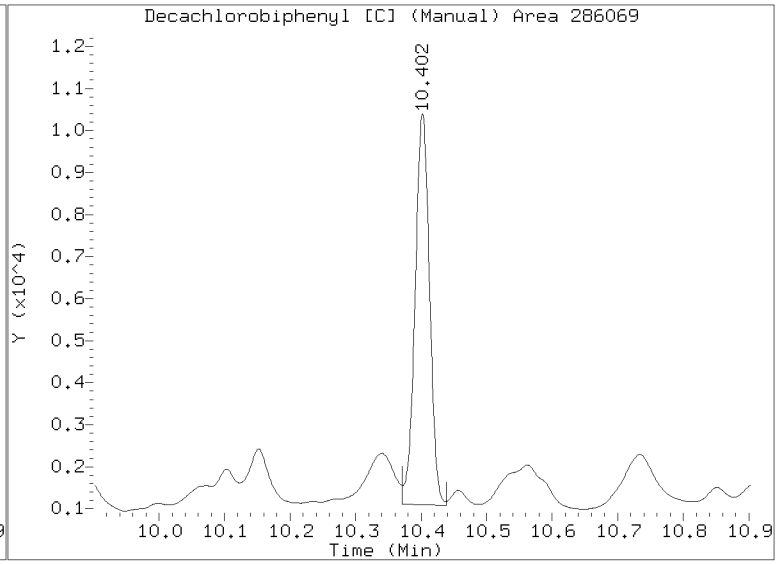
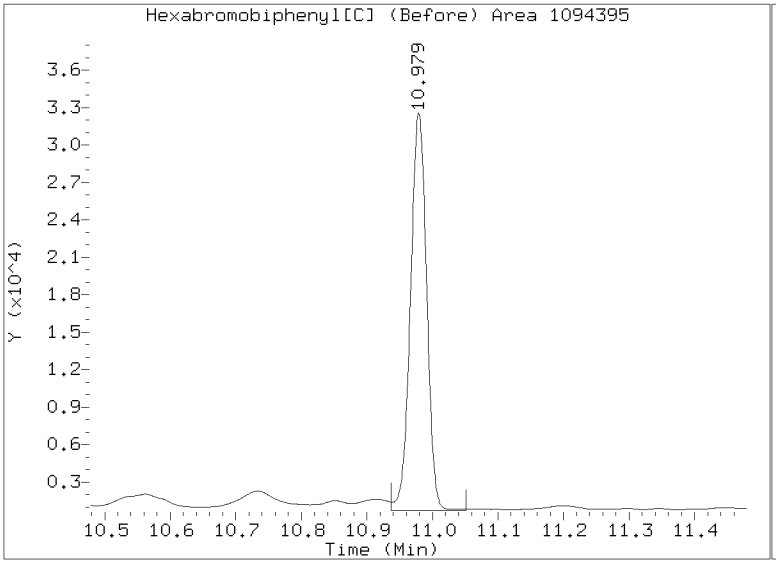
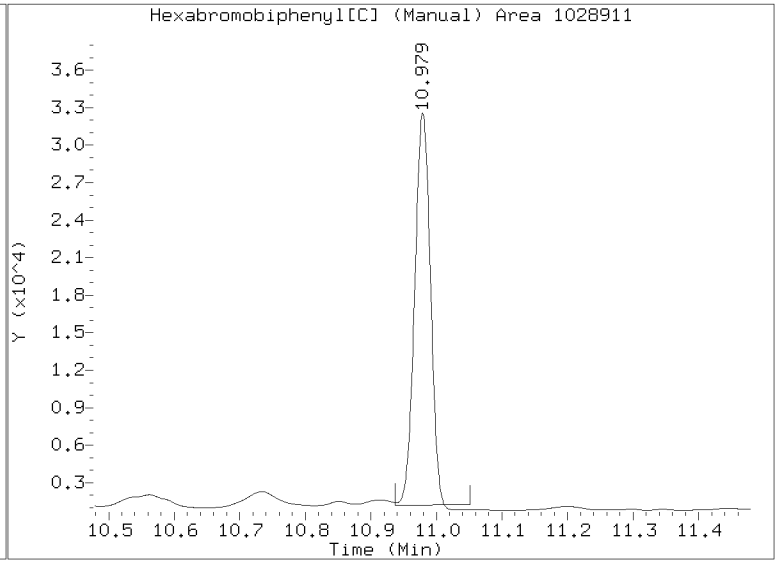








Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1003

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0420-07 A	File ID:	059F6801.D
Sampled:	01/19/23 12:25	Prepared:	02/16/23 11:56	Analyzed:	03/03/23 20:01
% Solids:	51.28	Preparation:	EPA 3546 (Microwave)	Initial/Final:	24.41 g Wet / 2.5 mL
Batch:	BLB0382	Sequence:	SLC0093	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9888*	*5.05*	*63.2*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.9888*	*4.82*	*60.3*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9888*	*3.04*	*38.0*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.9888*	*3.90*	*48.8*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/059F6801.D
Data file 2: /20230302.b/B20230302.b/059F6801.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23A0420-07
Client ID:
Injection Date: 03-MAR-2023 20:01
Report Date: 03/09/2023 11:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.409	0.018	56202	4.845	0.016	17683	1.86	0.48	118.0*	alpha-BHC MN
4.775	-0.004	8085	5.328	0.027	24010	0.70	1.72	84.6*	beta-BHC MN
4.976	0.011	149327	5.688	0.033	78198	6.06	2.58	80.5*	delta-BHC MN
4.718	0.019	127948	----			4.89	0.00	---	gamma-BHC (Lindane)
5.173	-0.018	54458	5.759	0.010	64520	2.34	2.28	2.5	Heptachlor MN
5.536	0.016	67251	----			2.58	0.00	---	Aldrin
6.186	-0.013	42379	6.785	-0.022	275486	1.87	10.32	138.5*	Heptachlor epoxide b MN
----			7.236	-0.014	15468	0.00	0.66	---	Endosulfan I
6.881	-0.020	143757	7.523	-0.020	80865	6.45	3.11	69.8*	Dieldrin MN
6.555	-0.005	176129	7.330	-0.001	96267	8.51	4.04	71.3*	4,4'-DDE MN
7.173	0.023	366790	7.893	0.027	280206	30.34	18.68	47.6*	Endrin MN
7.414	0.026	25614	8.084	0.007	149449	2.35	9.72	122.0*	Endosulfan II MN
----			7.933	-0.003	93714	0.00	6.42	---	4,4'-DDD
8.238	-0.011	5777	----			0.56	0.00	---	Endosulfan sulfate
----			8.263	0.009	506935	0.00	36.00	---	4,4'-DDT
8.016	0.030	43002	----			8.82	0.00	---	Methoxychlor
----			9.211	0.015	202693	0.00	13.90	---	Endrin ketone
7.840	0.024	102250	8.399	-0.008	80319	11.78	7.41	45.6*	Endrin aldehyde MN
6.337	-0.003	21783	----			0.95	0.00	---	trans-Chlordane
6.505	0.019	94560	7.174	-0.003	19422	4.10	0.75	138.5*	cis-Chlordane MN
2.325	-0.021	15920	2.521	0.029	3860	0.50	0.11	128.0*	Hexachlorobutadiene
----			----			0.00	0.00	---	Hexachlorobenzene
3.868	-0.003	324026	4.193	-0.002	504477	15.20	19.52	24.9	Tetrachloro-m-xylene MN
9.438	0.001	236007	10.403	0.000	281121	25.26	24.11	4.7	Decachlorobiphenyl MN

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

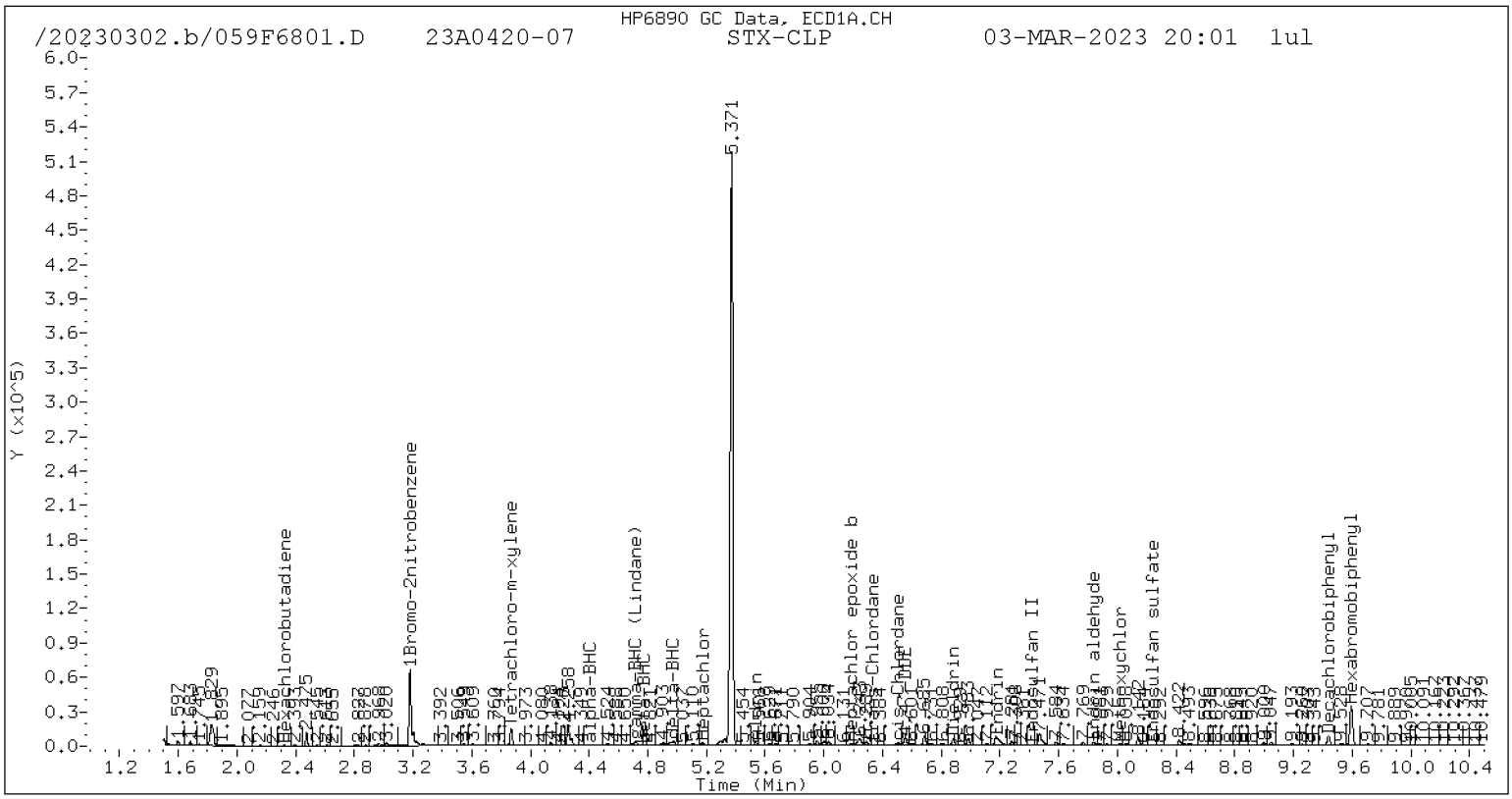
Standard Cpnd	Standard Area*	Sample Area	%D	
Bromo-Nitrobenzene	672426	1567346	133.1	<-
Hexabromobiphenyl	609723	922088	51.2	

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1835742	82.4
Hexabromobiphenyl	769764	1055037	37.1

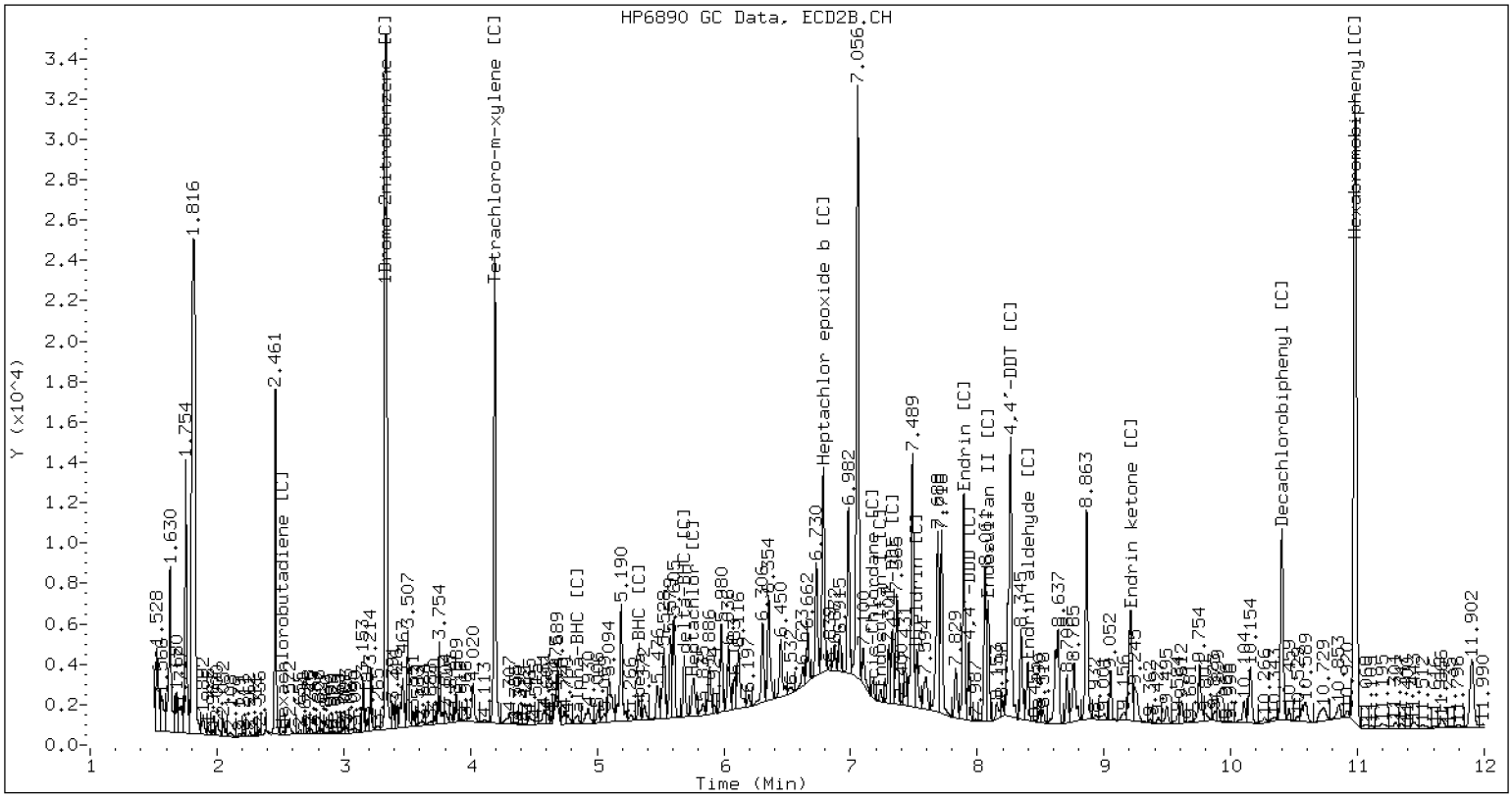
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

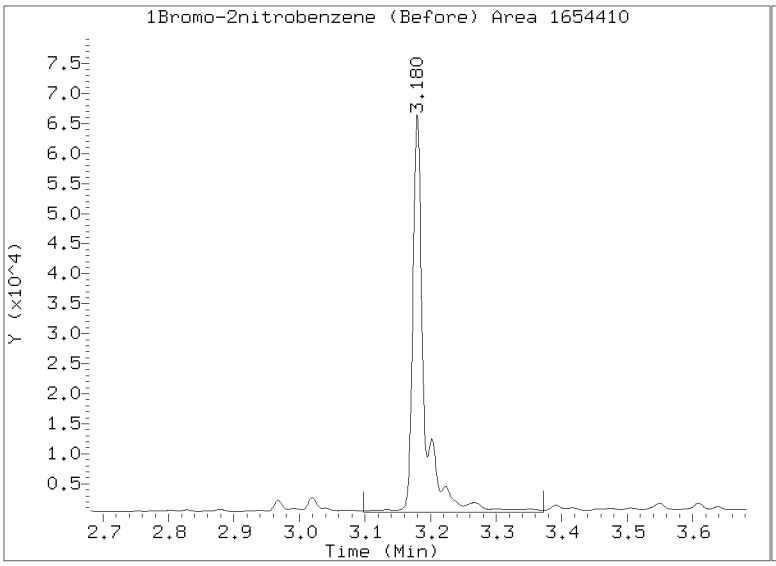
/20230302.b/B20230302.b/059F6801.D 23A0420-07 CLP2

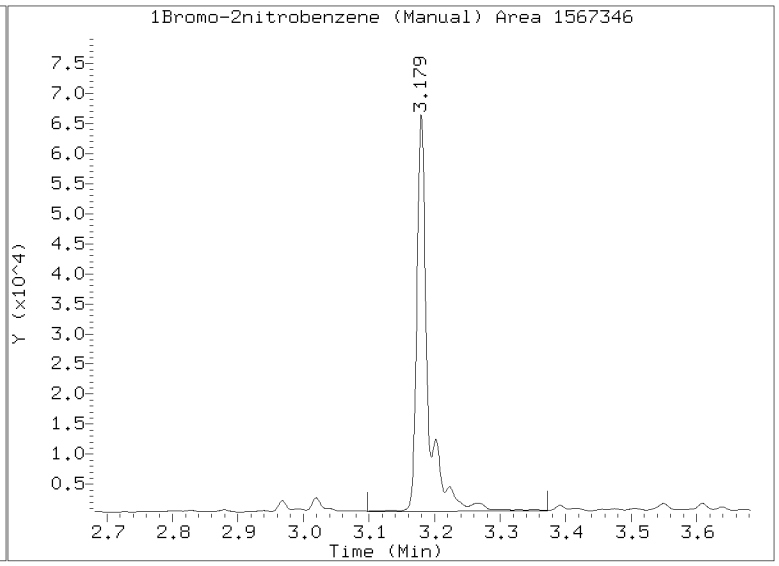


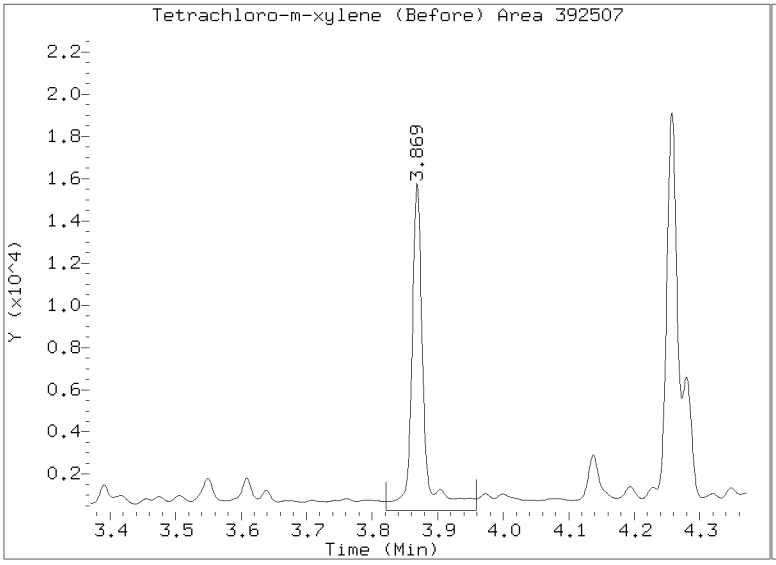
CLP-2 Manual Integration: YES

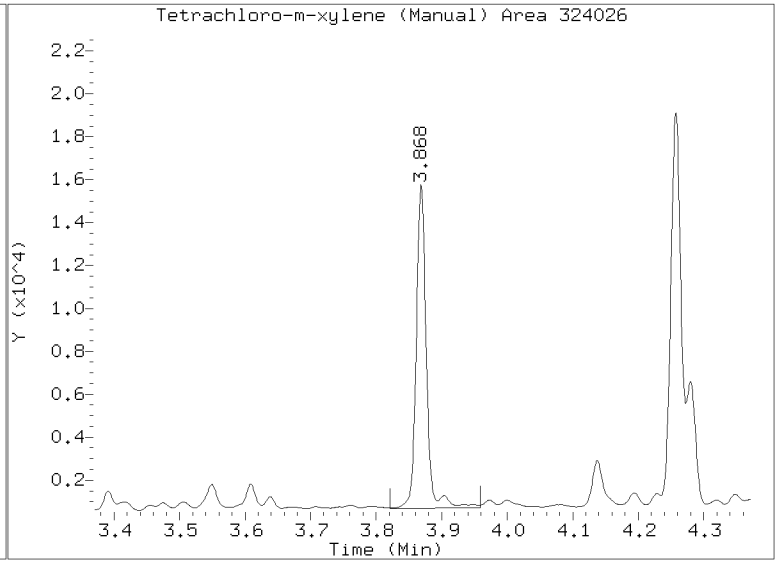
Manual Peak Adjustment Report, STX-CLP

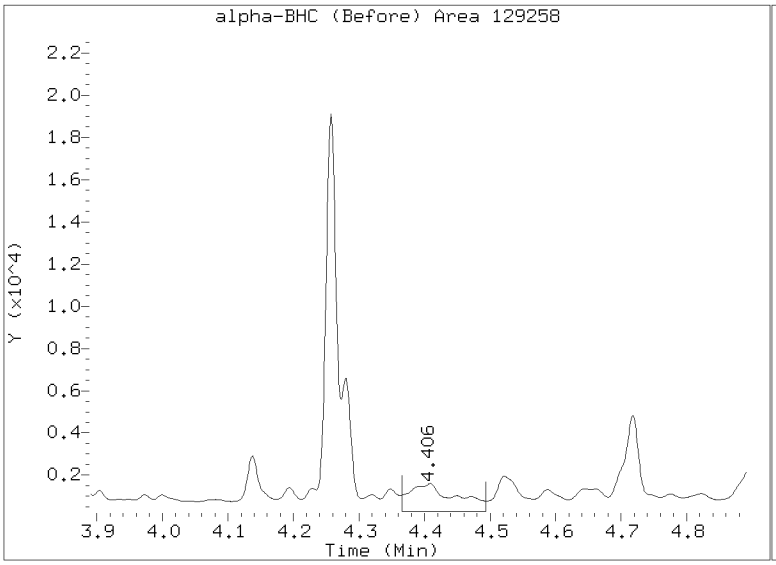
Datafile: /20230302.b/059F6801.D
Injection Date: 03-MAR-2023 20:01
Lab ID:23A0420-07 Client ID:
Report Date: 03/09/2023 11:19

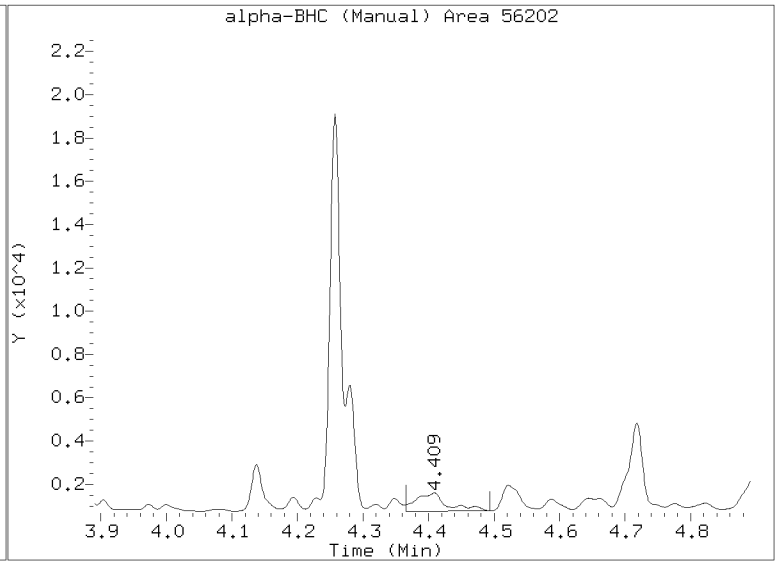












Manual Peak Adjustment Report, STX-CLP

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Injection Date: 03-MAR-2023 20:01
Lab ID:23A0420-07 Client ID:
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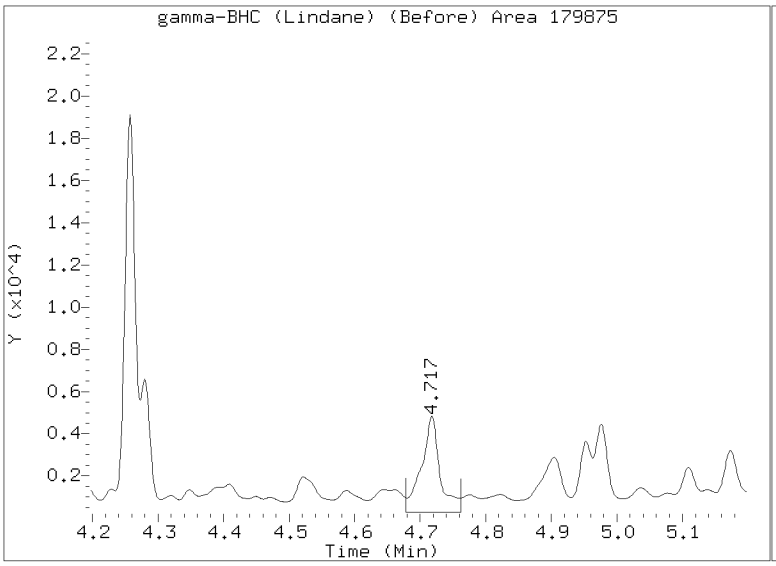

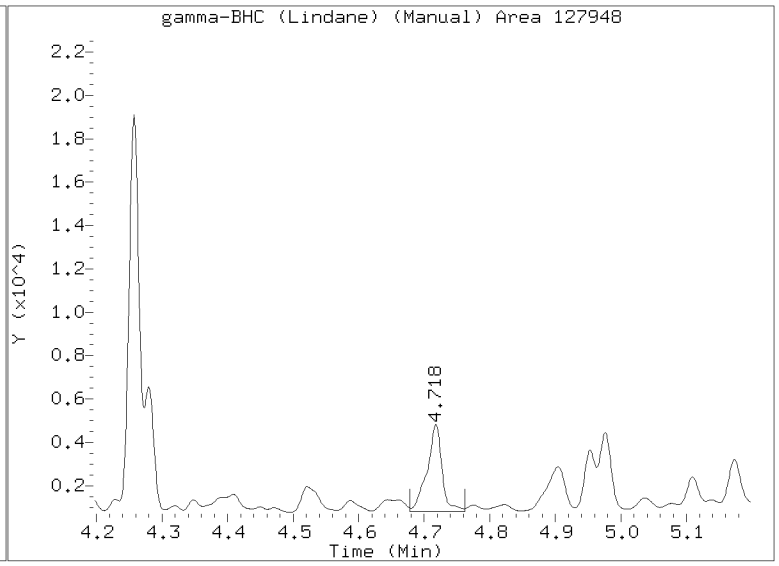

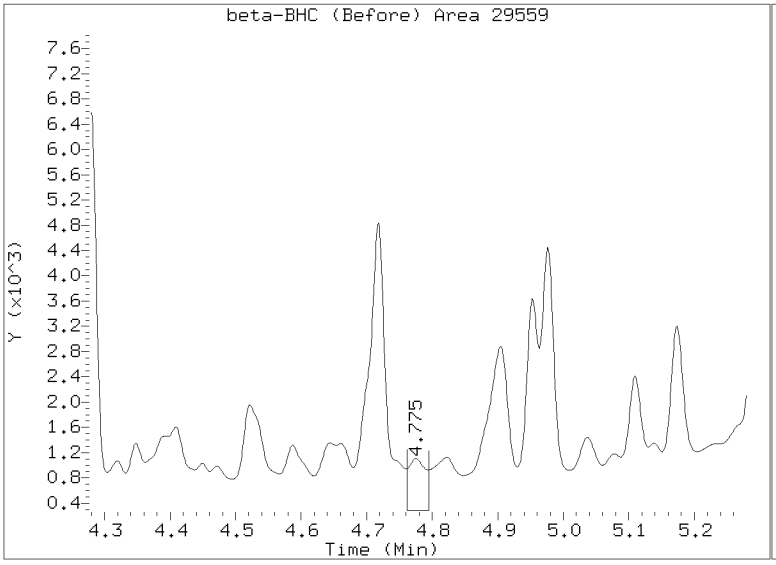

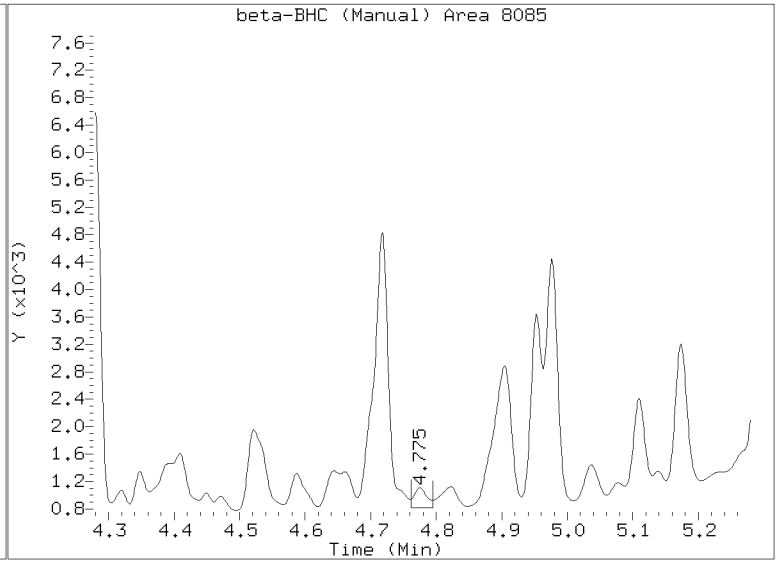

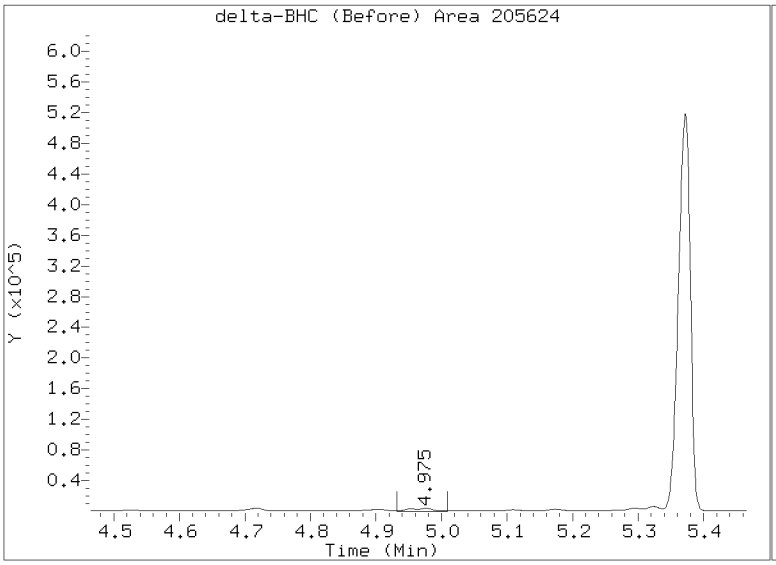

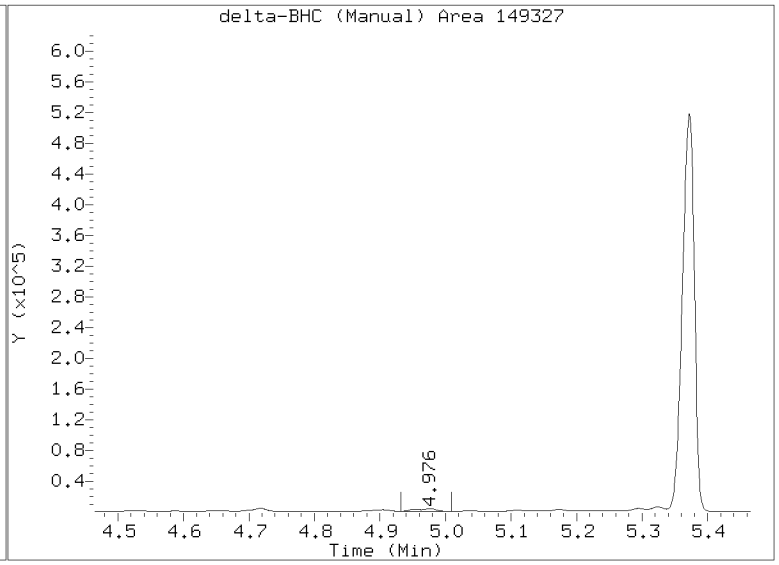

Manual Peak Adjustment Report, STX-CLP

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Injection Date: 03-MAR-2023 20:01
Lab ID:23A0420-07 Client ID:
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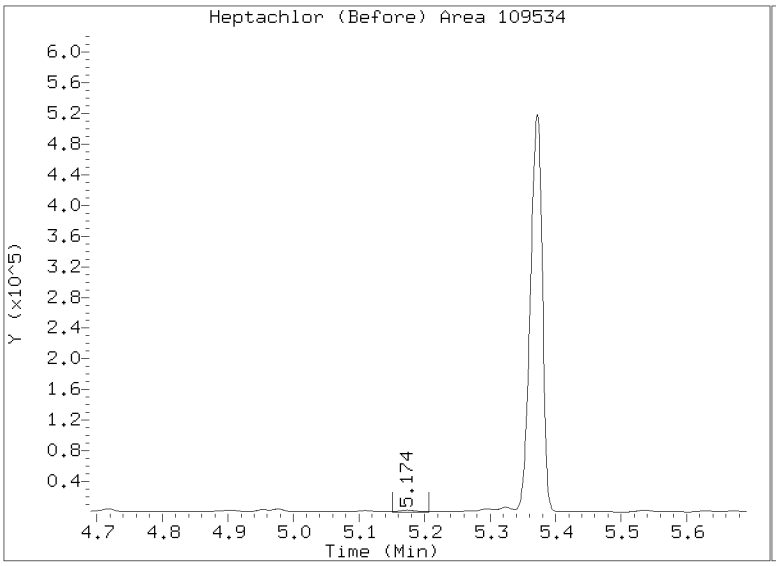

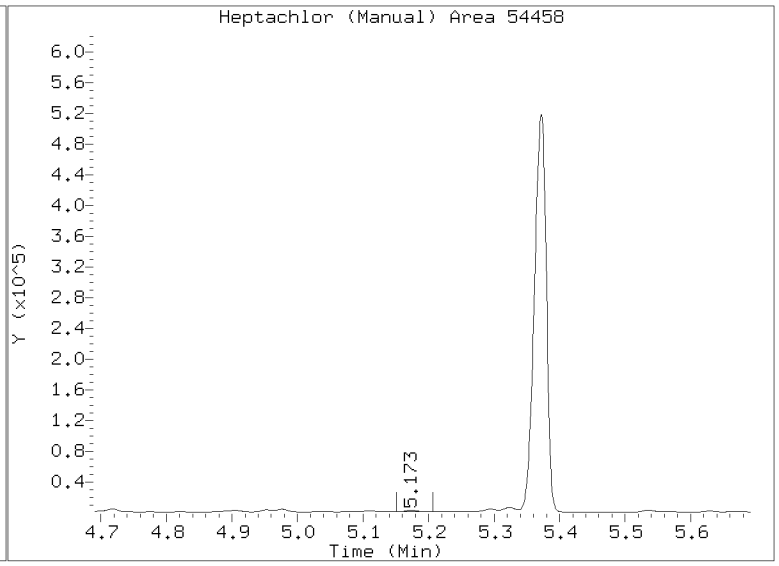

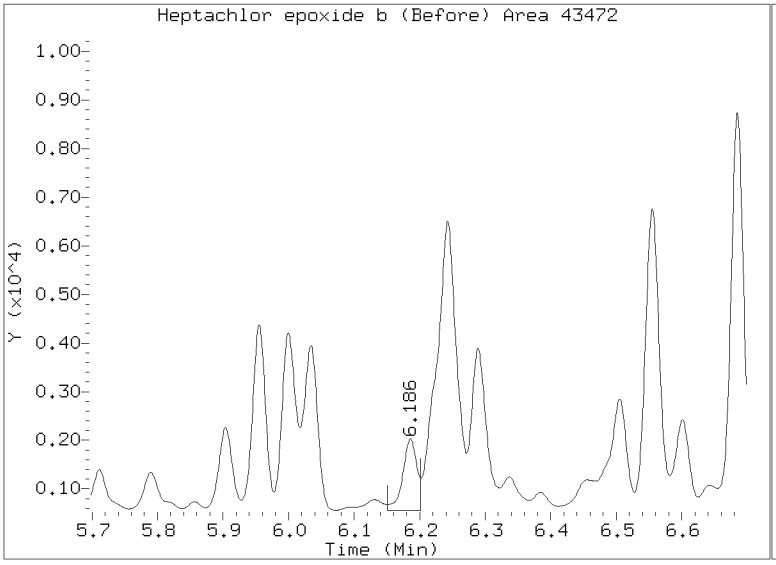

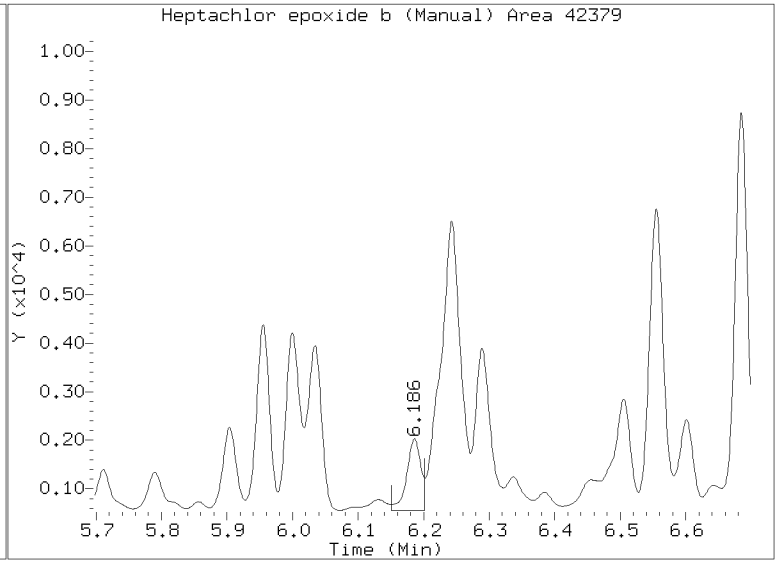

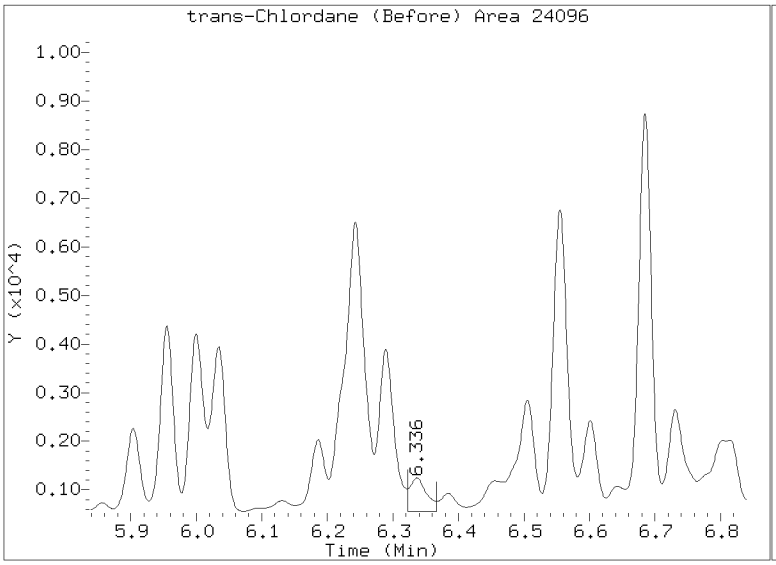

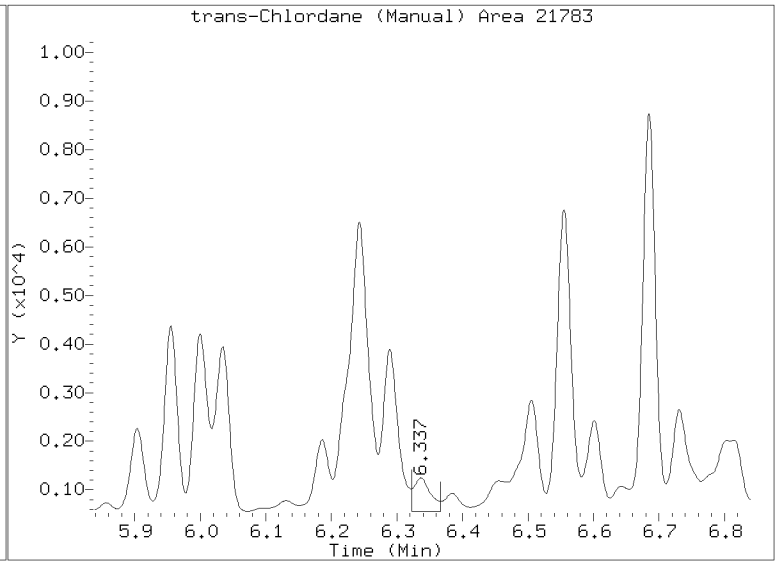

Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/059F6801.D
Injection Date: 03-MAR-2023 20:01
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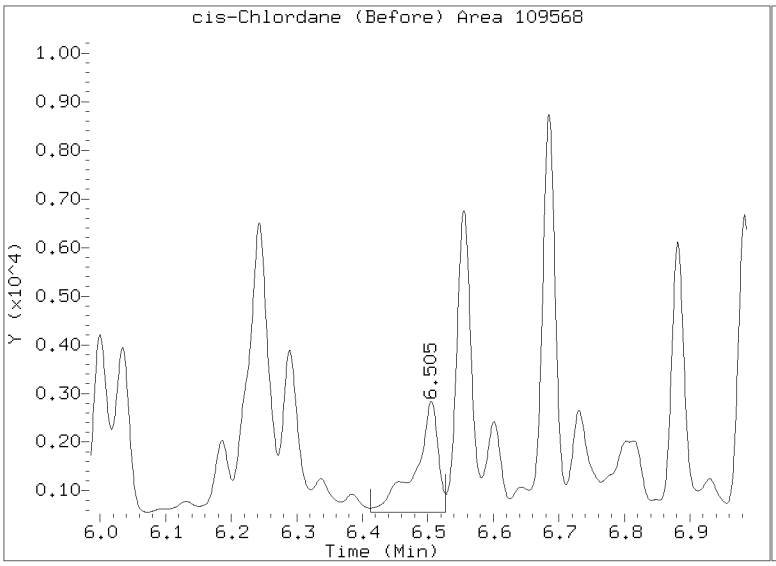

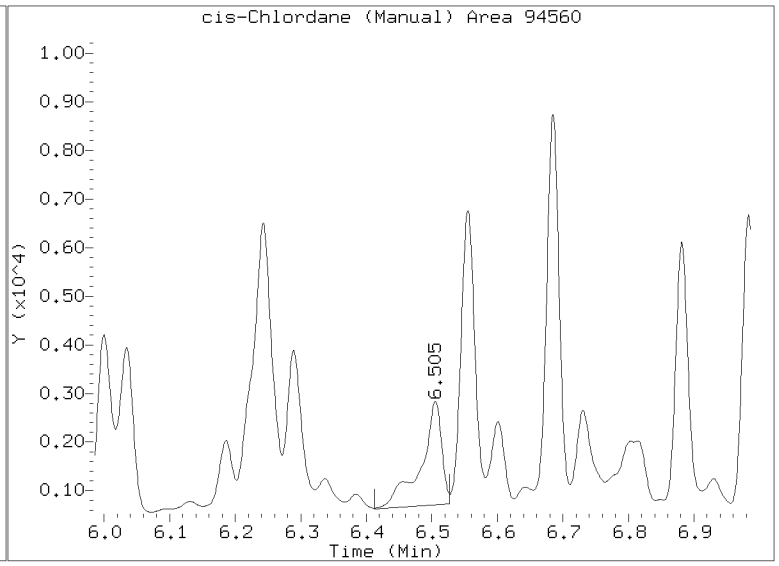

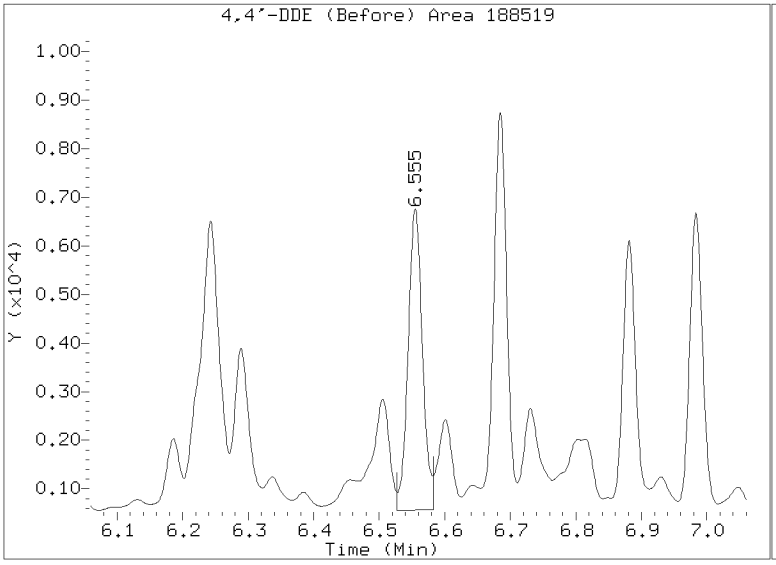

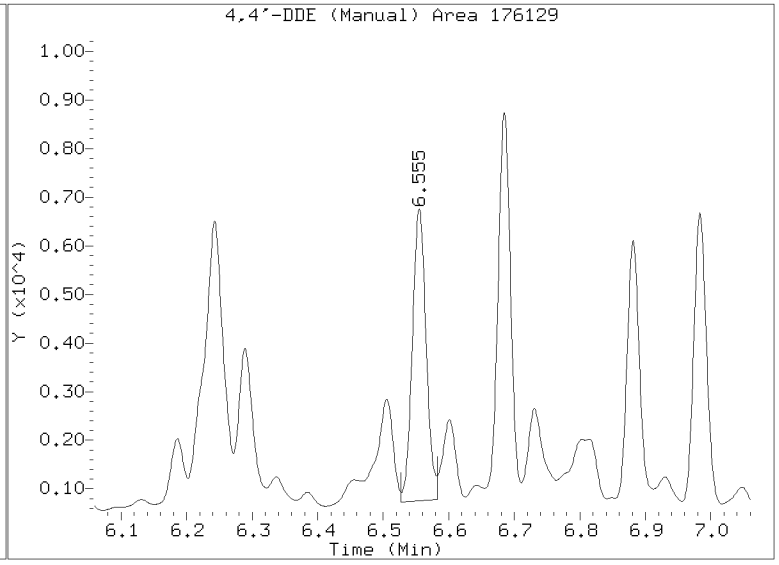

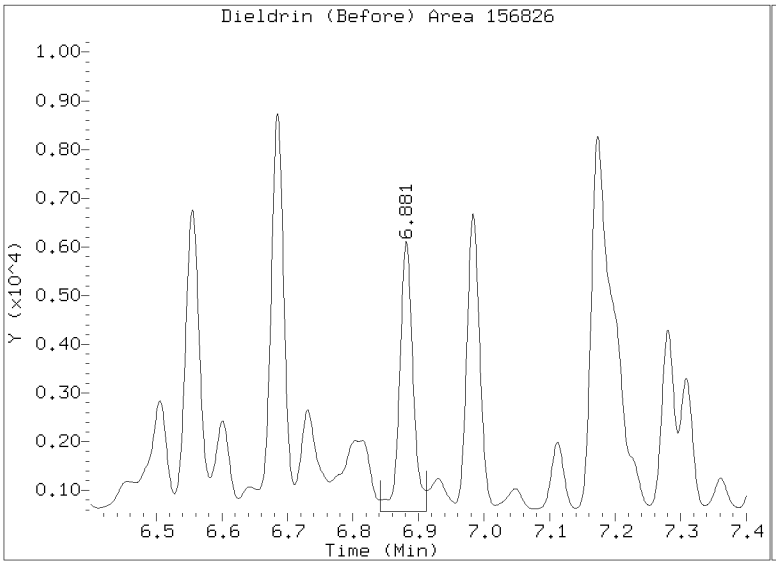

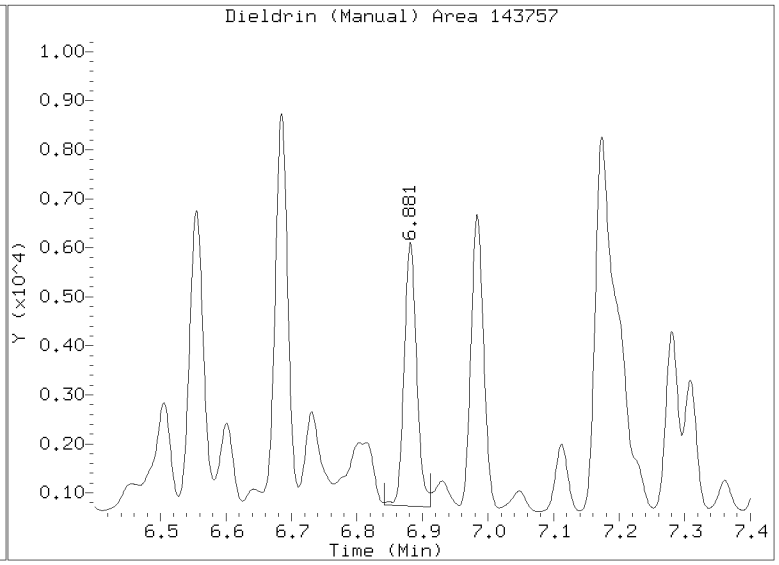

Manual Peak Adjustment Report, STX-CLP

Datafile: /20230302.b/059F6801.D
Injection Date: 03-MAR-2023 20:01
Lab ID:23A0420-07 Client ID:
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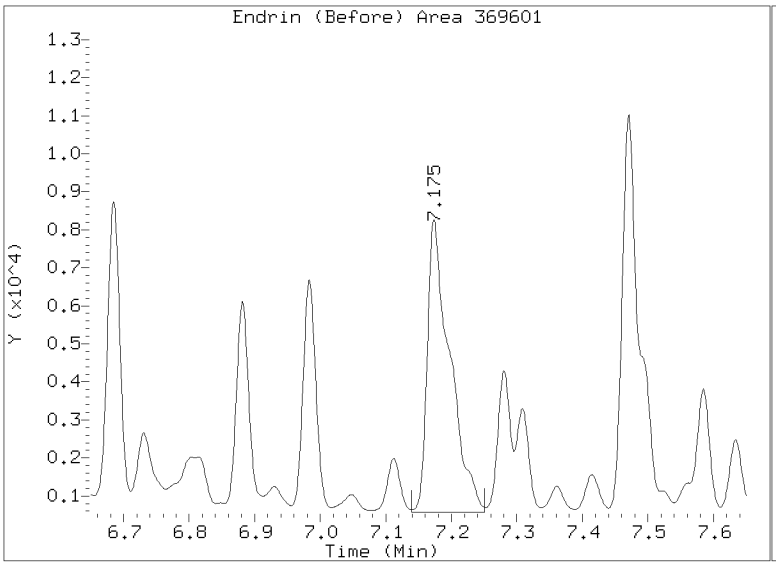

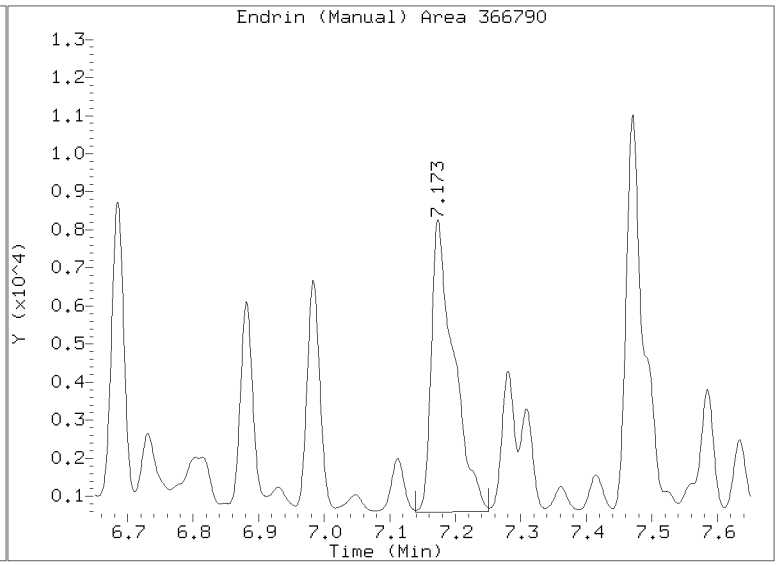

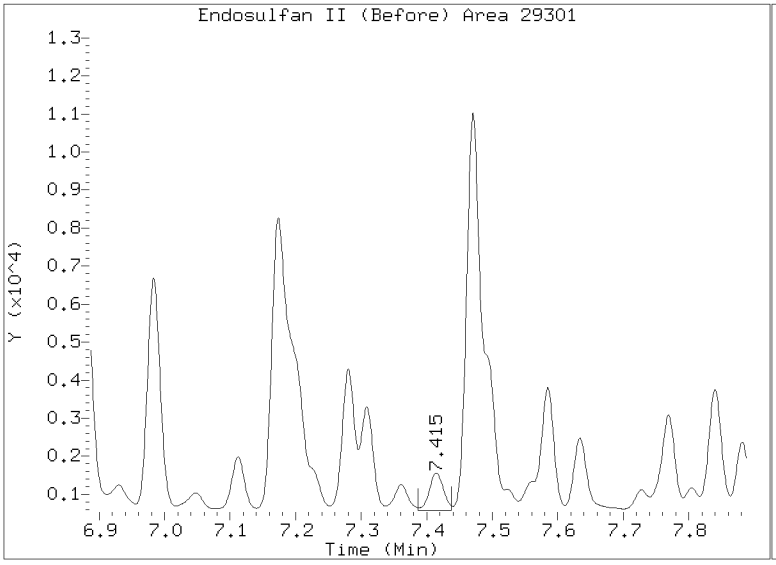

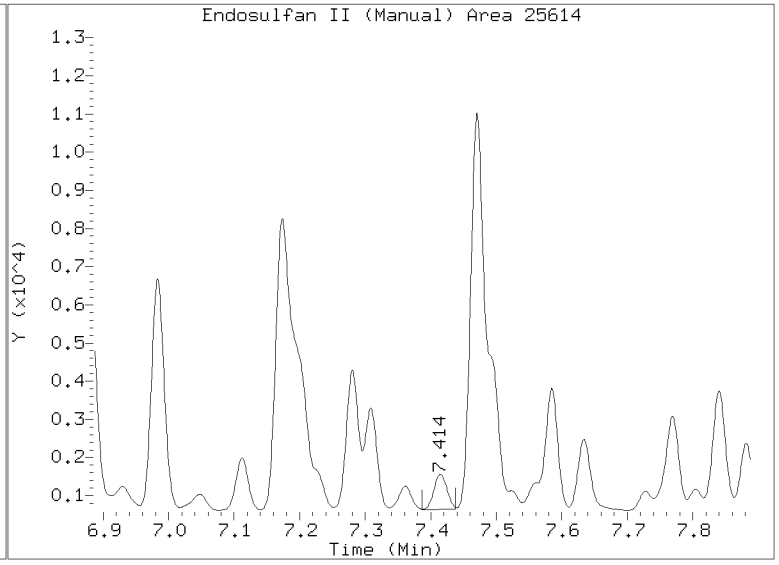

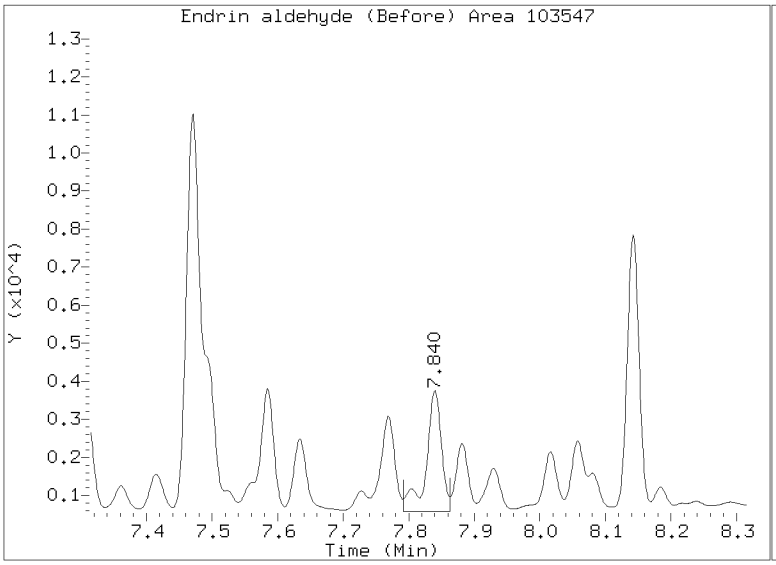

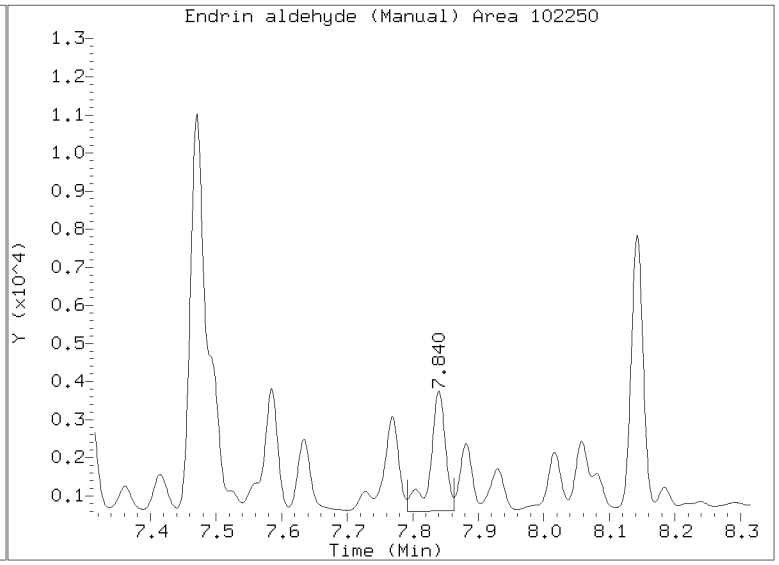

Manual Peak Adjustment Report, STX-CLP

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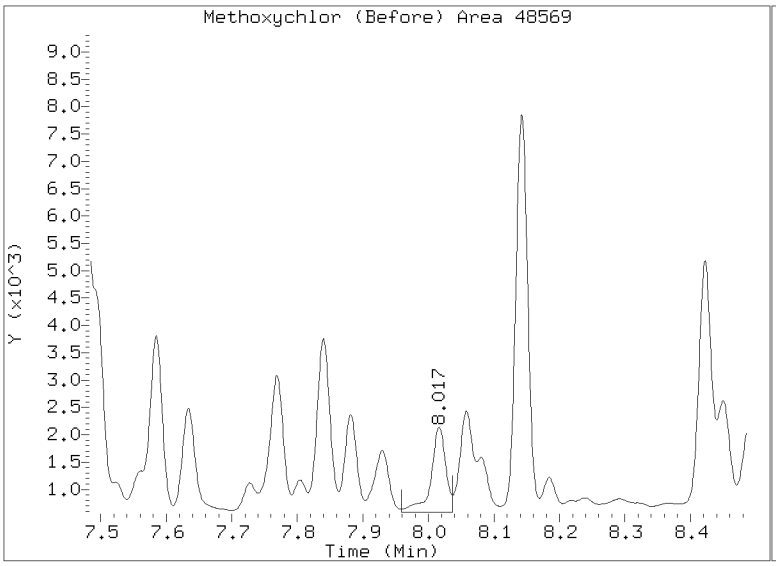

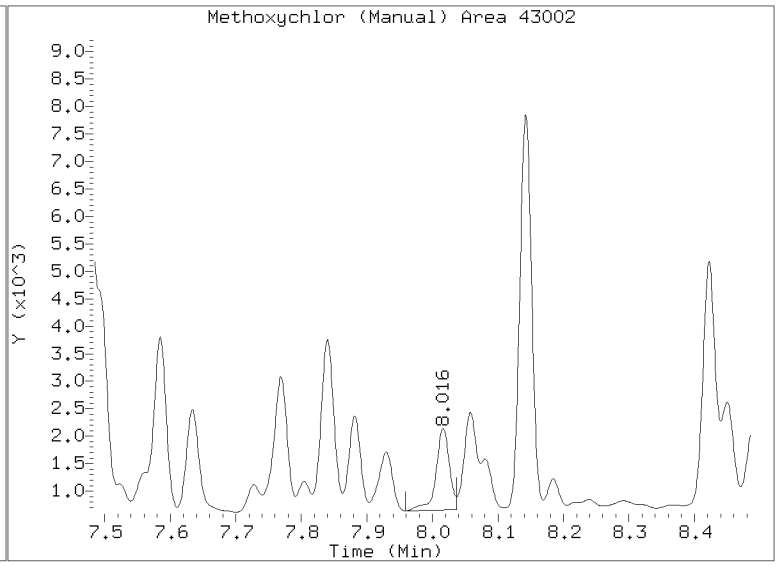

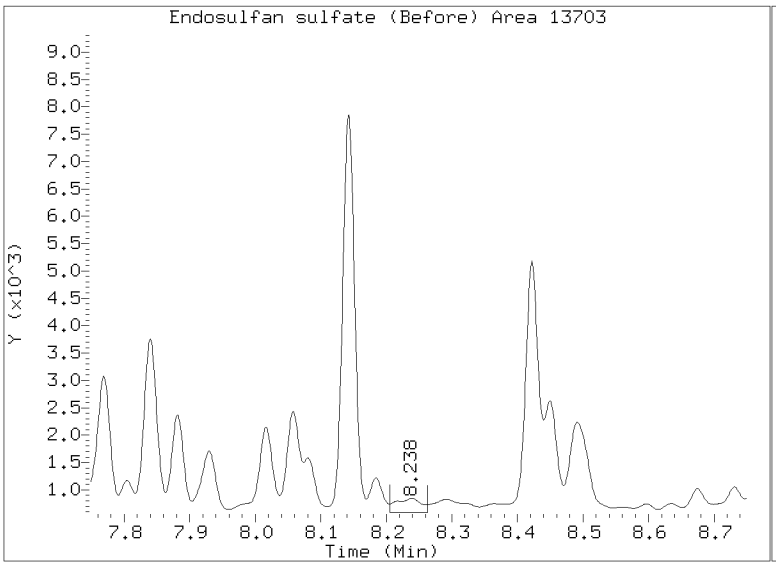

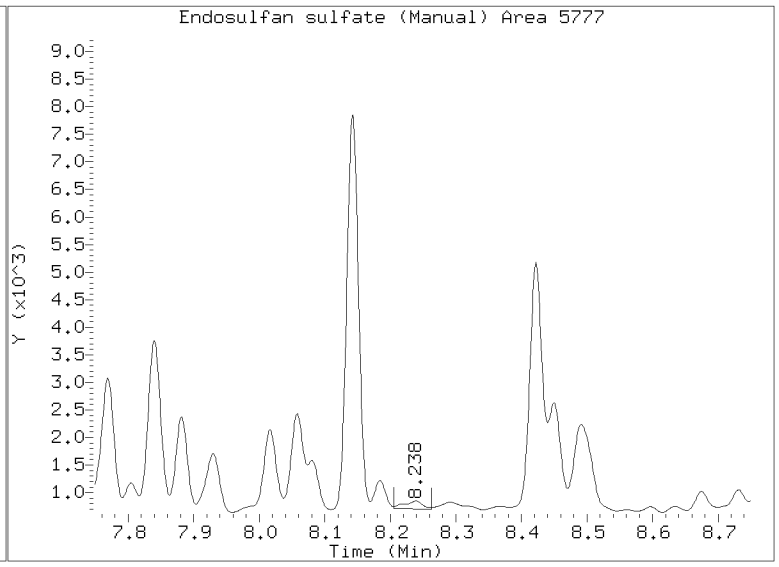

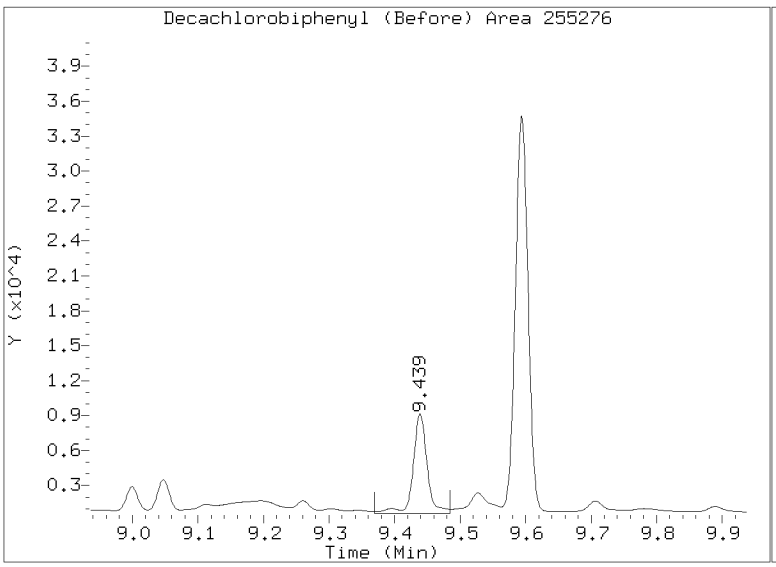

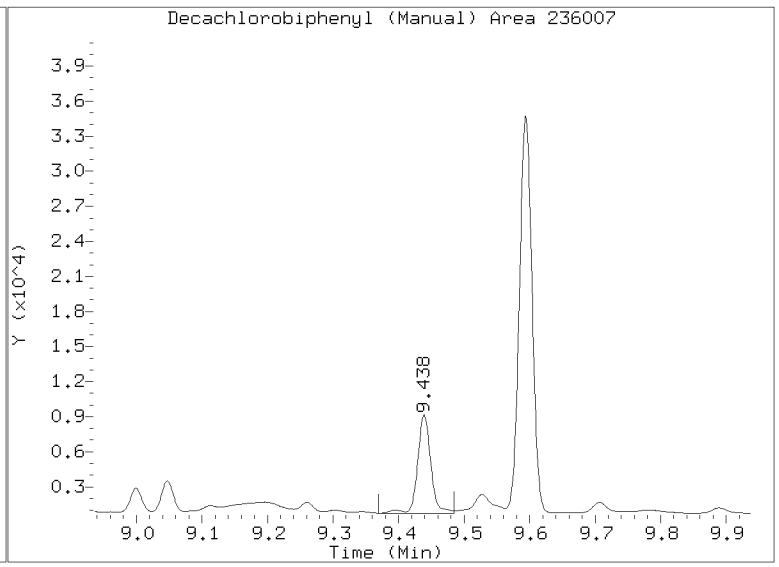

Manual Peak Adjustment Report, STX-CLP

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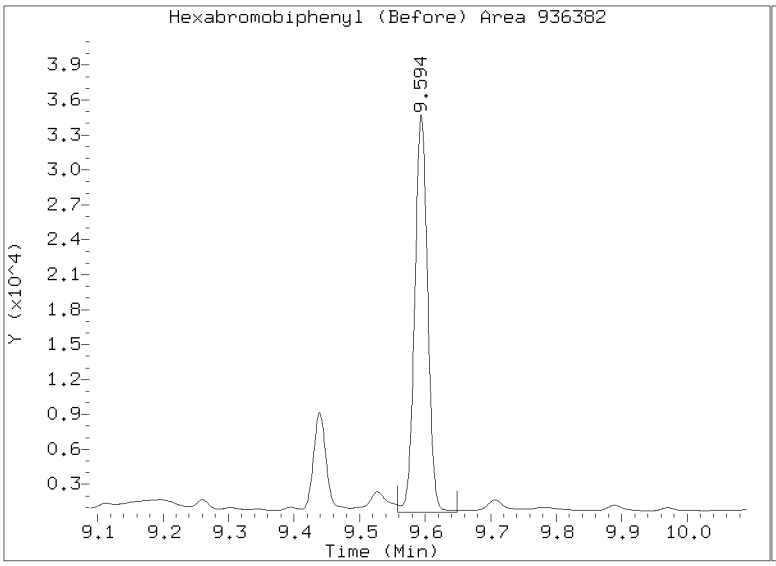

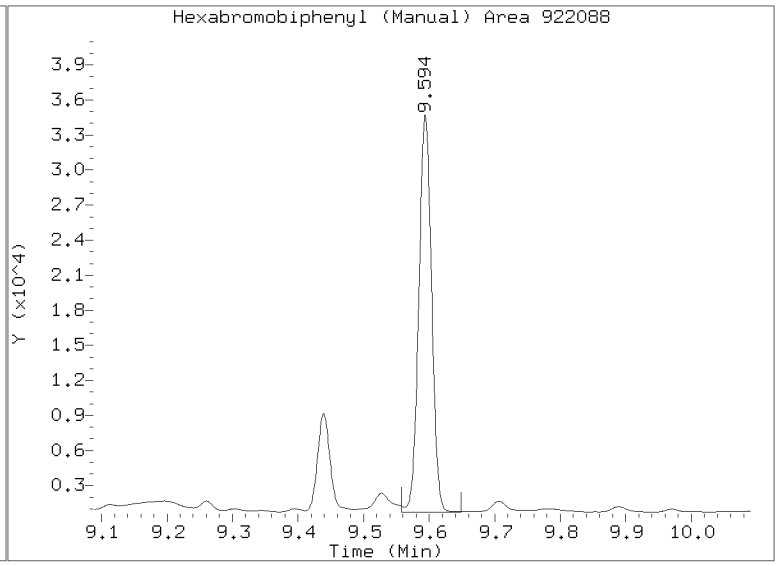

Manual Peak Adjustment Report, CLP-2

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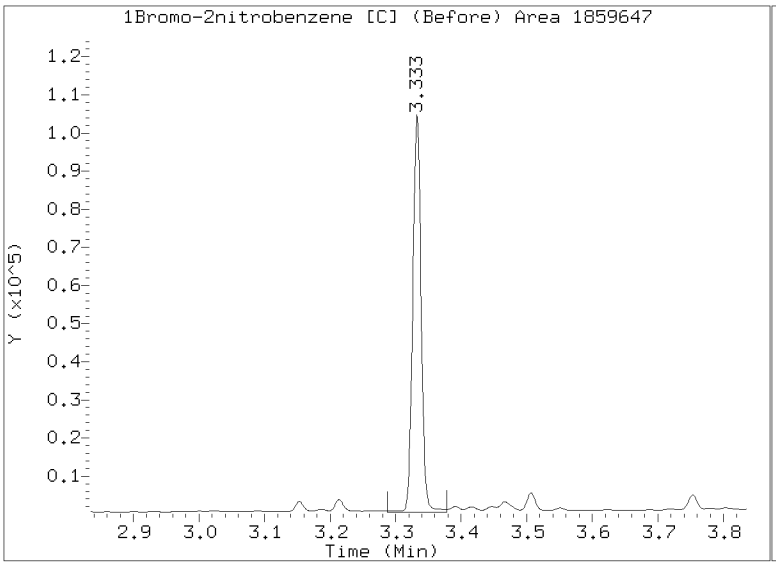

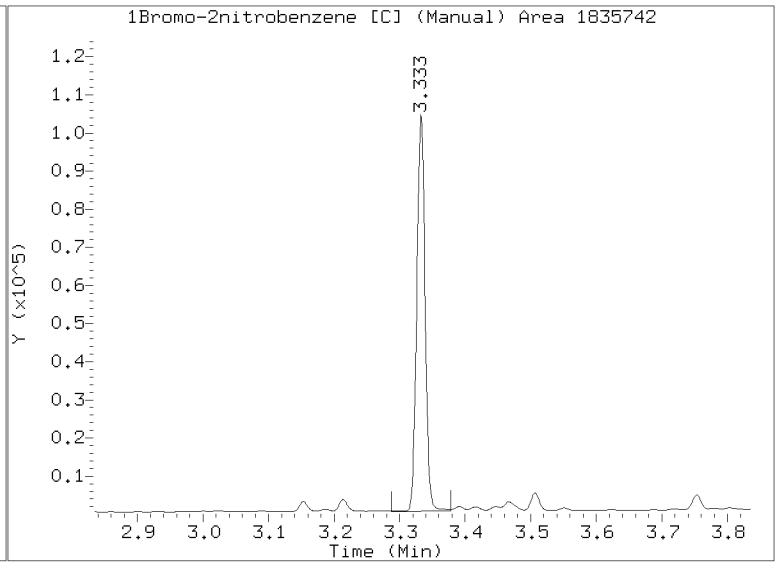

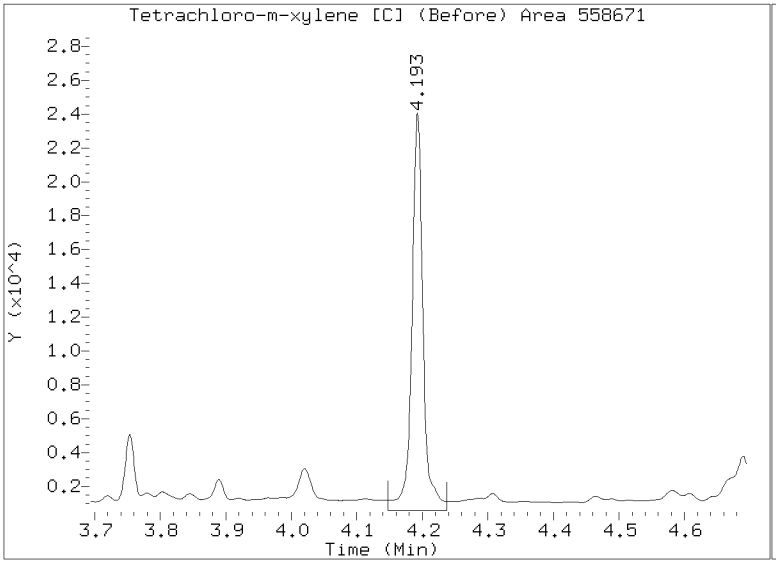

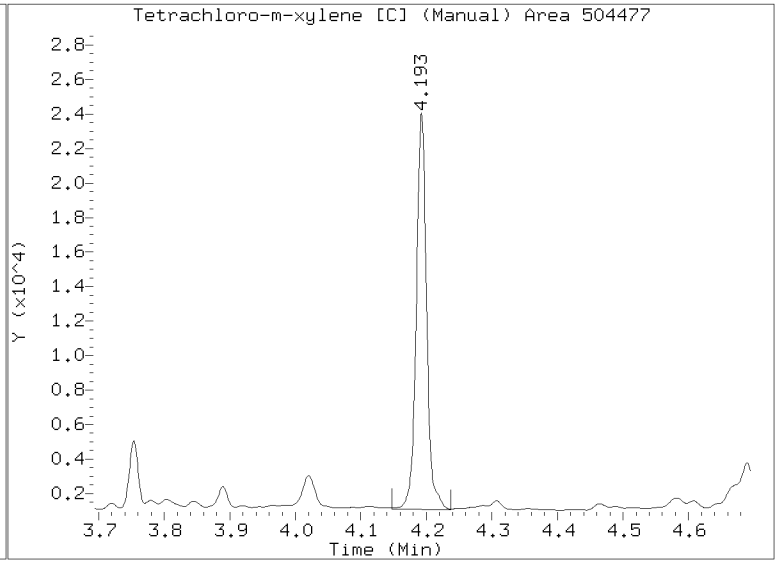

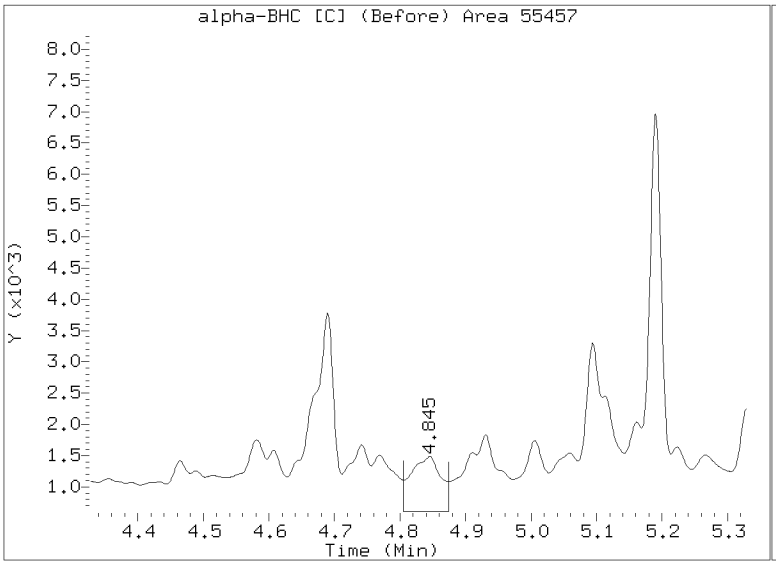

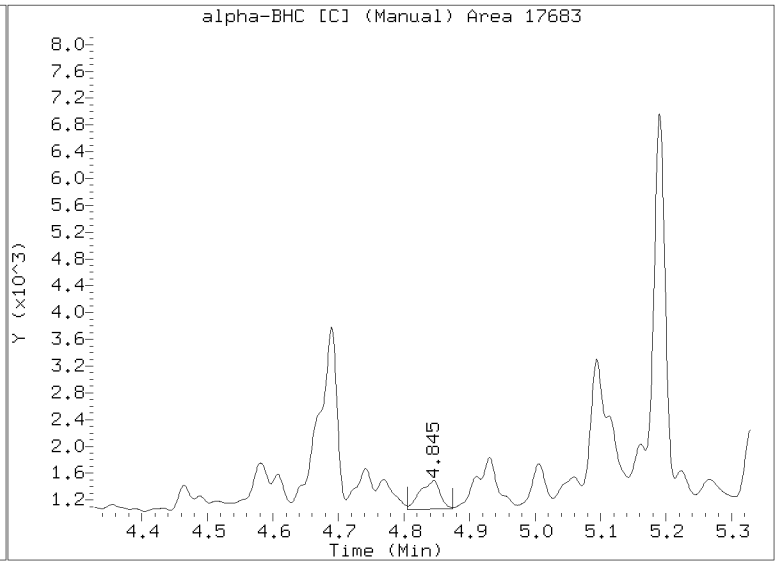

Manual Peak Adjustment Report, CLP-2

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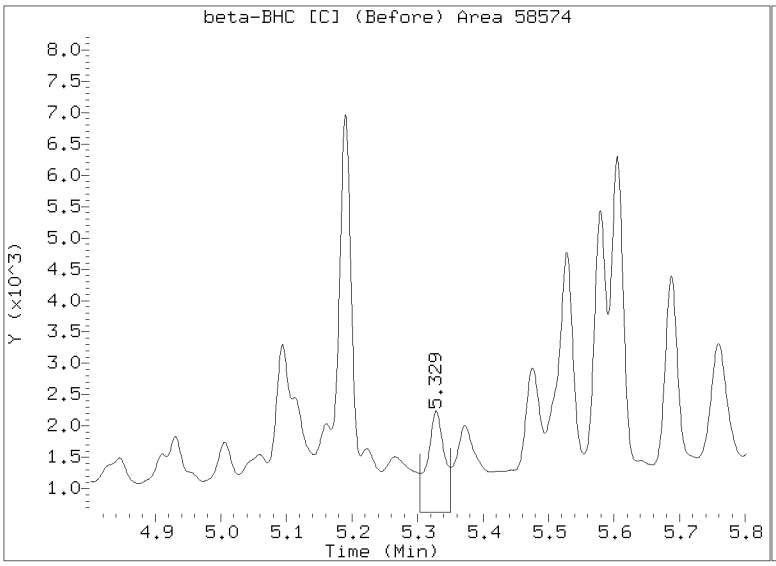
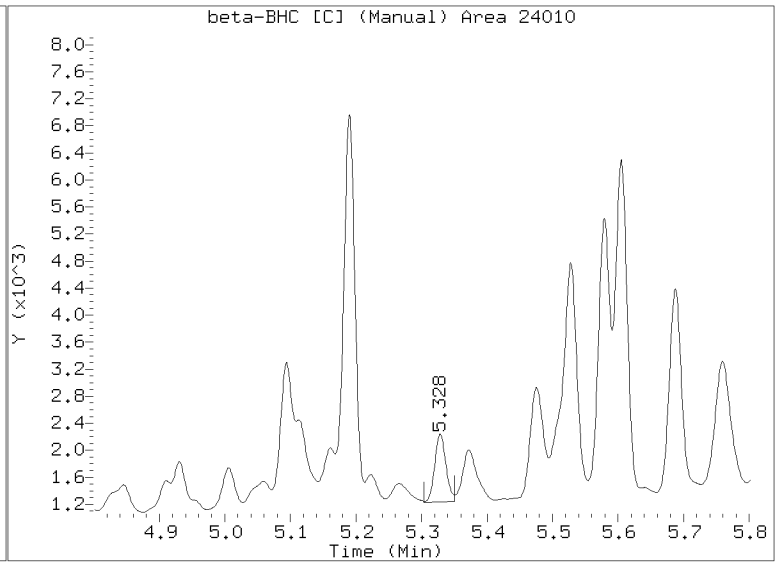
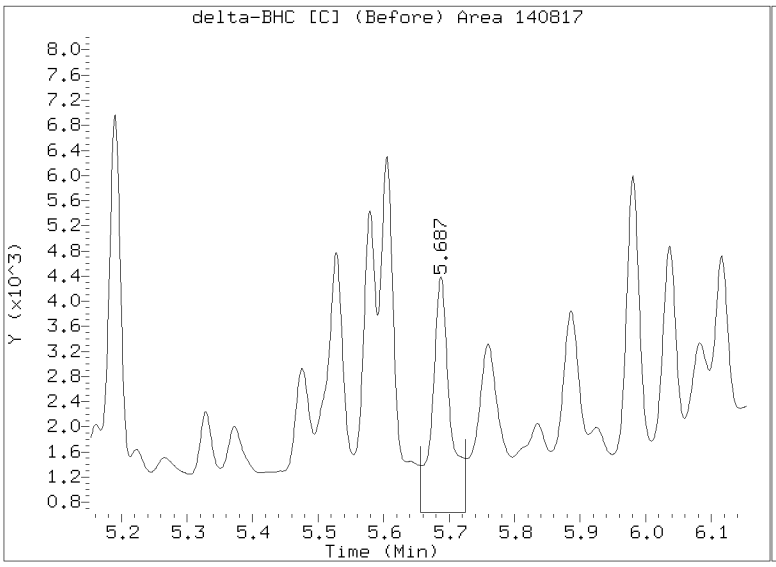
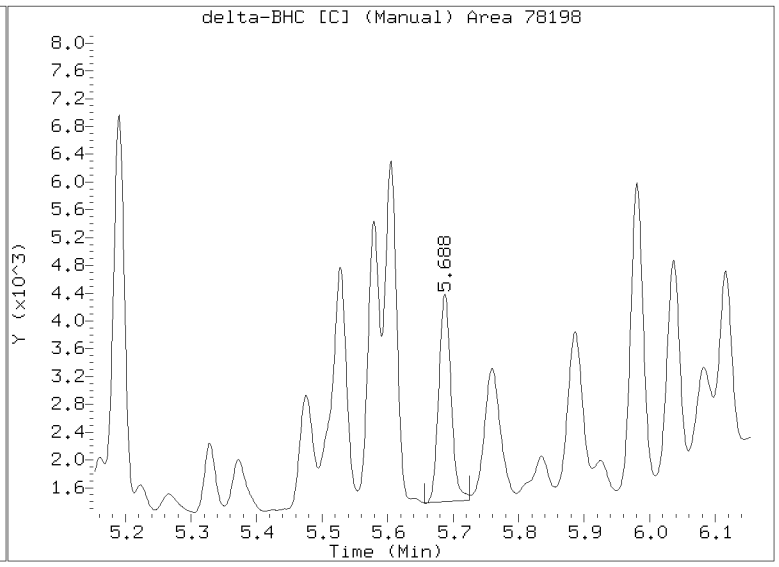
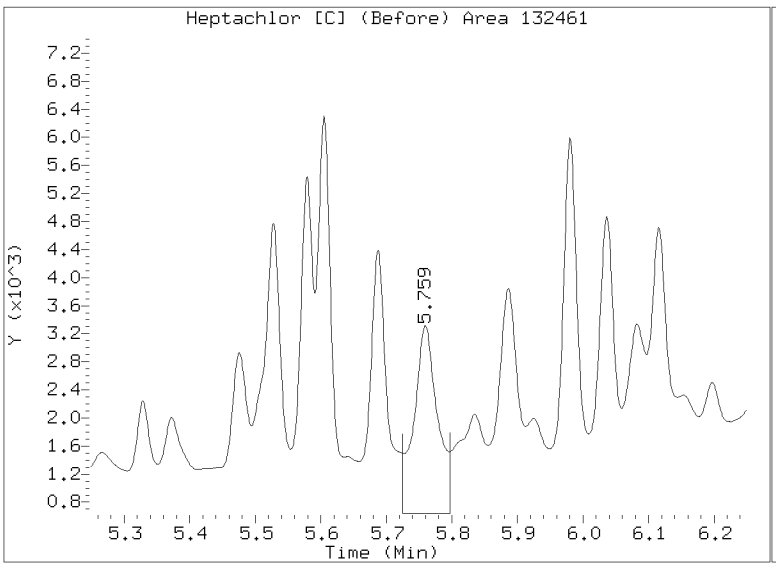
Lab ID:23A0420-07 Client ID:

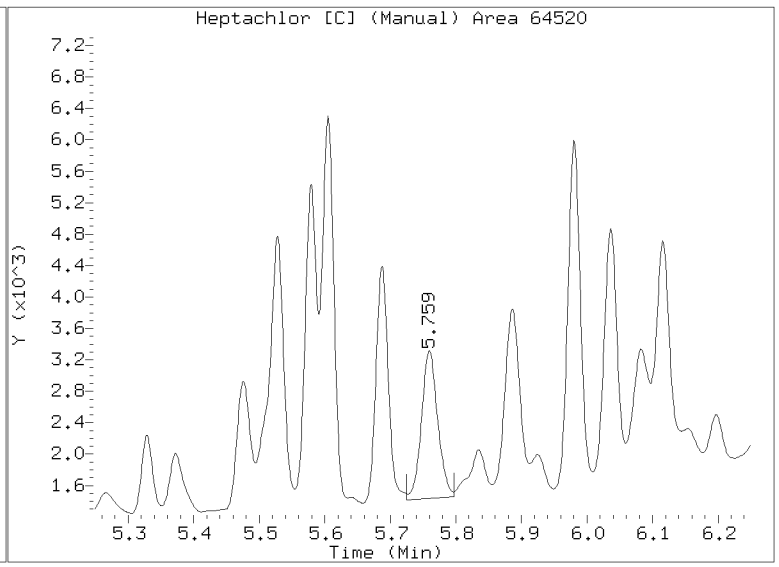












Manual Peak Adjustment Report, CLP-2

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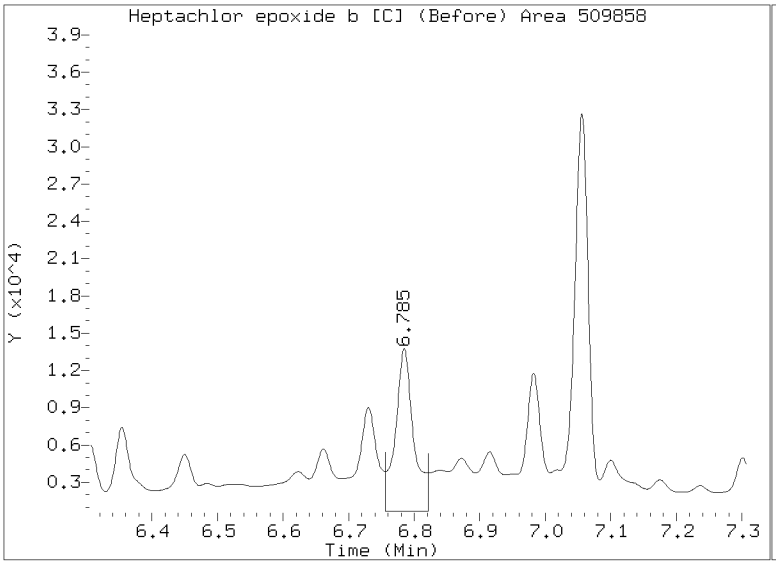

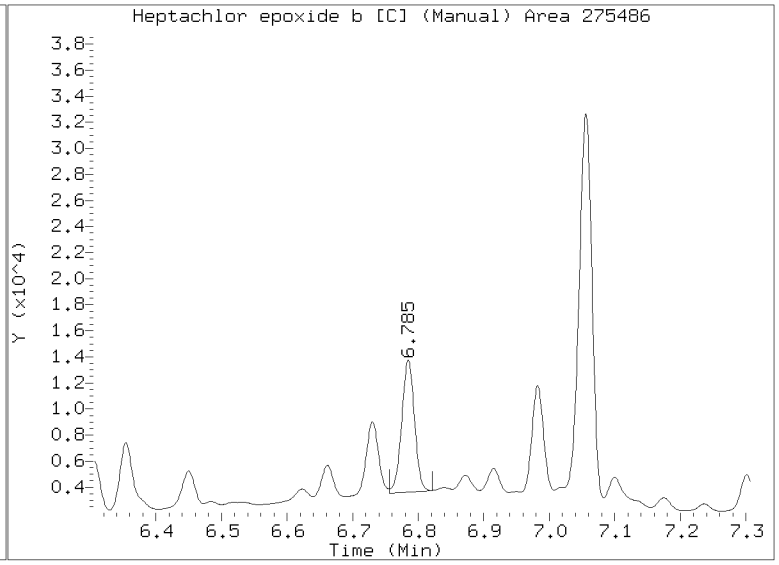

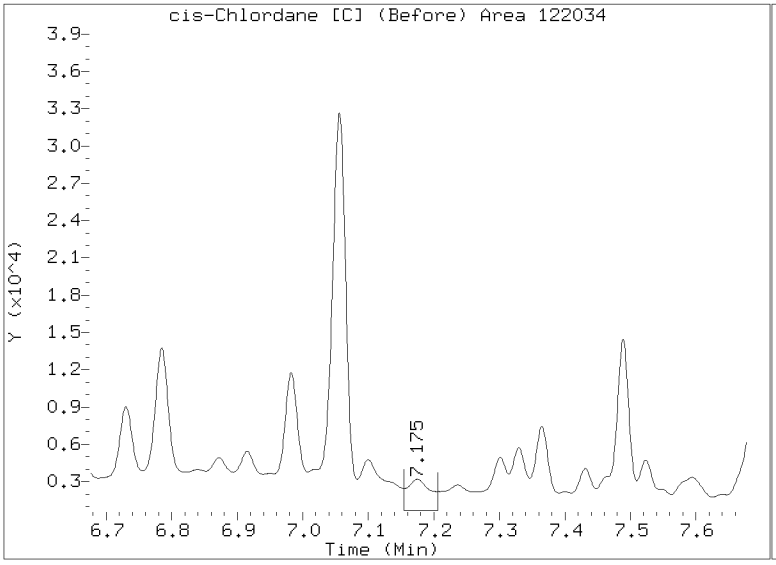

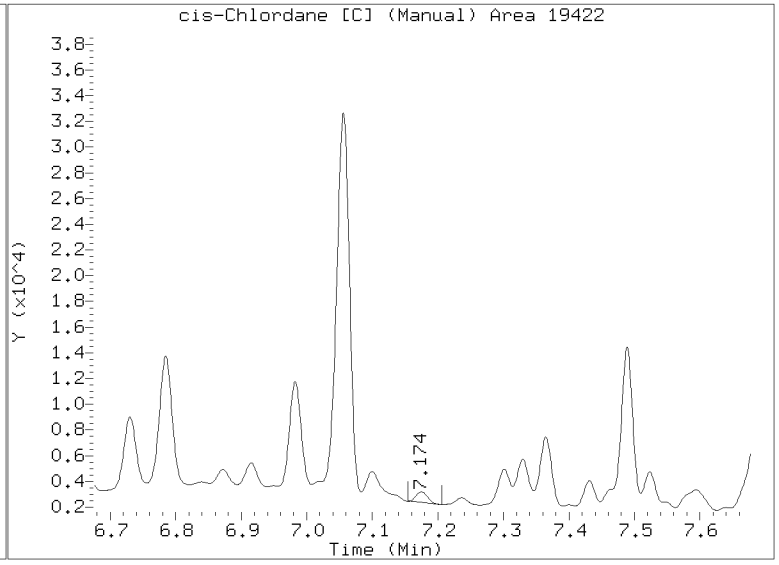

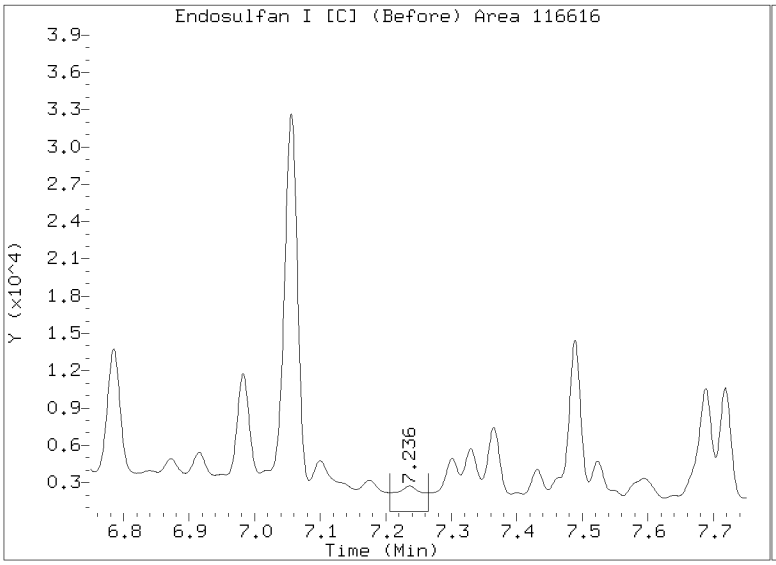

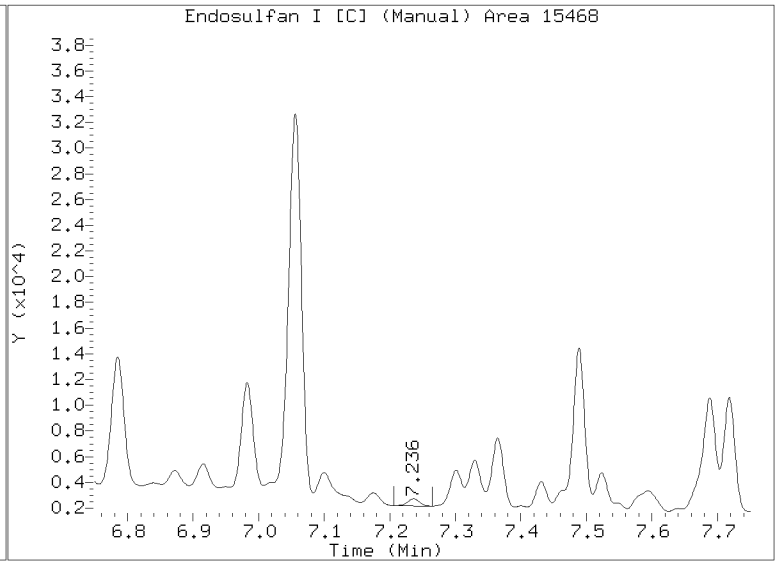

Manual Peak Adjustment Report, CLP-2

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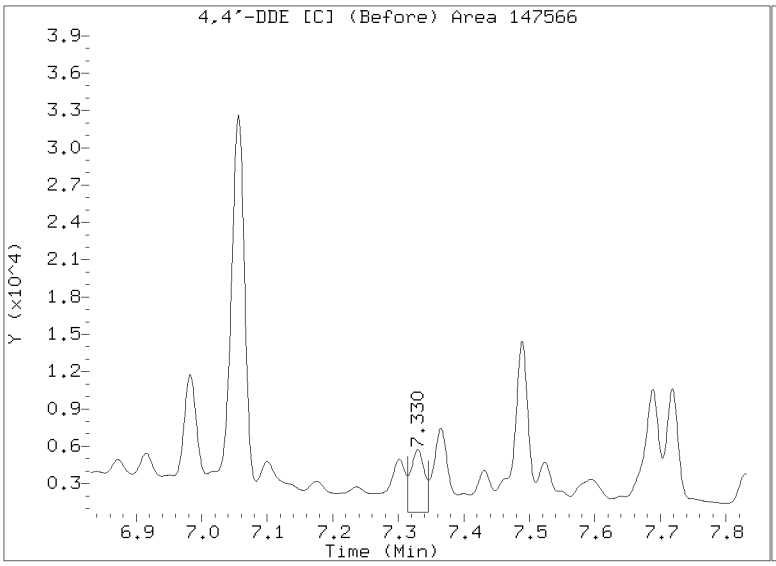

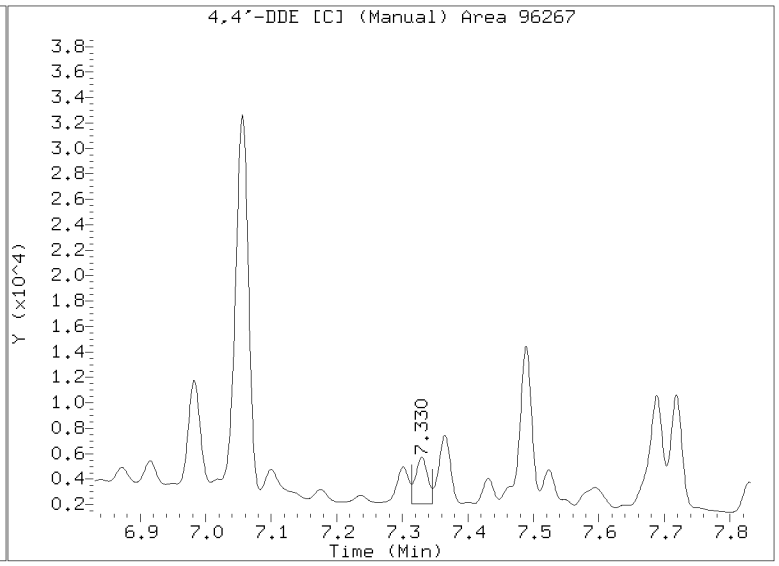

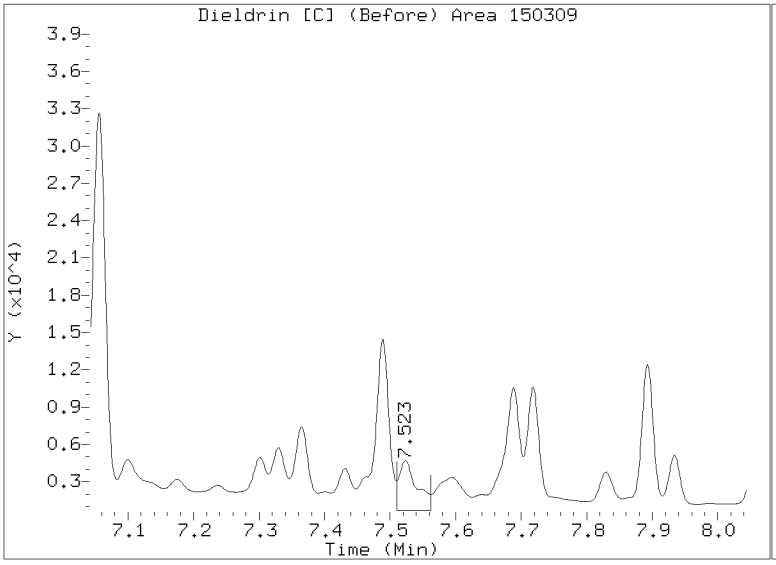

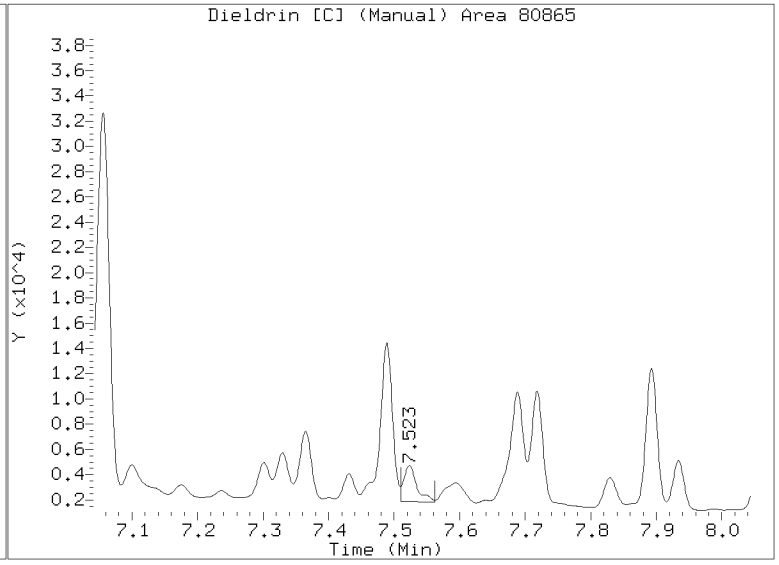

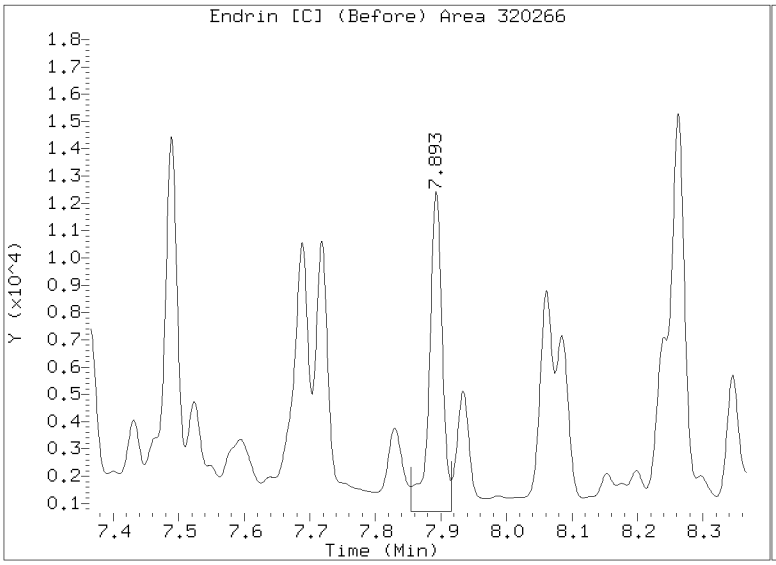

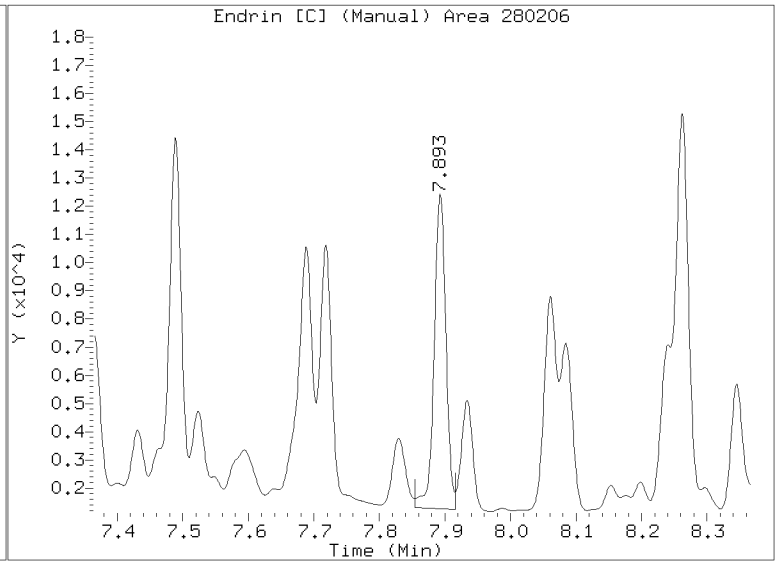

Manual Peak Adjustment Report, CLP-2

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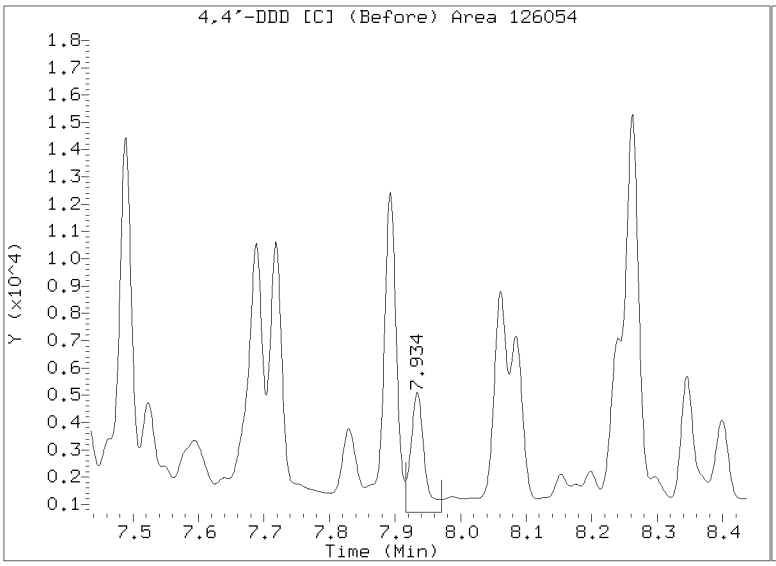

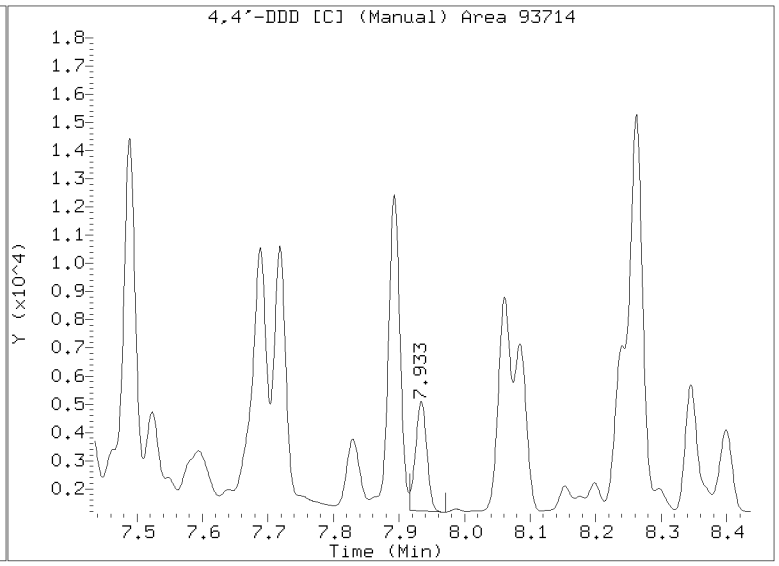

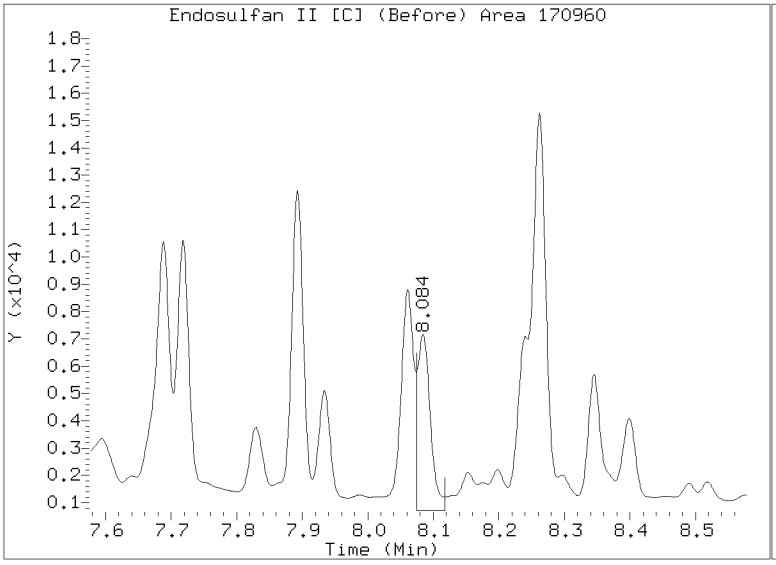

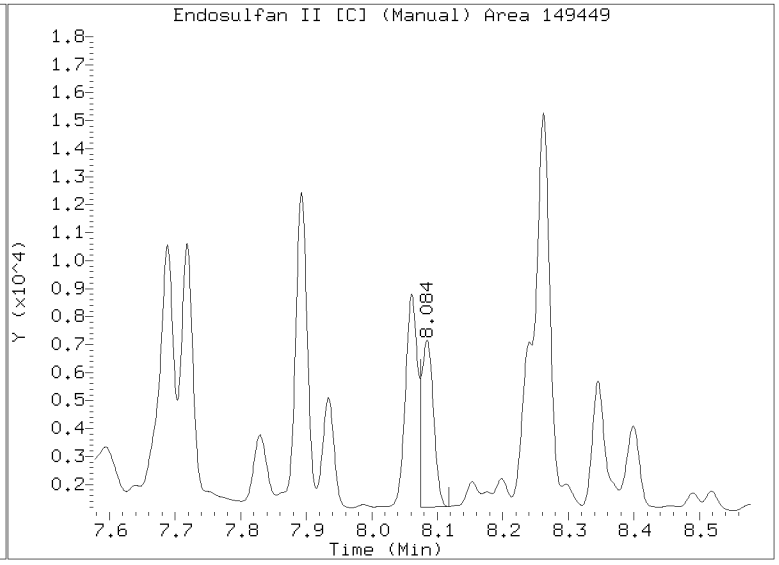

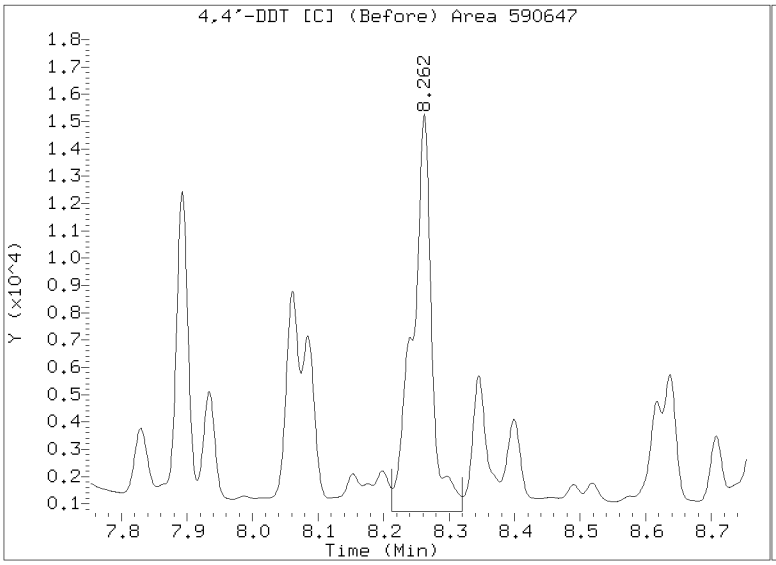

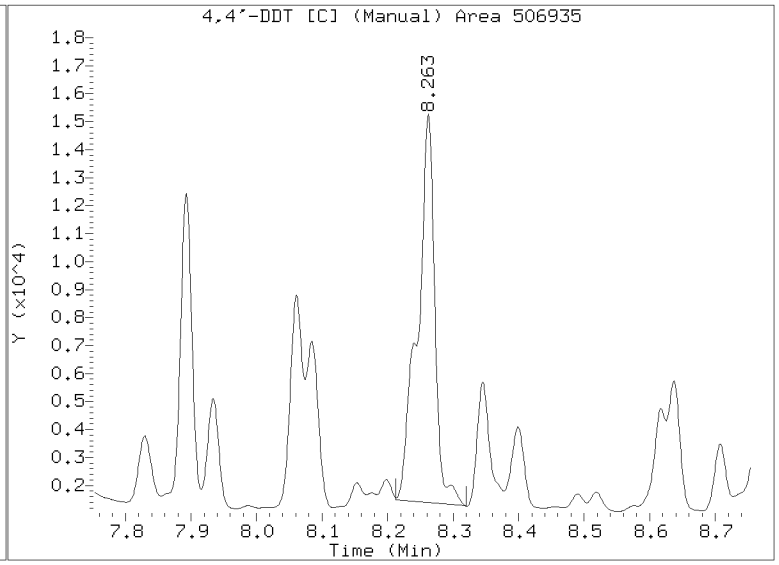

Manual Peak Adjustment Report, CLP-2

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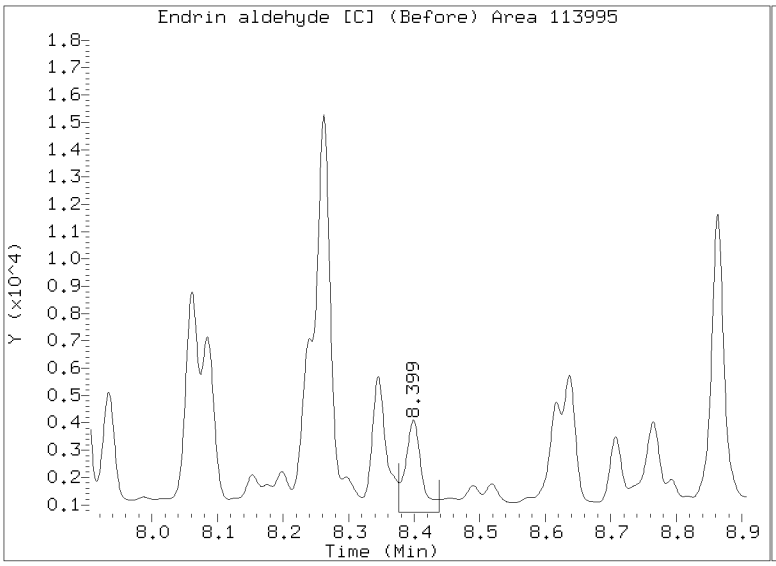

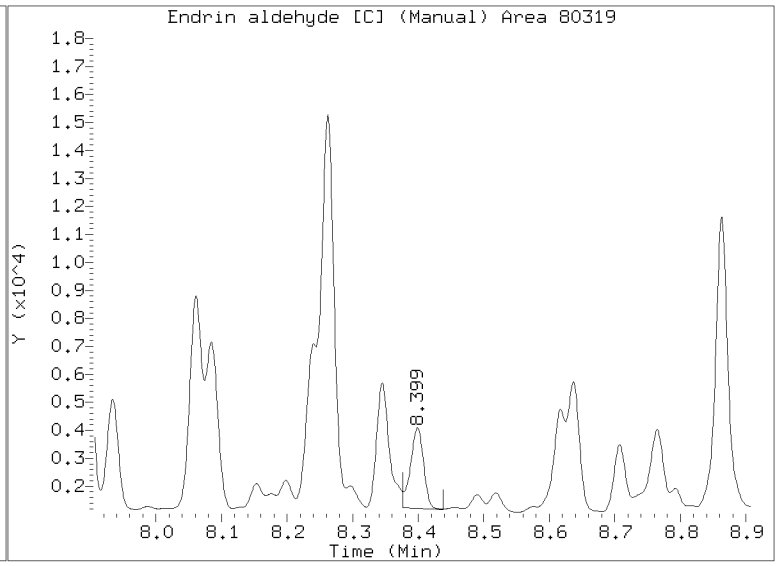

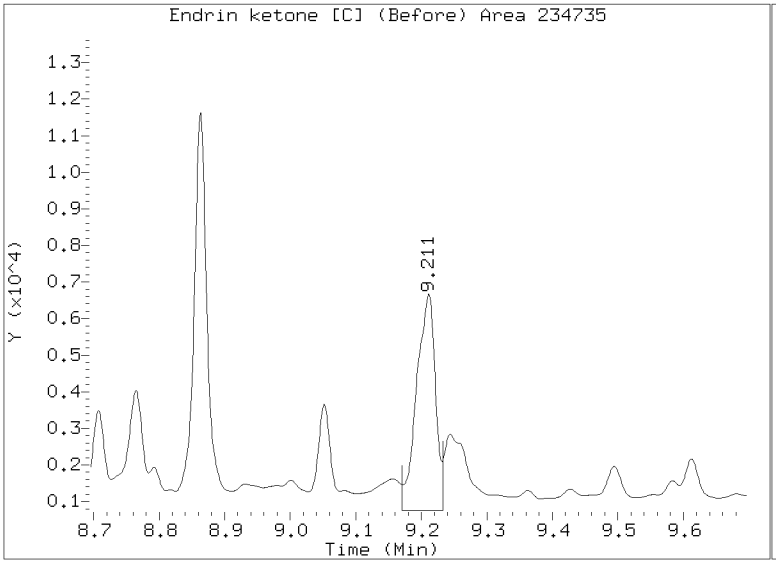

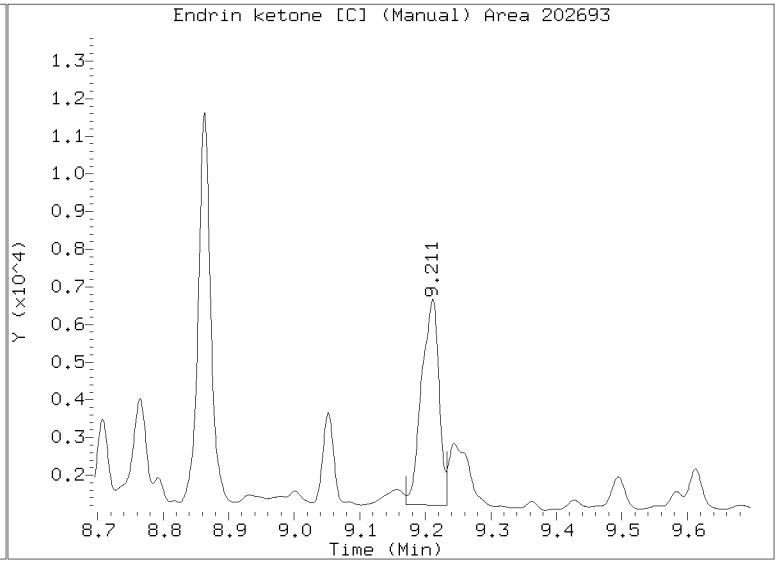

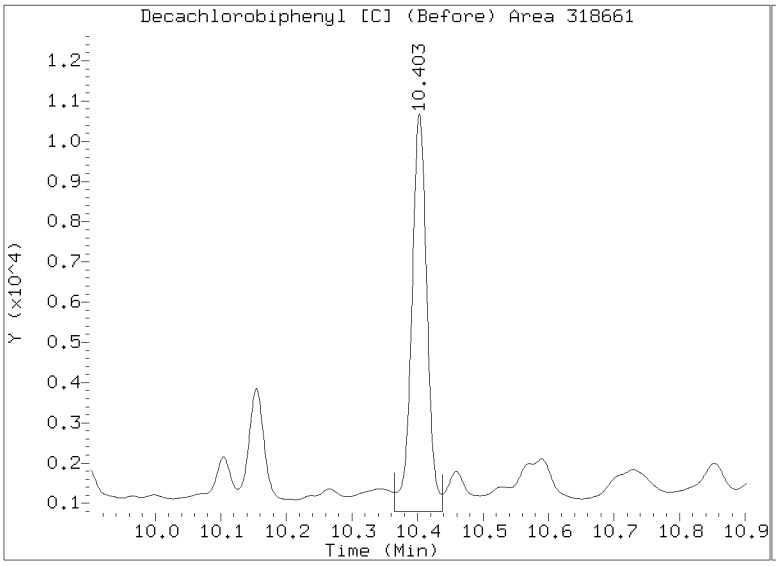

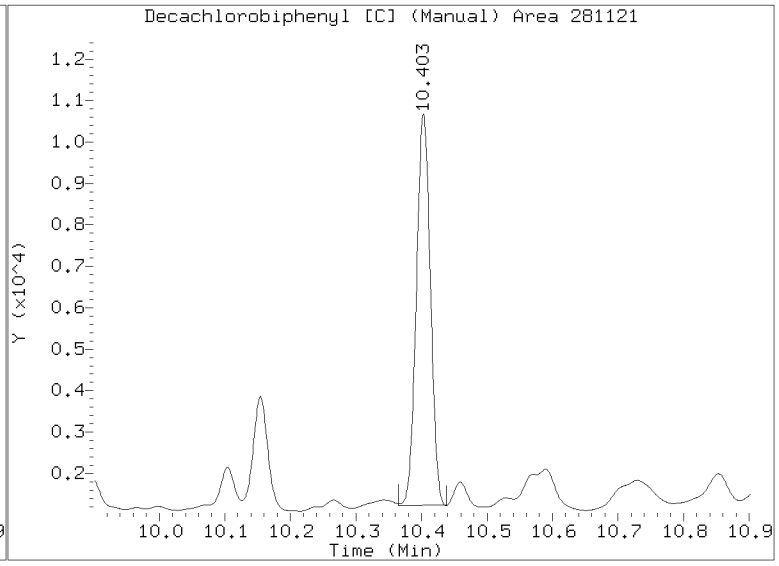

Manual Peak Adjustment Report, CLP-2

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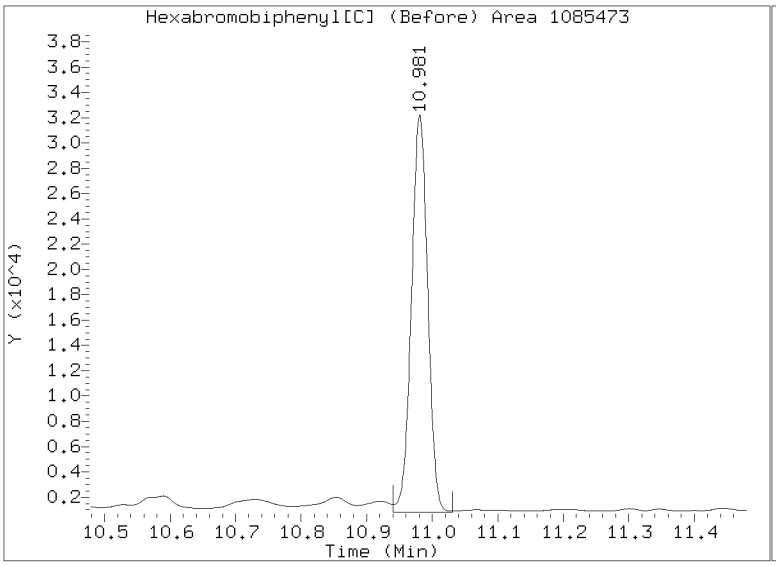
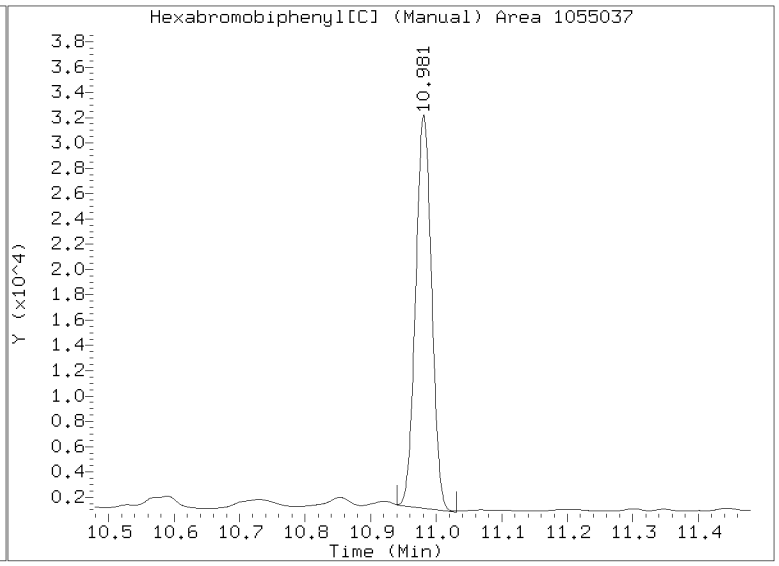




Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1004

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0420-08 A	File ID:	060F6901.D
Sampled:	01/19/23 11:55	Prepared:	02/16/23 11:56	Analyzed:	03/03/23 20:19
% Solids:	59.89	Preparation:	EPA 3546 (Microwave)	Initial/Final:	20.9 g Wet / 2.5 mL
Batch:	BLB0382	Sequence:	SLC0093	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9891*	*5.21*	*65.2*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.9891*	*5.14*	*64.3*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9891*	*3.49*	*43.7*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.9891*	*4.14*	*51.8*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/060F6901.D
Data file 2: /20230302.b/B20230302.b/060F6901.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23A0420-08
Client ID:
Injection Date: 03-MAR-2023 20:19
Report Date: 03/09/2023 11:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.408	0.017	48861	4.829	-0.000	10472	1.90	0.30	145.4*	alpha-BHC MN
4.774	-0.005	8473	5.327	0.025	14228	0.85	1.07	22.5	beta-BHC MN
4.976	0.010	92517	5.686	0.032	55907	4.39	1.94	77.4*	delta-BHC MN
4.716	0.018	99314	----			4.44	0.00	---	gamma-BHC (Lindane)
5.172	-0.019	40829	5.758	0.008	41608	2.05	1.55	28.1	Heptachlor MN
5.535	0.015	72507	6.152	0.001	18855	3.25	0.61	136.5*	Aldrin M
6.185	-0.014	30743	6.783	-0.024	192293	1.59	7.57	130.6*	Heptachlor epoxide b MN
----			7.235	-0.016	10888	0.00	0.49	---	Endosulfan I
6.880	-0.021	103986	7.522	-0.021	55210	5.46	2.23	83.9*	Dieldrin MN
6.554	-0.007	122682	7.328	-0.003	61930	6.94	2.73	87.0*	4,4'-DDE MN
7.172	0.022	253329	7.892	0.026	199269	21.77	13.81	44.8*	Endrin MN
7.413	0.025	17122	8.083	0.005	105130	1.63	7.11	125.2*	Endosulfan II MN
----			7.933	-0.003	62308	0.00	4.44	---	4,4'-DDD
----			8.706	0.032	39211	0.00	3.02	---	Endosulfan sulfate
----			8.259	0.005	439181	0.00	32.41	---	4,4'-DDT
8.015	0.029	29025	----			6.18	0.00	---	Methoxychlor
----			9.211	0.015	144089	0.00	10.27	---	Endrin ketone
7.838	0.022	61232	8.398	-0.009	58602	7.33	5.62	26.5	Endrin aldehyde MN
----			7.051	0.033	192805	0.00	7.61	---	trans-Chlordane
6.504	0.018	67534	7.174	-0.003	17044	3.43	0.69	133.2*	cis-Chlordane MN
2.325	-0.021	10922	2.520	0.028	4140	0.40	0.12	105.8*	Hexachlorobutadiene M
----			----			0.00	0.00	---	Hexachlorobenzene
3.868	-0.003	318051	4.192	-0.003	509065	17.47	20.72	17.0	Tetrachloro-m-xylene MN
9.438	0.001	234372	10.402	-0.000	288603	26.06	25.72	1.3	Decachlorobiphenyl MN

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

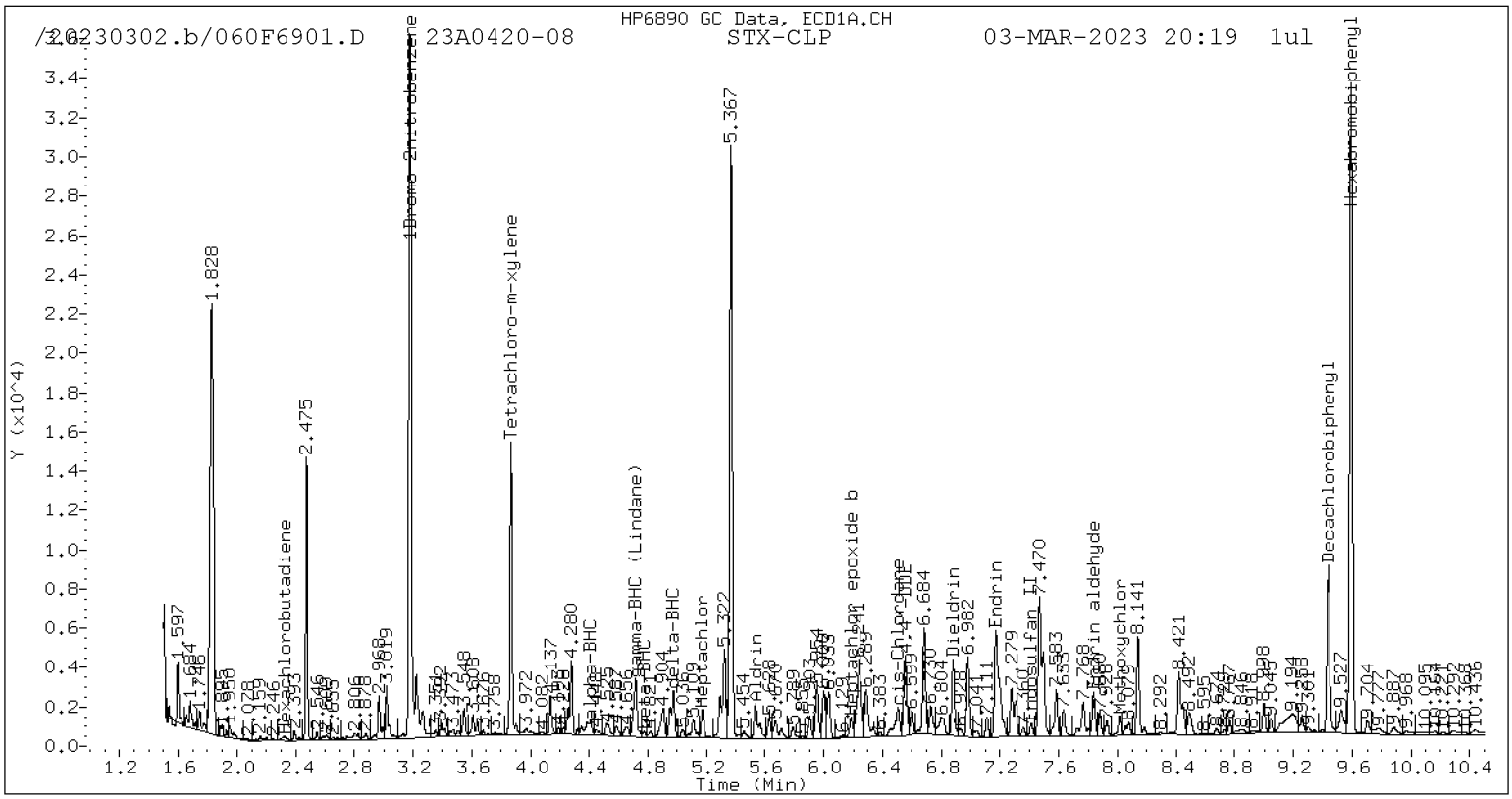
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	1338865	99.1
Hexabromobiphenyl	609723	887481	45.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1745592	73.4
Hexabromobiphenyl	769764	1015086	31.9

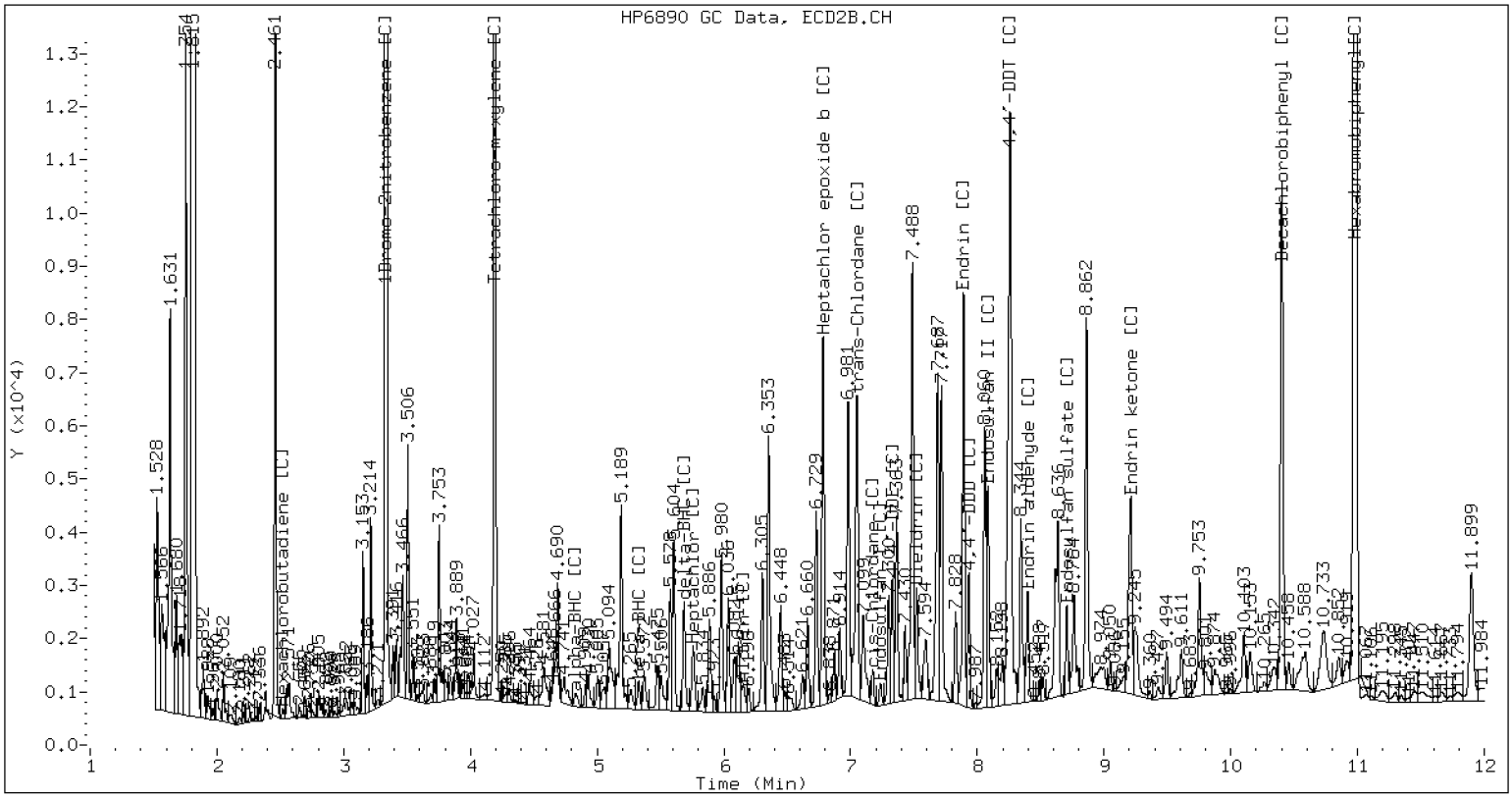
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

/20230302.b/B20230302.b/060F6901.D 23A0420-08 CLP2



CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, STX-CLP

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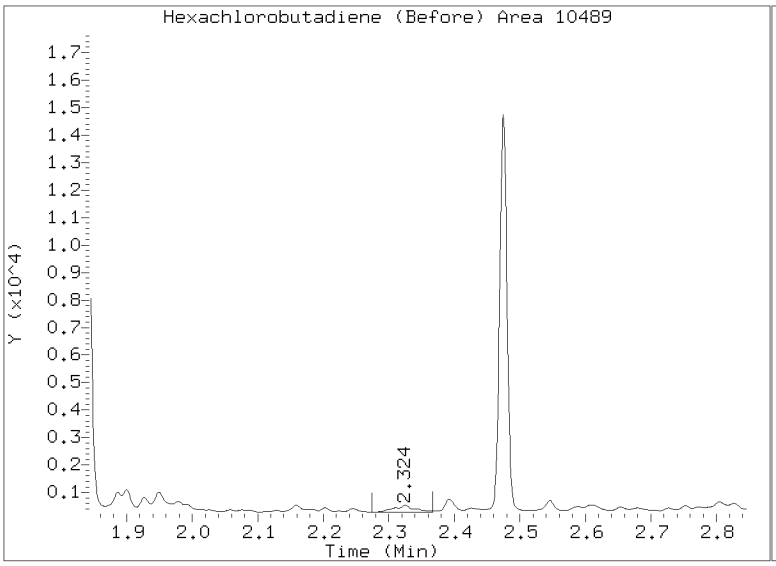
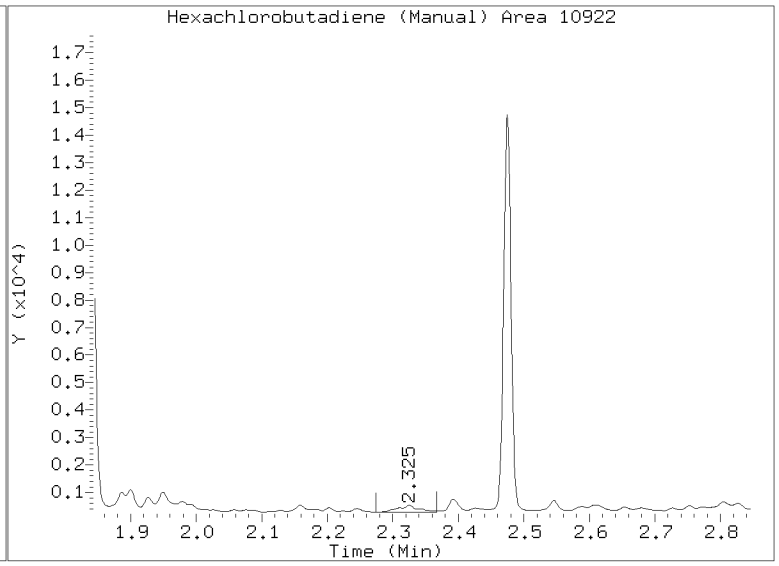
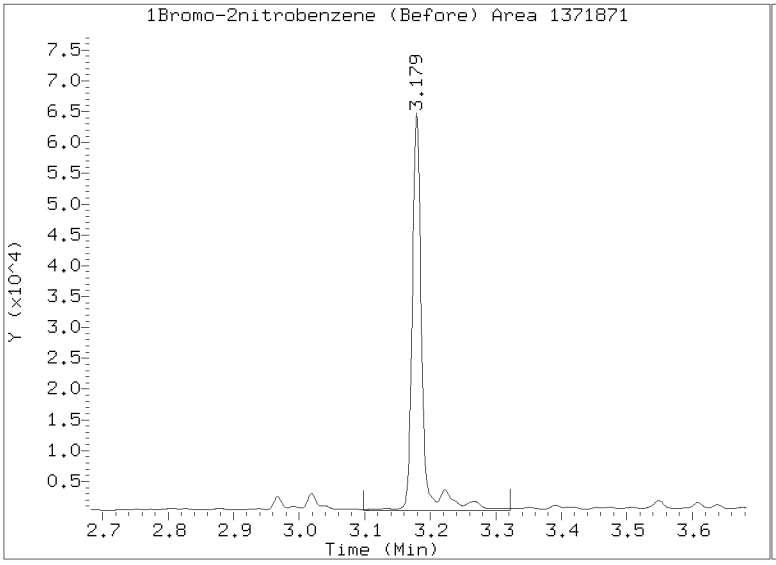
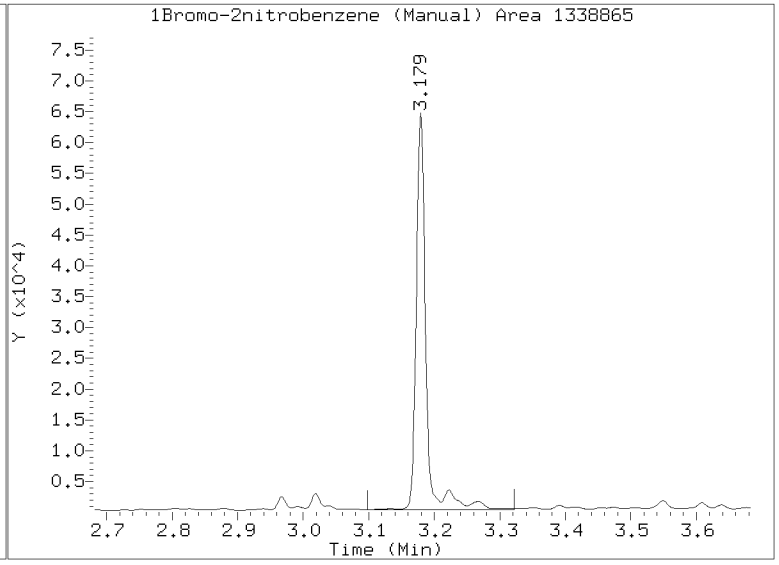
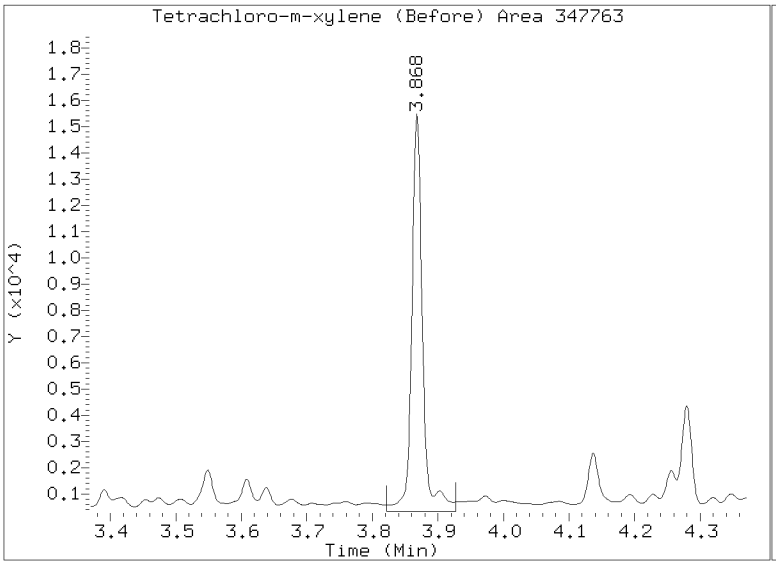
Lab ID:23A0420-08 Client ID:
Report Date: 03/09/2023 11:19

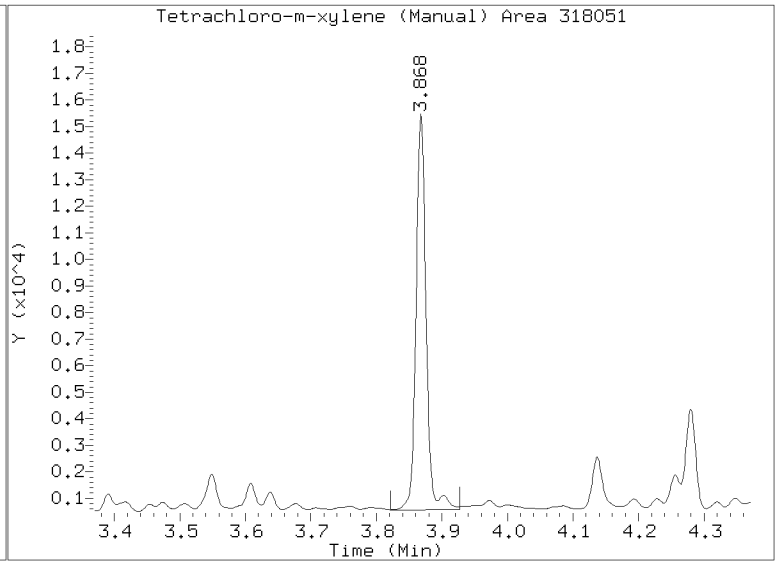












Manual Peak Adjustment Report, STX-CLP

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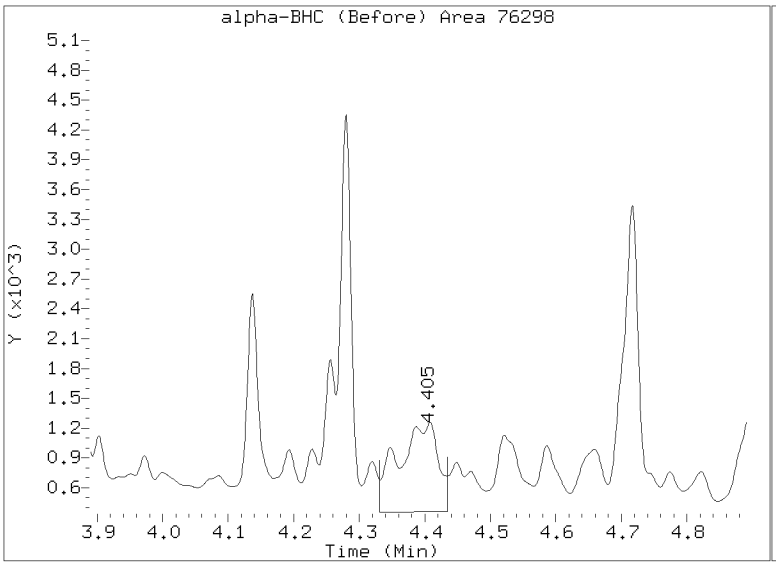
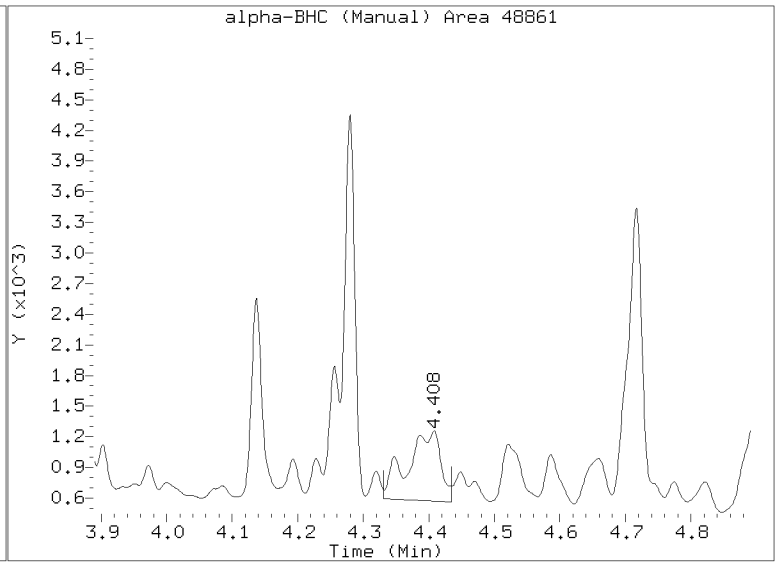
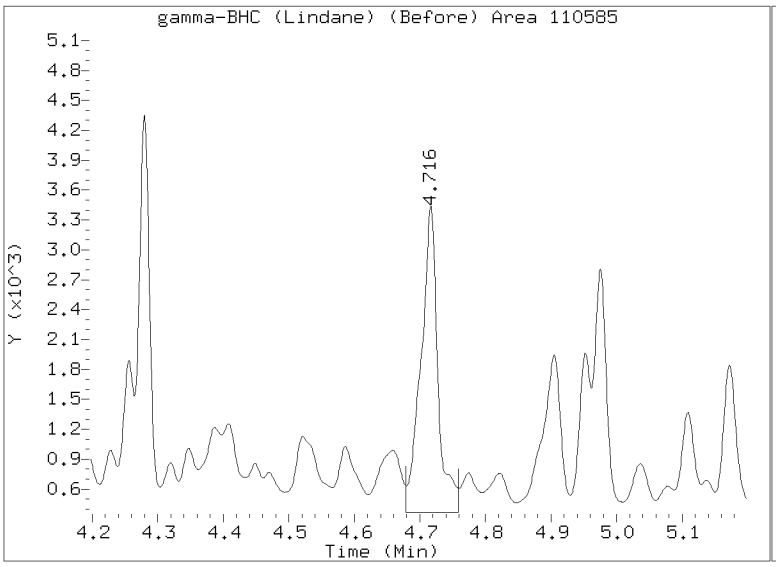
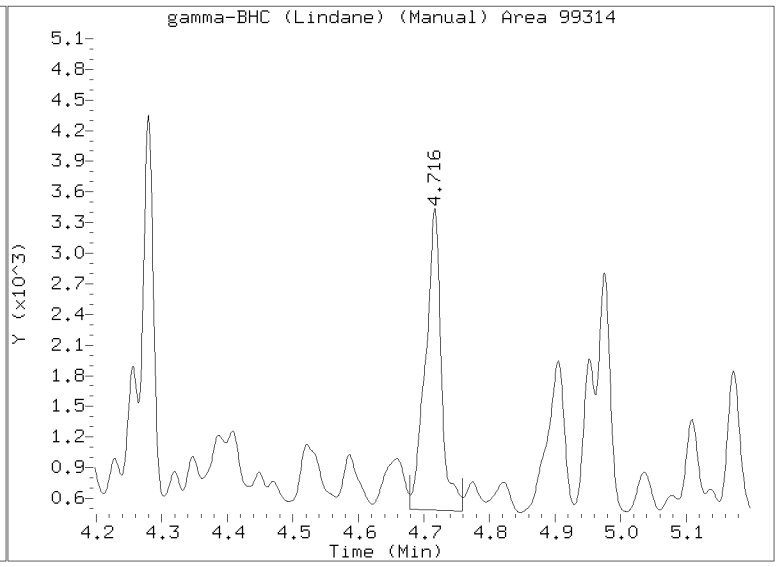
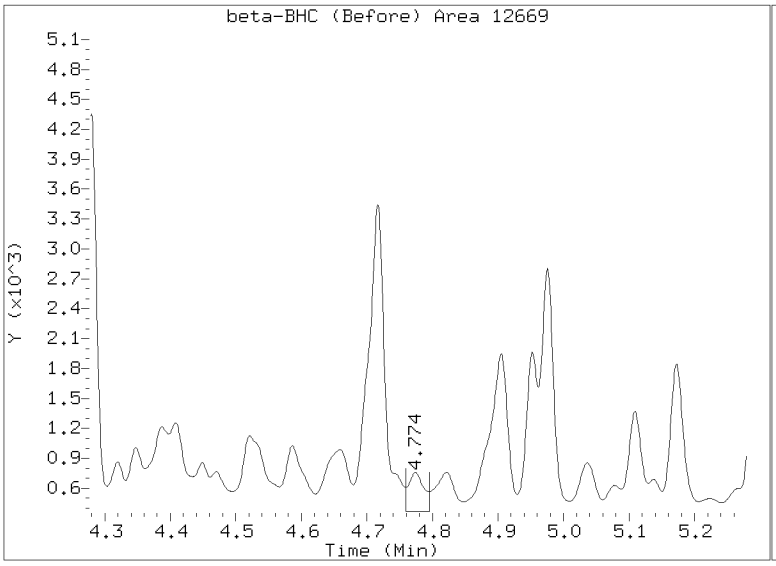
Report Date: 03/09/2023 11:19

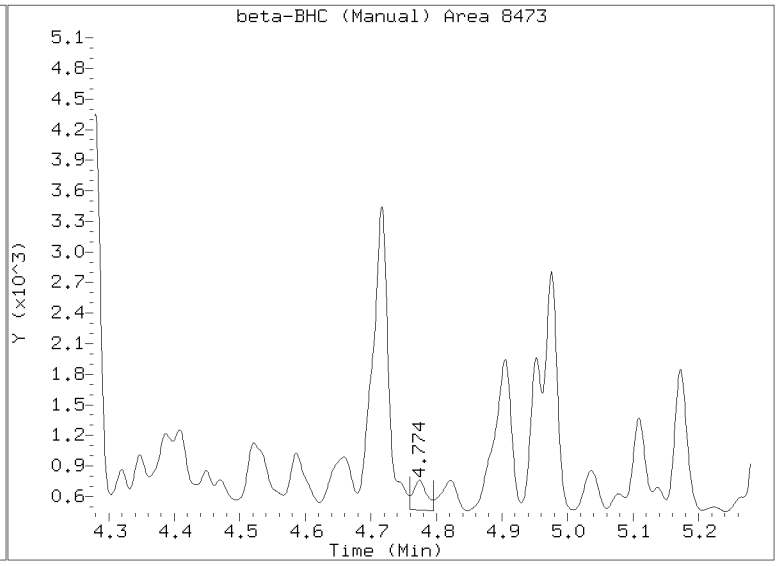












Manual Peak Adjustment Report, STX-CLP

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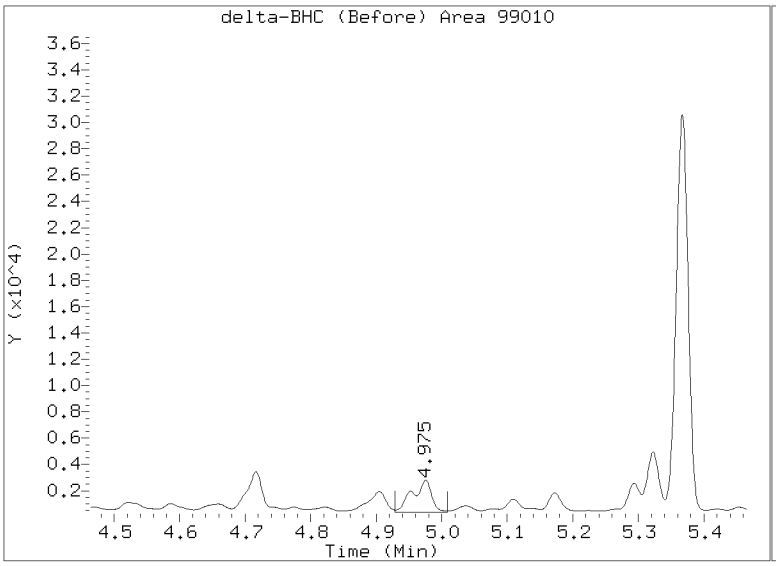

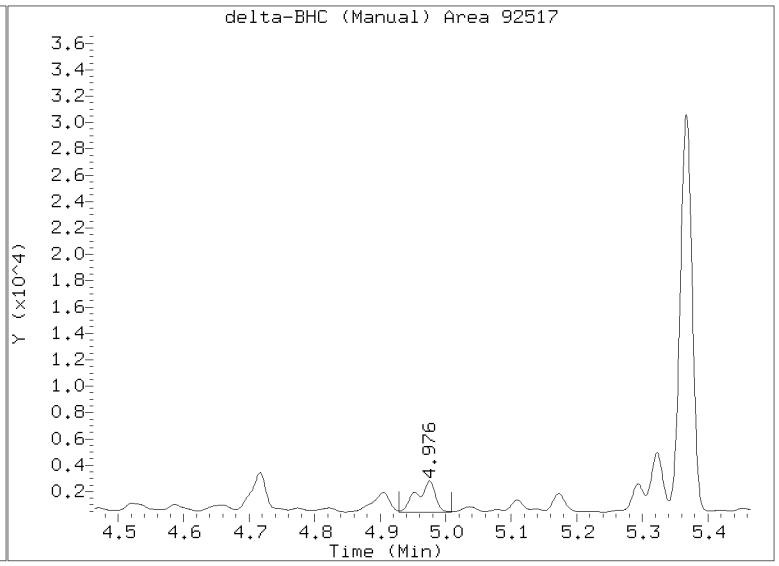

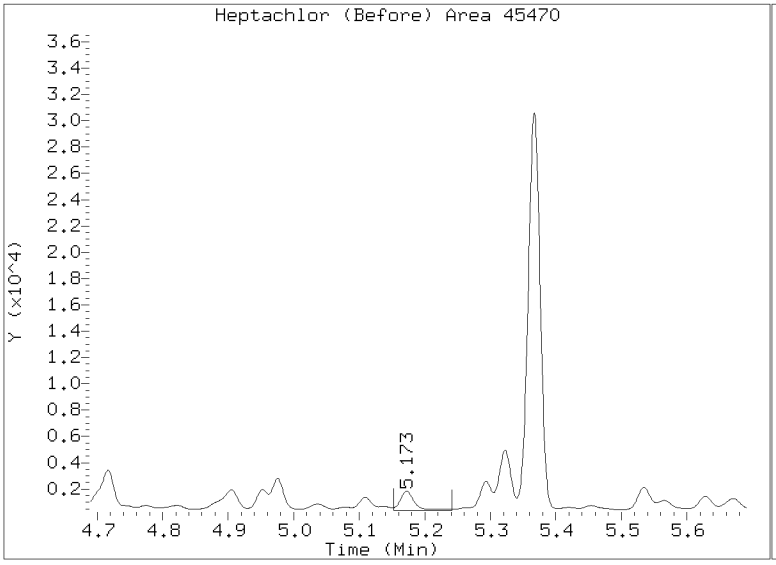

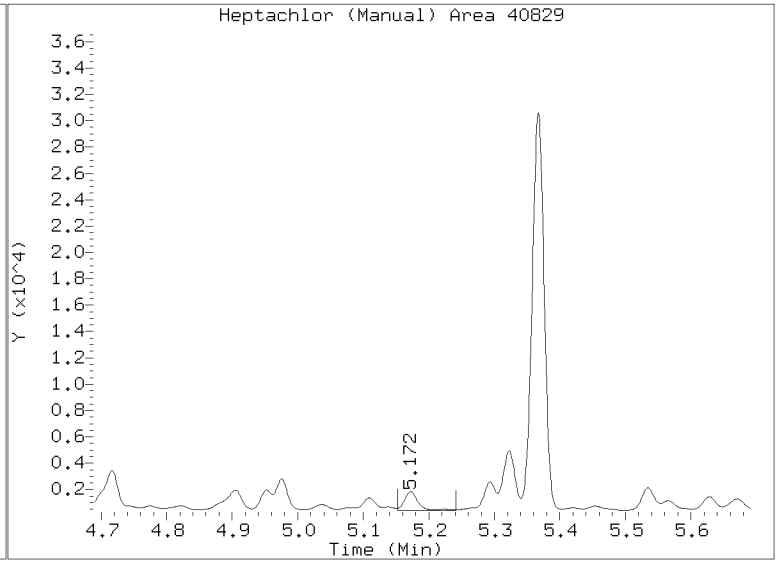

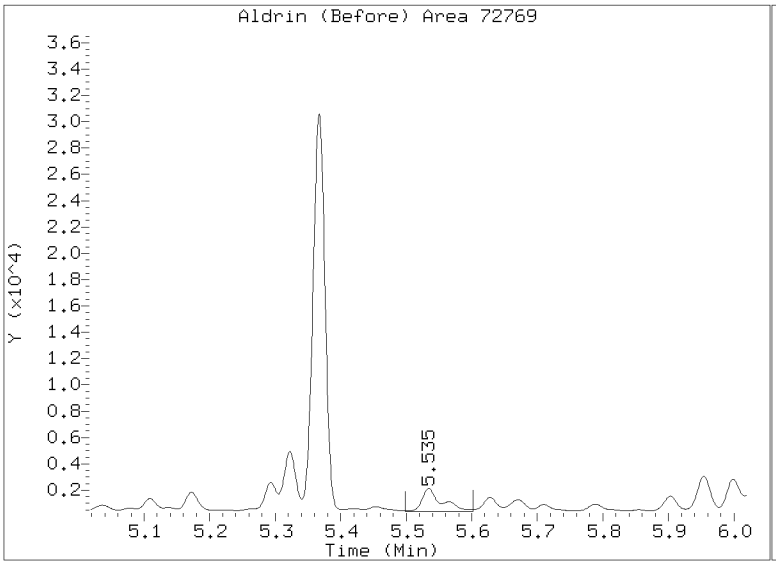

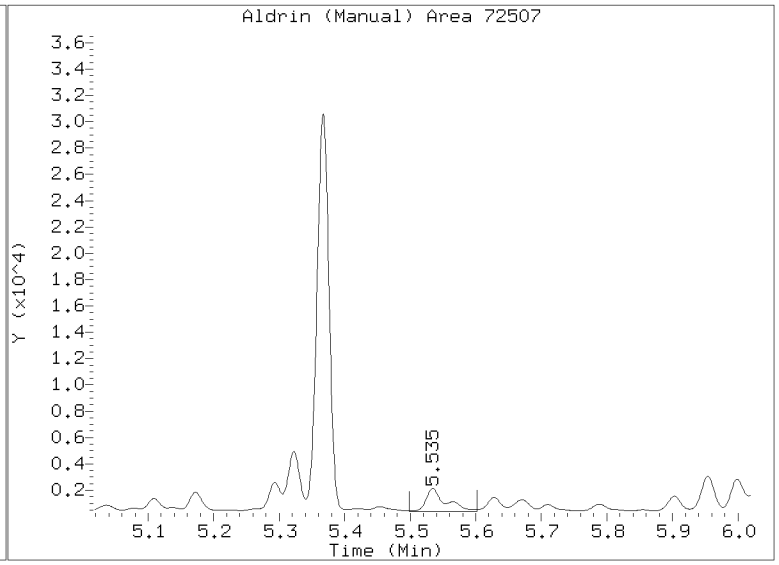

Manual Peak Adjustment Report, STX-CLP

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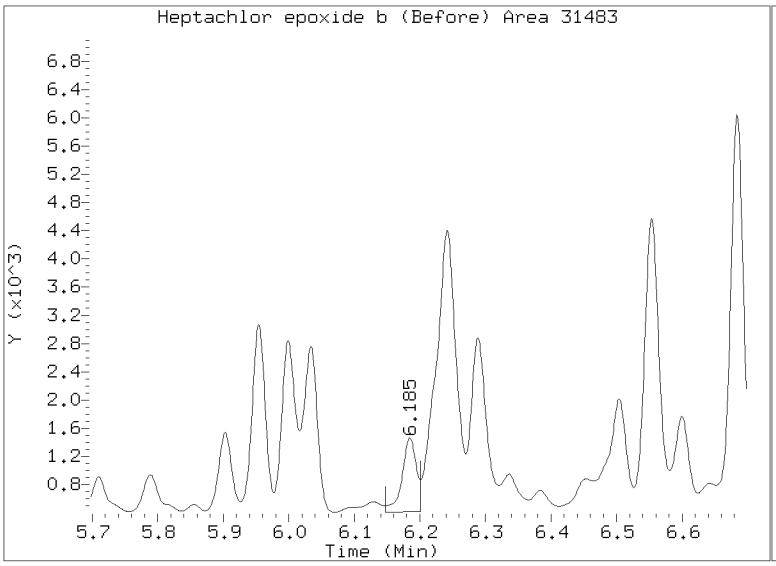

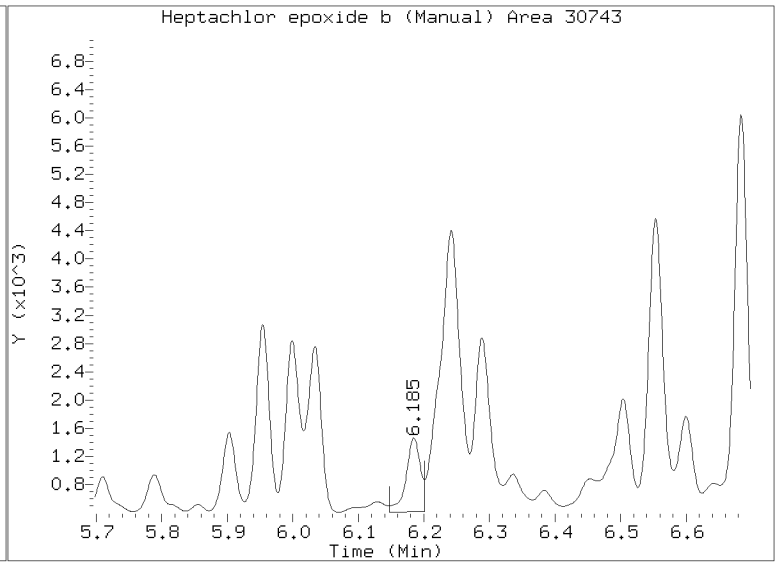

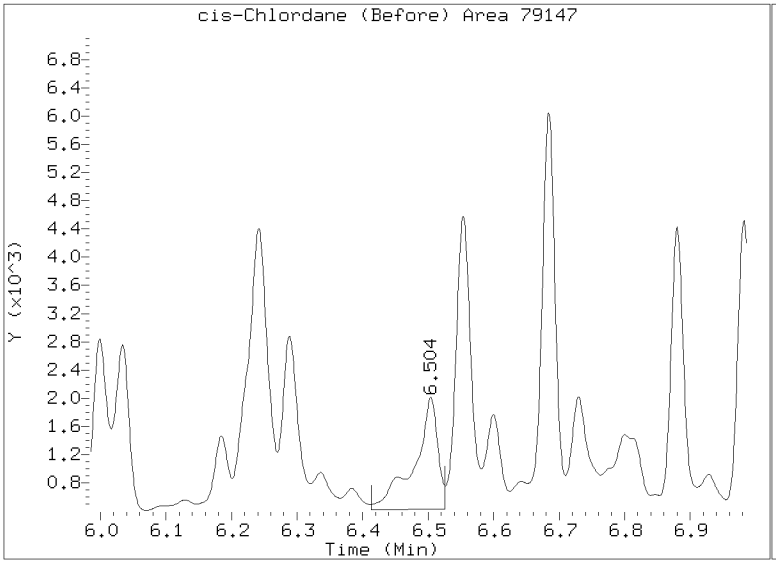

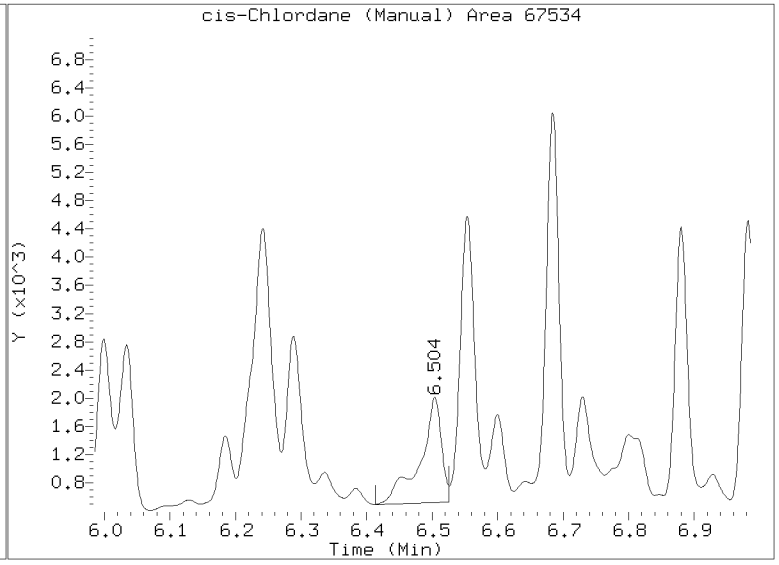

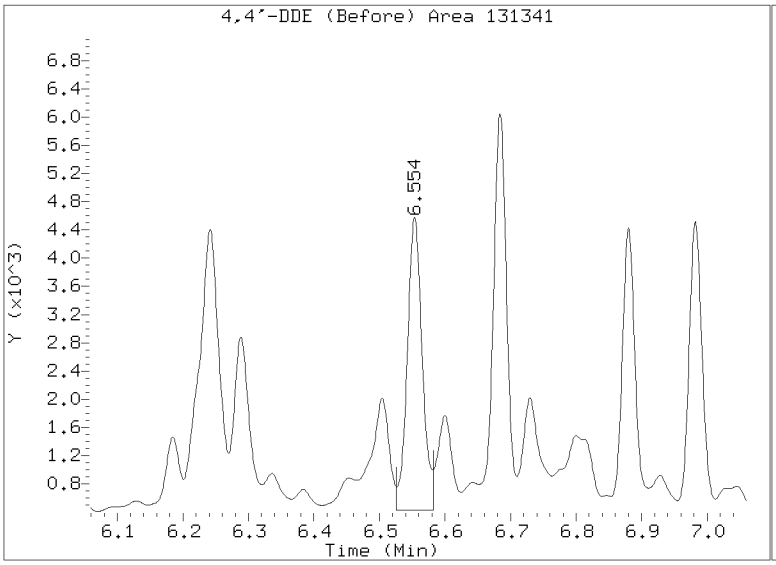

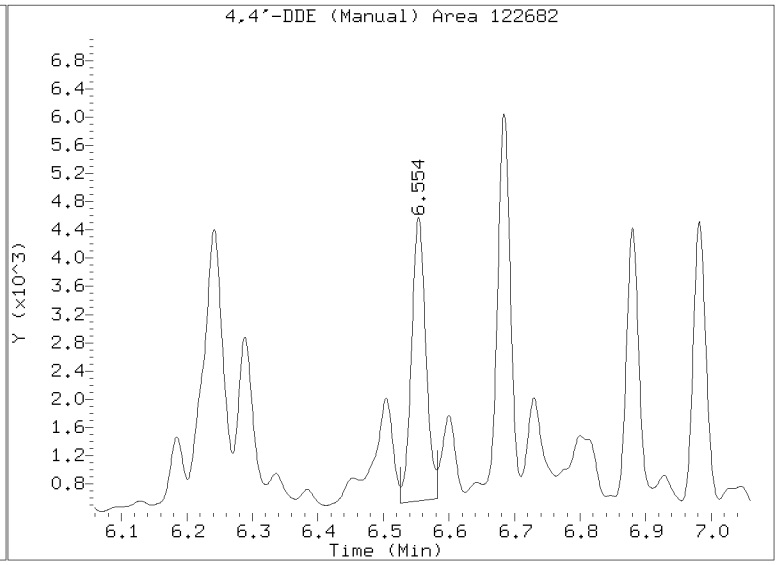

Manual Peak Adjustment Report, STX-CLP

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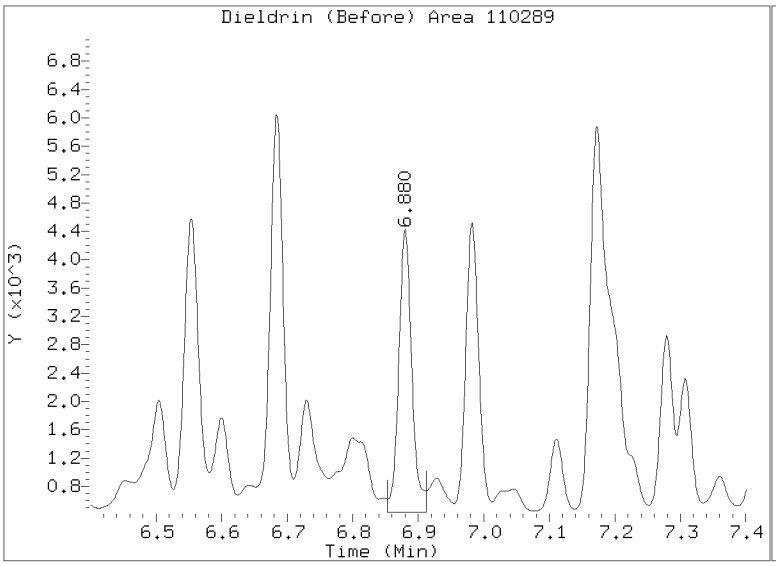

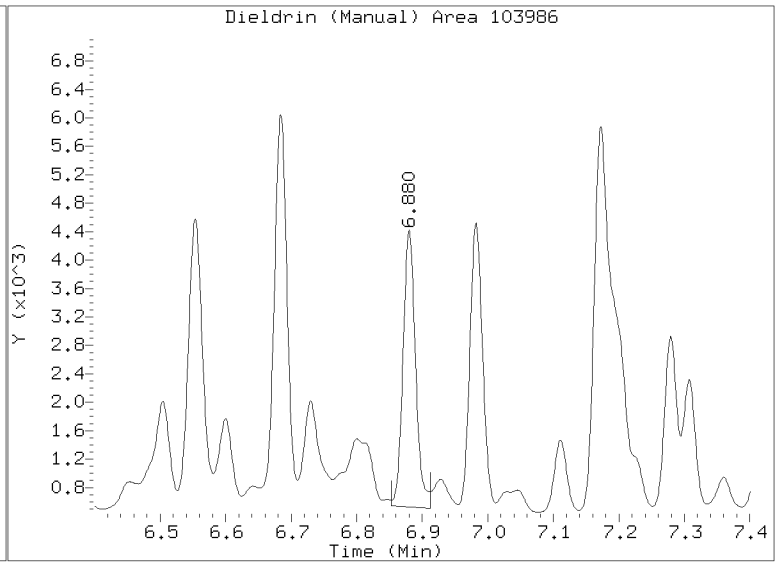

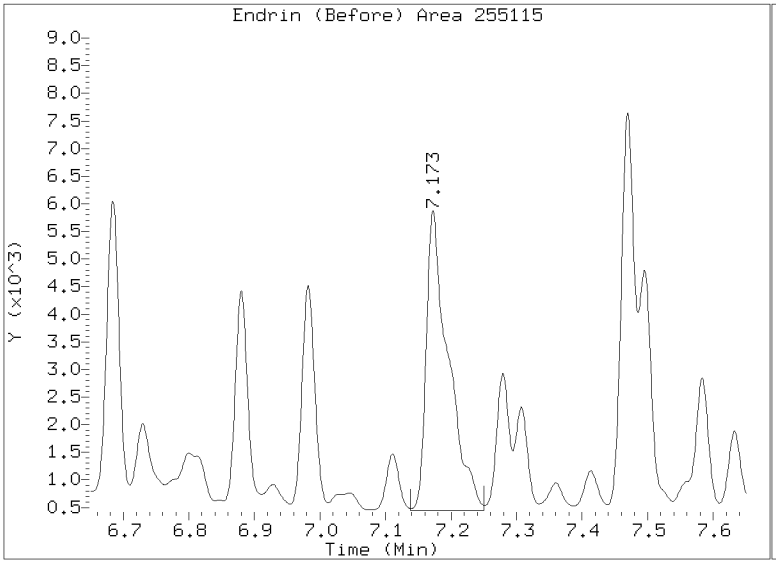

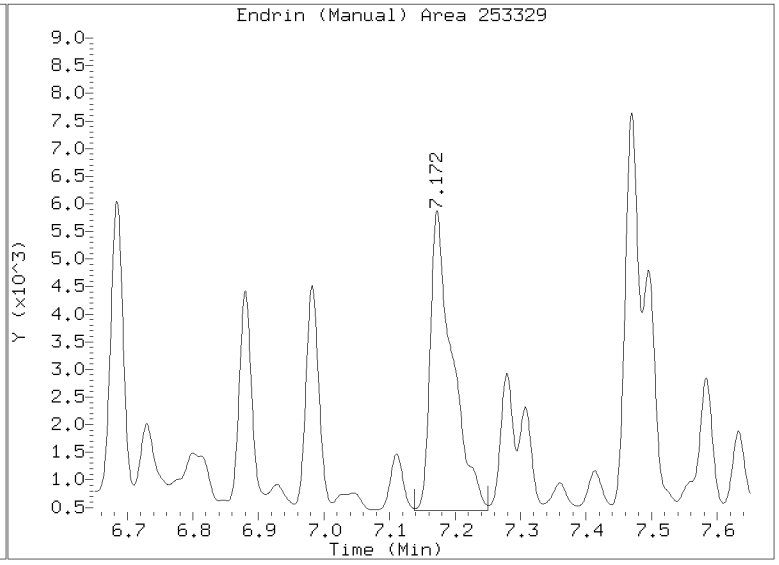

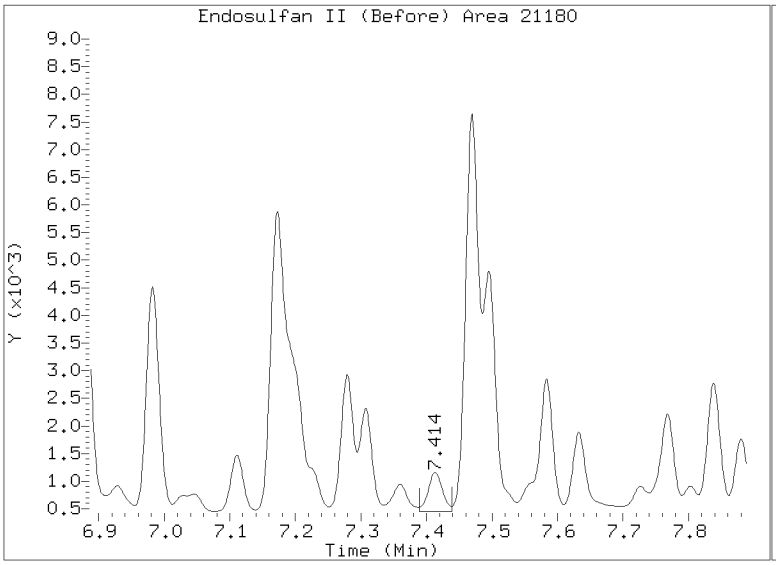

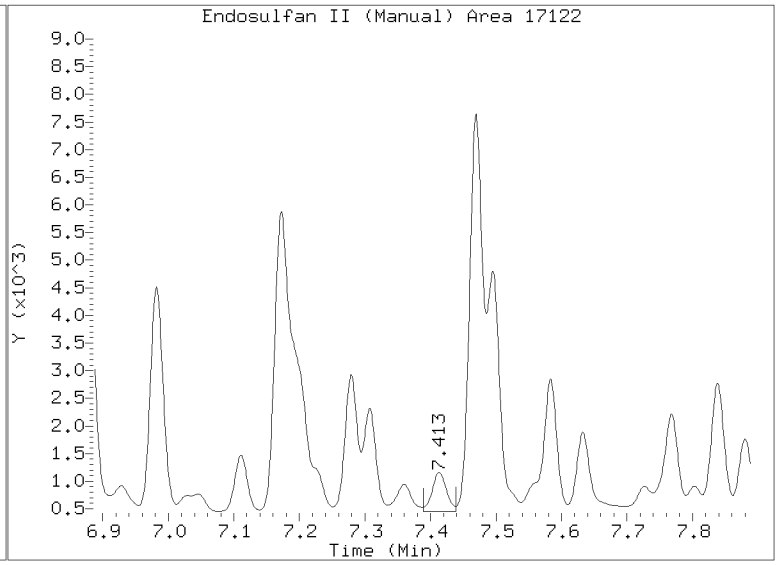

Manual Peak Adjustment Report, STX-CLP

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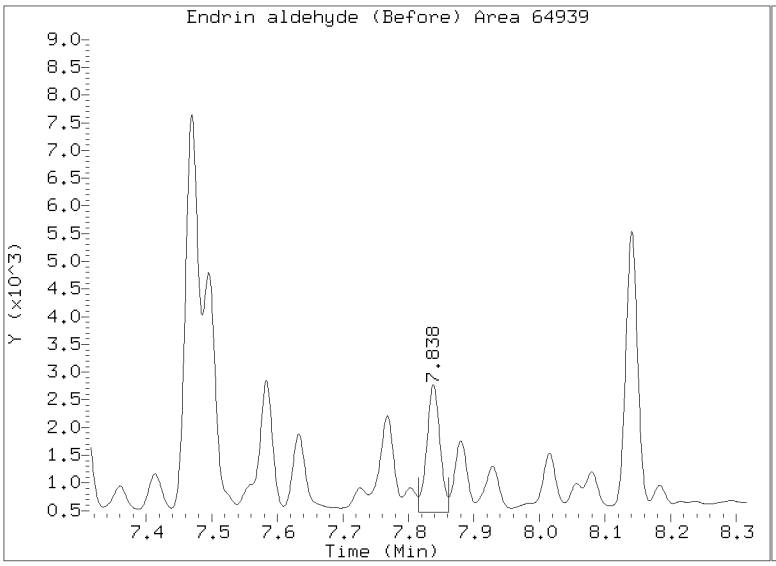

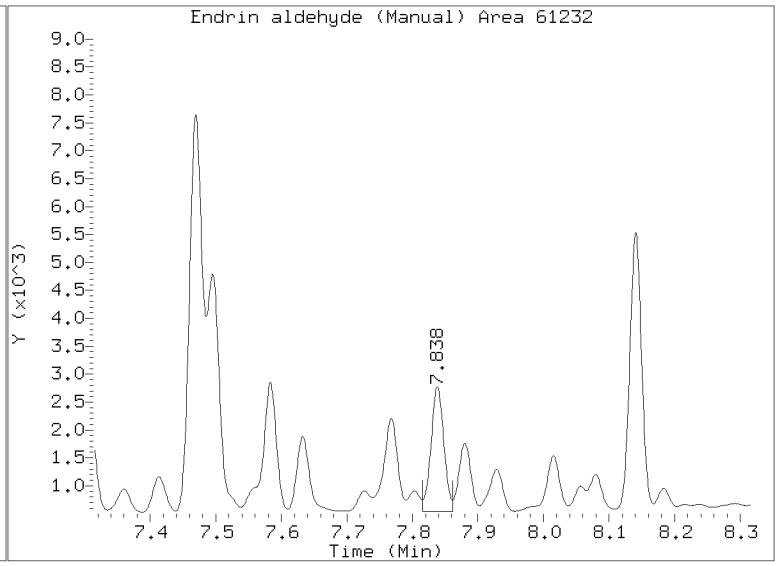

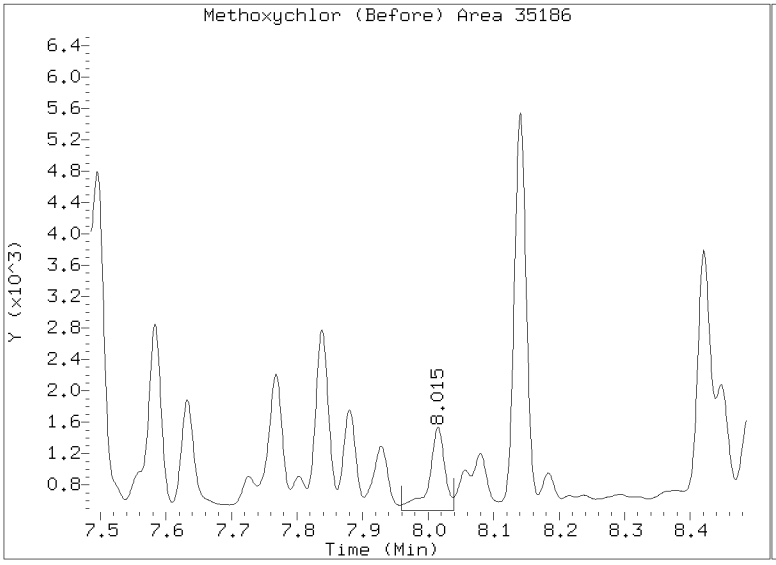

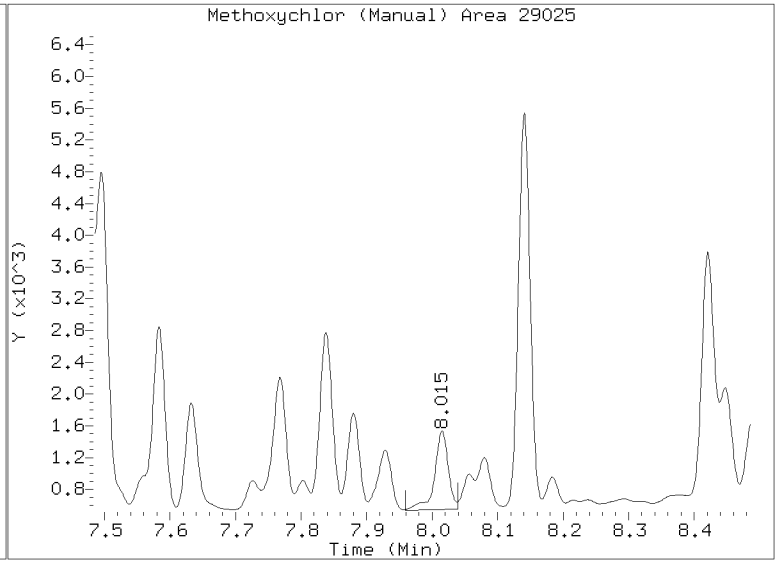

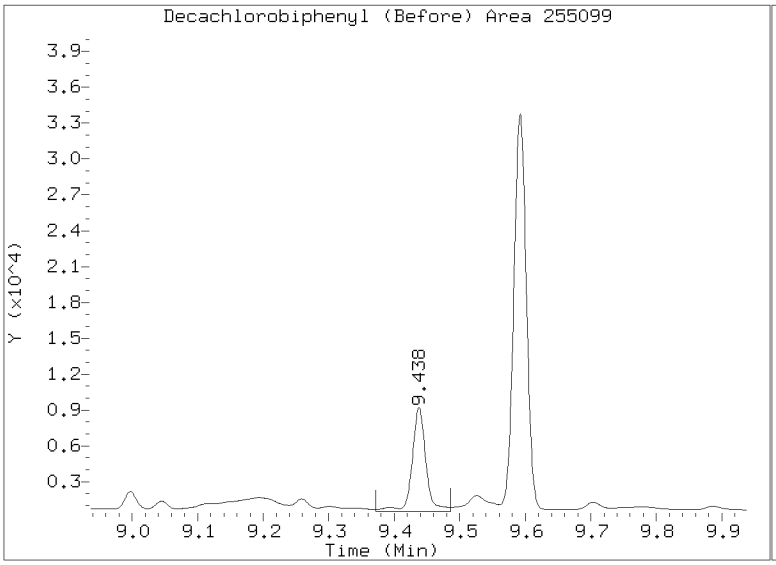

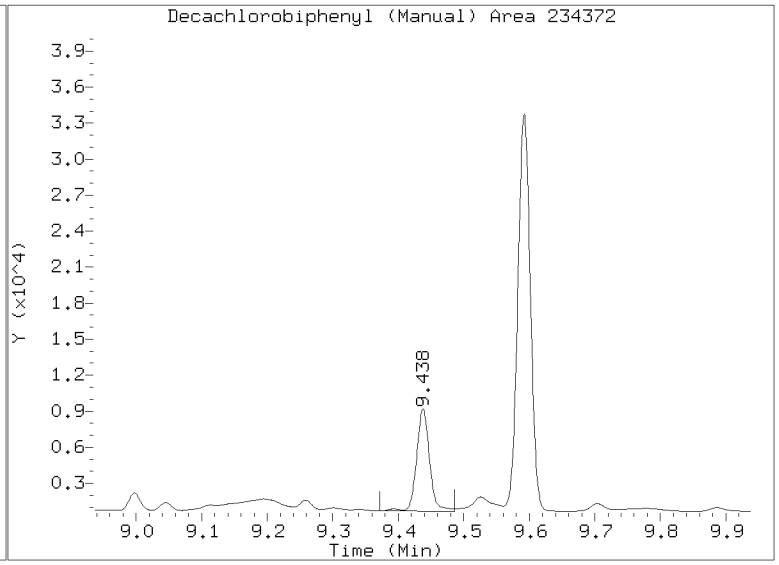

Manual Peak Adjustment Report, STX-CLP

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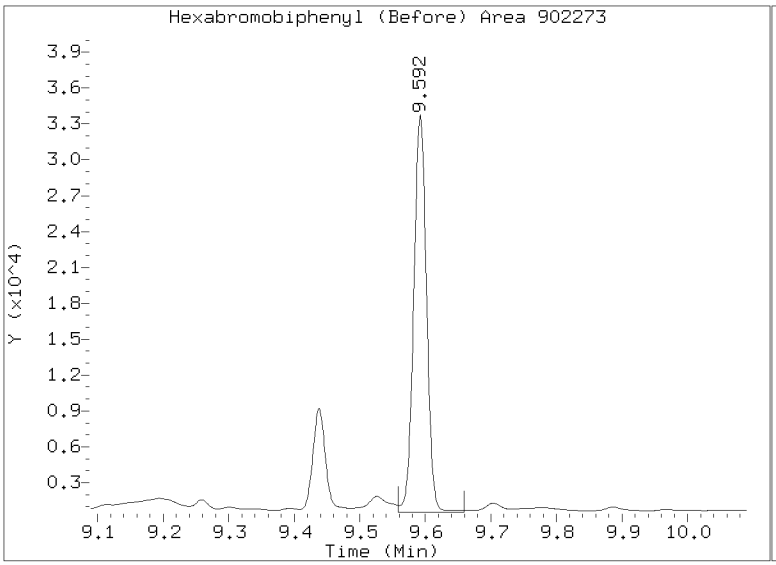

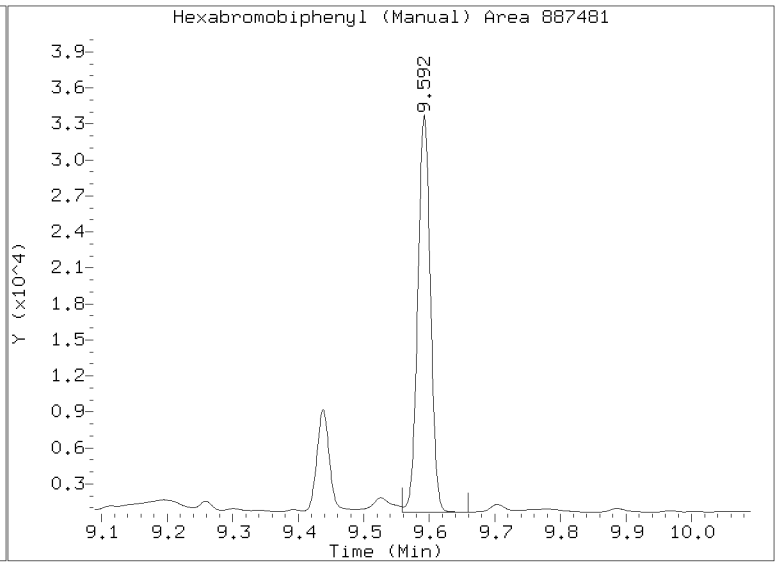

Manual Peak Adjustment Report, CLP-2

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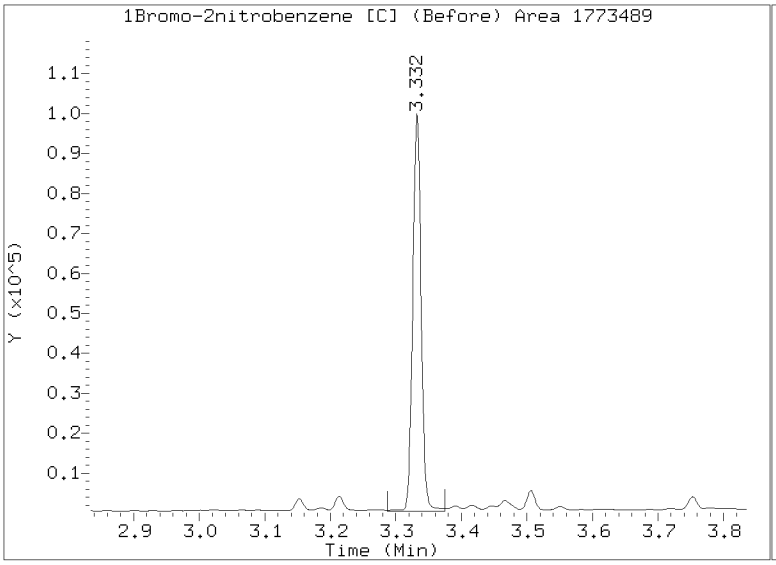

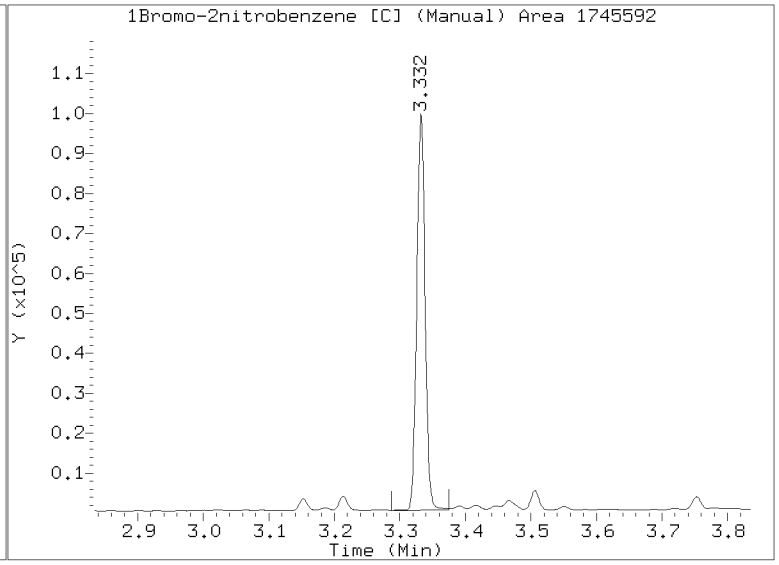

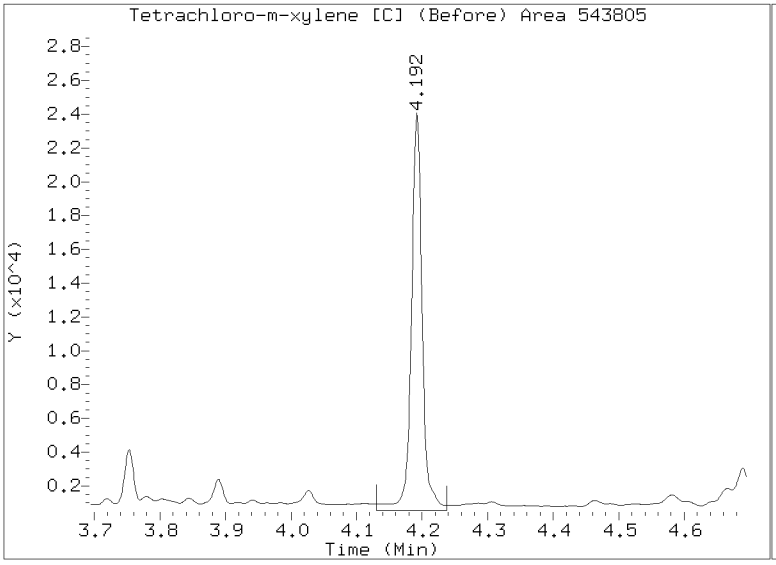

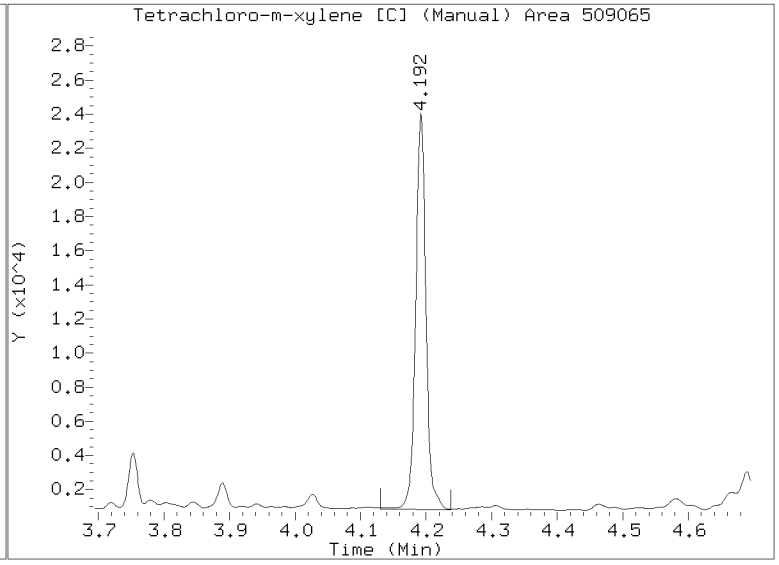

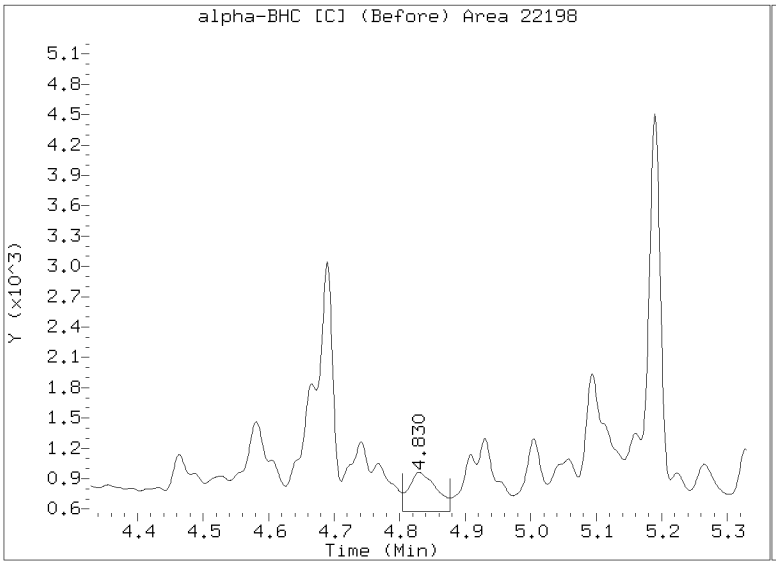

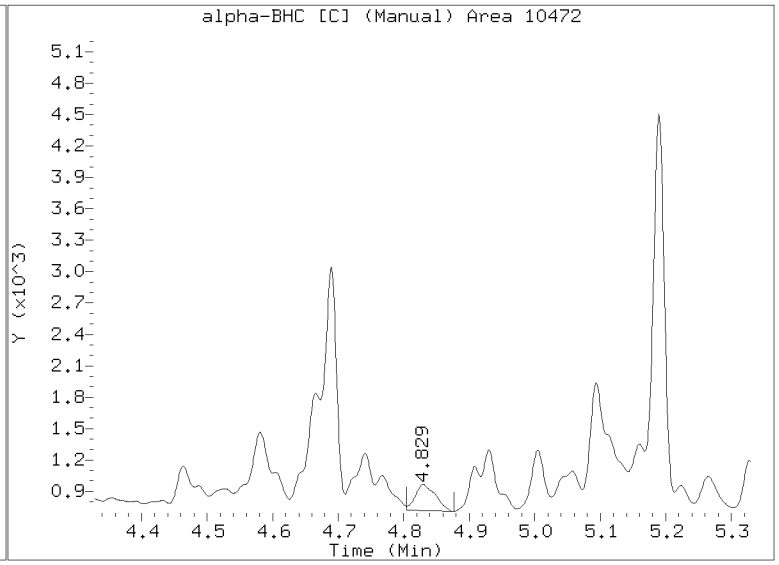

Manual Peak Adjustment Report, CLP-2

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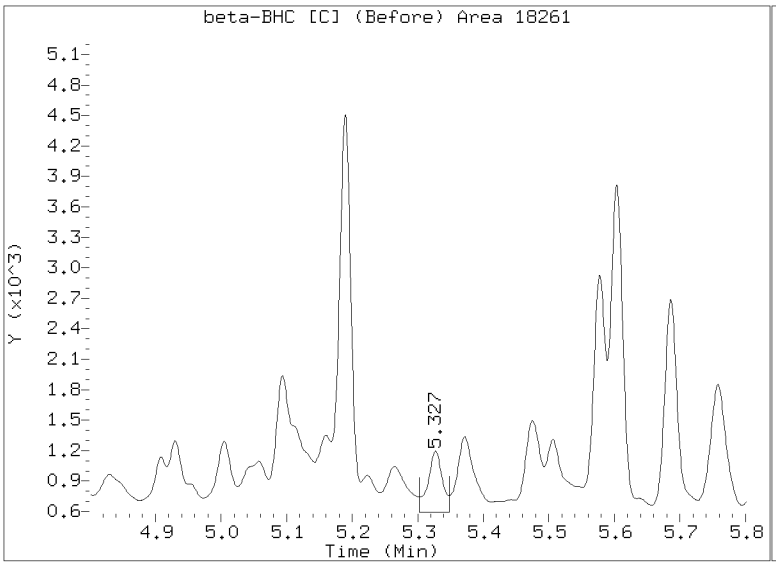

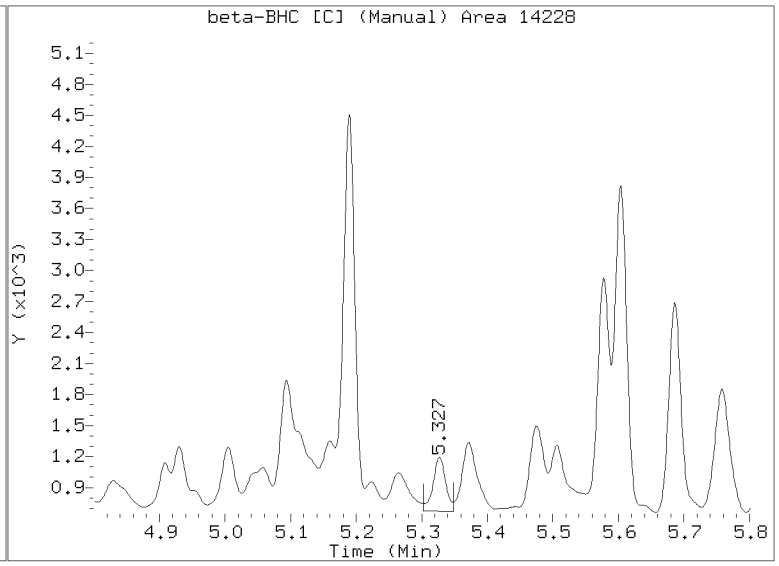

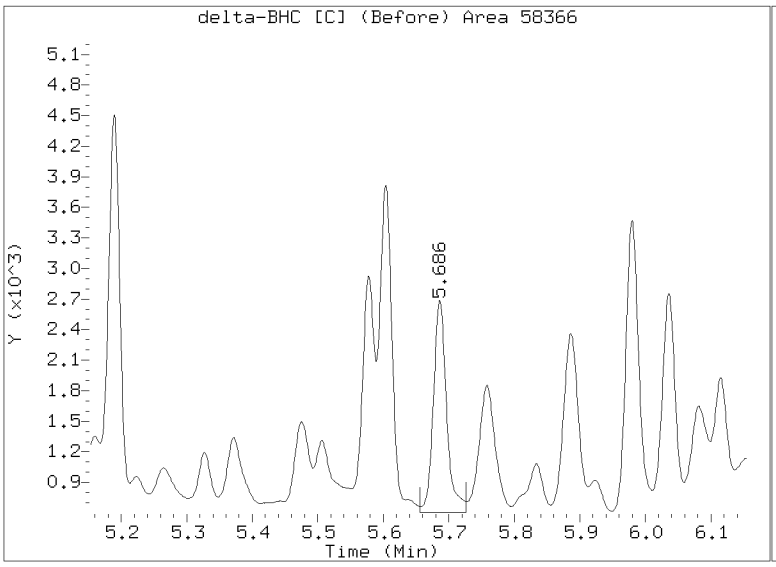

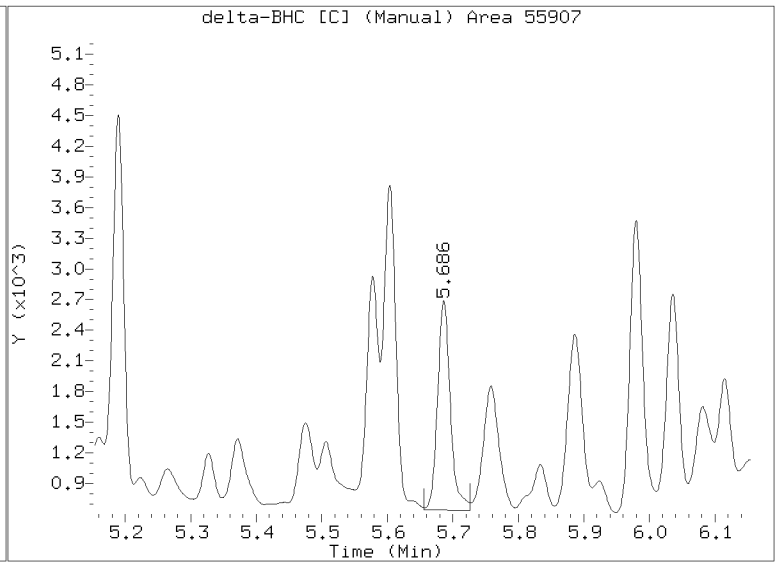

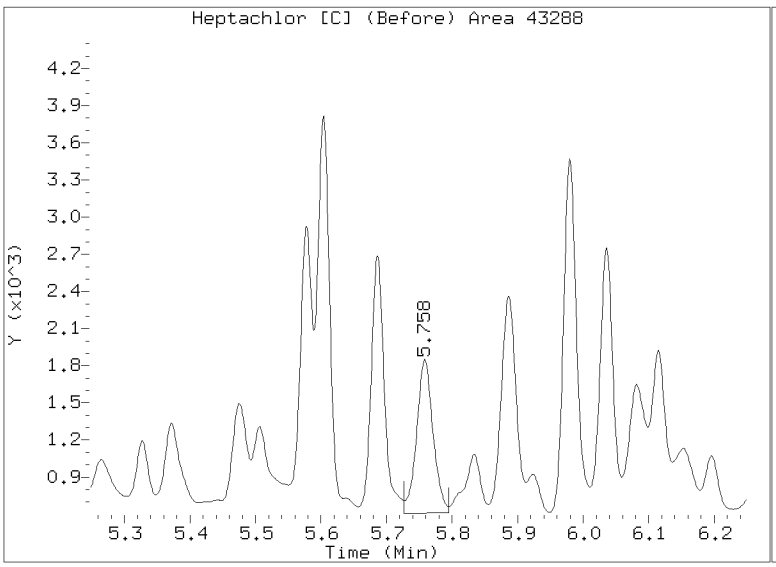

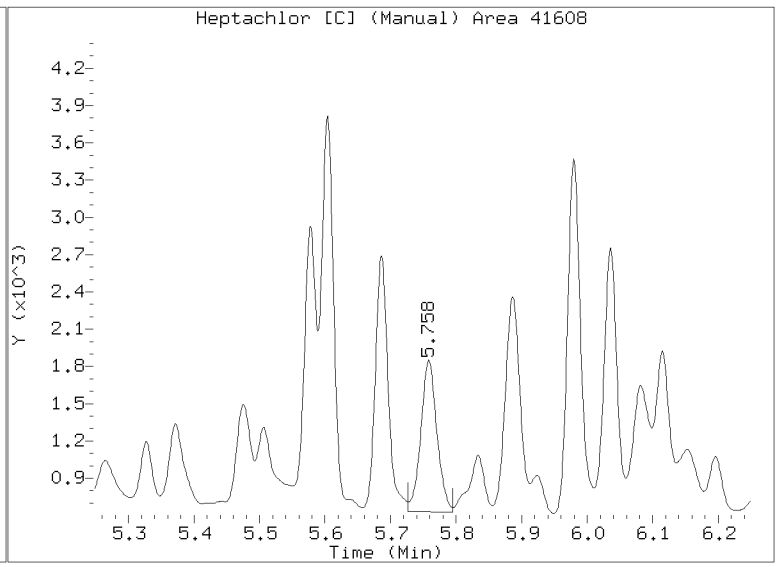

Manual Peak Adjustment Report, CLP-2

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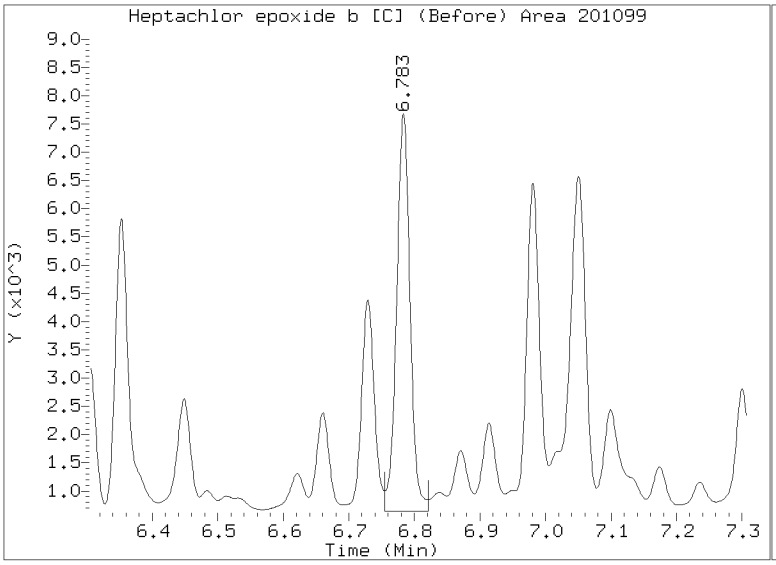
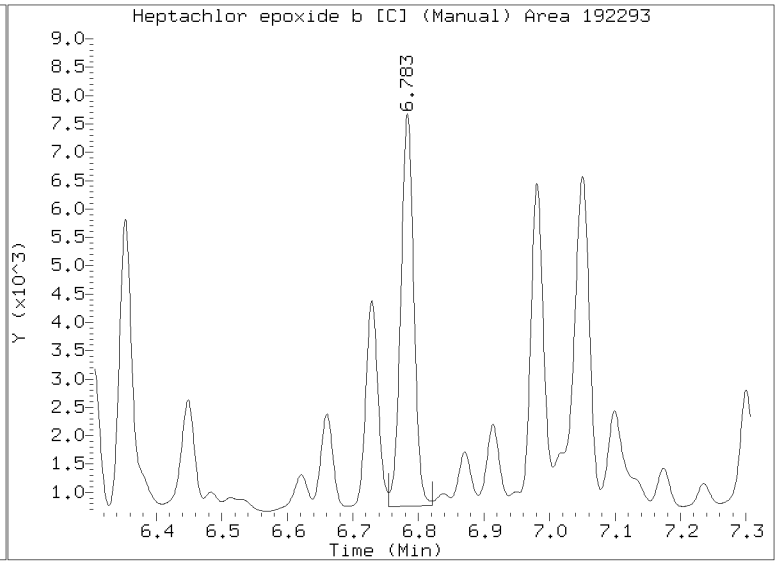
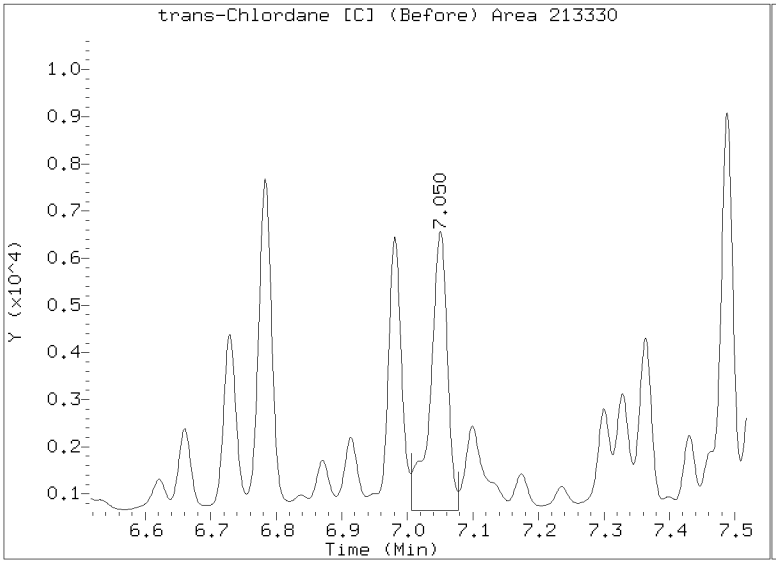
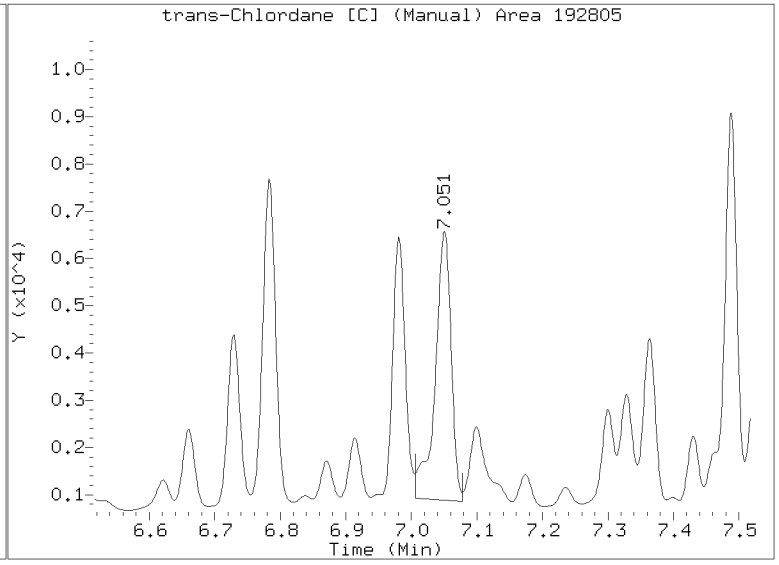
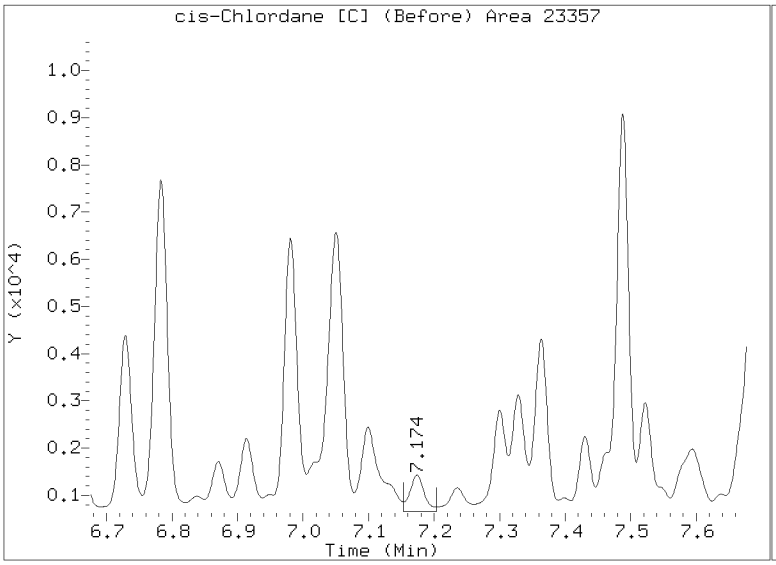
Injection Date: 03-MAR-2023 20:19
Lab ID:23A0420-08 Client ID:

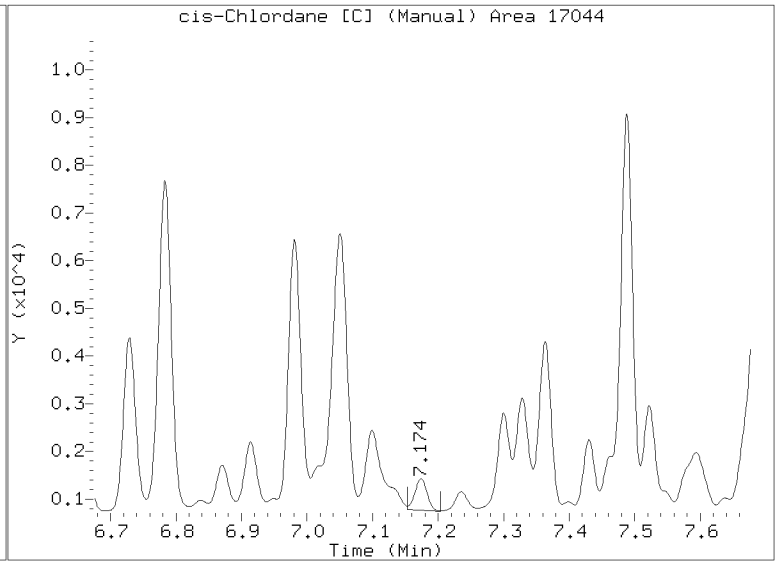












Manual Peak Adjustment Report, CLP-2

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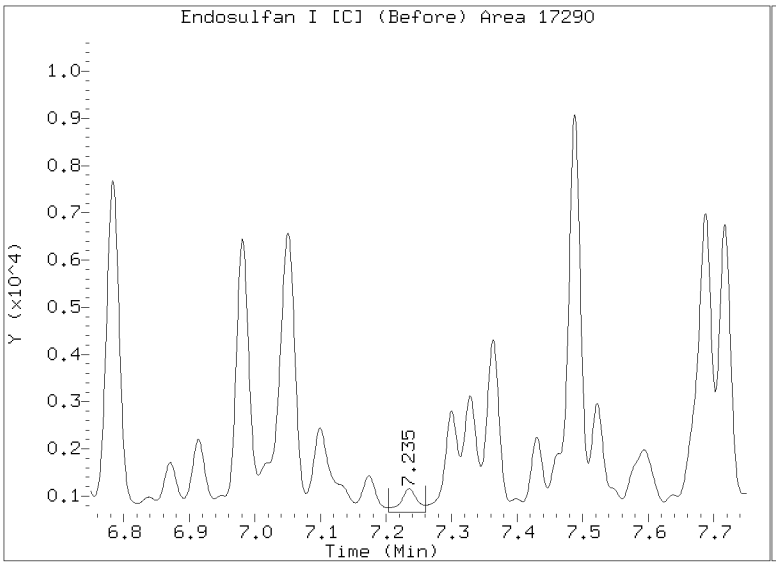
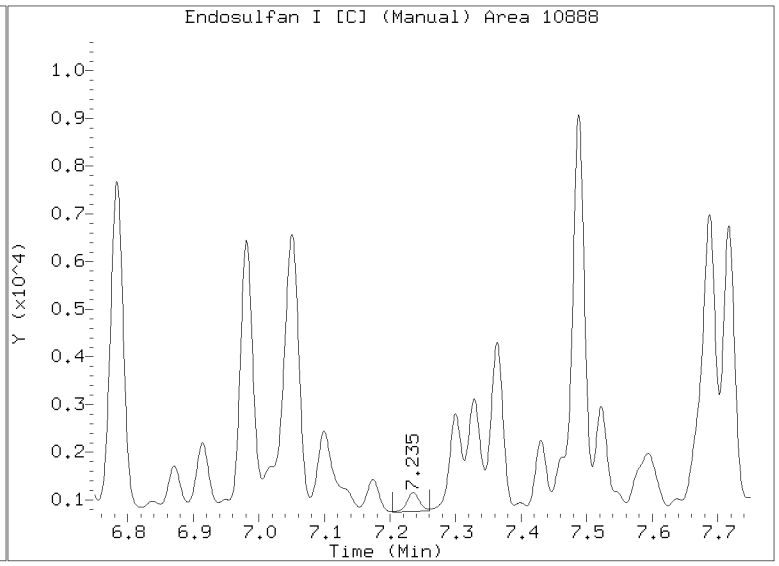
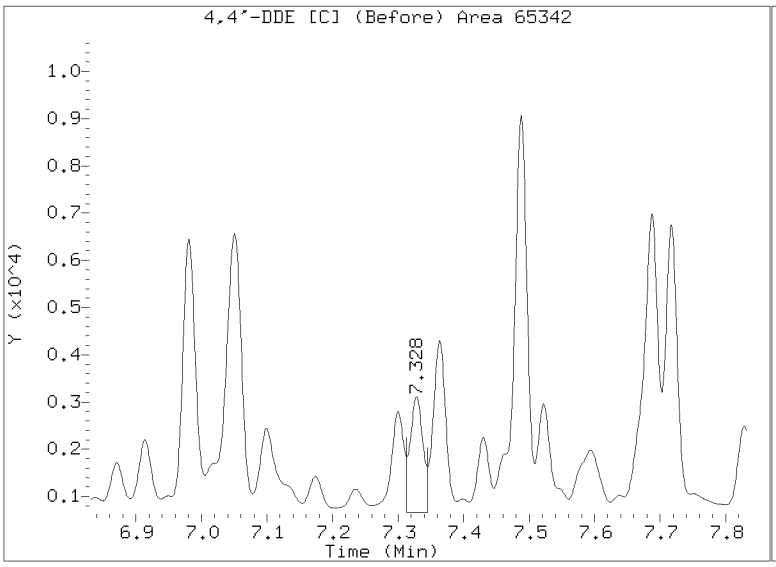
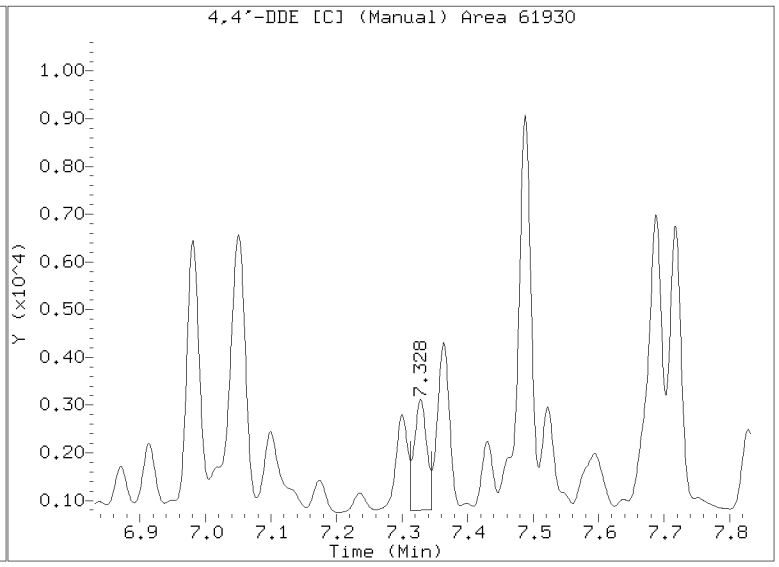
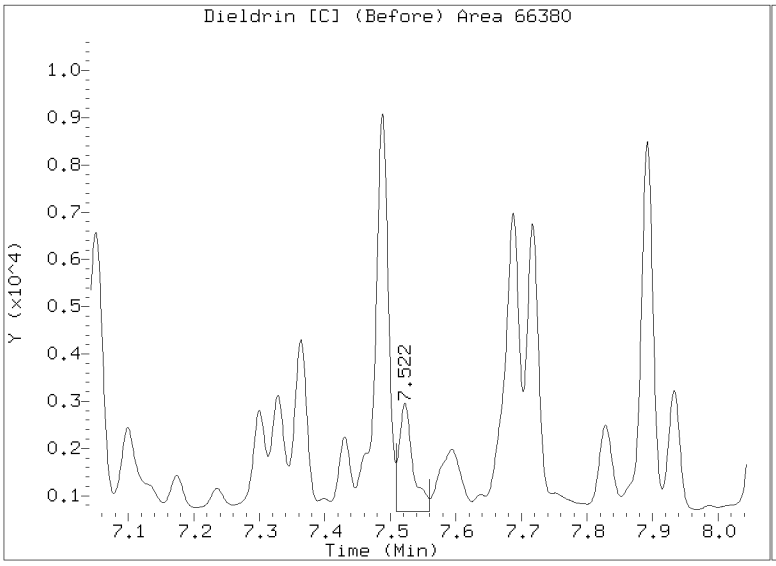
Lab ID:23A0420-08 Client ID:

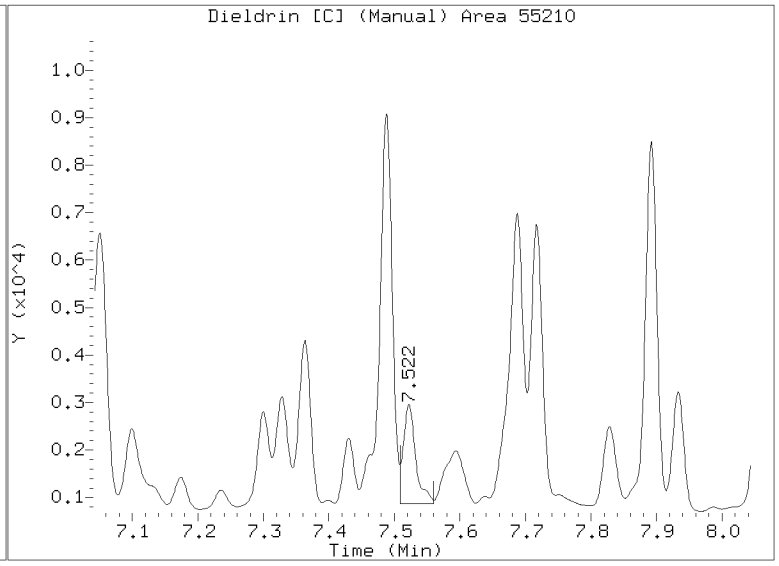












Manual Peak Adjustment Report, CLP-2

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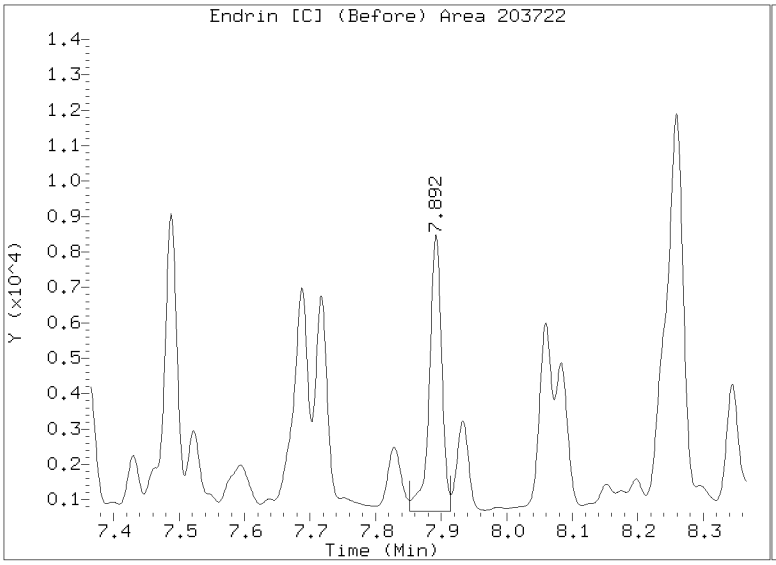
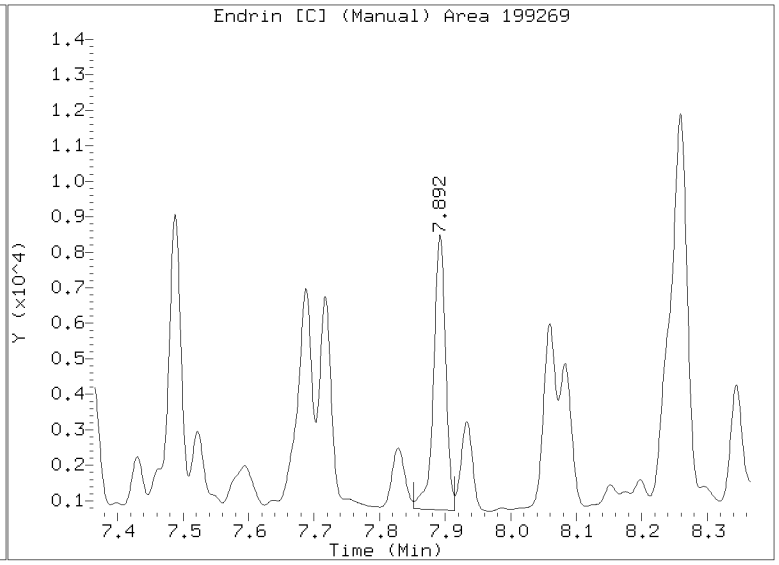
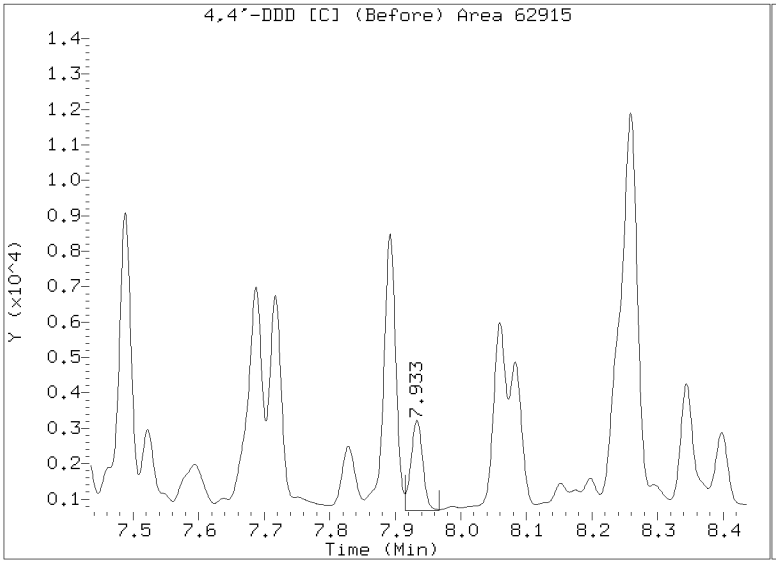
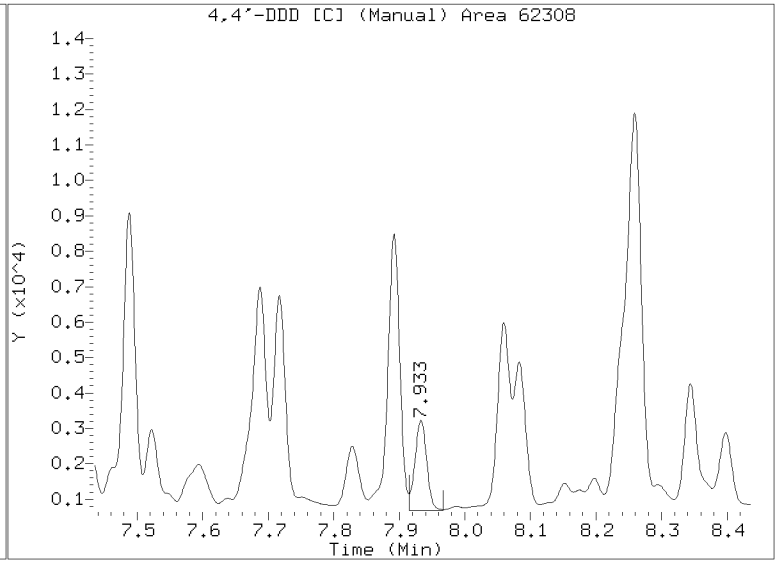
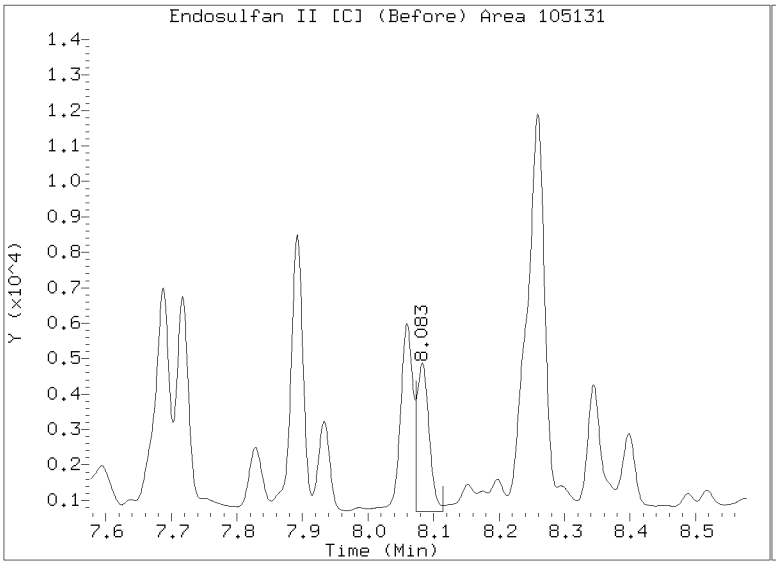
Lab ID:23A0420-08 Client ID:

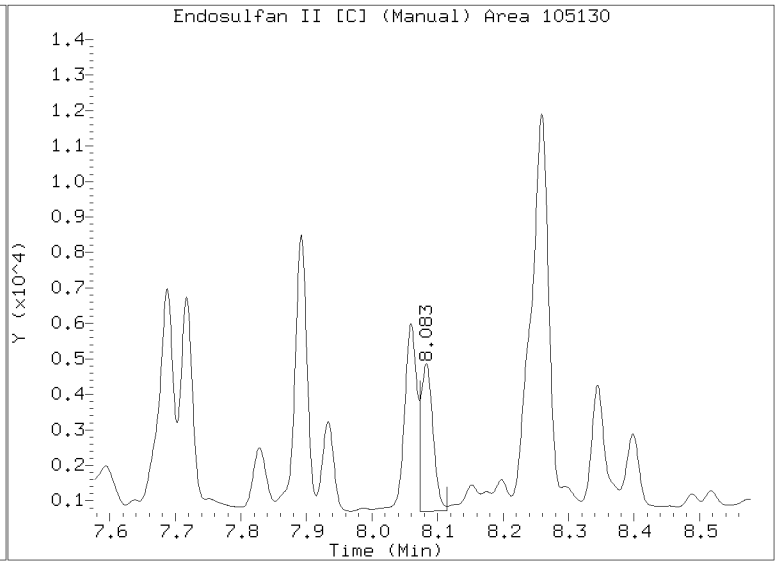












Manual Peak Adjustment Report, CLP-2

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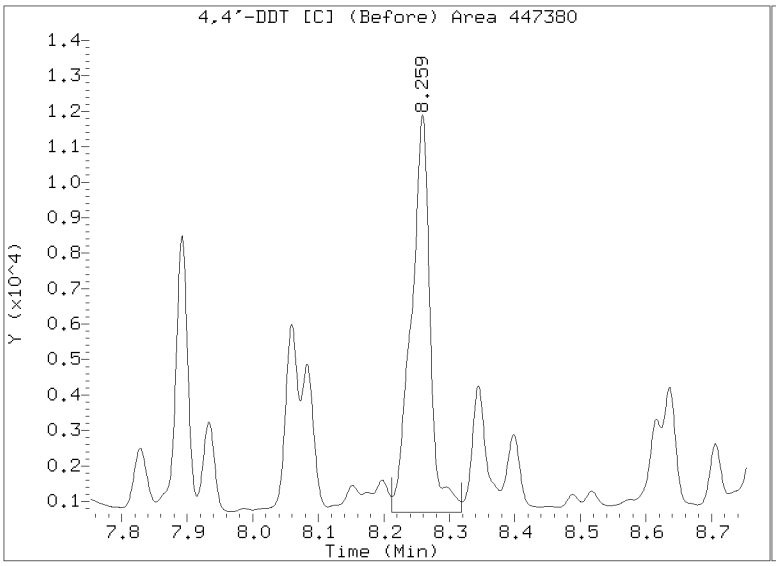
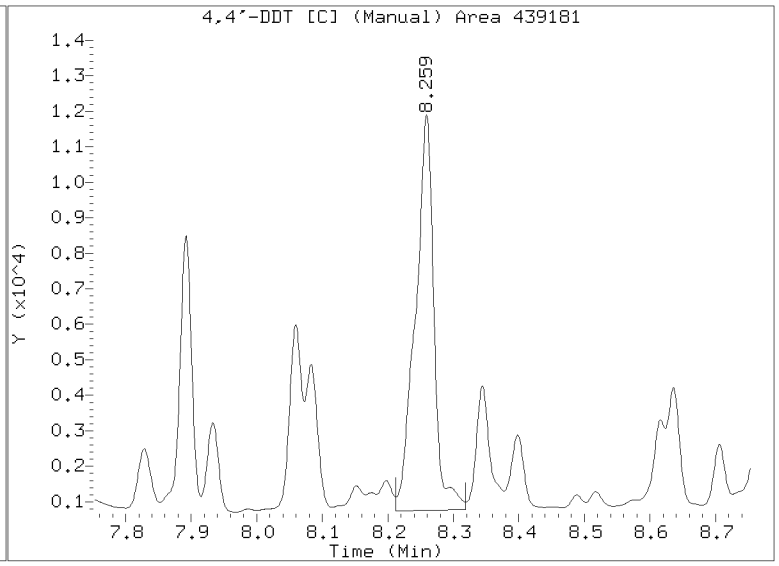
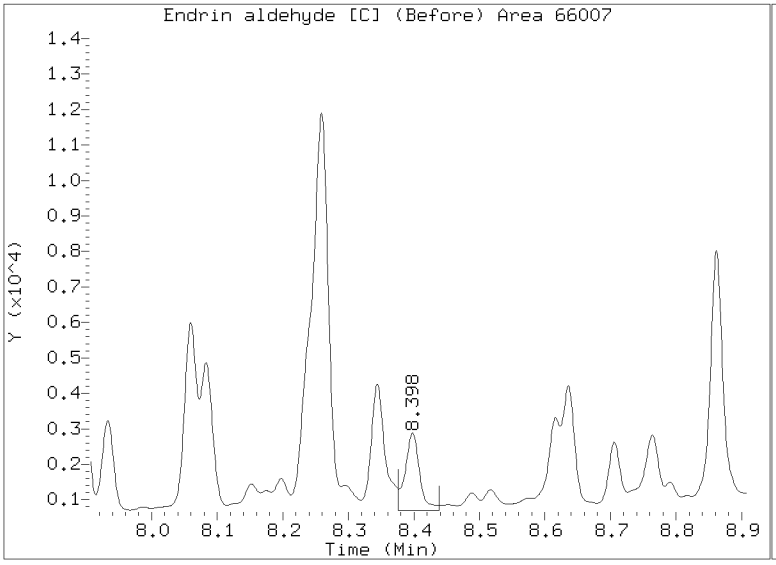
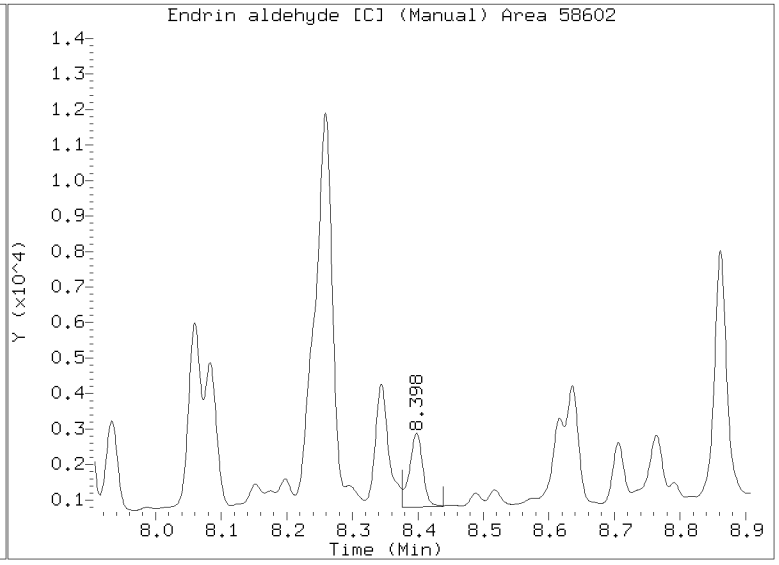
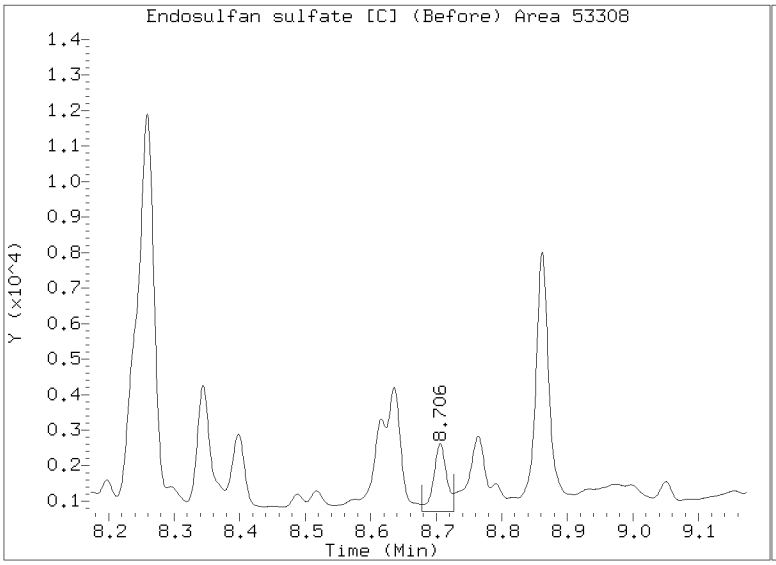
Lab ID:23A0420-08 Client ID:

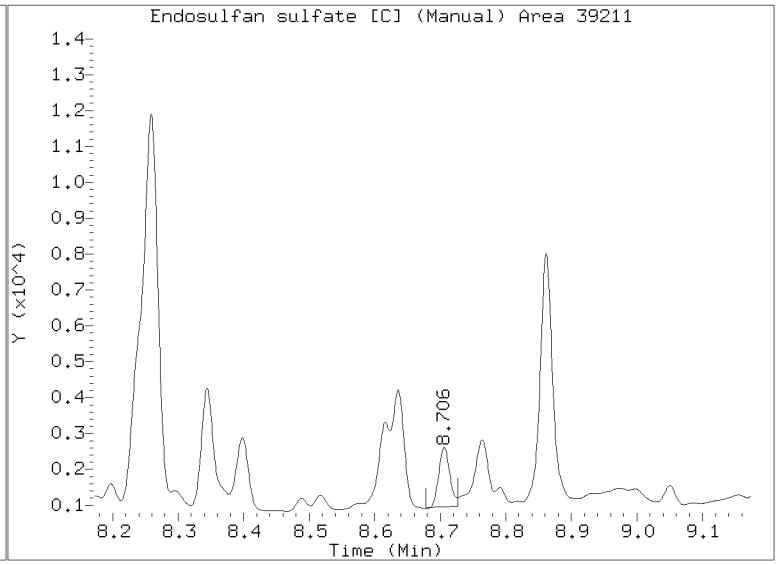












Manual Peak Adjustment Report, CLP-2

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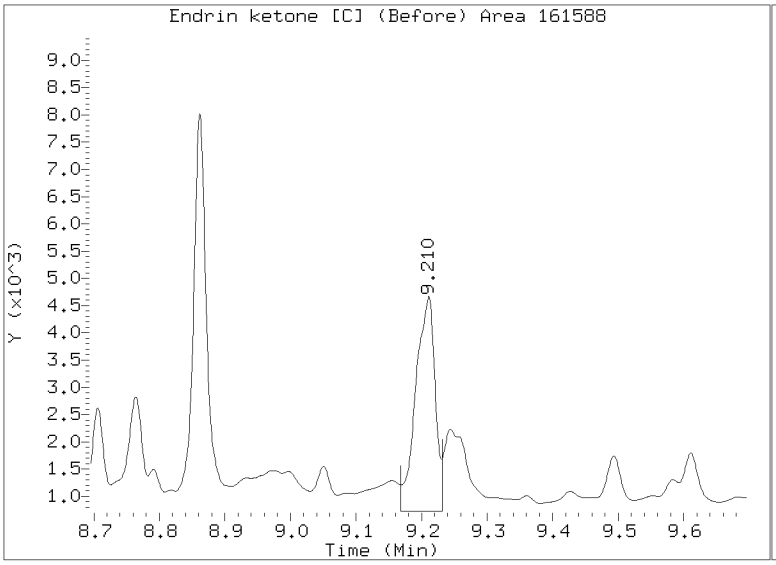
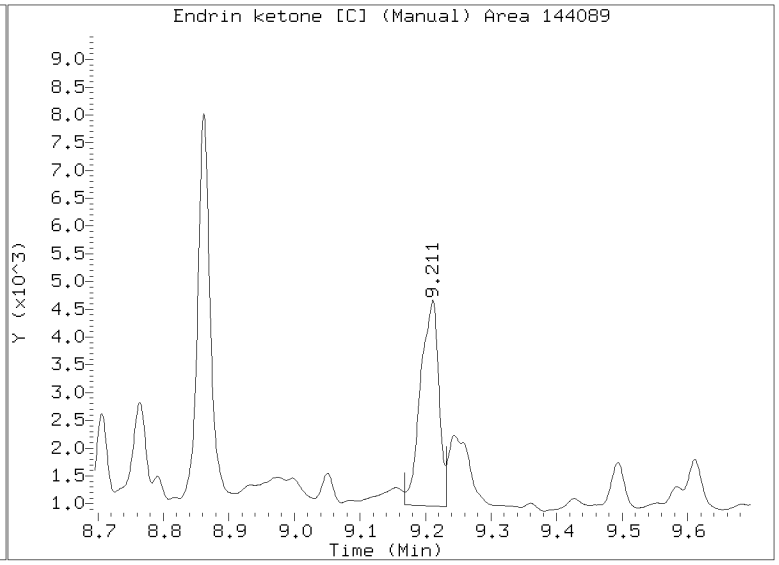
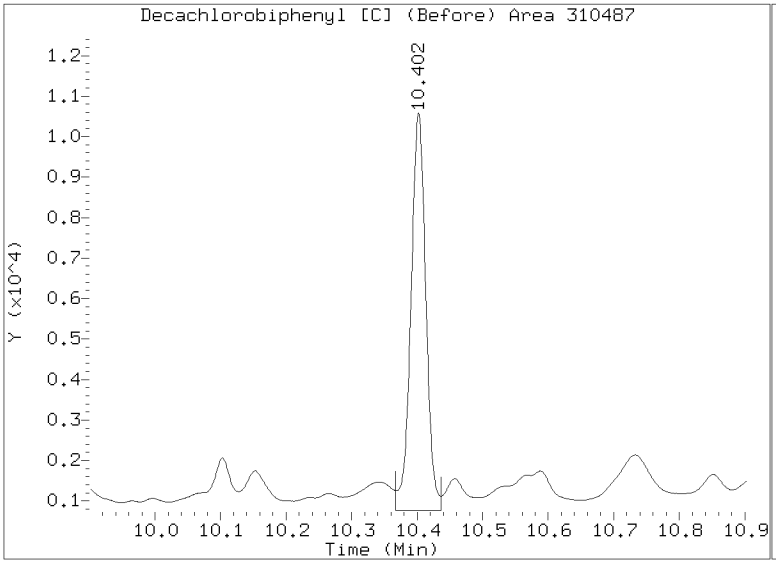
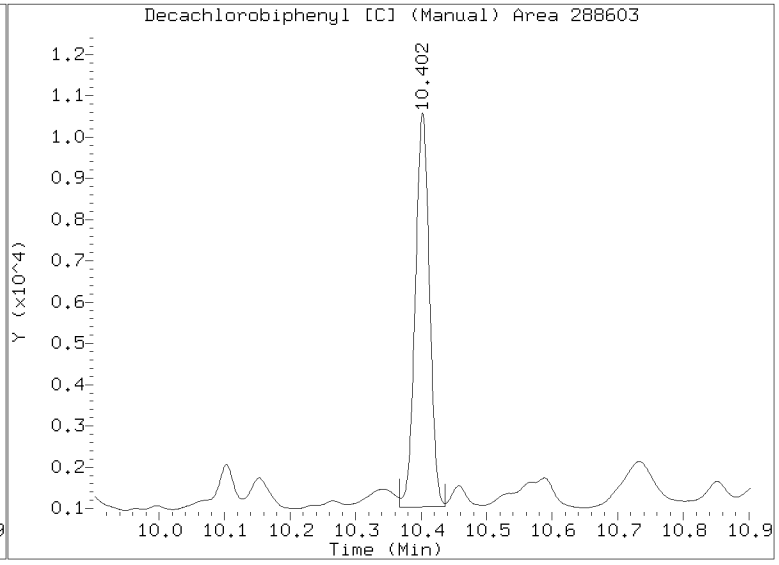
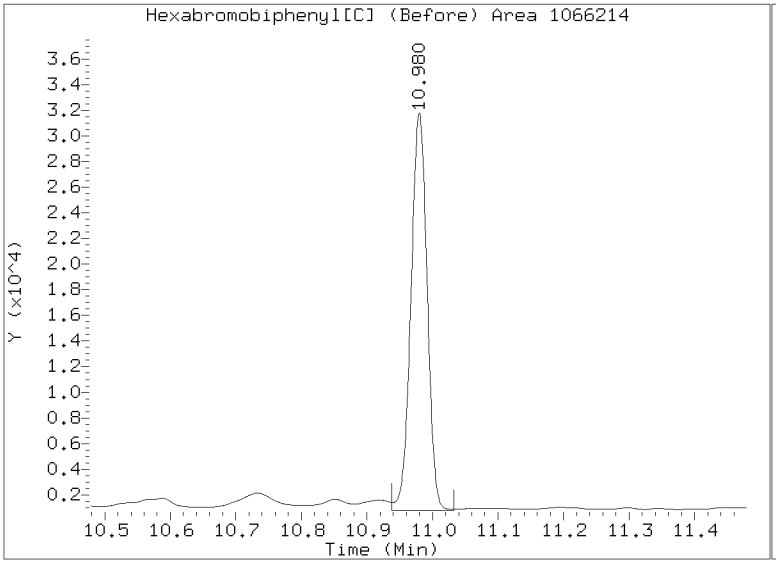
Lab ID:23A0420-08 Client ID:

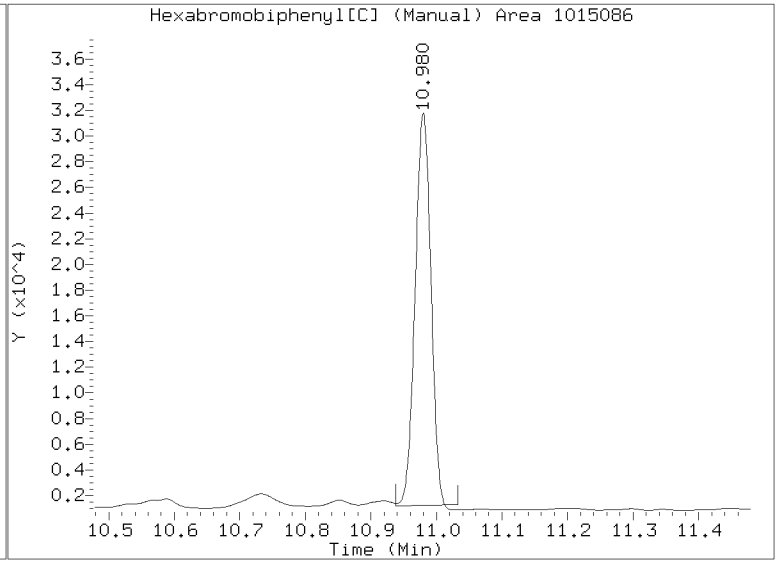












Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1082

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0420-09 A	File ID:	061F7001.D
Sampled:	01/19/23 13:40	Prepared:	02/16/23 11:56	Analyzed:	03/03/23 20:37
% Solids:	58.87	Preparation:	EPA 3546 (Microwave)	Initial/Final:	21.28 g Wet / 2.5 mL
Batch:	BLB0382	Sequence:	SLC0093	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9824*	*4.60*	*57.7*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.9824*	*4.47*	*55.9*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9824*	*3.54*	*44.4*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.9824*	*3.53*	*44.3*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/061F7001.D
Data file 2: /20230302.b/B20230302.b/061F7001.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23A0420-09
Client ID:
Injection Date: 03-MAR-2023 20:37
Report Date: 03/09/2023 11:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.385	-0.006	36653	4.845	0.015	12889	1.56	0.36	125.4*	alpha-BHC MN
4.775	-0.005	10837	5.328	0.026	60704	1.20	4.43	114.8*	beta-BHC MN
4.975	0.010	353120	5.686	0.032	15097	18.41	0.51	189.2*	delta-BHC MN
4.720	0.022	103790	5.220	-0.004	17839	5.10	0.58	158.9*	gamma-BHC (Lindane) MN
5.174	-0.018	80734	5.758	0.008	168468	4.46	6.09	30.9	Heptachlor MN
5.535	0.016	360745	6.140	-0.011	27460	17.78	0.87	181.4*	Aldrin MN
6.184	-0.015	175892	6.784	-0.023	915267	10.00	35.02	111.2*	Heptachlor epoxide b MN
----			7.235	-0.015	55119	0.00	2.39	---	Endosulfan I
6.880	-0.021	372626	7.523	-0.021	221739	21.48	8.71	84.6*	Dieldrin MN
6.555	-0.005	559639	7.330	-0.002	441013	34.74	18.89	59.1*	4,4'-DDE MN
7.172	0.021	918267	7.893	0.027	588805	77.09	39.32	64.9*	Endrin MN
7.412	0.024	47719	8.060	-0.018	787603	4.45	51.31	168.1*	Endosulfan II MN
----			7.934	-0.002	368536	0.00	25.30	---	4,4'-DDD
----			----			0.00	0.00	---	Endosulfan sulfate
----			8.262	0.008	1051673	0.00	74.80	---	4,4'-DDT
8.015	0.029	76018	----			15.82	0.00	---	Methoxychlor
----			9.211	0.015	333336	0.00	22.89	---	Endrin ketone
7.838	0.022	138375	8.399	-0.009	118474	16.18	10.94	38.6	Endrin aldehyde MN
----			7.050	0.032	562603	0.00	21.58	---	trans-Chlordane
6.505	0.018	199753	7.175	-0.003	28555	11.14	1.12	163.5*	cis-Chlordane MN
2.326	-0.020	38401	2.520	0.028	3835	1.56	0.11	173.2*	Hexachlorobutadiene
----			----			0.00	0.00	---	Hexachlorobenzene
3.868	-0.003	294438	4.192	-0.003	447899	17.76	17.71	0.3	Tetrachloro-m-xylene MN
9.438	0.001	212332	10.401	-0.001	260485	23.07	22.38	3.0	Decachlorobiphenyl MN

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

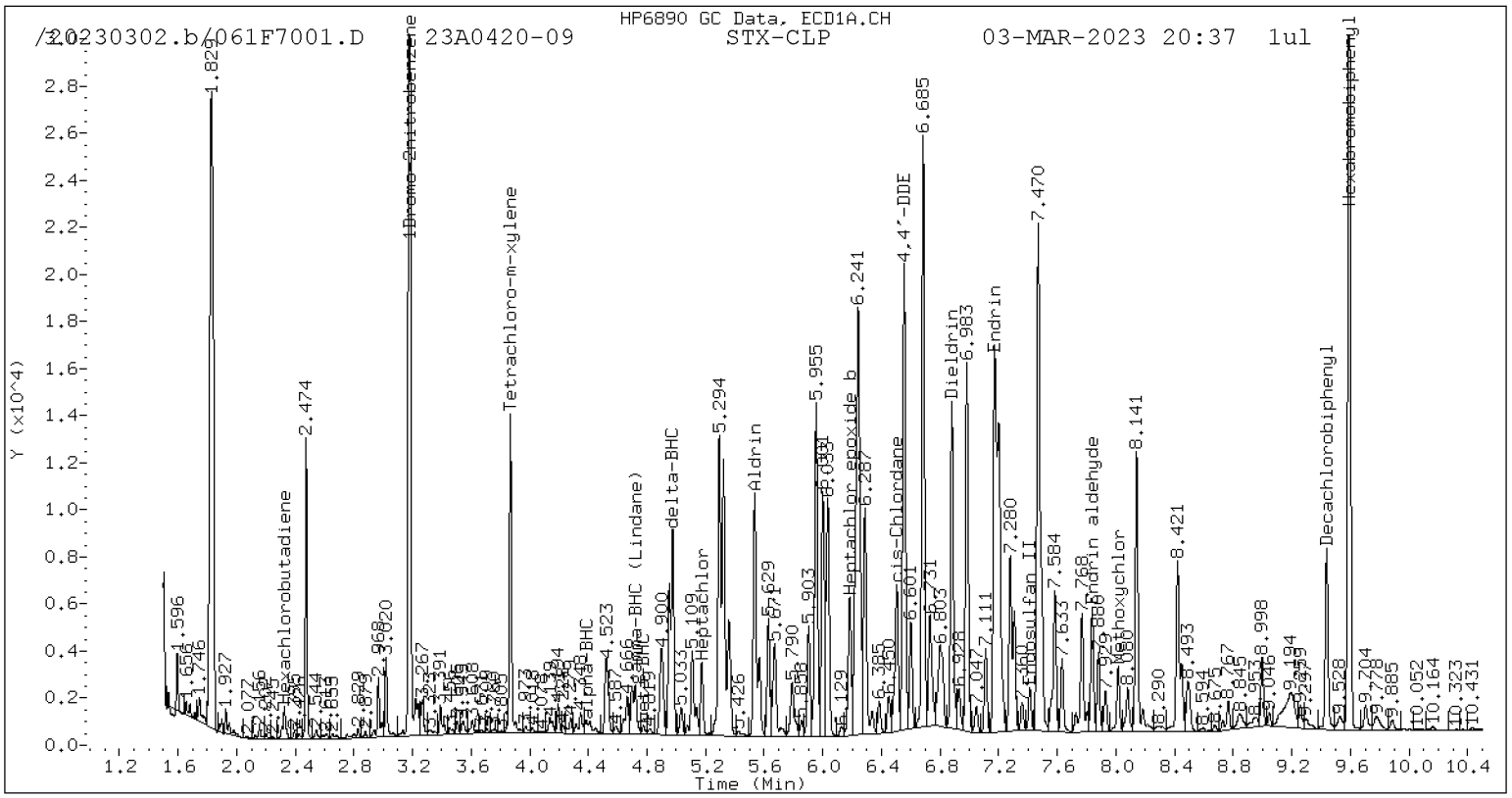
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	1219298	81.3
Hexabromobiphenyl	609723	908537	49.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1797000	78.5
Hexabromobiphenyl	769764	1053287	36.8

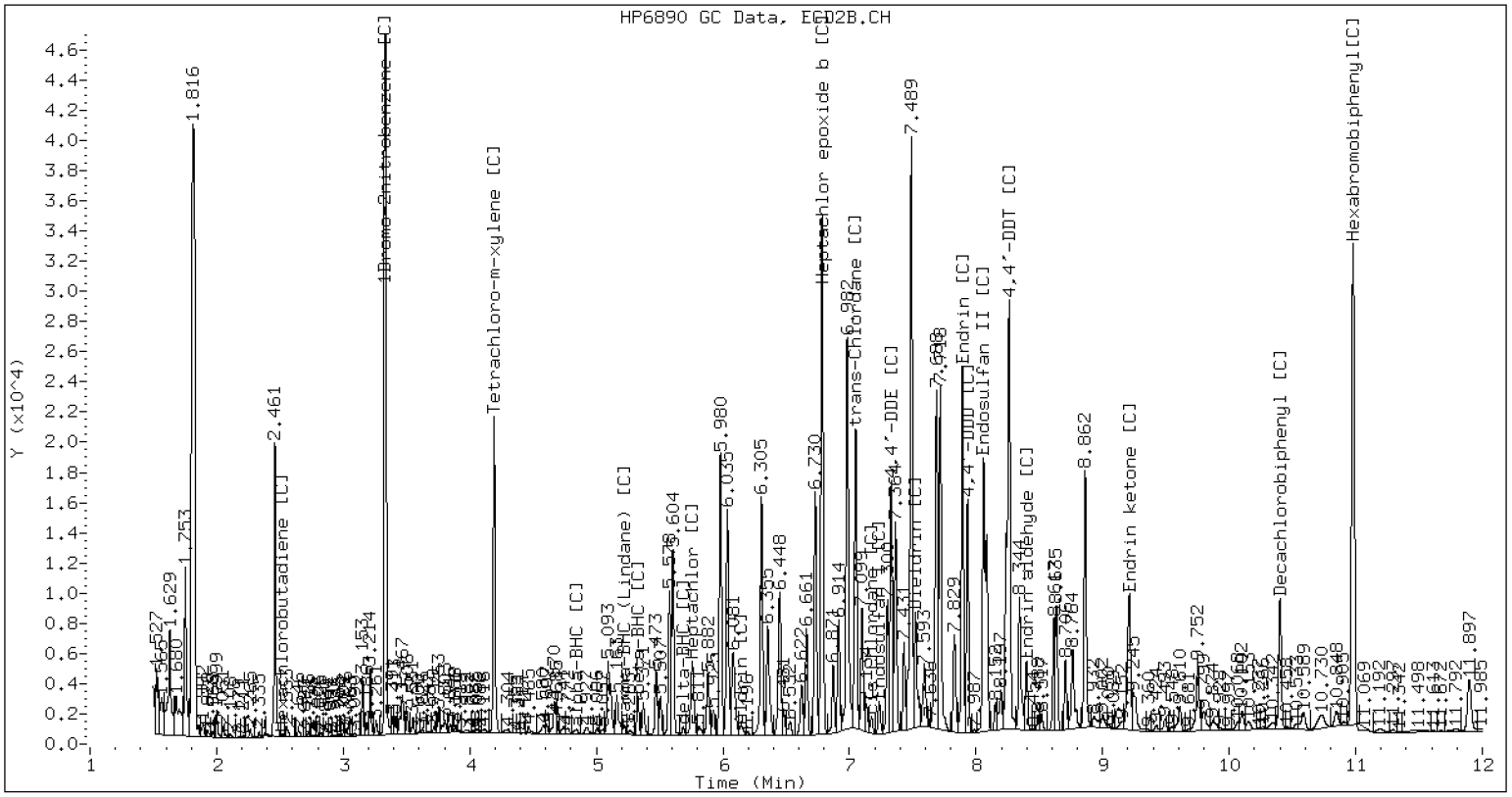
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

/20230302.b/B20230302.b/061F7001.D 23A0420-09 CLP2



CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, STX-CLP

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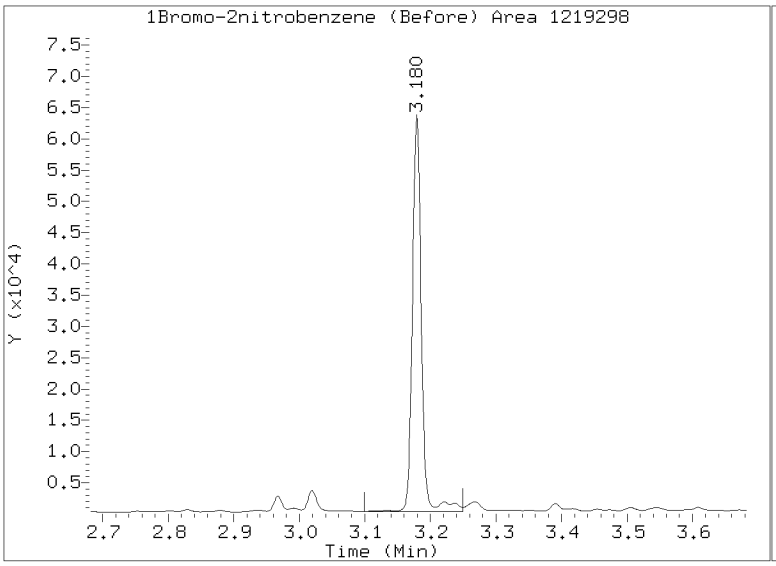
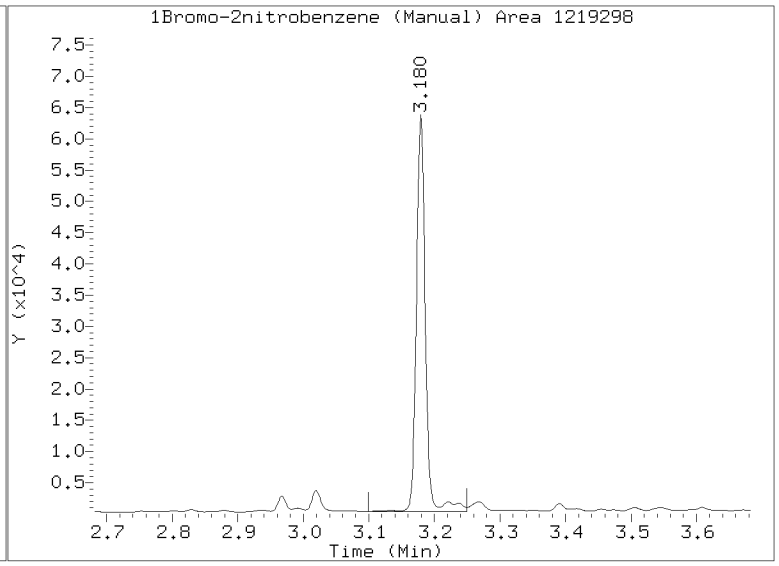
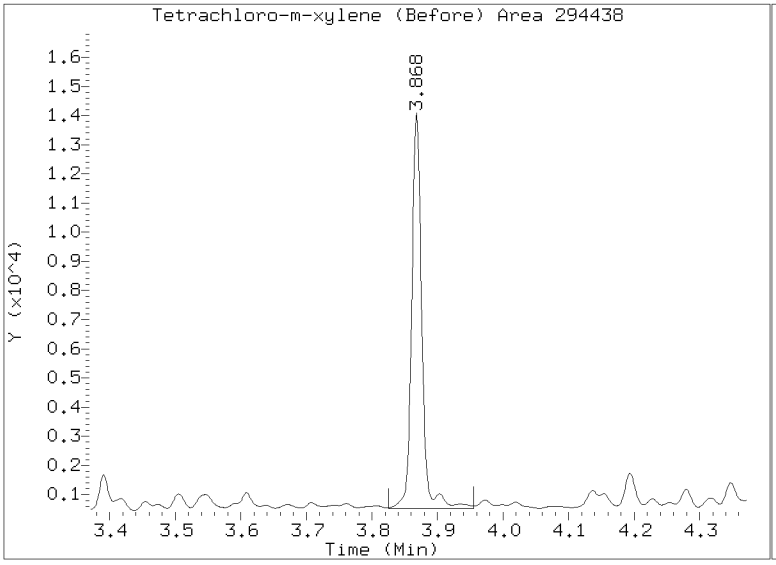
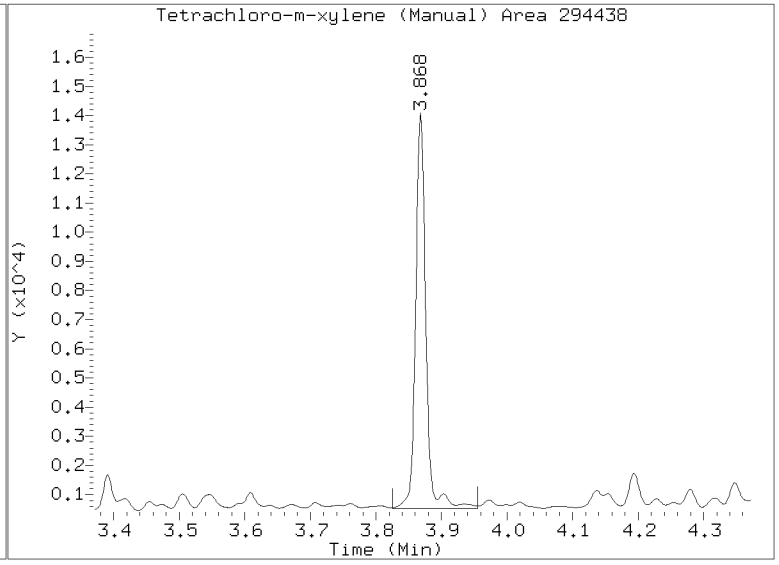
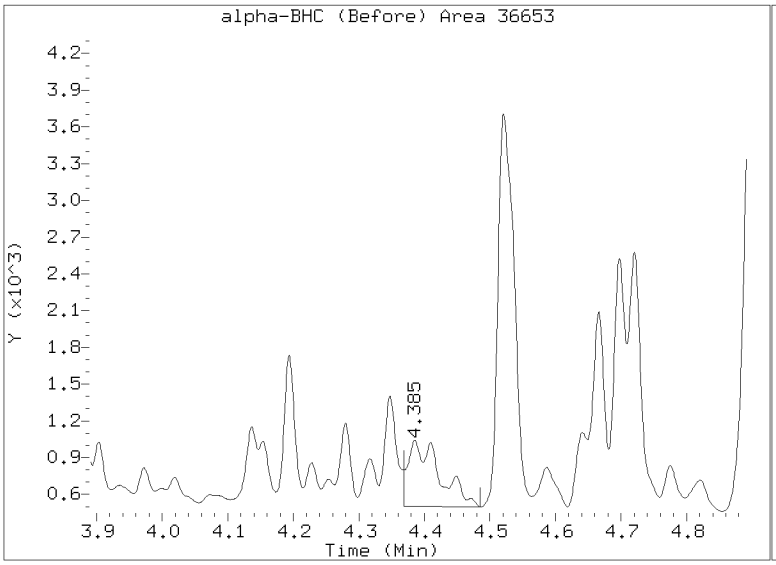
Injection Date: 03-MAR-2023 20:37
Lab ID:23A0420-09 Client ID:
Report Date: 03/09/2023 11:19

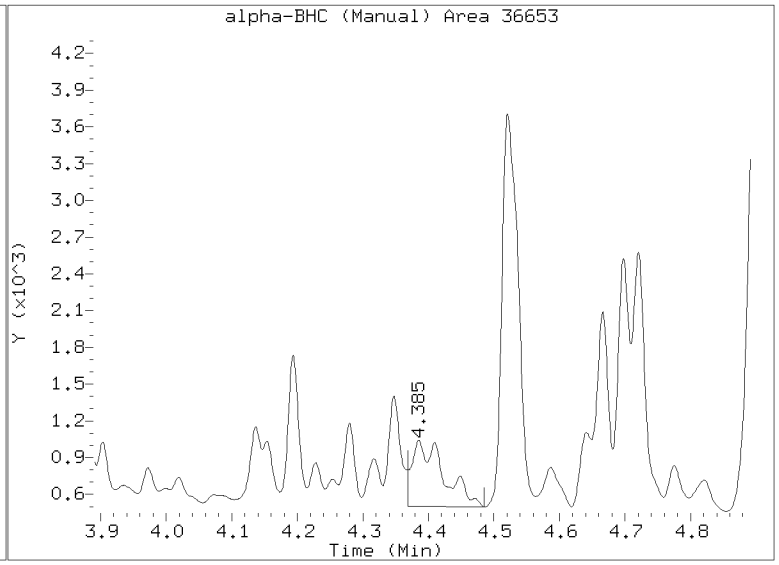












Manual Peak Adjustment Report, STX-CLP

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Injection Date: 03-MAR-2023 20:37
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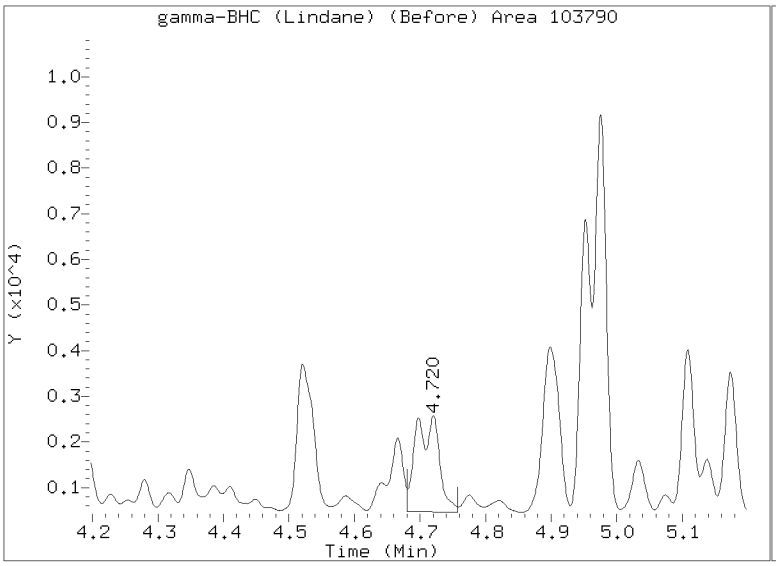
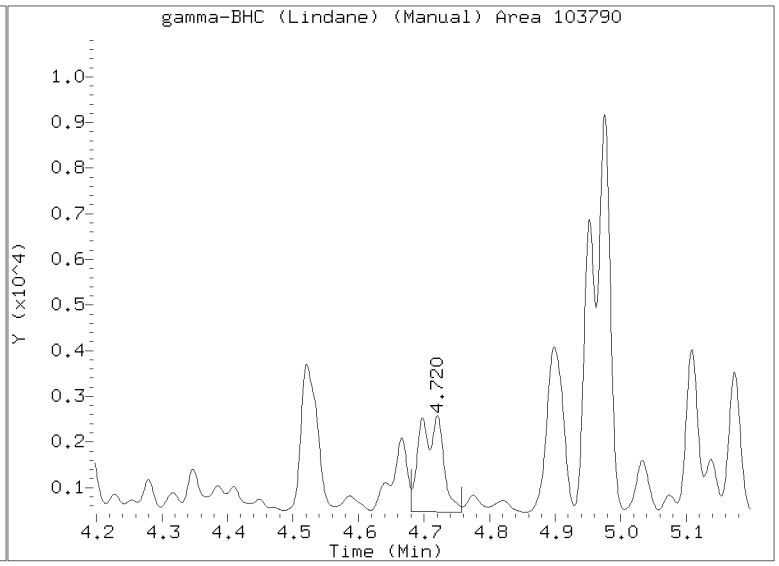
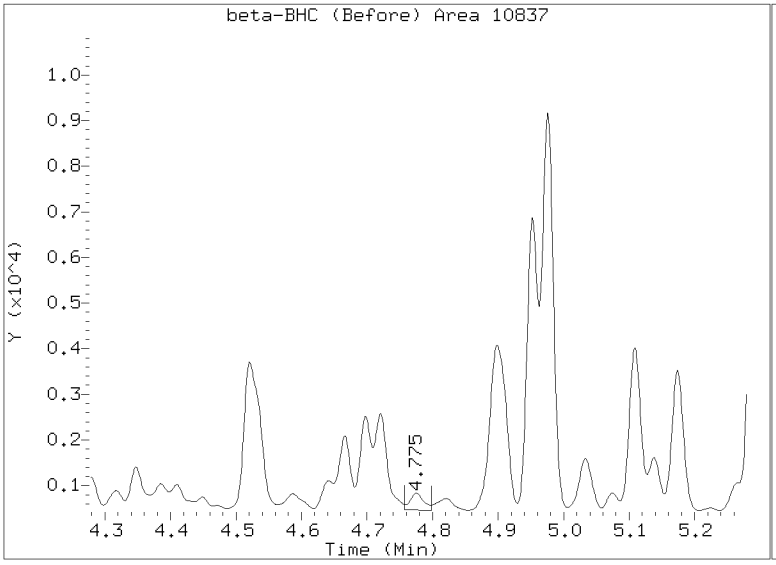
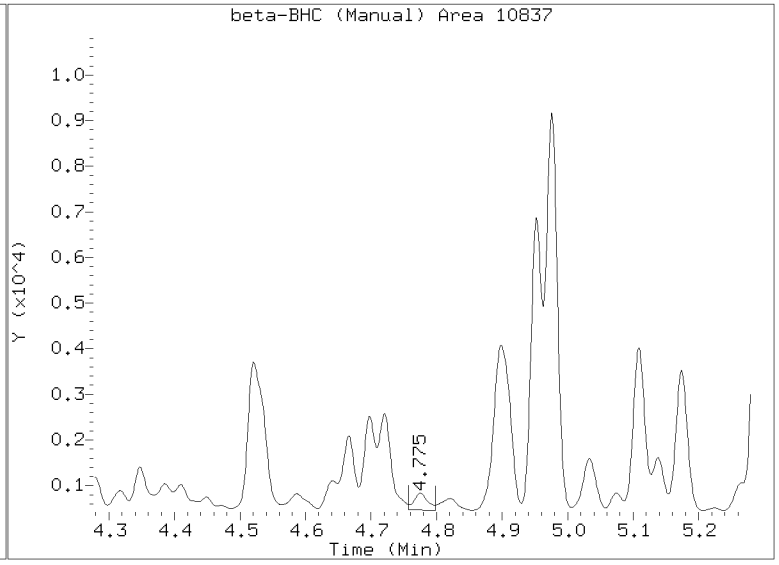
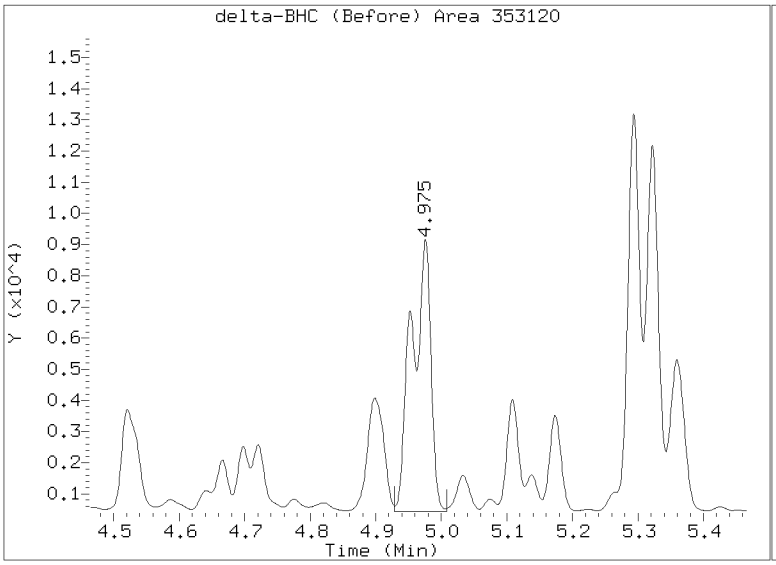
Report Date: 03/09/2023 11:19

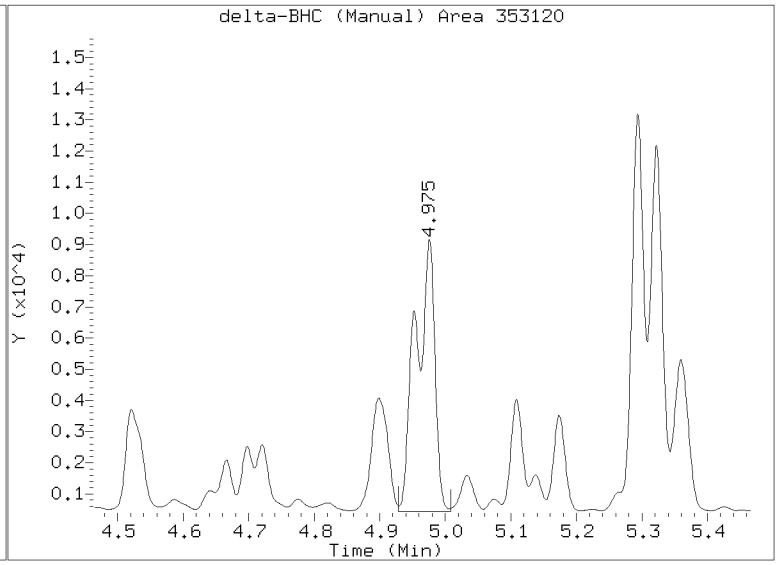












Manual Peak Adjustment Report, STX-CLP

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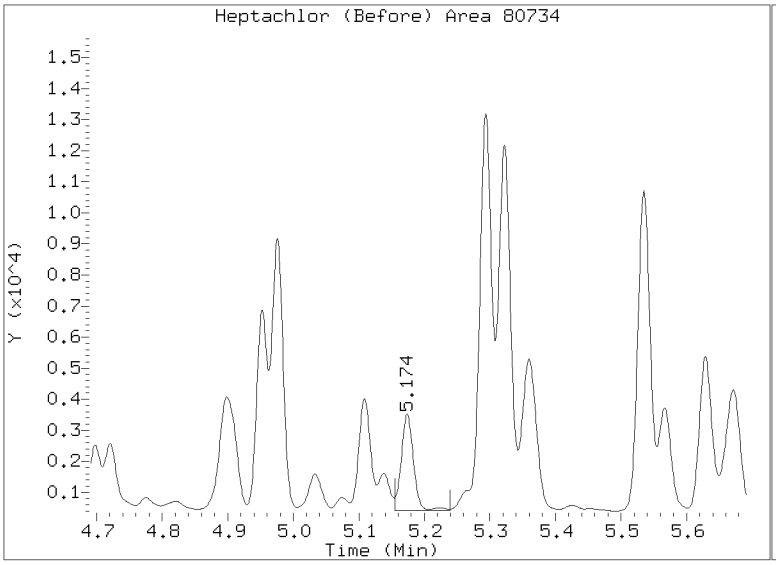

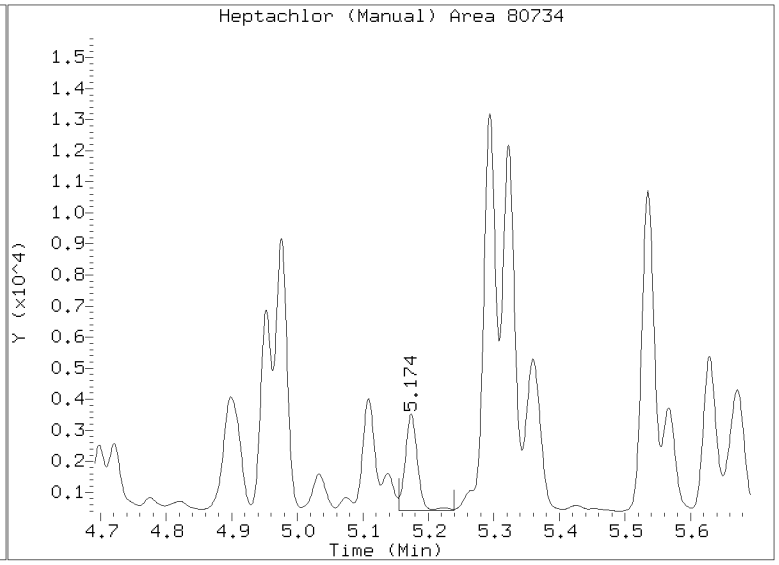

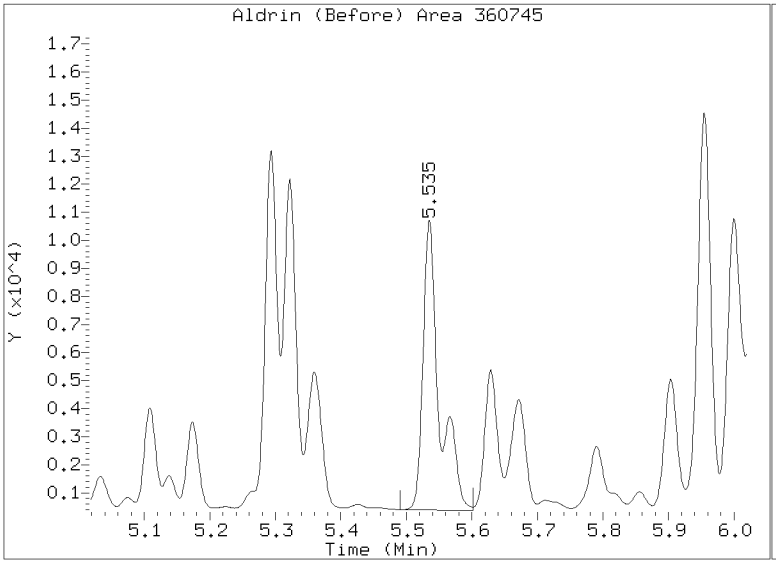

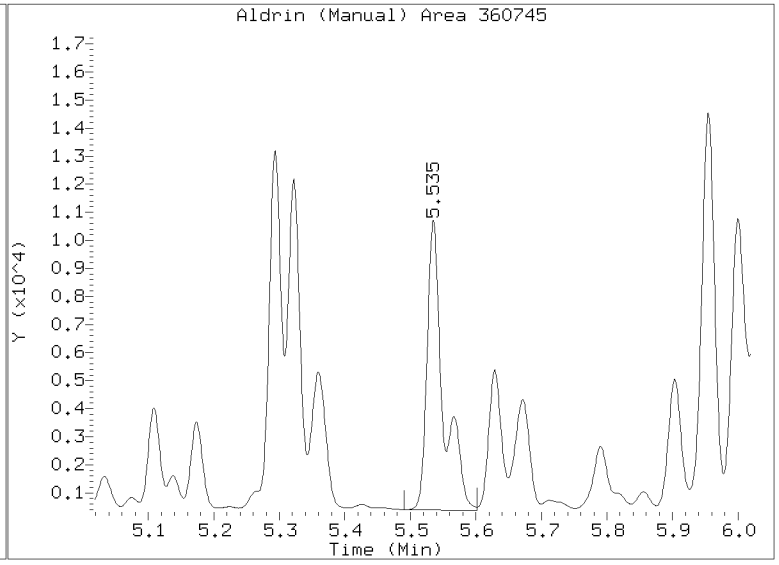

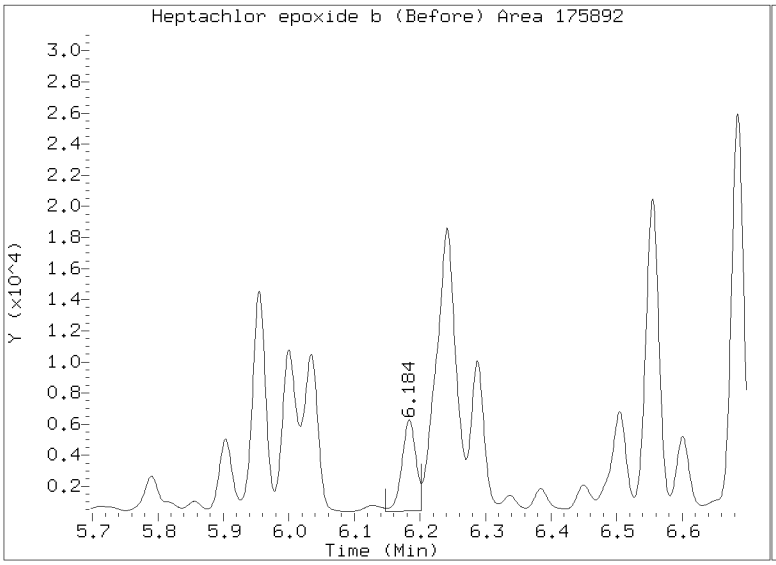

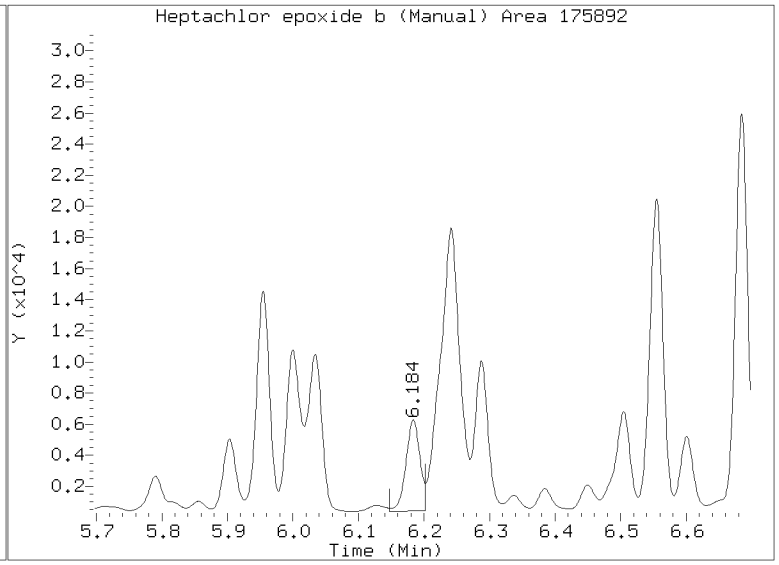

Manual Peak Adjustment Report, STX-CLP

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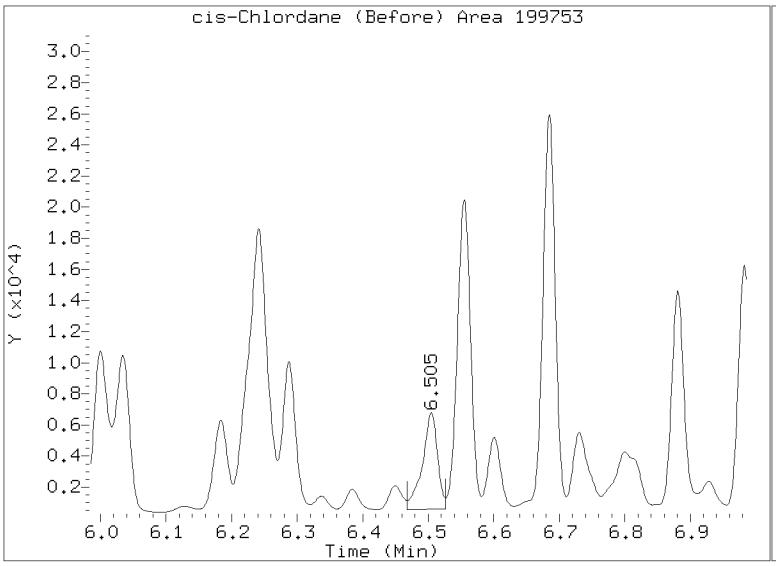

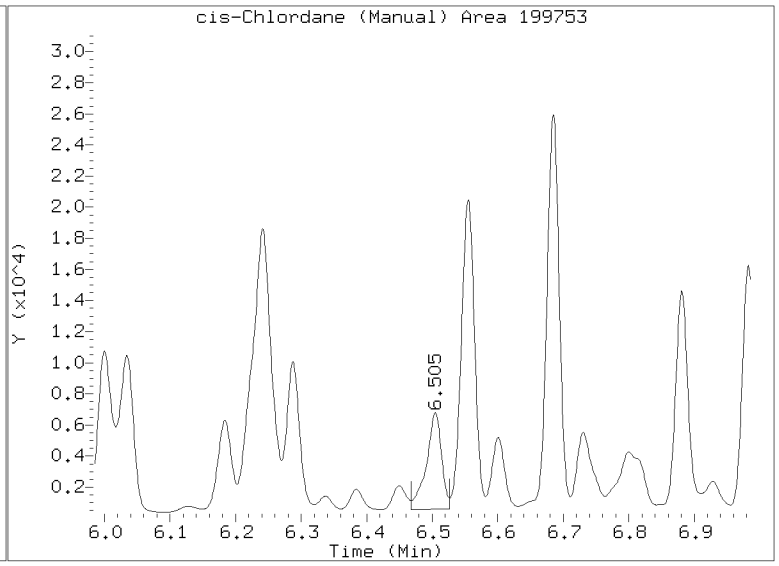

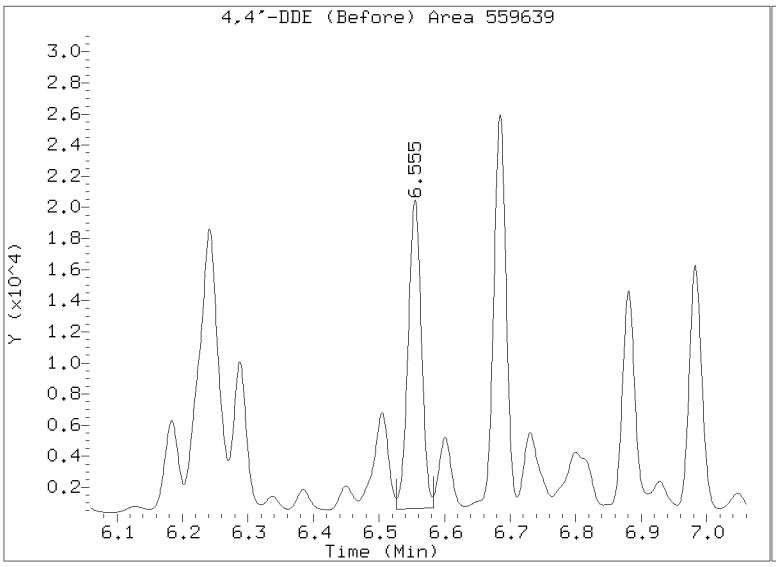

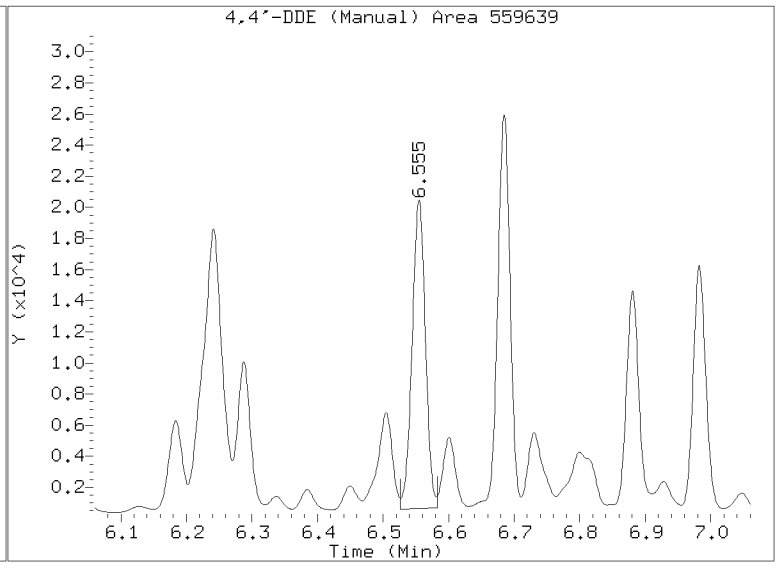

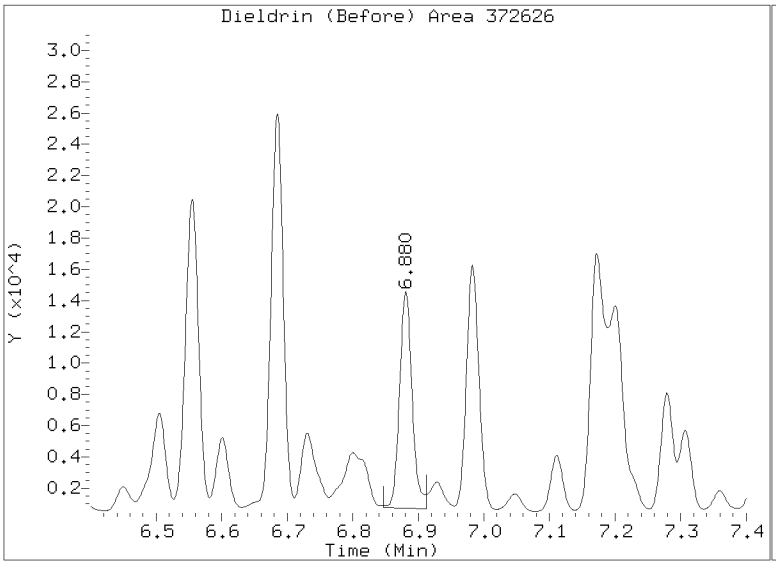

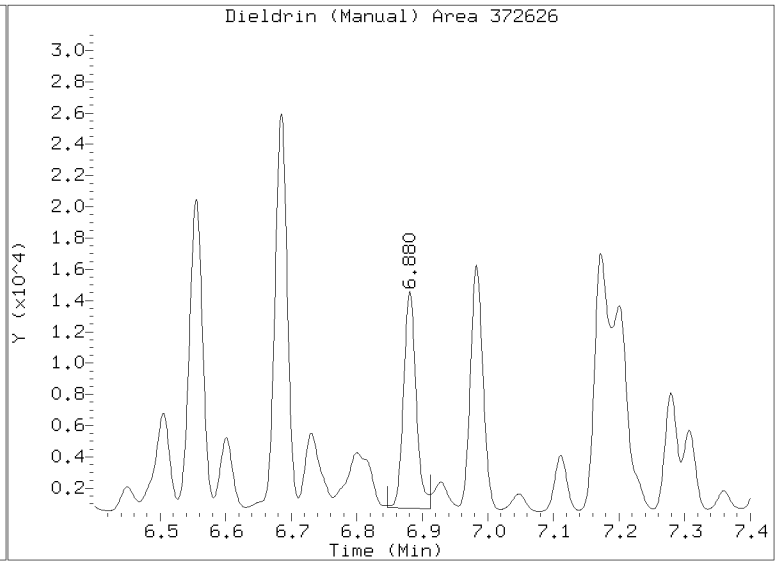

Manual Peak Adjustment Report, STX-CLP

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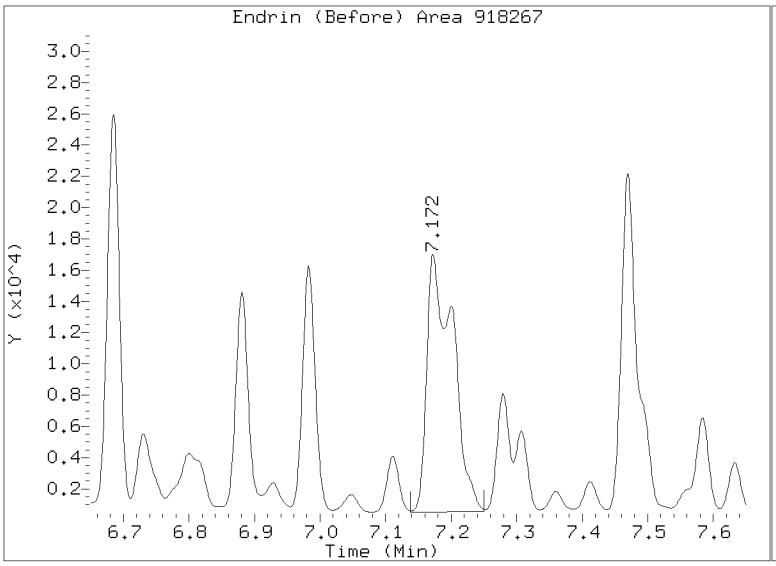

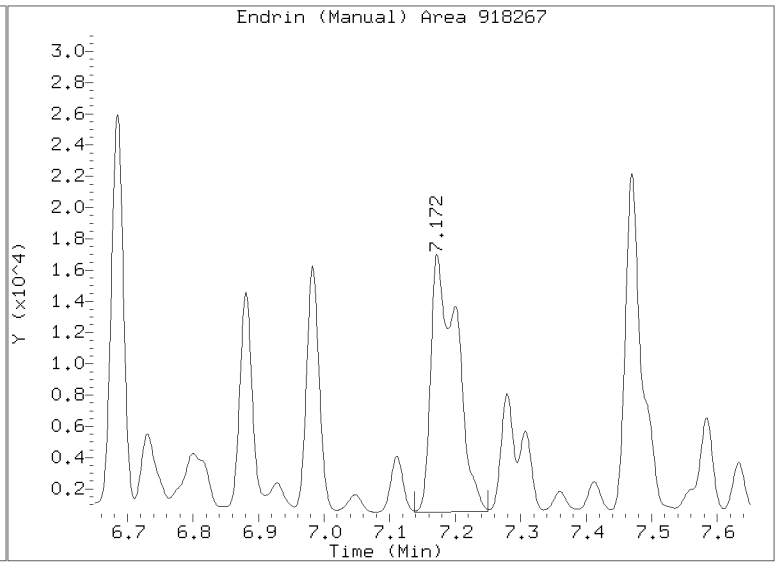

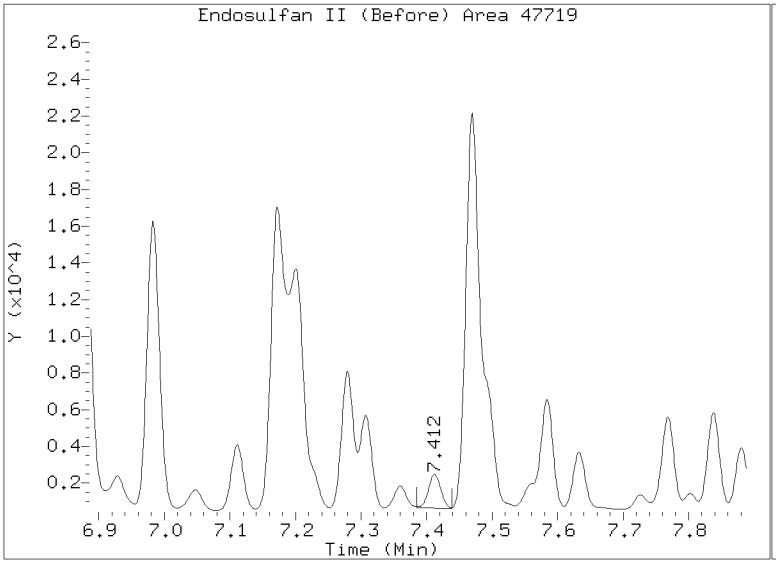

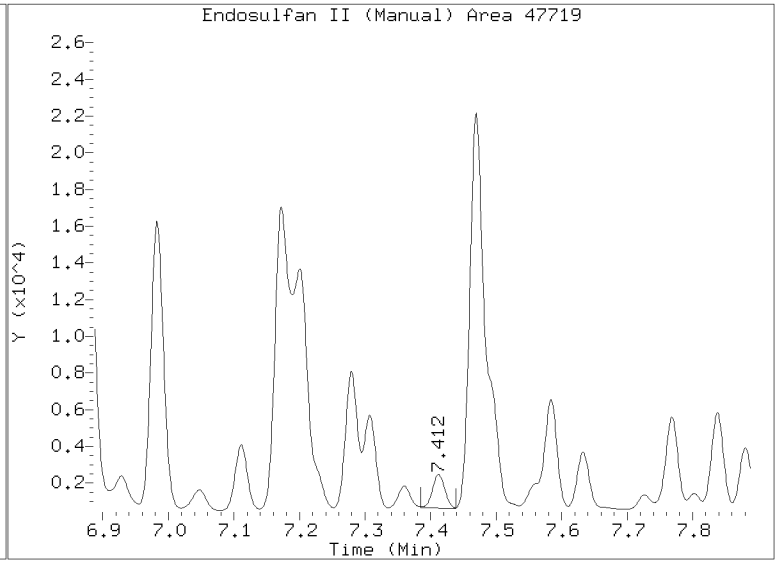

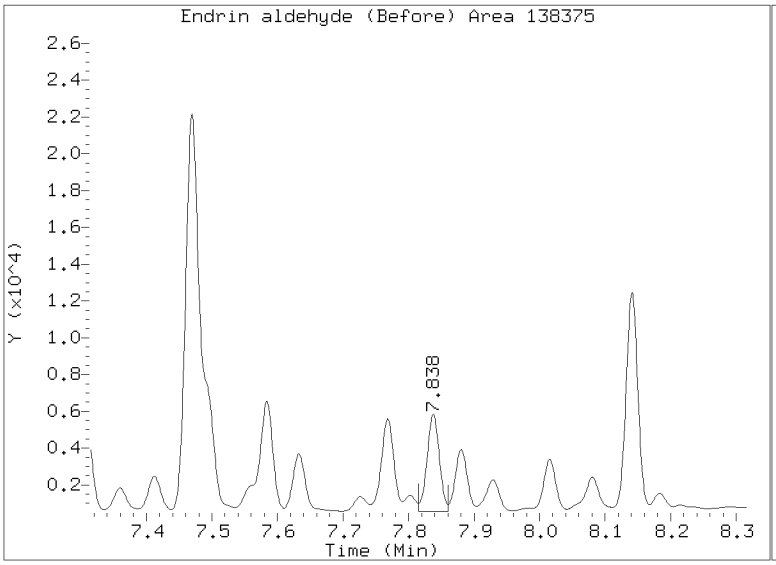

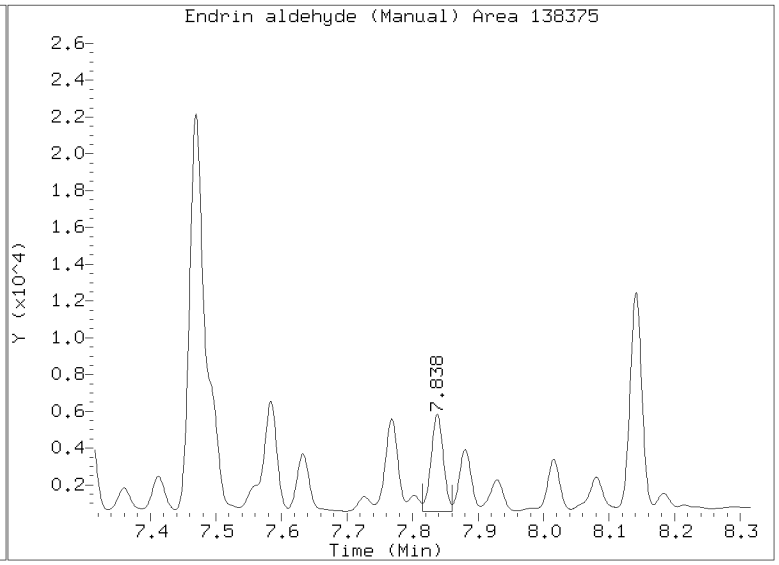

Manual Peak Adjustment Report, STX-CLP

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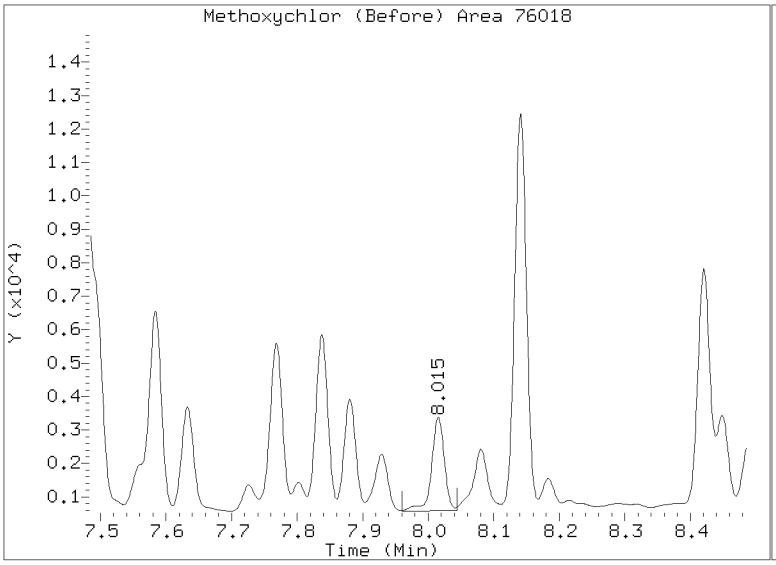

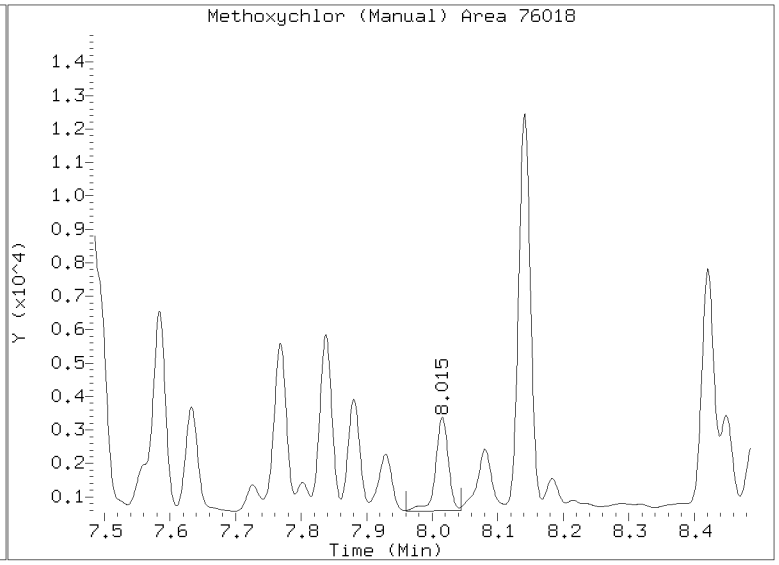

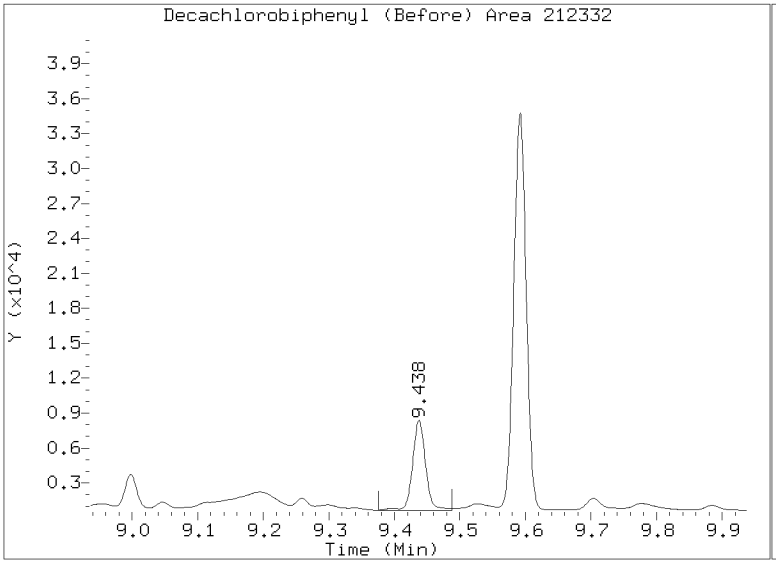

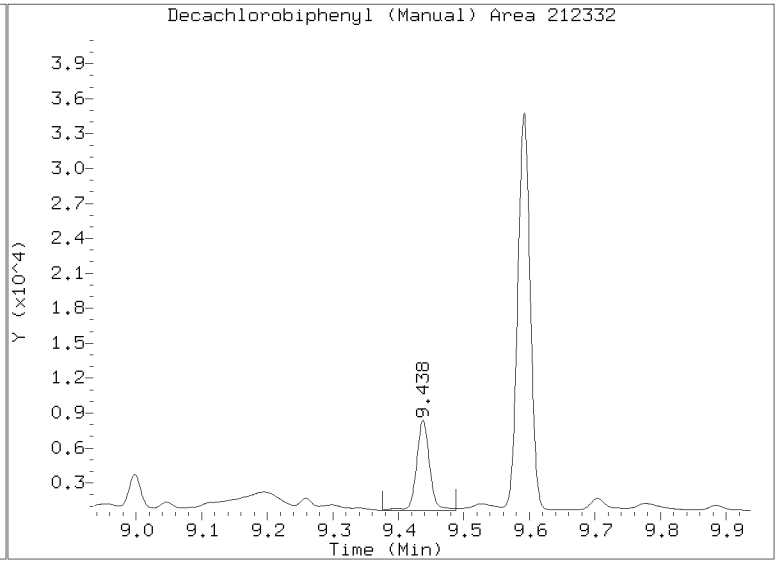

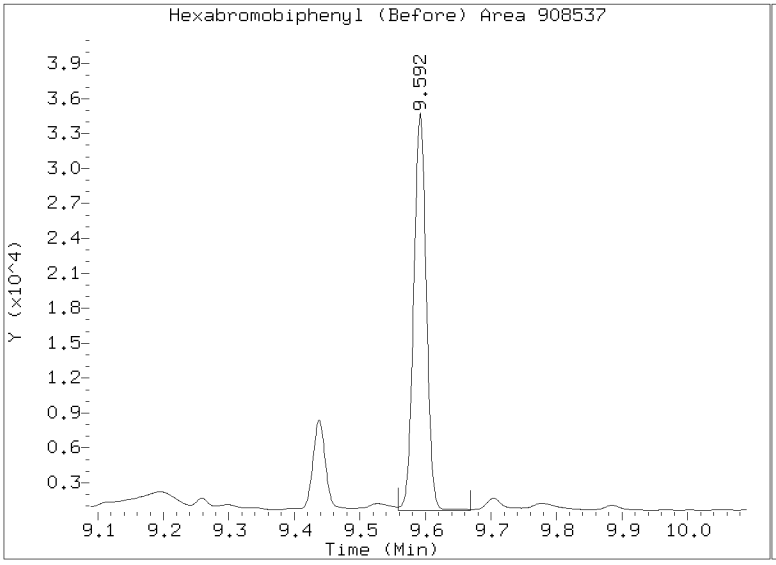

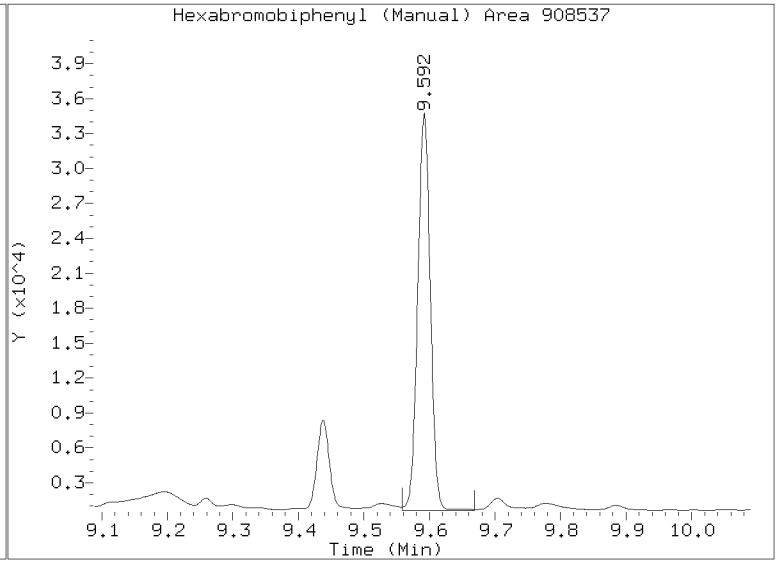

Manual Peak Adjustment Report, CLP-2

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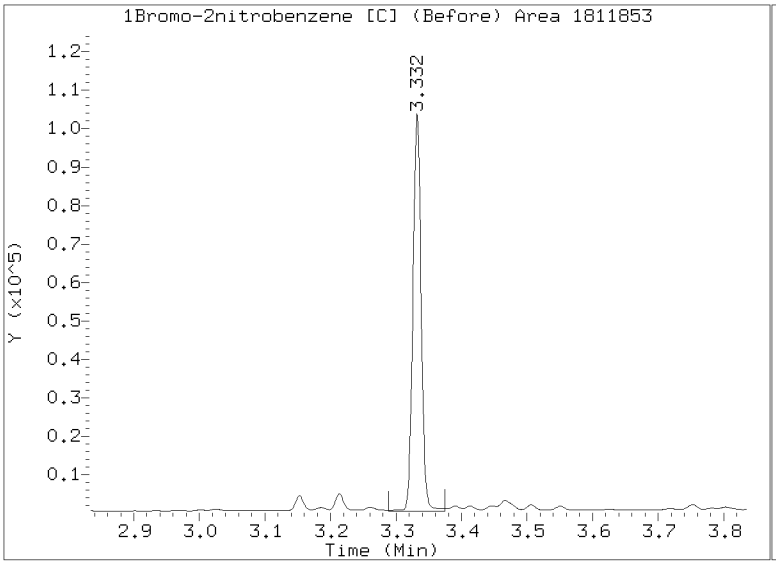

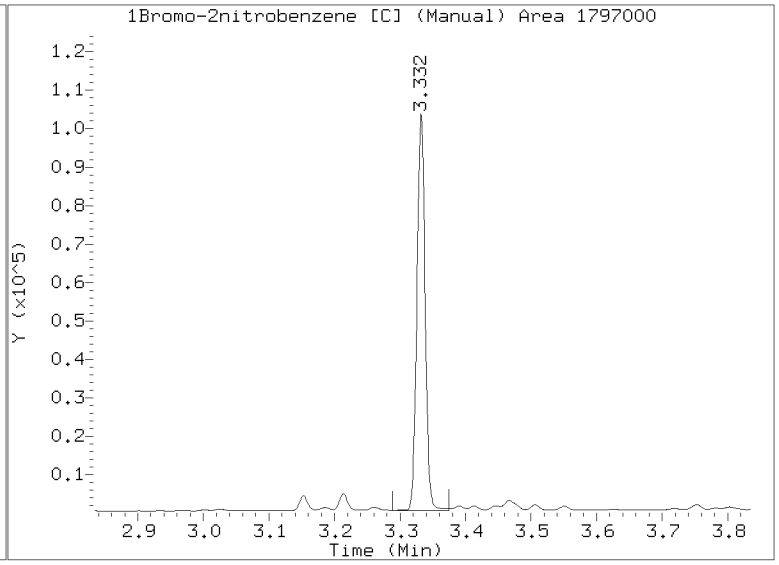

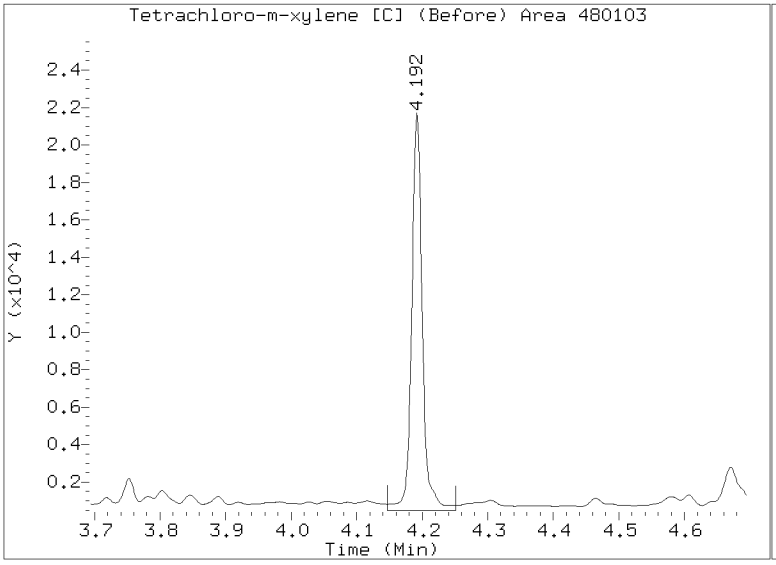

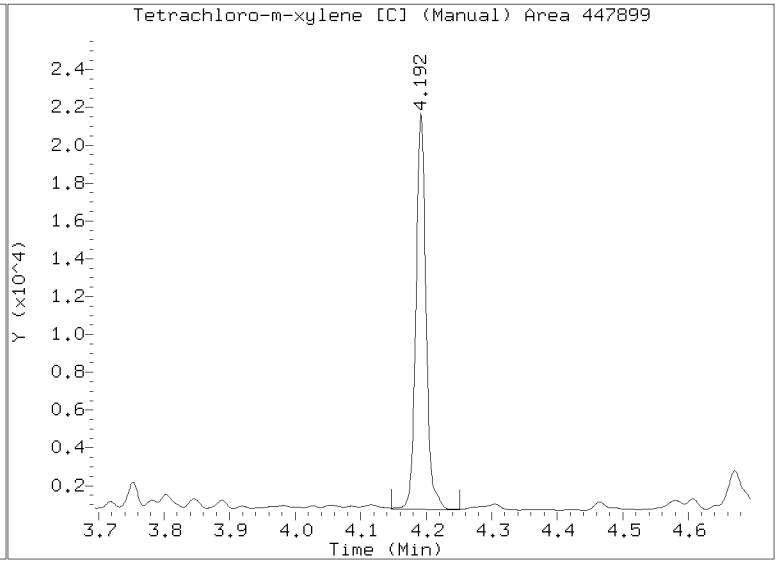

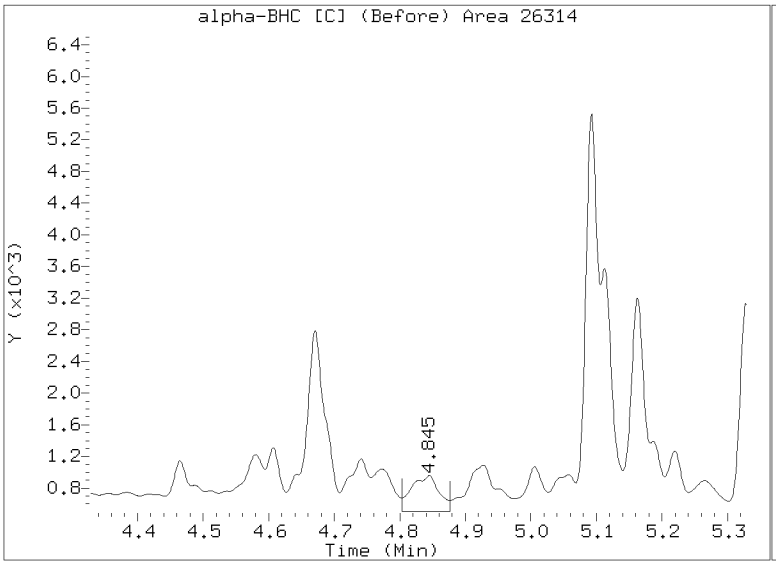

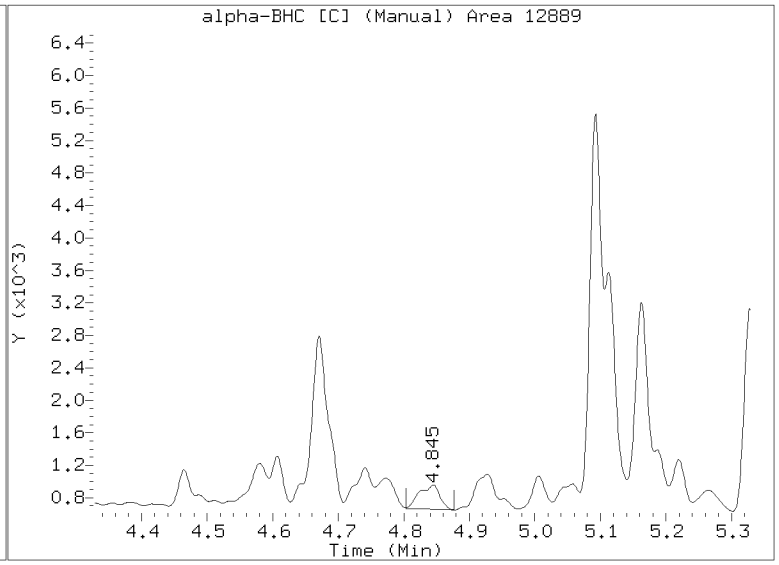

Manual Peak Adjustment Report, CLP-2

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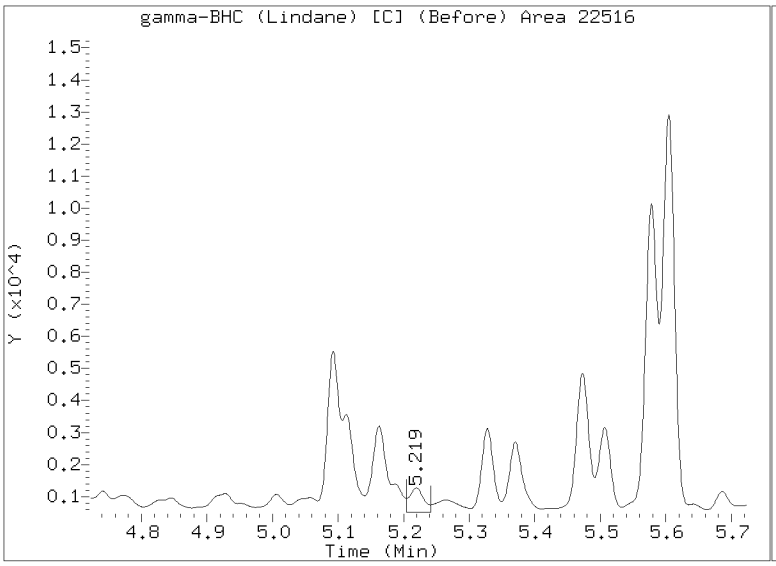

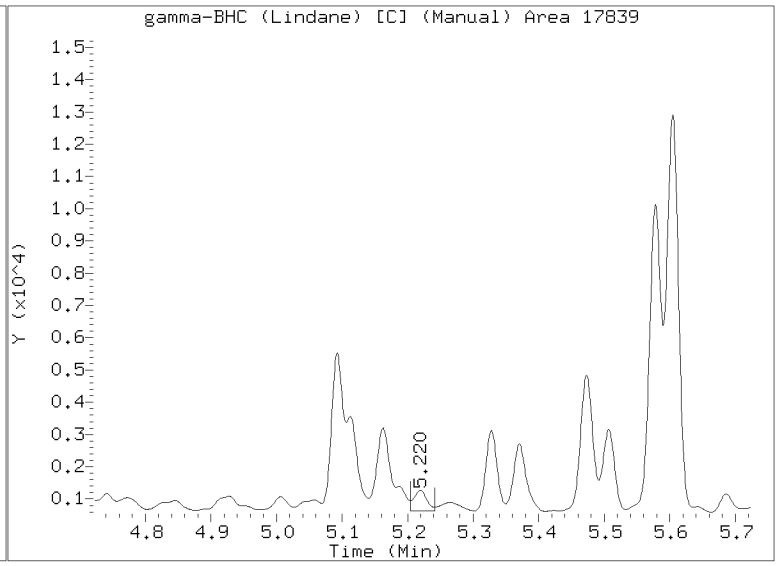

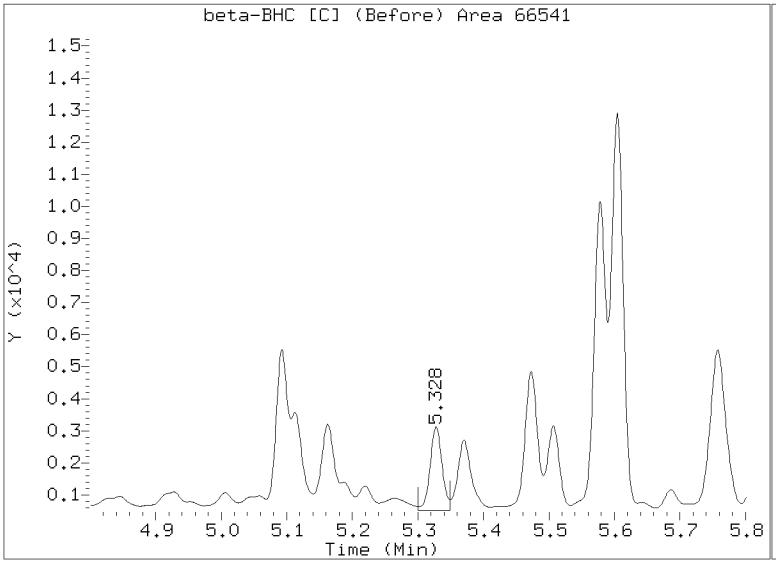

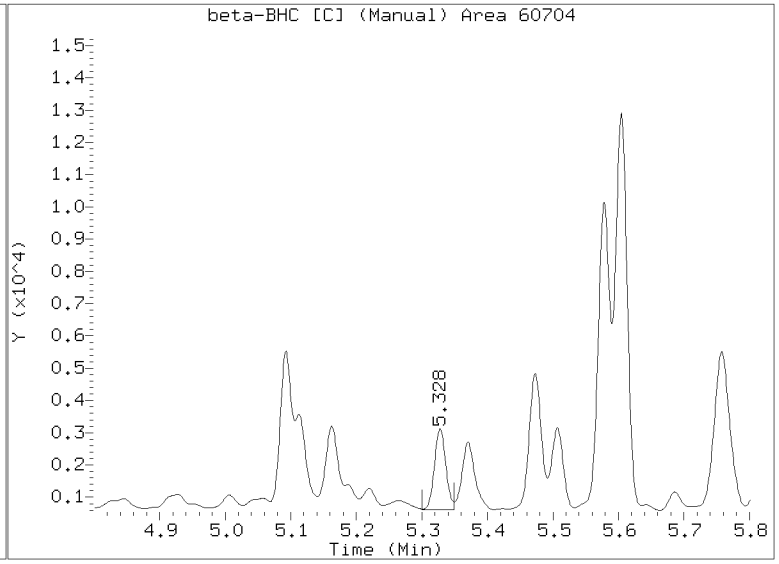

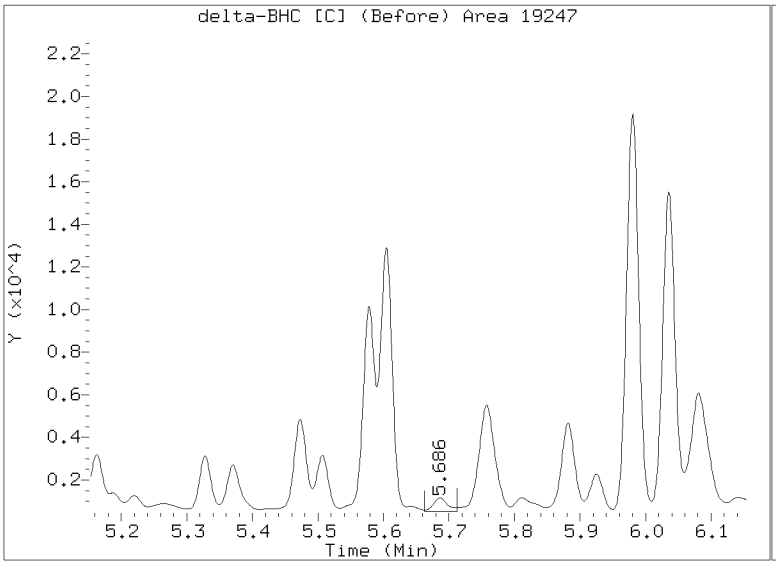

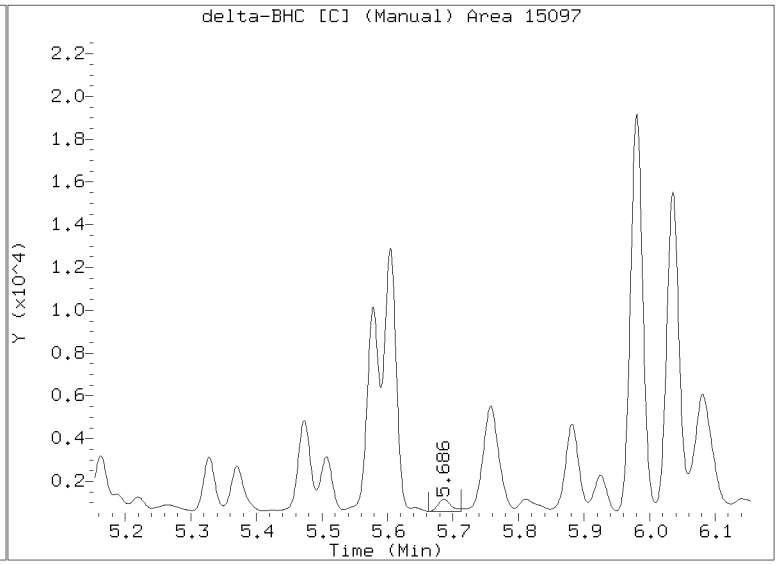

Manual Peak Adjustment Report, CLP-2

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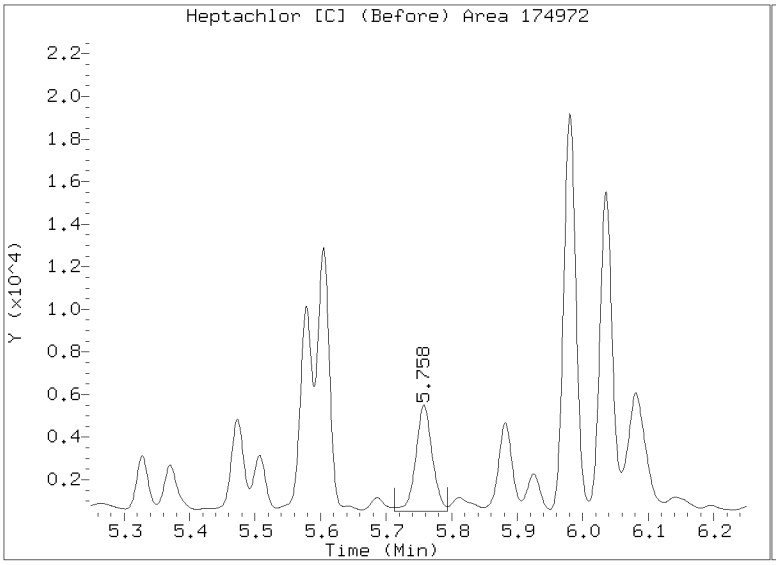

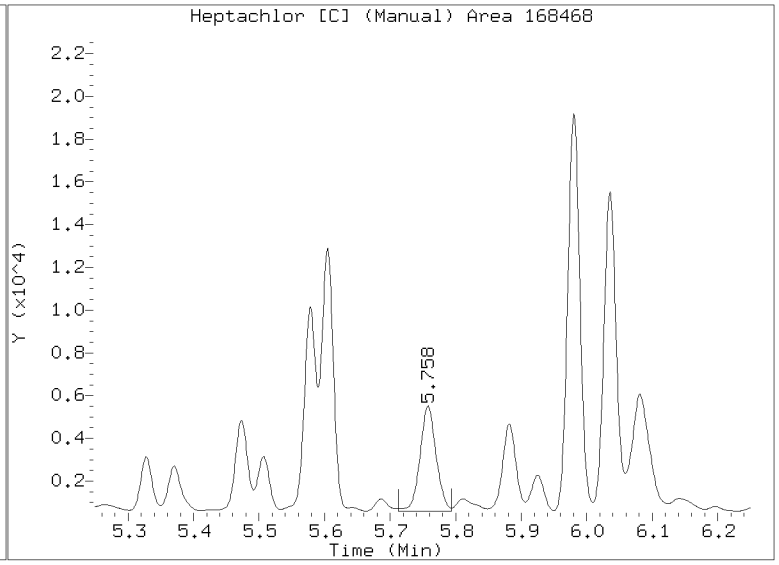

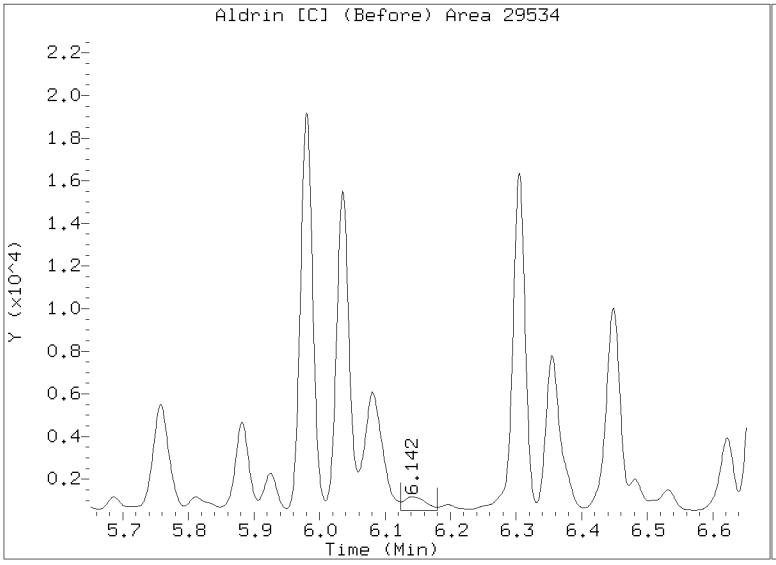

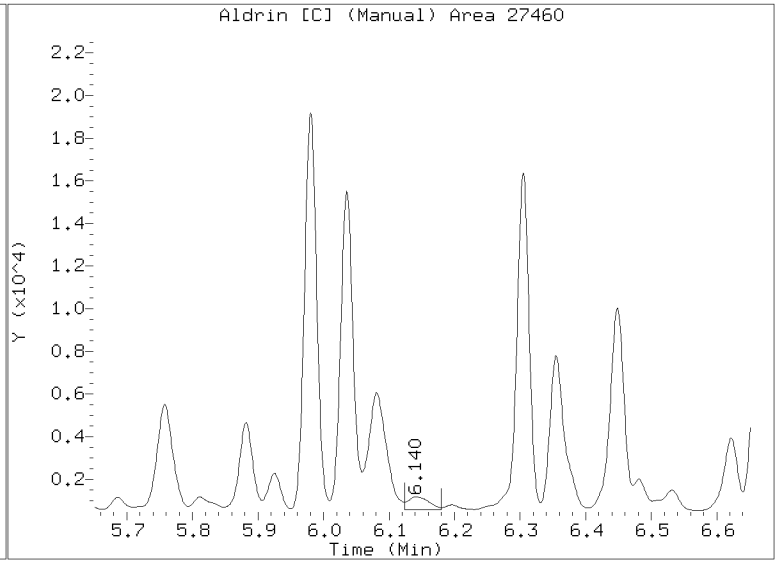

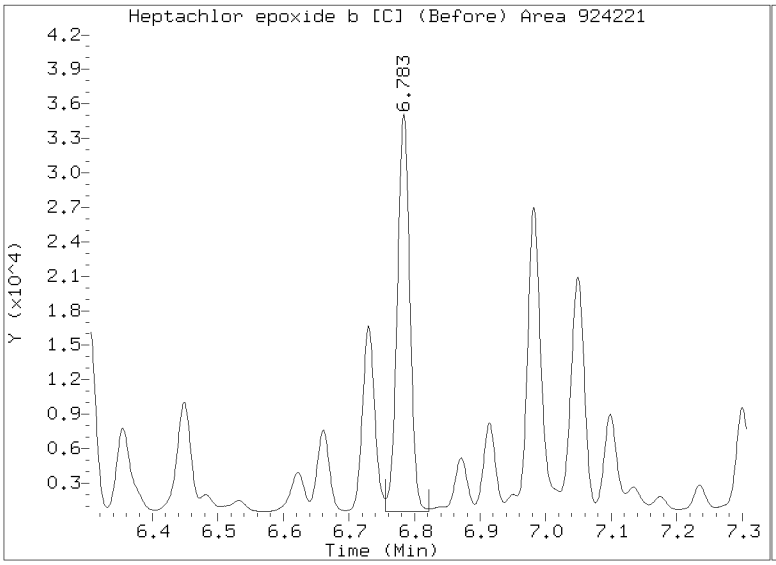

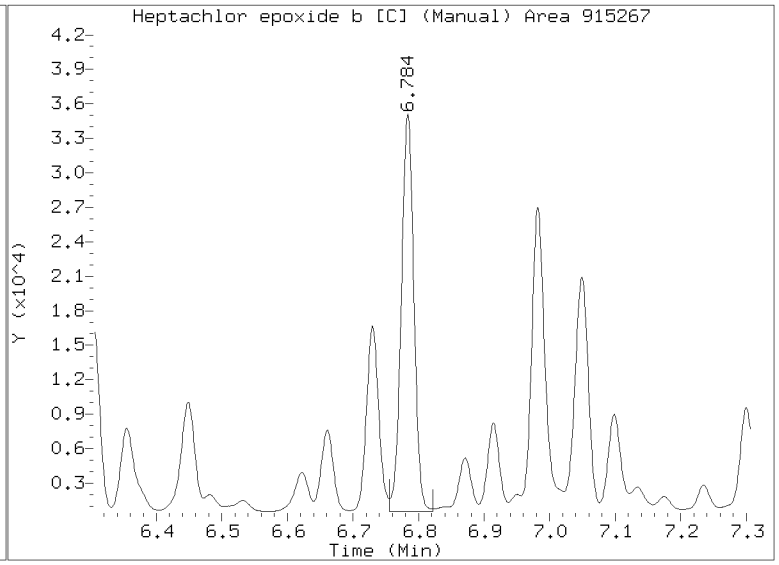

Manual Peak Adjustment Report, CLP-2

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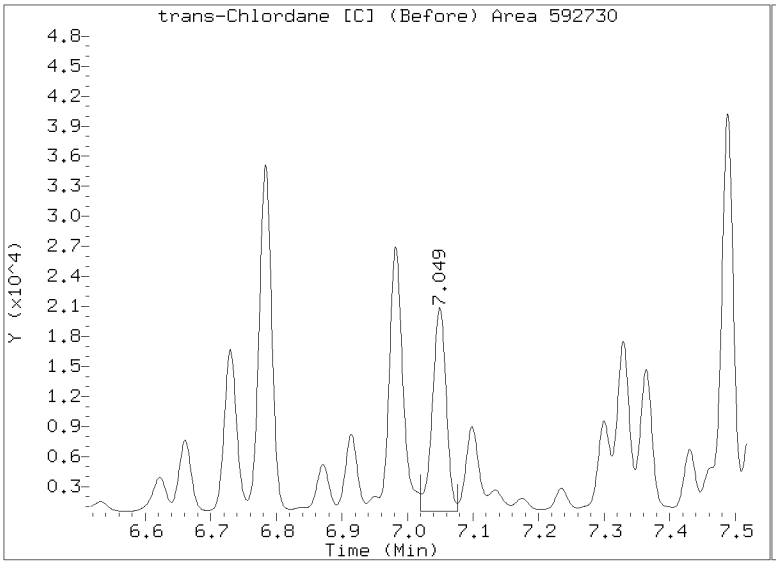
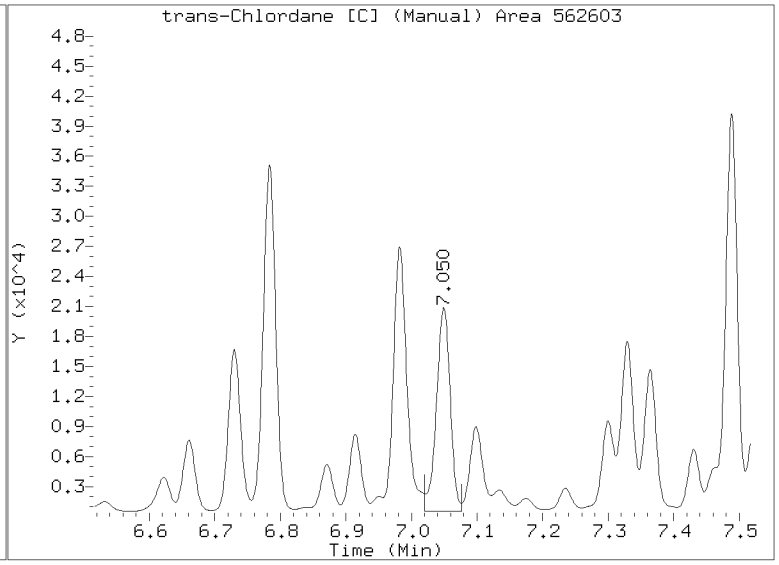
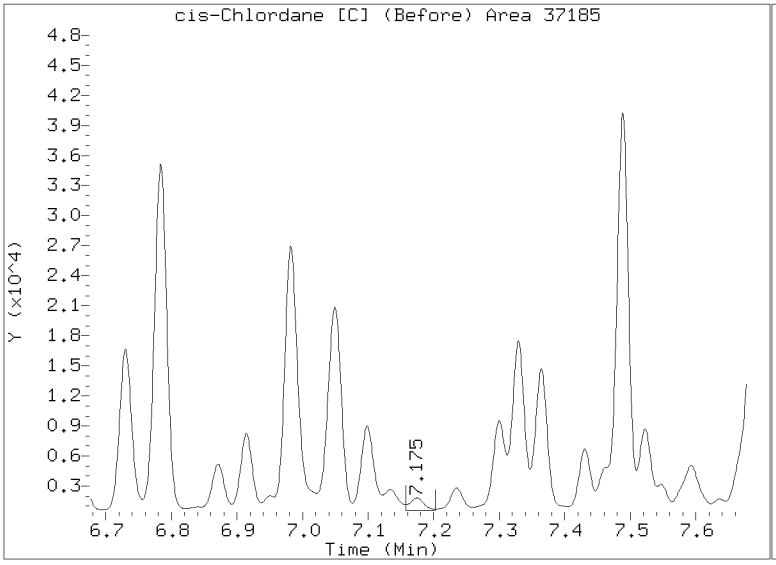
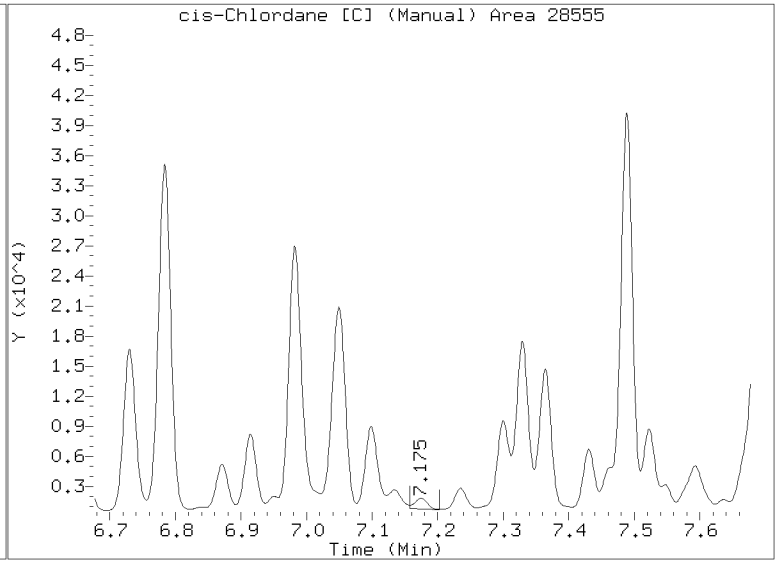
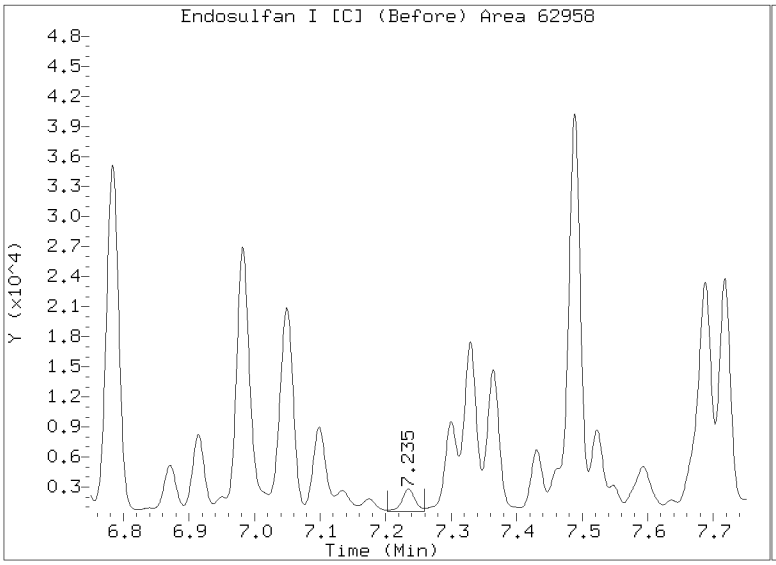
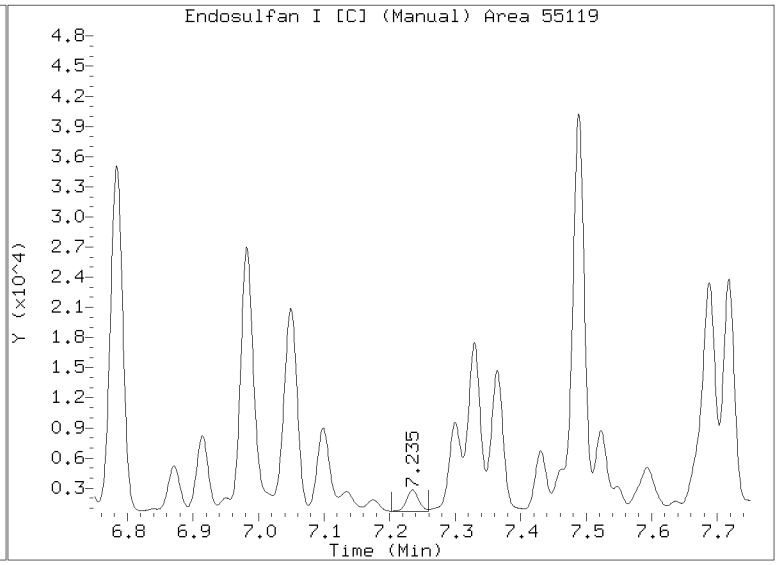






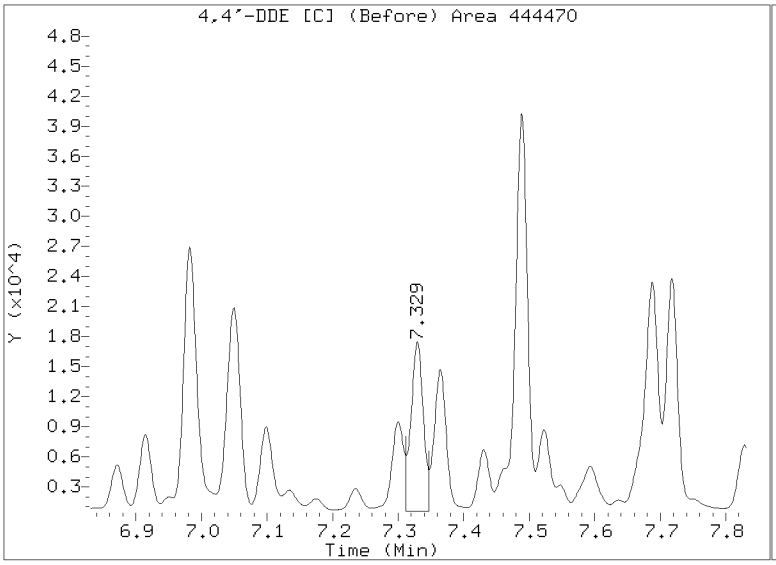


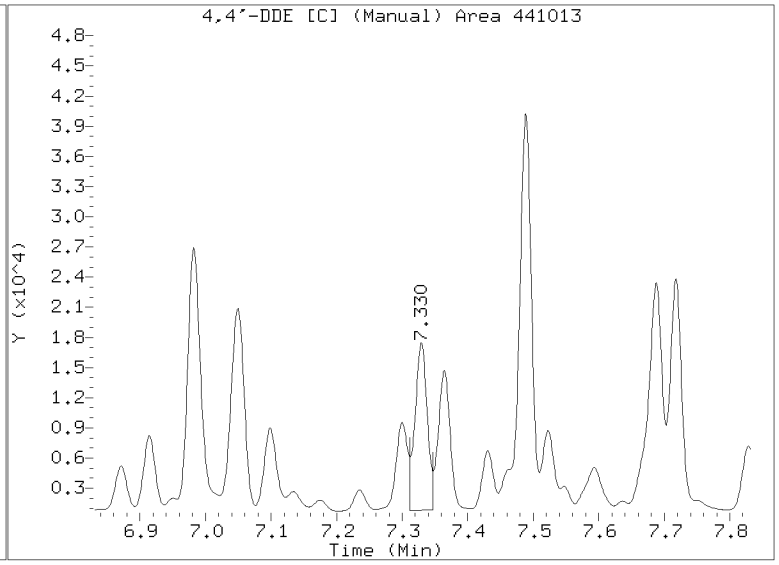


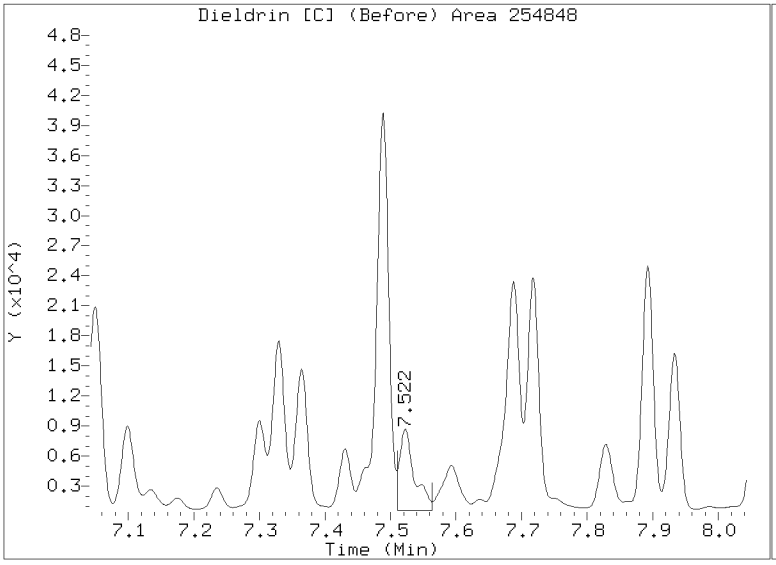


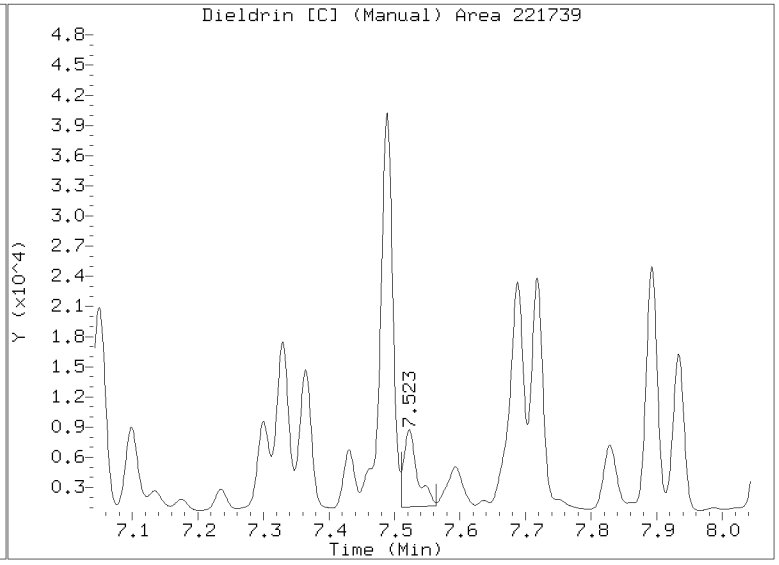
Manual Peak Adjustment Report, CLP-2

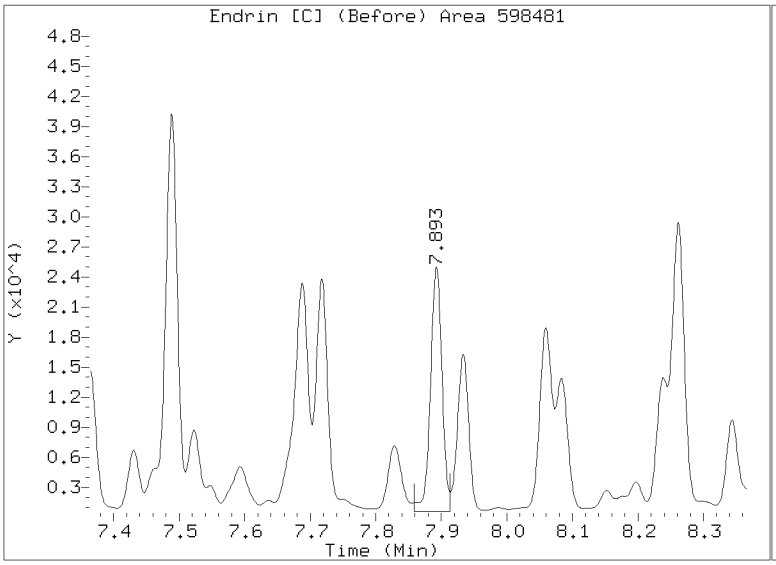
Datafile: /20230302.b/B20230302.b/061F7001.D
Injection Date: 03-MAR-2023 20:37
Lab ID:23A0420-09 Client ID:

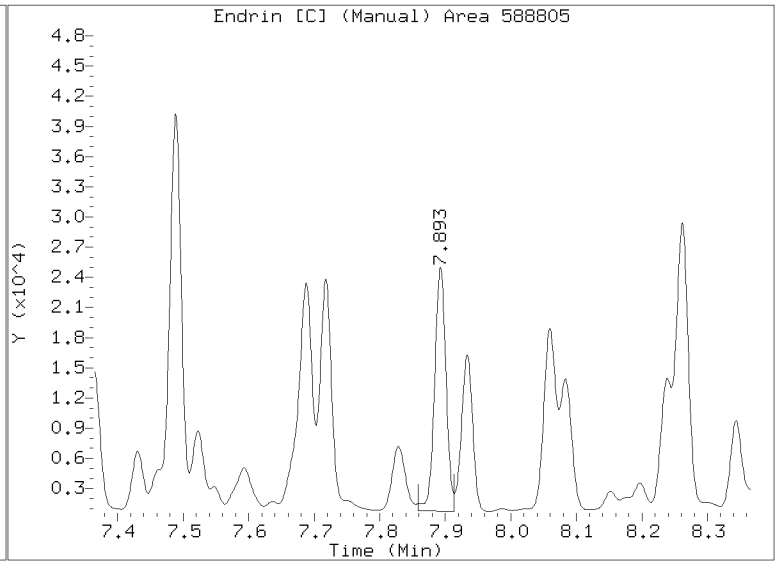






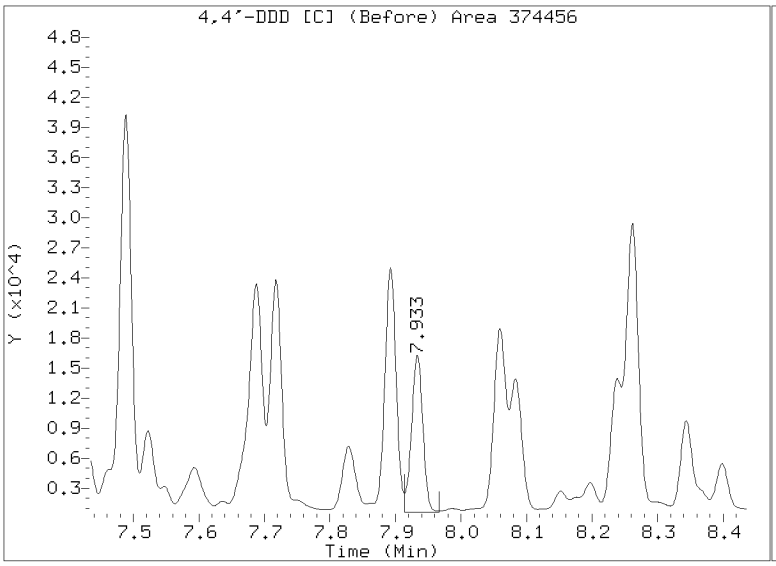


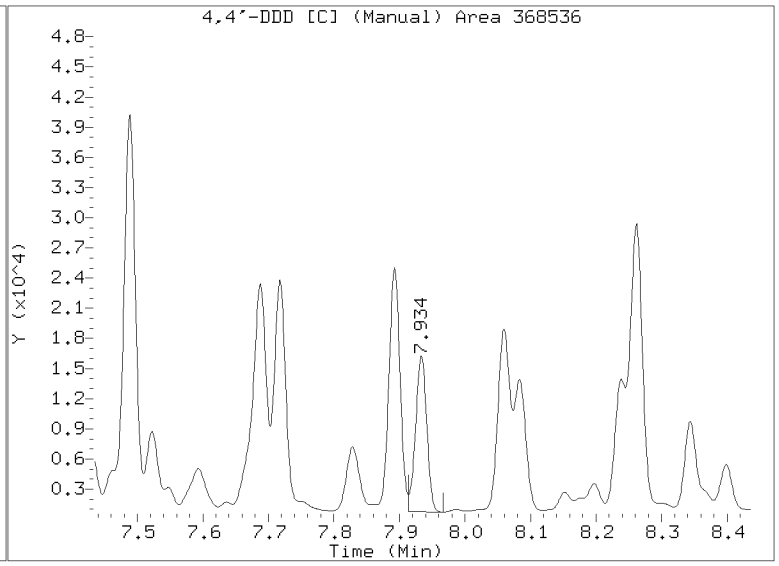


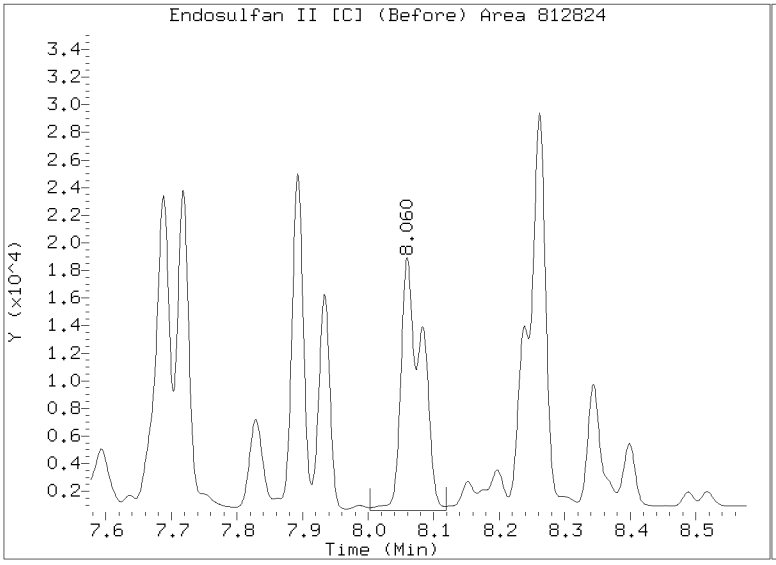


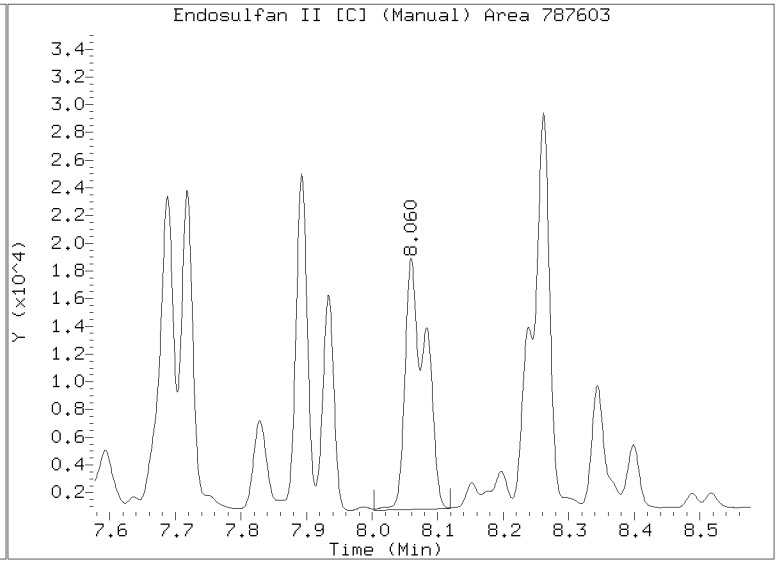
Manual Peak Adjustment Report, CLP-2

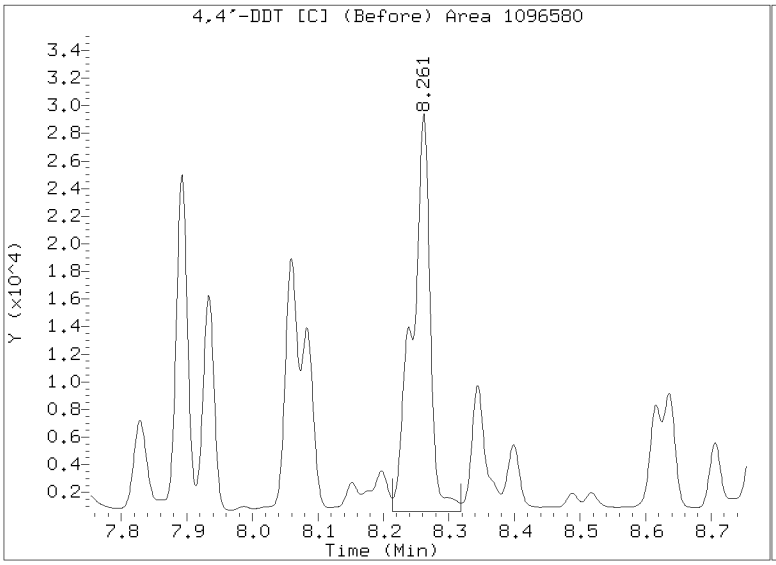
Datafile: /20230302.b/B20230302.b/061F7001.D
Injection Date: 03-MAR-2023 20:37
Lab ID:23A0420-09 Client ID:

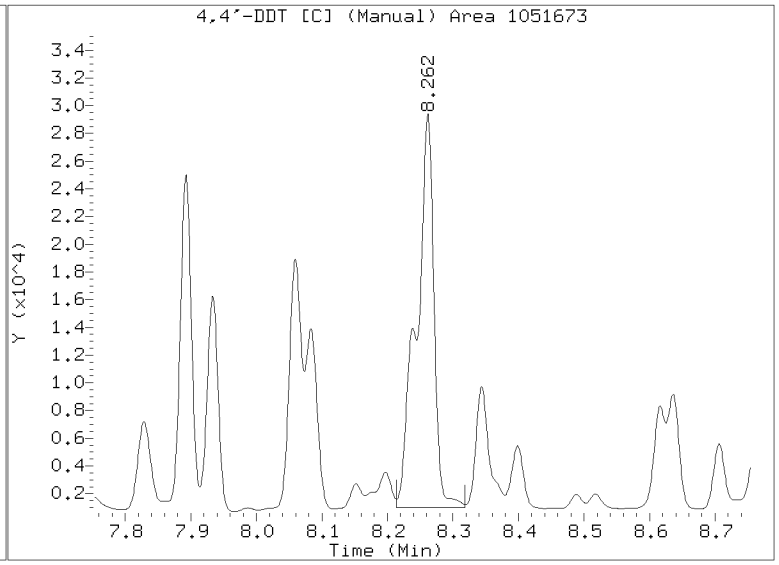






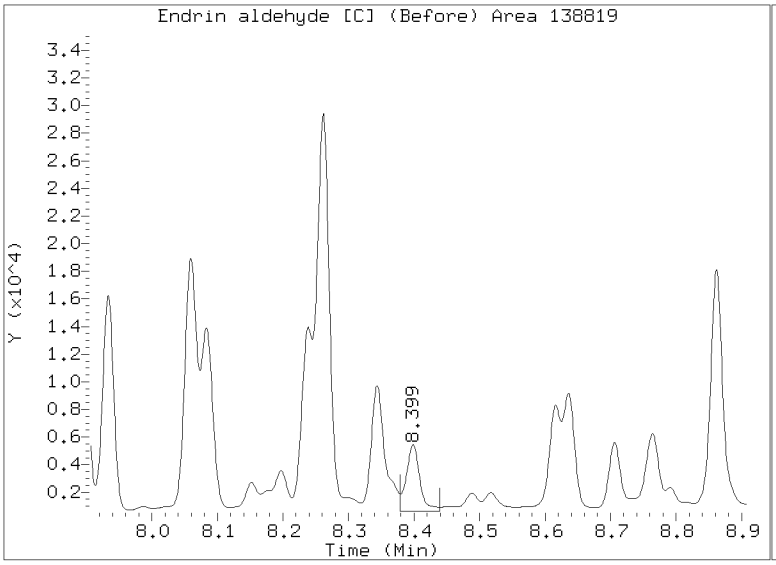


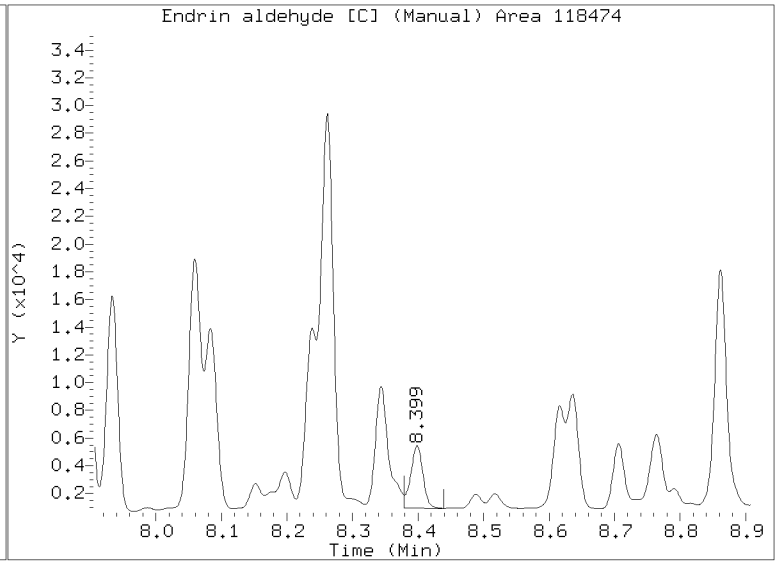


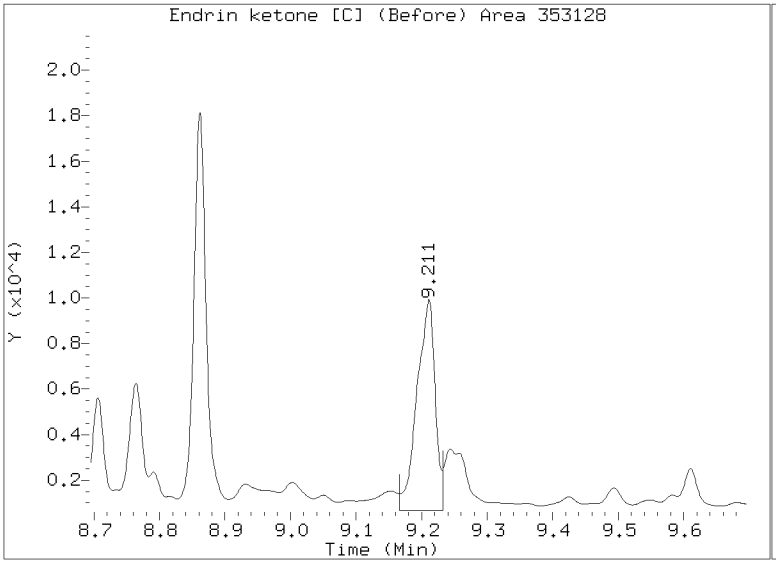


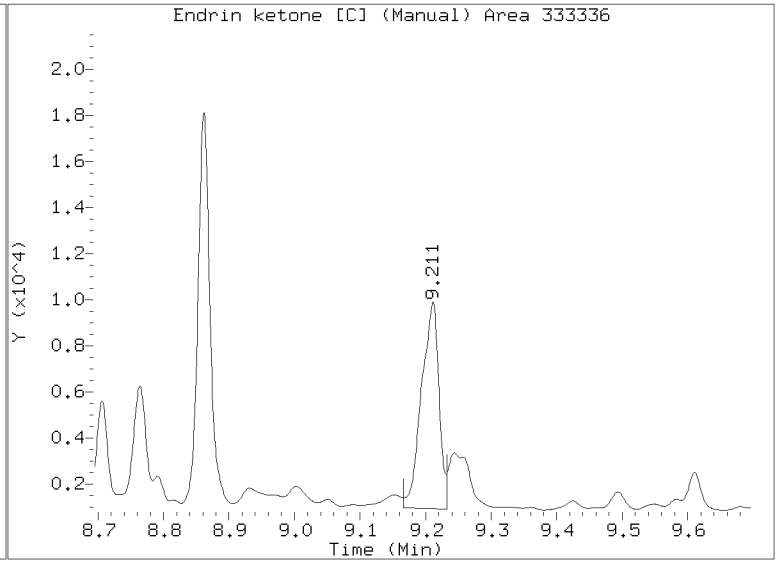
Manual Peak Adjustment Report, CLP-2

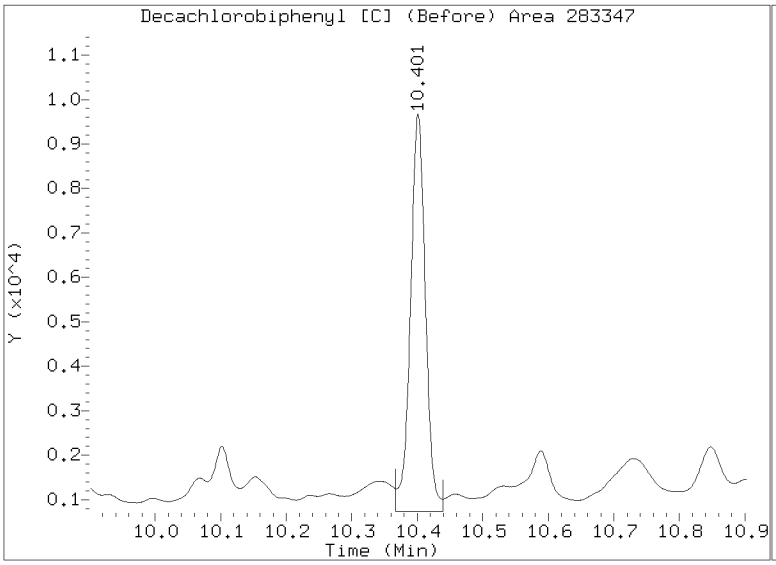
Datafile: /20230302.b/B20230302.b/061F7001.D
Injection Date: 03-MAR-2023 20:37
Lab ID:23A0420-09 Client ID:

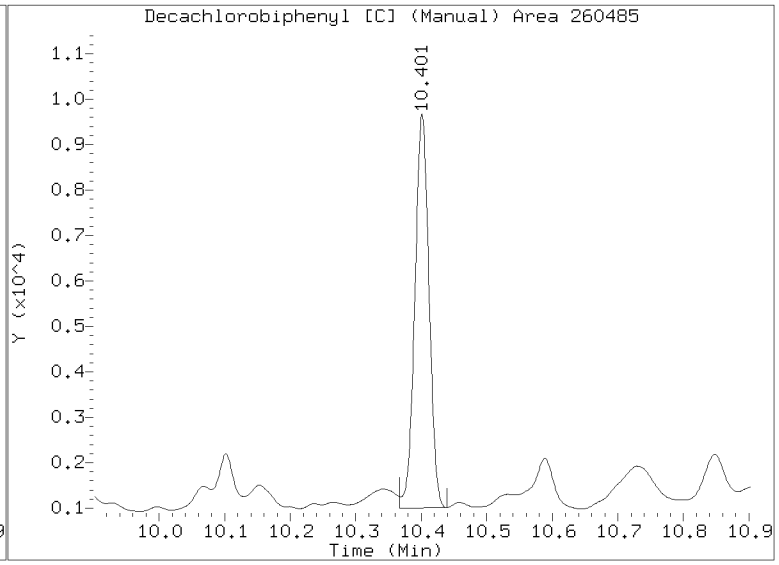






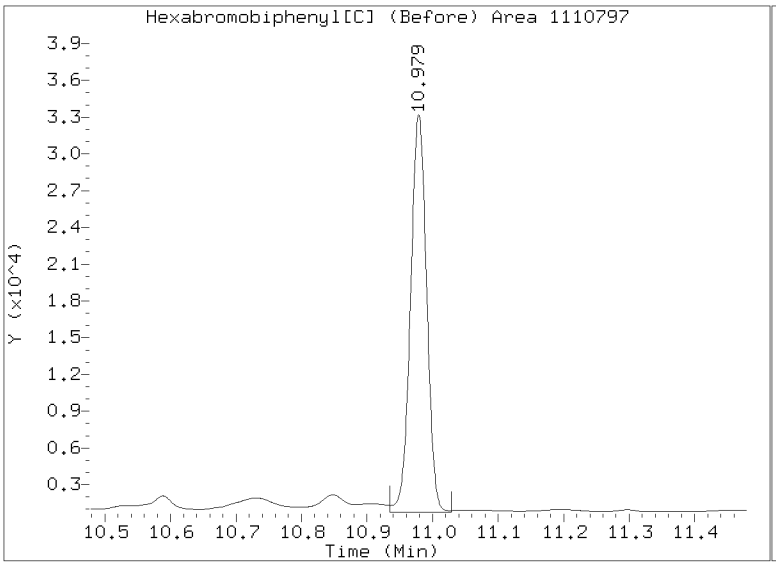


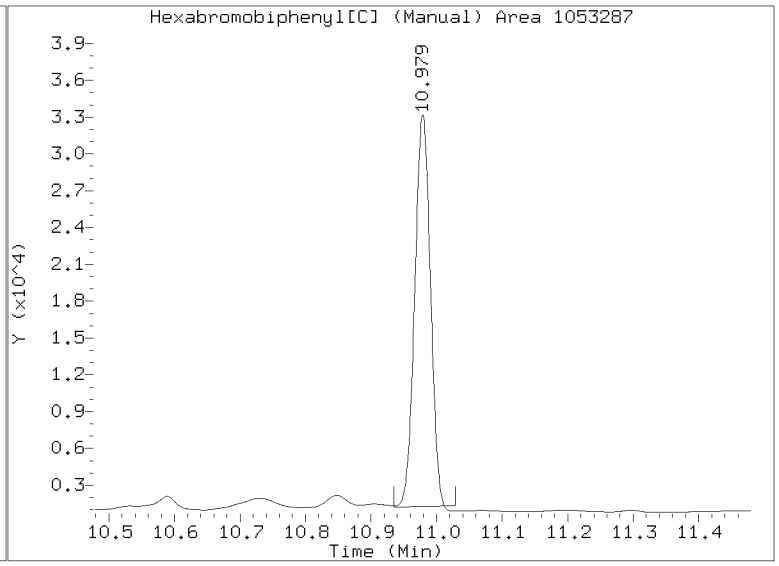




Manual Peak Adjustment Report, CLP-2

Datafile: /20230302.b/B20230302.b/061F7001.D
Injection Date: 03-MAR-2023 20:37
Lab ID:23A0420-09 Client ID:





PREPARATION BATCH SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC SDG: 23A0420

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

Batch: BLB0382 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1045	23A0420-01	058F6701.D	02/16/23 11:56	
LDW23-SC1003	23A0420-07	059F6801.D	02/16/23 11:56	
LDW23-SC1004	23A0420-08	060F6901.D	02/16/23 11:56	
LDW23-SC1082	23A0420-09	061F7001.D	02/16/23 11:56	
Blank	BLB0382-BLK1	041F4801.D	02/16/23 11:56	
LCS	BLB0382-BS1	042F4901.D	02/16/23 11:56	
LCS Dup	BLB0382-BSD1	043F5001.D	02/16/23 11:56	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0382

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

Matrix: Solid | Date Prepared: 2/16/23 (~~2/15/23~~) | Balance ID: B139298002 | Set Up By: CTO 2/15/23

WO Comments

23A0419: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
62	Toxaphene
44	WND
QLS 10	QLS Spike

Analysis: 8081B Pest (PSDDA)

Lab Number & Container	% Solids	Initial (g) Target Dry: 12.5 (Wet)	Actual	(REQ) GPC (1:1) (1) 2 3	(Yes / No) Acid Clean 5mL	(REQ) Sulfur C/U 4.5mL+0.5 mL Ethyl Acetate	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0419-01 A	72.3	(17.29)	17.33	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0419-02 A	48.3	(25.86)	25.91	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0419-03 A	55.7	(22.45)	22.57	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0419-04 A	69.5	(17.98)	17.99	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0419-05 A	69.4	(18.01)	18.09	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0419-06 A	76.4	(16.36)	16.37	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0419-07 A	56.9	(21.96)	21.97	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0419-08 A	67.5	(18.53)	18.59	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0419-09 A	58.6	(21.33)	21.34	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0419-10 A	73.4	(17.03)	17.09	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0419-11 A	50.3	(24.86)	24.88	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0419-12 A	45.1	(27.74)	27.74	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0420-01 A	54.7	(22.85)	22.87	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0420-07 A	51.3	(24.38)	24.41	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0420-08 A	59.9	(20.87)	20.94	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0420-09 A	58.9	(21.23)	21.28	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 12.5 (Wet)	Actual	(REQ) GPC (1:1) (1) 2 3	(Yes / No) Acid Clean 5mL	(REQ) Sulfur C/U 4.5mL+0.5 mL Ethyl Acetate	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLB0382-BLK1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLB0382-BS1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLB0382-BSD1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLB0382-MS1	56.9	(21.96)	21.96	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	Use 23A0419-07
BLB0382-MSD1	56.9	(21.96)	21.96	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	Use 23A0419-07

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0382

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

WO Comments

23A0419: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps

Microwave
1 2 3
CT 2/16/23
Analyst/Date

Pre GPC KD
100°C
(No Exchange)
4 3 4 5 6
SV 02/17
Analyst/Date

TurboVap
Pre GPC
1 2 3 4 5
SH 2/21/23
Analyst/Date

Post GPC KD
80 - 85°C
Hexane Exchange
(2 X 20 mL)
100°C
1 2 3 4 5 6
LO 2-24
Analyst/Date

TurboVap
Pre-Cleanups
1 2 3 4 5
LJ 2/24/23
Analyst/Date

TurboVap
Post-Cleanups
1 2 3 4 5
TWC 2/25/23
Analyst/Date

Vialing

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: CT Date: 2/16/23	
Hexane	L000889
80:20 Hexane/Acetone	L000122
1:1 Hexane/Acetone	L000122
Neutral Glass Wool	L000354
Anhydrous Sodium Sulfate	L000128
Pre GPC KD Analyst: SV Date: 02/17/2023	
Hexane	L000889
~~Anhydrous Sodium Sulfate~~	
~~Neutral Glass Wool~~ SH 2/21/23	
GPC Filter Prep Analyst: SH Date: 2/21/23	
Methylene Chloride	K000558
GPC Filter	L001999
GPC Analyst: CTO Date: 2/22/23	
Methylene Chloride	K000558
GPC Calibration File	CLB0150
Post GPC KD Analyst: LO Date: 2-24-23	
Methylene Chloride	K000558
Hexane	L000889
Vialing Analyst: LJ/TWC Date: 2/25/23	
Hexane	L000889
Sulfuric Acid	L001033
Ethyl Acetate	N/A
Tetrabutylammonium hydrogensulfate (TBAS)	L001601
Sodium Sulfite	K010363

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 2µg/mL	N L000773 (V) Exp Date: 7/21/2023	50µL	CT	
Spike (Freezer) 0.5/1/5µg/mL	3 K011471 (V) Exp Date: 6/14/2023	100µL	CT	

MANUALLY ENTER EXPIRATION DATES!

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

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

Printed: 2/15/2023 1:27:09PM

3046F

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0382

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

WO Comments

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23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

TWC 2/25/23
Analyst/Date

Silica Gel (SPE) Darts LQ9/084

WO Comments

23A0419: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

2/16/23 — Client ID verified By — Date 2/16/23

2/16/23 — Preparation Reviewed By — Date TWC 2/25/23

2/16/23 11:56 — Extraction Date and Time

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0382

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

WO Comments

23A0419: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
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<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Instructions	
SPECIAL INSTRUCTIONS: 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessels. 3. Add 1:1 Hex/ACE to the vessels (until solvent is 3" above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-re-homogenize while hot then let cool 15 min in cold water. Re-homogenize while cool. 7. Decant 1:1 Hex/ACE into Erlenmeyer flask using a funnel containing neutral glasswool. 8. Rinse with Hexane. 9. Microwave a 2nd time using 8:2 Hex/Ace (until solvent is 3" above soil layer after homogenization). 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with Hexane. 11. KD to 5mL at 100°C. (NO HEXANE EXCHANGE). 12. TurboVap 13. GPC 14. After GPC: KD at 80 - 85°C . 15. Exchange to Hexane at 100°C 2 x 20 mL). 16. TurboVap. 17. Cleanups, If Acid cleaning do not add Ethyl Acetate for Sulfur Clean. Do Not Acid Clean if Acid liable compounds are requested. 18. Vial in Hexane. A. Need Total Solids Y [N] B. Archive/Freeze [Y] N	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: PEST Extraction Batch BLB0382

Total Solids Batch: BLB0153 Work Order(s): 23A0419 01-12

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
[X] No Anomalies (standard soil/wet sediment/sand/gravel)= 01-12	CR 2/9/23
[X] Standing Water Decanted (Not shared)= 01-12	CR 2/9/23
[ ] Standing Water Homogenized (Shared samples)=	
[ ] Clay/Clumps (Difficult to homogenize)=	
[ ] Rocks (%+size)?	
[ ] Organics (Leaves/sticks/grass)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Received in 32oz jar(s)=Homogenized in Pyrex dish=	
[X] Previously Frozen = 01-12	CR 2/9/23
[ ] Other (Details)=	
Aqueous:	
[/] No Anomalies	
[ ] Turbid/Color=	
[ ] Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
[ ] Emulsions (%)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Other (Details)=	
[ ] Received in 1.0L Bottle(s)=No Bottle Rinse=	
[ ] Other Notes/Comments= (Note problems, concerns, corrective actions).	
[X] Share Samples Y / (N)	CR 2/9/23
[X] Multiple Jars Y / (N)	CR 2/9/23
[ ] Sample Pre-Screens indicate analyte activity=	
[ ] Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: PEST Extraction Batch: BLB1382

Total Solids Batch: BLB0154 Work Order(s): 23A0420

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☒ Standing Water Decanted (Not shared)= ϕ1 – ϕ9.	ϕ2/14/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☒ Oily, obvious fuel/sulfur odors= ϕ1 – ϕ9.	ϕ2/14/23
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / N	ϕ2/14/23
☒ Multiple Jars Y / N	ϕ2/14/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : BLB0382-BLK1

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/22/2023 2:17 PM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : BLB0382-BS1

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/22/2023 3:26 PM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : BLB0382-BSD1

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/22/2023 4:36 PM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : BLB0382-MS1

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/22/2023 5:45 PM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : BLB0382-MSD1

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/22/2023 6:55 PM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : 23A0419-01

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/22/2023 8:05 PM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : 23A0419-02

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/22/2023 9:14 PM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : 23A0419-03

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/22/2023 10:24 PM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : 23A0419-04

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/22/2023 11:33 PM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : 23A0419-05

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/23/2023 12:43 AM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : 23A0419-06

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/23/2023 1:52 AM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : 23A0419-07

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/23/2023 3:02 AM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : 23A0419-08

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/23/2023 4:11 AM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : 23A0419-09

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/23/2023 5:21 AM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : 23A0419-10

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/23/2023 6:31 AM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : 23A0419-11

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/23/2023 7:40 AM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : 23A0419-12

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/23/2023 8:50 AM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : 23A0420-01

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/23/2023 9:59 AM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : 23A0420-08

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/23/2023 12:18 PM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	☐
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	☐
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	☐
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	☐
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	☐

GPC1

PEST-PNA_Method_GPC1

BLB0382

Sample Description:

Sample ID : BLB0382

Sample : 23A0420-09

Method : PEST-PNA_Method_GPC1

Description : PEST-PNA METHOD GPC 1

Created : 10/18/2013 6:05 AM

By : Administrator

Modified : 2/23/2023 1:28 PM

Time and Input Events Table (PEST-PNA_Method_GPC1)

	Input					Output			
Name	Type	Source	Input	Value	Units	Output Type	Output	Parameter	Store
Set_dump	Time Idle >	---	---	0.010	min	Colibrick	gpc1collect	High	
Start_collect	Run Time >	---	---	35.000	min	Colibrick	gpc1collect	Low	
Start_dump	Run Time >	---	---	58.000	min	Colibrick	gpc1collect	High	
Next_fract	Run Time >	---	---	67.800	min	GPC1Fraction	Next	---	
Error-Pump-Off	Time Idle >	---	---	78.000	min	Colibrick	GPC1-Poweroff	Low	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0234	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	BLB0382-BLK1	041F4801.D	02/22/2023	
LCS Dup	BLB0382-BSD1	043F5001.D	02/22/2023	
LCS	BLB0382-BS1	042F4901.D	02/22/2023	
LDW23-SC1045	23A0420-01	058F6701.D	02/22/2023	
LDW23-SC1004	23A0420-08	060F6901.D	02/22/2023	
LDW23-SC1003	23A0420-07	059F6801.D	02/22/2023	
LDW23-SC1082	23A0420-09	061F7001.D	02/22/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0234

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLB0150-GPC2** **Printed: 2/25/2023 5:10:01PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0419-01	A	LDW23-SS1218	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
23A0419-02	A	LDW23-SS1045	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
23A0419-03	A	LDW23-SS1133	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
23A0419-04	A	LDW23-SS1135	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
23A0419-05	A	LDW23-SS1136	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
23A0419-06	A	LDW23-SS1140	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
23A0419-07	A	LDW23-SS1141	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
23A0419-08	A	LDW23-SS1142	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
23A0419-09	A	LDW23-SS1202	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
23A0419-10	A	LDW23-SS1041	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
23A0419-11	A	LDW23-SS1038	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
23A0419-12	A	LDW23-SS1030	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
23A0420-01	A	LDW23-SC1045	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
23A0420-07	A	LDW23-SC1003	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
23A0420-08	A	LDW23-SC1004	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
23A0420-09	A	LDW23-SC1082	A 03	2.5	2.5	8081B Pest (PSDDA)	2/22/2023	CTO	
BLB0382-BLK1	-	Blank	-	2.5	2.5	-	2/22/2023	CTO	
BLB0382-BS1	-	LCS	-	2.5	2.5	-	2/22/2023	CTO	
BLB0382-BSD1	-	LCS Dup	-	2.5	2.5	-	2/22/2023	CTO	
BLB0382-MS1	-	Matrix Spike	-	2.5	2.5	-	2/22/2023	CTO	
BLB0382-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/22/2023	CTO	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0235	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS Dup	BLB0382-BSD1	043F5001.D	02/25/2023	
LCS	BLB0382-BS1	042F4901.D	02/25/2023	
Blank	BLB0382-BLK1	041F4801.D	02/25/2023	
LDW23-SC1004	23A0420-08	060F6901.D	02/25/2023	
LDW23-SC1045	23A0420-01	058F6701.D	02/25/2023	
LDW23-SC1003	23A0420-07	059F6801.D	02/25/2023	
LDW23-SC1082	23A0420-09	061F7001.D	02/25/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0235

Matrix: Solid **Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL** **Printed: 2/25/2023 5:11:21PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0419-01	A	LDW23-SS1218	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-02	A	LDW23-SS1045	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-03	A	LDW23-SS1133	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-04	A	LDW23-SS1135	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-05	A	LDW23-SS1136	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-06	A	LDW23-SS1140	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-07	A	LDW23-SS1141	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-08	A	LDW23-SS1142	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-09	A	LDW23-SS1202	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-10	A	LDW23-SS1041	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-11	A	LDW23-SS1038	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-12	A	LDW23-SS1030	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0420-01	A	LDW23-SC1045	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0420-07	A	LDW23-SC1003	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0420-08	A	LDW23-SC1004	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0420-09	A	LDW23-SC1082	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
BLB0382-BLK1	-	Blank	-	2.5	2.5	-	2/25/2023	LD	
BLB0382-BS1	-	LCS	-	2.5	2.5	-	2/25/2023	LD	
BLB0382-BSD1	-	LCS Dup	-	2.5	2.5	-	2/25/2023	LD	
BLB0382-MS1	-	Matrix Spike	-	2.5	2.5	-	2/25/2023	LD	
BLB0382-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/25/2023	LD	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0236	Cleanup Type:	Sulfur
Cleanup Method:	EPA 3660B Sulfur Cleanup - uL	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS	BLB0382-BS1	042F4901.D	02/25/2023	
Blank	BLB0382-BLK1	041F4801.D	02/25/2023	
LCS Dup	BLB0382-BSD1	043F5001.D	02/25/2023	
LDW23-SC1082	23A0420-09	061F7001.D	02/25/2023	
LDW23-SC1045	23A0420-01	058F6701.D	02/25/2023	
LDW23-SC1004	23A0420-08	060F6901.D	02/25/2023	
LDW23-SC1003	23A0420-07	059F6801.D	02/25/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0236

Matrix: Solid **Cleanup using: Organics - EPA 3660B Sulfur Cleanup - uL** **Printed: 2/25/2023 5:12:27PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0419-01	A	LDW23-SS1218	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-02	A	LDW23-SS1045	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-03	A	LDW23-SS1133	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-04	A	LDW23-SS1135	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-05	A	LDW23-SS1136	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-06	A	LDW23-SS1140	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-07	A	LDW23-SS1141	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-08	A	LDW23-SS1142	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-09	A	LDW23-SS1202	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-10	A	LDW23-SS1041	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-11	A	LDW23-SS1038	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-12	A	LDW23-SS1030	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0420-01	A	LDW23-SC1045	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0420-07	A	LDW23-SC1003	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0420-08	A	LDW23-SC1004	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0420-09	A	LDW23-SC1082	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
BLB0382-BLK1	-	Blank	-	2.5	2.5	-	2/25/2023	LD	
BLB0382-BS1	-	LCS	-	2.5	2.5	-	2/25/2023	LD	
BLB0382-BSD1	-	LCS Dup	-	2.5	2.5	-	2/25/2023	LD	
BLB0382-MS1	-	Matrix Spike	-	2.5	2.5	-	2/25/2023	LD	
BLB0382-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/25/2023	LD	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0237	Cleanup Type:	Sulfuric Acid
Cleanup Method:	EPA 3665 Sulfuric Acid Cleanup - uL	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1003	23A0420-07	059F6801.D	02/25/2023	
Blank	BLB0382-BLK1	041F4801.D	02/25/2023	
LCS	BLB0382-BS1	042F4901.D	02/25/2023	
LCS Dup	BLB0382-BSD1	043F5001.D	02/25/2023	
LDW23-SC1082	23A0420-09	061F7001.D	02/25/2023	
LDW23-SC1004	23A0420-08	060F6901.D	02/25/2023	
LDW23-SC1045	23A0420-01	058F6701.D	02/25/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0237

Matrix: Solid **Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 2/25/2023 5:13:33PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0419-01	A	LDW23-SS1218	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-02	A	LDW23-SS1045	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-03	A	LDW23-SS1133	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-04	A	LDW23-SS1135	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-05	A	LDW23-SS1136	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-06	A	LDW23-SS1140	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-07	A	LDW23-SS1141	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-08	A	LDW23-SS1142	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-09	A	LDW23-SS1202	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-10	A	LDW23-SS1041	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-11	A	LDW23-SS1038	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0419-12	A	LDW23-SS1030	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0420-01	A	LDW23-SC1045	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0420-07	A	LDW23-SC1003	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0420-08	A	LDW23-SC1004	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
23A0420-09	A	LDW23-SC1082	A 03	2.5	2.5	8081B Pest (PSDDA)	2/25/2023	LD	
BLB0382-BLK1	-	Blank	-	2.5	2.5	-	2/25/2023	LD	
BLB0382-BS1	-	LCS	-	2.5	2.5	-	2/25/2023	LD	
BLB0382-BSD1	-	LCS Dup	-	2.5	2.5	-	2/25/2023	LD	
BLB0382-MS1	-	Matrix Spike	-	2.5	2.5	-	2/25/2023	LD	
BLB0382-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/25/2023	LD	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8081B

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLB0382-BLK1	File ID:	041F4801.D
Sampled:	N/A	Prepared:	02/16/23 11:56	Analyzed:	03/03/23 14:02
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	12.5 g / 2.5 mL
Batch:	BLB0382	Sequence:	SLC0093	Calibration:	FL00041
Instrument:	ECD6	Column:	STX-CLP	Cleanups:	GPC, Silica Gel, Sulfur, Sulfuric Acid

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
118-74-1	Hexachlorobenzene	1	0.50	U	0.15	0.50

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl	8.0000	5.52	69.0	30 - 160	
Decachlorobiphenyl [2C]	8.0000	5.57	69.6	30 - 160	
Tetrachlorometaxylene	8.0000	4.90	61.2	30 - 160	
Tetrachlorometaxylene [2C]	8.0000	4.78	59.7	30 - 160	

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/041F4801.D
Data file 2: /20230302.b/B20230302.b/041F4801.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: BLB0382-BLK1
Client ID:
Injection Date: 03-MAR-2023 14:02
Report Date: 03/09/2023 11:18
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			4.830	0.001	2607	0.00	0.07	---	alpha-BHC
4.809	0.030	3877	5.281	-0.021	861	0.47	0.06	152.4*	beta-BHC
----			5.649	-0.006	185	0.00	0.01	---	delta-BHC
----			5.219	-0.005	715	0.00	0.02	---	gamma-BHC (Lindane)
----			5.751	0.002	1170	0.00	0.04	---	Heptachlor
----			6.155	0.003	9393	0.00	0.30	---	Aldrin
----			6.781	-0.026	5422	0.00	0.21	---	Heptachlor epoxide b
----			----			0.00	0.00	---	Endosulfan I
----			7.522	-0.022	876	0.00	0.03	---	Dieldrin
----			7.327	-0.004	461	0.00	0.02	---	4,4'-DDE
7.171	0.021	2125	7.891	0.025	1611	0.17	0.11	45.8*	Endrin
----			8.089	0.011	451	0.00	0.03	---	Endosulfan II
----			7.935	-0.001	226	0.00	0.02	---	4,4'-DDD
----			8.706	0.032	2769	0.00	0.21	---	Endosulfan sulfate
----			8.259	0.005	3532	0.00	0.25	---	4,4'-DDT
----			8.909	0.017	2772	0.00	0.45	---	Methoxychlor
8.515	-0.009	3397	9.187	-0.009	16868	0.28	1.17	122.1*	Endrin ketone
7.840	0.024	4582	8.399	-0.009	3208	0.52	0.30	54.0*	Endrin aldehyde
----			7.012	-0.005	610	0.00	0.02	---	trans-Chlordane
----			7.173	-0.004	336	0.00	0.01	---	cis-Chlordane
2.346	0.001	5337	----			0.24	0.00	---	Hexachlorobutadiene
4.228	-0.002	8942	4.683	-0.005	3273	0.45	0.10	126.7*	Hexachlorobenzene
3.868	-0.003	374091	4.192	-0.003	604027	24.50	23.89	2.5	Tetrachloro-m-xylene
9.434	-0.003	262795	10.399	-0.004	322317	27.61	27.85	0.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

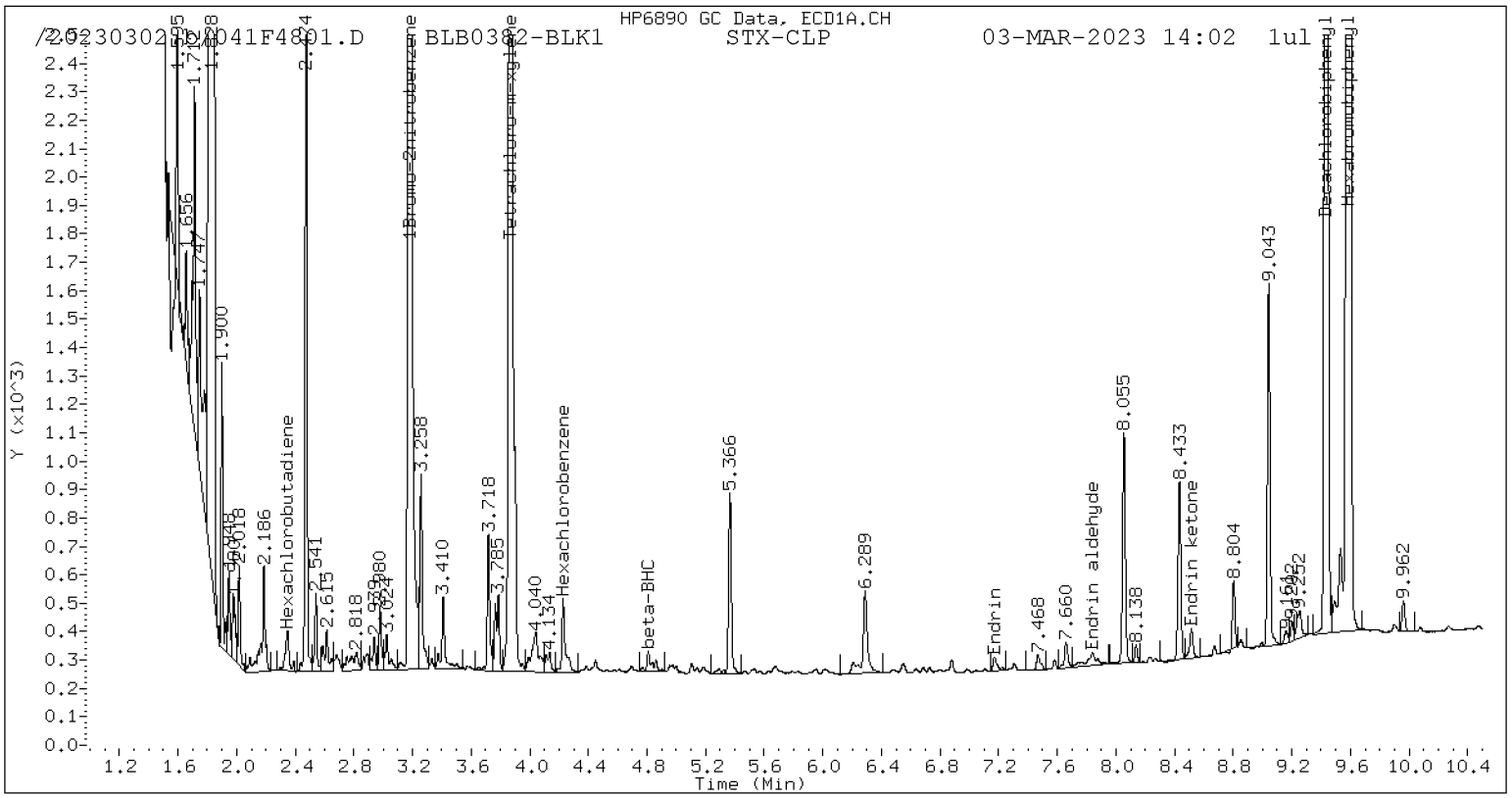
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	1122897	67.0
Hexabromobiphenyl	609723	939374	54.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1796358	78.5
Hexabromobiphenyl	769764	1047214	36.0

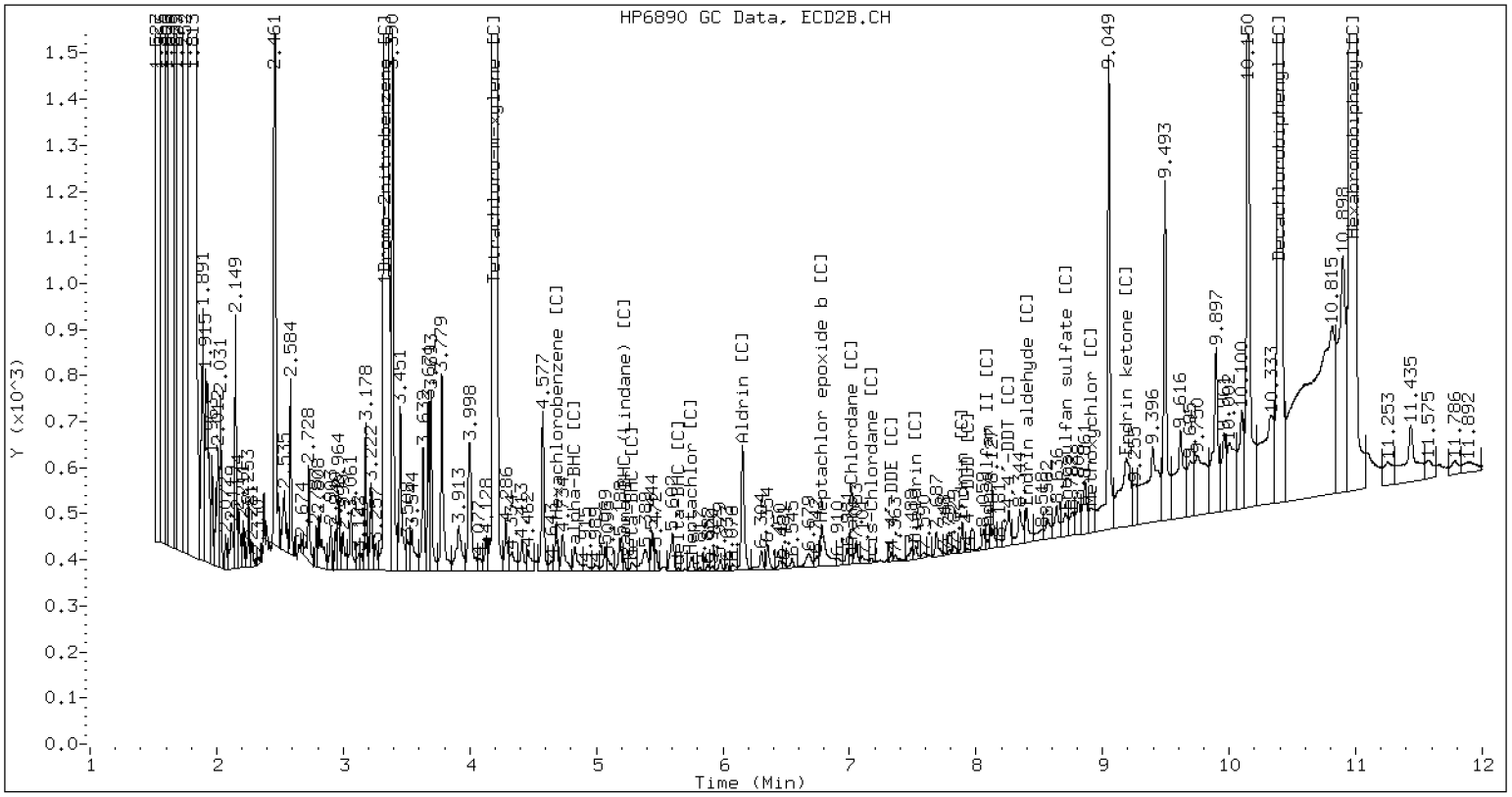
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230302.b/B20230302.b/041F4801.D BLB0382-BLK1 CLP2



CLP-2 Manual Integration: NO

LCS / LCS DUPLICATE RECOVERY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/03/23 14:20
Batch:	BLB0382	Laboratory ID:	BLB0382-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	12.5 g / 2.5 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Hexachlorobenzene [2C]	4.00	2.26		56.4	26 - 128

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Hexachlorobenzene	4.00	2.28		56.9	1.21	30	26 - 128

* Indicates values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/042F4901.D
Data file 2: /20230302.b/B20230302.b/042F4901.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: BLB0382-BS1
Client ID:
Injection Date: 03-MAR-2023 14:20
Report Date: 03/09/2023 11:18
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.388	-0.003	275794	4.826	-0.003	418496	12.74	11.57	9.6	alpha-BHC
4.777	-0.003	114256	5.299	-0.003	165004	13.71	12.00	13.3	beta-BHC
4.962	-0.003	254533	5.651	-0.003	378765	14.39	12.72	12.3	delta-BHC
4.695	-0.003	259336	5.221	-0.003	376592	13.82	12.27	11.8	gamma-BHC (Lindane)
5.188	-0.003	218569	5.747	-0.003	325201	13.09	11.70	11.2	Heptachlor
5.516	-0.003	230176	6.149	-0.003	304655	12.30	9.60	24.7	Aldrin
6.195	-0.003	210844	6.804	-0.002	288058	12.99	10.98	16.8	Heptachlor epoxide b
6.638	-0.003	315939	7.247	-0.003	417304	21.22	18.04	16.2	Endosulfan I
----			7.548	0.004	760	0.00	0.03	---	Dieldrin
6.557	-0.004	396082	7.328	-0.003	520152	26.66	22.20	18.3	4,4'-DDE
----			7.870	0.004	2457	0.00	0.16	---	Endrin
7.384	-0.004	101174	8.074	-0.003	123183	9.27	7.95	15.3	Endosulfan II
7.203	-0.004	332415	7.933	-0.003	424936	30.44	28.91	5.1	4,4'-DDD
8.246	-0.004	252947	8.671	-0.002	319478	24.41	23.49	3.8	Endosulfan sulfate
7.497	-0.004	331352	8.251	-0.003	412596	30.02	29.09	3.2	4,4'-DDT
7.982	-0.003	26786	8.890	-0.002	44299	5.48	7.06	25.2	Methoxychlor
8.521	-0.003	279334	9.194	-0.002	326952	23.53	22.26	5.6	Endrin ketone
7.812	-0.004	27163	8.404	-0.003	38160	3.12	3.49	11.3	Endrin aldehyde
6.336	-0.003	222594	7.015	-0.003	289560	13.51	11.06	19.9	trans-Chlordane
6.483	-0.003	215055	7.174	-0.003	277685	13.01	10.85	18.1	cis-Chlordane
2.342	-0.003	227749	2.488	-0.003	318782	10.04	9.28	7.8	Hexachlorobutadiene
4.228	-0.002	225999	4.686	-0.003	371226	11.25	11.28	0.3	Hexachlorobenzene
3.868	-0.003	343582	4.192	-0.003	551722	22.47	21.72	3.4	Tetrachloro-m-xylene
9.434	-0.003	250491	10.400	-0.003	308227	26.74	26.24	1.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

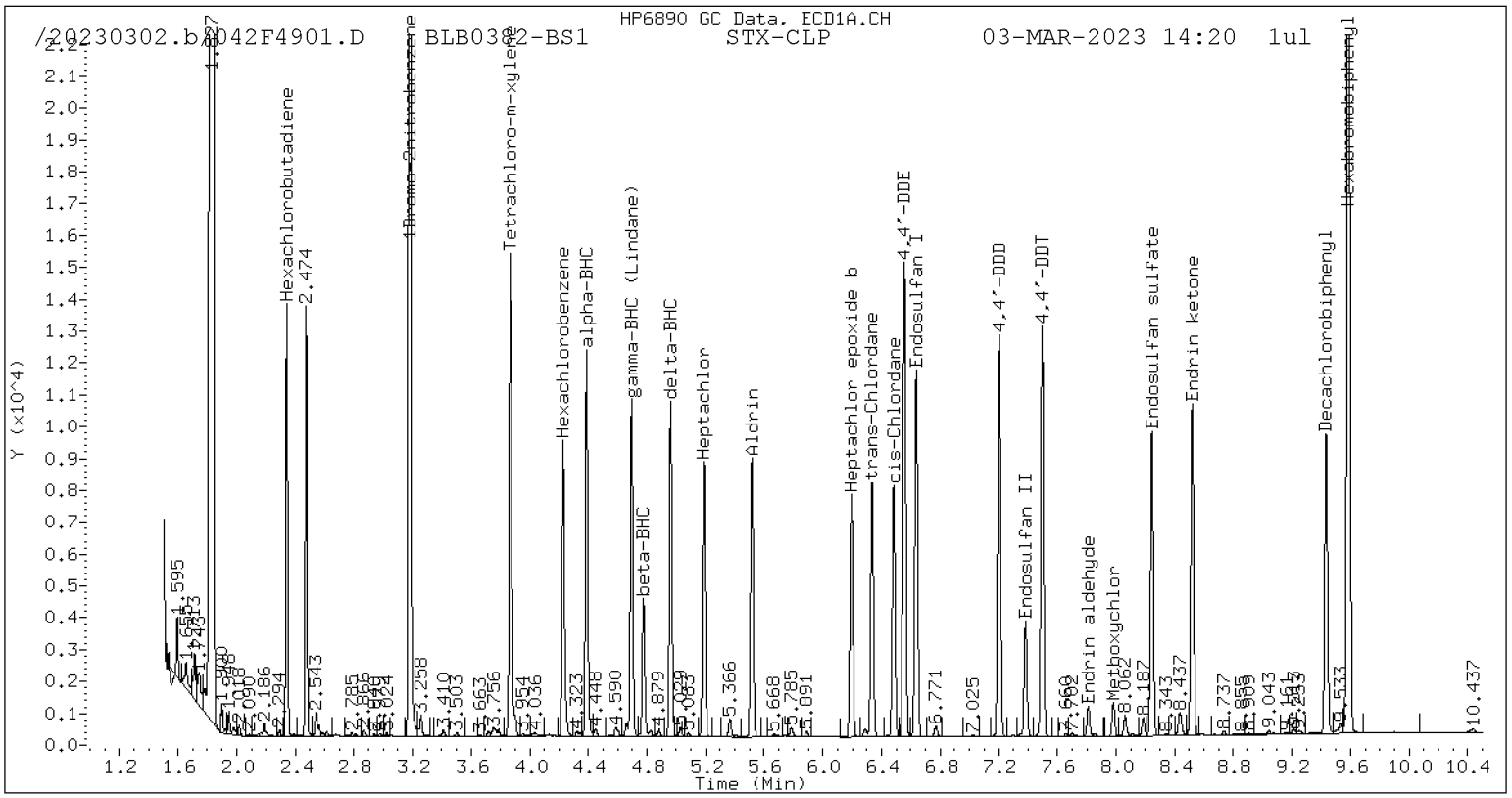
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	1124430	67.2
Hexabromobiphenyl	609723	924668	51.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1804150	79.3
Hexabromobiphenyl	769764	1062692	38.1

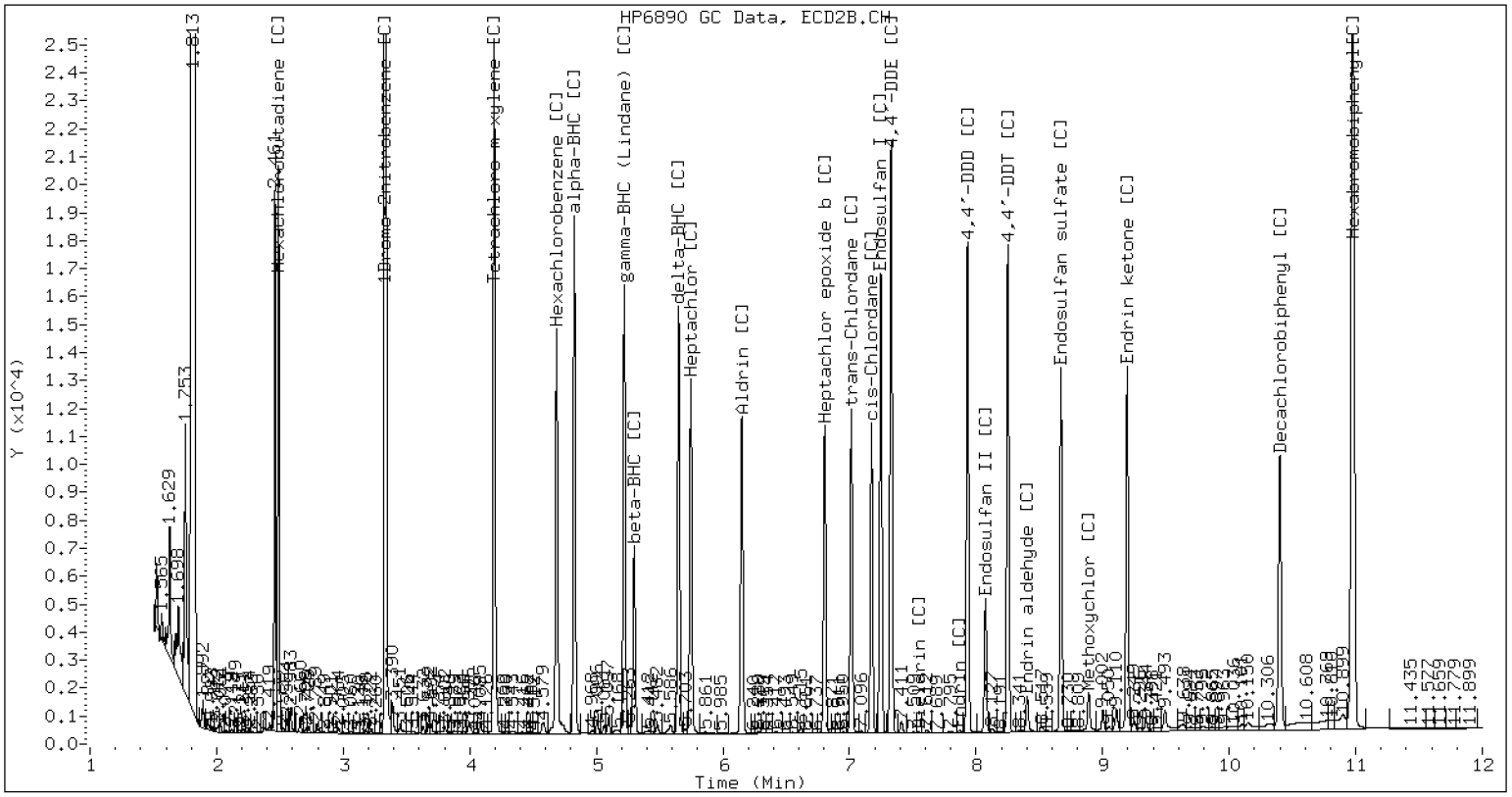
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230302.b/B20230302.b/042F4901.D BLB0382-BS1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/043F5001.D
Data file 2: /20230302.b/B20230302.b/043F5001.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: BLB0382-BSD1
Client ID:
Injection Date: 03-MAR-2023 14:38
Report Date: 03/09/2023 11:18
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.388	-0.003	277174	4.826	-0.003	425376	12.76	11.63	9.2	alpha-BHC
4.776	-0.003	109848	5.299	-0.003	167653	13.13	12.06	8.5	beta-BHC
4.962	-0.003	260133	5.651	-0.003	393380	14.65	13.06	11.5	delta-BHC
4.695	-0.003	252843	5.221	-0.003	387140	13.42	12.48	7.3	gamma-BHC (Lindane)
5.188	-0.003	221459	5.747	-0.003	333368	13.21	11.86	10.8	Heptachlor
5.516	-0.003	234903	6.149	-0.003	308867	12.51	9.62	26.0	Aldrin
6.195	-0.004	212148	6.804	-0.003	292798	13.03	11.03	16.6	Heptachlor epoxide b
6.637	-0.003	320103	7.247	-0.004	426225	21.42	18.22	16.1	Endosulfan I
----			7.548	0.005	710	0.00	0.03	---	Dieldrin
6.556	-0.004	401398	7.329	-0.003	530110	26.92	22.37	18.5	4,4'-DDE
----			7.870	0.004	2372	0.00	0.15	---	Endrin
7.384	-0.005	91490	8.074	-0.003	111488	8.16	7.04	14.8	Endosulfan II
7.203	-0.004	340787	7.933	-0.003	437718	30.38	29.12	4.2	4,4'-DDD
8.246	-0.004	257144	8.670	-0.003	327850	24.16	23.57	2.5	Endosulfan sulfate
7.497	-0.004	337179	8.251	-0.003	421548	29.74	29.06	2.3	4,4'-DDT
7.982	-0.004	21019	8.889	-0.003	37454	4.18	5.83	32.9	Methoxychlor
8.520	-0.004	271271	9.193	-0.003	318203	22.25	21.18	4.9	Endrin ketone
7.812	-0.004	23792	8.404	-0.004	35380	2.66	3.17	17.3	Endrin aldehyde
6.336	-0.004	226127	7.014	-0.003	294504	13.67	11.13	20.5	trans-Chlordane
6.483	-0.004	217321	7.174	-0.003	284319	13.10	10.98	17.6	cis-Chlordane
2.342	-0.004	234167	2.488	-0.004	327152	10.29	9.42	8.8	Hexachlorobutadiene
4.228	-0.003	229591	4.686	-0.003	358754	11.38	10.78	5.4	Hexachlorobenzene
3.868	-0.003	354132	4.193	-0.002	572018	23.07	22.27	3.5	Tetrachloro-m-xylene
9.434	-0.003	257984	10.399	-0.003	316269	26.81	26.33	1.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

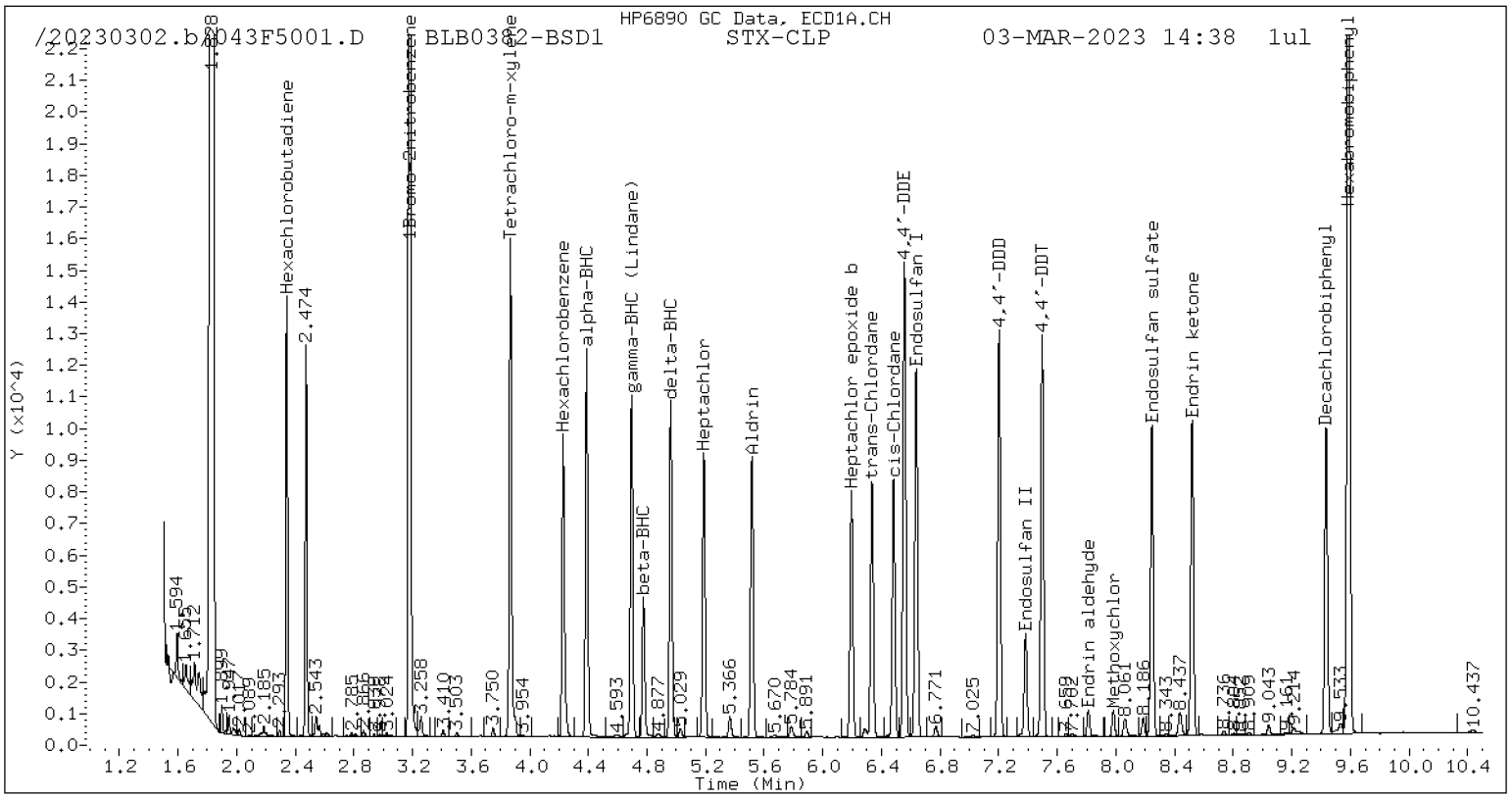
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	1128565	67.8
Hexabromobiphenyl	609723	949834	55.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1824577	81.3
Hexabromobiphenyl	769764	1086833	41.2

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

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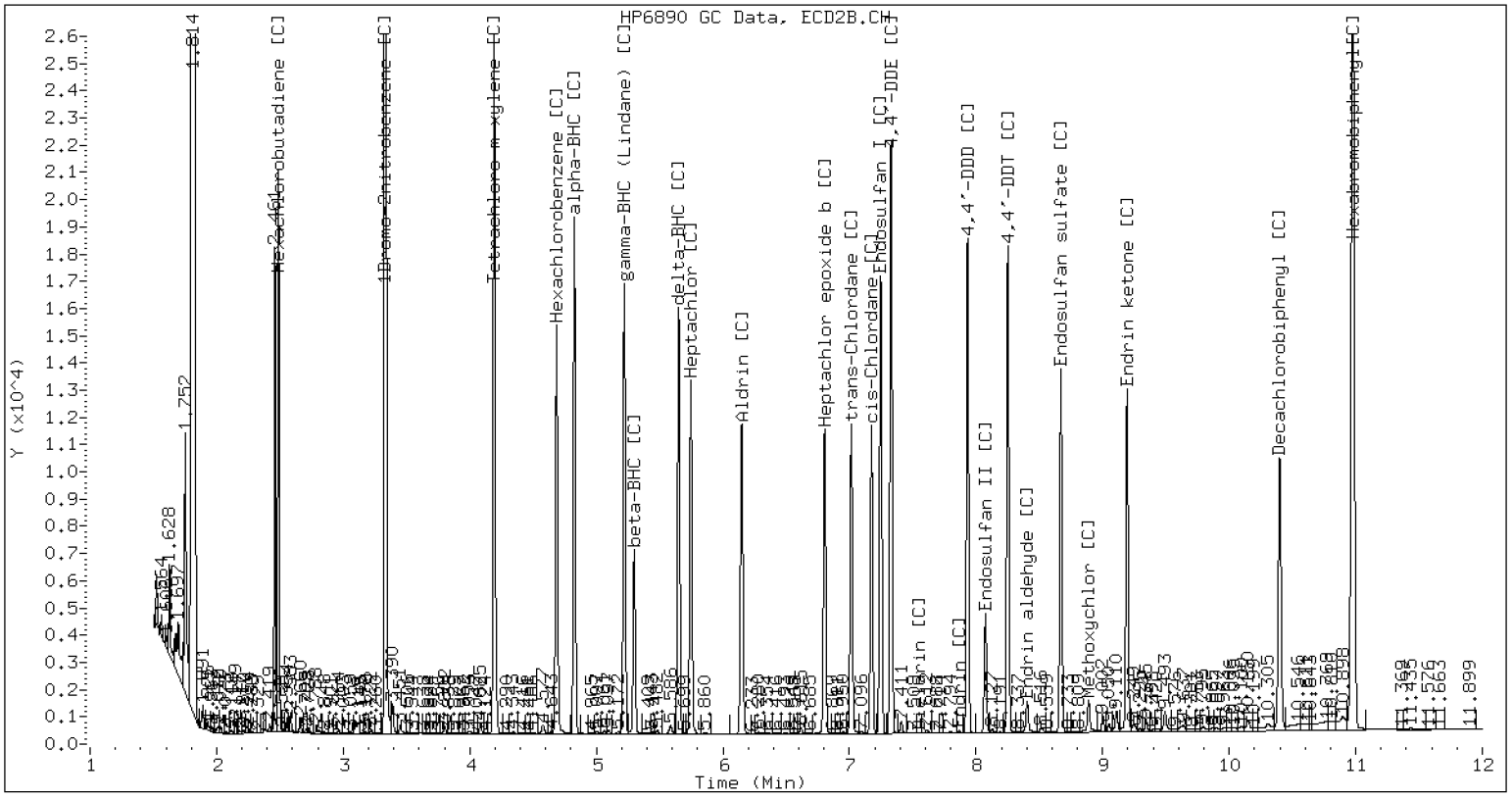

CLP-2 Manual Integration: NO

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
alpha-BHC			2.5	1.564682	5	1.558115	10	1.57359	20	1.566596	40	1.528219
beta-BHC			2.5	0.6501672	5	0.6116678	10	0.6049898	20	0.5910241	40	0.567415
gamma-BHC (Lindane)			2.5	1.364013	5	1.359107	10	1.367627	20	1.357913	40	1.317203
delta-BHC			2.5	1.267737	5	1.264366	10	1.278672	20	1.286232	40	1.255792
Heptachlor			2.5	1.26903	5	1.222902	10	1.218715	20	1.207966	40	1.145438
Aldrin			2.5	1.349967	5	1.349283	10	1.40535	20	1.372547	40	1.307197
Heptachlor Epoxide			2.5	1.231126	5	1.189593	10	1.20792	20	1.178021	40	1.104377
trans-Chlordane (beta-Chlordane)			2.5	1.262297	5	1.202181	10	1.202336	20	1.19062	40	1.128117
cis-Chlordane (alpha-chlordane)			2.5	1.308183	5	1.222582	10	1.200602	20	1.177182	40	1.111332
Endosulfan I			2.5	1.143813	5	1.097776	10	1.093658	20	1.076133	40	1.011287
4,4'-DDE			5	1.141182	10	1.108491	20	1.098369	40	1.077225	80	0.9961189
Dieldrin			5	1.225418	10	1.190449	20	1.185191	40	1.155764	80	1.077517
Endrin			5	1.158191	10	1.117563	20	1.079508	40	1.061387	80	0.9725989
Endosulfan II			5	0.9400399	10	0.9913797	20	1.005265	40	0.925043	80	0.9337917
4,4'-DDD			5	1.004568	10	0.9927897	20	0.9803235	40	0.9586353	80	0.8937077
Endrin Aldehyde			5	0.8167784	10	0.7834798	20	0.7706241	40	0.7573308	80	0.7147756
4,4'-DDT			5	1.007054	10	0.9936998	20	0.9768522	40	0.9722874	80	0.9123228
Endosulfan Sulfate			5	0.9534179	10	0.9413755	20	0.9158457	40	0.9056998	80	0.8542021
Endrin Ketone			5	1.134866	10	1.083274	20	1.043162	40	1.021136	80	0.9645492
Methoxychlor			25	0.4887243	50	0.4567517	100	0.4291758	200	0.4123964	400	0.380531
Hexachlorobutadiene			2.5	1.967135	5	1.727858	10	1.608612	20	1.550898	40	1.457962
Hexachlorobenzene			2.5	1.583946	5	1.509865	10	1.463674	20	1.414258	40	1.348389
Decachlorobiphenyl			5	0.9567749	10	0.8690419	20	0.8114883	40	0.7853665	80	0.7399881
Tetrachlorometaxylene			5	1.223478	10	1.154628	20	1.122612	40	1.064313	80	1.018952

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
alpha-BHC	80	1.449687										
beta-BHC	80	0.5324503										
gamma-BHC (Lindane)	80	1.246178										
delta-BHC	80	1.199667										
Heptachlor	80	1.064858										
Aldrin	80	1.204866										
Heptachlor Epoxide	80	1.016142										
trans-Chlordane (beta-Chlordane)	80	1.050129										
cis-Chlordane (alpha-chlordane)	80	1.036345										
Endosulfan I	80	0.9344351										
4,4'-DDE	160	0.9196699										
Dieldrin	160	0.9953457										
Endrin	160	0.903669										
Endosulfan II	160	0.8694106										
4,4'-DDD	160	0.8394108										
Endrin Aldehyde	160	0.6754471										
4,4'-DDT	160	0.8666848										
Endosulfan Sulfate	160	0.808554										
Endrin Ketone	160	0.9150773										
Methoxychlor	800	0.3710888										
Hexachlorobutadiene	80	1.368623										
Hexachlorobenzene	80	1.259233										
2,4'-DDE					5	0.8703192	10	0.8471901	20	0.8231684	40	0.7887622
2,4'-DDD					5	0.761682	10	0.7418629	20	0.7301989	40	0.7053717
2,4'-DDT					5	0.8194572	10	0.8004965	20	0.7842725	40	0.7616258
Oxychlordane					5	1.016746	10	1.011016	20	0.9890796	40	0.9530961
cis-Nonachlor					5	1.323191	10	1.277938	20	1.243982	40	1.217703

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
trans-Nonachlor					5	1.347777	10	1.328677	20	1.28535	40	1.249062
Mirex					5	0.8317764	10	0.8043457	20	0.7641487	40	0.7481553
Decachlorobiphenyl	160	0.7008722										
Tetrachlorometaxylene	160	0.9437243										

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,4'-DDE	80	0.7262802	160	0.6559468								
2,4'-DDD	80	0.6522807	160	0.6001736								
2,4'-DDT	80	0.7135595	160	0.6495601								
Oxychlordane	80	0.9018234	160	0.8351028								
cis-Nonachlor	80	1.140435	160	1.065099								
trans-Nonachlor	80	1.167639	160	1.085646								
Mirex	80	0.706171	160	0.6667706								

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 25		Level 26		Level 27		Level 28		Level 29		Level 30	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
alpha-BHC	1.540148	3.1			RSD (20)	
beta-BHC	0.5929524	6.8			RSD (20)	
gamma-BHC (Lindane)	1.33534	3.5			RSD (20)	
delta-BHC	1.258744	2.5			RSD (20)	
Heptachlor	1.188151	6.1			RSD (20)	
Aldrin	1.331535	5.2			RSD (20)	
Heptachlor Epoxide	1.15453	6.9			RSD (20)	
trans-Chlordane (beta-Chlordane)	1.172613	6.3			RSD (20)	
cis-Chlordane (alpha-chlordane)	1.176038	8.0			RSD (20)	
Endosulfan I	1.059517	7.1			RSD (20)	
4,4'-DDE	1.056843	7.9			RSD (20)	
Dieldrin	1.138281	7.6			RSD (20)	
Endrin	1.048819	9.0			RSD (20)	
Endosulfan II	0.944155	5.2			RSD (20)	
4,4'-DDD	0.9449058	6.9			RSD (20)	
Endrin Aldehyde	0.7530726	6.7			RSD (20)	
4,4'-DDT	0.9548168	5.7			RSD (20)	
Endosulfan Sulfate	0.8965158	6.2			RSD (20)	
Endrin Ketone	1.027011	7.7			RSD (20)	
Methoxychlor	0.4231113	10.6			RSD (20)	
Hexachlorobutadiene	1.613515	13.2			RSD (20)	
Hexachlorobenzene	1.429894	8.1			RSD (20)	
2,4'-DDE	0.7852778	10.3			RSD (20)	
2,4'-DDD	0.698595	8.8			RSD (20)	
2,4'-DDT	0.7548286	8.4			RSD (20)	
Oxychlordane	0.951144	7.5			RSD (20)	
cis-Nonachlor	1.211391	7.8			RSD (20)	
trans-Nonachlor	1.244025	8.1			RSD (20)	
Mirex	0.7535613	8.1			RSD (20)	
Decachlorobiphenyl	0.8105886	11.4			RSD (20)	
Tetrachlorometaxylene	1.087951	9.2			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
alpha-BHC [2C]			2.5	1.582358	5	1.586238	10	1.633164	20	1.640486	40	1.615441
beta-BHC [2C]			2.5	0.652782	5	0.6172948	10	0.6184608	20	0.6125812	40	0.5918008
gamma-BHC (Lindane) [2C]			2.5	1.355071	5	1.348783	10	1.381456	20	1.392772	40	1.366606
delta-BHC [2C]			2.5	1.323764	5	1.307234	10	1.339425	20	1.328433	40	1.331977
Heptachlor [2C]			2.5	1.270249	5	1.234236	10	1.258409	20	1.272245	40	1.215755
Aldrin [2C]			2.5	1.511397	5	1.416724	10	1.432636	20	1.430376	40	1.370917
Heptachlor Epoxide [2C]			2.5	1.2977	5	1.174596	10	1.174288	20	1.174706	40	1.114434
trans-Chlordane (beta-Chlordane) [2C]			2.5	1.25449	5	1.176102	10	1.164843	20	1.168848	40	1.125534
cis-Chlordane (alpha-chlordane) [2C]			2.5	1.258498	5	1.153199	10	1.135052	20	1.136251	40	1.089792
Endosulfan I [2C]			2.5	1.118263	5	1.044155	10	1.035412	20	1.034697	40	0.9885012
4,4'-DDE [2C]			5	1.120237	10	1.069625	20	1.064387	40	1.055415	80	0.9897135
Dieldrin [2C]			5	1.270008	10	1.162844	20	1.139359	40	1.136098	80	1.071389
Endrin [2C]			5	1.256912	10	1.17909	20	1.159477	40	1.149599	80	1.066056
Endosulfan II [2C]			5	1.296819	10	1.202961	20	1.188491	40	1.160501	80	1.099056
4,4'-DDD [2C]			5	1.234482	10	1.121556	20	1.117792	40	1.112003	80	1.04628
Endrin Aldehyde [2C]			5	0.9430111	10	0.8430348	20	0.8249196	40	0.8129946	80	0.7727701
4,4'-DDT [2C]			5	1.175911	10	1.077825	20	1.067612	40	1.073272	80	1.019364
Endosulfan Sulfate [2C]			5	1.137768	10	1.042553	20	1.030373	40	1.023023	80	0.9721732
Endrin Ketone [2C]			5	1.235631	10	1.119988	20	1.114405	40	1.100852	80	1.047659
Methoxychlor [2C]			25	0.5184064	50	0.4866753	100	0.4751666	200	0.4681736	400	0.4433957
Hexachlorobutadiene [2C]			2.5	1.975612	5	1.648845	10	1.492482	20	1.376096	40	1.341211
Hexachlorobenzene [2C]			2.5	1.602215	5	1.520618	10	1.491402	20	1.450251	40	1.385947
Decachlorobiphenyl [2C]			5	1.087142	10	0.9391597	20	0.8562421	40	0.8499592	80	0.8013928
Tetrachlorometaxylene [2C]			5	1.220863	10	1.179368	20	1.164832	40	1.127982	80	1.06878

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
alpha-BHC [2C]	80	1.561903										
beta-BHC [2C]	80	0.5642956										
gamma-BHC (Lindane) [2C]	80	1.31891										
delta-BHC [2C]	80	1.29291										
Heptachlor [2C]	80	1.144118										
Aldrin [2C]	80	1.281263										
Heptachlor Epoxide [2C]	80	1.046144										
trans-Chlordane (beta-Chlordane) [2C]	80	1.072685										
cis-Chlordane (alpha-chlordane) [2C]	80	1.03859										
Endosulfan I [2C]	80	0.9325836										
4,4'-DDE [2C]	160	0.9356313										
Dieldrin [2C]	160	1.019365										
Endrin [2C]	160	1.013782										
Endosulfan II [2C]	160	1.047801										
4,4'-DDD [2C]	160	1.006382										
Endrin Aldehyde [2C]	160	0.7380269										
4,4'-DDT [2C]	160	0.9933936										
Endosulfan Sulfate [2C]	160	0.9372514										
Endrin Ketone [2C]	160	1.016567										
Methoxychlor [2C]	800	0.4436418										
Hexachlorobutadiene [2C]	80	1.300813										
Hexachlorobenzene [2C]	80	1.304223										
2,4'-DDE [2C]					5	0.8343307	10	0.8052418	20	0.7431295	40	0.7258871
2,4'-DDD [2C]					5	0.9097548	10	0.8797099	20	0.8273813	40	0.8164191
2,4'-DDT [2C]					5	0.9400077	10	0.8804604	20	0.8502582	40	0.8485216
Oxychlordane [2C]					5	0.9644685	10	0.9467754	20	0.9033255	40	0.8966281
cis-Nonachlor [2C]					5	1.449238	10	1.407074	20	1.376474	40	1.372123

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
trans-Nonachlor [2C]					5	1.488853	10	1.51762	20	1.451789	40	1.447663
Mirex [2C]					5	0.9331395	10	0.8115521	20	0.7946205	40	0.762682
Decachlorobiphenyl [2C]	160	0.7711875										
Tetrachlorometaxylene [2C]	160	0.9948184										

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,4'-DDE [2C]	80	0.6667087	160	0.6020159								
2,4'-DDD [2C]	80	0.76623	160	0.7136982								
2,4'-DDT [2C]	80	0.7977257	160	0.7424898								
Oxychlordane [2C]	80	0.8433342	160	0.7909247								
cis-Nonachlor [2C]	80	1.313286	160	1.248174								
trans-Nonachlor [2C]	80	1.376815	160	1.306683								
Mirex [2C]	80	0.7399752	160	0.7075065								

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 25		Level 26		Level 27		Level 28		Level 29		Level 30	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
alpha-BHC [2C]	1.603265	1.9			RSD (20)	
beta-BHC [2C]	0.6095359	4.9			RSD (20)	
gamma-BHC (Lindane) [2C]	1.3606	1.9			RSD (20)	
delta-BHC [2C]	1.320624	1.3			RSD (20)	
Heptachlor [2C]	1.232502	3.9			RSD (20)	
Aldrin [2C]	1.407219	5.4			RSD (20)	
Heptachlor Epoxide [2C]	1.163645	7.1			RSD (20)	
trans-Chlordane (beta-Chlordane) [2C]	1.160417	5.2			RSD (20)	
cis-Chlordane (alpha-chlordane) [2C]	1.13523	6.5			RSD (20)	
Endosulfan I [2C]	1.025602	6.0			RSD (20)	
4,4'-DDE [2C]	1.039168	6.3			RSD (20)	
Dieldrin [2C]	1.133177	7.5			RSD (20)	
Endrin [2C]	1.137486	7.6			RSD (20)	
Endosulfan II [2C]	1.165938	7.4			RSD (20)	
4,4'-DDD [2C]	1.106416	7.0			RSD (20)	
Endrin Aldehyde [2C]	0.8224595	8.5			RSD (20)	
4,4'-DDT [2C]	1.067896	5.9			RSD (20)	
Endosulfan Sulfate [2C]	1.023857	6.7			RSD (20)	
Endrin Ketone [2C]	1.10585	6.8			RSD (20)	
Methoxychlor [2C]	0.4725766	6.0			RSD (20)	
Hexachlorobutadiene [2C]	1.52251	16.8			RSD (20)	
Hexachlorobenzene [2C]	1.459109	7.2			RSD (20)	
2,4'-DDE [2C]	0.7295523	11.8			RSD (20)	
2,4'-DDD [2C]	0.8188656	8.8			RSD (20)	
2,4'-DDT [2C]	0.8432439	8.1			RSD (20)	
Oxychlordane [2C]	0.8909094	7.3			RSD (20)	
cis-Nonachlor [2C]	1.361061	5.2			RSD (20)	
trans-Nonachlor [2C]	1.43157	5.4			RSD (20)	
Mirex [2C]	0.7915793	9.9			RSD (20)	
Decachlorobiphenyl [2C]	0.8841805	13.0			RSD (20)	
Tetrachlorometaxylene [2C]	1.126107	7.3			RSD (20)	

Printed: 12/17/2022 10:57:45AM

ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-PEM1	DS1	QC		1	K007286	K006953		
SKL0233-CAL1	INDAA	QC		2	K011594	K006953		
SKL0233-CAL2	INDAB	QC		3	K011593	K006953		
SKL0233-CAL3	INDAC	QC		4	K011592	K006953		
SKL0233-CAL4	INDAD	QC		5	K011591	K006953		
SKL0233-CAL5	INDAE	QC		6	K011590	K006953		
SKL0233-CAL6	INDAF	QC		7	K011589	K006953		
SKL0233-CAL7	INDAG	QC		8	K011463	K006953		
SKL0233-CAL8	WNDA	QC		9	K011595	K006953		
SKL0233-CAL9	WNDB	QC		10	K007148	K006953		
SKL0233-CALA	WNDC	QC		11	K007147	K006953		
SKL0233-CALB	WNDD	QC		12	K007146	K006953		
SKL0233-CALC	WNDE	QC		13	K007145	K006953		
SKL0233-CALD	WNDF	QC		14	K007144	K006953		
SKL0233-CALE	WNDG	QC		15	K007093	K006953		
SKL0233-CALM	NOS1	QC		16	K007375	K006953		
SKL0233-CALN	NOS2	QC		17	K007374	K006953		
SKL0233-CALO	NOS3	QC		18	K007373	K006953		
SKL0233-CALP	NOS4	QC		19	K007372	K006953		
SKL0233-CALQ	NOS5	QC		20	K007371	K006953		
SKL0233-CALR	NOS6	QC		21	K007370	K006953		
SKL0233-CALS	NOS7	QC		22	K007287	K006953		

Printed: 12/17/2022 10:57:45AM

ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-CALF	TOXAPH1	QC		23	K011601	K006953		
SKL0233-CALG	TOXAPH2	QC		24	K011600	K006953		
SKL0233-CALH	TOXAPH3	QC		25	K011599	K006953		
SKL0233-CALI	TOXAPH4	QC		26	K011598	K006953		
SKL0233-CALJ	TOXAPH5	QC		27	K011597	K006953		
SKL0233-CALK	TOXAPH6	QC		28	K011596	K006953		
SKL0233-CALL	TOXAPH7	QC		29	K008546	K006953		

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	14-DEC-2022 19:27	22121401.D	1	RINSE	
2	14-DEC-2022 19:44	22121402.D	1	RINSE	
3	14-DEC-2022 20:02	22121403.D	1	SEQ-IBL1	
4	14-DEC-2022 20:20	22121404.D	1	SEQ-PEM1	
5	14-DEC-2022 20:38	22121405.D	1	SEQ-CAL1	
6	14-DEC-2022 20:56	22121406.D	1	SEQ-CAL2	
7	14-DEC-2022 21:14	22121407.D	1	SEQ-CAL3	
8	14-DEC-2022 21:31	22121408.D	1	SEQ-CAL4	
9	14-DEC-2022 21:49	22121409.D	1	SEQ-CAL5	
10	14-DEC-2022 22:07	22121410.D	1	SEQ-CAL6	
11	14-DEC-2022 22:25	22121411.D	1	SEQ-CAL7	
12	14-DEC-2022 22:43	22121412.D	1	SEQ-CAL8	
13	14-DEC-2022 23:01	22121413.D	1	SEQ-CAL9	
14	14-DEC-2022 23:19	22121414.D	1	SEQ-CALA	
15	14-DEC-2022 23:36	22121415.D	1	SEQ-CALB	
16	14-DEC-2022 23:54	22121416.D	1	SEQ-CALC	
17	15-DEC-2022 00:12	22121417.D	1	SEQ-CALD	
18	15-DEC-2022 00:30	22121418.D	1	SEQ-CALE	
19	15-DEC-2022 00:48	22121419.D	1	SEQ-SCV1	
20	15-DEC-2022 01:06	22121420.D	1	SEQ-SCV2	
21	15-DEC-2022 01:24	22121421.D	1	SEQ-CAL1A	
22	15-DEC-2022 01:42	22121422.D	1	SEQ-CAL2A	
23	15-DEC-2022 01:59	22121423.D	1	SEQ-CAL3A	
24	15-DEC-2022 02:17	22121424.D	1	SEQ-CAL4A	
25	15-DEC-2022 02:35	22121425.D	1	SEQ-CAL5A	
26	15-DEC-2022 02:53	22121426.D	1	SEQ-CAL6A	
27	15-DEC-2022 03:11	22121427.D	1	SEQ-CAL7A	
28	15-DEC-2022 03:29	22121428.D	1	SEQ-CAL8A	
29	15-DEC-2022 03:46	22121429.D	1	SEQ-CAL9A	
30	15-DEC-2022 04:04	22121430.D	1	SEQ-CALAA	
31	15-DEC-2022 04:22	22121431.D	1	SEQ-CALAB	
32	15-DEC-2022 04:40	22121432.D	1	SEQ-CALAC	
33	15-DEC-2022 04:58	22121433.D	1	SEQ-CALAD	
34	15-DEC-2022 05:16	22121434.D	1	SEQ-CALAE	
35	15-DEC-2022 05:33	22121435.D	1	SEQ-PEM2	
36	15-DEC-2022 05:51	22121436.D	1	SEQ-ICV1	
37	15-DEC-2022 06:09	22121437.D	1	SEQ-ICV2	
38	15-DEC-2022 06:27	22121438.D	1	SEQ-ICV3	
39	15-DEC-2022 06:45	22121439.D	1	SEQ-ICV4	
40	15-DEC-2022 07:03	22121440.D	1	BKK0688-BLK1	
41	15-DEC-2022 07:21	22121441.D	1	BKK0688-BS1	
42	15-DEC-2022 07:39	22121442.D	1	BKK0688-BS2	
43	15-DEC-2022 07:57	22121443.D	1	BKK0688-BS3	
44	15-DEC-2022 08:15	22121444.D	1	BKK0688-BSD1	
45	15-DEC-2022 08:32	22121445.D	1	BKK0142-BLK1	
46	15-DEC-2022 08:50	22121446.D	1	BKK0142-BS1	
47	15-DEC-2022 09:08	22121447.D	1	BKK0142-BS2	
48	15-DEC-2022 09:26	22121448.D	1	BKK0142-BSD1	
49	15-DEC-2022 09:44	22121449.D	1	BKK0142-MS1	
50	15-DEC-2022 10:02	22121450.D	1	BKK0142-MSD1	

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b p

	Inject Date/Time	Filename	DF	LabID	ClientID
51	15-DEC-2022 10:20	22121451.D	1	22J0513-01	
52	15-DEC-2022 10:38	22121452.D	1	22J0513-04	
53	15-DEC-2022 10:55	22121453.D	1	22J0535-01	
54	15-DEC-2022 11:13	22121454.D	1	22K0429-01	
55	15-DEC-2022 11:31	22121455.D	1	22K0429-02	
56	15-DEC-2022 11:49	22121456.D	1	22K0429-03	
57	15-DEC-2022 12:07	22121457.D	1	SEQ-PEM3	
58	15-DEC-2022 12:25	22121458.D	1	SEQ-CCV1	
59	15-DEC-2022 12:43	22121459.D	1	SEQ-CCV2	
60	15-DEC-2022 13:01	22121460.D	1	SEQ-CCV3	
61	15-DEC-2022 13:19	22121461.D	1	SEQ-CCV4	
62	15-DEC-2022 13:36	22121462.D	1	BKK0380-BLK1	
63	15-DEC-2022 13:54	22121463.D	1	BKK0380-BS1	
64	15-DEC-2022 14:12	22121464.D	1	BKK0380-BSD1	
65	15-DEC-2022 14:30	22121465.D	1	22K0157-01	
66	15-DEC-2022 14:48	22121466.D	1	22K0230-01	
67	15-DEC-2022 15:06	22121467.D	1	22K0231-01	
68	15-DEC-2022 15:24	22121468.D	1	BKK0382-BLK1	
69	15-DEC-2022 15:42	22121469.D	1	BKK0382-BS1	
70	15-DEC-2022 16:00	22121470.D	1	BKK0382-BS2	
71	15-DEC-2022 16:18	22121471.D	1	BKK0382-BSD1	
72	15-DEC-2022 16:35	22121472.D	1	22K0075-01	
73	15-DEC-2022 16:53	22121473.D	1	SEQ-PEM4	
74	15-DEC-2022 17:11	22121474.D	1	SEQ-CCV5	
75	15-DEC-2022 17:29	22121475.D	1	SEQ-CCV6	
76	15-DEC-2022 17:47	22121476.D	1	SEQ-CCV7	
77	15-DEC-2022 18:05	22121477.D	1	SEQ-CCV8	
78	15-DEC-2022 18:23	22121478.D	1	BKK0537-BLK1	
79	15-DEC-2022 18:40	22121479.D	1	BKK0537-BS1	
80	15-DEC-2022 18:58	22121480.D	1	BKK0537-BS2	
81	15-DEC-2022 19:16	22121481.D	1	22K0194-01	
82	15-DEC-2022 19:34	22121482.D	1	22K0194-01RE1	10
83	15-DEC-2022 19:52	22121483.D	1	SEQ-PEM5	
84	15-DEC-2022 20:09	22121484.D	1	SEQ-CCV9	
85	15-DEC-2022 20:27	22121485.D	1	SEQ-CCVA	
86	15-DEC-2022 20:45	22121486.D	1	SEQ-CCVB	
87	15-DEC-2022 21:03	22121487.D	1	SEQ-CCVC	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 14-DEC-2022

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1113	22121454.D	22K0429-01		1	Heptachlor epoxide b,
1131	22121455.D	22K0429-02		1	Heptachlor epoxide b,
1149	22121456.D	22K0429-03		1	Hexachlorobenzene,
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2009	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane [C],
1113	22121454.D	22K0429-01		1	NO MANUAL INTEGRATION
1131	22121455.D	22K0429-02		1	Aldrin [C], Heptachlor epoxide b [C], trans-Chlordane [C],
1149	22121456.D	22K0429-03		1	Aldrin [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2010	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION

Security Status Report

Date: 17-Dec-2022 10:57

22121401.D	Data Locked	jrains, 17-Dec-2022 10:57
22121402.D	Data Locked	jrains, 17-Dec-2022 10:57
22121403.D	Data Locked	jrains, 17-Dec-2022 10:57
22121404.D	Data Locked	jrains, 17-Dec-2022 10:57
22121405.D	Data Locked	jrains, 17-Dec-2022 10:57
22121406.D	Data Locked	jrains, 17-Dec-2022 10:57
22121407.D	Data Locked	jrains, 17-Dec-2022 10:57
22121408.D	Data Locked	jrains, 17-Dec-2022 10:57
22121409.D	Data Locked	jrains, 17-Dec-2022 10:57
22121410.D	Data Locked	jrains, 17-Dec-2022 10:57
22121411.D	Data Locked	jrains, 17-Dec-2022 10:57
22121412.D	Data Locked	jrains, 17-Dec-2022 10:57
22121413.D	Data Locked	jrains, 17-Dec-2022 10:57
22121414.D	Data Locked	jrains, 17-Dec-2022 10:57
22121415.D	Data Locked	jrains, 17-Dec-2022 10:57
22121416.D	Data Locked	jrains, 17-Dec-2022 10:57
22121417.D	Data Locked	jrains, 17-Dec-2022 10:57
22121418.D	Data Locked	jrains, 17-Dec-2022 10:57
22121419.D	Data Locked	jrains, 17-Dec-2022 10:57
22121420.D	Data Locked	jrains, 17-Dec-2022 10:57
22121421.D	Data Locked	jrains, 17-Dec-2022 10:57
22121422.D	Data Locked	jrains, 17-Dec-2022 10:57
22121423.D	Data Locked	jrains, 17-Dec-2022 10:57
22121424.D	Data Locked	jrains, 17-Dec-2022 10:57
22121425.D	Data Locked	jrains, 17-Dec-2022 10:57
22121426.D	Data Locked	jrains, 17-Dec-2022 10:57
22121427.D	Data Locked	jrains, 17-Dec-2022 10:57
22121428.D	Data Locked	jrains, 17-Dec-2022 10:57
22121429.D	Data Locked	jrains, 17-Dec-2022 10:57
22121430.D	Data Locked	jrains, 17-Dec-2022 10:57
22121431.D	Data Locked	jrains, 17-Dec-2022 10:57
22121432.D	Data Locked	jrains, 17-Dec-2022 10:57
22121433.D	Data Locked	jrains, 17-Dec-2022 10:57
22121434.D	Data Locked	jrains, 17-Dec-2022 10:57

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121428.D
Level 2: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121429.D
Level 3: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121430.D
Level 4: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121431.D
Level 5: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121432.D
Level 6: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121433.D
Level 7: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121434.D

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
1 Hexachlorobutadiene [C]	+++++	1.97561	1.64885	1.49248	1.37610	1.34121	1.30081	1.52251	16.761
5 Hexachlorobenzene [C]	+++++	1.60221	1.52062	1.49140	1.45025	1.38595	1.30422	1.45911	7.170
6 alpha-BHC [C]	+++++	1.58236	1.58624	1.63316	1.64049	1.61544	1.56190	1.60327	1.946
7 gamma-BHC (Lindane) [C]	+++++	1.35507	1.34878	1.38146	1.39277	1.36661	1.31891	1.36060	1.921
8 beta-BHC [C]	+++++	0.65278	0.61729	0.61846	0.61258	0.59180	0.56430	0.60954	4.856
9 delta-BHC [C]	+++++	1.32376	1.30723	1.33943	1.32843	1.33198	1.29291	1.32062	1.312
10 Heptachlor [C]	+++++	1.27025	1.23424	1.25841	1.27225	1.21576	1.14412	1.23250	3.937
11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
12 Aldrin [C]	+++++	1.51140	1.41672	1.43264	1.43038	1.37092	1.28126	1.40722	5.441
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Heptachlor epoxide b [C]	+++++	1.29770	1.17460	1.17429	1.17471	1.11443	1.04614	1.16364	7.144
15 cis-Chlordane [C]	+++++	1.25850	1.15320	1.13505	1.13625	1.08979	1.03859	1.13523	6.464
16 trans-Chlordane [C]	+++++	1.25449	1.17610	1.16484	1.16885	1.12553	1.07269	1.16042	5.185
17 Endosulfan I [C]	+++++	1.11826	1.04415	1.03541	1.03470	0.98850	0.93258	1.02560	6.032
18 4,4'-DDE [C]	+++++	1.12024	1.06963	1.06439	1.05541	0.98971	0.93563	1.03917	6.320
19 Dieldrin [C]	+++++	1.27001	1.16284	1.13936	1.13610	1.07139	1.01937	1.13318	7.532
20 Endrin [C]	+++++	1.25691	1.17909	1.15948	1.14960	1.06606	1.01378	1.13749	7.566
21 4,4'-DDD [C]	+++++	1.23448	1.12156	1.11779	1.11200	1.04628	1.00638	1.10642	7.049
22 Endosulfan II [C]	+++++	1.29682	1.20296	1.18849	1.16050	1.09906	1.04780	1.16594	7.425

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
23 4,4'-DDT [C]	+++++	1.17591	1.07782	1.06761	1.07327	1.01936	0.99339	1.06790	5.878
24 Endrin aldehyde [C]	+++++	0.94301	0.84303	0.82492	0.81299	0.77277	0.73803	0.82246	8.537
25 Endosulfan sulfate [C]	+++++	1.13777	1.04255	1.03037	1.02302	0.97217	0.93725	1.02386	6.702
26 Methoxychlor [C]	+++++	0.51841	0.48668	0.47517	0.46817	0.44340	0.44364	0.47258	5.996
27 Endrin ketone [C]	+++++	1.23563	1.11999	1.11440	1.10085	1.04766	1.01657	1.10585	6.827
29 Aroclor-1016(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
31 Aroclor-1232(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
32 Aroclor-1242(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
33 Aroclor-1248(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
34 Aroclor-1254(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
35 Aroclor-1260(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
36 Aroclor-1262(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
37 Aroclor-1268(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
38 Toxaphene [C](1)	0.01492	0.01529	0.01573	0.01558	0.01527	0.01455	0.01387	0.01503	4.285
(2)	0.03524	0.03538	0.03581	0.03480	0.03351	0.03170	0.03010	0.03379	6.368
(3)	0.02615	0.02659	0.02671	0.02640	0.02571	0.02464	0.02387	0.02572	4.197
(4)	0.08868	0.08690	0.08740	0.08502	0.08225	0.07926	0.07782	0.08390	5.022
(5)	0.04138	0.04124	0.04193	0.04145	0.04102	0.04046	0.04062	0.04116	1.227
39 2,4-DDE [C]	*****	0.83433	0.80524	0.74313	0.72589	0.66671	0.60202	0.72955	11.810

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
40 2,4-DDD [C]	+++++	0.90975	0.87971	0.82738	0.81642	0.76623		
	0.71370						0.81887	8.785
41 2,4-DDT [C]	+++++	0.94001	0.88046	0.85026	0.84852	0.79773		
	0.74249						0.84324	8.052
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
43 Oxychlordane [C]	+++++	0.96447	0.94678	0.90333	0.89663	0.84333		
	0.79092						0.89091	7.271
44 trans-Nonachlor [C]	+++++	1.48885	1.51762	1.45179	1.44766	1.37681		
	1.30668						1.43157	5.406
45 cis-Nonachlor [C]	+++++	1.44924	1.40707	1.37647	1.37212	1.31329		
	1.24817						1.36106	5.224
46 Mirex [C]	+++++	0.93314	0.81155	0.79462	0.76268	0.73998		
	0.70751						0.79158	9.949
47 bis-(2-ethylhexyl) Phthalate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
48 Chlordane (NOS) [C](1)	0.03877	0.03690	0.03764	0.03840	0.03761	0.03805		
	0.03764						0.03786	1.615
(2)	0.04647	0.04439	0.04416	0.04357	0.04103	0.03978		
	0.03825						0.04252	6.844
(3)	0.14135	0.14252	0.14927	0.15059	0.14418	0.14081		
	0.13812						0.14383	3.173

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 4 Tetrachloro-m-xylene [C]	+++++	1.22086	1.17937	1.16483	1.12798	1.06878	0.99482	1.12611	7.306
$ 28 Decachlorobiphenyl [C]	+++++	1.08714	0.93916	0.85624	0.84996	0.80139	0.77119	0.88418	12.973

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd6.i\20220809.b\22080909.D
Level 2: \\target\share\chem4\ecd6.i\20220809.b\22080910.D
Level 3: \\target\share\chem4\ecd6.i\20220809.b\22080911.D
Level 4: \\target\share\chem4\ecd6.i\20220809.b\22080912.D
Level 5: \\target\share\chem4\ecd6.i\20220809.b\22080913.D
Level 6: \\target\share\chem4\ecd6.i\20220809.b\22080914.D
Level 7: \\target\share\chem4\ecd6.i\20220809.b\22080915.D

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
1 Hexachlorobutadiene	+++++	1.64215	1.55667	1.51049	1.47308	1.40536		
	1.30292						1.48178	7.988
5 Hexachlorobenzene	+++++	1.48647	1.40778	1.36481	1.31957	1.25458		
	1.15582						1.33150	8.750
6 alpha-BHC	+++++	1.41183	1.40802	1.42270	1.42790	1.37811		
	1.29587						1.39074	3.567
7 gamma-BHC (Lindane)	+++++	1.20108	1.18733	1.20704	1.21598	1.18532		
	1.11861						1.18589	2.948
8 beta-BHC	+++++	0.65244	0.60612	0.58927	0.57533	0.54649		
	0.50588						0.57925	8.684
9 delta-BHC	+++++	1.15252	1.13315	1.18185	1.21952	1.21492		
	1.16159						1.17726	2.950
10 Heptachlor	+++++	1.18674	1.12881	1.11527	1.09009	1.03076		
	0.94214						1.08230	7.897
11 Aldrin	+++++	1.14505	1.10493	1.10576	1.09698	1.04621		
	0.96536						1.07738	5.877

ARI Labs, Inc.

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Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Heptachlor epoxide b	+++++	1.05278	0.99602	0.98316	0.95413	0.89408	0.81733	0.94959	8.751
15 cis-Chlordane	+++++	1.00217	0.95563	0.94931	0.93343	0.89233	0.82943	0.92705	6.424
16 trans-Chlordane	+++++	1.02223	0.96054	0.95840	0.94631	0.90606	0.84267	0.93937	6.420
17 Endosulfan I	+++++	1.10444	1.01004	0.97510	0.92642	0.86761	0.77363	0.94287	12.207
18 4,4'-DDE	+++++	0.85783	0.84618	0.86175	0.85068	0.80349	0.73346	0.82557	6.027
19 Dieldrin	+++++	1.02112	0.97469	0.96064	0.93395	0.87876	0.79720	0.92773	8.553
20 Endrin	+++++	1.03359	0.99258	1.01493	1.03951	0.95184	0.92125	0.99228	4.755
21 4,4'-DDD	+++++	1.26749	1.21690	1.21140	1.19455	1.09258	1.02286	1.16763	7.815
22 Endosulfan II	+++++	1.32213	1.30831	1.28817	1.25191	1.14300	1.05695	1.22841	8.614

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
23 4,4'-DDT	+++++	1.20278	1.19912	1.21231	1.21971	1.13284	1.06544	1.17203	5.186
24 Endrin aldehyde	+++++	1.05042	1.01673	1.00197	0.99460	0.91340	0.84575	0.97048	7.836
25 Methoxychlor	+++++	0.56408	0.54010	0.51985	0.50693	0.45626	0.43428	0.50358	9.854
26 Endosulfan sulfate	+++++	1.14290	1.11216	1.09802	1.09968	1.00734	0.94888	1.06816	6.922
27 Endrin ketone	+++++	1.47959	1.40243	1.34455	1.31335	1.19489	1.12695	1.31029	9.966
29 Aroclor-1016(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
31 Aroclor-1232(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
32 Aroclor-1242(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(6)	*****	*****	*****	*****	*****	*****	*****	*****	*****
33 Aroclor-1248(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
34 Aroclor-1254(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
35 Aroclor-1260(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
36 Aroclor-1262(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
37 Aroclor-1268(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
38 Toxaphene(1)	0.02824	0.03896	0.03693	0.03480	0.03418	0.02891	0.02792	0.03285	13.645
(2)	0.08343	0.10636	0.10204	0.09499	0.09608	0.08394	0.08263	0.09278	10.362
(3)	0.04776	0.06283	0.06069	0.06020	0.06090	0.05141	0.05119	0.05643	10.755
(4)	0.05098	0.07225	0.07089	0.06844	0.06847	0.06296	0.06388	0.06541	11.021
(5)	0.04955	0.06896	0.06748	0.06372	0.06603	0.05846	0.05934	0.06194	10.880

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
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Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
39 2,4-DDE	+++++	1.14103	1.08072	1.09005	1.06169	0.88466	0.89319	1.02522	10.614
40 2,4-DDD	+++++	1.08881	1.01841	0.99599	0.98400	0.85150	0.85318	0.96531	9.816
41 2,4-DDT	+++++	0.97799	0.97179	0.97332	0.98841	0.88743	0.88215	0.94685	5.117
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Oxychlordane	+++++	1.32927	1.24890	1.22496	1.20236	1.04785	1.05015	1.18392	9.540
44 trans-Nonachlor	+++++	1.68629	1.57989	1.58456	1.55669	1.34437	1.36253	1.51906	8.949
45 cis-Nonachlor	+++++	1.62941	1.55213	1.53413	1.52347	1.34758	1.35527	1.49033	7.639
46 Mirex	+++++	1.20478	1.11168	1.05006	1.00932	0.85381	0.85786	1.01459	13.749
47 bis-(2-ethylhexyl) Phthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Chlordane (NOS)(1)	0.06029	0.05735	0.05369	0.05005	0.04581	0.04808	0.04531	0.05151	11.230
(2)	0.15038	0.14213	0.13501	0.13074	0.12020	0.12674	0.12030	0.13221	8.482

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
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Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(3)	0.17221	0.15459	0.13623	0.13893	0.12753	0.13518	0.13160	0.14232	11.024
49 Trifluralin	*****	*****	*****	*****	*****	*****	*****	*****	*****
50 Dacthal	*****	*****	*****	*****	*****	*****	*****	*****	*****
51 Oxadiazon	*****	*****	*****	*****	*****	*****	*****	*****	*****
52 Kelthane	*****	*****	*****	*****	*****	*****	*****	*****	*****
53 Chlorpyrifos	*****	*****	*****	*****	*****	*****	*****	*****	*****
54 Methyl Parathion	*****	*****	*****	*****	*****	*****	*****	*****	*****
55 Ethyl Parathion	*****	*****	*****	*****	*****	*****	*****	*****	*****
56 Kepone	*****	*****	*****	*****	*****	*****	*****	*****	*****
57 1-Chloropyrene	*****	*****	*****	*****	*****	*****	*****	*****	*****
$ 4 Tetrachloro-m-xylene	*****	1.10401	1.05839	1.02629	0.99588	0.93352	0.85040	0.99475	9.166

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	___ RRF	% RSD
	80.000 Level 7							
$ 28 Decachlorobiphenyl	+++++	0.99444	0.96249	0.90111	0.87014	0.79161		
	0.75653						0.87939	10.607

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121405	22121406	22121407	22121408	22121409	22121410	22121411
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022
INJ.TIME:	20:38	20:56	21:14	21:31	21:49	22:07	22:25

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene	2.323	2.323	2.324	2.323	2.324	2.324	2.324	2.324	2.294-2.354	2.323	0.000
* 2 1Bromo-2nitrobenzene	3.151	3.151	3.152	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
* 3 Hexabromobiphenyl	9.504	9.503	9.504	9.505	9.505	9.504	9.504	9.505	9.475-9.535	9.504	0.001
$ 4 Tetrachloro-m-xylene	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.798-3.858	3.828	0.000
5 Hexachlorobenzene	4.182	4.182	4.183	4.183	4.182	4.183	4.182	4.182	4.152-4.212	4.183	0.000
6 alpha-BHC	4.342	4.342	4.343	4.343	4.342	4.342	4.342	4.342	4.312-4.372	4.342	0.000
7 gamma-BHC (Lindane)	4.645	4.645	4.646	4.646	4.645	4.646	4.645	4.645	4.615-4.675	4.645	0.000
8 beta-BHC	4.726	4.726	4.727	4.726	4.726	4.726	4.726	4.726	4.696-4.756	4.726	0.000
9 delta-BHC	4.909	4.909	4.910	4.910	4.909	4.910	4.910	4.909	4.879-4.939	4.910	0.000
10 Heptachlor	5.130	5.129	5.130	5.130	5.130	5.130	5.130	5.130	5.100-5.160	5.130	0.000
11 Aldrin	5.453	5.453	5.455	5.454	5.454	5.454	5.454	5.454	5.424-5.484	5.454	0.000
12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
14 Heptachlor epoxide b	6.130	6.130	6.132	6.131	6.130	6.130	6.130	6.130	6.100-6.160	6.131	0.001
15 cis-Chlordane	6.417	6.417	6.417	6.418	6.417	6.417	6.417	6.417	6.387-6.447	6.417	0.000
16 trans-Chlordane	6.270	6.271	6.271	6.271	6.271	6.271	6.271	6.271	6.241-6.301	6.271	0.000
17 Endosulfan I	6.572	6.572	6.573	6.573	6.572	6.572	6.573	6.572	6.542-6.602	6.573	0.000

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	6.489	6.489	6.490	6.490	6.489	6.489	6.490	6.489	6.459-6.519	6.489	0.000
	19 Dieldrin	6.831	6.832	6.832	6.832	6.831	6.832	6.832	6.831	6.801-6.861	6.832	0.000
	20 Endrin	7.081	7.081	7.082	7.082	7.081	7.082	7.082	7.081	7.051-7.111	7.082	0.000
	21 4,4'-DDD	7.135	7.136	7.136	7.136	7.135	7.136	7.135	7.135	7.105-7.165	7.136	0.000
	22 Endosulfan II	7.318	7.317	7.318	7.318	7.317	7.317	7.317	7.317	7.287-7.347	7.317	0.000
	23 4,4'-DDT	7.427	7.427	7.428	7.428	7.427	7.427	7.428	7.427	7.397-7.457	7.428	0.000
	24 Endrin aldehyde	7.746	7.746	7.746	7.746	7.746	7.746	7.746	7.746	7.716-7.776	7.746	0.000
	25 Methoxychlor	7.912	7.912	7.913	7.912	7.912	7.912	7.912	7.912	7.882-7.942	7.912	0.000
	26 Endosulfan sulfate	8.180	8.179	8.180	8.180	8.180	8.179	8.180	8.180	8.150-8.210	8.180	0.000
	27 Endrin ketone	8.453	8.452	8.454	8.453	8.453	8.453	8.454	8.453	8.423-8.483	8.453	0.001
$	28 Decachlorobiphenyl	9.355	9.354	9.355	9.355	9.355	9.355	9.356	9.355	9.325-9.385	9.355	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
	39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121405	22121406	22121407	22121408	22121409	22121410	22121411
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022
INJ.TIME:	20:38	20:56	21:14	21:31	21:49	22:07	22:25

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene [C	2.500	2.500	2.500	2.500	2.500	2.500	2.501	2.501	2.471-2.531	2.500	0.000
* 2 1Bromo-2nitrobenzene [	3.350	3.350	3.351	3.351	3.350	3.351	3.351	3.351	3.321-3.381	3.351	0.000
* 3 Hexabromobiphenyl[C]	11.054	11.053	11.054	11.054	11.053	11.053	11.054	11.054	11.024-11.084	11.054	0.000
$ 4 Tetrachloro-m-xylene [	4.220	4.220	4.220	4.220	4.220	4.221	4.220	4.220	4.190-4.250	4.220	0.000
5 Hexachlorobenzene [C]	4.718	4.718	4.718	4.718	4.718	4.718	4.718	4.718	4.688-4.748	4.718	0.000
6 alpha-BHC [C]	4.860	4.859	4.860	4.860	4.860	4.860	4.861	4.861	4.831-4.891	4.860	0.000
7 gamma-BHC (Lindane) [C	5.257	5.257	5.258	5.258	5.258	5.258	5.258	5.258	5.228-5.288	5.258	0.000
8 beta-BHC [C]	5.337	5.337	5.338	5.337	5.337	5.337	5.337	5.337	5.307-5.367	5.337	0.000
9 delta-BHC [C]	5.690	5.691	5.691	5.691	5.690	5.691	5.691	5.691	5.661-5.721	5.691	0.000
10 Heptachlor [C]	5.786	5.787	5.787	5.787	5.787	5.787	5.787	5.787	5.757-5.817	5.787	0.000
11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
12 Aldrin [C]	6.190	6.190	6.191	6.191	6.191	6.190	6.191	6.191	6.161-6.221	6.191	0.000
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
14 Heptachlor epoxide b [	6.845	6.845	6.845	6.846	6.845	6.846	6.845	6.845	6.815-6.875	6.845	0.000
15 cis-Chlordane [C]	7.215	7.215	7.216	7.216	7.216	7.215	7.216	7.216	7.186-7.246	7.215	0.000
16 trans-Chlordane [C]	7.056	7.055	7.056	7.056	7.056	7.056	7.056	7.056	7.026-7.086	7.056	0.000
17 Endosulfan I [C]	7.288	7.288	7.289	7.289	7.289	7.288	7.289	7.289	7.259-7.319	7.288	0.000

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	7.370	7.370	7.371	7.371	7.370	7.371	7.371	7.371	7.341-7.401	7.371	0.000
	19 Dieldrin [C]	7.582	7.582	7.583	7.583	7.582	7.582	7.583	7.583	7.553-7.613	7.582	0.000
	20 Endrin [C]	7.906	7.906	7.906	7.907	7.907	7.907	7.907	7.907	7.877-7.937	7.907	0.000
	21 4,4'-DDD [C]	7.976	7.976	7.976	7.977	7.976	7.976	7.976	7.976	7.946-8.006	7.976	0.000
	22 Endosulfan II [C]	8.117	8.116	8.117	8.117	8.117	8.117	8.117	8.117	8.087-8.147	8.117	0.000
	23 4,4'-DDT [C]	8.294	8.294	8.294	8.295	8.295	8.295	8.295	8.295	8.265-8.325	8.295	0.000
	24 Endrin aldehyde [C]	8.448	8.447	8.448	8.448	8.448	8.448	8.448	8.448	8.418-8.478	8.448	0.000
	25 Endosulfan sulfate [C]	8.715	8.714	8.715	8.715	8.715	8.715	8.715	8.715	8.685-8.745	8.715	0.000
	26 Methoxychlor [C]	8.935	8.934	8.935	8.936	8.935	8.935	8.936	8.936	8.906-8.966	8.935	0.001
	27 Endrin ketone [C]	9.239	9.239	9.239	9.240	9.239	9.239	9.240	9.240	9.210-9.270	9.239	0.000
$	28 Decachlorobiphenyl [C]	10.466	10.465	10.466	10.466	10.466	10.466	10.467	10.467	10.437-10.497	10.466	0.001
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
	39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121412	22121413	22121414	22121415	22121416	22121417	22121418
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	22:43	23:01	23:19	23:36	23:54	00:12	00:30

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.324	2.294-2.354	+++++	+++++
*	2 1Bromo-2nitrobenzene	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
*	3 Hexabromobiphenyl	9.504	9.504	9.504	9.504	9.504	9.504	9.504	9.505	9.475-9.535	9.504	0.000
$	4 Tetrachloro-m-xylene	+++++	+++++	+++++	+++++	3.800	3.800	3.800	3.828	3.798-3.858	3.800	0.000
	5 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.182	4.152-4.212	+++++	+++++
	6 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.342	4.312-4.372	+++++	+++++
	7 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.645	4.615-4.675	+++++	+++++
	8 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.726	4.696-4.756	+++++	+++++
	9 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.909	4.879-4.939	+++++	+++++
	10 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.130	5.100-5.160	+++++	+++++
	11 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.454	5.424-5.484	+++++	+++++
	12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
	14 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.130	6.100-6.160	+++++	+++++
	15 cis-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.417	6.387-6.447	+++++	+++++
	16 trans-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.271	6.241-6.301	+++++	+++++
	17 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.572	6.542-6.602	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
	19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
	20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
	21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
	22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
	23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
	24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
	25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
	26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
	27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
$	28 Decachlorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.355	9.325-9.385	+++++	+++++
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
	39 2,4-DDE	6.106	6.106	6.106	6.106	6.106	6.106	6.106	6.106	6.076-6.136	6.106	0.000

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	6.681	6.681	6.681	6.681	6.681	6.681	6.680	6.681	6.651-6.711	6.681	0.000
41 2,4-DDT	6.956	6.957	6.956	6.956	6.957	6.956	6.956	6.957	6.927-6.987	6.956	0.000
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	6.014	6.015	6.014	6.015	6.014	6.014	6.014	6.014	5.984-6.044	6.015	0.000
44 trans-Nonachlor	6.397	6.398	6.398	6.398	6.397	6.397	6.397	6.397	6.367-6.427	6.398	0.000
45 cis-Nonachlor	7.112	7.112	7.111	7.112	7.112	7.112	7.112	7.112	7.082-7.142	7.112	0.000
46 Mirex	8.082	8.082	8.082	8.082	8.082	8.082	8.082	8.082	8.052-8.112	8.082	0.000
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121412	22121413	22121414	22121415	22121416	22121417	22121418
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	22:43	23:01	23:19	23:36	23:54	00:12	00:30

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.501	2.471-2.531	+++++	+++++
*	2 1Bromo-2nitrobenzene [	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.321-3.381	3.351	0.000
*	3 Hexabromobiphenyl[C]	11.054	11.054	11.054	11.054	11.054	11.054	11.054	11.054	11.024-11.084	11.054	0.000
$	4 Tetrachloro-m-xylene [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.220	4.190-4.250	+++++	+++++
	5 Hexachlorobenzene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.718	4.688-4.748	+++++	+++++
	6 alpha-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.861	4.831-4.891	+++++	+++++
	7 gamma-BHC (Lindane) [C	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.258	5.228-5.288	+++++	+++++
	8 beta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.337	5.307-5.367	+++++	+++++
	9 delta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.691	5.661-5.721	+++++	+++++
	10 Heptachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.787	5.757-5.817	+++++	+++++
	11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
	12 Aldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.191	6.161-6.221	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
	14 Heptachlor epoxide b [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.845	6.815-6.875	+++++	+++++
	15 cis-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.216	7.186-7.246	+++++	+++++
	16 trans-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.056	7.026-7.086	+++++	+++++
	17 Endosulfan I [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.289	7.259-7.319	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
$ 28 Decachlorobiphenyl [C]	+++++	+++++	+++++	+++++	+++++	+++++	10.471	10.467	10.437-10.497	10.471	0.000
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
39 2,4-DDE [C]	7.036	7.036	7.035	7.036	7.036	7.036	7.036	7.036	7.006-7.066	7.036	0.000

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	7.591	7.590	7.590	7.591	7.590	7.591	7.591	7.591	7.561-7.621	7.591	0.000
41 2,4-DDT [C]	7.913	7.914	7.913	7.913	7.913	7.914	7.913	7.913	7.883-7.943	7.913	0.000
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	6.741	6.741	6.741	6.741	6.741	6.741	6.741	6.741	6.711-6.771	6.741	0.000
44 trans-Nonachlor [C]	7.154	7.154	7.154	7.155	7.154	7.155	7.155	7.155	7.125-7.185	7.154	0.000
45 cis-Nonachlor [C]	7.975	7.975	7.975	7.975	7.975	7.975	7.975	7.975	7.945-8.005	7.975	0.000
46 Mirex [C]	9.223	9.223	9.222	9.223	9.222	9.223	9.223	9.223	9.193-9.253	9.223	0.000
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121421	22121422	22121423	22121424	22121425	22121426	22121427
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	01:24	01:42	01:59	02:17	02:35	02:53	03:11

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.324	2.294-2.354	+++++	+++++
*	2 1Bromo-2nitrobenzene	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
*	3 Hexabromobiphenyl	9.504	9.504	9.505	9.504	9.504	9.504	9.505	9.505	9.475-9.535	9.504	0.000
$	4 Tetrachloro-m-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.828	3.798-3.858	+++++	+++++
	5 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.182	4.152-4.212	+++++	+++++
	6 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.342	4.312-4.372	+++++	+++++
	7 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.645	4.615-4.675	+++++	+++++
	8 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.726	4.696-4.756	+++++	+++++
	9 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.909	4.879-4.939	+++++	+++++
	10 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.130	5.100-5.160	+++++	+++++
	11 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.454	5.424-5.484	+++++	+++++
	12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
	14 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.130	6.100-6.160	+++++	+++++
	15 cis-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.417	6.387-6.447	+++++	+++++
	16 trans-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.271	6.241-6.301	+++++	+++++
	17 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.572	6.542-6.602	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
	19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
	20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
	21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
	22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
	23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
	24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
	25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
	26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
	27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
$	28 Decachlorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	9.380	9.355	9.325-9.385	9.380	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
	39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	5.593	5.593	5.593	5.593	5.593	5.592	5.593	5.593	5.563-5.623	5.593	0.000
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121421	22121422	22121423	22121424	22121425	22121426	22121427
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	01:24	01:42	01:59	02:17	02:35	02:53	03:11

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.501	2.471-2.531	+++++	+++++
*	2 1Bromo-2nitrobenzene [	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.321-3.381	3.351	0.000
*	3 Hexabromobiphenyl[C]	11.054	11.055	11.054	11.054	11.054	11.054	11.054	11.054	11.024-11.084	11.054	0.000
$	4 Tetrachloro-m-xylene [	4.215	+++++	+++++	+++++	+++++	+++++	+++++	4.220	4.190-4.250	4.215	0.000
	5 Hexachlorobenzene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.718	4.688-4.748	+++++	+++++
	6 alpha-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.861	4.831-4.891	+++++	+++++
	7 gamma-BHC (Lindane) [C	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.258	5.228-5.288	+++++	+++++
	8 beta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.337	5.307-5.367	+++++	+++++
	9 delta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.691	5.661-5.721	+++++	+++++
	10 Heptachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.787	5.757-5.817	+++++	+++++
	11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
	12 Aldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.191	6.161-6.221	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
	14 Heptachlor epoxide b [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.845	6.815-6.875	+++++	+++++
	15 cis-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.216	7.186-7.246	+++++	+++++
	16 trans-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.056	7.026-7.086	+++++	+++++
	17 Endosulfan I [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.289	7.259-7.319	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
	19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
	20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
	21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
	22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
	23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
	24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
	25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
	26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
	27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
$	28 Decachlorobiphenyl [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.467	10.437-10.497	+++++	+++++
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
	39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	5.612	5.612	5.612	5.611	5.612	5.612	5.612	5.612	5.582-5.642	5.612	0.000
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121428	22121429	22121430	22121431	22121432	22121433	22121434
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	03:29	03:46	04:04	04:22	04:40	04:58	05:16

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.324	2.294-2.354	+++++	+++++
*	2 1Bromo-2nitrobenzene	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
*	3 Hexabromobiphenyl	9.505	9.504	9.504	9.504	9.505	9.504	9.504	9.505	9.475-9.535	9.504	0.000
$	4 Tetrachloro-m-xylene	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.798-3.858	3.828	0.000
	5 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.182	4.152-4.212	+++++	+++++
	6 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.342	4.312-4.372	+++++	+++++
	7 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.645	4.615-4.675	+++++	+++++
	8 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.726	4.696-4.756	+++++	+++++
	9 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.909	4.879-4.939	+++++	+++++
	10 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.130	5.100-5.160	+++++	+++++
	11 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.454	5.424-5.484	+++++	+++++
	12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
	14 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.130	6.100-6.160	+++++	+++++
	15 cis-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.417	6.387-6.447	+++++	+++++
	16 trans-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.271	6.241-6.301	+++++	+++++
	17 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.572	6.542-6.602	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18	4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
19	Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
20	Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
21	4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
22	Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
23	4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
24	Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
25	Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
26	Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
27	Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
$ 28	Decachlorobiphenyl	9.355	9.355	9.355	9.355	9.356	9.356	9.355	9.355	9.325-9.385	9.356	0.000
29	Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
30	Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
31	Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
32	Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
33	Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
34	Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
35	Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
36	Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
37	Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
38	Toxaphene	6.931	6.931	6.931	6.931	6.931	6.931	6.931	6.931	6.901-6.961	6.931	0.000
39	2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121428	22121429	22121430	22121431	22121432	22121433	22121434
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	03:29	03:46	04:04	04:22	04:40	04:58	05:16

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.501	2.471-2.531	+++++	+++++
*	2 1Bromo-2nitrobenzene [	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.321-3.381	3.351	0.000
*	3 Hexabromobiphenyl[C]	11.055	11.054	11.054	11.055	11.054	11.054	11.054	11.054	11.024-11.084	11.054	0.000
$	4 Tetrachloro-m-xylene [	4.221	4.220	4.220	4.221	4.221	4.221	4.221	4.220	4.190-4.250	4.221	0.000
	5 Hexachlorobenzene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.718	4.688-4.748	+++++	+++++
	6 alpha-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.861	4.831-4.891	+++++	+++++
	7 gamma-BHC (Lindane) [C	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.258	5.228-5.288	+++++	+++++
	8 beta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.337	5.307-5.367	+++++	+++++
	9 delta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.691	5.661-5.721	+++++	+++++
	10 Heptachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.787	5.757-5.817	+++++	+++++
	11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
	12 Aldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.191	6.161-6.221	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
	14 Heptachlor epoxide b [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.845	6.815-6.875	+++++	+++++
	15 cis-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.216	7.186-7.246	+++++	+++++
	16 trans-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.056	7.026-7.086	+++++	+++++
	17 Endosulfan I [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.289	7.259-7.319	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
	19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
	20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
	21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
	22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
	23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
	24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
	25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
	26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
	27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
$	28 Decachlorobiphenyl [C]	10.467	10.467	10.467	10.466	10.466	10.466	10.467	10.467	10.437-10.497	10.466	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	7.125	7.125	7.125	7.125	7.126	7.126	7.126	7.126	7.096-7.156	7.125	0.000
	39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121403.D
Data file 2: /20221214.b/B20221214.b/22121403.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-IBL1
Client ID:
Injection Date: 14-DEC-2022 20:02
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	alpha-BHC
----			----			0.00	0.00	---	beta-BHC
----			----			0.00	0.00	---	delta-BHC
----			----			0.00	0.00	---	gamma-BHC (Lindane)
----			----			0.00	0.00	---	Heptachlor
----			----			0.00	0.00	---	Aldrin
----			6.824	-0.021	2291	0.00	0.14	---	Heptachlor epoxide b
----			----			0.00	0.00	---	Endosulfan I
----			7.597	0.015	1696	0.00	0.11	---	Dieldrin
----			----			0.00	0.00	---	4,4'-DDE
----			----			0.00	0.00	---	Endrin
----			8.135	0.018	285	0.00	0.02	---	Endosulfan II
----			7.975	-0.002	1369	0.00	0.12	---	4,4'-DDD
----			8.720	0.005	243	0.00	0.02	---	Endosulfan sulfate
----			----			0.00	0.00	---	4,4'-DDT
----			8.924	-0.013	546	0.00	0.11	---	Methoxychlor
8.444	-0.009	1962	9.226	-0.013	2888	0.23	0.25	10.1	Endrin ketone
----			----			0.00	0.00	---	Endrin aldehyde
----			7.070	0.014	4708	0.00	0.30	---	trans-Chlordane
----			7.219	0.003	810	0.00	0.05	---	cis-Chlordane
2.351	0.028	6378	2.512	0.012	33421	0.42	1.60	116.6*	Hexachlorobutadiene
4.183	0.001	4869	4.721	0.003	421	0.36	0.02	178.1*	Hexachlorobenzene
3.828	0.000	375293	4.220	-0.000	579767	36.70	37.46	2.1	Tetrachloro-m-xylene
9.356	0.001	243291	10.467	0.000	323668	35.86	35.40	1.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

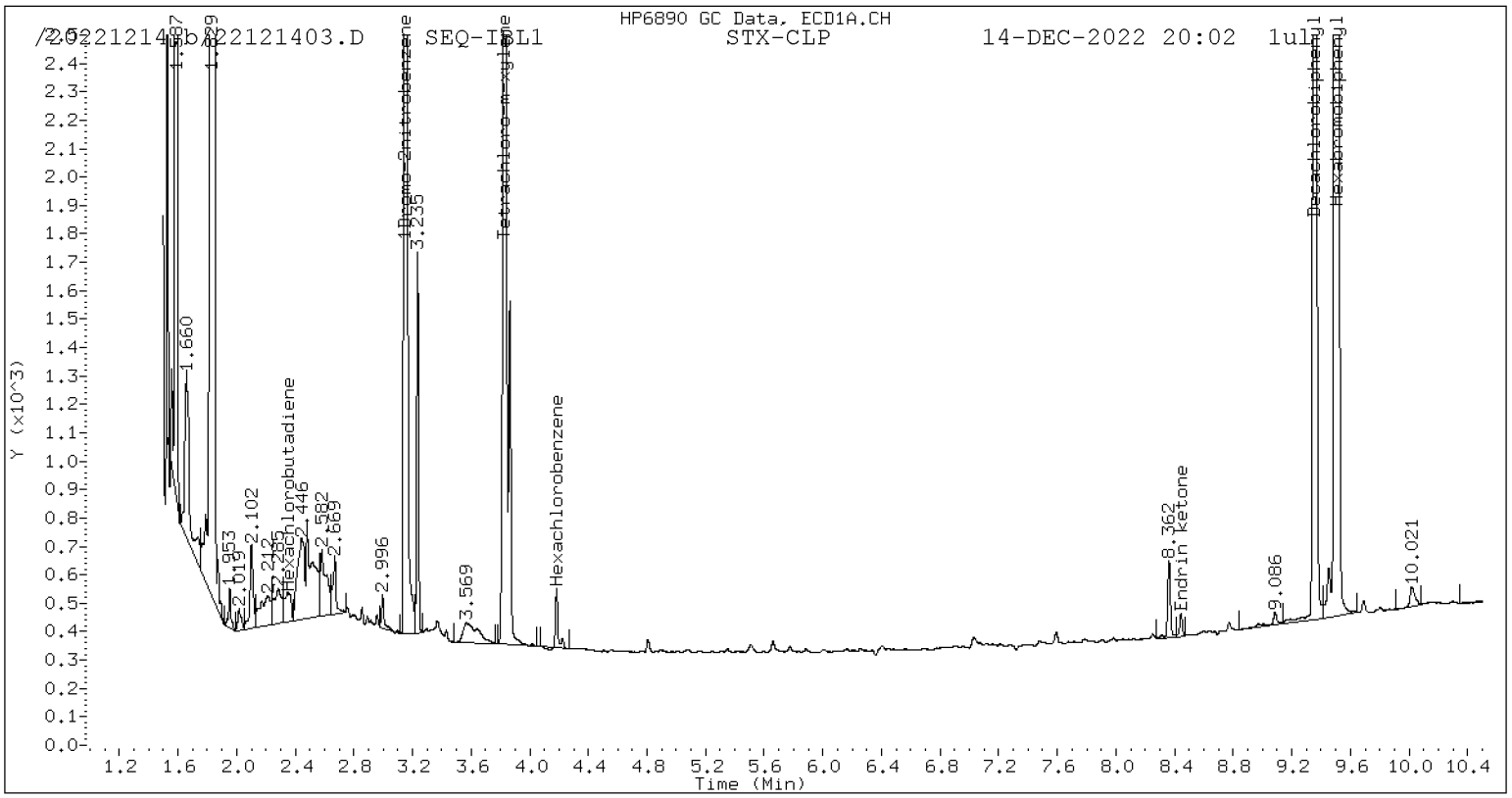
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	751998	5.8
Hexabromobiphenyl	641833	669495	4.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1099555	3.8
Hexabromobiphenyl	797125	827325	3.8

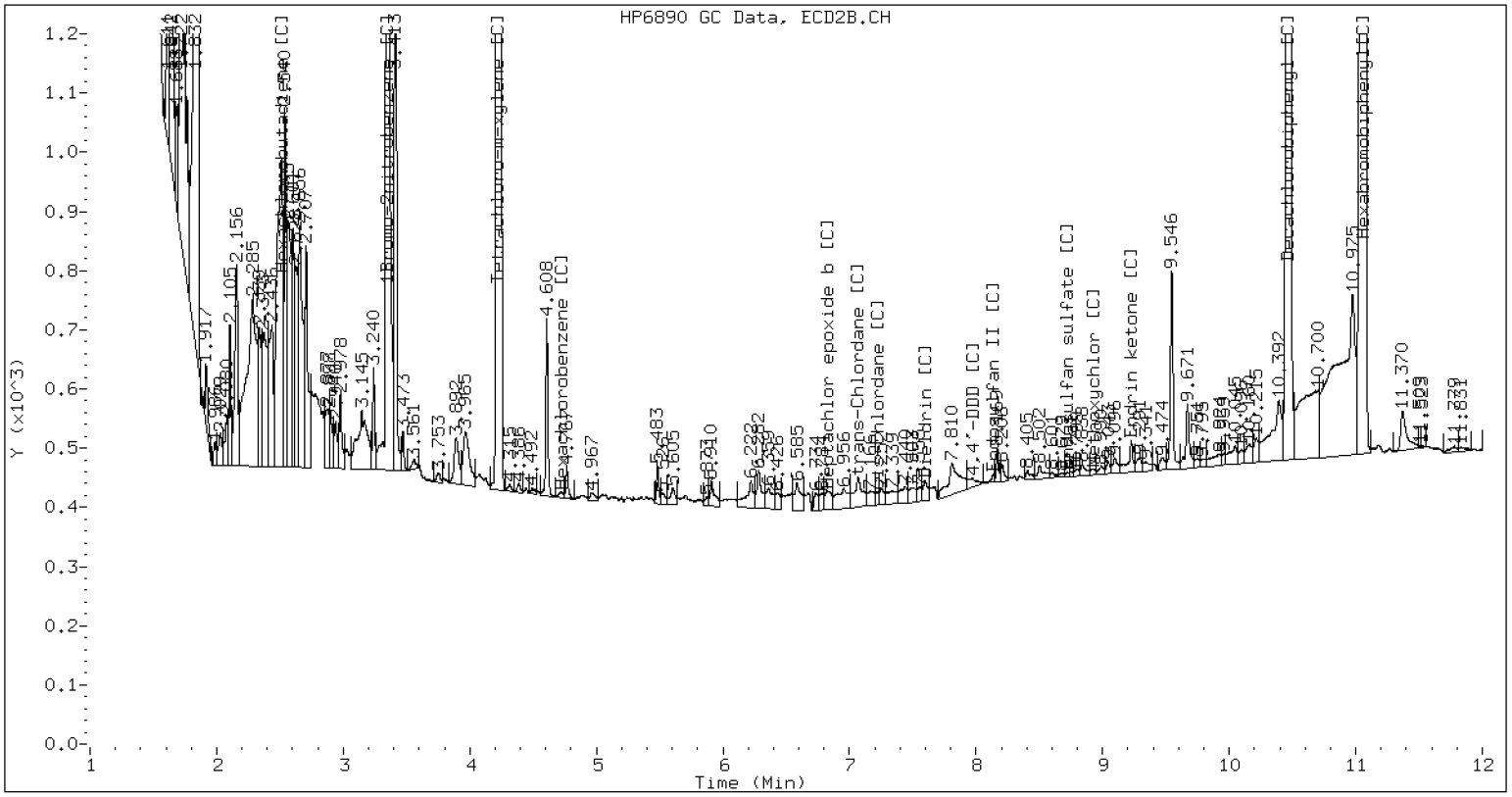
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121403.D SEQ-IBL1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121403.D
Data file 2: /20221214.b/B20221214.b/22121403.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-IBL1
Client ID:
Injection Date: 14-DEC-2022 20:02
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

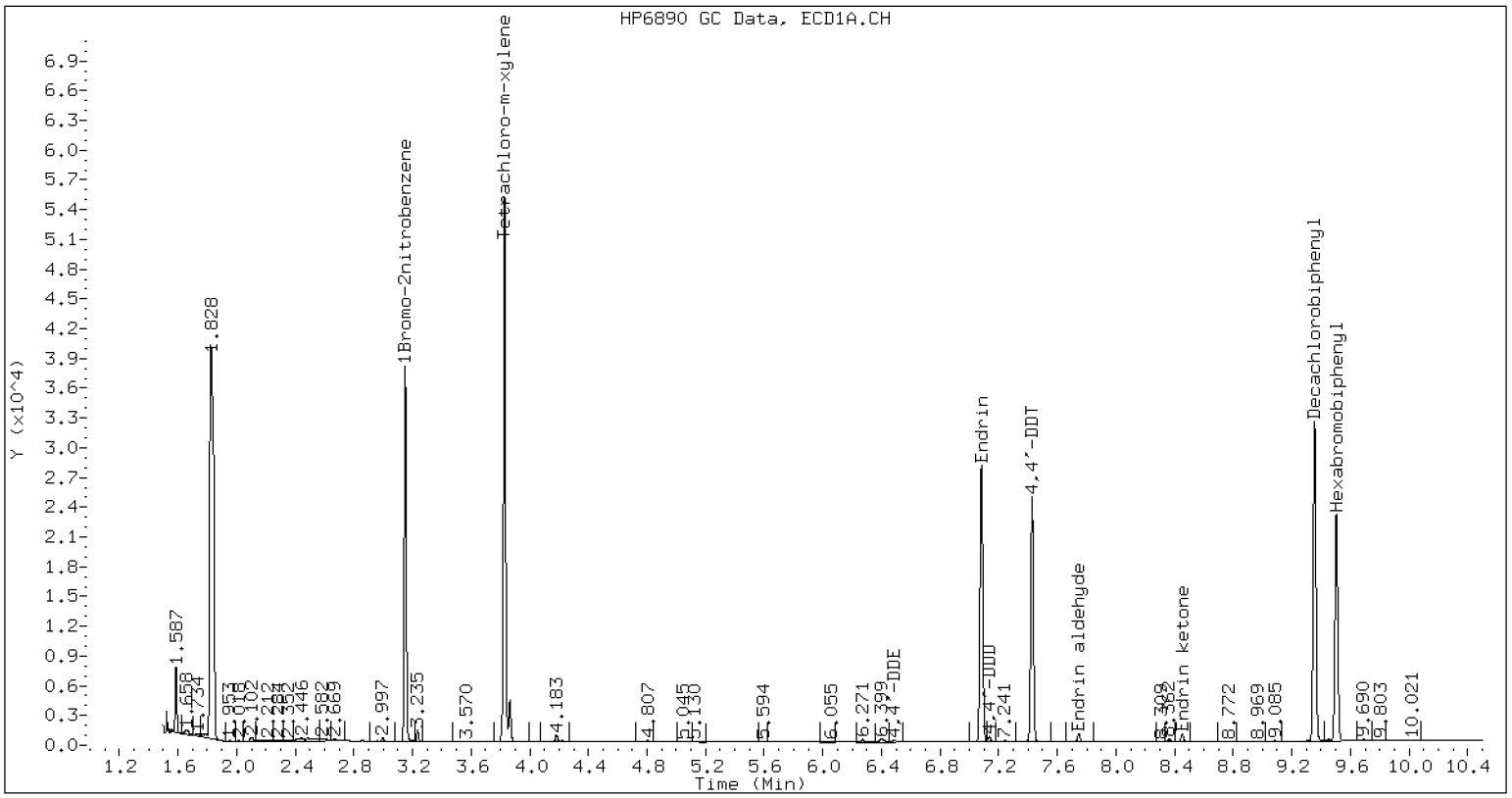
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene [C]	3.350	1005375
4,4'-DDE [C]	7.370	11906
Endrin [C]	7.907	1029194
4,4'-DDD [C]	7.977	32697
4,4'-DDT [C]	8.295	890195
Endrin ketone [C]	9.239	28268
Endrin aldehyde [C]	8.448	31426
Hexabromobiphenyl[C]	11.054	772586
Tetrachloro-m-xylene [C]	4.220	1890294
Decachlorobiphenyl [C]	10.467	1140978

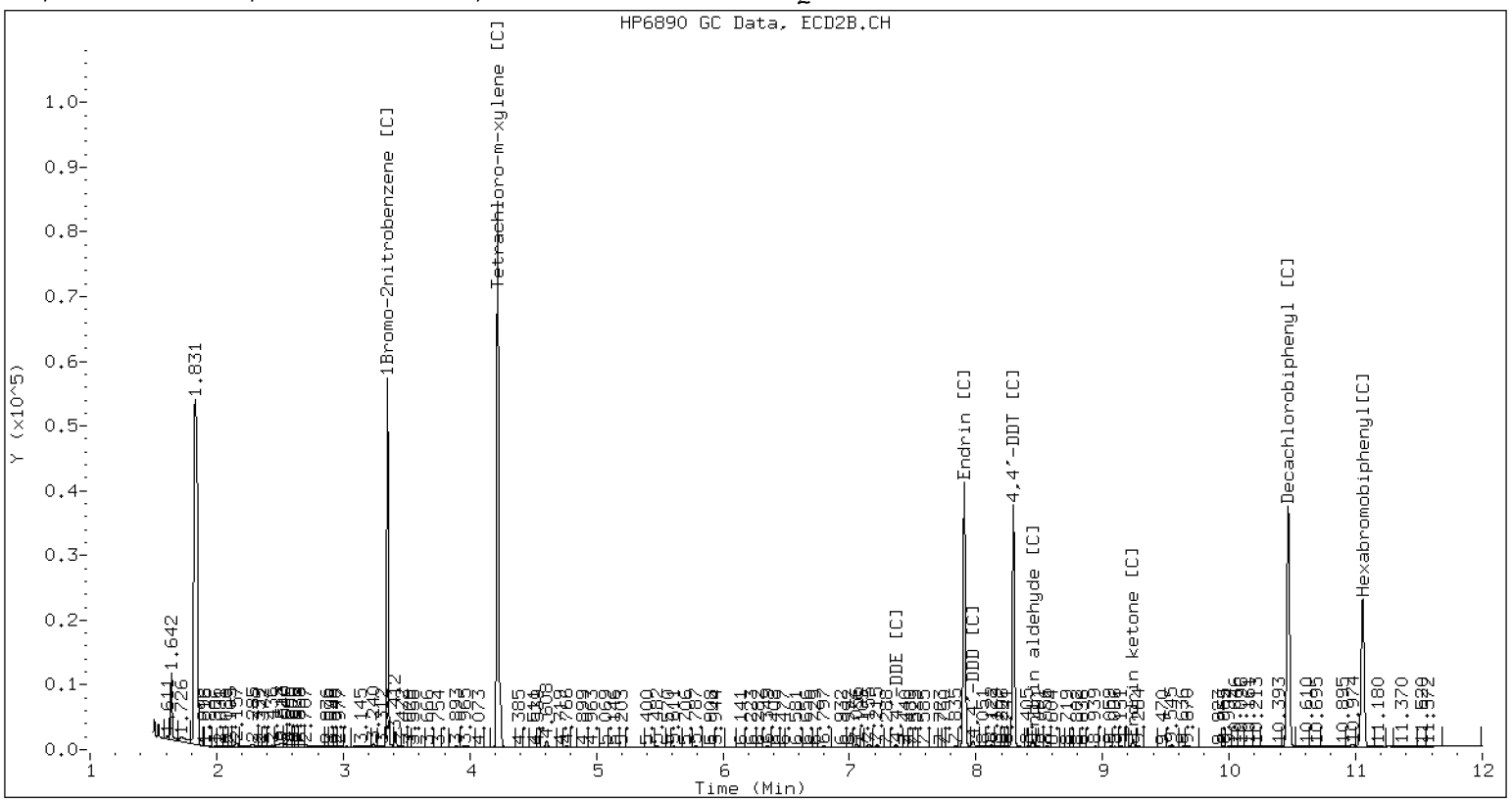
DDT Percent Breakdown = 4.8 %
((11906+32697) * 100)/(11906+32697+890195)

Endrin Percent Breakdown = 5.5 %
((31426+28268) * 100)/(31426+28268+1029194)

/20221214.b/22121404.D SEQ-PEM1 STX-CLP 14-DEC-2022 20:20 1ul



/20221214.b/B20221214.b/22121404.D SEQ-PEM1 CLP2 14-DEC-2022



7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121405.D
Data file 2: /20221214.b/B20221214.b/22121405.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1
Client ID:
Injection Date: 14-DEC-2022 20:38
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	-0.000	17720	4.860	-0.001	25579	1.30	1.22	6.4	alpha-BHC
4.726	-0.000	7513	5.337	-0.000	10927	1.43	1.37	4.4	beta-BHC
4.909	-0.000	14050	5.690	-0.000	21188	1.26	1.23	2.8	delta-BHC
4.645	-0.000	15329	5.257	-0.001	21981	1.30	1.24	4.9	gamma-BHC (Lindane)
5.130	-0.000	14540	5.786	-0.000	20395	1.38	1.27	8.9	Heptachlor
5.453	-0.001	15026	6.190	-0.001	24413	1.28	1.33	3.9	Aldrin
6.130	0.000	13937	6.845	-0.000	21959	1.37	1.44	5.6	Heptachlor epoxide b
6.572	-0.000	13220	7.288	-0.000	19257	1.41	1.44	1.8	Endosulfan I
6.831	0.000	27285	7.582	-0.001	43580	2.71	2.94	8.2	Dieldrin
6.489	0.000	25951	7.370	-0.001	37722	2.78	2.78	0.0	4,4'-DDE
7.081	0.000	24429	7.906	-0.001	31381	2.94	2.78	5.3	Endrin
7.318	0.001	19827	8.117	-0.000	30675	2.65	2.66	0.3	Endosulfan II
7.135	0.000	20434	7.976	-0.000	28995	2.73	2.65	3.0	4,4'-DDD
8.180	-0.000	19661	8.715	-0.000	26689	2.76	2.63	4.9	Endosulfan sulfate
7.427	0.000	20071	8.294	-0.001	26950	2.65	2.55	3.9	4,4'-DDT
7.912	-0.000	52385	8.935	-0.001	65896	15.60	14.07	10.3	Methoxychlor
8.453	-0.001	24276	9.239	-0.000	30129	2.98	2.75	8.0	Endrin ketone
7.746	-0.000	17209	8.448	-0.000	21218	2.88	2.60	10.1	Endrin aldehyde
6.270	-0.001	14829	7.056	-0.000	22517	1.43	1.48	3.7	trans-Chlordane
6.417	0.000	15767	7.215	-0.000	22150	1.52	1.49	1.6	cis-Chlordane
2.323	-0.001	27320	2.500	-0.001	42655	1.92	2.14	11.3	Hexachlorobutadiene
4.182	0.000	18555	4.718	-0.000	27377	1.47	1.44	2.2	Hexachlorobenzene
3.828	-0.000	28792	4.220	-0.001	41270	2.99	2.80	6.5	Tetrachloro-m-xylene
9.355	-0.000	21954	10.466	-0.000	30646	3.41	3.50	2.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

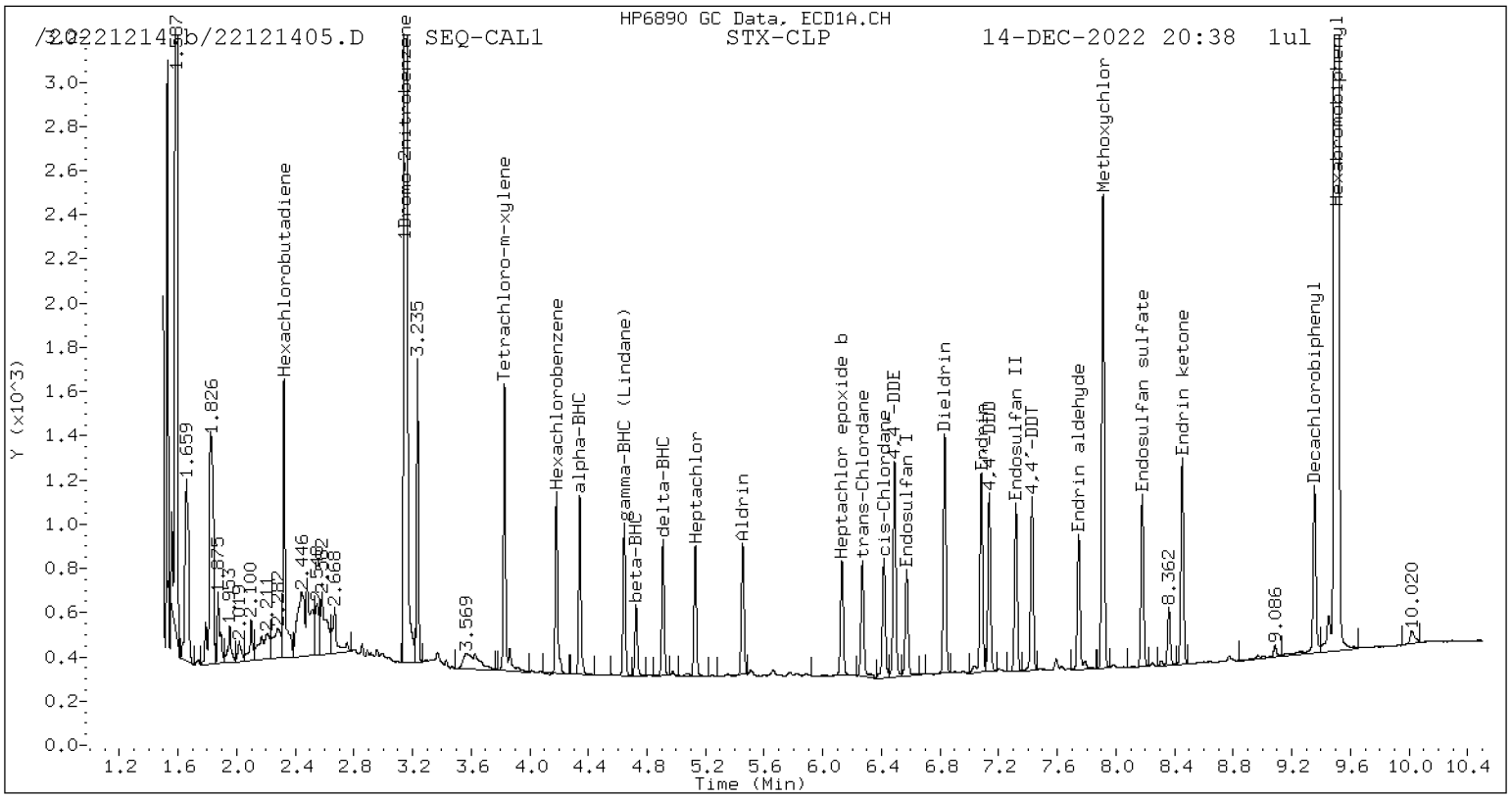
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	707324	-0.5
Hexabromobiphenyl	641833	634819	-1.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1045524	-1.3
Hexabromobiphenyl	797125	792558	-0.6

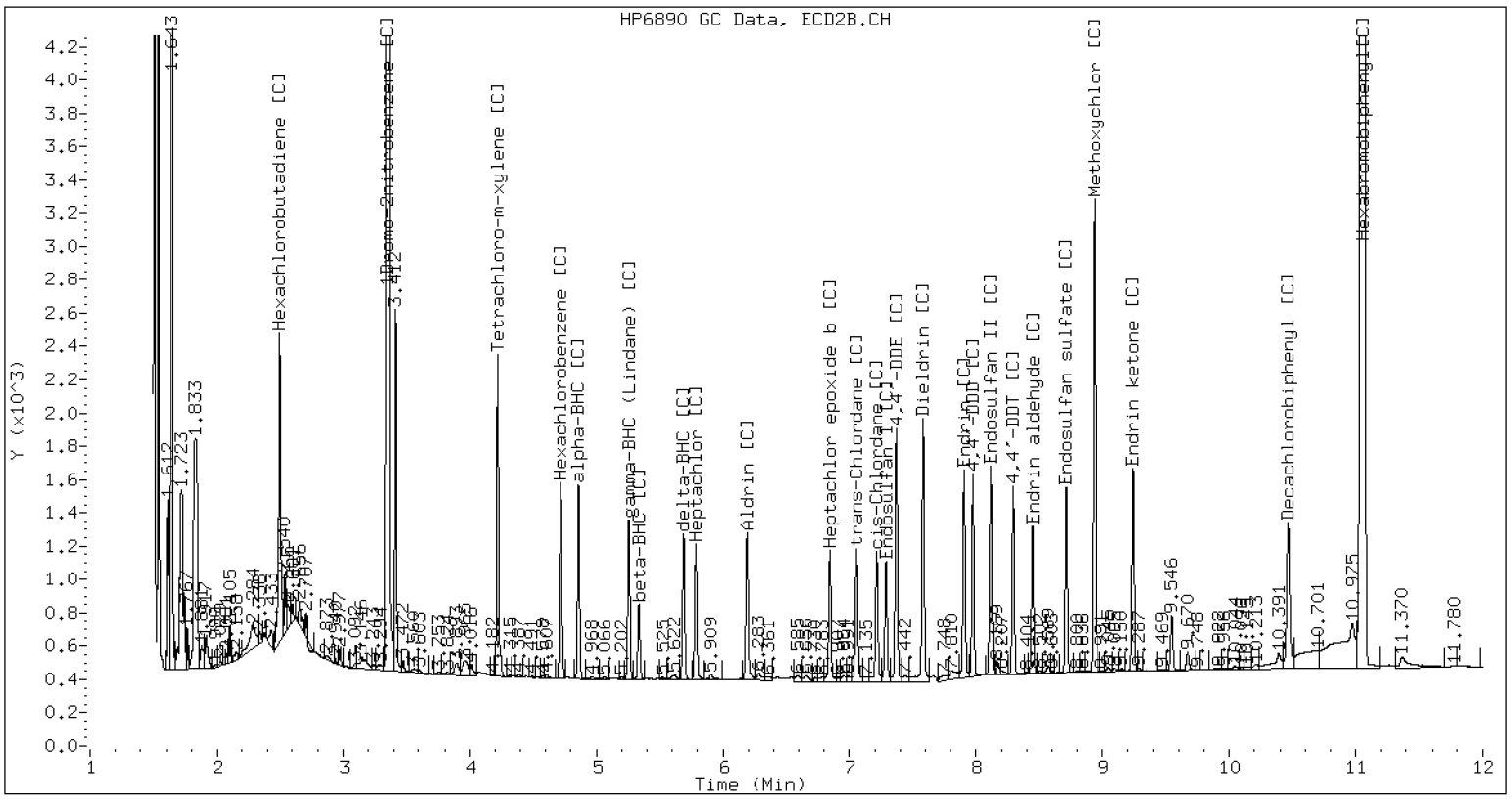
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121405.D SEQ-CAL1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121405.D
Data file 2: /20221214.b/B20221214.b/22121405.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1
Client ID:
Injection Date: 14-DEC-2022 20:38
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121406.D
Data file 2: /20221214.b/B20221214.b/22121406.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2
Client ID:
Injection Date: 14-DEC-2022 20:56
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	-0.000	35088	4.859	-0.001	52514	2.54	2.47	2.9	alpha-BHC
4.726	-0.000	14580	5.337	-0.000	21664	2.74	2.68	2.4	beta-BHC
4.909	-0.000	28429	5.691	-0.000	43932	2.52	2.51	0.5	delta-BHC
4.645	0.000	30588	5.257	-0.001	44971	2.55	2.49	2.5	gamma-BHC (Lindane)
5.129	-0.001	28458	5.787	-0.000	42156	2.67	2.58	3.6	Heptachlor
5.453	-0.001	30273	6.190	-0.001	50159	2.53	2.69	5.8	Aldrin
6.130	-0.001	27608	6.845	-0.001	43067	2.67	2.79	4.5	Heptachlor epoxide b
6.572	-0.000	25650	7.288	-0.001	37112	2.70	2.73	1.0	Endosulfan I
6.832	0.000	54960	7.582	-0.001	84296	5.38	5.60	4.0	Dieldrin
6.489	-0.000	51182	7.370	-0.001	74355	5.40	5.39	0.2	4,4'-DDE
7.081	0.000	46577	7.906	-0.001	63434	5.52	5.52	0.1	Endrin
7.317	0.001	37804	8.116	-0.001	65448	4.98	5.56	11.1	Endosulfan II
7.136	0.001	40399	7.976	-0.001	62302	5.32	5.58	4.8	4,4'-DDD
8.179	-0.001	38342	8.714	-0.001	57421	5.32	5.56	4.4	Endosulfan sulfate
7.427	-0.000	40499	8.294	-0.001	59346	5.27	5.51	4.3	4,4'-DDT
7.912	-0.000	98271	8.934	-0.002	130815	28.88	27.42	5.2	Methoxychlor
8.452	-0.001	45639	9.239	-0.001	62360	5.53	5.59	1.1	Endrin ketone
7.746	0.000	32847	8.447	-0.001	47592	5.42	5.73	5.6	Endrin aldehyde
6.271	0.000	28307	7.055	-0.001	41633	2.69	2.70	0.4	trans-Chlordane
6.417	0.000	29336	7.215	-0.000	41766	2.78	2.77	0.3	cis-Chlordane
2.323	-0.001	44113	2.500	-0.001	65565	3.05	3.24	6.2	Hexachlorobutadiene
4.182	-0.000	35520	4.718	-0.000	53173	2.77	2.75	0.9	Hexachlorobenzene
3.828	-0.000	54873	4.220	-0.001	81034	5.62	5.42	3.7	Tetrachloro-m-xylene
9.354	-0.001	38477	10.465	-0.001	54866	5.90	6.15	4.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

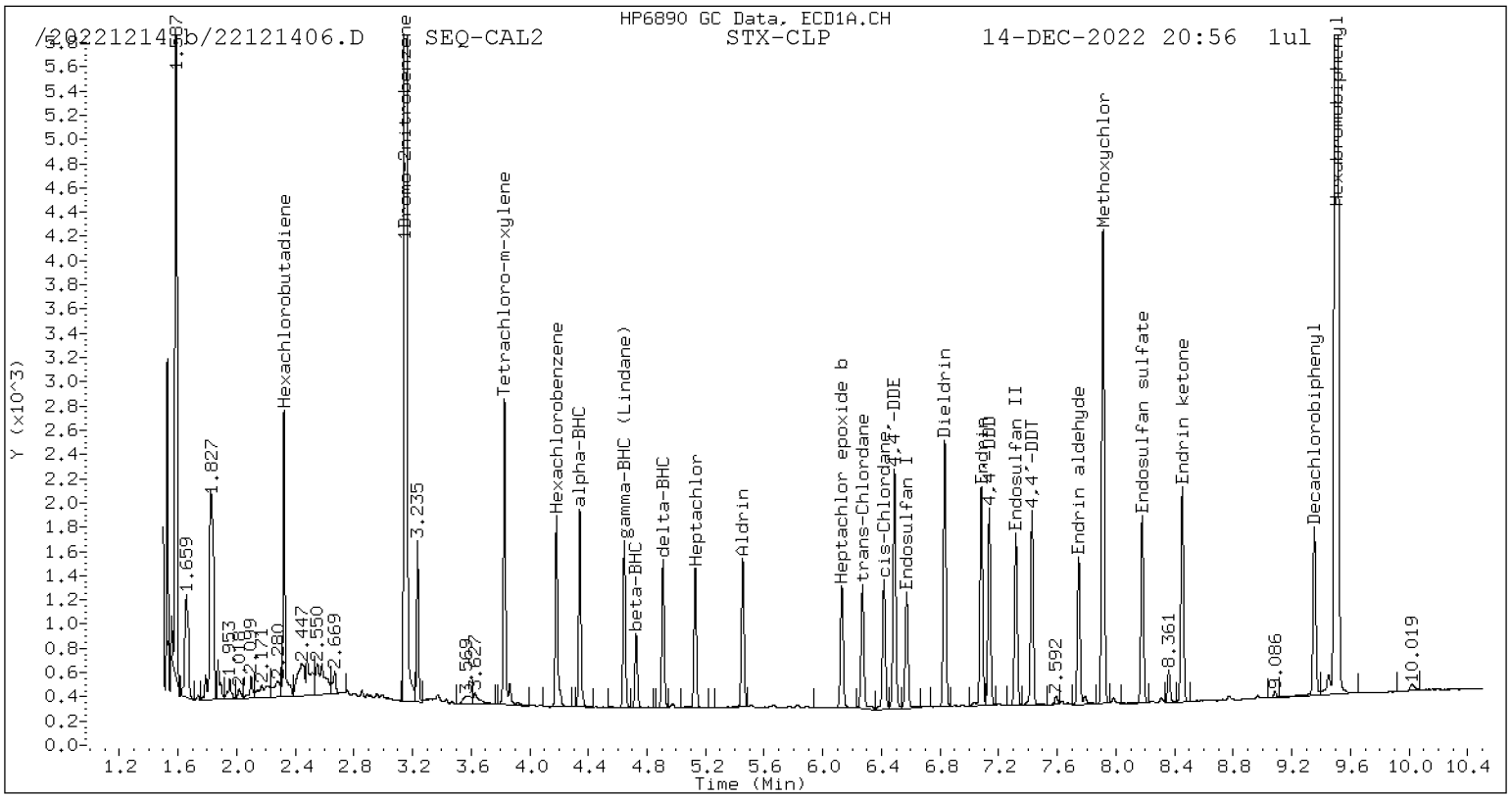
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	717600	1.0
Hexabromobiphenyl	641833	643445	0.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1061990	0.3
Hexabromobiphenyl	797125	807490	1.3

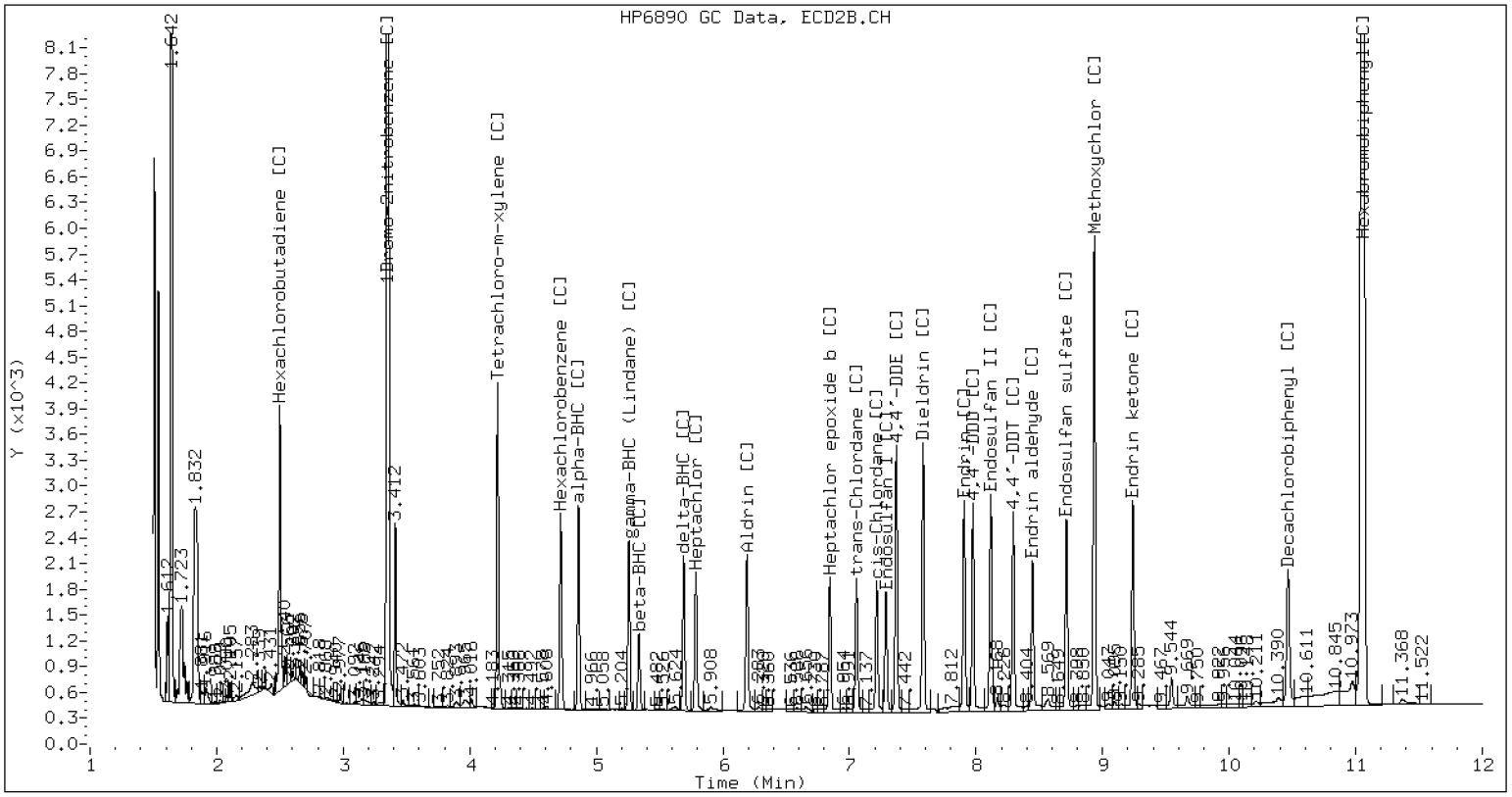
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121406.D SEQ-CAL2 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121406.D
Data file 2: /20221214.b/B20221214.b/22121406.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2
Client ID:
Injection Date: 14-DEC-2022 20:56
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121407.D
Data file 2: /20221214.b/B20221214.b/22121407.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3
Client ID:
Injection Date: 14-DEC-2022 21:14
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.343	0.001	68202	4.860	-0.000	103195	5.06	4.95	2.2	alpha-BHC
4.727	0.000	26774	5.338	0.000	40159	5.16	5.06	1.8	beta-BHC
4.910	0.001	55344	5.691	0.000	85044	5.02	4.95	1.5	delta-BHC
4.646	0.001	59491	5.258	0.000	87747	5.09	4.96	2.6	gamma-BHC (Lindane)
5.130	0.000	53529	5.787	0.000	80295	5.15	5.01	2.7	Heptachlor
5.455	0.001	59061	6.191	0.000	92167	5.07	5.03	0.7	Aldrin
6.132	0.001	52071	6.845	-0.000	76415	5.15	5.05	2.1	Heptachlor epoxide b
6.573	0.001	48052	7.289	-0.000	67929	5.18	5.09	1.8	Endosulfan I
6.832	0.001	104217	7.583	-0.000	151301	10.46	10.26	1.9	Dieldrin
6.490	0.001	97042	7.371	0.000	139172	10.49	10.29	1.9	4,4'-DDE
7.082	0.001	87185	7.906	-0.001	115830	10.66	10.37	2.8	Endrin
7.318	0.001	77341	8.117	0.000	118175	10.50	10.32	1.8	Endosulfan II
7.136	0.001	77451	7.976	0.000	110178	10.51	10.14	3.6	4,4'-DDD
8.180	0.001	73440	8.715	0.000	102417	10.50	10.18	3.1	Endosulfan sulfate
7.428	0.001	77522	8.294	-0.001	105882	10.41	10.09	3.1	4,4'-DDT
7.913	0.001	178164	8.935	-0.001	239047	53.98	51.49	4.7	Methoxychlor
8.454	0.000	84510	9.239	-0.000	110024	10.55	10.13	4.1	Endrin ketone
7.746	0.001	61122	8.448	-0.000	82817	10.40	10.25	1.5	Endrin aldehyde
6.271	0.001	52622	7.056	-0.000	76513	5.13	5.07	1.1	trans-Chlordane
6.417	0.001	53515	7.216	0.000	75023	5.20	5.08	2.3	cis-Chlordane
2.324	-0.000	75632	2.500	-0.000	107268	5.35	5.41	1.1	Hexachlorobutadiene
4.183	0.001	66090	4.718	-0.000	98926	5.28	5.21	1.3	Hexachlorobenzene
3.828	0.000	101081	4.220	-0.000	153451	10.61	10.47	1.3	Tetrachloro-m-xylene
9.355	-0.000	67797	10.466	-0.000	92260	10.72	10.62	0.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

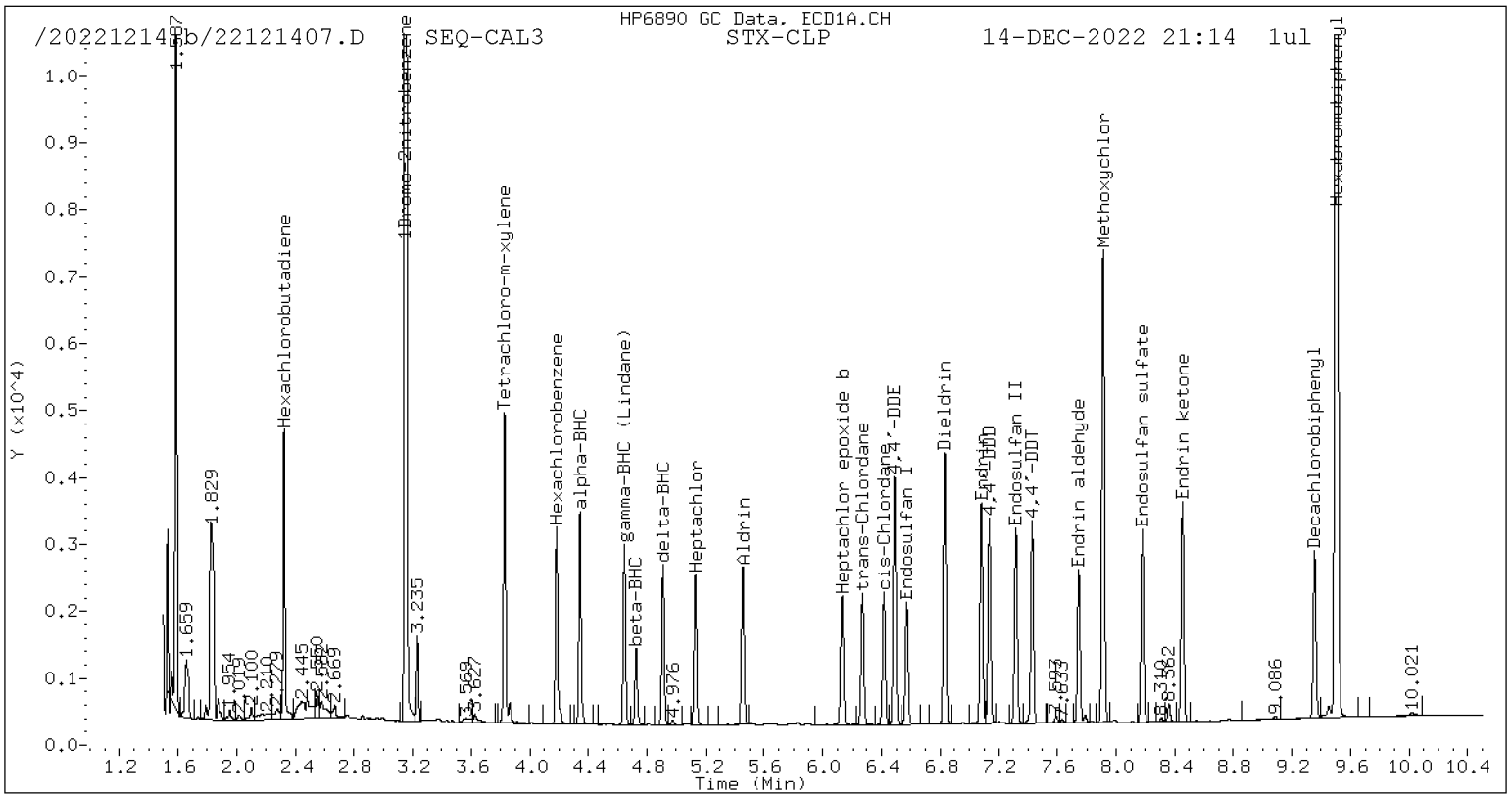
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	700354	-1.4
Hexabromobiphenyl	641833	624108	-2.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1040903	-1.7
Hexabromobiphenyl	797125	785894	-1.4

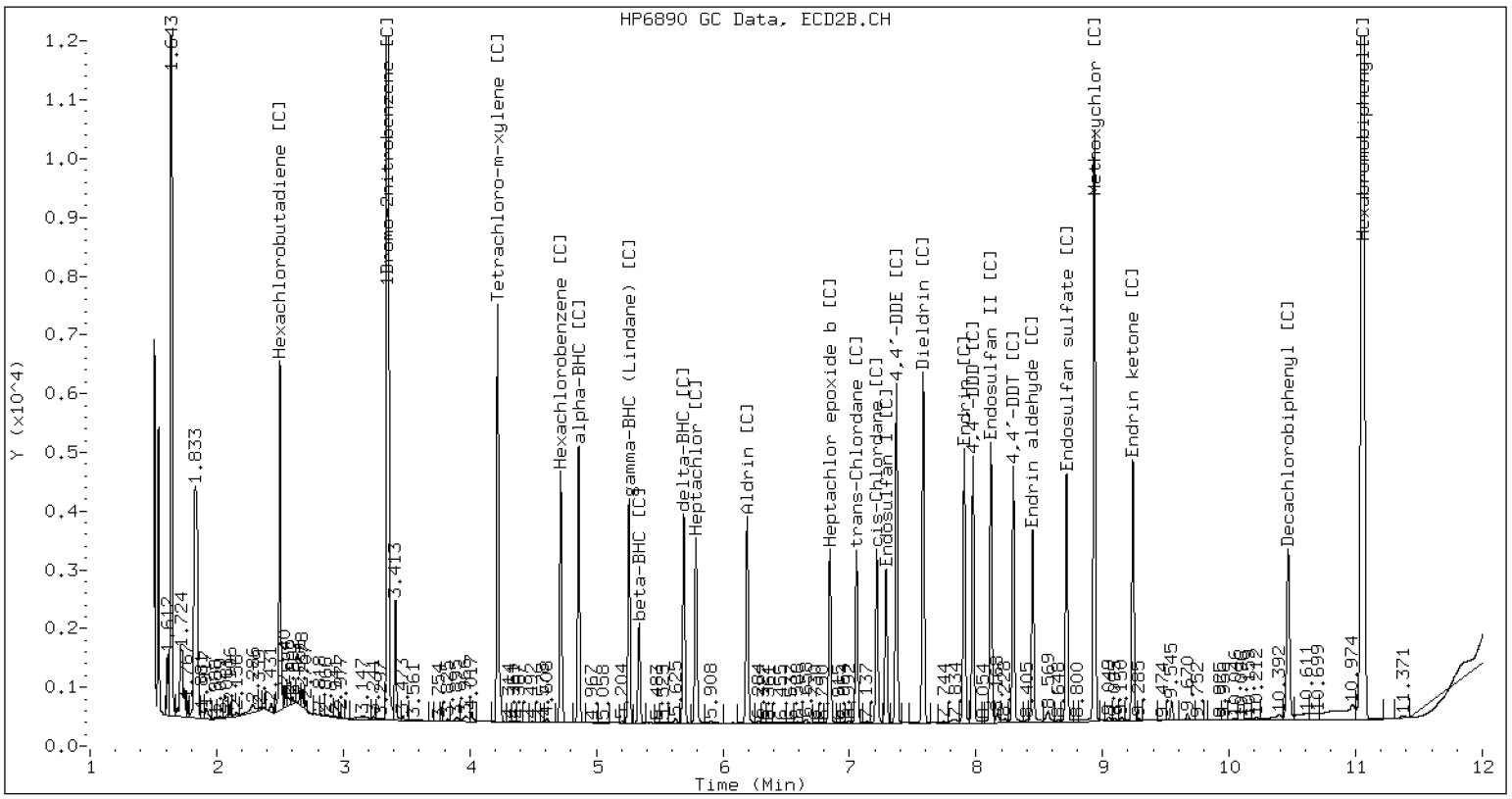
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121407.D SEQ-CAL3 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121407.D
Data file 2: /20221214.b/B20221214.b/22121407.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3
Client ID:
Injection Date: 14-DEC-2022 21:14
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121408.D
Data file 2: /20221214.b/B20221214.b/22121408.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4
Client ID:
Injection Date: 14-DEC-2022 21:31
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.343	0.000	139784	4.860	-0.000	216159	10.22	10.19	0.3	alpha-BHC
4.726	0.000	53742	5.337	0.000	81857	10.20	10.15	0.6	beta-BHC
4.910	0.001	113586	5.691	0.000	177281	10.16	10.14	0.2	delta-BHC
4.646	0.000	121488	5.258	0.000	182844	10.24	10.15	0.9	gamma-BHC (Lindane)
5.130	0.000	108260	5.787	-0.000	166558	10.26	10.21	0.5	Heptachlor
5.454	0.000	124839	6.191	0.000	189618	10.55	10.18	3.6	Aldrin
6.131	0.001	107301	6.846	0.001	155424	10.46	10.09	3.6	Heptachlor epoxide b
6.573	0.000	97151	7.289	0.000	137043	10.32	10.10	2.2	Endosulfan I
6.832	0.001	210564	7.583	0.000	301602	20.82	20.11	3.5	Dieldrin
6.490	0.001	195139	7.371	0.000	281756	20.79	20.49	1.5	4,4'-DDE
7.082	0.001	173216	7.907	-0.000	231062	20.59	20.39	1.0	Endrin
7.318	0.001	161303	8.117	0.001	236844	21.29	20.39	4.4	Endosulfan II
7.136	0.001	157301	7.977	0.001	222755	20.75	20.21	2.7	4,4'-DDD
8.180	0.000	146955	8.715	0.000	205334	20.43	20.13	1.5	Endosulfan sulfate
7.428	0.001	156744	8.295	-0.000	212755	20.46	19.99	2.3	4,4'-DDT
7.912	0.001	344324	8.936	-0.001	473459	101.43	100.55	0.9	Methoxychlor
8.453	-0.000	167384	9.240	0.000	222080	20.31	20.15	0.8	Endrin ketone
7.746	0.000	123653	8.448	0.000	164391	20.47	20.06	2.0	Endrin aldehyde
6.271	0.001	106805	7.056	0.000	154174	10.25	10.04	2.1	trans-Chlordane
6.418	0.001	106651	7.216	0.001	150231	10.21	10.00	2.1	cis-Chlordane
2.323	-0.000	142895	2.500	-0.001	197539	9.97	9.80	1.7	Hexachlorobutadiene
4.183	0.000	130020	4.718	0.000	197396	10.24	10.22	0.1	Hexachlorobenzene
3.828	0.000	199446	4.220	-0.000	308345	20.64	20.69	0.2	Tetrachloro-m-xylene
9.355	0.000	130210	10.466	-0.000	170633	20.02	19.37	3.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

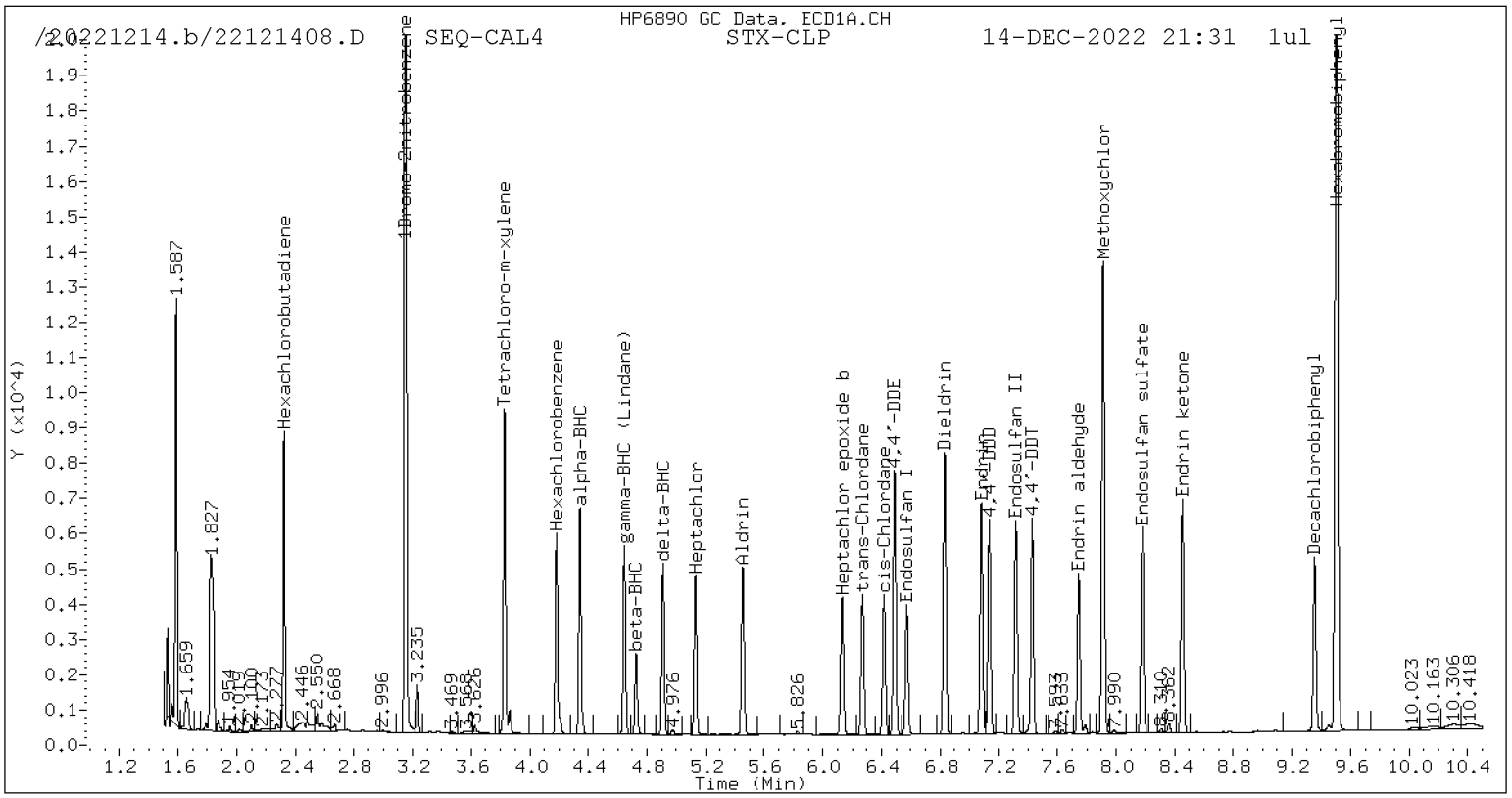
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	710650	0.0
Hexabromobiphenyl	641833	641833	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1058848	0.0
Hexabromobiphenyl	797125	797125	0.0

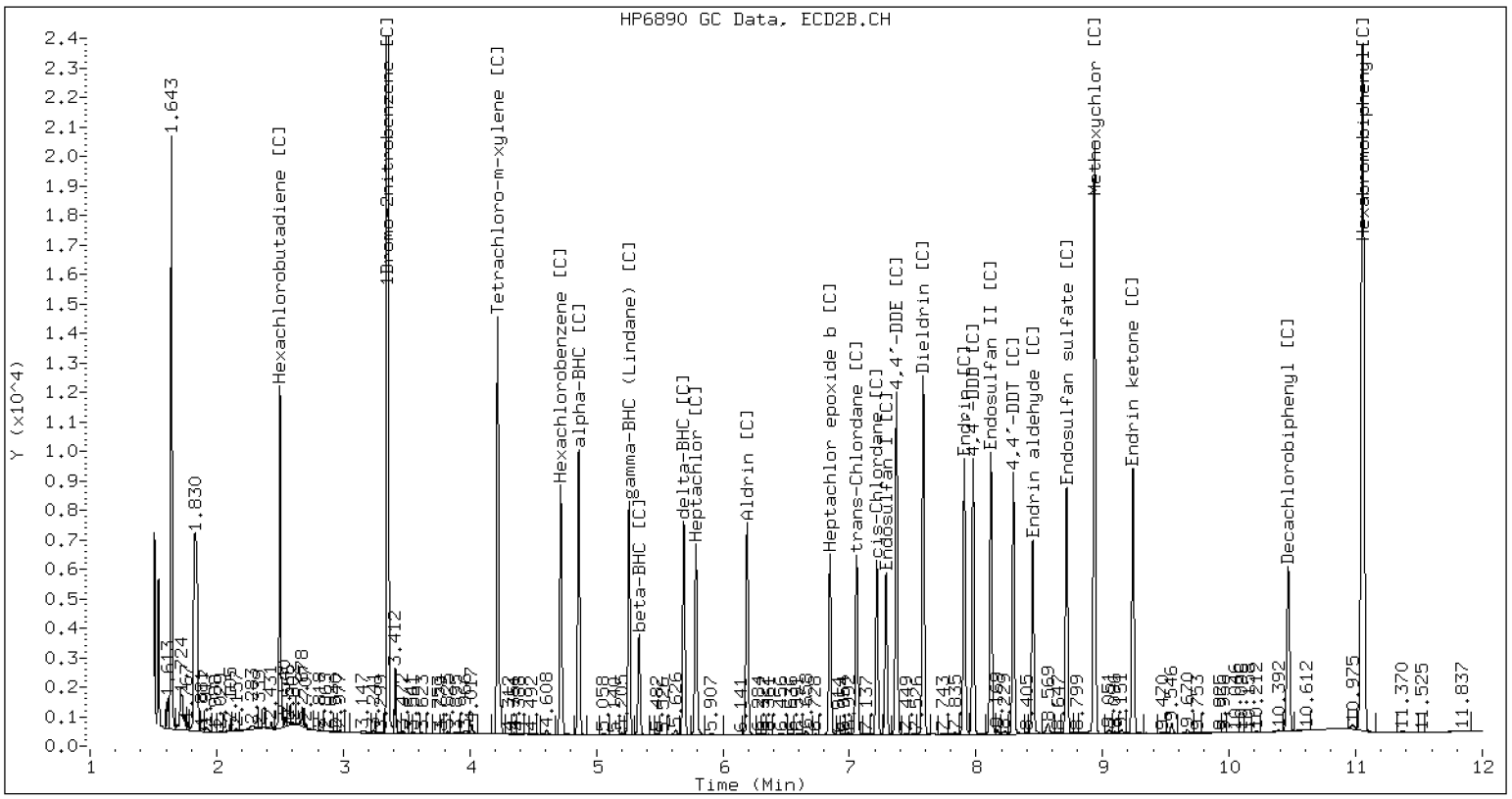
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121408.D SEQ-CAL4 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121408.D
Data file 2: /20221214.b/B20221214.b/22121408.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4
Client ID:
Injection Date: 14-DEC-2022 21:31
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121409.D
Data file 2: /20221214.b/B20221214.b/22121409.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5
Client ID:
Injection Date: 14-DEC-2022 21:49
Report Date: 12/16/2022 15:30
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	263355	4.860	-0.001	412780	20.34	20.46	0.6	alpha-BHC
4.726	0.000	99355	5.337	-0.000	154138	19.93	20.10	0.8	beta-BHC
4.909	0.000	216224	5.690	-0.000	334261	20.44	20.12	1.6	delta-BHC
4.645	0.000	228274	5.258	-0.000	350450	20.34	20.47	0.7	gamma-BHC (Lindane)
5.130	0.000	203067	5.787	-0.000	320123	20.33	20.64	1.5	Heptachlor
5.454	0.000	230734	6.191	-0.000	359912	20.62	20.33	1.4	Aldrin
6.130	0.000	198033	6.845	-0.000	295580	20.41	20.19	1.1	Heptachlor epoxide b
6.572	0.000	180905	7.289	-0.000	260351	20.31	20.18	0.7	Endosulfan I
6.831	0.000	388583	7.582	-0.000	571731	40.61	40.10	1.3	Dieldrin
6.489	0.000	362177	7.370	-0.000	531128	40.77	40.63	0.4	4,4'-DDE
7.081	0.000	323576	7.907	-0.000	442460	40.48	40.43	0.1	Endrin
7.317	0.000	282010	8.117	-0.000	446656	39.19	39.81	1.6	Endosulfan II
7.135	0.000	292251	7.976	-0.000	427990	40.58	40.20	0.9	4,4'-DDD
8.180	0.000	276113	8.715	0.000	393743	40.41	39.97	1.1	Endosulfan sulfate
7.427	0.000	296413	8.295	-0.000	413083	40.73	40.20	1.3	4,4'-DDT
7.912	0.000	628619	8.935	-0.001	900958	194.94	198.14	1.6	Methoxychlor
8.453	0.000	311305	9.239	-0.000	423698	39.77	39.82	0.1	Endrin ketone
7.746	0.000	230881	8.448	0.000	312907	40.23	39.54	1.7	Endrin aldehyde
6.271	0.000	200151	7.056	-0.000	294106	20.31	20.15	0.8	trans-Chlordane
6.417	0.000	197892	7.216	-0.000	285904	20.02	20.02	0.0	cis-Chlordane
2.324	0.000	260716	2.500	-0.000	346254	19.22	18.08	6.2	Hexachlorobutadiene
4.182	0.000	237746	4.718	-0.000	364913	19.78	19.88	0.5	Hexachlorobenzene
3.828	0.000	357836	4.220	-0.000	567647	39.13	40.07	2.4	Tetrachloro-m-xylene
9.355	0.000	239428	10.466	-0.001	327134	38.76	38.45	0.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

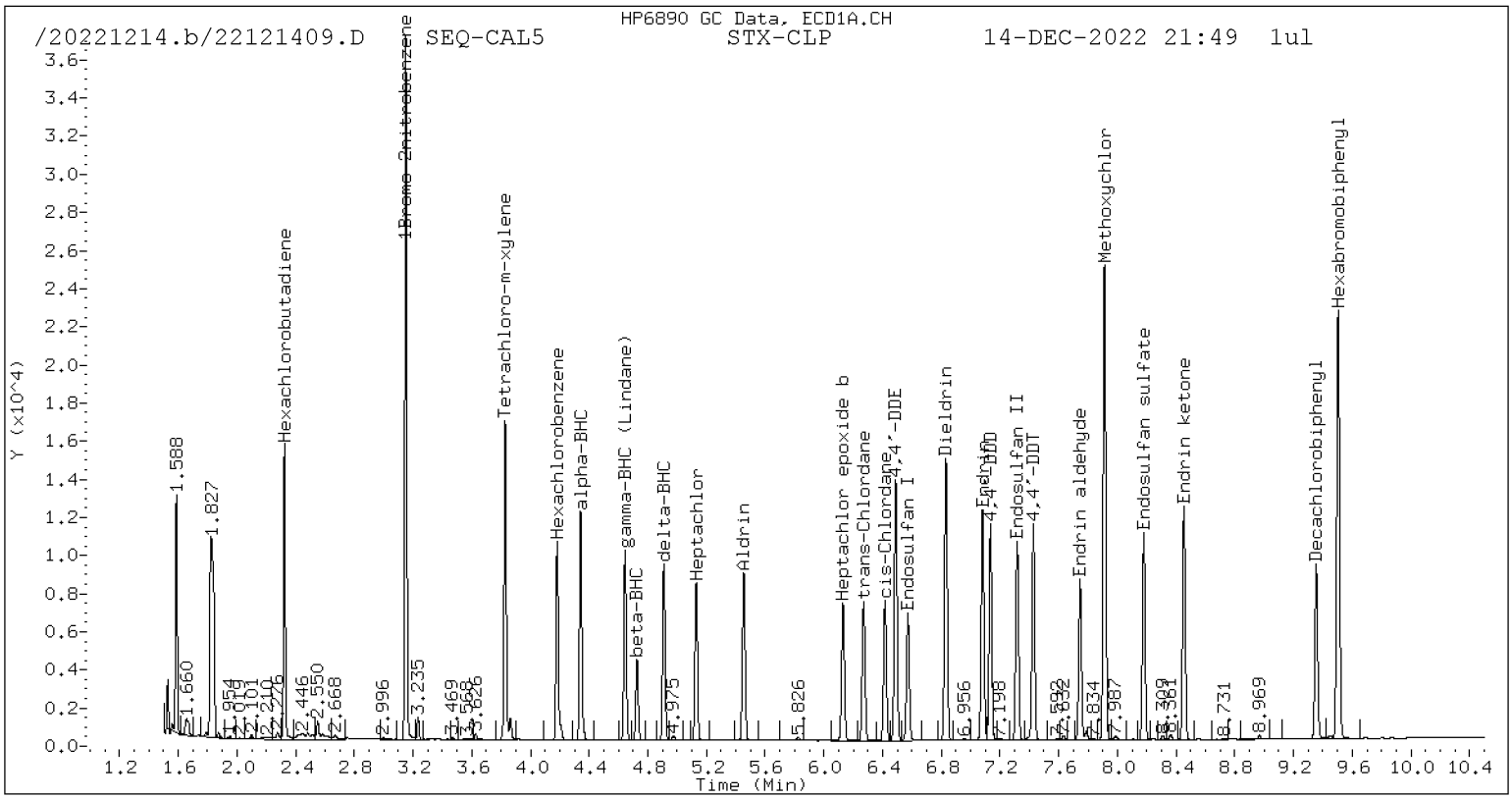
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	672426	0.0
Hexabromobiphenyl	609723	609723	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1006482	0.0
Hexabromobiphenyl	769764	769764	0.0

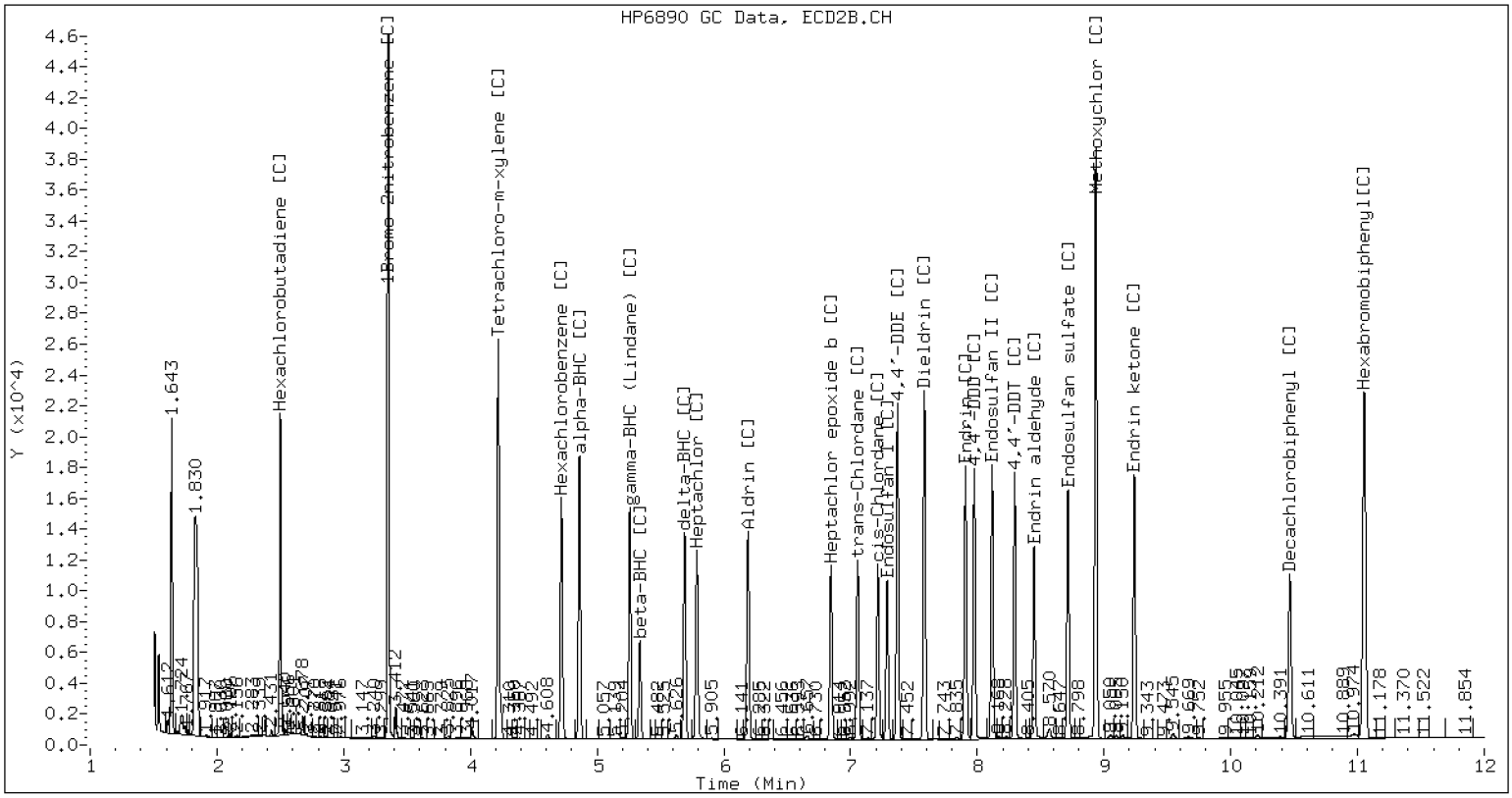
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121409.D SEQ-CAL5 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121409.D
Data file 2: /20221214.b/B20221214.b/22121409.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5
Client ID:
Injection Date: 14-DEC-2022 21:49
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121410.D
Data file 2: /20221214.b/B20221214.b/22121410.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6
Client ID:
Injection Date: 14-DEC-2022 22:07
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	535902	4.860	-0.000	849533	39.69	40.30	1.5	alpha-BHC
4.726	0.000	198976	5.337	-0.000	311218	38.28	38.84	1.4	beta-BHC
4.910	0.000	440370	5.691	0.000	700464	39.91	40.34	1.1	delta-BHC
4.646	0.000	461905	5.258	0.000	718675	39.46	40.18	1.8	gamma-BHC (Lindane)
5.130	0.000	401672	5.787	0.000	639345	38.56	39.46	2.3	Heptachlor
5.454	0.000	458396	6.190	-0.000	720942	39.27	38.97	0.8	Aldrin
6.130	0.000	387273	6.846	0.000	586062	38.26	38.31	0.1	Heptachlor epoxide b
6.572	-0.000	354629	7.288	-0.001	519836	38.18	38.55	1.0	Endosulfan I
6.832	0.000	755708	7.582	-0.000	1126850	75.73	75.64	0.1	Dieldrin
6.489	0.000	698620	7.371	-0.000	1040947	75.40	76.19	1.0	4,4'-DDE
7.082	0.000	615481	7.907	-0.000	858461	74.19	74.98	1.1	Endrin
7.317	0.000	590923	8.117	-0.000	885035	79.12	75.41	4.8	Endosulfan II
7.136	0.000	565557	7.976	-0.000	842536	75.67	75.65	0.0	4,4'-DDD
8.179	-0.001	540557	8.715	0.000	782860	76.22	75.96	0.3	Endosulfan sulfate
7.427	0.000	577337	8.295	-0.000	820861	76.44	76.36	0.1	4,4'-DDT
7.912	-0.000	1204040	8.935	-0.001	1785262	359.75	375.30	4.2	Methoxychlor
8.453	-0.001	610387	9.239	-0.000	843646	75.13	75.79	0.9	Endrin ketone
7.746	-0.000	452325	8.448	0.000	622287	75.93	75.17	1.0	Endrin aldehyde
6.271	0.000	395598	7.056	-0.000	591899	38.48	38.80	0.8	trans-Chlordane
6.417	0.001	389712	7.215	-0.000	573103	37.80	38.40	1.6	cis-Chlordane
2.324	0.000	511265	2.500	-0.000	705320	36.14	35.24	2.5	Hexachlorobutadiene
4.183	0.001	472841	4.718	0.000	728846	37.72	37.99	0.7	Hexachlorobenzene
3.828	-0.000	714634	4.221	0.000	1124106	74.93	75.93	1.3	Tetrachloro-m-xylene
9.355	-0.000	468280	10.466	-0.001	645336	73.03	72.51	0.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

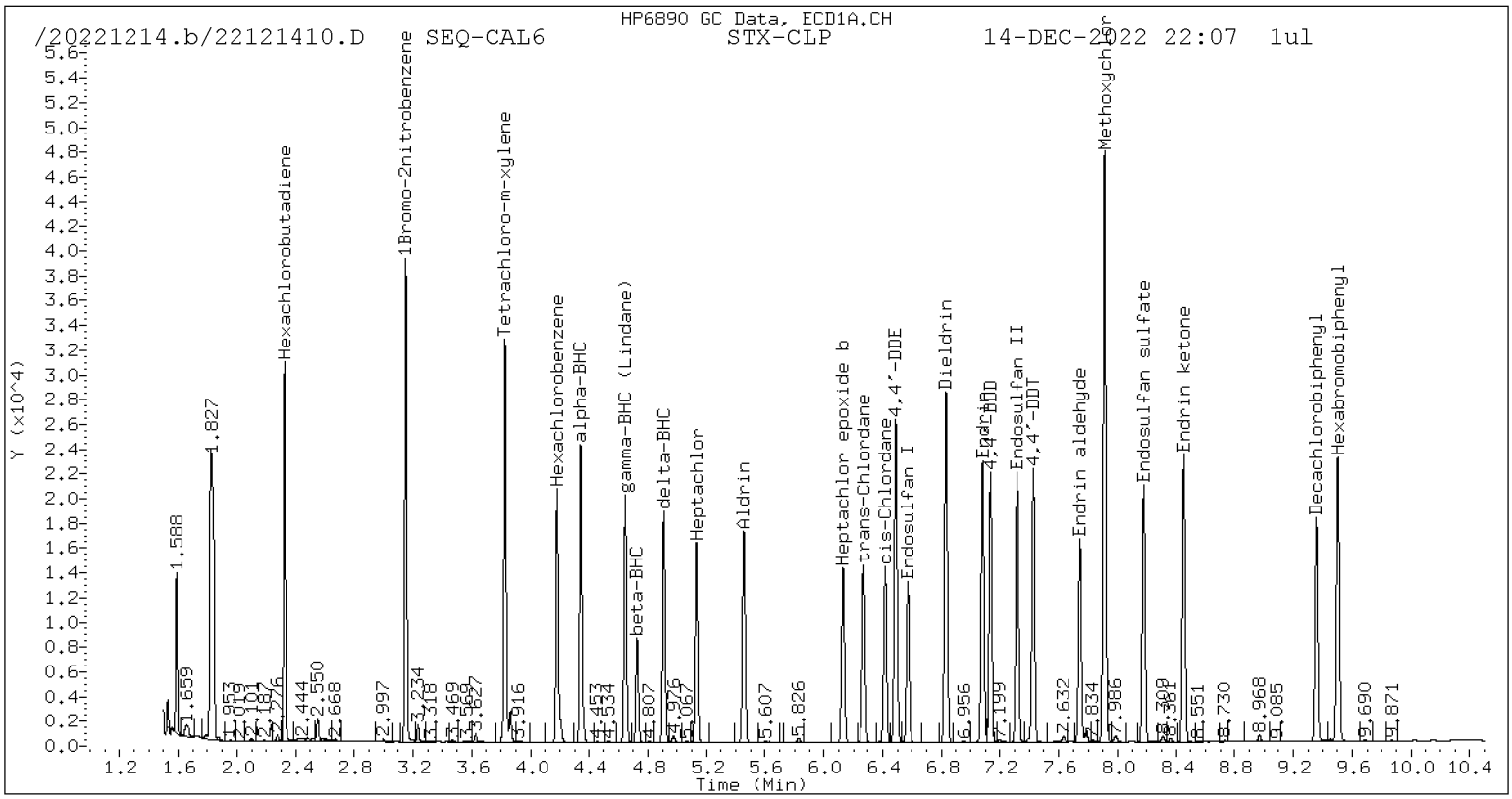
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	701342	-1.3
Hexabromobiphenyl	641833	632821	-1.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1051766	-0.7
Hexabromobiphenyl	797125	805268	1.0

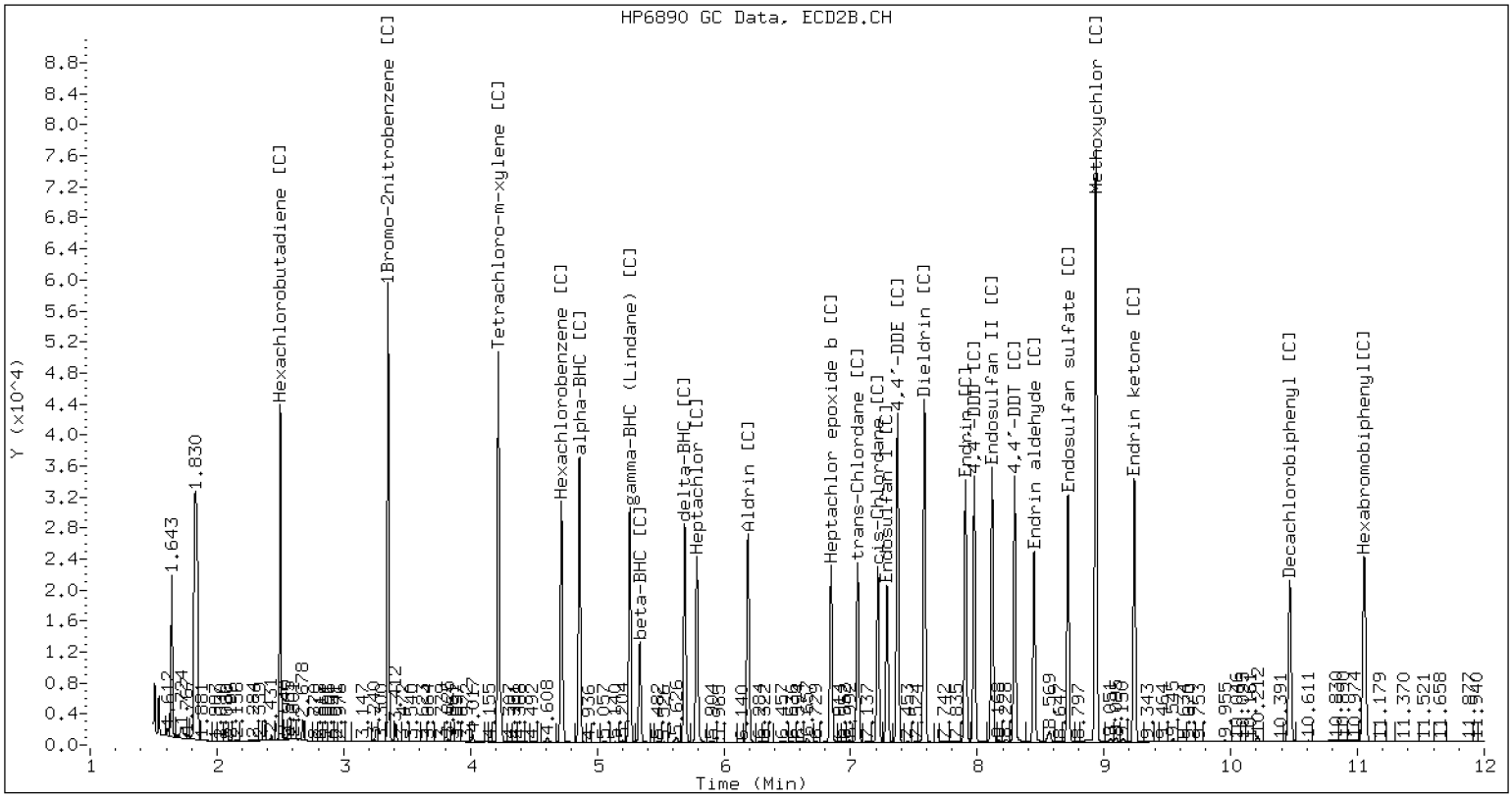
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121410.D SEQ-CAL6 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121410.D
Data file 2: /20221214.b/B20221214.b/22121410.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6
Client ID:
Injection Date: 14-DEC-2022 22:07
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121411.D
Data file 2: /20221214.b/B20221214.b/22121411.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7
Client ID:
Injection Date: 14-DEC-2022 22:25
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	1012605	4.861	0.000	1623058	75.30	77.94	3.4	alpha-BHC
4.726	0.000	371916	5.337	0.000	586390	71.84	74.06	3.1	beta-BHC
4.910	0.000	837966	5.691	0.000	1343533	76.25	78.32	2.7	delta-BHC
4.645	-0.000	870454	5.258	0.000	1370551	74.66	77.55	3.8	gamma-BHC (Lindane)
5.130	0.000	743802	5.787	0.000	1188915	71.70	74.26	3.5	Heptachlor
5.454	0.000	841598	6.191	0.000	1331430	72.39	72.84	0.6	Aldrin
6.130	-0.000	709774	6.845	0.000	1087105	70.41	71.92	2.1	Heptachlor epoxide b
6.573	0.000	652702	7.289	0.000	969098	70.56	72.74	3.1	Endosulfan I
6.832	0.000	1390496	7.583	0.000	2118555	139.91	143.93	2.8	Dieldrin
6.490	0.001	1284777	7.371	0.000	1944530	139.23	144.06	3.4	4,4'-DDE
7.082	0.001	1132487	7.907	0.000	1618631	137.86	142.60	3.4	Endrin
7.317	0.000	1089554	8.117	0.000	1672946	147.33	143.79	2.4	Endosulfan II
7.135	0.000	1051958	7.976	0.000	1606815	142.14	145.53	2.4	4,4'-DDD
8.180	0.000	1013288	8.715	0.000	1496440	144.30	146.47	1.5	Endosulfan sulfate
7.428	0.001	1086138	8.295	0.000	1586078	145.23	148.84	2.5	4,4'-DDT
7.912	0.001	2325261	8.936	0.000	3541650	701.64	751.02	6.8	Methoxychlor
8.454	0.000	1146784	9.240	0.000	1623077	142.56	147.08	3.1	Endrin ketone
7.746	-0.000	846477	8.448	0.000	1178353	143.51	143.57	0.0	Endrin aldehyde
6.271	0.000	733514	7.056	0.000	1114685	71.64	73.95	3.2	trans-Chlordane
6.417	0.001	723886	7.216	0.000	1079255	70.50	73.19	3.7	cis-Chlordane
2.324	0.000	955982	2.501	0.000	1351745	67.86	68.35	0.7	Hexachlorobutadiene
4.182	0.000	879573	4.718	0.000	1355289	70.45	71.51	1.5	Hexachlorobenzene
3.828	0.000	1318381	4.220	0.000	2067539	138.79	141.35	1.8	Tetrachloro-m-xylene
9.356	0.000	878340	10.467	0.000	1231298	138.34	139.55	0.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

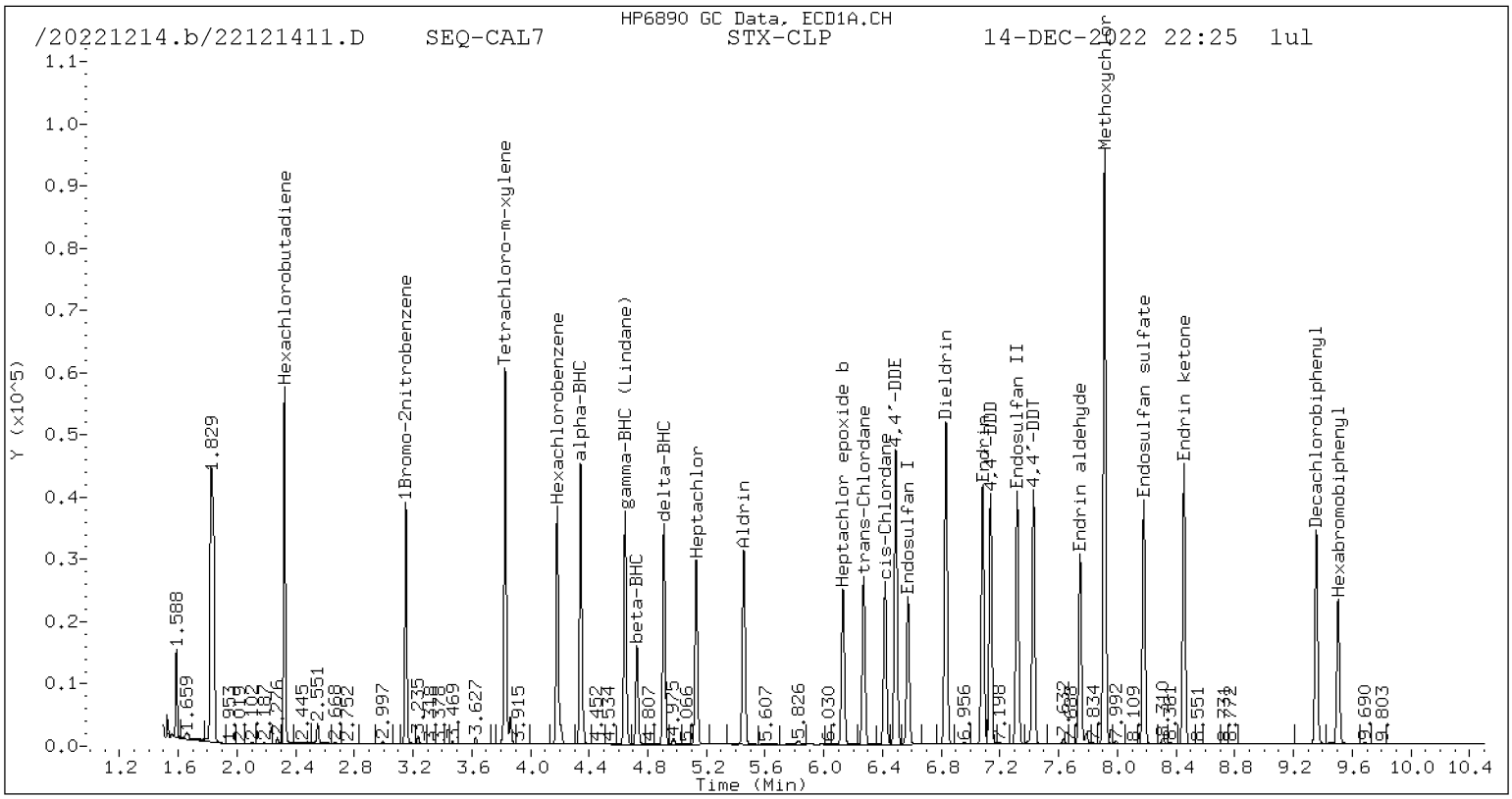
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	698499	-1.7
Hexabromobiphenyl	641833	626605	-2.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1039154	-1.9
Hexabromobiphenyl	797125	798313	0.1

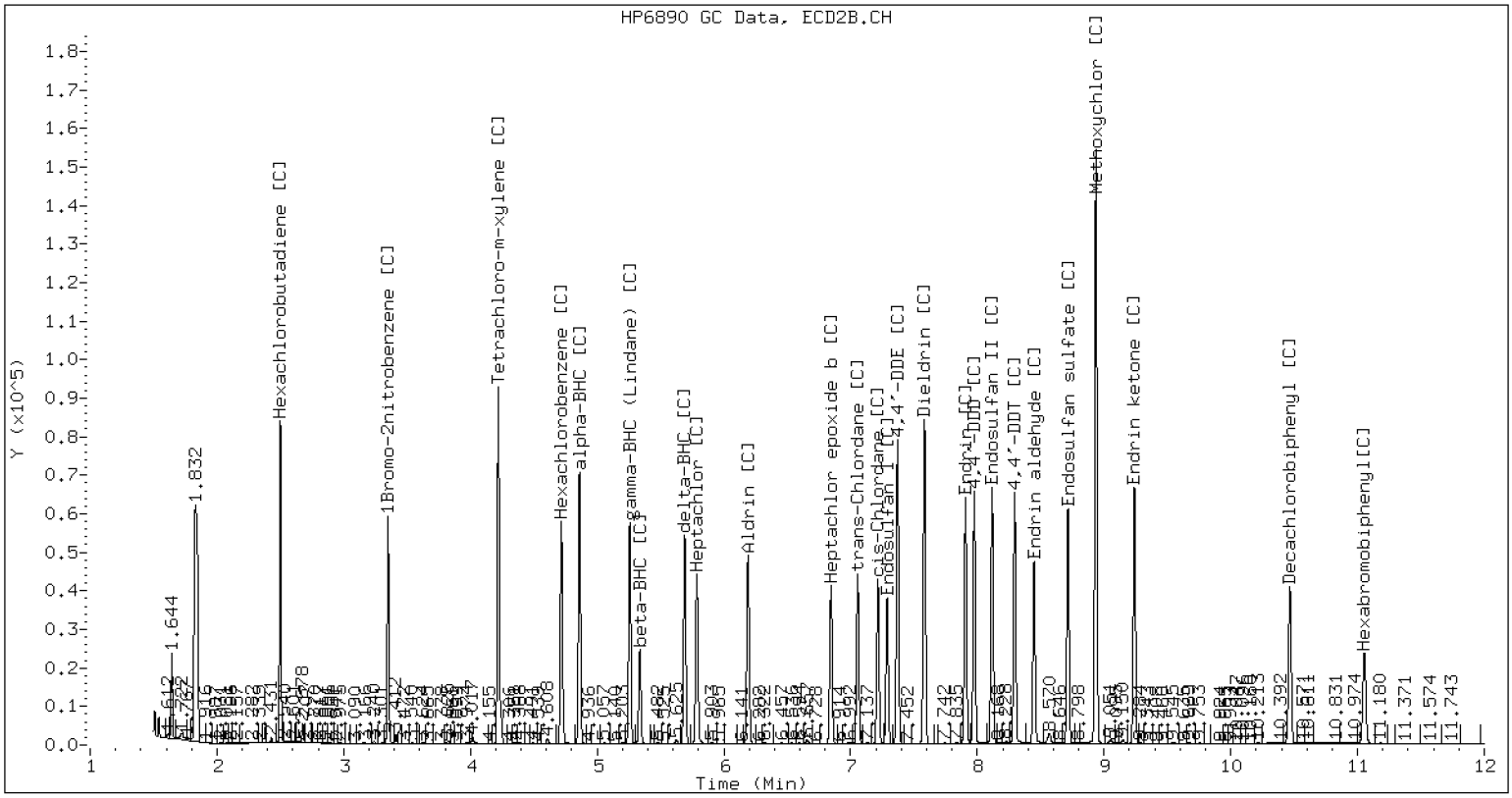
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121411.D SEQ-CAL7 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121411.D
Data file 2: /20221214.b/B20221214.b/22121411.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7
Client ID:
Injection Date: 14-DEC-2022 22:25
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121412.D
Data file 2: /20221214.b/B20221214.b/22121412.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8
Client ID:
Injection Date: 14-DEC-2022 22:43
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	22184	6.741	-0.000	34211	2.89	2.85	1.2	Oxychlordane
6.106	-0.000	18661	7.036	-0.000	30817	2.94	3.14	6.5	2,4-DDE
6.397	-0.000	30616	7.154	-0.001	41466	3.05	2.82	7.5	trans-Nonachlor
6.681	0.000	16263	7.591	0.000	26177	2.88	3.12	7.9	2,4-DDD
6.956	-0.001	17569	7.913	-0.000	24398	2.88	2.82	2.1	2,4-DDT
7.112	-0.000	29417	7.975	-0.000	37972	3.01	2.72	9.9	cis-Nonachlor
8.082	-0.000	18819	9.223	-0.000	24312	3.09	3.00	3.1	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

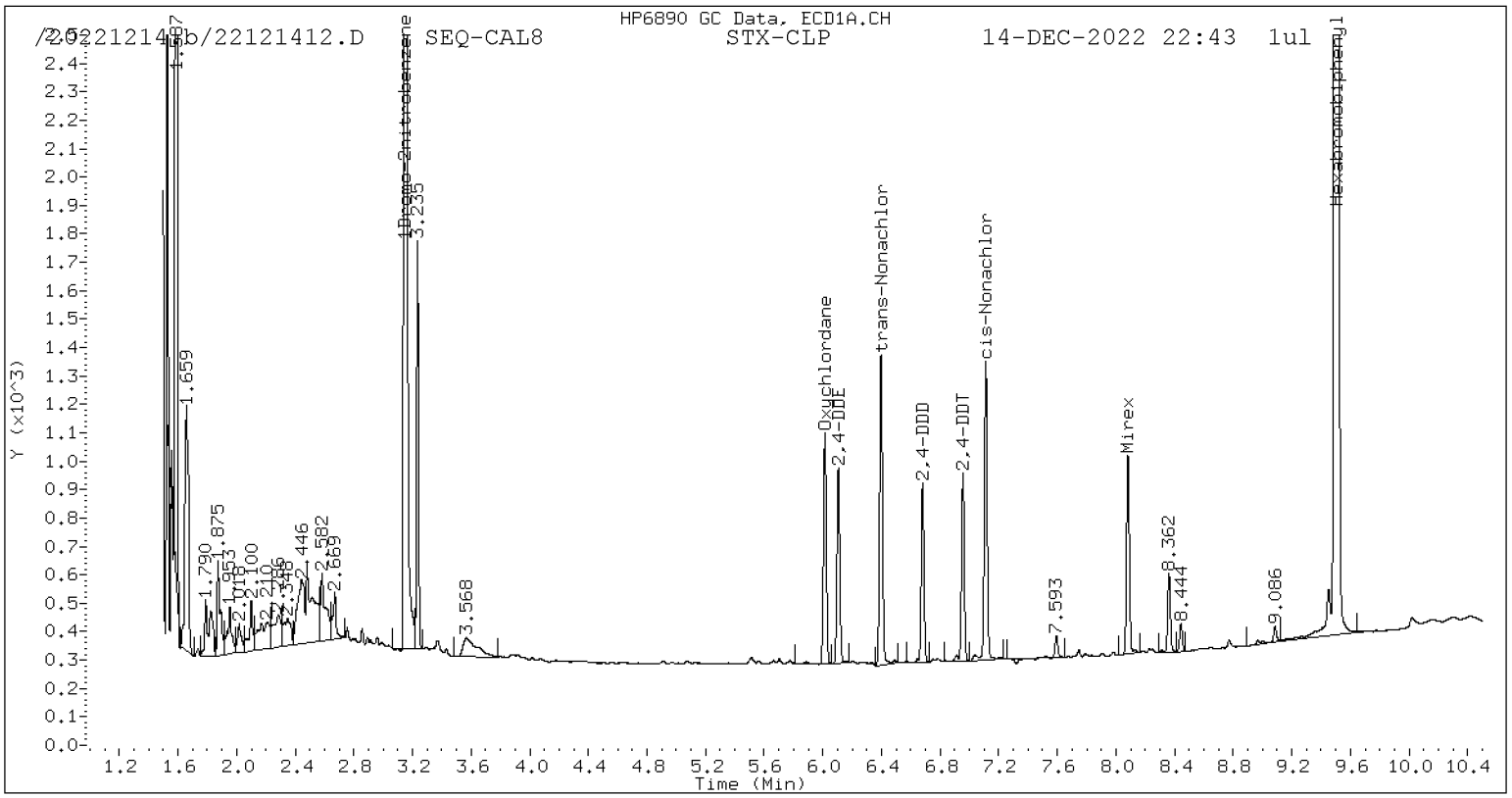
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	713898	0.5
Hexabromobiphenyl	641833	646441	0.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1076864	1.7
Hexabromobiphenyl	797125	820275	2.9

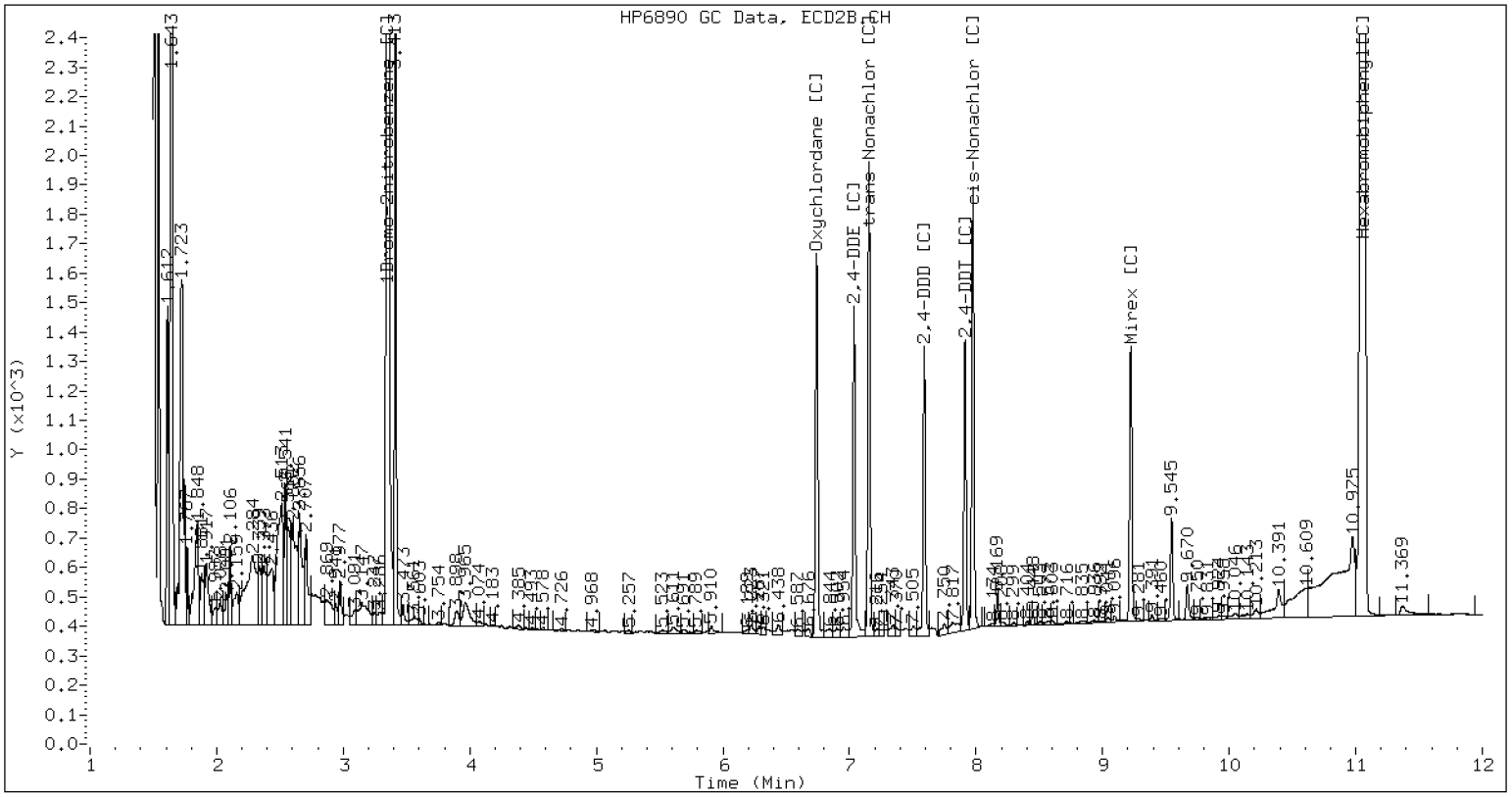
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121412.D SEQ-CAL8 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121412.D
Data file 2: /20221214.b/B20221214.b/22121412.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8
Client ID:
Injection Date: 14-DEC-2022 22:43
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121413.D
Data file 2: /20221214.b/B20221214.b/22121413.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9
Client ID:
Injection Date: 14-DEC-2022 23:01
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.015	0.000	39121	6.741	-0.000	61505	5.34	5.41	1.3	Oxychlordane
6.106	0.000	33487	7.036	-0.000	53206	5.54	5.72	3.1	2,4-DDE
6.398	0.000	51858	7.154	-0.001	72836	5.42	5.20	4.1	trans-Nonachlor
6.681	0.000	29307	7.590	-0.000	44506	5.45	5.55	1.9	2,4-DDD
6.957	-0.000	31530	7.914	0.000	45986	5.43	5.57	2.6	2,4-DDT
7.112	-0.000	50912	7.975	0.000	70898	5.46	5.32	2.6	cis-Nonachlor
8.082	-0.000	32004	9.223	-0.000	45650	5.52	5.89	6.6	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

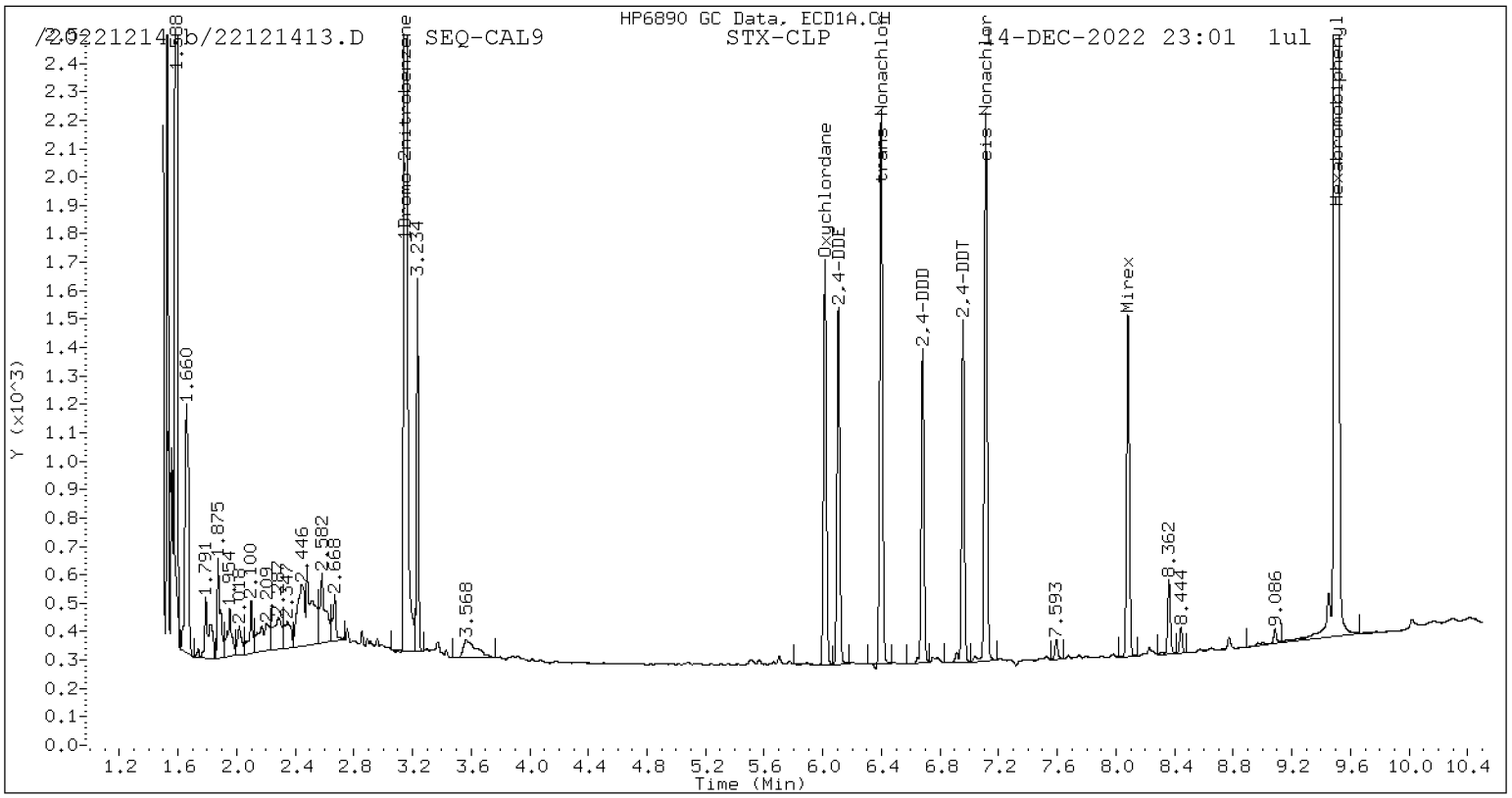
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	672507	-5.4
Hexabromobiphenyl	641833	615627	-4.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1020334	-3.6
Hexabromobiphenyl	797125	782734	-1.8

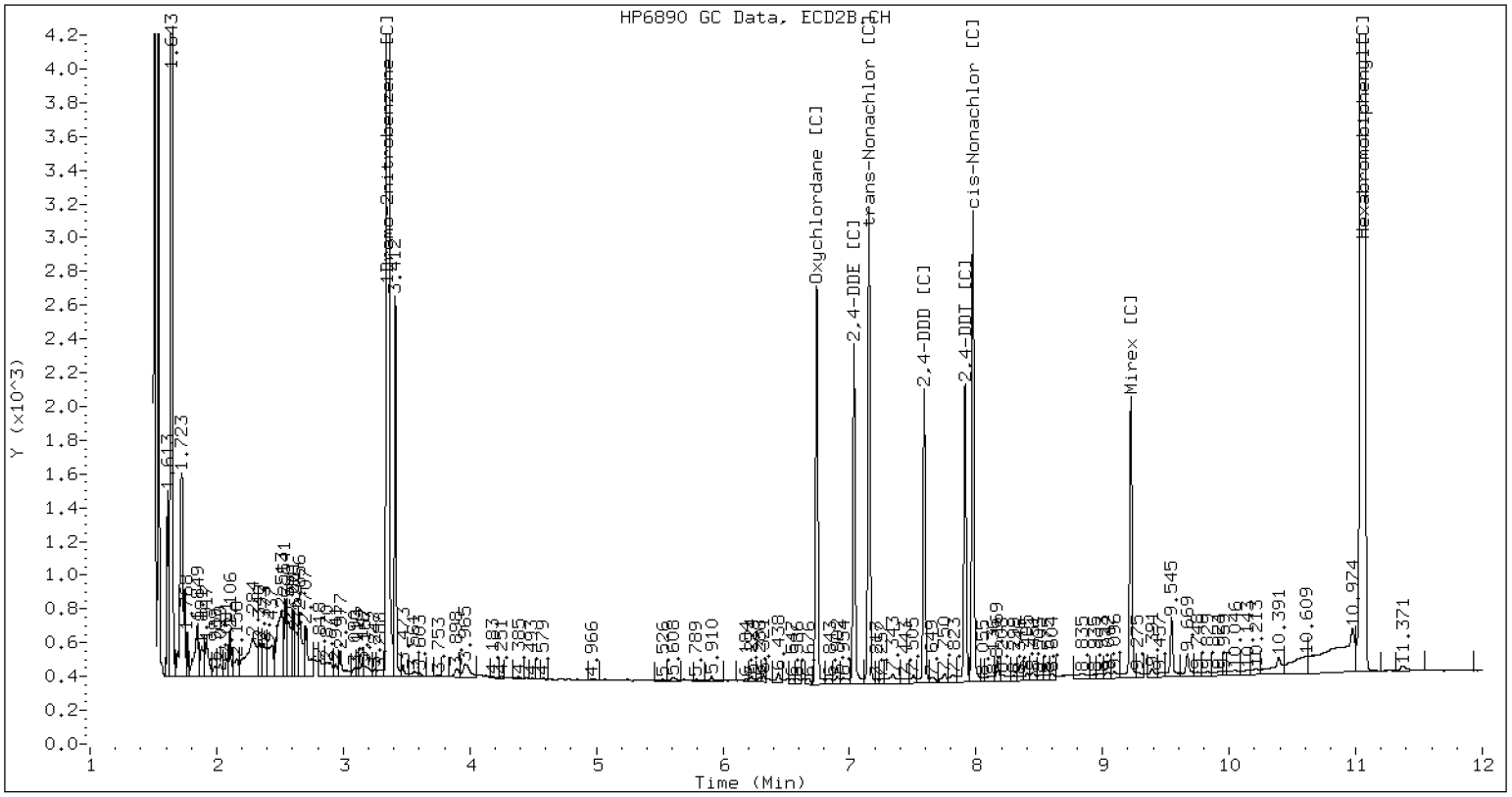
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121413.D SEQ-CAL9 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121413.D
Data file 2: /20221214.b/B20221214.b/22121413.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9
Client ID:
Injection Date: 14-DEC-2022 23:01
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121414.D
Data file 2: /20221214.b/B20221214.b/22121414.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALA
Client ID:
Injection Date: 14-DEC-2022 23:19
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	82473	6.741	-0.001	127500	10.63	10.63	0.0	Oxychlordane
6.106	-0.000	69109	7.035	-0.001	108440	10.79	11.04	2.3	2,4-DDE
6.398	0.000	108386	7.154	-0.001	157712	10.68	10.60	0.7	trans-Nonachlor
6.681	0.000	60517	7.590	-0.000	91420	10.62	10.74	1.2	2,4-DDD
6.956	-0.001	65300	7.913	0.000	91498	10.61	10.44	1.6	2,4-DDT
7.111	-0.001	104247	7.975	-0.000	146224	10.55	10.34	2.0	cis-Nonachlor
8.082	-0.000	65614	9.222	-0.000	84337	10.67	10.25	4.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

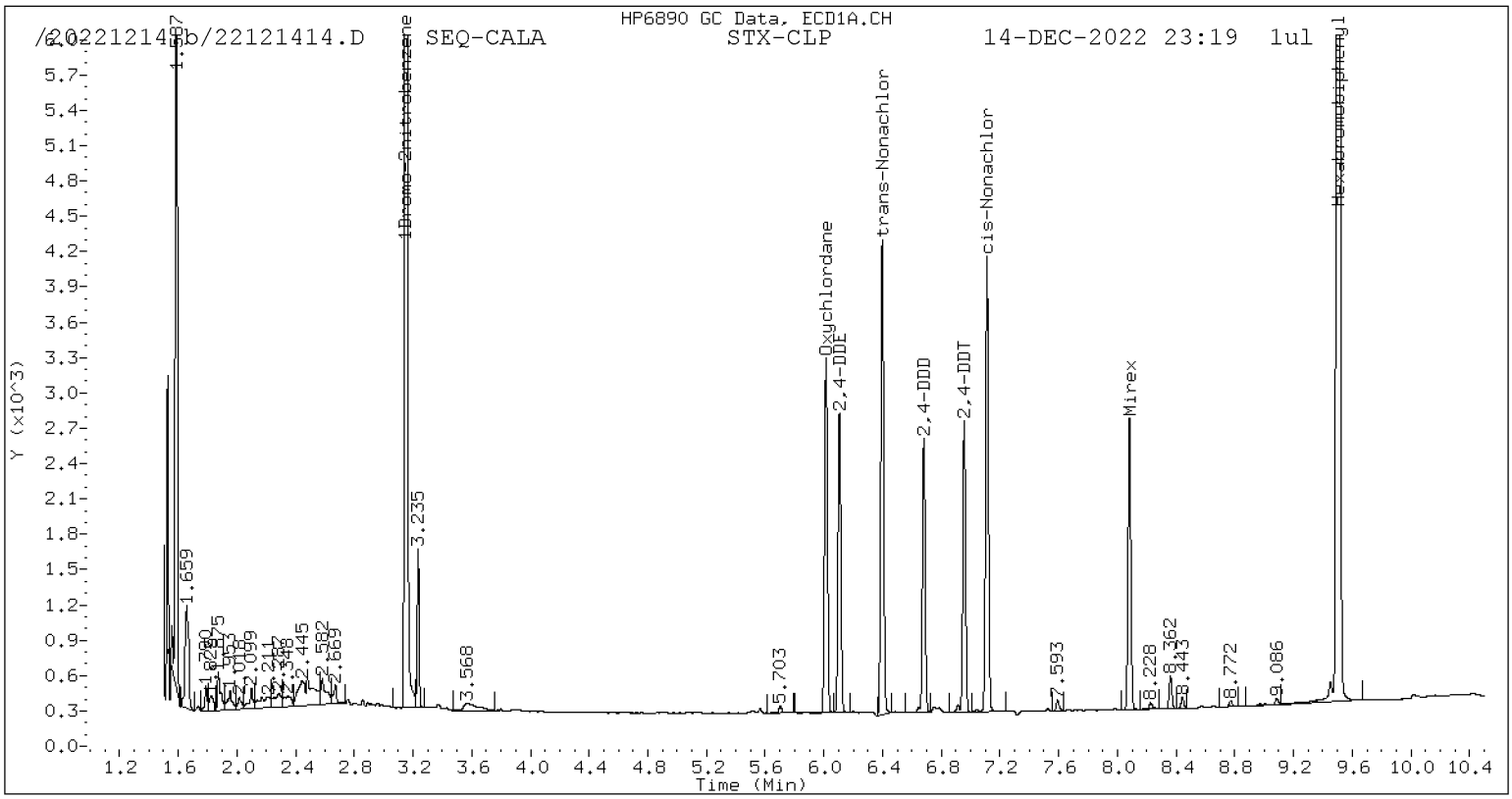
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	712122	0.2
Hexabromobiphenyl	641833	652595	1.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1077341	1.7
Hexabromobiphenyl	797125	831365	4.3

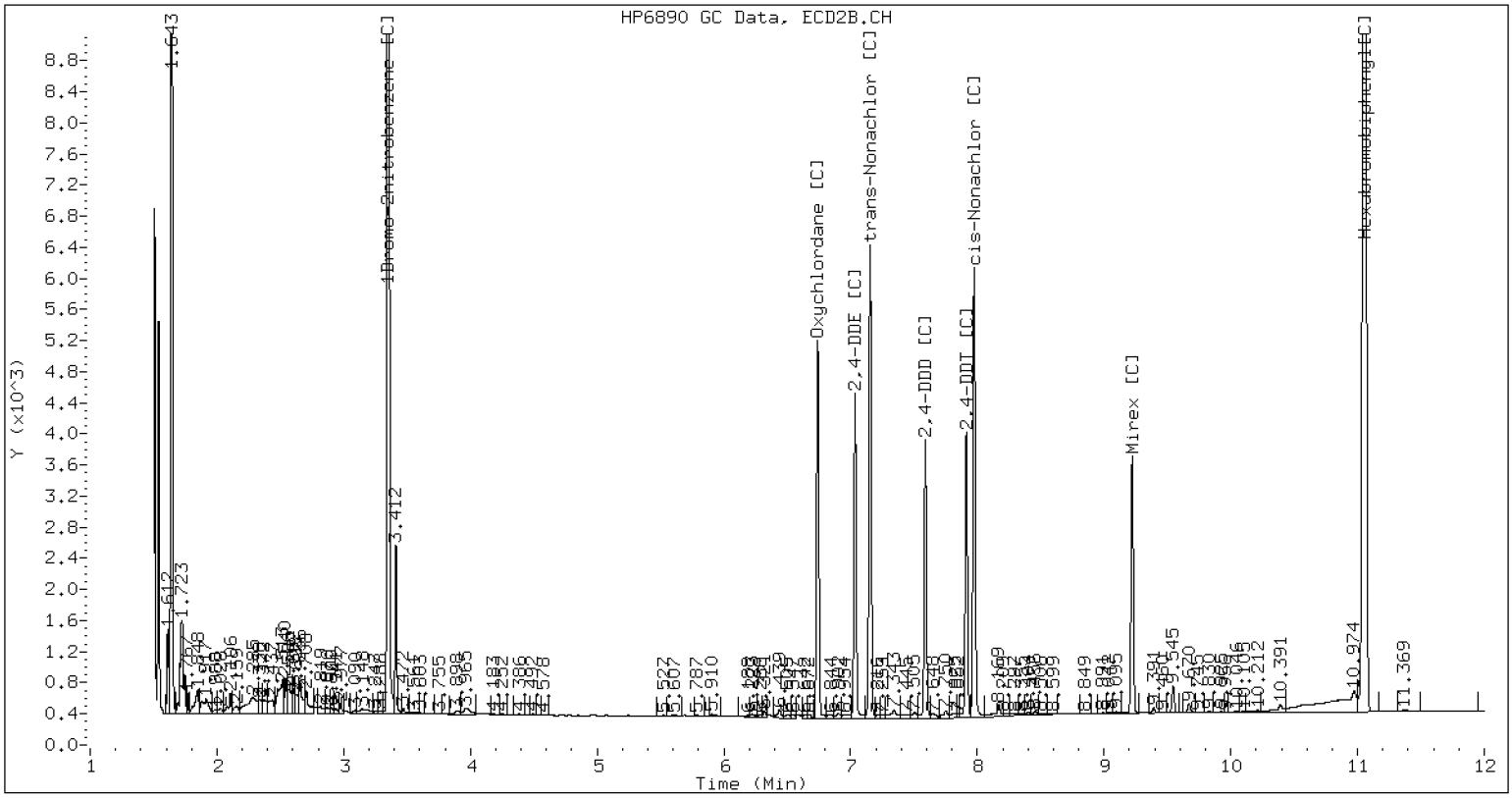
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121414.D SEQ-CALA CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121414.D
Data file 2: /20221214.b/B20221214.b/22121414.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALA
Client ID:
Injection Date: 14-DEC-2022 23:19
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121415.D
Data file 2: /20221214.b/B20221214.b/22121415.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALB
Client ID:
Injection Date: 14-DEC-2022 23:36
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.015	0.001	154379	6.741	-0.000	238017	20.80	20.28	2.5	Oxychlordane
6.106	-0.000	128483	7.036	-0.000	195807	20.97	20.37	2.9	2,4-DDE
6.398	0.000	200622	7.155	-0.000	289952	20.66	20.28	1.9	trans-Nonachlor
6.681	0.000	113972	7.591	0.000	165245	20.90	20.21	3.4	2,4-DDD
6.956	-0.001	122412	7.913	0.000	169814	20.78	20.17	3.0	2,4-DDT
7.112	-0.000	194165	7.975	-0.000	274910	20.54	20.23	1.5	cis-Nonachlor
8.082	-0.000	119271	9.223	0.000	158702	20.28	20.08	1.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

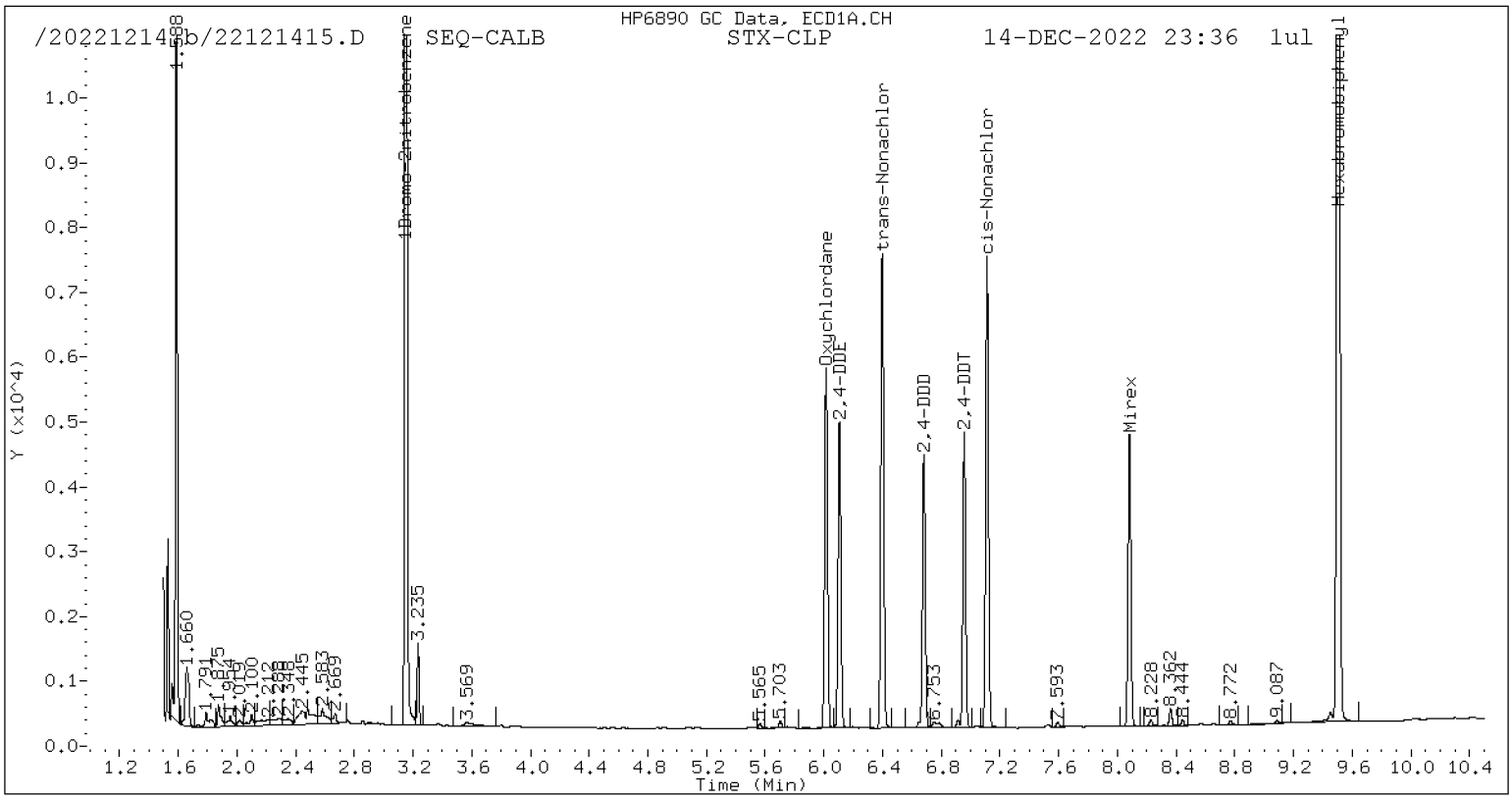
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	693450	-2.4
Hexabromobiphenyl	641833	624334	-2.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1053959	-0.5
Hexabromobiphenyl	797125	798882	0.2

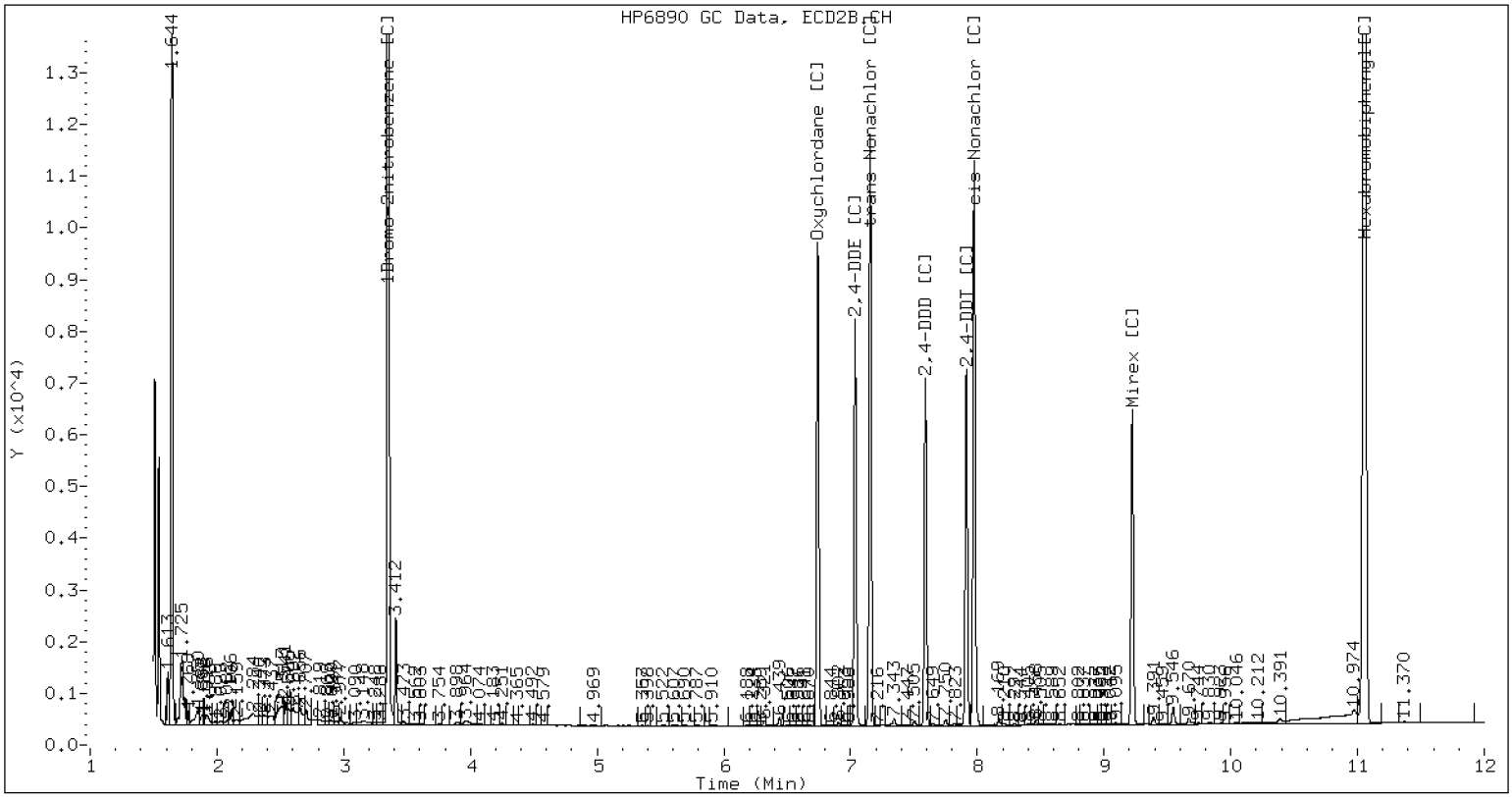
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121415.D SEQ-CALB CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121415.D
Data file 2: /20221214.b/B20221214.b/22121415.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALB
Client ID:
Injection Date: 14-DEC-2022 23:36
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121416.D
Data file 2: /20221214.b/B20221214.b/22121416.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALC
Client ID:
Injection Date: 14-DEC-2022 23:54
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	0.000	292499	6.741	-0.000	460731	40.08	40.26	0.4	Oxychlordane
6.106	0.000	242066	7.036	-0.000	372996	40.18	39.80	0.9	2,4-DDE
6.397	0.000	383329	7.154	-0.001	567971	40.16	40.45	0.7	trans-Nonachlor
6.681	0.000	216474	7.590	-0.000	320311	40.39	39.88	1.3	2,4-DDD
6.957	0.000	233738	7.913	-0.000	332906	40.36	40.25	0.3	2,4-DDT
7.112	0.000	373705	7.975	-0.000	538334	40.21	40.33	0.3	cis-Nonachlor
8.082	0.000	229604	9.222	-0.000	299228	39.71	38.54	3.0	Mirex
3.800	-0.028	1151	----			0.13	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

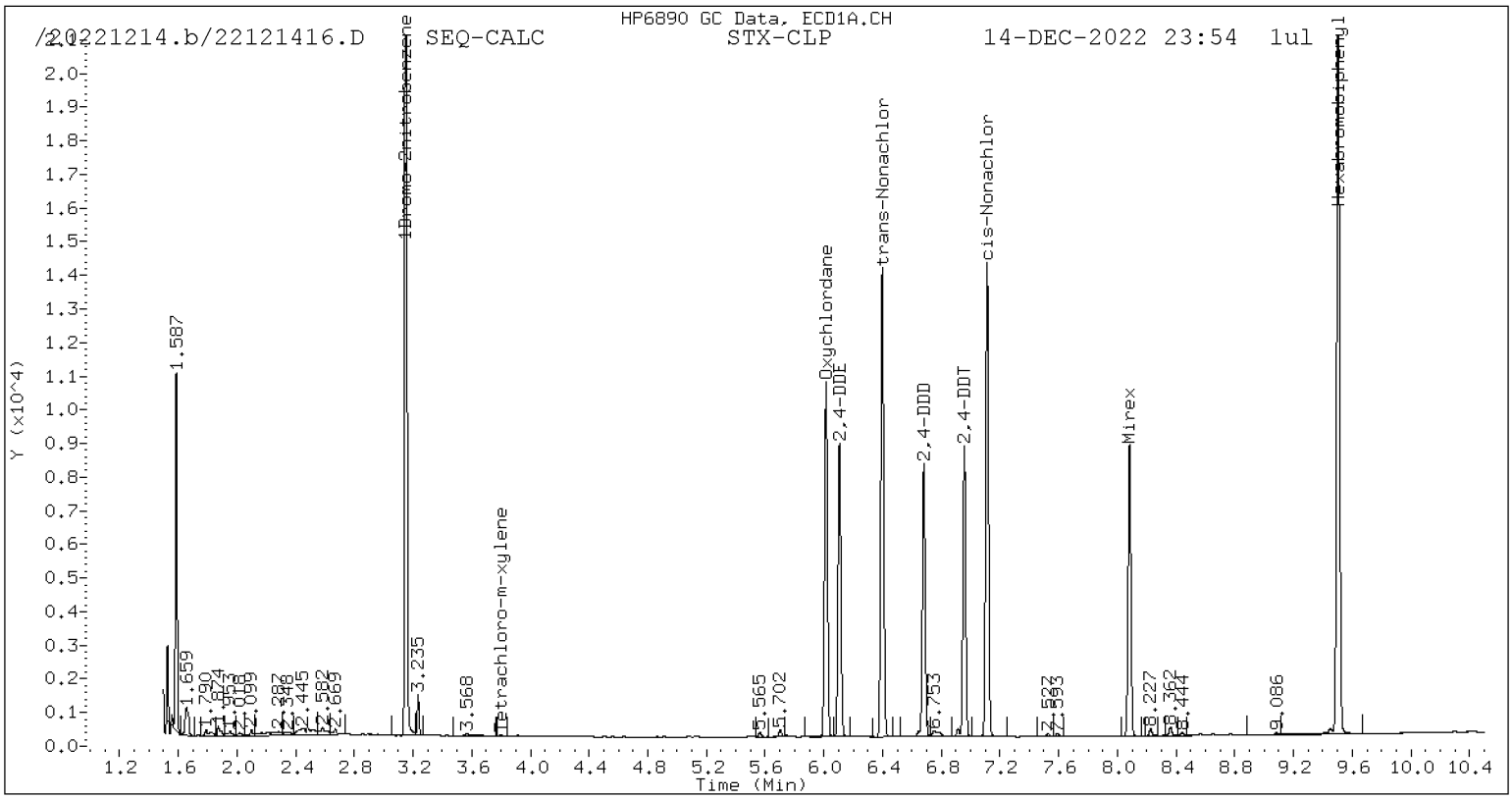
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	674573	-5.1
Hexabromobiphenyl	641833	613787	-4.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1027697	-2.9
Hexabromobiphenyl	797125	784673	-1.6

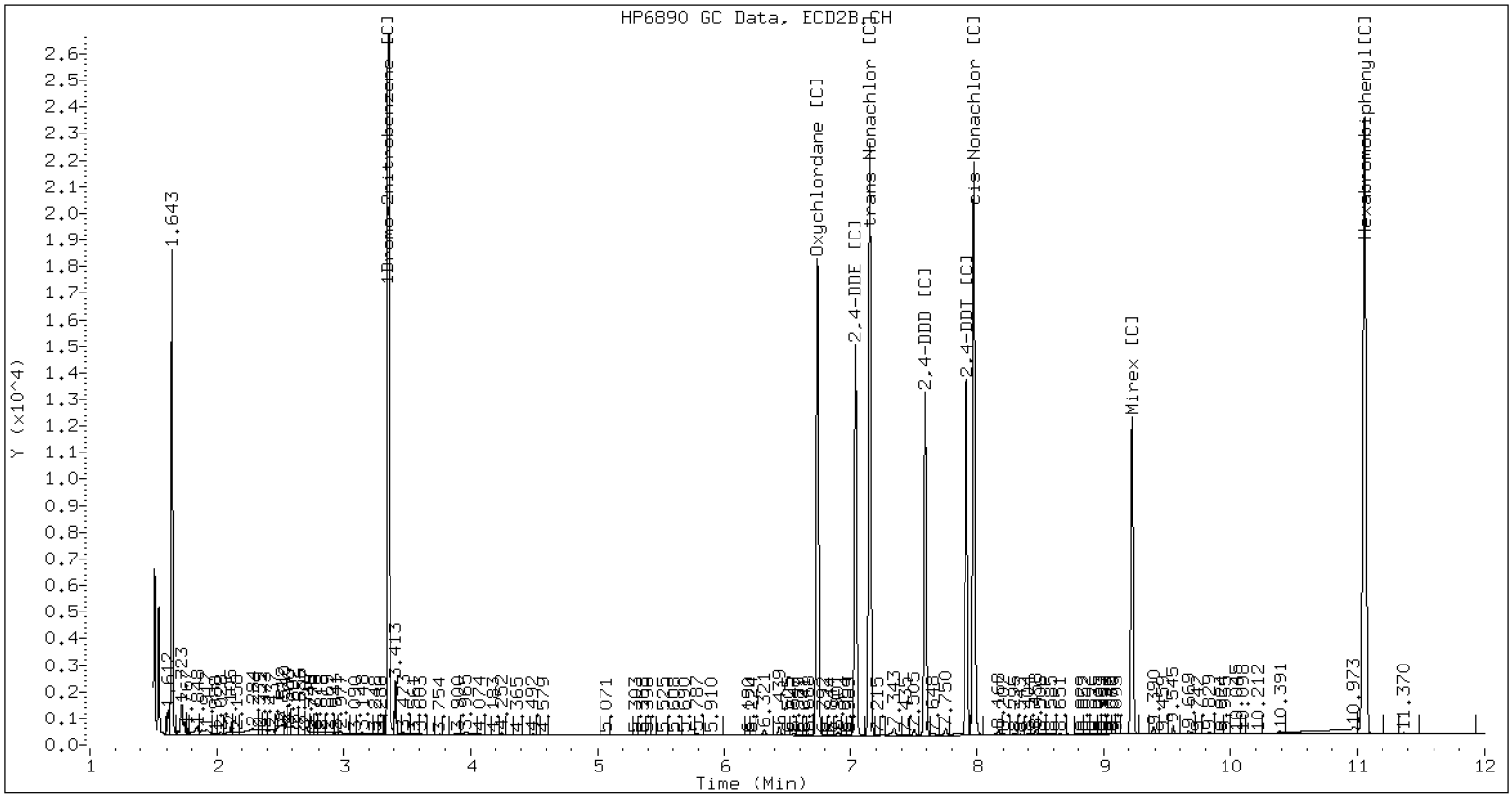
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121416.D SEQ-CALC CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121416.D
Data file 2: /20221214.b/B20221214.b/22121416.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALC
Client ID:
Injection Date: 14-DEC-2022 23:54
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121417.D
Data file 2: /20221214.b/B20221214.b/22121417.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALD
Client ID:
Injection Date: 15-DEC-2022 00:12
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	544254	6.741	-0.000	856443	75.85	75.73	0.2	Oxychlordane
6.106	-0.000	438313	7.036	-0.000	677072	73.99	73.11	1.2	2,4-DDE
6.397	-0.000	704675	7.155	0.000	1067899	75.09	76.94	2.4	trans-Nonachlor
6.681	0.000	393654	7.591	0.000	594311	74.70	74.86	0.2	2,4-DDD
6.956	-0.001	430636	7.914	0.000	618740	75.63	75.68	0.1	2,4-DDT
7.112	-0.000	688257	7.975	0.000	1018624	75.31	77.19	2.5	cis-Nonachlor
8.082	-0.001	426177	9.223	0.000	573947	74.97	74.78	0.2	Mirex
3.800	-0.028	2109	----			0.23	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

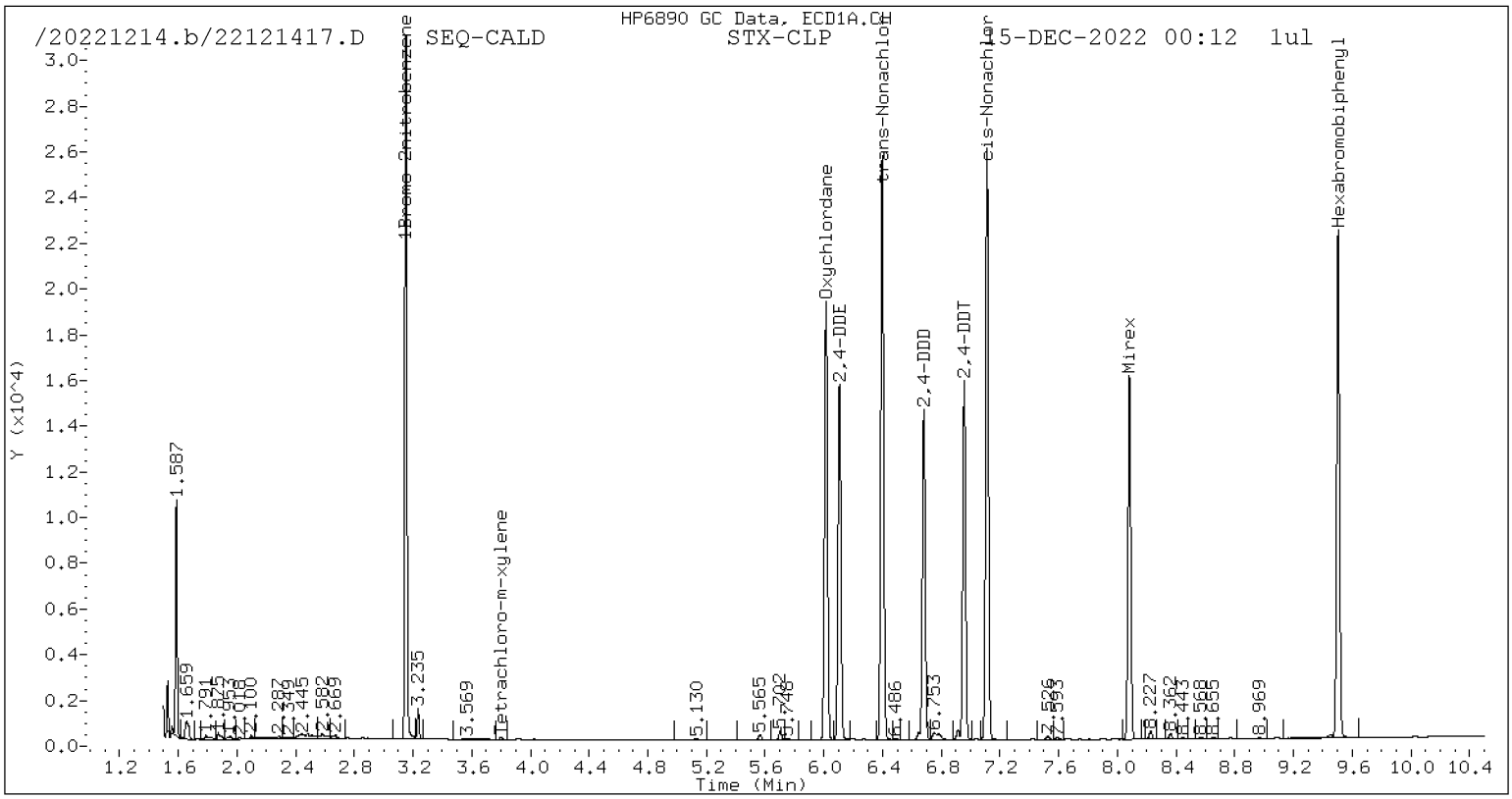
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	664375	-6.5
Hexabromobiphenyl	641833	603504	-6.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1015544	-4.1
Hexabromobiphenyl	797125	775630	-2.7

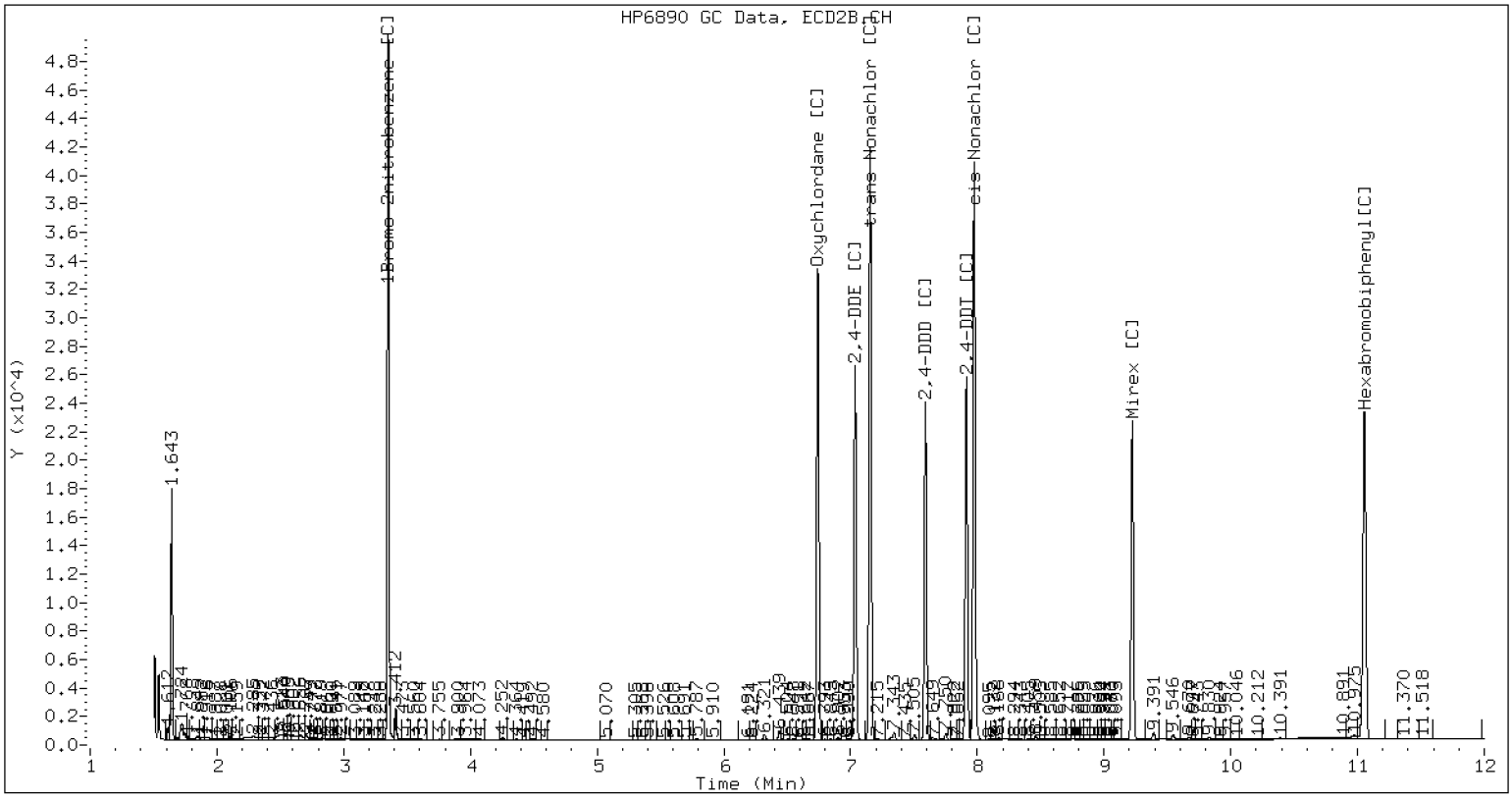
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121417.D SEQ-CALD CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121417.D
Data file 2: /20221214.b/B20221214.b/22121417.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALD
Client ID:
Injection Date: 15-DEC-2022 00:12
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121418.D
Data file 2: /20221214.b/B20221214.b/22121418.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALE
Client ID:
Injection Date: 15-DEC-2022 00:30
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	0.000	1020828	6.741	0.000	1630330	140.48	142.04	1.1	Oxychlordane
6.106	-0.000	801828	7.036	0.000	1240933	133.65	132.03	1.2	2,4-DDE
6.397	0.000	1327091	7.155	0.000	2047915	139.63	146.04	4.5	trans-Nonachlor
6.680	-0.000	733651	7.591	0.000	1118552	137.46	139.45	1.4	2,4-DDD
6.956	-0.001	794021	7.913	0.000	1163676	137.69	140.88	2.3	2,4-DDT
7.112	-0.000	1301975	7.975	0.000	1956215	140.68	146.73	4.2	cis-Nonachlor
8.082	-0.001	815059	9.223	0.000	1108848	141.57	143.01	1.0	Mirex
3.800	-0.028	3997	----			0.43	0.00	---	Tetrachloro-m-xylene
----			10.471	0.004	3393	0.00	0.39	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

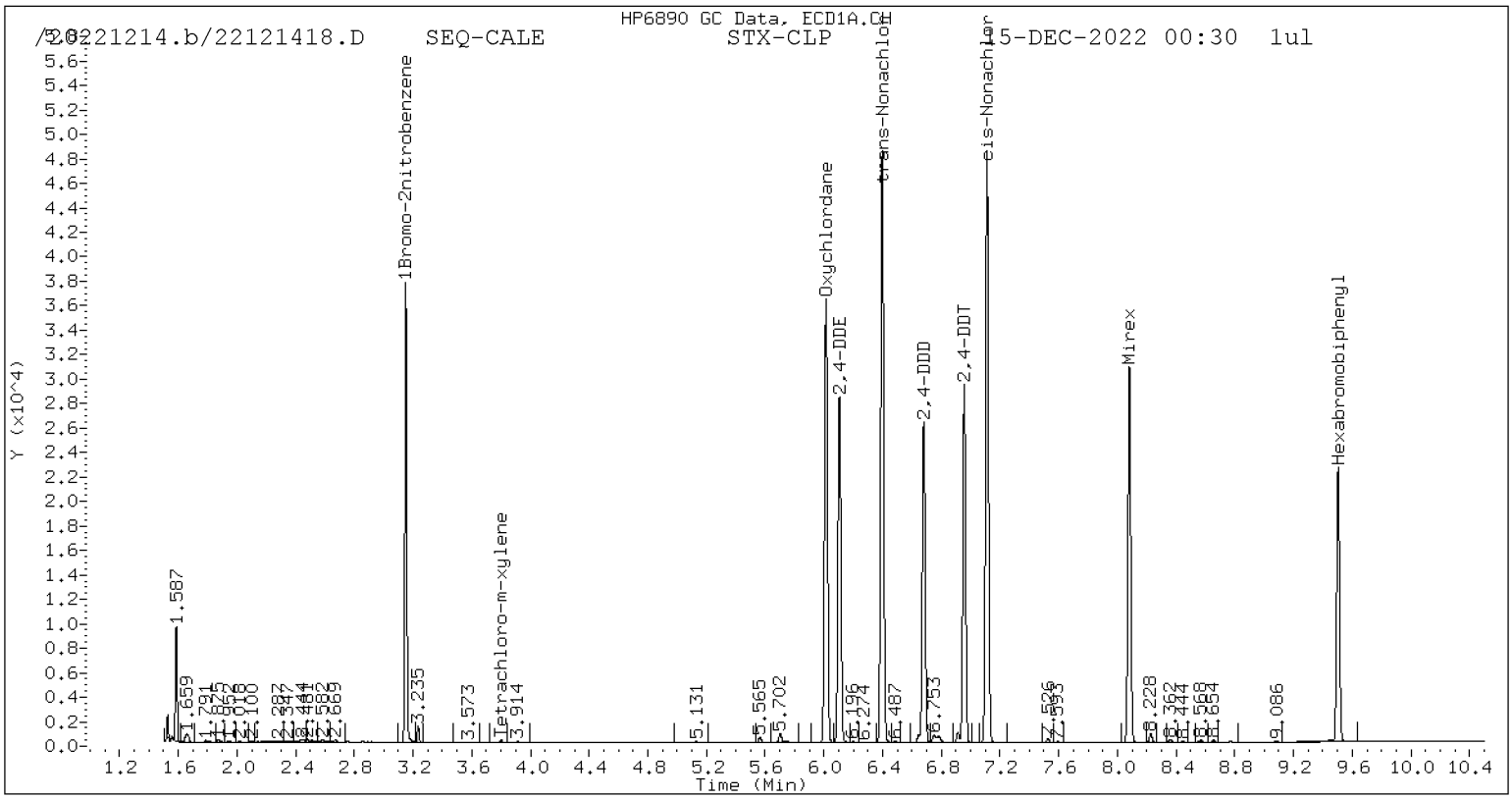
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	675789	-4.9
Hexabromobiphenyl	641833	611199	-4.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1030648	-2.7
Hexabromobiphenyl	797125	783631	-1.7

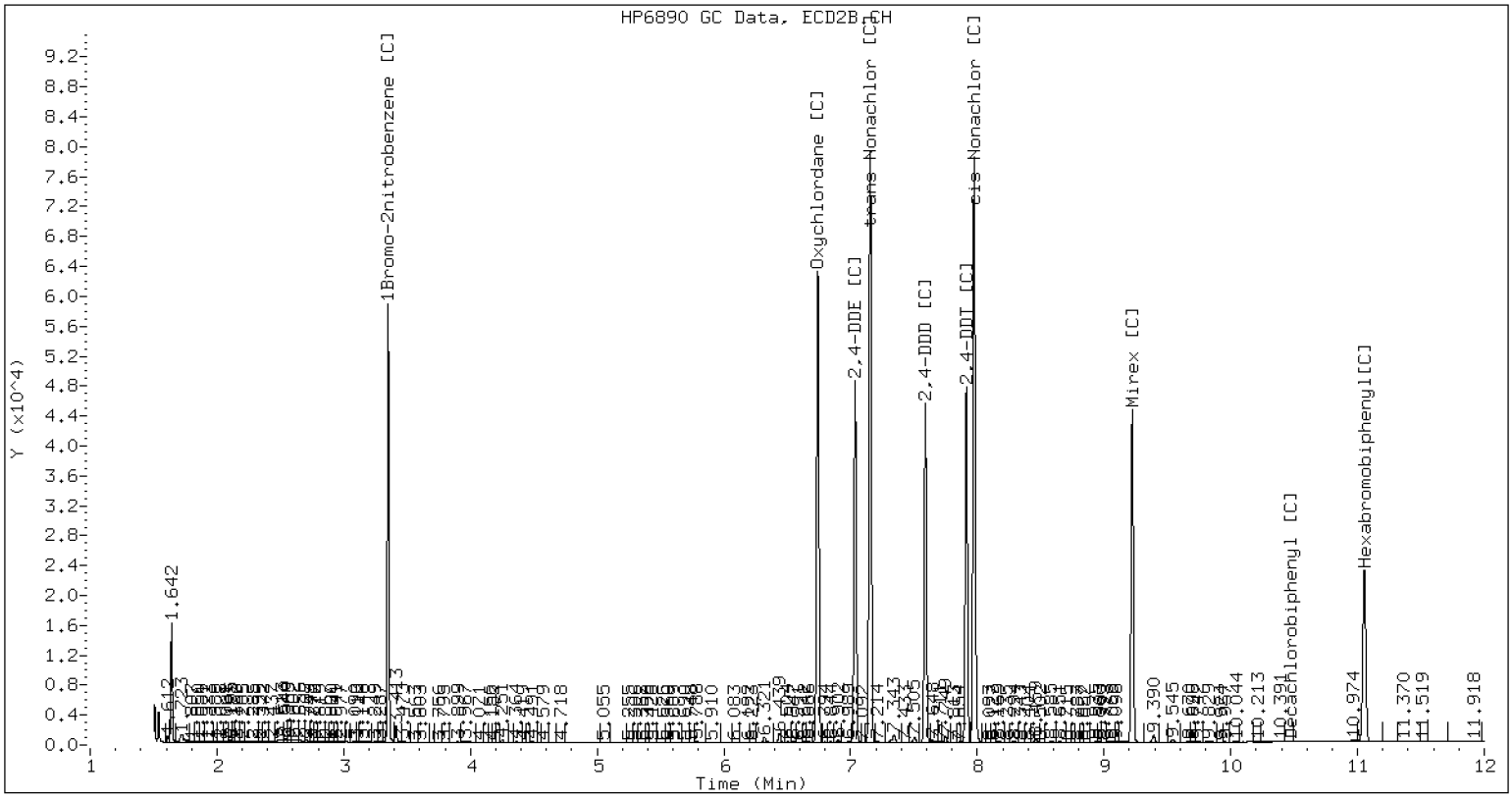
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121418.D SEQ-CALE CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121418.D
Data file 2: /20221214.b/B20221214.b/22121418.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALE
Client ID:
Injection Date: 15-DEC-2022 00:30
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121419.D
Data file 2: /20221214.b/B20221214.b/22121419.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV1
Client ID:
Injection Date: 15-DEC-2022 00:48
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	643235	4.860	-0.000	1047709	49.66	51.22	3.1	alpha-BHC
4.726	-0.000	242617	5.337	0.000	386388	48.66	49.69	2.1	beta-BHC
4.909	0.000	554797	5.692	0.001	897343	52.41	53.26	1.6	delta-BHC
4.646	0.001	573983	5.258	0.000	915596	51.11	52.75	3.1	gamma-BHC (Lindane)
5.130	0.000	495138	5.788	0.001	804002	49.55	51.13	3.1	Heptachlor
5.454	0.000	526615	6.191	0.000	842909	47.03	46.95	0.2	Aldrin
6.130	0.000	469481	6.846	0.000	724932	48.36	48.83	1.0	Heptachlor epoxide b
6.573	0.000	423102	7.289	-0.000	632890	47.49	48.37	1.8	Endosulfan I
6.832	0.000	478299	7.583	0.000	724854	49.97	50.14	0.3	Dieldrin
6.489	0.000	448741	7.371	0.000	670346	50.49	50.56	0.1	4,4'-DDE
7.082	0.001	396143	7.907	0.000	551004	50.36	50.73	0.7	Endrin
7.318	0.001	350431	8.118	0.001	537104	49.49	48.24	2.6	Endosulfan II
7.136	0.001	355688	7.977	0.001	525927	50.19	49.78	0.8	4,4'-DDD
8.180	0.000	347949	8.716	0.001	502438	51.75	51.39	0.7	Endosulfan sulfate
7.428	0.001	368644	8.295	-0.000	524685	51.48	51.45	0.1	4,4'-DDT
7.913	0.001	174306	8.935	-0.001	238791	54.93	52.91	3.7	Methoxychlor
8.454	0.000	394474	9.240	-0.000	540431	51.21	51.18	0.1	Endrin ketone
7.746	0.001	316262	8.448	0.000	449269	56.00	57.20	2.1	Endrin aldehyde
6.271	0.000	490842	7.056	0.000	748350	49.78	50.55	1.5	trans-Chlordane
6.417	0.001	469513	7.216	0.000	700871	47.47	48.39	1.9	cis-Chlordane
----			2.512	0.011	11364	0.00	0.59	---	Hexachlorobutadiene
----			4.719	0.001	634	0.00	0.03	---	Hexachlorobenzene
----			4.220	-0.000	1724	0.00	0.12	---	Tetrachloro-m-xylene
----			10.468	0.001	643	0.00	0.08	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

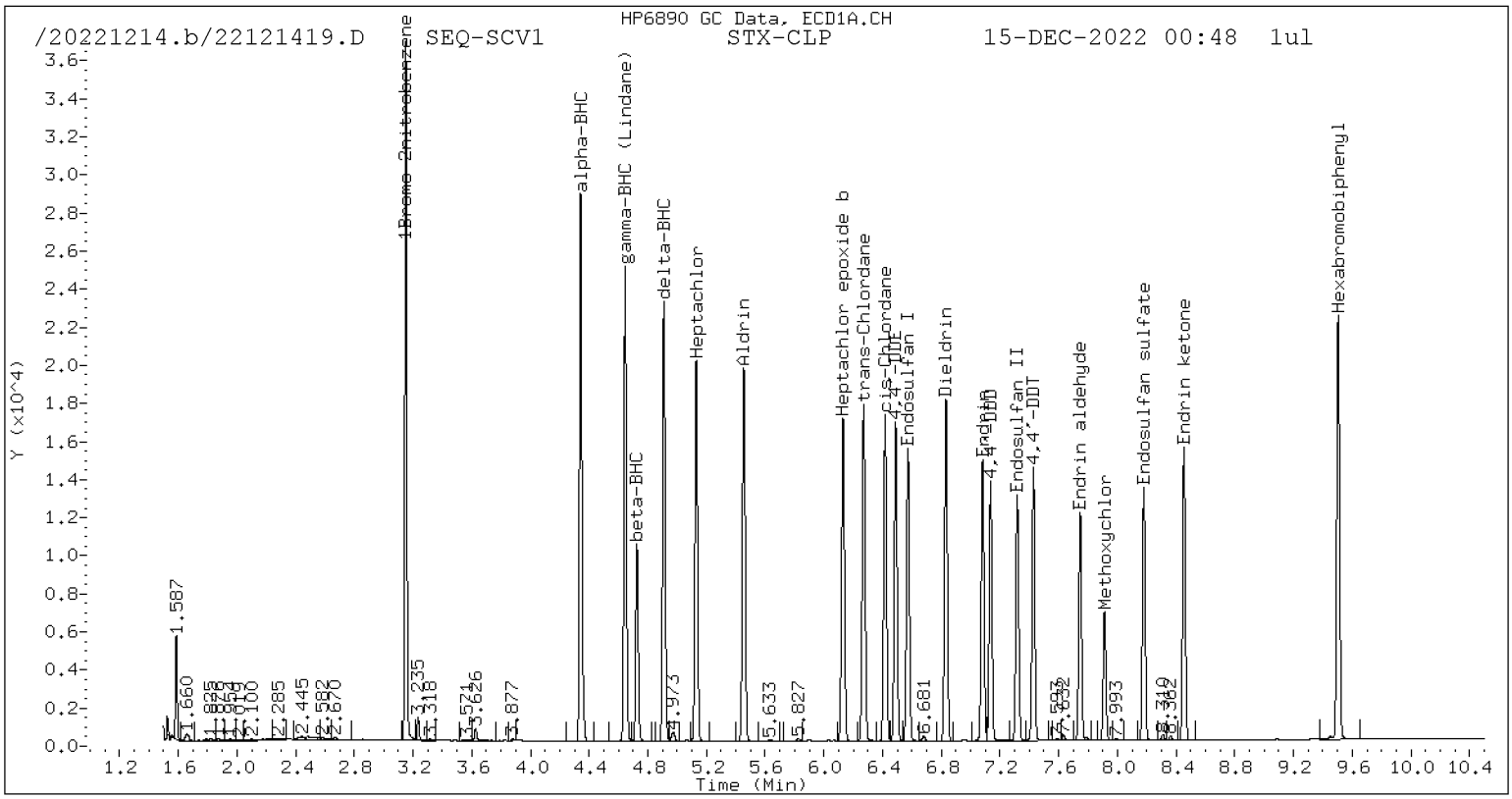
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	672755	-5.3
Hexabromobiphenyl	641833	599983	-6.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1020655	-3.6
Hexabromobiphenyl	797125	763949	-4.2

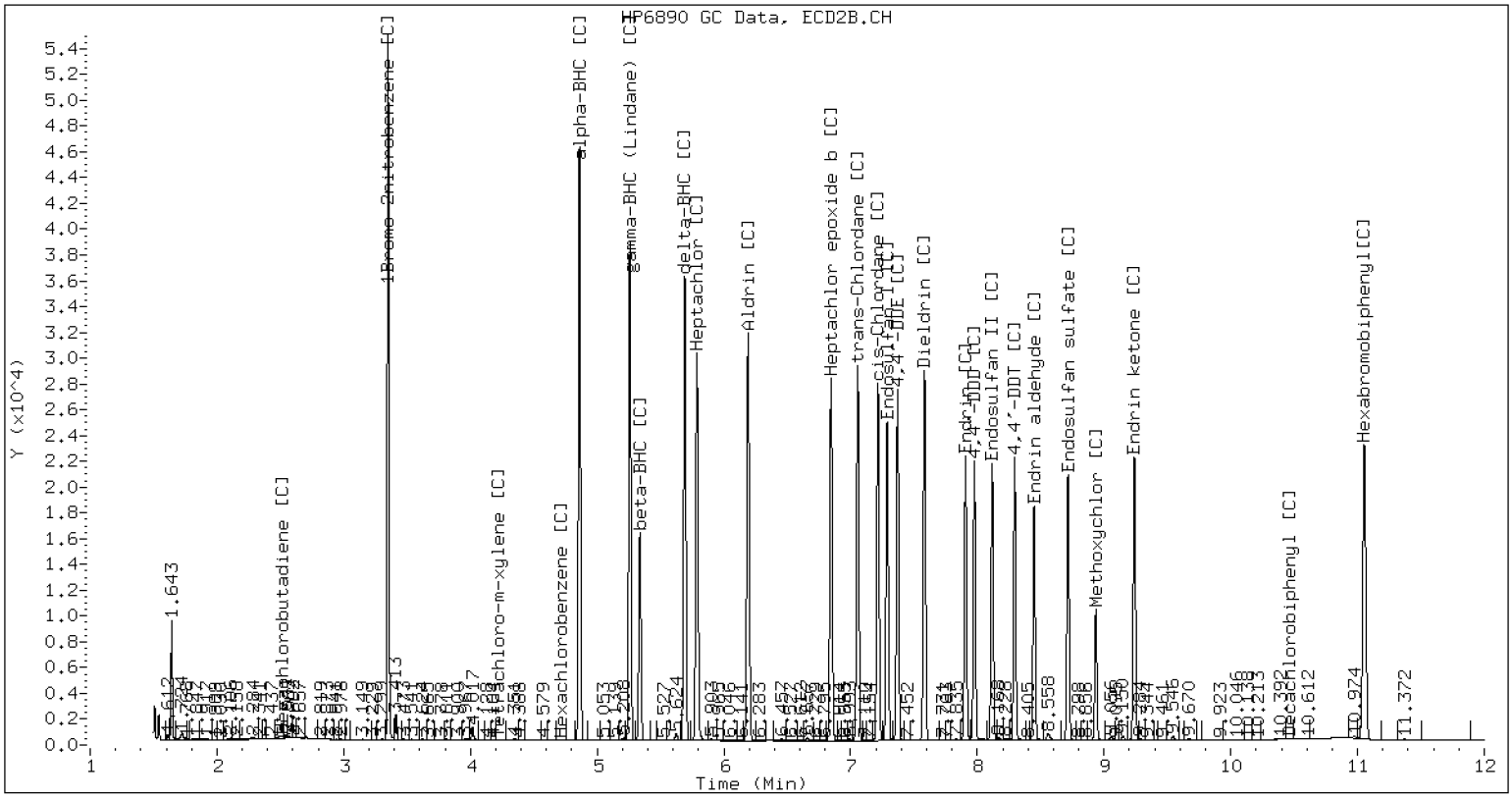
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121419.D SEQ-SCV1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121419.D
Data file 2: /20221214.b/B20221214.b/22121419.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV1
Client ID:
Injection Date: 15-DEC-2022 00:48
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121420.D
Data file 2: /20221214.b/B20221214.b/22121420.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV2
Client ID:
Injection Date: 15-DEC-2022 01:06
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	374516	6.741	0.000	591348	51.08	50.07	2.0	Oxychlordane
6.106	-0.000	261097	7.036	-0.000	403824	43.13	41.76	3.2	2,4-DDE
6.397	-0.000	444133	7.155	-0.000	657777	46.31	45.91	0.9	trans-Nonachlor
6.681	0.000	222534	7.591	0.000	334706	41.32	40.84	1.2	2,4-DDD
6.956	-0.001	262722	7.914	0.000	382016	45.15	45.26	0.2	2,4-DDT
7.111	-0.001	455894	7.975	0.000	655718	48.82	48.13	1.4	cis-Nonachlor
8.081	-0.001	256593	9.223	0.000	343173	44.17	43.31	2.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

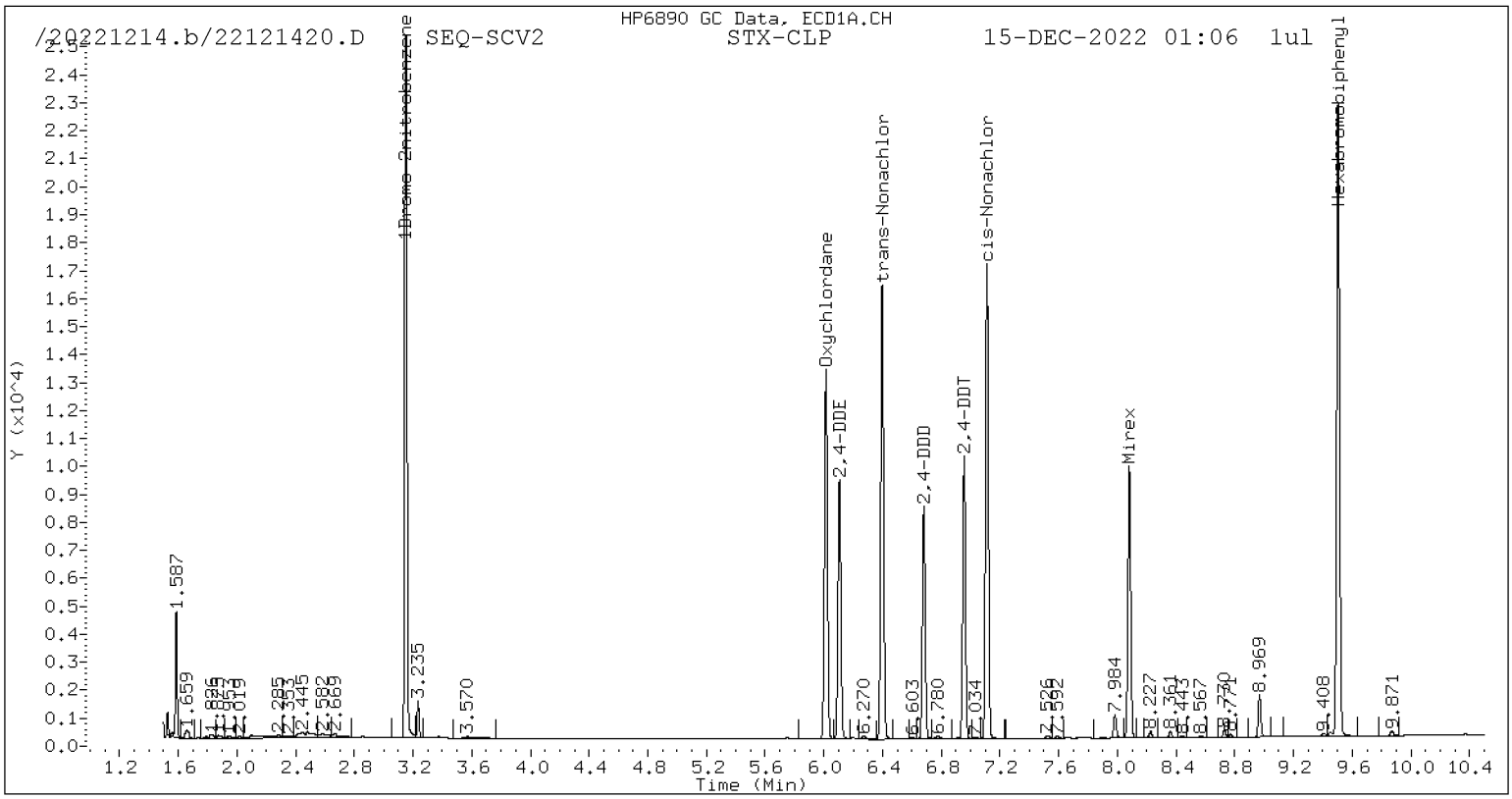
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	687052	-3.3
Hexabromobiphenyl	641833	616730	-3.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1060438	0.2
Hexabromobiphenyl	797125	800740	0.5

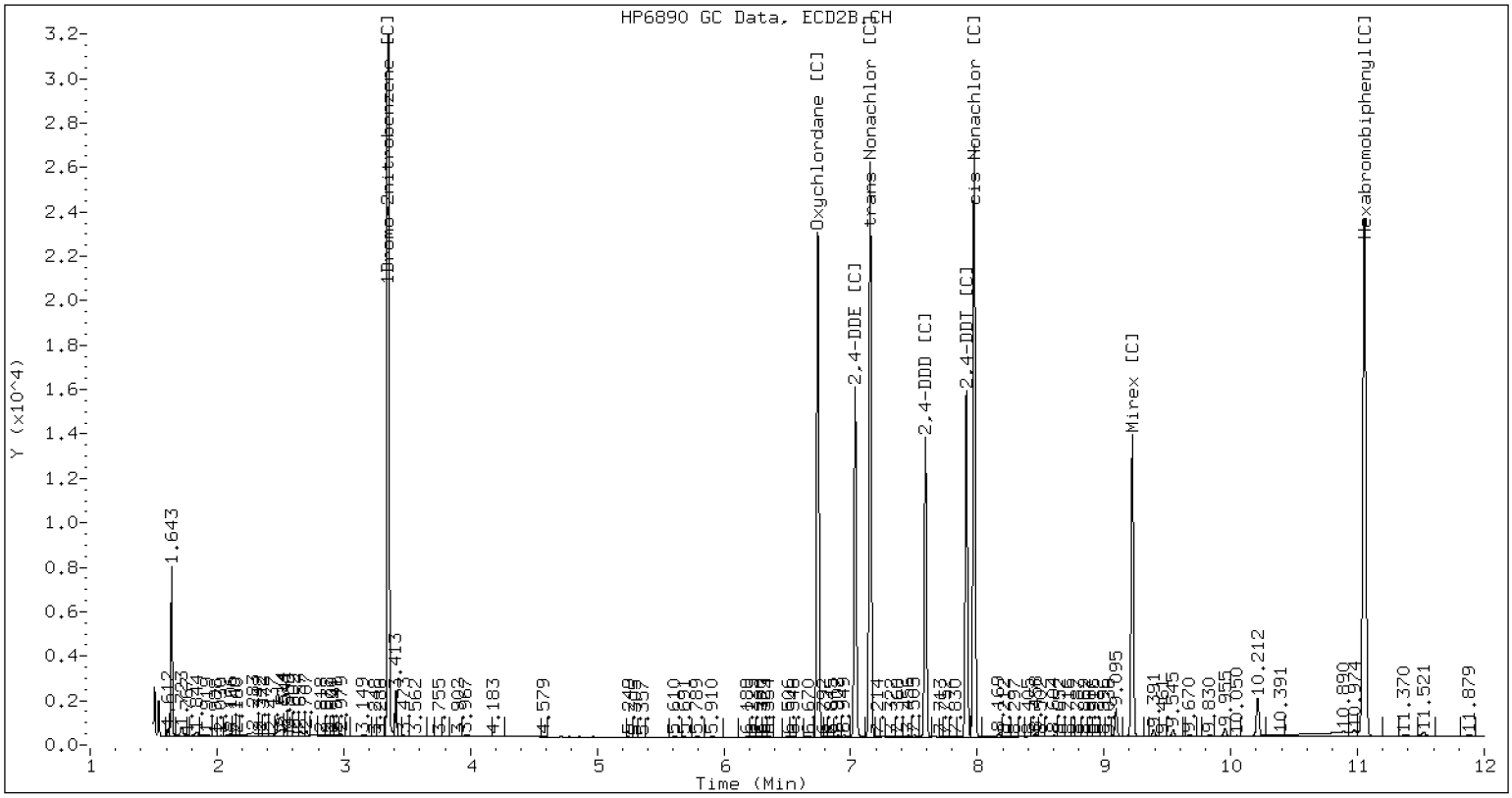
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121420.D SEQ-SCV2 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121420.D
Data file 2: /20221214.b/B20221214.b/22121420.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV2
Client ID:
Injection Date: 15-DEC-2022 01:06
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121421.D
Data file 2: /20221214.b/B20221214.b/22121421.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1A
Client ID:
Injection Date: 15-DEC-2022 01:24
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			4.215	-0.006	361	0.00	0.02	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	601512	-15.4
Hexabromobiphenyl	641833	690103	7.5

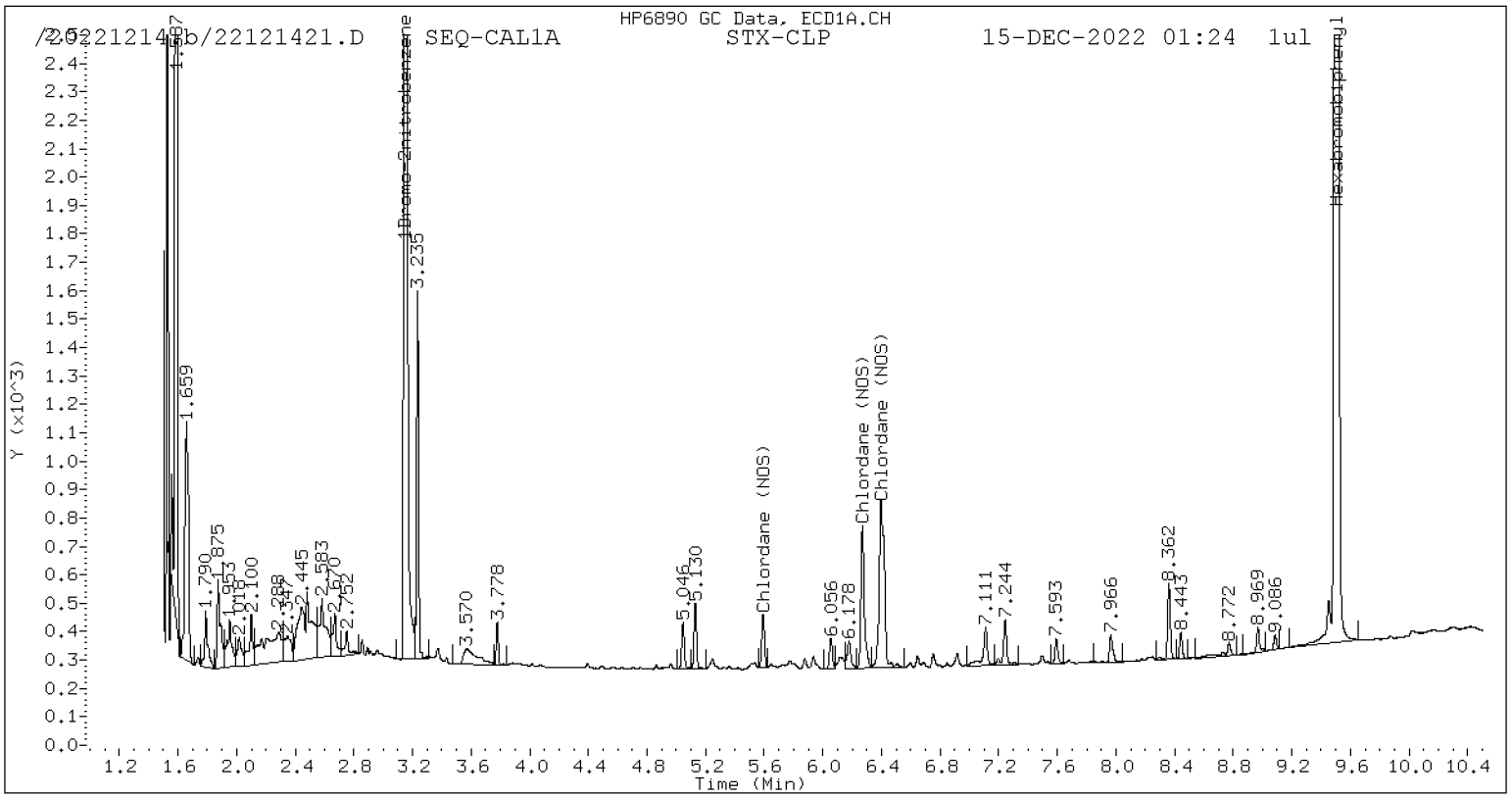
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	776759	-26.6
Hexabromobiphenyl	797125	1058847	32.8

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

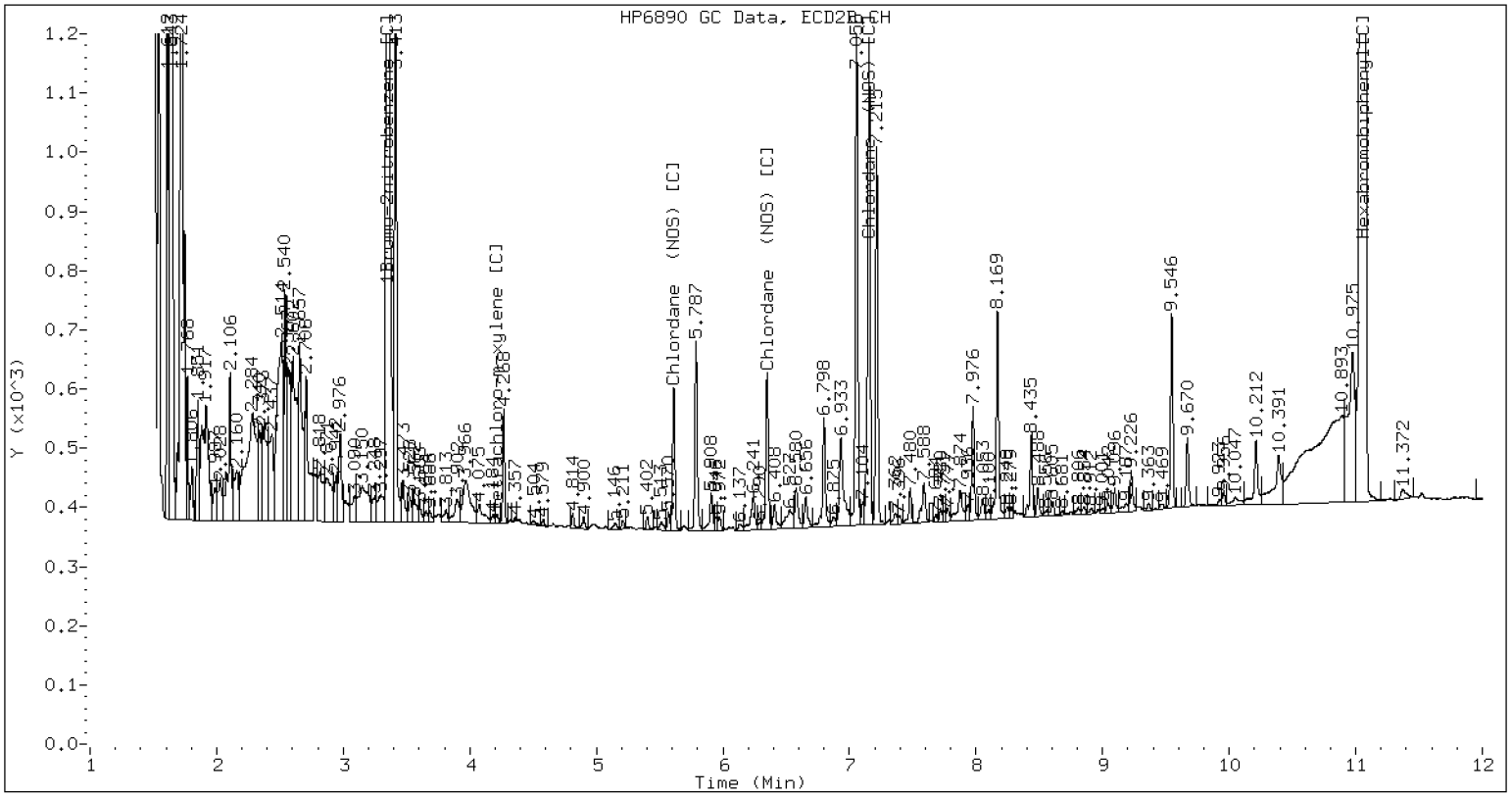
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.000	5054	13.1	1	5.612	-0.000	6415	12.8	
Chlordane (NOS)	2	6.271	-0.000	15913	12.4	2	6.349	-0.000	7689	13.7	
Chlordane (NOS)	3	6.399	0.000	29332	13.1	3	7.155	-0.001	23386	12.3	
Total STX-CLPAve (3 peaks): 12.882						Total CLP2Ave (3 peaks): 12.916				RPD = 0	
Corrected Ave (3 peaks): 12.882						Corrected Ave (3 peaks): 12.916				RPD = 0	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121421.D SEQ-CAL1A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121421.D
Data file 2: /20221214.b/B20221214.b/22121421.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1A
Client ID:
Injection Date: 15-DEC-2022 01:24
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121422.D
Data file 2: /20221214.b/B20221214.b/22121422.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2A
Client ID:
Injection Date: 15-DEC-2022 01:42
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	611280	-14.0
Hexabromobiphenyl	641833	704720	9.8

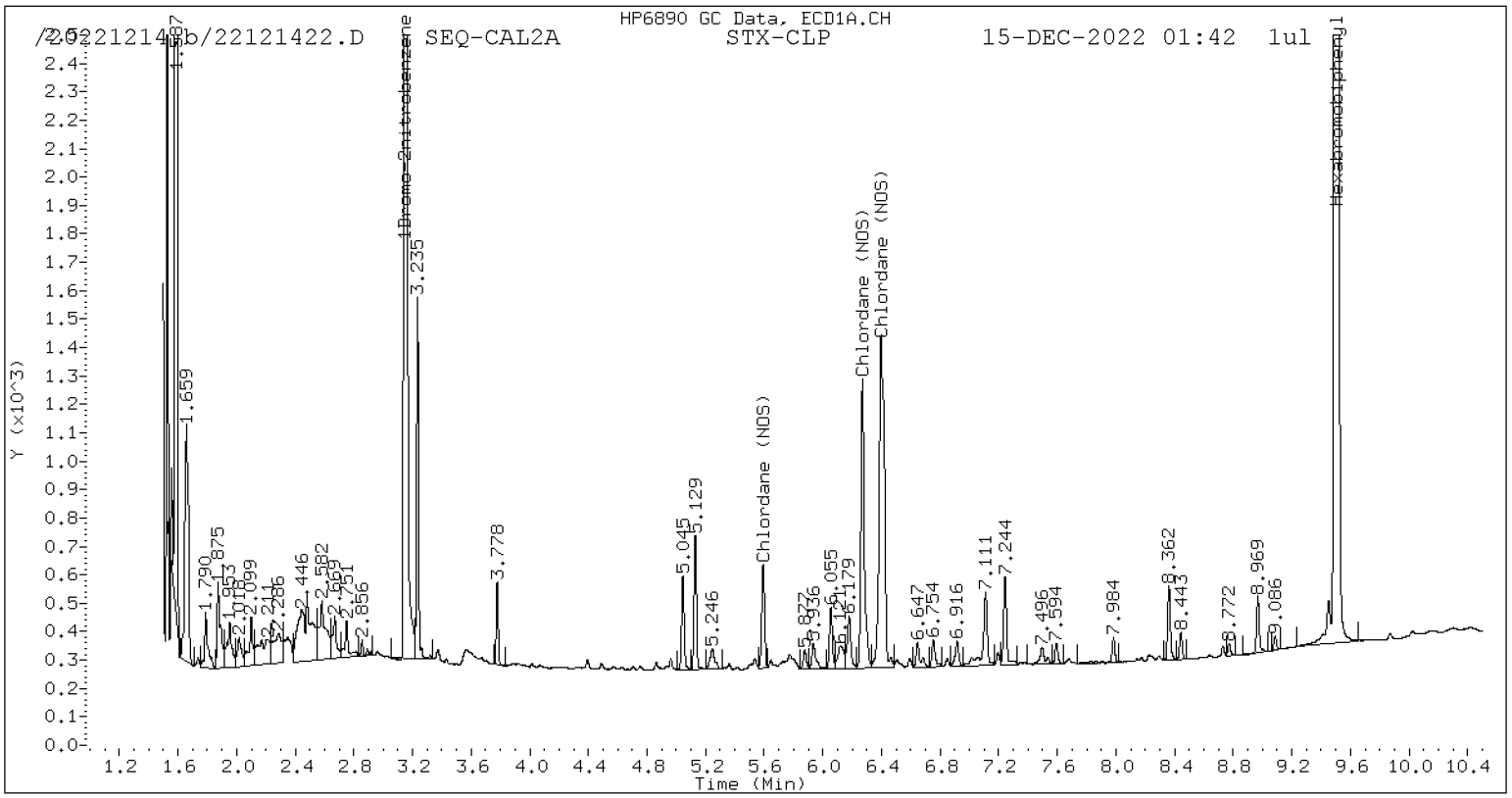
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	793365	-25.1
Hexabromobiphenyl	797125	1083049	35.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

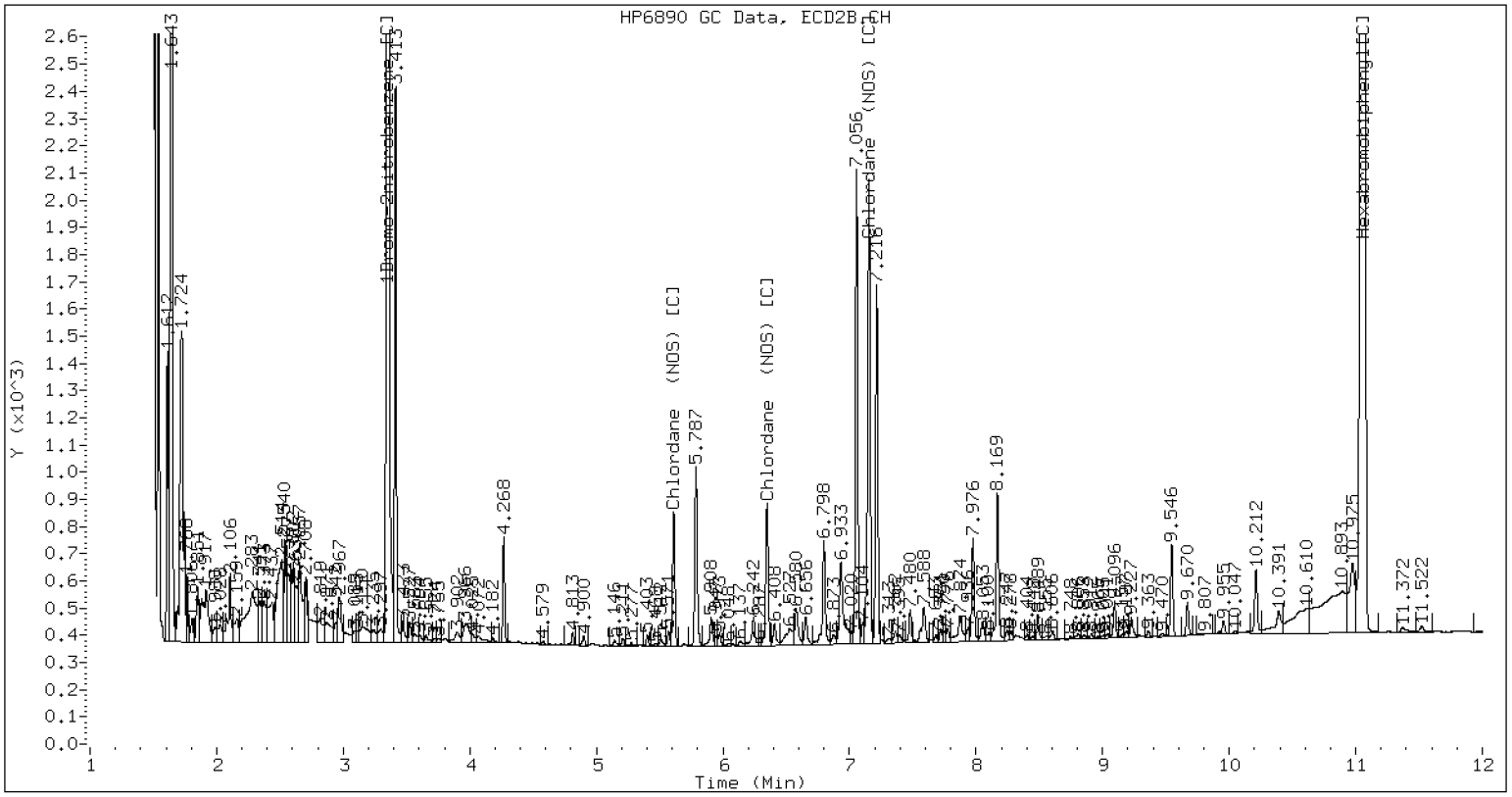
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.000	10046	25.5	1	5.612	-0.000	12488	24.4	
Chlordane (NOS)	2	6.271	-0.000	32715	25.0	2	6.348	-0.001	15023	26.1	
Chlordane (NOS)	3	6.399	0.000	58016	25.4	3	7.155	-0.000	48236	24.8	
Total STX-CLPAve (3 peaks): 25.309						Total CLP2Ave (3 peaks): 25.077				RPD = 1	
Corrected Ave (3 peaks): 25.309						Corrected Ave (3 peaks): 25.077				RPD = 1	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121422.D SEQ-CAL2A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121422.D
Data file 2: /20221214.b/B20221214.b/22121422.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2A
Client ID:
Injection Date: 15-DEC-2022 01:42
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121423.D
Data file 2: /20221214.b/B20221214.b/22121423.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3A
Client ID:
Injection Date: 15-DEC-2022 01:59
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	592438	-16.6
Hexabromobiphenyl	641833	685225	6.8

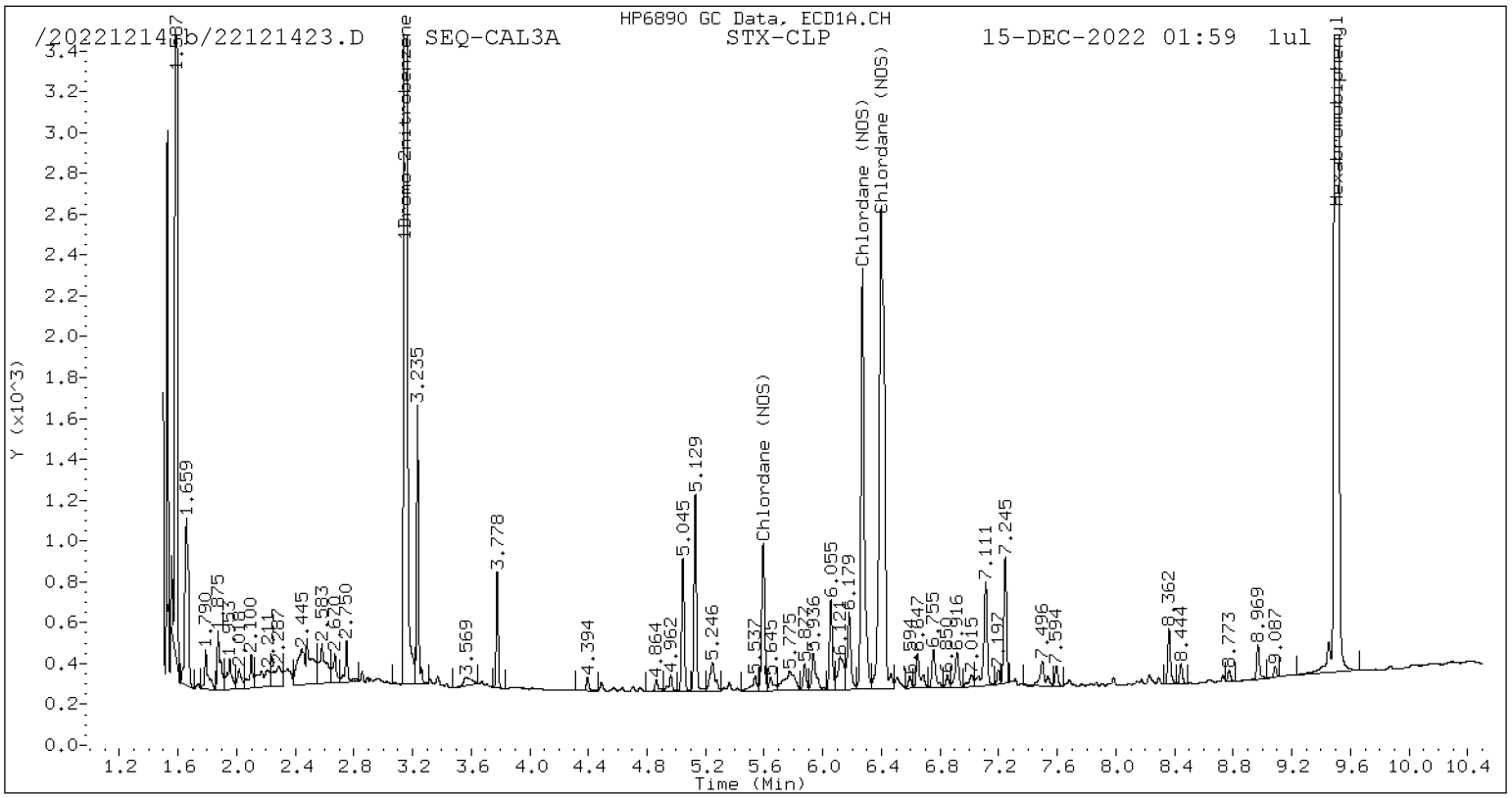
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	769029	-27.4
Hexabromobiphenyl	797125	1054742	32.3

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

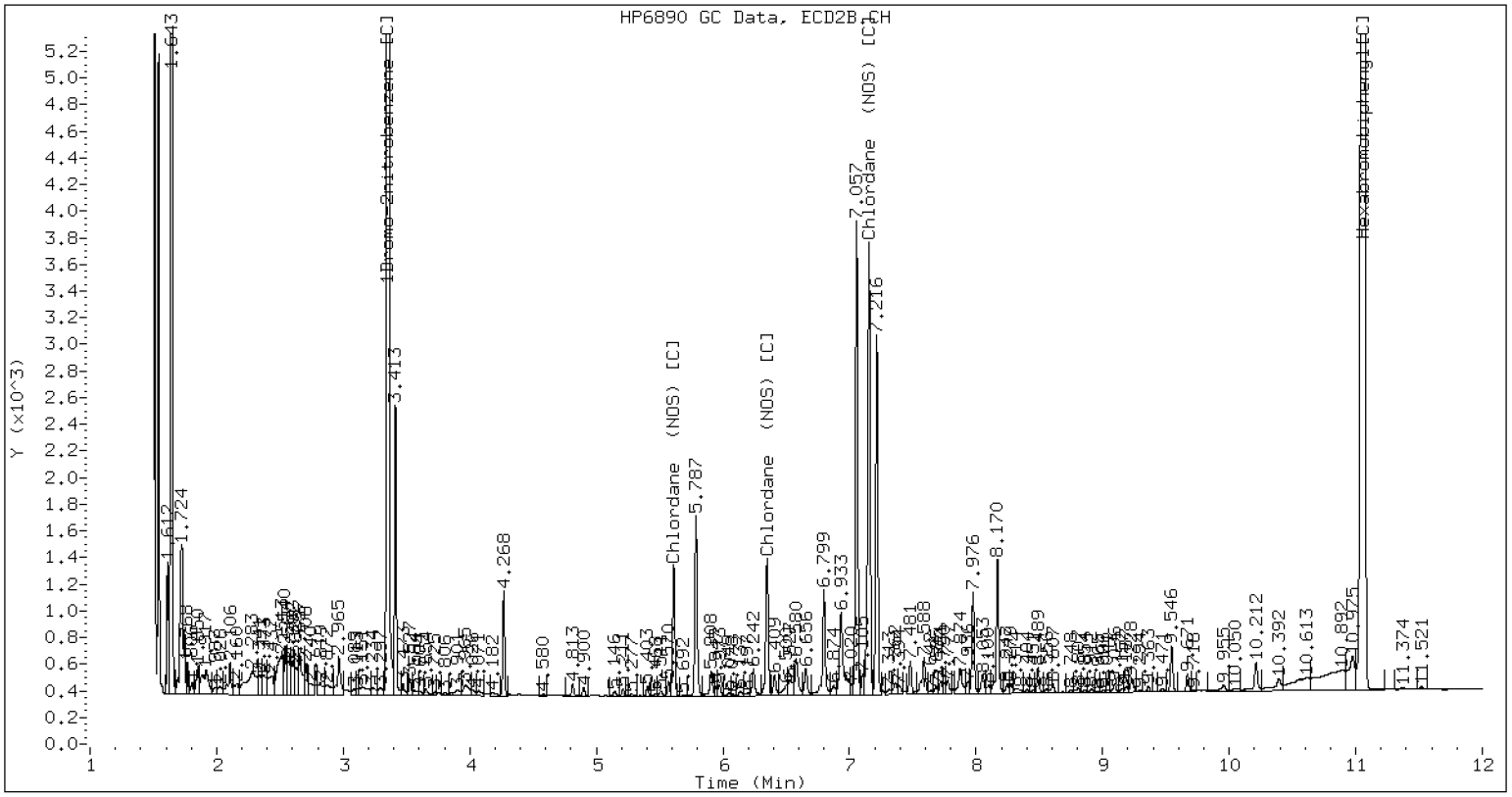
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.001	20502	53.5	1	5.612	-0.000	24816	49.7	
Chlordane (NOS)	2	6.271	-0.000	66320	52.2	2	6.349	0.000	29114	51.9	
Chlordane (NOS)	3	6.399	0.000	116820	52.6	3	7.155	-0.000	98401	51.9	
Total STX-CLPAve (3 peaks): 52.767						Total CLP2Ave (3 peaks): 51.179				RPD = 3	
Corrected Ave (3 peaks): 52.767						Corrected Ave (3 peaks): 51.179				RPD = 3	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121423.D SEQ-CAL3A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121423.D
Data file 2: /20221214.b/B20221214.b/22121423.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3A
Client ID:
Injection Date: 15-DEC-2022 01:59
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121424.D
Data file 2: /20221214.b/B20221214.b/22121424.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4A
Client ID:
Injection Date: 15-DEC-2022 02:17
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	584808	-17.7
Hexabromobiphenyl	641833	675665	5.3

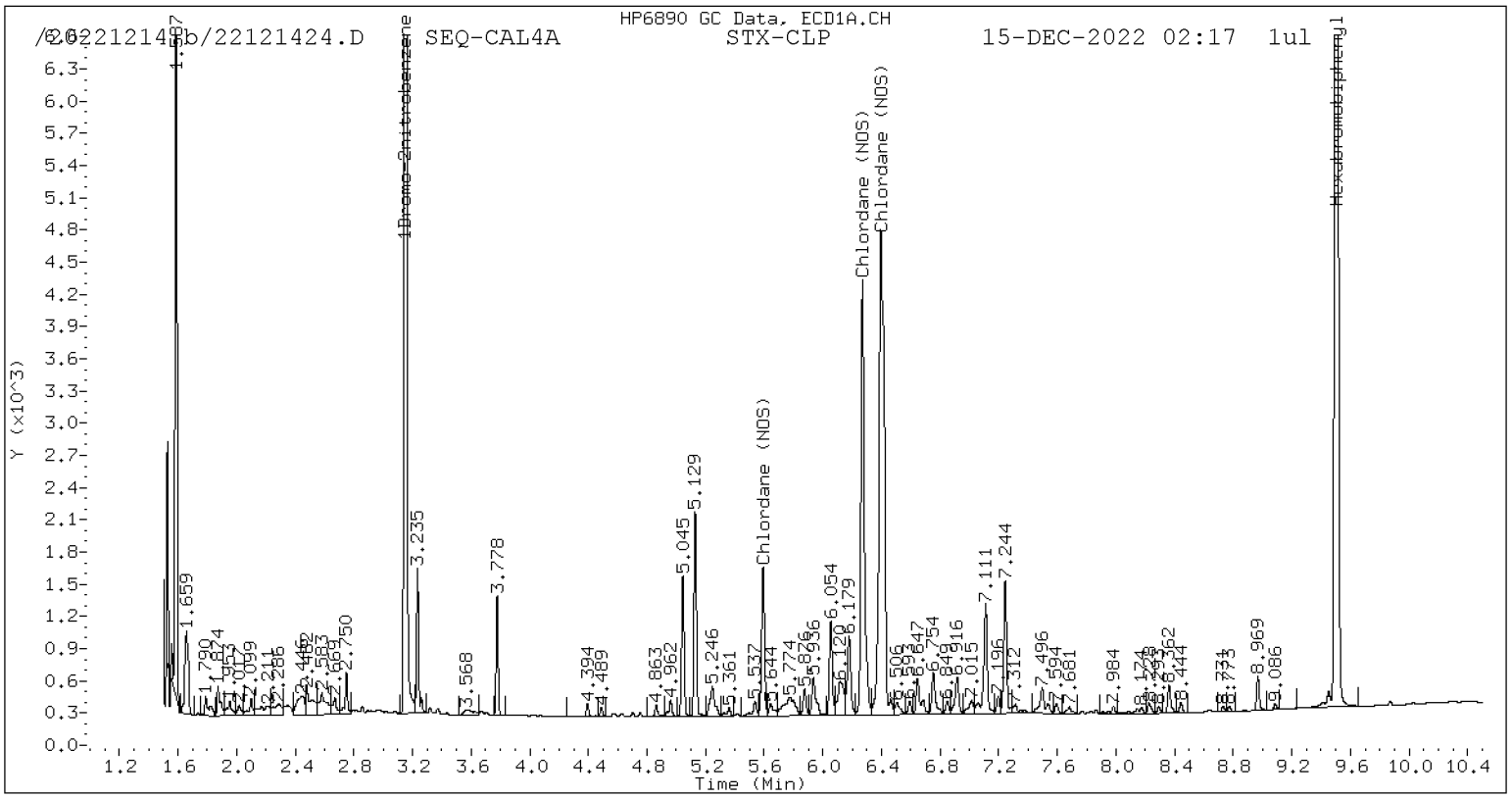
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	758204	-28.4
Hexabromobiphenyl	797125	1039488	30.4

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

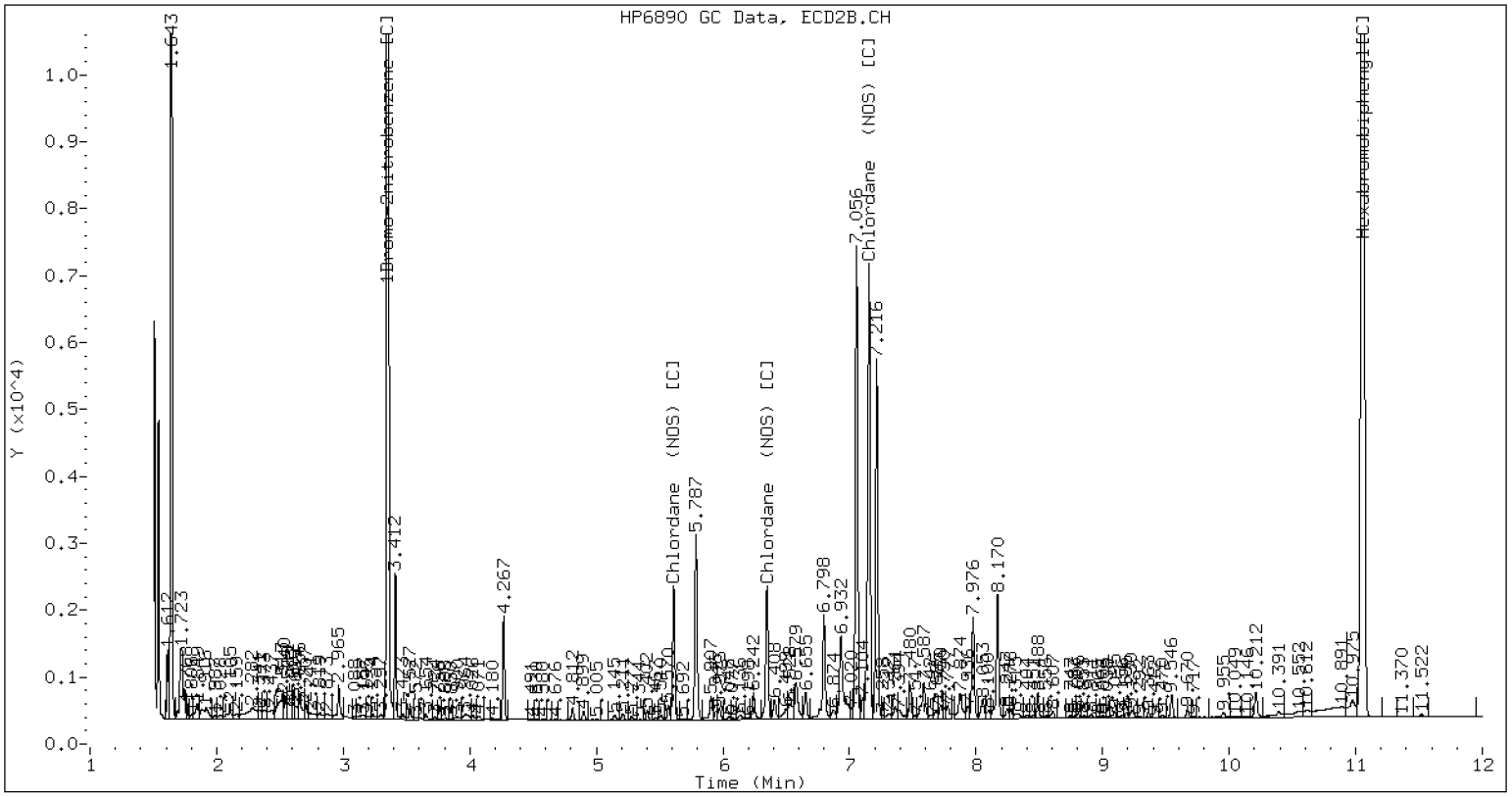
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	-0.000	39696	105.0	1	5.611	-0.001	49889	101.4	
Chlordane (NOS)	2	6.271	-0.000	131726	105.2	2	6.348	-0.001	56608	102.5	
Chlordane (NOS)	3	6.398	-0.001	229050	104.6	3	7.155	-0.000	195665	104.7	
Total STX-CLPAve (3 peaks): 104.931						Total CLP2Ave (3 peaks): 102.854				RPD = 2	
Corrected Ave (3 peaks): 104.931						Corrected Ave (3 peaks): 102.854				RPD = 2	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121424.D SEQ-CAL4A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121424.D
Data file 2: /20221214.b/B20221214.b/22121424.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4A
Client ID:
Injection Date: 15-DEC-2022 02:17
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121425.D
Data file 2: /20221214.b/B20221214.b/22121425.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5A
Client ID:
Injection Date: 15-DEC-2022 02:35
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	612592	-13.8
Hexabromobiphenyl	641833	705251	9.9

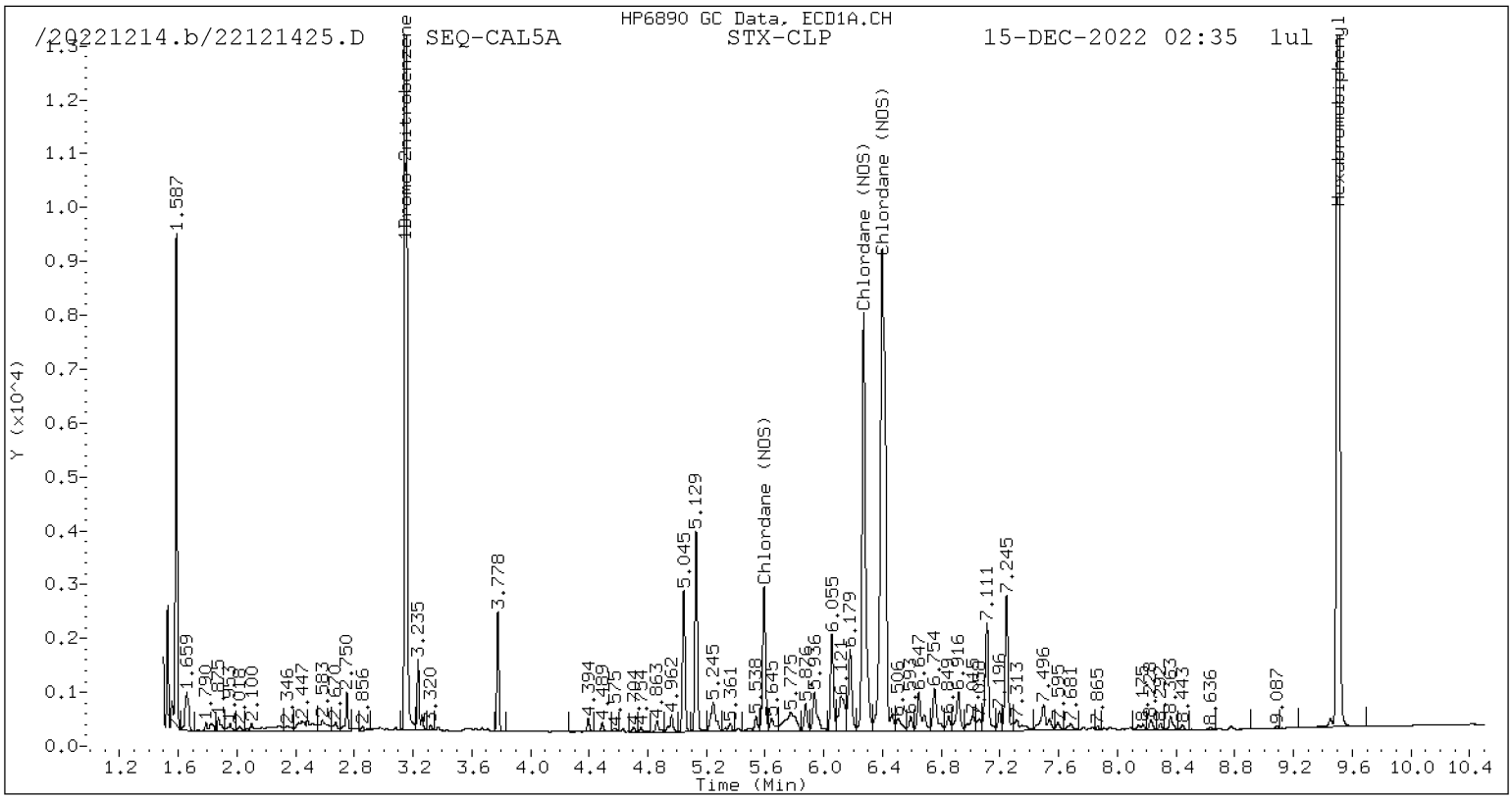
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	792856	-25.1
Hexabromobiphenyl	797125	1079718	35.5

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

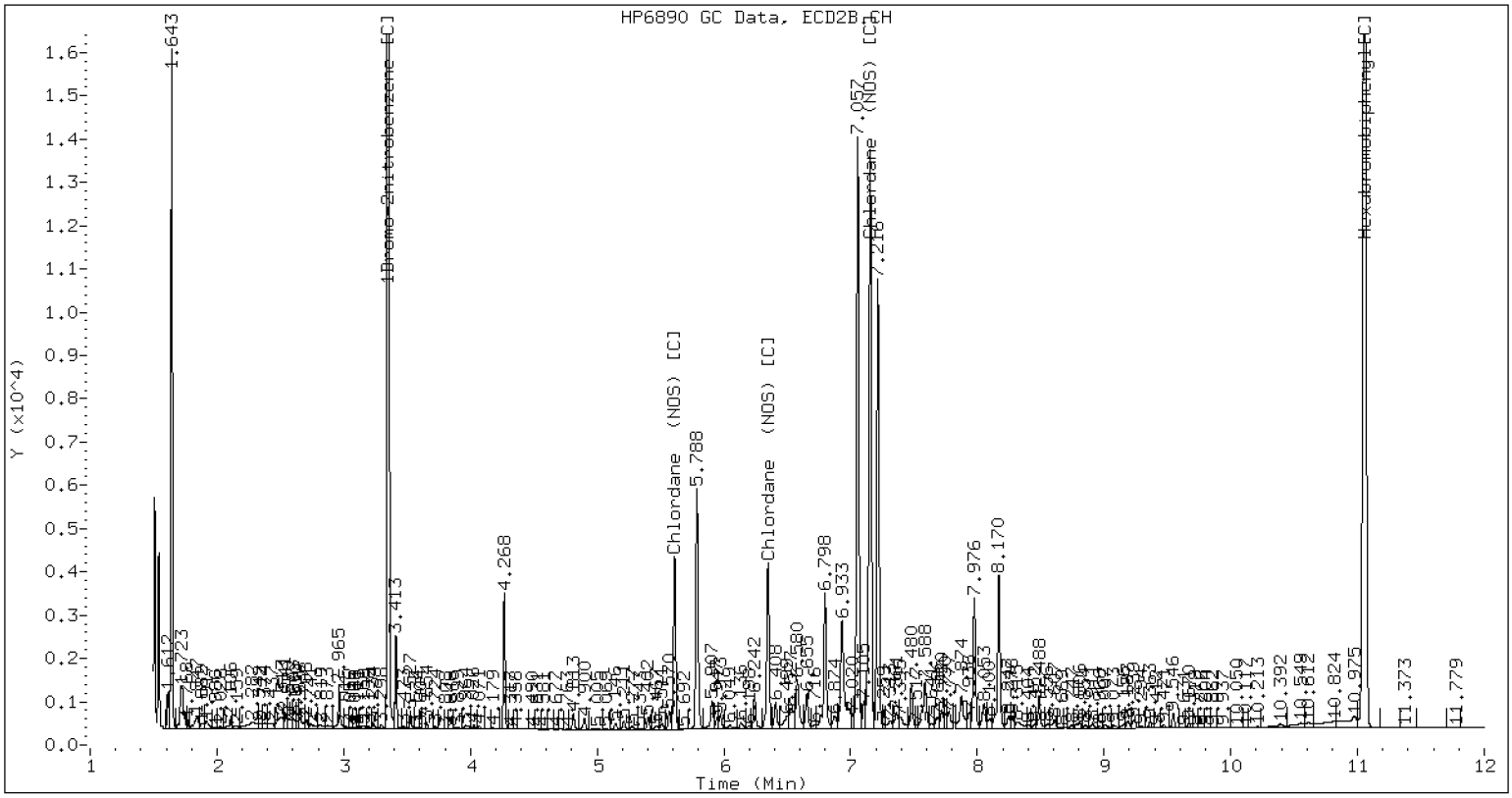
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.000	77307	196.0	1	5.612	-0.000	101527	198.7	
Chlordane (NOS)	2	6.271	0.000	261078	199.7	2	6.349	-0.001	110757	193.0	
Chlordane (NOS)	3	6.399	0.000	449301	196.5	3	7.155	-0.000	389197	200.5	
Total STX-CLPAve (3 peaks): 197.408						Total CLP2Ave (3 peaks): 197.390				RPD = 0	
Corrected Ave (3 peaks): 197.408						Corrected Ave (3 peaks): 197.390				RPD = 0	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121425.D SEQ-CAL5A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121425.D
Data file 2: /20221214.b/B20221214.b/22121425.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5A
Client ID:
Injection Date: 15-DEC-2022 02:35
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121426.D
Data file 2: /20221214.b/B20221214.b/22121426.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6A
Client ID:
Injection Date: 15-DEC-2022 02:53
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	603526	-15.1
Hexabromobiphenyl	641833	699031	8.9

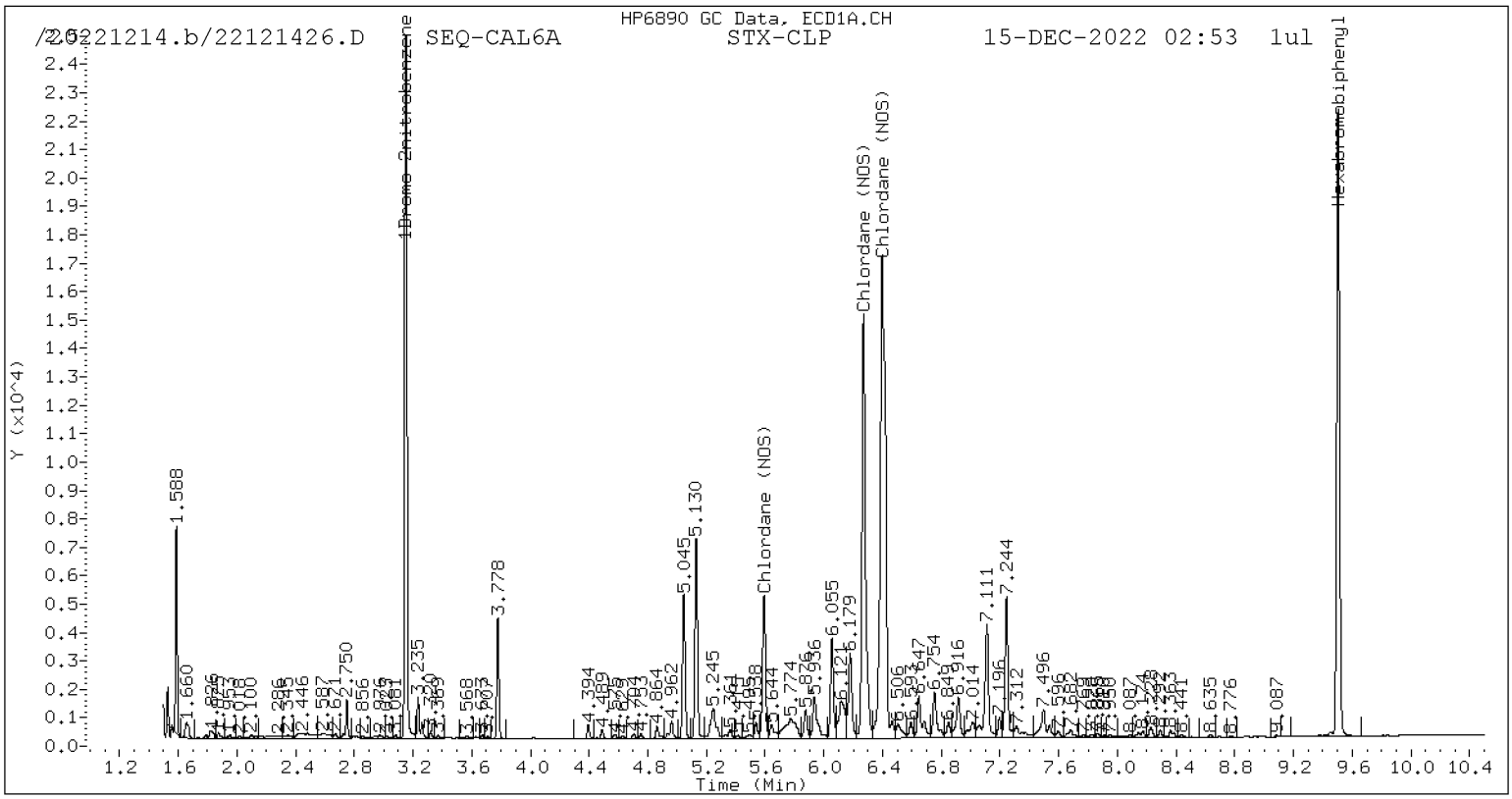
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	779405	-26.4
Hexabromobiphenyl	797125	1068976	34.1

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

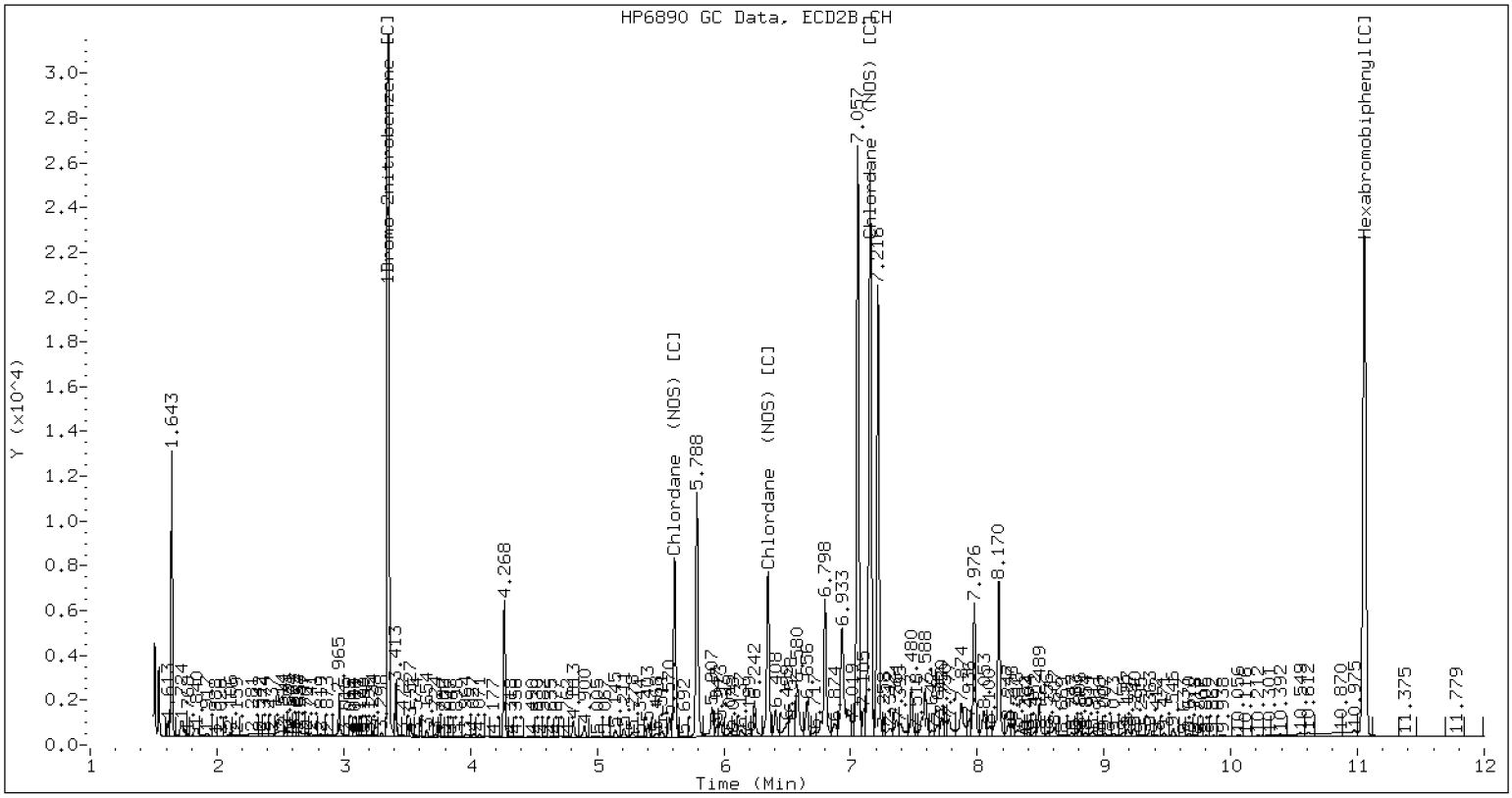
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.592	-0.000	146950	375.8	1	5.612	-0.000	203386	402.0	
Chlordane (NOS)	2	6.271	-0.000	503310	388.5	2	6.349	-0.000	212637	374.2	
Chlordane (NOS)	3	6.399	0.000	857451	378.4	3	7.155	-0.000	752631	391.6	
Total STX-CLPAve (3 peaks): 380.894						Total CLP2Ave (3 peaks): 389.290				RPD = 2	
Corrected Ave (3 peaks): 380.894						Corrected Ave (3 peaks): 389.290				RPD = 2	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121426.D SEQ-CAL6A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121426.D
Data file 2: /20221214.b/B20221214.b/22121426.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6A
Client ID:
Injection Date: 15-DEC-2022 02:53
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121427.D
Data file 2: /20221214.b/B20221214.b/22121427.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7A
Client ID:
Injection Date: 15-DEC-2022 03:11
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
9.380	0.025	1930	----			0.31	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	610159	-14.1
Hexabromobiphenyl	641833	692215	7.8

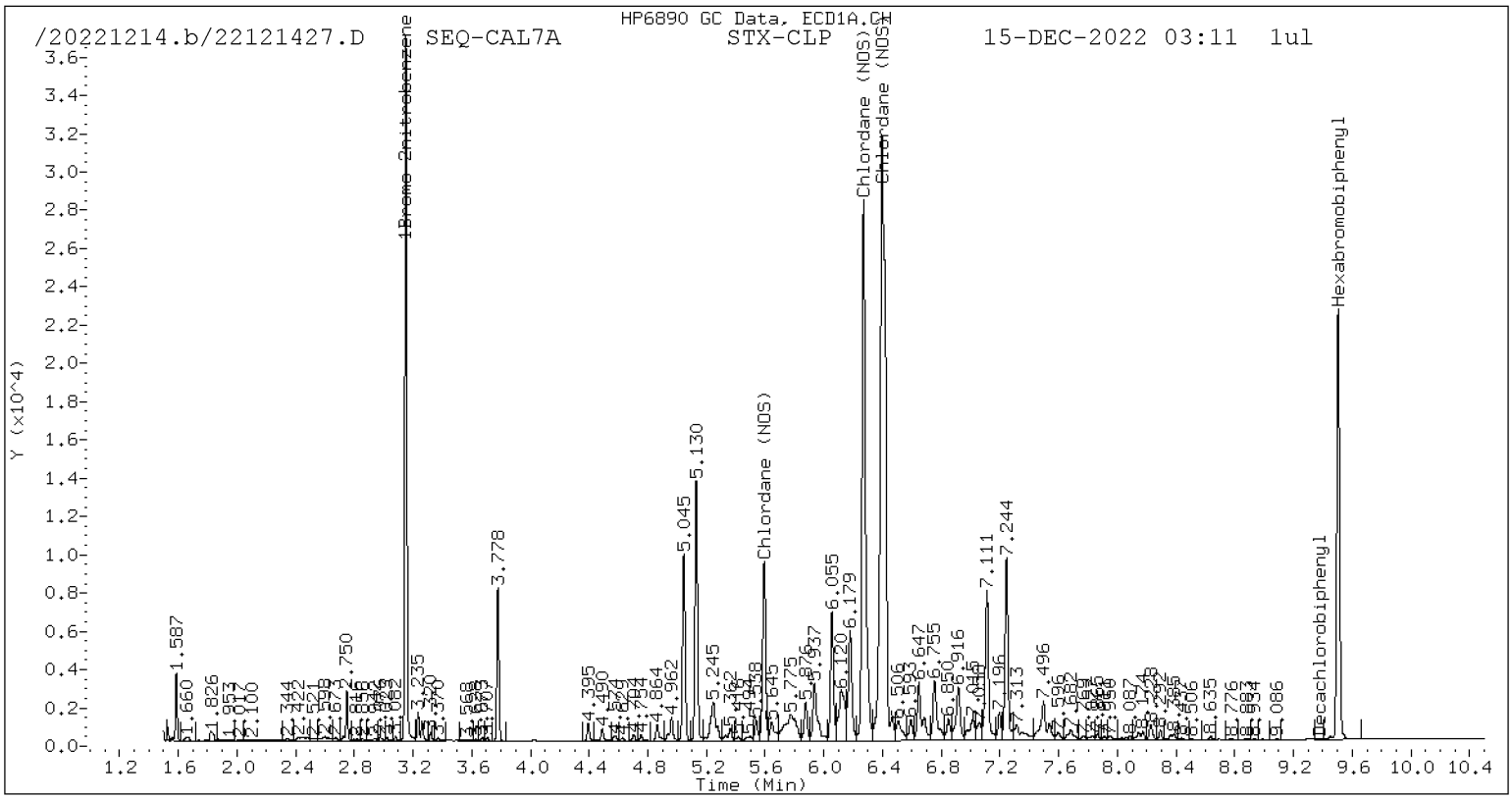
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	790388	-25.4
Hexabromobiphenyl	797125	1059143	32.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

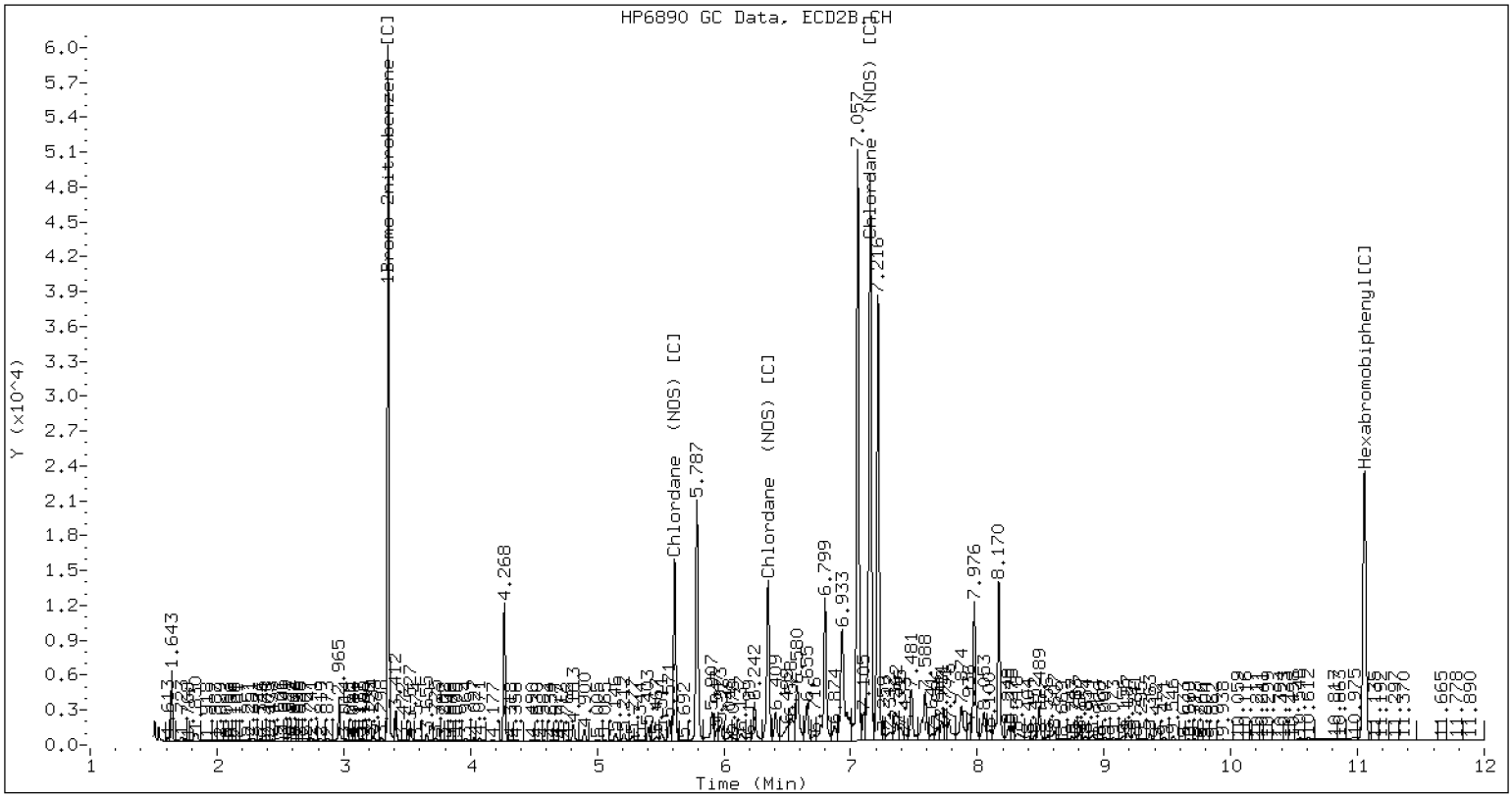
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.001	276980	715.3	1	5.612	0.000	398620	795.3	
Chlordane (NOS)	2	6.271	-0.000	961368	749.3	2	6.349	0.000	405170	719.7	
Chlordane (NOS)	3	6.399	-0.000	1631241	727.0	3	7.155	0.000	1462876	768.2	
Total STX-CLPAve (3 peaks): 730.539						Total CLP2Ave (3 peaks): 761.064				RPD = 4	
Corrected Ave (3 peaks): 730.539						Corrected Ave (3 peaks): 761.064				RPD = 4	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121427.D SEQ-CAL7A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121427.D
Data file 2: /20221214.b/B20221214.b/22121427.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7A
Client ID:
Injection Date: 15-DEC-2022 03:11
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121428.D
Data file 2: /20221214.b/B20221214.b/22121428.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8A
Client ID:
Injection Date: 15-DEC-2022 03:29
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	0.000	8893	4.221	0.000	14795	0.95	0.98	4.0	Tetrachloro-m-xylene
9.355	0.000	15511	10.467	0.000	24896	2.54	2.86	11.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	691781	-2.7
Hexabromobiphenyl	641833	602865	-6.1

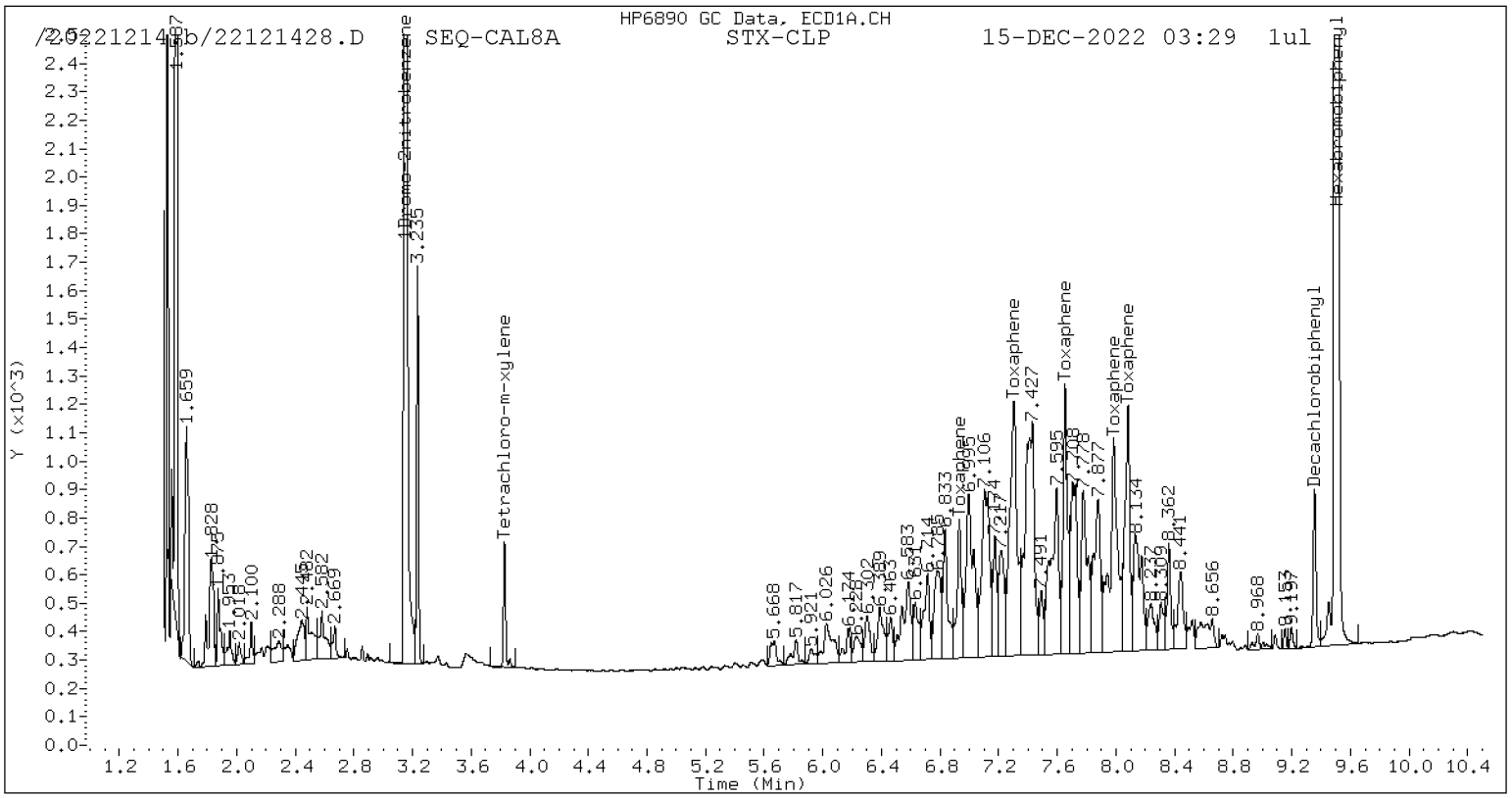
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1068328	0.9
Hexabromobiphenyl	797125	788806	-1.0

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

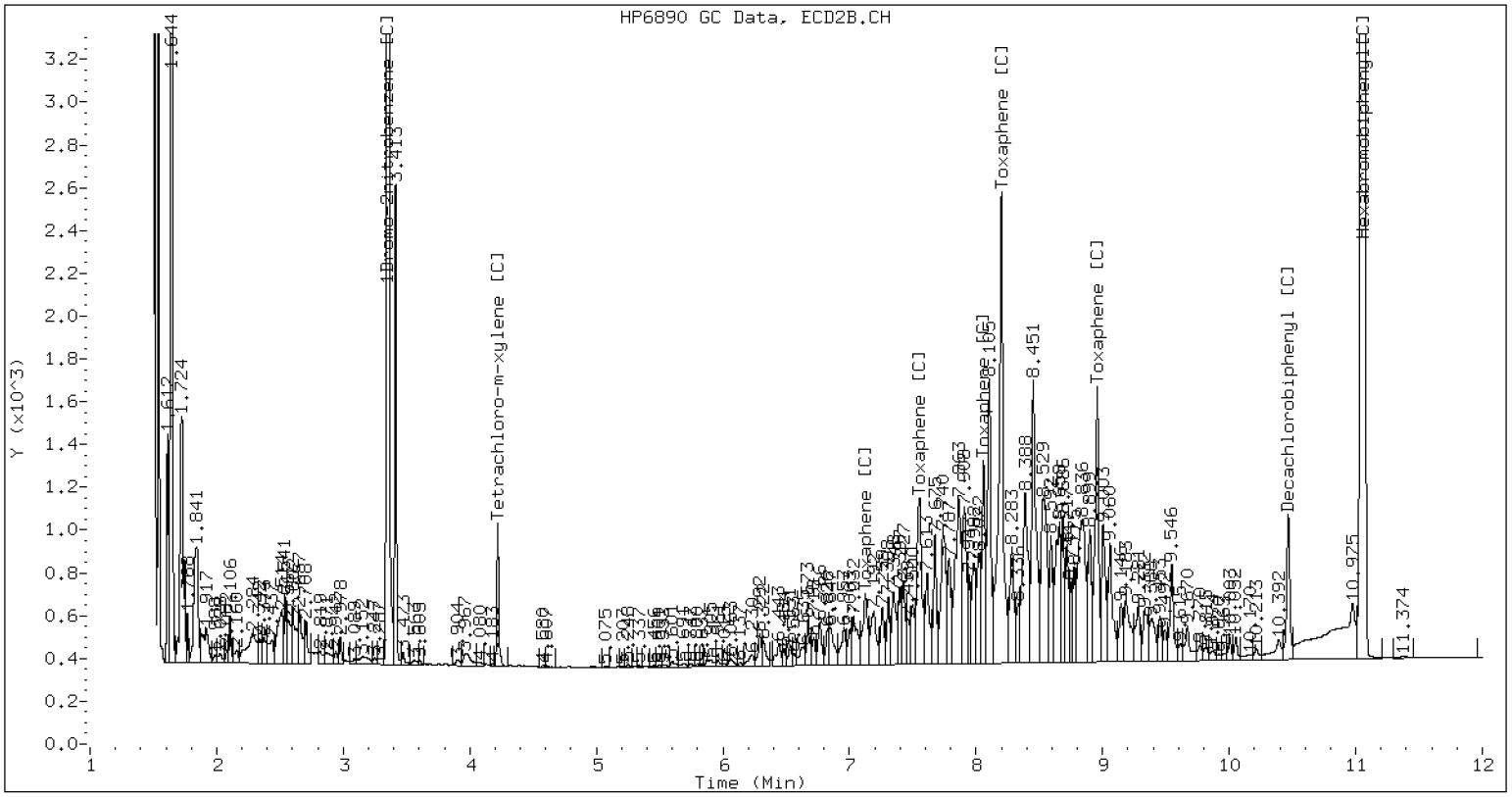
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	6.931	0.000	20939	118.9	1	7.125	-0.000	18390	124.1	
Toxaphene	2	7.304	0.000	62921	127.5	2	7.553	-0.000	43437	130.4	
Toxaphene	3	7.653	-0.000	40147	126.2	3	8.059	-0.001	32235	127.1	
Toxaphene	4	7.985	-0.001	56816	133.6	4	8.201	-0.001	109296	132.1	
Toxaphene	5	8.082	-0.000	39643	123.4	5	8.958	-0.001	50997	125.7	
Total STX-CLPAve (5 peaks): 125.907						Total CLP2Ave (5 peaks): 127.865					RPD = 2
Corrected Ave (5 peaks): 125.907						Corrected Ave (5 peaks): 127.865					RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121428.D SEQ-CAL8A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121428.D
Data file 2: /20221214.b/B20221214.b/22121428.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8A
Client ID:
Injection Date: 15-DEC-2022 03:29
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121429.D
Data file 2: /20221214.b/B20221214.b/22121429.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9A
Client ID:
Injection Date: 15-DEC-2022 03:46
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	18632	4.220	-0.000	29829	1.92	1.92	0.1	Tetrachloro-m-xylene
9.355	0.000	29179	10.467	0.000	44716	4.64	4.98	7.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	713620	0.4
Hexabromobiphenyl	641833	620026	-3.4

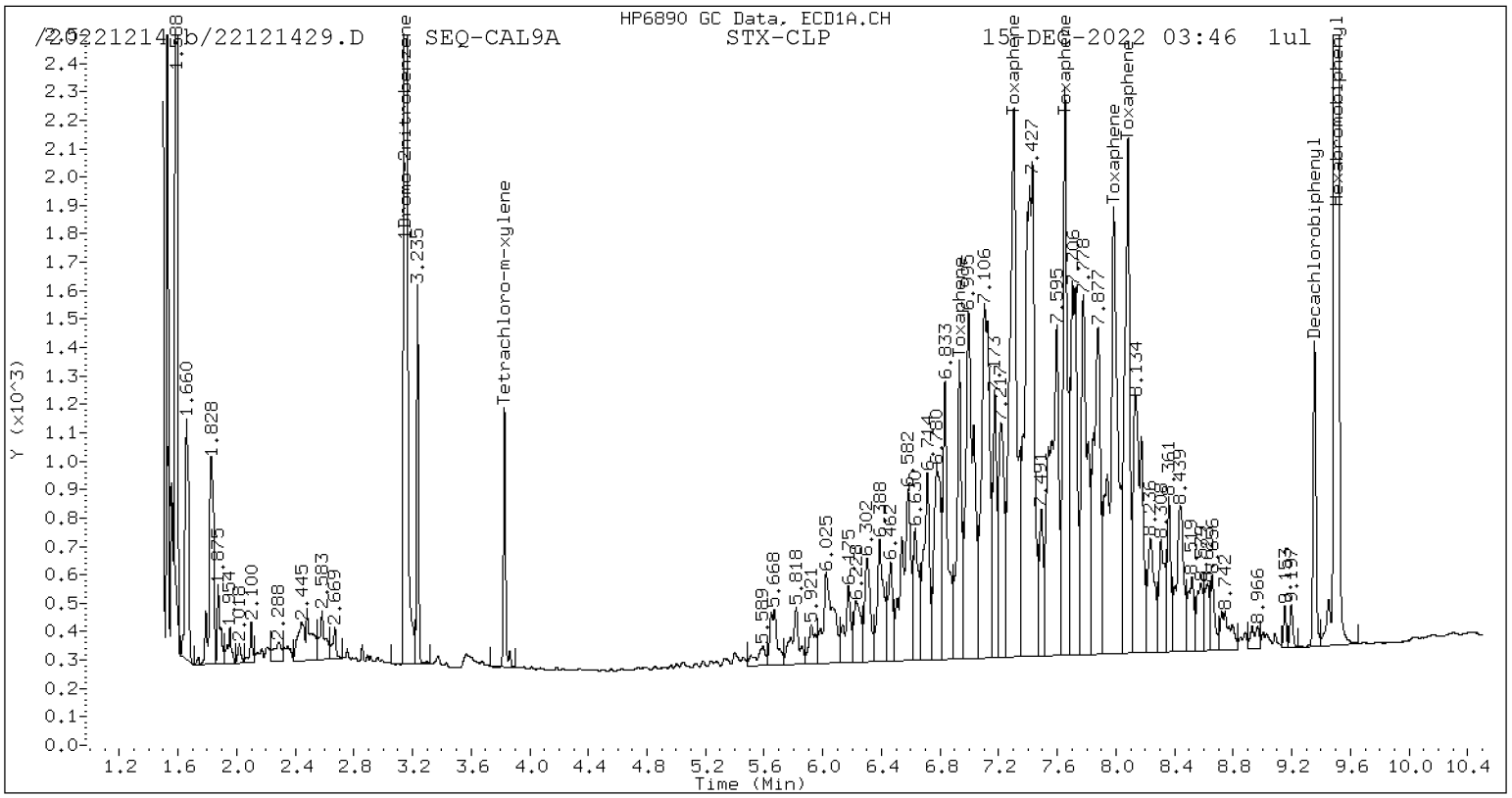
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1104488	4.3
Hexabromobiphenyl	797125	811719	1.8

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

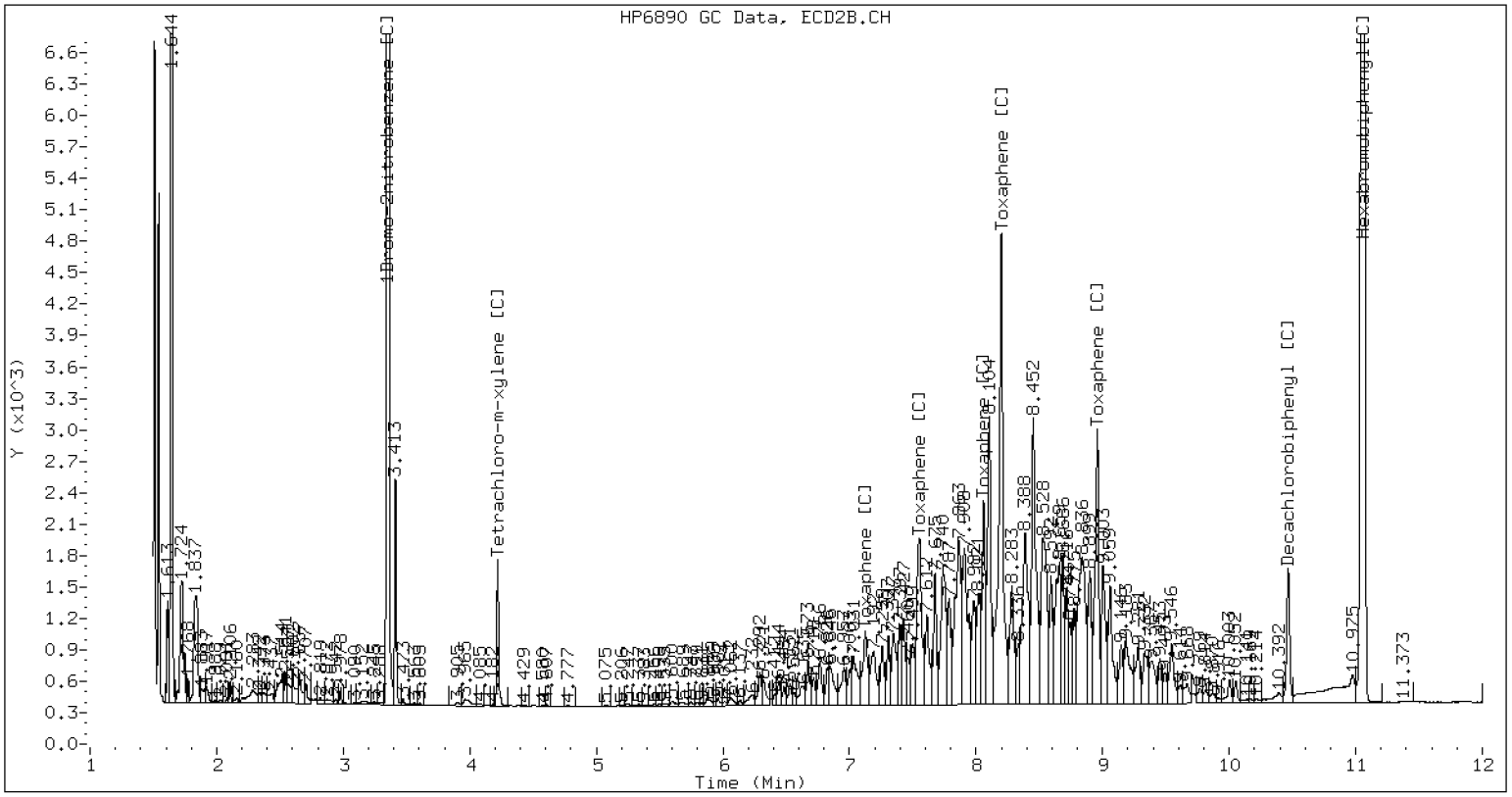
	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	0.000	47415	261.8	1	7.125	-0.001	38790	254.4
Toxaphene	2	7.302	-0.001	134642	265.2	2	7.552	-0.001	89754	261.8
Toxaphene	3	7.652	-0.001	86679	264.9	3	8.059	-0.001	67442	258.4
Toxaphene	4	7.985	-0.001	125891	287.7	4	8.200	-0.001	220426	258.9
Toxaphene	5	8.081	-0.000	85903	260.0	5	8.958	-0.001	104601	250.5
Total STX-CLPAve (5 peaks): 267.939						Total CLP2Ave (5 peaks): 256.784				RPD = 4
Corrected Ave (5 peaks): 267.939						Corrected Ave (5 peaks): 256.784				RPD = 4

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121429.D SEQ-CAL9A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121429.D
Data file 2: /20221214.b/B20221214.b/22121429.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9A
Client ID:
Injection Date: 15-DEC-2022 03:46
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121430.D
Data file 2: /20221214.b/B20221214.b/22121430.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAA
Client ID:
Injection Date: 15-DEC-2022 04:04
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	37717	4.220	0.000	60469	3.98	3.98	0.0	Tetrachloro-m-xylene
9.355	0.000	57106	10.467	0.000	82418	9.20	9.32	1.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	696179	-2.0
Hexabromobiphenyl	641833	612804	-4.5

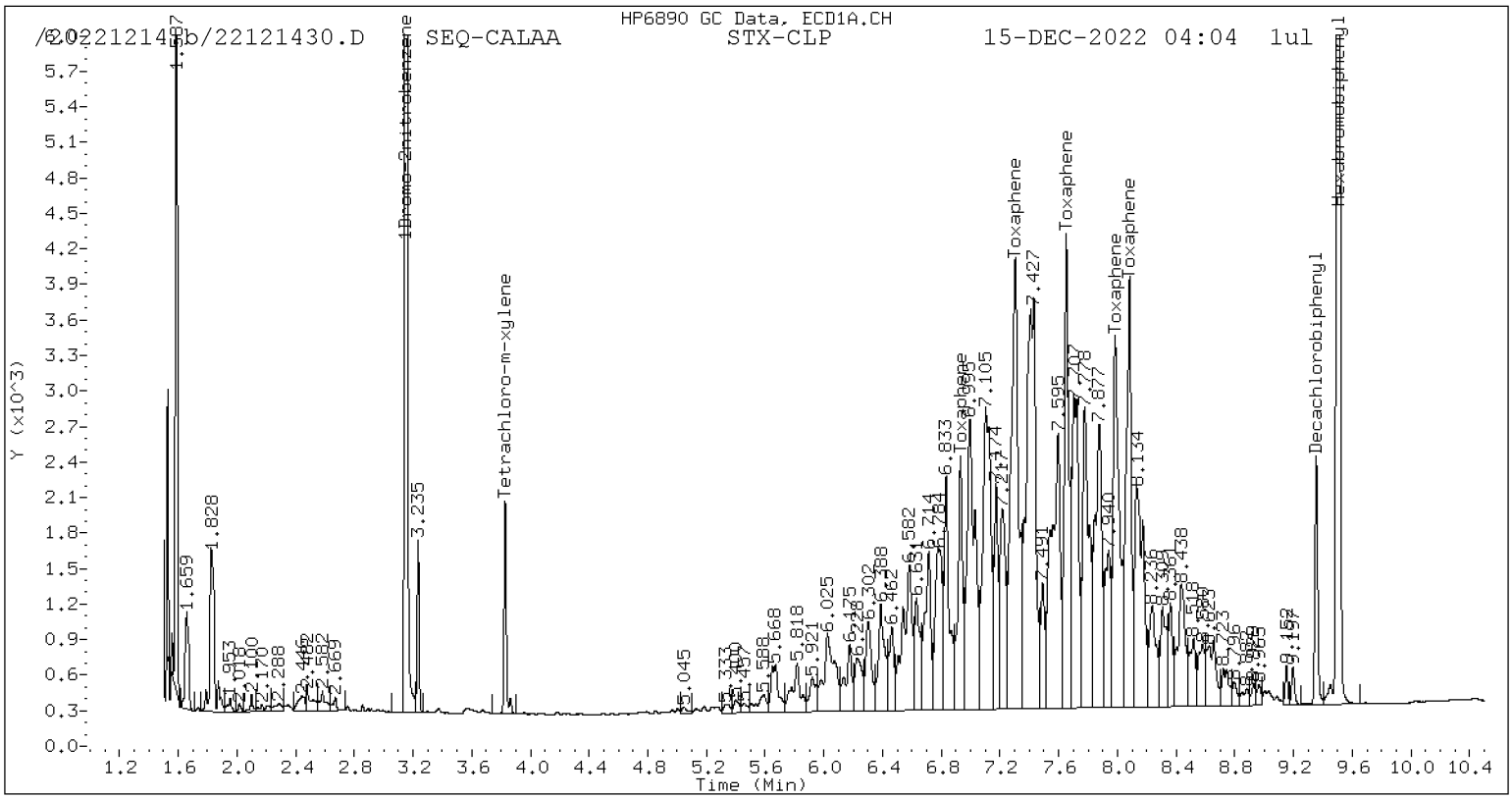
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1078803	1.9
Hexabromobiphenyl	797125	800071	0.4

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

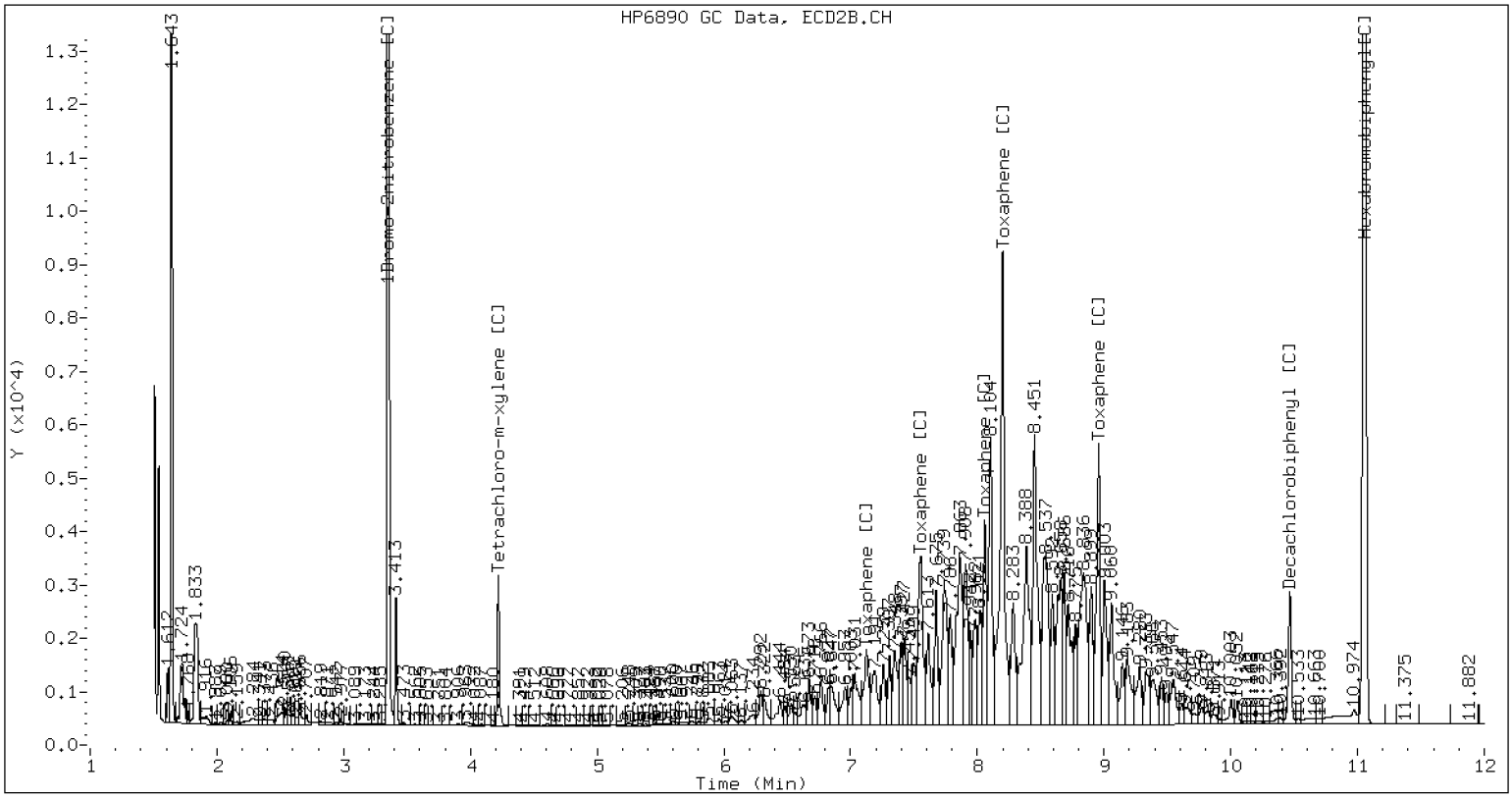
	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	-0.000	96535	539.4	1	7.125	-0.001	78635	523.1
Toxaphene	2	7.304	0.000	273576	545.2	2	7.553	-0.001	179081	529.9
Toxaphene	3	7.652	-0.001	177095	547.7	3	8.059	-0.001	133547	519.1
Toxaphene	4	7.985	-0.001	190443	440.4	4	8.200	-0.001	437035	520.8
Toxaphene	5	8.082	-0.000	175009	535.8	5	8.958	-0.001	209659	509.4
Total STX-CLPAve (5 peaks): 521.711						Total CLP2Ave (5 peaks): 520.468				RPD = 0
Corrected Ave (5 peaks): 521.711						Corrected Ave (5 peaks): 520.468				RPD = 0

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121430.D SEQ-CALAA CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121430.D
Data file 2: /20221214.b/B20221214.b/22121430.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAA
Client ID:
Injection Date: 15-DEC-2022 04:04
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121431.D
Data file 2: /20221214.b/B20221214.b/22121431.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAB
Client ID:
Injection Date: 15-DEC-2022 04:22
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	0.000	74347	4.221	0.000	119694	7.73	7.77	0.5	Tetrachloro-m-xylene
9.355	-0.000	107024	10.466	-0.000	151970	17.00	17.11	0.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	706924	-0.5
Hexabromobiphenyl	641833	621486	-3.2

Column 2

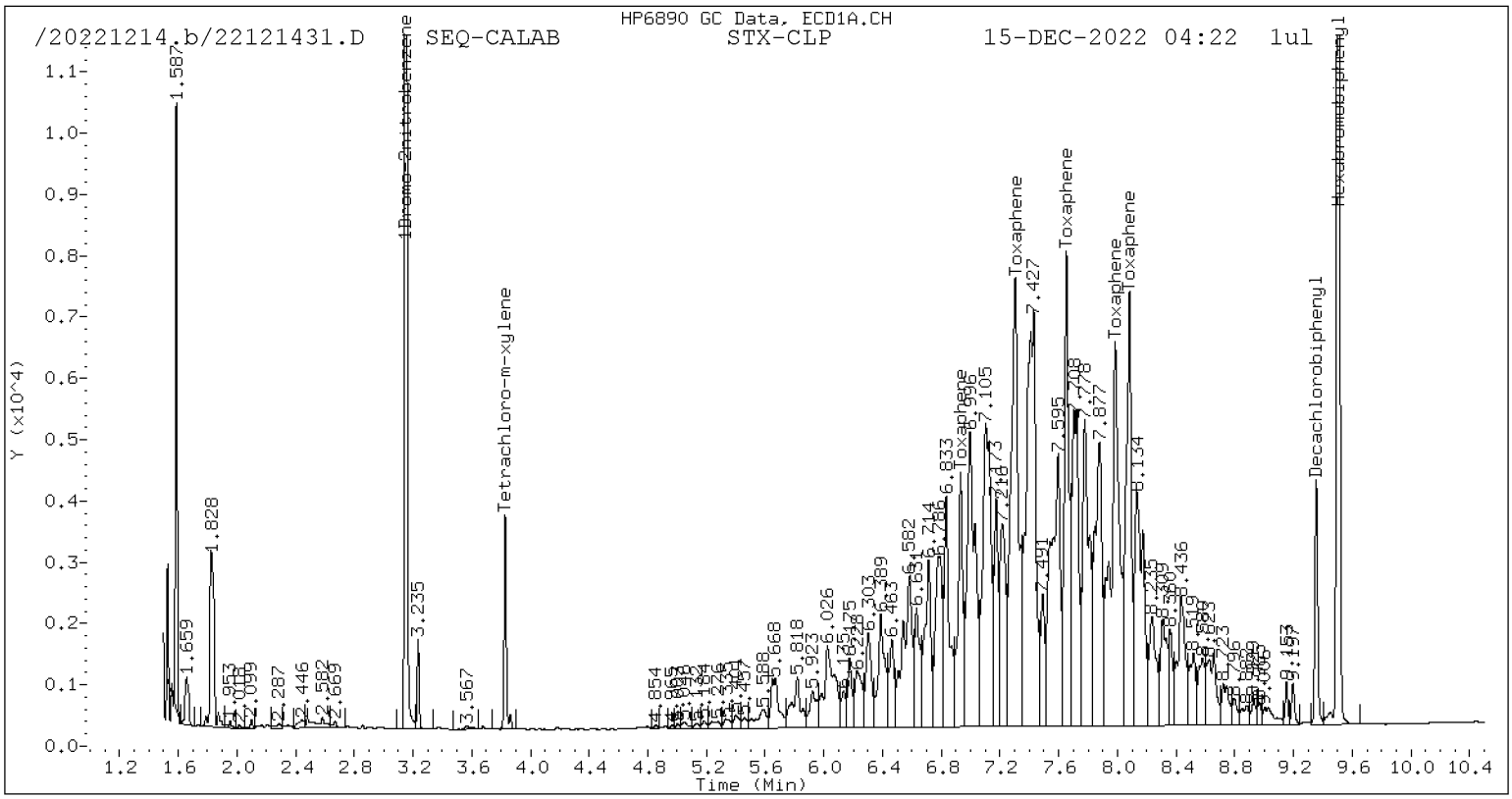
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1093936	3.3
Hexabromobiphenyl	797125	803782	0.8

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	0.000	192757	1062.0	1	7.125	-0.000	156515	1036.5
Toxaphene	2	7.303	-0.000	530863	1043.2	2	7.553	-0.001	349637	1029.8
Toxaphene	3	7.653	-0.000	344194	1049.6	3	8.059	-0.000	265296	1026.5
Toxaphene	4	7.986	-0.000	522105	1190.6	4	8.201	-0.001	854255	1013.3
Toxaphene	5	8.082	-0.000	345477	1043.0	5	8.958	-0.001	416452	1007.1

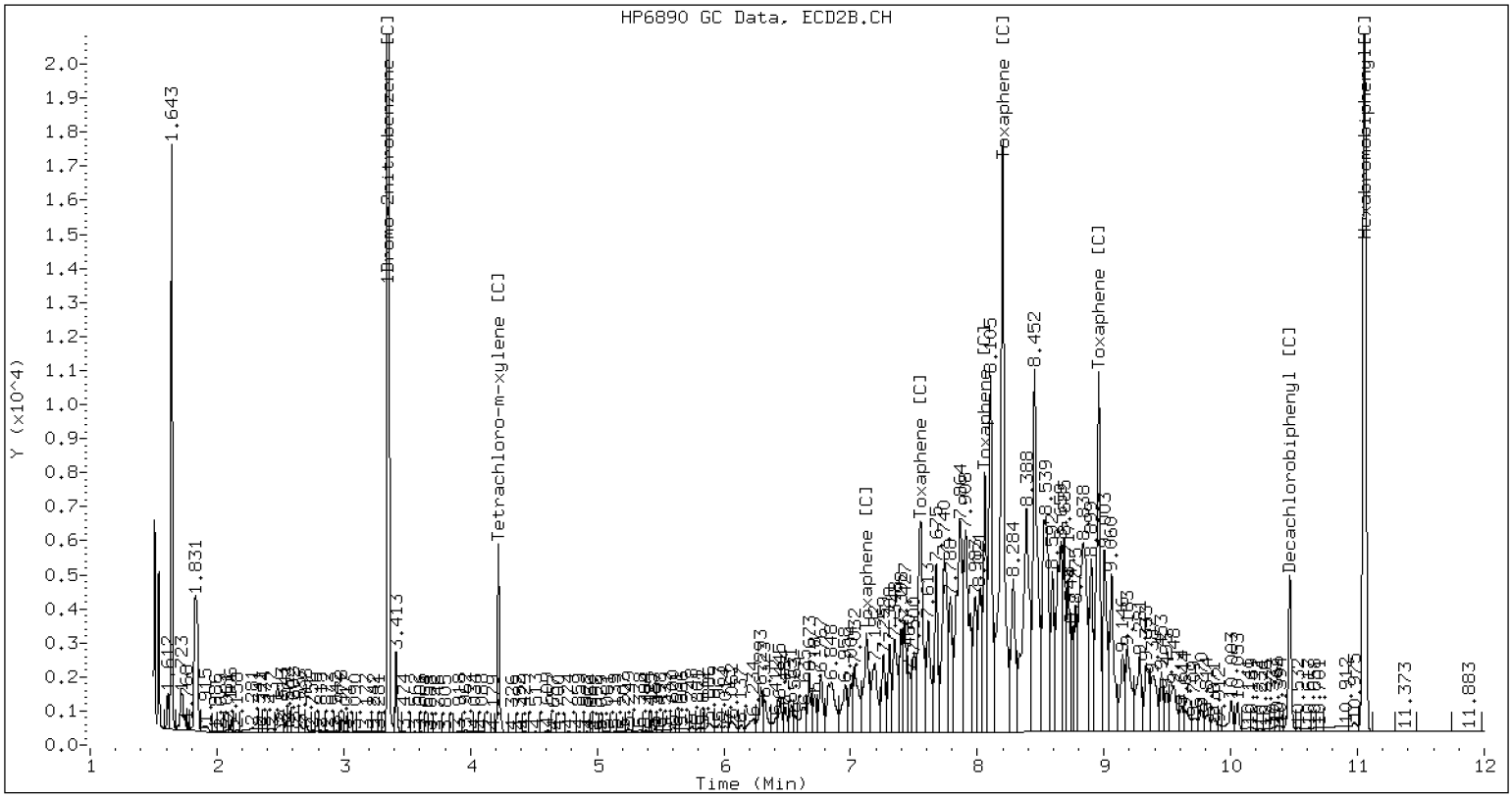
Total STX-CLPAve (5 peaks): 1077.665 Total CLP2Ave (5 peaks): 1022.630 RPD = 5
Corrected Ave (5 peaks): 1077.665 Corrected Ave (5 peaks): 1022.630 RPD = 5

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121431.D SEQ-CALAB CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121431.D
Data file 2: /20221214.b/B20221214.b/22121431.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAB
Client ID:
Injection Date: 15-DEC-2022 04:22
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121432.D
Data file 2: /20221214.b/B20221214.b/22121432.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAC
Client ID:
Injection Date: 15-DEC-2022 04:40
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	0.000	169388	4.221	0.000	273030	18.51	18.69	1.0	Tetrachloro-m-xylene
9.356	0.001	234532	10.466	-0.000	332716	40.53	40.11	1.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	672958	-5.3
Hexabromobiphenyl	641833	571112	-11.0

Column 2

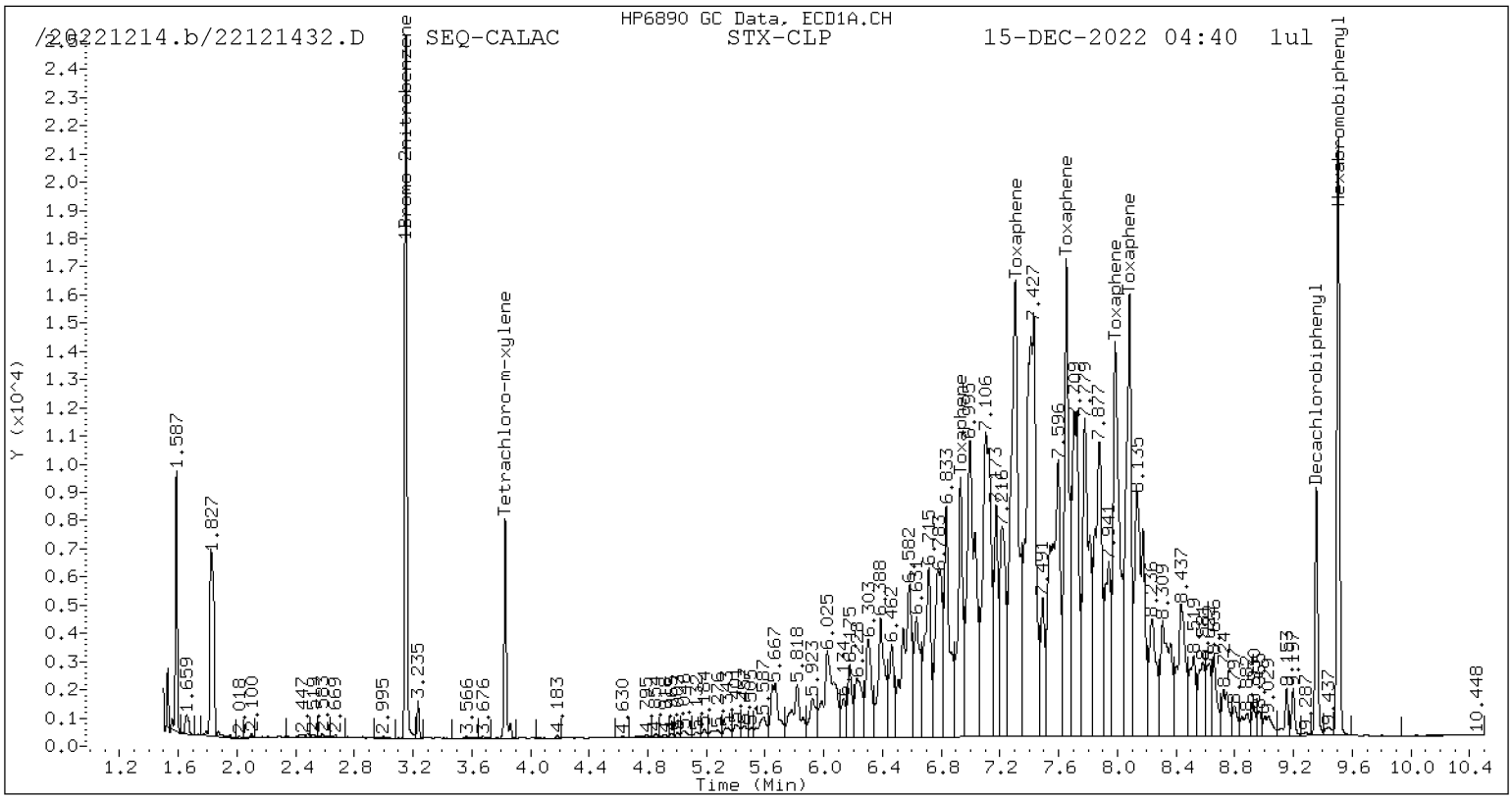
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1037593	-2.0
Hexabromobiphenyl	797125	750492	-5.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	0.000	432250	2591.5	1	7.126	-0.000	358061	2539.5
Toxaphene	2	7.303	0.000	1180375	2524.1	2	7.553	0.000	785942	2479.1
Toxaphene	3	7.653	0.000	762221	2529.4	3	8.059	-0.000	602985	2498.7
Toxaphene	4	7.986	0.000	863552	2142.9	4	8.201	-0.001	1929083	2450.8
Toxaphene	5	8.082	0.000	777497	2554.3	5	8.958	-0.001	962132	2492.0

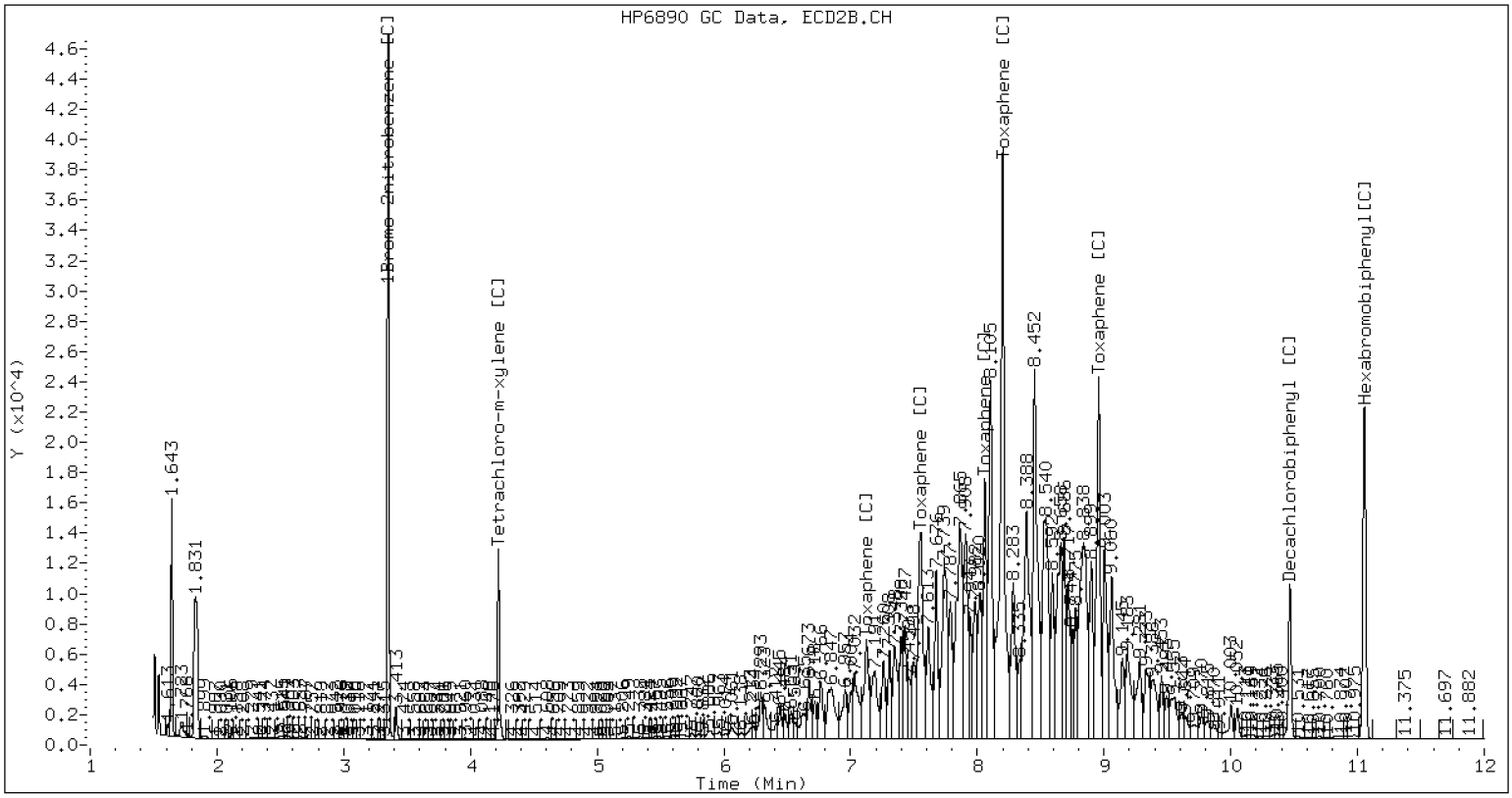
Total STX-CLPAve (5 peaks): 2468.427 Total CLP2Ave (5 peaks): 2492.024 RPD = 1
Corrected Ave (5 peaks): 2468.427 Corrected Ave (5 peaks): 2492.024 RPD = 1

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121432.D SEQ-CALAC CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121432.D
Data file 2: /20221214.b/B20221214.b/22121432.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAC
Client ID:
Injection Date: 15-DEC-2022 04:40
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121433.D
Data file 2: /20221214.b/B20221214.b/22121433.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAD
Client ID:
Injection Date: 15-DEC-2022 04:58
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	329284	4.221	0.000	536251	34.78	35.63	2.4	Tetrachloro-m-xylene
9.356	0.000	464116	10.466	-0.000	660536	76.95	77.19	0.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	696178	-2.0
Hexabromobiphenyl	641833	595287	-7.3

Column 2

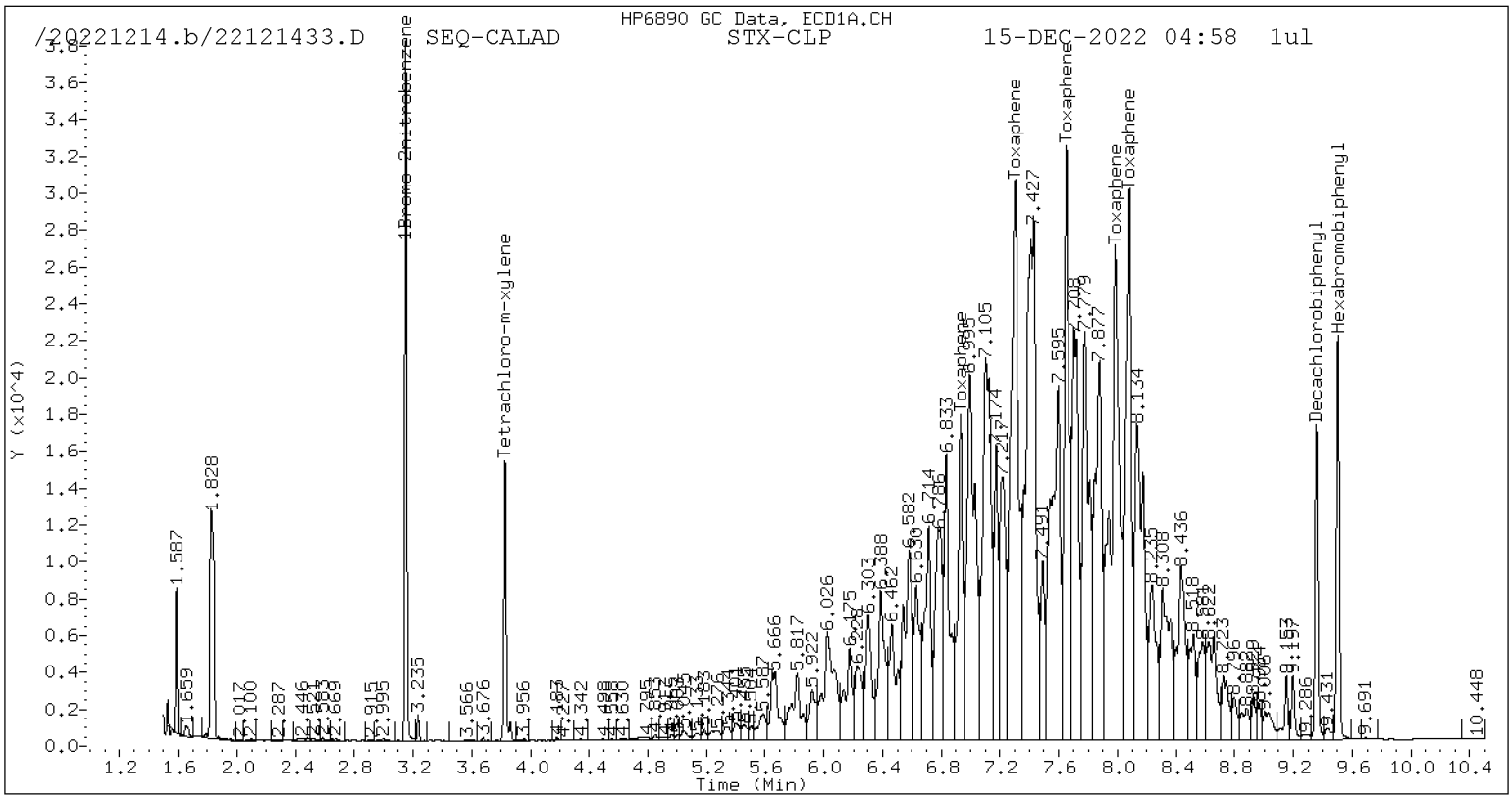
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1069205	1.0
Hexabromobiphenyl	797125	774218	-2.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	0.000	828531	4765.6	1	7.126	-0.000	704213	4841.5
Toxaphene	2	7.303	-0.000	2275106	4667.4	2	7.554	0.000	1533921	4690.3
Toxaphene	3	7.653	-0.000	1493693	4755.4	3	8.059	-0.001	1192086	4788.5
Toxaphene	4	7.986	0.000	2318449	5519.5	4	8.201	-0.001	3835448	4723.4
Toxaphene	5	8.081	-0.000	1509568	4758.0	5	8.958	-0.000	1957568	4914.8

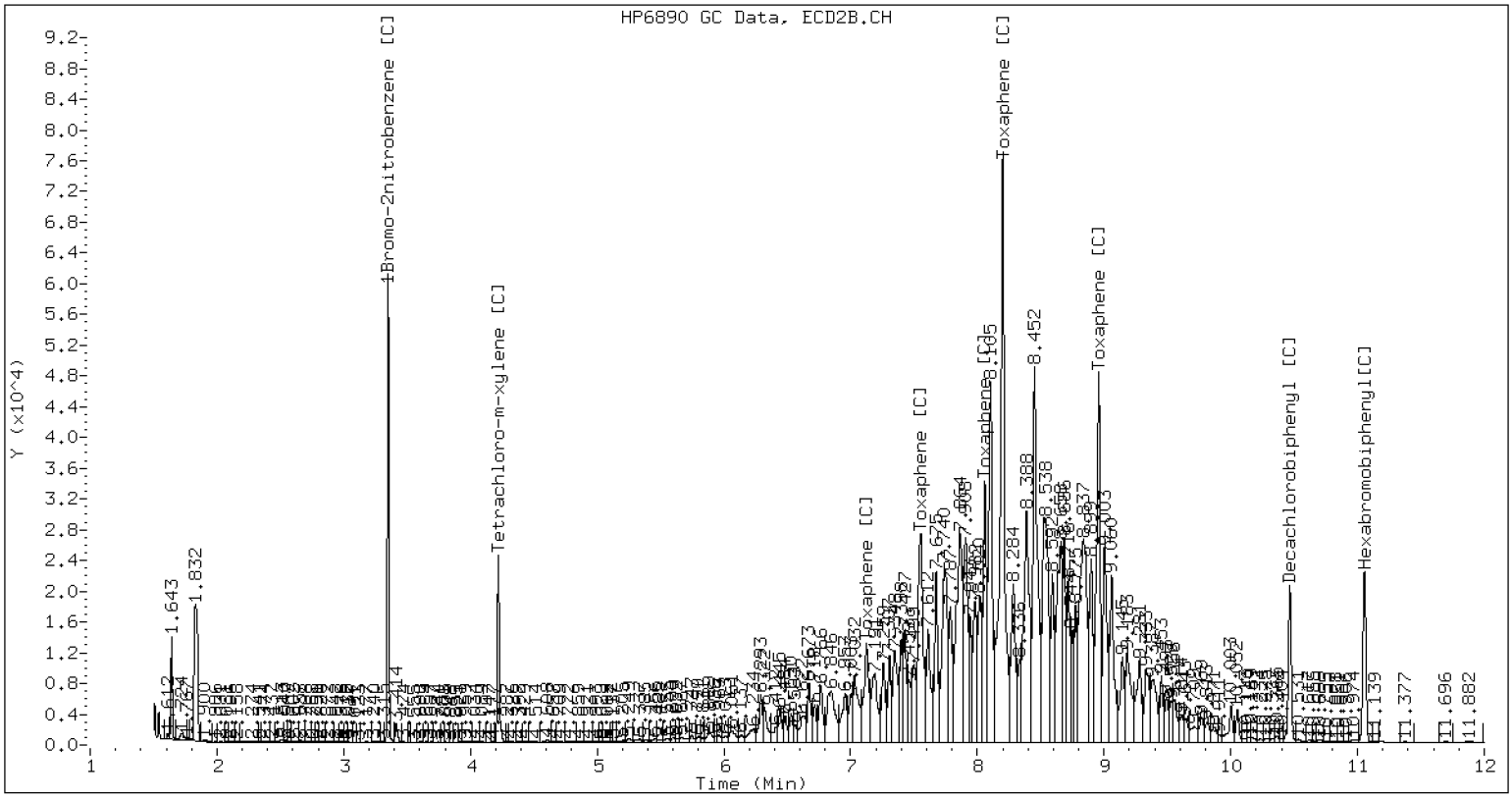
Total STX-CLPAve (5 peaks): 4893.192 Total CLP2Ave (5 peaks): 4791.694 RPD = 2
Corrected Ave (5 peaks): 4893.192 Corrected Ave (5 peaks): 4791.694 RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121433.D SEQ-CALAD CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121433.D
Data file 2: /20221214.b/B20221214.b/22121433.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAD
Client ID:
Injection Date: 15-DEC-2022 04:58
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121434.D
Data file 2: /20221214.b/B20221214.b/22121434.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAE
Client ID:
Injection Date: 15-DEC-2022 05:16
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	626937	4.221	0.000	1016753	65.66	67.54	2.8	Tetrachloro-m-xylene
9.355	0.000	899917	10.467	0.000	1293767	145.37	151.89	4.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	702143	-1.2
Hexabromobiphenyl	641833	610983	-4.8

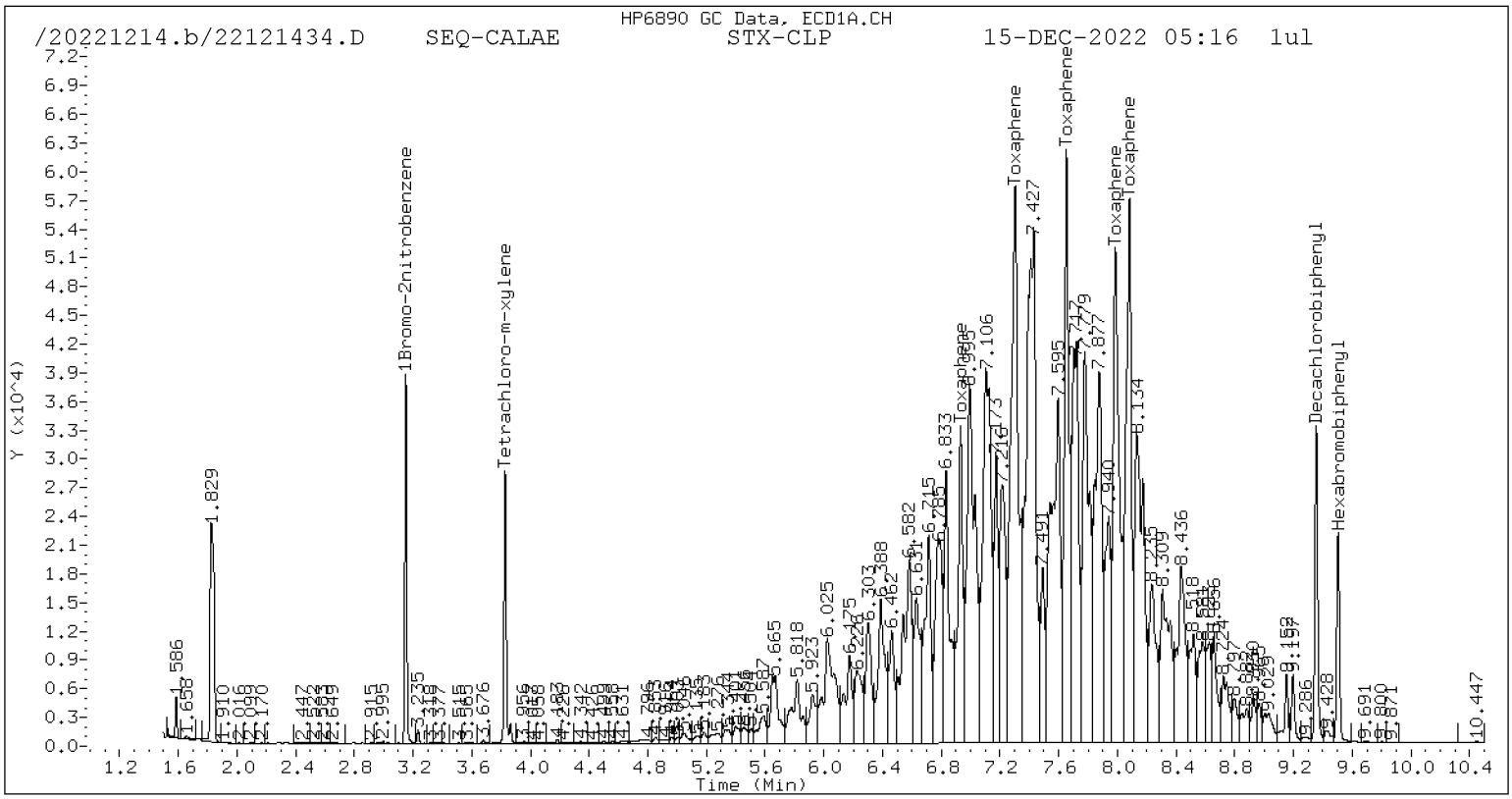
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1069521	1.0
Hexabromobiphenyl	797125	770702	-3.3

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

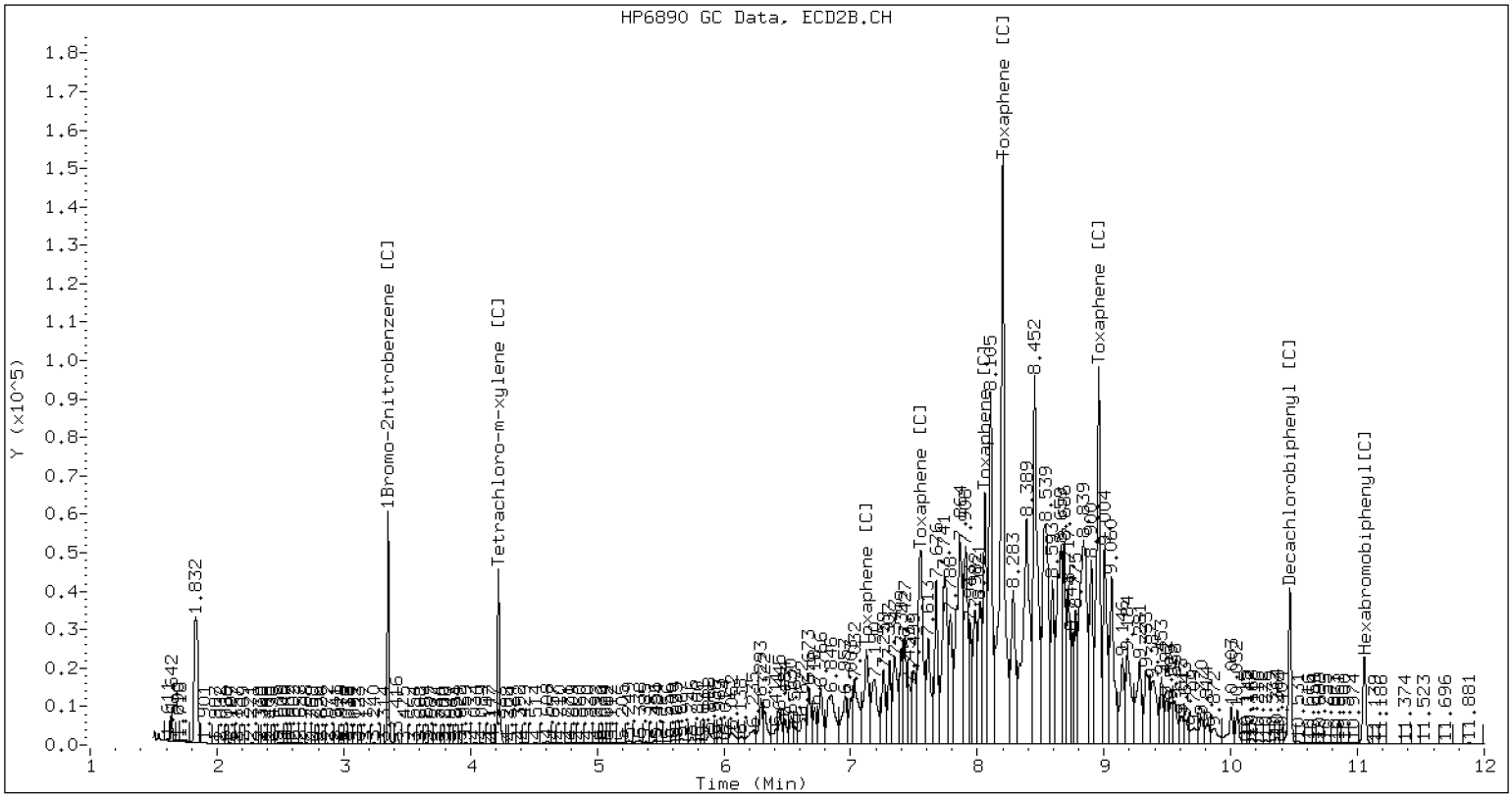
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	6.931	0.000	1553785	8707.6	1	7.126	0.000	1336419	9229.8	
Toxaphene	2	7.303	-0.000	4216546	8428.1	2	7.553	0.000	2900195	8908.4	
Toxaphene	3	7.653	-0.000	2652265	8227.0	3	8.060	0.000	2299294	9278.2	
Toxaphene	4	7.987	0.001	3225164	7480.8	4	8.201	0.000	7496819	9274.6	
Toxaphene	5	8.082	-0.000	2882252	8851.2	5	8.959	0.000	3913616	9870.7	
Total STX-CLPAve (5 peaks): 8338.950						Total CLP2Ave (5 peaks): 9312.318				RPD = 11	
Corrected Ave (5 peaks): 8338.950						Corrected Ave (5 peaks): 9312.318				RPD = 11	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121434.D SEQ-CALAE CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121434.D
Data file 2: /20221214.b/B20221214.b/22121434.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAE
Client ID:
Injection Date: 15-DEC-2022 05:16
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23C03023.D	Calibration Date:	12/14/2022
Sequence:	SLC0093	Injection Date:	03/03/23
Lab Sample ID:	SLC0093-ICV1	Injection Time:	00:34
Sequence Name:	INDAE1		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Hexachlorobenzene	A	20.000	19.2	1.4298940	1.3740710		-4.0	+/-20
Hexachlorobenzene [2C]	A	20.000	18.4	1.4591090	1.3403750		-8.0	+/-20
Decachlorobiphenyl	A	40.000	37.9	0.8105886	0.7680604		-5.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.0	0.8841805	0.8392586		-5.0	+/-20
Tetrachlorometaxylene	A	40.000	37.0	1.0879510	1.0054160		-7.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.7	1.1261070	1.0323690		-8.3	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/23C03023.D
Data file 2: /20230302.b/B20230302.b/23C03023.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA1
Client ID:
Injection Date: 03-MAR-2023 00:34
Report Date: 03/09/2023 11:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.391	0.000	183062	4.829	0.000	264706	20.14	19.12	5.2	alpha-BHC
4.779	0.000	70663	5.302	0.000	100950	20.19	19.18	5.2	beta-BHC
4.965	0.000	157975	5.654	0.000	222619	21.27	19.52	8.6	delta-BHC
4.698	0.000	159687	5.223	0.000	229812	20.26	19.56	3.5	gamma-BHC (Lindane)
5.191	0.000	147595	5.750	0.000	200100	21.05	18.80	11.3	Heptachlor
5.519	0.000	156781	6.152	0.000	217550	19.95	17.90	10.8	Aldrin
6.199	0.000	138028	6.807	0.000	175914	20.26	17.51	14.6	Heptachlor epoxide b
6.641	0.000	123673	7.250	0.000	149530	19.78	16.89	15.8	Endosulfan I
6.901	0.000	260632	7.543	0.000	321444	38.80	32.85	16.6	Dieldrin
6.561	0.000	249441	7.331	0.000	307144	40.00	34.23	15.5	4,4'-DDE
7.151	0.000	171344	7.866	0.000	191394	34.62	33.20	4.2	Endrin
7.388	0.000	215006	8.078	0.000	259590	48.26	43.93	9.4	Endosulfan II
7.207	0.000	202817	7.936	0.000	249024	45.48	44.41	2.4	4,4'-DDD
8.249	0.000	186171	8.673	0.000	234465	44.00	45.18	2.6	Endosulfan sulfate
7.500	0.000	205859	8.254	0.000	234837	45.69	43.39	5.2	4,4'-DDT
7.986	0.000	443110	8.892	0.000	524337	221.92	218.91	1.4	Methoxychlor
8.524	0.000	231289	9.196	0.000	270054	47.72	48.18	1.0	Endrin ketone
7.816	0.000	171425	8.408	0.000	202528	48.24	48.59	0.7	Endrin aldehyde
6.339	0.000	136541	7.017	0.000	166872	19.73	16.65	16.9	trans-Chlordane
6.486	0.000	135083	7.177	0.000	164901	19.46	16.82	14.6	cis-Chlordane
2.346	0.000	176391	2.492	0.000	228593	18.53	17.39	6.3	Hexachlorobutadiene
4.231	0.000	162171	4.689	0.000	231474	19.22	18.37	4.5	Hexachlorobenzene
3.871	0.000	237323	4.195	0.000	356567	36.97	36.67	0.8	Tetrachloro-m-xylene
9.437	0.000	144981	10.402	0.000	170145	37.90	37.97	0.2	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

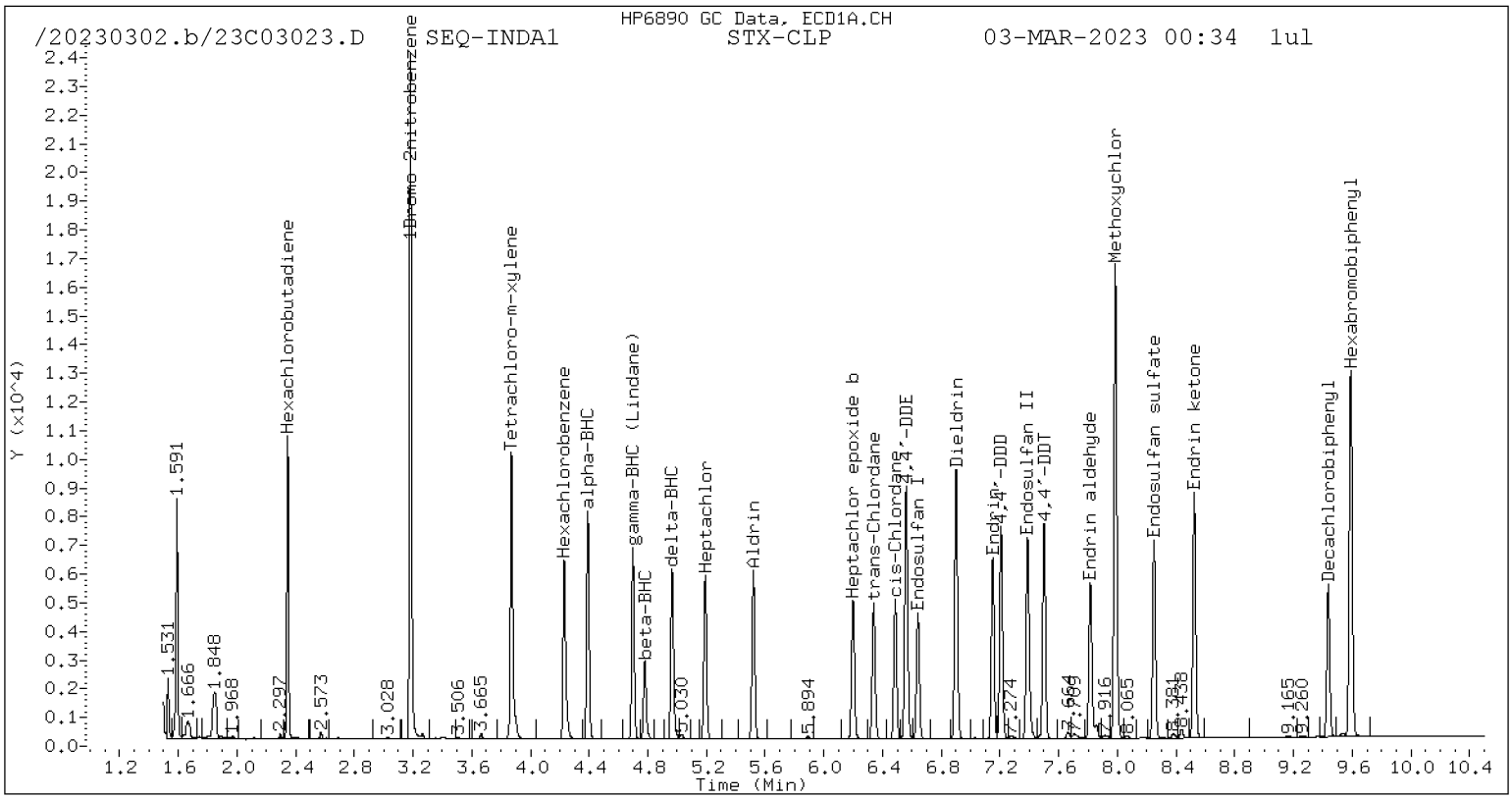
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	472089	-29.8
Hexabromobiphenyl	609723	377525	-38.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	690774	-31.4
Hexabromobiphenyl	769764	405465	-47.3

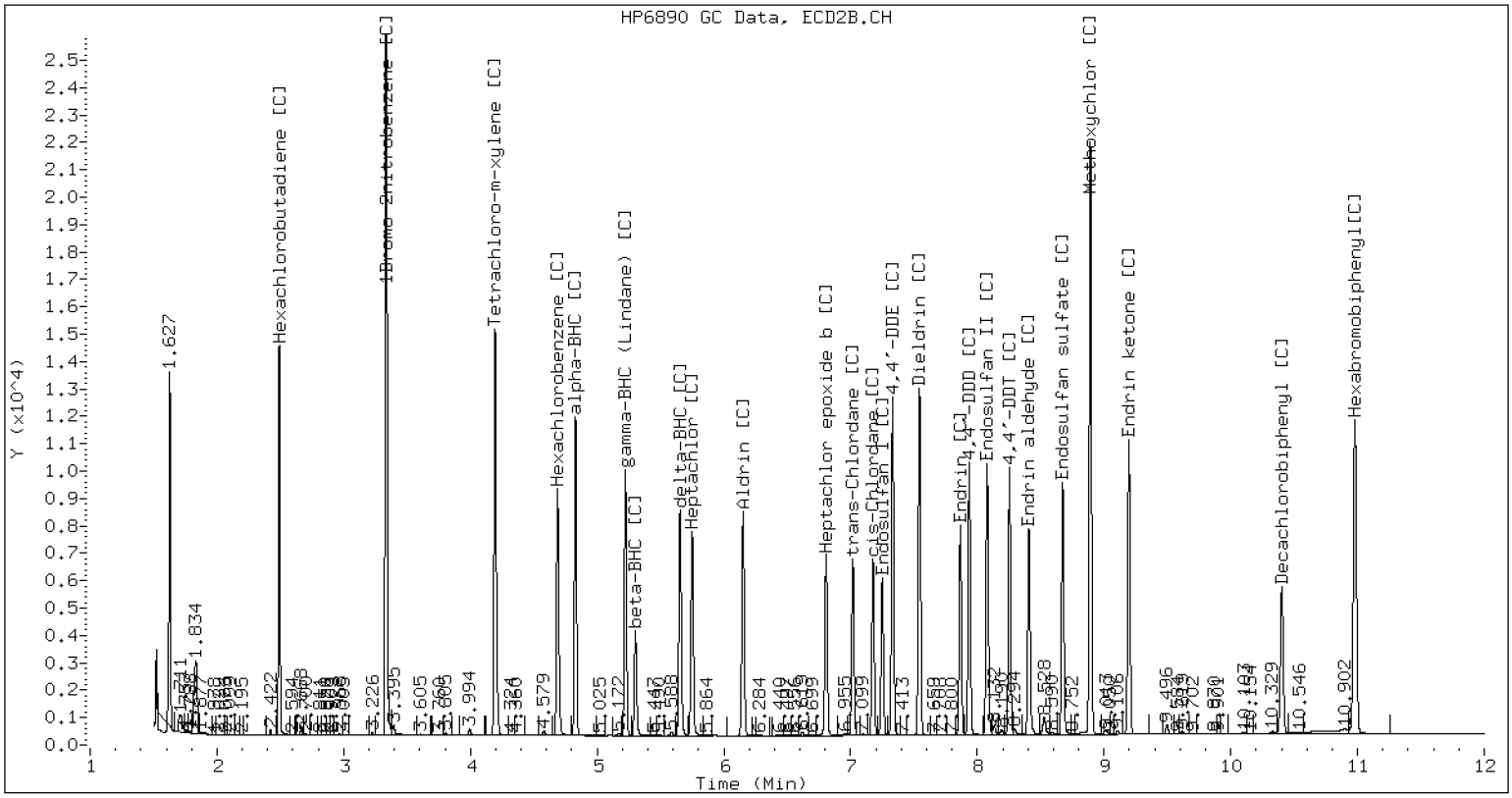
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230302.b/B20230302.b/23C03023.D SEQ-INDA1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	002F1801.D	Calibration Date:	12/14/2022
Sequence:	SLC0093	Injection Date:	03/03/23
Lab Sample ID:	SLC0093-CCV1	Injection Time:	05:03
Sequence Name:	INDAE2		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.7	1.4298940	1.4075310		-1.5	+/-20
Hexachlorobenzene [2C]	A	20.000	18.4	1.4591090	1.3462030		-8.0	+/-20
Decachlorobiphenyl	A	40.000	36.3	0.8105886	0.7358649		-9.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.1	0.8841805	0.7989683		-9.8	+/-20
Tetrachlorometaxylene	A	40.000	37.6	1.0879510	1.0232470		-6.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.6	1.1261070	1.0306140		-8.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/002F1801.D
Data file 2: /20230302.b/B20230302.b/002F1801.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA2
Client ID:
Injection Date: 03-MAR-2023 05:03
Report Date: 03/09/2023 11:17
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.389	-0.002	343168	4.827	-0.002	523633	21.36	19.90	7.1	alpha-BHC
4.777	-0.002	130399	5.301	-0.001	195475	21.08	19.54	7.6	beta-BHC
4.964	-0.002	301259	5.652	-0.002	447075	22.94	20.63	10.6	delta-BHC
4.696	-0.002	298011	5.222	-0.001	455223	21.39	20.38	4.8	gamma-BHC (Lindane)
5.190	-0.002	271697	5.748	-0.001	401965	21.92	19.87	9.8	Heptachlor
5.517	-0.002	286941	6.150	-0.001	422330	20.65	18.29	12.2	Aldrin
6.196	-0.002	241170	6.805	-0.002	328965	20.02	17.22	15.0	Heptachlor epoxide b
6.639	-0.002	222373	7.248	-0.002	282710	20.12	16.79	18.0	Endosulfan I
6.899	-0.002	459350	7.542	-0.002	598481	38.68	32.18	18.3	Dieldrin
6.558	-0.002	445996	7.330	-0.002	573822	40.45	33.64	18.4	4,4'-DDE
7.149	-0.002	289978	7.864	-0.002	349879	33.34	32.02	4.0	Endrin
7.385	-0.003	380821	8.075	-0.002	482441	48.64	43.08	12.1	Endosulfan II
7.204	-0.003	359106	7.934	-0.002	461474	45.83	43.42	5.4	4,4'-DDD
8.247	-0.003	327788	8.671	-0.002	438173	44.10	44.56	1.0	Endosulfan sulfate
7.498	-0.002	362592	8.252	-0.002	460505	45.80	44.90	2.0	4,4'-DDT
7.984	-0.002	782122	8.891	-0.002	1021448	222.94	225.03	0.9	Methoxychlor
8.522	-0.002	401746	9.194	-0.002	525667	47.18	49.49	4.8	Endrin ketone
7.813	-0.003	298557	8.405	-0.002	379452	47.81	48.03	0.5	Endrin aldehyde
6.338	-0.002	246874	7.016	-0.002	321581	20.18	16.88	17.8	trans-Chlordane
6.484	-0.002	243082	7.176	-0.002	310953	19.81	16.69	17.1	cis-Chlordane
2.344	-0.002	318266	2.490	-0.002	433551	18.90	17.35	8.6	Hexachlorobutadiene
4.229	-0.002	293718	4.687	-0.002	441908	19.69	18.45	6.5	Hexachlorobenzene
3.869	-0.002	427054	4.193	-0.002	676624	37.62	36.61	2.7	Tetrachloro-m-xylene
9.435	-0.002	244061	10.400	-0.002	306966	36.31	36.15	0.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

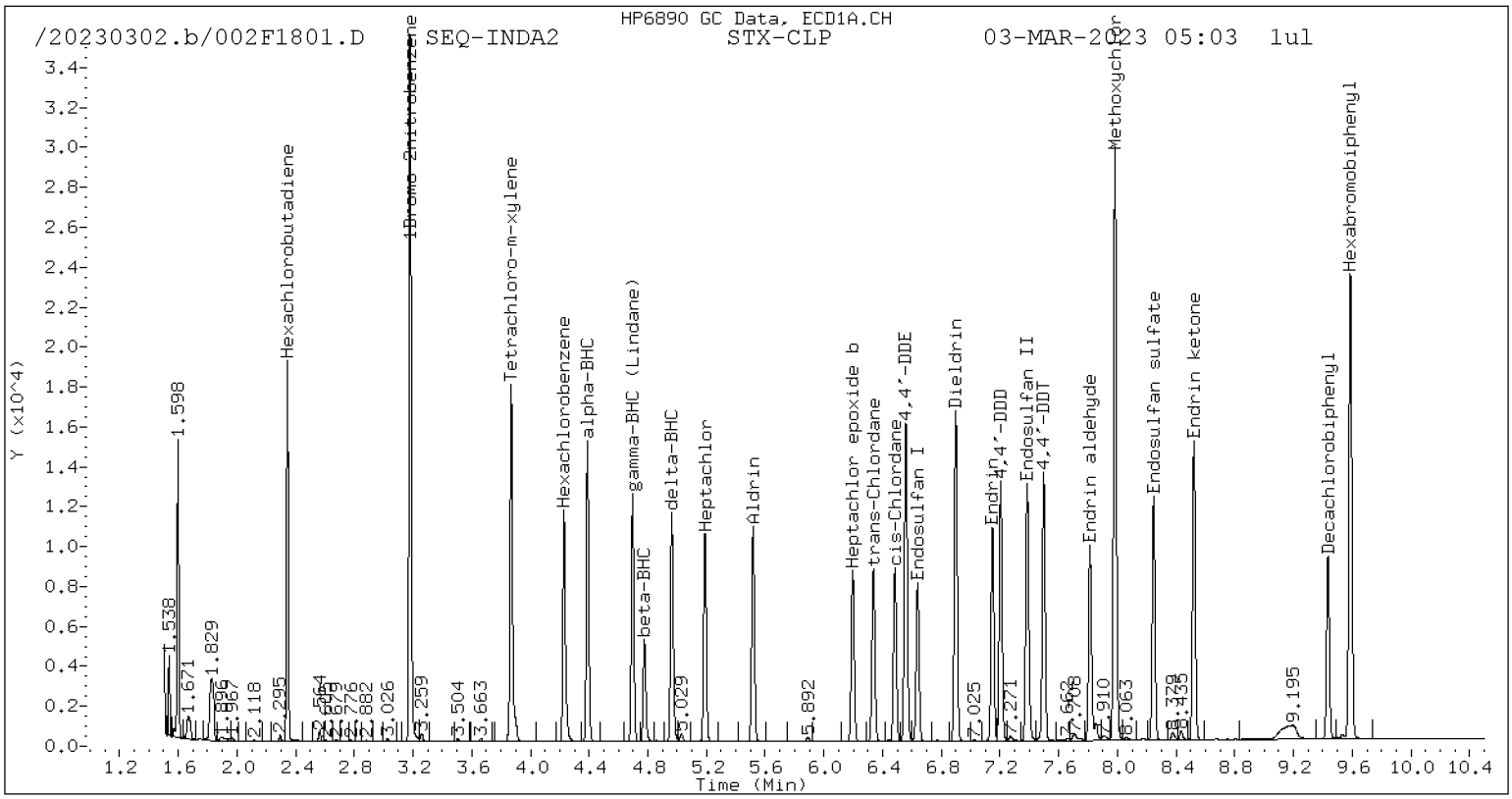
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	834704	24.1
Hexabromobiphenyl	609723	663331	8.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1313050	30.5
Hexabromobiphenyl	769764	768406	-0.2

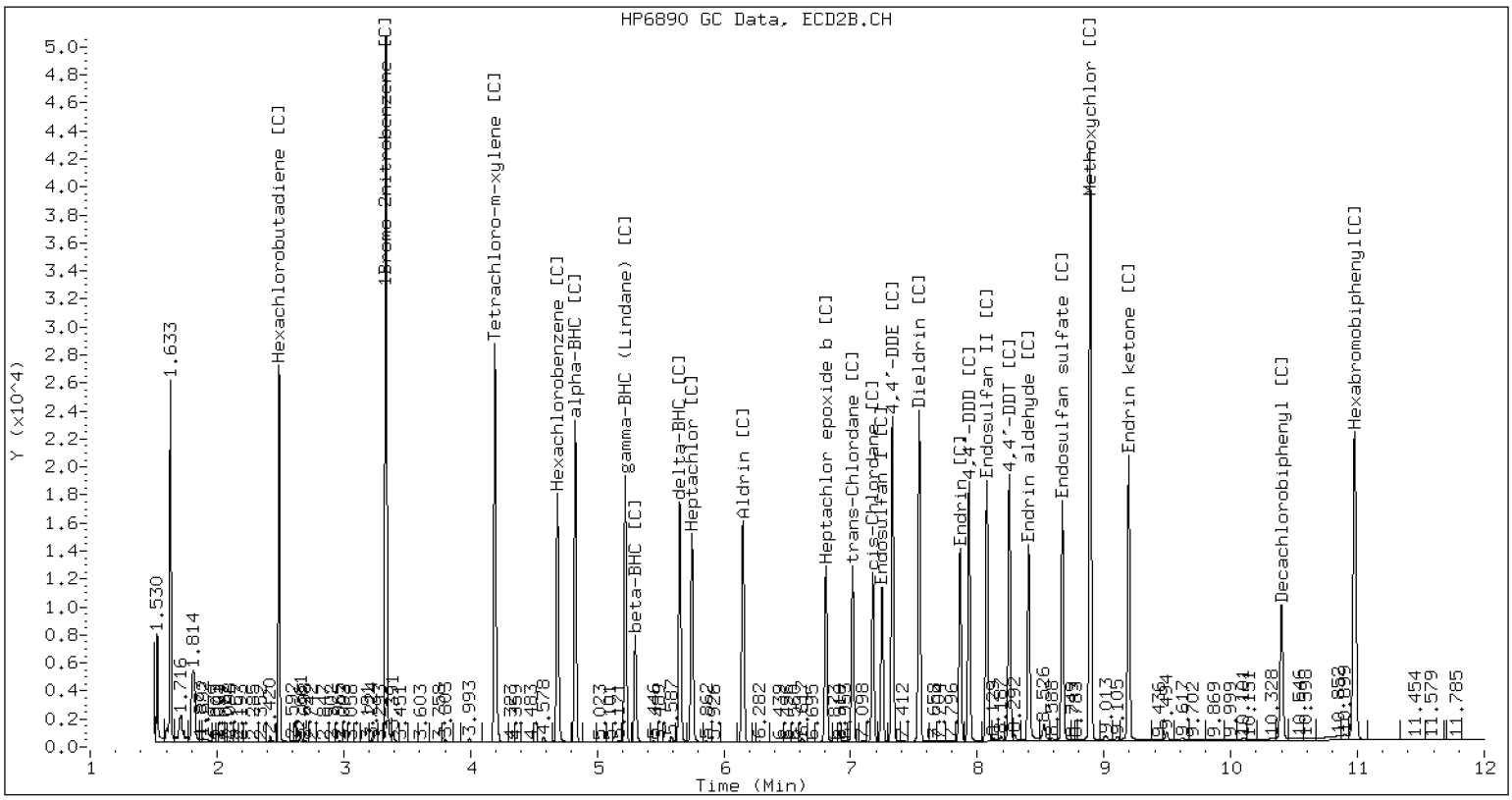
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230302.b/B20230302.b/002F1801.D SEQ-INDA2 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	002F3501.D	Calibration Date:	12/14/2022
Sequence:	SLC0093	Injection Date:	03/03/23
Lab Sample ID:	SLC0093-CCV2	Injection Time:	10:08
Sequence Name:	INDAE3		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.1	1.4298940	1.3662080		-4.5	+/-20
Hexachlorobenzene [2C]	A	20.000	17.8	1.4591090	1.2955280		-11.0	+/-20
Decachlorobiphenyl	A	40.000	37.2	0.8105886	0.7548490		-7.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.1	0.8841805	0.8653759		-2.3	+/-20
Tetrachlorometaxylene	A	40.000	36.7	1.0879510	0.9994100		-8.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	35.6	1.1261070	1.0022730		-11.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/002F3501.D
Data file 2: /20230302.b/B20230302.b/002F3501.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA3
Client ID:
Injection Date: 03-MAR-2023 10:08
Report Date: 03/09/2023 11:17
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.390	-0.001	188143	4.828	-0.002	275046	20.16	18.61	8.0	alpha-BHC
4.778	-0.001	72578	5.301	-0.001	105366	20.20	18.75	7.4	beta-BHC
4.964	-0.001	164939	5.653	-0.001	233517	21.63	19.18	12.0	delta-BHC
4.697	-0.002	164164	5.223	-0.001	240371	20.29	19.16	5.7	gamma-BHC (Lindane)
5.190	-0.002	149850	5.748	-0.001	211270	20.81	18.60	11.3	Heptachlor
5.518	-0.002	158122	6.150	-0.002	220726	19.60	17.02	14.1	Aldrin
6.197	-0.002	135037	6.805	-0.002	172673	19.30	16.10	18.1	Heptachlor epoxide b
6.638	-0.002	121689	7.249	-0.002	144082	18.95	15.24	21.7	Endosulfan I
6.899	-0.002	254846	7.542	-0.002	310486	36.95	29.72	21.7	Dieldrin
6.558	-0.002	246764	7.330	-0.001	293802	38.53	30.67	22.7	4,4'-DDE
7.149	-0.002	137316	7.865	-0.001	154172	28.85	26.63	8.0	Endrin
7.386	-0.002	206483	8.076	-0.001	253584	48.20	42.72	12.0	Endosulfan II
7.205	-0.002	195256	7.935	-0.002	237045	45.54	42.09	7.9	4,4'-DDD
8.247	-0.003	178093	8.672	-0.002	229175	43.78	43.97	0.4	Endosulfan sulfate
7.498	-0.002	194392	8.252	-0.002	241758	44.87	44.47	0.9	4,4'-DDT
7.984	-0.002	427965	8.891	-0.001	525596	222.91	218.48	2.0	Methoxychlor
8.522	-0.002	221528	9.195	-0.001	282492	47.54	50.18	5.4	Endrin ketone
7.814	-0.002	167495	8.406	-0.002	201428	49.02	48.11	1.9	Endrin aldehyde
6.338	-0.002	134516	7.016	-0.002	164467	18.93	15.37	20.7	trans-Chlordane
6.484	-0.002	132633	7.175	-0.002	158664	18.61	15.16	20.4	cis-Chlordane
2.345	-0.000	180359	2.492	-0.000	243057	18.45	17.32	6.3	Hexachlorobutadiene
4.230	-0.001	165566	4.688	-0.001	238852	19.11	17.76	7.3	Hexachlorobenzene
3.870	-0.001	242230	4.194	-0.001	369571	36.74	35.60	3.2	Tetrachloro-m-xylene
9.435	-0.002	137010	10.401	-0.001	176210	37.25	39.15	5.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

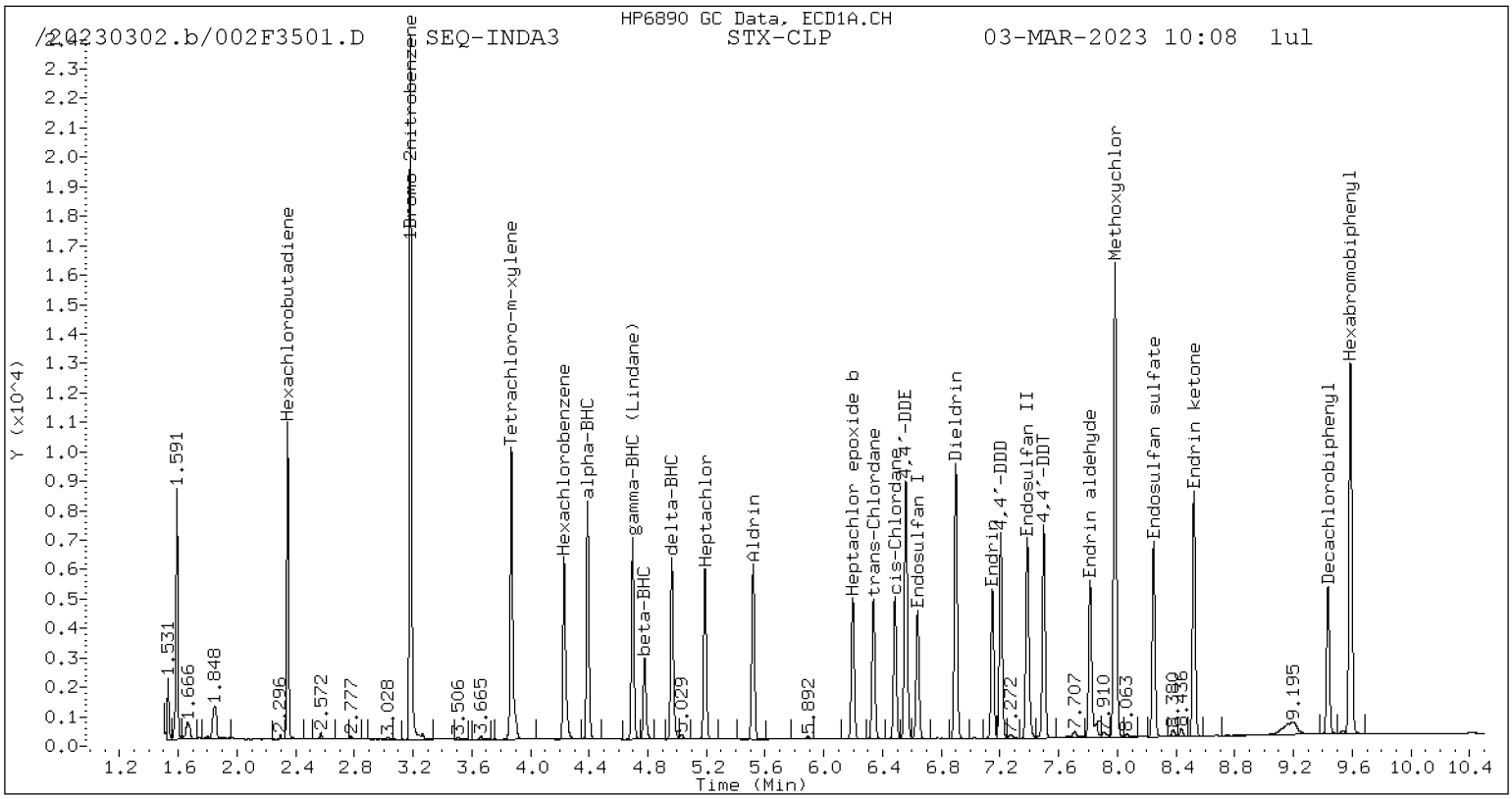
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	484746	-27.9
Hexabromobiphenyl	609723	363013	-40.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	737466	-26.7
Hexabromobiphenyl	769764	407245	-47.1

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

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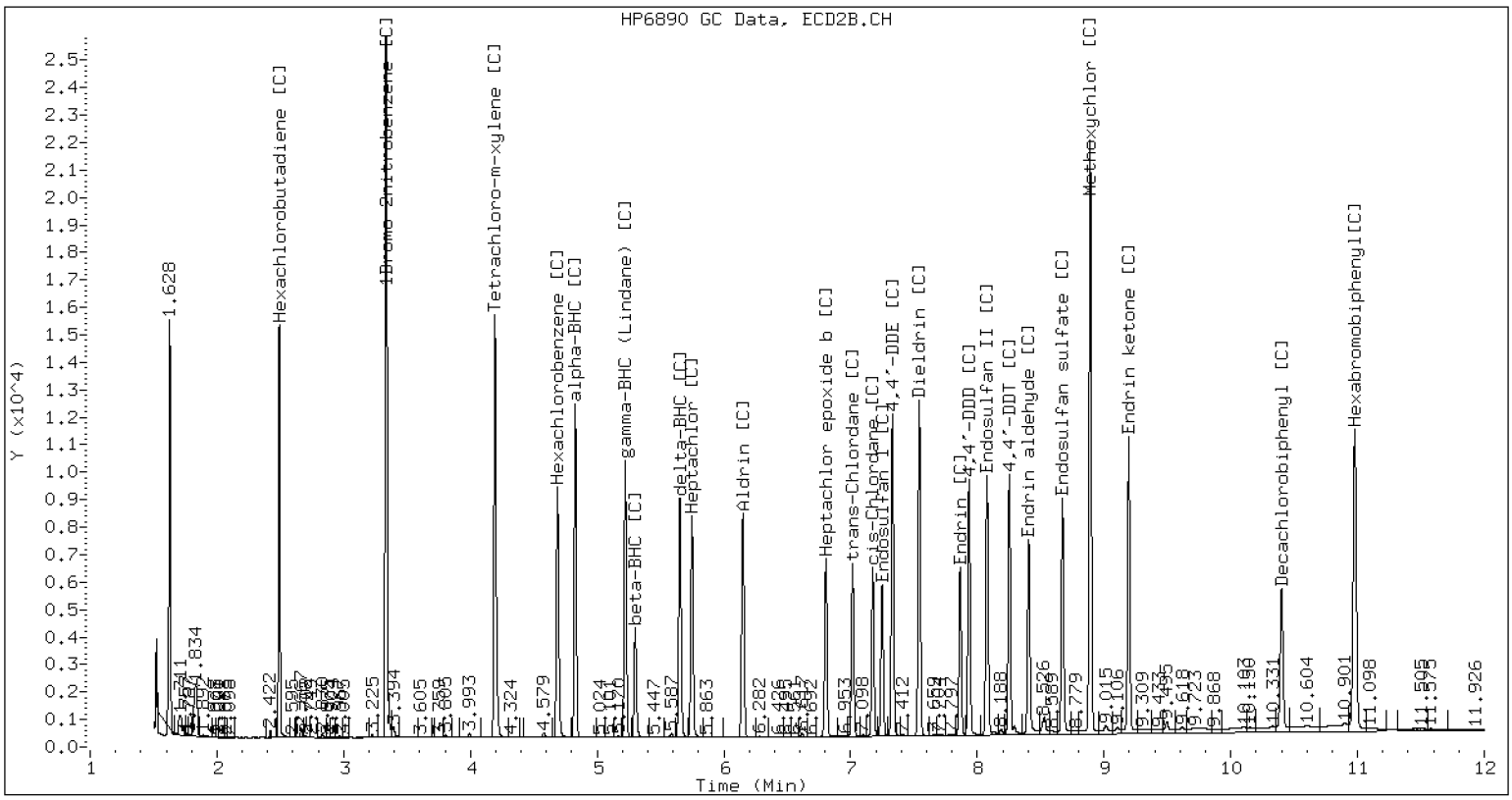


CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	002F4701.D	Calibration Date:	12/14/2022
Sequence:	SLC0093	Injection Date:	03/03/23
Lab Sample ID:	SLC0093-CCV3	Injection Time:	13:44
Sequence Name:	INDAE4		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.7	1.4298940	1.4099430		-1.5	+/-20
Hexachlorobenzene [2C]	A	20.000	18.3	1.4591090	1.3359870		-8.5	+/-20
Decachlorobiphenyl	A	40.000	36.6	0.8105886	0.7427974		-8.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	37.1	0.8841805	0.8195756		-7.3	+/-20
Tetrachlorometaxylene	A	40.000	37.6	1.0879510	1.0221840		-6.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.4	1.1261070	1.0237650		-9.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/002F4701.D
Data file 2: /20230302.b/B20230302.b/002F4701.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA4
Client ID:
Injection Date: 03-MAR-2023 13:44
Report Date: 03/09/2023 11:17
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.388	-0.003	379468	4.827	-0.003	577232	21.57	19.98	7.7	alpha-BHC
4.777	-0.003	144483	5.300	-0.002	213799	21.33	19.47	9.2	beta-BHC
4.963	-0.002	333612	5.651	-0.003	492614	23.21	20.70	11.4	delta-BHC
4.696	-0.003	329374	5.221	-0.002	500419	21.60	20.41	5.6	gamma-BHC (Lindane)
5.189	-0.003	299929	5.747	-0.002	443759	22.10	19.98	10.1	Heptachlor
5.517	-0.003	316209	6.149	-0.003	460479	20.79	18.16	13.5	Aldrin
6.195	-0.003	267512	6.804	-0.002	361113	20.29	17.22	16.3	Heptachlor epoxide b
6.638	-0.003	246695	7.247	-0.003	310176	20.39	16.79	19.4	Endosulfan I
6.898	-0.003	509698	7.541	-0.002	657623	39.21	32.21	19.6	Dieldrin
6.558	-0.003	493672	7.330	-0.002	629206	40.90	33.61	19.6	4,4'-DDE
7.148	-0.003	300689	7.864	-0.002	353106	31.04	30.07	3.2	Endrin
7.385	-0.004	423983	8.074	-0.003	526901	48.62	43.77	10.5	Endosulfan II
7.204	-0.003	399949	7.933	-0.003	507547	45.83	44.43	3.1	4,4'-DDD
8.246	-0.003	367025	8.671	-0.002	479504	44.32	45.36	2.3	Endosulfan sulfate
7.497	-0.003	408068	8.252	-0.002	507007	46.27	45.98	0.6	4,4'-DDT
7.983	-0.003	860998	8.890	-0.002	1119933	220.32	229.53	4.1	Methoxychlor
8.521	-0.003	456538	9.193	-0.003	564083	48.13	49.41	2.6	Endrin ketone
7.813	-0.003	332618	8.405	-0.002	405394	47.82	47.74	0.2	Endrin aldehyde
6.337	-0.003	273685	7.015	-0.003	351857	20.44	16.83	19.4	trans-Chlordane
6.483	-0.003	269319	7.174	-0.003	340839	20.05	16.66	18.5	cis-Chlordane
2.344	-0.002	344557	2.489	-0.002	468591	18.70	17.08	9.0	Hexachlorobutadiene
4.229	-0.002	322063	4.686	-0.003	481416	19.72	18.31	7.4	Hexachlorobenzene
3.868	-0.003	466980	4.193	-0.002	737817	37.58	36.36	3.3	Tetrachloro-m-xylene
9.434	-0.003	274425	10.399	-0.003	338472	36.65	37.08	1.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

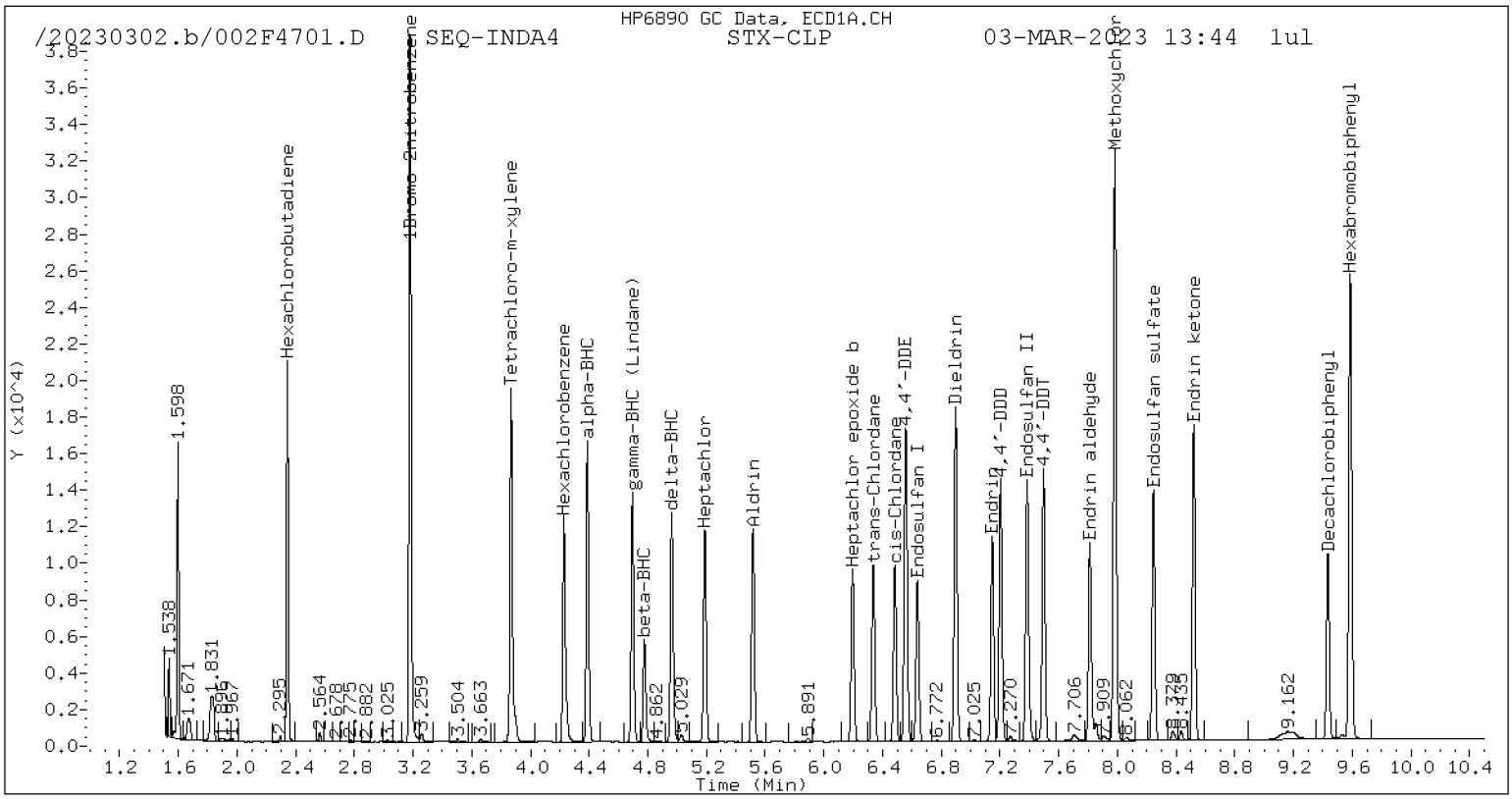
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	913691	35.9
Hexabromobiphenyl	609723	738896	21.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1441379	43.2
Hexabromobiphenyl	769764	825969	7.3

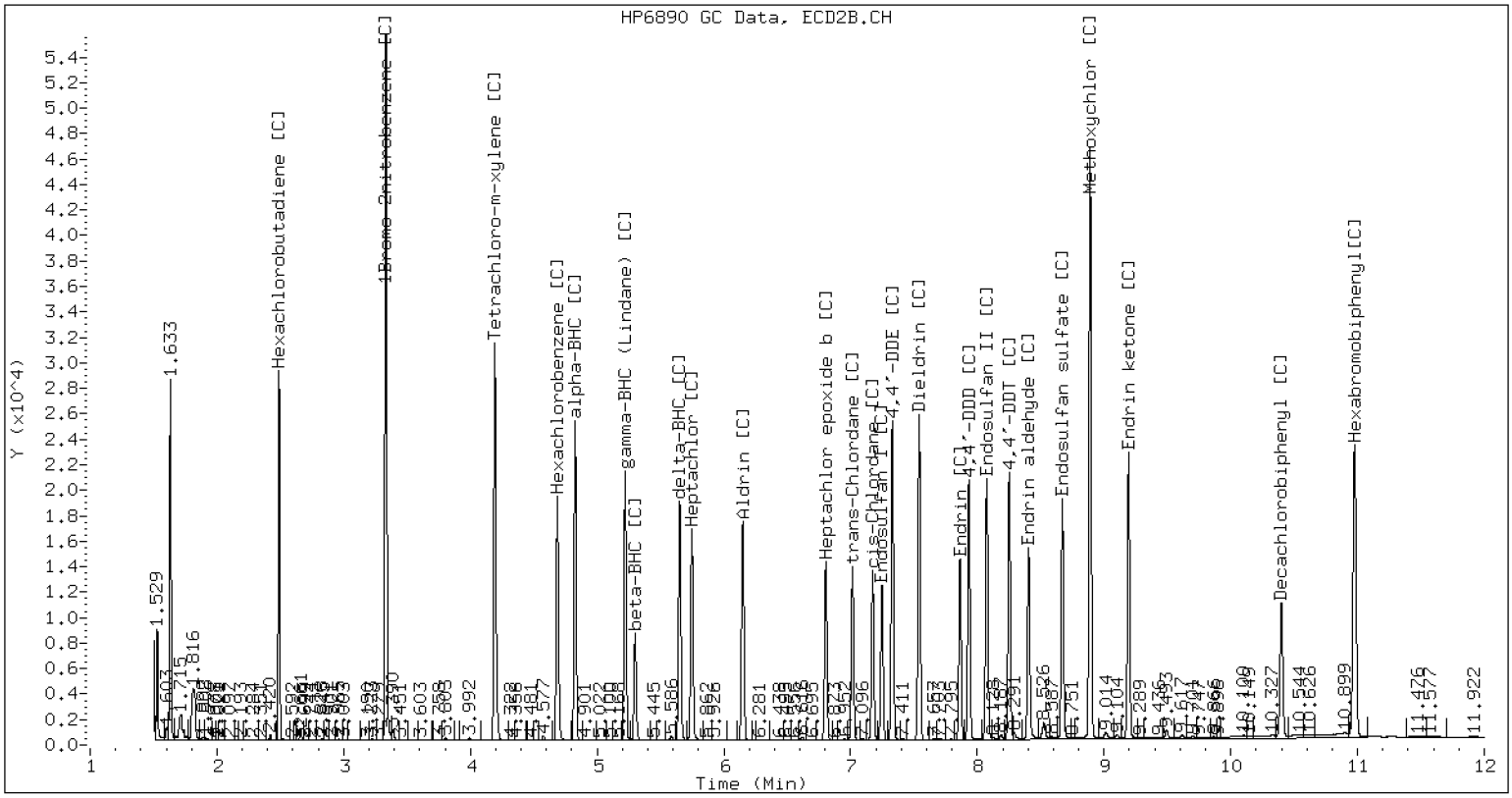
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230302.b/B20230302.b/002F4701.D SEQ-INDA4 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	002F6401.D	Calibration Date:	12/14/2022
Sequence:	SLC0093	Injection Date:	03/03/23
Lab Sample ID:	SLC0093-CCV4	Injection Time:	18:49
Sequence Name:	INDAE5		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.7	1.4298940	1.4095660		-1.5	+/-20
Hexachlorobenzene [2C]	A	20.000	18.3	1.4591090	1.3381500		-8.5	+/-20
Decachlorobiphenyl	A	40.000	36.6	0.8105886	0.7418655		-8.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.4	0.8841805	0.8049382		-9.0	+/-20
Tetrachlorometaxylene	A	40.000	37.4	1.0879510	1.0168510		-6.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.2	1.1261070	1.0206150		-9.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/002F6401.D
Data file 2: /20230302.b/B20230302.b/002F6401.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA5
Client ID:
Injection Date: 03-MAR-2023 18:49
Report Date: 03/09/2023 11:17
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.389	-0.002	403802	4.827	-0.003	612327	21.63	20.13	7.2	alpha-BHC
4.777	-0.002	153697	5.300	-0.002	225088	21.38	19.46	9.4	beta-BHC
4.963	-0.002	355860	5.652	-0.002	519240	23.32	20.72	11.8	delta-BHC
4.696	-0.002	350121	5.221	-0.002	528176	21.63	20.46	5.6	gamma-BHC (Lindane)
5.189	-0.002	318388	5.748	-0.002	467209	22.11	19.98	10.1	Heptachlor
5.517	-0.002	334458	6.149	-0.003	483720	20.72	18.11	13.4	Aldrin
6.196	-0.002	280279	6.805	-0.002	376773	20.03	17.06	16.0	Heptachlor epoxide b
6.638	-0.002	259074	7.248	-0.003	321896	20.17	16.54	19.8	Endosulfan I
6.898	-0.002	535604	7.541	-0.002	690086	38.82	32.09	19.0	Dieldrin
6.558	-0.003	518999	7.330	-0.002	653975	40.51	33.16	20.0	4,4'-DDE
7.148	-0.002	287586	7.864	-0.002	373877	27.72	29.68	6.9	Endrin
7.385	-0.003	444918	8.075	-0.003	547436	47.63	42.40	11.6	Endosulfan II
7.204	-0.003	421292	7.934	-0.002	528703	45.07	43.16	4.3	4,4'-DDD
8.246	-0.003	387652	8.671	-0.002	507917	43.71	44.80	2.5	Endosulfan sulfate
7.498	-0.003	428334	8.252	-0.002	560840	45.35	47.43	4.5	4,4'-DDT
7.983	-0.002	910628	8.891	-0.002	1193144	217.56	228.01	4.7	Methoxychlor
8.521	-0.003	486178	9.194	-0.002	599065	47.85	48.92	2.2	Endrin ketone
7.813	-0.003	364729	8.405	-0.003	427903	48.96	46.99	4.1	Endrin aldehyde
6.337	-0.002	287083	7.015	-0.002	367731	20.20	16.70	19.0	trans-Chlordane
6.484	-0.002	282842	7.174	-0.003	354428	19.84	16.45	18.7	cis-Chlordane
2.344	-0.001	369947	2.490	-0.002	492751	18.92	17.06	10.3	Hexachlorobutadiene
4.229	-0.002	341714	4.686	-0.002	507857	19.72	18.34	7.2	Hexachlorobenzene
3.869	-0.002	493020	4.193	-0.002	774691	37.39	36.25	3.1	Tetrachloro-m-xylene
9.435	-0.003	293561	10.400	-0.002	356518	36.61	36.42	0.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

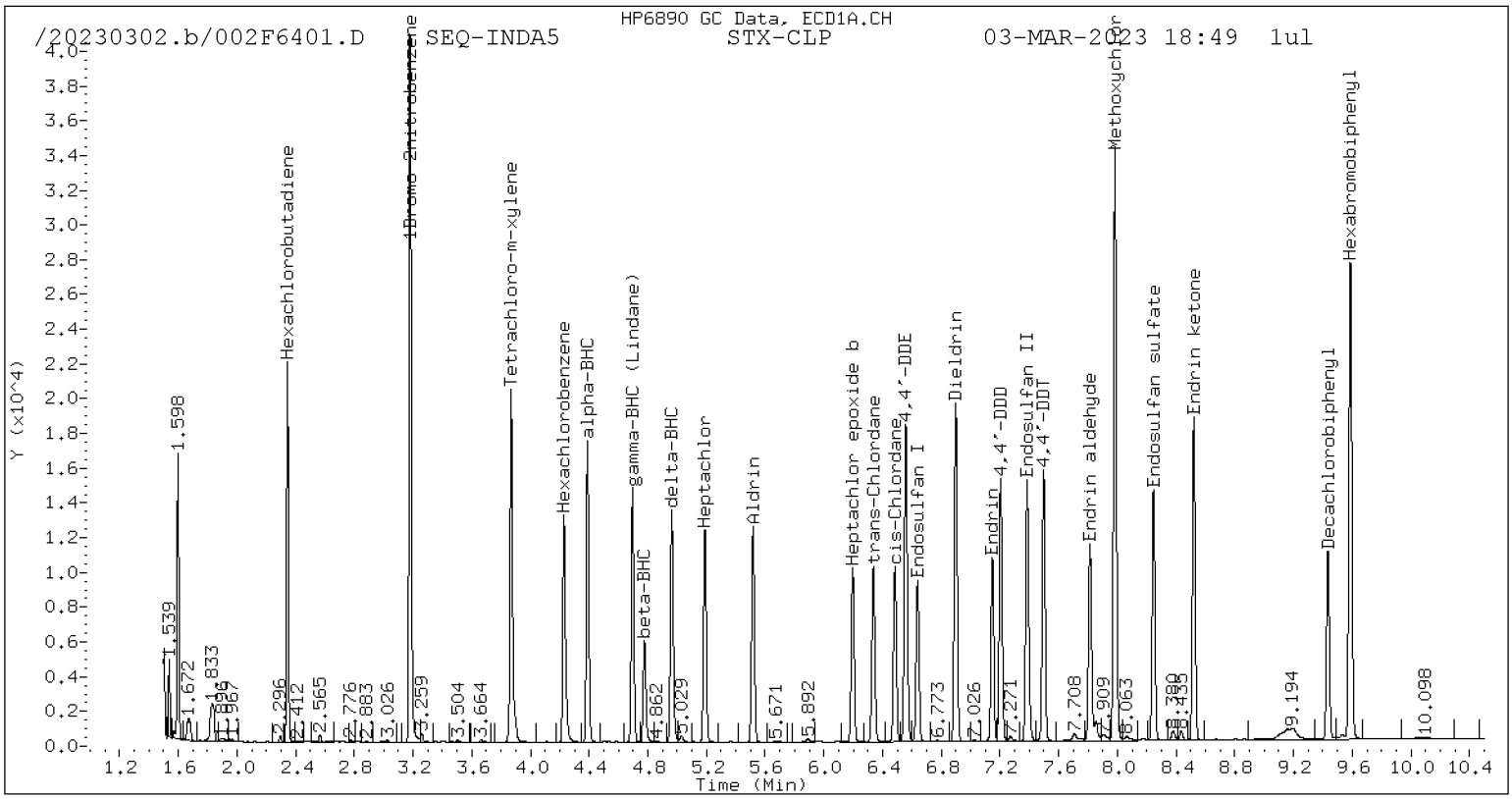
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	969700	44.2
Hexabromobiphenyl	609723	791413	29.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1518087	50.8
Hexabromobiphenyl	769764	885827	15.1

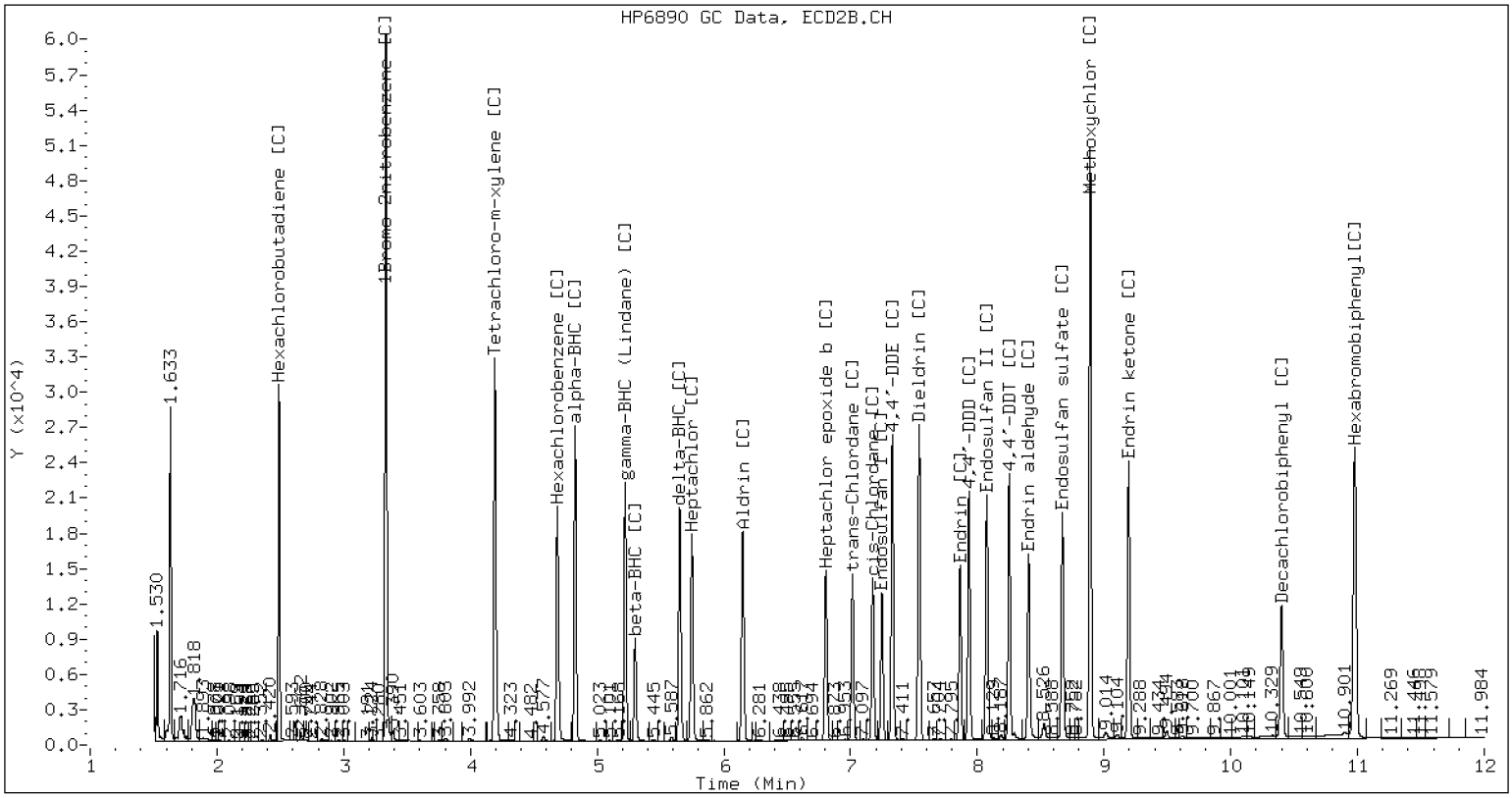
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230302.b/B20230302.b/002F6401.D SEQ-INDA5 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	002F8101.D	Calibration Date:	12/14/2022
Sequence:	SLC0093	Injection Date:	03/03/23
Lab Sample ID:	SLC0093-CCV5	Injection Time:	23:55
Sequence Name:	INDAE6		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.4	1.4298940	1.3896490		-3.0	+/-20
Hexachlorobenzene [2C]	A	20.000	17.9	1.4591090	1.3063800		-10.5	+/-20
Decachlorobiphenyl	A	40.000	36.3	0.8105886	0.7362187		-9.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.1	0.8841805	0.7988071		-9.8	+/-20
Tetrachlorometaxylene	A	40.000	37.1	1.0879510	1.0095270		-7.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	35.4	1.1261070	0.9979182		-11.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/002F8101.D
Data file 2: /20230302.b/B20230302.b/002F8101.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA6
Client ID:
Injection Date: 03-MAR-2023 23:55
Report Date: 03/09/2023 11:17
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.389	-0.002	423670	4.826	-0.003	632459	21.39	19.66	8.4	alpha-BHC
4.777	-0.002	161663	5.299	-0.003	237106	21.20	19.39	8.9	beta-BHC
4.963	-0.002	374799	5.651	-0.003	545788	23.15	20.60	11.7	delta-BHC
4.696	-0.002	369134	5.221	-0.002	554303	21.49	20.30	5.7	gamma-BHC (Lindane)
5.189	-0.002	330103	5.747	-0.003	487989	21.60	19.73	9.0	Heptachlor
5.516	-0.003	347634	6.149	-0.003	500567	20.30	17.73	13.5	Aldrin
6.196	-0.003	293193	6.804	-0.003	391207	19.74	16.75	16.4	Heptachlor epoxide b
6.638	-0.002	267449	7.247	-0.003	329740	19.62	16.02	20.2	Endosulfan I
6.898	-0.003	555584	7.541	-0.003	709727	37.95	31.21	19.5	Dieldrin
6.558	-0.002	537176	7.329	-0.002	668290	39.52	32.05	20.9	4,4'-DDE
7.148	-0.003	326649	7.863	-0.003	392822	30.86	30.09	2.5	Endrin
7.385	-0.003	450235	8.075	-0.003	571156	47.25	42.69	10.1	Endosulfan II
7.204	-0.003	431860	7.933	-0.003	549109	45.28	43.25	4.6	4,4'-DDD
8.246	-0.003	393731	8.670	-0.003	522785	43.51	44.49	2.2	Endosulfan sulfate
7.498	-0.003	436042	8.251	-0.002	557519	45.25	45.49	0.5	4,4'-DDT
7.984	-0.002	952291	8.890	-0.002	1225977	223.00	226.06	1.4	Methoxychlor
8.521	-0.003	486130	9.193	-0.003	613799	46.90	48.37	3.1	Endrin ketone
7.813	-0.003	353104	8.404	-0.003	440487	46.46	46.67	0.5	Endrin aldehyde
6.337	-0.002	297118	7.014	-0.003	380777	19.70	16.35	18.6	trans-Chlordane
6.484	-0.003	291264	7.174	-0.003	363732	19.25	15.97	18.7	cis-Chlordane
2.344	-0.001	390461	2.490	-0.002	519362	18.81	17.00	10.1	Hexachlorobutadiene
4.229	-0.002	357497	4.686	-0.002	524287	19.44	17.91	8.2	Hexachlorobenzene
3.869	-0.002	519416	4.193	-0.002	800985	37.12	35.45	4.6	Tetrachloro-m-xylene
9.435	-0.003	297224	10.400	-0.003	366678	36.33	36.14	0.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

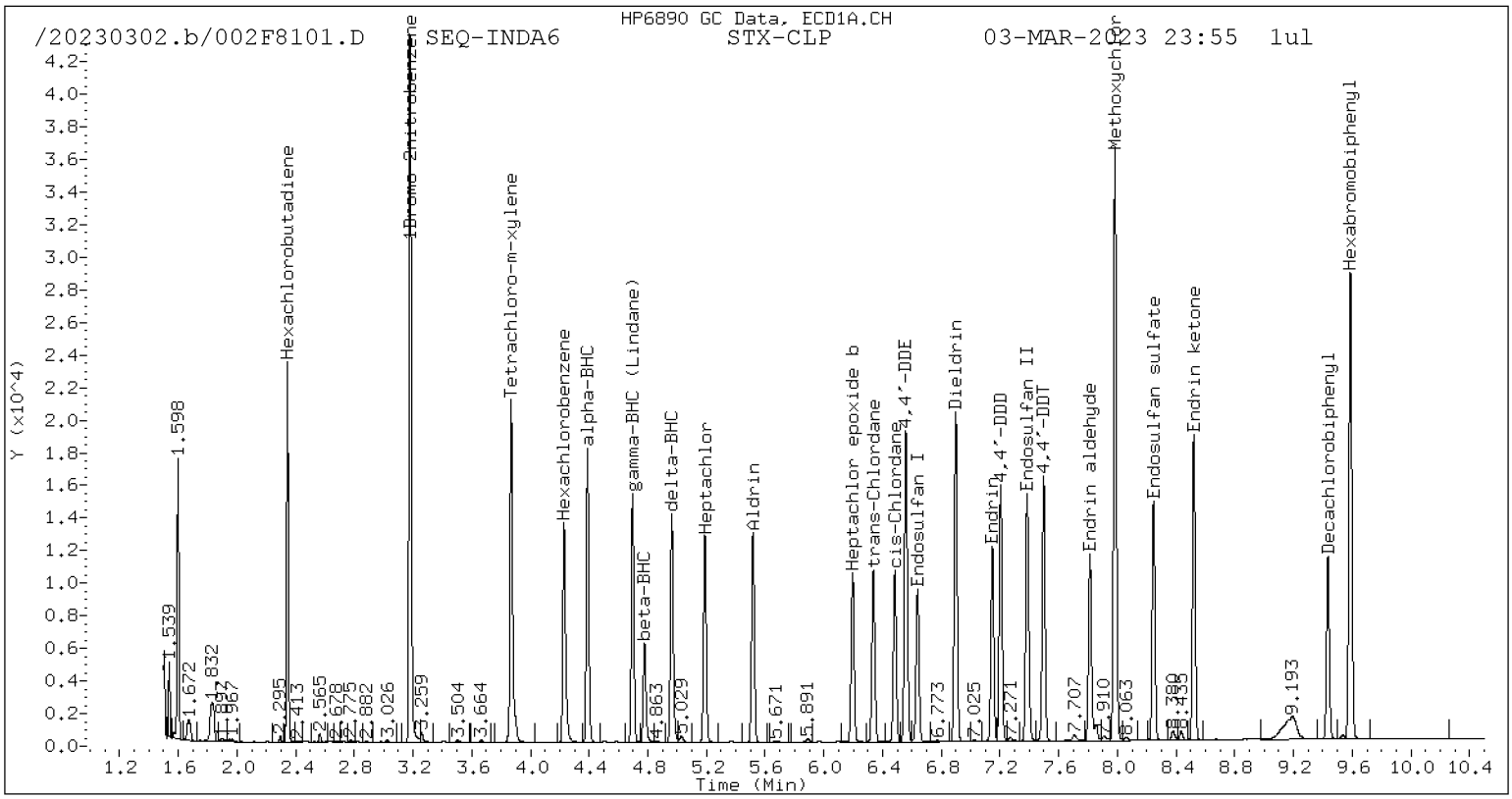
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	1029028	53.0
Hexabromobiphenyl	609723	807434	32.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1605312	59.5
Hexabromobiphenyl	769764	918064	19.3

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

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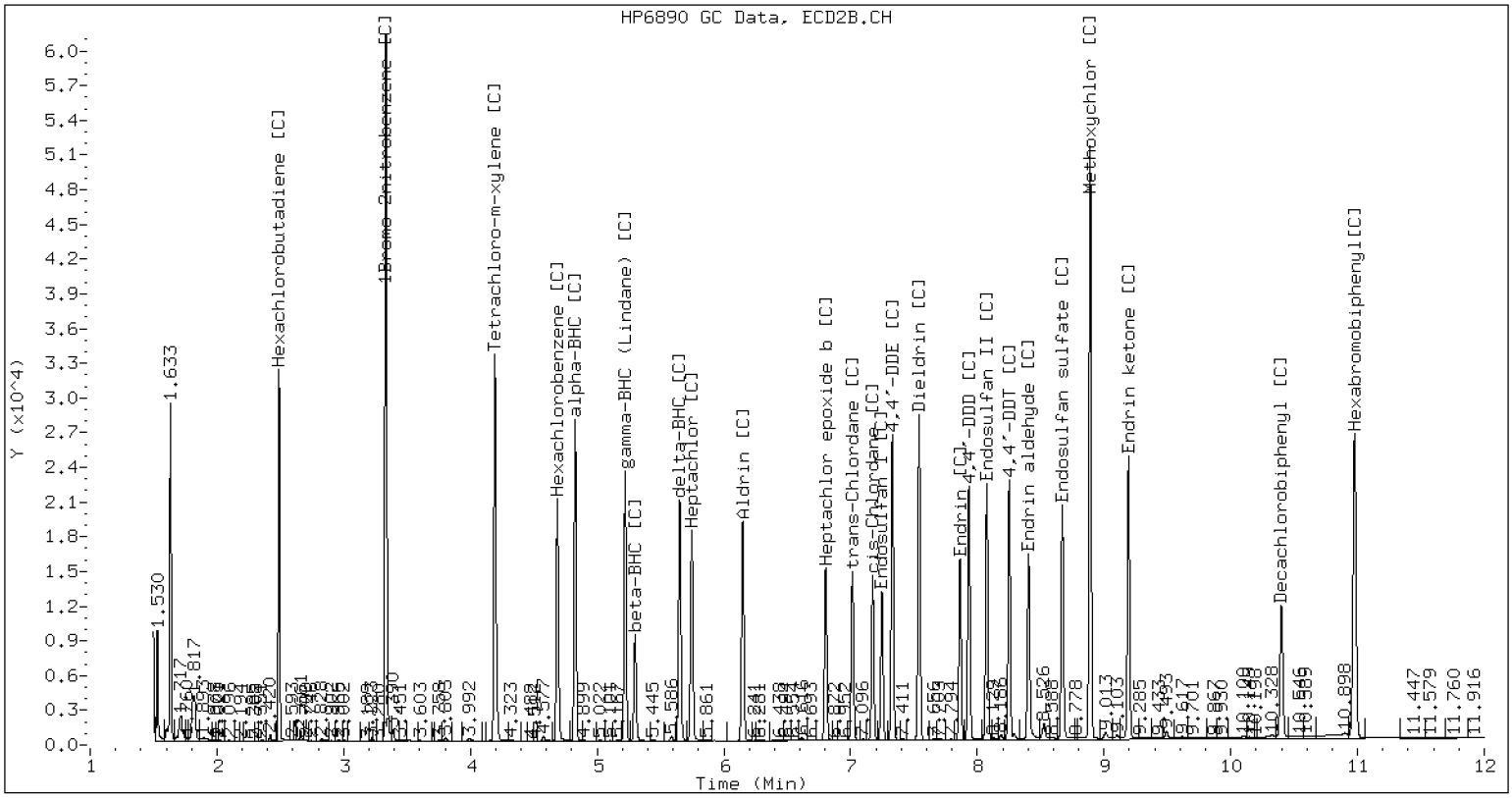


CLP-2 Manual Integration: NO

CONTINUING CALIBRATION CHECK

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	002F8601.D	Calibration Date:	12/14/2022
Sequence:	SLC0093	Injection Date:	03/04/23
Lab Sample ID:	SLC0093-CCV6	Injection Time:	01:24
Sequence Name:	INDAE7		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.6	1.4298940	1.4046940		-2.0	+/-20
Hexachlorobenzene [2C]	A	20.000	18.4	1.4591090	1.3433990		-8.0	+/-20
Decachlorobiphenyl	A	40.000	36.8	0.8105886	0.7463003		-8.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.3	0.8841805	0.8471666		-4.3	+/-20
Tetrachlorometaxylene	A	40.000	37.4	1.0879510	1.0181890		-6.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.9	1.1261070	1.0399830		-7.8	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230302.b/002F8601.D
Data file 2: /20230302.b/B20230302.b/002F8601.D
Method: \20230302.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA7
Client ID:
Injection Date: 04-MAR-2023 01:24
Report Date: 03/09/2023 11:17
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.390	-0.002	232463	4.827	-0.003	348200	20.93	19.69	6.1	alpha-BHC
4.778	-0.001	88525	5.300	-0.002	130148	20.70	19.36	6.7	beta-BHC
4.965	-0.001	203026	5.652	-0.002	293836	22.37	20.17	10.3	delta-BHC
4.697	-0.002	201127	5.221	-0.002	300315	20.89	20.01	4.3	gamma-BHC (Lindane)
5.189	-0.002	183971	5.747	-0.003	263668	21.47	19.40	10.2	Heptachlor
5.517	-0.002	195945	6.149	-0.003	278631	20.41	17.95	12.8	Aldrin
6.196	-0.003	166908	6.803	-0.003	220132	20.05	17.15	15.6	Heptachlor epoxide b
6.638	-0.002	153603	7.247	-0.003	184462	20.10	16.31	20.9	Endosulfan I
6.898	-0.003	319494	7.540	-0.003	395976	38.92	31.68	20.5	Dieldrin
6.558	-0.002	308565	7.329	-0.003	375932	40.49	32.80	21.0	4,4'-DDE
7.148	-0.003	163573	7.863	-0.003	180559	27.02	25.12	7.3	Endrin
7.386	-0.002	264500	8.075	-0.003	318841	48.53	43.27	11.5	Endosulfan II
7.205	-0.002	250266	7.933	-0.003	301992	45.88	43.19	6.0	4,4'-DDD
8.246	-0.003	229289	8.671	-0.003	305427	44.31	47.21	6.3	Endosulfan sulfate
7.498	-0.003	251470	8.251	-0.002	311428	45.63	46.15	1.1	4,4'-DDT
7.984	-0.002	527622	8.890	-0.002	661873	216.03	221.63	2.6	Methoxychlor
8.522	-0.002	288922	9.193	-0.003	351587	48.74	50.31	3.2	Endrin ketone
7.813	-0.003	214471	8.405	-0.002	248838	49.34	47.88	3.0	Endrin aldehyde
6.337	-0.002	168370	7.014	-0.003	211553	19.91	16.53	18.6	trans-Chlordane
6.484	-0.003	166433	7.174	-0.003	203902	19.63	16.29	18.6	cis-Chlordane
2.345	-0.000	216480	2.491	-0.000	290101	18.61	17.28	7.4	Hexachlorobutadiene
4.230	-0.001	202586	4.687	-0.001	296322	19.65	18.41	6.5	Hexachlorobenzene
3.870	-0.001	293688	4.194	-0.001	458791	37.44	36.94	1.3	Tetrachloro-m-xylene
9.435	-0.002	172317	10.399	-0.003	214140	36.83	38.33	4.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

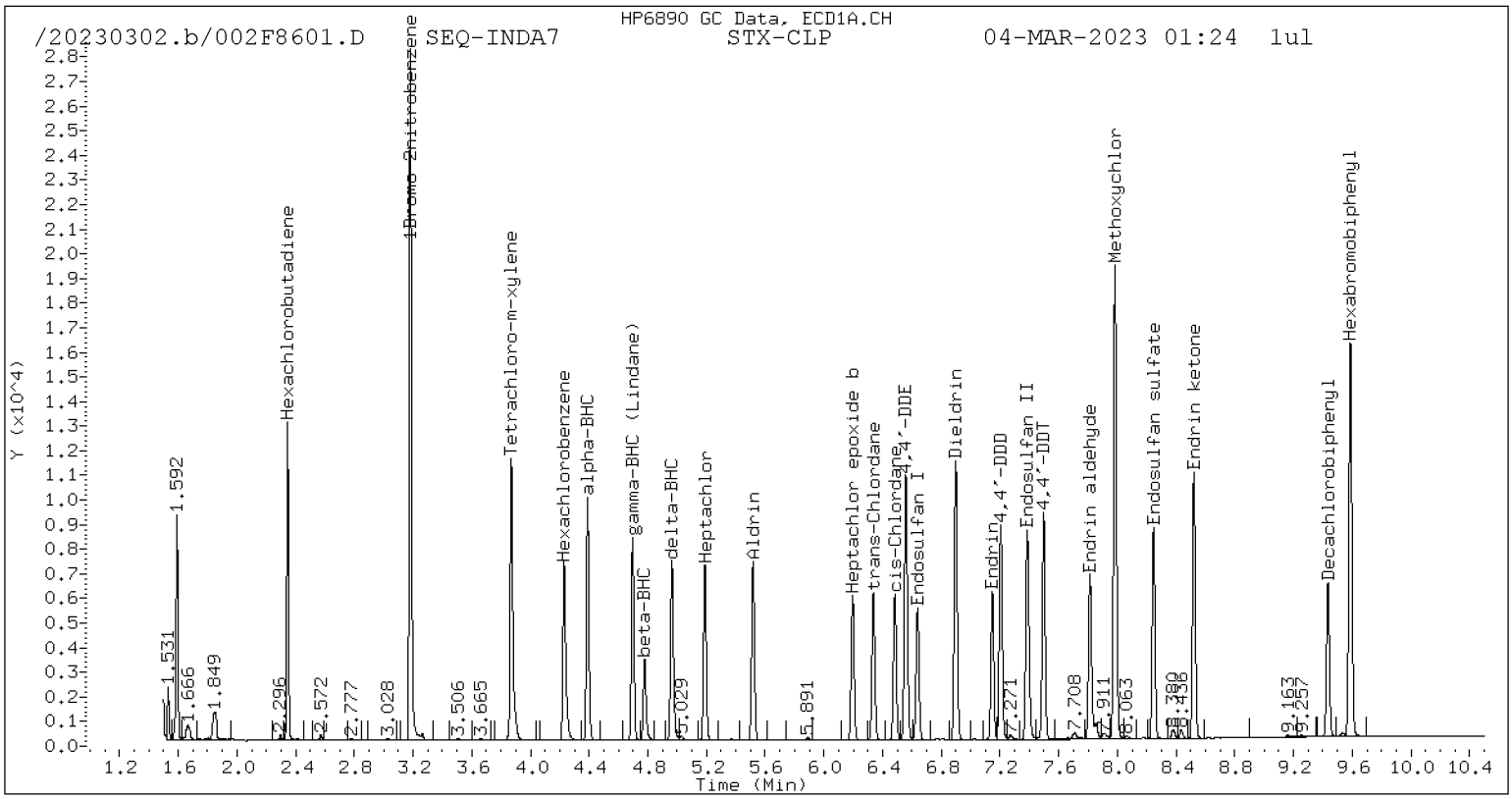
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	576883	-14.2
Hexabromobiphenyl	609723	461790	-24.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	882305	-12.3
Hexabromobiphenyl	769764	505544	-34.3

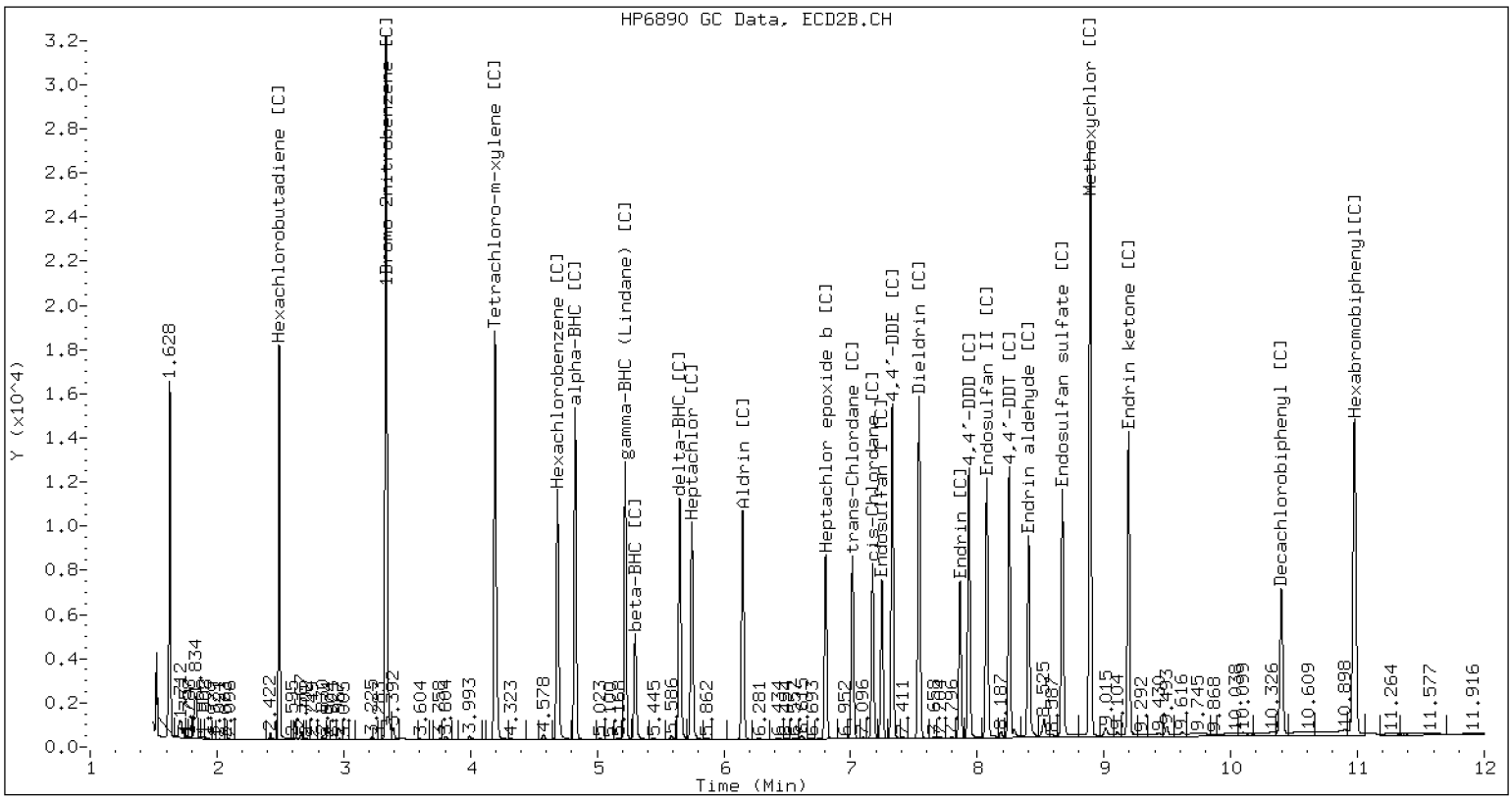
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230302.b/B20230302.b/002F8601.D SEQ-INDA7 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS1

EPA 8081B

Laboratory:	Analytical Resources, LLC	Laboratory ID:	SKL0233-PEM1	File ID:	22121404.D
Client:	Anchor QEA, LLC	Matrix:	Water	Instrument:	ECD6
Project:	AOC5 MR Phase 1	Analyzed:	12/14/2022	Sequence:	SKL0233
SDG:	23A0420	Calibration:	FL00041	Column:	1

PEM COMPOUND	RT	Response
4,4'-DDE	6.49	6258
Endrin	7.08	745471
4,4'-DDD	7.14	15566
Endrin Aldehyde	7.75	21328
4,4'-DDT	7.43	629664
Endrin Ketone	8.45	19276

4,4'-DDT %Breakdown (1): 3.3

Endrin %Breakdown (1): 5.2

Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS1

EPA 8081B

Laboratory:	Analytical Resources, LLC	Laboratory ID:	SKL0233-PEM1	File ID:	22121404.D
Client:	Anchor QEA, LLC	Matrix:	Water	Instrument:	ECD6
Project:	AOC5 MR Phase 1	Analyzed:	12/14/2022	Sequence:	SKL0233
SDG:	23A0420	Calibration:	FL00041	Column:	2

PEM COMPOUND	RT	Response
4,4'-DDE	7.37	11906
Endrin	7.91	1029194
4,4'-DDD	7.98	32697
Endrin Aldehyde	8.45	31426
4,4'-DDT	8.30	890195
Endrin Ketone	9.24	28268

4,4'-DDT %Breakdown (1): 4.8

Endrin %Breakdown (1): 5.5

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

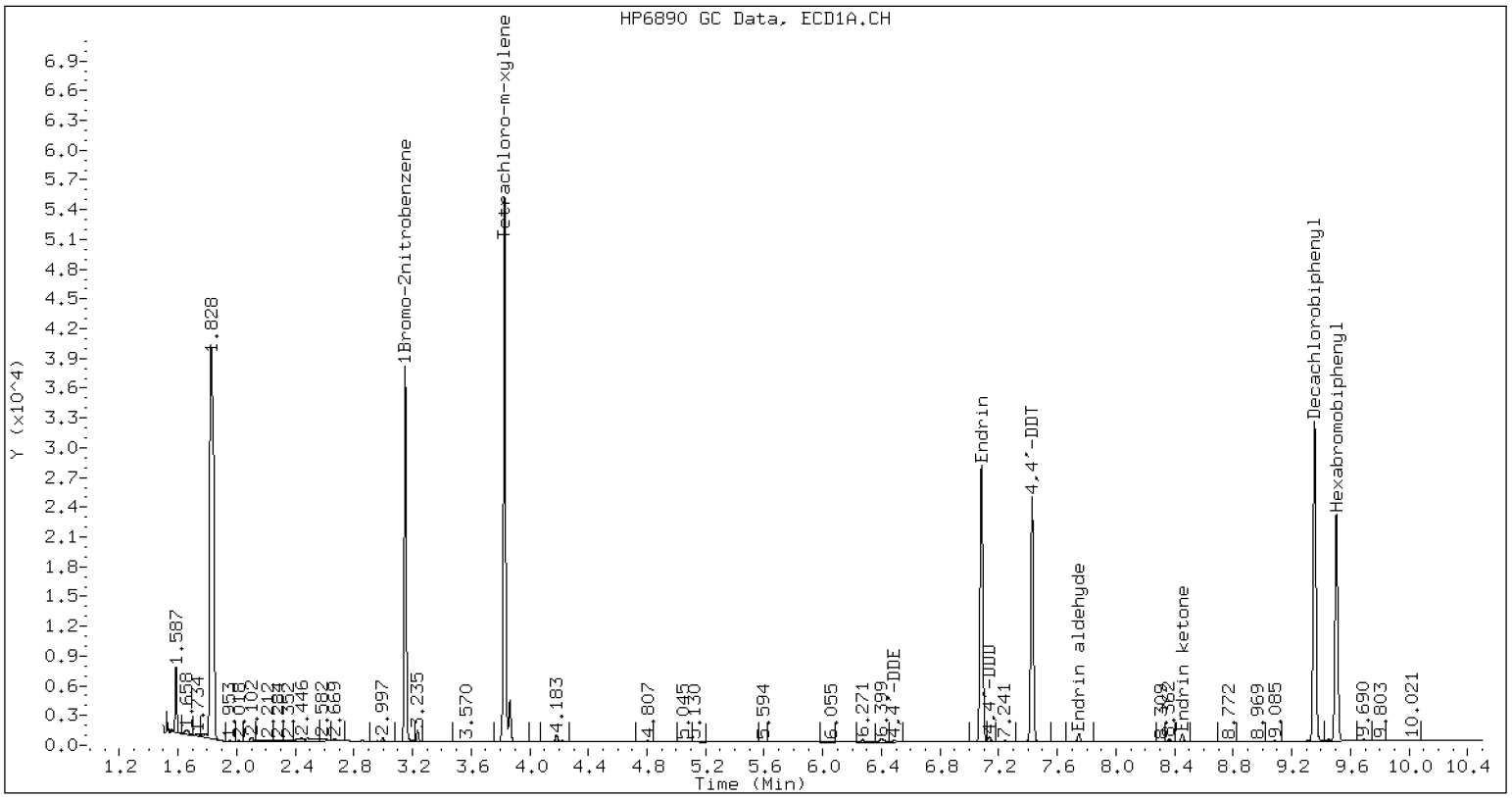
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene [C]	3.350	1005375
4,4'-DDE [C]	7.370	11906
Endrin [C]	7.907	1029194
4,4'-DDD [C]	7.977	32697
4,4'-DDT [C]	8.295	890195
Endrin ketone [C]	9.239	28268
Endrin aldehyde [C]	8.448	31426
Hexabromobiphenyl[C]	11.054	772586
Tetrachloro-m-xylene [C]	4.220	1890294
Decachlorobiphenyl [C]	10.467	1140978

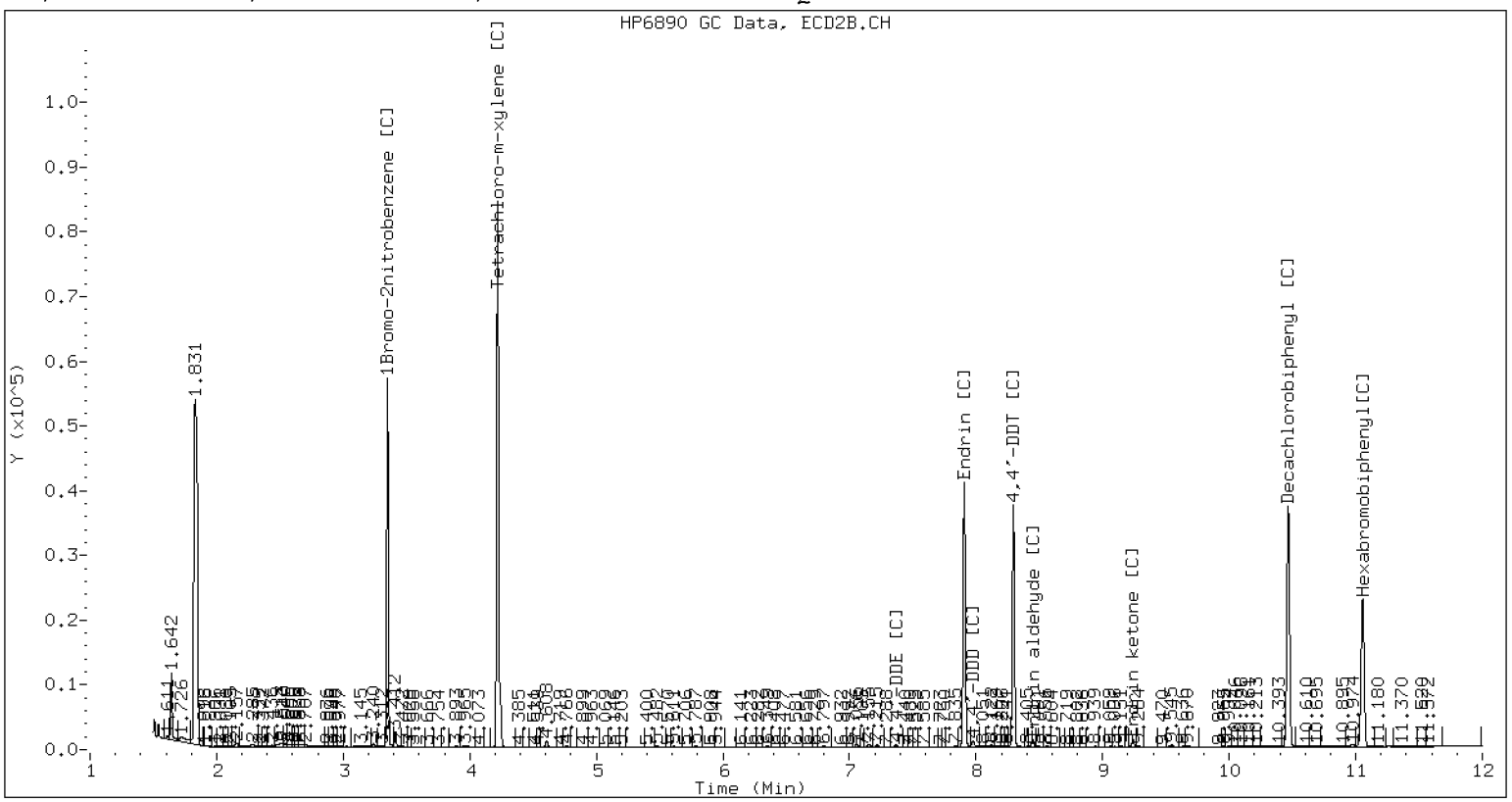
DDT Percent Breakdown = 4.8 %
((11906+32697) * 100)/(11906+32697+890195)

Endrin Percent Breakdown = 5.5 %
((31426+28268) * 100)/(31426+28268+1029194)

/20221214.b/22121404.D SEQ-PEM1 STX-CLP 14-DEC-2022 20:20 1ul



/20221214.b/B20221214.b/22121404.D SEQ-PEM1 CLP2 14-DEC-2022



7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SKL0233
Instrument: ECD6
Calibration: FL00041

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Performance Mix	SKL0233-PEM1	22121404.D	22121404.D	NA	12/14/22 20:20
Cal Standard	SKL0233-CAL1	22121405.D	22121405.D	NA	12/14/22 20:38
Cal Standard	SKL0233-CAL2	22121406.D	22121406.D	NA	12/14/22 20:56
Cal Standard	SKL0233-CAL3	22121407.D	22121407.D	NA	12/14/22 21:14
Cal Standard	SKL0233-CAL4	22121408.D	22121408.D	NA	12/14/22 21:31
Cal Standard	SKL0233-CAL5	22121409.D	22121409.D	NA	12/14/22 21:49
Cal Standard	SKL0233-CAL6	22121410.D	22121410.D	NA	12/14/22 22:07
Cal Standard	SKL0233-CAL7	22121411.D	22121411.D	NA	12/14/22 22:25
Cal Standard	SKL0233-CAL8	22121412.D	22121412.D	NA	12/14/22 22:43
Cal Standard	SKL0233-CAL9	22121413.D	22121413.D	NA	12/14/22 23:01
Cal Standard	SKL0233-CALA	22121414.D	22121414.D	NA	12/14/22 23:19
Cal Standard	SKL0233-CALB	22121415.D	22121415.D	NA	12/14/22 23:36
Cal Standard	SKL0233-CALC	22121416.D	22121416.D	NA	12/14/22 23:54
Cal Standard	SKL0233-CALD	22121417.D	22121417.D	NA	12/15/22 00:12
Cal Standard	SKL0233-CALE	22121418.D	22121418.D	NA	12/15/22 00:30

Printed: 12/17/2022 10:57:45AM

ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-PEM1	DS1	QC		1	K007286	K006953		
SKL0233-CAL1	INDAA	QC		2	K011594	K006953		
SKL0233-CAL2	INDAB	QC		3	K011593	K006953		
SKL0233-CAL3	INDAC	QC		4	K011592	K006953		
SKL0233-CAL4	INDAD	QC		5	K011591	K006953		
SKL0233-CAL5	INDAE	QC		6	K011590	K006953		
SKL0233-CAL6	INDAF	QC		7	K011589	K006953		
SKL0233-CAL7	INDAG	QC		8	K011463	K006953		
SKL0233-CAL8	WNDA	QC		9	K011595	K006953		
SKL0233-CAL9	WNDB	QC		10	K007148	K006953		
SKL0233-CALA	WNDC	QC		11	K007147	K006953		
SKL0233-CALB	WNDD	QC		12	K007146	K006953		
SKL0233-CALC	WNDE	QC		13	K007145	K006953		
SKL0233-CALD	WNDF	QC		14	K007144	K006953		
SKL0233-CALE	WNDG	QC		15	K007093	K006953		
SKL0233-CALM	NOS1	QC		16	K007375	K006953		
SKL0233-CALN	NOS2	QC		17	K007374	K006953		
SKL0233-CALO	NOS3	QC		18	K007373	K006953		
SKL0233-CALP	NOS4	QC		19	K007372	K006953		
SKL0233-CALQ	NOS5	QC		20	K007371	K006953		
SKL0233-CALR	NOS6	QC		21	K007370	K006953		
SKL0233-CALS	NOS7	QC		22	K007287	K006953		

Printed: 12/17/2022 10:57:45AM

ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-CALF	TOXAPH1	QC		23	K011601	K006953		
SKL0233-CALG	TOXAPH2	QC		24	K011600	K006953		
SKL0233-CALH	TOXAPH3	QC		25	K011599	K006953		
SKL0233-CALI	TOXAPH4	QC		26	K011598	K006953		
SKL0233-CALJ	TOXAPH5	QC		27	K011597	K006953		
SKL0233-CALK	TOXAPH6	QC		28	K011596	K006953		
SKL0233-CALL	TOXAPH7	QC		29	K008546	K006953		

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	14-DEC-2022 19:27	22121401.D	1	RINSE	
2	14-DEC-2022 19:44	22121402.D	1	RINSE	
3	14-DEC-2022 20:02	22121403.D	1	SEQ-IBL1	
4	14-DEC-2022 20:20	22121404.D	1	SEQ-PEM1	
5	14-DEC-2022 20:38	22121405.D	1	SEQ-CAL1	
6	14-DEC-2022 20:56	22121406.D	1	SEQ-CAL2	
7	14-DEC-2022 21:14	22121407.D	1	SEQ-CAL3	
8	14-DEC-2022 21:31	22121408.D	1	SEQ-CAL4	
9	14-DEC-2022 21:49	22121409.D	1	SEQ-CAL5	
10	14-DEC-2022 22:07	22121410.D	1	SEQ-CAL6	
11	14-DEC-2022 22:25	22121411.D	1	SEQ-CAL7	
12	14-DEC-2022 22:43	22121412.D	1	SEQ-CAL8	
13	14-DEC-2022 23:01	22121413.D	1	SEQ-CAL9	
14	14-DEC-2022 23:19	22121414.D	1	SEQ-CALA	
15	14-DEC-2022 23:36	22121415.D	1	SEQ-CALB	
16	14-DEC-2022 23:54	22121416.D	1	SEQ-CALC	
17	15-DEC-2022 00:12	22121417.D	1	SEQ-CALD	
18	15-DEC-2022 00:30	22121418.D	1	SEQ-CALE	
19	15-DEC-2022 00:48	22121419.D	1	SEQ-SCV1	
20	15-DEC-2022 01:06	22121420.D	1	SEQ-SCV2	
21	15-DEC-2022 01:24	22121421.D	1	SEQ-CAL1A	
22	15-DEC-2022 01:42	22121422.D	1	SEQ-CAL2A	
23	15-DEC-2022 01:59	22121423.D	1	SEQ-CAL3A	
24	15-DEC-2022 02:17	22121424.D	1	SEQ-CAL4A	
25	15-DEC-2022 02:35	22121425.D	1	SEQ-CAL5A	
26	15-DEC-2022 02:53	22121426.D	1	SEQ-CAL6A	
27	15-DEC-2022 03:11	22121427.D	1	SEQ-CAL7A	
28	15-DEC-2022 03:29	22121428.D	1	SEQ-CAL8A	
29	15-DEC-2022 03:46	22121429.D	1	SEQ-CAL9A	
30	15-DEC-2022 04:04	22121430.D	1	SEQ-CALAA	
31	15-DEC-2022 04:22	22121431.D	1	SEQ-CALAB	
32	15-DEC-2022 04:40	22121432.D	1	SEQ-CALAC	
33	15-DEC-2022 04:58	22121433.D	1	SEQ-CALAD	
34	15-DEC-2022 05:16	22121434.D	1	SEQ-CALAE	
35	15-DEC-2022 05:33	22121435.D	1	SEQ-PEM2	
36	15-DEC-2022 05:51	22121436.D	1	SEQ-ICV1	
37	15-DEC-2022 06:09	22121437.D	1	SEQ-ICV2	
38	15-DEC-2022 06:27	22121438.D	1	SEQ-ICV3	
39	15-DEC-2022 06:45	22121439.D	1	SEQ-ICV4	
40	15-DEC-2022 07:03	22121440.D	1	BKK0688-BLK1	
41	15-DEC-2022 07:21	22121441.D	1	BKK0688-BS1	
42	15-DEC-2022 07:39	22121442.D	1	BKK0688-BS2	
43	15-DEC-2022 07:57	22121443.D	1	BKK0688-BS3	
44	15-DEC-2022 08:15	22121444.D	1	BKK0688-BSD1	
45	15-DEC-2022 08:32	22121445.D	1	BKK0142-BLK1	
46	15-DEC-2022 08:50	22121446.D	1	BKK0142-BS1	
47	15-DEC-2022 09:08	22121447.D	1	BKK0142-BS2	
48	15-DEC-2022 09:26	22121448.D	1	BKK0142-BSD1	
49	15-DEC-2022 09:44	22121449.D	1	BKK0142-MS1	
50	15-DEC-2022 10:02	22121450.D	1	BKK0142-MSD1	

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b p

	Inject Date/Time	Filename	DF	LabID	ClientID
51	15-DEC-2022 10:20	22121451.D	1	22J0513-01	
52	15-DEC-2022 10:38	22121452.D	1	22J0513-04	
53	15-DEC-2022 10:55	22121453.D	1	22J0535-01	
54	15-DEC-2022 11:13	22121454.D	1	22K0429-01	
55	15-DEC-2022 11:31	22121455.D	1	22K0429-02	
56	15-DEC-2022 11:49	22121456.D	1	22K0429-03	
57	15-DEC-2022 12:07	22121457.D	1	SEQ-PEM3	
58	15-DEC-2022 12:25	22121458.D	1	SEQ-CCV1	
59	15-DEC-2022 12:43	22121459.D	1	SEQ-CCV2	
60	15-DEC-2022 13:01	22121460.D	1	SEQ-CCV3	
61	15-DEC-2022 13:19	22121461.D	1	SEQ-CCV4	
62	15-DEC-2022 13:36	22121462.D	1	BKK0380-BLK1	
63	15-DEC-2022 13:54	22121463.D	1	BKK0380-BS1	
64	15-DEC-2022 14:12	22121464.D	1	BKK0380-BSD1	
65	15-DEC-2022 14:30	22121465.D	1	22K0157-01	
66	15-DEC-2022 14:48	22121466.D	1	22K0230-01	
67	15-DEC-2022 15:06	22121467.D	1	22K0231-01	
68	15-DEC-2022 15:24	22121468.D	1	BKK0382-BLK1	
69	15-DEC-2022 15:42	22121469.D	1	BKK0382-BS1	
70	15-DEC-2022 16:00	22121470.D	1	BKK0382-BS2	
71	15-DEC-2022 16:18	22121471.D	1	BKK0382-BSD1	
72	15-DEC-2022 16:35	22121472.D	1	22K0075-01	
73	15-DEC-2022 16:53	22121473.D	1	SEQ-PEM4	
74	15-DEC-2022 17:11	22121474.D	1	SEQ-CCV5	
75	15-DEC-2022 17:29	22121475.D	1	SEQ-CCV6	
76	15-DEC-2022 17:47	22121476.D	1	SEQ-CCV7	
77	15-DEC-2022 18:05	22121477.D	1	SEQ-CCV8	
78	15-DEC-2022 18:23	22121478.D	1	BKK0537-BLK1	
79	15-DEC-2022 18:40	22121479.D	1	BKK0537-BS1	
80	15-DEC-2022 18:58	22121480.D	1	BKK0537-BS2	
81	15-DEC-2022 19:16	22121481.D	1	22K0194-01	
82	15-DEC-2022 19:34	22121482.D	1	22K0194-01RE1	10
83	15-DEC-2022 19:52	22121483.D	1	SEQ-PEM5	
84	15-DEC-2022 20:09	22121484.D	1	SEQ-CCV9	
85	15-DEC-2022 20:27	22121485.D	1	SEQ-CCVA	
86	15-DEC-2022 20:45	22121486.D	1	SEQ-CCVB	
87	15-DEC-2022 21:03	22121487.D	1	SEQ-CCVC	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 14-DEC-2022

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1113	22121454.D	22K0429-01		1	Heptachlor epoxide b,
1131	22121455.D	22K0429-02		1	Heptachlor epoxide b,
1149	22121456.D	22K0429-03		1	Hexachlorobenzene,
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2009	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane [C],
1113	22121454.D	22K0429-01		1	NO MANUAL INTEGRATION
1131	22121455.D	22K0429-02		1	Aldrin [C], Heptachlor epoxide b [C], trans-Chlordane [C],
1149	22121456.D	22K0429-03		1	Aldrin [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2010	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION

Security Status Report

Date: 17-Dec-2022 10:57

22121401.D	Data Locked	jrains, 17-Dec-2022 10:57
22121402.D	Data Locked	jrains, 17-Dec-2022 10:57
22121403.D	Data Locked	jrains, 17-Dec-2022 10:57
22121404.D	Data Locked	jrains, 17-Dec-2022 10:57
22121405.D	Data Locked	jrains, 17-Dec-2022 10:57
22121406.D	Data Locked	jrains, 17-Dec-2022 10:57
22121407.D	Data Locked	jrains, 17-Dec-2022 10:57
22121408.D	Data Locked	jrains, 17-Dec-2022 10:57
22121409.D	Data Locked	jrains, 17-Dec-2022 10:57
22121410.D	Data Locked	jrains, 17-Dec-2022 10:57
22121411.D	Data Locked	jrains, 17-Dec-2022 10:57
22121412.D	Data Locked	jrains, 17-Dec-2022 10:57
22121413.D	Data Locked	jrains, 17-Dec-2022 10:57
22121414.D	Data Locked	jrains, 17-Dec-2022 10:57
22121415.D	Data Locked	jrains, 17-Dec-2022 10:57
22121416.D	Data Locked	jrains, 17-Dec-2022 10:57
22121417.D	Data Locked	jrains, 17-Dec-2022 10:57
22121418.D	Data Locked	jrains, 17-Dec-2022 10:57
22121419.D	Data Locked	jrains, 17-Dec-2022 10:57
22121420.D	Data Locked	jrains, 17-Dec-2022 10:57
22121421.D	Data Locked	jrains, 17-Dec-2022 10:57
22121422.D	Data Locked	jrains, 17-Dec-2022 10:57
22121423.D	Data Locked	jrains, 17-Dec-2022 10:57
22121424.D	Data Locked	jrains, 17-Dec-2022 10:57
22121425.D	Data Locked	jrains, 17-Dec-2022 10:57
22121426.D	Data Locked	jrains, 17-Dec-2022 10:57
22121427.D	Data Locked	jrains, 17-Dec-2022 10:57
22121428.D	Data Locked	jrains, 17-Dec-2022 10:57
22121429.D	Data Locked	jrains, 17-Dec-2022 10:57
22121430.D	Data Locked	jrains, 17-Dec-2022 10:57
22121431.D	Data Locked	jrains, 17-Dec-2022 10:57
22121432.D	Data Locked	jrains, 17-Dec-2022 10:57
22121433.D	Data Locked	jrains, 17-Dec-2022 10:57
22121434.D	Data Locked	jrains, 17-Dec-2022 10:57

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0093
Instrument: ECD6
Calibration: FL00041

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLC0093-ICV1	23C03023.D	23C03023.D	NA	03/03/23 00:34
Calibration Check	SLC0093-CCV1	002F1801.D	002F1801.D	NA	03/03/23 05:03
Calibration Check	SLC0093-CCV2	002F3501.D	002F3501.D	NA	03/03/23 10:08
Calibration Check	SLC0093-CCV3	002F4701.D	002F4701.D	NA	03/03/23 13:44
Blank	BLB0382-BLK1	041F4801.D	041F4801.D	Solid	03/03/23 14:02
LCS	BLB0382-BS1	042F4901.D	042F4901.D	Solid	03/03/23 14:20
LCS Dup	BLB0382-BSD1	043F5001.D	043F5001.D	Solid	03/03/23 14:38
Calibration Check	SLC0093-CCV4	002F6401.D	002F6401.D	NA	03/03/23 18:49
LDW23-SC1045	23A0420-01	058F6701.D	058F6701.D	Solid	03/03/23 19:43
LDW23-SC1003	23A0420-07	059F6801.D	059F6801.D	Solid	03/03/23 20:01
LDW23-SC1004	23A0420-08	060F6901.D	060F6901.D	Solid	03/03/23 20:19
LDW23-SC1082	23A0420-09	061F7001.D	061F7001.D	Solid	03/03/23 20:37
Calibration Check	SLC0093-CCV5	002F8101.D	002F8101.D	NA	03/03/23 23:55
Calibration Check	SLC0093-CCV6	002F8601.D	002F8601.D	NA	03/04/23 01:24

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLC0093

Instrument: ECD6
Calibration ID: FL00041

Printed: 3/9/2023 11:10:02AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0093-PEM2	QC		1		L002116	L000844		
SLC0093-PEM3	QC		2		L002116	L000844		
SLC0093-PEM4	QC		3		L002116	L000844		
SLC0093-PEM5	QC		4		L002116	L000844		
SLC0093-PEM6	QC		5		L002116	L000844		
SLC0093-PEM7	QC		6		L002116	L000844		
SLC0093-CCV1	QC		7		L000845	L000844		
SLC0093-CCV2	QC		8		L000845	L000844		
SLC0093-CCV3	QC		9		L000845	L000844		
SLC0093-CCV4	QC		10		L000845	L000844		
SLC0093-CCV5	QC		11		L000845	L000844		
SLC0093-CCV6	QC		12		L000845	L000844		
23A0328-03	8081B Pest (PSDDA)	A 04	13			L000844	Anchor QEA, LLC	
23A0328-04	8081B Pest (PSDDA)	A 04	14			L000844	Anchor QEA, LLC	
23A0328-05	8081B Pest (PSDDA)	A 04	15			L000844	Anchor QEA, LLC	
23A0328-06	8081B Pest (PSDDA)	A 04	16			L000844	Anchor QEA, LLC	
23A0328-07	8081B Pest (PSDDA)	A 04	17			L000844	Anchor QEA, LLC	
BLB0018-MS1	QC		18			L000844		
BLB0018-MSD1	QC		19			L000844		
23A0328-08	8081B Pest (PSDDA)	A 04	20			L000844	Anchor QEA, LLC	
23A0328-09	8081B Pest (PSDDA)	A 04	21			L000844	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SLC0093

Instrument: ECD6
Calibration ID: FL00041

Printed: 3/9/2023 11:10:02AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
23A0328-10	8081B Pest (PSDDA)	A 04	22			L000844	Anchor QEA, LLC	
23A0328-11	8081B Pest (PSDDA)	A 04	23			L000844	Anchor QEA, LLC	
23A0328-12	8081B Pest (PSDDA)	A 04	24			L000844	Anchor QEA, LLC	
BLB0023-BLK1	QC		25			L000844		
BLB0023-BS1	QC		26			L000844		
BLB0023-BSD1	QC		27			L000844		
BLB0023-MSD1	QC		28			L000844		
23A0417-12	8081B Pest (PSDDA)	A 02	29			L000844	Anchor QEA, LLC	
23A0417-14	8081B Pest (PSDDA)	A 02	30			L000844	Anchor QEA, LLC	
BLB0382-BLK1	QC		31			L000844		
BLB0382-BS1	QC		32			L000844		
BLB0382-BSD1	QC		33			L000844		
23A0419-01	8081B Pest (PSDDA)	A 03	34			L000844	Anchor QEA, LLC	
23A0419-03	8081B Pest (PSDDA)	A 03	35			L000844	Anchor QEA, LLC	
23A0419-04	8081B Pest (PSDDA)	A 03	36			L000844	Anchor QEA, LLC	
23A0419-05	8081B Pest (PSDDA)	A 03	37			L000844	Anchor QEA, LLC	
23A0419-06	8081B Pest (PSDDA)	A 03	38			L000844	Anchor QEA, LLC	
23A0419-07	8081B Pest (PSDDA)	A 03	39			L000844	Anchor QEA, LLC	
BLB0382-MS1	QC		40			L000844		
BLB0382-MSD1	QC		41			L000844		
23A0419-10	8081B Pest (PSDDA)	A 03	42			L000844	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SLC0093

Instrument: ECD6
Calibration ID: FL00041

Printed: 3/9/2023 11:10:02AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
23A0419-11	8081B Pest (PSDDA)	A 03	43			L000844	Anchor QEA, LLC	
23A0420-01	8081B Pest (PSDDA)	A 01	44			L000844	Anchor QEA, LLC	
23A0420-07	8081B Pest (PSDDA)	A 01	45			L000844	Anchor QEA, LLC	
23A0420-08	8081B Pest (PSDDA)	A 01	46			L000844	Anchor QEA, LLC	
23A0420-09	8081B Pest (PSDDA)	A 01	47			L000844	Anchor QEA, LLC	
BLB0422-BLK1	QC		48			L000844		
BLB0422-BS1	QC		49			L000844		
BLB0422-BSD1	QC		50			L000844		
23B0229-02	8081B Pest (PSDDA)	A 02	51			L000844	Anchor QEA, LLC	
23B0229-04	8081B Pest (PSDDA)	A 02	52			L000844	Anchor QEA, LLC	
23B0229-06	8081B Pest (PSDDA)	A 02	53			L000844	Anchor QEA, LLC	
SLC0093-PEM1	QC		54		L002116	L000844		
SLC0093-ICV1	QC		55		L000845	L000844		
BLB0018-BLK1	QC		56			L000844		
BLB0018-BS1	QC		57			L000844		
BLB0018-BSD1	QC		58			L000844		
23A0328-02	8081B Pest (PSDDA)	A 04	59			L000844	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \ecd6.i\20230302.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	03-MAR-2023 04:45	001F1701.D	1	SEQ-PEM2	
2	03-MAR-2023 09:50	001F3401.D	1	SEQ-PEM3	
3	03-MAR-2023 13:26	001F4601.D	1	SEQ-PEM4	
4	03-MAR-2023 18:31	001F6301.D	1	SEQ-PEM5	
5	03-MAR-2023 23:37	001F8001.D	1	SEQ-PEM6	
6	04-MAR-2023 01:06	001F8501.D	1	SEQ-PEM7	
7	03-MAR-2023 05:03	002F1801.D	1	SEQ-INDA2	
8	03-MAR-2023 10:08	002F3501.D	1	SEQ-INDA3	
9	03-MAR-2023 13:44	002F4701.D	1	SEQ-INDA4	
10	03-MAR-2023 18:49	002F6401.D	1	SEQ-INDA5	
11	03-MAR-2023 23:55	002F8101.D	1	SEQ-INDA6	
12	04-MAR-2023 01:24	002F8601.D	1	SEQ-INDA7	
13	03-MAR-2023 02:40	009F1001.D	1	23A0328-03	
14	03-MAR-2023 02:58	010F1101.D	1	23A0328-04	
15	03-MAR-2023 03:15	011F1201.D	1	23A0328-05	
16	03-MAR-2023 03:33	012F1301.D	1	23A0328-06	
17	03-MAR-2023 03:51	013F1401.D	1	23A0328-07	
18	03-MAR-2023 04:09	014F1501.D	1	BLB0018-MS1	
19	03-MAR-2023 04:27	015F1601.D	1	BLB0018-MSD1	
20	03-MAR-2023 05:21	016F1901.D	1	23A0328-08	
21	03-MAR-2023 05:39	017F2001.D	1	23A0328-09	
22	03-MAR-2023 05:57	018F2101.D	1	23A0328-10	
23	03-MAR-2023 06:15	019F2201.D	1	23A0328-11	
24	03-MAR-2023 06:33	020F2301.D	1	23A0328-12	
25	03-MAR-2023 06:51	021F2401.D	1	BLB0023-BLK1	
26	03-MAR-2023 07:09	022F2501.D	1	BLB0023-BS1	
27	03-MAR-2023 07:27	023F2601.D	1	BLB0023-BSD1	
28	03-MAR-2023 07:45	024F2701.D	1	BLB0023-MS1	
29	03-MAR-2023 08:03	025F2801.D	1	BLB0023-MSD1	
30	03-MAR-2023 08:21	026F2901.D	1	23A0417-01	
31	03-MAR-2023 08:39	027F3001.D	1	23A0417-02	
32	03-MAR-2023 08:57	028F3101.D	1	23A0417-03	
33	03-MAR-2023 09:15	029F3201.D	1	23A0417-04	
34	03-MAR-2023 09:32	030F3301.D	1	23A0417-05	
35	03-MAR-2023 10:26	031F3601.D	1	23A0417-06	
36	03-MAR-2023 10:44	032F3701.D	1	23A0417-07	
37	03-MAR-2023 11:02	033F3801.D	1	23A0417-08	
38	03-MAR-2023 11:20	034F3901.D	1	23A0417-09	
39	03-MAR-2023 11:38	035F4001.D	1	23A0417-10	
40	03-MAR-2023 11:56	036F4101.D	1	23A0417-11	
41	03-MAR-2023 12:14	037F4201.D	1	23A0417-12	
42	03-MAR-2023 12:32	038F4301.D	1	23A0417-13	
43	03-MAR-2023 12:50	039F4401.D	1	23A0417-14	
44	03-MAR-2023 13:08	040F4501.D	1	23A0417-15	
45	03-MAR-2023 14:02	041F4801.D	1	BLB0382-BLK1	
46	03-MAR-2023 14:20	042F4901.D	1	BLB0382-BS1	
47	03-MAR-2023 14:38	043F5001.D	1	BLB0382-BSD1	
48	03-MAR-2023 14:56	044F5101.D	1	23A0419-01	
49	03-MAR-2023 15:14	045F5201.D	1	23A0419-02	
50	03-MAR-2023 15:32	046F5301.D	1	23A0419-03	

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b p

	Inject Date/Time	Filename	DF	LabID	ClientID
51	03-MAR-2023 15:50	047F5401.D	1	23A0419-04	
52	03-MAR-2023 16:08	048F5501.D	1	23A0419-05	
53	03-MAR-2023 16:25	049F5601.D	1	23A0419-06	
54	03-MAR-2023 16:43	050F5701.D	1	23A0419-07	
55	03-MAR-2023 17:01	051F5801.D	1	BLB0382-MS1	
56	03-MAR-2023 17:19	052F5901.D	1	BLB0382-MSD1	
57	03-MAR-2023 17:37	053F6001.D	1	23A0419-08	
58	03-MAR-2023 17:55	054F6101.D	1	23A0419-09	
59	03-MAR-2023 18:13	055F6201.D	1	23A0419-10	
60	03-MAR-2023 19:07	056F6501.D	1	23A0419-11	
61	03-MAR-2023 19:25	057F6601.D	1	23A0419-12	
62	03-MAR-2023 19:43	058F6701.D	1	23A0420-01	
63	03-MAR-2023 20:01	059F6801.D	1	23A0420-07	
64	03-MAR-2023 20:19	060F6901.D	1	23A0420-08	
65	03-MAR-2023 20:37	061F7001.D	1	23A0420-09	
66	03-MAR-2023 20:55	062F7101.D	1	BLB0422-BLK1	
67	03-MAR-2023 21:13	063F7201.D	1	BLB0422-BS1	
68	03-MAR-2023 21:31	064F7301.D	1	BLB0422-BSD1	
69	03-MAR-2023 21:49	065F7401.D	1	BLB0422-MS1	
70	03-MAR-2023 22:07	066F7501.D	1	BLB0422-MSD1	
71	03-MAR-2023 22:25	067F7601.D	1	23B0229-02	
72	03-MAR-2023 22:43	068F7701.D	1	23B0229-03	
73	03-MAR-2023 23:01	069F7801.D	1	23B0229-04	
74	03-MAR-2023 23:19	070F7901.D	1	23B0229-05	
75	04-MAR-2023 00:13	071F8201.D	1	23B0229-06	
76	04-MAR-2023 00:30	072F8301.D	1	23B0229-08	
77	04-MAR-2023 00:48	073F8401.D	1	23B0276-01	
78	02-MAR-2023 23:58	23C03021.D	1	RINSE	
79	03-MAR-2023 00:16	23C03022.D	1	SEQ-PEM1	
80	03-MAR-2023 00:34	23C03023.D	1	SEQ-INDA1	
81	03-MAR-2023 00:52	23C03024.D	1	23A0295-04	
82	03-MAR-2023 01:10	23C03025.D	1	23A0249-05	
83	03-MAR-2023 01:28	23C03026.D	1	BLB0018-BLK1	
84	03-MAR-2023 01:46	23C03027.D	1	BLB0018-BS1	
85	03-MAR-2023 02:04	23C03028.D	1	BLB0018-BSD1	
86	03-MAR-2023 02:22	23C03029.D	1	23A0328-02	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b

ARI Job No.: SEQ- Method: PEST.m Instrument: ecd6.i Date: 03-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0445	001F1701.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
0950	001F3401.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1326	001F4601.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1831	001F6301.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2337	001F8001.D	SEQ-PEM6		1	NO MANUAL INTEGRATION
0106	001F8501.D	SEQ-PEM7		1	NO MANUAL INTEGRATION
0503	002F1801.D	SEQ-INDA2		1	NO MANUAL INTEGRATION
1008	002F3501.D	SEQ-INDA3		1	NO MANUAL INTEGRATION
1344	002F4701.D	SEQ-INDA4		1	NO MANUAL INTEGRATION
1849	002F6401.D	SEQ-INDA5		1	NO MANUAL INTEGRATION
2355	002F8101.D	SEQ-INDA6		1	NO MANUAL INTEGRATION
0124	002F8601.D	SEQ-INDA7		1	NO MANUAL INTEGRATION
0240	009F1001.D	23A0328-03		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0258	010F1101.D	23A0328-04		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0315	011F1201.D	23A0328-05		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0333	012F1301.D	23A0328-06		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0351	013F1401.D	23A0328-07		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin,

Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde,
trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

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MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0409	014F1501.D	BLB0018-MS1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, H
0427	015F1601.D	BLB0018-MSD1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, H
0521	016F1901.D	23A0328-08		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0539	017F2001.D	23A0328-09		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0557	018F2101.D	23A0328-10		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0615	019F2201.D	23A0328-11		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0633	020F2301.D	23A0328-12		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0651	021F2401.D	BLB0023-BLK1		1	NO MANUAL INTEGRATION
0709	022F2501.D	BLB0023-BS1		1	NO MANUAL INTEGRATION
0727	023F2601.D	BLB0023-BSD1		1	NO MANUAL INTEGRATION
0745	024F2701.D	BLB0023-MS1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Hexachlorobenzene, Tetrachloro-m-xylene,
0803	025F2801.D	BLB0023-MSD1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, gamma-BHC (Lindane), Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-
0821	026F2901.D	23A0417-01		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Tetrachloro-m-xylene,

0839	027F3001.D 23A0417-02	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0857	028F3101.D 23A0417-03	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene,
0915	029F3201.D 23A0417-04	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene,
0932	030F3301.D 23A0417-05	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene,
1026	031F3601.D 23A0417-06	1	1Bromo-2nitrobenzene, alpha-BHC, gamma-BHC (Lindane), Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1044	032F3701.D	23A0417-07		1	alpha-BHC, gamma-BHC (Lindane), Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1102	033F3801.D	23A0417-08		1	alpha-BHC, beta-BHC, gamma-BHC (Lindane), Aldrin, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1120	034F3901.D	23A0417-09		1	alpha-BHC, beta-BHC, gamma-BHC (Lindane), Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1138	035F4001.D	23A0417-10		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1156	036F4101.D	23A0417-11		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene,
1214	037F4201.D	23A0417-12		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1232	038F4301.D	23A0417-13		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene, Decachlorobiphenyl,
1250	039F4401.D	23A0417-14		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1308	040F4501.D	23A0417-15		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Tetrachloro-m-xylene,
1402	041F4801.D	BLB0382-BLK1		1	NO MANUAL INTEGRATION
1420	042F4901.D	BLB0382-BS1		1	NO MANUAL INTEGRATION
1438	043F5001.D	BLB0382-BSD1		1	NO MANUAL INTEGRATION
1456	044F5101.D	23A0419-01		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

1514	045F5201.D 23A0419-02	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1532	046F5301.D 23A0419-03	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1550	047F5401.D 23A0419-04	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1608	048F5501.D 23A0419-05	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1625	049F5601.D 23A0419-06	1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1643	050F5701.D	23A0419-07		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Endosulfan sulfate, Methoxychlor, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1701	051F5801.D	BLB0382-MS1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobe
1719	052F5901.D	BLB0382-MSD1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobe
1737	053F6001.D	23A0419-08		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1755	054F6101.D	23A0419-09		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene,
1813	055F6201.D	23A0419-10		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, 4,4'-DDT, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1907	056F6501.D	23A0419-11		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, Tetrachloro-m-xylene,
1925	057F6601.D	23A0419-12		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1943	058F6701.D	23A0420-01		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobip
2001	059F6801.D	23A0420-07		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
2019	060F6901.D	23A0420-08		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

2037	061F7001.D 23A0420-09	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
2055	062F7101.D BLB0422-BLK1	1	NO MANUAL INTEGRATION
2113	063F7201.D BLB0422-BS1	1	NO MANUAL INTEGRATION
2131	064F7301.D BLB0422-BSD1	1	NO MANUAL INTEGRATION
2149	065F7401.D BLB0422-MS1	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Endosulfan I, Dieldrin, 4,4'-DDE, cis-Chlordane, Hexachlorobenzene, Tetrachloro-m-xylene,
2207	066F7501.D BLB0422-MSD1	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, 4,4'-DDT, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobenzene, Hexabromobiphenyl, Tetrachlo
2225	067F7601.D 23B0229-02	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, De

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Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2243	068F7701.D	23B0229-03		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Tetrachloro-m-xylene,
2301	069F7801.D	23B0229-04		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
2319	070F7901.D	23B0229-05		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0013	071F8201.D	23B0229-06		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0030	072F8301.D	23B0229-08		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Tetrachloro-m-xylene,
0048	073F8401.D	23B0276-01		1	Endosulfan I, Dieldrin, 4,4'-DDE, Endrin ketone, Hexabromobiphenyl,
2358	23C03021.D	RINSE		1	NO MANUAL INTEGRATION
0016	23C03022.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
0034	23C03023.D	SEQ-INDA1		1	NO MANUAL INTEGRATION
0052	23C03024.D	23A0295-04		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0110	23C03025.D	23A0249-05		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, trans-Chlordane, cis-Chlordane, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0128	23C03026.D	BLB0018-BLK1		1	NO MANUAL INTEGRATION
0146	23C03027.D	BLB0018-BS1		1	NO MANUAL INTEGRATION
0204	23C03028.D	BLB0018-BSD1		1	NO MANUAL INTEGRATION
0222	23C03029.D	23A0328-02		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, gamma-BHC (Lindane), Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin ketone,

			Endrin aldehyde, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
0445	001F1701.D SEQ-PEM2	1	4,4'-DDE [C], Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
0950	001F3401.D SEQ-PEM3	1	Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
1326	001F4601.D SEQ-PEM4	1	Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],

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Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1831	001F6301.D	SEQ-PEM5		1	4,4'-DDE [C], Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
2337	001F8001.D	SEQ-PEM6		1	Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
0106	001F8501.D	SEQ-PEM7		1	Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
0503	002F1801.D	SEQ-INDA2		1	NO MANUAL INTEGRATION
1008	002F3501.D	SEQ-INDA3		1	NO MANUAL INTEGRATION
1344	002F4701.D	SEQ-INDA4		1	NO MANUAL INTEGRATION
1849	002F6401.D	SEQ-INDA5		1	NO MANUAL INTEGRATION
2355	002F8101.D	SEQ-INDA6		1	NO MANUAL INTEGRATION
0124	002F8601.D	SEQ-INDA7		1	NO MANUAL INTEGRATION
0240	009F1001.D	23A0328-03		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-
0258	010F1101.D	23A0328-04		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C
0315	011F1201.D	23A0328-05		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Tetrachloro-
0333	012F1301.D	23A0328-06		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-
0351	013F1401.D	23A0328-07		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-
0409	014F1501.D	BLB0018-MS1		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C],

			Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexachlorobe
0427	015F1601.D BLB0018-MSD1	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor epoxide b [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetra
0521	016F1901.D 23A0328-08	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-
0539	017F2001.D 23A0328-09	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiph

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Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0557	018F2101.D	23A0328-10		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[
0615	019F2201.D	23A0328-11		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-
0633	020F2301.D	23A0328-12		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], De
0651	021F2401.D	BLB0023-BLK1		1	Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
0709	022F2501.D	BLB0023-BS1		1	NO MANUAL INTEGRATION
0727	023F2601.D	BLB0023-BSD1		1	NO MANUAL INTEGRATION
0745	024F2701.D	BLB0023-MS1		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C]
0803	025F2801.D	BLB0023-MSD1		1	1Bromo-2nitrobenzene [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl
0821	026F2901.D	23A0417-01		1	NO MANUAL INTEGRATION
0839	027F3001.D	23A0417-02		1	NO MANUAL INTEGRATION
0857	028F3101.D	23A0417-03		1	NO MANUAL INTEGRATION
0915	029F3201.D	23A0417-04		1	NO MANUAL INTEGRATION
0932	030F3301.D	23A0417-05		1	NO MANUAL INTEGRATION
1026	031F3601.D	23A0417-06		1	NO MANUAL INTEGRATION
1044	032F3701.D	23A0417-07		1	NO MANUAL INTEGRATION
1102	033F3801.D	23A0417-08		1	NO MANUAL INTEGRATION

1120	034F3901.D 23A0417-09	1	NO MANUAL INTEGRATION
1138	035F4001.D 23A0417-10	1	NO MANUAL INTEGRATION

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Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1156	036F4101.D	23A0417-11		1	NO MANUAL INTEGRATION
1214	037F4201.D	23A0417-12		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C
1232	038F4301.D	23A0417-13		1	NO MANUAL INTEGRATION
1250	039F4401.D	23A0417-14		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene
1308	040F4501.D	23A0417-15		1	NO MANUAL INTEGRATION
1402	041F4801.D	BLB0382-BLK1		1	NO MANUAL INTEGRATION
1420	042F4901.D	BLB0382-BS1		1	NO MANUAL INTEGRATION
1438	043F5001.D	BLB0382-BSD1		1	NO MANUAL INTEGRATION
1456	044F5101.D	23A0419-01		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Endosulfan II [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Tetrachloro-m-xylene [C],
1514	045F5201.D	23A0419-02		1	NO MANUAL INTEGRATION
1532	046F5301.D	23A0419-03		1	alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C]
1550	047F5401.D	23A0419-04		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C]
1608	048F5501.D	23A0419-05		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], gamma-BHC (Lindane) [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], De
1625	049F5601.D	23A0419-06		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], Heptachlor [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1643	050F5701.D	23A0419-07		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Endosulfan II [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C],

				Decachlorobiphenyl [C],
1701	051F5801.D	BLB0382-MS1	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C]
1719	052F5901.D	BLB0382-MSD1	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C]
1737	053F6001.D	23A0419-08	1	Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],

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Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1755	054F6101.D	23A0419-09		1	alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1813	055F6201.D	23A0419-10		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobip
1907	056F6501.D	23A0419-11		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1925	057F6601.D	23A0419-12		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C],
1943	058F6701.D	23A0420-01		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-
2001	059F6801.D	23A0420-07		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlor
2019	060F6901.D	23A0420-08		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobip
2037	061F7001.D	23A0420-09		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hex
2055	062F7101.D	BLB0422-BLK1		1	Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
2113	063F7201.D	BLB0422-BS1		1	NO MANUAL INTEGRATION
2131	064F7301.D	BLB0422-BSD1		1	NO MANUAL INTEGRATION
2149	065F7401.D	BLB0422-MS1		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C]
2207	066F7501.D	BLB0422-MSD1		1	NO MANUAL INTEGRATION

2225	067F7601.D 23B0229-02	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobip
2243	068F7701.D 23B0229-03	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C]
2301	069F7801.D 23B0229-04	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C]
2319	070F7901.D 23B0229-05	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl
0013	071F8201.D 23B0229-06	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromob

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230302.b\B20230302.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0031	072F8301.D	23B0229-08		1	NO MANUAL INTEGRATION
0048	073F8401.D	23B0276-01		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], Dieldrin [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
2358	23C03021.D	RINSE		1	NO MANUAL INTEGRATION
0016	23C03022.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
0034	23C03023.D	SEQ-INDA1		1	NO MANUAL INTEGRATION
0052	23C03024.D	23A0295-04		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexachlorobenzene [C], Tetrachloro-m-xylene
0110	23C03025.D	23A0249-05		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene
0128	23C03026.D	BLB0018-BLK1		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
0146	23C03027.D	BLB0018-BS1		1	Endosulfan II [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
0204	23C03028.D	BLB0018-BSD1		1	NO MANUAL INTEGRATION
0222	23C03029.D	23A0328-02		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], Dieldrin [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], cis-Chlordane [C], Hexabromobiphenyl[C], Te

Security Status Report

Date: 09-Mar-2023 11:14

001F1701.D	Data Locked	alfonso, 09-Mar-2023 11:14
001F3401.D	Data Locked	alfonso, 09-Mar-2023 11:14
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23C03028.D	Data Locked	alfonso, 09-Mar-2023 11:14
23C03029.D	Data Locked	alfonso, 09-Mar-2023 11:14

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SKL0233	Instrument:	ECD6
Calibration:	FL00041	Calibration Date:	12/15/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SKL0233-PEM1 (Water)				Lab File ID: 22121404.D			Analyzed: 12/14/22 20:20	
Decachlorobiphenyl	160.00	83.0	0 - 200	9.355	9.354666	0.0003	+/-0.1	
Decachlorobiphenyl [2C]	160.00	83.5	0 - 200	10.466	10.4655	0.0005	+/-0.1	
Tetrachlorometaxylene	160.00	78.1	0 - 200	3.828	3.827833	0.0002	+/-0.1	
Tetrachlorometaxylene [2C]	160.00	83.5	0 - 200	4.22	4.219666	0.0003	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0093	Instrument:	ECD6
Calibration:	FL00041	Calibration Date:	12/14/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0093-ICV1 (Solid)				Lab File ID: 23C03023.D			Analyzed: 03/03/23 00:34	
Decachlorobiphenyl	40.000	94.8	80 - 120	9.437	9.354666	0.0823	+/-0.1	
Decachlorobiphenyl [2C]	40.000	95.0	80 - 120	10.402	10.4655	-0.0635	+/-0.1	
Tetrachlorometaxylene	40.000	92.5	80 - 120	3.871	3.827833	0.0432	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	91.8	80 - 120	4.195	4.219666	-0.0247	+/-0.1	
SLC0093-CCV1 (Solid)				Lab File ID: 002F1801.D			Analyzed: 03/03/23 05:03	
Decachlorobiphenyl	40.000	90.8	80 - 120	9.434	9.354666	0.0793	+/-0.1	
Decachlorobiphenyl [2C]	40.000	90.3	80 - 120	10.399	10.4655	-0.0665	+/-0.1	
Tetrachlorometaxylene	40.000	94.0	80 - 120	3.869	3.827833	0.0412	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	91.5	80 - 120	4.193	4.219666	-0.0267	+/-0.1	
SLC0093-CCV2 (Solid)				Lab File ID: 002F3501.D			Analyzed: 03/03/23 10:08	
Decachlorobiphenyl	40.000	93.0	80 - 120	9.435	9.354666	0.0803	+/-0.1	
Decachlorobiphenyl [2C]	40.000	97.8	80 - 120	10.4	10.4655	-0.0655	+/-0.1	
Tetrachlorometaxylene	40.000	91.8	80 - 120	3.87	3.827833	0.0422	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	89.0	80 - 120	4.193	4.219666	-0.0267	+/-0.1	
SLC0093-CCV3 (Solid)				Lab File ID: 002F4701.D			Analyzed: 03/03/23 13:44	
Decachlorobiphenyl	40.000	91.5	80 - 120	9.434	9.354666	0.0793	+/-0.1	
Decachlorobiphenyl [2C]	40.000	92.8	80 - 120	10.399	10.4655	-0.0665	+/-0.1	
Tetrachlorometaxylene	40.000	94.0	80 - 120	3.868	3.827833	0.0402	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	91.0	80 - 120	4.193	4.219666	-0.0267	+/-0.1	
BLB0382-BLK1 (Solid)				Lab File ID: 041F4801.D			Analyzed: 03/03/23 14:02	
Decachlorobiphenyl	8.0000	69.0	30 - 160	9.433	9.354666	0.0783	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	69.6	30 - 160	10.398	10.4655	-0.0675	+/-0.1	
Tetrachlorometaxylene	8.0000	61.2	30 - 160	3.868	3.827833	0.0402	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	59.7	30 - 160	4.192	4.219666	-0.0277	+/-0.1	
BLB0382-BS1 (Solid)				Lab File ID: 042F4901.D			Analyzed: 03/03/23 14:20	
Decachlorobiphenyl	8.0000	66.8	30 - 160	9.434	9.354666	0.0793	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	65.6	30 - 160	10.399	10.4655	-0.0665	+/-0.1	
Tetrachlorometaxylene	8.0000	56.2	30 - 160	3.868	3.827833	0.0402	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	54.3	30 - 160	4.192	4.219666	-0.0277	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0093
Instrument: ECD6
Calibration: FL00041
Calibration Date: 12/15/2022

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLB0382-BSD1 (Solid)				Lab File ID: 043F5001.D			Analyzed: 03/03/23 14:38	
Decachlorobiphenyl	8.0000	67.0	30 - 160	9.433	9.354666	0.0783	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	65.8	30 - 160	10.399	10.4655	-0.0665	+/-0.1	
Tetrachlorometaxylene	8.0000	57.7	30 - 160	3.868	3.827833	0.0402	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	55.7	30 - 160	4.192	4.219666	-0.0277	+/-0.1	
SLC0093-CCV4 (Solid)				Lab File ID: 002F6401.D			Analyzed: 03/03/23 18:49	
Decachlorobiphenyl	40.000	91.5	80 - 120	9.434	9.354666	0.0793	+/-0.1	
Decachlorobiphenyl [2C]	40.000	91.0	80 - 120	10.4	10.4655	-0.0655	+/-0.1	
Tetrachlorometaxylene	40.000	93.5	80 - 120	3.869	3.827833	0.0412	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	90.5	80 - 120	4.192	4.219666	-0.0277	+/-0.1	
23A0420-01 (Solid)				Lab File ID: 058F6701.D			Analyzed: 03/03/23 19:43	
Decachlorobiphenyl	7.9922	61.6	30 - 160	9.437	9.354666	0.0823	+/-0.1	
Decachlorobiphenyl [2C]	7.9922	62.9	30 - 160	10.402	10.4655	-0.0635	+/-0.1	
Tetrachlorometaxylene	7.9922	45.5	30 - 160	3.868	3.827833	0.0402	+/-0.1	
Tetrachlorometaxylene [2C]	7.9922	49.7	30 - 160	4.192	4.219666	-0.0277	+/-0.1	
23A0420-07 (Solid)				Lab File ID: 059F6801.D			Analyzed: 03/03/23 20:01	
Decachlorobiphenyl	7.9888	63.2	30 - 160	9.438	9.354666	0.0833	+/-0.1	
Decachlorobiphenyl [2C]	7.9888	60.3	30 - 160	10.402	10.4655	-0.0635	+/-0.1	
Tetrachlorometaxylene	7.9888	38.0	30 - 160	3.868	3.827833	0.0402	+/-0.1	
Tetrachlorometaxylene [2C]	7.9888	48.8	30 - 160	4.192	4.219666	-0.0277	+/-0.1	
23A0420-08 (Solid)				Lab File ID: 060F6901.D			Analyzed: 03/03/23 20:19	
Decachlorobiphenyl	7.9891	65.2	30 - 160	9.438	9.354666	0.0833	+/-0.1	
Decachlorobiphenyl [2C]	7.9891	64.3	30 - 160	10.402	10.4655	-0.0635	+/-0.1	
Tetrachlorometaxylene	7.9891	43.7	30 - 160	3.868	3.827833	0.0402	+/-0.1	
Tetrachlorometaxylene [2C]	7.9891	51.8	30 - 160	4.192	4.219666	-0.0277	+/-0.1	
23A0420-09 (Solid)				Lab File ID: 061F7001.D			Analyzed: 03/03/23 20:37	
Decachlorobiphenyl	7.9824	57.7	30 - 160	9.437	9.354666	0.0823	+/-0.1	
Decachlorobiphenyl [2C]	7.9824	55.9	30 - 160	10.401	10.4655	-0.0645	+/-0.1	
Tetrachlorometaxylene	7.9824	44.4	30 - 160	3.867	3.827833	0.0392	+/-0.1	
Tetrachlorometaxylene [2C]	7.9824	44.3	30 - 160	4.192	4.219666	-0.0277	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0093	Instrument:	ECD6
Calibration:	FL00041	Calibration Date:	12/14/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0093-CCV5 (Solid)			Lab File ID: 002F8101.D			Analyzed: 03/03/23 23:55		
Decachlorobiphenyl	40.000	90.8	80 - 120	9.434	9.354666	0.0793	+/-0.1	
Decachlorobiphenyl [2C]	40.000	90.3	80 - 120	10.399	10.4655	-0.0665	+/-0.1	
Tetrachlorometaxylene	40.000	92.8	80 - 120	3.869	3.827833	0.0412	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	88.5	80 - 120	4.193	4.219666	-0.0267	+/-0.1	
SLC0093-CCV6 (Solid)			Lab File ID: 002F8601.D			Analyzed: 03/04/23 01:24		
Decachlorobiphenyl	40.000	92.0	80 - 120	9.434	9.354666	0.0793	+/-0.1	
Decachlorobiphenyl [2C]	40.000	95.8	80 - 120	10.399	10.4655	-0.0665	+/-0.1	
Tetrachlorometaxylene	40.000	93.5	80 - 120	3.87	3.827833	0.0422	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	92.3	80 - 120	4.193	4.219666	-0.0267	+/-0.1	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SKL0233	Instrument:	ECD6
		Calibration:	FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Performance Mix (SKL0233-PEM1)		(Water)		Lab File ID: 22121404.D				Analyzed: 12/14/22 20:20	
1-Bromo-2-Nitrobenzene	683485	3.15	672426	3.15	102	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	619012	9.503	609723	9.504	102	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1005375	3.35	1006482	3.35	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	772586	11.054	769764	11.053	100	50 - 200	0.001	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0093
Instrument: ECD6
Calibration: FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0093-ICV1)		(Solid)		Lab File ID: 23C03023.D			Analyzed: 03/03/23 00:34		
1-Bromo-2-Nitrobenzene	472089	3.182	472089	3.182	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	377525	9.59	377525	9.59	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	690774	3.335	690774	3.335	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	405465	10.979	405465	10.979	100	50 - 200	0.000	+/-0.50	
Blank (BLB0382-BLK1)		(Solid)		Lab File ID: 041F4801.D			Analyzed: 03/03/23 14:02		
1-Bromo-2-Nitrobenzene	1122897	3.179	472089	3.182	238	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl	939374	9.586	377525	9.59	249	50 - 200	-0.004	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	1796358	3.332	690774	3.335	260	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl [2C]	1047214	10.976	405465	10.979	258	50 - 200	-0.003	+/-0.50	*
LCS (BLB0382-BS1)		(Solid)		Lab File ID: 042F4901.D			Analyzed: 03/03/23 14:20		
1-Bromo-2-Nitrobenzene	1124430	3.179	472089	3.182	238	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl	924668	9.586	377525	9.59	245	50 - 200	-0.004	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	1804150	3.332	690774	3.335	261	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl [2C]	1062692	10.976	405465	10.979	262	50 - 200	-0.003	+/-0.50	*
LCS Dup (BLB0382-BSD1)		(Solid)		Lab File ID: 043F5001.D			Analyzed: 03/03/23 14:38		
1-Bromo-2-Nitrobenzene	1128565	3.179	472089	3.182	239	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl	949834	9.586	377525	9.59	252	50 - 200	-0.004	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	1824577	3.332	690774	3.335	264	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl [2C]	1086833	10.976	405465	10.979	268	50 - 200	-0.003	+/-0.50	*
LDW23-SC1045 (23A0420-01)		(Solid)		Lab File ID: 058F6701.D			Analyzed: 03/03/23 19:43		
1-Bromo-2-Nitrobenzene	1300686	3.179	472089	3.182	276	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl	904003	9.591	377525	9.59	239	50 - 200	0.001	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	1801442	3.332	690774	3.335	261	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl [2C]	1028911	10.978	405465	10.979	254	50 - 200	-0.001	+/-0.50	*
LDW23-SC1003 (23A0420-07)		(Solid)		Lab File ID: 059F6801.D			Analyzed: 03/03/23 20:01		
1-Bromo-2-Nitrobenzene	1567346	3.179	472089	3.182	332	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl	922088	9.594	377525	9.59	244	50 - 200	0.004	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	1835742	3.332	690774	3.335	266	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl [2C]	1055037	10.98	405465	10.979	260	50 - 200	0.001	+/-0.50	*

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0093
Instrument: ECD6
Calibration: FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1004 (23A0420-08)		(Solid)		Lab File ID: 060F6901.D				Analyzed: 03/03/23 20:19	
1-Bromo-2-Nitrobenzene	1338865	3.178	472089	3.182	284	50 - 200	-0.004	+/-0.50	*
Hexabromobiphenyl	887481	9.592	377525	9.59	235	50 - 200	0.002	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	1745592	3.332	690774	3.335	253	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl [2C]	1015086	10.979	405465	10.979	250	50 - 200	0.000	+/-0.50	*
LDW23-SC1082 (23A0420-09)		(Solid)		Lab File ID: 061F7001.D				Analyzed: 03/03/23 20:37	
1-Bromo-2-Nitrobenzene	1219298	3.179	472089	3.182	258	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl	908537	9.592	377525	9.59	241	50 - 200	0.002	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	1797000	3.332	690774	3.335	260	50 - 200	-0.003	+/-0.50	*
Hexabromobiphenyl [2C]	1053287	10.978	405465	10.979	260	50 - 200	-0.001	+/-0.50	*

HOLDING TIME SUMMARY

Analysis: EPA 8081B

Laboratory: Analytical Resources, LLC SDG: 23A0420

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1045 23A0420-01	01/19/23 08:10	01/19/23 15:55	02/16/23 11:56	28	365	03/03/23 19:43	15	40	
LDW23-SC1003 23A0420-07	01/19/23 12:25	01/19/23 15:55	02/16/23 11:56	27	365	03/03/23 20:01	15	40	
LDW23-SC1004 23A0420-08	01/19/23 11:55	01/19/23 15:55	02/16/23 11:56	28	365	03/03/23 20:19	15	40	
LDW23-SC1082 23A0420-09	01/19/23 13:40	01/19/23 15:55	02/16/23 11:56	27	365	03/03/23 20:37	15	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ECD6

Analyte	MDL	RL	Units
Hexachlorobenzene	0.15	0.50	ug/kg
Hexachlorobenzene [2C]	0.15	0.50	ug/kg

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CERTIFICATE OF ANALYSIS

Catalog No: S-279N
Description: Tetrachloro-m-xylene
Lot: 0052481B-1
Solvent: N/A
Hazards: *Refer to SDS for complete safety information*

Signal Word: Warning

Date Certified: Jul 28, 2005
Expiration: Jul 28, 2015
Sample Size: 100 mg
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

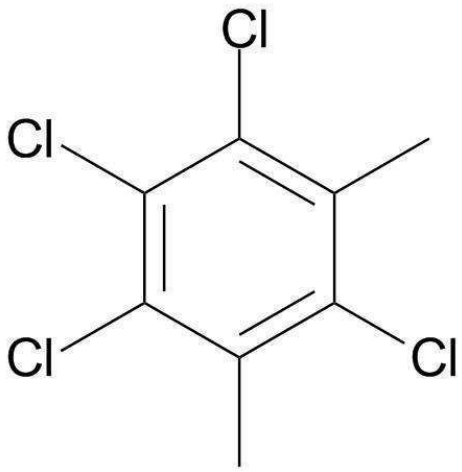
ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration	Certified Analyte Concentration[1]
Tetrachloro-meta-xylene	877-09-8	96.0	N/A	N/A

Identification:

Molecular formula: C8H6Cl4
Molecular weight: 243.94



C000147
tetrachlormetaxylene
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] The Uncertainty calculated for this product is ±2.4%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Metrological traceability is established through in-house validated methods.

Purity, if stated, is equal to 100% minus found impurity components. Impurity components have not been identified.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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Rev. 5/18

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CERTIFICATE OF PRODUCT DATA

PRODUCT: C-209N
DESCRIPTION: 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl
LOT #: 990521LB-AC
SOLVENT: N/A

EXPIRATION: Jul 28, 2015

This product is guaranteed accurate to ±0.5% of the Certified Analyte concentration through the Expiration Date on the Label.

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1]	Certified Analyte Concentration[2]
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	2051-24-3	100	N/A	N/A

C000148
decachlorbiphenyl
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

* I1768A

Certified by: R. Cooper

1. All weights are traceable through National Institute of Standards & Technology, Test No. 822/264480
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is ±4% which is the Combined Uncertainty uc(y). It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is Uc(y) *K where K is the coverage factor at the 95% confidence level (K=2).
3. A product with a suffix (-1A, -2B, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

Please note: AccuStandard follows the U.S. conventions in reporting numerical values, on both certificates and labels.

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

This product was manufactured in accordance to quality system requirements of ISO 9001:2000 and ISO 17025

* Recertified 2 4-6-09 JS

Analytical Standard Record

Standard ID: C000148 **Printed: 4/23/2015 11:54:44AM**

Description:	decachlorbiphenyl	Expires:	15-Jan-2020
Standard Type:	Other	Prepared:	15-Jan-2014
Solvent:	na/a	Prepared By:	Joshua Rains
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	27-Feb-2015 13:03 by JGR
Vendor:	Accustandard	Lot #:	990521lb-ac
Vendor Catalog #:			

Comments

see i1768a
SOM calibrations added 06/12/14 sdrd

Analyte	CAS Number	Concentration	Units
Decachlorobiphenyl [2C]	2051-24-3	1000000	ug/mL
Decachlorobiphenyl	2051-24-3	1000000	ug/mL
DCB 1660 [2C]	2051-24-3	1000000	ug/mL
DCB 1660	2051-24-3	1000000	ug/mL
DCB [2C]	2051-24-3	1000000	ug/mL
DCB (A) [2C]	2051-24-3	1000000	ug/mL
DCB (A)	2051-24-3	1000000	ug/mL
DCB	2051-24-3	1000000	ug/mL

Reviewed By Date

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CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 219051741-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jun 5, 2020
Expiration: Jun 5, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Mirex	2385-85-5	98.2	100.2	98.4

I007970
Mirex 2d source
Solvent / Lot: MeOH
Prep: 9/7/2020 by JR
Exp: 6/5/2024
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

Catalog No: P-026S
Description: o,p'-DDE
Lot: 218021093-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Feb 10, 2020
Expiration: Feb 10, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o,p'-DDE	3424-82-6	99.9	100.4	100.3

I7971

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 822-275872-11

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

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CERTIFICATE OF ANALYSIS

Catalog No: P-184S
Description: trans-Nonachlor
Lot: 218011470
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jan 30, 2018
Expiration: Jan 30, 2028
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
trans-Nonachlor	39765-80-5	99.0	100.2	99.2

I 7974

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 822-275872-11

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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CERTIFICATE OF ANALYSIS

Catalog No: P-024S
Description: o,p'-DDD
Lot: 220051307
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: May 27, 2020
Expiration: Jun 27, 2022
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o,p'-DDD	53-19-0	100.0	100.2	100.2

I010773
o,p-DDD
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 6/27/2022
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this .

4 **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7 **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: P-331S
Description: Oxychlordane Isomer
Lot: 218101131
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Oct 8, 2018
Expiration: Nov 8, 2020
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Oxychlordane Isomer	27304-13-8	97.7	102.4*	100.0

I010795
Oxychlordane isomer
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 6/20/2022
Location:

* Weight compensated to 100% purity.

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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Rev. 5/18

1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this CRM.

4 **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

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CERTIFICATE OF ANALYSIS

Catalog No: P-297S
Description: cis-Nonachlor
Lot: 217121240
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Dec 13, 2017
Expiration: Dec 13, 2020
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
cis-Nonachlor	5103-73-1	98.6	100.4	99.0

I010796
cis-Nonochlor-Accustd-100ug/ml
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 11/27/2022
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] All weights are traceable through NIST, Test No. 822-275872-11

[2] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 11.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this CRM.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: APP-9-112-D-20X
Description: Hexachlorobenzene in Dichloromethane
Lot: 219051389
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*

Signal Word: Warning

Date Certified: May 13, 2019
Expiration: May 13, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Hexachlorobenzene	118-74-1	99.0	2002	1982

J006504
Hexachlorobenzene
Solvent / Lot: Dichloromethane
Prep: 6/21/2021 by YZ
Exp: 5/13/2029
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this .

4 **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

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CERTIFICATE OF ANALYSIS

Catalog No: P-028S
Description: o,p'-DDT
Lot: 221071322
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jul 21, 2021
Expiration: Aug 21, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o,p'-DDT	789-02-6	99.9	100.1	100.0

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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Rev. 5/18

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

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CERTIFICATE OF ANALYSIS

Catalog No: P-024S
Description: o,p'-DDD
Lot: 220051307-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jul 6, 2021
Expiration: Aug 6, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o,p'-DDD	53-19-0	100.0	100.2	100.2

K 0448

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

Catalog No: P-331S
Description: Oxychlordane Isomer
Lot: 221051706
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: May 28, 2021
Expiration: Jun 28, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Oxychlordane Isomer	27304-13-8	99.2	100.1	99.3

K000449
Oxychlordane isomer
Solvent / Lot: methanol
Prep: 1/13/2022 by YZ
Exp: 6/28/2023
Location:

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

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Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

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4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: P-297S
Description: cis-Nonachlor
Lot: 221041461
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Apr 22, 2021
Expiration: Apr 22, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
cis-Nonachlor	5103-73-1	98.6	101.1	99.7

K 000450

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:
Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

Catalog No: P-184S
Description: trans-Nonachlor
Lot: 220091107
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Sep 11, 2020
Expiration: Sep 11, 2030
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB AR-1463 ANAB AT-1339 ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
trans-Nonachlor	39765-80-5	99.0	100.2	99.2

K 0045 I

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 219051741-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jun 5, 2020
Expiration: Jun 5, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED AR-1463 ANAB ACCREDITED AT-1339 ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Mirex	2385-85-5	98.2	100.2	98.4

K 000452

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

K 000 452

CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 221121451
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Dec 27, 2021
Expiration: Dec 27, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Mirex	2385-85-5	98.2	100.0	98.2

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 7/20

125 Market Street
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USA

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CERTIFICATE OF ANALYSIS

Catalog No: M-8081-DS
Description: 4,4'-DDT & Endrin
Lot: 221031488-04
Solvent: Hexane
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Apr 8, 2022
Expiration: May 8, 2023
Sample Size: 1 mL
Components: 2
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
4,4'-DDT	50-29-3	100.0	200.9	200.9
Endrin	72-20-8	99.8	200.0	199.6

K7002

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32292 **Lot No.:** A0185477

Description : Organochlorine Pesticide Mix AB # 2

Organochlorine Pesticide Mix AB # 2 8-80 µg/mL, Hexane/Toluene(1:1), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	alpha-BHC	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 319-84-6 (Lot 12307600)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed
2	gamma-BHC (Lindane)	8.0 µg/mL	+/- 0.0654 µg/mL	Gravimetric
	CAS # 58-89-9 (Lot 13087200)		+/- 0.3672 µg/mL	Unstressed
	Purity 99%		+/- 0.5281 µg/mL	Stressed
3	beta-BHC	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 319-85-7 (Lot 0588007-4)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed
4	delta-BHC	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 319-86-8 (Lot 13112400)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed
5	Heptachlor	8.0 µg/mL	+/- 0.0654 µg/mL	Gravimetric
	CAS # 76-44-8 (Lot 803759)		+/- 0.3672 µg/mL	Unstressed
	Purity 99%		+/- 0.5281 µg/mL	Stressed
6	Aldrin	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 309-00-2 (Lot 12983100)		+/- 0.3702 µg/mL	Unstressed
	Purity 96%		+/- 0.5323 µg/mL	Stressed
7	Heptachlor epoxide (isomer B)	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 1024-57-3 (Lot 13168200)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed

8	trans-Chlordane		8.0	µg/mL	+/-	0.0657	µg/mL	Gravimetric
	CAS # 5103-74-2	(Lot 32943)			+/-	0.3689	µg/mL	Unstressed
	Purity 98%				+/-	0.5305	µg/mL	Stressed
9	cis-Chlordane		8.0	µg/mL	+/-	0.0657	µg/mL	Gravimetric
	CAS # 5103-71-9	(Lot 31766)			+/-	0.3689	µg/mL	Unstressed
	Purity 98%				+/-	0.5305	µg/mL	Stressed
10	Endosulfan I		8.0	µg/mL	+/-	0.0654	µg/mL	Gravimetric
	CAS # 959-98-8	(Lot BCCF4060)			+/-	0.3672	µg/mL	Unstressed
	Purity 99%				+/-	0.5281	µg/mL	Stressed
11	4,4'-DDE		16.1	µg/mL	+/-	0.1314	µg/mL	Gravimetric
	CAS # 72-55-9	(Lot GHYQG)			+/-	0.7375	µg/mL	Unstressed
	Purity 99%				+/-	1.0606	µg/mL	Stressed
12	Dieldrin		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 60-57-1	(Lot 11129900)			+/-	0.7408	µg/mL	Unstressed
	Purity 98%				+/-	1.0653	µg/mL	Stressed
13	Endrin		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 72-20-8	(Lot 13157400)			+/-	0.7406	µg/mL	Unstressed
	Purity 99%				+/-	1.0650	µg/mL	Stressed
14	4,4'-DDD		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 72-54-8	(Lot HAN02)			+/-	0.7406	µg/mL	Unstressed
	Purity 99%				+/-	1.0650	µg/mL	Stressed
15	Endosulfan II		16.0	µg/mL	+/-	0.1309	µg/mL	Gravimetric
	CAS # 33213-65-9	(Lot 12448900)			+/-	0.7345	µg/mL	Unstressed
	Purity 99%				+/-	1.0562	µg/mL	Stressed
16	4,4'-DDT		16.1	µg/mL	+/-	0.1315	µg/mL	Gravimetric
	CAS # 50-29-3	(Lot 220428JLM)			+/-	0.7378	µg/mL	Unstressed
	Purity 98%				+/-	1.0610	µg/mL	Stressed
17	Endrin aldehyde		16.1	µg/mL	+/-	0.1314	µg/mL	Gravimetric
	CAS # 7421-93-4	(Lot 30720)			+/-	0.7375	µg/mL	Unstressed
	Purity 99%				+/-	1.0606	µg/mL	Stressed
18	Endosulfan sulfate		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 1031-07-8	(Lot BCCB0424)			+/-	0.7406	µg/mL	Unstressed
	Purity 99%				+/-	1.0650	µg/mL	Stressed
19	Methoxychlor		80.2	µg/mL	+/-	0.5781	µg/mL	Gravimetric
	CAS # 72-43-5	(Lot 13027000)			+/-	3.6697	µg/mL	Unstressed
	Purity 98%				+/-	5.2871	µg/mL	Stressed
20	Endrin ketone		16.1	µg/mL	+/-	0.1314	µg/mL	Gravimetric
	CAS # 53494-70-5	(Lot 13026800)			+/-	0.7375	µg/mL	Unstressed
	Purity 99%				+/-	1.0606	µg/mL	Stressed

Solvent: Hexane/Toluene (50:50)
CAS # 110-54-3/108-88-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

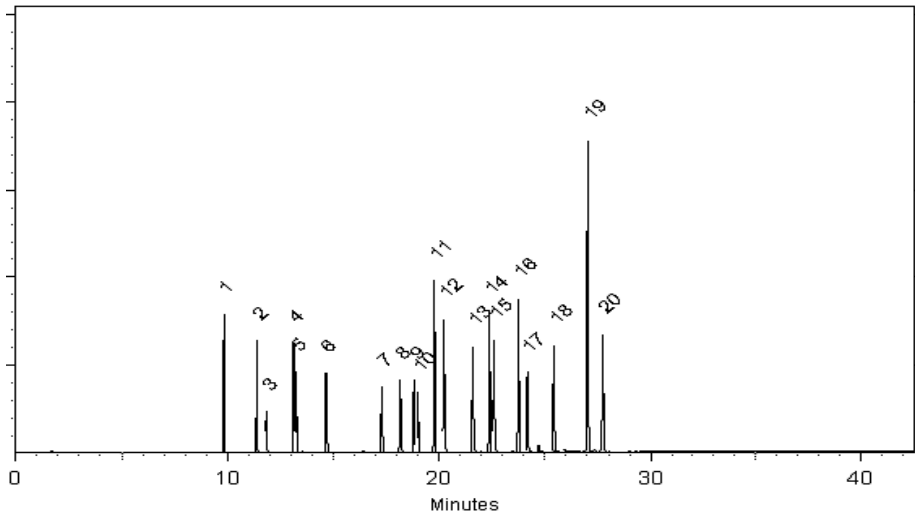
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Morgan Craighead - Mix Technician

Date Mixed: 19-May-2022 **Balance:** B442140311

Fang-Yun Lo - QC Analyst

Date Passed: 26-May-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

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www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-502-36-10X
Description: Hexachlorobutadiene
Lot: 222031188
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Mar 11, 2022
Expiration: Apr 11, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Hexachlorobutadiene	87-68-3	98.0	2002	1962

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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New Haven, CT 06513
USA

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www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-502-36-10X
Description: Hexachlorobutadiene
Lot: 222031188
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Mar 11, 2022
Expiration: Apr 11, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Hexachlorobutadiene	87-68-3	98.0	2002	1962

K011468

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1045

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0420-01 A	File ID:	02282319ECD7.D
Sampled:	01/19/23 08:10	Prepared:	02/15/23 16:55	Analyzed:	02/28/23 22:14
% Solids:	54.71	Preparation:	EPA 3546 (Microwave)	Initial/Final:	22.88 g Wet / 2.5 mL
Batch:	BLB0391	Sequence:	SLC0014	Calibration:	GB00069
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	29.1	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	45.3	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	43.5	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9887*	*7.03*	*88.0*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9887*	*5.16*	*64.6*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9887*	*6.62*	*82.9*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9887*	*6.29*	*78.8*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282319ECD7.D
Data file 2: /230228.b/230228.b/02282319ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0420-01
Client ID:
Injection Date: 28-FEB-2023 22:14
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.804	-0.003	298487	5.681	-0.006	142382	25.8	31.5	19.8	Tetrachloro-m-xylene
13.885	-0.008	260093	14.112	-0.008	180227	35.2	33.2	6.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	773625	14.8
Hexabromobiphenyl	1429847	749950	-47.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	307965	-2.3
Hexabromobiphenyl	513946	356849	-30.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.395	-0.011	41144	109.0	1	8.298	-0.010	23021	156.6
Aroclor-1248	2	8.565	-0.016	37778	78.7	2	8.704	-0.011	18903	124.3
Aroclor-1248	3	8.983	-0.014	99955	110.4	3	9.138	-0.031	27328	156.2
Aroclor-1248	4	9.285	-0.010	114125	247.7	4	9.531	-0.063	24884	110.5
		Total Col1Ave (4 peaks):			136.5		Total Col2Ave (4 peaks):			138.9 RPD = 2
		Corrected Ave (3 peaks):			99.4		Corrected Ave (3 peaks):			133.0 RPD = 29
										145.7
Aroclor-1254	1	9.285	-0.014	114125	146.9	1	9.436	-0.015	47962	204.9
Aroclor-1254	2	9.361	-0.018	45493	130.2	2	9.954	-0.018	27417	145.6
Aroclor-1254	3	9.658	-0.011	100517	201.3	3	10.103	-0.022	83638	205.3
Aroclor-1254	4	9.786	-0.022	165960	170.9	4	10.350	-0.025	105784	266.3
Aroclor-1254	5	10.118	-0.060	107002	175.8	5	10.552	-0.018	75540	312.4
		Total Col1Ave (5 peaks):			165.0		Total Col2Ave (5 peaks):			226.9 RPD = 32
		Corrected Ave (4 peaks):			156.0		Corrected Ave (4 peaks):			205.5 RPD = 27
										162.325
Aroclor-1260	1	11.032	-0.012	69580	257.9	1	11.641	-0.012	48186	229.6
Aroclor-1260	2	11.346	-0.015	55545	197.1	2	11.902	-0.015	91032	170.0
Aroclor-1260	3	11.718	-0.018	176408	236.0	3	12.421	-0.015	41797	294.1
Aroclor-1260	4	12.119	-0.021	86537	229.9	4	12.486	-0.016	64394	178.4
Aroclor-1260	5	12.233	-0.010	43179	266.5	NS	---			----
		Total Col1Ave (5 peaks):			237.4		Total Col2Ave (4 peaks):			218.0 RPD = 9
		Corrected Ave (4 peaks):			230.2		Corrected Ave (3 peaks):			192.7 RPD = 18
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.793) = 3452383 Col1 Total PCB = 0.4 ppm*

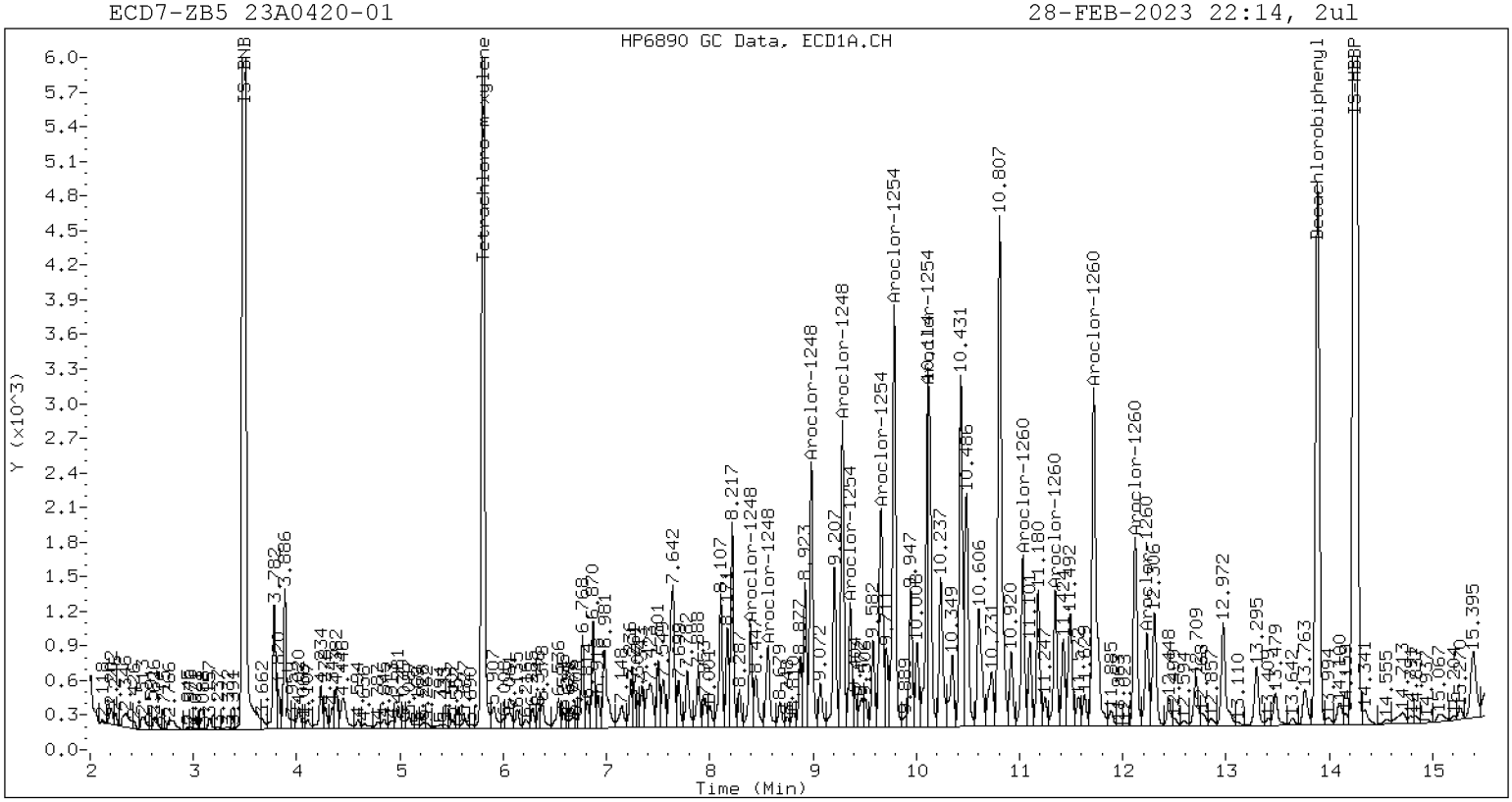
Total PCB Area Col2 (5.787 - 14.020) = 1735669 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

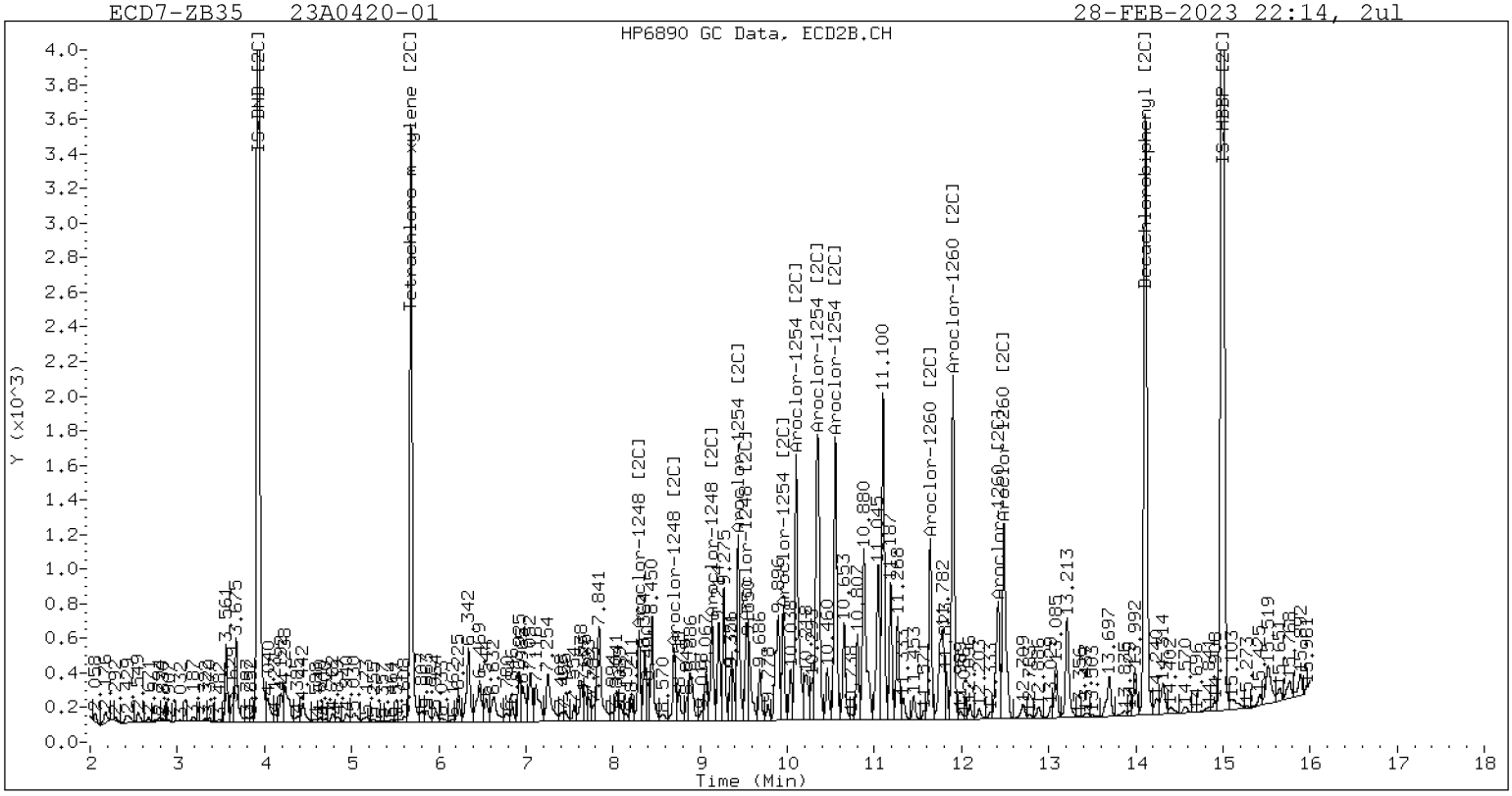
PCB Dual Column Chromatograms

ECD7-ZB5 23A0420-01 28-FEB-2023 22:14, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0420-01 28-FEB-2023 22:14, 2ul

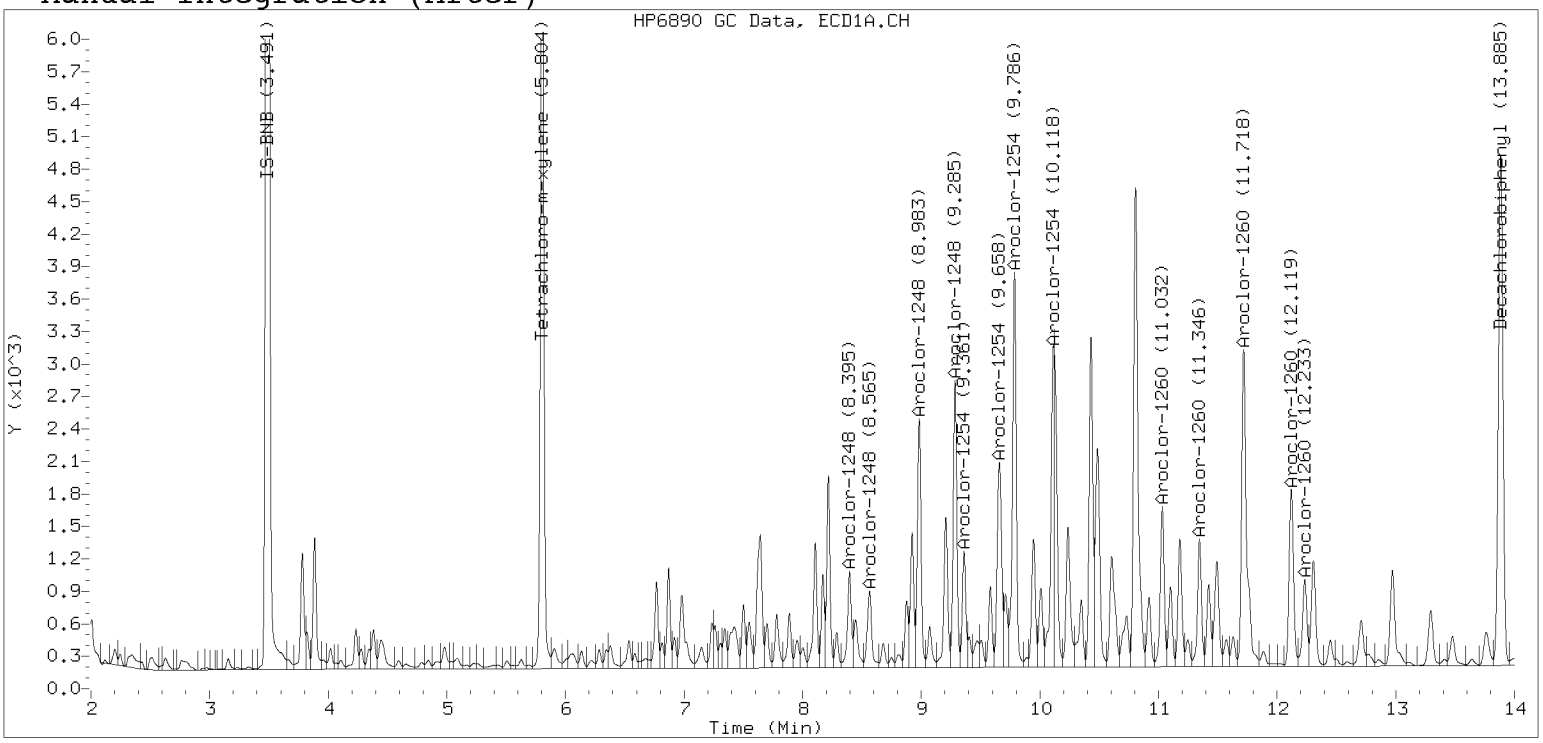


ZB-35 Manual Integration: YES

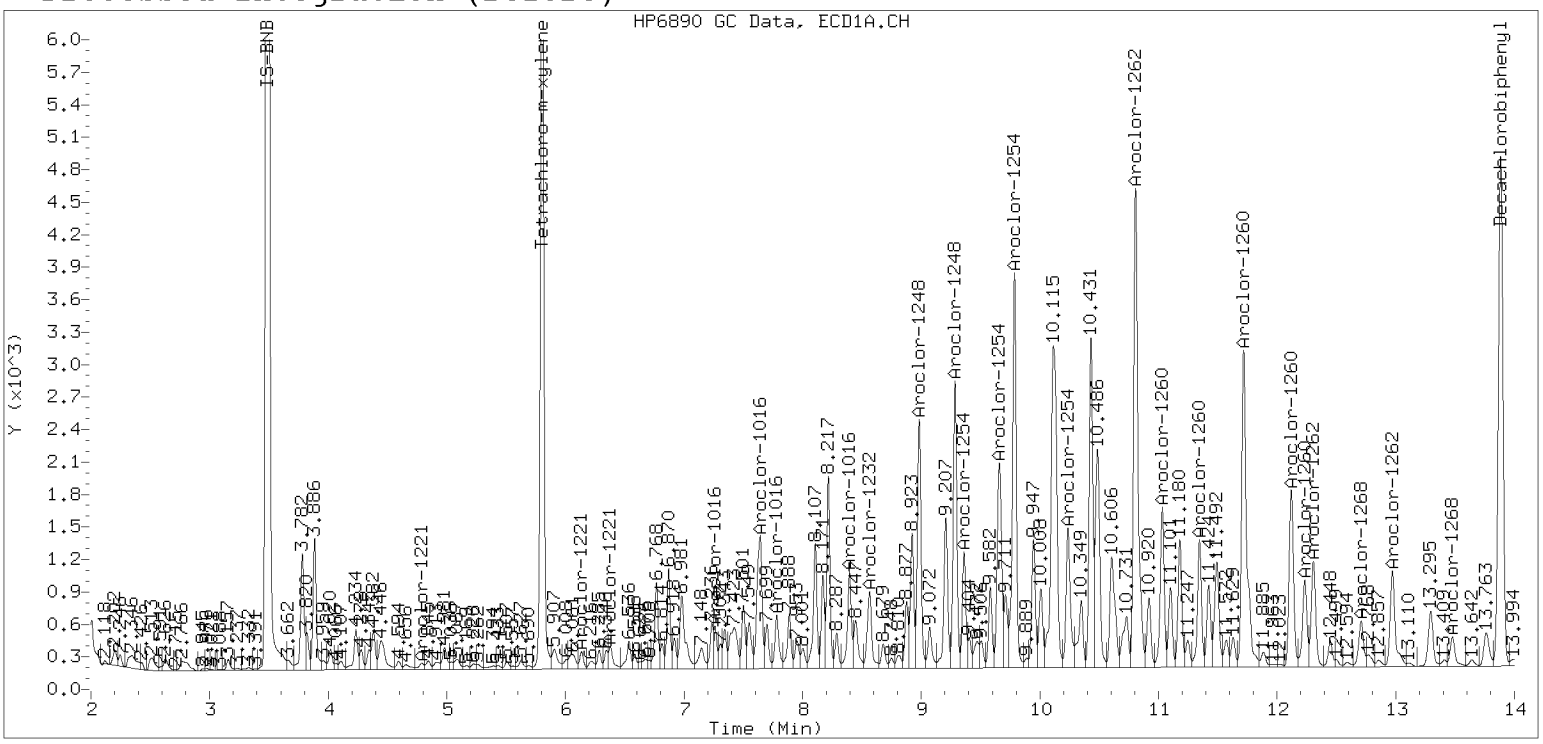
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230228.b/02282319ECD7.D Injection Date: 28-FEB-2023 22:14

Manual Integration (After)



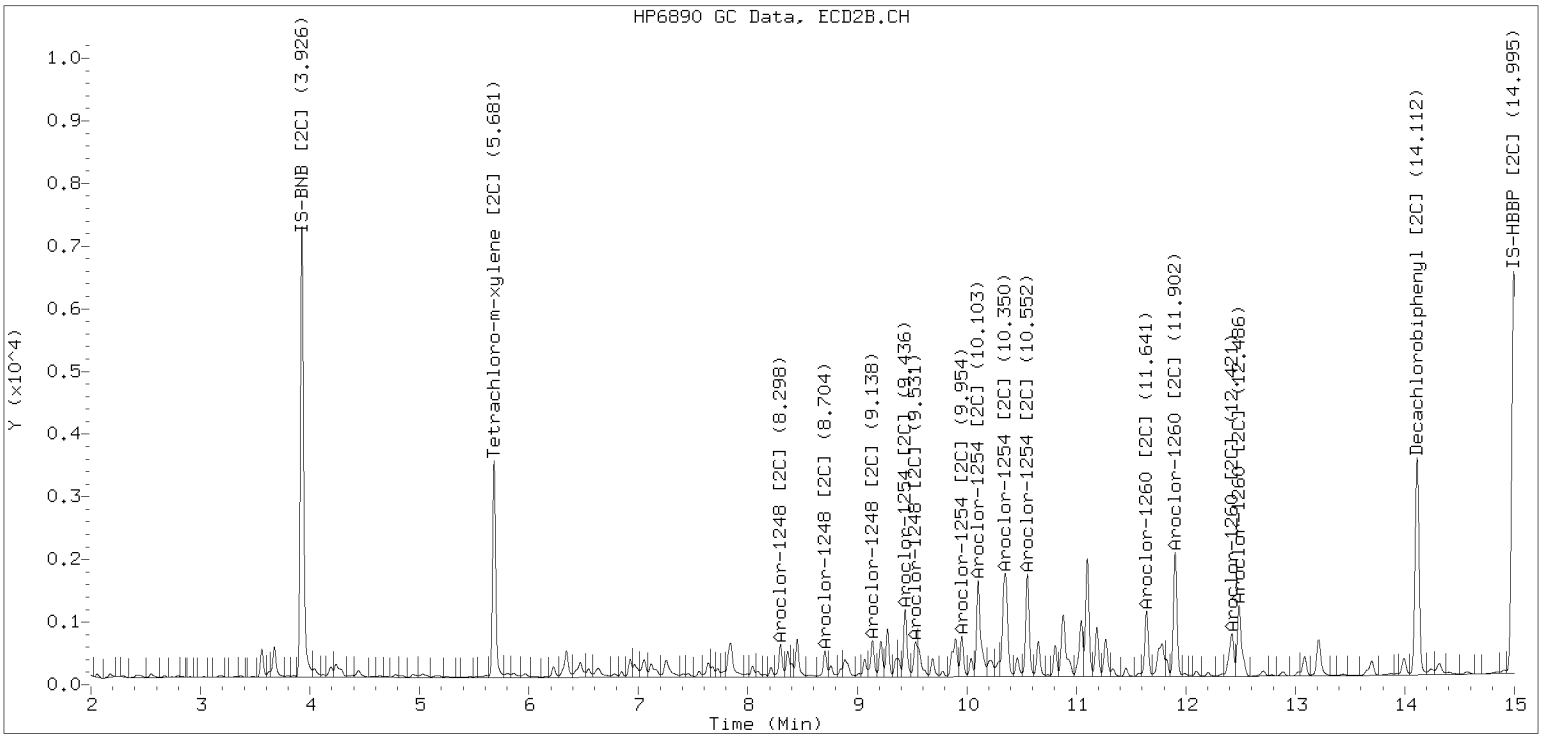
Processed Integration (Before)



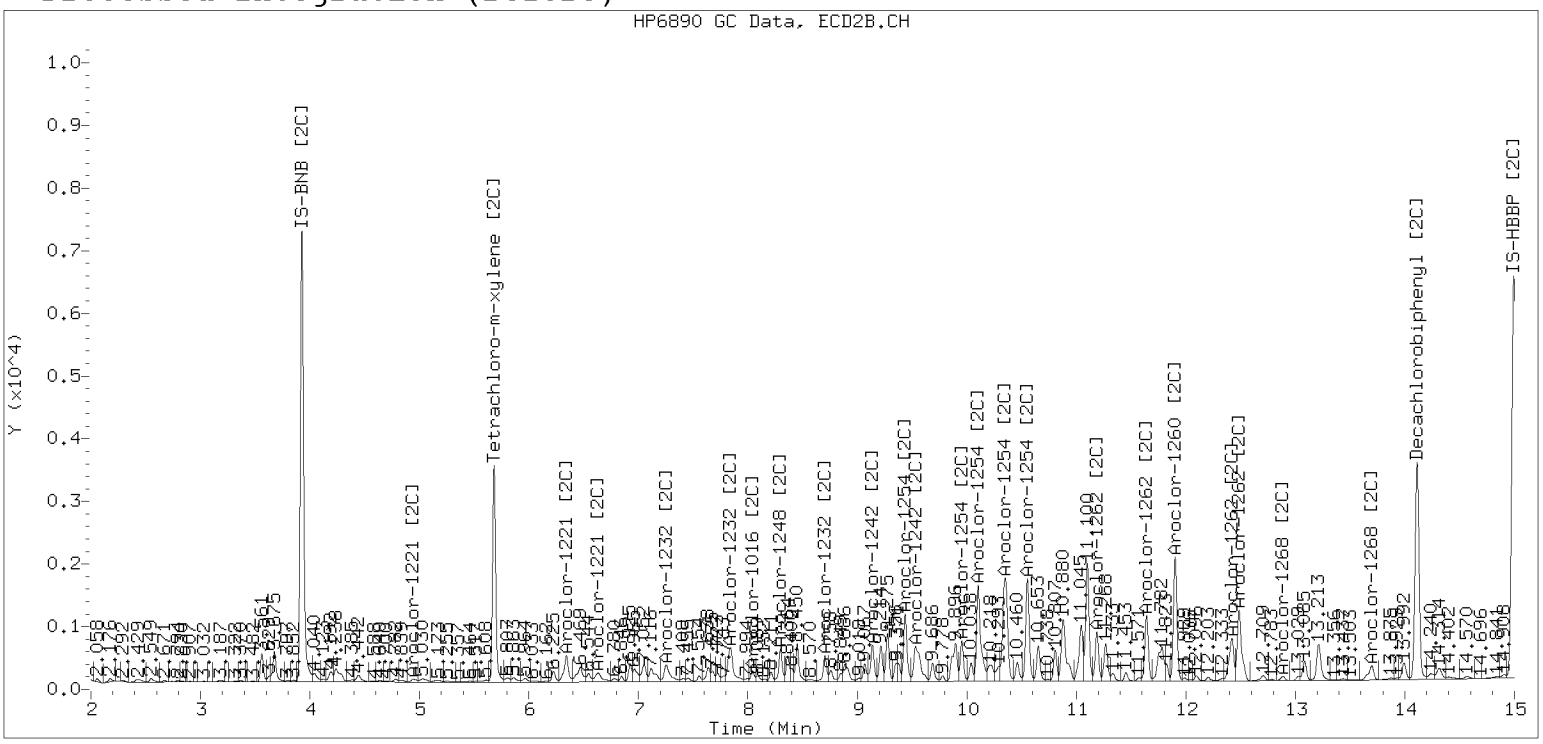
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282319ECD7.D Injection Date: 28-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1052

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0420-02 A	File ID:	02282320ECD7.D
Sampled:	01/19/23 08:37	Prepared:	02/15/23 16:55	Analyzed:	02/28/23 22:35
% Solids:	53.56	Preparation:	EPA 3546 (Microwave)	Initial/Final:	23.64 g Wet / 2.5 mL
Batch:	BLB0391	Sequence:	SLC0014	Calibration:	GB00069
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	3	11.8	4.6	11.8	U
11104-28-2	Aroclor 1221	1	3	11.8	4.6	11.8	U
11141-16-5	Aroclor 1232	1	3	11.8	4.6	11.8	U
53469-21-9	Aroclor 1242	1	3	11.8	4.6	11.8	U
12672-29-6	Aroclor 1248	2	3	39.3	4.6	11.8	D
11097-69-1	Aroclor 1254	2	3	61.9	4.6	11.8	D
11096-82-5	Aroclor 1260	2	3	56.3	1.7	11.8	D

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.8979*	*6.55*	*83.0*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.8979*	*5.12*	*64.8*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.8979*	*6.03*	*76.4*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.8979*	*5.96*	*75.5*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282320ECD7.D
Data file 2: /230228.b/230228.b/02282320ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0420-02RE1
Client ID:
Injection Date: 28-FEB-2023 22:35
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 3.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.003	103404	5.683	-0.004	49011	8.6	10.1	15.2	Tetrachloro-m-xylene
13.885	-0.008	92237	14.112	-0.008	59110	11.1	10.2	8.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	801200	18.9
Hexabromobiphenyl	1429847	846744	-40.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	331997	5.3
Hexabromobiphenyl	513946	381133	-25.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	8.397	-0.009	20302	51.9	1	8.299	-0.008	11764	74.2
Aroclor-1248	2	8.566	-0.014	18104	36.4	2	8.706	-0.009	9612	58.6
Aroclor-1248	3	8.985	-0.011	49558	52.9	3	9.142	-0.027	12521	66.4
Aroclor-1248	4	9.286	-0.009	56973	119.4	4	9.532	-0.062	12163	~~53.~~7
		Total Col1Ave (4 peaks):			65.2		Total Col2Ave (4 peaks):			63.2 RPD = 3
		Corrected Ave (3 peaks):			47.1		Corrected Ave (3 peaks):			59.6 RPD = 23
										66.4
Aroclor-1254	1	9.286	-0.013	56973	70.8	1	9.439	-0.013	23771	94.2
Aroclor-1254	2	9.363	-0.016	28177	77.9	2	9.957	-0.015	12812	63.1
Aroclor-1254	3	9.661	-0.008	47170	91.2	3	10.107	-0.019	41727	95.0
Aroclor-1254	4	9.788	-0.020	80359	79.9	4	10.355	-0.019	51776	120.9
Aroclor-1254	5	10.115	-0.064	103412	1~~64.~~1	5	10.554	-0.015	38903	149.2
		Total Col1Ave (5 peaks):			~~96.~~8		Total Col2Ave (5 peaks):			104.5 RPD = 8
		Corrected Ave (4 peaks):			79.9		Corrected Ave (4 peaks):			93.3 RPD = 15
Aroclor-1260	1	11.033	-0.011	35010	114.9	1	11.643	-0.009	23472	104.7
Aroclor-1260	2	11.347	-0.013	26838	84.3	2	11.904	-0.014	42705	74.7
Aroclor-1260	3	11.719	-0.017	83430	98.8	3	12.423	-0.013	18038	118.8
Aroclor-1260	4	12.120	-0.020	44202	104.0	4	12.488	-0.014	31517	81.7
Aroclor-1260	5	12.234	-0.009	21018	114.9	NS	---			----
		Total Col1Ave (5 peaks):			103.4		Total Col2Ave (4 peaks):			95.0 RPD = 8
		Corrected Ave (4 peaks):			100.5		Corrected Ave (3 peaks):			87.1 RPD = 14
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.907 - 13.793) = 1676995 Col1 Total PCB = 0.2 ppm*

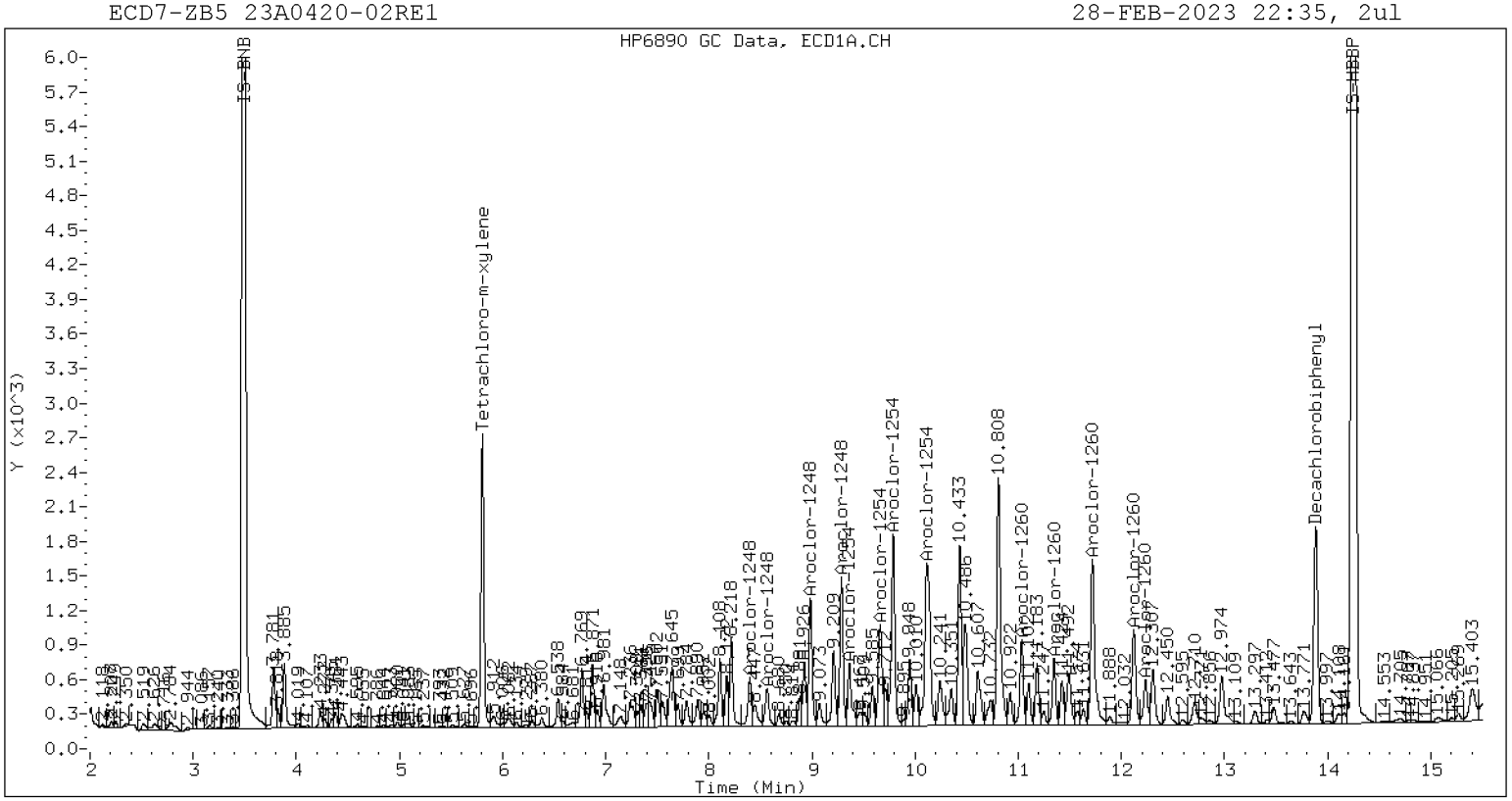
Total PCB Area Col2 (5.787 - 14.020) = 869600 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

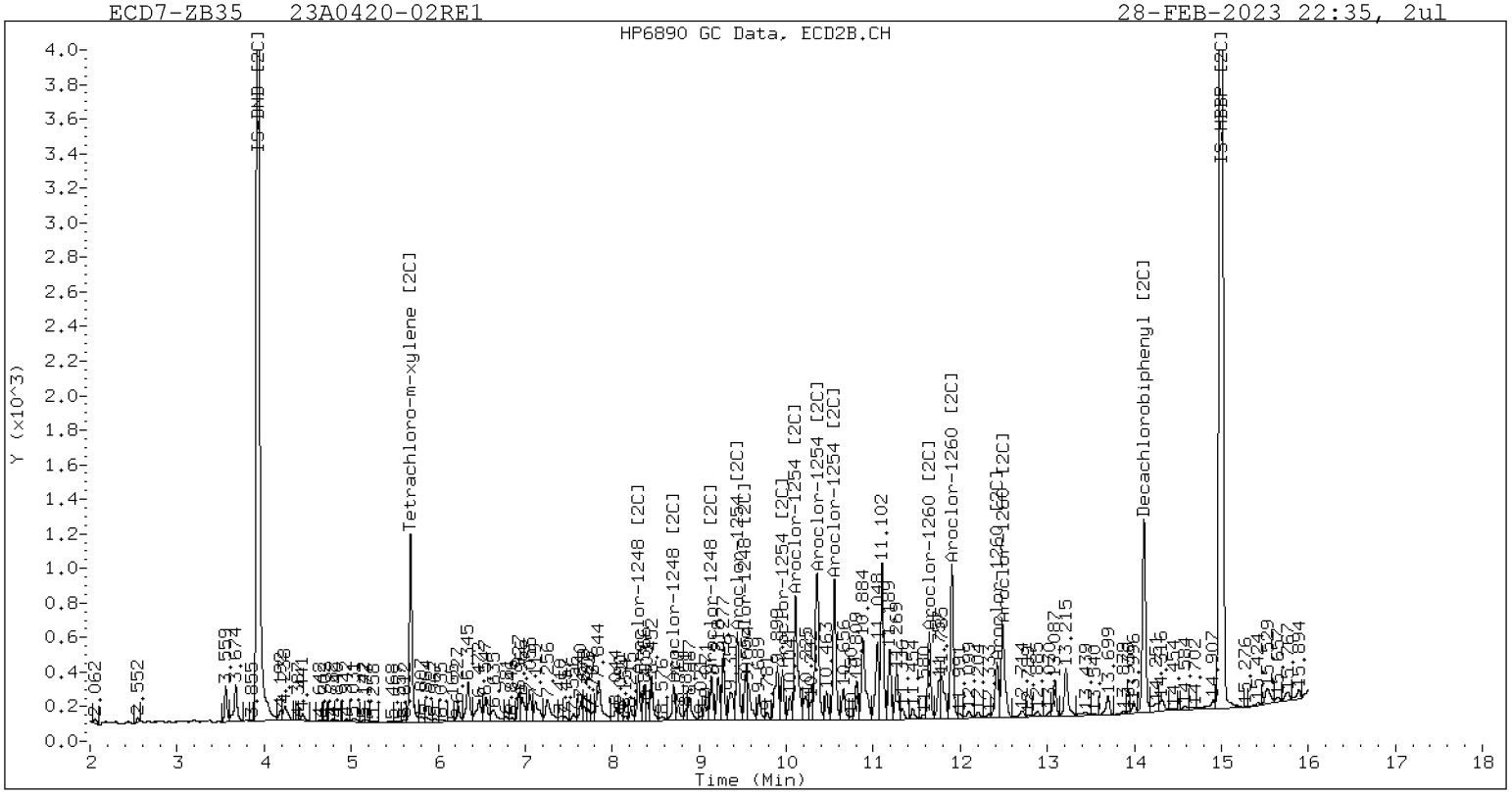
PCB Dual Column Chromatograms

ECD7-ZB5 23A0420-02RE1 28-FEB-2023 22:35, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0420-02RE1 28-FEB-2023 22:35, 2ul

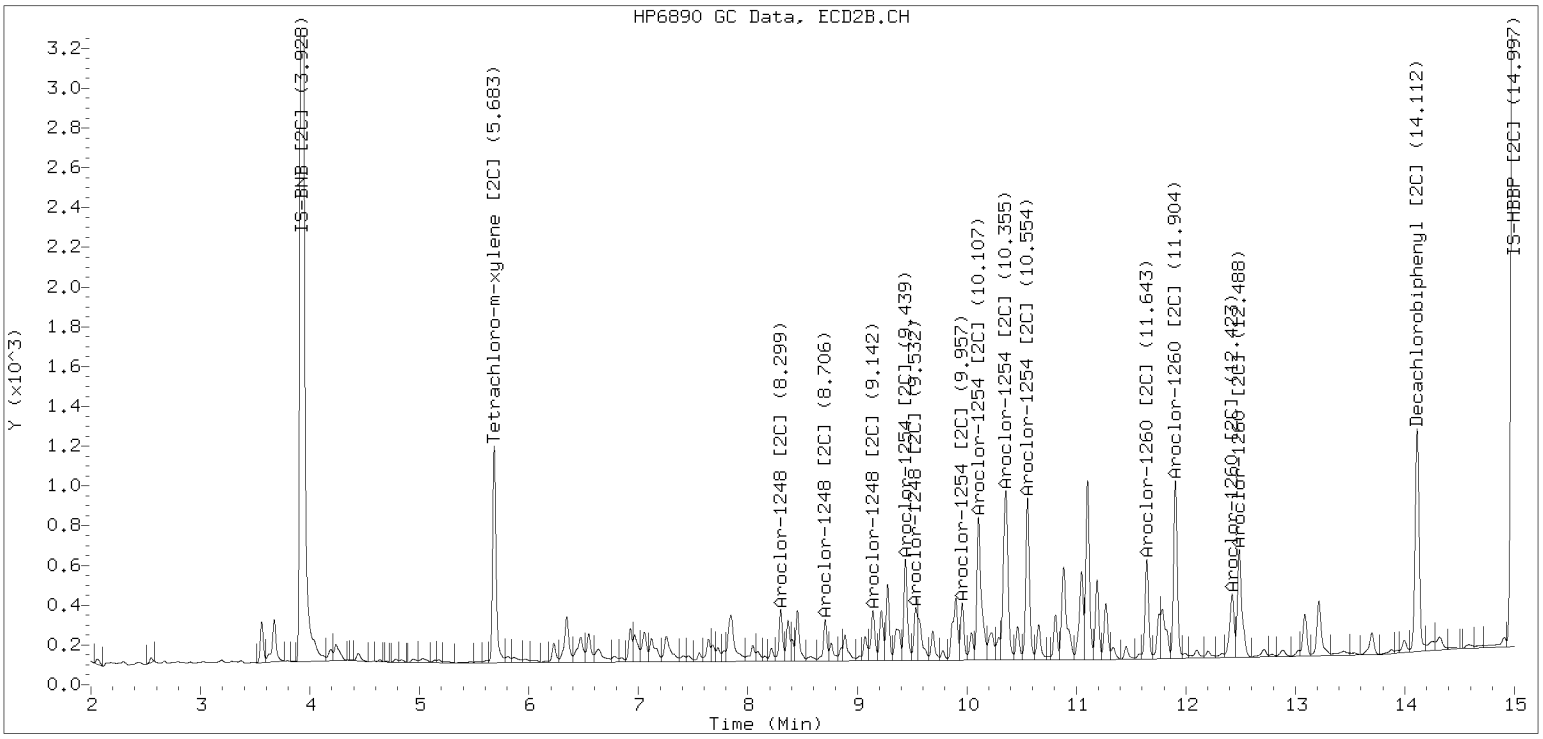


ZB-35 Manual Integration: YES

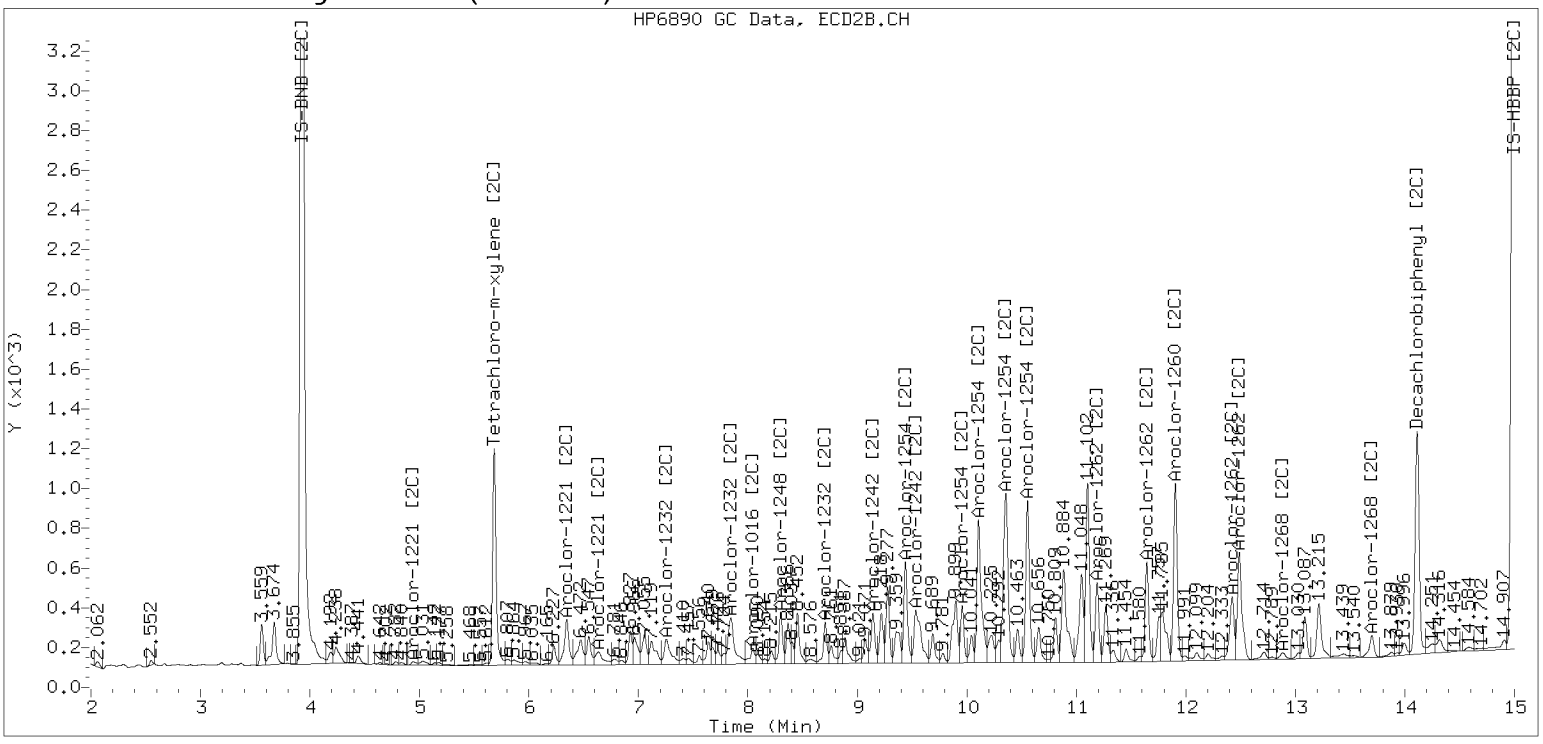
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282320ECD7.D Injection Date: 28-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1057

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0420-03 A	File ID:	02282321ECD7.D
Sampled:	01/19/23 09:16	Prepared:	02/15/23 16:55	Analyzed:	02/28/23 22:56
% Solids:	55.94	Preparation:	EPA 3546 (Microwave)	Initial/Final:	22.86 g Wet / 2.5 mL
Batch:	BLB0391	Sequence:	SLC0014	Calibration:	GB00069
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	3	11.7	4.6	11.7	U
11104-28-2	Aroclor 1221	1	3	11.7	4.6	11.7	U
11141-16-5	Aroclor 1232	1	3	11.7	4.6	11.7	U
53469-21-9	Aroclor 1242	1	3	11.7	4.6	11.7	U
12672-29-6	Aroclor 1248	1	3	43.7	4.6	11.7	D
11097-69-1	Aroclor 1254	2	3	69.7	4.6	11.7	D
11096-82-5	Aroclor 1260	2	3	57.8	1.7	11.7	D

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.8199*	*7.13*	*91.2*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.8199*	*5.58*	*71.3*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.8199*	*6.59*	*84.3*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.8199*	*6.61*	*84.5*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282321ECD7.D
Data file 2: /230228.b/230228.b/02282321ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0420-03RE1
Client ID:
Injection Date: 28-FEB-2023 22:56
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 3.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.002	114245	5.685	-0.003	54010	9.5	11.3	16.9	Tetrachloro-m-xylene
13.885	-0.008	97018	14.112	-0.008	62910	12.2	11.2	7.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	804676	19.4
Hexabromobiphenyl	1429847	810548	-43.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	326824	3.7
Hexabromobiphenyl	513946	367649	-28.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.396	-0.009	23250	59.2	1	8.299	-0.008	12923	82.8
Aroclor-1248	2	8.565	-0.015	18960	38.0	2	8.705	-0.009	10228	63.4
Aroclor-1248	3	8.985	-0.012	56972	60.5	3	9.140	-0.028	13082	70.5
Aroclor-1248	4	9.286	-0.009	67343	140.5	4	9.531	-0.064	13674	~~61.3~~ 72.23
		Total Col1Ave (4 peaks):			74.6		Total Col2Ave (4 peaks):			69.5 RPD = 7
		Corrected Ave (3 peaks):			52.6		Corrected Ave (3 peaks):			65.1 RPD = 21
Aroclor-1254	1	9.286	-0.013	67343	83.3	1	9.437	-0.014	26913	108.3
Aroclor-1254	2	9.362	-0.017	31032	85.4	2	9.956	-0.016	15121	75.7
Aroclor-1254	3	9.660	-0.010	53137	102.3	3	10.106	-0.020	48351	111.8
Aroclor-1254	4	9.786	-0.022	92734	91.8	4	10.354	-0.021	57557	136.6
Aroclor-1254	5	10.114	-0.064	116246	~~183.~~6	5	10.553	-0.017	41443	161.5
		Total Col1Ave (5 peaks):			~~109.~~3		Total Col2Ave (5 peaks):			118.8 RPD = 8
		Corrected Ave (4 peaks):			90.7		Corrected Ave (4 peaks):			108.1 RPD = 17
Aroclor-1260	1	11.032	-0.012	35369	121.3	1	11.643	-0.010	24936	115.3
Aroclor-1260	2	11.347	-0.013	29263	96.1	2	11.904	-0.014	44552	80.8
Aroclor-1260	3	11.718	-0.018	84365	104.4	3	12.423	-0.012	16531	112.9
Aroclor-1260	4	12.119	-0.021	45581	112.0	4	12.486	-0.016	31676	85.2
Aroclor-1260	5	12.233	-0.010	19366	110.6	NS	---			----
		Total Col1Ave (5 peaks):			108.9		Total Col2Ave (4 peaks):			98.5 RPD = 10
		Corrected Ave (4 peaks):			105.8		Corrected Ave (3 peaks):			92.9 RPD = 13
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.793) = 1884724 Col1 Total PCB = 0.2 ppm*

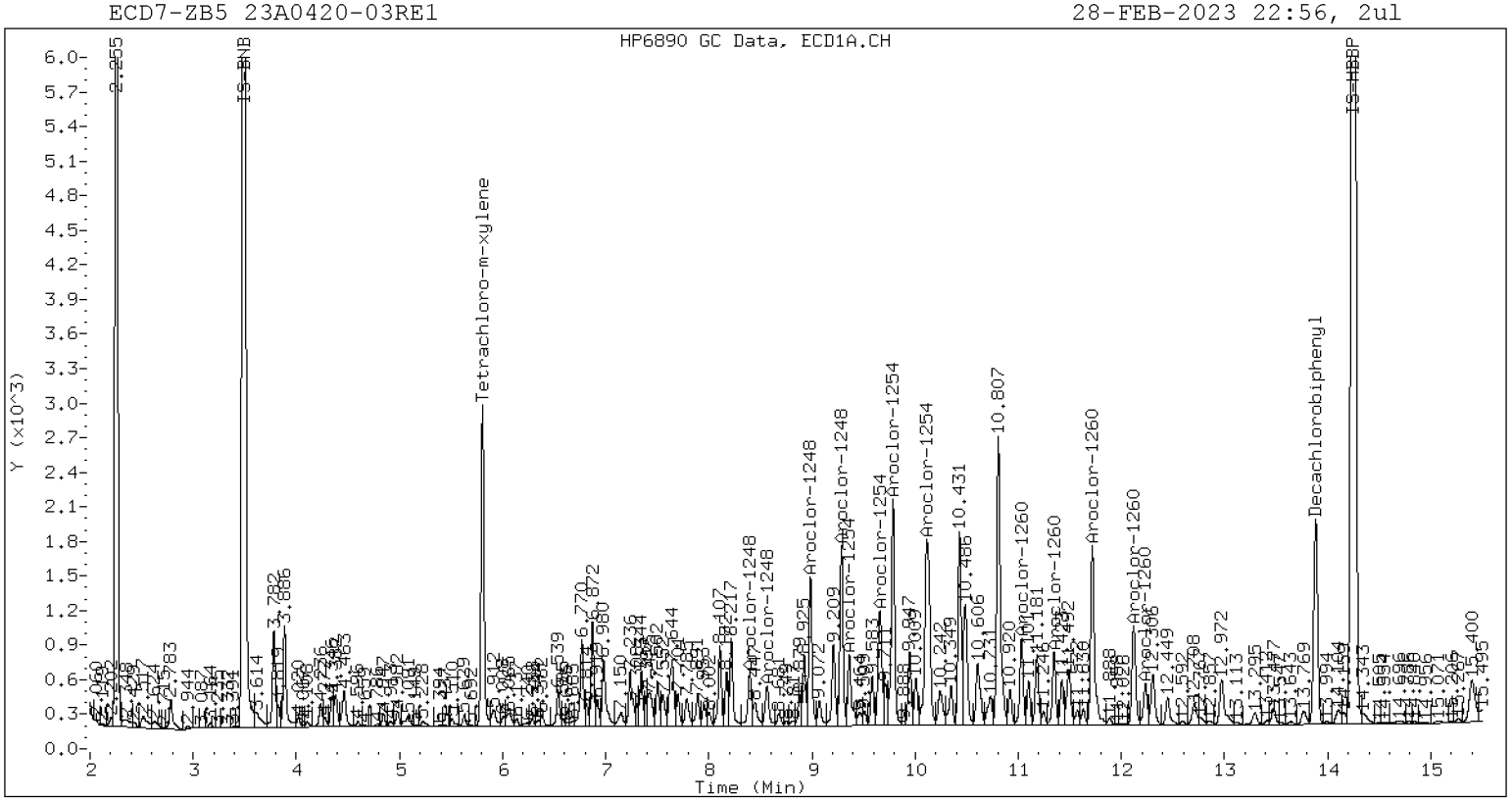
Total PCB Area Col2 (5.787 - 14.020) = 947580 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

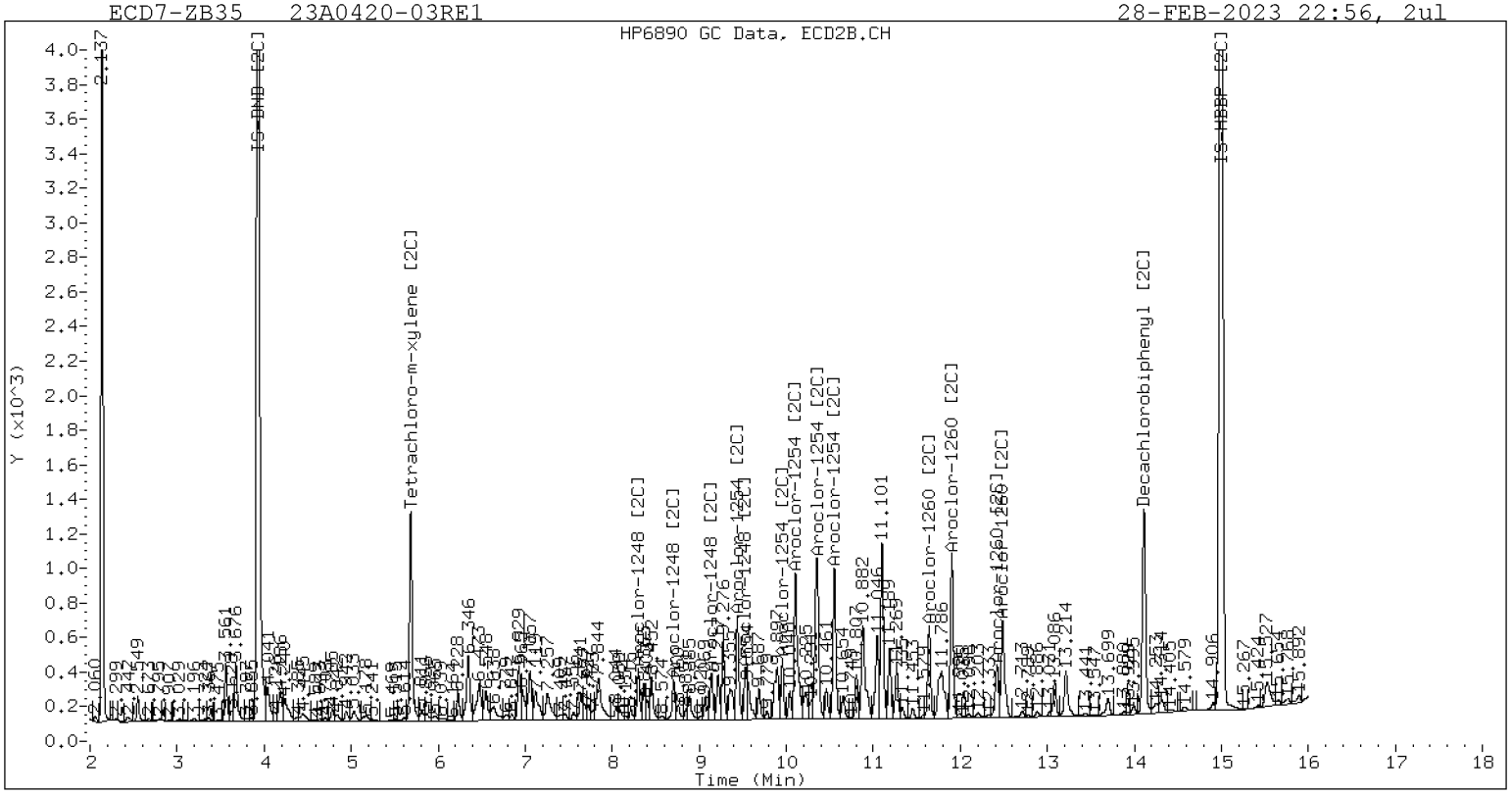
PCB Dual Column Chromatograms

ECD7-ZB5 23A0420-03RE1 28-FEB-2023 22:56, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0420-03RE1 28-FEB-2023 22:56, 2ul

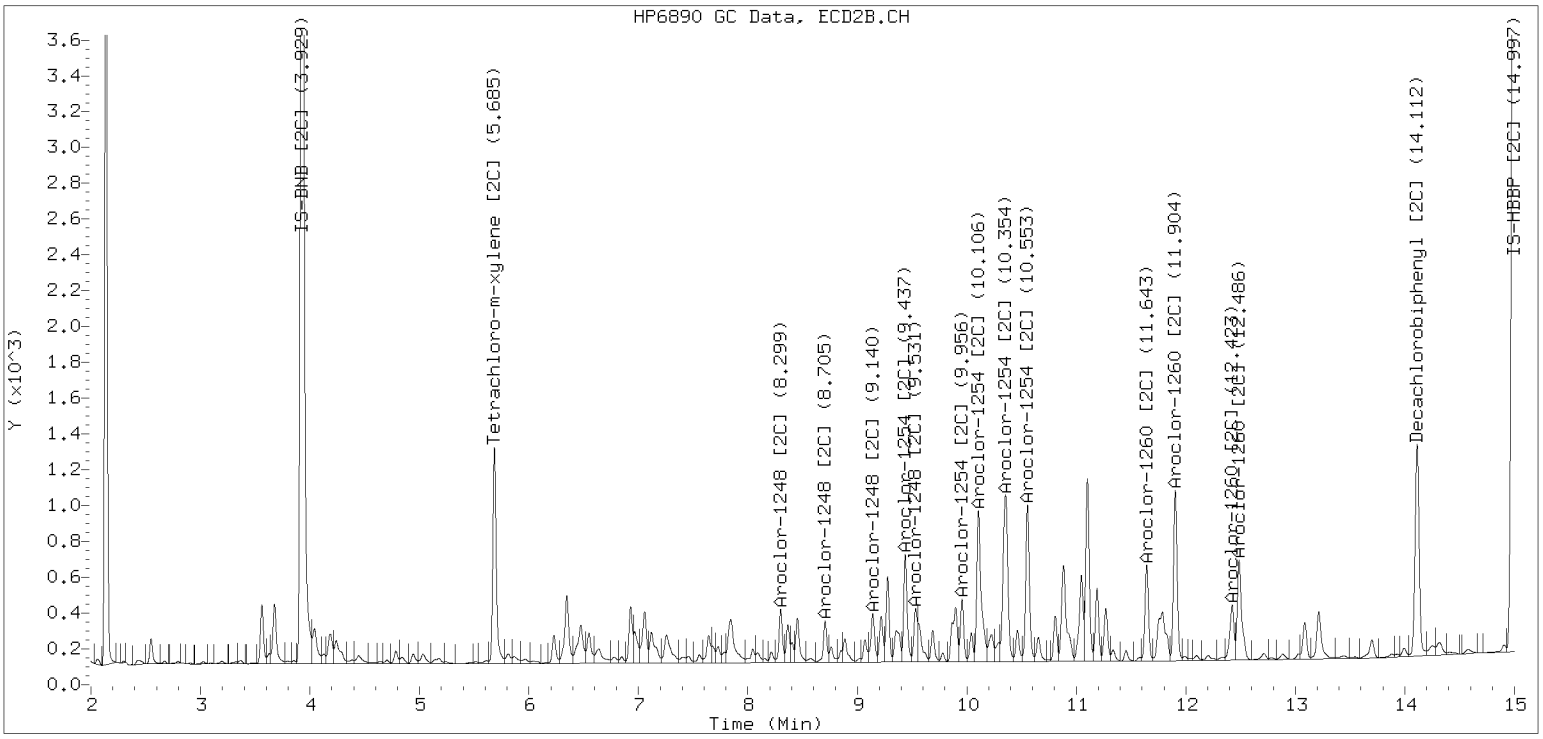


ZB-35 Manual Integration: YES

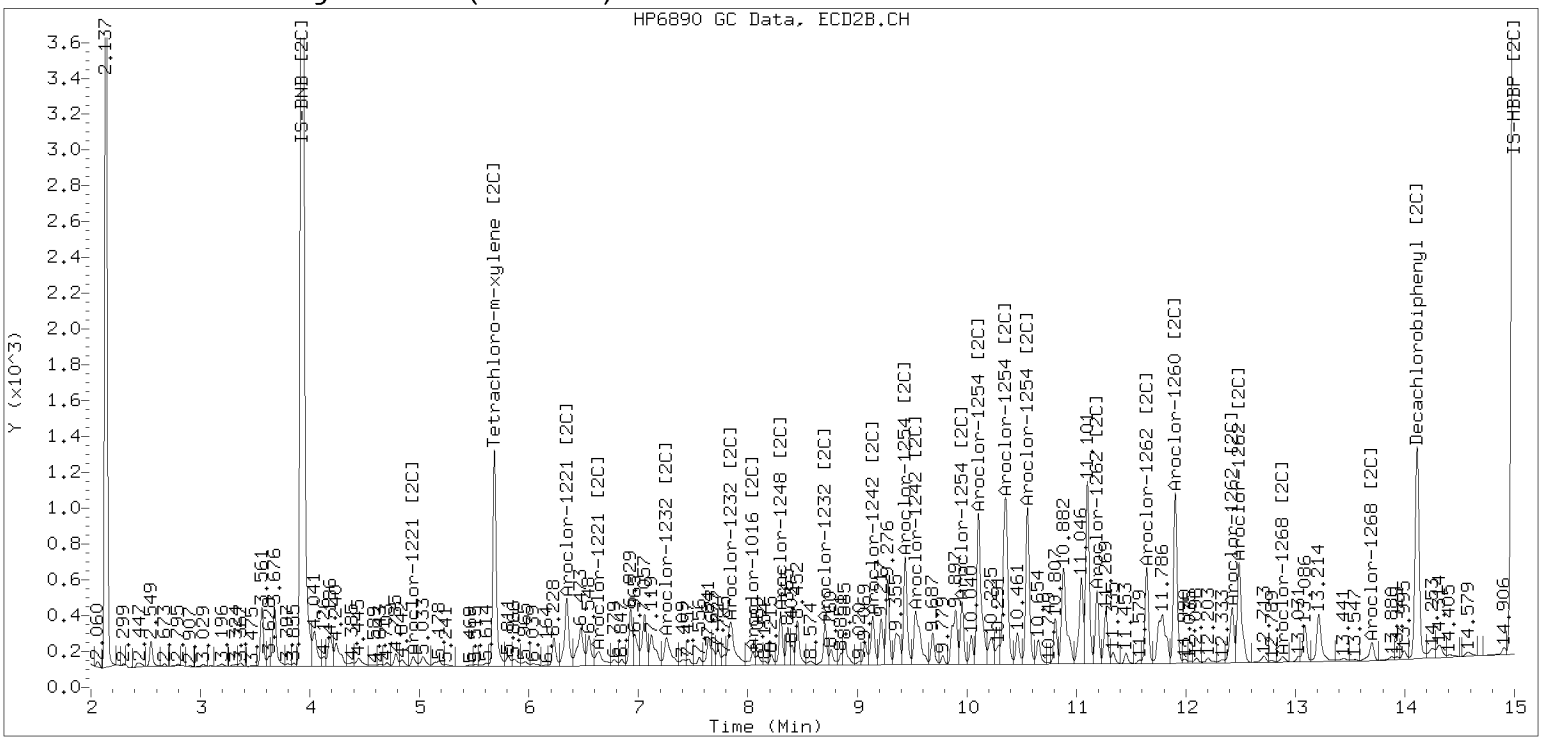
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282321ECD7.D Injection Date: 28-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-IT1051

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0420-04 A	File ID:	02282322ECD7.D
Sampled:	01/19/23 09:55	Prepared:	02/15/23 16:55	Analyzed:	02/28/23 23:17
% Solids:	70.53	Preparation:	EPA 3546 (Microwave)	Initial/Final:	17.72 g Wet / 2.5 mL
Batch:	BLB0391	Sequence:	SLC0014	Calibration:	GB00069
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	21.9	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	36.2	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	46.5	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*8.0013*	*7.48*	*93.5*	*40 - 126*	
Tetrachlorometaxylene	*1*	*8.0013*	*4.77*	*59.6*	*44 - 120*	
Decachlorobiphenyl	*2*	*8.0013*	*7.30*	*91.2*	*40 - 126*	
Tetrachlorometaxylene	*2*	*8.0013*	*6.04*	*75.5*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282322ECD7.D
Data file 2: /230228.b/230228.b/02282322ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0420-04
Client ID:
Injection Date: 28-FEB-2023 23:17
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.804	-0.003	265430	5.682	-0.005	130045	23.8	30.2	23.6	Tetrachloro-m-xylene
13.885	-0.008	193048	14.111	-0.009	148792	37.4	36.5	2.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	745911	10.7
Hexabromobiphenyl	1429847	524263	-63.3 <-

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	293455	-6.9
Hexabromobiphenyl	513946	267743	-47.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.392	-0.014	41757	114.7	1	8.296	-0.011	15584	111.2
Aroclor-1248	2	8.563	-0.018	29141	63.0	2	8.703	-0.012	16067	110.9
Aroclor-1248	3	8.981	-0.015	64969	74.4	3	9.136	-0.033	17619	105.7
Aroclor-1248	4	9.282	-0.013	78941	177.7	4	9.528	-0.067	19305	96.4
		Total Col1Ave (4 peaks):			107.5		Total Col2Ave (4 peaks):			106.1 RPD = 1
		Corrected Ave (3 peaks):			84.1		Corrected Ave (3 peaks):			104.3 RPD = 22
										109.27
Aroclor-1254	1	9.282	-0.017	78941	105.4	1	9.438	-0.013	42017	188.4
Aroclor-1254	2	9.359	-0.020	26048	77.3	2	9.953	-0.019	18014	100.4
Aroclor-1254	3	9.662	-0.007	94503	196.2	3	10.102	-0.024	62036	159.8
Aroclor-1254	4	9.784	-0.024	134366	143.5	4	10.350	-0.024	73137	193.2
Aroclor-1254	5	10.116	-0.062	78638	134.0	5	10.552	-0.018	60888	264.2
		Total Col1Ave (5 peaks):			131.3		Total Col2Ave (5 peaks):			181.2 RPD = 32
		Corrected Ave (4 peaks):			115.1		Corrected Ave (4 peaks):			160.5 RPD = 33
					130.6					
Aroclor-1260	1	11.032	-0.012	51692	274.1	1	11.640	-0.013	38219	242.8
Aroclor-1260	2	11.346	-0.015	41115	208.7	2	11.902	-0.016	70898	176.5
Aroclor-1260	3	11.717	-0.018	138262	264.5	3	12.419	-0.016	35446	332.4
Aroclor-1260	4	12.117	-0.023	63766	242.3	4	12.486	-0.016	48291	178.3
Aroclor-1260	5	12.232	-0.011	31319	276.5	NS	---			----
		Total Col1Ave (5 peaks):			253.2		Total Col2Ave (4 peaks):			232.5 RPD = 9
		Corrected Ave (4 peaks):			247.4		Corrected Ave (3 peaks):			199.2 RPD = 22
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.793) = 3271170 Col1 Total PCB = 0.4 ppm*

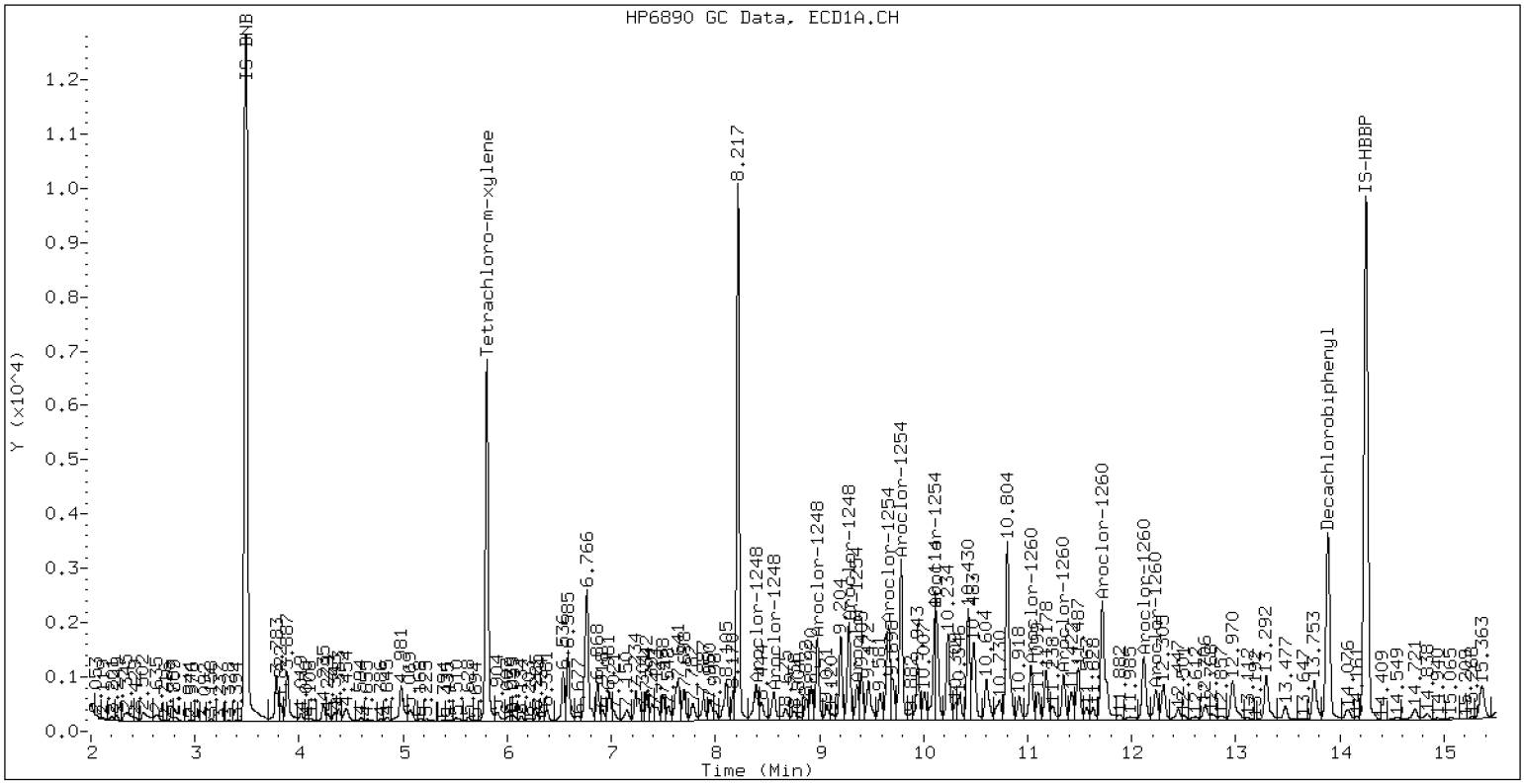
Total PCB Area Col2 (5.787 - 14.020) = 1642721 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

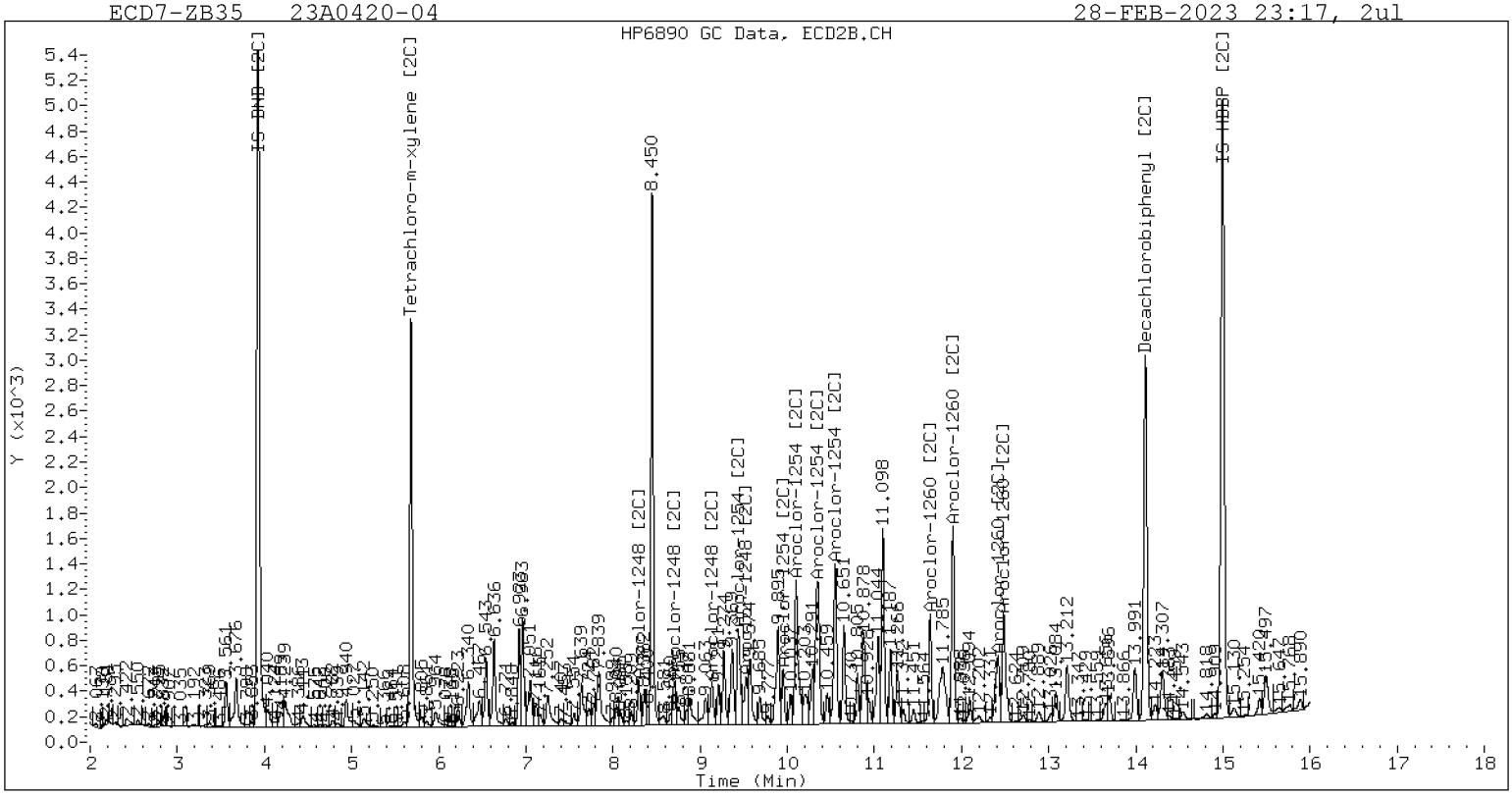
PCB Dual Column Chromatograms

ECD7-ZB5 23A0420-04 28-FEB-2023 23:17, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0420-04 28-FEB-2023 23:17, 2ul

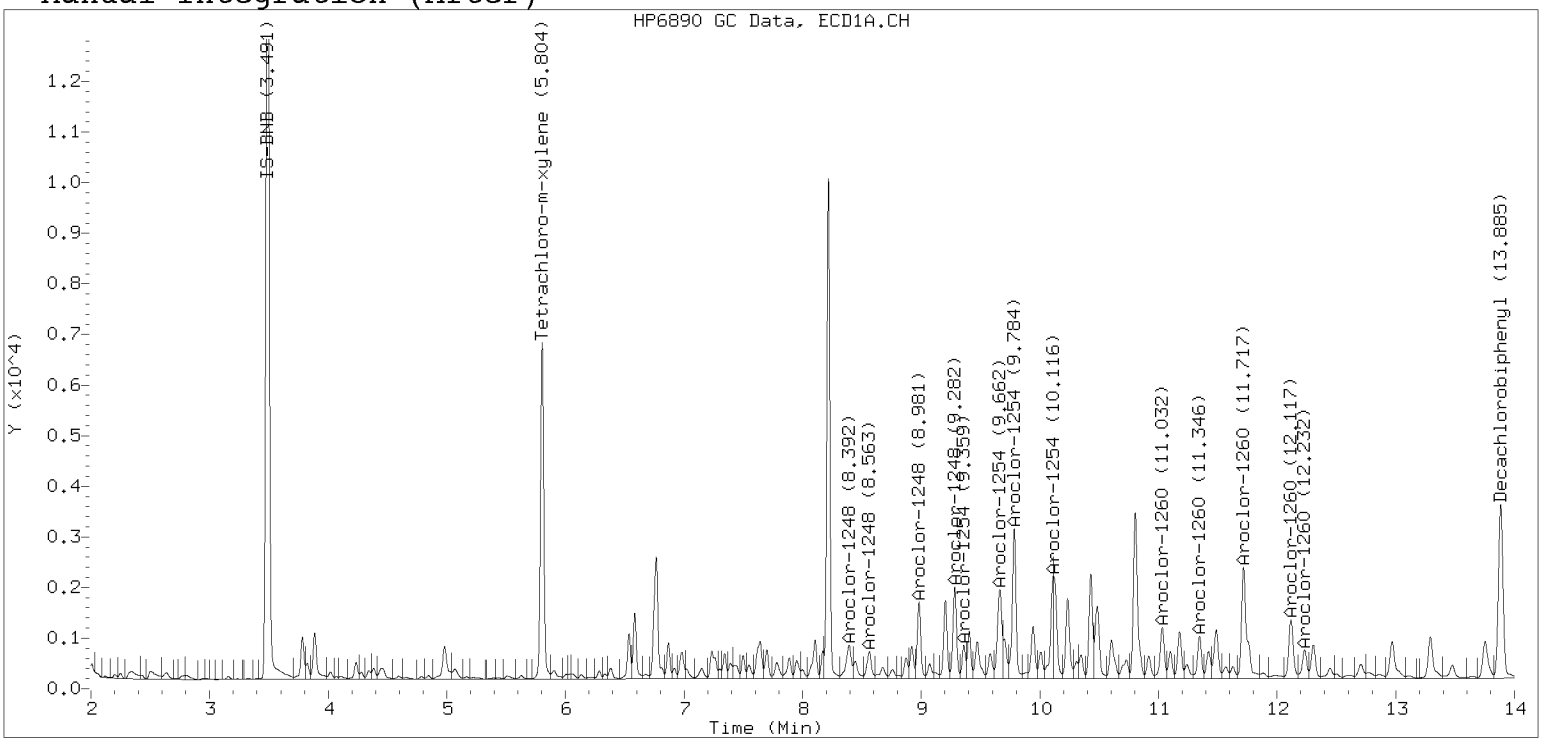


ZB-35 Manual Integration: YES

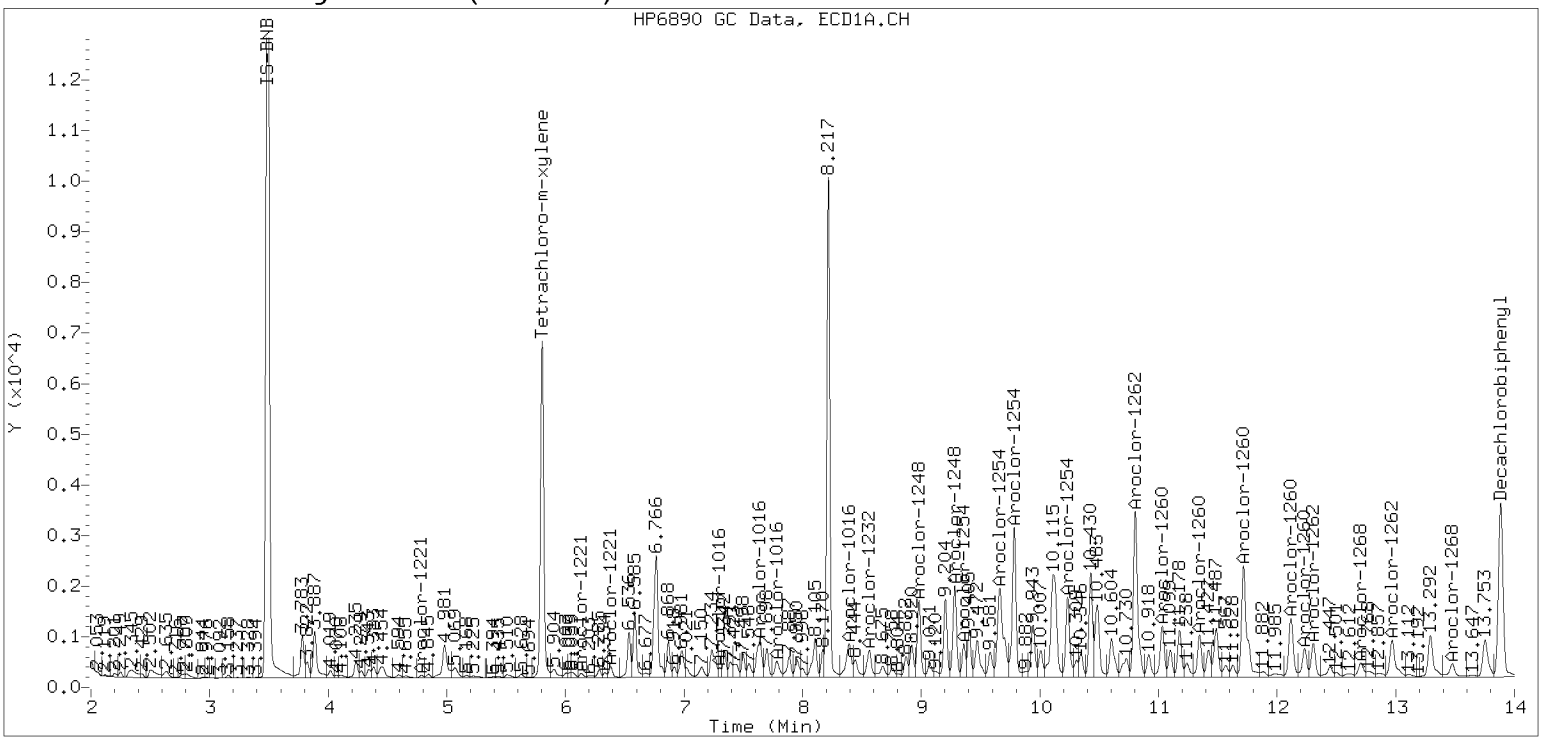
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230228.b/02282322ECD7.D Injection Date: 28-FEB-2023 23:17

Manual Integration (After)



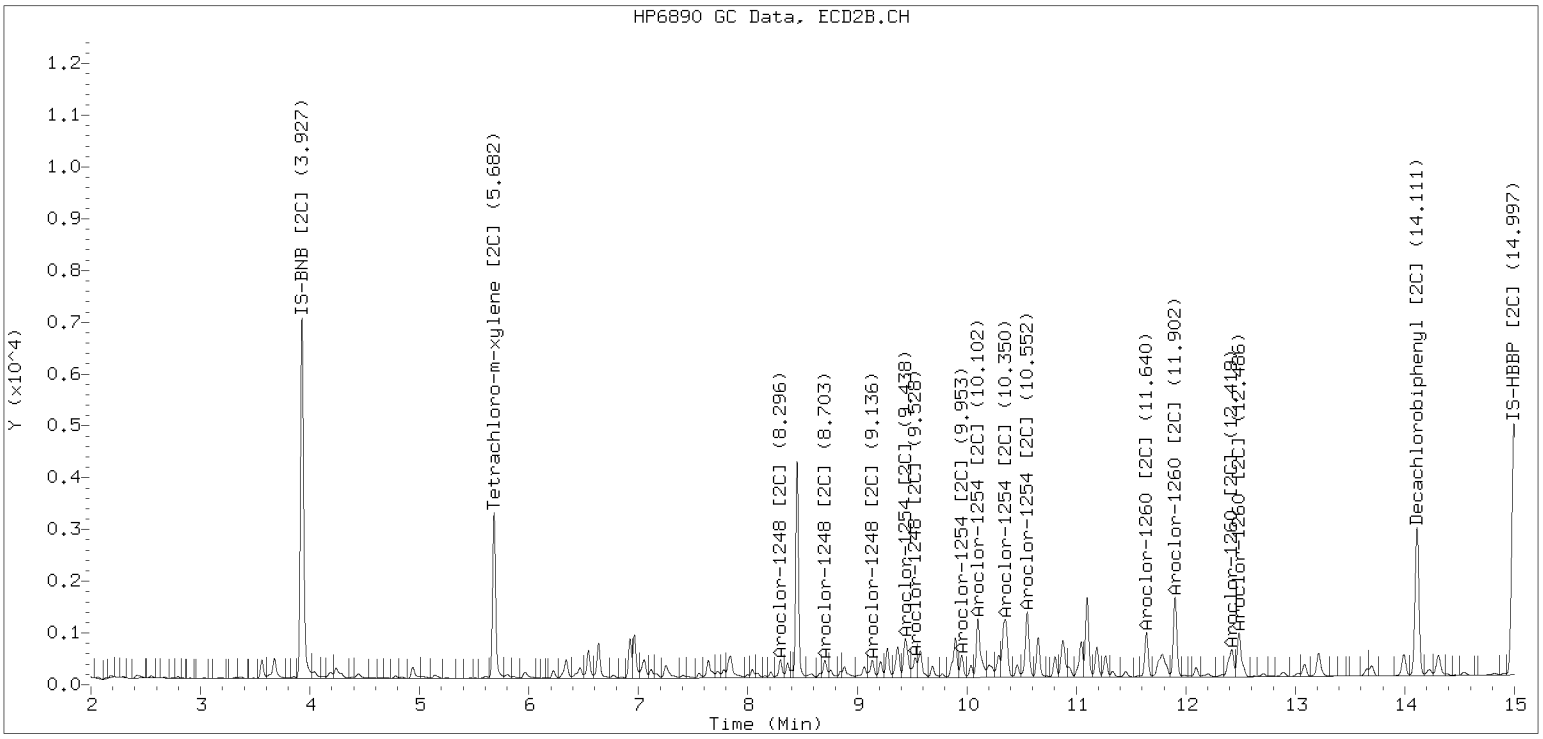
Processed Integration (Before)



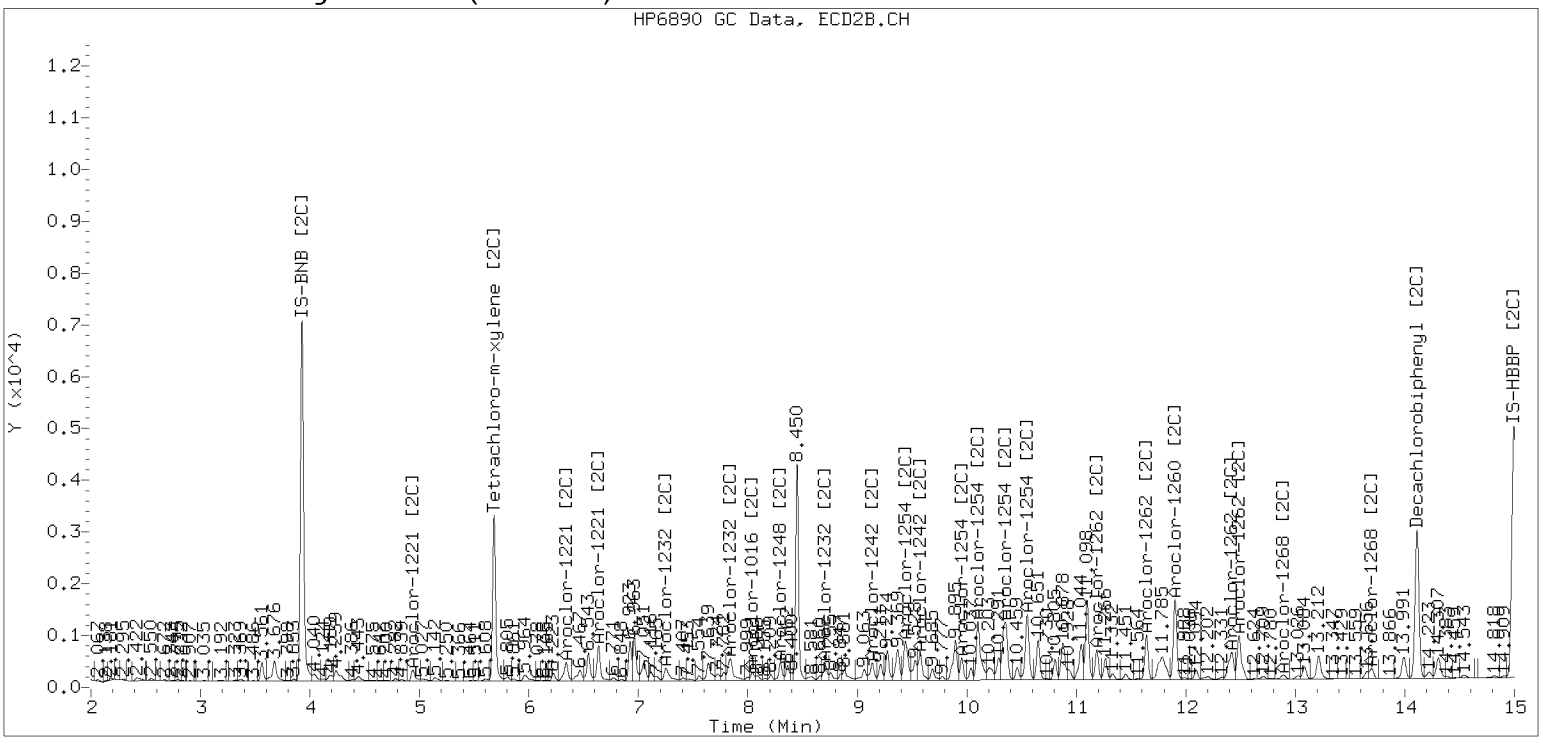
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282322ECD7.D Injection Date: 28-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1125

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0420-05 A	File ID:	02282325ECD7.D
Sampled:	01/19/23 10:32	Prepared:	02/15/23 16:55	Analyzed:	03/01/23 00:20
% Solids:	54.68	Preparation:	EPA 3546 (Microwave)	Initial/Final:	22.9 g Wet / 2.5 mL
Batch:	BLB0391	Sequence:	SLC0014	Calibration:	GB00069
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	15	59.9	23.4	59.9	U
11104-28-2	Aroclor 1221	1	15	59.9	23.4	59.9	U
11141-16-5	Aroclor 1232	1	15	59.9	23.4	59.9	U
53469-21-9	Aroclor 1242	1	15	59.9	23.4	59.9	U
12672-29-6	Aroclor 1248	2	15	435	23.4	59.9	D
11097-69-1	Aroclor 1254	2	15	371	23.4	59.9	D
11096-82-5	Aroclor 1260	2	15	242	8.8	59.9	D

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9861*	*7.69*	*96.3*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9861*	*5.30*	*66.3*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9861*	*7.18*	*89.9*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9861*	*6.37*	*79.7*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282325ECD7.D
Data file 2: /230228.b/230228.b/02282325ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0420-05RE2
Client ID:
Injection Date: 01-MAR-2023 00:20
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 15.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.003	20644	5.685	-0.003	10385	1.8	2.1	18.3	Tetrachloro-m-xylene
13.887	-0.006	13980	14.115	-0.005	10001	2.6	2.4	6.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	781519	16.0
Hexabromobiphenyl	1429847	552782	-61.3 <-

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	332889	5.6
Hexabromobiphenyl	513946	274079	-46.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.399	-0.007	47146	123.6	1	8.301	-0.006	31487	198.1
Aroclor-1248	2	8.569	-0.012	40130	82.8	2	8.708	-0.007	23963	145.8
Aroclor-1248	3	8.988	-0.009	100428	109.8	3	9.147	-0.022	17320	91.6
Aroclor-1248	4	9.289	-0.006	90435	194.3	4	9.535	-0.059	30066	132.4
		Total Col1Ave (4 peaks):			127.6		Total Col2Ave (4 peaks):			142.0 RPD = 11
		Corrected Ave (3 peaks):			105.4		Corrected Ave (3 peaks):			123.3 RPD = 16
										145.17
Aroclor-1254	1	9.289	-0.010	90435	115.2	1	9.442	-0.010	34640	136.9
Aroclor-1254	2	9.365	-0.013	46337	131.3	2	9.959	-0.013	12964	63.7
Aroclor-1254	3	9.659	-0.010	38303	75.9	3	10.111	-0.014	63484	144.2
Aroclor-1254	4	9.792	-0.016	119875	122.2	4	10.358	-0.017	60118	140.0
Aroclor-1254	5	10.138	-0.041	52258	85.0	5	10.558	-0.012	35273	134.9
		Total Col1Ave (5 peaks):			105.9		Total Col2Ave (5 peaks):			123.9 RPD = 16
		Corrected Ave (4 peaks):			99.6		Corrected Ave (4 peaks):			118.9 RPD = 18
Aroclor-1260	1	11.035	-0.009	23963	120.5	1	11.647	-0.006	18671	115.9
Aroclor-1260	2	11.351	-0.009	17772	85.5	2	11.908	-0.009	26645	64.8
Aroclor-1260	3	11.723	-0.013	42555	77.2	3	12.427	-0.008	8410	77.1
Aroclor-1260	4	12.124	-0.016	21581	77.8	4	12.492	-0.009	17988	64.9
Aroclor-1260	5	12.236	-0.007	9169	76.8	NS	---			----
		Total Col1Ave (5 peaks):			87.6		Total Col2Ave (4 peaks):			80.6 RPD = 8
		Corrected Ave (4 peaks):			79.3		Corrected Ave (3 peaks):			68.9 RPD = 14
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.793) = 1844607 Col1 Total PCB = 0.2 ppm*

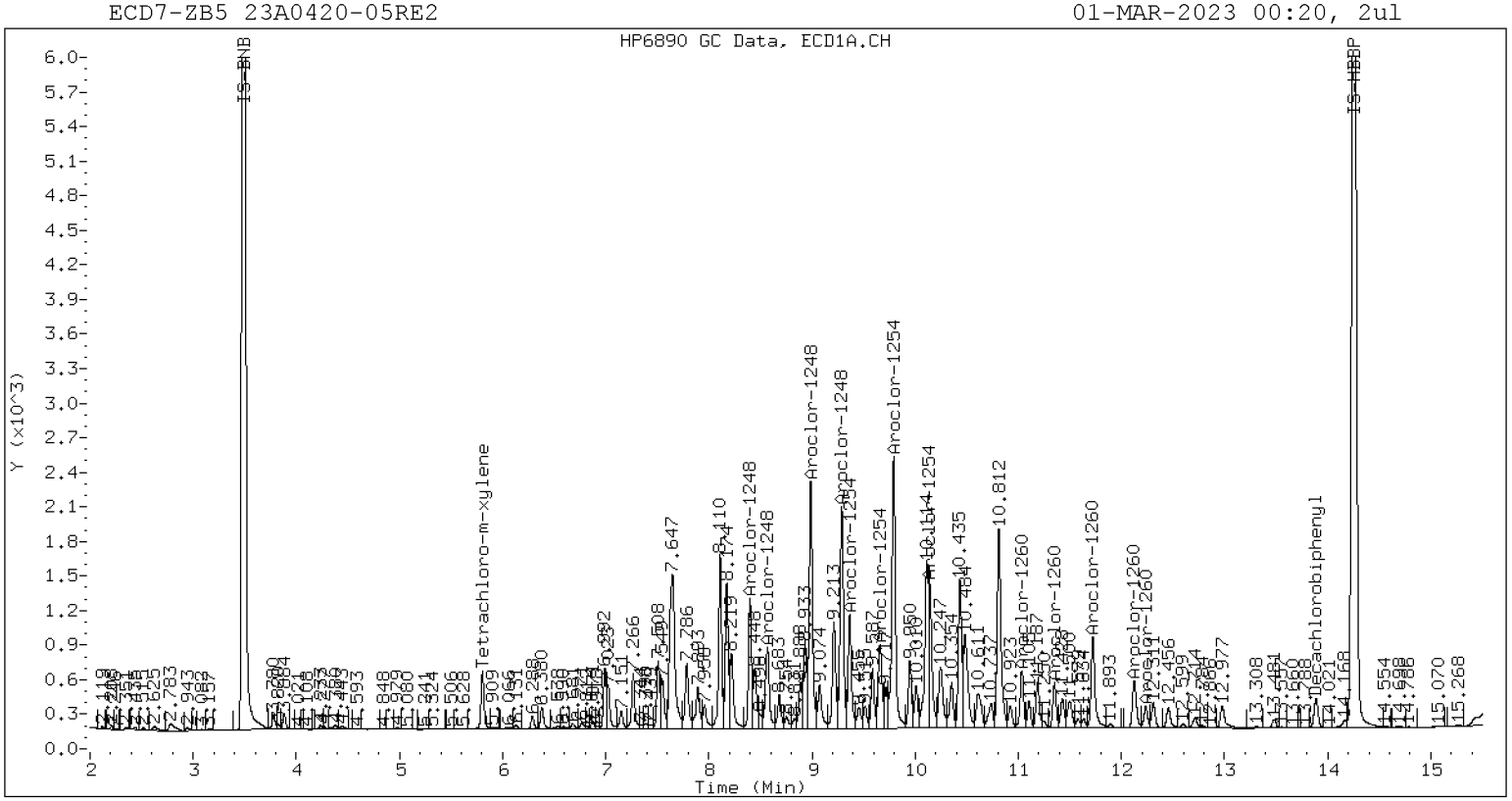
Total PCB Area Col2 (5.787 - 14.020) = 967347 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

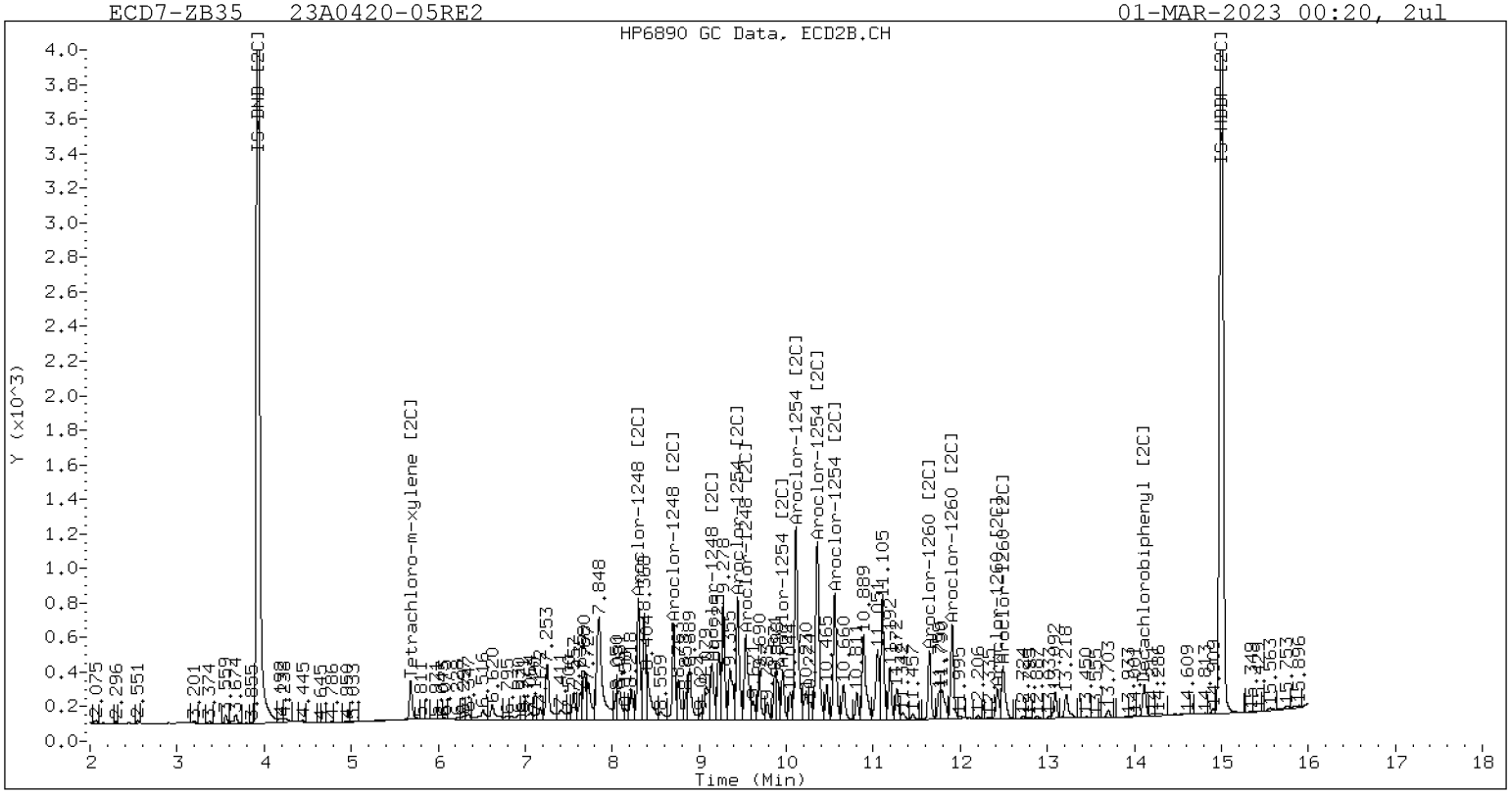
PCB Dual Column Chromatograms

ECD7-ZB5 23A0420-05RE2 01-MAR-2023 00:20, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0420-05RE2 01-MAR-2023 00:20, 2ul

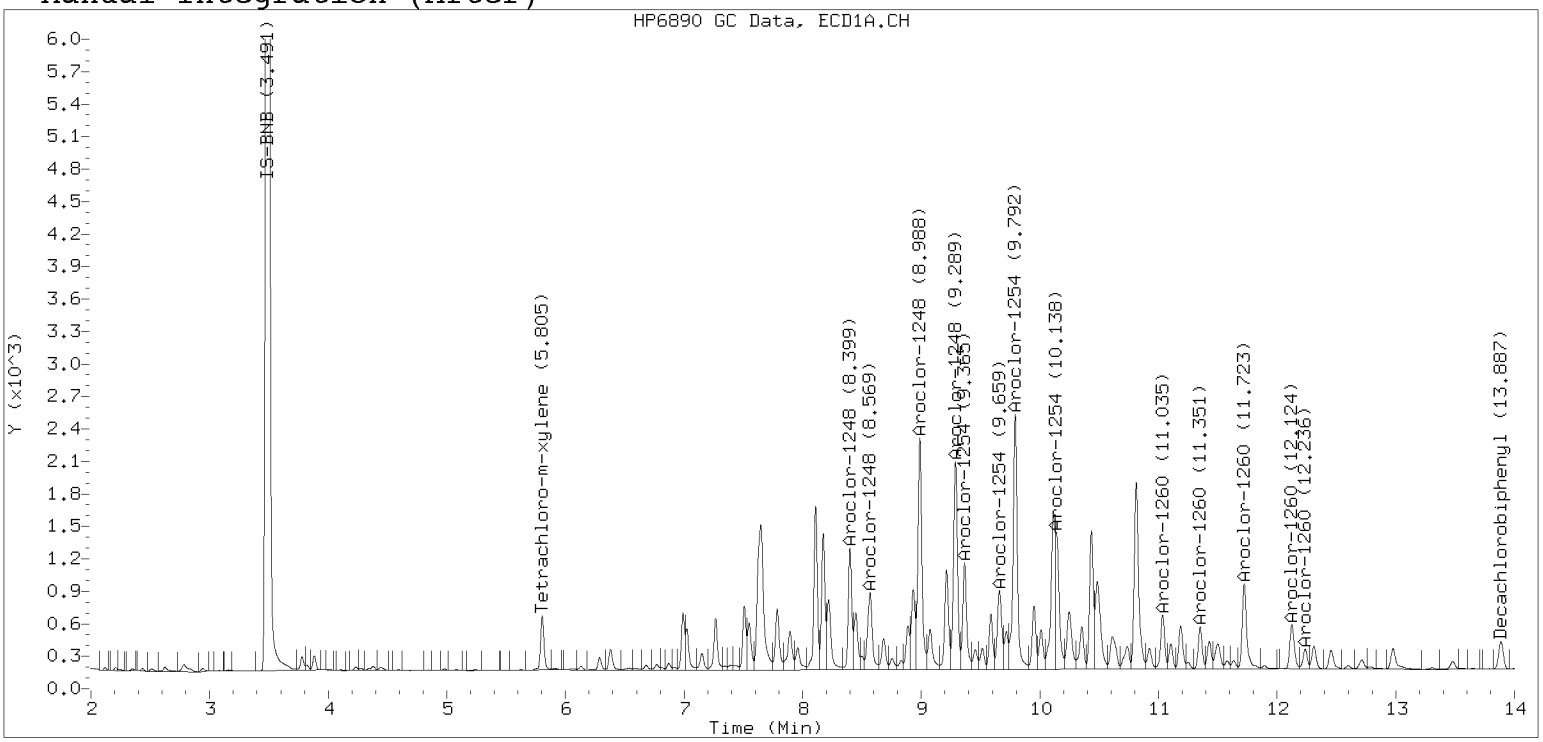


ZB-35 Manual Integration: YES

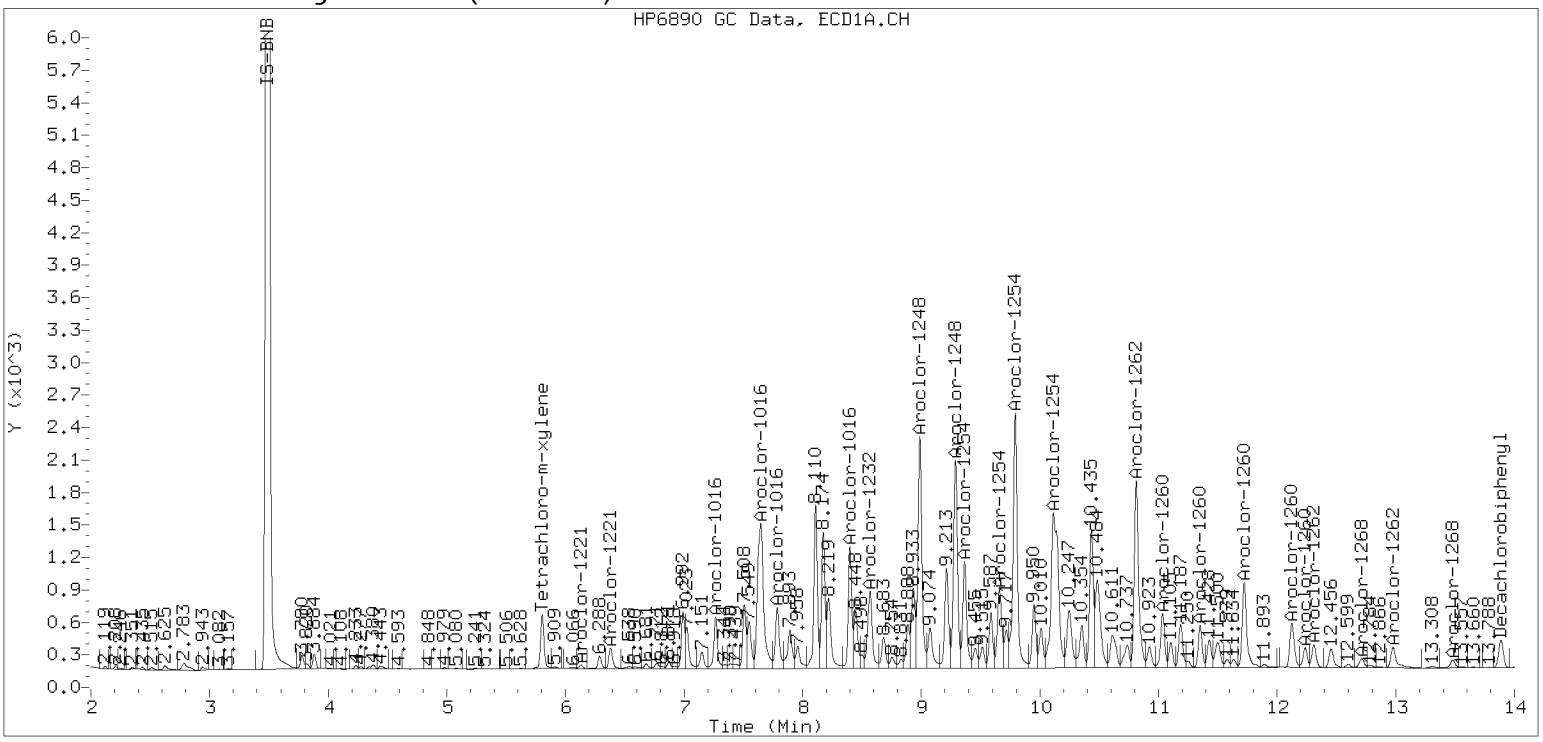
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230228.b/02282325ECD7.D Injection Date: 01-MAR-2023 00:20

Manual Integration (After)



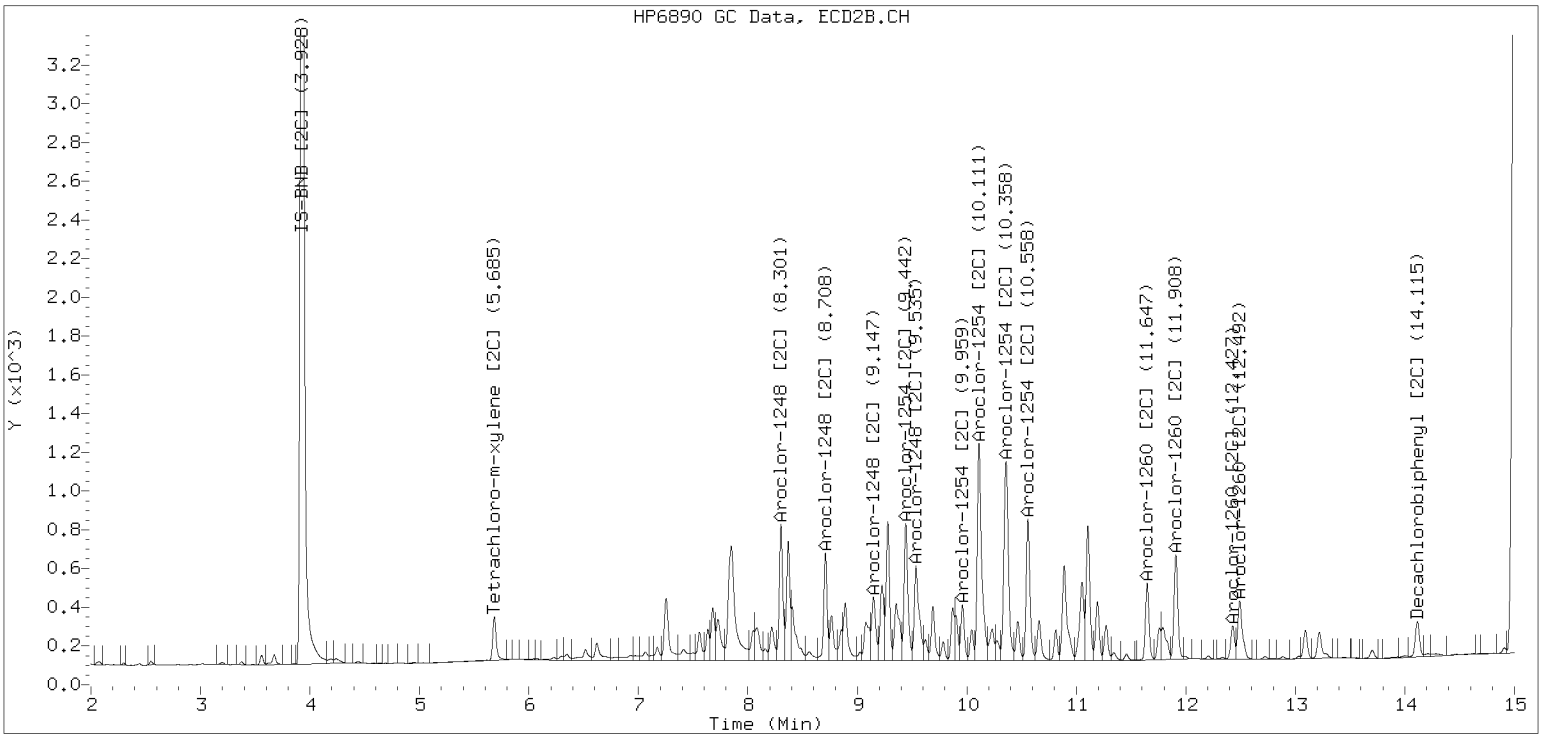
Processed Integration (Before)



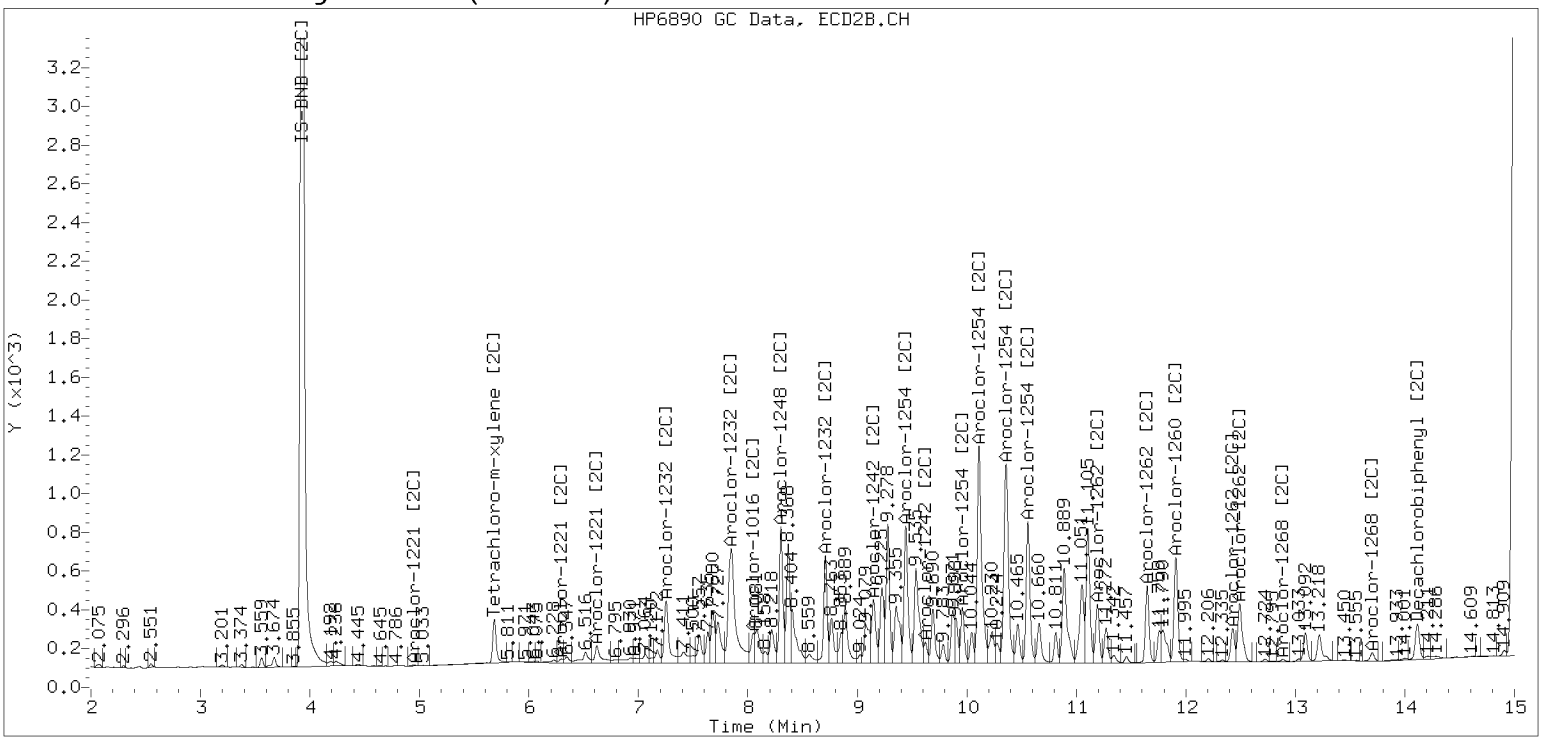
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282325ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1132

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0420-06 A	File ID:	02282326ECD7.D
Sampled:	01/19/23 10:46	Prepared:	02/15/23 16:55	Analyzed:	03/01/23 00:41
% Solids:	57.24	Preparation:	EPA 3546 (Microwave)	Initial/Final:	21.85 g Wet / 2.5 mL
Batch:	BLB0391	Sequence:	SLC0014	Calibration:	GB00069
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	25	99.9	39.0	99.9	U
11104-28-2	Aroclor 1221	1	25	99.9	39.0	99.9	U
11141-16-5	Aroclor 1232	1	25	99.9	39.0	99.9	U
53469-21-9	Aroclor 1242	1	25	99.9	39.0	99.9	U
12672-29-6	Aroclor 1248	1	25	457	39.0	99.9	D
11097-69-1	Aroclor 1254	2	25	551	39.0	99.9	D
11096-82-5	Aroclor 1260	2	25	335	14.7	99.9	D

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9956*	*9.00*	*113*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9956*	*6.47*	*80.9*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9956*	*7.85*	*98.1*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9956*	*6.95*	*87.0*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282326ECD7.D
Data file 2: /230228.b/230228.b/02282326ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0420-06RE2
Client ID:
Injection Date: 01-MAR-2023 00:41
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 25.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.002	15636	5.685	-0.003	6951	1.3	1.4	7.3	Tetrachloro-m-xylene
13.888	-0.005	12000	14.116	-0.004	7406	1.8	1.6	13.7	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	809086	20.1
Hexabromobiphenyl	1429847	676711	-52.7 <-

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	340431	8.0
Hexabromobiphenyl	513946	309692	-39.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	8.400	-0.005	24193	61.3	1	8.303	-0.004	15477	95.2
Aroclor-1248	2	8.571	-0.009	19457	38.8	2	8.710	-0.005	11112	66.1
Aroclor-1248	3	8.989	-0.007	80104	84.6	3	9.152	-0.017	12732	65.8
Aroclor-1248	4	9.291	-0.004	87180	180.9	4	9.537	-0.057	23016	99.1
	Total Col1Ave (4 peaks):				91.4	Total Col2Ave (4 peaks):				81.6 RPD = 11
	Corrected Ave (3 peaks):				61.6	Corrected Ave (3 peaks):				75.7 RPD = 21
Aroclor-1254	1	9.291	-0.008	87180	107.3	1	9.443	-0.009	31087	120.1
Aroclor-1254	2	9.368	-0.011	42549	116.4	2	9.961	-0.010	13812	66.4
Aroclor-1254	3	9.659	-0.010	38773	74.2	3	10.113	-0.012	52604	116.8
Aroclor-1254	4	9.794	-0.014	110798	109.1	4	10.361	-0.014	55012	125.3
Aroclor-1254	5	10.145	-0.033	60476	95.0	5	10.560	-0.010	32796	122.7
	Total Col1Ave (5 peaks):				100.4	Total Col2Ave (5 peaks):				110.3 RPD = 9
	Corrected Ave (4 peaks):				96.4	Corrected Ave (4 peaks):				106.5 RPD = 10
Aroclor-1260	1	11.037	-0.007	23940	98.3	1	11.649	-0.004	18183	99.9
Aroclor-1260	2	11.354	-0.007	18266	71.8	2	11.911	-0.007	24807	53.4
Aroclor-1260	3	11.725	-0.011	44612	66.1	3	12.429	-0.006	7440	60.3
Aroclor-1260	4	12.127	-0.013	22791	67.1	4	12.493	-0.009	17072	54.5
Aroclor-1260	5	12.238	-0.005	8834	60.4	NS	---			----
	Total Col1Ave (5 peaks):				72.8	Total Col2Ave (4 peaks):				67.0 RPD = 8
	Corrected Ave (4 peaks):				66.4	Corrected Ave (3 peaks):				56.1 RPD = 17
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.907 - 13.793) = 1494912 Col1 Total PCB = 0.2 ppm*

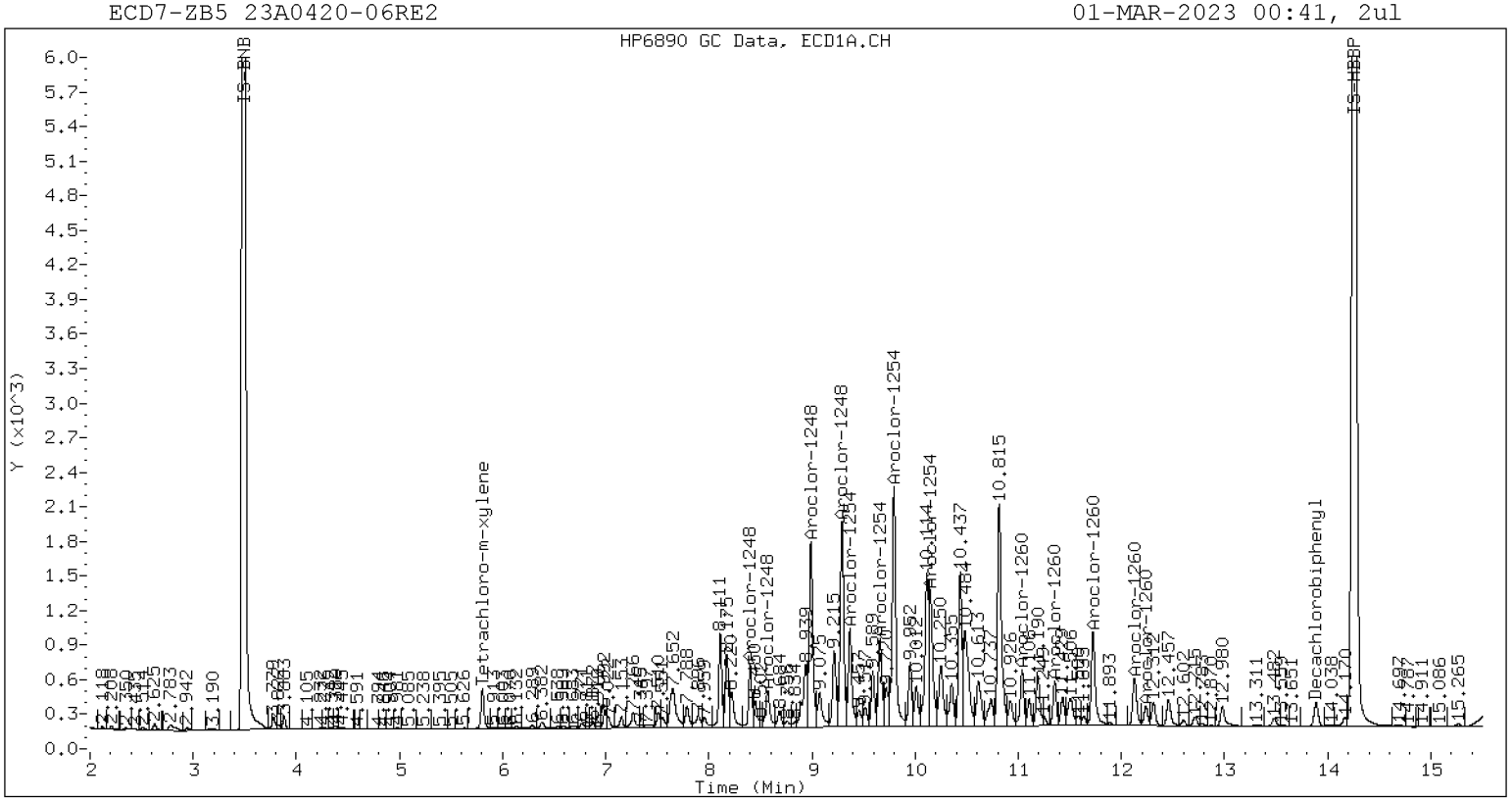
Total PCB Area Col2 (5.787 - 14.020) = 674081 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

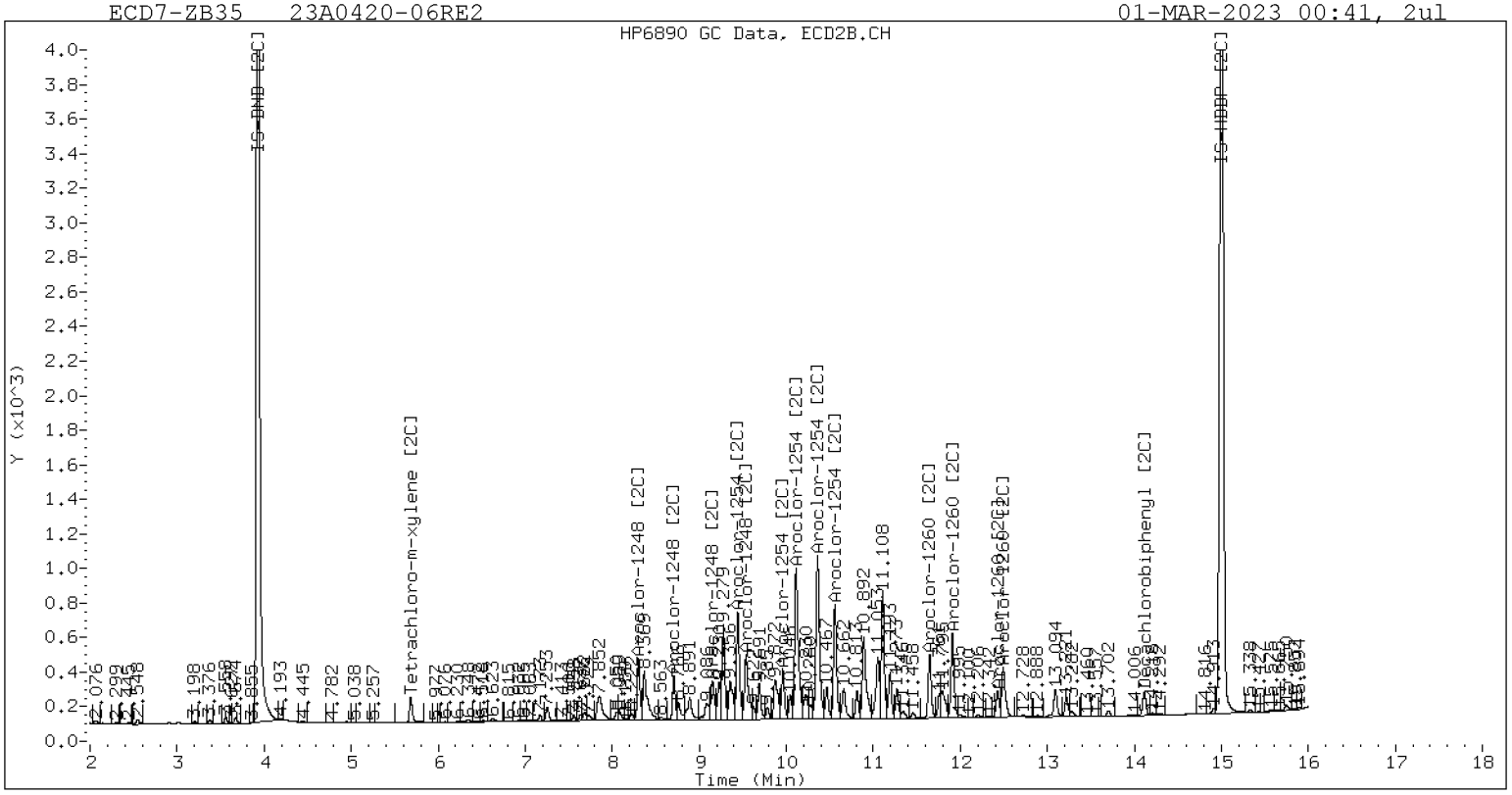
PCB Dual Column Chromatograms

ECD7-ZB5 23A0420-06RE2 01-MAR-2023 00:41, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0420-06RE2 01-MAR-2023 00:41, 2ul

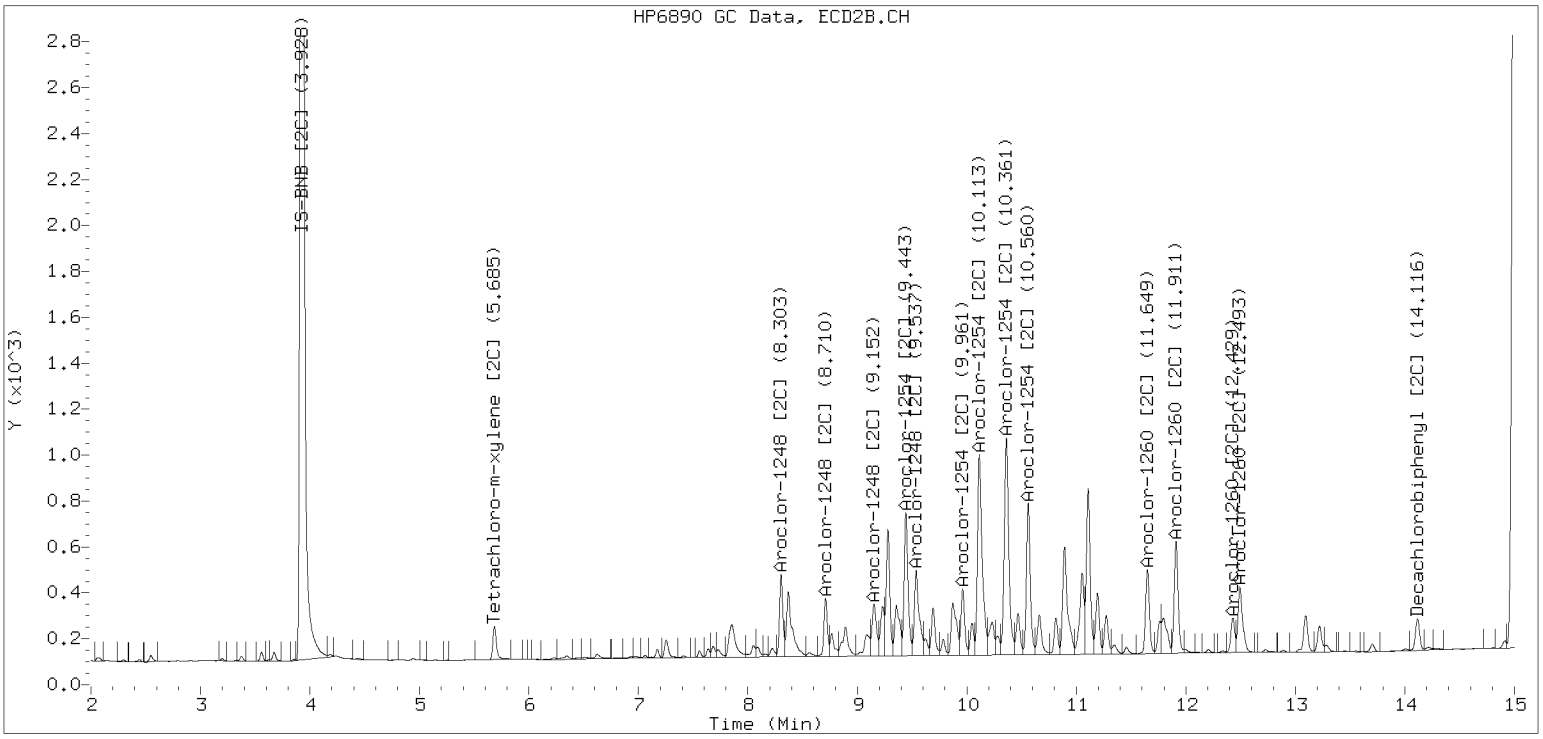


ZB-35 Manual Integration: YES

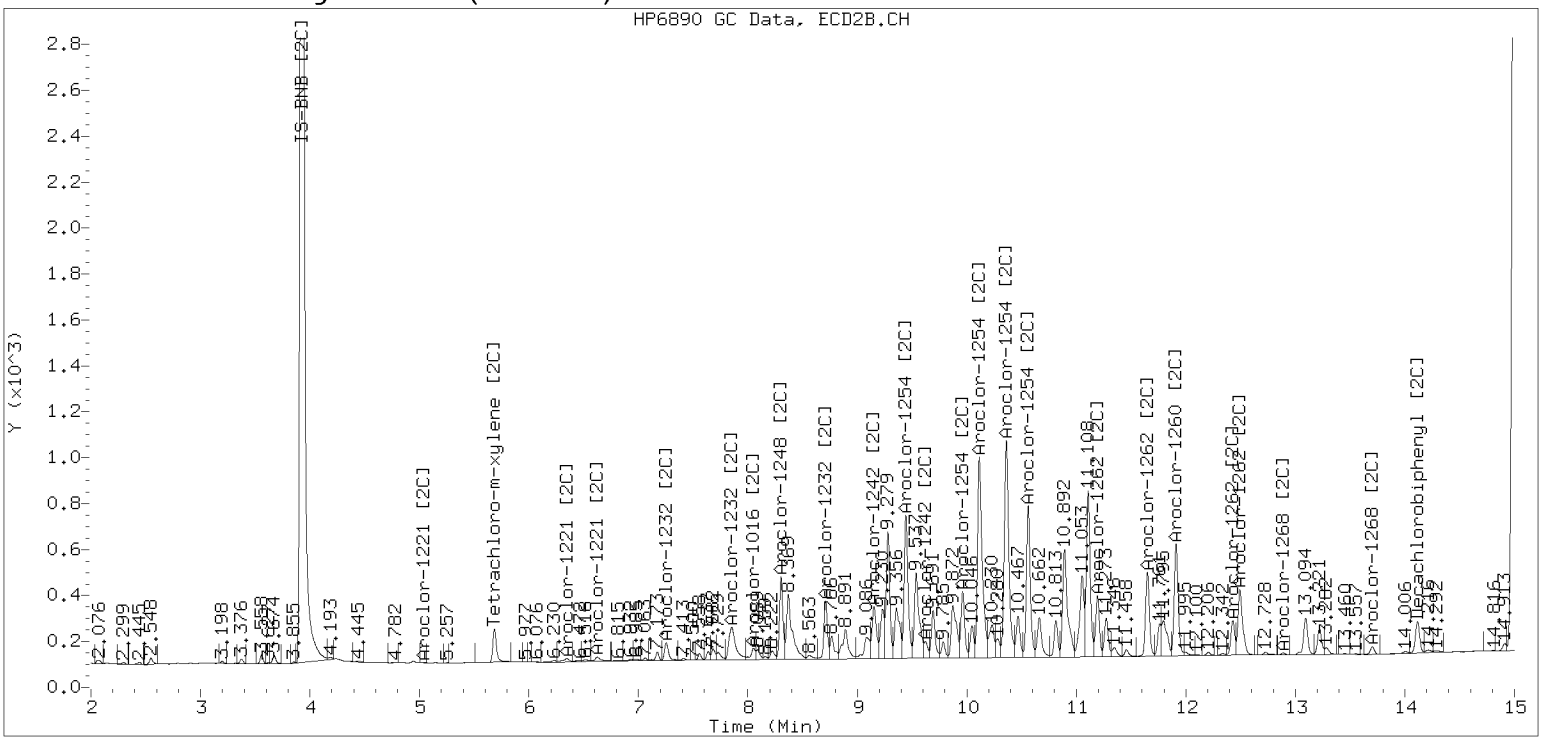
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282326ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1003

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0420-07 A	File ID:	02282327ECD7.D
Sampled:	01/19/23 12:25	Prepared:	02/15/23 16:55	Analyzed:	03/01/23 01:02
% Solids:	51.28	Preparation:	EPA 3546 (Microwave)	Initial/Final:	24.81 g Wet / 2.5 mL
Batch:	BLB0391	Sequence:	SLC0014	Calibration:	GB00069
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	3	11.8	4.6	11.8	U
11104-28-2	Aroclor 1221	1	3	11.8	4.6	11.8	U
11141-16-5	Aroclor 1232	1	3	11.8	4.6	11.8	U
53469-21-9	Aroclor 1242	1	3	11.8	4.6	11.8	U
12672-29-6	Aroclor 1248	2	3	56.2	4.6	11.8	D
11097-69-1	Aroclor 1254	2	3	83.0	4.6	11.8	D
11096-82-5	Aroclor 1260	2	3	75.8	1.7	11.8	D

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.8600*	*7.42*	*94.4*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.8600*	*5.42*	*68.9*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.8600*	*6.85*	*87.2*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.8600*	*6.24*	*79.4*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282327ECD7.D
Data file 2: /230228.b/230228.b/02282327ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0420-07RE1
Client ID:
Injection Date: 01-MAR-2023 01:02
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 3.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.804	-0.004	106322	5.683	-0.005	50052	9.2	10.6	14.2	Tetrachloro-m-xylene
13.886	-0.008	87367	14.113	-0.007	56864	12.6	11.6	7.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	775126	15.0
Hexabromobiphenyl	1429847	705047	-50.7 <-

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	322183	2.2
Hexabromobiphenyl	513946	321197	-37.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.396	-0.010	29137	77.0	1	8.299	-0.009	14461	94.0
Aroclor-1248	2	8.566	-0.015	26317	54.7	2	8.706	-0.009	13032	81.9
Aroclor-1248	3	8.984	-0.013	65846	72.6	3	9.141	-0.028	20171	110.2
Aroclor-1248	4	9.286	-0.009	74912	162.3	4	9.534	-0.060	14491	65.9
		Total Col1Ave (4 peaks):			91.7		Total Col2Ave (4 peaks):			88.0 RPD = 4
		Corrected Ave (3 peaks):			68.1		Corrected Ave (3 peaks):			80.6 RPD = 17
										95.37
Aroclor-1254	1	9.286	-0.013	74912	96.2	1	9.438	-0.013	31497	128.6
Aroclor-1254	2	9.362	-0.017	34500	98.6	2	9.956	-0.015	18972	96.3
Aroclor-1254	3	9.658	-0.011	59749	119.4	3	10.105	-0.020	55097	129.3
Aroclor-1254	4	9.787	-0.021	103025	105.9	4	10.351	-0.024	67953	163.5
Aroclor-1254	5	10.122	-0.057	64897	106.4	5	10.554	-0.016	47114	186.2
		Total Col1Ave (5 peaks):			105.3		Total Col2Ave (5 peaks):			140.8 RPD = 29
		Corrected Ave (4 peaks):			101.8		Corrected Ave (4 peaks):			129.4 RPD = 24
										105.025
Aroclor-1260	1	11.033	-0.011	38480	151.7	1	11.643	-0.010	28524	151.0
Aroclor-1260	2	11.348	-0.013	33171	125.2	2	11.904	-0.013	48330	100.3
Aroclor-1260	3	11.719	-0.017	92800	132.0	3	12.423	-0.012	19914	155.7
Aroclor-1260	4	12.121	-0.019	46946	132.6	4	12.488	-0.014	34982	107.7
Aroclor-1260	5	12.236	-0.007	21575	141.6	NS	---			----
		Total Col1Ave (5 peaks):			136.6		Total Col2Ave (4 peaks):			128.7 RPD = 6
		Corrected Ave (4 peaks):			132.9		Corrected Ave (3 peaks):			119.7 RPD = 10
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.907 - 13.793) = 1981527 Col1 Total PCB = 0.2 ppm*

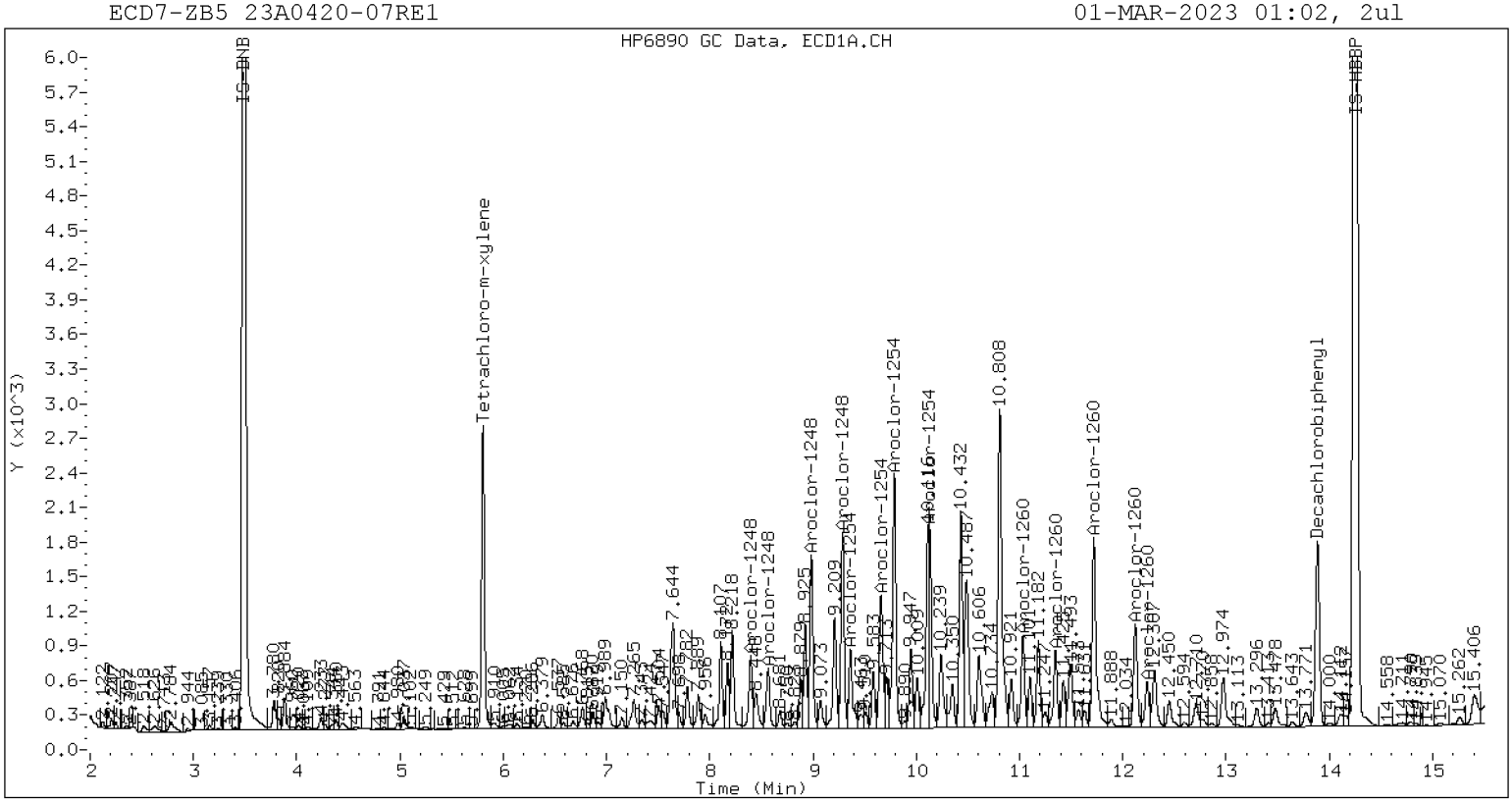
Total PCB Area Col2 (5.787 - 14.020) = 1001720 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

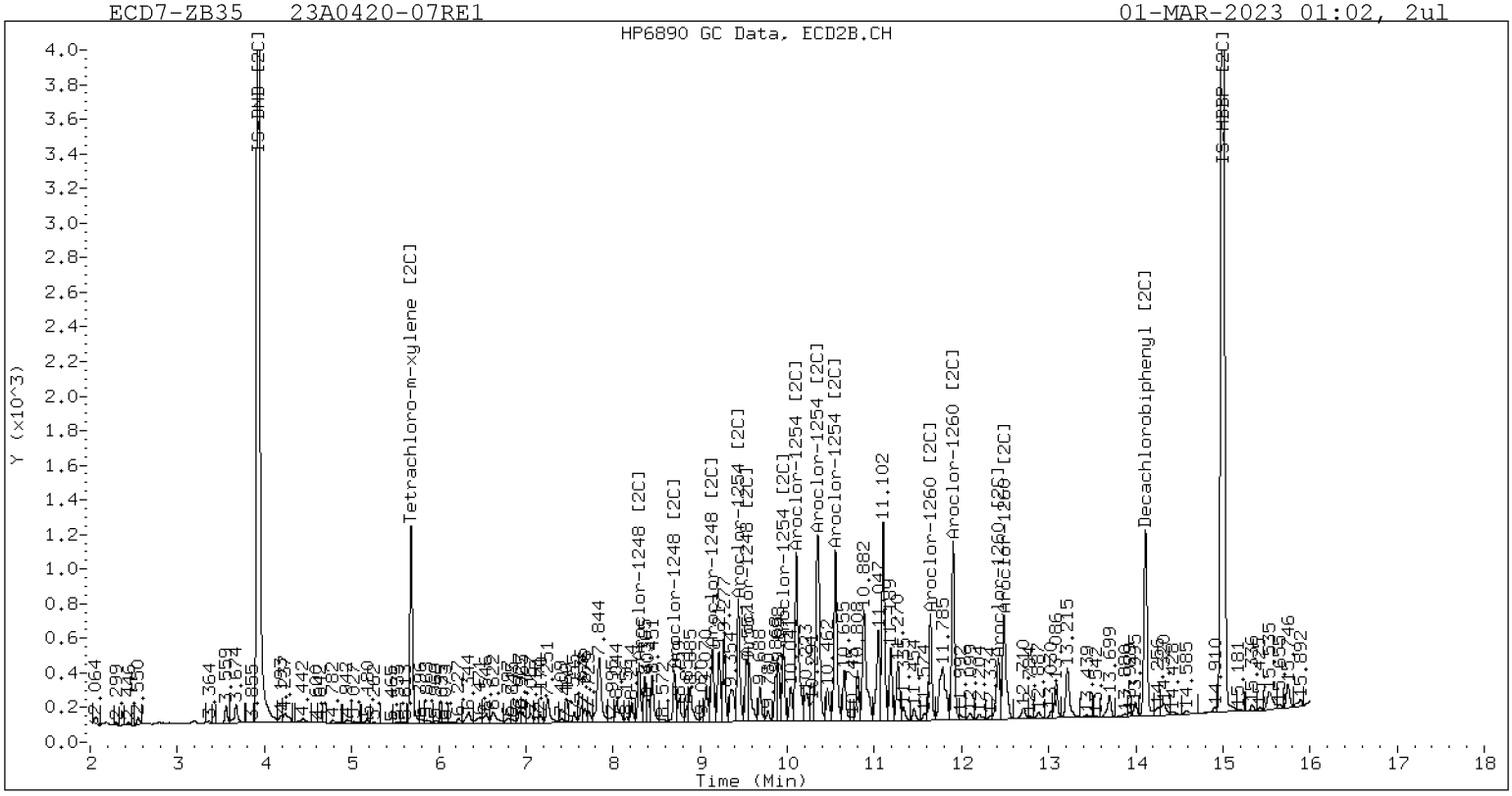
PCB Dual Column Chromatograms

ECD7-ZB5 23A0420-07RE1 01-MAR-2023 01:02, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0420-07RE1 01-MAR-2023 01:02, 2ul

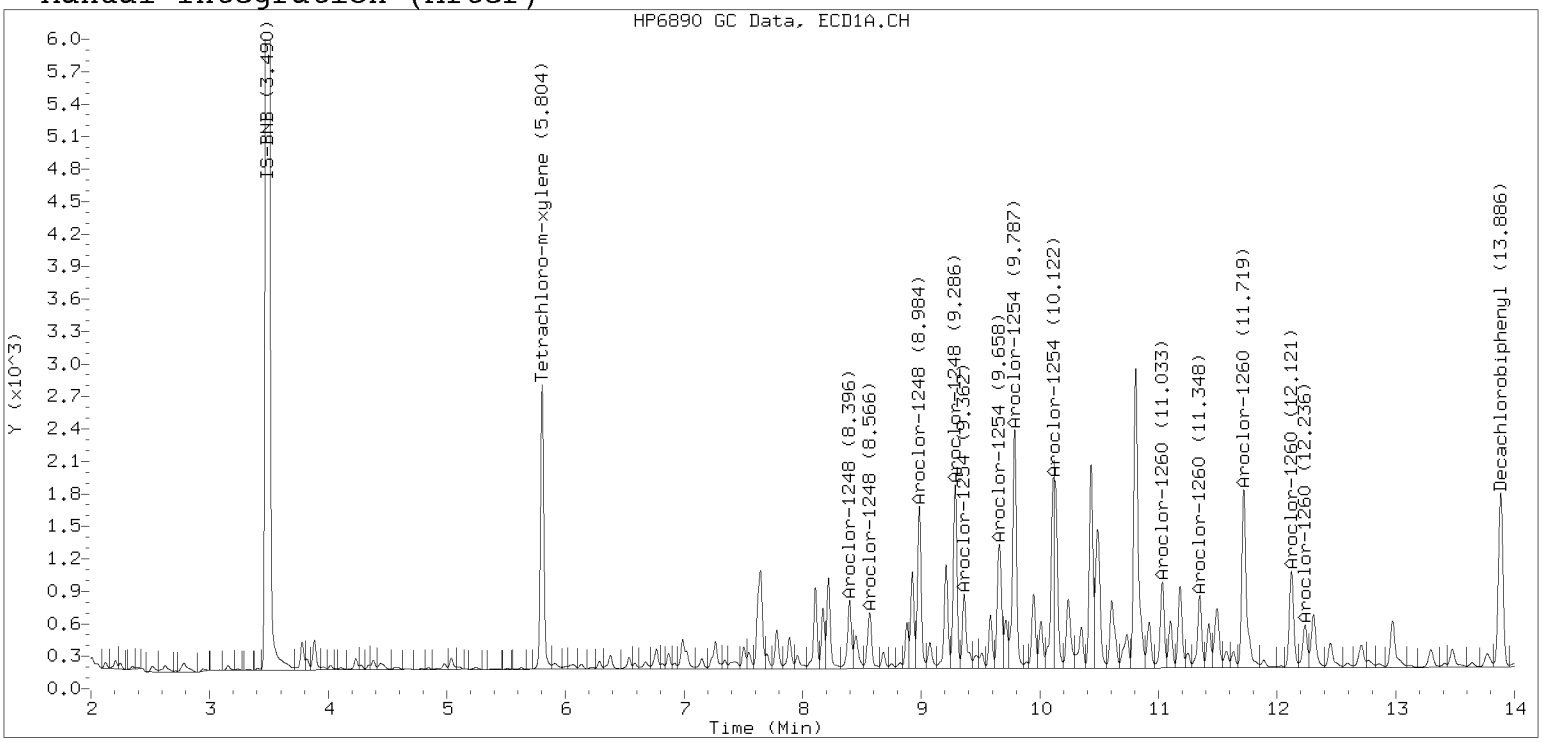


ZB-35 Manual Integration: YES

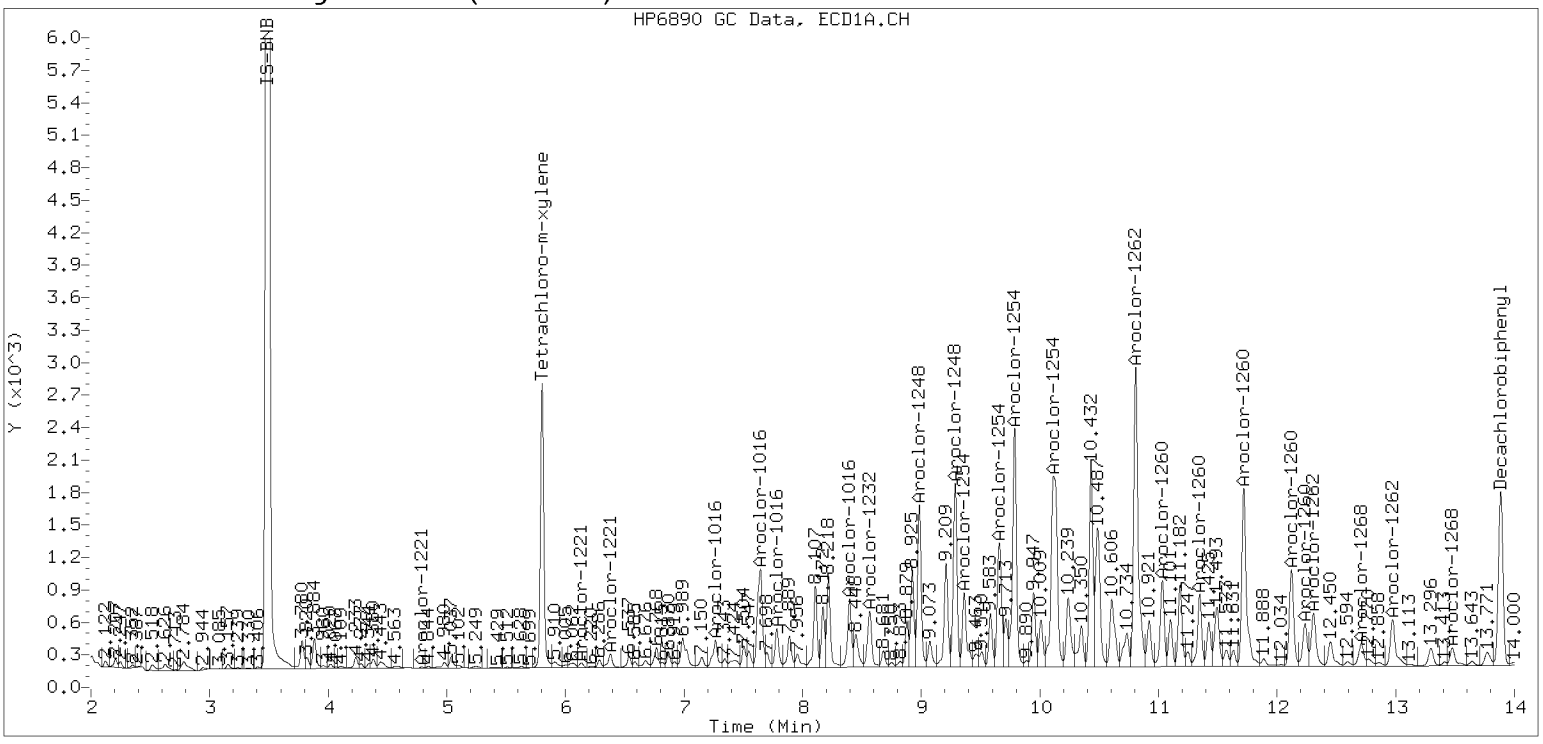
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230228.b/02282327ECD7.D Injection Date: 01-MAR-2023 01:02

Manual Integration (After)



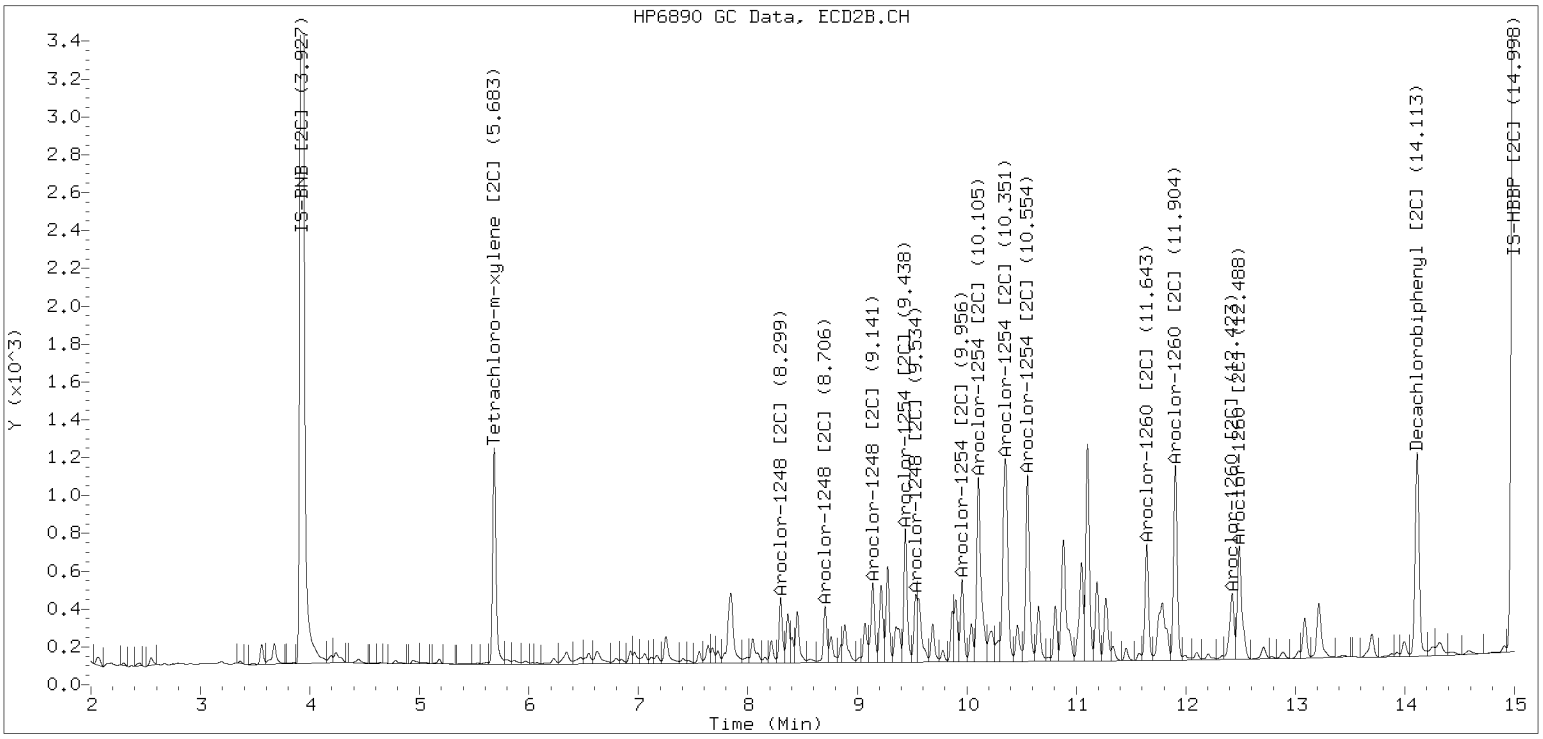
Processed Integration (Before)



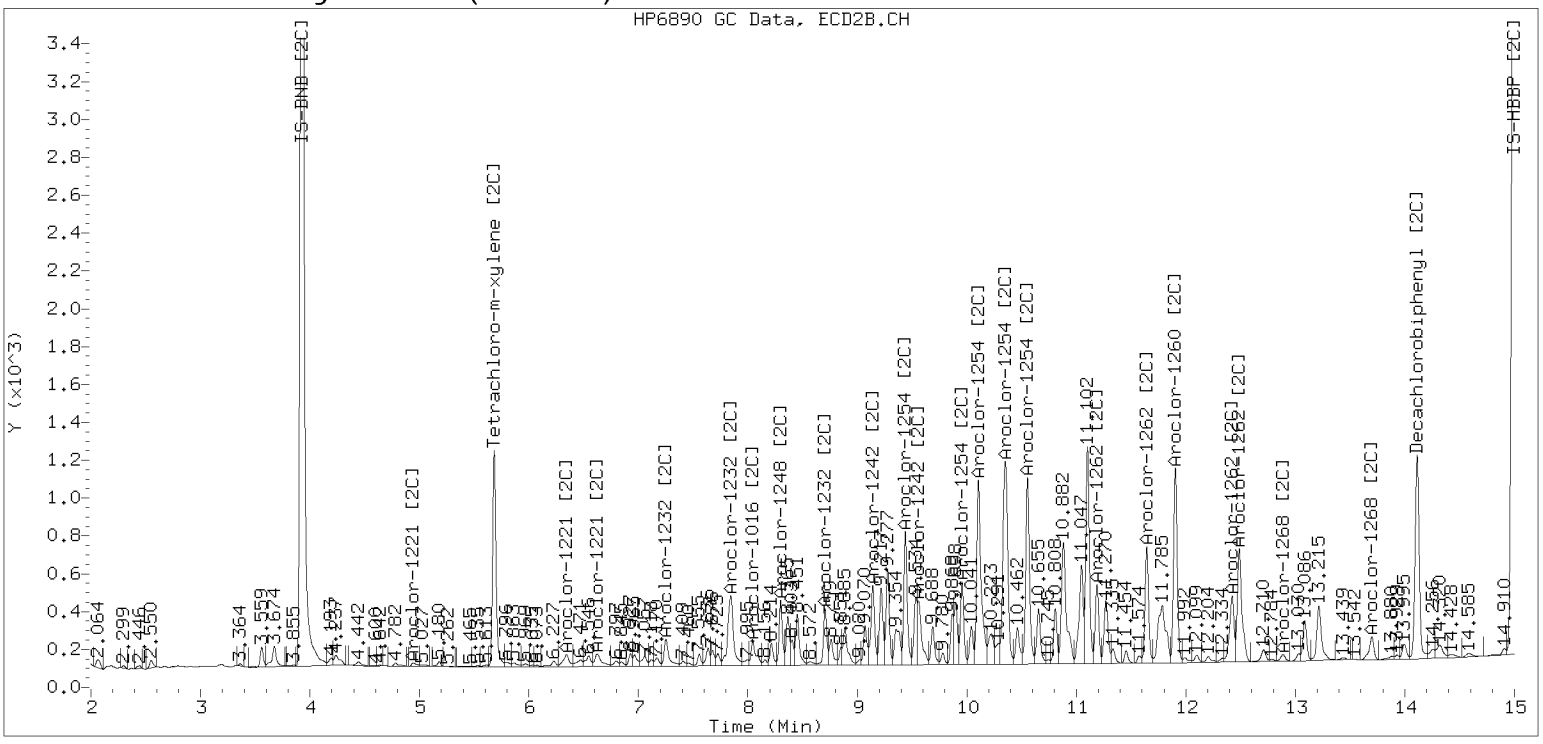
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282327ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1004

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0420-08 A	File ID:	02282328ECD7.D
Sampled:	01/19/23 11:55	Prepared:	02/15/23 16:55	Analyzed:	03/01/23 01:23
% Solids:	59.89	Preparation:	EPA 3546 (Microwave)	Initial/Final:	20.87 g Wet / 2.5 mL
Batch:	BLB0391	Sequence:	SLC0014	Calibration:	GB00069
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	33.4	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	52.2	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	49.4	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*8.0006*	*7.66*	*95.8*	*40 - 126*	
Tetrachlorometaxylene	*1*	*8.0006*	*5.53*	*69.1*	*44 - 120*	
Decachlorobiphenyl	*2*	*8.0006*	*7.46*	*93.2*	*40 - 126*	
Tetrachlorometaxylene	*2*	*8.0006*	*6.66*	*83.2*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282328ECD7.D
Data file 2: /230228.b/230228.b/02282328ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0420-08
Client ID:
Injection Date: 01-MAR-2023 01:23
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.003	317981	5.682	-0.005	151416	27.6	33.3	18.6	Tetrachloro-m-xylene
13.885	-0.008	240784	14.113	-0.007	176115	38.3	37.3	2.7	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	770791	14.4
Hexabromobiphenyl	1429847	638315	-55.4 <-

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	310019	-1.7
Hexabromobiphenyl	513946	310127	-39.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.395	-0.011	48639	129.3	1	8.298	-0.010	24368	164.6
Aroclor-1248	2	8.564	-0.017	43941	91.9	2	8.704	-0.011	22489	146.9
Aroclor-1248	3	8.982	-0.015	121111	134.3	3	9.138	-0.031	33382	189.5
Aroclor-1248	4	9.285	-0.010	126543	275.6	4	9.532	-0.063	29889	141.3
		Total Col1Ave (4 peaks):			157.8		Total Col2Ave (4 peaks):			160.6 RPD = 2
		Corrected Ave (3 peaks):			118.5		Corrected Ave (3 peaks):			151.0 RPD = 24
Aroclor-1254	1	9.285	-0.014	126543	163.5	1	9.436	-0.015	53557	227.3
Aroclor-1254	2	9.360	-0.018	52540	150.9	2	9.955	-0.017	31531	166.3
Aroclor-1254	3	9.657	-0.012	104215	209.4	3	10.103	-0.022	96575	235.5
Aroclor-1254	4	9.785	-0.023	175598	181.5	4	10.349	-0.025	128776	322.1
Aroclor-1254	5	10.117	-0.062	225970	372.6	5	10.552	-0.018	86144	353.9
		Total Col1Ave (5 peaks):			215.6		Total Col2Ave (5 peaks):			261.0 RPD = 19
		Corrected Ave (4 peaks):			176.3		Corrected Ave (4 peaks):			237.8 RPD = 30
Aroclor-1260	1	11.031	-0.013	69299	301.8	1	11.642	-0.011	51420	282.0
Aroclor-1260	2	11.347	-0.014	59676	248.7	2	11.903	-0.015	91092	195.7
Aroclor-1260	3	11.718	-0.018	166004	260.9	3	12.422	-0.013	36819	298.1
Aroclor-1260	4	12.118	-0.022	87432	272.9	4	12.486	-0.016	66765	212.8
Aroclor-1260	5	12.234	-0.009	41092	297.9	NS	---			----
		Total Col1Ave (5 peaks):			276.4		Total Col2Ave (4 peaks):			247.2 RPD = 11
		Corrected Ave (4 peaks):			270.1		Corrected Ave (3 peaks):			230.2 RPD = 16
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

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Total PCB Area Col1 (5.907 - 13.793) = 3528157 Col1 Total PCB = 0.4 ppm*

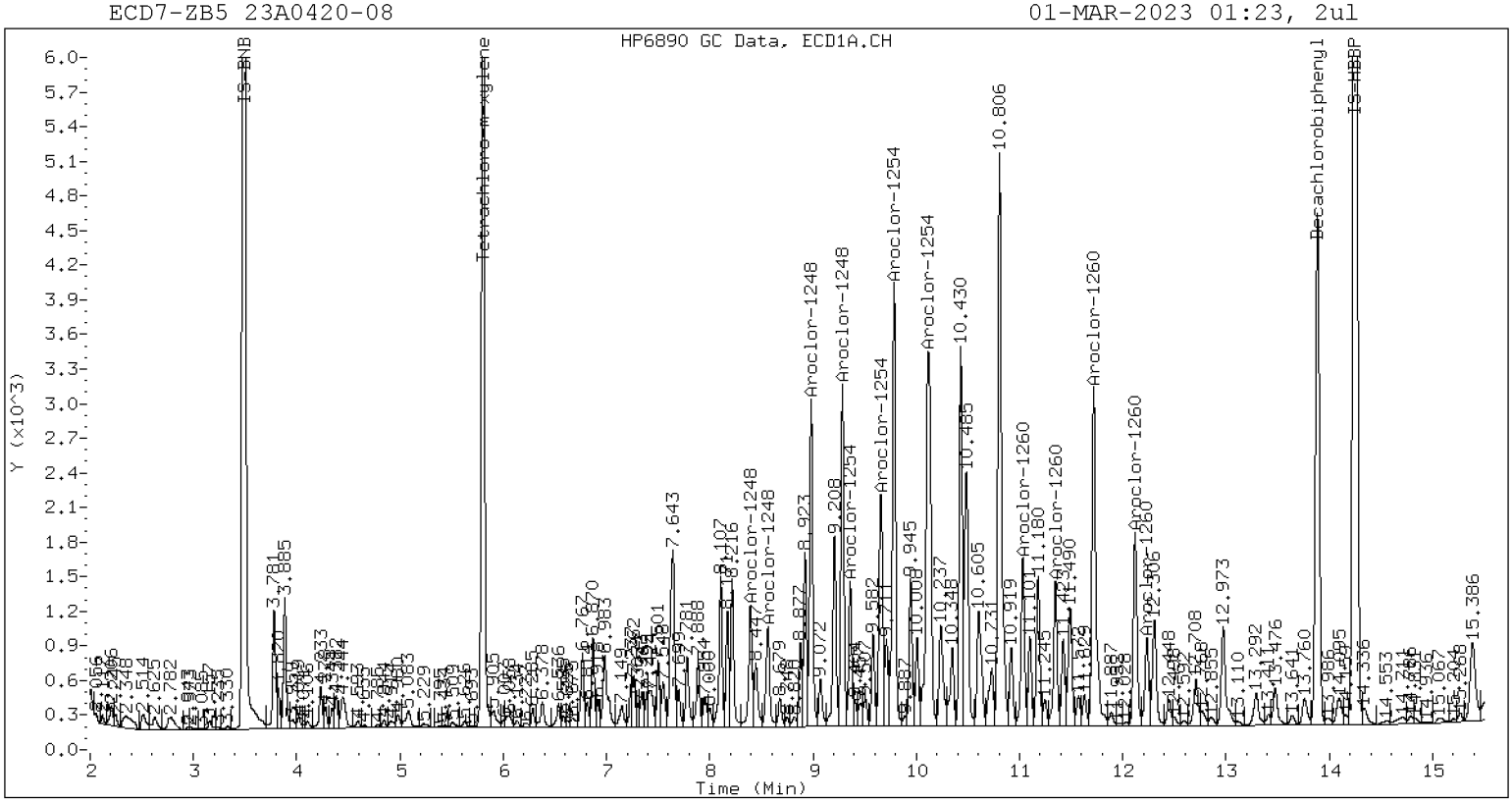
Total PCB Area Col2 (5.787 - 14.020) = 1829382 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

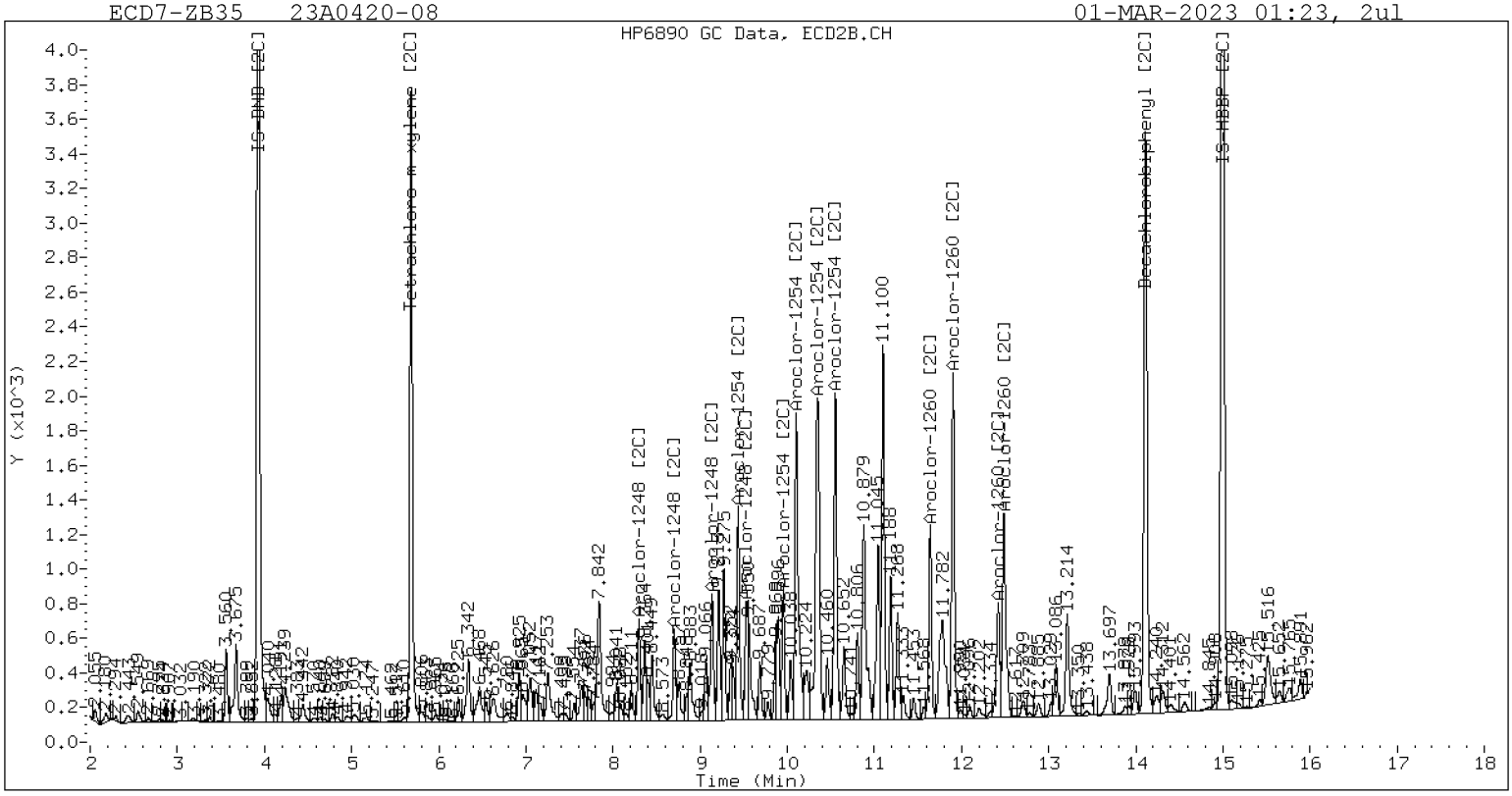
PCB Dual Column Chromatograms

ECD7-ZB5 23A0420-08 01-MAR-2023 01:23, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0420-08 01-MAR-2023 01:23, 2ul

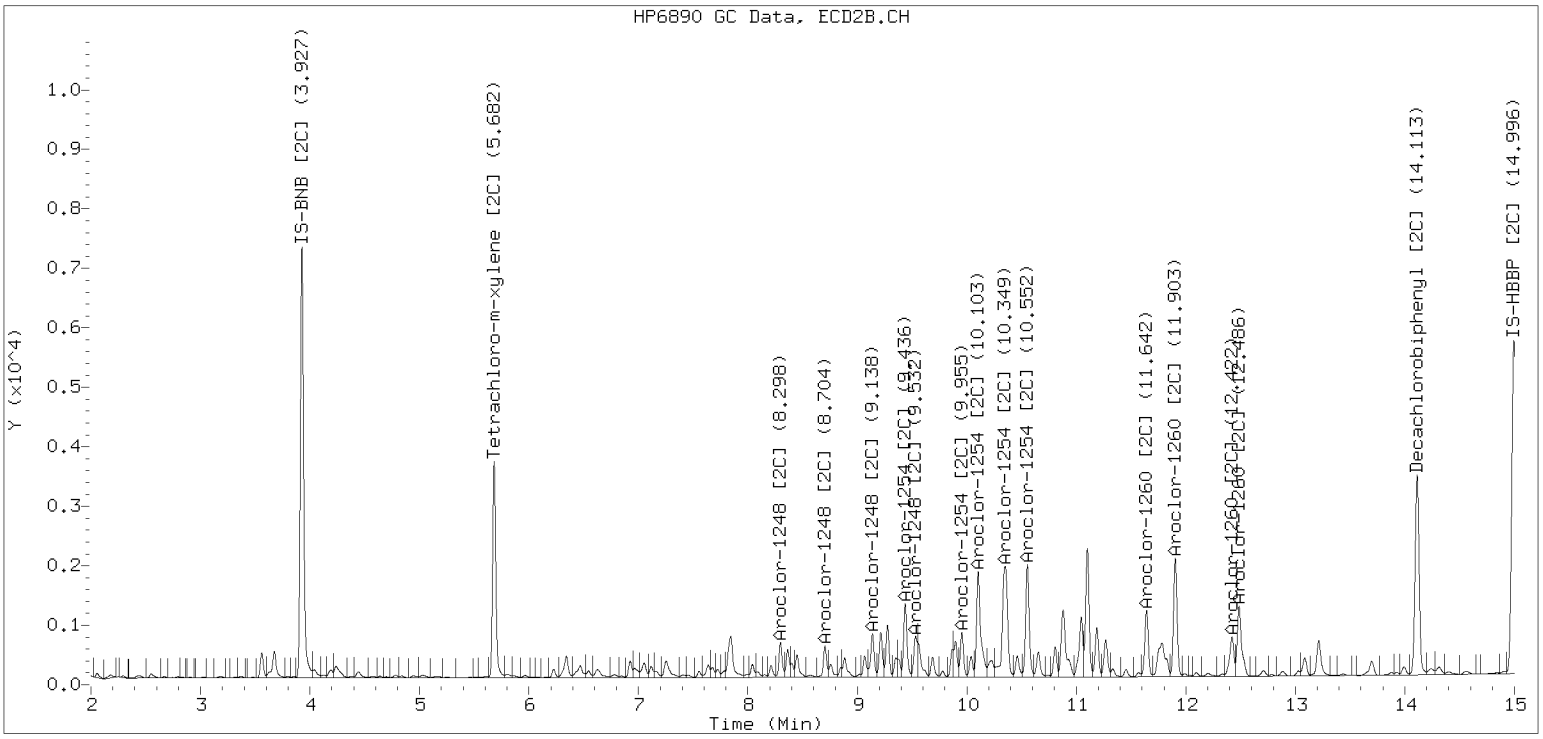


ZB-35 Manual Integration: YES

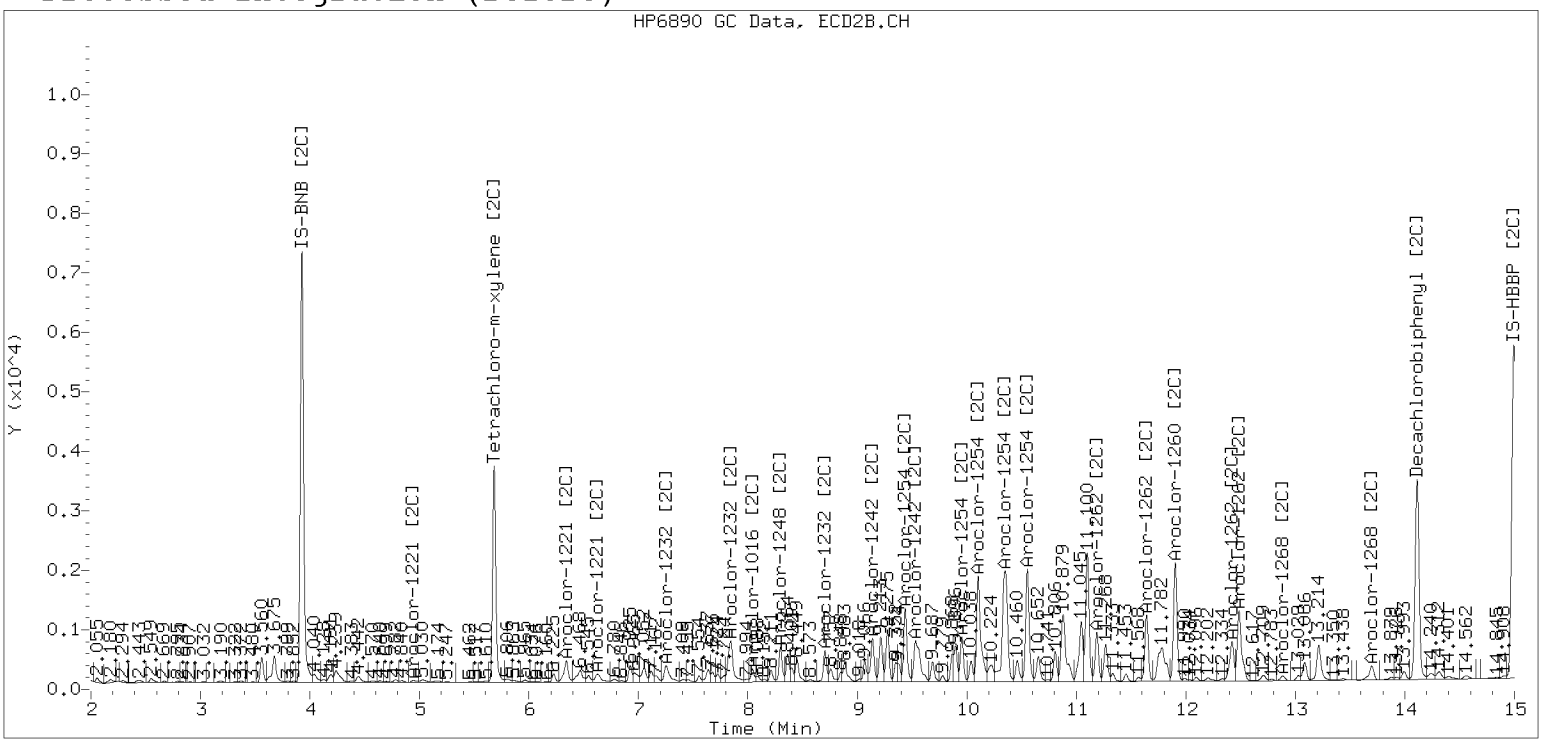
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282328ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1082

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0420-09 A	File ID:	02282329ECD7.D
Sampled:	01/19/23 13:40	Prepared:	02/15/23 16:55	Analyzed:	03/01/23 01:44
% Solids:	58.87	Preparation:	EPA 3546 (Microwave)	Initial/Final:	21.69 g Wet / 2.5 mL
Batch:	BLB0391	Sequence:	SLC0014	Calibration:	GB00069
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	5	19.6	7.6	19.6	U
11104-28-2	Aroclor 1221	1	5	19.6	7.6	19.6	U
11141-16-5	Aroclor 1232	1	5	19.6	7.6	19.6	U
53469-21-9	Aroclor 1242	1	5	19.6	7.6	19.6	U
12672-29-6	Aroclor 1248	2	5	208	7.6	19.6	D
11097-69-1	Aroclor 1254	2	5	235	7.6	19.6	D
11096-82-5	Aroclor 1260	2	5	122	2.9	19.6	D

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.8315*	*7.81*	*99.7*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.8315*	*6.00*	*76.6*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.8315*	*7.33*	*93.6*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.8315*	*6.55*	*83.6*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282329ECD7.D
Data file 2: /230228.b/230228.b/02282329ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0420-09RE1
Client ID:
Injection Date: 01-MAR-2023 01:44
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 5.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.804	-0.004	69099	5.683	-0.004	30642	6.1	6.7	8.8	Tetrachloro-m-xylene
13.887	-0.006	58736	14.114	-0.006	37747	8.0	7.5	6.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	755446	12.1
Hexabromobiphenyl	1429847	747447	-47.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	312211	-1.0
Hexabromobiphenyl	513946	331087	-35.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	8.397	-0.009	62412	169.3	1	8.300	-0.007	38335	257.2
Aroclor-1248	2	8.567	-0.014	53929	115.1	2	8.706	-0.009	29763	193.1
Aroclor-1248	3	8.986	-0.011	163611	185.1	3	9.144	-0.025	33262	187.5
Aroclor-1248	4	9.288	-0.007	166198	369.3	4	9.534	-0.061	53595	251.7
	Total Col1Ave (4 peaks):				209.7	Total Col2Ave (4 peaks):				222.4 RPD = 6
	Corrected Ave (3 peaks):				156.5	Corrected Ave (3 peaks):				210.8 RPD = 30
										212.6
Aroclor-1254	1	9.288	-0.011	166198	219.1	1	9.440	-0.012	60299	254.1
Aroclor-1254	2	9.363	-0.015	72944	213.8	2	9.958	-0.014	30330	158.9
Aroclor-1254	3	9.664	-0.005	129656	265.8	3	10.107	-0.018	103359	250.2
Aroclor-1254	4	9.790	-0.018	209766	221.2	4	10.356	-0.019	112032	278.2
Aroclor-1254	5	10.131	-0.048	114924	193.4	5	10.556	-0.014	63726	259.9
	Total Col1Ave (5 peaks):				222.7	Total Col2Ave (5 peaks):				240.3 RPD = 8
	Corrected Ave (4 peaks):				211.9	Corrected Ave (4 peaks):				230.8 RPD = 9
Aroclor-1260	1	11.035	-0.009	47895	178.1	1	11.646	-0.007	34373	176.6
Aroclor-1260	2	11.350	-0.010	39777	141.6	2	11.907	-0.011	51341	103.3
Aroclor-1260	3	11.722	-0.014	100615	135.0	3	12.426	-0.009	15546	117.9
Aroclor-1260	4	12.123	-0.017	53976	143.9	4	12.490	-0.012	34004	101.5
Aroclor-1260	5	12.236	-0.007	21573	133.6	NS	---			----
	Total Col1Ave (5 peaks):				146.4	Total Col2Ave (4 peaks):				124.8 RPD = 16
	Corrected Ave (4 peaks):				138.5	Corrected Ave (3 peaks):				107.6 RPD = 25
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.907 - 13.793) = 3127714 Col1 Total PCB = 0.3 ppm*

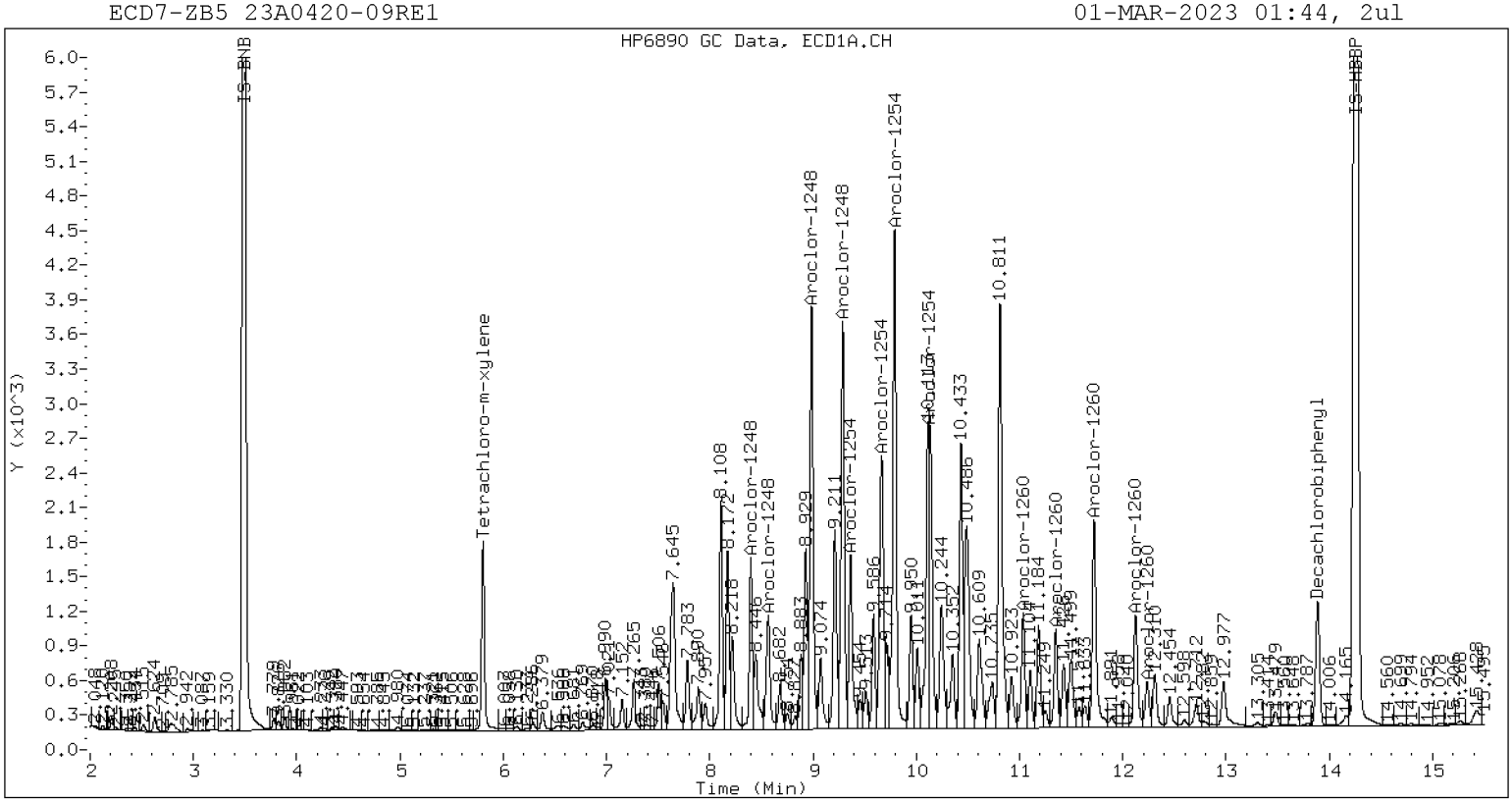
Total PCB Area Col2 (5.787 - 14.020) = 1493415 Col2 Total PCB = 0.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

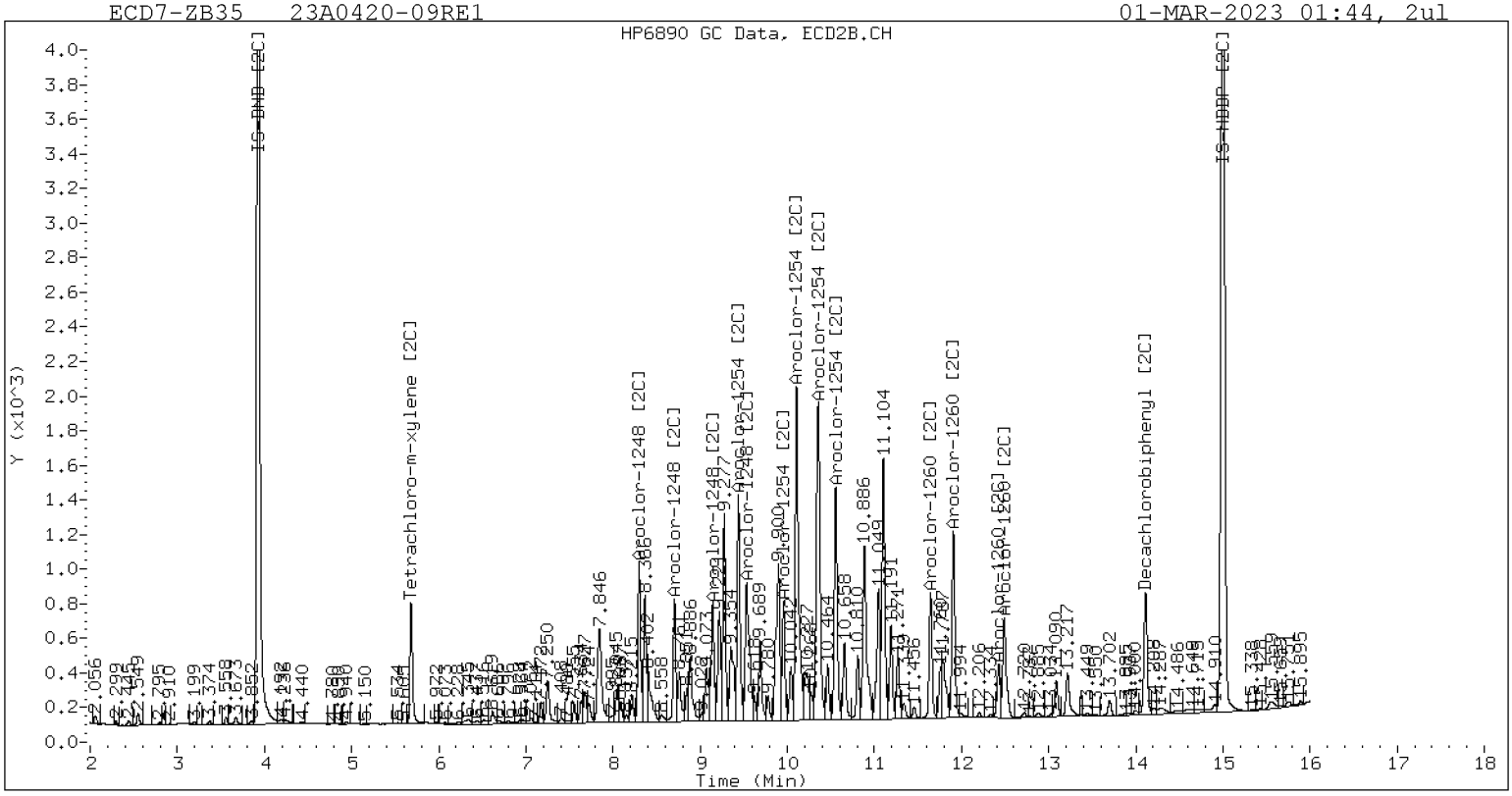
PCB Dual Column Chromatograms

ECD7-ZB5 23A0420-09RE1 01-MAR-2023 01:44, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0420-09RE1 01-MAR-2023 01:44, 2ul

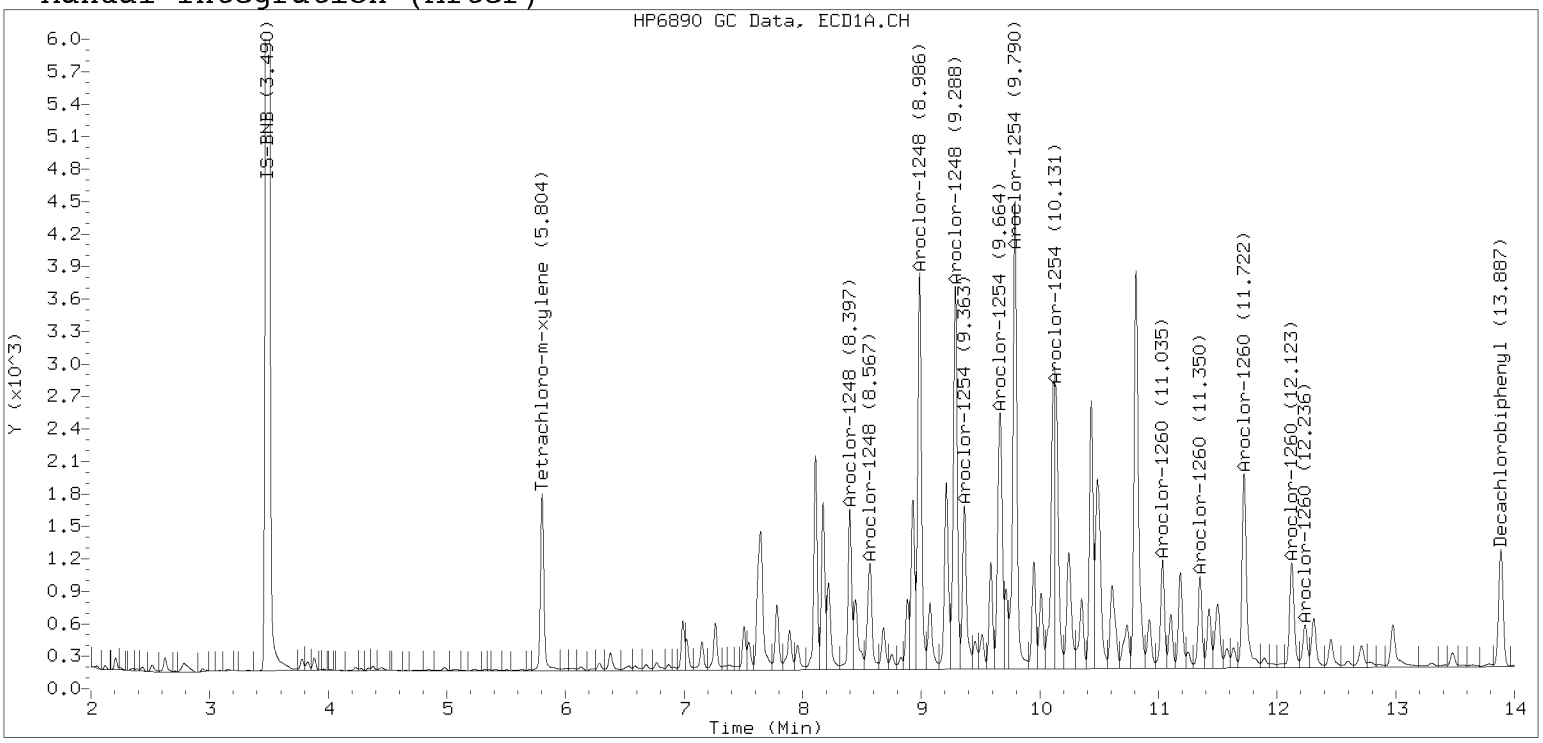


ZB-35 Manual Integration: YES

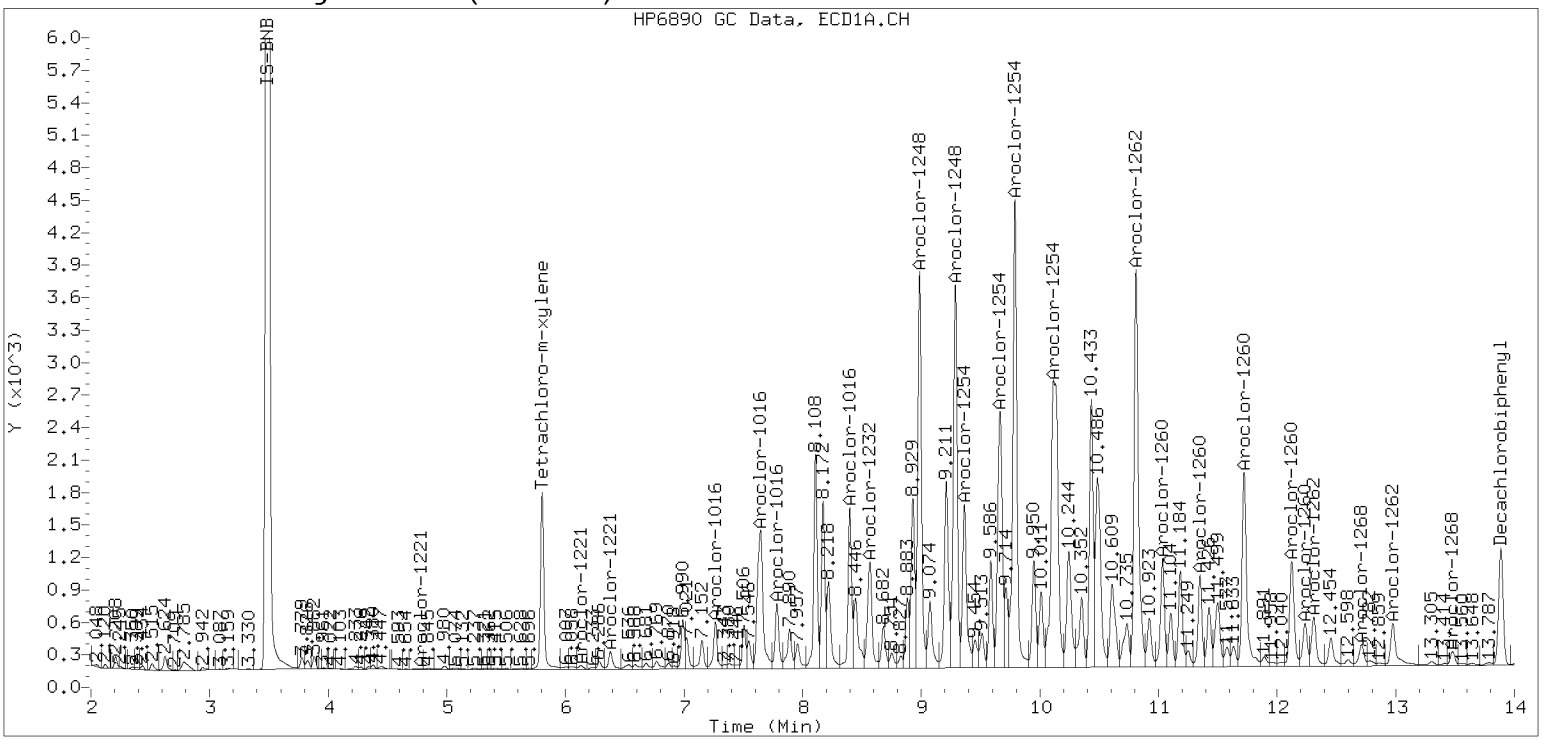
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230228.b/02282329ECD7.D Injection Date: 01-MAR-2023 01:44

Manual Integration (After)



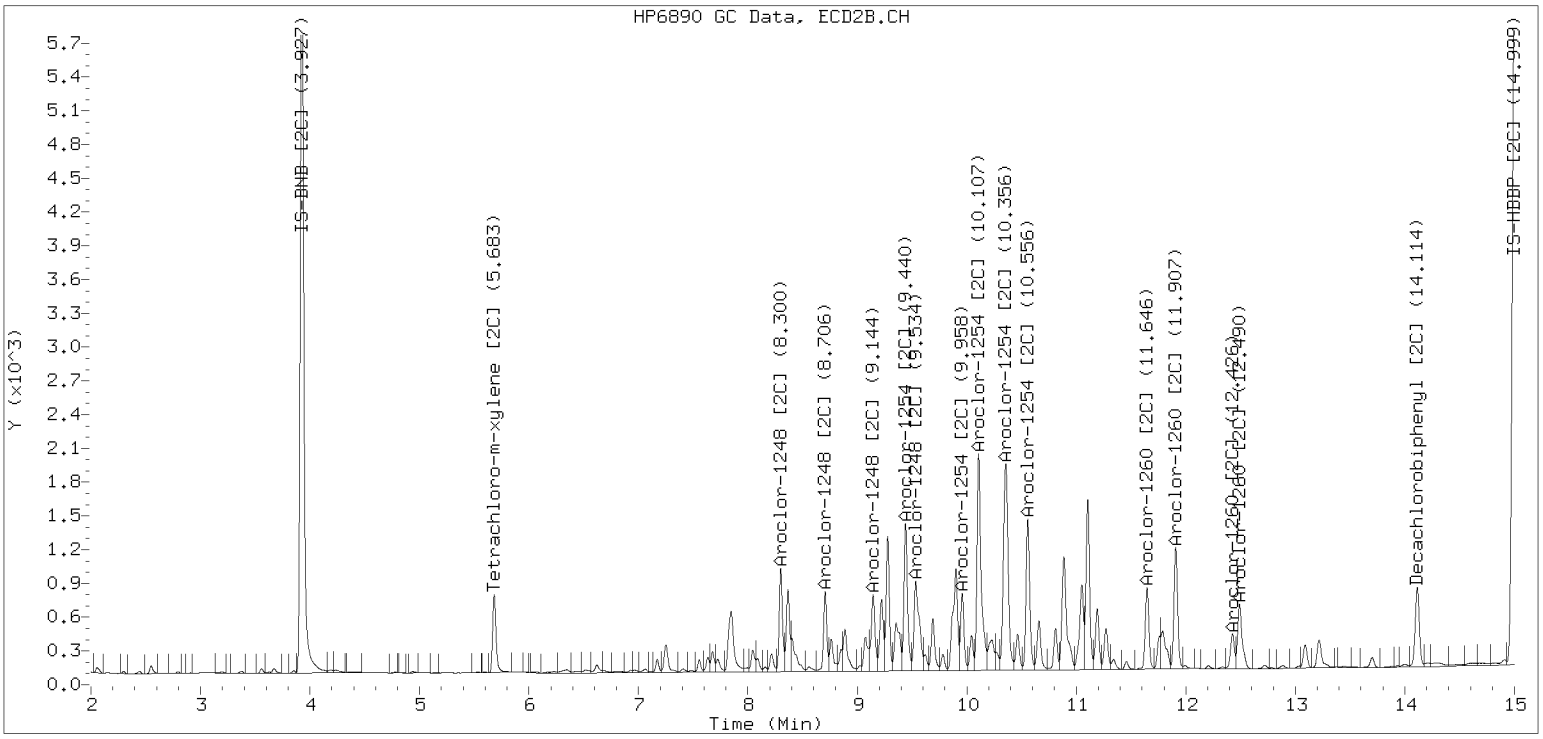
Processed Integration (Before)



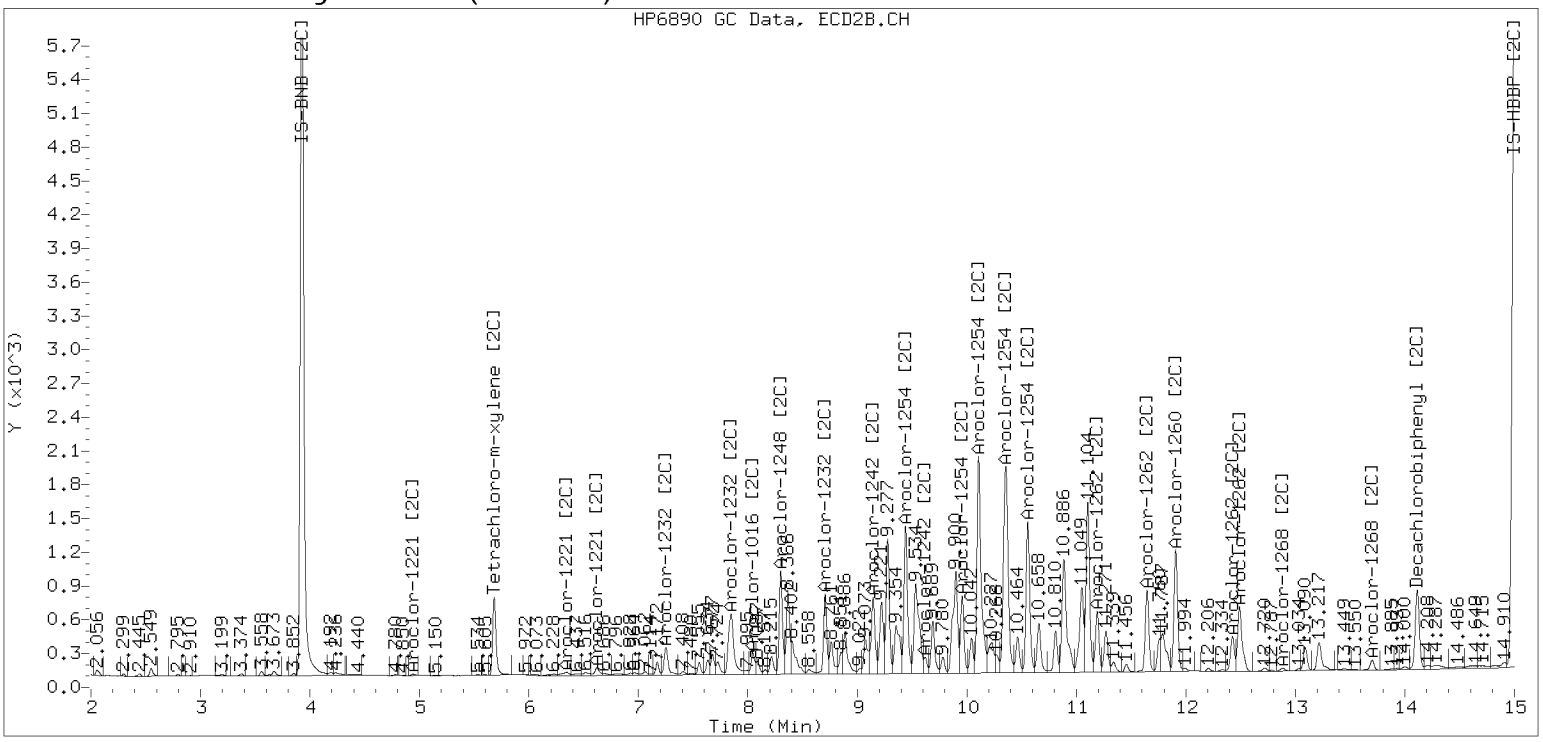
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282329ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)



PREPARATION BATCH SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC SDG: 23A0420

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

Batch: BLB0391 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1045	23A0420-01	02282319ECD7.D	02/15/23 16:55	
LDW23-SC1052	23A0420-02	02282320ECD7.D	02/15/23 16:55	
LDW23-SC1057	23A0420-03	02282321ECD7.D	02/15/23 16:55	
LDW23-IT1051	23A0420-04	02282322ECD7.D	02/15/23 16:55	
LDW23-SC1125	23A0420-05	02282325ECD7.D	02/15/23 16:55	
LDW23-SC1132	23A0420-06	02282326ECD7.D	02/15/23 16:55	
LDW23-SC1003	23A0420-07	02282327ECD7.D	02/15/23 16:55	
LDW23-SC1004	23A0420-08	02282328ECD7.D	02/15/23 16:55	
LDW23-SC1082	23A0420-09	02282329ECD7.D	02/15/23 16:55	
Blank	BLB0391-BLK1	02282315ECD7.D	02/15/23 16:55	
LCS	BLB0391-BS1	02282316ECD7.D	02/15/23 16:55	
LCS Dup	BLB0391-BSD1	02282317ECD7.D	02/15/23 16:55	
LDW23-IT1051	BLB0391-MS1	02282323ECD7.D	02/15/23 16:55	
LDW23-IT1051	BLB0391-MSD1	02282324ECD7.D	02/15/23 16:55	
Reference	BLB0391-SRM1	02282318ECD7.D	02/15/23 16:55	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0391

Prepared using: EPA 3546 (Microwave)

8082A PCB Solid 4 in Solid (Version:)
8082A PCB Solid 4 in Solid (Version:7 Aroclors)

Matrix: Solid Date Prepared: 2/15/23 Balance ID: B139298002 Set Up By: CGD 2/15/23

WO Comments

23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23B0276: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H>Please push this to front of LDW line of samples

The following standards may be missing from this batch!

Designator	Description
QLS 5	QLS Spike

Analysis: 8082A PCB Solid 4

Lab Number & Container	% Solids	Initial (g) Target Dry: 12.5 (Wet)	Initial (g) Actual	(REQ) Acid C/U (5mL)	(REQ) Sulfur C/U (5mL) 1 2 3	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0420-01 A	54.7	(22.85)	22.88	5mL	5mL	2mL	2.5	1.0	
23A0420-02 A	53.6	(23.34)	23.64	5mL	5mL	2mL	2.5	1.0	
23A0420-03 A	55.9	(22.35)	22.86	5mL	5mL	2mL	2.5	1.0	
23A0420-04 A	70.5	(17.72)	17.72	5mL	5mL	2mL	2.5	1.0	
23A0420-05 A	54.7	(22.86)	22.90	5mL	5mL	2mL	2.5	1.0	
23A0420-06 A	57.2	(21.84)	21.85	5mL	5mL	2mL	2.5	1.0	
23A0420-07 A	51.3	(24.38)	24.81	5mL	5mL	2mL	2.5	1.0	
23A0420-08 A	59.9	(20.87)	20.87	5mL	5mL	2mL	2.5	1.0	
23A0420-09 A	58.9	(21.23)	21.69	5mL	5mL	2mL	2.5	1.0	
23B0276-01 A	63.6	(19.65)	19.75	5mL	5mL	2mL	2.5	1.0	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 12.5 (Wet)	Initial (g) Actual	(REQ) Acid C/U (5mL)	(REQ) Sulfur C/U (5mL) 1 2 3	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLB0391-BLK1	100.0	(12.50)	12.50	5mL	5mL	2mL	2.5	1.0	(10g Actual Wt.)
BLB0391-BS1	100.0	(12.50)	12.50	5mL	5mL	2mL	2.5	1.0	(10g Actual Wt.)
BLB0391-BSD1	100.0	(12.50)	12.50	5mL	5mL	2mL	2.5	1.0	(10g Actual Wt.)
BLB0391-MS1	70.5	(17.72)	17.72	5mL	5mL	2mL	2.5	1.0	Use 23A0420-04
BLB0391-MSD1	70.5	(17.72)	17.72	5mL	5mL	2mL	2.5	1.0	Use 23A0420-04
BLB0391-SRM1	100.0	~~(12.50)~~ (2.50)	2.50	5mL	5mL	2mL	2.5	1.0	Use K011478

+1g DI WATER

CR 2/15/23 Client ID verified By / Date

NR3 2/18/23 Preparation Reviewed By / Date

2/15/23 16:55 Extraction Date and Time

Printed: 2/15/2023 1:50:55PM

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0391

Prepared using: EPA 3546 (Microwave)

8082A PCB Solid 4 in Solid (Version:)
8082A PCB Solid 4 in Solid (Version:7 Aroclors)

WO Comments

23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23B0276: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H>Please push this to front of LDW line of samples

Prep Steps

Microwave
1 2 3
NJ 02/16/23
Analyst/Date

KD
100°C
Hexane Exchange
(2 X 20 mL)
1 2 3 4 5 6
LD 2-17
Analyst/Date

TurboVap
Pre Cleanups
1 2 3 4 5
NKB 2/18/23
Analyst/Date

TurboVap
Post Cleanups
1 2 3 4 5
NKB 2/18/23
Analyst/Date

Vialing
NKB 2/18/23
Analyst/Date

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: NJ ET Date: 02/16/23	
Neutral Glass Wool	L000350
1:1 Hexane/Acetone	L001220
Hexane	L000389
Anhydrous Sodium Sulfate	L000980
KD Analyst: LD Date: 2-17-23	
Anhydrous Sodium Sulfate	
Hexane	~~L000889~~
Vialing Analyst: NKB Date: 2/18/23	
Hexane	L000889
Concentrated Sulfuric Acid	L001033
Silica Gel (SPE) Darts	L001084
Sodium Sulfite	K010363
Tetrabutylammonium hydrogensulfate (TBAS)	L001601

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 2µg/mL	N L000773 Exp Date: 7/21/23	50µL	VR	NJ
Spike 20µg/mL	1 L001587 Exp Date: 8/3/23	63µL	VR	NJ

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: PCB Extraction Batch: BLB0391

Total Solids Batch: BLB0154 Work Order(s): 23A0420

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☒ Standing Water Decanted (Not shared)= Φ1 – Φ9.	✓ Φ2/14/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☒ Oily, obvious fuel/sulfur odors= Φ1 – Φ9.	✓ Φ2/14/23
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☒ Other Notes/Comments= (Note problems, concerns, corrective actions).	
– lost 5% on vortex during acid clear 420 – Φ7	MKS 2/18/23
☒ Share Samples Y (N)	✓ Φ2/14/23
☒ Multiple Jars Y (N)	✓ Φ2/14/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLB0391

Prepared using: EPA 3546 (Microwave)

8082A PCB Solid 4 in Solid (Version:)
8082A PCB Solid 4 in Solid (Version:7 Aroclors)

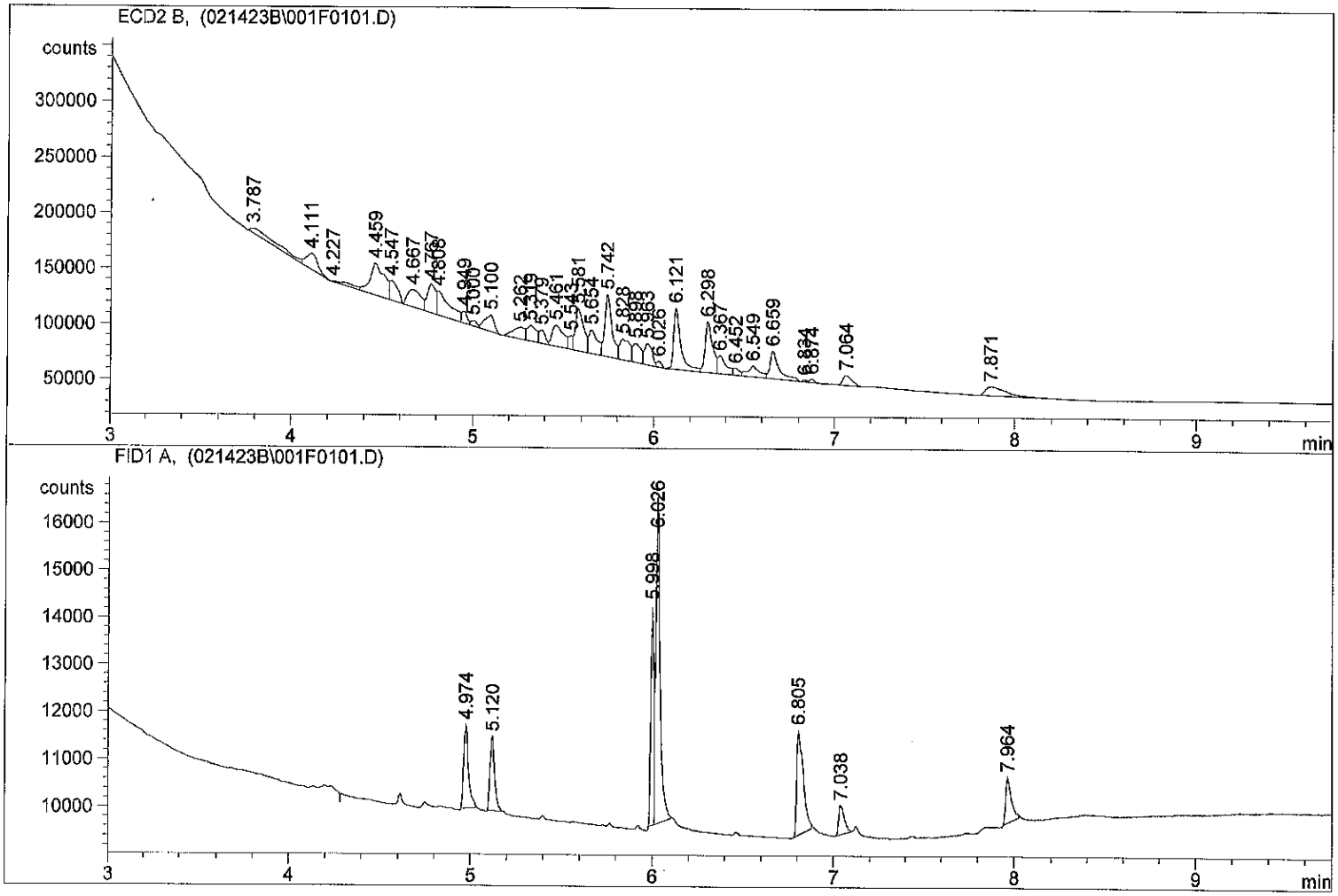
WO Comments

23A0420: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23B0276: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM H002055, SIM RM H010158, PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H>Please push this to front of LDW line of samples

Prep Instructions	
SPECIAL INSTRUCTIONS: 1. Weigh soil/sed into beakers-lightly dry with sodium sulfate. 2. Transfer to microwave vessel(s). Note: (do not fill vessels more than 2/3rd full. Some samples may require two vessels). 3. Add 1:1 Hexane/Acetone until the solvent layer is 3 inches above the soil layer after homogenization. 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-Re-homogenize while hot then cool vessels in R-05 15 minutes. Re-homogenize while cool. 7. Decant 1:1 Hex/Ace into Erlenmeyer flask with sodium sulfate in bottom and funnel with neutral glasswool plug. 8. Re-homogenize and rinse with 1:1 Hexane/Acetone. 9. Let cool and decant solvent then empty the soil into the funnel and rinse with Hexane. 10. KD on 100° bath. 11. Exchange (2 X with 20mL) Hexane. 12. TurboVap. 13. Clean-ups. 14. TurboVap. 15. Vial with Hexane. A. Need Total Solids Y /(N) B. Archive/Freeze(Y)/N	

Data File C:\HPCHEM\1\DATA\021423B\001F0101.D Sample Name: DCM RINSE

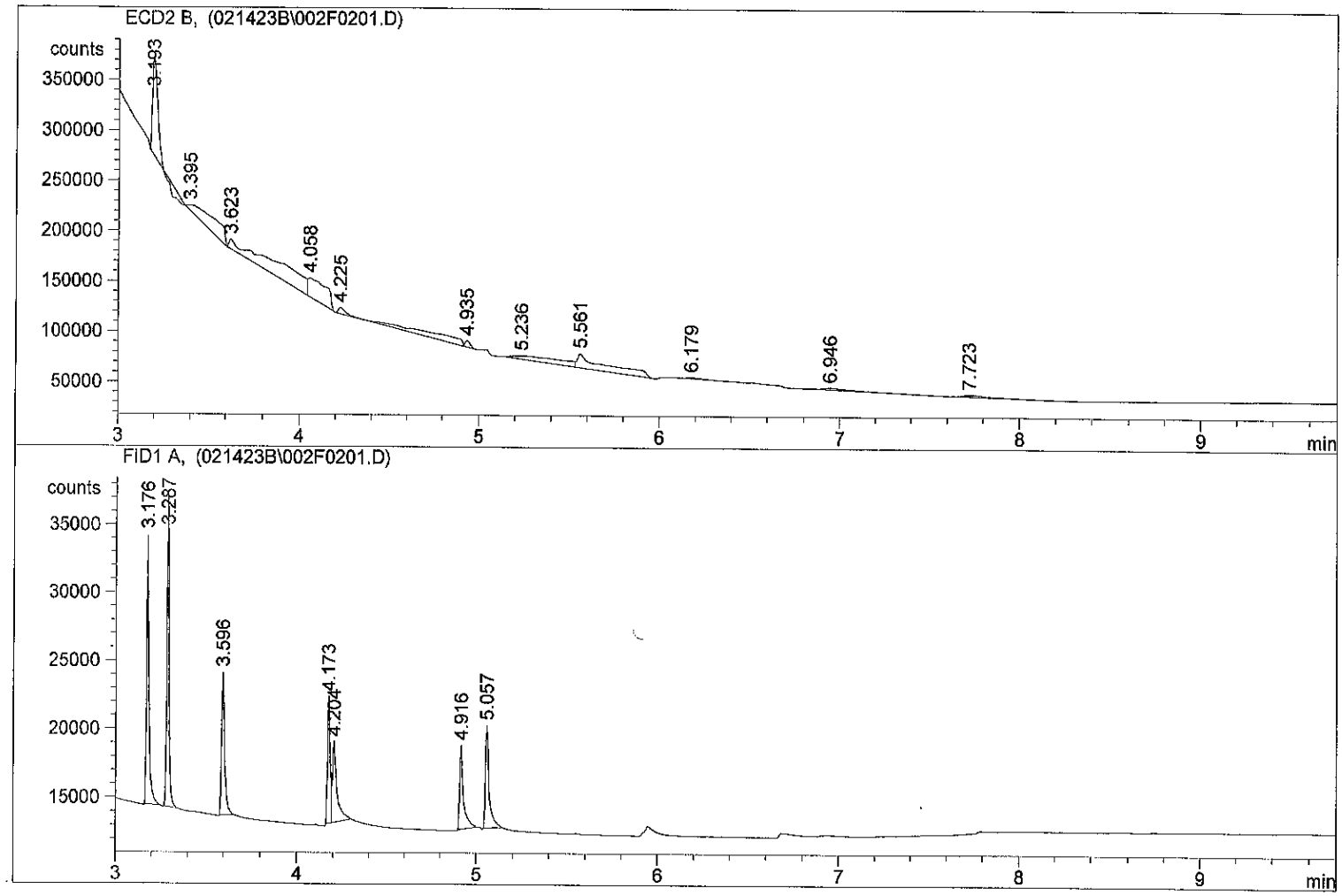
Injection Date	: 2/14/2023 3:47:52 PM	Seq. Line :	1
Sample Name	: DCM RINSE	Location :	Vial 1
Acq. Operator	: YL	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\021423B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

Data File C:\HPCHEM\1\DATA\021423B\002F0201.D Sample Name: PNA STTD 10PPM

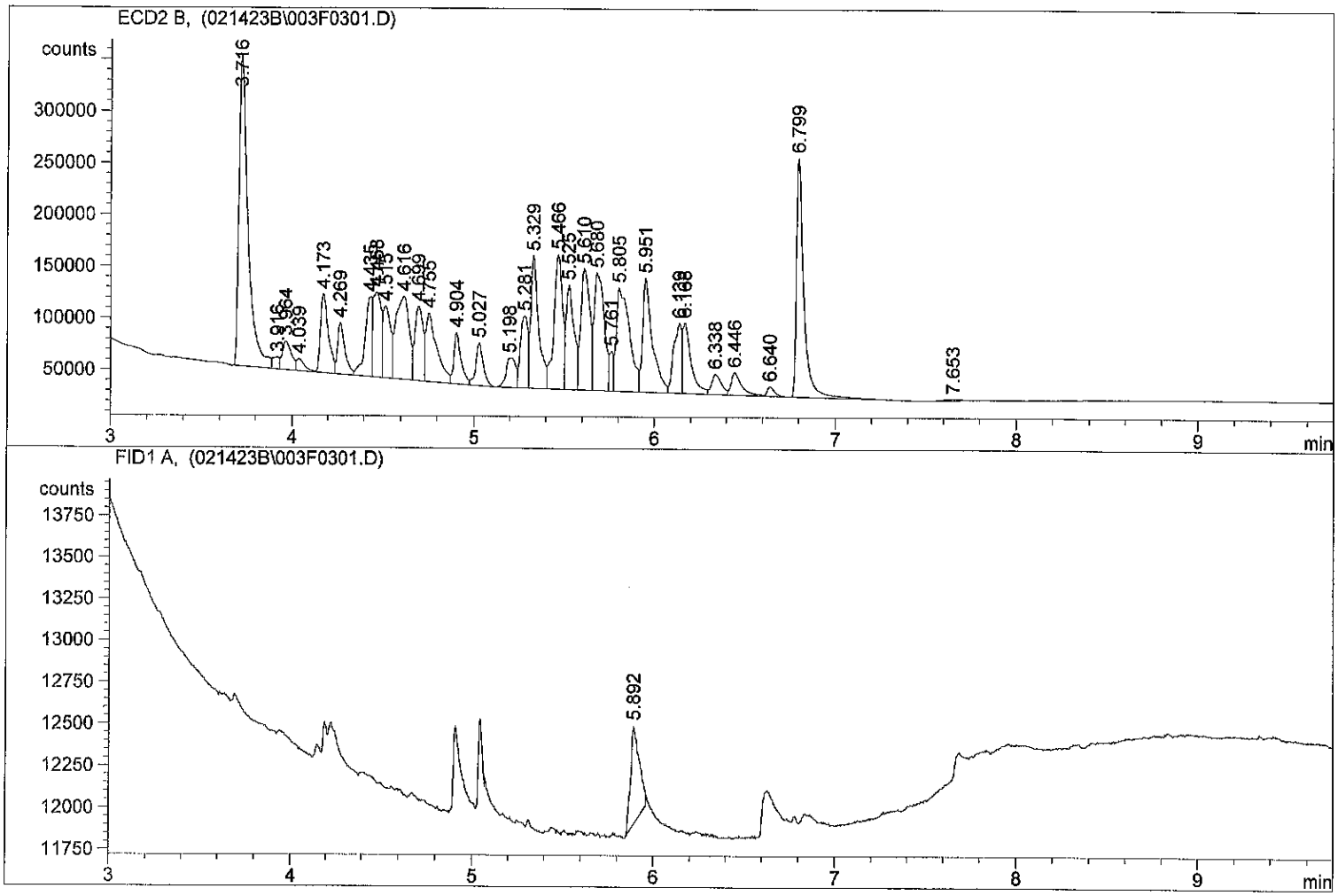
Injection Date	: 2/14/2023 4:02:20 PM	Seq. Line :	2
Sample Name	: PNA STTD 10PPM	Location :	Vial 2
Acq. Operator	: YL	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\021423B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

Data File C:\HPCHEM\1\DATA\021423B\003F0301.D Sample Name: AR1660 1PPM

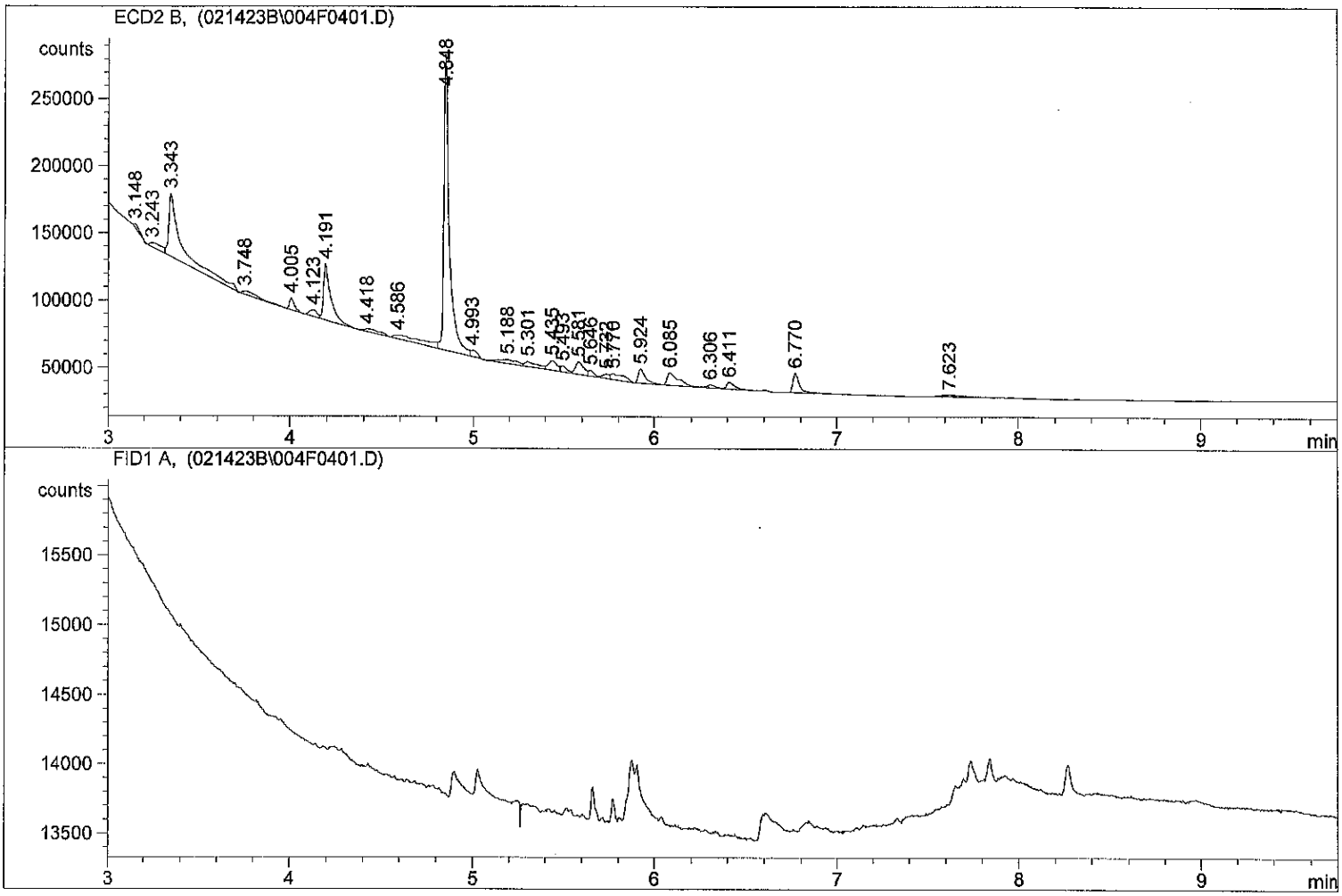
Injection Date	: 2/14/2023 4:16:37 PM	Seq. Line :	3
Sample Name	: AR1660 1PPM	Location :	Vial 3
Acq. Operator	: YL	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\021423B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

Data File C:\HPCHEM\1\DATA\021423B\004F0401.D Sample Name: 23B0420 01

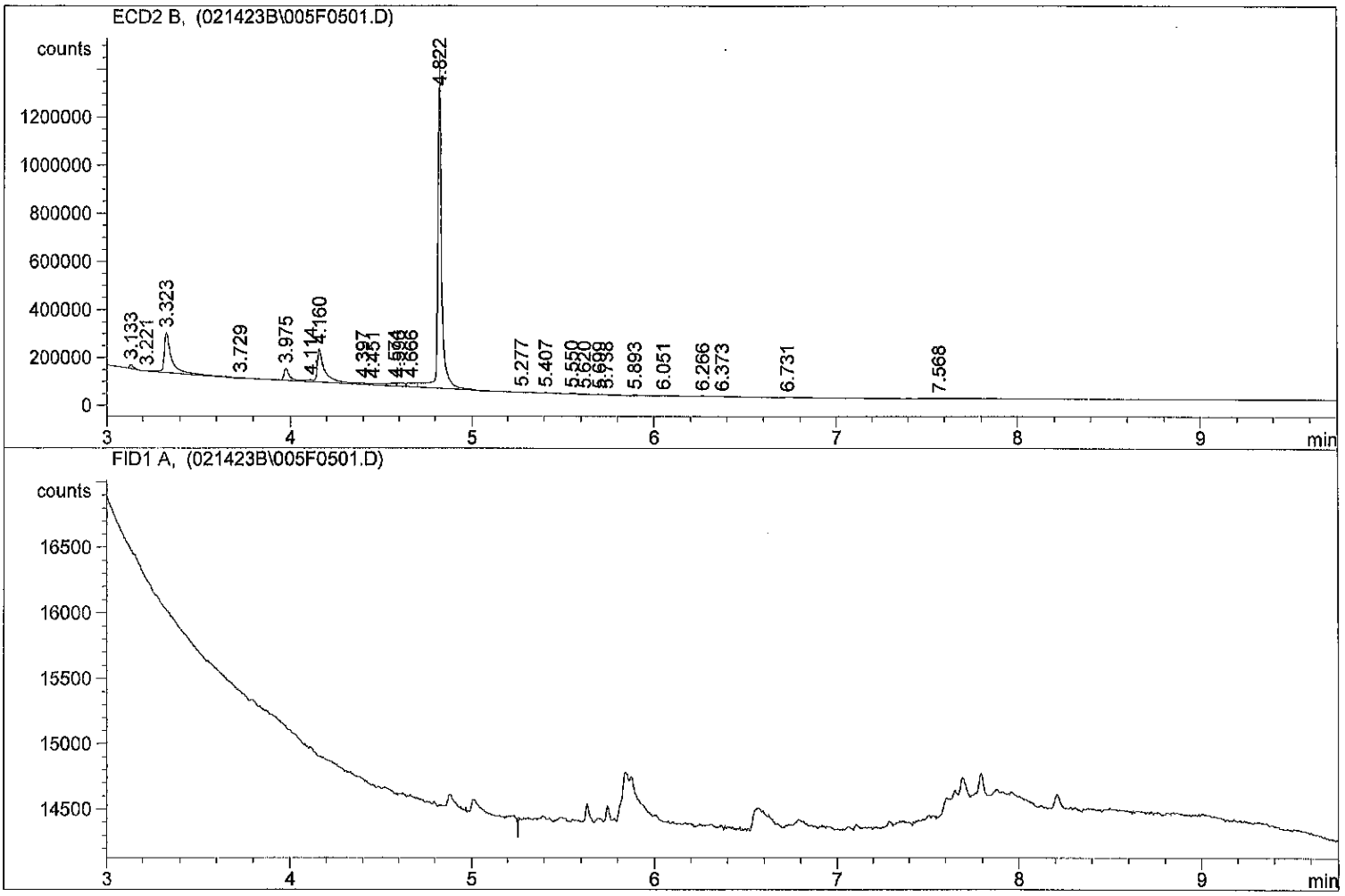
Injection Date	: 2/14/2023 4:30:33 PM	Seq. Line	: 4
Sample Name	: 23B0420 01	Location	: Vial 4
Acq. Operator	: YL	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\021423B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

Injection Date : 2/14/2023 4:45:04 PM Seq. Line : 5
Sample Name : 23B0420 02 Location : Vial 5
Acq. Operator : YL Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\021423B.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

```
Injection Date  : 2/14/2023 4:59:03 PM          Seq. Line :  6
Sample Name     : 23B0420 03                    Location : Vial 6
Acq. Operator   : YL                               Inj :  1
                                                Inj Volume : 1 µl
Sequence File   : C:\HPCHEM\1\SEQUENCE\021423B.S
Method          : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed    : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
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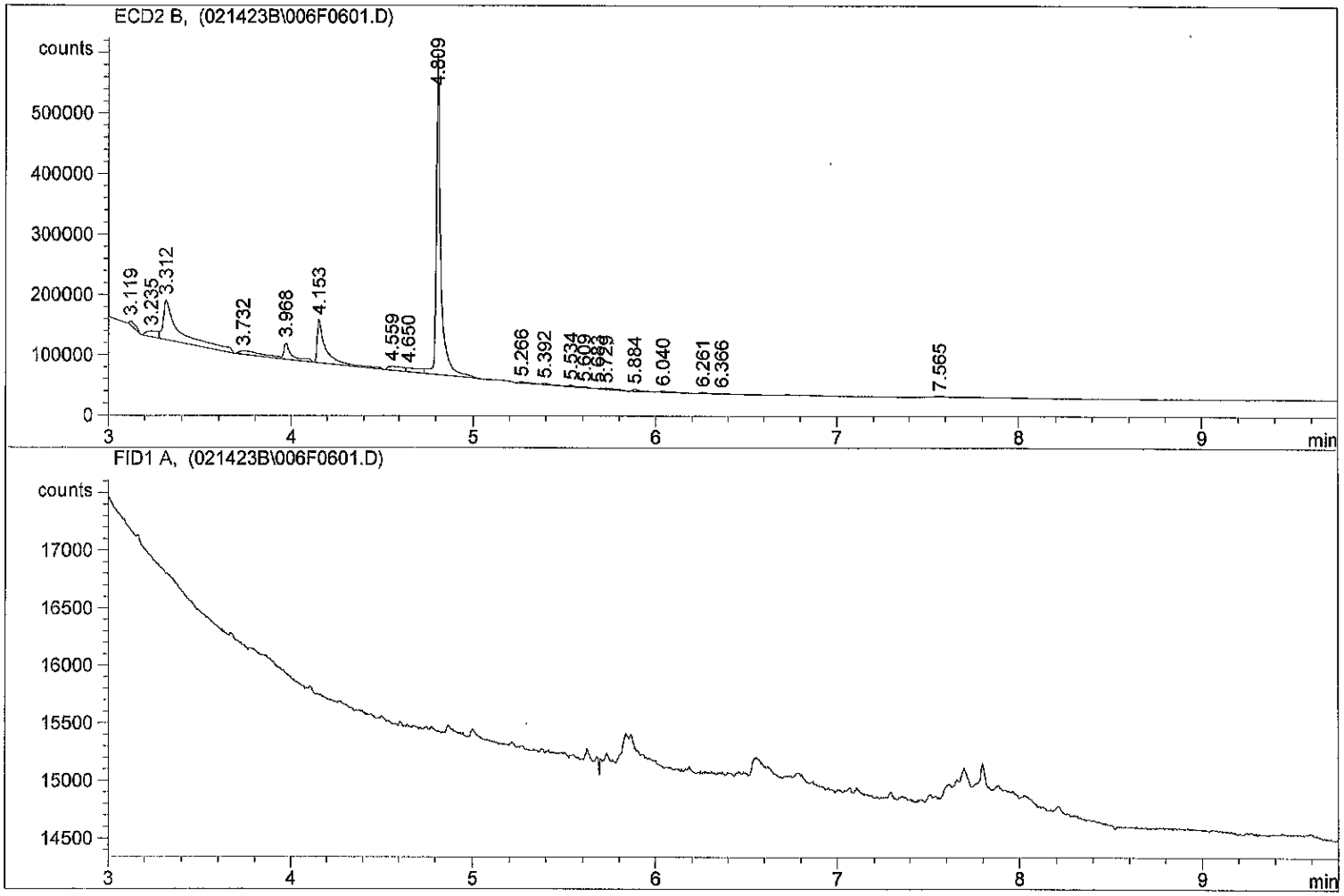
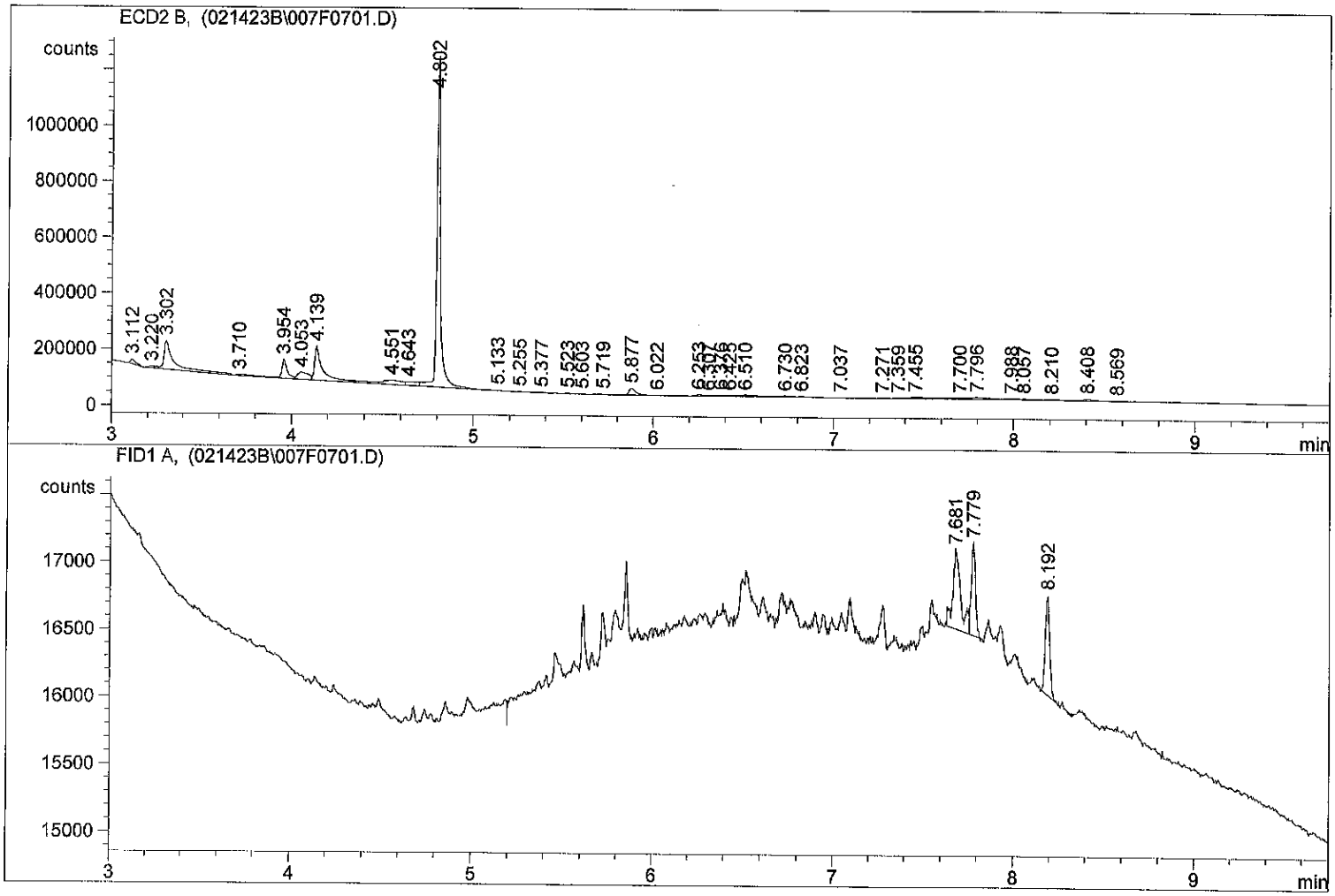


*** End of Report ***

Injection Date : 2/14/2023 5:13:35 PM Seq. Line : 7
Sample Name : 23B0420 04 Location : Vial 7
Acq. Operator : YL Inj : 1
Inj Volume : 1 µl

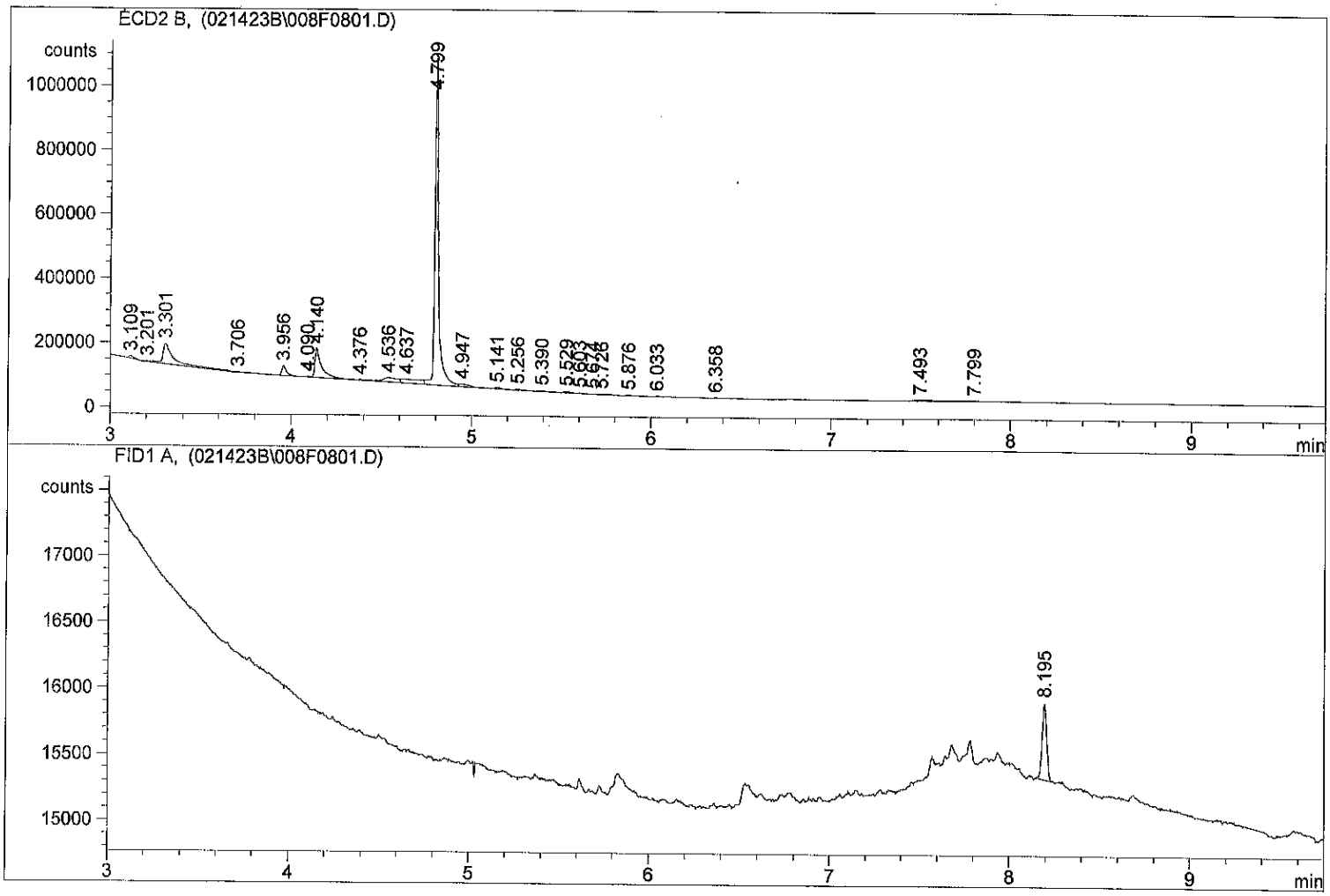
Sequence File : C:\HPCHEM\1\SEQUENCE\021423B.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Data File C:\HPCHEM\1\DATA\021423B\008F0801.D Sample Name: 23B0420 05

Injection Date	: 2/14/2023 5:27:33 PM	Seq. Line :	8
Sample Name	: 23B0420 05	Location :	Vial 8
Acq. Operator	: YL	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\021423B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

```
Injection Date  : 2/14/2023 5:42:01 PM        Seq. Line :   9
Sample Name     : 23B0420 06                  Location : Vial 9
Acq. Operator   : YL                             Inj :   1
                                              Inj Volume : 1 µl

Sequence File   : C:\HPCHEM\1\SEQUENCE\021423B.S
Method          : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed    : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
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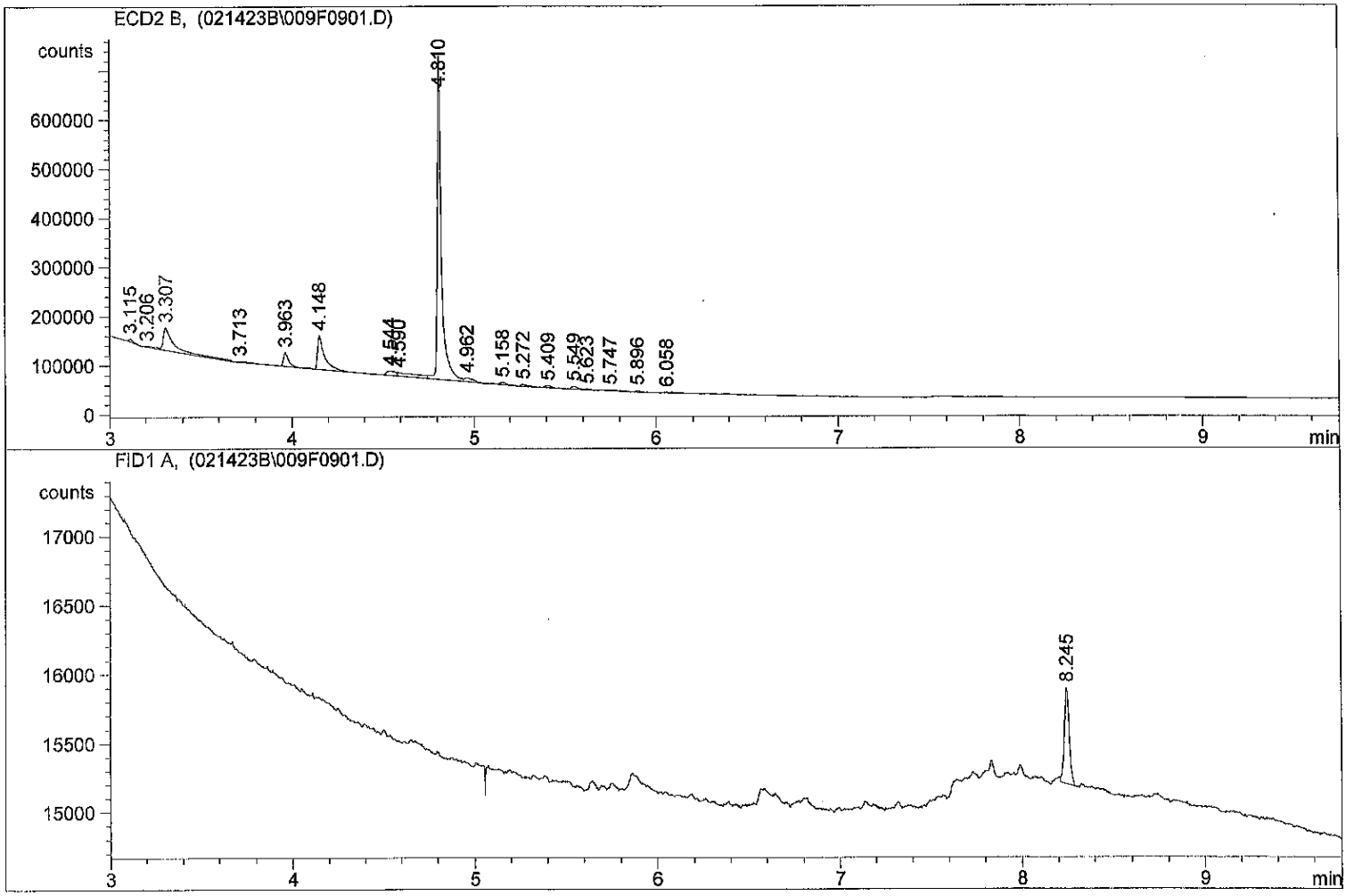
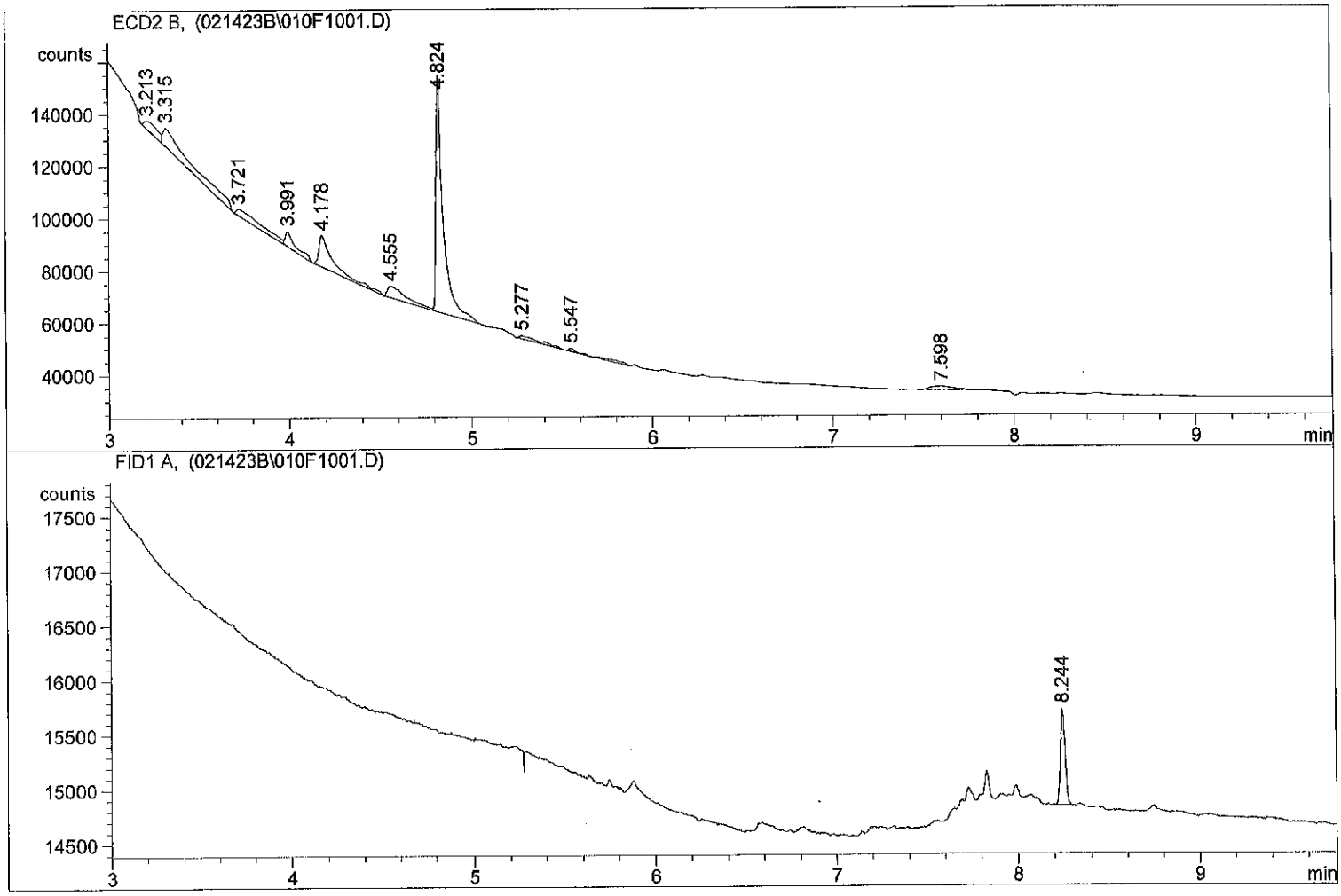


*** End of Report ***

Data File C:\HPCHEM\1\DATA\021423B\010F1001.D Sample Name: 23B0420 07

Injection Date	: 2/14/2023 5:56:02 PM	Seq. Line	: 10
Sample Name	: 23B0420 07	Location	: Vial 10
Acq. Operator	: YL	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\021423B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			

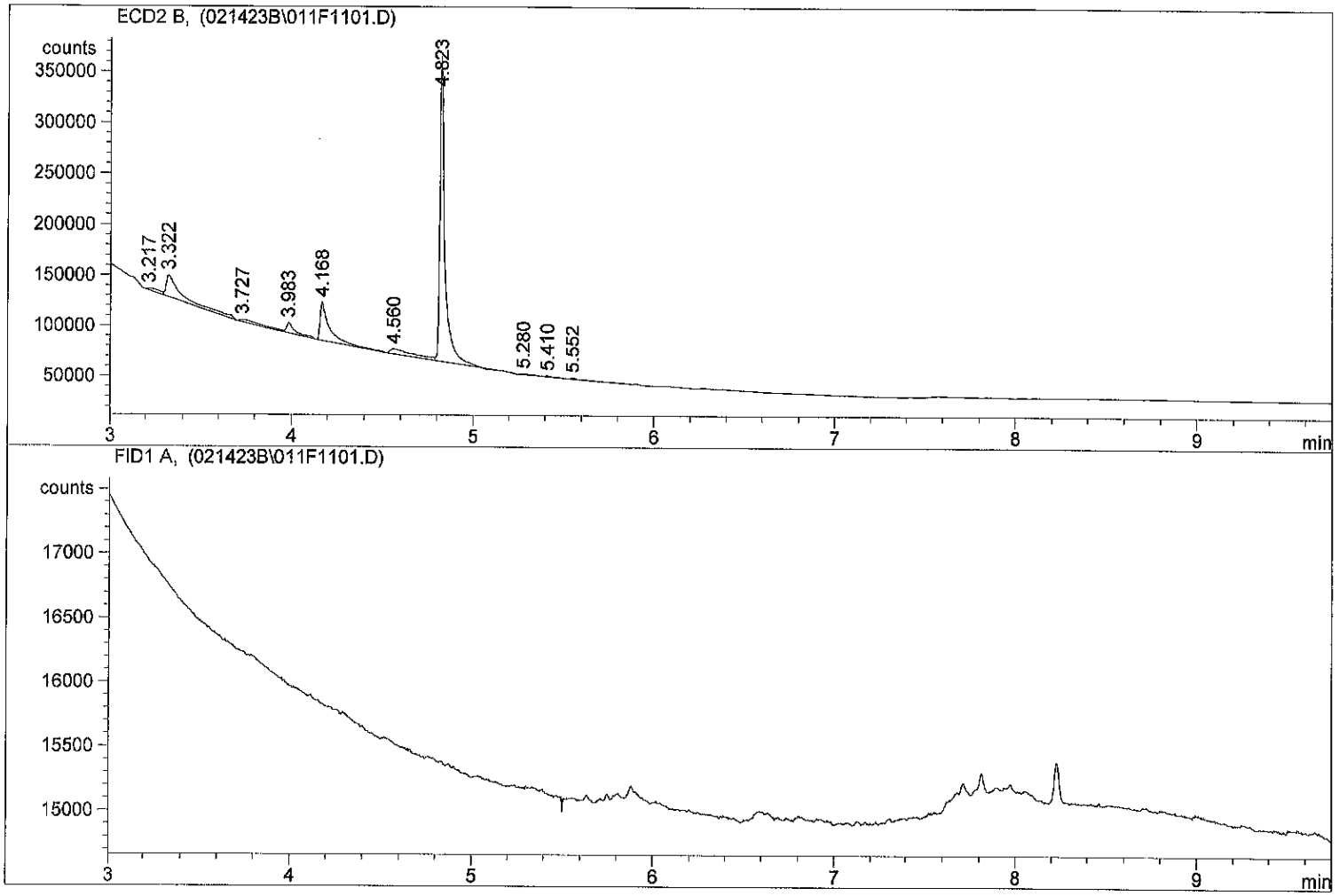


*** End of Report ***

Data File C:\HPCHEM\1\DATA\021423B\011F1101.D Sample Name: 23B0420 08

Injection Date : 2/14/2023 6:10:30 PM Seq. Line : 11
Sample Name : 23B0420 08 Location : Vial 11
Acq. Operator : YL Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\021423B.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

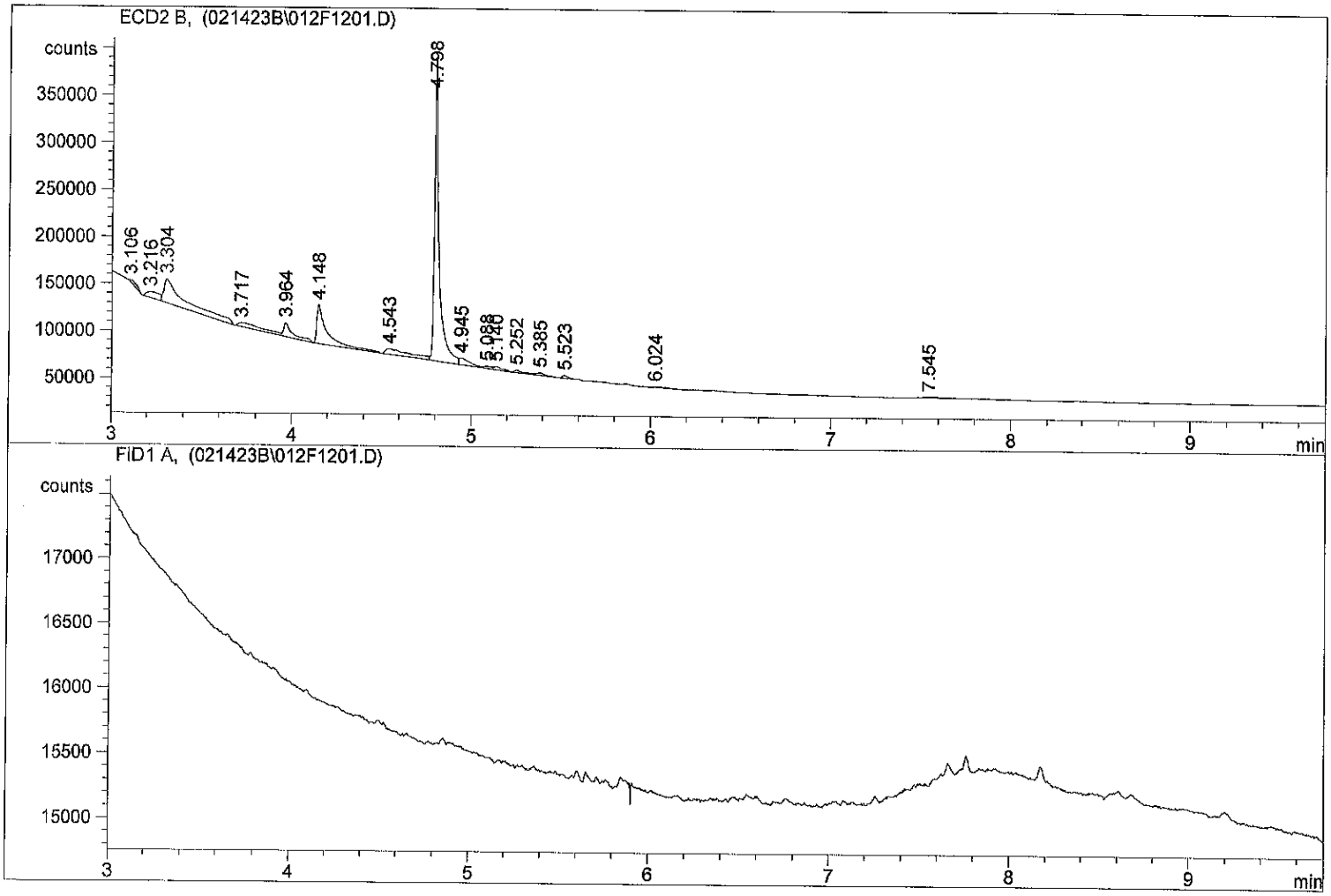


*** End of Report ***

Data File C:\HPCHEM\1\DATA\021423B\012F1201.D Sample Name: 23B0420 09

Injection Date	: 2/14/2023 6:24:29 PM	Seq. Line :	12
Sample Name	: 23B0420 09	Location :	Vial 12
Acq. Operator	: YL	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\021423B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		

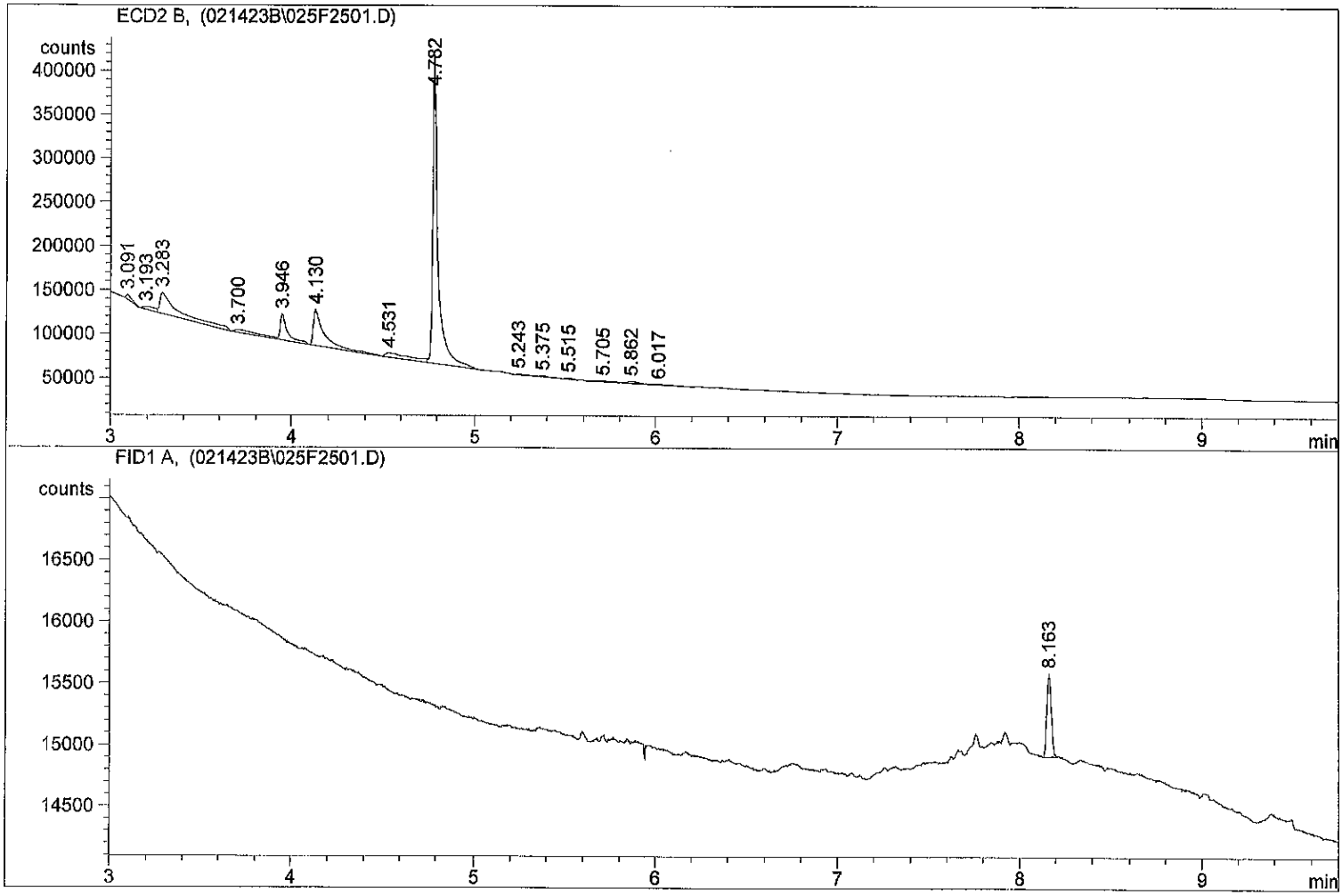
SCREEN METHOD



*** End of Report ***

Data File C:\HPCHEM\1\DATA\021423B\025F2501.D Sample Name: 23B0276 01

Injection Date	: 2/14/2023 9:29:57 PM	Seq. Line	: 25
Sample Name	: 23B0276 01	Location	: Vial 25
Acq. Operator	: YL	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\021423B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		
SCREEN METHOD			



*** End of Report ***

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0161	Cleanup Type:	Sulfuric Acid
Cleanup Method:	EPA 3665 Sulfuric Acid Cleanup - uL	Analysis:	EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1004	23A0420-08	02282328ECD7.D	02/18/2023	
LDW23-SC1045	23A0420-01	02282319ECD7.D	02/18/2023	
LDW23-SC1003	23A0420-07	02282327ECD7.D	02/18/2023	
Reference	BLB0391-SRM1	02282318ECD7.D	02/18/2023	
Matrix Spike Dup	BLB0391-MSD1	02282324ECD7.D	02/18/2023	
Matrix Spike	BLB0391-MS1	02282323ECD7.D	02/18/2023	
LCS Dup	BLB0391-BSD1	02282317ECD7.D	02/18/2023	
Blank	BLB0391-BLK1	02282315ECD7.D	02/18/2023	
LDW23-SC1057	23A0420-03	02282321ECD7.D	02/18/2023	
LDW23-SC1052	23A0420-02	02282320ECD7.D	02/18/2023	
LDW23-IT1051	23A0420-04	02282322ECD7.D	02/18/2023	
LDW23-SC1132	23A0420-06	02282326ECD7.D	02/18/2023	
LDW23-SC1125	23A0420-05	02282325ECD7.D	02/18/2023	
LDW23-SC1082	23A0420-09	02282329ECD7.D	02/18/2023	
LCS	BLB0391-BS1	02282316ECD7.D	02/18/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0161

Matrix: Solid **Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 2/18/2023 2:42:56PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0420-01	A	LDW23-SC1045	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-02	A	LDW23-SC1052	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-03	A	LDW23-SC1057	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-04	A	LDW23-IT1051	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-05	A	LDW23-SC1125	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-06	A	LDW23-SC1132	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-07	A	LDW23-SC1003	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-08	A	LDW23-SC1004	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-09	A	LDW23-SC1082	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23B0276-01	A	LDW23-SC1150B	A 01	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
BLB0391-BLK1	-	Blank	-	2.5	2.5	-	2/18/2023	NRB	
BLB0391-BS1	-	LCS	-	2.5	2.5	-	2/18/2023	NRB	
BLB0391-BSD1	-	LCS Dup	-	2.5	2.5	-	2/18/2023	NRB	
BLB0391-MS1	-	Matrix Spike	-	2.5	2.5	-	2/18/2023	NRB	
BLB0391-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/18/2023	NRB	
BLB0391-SRM1	-	Reference	-	2.5	2.5	-	2/18/2023	NRB	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0162	Cleanup Type:	Sulfur
Cleanup Method:	EPA 3660B Sulfur Cleanup - uL	Analysis:	EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-IT1051	23A0420-04	02282322ECD7.D	02/18/2023	
LDW23-SC1045	23A0420-01	02282319ECD7.D	02/18/2023	
LDW23-SC1052	23A0420-02	02282320ECD7.D	02/18/2023	
LDW23-SC1057	23A0420-03	02282321ECD7.D	02/18/2023	
LDW23-SC1082	23A0420-09	02282329ECD7.D	02/18/2023	
LDW23-SC1125	23A0420-05	02282325ECD7.D	02/18/2023	
LDW23-SC1132	23A0420-06	02282326ECD7.D	02/18/2023	
LDW23-SC1004	23A0420-08	02282328ECD7.D	02/18/2023	
Reference	BLB0391-SRM1	02282318ECD7.D	02/18/2023	
Blank	BLB0391-BLK1	02282315ECD7.D	02/18/2023	
LCS	BLB0391-BS1	02282316ECD7.D	02/18/2023	
LCS Dup	BLB0391-BSD1	02282317ECD7.D	02/18/2023	
Matrix Spike	BLB0391-MS1	02282323ECD7.D	02/18/2023	
Matrix Spike Dup	BLB0391-MSD1	02282324ECD7.D	02/18/2023	
LDW23-SC1003	23A0420-07	02282327ECD7.D	02/18/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0162

Matrix: Solid **Cleanup using: Organics - EPA 3660B Sulfur Cleanup - uL** **Printed: 2/18/2023 2:44:20PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0420-01	A	LDW23-SC1045	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-02	A	LDW23-SC1052	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-03	A	LDW23-SC1057	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-04	A	LDW23-IT1051	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-05	A	LDW23-SC1125	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-06	A	LDW23-SC1132	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-07	A	LDW23-SC1003	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-08	A	LDW23-SC1004	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-09	A	LDW23-SC1082	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23B0276-01	A	LDW23-SC1150B	A 01	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
BLB0391-BLK1	-	Blank	-	2.5	2.5	-	2/18/2023	NRB	
BLB0391-BS1	-	LCS	-	2.5	2.5	-	2/18/2023	NRB	
BLB0391-BSD1	-	LCS Dup	-	2.5	2.5	-	2/18/2023	NRB	
BLB0391-MS1	-	Matrix Spike	-	2.5	2.5	-	2/18/2023	NRB	
BLB0391-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/18/2023	NRB	
BLB0391-SRM1	-	Reference	-	2.5	2.5	-	2/18/2023	NRB	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0163	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Matrix Spike Dup	BLB0391-MSD1	02282324ECD7.D	02/18/2023	
Reference	BLB0391-SRM1	02282318ECD7.D	02/18/2023	
Matrix Spike	BLB0391-MS1	02282323ECD7.D	02/18/2023	
LCS Dup	BLB0391-BSD1	02282317ECD7.D	02/18/2023	
LCS	BLB0391-BS1	02282316ECD7.D	02/18/2023	
Blank	BLB0391-BLK1	02282315ECD7.D	02/18/2023	
LDW23-SC1132	23A0420-06	02282326ECD7.D	02/18/2023	
LDW23-IT1051	23A0420-04	02282322ECD7.D	02/18/2023	
LDW23-SC1082	23A0420-09	02282329ECD7.D	02/18/2023	
LDW23-SC1003	23A0420-07	02282327ECD7.D	02/18/2023	
LDW23-SC1004	23A0420-08	02282328ECD7.D	02/18/2023	
LDW23-SC1045	23A0420-01	02282319ECD7.D	02/18/2023	
LDW23-SC1052	23A0420-02	02282320ECD7.D	02/18/2023	
LDW23-SC1057	23A0420-03	02282321ECD7.D	02/18/2023	
LDW23-SC1125	23A0420-05	02282325ECD7.D	02/18/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0163

Matrix: Solid **Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL** **Printed: 2/18/2023 2:44:57PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0420-01	A	LDW23-SC1045	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-02	A	LDW23-SC1052	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-03	A	LDW23-SC1057	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-04	A	LDW23-IT1051	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-05	A	LDW23-SC1125	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-06	A	LDW23-SC1132	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-07	A	LDW23-SC1003	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-08	A	LDW23-SC1004	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23A0420-09	A	LDW23-SC1082	A 02	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
23B0276-01	A	LDW23-SC1150B	A 01	2.5	2.5	8082A PCB Solid 4	2/18/2023	NRB	
BLB0391-BLK1	-	Blank	-	2.5	2.5	-	2/18/2023	NRB	
BLB0391-BS1	-	LCS	-	2.5	2.5	-	2/18/2023	NRB	
BLB0391-BSD1	-	LCS Dup	-	2.5	2.5	-	2/18/2023	NRB	
BLB0391-MS1	-	Matrix Spike	-	2.5	2.5	-	2/18/2023	NRB	
BLB0391-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/18/2023	NRB	
BLB0391-SRM1	-	Reference	-	2.5	2.5	-	2/18/2023	NRB	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8082A

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLB0391-BLK1	File ID:	02282315ECD7.D
Sampled:	N/A	Prepared:	02/15/23 16:55	Analyzed:	02/28/23 20:49
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	12.5 g / 2.5 mL
Batch:	BLB0391	Sequence:	SLC0014	Calibration:	GB00069
Instrument:	ECD7	Column:	ZB5	Cleanups:	Silica Gel, Sulfur, Sulfuric Acid

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
12674-11-2	Aroclor 1016	1	4.0	U	1.6	4.0
11104-28-2	Aroclor 1221	1	4.0	U	1.6	4.0
11141-16-5	Aroclor 1232	1	4.0	U	1.6	4.0
53469-21-9	Aroclor 1242	1	4.0	U	1.6	4.0
12672-29-6	Aroclor 1248	1	4.0	U	1.6	4.0
11097-69-1	Aroclor 1254	1	4.0	U	1.6	4.0
11096-82-5	Aroclor 1260	1	4.0	U	0.6	4.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl	8.0000	6.41	80.1	40 - 126	
Tetrachlorometaxylene	8.0000	5.43	67.9	44 - 120	
Decachlorobiphenyl [2C]	8.0000	6.70	83.8	40 - 126	
Tetrachlorometaxylene [2C]	8.0000	5.52	69.0	44 - 120	

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282315ECD7.D
Data file 2: /230228.b/230228.b/02282315ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLB0391-BLK1
Client ID:
Injection Date: 28-FEB-2023 20:49
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.000	328738	5.686	-0.001	136124	27.1	27.6	1.6	Tetrachloro-m-xylene
13.893	0.000	536209	14.118	-0.002	259157	32.0	33.5	4.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	811031	20.4
Hexabromobiphenyl	1429847	1699761	18.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	336382	6.7
Hexabromobiphenyl	513946	507633	-1.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	ZB5 Col Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	---			0.0
Aroclor-1248	2	---			0.0	2	---			0.0
Aroclor-1248	3	---			0.0	3	---			0.0
Aroclor-1248	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	---			0.0
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	---			0.0	3	---			0.0
Aroclor-1254	4	---			0.0	4	---			0.0
Aroclor-1254	5	---			0.0	5	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	---			0.0	1	---			0.0
Aroclor-1260	2	---			0.0	2	---			0.0
Aroclor-1260	3	---			0.0	3	---			0.0
Aroclor-1260	4	---			0.0	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.907 - 13.793) = 300320 Col1 Total PCB = 0.0 ppm*

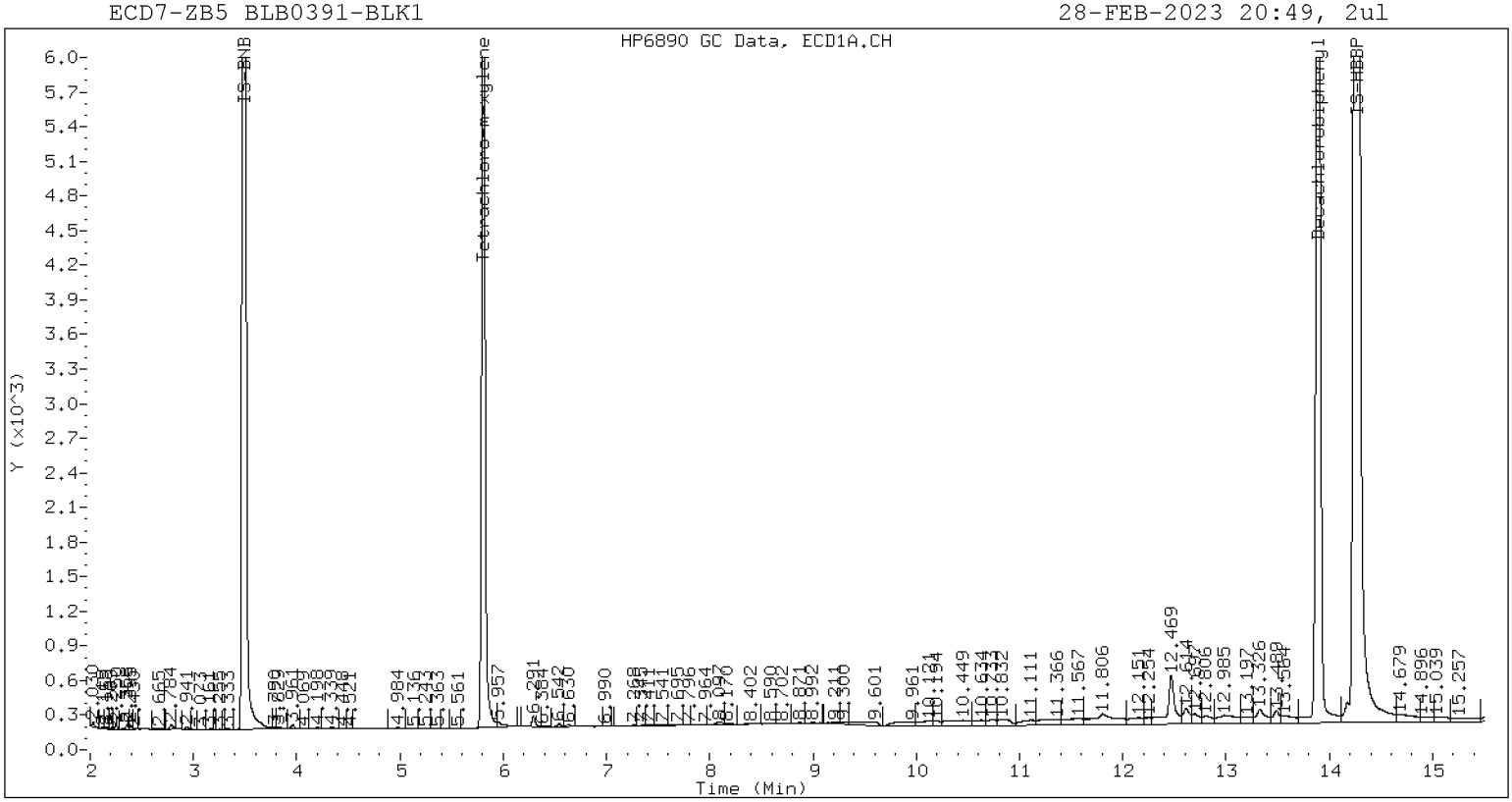
Total PCB Area Col2 (5.787 - 14.020) = 24116 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

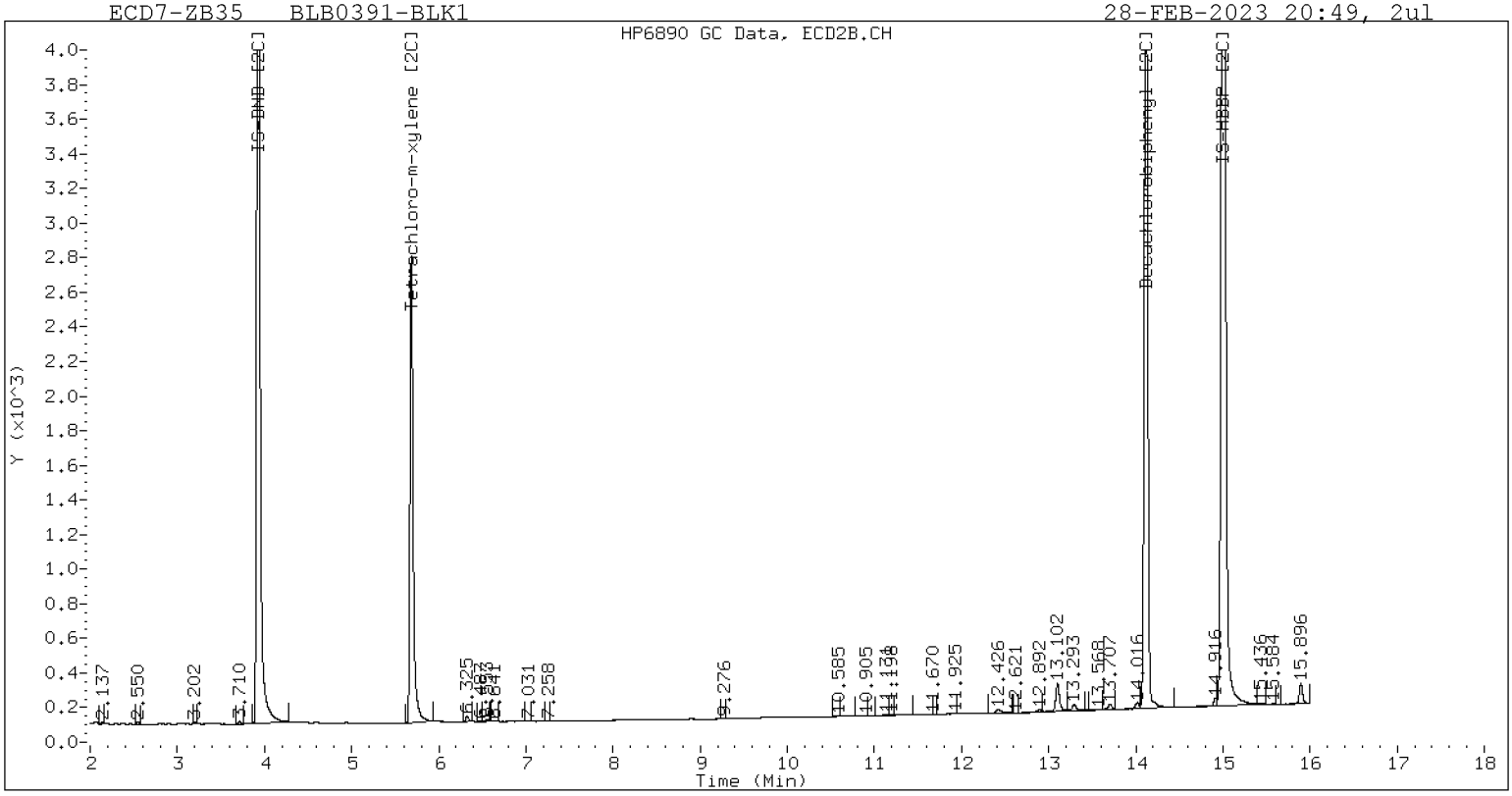
PCB Dual Column Chromatograms

ECD7-ZB5 BLB0391-BLK1 28-FEB-2023 20:49, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLB0391-BLK1 28-FEB-2023 20:49, 2ul



ZB-35 Manual Integration: NO

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/28/23 21:10
Batch:	BLB0391	Laboratory ID:	BLB0391-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	12.5 g / 2.5 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Aroclor 1016	101	81.9		81.3	56 - 120
Aroclor 1260 [2C]	101	99.0		98.2	58 - 120

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Aroclor 1016	101	86.1		85.5	5.04	30	56 - 120
Aroclor 1260	101	103		103	9.75	30	58 - 120

* Indicates values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282316ECD7.D
Data file 2: /230228.b/230228.b/02282316ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLB0391-BS1
Client ID:
Injection Date: 28-FEB-2023 21:10
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.001	396829	5.687	-0.001	155760	32.0	30.9	3.7	Tetrachloro-m-xylene
13.892	-0.001	607607	14.118	-0.002	309970	32.8	38.4	15.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	830219	23.2
Hexabromobiphenyl	1429847	1880213	31.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	344030	9.1
Hexabromobiphenyl	513946	529461	3.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.268	-0.001	125739	398.8	1	7.253	-0.002	76955	382.1
Aroclor-1016	2	7.652	-0.004	412349	429.0	2	7.853	-0.006	174691	427.7
Aroclor-1016	3	7.789	-0.003	178538	380.5	3	8.052	-0.006	72952	395.5
Aroclor-1016	4	8.403	-0.003	130388	429.8	4	8.305	-0.003	56492	390.4
Total Col1Ave (4 peaks):					409.5	Total Col2Ave (4 peaks):				398.9 RPD = 3
Corrected Ave (3 peaks):					402.7	Corrected Ave (3 peaks):				389.3 RPD = 3
Aroclor-1221	1	4.732	0.001	680	9.1	1	---			0.0
Aroclor-1221	2	6.130	-0.001	16280	122.4	2	6.298	0.002	7389	119.9
Aroclor-1221	3	6.382	-0.000	79239	256.7	3	6.621	-0.000	33393	332.8
Total Col1Ave (3 peaks):					129.4	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.732	0.002	680	15.3	1	---			0.0
Aroclor-1232	2	6.130	-0.000	16280	184.6	2	7.253	-0.001	76955	879.8
Aroclor-1232	3	7.652	-0.004	412349	1032.7	3	7.853	-0.007	174691	998.8
Aroclor-1232	4	8.576	-0.005	165842	977.2	4	8.711	-0.004	55246	1097.6
Total Col1Ave (4 peaks):					552.4	Total Col2Ave (3 peaks):				992.0 RPD = 57*
Corrected Ave (3 peaks):					392.4	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.268	-0.000	125739	488.7	1	7.253	0.000	76955	481.4
Aroclor-1242	2	7.652	-0.004	412349	527.7	2	7.853	-0.006	174691	519.9
Aroclor-1242	3	8.403	-0.002	130388	536.3	3	9.157	-0.010	9659	92.4
Aroclor-1242	4	8.576	-0.005	165842	461.5	4	9.582	-0.016	3942	30.9
Total Col1Ave (4 peaks):					503.6	Total Col2Ave (4 peaks):				281.2 RPD = 57*
Corrected Ave (3 peaks):					492.7	Corrected Ave (3 peaks):				201.6 RPD = 84*
Aroclor-1248	1	8.403	-0.003	130388	321.9	1	8.305	-0.003	56492	343.9
Aroclor-1248	2	8.576	-0.005	165842	322.1	2	8.711	-0.004	55246	325.3
Aroclor-1248	3	8.991	-0.006	183271	188.7	3	9.157	-0.011	9659	49.4
Aroclor-1248	4	9.297	0.002	143344	289.9	4	9.582	-0.013	3942	16.8
Total Col1Ave (4 peaks):					280.6	Total Col2Ave (4 peaks):				183.9 RPD = 42*
Corrected Ave (3 peaks):					266.8	Corrected Ave (3 peaks):				130.5 RPD = 69*
Aroclor-1254	1	9.297	-0.002	143344	171.9	1	9.446	-0.005	49410	189.0
Aroclor-1254	2	---			0.0	2	9.967	-0.005	10467	49.8
Aroclor-1254	3	9.663	-0.006	18433	34.4	3	10.142	0.017	105757	232.4
Aroclor-1254	4	9.802	-0.006	79037	75.8	4	10.367	-0.007	133928	301.8
Aroclor-1254	5	10.118	-0.061	378226	579.0	5	10.564	-0.006	185477	686.6
Total Col1Ave (4 peaks):					215.3	Total Col2Ave (5 peaks):				291.9 RPD = 30
Corrected Ave (3 peaks):					94.1	Corrected Ave (4 peaks):				193.2 RPD = 69*
Aroclor-1260	1	11.042	-0.002	290841	430.0	1	11.650	-0.003	142796	458.7
Aroclor-1260	2	11.359	-0.002	328957	465.5	2	11.915	-0.003	367767	462.9
Aroclor-1260	3	11.732	-0.003	937633	500.2	3	12.432	-0.003	123477	585.6
Aroclor-1260	4	12.136	-0.004	459600	486.9	4	12.499	-0.003	253355	473.1
Aroclor-1260	5	12.242	-0.001	188376	463.7	NS	---			----
Total Col1Ave (5 peaks):					469.3	Total Col2Ave (4 peaks):				495.1 RPD = 5
Corrected Ave (4 peaks):					461.5	Corrected Ave (3 peaks):				464.9 RPD = 1
Aroclor-1262	1	10.823	-0.006	628458	1089.6	1	11.197	-0.003	135585	299.9
Aroclor-1262	2	12.242	-0.001	188376	200.7	2	11.650	-0.001	142796	370.9
Aroclor-1262	3	12.318	-0.001	229571	227.5	3	12.432	-0.001	123477	282.6
Aroclor-1262	4	12.986	-0.002	251034	272.2	4	12.499	-0.003	253355	370.2
Total Col1Ave (4 peaks):					447.5	Total Col2Ave (4 peaks):				330.9 RPD = 30
Corrected Ave (3 peaks):					233.5	Corrected Ave (3 peaks):				317.6 RPD = 31
Aroclor-1268	1	12.242	-0.004	188376	78.2	1	12.432	0.000	123477	115.8
Aroclor-1268	2	12.318	0.001	229571	96.2	2	12.499	-0.001	253355	221.0
Aroclor-1268	3	12.720	0.021	104602	51.2	3	12.890	-0.002	7681	7.8
Aroclor-1268	4	13.488	-0.002	86804	12.9	4	13.706	-0.003	35512	11.4
Total Col1Ave (4 peaks):					59.6	Total Col2Ave (4 peaks):				89.0 RPD = 40
Corrected Ave (3 peaks):					47.4	Corrected Ave (3 peaks):				45.0 RPD = 5

Total PCB Area Col1 (5.907 - 13.793) = 8863827 Col1 Total PCB = 0.9 ppm*

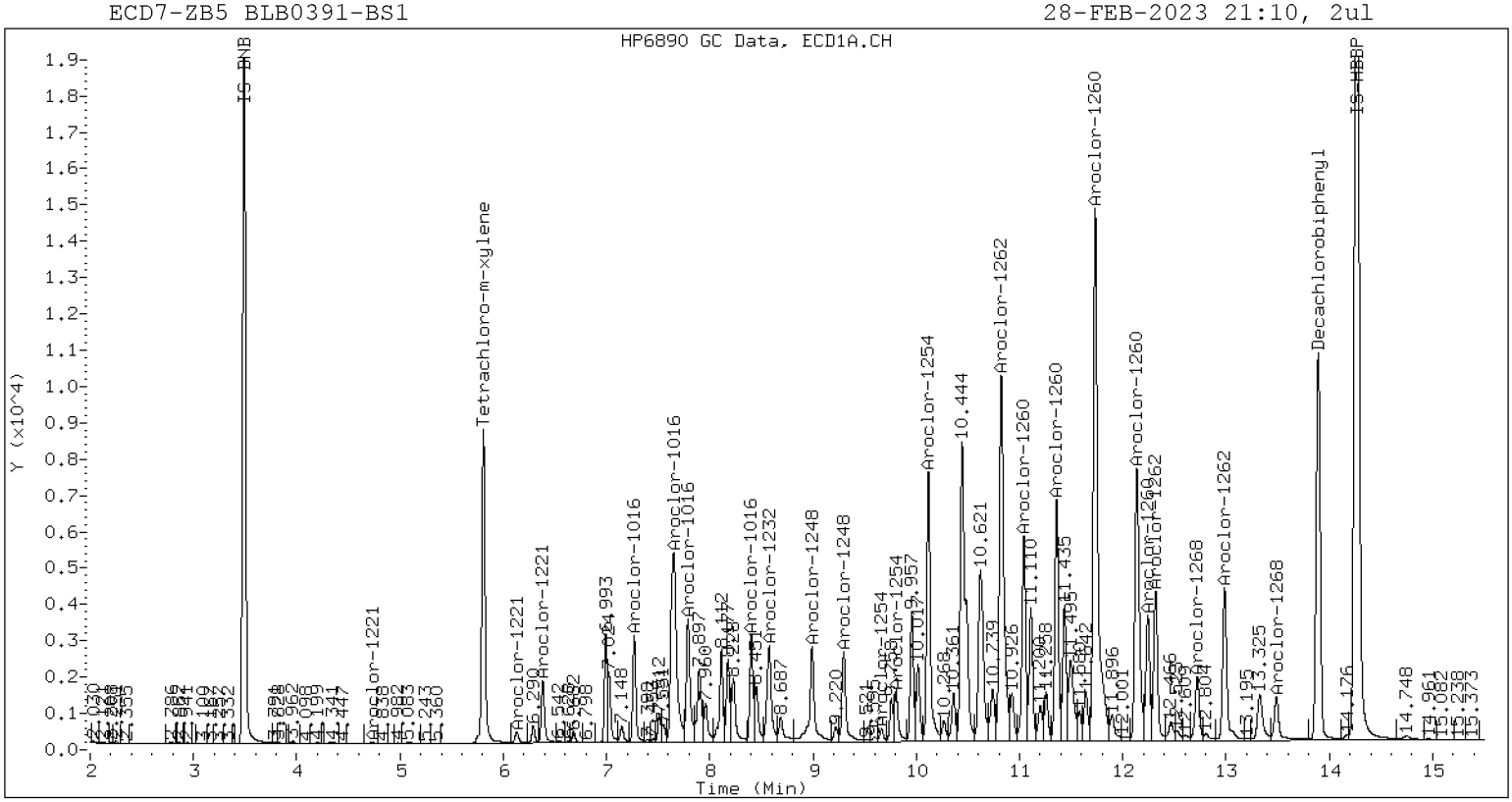
Total PCB Area Col2 (5.787 - 14.020) = 3418677 Col2 Total PCB = 0.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

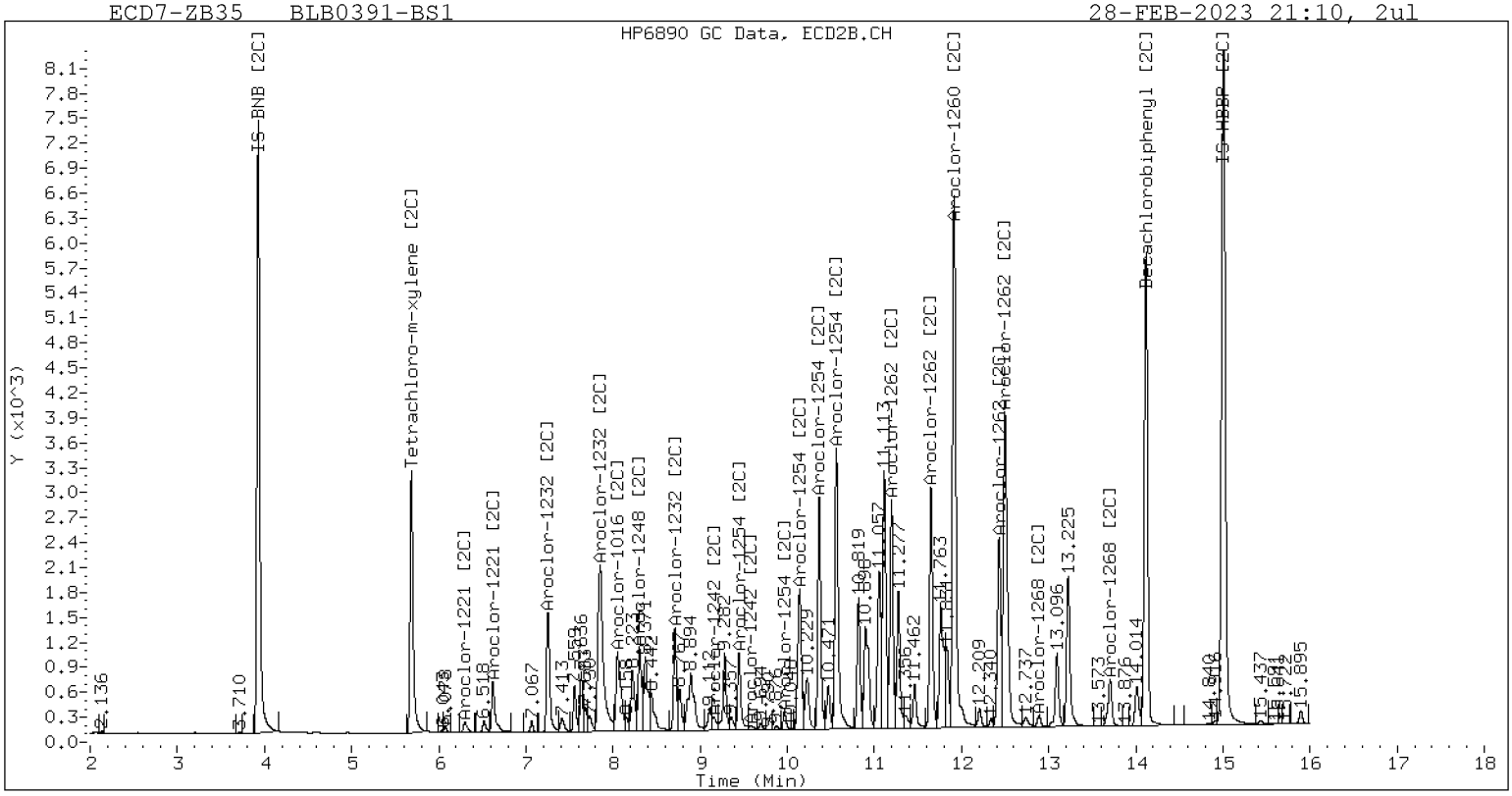
PCB Dual Column Chromatograms

ECD7-ZB5 BLB0391-BS1 28-FEB-2023 21:10, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLB0391-BS1 28-FEB-2023 21:10, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282317ECD7.D
Data file 2: /230228.b/230228.b/02282317ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLB0391-BSD1
Client ID:
Injection Date: 28-FEB-2023 21:31
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.001	394802	5.686	-0.001	156172	33.3	32.6	2.0	Tetrachloro-m-xylene
13.893	-0.000	592555	14.118	-0.002	302113	35.9	38.9	8.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	793505	17.8
Hexabromobiphenyl	1429847	1676867	17.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	326035	3.4
Hexabromobiphenyl	513946	510092	-0.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.268	-0.001	126002	418.1	1	7.253	-0.002	76590	401.3
Aroclor-1016	2	7.651	-0.004	416308	453.1	2	7.854	-0.006	173242	447.6
Aroclor-1016	3	7.789	-0.003	179707	400.7	3	8.052	-0.007	71983	411.8
Aroclor-1016	4	8.403	-0.002	130725	450.9	4	8.305	-0.003	56021	408.5
Total Col1Ave (4 peaks):					430.7	Total Col2Ave (4 peaks):				417.3 RPD = 3
Corrected Ave (3 peaks):					423.2	Corrected Ave (3 peaks):				407.2 RPD = 4
Aroclor-1221	1	4.731	0.001	666	9.4	1	---			0.0
Aroclor-1221	2	6.130	-0.002	15721	123.7	2	6.297	0.000	7604	130.2
Aroclor-1221	3	6.382	-0.000	79989	271.1	3	6.622	0.000	34049	358.1
Total Col1Ave (3 peaks):					134.7	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.731	0.001	666	15.7	1	---			0.0
Aroclor-1232	2	6.130	-0.001	15721	186.5	2	7.253	-0.001	76590	923.9
Aroclor-1232	3	7.651	-0.005	416308	1090.8	3	7.854	-0.007	173242	1045.2
Aroclor-1232	4	8.576	-0.005	165875	1022.6	4	8.711	-0.004	54545	1143.4
Total Col1Ave (4 peaks):					578.9	Total Col2Ave (3 peaks):				1037.5 RPD = 57*
Corrected Ave (3 peaks):					408.3	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.268	-0.000	126002	512.4	1	7.253	-0.001	76590	505.6
Aroclor-1242	2	7.651	-0.005	416308	557.5	2	7.854	-0.006	173242	544.1
Aroclor-1242	3	8.403	-0.001	130725	562.6	3	9.157	-0.010	9200	92.9
Aroclor-1242	4	8.576	-0.004	165875	482.9	4	9.585	-0.013	3757	31.1
Total Col1Ave (4 peaks):					528.9	Total Col2Ave (4 peaks):				293.4 RPD = 57*
Corrected Ave (3 peaks):					517.6	Corrected Ave (3 peaks):				209.9 RPD = 85*
Aroclor-1248	1	8.403	-0.002	130725	337.7	1	8.305	-0.003	56021	359.9
Aroclor-1248	2	8.576	-0.005	165875	337.1	2	8.711	-0.004	54545	338.9
Aroclor-1248	3	8.991	-0.005	181611	195.6	3	9.157	-0.012	9200	49.7
Aroclor-1248	4	9.297	0.002	145190	307.2	4	9.585	-0.010	3757	16.9
Total Col1Ave (4 peaks):					294.4	Total Col2Ave (4 peaks):				191.3 RPD = 42*
Corrected Ave (3 peaks):					280.0	Corrected Ave (3 peaks):				135.1 RPD = 70*
Aroclor-1254	1	9.297	-0.002	145190	182.2	1	9.447	-0.004	49391	199.3
Aroclor-1254	2	---			0.0	2	9.968	-0.004	10512	52.7
Aroclor-1254	3	9.663	-0.006	20907	40.8	3	10.144	0.019	107523	249.3
Aroclor-1254	4	9.802	-0.006	78155	78.5	4	10.368	-0.007	134425	319.7
Aroclor-1254	5	10.118	-0.060	379913	608.5	5	10.565	-0.005	186438	728.2
Total Col1Ave (4 peaks):					227.5	Total Col2Ave (5 peaks):				309.8 RPD = 31
Corrected Ave (3 peaks):					100.5	Corrected Ave (4 peaks):				205.3 RPD = 69*
Aroclor-1260	1	11.043	-0.001	293229	486.1	1	11.651	-0.002	141608	472.1
Aroclor-1260	2	11.360	-0.000	329992	523.6	2	11.915	-0.003	367844	480.5
Aroclor-1260	3	11.733	-0.003	866298	518.2	3	12.434	-0.001	98894	486.8
Aroclor-1260	4	12.138	-0.002	455857	541.5	4	12.499	-0.003	246346	477.4
Aroclor-1260	5	12.244	0.001	187452	517.3	NS	---			----
Total Col1Ave (5 peaks):					517.4	Total Col2Ave (4 peaks):				479.2 RPD = 8
Corrected Ave (4 peaks):					511.3	Corrected Ave (3 peaks):				476.7 RPD = 7
Aroclor-1262	1	10.823	-0.006	622725	1210.6	1	11.197	-0.003	133695	307.0
Aroclor-1262	2	12.244	-0.000	187452	223.9	2	11.651	-0.001	141608	381.7
Aroclor-1262	3	12.318	-0.001	227938	253.3	3	12.434	0.000	98894	235.0
Aroclor-1262	4	12.986	-0.001	209990	255.3	4	12.499	-0.003	246346	373.6
Total Col1Ave (4 peaks):					485.8	Total Col2Ave (4 peaks):				324.3 RPD = 40
Corrected Ave (3 peaks):					244.2	Corrected Ave (3 peaks):				305.2 RPD = 22
Aroclor-1268	1	12.244	-0.003	187452	87.2	1	12.434	0.002	98894	96.3
Aroclor-1268	2	12.318	0.001	227938	107.1	2	12.499	-0.001	246346	223.1
Aroclor-1268	3	12.722	0.023	103209	56.7	3	12.890	-0.001	7329	7.8
Aroclor-1268	4	13.488	-0.002	69630	11.6	4	13.707	-0.002	29028	9.6
Total Col1Ave (4 peaks):					65.7	Total Col2Ave (4 peaks):				84.2 RPD = 25
Corrected Ave (3 peaks):					51.9	Corrected Ave (3 peaks):				37.9 RPD = 31

Total PCB Area Col1 (5.907 - 13.793) = 8610196 Col1 Total PCB = 0.9 ppm*

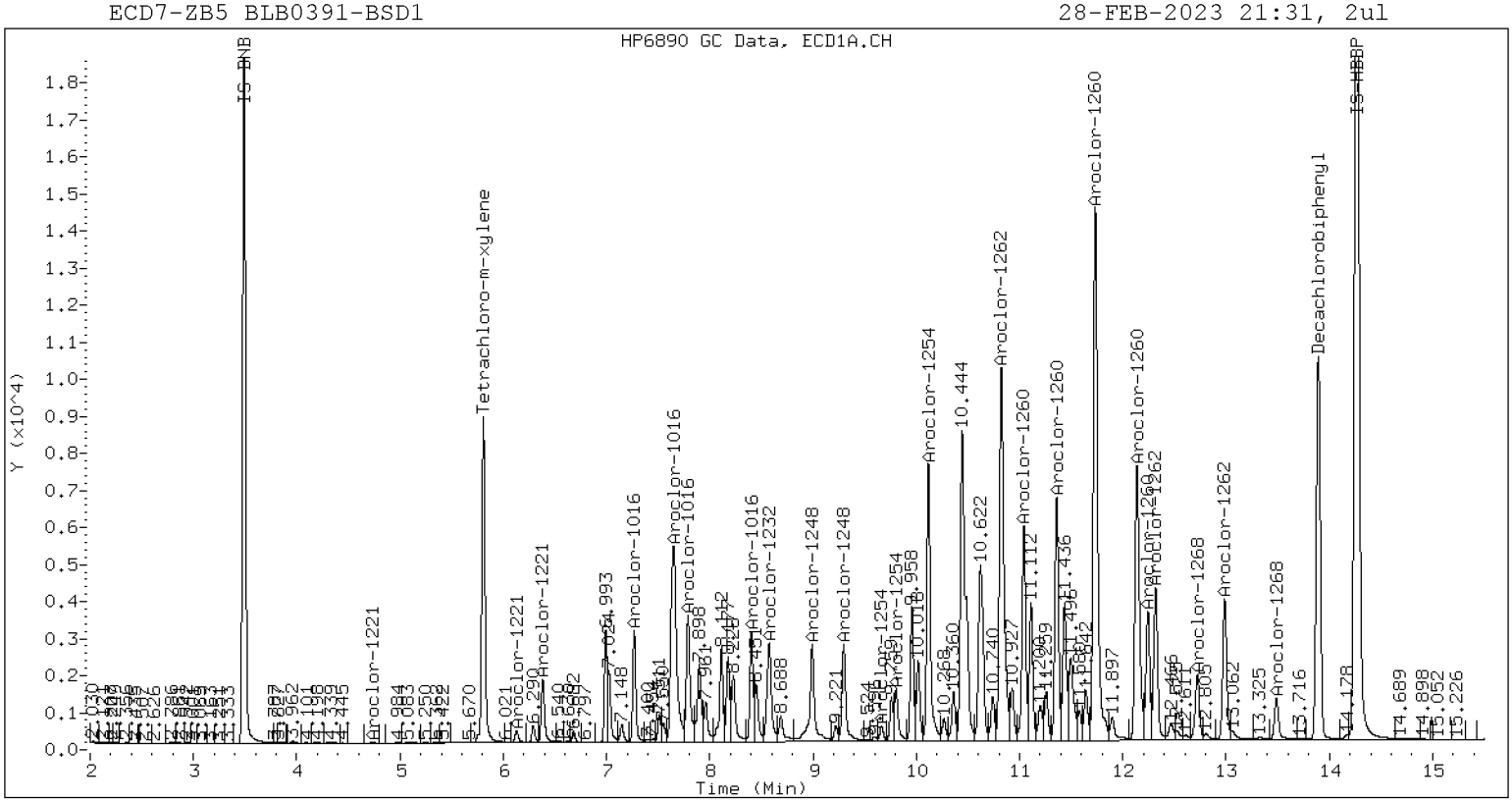
Total PCB Area Col2 (5.787 - 14.020) = 3357653 Col2 Total PCB = 0.9 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

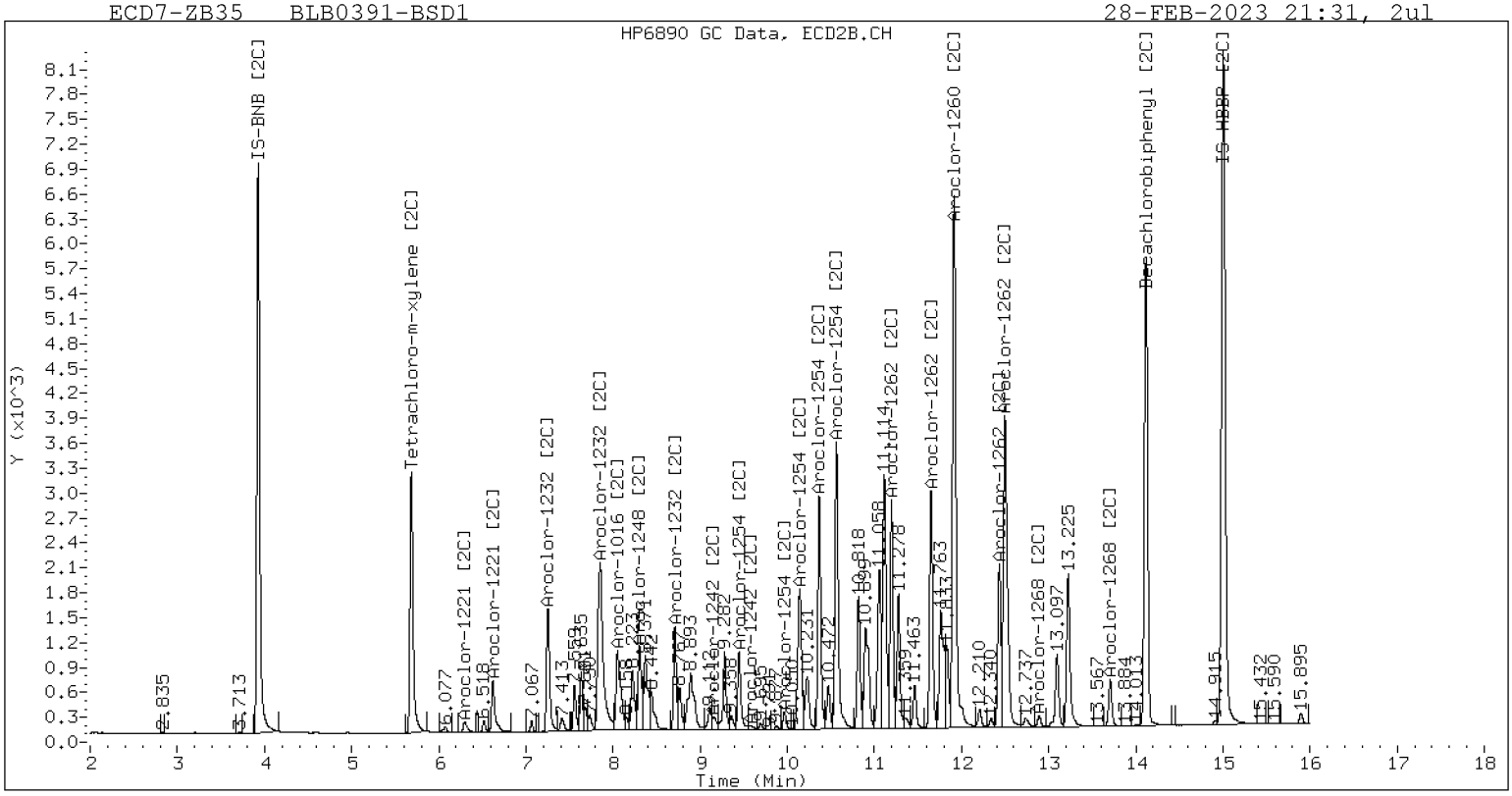
PCB Dual Column Chromatograms

ECD7-ZB5 BLB0391-BSD1 28-FEB-2023 21:31, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLB0391-BSD1 28-FEB-2023 21:31, 2ul



ZB-35 Manual Integration: NO

MS / MS DUPLICATE RECOVERY
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/28/23 23:38
Batch:	BLB0391	Laboratory ID:	BLB0391-MS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike
Initial/Final:	17.72 g / 2.5 mL	Source Sample:	LDW23-IT1051

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	Q	MS CONCENTRATION (ug/kg dry)	Q	MS % REC. #	QC LIMITS REC.
Aroclor 1016	101	ND	U	81.4		80.7	56 - 120
Aroclor 1260 [2C]	101	46.5		125		77.9	58 - 120

* Values outside of QC limits

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

MS / MS DUPLICATE RECOVERY
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/28/23 23:59
Batch:	BLB0391	Laboratory ID:	BLB0391-MSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike Dup
Initial/Final:	17.72 g / 2.5 mL	Source Sample:	LDW23-IT1051

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor 1016	101	66.5		66.0	20.1	30	56 - 120
Aroclor 1260 [2C]	101	125		77.8	0.126	30	58 - 120

* Values outside of QC limits

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282323ECD7.D
Data file 2: /230228.b/230228.b/02282323ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLB0391-MS1
Client ID:
Injection Date: 28-FEB-2023 23:38
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.804	-0.003	264144	5.682	-0.005	129038	26.7	32.1	18.3	Tetrachloro-m-xylene
13.885	-0.008	170623	14.111	-0.009	138023	38.9	38.6	0.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	662459	-1.7
Hexabromobiphenyl	1429847	445086	-68.9 <-

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	274067	-13.1
Hexabromobiphenyl	513946	234727	-54.3 <-

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1016	1	7.264	-0.005	102764	408.4	1	7.249	-0.006	64553	402.4
Aroclor-1016	2	7.641	-0.014	272618	355.4	2	7.839	-0.020	151523	465.7
Aroclor-1016	3	7.779	-0.013	101981	272.4	3	8.039	-0.019	56460	384.2
Aroclor-1016	4	8.394	-0.012	143158	591.4	4	8.297	-0.011	53713	465.9
Total Col1Ave (4 peaks):					406.9	Total Col2Ave (4 peaks):				429.6 RPD = 5
Corrected Ave (3 peaks):					345.4	Corrected Ave (3 peaks):				417.4 RPD = 19
Aroclor-1221	1	4.731	-0.000	407	6.9	1	4.940	-0.016	8972	345.8
Aroclor-1221	2	6.128	-0.004	10448	98.5	2	6.299	0.002	5741	116.9
Aroclor-1221	3	6.378	-0.005	53241	216.1	3	6.620	-0.001	41841	523.4
Total Col1Ave (3 peaks):					107.2	Total Col2Ave (3 peaks):				328.7 RPD = 102*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.731	0.000	407	11.5	1	4.940	-0.016	8972	639.8
Aroclor-1232	2	6.128	-0.003	10448	148.4	2	7.249	-0.005	64553	926.4
Aroclor-1232	3	7.641	-0.015	272618	855.6	3	7.839	-0.021	151523	1087.5
Aroclor-1232	4	8.563	-0.017	155409	1147.6	4	8.703	-0.012	71918	1793.5
Total Col1Ave (4 peaks):					540.8	Total Col2Ave (4 peaks):				1111.8 RPD = 69*
Corrected Ave (3 peaks):					338.5	Corrected Ave (3 peaks):				884.6 RPD = 89*
Aroclor-1242	1	7.264	-0.005	102764	500.6	1	7.249	-0.004	64553	507.0
Aroclor-1242	2	7.641	-0.015	272618	437.3	2	7.839	-0.020	151523	566.1
Aroclor-1242	3	8.394	-0.011	143158	738.0	3	9.135	-0.032	24004	288.2
Aroclor-1242	4	8.563	-0.017	155409	542.0	4	9.572	-0.025	24468	241.1
Total Col1Ave (4 peaks):					554.4	Total Col2Ave (4 peaks):				400.6 RPD = 32
Corrected Ave (3 peaks):					493.3	Corrected Ave (3 peaks):				345.4 RPD = 35
Aroclor-1248	1	8.394	-0.012	143158	442.9	1	8.297	-0.011	53713	410.5
Aroclor-1248	2	8.563	-0.017	155409	378.3	2	8.703	-0.012	71918	531.6
Aroclor-1248	3	8.982	-0.014	114786	148.1	3	9.135	-0.033	24004	154.2
Aroclor-1248	4	9.283	-0.012	105097	266.3	4	9.572	-0.022	24468	130.9
Total Col1Ave (4 peaks):					308.9	Total Col2Ave (4 peaks):				306.8 RPD = 1
Corrected Ave (3 peaks):					264.2	Corrected Ave (3 peaks):				231.8 RPD = 13
Aroclor-1254	1	9.283	-0.016	105097	158.0	1	9.436	-0.015	55973	268.7
Aroclor-1254	2	9.359	-0.020	19807	66.2	2	9.953	-0.019	18005	107.4
Aroclor-1254	3	9.662	-0.007	108109	252.8	3	10.131	0.006	49793	137.3
Aroclor-1254	4	9.783	-0.025	140153	168.5	4	10.357	-0.017	114198	323.1
Aroclor-1254	5	10.234	0.055	58590	112.4	5	10.551	-0.019	123789	575.2
Total Col1Ave (5 peaks):					151.6	Total Col2Ave (5 peaks):				282.4 RPD = 60*
Corrected Ave (4 peaks):					126.3	Corrected Ave (4 peaks):				209.1 RPD = 49*
Aroclor-1260	1	11.032	-0.012	123769	773.0	1	11.640	-0.012	84132	609.6
Aroclor-1260	2	11.347	-0.013	111854	668.6	2	11.902	-0.016	200209	568.4
Aroclor-1260	3	11.718	-0.018	315317	710.6	3	12.422	-0.013	72058	770.9
Aroclor-1260	4	12.118	-0.022	158056	707.4	4	12.485	-0.017	131156	552.4
Aroclor-1260	5	12.232	-0.011	67033	697.0	NS	---			----
Total Col1Ave (5 peaks):					711.3	Total Col2Ave (4 peaks):				625.3 RPD = 13
Corrected Ave (4 peaks):					695.9	Corrected Ave (3 peaks):				576.8 RPD = 19
Aroclor-1262	1	10.805	-0.024	290717	2129.2	1	11.187	-0.013	72540	361.9
Aroclor-1262	2	12.232	-0.012	67033	301.7	2	11.640	-0.011	84132	492.9
Aroclor-1262	3	12.306	-0.012	78147	327.2	3	12.422	-0.012	72058	372.1
Aroclor-1262	4	12.972	-0.015	90671	415.4	4	12.485	-0.017	131156	432.3
Total Col1Ave (4 peaks):					793.4	Total Col2Ave (4 peaks):				414.8 RPD = 63*
Corrected Ave (3 peaks):					348.1	Corrected Ave (3 peaks):				388.8 RPD = 11
Aroclor-1268	1	12.232	-0.014	67033	117.5	1	12.422	-0.010	72058	152.5
Aroclor-1268	2	12.306	-0.011	78147	138.4	2	12.485	-0.015	131156	258.1
Aroclor-1268	3	12.708	0.008	38517	79.7	3	12.887	-0.004	6817	15.7
Aroclor-1268	4	13.478	-0.012	27773	17.5	4	13.698	-0.011	24205	17.5
Total Col1Ave (4 peaks):					88.3	Total Col2Ave (4 peaks):				110.9 RPD = 23

Corrected Ave (3 peaks): 71.6 Corrected Ave (3 peaks): 61.9 RPD = 15

Total PCB Area Col1 (5.907 - 13.793) = 5544286 Col1 Total PCB = 0.7 ppm*

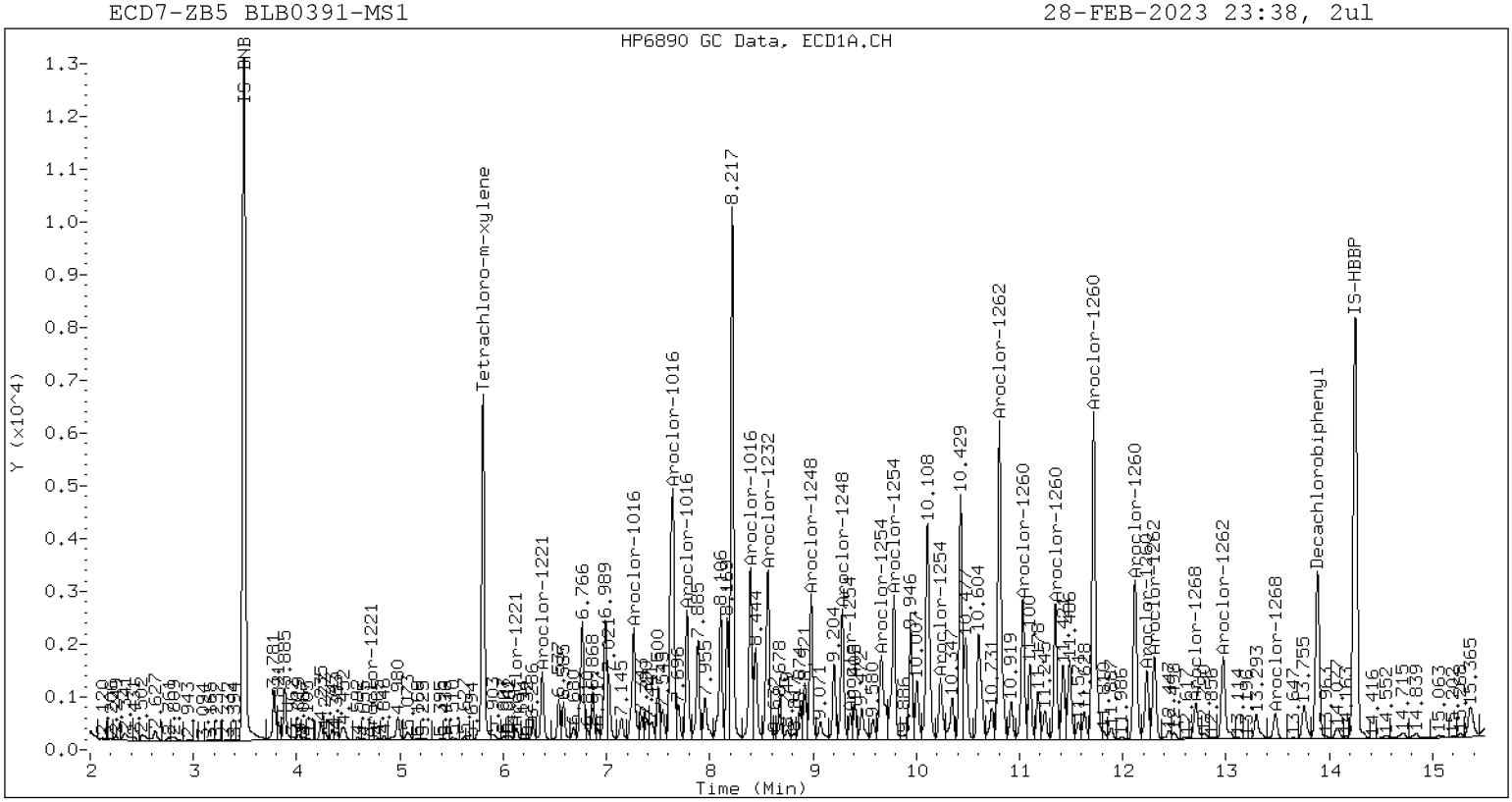
Total PCB Area Col2 (5.787 - 14.020) = 2999949 Col2 Total PCB = 0.9 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

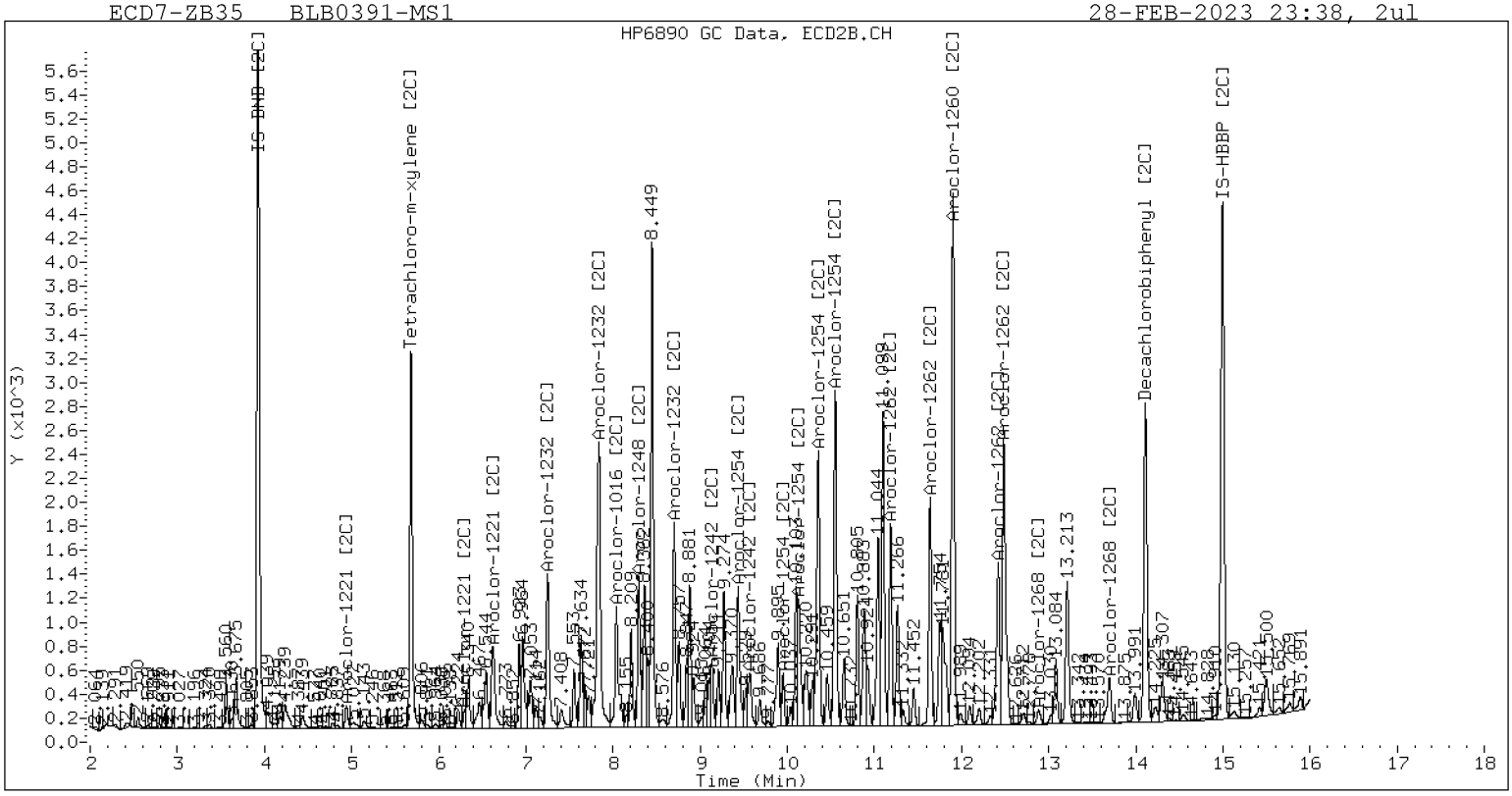
PCB Dual Column Chromatograms

ECD7-ZB5 BLB0391-MS1 28-FEB-2023 23:38, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLB0391-MS1 28-FEB-2023 23:38, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282324ECD7.D
Data file 2: /230228.b/230228.b/02282324ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLB0391-MSD1
Client ID:
Injection Date: 28-FEB-2023 23:59
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.002	265948	5.683	-0.005	129680	24.7	30.8	22.2	Tetrachloro-m-xylene
13.886	-0.007	176142	14.112	-0.008	138598	38.5	37.2	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	722327	7.2
Hexabromobiphenyl	1429847	464759	-67.5 <-

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	286854	-9.0
Hexabromobiphenyl	513946	244760	-52.4 <-

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.264	-0.006	115031	419.3	1	7.249	-0.006	72386	431.1
Aroclor-1016	2	7.641	-0.014	257644	308.0	2	7.839	-0.020	146030	428.8
Aroclor-1016	3	7.780	-0.012	98850	242.1	3	8.040	-0.019	55403	360.2
Aroclor-1016	4	8.394	-0.012	95311	361.1	4	8.297	-0.011	41805	346.5
Total Col1Ave (4 peaks):					332.6	Total Col2Ave (4 peaks):				391.7 RPD = 16
Corrected Ave (3 peaks):					303.8	Corrected Ave (3 peaks):				378.5 RPD = 22
Aroclor-1221	1	4.729	-0.002	1060	16.4	1	4.941	-0.015	7949	292.7
Aroclor-1221	2	6.128	-0.004	12981	112.2	2	6.342	0.045	37274	725.3
Aroclor-1221	3	6.378	-0.004	62145	231.4	3	6.618	-0.004	39965	477.7
Total Col1Ave (3 peaks):					120.0	Total Col2Ave (3 peaks):				498.6 RPD = 122*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.729	-0.001	1060	27.4	1	4.941	-0.015	7949	541.6
Aroclor-1232	2	6.128	-0.003	12981	169.1	2	7.249	-0.005	72386	992.5
Aroclor-1232	3	7.641	-0.015	257644	741.6	3	7.839	-0.021	146030	1001.4
Aroclor-1232	4	8.564	-0.016	88055	596.4	4	8.703	-0.012	48234	1149.2
Total Col1Ave (4 peaks):					383.6	Total Col2Ave (4 peaks):				921.2 RPD = 82*
Corrected Ave (3 peaks):					264.3	Corrected Ave (3 peaks):				845.1 RPD = 105*
Aroclor-1242	1	7.264	-0.005	115031	513.9	1	7.249	-0.004	72386	543.1
Aroclor-1242	2	7.641	-0.015	257644	379.0	2	7.839	-0.020	146030	521.2
Aroclor-1242	3	8.394	-0.011	95311	450.6	3	9.136	-0.032	25902	297.1
Aroclor-1242	4	8.564	-0.016	88055	281.6	4	9.574	-0.024	24302	228.8
Total Col1Ave (4 peaks):					406.3	Total Col2Ave (4 peaks):				397.6 RPD = 2
Corrected Ave (3 peaks):					370.4	Corrected Ave (3 peaks):				349.1 RPD = 6
Aroclor-1248	1	8.394	-0.012	95311	270.4	1	8.297	-0.011	41805	305.2
Aroclor-1248	2	8.564	-0.016	88055	196.6	2	8.703	-0.012	48234	340.6
Aroclor-1248	3	8.982	-0.014	98449	116.5	3	9.136	-0.033	25902	158.9
Aroclor-1248	4	9.283	-0.012	109690	254.9	4	9.574	-0.020	24302	124.2
Total Col1Ave (4 peaks):					209.6	Total Col2Ave (4 peaks):				232.2 RPD = 10
Corrected Ave (3 peaks):					189.3	Corrected Ave (3 peaks):				196.1 RPD = 4
Aroclor-1254	1	9.283	-0.015	109690	151.2	1	9.436	-0.015	59042	270.8
Aroclor-1254	2	9.359	-0.019	21679	66.5	2	9.953	-0.018	19114	109.0
Aroclor-1254	3	9.663	-0.006	115716	248.1	3	10.132	0.007	51255	135.1
Aroclor-1254	4	9.784	-0.024	149583	165.0	4	10.357	-0.017	119292	322.5
Aroclor-1254	5	10.235	0.056	59633	104.9	5	10.552	-0.018	128688	571.3
Total Col1Ave (5 peaks):					147.1	Total Col2Ave (5 peaks):				281.7 RPD = 63*
Corrected Ave (4 peaks):					121.9	Corrected Ave (4 peaks):				209.3 RPD = 53*
Aroclor-1260	1	11.032	-0.012	126779	758.3	1	11.640	-0.013	85682	595.3
Aroclor-1260	2	11.346	-0.014	113685	650.8	2	11.903	-0.015	202533	551.4
Aroclor-1260	3	11.718	-0.018	344136	742.8	3	12.421	-0.014	80600	826.9
Aroclor-1260	4	12.118	-0.022	160839	689.4	4	12.486	-0.016	129832	524.4
Aroclor-1260	5	12.233	-0.010	64909	646.3	NS	---			----
Total Col1Ave (5 peaks):					697.5	Total Col2Ave (4 peaks):				624.5 RPD = 11
Corrected Ave (4 peaks):					682.3	Corrected Ave (3 peaks):				557.0 RPD = 20
Aroclor-1262	1	10.805	-0.024	304785	2137.8	1	11.188	-0.013	74385	355.9
Aroclor-1262	2	12.233	-0.011	64909	279.8	2	11.640	-0.011	85682	481.4
Aroclor-1262	3	12.306	-0.012	74376	298.2	3	12.421	-0.012	80600	399.1
Aroclor-1262	4	12.971	-0.016	92744	406.9	4	12.486	-0.016	129832	410.4
Total Col1Ave (4 peaks):					780.7	Total Col2Ave (4 peaks):				411.7 RPD = 62*
Corrected Ave (3 peaks):					328.3	Corrected Ave (3 peaks):				388.5 RPD = 17
Aroclor-1268	1	12.233	-0.014	64909	109.0	1	12.421	-0.011	80600	163.5
Aroclor-1268	2	12.306	-0.011	74376	126.1	2	12.486	-0.014	129832	245.0
Aroclor-1268	3	12.708	0.009	36754	72.8	3	12.888	-0.004	7699	17.0
Aroclor-1268	4	13.478	-0.012	29091	17.5	4	13.698	-0.011	27752	19.2
Total Col1Ave (4 peaks):					81.4	Total Col2Ave (4 peaks):				111.2 RPD = 31

Corrected Ave (3 peaks): 66.4 Corrected Ave (3 peaks): 66.6 RPD = 0

Total PCB Area Col1 (5.907 - 13.793) = 5538156 Col1 Total PCB = 0.6 ppm*

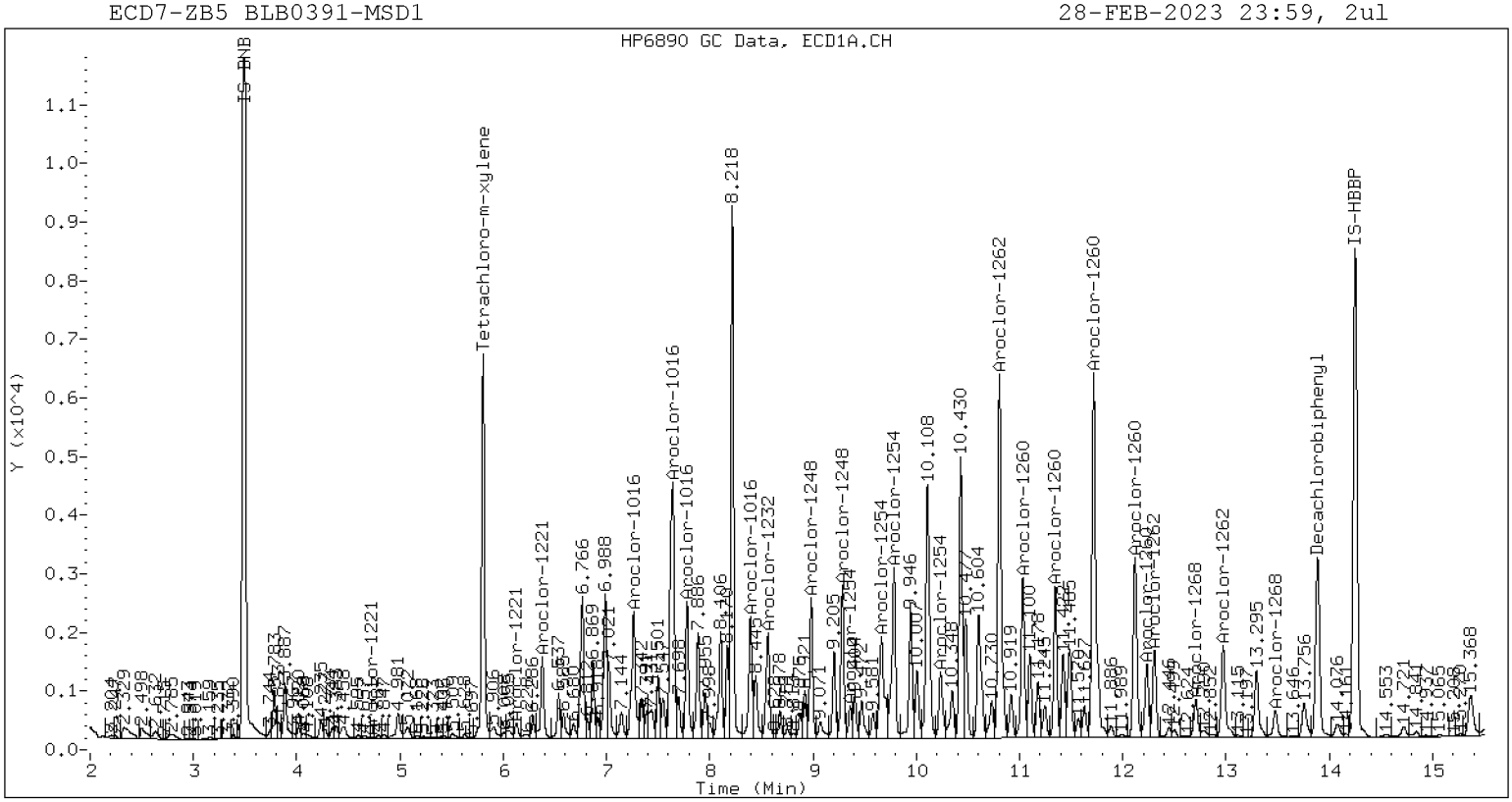
Total PCB Area Col2 (5.787 - 14.020) = 2976476 Col2 Total PCB = 0.9 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

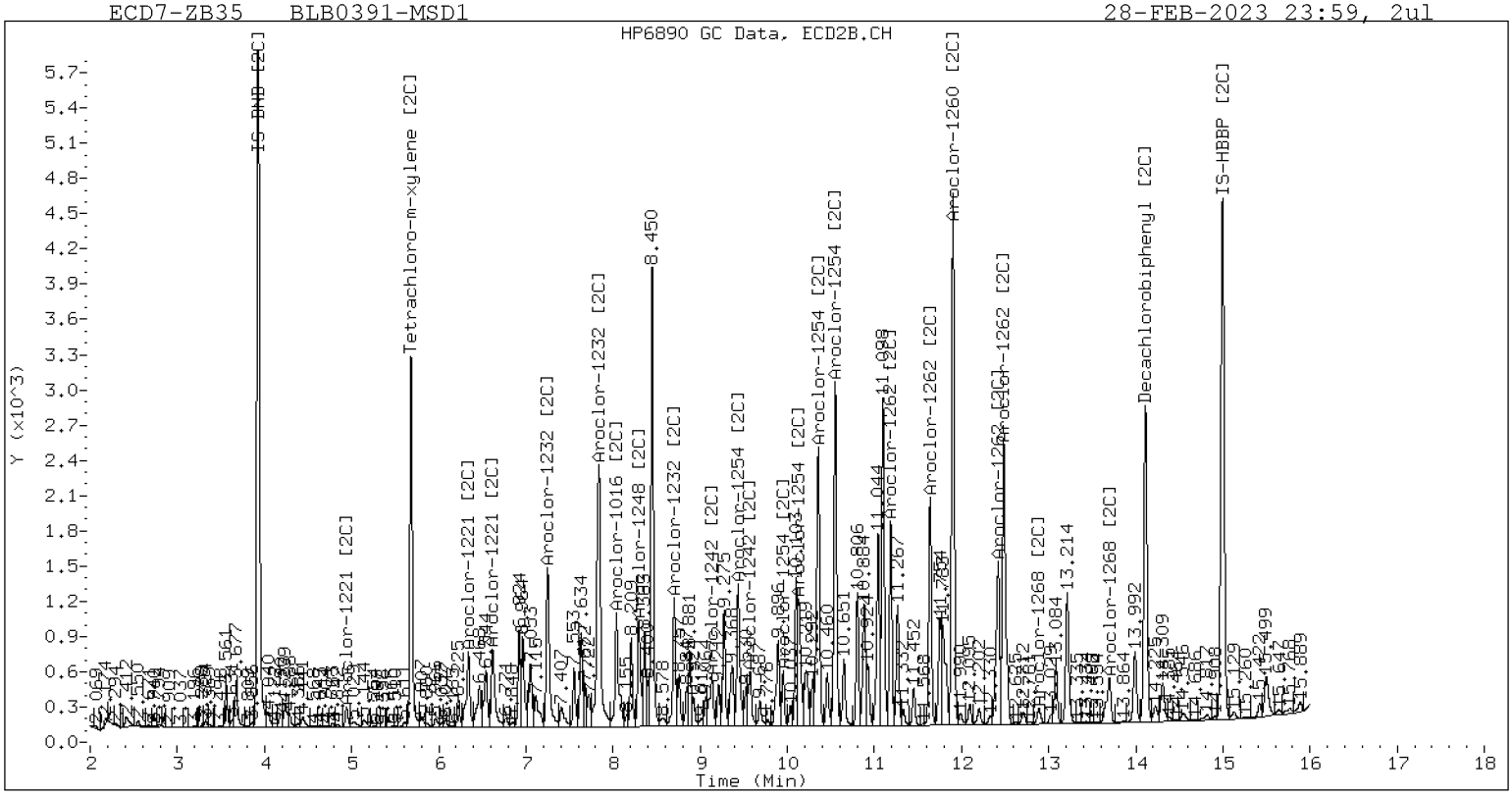
PCB Dual Column Chromatograms

ECD7-ZB5 BLB0391-MSD1 28-FEB-2023 23:59, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLB0391-MSD1 28-FEB-2023 23:59, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLB0391-SRM1
Batch: BLB0391
Initial/Final: 2.5 g / 2.5 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 02/28/2023 21:53
Standard ID: K011478
Expires: 06/11/2023
Standard Lot#: PSRM0169
Description: Puget Sound reference-SRM

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Aroclor 1260	108.00	120	2.9	20.0		111	38 - 167
Aroclor 1260 [2C]	108.00	117	2.9	20.0		108	38 - 167

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282318ECD7.D
Data file 2: /230228.b/230228.b/02282318ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLB0391-SRM1
Client ID:
Injection Date: 28-FEB-2023 21:53
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.002	336386	5.685	-0.002	141149	26.3	28.2	7.0	Tetrachloro-m-xylene
13.888	-0.005	482536	14.115	-0.005	269992	34.8	35.7	2.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	857849	27.3
Hexabromobiphenyl	1429847	1407985	-1.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	341454	8.3
Hexabromobiphenyl	513946	496203	-3.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.264	-0.005	6190	19.0	1	7.253	-0.002	2055	10.3
Aroclor-1016	2	7.649	-0.007	15468	15.6	2	7.851	-0.009	6875	17.0
Aroclor-1016	3	7.788	-0.004	5510	11.4	3	8.049	-0.009	1941	10.6
Aroclor-1016	4	8.399	-0.006	10479	33.4	4	8.301	-0.007	6479	45.1
Total Col1Ave (4 peaks):					19.8	Total Col2Ave (4 peaks):				20.7 RPD = 4
Corrected Ave (3 peaks):					15.3	Corrected Ave (3 peaks):				12.6 RPD = 19
Aroclor-1221	1	4.776	0.046	809	10.5	1	4.942	-0.014	808	25.0
Aroclor-1221	2	6.161	0.029	1000	7.3	2	6.329	0.033	3537	57.8
Aroclor-1221	3	6.392	0.009	3440	10.8	3	6.634	0.012	1700	17.1
Total Col1Ave (3 peaks):					9.5	Total Col2Ave (3 peaks):				33.3 RPD = 111*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.776	0.046	809	17.6	1	4.942	-0.014	808	46.2
Aroclor-1232	2	6.161	0.030	1000	11.0	2	7.253	-0.001	2055	23.7
Aroclor-1232	3	7.649	-0.007	15468	37.5	3	7.851	-0.010	6875	39.6
Aroclor-1232	4	8.571	-0.010	10007	57.1	4	8.708	-0.007	4283	85.7
Total Col1Ave (4 peaks):					30.8	Total Col2Ave (4 peaks):				48.8 RPD = 45*
Corrected Ave (3 peaks):					22.0	Corrected Ave (3 peaks):				36.5 RPD = 50*
Aroclor-1242	1	7.264	-0.005	6190	23.3	1	7.253	-0.000	2055	13.0
Aroclor-1242	2	7.649	-0.007	15468	19.2	2	7.851	-0.009	6875	20.6
Aroclor-1242	3	8.399	-0.006	10479	41.7	3	9.149	-0.018	5700	54.9
Aroclor-1242	4	8.571	-0.010	10007	26.9	4	9.571	-0.027	4936	39.0
Total Col1Ave (4 peaks):					27.8	Total Col2Ave (4 peaks):				31.9 RPD = 14
Corrected Ave (3 peaks):					23.1	Corrected Ave (3 peaks):				24.2 RPD = 5
Aroclor-1248	1	8.399	-0.007	10479	25.0	1	8.301	-0.007	6479	39.7
Aroclor-1248	2	8.571	-0.010	10007	18.8	2	8.708	-0.007	4283	25.4
Aroclor-1248	3	8.987	-0.009	42244	42.1	3	9.149	-0.020	5700	29.4
Aroclor-1248	4	9.291	-0.004	49984	97.8	4	9.571	-0.023	4936	21.2
Total Col1Ave (4 peaks):					45.9	Total Col2Ave (4 peaks):				28.9 RPD = 45*
Corrected Ave (3 peaks):					28.6	Corrected Ave (3 peaks):				25.3 RPD = 12
Aroclor-1254	1	9.291	-0.008	49984	58.0	1	9.442	-0.009	18854	72.6
Aroclor-1254	2	9.367	-0.012	19288	49.8	2	9.960	-0.012	9011	43.2
Aroclor-1254	3	9.663	-0.006	22581	40.8	3	10.117	-0.008	38009	84.1
Aroclor-1254	4	9.793	-0.015	72941	67.7	4	10.362	-0.013	46522	105.6
Aroclor-1254	5	10.112	-0.066	110202	163.3	5	10.558	-0.012	48416	180.6
Total Col1Ave (5 peaks):					75.9	Total Col2Ave (5 peaks):				97.2 RPD = 25
Corrected Ave (4 peaks):					54.1	Corrected Ave (4 peaks):				76.4 RPD = 34
Aroclor-1260	1	11.036	-0.008	64553	127.4	1	11.646	-0.007	36186	124.0
Aroclor-1260	2	11.349	-0.011	55069	104.1	2	11.907	-0.010	80429	108.0
Aroclor-1260	3	11.723	-0.013	181079	129.0	3	12.426	-0.009	25907	131.1
Aroclor-1260	4	12.126	-0.014	88954	125.9	4	12.491	-0.011	52777	105.1
Aroclor-1260	5	12.236	-0.007	34080	112.0	NS	---			----
Total Col1Ave (5 peaks):					119.7	Total Col2Ave (4 peaks):				117.1 RPD = 2
Corrected Ave (4 peaks):					117.3	Corrected Ave (3 peaks):				112.4 RPD = 4
Aroclor-1262	1	10.814	-0.015	148155	343.0	1	11.192	-0.009	31898	75.3
Aroclor-1262	2	12.236	-0.008	34080	48.5	2	11.646	-0.006	36186	100.3
Aroclor-1262	3	12.310	-0.008	42735	56.6	3	12.426	-0.008	25907	63.3
Aroclor-1262	4	12.978	-0.009	43866	63.5	4	12.491	-0.011	52777	82.3
Total Col1Ave (4 peaks):					127.9	Total Col2Ave (4 peaks):				80.3 RPD = 46*
Corrected Ave (3 peaks):					56.2	Corrected Ave (3 peaks):				73.6 RPD = 27
Aroclor-1268	1	12.236	-0.011	34080	18.9	1	12.426	-0.006	25907	25.9
Aroclor-1268	2	12.310	-0.006	42735	23.9	2	12.491	-0.009	52777	49.1
Aroclor-1268	3	12.714	0.014	21169	13.8	3	12.888	-0.004	1949	2.1
Aroclor-1268	4	13.480	-0.010	12893	2.6	4	13.701	-0.008	8610	2.9
Total Col1Ave (4 peaks):					14.8	Total Col2Ave (4 peaks):				20.0 RPD = 30

Corrected Ave (3 peaks): 11.8 Corrected Ave (3 peaks): 10.3 RPD = 13

Total PCB Area Col1 (5.907 - 13.793) = 1797198 Col1 Total PCB = 0.2 ppm*

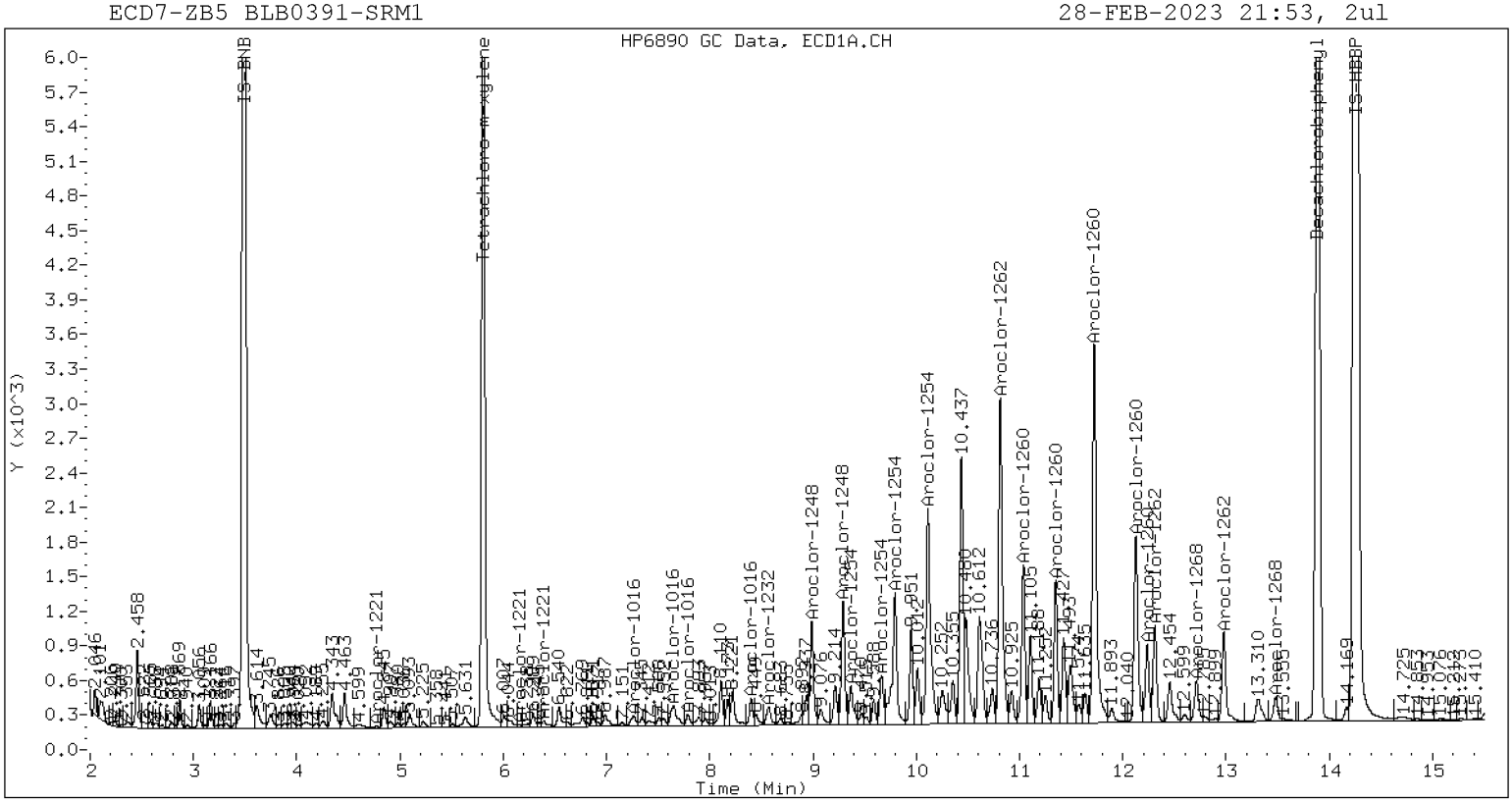
Total PCB Area Col2 (5.787 - 14.020) = 801672 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

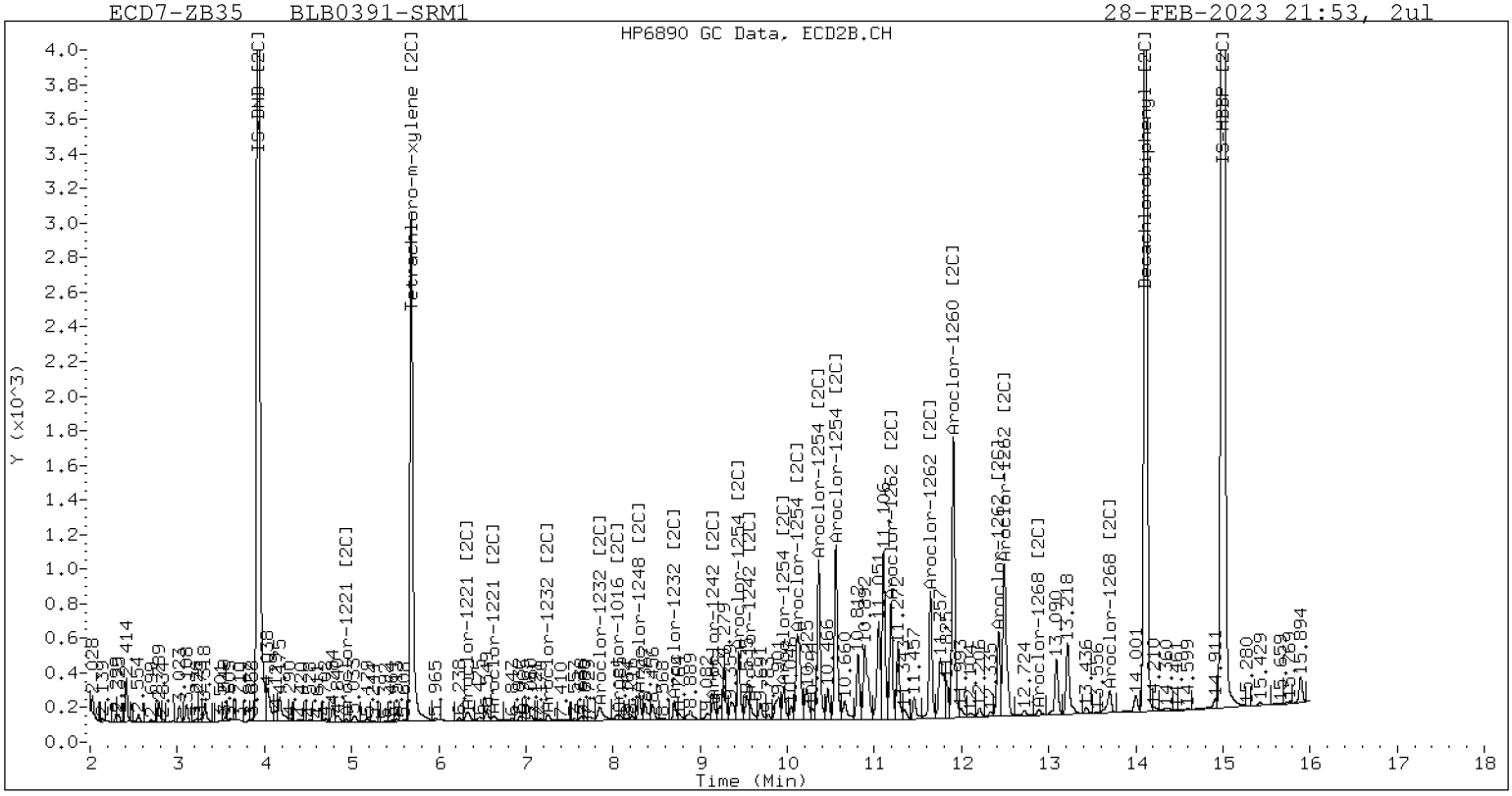
PCB Dual Column Chromatograms

ECD7-ZB5 BLB0391-SRM1 28-FEB-2023 21:53, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLB0391-SRM1 28-FEB-2023 21:53, 2ul



ZB-35 Manual Integration: NO

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00069	Instrument:	ECD7
Calibration Date:	02/24/2023	Column (1):	ZB5

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1016	250	0.0511017	20	0.0514466	50	5.107478E-02	1000	4.502727E-02	100	5.036259E-02	500	0.0471841
Aroclor-1016 (1)	250	0.031405	20	3.172321E-02	50	3.253176E-02	1000	2.667138E-02	100	3.141686E-02	500	2.856283E-02
Aroclor-1016 (2)	250	9.848704E-02	20	9.239415E-02	50	9.245774E-02	1000	8.848657E-02	100	9.221759E-02	500	0.0917416
Aroclor-1016 (3)	250	4.393471E-02	20	5.165382E-02	50	5.037363E-02	1000	3.720718E-02	100	4.822959E-02	500	3.990906E-02
Aroclor-1016 (4)	250	3.058004E-02	20	3.001523E-02	50	2.893599E-02	1000	2.774395E-02	100	2.958631E-02	500	2.852291E-02
Aroclor 1260	250	4.264611E-02	20	3.933745E-02	50	3.914748E-02	1000	0.0377098	100	3.888069E-02	500	3.753326E-02
Aroclor-1260 (1)	250	3.096387E-02	20	2.926415E-02	50	2.920486E-02	1000	2.746159E-02	100	2.841034E-02	500	2.736642E-02
Aroclor-1260 (2)	250	3.291004E-02	20	2.966791E-02	50	3.006192E-02	1000	2.856573E-02	100	3.010757E-02	500	2.910054E-02
Aroclor-1260 (3)	250	8.575373E-02	20	8.087657E-02	50	8.045158E-02	1000	7.674417E-02	100	7.953737E-02	500	7.514663E-02
Aroclor-1260 (4)	250	4.484933E-02	20	3.904963E-02	50	3.886754E-02	1000	3.922291E-02	100	3.955346E-02	500	3.941669E-02
Aroclor-1260 (5)	250	1.875356E-02	20	1.782901E-02	50	1.715148E-02	1000	1.655457E-02	100	1.679471E-02	500	1.663603E-02
Decachlorobiphenyl	40	0.7880759	3.2	0.8290115	8	0.8055828	160	0.797423	16	0.7758675	80	0.7312517
Tetrachlorometaxylene	40	1.205085	3.2	1.168271	8	1.244015	160	1.241136	16	1.185465	80	1.122954

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00069	Instrument:	ECD7
Calibration Date:	02/24/2023	Column (1):	ZB5

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1221							250	1.657582E-02				
Aroclor-1221 (1)							250	7.164712E-03				
Aroclor-1221 (2)							250	0.0128135				
Aroclor-1221 (3)							250	2.974924E-02				
Aroclor 1232									250	1.690391E-02		
Aroclor-1232 (1)									250	4.285984E-03		
Aroclor-1232 (2)									250	8.499602E-03		
Aroclor-1232 (3)									250	3.847671E-02		
Aroclor-1232 (4)									250	1.635336E-02		
Aroclor 1242	250	3.953397E-02										
Aroclor-1242 (1)	250	2.479209E-02										
Aroclor-1242 (2)	250	7.528986E-02										
Aroclor-1242 (3)	250	2.342574E-02										
Aroclor-1242 (4)	250	3.462819E-02										
Aroclor 1248			250	5.747549E-02								
Aroclor-1248 (1)			250	3.903293E-02								
Aroclor-1248 (2)			250	0.0496149								
Aroclor-1248 (3)			250	9.360202E-02								
Aroclor-1248 (4)			250	4.765213E-02								
Aroclor 1254					250	6.629494E-02						
Aroclor-1254 (1)					250	8.033306E-02						
Aroclor-1254 (2)					250	0.0361302						
Aroclor-1254 (3)					250	5.164705E-02						
Aroclor-1254 (4)					250	0.100423						
Aroclor-1254 (5)					250	6.294139E-02						
Aroclor 1262							250	3.665955E-02				
Aroclor-1262 (1)							250	2.454122E-02				
Aroclor-1262 (2)							250	3.993338E-02				

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00069	Instrument:	ECD7
Calibration Date:	02/24/2023	Column (1):	ZB5

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor-1262 (3)							250	4.292945E-02				
Aroclor-1262 (4)							250	3.923413E-02				
Aroclor 1268									250	0.1442124		
Aroclor-1268 (1)									250	0.102504		
Aroclor-1268 (2)									250	0.1015072		
Aroclor-1268 (3)									250	8.685666E-02		
Aroclor-1268 (4)									250	0.2859818		

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00069	Instrument:	ECD7
Calibration Date:	02/24/2023	Column (1):	ZB5

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor 1016	4.936617E-02	5.3			RSD (20)	
Aroclor-1016 (1)	3.038517E-02	7.4			RSD (20)	
Aroclor-1016 (2)	9.263078E-02	3.5			RSD (20)	
Aroclor-1016 (3)	0.045218	12.9			RSD (20)	
Aroclor-1016 (4)	2.923074E-02	3.5			RSD (20)	
Aroclor 1221		0.0			RSD (20)	
Aroclor-1221 (1)		0.0			RSD (20)	
Aroclor-1221 (2)		0.0			RSD (20)	
Aroclor-1221 (3)		0.0			RSD (20)	
Aroclor 1232		0.0			RSD (20)	
Aroclor-1232 (1)		0.0			RSD (20)	
Aroclor-1232 (2)		0.0			RSD (20)	
Aroclor-1232 (3)		0.0			RSD (20)	
Aroclor-1232 (4)		0.0			RSD (20)	
Aroclor 1242		0.0			RSD (20)	
Aroclor-1242 (1)		0.0			RSD (20)	
Aroclor-1242 (2)		0.0			RSD (20)	
Aroclor-1242 (3)		0.0			RSD (20)	
Aroclor-1242 (4)		0.0			RSD (20)	
Aroclor 1248		0.0			RSD (20)	
Aroclor-1248 (1)		0.0			RSD (20)	
Aroclor-1248 (2)		0.0			RSD (20)	
Aroclor-1248 (3)		0.0			RSD (20)	
Aroclor-1248 (4)		0.0			RSD (20)	
Aroclor 1254		0.0			RSD (20)	
Aroclor-1254 (1)		0.0			RSD (20)	
Aroclor-1254 (2)		0.0			RSD (20)	
Aroclor-1254 (3)		0.0			RSD (20)	
Aroclor-1254 (4)		0.0			RSD (20)	
Aroclor-1254 (5)		0.0			RSD (20)	
Aroclor 1260	3.920913E-02	4.7			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00069	Instrument:	ECD7
Calibration Date:	02/24/2023	Column (1):	ZB5

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor-1260 (1)	2.877854E-02	4.7			RSD (20)	
Aroclor-1260 (2)	3.006895E-02	5.0			RSD (20)	
Aroclor-1260 (3)	7.975167E-02	4.6			RSD (20)	
Aroclor-1260 (4)	4.015993E-02	5.8			RSD (20)	
Aroclor-1260 (5)	1.728656E-02	5.0			RSD (20)	
Aroclor 1262		0.0			RSD (20)	
Aroclor-1262 (1)		0.0			RSD (20)	
Aroclor-1262 (2)		0.0			RSD (20)	
Aroclor-1262 (3)		0.0			RSD (20)	
Aroclor-1262 (4)		0.0			RSD (20)	
Aroclor 1268		0.0			RSD (20)	
Aroclor-1268 (1)		0.0			RSD (20)	
Aroclor-1268 (2)		0.0			RSD (20)	
Aroclor-1268 (3)		0.0			RSD (20)	
Aroclor-1268 (4)		0.0			RSD (20)	
Decachlorobiphenyl	0.7878687	4.2			RSD (20)	
Tetrachlorometaxylene	1.194488	3.9			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00069	Instrument:	ECD7
Calibration Date:	02/24/2023	Column (2):	ZB35

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1016 [2C]	250	0.0571297	20	5.099991E-02	50	0.0573721	1000	5.075893E-02	100	5.836783E-02	500	5.288542E-02
Aroclor-1016 (1) [2C]	250	4.732763E-02	20	5.070692E-02	50	5.021603E-02	1000	4.080107E-02	100	4.868029E-02	500	4.325569E-02
Aroclor-1016 (2) [2C]	250	0.1025919	20	8.142537E-02	50	9.407053E-02	1000	9.361548E-02	100	0.1015897	500	9.651233E-02
Aroclor-1016 (3) [2C]	250	4.410181E-02	20	4.005508E-02	50	4.718351E-02	1000	3.925581E-02	100	4.613223E-02	500	4.062487E-02
Aroclor-1016 (4) [2C]	250	3.449742E-02	20	3.181228E-02	50	3.801833E-02	1000	0.0293633	100	0.0370691	500	3.114879E-02
Aroclor 1260 [2C]	250	7.266587E-02	20	0.0760446	50	7.181489E-02	1000	0.0636872	100	6.942709E-02	500	6.617305E-02
Aroclor-1260 (1) [2C]	250	4.801376E-02	20	5.286013E-02	50	4.911343E-02	1000	4.201242E-02	100	4.695569E-02	500	4.328842E-02
Aroclor-1260 (2) [2C]	250	0.1266443	20	0.1297611	50	0.1243096	1000	0.1054494	100	0.1209452	500	0.1132043
Aroclor-1260 (3) [2C]	250	3.207621E-02	20	3.524009E-02	50	3.146502E-02	1000	0.0319805	100	2.936945E-02	500	3.102287E-02
Aroclor-1260 (4) [2C]	250	8.392913E-02	20	8.631709E-02	50	8.237154E-02	1000	7.530648E-02	100	0.080438	500	7.717658E-02
Decachlorobiphenyl [2C]	40	1.310398	3.2	1.170661	8	1.20406	160	1.207975	16	1.205489	80	1.211045
Tetrachlorometaxylene [2C]	40	1.219073	3.2	1.21526	8	1.195453	160	1.111394	16	1.175548	80	1.125598

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00069	Instrument:	ECD7
Calibration Date:	02/24/2023	Column (2):	ZB35

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1221 [2C]							250	1.507982E-02				
Aroclor-1221 (1) [2C]							250	7.573277E-03				
Aroclor-1221 (2) [2C]							250	0.0143332				
Aroclor-1221 (3) [2C]							250	2.333296E-02				
Aroclor 1232 [2C]									250	1.920227E-02		
Aroclor-1232 (1) [2C]									250	4.09321E-03		
Aroclor-1232 (2) [2C]									250	2.034072E-02		
Aroclor-1232 (3) [2C]									250	4.067023E-02		
Aroclor-1232 (4) [2C]									250	1.170493E-02		
Aroclor 1242 [2C]	250	4.230924E-02										
Aroclor-1242 (1) [2C]	250	3.716893E-02										
Aroclor-1242 (2) [2C]	250	7.813249E-02										
Aroclor-1242 (3) [2C]	250	2.431205E-02										
Aroclor-1242 (4) [2C]	250	0.0296235										
Aroclor 1248 [2C]			250	4.442703E-02								
Aroclor-1248 (1) [2C]			250	3.819713E-02								
Aroclor-1248 (2) [2C]			250	3.949349E-02								
Aroclor-1248 (3) [2C]			250	4.544987E-02								
Aroclor-1248 (4) [2C]			250	5.456762E-02								
Aroclor 1254 [2C]					250	0.0763106						
Aroclor-1254 (1) [2C]					250	6.080523E-02						
Aroclor-1254 (2) [2C]					250	4.891616E-02						
Aroclor-1254 (3) [2C]					250	0.1058376						
Aroclor-1254 (4) [2C]					250	0.103175						
Aroclor-1254 (5) [2C]					250	6.281905E-02						
Aroclor 1262 [2C]							250	7.397596E-02				
Aroclor-1262 (1) [2C]							250	6.830764E-02				
Aroclor-1262 (2) [2C]							250	5.817803E-02				

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00069	Instrument:	ECD7
Calibration Date:	02/24/2023	Column (2):	ZB35

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor-1262 (3) [2C]							250	6.600951E-02				
Aroclor-1262 (4) [2C]							250	0.1034087				
Aroclor 1268 [2C]									250	0.2386862		
Aroclor-1268 (1) [2C]									250	0.1610947		
Aroclor-1268 (2) [2C]									250	0.1731794		
Aroclor-1268 (3) [2C]									250	0.1478672		
Aroclor-1268 (4) [2C]									250	0.4726034		

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00069	Instrument:	ECD7
Calibration Date:	02/24/2023	Column (2):	ZB35

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor 1016 [2C]	5.458565E-02	6.3			RSD (20)	
Aroclor-1016 (1) [2C]	4.683127E-02	8.5			RSD (20)	
Aroclor-1016 (2) [2C]	9.496755E-02	8.0			RSD (20)	
Aroclor-1016 (3) [2C]	4.289222E-02	7.9			RSD (20)	
Aroclor-1016 (4) [2C]	3.365154E-02	10.3			RSD (20)	
Aroclor 1221 [2C]		0.0			RSD (20)	
Aroclor-1221 (1) [2C]		0.0			RSD (20)	
Aroclor-1221 (2) [2C]		0.0			RSD (20)	
Aroclor-1221 (3) [2C]		0.0			RSD (20)	
Aroclor 1232 [2C]		0.0			RSD (20)	
Aroclor-1232 (1) [2C]		0.0			RSD (20)	
Aroclor-1232 (2) [2C]		0.0			RSD (20)	
Aroclor-1232 (3) [2C]		0.0			RSD (20)	
Aroclor-1232 (4) [2C]		0.0			RSD (20)	
Aroclor 1242 [2C]		0.0			RSD (20)	
Aroclor-1242 (1) [2C]		0.0			RSD (20)	
Aroclor-1242 (2) [2C]		0.0			RSD (20)	
Aroclor-1242 (3) [2C]		0.0			RSD (20)	
Aroclor-1242 (4) [2C]		0.0			RSD (20)	
Aroclor 1248 [2C]		0.0			RSD (20)	
Aroclor-1248 (1) [2C]		0.0			RSD (20)	
Aroclor-1248 (2) [2C]		0.0			RSD (20)	
Aroclor-1248 (3) [2C]		0.0			RSD (20)	
Aroclor-1248 (4) [2C]		0.0			RSD (20)	
Aroclor 1254 [2C]		0.0			RSD (20)	
Aroclor-1254 (1) [2C]		0.0			RSD (20)	
Aroclor-1254 (2) [2C]		0.0			RSD (20)	
Aroclor-1254 (3) [2C]		0.0			RSD (20)	
Aroclor-1254 (4) [2C]		0.0			RSD (20)	
Aroclor-1254 (5) [2C]		0.0			RSD (20)	
Aroclor 1260 [2C]	6.996878E-02	6.4			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GB00069	Instrument:	ECD7
Calibration Date:	02/24/2023	Column (2):	ZB35

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor-1260 (1) [2C]	4.704064E-02	8.4			RSD (20)	
Aroclor-1260 (2) [2C]	0.1200523	7.6			RSD (20)	
Aroclor-1260 (3) [2C]	3.185902E-02	6.0			RSD (20)	
Aroclor-1260 (4) [2C]	8.092314E-02	5.1			RSD (20)	
Aroclor 1262 [2C]		0.0			RSD (20)	
Aroclor-1262 (1) [2C]		0.0			RSD (20)	
Aroclor-1262 (2) [2C]		0.0			RSD (20)	
Aroclor-1262 (3) [2C]		0.0			RSD (20)	
Aroclor-1262 (4) [2C]		0.0			RSD (20)	
Aroclor 1268 [2C]		0.0			RSD (20)	
Aroclor-1268 (1) [2C]		0.0			RSD (20)	
Aroclor-1268 (2) [2C]		0.0			RSD (20)	
Aroclor-1268 (3) [2C]		0.0			RSD (20)	
Aroclor-1268 (4) [2C]		0.0			RSD (20)	
Decachlorobiphenyl [2C]	1.218271	3.9			RSD (20)	
Tetrachlorometaxylene [2C]	1.173721	3.9			RSD (20)	

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLB0342

Instrument: ECD7
Calibration ID: GB00069

Printed: 2/28/2023 9:54:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLB0342-CAL1	QC		1		L000856	L000844		
SLB0342-CAL2	QC		2		L000859	L000844		
SLB0342-CAL3	QC		3		L000858	L000844		
SLB0342-CAL4	QC		4		L000731	L000844		
SLB0342-CAL5	QC		5		L000857	L000844		
SLB0342-CAL6	QC		6		L000855	L000844		
SLB0342-CAL7	QC		7		L000860	L000844		
SLB0342-CAL8	QC		8		L000861	L000844		
SLB0342-CAL9	QC		9		L000862	L000844		
SLB0342-CALA	QC		10		L000863	L000844		
SLB0342-CALB	QC		11		L000864	L000844		
SLB0342-SCV1	QC		12		L002065	L000844		
SLB0342-SCV2	QC		13		K007656	L000844		
SLB0342-SCV3	QC		14		L002066	L000844		
SLB0342-SCV4	QC		15		L002067	L000844		
SLB0342-SCV5	QC		16		L002068	L000844		
SLB0342-SCV6	QC		17		L002069	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	24-FEB-2023 10:51	02242301ECD7.D	1	IB	
2	24-FEB-2023 11:12	02242302ECD7.D	1	0.25PPMAR1660	
3	24-FEB-2023 11:33	02242303ECD7.D	1	0.02PPMAR1660	
4	24-FEB-2023 11:54	02242304ECD7.D	1	0.05PPMAR1660	
5	24-FEB-2023 12:15	02242305ECD7.D	1	1.0PPMAR1660	
6	24-FEB-2023 12:36	02242306ECD7.D	1	0.1PPMAR1660	
7	24-FEB-2023 12:57	02242307ECD7.D	1	0.5PPMAR1660	
8	24-FEB-2023 13:18	02242308ECD7.D	1	0.25PPMAR1242	
9	24-FEB-2023 13:39	02242309ECD7.D	1	0.25PPMAR1248	
10	24-FEB-2023 14:00	02242310ECD7.D	1	0.25PPMAR1254	
11	24-FEB-2023 14:21	02242311ECD7.D	1	0.25PPMAR2162	
12	24-FEB-2023 14:42	02242312ECD7.D	1	0.25PPMAR3268	
13	24-FEB-2023 15:03	02242313ECD7.D	1	AR1660SCV	
14	24-FEB-2023 15:24	02242314ECD7.D	1	AR1242SCV	
15	24-FEB-2023 15:45	02242315ECD7.D	1	AR1248SCV	
16	24-FEB-2023 16:06	02242316ECD7.D	1	AR1254SCV	
17	24-FEB-2023 16:27	02242317ECD7.D	1	AR2162SCV	
18	24-FEB-2023 16:48	02242318ECD7.D	1	AR3268SCV	
19	24-FEB-2023 17:09	02242319ECD7.D	1	DDTS	
20	24-FEB-2023 17:30	02242320ECD7.D	1	DDT BD	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

ARI Job No.: IB Method: PCB.m Instrument: ecd7.i Date: 24-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1051	02242301ECD7.D	IB		1	NO MANUAL INTEGRATION
1112	02242302ECD7.D	0.25PPMAR1660		1	NO MANUAL INTEGRATION
1133	02242303ECD7.D	0.02PPMAR1660		1	NO MANUAL INTEGRATION
1154	02242304ECD7.D	0.05PPMAR1660		1	NO MANUAL INTEGRATION
1215	02242305ECD7.D	1.0PPMAR1660		1	NO MANUAL INTEGRATION
1236	02242306ECD7.D	0.1PPMAR1660		1	NO MANUAL INTEGRATION
1257	02242307ECD7.D	0.5PPMAR1660		1	NO MANUAL INTEGRATION
1318	02242308ECD7.D	0.25PPMAR1242		1	NO MANUAL INTEGRATION
1339	02242309ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
1400	02242310ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
1421	02242311ECD7.D	0.25PPMAR2162		1	NO MANUAL INTEGRATION
1442	02242312ECD7.D	0.25PPMAR3268		1	NO MANUAL INTEGRATION
1503	02242313ECD7.D	AR1660SCV		1	NO MANUAL INTEGRATION
1524	02242314ECD7.D	AR1242SCV		1	NO MANUAL INTEGRATION
1545	02242315ECD7.D	AR1248SCV		1	NO MANUAL INTEGRATION
1606	02242316ECD7.D	AR1254SCV		1	NO MANUAL INTEGRATION
1627	02242317ECD7.D	AR2162SCV		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1648	02242318ECD7.D	AR3268SCV		1	NO MANUAL INTEGRATION
1709	02242319ECD7.D	DDTS		1	NO MANUAL INTEGRATION
1730	02242320ECD7.D	DDT BD		1	NO MANUAL INTEGRATION
1751	02242321ECD7.D			1	NO MANUAL INTEGRATION
1812	02242322ECD7.D			1	NO MANUAL INTEGRATION
1833	02242323ECD7.D			1	NO MANUAL INTEGRATION
1854	02242324ECD7.D			1	NO MANUAL INTEGRATION
1915	02242325ECD7.D			1	NO MANUAL INTEGRATION
1936	02242326ECD7.D			1	NO MANUAL INTEGRATION
1957	02242327ECD7.D			1	NO MANUAL INTEGRATION
2018	02242328ECD7.D			1	NO MANUAL INTEGRATION
2039	02242329ECD7.D			1	NO MANUAL INTEGRATION
2059	02242330ECD7.D			1	NO MANUAL INTEGRATION
2120	02242331ECD7.D			1	NO MANUAL INTEGRATION
2141	02242332ECD7.D			1	NO MANUAL INTEGRATION
2202	02242333ECD7.D			1	NO MANUAL INTEGRATION
2223	02242334ECD7.D			1	NO MANUAL INTEGRATION
2244	02242335ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2305	02242336ECD7.D			1	NO MANUAL INTEGRATION
2326	02242337ECD7.D			1	NO MANUAL INTEGRATION
2347	02242338ECD7.D			1	NO MANUAL INTEGRATION
0008	02242339ECD7.D			1	NO MANUAL INTEGRATION
0029	02242340ECD7.D			1	NO MANUAL INTEGRATION
0050	02242341ECD7.D			1	NO MANUAL INTEGRATION
0111	02242342ECD7.D			1	NO MANUAL INTEGRATION
0132	02242343ECD7.D			1	NO MANUAL INTEGRATION
0153	02242344ECD7.D			1	NO MANUAL INTEGRATION
0214	02242345ECD7.D			1	NO MANUAL INTEGRATION
0235	02242346ECD7.D			1	NO MANUAL INTEGRATION
0256	02242347ECD7.D			1	NO MANUAL INTEGRATION
0317	02242348ECD7.D			1	NO MANUAL INTEGRATION
0338	02242349ECD7.D			1	NO MANUAL INTEGRATION
0359	02242350ECD7.D			1	NO MANUAL INTEGRATION
0420	02242351ECD7.D			1	NO MANUAL INTEGRATION
0441	02242352ECD7.D			1	NO MANUAL INTEGRATION
0502	02242353ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0523	02242354ECD7.D			1	NO MANUAL INTEGRATION
0544	02242355ECD7.D			1	NO MANUAL INTEGRATION
0605	02242356ECD7.D			1	NO MANUAL INTEGRATION
0626	02242357ECD7.D			1	NO MANUAL INTEGRATION
0647	02242358ECD7.D			1	NO MANUAL INTEGRATION
0708	02242359ECD7.D			1	NO MANUAL INTEGRATION
0729	02242360ECD7.D			1	NO MANUAL INTEGRATION
0750	02242361ECD7.D			1	NO MANUAL INTEGRATION
0811	02242362ECD7.D			1	NO MANUAL INTEGRATION
0832	02242363ECD7.D			1	NO MANUAL INTEGRATION
0853	02242364ECD7.D			1	NO MANUAL INTEGRATION
0914	02242365ECD7.D			1	NO MANUAL INTEGRATION
0935	02242366ECD7.D			1	NO MANUAL INTEGRATION
0956	02242367ECD7.D			1	NO MANUAL INTEGRATION
1017	02242368ECD7.D			1	NO MANUAL INTEGRATION
1038	02242369ECD7.D			1	NO MANUAL INTEGRATION
1059	02242370ECD7.D			1	NO MANUAL INTEGRATION
1120	02242371ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1141	02242372ECD7.D			1	NO MANUAL INTEGRATION
1202	02242373ECD7.D			1	NO MANUAL INTEGRATION
1223	02242374ECD7.D			1	NO MANUAL INTEGRATION
1244	02242375ECD7.D			1	NO MANUAL INTEGRATION
1305	02242376ECD7.D			1	NO MANUAL INTEGRATION
1326	02242377ECD7.D			1	NO MANUAL INTEGRATION
1347	02242378ECD7.D			1	NO MANUAL INTEGRATION
1408	02242379ECD7.D			1	NO MANUAL INTEGRATION
1429	02242380ECD7.D			1	NO MANUAL INTEGRATION
1450	02242381ECD7.D			1	NO MANUAL INTEGRATION
1511	02242382ECD7.D			1	NO MANUAL INTEGRATION
1532	02242383ECD7.D			1	NO MANUAL INTEGRATION
1553	02242384ECD7.D			1	NO MANUAL INTEGRATION
1051	02242301ECD7.D	IB		1	NO MANUAL INTEGRATION
1112	02242302ECD7.D	0.25PPMAR1660		1	NO MANUAL INTEGRATION
1133	02242303ECD7.D	0.02PPMAR1660		1	Aroclor-1016 [2C],
1154	02242304ECD7.D	0.05PPMAR1660		1	NO MANUAL INTEGRATION
1215	02242305ECD7.D	1.0PPMAR1660		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1236	02242306ECD7.D	0.1PPMAR1660		1	NO MANUAL INTEGRATION
1257	02242307ECD7.D	0.5PPMAR1660		1	NO MANUAL INTEGRATION
1318	02242308ECD7.D	0.25PPMAR1242		1	NO MANUAL INTEGRATION
1339	02242309ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
1400	02242310ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
1421	02242311ECD7.D	0.25PPMAR2162		1	NO MANUAL INTEGRATION
1442	02242312ECD7.D	0.25PPMAR3268		1	NO MANUAL INTEGRATION
1503	02242313ECD7.D	AR1660SCV		1	NO MANUAL INTEGRATION
1524	02242314ECD7.D	AR1242SCV		1	NO MANUAL INTEGRATION
1545	02242315ECD7.D	AR1248SCV		1	NO MANUAL INTEGRATION
1606	02242316ECD7.D	AR1254SCV		1	NO MANUAL INTEGRATION
1627	02242317ECD7.D	AR2162SCV		1	NO MANUAL INTEGRATION
1648	02242318ECD7.D	AR3268SCV		1	NO MANUAL INTEGRATION
1709	02242319ECD7.D	DDTS		1	NO MANUAL INTEGRATION
1730	02242320ECD7.D	DDT BD		1	NO MANUAL INTEGRATION
1751	02242321ECD7.D			1	NO MANUAL INTEGRATION
1812	02242322ECD7.D			1	NO MANUAL INTEGRATION
1833	02242323ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1854	02242324ECD7.D			1	NO MANUAL INTEGRATION
1915	02242325ECD7.D			1	NO MANUAL INTEGRATION
1936	02242326ECD7.D			1	NO MANUAL INTEGRATION
1957	02242327ECD7.D			1	NO MANUAL INTEGRATION
2018	02242328ECD7.D			1	NO MANUAL INTEGRATION
2038	02242329ECD7.D			1	NO MANUAL INTEGRATION
2059	02242330ECD7.D			1	NO MANUAL INTEGRATION
2120	02242331ECD7.D			1	NO MANUAL INTEGRATION
2141	02242332ECD7.D			1	NO MANUAL INTEGRATION
2202	02242333ECD7.D			1	NO MANUAL INTEGRATION
2223	02242334ECD7.D			1	NO MANUAL INTEGRATION
2244	02242335ECD7.D			1	NO MANUAL INTEGRATION
2305	02242336ECD7.D			1	NO MANUAL INTEGRATION
2326	02242337ECD7.D			1	NO MANUAL INTEGRATION
2347	02242338ECD7.D			1	NO MANUAL INTEGRATION
0008	02242339ECD7.D			1	NO MANUAL INTEGRATION
0029	02242340ECD7.D			1	NO MANUAL INTEGRATION
0050	02242341ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0111	02242342ECD7.D			1	NO MANUAL INTEGRATION
0132	02242343ECD7.D			1	NO MANUAL INTEGRATION
0153	02242344ECD7.D			1	NO MANUAL INTEGRATION
0214	02242345ECD7.D			1	NO MANUAL INTEGRATION
0235	02242346ECD7.D			1	NO MANUAL INTEGRATION
0256	02242347ECD7.D			1	NO MANUAL INTEGRATION
0317	02242348ECD7.D			1	NO MANUAL INTEGRATION
0338	02242349ECD7.D			1	NO MANUAL INTEGRATION
0359	02242350ECD7.D			1	NO MANUAL INTEGRATION
0420	02242351ECD7.D			1	NO MANUAL INTEGRATION
0441	02242352ECD7.D			1	NO MANUAL INTEGRATION
0502	02242353ECD7.D			1	NO MANUAL INTEGRATION
0523	02242354ECD7.D			1	NO MANUAL INTEGRATION
0544	02242355ECD7.D			1	NO MANUAL INTEGRATION
0605	02242356ECD7.D			1	NO MANUAL INTEGRATION
0626	02242357ECD7.D			1	NO MANUAL INTEGRATION
0647	02242358ECD7.D			1	NO MANUAL INTEGRATION
0708	02242359ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0729	02242360ECD7.D			1	NO MANUAL INTEGRATION
0750	02242361ECD7.D			1	NO MANUAL INTEGRATION
0811	02242362ECD7.D			1	NO MANUAL INTEGRATION
0832	02242363ECD7.D			1	NO MANUAL INTEGRATION
0853	02242364ECD7.D			1	NO MANUAL INTEGRATION
0914	02242365ECD7.D			1	NO MANUAL INTEGRATION
0935	02242366ECD7.D			1	NO MANUAL INTEGRATION
0956	02242367ECD7.D			1	NO MANUAL INTEGRATION
1017	02242368ECD7.D			1	NO MANUAL INTEGRATION
1038	02242369ECD7.D			1	NO MANUAL INTEGRATION
1059	02242370ECD7.D			1	NO MANUAL INTEGRATION
1120	02242371ECD7.D			1	NO MANUAL INTEGRATION
1141	02242372ECD7.D			1	NO MANUAL INTEGRATION
1202	02242373ECD7.D			1	NO MANUAL INTEGRATION
1223	02242374ECD7.D			1	NO MANUAL INTEGRATION
1244	02242375ECD7.D			1	NO MANUAL INTEGRATION
1305	02242376ECD7.D			1	NO MANUAL INTEGRATION
1326	02242377ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1347	02242378ECD7.D			1	NO MANUAL INTEGRATION
1408	02242379ECD7.D			1	NO MANUAL INTEGRATION
1429	02242380ECD7.D			1	NO MANUAL INTEGRATION
1450	02242381ECD7.D			1	NO MANUAL INTEGRATION
1511	02242382ECD7.D			1	NO MANUAL INTEGRATION
1532	02242383ECD7.D			1	NO MANUAL INTEGRATION
1553	02242384ECD7.D			1	NO MANUAL INTEGRATION

Security Status Report

Date: 28-Feb-2023 09:27

02242301ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242302ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242303ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242304ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242305ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242306ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242307ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
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02242309ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242310ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242311ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242312ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242313ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242314ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242315ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242316ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242317ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242318ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242319ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27
02242320ECD7.D	Data Locked	richardl, 28-Feb-2023 09:27

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
Last Edit : 24-Feb-2023 15:31 richardl
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd7.i\230224.b\02242303ECD7.D
Level 2: \\target\share\chem4\ecd7.i\230224.b\02242304ECD7.D
Level 3: \\target\share\chem4\ecd7.i\230224.b\02242306ECD7.D
Level 4: \\target\share\chem4\ecd7.i\230224.b\02242302ECD7.D
Level 5: \\target\share\chem4\ecd7.i\230224.b\02242307ECD7.D
Level 6: \\target\share\chem4\ecd7.i\230224.b\02242305ECD7.D
Level 7: \\target\share\chem4\ecd7.i\230224.b\02242312ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
2 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00716	0.00716	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01281	0.01281	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02975	0.02975	0.000
3 Aroclor-1242(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.02479	0.02479	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.07529	0.07529	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02343	0.02343	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.03463	0.03463	0.000
4 Aroclor-1232(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00429	0.00429	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
Last Edit : 24-Feb-2023 15:31 richardl
Curve Type : Average

Compound	20.000 Level 1 / 250.000 Level 7	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(2)	+++++ / 0.00850	+++++	+++++	+++++	+++++	+++++	0.00850	0.000
(3)	+++++ / 0.03848	+++++	+++++	+++++	+++++	+++++	0.03848	0.000
(4)	+++++ / 0.01635	+++++	+++++	+++++	+++++	+++++	0.01635	0.000
7 Aroclor-1016(1)	0.03172 / +++++	0.03253	0.03142	0.03141	0.02856	0.02667	0.03039	7.449
(2)	0.09239 / +++++	0.09246	0.09222	0.09849	0.09174	0.08849	0.09263	3.499
(3)	0.05165 / +++++	0.05037	0.04823	0.04393	0.03991	0.03721	0.04522	12.936
(4)	0.03002 / +++++	0.02894	0.02959	0.03058	0.02852	0.02774	0.02923	3.542
6 Aroclor-1248(1)	+++++ / 0.03903	+++++	+++++	+++++	+++++	+++++	0.03903	0.000
(2)	+++++ / 0.04961	+++++	+++++	+++++	+++++	+++++	0.04961	0.000
(3)	+++++ / 0.09360	+++++	+++++	+++++	+++++	+++++	0.09360	0.000
(4)	+++++ / 0.04765	+++++	+++++	+++++	+++++	+++++	0.04765	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
Last Edit : 24-Feb-2023 15:31 richardl
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
8 Aroclor-1254(1)	*****	*****	*****	*****	*****	*****	0.08033	0.08033	0.000
(2)	*****	*****	*****	*****	*****	*****	0.03613	0.03613	0.000
(3)	*****	*****	*****	*****	*****	*****	0.05165	0.05165	0.000
(4)	*****	*****	*****	*****	*****	*****	0.10042	0.10042	0.000
(5)	*****	*****	*****	*****	*****	*****	0.06294	0.06294	0.000
9 Aroclor-1260(1)	0.02926	0.02920	0.02841	0.03096	0.02737	0.02746	*****	0.02878	4.677
(2)	0.02967	0.03006	0.03011	0.03291	0.02910	0.02857	*****	0.03007	5.029
(3)	0.08088	0.08045	0.07954	0.08575	0.07515	0.07674	*****	0.07975	4.627
(4)	0.03905	0.03887	0.03955	0.04485	0.03942	0.03922	*****	0.04016	5.753
(5)	0.01783	0.01715	0.01679	0.01875	0.01664	0.01655	*****	0.01729	4.953
10 Aroclor-1262(1)	*****	*****	*****	*****	*****	*****	0.02454	0.02454	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
Last Edit : 24-Feb-2023 15:31 richardl
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
(2)	*****	*****	*****	*****	*****	*****	0.03993	0.03993	0.000
(3)	*****	*****	*****	*****	*****	*****	0.04293	0.04293	0.000
(4)	*****	*****	*****	*****	*****	*****	0.03923	0.03923	0.000
11 Aroclor-1268(1)	*****	*****	*****	*****	*****	*****	0.10250	0.10250	0.000
(2)	*****	*****	*****	*****	*****	*****	0.10151	0.10151	0.000
(3)	*****	*****	*****	*****	*****	*****	0.08686	0.08686	0.000
(4)	*****	*****	*****	*****	*****	*****	0.28598	0.28598	0.000
42 2,4-DDE	*****	*****	*****	*****	*****	*****	*****	*****	*****
43 2,4-DDD	*****	*****	*****	*****	*****	*****	*****	*****	*****
44 2,4-DDT	*****	*****	*****	*****	*****	*****	*****	*****	*****
46 4,4-DDE	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
Last Edit : 24-Feb-2023 15:31 richardl
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 1 Tetrachloro-m-xylene	1.16827	1.24402	1.18546	1.20509	1.12295	1.24114	+++++	1.19449	3.860
$ 13 Decachlorobiphenyl	0.82901	0.80558	0.77587	0.78808	0.73125	0.79742	+++++	0.78787	4.189

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Last Edit : 24-Feb-2023 15:29 richardl
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242303ECD7.D
Level 2: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242304ECD7.D
Level 3: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242306ECD7.D
Level 4: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242302ECD7.D
Level 5: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242307ECD7.D
Level 6: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242305ECD7.D
Level 7: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242312ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	RRF	% RSD
1 Aroclor-1221 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00757	0.00757	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01433	0.01433	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02333	0.02333	0.000
4 Aroclor-1232 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00409	0.00409	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.02034	0.02034	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.04067	0.04067	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.01170	0.01170	0.000
3 Aroclor-1242 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.03717	0.03717	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Last Edit : 24-Feb-2023 15:29 richardl
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.07813	0.07813	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02431	0.02431	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.02962	0.02962	0.000
6 Aroclor-1248 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.03820	0.03820	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.03949	0.03949	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.04545	0.04545	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.05457	0.05457	0.000
7 Aroclor-1016 [2C](1)	0.05071	0.05022	0.04868	0.04733	0.04326	0.04080	+++++	0.04683	8.503
(2)	0.08143	0.09407	0.10159	0.10259	0.09651	0.09362	+++++	0.09497	8.025
(3)	0.04006	0.04718	0.04613	0.04410	0.04062	0.03926	+++++	0.04289	7.857
(4)	0.03181	0.03802	0.03707	0.03450	0.03115	0.02936	+++++	0.03365	10.251

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Last Edit : 24-Feb-2023 15:29 richardl
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
8 Aroclor-1254 [2C](1)	*****	*****	*****	*****	*****	*****	0.06081	0.06081	0.000
(2)	*****	*****	*****	*****	*****	*****	0.04892	0.04892	0.000
(3)	*****	*****	*****	*****	*****	*****	0.10584	0.10584	0.000
(4)	*****	*****	*****	*****	*****	*****	0.10317	0.10317	0.000
(5)	*****	*****	*****	*****	*****	*****	0.06282	0.06282	0.000
10 Aroclor-1262 [2C](1)	*****	*****	*****	*****	*****	*****	0.06831	0.06831	0.000
(2)	*****	*****	*****	*****	*****	*****	0.05818	0.05818	0.000
(3)	*****	*****	*****	*****	*****	*****	0.06601	0.06601	0.000
(4)	*****	*****	*****	*****	*****	*****	0.10341	0.10341	0.000
9 Aroclor-1260 [2C](1)	0.05286	0.04911	0.04696	0.04801	0.04329	0.04201	*****	0.04704	8.422
(2)	0.12976	0.12431	0.12095	0.12664	0.11320	0.10545	*****	0.12005	7.605

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Last Edit : 24-Feb-2023 15:29 richardl
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
(3)	0.03524	0.03147	0.02937	0.03208	0.03102	0.03198	#####	0.03186	6.045
(4)	0.08632	0.08237	0.08044	0.08393	0.07718	0.07531	#####	0.08092	5.126
11 Aroclor-1268 [2C](1)	#####	#####	#####	#####	#####	#####	0.16109	0.16109	0.000
(2)	#####	#####	#####	#####	#####	#####	0.17318	0.17318	0.000
(3)	#####	#####	#####	#####	#####	#####	0.14787	0.14787	0.000
(4)	#####	#####	#####	#####	#####	#####	0.47260	0.47260	0.000
41 2,4-DDE [2C]	#####	#####	#####	#####	#####	#####	#####	#####	#####
42 2,4-DDD [2C]	#####	#####	#####	#####	#####	#####	#####	#####	#####
44 4,4-DDE [2C]	#####	#####	#####	#####	#####	#####	#####	#####	#####
45 4,4-DDD/2,4-DDT [2C]	#####	#####	#####	#####	#####	#####	#####	#####	#####
46 4,4-DDT [2C]	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Last Edit : 24-Feb-2023 15:29 richardl
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 2 Tetrachloro-m-xylene [2C]	1.21526	1.19545	1.17555	1.21907	1.12560	1.11139	+++++	1.17372	3.897
$ 13 Decachlorobiphenyl [2C]	1.17066	1.20406	1.20549	1.31040	1.21104	1.20797	+++++	1.21827	3.898

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Batch File: \\target\share\chem4\ecd7.i\230224.b
Inst ID: ecd7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	02242302ECD7	02242303ECD7	02242304ECD7	02242305ECD7	02242306ECD7	02242307ECD7
INJ.DATE:	24-FEB-2023	24-FEB-2023	24-FEB-2023	24-FEB-2023	24-FEB-2023	24-FEB-2023
INJ.TIME:	11:12	11:33	11:54	12:15	12:36	12:57

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 41 IS-BNB	3.493	3.492	3.492	3.492	3.491	3.491	3.493	3.393-3.593	3.492	0.001
$ 1 Tetrachloro-m-xylene	5.811	5.809	5.809	5.813	5.809	5.810	5.811	5.711-5.911	5.810	0.002
2 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	4.732	4.632-4.832	+++++	+++++
3 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	7.269	7.169-7.369	+++++	+++++
4 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	4.732	4.632-4.832	+++++	+++++
7 Aroclor-1016	7.272	7.272	7.272	7.270	7.271	7.270	7.272	7.172-7.372	7.271	0.001
6 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	8.403	8.303-8.503	+++++	+++++
8 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	9.295	9.195-9.395	+++++	+++++
9 Aroclor-1260	11.046	11.047	11.046	11.044	11.045	11.044	11.046	10.946-11.146	11.045	0.001
10 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	10.824	10.724-10.924	+++++	+++++
11 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	12.243	12.143-12.343	+++++	+++++
$ 13 Decachlorobiphenyl	13.897	13.893	13.893	13.899	13.892	13.898	13.897	13.797-13.997	13.895	0.003
* 12 IS-HBBP	14.269	14.268	14.268	14.267	14.268	14.268	14.269	14.169-14.369	14.268	0.001
42 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	9.260	9.210-9.310	+++++	+++++
43 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	9.801	9.751-9.851	+++++	+++++
44 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	10.293	10.243-10.343	+++++	+++++
46 4,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	9.683	9.583-9.783	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Batch File: \\target\share\chem4\ecd7.i\230224.b
Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	10.254	10.154-10.354	+++++	+++++
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	10.754	10.654-10.854	+++++	+++++
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.842	1.742-1.942	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	6.708	6.608-6.808	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Batch File: \\target\share\chem4\ecd7.i\230224.b\230224.b
Inst ID: ecd7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	02242302ECD7	02242303ECD7	02242304ECD7	02242305ECD7	02242306ECD7	02242307ECD7
INJ.DATE:	24-FEB-2023	24-FEB-2023	24-FEB-2023	24-FEB-2023	24-FEB-2023	24-FEB-2023
INJ.TIME:	11:12	11:33	11:54	12:15	12:36	12:57

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 40 IS-BNB [2C]	3.928	3.929	3.929	3.929	3.928	3.929	3.928	3.828-4.028	3.929	0.000
$ 2 Tetrachloro-m-xylene [	5.687	5.688	5.688	5.688	5.688	5.688	5.687	5.587-5.787	5.688	0.001
1 Aroclor-1221 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	4.958	4.858-5.058	+++++	+++++
4 Aroclor-1232 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	4.958	4.859-5.059	+++++	+++++
3 Aroclor-1242 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	7.254	7.154-7.354	+++++	+++++
6 Aroclor-1248 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	8.305	8.205-8.405	+++++	+++++
7 Aroclor-1016 [2C]	7.255	7.256	7.256	7.254	7.255	7.256	7.255	7.155-7.355	7.255	0.001
8 Aroclor-1254 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	9.447	9.347-9.547	+++++	+++++
10 Aroclor-1262 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	11.198	11.098-11.298	+++++	+++++
9 Aroclor-1260 [2C]	11.653	11.656	11.655	11.652	11.655	11.653	11.653	11.553-11.753	11.654	0.001
11 Aroclor-1268 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	12.431	12.331-12.531	+++++	+++++
$ 13 Decachlorobiphenyl [2C	14.120	14.120	14.119	14.122	14.119	14.120	14.120	14.020-14.220	14.120	0.001
* 12 IS-HBBP [2C]	15.008	15.008	15.008	15.008	15.007	15.008	15.008	14.908-15.108	15.008	0.000
41 2,4-DDE [2C]	+++++	+++++	+++++	+++++	+++++	+++++	9.911	9.861-9.961	+++++	+++++
42 2,4-DDD [2C]	+++++	+++++	+++++	+++++	+++++	+++++	9.536	9.486-9.586	+++++	+++++
44 4,4-DDE [2C]	+++++	+++++	+++++	+++++	+++++	+++++	10.209	10.109-10.309	+++++	+++++
45 4,4-DDD/2,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++	10.667	10.567-10.767	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Batch File: \\target\share\chem4\ecd7.i\230224.b\230224.b
Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
46 4,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++	11.092	10.992-11.192	+++++	+++++
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.703	1.603-1.803	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	7.178	7.078-7.278	+++++	+++++

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242301ECD7.D
Data file 2: /230224.b/230224.b/02242301ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: IB
Client ID:
Injection Date: 24-FEB-2023 10:51
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.826	0.019	382217	5.683	-0.002	180378	33.8	36.5	7.7	Tetrachloro-m-xylene
13.904	0.011	534110	14.120	0.001	295605	35.3	37.2	5.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	756896	12.3
Hexabromobiphenyl	1429847	1534275	7.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	336543	6.8
Hexabromobiphenyl	513946	521508	1.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.321	0.025	1873	31.1
Aroclor-1221	3	---			0.0	3	6.633	0.012	314	3.2
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	7.698	0.043	2193	6.0	3	---			0.0
Aroclor-1232	4	8.505	-0.076	11525	74.5	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	7.698	0.042	2193	3.1	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	8.505	-0.074	11525	35.2	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	---			0.0
Aroclor-1248	2	---			0.0	2	---			0.0
Aroclor-1248	3	---			0.0	3	---			0.0
Aroclor-1248	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	---			0.0
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	9.596	-0.072	31424	64.3	3	---			0.0
Aroclor-1254	4	---			0.0	4	---			0.0
Aroclor-1254	5	10.167	-0.010	18361	30.8	5	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	11.098	0.054	6994	12.7	1	---			0.0
Aroclor-1260	2	---			0.0	2	---			0.0
Aroclor-1260	3	11.706	-0.027	7806	5.1	3	---			0.0
Aroclor-1260	4	---			0.0	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	10.824	-0.005	16873	35.8	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	13.040	0.053	14031	18.6	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.709	0.009	6037	3.6	3	12.891	-0.001	659	0.7
Aroclor-1268	4	13.499	0.010	12396	2.3	4	13.710	0.001	1848	0.6
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.906 - 13.793) = 260205 Col1 Total PCB = 0.0 ppm*

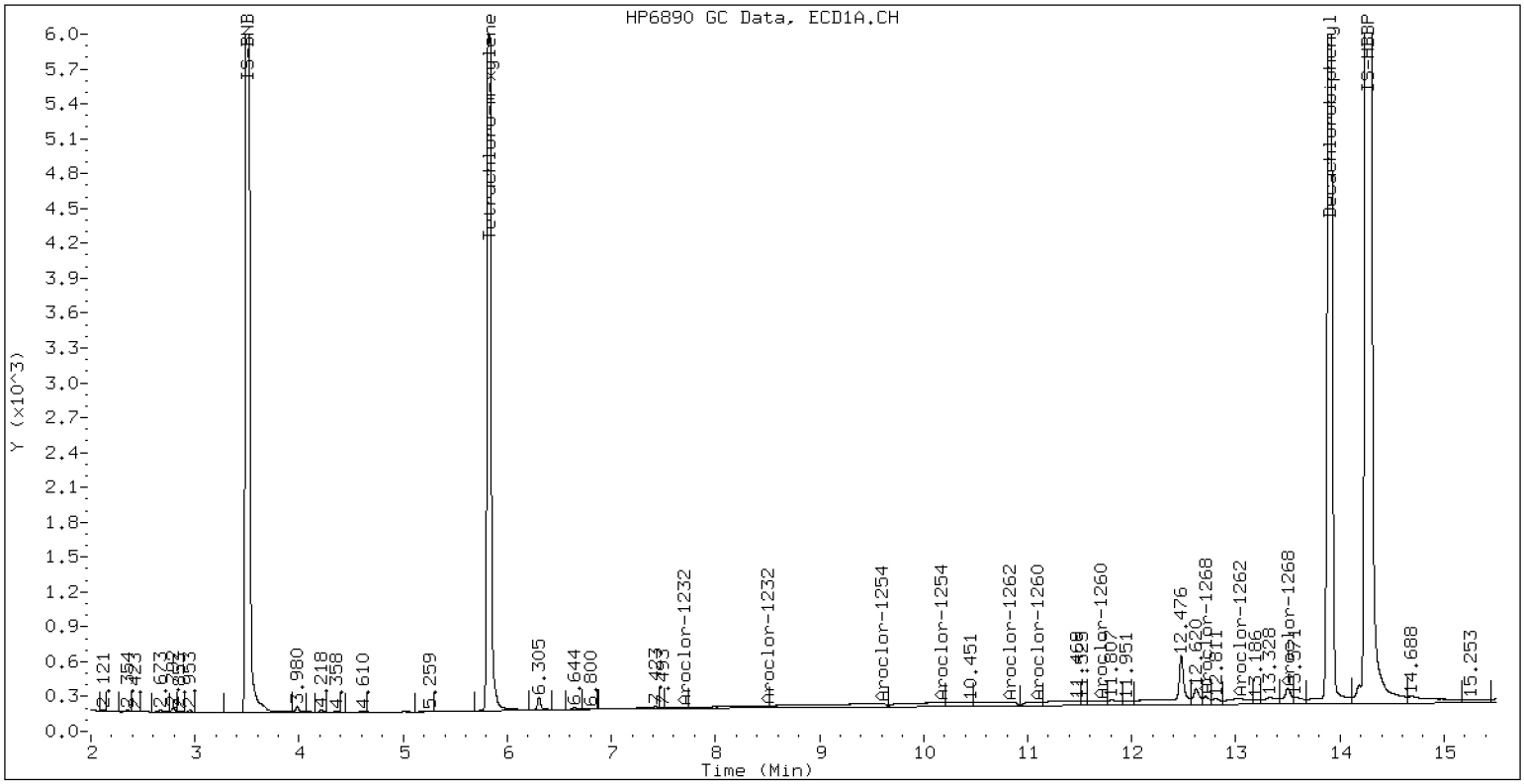
Total PCB Area Col2 (5.785 - 14.019) = 18252 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

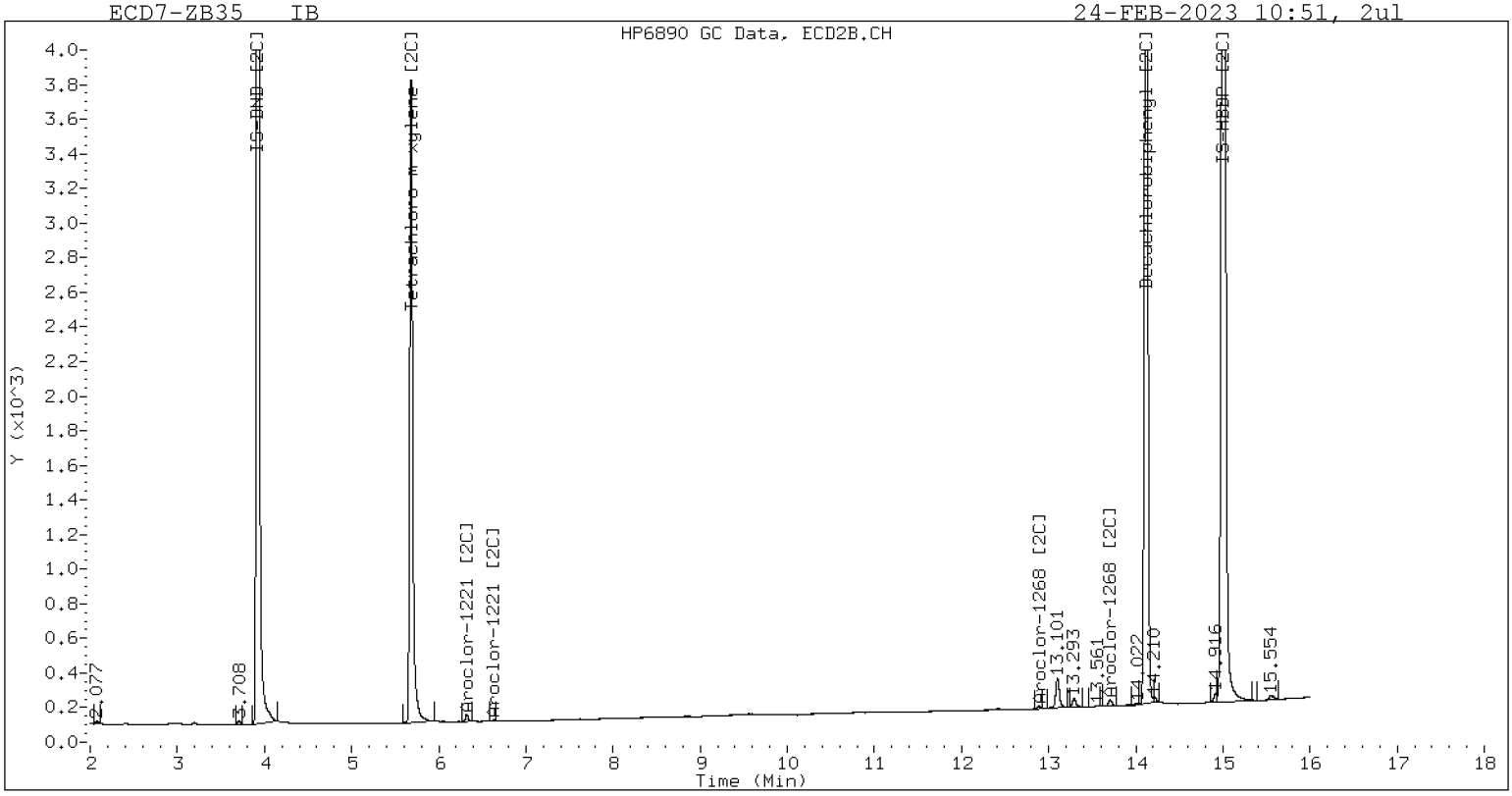
PCB Dual Column Chromatograms

ECD7-ZB5 IB 24-FEB-2023 10:51, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 IB 24-FEB-2023 10:51, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242302ECD7.D
Data file 2: /230224.b/230224.b/02242302ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 11:12
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.811	0.005	405980	5.687	0.002	192160	40.4	41.5	2.9	Tetrachloro-m-xylene
13.897	0.004	563414	14.120	0.001	336737	40.0	43.0	7.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	673778	0.0
Hexabromobiphenyl	1429847	1429847	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	315256	0.0
Hexabromobiphenyl	513946	513946	0.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1016	1	7.272	0.001	66125	258.4	1	7.255	-0.001	46626	252.6
Aroclor-1016	2	7.654	-0.000	207370	265.8	2	7.855	-0.001	101071	270.1
Aroclor-1016	3	7.792	0.002	92507	242.9	3	8.055	0.001	43448	257.1
Aroclor-1016	4	8.406	0.001	64388	261.5	4	8.306	-0.000	33986	256.3
Total Col1Ave (4 peaks):					257.2	Total Col2Ave (4 peaks):				259.0 RPD = 1
Corrected Ave (3 peaks):					254.3	Corrected Ave (3 peaks):				255.3 RPD = 0
CalAmt %D:					2.9	CalAmt %D:				3.6
Aroclor-1260	1	11.046	0.001	138355	269.0	1	11.653	0.001	77114	255.2
Aroclor-1260	2	11.363	0.002	147051	273.6	2	11.918	0.001	203401	263.7
Aroclor-1260	3	11.736	0.003	383171	268.8	3	12.435	-0.000	51517	251.7
Aroclor-1260	4	12.141	0.002	200399	279.2	4	12.502	0.001	134797	259.3
Aroclor-1260	5	12.247	0.003	83796	271.2	NS	---			----
Total Col1Ave (5 peaks):					272.4	Total Col2Ave (4 peaks):				257.5 RPD = 6
Corrected Ave (4 peaks):					270.7	Corrected Ave (3 peaks):				255.4 RPD = 6
CalAmt %D:					8.9	CalAmt %D:				3.0

Total PCB Area Col1 (5.906 - 13.793) = 4024419 Col1 Total PCB = 0.5 ppm*

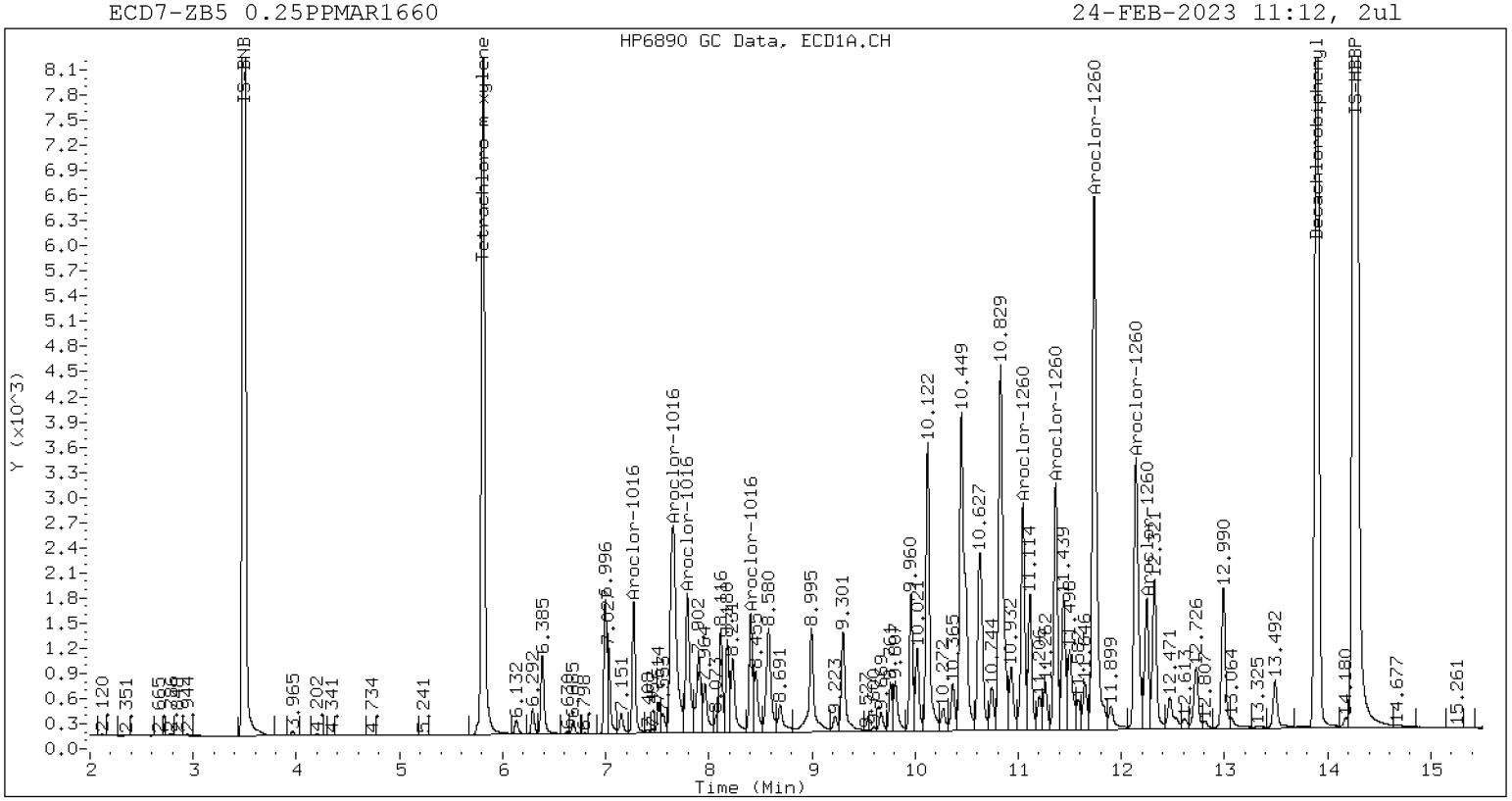
Total PCB Area Col2 (5.785 - 14.019) = 1889311 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

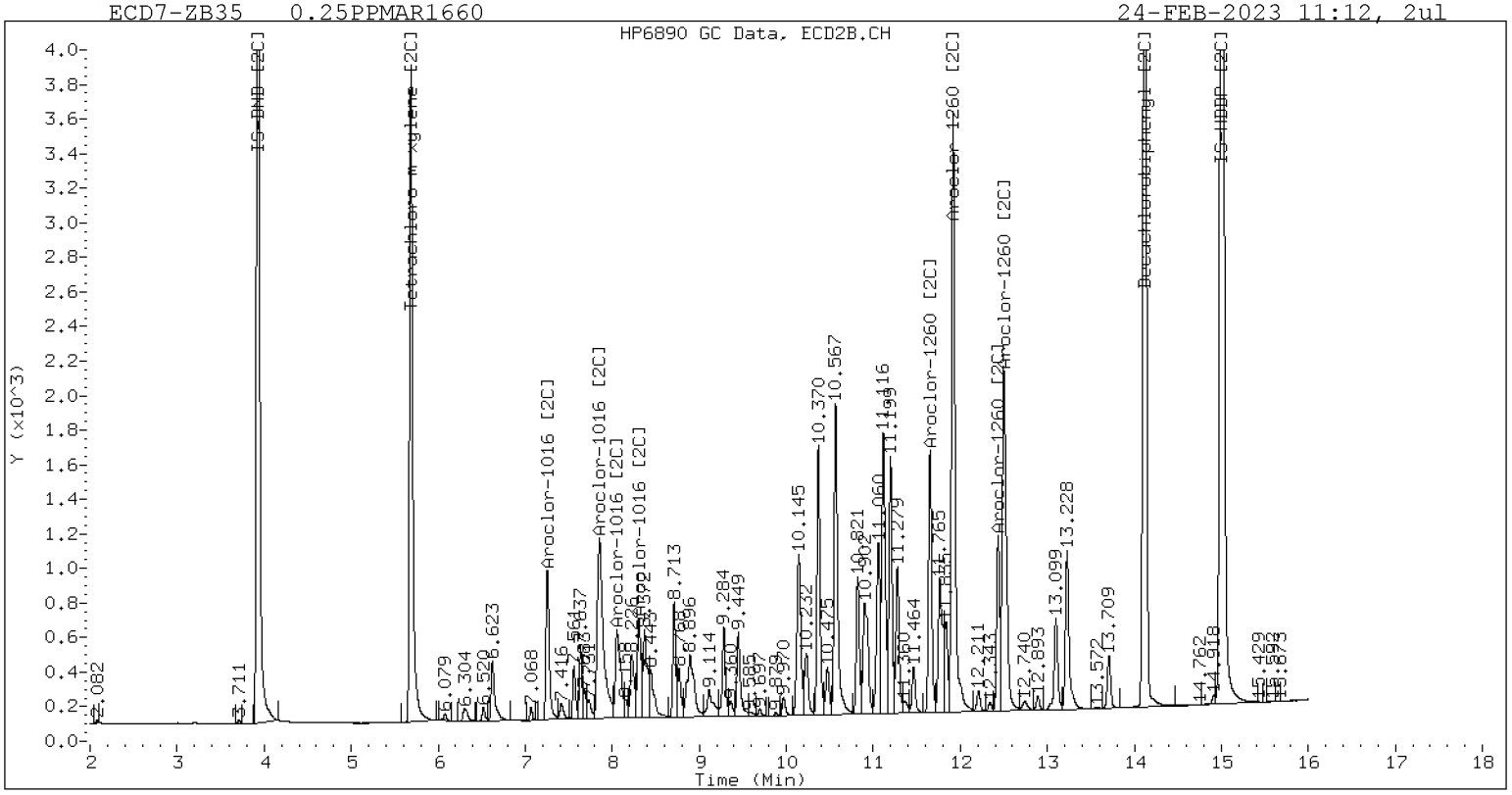
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1660 24-FEB-2023 11:12, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1660 24-FEB-2023 11:12, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242303ECD7.D
Data file 2: /230224.b/230224.b/02242303ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.02PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 11:33
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.002	29768	5.688	0.003	14932	3.1	3.3	5.7	Tetrachloro-m-xylene
13.893	0.000	45992	14.120	0.000	23950	3.4	3.1	9.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	637010	-5.5
Hexabromobiphenyl	1429847	1386953	-3.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	307177	-2.6
Hexabromobiphenyl	513946	511463	-0.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.001	5052	20.9	1	7.256	0.000	3894	21.7
Aroclor-1016	2	7.659	0.005	14714	19.9	2	7.864	0.008	6253	17.1
Aroclor-1016	3	7.795	0.005	8226	22.8	3	8.060	0.006	3076	18.7
Aroclor-1016	4	8.407	0.002	4780	20.5	4	8.309	0.002	2443	18.9
Total Col1Ave (4 peaks):					21.1	Total Col2Ave (4 peaks):				19.1 RPD = 10
Corrected Ave (3 peaks):					20.5	Corrected Ave (3 peaks):				18.2 RPD = 11
CalAmt %D:					5.3	CalAmt %D:				-4.5
Aroclor-1260	1	11.047	0.003	10147	20.3	1	11.656	0.003	6759	22.5
Aroclor-1260	2	11.364	0.003	10287	19.7	2	11.922	0.005	16592	21.6
Aroclor-1260	3	11.740	0.006	28043	20.3	3	12.438	0.002	4506	22.1
Aroclor-1260	4	12.145	0.006	13540	19.4	4	12.505	0.004	11037	21.3
Aroclor-1260	5	12.246	0.002	6182	20.6	NS	---			----
Total Col1Ave (5 peaks):					20.1	Total Col2Ave (4 peaks):				21.9 RPD = 9
Corrected Ave (4 peaks):					19.9	Corrected Ave (3 peaks):				21.7 RPD = 8
CalAmt %D:					0.4	CalAmt %D:				9.4

Total PCB Area Col1 (5.906 - 13.793) = 324832 Col1 Total PCB = 0.0 ppm*

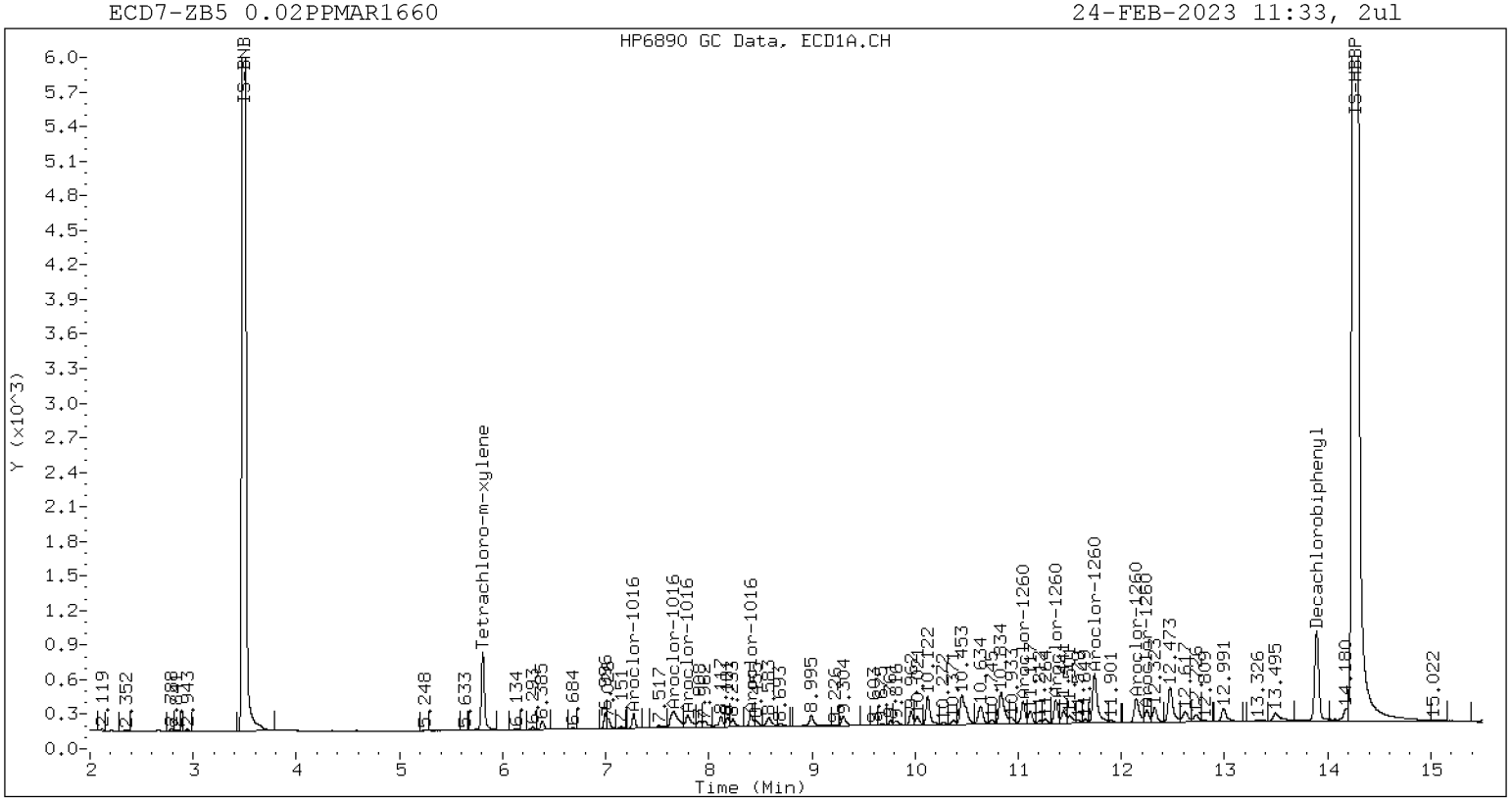
Total PCB Area Col2 (5.785 - 14.019) = 157149 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

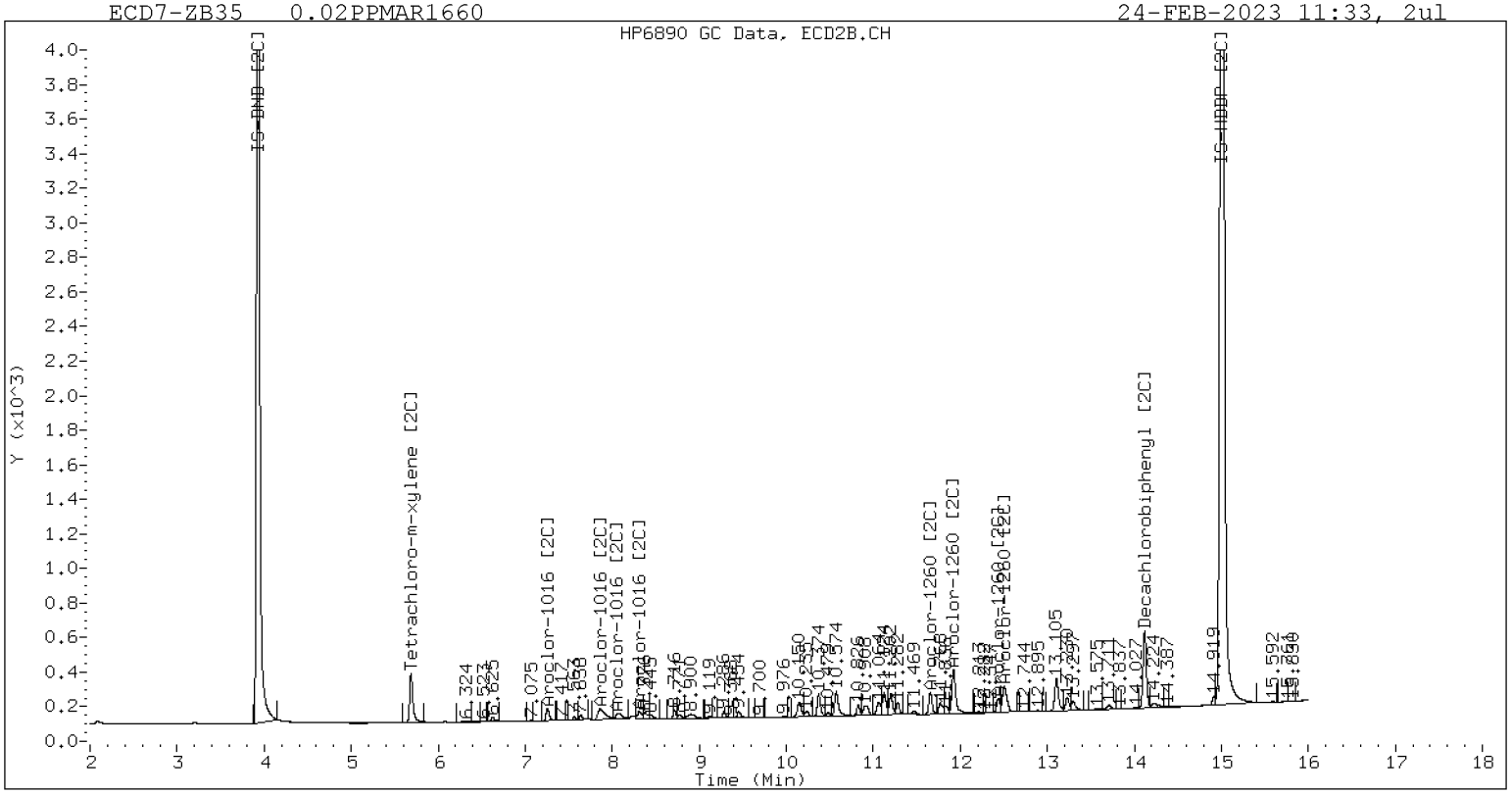
PCB Dual Column Chromatograms

ECD7-ZB5 0.02PPMAR1660 24-FEB-2023 11:33, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.02PPMAR1660 24-FEB-2023 11:33, 2ul

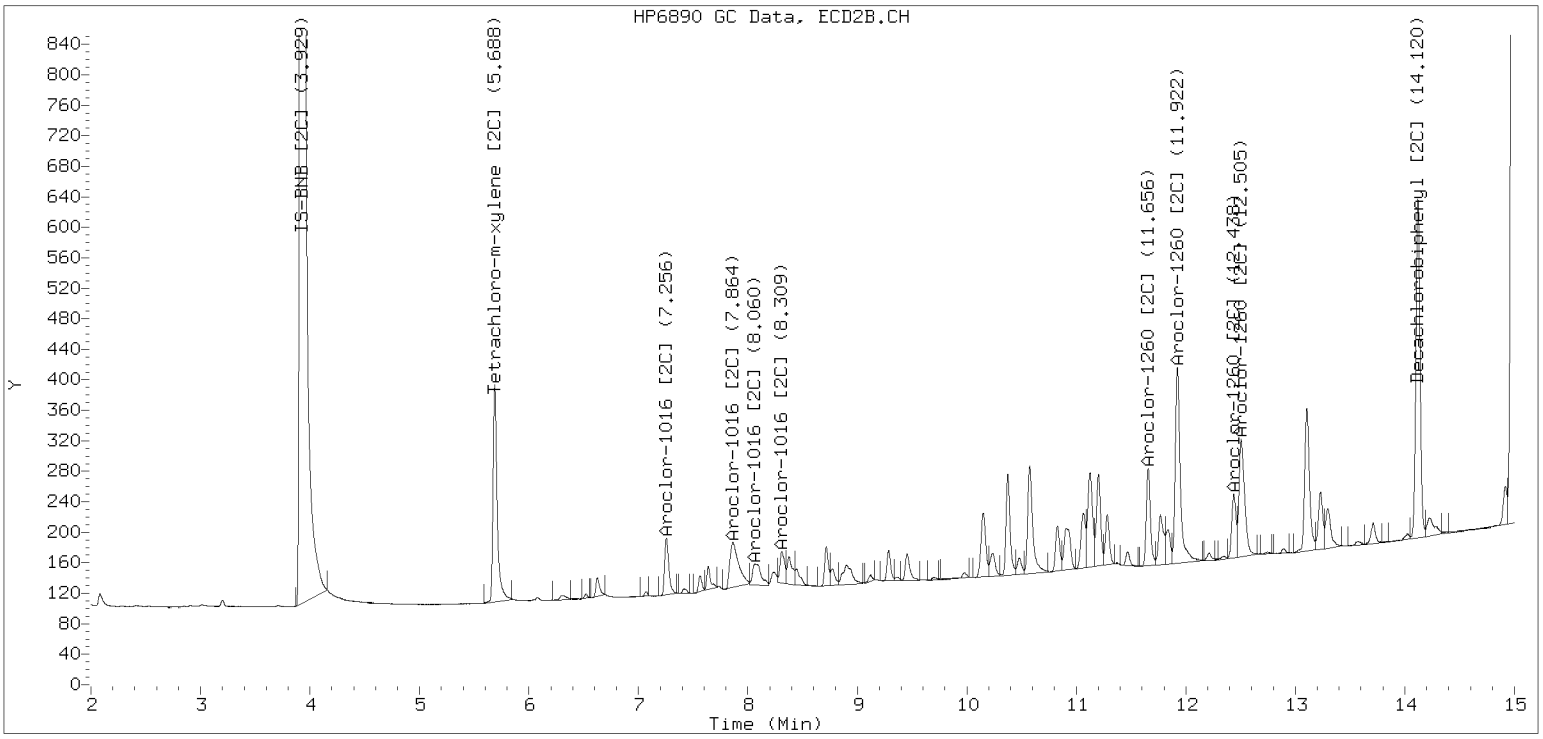


ZB-35 Manual Integration: YES

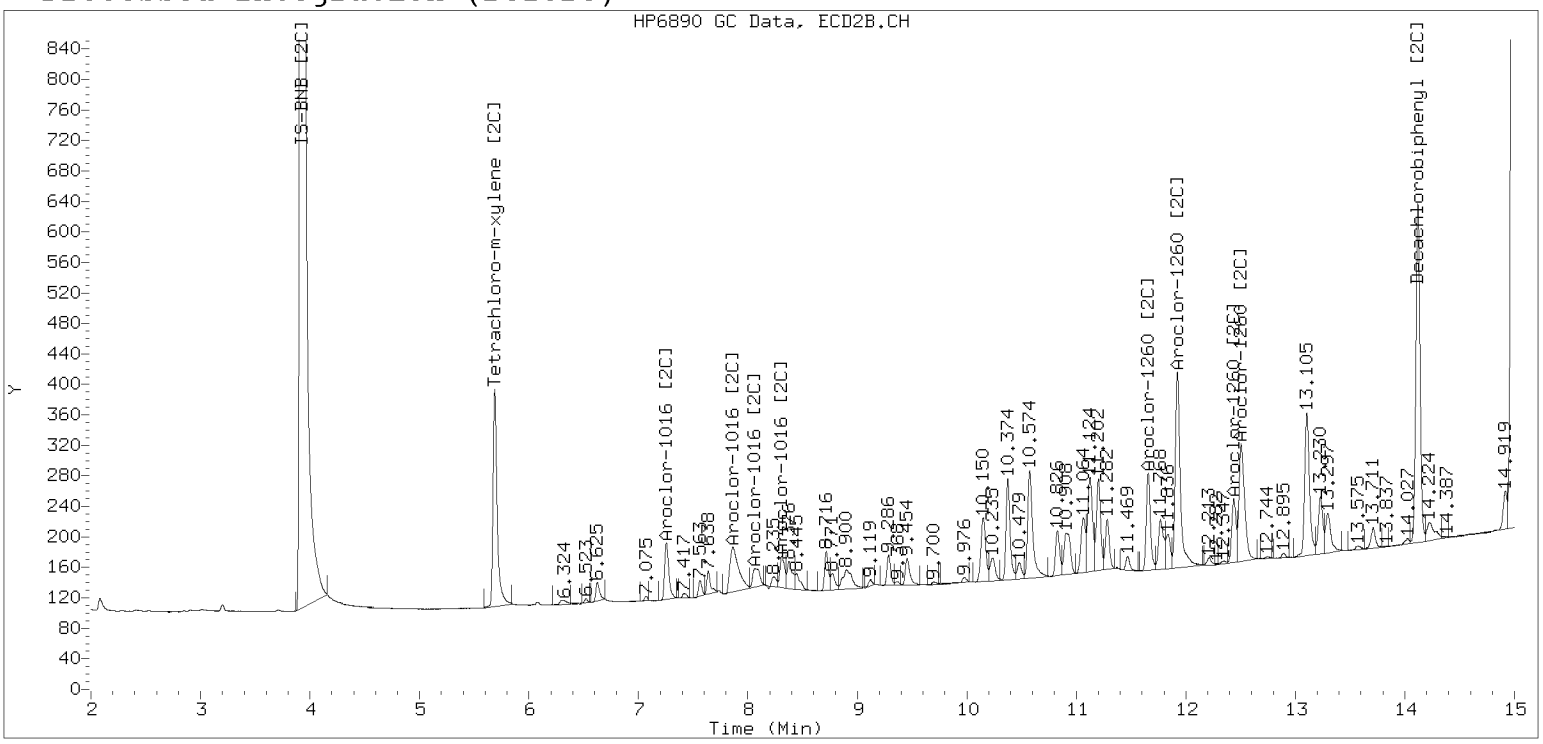
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230224.b/230224.b/02242303ECD7.D Injection Date: 24-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242304ECD7.D
Data file 2: /230224.b/230224.b/02242304ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.05PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 11:54
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.003	78493	5.688	0.003	36772	8.3	8.1	2.2	Tetrachloro-m-xylene
13.893	-0.000	113544	14.119	-0.000	62745	8.2	7.9	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	630965	-6.4
Hexabromobiphenyl	1429847	1409464	-1.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	307599	-2.4
Hexabromobiphenyl	513946	521112	1.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	12829	53.5	1	7.256	0.000	9654	53.6
Aroclor-1016	2	7.660	0.006	36461	49.9	2	7.864	0.008	18085	49.5
Aroclor-1016	3	7.795	0.005	19865	55.7	3	8.063	0.008	9071	55.0
Aroclor-1016	4	8.408	0.003	11411	49.5	4	8.310	0.003	7309	56.5
Total Col1Ave (4 peaks):					52.2	Total Col2Ave (4 peaks):				53.7 RPD = 3
Corrected Ave (3 peaks):					51.0	Corrected Ave (3 peaks):				52.7 RPD = 3
CalAmt %D:					4.3	CalAmt %D:				7.3
Aroclor-1260	1	11.046	0.002	25727	50.7	1	11.655	0.002	15996	52.2
Aroclor-1260	2	11.363	0.002	26482	50.0	2	11.922	0.004	40487	51.8
Aroclor-1260	3	11.739	0.005	70871	50.4	3	12.437	0.002	10248	49.4
Aroclor-1260	4	12.143	0.004	34239	48.4	4	12.506	0.004	26828	50.9
Aroclor-1260	5	12.246	0.002	15109	49.6	NS	---			----
Total Col1Ave (5 peaks):					49.8	Total Col2Ave (4 peaks):				51.1 RPD = 2
Corrected Ave (4 peaks):					49.6	Corrected Ave (3 peaks):				50.7 RPD = 2
CalAmt %D:					-0.3	CalAmt %D:				2.1

Total PCB Area Col1 (5.906 - 13.793) = 758292 Col1 Total PCB = 0.1 ppm*

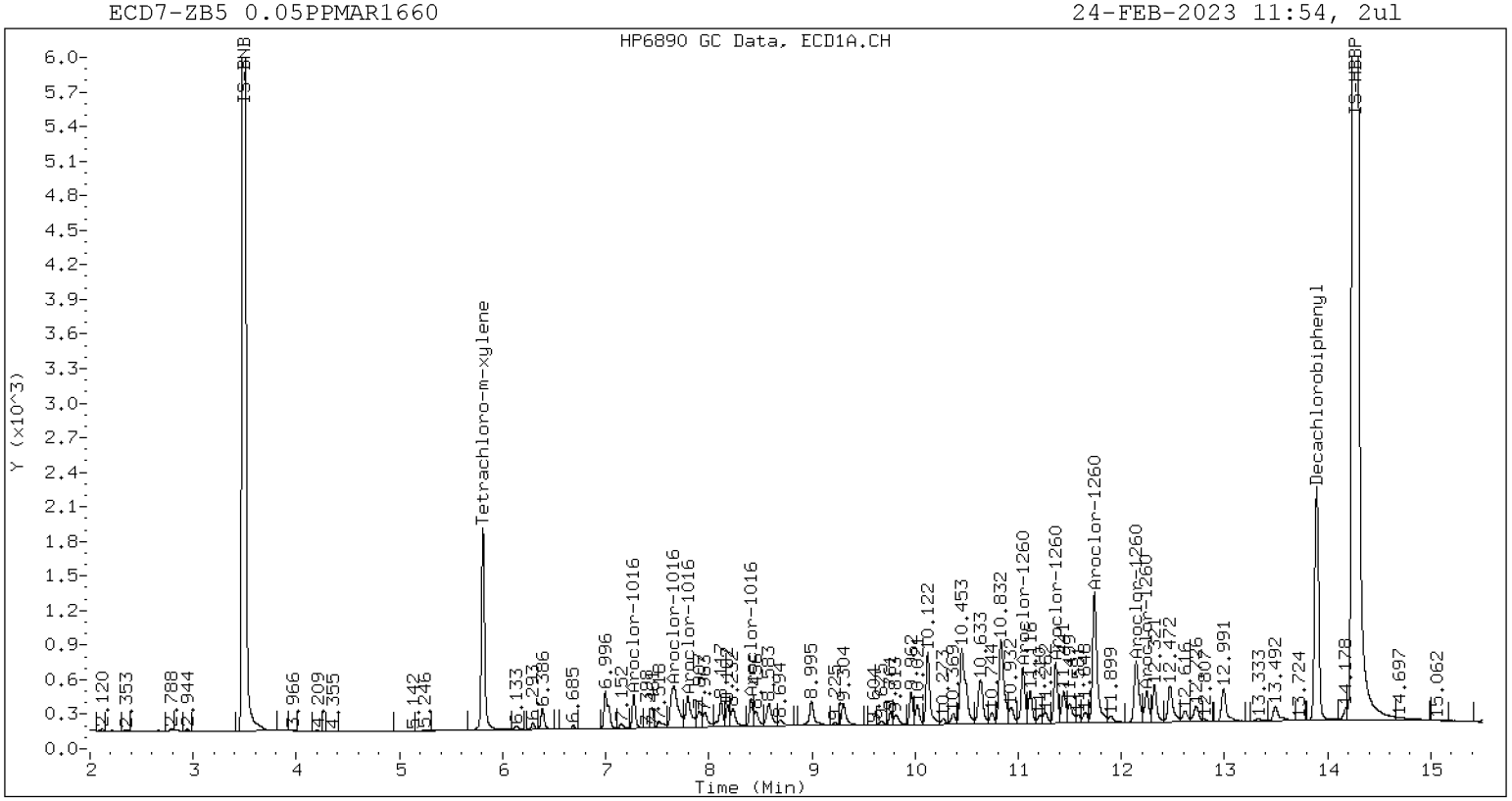
Total PCB Area Col2 (5.785 - 14.019) = 386383 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

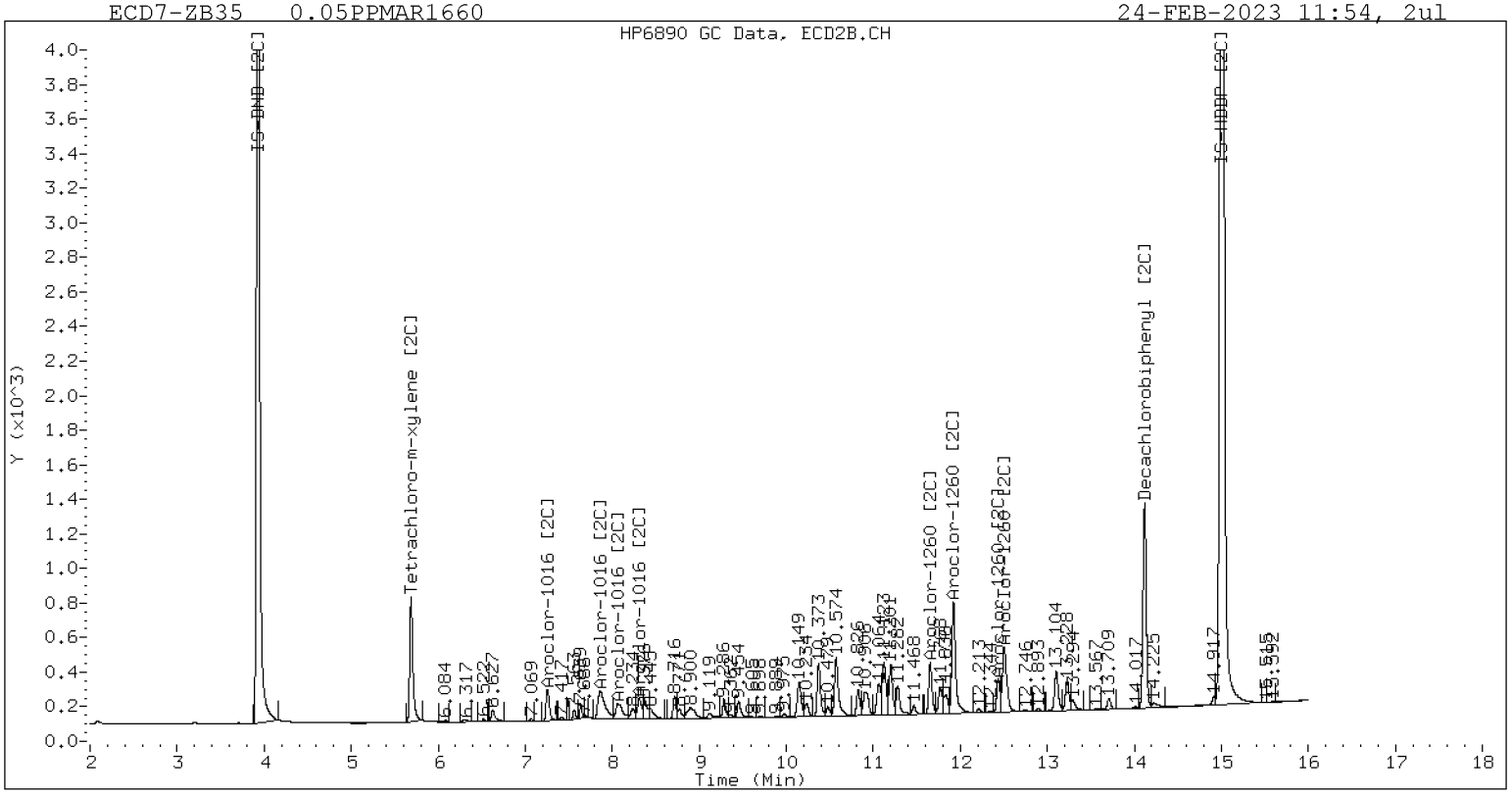
PCB Dual Column Chromatograms

ECD7-ZB5 0.05PPMAR1660 24-FEB-2023 11:54, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.05PPMAR1660 24-FEB-2023 11:54, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242305ECD7.D
Data file 2: /230224.b/230224.b/02242305ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 1.0PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 12:15
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.813	0.006	1641874	5.688	0.003	709674	166.2	151.5	9.3	Tetrachloro-m-xylene
13.899	0.006	2344583	14.122	0.002	1300114	161.9	158.6	2.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	661440	-1.8
Hexabromobiphenyl	1429847	1470100	2.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	319272	1.3
Hexabromobiphenyl	513946	538138	4.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	-0.000	220519	877.8	1	7.254	-0.001	162833	871.2
Aroclor-1016	2	7.652	-0.002	731607	955.3	2	7.852	-0.004	373610	985.8
Aroclor-1016	3	7.789	-0.001	307629	822.8	3	8.051	-0.003	156666	915.2
Aroclor-1016	4	8.404	-0.001	229387	949.1	4	8.305	-0.002	117186	872.6
Total Col1Ave (4 peaks):					901.3	Total Col2Ave (4 peaks):				911.2 RPD = 1
Corrected Ave (3 peaks):					883.3	Corrected Ave (3 peaks):				886.3 RPD = 0
CalAmt %D:					-9.9	CalAmt %D:				-8.9
Aroclor-1260	1	11.044	-0.000	504641	954.2	1	11.652	-0.000	282606	893.1
Aroclor-1260	2	11.360	-0.001	524931	950.0	2	11.917	-0.000	709329	878.4
Aroclor-1260	3	11.734	-0.000	1410270	962.3	3	12.434	-0.001	215124	1003.8
Aroclor-1260	4	12.137	-0.002	720770	976.7	4	12.501	-0.001	506566	930.6
Aroclor-1260	5	12.243	-0.001	304211	957.7	NS	---			----
Total Col1Ave (5 peaks):					960.2	Total Col2Ave (4 peaks):				926.5 RPD = 4
Corrected Ave (4 peaks):					956.0	Corrected Ave (3 peaks):				900.7 RPD = 6
CalAmt %D:					-4.0	CalAmt %D:				-7.4

Total PCB Area Col1 (5.906 - 13.793) = 14454279 Col1 Total PCB = 1.8 ppm*

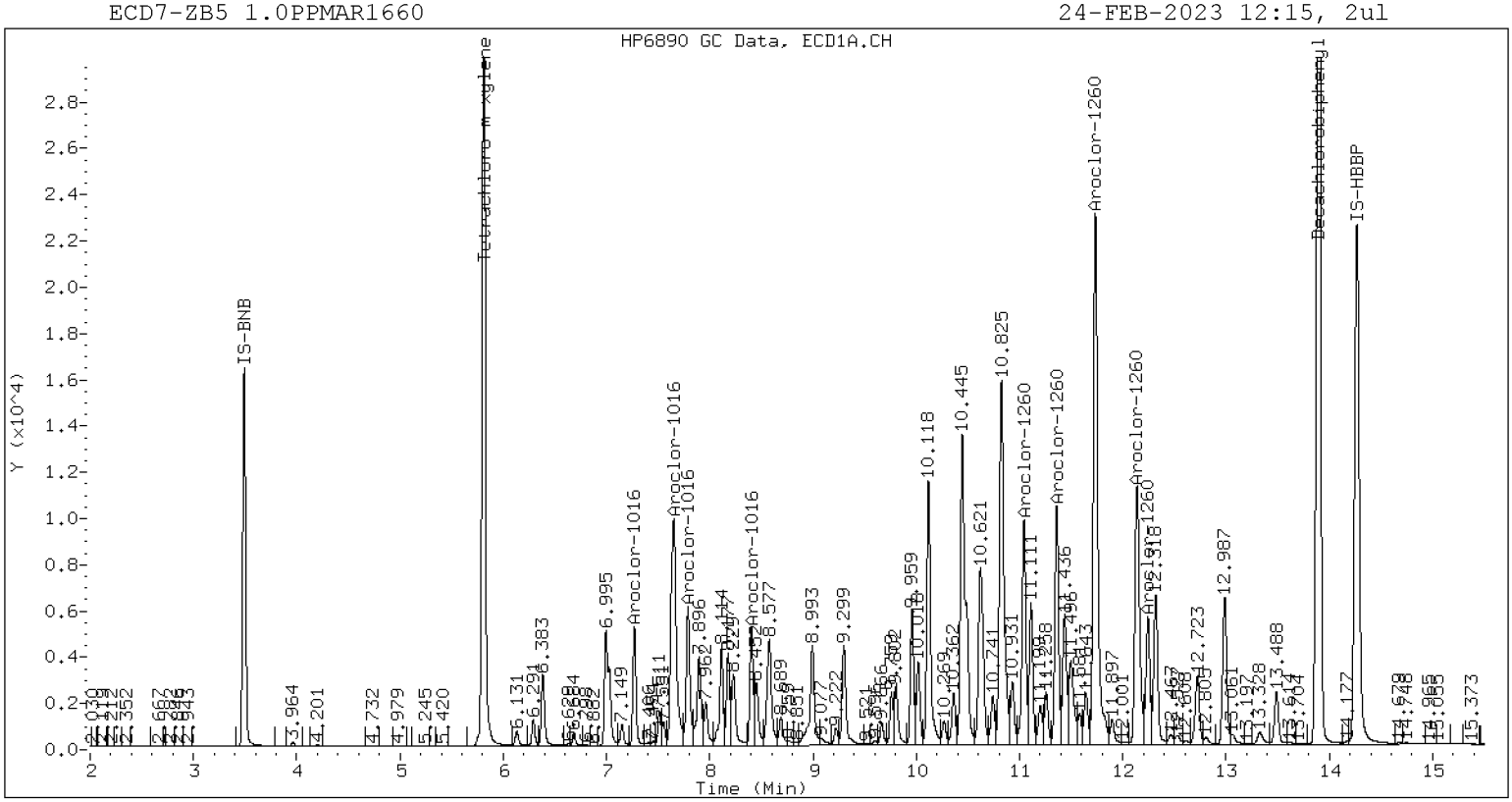
Total PCB Area Col2 (5.785 - 14.019) = 7029563 Col2 Total PCB = 1.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

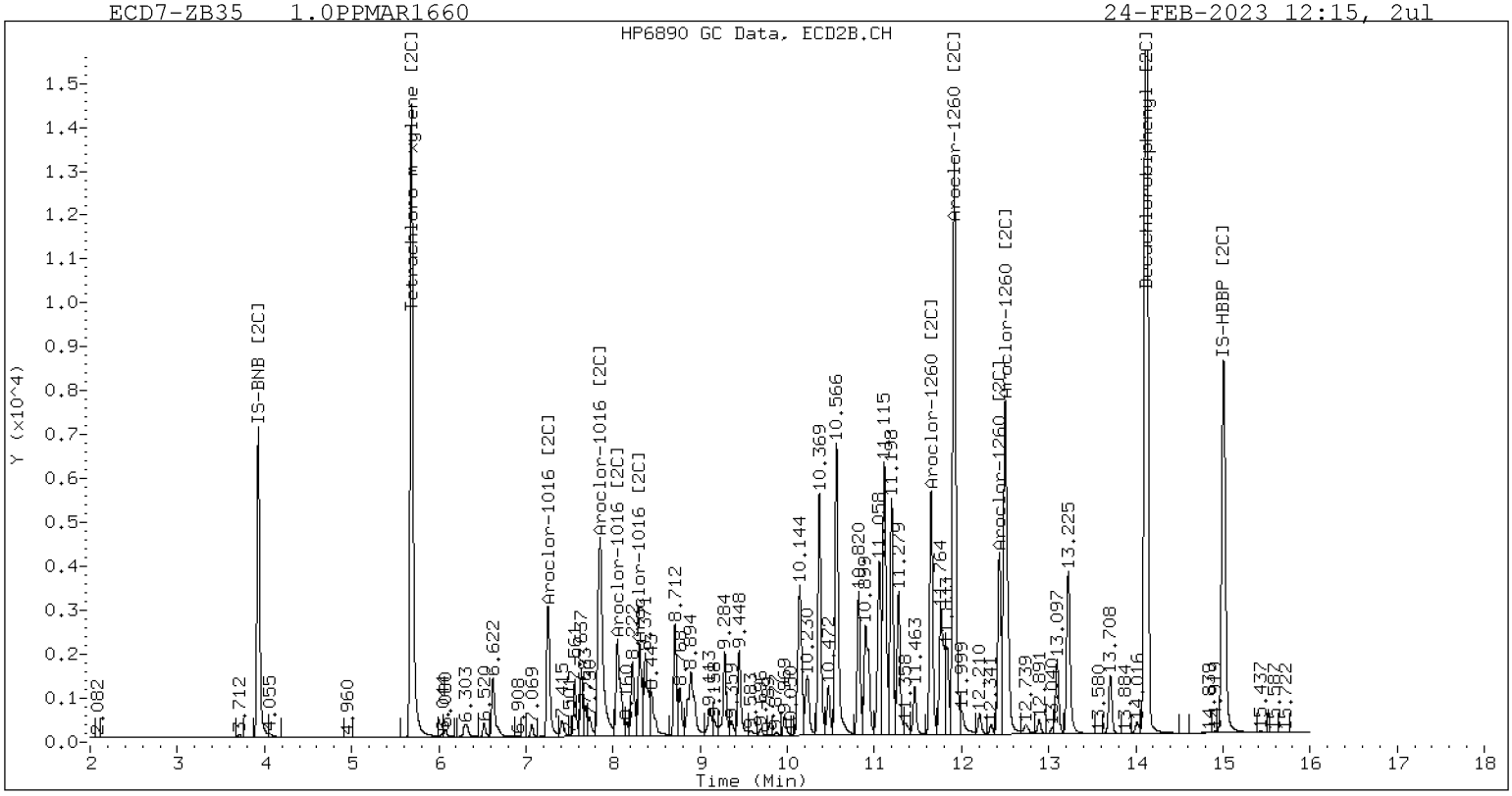
PCB Dual Column Chromatograms

ECD7-ZB5 1.0PPMAR1660 24-FEB-2023 12:15, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 1.0PPMAR1660 24-FEB-2023 12:15, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242306ECD7.D
Data file 2: /230224.b/230224.b/02242306ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.1PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 12:36
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.002	155528	5.688	0.003	74628	15.9	16.0	0.9	Tetrachloro-m-xylene
13.892	-0.001	227253	14.119	-0.000	128496	15.8	15.8	0.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	655979	-2.6
Hexabromobiphenyl	1429847	1464509	2.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317418	0.7
Hexabromobiphenyl	513946	532962	3.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.000	25761	103.4	1	7.255	-0.000	19315	103.9
Aroclor-1016	2	7.657	0.003	75616	99.6	2	7.863	0.007	40308	107.0
Aroclor-1016	3	7.794	0.004	39547	106.7	3	8.059	0.005	18304	107.6
Aroclor-1016	4	8.406	0.001	24260	101.2	4	8.309	0.002	14708	110.2
Total Col1Ave (4 peaks):					102.7	Total Col2Ave (4 peaks):				107.2 RPD = 4
Corrected Ave (3 peaks):					101.4	Corrected Ave (3 peaks):				106.2 RPD = 5
CalAmt %D:					2.7	CalAmt %D:				7.2
Aroclor-1260	1	11.045	0.000	52009	98.7	1	11.655	0.002	31282	99.8
Aroclor-1260	2	11.362	0.001	55116	100.1	2	11.920	0.003	80574	100.7
Aroclor-1260	3	11.738	0.004	145604	99.7	3	12.437	0.002	19566	92.2
Aroclor-1260	4	12.141	0.002	72408	98.5	4	12.503	0.001	53588	99.4
Aroclor-1260	5	12.245	0.001	30745	97.2	NS	---			----
Total Col1Ave (5 peaks):					98.8	Total Col2Ave (4 peaks):				98.0 RPD = 1
Corrected Ave (4 peaks):					98.5	Corrected Ave (3 peaks):				97.1 RPD = 1
CalAmt %D:					-1.2	CalAmt %D:				-2.0

Total PCB Area Col1 (5.906 - 13.793) = 1555762 Col1 Total PCB = 0.2 ppm*

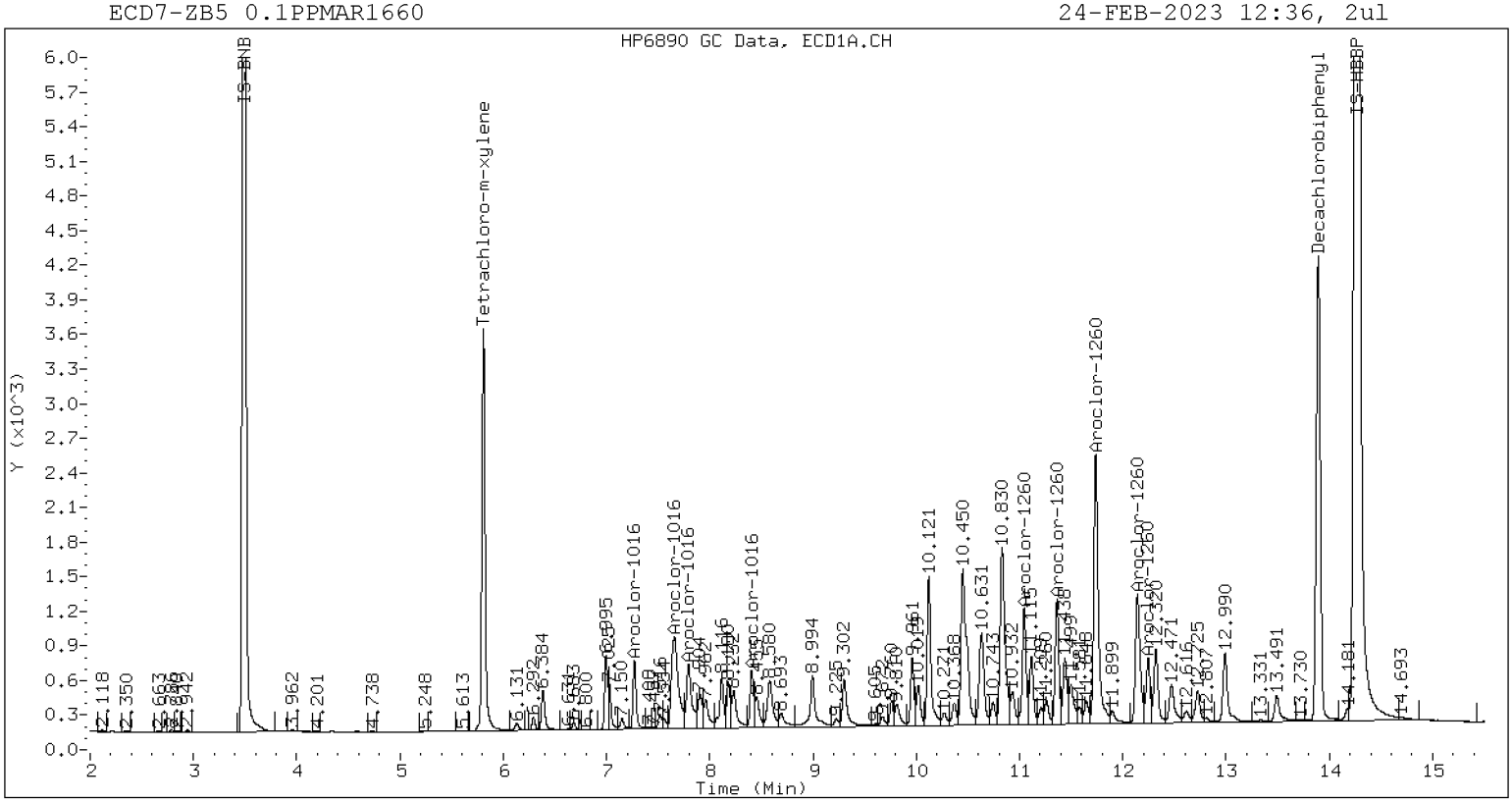
Total PCB Area Col2 (5.785 - 14.019) = 764924 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

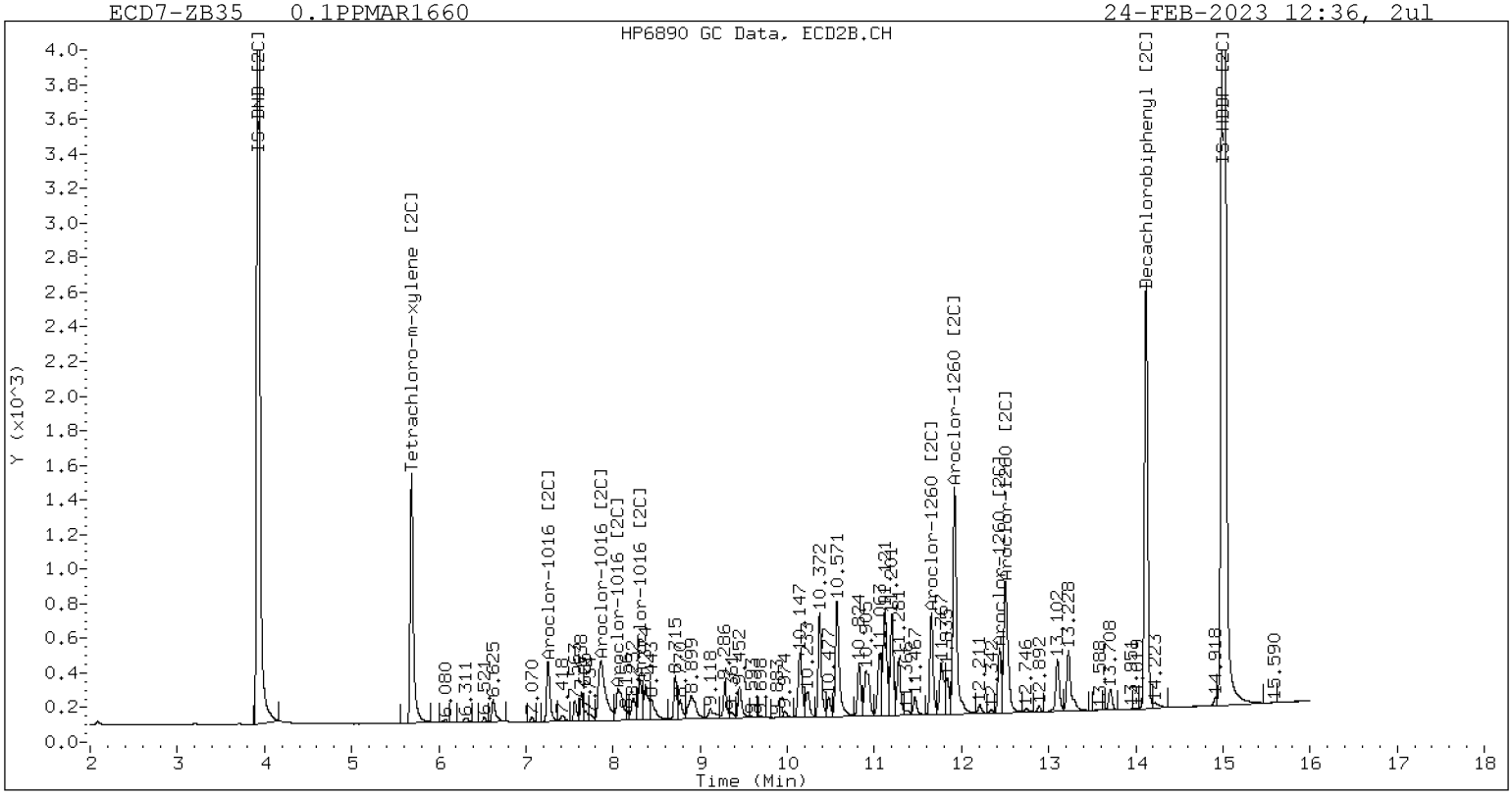
PCB Dual Column Chromatograms

ECD7-ZB5 0.1PPMAR1660 24-FEB-2023 12:36, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.1PPMAR1660 24-FEB-2023 12:36, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242307ECD7.D
Data file 2: /230224.b/230224.b/02242307ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.5PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 12:57
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.810	0.004	724614	5.688	0.003	359257	75.2	76.7	2.0	Tetrachloro-m-xylene
13.898	0.005	1056911	14.120	0.000	650153	74.3	79.5	6.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	645275	-4.2
Hexabromobiphenyl	1429847	1445345	1.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	319170	1.2
Hexabromobiphenyl	513946	536853	4.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	0.000	115193	470.0	1	7.256	0.000	86287	461.8
Aroclor-1016	2	7.654	0.000	369991	495.2	2	7.856	0.000	192524	508.1
Aroclor-1016	3	7.790	0.000	160952	441.3	3	8.055	0.000	81039	473.6
Aroclor-1016	4	8.405	0.000	115032	487.9	4	8.307	0.000	62136	462.8
Total Col1Ave (4 peaks):					473.6	Total Col2Ave (4 peaks):				476.6 RPD = 1
Corrected Ave (3 peaks):					466.4	Corrected Ave (3 peaks):				466.1 RPD = 0
CalAmt %D:					-5.3	CalAmt %D:				-4.7
Aroclor-1260	1	11.044	0.000	247212	475.5	1	11.653	0.000	145247	460.1
Aroclor-1260	2	11.361	0.000	262877	483.9	2	11.918	0.000	379838	471.5
Aroclor-1260	3	11.734	0.000	678830	471.1	3	12.436	0.000	104092	486.9
Aroclor-1260	4	12.139	0.000	356067	490.7	4	12.502	0.000	258953	476.9
Aroclor-1260	5	12.244	0.000	150280	481.2	NS	---			----
Total Col1Ave (5 peaks):					480.5	Total Col2Ave (4 peaks):				473.8 RPD = 1
Corrected Ave (4 peaks):					477.9	Corrected Ave (3 peaks):				469.5 RPD = 2
CalAmt %D:					-3.9	CalAmt %D:				-5.2

Total PCB Area Col1 (5.906 - 13.793) = 7134169 Col1 Total PCB = 0.9 ppm*

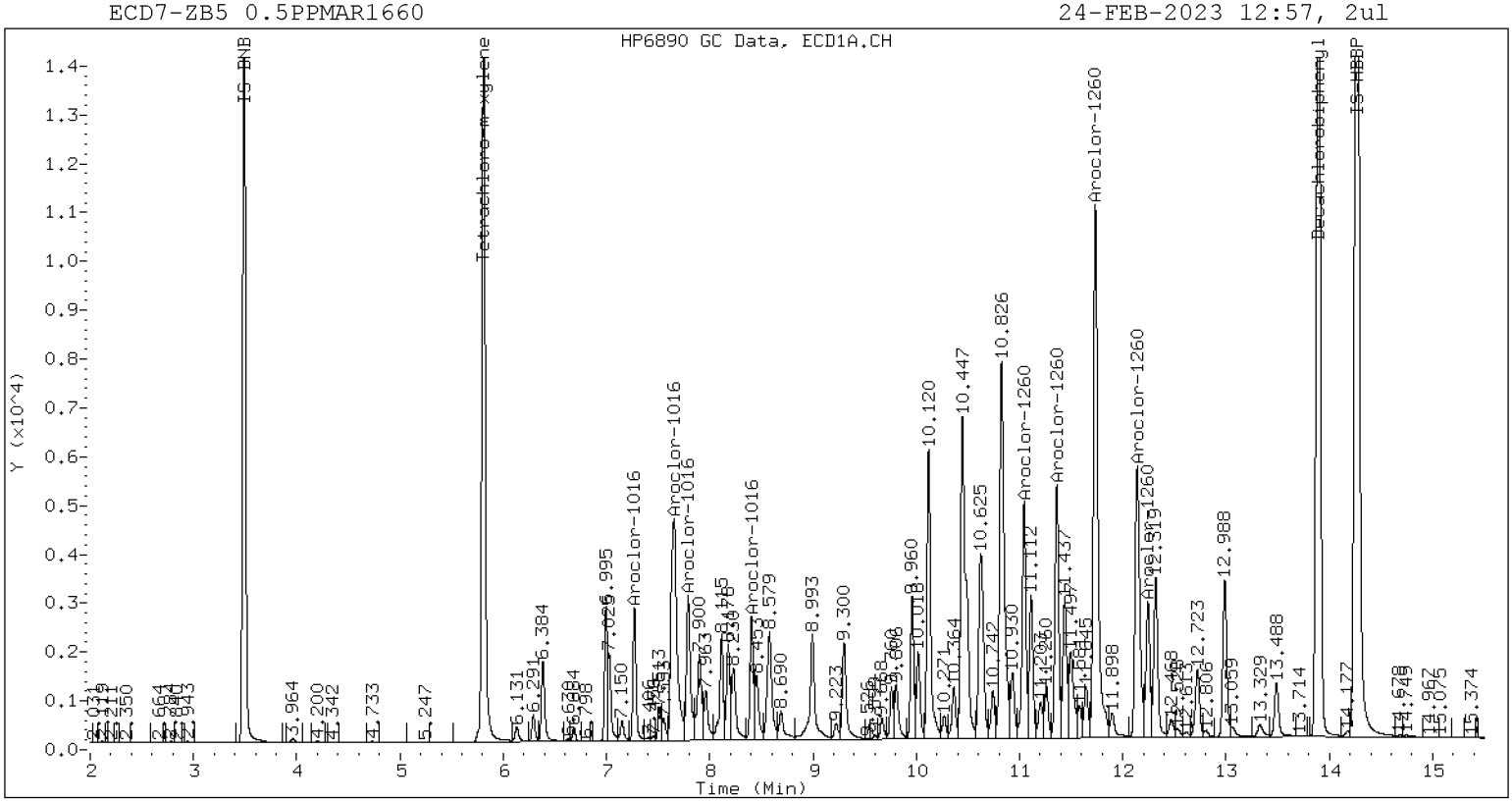
Total PCB Area Col2 (5.785 - 14.019) = 3589735 Col2 Total PCB = 0.9 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

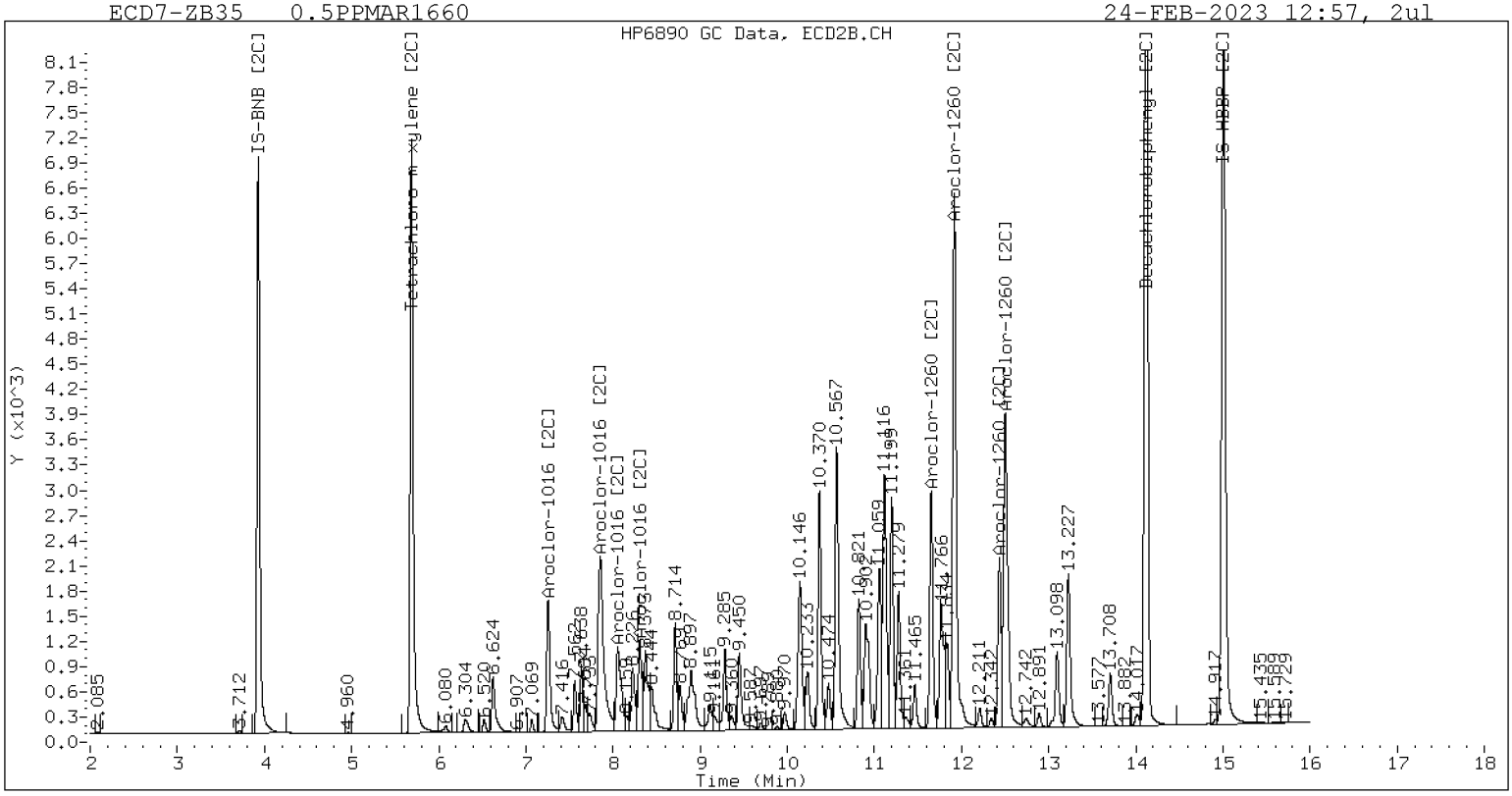
PCB Dual Column Chromatograms

ECD7-ZB5 0.5PPMAR1660 24-FEB-2023 12:57, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.5PPMAR1660 24-FEB-2023 12:57, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242308ECD7.D
Data file 2: /230224.b/230224.b/02242308ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1242
Client ID:
Injection Date: 24-FEB-2023 13:18
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.003	434187	5.688	0.003	214306	46.0	46.5	1.1	Tetrachloro-m-xylene
13.894	0.000	515867	14.119	-0.001	312943	35.6	38.5	7.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	632576	-6.1
Hexabromobiphenyl	1429847	1469715	2.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	314129	-0.4
Hexabromobiphenyl	513946	534294	4.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	7.271	0.000	49009	250.0	1	7.255	0.000	36487	250.0
Aroclor-1242	2	7.656	0.000	148833	250.0	2	7.858	0.000	76699	250.0
Aroclor-1242	3	8.405	0.000	46308	250.0	3	9.167	0.000	23866	250.0
Aroclor-1242	4	8.579	0.000	68453	250.0	4	9.597	0.000	29080	250.0

Total Col1Ave (4 peaks): 250.0 Total Col2Ave (4 peaks): 250.0 RPD = 0

Corrected Ave (3 peaks): 250.0 Corrected Ave (3 peaks): 250.0 RPD = 0

Total PCB Area Col1 (5.906 - 13.793) = 1221467 Col1 Total PCB = 0.2 ppm*

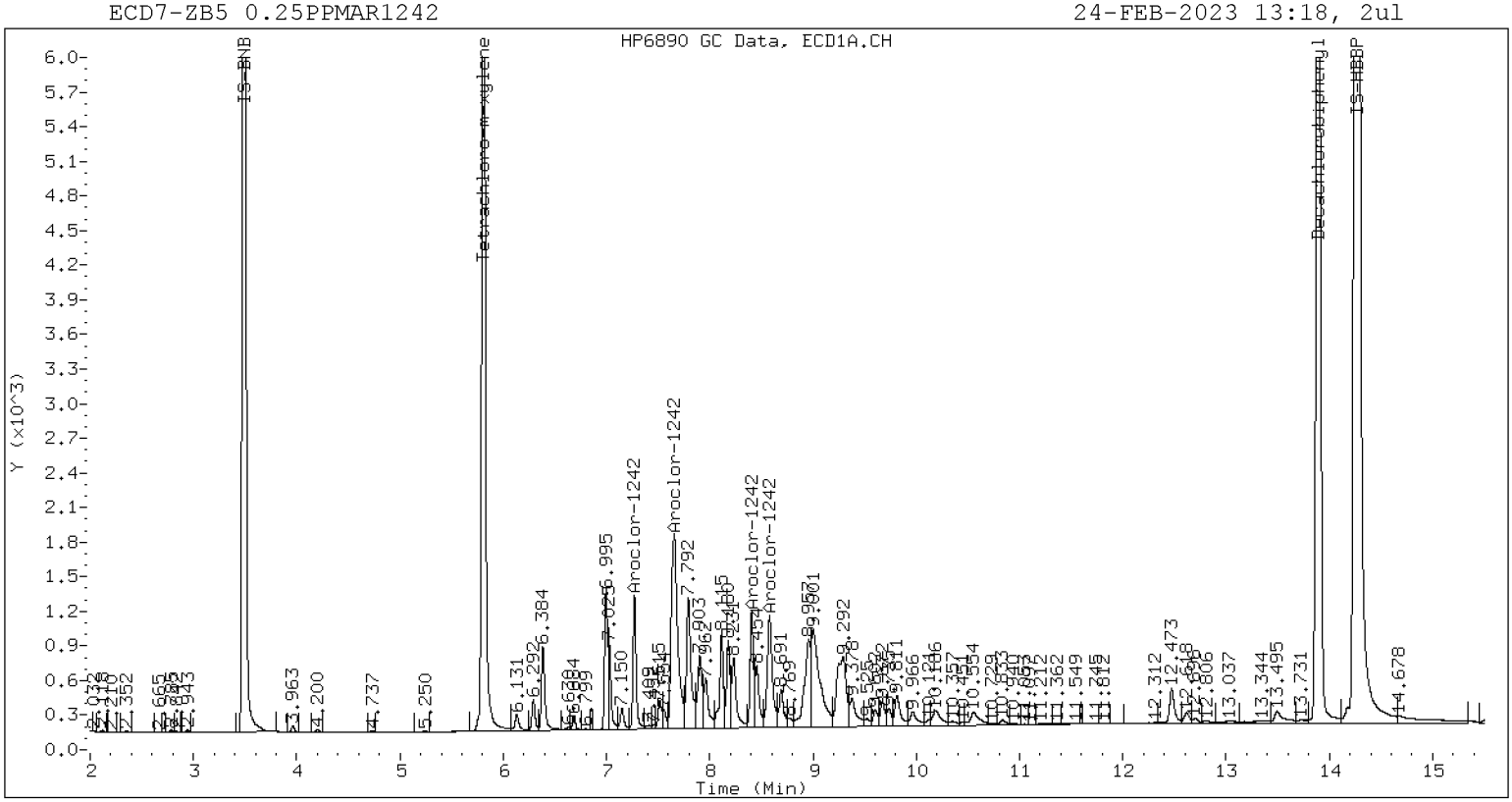
Total PCB Area Col2 (5.785 - 14.019) = 572067 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

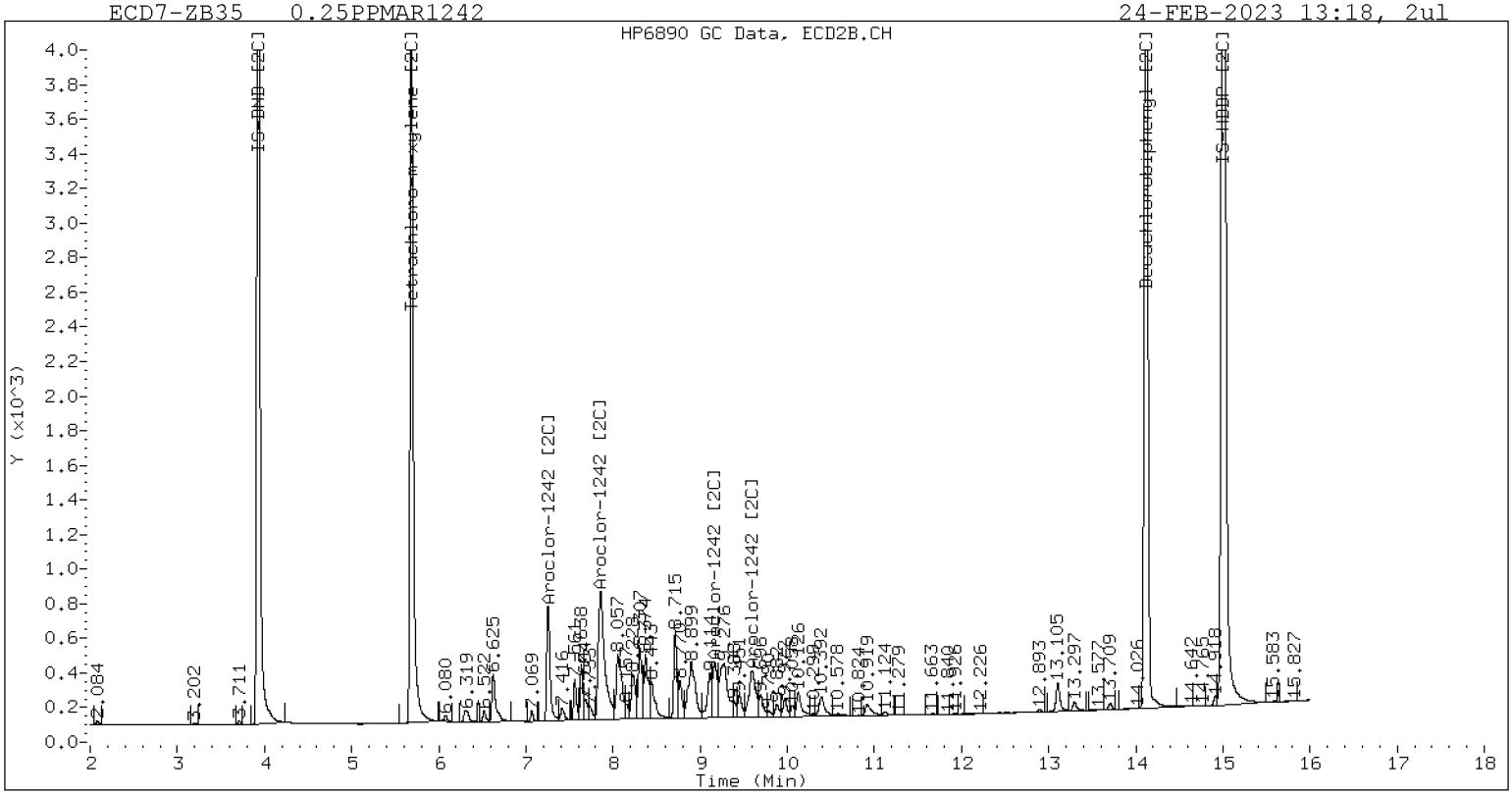
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1242 24-FEB-2023 13:18, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1242 24-FEB-2023 13:18, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242309ECD7.D
Data file 2: /230224.b/230224.b/02242309ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1248
Client ID:
Injection Date: 24-FEB-2023 13:39
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.003	349513	5.688	0.003	176615	36.6	37.9	3.4	Tetrachloro-m-xylene
13.894	0.001	523008	14.121	0.001	322054	36.4	39.3	7.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	639911	-5.0
Hexabromobiphenyl	1429847	1458696	2.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317938	0.9
Hexabromobiphenyl	513946	538760	4.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.405	0.000	78055	250.0	1	8.308	0.000	37951	250.0
Aroclor-1248	2	8.580	0.000	99216	250.0	2	8.714	0.000	39239	250.0
Aroclor-1248	3	8.999	0.000	187178	250.0	3	9.166	0.000	45157	250.0
Aroclor-1248	4	9.295	0.000	95291	250.0	4	9.590	0.000	54216	250.0

Total Col1Ave (4 peaks): 250.0 Total Col2Ave (4 peaks): 250.0 RPD = 0

Corrected Ave (3 peaks): 250.0 Corrected Ave (3 peaks): 250.0 RPD = 0

Total PCB Area Col1 (5.906 - 13.793) = 1565180 Col1 Total PCB = 0.2 ppm*

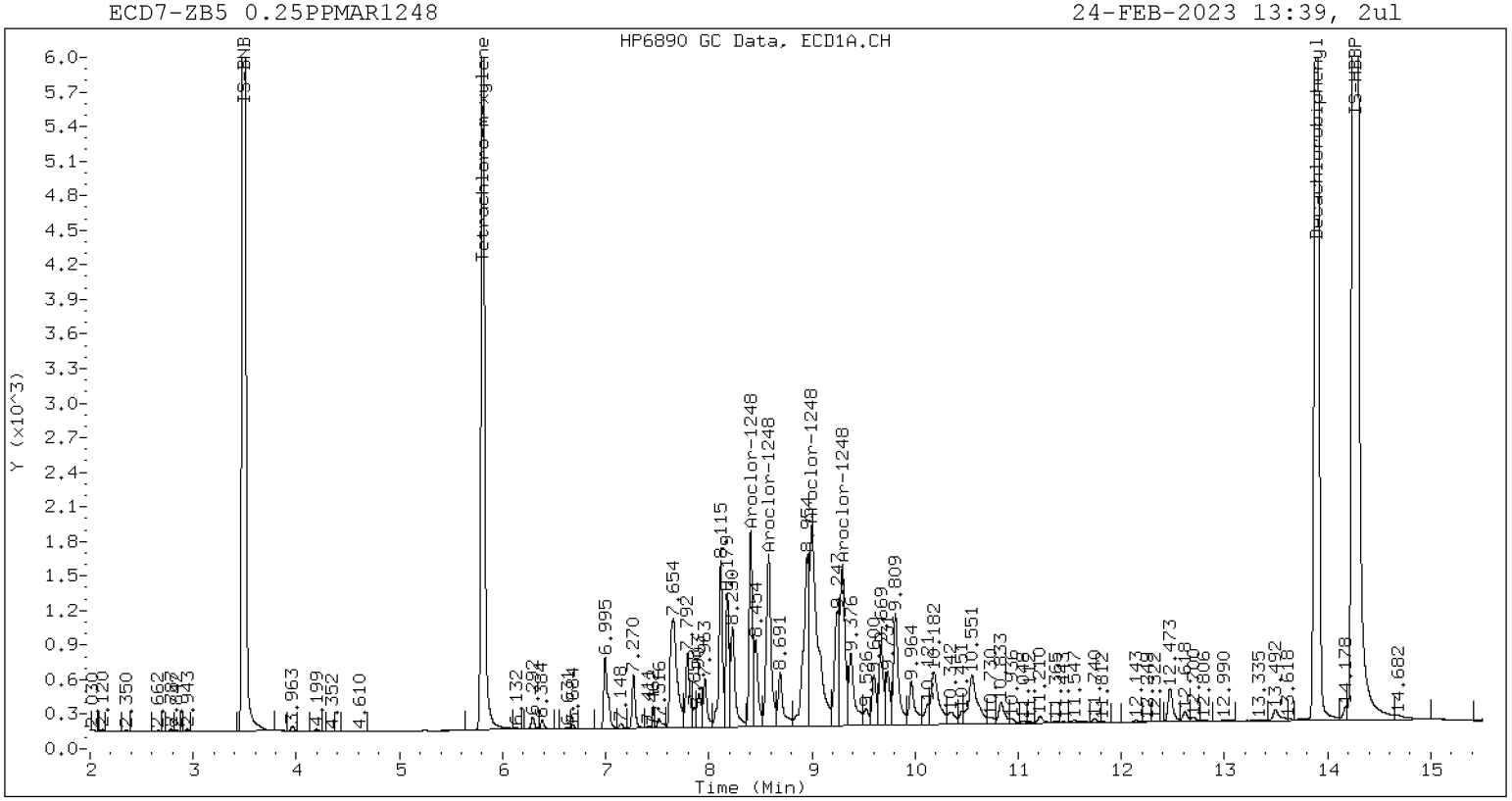
Total PCB Area Col2 (5.785 - 14.019) = 754991 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

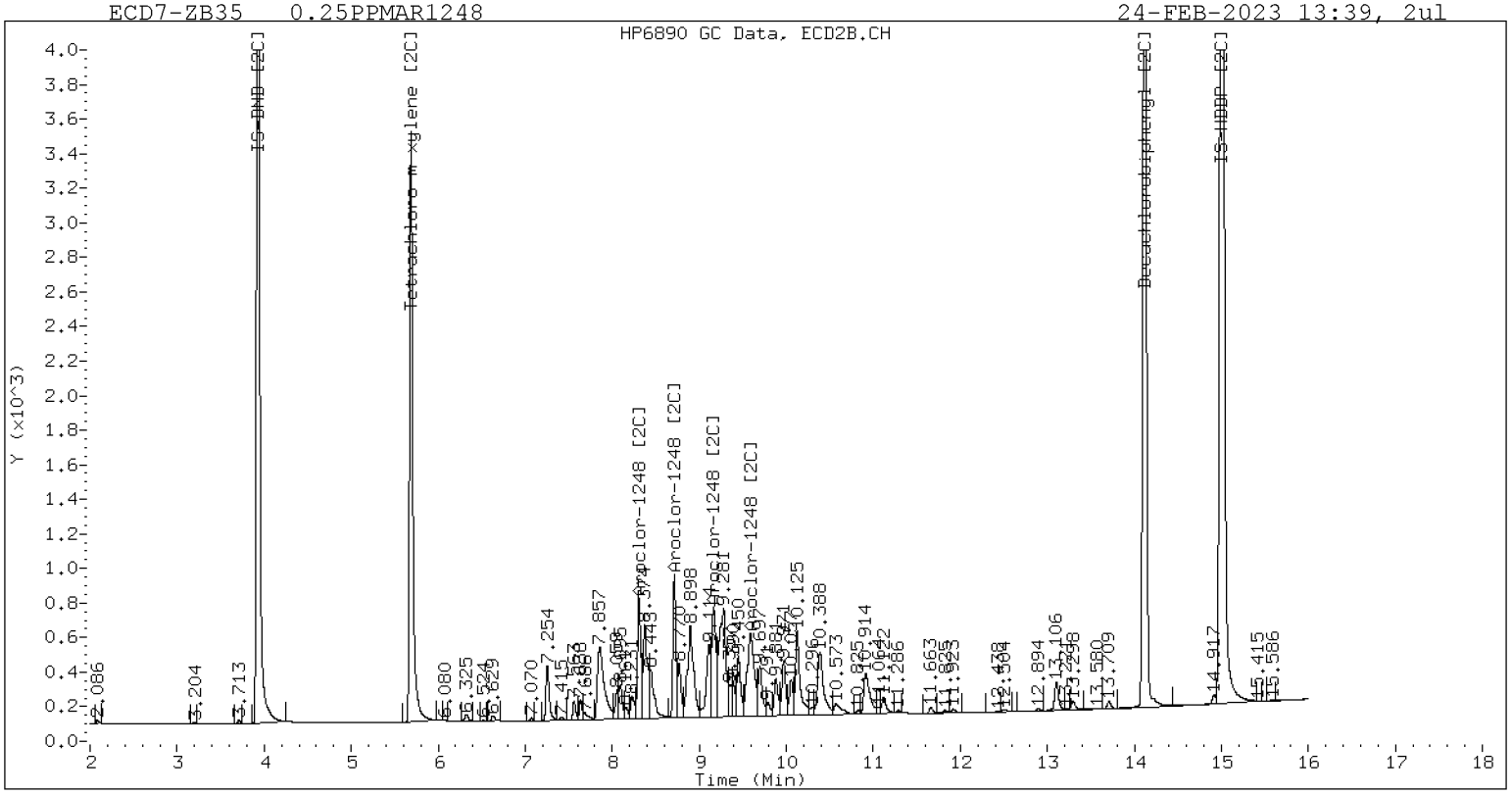
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1248 24-FEB-2023 13:39, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1248 24-FEB-2023 13:39, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242310ECD7.D
Data file 2: /230224.b/230224.b/02242310ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1254
Client ID:
Injection Date: 24-FEB-2023 14:00
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.002	352587	5.687	0.002	177502	37.3	38.6	3.4	Tetrachloro-m-xylene
13.895	0.002	532500	14.119	0.000	325903	37.0	40.2	8.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	633407	-6.0
Hexabromobiphenyl	1429847	1460265	2.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	313673	-0.5
Hexabromobiphenyl	513946	532442	3.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.299	0.000	159011	250.0	1	9.449	0.000	59603	250.0
Aroclor-1254	2	9.377	0.000	71516	250.0	2	9.970	0.000	47949	250.0
Aroclor-1254	3	9.668	0.000	102230	250.0	3	10.124	0.000	103745	250.0
Aroclor-1254	4	9.807	0.000	198777	250.0	4	10.373	0.000	101135	250.0
Aroclor-1254	5	10.176	0.000	124586	250.0	5	10.569	0.000	61577	250.0

Total Col1Ave (5 peaks): 250.0 Total Col2Ave (5 peaks): 250.0 RPD = 0

Corrected Ave (4 peaks): 250.0 Corrected Ave (4 peaks): 250.0 RPD = 0

Total PCB Area Col1 (5.906 - 13.793) = 2179224 Col1 Total PCB = 0.3 ppm*

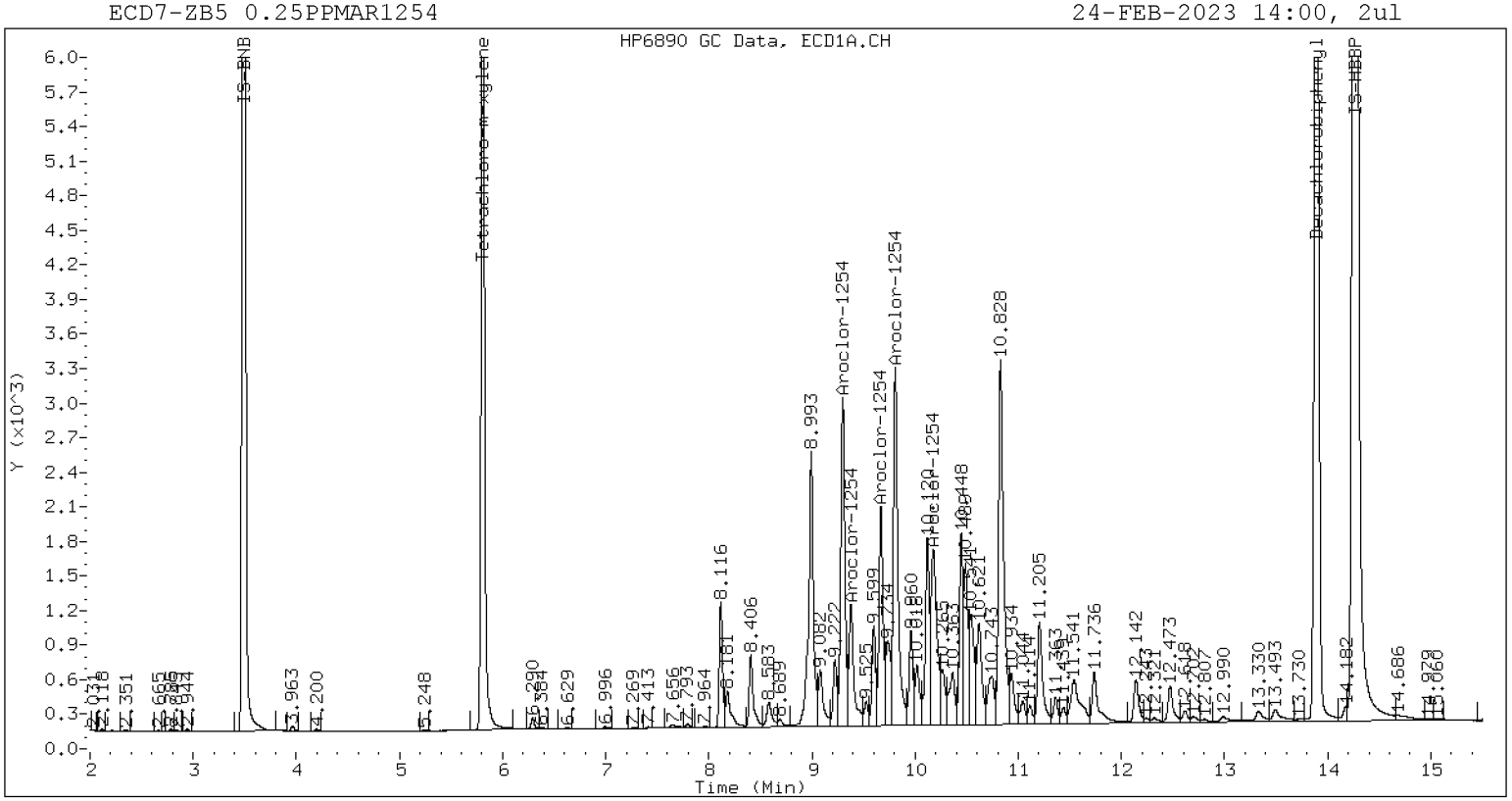
Total PCB Area Col2 (5.785 - 14.019) = 1022156 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

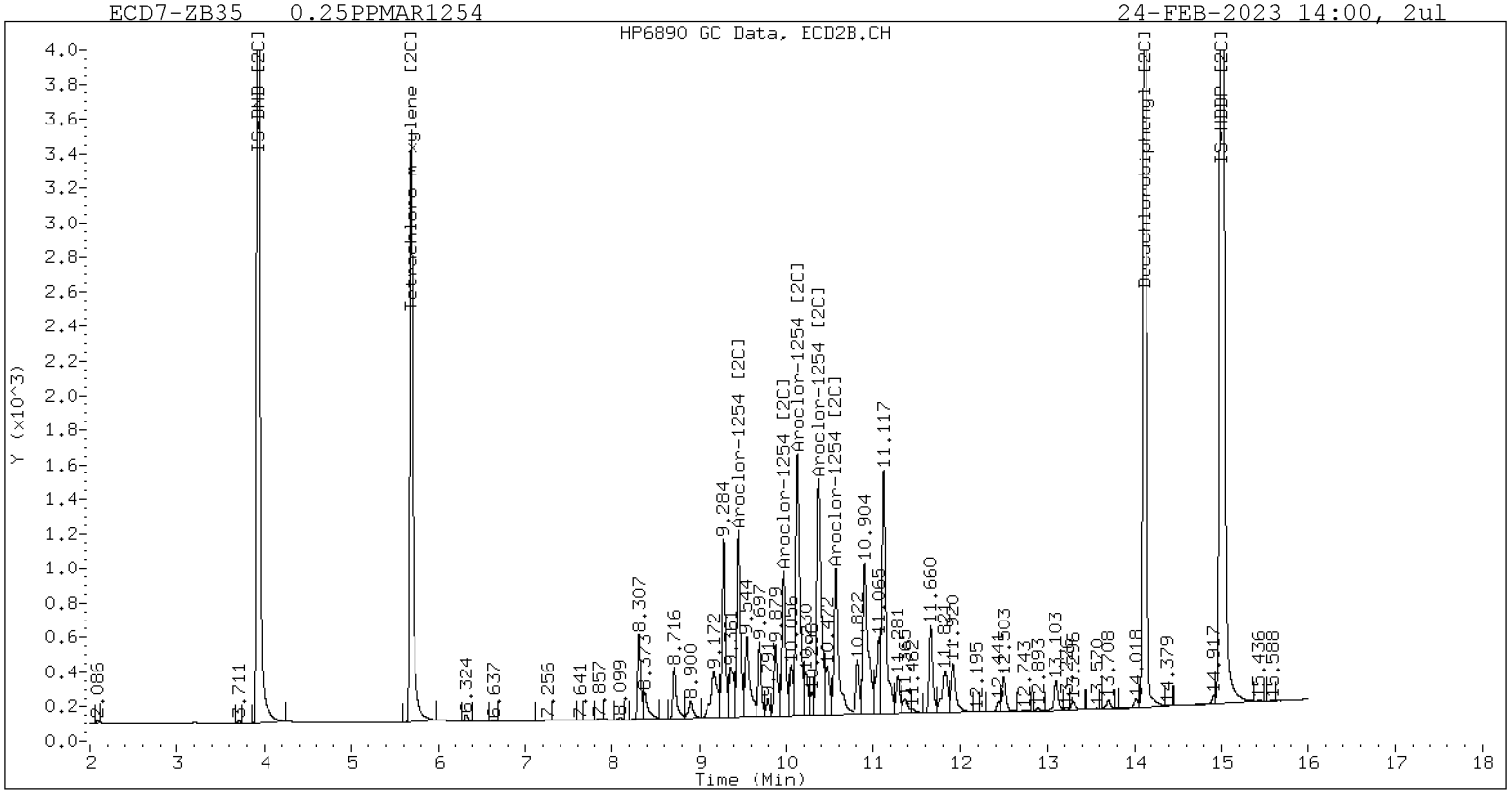
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1254 24-FEB-2023 14:00, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1254 24-FEB-2023 14:00, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242311ECD7.D
Data file 2: /230224.b/230224.b/02242311ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR2162.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR2162
Client ID:
Injection Date: 24-FEB-2023 14:21
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	0.001	362236	5.686	0.000	177349	38.4	39.2	2.1	Tetrachloro-m-xylene
13.894	0.001	523254	14.119	-0.000	321034	36.0	39.2	8.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	632433	-6.1
Hexabromobiphenyl	1429847	1474039	3.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	308453	-2.2
Hexabromobiphenyl	513946	538177	4.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1221	1	4.731	0.000	14160	250.0	1	4.956	0.000	7300	250.0
Aroclor-1221	2	6.132	0.000	25324	250.0	2	6.296	0.000	13816	250.0
Aroclor-1221	3	6.382	0.000	58795	250.0	3	6.622	0.000	22491	250.0
Total Col1Ave (3 peaks):					250.0	Total Col2Ave (3 peaks):				250.0 RPD = 0
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.829	0.000	113046	250.0	1	11.200	0.000	114880	250.0
Aroclor-1262	2	12.244	0.000	183948	250.0	2	11.652	0.000	97844	250.0
Aroclor-1262	3	12.319	0.000	197749	250.0	3	12.434	0.000	111015	250.0
Aroclor-1262	4	12.987	0.000	180727	250.0	4	12.502	0.000	173913	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.906 - 13.793) = 3105316 Col1 Total PCB = 0.4 ppm*

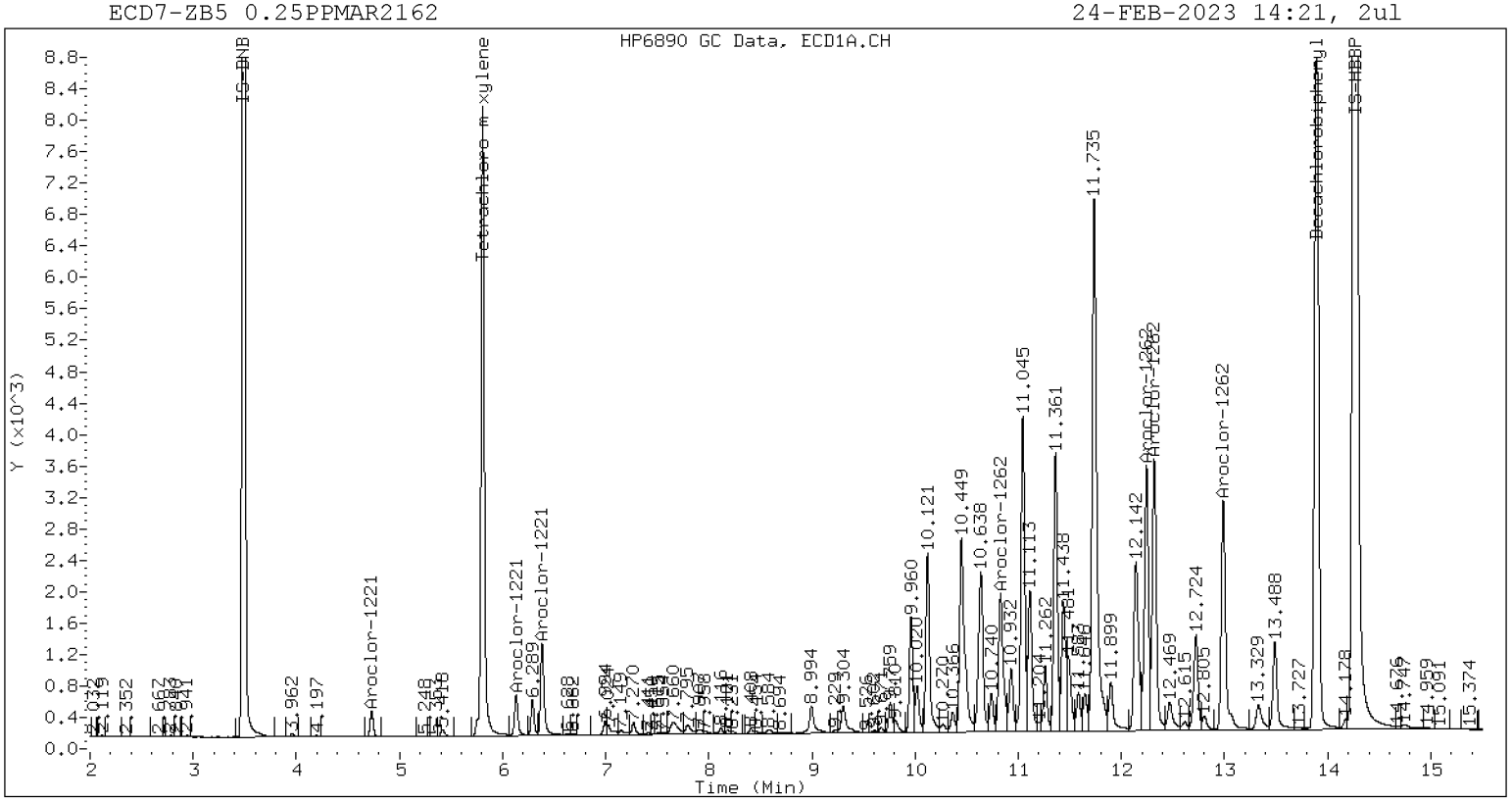
Total PCB Area Col2 (5.785 - 14.019) = 1573107 Col2 Total PCB = 0.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

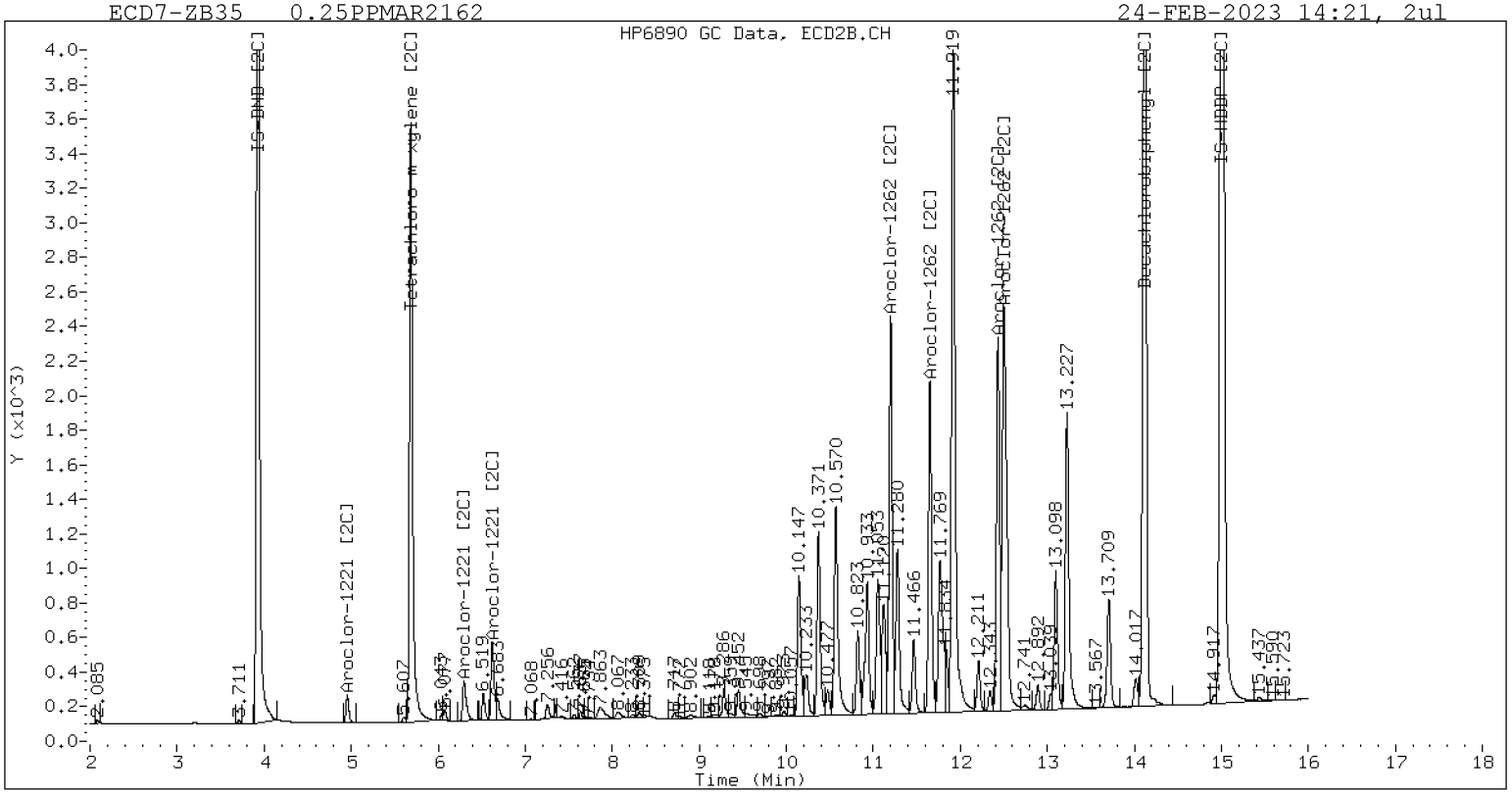
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR2162 24-FEB-2023 14:21, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR2162 24-FEB-2023 14:21, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242312ECD7.D
Data file 2: /230224.b/230224.b/02242312ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR3268.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR3268
Client ID:
Injection Date: 24-FEB-2023 14:42
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	0.000	366416	5.685	0.000	179450	38.0	38.9	2.4	Tetrachloro-m-xylene
13.893	0.000	778191	14.119	0.000	477889	53.0	57.5	8.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	645602	-4.2
Hexabromobiphenyl	1429847	1492154	4.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	314042	-0.4
Hexabromobiphenyl	513946	545458	6.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1232	1	4.730	0.000	8647	250.0	1	4.956	0.000	4017	250.0
Aroclor-1232	2	6.131	0.000	17148	250.0	2	7.254	0.000	19962	250.0
Aroclor-1232	3	7.656	0.000	77627	250.0	3	7.861	0.000	39913	250.0
Aroclor-1232	4	8.581	0.000	32993	250.0	4	8.715	0.000	11487	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0
Aroclor-1268	1	12.247	0.000	477974	250.0	1	12.432	0.000	274595	250.0
Aroclor-1268	2	12.317	0.000	473326	250.0	2	12.500	0.000	295194	250.0
Aroclor-1268	3	12.699	0.000	405011	250.0	3	12.892	0.000	252048	250.0
Aroclor-1268	4	13.490	0.000	1333528	250.0	4	13.709	0.000	805579	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.906 - 13.793) = 3998414 Col1 Total PCB = 0.5 ppm*

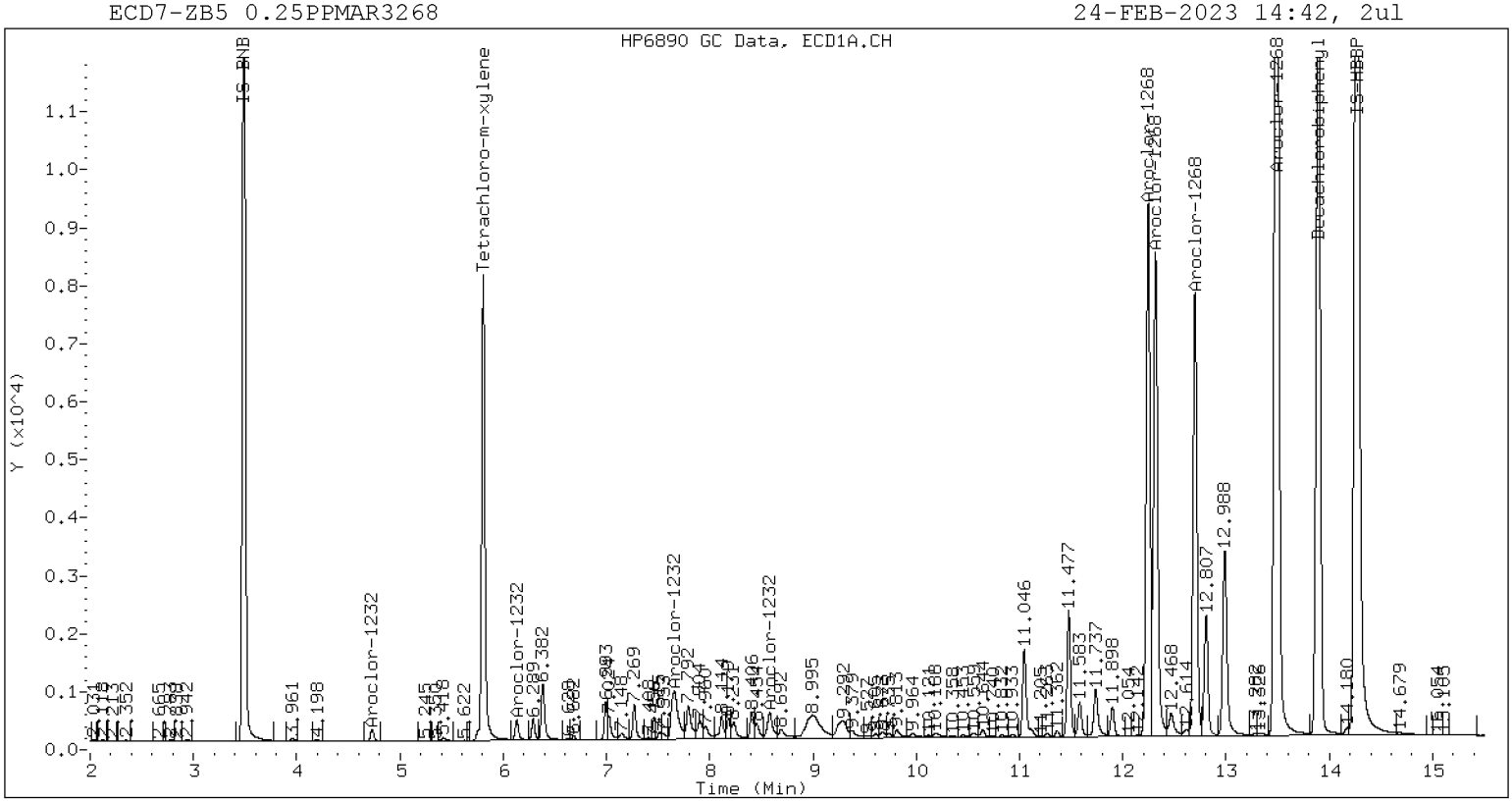
Total PCB Area Col2 (5.785 - 14.019) = 2300029 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

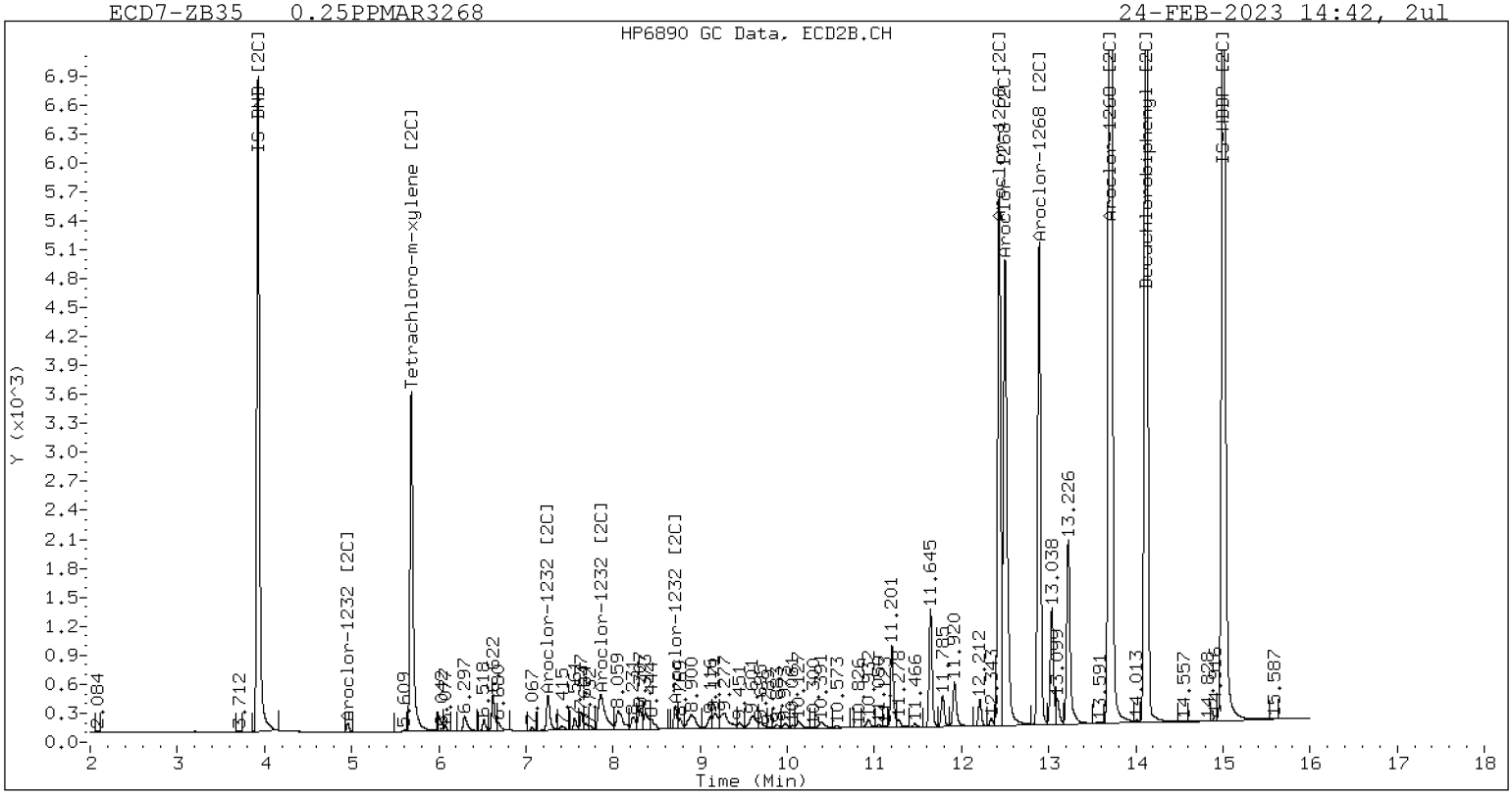
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR3268 24-FEB-2023 14:42, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR3268 24-FEB-2023 14:42, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242313ECD7.D
Data file 2: /230224.b/230224.b/02242313ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660SCV
Client ID:
Injection Date: 24-FEB-2023 15:03
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	0.001	337070	5.686	0.001	165848	34.9	35.8	2.3	Tetrachloro-m-xylene
13.895	0.002	515407	14.119	-0.000	316730	34.3	37.3	8.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	645975	-4.1
Hexabromobiphenyl	1429847	1524245	6.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	316115	0.3
Hexabromobiphenyl	513946	556950	8.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.002	59491	242.5	1	7.254	-0.002	44576	240.9
Aroclor-1016	2	7.655	0.001	181090	242.1	2	7.857	0.002	95386	254.2
Aroclor-1016	3	7.790	0.000	88470	242.3	3	8.056	0.002	42160	248.8
Aroclor-1016	4	8.404	-0.001	57980	245.6	4	8.307	0.000	32197	242.1
Total Col1Ave (4 peaks):					243.1	Total Col2Ave (4 peaks):				246.5 RPD = 1
Corrected Ave (3 peaks):					242.3	Corrected Ave (3 peaks):				243.9 RPD = 1
Aroclor-1221	1	4.731	0.000	464	8.0	1	---			0.0
Aroclor-1221	2	6.130	-0.002	9233	89.2	2	6.300	0.004	5379	95.0
Aroclor-1221	3	6.382	-0.001	42570	177.2	3	6.623	0.001	20952	227.2
Total Col1Ave (3 peaks):					91.5	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.731	0.001	464	13.4	1	---			0.0
Aroclor-1232	2	6.130	-0.001	9233	134.5	2	7.254	-0.000	44576	554.6
Aroclor-1232	3	7.655	-0.001	181090	582.9	3	7.857	-0.003	95386	593.5
Aroclor-1232	4	8.580	-0.001	79916	605.2	4	8.713	-0.002	29795	644.2
Total Col1Ave (4 peaks):					334.0	Total Col2Ave (3 peaks):				597.4 RPD = 57*
Corrected Ave (3 peaks):					243.6	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.269	-0.002	59491	297.2	1	7.254	-0.002	44576	303.5
Aroclor-1242	2	7.655	-0.001	181090	297.9	2	7.857	-0.000	95386	309.0
Aroclor-1242	3	8.404	-0.001	57980	306.5	3	9.115	-0.052	18754	195.2
Aroclor-1242	4	8.580	0.000	79916	285.8	4	9.697	0.100	1355	11.6
Total Col1Ave (4 peaks):					296.8	Total Col2Ave (4 peaks):				204.8 RPD = 37
Corrected Ave (3 peaks):					293.6	Corrected Ave (3 peaks):				170.1 RPD = 53*
Aroclor-1248	1	8.404	-0.001	57980	184.0	1	8.307	-0.001	32197	213.3
Aroclor-1248	2	8.580	-0.001	79916	199.5	2	8.713	-0.001	29795	190.9
Aroclor-1248	3	8.993	-0.006	71805	95.0	3	9.115	-0.050	18754	104.4
Aroclor-1248	4	9.300	0.006	47348	123.1	4	---			0.0
Total Col1Ave (4 peaks):					150.4	Total Col2Ave (3 peaks):				169.6 RPD = 12
Corrected Ave (3 peaks):					134.0	Corrected Ave: < 3 Peaks				
Aroclor-1254	1	9.300	0.002	47348	73.0	1	9.451	0.001	22438	93.4
Aroclor-1254	2	---			0.0	2	9.972	0.001	2694	13.9
Aroclor-1254	3	9.670	0.002	5461	13.1	3	10.147	0.024	52914	126.5
Aroclor-1254	4	9.807	-0.000	18944	23.4	4	10.370	-0.003	70430	172.8
Aroclor-1254	5	10.121	-0.056	154170	303.3	5	10.568	-0.000	98525	396.9
Total Col1Ave (4 peaks):					103.2	Total Col2Ave (5 peaks):				160.7 RPD = 44*
Corrected Ave (3 peaks):					36.5	Corrected Ave (4 peaks):				101.7 RPD = 94*
Aroclor-1260	1	11.044	0.000	149195	272.1	1	11.653	0.000	82210	251.0
Aroclor-1260	2	11.361	-0.000	153832	268.5	2	11.919	0.001	222226	265.9
Aroclor-1260	3	11.736	0.002	396660	261.0	3	12.435	-0.000	59148	266.7
Aroclor-1260	4	12.140	0.001	190448	248.9	4	12.504	0.002	147180	261.2
Aroclor-1260	5	12.244	-0.000	91385	277.5	NS	---			----
Total Col1Ave (5 peaks):					265.6	Total Col2Ave (4 peaks):				261.2 RPD = 2
Corrected Ave (4 peaks):					262.6	Corrected Ave (3 peaks):				259.4 RPD = 1
Aroclor-1262	1	10.827	-0.002	220238	471.0	1	11.199	-0.001	84479	177.6
Aroclor-1262	2	12.244	0.000	91385	120.1	2	11.653	0.002	82210	203.0
Aroclor-1262	3	12.320	0.001	113066	138.2	3	12.435	0.002	59148	128.7
Aroclor-1262	4	12.988	0.001	102156	136.7	4	12.504	0.002	147180	204.4
Total Col1Ave (4 peaks):					216.5	Total Col2Ave (4 peaks):				178.4 RPD = 19
Corrected Ave (3 peaks):					131.7	Corrected Ave (3 peaks):				169.8 RPD = 25
Aroclor-1268	1	12.244	-0.003	91385	46.8	1	12.435	0.003	59148	52.7
Aroclor-1268	2	12.320	0.003	113066	58.5	2	12.504	0.004	147180	122.1
Aroclor-1268	3	12.726	0.027	46633	28.2	3	12.893	0.001	2874	2.8
Aroclor-1268	4	13.489	-0.000	25567	4.7	4	13.709	-0.000	13041	4.0
Total Col1Ave (4 peaks):					34.5	Total Col2Ave (4 peaks):				45.4 RPD = 27
Corrected Ave (3 peaks):					26.6	Corrected Ave (3 peaks):				19.8 RPD = 29

Total PCB Area Col1 (5.906 - 13.793) = 3743076 Col1 Total PCB = 0.5 ppm*

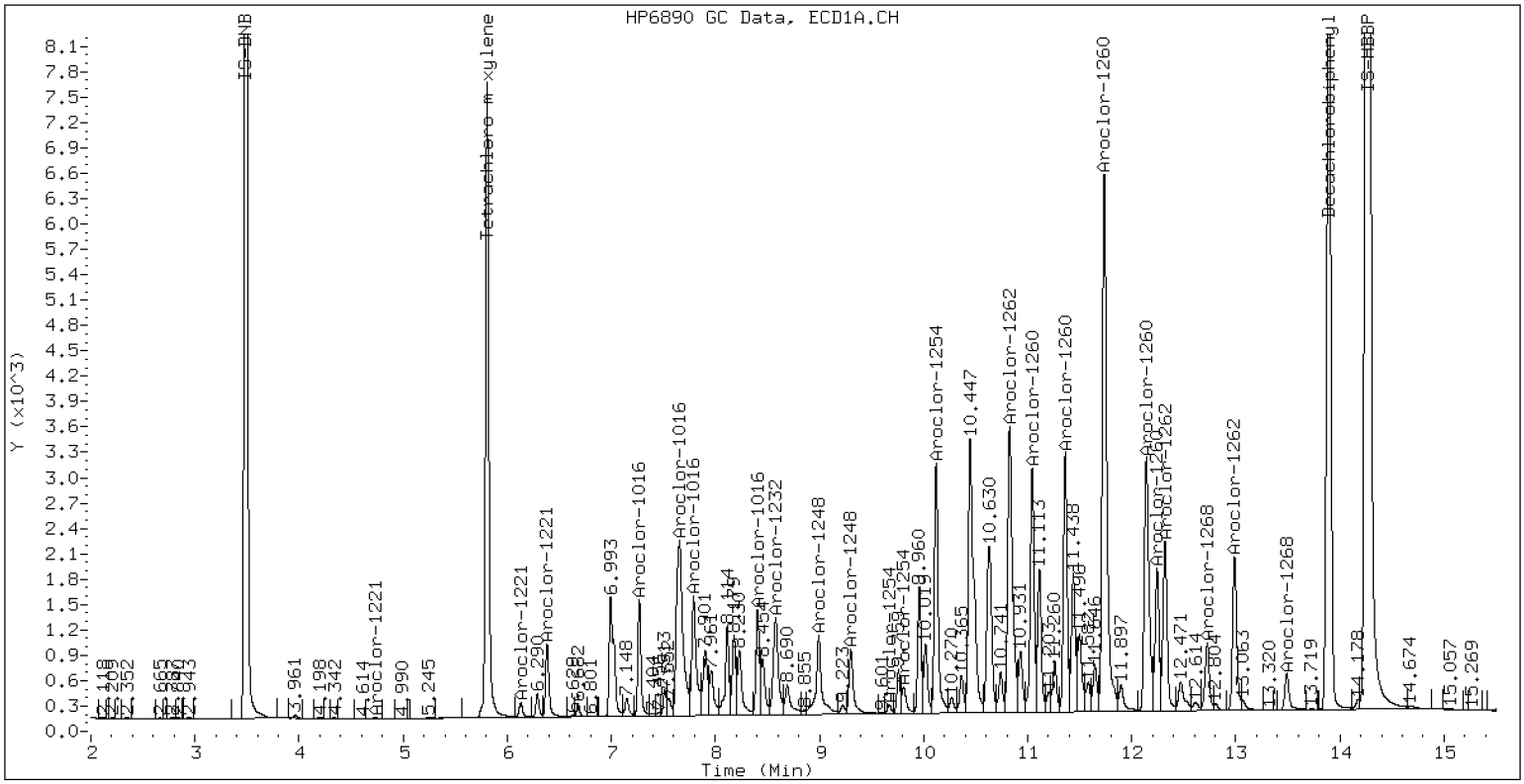
Total PCB Area Col2 (5.785 - 14.019) = 1897008 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

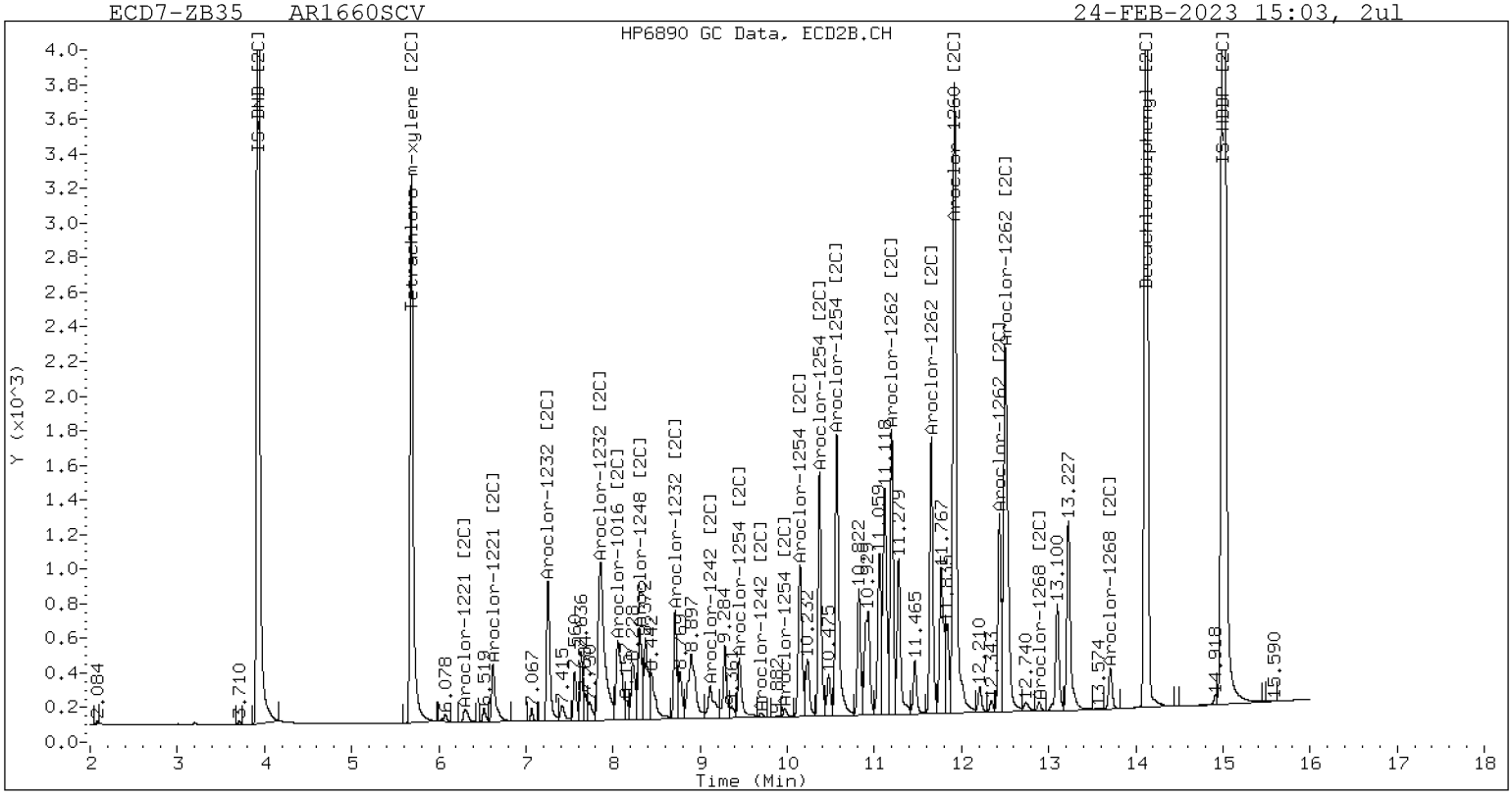
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660SCV 24-FEB-2023 15:03, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660SCV 24-FEB-2023 15:03, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242314ECD7.D
Data file 2: /230224.b/230224.b/02242314ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242SCV
Client ID:
Injection Date: 24-FEB-2023 15:24
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.002	354283	5.686	0.001	172455	33.6	34.5	2.6	Tetrachloro-m-xylene
13.895	0.002	567088	14.120	0.001	347430	37.0	40.3	8.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	705650	4.7
Hexabromobiphenyl	1429847	1555683	8.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	340433	8.0
Hexabromobiphenyl	513946	565609	10.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	-0.000	39927	149.0	1	7.256	0.000	32417	162.7
Aroclor-1016	2	7.653	-0.001	132339	162.0	2	7.856	0.001	69235	171.3
Aroclor-1016	3	7.791	0.001	59310	148.7	3	8.055	0.000	29473	161.5
Aroclor-1016	4	8.405	0.000	42537	165.0	4	8.307	-0.000	22792	159.2
Total Col1Ave (4 peaks):					156.2	Total Col2Ave (4 peaks):				163.7 RPD = 5
Corrected Ave (3 peaks):					153.2	Corrected Ave (3 peaks):				161.1 RPD = 5
Aroclor-1221	1	4.733	0.002	319	5.0	1	---			0.0
Aroclor-1221	2	6.131	-0.001	6534	57.8	2	6.319	0.022	4365	71.6
Aroclor-1221	3	6.384	0.001	29664	113.0	3	6.624	0.002	14916	150.2
Total Col1Ave (3 peaks):					58.6	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.733	0.003	319	8.4	1	---			0.0
Aroclor-1232	2	6.131	0.000	6534	87.2	2	7.256	0.002	32417	374.5
Aroclor-1232	3	7.653	-0.003	132339	389.9	3	7.856	-0.004	69235	400.0
Aroclor-1232	4	8.579	-0.002	69445	481.4	4	8.714	-0.001	22167	445.0
Total Col1Ave (4 peaks):					241.7	Total Col2Ave (3 peaks):				406.5 RPD = 51*
Corrected Ave (3 peaks):					161.8	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.270	-0.001	39927	182.6	1	7.256	0.000	32417	205.0
Aroclor-1242	2	7.653	-0.003	132339	199.3	2	7.856	-0.002	69235	208.2
Aroclor-1242	3	8.405	-0.000	42537	205.9	3	9.164	-0.004	23068	223.0
Aroclor-1242	4	8.579	-0.000	69445	227.4	4	9.587	-0.010	31021	246.1
Total Col1Ave (4 peaks):					203.8	Total Col2Ave (4 peaks):				220.6 RPD = 8
Corrected Ave (3 peaks):					195.9	Corrected Ave (3 peaks):				212.1 RPD = 8
Aroclor-1248	1	8.405	0.000	42537	123.5	1	8.307	-0.001	22792	140.2
Aroclor-1248	2	8.579	-0.001	69445	158.7	2	8.714	-0.000	22167	131.9
Aroclor-1248	3	9.001	0.003	91942	111.4	3	9.164	-0.002	23068	119.3
Aroclor-1248	4	9.294	-0.000	38711	92.1	4	9.587	-0.003	31021	133.6
Total Col1Ave (4 peaks):					121.4	Total Col2Ave (4 peaks):				131.2 RPD = 8
Corrected Ave (3 peaks):					109.0	Corrected Ave (3 peaks):				128.3 RPD = 16
Aroclor-1254	1	9.294	-0.005	38711	54.6	1	9.450	0.001	13131	50.7
Aroclor-1254	2	9.377	-0.000	17371	54.5	2	9.970	0.000	8340	40.1
Aroclor-1254	3	9.668	-0.000	16373	35.9	3	10.123	-0.000	16364	36.3
Aroclor-1254	4	9.807	-0.001	27490	31.0	4	10.382	0.009	16062	36.6
Aroclor-1254	5	10.175	-0.001	20494	36.9	5	10.572	0.004	4818	18.0
Total Col1Ave (5 peaks):					42.6	Total Col2Ave (5 peaks):				36.4 RPD = 16
Corrected Ave (4 peaks):					39.6	Corrected Ave (4 peaks):				32.8 RPD = 19
Aroclor-1260	1	11.048	0.003	794	1.4	1	11.665	0.012	1652	5.0
Aroclor-1260	2	11.366	0.005	814	1.4	2	11.926	0.008	842	1.0
Aroclor-1260	3	11.739	0.006	1848	1.2	3	12.438	0.002	483	2.1
Aroclor-1260	4	12.145	0.006	1372	1.8	4	12.506	0.004	790	1.4
Aroclor-1260	5	---			0.0	NS	---			----
Total Col1Ave (4 peaks):					1.4	Total Col2Ave (4 peaks):				2.4 RPD = 49*
Corrected Ave (3 peaks):					1.3	Corrected Ave (3 peaks):				1.5 RPD = 12
Aroclor-1262	1	10.832	0.003	13157	27.6	1	11.121	-0.079	6113	12.7
Aroclor-1262	2	12.145	-0.098	1372	1.8	2	11.665	0.013	1652	4.0
Aroclor-1262	3	---			0.0	3	12.438	0.004	483	1.0
Aroclor-1262	4	13.038	0.051	842	1.1	4	12.506	0.004	790	1.1
Total Col1Ave (3 peaks):					10.1	Total Col2Ave (4 peaks):				4.7 RPD = 73*
Corrected Ave: < 3 Peaks						Corrected Ave (3 peaks):				2.0
Aroclor-1268	1	---			0.0	1	12.438	0.006	483	0.4
Aroclor-1268	2	---			0.0	2	12.506	0.006	790	0.6
Aroclor-1268	3	12.617	-0.082	5851	3.5	3	12.899	0.007	491	0.5
Aroclor-1268	4	13.500	0.010	1745	0.3	4	13.714	0.005	379	0.1
Col1Ave: <3 Quant Peaks						Col2Ave: 0.4				

Total PCB Area Col1 (5.906 - 13.793) = 1149784 Col1 Total PCB = 0.1 ppm*

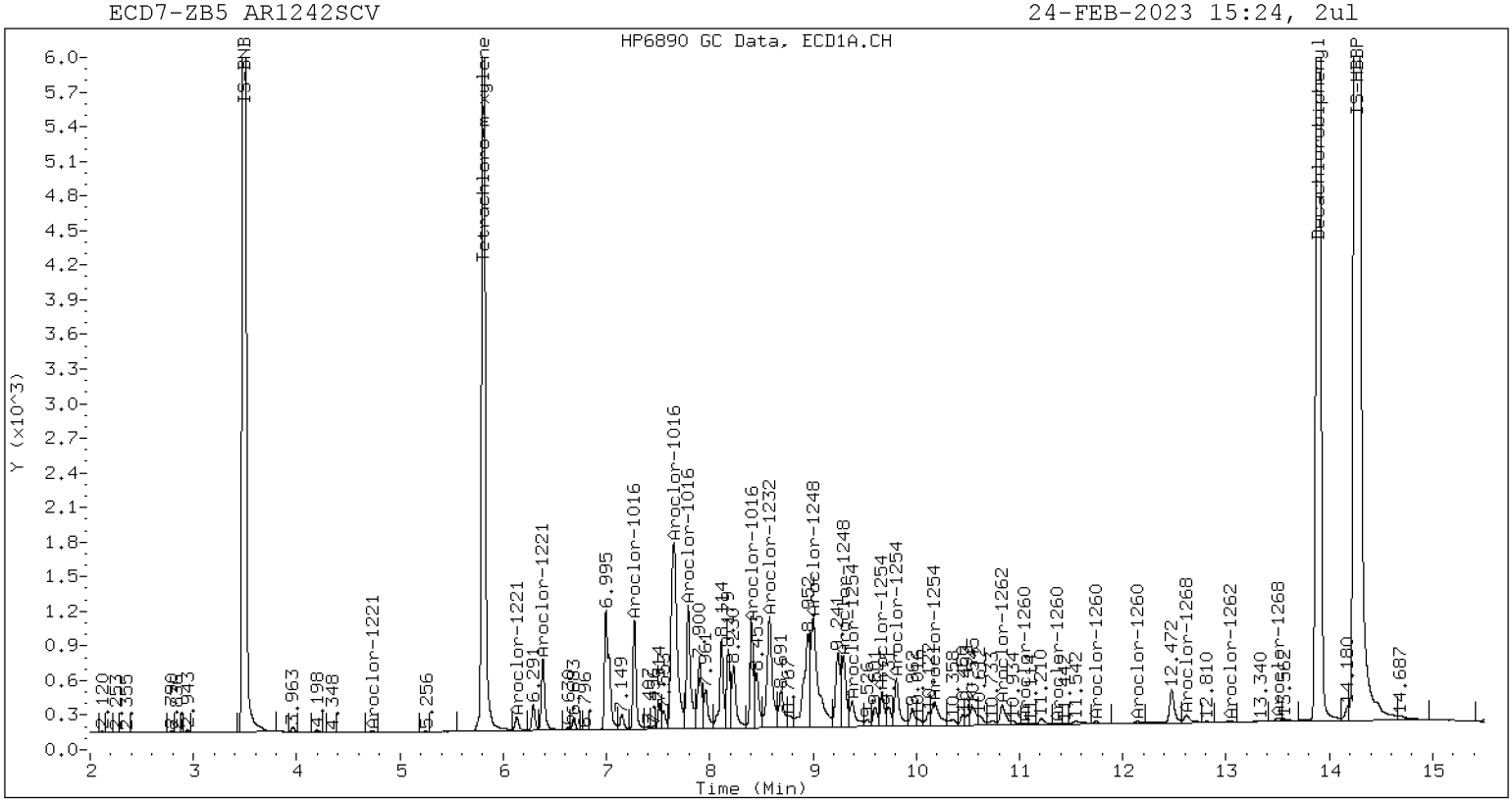
Total PCB Area Col2 (5.785 - 14.019) = 572210 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

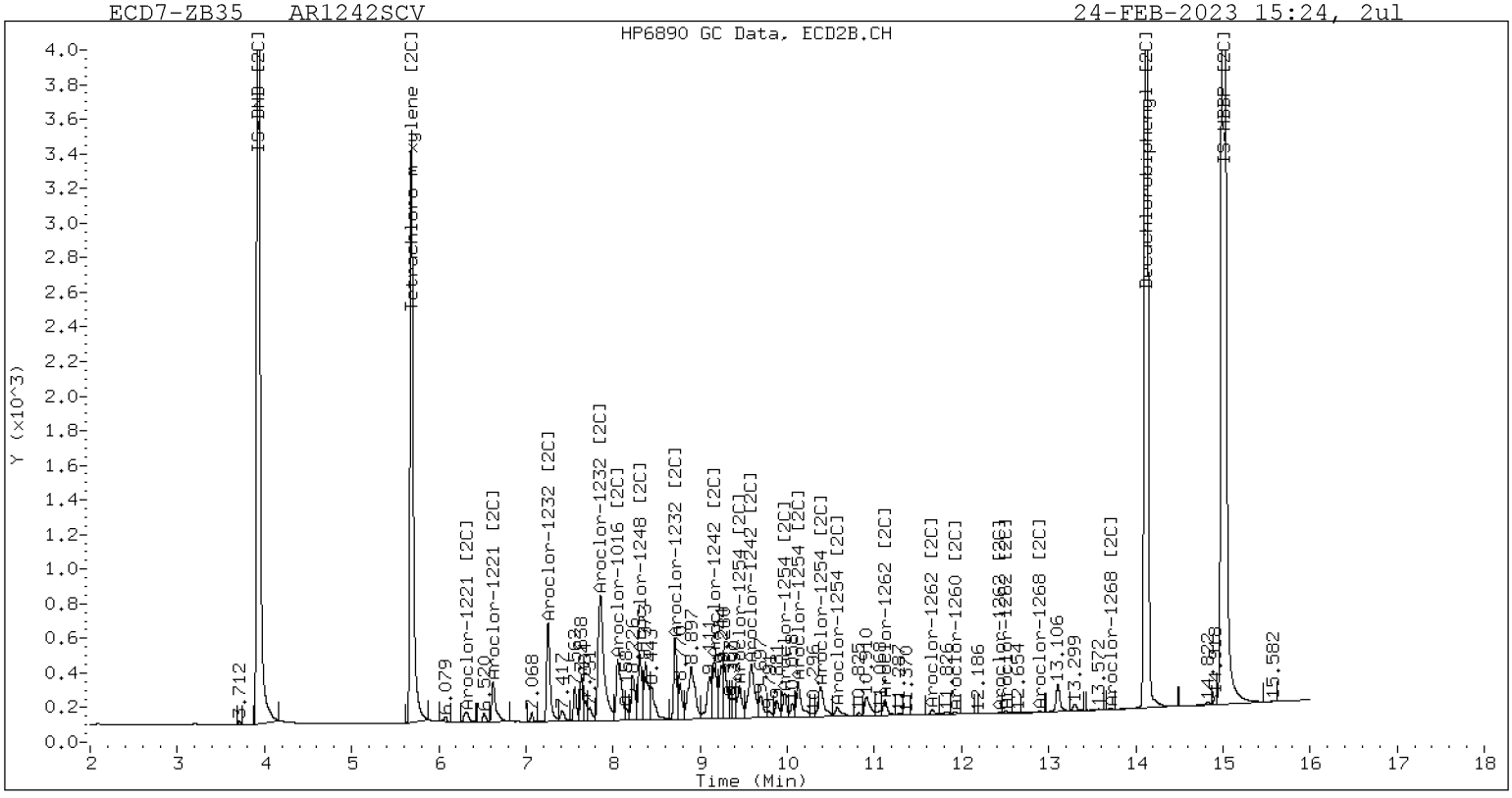
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242SCV 24-FEB-2023 15:24, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242SCV 24-FEB-2023 15:24, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242315ECD7.D
Data file 2: /230224.b/230224.b/02242315ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248SCV
Client ID:
Injection Date: 24-FEB-2023 15:45
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.002	336655	5.687	0.002	168719	34.9	36.4	4.2	Tetrachloro-m-xylene
13.894	0.001	499162	14.118	-0.001	308317	33.1	36.3	9.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	646554	-4.0
Hexabromobiphenyl	1429847	1529451	7.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	316066	0.3
Hexabromobiphenyl	513946	557213	8.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.000	19773	80.5	1	7.254	-0.002	16926	91.5
Aroclor-1016	2	7.653	-0.001	88099	117.7	2	7.857	0.001	45733	121.9
Aroclor-1016	3	7.794	0.003	35915	98.3	3	8.060	0.005	8078	47.7
Aroclor-1016	4	8.406	0.001	77842	329.5	4	8.307	0.000	37348	280.9
Total Col1Ave (4 peaks):					156.5	Total Col2Ave (4 peaks):				135.5 RPD = 14
Corrected Ave (3 peaks):					98.8	Corrected Ave (3 peaks):				87.0 RPD = 13
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.133	0.001	680	6.6	2	6.326	0.030	1966	34.7
Aroclor-1221	3	6.384	0.002	3390	14.1	3	6.631	0.009	1571	17.0
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.133	0.002	680	9.9	2	7.254	-0.000	16926	210.6
Aroclor-1232	3	7.653	-0.002	88099	283.3	3	7.857	-0.004	45733	284.6
Aroclor-1232	4	8.581	-0.000	99572	753.4	4	8.714	-0.001	38224	826.6
Total Col1Ave (3 peaks):					348.9	Total Col2Ave (3 peaks):				440.6 RPD = 23
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	-0.000	19773	98.7	1	7.254	-0.002	16926	115.3
Aroclor-1242	2	7.653	-0.003	88099	144.8	2	7.857	-0.001	45733	148.2
Aroclor-1242	3	8.406	0.000	77842	411.2	3	9.165	-0.002	45021	468.7
Aroclor-1242	4	8.581	0.001	99572	355.8	4	9.590	-0.008	53613	458.1
Total Col1Ave (4 peaks):					252.6	Total Col2Ave (4 peaks):				297.6 RPD = 16
Corrected Ave (3 peaks):					199.8	Corrected Ave (3 peaks):				240.5 RPD = 19
Aroclor-1248	1	8.406	0.000	77842	246.8	1	8.307	-0.001	37348	247.5
Aroclor-1248	2	8.581	0.000	99572	248.3	2	8.714	-0.000	38224	245.0
Aroclor-1248	3	8.998	-0.000	186857	247.0	3	9.165	-0.000	45021	250.7
Aroclor-1248	4	9.294	-0.000	98398	255.5	4	9.590	-0.001	53613	248.7
Total Col1Ave (4 peaks):					249.4	Total Col2Ave (4 peaks):				248.0 RPD = 1
Corrected Ave (3 peaks):					247.4	Corrected Ave (3 peaks):				247.0 RPD = 0
Aroclor-1254	1	9.294	-0.004	98398	151.6	1	9.450	0.001	21823	90.8
Aroclor-1254	2	9.377	-0.001	49616	169.9	2	9.971	0.001	19450	100.6
Aroclor-1254	3	9.669	0.001	40230	96.4	3	10.124	0.000	36574	87.5
Aroclor-1254	4	9.808	0.001	68500	84.4	4	10.389	0.016	35100	86.1
Aroclor-1254	5	10.183	0.007	47365	93.1	5	10.573	0.004	5676	22.9
Total Col1Ave (5 peaks):					119.1	Total Col2Ave (5 peaks):				77.6 RPD = 42*
Corrected Ave (4 peaks):					106.4	Corrected Ave (4 peaks):				71.8 RPD = 39
Aroclor-1260	1	11.047	0.003	1670	3.0	1	11.662	0.009	2055	6.3
Aroclor-1260	2	11.362	0.001	1111	1.9	2	11.924	0.007	1466	1.8
Aroclor-1260	3	11.739	0.005	2107	1.4	3	12.434	-0.002	573	2.6
Aroclor-1260	4	12.144	0.005	1379	1.8	4	12.505	0.003	1003	1.8
Aroclor-1260	5	12.251	0.006	698	2.1	NS	---			----
Total Col1Ave (5 peaks):					2.1	Total Col2Ave (4 peaks):				3.1 RPD = 41*
Corrected Ave (4 peaks):					1.8	Corrected Ave (3 peaks):				2.0 RPD = 12
Aroclor-1262	1	10.833	0.005	15355	32.7	1	11.122	-0.079	7225	15.2
Aroclor-1262	2	12.251	0.007	698	0.9	2	11.662	0.011	2055	5.1
Aroclor-1262	3	12.321	0.002	836	1.0	3	12.434	0.000	573	1.2
Aroclor-1262	4	12.991	0.004	1043	1.4	4	12.505	0.003	1003	1.4
Total Col1Ave (4 peaks):					9.0	Total Col2Ave (4 peaks):				5.7 RPD = 45*
Corrected Ave (3 peaks):					1.1	Corrected Ave (3 peaks):				2.6 RPD = 80*
Aroclor-1268	1	12.251	0.004	698	0.4	1	12.434	0.002	573	0.5
Aroclor-1268	2	12.321	0.004	836	0.4	2	12.505	0.005	1003	0.8
Aroclor-1268	3	12.700	0.001	2449	1.5	3	12.892	0.001	721	0.7
Aroclor-1268	4	13.493	0.003	7547	1.4	4	13.708	-0.001	2265	0.7
Total Col1Ave (4 peaks):					0.9	Total Col2Ave (4 peaks):				0.7 RPD = 29
Corrected Ave (3 peaks):					0.7	Corrected Ave (3 peaks):				0.6 RPD = 13

Total PCB Area Col1 (5.906 - 13.793) = 1574335 Col1 Total PCB = 0.2 ppm*

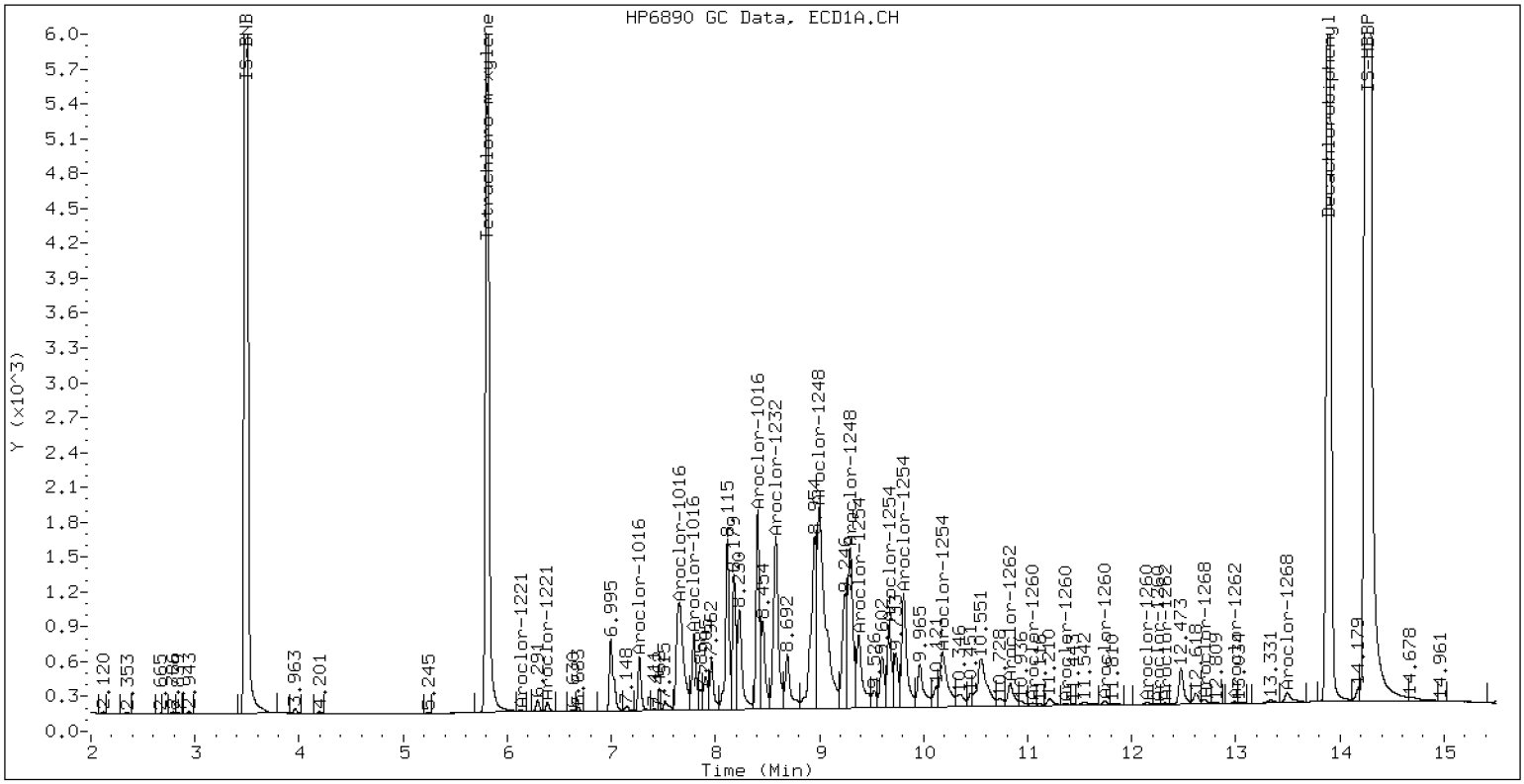
Total PCB Area Col2 (5.785 - 14.019) = 746330 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

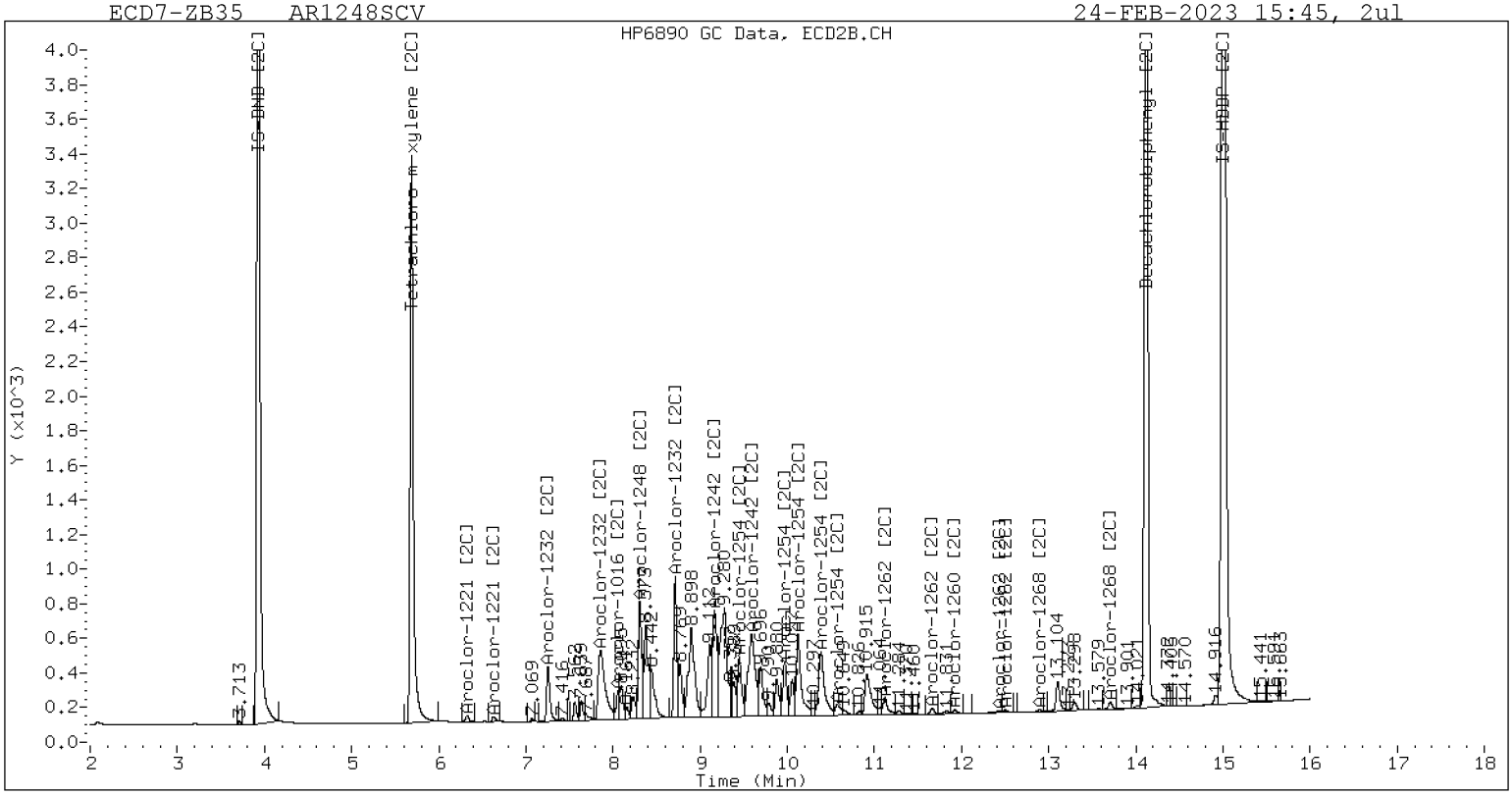
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248SCV 24-FEB-2023 15:45, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248SCV 24-FEB-2023 15:45, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242316ECD7.D
Data file 2: /230224.b/230224.b/02242316ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254SCV
Client ID:
Injection Date: 24-FEB-2023 16:06
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.000	354312	5.686	0.001	174604	36.1	37.1	2.6	Tetrachloro-m-xylene
13.895	0.002	540961	14.119	-0.000	329134	34.6	37.9	9.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	656887	-2.5
Hexabromobiphenyl	1429847	1585505	10.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	320936	1.8
Hexabromobiphenyl	513946	570006	10.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	0.000	565	2.3	1	7.255	-0.001	387	2.1
Aroclor-1016	2	7.656	0.002	1875	2.5	2	7.854	-0.002	860	2.3
Aroclor-1016	3	7.792	0.002	1106	3.0	3	8.098	0.043	578	3.4
Aroclor-1016	4	8.405	0.000	29924	124.7	4	8.307	0.000	21985	162.9
	Total Col1Ave (4 peaks):				33.1	Total Col2Ave (4 peaks):				42.6 RPD = 25
	Corrected Ave (3 peaks):				2.6	Corrected Ave (3 peaks):				2.6 RPD = 0
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.325	0.028	1947	33.9
Aroclor-1221	3	---			0.0	3	6.637	0.015	368	3.9
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	7.255	0.001	387	4.7
Aroclor-1232	3	7.656	0.000	1875	5.9	3	7.854	-0.007	860	5.3
Aroclor-1232	4	8.583	0.002	12327	91.8	4	8.715	0.000	15013	319.7
	Col1Ave: <3 Quant Peaks					Col2Ave: 109.9				
Aroclor-1242	1	7.270	-0.000	565	2.8	1	7.255	-0.001	387	2.6
Aroclor-1242	2	7.656	0.000	1875	3.0	2	7.854	-0.004	860	2.7
Aroclor-1242	3	8.405	-0.000	29924	155.6	3	9.169	0.002	21933	224.9
Aroclor-1242	4	8.583	0.003	12327	43.4	4	9.545	-0.053	34065	286.6
	Total Col1Ave (4 peaks):				51.2	Total Col2Ave (4 peaks):				129.2 RPD = 87*
	Corrected Ave (3 peaks):				16.4	Corrected Ave (3 peaks):				76.7 RPD = 130*
Aroclor-1248	1	8.405	0.000	29924	93.4	1	8.307	-0.001	21985	143.5
Aroclor-1248	2	8.583	0.002	12327	30.3	2	8.715	0.001	15013	94.8
Aroclor-1248	3	8.992	-0.007	145580	189.4	3	9.169	0.004	21933	120.3
Aroclor-1248	4	9.298	0.003	155450	397.3	4	9.545	-0.046	34065	155.6
	Total Col1Ave (4 peaks):				177.6	Total Col2Ave (4 peaks):				128.5 RPD = 32
	Corrected Ave (3 peaks):				104.3	Corrected Ave (3 peaks):				119.5 RPD = 14
Aroclor-1254	1	9.298	-0.001	155450	235.7	1	9.450	0.001	58639	240.4
Aroclor-1254	2	9.377	-0.001	69801	235.3	2	9.971	0.000	47008	239.5
Aroclor-1254	3	9.668	-0.000	100839	237.8	3	10.124	0.000	100062	235.7
Aroclor-1254	4	9.807	0.000	190544	231.1	4	10.373	0.000	99535	240.5
Aroclor-1254	5	10.176	-0.000	122321	236.7	5	10.570	0.001	61549	244.2
	Total Col1Ave (5 peaks):				235.3	Total Col2Ave (5 peaks):				240.1 RPD = 2
	Corrected Ave (4 peaks):				234.7	Corrected Ave (4 peaks):				239.0 RPD = 2
Aroclor-1260	1	11.043	-0.002	12288	21.5	1	11.661	0.008	29062	86.7
Aroclor-1260	2	11.361	-0.001	13660	22.9	2	11.921	0.003	22238	26.0
Aroclor-1260	3	11.736	0.002	37632	23.8	3	12.441	0.005	3555	15.7
Aroclor-1260	4	12.141	0.002	27105	34.1	4	12.503	0.001	13126	22.8
Aroclor-1260	5	12.320	0.076	2381	6.9	NS	---			----
	Total Col1Ave (5 peaks):				21.9	Total Col2Ave (4 peaks):				37.8 RPD = 53*
	Corrected Ave (4 peaks):				18.8	Corrected Ave (3 peaks):				21.5 RPD = 13
Aroclor-1262	1	10.827	-0.002	220626	453.6	1	11.281	0.081	13562	27.9
Aroclor-1262	2	12.320	0.076	2381	3.0	2	11.661	0.009	29062	70.1
Aroclor-1262	3	---			0.0	3	12.441	0.007	3555	7.6
Aroclor-1262	4	12.989	0.002	3225	4.1	4	12.503	0.001	13126	17.8
	Total Col1Ave (3 peaks):				153.6	Total Col2Ave (4 peaks):				30.8 RPD = 133*
	Corrected Ave: < 3 Peaks					Corrected Ave (3 peaks):				17.7
Aroclor-1268	1	12.320	0.074	2381	1.2	1	12.441	0.009	3555	3.1
Aroclor-1268	2	---			0.0	2	12.503	0.003	13126	10.6
Aroclor-1268	3	12.701	0.002	2939	1.7	3	12.892	0.000	772	0.7
Aroclor-1268	4	13.493	0.003	9164	1.6	4	13.707	-0.002	2801	0.8
	Total Col1Ave (3 peaks):				1.5	Total Col2Ave (4 peaks):				3.8 RPD = 87*
	Corrected Ave: < 3 Peaks					Corrected Ave (3 peaks):				1.6

Total PCB Area Col1 (5.906 - 13.793) = 2118645 Col1 Total PCB = 0.3 ppm*

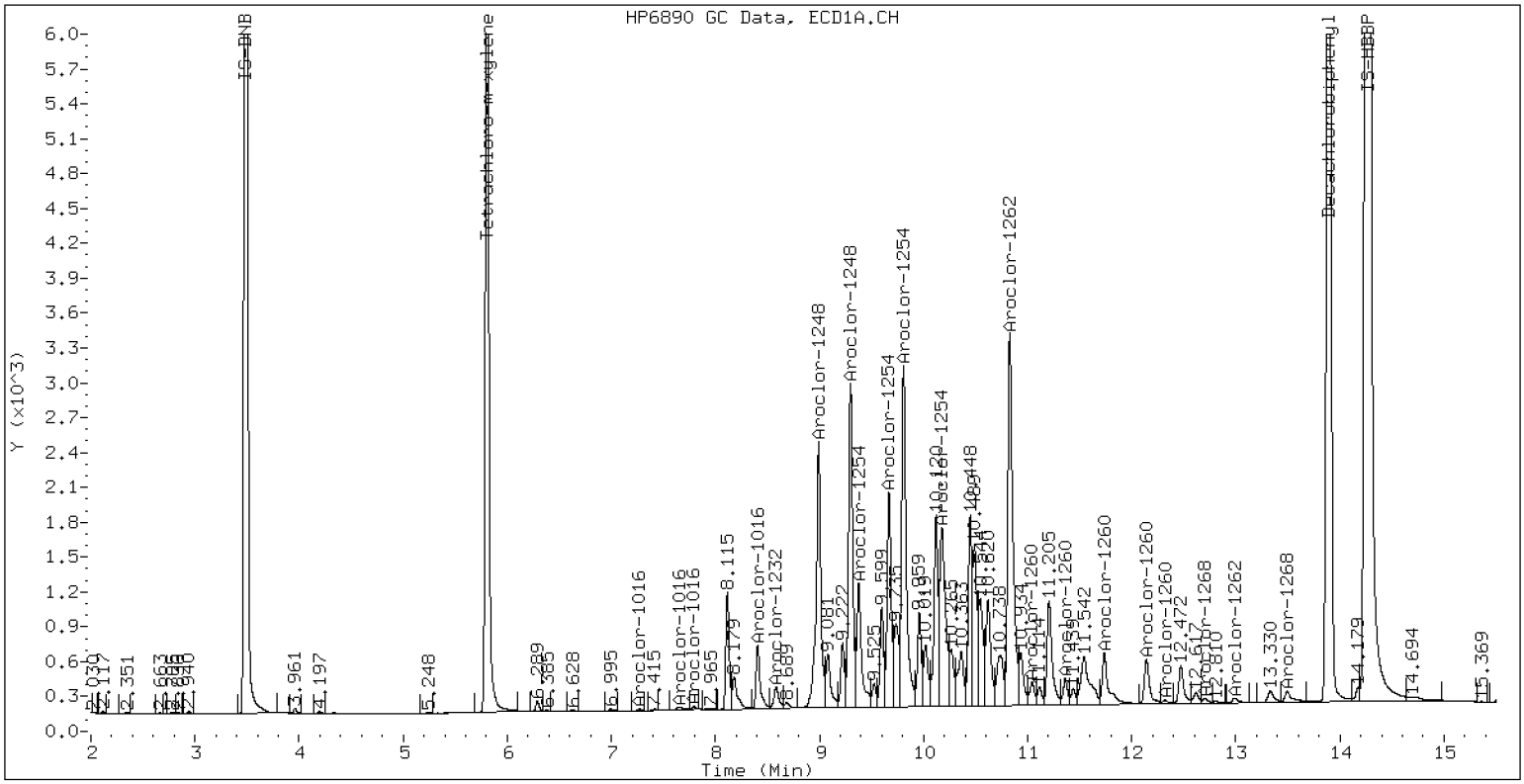
Total PCB Area Col2 (5.785 - 14.019) = 1007601 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

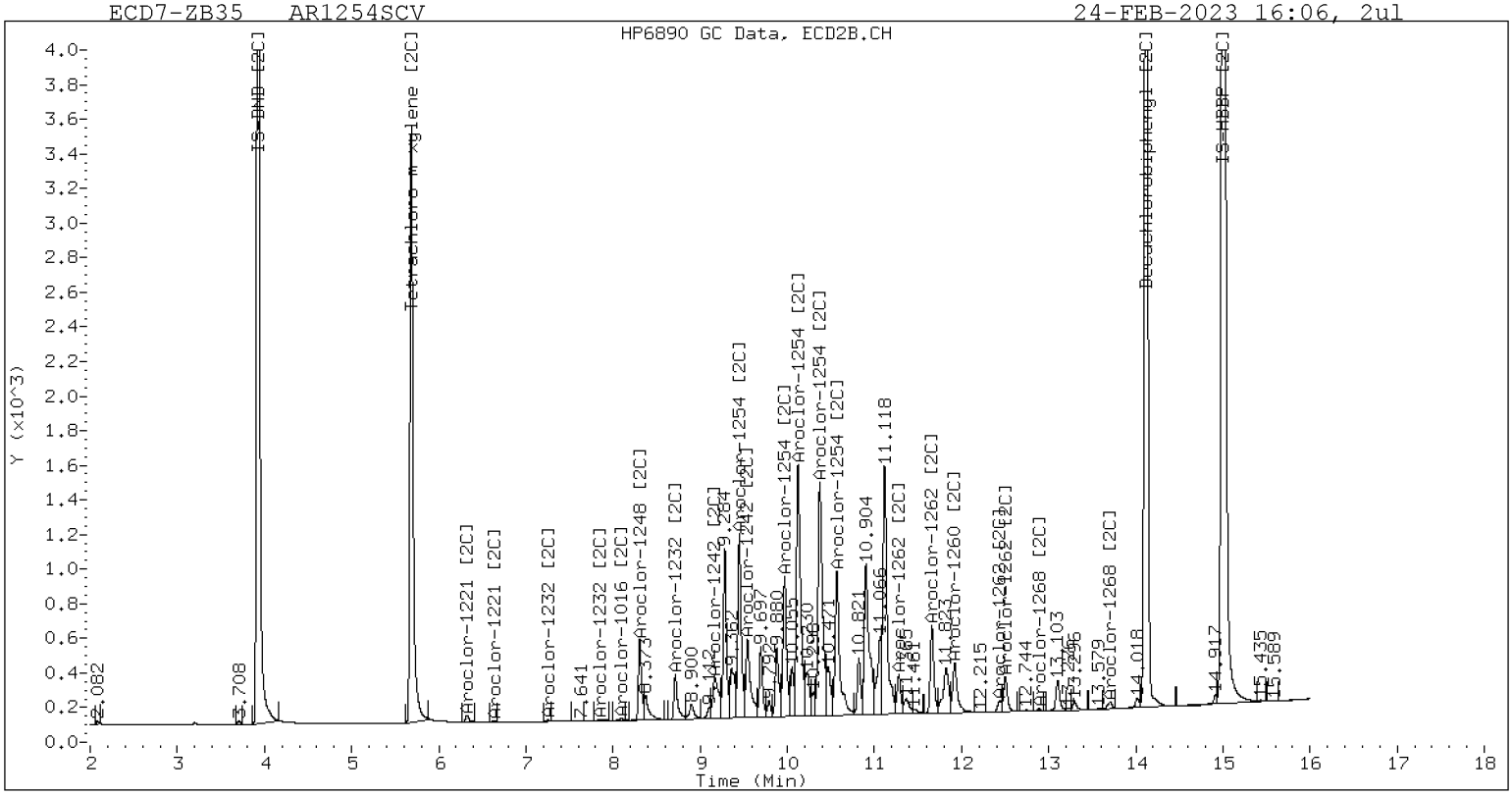
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254SCV 24-FEB-2023 16:06, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254SCV 24-FEB-2023 16:06, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242317ECD7.D
Data file 2: /230224.b/230224.b/02242317ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162SCV
Client ID:
Injection Date: 24-FEB-2023 16:27
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	0.000	356001	5.685	0.000	170882	36.0	36.6	1.7	Tetrachloro-m-xylene
13.895	0.002	533971	14.119	0.000	326235	34.4	37.9	9.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	661953	-1.8
Hexabromobiphenyl	1429847	1574993	10.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317807	0.8
Hexabromobiphenyl	513946	565951	10.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.001	7175	28.5	1	7.256	0.000	3727	20.0
Aroclor-1016	2	7.659	0.005	12893	16.8	2	7.863	0.007	5834	15.5
Aroclor-1016	3	7.794	0.004	6936	18.5	3	8.063	0.009	2963	17.4
Aroclor-1016	4	8.408	0.003	3610	14.9	4	8.308	0.002	2045	15.3
Total Col1Ave (4 peaks):					19.7	Total Col2Ave (4 peaks):				17.0 RPD = 14
Corrected Ave (3 peaks):					16.8	Corrected Ave (3 peaks):				16.1 RPD = 4
Aroclor-1221	1	4.730	-0.000	15803	266.6	1	4.955	-0.001	7909	262.9
Aroclor-1221	2	6.131	-0.001	26946	254.1	2	6.296	-0.000	14303	251.2
Aroclor-1221	3	6.382	-0.000	62477	253.8	3	6.622	0.000	23612	254.7
Total Col1Ave (3 peaks):					258.2	Total Col2Ave (3 peaks):				256.3 RPD = 1
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.730	0.000	15803	445.6	1	4.955	-0.001	7909	486.4
Aroclor-1232	2	6.131	0.000	26946	383.1	2	7.256	0.002	3727	46.1
Aroclor-1232	3	7.659	0.003	12893	40.5	3	7.863	0.002	5834	36.1
Aroclor-1232	4	8.583	0.003	2684	19.8	4	8.716	0.002	1189	25.6
Total Col1Ave (4 peaks):					222.3	Total Col2Ave (4 peaks):				148.5 RPD = 40
Corrected Ave (3 peaks):					147.8	Corrected Ave (3 peaks):				35.9 RPD = 122*
Aroclor-1242	1	7.269	-0.001	7175	35.0	1	7.256	0.000	3727	25.2
Aroclor-1242	2	7.659	0.003	12893	20.7	2	7.863	0.005	5834	18.8
Aroclor-1242	3	8.408	0.002	3610	18.6	3	9.175	0.008	1082	11.2
Aroclor-1242	4	8.583	0.004	2684	9.4	4	9.543	-0.054	1390	11.8
Total Col1Ave (4 peaks):					20.9	Total Col2Ave (4 peaks):				16.8 RPD = 22
Corrected Ave (3 peaks):					16.2	Corrected Ave (3 peaks):				13.9 RPD = 15
Aroclor-1248	1	8.408	0.002	3610	11.2	1	8.308	0.001	2045	13.5
Aroclor-1248	2	8.583	0.003	2684	6.5	2	8.716	0.002	1189	7.6
Aroclor-1248	3	8.994	-0.005	24440	31.6	3	9.175	0.009	1082	6.0
Aroclor-1248	4	9.302	0.008	26328	66.8	4	9.543	-0.048	1390	6.4
Total Col1Ave (4 peaks):					29.0	Total Col2Ave (4 peaks):				8.4 RPD = 110*
Corrected Ave (3 peaks):					16.4	Corrected Ave (3 peaks):				6.7 RPD = 85*
Aroclor-1254	1	9.302	0.004	26328	39.6	1	9.452	0.003	9571	39.6
Aroclor-1254	2	---			0.0	2	9.972	0.002	1733	8.9
Aroclor-1254	3	9.670	0.002	3721	8.7	3	10.147	0.023	49218	117.1
Aroclor-1254	4	9.808	0.000	9653	11.6	4	10.370	-0.002	59603	145.4
Aroclor-1254	5	10.120	-0.056	131179	251.9	5	10.569	0.001	79533	318.7
Total Col1Ave (4 peaks):					78.0	Total Col2Ave (5 peaks):				125.9 RPD = 47*
Corrected Ave (3 peaks):					20.0	Corrected Ave (4 peaks):				77.8 RPD = 118*
Aroclor-1260	1	11.044	-0.000	223208	394.0	1	11.652	-0.001	104071	312.7
Aroclor-1260	2	11.361	-0.001	190166	321.2	2	11.919	0.002	251579	296.2
Aroclor-1260	3	11.737	0.003	458281	291.9	3	12.435	-0.001	113645	504.2
Aroclor-1260	4	12.141	0.002	149720	189.4	4	12.501	-0.001	182951	319.6
Aroclor-1260	5	12.244	0.000	196033	576.0	NS	---			----
Total Col1Ave (5 peaks):					354.5	Total Col2Ave (4 peaks):				358.2 RPD = 1
Corrected Ave (4 peaks):					299.1	Corrected Ave (3 peaks):				309.5 RPD = 3
Aroclor-1262	1	10.828	-0.001	121431	251.3	1	11.201	0.000	121335	251.1
Aroclor-1262	2	12.244	0.000	196033	249.3	2	11.652	0.000	104071	252.9
Aroclor-1262	3	12.319	0.001	211092	249.8	3	12.435	0.001	113645	243.4
Aroclor-1262	4	12.988	0.001	183455	237.5	4	12.501	-0.001	182951	250.1
Total Col1Ave (4 peaks):					247.0	Total Col2Ave (4 peaks):				249.3 RPD = 1
Corrected Ave (3 peaks):					245.5	Corrected Ave (3 peaks):				248.2 RPD = 1
Aroclor-1268	1	12.244	-0.002	196033	97.1	1	12.435	0.003	113645	99.7
Aroclor-1268	2	12.319	0.002	211092	105.6	2	12.501	0.001	182951	149.3
Aroclor-1268	3	12.723	0.024	77240	45.2	3	12.891	-0.000	7755	7.4
Aroclor-1268	4	13.488	-0.002	65479	11.6	4	13.709	0.000	35146	10.5
Total Col1Ave (4 peaks):					64.9	Total Col2Ave (4 peaks):				66.7 RPD = 3

Corrected Ave (3 peaks): 51.3 Corrected Ave (3 peaks): 39.2 RPD = 27

Total PCB Area Col1 (5.906 - 13.793) = 3239932 Col1 Total PCB = 0.4 ppm*

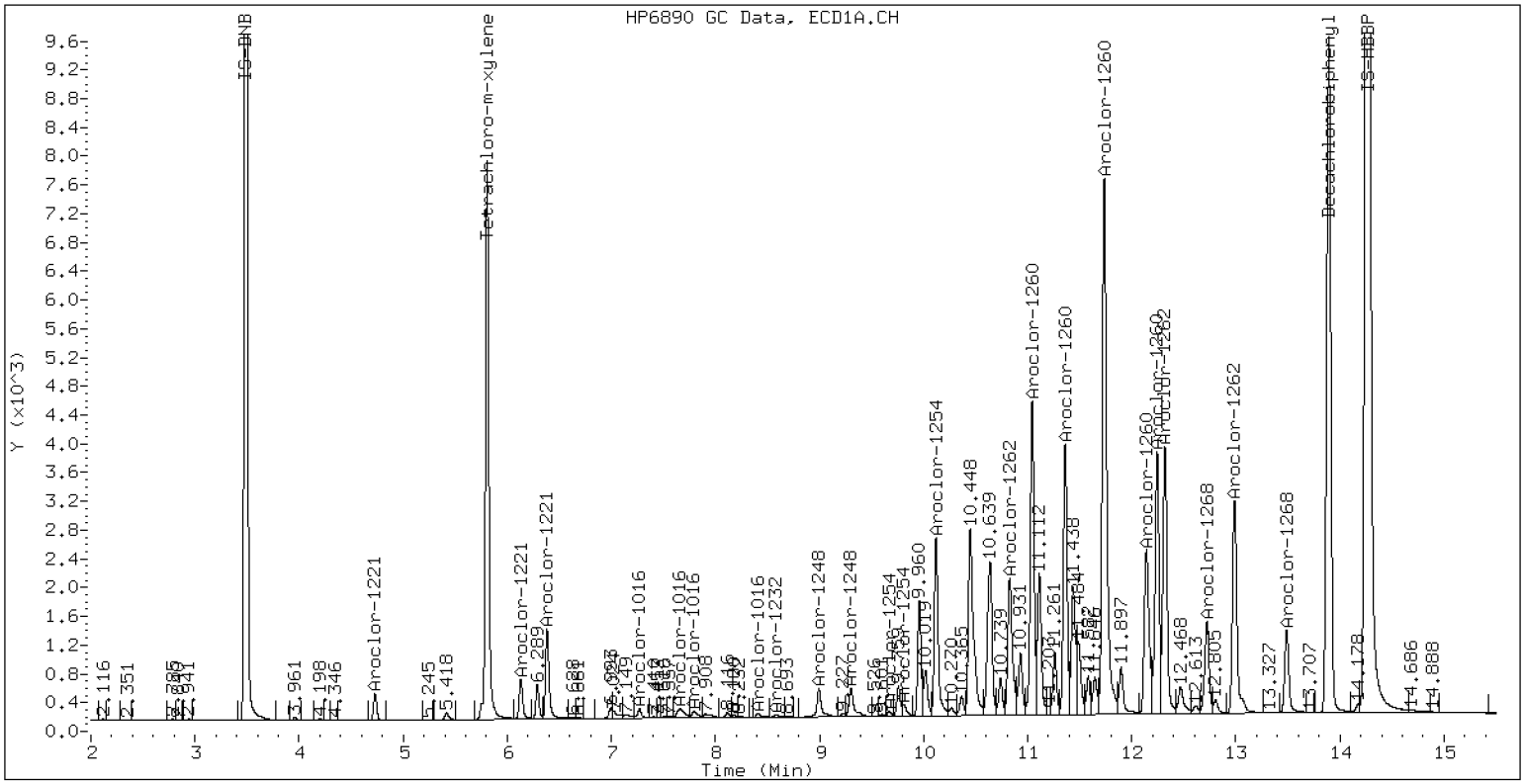
Total PCB Area Col2 (5.785 - 14.019) = 1655522 Col2 Total PCB = 0.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

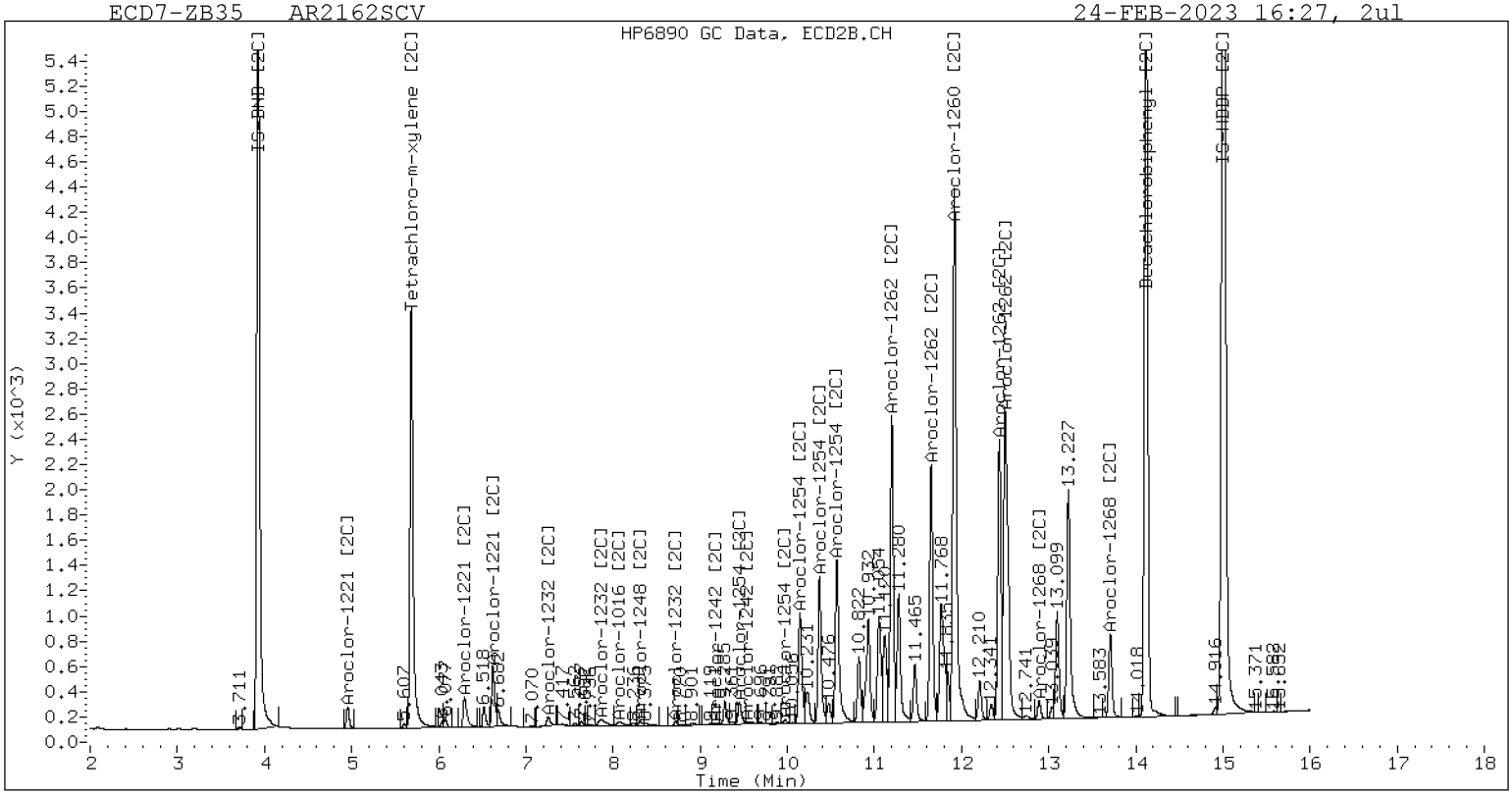
PCB Dual Column Chromatograms

ECD7-ZB5 AR2162SCV 24-FEB-2023 16:27, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR2162SCV 24-FEB-2023 16:27, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242318ECD7.D
Data file 2: /230224.b/230224.b/02242318ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268SCV
Client ID:
Injection Date: 24-FEB-2023 16:48
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	0.000	363331	5.685	0.000	176204	37.1	38.2	2.9	Tetrachloro-m-xylene
13.894	0.001	800845	14.118	-0.001	488290	51.3	56.4	9.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	656592	-2.6
Hexabromobiphenyl	1429847	1584453	10.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	314741	-0.2
Hexabromobiphenyl	513946	568346	10.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	7.270	-0.001	28327	113.6	1	7.254	-0.001	20651	112.1
Aroclor-1016	2	7.657	0.003	80668	106.1	2	7.861	0.005	41326	110.6
Aroclor-1016	3	7.793	0.003	40661	109.6	3	8.060	0.005	20446	121.2
Aroclor-1016	4	8.407	0.002	24680	102.9	4	8.308	0.001	13576	102.5
Total Col1Ave (4 peaks):					108.0	Total Col2Ave (4 peaks):				111.6 RPD = 3
Corrected Ave (3 peaks):					106.2	Corrected Ave (3 peaks):				108.4 RPD = 2
Aroclor-1221	1	4.729	-0.001	8535	145.1	1	4.956	-0.000	3965	133.1
Aroclor-1221	2	6.132	-0.000	15523	147.6	2	6.297	0.001	8689	154.1
Aroclor-1221	3	6.382	-0.000	45872	187.9	3	6.622	0.001	22272	242.6
Total Col1Ave (3 peaks):					160.2	Total Col2Ave (3 peaks):				176.6 RPD = 10
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.729	-0.001	8535	242.6	1	4.956	0.000	3965	246.2
Aroclor-1232	2	6.132	0.001	15523	222.5	2	7.254	0.000	20651	258.1
Aroclor-1232	3	7.657	0.001	80668	255.4	3	7.861	0.001	41326	258.3
Aroclor-1232	4	8.582	0.001	34784	259.2	4	8.714	-0.001	12504	271.5
Total Col1Ave (4 peaks):					244.9	Total Col2Ave (4 peaks):				258.5 RPD = 5
Corrected Ave (3 peaks):					240.2	Corrected Ave (3 peaks):				254.2 RPD = 6
Aroclor-1242	1	7.270	-0.001	28327	139.2	1	7.254	-0.001	20651	141.2
Aroclor-1242	2	7.657	0.001	80668	130.5	2	7.861	0.003	41326	134.4
Aroclor-1242	3	8.407	0.001	24680	128.4	3	9.170	0.003	12830	134.1
Aroclor-1242	4	8.582	0.003	34784	122.4	4	9.600	0.003	14836	127.3
Total Col1Ave (4 peaks):					130.1	Total Col2Ave (4 peaks):				134.3 RPD = 3
Corrected Ave (3 peaks):					127.1	Corrected Ave (3 peaks):				132.0 RPD = 4
Aroclor-1248	1	8.407	0.001	24680	77.0	1	8.308	0.000	13576	90.3
Aroclor-1248	2	8.582	0.001	34784	85.4	2	8.714	-0.000	12504	80.5
Aroclor-1248	3	8.996	-0.003	83592	108.8	3	9.170	0.004	12830	71.8
Aroclor-1248	4	9.292	-0.003	39603	101.3	4	9.600	0.010	14836	69.1
Total Col1Ave (4 peaks):					93.1	Total Col2Ave (4 peaks):				77.9 RPD = 18
Corrected Ave (3 peaks):					87.9	Corrected Ave (3 peaks):				73.8 RPD = 17
Aroclor-1254	1	9.292	-0.007	39603	60.1	1	9.452	0.003	4590	19.2
Aroclor-1254	2	9.377	-0.000	11450	38.6	2	9.973	0.003	2892	15.0
Aroclor-1254	3	9.674	0.005	6387	15.1	3	10.131	0.007	6052	14.5
Aroclor-1254	4	9.813	0.006	10162	12.3	4	10.390	0.017	5324	13.1
Aroclor-1254	5	10.189	0.012	6862	13.3	5	10.572	0.004	1891	7.7
Total Col1Ave (5 peaks):					27.9	Total Col2Ave (5 peaks):				13.9 RPD = 67*
Corrected Ave (4 peaks):					19.8	Corrected Ave (4 peaks):				12.6 RPD = 45*
Aroclor-1260	1	11.046	0.002	87033	152.7	1	11.645	-0.008	62543	187.1
Aroclor-1260	2	11.362	0.001	6300	10.6	2	11.920	0.003	28552	33.5
Aroclor-1260	3	11.738	0.004	54524	34.5	3	12.432	-0.004	285450	1261.2
Aroclor-1260	4	12.144	0.005	1727	2.2	4	12.499	-0.002	306992	534.0
Aroclor-1260	5	12.246	0.002	502931	1469.0	NS	---			----
Total Col1Ave (5 peaks):					333.8	Total Col2Ave (4 peaks):				503.9 RPD = 41*
Corrected Ave (4 peaks):					50.0	Corrected Ave (3 peaks):				251.5 RPD = 134*
Aroclor-1262	1	10.832	0.004	3395	7.0	1	11.201	0.001	44255	91.2
Aroclor-1262	2	12.246	0.002	502931	635.9	2	11.645	-0.007	62543	151.3
Aroclor-1262	3	12.318	-0.000	497006	584.5	3	12.432	-0.002	285450	608.7
Aroclor-1262	4	12.987	-0.000	202197	260.2	4	12.499	-0.003	306992	417.9
Total Col1Ave (4 peaks):					371.9	Total Col2Ave (4 peaks):				317.3 RPD = 16
Corrected Ave (3 peaks):					283.9	Corrected Ave (3 peaks):				220.1 RPD = 25
Aroclor-1268	1	12.246	-0.001	502931	247.7	1	12.432	-0.000	285450	249.4
Aroclor-1268	2	12.318	0.002	497006	247.2	2	12.499	-0.001	306992	249.5
Aroclor-1268	3	12.699	-0.000	422793	245.8	3	12.892	0.000	260893	248.4
Aroclor-1268	4	13.490	0.000	1386953	244.9	4	13.709	-0.000	829733	247.1
Total Col1Ave (4 peaks):					246.4	Total Col2Ave (4 peaks):				248.6 RPD = 1

Corrected Ave (3 peaks): 246.0 Corrected Ave (3 peaks): 248.3 RPD = 1

Total PCB Area Col1 (5.906 - 13.793) = 4180607 Col1 Total PCB = 0.5 ppm*

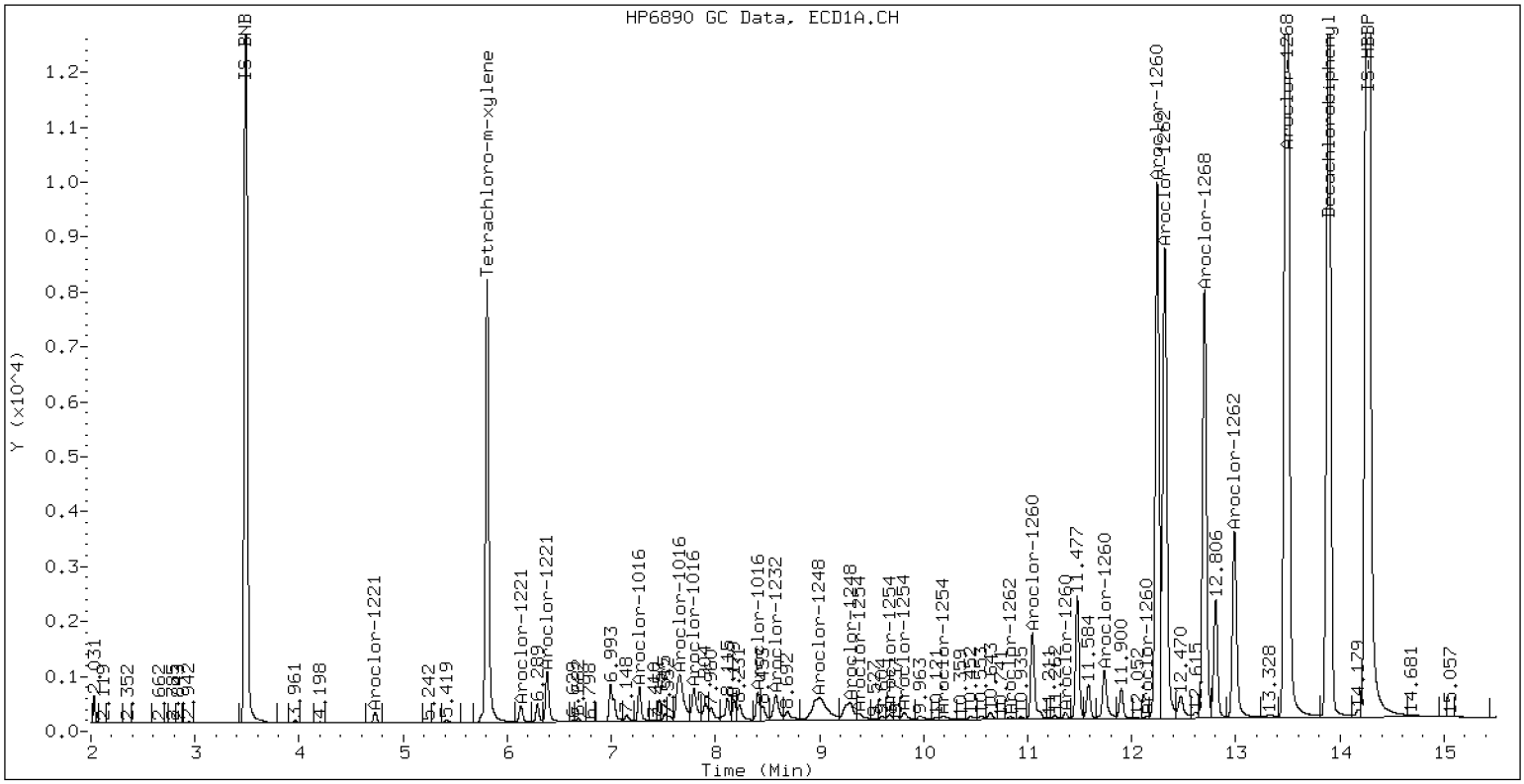
Total PCB Area Col2 (5.785 - 14.019) = 2376912 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

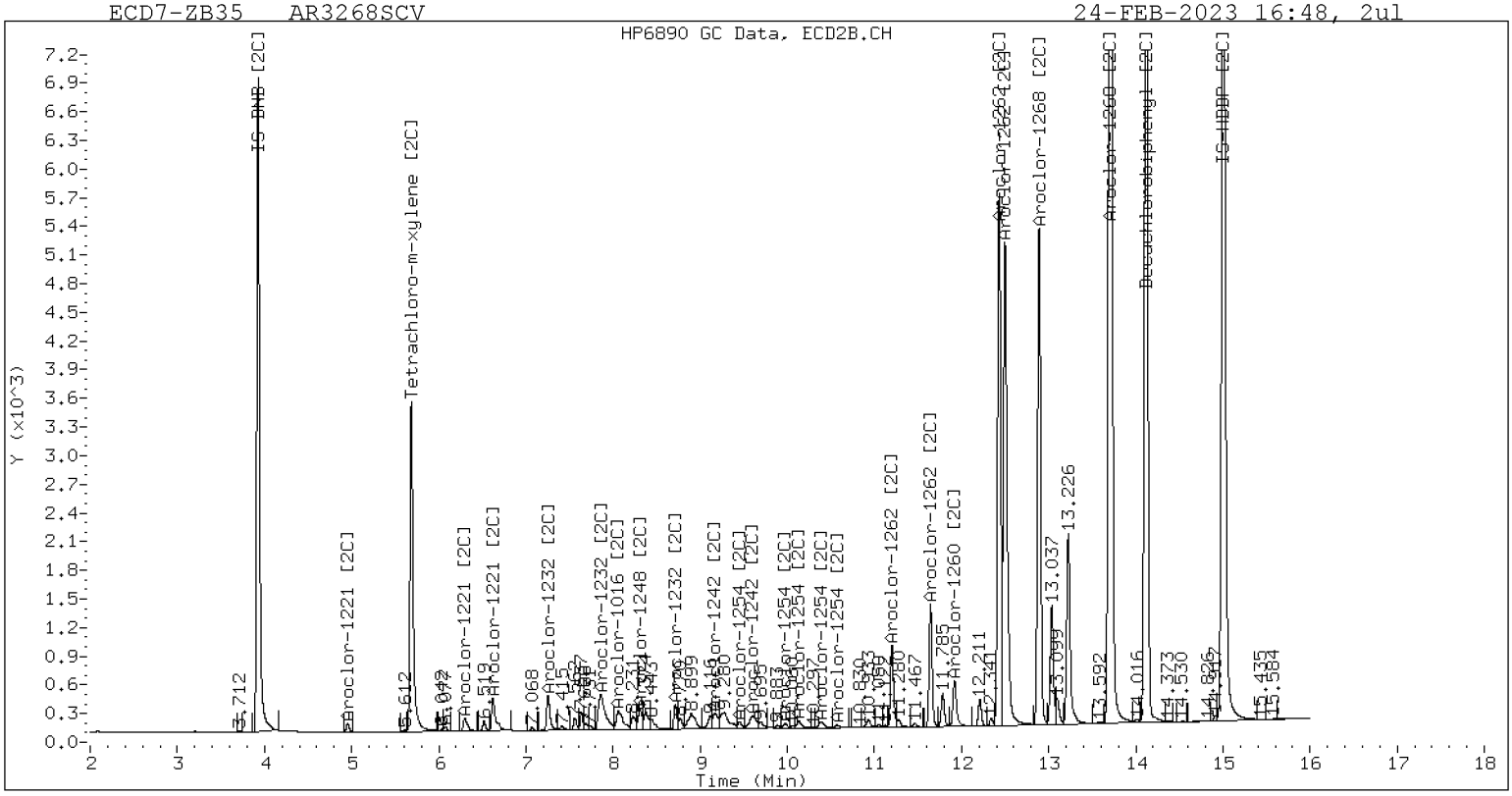
PCB Dual Column Chromatograms

ECD7-ZB5 AR3268SCV 24-FEB-2023 16:48, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR3268SCV 24-FEB-2023 16:48, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
8082 DDT SCREEN REPORT

Data file 1: /230224.b/02242319ECD7.D ARI ID: DDTS

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
9.261	0.000	694353	9.912	0.000	580269	0.100	0.100	0.0	2,4-DDE
0.000	-10.293	0	10.672	0.000	673479	0.000	0.200#	----	2,4-DDT
9.686	0.000	1191406	10.212	0.000	433373	0.100	0.100	0.0	4,4-DDE
10.259	0.000	1721760	10.672	0.000	673479	0.100	0.200#	66.7*	4,4-DDD

# Indicates value is from co-eluting peaks
* Indicates RPD > 40%

Analytical Resources Inc.
8082 DDT SCREEN REPORT

Data file 1: /230224.b/02242320ECD7.D ARI ID: DDT BD

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
9.285	0.023	4923	9.921	0.009	9972	0.001	0.002	84.3*	2,4-DDE
0.000	-10.293	0	10.677	0.004	249094	0.000	0.074#	----	2,4-DDT
9.692	0.006	12128	10.221	0.009	528	0.001	0.000	156.7*	4,4-DDE
10.265	0.006	410017	10.677	0.004	249094	0.023	0.074#	103.6*	4,4-DDD

# Indicates value is from co-eluting peaks
* Indicates RPD > 40%

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLB0342

Instrument: ECD7
Calibration ID: GB00069

Printed: 2/28/2023 9:54:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLB0342-CAL1	QC		1		L000856	L000844		
SLB0342-CAL2	QC		2		L000859	L000844		
SLB0342-CAL3	QC		3		L000858	L000844		
SLB0342-CAL4	QC		4		L000731	L000844		
SLB0342-CAL5	QC		5		L000857	L000844		
SLB0342-CAL6	QC		6		L000855	L000844		
SLB0342-CAL7	QC		7		L000860	L000844		
SLB0342-CAL8	QC		8		L000861	L000844		
SLB0342-CAL9	QC		9		L000862	L000844		
SLB0342-CALA	QC		10		L000863	L000844		
SLB0342-CALB	QC		11		L000864	L000844		
SLB0342-SCV1	QC		12		L002065	L000844		
SLB0342-SCV2	QC		13		K007656	L000844		
SLB0342-SCV3	QC		14		L002066	L000844		
SLB0342-SCV4	QC		15		L002067	L000844		
SLB0342-SCV5	QC		16		L002068	L000844		
SLB0342-SCV6	QC		17		L002069	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	24-FEB-2023 10:51	02242301ECD7.D	1	IB	
2	24-FEB-2023 11:12	02242302ECD7.D	1	0.25PPMAR1660	
3	24-FEB-2023 11:33	02242303ECD7.D	1	0.02PPMAR1660	
4	24-FEB-2023 11:54	02242304ECD7.D	1	0.05PPMAR1660	
5	24-FEB-2023 12:15	02242305ECD7.D	1	1.0PPMAR1660	
6	24-FEB-2023 12:36	02242306ECD7.D	1	0.1PPMAR1660	
7	24-FEB-2023 12:57	02242307ECD7.D	1	0.5PPMAR1660	
8	24-FEB-2023 13:18	02242308ECD7.D	1	0.25PPMAR1242	
9	24-FEB-2023 13:39	02242309ECD7.D	1	0.25PPMAR1248	
10	24-FEB-2023 14:00	02242310ECD7.D	1	0.25PPMAR1254	
11	24-FEB-2023 14:21	02242311ECD7.D	1	0.25PPMAR2162	
12	24-FEB-2023 14:42	02242312ECD7.D	1	0.25PPMAR3268	
13	24-FEB-2023 15:03	02242313ECD7.D	1	AR1660SCV	
14	24-FEB-2023 15:24	02242314ECD7.D	1	AR1242SCV	
15	24-FEB-2023 15:45	02242315ECD7.D	1	AR1248SCV	
16	24-FEB-2023 16:06	02242316ECD7.D	1	AR1254SCV	
17	24-FEB-2023 16:27	02242317ECD7.D	1	AR2162SCV	
18	24-FEB-2023 16:48	02242318ECD7.D	1	AR3268SCV	
19	24-FEB-2023 17:09	02242319ECD7.D	1	DDTS	
20	24-FEB-2023 17:30	02242320ECD7.D	1	DDT BD	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

ARI Job No.: IB Method: PCB.m Instrument: ecd7.i Date: 24-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1051	02242301ECD7.D	IB		1	NO MANUAL INTEGRATION
1112	02242302ECD7.D	0.25PPMAR1660		1	NO MANUAL INTEGRATION
1133	02242303ECD7.D	0.02PPMAR1660		1	NO MANUAL INTEGRATION
1154	02242304ECD7.D	0.05PPMAR1660		1	NO MANUAL INTEGRATION
1215	02242305ECD7.D	1.0PPMAR1660		1	NO MANUAL INTEGRATION
1236	02242306ECD7.D	0.1PPMAR1660		1	NO MANUAL INTEGRATION
1257	02242307ECD7.D	0.5PPMAR1660		1	NO MANUAL INTEGRATION
1318	02242308ECD7.D	0.25PPMAR1242		1	NO MANUAL INTEGRATION
1339	02242309ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
1400	02242310ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
1421	02242311ECD7.D	0.25PPMAR2162		1	NO MANUAL INTEGRATION
1442	02242312ECD7.D	0.25PPMAR3268		1	NO MANUAL INTEGRATION
1503	02242313ECD7.D	AR1660SCV		1	NO MANUAL INTEGRATION
1524	02242314ECD7.D	AR1242SCV		1	NO MANUAL INTEGRATION
1545	02242315ECD7.D	AR1248SCV		1	NO MANUAL INTEGRATION
1606	02242316ECD7.D	AR1254SCV		1	NO MANUAL INTEGRATION
1627	02242317ECD7.D	AR2162SCV		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1648	02242318ECD7.D	AR3268SCV		1	NO MANUAL INTEGRATION
1709	02242319ECD7.D	DDTS		1	NO MANUAL INTEGRATION
1730	02242320ECD7.D	DDT BD		1	NO MANUAL INTEGRATION
1751	02242321ECD7.D			1	NO MANUAL INTEGRATION
1812	02242322ECD7.D			1	NO MANUAL INTEGRATION
1833	02242323ECD7.D			1	NO MANUAL INTEGRATION
1854	02242324ECD7.D			1	NO MANUAL INTEGRATION
1915	02242325ECD7.D			1	NO MANUAL INTEGRATION
1936	02242326ECD7.D			1	NO MANUAL INTEGRATION
1957	02242327ECD7.D			1	NO MANUAL INTEGRATION
2018	02242328ECD7.D			1	NO MANUAL INTEGRATION
2039	02242329ECD7.D			1	NO MANUAL INTEGRATION
2059	02242330ECD7.D			1	NO MANUAL INTEGRATION
2120	02242331ECD7.D			1	NO MANUAL INTEGRATION
2141	02242332ECD7.D			1	NO MANUAL INTEGRATION
2202	02242333ECD7.D			1	NO MANUAL INTEGRATION
2223	02242334ECD7.D			1	NO MANUAL INTEGRATION
2244	02242335ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2305	02242336ECD7.D			1	NO MANUAL INTEGRATION
2326	02242337ECD7.D			1	NO MANUAL INTEGRATION
2347	02242338ECD7.D			1	NO MANUAL INTEGRATION
0008	02242339ECD7.D			1	NO MANUAL INTEGRATION
0029	02242340ECD7.D			1	NO MANUAL INTEGRATION
0050	02242341ECD7.D			1	NO MANUAL INTEGRATION
0111	02242342ECD7.D			1	NO MANUAL INTEGRATION
0132	02242343ECD7.D			1	NO MANUAL INTEGRATION
0153	02242344ECD7.D			1	NO MANUAL INTEGRATION
0214	02242345ECD7.D			1	NO MANUAL INTEGRATION
0235	02242346ECD7.D			1	NO MANUAL INTEGRATION
0256	02242347ECD7.D			1	NO MANUAL INTEGRATION
0317	02242348ECD7.D			1	NO MANUAL INTEGRATION
0338	02242349ECD7.D			1	NO MANUAL INTEGRATION
0359	02242350ECD7.D			1	NO MANUAL INTEGRATION
0420	02242351ECD7.D			1	NO MANUAL INTEGRATION
0441	02242352ECD7.D			1	NO MANUAL INTEGRATION
0502	02242353ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0523	02242354ECD7.D			1	NO MANUAL INTEGRATION
0544	02242355ECD7.D			1	NO MANUAL INTEGRATION
0605	02242356ECD7.D			1	NO MANUAL INTEGRATION
0626	02242357ECD7.D			1	NO MANUAL INTEGRATION
0647	02242358ECD7.D			1	NO MANUAL INTEGRATION
0708	02242359ECD7.D			1	NO MANUAL INTEGRATION
0729	02242360ECD7.D			1	NO MANUAL INTEGRATION
0750	02242361ECD7.D			1	NO MANUAL INTEGRATION
0811	02242362ECD7.D			1	NO MANUAL INTEGRATION
0832	02242363ECD7.D			1	NO MANUAL INTEGRATION
0853	02242364ECD7.D			1	NO MANUAL INTEGRATION
0914	02242365ECD7.D			1	NO MANUAL INTEGRATION
0935	02242366ECD7.D			1	NO MANUAL INTEGRATION
0956	02242367ECD7.D			1	NO MANUAL INTEGRATION
1017	02242368ECD7.D			1	NO MANUAL INTEGRATION
1038	02242369ECD7.D			1	NO MANUAL INTEGRATION
1059	02242370ECD7.D			1	NO MANUAL INTEGRATION
1120	02242371ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1141	02242372ECD7.D			1	NO MANUAL INTEGRATION
1202	02242373ECD7.D			1	NO MANUAL INTEGRATION
1223	02242374ECD7.D			1	NO MANUAL INTEGRATION
1244	02242375ECD7.D			1	NO MANUAL INTEGRATION
1305	02242376ECD7.D			1	NO MANUAL INTEGRATION
1326	02242377ECD7.D			1	NO MANUAL INTEGRATION
1347	02242378ECD7.D			1	NO MANUAL INTEGRATION
1408	02242379ECD7.D			1	NO MANUAL INTEGRATION
1429	02242380ECD7.D			1	NO MANUAL INTEGRATION
1450	02242381ECD7.D			1	NO MANUAL INTEGRATION
1511	02242382ECD7.D			1	NO MANUAL INTEGRATION
1532	02242383ECD7.D			1	NO MANUAL INTEGRATION
1553	02242384ECD7.D			1	NO MANUAL INTEGRATION
1051	02242301ECD7.D	IB		1	NO MANUAL INTEGRATION
1112	02242302ECD7.D	0.25PPMAR1660		1	NO MANUAL INTEGRATION
1133	02242303ECD7.D	0.02PPMAR1660		1	Aroclor-1016 [2C],
1154	02242304ECD7.D	0.05PPMAR1660		1	NO MANUAL INTEGRATION
1215	02242305ECD7.D	1.0PPMAR1660		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1236	02242306ECD7.D	0.1PPMAR1660		1	NO MANUAL INTEGRATION
1257	02242307ECD7.D	0.5PPMAR1660		1	NO MANUAL INTEGRATION
1318	02242308ECD7.D	0.25PPMAR1242		1	NO MANUAL INTEGRATION
1339	02242309ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
1400	02242310ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
1421	02242311ECD7.D	0.25PPMAR2162		1	NO MANUAL INTEGRATION
1442	02242312ECD7.D	0.25PPMAR3268		1	NO MANUAL INTEGRATION
1503	02242313ECD7.D	AR1660SCV		1	NO MANUAL INTEGRATION
1524	02242314ECD7.D	AR1242SCV		1	NO MANUAL INTEGRATION
1545	02242315ECD7.D	AR1248SCV		1	NO MANUAL INTEGRATION
1606	02242316ECD7.D	AR1254SCV		1	NO MANUAL INTEGRATION
1627	02242317ECD7.D	AR2162SCV		1	NO MANUAL INTEGRATION
1648	02242318ECD7.D	AR3268SCV		1	NO MANUAL INTEGRATION
1709	02242319ECD7.D	DDTS		1	NO MANUAL INTEGRATION
1730	02242320ECD7.D	DDT BD		1	NO MANUAL INTEGRATION
1751	02242321ECD7.D			1	NO MANUAL INTEGRATION
1812	02242322ECD7.D			1	NO MANUAL INTEGRATION
1833	02242323ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1854	02242324ECD7.D			1	NO MANUAL INTEGRATION
1915	02242325ECD7.D			1	NO MANUAL INTEGRATION
1936	02242326ECD7.D			1	NO MANUAL INTEGRATION
1957	02242327ECD7.D			1	NO MANUAL INTEGRATION
2018	02242328ECD7.D			1	NO MANUAL INTEGRATION
2038	02242329ECD7.D			1	NO MANUAL INTEGRATION
2059	02242330ECD7.D			1	NO MANUAL INTEGRATION
2120	02242331ECD7.D			1	NO MANUAL INTEGRATION
2141	02242332ECD7.D			1	NO MANUAL INTEGRATION
2202	02242333ECD7.D			1	NO MANUAL INTEGRATION
2223	02242334ECD7.D			1	NO MANUAL INTEGRATION
2244	02242335ECD7.D			1	NO MANUAL INTEGRATION
2305	02242336ECD7.D			1	NO MANUAL INTEGRATION
2326	02242337ECD7.D			1	NO MANUAL INTEGRATION
2347	02242338ECD7.D			1	NO MANUAL INTEGRATION
0008	02242339ECD7.D			1	NO MANUAL INTEGRATION
0029	02242340ECD7.D			1	NO MANUAL INTEGRATION
0050	02242341ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0111	02242342ECD7.D			1	NO MANUAL INTEGRATION
0132	02242343ECD7.D			1	NO MANUAL INTEGRATION
0153	02242344ECD7.D			1	NO MANUAL INTEGRATION
0214	02242345ECD7.D			1	NO MANUAL INTEGRATION
0235	02242346ECD7.D			1	NO MANUAL INTEGRATION
0256	02242347ECD7.D			1	NO MANUAL INTEGRATION
0317	02242348ECD7.D			1	NO MANUAL INTEGRATION
0338	02242349ECD7.D			1	NO MANUAL INTEGRATION
0359	02242350ECD7.D			1	NO MANUAL INTEGRATION
0420	02242351ECD7.D			1	NO MANUAL INTEGRATION
0441	02242352ECD7.D			1	NO MANUAL INTEGRATION
0502	02242353ECD7.D			1	NO MANUAL INTEGRATION
0523	02242354ECD7.D			1	NO MANUAL INTEGRATION
0544	02242355ECD7.D			1	NO MANUAL INTEGRATION
0605	02242356ECD7.D			1	NO MANUAL INTEGRATION
0626	02242357ECD7.D			1	NO MANUAL INTEGRATION
0647	02242358ECD7.D			1	NO MANUAL INTEGRATION
0708	02242359ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0729	02242360ECD7.D			1	NO MANUAL INTEGRATION
0750	02242361ECD7.D			1	NO MANUAL INTEGRATION
0811	02242362ECD7.D			1	NO MANUAL INTEGRATION
0832	02242363ECD7.D			1	NO MANUAL INTEGRATION
0853	02242364ECD7.D			1	NO MANUAL INTEGRATION
0914	02242365ECD7.D			1	NO MANUAL INTEGRATION
0935	02242366ECD7.D			1	NO MANUAL INTEGRATION
0956	02242367ECD7.D			1	NO MANUAL INTEGRATION
1017	02242368ECD7.D			1	NO MANUAL INTEGRATION
1038	02242369ECD7.D			1	NO MANUAL INTEGRATION
1059	02242370ECD7.D			1	NO MANUAL INTEGRATION
1120	02242371ECD7.D			1	NO MANUAL INTEGRATION
1141	02242372ECD7.D			1	NO MANUAL INTEGRATION
1202	02242373ECD7.D			1	NO MANUAL INTEGRATION
1223	02242374ECD7.D			1	NO MANUAL INTEGRATION
1244	02242375ECD7.D			1	NO MANUAL INTEGRATION
1305	02242376ECD7.D			1	NO MANUAL INTEGRATION
1326	02242377ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230224.b\230224.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1347	02242378ECD7.D			1	NO MANUAL INTEGRATION
1408	02242379ECD7.D			1	NO MANUAL INTEGRATION
1429	02242380ECD7.D			1	NO MANUAL INTEGRATION
1450	02242381ECD7.D			1	NO MANUAL INTEGRATION
1511	02242382ECD7.D			1	NO MANUAL INTEGRATION
1532	02242383ECD7.D			1	NO MANUAL INTEGRATION
1553	02242384ECD7.D			1	NO MANUAL INTEGRATION

Security Status Report

Date: 28-Feb-2023 10:53

02242301ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242302ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242303ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242304ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242305ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242306ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242307ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242308ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242309ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242310ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242311ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242312ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242313ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242314ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242315ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242316ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242317ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242318ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242319ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53
02242320ECD7.D	Data Locked	richardl, 28-Feb-2023 10:53

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
Last Edit : 24-Feb-2023 15:31 richardl
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd7.i\230224.b\02242303ECD7.D
Level 2: \\target\share\chem4\ecd7.i\230224.b\02242304ECD7.D
Level 3: \\target\share\chem4\ecd7.i\230224.b\02242306ECD7.D
Level 4: \\target\share\chem4\ecd7.i\230224.b\02242302ECD7.D
Level 5: \\target\share\chem4\ecd7.i\230224.b\02242307ECD7.D
Level 6: \\target\share\chem4\ecd7.i\230224.b\02242305ECD7.D
Level 7: \\target\share\chem4\ecd7.i\230224.b\02242312ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	RRF	% RSD
2 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00716	0.00716	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01281	0.01281	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02975	0.02975	0.000
3 Aroclor-1242(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.02479	0.02479	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.07529	0.07529	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02343	0.02343	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.03463	0.03463	0.000
4 Aroclor-1232(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00429	0.00429	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
Last Edit : 24-Feb-2023 15:31 richardl
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
(2)	*****	*****	*****	*****	*****	*****			
	0.00850							0.00850	0.000
(3)	*****	*****	*****	*****	*****	*****			
	0.03848							0.03848	0.000
(4)	*****	*****	*****	*****	*****	*****			
	0.01635							0.01635	0.000
7 Aroclor-1016(1)	0.03172	0.03253	0.03142	0.03141	0.02856	0.02667			
	*****							0.03039	7.449
(2)	0.09239	0.09246	0.09222	0.09849	0.09174	0.08849			
	*****							0.09263	3.499
(3)	0.05165	0.05037	0.04823	0.04393	0.03991	0.03721			
	*****							0.04522	12.936
(4)	0.03002	0.02894	0.02959	0.03058	0.02852	0.02774			
	*****							0.02923	3.542
6 Aroclor-1248(1)	*****	*****	*****	*****	*****	*****			
	0.03903							0.03903	0.000
(2)	*****	*****	*****	*****	*****	*****			
	0.04961							0.04961	0.000
(3)	*****	*****	*****	*****	*****	*****			
	0.09360							0.09360	0.000
(4)	*****	*****	*****	*****	*****	*****			
	0.04765							0.04765	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
Last Edit : 24-Feb-2023 15:31 richardl
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
8 Aroclor-1254(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.08033	0.08033	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.03613	0.03613	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.05165	0.05165	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.10042	0.10042	0.000
(5)	+++++	+++++	+++++	+++++	+++++	+++++	0.06294	0.06294	0.000
9 Aroclor-1260(1)	0.02926	0.02920	0.02841	0.03096	0.02737	0.02746	+++++	0.02878	4.677
(2)	0.02967	0.03006	0.03011	0.03291	0.02910	0.02857	+++++	0.03007	5.029
(3)	0.08088	0.08045	0.07954	0.08575	0.07515	0.07674	+++++	0.07975	4.627
(4)	0.03905	0.03887	0.03955	0.04485	0.03942	0.03922	+++++	0.04016	5.753
(5)	0.01783	0.01715	0.01679	0.01875	0.01664	0.01655	+++++	0.01729	4.953
10 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.02454	0.02454	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
Last Edit : 24-Feb-2023 15:31 richardl
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
(2)	*****	*****	*****	*****	*****	*****	0.03993	0.03993	0.000
(3)	*****	*****	*****	*****	*****	*****	0.04293	0.04293	0.000
(4)	*****	*****	*****	*****	*****	*****	0.03923	0.03923	0.000
11 Aroclor-1268(1)	*****	*****	*****	*****	*****	*****	0.10250	0.10250	0.000
(2)	*****	*****	*****	*****	*****	*****	0.10151	0.10151	0.000
(3)	*****	*****	*****	*****	*****	*****	0.08686	0.08686	0.000
(4)	*****	*****	*****	*****	*****	*****	0.28598	0.28598	0.000
42 2,4-DDE	*****	*****	*****	*****	*****	*****	*****	*****	*****
43 2,4-DDD	*****	*****	*****	*****	*****	*****	*****	*****	*****
44 2,4-DDT	*****	*****	*****	*****	*****	*****	*****	*****	*****
46 4,4-DDE	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m
Last Edit : 24-Feb-2023 15:31 richardl
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 1 Tetrachloro-m-xylene	1.16827	1.24402	1.18546	1.20509	1.12295	1.24114	+++++	1.19449	3.860
$ 13 Decachlorobiphenyl	0.82901	0.80558	0.77587	0.78808	0.73125	0.79742	+++++	0.78787	4.189

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Last Edit : 24-Feb-2023 15:29 richardl
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242303ECD7.D
Level 2: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242304ECD7.D
Level 3: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242306ECD7.D
Level 4: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242302ECD7.D
Level 5: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242307ECD7.D
Level 6: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242305ECD7.D
Level 7: \\target\share\chem4\ecd7.i\230224.b\230224.b\02242312ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	RRF	% RSD
1 Aroclor-1221 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00757	0.00757	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01433	0.01433	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02333	0.02333	0.000
4 Aroclor-1232 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00409	0.00409	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.02034	0.02034	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.04067	0.04067	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.01170	0.01170	0.000
3 Aroclor-1242 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.03717	0.03717	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Last Edit : 24-Feb-2023 15:29 richardl
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
(2)	*****	*****	*****	*****	*****	*****			
	0.07813							0.07813	0.000
(3)	*****	*****	*****	*****	*****	*****			
	0.02431							0.02431	0.000
(4)	*****	*****	*****	*****	*****	*****			
	0.02962							0.02962	0.000
6 Aroclor-1248 [2C](1)	*****	*****	*****	*****	*****	*****			
	0.03820							0.03820	0.000
(2)	*****	*****	*****	*****	*****	*****			
	0.03949							0.03949	0.000
(3)	*****	*****	*****	*****	*****	*****			
	0.04545							0.04545	0.000
(4)	*****	*****	*****	*****	*****	*****			
	0.05457							0.05457	0.000
7 Aroclor-1016 [2C](1)	0.05071	0.05022	0.04868	0.04733	0.04326	0.04080			
	*****							0.04683	8.503
(2)	0.08143	0.09407	0.10159	0.10259	0.09651	0.09362			
	*****							0.09497	8.025
(3)	0.04006	0.04718	0.04613	0.04410	0.04062	0.03926			
	*****							0.04289	7.857
(4)	0.03181	0.03802	0.03707	0.03450	0.03115	0.02936			
	*****							0.03365	10.251

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Last Edit : 24-Feb-2023 15:29 richardl
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
8 Aroclor-1254 [2C](1)	*****	*****	*****	*****	*****	*****	0.06081	0.06081	0.000
(2)	*****	*****	*****	*****	*****	*****	0.04892	0.04892	0.000
(3)	*****	*****	*****	*****	*****	*****	0.10584	0.10584	0.000
(4)	*****	*****	*****	*****	*****	*****	0.10317	0.10317	0.000
(5)	*****	*****	*****	*****	*****	*****	0.06282	0.06282	0.000
10 Aroclor-1262 [2C](1)	*****	*****	*****	*****	*****	*****	0.06831	0.06831	0.000
(2)	*****	*****	*****	*****	*****	*****	0.05818	0.05818	0.000
(3)	*****	*****	*****	*****	*****	*****	0.06601	0.06601	0.000
(4)	*****	*****	*****	*****	*****	*****	0.10341	0.10341	0.000
9 Aroclor-1260 [2C](1)	0.05286	0.04911	0.04696	0.04801	0.04329	0.04201	*****	0.04704	8.422
(2)	0.12976	0.12431	0.12095	0.12664	0.11320	0.10545	*****	0.12005	7.605

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Last Edit : 24-Feb-2023 15:29 richardl
Curve Type : Average

Compound	20.000 Level 1 / 250.000 Level 7	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(3)	0.03524 / +++++	0.03147	0.02937	0.03208	0.03102	0.03198	0.03186	6.045
(4)	0.08632 / +++++	0.08237	0.08044	0.08393	0.07718	0.07531	0.08092	5.126
11 Aroclor-1268 [2C](1)	+++++ / 0.16109	+++++	+++++	+++++	+++++	+++++	0.16109	0.000
(2)	+++++ / 0.17318	+++++	+++++	+++++	+++++	+++++	0.17318	0.000
(3)	+++++ / 0.14787	+++++	+++++	+++++	+++++	+++++	0.14787	0.000
(4)	+++++ / 0.47260	+++++	+++++	+++++	+++++	+++++	0.47260	0.000
41 2,4-DDE [2C]	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 2,4-DDD [2C]	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 4,4-DDE [2C]	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 4,4-DDD/2,4-DDT [2C]	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 4,4-DDT [2C]	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2023 11:12
End Cal Date : 24-FEB-2023 14:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Last Edit : 24-Feb-2023 15:29 richardl
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 2 Tetrachloro-m-xylene [2C]	1.21526	1.19545	1.17555	1.21907	1.12560	1.11139	+++++	1.17372	3.897
$ 13 Decachlorobiphenyl [2C]	1.17066	1.20406	1.20549	1.31040	1.21104	1.20797	+++++	1.21827	3.898

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Batch File: \\target\share\chem4\ecd7.i\230224.b
Inst ID: ecd7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	02242302ECD7	02242303ECD7	02242304ECD7	02242305ECD7	02242306ECD7	02242307ECD7
INJ.DATE:	24-FEB-2023	24-FEB-2023	24-FEB-2023	24-FEB-2023	24-FEB-2023	24-FEB-2023
INJ.TIME:	11:12	11:33	11:54	12:15	12:36	12:57

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 41 IS-BNB	3.493	3.492	3.492	3.492	3.491	3.491	3.493	3.393-3.593	3.492	0.001
$ 1 Tetrachloro-m-xylene	5.811	5.809	5.809	5.813	5.809	5.810	5.811	5.711-5.911	5.810	0.002
2 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	4.732	4.632-4.832	+++++	+++++
3 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	7.269	7.169-7.369	+++++	+++++
4 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	4.732	4.632-4.832	+++++	+++++
7 Aroclor-1016	7.272	7.272	7.272	7.270	7.271	7.270	7.272	7.172-7.372	7.271	0.001
6 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	8.403	8.303-8.503	+++++	+++++
8 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	9.295	9.195-9.395	+++++	+++++
9 Aroclor-1260	11.046	11.047	11.046	11.044	11.045	11.044	11.046	10.946-11.146	11.045	0.001
10 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	10.824	10.724-10.924	+++++	+++++
11 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	12.243	12.143-12.343	+++++	+++++
$ 13 Decachlorobiphenyl	13.897	13.893	13.893	13.899	13.892	13.898	13.897	13.797-13.997	13.895	0.003
* 12 IS-HBBP	14.269	14.268	14.268	14.267	14.268	14.268	14.269	14.169-14.369	14.268	0.001
42 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	9.260	9.210-9.310	+++++	+++++
43 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	9.801	9.751-9.851	+++++	+++++
44 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	10.293	10.243-10.343	+++++	+++++
46 4,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	9.683	9.583-9.783	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Batch File: \\target\share\chem4\ecd7.i\230224.b
Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	10.254	10.154-10.354	+++++	+++++
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	10.754	10.654-10.854	+++++	+++++
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.842	1.742-1.942	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	6.708	6.608-6.808	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Batch File: \\target\share\chem4\ecd7.i\230224.b\230224.b
Inst ID: ecd7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	02242302ECD7	02242303ECD7	02242304ECD7	02242305ECD7	02242306ECD7	02242307ECD7
INJ.DATE:	24-FEB-2023	24-FEB-2023	24-FEB-2023	24-FEB-2023	24-FEB-2023	24-FEB-2023
INJ.TIME:	11:12	11:33	11:54	12:15	12:36	12:57

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 40 IS-BNB [2C]	3.928	3.929	3.929	3.929	3.928	3.929	3.928	3.828-4.028	3.929	0.000
$ 2 Tetrachloro-m-xylene [	5.687	5.688	5.688	5.688	5.688	5.688	5.687	5.587-5.787	5.688	0.001
1 Aroclor-1221 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	4.958	4.858-5.058	+++++	+++++
4 Aroclor-1232 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	4.958	4.859-5.059	+++++	+++++
3 Aroclor-1242 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	7.254	7.154-7.354	+++++	+++++
6 Aroclor-1248 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	8.305	8.205-8.405	+++++	+++++
7 Aroclor-1016 [2C]	7.255	7.256	7.256	7.254	7.255	7.256	7.255	7.155-7.355	7.255	0.001
8 Aroclor-1254 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	9.447	9.347-9.547	+++++	+++++
10 Aroclor-1262 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	11.198	11.098-11.298	+++++	+++++
9 Aroclor-1260 [2C]	11.653	11.656	11.655	11.652	11.655	11.653	11.653	11.553-11.753	11.654	0.001
11 Aroclor-1268 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	12.431	12.331-12.531	+++++	+++++
$ 13 Decachlorobiphenyl [2C	14.120	14.120	14.119	14.122	14.119	14.120	14.120	14.020-14.220	14.120	0.001
* 12 IS-HBBP [2C]	15.008	15.008	15.008	15.008	15.007	15.008	15.008	14.908-15.108	15.008	0.000
41 2,4-DDE [2C]	+++++	+++++	+++++	+++++	+++++	+++++	9.911	9.861-9.961	+++++	+++++
42 2,4-DDD [2C]	+++++	+++++	+++++	+++++	+++++	+++++	9.536	9.486-9.586	+++++	+++++
44 4,4-DDE [2C]	+++++	+++++	+++++	+++++	+++++	+++++	10.209	10.109-10.309	+++++	+++++
45 4,4-DDD/2,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++	10.667	10.567-10.767	+++++	+++++

Reviewer 1 _____ Date:_____
Reviewer 2 _____ Date:_____

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230224.b\PCB.m\PCB2.m
Batch File: \\target\share\chem4\ecd7.i\230224.b\230224.b
Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
46 4,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++	11.092	10.992-11.192	+++++	+++++
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.703	1.603-1.803	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	7.178	7.078-7.278	+++++	+++++

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242301ECD7.D
Data file 2: /230224.b/230224.b/02242301ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: IB
Client ID:
Injection Date: 24-FEB-2023 10:51
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.826	0.019	382217	5.683	-0.002	180378	33.8	36.5	7.7	Tetrachloro-m-xylene
13.904	0.011	534110	14.120	0.001	295605	35.3	37.2	5.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	756896	12.3
Hexabromobiphenyl	1429847	1534275	7.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	336543	6.8
Hexabromobiphenyl	513946	521508	1.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.321	0.025	1873	31.1
Aroclor-1221	3	---			0.0	3	6.633	0.012	314	3.2
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	7.698	0.043	2193	6.0	3	---			0.0
Aroclor-1232	4	8.505	-0.076	11525	74.5	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	7.698	0.042	2193	3.1	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	8.505	-0.074	11525	35.2	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	---			0.0
Aroclor-1248	2	---			0.0	2	---			0.0
Aroclor-1248	3	---			0.0	3	---			0.0
Aroclor-1248	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	---			0.0
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	9.596	-0.072	31424	64.3	3	---			0.0
Aroclor-1254	4	---			0.0	4	---			0.0
Aroclor-1254	5	10.167	-0.010	18361	30.8	5	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	11.098	0.054	6994	12.7	1	---			0.0
Aroclor-1260	2	---			0.0	2	---			0.0
Aroclor-1260	3	11.706	-0.027	7806	5.1	3	---			0.0
Aroclor-1260	4	---			0.0	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	10.824	-0.005	16873	35.8	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	13.040	0.053	14031	18.6	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.709	0.009	6037	3.6	3	12.891	-0.001	659	0.7
Aroclor-1268	4	13.499	0.010	12396	2.3	4	13.710	0.001	1848	0.6
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.906 - 13.793) = 260205 Col1 Total PCB = 0.0 ppm*

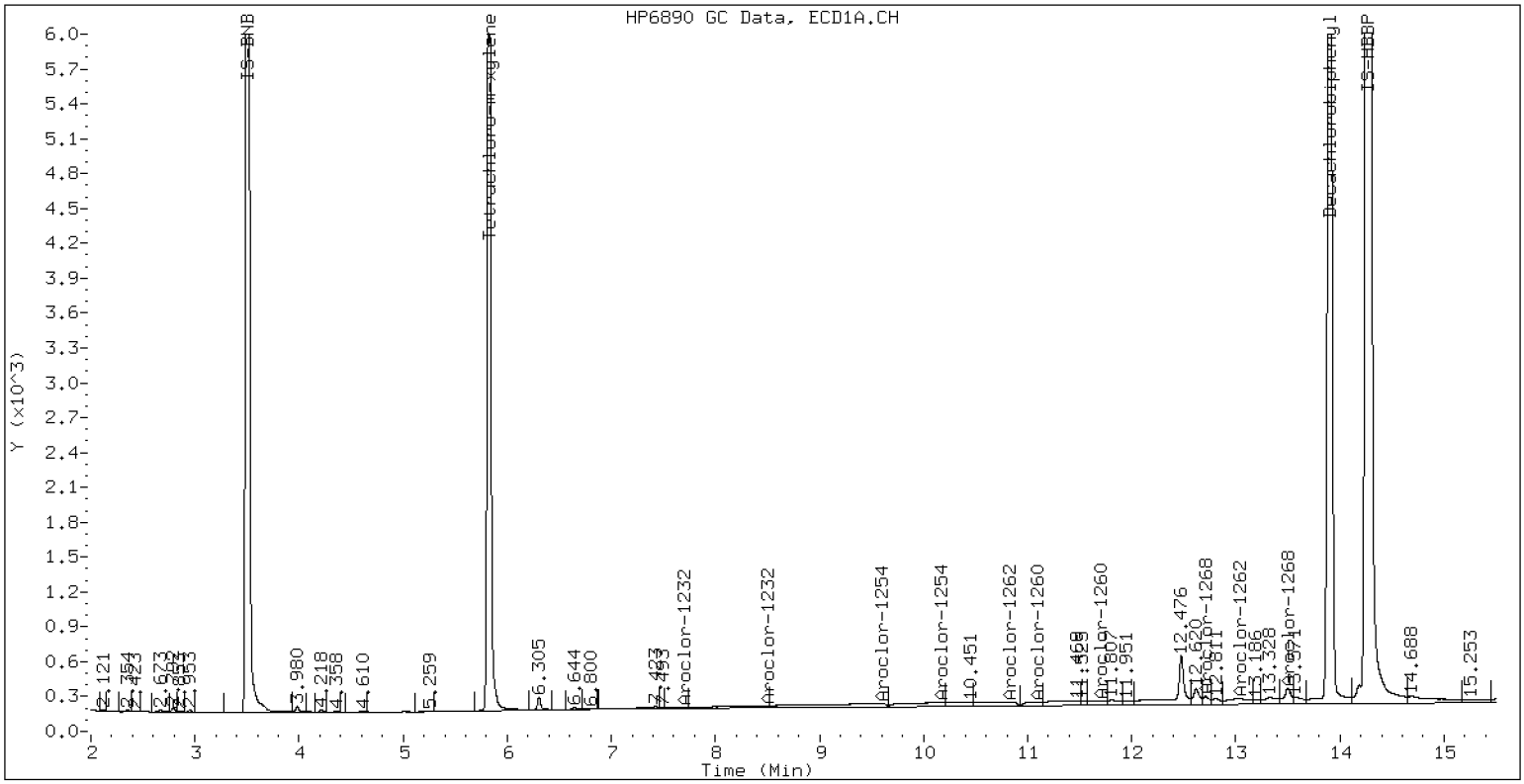
Total PCB Area Col2 (5.785 - 14.019) = 18252 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

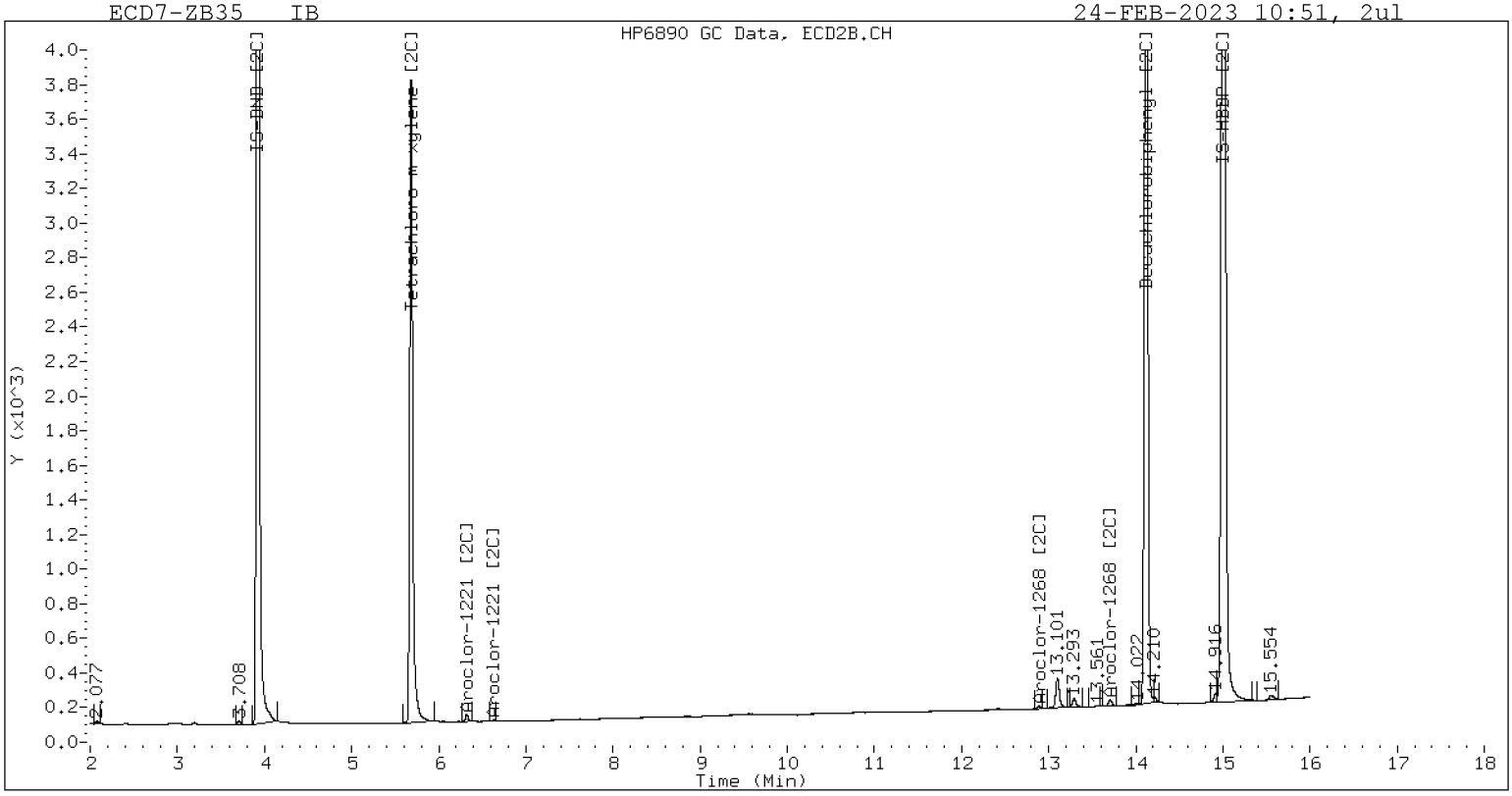
PCB Dual Column Chromatograms

ECD7-ZB5 IB 24-FEB-2023 10:51, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 IB 24-FEB-2023 10:51, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242302ECD7.D
Data file 2: /230224.b/230224.b/02242302ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 11:12
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.811	0.005	405980	5.687	0.002	192160	40.4	41.5	2.9	Tetrachloro-m-xylene
13.897	0.004	563414	14.120	0.001	336737	40.0	43.0	7.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	673778	0.0
Hexabromobiphenyl	1429847	1429847	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	315256	0.0
Hexabromobiphenyl	513946	513946	0.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.001	66125	258.4	1	7.255	-0.001	46626	252.6
Aroclor-1016	2	7.654	-0.000	207370	265.8	2	7.855	-0.001	101071	270.1
Aroclor-1016	3	7.792	0.002	92507	242.9	3	8.055	0.001	43448	257.1
Aroclor-1016	4	8.406	0.001	64388	261.5	4	8.306	-0.000	33986	256.3
Total Col1Ave (4 peaks):					257.2	Total Col2Ave (4 peaks):				259.0 RPD = 1
Corrected Ave (3 peaks):					254.3	Corrected Ave (3 peaks):				255.3 RPD = 0
CalAmt %D:					2.9	CalAmt %D:				3.6
Aroclor-1260	1	11.046	0.001	138355	269.0	1	11.653	0.001	77114	255.2
Aroclor-1260	2	11.363	0.002	147051	273.6	2	11.918	0.001	203401	263.7
Aroclor-1260	3	11.736	0.003	383171	268.8	3	12.435	-0.000	51517	251.7
Aroclor-1260	4	12.141	0.002	200399	279.2	4	12.502	0.001	134797	259.3
Aroclor-1260	5	12.247	0.003	83796	271.2	NS	---			----
Total Col1Ave (5 peaks):					272.4	Total Col2Ave (4 peaks):				257.5 RPD = 6
Corrected Ave (4 peaks):					270.7	Corrected Ave (3 peaks):				255.4 RPD = 6
CalAmt %D:					8.9	CalAmt %D:				3.0

Total PCB Area Col1 (5.906 - 13.793) = 4024419 Col1 Total PCB = 0.5 ppm*

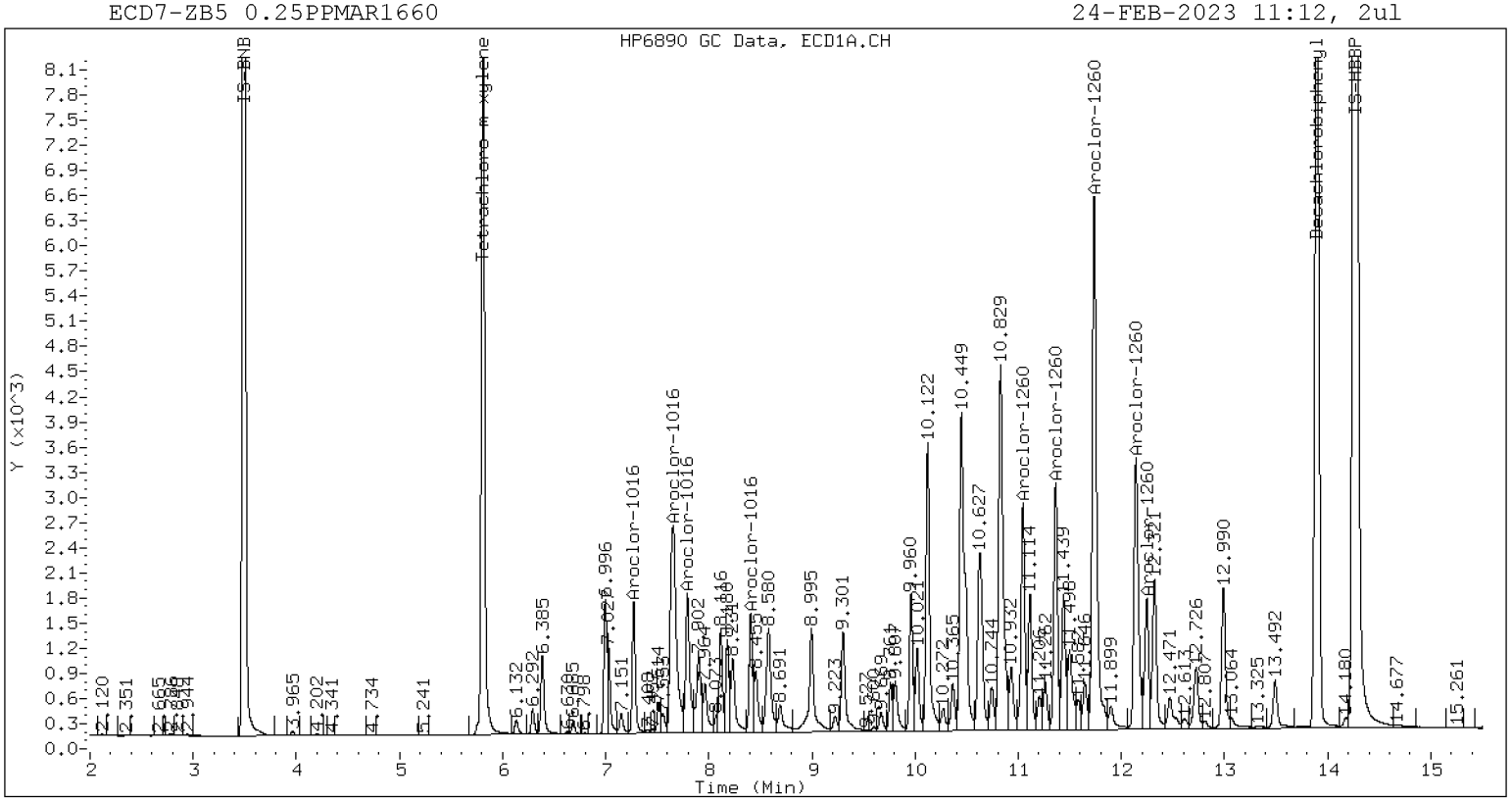
Total PCB Area Col2 (5.785 - 14.019) = 1889311 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

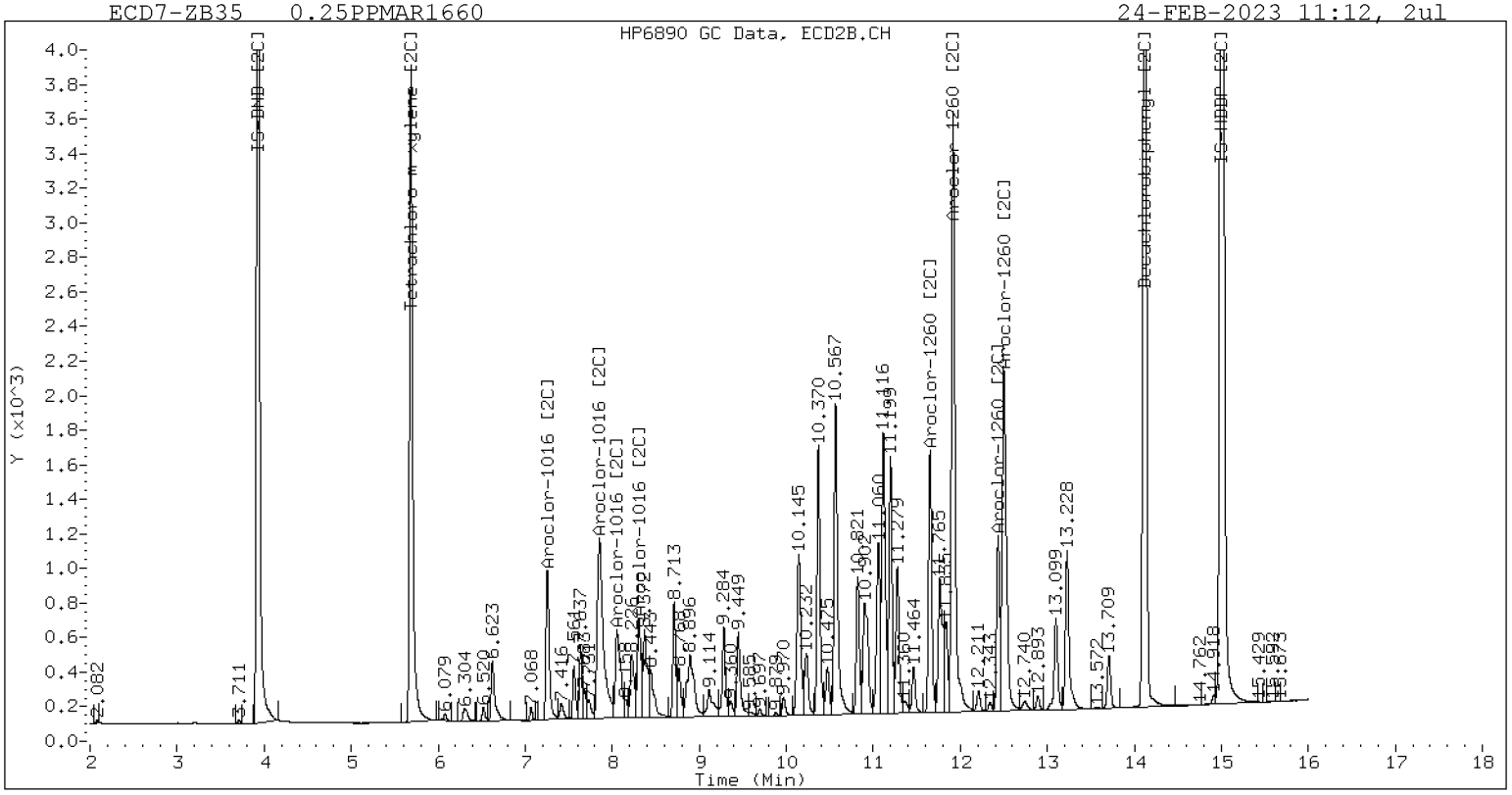
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1660 24-FEB-2023 11:12, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1660 24-FEB-2023 11:12, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242303ECD7.D
Data file 2: /230224.b/230224.b/02242303ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.02PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 11:33
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.002	29768	5.688	0.003	14932	3.1	3.3	5.7	Tetrachloro-m-xylene
13.893	0.000	45992	14.120	0.000	23950	3.4	3.1	9.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	637010	-5.5
Hexabromobiphenyl	1429847	1386953	-3.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	307177	-2.6
Hexabromobiphenyl	513946	511463	-0.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.001	5052	20.9	1	7.256	0.000	3894	21.7
Aroclor-1016	2	7.659	0.005	14714	19.9	2	7.864	0.008	6253	17.1
Aroclor-1016	3	7.795	0.005	8226	22.8	3	8.060	0.006	3076	18.7
Aroclor-1016	4	8.407	0.002	4780	20.5	4	8.309	0.002	2443	18.9
Total Col1Ave (4 peaks):					21.1	Total Col2Ave (4 peaks):				19.1 RPD = 10
Corrected Ave (3 peaks):					20.5	Corrected Ave (3 peaks):				18.2 RPD = 11
CalAmt %D:					5.3	CalAmt %D:				-4.5
Aroclor-1260	1	11.047	0.003	10147	20.3	1	11.656	0.003	6759	22.5
Aroclor-1260	2	11.364	0.003	10287	19.7	2	11.922	0.005	16592	21.6
Aroclor-1260	3	11.740	0.006	28043	20.3	3	12.438	0.002	4506	22.1
Aroclor-1260	4	12.145	0.006	13540	19.4	4	12.505	0.004	11037	21.3
Aroclor-1260	5	12.246	0.002	6182	20.6	NS	---			----
Total Col1Ave (5 peaks):					20.1	Total Col2Ave (4 peaks):				21.9 RPD = 9
Corrected Ave (4 peaks):					19.9	Corrected Ave (3 peaks):				21.7 RPD = 8
CalAmt %D:					0.4	CalAmt %D:				9.4

Total PCB Area Col1 (5.906 - 13.793) = 324832 Col1 Total PCB = 0.0 ppm*

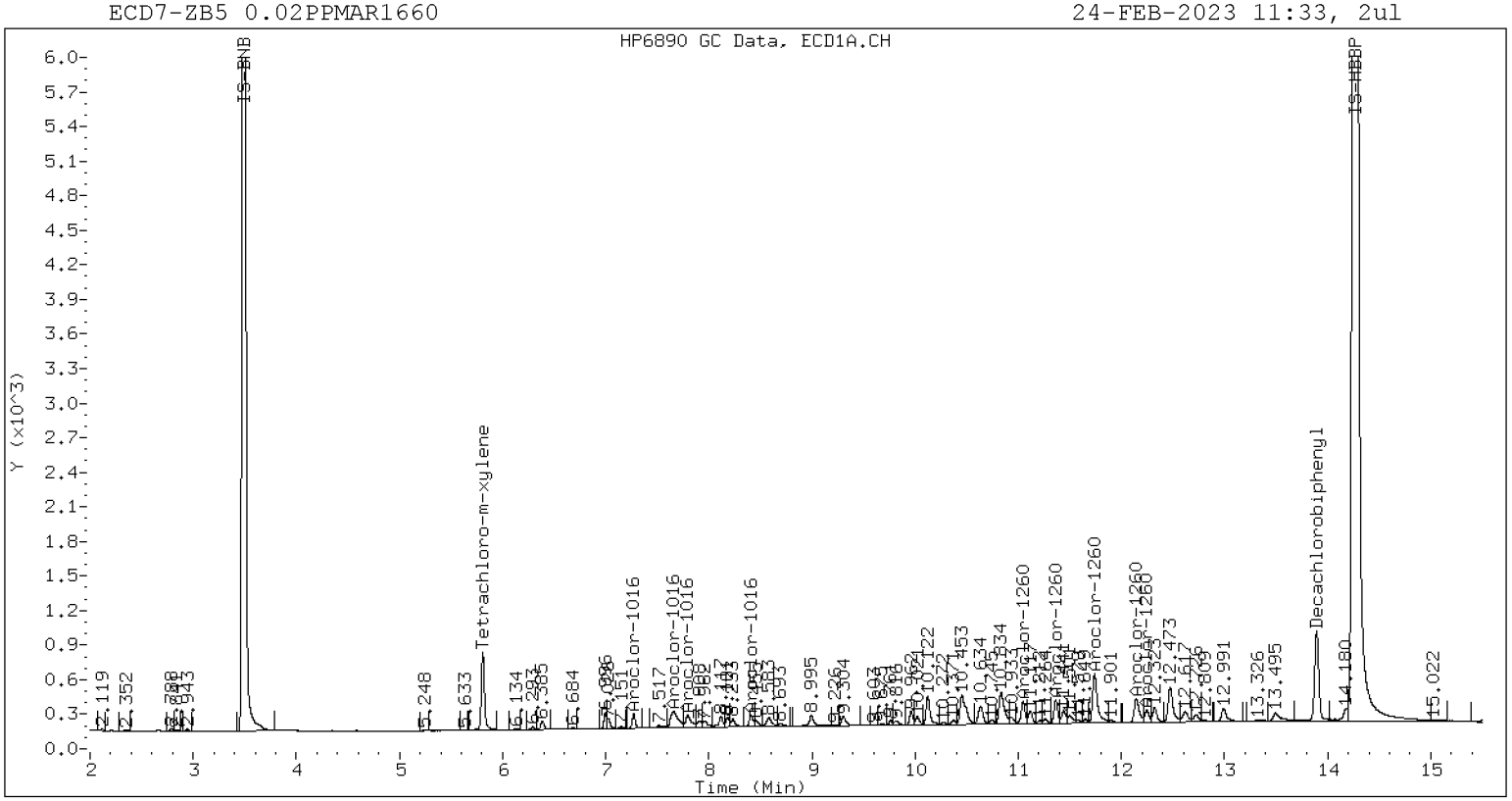
Total PCB Area Col2 (5.785 - 14.019) = 157149 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

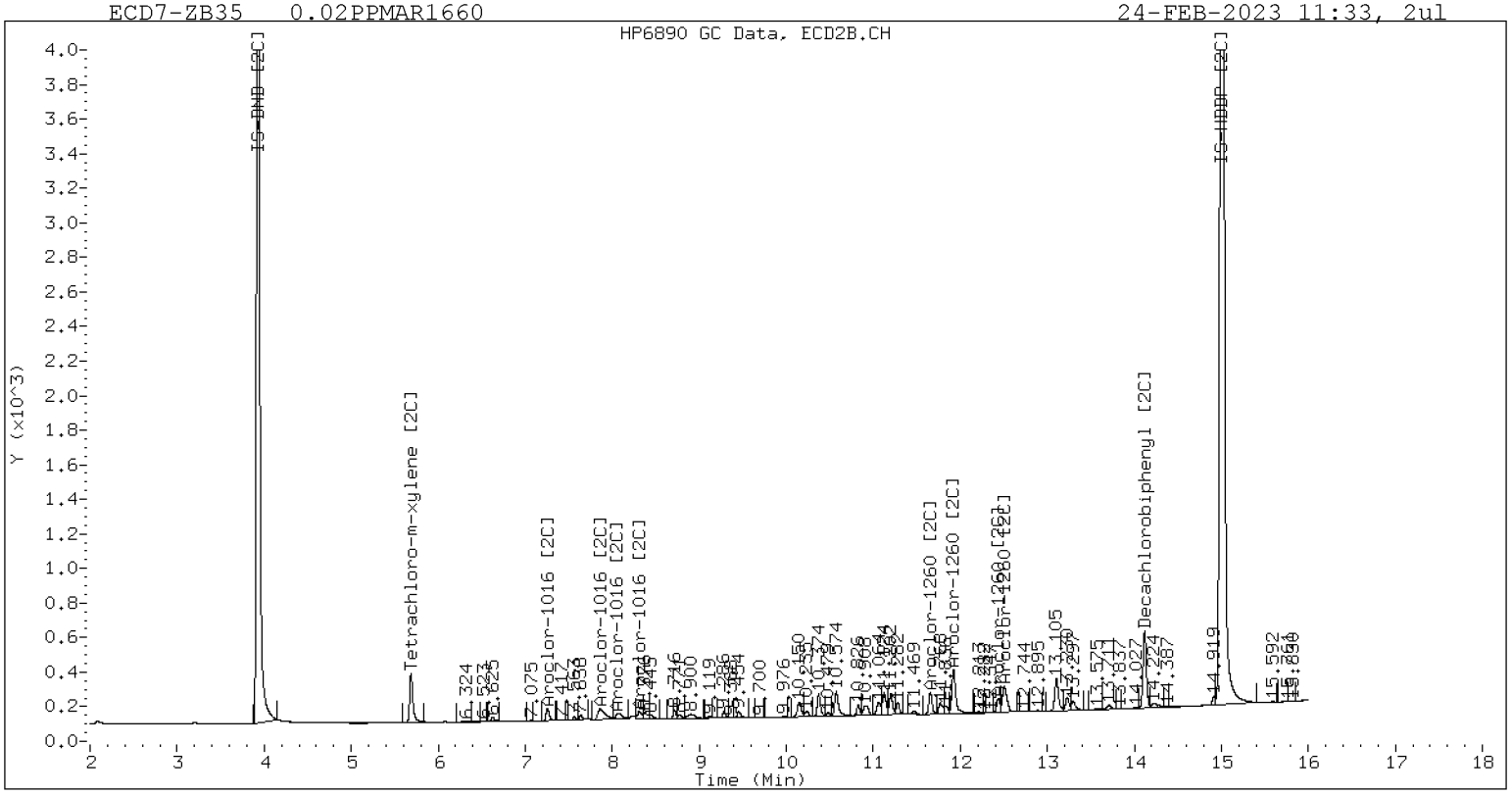
PCB Dual Column Chromatograms

ECD7-ZB5 0.02PPMAR1660 24-FEB-2023 11:33, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.02PPMAR1660 24-FEB-2023 11:33, 2ul

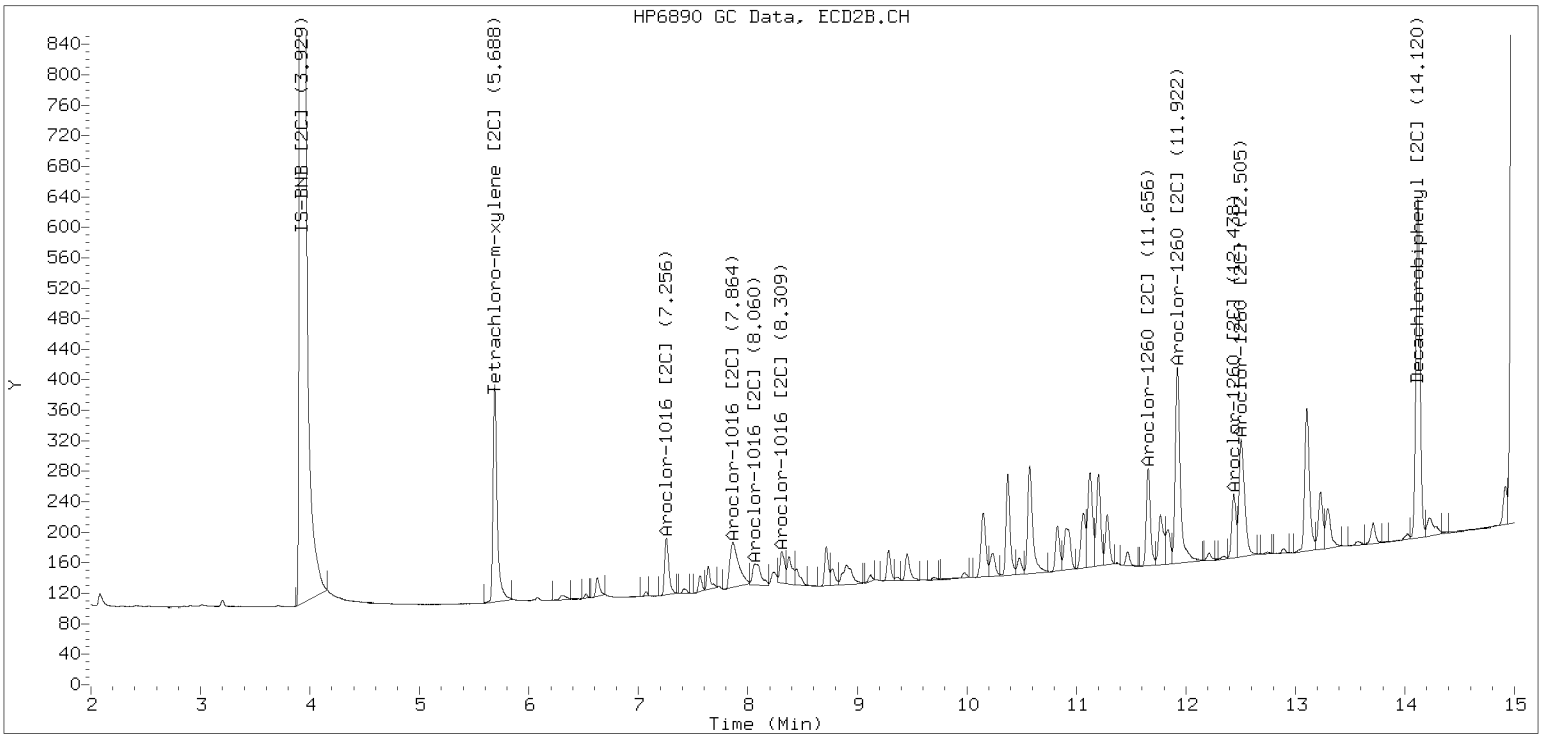


ZB-35 Manual Integration: YES

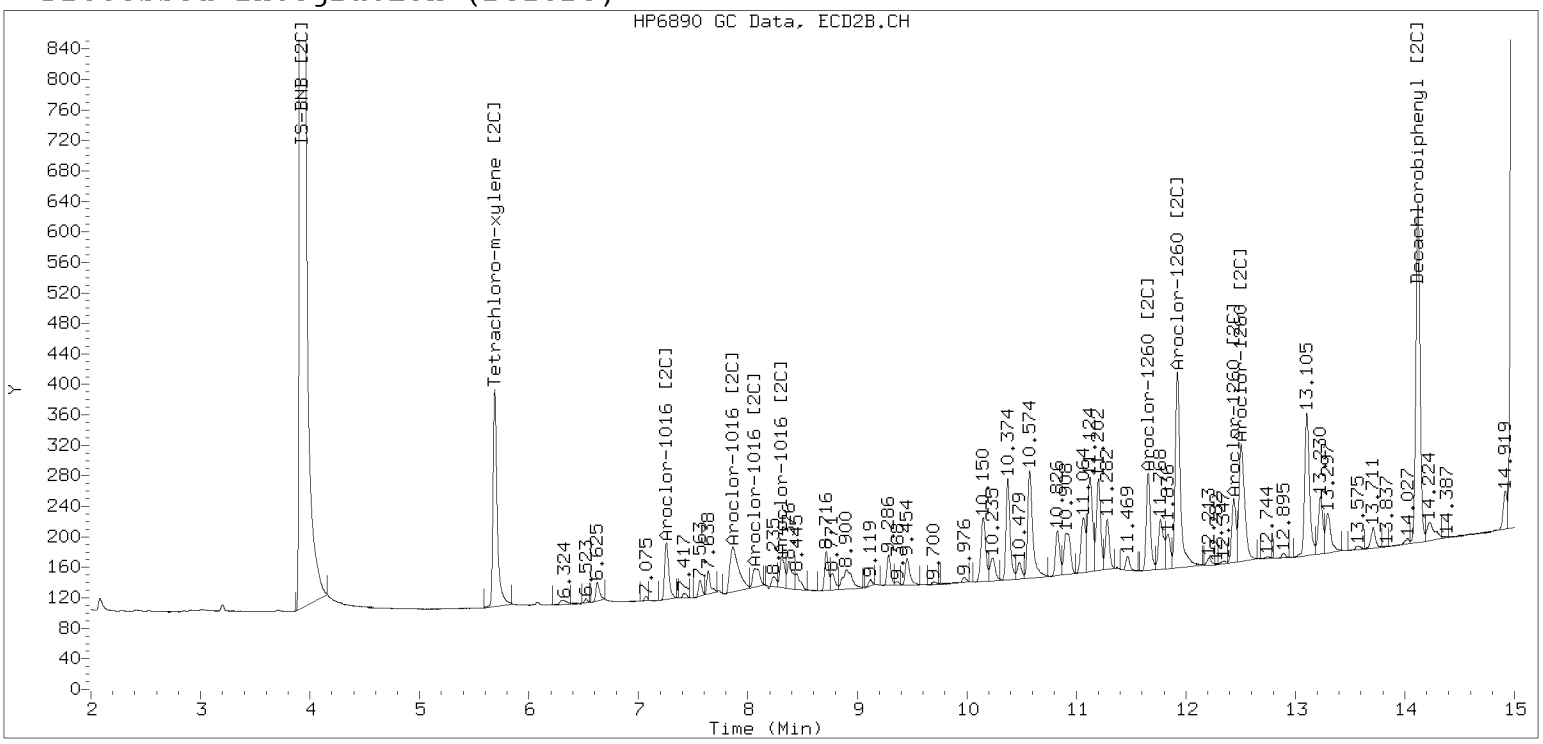
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230224.b/230224.b/02242303ECD7.D Injection Date: 24-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242304ECD7.D
Data file 2: /230224.b/230224.b/02242304ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.05PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 11:54
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.003	78493	5.688	0.003	36772	8.3	8.1	2.2	Tetrachloro-m-xylene
13.893	-0.000	113544	14.119	-0.000	62745	8.2	7.9	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	630965	-6.4
Hexabromobiphenyl	1429847	1409464	-1.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	307599	-2.4
Hexabromobiphenyl	513946	521112	1.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	12829	53.5	1	7.256	0.000	9654	53.6
Aroclor-1016	2	7.660	0.006	36461	49.9	2	7.864	0.008	18085	49.5
Aroclor-1016	3	7.795	0.005	19865	55.7	3	8.063	0.008	9071	55.0
Aroclor-1016	4	8.408	0.003	11411	49.5	4	8.310	0.003	7309	56.5
Total Col1Ave (4 peaks):					52.2	Total Col2Ave (4 peaks):				53.7 RPD = 3
Corrected Ave (3 peaks):					51.0	Corrected Ave (3 peaks):				52.7 RPD = 3
CalAmt %D:					4.3	CalAmt %D:				7.3
Aroclor-1260	1	11.046	0.002	25727	50.7	1	11.655	0.002	15996	52.2
Aroclor-1260	2	11.363	0.002	26482	50.0	2	11.922	0.004	40487	51.8
Aroclor-1260	3	11.739	0.005	70871	50.4	3	12.437	0.002	10248	49.4
Aroclor-1260	4	12.143	0.004	34239	48.4	4	12.506	0.004	26828	50.9
Aroclor-1260	5	12.246	0.002	15109	49.6	NS	---			----
Total Col1Ave (5 peaks):					49.8	Total Col2Ave (4 peaks):				51.1 RPD = 2
Corrected Ave (4 peaks):					49.6	Corrected Ave (3 peaks):				50.7 RPD = 2
CalAmt %D:					-0.3	CalAmt %D:				2.1

Total PCB Area Col1 (5.906 - 13.793) = 758292 Col1 Total PCB = 0.1 ppm*

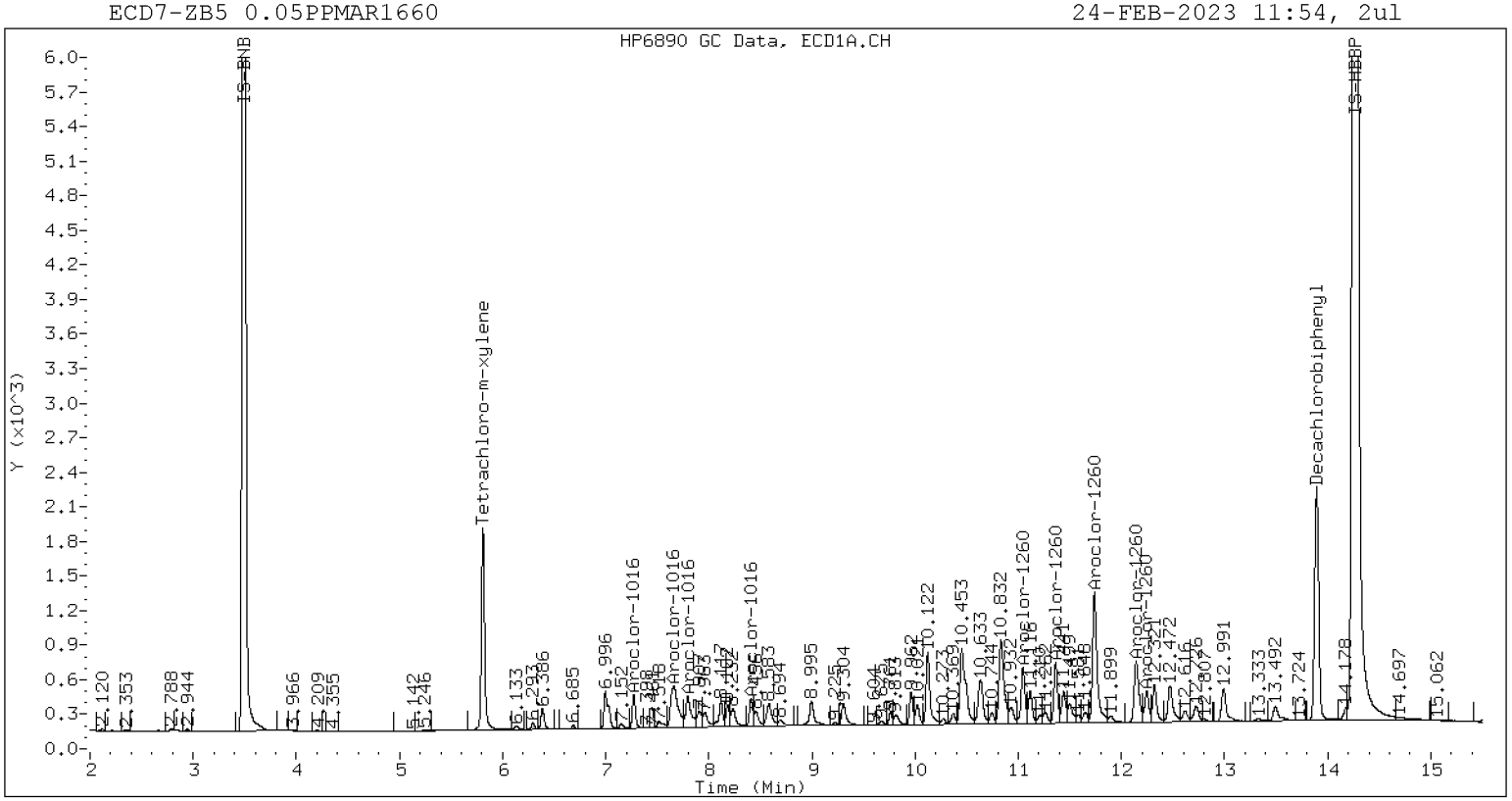
Total PCB Area Col2 (5.785 - 14.019) = 386383 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

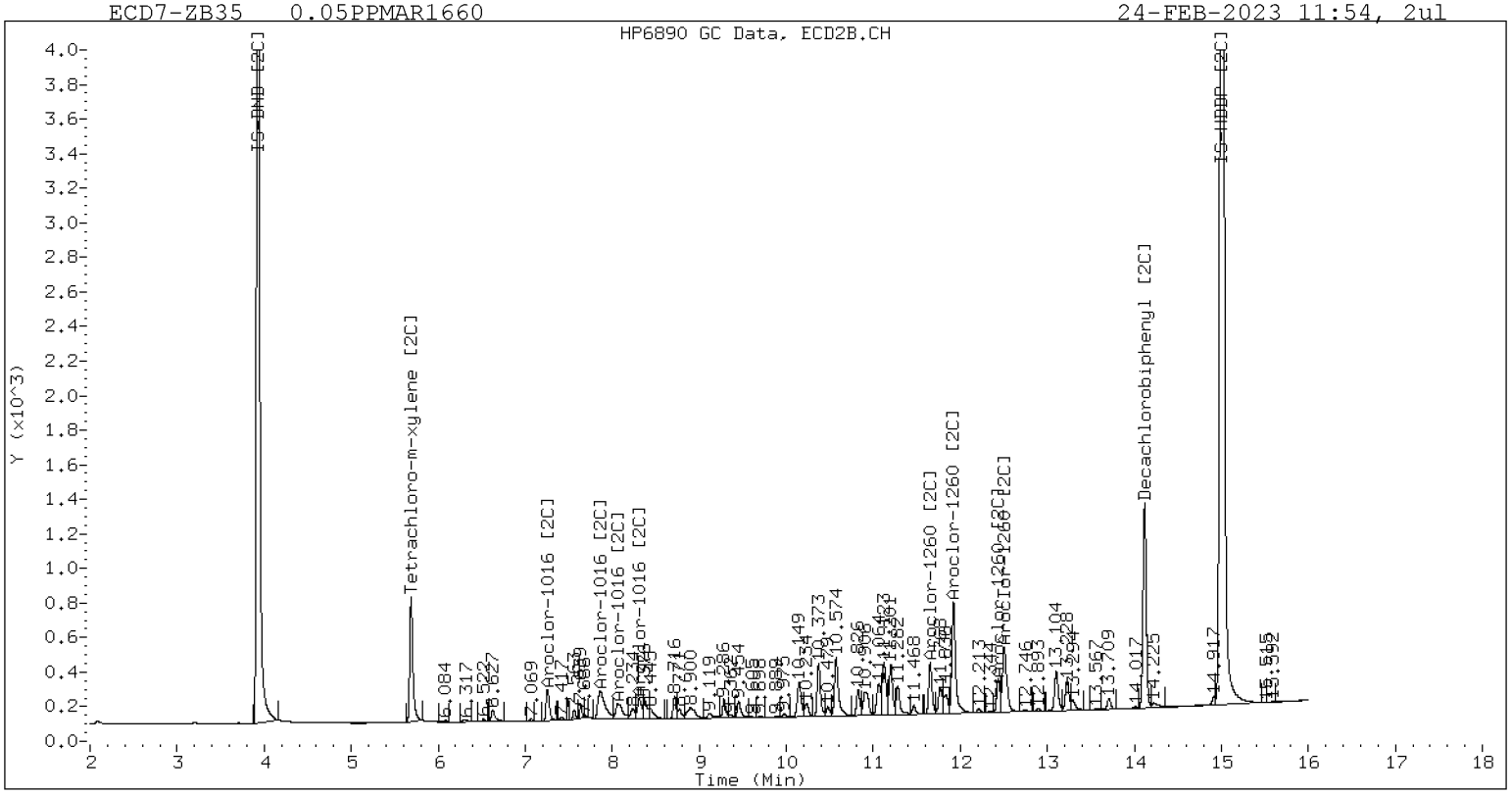
PCB Dual Column Chromatograms

ECD7-ZB5 0.05PPMAR1660 24-FEB-2023 11:54, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.05PPMAR1660 24-FEB-2023 11:54, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242305ECD7.D
Data file 2: /230224.b/230224.b/02242305ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 1.0PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 12:15
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.813	0.006	1641874	5.688	0.003	709674	166.2	151.5	9.3	Tetrachloro-m-xylene
13.899	0.006	2344583	14.122	0.002	1300114	161.9	158.6	2.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	661440	-1.8
Hexabromobiphenyl	1429847	1470100	2.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	319272	1.3
Hexabromobiphenyl	513946	538138	4.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1016	1	7.270	-0.000	220519	877.8	1	7.254	-0.001	162833	871.2
Aroclor-1016	2	7.652	-0.002	731607	955.3	2	7.852	-0.004	373610	985.8
Aroclor-1016	3	7.789	-0.001	307629	822.8	3	8.051	-0.003	156666	915.2
Aroclor-1016	4	8.404	-0.001	229387	949.1	4	8.305	-0.002	117186	872.6
Total Col1Ave (4 peaks):					901.3	Total Col2Ave (4 peaks):				911.2 RPD = 1
Corrected Ave (3 peaks):					883.3	Corrected Ave (3 peaks):				886.3 RPD = 0
CalAmt %D:					-9.9	CalAmt %D:				-8.9
Aroclor-1260	1	11.044	-0.000	504641	954.2	1	11.652	-0.000	282606	893.1
Aroclor-1260	2	11.360	-0.001	524931	950.0	2	11.917	-0.000	709329	878.4
Aroclor-1260	3	11.734	-0.000	1410270	962.3	3	12.434	-0.001	215124	1003.8
Aroclor-1260	4	12.137	-0.002	720770	976.7	4	12.501	-0.001	506566	930.6
Aroclor-1260	5	12.243	-0.001	304211	957.7	NS	---			----
Total Col1Ave (5 peaks):					960.2	Total Col2Ave (4 peaks):				926.5 RPD = 4
Corrected Ave (4 peaks):					956.0	Corrected Ave (3 peaks):				900.7 RPD = 6
CalAmt %D:					-4.0	CalAmt %D:				-7.4

Total PCB Area Col1 (5.906 - 13.793) = 14454279 Col1 Total PCB = 1.8 ppm*

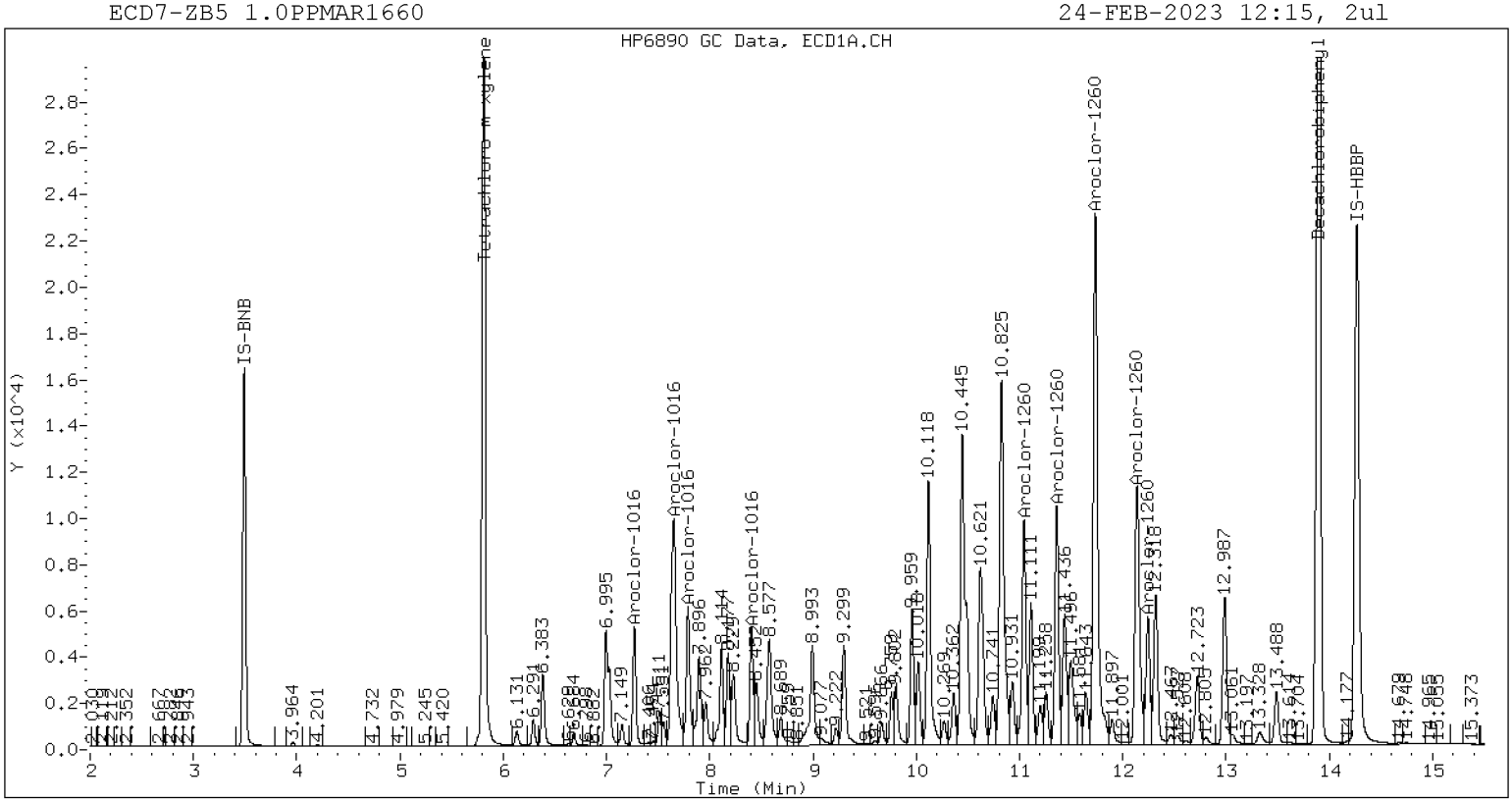
Total PCB Area Col2 (5.785 - 14.019) = 7029563 Col2 Total PCB = 1.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

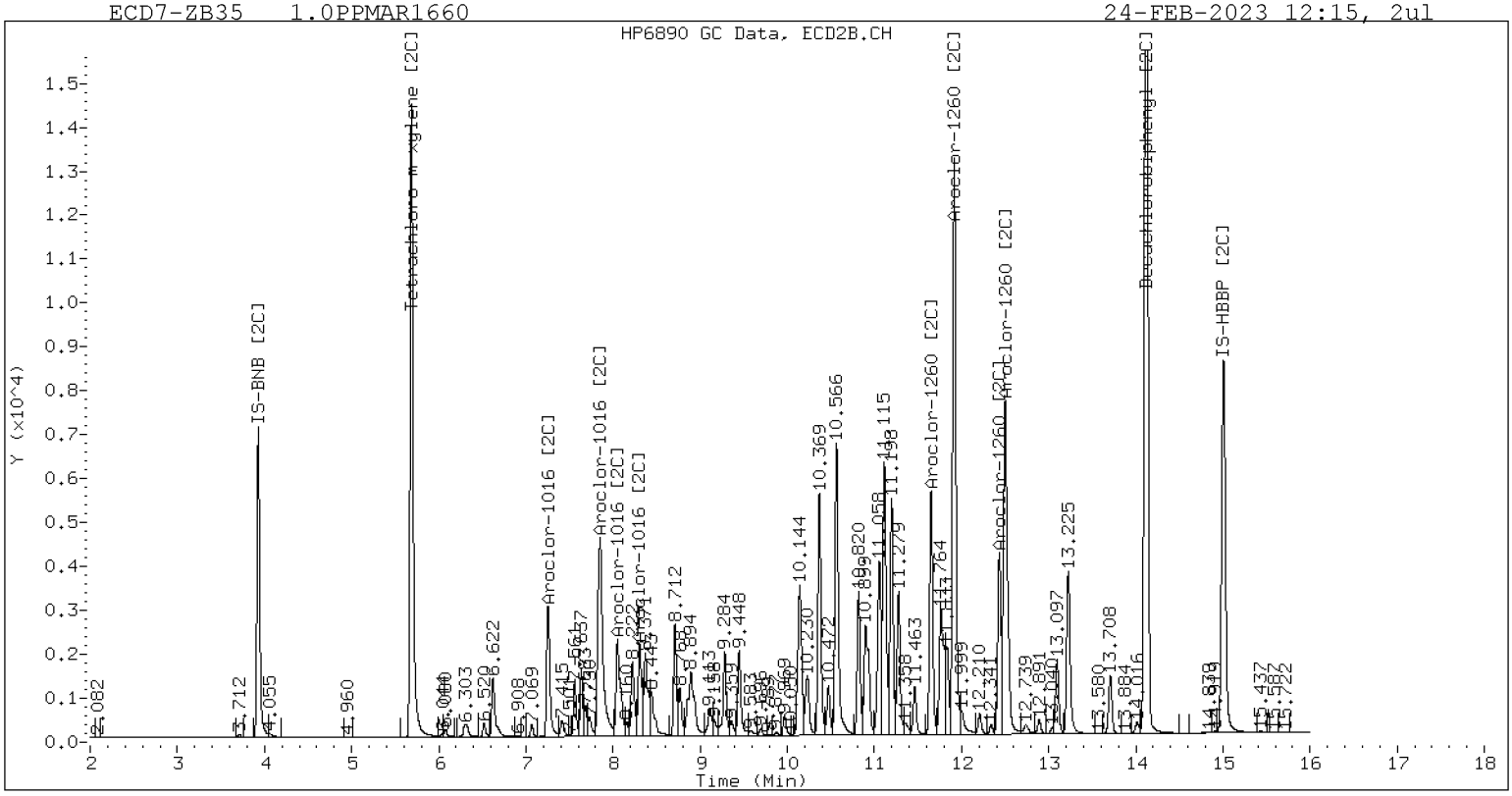
PCB Dual Column Chromatograms

ECD7-ZB5 1.0PPMAR1660 24-FEB-2023 12:15, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 1.0PPMAR1660 24-FEB-2023 12:15, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242306ECD7.D
Data file 2: /230224.b/230224.b/02242306ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.1PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 12:36
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.002	155528	5.688	0.003	74628	15.9	16.0	0.9	Tetrachloro-m-xylene
13.892	-0.001	227253	14.119	-0.000	128496	15.8	15.8	0.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	655979	-2.6
Hexabromobiphenyl	1429847	1464509	2.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317418	0.7
Hexabromobiphenyl	513946	532962	3.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.000	25761	103.4	1	7.255	-0.000	19315	103.9
Aroclor-1016	2	7.657	0.003	75616	99.6	2	7.863	0.007	40308	107.0
Aroclor-1016	3	7.794	0.004	39547	106.7	3	8.059	0.005	18304	107.6
Aroclor-1016	4	8.406	0.001	24260	101.2	4	8.309	0.002	14708	110.2
Total Col1Ave (4 peaks):					102.7	Total Col2Ave (4 peaks):				107.2 RPD = 4
Corrected Ave (3 peaks):					101.4	Corrected Ave (3 peaks):				106.2 RPD = 5
CalAmt %D:					2.7	CalAmt %D:				7.2
Aroclor-1260	1	11.045	0.000	52009	98.7	1	11.655	0.002	31282	99.8
Aroclor-1260	2	11.362	0.001	55116	100.1	2	11.920	0.003	80574	100.7
Aroclor-1260	3	11.738	0.004	145604	99.7	3	12.437	0.002	19566	92.2
Aroclor-1260	4	12.141	0.002	72408	98.5	4	12.503	0.001	53588	99.4
Aroclor-1260	5	12.245	0.001	30745	97.2	NS	---			----
Total Col1Ave (5 peaks):					98.8	Total Col2Ave (4 peaks):				98.0 RPD = 1
Corrected Ave (4 peaks):					98.5	Corrected Ave (3 peaks):				97.1 RPD = 1
CalAmt %D:					-1.2	CalAmt %D:				-2.0

Total PCB Area Col1 (5.906 - 13.793) = 1555762 Col1 Total PCB = 0.2 ppm*

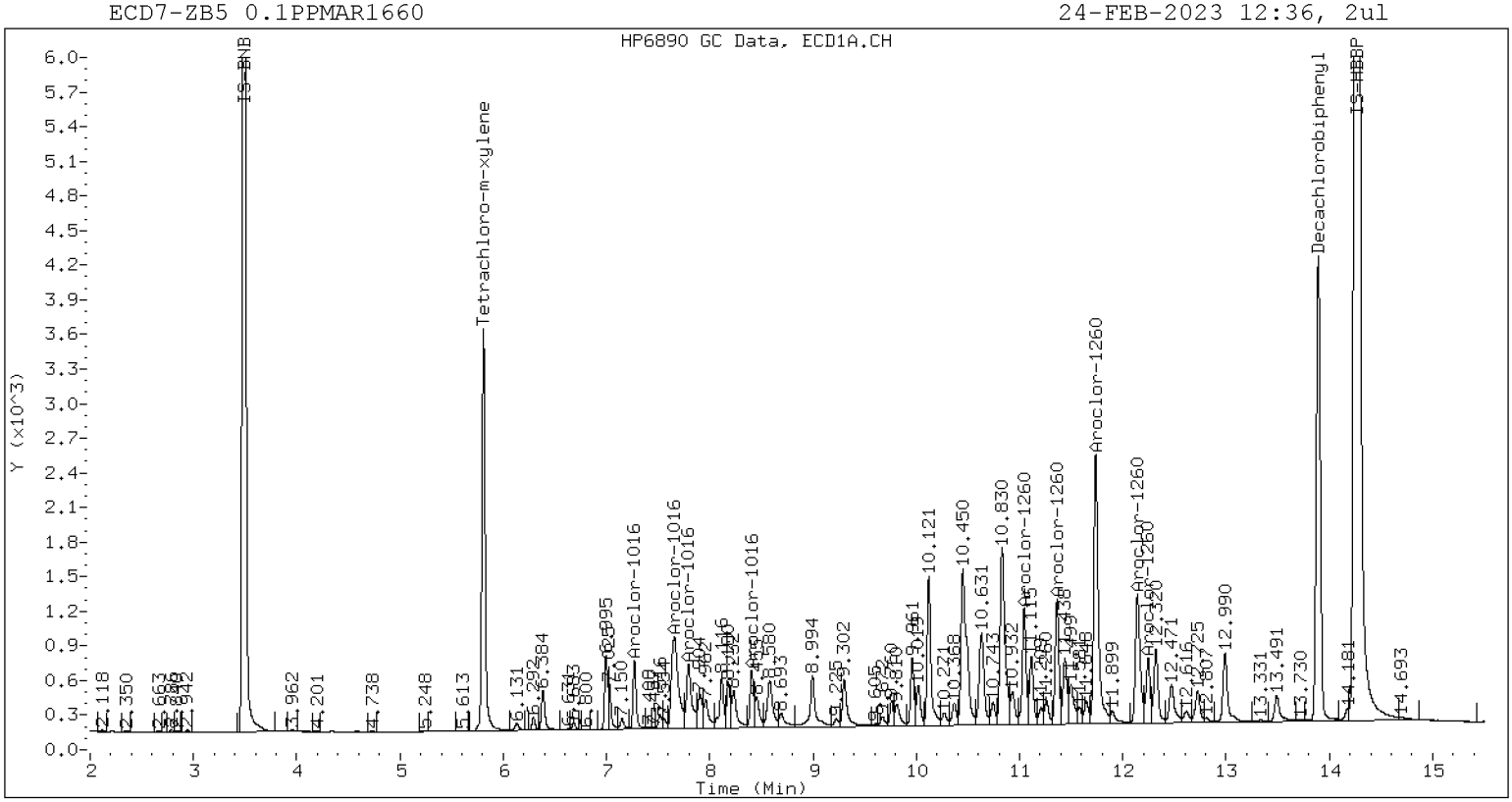
Total PCB Area Col2 (5.785 - 14.019) = 764924 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

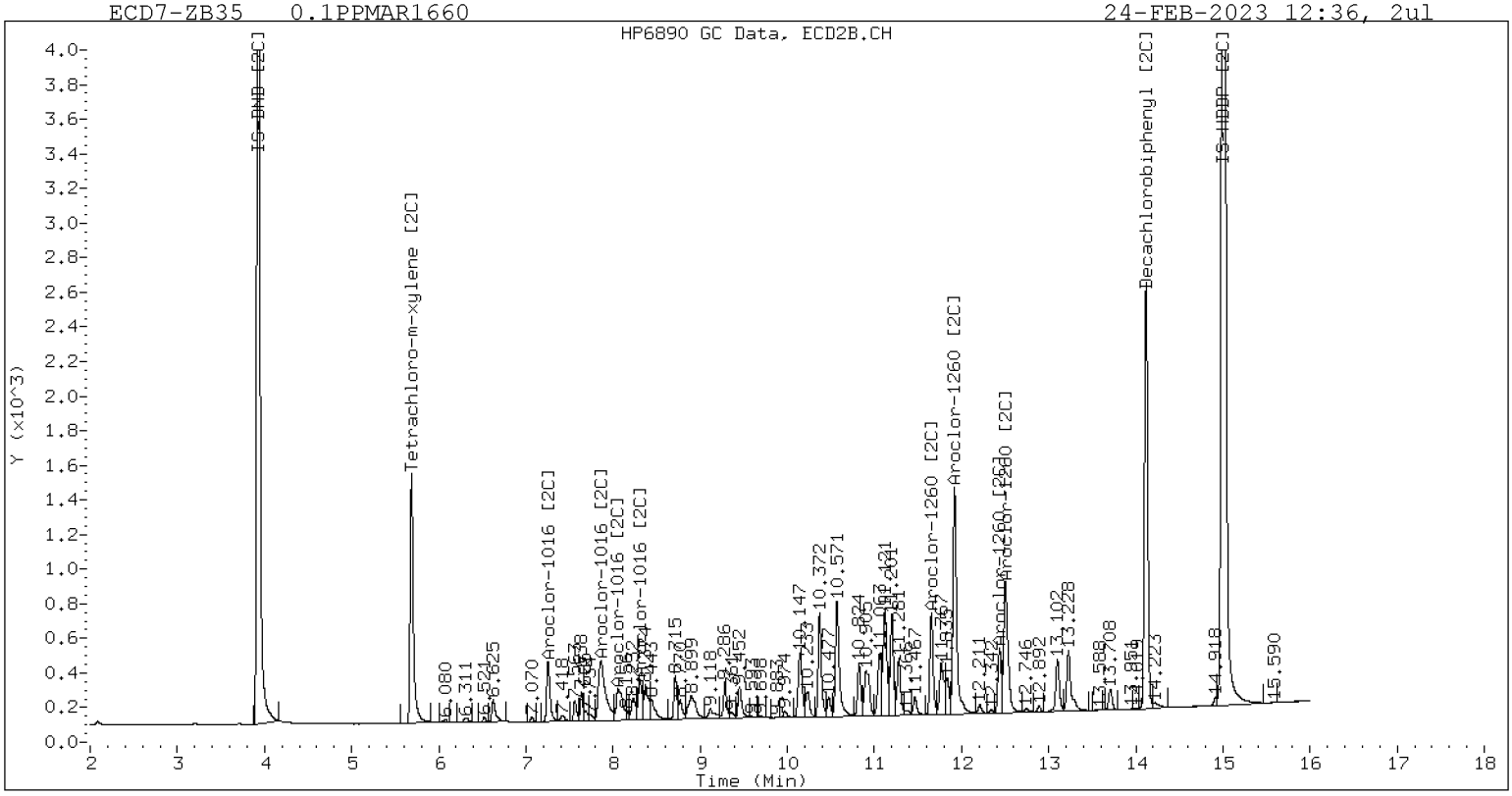
PCB Dual Column Chromatograms

ECD7-ZB5 0.1PPMAR1660 24-FEB-2023 12:36, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.1PPMAR1660 24-FEB-2023 12:36, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242307ECD7.D
Data file 2: /230224.b/230224.b/02242307ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.5PPMAR1660
Client ID:
Injection Date: 24-FEB-2023 12:57
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.810	0.004	724614	5.688	0.003	359257	75.2	76.7	2.0	Tetrachloro-m-xylene
13.898	0.005	1056911	14.120	0.000	650153	74.3	79.5	6.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	645275	-4.2
Hexabromobiphenyl	1429847	1445345	1.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	319170	1.2
Hexabromobiphenyl	513946	536853	4.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	0.000	115193	470.0	1	7.256	0.000	86287	461.8
Aroclor-1016	2	7.654	0.000	369991	495.2	2	7.856	0.000	192524	508.1
Aroclor-1016	3	7.790	0.000	160952	441.3	3	8.055	0.000	81039	473.6
Aroclor-1016	4	8.405	0.000	115032	487.9	4	8.307	0.000	62136	462.8
Total Col1Ave (4 peaks):					473.6	Total Col2Ave (4 peaks):				476.6 RPD = 1
Corrected Ave (3 peaks):					466.4	Corrected Ave (3 peaks):				466.1 RPD = 0
			CalAmt %D:		-5.3			CalAmt %D:		-4.7
Aroclor-1260	1	11.044	0.000	247212	475.5	1	11.653	0.000	145247	460.1
Aroclor-1260	2	11.361	0.000	262877	483.9	2	11.918	0.000	379838	471.5
Aroclor-1260	3	11.734	0.000	678830	471.1	3	12.436	0.000	104092	486.9
Aroclor-1260	4	12.139	0.000	356067	490.7	4	12.502	0.000	258953	476.9
Aroclor-1260	5	12.244	0.000	150280	481.2	NS	---			----
Total Col1Ave (5 peaks):					480.5	Total Col2Ave (4 peaks):				473.8 RPD = 1
Corrected Ave (4 peaks):					477.9	Corrected Ave (3 peaks):				469.5 RPD = 2
			CalAmt %D:		-3.9			CalAmt %D:		-5.2

Total PCB Area Col1 (5.906 - 13.793) = 7134169 Col1 Total PCB = 0.9 ppm*

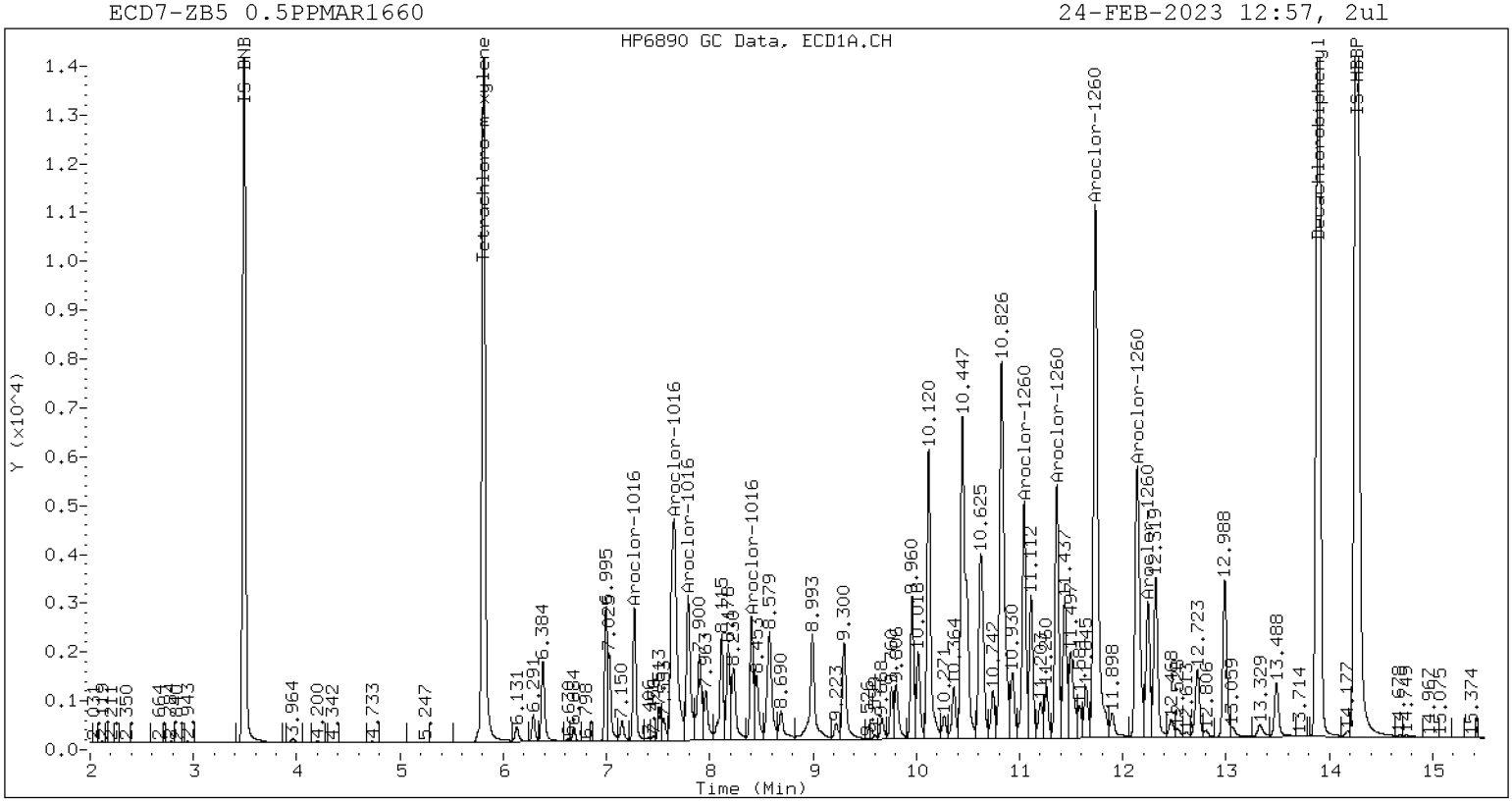
Total PCB Area Col2 (5.785 - 14.019) = 3589735 Col2 Total PCB = 0.9 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

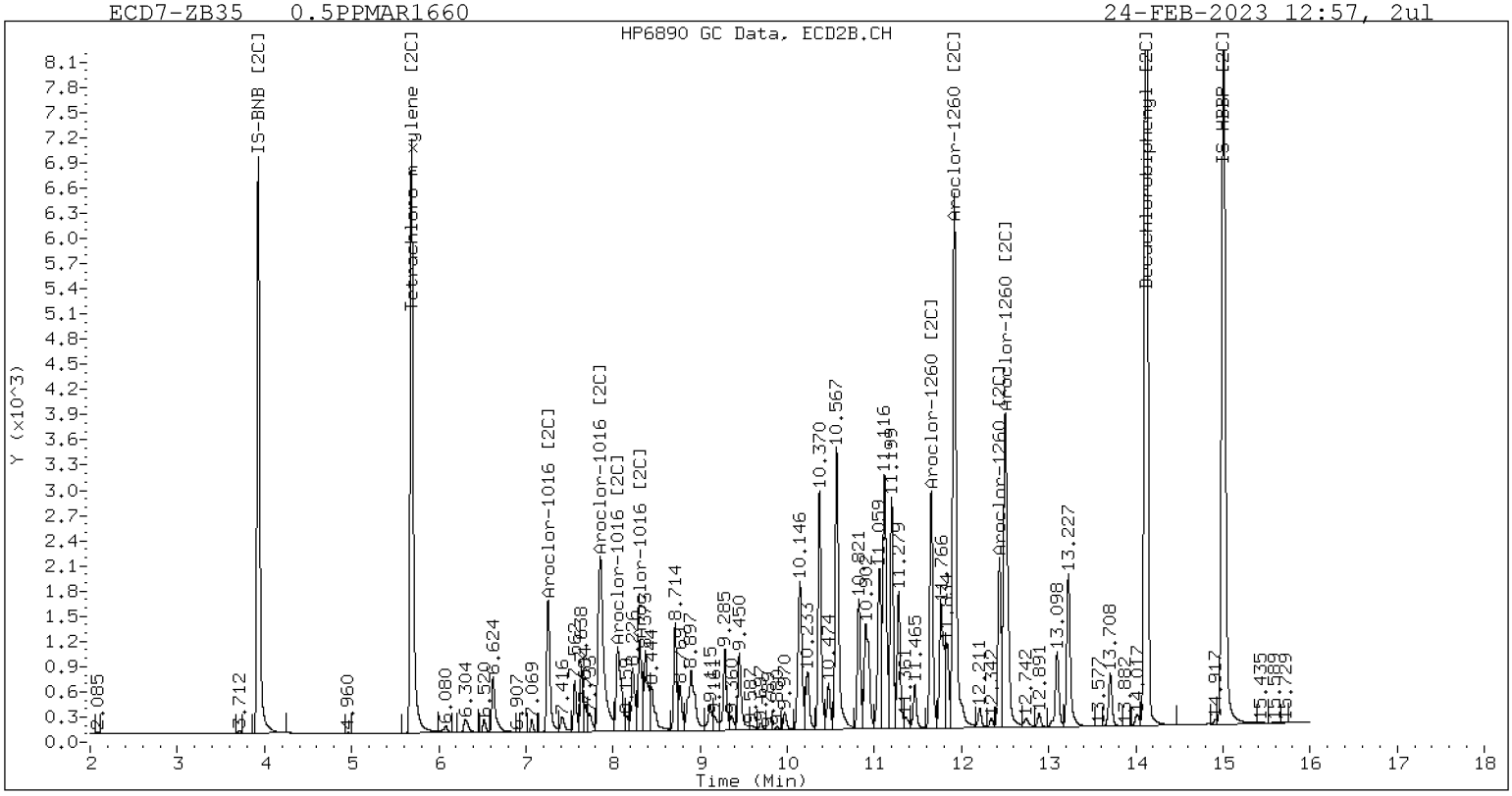
PCB Dual Column Chromatograms

ECD7-ZB5 0.5PPMAR1660 24-FEB-2023 12:57, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.5PPMAR1660 24-FEB-2023 12:57, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242308ECD7.D
Data file 2: /230224.b/230224.b/02242308ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1242
Client ID:
Injection Date: 24-FEB-2023 13:18
Report Date: 02/28/2023 09:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.003	434187	5.688	0.003	214306	46.0	46.5	1.1	Tetrachloro-m-xylene
13.894	0.000	515867	14.119	-0.001	312943	35.6	38.5	7.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	632576	-6.1
Hexabromobiphenyl	1429847	1469715	2.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	314129	-0.4
Hexabromobiphenyl	513946	534294	4.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	7.271	0.000	49009	250.0	1	7.255	0.000	36487	250.0
Aroclor-1242	2	7.656	0.000	148833	250.0	2	7.858	0.000	76699	250.0
Aroclor-1242	3	8.405	0.000	46308	250.0	3	9.167	0.000	23866	250.0
Aroclor-1242	4	8.579	0.000	68453	250.0	4	9.597	0.000	29080	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.906 - 13.793) = 1221467 Col1 Total PCB = 0.2 ppm*

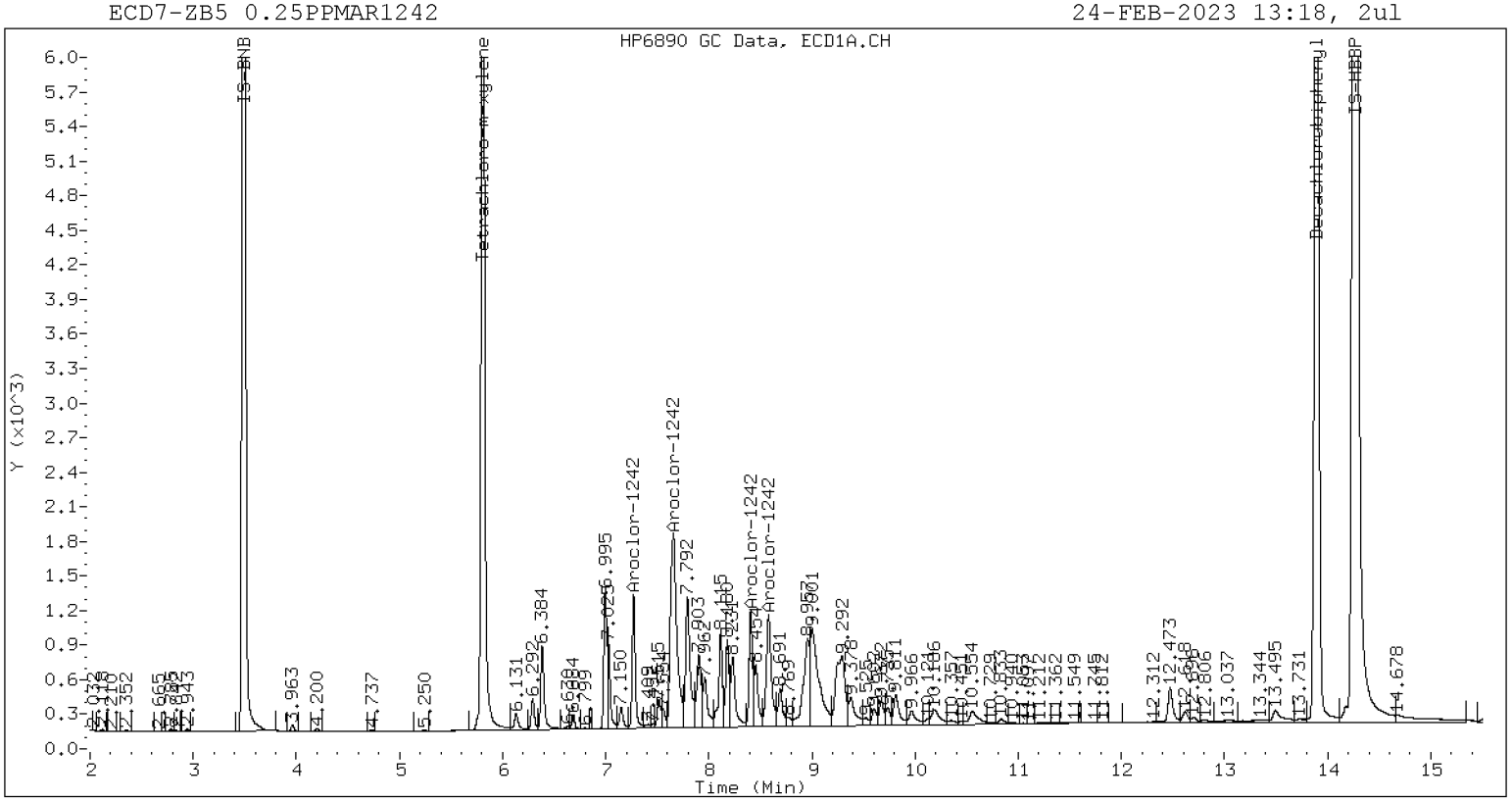
Total PCB Area Col2 (5.785 - 14.019) = 572067 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

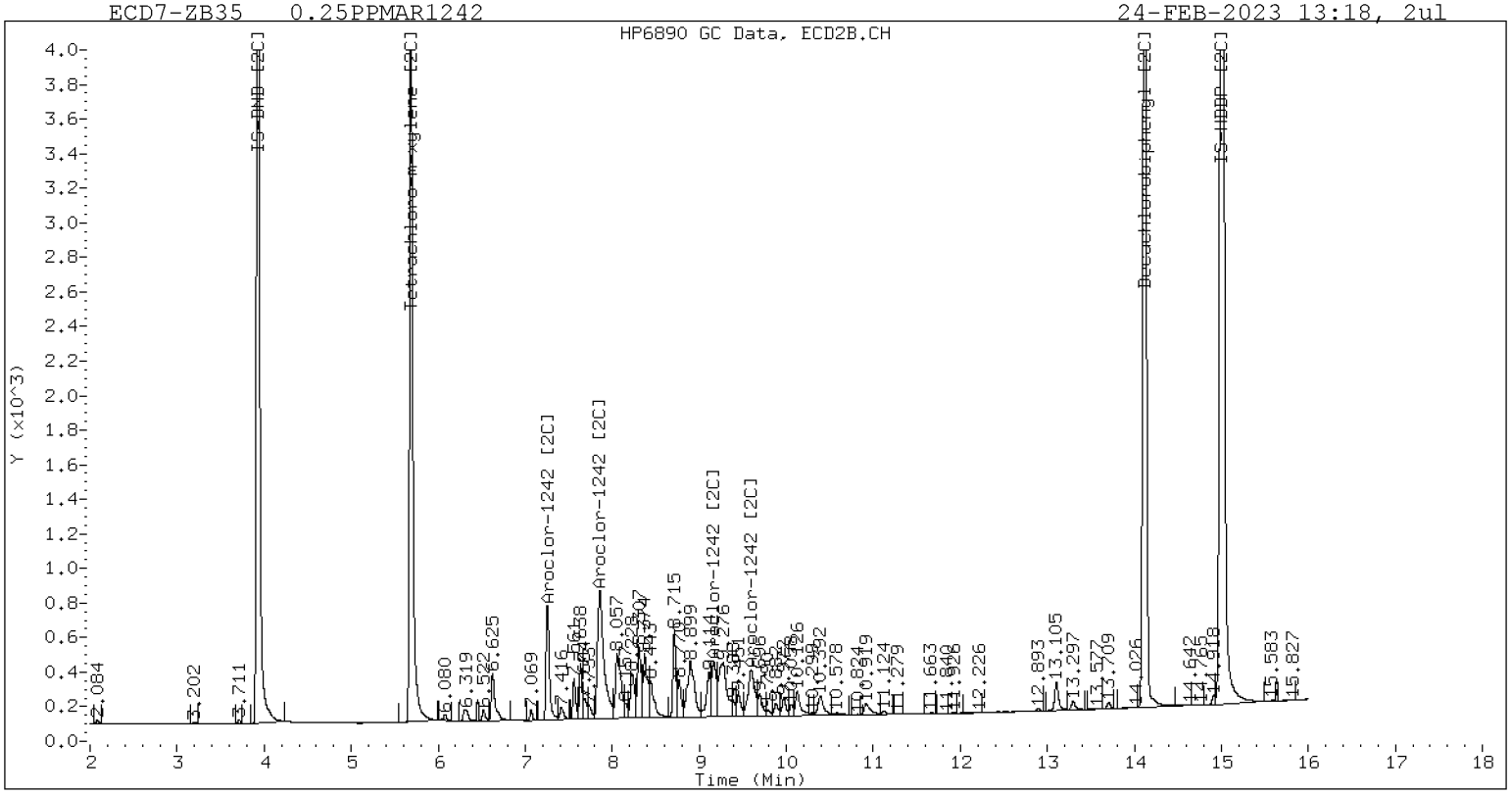
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1242 24-FEB-2023 13:18, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1242 24-FEB-2023 13:18, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242309ECD7.D
Data file 2: /230224.b/230224.b/02242309ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1248
Client ID:
Injection Date: 24-FEB-2023 13:39
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.003	349513	5.688	0.003	176615	36.6	37.9	3.4	Tetrachloro-m-xylene
13.894	0.001	523008	14.121	0.001	322054	36.4	39.3	7.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	639911	-5.0
Hexabromobiphenyl	1429847	1458696	2.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317938	0.9
Hexabromobiphenyl	513946	538760	4.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.405	0.000	78055	250.0	1	8.308	0.000	37951	250.0
Aroclor-1248	2	8.580	0.000	99216	250.0	2	8.714	0.000	39239	250.0
Aroclor-1248	3	8.999	0.000	187178	250.0	3	9.166	0.000	45157	250.0
Aroclor-1248	4	9.295	0.000	95291	250.0	4	9.590	0.000	54216	250.0

Total Col1Ave (4 peaks): 250.0 Total Col2Ave (4 peaks): 250.0 RPD = 0

Corrected Ave (3 peaks): 250.0 Corrected Ave (3 peaks): 250.0 RPD = 0

Total PCB Area Col1 (5.906 - 13.793) = 1565180 Col1 Total PCB = 0.2 ppm*

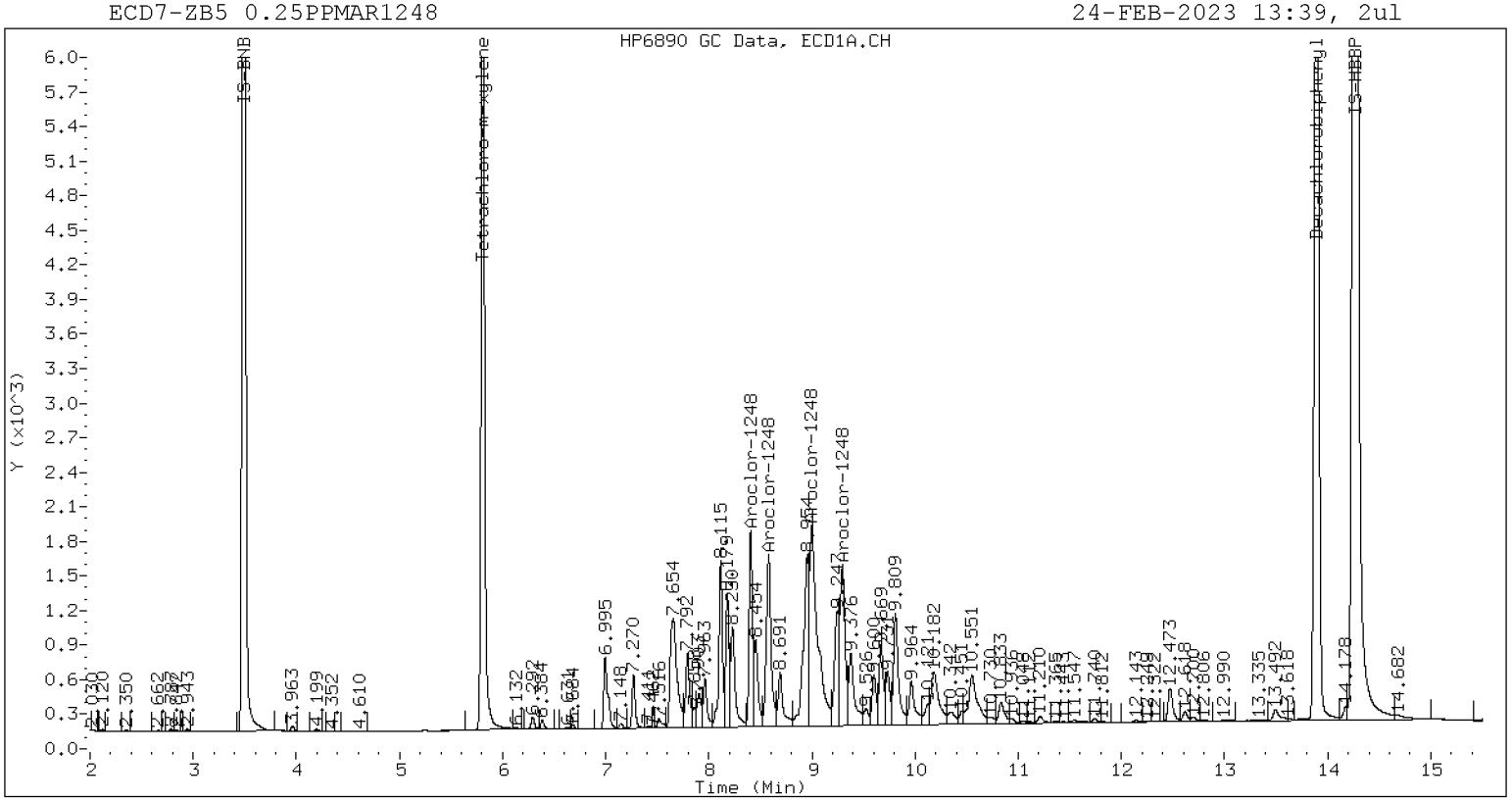
Total PCB Area Col2 (5.785 - 14.019) = 754991 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

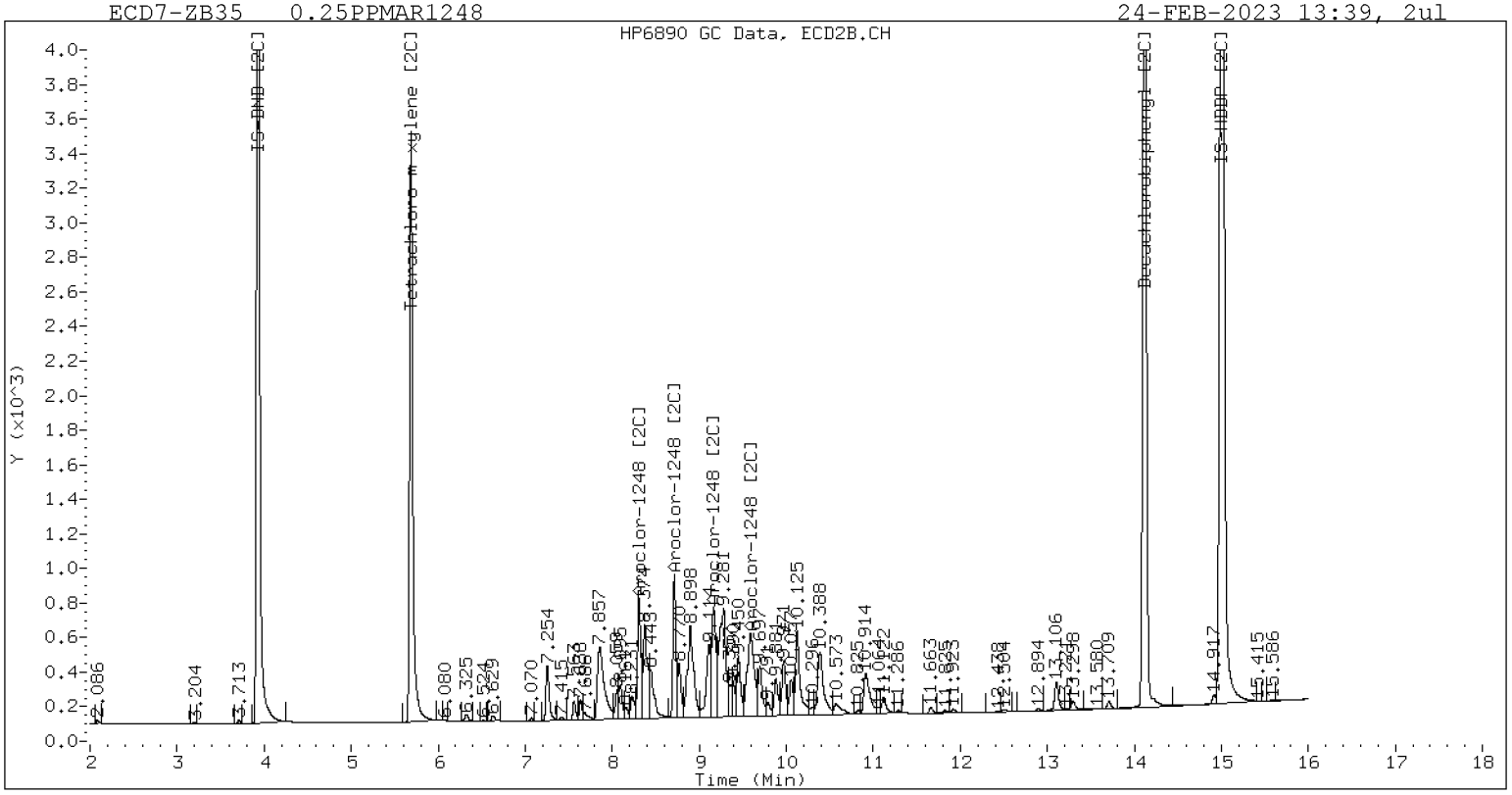
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1248 24-FEB-2023 13:39, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1248 24-FEB-2023 13:39, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242310ECD7.D
Data file 2: /230224.b/230224.b/02242310ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1254
Client ID:
Injection Date: 24-FEB-2023 14:00
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.002	352587	5.687	0.002	177502	37.3	38.6	3.4	Tetrachloro-m-xylene
13.895	0.002	532500	14.119	0.000	325903	37.0	40.2	8.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	633407	-6.0
Hexabromobiphenyl	1429847	1460265	2.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	313673	-0.5
Hexabromobiphenyl	513946	532442	3.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.299	0.000	159011	250.0	1	9.449	0.000	59603	250.0
Aroclor-1254	2	9.377	0.000	71516	250.0	2	9.970	0.000	47949	250.0
Aroclor-1254	3	9.668	0.000	102230	250.0	3	10.124	0.000	103745	250.0
Aroclor-1254	4	9.807	0.000	198777	250.0	4	10.373	0.000	101135	250.0
Aroclor-1254	5	10.176	0.000	124586	250.0	5	10.569	0.000	61577	250.0

Total Col1Ave (5 peaks): 250.0 Total Col2Ave (5 peaks): 250.0 RPD = 0

Corrected Ave (4 peaks): 250.0 Corrected Ave (4 peaks): 250.0 RPD = 0

Total PCB Area Col1 (5.906 - 13.793) = 2179224 Col1 Total PCB = 0.3 ppm*

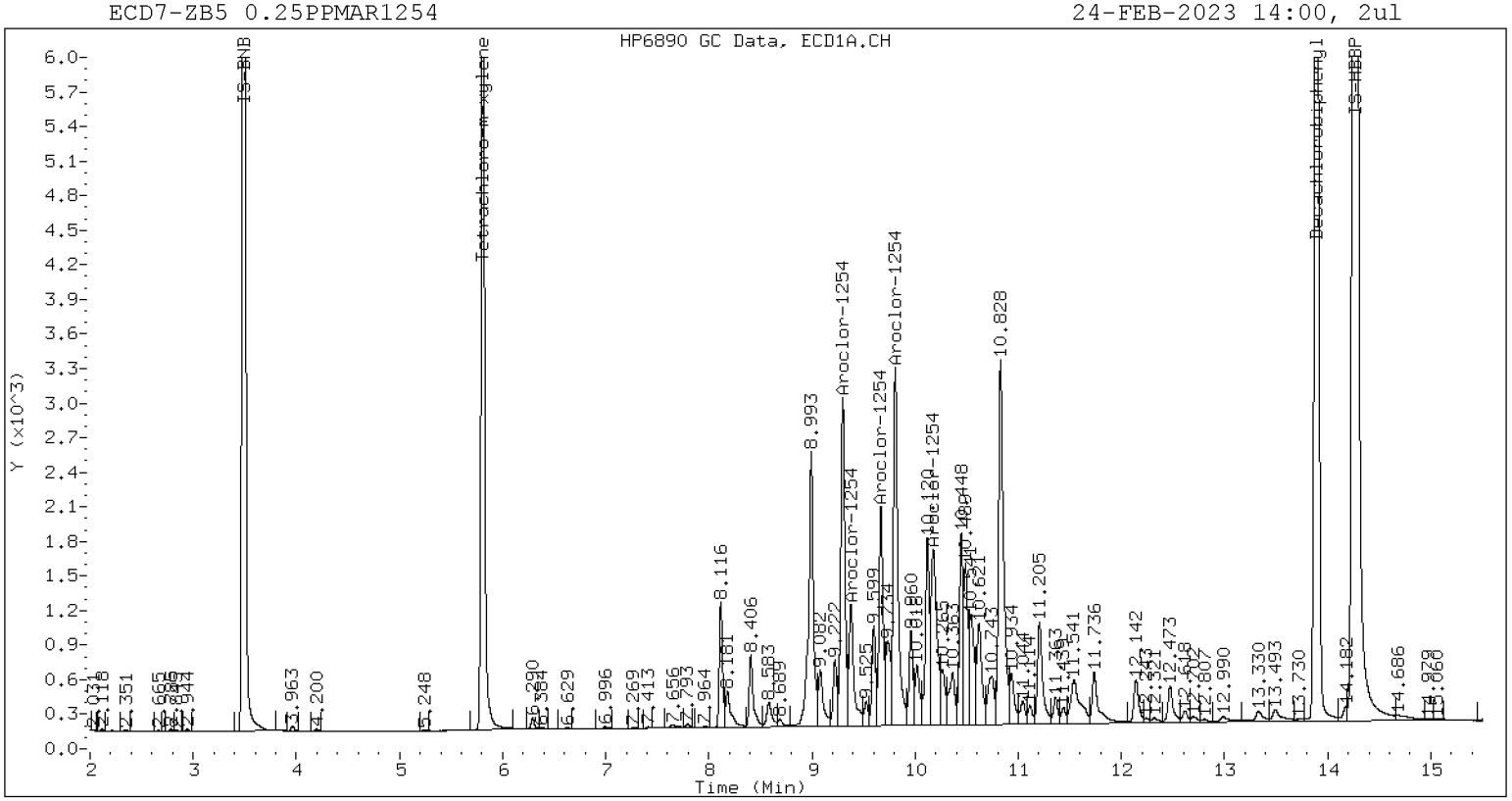
Total PCB Area Col2 (5.785 - 14.019) = 1022156 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

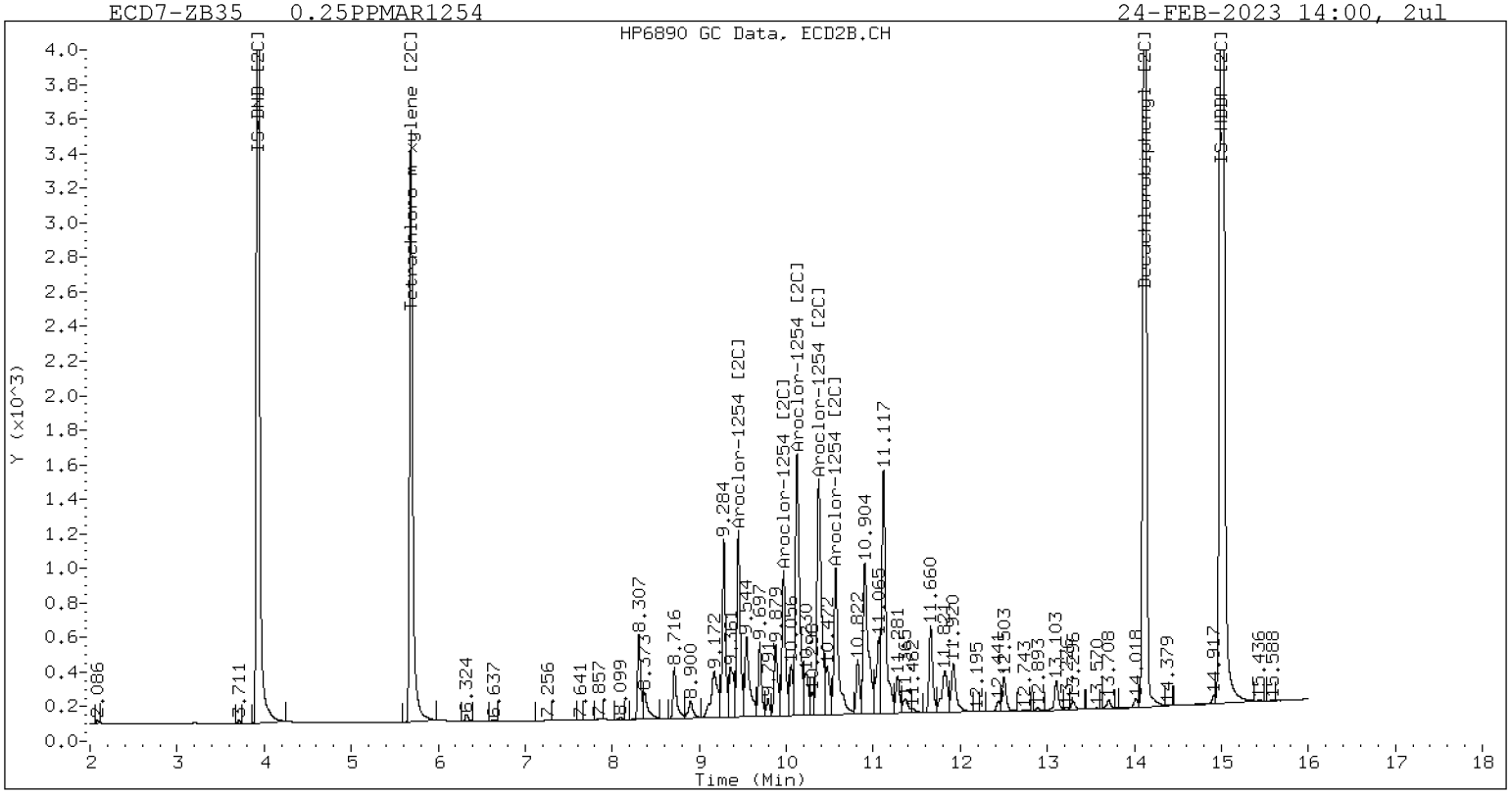
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1254 24-FEB-2023 14:00, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1254 24-FEB-2023 14:00, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242311ECD7.D
Data file 2: /230224.b/230224.b/02242311ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR2162.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR2162
Client ID:
Injection Date: 24-FEB-2023 14:21
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	0.001	362236	5.686	0.000	177349	38.4	39.2	2.1	Tetrachloro-m-xylene
13.894	0.001	523254	14.119	-0.000	321034	36.0	39.2	8.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	632433	-6.1
Hexabromobiphenyl	1429847	1474039	3.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	308453	-2.2
Hexabromobiphenyl	513946	538177	4.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1221	1	4.731	0.000	14160	250.0	1	4.956	0.000	7300	250.0
Aroclor-1221	2	6.132	0.000	25324	250.0	2	6.296	0.000	13816	250.0
Aroclor-1221	3	6.382	0.000	58795	250.0	3	6.622	0.000	22491	250.0
Total Col1Ave (3 peaks):					250.0	Total Col2Ave (3 peaks):				250.0 RPD = 0
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.829	0.000	113046	250.0	1	11.200	0.000	114880	250.0
Aroclor-1262	2	12.244	0.000	183948	250.0	2	11.652	0.000	97844	250.0
Aroclor-1262	3	12.319	0.000	197749	250.0	3	12.434	0.000	111015	250.0
Aroclor-1262	4	12.987	0.000	180727	250.0	4	12.502	0.000	173913	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.906 - 13.793) = 3105316 Col1 Total PCB = 0.4 ppm*

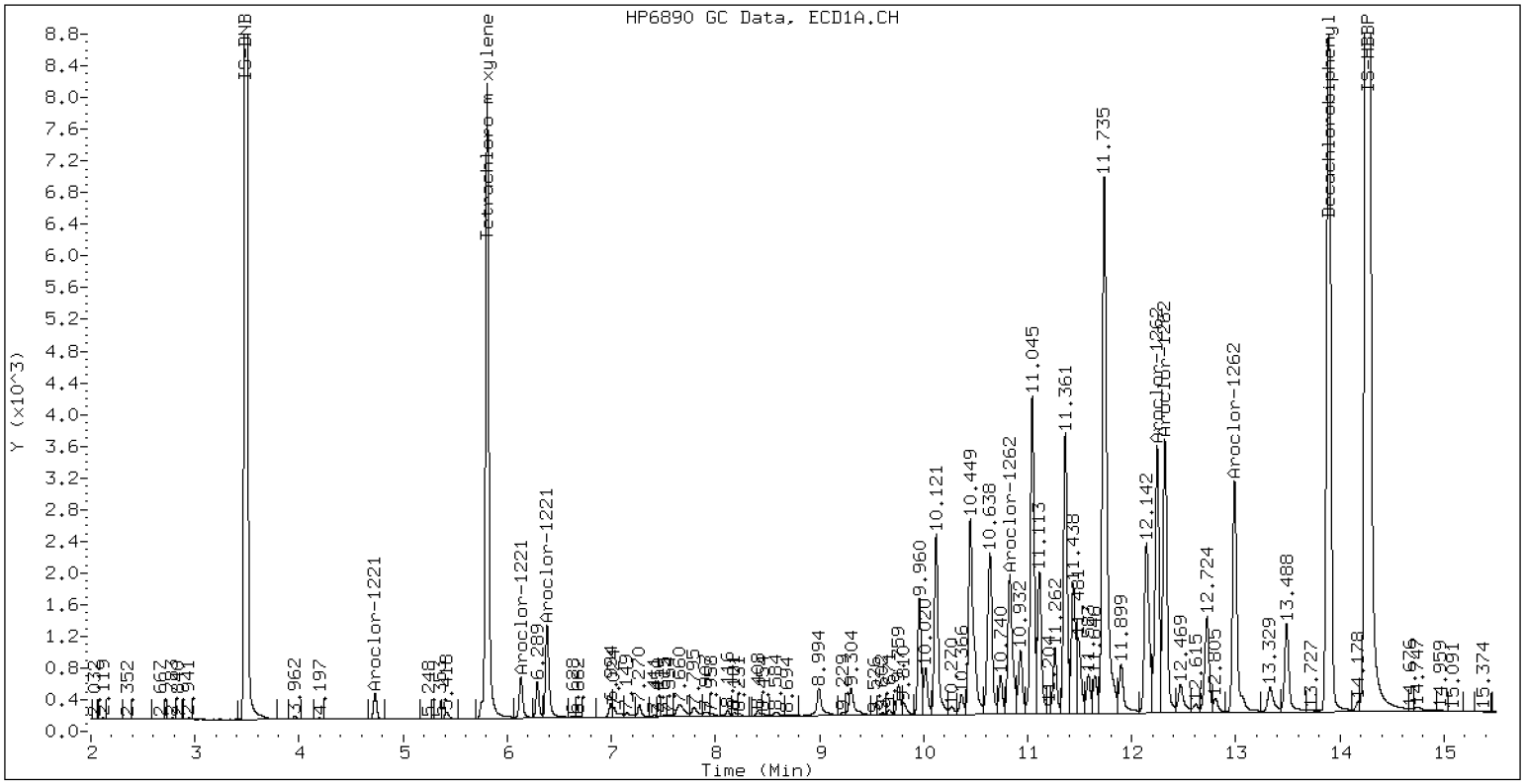
Total PCB Area Col2 (5.785 - 14.019) = 1573107 Col2 Total PCB = 0.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

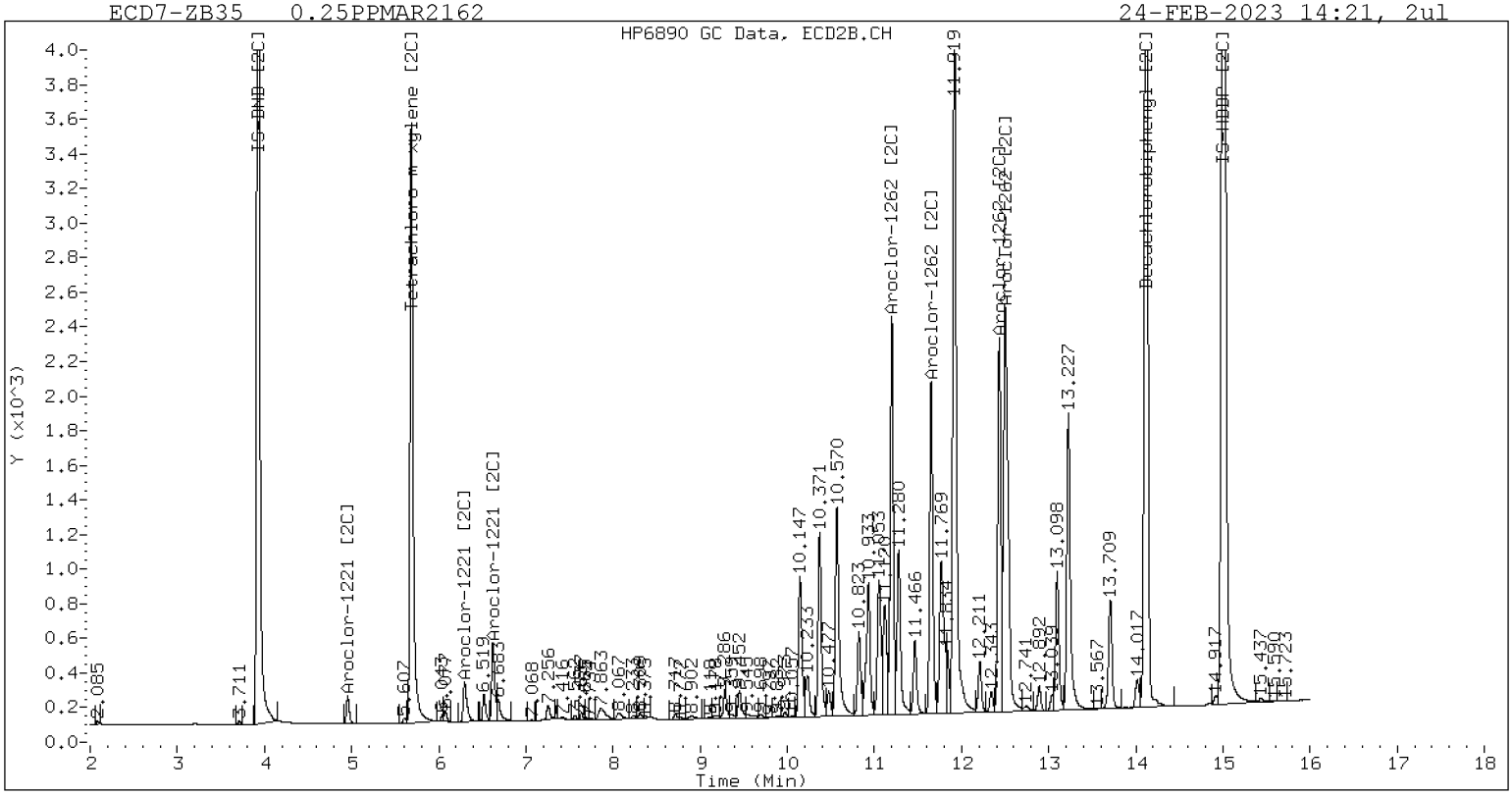
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR2162 24-FEB-2023 14:21, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR2162 24-FEB-2023 14:21, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242312ECD7.D
Data file 2: /230224.b/230224.b/02242312ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: AR3268.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR3268
Client ID:
Injection Date: 24-FEB-2023 14:42
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	0.000	366416	5.685	0.000	179450	38.0	38.9	2.4	Tetrachloro-m-xylene
13.893	0.000	778191	14.119	0.000	477889	53.0	57.5	8.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	645602	-4.2
Hexabromobiphenyl	1429847	1492154	4.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	314042	-0.4
Hexabromobiphenyl	513946	545458	6.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1232	1	4.730	0.000	8647	250.0	1	4.956	0.000	4017	250.0
Aroclor-1232	2	6.131	0.000	17148	250.0	2	7.254	0.000	19962	250.0
Aroclor-1232	3	7.656	0.000	77627	250.0	3	7.861	0.000	39913	250.0
Aroclor-1232	4	8.581	0.000	32993	250.0	4	8.715	0.000	11487	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0
Aroclor-1268	1	12.247	0.000	477974	250.0	1	12.432	0.000	274595	250.0
Aroclor-1268	2	12.317	0.000	473326	250.0	2	12.500	0.000	295194	250.0
Aroclor-1268	3	12.699	0.000	405011	250.0	3	12.892	0.000	252048	250.0
Aroclor-1268	4	13.490	0.000	1333528	250.0	4	13.709	0.000	805579	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.906 - 13.793) = 3998414 Col1 Total PCB = 0.5 ppm*

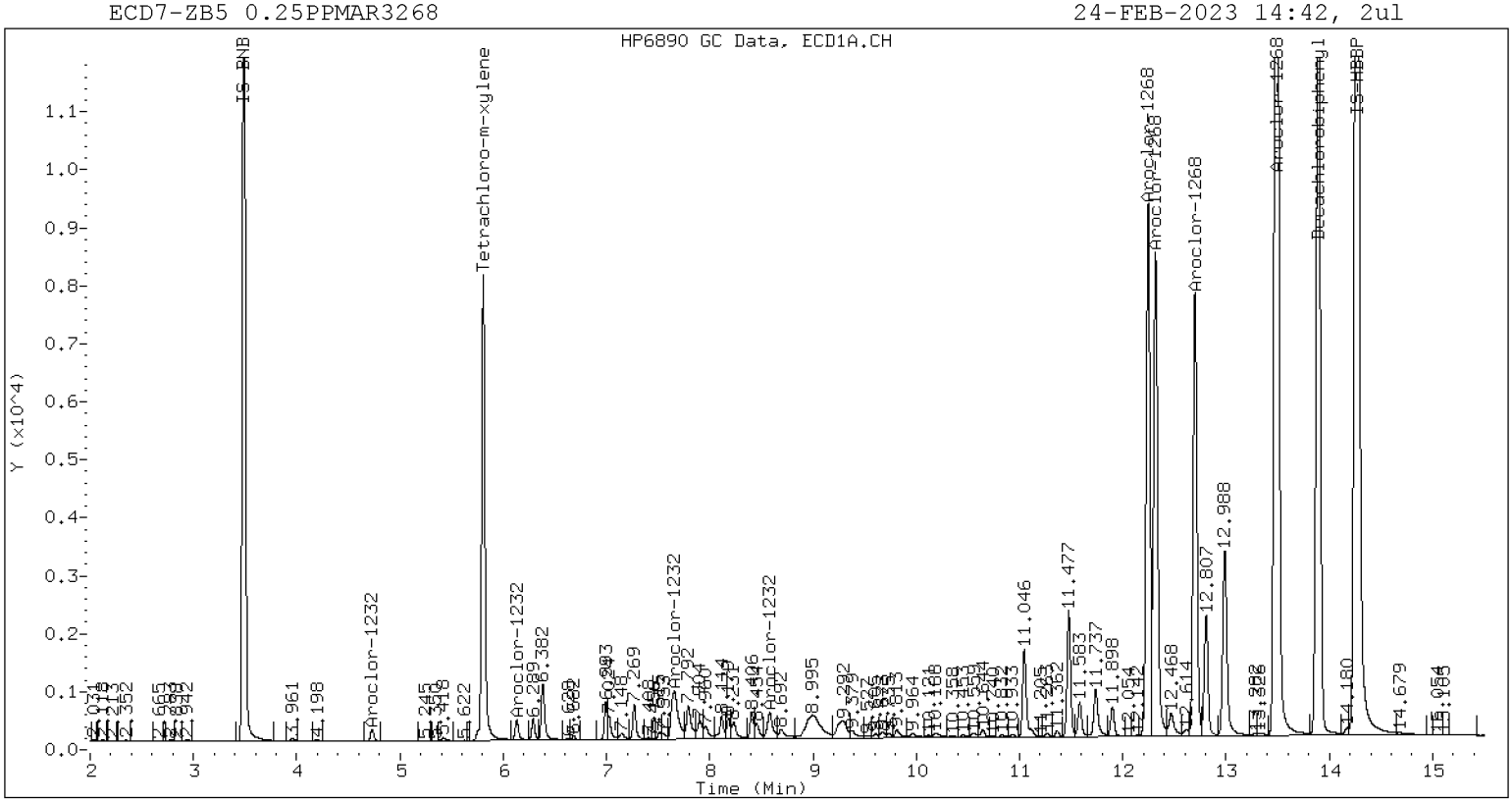
Total PCB Area Col2 (5.785 - 14.019) = 2300029 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

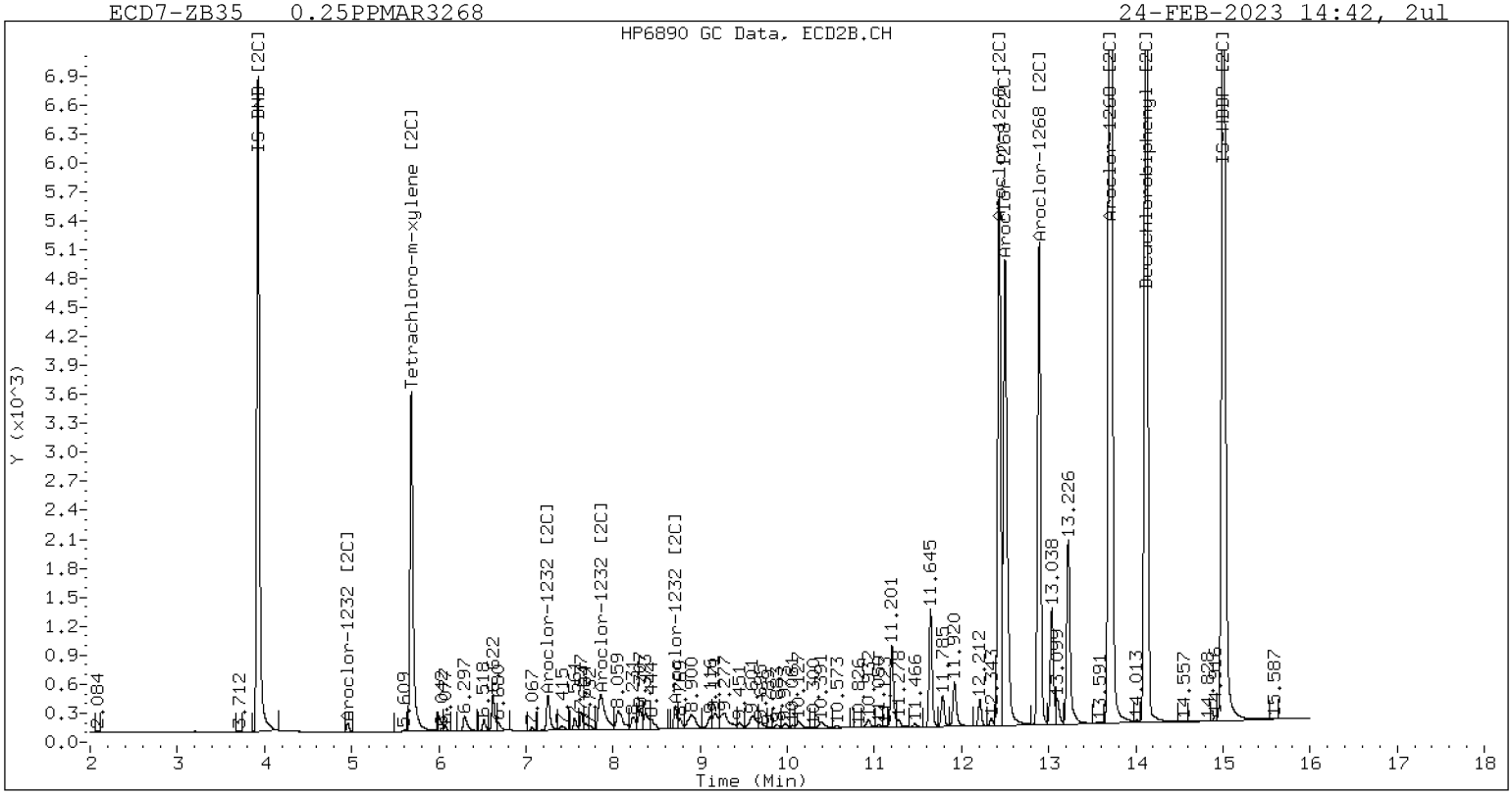
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR3268 24-FEB-2023 14:42, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR3268 24-FEB-2023 14:42, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242313ECD7.D
Data file 2: /230224.b/230224.b/02242313ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660SCV
Client ID:
Injection Date: 24-FEB-2023 15:03
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	0.001	337070	5.686	0.001	165848	34.9	35.8	2.3	Tetrachloro-m-xylene
13.895	0.002	515407	14.119	-0.000	316730	34.3	37.3	8.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	645975	-4.1
Hexabromobiphenyl	1429847	1524245	6.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	316115	0.3
Hexabromobiphenyl	513946	556950	8.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.002	59491	242.5	1	7.254	-0.002	44576	240.9
Aroclor-1016	2	7.655	0.001	181090	242.1	2	7.857	0.002	95386	254.2
Aroclor-1016	3	7.790	0.000	88470	242.3	3	8.056	0.002	42160	248.8
Aroclor-1016	4	8.404	-0.001	57980	245.6	4	8.307	0.000	32197	242.1
Total Col1Ave (4 peaks):					243.1	Total Col2Ave (4 peaks):				246.5 RPD = 1
Corrected Ave (3 peaks):					242.3	Corrected Ave (3 peaks):				243.9 RPD = 1
Aroclor-1221	1	4.731	0.000	464	8.0	1	---			0.0
Aroclor-1221	2	6.130	-0.002	9233	89.2	2	6.300	0.004	5379	95.0
Aroclor-1221	3	6.382	-0.001	42570	177.2	3	6.623	0.001	20952	227.2
Total Col1Ave (3 peaks):					91.5	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.731	0.001	464	13.4	1	---			0.0
Aroclor-1232	2	6.130	-0.001	9233	134.5	2	7.254	-0.000	44576	554.6
Aroclor-1232	3	7.655	-0.001	181090	582.9	3	7.857	-0.003	95386	593.5
Aroclor-1232	4	8.580	-0.001	79916	605.2	4	8.713	-0.002	29795	644.2
Total Col1Ave (4 peaks):					334.0	Total Col2Ave (3 peaks):				597.4 RPD = 57*
Corrected Ave (3 peaks):					243.6	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.269	-0.002	59491	297.2	1	7.254	-0.002	44576	303.5
Aroclor-1242	2	7.655	-0.001	181090	297.9	2	7.857	-0.000	95386	309.0
Aroclor-1242	3	8.404	-0.001	57980	306.5	3	9.115	-0.052	18754	195.2
Aroclor-1242	4	8.580	0.000	79916	285.8	4	9.697	0.100	1355	11.6
Total Col1Ave (4 peaks):					296.8	Total Col2Ave (4 peaks):				204.8 RPD = 37
Corrected Ave (3 peaks):					293.6	Corrected Ave (3 peaks):				170.1 RPD = 53*
Aroclor-1248	1	8.404	-0.001	57980	184.0	1	8.307	-0.001	32197	213.3
Aroclor-1248	2	8.580	-0.001	79916	199.5	2	8.713	-0.001	29795	190.9
Aroclor-1248	3	8.993	-0.006	71805	95.0	3	9.115	-0.050	18754	104.4
Aroclor-1248	4	9.300	0.006	47348	123.1	4	---			0.0
Total Col1Ave (4 peaks):					150.4	Total Col2Ave (3 peaks):				169.6 RPD = 12
Corrected Ave (3 peaks):					134.0	Corrected Ave: < 3 Peaks				
Aroclor-1254	1	9.300	0.002	47348	73.0	1	9.451	0.001	22438	93.4
Aroclor-1254	2	---			0.0	2	9.972	0.001	2694	13.9
Aroclor-1254	3	9.670	0.002	5461	13.1	3	10.147	0.024	52914	126.5
Aroclor-1254	4	9.807	-0.000	18944	23.4	4	10.370	-0.003	70430	172.8
Aroclor-1254	5	10.121	-0.056	154170	303.3	5	10.568	-0.000	98525	396.9
Total Col1Ave (4 peaks):					103.2	Total Col2Ave (5 peaks):				160.7 RPD = 44*
Corrected Ave (3 peaks):					36.5	Corrected Ave (4 peaks):				101.7 RPD = 94*
Aroclor-1260	1	11.044	0.000	149195	272.1	1	11.653	0.000	82210	251.0
Aroclor-1260	2	11.361	-0.000	153832	268.5	2	11.919	0.001	222226	265.9
Aroclor-1260	3	11.736	0.002	396660	261.0	3	12.435	-0.000	59148	266.7
Aroclor-1260	4	12.140	0.001	190448	248.9	4	12.504	0.002	147180	261.2
Aroclor-1260	5	12.244	-0.000	91385	277.5	NS	---			----
Total Col1Ave (5 peaks):					265.6	Total Col2Ave (4 peaks):				261.2 RPD = 2
Corrected Ave (4 peaks):					262.6	Corrected Ave (3 peaks):				259.4 RPD = 1
Aroclor-1262	1	10.827	-0.002	220238	471.0	1	11.199	-0.001	84479	177.6
Aroclor-1262	2	12.244	0.000	91385	120.1	2	11.653	0.002	82210	203.0
Aroclor-1262	3	12.320	0.001	113066	138.2	3	12.435	0.002	59148	128.7
Aroclor-1262	4	12.988	0.001	102156	136.7	4	12.504	0.002	147180	204.4
Total Col1Ave (4 peaks):					216.5	Total Col2Ave (4 peaks):				178.4 RPD = 19
Corrected Ave (3 peaks):					131.7	Corrected Ave (3 peaks):				169.8 RPD = 25
Aroclor-1268	1	12.244	-0.003	91385	46.8	1	12.435	0.003	59148	52.7
Aroclor-1268	2	12.320	0.003	113066	58.5	2	12.504	0.004	147180	122.1
Aroclor-1268	3	12.726	0.027	46633	28.2	3	12.893	0.001	2874	2.8
Aroclor-1268	4	13.489	-0.000	25567	4.7	4	13.709	-0.000	13041	4.0
Total Col1Ave (4 peaks):					34.5	Total Col2Ave (4 peaks):				45.4 RPD = 27
Corrected Ave (3 peaks):					26.6	Corrected Ave (3 peaks):				19.8 RPD = 29

Total PCB Area Col1 (5.906 - 13.793) = 3743076 Col1 Total PCB = 0.5 ppm*

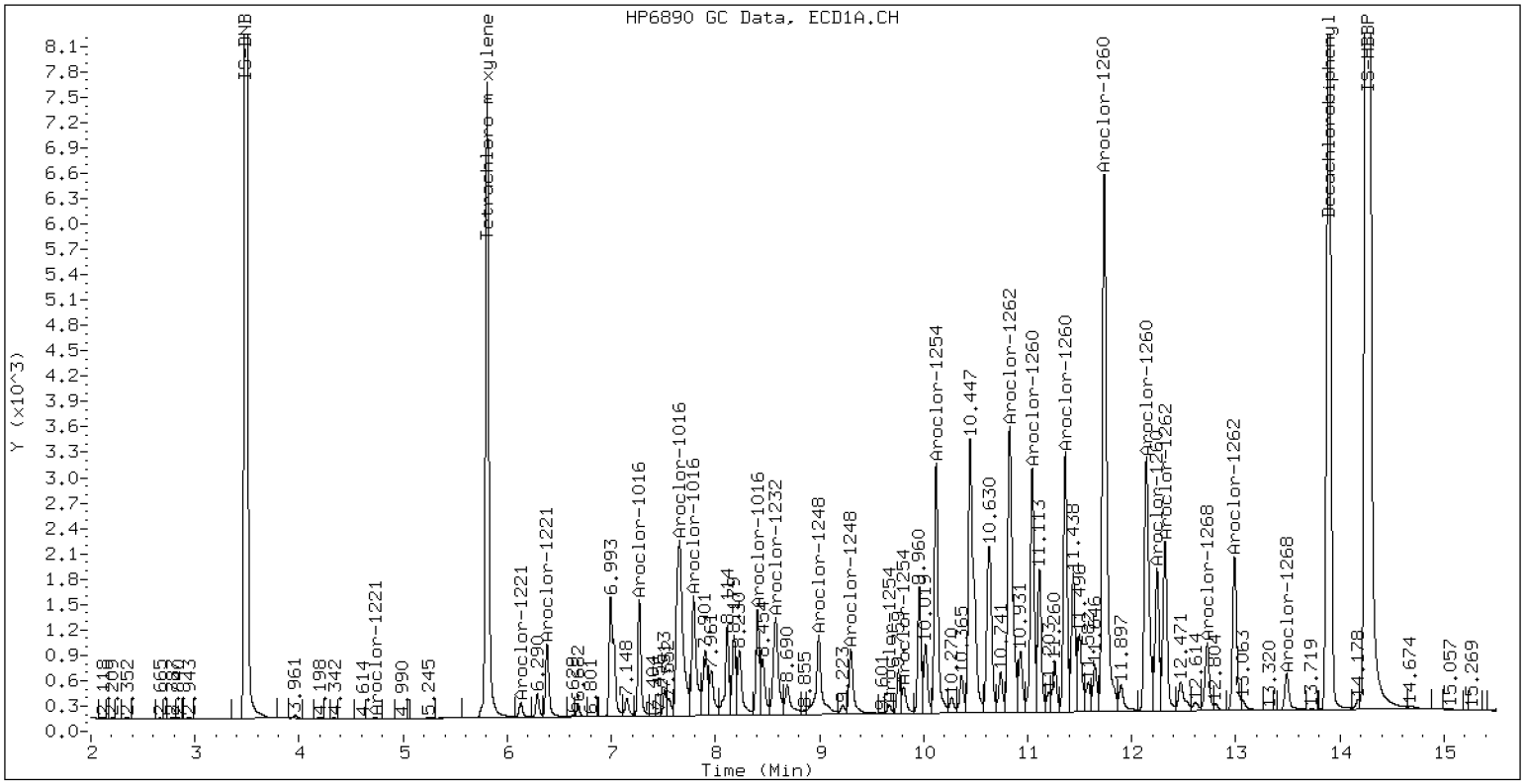
Total PCB Area Col2 (5.785 - 14.019) = 1897008 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

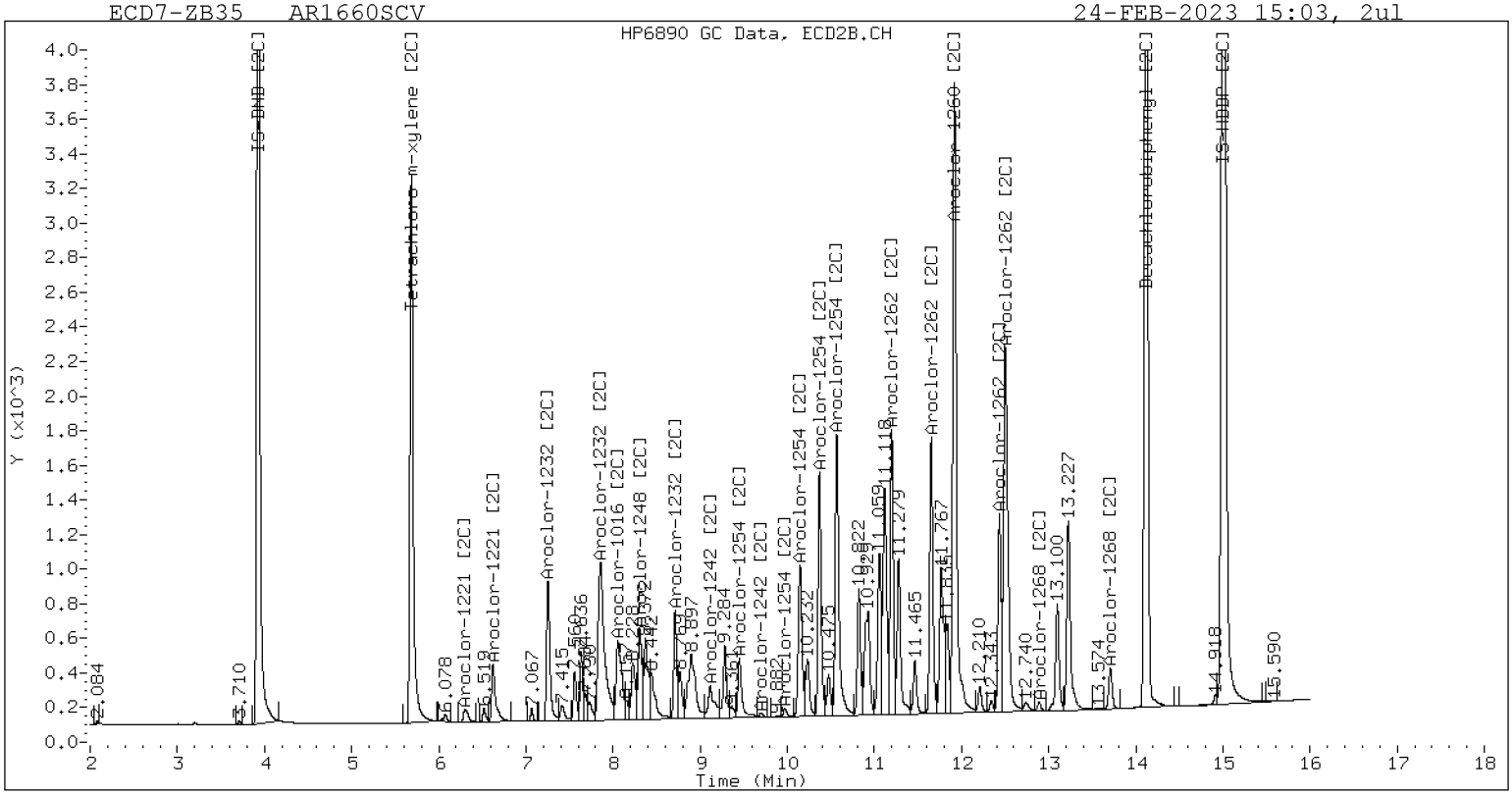
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660SCV 24-FEB-2023 15:03, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660SCV 24-FEB-2023 15:03, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242314ECD7.D
Data file 2: /230224.b/230224.b/02242314ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242SCV
Client ID:
Injection Date: 24-FEB-2023 15:24
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.002	354283	5.686	0.001	172455	33.6	34.5	2.6	Tetrachloro-m-xylene
13.895	0.002	567088	14.120	0.001	347430	37.0	40.3	8.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	705650	4.7
Hexabromobiphenyl	1429847	1555683	8.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	340433	8.0
Hexabromobiphenyl	513946	565609	10.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1016	1	7.270	-0.000	39927	149.0	1	7.256	0.000	32417	162.7
Aroclor-1016	2	7.653	-0.001	132339	162.0	2	7.856	0.001	69235	171.3
Aroclor-1016	3	7.791	0.001	59310	148.7	3	8.055	0.000	29473	161.5
Aroclor-1016	4	8.405	0.000	42537	165.0	4	8.307	-0.000	22792	159.2
Total Col1Ave (4 peaks):					156.2	Total Col2Ave (4 peaks):				163.7 RPD = 5
Corrected Ave (3 peaks):					153.2	Corrected Ave (3 peaks):				161.1 RPD = 5
Aroclor-1221	1	4.733	0.002	319	5.0	1	---			0.0
Aroclor-1221	2	6.131	-0.001	6534	57.8	2	6.319	0.022	4365	71.6
Aroclor-1221	3	6.384	0.001	29664	113.0	3	6.624	0.002	14916	150.2
Total Col1Ave (3 peaks):					58.6	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.733	0.003	319	8.4	1	---			0.0
Aroclor-1232	2	6.131	0.000	6534	87.2	2	7.256	0.002	32417	374.5
Aroclor-1232	3	7.653	-0.003	132339	389.9	3	7.856	-0.004	69235	400.0
Aroclor-1232	4	8.579	-0.002	69445	481.4	4	8.714	-0.001	22167	445.0
Total Col1Ave (4 peaks):					241.7	Total Col2Ave (3 peaks):				406.5 RPD = 51*
Corrected Ave (3 peaks):					161.8	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.270	-0.001	39927	182.6	1	7.256	0.000	32417	205.0
Aroclor-1242	2	7.653	-0.003	132339	199.3	2	7.856	-0.002	69235	208.2
Aroclor-1242	3	8.405	-0.000	42537	205.9	3	9.164	-0.004	23068	223.0
Aroclor-1242	4	8.579	-0.000	69445	227.4	4	9.587	-0.010	31021	246.1
Total Col1Ave (4 peaks):					203.8	Total Col2Ave (4 peaks):				220.6 RPD = 8
Corrected Ave (3 peaks):					195.9	Corrected Ave (3 peaks):				212.1 RPD = 8
Aroclor-1248	1	8.405	0.000	42537	123.5	1	8.307	-0.001	22792	140.2
Aroclor-1248	2	8.579	-0.001	69445	158.7	2	8.714	-0.000	22167	131.9
Aroclor-1248	3	9.001	0.003	91942	111.4	3	9.164	-0.002	23068	119.3
Aroclor-1248	4	9.294	-0.000	38711	92.1	4	9.587	-0.003	31021	133.6
Total Col1Ave (4 peaks):					121.4	Total Col2Ave (4 peaks):				131.2 RPD = 8
Corrected Ave (3 peaks):					109.0	Corrected Ave (3 peaks):				128.3 RPD = 16
Aroclor-1254	1	9.294	-0.005	38711	54.6	1	9.450	0.001	13131	50.7
Aroclor-1254	2	9.377	-0.000	17371	54.5	2	9.970	0.000	8340	40.1
Aroclor-1254	3	9.668	-0.000	16373	35.9	3	10.123	-0.000	16364	36.3
Aroclor-1254	4	9.807	-0.001	27490	31.0	4	10.382	0.009	16062	36.6
Aroclor-1254	5	10.175	-0.001	20494	36.9	5	10.572	0.004	4818	18.0
Total Col1Ave (5 peaks):					42.6	Total Col2Ave (5 peaks):				36.4 RPD = 16
Corrected Ave (4 peaks):					39.6	Corrected Ave (4 peaks):				32.8 RPD = 19
Aroclor-1260	1	11.048	0.003	794	1.4	1	11.665	0.012	1652	5.0
Aroclor-1260	2	11.366	0.005	814	1.4	2	11.926	0.008	842	1.0
Aroclor-1260	3	11.739	0.006	1848	1.2	3	12.438	0.002	483	2.1
Aroclor-1260	4	12.145	0.006	1372	1.8	4	12.506	0.004	790	1.4
Aroclor-1260	5	---			0.0	NS	---			----
Total Col1Ave (4 peaks):					1.4	Total Col2Ave (4 peaks):				2.4 RPD = 49*
Corrected Ave (3 peaks):					1.3	Corrected Ave (3 peaks):				1.5 RPD = 12
Aroclor-1262	1	10.832	0.003	13157	27.6	1	11.121	-0.079	6113	12.7
Aroclor-1262	2	12.145	-0.098	1372	1.8	2	11.665	0.013	1652	4.0
Aroclor-1262	3	---			0.0	3	12.438	0.004	483	1.0
Aroclor-1262	4	13.038	0.051	842	1.1	4	12.506	0.004	790	1.1
Total Col1Ave (3 peaks):					10.1	Total Col2Ave (4 peaks):				4.7 RPD = 73*
Corrected Ave: < 3 Peaks						Corrected Ave (3 peaks):				2.0
Aroclor-1268	1	---			0.0	1	12.438	0.006	483	0.4
Aroclor-1268	2	---			0.0	2	12.506	0.006	790	0.6
Aroclor-1268	3	12.617	-0.082	5851	3.5	3	12.899	0.007	491	0.5
Aroclor-1268	4	13.500	0.010	1745	0.3	4	13.714	0.005	379	0.1
Col1Ave: <3 Quant Peaks						Col2Ave: 0.4				

Total PCB Area Col1 (5.906 - 13.793) = 1149784 Col1 Total PCB = 0.1 ppm*

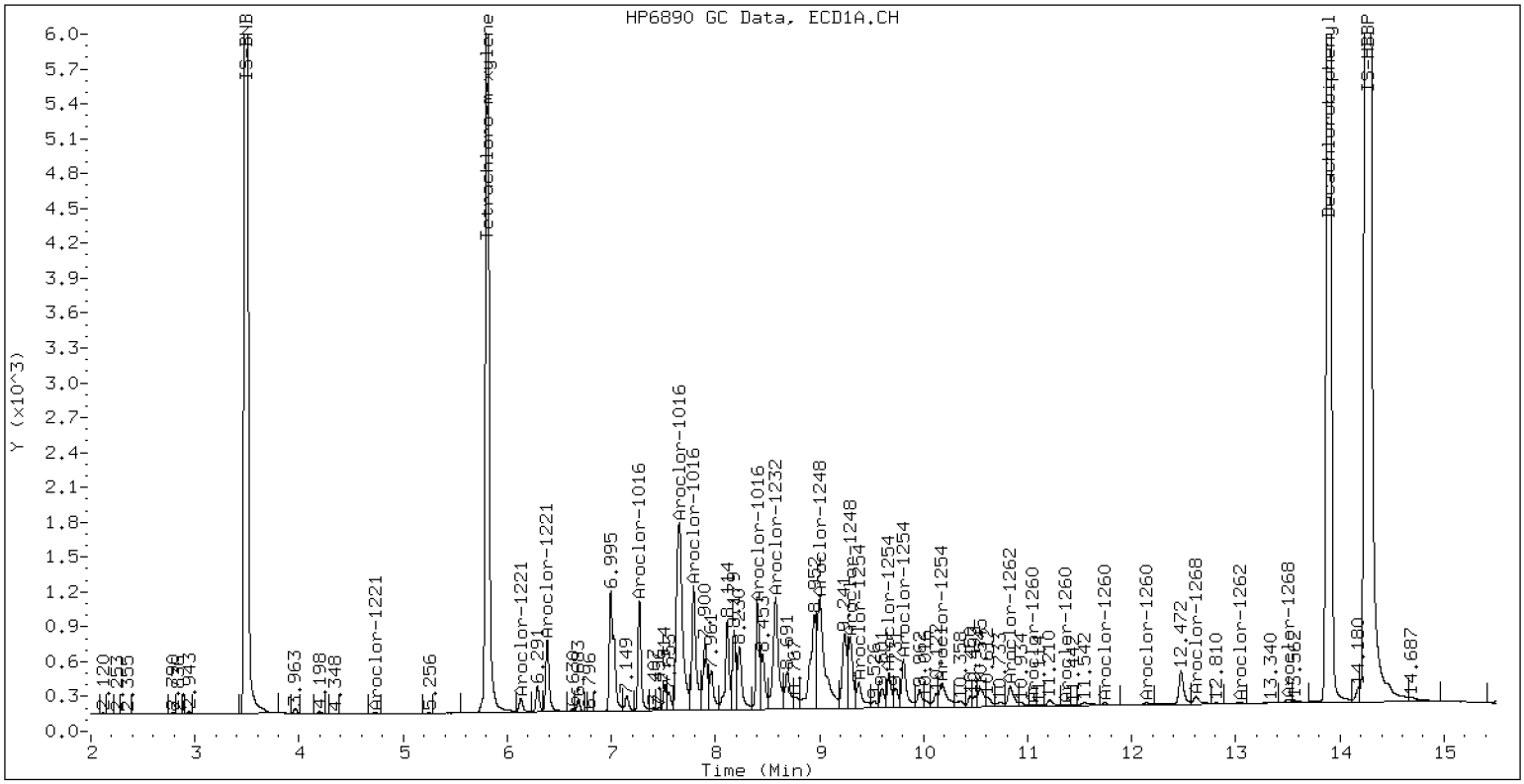
Total PCB Area Col2 (5.785 - 14.019) = 572210 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

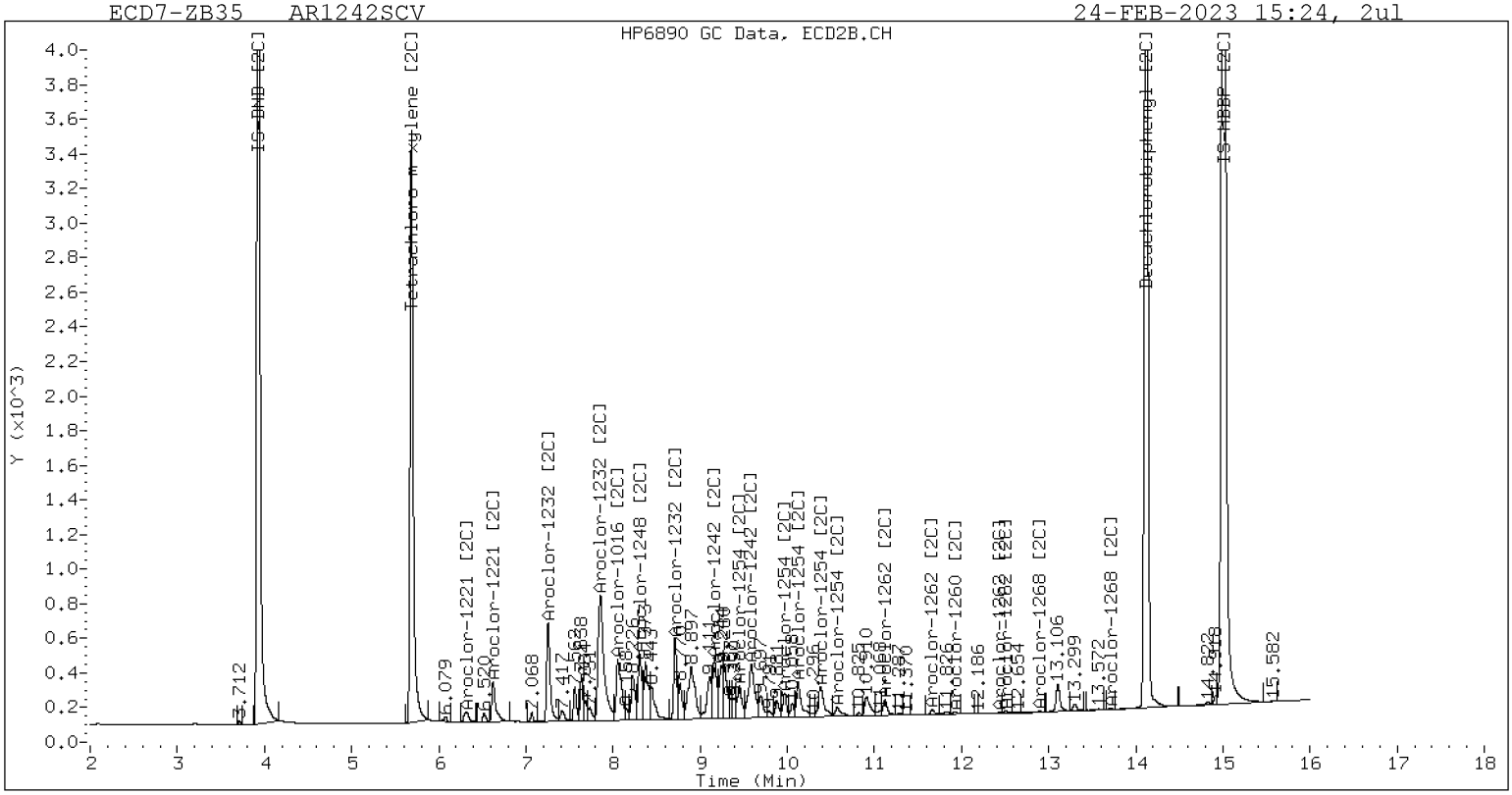
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242SCV 24-FEB-2023 15:24, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242SCV 24-FEB-2023 15:24, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242315ECD7.D
Data file 2: /230224.b/230224.b/02242315ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248SCV
Client ID:
Injection Date: 24-FEB-2023 15:45
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.002	336655	5.687	0.002	168719	34.9	36.4	4.2	Tetrachloro-m-xylene
13.894	0.001	499162	14.118	-0.001	308317	33.1	36.3	9.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	646554	-4.0
Hexabromobiphenyl	1429847	1529451	7.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	316066	0.3
Hexabromobiphenyl	513946	557213	8.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.000	19773	80.5	1	7.254	-0.002	16926	91.5
Aroclor-1016	2	7.653	-0.001	88099	117.7	2	7.857	0.001	45733	121.9
Aroclor-1016	3	7.794	0.003	35915	98.3	3	8.060	0.005	8078	47.7
Aroclor-1016	4	8.406	0.001	77842	329.5	4	8.307	0.000	37348	280.9
Total Col1Ave (4 peaks):					156.5	Total Col2Ave (4 peaks):				135.5 RPD = 14
Corrected Ave (3 peaks):					98.8	Corrected Ave (3 peaks):				87.0 RPD = 13
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.133	0.001	680	6.6	2	6.326	0.030	1966	34.7
Aroclor-1221	3	6.384	0.002	3390	14.1	3	6.631	0.009	1571	17.0
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.133	0.002	680	9.9	2	7.254	-0.000	16926	210.6
Aroclor-1232	3	7.653	-0.002	88099	283.3	3	7.857	-0.004	45733	284.6
Aroclor-1232	4	8.581	-0.000	99572	753.4	4	8.714	-0.001	38224	826.6
Total Col1Ave (3 peaks):					348.9	Total Col2Ave (3 peaks):				440.6 RPD = 23
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	-0.000	19773	98.7	1	7.254	-0.002	16926	115.3
Aroclor-1242	2	7.653	-0.003	88099	144.8	2	7.857	-0.001	45733	148.2
Aroclor-1242	3	8.406	0.000	77842	411.2	3	9.165	-0.002	45021	468.7
Aroclor-1242	4	8.581	0.001	99572	355.8	4	9.590	-0.008	53613	458.1
Total Col1Ave (4 peaks):					252.6	Total Col2Ave (4 peaks):				297.6 RPD = 16
Corrected Ave (3 peaks):					199.8	Corrected Ave (3 peaks):				240.5 RPD = 19
Aroclor-1248	1	8.406	0.000	77842	246.8	1	8.307	-0.001	37348	247.5
Aroclor-1248	2	8.581	0.000	99572	248.3	2	8.714	-0.000	38224	245.0
Aroclor-1248	3	8.998	-0.000	186857	247.0	3	9.165	-0.000	45021	250.7
Aroclor-1248	4	9.294	-0.000	98398	255.5	4	9.590	-0.001	53613	248.7
Total Col1Ave (4 peaks):					249.4	Total Col2Ave (4 peaks):				248.0 RPD = 1
Corrected Ave (3 peaks):					247.4	Corrected Ave (3 peaks):				247.0 RPD = 0
Aroclor-1254	1	9.294	-0.004	98398	151.6	1	9.450	0.001	21823	90.8
Aroclor-1254	2	9.377	-0.001	49616	169.9	2	9.971	0.001	19450	100.6
Aroclor-1254	3	9.669	0.001	40230	96.4	3	10.124	0.000	36574	87.5
Aroclor-1254	4	9.808	0.001	68500	84.4	4	10.389	0.016	35100	86.1
Aroclor-1254	5	10.183	0.007	47365	93.1	5	10.573	0.004	5676	22.9
Total Col1Ave (5 peaks):					119.1	Total Col2Ave (5 peaks):				77.6 RPD = 42*
Corrected Ave (4 peaks):					106.4	Corrected Ave (4 peaks):				71.8 RPD = 39
Aroclor-1260	1	11.047	0.003	1670	3.0	1	11.662	0.009	2055	6.3
Aroclor-1260	2	11.362	0.001	1111	1.9	2	11.924	0.007	1466	1.8
Aroclor-1260	3	11.739	0.005	2107	1.4	3	12.434	-0.002	573	2.6
Aroclor-1260	4	12.144	0.005	1379	1.8	4	12.505	0.003	1003	1.8
Aroclor-1260	5	12.251	0.006	698	2.1	NS	---			----
Total Col1Ave (5 peaks):					2.1	Total Col2Ave (4 peaks):				3.1 RPD = 41*
Corrected Ave (4 peaks):					1.8	Corrected Ave (3 peaks):				2.0 RPD = 12
Aroclor-1262	1	10.833	0.005	15355	32.7	1	11.122	-0.079	7225	15.2
Aroclor-1262	2	12.251	0.007	698	0.9	2	11.662	0.011	2055	5.1
Aroclor-1262	3	12.321	0.002	836	1.0	3	12.434	0.000	573	1.2
Aroclor-1262	4	12.991	0.004	1043	1.4	4	12.505	0.003	1003	1.4
Total Col1Ave (4 peaks):					9.0	Total Col2Ave (4 peaks):				5.7 RPD = 45*
Corrected Ave (3 peaks):					1.1	Corrected Ave (3 peaks):				2.6 RPD = 80*
Aroclor-1268	1	12.251	0.004	698	0.4	1	12.434	0.002	573	0.5
Aroclor-1268	2	12.321	0.004	836	0.4	2	12.505	0.005	1003	0.8
Aroclor-1268	3	12.700	0.001	2449	1.5	3	12.892	0.001	721	0.7
Aroclor-1268	4	13.493	0.003	7547	1.4	4	13.708	-0.001	2265	0.7
Total Col1Ave (4 peaks):					0.9	Total Col2Ave (4 peaks):				0.7 RPD = 29
Corrected Ave (3 peaks):					0.7	Corrected Ave (3 peaks):				0.6 RPD = 13

Total PCB Area Col1 (5.906 - 13.793) = 1574335 Col1 Total PCB = 0.2 ppm*

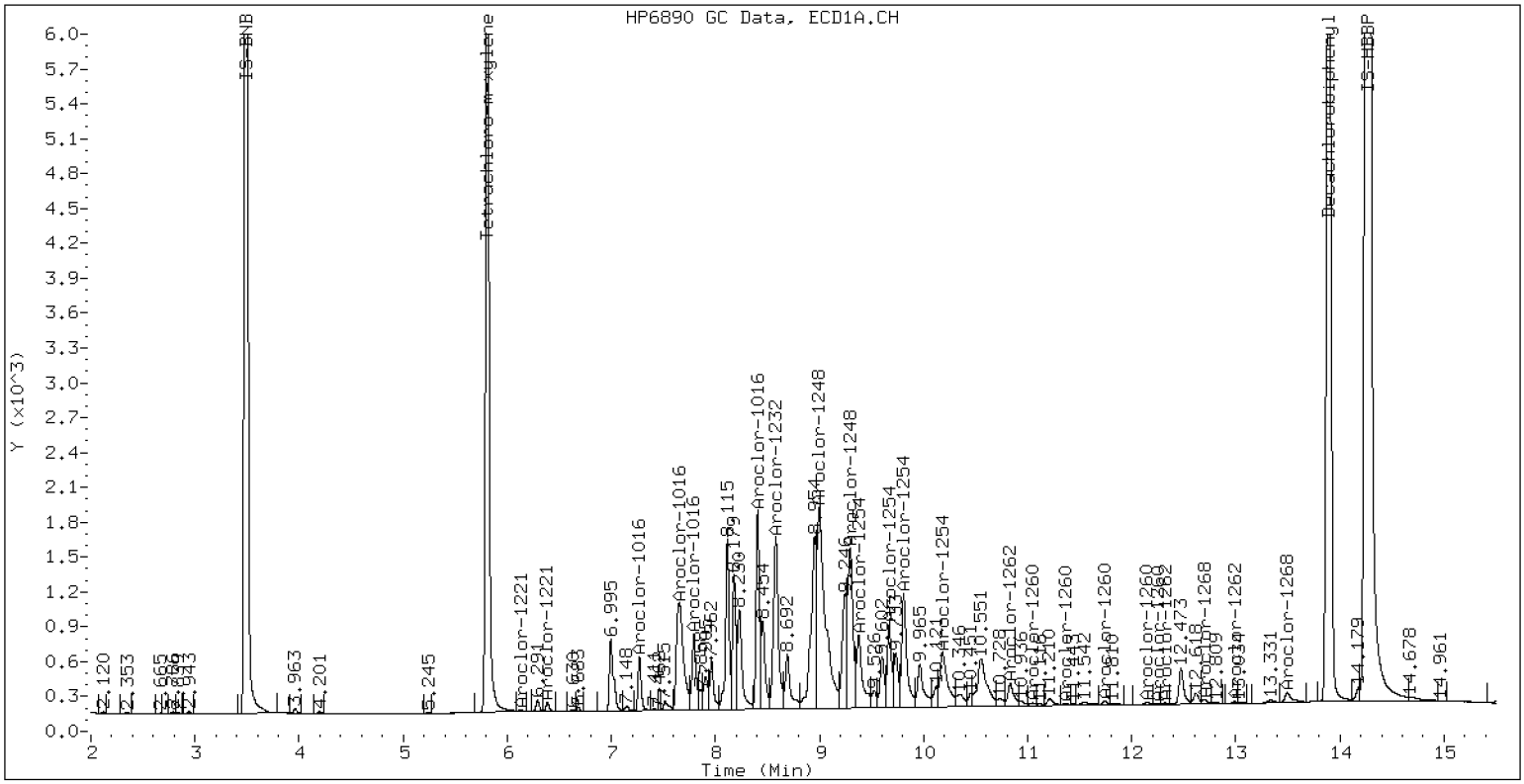
Total PCB Area Col2 (5.785 - 14.019) = 746330 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

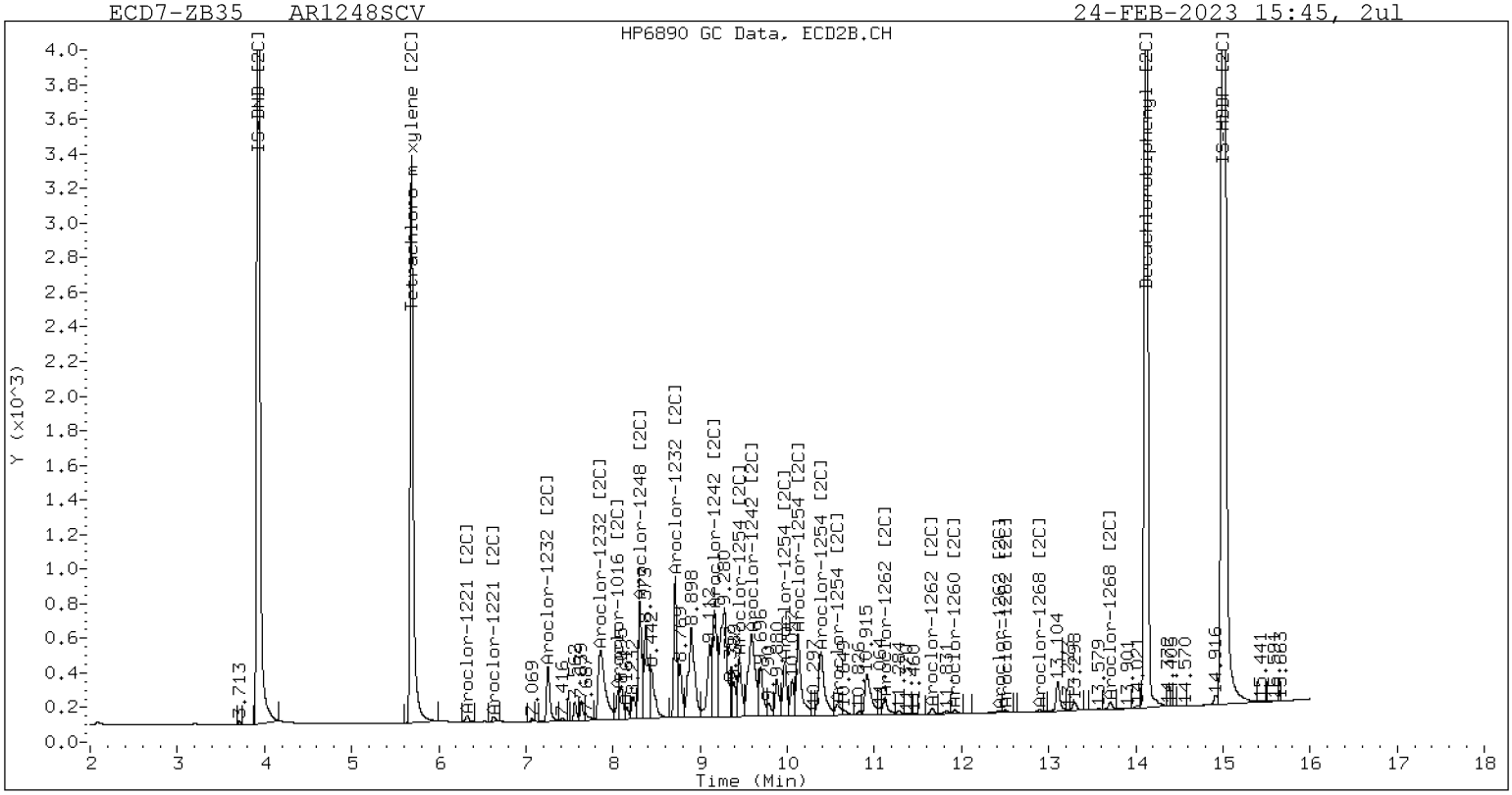
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248SCV 24-FEB-2023 15:45, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248SCV 24-FEB-2023 15:45, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242316ECD7.D
Data file 2: /230224.b/230224.b/02242316ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254SCV
Client ID:
Injection Date: 24-FEB-2023 16:06
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.000	354312	5.686	0.001	174604	36.1	37.1	2.6	Tetrachloro-m-xylene
13.895	0.002	540961	14.119	-0.000	329134	34.6	37.9	9.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	656887	-2.5
Hexabromobiphenyl	1429847	1585505	10.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	320936	1.8
Hexabromobiphenyl	513946	570006	10.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	0.000	565	2.3	1	7.255	-0.001	387	2.1
Aroclor-1016	2	7.656	0.002	1875	2.5	2	7.854	-0.002	860	2.3
Aroclor-1016	3	7.792	0.002	1106	3.0	3	8.098	0.043	578	3.4
Aroclor-1016	4	8.405	0.000	29924	124.7	4	8.307	0.000	21985	162.9
	Total Col1Ave (4 peaks):				33.1	Total Col2Ave (4 peaks):				42.6 RPD = 25
	Corrected Ave (3 peaks):				2.6	Corrected Ave (3 peaks):				2.6 RPD = 0
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.325	0.028	1947	33.9
Aroclor-1221	3	---			0.0	3	6.637	0.015	368	3.9
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	7.255	0.001	387	4.7
Aroclor-1232	3	7.656	0.000	1875	5.9	3	7.854	-0.007	860	5.3
Aroclor-1232	4	8.583	0.002	12327	91.8	4	8.715	0.000	15013	319.7
	Col1Ave: <3 Quant Peaks					Col2Ave: 109.9				
Aroclor-1242	1	7.270	-0.000	565	2.8	1	7.255	-0.001	387	2.6
Aroclor-1242	2	7.656	0.000	1875	3.0	2	7.854	-0.004	860	2.7
Aroclor-1242	3	8.405	-0.000	29924	155.6	3	9.169	0.002	21933	224.9
Aroclor-1242	4	8.583	0.003	12327	43.4	4	9.545	-0.053	34065	286.6
	Total Col1Ave (4 peaks):				51.2	Total Col2Ave (4 peaks):				129.2 RPD = 87*
	Corrected Ave (3 peaks):				16.4	Corrected Ave (3 peaks):				76.7 RPD = 130*
Aroclor-1248	1	8.405	0.000	29924	93.4	1	8.307	-0.001	21985	143.5
Aroclor-1248	2	8.583	0.002	12327	30.3	2	8.715	0.001	15013	94.8
Aroclor-1248	3	8.992	-0.007	145580	189.4	3	9.169	0.004	21933	120.3
Aroclor-1248	4	9.298	0.003	155450	397.3	4	9.545	-0.046	34065	155.6
	Total Col1Ave (4 peaks):				177.6	Total Col2Ave (4 peaks):				128.5 RPD = 32
	Corrected Ave (3 peaks):				104.3	Corrected Ave (3 peaks):				119.5 RPD = 14
Aroclor-1254	1	9.298	-0.001	155450	235.7	1	9.450	0.001	58639	240.4
Aroclor-1254	2	9.377	-0.001	69801	235.3	2	9.971	0.000	47008	239.5
Aroclor-1254	3	9.668	-0.000	100839	237.8	3	10.124	0.000	100062	235.7
Aroclor-1254	4	9.807	0.000	190544	231.1	4	10.373	0.000	99535	240.5
Aroclor-1254	5	10.176	-0.000	122321	236.7	5	10.570	0.001	61549	244.2
	Total Col1Ave (5 peaks):				235.3	Total Col2Ave (5 peaks):				240.1 RPD = 2
	Corrected Ave (4 peaks):				234.7	Corrected Ave (4 peaks):				239.0 RPD = 2
Aroclor-1260	1	11.043	-0.002	12288	21.5	1	11.661	0.008	29062	86.7
Aroclor-1260	2	11.361	-0.001	13660	22.9	2	11.921	0.003	22238	26.0
Aroclor-1260	3	11.736	0.002	37632	23.8	3	12.441	0.005	3555	15.7
Aroclor-1260	4	12.141	0.002	27105	34.1	4	12.503	0.001	13126	22.8
Aroclor-1260	5	12.320	0.076	2381	6.9	NS	---			----
	Total Col1Ave (5 peaks):				21.9	Total Col2Ave (4 peaks):				37.8 RPD = 53*
	Corrected Ave (4 peaks):				18.8	Corrected Ave (3 peaks):				21.5 RPD = 13
Aroclor-1262	1	10.827	-0.002	220626	453.6	1	11.281	0.081	13562	27.9
Aroclor-1262	2	12.320	0.076	2381	3.0	2	11.661	0.009	29062	70.1
Aroclor-1262	3	---			0.0	3	12.441	0.007	3555	7.6
Aroclor-1262	4	12.989	0.002	3225	4.1	4	12.503	0.001	13126	17.8
	Total Col1Ave (3 peaks):				153.6	Total Col2Ave (4 peaks):				30.8 RPD = 133*
	Corrected Ave: < 3 Peaks					Corrected Ave (3 peaks):				17.7
Aroclor-1268	1	12.320	0.074	2381	1.2	1	12.441	0.009	3555	3.1
Aroclor-1268	2	---			0.0	2	12.503	0.003	13126	10.6
Aroclor-1268	3	12.701	0.002	2939	1.7	3	12.892	0.000	772	0.7
Aroclor-1268	4	13.493	0.003	9164	1.6	4	13.707	-0.002	2801	0.8
	Total Col1Ave (3 peaks):				1.5	Total Col2Ave (4 peaks):				3.8 RPD = 87*
	Corrected Ave: < 3 Peaks					Corrected Ave (3 peaks):				1.6

Total PCB Area Col1 (5.906 - 13.793) = 2118645 Col1 Total PCB = 0.3 ppm*

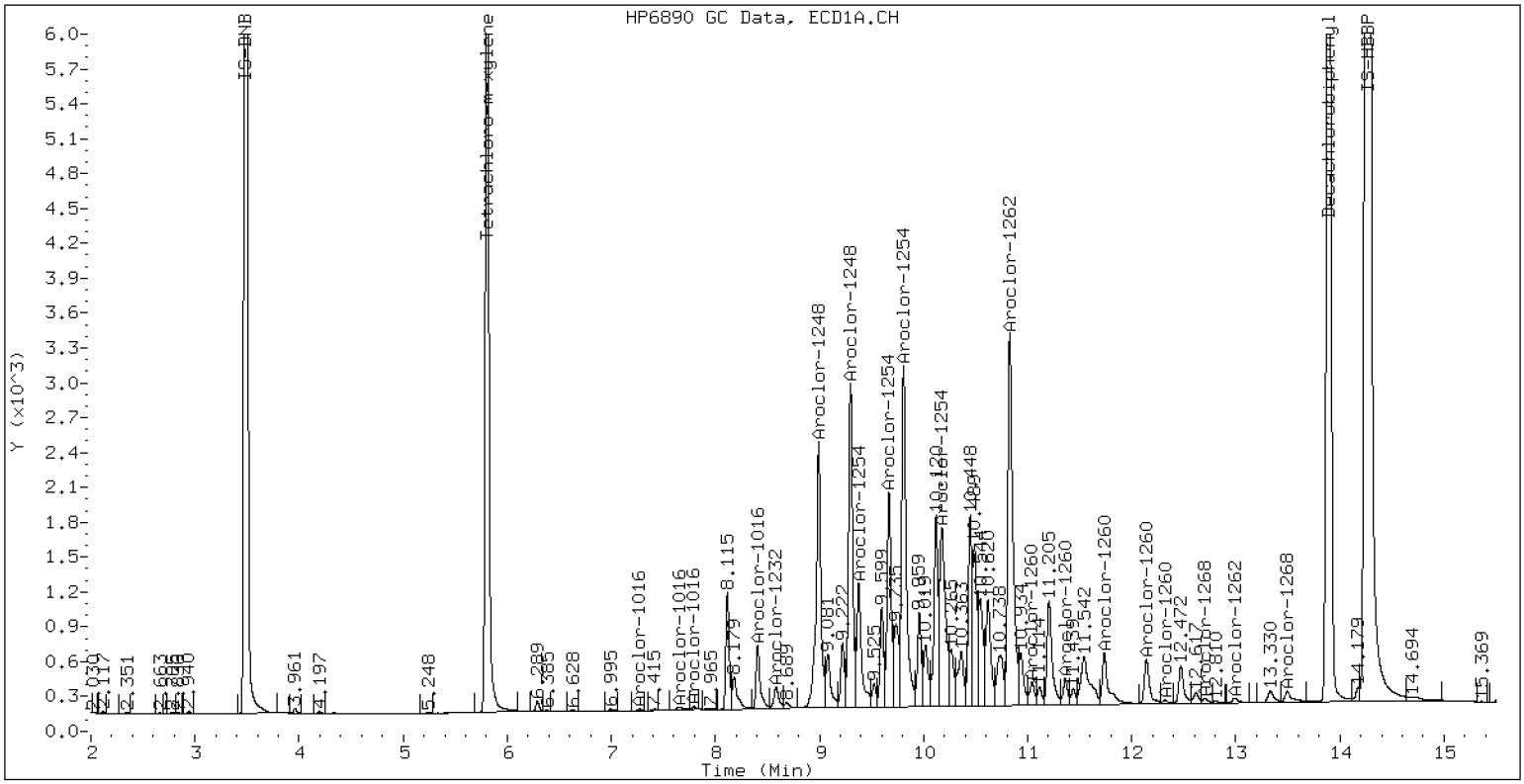
Total PCB Area Col2 (5.785 - 14.019) = 1007601 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

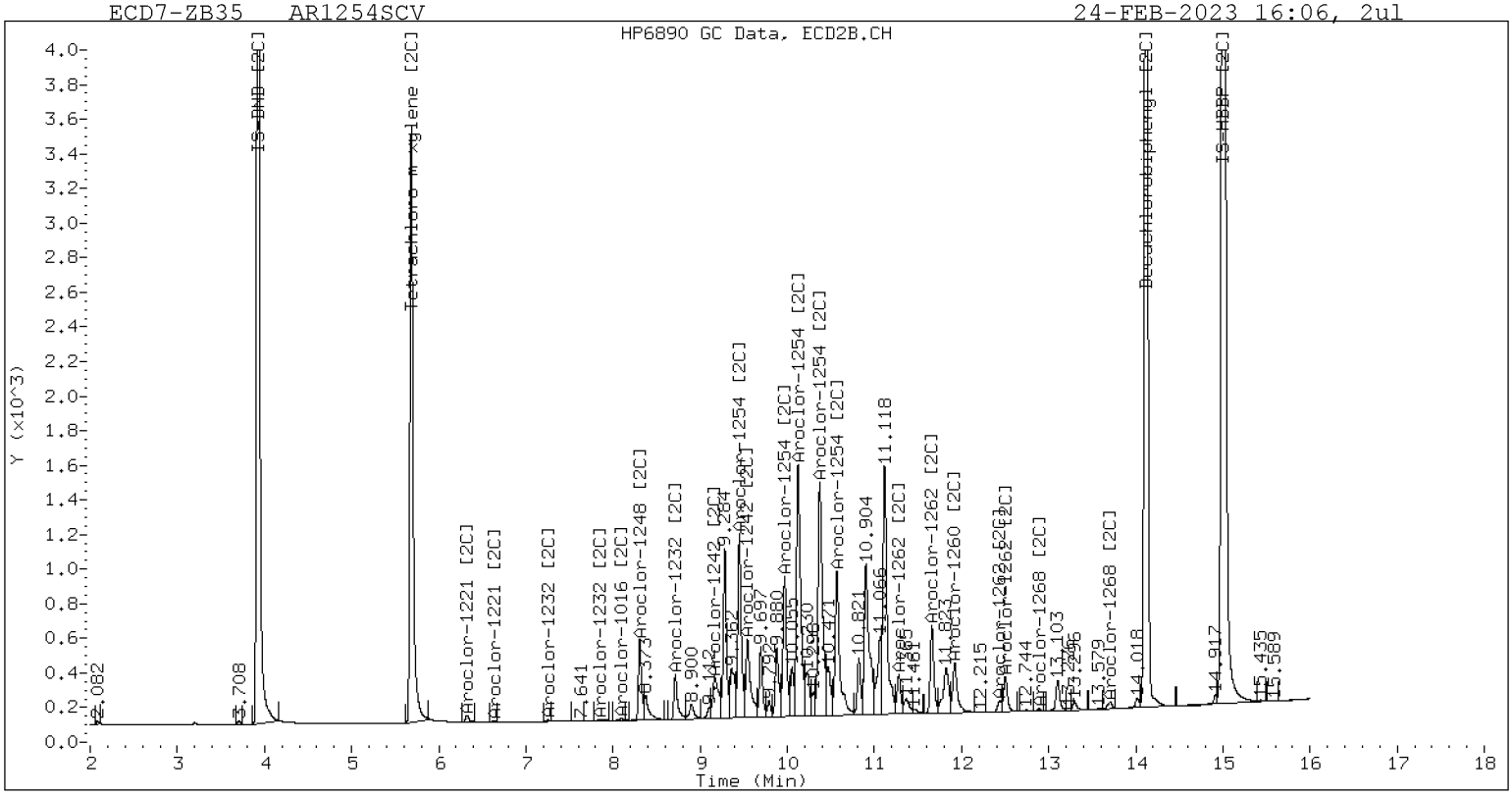
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254SCV 24-FEB-2023 16:06, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254SCV 24-FEB-2023 16:06, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242317ECD7.D
Data file 2: /230224.b/230224.b/02242317ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162SCV
Client ID:
Injection Date: 24-FEB-2023 16:27
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	0.000	356001	5.685	0.000	170882	36.0	36.6	1.7	Tetrachloro-m-xylene
13.895	0.002	533971	14.119	0.000	326235	34.4	37.9	9.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	661953	-1.8
Hexabromobiphenyl	1429847	1574993	10.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317807	0.8
Hexabromobiphenyl	513946	565951	10.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.001	7175	28.5	1	7.256	0.000	3727	20.0
Aroclor-1016	2	7.659	0.005	12893	16.8	2	7.863	0.007	5834	15.5
Aroclor-1016	3	7.794	0.004	6936	18.5	3	8.063	0.009	2963	17.4
Aroclor-1016	4	8.408	0.003	3610	14.9	4	8.308	0.002	2045	15.3
Total Col1Ave (4 peaks):					19.7	Total Col2Ave (4 peaks):				17.0 RPD = 14
Corrected Ave (3 peaks):					16.8	Corrected Ave (3 peaks):				16.1 RPD = 4
Aroclor-1221	1	4.730	-0.000	15803	266.6	1	4.955	-0.001	7909	262.9
Aroclor-1221	2	6.131	-0.001	26946	254.1	2	6.296	-0.000	14303	251.2
Aroclor-1221	3	6.382	-0.000	62477	253.8	3	6.622	0.000	23612	254.7
Total Col1Ave (3 peaks):					258.2	Total Col2Ave (3 peaks):				256.3 RPD = 1
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.730	0.000	15803	445.6	1	4.955	-0.001	7909	486.4
Aroclor-1232	2	6.131	0.000	26946	383.1	2	7.256	0.002	3727	46.1
Aroclor-1232	3	7.659	0.003	12893	40.5	3	7.863	0.002	5834	36.1
Aroclor-1232	4	8.583	0.003	2684	19.8	4	8.716	0.002	1189	25.6
Total Col1Ave (4 peaks):					222.3	Total Col2Ave (4 peaks):				148.5 RPD = 40
Corrected Ave (3 peaks):					147.8	Corrected Ave (3 peaks):				35.9 RPD = 122*
Aroclor-1242	1	7.269	-0.001	7175	35.0	1	7.256	0.000	3727	25.2
Aroclor-1242	2	7.659	0.003	12893	20.7	2	7.863	0.005	5834	18.8
Aroclor-1242	3	8.408	0.002	3610	18.6	3	9.175	0.008	1082	11.2
Aroclor-1242	4	8.583	0.004	2684	9.4	4	9.543	-0.054	1390	11.8
Total Col1Ave (4 peaks):					20.9	Total Col2Ave (4 peaks):				16.8 RPD = 22
Corrected Ave (3 peaks):					16.2	Corrected Ave (3 peaks):				13.9 RPD = 15
Aroclor-1248	1	8.408	0.002	3610	11.2	1	8.308	0.001	2045	13.5
Aroclor-1248	2	8.583	0.003	2684	6.5	2	8.716	0.002	1189	7.6
Aroclor-1248	3	8.994	-0.005	24440	31.6	3	9.175	0.009	1082	6.0
Aroclor-1248	4	9.302	0.008	26328	66.8	4	9.543	-0.048	1390	6.4
Total Col1Ave (4 peaks):					29.0	Total Col2Ave (4 peaks):				8.4 RPD = 110*
Corrected Ave (3 peaks):					16.4	Corrected Ave (3 peaks):				6.7 RPD = 85*
Aroclor-1254	1	9.302	0.004	26328	39.6	1	9.452	0.003	9571	39.6
Aroclor-1254	2	---			0.0	2	9.972	0.002	1733	8.9
Aroclor-1254	3	9.670	0.002	3721	8.7	3	10.147	0.023	49218	117.1
Aroclor-1254	4	9.808	0.000	9653	11.6	4	10.370	-0.002	59603	145.4
Aroclor-1254	5	10.120	-0.056	131179	251.9	5	10.569	0.001	79533	318.7
Total Col1Ave (4 peaks):					78.0	Total Col2Ave (5 peaks):				125.9 RPD = 47*
Corrected Ave (3 peaks):					20.0	Corrected Ave (4 peaks):				77.8 RPD = 118*
Aroclor-1260	1	11.044	-0.000	223208	394.0	1	11.652	-0.001	104071	312.7
Aroclor-1260	2	11.361	-0.001	190166	321.2	2	11.919	0.002	251579	296.2
Aroclor-1260	3	11.737	0.003	458281	291.9	3	12.435	-0.001	113645	504.2
Aroclor-1260	4	12.141	0.002	149720	189.4	4	12.501	-0.001	182951	319.6
Aroclor-1260	5	12.244	0.000	196033	576.0	NS	---			----
Total Col1Ave (5 peaks):					354.5	Total Col2Ave (4 peaks):				358.2 RPD = 1
Corrected Ave (4 peaks):					299.1	Corrected Ave (3 peaks):				309.5 RPD = 3
Aroclor-1262	1	10.828	-0.001	121431	251.3	1	11.201	0.000	121335	251.1
Aroclor-1262	2	12.244	0.000	196033	249.3	2	11.652	0.000	104071	252.9
Aroclor-1262	3	12.319	0.001	211092	249.8	3	12.435	0.001	113645	243.4
Aroclor-1262	4	12.988	0.001	183455	237.5	4	12.501	-0.001	182951	250.1
Total Col1Ave (4 peaks):					247.0	Total Col2Ave (4 peaks):				249.3 RPD = 1
Corrected Ave (3 peaks):					245.5	Corrected Ave (3 peaks):				248.2 RPD = 1
Aroclor-1268	1	12.244	-0.002	196033	97.1	1	12.435	0.003	113645	99.7
Aroclor-1268	2	12.319	0.002	211092	105.6	2	12.501	0.001	182951	149.3
Aroclor-1268	3	12.723	0.024	77240	45.2	3	12.891	-0.000	7755	7.4
Aroclor-1268	4	13.488	-0.002	65479	11.6	4	13.709	0.000	35146	10.5
Total Col1Ave (4 peaks):					64.9	Total Col2Ave (4 peaks):				66.7 RPD = 3

Corrected Ave (3 peaks): 51.3 Corrected Ave (3 peaks): 39.2 RPD = 27

Total PCB Area Col1 (5.906 - 13.793) = 3239932 Col1 Total PCB = 0.4 ppm*

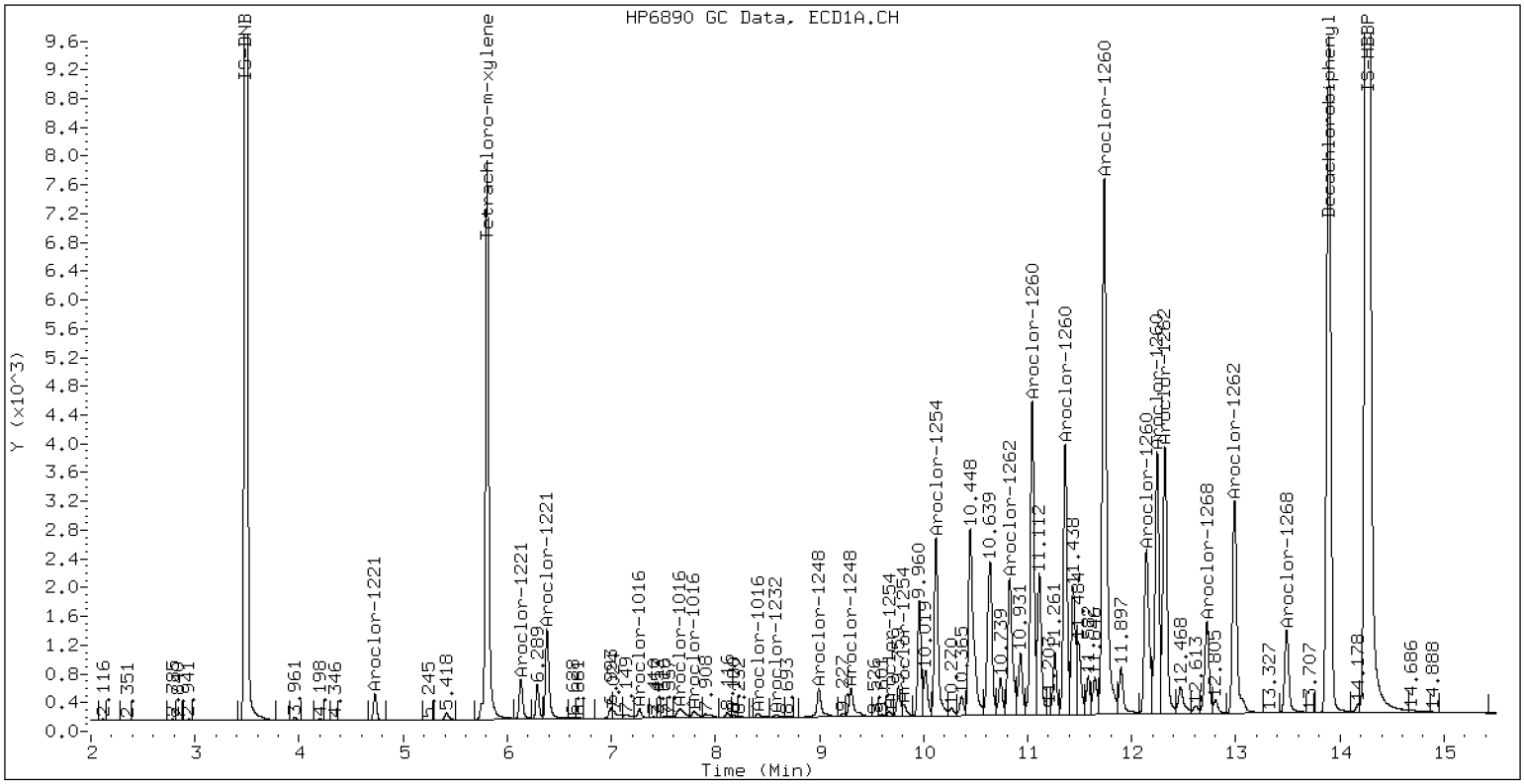
Total PCB Area Col2 (5.785 - 14.019) = 1655522 Col2 Total PCB = 0.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

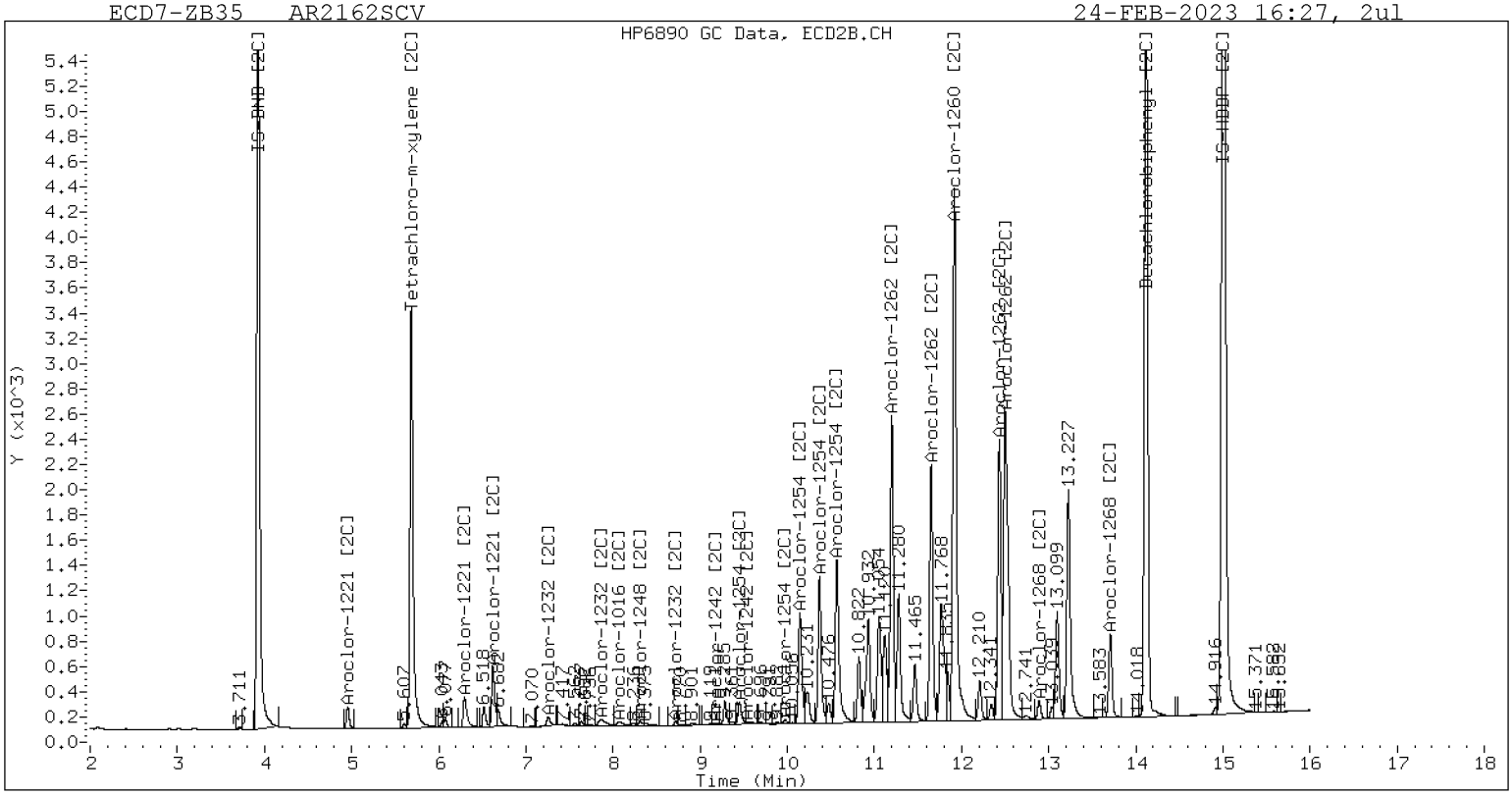
PCB Dual Column Chromatograms

ECD7-ZB5 AR2162SCV 24-FEB-2023 16:27, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR2162SCV 24-FEB-2023 16:27, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230224.b/02242318ECD7.D
Data file 2: /230224.b/230224.b/02242318ECD7.D
Method: \\target\share\chem4\ecd7.i\230224.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268SCV
Client ID:
Injection Date: 24-FEB-2023 16:48
Report Date: 02/28/2023 09:51
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	0.000	363331	5.685	0.000	176204	37.1	38.2	2.9	Tetrachloro-m-xylene
13.894	0.001	800845	14.118	-0.001	488290	51.3	56.4	9.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	656592	-2.6
Hexabromobiphenyl	1429847	1584453	10.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	314741	-0.2
Hexabromobiphenyl	513946	568346	10.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col					ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	-0.001	28327	113.6	1	7.254	-0.001	20651	112.1
Aroclor-1016	2	7.657	0.003	80668	106.1	2	7.861	0.005	41326	110.6
Aroclor-1016	3	7.793	0.003	40661	109.6	3	8.060	0.005	20446	121.2
Aroclor-1016	4	8.407	0.002	24680	102.9	4	8.308	0.001	13576	102.5
Total Col1Ave (4 peaks):					108.0	Total Col2Ave (4 peaks):				111.6 RPD = 3
Corrected Ave (3 peaks):					106.2	Corrected Ave (3 peaks):				108.4 RPD = 2
Aroclor-1221	1	4.729	-0.001	8535	145.1	1	4.956	-0.000	3965	133.1
Aroclor-1221	2	6.132	-0.000	15523	147.6	2	6.297	0.001	8689	154.1
Aroclor-1221	3	6.382	-0.000	45872	187.9	3	6.622	0.001	22272	242.6
Total Col1Ave (3 peaks):					160.2	Total Col2Ave (3 peaks):				176.6 RPD = 10
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.729	-0.001	8535	242.6	1	4.956	0.000	3965	246.2
Aroclor-1232	2	6.132	0.001	15523	222.5	2	7.254	0.000	20651	258.1
Aroclor-1232	3	7.657	0.001	80668	255.4	3	7.861	0.001	41326	258.3
Aroclor-1232	4	8.582	0.001	34784	259.2	4	8.714	-0.001	12504	271.5
Total Col1Ave (4 peaks):					244.9	Total Col2Ave (4 peaks):				258.5 RPD = 5
Corrected Ave (3 peaks):					240.2	Corrected Ave (3 peaks):				254.2 RPD = 6
Aroclor-1242	1	7.270	-0.001	28327	139.2	1	7.254	-0.001	20651	141.2
Aroclor-1242	2	7.657	0.001	80668	130.5	2	7.861	0.003	41326	134.4
Aroclor-1242	3	8.407	0.001	24680	128.4	3	9.170	0.003	12830	134.1
Aroclor-1242	4	8.582	0.003	34784	122.4	4	9.600	0.003	14836	127.3
Total Col1Ave (4 peaks):					130.1	Total Col2Ave (4 peaks):				134.3 RPD = 3
Corrected Ave (3 peaks):					127.1	Corrected Ave (3 peaks):				132.0 RPD = 4
Aroclor-1248	1	8.407	0.001	24680	77.0	1	8.308	0.000	13576	90.3
Aroclor-1248	2	8.582	0.001	34784	85.4	2	8.714	-0.000	12504	80.5
Aroclor-1248	3	8.996	-0.003	83592	108.8	3	9.170	0.004	12830	71.8
Aroclor-1248	4	9.292	-0.003	39603	101.3	4	9.600	0.010	14836	69.1
Total Col1Ave (4 peaks):					93.1	Total Col2Ave (4 peaks):				77.9 RPD = 18
Corrected Ave (3 peaks):					87.9	Corrected Ave (3 peaks):				73.8 RPD = 17
Aroclor-1254	1	9.292	-0.007	39603	60.1	1	9.452	0.003	4590	19.2
Aroclor-1254	2	9.377	-0.000	11450	38.6	2	9.973	0.003	2892	15.0
Aroclor-1254	3	9.674	0.005	6387	15.1	3	10.131	0.007	6052	14.5
Aroclor-1254	4	9.813	0.006	10162	12.3	4	10.390	0.017	5324	13.1
Aroclor-1254	5	10.189	0.012	6862	13.3	5	10.572	0.004	1891	7.7
Total Col1Ave (5 peaks):					27.9	Total Col2Ave (5 peaks):				13.9 RPD = 67*
Corrected Ave (4 peaks):					19.8	Corrected Ave (4 peaks):				12.6 RPD = 45*
Aroclor-1260	1	11.046	0.002	87033	152.7	1	11.645	-0.008	62543	187.1
Aroclor-1260	2	11.362	0.001	6300	10.6	2	11.920	0.003	28552	33.5
Aroclor-1260	3	11.738	0.004	54524	34.5	3	12.432	-0.004	285450	1261.2
Aroclor-1260	4	12.144	0.005	1727	2.2	4	12.499	-0.002	306992	534.0
Aroclor-1260	5	12.246	0.002	502931	1469.0	NS	---			----
Total Col1Ave (5 peaks):					333.8	Total Col2Ave (4 peaks):				503.9 RPD = 41*
Corrected Ave (4 peaks):					50.0	Corrected Ave (3 peaks):				251.5 RPD = 134*
Aroclor-1262	1	10.832	0.004	3395	7.0	1	11.201	0.001	44255	91.2
Aroclor-1262	2	12.246	0.002	502931	635.9	2	11.645	-0.007	62543	151.3
Aroclor-1262	3	12.318	-0.000	497006	584.5	3	12.432	-0.002	285450	608.7
Aroclor-1262	4	12.987	-0.000	202197	260.2	4	12.499	-0.003	306992	417.9
Total Col1Ave (4 peaks):					371.9	Total Col2Ave (4 peaks):				317.3 RPD = 16
Corrected Ave (3 peaks):					283.9	Corrected Ave (3 peaks):				220.1 RPD = 25
Aroclor-1268	1	12.246	-0.001	502931	247.7	1	12.432	-0.000	285450	249.4
Aroclor-1268	2	12.318	0.002	497006	247.2	2	12.499	-0.001	306992	249.5
Aroclor-1268	3	12.699	-0.000	422793	245.8	3	12.892	0.000	260893	248.4
Aroclor-1268	4	13.490	0.000	1386953	244.9	4	13.709	-0.000	829733	247.1
Total Col1Ave (4 peaks):					246.4	Total Col2Ave (4 peaks):				248.6 RPD = 1

Corrected Ave (3 peaks): 246.0 Corrected Ave (3 peaks): 248.3 RPD = 1

Total PCB Area Col1 (5.906 - 13.793) = 4180607 Col1 Total PCB = 0.5 ppm*

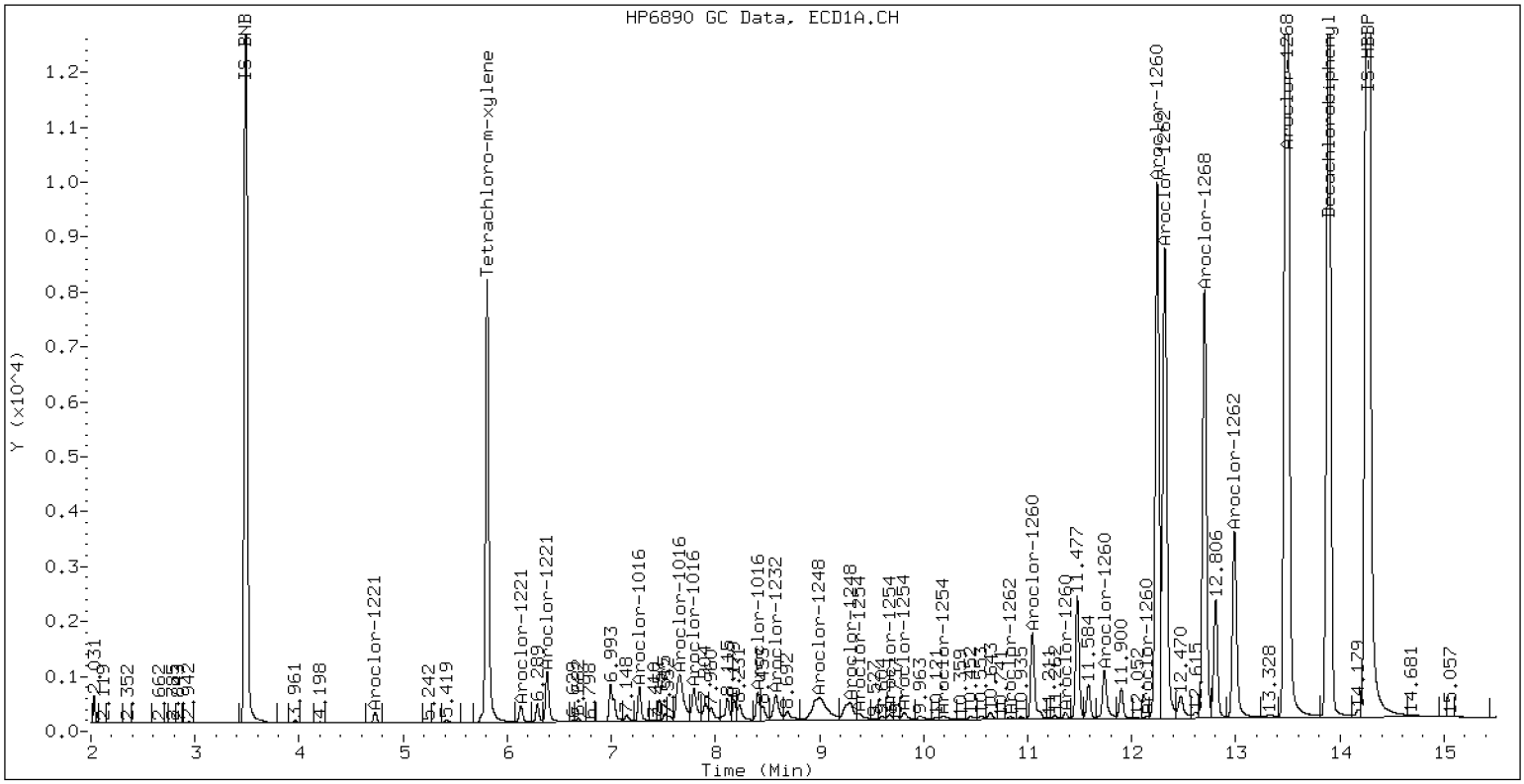
Total PCB Area Col2 (5.785 - 14.019) = 2376912 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

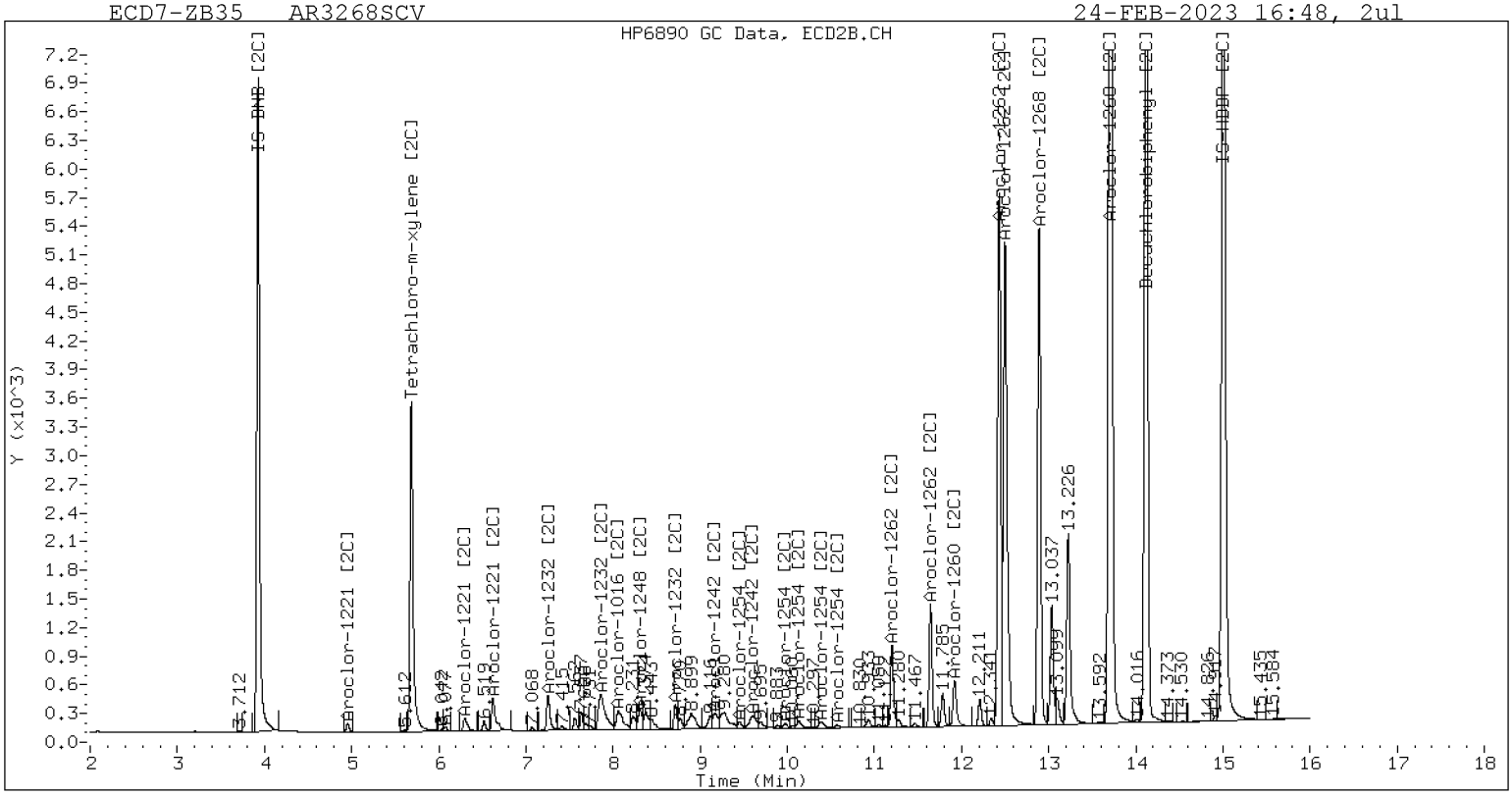
PCB Dual Column Chromatograms

ECD7-ZB5 AR3268SCV 24-FEB-2023 16:48, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR3268SCV 24-FEB-2023 16:48, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
8082 DDT SCREEN REPORT

Data file 1: /230224.b/02242319ECD7.D ARI ID: DDTS

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
9.261	0.000	694353	9.912	0.000	580269	0.100	0.100	0.0	2,4-DDE
0.000	-10.293	0	10.672	0.000	673479	0.000	0.200#	----	2,4-DDT
9.686	0.000	1191406	10.212	0.000	433373	0.100	0.100	0.0	4,4-DDE
10.259	0.000	1721760	10.672	0.000	673479	0.100	0.200#	66.7*	4,4-DDD

# Indicates value is from co-eluting peaks
* Indicates RPD > 40%

Analytical Resources Inc.
8082 DDT SCREEN REPORT

Data file 1: /230224.b/02242320ECD7.D ARI ID: DDT BD

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
9.285	0.023	4923	9.921	0.009	9972	0.001	0.002	84.3*	2,4-DDE
0.000	-10.293	0	10.677	0.004	249094	0.000	0.074#	----	2,4-DDT
9.692	0.006	12128	10.221	0.009	528	0.001	0.000	156.7*	4,4-DDE
10.265	0.006	410017	10.677	0.004	249094	0.023	0.074#	103.6*	4,4-DDD

# Indicates value is from co-eluting peaks
* Indicates RPD > 40%

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00069
Laboratory ID: SLB0342-SCV1
Sequence: SLB0342
Sequence Name: AR1660SCV1
Standard ID: L002065

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1016	250.00	243	-2.7	20.00
Aroclor 1016 [2C]	250.00	246	-1.4	20.00
Aroclor 1260	250.00	266	6.2	20.00
Aroclor 1260 [2C]	250.00	261	4.5	20.00
Decachlorobiphenyl	40.000	34.3	-14.2	20.00
Tetrachlorometaxylene	40.000	34.9	-12.6	20.00
Decachlorobiphenyl [2C]	40.000	37.3	-6.6	20.00
Tetrachlorometaxylene [2C]	40.000	35.8	-10.6	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00069
Laboratory ID: SLB0342-SCV2
Sequence: SLB0342
Sequence Name: AR1242SCV2
Standard ID: K007656

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1242	250.00	204	-18.5	20.00
Aroclor 1242 [2C]	250.00	221	-11.8	20.00
Decachlorobiphenyl	40.000	37.0	-7.5	20.00
Tetrachlorometaxylene	40.000	33.6	-15.9	20.00
Decachlorobiphenyl [2C]	40.000	40.3	0.8	20.00
Tetrachlorometaxylene [2C]	40.000	34.5	-13.7	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00069
Laboratory ID: SLB0342-SCV3
Sequence: SLB0342
Sequence Name: AR1248SCV3
Standard ID: L002066

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1248	250.00	249	-0.2	20.00
Aroclor 1248 [2C]	250.00	248	-0.8	20.00
Decachlorobiphenyl	40.000	33.1	-17.2	20.00
Tetrachlorometaxylene	40.000	34.9	-12.8	20.00
Decachlorobiphenyl [2C]	40.000	36.3	-9.2	20.00
Tetrachlorometaxylene [2C]	40.000	36.4	-9.0	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Calibration: GB00069
Sequence: SLB0342

SDG: 23A0420
Project: AOC5 MR Phase 1
Laboratory ID: SLB0342-SCV4
Sequence Name: AR1254SCV4
Standard ID: L002067

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1254	250.00	235	-5.9	20.00
Aroclor 1254 [2C]	250.00	240	-4.0	20.00
Decachlorobiphenyl	40.000	34.6	-13.4	20.00
Tetrachlorometaxylene	40.000	36.1	-9.7	20.00
Decachlorobiphenyl [2C]	40.000	37.9	-5.2	20.00
Tetrachlorometaxylene [2C]	40.000	37.1	-7.3	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00069
Laboratory ID: SLB0342-SCV5
Sequence: SLB0342
Sequence Name: AR2162SCV5
Standard ID: L002068

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1221	250.00	258	3.3	20.00
Aroclor 1221 [2C]	250.00	256	2.5	20.00
Aroclor 1262	250.00	247	-1.2	20.00
Aroclor 1262 [2C]	250.00	249	-0.3	20.00
Decachlorobiphenyl	40.000	34.4	-13.9	20.00
Tetrachlorometaxylene	40.000	36.0	-10.0	20.00
Decachlorobiphenyl [2C]	40.000	37.9	-5.4	20.00
Tetrachlorometaxylene [2C]	40.000	36.6	-8.4	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GB00069
Laboratory ID: SLB0342-SCV6
Sequence: SLB0342
Sequence Name: AR3268SCV6
Standard ID: L002069

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1232	250.00	245	-2.0	20.00
Aroclor 1232 [2C]	250.00	259	3.4	20.00
Aroclor 1268	250.00	246	-1.4	20.00
Aroclor 1268 [2C]	250.00	249	-0.6	20.00
Decachlorobiphenyl	40.000	51.3	28.3	20.00
Tetrachlorometaxylene	40.000	37.1	-7.3	20.00
Decachlorobiphenyl [2C]	40.000	56.4	41.0	20.00
Tetrachlorometaxylene [2C]	40.000	38.2	-4.6	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GB00069
Lab File ID:	02282310ECD7.D	Calibration Date:	02/24/2023
Sequence:	SLC0014	Injection Date:	02/28/23
Lab Sample ID:	SLC0014-ICV1	Injection Time:	19:04
Sequence Name:	AR1254ICV1		

		CONC. (ug/L)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Aroclor 1254	A	250.00	284	0.0662949	0.0748899		13.7	+/-20
Aroclor-1254 (1)	A	250.00	282	0.0803331	0.0904834			
Aroclor-1254 (2)	A	250.00	292	0.0361302	0.0421510			
Aroclor-1254 (3)	A	250.00	291	0.0516471	0.0600635			
Aroclor-1254 (4)	A	250.00	278	0.1004230	0.1118357			
Aroclor-1254 (5)	A	250.00	278	0.0629414	0.0699159			
Aroclor 1254 [2C]	A	250.00	263	0.0763106	0.0803775		5.4	+/-20
Aroclor-1254 (1) [2C]	A	250.00	264	0.0608052	0.0641940			
Aroclor-1254 (2) [2C]	A	250.00	266	0.0489162	0.0521536			
Aroclor-1254 (3) [2C]	A	250.00	266	0.1058376	0.1127019			
Aroclor-1254 (4) [2C]	A	250.00	258	0.1031750	0.1067184			
Aroclor-1254 (5) [2C]	A	250.00	263	0.0628191	0.0661198			
Decachlorobiphenyl	A	40.000	37.4	0.7878687	0.7377254		-6.5	+/-20
Tetrachlorometaxylene	A	40.000	40.1	1.1944880	1.1986300		0.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	41.4	1.2182710	1.2609770		3.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	40.4	1.1737210	1.1848750		1.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282310ECD7.D
Data file 2: /230228.b/230228.b/02282310ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254ICV1
Client ID:
Injection Date: 28-FEB-2023 19:04
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.002	447919	5.688	0.001	178473	40.1	40.4	0.6	Tetrachloro-m-xylene
13.894	0.001	610235	14.119	-0.001	294184	37.5	41.4	10.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	747385	10.9
Hexabromobiphenyl	1429847	1654369	15.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	301252	-4.4
Hexabromobiphenyl	513946	466597	-9.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.300	0.001	211331	281.6	1	9.451	0.000	60433	263.9
Aroclor-1254	2	9.378	-0.000	98447	291.7	2	9.971	-0.001	49098	266.5
Aroclor-1254	3	9.670	0.001	140283	290.7	3	10.125	-0.000	106099	266.2
Aroclor-1254	4	9.809	0.001	261201	278.4	4	10.375	0.001	100466	258.6
Aroclor-1254	5	10.179	0.001	163294	277.7	5	10.570	0.000	62246	263.1

Total Col1Ave (5 peaks): 284.0 Total Col2Ave (5 peaks): 263.7 RPD = 7

Corrected Ave (4 peaks): 282.1 Corrected Ave (4 peaks): 263.0 RPD = 7

CalAmt %D: 13.6 CalAmt %D: 5.5

Total PCB Area Col1 (5.907 - 13.793) = 3085449 Col1 Total PCB = 0.3 ppm*

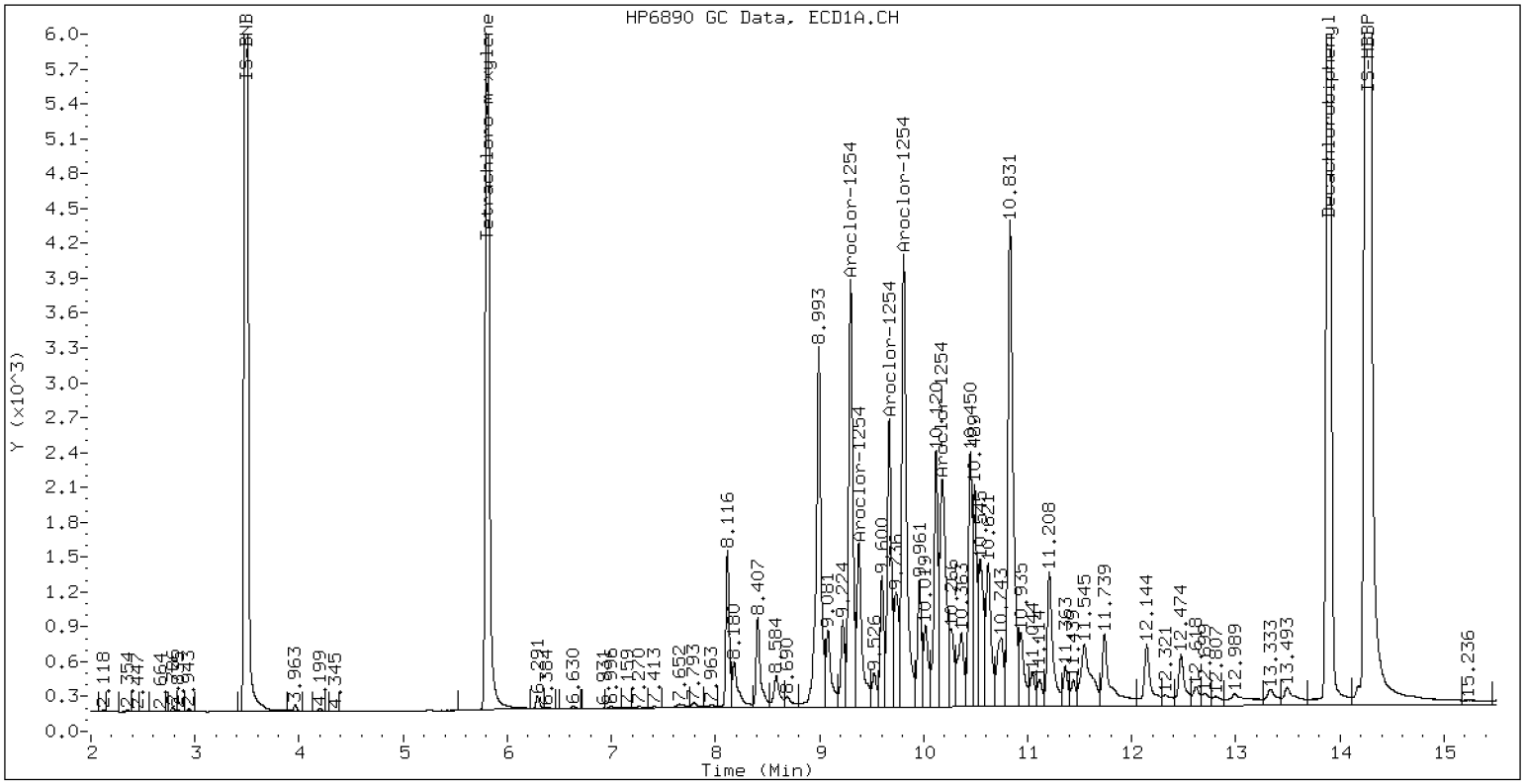
Total PCB Area Col2 (5.787 - 14.020) = 1027352 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

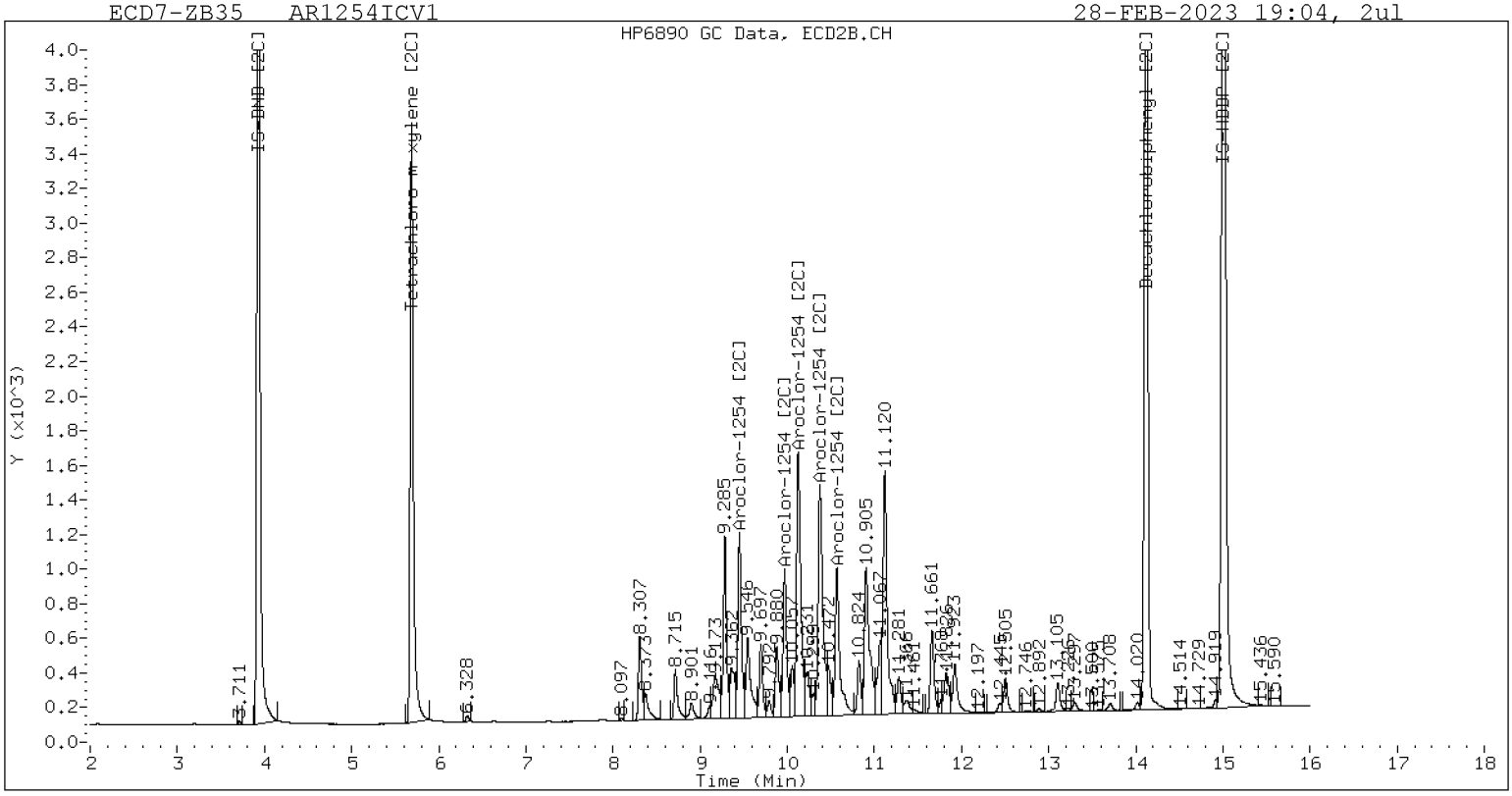
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254ICV1 28-FEB-2023 19:04, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 AR1254ICV1 28-FEB-2023 19:04, 2ul

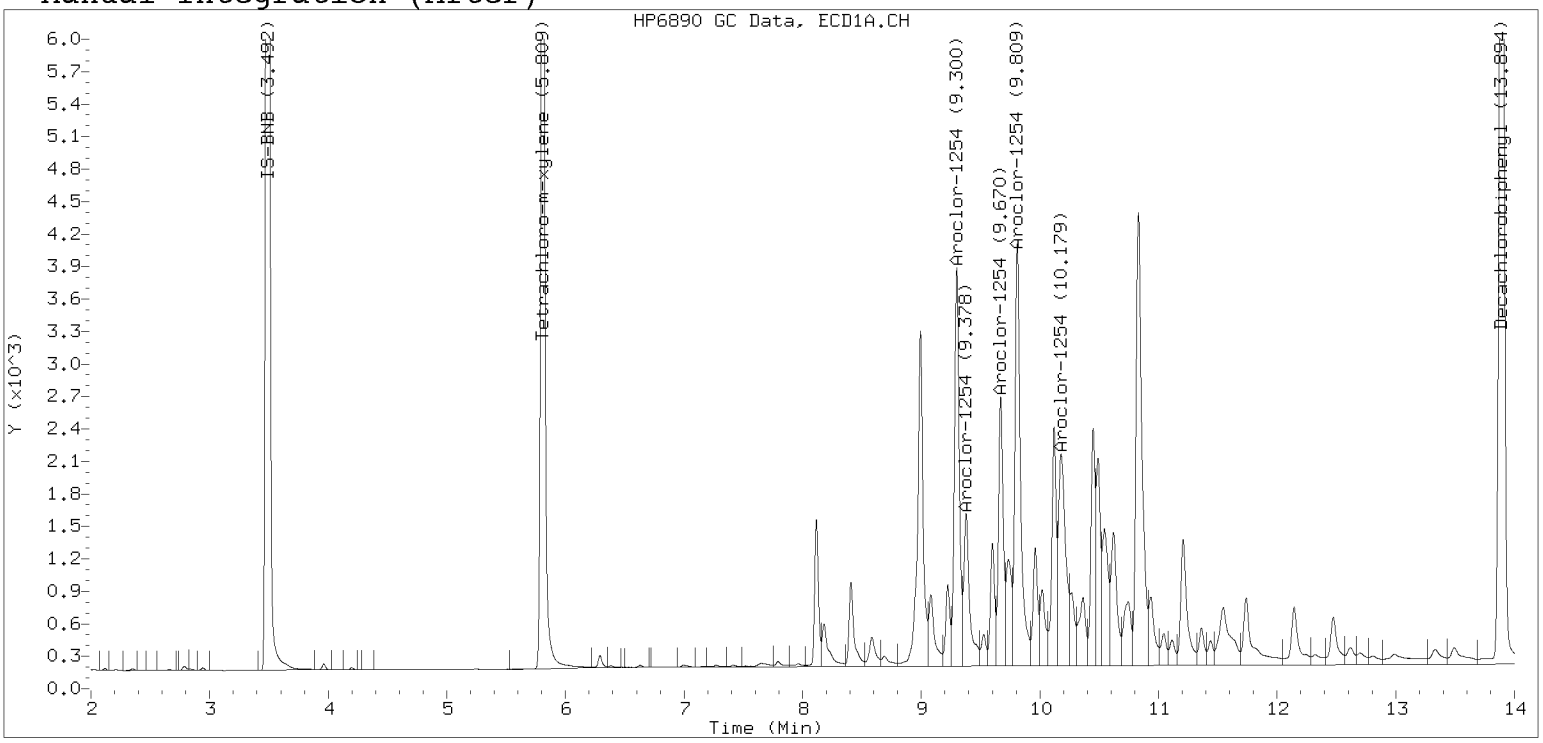


ZB-35 Manual Integration: NO

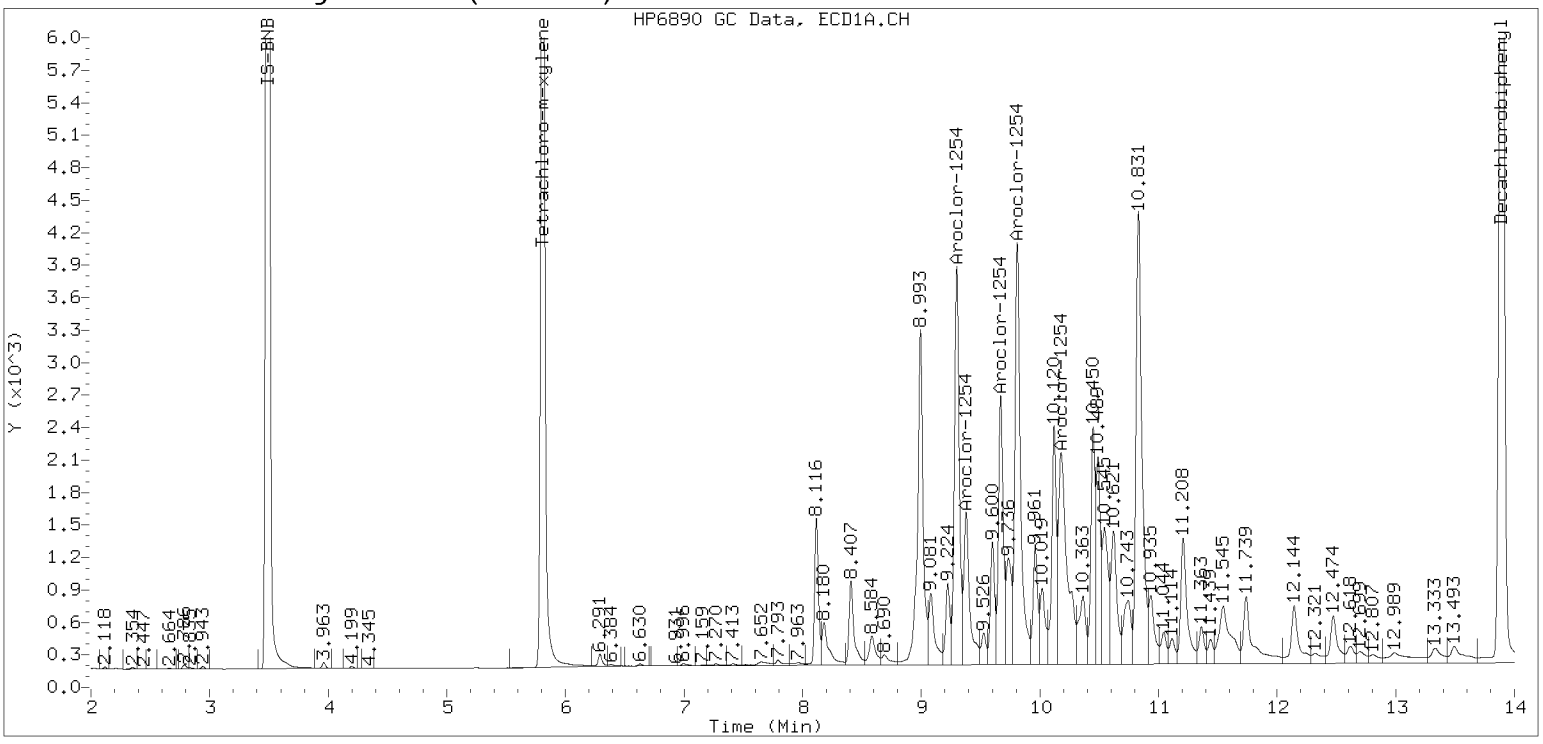
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230228.b/02282310ECD7.D Injection Date: 28-FEB-2023 19:04

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GB00069
Lab File ID:	02282311ECD7.D	Calibration Date:	02/24/2023
Sequence:	SLC0014	Injection Date:	02/28/23
Lab Sample ID:	SLC0014-ICV2	Injection Time:	19:25
Sequence Name:	AR1660ICV2		

		CONC. (ug/L)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
Aroclor 1016	A	250.00	280	0.0493662	0.0552775		12.0	+/-20	
Aroclor-1016 (1)	A	250.00	277	0.0303852	0.0337077		10.8		
Aroclor-1016 (2)	A	250.00	278	0.0926308	0.1031854		11.2		
Aroclor-1016 (3)	A	250.00	284	0.0452180	0.0513640		13.6		
Aroclor-1016 (4)	A	250.00	281	0.0292307	0.0328528		12.4		
Aroclor 1016 [2C]	A	250.00	267	0.0545857	0.0586892		6.6	+/-20	
Aroclor-1016 (1) [2C]	A	250.00	258	0.0468313	0.0483572		3.2		
Aroclor-1016 (2) [2C]	A	250.00	278	0.0949676	0.1054261		11.2		
Aroclor-1016 (3) [2C]	A	250.00	260	0.0428922	0.0445645		4.0		
Aroclor-1016 (4) [2C]	A	250.00	270	0.0336515	0.0364091		8.0		
Aroclor 1260	A	250.00	308	0.0392091	0.0484773		23.3	+/-20	*
Aroclor-1260 (1)	A	250.00	282	0.0287785	0.0324665		12.8		
Aroclor-1260 (2)	A	250.00	318	0.0300690	0.0382204		27.2		
Aroclor-1260 (3)	A	250.00	310	0.0797517	0.0989819		24.0		
Aroclor-1260 (4)	A	250.00	318	0.0401599	0.0510785		27.2		
Aroclor-1260 (5)	A	250.00	313	0.0172866	0.0216391		25.2		
Aroclor 1260 [2C]	A	250.00	252	0.0699688	0.0716171		0.7	+/-20	
Aroclor-1260 (1) [2C]	A	250.00	237	0.0470406	0.0445304		-5.2		
Aroclor-1260 (2) [2C]	A	250.00	260	0.1200523	0.1249385		4.0		
Aroclor-1260 (3) [2C]	A	250.00	246	0.0318590	0.0313749		-1.6		
Aroclor-1260 (4) [2C]	A	250.00	264	0.0809231	0.0856245		5.6		
Decachlorobiphenyl	A	40.000	40.5	0.7878687	0.7977915		1.3	+/-20	
Tetrachlorometaxylene	A	40.000	41.8	1.1944880	1.2496600		4.5	+/-20	
Decachlorobiphenyl [2C]	A	40.000	40.4	1.2182710	1.2317770		1.0	+/-20	
Tetrachlorometaxylene [2C]	A	40.000	42.2	1.1737210	1.2392490		5.5	+/-20	

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282311ECD7.D
Data file 2: /230228.b/230228.b/02282311ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660ICV2
Client ID:
Injection Date: 28-FEB-2023 19:25
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.000	469361	5.687	-0.000	189615	41.8	42.2	0.9	Tetrachloro-m-xylene
13.893	-0.001	628838	14.118	-0.002	286648	40.5	40.4	0.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	751182	11.5
Hexabromobiphenyl	1429847	1576447	10.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	306016	-2.9
Hexabromobiphenyl	513946	465422	-9.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.269	0.000	79127	277.3	1	7.254	-0.001	46244	258.1	
Aroclor-1016	2	7.655	-0.000	242222	278.5	2	7.858	-0.001	100819	277.5	
Aroclor-1016	3	7.792	0.000	120574	284.0	3	8.057	-0.002	42617	259.7	
Aroclor-1016	4	8.405	-0.001	77120	281.0	4	8.308	-0.000	34818	270.5	
Total Col1Ave (4 peaks):					280.2	Total Col2Ave (4 peaks):				266.5	RPD = 5
Corrected Ave (3 peaks):					278.9	Corrected Ave (3 peaks):				262.8	RPD = 6
CalAmt %D:					12.1	CalAmt %D:				6.6	
Aroclor-1260	1	11.045	0.001	159943	282.0	1	11.653	-0.000	64767	236.7	
Aroclor-1260	2	11.362	0.001	188289	317.8	2	11.919	0.001	181716	260.2	
Aroclor-1260	3	11.736	0.001	487624	310.3	3	12.436	0.001	45633	246.2	
Aroclor-1260	4	12.140	0.000	251633	318.0	4	12.502	0.000	124536	264.5	
Aroclor-1260	5	12.244	0.001	106603	312.9	NS	---			----	
Total Col1Ave (5 peaks):					308.2	Total Col2Ave (4 peaks):				251.9	RPD = 20
Corrected Ave (4 peaks):					305.8	Corrected Ave (3 peaks):				247.7	RPD = 21
CalAmt %D:					23.3	CalAmt %D:				0.8	

Total PCB Area Col1 (5.907 - 13.793) = 5090549 Col1 Total PCB = 0.6 ppm*

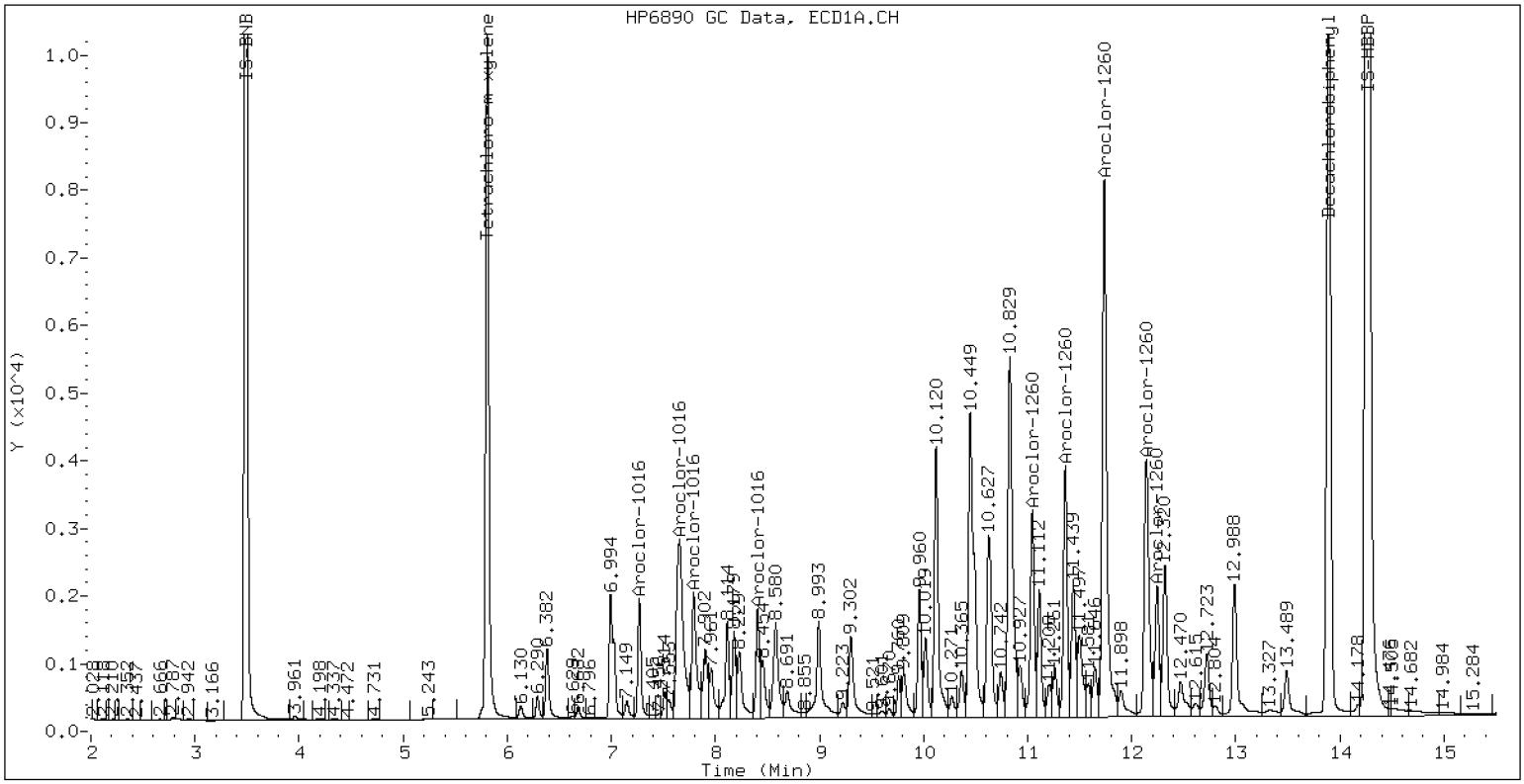
Total PCB Area Col2 (5.787 - 14.020) = 1776656 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

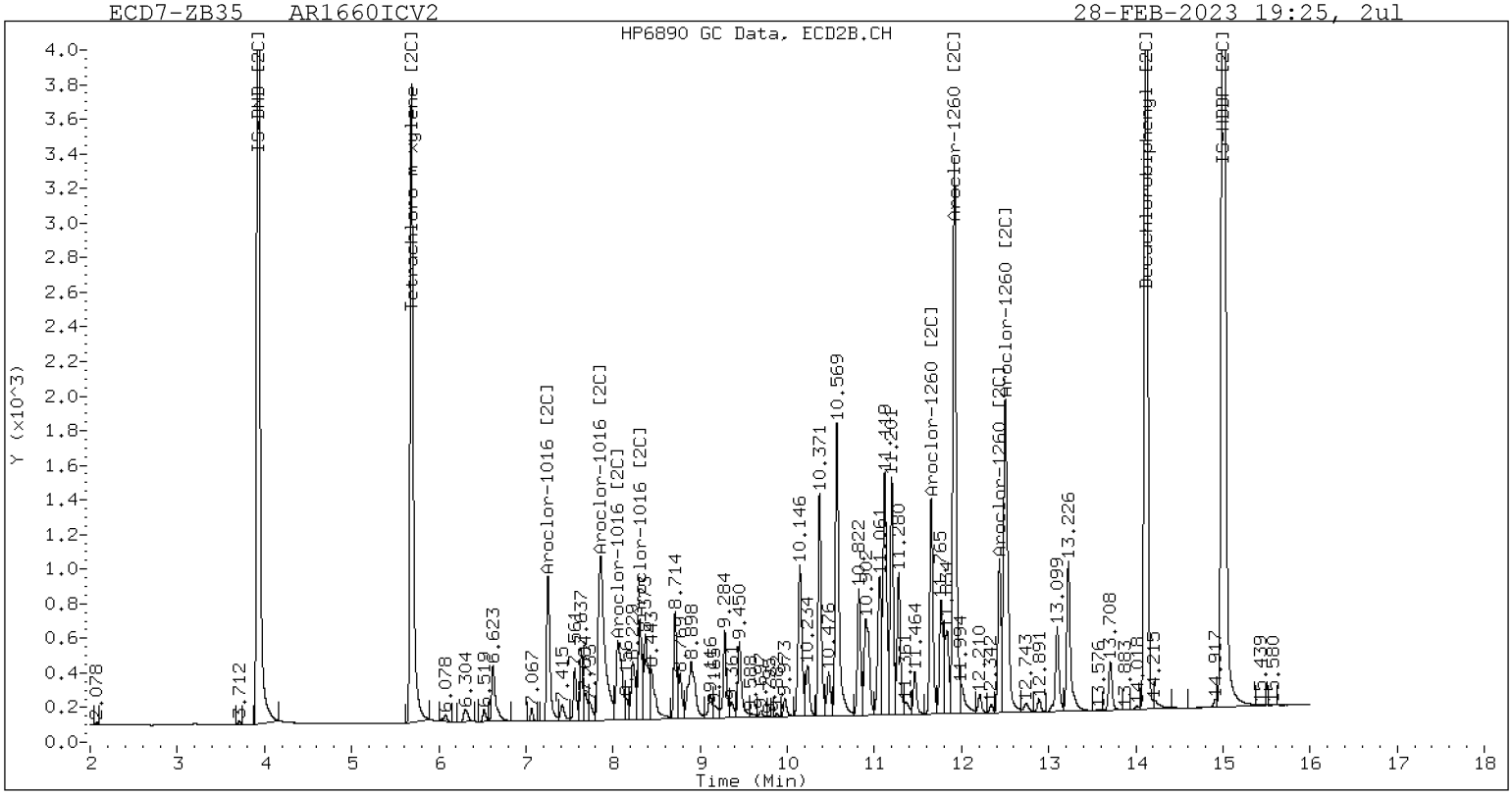
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660ICV2 28-FEB-2023 19:25, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660ICV2 28-FEB-2023 19:25, 2ul

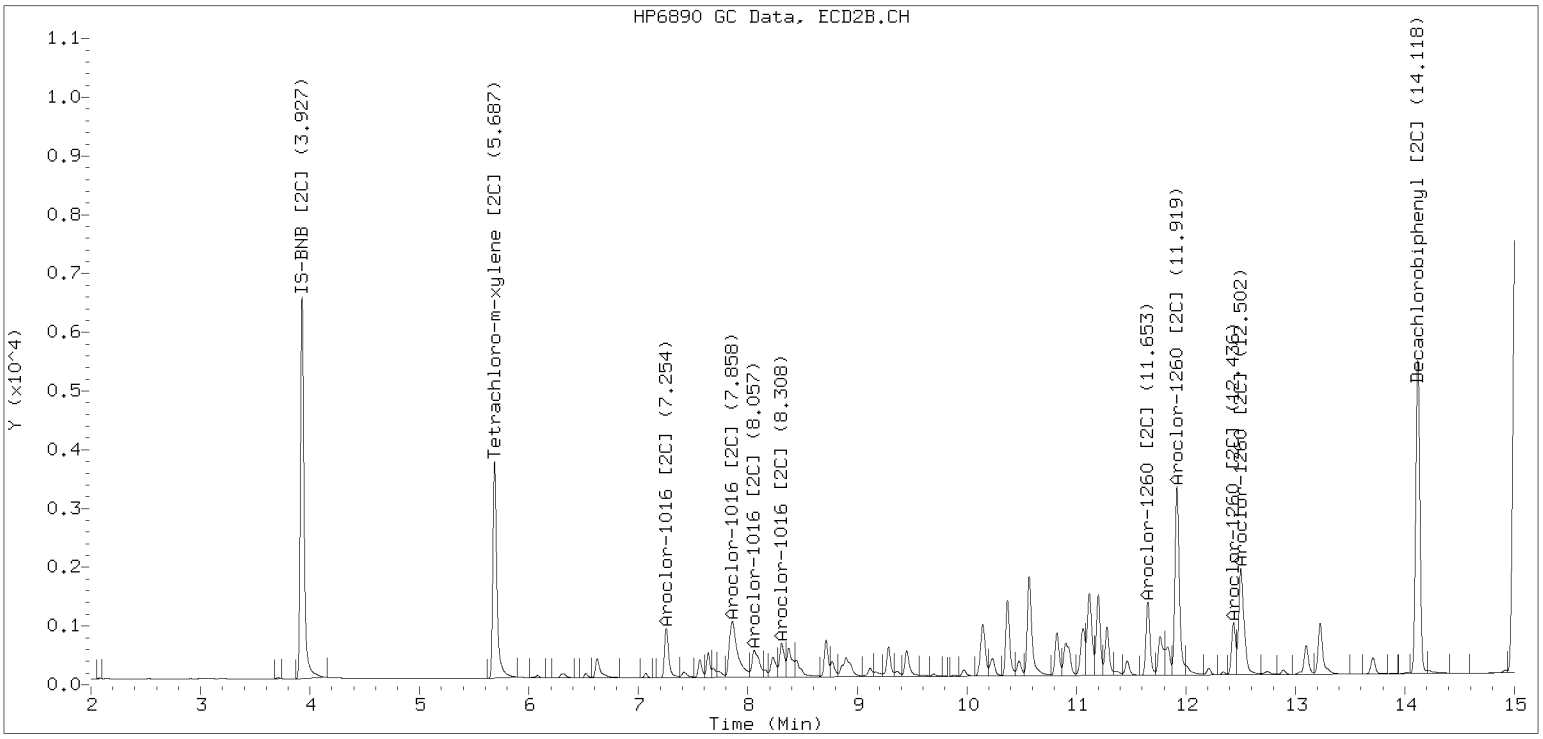


ZB-35 Manual Integration: YES

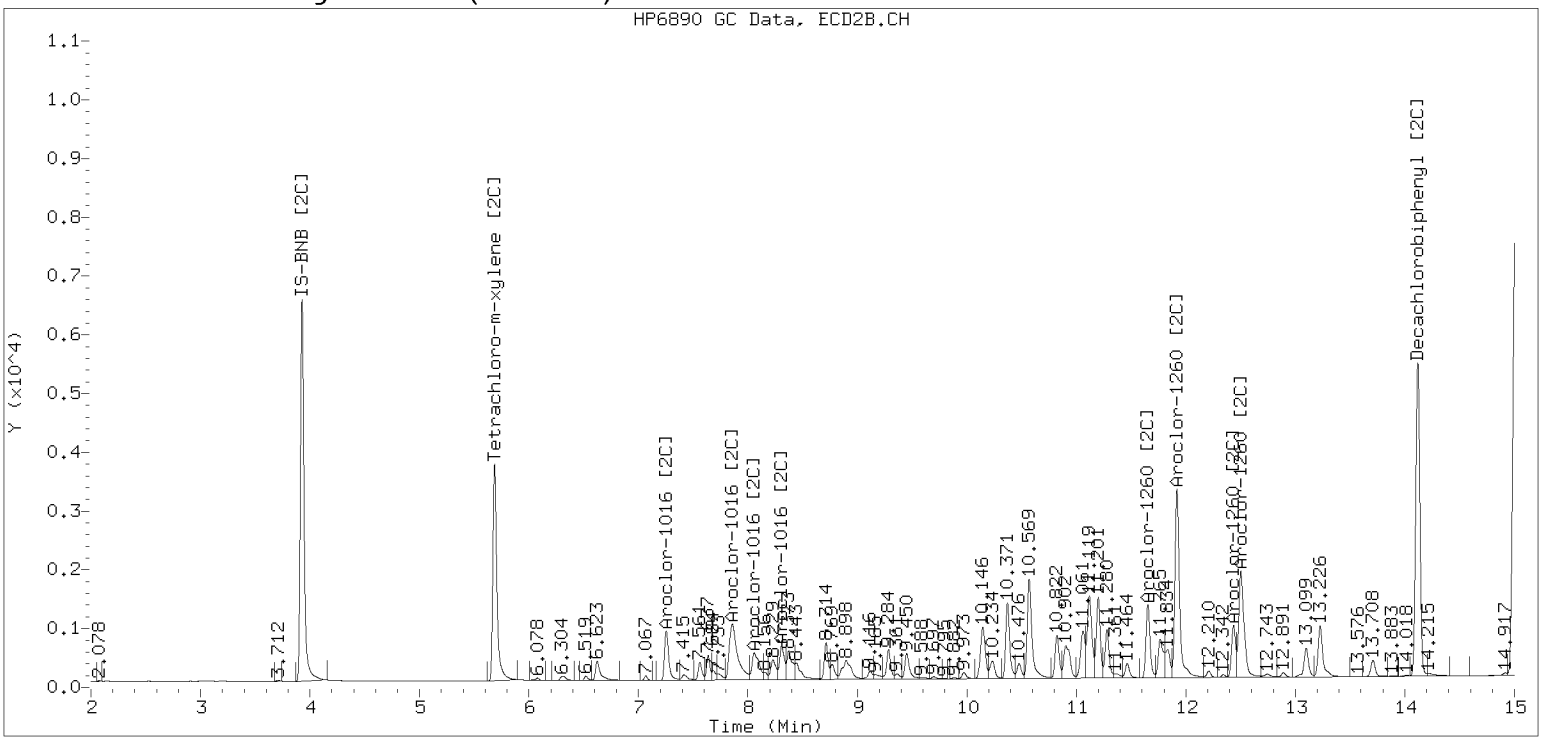
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282311ECD7.D Injection Date: 28-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GB00069
Lab File ID:	02242313ECD7.D	Calibration Date:	02/24/2023
Sequence:	SLB0342	Injection Date:	02/24/23
Lab Sample ID:	SLB0342-SCV1	Injection Time:	15:03
Sequence Name:	AR1660SCV1		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	243	0.0493662	0.0479314		-2.7	+/-20
Aroclor 1016 [2C]	A	250.00	246	0.0545857	0.0542382		-1.4	+/-20
Aroclor 1260	A	250.00	266	0.0392091	0.0412121		6.2	+/-20
Aroclor 1260 [2C]	A	250.00	261	0.0699688	0.0733659		4.5	+/-20
Decachlorobiphenyl	A	40.000	34.3	0.7878687	0.6762784		-14.2	+/-20
Tetrachlorometaxylene	A	40.000	34.9	1.1944880	1.0436010		-12.6	+/-20
Decachlorobiphenyl [2C]	A	40.000	37.3	1.2182710	1.1373730		-6.6	+/-20
Tetrachlorometaxylene [2C]	A	40.000	35.8	1.1737210	1.0492890		-10.6	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GB00069
Lab File ID:	02242314ECD7.D	Calibration Date:	02/24/2023
Sequence:	SLB0342	Injection Date:	02/24/23
Lab Sample ID:	SLB0342-SCV2	Injection Time:	15:24
Sequence Name:	AR1242SCV2		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1242	A	250.00	204	0.0395340	0.0322254		-18.5	+/-20
Aroclor 1242 [2C]	A	250.00	221	0.0423092	0.0365983		-11.8	+/-20
Decachlorobiphenyl	A	40.000	37.0	0.7878687	0.7290534		-7.5	+/-20
Tetrachlorometaxylene	A	40.000	33.6	1.1944880	1.0041320		-15.9	+/-20
Decachlorobiphenyl [2C]	A	40.000	40.3	1.2182710	1.2285170		0.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	34.5	1.1737210	1.0131510		-13.7	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GB00069
Lab File ID:	02242315ECD7.D	Calibration Date:	02/24/2023
Sequence:	SLB0342	Injection Date:	02/24/23
Lab Sample ID:	SLB0342-SCV3	Injection Time:	15:45
Sequence Name:	AR1248SCV3		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	249	0.0574755	0.0572474		-0.2	+/-20
Aroclor 1248 [2C]	A	250.00	248	0.0444270	0.0440936		-0.8	+/-20
Decachlorobiphenyl	A	40.000	33.1	0.7878687	0.6527336		-17.2	+/-20
Tetrachlorometaxylene	A	40.000	34.9	1.1944880	1.0413820		-12.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.3	1.2182710	1.1066400		-9.2	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.4	1.1737210	1.0676190		-9.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GB00069
Lab File ID:	02242316ECD7.D	Calibration Date:	02/24/2023
Sequence:	SLB0342	Injection Date:	02/24/23
Lab Sample ID:	SLB0342-SCV4	Injection Time:	16:06
Sequence Name:	AR1254SCV4		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1254	A	250.00	235	0.0662949	0.0622529		-5.9	+/-20
Aroclor 1254 [2C]	A	250.00	240	0.0763106	0.0731447		-4.0	+/-20
Decachlorobiphenyl	A	40.000	34.6	0.7878687	0.6823832		-13.4	+/-20
Tetrachlorometaxylene	A	40.000	36.1	1.1944880	1.0787610		-9.7	+/-20
Decachlorobiphenyl [2C]	A	40.000	37.9	1.2182710	1.1548440		-5.2	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.1	1.1737210	1.0880920		-7.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GB00069
Lab File ID:	02242317ECD7.D	Calibration Date:	02/24/2023
Sequence:	SLB0342	Injection Date:	02/24/23
Lab Sample ID:	SLB0342-SCV5	Injection Time:	16:27
Sequence Name:	AR2162SCV5		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1221	A	250.00	258	0.0165758	0.0169561		3.3	+/-20
Aroclor 1221 [2C]	A	250.00	256	0.0150798	0.0153801		2.5	+/-20
Aroclor 1262	A	250.00	247	0.0366596	0.0361658		-1.2	+/-20
Aroclor 1262 [2C]	A	250.00	249	0.0739760	0.0737876		-0.3	+/-20
Decachlorobiphenyl	A	40.000	34.4	0.7878687	0.6780614		-13.9	+/-20
Tetrachlorometaxylene	A	40.000	36.0	1.1944880	1.0756080		-10.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	37.9	1.2182710	1.1528740		-5.4	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.6	1.1737210	1.0753820		-8.4	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GB00069
Lab File ID:	02242318ECD7.D	Calibration Date:	02/24/2023
Sequence:	SLB0342	Injection Date:	02/24/23
Lab Sample ID:	SLB0342-SCV6	Injection Time:	16:48
Sequence Name:	AR3268SCV6		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1232	A	250.00	245	0.0169039	0.0169981		-2.0	+/-20
Aroclor 1232 [2C]	A	250.00	259	0.0192023	0.0199392		3.4	+/-20
Aroclor 1268	A	250.00	246	0.1442124	0.1418626		-1.4	+/-20
Aroclor 1268 [2C]	A	250.00	249	0.2386862	0.2369075		-0.6	+/-20
Decachlorobiphenyl	A	40.000	51.3	0.7878687	1.0108790		28.3	+/-20
Tetrachlorometaxylene	A	40.000	37.1	1.1944880	1.1067180		-7.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	56.4	1.2182710	1.7182840		41.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	38.2	1.1737210	1.1196760		-4.6	+/-20

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GB00069
Lab File ID:	02282313ECD7.D	Calibration Date:	02/24/2023
Sequence:	SLC0014	Injection Date:	02/28/23
Lab Sample ID:	SLC0014-CCV1	Injection Time:	20:07
Sequence Name:	AR1248CCV1		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	269	0.0574755	0.0623062		7.6	+/-20
Aroclor-1248 (1)	A	250.00	262		0.0409869			
Aroclor-1248 (2)	A	250.00	263		0.0521196			
Aroclor-1248 (3)	A	250.00	278		0.1040716			
Aroclor-1248 (4)	A	250.00	273		0.0520464			
Aroclor 1248 [2C]	A	250.00	251	0.0444270	0.0445547		0.5	+/-20
Aroclor-1248 (1) [2C]	A	250.00	256		0.0391330			
Aroclor-1248 (2) [2C]	A	250.00	254		0.0400822			
Aroclor-1248 (3) [2C]	A	250.00	248		0.0450484			
Aroclor-1248 (4) [2C]	A	250.00	247		0.0539552			
Decachlorobiphenyl	A	40.000	36.6	0.7878687	0.7215080		-8.5	+/-20
Tetrachlorometaxylene	A	40.000	37.8	1.1944880	1.1297030		-5.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	40.0	1.2182710	1.2199110		0.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	38.5	1.1737210	1.1298520		-3.8	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282313ECD7.D
Data file 2: /230228.b/230228.b/02282313ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248CCV1
Client ID:
Injection Date: 28-FEB-2023 20:07
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.001	442341	5.687	-0.000	182079	37.8	38.5	1.8	Tetrachloro-m-xylene
13.894	0.001	593120	14.118	-0.001	303850	36.6	40.1	8.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	783110	16.2
Hexabromobiphenyl	1429847	1644112	15.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	322306	2.2
Hexabromobiphenyl	513946	498151	-3.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.406	0.000	100304	262.5	1	8.307	0.000	39415	256.1
Aroclor-1248	2	8.581	0.000	127548	262.6	2	8.715	0.000	40371	253.7
Aroclor-1248	3	8.997	0.000	254686	278.0	3	9.169	0.000	45373	247.8
Aroclor-1248	4	9.295	0.000	127369	273.1	4	9.594	0.000	54344	247.2
Total Col1Ave (4 peaks):					269.0	Total Col2Ave (4 peaks):				251.2 RPD = 7
Corrected Ave (3 peaks):					266.1	Corrected Ave (3 peaks):				249.6 RPD = 6
CalAmt %D:					7.6	CalAmt %D:				0.5

Total PCB Area Col1 (5.907 - 13.793) = 1982415 Col1 Total PCB = 0.2 ppm*

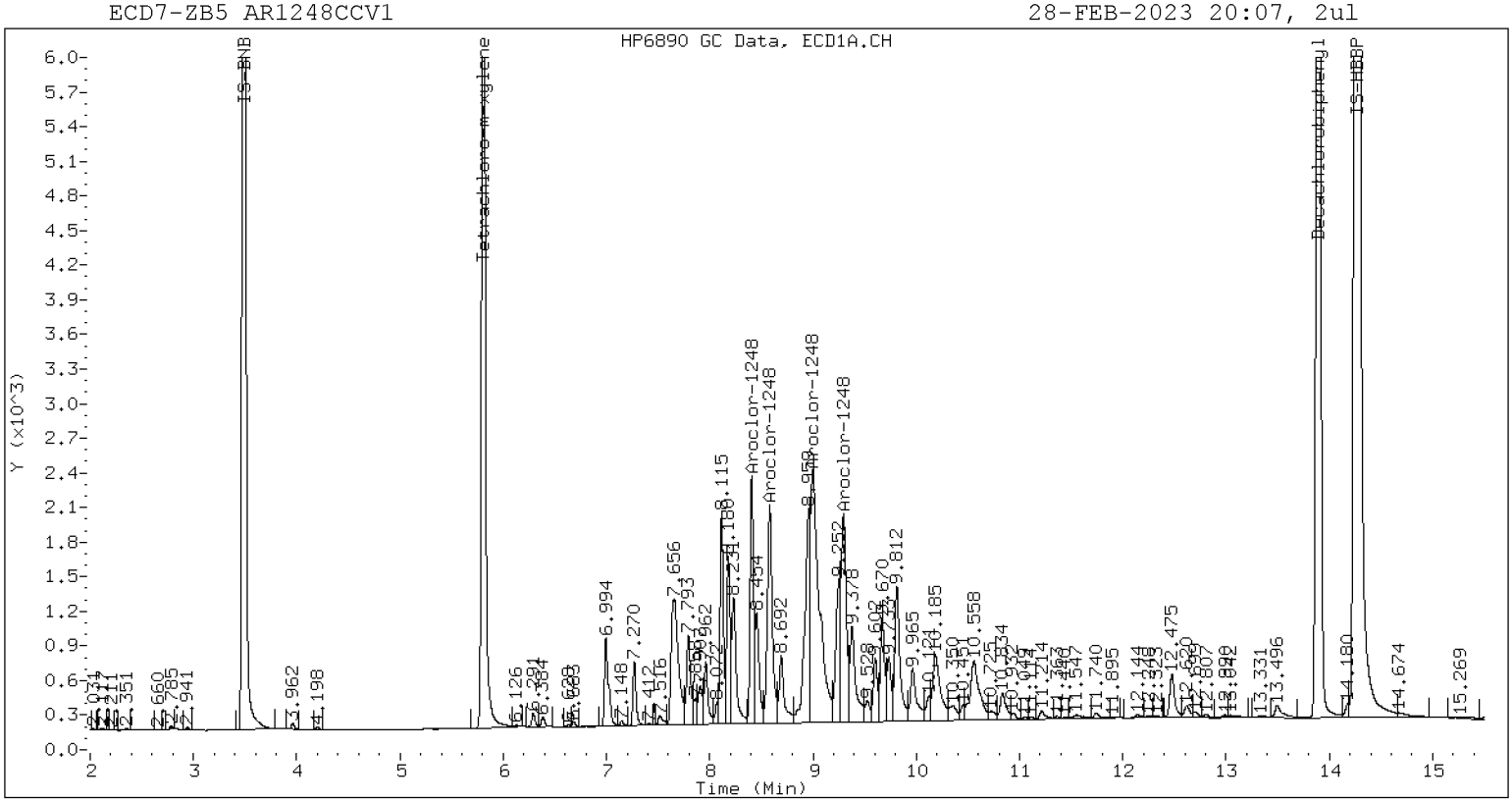
Total PCB Area Col2 (5.787 - 14.020) = 774039 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

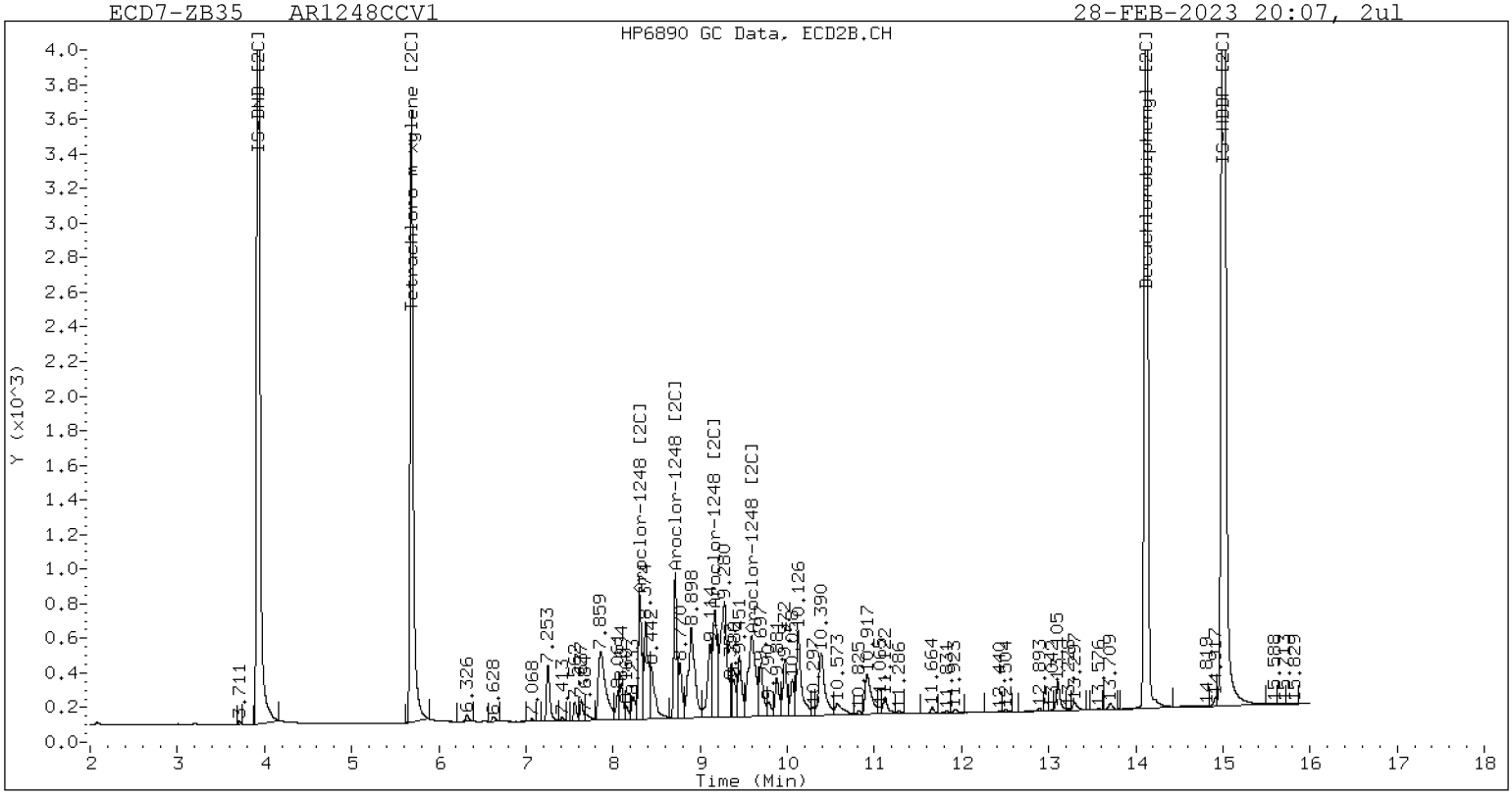
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248CCV1 28-FEB-2023 20:07, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 AR1248CCV1 28-FEB-2023 20:07, 2ul

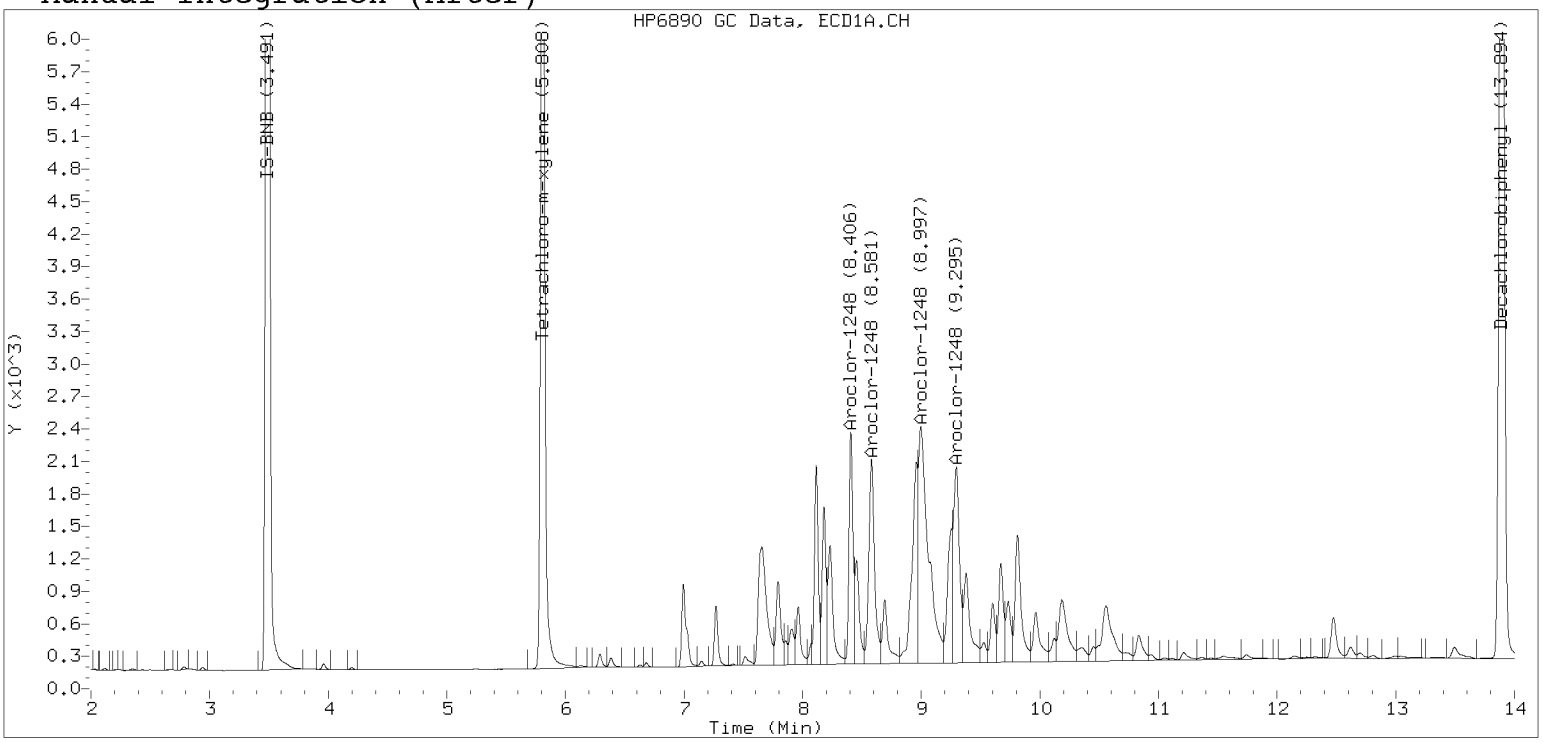


ZB-35 Manual Integration: NO

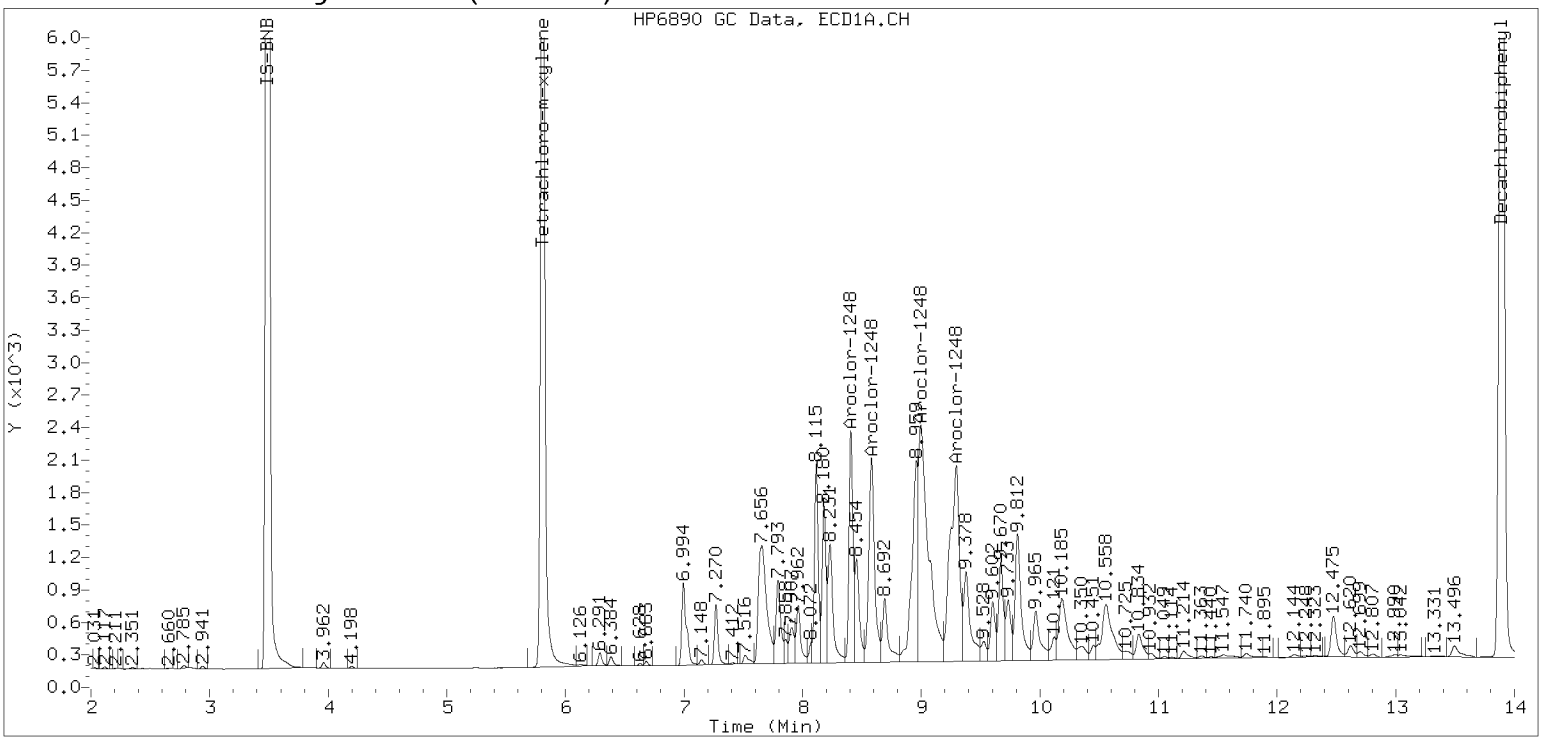
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230228.b/02282313ECD7.D Injection Date: 28-FEB-2023 20:07

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GB00069
Lab File ID:	02282314ECD7.D	Calibration Date:	02/24/2023
Sequence:	SLC0014	Injection Date:	02/28/23
Lab Sample ID:	SLC0014-CCV2	Injection Time:	20:28
Sequence Name:	AR1660CCV2		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Aroclor 1016	A	250.00	269	0.0493662	0.0531918		7.6	+/-20	
Aroclor-1016 (1)	A	250.00	264	0.0303852	0.0320347		5.6		
Aroclor-1016 (2)	A	250.00	270	0.0926308	0.0998609		8.0		
Aroclor-1016 (3)	A	250.00	274	0.0452180	0.0495154		9.6		
Aroclor-1016 (4)	A	250.00	268	0.0292307	0.0313563		7.2		
Aroclor 1016 [2C]	A	250.00	261	0.0545857	0.0576031		4.5	+/-20	
Aroclor-1016 (1) [2C]	A	250.00	252	0.0468313	0.0472870		0.8		
Aroclor-1016 (2) [2C]	A	250.00	272	0.0949676	0.1035346		8.8		
Aroclor-1016 (3) [2C]	A	250.00	254	0.0428922	0.0436436		1.6		
Aroclor-1016 (4) [2C]	A	250.00	267	0.0336515	0.0359471		6.8		
Aroclor 1260	A	250.00	302	0.0392091	0.0475954		20.8	+/-20	*
Aroclor-1260 (1)	A	250.00	277	0.0287785	0.0319038		10.8		
Aroclor-1260 (2)	A	250.00	310	0.0300690	0.0373331		24.0		
Aroclor-1260 (3)	A	250.00	306	0.0797517	0.0976402		22.4		
Aroclor-1260 (4)	A	250.00	310	0.0401599	0.0498416		24.0		
Aroclor-1260 (5)	A	250.00	307	0.0172866	0.0212581		22.8		
Aroclor 1260 [2C]	A	250.00	245	0.0699688	0.0695777		-2.2	+/-20	
Aroclor-1260 (1) [2C]	A	250.00	230	0.0470406	0.0433241		-8.0		
Aroclor-1260 (2) [2C]	A	250.00	252	0.1200523	0.1210413		0.8		
Aroclor-1260 (3) [2C]	A	250.00	238	0.0318590	0.0303454		-4.8		
Aroclor-1260 (4) [2C]	A	250.00	258	0.0809231	0.0835999		3.2		
Decachlorobiphenyl	A	40.000	40.1	0.7878687	0.7892449		0.3	+/-20	
Tetrachlorometaxylene	A	40.000	40.8	1.1944880	1.2188610		2.0	+/-20	
Decachlorobiphenyl [2C]	A	40.000	40.6	1.2182710	1.2361950		1.5	+/-20	
Tetrachlorometaxylene [2C]	A	40.000	41.3	1.1737210	1.2124060		3.3	+/-20	

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282314ECD7.D
Data file 2: /230228.b/230228.b/02282314ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV2
Client ID:
Injection Date: 28-FEB-2023 20:28
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.001	465648	5.688	0.000	189813	40.8	41.3	1.2	Tetrachloro-m-xylene
13.893	-0.000	625756	14.119	-0.001	297494	40.1	40.6	1.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	764071	13.4
Hexabromobiphenyl	1429847	1585708	10.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	313118	-0.7
Hexabromobiphenyl	513946	481306	-6.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	0.001	76490	263.6	1	7.255	-0.000	46270	252.4
Aroclor-1016	2	7.657	0.002	238440	269.5	2	7.860	0.000	101308	272.6
Aroclor-1016	3	7.792	0.001	118229	273.8	3	8.059	0.000	42705	254.4
Aroclor-1016	4	8.406	-0.000	74870	268.2	4	8.307	-0.001	35174	267.1
Total Col1Ave (4 peaks):					268.8	Total Col2Ave (4 peaks):				261.6 RPD = 3
Corrected Ave (3 peaks):					267.1	Corrected Ave (3 peaks):				258.0 RPD = 3
CalAmt %D:					7.5	CalAmt %D:				4.6
Aroclor-1260	1	11.045	0.000	158094	277.1	1	11.654	0.001	65163	230.2
Aroclor-1260	2	11.362	0.001	184998	310.4	2	11.918	0.001	182056	252.1
Aroclor-1260	3	11.737	0.001	483840	306.1	3	12.436	0.001	45642	238.1
Aroclor-1260	4	12.141	0.001	246982	310.3	4	12.503	0.001	125741	258.3
Aroclor-1260	5	12.245	0.002	105341	307.4	NS	---			----
Total Col1Ave (5 peaks):					302.3	Total Col2Ave (4 peaks):				244.7 RPD = 21
Corrected Ave (4 peaks):					300.2	Corrected Ave (3 peaks):				240.1 RPD = 22
CalAmt %D:					20.9	CalAmt %D:				-2.1

Total PCB Area Col1 (5.907 - 13.793) = 4921192 Col1 Total PCB = 0.5 ppm*

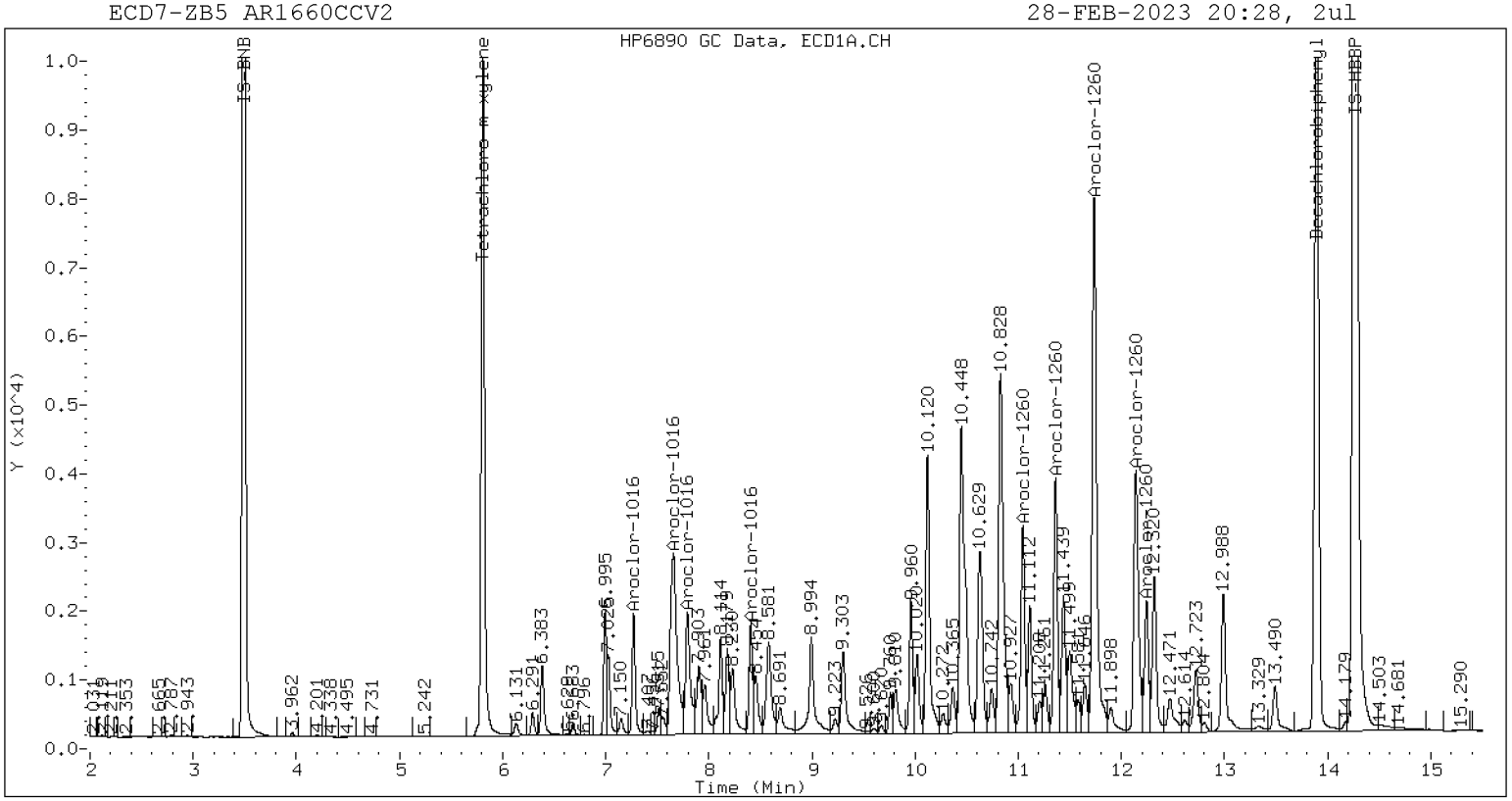
Total PCB Area Col2 (5.787 - 14.020) = 1783996 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

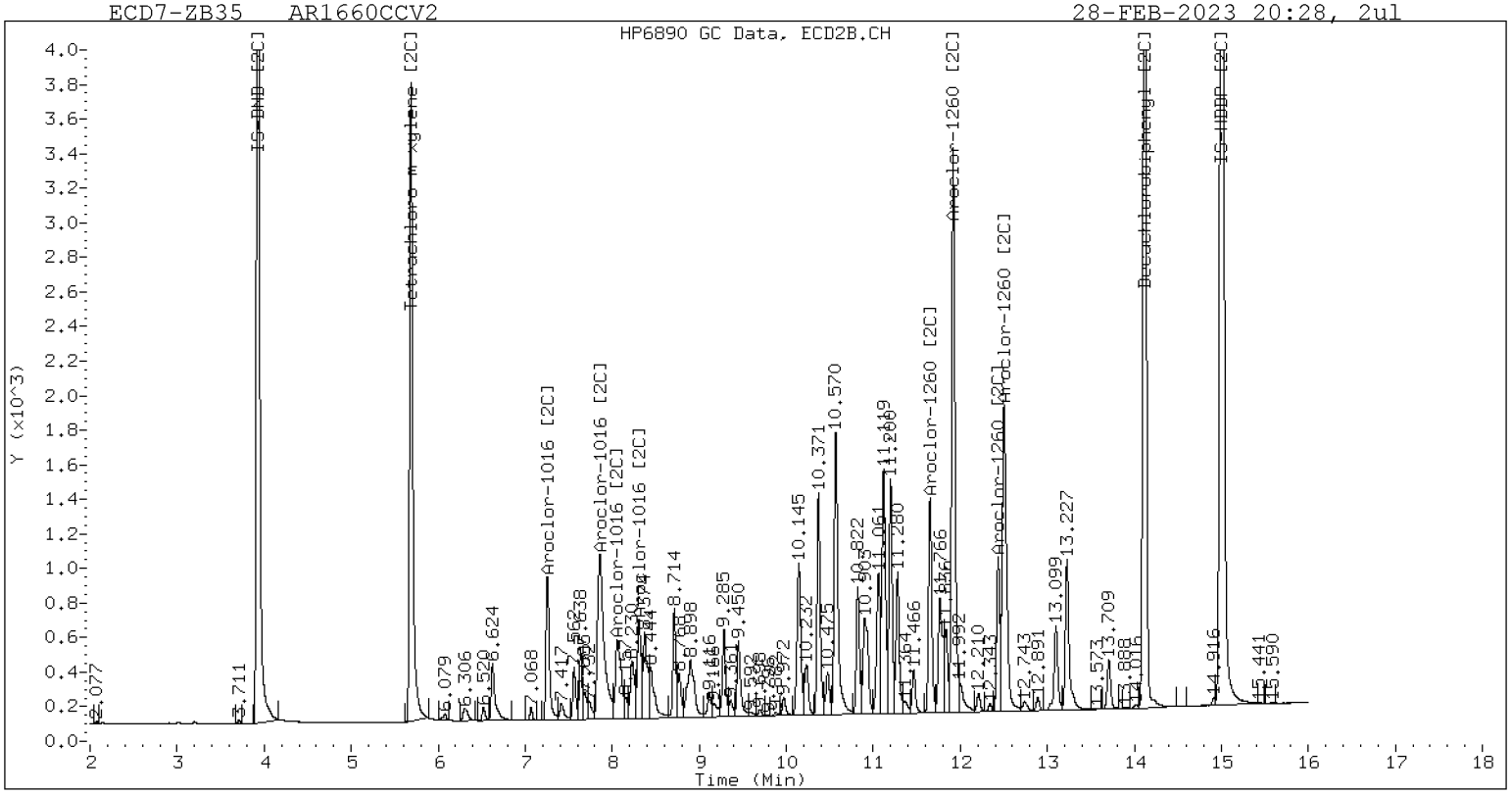
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV2 28-FEB-2023 20:28, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV2 28-FEB-2023 20:28, 2ul

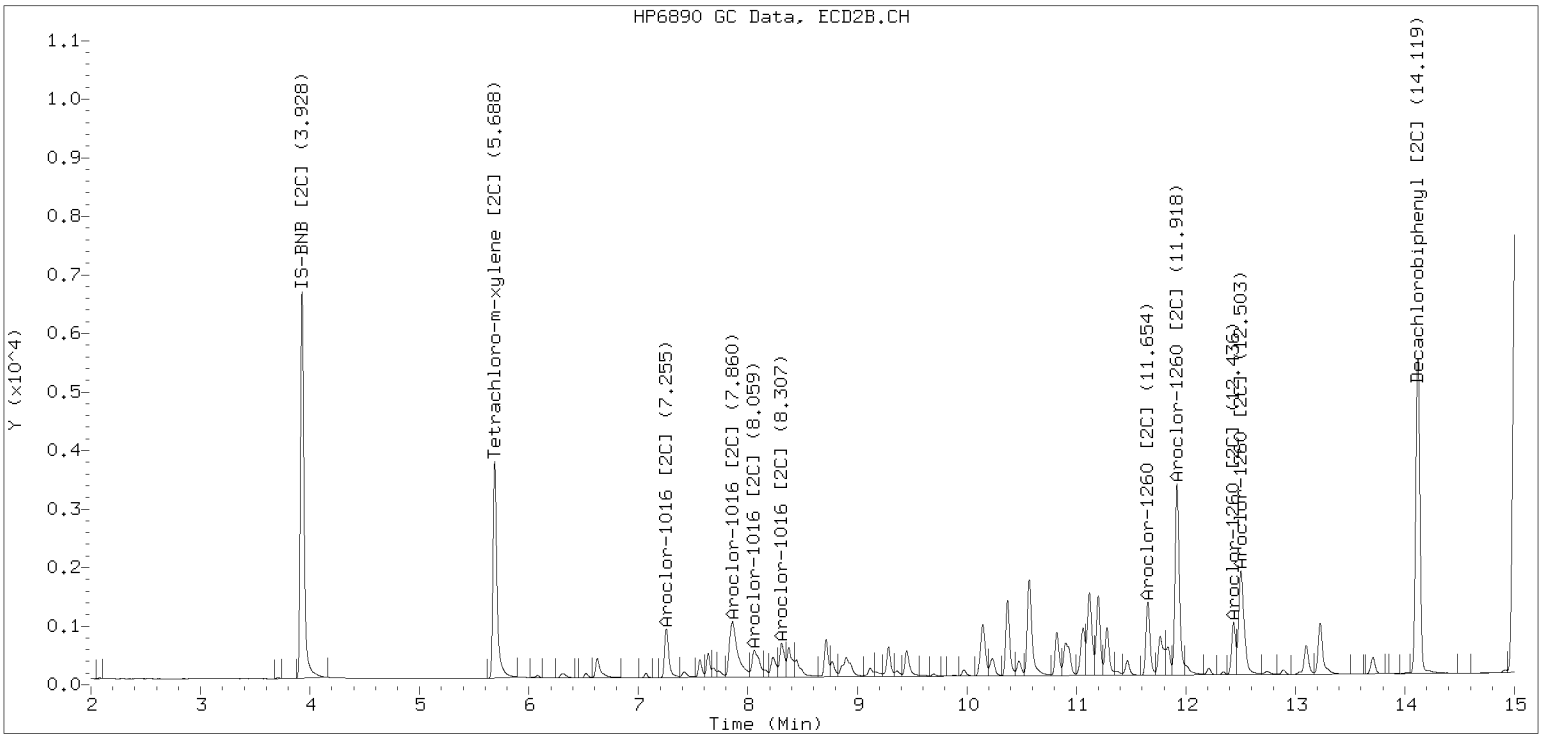


ZB-35 Manual Integration: YES

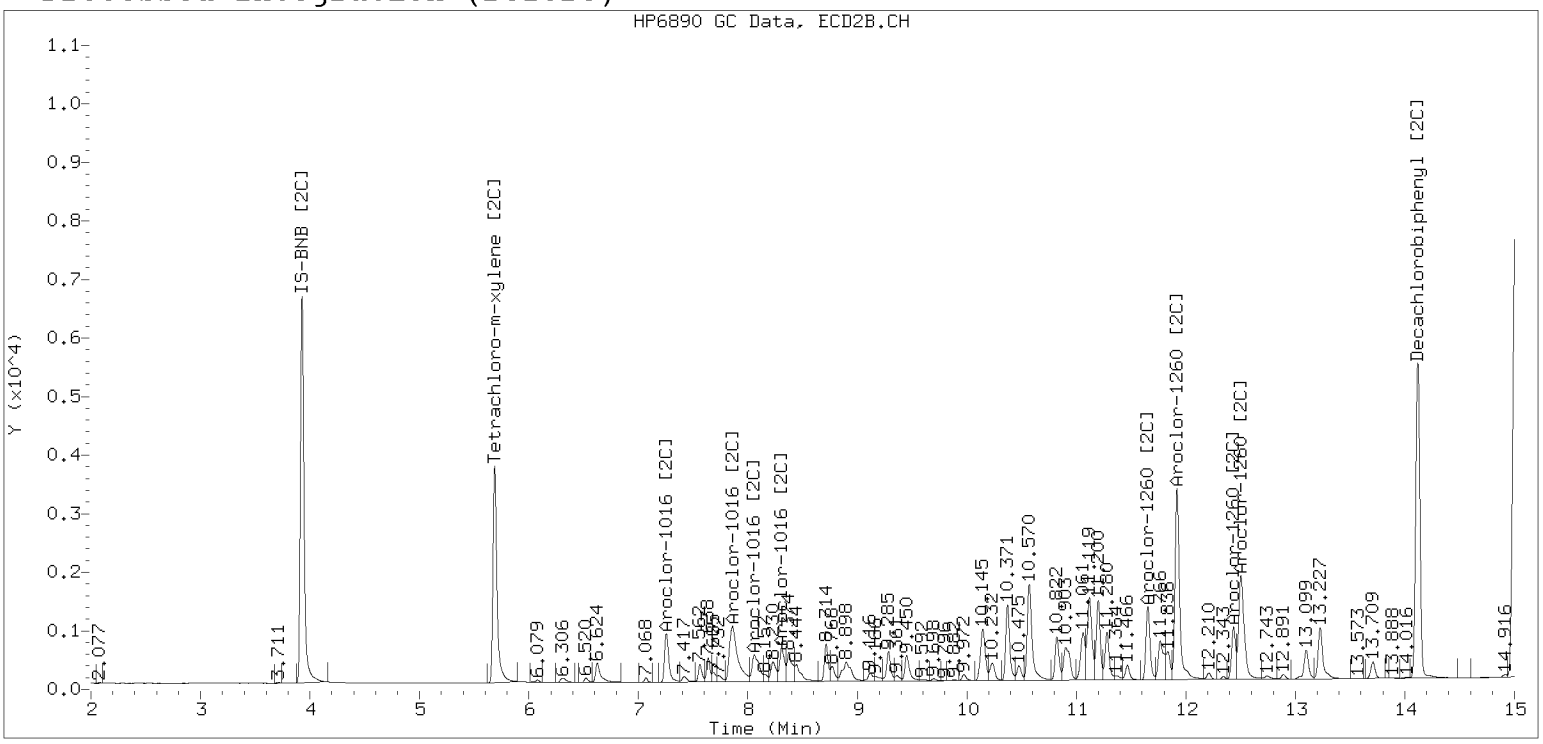
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282314ECD7.D Injection Date: 28-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GB00069
Lab File ID:	02282331ECD7.D	Calibration Date:	02/24/2023
Sequence:	SLC0014	Injection Date:	03/01/23
Lab Sample ID:	SLC0014-CCV3	Injection Time:	02:26
Sequence Name:	AR1242CCV3		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1242	A	250.00	250	0.0395340	0.0396605		0.1	+/-20
Aroclor-1242 (1)	A	250.00	249		0.0246910			
Aroclor-1242 (2)	A	250.00	251		0.0757041			
Aroclor-1242 (3)	A	250.00	250		0.0234345			
Aroclor-1242 (4)	A	250.00	251		0.0348122			
Aroclor 1242 [2C]	A	250.00	248	0.0423092	0.0421656		-0.8	+/-20
Aroclor-1242 (1) [2C]	A	250.00	251		0.0372722			
Aroclor-1242 (2) [2C]	A	250.00	251		0.0785934			
Aroclor-1242 (3) [2C]	A	250.00	246		0.0239032			
Aroclor-1242 (4) [2C]	A	250.00	244		0.0288938			
Decachlorobiphenyl	A	40.000	39.8	0.7878687	0.7842420		-0.5	+/-20
Tetrachlorometaxylene	A	40.000	44.9	1.1944880	1.3409470		12.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	42.1	1.2182710	1.2828530		5.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	46.8	1.1737210	1.3739480		17.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282331ECD7.D
Data file 2: /230228.b/230228.b/02282331ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242CCV3
Client ID:
Injection Date: 01-MAR-2023 02:26
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	-0.000	520986	5.687	-0.000	217825	44.9	46.8	4.2	Tetrachloro-m-xylene
13.892	-0.001	352496	14.118	-0.001	222500	39.8	42.1	5.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	777042	15.3
Hexabromobiphenyl	1429847	898947	-37.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317079	0.6
Hexabromobiphenyl	513946	346883	-32.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	7.269	0.000	59956	249.0	1	7.253	0.000	36932	250.7
Aroclor-1242	2	7.656	0.000	183829	251.4	2	7.859	0.000	77876	251.5
Aroclor-1242	3	8.405	0.000	56905	250.1	3	9.167	0.000	23685	245.8
Aroclor-1242	4	8.580	0.000	84533	251.3	4	9.598	0.000	28630	243.8
Total Col1Ave (4 peaks):					250.4	Total Col2Ave (4 peaks):				248.0 RPD = 1
Corrected Ave (3 peaks):					250.1	Corrected Ave (3 peaks):				246.8 RPD = 1
CalAmt %D:					0.2	CalAmt %D:				-0.8

Total PCB Area Col1 (5.907 - 13.793) = 1461012 Col1 Total PCB = 0.2 ppm*

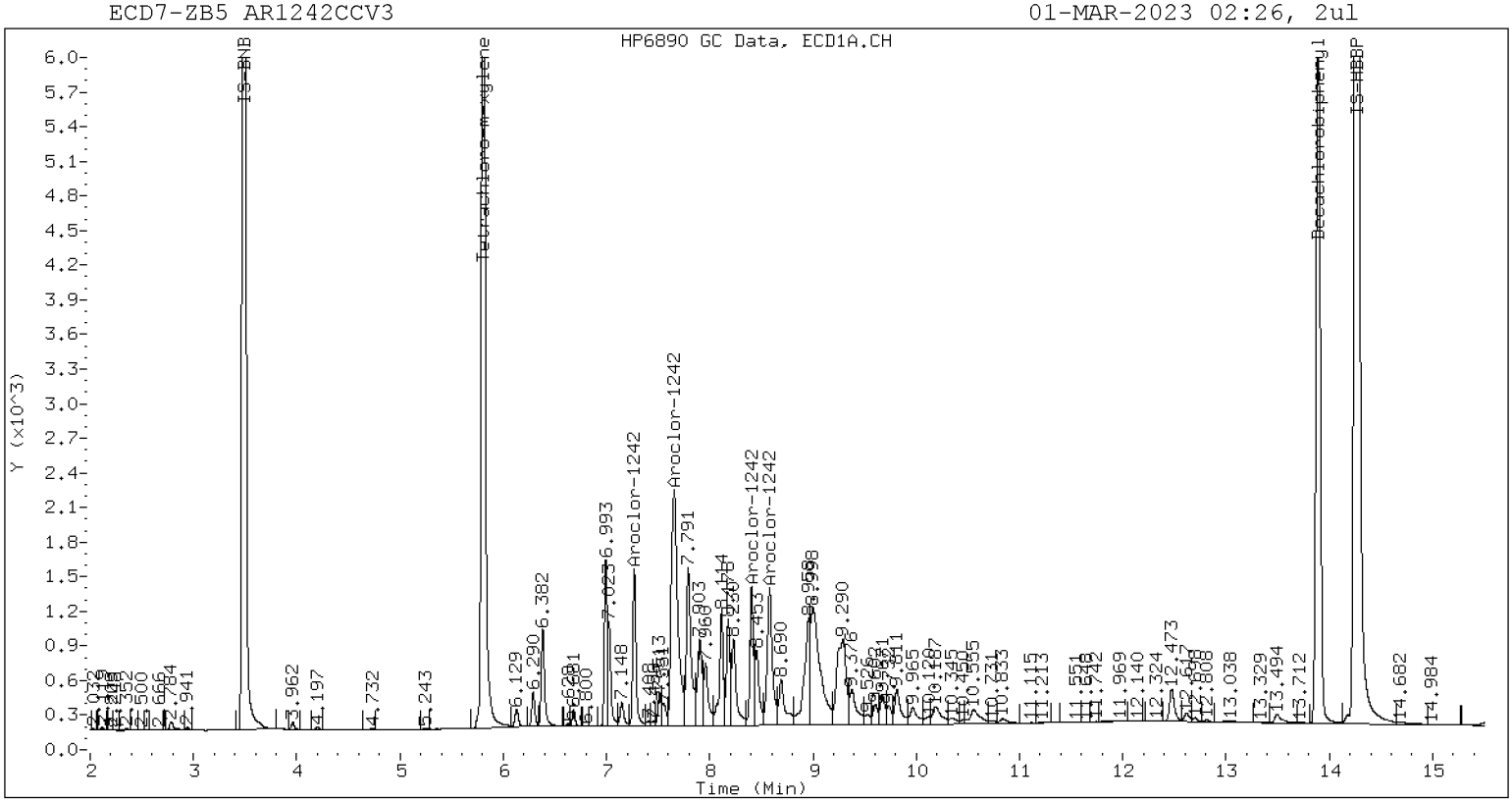
Total PCB Area Col2 (5.787 - 14.020) = 562198 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

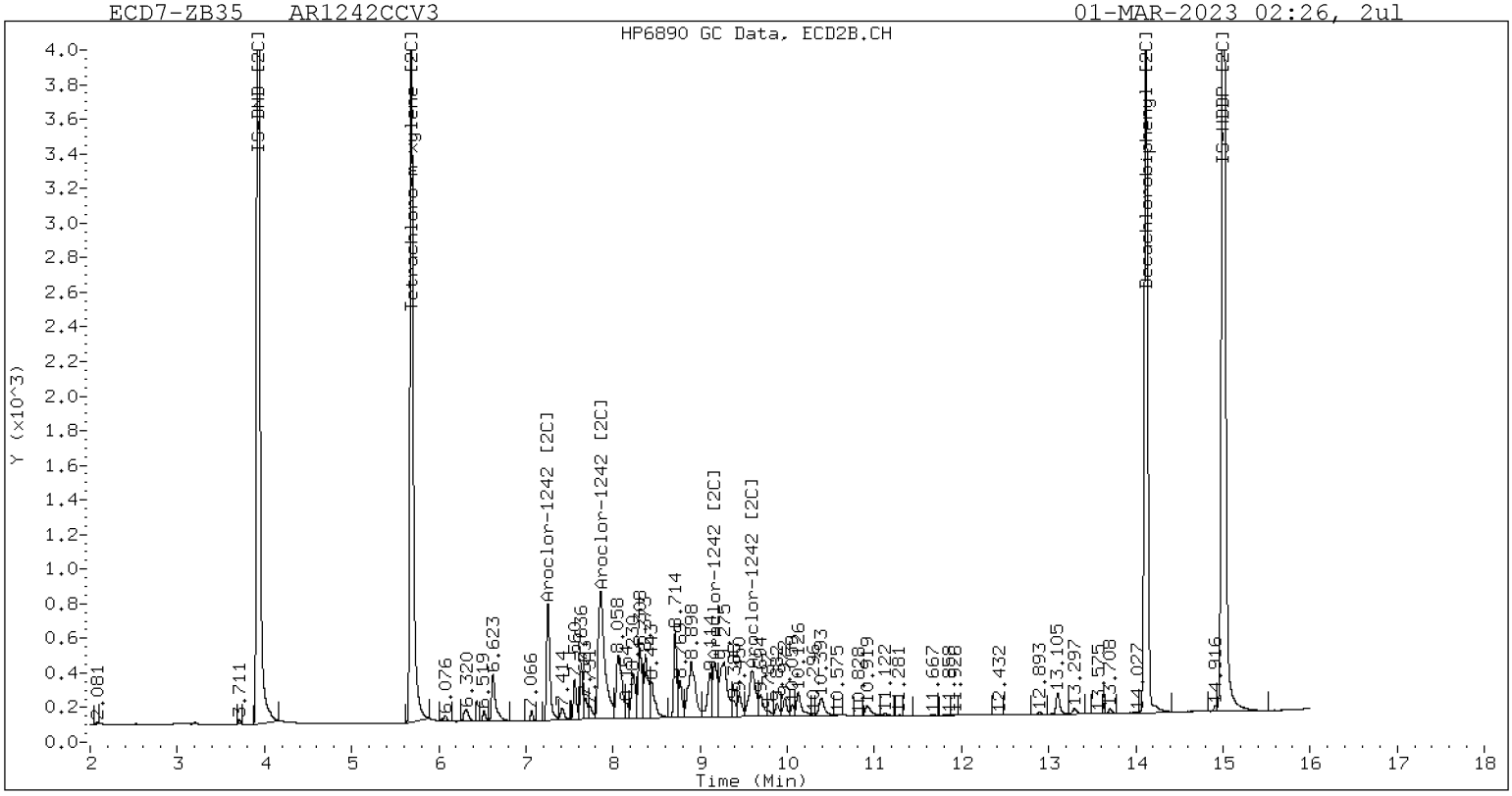
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242CCV3 01-MAR-2023 02:26, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242CCV3 01-MAR-2023 02:26, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GB00069
Lab File ID:	02282332ECD7.D	Calibration Date:	02/24/2023
Sequence:	SLC0014	Injection Date:	03/01/23
Lab Sample ID:	SLC0014-CCV4	Injection Time:	02:47
Sequence Name:	AR1660CCV4		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Aroclor 1016	A	250.00	265	0.0493662	0.0524970		5.9	+/-20	
Aroclor-1016 (1)	A	250.00	258	0.0303852	0.0314097		3.2		
Aroclor-1016 (2)	A	250.00	267	0.0926308	0.0990067		6.8		
Aroclor-1016 (3)	A	250.00	266	0.0452180	0.0482150		6.4		
Aroclor-1016 (4)	A	250.00	268	0.0292307	0.0313565		7.2		
Aroclor 1016 [2C]	A	250.00	254	0.0545857	0.0560912		1.5	+/-20	
Aroclor-1016 (1) [2C]	A	250.00	247	0.0468313	0.0462735		-1.2		
Aroclor-1016 (2) [2C]	A	250.00	267	0.0949676	0.1015811		6.8		
Aroclor-1016 (3) [2C]	A	250.00	245	0.0428922	0.0420645		-2.0		
Aroclor-1016 (4) [2C]	A	250.00	256	0.0336515	0.0344458		2.4		
Aroclor 1260	A	250.00	383	0.0392091	0.0596066		53.2	+/-20	*
Aroclor-1260 (1)	A	250.00	366	0.0287785	0.0421980		46.4		
Aroclor-1260 (2)	A	250.00	379	0.0300690	0.0455431		51.6		
Aroclor-1260 (3)	A	250.00	369	0.0797517	0.1177419		47.6		
Aroclor-1260 (4)	A	250.00	406	0.0401599	0.0652154		62.4		
Aroclor-1260 (5)	A	250.00	395	0.0172866	0.0273346		58.0		
Aroclor 1260 [2C]	A	250.00	297	0.0699688	0.0837623		18.6	+/-20	
Aroclor-1260 (1) [2C]	A	250.00	288	0.0470406	0.0541160		15.2		
Aroclor-1260 (2) [2C]	A	250.00	303	0.1200523	0.1454699		21.2		
Aroclor-1260 (3) [2C]	A	250.00	291	0.0318590	0.0371272		16.4		
Aroclor-1260 (4) [2C]	A	250.00	304	0.0809231	0.0983362		21.6		
Decachlorobiphenyl	A	40.000	45.3	0.7878687	0.8917978		13.3	+/-20	
Tetrachlorometaxylene	A	40.000	39.7	1.1944880	1.1844690		-0.8	+/-20	
Decachlorobiphenyl [2C]	A	40.000	44.0	1.2182710	1.3404950		10.0	+/-20	
Tetrachlorometaxylene [2C]	A	40.000	41.8	1.1737210	1.2272110		4.5	+/-20	

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282332ECD7.D
Data file 2: /230228.b/230228.b/02282332ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV4
Client ID:
Injection Date: 01-MAR-2023 02:47
Report Date: 03/01/2023 12:20
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	-0.001	466455	5.686	-0.001	195329	39.7	41.8	5.3	Tetrachloro-m-xylene
13.892	-0.001	461529	14.118	-0.002	245956	45.3	44.0	2.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	787619	16.9
Hexabromobiphenyl	1429847	1035053	-27.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	318330	1.0
Hexabromobiphenyl	513946	366963	-28.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.001	77309	258.4	1	7.253	-0.002	46032	247.0
Aroclor-1016	2	7.654	-0.001	243686	267.2	2	7.857	-0.003	101051	267.4
Aroclor-1016	3	7.791	-0.001	118672	266.6	3	8.056	-0.002	41845	245.2
Aroclor-1016	4	8.405	-0.001	77178	268.2	4	8.306	-0.002	34266	255.9
Total Col1Ave (4 peaks):					265.1	Total Col2Ave (4 peaks):				253.9 RPD = 4
Corrected Ave (3 peaks):					264.1	Corrected Ave (3 peaks):				249.4 RPD = 6
CalAmt %D:					6.0	CalAmt %D:				1.6
Aroclor-1260	1	11.044	-0.000	136491	366.6	1	11.653	-0.000	62058	287.6
Aroclor-1260	2	11.361	0.000	147311	378.7	2	11.917	-0.001	166819	302.9
Aroclor-1260	3	11.735	-0.000	380841	369.1	3	12.435	0.000	42576	291.3
Aroclor-1260	4	12.139	-0.001	210942	406.0	4	12.501	-0.001	112768	303.8
Aroclor-1260	5	12.244	0.001	88415	395.3	NS	---			----
Total Col1Ave (5 peaks):					383.1	Total Col2Ave (4 peaks):				296.4 RPD = 26
Corrected Ave (4 peaks):					377.4	Corrected Ave (3 peaks):				294.0 RPD = 25
CalAmt %D:					53.2	CalAmt %D:				18.6

Total PCB Area Col1 (5.907 - 13.793) = 4504656 Col1 Total PCB = 0.5 ppm*

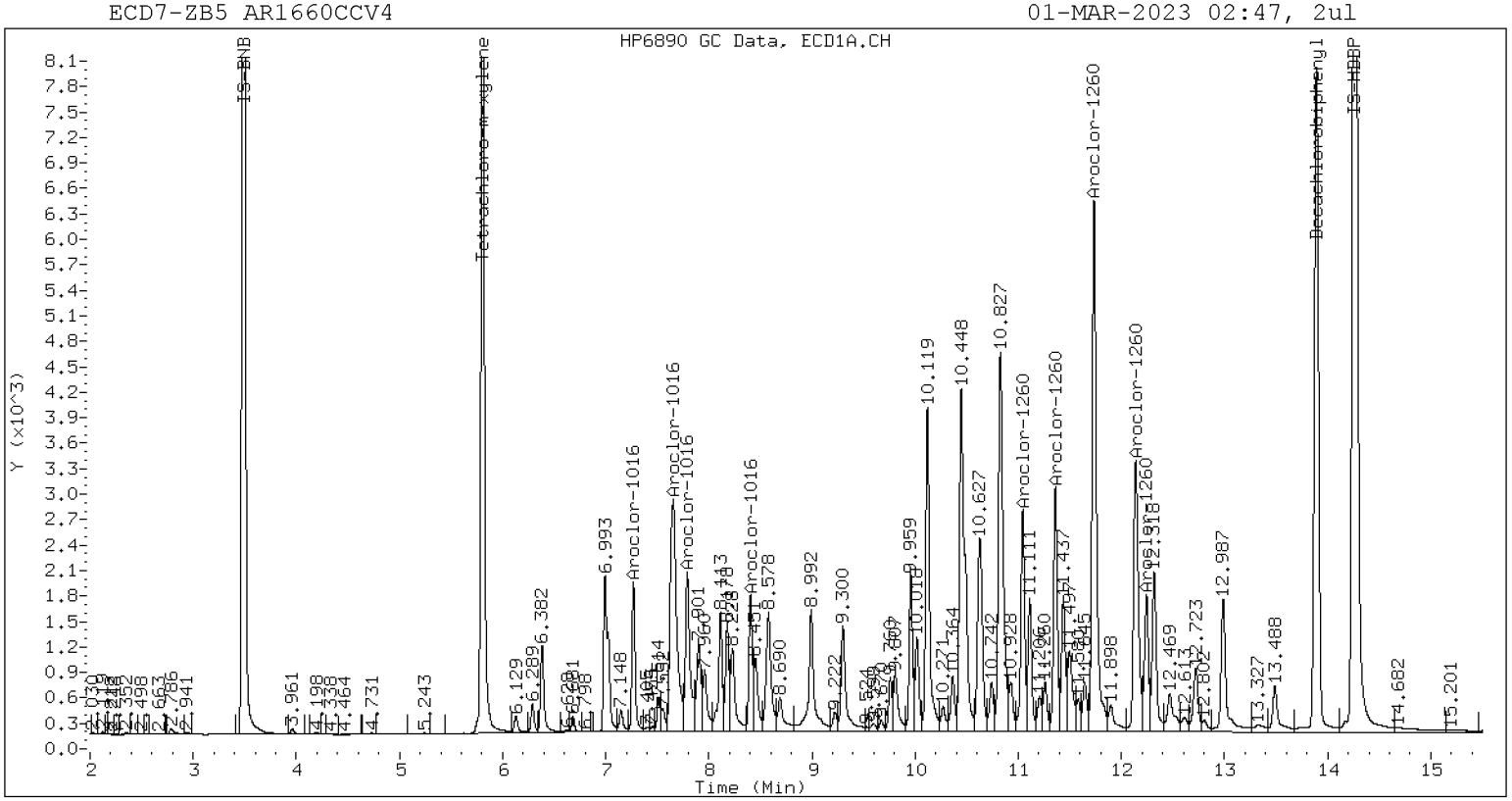
Total PCB Area Col2 (5.787 - 14.020) = 1698889 Col2 Total PCB = 0.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

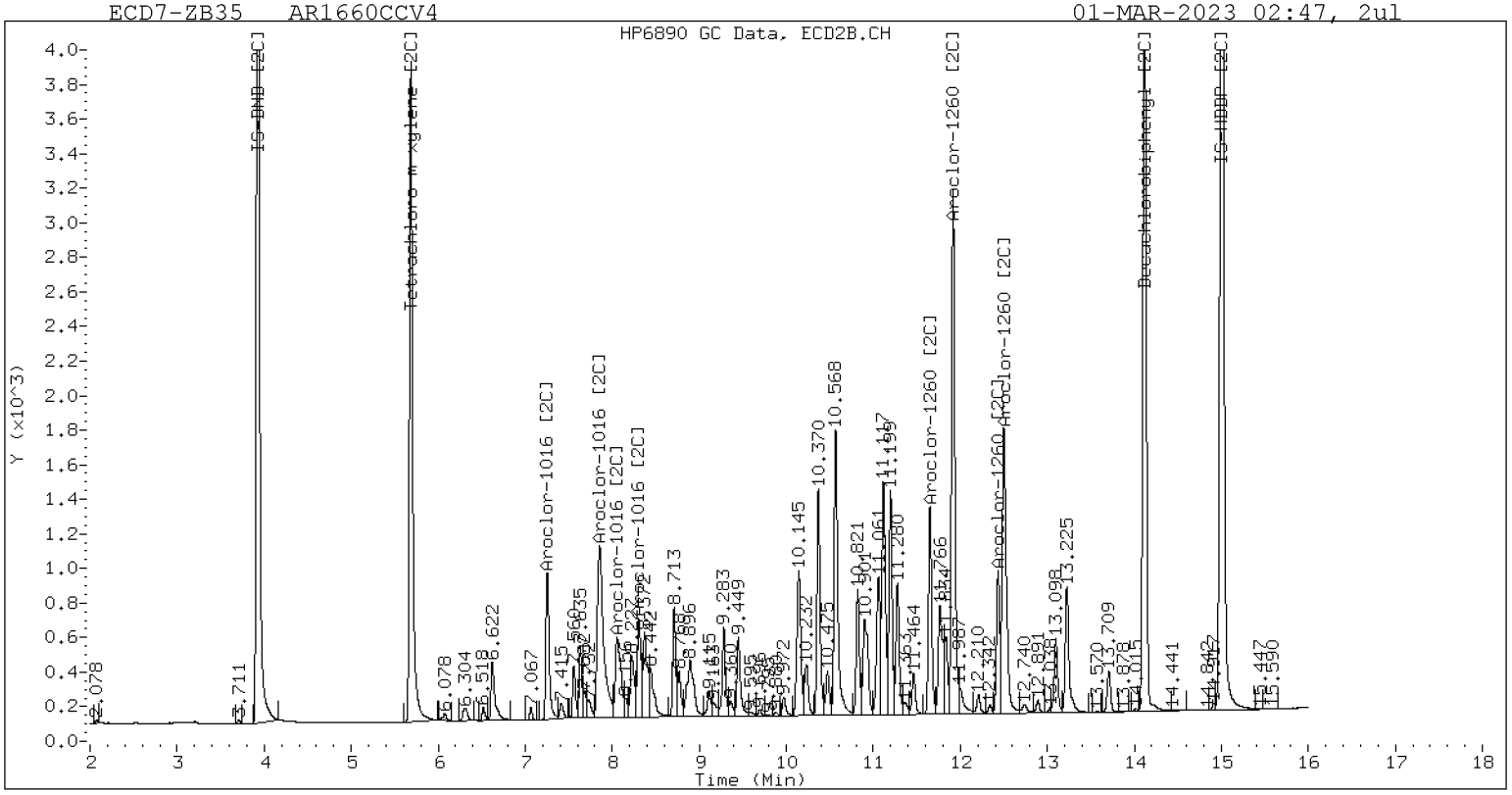
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV4 01-MAR-2023 02:47, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV4 01-MAR-2023 02:47, 2ul

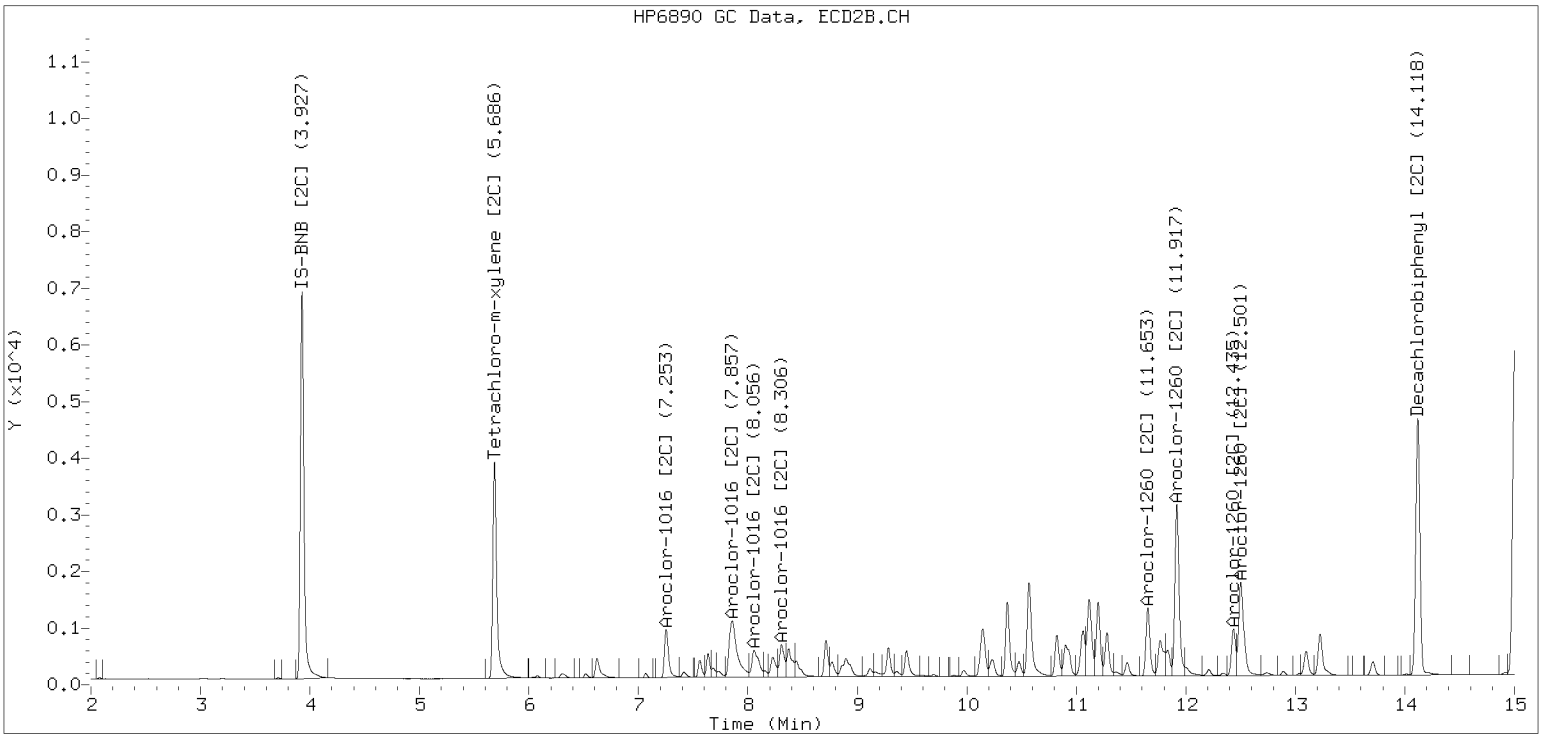


ZB-35 Manual Integration: YES

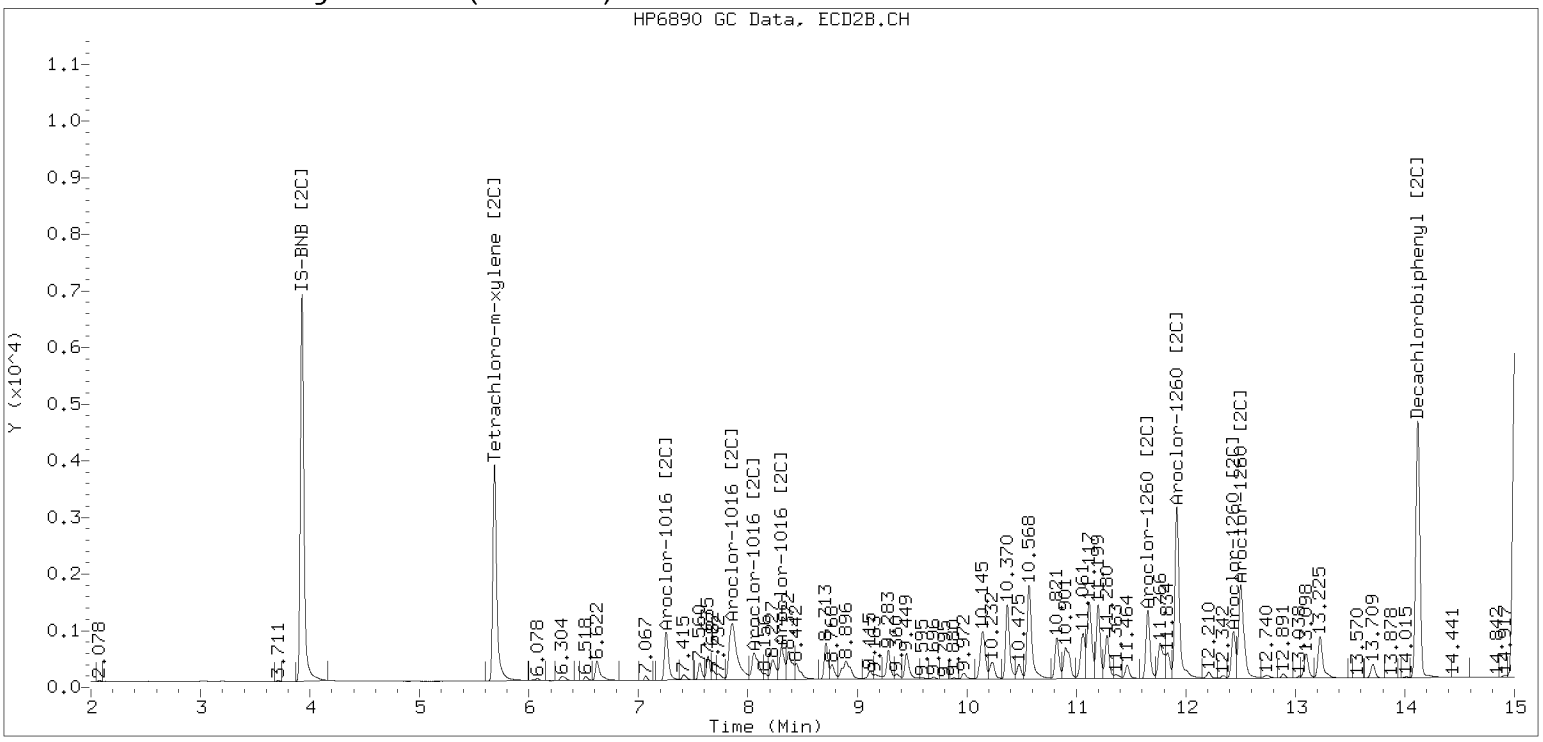
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282332ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GB00069
Lab File ID:	02282348ECD7.D	Calibration Date:	02/24/2023
Sequence:	SLC0014	Injection Date:	03/01/23
Lab Sample ID:	SLC0014-CCV5	Injection Time:	08:24
Sequence Name:	AR1254CCV5		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1254	A	250.00	245	0.0662949	0.0646060		-2.2	+/-20
Aroclor-1254 (1)	A	250.00	247		0.0793086			
Aroclor-1254 (2)	A	250.00	250		0.0361281			
Aroclor-1254 (3)	A	250.00	245		0.0506642			
Aroclor-1254 (4)	A	250.00	238		0.0956681			
Aroclor-1254 (5)	A	250.00	243		0.0612610			
Aroclor 1254 [2C]	A	250.00	243	0.0763106	0.0741904		-2.8	+/-20
Aroclor-1254 (1) [2C]	A	250.00	248		0.0603001			
Aroclor-1254 (2) [2C]	A	250.00	246		0.0482340			
Aroclor-1254 (3) [2C]	A	250.00	245		0.1038543			
Aroclor-1254 (4) [2C]	A	250.00	240		0.0991212			
Aroclor-1254 (5) [2C]	A	250.00	236		0.0594422			
Decachlorobiphenyl	A	40.000	38.4	0.7878687	0.7555757		-4.0	+/-20
Tetrachlorometaxylene	A	40.000	37.5	1.1944880	1.1209210		-6.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	42.7	1.2182710	1.3011340		6.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.5	1.1737210	1.1593320		-1.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282348ECD7.D
Data file 2: /230228.b/230228.b/02282348ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254CCV5
Client ID:
Injection Date: 01-MAR-2023 08:24
Report Date: 03/01/2023 09:00
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.000	436115	5.687	0.000	183801	37.5	39.5	5.1	Tetrachloro-m-xylene
13.893	-0.001	396137	14.119	0.000	249929	38.4	42.7	10.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	778137	15.5
Hexabromobiphenyl	1429847	1048570	-26.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	317081	0.6
Hexabromobiphenyl	513946	384171	-25.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.299	-0.001	192853	246.8	1	9.451	0.000	59750	247.9
Aroclor-1254	2	9.378	0.000	87852	250.0	2	9.972	0.000	47794	246.5
Aroclor-1254	3	9.669	-0.001	123199	245.2	3	10.125	0.000	102907	245.3
Aroclor-1254	4	9.808	-0.001	232634	238.2	4	10.374	0.000	98217	240.2
Aroclor-1254	5	10.178	-0.001	148967	243.3	5	10.570	0.000	58900	236.6

Total Col1Ave (5 peaks): 244.7 Total Col2Ave (5 peaks): 243.3 RPD = 1

Corrected Ave (4 peaks): 243.4 Corrected Ave (4 peaks): 242.1 RPD = 1

CalAmt %D: -2.1 CalAmt %D: -2.7

Total PCB Area Col1 (5.908 - 13.794) = 2555616 Col1 Total PCB = 0.3 ppm*

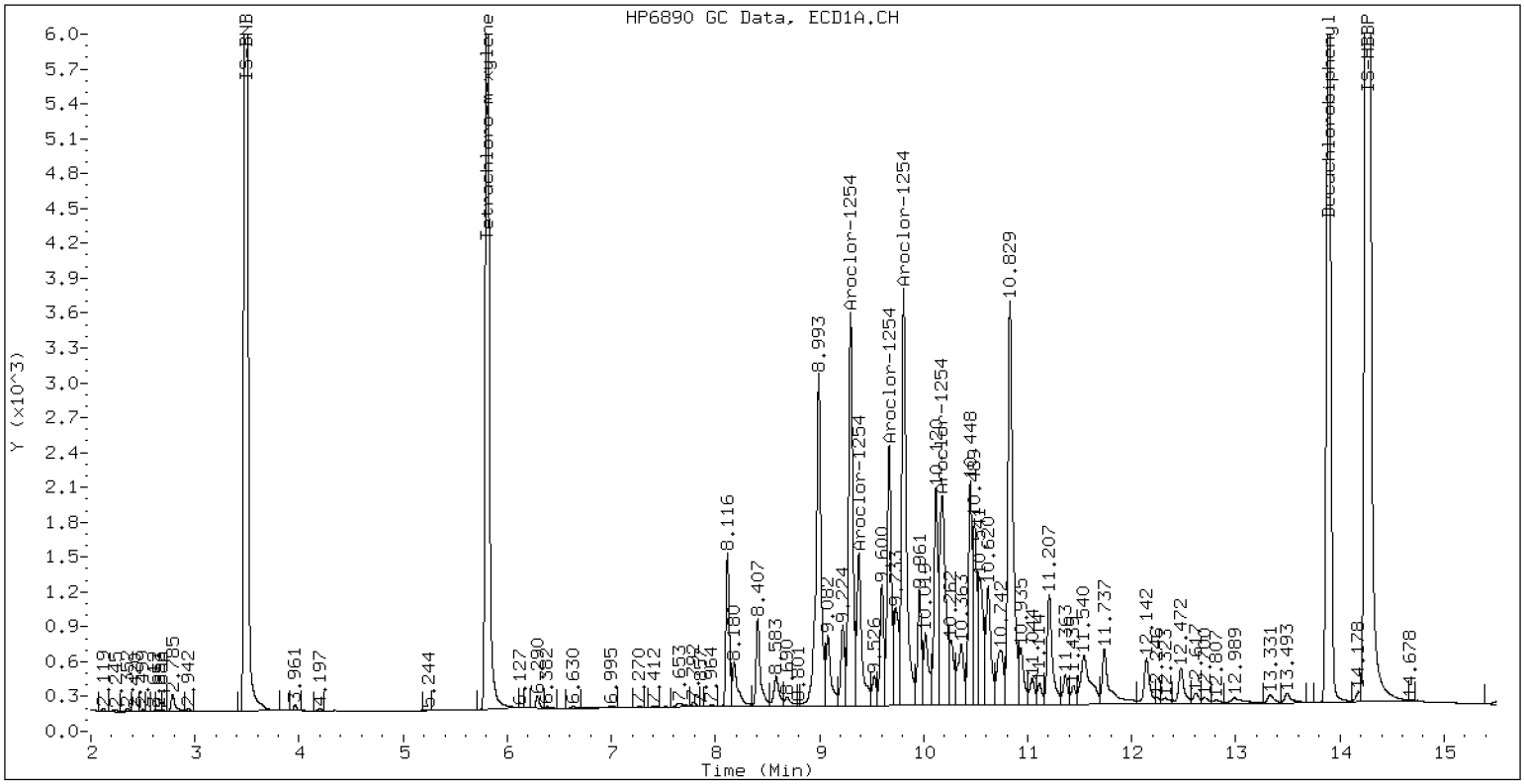
Total PCB Area Col2 (5.787 - 14.019) = 986433 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

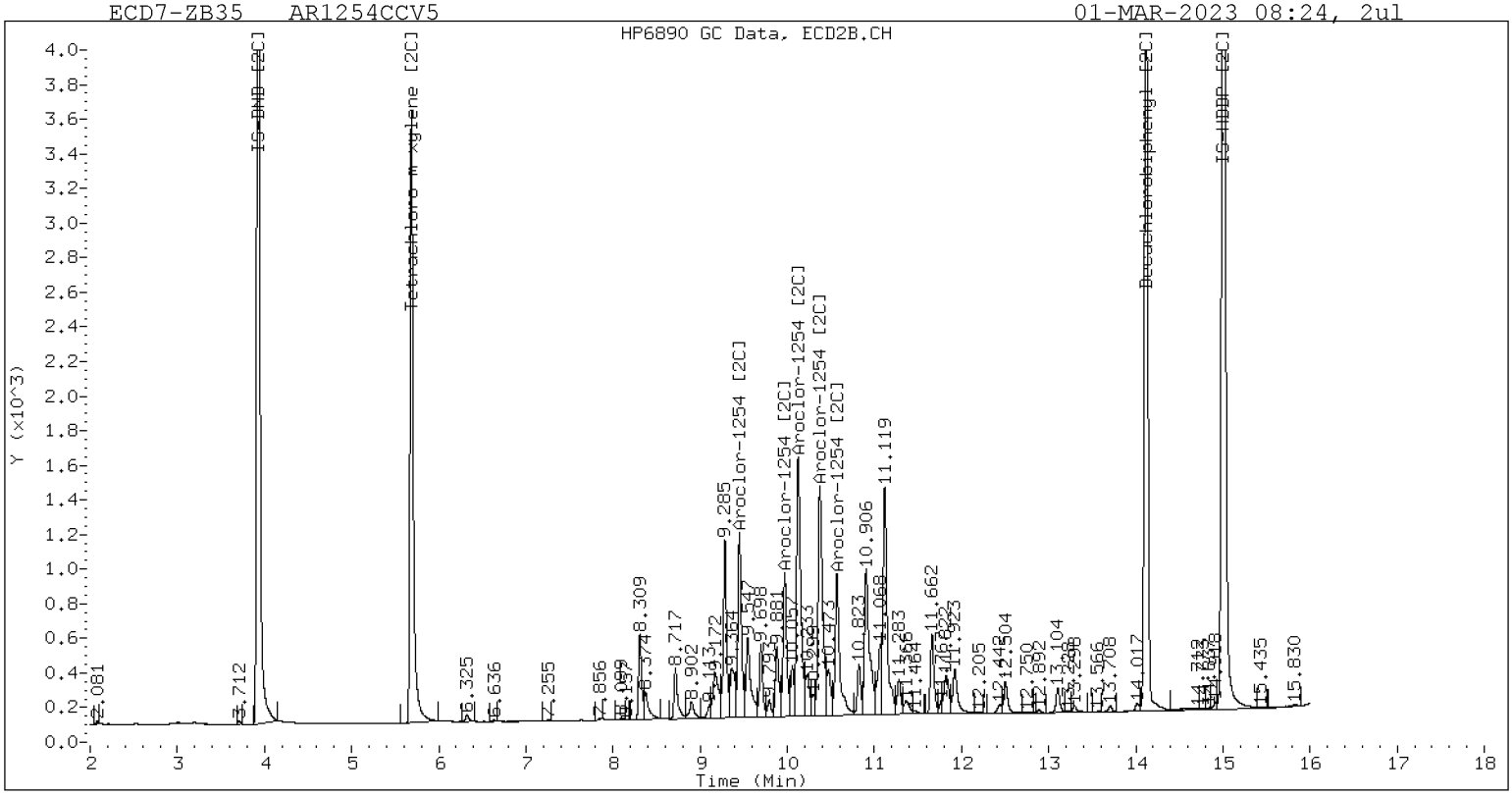
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254CCV5 01-MAR-2023 08:24, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254CCV5 01-MAR-2023 08:24, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GB00069
Lab File ID:	02282349ECD7.D	Calibration Date:	02/24/2023
Sequence:	SLC0014	Injection Date:	03/01/23
Lab Sample ID:	SLC0014-CCV6	Injection Time:	08:45
Sequence Name:	AR1660CCV6		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Aroclor 1016	A	250.00	267	0.0493662	0.0529550		6.6	+/-20	
Aroclor-1016 (1)	A	250.00	260	0.0303852	0.0316067		4.0		
Aroclor-1016 (2)	A	250.00	270	0.0926308	0.1001731		8.0		
Aroclor-1016 (3)	A	250.00	270	0.0452180	0.0488706		8.0		
Aroclor-1016 (4)	A	250.00	266	0.0292307	0.0311698		6.4		
Aroclor 1016 [2C]	A	250.00	256	0.0545857	0.0566479		2.4	+/-20	
Aroclor-1016 (1) [2C]	A	250.00	249	0.0468313	0.0466155		-0.4		
Aroclor-1016 (2) [2C]	A	250.00	272	0.0949676	0.1032238		8.8		
Aroclor-1016 (3) [2C]	A	250.00	244	0.0428922	0.0419403		-2.4		
Aroclor-1016 (4) [2C]	A	250.00	259	0.0336515	0.0348121		3.6		
Aroclor 1260	A	250.00	335	0.0392091	0.0526811		34.1	+/-20	*
Aroclor-1260 (1)	A	250.00	330	0.0287785	0.0379438		32.0		
Aroclor-1260 (2)	A	250.00	352	0.0300690	0.0422977		40.8		
Aroclor-1260 (3)	A	250.00	336	0.0797517	0.1070851		34.4		
Aroclor-1260 (4)	A	250.00	335	0.0401599	0.0537628		34.0		
Aroclor-1260 (5)	A	250.00	323	0.0172866	0.0223159		29.2		
Aroclor 1260 [2C]	A	250.00	272	0.0699688	0.0769061		8.6	+/-20	
Aroclor-1260 (1) [2C]	A	250.00	263	0.0470406	0.0494367		5.2		
Aroclor-1260 (2) [2C]	A	250.00	278	0.1200523	0.1337765		11.2		
Aroclor-1260 (3) [2C]	A	250.00	266	0.0318590	0.0339438		6.4		
Aroclor-1260 (4) [2C]	A	250.00	279	0.0809231	0.0904670		11.6		
Decachlorobiphenyl	A	40.000	38.7	0.7878687	0.7622857		-3.3	+/-20	
Tetrachlorometaxylene	A	40.000	40.1	1.1944880	1.1963830		0.3	+/-20	
Decachlorobiphenyl [2C]	A	40.000	42.8	1.2182710	1.3020620		7.0	+/-20	
Tetrachlorometaxylene [2C]	A	40.000	42.1	1.1737210	1.2367140		5.3	+/-20	

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230228.b/02282349ECD7.D
Data file 2: /230228.b/230228.b/02282349ECD7.D
Method: \\target\share\chem4\ecd7.i\230228.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV6
Client ID:
Injection Date: 01-MAR-2023 08:45
Report Date: 03/01/2023 12:50
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	0.000	481038	5.687	0.000	200869	40.1	42.1	5.1	Tetrachloro-m-xylene
13.893	0.000	498212	14.120	0.000	275782	38.7	42.8	9.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	673778	804154	19.3
Hexabromobiphenyl	1429847	1307153	-8.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	315256	324843	3.0
Hexabromobiphenyl	513946	423608	-17.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-FEB-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	0.000	79427	260.1	1	7.255	0.000	47321	248.8
Aroclor-1016	2	7.655	0.000	251733	270.4	2	7.859	0.000	104786	271.7
Aroclor-1016	3	7.792	0.000	122811	270.2	3	8.059	0.000	42575	244.5
Aroclor-1016	4	8.406	0.000	78329	266.6	4	8.308	0.000	35339	258.6
Total Col1Ave (4 peaks):					266.8	Total Col2Ave (4 peaks):				255.9 RPD = 4
Corrected Ave (3 peaks):					265.6	Corrected Ave (3 peaks):				250.6 RPD = 6
CalAmt %D:					6.7	CalAmt %D:				2.4
Aroclor-1260	1	11.044	0.000	154995	329.6	1	11.653	0.000	65443	262.7
Aroclor-1260	2	11.360	0.000	172780	351.7	2	11.918	0.000	177090	278.6
Aroclor-1260	3	11.736	0.000	437427	335.7	3	12.435	0.000	44934	266.4
Aroclor-1260	4	12.140	0.000	219613	334.7	4	12.502	0.000	119758	279.5
Aroclor-1260	5	12.243	0.000	91157	322.7	NS	---			----
Total Col1Ave (5 peaks):					334.9	Total Col2Ave (4 peaks):				271.8 RPD = 21
Corrected Ave (4 peaks):					330.7	Corrected Ave (3 peaks):				269.2 RPD = 20
CalAmt %D:					34.0	CalAmt %D:				8.7

Total PCB Area Col1 (5.907 - 13.793) = 4749889 Col1 Total PCB = 0.5 ppm*

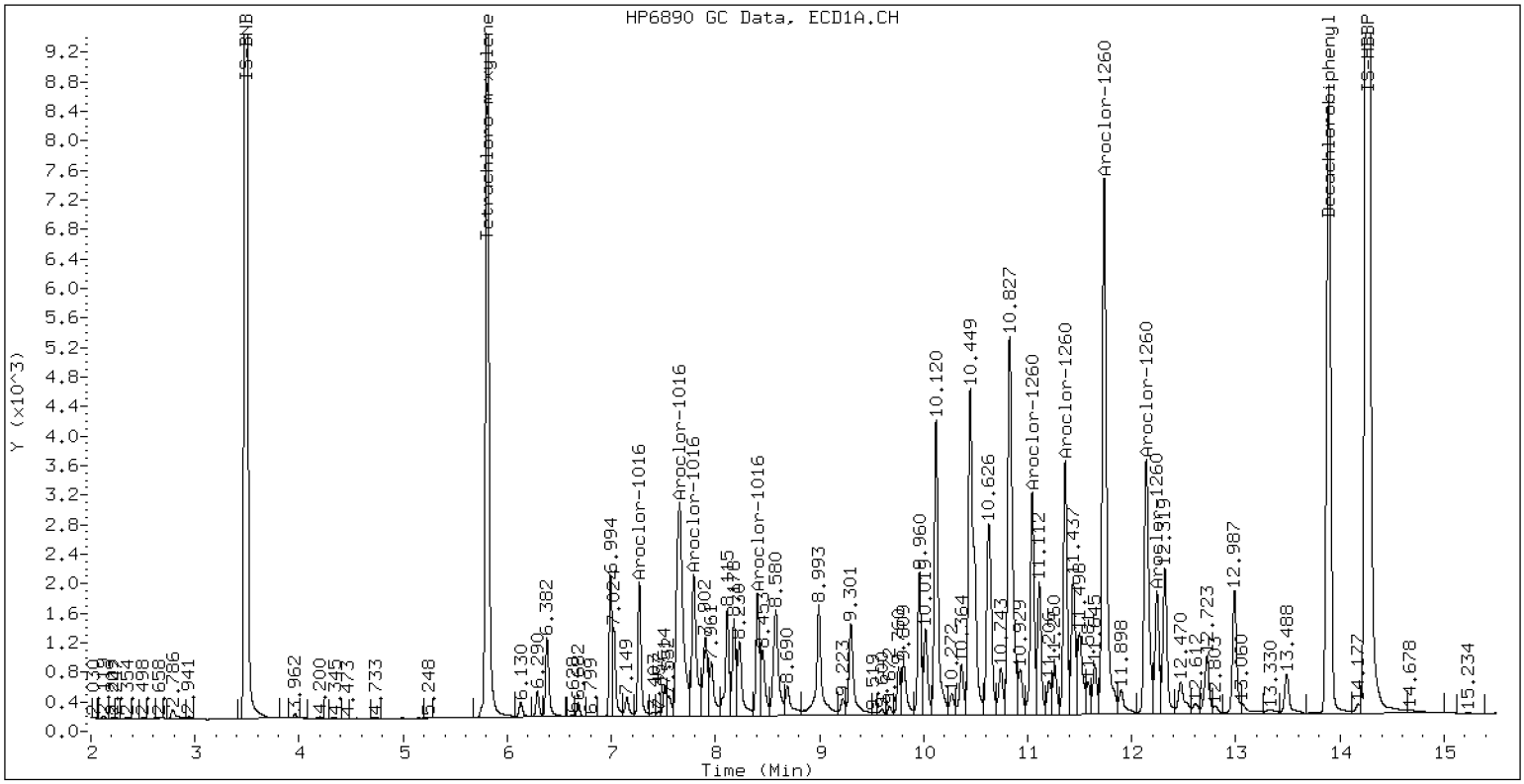
Total PCB Area Col2 (5.787 - 14.020) = 1777486 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

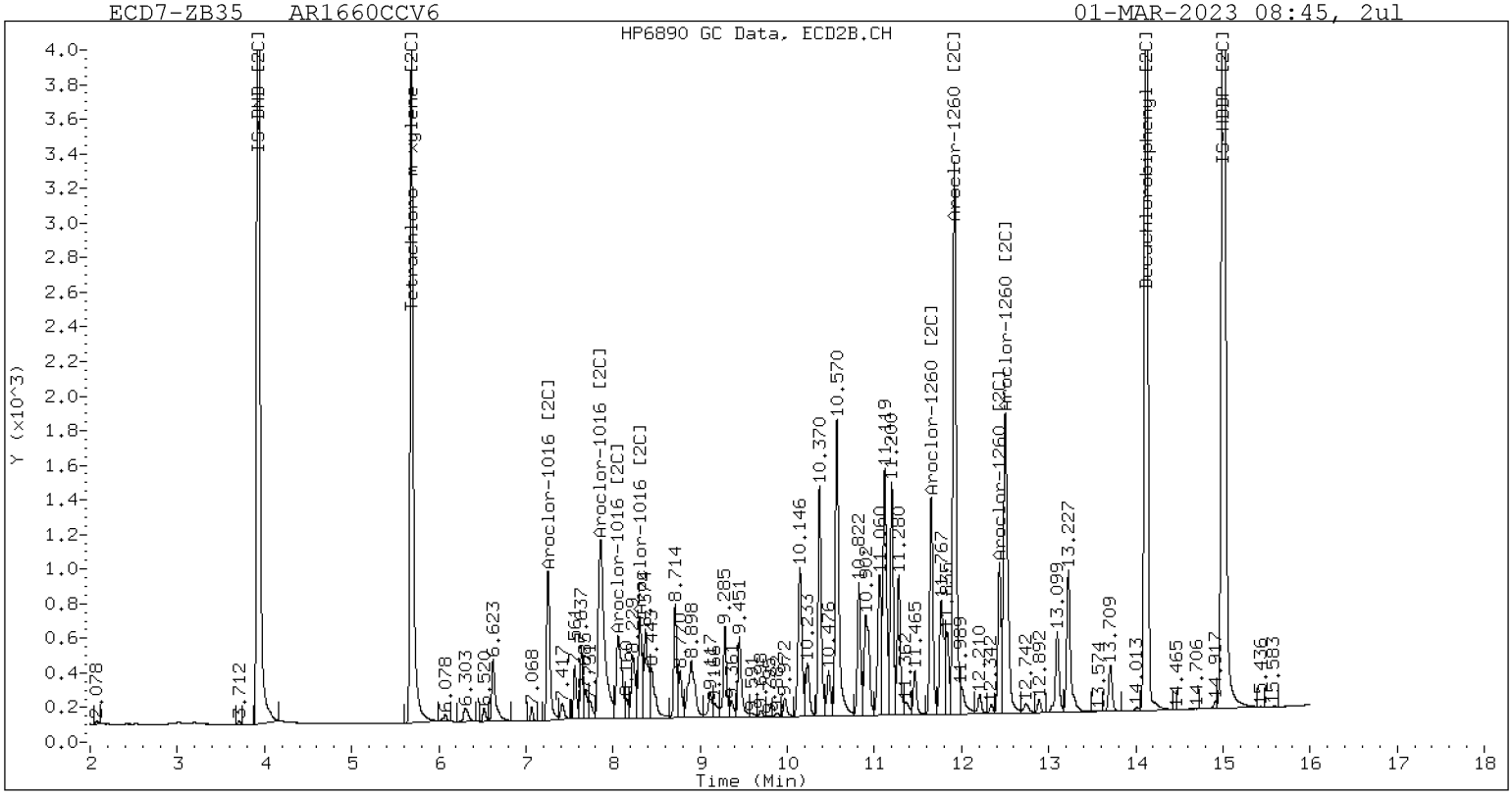
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV6 01-MAR-2023 08:45, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV6 01-MAR-2023 08:45, 2ul

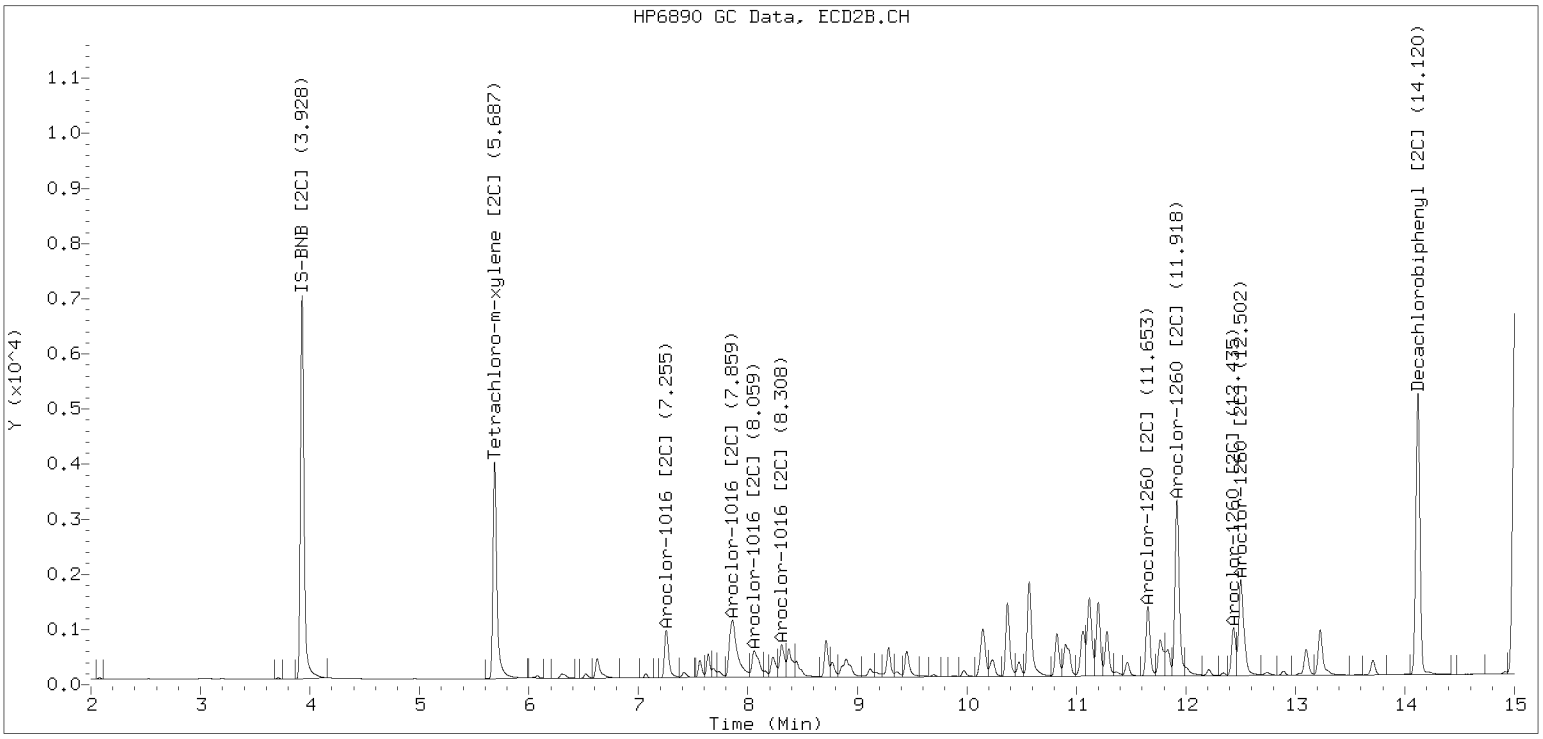


ZB-35 Manual Integration: YES

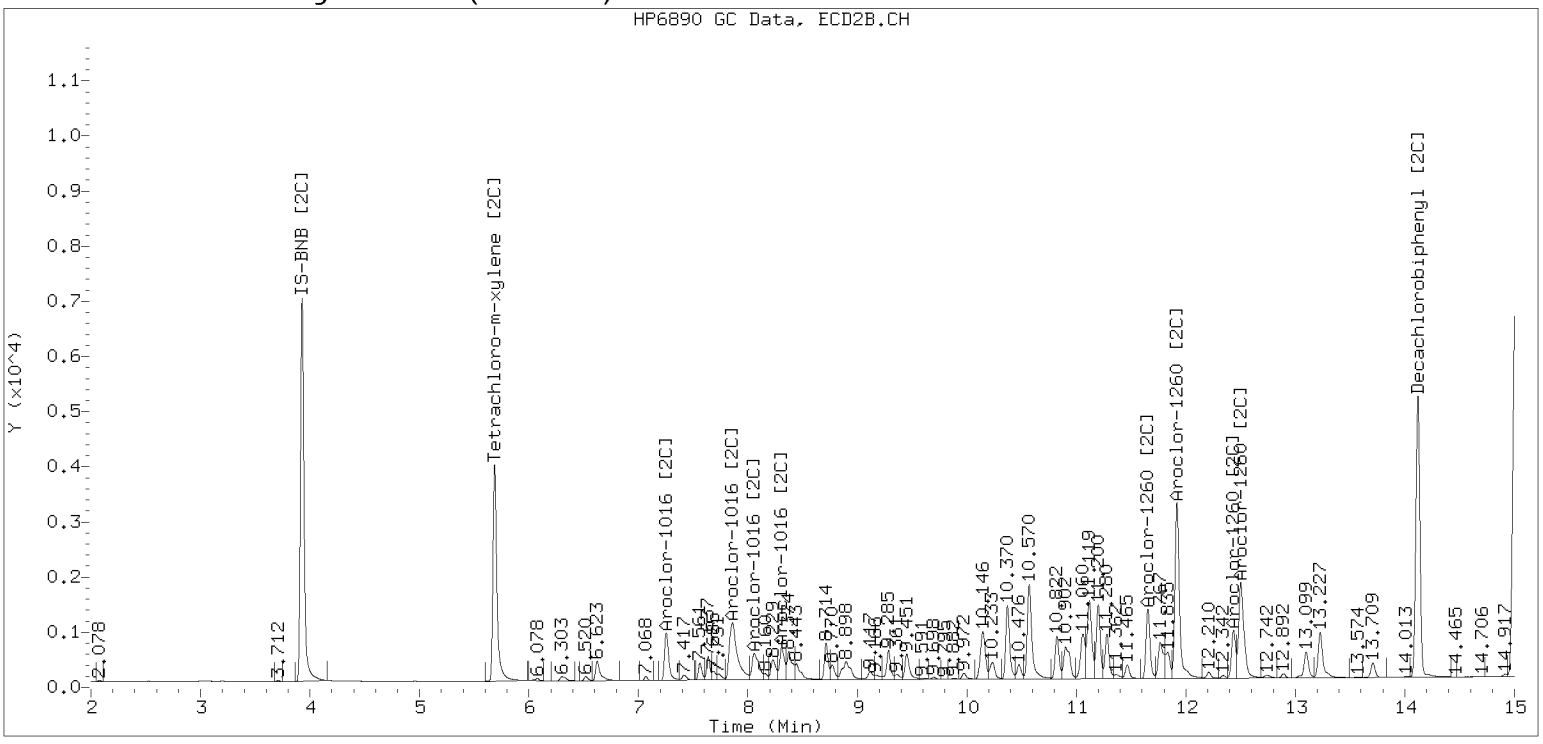
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230228.b/230228.b/02282349ECD7.D Injection Date: 01-MAR-2023

Manual Integration (After)



Processed Integration (Before)



Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0342
Instrument: ECD7
Calibration: GB00069

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Cal Standard	SLB0342-CAL1	02242302ECD7.D	02242302ECD7.D	NA	02/24/23 11:12
Cal Standard	SLB0342-CAL2	02242303ECD7.D	02242303ECD7.D	NA	02/24/23 11:33
Cal Standard	SLB0342-CAL3	02242304ECD7.D	02242304ECD7.D	NA	02/24/23 11:54
Cal Standard	SLB0342-CAL4	02242305ECD7.D	02242305ECD7.D	NA	02/24/23 12:15
Cal Standard	SLB0342-CAL5	02242306ECD7.D	02242306ECD7.D	NA	02/24/23 12:36
Cal Standard	SLB0342-CAL6	02242307ECD7.D	02242307ECD7.D	NA	02/24/23 12:57
Cal Standard	SLB0342-CAL7	02242308ECD7.D	02242308ECD7.D	NA	02/24/23 13:18
Cal Standard	SLB0342-CAL8	02242309ECD7.D	02242309ECD7.D	NA	02/24/23 13:39
Cal Standard	SLB0342-CAL9	02242310ECD7.D	02242310ECD7.D	NA	02/24/23 14:00
Cal Standard	SLB0342-CALA	02242311ECD7.D	02242311ECD7.D	NA	02/24/23 14:21
Cal Standard	SLB0342-CALB	02242312ECD7.D	02242312ECD7.D	NA	02/24/23 14:42
Secondary Cal Check	SLB0342-SCV1	02242313ECD7.D	02242313ECD7.D	NA	02/24/23 15:03
Secondary Cal Check	SLB0342-SCV2	02242314ECD7.D	02242314ECD7.D	NA	02/24/23 15:24
Secondary Cal Check	SLB0342-SCV3	02242315ECD7.D	02242315ECD7.D	NA	02/24/23 15:45
Secondary Cal Check	SLB0342-SCV4	02242316ECD7.D	02242316ECD7.D	NA	02/24/23 16:06
Secondary Cal Check	SLB0342-SCV5	02242317ECD7.D	02242317ECD7.D	NA	02/24/23 16:27
Secondary Cal Check	SLB0342-SCV6	02242318ECD7.D	02242318ECD7.D	NA	02/24/23 16:48

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0014	Instrument:	ECD7
		Calibration:	GB00069

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLC0014-ICV1	02282310ECD7.D	02282310ECD7.D	NA	02/28/23 19:04
Initial Cal Check	SLC0014-ICV2	02282311ECD7.D	02282311ECD7.D	NA	02/28/23 19:25
Calibration Check	SLC0014-CCV1	02282313ECD7.D	02282313ECD7.D	NA	02/28/23 20:07
Calibration Check	SLC0014-CCV2	02282314ECD7.D	02282314ECD7.D	NA	02/28/23 20:28
Blank	BLB0391-BLK1	02282315ECD7.D	02282315ECD7.D	Solid	02/28/23 20:49
LCS	BLB0391-BS1	02282316ECD7.D	02282316ECD7.D	Solid	02/28/23 21:10
LCS Dup	BLB0391-BSD1	02282317ECD7.D	02282317ECD7.D	Solid	02/28/23 21:31
Reference	BLB0391-SRM1	02282318ECD7.D	02282318ECD7.D	Solid	02/28/23 21:53
LDW23-SC1045	23A0420-01	02282319ECD7.D	02282319ECD7.D	Solid	02/28/23 22:14
LDW23-SC1052	23A0420-02	02282320ECD7.D	02282320ECD7.D	Solid	02/28/23 22:35
LDW23-SC1057	23A0420-03	02282321ECD7.D	02282321ECD7.D	Solid	02/28/23 22:56
LDW23-IT1051	23A0420-04	02282322ECD7.D	02282322ECD7.D	Solid	02/28/23 23:17
LDW23-IT1051	BLB0391-MS1	02282323ECD7.D	02282323ECD7.D	Solid	02/28/23 23:38
LDW23-IT1051	BLB0391-MSD1	02282324ECD7.D	02282324ECD7.D	Solid	02/28/23 23:59
LDW23-SC1125	23A0420-05	02282325ECD7.D	02282325ECD7.D	Solid	03/01/23 00:20
LDW23-SC1132	23A0420-06	02282326ECD7.D	02282326ECD7.D	Solid	03/01/23 00:41
LDW23-SC1003	23A0420-07	02282327ECD7.D	02282327ECD7.D	Solid	03/01/23 01:02
LDW23-SC1004	23A0420-08	02282328ECD7.D	02282328ECD7.D	Solid	03/01/23 01:23
LDW23-SC1082	23A0420-09	02282329ECD7.D	02282329ECD7.D	Solid	03/01/23 01:44
Calibration Check	SLC0014-CCV3	02282331ECD7.D	02282331ECD7.D	NA	03/01/23 02:26
Calibration Check	SLC0014-CCV4	02282332ECD7.D	02282332ECD7.D	NA	03/01/23 02:47
Calibration Check	SLC0014-CCV5	02282348ECD7.D	02282348ECD7.D	NA	03/01/23 08:24
Calibration Check	SLC0014-CCV6	02282349ECD7.D	02282349ECD7.D	NA	03/01/23 08:45

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLC0014

Instrument: ECD7
Calibration ID: GB00069

Printed: 3/1/2023 2:29:55PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0014-ICV1	QC		1		L000862	L000844		
SLC0014-ICV2	QC		2		L000856	L000844		
23A0556-01	PCB (20 ug/kg) or (MTCA 0.	A 02	3			L000844	Integral Consulting, Inc.	Use this one
SLC0014-CCV1	QC		4		L000861	L000844		
SLC0014-CCV2	QC		5		L000856	L000844		
BLB0391-BLK1	QC		6			L000844		
BLB0391-BS1	QC		7			L000844		
BLB0391-BSD1	QC		8			L000844		
BLB0391-SRM1	QC		9			L000844		
23A0420-01	8082A PCB Solid 4	A 02	10			L000844	Anchor QEA, LLC	
23A0420-02	8082A PCB Solid 4	A 02	11			L000844	Anchor QEA, LLC	
23A0420-03	8082A PCB Solid 4	A 02	12			L000844	Anchor QEA, LLC	
23A0420-04	8082A PCB Solid 4	A 02	13			L000844	Anchor QEA, LLC	
BLB0391-MS1	QC		14			L000844		
BLB0391-MSD1	QC		15			L000844		
23A0420-05	8082A PCB Solid 4	A 02	16			L000844	Anchor QEA, LLC	
23A0420-06	8082A PCB Solid 4	A 02	17			L000844	Anchor QEA, LLC	
23A0420-07	8082A PCB Solid 4	A 02	18			L000844	Anchor QEA, LLC	
23A0420-08	8082A PCB Solid 4	A 02	19			L000844	Anchor QEA, LLC	
23A0420-09	8082A PCB Solid 4	A 02	20			L000844	Anchor QEA, LLC	
23B0276-01	8082A PCB Solid 4	A 01	21			L000844	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SLC0014

Instrument: ECD7
Calibration ID: GB00069

Printed: 3/1/2023 2:29:55PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0014-CCV3	QC		22		L000860	L000844		
SLC0014-CCV4	QC		23		L000856	L000844		
BLB0427-BLK1	QC		24			L000844		
BLB0427-BS1	QC		25			L000844		
BLB0427-BSD1	QC		26			L000844		
BLB0427-SRM1	QC		27			L000844		
23B0228-01	8082A PCB Solid 4	A 01	28			L000844	Anchor QEA, LLC	
23B0229-01	8082A PCB Solid 4	A 01	29			L000844	Anchor QEA, LLC	
23B0229-02	8082A PCB Solid 4	A 01	30			L000844	Anchor QEA, LLC	
23B0229-03	8082A PCB Solid 4	A 01	31			L000844	Anchor QEA, LLC	
23B0229-04	8082A PCB Solid 4	A 01	32			L000844	Anchor QEA, LLC	
23B0229-05	8082A PCB Solid 4	A 01	33			L000844	Anchor QEA, LLC	
23B0229-06	8082A PCB Solid 4	A 01	34			L000844	Anchor QEA, LLC	
23B0229-07	8082A PCB Solid 4	A 01	35			L000844	Anchor QEA, LLC	
BLB0427-MS1	QC		36			L000844		
BLB0427-MSD1	QC		37			L000844		
23B0229-08	8082A PCB Solid 4	A 01	38			L000844	Anchor QEA, LLC	
SLC0014-CCV5	QC		39		L000862	L000844		
SLC0014-CCV6	QC		40		L000856	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230228.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	28-FEB-2023 19:04	02282310ECD7.D	1	AR1254ICV1	
2	28-FEB-2023 19:25	02282311ECD7.D	1	AR1660ICV2	
3	28-FEB-2023 19:46	02282312ECD7.D	10	23A0556-01RE1	
4	28-FEB-2023 20:07	02282313ECD7.D	1	AR1248CCV1	
5	28-FEB-2023 20:28	02282314ECD7.D	1	AR1660CCV2	
6	28-FEB-2023 20:49	02282315ECD7.D	1	BLB0391-BLK1	
7	28-FEB-2023 21:10	02282316ECD7.D	1	BLB0391-BS1	
8	28-FEB-2023 21:31	02282317ECD7.D	1	BLB0391-BSD1	
9	28-FEB-2023 21:53	02282318ECD7.D	1	BLB0391-SRM1	
10	28-FEB-2023 22:14	02282319ECD7.D	1	23A0420-01	
11	28-FEB-2023 22:35	02282320ECD7.D	3	23A0420-02RE1	
12	28-FEB-2023 22:56	02282321ECD7.D	3	23A0420-03RE1	
13	28-FEB-2023 23:17	02282322ECD7.D	1	23A0420-04	
14	28-FEB-2023 23:38	02282323ECD7.D	1	BLB0391-MS1	
15	28-FEB-2023 23:59	02282324ECD7.D	1	BLB0391-MSD1	
16	01-MAR-2023 00:20	02282325ECD7.D	15	23A0420-05RE2	
17	01-MAR-2023 00:41	02282326ECD7.D	25	23A0420-06RE2	
18	01-MAR-2023 01:02	02282327ECD7.D	3	23A0420-07RE1	
19	01-MAR-2023 01:23	02282328ECD7.D	1	23A0420-08	
20	01-MAR-2023 01:44	02282329ECD7.D	5	23A0420-09RE1	
21	01-MAR-2023 02:05	02282330ECD7.D	3	23A0276-01RE1	
22	01-MAR-2023 02:26	02282331ECD7.D	1	AR1242CCV3	
23	01-MAR-2023 02:47	02282332ECD7.D	1	AR1660CCV4	
24	01-MAR-2023 03:08	02282333ECD7.D	1	BLB0427-BLK1	
25	01-MAR-2023 03:29	02282334ECD7.D	1	BLB0427-BS1	
26	01-MAR-2023 03:50	02282335ECD7.D	1	BLB0427-BSD1	
27	01-MAR-2023 04:11	02282336ECD7.D	1	BLB0427-SRM1	
28	01-MAR-2023 04:32	02282337ECD7.D	3	23B0228-01RE1	
29	01-MAR-2023 04:53	02282338ECD7.D	1	23B0229-01	
30	01-MAR-2023 05:14	02282339ECD7.D	1	23B0229-02	
31	01-MAR-2023 05:35	02282340ECD7.D	1	23B0229-03	
32	01-MAR-2023 05:56	02282341ECD7.D	1	23B0229-04	
33	01-MAR-2023 06:17	02282342ECD7.D	4	23B0229-05RE1	
34	01-MAR-2023 06:39	02282343ECD7.D	3	23B0229-06RE1	
35	01-MAR-2023 07:00	02282344ECD7.D	1	23B0229-07	
36	01-MAR-2023 07:21	02282345ECD7.D	1	BLB0427-MS1	
37	01-MAR-2023 07:42	02282346ECD7.D	1	BLB0427-MSD1	
38	01-MAR-2023 08:03	02282347ECD7.D	3	23B0229-08RE1	
39	01-MAR-2023 08:24	02282348ECD7.D	1	AR1254CCV5	
40	01-MAR-2023 08:45	02282349ECD7.D	1	AR1660CCV6	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230228.b

ARI Job No.: AR12 Method: PCB.m Instrument: ecd7.i Date: 28-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1904	02282310ECD7.D	AR1254ICV1		1	Aroclor-1254,
1925	02282311ECD7.D	AR1660ICV2		1	NO MANUAL INTEGRATION
1946	02282312ECD7.D	23A0556-01RE1		10	Aroclor-1262,
2007	02282313ECD7.D	AR1248CCV1		1	Aroclor-1248,
2028	02282314ECD7.D	AR1660CCV2		1	NO MANUAL INTEGRATION
2049	02282315ECD7.D	BLB0391-BLK1		1	NO MANUAL INTEGRATION
2110	02282316ECD7.D	BLB0391-BS1		1	NO MANUAL INTEGRATION
2131	02282317ECD7.D	BLB0391-BSD1		1	NO MANUAL INTEGRATION
2153	02282318ECD7.D	BLB0391-SRM1		1	NO MANUAL INTEGRATION
2214	02282319ECD7.D	23A0420-01		1	Aroclor-1254,
2235	02282320ECD7.D	23A0420-02RE1		3	NO MANUAL INTEGRATION
2256	02282321ECD7.D	23A0420-03RE1		3	NO MANUAL INTEGRATION
2317	02282322ECD7.D	23A0420-04		1	Aroclor-1254,
2338	02282323ECD7.D	BLB0391-MS1		1	NO MANUAL INTEGRATION
2359	02282324ECD7.D	BLB0391-MSD1		1	NO MANUAL INTEGRATION
0020	02282325ECD7.D	23A0420-05RE2		15	Aroclor-1254,
0041	02282326ECD7.D	23A0420-06RE2		25	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230228.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0102	02282327ECD7.D	23A0420-07RE1		3	Aroclor-1254,
0123	02282328ECD7.D	23A0420-08		1	NO MANUAL INTEGRATION
0144	02282329ECD7.D	23A0420-09RE1		5	Aroclor-1254,
0205	02282330ECD7.D	23A0276-01RE1		3	Aroclor-1254,
0226	02282331ECD7.D	AR1242CCV3		1	NO MANUAL INTEGRATION
0247	02282332ECD7.D	AR1660CCV4		1	NO MANUAL INTEGRATION
0308	02282333ECD7.D	BLB0427-BLK1		1	NO MANUAL INTEGRATION
0329	02282334ECD7.D	BLB0427-BS1		1	NO MANUAL INTEGRATION
0350	02282335ECD7.D	BLB0427-BSD1		1	NO MANUAL INTEGRATION
0411	02282336ECD7.D	BLB0427-SRM1		1	NO MANUAL INTEGRATION
0432	02282337ECD7.D	23B0228-01RE1		3	NO MANUAL INTEGRATION
0453	02282338ECD7.D	23B0229-01		1	Aroclor-1254,
0514	02282339ECD7.D	23B0229-02		1	NO MANUAL INTEGRATION
0535	02282340ECD7.D	23B0229-03		1	Aroclor-1254,
0556	02282341ECD7.D	23B0229-04		1	Aroclor-1254,
0617	02282342ECD7.D	23B0229-05RE1		4	Aroclor-1254,
0639	02282343ECD7.D	23B0229-06RE1		3	Aroclor-1254,
0700	02282344ECD7.D	23B0229-07		1	Aroclor-1254,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230228.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0721	02282345ECD7.D	BLB0427-MS1		1	NO MANUAL INTEGRATION
0742	02282346ECD7.D	BLB0427-MSD1		1	NO MANUAL INTEGRATION
0803	02282347ECD7.D	23B0229-08RE1		3	Aroclor-1254,
0824	02282348ECD7.D	AR1254CCV5		1	NO MANUAL INTEGRATION
0845	02282349ECD7.D	AR1660CCV6		1	NO MANUAL INTEGRATION
1216	02282302ECD7.D	AR2162SCVICAL		1	NO MANUAL INTEGRATION
1319	02282303ECD7.D	AR1660		1	NO MANUAL INTEGRATION
1412	02282304ECD7.D	AR1660		1	NO MANUAL INTEGRATION
1719	02282305ECD7.D	0.25PPMAR1660		1	NO MANUAL INTEGRATION
1740	02282306ECD7.D	0.25PPMAR1242		1	NO MANUAL INTEGRATION
1801	02282307ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
1822	02282308ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
1843	02282309ECD7.D	DDTS		1	NO MANUAL INTEGRATION
1904	02282310ECD7.D	AR1254ICV1		1	NO MANUAL INTEGRATION
1925	02282311ECD7.D	AR1660ICV2		1	Aroclor-1260 [2C],
1946	02282312ECD7.D	23A0556-01RE1		10	NO MANUAL INTEGRATION
2007	02282313ECD7.D	AR1248CCV1		1	NO MANUAL INTEGRATION
2028	02282314ECD7.D	AR1660CCV2		1	Aroclor-1260 [2C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230228.b\230228.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2049	02282315ECD7.D	BLB0391-BLK1		1	NO MANUAL INTEGRATION
2110	02282316ECD7.D	BLB0391-BS1		1	NO MANUAL INTEGRATION
2131	02282317ECD7.D	BLB0391-BSD1		1	NO MANUAL INTEGRATION
2153	02282318ECD7.D	BLB0391-SRM1		1	NO MANUAL INTEGRATION
2214	02282319ECD7.D	23A0420-01		1	Aroclor-1248 [2C],
2235	02282320ECD7.D	23A0420-02RE1		3	Aroclor-1248 [2C],
2256	02282321ECD7.D	23A0420-03RE1		3	Aroclor-1248 [2C],
2317	02282322ECD7.D	23A0420-04		1	Aroclor-1248 [2C],
2338	02282323ECD7.D	BLB0391-MS1		1	NO MANUAL INTEGRATION
2359	02282324ECD7.D	BLB0391-MSD1		1	NO MANUAL INTEGRATION
0020	02282325ECD7.D	23A0420-05RE2		15	Aroclor-1248 [2C],
0041	02282326ECD7.D	23A0420-06RE2		25	Aroclor-1248 [2C],
0102	02282327ECD7.D	23A0420-07RE1		3	Aroclor-1248 [2C],
0123	02282328ECD7.D	23A0420-08		1	Aroclor-1248 [2C],
0144	02282329ECD7.D	23A0420-09RE1		5	Aroclor-1248 [2C],
0205	02282330ECD7.D	23A0276-01RE1		3	Aroclor-1248 [2C],
0226	02282331ECD7.D	AR1242CCV3		1	NO MANUAL INTEGRATION
0247	02282332ECD7.D	AR1660CCV4		1	Aroclor-1260 [2C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230228.b\230228.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0308	02282333ECD7.D	BLB0427-BLK1		1	NO MANUAL INTEGRATION
0329	02282334ECD7.D	BLB0427-BS1		1	NO MANUAL INTEGRATION
0350	02282335ECD7.D	BLB0427-BSD1		1	NO MANUAL INTEGRATION
0411	02282336ECD7.D	BLB0427-SRM1		1	NO MANUAL INTEGRATION
0432	02282337ECD7.D	23B0228-01RE1		3	Aroclor-1248 [2C],
0453	02282338ECD7.D	23B0229-01		1	Aroclor-1248 [2C],
0514	02282339ECD7.D	23B0229-02		1	Aroclor-1248 [2C],
0535	02282340ECD7.D	23B0229-03		1	Aroclor-1248 [2C],
0556	02282341ECD7.D	23B0229-04		1	Aroclor-1248 [2C],
0617	02282342ECD7.D	23B0229-05RE1		4	Aroclor-1248 [2C],
0639	02282343ECD7.D	23B0229-06RE1		3	Aroclor-1248 [2C],
0700	02282344ECD7.D	23B0229-07		1	Aroclor-1248 [2C],
0721	02282345ECD7.D	BLB0427-MS1		1	NO MANUAL INTEGRATION
0742	02282346ECD7.D	BLB0427-MSD1		1	NO MANUAL INTEGRATION
0803	02282347ECD7.D	23B0229-08RE1		3	Aroclor-1248 [2C],
0824	02282348ECD7.D	AR1254CCV5		1	NO MANUAL INTEGRATION
0845	02282349ECD7.D	AR1660CCV6		1	Aroclor-1260 [2C],

Security Status Report

Date: 01-Mar-2023 12:52

02282302ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282303ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282304ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282305ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282306ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282307ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282308ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282309ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282310ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282311ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282312ECD7.D	Data Locked	richardl, 01-Mar-2023 12:52
02282313ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282314ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282315ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282316ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282317ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282318ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282319ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282320ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282321ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282322ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282323ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282324ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282325ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282326ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282327ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282328ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282329ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282330ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282331ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282332ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282333ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282334ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282335ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282336ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282337ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282338ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282339ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282340ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282341ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282342ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282343ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282344ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282345ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23

02282346ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282347ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282348ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23
02282349ECD7.D	Data Locked	richardl, 01-Mar-2023 12:23

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0342	Instrument:	ECD7
Calibration:	GB00069	Calibration Date:	02/24/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0342-SCV1 (Water)			Lab File ID: 02242313ECD7.D			Analyzed: 02/24/23 15:03		
Decachlorobiphenyl	40.000	85.8	80 - 120	13.894	13.89483	-0.0008	N/A	
Tetrachlorometaxylene	40.000	87.4	80 - 120	5.807	5.8095	-0.0025	N/A	
Decachlorobiphenyl [2C]	40.000	93.4	80 - 120	14.119	14.11917	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	89.4	80 - 120	5.685	5.687167	-0.0022	N/A	
SLB0342-SCV2 (Water)			Lab File ID: 02242314ECD7.D			Analyzed: 02/24/23 15:24		
Decachlorobiphenyl	40.000	92.5	80 - 120	13.895	13.89483	0.0002	N/A	
Tetrachlorometaxylene	40.000	84.1	80 - 120	5.808	5.8095	-0.0015	N/A	
Decachlorobiphenyl [2C]	40.000	101	80 - 120	14.12	14.11917	0.0008	N/A	
Tetrachlorometaxylene [2C]	40.000	86.3	80 - 120	5.686	5.687167	-0.0012	N/A	
SLB0342-SCV3 (Water)			Lab File ID: 02242315ECD7.D			Analyzed: 02/24/23 15:45		
Decachlorobiphenyl	40.000	82.8	80 - 120	13.893	13.89483	-0.0018	N/A	
Tetrachlorometaxylene	40.000	87.2	80 - 120	5.808	5.8095	-0.0015	N/A	
Decachlorobiphenyl [2C]	40.000	90.8	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	91.0	80 - 120	5.687	5.687167	-0.0002	N/A	
SLB0342-SCV4 (Water)			Lab File ID: 02242316ECD7.D			Analyzed: 02/24/23 16:06		
Decachlorobiphenyl	40.000	86.6	80 - 120	13.894	13.89483	-0.0008	N/A	
Tetrachlorometaxylene	40.000	90.3	80 - 120	5.806	5.8095	-0.0035	N/A	
Decachlorobiphenyl [2C]	40.000	94.8	80 - 120	14.119	14.11917	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	92.7	80 - 120	5.685	5.687167	-0.0022	N/A	
SLB0342-SCV5 (Water)			Lab File ID: 02242317ECD7.D			Analyzed: 02/24/23 16:27		
Decachlorobiphenyl	40.000	86.1	80 - 120	13.894	13.89483	-0.0008	N/A	
Tetrachlorometaxylene	40.000	90.0	80 - 120	5.806	5.8095	-0.0035	N/A	
Decachlorobiphenyl [2C]	40.000	94.6	80 - 120	14.119	14.11917	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	91.6	80 - 120	5.685	5.687167	-0.0022	N/A	
SLB0342-SCV6 (Water)			Lab File ID: 02242318ECD7.D			Analyzed: 02/24/23 16:48		
Decachlorobiphenyl	40.000	128	80 - 120	13.893	13.89483	-0.0018	N/A	
Tetrachlorometaxylene	40.000	92.7	80 - 120	5.806	5.8095	-0.0035	N/A	
Decachlorobiphenyl [2C]	40.000	141	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	95.4	80 - 120	5.685	5.687167	-0.0022	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0014
Instrument: ECD7
Calibration: GB00069
Calibration Date: 02/24/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0014-ICV1 (Solid)			Lab File ID: 02282310ECD7.D			Analyzed: 02/28/23 19:04		
Decachlorobiphenyl	40.000	93.5	80 - 120	13.894	13.89483	-0.0008	N/A	
Tetrachlorometaxylene	40.000	100	80 - 120	5.809	5.8095	-0.0005	N/A	
Decachlorobiphenyl [2C]	40.000	104	80 - 120	14.119	14.11917	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	101	80 - 120	5.688	5.687167	0.0008	N/A	
SLC0014-ICV2 (Solid)			Lab File ID: 02282311ECD7.D			Analyzed: 02/28/23 19:25		
Decachlorobiphenyl	40.000	101	80 - 120	13.892	13.89483	-0.0028	N/A	
Tetrachlorometaxylene	40.000	105	80 - 120	5.807	5.8095	-0.0025	N/A	
Decachlorobiphenyl [2C]	40.000	101	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	106	80 - 120	5.686	5.687167	-0.0012	N/A	
SLC0014-CCV1 (Solid)			Lab File ID: 02282313ECD7.D			Analyzed: 02/28/23 20:07		
Decachlorobiphenyl	40.000	91.5	80 - 120	13.894	13.89483	-0.0008	N/A	
Tetrachlorometaxylene	40.000	94.5	80 - 120	5.808	5.8095	-0.0015	N/A	
Decachlorobiphenyl [2C]	40.000	100	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	96.3	80 - 120	5.686	5.687167	-0.0012	N/A	
SLC0014-CCV2 (Solid)			Lab File ID: 02282314ECD7.D			Analyzed: 02/28/23 20:28		
Decachlorobiphenyl	40.000	100	80 - 120	13.893	13.89483	-0.0018	N/A	
Tetrachlorometaxylene	40.000	102	80 - 120	5.808	5.8095	-0.0015	N/A	
Decachlorobiphenyl [2C]	40.000	102	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	103	80 - 120	5.687	5.687167	-0.0002	N/A	
BLB0391-BLK1 (Solid)			Lab File ID: 02282315ECD7.D			Analyzed: 02/28/23 20:49		
Decachlorobiphenyl	8.0000	80.1	40 - 126	13.893	13.89483	-0.0018	N/A	
Tetrachlorometaxylene	8.0000	67.9	44 - 120	5.807	5.8095	-0.0025	N/A	
Decachlorobiphenyl [2C]	8.0000	83.8	40 - 126	14.117	14.11917	-0.0022	N/A	
Tetrachlorometaxylene [2C]	8.0000	69.0	44 - 120	5.686	5.687167	-0.0012	N/A	
BLB0391-BS1 (Solid)			Lab File ID: 02282316ECD7.D			Analyzed: 02/28/23 21:10		
Decachlorobiphenyl	8.0000	82.0	40 - 126	13.891	13.89483	-0.0038	N/A	
Tetrachlorometaxylene	8.0000	80.0	44 - 120	5.808	5.8095	-0.0015	N/A	
Decachlorobiphenyl [2C]	8.0000	96.1	40 - 126	14.117	14.11917	-0.0022	N/A	
Tetrachlorometaxylene [2C]	8.0000	77.1	44 - 120	5.686	5.687167	-0.0012	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0014
Instrument: ECD7
Calibration: GB00069
Calibration Date: 02/24/2023

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLB0391-BSD1 (Solid)			Lab File ID: 02282317ECD7.D			Analyzed: 02/28/23 21:31		
Decachlorobiphenyl	8.0000	89.7	40 - 126	13.892	13.89483	-0.0028	N/A	
Tetrachlorometaxylene	8.0000	83.3	44 - 120	5.807	5.8095	-0.0025	N/A	
Decachlorobiphenyl [2C]	8.0000	97.2	40 - 126	14.117	14.11917	-0.0022	N/A	
Tetrachlorometaxylene [2C]	8.0000	81.6	44 - 120	5.686	5.687167	-0.0012	N/A	
BLB0391-SRM1 (Solid)			Lab File ID: 02282318ECD7.D			Analyzed: 02/28/23 21:53		
Decachlorobiphenyl	40.000	87.0	40 - 126	13.888	13.89483	-0.0068	N/A	
Tetrachlorometaxylene	40.000	65.7	44 - 120	5.805	5.8095	-0.0045	N/A	
Decachlorobiphenyl [2C]	40.000	89.3	40 - 126	14.114	14.11917	-0.0052	N/A	
Tetrachlorometaxylene [2C]	40.000	70.4	44 - 120	5.684	5.687167	-0.0032	N/A	
23A0420-01 (Solid)			Lab File ID: 02282319ECD7.D			Analyzed: 02/28/23 22:14		
Decachlorobiphenyl	7.9887	88.0	40 - 126	13.885	13.89483	-0.0098	N/A	
Tetrachlorometaxylene	7.9887	64.6	44 - 120	5.804	5.8095	-0.0055	N/A	
Decachlorobiphenyl [2C]	7.9887	82.9	40 - 126	14.111	14.11917	-0.0082	N/A	
Tetrachlorometaxylene [2C]	7.9887	78.8	44 - 120	5.681	5.687167	-0.0062	N/A	
23A0420-02 (Solid)			Lab File ID: 02282320ECD7.D			Analyzed: 02/28/23 22:35		
Decachlorobiphenyl	7.8979	83.0	40 - 126	13.884	13.89483	-0.0108	N/A	
Tetrachlorometaxylene	7.8979	64.8	44 - 120	5.804	5.8095	-0.0055	N/A	
Decachlorobiphenyl [2C]	7.8979	76.4	40 - 126	14.112	14.11917	-0.0072	N/A	
Tetrachlorometaxylene [2C]	7.8979	75.5	44 - 120	5.683	5.687167	-0.0042	N/A	
23A0420-03 (Solid)			Lab File ID: 02282321ECD7.D			Analyzed: 02/28/23 22:56		
Decachlorobiphenyl	7.8199	91.2	40 - 126	13.884	13.89483	-0.0108	N/A	
Tetrachlorometaxylene	7.8199	71.3	44 - 120	5.805	5.8095	-0.0045	N/A	
Decachlorobiphenyl [2C]	7.8199	84.3	40 - 126	14.112	14.11917	-0.0072	N/A	
Tetrachlorometaxylene [2C]	7.8199	84.5	44 - 120	5.684	5.687167	-0.0032	N/A	
23A0420-04 (Solid)			Lab File ID: 02282322ECD7.D			Analyzed: 02/28/23 23:17		
Decachlorobiphenyl	8.0013	93.5	40 - 126	13.884	13.89483	-0.0108	N/A	
Tetrachlorometaxylene	8.0013	59.6	44 - 120	5.804	5.8095	-0.0055	N/A	
Decachlorobiphenyl [2C]	8.0013	91.2	40 - 126	14.111	14.11917	-0.0082	N/A	
Tetrachlorometaxylene [2C]	8.0013	75.5	44 - 120	5.681	5.687167	-0.0062	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0014
Instrument: ECD7
Calibration: GB00069
Calibration Date: 02/24/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLB0391-MS1 (Solid)			Lab File ID: 02282323ECD7.D			Analyzed: 02/28/23 23:38		
Decachlorobiphenyl	8.0013	97.3	40 - 126	13.885	13.89483	-0.0098	N/A	
Tetrachlorometaxylene	8.0013	66.8	44 - 120	5.804	5.8095	-0.0055	N/A	
Decachlorobiphenyl [2C]	8.0013	96.5	40 - 126	14.11	14.11917	-0.0092	N/A	
Tetrachlorometaxylene [2C]	8.0013	80.2	44 - 120	5.682	5.687167	-0.0052	N/A	
BLB0391-MSD1 (Solid)			Lab File ID: 02282324ECD7.D			Analyzed: 02/28/23 23:59		
Decachlorobiphenyl	8.0013	96.2	40 - 126	13.886	13.89483	-0.0088	N/A	
Tetrachlorometaxylene	8.0013	61.6	44 - 120	5.804	5.8095	-0.0055	N/A	
Decachlorobiphenyl [2C]	8.0013	93.0	40 - 126	14.111	14.11917	-0.0082	N/A	
Tetrachlorometaxylene [2C]	8.0013	77.0	44 - 120	5.682	5.687167	-0.0052	N/A	
23A0420-05 (Solid)			Lab File ID: 02282325ECD7.D			Analyzed: 03/01/23 00:20		
Decachlorobiphenyl	7.9861	96.3	40 - 126	13.887	13.89483	-0.0078	N/A	
Tetrachlorometaxylene	7.9861	66.3	44 - 120	5.804	5.8095	-0.0055	N/A	
Decachlorobiphenyl [2C]	7.9861	89.9	40 - 126	14.115	14.11917	-0.0042	N/A	
Tetrachlorometaxylene [2C]	7.9861	79.7	44 - 120	5.684	5.687167	-0.0032	N/A	
23A0420-06 (Solid)			Lab File ID: 02282326ECD7.D			Analyzed: 03/01/23 00:41		
Decachlorobiphenyl	7.9956	113	40 - 126	13.888	13.89483	-0.0068	N/A	
Tetrachlorometaxylene	7.9956	80.9	44 - 120	5.805	5.8095	-0.0045	N/A	
Decachlorobiphenyl [2C]	7.9956	98.1	40 - 126	14.116	14.11917	-0.0032	N/A	
Tetrachlorometaxylene [2C]	7.9956	87.0	44 - 120	5.684	5.687167	-0.0032	N/A	
23A0420-07 (Solid)			Lab File ID: 02282327ECD7.D			Analyzed: 03/01/23 01:02		
Decachlorobiphenyl	7.8600	94.4	40 - 126	13.885	13.89483	-0.0098	N/A	
Tetrachlorometaxylene	7.8600	68.9	44 - 120	5.803	5.8095	-0.0065	N/A	
Decachlorobiphenyl [2C]	7.8600	87.2	40 - 126	14.112	14.11917	-0.0072	N/A	
Tetrachlorometaxylene [2C]	7.8600	79.4	44 - 120	5.682	5.687167	-0.0052	N/A	
23A0420-08 (Solid)			Lab File ID: 02282328ECD7.D			Analyzed: 03/01/23 01:23		
Decachlorobiphenyl	8.0006	95.8	40 - 126	13.885	13.89483	-0.0098	N/A	
Tetrachlorometaxylene	8.0006	69.1	44 - 120	5.804	5.8095	-0.0055	N/A	
Decachlorobiphenyl [2C]	8.0006	93.2	40 - 126	14.112	14.11917	-0.0072	N/A	
Tetrachlorometaxylene [2C]	8.0006	83.2	44 - 120	5.682	5.687167	-0.0052	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0014
Instrument: ECD7
Calibration: GB00069
Calibration Date: 02/24/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0420-09 (Solid)			Lab File ID: 02282329ECD7.D			Analyzed: 03/01/23 01:44		
Decachlorobiphenyl	7.8315	99.7	40 - 126	13.886	13.89483	-0.0088	N/A	
Tetrachlorometaxylene	7.8315	76.6	44 - 120	5.803	5.8095	-0.0065	N/A	
Decachlorobiphenyl [2C]	7.8315	93.6	40 - 126	14.113	14.11917	-0.0062	N/A	
Tetrachlorometaxylene [2C]	7.8315	83.6	44 - 120	5.682	5.687167	-0.0052	N/A	
SLC0014-CCV3 (Solid)			Lab File ID: 02282331ECD7.D			Analyzed: 03/01/23 02:26		
Decachlorobiphenyl	40.000	99.5	80 - 120	13.892	13.89483	-0.0028	N/A	
Tetrachlorometaxylene	40.000	112	80 - 120	5.806	5.8095	-0.0035	N/A	
Decachlorobiphenyl [2C]	40.000	105	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	117	80 - 120	5.686	5.687167	-0.0012	N/A	
SLC0014-CCV4 (Solid)			Lab File ID: 02282332ECD7.D			Analyzed: 03/01/23 02:47		
Decachlorobiphenyl	40.000	113	80 - 120	13.892	13.89483	-0.0028	N/A	
Tetrachlorometaxylene	40.000	99.3	80 - 120	5.806	5.8095	-0.0035	N/A	
Decachlorobiphenyl [2C]	40.000	110	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	105	80 - 120	5.686	5.687167	-0.0012	N/A	
SLC0014-CCV5 (Solid)			Lab File ID: 02282348ECD7.D			Analyzed: 03/01/23 08:24		
Decachlorobiphenyl	40.000	96.0	80 - 120	13.892	13.89483	-0.0028	N/A	
Tetrachlorometaxylene	40.000	93.8	80 - 120	5.807	5.8095	-0.0025	N/A	
Decachlorobiphenyl [2C]	40.000	107	80 - 120	14.118	14.11917	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	98.8	80 - 120	5.686	5.687167	-0.0012	N/A	
SLC0014-CCV6 (Solid)			Lab File ID: 02282349ECD7.D			Analyzed: 03/01/23 08:45		
Decachlorobiphenyl	40.000	96.8	80 - 120	13.893	13.89483	-0.0018	N/A	
Tetrachlorometaxylene	40.000	100	80 - 120	5.807	5.8095	-0.0025	N/A	
Decachlorobiphenyl [2C]	40.000	107	80 - 120	14.119	14.11917	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	105	80 - 120	5.687	5.687167	-0.0002	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0342
Instrument: ECD7
Calibration: GB00069

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLB0342-SCV1)		(Water)	Lab File ID: 02242313ECD7.D				Analyzed: 02/24/23 15:03		
1-Bromo-2-Nitrobenzene	645975	3.489	673778	3.493	96	50 - 200	-0.004	+/-0.50	
Hexabromobiphenyl	1524245	14.268	1429847	14.268	107	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	316115	3.927	315256	3.928	100	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	556950	15.007	513946	15.008	108	50 - 200	-0.001	+/-0.50	
Secondary Cal Check (SLB0342-SCV2)		(Water)	Lab File ID: 02242314ECD7.D				Analyzed: 02/24/23 15:24		
1-Bromo-2-Nitrobenzene	705650	3.493	673778	3.493	105	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	1555683	14.267	1429847	14.268	109	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	340433	3.929	315256	3.928	108	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	565609	15.008	513946	15.008	110	50 - 200	0.000	+/-0.50	
Secondary Cal Check (SLB0342-SCV3)		(Water)	Lab File ID: 02242315ECD7.D				Analyzed: 02/24/23 15:45		
1-Bromo-2-Nitrobenzene	646554	3.49	673778	3.493	96	50 - 200	-0.003	+/-0.50	
Hexabromobiphenyl	1529451	14.268	1429847	14.268	107	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	316066	3.928	315256	3.928	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	557213	15.008	513946	15.008	108	50 - 200	0.000	+/-0.50	
Secondary Cal Check (SLB0342-SCV4)		(Water)	Lab File ID: 02242316ECD7.D				Analyzed: 02/24/23 16:06		
1-Bromo-2-Nitrobenzene	656887	3.488	673778	3.493	97	50 - 200	-0.005	+/-0.50	
Hexabromobiphenyl	1585505	14.267	1429847	14.268	111	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	320936	3.925	315256	3.928	102	50 - 200	-0.003	+/-0.50	
Hexabromobiphenyl [2C]	570006	15.007	513946	15.008	111	50 - 200	-0.001	+/-0.50	
Secondary Cal Check (SLB0342-SCV5)		(Water)	Lab File ID: 02242317ECD7.D				Analyzed: 02/24/23 16:27		
1-Bromo-2-Nitrobenzene	661953	3.489	673778	3.493	98	50 - 200	-0.004	+/-0.50	
Hexabromobiphenyl	1574993	14.268	1429847	14.268	110	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	317807	3.926	315256	3.928	101	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl [2C]	565951	15.007	513946	15.008	110	50 - 200	-0.001	+/-0.50	
Secondary Cal Check (SLB0342-SCV6)		(Water)	Lab File ID: 02242318ECD7.D				Analyzed: 02/24/23 16:48		
1-Bromo-2-Nitrobenzene	656592	3.489	673778	3.493	97	50 - 200	-0.004	+/-0.50	
Hexabromobiphenyl	1584453	14.268	1429847	14.268	111	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	314741	3.926	315256	3.928	100	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl [2C]	568346	15.007	513946	15.008	111	50 - 200	-0.001	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0014	Instrument:	ECD7
		Calibration:	GB00069

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0014-ICV1)		(Solid)	Lab File ID: 02282310ECD7.D				Analyzed: 02/28/23 19:04		
1-Bromo-2-Nitrobenzene	747385	3.492	747385	3.492	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	1654369	14.268	1654369	14.268	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	301252	3.928	301252	3.928	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	466597	15.008	466597	15.008	100	50 - 200	0.000	+/-0.50	
Initial Cal Check (SLC0014-ICV2)		(Solid)	Lab File ID: 02282311ECD7.D				Analyzed: 02/28/23 19:25		
1-Bromo-2-Nitrobenzene	751182	3.491	751182	3.491	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	1576447	14.266	1576447	14.266	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	306016	3.927	306016	3.927	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	465422	15.006	465422	15.006	100	50 - 200	0.000	+/-0.50	
Blank (BLB0391-BLK1)		(Solid)	Lab File ID: 02282315ECD7.D				Analyzed: 02/28/23 20:49		
1-Bromo-2-Nitrobenzene	811031	3.49	751182	3.491	108	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	1699761	14.265	1576447	14.266	108	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	336382	3.928	306016	3.927	110	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	507633	15.005	465422	15.006	109	50 - 200	-0.001	+/-0.50	
LCS (BLB0391-BS1)		(Solid)	Lab File ID: 02282316ECD7.D				Analyzed: 02/28/23 21:10		
1-Bromo-2-Nitrobenzene	830219	3.491	751182	3.491	111	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	1880213	14.273	1576447	14.266	119	50 - 200	0.007	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	344030	3.928	306016	3.927	112	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	529461	15.005	465422	15.006	114	50 - 200	-0.001	+/-0.50	
LCS Dup (BLB0391-BSD1)		(Solid)	Lab File ID: 02282317ECD7.D				Analyzed: 02/28/23 21:31		
1-Bromo-2-Nitrobenzene	793505	3.491	751182	3.491	106	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	1676867	14.267	1576447	14.266	106	50 - 200	0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	326035	3.927	306016	3.927	107	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	510092	15.004	465422	15.006	110	50 - 200	-0.002	+/-0.50	
Reference (BLB0391-SRM1)		(Solid)	Lab File ID: 02282318ECD7.D				Analyzed: 02/28/23 21:53		
1-Bromo-2-Nitrobenzene	857849	3.489	751182	3.491	114	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl	1407985	14.258	1576447	14.266	89	50 - 200	-0.008	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	341454	3.927	306016	3.927	112	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	496203	14.999	465422	15.006	107	50 - 200	-0.007	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0014	Instrument:	ECD7
		Calibration:	GB00069

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1045 (23A0420-01)		(Solid)	Lab File ID: 02282319ECD7.D				Analyzed: 02/28/23 22:14		
1-Bromo-2-Nitrobenzene	773625	3.49	751182	3.491	103	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	749950	14.25	1576447	14.266	48	50 - 200	-0.016	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	307965	3.926	306016	3.927	101	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	356849	14.995	465422	15.006	77	50 - 200	-0.011	+/-0.50	
LDW23-SC1052 (23A0420-02)		(Solid)	Lab File ID: 02282320ECD7.D				Analyzed: 02/28/23 22:35		
1-Bromo-2-Nitrobenzene	801200	3.49	751182	3.491	107	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	846744	14.251	1576447	14.266	54	50 - 200	-0.015	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	331997	3.927	306016	3.927	108	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	381133	14.997	465422	15.006	82	50 - 200	-0.009	+/-0.50	
LDW23-SC1057 (23A0420-03)		(Solid)	Lab File ID: 02282321ECD7.D				Analyzed: 02/28/23 22:56		
1-Bromo-2-Nitrobenzene	804676	3.491	751182	3.491	107	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	810548	14.251	1576447	14.266	51	50 - 200	-0.015	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	326824	3.928	306016	3.927	107	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	367649	14.997	465422	15.006	79	50 - 200	-0.009	+/-0.50	
LDW23-IT1051 (23A0420-04)		(Solid)	Lab File ID: 02282322ECD7.D				Analyzed: 02/28/23 23:17		
1-Bromo-2-Nitrobenzene	745911	3.49	751182	3.491	99	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	524263	14.251	1576447	14.266	33	50 - 200	-0.015	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	293455	3.926	306016	3.927	96	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	267743	14.996	465422	15.006	58	50 - 200	-0.010	+/-0.50	
Matrix Spike (BLB0391-MS1)		(Solid)	Lab File ID: 02282323ECD7.D				Analyzed: 02/28/23 23:38		
1-Bromo-2-Nitrobenzene	662459	3.491	751182	3.491	88	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	445086	14.25	1576447	14.266	28	50 - 200	-0.016	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	274067	3.926	306016	3.927	90	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	234727	14.996	465422	15.006	50	50 - 200	-0.010	+/-0.50	
Matrix Spike Dup (BLB0391-MSD1)		(Solid)	Lab File ID: 02282324ECD7.D				Analyzed: 02/28/23 23:59		
1-Bromo-2-Nitrobenzene	722327	3.491	751182	3.491	96	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	464759	14.25	1576447	14.266	29	50 - 200	-0.016	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	286854	3.927	306016	3.927	94	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	244760	14.996	465422	15.006	53	50 - 200	-0.010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0014
Instrument: ECD7
Calibration: GB00069

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1125 (23A0420-05)		(Solid)	Lab File ID: 02282325ECD7.D				Analyzed: 03/01/23 00:20		
1-Bromo-2-Nitrobenzene	781519	3.49	751182	3.491	104	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	552782	14.257	1576447	14.266	35	50 - 200	-0.009	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	332889	3.927	306016	3.927	109	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	274079	15	465422	15.006	59	50 - 200	-0.006	+/-0.50	
LDW23-SC1132 (23A0420-06)		(Solid)	Lab File ID: 02282326ECD7.D				Analyzed: 03/01/23 00:41		
1-Bromo-2-Nitrobenzene	809086	3.49	751182	3.491	108	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	676711	14.258	1576447	14.266	43	50 - 200	-0.008	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	340431	3.928	306016	3.927	111	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	309692	15.001	465422	15.006	67	50 - 200	-0.005	+/-0.50	
LDW23-SC1003 (23A0420-07)		(Solid)	Lab File ID: 02282327ECD7.D				Analyzed: 03/01/23 01:02		
1-Bromo-2-Nitrobenzene	775126	3.49	751182	3.491	103	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	705047	14.253	1576447	14.266	45	50 - 200	-0.013	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	322183	3.926	306016	3.927	105	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	321197	14.997	465422	15.006	69	50 - 200	-0.009	+/-0.50	
LDW23-SC1004 (23A0420-08)		(Solid)	Lab File ID: 02282328ECD7.D				Analyzed: 03/01/23 01:23		
1-Bromo-2-Nitrobenzene	770791	3.489	751182	3.491	103	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl	638315	14.25	1576447	14.266	40	50 - 200	-0.016	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	310019	3.927	306016	3.927	101	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	310127	14.996	465422	15.006	67	50 - 200	-0.010	+/-0.50	
LDW23-SC1082 (23A0420-09)		(Solid)	Lab File ID: 02282329ECD7.D				Analyzed: 03/01/23 01:44		
1-Bromo-2-Nitrobenzene	755446	3.49	751182	3.491	101	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	747447	14.255	1576447	14.266	47	50 - 200	-0.011	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	312211	3.926	306016	3.927	102	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	331087	14.999	465422	15.006	71	50 - 200	-0.007	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0420-01	File ID:	02282319ECD7.D
Sampled:	01/19/23 08:10	Prepared:	02/15/23 16:55	Analyzed:	02/28/23 22:14
Solids:	54.71	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLB0391	Sequence:	SLC0014		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.395	8.405	0.01	73250.5	27.3	6.4
	* 2	8.297	8.307	0.01	23534	29.1	
Aroclor 1254	1	9.284	9.298	0.014	106619.4	32.4	33.2
	* 2	9.436	9.449	0.013	68068.2	45.3	
Aroclor 1260	1	11.032	11.04467	0.0127	86249.8	47.4	8.6
	* 2	11.64	11.6535	0.0135	61352.25	43.5	

* Column used for quantitation

Analytical Resources, LLC
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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0420-02	File ID:	02282320ECD7.D
Sampled:	01/19/23 08:37	Prepared:	02/15/23 16:55	Analyzed:	02/28/23 22:35
Solids:	53.56	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLB0391	Sequence:	SLC0014		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.396	8.405	0.009	36234.25	38.6	1.8
	* 2	8.299	8.307	0.008	11515	39.3	
Aroclor 1254	1	9.286	9.298	0.012	63218.2	47.3	26.7
	* 2	9.438	9.449	0.011	33797.8	61.9	
Aroclor 1260	1	11.033	11.04467	0.0117	42099.6	61.2	8.3
	* 2	11.643	11.6535	0.0105	28933	56.3	

* Column used for quantitation

Analytical Resources, LLC
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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0420-03	File ID:	02282321ECD7.D
Sampled:	01/19/23 09:16	Prepared:	02/15/23 16:55	Analyzed:	02/28/23 22:56
Solids:	55.94	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLB0391	Sequence:	SLC0014		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	* 1	8.396	8.405	0.009	41631.25	43.7	3.
	2	8.299	8.307	0.008	12476.75	42.4	
Aroclor 1254	1	9.286	9.298	0.012	72098.4	53.2	26.9
	* 2	9.437	9.449	0.012	37877	69.7	
Aroclor 1260	1	11.032	11.04467	0.0127	42788.8	63.9	10.
	* 2	11.642	11.6535	0.0115	29423.75	57.8	

* Column used for quantitation

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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0420-04	File ID:	02282322ECD7.D
Sampled:	01/19/23 09:55	Prepared:	02/15/23 16:55	Analyzed:	02/28/23 23:17
Solids:	70.53	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLB0391	Sequence:	SLC0014		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.392	8.405	0.013	53702	21.5	1.8
	* 2	8.296	8.307	0.011	17143.75	21.9	
Aroclor 1254	1	9.282	9.298	0.016	82499.2	26.1	32.4
	* 2	9.438	9.449	0.011	51218.4	36.2	
Aroclor 1260	1	11.032	11.04467	0.0127	65230.8	50.7	8.6
	* 2	11.64	11.6535	0.0135	48213.5	46.5	

* Column used for quantitation

Analytical Resources, LLC
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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0420-05	File ID:	02282325ECD7.D
Sampled:	01/19/23 10:32	Prepared:	02/15/23 16:55	Analyzed:	03/01/23 00:20
Solids:	54.68	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLB0391	Sequence:	SLC0014		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.398	8.405	0.007	69534.75	382	13.
	* 2	8.301	8.307	0.006	25709	435	
Aroclor 1254	1	9.289	9.298	0.009	69441.6	317	15.7
	* 2	9.441	9.449	0.008	41295.8	371	
Aroclor 1260	1	11.035	11.04467	0.00967	23008	262	7.9
	* 2	11.646	11.6535	0.0075	17928.5	242	

* Column used for quantitation

Analytical Resources, LLC
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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0420-06	File ID:	02282326ECD7.D
Sampled:	01/19/23 10:46	Prepared:	02/15/23 16:55	Analyzed:	03/01/23 00:41
Solids:	57.24	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLB0391	Sequence:	SLC0014		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	* 1	8.4	8.405	0.005	52733.5	457	18.9
	2	8.303	8.307	0.004	15584.25	378	
Aroclor 1254	1	9.29	9.298	0.008	67955.2	502	9.3
	* 2	9.442	9.449	0.007	37062.2	551	
Aroclor 1260	1	11.037	11.04467	0.00767	23688.6	364	8.3
	* 2	11.649	11.6535	0.0045	16875.5	335	

* Column used for quantitation

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DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0420-07	File ID:	02282327ECD7.D
Sampled:	01/19/23 12:25	Prepared:	02/15/23 16:55	Analyzed:	03/01/23 01:02
Solids:	51.28	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLB0391	Sequence:	SLC0014		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.396	8.405	0.009	49053	54.0	4.
	* 2	8.298	8.307	0.009	15538.75	56.2	
Aroclor 1254	1	9.285	9.298	0.013	67416.6	61.9	29.1
	* 2	9.437	9.449	0.012	44126.6	83.0	
Aroclor 1260	1	11.032	11.04467	0.0127	46594.4	80.5	6.
	* 2	11.642	11.6535	0.0115	32937.5	75.8	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0420-08	File ID:	02282328ECD7.D
Sampled:	01/19/23 11:55	Prepared:	02/15/23 16:55	Analyzed:	03/01/23 01:23
Solids:	59.89	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLB0391	Sequence:	SLC0014		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.395	8.405	0.01	85058.5	31.6	5.5
	* 2	8.297	8.307	0.01	27532	33.4	
Aroclor 1254	1	9.284	9.298	0.014	136973.2	35.3	38.6
	* 2	9.436	9.449	0.013	79316.6	52.2	
Aroclor 1260	1	11.031	11.04467	0.0137	84700.6	55.3	11.3
	* 2	11.641	11.6535	0.0125	61524	49.4	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0420-09	File ID:	02282329ECD7.D
Sampled:	01/19/23 13:40	Prepared:	02/15/23 16:55	Analyzed:	03/01/23 01:44
Solids:	58.87	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLB0391	Sequence:	SLC0014		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.397	8.405	0.008	111537.5	205	1.5
	* 2	8.3	8.307	0.007	38738.75	208	
Aroclor 1254	1	9.287	9.298	0.011	138697.6	218	7.5
	* 2	9.439	9.449	0.01	73949.2	235	
Aroclor 1260	1	11.034	11.04467	0.0107	52767.2	143	15.8
	* 2	11.645	11.6535	0.0085	33816	122	

* Column used for quantitation

HOLDING TIME SUMMARY

Analysis: EPA 8082A

Laboratory: Analytical Resources, LLC SDG: 23A0420

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1045 23A0420-01	01/19/23 08:10	01/19/23 15:55	02/15/23 16:55	27	365	02/28/23 22:14	13	40	
LDW23-SC1052 23A0420-02	01/19/23 08:37	01/19/23 15:55	02/15/23 16:55	27	365	02/28/23 22:35	13	40	
LDW23-SC1057 23A0420-03	01/19/23 09:16	01/19/23 15:55	02/15/23 16:55	27	365	02/28/23 22:56	13	40	
LDW23-IT1051 23A0420-04	01/19/23 09:55	01/19/23 15:55	02/15/23 16:55	27	365	02/28/23 23:17	13	40	
LDW23-SC1125 23A0420-05	01/19/23 10:32	01/19/23 15:55	02/15/23 16:55	27	365	03/01/23 00:20	13	40	
LDW23-SC1132 23A0420-06	01/19/23 10:46	01/19/23 15:55	02/15/23 16:55	27	365	03/01/23 00:41	13	40	
LDW23-SC1003 23A0420-07	01/19/23 12:25	01/19/23 15:55	02/15/23 16:55	27	365	03/01/23 01:02	13	40	
LDW23-SC1004 23A0420-08	01/19/23 11:55	01/19/23 15:55	02/15/23 16:55	27	365	03/01/23 01:23	13	40	
LDW23-SC1082 23A0420-09	01/19/23 13:40	01/19/23 15:55	02/15/23 16:55	27	365	03/01/23 01:44	13	40	
Matrix Spike BLB0391-MS1	01/19/23 09:55	01/19/23 15:55	02/15/23 16:55	27	365	02/28/23 23:38	13	40	
Matrix Spike Dup BLB0391-MSD1	01/19/23 09:55	01/19/23 15:55	02/15/23 16:55	27	365	02/28/23 23:59	13	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ECD7

Analyte	MDL	RL	Units
Aroclor 1016	1.6	4.0	ug/kg
Aroclor 1016 [2C]	1.6	4.0	ug/kg
Aroclor 1221	1.6	4.0	ug/kg
Aroclor 1221 [2C]	1.6	4.0	ug/kg
Aroclor 1232	1.6	4.0	ug/kg
Aroclor 1232 [2C]	1.6	4.0	ug/kg
Aroclor 1242	1.6	4.0	ug/kg
Aroclor 1242 [2C]	1.6	4.0	ug/kg
Aroclor 1248	1.6	4.0	ug/kg
Aroclor 1248 [2C]	1.6	4.0	ug/kg
Aroclor 1254	1.6	4.0	ug/kg
Aroclor 1254 [2C]	1.6	4.0	ug/kg
Aroclor 1260	0.6	4.0	ug/kg
Aroclor 1260 [2C]	0.6	4.0	ug/kg

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: S-279N
Description: Tetrachloro-m-xylene
Lot: 0052481B-1
Solvent: N/A
Hazards: *Refer to SDS for complete safety information*

Signal Word: Warning

Date Certified: Jul 28, 2005
Expiration: Jul 28, 2015
Sample Size: 100 mg
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

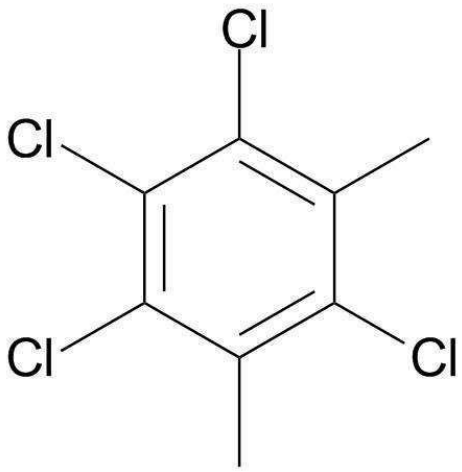
ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration	Certified Analyte Concentration[1]
Tetrachloro-meta-xylene	877-09-8	96.0	N/A	N/A

Identification:

Molecular formula: C8H6Cl4
Molecular weight: 243.94



C000147
tetrachlormetaxylene
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] The Uncertainty calculated for this product is ±2.4%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Metrological traceability is established through in-house validated methods.

Purity, if stated, is equal to 100% minus found impurity components. Impurity components have not been identified.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

AccuStandard
125 Market Street
New Haven, CT 06513
(203) 786-5290

CERTIFICATE OF PRODUCT DATA

PRODUCT: C-209N
DESCRIPTION: 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl
LOT #: 990521LB-AC
SOLVENT: N/A

EXPIRATION: Jul 28, 2015

This product is guaranteed accurate to ±0.5% of the Certified Analyte concentration through the Expiration Date on the Label.

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1]	Certified Analyte Concentration[2]
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	2051-24-3	100	N/A	N/A

2,

C000148
decachlorbiphenyl
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

* I1768A

Certified by: R. Cooper

1. All weights are traceable through National Institute of Standards & Technology, Test No. 822/254480
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is ±4% which is the Combined Uncertainty uc(y). It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is Uc(y) *K where K is the coverage factor at the 95% confidence level (K=2).
3. A product with a suffix (-1A, -2B, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

Please note: AccuStandard follows the U.S. conventions in reporting numerical values, on both certificates and labels.

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

This product was manufactured in accordance to quality system requirements of ISO 9001:2000 and ISO 17025

* Recertified 2 4-6-09 JS

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Analytical Standard Record

Standard ID: C000148 **Printed: 4/23/2015 11:54:44AM**

Description:	decachlorbiphenyl	Expires:	15-Jan-2020
Standard Type:	Other	Prepared:	15-Jan-2014
Solvent:	na/a	Prepared By:	Joshua Rains
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	27-Feb-2015 13:03 by JGR
Vendor:	Accustandard	Lot #:	990521lb-ac
Vendor Catalog #:			

Comments

see i1768a
SOM calibrations added 06/12/14 sdrd

Analyte	CAS Number	Concentration	Units
Decachlorobiphenyl [2C]	2051-24-3	1000000	ug/mL
Decachlorobiphenyl	2051-24-3	1000000	ug/mL
DCB 1660 [2C]	2051-24-3	1000000	ug/mL
DCB 1660	2051-24-3	1000000	ug/mL
DCB [2C]	2051-24-3	1000000	ug/mL
DCB (A) [2C]	2051-24-3	1000000	ug/mL
DCB (A)	2051-24-3	1000000	ug/mL
DCB	2051-24-3	1000000	ug/mL

Reviewed By Date

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Access your MSDS and digital C of A at **www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards**

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101461
Description: Aroclor 1254
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Hexane

Lot Number: CL13053
Certification Date: November 29, 2018
Expiration Date: November 30, 2026

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1254	11097-69-1	1000	± 0.246%

I09808
Recd. JP
02/24/20

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Reference Material Producer
Certificate No. 2427.02

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Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
Certificate No. 2427.03

IL111110613_us

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101468
Description: Aroclor 1221
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Isooctane

Lot Number: CL14017
Certification Date: August 20, 2019
Expiration Date: August 31, 2027

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1221	11104-28-2	1000	± 0.553%

J004466
Rcd JK
06/18/21

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101469
Description: Aroclor 1232
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Isooctane

Lot Number: CL14914
Certification Date: January 31, 2020
Expiration Date: January 31, 2028

Andrea L Gill
Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1232	11141-16-5	1000	± 0.738%

J006467 JR
read
06/18/21

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3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.:	AL0-101470	**Lot Number:**	CL14018
Description:	Aroclor 1242	**Certification Date:**	August 20, 2019
Storage:	4 °C	**Expiration Date:**	August 31, 2027
Provided As:	1 mL in 2 mL Ampoule in Isooctane		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1242	53469-21-9	1000	± 0.553%

J006468
Read JR
06/18/21

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4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.:	AL0-101471	**Lot Number:**	CL15384
Description:	Aroclor 1248	**Certification Date:**	June 19, 2020
Storage:	4 °C	**Expiration Date:**	June 30, 2028
Provided As:	1 mL in 2 mL Ampoule in Isooctane		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1248	12672-29-6	1000	± 0.520%

JJ06469
Reed, JR
06/18/21

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Reference Material Producer
Certicate No. 2427.02

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Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
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3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

Phenova Certified Reference Materials are sold by Phenomenex.
411 Madrid Ave., Torrance, CA 90501 USA ▪ Tel: 310-212-0555 ▪ Fax: 310-328-7768 ▪ info@phenomenex.com
Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101474	**Lot Number:**	CL11330
Description:	Aroclor 1262	**Certification Date:**	May 15, 2015
Storage:	4 °C	**Expiration Date:**	April 30, 2023
Provided As:	1 mL in 2 mL Ampoule in Isooctane	**Revision Date:**	April 2, 2018

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1262	37324-23-5	1000	± 0.516%

J 00647
Red JK
06/18/21

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
Certificate No. 2427.03

IL111110613_us

Certificate of Analysis

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Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO Guide 34[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.

4. Instruction: Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.

12. Period of Validity: The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
[3] ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

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Access your MSDS and digital C of A at **www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards**

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101475	**Lot Number:**	CL11331
Description:	Aroclor 1268	**Certification Date:**	May 15, 2015
Storage:	4 °C	**Expiration Date:**	April 30, 2023
Provided As:	1 mL in 2 mL Ampoule in Isooctane	**Revision Date:**	April 2, 2018

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1268	11100-14-4	1000	± 0.516%

J006472
Rec'd
06/18/21

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

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Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
Certificate No. 2427.03

IL11110613_us

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Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO Guide 34[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.

4. Instruction: Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.

12. Period of Validity: The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
[3] ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Agilent

Aroclor 1016 Solution

Product Number: PP-282 **Page:** 1 of 1

Lot Number: CR-0761 **Lot Issue Date:** 28-Feb-2017 **Expiration Date:** 31-Mar-2025

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1016	012674-11-2	NT01016	100.2 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1254 Reed JR 02/05/22

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

John Russo
President

Monica Bourgeois
Director of QA/RA

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 9001
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Agilent

Certificate of Analysis

Product Name: Aroclor 1260 Standard

Product Number: PP-362-1 **Lot Issue Date:** 20-Jan-2021

Lot Number: 0006582048 **Expiration Date:** 28-Feb-2025

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1260	011096-82-5	NT01023	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K 1255

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

MJBourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

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Certificate of Analysis
ISO Guide 34

Aroclor 1242 Solution

Product Number: PP-312 **Page:** 1 of 1

Lot Number: CS-6293 **Lot Issue Date:** 04-Jan-2019 **Expiration Date:** 31-Jan-2023

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1242	053469-21-9	NT01020	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1256

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

M Bourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER
ISO Guide 34 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Management System

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No.
AT-1937

ISO 17034

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Reference Material Certificate

Product Name:	Aroclor 1248 Standard	**Lot Number:**	0006626997
Product Number:	PP-342-1	**Lot Issue Date:**	17-Aug-2021
Storage Conditions:	Store at Room Temperature (15° to 30°C).	**Expiration Date:**	30-Sep-2025

	CERTIFIED VALUES				
Component Name	Concentration		Expanded Uncertainty	CAS#	Analyte Lot
Aroclor 1248	100.3	±	0.5 µg/mL	012672-29-6	NT01582

Matrix: isooctane (2,2,4-trimethylpentane)

K1257

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:
The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Certificate of Analysis

Agilent

Aroclor 1254 Solution

Product Number: PP-352 **Page:** 1 of 1

Lot Number: CS-2321 **Lot Issue Date:** 04-May-2018 **Expiration Date:** 31-May-2026

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1254	011097-69-1	RM00922	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1258

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

John Russo
President

Monica Bourgeois
Director of QA/RA

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

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Agilent

Certificate of Analysis

Product Name: Aroclor 1221 Standard

Product Number: PP-292-1 **Lot Issue Date:** 28-Apr-2020

Lot Number: 0006535333 **Expiration Date:** 31-May-2024

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1221	011104-28-2	RM04278	100.2 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K1259

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

MBourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 17025 Cert No. AT-1937

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Certificate of Analysis
ISO 17034

Aroclor 1262 Standard

Product Number: PP-372-1 **Page:** 1 of 1

Lot Number: 0006499800 **Lot Issue Date:** 04-Nov-2019 **Expiration Date:** 30-Nov-2023

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1262	037324-23-5	RM14263	100.0 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1260

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Management System

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

Agilent

Certificate of Analysis
ISO 17034

Aroclor 1232 Standard

Product Number: PP-302-1 **Page:** 1 of 1

Lot Number: CF-2197A **Lot Issue Date:** 05-Jul-2016 **Expiration Date:** 31-Aug-2023

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1232	011141-16-5	NT01717	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1261

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

M Bourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Management System

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No. AT-1937

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Certificate of Analysis

Product Name: Aroclor 1268 Standard

Product Number: PP-382-1 **Lot Issue Date:** 09-Feb-2021

Lot Number: 0006587800 **Expiration Date:** 31-Mar-2029

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1268	011100-14-4	RM00937	100.0 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K1262

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

M Bourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

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Certificate of Analysis

Phenova Certified Reference Materials are sold by Phenomenex.
411 Madrid Ave., Torrance, CA 90501 USA ▪ Tel: 310-212-0555 ▪ Fax: 310-328-7768 ▪ info@phenomenex.com
Access your MSDS and digital C of A at **www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards**

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101467
Description: Aroclor 1016
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Isooctane

Lot Number: CL12975
Certification Date: November 19, 2018
Expiration Date: October 31, 2026

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1016	12674-11-2	1000	± 0.553%

K5829

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

IL11110613_us

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO Guide 34[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.

4. Instruction: Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

   $$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.

12. Period of Validity: The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
[3] ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

ILT1116613_US

Certificate of Analysis

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Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101462
Description: Aroclor 1260
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Hexane

Lot Number: CL18021
Certification Date: February 14, 2022
Expiration Date: February 28, 2030

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1260	11096-82-5	1000	± 0.553%

K005830

Certificate of Analysis

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6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No. 15570

Order Number: CB014985

Date Shipped: 12/12/2022

AirBill No(s): 519204142631

From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. B
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712

To: SUE DUNNIHOO
ANALYTICAL RESOURCES INC.
4611 S. 134TH PLACE SUITE 100
TUKWILA WA 98168
250-695-6207

Sample ID	Sigma ID	Qty	Description/Remarks	→ Catalogue Number
KO11477 PSRM0168	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
KO11478 PSRM0169	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
KO11479 PSRM0171	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM

12/12/2022

PUGET SOUND SRM FOR DUWAMISH AOC4 PROJECT.

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	12/12/2022 (1400)	Phillip PJ	12/12/22 11:15
Custody Seal(s): Present/Absent	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Report No. 00, 9/11/2014

SMP Version 3.3

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1045

Form 1
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-01 C	File ID:	23031321
Sampled:	01/19/23 08:10	Prepared:	02/14/23 17:30	Analyzed:	03/14/23 02:54
% Solids:	52.01	Preparation:	EPA 1613	Initial/Final:	19.29 g Wet / 20 uL
Result Basis:	Dry	Sequence:	SLC0171	Calibration:	GC00015
Batch:	BLB0228	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

CAS NO.	COMPOUND	DF/Split	Ion Ratio	Ratio Limits	EDL	RL	Result	Units	Q
51207-31-9	2,3,7,8-TCDF	1	0.821	0.655-0.886	0.168	0.997	0.502	ng/kg	J
1746-01-6	2,3,7,8-TCDD	1	0.306	0.655-0.886	0.080	0.997	0.295	ng/kg	EMPC, J
57117-41-6	1,2,3,7,8-PeCDF	1	1.148	1.318-1.783	0.212	0.997	0.423	ng/kg	EMPC, J
57117-31-4	2,3,4,7,8-PeCDF	1	1.489	1.318-1.783	0.183	0.997	0.911	ng/kg	J
40321-76-4	1,2,3,7,8-PeCDD	1	1.658	1.318-1.783	0.279	0.997	1.16	ng/kg	
70648-26-9	1,2,3,4,7,8-HxCDF	1	1.220	1.054-1.426	0.078	0.997	3.02	ng/kg	
57117-44-9	1,2,3,6,7,8-HxCDF	1	1.203	1.054-1.426	0.081	0.997	1.02	ng/kg	
60851-34-5	2,3,4,6,7,8-HxCDF	1	1.380	1.054-1.426	0.086	0.997	1.55	ng/kg	
72918-21-9	1,2,3,7,8,9-HxCDF	1	1.233	1.054-1.426	0.092	0.997	0.788	ng/kg	J
39227-28-6	1,2,3,4,7,8-HxCDD	1	1.219	1.054-1.426	0.206	0.997	1.05	ng/kg	
57653-85-7	1,2,3,6,7,8-HxCDD	1	1.202	1.054-1.426	0.201	0.997	4.19	ng/kg	
19408-74-3	1,2,3,7,8,9-HxCDD	1	1.186	1.054-1.426	0.224	0.997	2.60	ng/kg	
67562-39-4	1,2,3,4,6,7,8-HpCDF	1	1.012	0.893-1.208	0.144	0.997	24.2	ng/kg	B
55673-89-7	1,2,3,4,7,8,9-HpCDF	1	1.062	0.893-1.208	0.196	0.997	2.03	ng/kg	
35822-46-9	1,2,3,4,6,7,8-HpCDD	1	1.050	0.893-1.208	0.327	2.49	120	ng/kg	B
39001-02-0	OCDF	1	0.865	0.757-1.024	0.252	2.49	63.9	ng/kg	
3268-87-9	OCDD	1	0.840	0.757-1.024	0.507	9.97	927	ng/kg	B

Homologue Groups

55722-27-5	Total TCDF	1	0.000			0.997	8.11	ng/kg	
41903-57-5	Total TCDD	1	0.000			0.997	1.05	ng/kg	
30402-15-4	Total PeCDF	1	0.000			0.997	9.78	ng/kg	
36088-22-9	Total PeCDD	1	0.000			0.997	1.88	ng/kg	
55684-94-1	Total HxCDF	1	0.000			0.997	33.2	ng/kg	
34465-46-8	Total HxCDD	1	0.000			0.997	35.4	ng/kg	
38998-75-3	Total HpCDF	1	0.000			0.997	86.7	ng/kg	
37871-00-4	Total HpCDD	1	0.000			0.997	275	ng/kg	

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 4.97
Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 4.97

LDW23-SC1045

Form 2
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0420-01	File ID:	23031321
Sampled:	01/19/23 08:10	Prepared:	02/14/23 17:30	Analyzed:	03/14/23 02:54
Solids Wt%:	52.01	Preparation:	EPA 1613	Initial/Final:	19.29 g / 20 uL
Result Basis:	Dry	Sequence:	SLC0171	Calibration:	GC00015
Batch:	BLB0228	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

Labels	DF/Split	Ion Ratio	Ratio Limits	EDL	% REC	QC LIMITS	Q
13C12-2,3,7,8-TCDF		0.735	0.655-0.886	0.100	63.3	24 - 169 %	
13C12-2,3,7,8-TCDD		0.780	0.655-0.886	0.163	87.1	25 - 164 %	
13C12-1,2,3,7,8-PeCDF		1.510	1.318-1.783	0.174	72.4	24 - 185 %	
13C12-2,3,4,7,8-PeCDF		1.485	1.318-1.783	0.193	78.5	21 - 178 %	
13C12-1,2,3,7,8-PeCDD		1.585	1.318-1.783	0.134	60.6	25 - 181 %	
13C12-1,2,3,4,7,8-HxCDF		0.500	0.434-0.587	0.151	87.3	26 - 152 %	
13C12-1,2,3,6,7,8-HxCDF		0.511	0.434-0.587	0.127	80.6	26 - 123 %	
13C12-2,3,4,6,7,8-HxCDF		0.513	0.434-0.587	0.156	88.2	28 - 136 %	
13C12-1,2,3,7,8,9-HxCDF		0.515	0.434-0.587	0.189	94.5	29 - 147 %	
13C12-1,2,3,4,7,8-HxCDD		1.258	1.054-1.426	0.222	88.0	32 - 141 %	
13C12-1,2,3,6,7,8-HxCDD		1.274	1.054-1.426	0.191	82.5	28 - 130 %	
13C12-1,2,3,4,6,7,8-HpCDF		0.441	0.374-0.506	0.156	74.9	28 - 143 %	
13C12-1,2,3,4,7,8,9-HpCDF		0.445	0.374-0.506	0.182	79.6	26 - 138 %	
13C12-1,2,3,4,6,7,8-HpCDD		1.047	0.893-1.208	0.151	85.1	23 - 140 %	
13C12-OCDD		0.892	0.757-1.024	0.211	75.9	17 - 157 %	
37Cl4-2,3,7,8-TCDD		328.000		0.038	73.6	35 - 197 %	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:22:09 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230313.mdb 13 Mar 2023 11:32:39
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: 23A0420-01, Name: 23031321, Date: 14-Mar-2023, Time: 02:54:51, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.576	1.001	4.355e2	5.302e2	0.702	0.821	0.770	885	774	6.80e3	8.94e3	7.7	11.5	NO	dd	bd	0.252
12378-PeCDF	29.736	1.000	3.690e2	3.215e2	0.679	1.148	1.550	792	929	6.05e3	6.25e3	7.6	6.7	YES	bb	bb	0.212
23478-PeCDF	31.072	1.000	1.004e3	6.742e2	0.786	1.489	1.550	792	929	1.67e4	1.43e4	21.1	15.4	NO	db	db	0.457
123478-HxCDF	34.715	1.000	5.345e3	4.380e3	1.166	1.220	1.240	793	526	8.12e4	6.98e4	102.4	132.8	NO	bd	dd	1.515
234678-HxCDF	35.696	0.999	2.756e3	1.998e3	1.140	1.380	1.240	793	526	2.34e4	1.79e4	29.5	34.1	NO	MM	bb	0.776
123678-HxCDF	34.860	1.001	1.833e3	1.524e3	1.091	1.203	1.240	793	526	2.61e4	2.39e4	32.9	45.5	NO	db	db	0.510
123789-HxCDF	36.721	1.000	1.180e3	9.572e2	1.137	1.233	1.240	793	526	1.48e4	1.19e4	18.7	22.6	NO	bb	bb	0.395
1234678-HpCDF	38.615	1.000	2.214e4	2.189e4	1.003	1.012	1.050	695	785	3.68e5	3.45e5	529.0	439.6	NO	bd	bb	12.131
1234789-HpCDF	40.832	1.000	1.655e3	1.559e3	0.953	1.062	1.050	695	785	2.13e4	2.33e4	30.6	29.6	NO	bb	bb	1.019
OCDF	45.038	1.005	3.637e4	4.204e4	0.778	0.865	0.890	522	704	4.00e5	4.70e5	766.7	668.3	NO	bd	bb	32.055
2378-TCDD	26.226	1.001	2.131e2	6.961e2	1.149	0.306	0.770	713	519	4.37e3	9.94e3	6.1	19.2	YES	dd	bd	0.148
12378-PeCDD	31.317	1.000	9.935e2	5.993e2	1.022	1.658	1.550	987	986	1.33e4	5.82e3	13.4	5.9	NO	bb	bb	0.583
123478-HxCDD	35.852	1.000	1.365e3	1.119e3	0.996	1.219	1.240	1088	1446	2.26e4	1.79e4	20.7	12.3	NO	bd	bd	0.528
123678-HxCDD	35.974	1.001	5.918e3	4.923e3	1.001	1.202	1.240	1088	1446	9.71e4	7.87e4	89.2	54.4	NO	dd	dd	2.103
123789-HxCDD	36.353	1.011	3.168e3	2.672e3	0.907	1.186	1.240	1088	1446	4.75e4	4.08e4	43.7	28.2	NO	bb	bb	1.304
1234678-HpCDD	40.097	1.000	1.239e5	1.180e5	1.039	1.050	1.050	1651	1506	1.77e6	1.76e6	1074.6	1169.5	NO	bd	bb	60.331
OCDD	44.810	1.000	6.142e5	7.315e5	0.920	0.840	0.890	1537	1377	7.47e6	8.87e6	4858.9	6439.0	NO	bb	bb	465.136
13C-2378-TCDF	25.548	1.007	2.315e5	3.150e5	1.620	0.735	0.770	1205	1119	3.57e6	4.84e6	2958.0	4320.9	NO	bb	bb	63.329
13C-12378-PeCDF	29.724	1.171	2.879e5	1.907e5	1.240	1.510	1.550	1852	1243	4.30e6	2.85e6	2324.4	2293.3	NO	bb	bb	72.428
13C-23478-PeCDF	31.061	1.224	2.792e5	1.880e5	1.118	1.485	1.550	1852	1243	4.27e6	2.89e6	2307.0	2325.8	NO	bb	bb	78.466
13C-123478-HxCDF	34.704	0.955	1.836e5	3.669e5	1.168	0.500	0.510	894	1581	2.88e6	5.69e6	3219.7	3598.4	NO	bd	bd	87.280
13C-123678-HxCDF	34.838	0.959	2.038e5	3.992e5	1.386	0.511	0.510	894	1581	3.03e6	5.94e6	3392.9	3753.7	NO	dd	dd	80.556
13C-234678-HxCDF	35.718	0.983	1.822e5	3.553e5	1.129	0.513	0.510	894	1581	2.74e6	5.40e6	3065.4	3413.7	NO	bb	bb	88.164
13C-123789-HxCDF	36.732	1.011	1.617e5	3.137e5	0.932	0.515	0.510	894	1581	2.58e6	5.06e6	2882.6	3200.9	NO	bb	bb	94.509
13C-1234678-HpCDF	38.604	1.062	1.107e5	2.511e5	0.895	0.441	0.440	853	1110	1.87e6	4.13e6	2193.1	3721.4	NO	bb	bb	74.863
13C-1234789-HpCDF	40.810	1.123	1.019e5	2.290e5	0.770	0.445	0.440	853	1110	1.46e6	3.31e6	1713.7	2985.5	NO	bb	bb	79.644
13C-1234-TCDD	25.379	0.000	2.338e5	2.989e5	1.000	0.782	0.770	1642	1054	3.76e6	4.82e6	2289.8	4572.9	NO	bb	bb	100.000
13C-2378-TCDD	26.198	1.032	2.343e5	3.002e5	1.152	0.780	0.770	1642	1054	3.53e6	4.49e6	2151.8	4258.9	NO	bb	bb	87.076
13C-12378-PeCDD	31.306	1.234	1.640e5	1.034e5	0.829	1.585	1.550	870	719	2.54e6	1.59e6	2919.3	2208.3	NO	bb	bb	60.568
13C-123478-HxCDD	35.841	0.986	2.632e5	2.093e5	0.995	1.258	1.240	1482	1616	4.12e6	3.30e6	2779.8	2044.4	NO	bd	bd	87.958
13C-123678-HxCDD	35.952	0.989	2.885e5	2.265e5	1.157	1.274	1.240	1482	1616	4.21e6	3.45e6	2843.6	2133.2	NO	db	dd	82.484
13C-1234678-HpCDD	40.085	1.103	1.973e5	1.884e5	0.840	1.047	1.050	969	813	2.84e6	2.64e6	2935.3	3247.0	NO	bb	bd	85.054
13C-OCDD	44.791	1.232	2.965e5	3.325e5	0.767	0.892	0.890	1446	827	3.52e6	4.04e6	2434.3	4882.0	NO	bb	bb	151.797
13C-123789-HxCDD	36.342	0.000	3.029e5	2.370e5	1.000	1.278	1.240	1482	1616	4.71e6	3.68e6	3180.7	2275.7	NO	bb	bb	100.000
37CL-2378-TCDD	26.212	1.033	2.021e5		1.288			693		3.05e6		4398.0			bb		29.458

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:22:09 Pacific Daylight Time

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Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.073	0.864	3.680e2	3.504e2	0.802	1.050	0.770	885	774	4.85e3	4.46e3	5.5	5.8	YES	bd	bd	0.164
1289-TCDF					0.678		0.770	885	774								
13468-PECDF	27.003	0.909	1.222e4	8.579e3	1.246	1.424	1.550	539	858	1.77e5	1.23e5	328.8	143.3	NO	bb	bb	3.486
12389-PECDF					0.496		1.550	792	929								
123468-HXCDF	33.044	0.952	4.275e3	3.831e3	1.169	1.116	1.240	793	526	6.59e4	5.57e4	83.1	106.0	NO	bb	bb	1.259
1368-TCDD	23.331	0.891	8.200e2	1.325e3	1.015	0.619	0.770	713	519	1.25e4	2.41e4	17.5	46.5	YES	bb	bb	0.395
1289-TCDD					0.909		0.770	713	519								
12479-PECDD	28.644	0.915	1.138e3	1.407e3	2.301	0.809	1.550	987	986	1.83e4	1.33e4	18.6	13.5	YES	db	bb	0.414
12389-PECDD	31.730	1.013	1.451e2	2.187e2	1.184	0.664	1.550	987	986	3.61e3	3.24e3	3.7	3.3	YES	bb	bb	0.115
124679-HXCDD	33.824	0.944	1.434e4	1.208e4	1.115	1.187	1.240	1088	1446	2.19e5	1.76e5	201.1	122.0	NO	bb	bd	5.013
1234679-HPCDD	39.061	0.974	1.721e5	1.682e5	1.137	1.023	1.050	1651	1506	2.85e6	2.76e6	1724.1	1834.2	NO	bb	bb	77.586
Total-tetrafurans			7.020e3		0.727			885		1.01e5							4.069
Total-penta1			1.222e4					539		1.77e5							3.486
Total-pentafurans			2.826e3		0.654			792		4.44e4							1.421
Total-hexafurans			5.635e4		1.141			793		8.37e5							16.657
Total-heptafurans			7.483e4		0.978			695		1.18e6							43.515
Total-Furans			1.896e5		0.922			885		2.74e6							101.203
Total-tetradioxins			1.272e3		1.024			713		1.95e4							0.526
Total-pentadioxins			1.840e3		1.502			987		2.61e4							0.941
Total-hexadioxins			4.911e4		1.005			1088		6.78e5							17.782
Total-heptadioxins			2.960e5		1.088			1651		4.62e6							137.917
Total-Dioxins			9.624e5		1.130			713		1.28e7							622.301
Total-TEQ			1.152e6					713		1.55e7							723.504
FUNCTION1 PFK			1.138e7					391496		3.11e7							
FUNCTION2 PFK			8.001e4					147220		1.09e6							0.000
FUNCTION3 PFK			2.354e7					223242		7.81e7							0.000
FUNCTION4 PFK			1.516e7					219194		9.05e7							
FUNCTION5 PFK			2.952e6					127430		3.59e6							
FUNCTION1 HXCD...			2.051e3					419		3.41e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			0.000e0					647		0.00e0							
FUNCTION3 OCDPE			1.076e2					374		1.56e3							0.000
FUNCTION4 NCDPE			7.881e3					514		1.35e5							0.000
FUNCTION5 DCDPE			0.000e0					395		0.00e0							

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Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.68	3.289e2	4.609e2	0.727	0.71	0.77	6.1	YES	NO	db	dd	0.199
2	Total-tetrafurans	23.56	6.143e2	7.140e2	0.727	0.86	0.77	9.2	YES	NO	bd	dd	0.334
3	Total-tetrafurans	23.22	1.136e3	1.533e3	0.727	0.74	0.77	15.3	YES	NO	dd	dd	0.672
4	Total-tetrafurans	23.10	2.005e2	2.301e2	0.727	0.87	0.77	4.9	YES	NO	dd	dd	0.108
5	Total-tetrafurans	22.91	1.010e3	1.248e3	0.727	0.81	0.77	12.9	YES	NO	bd	bd	0.568
6	Total-tetrafurans	22.33	3.466e2	4.910e2	0.727	0.71	0.77	6.6	YES	NO	db	db	0.211
7	Total-tetrafurans	25.80	4.722e2	6.748e2	0.727	0.70	0.77	7.0	YES	NO	dd	dd	0.289
8	Total-tetrafurans	25.69	3.518e2	4.164e2	0.727	0.84	0.77	6.0	YES	NO	dd	dd	0.193
9	2378-TCDF	25.58	4.355e2	5.302e2	0.702	0.82	0.77	7.7	YES	NO	dd	bd	0.252
10	Total-tetrafurans	25.34	9.922e2	1.215e3	0.727	0.82	0.77	14.3	YES	NO	bd	bb	0.556
11	Total-tetrafurans	24.67	3.419e2	4.313e2	0.727	0.79	0.77	7.6	YES	NO	bb	bb	0.195
12	Total-tetrafurans	24.47	5.942e2	8.869e2	0.727	0.67	0.77	11.6	YES	NO	bb	db	0.373
13	Total-tetrafurans	24.33	1.961e2	2.798e2	0.727	0.70	0.77	4.3	YES	NO	db	dd	0.120

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.00	1.222e4	8.579e3	1.246	1.42	1.55	328.8	YES	NO	bb	bb	3.486

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	28.48	1.148e3	7.255e2	0.654	1.58	1.55	21.0	YES	NO	dd	dd	0.606
2	23478-PeCDF	31.07	1.004e3	6.742e2	0.786	1.49	1.55	21.1	YES	NO	db	db	0.457
3	Total-pentafurans	30.93	6.731e2	4.343e2	0.654	1.55	1.55	14.0	YES	NO	dd	dd	0.358

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HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexafurans	34.56	7.956e2	6.992e2	1.141	1.14	1.24	15.7	YES	NO	bb	bd	0.242
2	Total-hexafurans	34.09	2.456e4	2.083e4	1.141	1.18	1.24	474.0	YES	NO	bb	bb	7.347
3	Total-hexafurans	33.26	1.560e4	1.288e4	1.141	1.21	1.24	299.3	YES	NO	bb	bb	4.612
4	123468-HXCDF	33.04	4.275e3	3.831e3	1.169	1.12	1.24	83.1	YES	NO	bb	bb	1.259
5	123789-HxCDF	36.72	1.180e3	9.572e2	1.137	1.23	1.24	18.7	YES	NO	bb	bb	0.395
6	234678-HxCDF	35.70	2.756e3	1.998e3	1.140	1.38	1.24	29.5	YES	NO	MM	bb	0.776
7	123678-HxCDF	34.86	1.833e3	1.524e3	1.091	1.20	1.24	32.9	YES	NO	db	db	0.510
8	123478-HxCDF	34.72	5.345e3	4.380e3	1.166	1.22	1.24	102.4	YES	NO	bd	dd	1.515

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptafurans	39.26	5.104e4	5.184e4	0.978	0.98	1.05	1133.3	YES	NO	bd	bb	30.365
2	1234678-HpCDF	38.62	2.214e4	2.189e4	1.003	1.01	1.05	529.0	YES	NO	bd	bb	12.131
3	1234789-HpCDF	40.83	1.655e3	1.559e3	0.953	1.06	1.05	30.6	YES	NO	bb	bb	1.019

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.68	3.289e2	4.609e2	0.727	0.71	0.77	6.1	YES	NO	db	dd	0.199
2	Total-tetrafurans	23.56	6.143e2	7.140e2	0.727	0.86	0.77	9.2	YES	NO	bd	dd	0.334
3	Total-tetrafurans	23.22	1.136e3	1.533e3	0.727	0.74	0.77	15.3	YES	NO	dd	dd	0.672
4	Total-tetrafurans	23.10	2.005e2	2.301e2	0.727	0.87	0.77	4.9	YES	NO	dd	dd	0.108
5	Total-tetrafurans	22.91	1.010e3	1.248e3	0.727	0.81	0.77	12.9	YES	NO	bd	bd	0.568
6	Total-tetrafurans	22.33	3.466e2	4.910e2	0.727	0.71	0.77	6.6	YES	NO	db	db	0.211
7	Total-tetrafurans	25.80	4.722e2	6.748e2	0.727	0.70	0.77	7.0	YES	NO	dd	dd	0.289
8	Total-tetrafurans	25.69	3.518e2	4.164e2	0.727	0.84	0.77	6.0	YES	NO	dd	dd	0.193
9	2378-TCDF	25.58	4.355e2	5.302e2	0.702	0.82	0.77	7.7	YES	NO	dd	bd	0.252
10	Total-tetrafurans	25.34	9.922e2	1.215e3	0.727	0.82	0.77	14.3	YES	NO	bd	bb	0.556
11	Total-tetrafurans	24.67	3.419e2	4.313e2	0.727	0.79	0.77	7.6	YES	NO	bb	bb	0.195
12	Total-tetrafurans	24.47	5.942e2	8.869e2	0.727	0.67	0.77	11.6	YES	NO	bb	db	0.373
13	Total-tetrafurans	24.33	1.961e2	2.798e2	0.727	0.70	0.77	4.3	YES	NO	db	dd	0.120
14	Total-pentafurans	28.48	1.148e3	7.255e2	0.654	1.58	1.55	21.0	YES	NO	dd	dd	0.606
15	23478-PeCDF	31.07	1.004e3	6.742e2	0.786	1.49	1.55	21.1	YES	NO	db	db	0.457
16	Total-pentafurans	30.93	6.731e2	4.343e2	0.654	1.55	1.55	14.0	YES	NO	dd	dd	0.358
17	Total-hexafurans	34.56	7.956e2	6.992e2	1.141	1.14	1.24	15.7	YES	NO	bb	bd	0.242
18	Total-hexafurans	34.09	2.456e4	2.083e4	1.141	1.18	1.24	474.0	YES	NO	bb	bb	7.347
19	Total-hexafurans	33.26	1.560e4	1.288e4	1.141	1.21	1.24	299.3	YES	NO	bb	bb	4.612
20	123468-HXCDF	33.04	4.275e3	3.831e3	1.169	1.12	1.24	83.1	YES	NO	bb	bb	1.259
21	123789-HxCDF	36.72	1.180e3	9.572e2	1.137	1.23	1.24	18.7	YES	NO	bb	bb	0.395
22	234678-HxCDF	35.70	2.756e3	1.998e3	1.140	1.38	1.24	29.5	YES	NO	MM	bb	0.776
23	123678-HxCDF	34.86	1.833e3	1.524e3	1.091	1.20	1.24	32.9	YES	NO	db	db	0.510
24	123478-HxCDF	34.72	5.345e3	4.380e3	1.166	1.22	1.24	102.4	YES	NO	bd	dd	1.515
25	Total-heptafurans	39.26	5.104e4	5.184e4	0.978	0.98	1.05	1133.3	YES	NO	bd	bb	30.365
26	1234678-HpCDF	38.62	2.214e4	2.189e4	1.003	1.01	1.05	529.0	YES	NO	bd	bb	12.131
27	OCDF	45.04	3.637e4	4.204e4	0.778	0.87	0.89	766.7	YES	NO	bd	bb	32.055
28	1234789-HpCDF	40.83	1.655e3	1.559e3	0.953	1.06	1.05	30.6	YES	NO	bb	bb	1.019
29	13468-PECDF	27.00	1.222e4	8.579e3	1.246	1.42	1.55	328.8	YES	NO	bb	bb	3.486

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	24.55	2.628e2	2.990e2	1.024	0.88	0.77	4.5	YES	NO	bb	bb	0.103
2	Total-tetradioxins	24.33	4.947e2	6.431e2	1.024	0.77	0.77	11.4	YES	NO	bb	bb	0.208
3	Total-tetradioxins	23.61	5.146e2	6.641e2	1.024	0.77	0.77	11.5	YES	NO	bb	bb	0.215

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PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentadioxins	29.94	8.468e2	5.915e2	1.502	1.43	1.55	13.0	YES	NO	bd	bd	0.358
2	12378-PeCDD	31.32	9.935e2	5.993e2	1.022	1.66	1.55	13.4	YES	NO	bb	bb	0.583

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.35	3.168e3	2.672e3	0.907	1.19	1.24	43.7	YES	NO	bb	bb	1.304
2	Total-hexadioxins	36.13	9.367e2	8.127e2	1.005	1.15	1.24	12.9	YES	NO	db	db	0.353
3	123678-HxCDD	35.97	5.918e3	4.923e3	1.001	1.20	1.24	89.2	YES	NO	dd	dd	2.103
4	123478-HxCDD	35.85	1.365e3	1.119e3	0.996	1.22	1.24	20.7	YES	NO	bd	bd	0.528
5	Total-hexadioxins	35.07	1.849e3	1.372e3	1.005	1.35	1.24	30.6	YES	NO	db	db	0.649
6	Total-hexadioxins	34.96	1.817e4	1.464e4	1.005	1.24	1.24	176.2	YES	NO	bd	bd	6.613
7	Total-hexadioxins	34.59	3.361e3	2.686e3	1.005	1.25	1.24	48.8	YES	NO	bb	bb	1.219
8	124679-HXCDD	33.82	1.434e4	1.208e4	1.115	1.19	1.24	201.1	YES	NO	bb	bd	5.013

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.10	1.239e5	1.180e5	1.039	1.05	1.05	1074.6	YES	NO	bd	bb	60.331
2	1234679-HPCDD	39.06	1.721e5	1.682e5	1.137	1.02	1.05	1724.1	YES	NO	bb	bb	77.586

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	24.55	2.628e2	2.990e2	1.024	0.88	0.77	4.5	YES	NO	bb	bb	0.103
2	Total-tetradioxins	24.33	4.947e2	6.431e2	1.024	0.77	0.77	11.4	YES	NO	bb	bb	0.208
3	Total-tetradioxins	23.61	5.146e2	6.641e2	1.024	0.77	0.77	11.5	YES	NO	bb	bb	0.215
4	Total-pentadioxins	29.94	8.468e2	5.915e2	1.502	1.43	1.55	13.0	YES	NO	bd	bd	0.358
5	12378-PeCDD	31.32	9.935e2	5.993e2	1.022	1.66	1.55	13.4	YES	NO	bb	bb	0.583
6	123789-HxCDD	36.35	3.168e3	2.672e3	0.907	1.19	1.24	43.7	YES	NO	bb	bb	1.304
7	Total-hexadioxins	36.13	9.367e2	8.127e2	1.005	1.15	1.24	12.9	YES	NO	db	db	0.353
8	123678-HxCDD	35.97	5.918e3	4.923e3	1.001	1.20	1.24	89.2	YES	NO	dd	dd	2.103
9	123478-HxCDD	35.85	1.365e3	1.119e3	0.996	1.22	1.24	20.7	YES	NO	bd	bd	0.528
10	Total-hexadioxins	35.07	1.849e3	1.372e3	1.005	1.35	1.24	30.6	YES	NO	db	db	0.649
11	Total-hexadioxins	34.96	1.817e4	1.464e4	1.005	1.24	1.24	176.2	YES	NO	bd	bd	6.613
12	Total-hexadioxins	34.59	3.361e3	2.686e3	1.005	1.25	1.24	48.8	YES	NO	bb	bb	1.219
13	124679-HXCDD	33.82	1.434e4	1.208e4	1.115	1.19	1.24	201.1	YES	NO	bb	bd	5.013
14	1234678-HpCDD	40.10	1.239e5	1.180e5	1.039	1.05	1.05	1074.6	YES	NO	bd	bb	60.331
15	1234679-HPCDD	39.06	1.721e5	1.682e5	1.137	1.02	1.05	1724.1	YES	NO	bb	bb	77.586
16	OCDD	44.81	6.142e5	7.315e5	0.920	0.84	0.89	4858.9	YES	NO	bb	bb	465.136

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.68	3.289e2	4.609e2	0.727	0.71	0.77	6.1	YES	NO	db	dd	0.199
2	Total-tetrafurans	23.56	6.143e2	7.140e2	0.727	0.86	0.77	9.2	YES	NO	bd	dd	0.334
3	Total-tetrafurans	23.22	1.136e3	1.533e3	0.727	0.74	0.77	15.3	YES	NO	dd	dd	0.672
4	Total-tetrafurans	23.10	2.005e2	2.301e2	0.727	0.87	0.77	4.9	YES	NO	dd	dd	0.108
5	Total-tetrafurans	22.91	1.010e3	1.248e3	0.727	0.81	0.77	12.9	YES	NO	bd	bd	0.568
6	Total-tetrafurans	22.33	3.466e2	4.910e2	0.727	0.71	0.77	6.6	YES	NO	db	db	0.211
7	Total-tetrafurans	25.80	4.722e2	6.748e2	0.727	0.70	0.77	7.0	YES	NO	dd	dd	0.289
8	Total-tetrafurans	25.69	3.518e2	4.164e2	0.727	0.84	0.77	6.0	YES	NO	dd	dd	0.193
9	2378-TCDF	25.58	4.355e2	5.302e2	0.702	0.82	0.77	7.7	YES	NO	dd	bd	0.252
10	Total-tetrafurans	25.34	9.922e2	1.215e3	0.727	0.82	0.77	14.3	YES	NO	bd	bb	0.556
11	Total-tetrafurans	24.67	3.419e2	4.313e2	0.727	0.79	0.77	7.6	YES	NO	bb	bb	0.195
12	Total-tetrafurans	24.47	5.942e2	8.869e2	0.727	0.67	0.77	11.6	YES	NO	bb	db	0.373
13	Total-tetrafurans	24.33	1.961e2	2.798e2	0.727	0.70	0.77	4.3	YES	NO	db	dd	0.120
14	Total-pentafurans	28.48	1.148e3	7.255e2	0.654	1.58	1.55	21.0	YES	NO	dd	dd	0.606
15	23478-PeCDF	31.07	1.004e3	6.742e2	0.786	1.49	1.55	21.1	YES	NO	db	db	0.457
16	Total-pentafurans	30.93	6.731e2	4.343e2	0.654	1.55	1.55	14.0	YES	NO	dd	dd	0.358
17	Total-hexafurans	34.56	7.956e2	6.992e2	1.141	1.14	1.24	15.7	YES	NO	bb	bd	0.242
18	Total-hexafurans	34.09	2.456e4	2.083e4	1.141	1.18	1.24	474.0	YES	NO	bb	bb	7.347
19	Total-hexafurans	33.26	1.560e4	1.288e4	1.141	1.21	1.24	299.3	YES	NO	bb	bb	4.612
20	123468-HXCDF	33.04	4.275e3	3.831e3	1.169	1.12	1.24	83.1	YES	NO	bb	bb	1.259
21	123789-HxCDF	36.72	1.180e3	9.572e2	1.137	1.23	1.24	18.7	YES	NO	bb	bb	0.395
22	234678-HxCDF	35.70	2.756e3	1.998e3	1.140	1.38	1.24	29.5	YES	NO	MM	bb	0.776
23	123678-HxCDF	34.86	1.833e3	1.524e3	1.091	1.20	1.24	32.9	YES	NO	db	db	0.510
24	123478-HxCDF	34.72	5.345e3	4.380e3	1.166	1.22	1.24	102.4	YES	NO	bd	dd	1.515
25	Total-heptafurans	39.26	5.104e4	5.184e4	0.978	0.98	1.05	1133.3	YES	NO	bd	bb	30.365
26	1234678-HpCDF	38.62	2.214e4	2.189e4	1.003	1.01	1.05	529.0	YES	NO	bd	bb	12.131
27	OCDF	45.04	3.637e4	4.204e4	0.778	0.87	0.89	766.7	YES	NO	bd	bb	32.055
28	1234789-HpCDF	40.83	1.655e3	1.559e3	0.953	1.06	1.05	30.6	YES	NO	bb	bb	1.019
29	13468-PECDF	27.00	1.222e4	8.579e3	1.246	1.42	1.55	328.8	YES	NO	bb	bb	3.486
30	Total-tetradioxins	24.55	2.628e2	2.990e2	1.024	0.88	0.77	4.5	YES	NO	bb	bb	0.103
31	Total-tetradioxins	24.33	4.947e2	6.431e2	1.024	0.77	0.77	11.4	YES	NO	bb	bb	0.208
32	Total-tetradioxins	23.61	5.146e2	6.641e2	1.024	0.77	0.77	11.5	YES	NO	bb	bb	0.215
33	Total-pentadioxins	29.94	8.468e2	5.915e2	1.502	1.43	1.55	13.0	YES	NO	bd	bd	0.358
34	12378-PeCDD	31.32	9.935e2	5.993e2	1.022	1.66	1.55	13.4	YES	NO	bb	bb	0.583
35	123789-HxCDD	36.35	3.168e3	2.672e3	0.907	1.19	1.24	43.7	YES	NO	bb	bb	1.304
36	Total-hexadioxins	36.13	9.367e2	8.127e2	1.005	1.15	1.24	12.9	YES	NO	db	db	0.353
37	123678-HxCDD	35.97	5.918e3	4.923e3	1.001	1.20	1.24	89.2	YES	NO	dd	dd	2.103

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	123478-HxCDD	35.85	1.365e3	1.119e3	0.996	1.22	1.24	20.7	YES	NO	bd	bd	0.528
39	Total-hexadioxins	35.07	1.849e3	1.372e3	1.005	1.35	1.24	30.6	YES	NO	db	db	0.649
40	Total-hexadioxins	34.96	1.817e4	1.464e4	1.005	1.24	1.24	176.2	YES	NO	bd	bd	6.613
41	Total-hexadioxins	34.59	3.361e3	2.686e3	1.005	1.25	1.24	48.8	YES	NO	bb	bb	1.219
42	124679-HXCDD	33.82	1.434e4	1.208e4	1.115	1.19	1.24	201.1	YES	NO	bb	bd	5.013
43	1234678-HpCDD	40.10	1.239e5	1.180e5	1.039	1.05	1.05	1074.6	YES	NO	bd	bb	60.331
44	1234679-HPCDD	39.06	1.721e5	1.682e5	1.137	1.02	1.05	1724.1	YES	NO	bb	bb	77.586
45	OCDD	44.81	6.142e5	7.315e5	0.920	0.84	0.89	4858.9	YES	NO	bb	bb	465.136

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.13	1.011e5					5.1	YES		db		
2	FUNCTION1 PFK	22.07	6.987e5					7.7	YES		bd		
3	FUNCTION1 PFK	21.78	6.158e5					18.9	YES		db		
4	FUNCTION1 PFK	21.48	6.524e6					31.9	YES		bd		
5	FUNCTION1 PFK	27.77	1.089e6					3.9	YES		bb		
6	FUNCTION1 PFK	27.06	2.051e6					7.1	YES		bb		
7	FUNCTION1 PFK	25.03	3.035e5					5.0	YES		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	29.16	1.681e4					3.2	YES		bb		0.000
2	FUNCTION2 PFK	29.01	6.320e4					4.2	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	36.87	1.344e6					21.8	YES		bb		0.000
2	FUNCTION3 PFK	36.40	2.283e6					29.9	YES		db		0.000
3	FUNCTION3 PFK	36.32	1.499e6					27.8	YES		bd		0.000
4	FUNCTION3 PFK	33.75	1.324e7					10.6	YES		db		0.000
5	FUNCTION3 PFK	32.73	3.014e6					127.5	YES		dd		0.000
6	FUNCTION3 PFK	32.69	2.155e6					132.3	YES		bd		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	37.72	1.439e6					75.4	YES		dd		
2	FUNCTION4 PFK	37.67	1.075e6					77.4	YES		bd		
3	FUNCTION4 PFK	40.68	9.217e3					1.4	NO		dd		
4	FUNCTION4 PFK	40.61	1.934e4					1.9	NO		bd		
5	FUNCTION4 PFK	40.41	1.182e4					1.8	NO		db		
6	FUNCTION4 PFK	40.38	3.010e3					0.8	NO		bd		
7	FUNCTION4 PFK	40.31	5.612e3					0.7	NO		bb		
8	FUNCTION4 PFK	40.00	3.008e3					0.7	NO		bb		
9	FUNCTION4 PFK	39.85	1.651e4					1.6	NO		bb		
10	FUNCTION4 PFK	39.61	4.815e3					0.7	NO		bb		
11	FUNCTION4 PFK	39.47	1.103e4					1.2	NO		bb		
12	FUNCTION4 PFK	39.39	2.858e3					0.4	NO		bb		
13	FUNCTION4 PFK	39.15	2.005e5					9.9	YES		db		
14	FUNCTION4 PFK	38.59	2.657e6					35.7	YES		dd		
15	FUNCTION4 PFK	38.56	3.542e5					36.9	YES		dd		
16	FUNCTION4 PFK	38.46	1.195e6					41.9	YES		dd		
17	FUNCTION4 PFK	38.37	4.126e6					46.3	YES		dd		
18	FUNCTION4 PFK	37.98	3.896e6					64.4	YES		dd		
19	FUNCTION4 PFK	42.16	9.137e3					1.0	NO		bb		
20	FUNCTION4 PFK	42.01	9.162e2					0.4	NO		bb		
21	FUNCTION4 PFK	41.86	1.337e4					1.3	NO		bb		
22	FUNCTION4 PFK	41.75	4.411e4					2.4	NO		bb		
23	FUNCTION4 PFK	41.59	3.010e3					0.6	NO		bb		
24	FUNCTION4 PFK	41.54	8.592e3					1.4	NO		bb		
25	FUNCTION4 PFK	41.34	3.113e3					0.7	NO		db		
26	FUNCTION4 PFK	41.27	9.780e3					1.1	NO		bd		
27	FUNCTION4 PFK	41.17	1.154e4					1.2	NO		bb		
28	FUNCTION4 PFK	40.92	1.105e4					1.5	NO		bb		
29	FUNCTION4 PFK	40.78	4.592e3					0.8	NO		bb		
30	FUNCTION4 PFK	40.72	8.665e3					1.5	NO		db		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.96	2.952e6					28.2	YES		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	25.72	1.927e3					76.9	YES		bb		0.000
2	FUNCTION1 HXCD...	25.94	1.240e2					4.5	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	34.16	1.076e2					4.2	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	39.05	7.534e1					4.1	YES		bb		0.000
2	FUNCTION4 NCDPE	38.24	7.806e3					258.2	YES		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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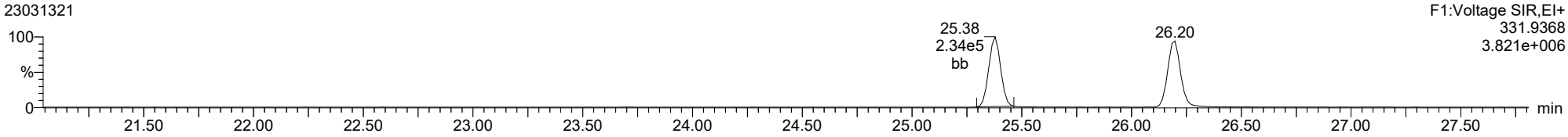

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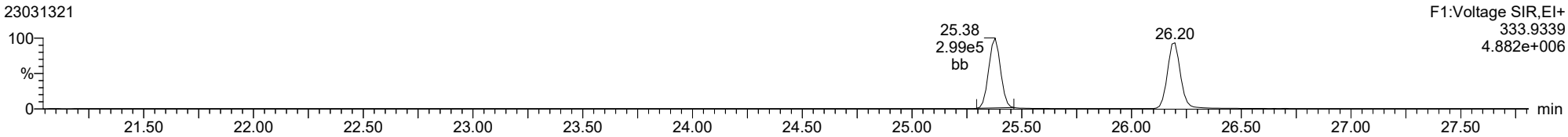

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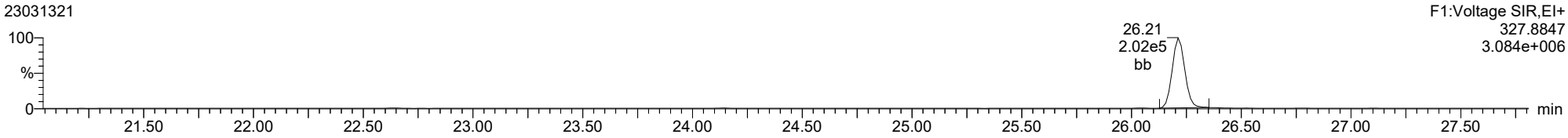

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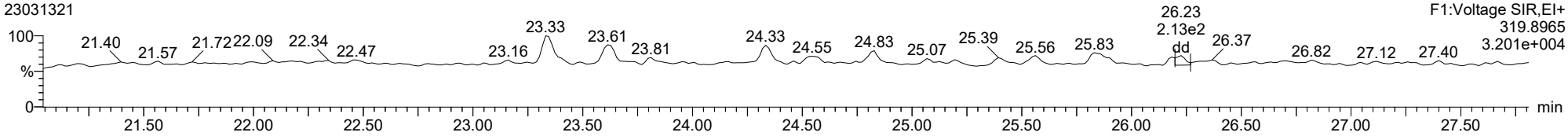

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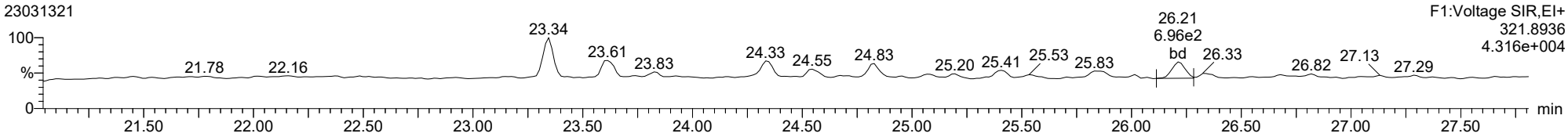

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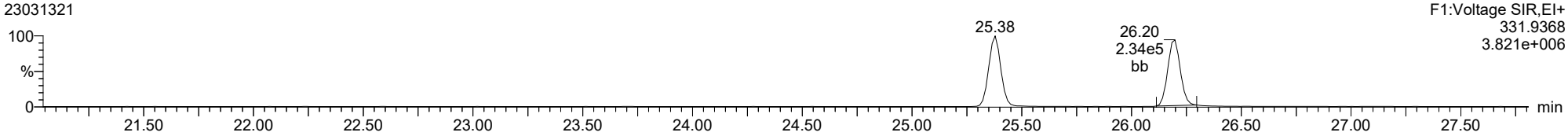

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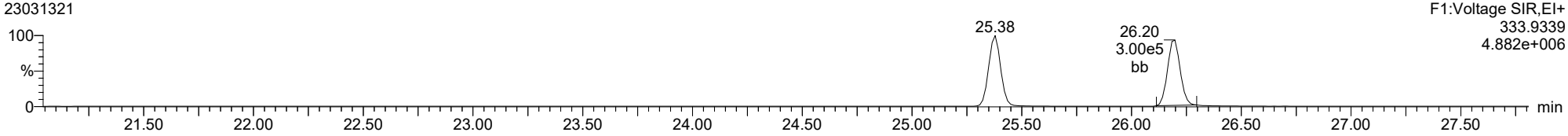

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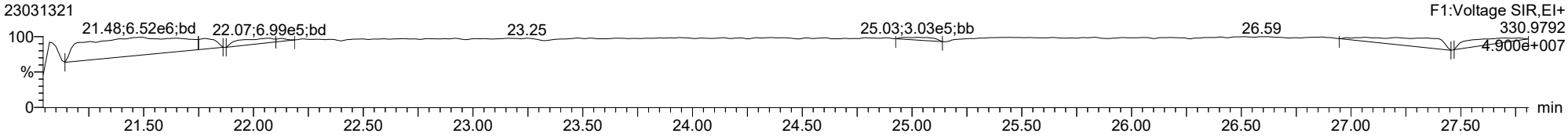

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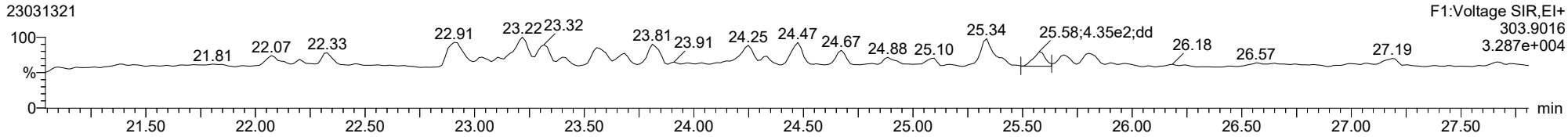

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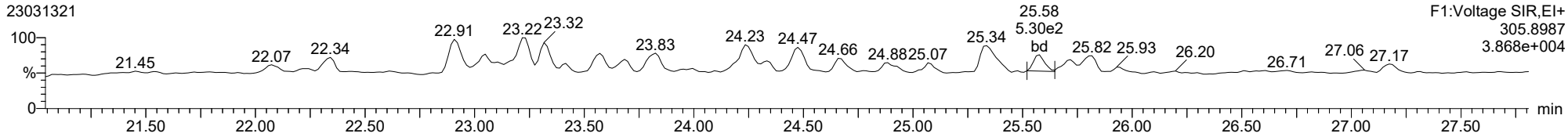

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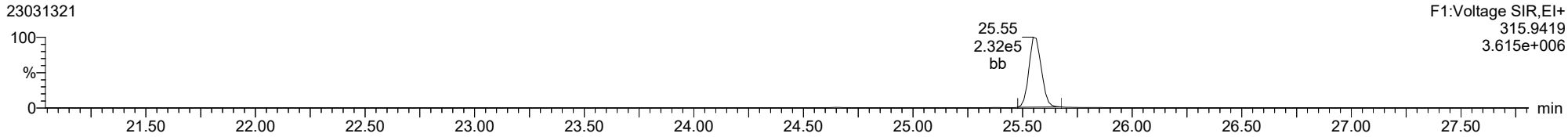

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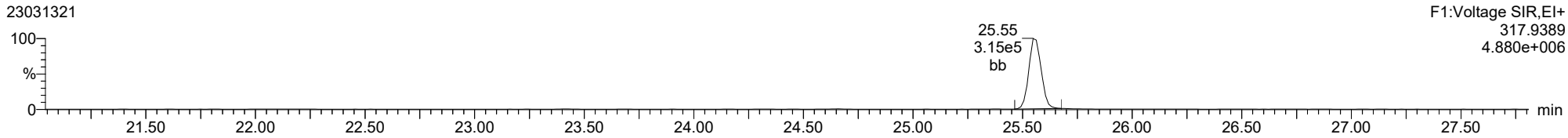

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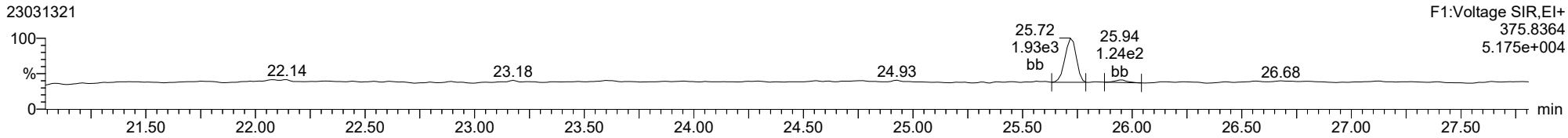

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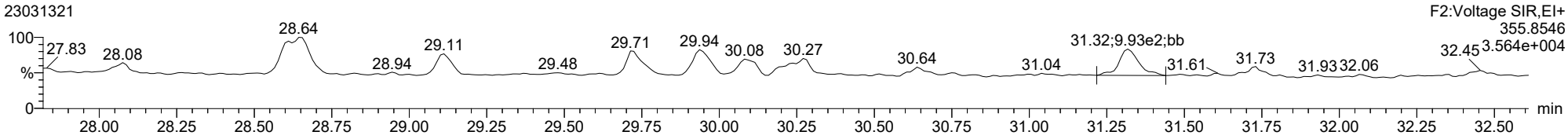
12378-PeCDD



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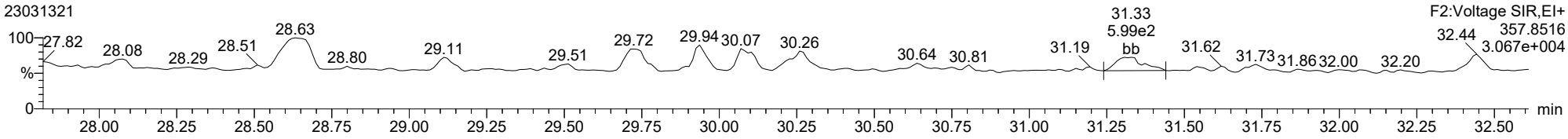

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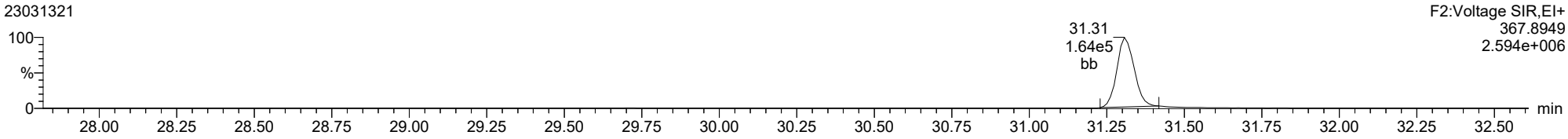

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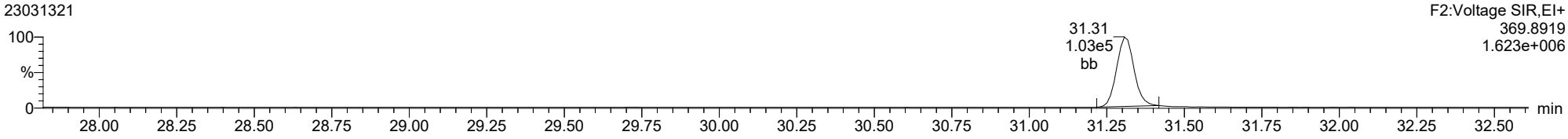

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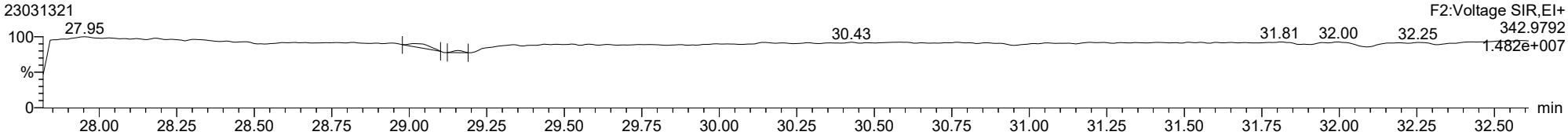

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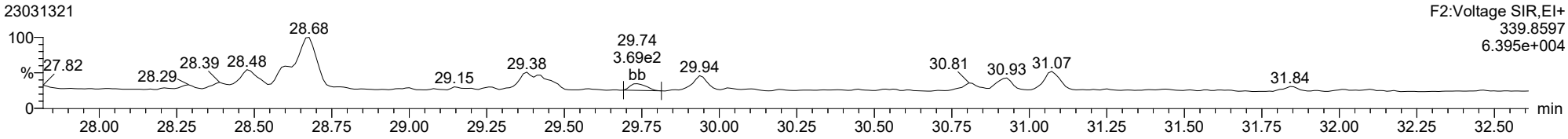
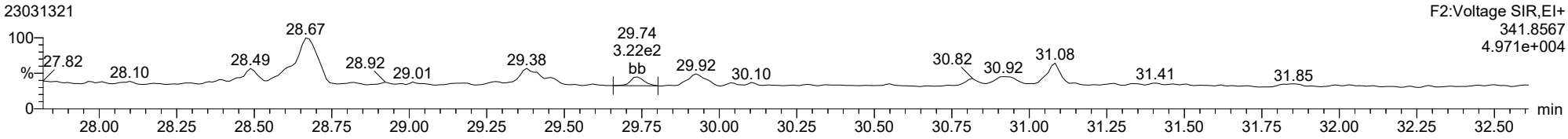
12378-PeCDF



12378-PeCDF



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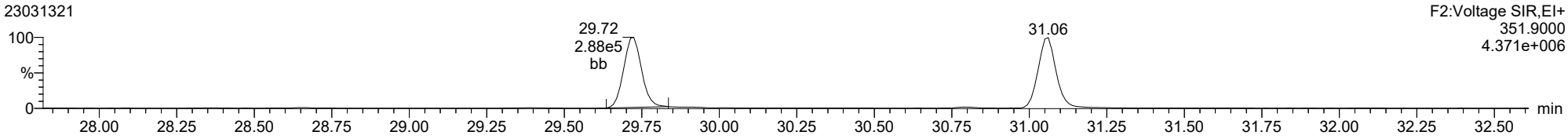

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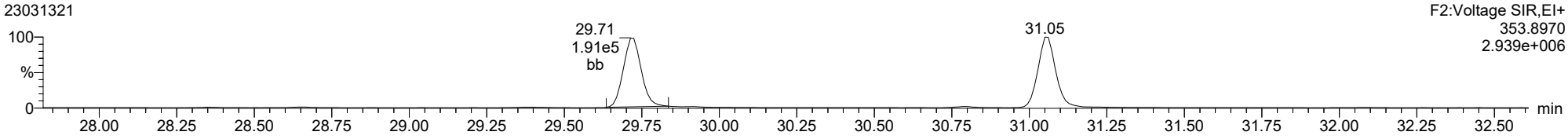

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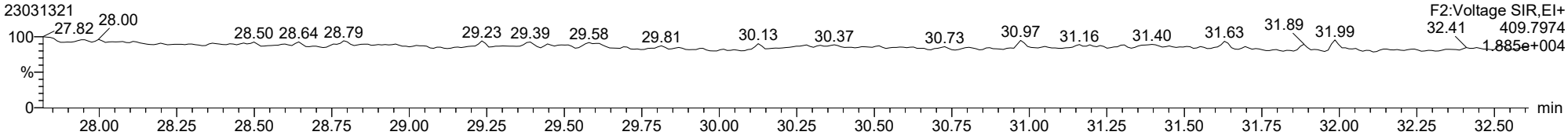

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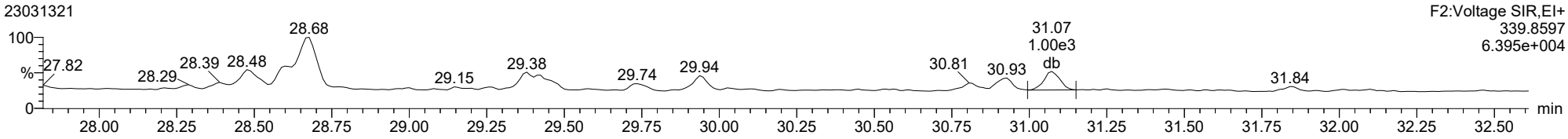

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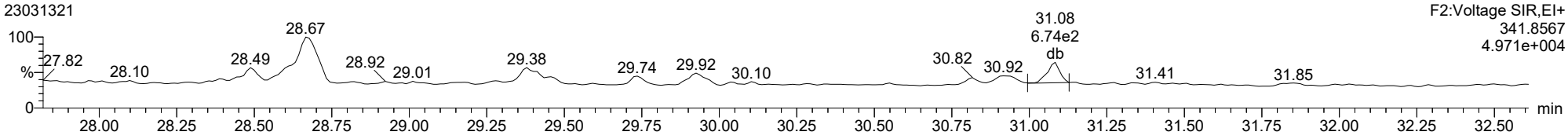

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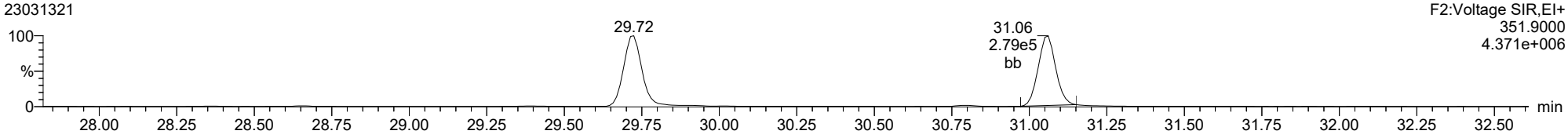

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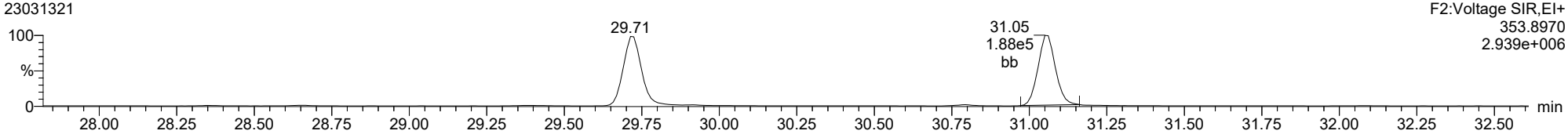

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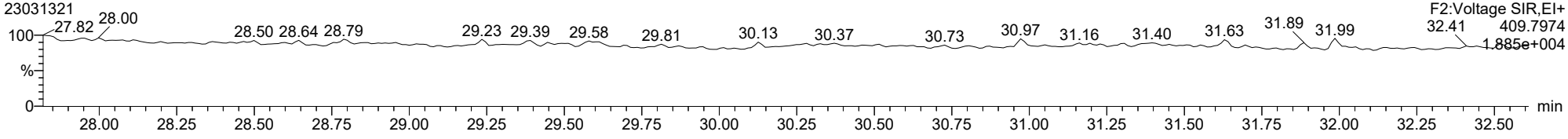

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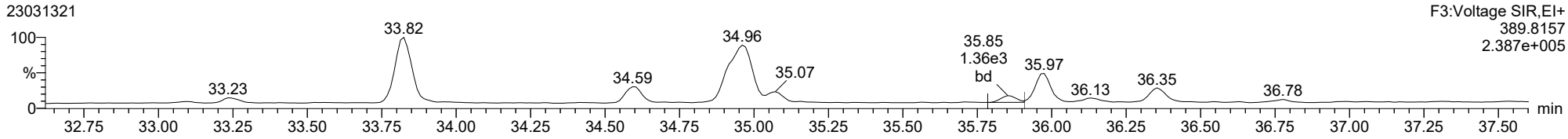

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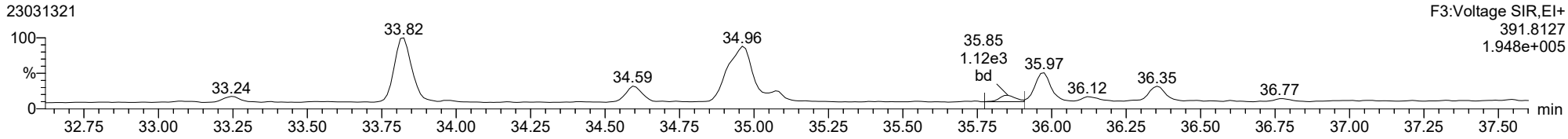

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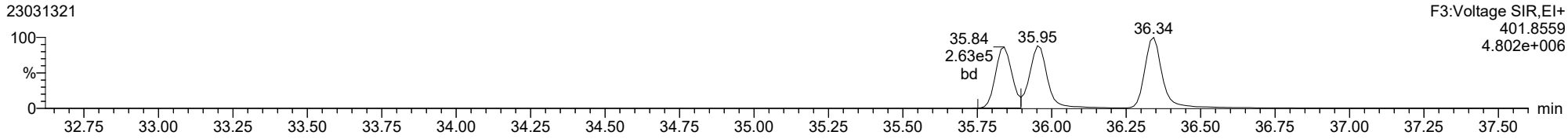

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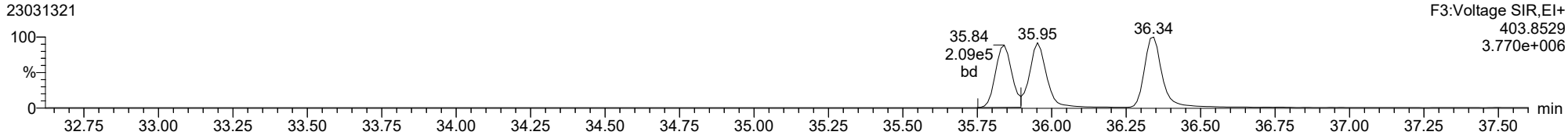

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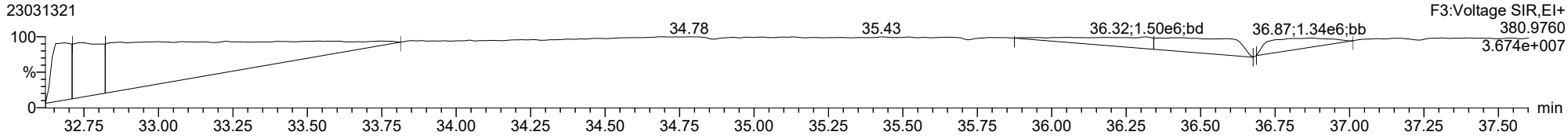

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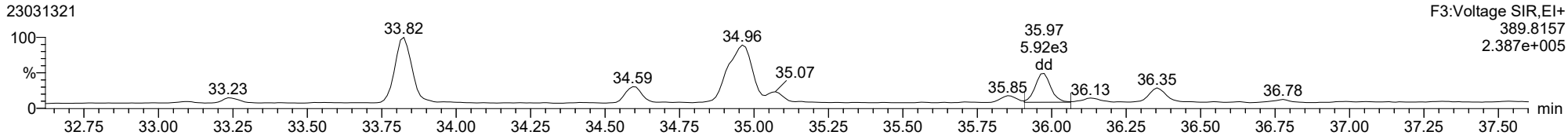

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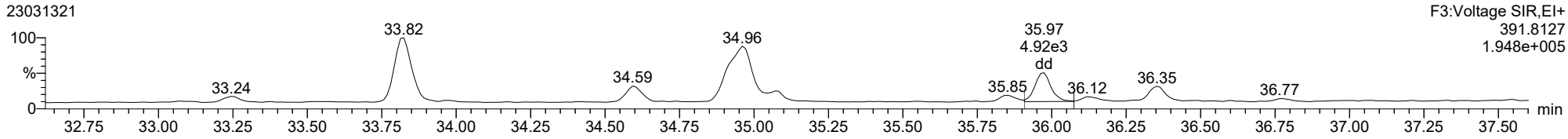

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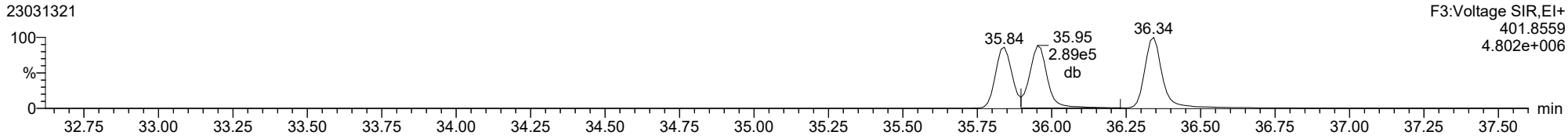

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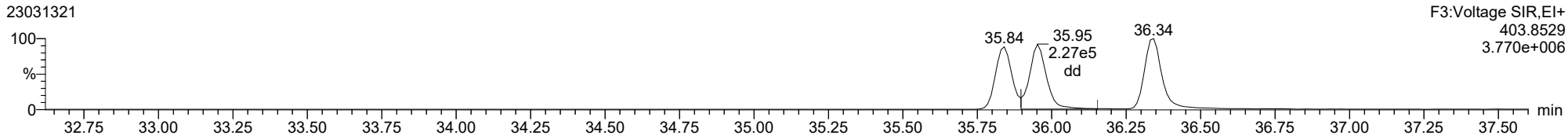

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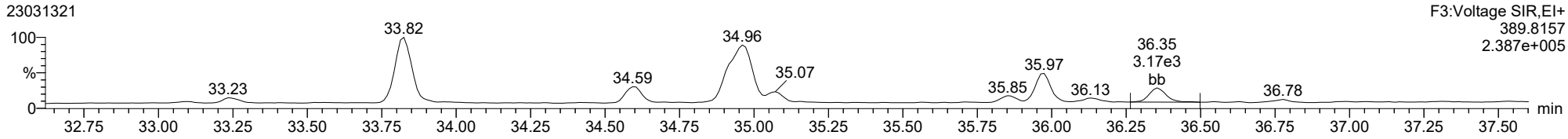

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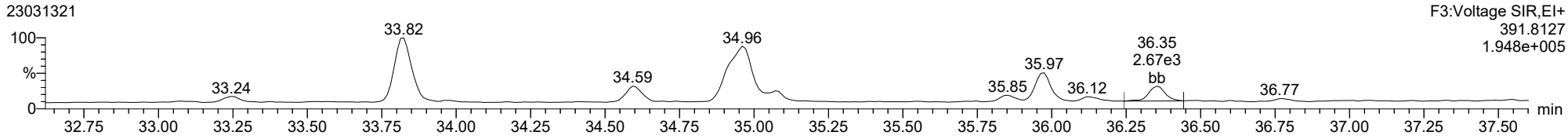

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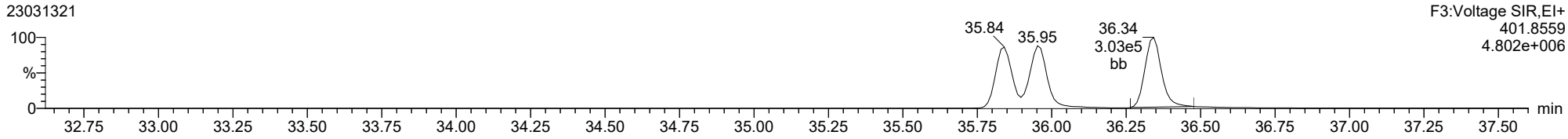

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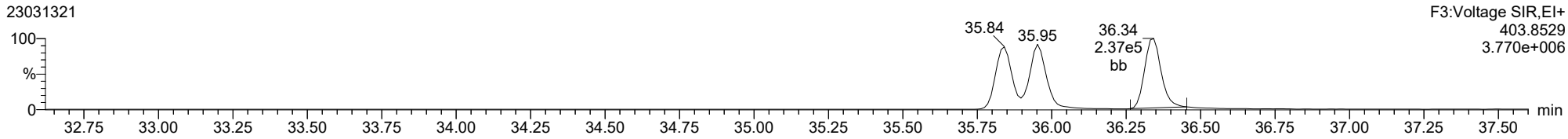

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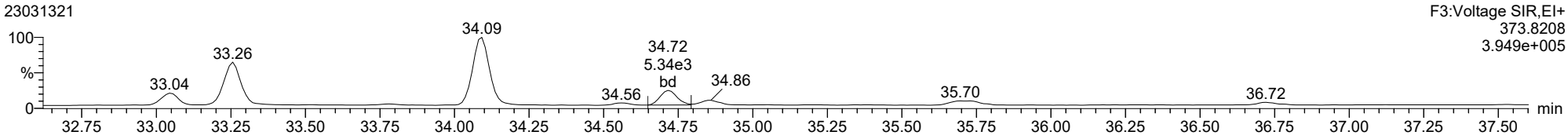

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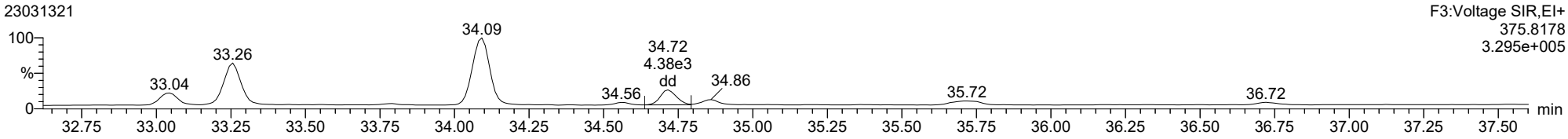

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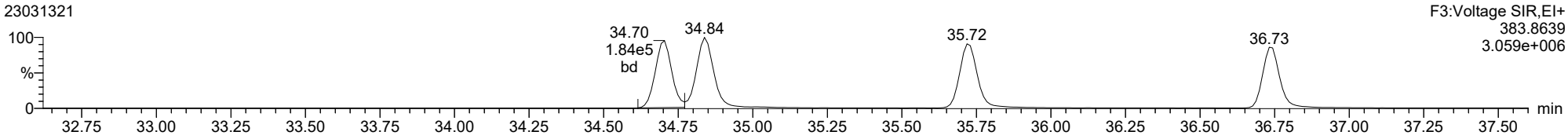

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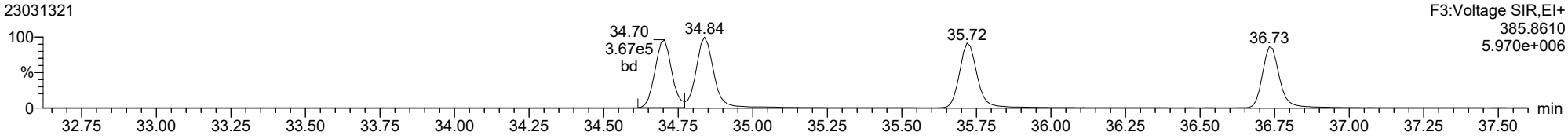

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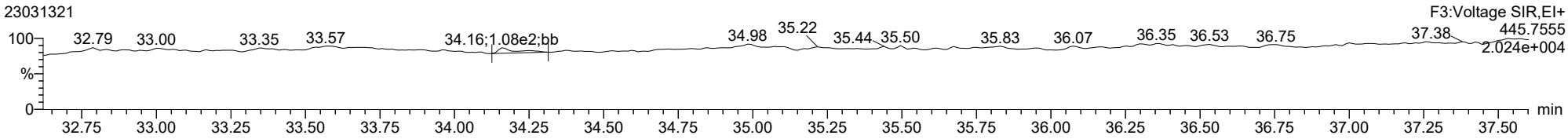

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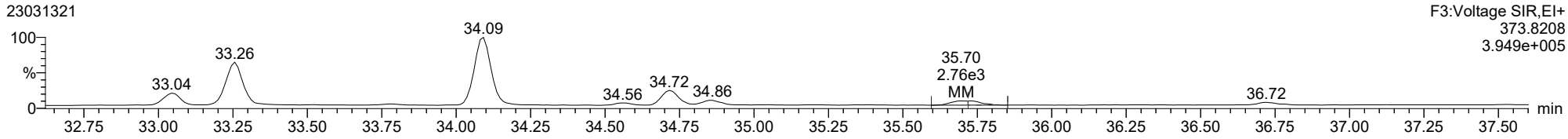

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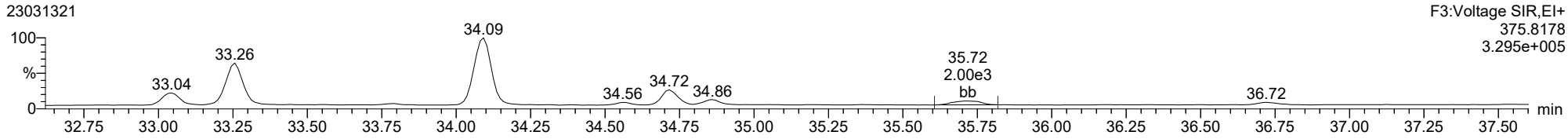

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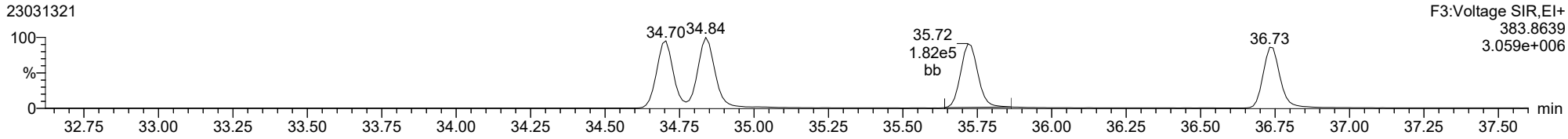

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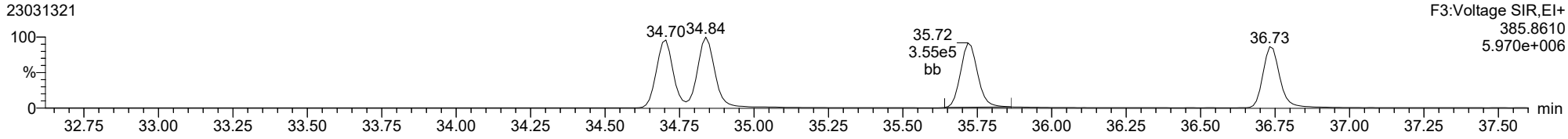

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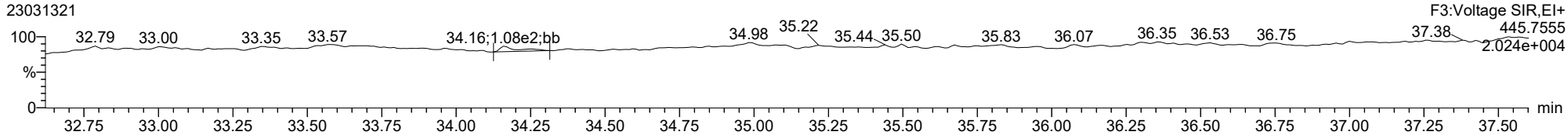

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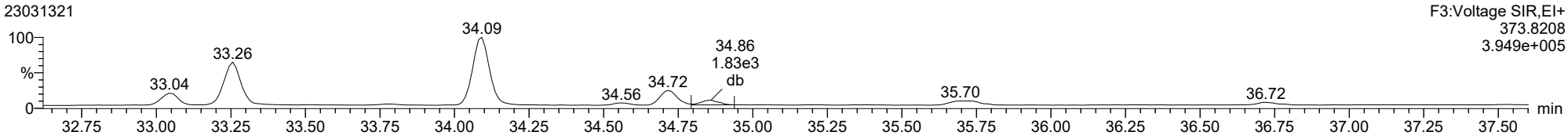

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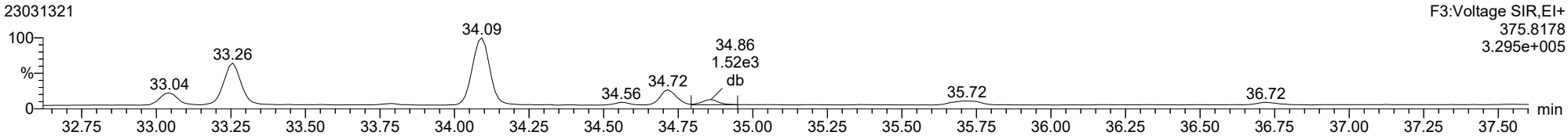

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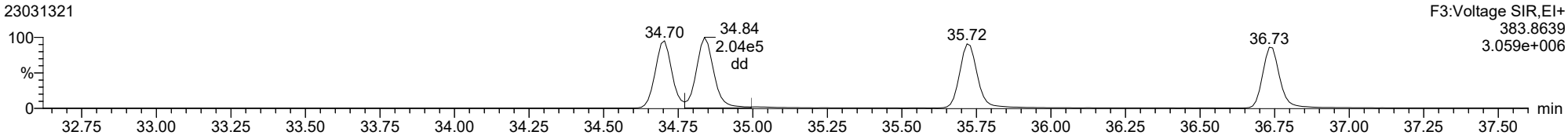

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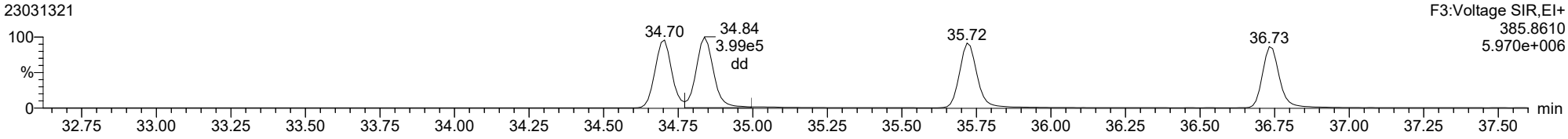

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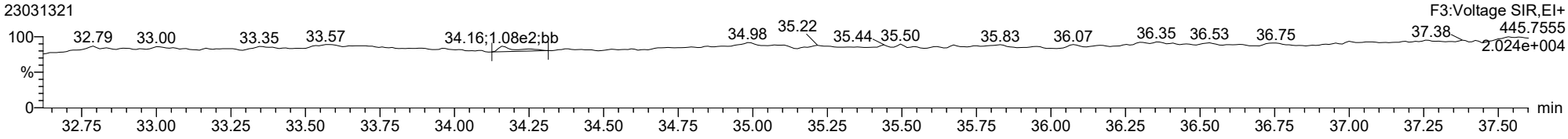

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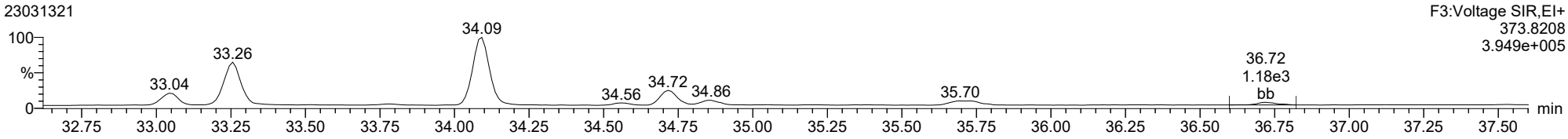

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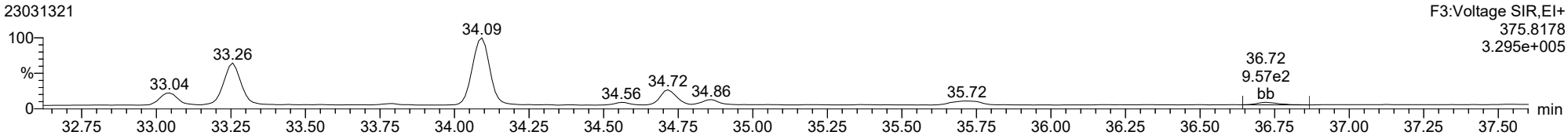

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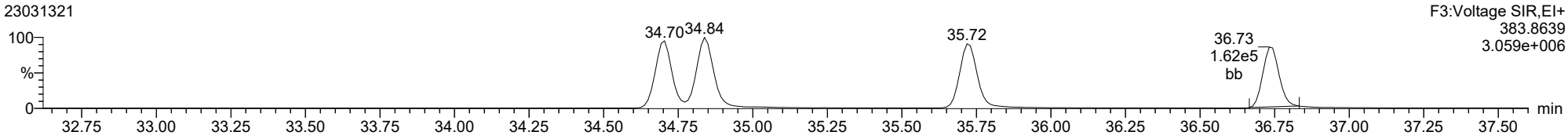

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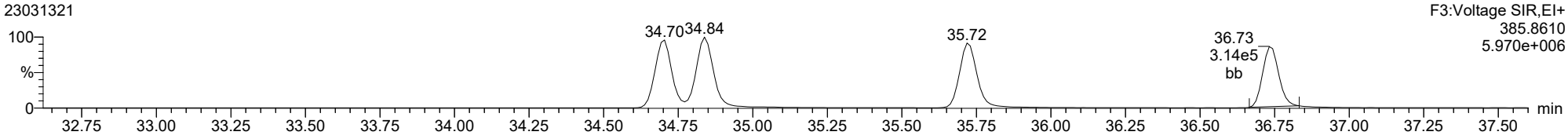

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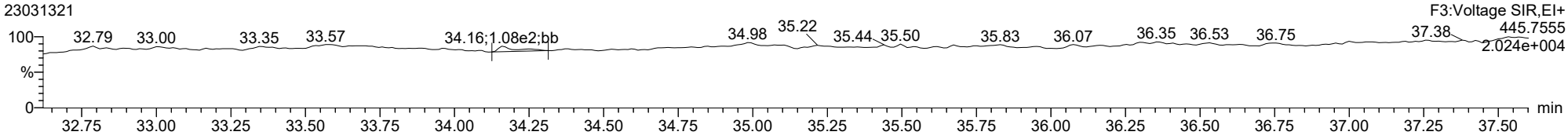

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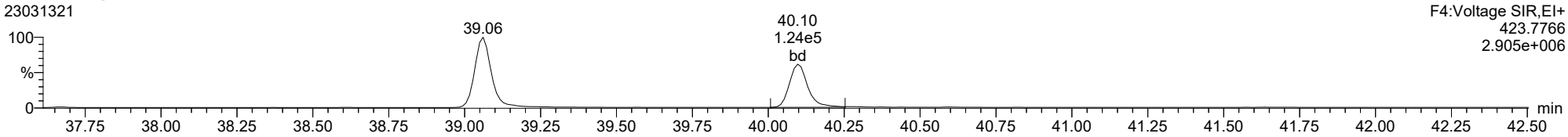

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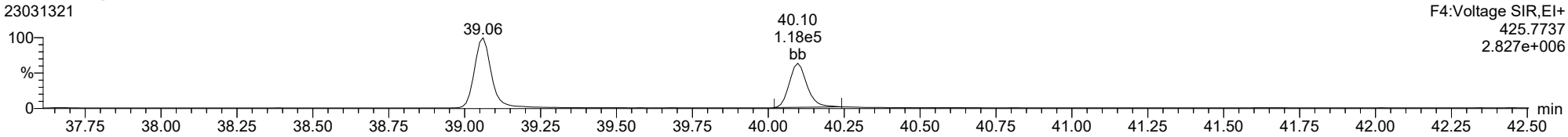

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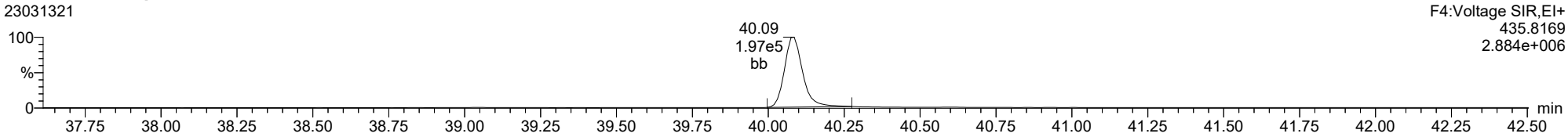

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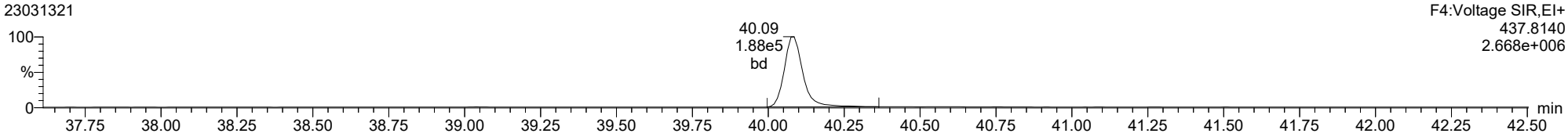

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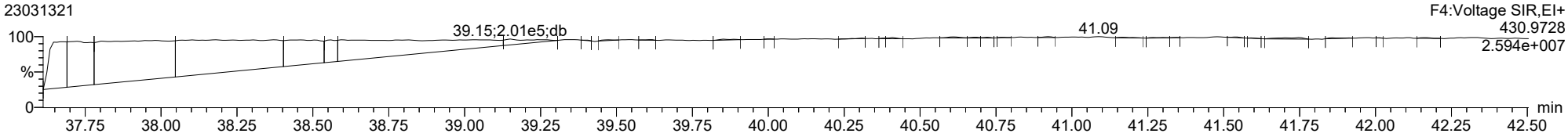

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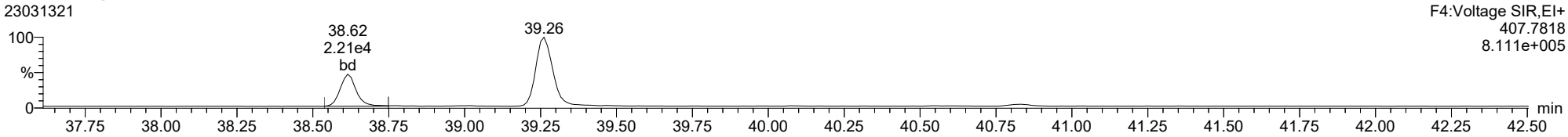

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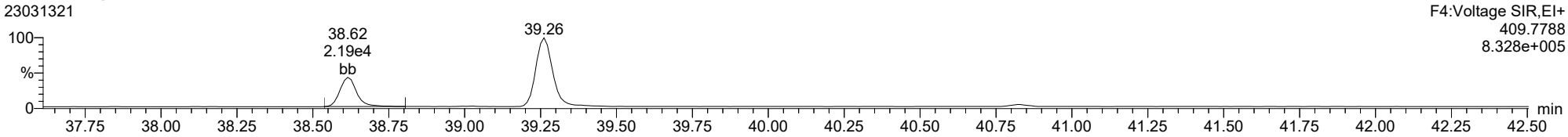

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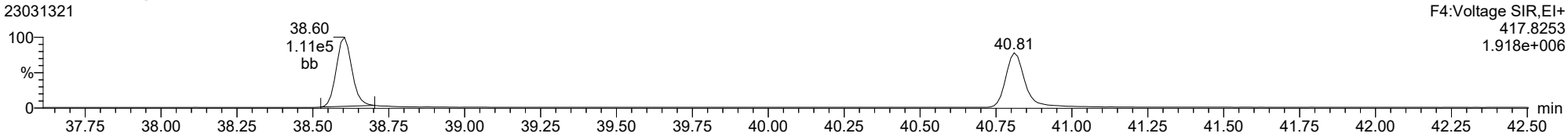

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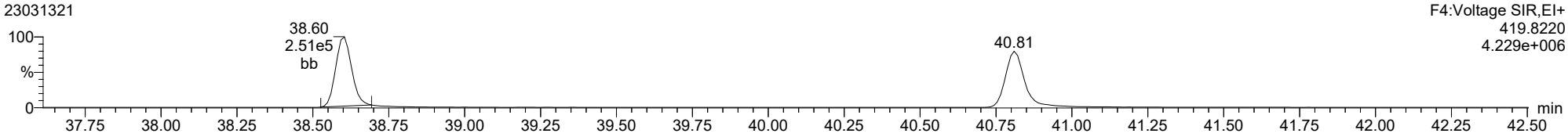

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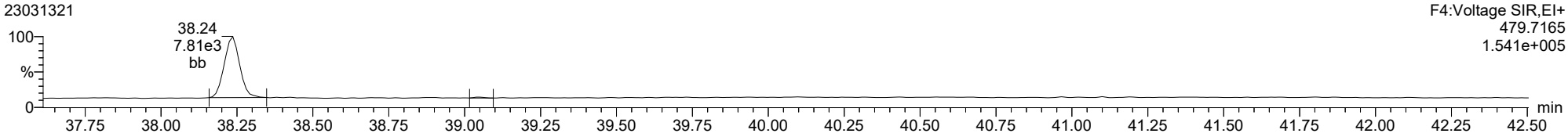

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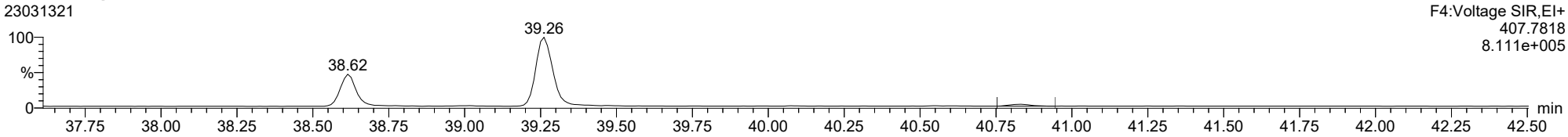

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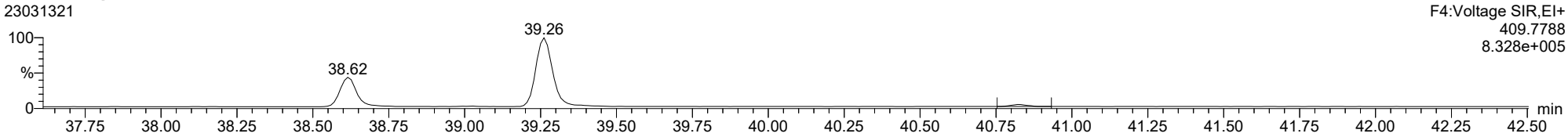

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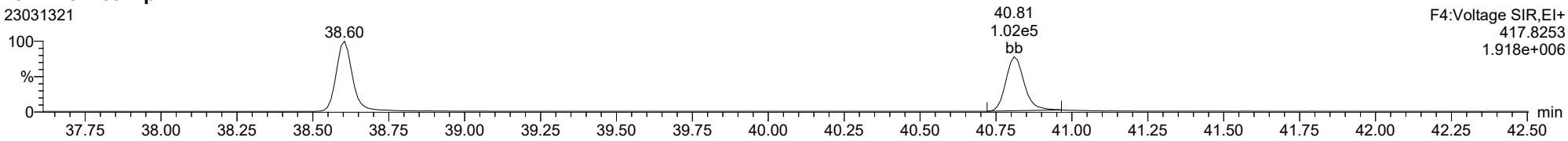

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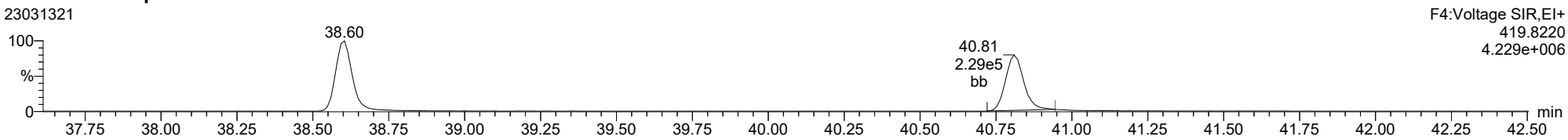
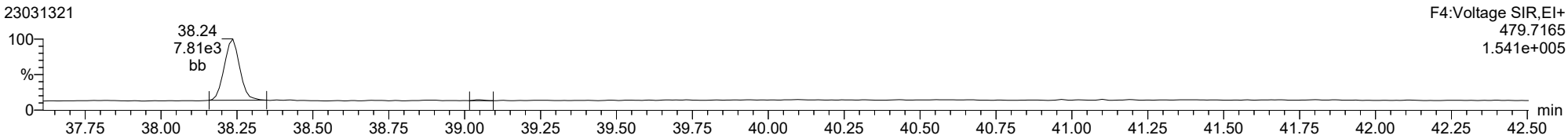


FUNCTION4 NCDPE



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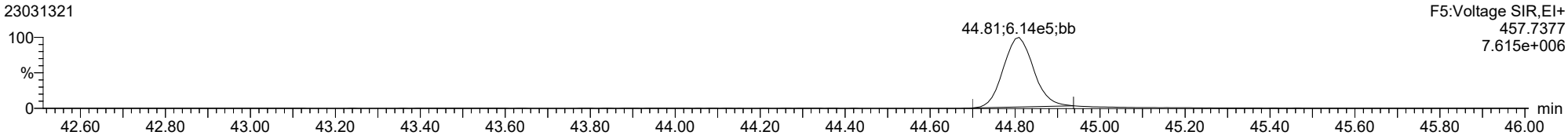
OCDD



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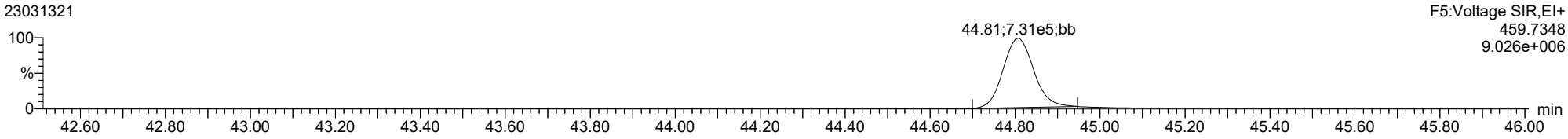

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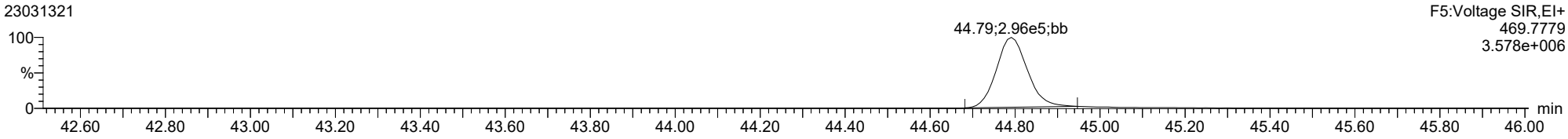

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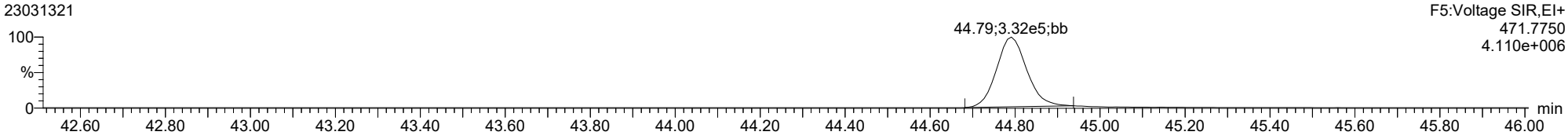
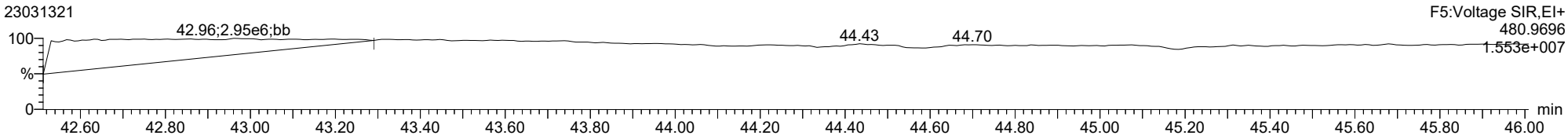


FUNCTION5 PFK



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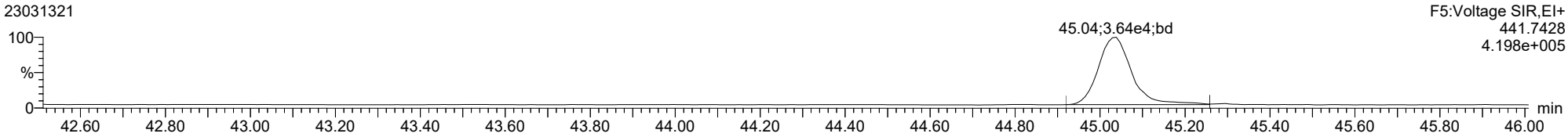
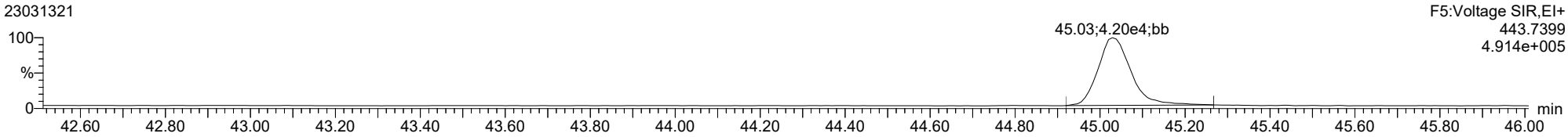
Printed: Tuesday, March 14, 2023 11:22:09 Pacific Daylight Time

ID: 23A0420-01, Name: 23031321, Date: 14-Mar-2023, Time: 02:54:51, Conditions: AUTOSPEC01, User: pk

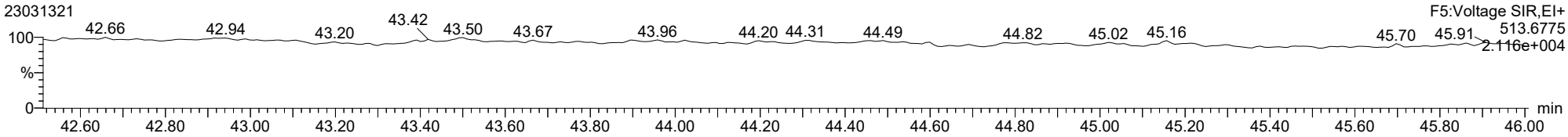
OCDF



OCDF

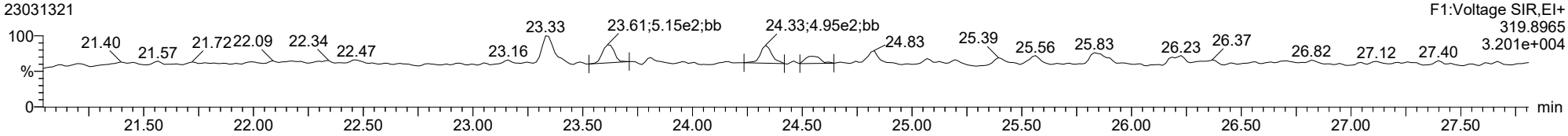


FUNCTION5 DCDPE

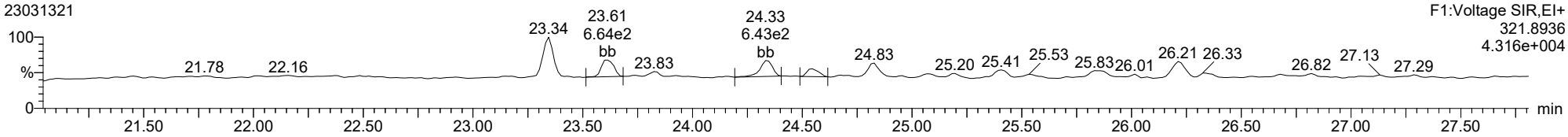


ID: 23A0420-01, Name: 23031321, Date: 14-Mar-2023, Time: 02:54:51, Conditions: AUTOSPEC01, User: pk

Total-tetradioxins



Total-tetradioxins



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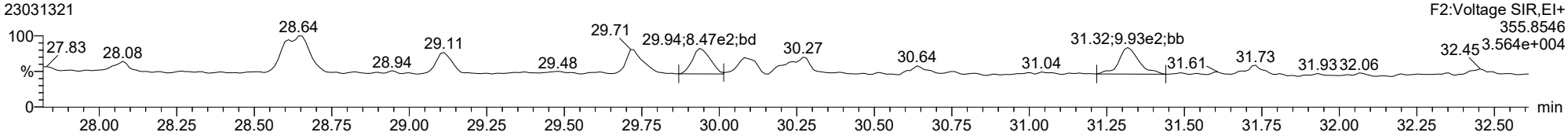
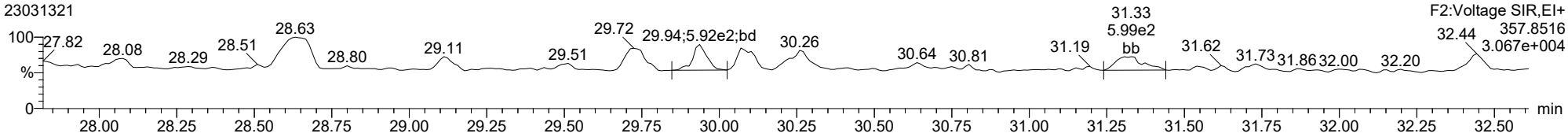
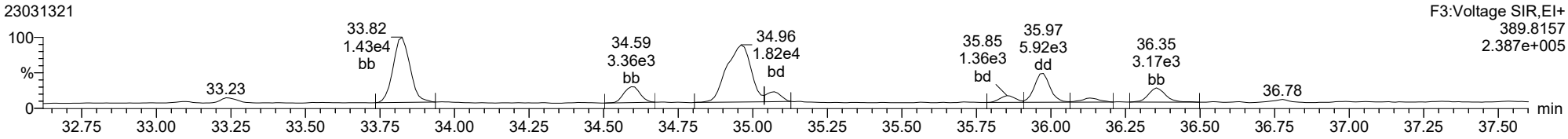


Total-pentadioxins

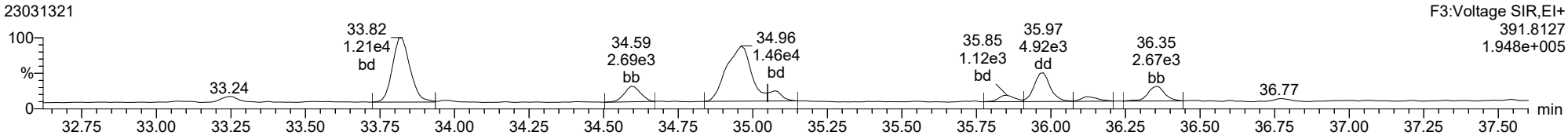


ID: 23A0420-01, Name: 23031321, Date: 14-Mar-2023, Time: 02:54:51, Conditions: AUTOSPEC01, User: pk

Total-hexadioxins



Total-hexadioxins



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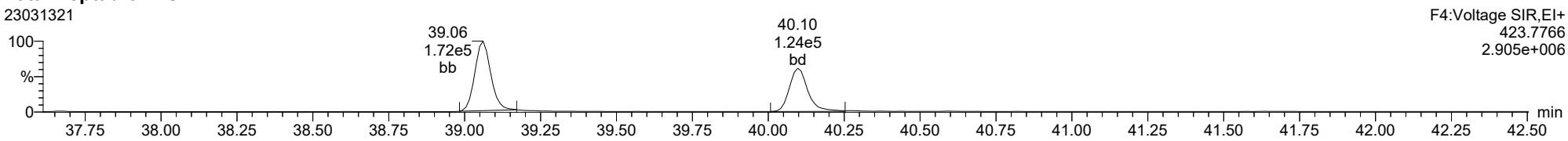

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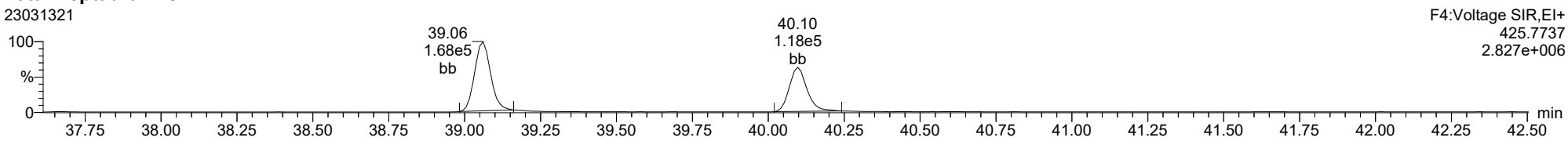
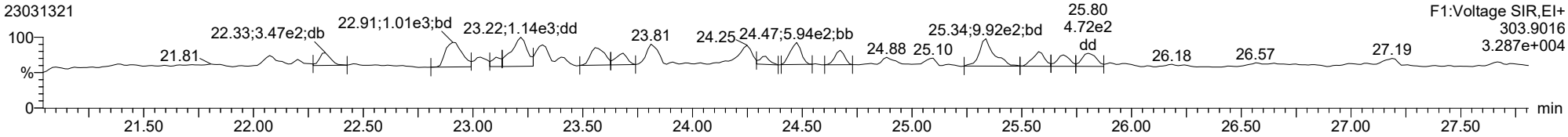


ID: 23A0420-01, Name: 23031321, Date: 14-Mar-2023, Time: 02:54:51, Conditions: AUTOSPEC01, User: pk

Total-tetrafurans



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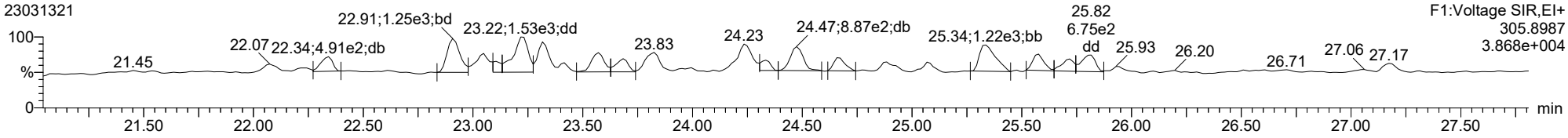
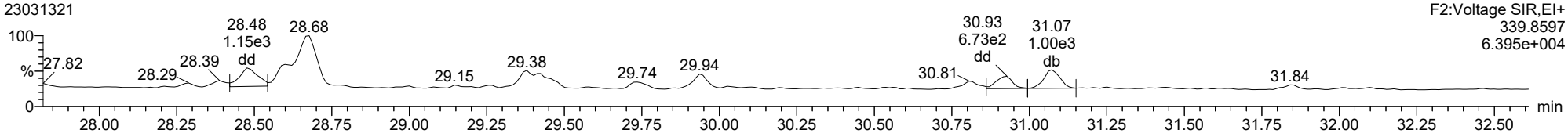
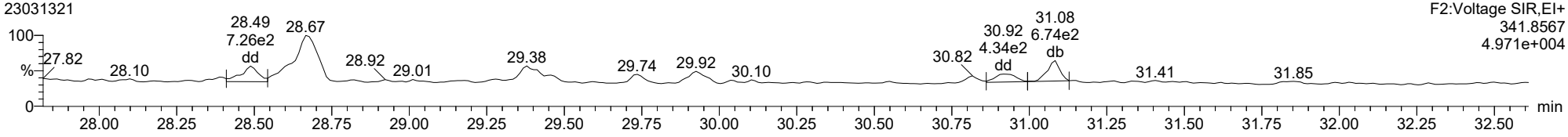


Total-pentafurans



Total-pentafurans



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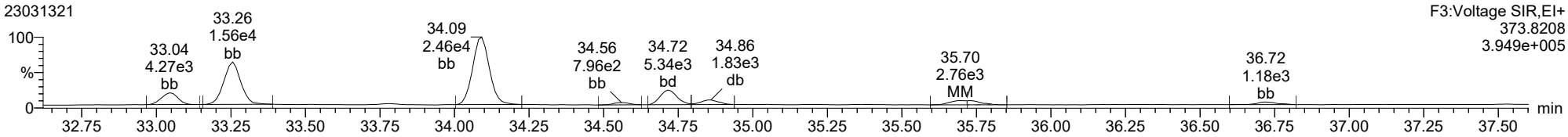
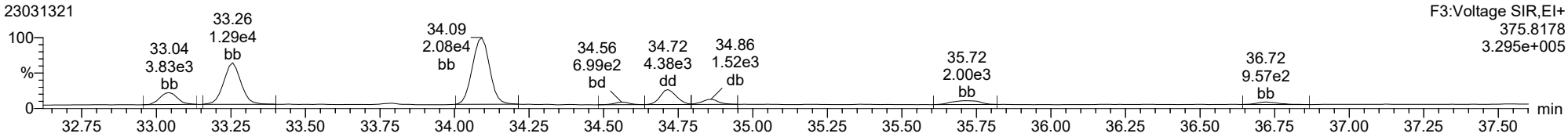
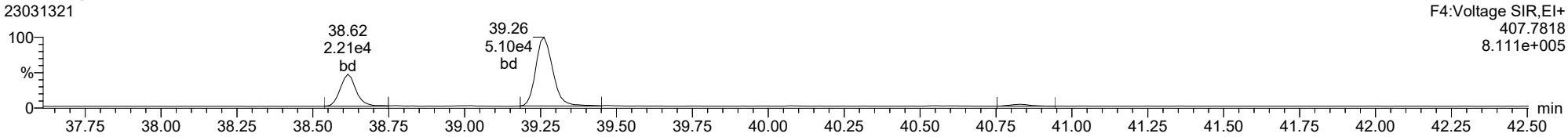
Total-hexafurans



Total-hexafurans



Total-heptafurans



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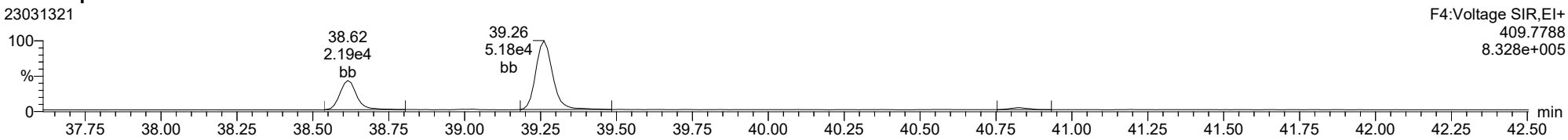

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-IT1051

Form 1
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-04 C	File ID:	23031322
Sampled:	01/19/23 09:55	Prepared:	02/14/23 17:30	Analyzed:	03/14/23 03:43
% Solids:	70.30	Preparation:	EPA 1613	Initial/Final:	14.34 g Wet / 20 uL
Result Basis:	Dry	Sequence:	SLC0171	Calibration:	GC00015
Batch:	BLB0228	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

CAS NO.	COMPOUND	DF/Split	Ion Ratio	Ratio Limits	EDL	RL	Result	Units	Q
51207-31-9	2,3,7,8-TCDF	1	0.898	0.655-0.886	0.157	0.992	0.867	ng/kg	EMPC, J
1746-01-6	2,3,7,8-TCDD	1	0.641	0.655-0.886	0.086	0.992	0.411	ng/kg	EMPC, J
57117-41-6	1,2,3,7,8-PeCDF	1	1.540	1.318-1.783	0.353	0.992	0.956	ng/kg	J
57117-31-4	2,3,4,7,8-PeCDF	1	1.540	1.318-1.783	0.316	0.992	1.30	ng/kg	
40321-76-4	1,2,3,7,8-PeCDD	1	1.493	1.318-1.783	0.346	0.992	3.28	ng/kg	
70648-26-9	1,2,3,4,7,8-HxCDF	1	1.128	1.054-1.426	0.094	0.992	2.75	ng/kg	
57117-44-9	1,2,3,6,7,8-HxCDF	1	1.321	1.054-1.426	0.101	0.992	1.92	ng/kg	
60851-34-5	2,3,4,6,7,8-HxCDF	1	1.087	1.054-1.426	0.104	0.992	3.02	ng/kg	
72918-21-9	1,2,3,7,8,9-HxCDF	1	1.258	1.054-1.426	0.110	0.992	1.33	ng/kg	
39227-28-6	1,2,3,4,7,8-HxCDD	1	1.291	1.054-1.426	0.153	0.992	3.43	ng/kg	
57653-85-7	1,2,3,6,7,8-HxCDD	1	1.234	1.054-1.426	0.148	0.992	10.2	ng/kg	
19408-74-3	1,2,3,7,8,9-HxCDD	1	1.302	1.054-1.426	0.166	0.992	7.98	ng/kg	
67562-39-4	1,2,3,4,6,7,8-HpCDF	1	0.947	0.893-1.208	0.209	0.992	29.8	ng/kg	B
55673-89-7	1,2,3,4,7,8,9-HpCDF	1	1.002	0.893-1.208	0.311	0.992	2.14	ng/kg	
35822-46-9	1,2,3,4,6,7,8-HpCDD	1	1.042	0.893-1.208	0.386	2.48	225	ng/kg	B
39001-02-0	OCDF	1	0.832	0.757-1.024	0.305	2.48	61.1	ng/kg	
3268-87-9	OCDD	1	0.839	0.757-1.024	0.494	9.92	1660	ng/kg	B

Homologue Groups

55722-27-5	Total TCDF	1	0.000			0.992	4.73	ng/kg	
41903-57-5	Total TCDD	1	0.000			0.992	2.39	ng/kg	
30402-15-4	Total PeCDF	1	0.000			0.992	24.9	ng/kg	
36088-22-9	Total PeCDD	1	0.000			0.992	6.85	ng/kg	
55684-94-1	Total HxCDF	1	0.000			0.992	55.2	ng/kg	
34465-46-8	Total HxCDD	1	0.000			0.992	81.5	ng/kg	
38998-75-3	Total HpCDF	1	0.000			0.992	88.1	ng/kg	
37871-00-4	Total HpCDD	1	0.000			0.992	543	ng/kg	

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 10.35
Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 10.35

Analytical Resources, Incorporated
Analytical Chemists and Consultants

LDW23-IT1051

Form 2

ORGANIC ANALYSIS DATA SHEET

EPA 1613B

Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0420-04	File ID:	23031322
Sampled:	01/19/23 09:55	Prepared:	02/14/23 17:30	Analyzed:	03/14/23 03:43
Solids Wt%:	70.30	Preparation:	EPA 1613	Initial/Final:	14.34 g / 20 uL
Result Basis:	Dry	Sequence:	SLC0171	Calibration:	GC00015
Batch:	BLB0228	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

Labels	DF/Split	Ion Ratio	Ratio Limits	EDL	% REC	QC LIMITS	Q
13C12-2,3,7,8-TCDF		0.726	0.655-0.886	0.089	67.4	24 - 169 %	
13C12-2,3,7,8-TCDD		0.774	0.655-0.886	0.142	95.6	25 - 164 %	
13C12-1,2,3,7,8-PeCDF		1.498	1.318-1.783	0.155	94.0	24 - 185 %	
13C12-2,3,4,7,8-PeCDF		1.463	1.318-1.783	0.172	99.8	21 - 178 %	
13C12-1,2,3,7,8-PeCDD		1.700	1.318-1.783	0.143	81.6	25 - 181 %	
13C12-1,2,3,4,7,8-HxCDF		0.521	0.434-0.587	0.172	97.7	26 - 152 %	
13C12-1,2,3,6,7,8-HxCDF		0.521	0.434-0.587	0.145	85.8	26 - 123 %	
13C12-2,3,4,6,7,8-HxCDF		0.527	0.434-0.587	0.178	92.6	28 - 136 %	
13C12-1,2,3,7,8,9-HxCDF		0.521	0.434-0.587	0.215	102	29 - 147 %	
13C12-1,2,3,4,7,8-HxCDD		1.267	1.054-1.426	0.152	86.7	32 - 141 %	
13C12-1,2,3,6,7,8-HxCDD		1.223	1.054-1.426	0.131	78.7	28 - 130 %	
13C12-1,2,3,4,6,7,8-HpCDF		0.436	0.374-0.506	0.208	80.1	28 - 143 %	
13C12-1,2,3,4,7,8,9-HpCDF		0.442	0.374-0.506	0.242	75.2	26 - 138 %	
13C12-1,2,3,4,6,7,8-HpCDD		1.077	0.893-1.208	0.143	78.2	23 - 140 %	
13C12-OCDD		0.896	0.757-1.024	0.236	69.6	17 - 157 %	
37Cl4-2,3,7,8-TCDD		328.000		0.043	84.0	35 - 197 %	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:22:22 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230313.mdb 13 Mar 2023 11:32:39
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: 23A0420-04, Name: 23031322, Date: 14-Mar-2023, Time: 03:43:53, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.591	1.001	8.188e2	9.114e2	0.702	0.898	0.770	782	794	1.03e4	1.47e4	13.2	18.5	YES	dd	bd	0.437
12378-PeCDF	29.758	1.001	1.195e3	7.758e2	0.679	1.540	1.550	1068	2638	1.85e4	1.00e4	17.3	3.8	NO	bb	bb	0.482
23478-PeCDF	31.084	1.000	1.798e3	1.168e3	0.786	1.540	1.550	1068	2638	2.61e4	1.63e4	24.5	6.2	NO	dd	bd	0.655
123478-HxCDF	34.738	1.000	4.683e3	4.152e3	1.166	1.128	1.240	722	834	7.05e4	6.89e4	97.6	82.6	NO	dd	dd	1.386
234678-HxCDF	35.752	1.000	4.522e3	4.161e3	1.140	1.087	1.240	722	834	4.88e4	4.15e4	67.6	49.7	NO	bb	MM	1.522
123678-HxCDF	34.883	1.001	3.431e3	2.596e3	1.091	1.321	1.240	722	834	5.10e4	3.94e4	70.6	47.2	NO	db	db	0.969
123789-HxCDF	36.766	1.000	1.945e3	1.546e3	1.137	1.258	1.240	722	834	1.94e4	1.49e4	26.9	17.9	NO	bb	MM	0.673
1234678-HpCDF	38.649	1.000	2.518e4	2.659e4	1.003	0.947	1.050	1290	731	4.02e5	4.42e5	311.3	605.1	NO	bb	bb	15.036
1234789-HpCDF	40.866	1.000	1.427e3	1.423e3	0.953	1.002	1.050	1290	731	2.03e4	2.03e4	15.7	27.8	NO	bb	bb	1.078
OCDF	45.075	1.005	2.784e4	3.346e4	0.778	0.832	0.890	650	627	3.21e5	3.84e5	494.3	611.7	NO	bb	bd	30.822
2378-TCDD	26.240	1.001	5.284e2	8.247e2	1.149	0.641	0.770	862	580	6.47e3	1.21e4	7.5	20.8	YES	bd	bd	0.207
12378-PeCDD	31.340	1.000	3.539e3	2.370e3	1.022	1.493	1.550	842	2319	4.75e4	3.15e4	56.3	13.6	NO	bb	bb	1.655
123478-HxCDD	35.875	1.000	4.007e3	3.104e3	0.996	1.291	1.240	817	881	6.54e4	5.36e4	80.0	60.8	NO	bd	bd	1.728
123678-HxCDD	35.986	1.000	1.237e4	1.003e4	1.001	1.234	1.240	817	881	1.90e5	1.62e5	231.9	183.2	NO	dd	dd	5.133
123789-HxCDD	36.376	1.011	8.761e3	6.731e3	0.907	1.302	1.240	817	881	1.34e5	9.91e4	163.4	112.5	NO	bb	bb	4.022
1234678-HpCDD	40.131	1.000	1.890e5	1.813e5	1.039	1.042	1.050	1551	1669	2.84e6	2.85e6	1832.4	1706.7	NO	bb	bb	113.247
OCDD	44.847	1.000	8.975e5	1.070e6	0.920	0.839	0.890	1419	1027	1.15e7	1.38e7	8085.5	13397.2	NO	bb	bb	836.309
13C-2378-TCDF	25.576	1.007	2.376e5	3.270e5	1.620	0.726	0.770	1089	861	3.58e6	4.85e6	3291.0	5634.7	NO	bb	bb	67.444
13C-12378-PeCDF	29.736	1.171	3.612e5	2.411e5	1.240	1.498	1.550	1424	1186	5.52e6	3.64e6	3876.6	3074.2	NO	bb	bb	93.970
13C-23478-PeCDF	31.073	1.224	3.422e5	2.339e5	1.118	1.463	1.550	1424	1186	5.27e6	3.57e6	3702.5	3008.6	NO	bb	bb	99.755
13C-123478-HxCDF	34.727	0.955	1.874e5	3.594e5	1.168	0.521	0.510	1258	1330	2.90e6	5.57e6	2303.8	4183.1	NO	bd	bd	97.694
13C-123678-HxCDF	34.861	0.959	1.954e5	3.746e5	1.386	0.521	0.510	1258	1330	2.87e6	5.50e6	2283.0	4133.3	NO	dd	dd	85.815
13C-234678-HxCDF	35.741	0.983	1.729e5	3.278e5	1.129	0.527	0.510	1258	1330	2.70e6	5.15e6	2145.8	3867.3	NO	bb	bb	92.552
13C-123789-HxCDF	36.766	1.011	1.563e5	3.002e5	0.932	0.521	0.510	1258	1330	2.54e6	4.81e6	2015.8	3614.2	NO	bb	bb	102.271
13C-1234678-HpCDF	38.638	1.063	1.042e5	2.391e5	0.895	0.436	0.440	1041	1360	1.74e6	3.95e6	1674.0	2902.0	NO	bb	bb	80.051
13C-1234789-HpCDF	40.855	1.123	8.497e4	1.924e5	0.770	0.442	0.440	1041	1360	1.24e6	2.79e6	1193.2	2049.3	NO	bb	bb	75.209
13C-1234-TCDD	25.393	0.000	2.264e5	2.903e5	1.000	0.780	0.770	1313	907	3.54e6	4.55e6	2697.2	5016.0	NO	bb	bb	100.000
13C-2378-TCDD	26.212	1.032	2.484e5	3.209e5	1.152	0.774	0.770	1313	907	3.81e6	4.85e6	2901.8	5343.6	NO	bb	bb	95.601
13C-12378-PeCDD	31.329	1.234	2.200e5	1.294e5	0.829	1.700	1.550	759	855	3.35e6	1.90e6	4414.3	2219.3	NO	bb	bb	81.575
13C-123478-HxCDD	35.863	0.986	2.310e5	1.824e5	0.995	1.267	1.240	1010	946	3.71e6	2.94e6	3673.7	3110.6	NO	bd	bd	86.714
13C-123678-HxCDD	35.975	0.989	2.398e5	1.961e5	1.157	1.223	1.240	1010	946	3.75e6	3.09e6	3717.6	3266.5	NO	db	db	78.673
13C-1234678-HpCDD	40.119	1.103	1.632e5	1.515e5	0.840	1.077	1.050	808	746	2.48e6	2.28e6	3063.9	3060.7	NO	bb	bb	78.176
13C-OCDD	44.828	1.233	2.416e5	2.698e5	0.767	0.896	0.890	1183	1152	3.03e6	3.36e6	2557.0	2918.3	NO	bb	bb	139.102
13C-123789-HxCDD	36.365	0.000	2.670e5	2.121e5	1.000	1.259	1.240	1010	946	4.28e6	3.43e6	4237.3	3623.3	NO	bb	bb	100.000
37CL-2378-TCDD	26.226	1.033	2.236e5		1.288			744		3.44e6		4620.7			bb		33.604

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
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Printed: Tuesday, March 14, 2023 11:22:22 Pacific Daylight Time

ID: 23A0420-04, Name: 23031322, Date: 14-Mar-2023, Time: 03:43:53, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.073	0.863	2.981e2	2.411e2	0.802	1.237	0.770	782	794	4.83e3	4.48e3	6.2	5.6	YES	bb	bb	0.119
1289-TCDF	27.187	1.063	2.654e2	4.571e2	0.678	0.581	0.770	782	794	4.85e3	7.80e3	6.2	9.8	YES	bb	bb	0.189
13468-PECDF					1.246		1.550	669	751								
12389-PECDF					0.496		1.550	1068	2638								
123468-HXCDF	33.067	0.952	1.054e4	8.878e3	1.169	1.187	1.240	722	834	1.65e5	1.40e5	228.6	167.8	NO	bb	bb	3.038
1368-TCDD	23.345	0.891	1.813e3	2.368e3	1.015	0.766	0.770	862	580	2.91e4	3.87e4	33.8	66.7	NO	bb	bb	0.723
1289-TCDD					0.909		0.770	862	580								
12479-PECDD	28.666	0.915	4.037e3	1.071e3	2.301	3.769	1.550	842	2319	3.98e4	2.59e4	47.2	11.2	YES	bb	db	0.635
12389-PECDD	31.752	1.013	6.039e2	3.133e2	1.184	1.927	1.550	842	2319	9.60e3	6.36e3	11.4	2.7	YES	bb	bb	0.222
124679-HXCDD	33.847	0.944	2.756e4	2.048e4	1.115	1.345	1.240	817	881	4.38e5	3.11e5	536.1	352.3	NO	bb	bb	10.420
1234679-HPCDD	39.095	0.975	2.888e5	2.845e5	1.137	1.015	1.050	1551	1669	4.79e6	4.72e6	3087.2	2829.1	NO	bb	bb	160.276
Total-tetrafurans			4.327e3		0.727			782		6.21e4							2.384
Total-penta1			2.543e4					669		3.66e5							7.591
Total-pentafurans			1.218e4		0.654			1068		1.41e5							4.936
Total-hexafurans			9.081e4		1.141			722		1.36e6							27.819
Total-heptafurans			6.803e4		0.978			1290		1.09e6							44.412
Total-Furans			2.286e5		0.922			782		3.35e6							117.964
Total-tetradioxins			3.014e3		1.024			862		4.64e4							1.203
Total-pentadioxins			9.258e3		1.502			842		1.39e5							3.451
Total-hexadioxins			9.966e4		1.005			817		1.38e6							41.091
Total-heptadioxins			4.777e5		1.088			1551		7.63e6							273.523
Total-Dioxins			1.488e6		1.130			862		2.07e7							1155.965
Total-TEQ			1.717e6					862		2.40e7							1273.929
FUNCTION1 PFK			2.956e7					290520		1.33e7							
FUNCTION2 PFK			3.339e5					145252		2.47e6							0.000
FUNCTION3 PFK			2.137e7					243797		6.20e7							0.000
FUNCTION4 PFK			1.124e7					191188		1.76e7							
FUNCTION5 PFK			9.607e4					95007		1.92e6							
FUNCTION1 HXCD...			1.310e3					430		2.19e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			0.000e0					690		0.00e0							
FUNCTION3 OCDPE			0.000e0					459		0.00e0							
FUNCTION4 NCDPE			2.459e4					553		4.33e5							0.000
FUNCTION5 DCDPE			0.000e0					487		0.00e0							

Method: T:\Autospec\Methods\Dioxin230313.mdb 13 Mar 2023 11:32:39
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: 23A0420-04, Name: 23031322, Date: 14-Mar-2023, Time: 03:43:53, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	24.26	9.400e2	1.247e3	0.727	0.75	0.77	16.4	YES	NO	bd	bd	0.533
2	Total-tetrafurans	23.70	4.174e2	6.343e2	0.727	0.66	0.77	8.3	YES	NO	dd	db	0.256
3	Total-tetrafurans	22.34	5.686e2	6.553e2	0.727	0.87	0.77	10.4	YES	NO	bb	bb	0.298
4	Total-tetrafurans	25.82	8.042e2	1.039e3	0.727	0.77	0.77	15.9	YES	NO	dd	db	0.449
5	Total-tetrafurans	25.08	3.218e2	3.970e2	0.727	0.81	0.77	5.0	YES	NO	bd	bb	0.175
6	Total-tetrafurans	24.49	1.275e3	1.486e3	0.727	0.86	0.77	23.4	YES	NO	dd	db	0.673

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-penta1	27.02	2.543e4	1.649e4		1.54	1.55	547.2	YES	NO	bb	bb	7.591

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDF	29.76	1.195e3	7.758e2	0.679	1.54	1.55	17.3	YES	NO	bb	bb	0.482
2	Total-pentafurans	29.48	5.158e2	3.761e2	0.654	1.37	1.55	10.8	YES	NO	db	db	0.231
3	Total-pentafurans	28.70	7.668e3	4.464e3	0.654	1.72	1.55	64.8	YES	NO	MM	MM	3.149
4	23478-PeCDF	31.08	1.798e3	1.168e3	0.786	1.54	1.55	24.5	YES	NO	dd	bd	0.655
5	Total-pentafurans	30.83	1.006e3	6.097e2	0.654	1.65	1.55	14.9	YES	NO	bd	bd	0.419

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexafurans	34.11	3.052e4	2.437e4	1.141	1.25	1.24	666.4	YES	NO	bb	bb	9.282
2	Total-hexafurans	33.81	8.541e2	7.417e2	1.141	1.15	1.24	15.2	YES	NO	bb	bb	0.270
3	Total-hexafurans	33.28	3.249e4	2.736e4	1.141	1.19	1.24	672.6	YES	NO	bb	bd	10.121
4	123468-HXCDF	33.07	1.054e4	8.878e3	1.169	1.19	1.24	228.6	YES	NO	bb	bb	3.038
5	123789-HxCDF	36.77	1.945e3	1.546e3	1.137	1.26	1.24	26.9	YES	NO	bb	MM	0.673
6	234678-HxCDF	35.75	4.522e3	4.161e3	1.140	1.09	1.24	67.6	YES	NO	bb	MM	1.522
7	Total-hexafurans	35.22	2.362e2	2.177e2	1.141	1.08	1.24	5.9	YES	NO	bb	bb	0.077
8	123678-HxCDF	34.88	3.431e3	2.596e3	1.091	1.32	1.24	70.6	YES	NO	db	db	0.969
9	123478-HxCDF	34.74	4.683e3	4.152e3	1.166	1.13	1.24	97.6	YES	NO	dd	dd	1.386
10	Total-hexafurans	34.59	1.593e3	1.255e3	1.141	1.27	1.24	34.2	YES	NO	bd	bd	0.482

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HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	40.87	1.427e3	1.423e3	0.953	1.00	1.05	15.7	YES	NO	bb	bb	1.078
2	Total-heptafurans	39.29	4.142e4	4.447e4	0.978	0.93	1.05	521.3	YES	NO	bb	bd	28.298
3	1234678-HpCDF	38.65	2.518e4	2.659e4	1.003	0.95	1.05	311.3	YES	NO	bb	bb	15.036

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	24.26	9.400e2	1.247e3	0.727	0.75	0.77	16.4	YES	NO	bd	bd	0.533
2	Total-tetrafurans	23.70	4.174e2	6.343e2	0.727	0.66	0.77	8.3	YES	NO	dd	db	0.256
3	Total-tetrafurans	22.34	5.686e2	6.553e2	0.727	0.87	0.77	10.4	YES	NO	bb	bb	0.298
4	Total-tetrafurans	25.82	8.042e2	1.039e3	0.727	0.77	0.77	15.9	YES	NO	dd	db	0.449
5	Total-tetrafurans	25.08	3.218e2	3.970e2	0.727	0.81	0.77	5.0	YES	NO	bd	bb	0.175
6	Total-tetrafurans	24.49	1.275e3	1.486e3	0.727	0.86	0.77	23.4	YES	NO	dd	db	0.673
7	12378-PeCDF	29.76	1.195e3	7.758e2	0.679	1.54	1.55	17.3	YES	NO	bb	bb	0.482
8	Total-pentafurans	29.48	5.158e2	3.761e2	0.654	1.37	1.55	10.8	YES	NO	db	db	0.231
9	Total-pentafurans	28.70	7.668e3	4.464e3	0.654	1.72	1.55	64.8	YES	NO	MM	MM	3.149
10	23478-PeCDF	31.08	1.798e3	1.168e3	0.786	1.54	1.55	24.5	YES	NO	dd	bd	0.655
11	Total-pentafurans	30.83	1.006e3	6.097e2	0.654	1.65	1.55	14.9	YES	NO	bd	bd	0.419
12	Total-hexafurans	34.11	3.052e4	2.437e4	1.141	1.25	1.24	666.4	YES	NO	bb	bb	9.282
13	Total-hexafurans	33.81	8.541e2	7.417e2	1.141	1.15	1.24	15.2	YES	NO	bb	bb	0.270
14	Total-hexafurans	33.28	3.249e4	2.736e4	1.141	1.19	1.24	672.6	YES	NO	bb	bd	10.121
15	123468-HXCDF	33.07	1.054e4	8.878e3	1.169	1.19	1.24	228.6	YES	NO	bb	bb	3.038
16	123789-HxCDF	36.77	1.945e3	1.546e3	1.137	1.26	1.24	26.9	YES	NO	bb	MM	0.673
17	234678-HxCDF	35.75	4.522e3	4.161e3	1.140	1.09	1.24	67.6	YES	NO	bb	MM	1.522
18	Total-hexafurans	35.22	2.362e2	2.177e2	1.141	1.08	1.24	5.9	YES	NO	bb	bb	0.077
19	123678-HxCDF	34.88	3.431e3	2.596e3	1.091	1.32	1.24	70.6	YES	NO	db	db	0.969
20	123478-HxCDF	34.74	4.683e3	4.152e3	1.166	1.13	1.24	97.6	YES	NO	dd	dd	1.386
21	Total-hexafurans	34.59	1.593e3	1.255e3	1.141	1.27	1.24	34.2	YES	NO	bd	bd	0.482
22	1234789-HpCDF	40.87	1.427e3	1.423e3	0.953	1.00	1.05	15.7	YES	NO	bb	bb	1.078
23	Total-heptafurans	39.29	4.142e4	4.447e4	0.978	0.93	1.05	521.3	YES	NO	bb	bd	28.298
24	1234678-HpCDF	38.65	2.518e4	2.659e4	1.003	0.95	1.05	311.3	YES	NO	bb	bb	15.036
25	OCDF	45.08	2.784e4	3.346e4	0.778	0.83	0.89	494.3	YES	NO	bb	bd	30.822
26	Total-penta1	27.02	2.543e4	1.649e4		1.54	1.55	547.2	YES	NO	bb	bb	7.591

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TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	26.37	3.534e2	4.101e2	1.024	0.86	0.77	6.9	YES	NO	db	db	0.131
2	Total-tetradioxins	25.41	2.461e2	3.443e2	1.024	0.71	0.77	4.8	YES	NO	bb	bb	0.101
3	Total-tetradioxins	24.56	6.019e2	8.388e2	1.024	0.72	0.77	8.4	YES	NO	bb	bb	0.247
4	1368-TCDD	23.34	1.813e3	2.368e3	1.015	0.77	0.77	33.8	YES	NO	bb	bb	0.723

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentadioxins	29.75	2.213e3	1.423e3	1.502	1.55	1.55	43.6	YES	NO	bb	bb	0.693
2	Total-pentadioxins	29.12	9.078e2	6.505e2	1.502	1.40	1.55	19.1	YES	NO	bb	bb	0.297
3	12378-PeCDD	31.34	3.539e3	2.370e3	1.022	1.49	1.55	56.3	YES	NO	bb	bb	1.655
4	Total-pentadioxins	29.96	2.598e3	1.630e3	1.502	1.59	1.55	46.1	YES	NO	bd	bd	0.806

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.38	8.761e3	6.731e3	0.907	1.30	1.24	163.4	YES	NO	bb	bb	4.022
2	Total-hexadioxins	36.15	1.866e3	1.379e3	1.005	1.35	1.24	37.4	YES	NO	db	db	0.760
3	123678-HxCDD	35.99	1.237e4	1.003e4	1.001	1.23	1.24	231.9	YES	NO	dd	dd	5.133
4	123478-HxCDD	35.87	4.007e3	3.104e3	0.996	1.29	1.24	80.0	YES	NO	bd	bd	1.728
5	Total-hexadioxins	35.09	2.648e3	2.191e3	1.005	1.21	1.24	53.6	YES	NO	db	db	1.134
6	Total-hexadioxins	34.98	3.543e4	2.828e4	1.005	1.25	1.24	451.9	YES	NO	bd	bd	14.932
7	Total-hexadioxins	34.62	7.015e3	5.626e3	1.005	1.25	1.24	133.8	YES	NO	bd	bb	2.963
8	124679-HXCDD	33.85	2.756e4	2.048e4	1.115	1.35	1.24	536.1	YES	NO	bb	bb	10.420

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.13	1.890e5	1.813e5	1.039	1.04	1.05	1832.4	YES	NO	bb	bb	113.247
2	1234679-HPCDD	39.09	2.888e5	2.845e5	1.137	1.01	1.05	3087.2	YES	NO	bb	bb	160.276

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	26.37	3.534e2	4.101e2	1.024	0.86	0.77	6.9	YES	NO	db	db	0.131
2	Total-tetradioxins	25.41	2.461e2	3.443e2	1.024	0.71	0.77	4.8	YES	NO	bb	bb	0.101
3	Total-tetradioxins	24.56	6.019e2	8.388e2	1.024	0.72	0.77	8.4	YES	NO	bb	bb	0.247
4	1368-TCDD	23.34	1.813e3	2.368e3	1.015	0.77	0.77	33.8	YES	NO	bb	bb	0.723
5	Total-Dioxins	22.19	9.951e2	1.511e3	1.130	0.66	0.77	20.4	YES	NO	bb	bb	0.389
6	Total-pentadioxins	29.75	2.213e3	1.423e3	1.502	1.55	1.55	43.6	YES	NO	bb	bb	0.693
7	Total-pentadioxins	29.12	9.078e2	6.505e2	1.502	1.40	1.55	19.1	YES	NO	bb	bb	0.297
8	12378-PeCDD	31.34	3.539e3	2.370e3	1.022	1.49	1.55	56.3	YES	NO	bb	bb	1.655
9	Total-pentadioxins	29.96	2.598e3	1.630e3	1.502	1.59	1.55	46.1	YES	NO	bd	bd	0.806
10	123789-HxCDD	36.38	8.761e3	6.731e3	0.907	1.30	1.24	163.4	YES	NO	bb	bb	4.022
11	Total-hexadioxins	36.15	1.866e3	1.379e3	1.005	1.35	1.24	37.4	YES	NO	db	db	0.760
12	123678-HxCDD	35.99	1.237e4	1.003e4	1.001	1.23	1.24	231.9	YES	NO	dd	dd	5.133
13	123478-HxCDD	35.87	4.007e3	3.104e3	0.996	1.29	1.24	80.0	YES	NO	bd	bd	1.728
14	Total-hexadioxins	35.09	2.648e3	2.191e3	1.005	1.21	1.24	53.6	YES	NO	db	db	1.134
15	Total-hexadioxins	34.98	3.543e4	2.828e4	1.005	1.25	1.24	451.9	YES	NO	bd	bd	14.932
16	Total-hexadioxins	34.62	7.015e3	5.626e3	1.005	1.25	1.24	133.8	YES	NO	bd	bb	2.963
17	124679-HXCDD	33.85	2.756e4	2.048e4	1.115	1.35	1.24	536.1	YES	NO	bb	bb	10.420
18	OCDD	44.85	8.975e5	1.070e6	0.920	0.84	0.89	8085.5	YES	NO	bb	bb	836.309
19	1234678-HpCDD	40.13	1.890e5	1.813e5	1.039	1.04	1.05	1832.4	YES	NO	bb	bb	113.247
20	1234679-HPCDD	39.09	2.888e5	2.845e5	1.137	1.01	1.05	3087.2	YES	NO	bb	bb	160.276

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	24.26	9.400e2	1.247e3	0.727	0.75	0.77	16.4	YES	NO	bd	bd	0.533
2	Total-tetrafurans	23.70	4.174e2	6.343e2	0.727	0.66	0.77	8.3	YES	NO	dd	db	0.256
3	Total-tetrafurans	22.34	5.686e2	6.553e2	0.727	0.87	0.77	10.4	YES	NO	bb	bb	0.298
4	Total-tetrafurans	25.82	8.042e2	1.039e3	0.727	0.77	0.77	15.9	YES	NO	dd	db	0.449
5	Total-tetrafurans	25.08	3.218e2	3.970e2	0.727	0.81	0.77	5.0	YES	NO	bd	bb	0.175
6	Total-tetrafurans	24.49	1.275e3	1.486e3	0.727	0.86	0.77	23.4	YES	NO	dd	db	0.673
7	12378-PeCDF	29.76	1.195e3	7.758e2	0.679	1.54	1.55	17.3	YES	NO	bb	bb	0.482
8	Total-pentafurans	29.48	5.158e2	3.761e2	0.654	1.37	1.55	10.8	YES	NO	db	db	0.231
9	Total-pentafurans	28.70	7.668e3	4.464e3	0.654	1.72	1.55	64.8	YES	NO	MM	MM	3.149
10	23478-PeCDF	31.08	1.798e3	1.168e3	0.786	1.54	1.55	24.5	YES	NO	dd	bd	0.655
11	Total-pentafurans	30.83	1.006e3	6.097e2	0.654	1.65	1.55	14.9	YES	NO	bd	bd	0.419
12	Total-hexafurans	34.11	3.052e4	2.437e4	1.141	1.25	1.24	666.4	YES	NO	bb	bb	9.282
13	Total-hexafurans	33.81	8.541e2	7.417e2	1.141	1.15	1.24	15.2	YES	NO	bb	bb	0.270
14	Total-hexafurans	33.28	3.249e4	2.736e4	1.141	1.19	1.24	672.6	YES	NO	bb	bd	10.121
15	123468-HXCDF	33.07	1.054e4	8.878e3	1.169	1.19	1.24	228.6	YES	NO	bb	bb	3.038
16	123789-HxCDF	36.77	1.945e3	1.546e3	1.137	1.26	1.24	26.9	YES	NO	bb	MM	0.673
17	234678-HxCDF	35.75	4.522e3	4.161e3	1.140	1.09	1.24	67.6	YES	NO	bb	MM	1.522
18	Total-hexafurans	35.22	2.362e2	2.177e2	1.141	1.08	1.24	5.9	YES	NO	bb	bb	0.077
19	123678-HxCDF	34.88	3.431e3	2.596e3	1.091	1.32	1.24	70.6	YES	NO	db	db	0.969
20	123478-HxCDF	34.74	4.683e3	4.152e3	1.166	1.13	1.24	97.6	YES	NO	dd	dd	1.386
21	Total-hexafurans	34.59	1.593e3	1.255e3	1.141	1.27	1.24	34.2	YES	NO	bd	bd	0.482
22	1234789-HpCDF	40.87	1.427e3	1.423e3	0.953	1.00	1.05	15.7	YES	NO	bb	bb	1.078
23	Total-heptafurans	39.29	4.142e4	4.447e4	0.978	0.93	1.05	521.3	YES	NO	bb	bd	28.298
24	1234678-HpCDF	38.65	2.518e4	2.659e4	1.003	0.95	1.05	311.3	YES	NO	bb	bb	15.036
25	OCDF	45.08	2.784e4	3.346e4	0.778	0.83	0.89	494.3	YES	NO	bb	bd	30.822
26	Total-penta1	27.02	2.543e4	1.649e4		1.54	1.55	547.2	YES	NO	bb	bb	7.591
27	Total-tetradioxins	26.37	3.534e2	4.101e2	1.024	0.86	0.77	6.9	YES	NO	db	db	0.131
28	Total-tetradioxins	25.41	2.461e2	3.443e2	1.024	0.71	0.77	4.8	YES	NO	bb	bb	0.101
29	Total-tetradioxins	24.56	6.019e2	8.388e2	1.024	0.72	0.77	8.4	YES	NO	bb	bb	0.247
30	1368-TCDD	23.34	1.813e3	2.368e3	1.015	0.77	0.77	33.8	YES	NO	bb	bb	0.723
31	Total-Dioxins	22.19	9.951e2	1.511e3	1.130	0.66	0.77	20.4	YES	NO	bb	bb	0.389
32	Total-pentadioxins	29.75	2.213e3	1.423e3	1.502	1.55	1.55	43.6	YES	NO	bb	bb	0.693
33	Total-pentadioxins	29.12	9.078e2	6.505e2	1.502	1.40	1.55	19.1	YES	NO	bb	bb	0.297
34	12378-PeCDD	31.34	3.539e3	2.370e3	1.022	1.49	1.55	56.3	YES	NO	bb	bb	1.655
35	Total-pentadioxins	29.96	2.598e3	1.630e3	1.502	1.59	1.55	46.1	YES	NO	bd	bd	0.806
36	123789-HxCDD	36.38	8.761e3	6.731e3	0.907	1.30	1.24	163.4	YES	NO	bb	bb	4.022
37	Total-hexadioxins	36.15	1.866e3	1.379e3	1.005	1.35	1.24	37.4	YES	NO	db	db	0.760

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	123678-HxCDD	35.99	1.237e4	1.003e4	1.001	1.23	1.24	231.9	YES	NO	dd	dd	5.133
39	123478-HxCDD	35.87	4.007e3	3.104e3	0.996	1.29	1.24	80.0	YES	NO	bd	bd	1.728
40	Total-hexadioxins	35.09	2.648e3	2.191e3	1.005	1.21	1.24	53.6	YES	NO	db	db	1.134
41	Total-hexadioxins	34.98	3.543e4	2.828e4	1.005	1.25	1.24	451.9	YES	NO	bd	bd	14.932
42	Total-hexadioxins	34.62	7.015e3	5.626e3	1.005	1.25	1.24	133.8	YES	NO	bd	bb	2.963
43	124679-HXCDD	33.85	2.756e4	2.048e4	1.115	1.35	1.24	536.1	YES	NO	bb	bb	10.420
44	OCDD	44.85	8.975e5	1.070e6	0.920	0.84	0.89	8085.5	YES	NO	bb	bb	836.309
45	1234678-HpCDD	40.13	1.890e5	1.813e5	1.039	1.04	1.05	1832.4	YES	NO	bb	bb	113.247
46	1234679-HPCDD	39.09	2.888e5	2.845e5	1.137	1.01	1.05	3087.2	YES	NO	bb	bb	160.276

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.31	2.956e7					45.7	YES		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	31.77	1.561e5					5.3	YES		bb		0.000
2	FUNCTION2 PFK	29.33	1.457e5					5.9	YES		db		0.000
3	FUNCTION2 PFK	29.18	3.215e4					5.8	YES		bd		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.48	1.265e5					5.7	YES		db		0.000
2	FUNCTION3 PFK	37.29	2.928e5					9.9	YES		dd		0.000
3	FUNCTION3 PFK	36.85	2.920e6					30.0	YES		bd		0.000
4	FUNCTION3 PFK	36.39	2.595e6					21.9	YES		bb		0.000
5	FUNCTION3 PFK	35.99	1.811e4					2.7	NO		bb		0.000
6	FUNCTION3 PFK	33.13	1.402e7					67.8	YES		db		0.000
7	FUNCTION3 PFK	32.65	1.397e6					116.1	YES		bd		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	37.79	9.283e6					76.4	YES		bb		
2	FUNCTION4 PFK	40.10	1.252e6					3.5	YES		bb		
3	FUNCTION4 PFK	39.22	7.088e5					12.2	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.86	5.974e2					0.7	NO		bb		
2	FUNCTION5 PFK	45.46	3.452e3					1.9	NO		bb		
3	FUNCTION5 PFK	45.10	8.010e3					1.8	NO		bb		
4	FUNCTION5 PFK	43.87	3.656e3					1.8	NO		bb		
5	FUNCTION5 PFK	42.64	6.804e4					9.0	YES		db		
6	FUNCTION5 PFK	42.59	1.231e4					5.0	YES		bd		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	25.73	8.521e2					29.1	YES		bb		0.000
2	FUNCTION1 HXCD...	24.63	1.500e2					5.6	YES		bb		0.000
3	FUNCTION1 HXCD...	22.12	2.002e2					10.9	YES		bb		0.000
4	FUNCTION1 HXCD...	21.95	1.080e2					5.5	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	38.58	1.351e2					5.2	YES		bb		0.000
2	FUNCTION4 NCDPE	38.26	2.445e4					777.9	YES		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
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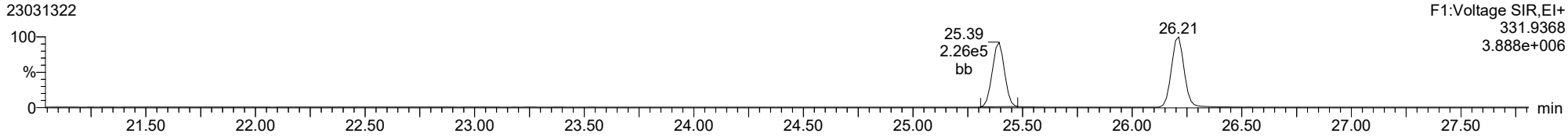
13C-1234-TCDD



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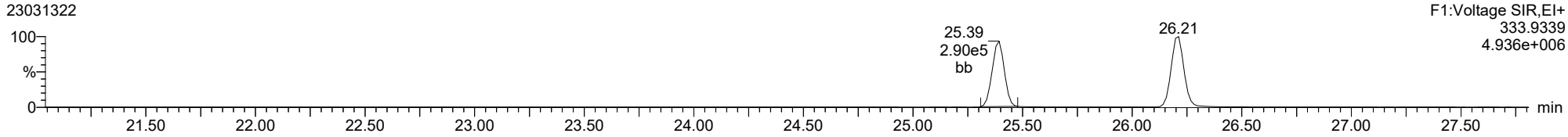

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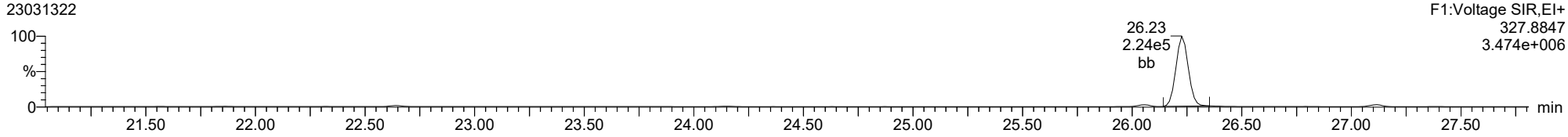

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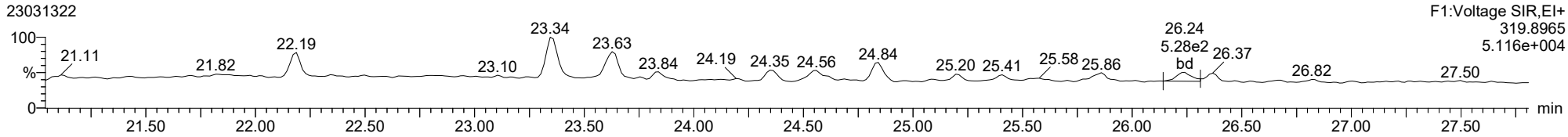
2378-TCDD



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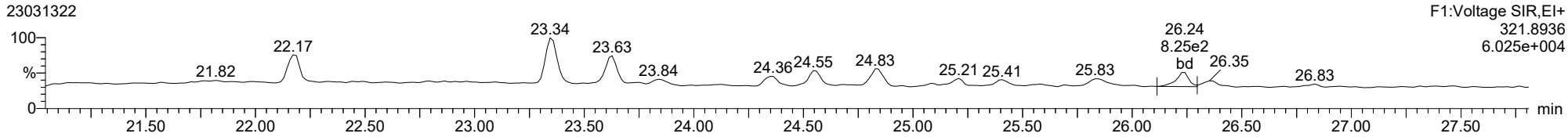

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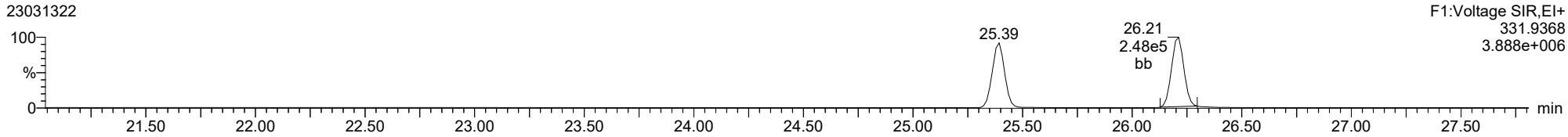

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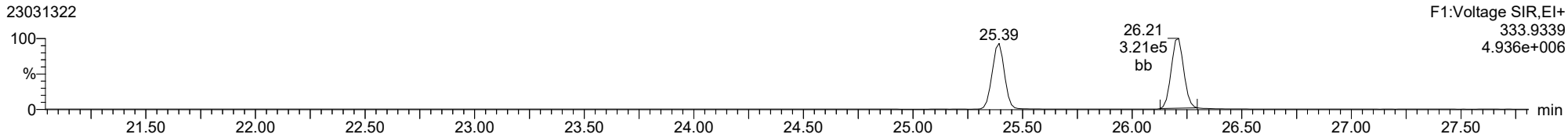

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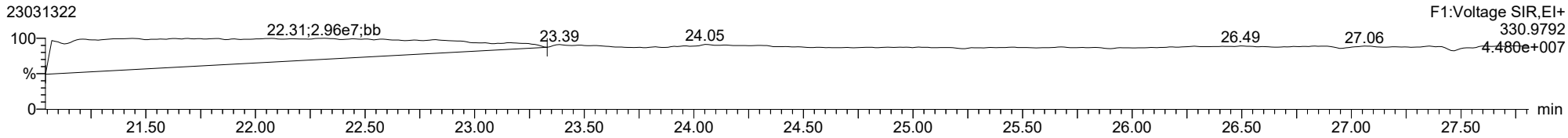

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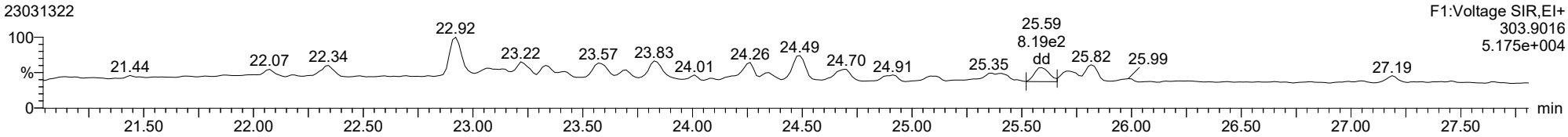
2378-TCDF



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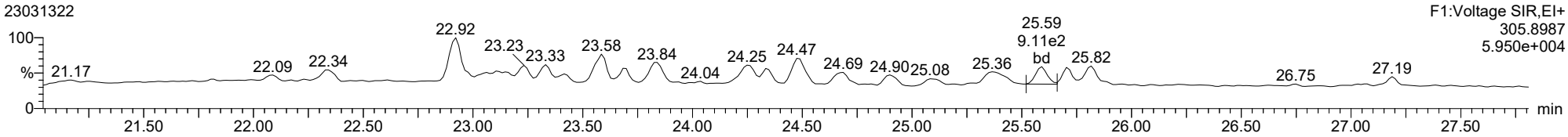

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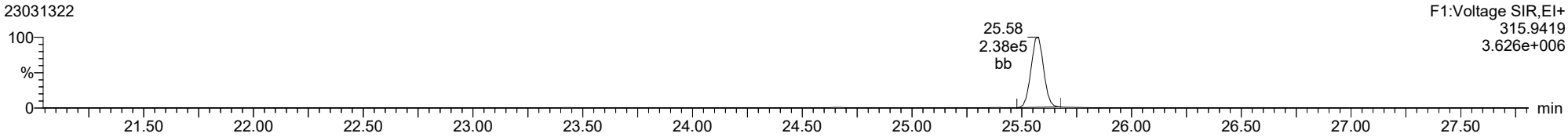

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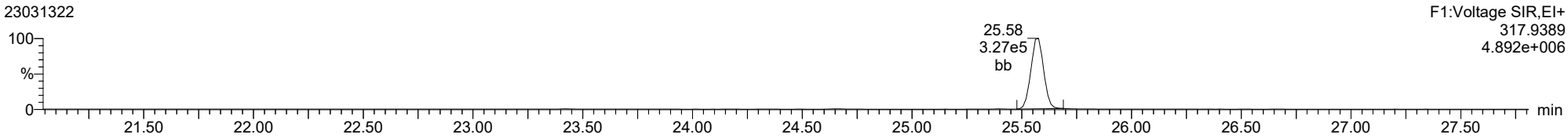

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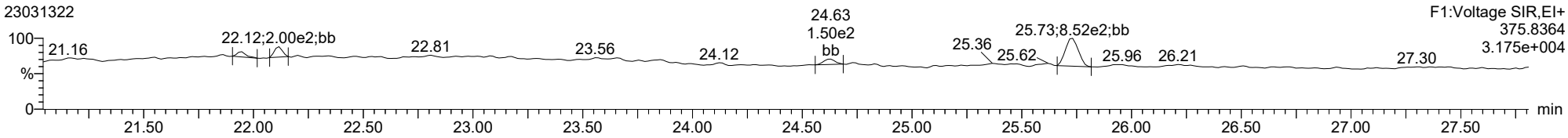

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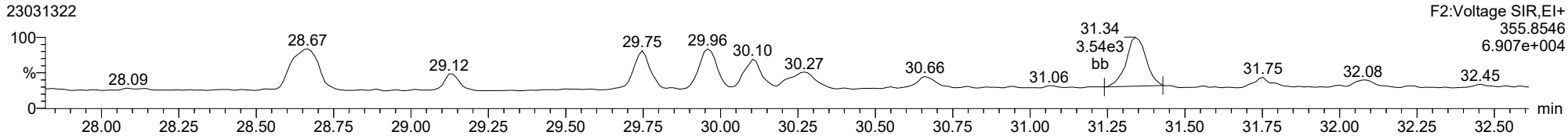
12378-PeCDD



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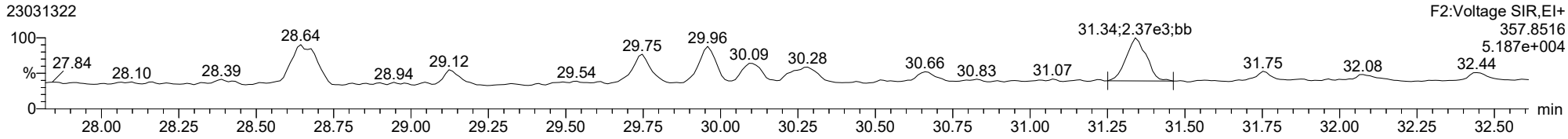

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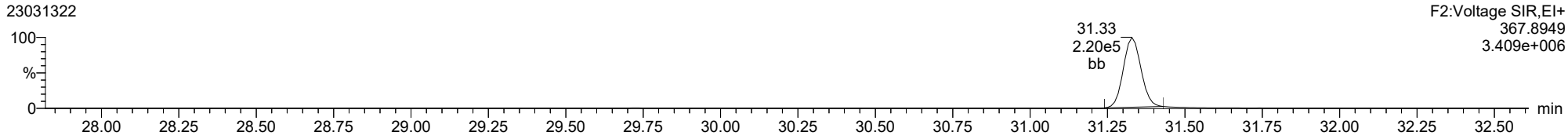

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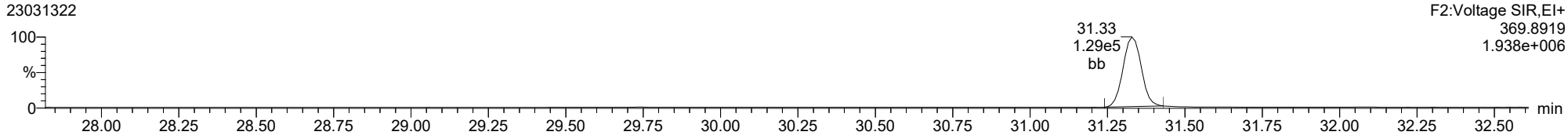

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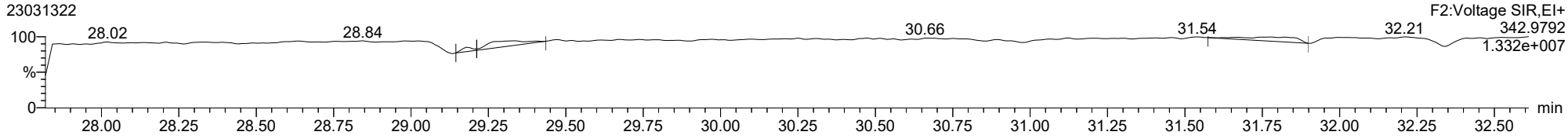

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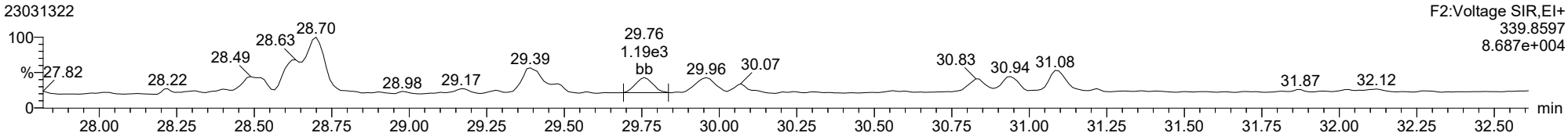

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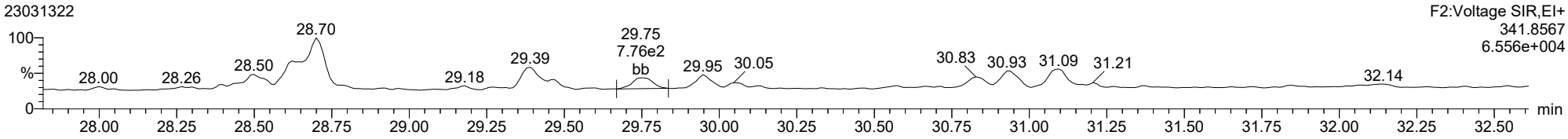

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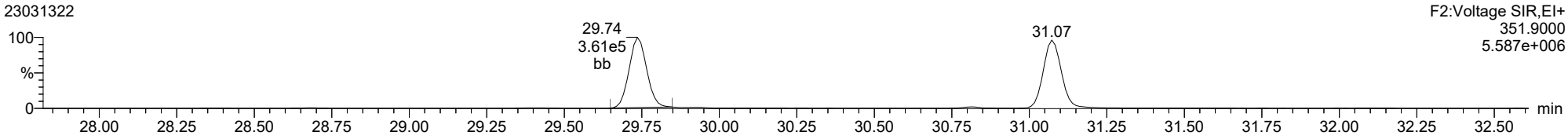

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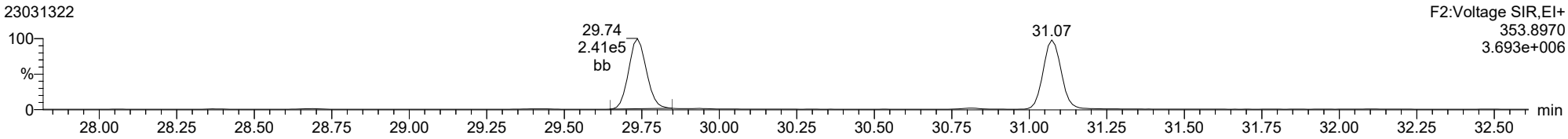

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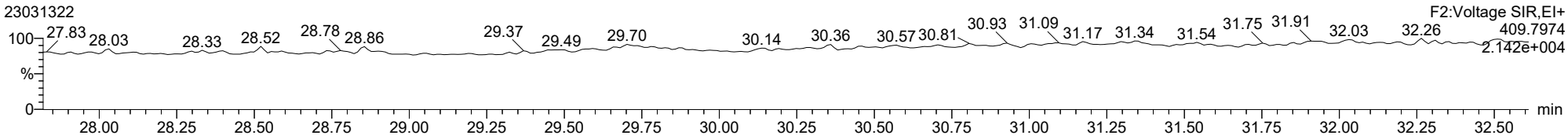

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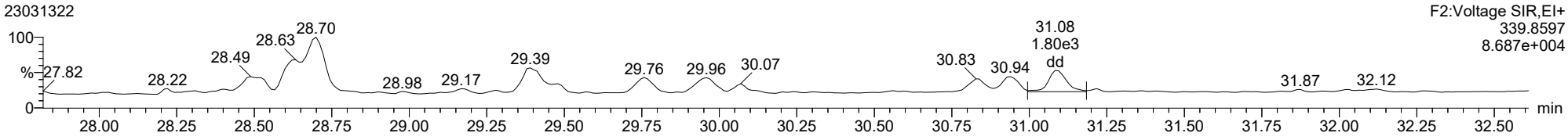

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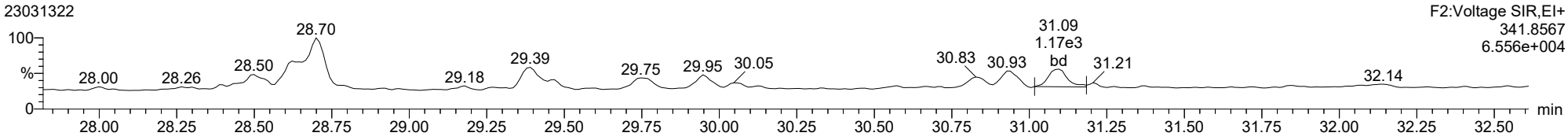

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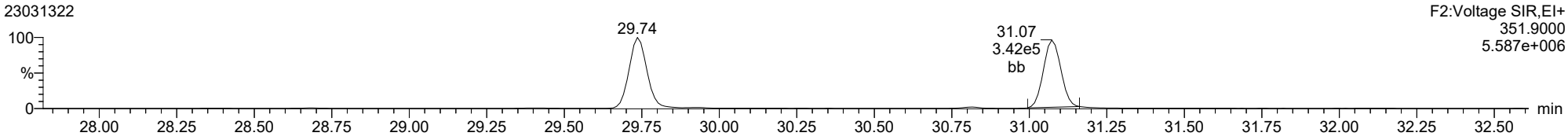

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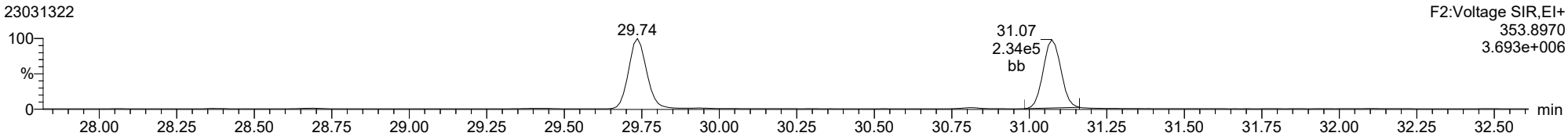

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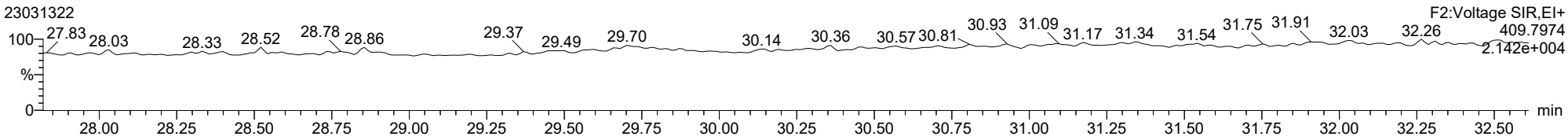

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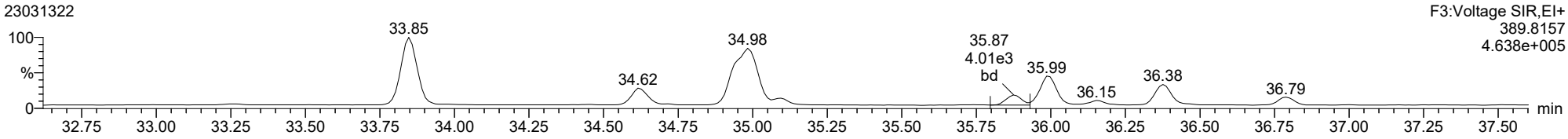
123478-HxCDD



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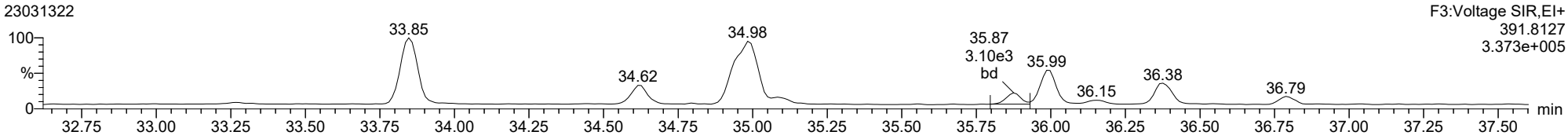

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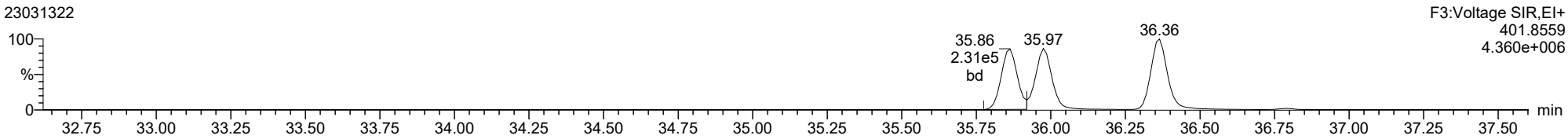

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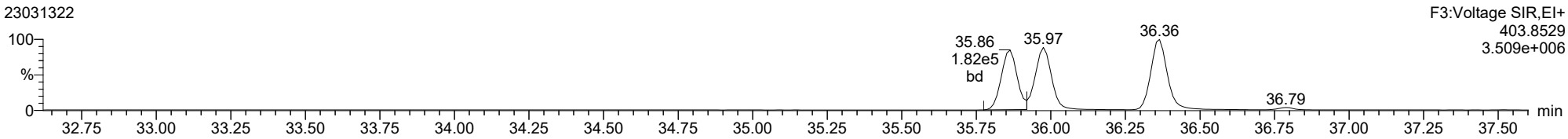

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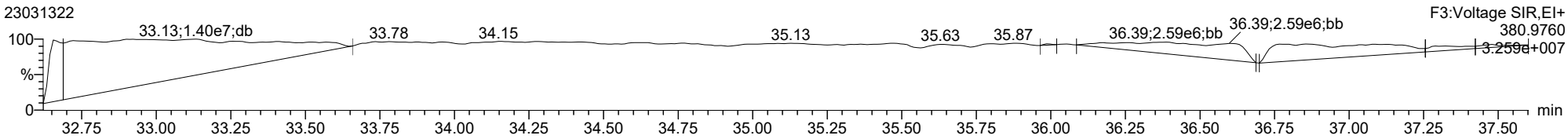

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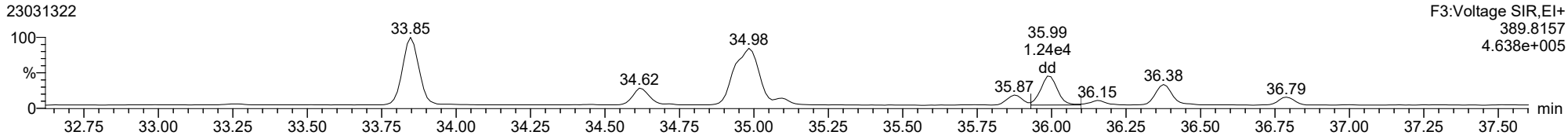

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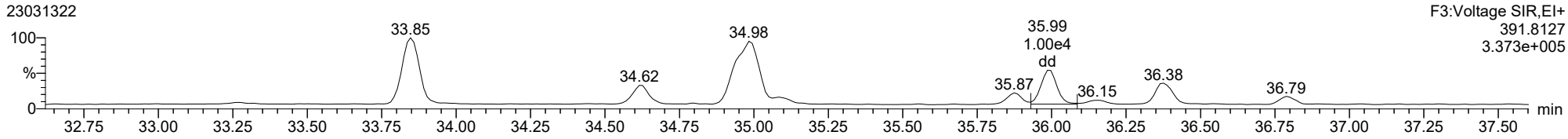

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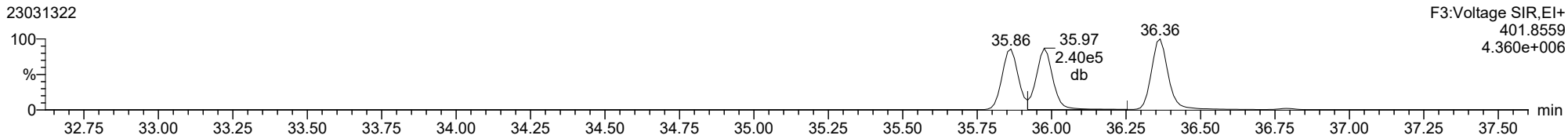

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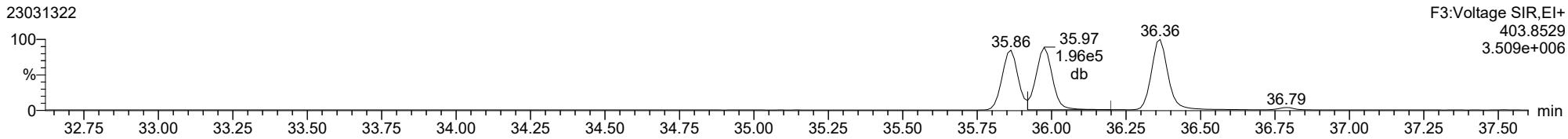

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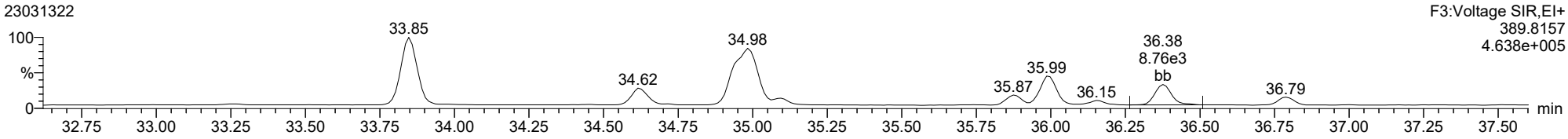

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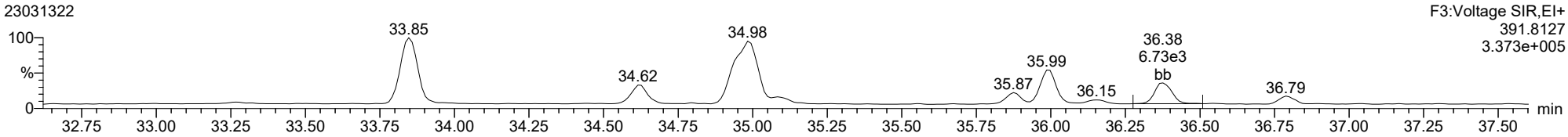

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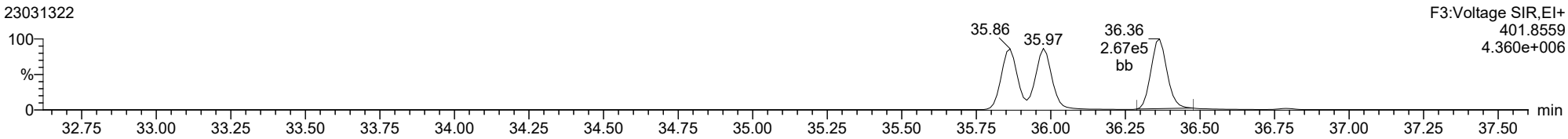

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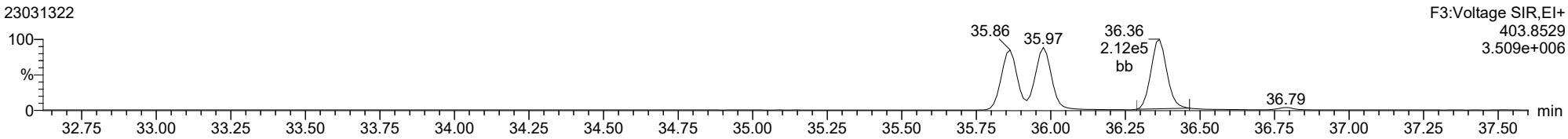

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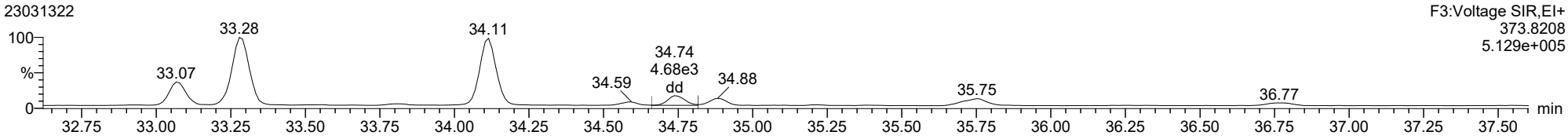

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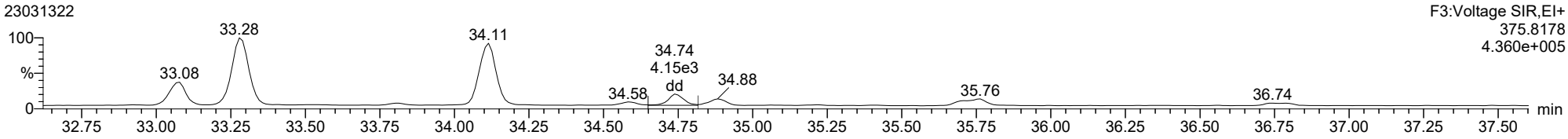

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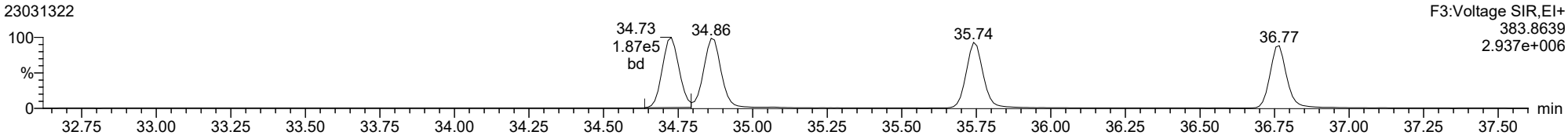

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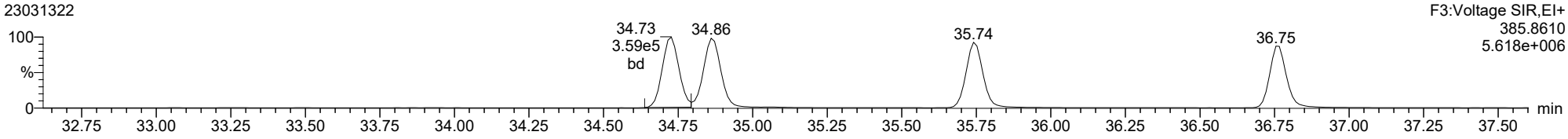

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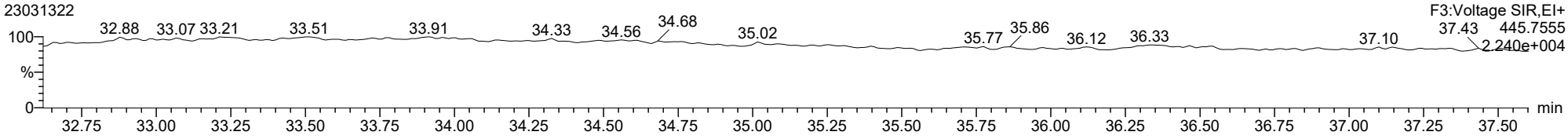

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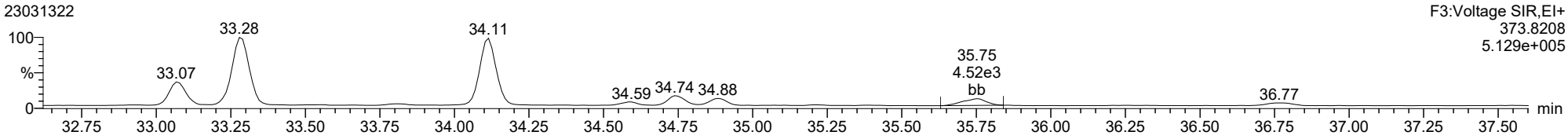
234678-HxCDF



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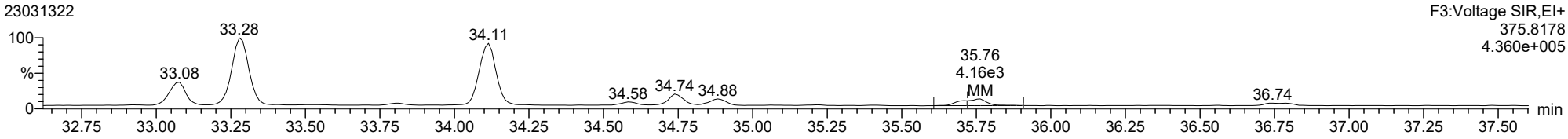

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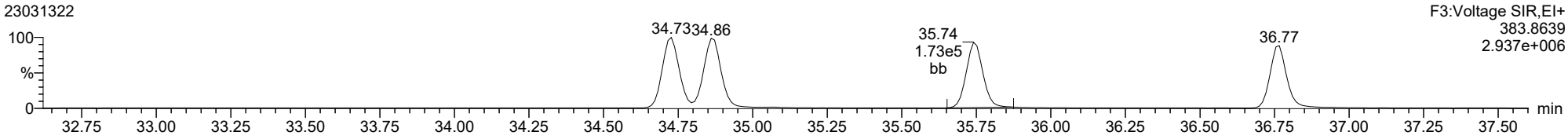

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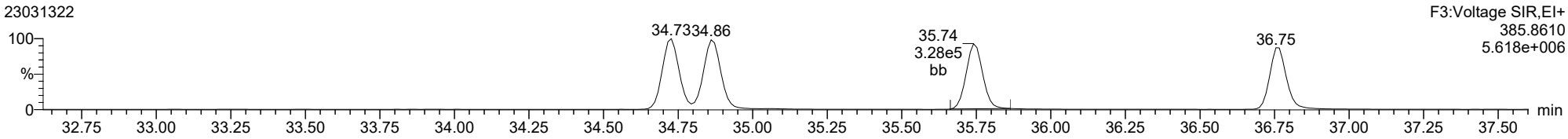

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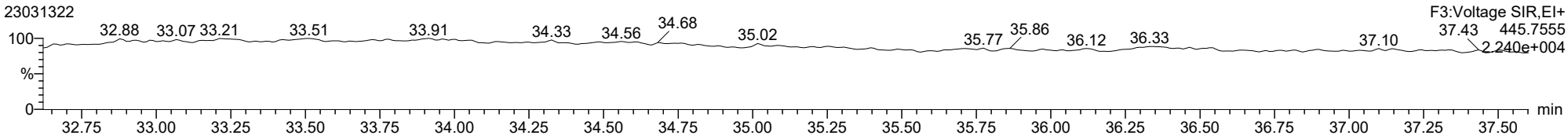

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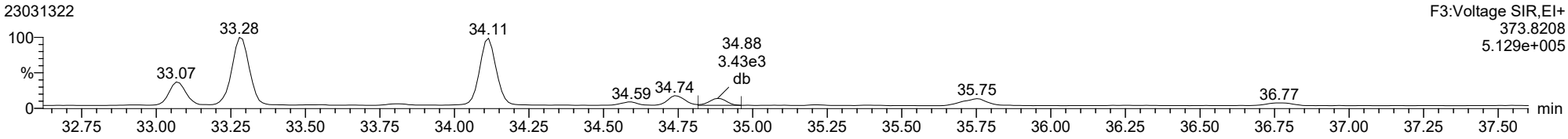

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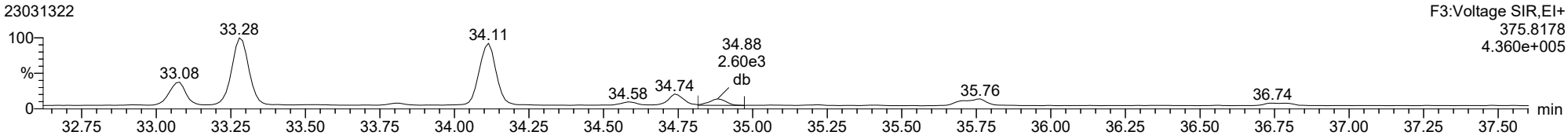

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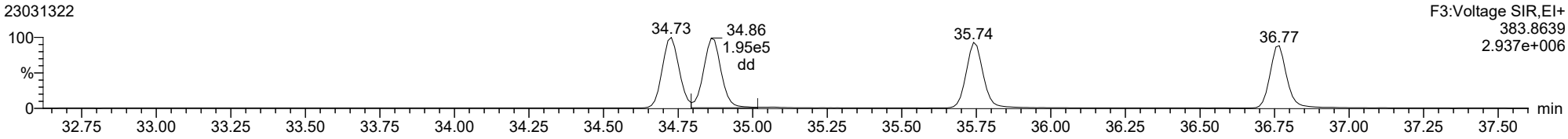

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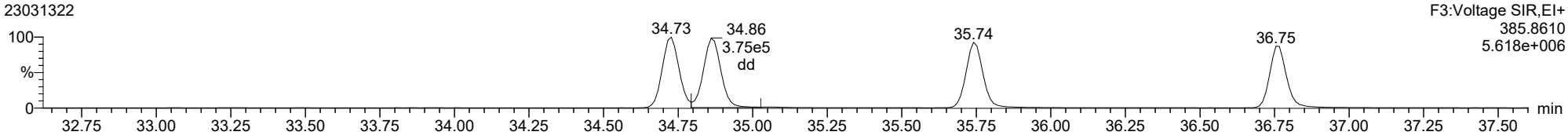

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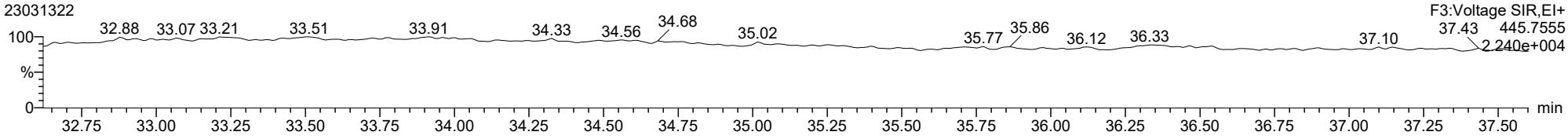

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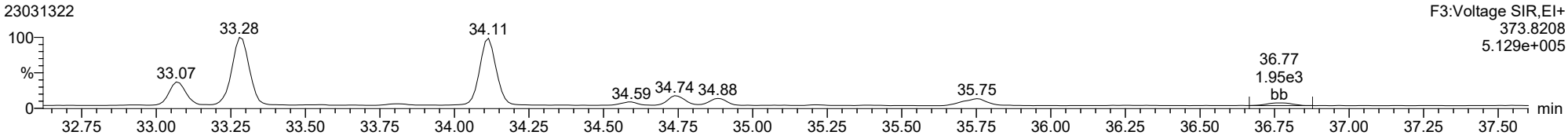

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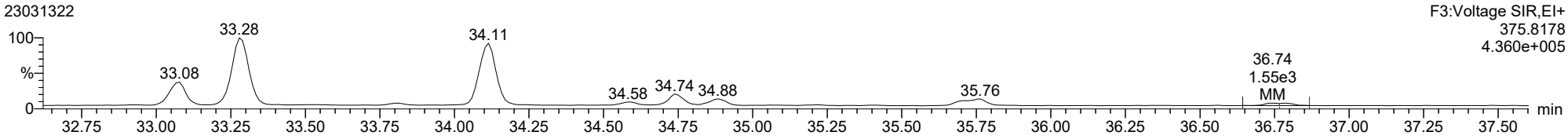

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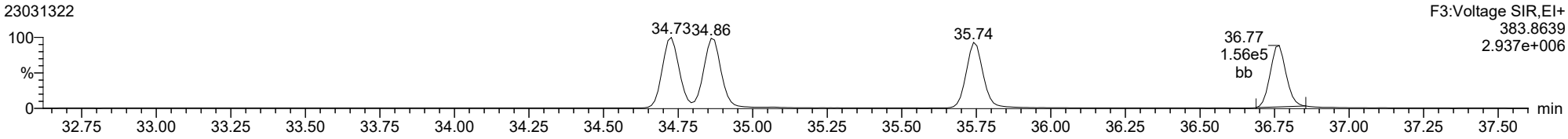

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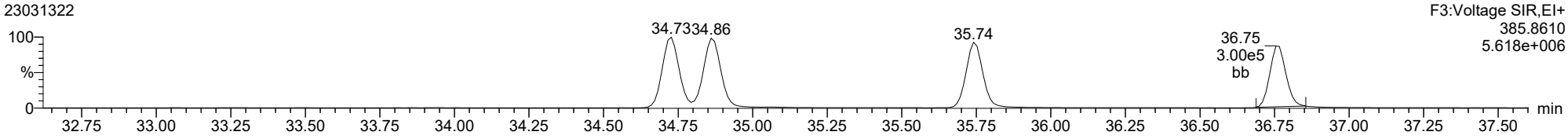

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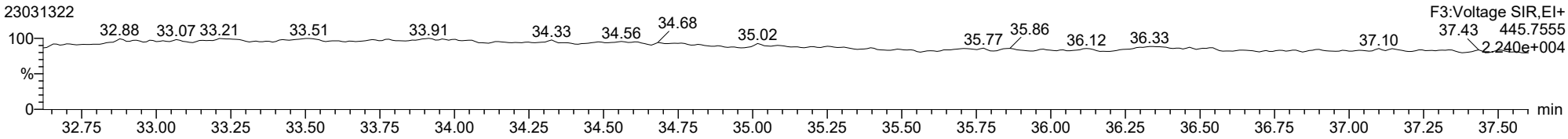

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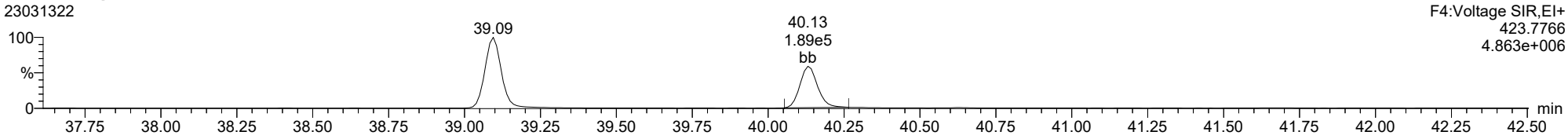

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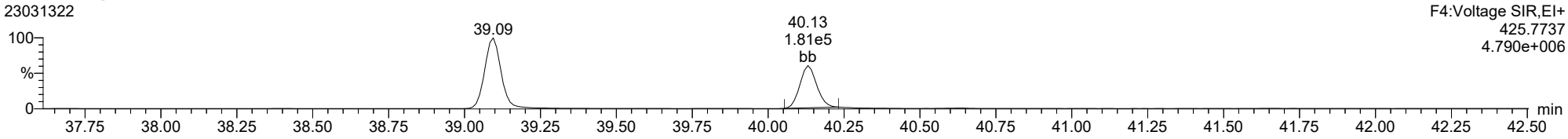

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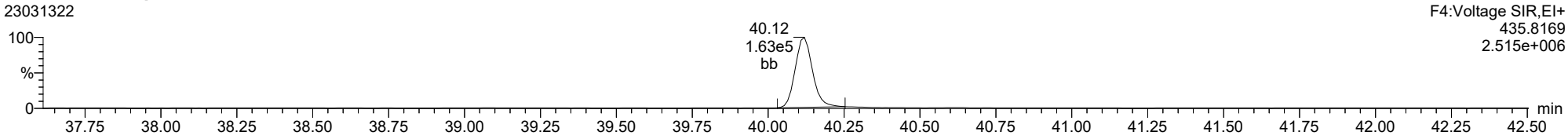

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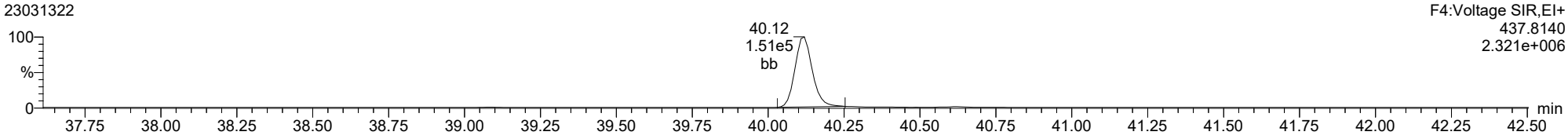

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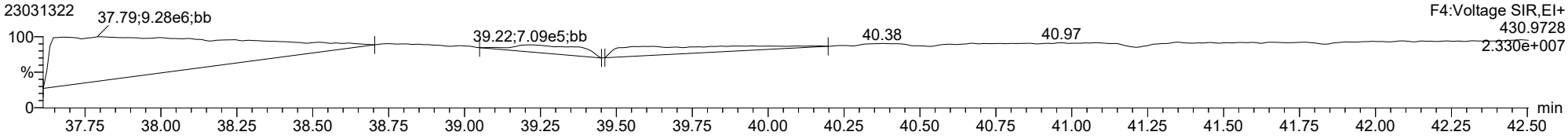

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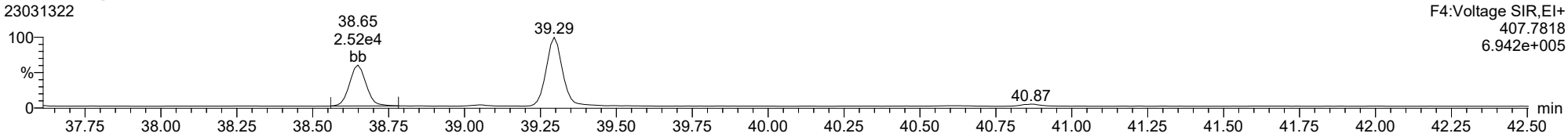

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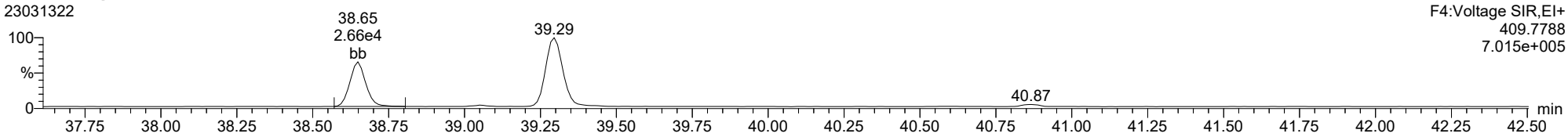

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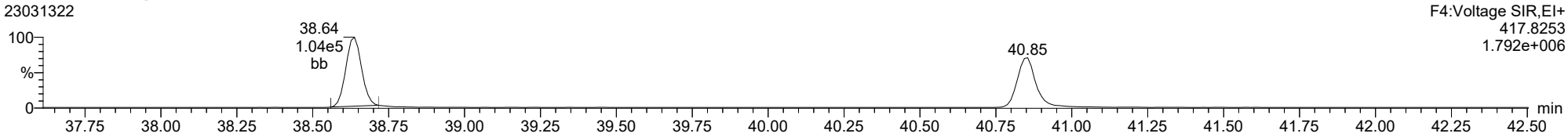

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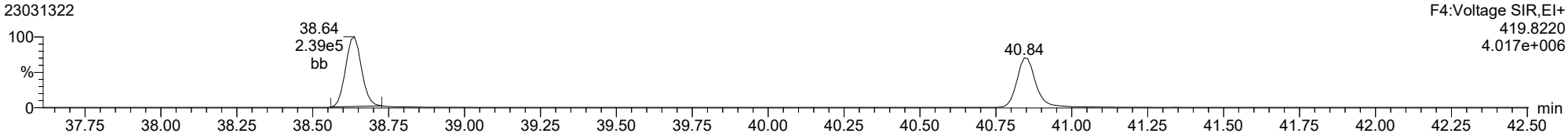

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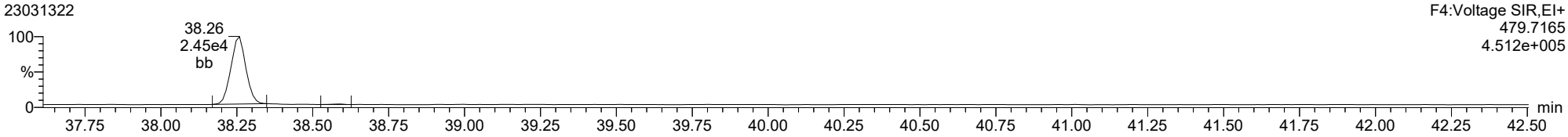

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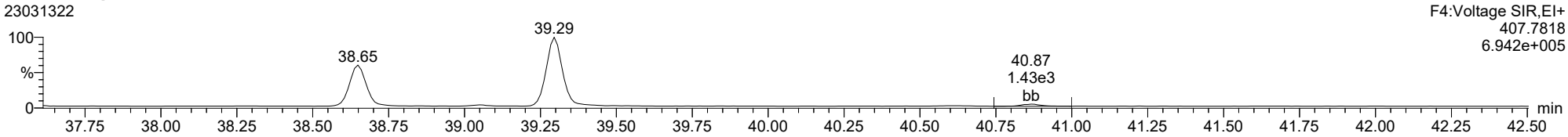

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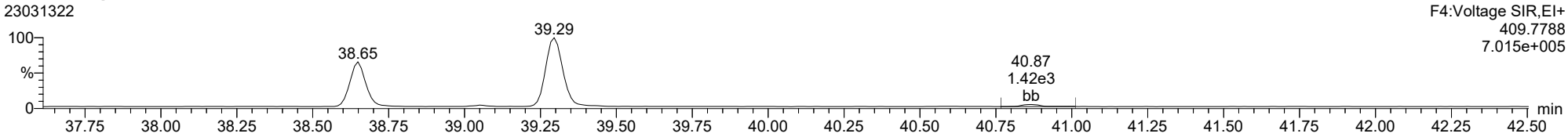

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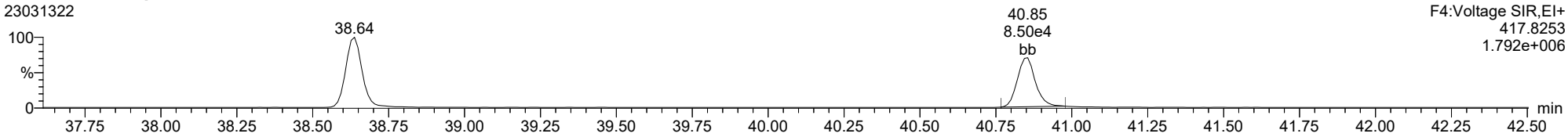

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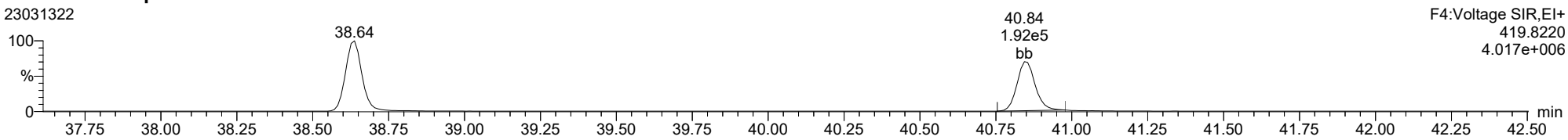
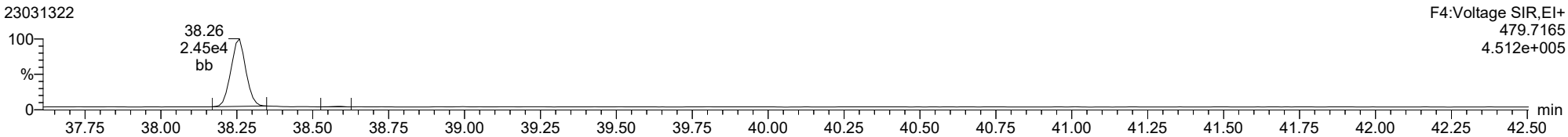


FUNCTION4 NCDPE



ID: 23A0420-04, Name: 23031322, Date: 14-Mar-2023, Time: 03:43:53, Conditions: AUTOSPEC01, User: pk

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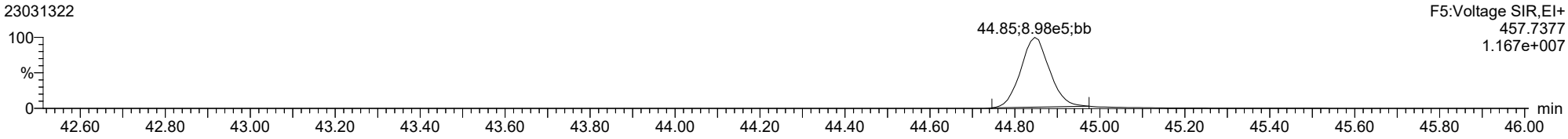

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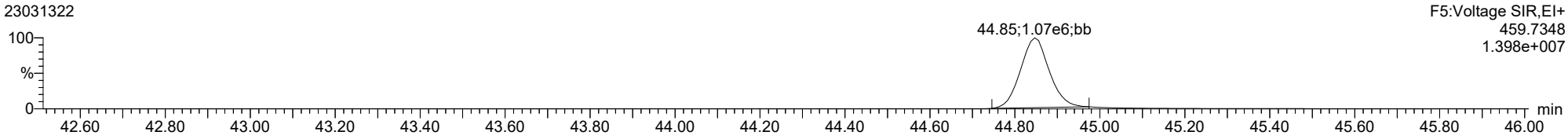

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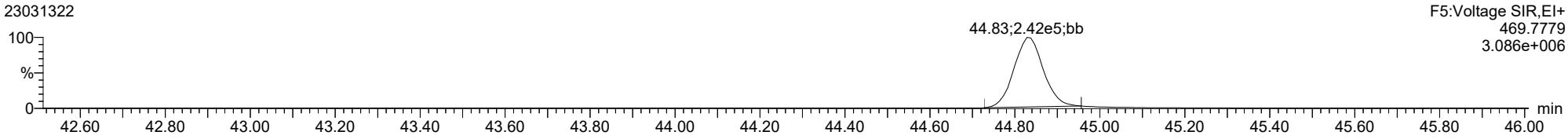

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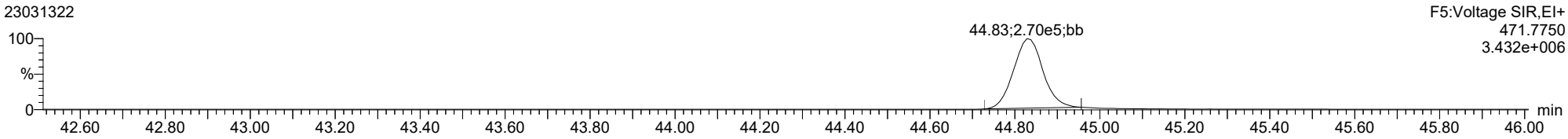

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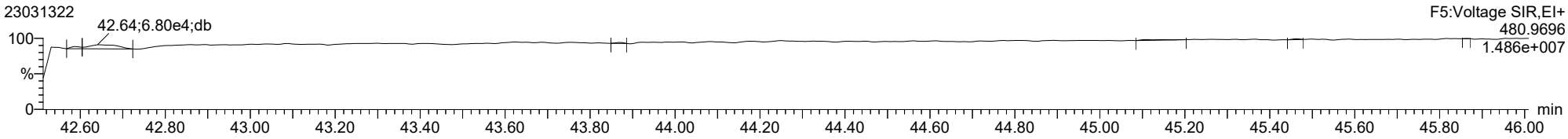

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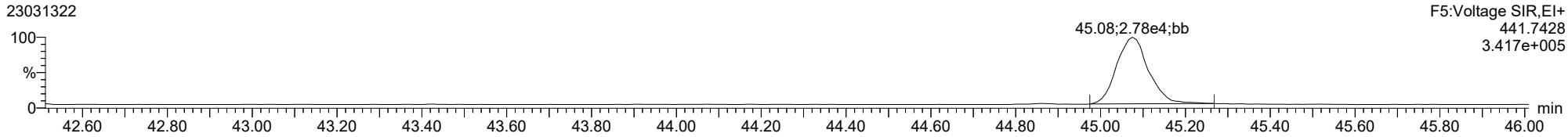

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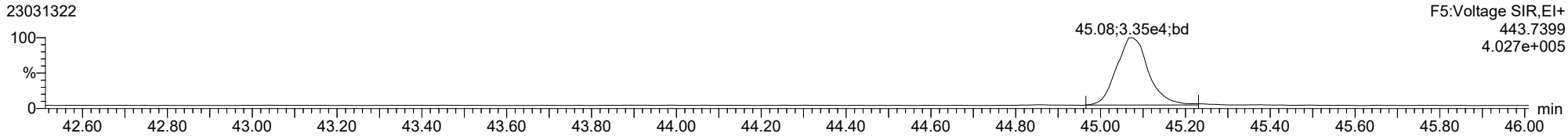
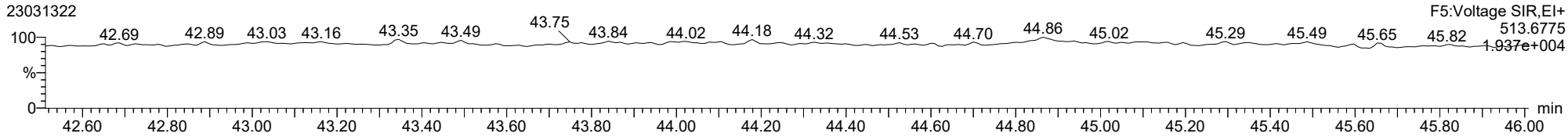
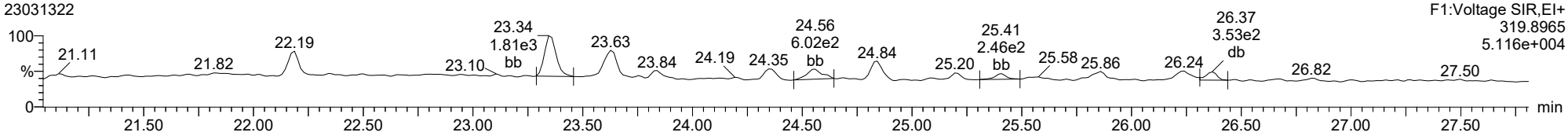


FUNCTION5 DCDPE

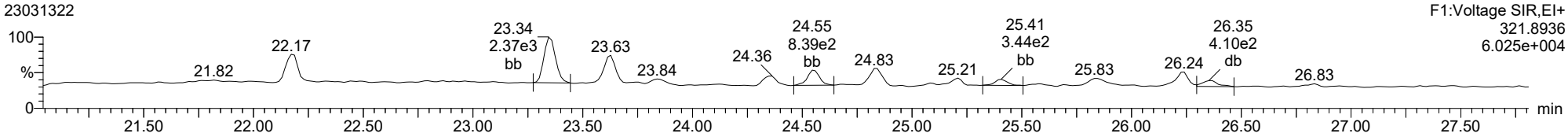


ID: 23A0420-04, Name: 23031322, Date: 14-Mar-2023, Time: 03:43:53, Conditions: AUTOSPEC01, User: pk

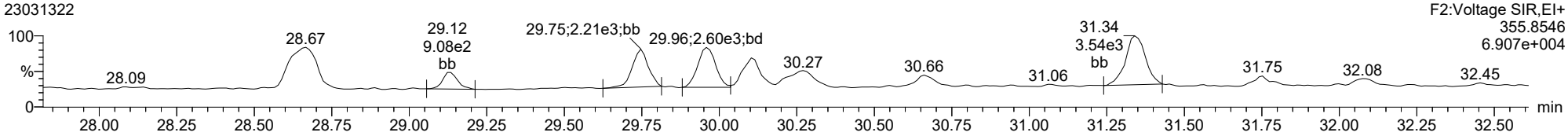
Total-tetradioxins



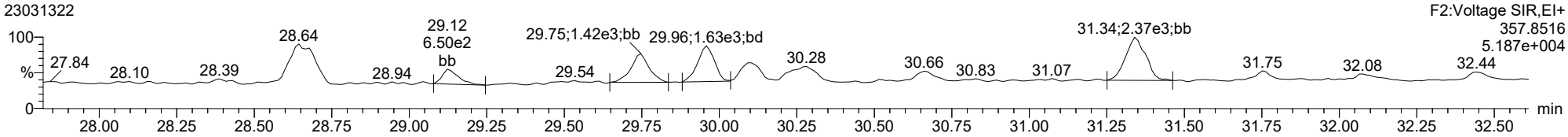
Total-tetradioxins



Total-pentadioxins



Total-pentadioxins



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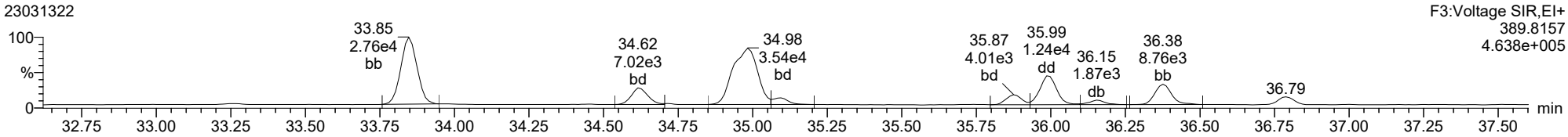
Printed: Tuesday, March 14, 2023 11:22:22 Pacific Daylight Time

ID: 23A0420-04, Name: 23031322, Date: 14-Mar-2023, Time: 03:43:53, Conditions: AUTOSPEC01, User: pk

Total-hexadioxins



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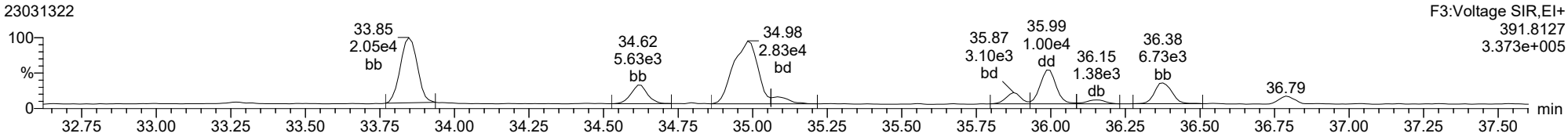

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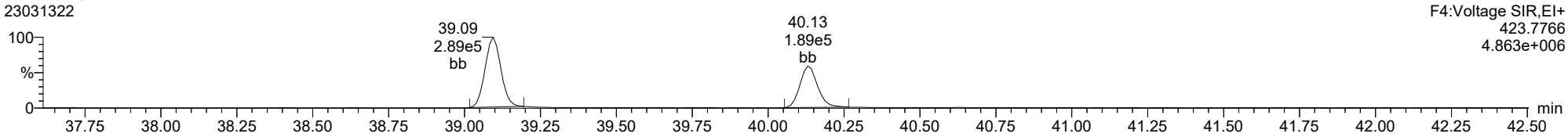

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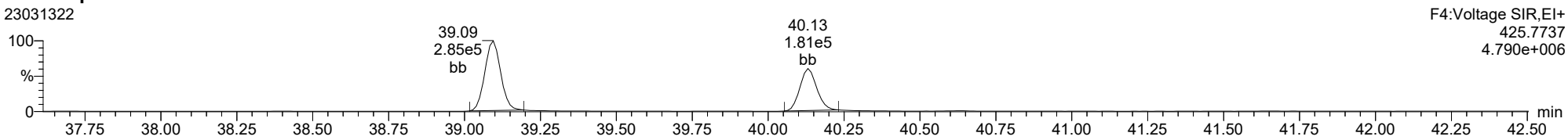
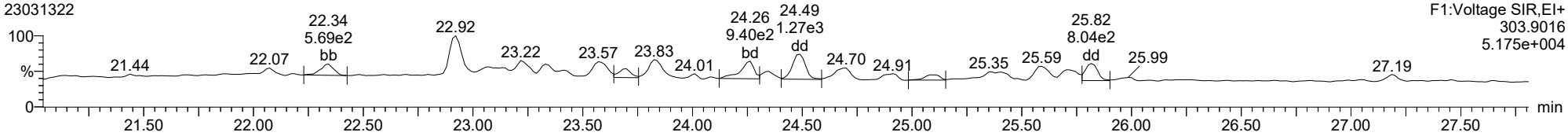


ID: 23A0420-04, Name: 23031322, Date: 14-Mar-2023, Time: 03:43:53, Conditions: AUTOSPEC01, User: pk

Total-tetrafurans



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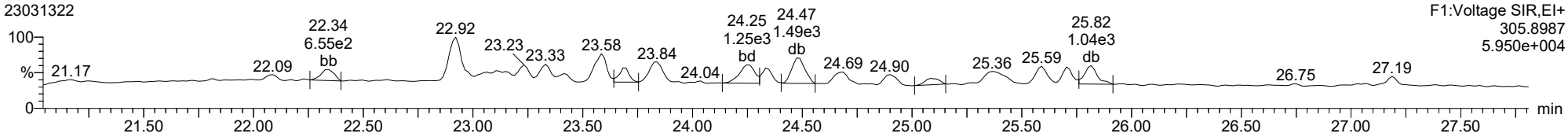

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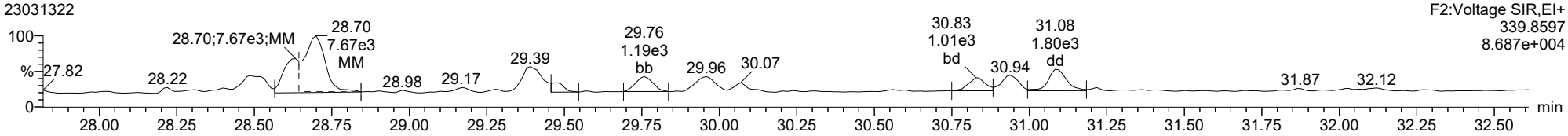

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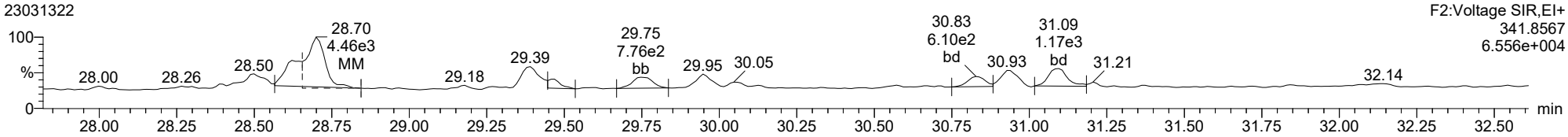

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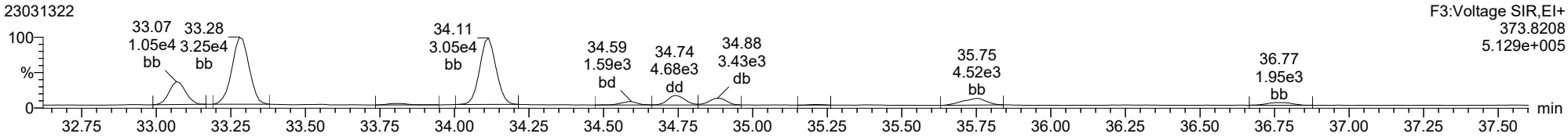
Total-hexafurans



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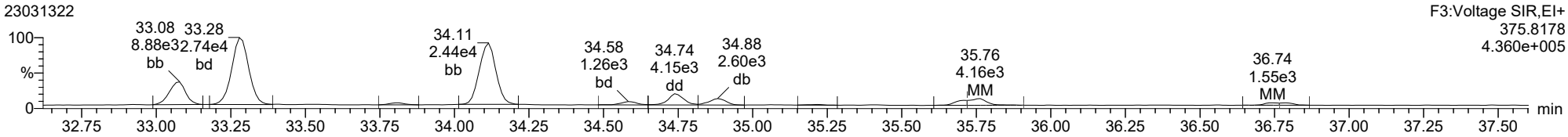

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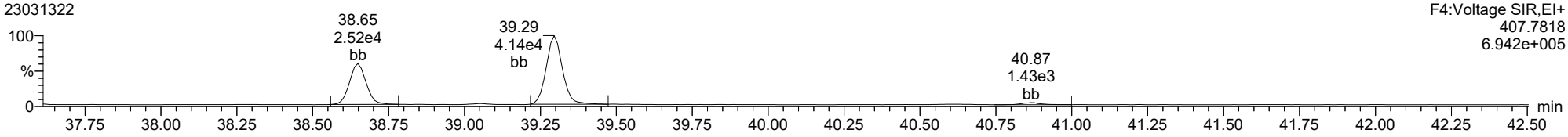

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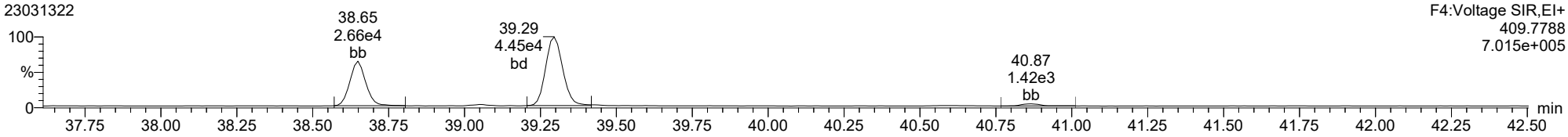

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1004

Form 1
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-08 C	File ID:	23031504
Sampled:	01/19/23 11:55	Prepared:	02/14/23 17:30	Analyzed:	03/15/23 12:48
% Solids:	57.53	Preparation:	EPA 1613	Initial/Final:	17.42 g Wet / 20 uL
Result Basis:	Dry	Sequence:	SLC0176	Calibration:	GC00015
Batch:	BLB0228	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

CAS NO.	COMPOUND	DF/Split	Ion Ratio	Ratio Limits	EDL	RL	Result	Units	Q
51207-31-9	2,3,7,8-TCDF	1	0.529	0.655-0.886	0.281	0.998	0.663	ng/kg	EMPC, X, J
1746-01-6	2,3,7,8-TCDD	1	0.789	0.655-0.886	0.152	0.998	0.321	ng/kg	J
57117-41-6	1,2,3,7,8-PeCDF	1	1.112	1.318-1.783	0.268	0.998	0.768	ng/kg	EMPC, J
57117-31-4	2,3,4,7,8-PeCDF	1	1.234	1.318-1.783	0.243	0.998	1.19	ng/kg	EMPC
40321-76-4	1,2,3,7,8-PeCDD	1	1.647	1.318-1.783	0.269	0.998	1.19	ng/kg	
70648-26-9	1,2,3,4,7,8-HxCDF	1	1.201	1.054-1.426	0.144	0.998	5.27	ng/kg	
57117-44-9	1,2,3,6,7,8-HxCDF	1	1.245	1.054-1.426	0.151	0.998	1.61	ng/kg	
60851-34-5	2,3,4,6,7,8-HxCDF	1	1.135	1.054-1.426	0.150	0.998	0.876	ng/kg	J
72918-21-9	1,2,3,7,8,9-HxCDF	1	1.127	1.054-1.426	0.150	0.998	1.11	ng/kg	
39227-28-6	1,2,3,4,7,8-HxCDD	1	1.250	1.054-1.426	0.197	0.998	1.49	ng/kg	
57653-85-7	1,2,3,6,7,8-HxCDD	1	1.195	1.054-1.426	0.188	0.998	6.08	ng/kg	
19408-74-3	1,2,3,7,8,9-HxCDD	1	1.178	1.054-1.426	0.212	0.998	3.54	ng/kg	
67562-39-4	1,2,3,4,6,7,8-HpCDF	1	1.017	0.893-1.208	0.198	0.998	48.2	ng/kg	B
55673-89-7	1,2,3,4,7,8,9-HpCDF	1	0.925	0.893-1.208	0.272	0.998	4.99	ng/kg	
35822-46-9	1,2,3,4,6,7,8-HpCDD	1	1.037	0.893-1.208	0.276	2.49	178	ng/kg	B
39001-02-0	OCDF	1	0.873	0.757-1.024	0.335	2.49	202	ng/kg	
3268-87-9	OCDD	1	0.863	0.757-1.024	0.397	9.98	1480	ng/kg	B

Homologue Groups

55722-27-5	Total TCDF	1	0.000			0.998	9.72	ng/kg
41903-57-5	Total TCDD	1	0.000			0.998	2.44	ng/kg
30402-15-4	Total PeCDF	1	0.000			0.998	12.1	ng/kg
36088-22-9	Total PeCDD	1	0.000			0.998	4.24	ng/kg
55684-94-1	Total HxCDF	1	0.000			0.998	56.4	ng/kg
34465-46-8	Total HxCDD	1	0.000			0.998	47.1	ng/kg
38998-75-3	Total HpCDF	1	0.000			0.998	203	ng/kg
37871-00-4	Total HpCDD	1	0.000			0.998	392	ng/kg

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 6.77

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 6.77

LDW23-SC1004

Form 2
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0420-08	File ID:	23031504
Sampled:	01/19/23 11:55	Prepared:	02/14/23 17:30	Analyzed:	03/15/23 12:48
Solids Wt%:	57.53	Preparation:	EPA 1613	Initial/Final:	17.42 g / 20 uL
Result Basis:	Dry	Sequence:	SLC0176	Calibration:	GC00015
Batch:	BLB0228	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

Labels	DF/Split	Ion Ratio	Ratio Limits	EDL	% REC	QC LIMITS	Q
13C12-2,3,7,8-TCDF		0.767	0.655-0.886	0.147	63.9	24 - 169 %	
13C12-2,3,7,8-TCDD		0.790	0.655-0.886	0.174	80.1	25 - 164 %	
13C12-1,2,3,7,8-PeCDF		1.511	1.318-1.783	0.140	69.7	24 - 185 %	
13C12-2,3,4,7,8-PeCDF		1.525	1.318-1.783	0.155	74.3	21 - 178 %	
13C12-1,2,3,7,8-PeCDD		1.610	1.318-1.783	0.188	80.4	25 - 181 %	
13C12-1,2,3,4,7,8-HxCDF		0.511	0.434-0.587	0.103	66.4	26 - 152 %	
13C12-1,2,3,6,7,8-HxCDF		0.510	0.434-0.587	0.087	59.4	26 - 123 %	
13C12-2,3,4,6,7,8-HxCDF		0.506	0.434-0.587	0.106	66.6	28 - 136 %	
13C12-1,2,3,7,8,9-HxCDF		0.510	0.434-0.587	0.129	75.7	29 - 147 %	
13C12-1,2,3,4,7,8-HxCDD		1.271	1.054-1.426	0.116	79.1	32 - 141 %	
13C12-1,2,3,6,7,8-HxCDD		1.265	1.054-1.426	0.100	71.1	28 - 130 %	
13C12-1,2,3,4,6,7,8-HpCDF		0.447	0.374-0.506	0.133	62.1	28 - 143 %	
13C12-1,2,3,4,7,8,9-HpCDF		0.438	0.374-0.506	0.155	65.7	26 - 138 %	
13C12-1,2,3,4,6,7,8-HpCDD		1.084	0.893-1.208	0.158	72.3	23 - 140 %	
13C12-OCDD		0.896	0.757-1.024	0.141	70.9	17 - 157 %	
37Cl4-2,3,7,8-TCDD		328.000		0.059	65.6	35 - 197 %	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:57:51 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: 23A0420-08, Name: 23031504, Date: 15-Mar-2023, Time: 12:48:44, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.563	1.001	3.499e2	6.612e2	0.702	0.529	0.770	1110	1133	6.96e3	1.09e4	6.3	9.6	YES	bd	bd	0.332
12378-PeCDF	29.736	1.001	4.974e2	4.474e2	0.679	1.112	1.550	742	997	8.33e3	7.42e3	11.2	7.4	YES	MM	bb	0.385
23478-PeCDF	31.073	1.001	9.000e2	7.296e2	0.786	1.234	1.550	742	997	1.58e4	9.14e3	21.3	9.2	YES	bb	db	0.597
123478-HxCDF	34.727	1.001	6.802e3	5.662e3	1.166	1.201	1.240	814	957	1.08e5	8.63e4	132.2	90.2	NO	dd	dd	2.640
234678-HxCDF	35.752	1.001	1.045e3	9.206e2	1.140	1.135	1.240	814	957	2.02e4	1.86e4	24.8	19.4	NO	db	db	0.439
123678-HxCDF	34.861	1.001	2.101e3	1.688e3	1.091	1.245	1.240	814	957	3.32e4	2.38e4	40.8	24.9	NO	db	db	0.809
123789-HxCDF	36.710	0.999	1.233e3	1.094e3	1.137	1.127	1.240	814	957	1.85e4	1.38e4	22.7	14.5	NO	bb	bb	0.556
1234678-HpCDF	38.615	1.000	3.548e4	3.487e4	1.003	1.017	1.050	711	1015	6.18e5	6.13e5	869.7	604.1	NO	bb	bb	24.161
1234789-HpCDF	40.833	1.000	3.023e3	3.269e3	0.953	0.925	1.050	711	1015	4.33e4	4.69e4	60.9	46.2	NO	bb	bb	2.502
OCDF	45.029	1.005	1.039e5	1.191e5	0.778	0.873	0.890	767	813	1.26e6	1.42e6	1647.3	1747.7	NO	bd	bd	100.997
2378-TCDD	26.198	1.000	3.152e2	3.993e2	1.149	0.789	0.770	841	900	4.52e3	5.89e3	5.4	6.5	NO	bd	bb	0.161
12378-PeCDD	31.307	1.000	1.057e3	6.418e2	1.022	1.647	1.550	1353	667	1.34e4	8.44e3	9.9	12.7	NO	bb	bb	0.596
123478-HxCDD	35.863	1.000	1.692e3	1.354e3	0.996	1.250	1.240	1019	1164	2.92e4	2.03e4	28.6	17.4	NO	bd	bd	0.745
123678-HxCDD	35.975	1.000	7.122e3	5.962e3	1.001	1.195	1.240	1019	1164	1.16e5	9.98e4	114.2	85.8	NO	dd	dd	3.047
123789-HxCDD	36.365	1.011	3.655e3	3.102e3	0.907	1.178	1.240	1019	1164	6.28e4	5.02e4	61.6	43.1	NO	bb	bb	1.774
1234678-HpCDD	40.097	1.000	1.494e5	1.440e5	1.039	1.037	1.050	1293	1072	2.38e6	2.28e6	1844.0	2128.1	NO	bb	bb	89.072
OCDD	44.801	1.000	8.941e5	1.036e6	0.920	0.863	0.890	833	1382	1.14e7	1.33e7	13639.1	9653.9	NO	bb	bb	739.222
13C-2378-TCDF	25.548	1.007	1.882e5	2.454e5	1.620	0.767	0.770	1459	1116	2.96e6	3.86e6	2027.6	3456.8	NO	bb	bb	63.942
13C-12378-PeCDF	29.713	1.171	2.176e5	1.440e5	1.240	1.511	1.550	1085	791	3.44e6	2.28e6	3172.0	2888.6	NO	bb	bb	69.655
13C-23478-PeCDF	31.051	1.224	2.098e5	1.376e5	1.118	1.525	1.550	1085	791	3.30e6	2.20e6	3038.4	2781.2	NO	bb	bb	74.259
13C-123478-HxCDF	34.705	0.955	1.370e5	2.679e5	1.168	0.511	0.510	766	1002	2.14e6	4.19e6	2795.2	4182.4	NO	bd	bd	66.416
13C-123678-HxCDF	34.839	0.958	1.450e5	2.844e5	1.386	0.510	0.510	766	1002	2.18e6	4.30e6	2842.3	4285.1	NO	dd	dd	59.352
13C-234678-HxCDF	35.730	0.983	1.320e5	2.607e5	1.129	0.506	0.510	766	1002	2.08e6	4.11e6	2715.2	4104.7	NO	bb	bb	66.648
13C-123789-HxCDF	36.732	1.010	1.244e5	2.438e5	0.932	0.510	0.510	766	1002	2.10e6	4.13e6	2746.8	4122.2	NO	bb	bb	75.736
13C-1234678-HpCDF	38.604	1.062	8.967e4	2.006e5	0.895	0.447	0.440	769	984	1.60e6	3.60e6	2085.8	3655.3	NO	bb	bb	62.144
13C-1234789-HpCDF	40.810	1.123	8.036e4	1.835e5	0.770	0.438	0.440	769	984	1.22e6	2.76e6	1579.6	2805.3	NO	bb	bb	65.681
13C-1234-TCDD	25.379	0.000	1.855e5	2.329e5	1.000	0.797	0.770	1442	723	2.87e6	3.63e6	1991.2	5014.4	NO	bb	bb	100.000
13C-2378-TCDD	26.184	1.032	1.705e5	2.158e5	1.152	0.790	0.770	1442	723	2.63e6	3.35e6	1821.8	4626.9	NO	bb	bb	80.113
13C-12378-PeCDD	31.307	1.234	1.721e5	1.069e5	0.829	1.610	1.550	943	745	2.71e6	1.66e6	2876.0	2232.2	NO	bb	bb	80.450
13C-123478-HxCDD	35.852	0.986	2.298e5	1.809e5	0.995	1.271	1.240	804	890	3.72e6	2.93e6	4627.7	3287.9	NO	bd	bd	79.100
13C-123678-HxCDD	35.964	0.989	2.396e5	1.894e5	1.157	1.265	1.240	804	890	3.89e6	3.04e6	4833.9	3418.2	NO	dd	db	71.080
13C-1234678-HpCDD	40.086	1.103	1.649e5	1.521e5	0.840	1.084	1.050	1007	945	2.57e6	2.42e6	2552.3	2556.7	NO	bd	bb	72.312
13C-OCDD	44.782	1.232	2.682e5	2.993e5	0.767	0.896	0.890	732	858	3.43e6	3.82e6	4688.9	4448.4	NO	bb	bb	141.718
13C-123789-HxCDD	36.354	0.000	2.903e5	2.315e5	1.000	1.254	1.240	804	890	4.90e6	3.90e6	6097.5	4377.3	NO	bb	bb	100.000
37CL-2378-TCDD	26.212	1.033	1.414e5		1.288			819		2.25e6		2743.5			bb		26.235

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:57:51 Pacific Daylight Time

ID: 23A0420-08, Name: 23031504, Date: 15-Mar-2023, Time: 12:48:44, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.059	0.863	7.675e1	2.471e2	0.802	0.311	0.770	1110	1133	1.38e3	3.24e3	1.2	2.9	YES	bb	bd	0.093
1289-TCDF	27.159	1.063	3.149e2	4.233e2	0.678	0.744	0.770	1110	1133	3.65e3	6.38e3	3.3	5.6	NO	bb	db	0.251
13468-PECDF					1.246		1.550	588	681								
12389-PECDF					0.496		1.550	742	997								
123468-HXCDF	33.045	0.952	5.144e3	4.226e3	1.169	1.217	1.240	814	957	7.82e4	6.90e4	96.0	72.1	NO	bb	bb	1.979
1368-TCDD	23.345	0.892	7.416e2	9.876e2	1.015	0.751	0.770	841	900	1.05e4	1.50e4	12.4	16.7	NO	bb	bb	0.441
1289-TCDD					0.909		0.770	841	900								
12479-PECDD	28.644	0.915	1.800e3	1.351e3	2.301	1.332	1.550	1353	667	2.23e4	1.35e4	16.5	20.2	NO	bb	bb	0.491
12389-PECDD					1.184		1.550	1353	667								
124679-HXCDD	33.825	0.943	1.753e4	1.365e4	1.115	1.284	1.240	1019	1164	2.76e5	2.21e5	270.5	190.0	NO	bd	bb	6.806
1234679-HPCDD	39.061	0.974	1.947e5	1.931e5	1.137	1.008	1.050	1293	1072	3.32e6	3.28e6	2565.7	3061.5	NO	bb	bb	107.580
Total-tetrafurans			6.507e3		0.727			1110		9.83e4							4.871
Total-penta1			1.047e4					588		1.50e5							5.186
Total-pentafurans			1.141e3		0.654			742		1.89e4							0.856
Total-hexafurans			7.102e4		1.141			814		1.11e6							28.284
Total-heptafurans			1.398e5		0.978			711		2.34e6							101.733
Total-Furans			3.328e5		0.922			1110		4.98e6							241.926
Total-tetradioxins			2.144e3		1.024			841		3.53e4							1.220
Total-pentadioxins			5.460e3		1.502			1353		7.68e4							2.127
Total-hexadioxins			5.660e4		1.005			1019		8.09e5							23.579
Total-heptadioxins			3.440e5		1.088			1293		5.70e6							196.652
Total-Dioxins			1.302e6		1.130			841		1.80e7							962.800
Total-TEQ			1.635e6					841		2.30e7							1204.726
FUNCTION1 PFK			7.743e6					388013		9.46e6							
FUNCTION2 PFK			8.450e5					204175		2.75e6							0.000
FUNCTION3 PFK			2.916e6					269393		5.39e6							0.000
FUNCTION4 PFK			0.000e0					210359		0.00e0							
FUNCTION5 PFK			1.086e6					123336		2.43e6							
FUNCTION1 HXCD...			1.388e3					508		2.40e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			3.351e2					716		6.20e3							0.000
FUNCTION3 OCDPE			3.531e2					518		4.26e3							0.000
FUNCTION4 NCDPE			6.149e3					649		1.11e5							0.000
FUNCTION5 DCDPE			0.000e0					556		0.00e0							

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: 23A0420-08, Name: 23031504, Date: 15-Mar-2023, Time: 12:48:44, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.81	5.535e2	7.668e2	0.727	0.72	0.77	7.4	YES	NO	db	db	0.419
2	Total-tetrafurans	23.57	6.483e2	7.434e2	0.727	0.87	0.77	10.4	YES	NO	dd	dd	0.442
3	Total-tetrafurans	23.32	7.961e2	1.117e3	0.727	0.71	0.77	11.6	YES	NO	dd	dd	0.607
4	Total-tetrafurans	23.23	1.422e3	1.927e3	0.727	0.74	0.77	18.4	YES	NO	dd	dd	1.063
5	Total-tetrafurans	22.91	8.446e2	1.265e3	0.727	0.67	0.77	9.6	YES	NO	bd	bd	0.669
6	Total-tetrafurans	22.34	3.608e2	4.338e2	0.727	0.83	0.77	4.5	YES	NO	bb	db	0.252
7	1289-TCDF	27.16	3.149e2	4.233e2	0.678	0.74	0.77	3.3	YES	NO	bb	db	0.251
8	Total-tetrafurans	25.80	4.164e2	6.327e2	0.727	0.66	0.77	6.0	YES	NO	db	db	0.333
9	Total-tetrafurans	25.69	2.866e2	3.762e2	0.727	0.76	0.77	4.7	YES	NO	dd	dd	0.210
10	Total-tetrafurans	25.08	3.029e2	3.491e2	0.727	0.87	0.77	4.0	YES	NO	db	db	0.207
11	Total-tetrafurans	24.67	5.609e2	7.569e2	0.727	0.74	0.77	8.5	YES	NO	db	dd	0.418

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-penta1	27.00	1.047e4	6.727e3		1.56	1.55	254.4	YES	NO	bb	bb	5.186

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	28.49	9.675e2	7.177e2	0.654	1.35	1.55	20.2	YES	NO	dd	dd	0.727
2	Total-pentafurans	28.37	1.735e2	1.247e2	0.654	1.39	1.55	5.2	YES	NO	bd	bd	0.129

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	234678-HxCDF	35.75	1.045e3	9.206e2	1.140	1.14	1.24	24.8	YES	NO	db	db	0.439
2	Total-hexafurans	35.71	1.597e3	1.487e3	1.141	1.07	1.24	30.2	YES	NO	bd	bd	0.678
3	123678-HxCDF	34.86	2.101e3	1.688e3	1.091	1.24	1.24	40.8	YES	NO	db	db	0.809
4	123478-HxCDF	34.73	6.802e3	5.662e3	1.166	1.20	1.24	132.2	YES	NO	dd	dd	2.640
5	Total-hexafurans	34.09	3.483e4	2.819e4	1.141	1.24	1.24	669.3	YES	NO	bb	bb	13.855
6	Total-hexafurans	33.78	5.499e2	4.497e2	1.141	1.22	1.24	9.9	YES	NO	bb	bb	0.220
7	Total-hexafurans	33.26	1.771e4	1.462e4	1.141	1.21	1.24	336.3	YES	NO	bb	bb	7.107
8	123468-HXCDF	33.04	5.144e3	4.226e3	1.169	1.22	1.24	96.0	YES	NO	bb	bb	1.979
9	123789-HxCDF	36.71	1.233e3	1.094e3	1.137	1.13	1.24	22.7	YES	NO	bb	bb	0.556

ID: 23A0420-08, Name: 23031504, Date: 15-Mar-2023, Time: 12:48:44, Conditions: AUTOSPEC01, User: pk

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	40.83	3.023e3	3.269e3	0.953	0.92	1.05	60.9	YES	NO	bb	bb	2.502
2	Total-heptafurans	39.26	1.007e5	1.017e5	0.978	0.99	1.05	2345.2	YES	NO	bb	bb	74.674
3	Total-heptafurans	39.02	5.660e2	5.052e2	0.978	1.12	1.05	11.5	YES	NO	bb	bb	0.395
4	1234678-HpCDF	38.62	3.548e4	3.487e4	1.003	1.02	1.05	869.7	YES	NO	bb	bb	24.161

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.81	5.535e2	7.668e2	0.727	0.72	0.77	7.4	YES	NO	db	db	0.419
2	Total-tetrafurans	23.57	6.483e2	7.434e2	0.727	0.87	0.77	10.4	YES	NO	dd	dd	0.442
3	Total-tetrafurans	23.32	7.961e2	1.117e3	0.727	0.71	0.77	11.6	YES	NO	dd	dd	0.607
4	Total-tetrafurans	23.23	1.422e3	1.927e3	0.727	0.74	0.77	18.4	YES	NO	dd	dd	1.063
5	Total-tetrafurans	22.91	8.446e2	1.265e3	0.727	0.67	0.77	9.6	YES	NO	bd	bd	0.669
6	Total-tetrafurans	22.34	3.608e2	4.338e2	0.727	0.83	0.77	4.5	YES	NO	bb	db	0.252
7	1289-TCDF	27.16	3.149e2	4.233e2	0.678	0.74	0.77	3.3	YES	NO	bb	db	0.251
8	Total-tetrafurans	25.80	4.164e2	6.327e2	0.727	0.66	0.77	6.0	YES	NO	db	db	0.333
9	Total-tetrafurans	25.69	2.866e2	3.762e2	0.727	0.76	0.77	4.7	YES	NO	dd	dd	0.210
10	Total-tetrafurans	25.08	3.029e2	3.491e2	0.727	0.87	0.77	4.0	YES	NO	db	db	0.207
11	Total-tetrafurans	24.67	5.609e2	7.569e2	0.727	0.74	0.77	8.5	YES	NO	db	dd	0.418
12	Total-pentafurans	28.49	9.675e2	7.177e2	0.654	1.35	1.55	20.2	YES	NO	dd	dd	0.727
13	Total-pentafurans	28.37	1.735e2	1.247e2	0.654	1.39	1.55	5.2	YES	NO	bd	bd	0.129
14	234678-HxCDF	35.75	1.045e3	9.206e2	1.140	1.14	1.24	24.8	YES	NO	db	db	0.439
15	Total-hexafurans	35.71	1.597e3	1.487e3	1.141	1.07	1.24	30.2	YES	NO	bd	bd	0.678
16	123678-HxCDF	34.86	2.101e3	1.688e3	1.091	1.24	1.24	40.8	YES	NO	db	db	0.809
17	123478-HxCDF	34.73	6.802e3	5.662e3	1.166	1.20	1.24	132.2	YES	NO	dd	dd	2.640
18	Total-hexafurans	34.09	3.483e4	2.819e4	1.141	1.24	1.24	669.3	YES	NO	bb	bb	13.855
19	Total-hexafurans	33.78	5.499e2	4.497e2	1.141	1.22	1.24	9.9	YES	NO	bb	bb	0.220
20	Total-hexafurans	33.26	1.771e4	1.462e4	1.141	1.21	1.24	336.3	YES	NO	bb	bb	7.107
21	123468-HXCDF	33.04	5.144e3	4.226e3	1.169	1.22	1.24	96.0	YES	NO	bb	bb	1.979
22	123789-HxCDF	36.71	1.233e3	1.094e3	1.137	1.13	1.24	22.7	YES	NO	bb	bb	0.556
23	1234789-HpCDF	40.83	3.023e3	3.269e3	0.953	0.92	1.05	60.9	YES	NO	bb	bb	2.502
24	Total-heptafurans	39.26	1.007e5	1.017e5	0.978	0.99	1.05	2345.2	YES	NO	bb	bb	74.674
25	Total-heptafurans	39.02	5.660e2	5.052e2	0.978	1.12	1.05	11.5	YES	NO	bb	bb	0.395
26	1234678-HpCDF	38.62	3.548e4	3.487e4	1.003	1.02	1.05	869.7	YES	NO	bb	bb	24.161
27	OCDF	45.03	1.039e5	1.191e5	0.778	0.87	0.89	1647.3	YES	NO	bd	bd	100.997
28	Total-penta1	27.00	1.047e4	6.727e3		1.56	1.55	254.4	YES	NO	bb	bb	5.186

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TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.34	7.416e2	9.876e2	1.015	0.75	0.77	12.4	YES	NO	bb	bb	0.441
2	2378-TCDD	26.20	3.152e2	3.993e2	1.149	0.79	0.77	5.4	YES	NO	bd	bb	0.161
3	Total-tetradioxins	24.81	3.662e2	4.222e2	1.024	0.87	0.77	9.2	YES	NO	bb	bb	0.199
4	Total-tetradioxins	24.55	2.481e2	2.881e2	1.024	0.86	0.77	4.9	YES	NO	dd	bb	0.135
5	Total-tetradioxins	23.61	4.724e2	6.515e2	1.024	0.73	0.77	10.2	YES	NO	bb	bb	0.284

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.31	1.057e3	6.418e2	1.022	1.65	1.55	9.9	YES	NO	bb	bb	0.596
2	Total-pentadioxins	29.94	1.102e3	6.894e2	1.502	1.60	1.55	11.7	YES	NO	dd	bb	0.427
3	Total-pentadioxins	29.72	9.916e2	7.390e2	1.502	1.34	1.55	12.2	YES	NO	bd	bb	0.413
4	Total-pentadioxins	29.11	5.095e2	3.286e2	1.502	1.55	1.55	6.4	YES	NO	bb	bb	0.200
5	12479-PECDD	28.64	1.800e3	1.351e3	2.301	1.33	1.55	16.5	YES	NO	bb	bb	0.491

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	124679-HXCDD	33.82	1.753e4	1.365e4	1.115	1.28	1.24	270.5	YES	NO	bd	bb	6.806
2	123789-HxCDD	36.36	3.655e3	3.102e3	0.907	1.18	1.24	61.6	YES	NO	bb	bb	1.774
3	Total-hexadioxins	36.14	1.132e3	9.887e2	1.005	1.14	1.24	17.9	YES	NO	db	db	0.503
4	123678-HxCDD	35.97	7.122e3	5.962e3	1.001	1.19	1.24	114.2	YES	NO	dd	dd	3.047
5	123478-HxCDD	35.86	1.692e3	1.354e3	0.996	1.25	1.24	28.6	YES	NO	bd	bd	0.745
6	Total-hexadioxins	35.07	1.893e3	1.499e3	1.005	1.26	1.24	30.8	YES	NO	db	db	0.804
7	Total-hexadioxins	34.97	1.977e4	1.524e4	1.005	1.30	1.24	209.6	YES	NO	bd	bd	8.300
8	Total-hexadioxins	34.60	3.806e3	2.946e3	1.005	1.29	1.24	61.1	YES	NO	bb	bb	1.600

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.10	1.494e5	1.440e5	1.039	1.04	1.05	1844.0	YES	NO	bb	bb	89.072
2	1234679-HPCDD	39.06	1.947e5	1.931e5	1.137	1.01	1.05	2565.7	YES	NO	bb	bb	107.580

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.34	7.416e2	9.876e2	1.015	0.75	0.77	12.4	YES	NO	bb	bb	0.441
2	2378-TCDD	26.20	3.152e2	3.993e2	1.149	0.79	0.77	5.4	YES	NO	bd	bb	0.161
3	Total-tetradioxins	24.81	3.662e2	4.222e2	1.024	0.87	0.77	9.2	YES	NO	bb	bb	0.199
4	Total-tetradioxins	24.55	2.481e2	2.881e2	1.024	0.86	0.77	4.9	YES	NO	dd	bb	0.135
5	Total-tetradioxins	23.61	4.724e2	6.515e2	1.024	0.73	0.77	10.2	YES	NO	bb	bb	0.284
6	12378-PeCDD	31.31	1.057e3	6.418e2	1.022	1.65	1.55	9.9	YES	NO	bb	bb	0.596
7	Total-pentadioxins	29.94	1.102e3	6.894e2	1.502	1.60	1.55	11.7	YES	NO	dd	bb	0.427
8	Total-pentadioxins	29.72	9.916e2	7.390e2	1.502	1.34	1.55	12.2	YES	NO	bd	bb	0.413
9	Total-pentadioxins	29.11	5.095e2	3.286e2	1.502	1.55	1.55	6.4	YES	NO	bb	bb	0.200
10	12479-PECDD	28.64	1.800e3	1.351e3	2.301	1.33	1.55	16.5	YES	NO	bb	bb	0.491
11	124679-HXCDD	33.82	1.753e4	1.365e4	1.115	1.28	1.24	270.5	YES	NO	bd	bb	6.806
12	123789-HxCDD	36.36	3.655e3	3.102e3	0.907	1.18	1.24	61.6	YES	NO	bb	bb	1.774
13	Total-hexadioxins	36.14	1.132e3	9.887e2	1.005	1.14	1.24	17.9	YES	NO	db	db	0.503
14	123678-HxCDD	35.97	7.122e3	5.962e3	1.001	1.19	1.24	114.2	YES	NO	dd	dd	3.047
15	123478-HxCDD	35.86	1.692e3	1.354e3	0.996	1.25	1.24	28.6	YES	NO	bd	bd	0.745
16	Total-hexadioxins	35.07	1.893e3	1.499e3	1.005	1.26	1.24	30.8	YES	NO	db	db	0.804
17	Total-hexadioxins	34.97	1.977e4	1.524e4	1.005	1.30	1.24	209.6	YES	NO	bd	bd	8.300
18	Total-hexadioxins	34.60	3.806e3	2.946e3	1.005	1.29	1.24	61.1	YES	NO	bb	bb	1.600
19	1234678-HpCDD	40.10	1.494e5	1.440e5	1.039	1.04	1.05	1844.0	YES	NO	bb	bb	89.072
20	1234679-HPCDD	39.06	1.947e5	1.931e5	1.137	1.01	1.05	2565.7	YES	NO	bb	bb	107.580
21	OCDD	44.80	8.941e5	1.036e6	0.920	0.86	0.89	13639.1	YES	NO	bb	bb	739.222

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.81	5.535e2	7.668e2	0.727	0.72	0.77	7.4	YES	NO	db	db	0.419
2	Total-tetrafurans	23.57	6.483e2	7.434e2	0.727	0.87	0.77	10.4	YES	NO	dd	dd	0.442
3	Total-tetrafurans	23.32	7.961e2	1.117e3	0.727	0.71	0.77	11.6	YES	NO	dd	dd	0.607
4	Total-tetrafurans	23.23	1.422e3	1.927e3	0.727	0.74	0.77	18.4	YES	NO	dd	dd	1.063
5	Total-tetrafurans	22.91	8.446e2	1.265e3	0.727	0.67	0.77	9.6	YES	NO	bd	bd	0.669
6	Total-tetrafurans	22.34	3.608e2	4.338e2	0.727	0.83	0.77	4.5	YES	NO	bb	db	0.252
7	1289-TCDF	27.16	3.149e2	4.233e2	0.678	0.74	0.77	3.3	YES	NO	bb	db	0.251
8	Total-tetrafurans	25.80	4.164e2	6.327e2	0.727	0.66	0.77	6.0	YES	NO	db	db	0.333
9	Total-tetrafurans	25.69	2.866e2	3.762e2	0.727	0.76	0.77	4.7	YES	NO	dd	dd	0.210
10	Total-tetrafurans	25.08	3.029e2	3.491e2	0.727	0.87	0.77	4.0	YES	NO	db	db	0.207
11	Total-tetrafurans	24.67	5.609e2	7.569e2	0.727	0.74	0.77	8.5	YES	NO	db	dd	0.418
12	Total-pentafurans	28.49	9.675e2	7.177e2	0.654	1.35	1.55	20.2	YES	NO	dd	dd	0.727
13	Total-pentafurans	28.37	1.735e2	1.247e2	0.654	1.39	1.55	5.2	YES	NO	bd	bd	0.129
14	234678-HxCDF	35.75	1.045e3	9.206e2	1.140	1.14	1.24	24.8	YES	NO	db	db	0.439
15	Total-hexafurans	35.71	1.597e3	1.487e3	1.141	1.07	1.24	30.2	YES	NO	bd	bd	0.678
16	123678-HxCDF	34.86	2.101e3	1.688e3	1.091	1.24	1.24	40.8	YES	NO	db	db	0.809
17	123478-HxCDF	34.73	6.802e3	5.662e3	1.166	1.20	1.24	132.2	YES	NO	dd	dd	2.640
18	Total-hexafurans	34.09	3.483e4	2.819e4	1.141	1.24	1.24	669.3	YES	NO	bb	bb	13.855
19	Total-hexafurans	33.78	5.499e2	4.497e2	1.141	1.22	1.24	9.9	YES	NO	bb	bb	0.220
20	Total-hexafurans	33.26	1.771e4	1.462e4	1.141	1.21	1.24	336.3	YES	NO	bb	bb	7.107
21	123468-HXCDF	33.04	5.144e3	4.226e3	1.169	1.22	1.24	96.0	YES	NO	bb	bb	1.979
22	123789-HxCDF	36.71	1.233e3	1.094e3	1.137	1.13	1.24	22.7	YES	NO	bb	bb	0.556
23	1234789-HpCDF	40.83	3.023e3	3.269e3	0.953	0.92	1.05	60.9	YES	NO	bb	bb	2.502
24	Total-heptafurans	39.26	1.007e5	1.017e5	0.978	0.99	1.05	2345.2	YES	NO	bb	bb	74.674
25	Total-heptafurans	39.02	5.660e2	5.052e2	0.978	1.12	1.05	11.5	YES	NO	bb	bb	0.395
26	1234678-HpCDF	38.62	3.548e4	3.487e4	1.003	1.02	1.05	869.7	YES	NO	bb	bb	24.161
27	OCDF	45.03	1.039e5	1.191e5	0.778	0.87	0.89	1647.3	YES	NO	bd	bd	100.997
28	Total-penta1	27.00	1.047e4	6.727e3		1.56	1.55	254.4	YES	NO	bb	bb	5.186
29	1368-TCDD	23.34	7.416e2	9.876e2	1.015	0.75	0.77	12.4	YES	NO	bb	bb	0.441
30	2378-TCDD	26.20	3.152e2	3.993e2	1.149	0.79	0.77	5.4	YES	NO	bd	bb	0.161
31	Total-tetradioxins	24.81	3.662e2	4.222e2	1.024	0.87	0.77	9.2	YES	NO	bb	bb	0.199
32	Total-tetradioxins	24.55	2.481e2	2.881e2	1.024	0.86	0.77	4.9	YES	NO	dd	bb	0.135
33	Total-tetradioxins	23.61	4.724e2	6.515e2	1.024	0.73	0.77	10.2	YES	NO	bb	bb	0.284
34	12378-PeCDD	31.31	1.057e3	6.418e2	1.022	1.65	1.55	9.9	YES	NO	bb	bb	0.596
35	Total-pentadioxins	29.94	1.102e3	6.894e2	1.502	1.60	1.55	11.7	YES	NO	dd	bb	0.427
36	Total-pentadioxins	29.72	9.916e2	7.390e2	1.502	1.34	1.55	12.2	YES	NO	bd	bb	0.413
37	Total-pentadioxins	29.11	5.095e2	3.286e2	1.502	1.55	1.55	6.4	YES	NO	bb	bb	0.200

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	12479-PECDD	28.64	1.800e3	1.351e3	2.301	1.33	1.55	16.5	YES	NO	bb	bb	0.491
39	124679-HXCDD	33.82	1.753e4	1.365e4	1.115	1.28	1.24	270.5	YES	NO	bd	bb	6.806
40	123789-HxCDD	36.36	3.655e3	3.102e3	0.907	1.18	1.24	61.6	YES	NO	bb	bb	1.774
41	Total-hexadioxins	36.14	1.132e3	9.887e2	1.005	1.14	1.24	17.9	YES	NO	db	db	0.503
42	123678-HxCDD	35.97	7.122e3	5.962e3	1.001	1.19	1.24	114.2	YES	NO	dd	dd	3.047
43	123478-HxCDD	35.86	1.692e3	1.354e3	0.996	1.25	1.24	28.6	YES	NO	bd	bd	0.745
44	Total-hexadioxins	35.07	1.893e3	1.499e3	1.005	1.26	1.24	30.8	YES	NO	db	db	0.804
45	Total-hexadioxins	34.97	1.977e4	1.524e4	1.005	1.30	1.24	209.6	YES	NO	bd	bd	8.300
46	Total-hexadioxins	34.60	3.806e3	2.946e3	1.005	1.29	1.24	61.1	YES	NO	bb	bb	1.600
47	1234678-HpCDD	40.10	1.494e5	1.440e5	1.039	1.04	1.05	1844.0	YES	NO	bb	bb	89.072
48	1234679-HPCDD	39.06	1.947e5	1.931e5	1.137	1.01	1.05	2565.7	YES	NO	bb	bb	107.580
49	OCDD	44.80	8.941e5	1.036e6	0.920	0.86	0.89	13639.1	YES	NO	bb	bb	739.222

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.99	4.935e3					0.9	NO		bb		
2	FUNCTION1 PFK	22.10	7.329e6					7.3	YES		bb		
3	FUNCTION1 PFK	21.07	4.088e5					16.2	YES		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	29.45	4.294e5					6.7	YES		bb		0.000
2	FUNCTION2 PFK	29.16	3.523e4					5.0	YES		bb		0.000
3	FUNCTION2 PFK	28.74	3.804e5					1.7	NO		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.06	1.232e6					5.3	YES		bb		0.000
2	FUNCTION3 PFK	36.43	1.684e6					14.7	YES		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	44.94	4.660e5					5.8	YES		bb		
2	FUNCTION5 PFK	43.67	7.562e4					2.9	NO		bb		
3	FUNCTION5 PFK	42.64	5.447e5					11.0	YES		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.54	8.765e1					1.9	NO		bb		0.000
2	FUNCTION1 HXCD...	26.58	1.735e2					5.3	YES		bb		0.000
3	FUNCTION1 HXCD...	25.93	1.868e2					6.3	YES		bb		0.000
4	FUNCTION1 HXCD...	25.72	3.384e2					11.2	YES		db		0.000
5	FUNCTION1 HXCD...	25.56	2.364e2					8.2	YES		bd		0.000
6	FUNCTION1 HXCD...	24.28	8.198e1					3.8	YES		bb		0.000
7	FUNCTION1 HXCD...	23.57	8.983e1					3.7	YES		bb		0.000
8	FUNCTION1 HXCD...	23.20	7.053e1					1.7	NO		bb		0.000
9	FUNCTION1 HXCD...	22.09	1.228e2					5.1	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.84	9.050e1					2.0	NO		bb		0.000
2	FUNCTION2 HPCD...	30.64	8.564e1					2.3	NO		bb		0.000
3	FUNCTION2 HPCD...	28.74	1.589e2					4.3	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	33.99	1.855e2					3.5	YES		bb		0.000
2	FUNCTION3 OCDPE	33.31	9.032e1					2.4	NO		bb		0.000
3	FUNCTION3 OCDPE	37.52	7.732e1					2.3	NO		bb		0.000

ID: 23A0420-08, Name: 23031504, Date: 15-Mar-2023, Time: 12:48:44, Conditions: AUTOSPEC01, User: pk

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.41	8.923e1					2.9	NO		bb		0.000
2	FUNCTION4 NCDPE	40.06	1.122e2					2.8	NO		bb		0.000
3	FUNCTION4 NCDPE	38.83	7.226e1					2.5	NO		bb		0.000
4	FUNCTION4 NCDPE	38.23	5.875e3					162.4	YES		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
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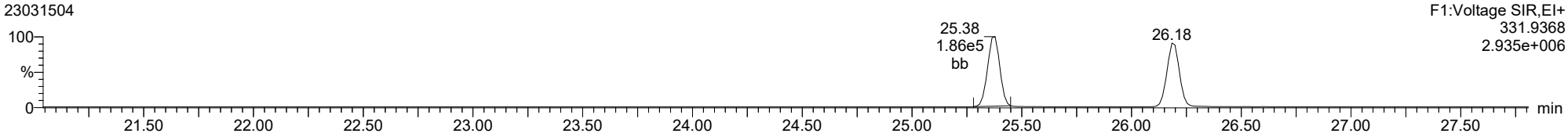

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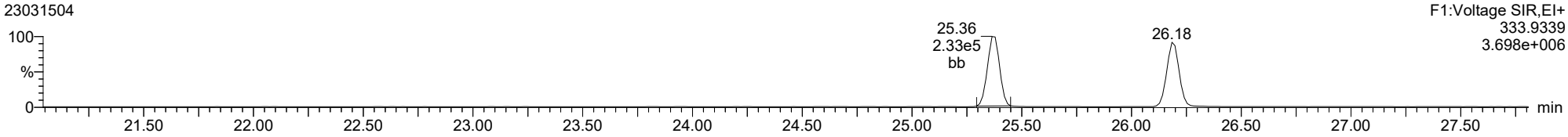
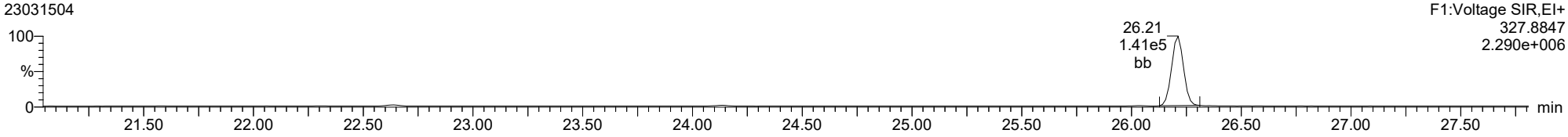


37CL-2378-TCDD



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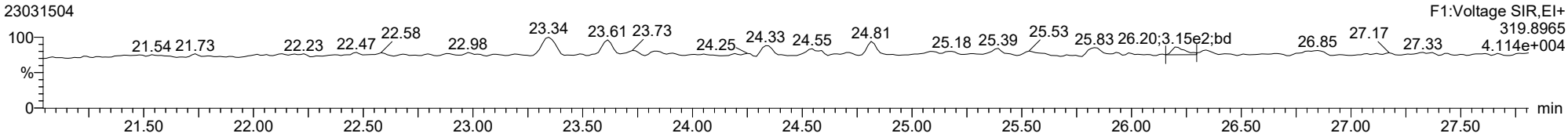

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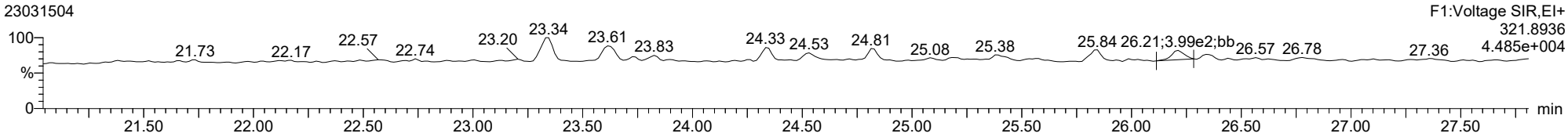

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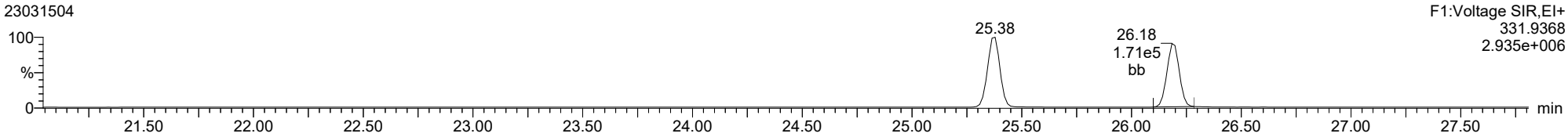

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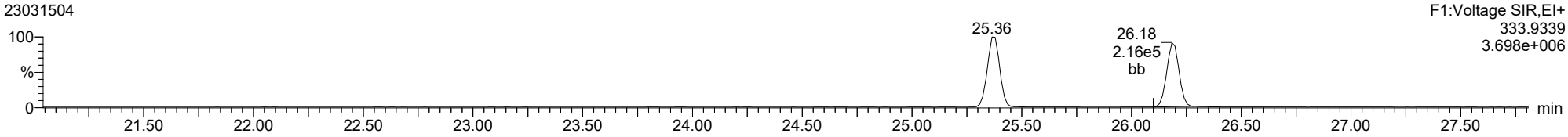

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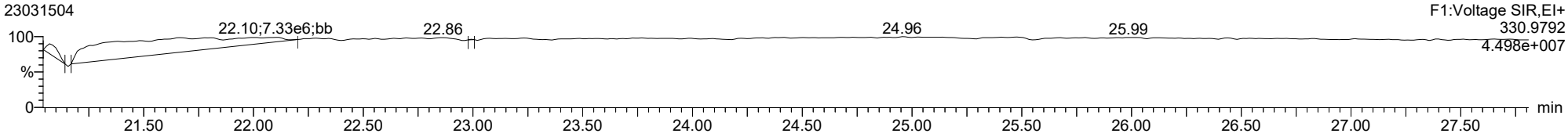

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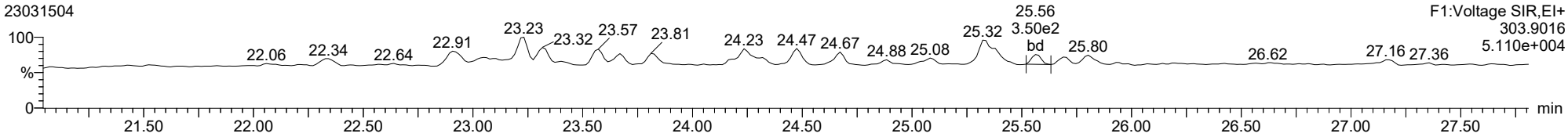

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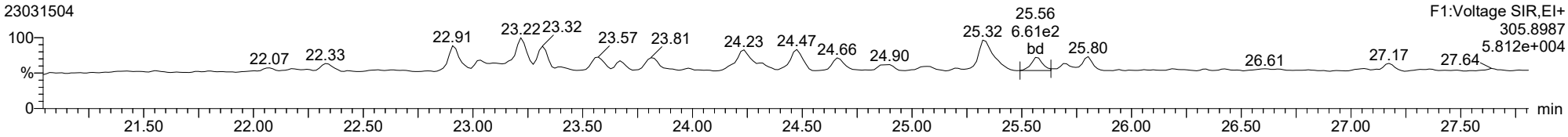

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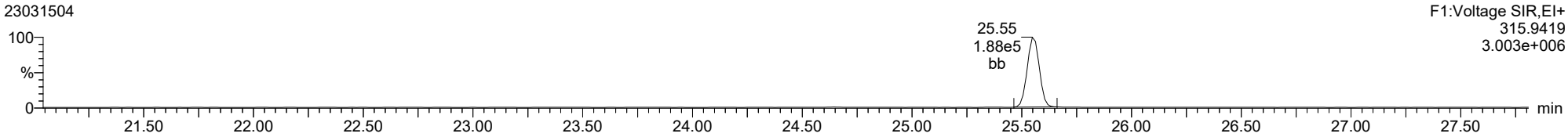

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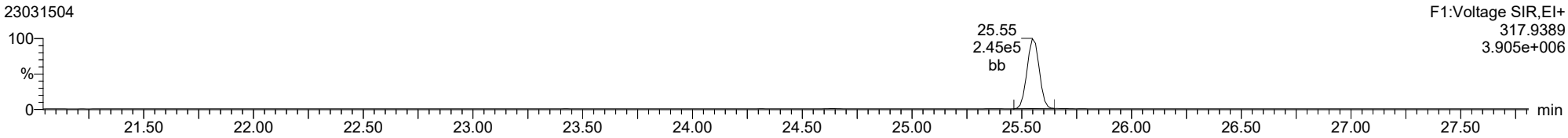

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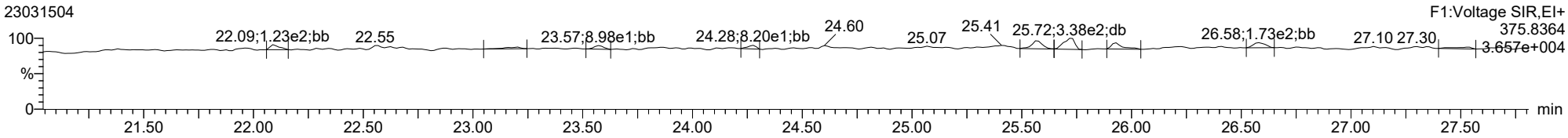

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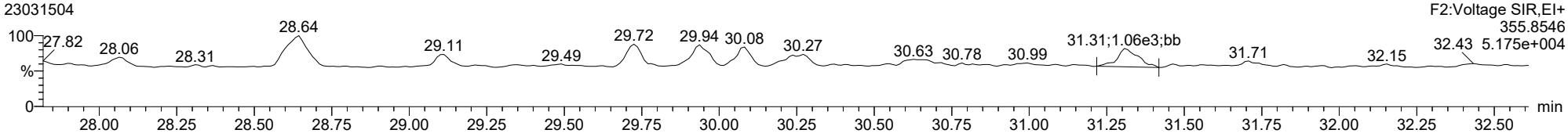
12378-PeCDD



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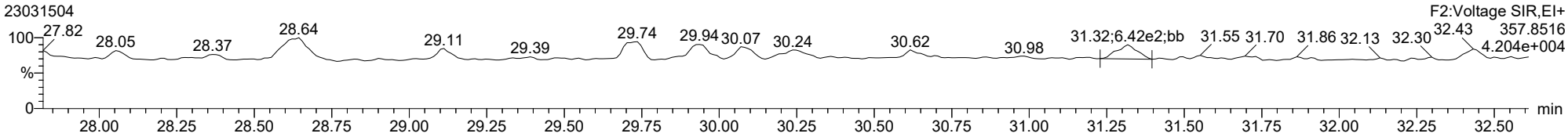

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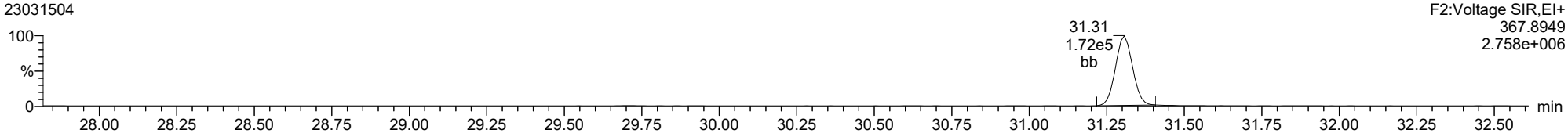

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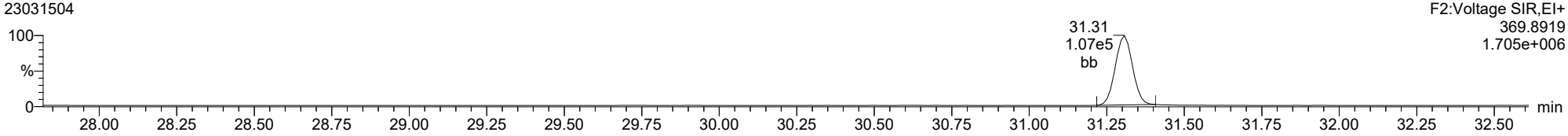

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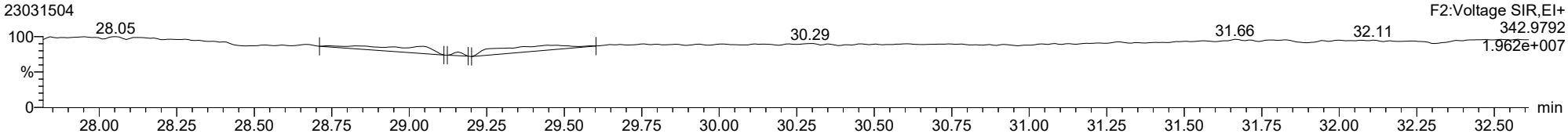

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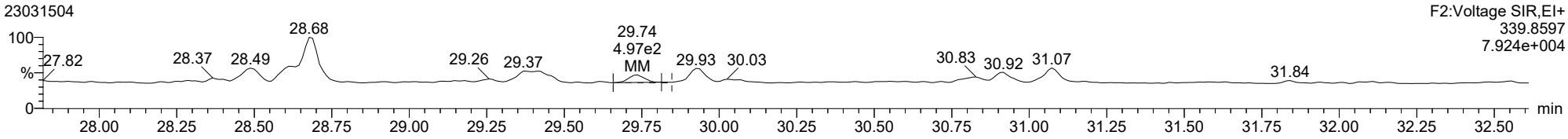

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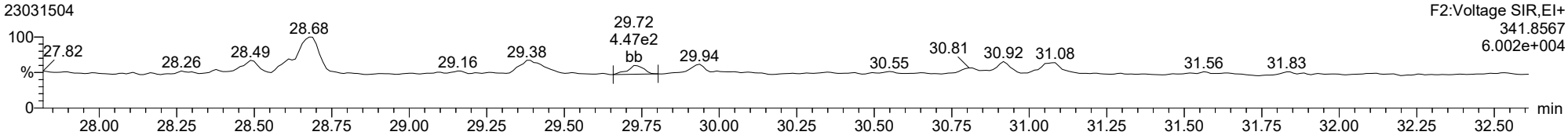

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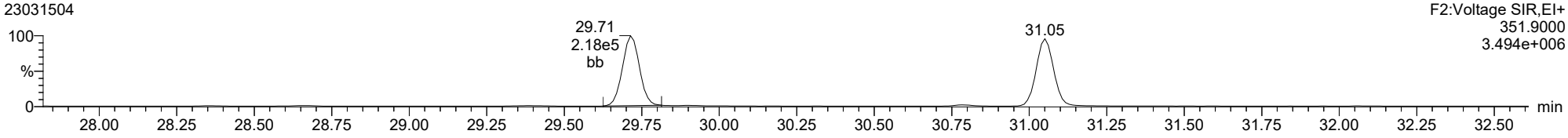

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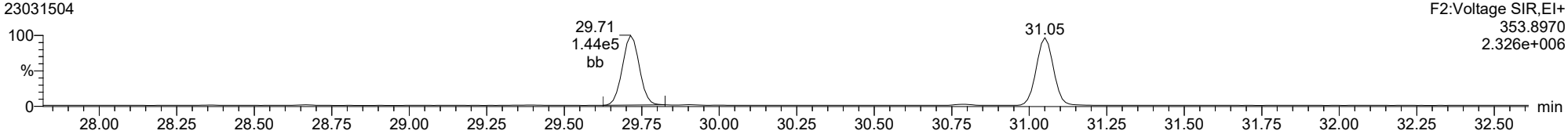
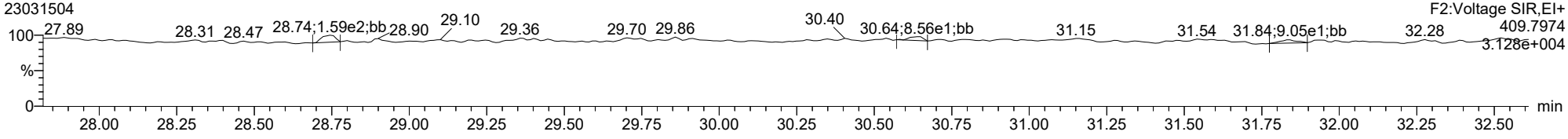


FUNCTION2 HPCDPE



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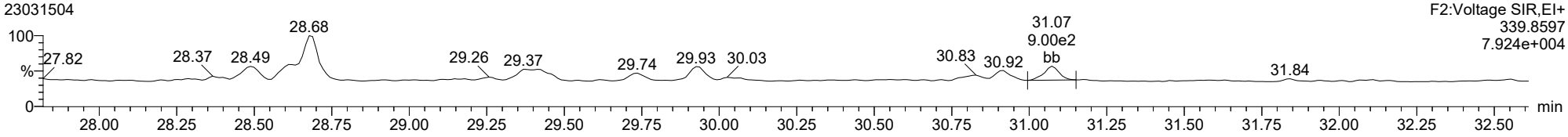

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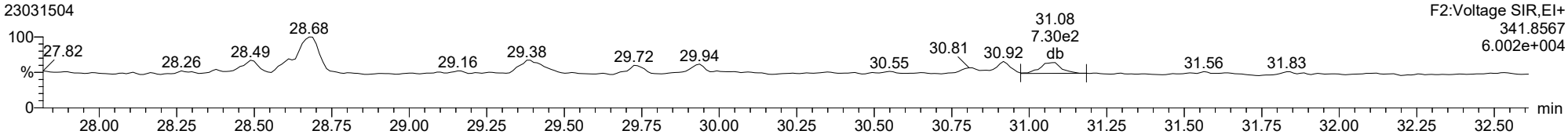

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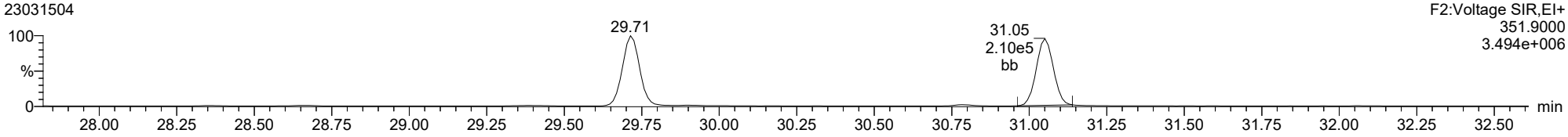

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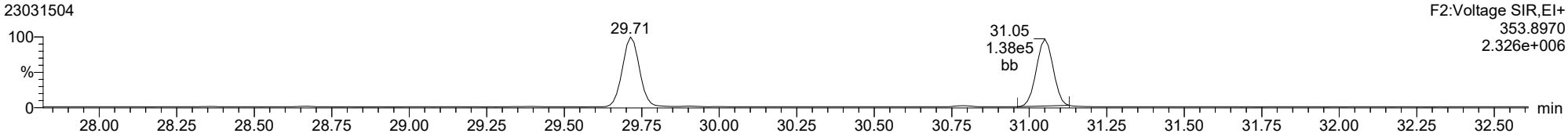

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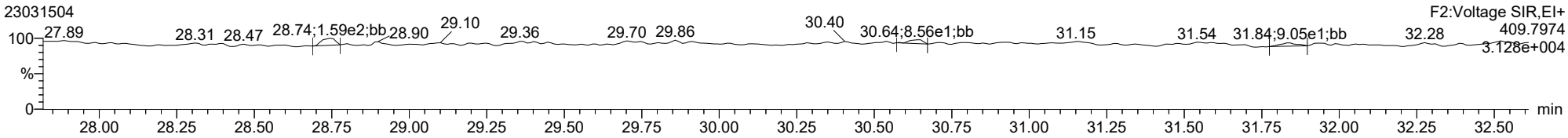

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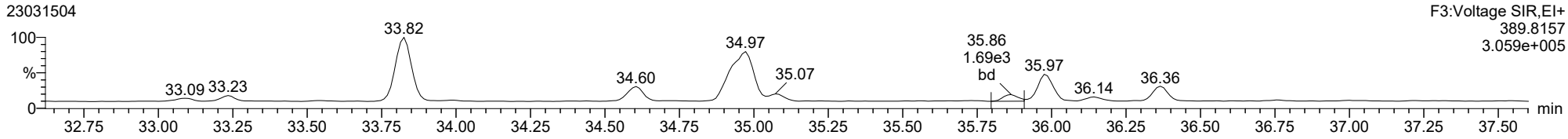

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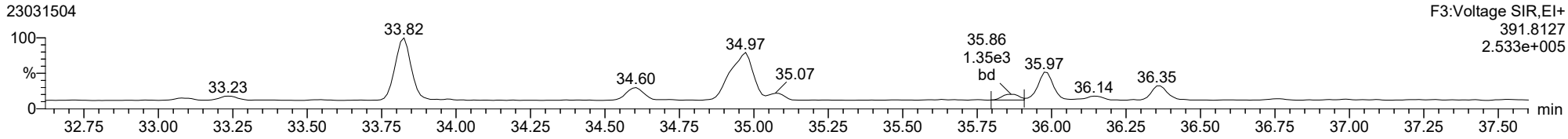

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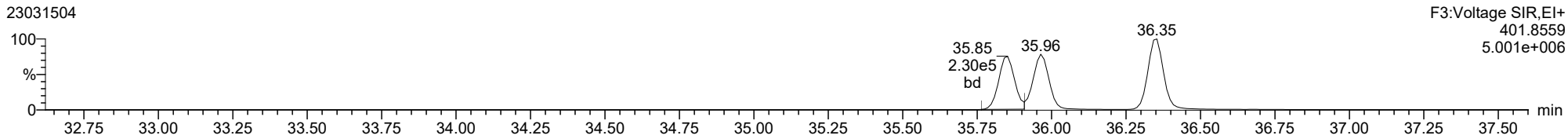

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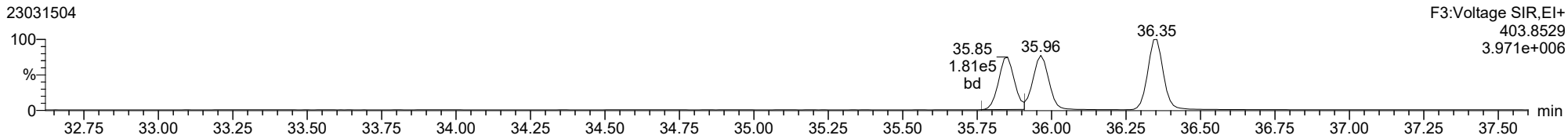

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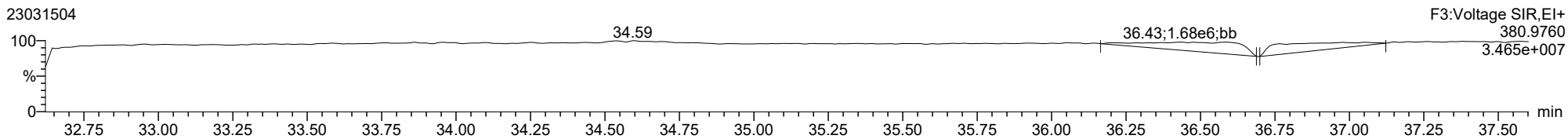

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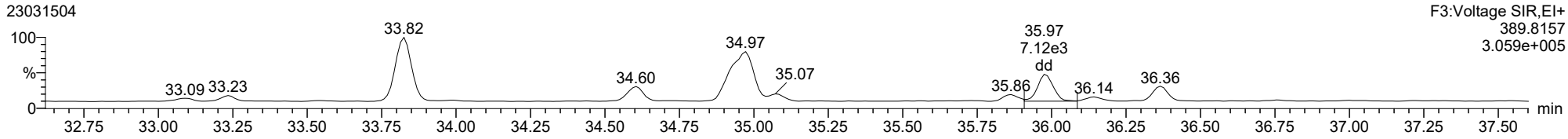

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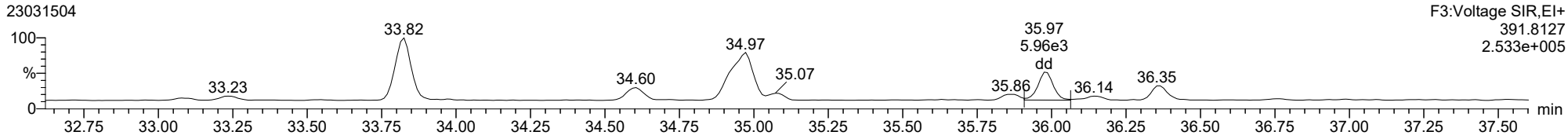

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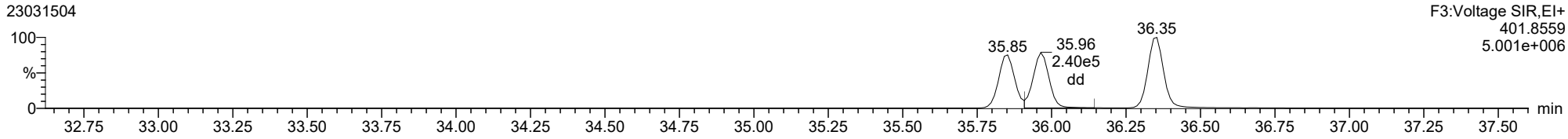

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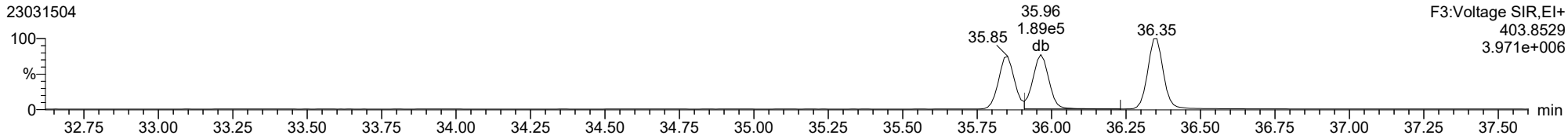

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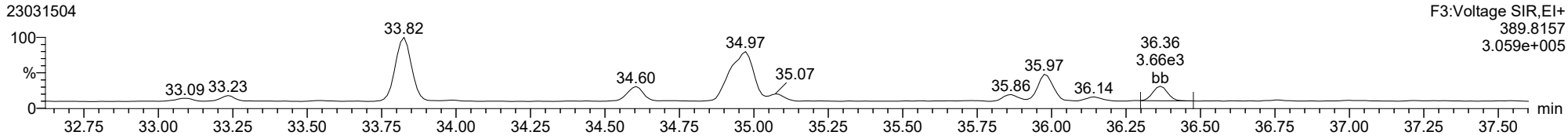

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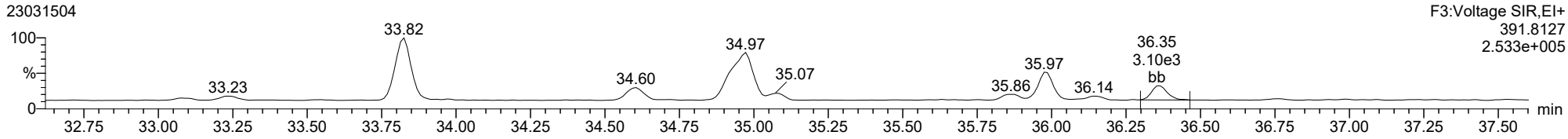

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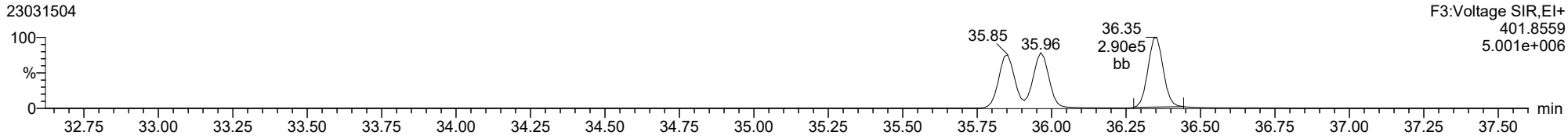

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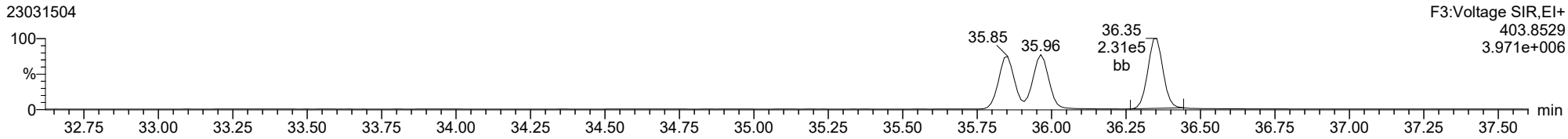

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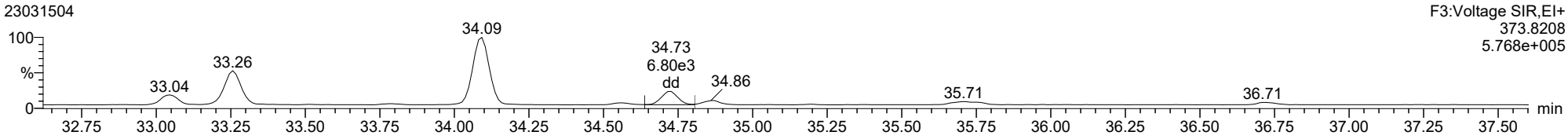

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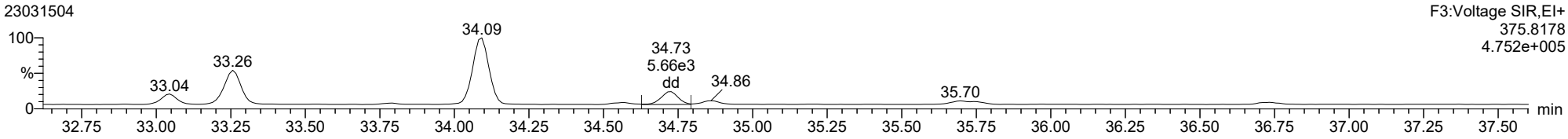

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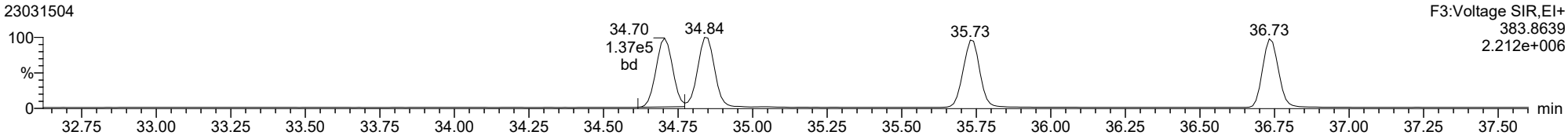

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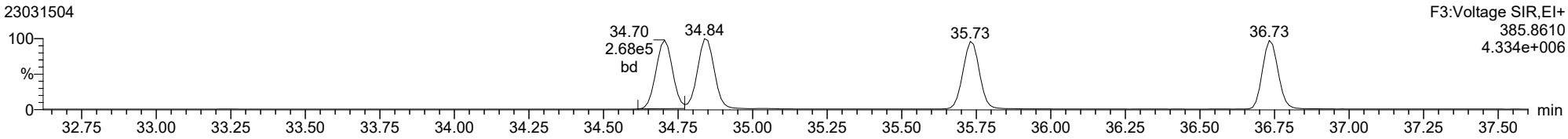

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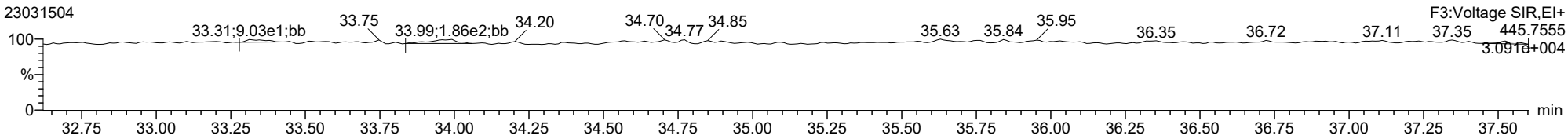

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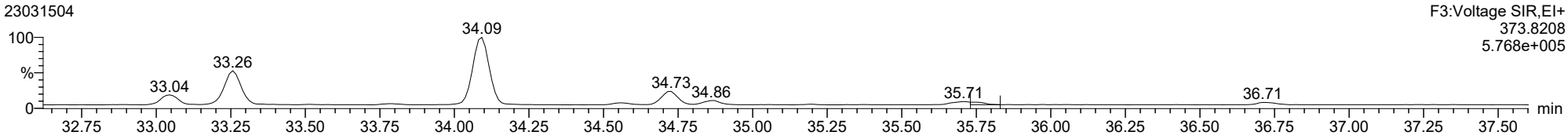

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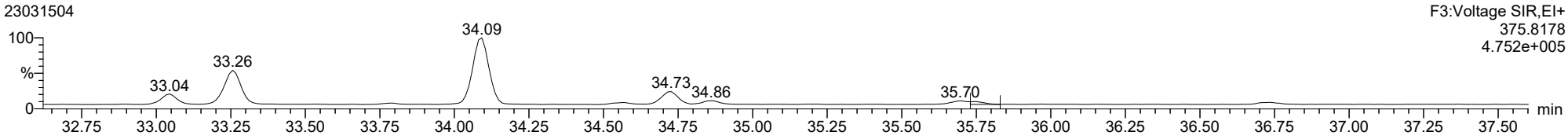

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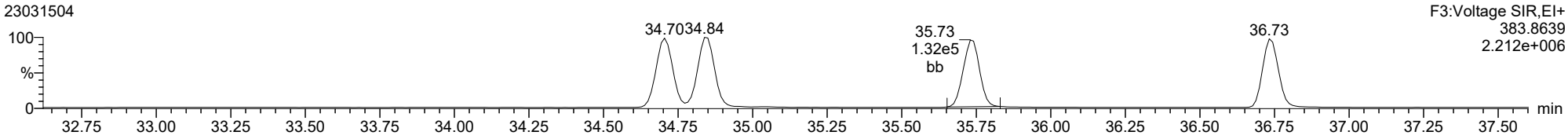

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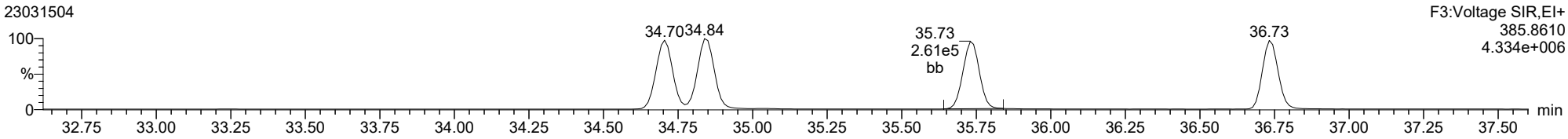

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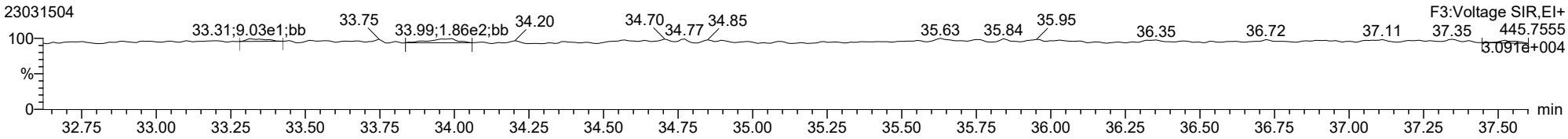

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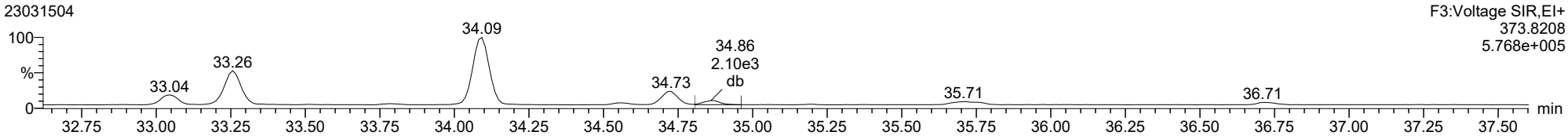

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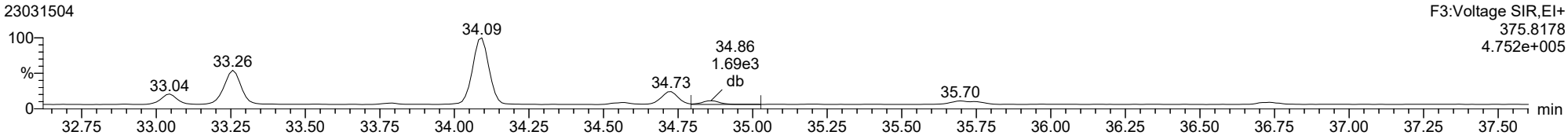

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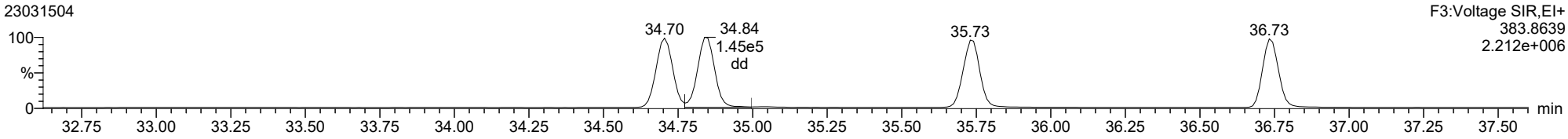

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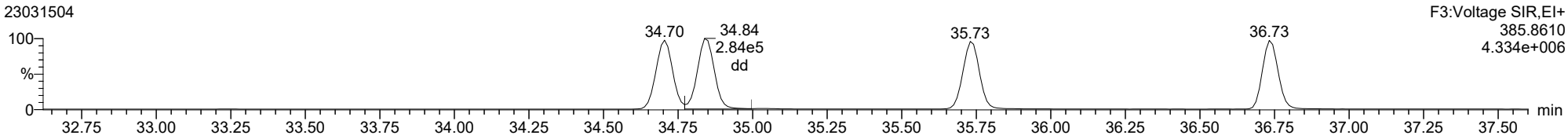

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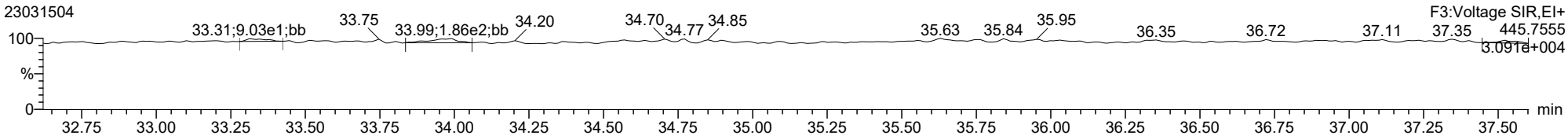

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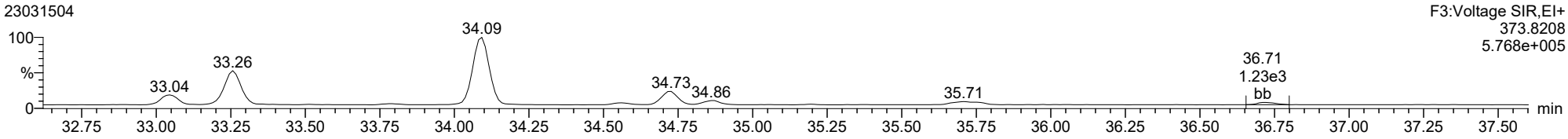

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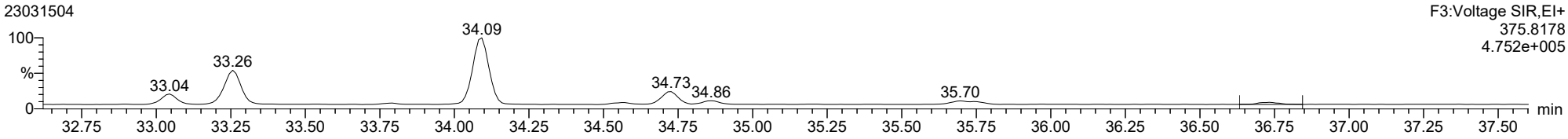

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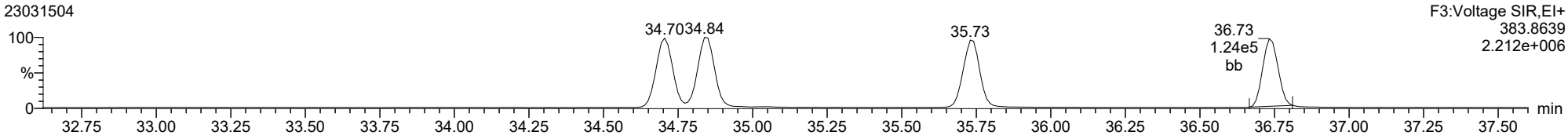

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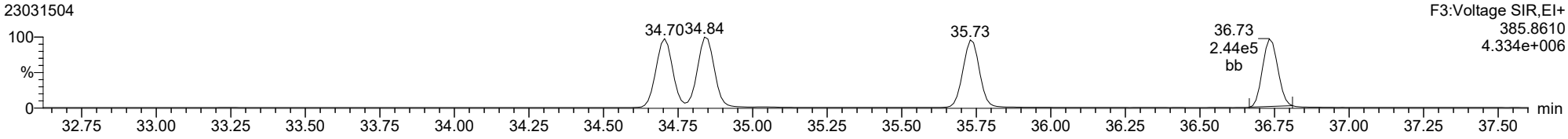

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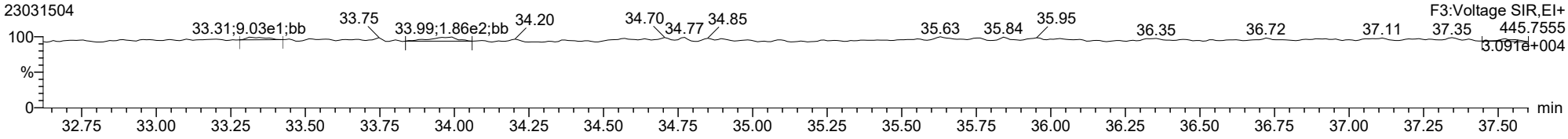

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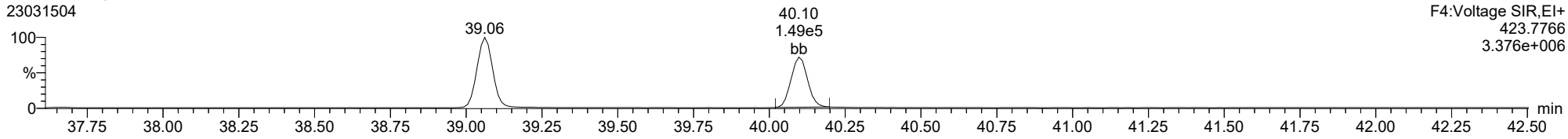

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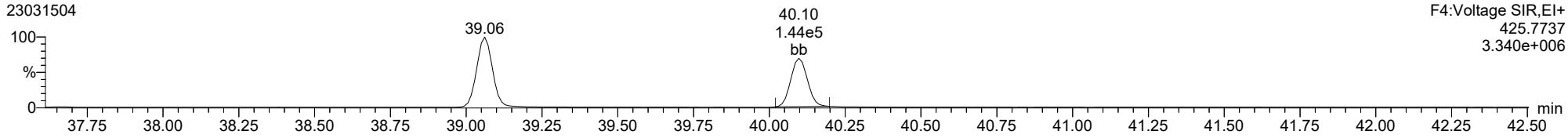

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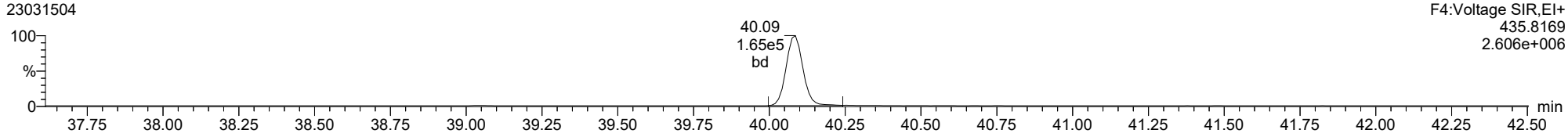

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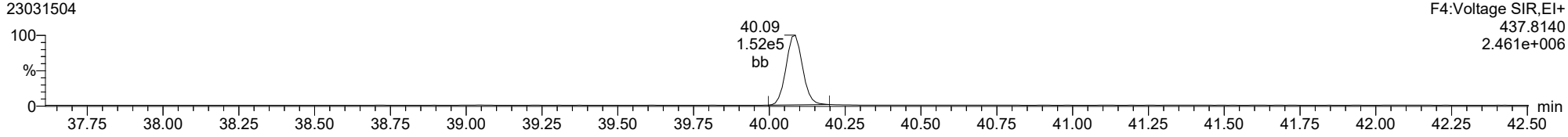

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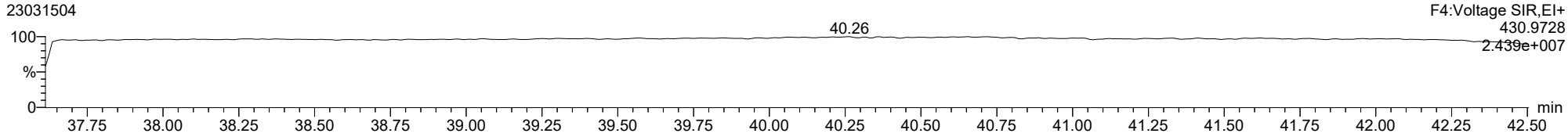

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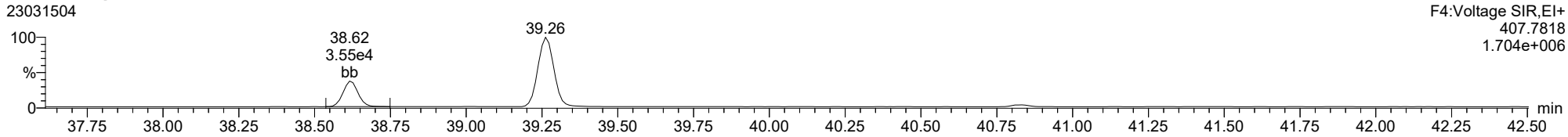

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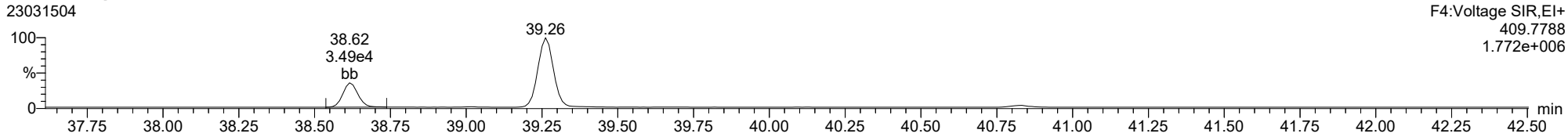

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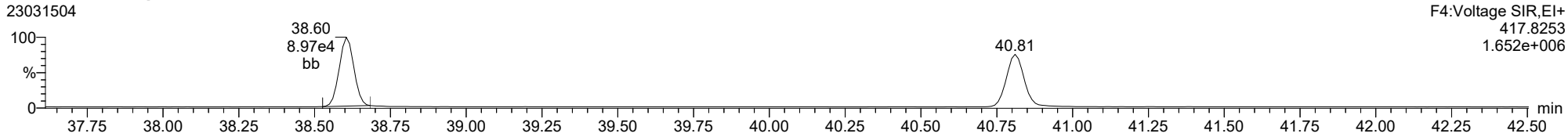

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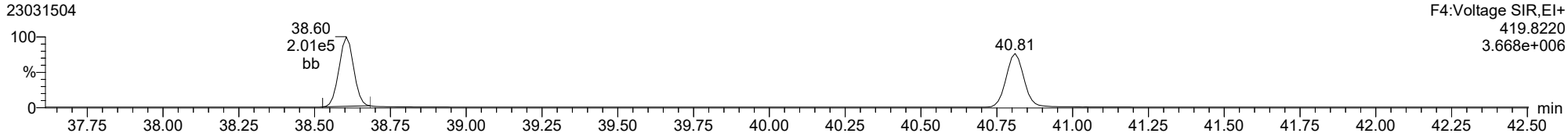

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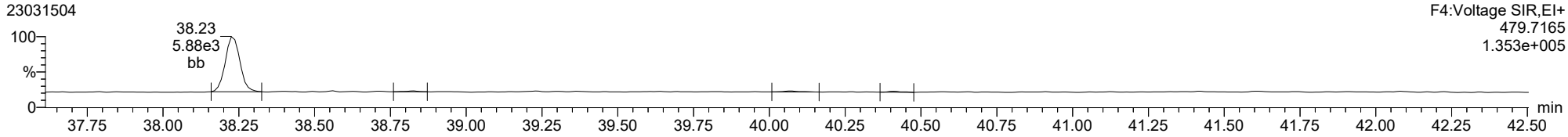

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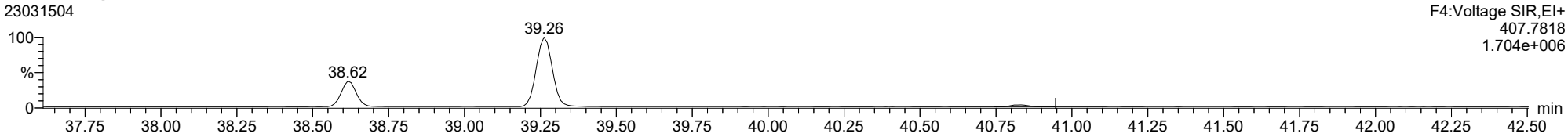

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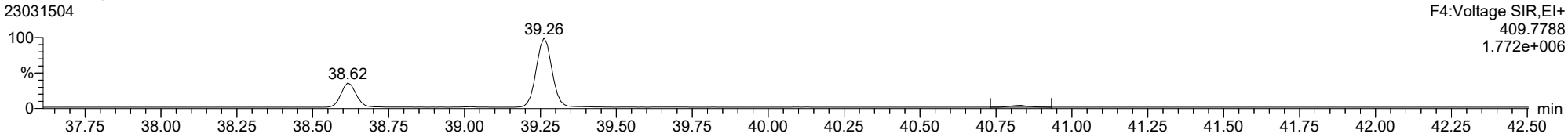

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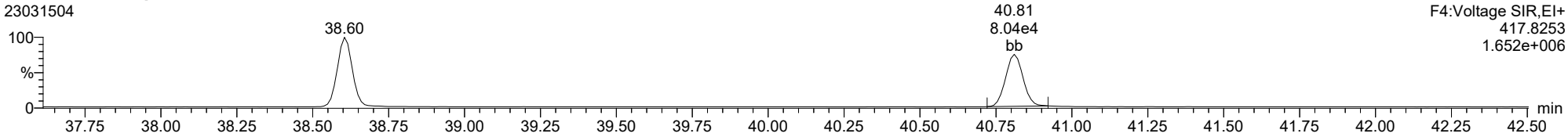

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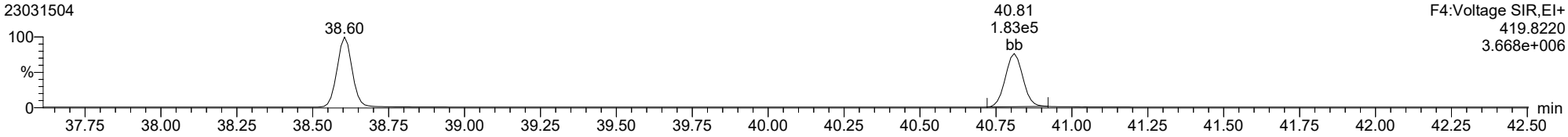

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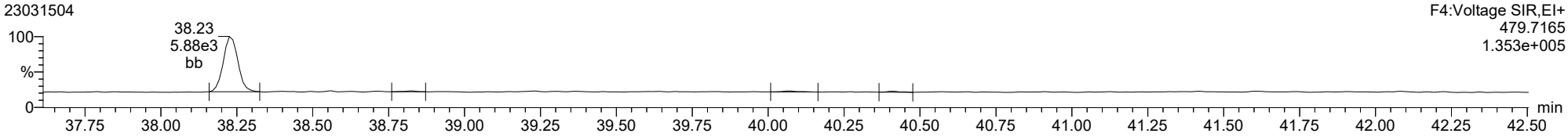

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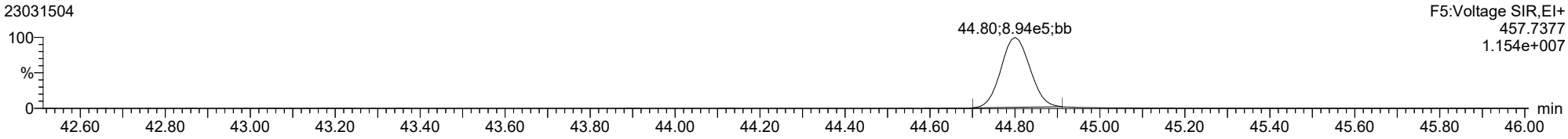

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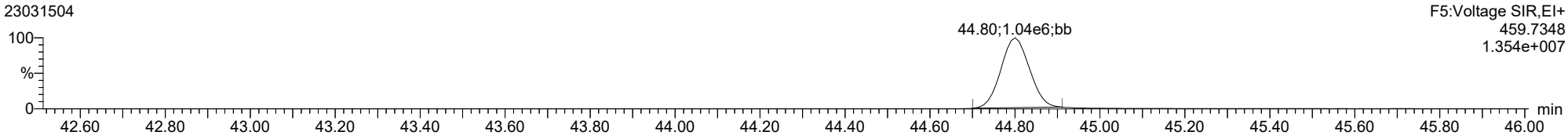

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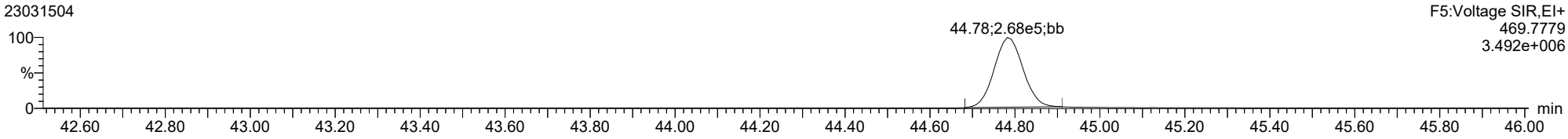

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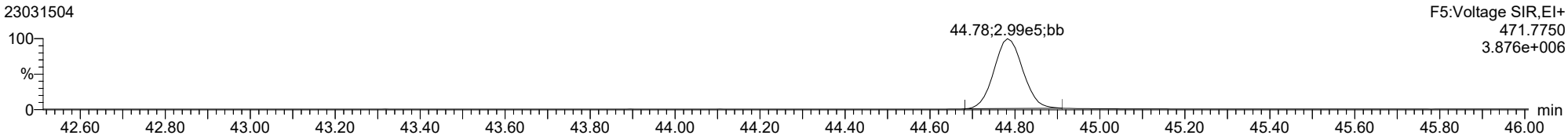

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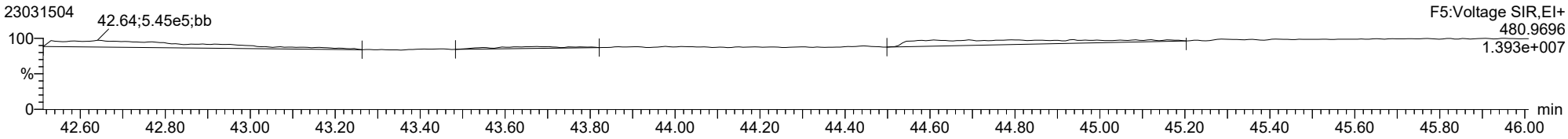

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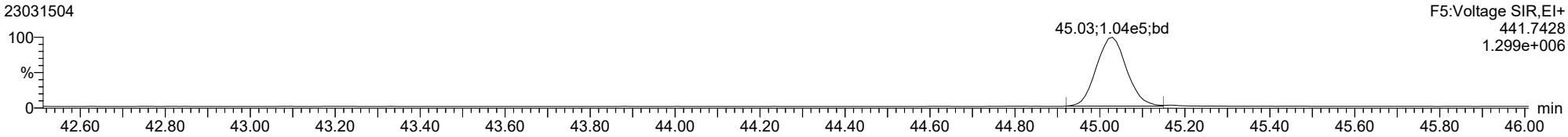

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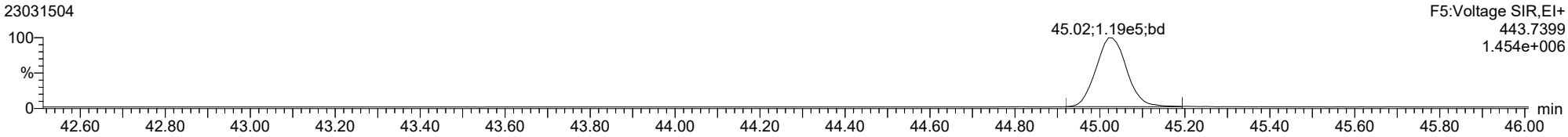

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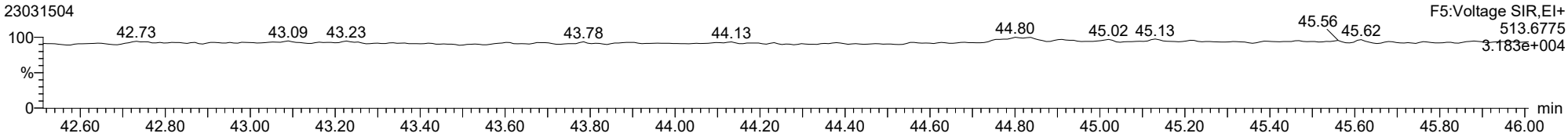

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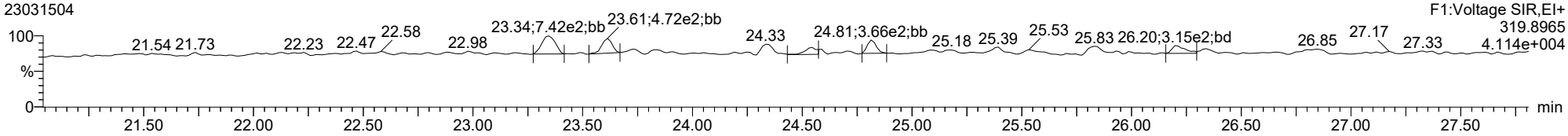
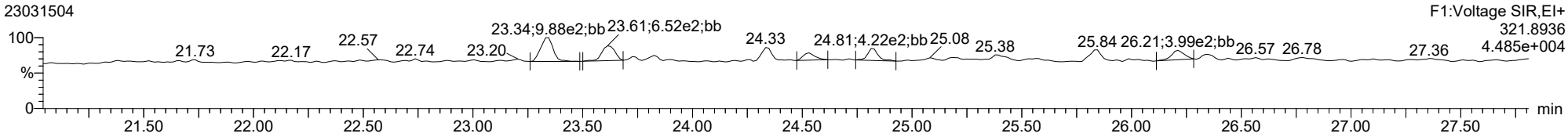
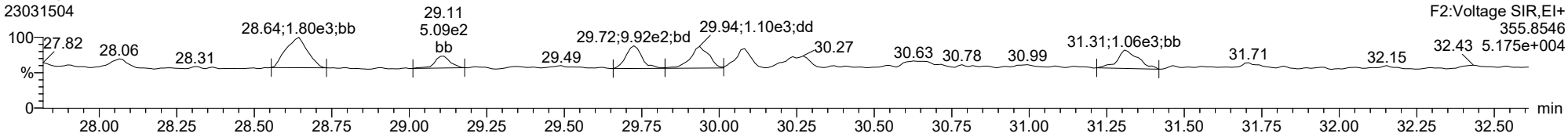
Total-tetradioxins



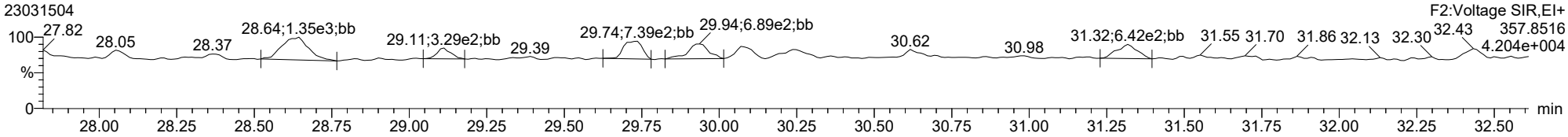
Total-tetradioxins



Total-pentadioxins



Total-pentadioxins



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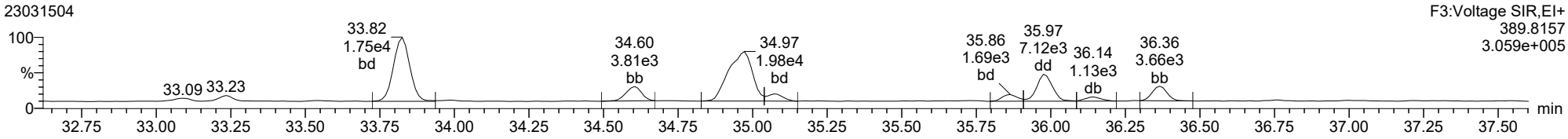
Total-hexadioxins



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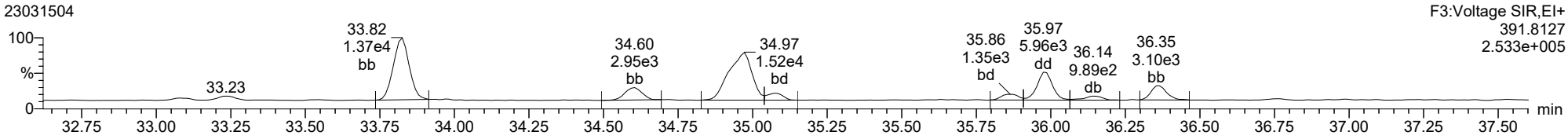
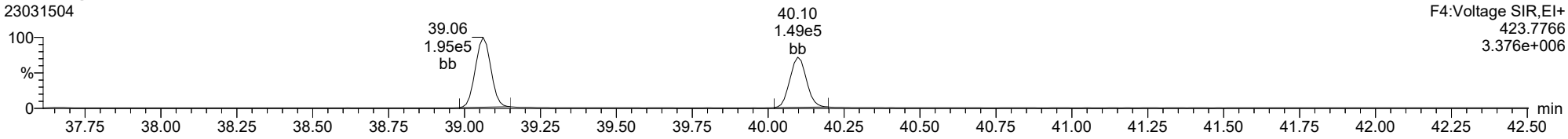


Total-heptadioxins



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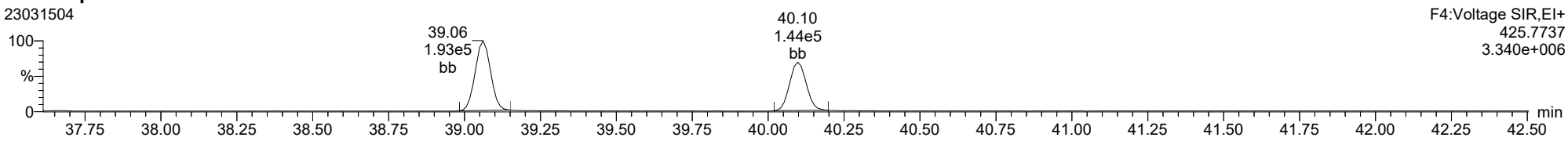

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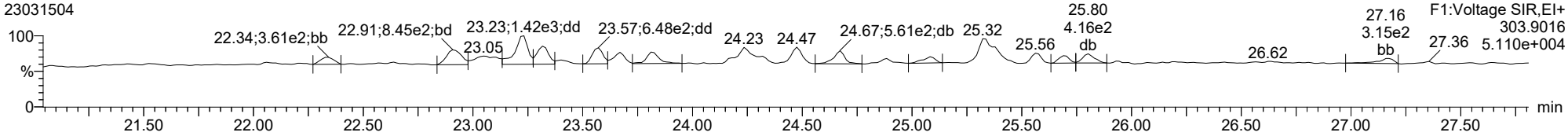
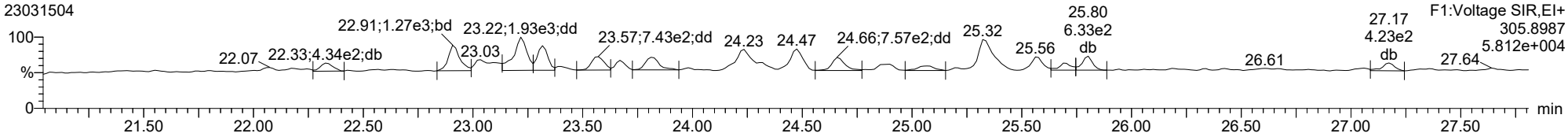
Total-tetrafurans



Total-tetrafurans



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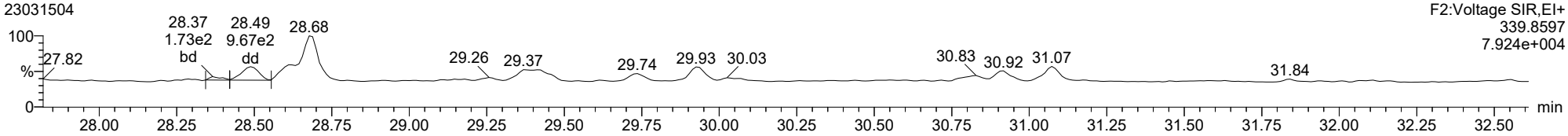

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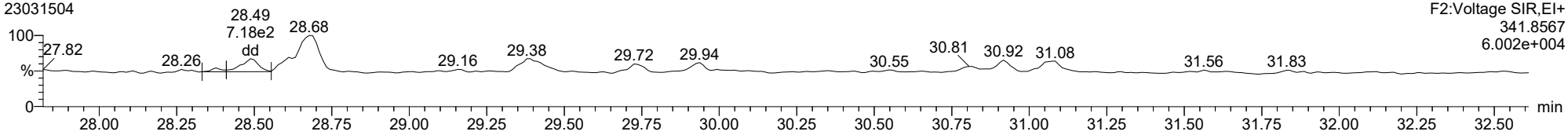

ID: 23A0420-08, Name: 23031504, Date: 15-Mar-2023, Time: 12:48:44, Conditions: AUTOSPEC01, User: pk

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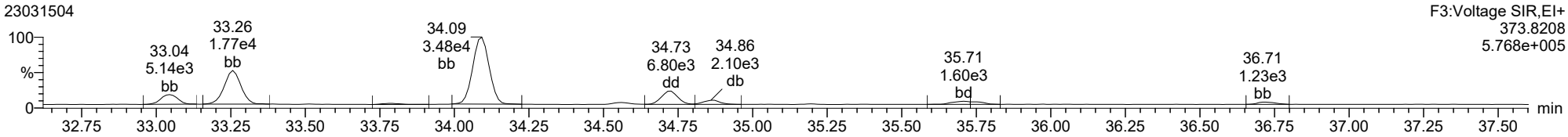

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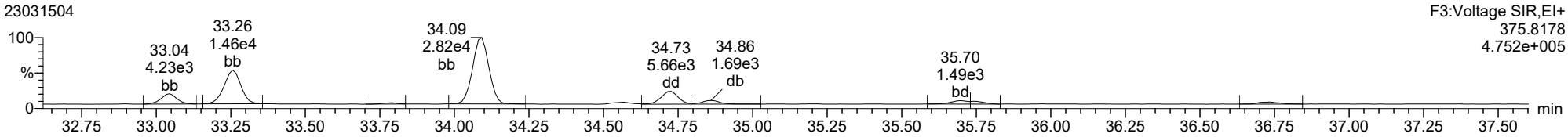
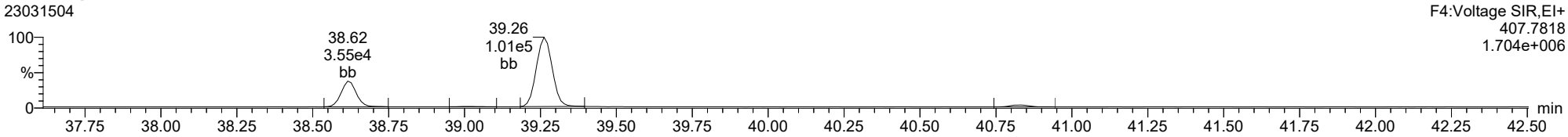
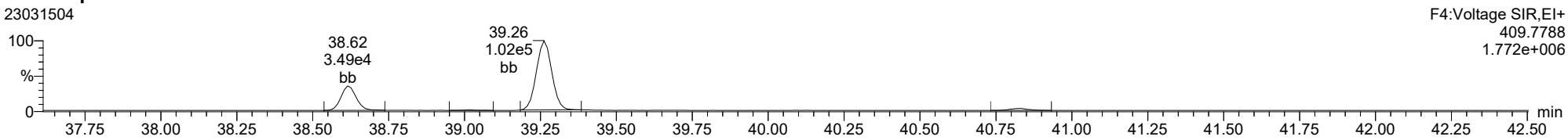


Total-heptafurans



Total-heptafurans



PREPARATION BATCH SUMMARY

EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLB0228 Batch Matrix: Solid
Preparation: EPA 1613

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1045	23A0420-01	23031321	02/14/23 17:30	
LDW23-IT1051	23A0420-04	23031322	02/14/23 17:30	
LDW23-SC1004	23A0420-08	23031504	02/14/23 17:30	
Blank	BLB0228-BLK1	23031304	02/14/23 17:30	
LCS	BLB0228-BS1	23031305	02/14/23 17:30	
Reference	BLB0228-SRM1	23031306	02/14/23 17:30	

Analytical Resources, LLC
Analytical Chemists and Consultants

HRGCMS Dioxin/Furan Preparation Bench Sheet EPA Methods 8290A or 1613B

Batch: BLB0228

Solid Samples

ARI Work Orders:	23A0295,23A0417,418,419,420,455	
Matrix (circle one)	(Soil) Sediment Oil Tissue	
Extraction Method	Start Date/Time:	End Date/Time:
(Soxhlet) SepF Shake out	2/14/23 17:30	2/15/23 09:56

Reagents/Equipment Used	NA	ID / Lot Number	Initials	Date
Glasswool		J01285Ø	DP	2/27/23
Basic Silica		KØØ2255	DP	2/27/23
Acid Silica		KØ11Ø12	DP	2/27/23
Activated Florisil		KØØ595C	DP	2/27/23
Balance		24650344	DP	2/14/23
Toluene		KØ11233	DP	2/14/23
Hexane		KØ11373/LØØØ889	DP	2/17/23
CH2Cl2		KØØ5158	DP	2/27/23
H2SO4		LØØ1033	DP	2/23/23
Na2SO4		LØØ1285	DP	2/14/23
Other (RM)		LØØ1273	DP	2/14/23
0% Silica		KØ11Ø54	DP	2/27/23
Nonane		LØØ6038	DP	2/28/23

Lab Number & Container	Sample Name	% Solids	Sample Weight Equal to dry (g) (Target Dry)	Actual	RotoVap 45 °C	Water Trap Vol (mL)	Final Vol. (uL)
23A0295-04 A	LDW23-SC1023B	56.16	(17.81)	17.87	(1)/2	5.8	20
23A0417-01 C	LDW23-SS1127	66.61	(15.01)	15.01	1/(2)	4.2	20
23A0417-03 C	LDW23-SS1095	43.48	(23.00)	23.02	(1)/2	11.1	20
23A0417-05 C	LDW23-SS1089	69.22	(14.45)	14.50	1/(2)	4.5	20
23A0418-01 C	LDW23-IT1136	83.97	(11.91)	11.97	(1)/2	1.8	20
23A0418-02 C	LDW23-IT1142	78.39	(12.76)	12.81	1/(2)	2.4	20
23A0418-10 C	LDW23-IT1135	74.26	(13.47)	13.55	(1)/2	3.5	20
23A0419-02 C	LDW23-SS1045	48.59	(20.58)	20.62	1/(2)	10.4	20
23A0419-04 C	LDW23-SS1135	68.57	(14.58)	14.63	(1)/2	4.Ø	20
23A0419-05 C	LDW23-SS1136	77.3	(12.94)	12.98	1/(2)	3.Ø	20
23A0419-08 C	LDW23-SS1142	71	(14.09)	14.13	(1)/2	4.Ø	20
23A0419-09 C	LDW23-SS1202	61.44	(16.28)	16.29	1/(2)	6.9	20
23A0420-01 C	LDW23-SC1045	52.01	(19.23)	19.29	(1)/2	8.Ø	20
23A0420-04 C	LDW23-IT1051	70.3	(14.23)	14.34	1/(2)	4.Ø	20
23A0420-08 C	LDW23-SC1004	57.53	(17.38)	17.42	(1)/2	7.Ø	20
23A0455-03 B	LDW23-SS1031	50	(20.00)	20.01	1/(2)	8.Ø	20
23A0455-08 B	LDW23-SS1023	50.51	(19.80)	19.83	(1)/2	5.Ø	20
23A0455-15 B	LDW23-SS1051	54.84	(18.24)	18.34	1/(3)	6.Ø	20
23A0455-16 B	LDW23-SS1052	48.29	(20.71)	20.71	(1)/2	9.5	20
BLB0228-BLK1	Blank	100	()	10.01	(1)/2	Ø.Ø	20
BLB0228-BS1	LCS	100	()	10.01	1/(2)	Ø.Ø	20
BLB0228-DUP1	23A0417-01C Duplicate	66.61	(15.01)	15.01	(1)/2	4.Ø	20
BLB0228-SRM1	Reference	100	()	10.09	1/(2)	Ø.Ø	20
Prep Analyst / Date:	DP 2/14/23				DP 2/22/23	DP 2/15/23	

Standards Used	Vol	ID / Lot Number	Concentration	Expiration Date	Analyst	Witness	Date
Recovery Standard	1.0 mL	KØ11158	2/4 ng/mL	12/2/23	DP	TW	2/14/23
OPR	1.0 mL	KØØ6ØØ3	0.2/1.0/2.0 ng/mL	6/30/23	DP	TW	2/14/23
~~QCS Standard~~	~~1.0 mL~~		~~0.1/0.5/1.0 ng/mL~~				
Cleanu-up Standard	1.0 mL	LØØ1332	0.8 ng/mL	2/8/24	DP	TW	2/27/23

Verify Client ID
Analyst / Date: DP 2/14/23

Acid Clean (Y) N
Analyst / Date: DP 2/23/23

Silica-Florisil Clean (Y) N
Analyst / Date: DP 2/27/23

3/8/23

Printed: 2/9/2023 7:22:17AM

Analytical Resources, LLC
Analytical Chemists and Consultants

HRGCMS Dioxin/Furan Preparation Bench Sheet EPA Methods 8290A or 1613B

Batch: BLB0228

Solid Samples

Supervisor Review By Date

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Dioxin Extraction Laboratory – Glassware

Batch ID: BLB0228 Work Order: 23A0295, 23A0417, 23A0418, 23A0419, 23A0420, 23A0455 Extraction Parameter: Dioxin ARI Analyst

ARI Sample ID		300 mL Flat Bottom	Small Soxhlet	Large Soxhlet	250 mL Beaker	Funnel	Column	Florisil Column	Turbo Tube	Sep Funnel	Erlenmeyer Flask	Centrifuge Bottle	Turbo-Vap	Vortex Mixer	Heating Mantle
BLB0228	-BLK1	21	6		239	93	33	4	26				4	4	
	-BS1	8	19		40	70	2	58	83				4	4	
	-DUP1	34	1		8	69	15	8	58				4	4	
	-SRM1	56	28		9	43	41	68	64				4	4	
23A0295	-04A	63		68	46	54	14	77	74				4	4	
23A0417	-01C	86	57		29	41	197	39	13				4	4	
	-03C	28		33	2	35	9	166	5				4	4	
	-05C	3	62		256	4	24	29	23				4	4	
23A0418	-01C	19	4		48	94	75	123	17				4	4	
	-02C	76	3		1	36	9	7	9				4	4	
	-10C	59	74		10	13	45	167	19				4	4	
23A0419	-02C	45		46	2	6	225	38	10				4	4	
	-04C	7	87		259	48	119	60	3				4	4	
	-05C	14	31		6	68	145	3	20				4	4	
	-08C	44	18		18	10	23	10	82				4	4	
	-09C	68	80		32	51	42	79	60				4	4	
23A0420	-01C	47		63	4	43	222	150	41				4	4	
	-04C	29	116		34	49	62	1	32				4	4	
	-08C	51		21	37	64	10	70	85				4	4	
23A0455	-03B	87		66	16	58	224	14	39				4	4	
	-08B	25		47	~~8~~88	65	2000	37	77				4	4	
	-15B	22		61	35	52	37	13	25				4	4	
	-16B	9		58	52	91	217	103	24				4	4	

TOTAL SOLIDS BENCHSHEET

Method HRSM01.2

(dry at 110 C)

Batch:	BLA0399
Date:	
Analyst:	JW
Drying Oven:	018
Analytical Balance:	24650344

Instrumentation

Batch drying time

Record times as mm/dd/yy hh:mm

Date/time in oven:	02/08/23	12:12
Date/time out:	02/09/23	0508
Elapsed hrs:	0.0	

Oven Temp, C: 112

TS (%) calculated as:

Final dry wt (g) = (Dry Wt - Tare Wt)

TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)

Oven Temps, °C	
Start Temp:	112
End Temp:	112

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23A0295-04 A	0.81	11.12	6.64			No
23A0417-01 C	0.80	11.88	8.18			~~No~~ Yes
23A0417-03 |	0.81	11.09	5.28			~~No~~ Yes
23A0417-05 |	0.81	11.63	8.34			~~No~~ Yes
23A0418-01 |	0.81	11.23	9.56			No
23A0418-02 |	0.81	11.59	9.26			~~No~~ Yes
23A0418-10 |	0.79	11.28	8.56			No
23A0419-02 |	0.82	11.44	5.98			~~No~~ Yes
23A0419-04 |	0.80	11.49	8.13			~~No~~ Yes
23A0419-05 |	0.80	11.55	9.11			~~No~~ Yes
23A0419-08 |	0.81	11.36	8.34			~~No~~ Yes
23A0419-09 |	0.82	11.48	7.37			~~No~~ Yes
23A0420-01 |	0.80	11.51	6.37			No Yes
23A0420-04 |	0.80	11.71	8.47			~~No~~ Yes
23A0420-08 ↓	0.81	11.57	7.44			~~No~~ Yes
23A0455-03 B	0.81	11.51	6.16			~~No~~ Yes
23A0455-08 |	0.81	11.60	6.24			~~No~~ Yes
23A0455-15 |	0.80	11.85	6.86			~~No~~ Yes
23A0455-16 ↓	0.80	11.90	6.16			~~No~~ Yes

TOTAL SOLIDS BENCHSHEET

Method HRSM01.2

(dry at 110 C)

Instrumentation

Batch:	BLA0399
Date:	2/9/2023 5:08
Analyst:	TW
Drying Oven:	18
Analytical Balance:	24650344

Batch drying time

Record times as mm/dd/yy hh:mm

Date/time in oven:	2/8/2023 12:12	112
Date/time out:	2/9/2023 5:08	112
Elapsed hrs:	16.9	

Oven Temp, C

TS (%) calculated as:

Final dry wt (g) = (Dry Wt - Tare Wt)

TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)

Oven Temps, °C	
Start Temp:	112
End Temp:	112

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23A0295-04	0.8100	11.1200	6.6000	5.79	**56.16%**	No
23A0417-01	0.8000	11.8800	8.1800	7.38	**66.61%**	Yes
23A0417-03	0.8100	11.0900	5.2800	4.47	**43.48%**	Yes
23A0417-05	0.8100	11.6300	8.3000	7.49	**69.22%**	Yes
23A0418-01	0.8100	11.2300	9.5600	8.75	**83.97%**	No
23A0418-02	0.8100	11.5900	9.2600	8.45	**78.39%**	Yes
23A0418-10	0.7900	11.2800	8.5800	7.79	**74.26%**	No
23A0419-02	0.8200	11.4400	5.9800	5.16	**48.59%**	Yes
23A0419-04	0.8000	11.4900	8.1300	7.33	**68.57%**	Yes
23A0419-05	0.8000	11.5500	9.1100	8.31	**77.30%**	Yes
23A0419-08	0.8100	11.3600	8.3000	7.49	**71.00%**	Yes
23A0419-09	0.8200	11.4800	7.3700	6.55	**61.44%**	Yes
23A0420-01	0.8000	11.5100	6.3700	5.57	**52.01%**	Yes
23A0420-04	0.8000	11.7100	8.4700	7.67	**70.30%**	Yes
23A0420-08	0.8100	11.5700	7.0000	6.19	**57.53%**	Yes
23A0455-03	0.8100	11.5100	6.1600	5.35	**50.00%**	Yes
23A0455-08	0.8100	11.6000	6.2600	5.45	**50.51%**	Yes
23A0455-15	0.8000	11.8500	6.8600	6.06	**54.84%**	Yes
23A0455-16	0.8000	11.9000	6.1600	5.36	**48.29%**	Yes

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

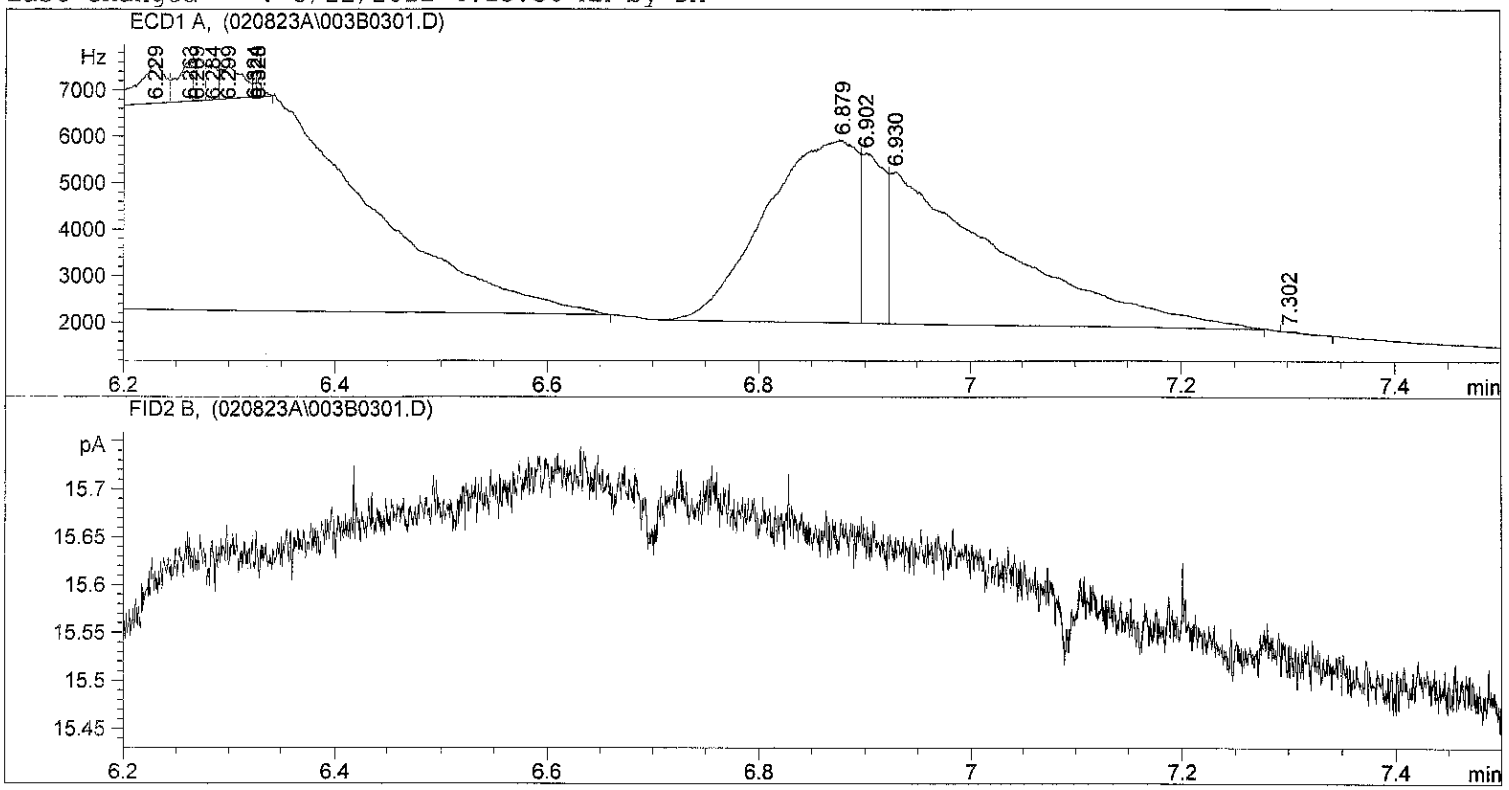
Extraction Parameter: Dioxin Extraction Batch: _____

Total Solids Batch: BLA0399 Work Order(s): 23A0417, 418, 419, 420, 455, 467

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☑ No Anomalies (standard soil/wet sediment/sand/gravel)= 418-01	
☑ Standing Water Decanted (Not shared)= 417-01, 03, 05, 418-02, 419-02 ~~08~~, 420-01-08, 455-03-16	TW 2/8/23
☐ Standing Water Homogenized (Shared samples)=	
☑ Clay/Clumps (Difficult to homogenize)= 418-10, 419-04, 08, 420-01-03, 295-04	TW 2/8/23
☑ Rocks (%+size)? 417-05, 420-04 = <1% small rocks 419-05 = ~5% small rocks	TW 2/8/23
☑ Organics (Leaves/sticks/grass)= 419-08,	
☑ Oily, obvious fuel/sulfur odors= 455-03	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☑ Other (Details)=	
455-15: Black, rubbery, synthetic smell/look	TW 2/8/23
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☒ Other Notes/Comments= (Note problems, concerns, corrective actions).	
Rotovaped to 23A0418-02c on 2/17/23.	DD 2/17/23
Sample 23A0418-02 might have ~~been~~ double clean-up std.	DD 2/27/23
☐ Share Samples Y / N	
☐ Multiple Jars Y / N	
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Injection Date : 2/8/2023 1:55:30 PM Seq. Line : 3
Sample Name : CS4 Location : Vial 3
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\020823A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.206	BP	0.0000	8.66767e4	664.88849	10.84094
2	5.587	VV S	0.0447	1.09698e5	2.98286e4	13.72025
3	5.683	VV S	0.1588	3.93675e5	4.13187e4	49.23825
4	5.978	BV T	5.04e-3	18.05461	57.88772	0.00226
5	6.047	PB S	0.1853	1.51055e5	9539.49121	18.89300
6	6.058	BV T	9.75e-3	174.80591	238.65413	0.02186
7	6.080	PB T	1.78e-3	3.53057	33.02444	0.00044
8	6.150	BV T	3.34e-3	9.06364	45.21567	0.00113
9	6.161	PV T	0.0000	35.20145	22.02009	0.00440
10	6.179	PV T	0.0163	61.39373	45.64867	0.00768
11	6.194	PV T	8.10e-3	244.74156	391.26068	0.03061
12	6.229	PV T	0.0207	1463.61755	850.93054	0.18306
13	6.263	PV T	0.0120	843.85364	860.64862	0.10554
14	6.269	PV T	8.67e-3	627.01740	885.06689	0.07842
15	6.284	PV T	8.71e-3	533.15363	748.61572	0.06668
16	6.299	PV T	0.0180	1025.12476	702.49194	0.12822
17	6.324	PV T	3.63e-3	65.86477	302.11624	0.00824

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	6.328	PB T	7.09e-3	132.00352	310.52213	0.01651
19	6.879	PV	0.0711	2.34277e4	3920.70630	2.93017
20	6.902	VV	0.0183	5542.96191	3652.82300	0.69328
21	6.930	VB	0.0876	2.42131e4	3267.66821	3.02841
22	7.302	PP	2.86e-3	5.18017	26.76217	0.00065
Totals :				7.99532e5	9.77138e4	

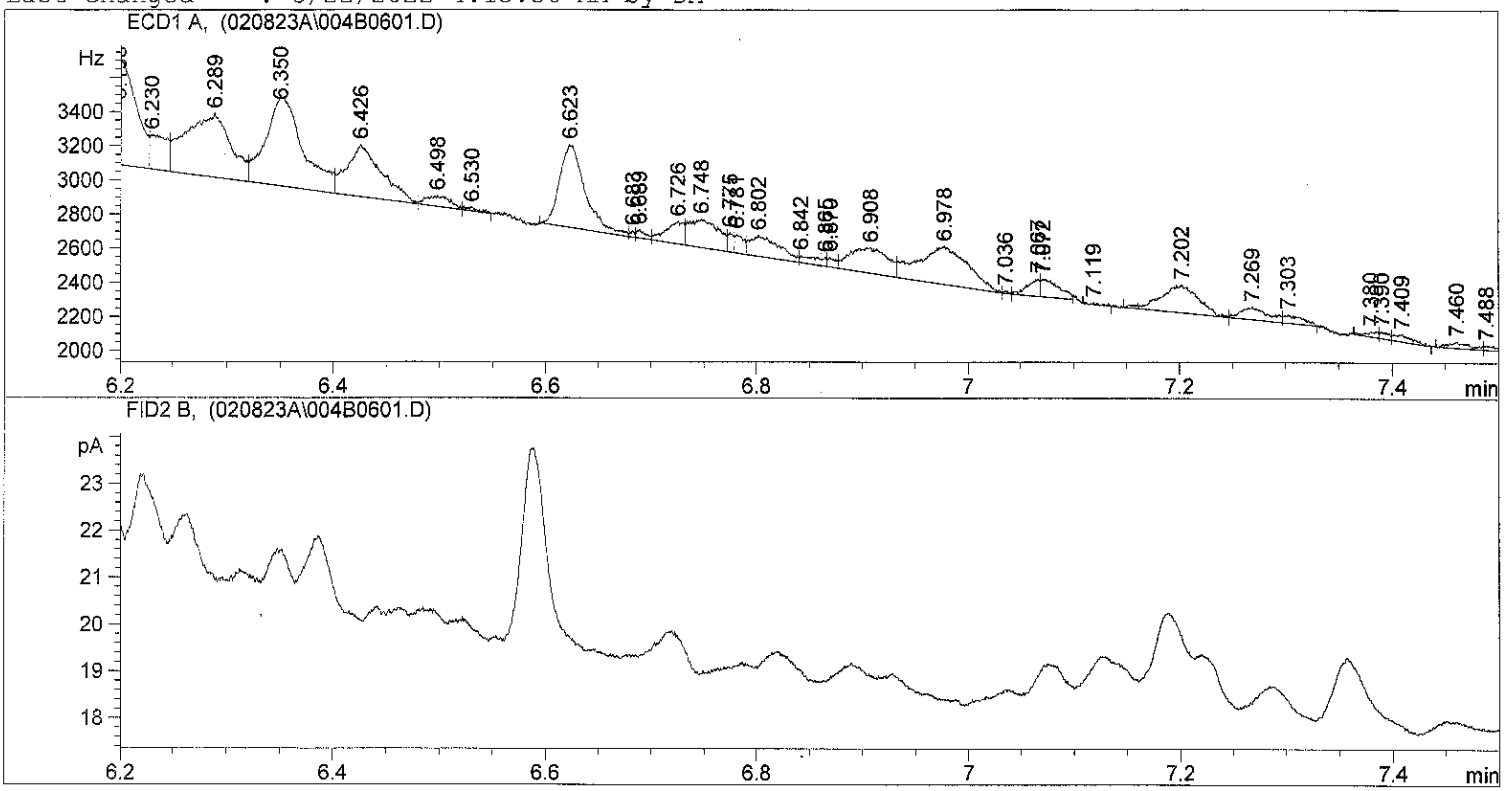
Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

Injection Date : 2/8/2023 2:29:08 PM Seq. Line : 6
Sample Name : 23A0295 04 Location : Vial 4
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\020823A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.229	BP	3.57e-3	6.02172	25.33255	0.01465
2	5.260	VV	0.0105	517.66351	636.44055	1.25981
3	5.265	VV	0.0120	621.50671	638.06256	1.51252
4	5.293	VV	0.0173	549.58148	398.05145	1.33748
5	5.339	VV	0.0174	746.33356	525.60638	1.81631
6	5.373	VV	0.0177	767.40723	554.69446	1.86759
7	5.391	VV	3.50e-3	59.52319	239.68765	0.14486
8	5.417	VV	0.0165	461.04587	355.50174	1.12202
9	5.423	VV	8.67e-3	226.67284	344.79965	0.55164
10	5.438	VV	6.95e-3	185.63216	351.98215	0.45176
11	5.446	VV	7.56e-3	226.15720	402.15451	0.55039
12	5.473	VV	0.0201	2214.69873	1368.04443	5.38978
13	5.507	VV	0.0208	1899.09534	1176.87427	4.62171
14	5.551	VV	0.0148	358.10165	289.72662	0.87149
15	5.586	VB	0.0291	2793.56641	1145.48547	6.79853
16	5.645	BV	0.0182	899.67645	597.65887	2.18949
17	5.664	VV	4.49e-3	183.34435	550.51160	0.44619

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.688	VV	0.0309	3660.92407	1409.61597	8.90937
19	5.729	VV	7.56e-3	533.47156	894.63739	1.29828
20	5.739	VV	0.0193	1432.10596	884.74542	3.48523
21	5.781	VV	0.0204	1232.63892	727.20807	2.99980
22	5.810	VV	0.0225	1386.06030	732.41357	3.37317
23	5.837	VV	3.71e-3	142.18623	533.31152	0.34603
24	5.861	VV	0.0270	2583.52100	1157.08142	6.28736
25	5.901	VV	9.83e-3	402.50500	508.67346	0.97955
26	5.930	VV	0.0181	1095.45581	745.53204	2.66594
27	5.944	VV	6.68e-3	374.58398	743.56281	0.91160
28	5.952	VV	0.0117	695.36249	760.99762	1.69226
29	5.972	VV	0.0147	836.39032	683.37524	2.03547
30	5.998	VV	0.0168	854.52460	672.59082	2.07961
31	6.012	VV	6.44e-3	311.27676	667.57452	0.75754
32	6.022	VV	7.28e-3	398.41943	695.64258	0.96961
33	6.030	VV	0.0464	1988.57068	714.67908	4.83946
34	6.104	VV	7.21e-3	196.44687	357.44254	0.47808
35	6.116	VV	0.0212	714.97156	405.47003	1.73998
36	6.144	VV	5.29e-3	133.84894	333.01926	0.32574
37	6.153	VV	9.22e-3	274.74622	372.00192	0.66863
38	6.162	VV	8.55e-3	245.76323	379.67969	0.59810
39	6.198	VV	0.0284	1472.86377	623.36548	3.58442
40	6.230	VB	0.0139	229.54462	198.96986	0.55863
41	6.289	BV	0.0340	1070.24390	371.95908	2.60459
42	6.350	VV	0.0283	1266.63757	532.68616	3.08254
43	6.426	VV	0.0267	676.30304	302.74939	1.64588
44	6.498	VV	0.0189	94.13110	62.15283	0.22908
45	6.530	VP	9.92e-3	16.08724	21.04246	0.03915
46	6.623	PV	0.0205	819.81897	484.47818	1.99514
47	6.683	VV	3.65e-3	9.29171	35.53580	0.02261
48	6.689	VV	8.22e-3	29.24295	47.28236	0.07117
49	6.726	VV	0.0143	154.65782	131.43607	0.37638
50	6.748	VV	0.0233	323.99377	166.69981	0.78848
51	6.775	VV	5.79e-3	41.99701	111.53319	0.10221
52	6.781	VV	7.15e-3	62.17921	110.71663	0.15132
53	6.802	VV	0.0243	235.55606	120.21734	0.57326
54	6.842	VV	0.0136	47.23201	41.83913	0.11495
55	6.865	VV	3.92e-3	11.85912	50.42408	0.02886
56	6.870	VV	7.16e-3	29.44323	55.72210	0.07165
57	6.908	VV	0.0294	370.06851	149.82793	0.90061
58	6.978	VP	0.0384	717.28583	222.30611	1.74562
59	7.036	VP	4.88e-3	4.82910	13.81245	0.01175
60	7.067	VV	0.0107	83.38009	102.91669	0.20292
61	7.072	VB	0.0145	123.56033	103.39581	0.30070
62	7.119	PP	9.57e-3	5.22175	9.09806	0.01271
63	7.202	BV	0.0293	391.67313	159.46561	0.95319
64	7.269	VV	0.0224	128.27414	71.24173	0.31217
65	7.303	VP	0.0214	61.62396	48.09589	0.14997
66	7.380	BV	9.58e-3	23.94708	31.11692	0.05828
67	7.390	VV	7.20e-3	21.66171	38.28507	0.05272
68	7.409	VP	0.0139	47.85396	41.85389	0.11646
69	7.460	BV	0.0165	47.43949	35.26856	0.11545
70	7.488	VB	0.0107	22.65638	26.18906	0.05514
71	7.610	PB	0.0241	215.91650	107.13709	0.52546
72	7.698	PB	9.10e-3	10.82723	16.83511	0.02635
73	7.770	BP	0.0131	13.60996	17.27345	0.03312
Totals :				4.10907e4	2.86428e4	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

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*** End of Report ***

```
Injection Date  : 2/8/2023 2:40:21 PM          Seq. Line :   7
Sample Name     : 23A0417 01                    Location : Vial 5
Acq. Operator   : TW                               Inj :   1
                                              Inj Volume : 1 µl
Sequence File   : C:\HPCHEM\2\SEQUENCE\020823A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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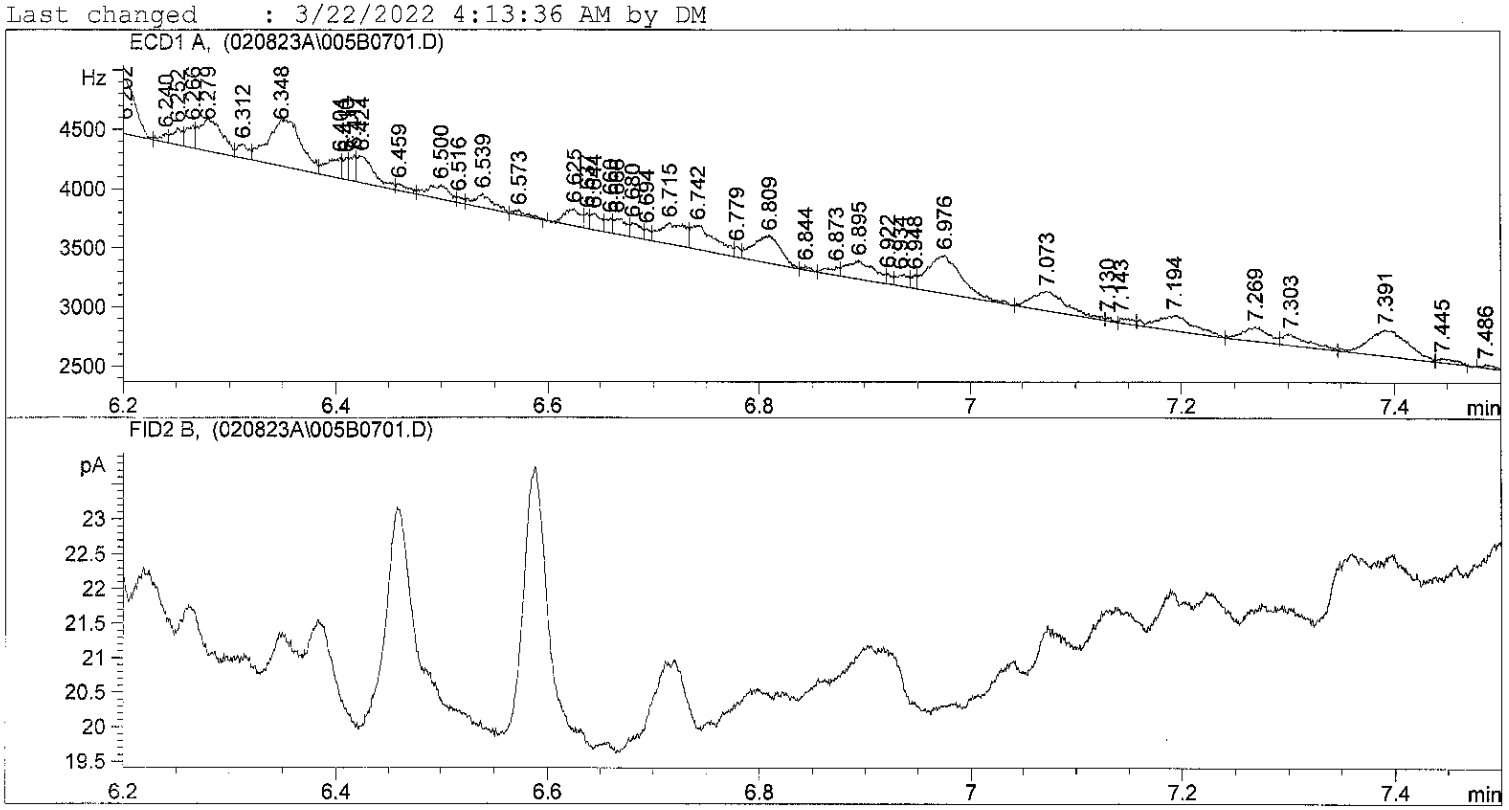

Area Percent Report

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Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
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Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.255	BV	0.0146	815.45447	710.09045	2.99082
2	5.268	VV	0.0202	1142.00171	694.57098	4.18849
3	5.318	VV	0.0194	1434.73865	1059.06042	5.26215
4	5.373	VV	0.0239	1731.56482	890.38507	6.35082
5	5.410	VV	9.35e-3	227.41800	310.13651	0.83410
6	5.423	VV	5.54e-3	96.70369	248.39459	0.35468
7	5.430	VV	5.17e-3	76.49197	195.17186	0.28055
8	5.438	VV	4.63e-3	61.26772	196.64864	0.22471
9	5.444	VV	4.91e-3	71.43562	193.45360	0.26200
10	5.474	VV S	0.0191	2531.69067	1932.20728	9.28542
11	5.509	VV S	0.0217	762.01013	586.13397	2.79481
12	5.689	VV S	0.0708	4071.45752	958.04388	14.93278
13	5.943	VV S	0.0551	4114.08594	1244.46411	15.08913
14	5.978	VB S	0.0153	141.42451	131.48395	0.51870
15	6.022	BV	5.89e-3	35.59397	88.59785	0.13055
16	6.046	VV	0.0110	274.10944	312.02682	1.00534
17	6.052	VP	0.0100	251.33211	324.74152	0.92180

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	6.098	VV	0.0166	458.79041	335.46207	1.68269
19	6.123	VV	0.0105	142.64905	176.00731	0.52319
20	6.144	VV	9.40e-3	89.12443	123.82484	0.32688
21	6.155	VV	9.46e-3	95.27046	134.61903	0.34942
22	6.167	VV	4.74e-3	46.32471	137.34149	0.16990
23	6.202	VV	0.0210	757.72601	452.08609	2.77909
24	6.240	VV	6.43e-3	37.51903	77.69917	0.13761
25	6.252	VV	8.39e-3	89.05262	140.63072	0.32662
26	6.266	VV	6.74e-3	98.96951	188.09015	0.36299
27	6.279	VV	0.0188	411.40167	272.41479	1.50889
28	6.312	VV	9.11e-3	84.97085	119.22510	0.31165
29	6.348	VV	0.0258	847.00513	394.98862	3.10654
30	6.404	VV	0.0132	156.97188	175.63280	0.57572
31	6.410	VV	4.90e-3	64.95693	184.86223	0.23824
32	6.417	VV	4.59e-3	80.40128	223.99045	0.29489
33	6.424	VV	0.0149	259.08554	221.31073	0.95024
34	6.459	VV	0.0102	45.13975	56.25411	0.16556
35	6.500	VV	0.0160	158.18497	121.14268	0.58017
36	6.516	VV	5.66e-3	21.28885	51.15183	0.07808
37	6.539	VV	0.0151	136.32153	118.20748	0.49998
38	6.573	VP	0.0108	32.95963	38.62346	0.12089
39	6.625	BV	0.0123	146.17775	145.82083	0.53613
40	6.637	VV	4.63e-3	42.14490	128.39906	0.15457
41	6.644	VV	9.09e-3	91.84103	135.84891	0.33684
42	6.660	VV	5.86e-3	54.58728	121.13416	0.20021
43	6.666	VV	0.0104	111.00921	132.72304	0.40715
44	6.680	VV	8.77e-3	83.29161	118.96418	0.30549
45	6.694	VV	5.37e-3	36.21357	92.42789	0.13282
46	6.715	VV	0.0206	302.73218	178.81856	1.11032
47	6.742	VV	0.0202	339.98639	202.57716	1.24696
48	6.779	VV	5.43e-3	34.99967	92.11266	0.12837
49	6.809	VP	0.0212	411.33746	232.41306	1.50865
50	6.844	VV	5.69e-3	14.91999	34.19013	0.05472
51	6.873	VV	0.0109	52.64597	75.83879	0.19309
52	6.895	VV	0.0219	282.10153	154.69080	1.03466
53	6.922	VV	5.64e-3	30.46431	90.10273	0.11173
54	6.934	VV	0.0105	81.36338	95.98094	0.29841
55	6.948	VV	4.64e-3	38.68324	117.63535	0.14188
56	6.976	VP	0.0276	721.37457	325.65369	2.64577
57	7.073	VV	0.0277	379.64487	164.92775	1.39241
58	7.130	VP	5.37e-3	12.37164	30.23129	0.04538
59	7.143	VB	0.0116	37.78104	40.13753	0.13857
60	7.194	BP	0.0295	320.26309	130.11871	1.17462
61	7.269	VV	0.0210	205.15720	118.62156	0.75245
62	7.303	VV	0.0202	159.15649	95.55270	0.58373
63	7.391	VV	0.0313	577.84399	220.77844	2.11934
64	7.445	VB	0.0155	48.54186	37.51603	0.17804
65	7.486	BP	0.0107	23.12334	28.34205	0.08481
66	7.555	PV	0.0238	320.04401	162.65607	1.17382
67	7.602	VP	0.0306	263.26691	102.38871	0.96558
68	7.678	VV	7.71e-3	17.07394	28.03465	0.06262
69	7.684	VP	5.18e-3	8.28595	20.21348	0.03039
70	7.695	VB	5.79e-3	7.57964	17.71121	0.02780
71	7.765	PP	0.0184	56.32850	38.21889	0.20659
Totals :				2.72652e4	1.75300e4	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

Results obtained with enhanced integrator!

*** End of Report ***

```
Injection Date  : 2/8/2023 2:51:33 PM          Seq. Line :   8
Sample Name     : 23A0417 03                   Location : Vial 6
Acq. Operator   : TW                              Inj :   1
                                               Inj Volume : 1 µl

Sequence File   : C:\HPCHEM\2\SEQUENCE\020823A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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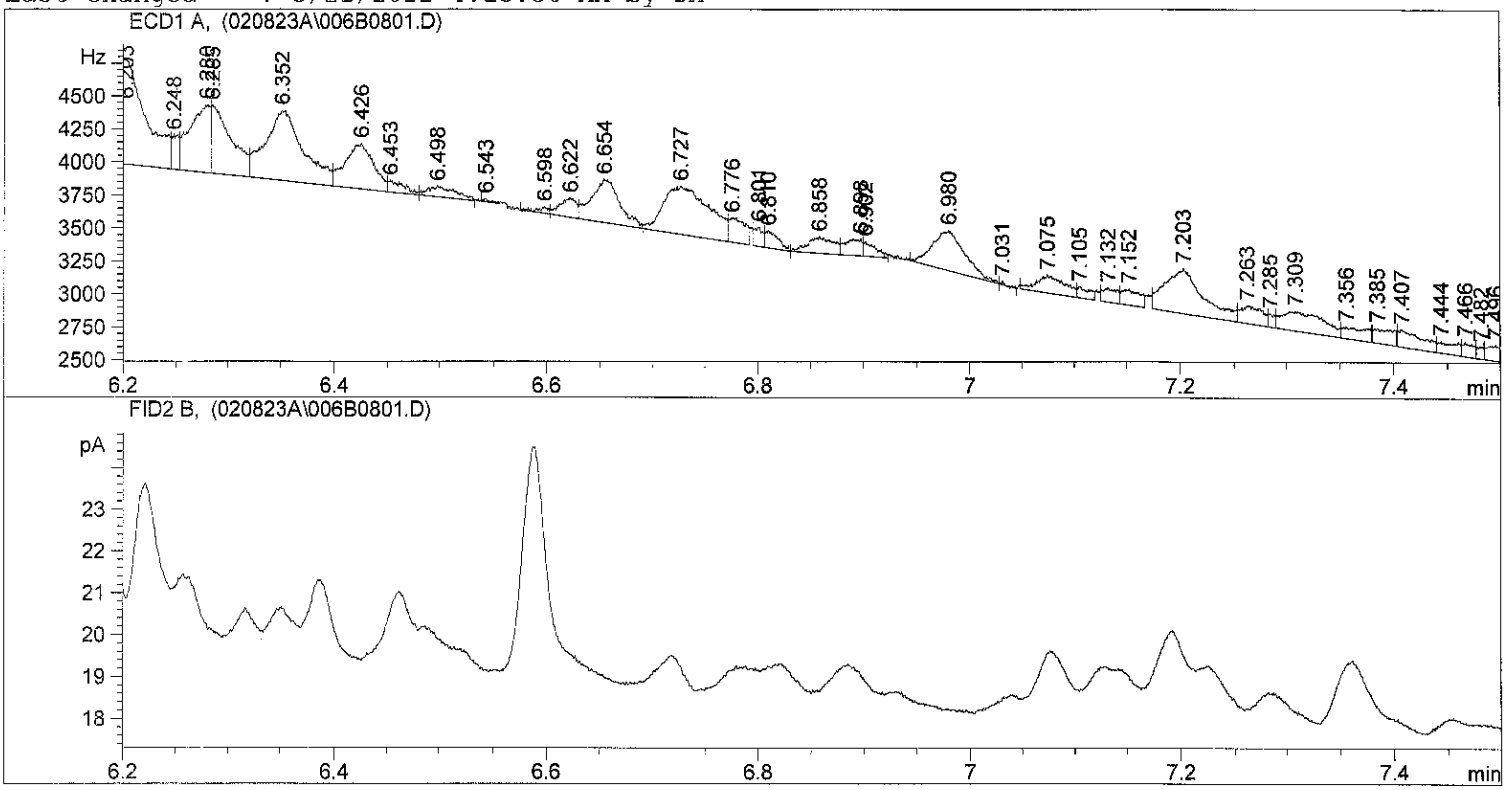

Area Percent Report

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Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
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Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.235	BV	8.96e-3	521.33185	745.51953	1.04245
2	5.257	VV	0.0154	1050.59021	875.67999	2.10076
3	5.262	VV	0.0161	1162.55261	877.77887	2.32464
4	5.309	VV	0.0142	304.24091	269.31735	0.60836
5	5.332	VV	7.98e-3	164.76659	283.33685	0.32947
6	5.339	VV	6.19e-3	125.92272	306.92709	0.25179
7	5.345	VV	6.07e-3	123.20325	272.64142	0.24636
8	5.372	VV	0.0195	756.34106	466.33102	1.51238
9	5.392	VV	3.64e-3	94.98354	364.19858	0.18993
10	5.397	VV	6.65e-3	194.43192	387.75223	0.38879
11	5.412	VV	8.05e-3	255.19582	399.60593	0.51029
12	5.416	VV	4.99e-3	150.95488	401.02234	0.30185
13	5.447	VV	0.0215	1128.91724	631.24237	2.25738
14	5.474	VV	0.0193	1495.22876	962.33270	2.98986
15	5.512	VV	0.0222	1604.82605	868.53864	3.20901
16	5.542	VV	8.38e-3	191.53056	287.27008	0.38298
17	5.588	VV	0.0193	1347.14050	840.14380	2.69374

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.595	VV	0.0146	1006.82550	826.89423	2.01325
19	5.620	VV	0.0100	619.00629	764.44983	1.23776
20	5.633	VV	5.68e-3	273.95837	747.53064	0.54781
21	5.638	VV	4.85e-3	295.79016	776.05646	0.59146
22	5.646	VV	0.0103	672.98041	809.72723	1.34569
23	5.688	VV	0.0321	4503.06445	1702.32898	9.00432
24	5.727	VV	9.89e-3	714.15991	916.16443	1.42803
25	5.746	VV	0.0218	1798.50964	989.72675	3.59630
26	5.785	VV	0.0172	961.86450	729.87408	1.92334
27	5.812	VV	0.0287	1938.82629	817.85364	3.87687
28	5.861	VV	0.0283	2982.26050	1285.88770	5.96332
29	5.903	VV	8.03e-3	382.73541	617.48114	0.76532
30	5.929	VV	0.0158	1243.80432	979.04144	2.48711
31	5.945	VV	0.0226	1874.88342	993.52832	3.74901
32	5.977	VV	0.0105	637.29865	751.07623	1.27434
33	6.001	VV	0.0187	1272.07666	819.67346	2.54364
34	6.030	VV	0.0336	2759.02441	976.01569	5.51694
35	6.090	VV	9.94e-3	415.32602	519.04919	0.83049
36	6.095	VV	0.0323	1486.13696	547.20074	2.97168
37	6.147	VV	4.19e-3	120.63813	391.55795	0.24123
38	6.160	VV	0.0131	471.70526	447.26956	0.94322
39	6.203	VV	0.0343	2231.59521	796.52960	4.46230
40	6.248	VV	5.87e-3	120.08164	256.00034	0.24012
41	6.280	VV	0.0165	683.60651	514.77844	1.36694
42	6.285	VV	0.0162	699.81256	515.96570	1.39934
43	6.352	VV	0.0290	1304.19263	531.27765	2.60786
44	6.426	VV	0.0222	632.58740	342.20044	1.26492
45	6.453	VV	0.0139	94.11954	84.91534	0.18820
46	6.498	VB	0.0217	145.70573	79.73717	0.29135
47	6.543	BP	5.16e-3	9.38791	24.00495	0.01877
48	6.598	PV	8.01e-3	29.96703	48.50067	0.05992
49	6.622	VV	0.0126	151.87347	144.92320	0.30369
50	6.654	VV	0.0221	600.76288	325.43271	1.20128
51	6.727	VV	0.0366	1114.50256	363.64456	2.22856
52	6.776	VB	0.0131	201.40446	185.65668	0.40273
53	6.801	BV	7.39e-3	84.77335	145.75244	0.16951
54	6.810	VP	0.0145	111.37266	128.02638	0.22270
55	6.858	VV	0.0204	209.82632	123.75417	0.41957
56	6.898	VV	0.0141	138.73624	125.91805	0.27742
57	6.902	VB	9.98e-3	88.32461	109.84135	0.17661
58	6.980	BV	0.0255	628.91467	303.96313	1.25758
59	7.031	VP	3.65e-3	5.44856	23.98592	0.01089
60	7.075	BV	0.0236	251.47235	129.96202	0.50284
61	7.105	VB	0.0102	64.59859	82.25236	0.12917
62	7.132	BV	0.0118	102.11861	106.32062	0.20420
63	7.152	VB	0.0152	140.59741	122.69398	0.28114
64	7.203	BB	0.0304	824.10864	336.44891	1.64789
65	7.263	BV	0.0174	193.08934	132.30629	0.38610
66	7.285	VB	6.14e-3	42.35452	97.38612	0.08469
67	7.309	BV	0.0348	413.84198	147.08018	0.82752
68	7.356	VV	0.0200	142.25491	84.83192	0.28445
69	7.385	VB	0.0150	142.48834	115.58903	0.28492
70	7.407	BV	0.0193	209.38939	130.61740	0.41869
71	7.444	VV	0.0209	105.74757	84.20407	0.21145
72	7.466	VB	8.88e-3	77.97742	107.32687	0.15592
73	7.482	BV	6.80e-3	38.46377	94.21661	0.07691
74	7.496	VB	0.0213	214.73947	121.06731	0.42939
75	7.530	BP	0.0162	131.72638	98.32513	0.26340
76	7.617	VV	0.0334	347.54767	132.37057	0.69496
77	7.644	VV	4.64e-3	27.65198	83.97115	0.05529
78	7.656	VV	0.0142	75.55587	65.76975	0.15108
79	7.678	VV	9.30e-3	36.09155	50.73938	0.07217
80	7.692	VB	6.60e-3	16.38600	30.83969	0.03277
81	7.740	BB	2.20e-3	1.74134	12.68031	0.00348
82	7.755	PB	6.81e-3	11.20881	21.05810	0.02241

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
83	7.771	BP	4.46e-3	8.31793	25.14285	0.01663
84	7.799	BPA	1.18e-3	5.32108e-1	7.52672	0.00106

Totals : 5.00100e4 3.42436e4

Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

```
Injection Date  : 2/8/2023 3:02:45 PM          Seq. Line :   9
Sample Name     : 23A0417 05                   Location : Vial 7
Acq. Operator   : TW                               Inj :   1
                                             Inj Volume : 1 µl

Sequence File   : C:\HPCHEM\2\SEQUENCE\020823A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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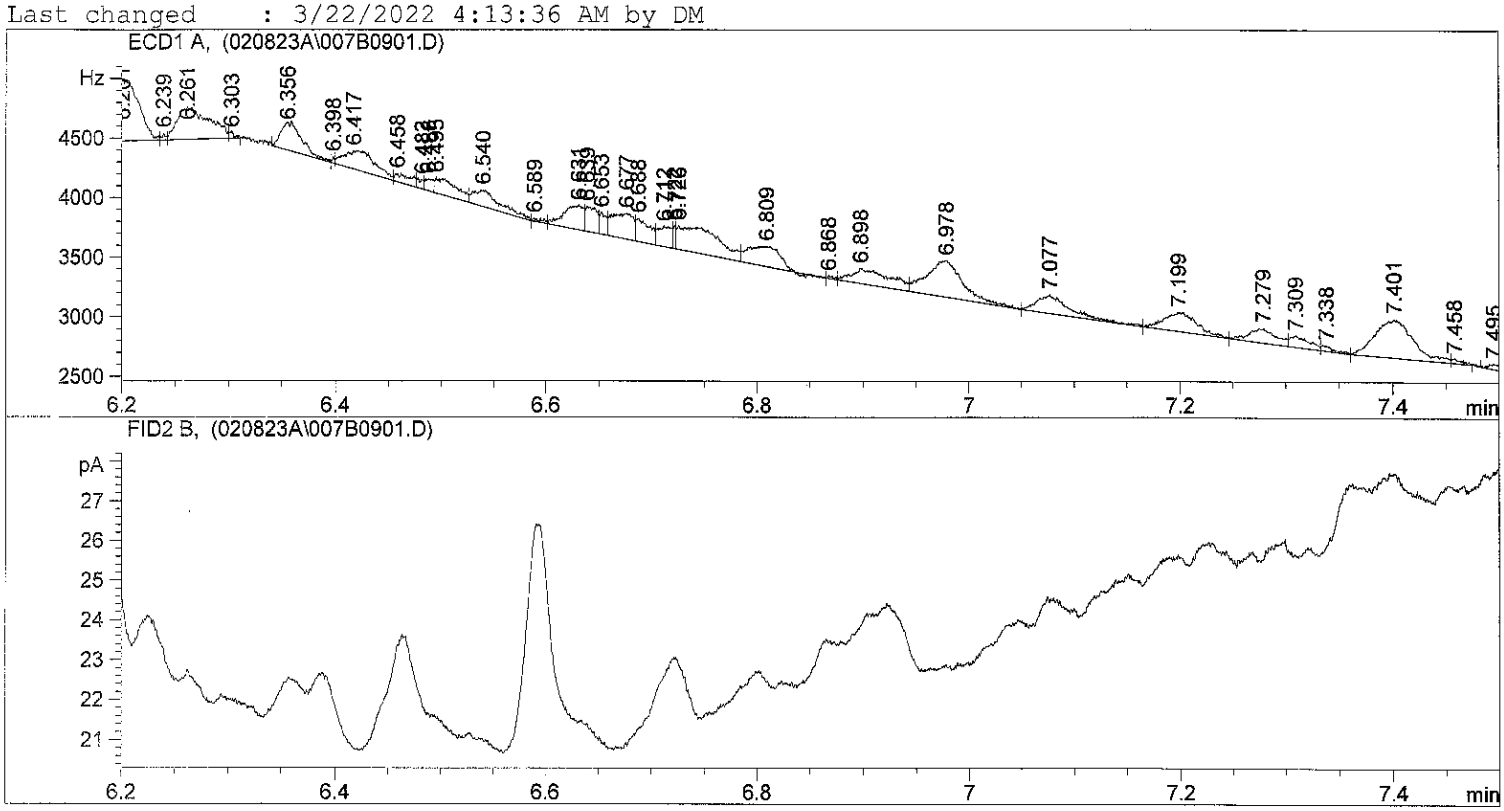

Area Percent Report

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Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
```

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.255	BV	0.0133	347.30539	377.52606	0.91560
2	5.264	VV	3.94e-3	97.55769	340.64270	0.25719
3	5.282	VV	0.0196	703.62549	457.13269	1.85497
4	5.318	VV	0.0197	2239.51025	1411.91626	5.90402
5	5.376	VV	0.0287	1964.45154	815.16602	5.17889
6	5.423	VV	3.48e-3	51.35733	208.11522	0.13539
7	5.443	VV	0.0123	292.77487	292.95859	0.77184
8	5.476	VV	0.0207	1924.69971	1237.59155	5.07409
9	5.512	VV	0.0219	1123.31433	639.60583	2.96140
10	5.563	VV	0.0182	344.57837	241.61873	0.90841
11	5.589	VV	0.0119	301.12103	320.93317	0.79385
12	5.593	VV	9.36e-3	226.61594	316.09338	0.59743
13	5.622	VV	0.0120	261.57596	267.16254	0.68959
14	5.636	VV	0.0116	306.84467	324.37503	0.80893
15	5.647	VV	8.92e-3	237.10547	324.71320	0.62508
16	5.656	VV	3.81e-3	82.56342	299.67459	0.21766
17	5.693	VV	0.0238	1657.61243	864.14038	4.36997

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.712	VV	0.0204	969.19366	576.16937	2.55509
19	5.755	VV	0.0207	1021.14325	591.89771	2.69204
20	5.781	VV	0.0139	474.02039	422.03165	1.24966
21	5.809	VV	0.0135	557.74597	568.20441	1.47039
22	5.818	VV	0.0165	717.73016	533.98267	1.89215
23	5.866	VV	0.0227	1666.52869	888.43384	4.39347
24	5.887	VV	4.53e-3	189.22620	534.83038	0.49886
25	5.895	VV	6.26e-3	245.96074	506.94196	0.64843
26	5.909	VV	9.13e-3	364.36298	486.95380	0.96057
27	5.946	VV	0.0228	4279.56396	2472.85229	11.28222
28	5.978	VV	0.0109	576.71362	653.17468	1.52039
29	5.990	VV	6.62e-3	320.61884	601.28186	0.84525
30	6.002	VV	0.0135	641.69257	598.49139	1.69169
31	6.018	VV	3.67e-3	133.24860	506.17755	0.35128
32	6.054	VV	0.0332	2351.88599	842.29340	6.20028
33	6.101	VV	0.0227	1402.49060	738.86334	3.69739
34	6.134	VV	4.92e-3	143.52238	427.32123	0.37837
35	6.141	VV	0.0175	447.70709	426.64978	1.18029
36	6.162	VV	0.0143	378.05066	317.21991	0.99666
37	6.181	VV	5.05e-3	100.78380	290.39023	0.26570
38	6.201	VV	0.0227	945.91345	505.05963	2.49371
39	6.239	VV	3.26e-3	12.74979	55.95242	0.03361
40	6.261	VV	0.0262	551.73035	266.37137	1.45453
41	6.303	VB	5.98e-3	17.16174	47.83054	0.04524
42	6.356	BV	0.0171	315.34674	228.87935	0.83135
43	6.398	VV	2.30e-3	7.62406	52.42258	0.02010
44	6.417	VV	0.0257	332.71732	153.65392	0.87714
45	6.458	VB	0.0149	79.87435	67.89582	0.21057
46	6.482	BV	4.95e-3	29.09678	78.06127	0.07671
47	6.488	VV	8.88e-3	52.59761	98.75021	0.13866
48	6.495	VV	0.0191	199.12570	125.57646	0.52496
49	6.540	VP	0.0215	243.99162	138.67888	0.64324
50	6.589	VV	8.98e-3	17.24462	24.01306	0.04546
51	6.631	VV	0.0159	258.99576	202.80991	0.68279
52	6.639	VV	9.00e-3	156.35497	212.08881	0.41220
53	6.653	VV	5.56e-3	77.10444	181.18547	0.20327
54	6.677	VV	0.0173	295.38959	214.61784	0.77874
55	6.688	VV	0.0118	178.47119	193.49361	0.47050
56	6.712	VV	0.0111	152.76973	166.68944	0.40275
57	6.722	VV	2.74e-3	35.10620	191.43936	0.09255
58	6.726	VV	0.0348	577.18127	196.71281	1.52162
59	6.809	VP	0.0252	338.69150	171.54057	0.89289
60	6.868	VV	5.20e-3	8.76129	21.28361	0.02310
61	6.898	VV	0.0315	335.09009	125.55132	0.88340
62	6.978	VP	0.0285	727.82648	307.00403	1.91877
63	7.077	VP	0.0260	327.66397	153.97694	0.86382
64	7.199	VP	0.0256	338.70749	159.20059	0.89293
65	7.279	VV	0.0212	216.47658	122.72334	0.57070
66	7.309	VV	0.0160	118.86810	93.68621	0.31337
67	7.338	VP	0.0110	36.71853	45.70008	0.09680
68	7.401	VV	0.0296	797.66028	320.53537	2.10287
69	7.458	VB	8.83e-3	25.72585	38.33428	0.06782
70	7.495	PP	0.0113	42.15821	45.10283	0.11114
71	7.563	VV	0.0260	545.93866	253.04730	1.43926
72	7.612	VP	0.0280	319.88290	136.29251	0.84331
73	7.719	BP	0.0124	16.45978	15.96781	0.04339
74	7.763	VV	7.24e-3	12.31849	23.04581	0.03248
75	7.771	VV	4.39e-3	10.38412	30.36786	0.02738
76	7.779	VBA	0.0106	31.24795	36.41956	0.08238
Totals :				3.79319e4	2.72255e4	

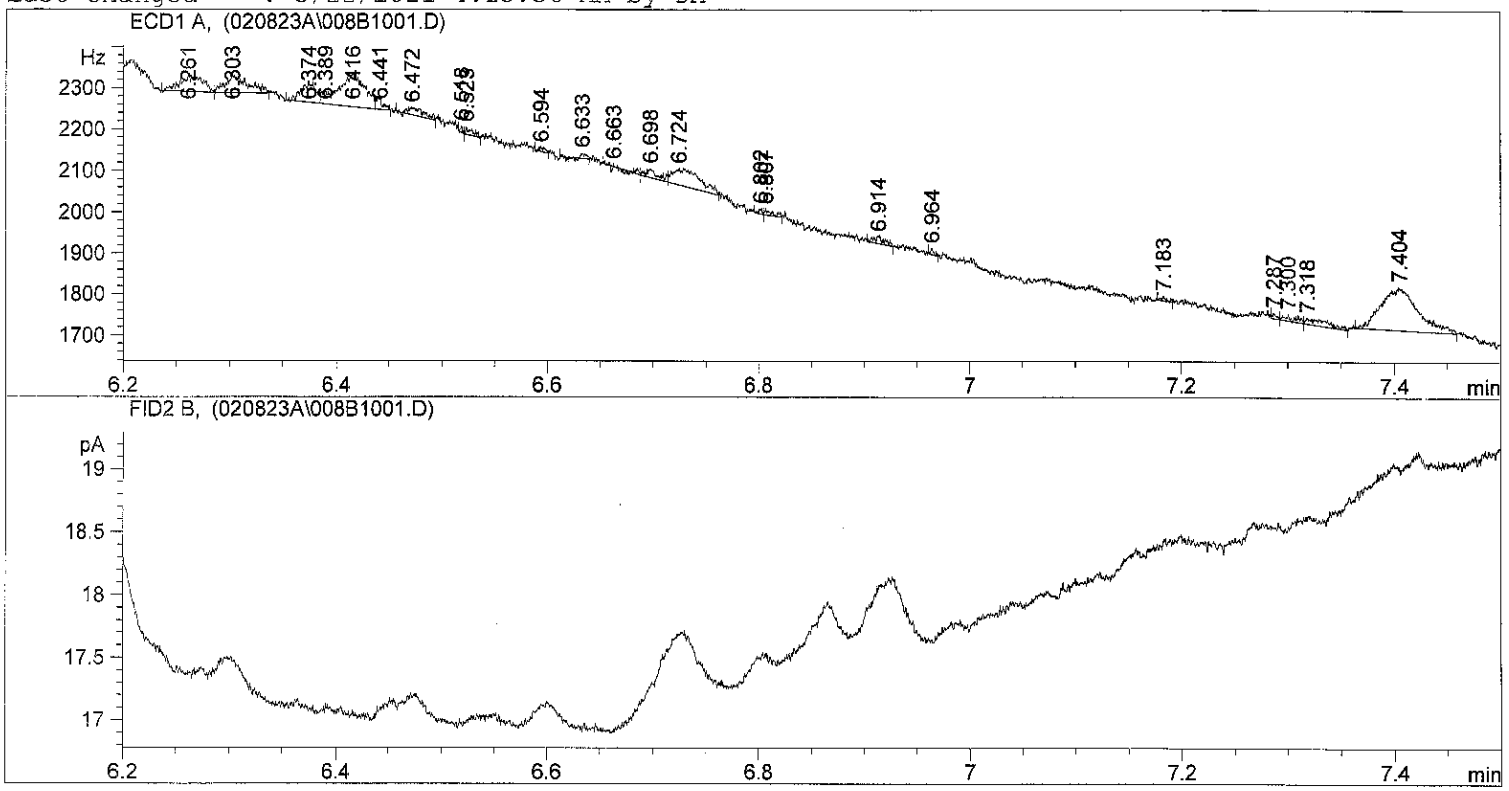
Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

Injection Date : 2/8/2023 3:13:58 PM Seq. Line : 10
Sample Name : 23A0418 01 Location : Vial 8
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\020823A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.256	PV	0.0153	162.73949	129.29457	2.38024
2	5.284	VV	0.0148	148.65704	122.00686	2.17427
3	5.320	VV	0.0158	722.65741	595.10913	10.56966
4	5.391	VP	0.0200	394.89487	242.86368	5.77577
5	5.476	VV	0.0185	228.76073	149.02046	3.34588
6	5.522	VV	0.0210	143.25690	83.42520	2.09529
7	5.561	VP	0.0123	46.37456	46.96839	0.67828
8	5.606	VP	0.0152	28.12291	24.18949	0.41133
9	5.639	VV	9.53e-3	18.15099	27.41008	0.26548
10	5.677	VV	0.0183	122.65091	83.73656	1.79390
11	5.691	VV	5.43e-3	22.56688	54.54949	0.33007
12	5.695	VV	7.83e-3	31.33781	50.54073	0.45835
13	5.731	VV	0.0182	95.10723	62.42218	1.39105
14	5.762	VP	0.0139	77.38287	73.20264	1.13181
15	5.950	VB S	0.0197	2476.90796	1914.70190	36.22749
16	6.008	PP	3.17e-3	3.09422	15.21701	0.04526
17	6.059	PV	0.0174	410.88821	304.21194	6.00969

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	6.107	VV	0.0176	576.51849	425.37735	8.43221
19	6.154	VV	0.0282	159.60561	71.54710	2.33441
20	6.261	PP	0.0168	55.83662	40.28873	0.81667
21	6.303	VB	0.0157	59.75159	46.11890	0.87393
22	6.374	PV	0.0111	44.31026	48.37506	0.64809
23	6.389	VV	6.46e-3	15.34341	30.54430	0.22441
24	6.416	VV	0.0192	125.76698	78.68539	1.83948
25	6.441	VB	5.01e-3	12.18266	32.24461	0.17818
26	6.472	BP	0.0122	17.45177	17.58265	0.25525
27	6.518	BP	1.97e-3	1.77035	15.09910	0.02589
28	6.523	VP	5.98e-3	8.11490	16.96809	0.11869
29	6.594	BB	6.77e-3	3.90520	9.61684	0.05712
30	6.633	PB	3.04e-3	2.41670	12.60909	0.03535
31	6.663	PP	0.0000	1.66399	4.27341	0.02434
32	6.698	VB	9.93e-3	16.51320	21.09516	0.24152
33	6.724	BB	0.0241	76.06440	38.39069	1.11253
34	6.802	PP	3.55e-3	2.77657	12.70730	0.04061
35	6.807	VB	6.63e-3	6.69535	12.96153	0.09793
36	6.914	PP	9.67e-3	11.73880	15.80258	0.17169
37	6.964	BB	3.12e-3	3.14714	14.57575	0.04603
38	7.183	BP	4.26e-3	2.40083	9.39084	0.03511
39	7.287	BB	3.86e-3	3.74117	13.38126	0.05472
40	7.300	BB	8.67e-3	9.80525	14.17358	0.14341
41	7.318	BP	0.0200	22.19640	13.48082	0.32465
42	7.404	BB	0.0283	247.57233	103.60189	3.62102
43	7.507	PP	2.26e-3	1.20800	7.57877	0.01767
44	7.563	BV	0.0254	215.04582	102.97736	3.14528

Totals : 6837.09475 5208.31850

Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

```
Injection Date  : 2/8/2023 3:25:10 PM          Seq. Line :  11
Sample Name     : 23A0418 02                    Location : Vial 9
Acq. Operator   : TW                               Inj :   1
                                              Inj Volume : 1 µl
Sequence File   : C:\HPCHEM\2\SEQUENCE\020823A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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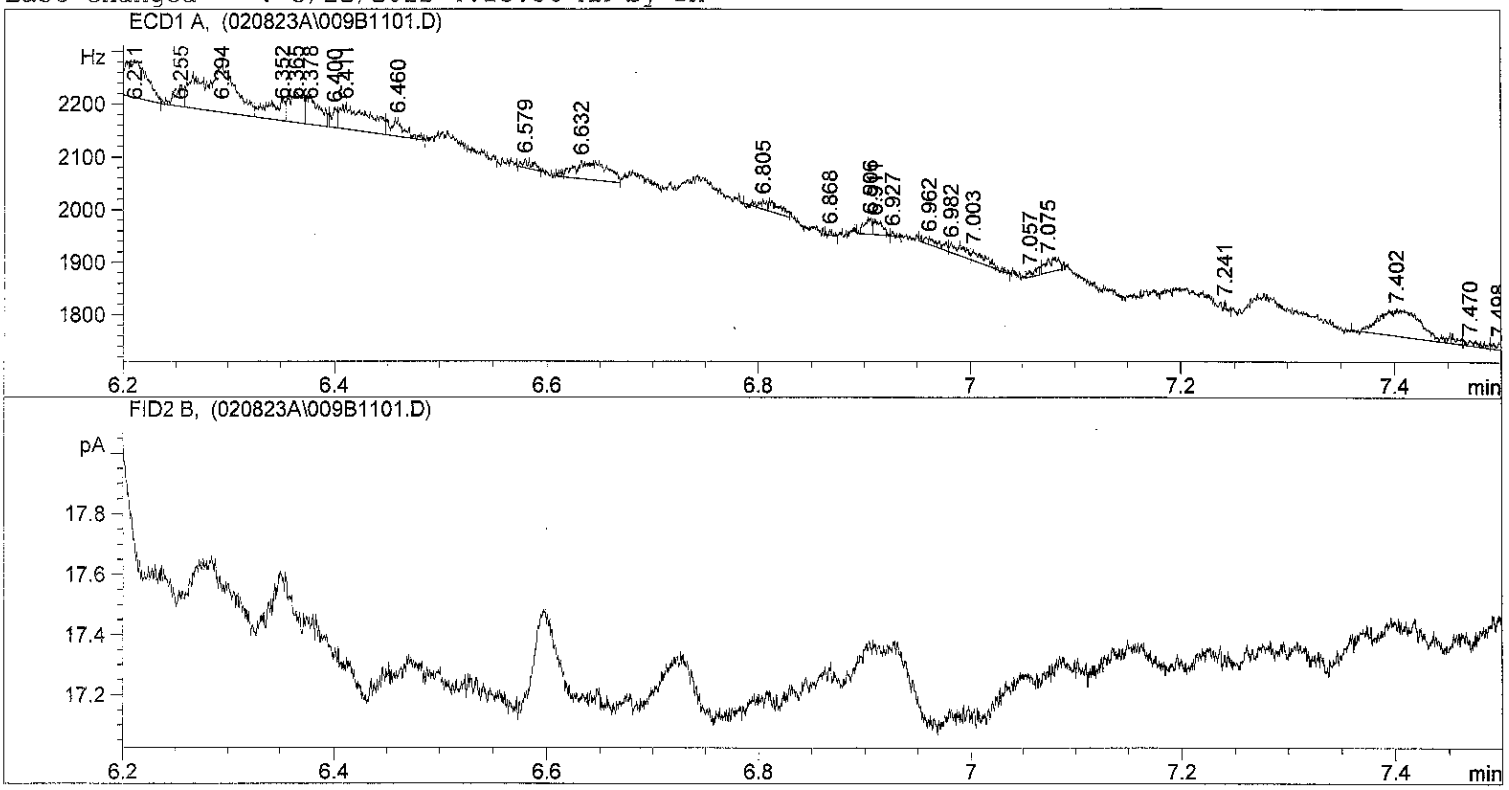

Area Percent Report

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Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
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Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.284	BV	0.0205	185.98737	109.28689	2.57529
2	5.320	VV	0.0156	205.36978	176.54172	2.84367
3	5.340	VB	5.78e-3	15.26789	34.38035	0.21141
4	5.379	BB	0.0252	652.25092	325.14948	9.03146
5	5.479	PV	0.0185	984.65771	681.25378	13.63416
6	5.515	VV	0.0160	188.90533	144.72467	2.61570
7	5.604	VV	0.0206	76.81649	46.22050	1.06365
8	5.659	VV	0.0178	89.96937	60.87792	1.24577
9	5.693	VV	0.0202	566.40369	366.13708	7.84276
10	5.740	VV	0.0245	227.35078	110.28571	3.14804
11	5.799	VV	0.0239	264.88922	133.76959	3.66781
12	5.815	VV	0.0170	171.92314	120.77317	2.38055
13	5.867	VV	0.0208	404.88681	240.85974	5.60631
14	5.890	VV	0.0197	327.11383	197.28690	4.52941
15	5.953	VV	0.0271	1393.68555	668.28003	19.29781
16	6.005	VB	0.0108	42.09756	51.14014	0.58291
17	6.058	BV	0.0177	116.95119	81.89530	1.61938

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	6.107	VV	0.0208	199.49174	115.44548	2.76228
19	6.158	VV	9.98e-3	29.13929	37.84408	0.40348
20	6.177	VV	0.0136	42.28775	37.95765	0.58554
21	6.211	VP	0.0190	113.91133	72.05461	1.57728
22	6.255	VV	7.37e-3	23.67378	42.04136	0.32780
23	6.294	VV	0.0280	205.30719	88.87523	2.84281
24	6.352	VV	0.0139	43.87957	39.67142	0.60758
25	6.365	VV	0.0108	50.18553	56.04232	0.69490
26	6.378	VB	0.0106	47.02105	56.00593	0.65108
27	6.400	BV	4.83e-3	12.24129	37.28984	0.16950
28	6.411	VB	0.0225	88.92070	47.27440	1.23125
29	6.460	BP	0.0108	29.65022	33.12469	0.41055
30	6.579	PB	7.45e-3	9.90240	16.87609	0.13711
31	6.632	PV	0.0263	74.67782	33.85627	1.03403
32	6.805	PB	0.0155	23.24734	18.00794	0.32190
33	6.868	PP	2.79e-3	1.48100	9.64122	0.02051
34	6.906	BV	6.86e-3	15.25563	28.43117	0.21124
35	6.911	VV	7.41e-3	15.58032	26.67681	0.21573
36	6.927	VB	2.69e-3	1.43526	8.87971	0.01987
37	6.962	BB	0.0138	14.07645	13.65695	0.19491
38	6.982	BV	0.0121	17.29800	17.57958	0.23952
39	7.003	VP	0.0114	19.12300	20.72646	0.26479
40	7.057	PB	7.03e-3	6.73690	12.21609	0.09328
41	7.075	BB	0.0105	21.83802	25.76926	0.30238
42	7.241	PB	1.66e-3	1.19383	13.11695	0.01653
43	7.402	PB	0.0325	141.54851	51.41534	1.95997
44	7.470	BB	0.0105	9.23284	11.07384	0.12784
45	7.498	BP	0.0108	11.64192	13.31694	0.16120
46	7.619	BB	0.0168	36.96336	26.64604	0.51182
47	7.664	BP	0.0000	5.21228e-1	1.84591	0.00722
Totals :				7221.98991	4562.22254	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

```
Injection Date  : 2/8/2023 3:36:23 PM          Seq. Line :  12
Sample Name     : 23A0418 10                   Location : Vial 10
Acq. Operator   : TW                               Inj :  1
                                             Inj Volume : 1 µl
Sequence File   : C:\HPCHEM\2\SEQUENCE\020823A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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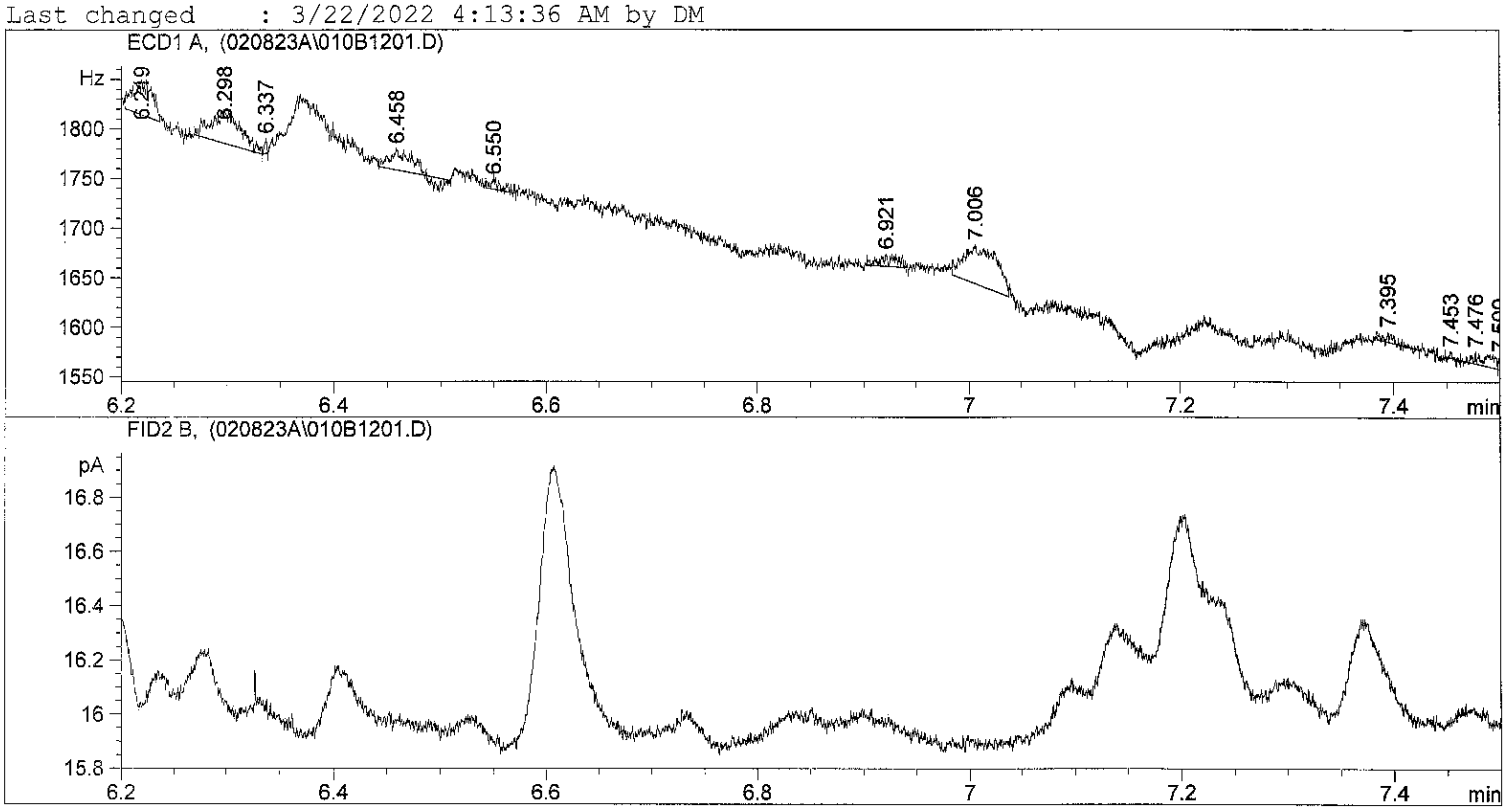

Area Percent Report

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Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
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Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.217	BB	0.0140	19.96141	17.85999	0.58222
2	5.324	PV	0.0427	235.87700	66.06883	6.87992
3	5.353	VB	0.0209	85.99411	51.95572	2.50822
4	5.392	BV	0.0131	43.37379	40.60246	1.26510
5	5.422	VP	0.0205	46.77159	27.13833	1.36421
6	5.496	VV	0.0255	159.11696	75.85979	4.64103
7	5.530	VV	0.0233	249.72490	133.12386	7.28383
8	5.558	VP	0.0108	40.37194	46.11444	1.17754
9	5.610	VV	0.0159	74.92420	56.34252	2.18534
10	5.619	VB	8.73e-3	38.77602	54.33096	1.13100
11	5.718	BV	0.0260	80.01202	36.45005	2.33374
12	5.734	VB	0.0143	32.62025	29.10176	0.95145
13	5.830	PV	0.0294	230.39557	95.43566	6.72004
14	5.869	VV	0.0197	148.93250	89.93824	4.34397
15	5.944	VV	0.0489	1575.69128	379.02917	45.95882
16	6.041	VP	0.0157	82.59758	63.63636	2.40916
17	6.130	BP	0.0156	18.53795	14.44320	0.54070

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	6.219	BB	0.0154	42.05111	34.64790	1.22652
19	6.298	BP	0.0233	62.26445	33.45536	1.81609
20	6.337	VP	2.63e-3	2.22899	14.21385	0.06501
21	6.458	PB	0.0125	20.93421	20.94570	0.61060
22	6.550	BP	0.0129	6.85344	8.86918	0.19990
23	6.921	BB	0.0132	12.50003	11.58583	0.36459
24	7.006	BB	0.0271	85.46437	38.22853	2.49277
25	7.395	BP	7.15e-3	5.09803	9.07597	0.14870
26	7.453	PB	1.07e-3	3.35659e-2	5.39775	0.00098
27	7.476	BV	0.0146	11.61378	10.74345	0.33874
28	7.500	VP	0.0119	11.54760	11.90927	0.33681
29	7.790	PBA	5.13e-3	4.21660	10.85319	0.12299

Totals : 3428.48524 1487.35732

Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

```
Injection Date  : 2/8/2023 3:47:33 PM          Seq. Line :  13
Sample Name     : 23A0419 02                   Location : Vial 11
Acq. Operator   : TW                               Inj :  1
                                             Inj Volume : 1 µl
Sequence File   : C:\HPCHEM\2\SEQUENCE\020823A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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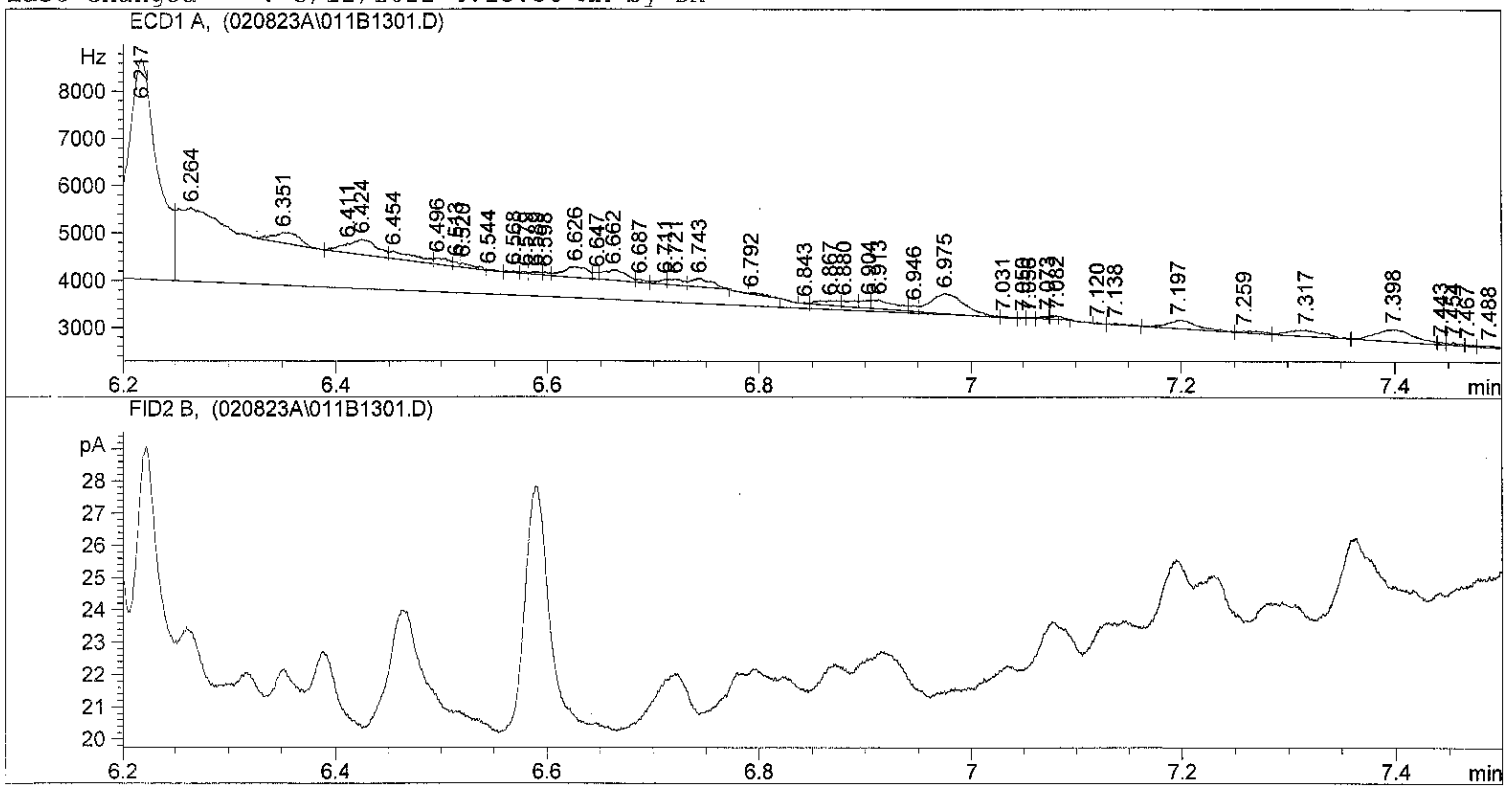

Area Percent Report

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Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
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Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.233	BV	0.0138	476.45328	454.57462	0.51335
2	5.257	VV	0.0120	434.18112	469.36865	0.46781
3	5.266	VV	0.0174	649.95868	461.86673	0.70030
4	5.317	VP	0.0146	1064.45105	926.16876	1.14689
5	5.393	VV	0.0309	1797.87891	702.29230	1.93712
6	5.444	VV	0.0177	1157.22144	779.15558	1.24685
7	5.458	VV	3.83e-3	155.75203	600.49158	0.16781
8	5.474	VV	0.0179	1497.46948	1057.72791	1.61345
9	5.511	VV	0.0256	2634.11938	1269.22461	2.83813
10	5.553	VV	9.44e-3	273.29517	352.79767	0.29446
11	5.586	VV	0.0163	1023.42578	759.99768	1.10269
12	5.594	VV	0.0104	443.21146	707.37396	0.47754
13	5.609	VV	4.75e-3	203.08759	571.04205	0.21882
14	5.613	VV	3.40e-3	136.55370	568.59100	0.14713
15	5.628	VV	0.0106	545.30859	636.61505	0.58754
16	5.641	VV	0.0148	828.77808	682.21582	0.89297
17	5.655	VV	6.03e-3	308.34354	662.46759	0.33222

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.692	VV	0.0291	3474.95898	1465.23706	3.74409
19	5.717	VV	7.57e-3	608.51306	1049.26782	0.65564
20	5.734	VV	9.20e-3	776.09338	1053.10168	0.83620
21	5.751	VV	0.0218	2105.52759	1159.54871	2.26860
22	5.785	VV	0.0172	1490.18945	1048.70911	1.60560
23	5.811	VV	0.0234	2306.55640	1169.63525	2.48520
24	5.841	VV	6.97e-3	506.39511	927.52887	0.54561
25	5.866	VV	0.0348	5298.26221	1852.43164	5.70861
26	5.946	VV S	0.0252	6341.68750	3272.77173	6.83284
27	6.045	VV S	0.1385	1.59792e4	1922.76843	17.21680
28	6.101	BV T	0.0152	561.72687	475.21698	0.60523
29	6.122	VV T	4.95e-3	39.34855	132.43436	0.04240
30	6.149	VV T	0.0385	46.93181	14.69083	0.05057
31	6.156	VV T	0.0157	18.75775	15.06542	0.02021
32	6.173	VV T	9.39e-4	6.53338e-1	54.89624	0.00070
33	6.217	VV S	0.0299	1.05513e4	4651.73682	11.36848
34	6.264	VB S	0.2373	2.21779e4	1557.58179	23.89552
35	6.351	BV T	0.0218	400.95480	220.99335	0.43201
36	6.411	PV T	8.82e-3	144.12952	204.66173	0.15529
37	6.424	PV T	0.0185	508.58496	327.25262	0.54797
38	6.454	PV T	0.0215	294.90741	164.56644	0.31775
39	6.496	PV T	0.0123	132.88893	130.48589	0.14318
40	6.513	PV T	5.56e-3	32.86663	98.53318	0.03541
41	6.520	PV T	0.0109	88.47569	100.34955	0.09533
42	6.544	PV T	9.66e-3	15.69776	27.08994	0.01691
43	6.568	PV T	5.26e-3	18.72460	48.92590	0.02017
44	6.579	PV T	6.15e-3	16.14340	43.74378	0.01739
45	6.589	PV T	7.33e-3	35.15026	59.16707	0.03787
46	6.598	PV T	7.24e-3	26.74384	61.54890	0.02882
47	6.626	PV T	0.0185	351.51505	228.86658	0.37874
48	6.647	PV T	5.06e-3	52.92997	138.48343	0.05703
49	6.662	PV T	0.0182	321.57904	218.62427	0.34648
50	6.687	PV T	8.73e-3	35.66878	68.13031	0.03843
51	6.711	PV T	6.93e-3	59.62995	109.84121	0.06425
52	6.721	PV T	0.0116	120.89310	126.32874	0.13026
53	6.743	PB T	0.0172	240.22905	172.86629	0.25883
54	6.792	BB T	0.0151	41.50498	33.47485	0.04472
55	6.843	BV T	5.52e-3	7.90048	23.86957	0.00851
56	6.867	PV T	0.0169	135.44463	98.33655	0.14593
57	6.880	PV T	0.0120	118.82906	121.40172	0.12803
58	6.904	PV T	8.40e-3	104.78790	160.92395	0.11290
59	6.913	PV T	0.0180	282.20795	188.97322	0.30406
60	6.946	PV T	7.57e-3	69.50109	123.39657	0.07488
61	6.975	PV T	0.0257	931.22357	428.66296	1.00335
62	7.031	PV T	0.0106	16.57218	26.16273	0.01786
63	7.050	PV T	3.27e-3	6.28066	27.40770	0.00677
64	7.056	PV T	4.08e-3	7.26370	24.33290	0.00783
65	7.073	PV T	5.71e-3	10.92734	25.94062	0.01177
66	7.082	PB T	6.00e-3	9.93984	27.60172	0.01071
67	7.120	PV	4.81e-3	7.54522	21.95337	0.00813
68	7.138	VB	0.0135	32.73728	29.50273	0.03527
69	7.197	PV	0.0241	360.90405	179.35376	0.38886
70	7.259	VV	0.0211	66.89769	37.69444	0.07208
71	7.317	VV	0.0269	297.09760	134.08533	0.32011
72	7.398	VV	0.0292	638.19153	259.88248	0.68762
73	7.443	VV	5.20e-3	20.43747	51.87404	0.02202
74	7.454	VV	8.22e-3	36.51320	55.93739	0.03934
75	7.467	VB	6.43e-3	17.38352	34.77761	0.01873
76	7.488	BP	0.0139	44.19710	38.65467	0.04762
77	7.530	VV	6.13e-3	14.51900	34.33236	0.01564
78	7.542	VV	6.55e-3	42.35155	80.32009	0.04563
79	7.559	VV	0.0202	273.00043	160.91420	0.29414
80	7.612	VV	0.0305	230.97661	90.15663	0.24887
81	7.662	VV	4.95e-3	11.48564	30.79850	0.01238
82	7.671	VV	0.0139	56.59897	52.09201	0.06098

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
83	7.691	VV	9.06e-3	29.70976	41.94360	0.03201
84	7.706	VB	0.0167	36.33719	26.25695	0.03915
85	7.751	PV	0.0105	18.32435	23.49723	0.01974
86	7.771	VP	0.0137	23.03991	28.07760	0.02482
Totals :				9.28118e4	3.87576e4	

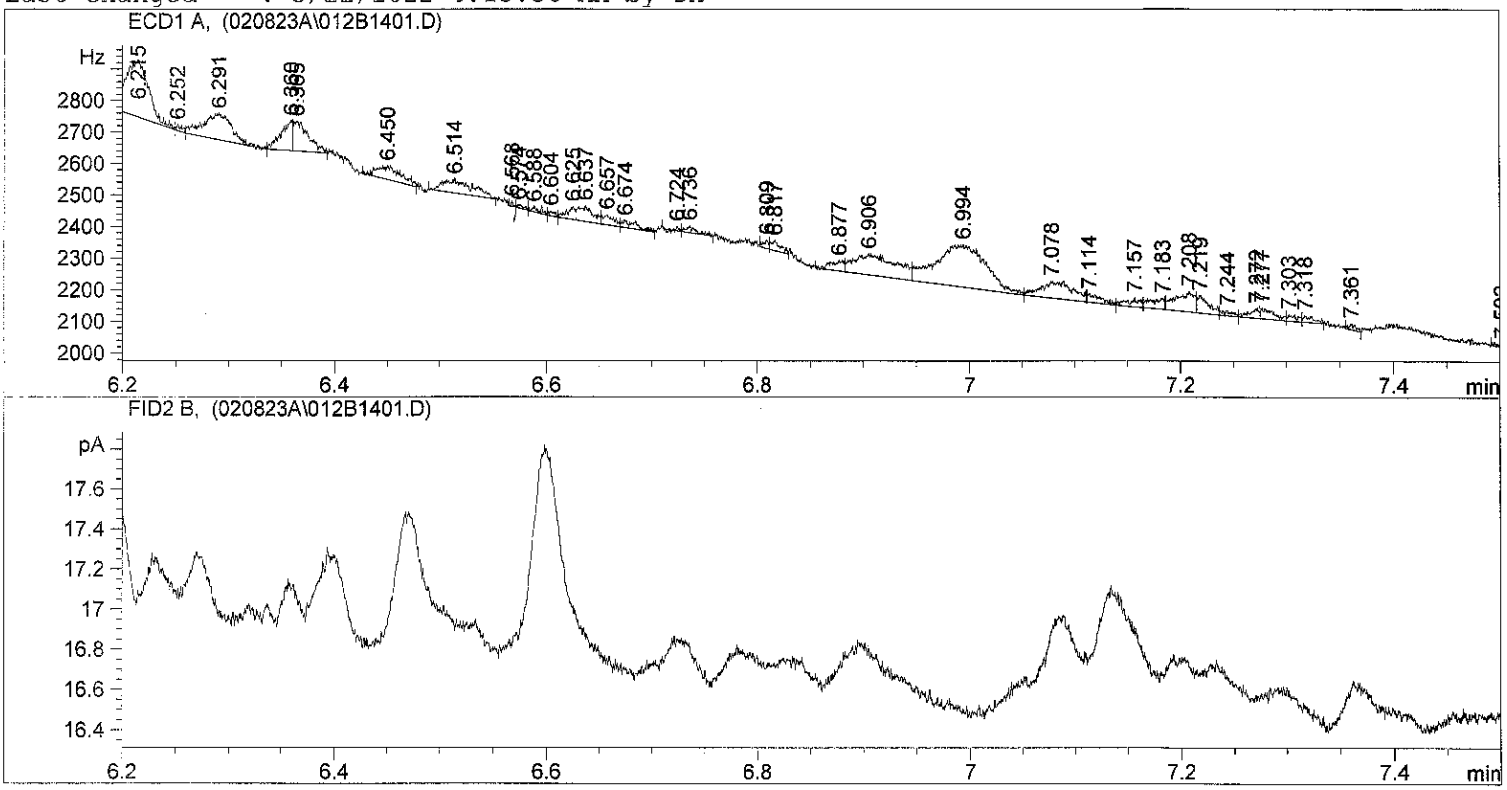
Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

Injection Date : 2/8/2023 3:58:45 PM Seq. Line : 14
Sample Name : 23A0419 04 Location : Vial 12
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\020823A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.281	PV	0.0380	1392.97693	436.78946	8.60048
2	5.312	VV	3.77e-3	49.47386	218.78587	0.30546
3	5.317	VB	0.0129	242.26303	237.30345	1.49577
4	5.376	BV	0.0331	1150.31458	420.83429	7.10224
5	5.447	VV	0.0196	493.16199	305.50455	3.04487
6	5.452	VV	4.65e-3	114.08431	313.42929	0.70438
7	5.478	VV	0.0213	1008.16901	578.81018	6.22461
8	5.506	VV	0.0241	1143.85791	577.05591	7.06237
9	5.588	VV	0.0172	619.04932	434.64249	3.82212
10	5.596	VV	0.0190	710.87079	445.31863	4.38904
11	5.624	VV	7.36e-3	146.93582	246.40495	0.90721
12	5.637	VV	4.57e-3	64.17200	198.34702	0.39621
13	5.643	VV	0.0160	253.61955	189.53732	1.56589
14	5.666	VV	6.41e-3	82.70788	178.40749	0.51065
15	5.693	VV	0.0209	557.52844	316.78461	3.44228
16	5.717	VV	0.0192	379.77264	240.39746	2.34478
17	5.745	VB	0.0168	214.45126	154.49857	1.32406

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.792	BV	0.0230	288.01025	151.18965	1.77822
19	5.826	VV	0.0183	260.27249	181.65096	1.60697
20	5.894	VV	0.0330	3465.24902	1255.70447	21.39504
21	5.937	VV	0.0195	1091.16638	687.16132	6.73705
22	5.977	VV	0.0137	229.11496	206.81931	1.41459
23	6.000	VP	0.0128	102.85414	98.16998	0.63504
24	6.038	VB	0.0105	21.35237	27.49969	0.13183
25	6.113	PP	6.99e-3	9.77132	19.02386	0.06033
26	6.129	VV	4.95e-3	10.17864	27.30000	0.06284
27	6.137	VP	5.78e-3	14.45246	33.85650	0.08923
28	6.158	VV	5.31e-3	7.56813	22.58284	0.04673
29	6.166	VV	2.90e-3	4.57893	23.17664	0.02827
30	6.170	VV	7.20e-3	15.28397	27.02565	0.09437
31	6.215	VV	0.0196	296.48099	181.95056	1.83052
32	6.252	VP	4.63e-3	6.32954	18.34366	0.03908
33	6.291	VP	0.0236	152.43686	81.65257	0.94117
34	6.360	VV	0.0104	74.14548	94.32375	0.45779
35	6.365	VP	0.0122	90.30084	92.28495	0.55753
36	6.450	PB	0.0188	66.93188	42.49412	0.41325
37	6.514	BB	0.0220	80.94071	43.80221	0.49974
38	6.568	PV	1.86e-3	1.58497	14.70962	0.00979
39	6.574	VB	6.06e-3	4.17939	8.93283	0.02580
40	6.588	BP	7.10e-3	7.75639	14.83860	0.04789
41	6.604	VP	5.83e-3	5.18997	14.83460	0.03204
42	6.625	VV	6.48e-3	20.08762	39.83491	0.12402
43	6.637	VB	0.0115	46.15977	48.51601	0.28500
44	6.657	BV	9.72e-3	23.66361	30.95971	0.14610
45	6.674	VP	0.0134	21.66717	20.39135	0.13378
46	6.724	BV	1.79e-3	1.43573	14.13250	0.00886
47	6.736	VB	7.97e-3	13.38426	21.17999	0.08264
48	6.809	BV	4.53e-3	8.78668	26.05229	0.05425
49	6.817	VB	8.36e-3	19.52429	30.93466	0.12055
50	6.877	PV	0.0113	28.30501	31.91000	0.17476
51	6.906	VV	0.0329	180.72781	65.67590	1.11584
52	6.994	VP	0.0382	432.69928	133.53177	2.67156
53	7.078	VV	0.0265	111.63512	51.54913	0.68925
54	7.114	VP	0.0117	22.78008	23.84934	0.14065
55	7.157	VV	0.0101	21.80869	26.84818	0.13465
56	7.183	VV	0.0118	29.25387	32.29038	0.18062
57	7.208	VV	0.0148	77.61890	63.88055	0.47923
58	7.219	VB	9.71e-3	41.28157	52.85612	0.25488
59	7.244	BP	8.44e-3	10.03579	14.92559	0.06196
60	7.272	VV	8.52e-3	19.33467	29.98754	0.11938
61	7.277	VB	0.0104	27.78467	33.15218	0.17155
62	7.303	BV	7.64e-3	11.77328	18.97219	0.07269
63	7.318	VB	9.31e-3	14.15439	19.40221	0.08739
64	7.361	BP	5.73e-3	7.77632	17.67407	0.04801
65	7.502	BP	8.58e-3	5.55226	7.91846	0.03428
66	7.533	PP	4.69e-3	4.85772	13.85113	0.02999
67	7.615	PV	0.0115	25.01267	26.23672	0.15443
68	7.628	VV	6.54e-3	11.79673	24.85177	0.07283
69	7.638	VB	8.97e-3	18.39002	26.92785	0.11354
70	7.658	BP	7.19e-3	8.92217	16.81404	0.05509
71	7.772	BB	2.25e-3	7.60391e-1	8.42378	0.00469
Totals :				1.61965e4	9835.71019	

Results obtained with enhanced integrator!

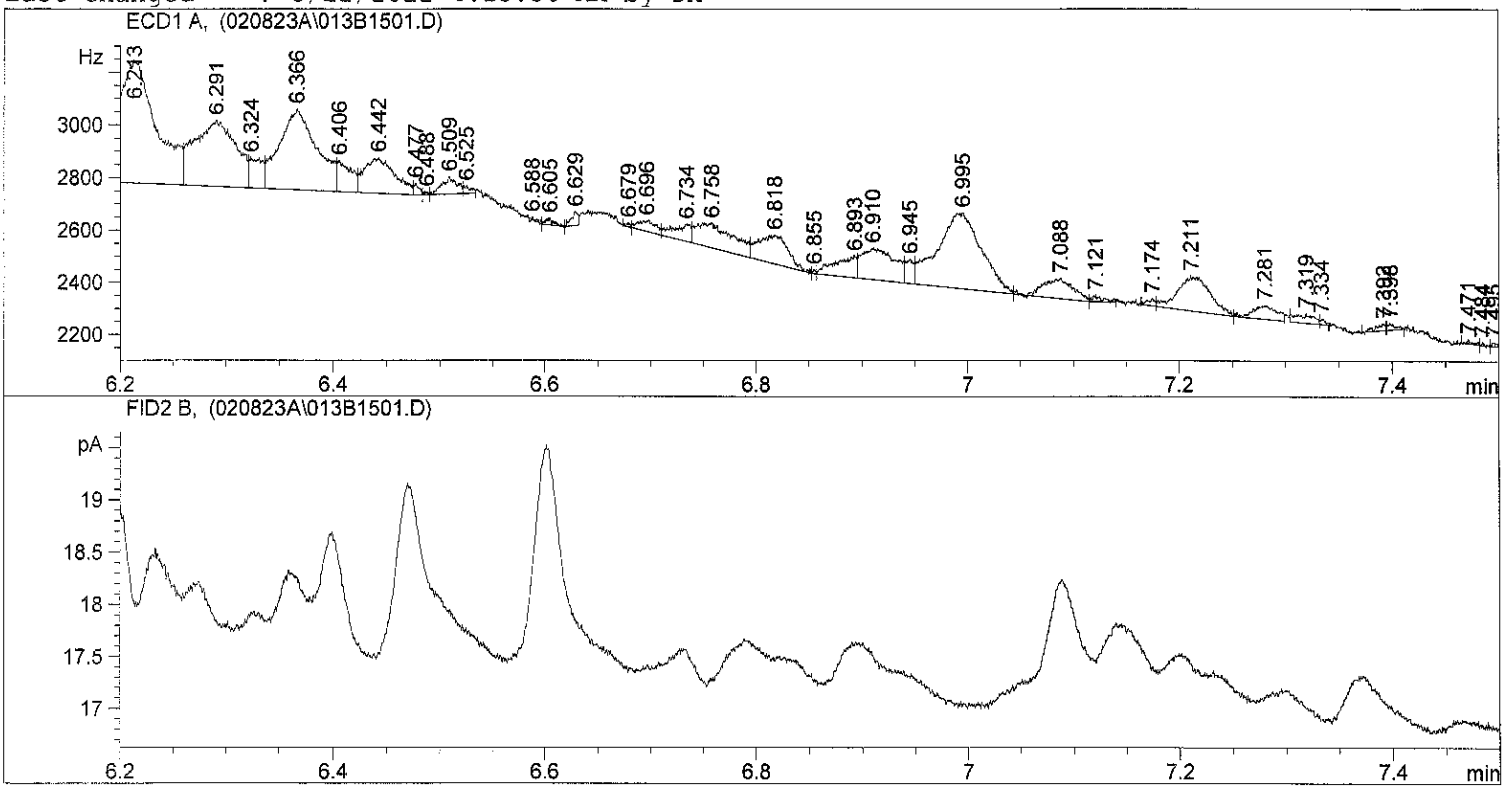
Signal 2: FID2 B,

Results obtained with enhanced integrator!

*** End of Report ***

Injection Date : 2/8/2023 4:09:56 PM Seq. Line : 15
Sample Name : 23A0419 05 Location : Vial 13
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\020823A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.239	BV	5.45e-3	11.83500	28.48541	0.04615
2	5.245	VV	4.99e-3	15.24343	40.55589	0.05945
3	5.274	VV	0.0185	257.26080	173.13242	1.00325
4	5.294	VV	7.16e-3	76.39262	135.86563	0.29791
5	5.322	VV	0.0175	285.58530	202.05225	1.11370
6	5.348	VV	0.0166	333.70230	240.80516	1.30135
7	5.378	VV	0.0171	797.43378	571.38611	3.10977
8	5.405	VV	0.0214	854.96179	499.62399	3.33412
9	5.454	VV	0.0143	279.62906	237.65984	1.09048
10	5.477	VV	0.0207	1608.27026	1023.33942	6.27181
11	5.514	VV	0.0303	1099.13538	429.25928	4.28633
12	5.607	VV	0.0280	695.09277	295.67511	2.71067
13	5.640	VV	0.0164	460.57288	340.59909	1.79611
14	5.650	VV	0.0214	619.58282	351.74942	2.41620
15	5.696	VV	0.0334	1768.65308	657.37677	6.89726
16	5.756	VV	0.0227	837.17908	437.70978	3.26477
17	5.798	VV	0.0208	682.23834	393.17737	2.66054

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.819	VV	0.0280	948.94629	413.16623	3.70063
19	5.851	VV	3.62e-3	87.53948	338.30728	0.34138
20	5.874	VV	0.0383	2136.34961	657.45148	8.33118
21	5.943	VV	0.0286	1506.61963	676.50275	5.87540
22	5.983	VV	0.0161	591.47375	445.46649	2.30659
23	6.005	VV	0.0221	792.55469	450.15430	3.09075
24	6.040	VV	0.0403	1582.80896	465.08493	6.17252
25	6.125	VV	0.0330	834.33936	304.07053	3.25370
26	6.159	VV	6.36e-3	126.92483	248.33682	0.49497
27	6.176	VV	0.0170	383.60745	276.20132	1.49596
28	6.213	VV	0.0305	1203.42322	470.34946	4.69302
29	6.291	VV	0.0324	683.66760	250.48186	2.66612
30	6.324	VV	0.0104	95.93051	113.69920	0.37410
31	6.366	VV	0.0287	731.38348	305.58499	2.85220
32	6.406	VV	0.0112	106.67705	117.79581	0.41601
33	6.442	VV	0.0238	263.73306	134.80022	1.02849
34	6.477	VP	4.67e-3	14.51855	43.79391	0.05662
35	6.488	VV	3.90e-3	2.94323	11.85437	0.01148
36	6.509	VV	0.0118	62.94789	65.52350	0.24548
37	6.525	VB	6.43e-3	14.28244	28.58422	0.05570
38	6.588	BP	1.67e-3	6.55637e-1	7.14646	0.00256
39	6.605	BP	6.13e-3	12.18150	25.70775	0.04750
40	6.629	VV	6.47e-3	23.85081	50.90097	0.09301
41	6.679	PV	3.05e-3	2.53093	14.40577	0.00987
42	6.696	VV	0.0141	48.08622	40.86644	0.18752
43	6.734	VV	0.0132	71.65473	66.53326	0.27943
44	6.758	VB	0.0298	231.13022	94.30674	0.90134
45	6.818	BP	0.0233	211.98463	109.91824	0.82668
46	6.855	VV	2.51e-3	2.38213	14.57520	0.00929
47	6.893	VV	0.0170	113.22604	81.76638	0.44155
48	6.910	VB	0.0261	259.90887	119.91524	1.01357
49	6.945	BV	6.45e-3	47.61444	91.84225	0.18568
50	6.995	VV	0.0338	825.05530	289.93625	3.21749
51	7.088	VP	0.0233	147.11485	76.43706	0.57371
52	7.121	VB	8.74e-3	15.93066	23.99966	0.06213
53	7.174	PV	6.28e-3	12.79307	26.26068	0.04989
54	7.211	VP	0.0262	280.42596	132.73004	1.09358
55	7.281	VB	0.0189	82.48508	52.54584	0.32167
56	7.319	BV	0.0152	40.48922	35.23048	0.15790
57	7.334	VB	4.89e-3	7.05355	21.15338	0.02751
58	7.392	PV	8.70e-3	15.82563	24.80054	0.06172
59	7.398	VB	8.02e-3	12.03331	25.01141	0.04693
60	7.471	PB	3.98e-3	4.11908	14.23151	0.01606
61	7.484	BP	2.06e-3	1.26083	10.07773	0.00492
62	7.495	VB	6.92e-3	7.97906	14.73147	0.03112
63	7.623	PV	0.0319	219.16937	81.12351	0.85470
64	7.666	VV	5.18e-3	12.97548	34.59040	0.05060
65	7.710	BV	0.0123	26.93408	27.78090	0.10504
66	7.725	VP	9.92e-3	13.22573	16.92501	0.05158
67	7.781	BBA	0.0181	39.30766	27.50088	0.15329
Totals :				2.56428e4	1.35286e4	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

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Injection Date  : 2/8/2023 4:20:53 PM          Seq. Line :  16
Sample Name     : 23A0419 08                   Location : Vial 14
Acq. Operator   : TW                              Inj :   1
                                               Inj Volume : 1 µl
Sequence File   : C:\HPCHEM\2\SEQUENCE\020823A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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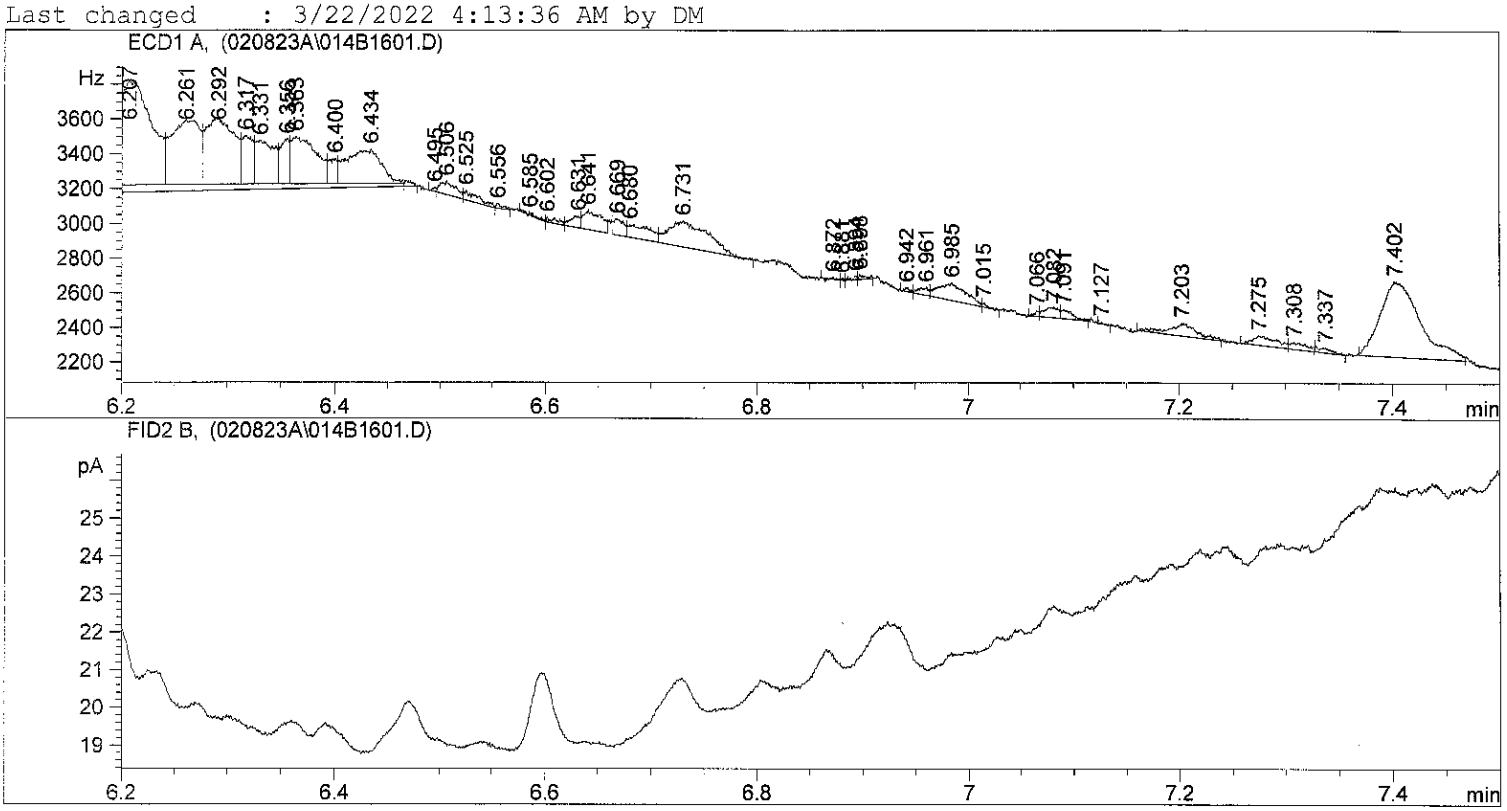

Area Percent Report

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Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
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Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.254	BV	0.0158	536.94073	435.11923	1.35902
2	5.284	VV	0.0184	793.60132	564.32904	2.00863
3	5.319	VB S	0.0471	7319.89746	1952.03308	18.52692
4	5.389	BV T	0.0214	1279.09058	738.23370	3.23742
5	5.423	VV T	9.26e-3	75.08506	103.59180	0.19004
6	5.447	VV T	6.41e-3	39.50686	76.64021	0.09999
7	5.452	VV T	3.68e-3	18.09274	81.93813	0.04579
8	5.477	VV T	0.0167	1140.69580	849.85120	2.88714
9	5.515	VV T	0.0230	553.83307	295.85269	1.40177
10	5.564	VV T	0.0125	254.12178	250.06247	0.64319
11	5.573	VV T	7.34e-3	99.46438	225.77917	0.25175
12	5.590	VV T	0.0226	559.23798	307.70581	1.41545
13	5.638	VV T	0.0206	483.82880	279.55258	1.22459
14	5.656	VV T	5.36e-3	118.94907	291.46204	0.30106
15	5.695	VV T	0.0265	1364.46094	619.52057	3.45350
16	5.725	VV T	0.0220	1088.75977	606.18018	2.75569
17	5.760	VV T	0.0211	889.12933	501.13837	2.25042

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.812	VV T	0.0431	1776.17749	490.12796	4.49557
19	5.871	VV T	0.0290	1834.94897	748.96246	4.64432
20	5.906	VV T	8.75e-3	275.36380	524.21802	0.69696
21	5.911	VV T	6.86e-3	211.32498	513.46832	0.53487
22	5.950	VV T	0.0269	3718.95044	1768.92432	9.41280
23	5.984	VV T	0.0145	562.65125	646.88464	1.42409
24	5.998	VV T	0.0306	1146.95447	624.51929	2.90298
25	6.060	VV T	0.0342	2076.33447	716.65533	5.25528
26	6.109	VV T	0.0341	2096.70654	725.02283	5.30684
27	6.158	VV T	0.0125	424.88553	440.38022	1.07540
28	6.177	VV T	0.0136	493.28720	437.07660	1.24853
29	6.207	VV T	0.0290	1428.29687	600.09839	3.61507
30	6.261	VV T	0.0218	680.73053	373.85681	1.72295
31	6.292	VV T	0.0227	727.36719	381.08499	1.84099
32	6.317	VV T	0.0108	180.22823	277.10480	0.45616
33	6.331	VV T	0.0149	306.37860	249.33714	0.77546
34	6.356	VV T	7.61e-3	140.42369	255.73315	0.35542
35	6.363	VV T	0.0197	445.86188	269.94476	1.12849
36	6.400	VV T	8.95e-3	77.82825	144.94865	0.19699
37	6.434	VB T	0.0268	444.25354	198.08102	1.12442
38	6.495	BV	3.20e-3	5.02035	22.54964	0.01271
39	6.506	VV	0.0123	78.05656	77.68035	0.19756
40	6.525	VP	0.0120	54.47338	55.68668	0.13787
41	6.556	VP	5.85e-3	11.91953	27.56260	0.03017
42	6.585	BP	8.52e-3	9.20569	13.56464	0.02330
43	6.602	VV	8.77e-3	18.41138	26.29961	0.04660
44	6.631	VV	7.47e-3	40.05598	66.08010	0.10138
45	6.641	VB	0.0152	132.82697	110.75614	0.33619
46	6.669	BV	9.24e-3	64.25235	90.96474	0.16262
47	6.680	VV	0.0187	113.98252	74.43030	0.28849
48	6.731	VP	0.0302	385.33221	150.90544	0.97529
49	6.872	PP	1.54e-3	8.69012e-1	10.84207	0.00220
50	6.881	VP	2.32e-3	1.60877	10.88754	0.00407
51	6.894	VV	4.23e-3	6.28679	20.18770	0.01591
52	6.898	VB	5.75e-3	11.73581	26.59804	0.02970
53	6.942	PV	4.98e-3	7.08040	20.74344	0.01792
54	6.961	VV	9.73e-3	27.11052	45.66724	0.06862
55	6.985	VV	0.0207	174.21275	100.11340	0.44094
56	7.015	VP	3.94e-3	6.64547	23.20151	0.01682
57	7.066	PV	4.19e-3	9.27259	31.90309	0.02347
58	7.082	VV	0.0110	55.10096	60.67918	0.13946
59	7.091	VB	0.0127	38.08129	50.05712	0.09639
60	7.127	PB	1.48e-3	8.32699e-1	11.06631	0.00211
61	7.203	PB	0.0208	127.05167	74.05933	0.32157
62	7.275	BV	0.0191	84.95429	54.07806	0.21502
63	7.308	VB	0.0140	44.09063	40.04904	0.11159
64	7.337	BP	0.0121	28.67022	30.54835	0.07257
65	7.402	BB	0.0306	1127.19678	435.70050	2.85298
66	7.565	BB	0.0322	1094.22791	408.73831	2.76953
67	7.654	BP	0.0104	26.47401	30.93799	0.06701
68	7.716	BP	9.10e-3	21.11508	30.41584	0.05344
69	7.769	PV	0.0133	26.77115	24.50163	0.06776
70	7.785	VBA	6.66e-3	12.94315	24.90383	0.03276
Totals :				3.95095e4	2.08478e4	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

*** End of Report ***

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Injection Date  : 2/8/2023 4:32:02 PM          Seq. Line :  17
Sample Name     : 23A0419 09                   Location : Vial 15
Acq. Operator   : TW                              Inj :   1
                                               Inj Volume : 1 µl

Sequence File   : C:\HPCHEM\2\SEQUENCE\020823A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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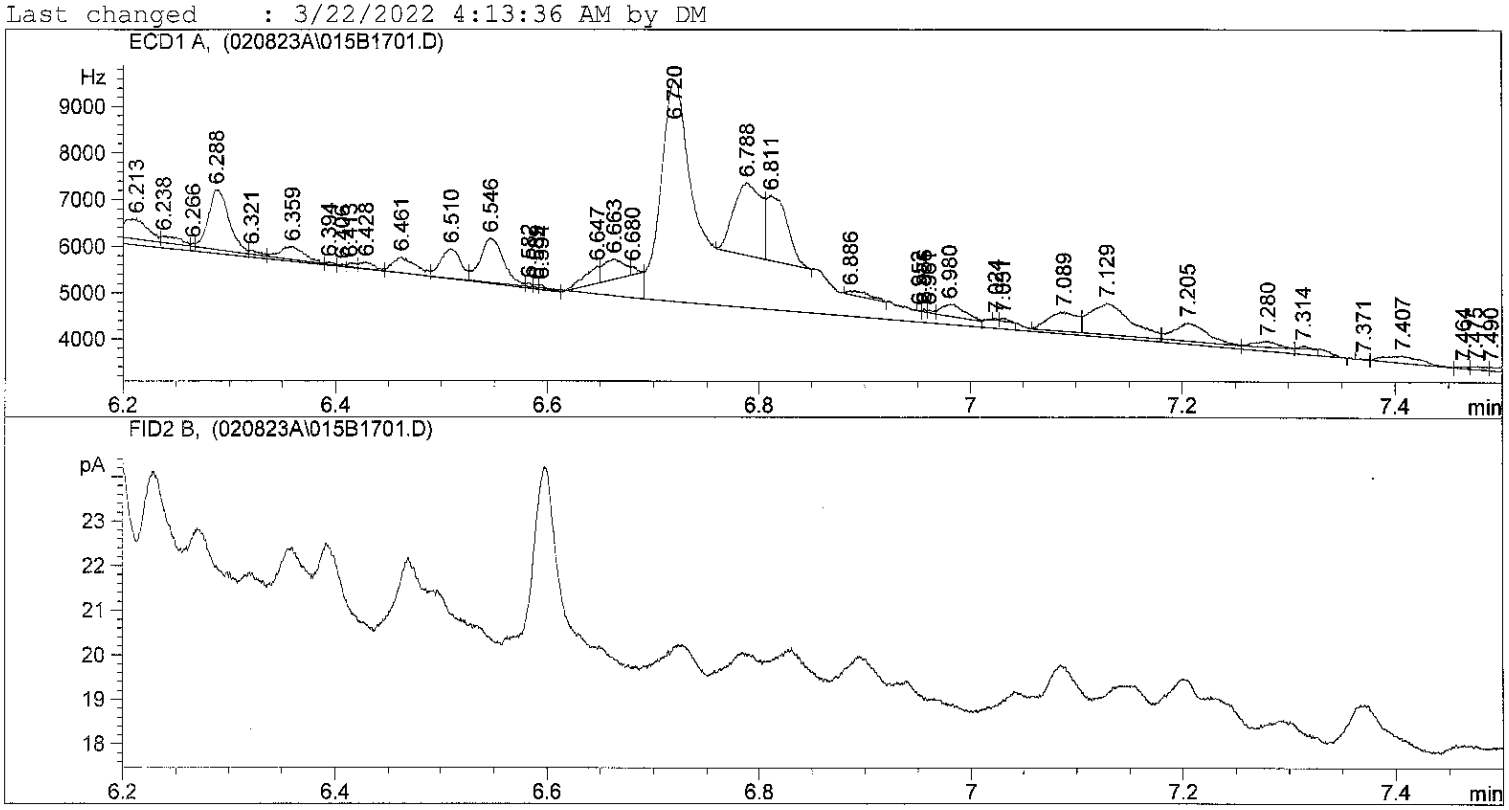

Area Percent Report

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Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
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Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.224	BV S	0.0247	2.26161e4	1.30048e4	15.97021
2	5.278	BB T	0.0155	676.93103	545.43677	0.47801
3	5.378	PV T	0.0116	723.30548	765.36249	0.51076
4	5.399	PV T	0.0196	1738.93091	1068.60095	1.22794
5	5.439	PV T	0.0157	965.49048	748.29913	0.68178
6	5.480	PV S	0.0256	6504.68408	3029.78442	4.59324
7	5.485	BB T	0.0139	1115.86804	1337.89221	0.78796
8	5.565	PV S	0.0280	9259.48437	3969.03247	6.53853
9	5.625	PV S	0.0236	8108.20410	4413.39795	5.72556
10	5.677	PV S	0.0744	4.43129e4	7282.56396	31.29128
11	5.735	BV T	8.00e-3	172.89847	265.29913	0.12209
12	5.749	PB T	0.0123	473.67648	487.21869	0.33448
13	5.822	BV T	0.0146	702.87885	584.28333	0.49633
14	5.833	PV T	0.0123	317.50607	428.85645	0.22420
15	5.866	PV T	0.0203	1343.74280	804.91534	0.94888
16	5.896	PV T	7.39e-3	126.18679	284.57892	0.08911
17	5.904	PV T	0.0112	274.42953	314.00400	0.19379

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.950	PV T	0.0196	1795.60120	1163.81848	1.26795
19	5.981	PB T	0.0138	565.78790	531.68835	0.39953
20	6.037	BB T	0.0106	255.05235	317.17413	0.18010
21	6.090	BV T	7.85e-3	84.70217	136.21539	0.05981
22	6.106	PB T	0.0135	166.04892	150.01920	0.11725
23	6.153	BV T	3.15e-3	8.35498	41.46931	0.00590
24	6.177	PV T	0.0113	142.25854	158.30394	0.10045
25	6.182	PV T	6.45e-3	59.89659	154.74049	0.04230
26	6.189	PV T	4.20e-3	39.31172	156.01338	0.02776
27	6.213	PV T	0.0217	746.08325	437.61166	0.52684
28	6.238	PV T	0.0218	187.86642	143.52455	0.13266
29	6.266	PV T	3.27e-3	16.41131	71.72646	0.01159
30	6.288	PV T	0.0172	1739.89026	1286.49133	1.22861
31	6.321	PV T	0.0109	58.27133	89.10266	0.04115
32	6.359	PV T	0.0183	421.86691	278.64462	0.29790
33	6.394	PV T	5.57e-3	20.36860	47.79056	0.01438
34	6.406	PV T	4.92e-3	13.54455	34.95787	0.00956
35	6.413	PV T	6.08e-3	43.03933	91.56277	0.03039
36	6.428	PV T	0.0120	131.42455	145.15997	0.09280
37	6.461	PV T	0.0181	519.39844	351.27942	0.36677
38	6.510	PV T	0.0161	856.47162	644.28595	0.60479
39	6.546	PV T	0.0185	1500.75562	980.31299	1.05975
40	6.582	PV T	5.23e-3	40.32660	106.25060	0.02848
41	6.589	PV T	4.85e-3	26.28593	90.36040	0.01856
42	6.594	PP T	8.45e-3	54.02439	106.51172	0.03815
43	6.647	PV T	0.0127	372.72208	365.84586	0.26320
44	6.663	PV T	0.0168	597.77448	441.84576	0.42211
45	6.680	PV T	6.60e-3	69.91120	176.46817	0.04937
46	6.720	PB S	0.0554	2.10988e4	4774.85547	14.89875
47	6.788	BV T	0.0227	2874.90894	1556.70703	2.03010
48	6.811	PB T	0.0168	1888.14453	1390.25391	1.33330
49	6.886	BB T	0.0215	151.32484	85.93279	0.10686
50	6.952	BV T	2.94e-3	3.52855	20.02256	0.00249
51	6.956	PV T	2.73e-3	12.22182	66.94424	0.00863
52	6.961	PV T	6.59e-3	23.46778	59.32130	0.01657
53	6.980	PB T	0.0187	391.30499	252.26840	0.27632
54	7.024	BV T	4.19e-3	10.08147	36.86085	0.00712
55	7.031	PB T	8.75e-3	32.49810	61.87251	0.02295
56	7.089	BV T	0.0224	791.08484	418.87347	0.55862
57	7.129	PV T	0.0319	1784.25684	672.92316	1.25994
58	7.205	PV T	0.0253	817.51630	389.27277	0.57728
59	7.280	PV T	0.0199	189.36307	124.72986	0.13372
60	7.314	PB T	6.89e-3	33.71373	60.60028	0.02381
61	7.371	PV	3.96e-3	7.39604	25.67952	0.00522
62	7.407	VP	0.0283	370.30115	157.06088	0.26149
63	7.464	VV	9.12e-3	26.20150	39.60221	0.01850
64	7.475	VV	0.0162	64.89762	66.64787	0.04583
65	7.490	VB	9.02e-3	65.75121	91.07853	0.04643
66	7.510	BP	0.0296	291.79071	119.00824	0.20605
67	7.577	VV	3.53e-3	4.41951	20.39095	0.00312
68	7.621	VV	0.0340	587.26837	206.16566	0.41470
69	7.687	VV	0.0156	53.86090	41.95164	0.03803
70	7.710	VB	9.31e-3	48.64100	65.12724	0.03435
71	7.740	BP	5.56e-3	9.03246	22.14679	0.00638
72	7.754	VB	6.11e-3	11.60373	24.55514	0.00819
73	7.791	PPA	3.55e-3	4.23460	15.66138	0.00299
Totals :				1.41614e5	5.89000e4	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

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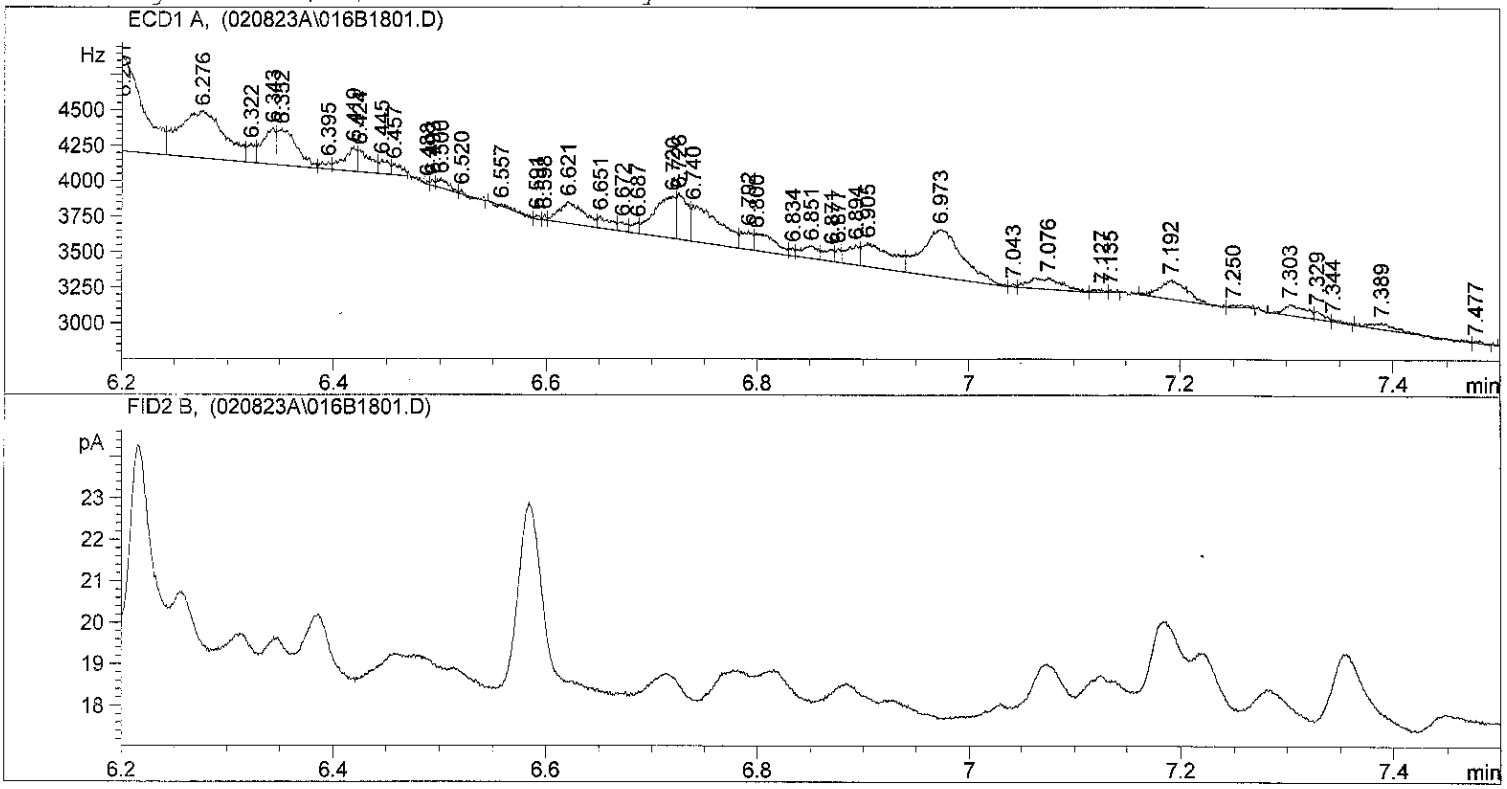
*** End of Report ***

Injection Date : 2/8/2023 4:43:11 PM Seq. Line : 18
Sample Name : 23A0420 01 Location : Vial 16
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\020823A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.235	BV	8.60e-3	187.75310	267.16290	0.48265
2	5.262	VV	0.0291	1331.45129	541.44641	3.42269
3	5.310	VV	0.0124	199.39812	196.46136	0.51258
4	5.333	VV	6.66e-3	90.00140	173.14925	0.23136
5	5.338	VV	7.66e-3	115.56195	185.58551	0.29707
6	5.372	VV	0.0193	546.97931	348.96313	1.40609
7	5.406	VV	0.0165	516.99805	373.58511	1.32902
8	5.443	VV	0.0203	1390.29871	824.88037	3.57396
9	5.471	VV	0.0192	1365.01868	858.05542	3.50898
10	5.508	VV	0.0208	1192.24927	696.07397	3.06485
11	5.545	VV	8.07e-3	158.70657	247.79767	0.40798
12	5.551	VV	7.62e-3	111.15374	242.96310	0.28574
13	5.584	VV	0.0217	880.51819	520.55096	2.26350
14	5.598	VV	6.75e-3	273.12387	501.62369	0.70210
15	5.622	VV	0.0175	777.77930	549.61816	1.99939
16	5.635	VV	0.0174	771.04657	548.22754	1.98209
17	5.661	VV	6.79e-3	275.12805	518.23169	0.70726

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.690	VV	0.0270	2662.46191	1193.08118	6.84424
19	5.719	VV	9.19e-3	496.99866	784.88751	1.27761
20	5.746	VV	0.0253	2083.43018	983.67633	5.35575
21	5.778	VV	0.0166	915.77844	661.36322	2.35414
22	5.808	VV	0.0250	1599.77124	785.00818	4.11244
23	5.861	VV	0.0327	3289.16113	1250.22046	8.45526
24	5.930	VV	0.0374	2695.90332	897.84521	6.93020
25	5.965	VV	0.0130	743.15216	685.59290	1.91038
26	5.985	VV	3.48e-3	160.14035	649.43671	0.41166
27	5.999	VV	0.0171	969.67328	737.68640	2.49268
28	6.031	VV	0.0148	1104.48450	907.03802	2.83924
29	6.035	VV	0.0234	1737.58472	898.65363	4.46671
30	6.106	VV	0.0341	1118.46985	389.06744	2.87519
31	6.146	VV	5.86e-3	145.58151	322.88300	0.37424
32	6.159	VV	6.97e-3	177.51299	335.59000	0.45632
33	6.201	VV	0.0357	1937.66907	659.40894	4.98106
34	6.276	VV	0.0359	986.68066	331.74136	2.53640
35	6.322	VV	6.79e-3	71.02360	133.91180	0.18258
36	6.343	VV	0.0105	207.04768	254.16528	0.53225
37	6.352	VV	0.0157	330.40857	252.16135	0.84936
38	6.395	VV	6.94e-3	29.09739	51.92316	0.07480
39	6.419	VV	0.0109	142.49625	171.31099	0.36631
40	6.424	VB	9.95e-3	123.65766	154.28165	0.31788
41	6.445	BV	7.75e-3	61.28566	99.95091	0.15754
42	6.457	VB	8.54e-3	49.15018	74.10615	0.12635
43	6.488	PV	2.78e-3	3.63719	19.46346	0.00935
44	6.493	VV	3.08e-3	10.04882	43.69170	0.02583
45	6.500	VV	9.03e-3	46.51439	62.89204	0.11957
46	6.520	VB	2.13e-3	3.18769	28.00496	0.00819
47	6.557	BP	5.27e-3	6.42500	17.57418	0.01652
48	6.591	VV	3.91e-3	8.06849	28.41475	0.02074
49	6.598	VV	2.95e-3	7.10101	38.50777	0.01825
50	6.621	VV	0.0197	244.27048	152.38084	0.62793
51	6.651	VB	9.83e-3	68.93793	87.16122	0.17721
52	6.672	BV	6.84e-3	35.71013	66.80986	0.09180
53	6.687	VV	6.69e-3	35.45783	78.16505	0.09115
54	6.720	VV	0.0166	411.53693	296.74841	1.05791
55	6.726	VV	9.15e-3	241.50055	322.11505	0.62081
56	6.740	VV	0.0223	478.89539	255.25871	1.23107
57	6.792	VV	8.89e-3	93.60214	128.55122	0.24062
58	6.800	VV	0.0174	173.02711	121.31945	0.44479
59	6.834	VV	4.01e-3	16.66453	57.09153	0.04284
60	6.851	VV	0.0134	94.24088	88.63335	0.24226
61	6.871	VV	9.51e-3	57.58392	80.87453	0.14803
62	6.877	VV	5.06e-3	33.42267	96.14068	0.08592
63	6.894	VV	0.0106	117.88213	140.68242	0.30303
64	6.905	VV	0.0237	324.79056	164.15370	0.83492
65	6.973	VP	0.0320	886.97614	336.44687	2.28010
66	7.043	VV	4.16e-3	5.55915	21.88180	0.01429
67	7.076	VP	0.0240	161.38470	81.18856	0.41486
68	7.127	VV	8.22e-3	12.09336	21.32755	0.03109
69	7.135	VP	4.58e-3	5.97988	17.52330	0.01537
70	7.192	BP	0.0213	231.95667	130.54224	0.59628
71	7.250	BP	0.0129	19.58883	19.89800	0.05036
72	7.303	PV	0.0172	109.04325	75.70282	0.28031
73	7.329	VV	7.37e-3	34.64939	59.68042	0.08907
74	7.344	VB	7.94e-3	12.57033	19.98596	0.03231
75	7.389	BP	0.0194	64.93280	42.95689	0.16692
76	7.477	VB	5.78e-3	6.34069	14.96474	0.01630
77	7.508	PB	0.0142	26.26700	22.15121	0.06752
78	7.602	PB	0.0589	691.03680	139.22144	1.77641
79	7.710	BB	0.0106	37.92992	44.04510	0.09750
80	7.732	BV	8.98e-3	22.84619	32.56651	0.05873
81	7.756	VB	0.0124	37.32824	36.80726	0.09596

Totals : 3.89008e4 2.47509e4

Results obtained with enhanced integrator!

Signal 2: FID2 B,

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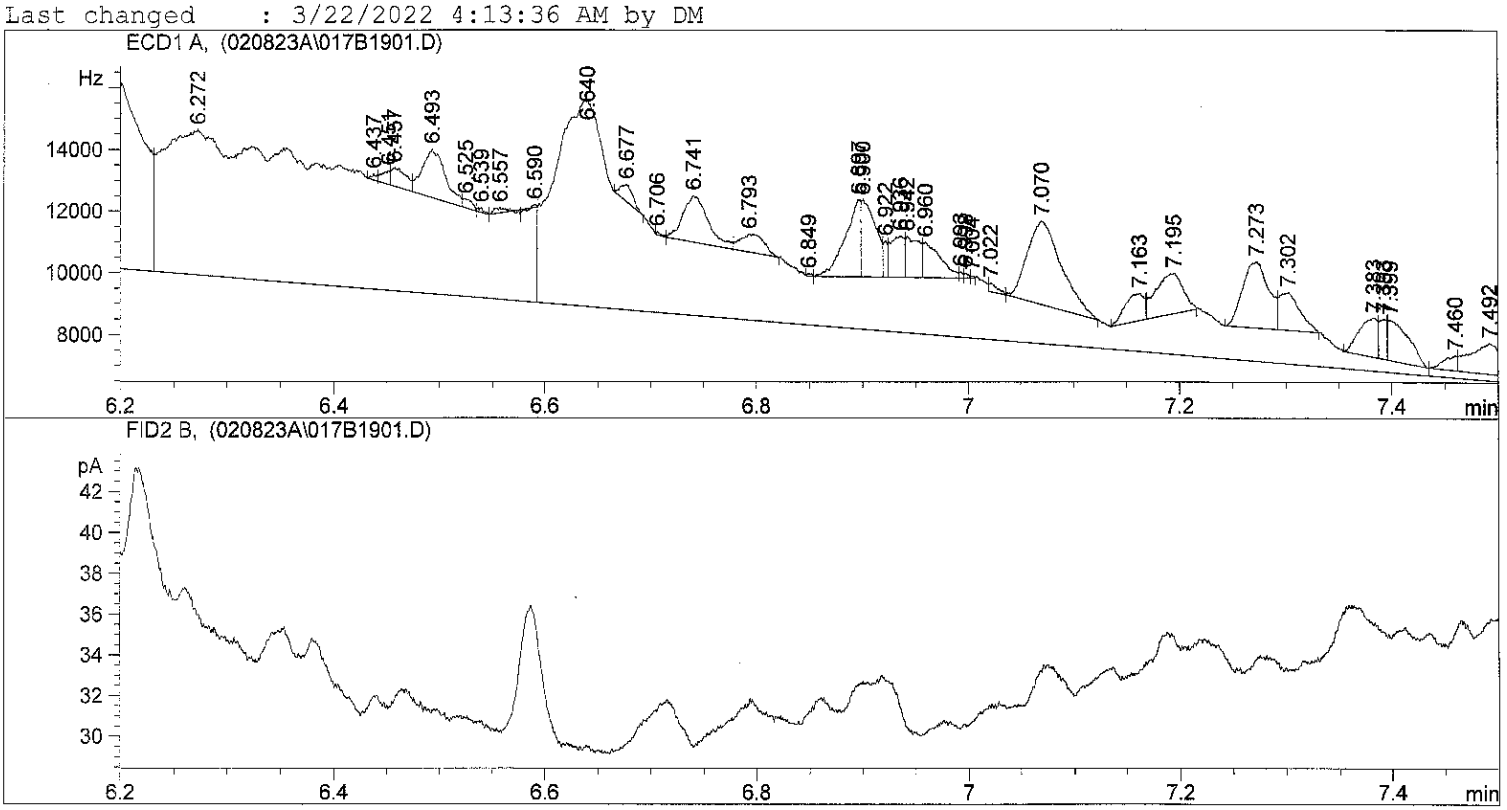
*** End of Report ***

Injection Date : 2/8/2023 4:54:21 PM Seq. Line : 19
Sample Name : 23A0420 04 Location : Vial 17
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\020823A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.237	BV	0.0165	1485.62378	1133.84265	0.32290
2	5.249	VV	0.0134	1363.00903	1242.37256	0.29625
3	5.274	VV	3.28e-3	76.55468	332.75403	0.01664
4	5.278	VV	6.79e-3	227.05806	428.14581	0.04935
5	5.312	VV S	0.0216	4105.56641	2327.10107	0.89235
6	5.622	VV S	0.1695	4.80503e4	4723.56396	10.44377
7	5.862	VV S	0.1237	6.51573e4	6512.40771	14.16199
8	5.943	VV S	0.0422	2.49698e4	9858.86328	5.42721
9	6.041	VV S	0.1000	4.15656e4	6926.90674	9.03431
10	6.194	VV S	0.0933	4.84416e4	6153.32324	10.52883
11	6.272	VV S	0.2395	7.85848e4	4696.51367	17.08047
12	6.437	BV T	5.44e-3	66.46457	203.55956	0.01445
13	6.451	VV T	7.44e-3	230.48369	445.46396	0.05010
14	6.457	VV T	0.0175	627.96436	599.42334	0.13649
15	6.493	VV T	0.0186	2419.69971	1569.04919	0.52592
16	6.525	PV T	0.0103	171.72934	277.35654	0.03733
17	6.539	PV T	5.82e-3	52.47401	150.26068	0.01141

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	6.557	PV T	6.88e-3	95.63217	172.12682	0.02079
19	6.590	PV T	0.0000	11.46817	92.47522	0.00249
20	6.640	VBAS	0.1673	9.47139e4	6676.62256	20.58614
21	6.677	BB T	0.0105	449.56628	553.51715	0.09771
22	6.706	BV T	5.49e-3	34.71306	105.42339	0.00754
23	6.741	PV T	0.0207	2512.52246	1503.50464	0.54610
24	6.793	PB T	0.0195	925.54846	577.54700	0.20117
25	6.849	BV T	4.84e-3	23.28367	80.22003	0.00506
26	6.897	PV T	0.0126	2517.06421	2495.14722	0.54709
27	6.900	PV T	0.0157	2339.04590	2486.24756	0.50839
28	6.922	PV T	4.49e-3	313.32199	1163.03052	0.06810
29	6.936	PV T	0.0116	1209.19910	1334.88330	0.26282
30	6.942	PV T	0.0152	1209.83240	1327.48145	0.26296
31	6.960	PV T	0.0192	1303.08789	1128.57446	0.28323
32	6.993	PV T	3.66e-3	43.17938	196.45650	0.00939
33	6.998	PV T	4.37e-3	41.50412	158.43126	0.00902
34	7.004	PB T	3.14e-3	12.36847	65.74187	0.00269
35	7.022	BV T	9.89e-3	166.96561	281.26270	0.03629
36	7.070	PB T	0.0275	6050.96875	2702.57666	1.31518
37	7.163	BV T	0.0164	1126.28735	873.53943	0.24480
38	7.195	PB T	0.0220	2361.68701	1297.83289	0.51331
39	7.273	BV T	0.0208	3653.07202	2135.90552	0.79400
40	7.302	PB T	0.0173	1644.78589	1220.99084	0.35750
41	7.383	BV T	0.0151	1525.57153	1263.30200	0.33158
42	7.393	PV T	6.67e-3	633.45203	1304.04871	0.13768
43	7.399	PV T	0.0228	1792.77466	1311.07397	0.38966
44	7.460	PV T	0.0107	412.95816	477.87720	0.08976
45	7.492	PV T	0.0270	2195.11865	993.18066	0.47711
46	7.524	PV T	4.73e-3	69.96172	246.70419	0.01521
47	7.550	PV T	0.0136	602.19305	538.36847	0.13089
48	7.560	PV T	0.0103	480.49927	577.79565	0.10444
49	7.610	PV T	0.0384	8281.35645	2558.05957	1.79996
50	7.672	PV T	6.02e-3	269.40738	579.92719	0.05856
51	7.701	PV T	0.0297	2544.86963	1020.15814	0.55313
52	7.755	PV T	0.0111	311.57181	347.77527	0.06772
53	7.768	PV T	0.0168	610.94757	439.85101	0.13279
Totals :				4.60086e5	8.78686e4	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

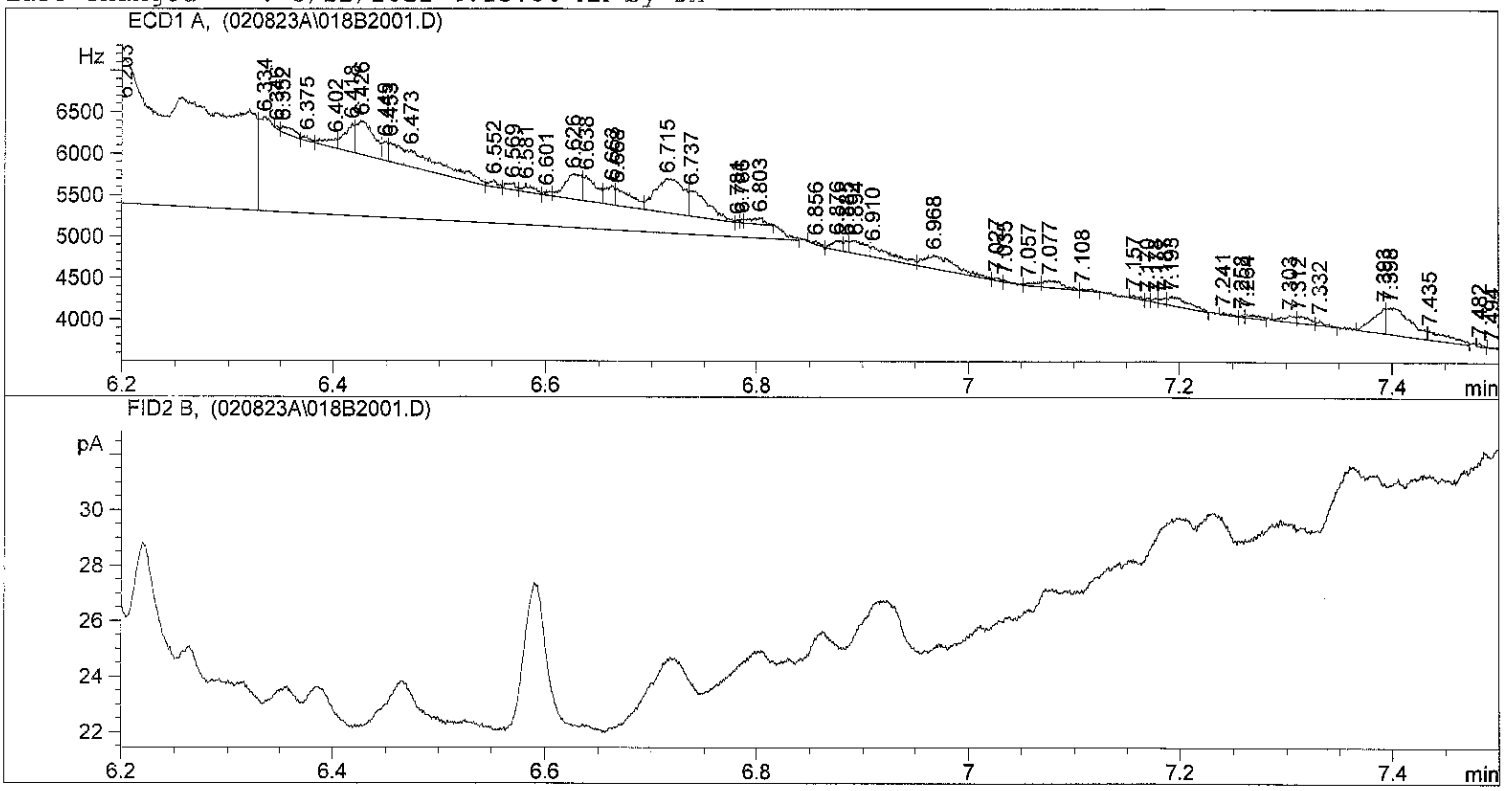
Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	5.366	PB	0.0153	28.75806	28.66451	1.000e2
Totals :				28.75806	28.66451	

Results obtained with enhanced integrator!

*** End of Report ***

Injection Date : 2/8/2023 5:05:18 PM Seq. Line : 20
Sample Name : 23A0420 08 Location : Vial 18
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\020823A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.255	BV	0.0255	1320.82288	618.19287	1.38239
2	5.282	VV	0.0137	445.68790	403.73132	0.46646
3	5.318	VV	0.0173	1842.87451	1442.31848	1.92878
4	5.388	VV	0.0263	1642.68909	740.39636	1.71926
5	5.411	VV	3.94e-3	122.62097	428.52899	0.12834
6	5.443	VV	0.0235	1428.01880	726.72559	1.49459
7	5.476	VV	0.0180	2170.34570	1455.55090	2.27152
8	5.496	VV	3.25e-3	141.15285	620.51318	0.14773
9	5.511	VV	0.0212	1527.74695	865.53967	1.59896
10	5.545	VV	7.14e-3	207.94037	371.07162	0.21763
11	5.589	VV	0.0288	2169.50757	896.87305	2.27064
12	5.607	VV	4.84e-3	232.32959	670.27686	0.24316
13	5.629	VV	0.0149	1050.36047	884.33148	1.09932
14	5.636	VV	4.90e-3	311.59256	845.84772	0.32612
15	5.643	VV	0.0125	899.77026	867.84772	0.94171
16	5.691	VV	0.0285	4193.60156	1754.08618	4.38909
17	5.719	VV	0.0157	1537.45435	1169.02563	1.60912

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.750	VV	0.0261	3259.82227	1504.54309	3.41178
19	5.808	VV	0.0359	3764.29614	1281.46582	3.93977
20	5.864	VV	0.0326	4795.03613	1778.94836	5.01856
21	5.901	VV	0.0118	1096.92883	1282.44629	1.14806
22	5.946	VV S	0.0262	9072.93848	4605.59033	9.49587
23	6.051	VV S	0.1159	1.61501e4	1994.53589	16.90296
24	6.203	VV S	0.1277	1.46878e4	1731.30713	15.37249
25	6.334	VB S	0.2090	1.41692e4	1129.77307	14.82974
26	6.346	BV X	3.83e-3	7.71117	33.58122	0.00807
27	6.352	VV X	0.0126	76.13878	74.07706	0.07969
28	6.375	VV T	5.29e-3	25.35275	63.05539	0.02653
29	6.402	VV T	8.98e-3	88.18307	122.72936	0.09229
30	6.418	VV T	7.90e-3	213.81625	341.93765	0.22378
31	6.426	VV T	0.0142	467.94162	405.90936	0.48975
32	6.449	VV T	5.36e-3	82.90526	221.74309	0.08677
33	6.453	VV T	0.0129	181.42732	234.50809	0.18988
34	6.473	PV T	0.0462	552.17316	199.33292	0.57791
35	6.552	PV T	6.32e-3	43.38413	88.43945	0.04541
36	6.569	PV T	7.85e-3	47.71178	79.00363	0.04994
37	6.581	PV T	8.63e-3	62.11839	94.98878	0.06501
38	6.601	PV T	6.71e-3	20.62325	51.19820	0.02158
39	6.626	PV T	0.0143	335.50217	303.87231	0.35114
40	6.638	PV T	9.88e-3	249.99263	307.75842	0.26165
41	6.663	PV T	8.35e-3	139.09222	226.90672	0.14558
42	6.668	PV T	0.0182	226.58362	207.37369	0.23715
43	6.715	PV T	0.0226	769.18927	411.83582	0.80504
44	6.737	PV T	0.0219	404.77161	307.35080	0.42364
45	6.781	PV T	2.91e-3	5.94338	34.02598	0.00622
46	6.786	PV T	2.77e-3	8.60800	51.76199	0.00901
47	6.803	PB T	0.0106	75.71616	86.23238	0.07925
48	6.856	BP	5.77e-3	14.91284	36.49826	0.01561
49	6.876	VV	8.64e-3	77.57898	115.43221	0.08120
50	6.885	VV	4.57e-3	39.92399	130.33173	0.04179
51	6.894	VV	0.0132	161.95630	157.16597	0.16951
52	6.910	VV	0.0195	197.89909	123.64412	0.20712
53	6.968	VV	0.0246	337.58856	163.78944	0.35333
54	7.027	VP	5.80e-3	14.24515	33.23471	0.01491
55	7.035	VP	5.73e-3	9.26226	21.91399	0.00969
56	7.057	VB	0.0122	33.83327	34.50703	0.03541
57	7.077	BV	0.0159	108.36716	82.48896	0.11342
58	7.108	VB	8.31e-3	14.50893	21.94209	0.01519
59	7.157	BP	6.01e-3	17.50828	39.18328	0.01832
60	7.170	VV	3.44e-3	9.50664	36.51269	0.00995
61	7.178	VV	4.42e-3	16.07331	51.84506	0.01682
62	7.187	VV	4.51e-3	26.63697	75.54693	0.02788
63	7.193	VP	0.0172	146.60704	104.09608	0.15344
64	7.241	PP	5.06e-3	10.77847	27.00935	0.01128
65	7.258	VV	3.18e-3	4.92981	24.15514	0.00516
66	7.264	VB	0.0113	33.11380	35.94738	0.03466
67	7.303	BV	0.0104	65.11572	78.96690	0.06815
68	7.312	VV	9.92e-3	69.29253	84.91491	0.07252
69	7.332	VB	6.98e-3	25.32472	60.47476	0.02651
70	7.393	BV	0.0102	253.86046	308.89203	0.26569
71	7.398	VV	0.0196	506.86240	320.85007	0.53049
72	7.435	VB	0.0183	162.77582	106.09575	0.17036
73	7.482	BB	4.14e-3	12.88894	42.45178	0.01349
74	7.494	BB	8.78e-3	9.22772	13.84552	0.00966
75	7.512	PV	2.15e-3	3.00266	22.62210	0.00314
76	7.521	VV	6.51e-3	21.56146	42.57922	0.02257
77	7.559	VV	0.0244	576.59937	280.22690	0.60348
78	7.601	VV	9.77e-3	53.14022	70.68597	0.05562
79	7.611	VV	0.0121	92.36414	93.46524	0.09667
80	7.633	VP	5.48e-3	19.80673	45.44753	0.02073
81	7.667	PP	8.15e-3	8.80141	18.00569	0.00921
82	7.677	VV	5.38e-3	5.44201	16.86254	0.00570

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
83	7.688	VB	4.00e-3	6.41904	22.05505	0.00672
84	7.730	PB	5.65e-3	7.20649	16.64633	0.00754
85	7.770	PV	9.11e-3	23.32820	39.35926	0.02442
86	7.777	VB	8.23e-3	22.25709	34.97053	0.02329

Totals : 9.55461e4 3.70518e4

Results obtained with enhanced integrator!

Signal 2: FID2 B,

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	5.366	PB	0.0166	24.88807	22.96079	1.000e2

Totals : 24.88807 22.96079

Results obtained with enhanced integrator!

*** End of Report ***

```
Injection Date  : 2/8/2023 5:16:31 PM          Seq. Line :  21
Sample Name     : 23A0455 03                   Location : Vial 19
Acq. Operator   : TW                              Inj :   1
                                               Inj Volume : 1 µl
Sequence File   : C:\HPCHEM\2\SEQUENCE\020823A.S
Method          : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed    : 3/22/2022 4:13:36 AM by DM
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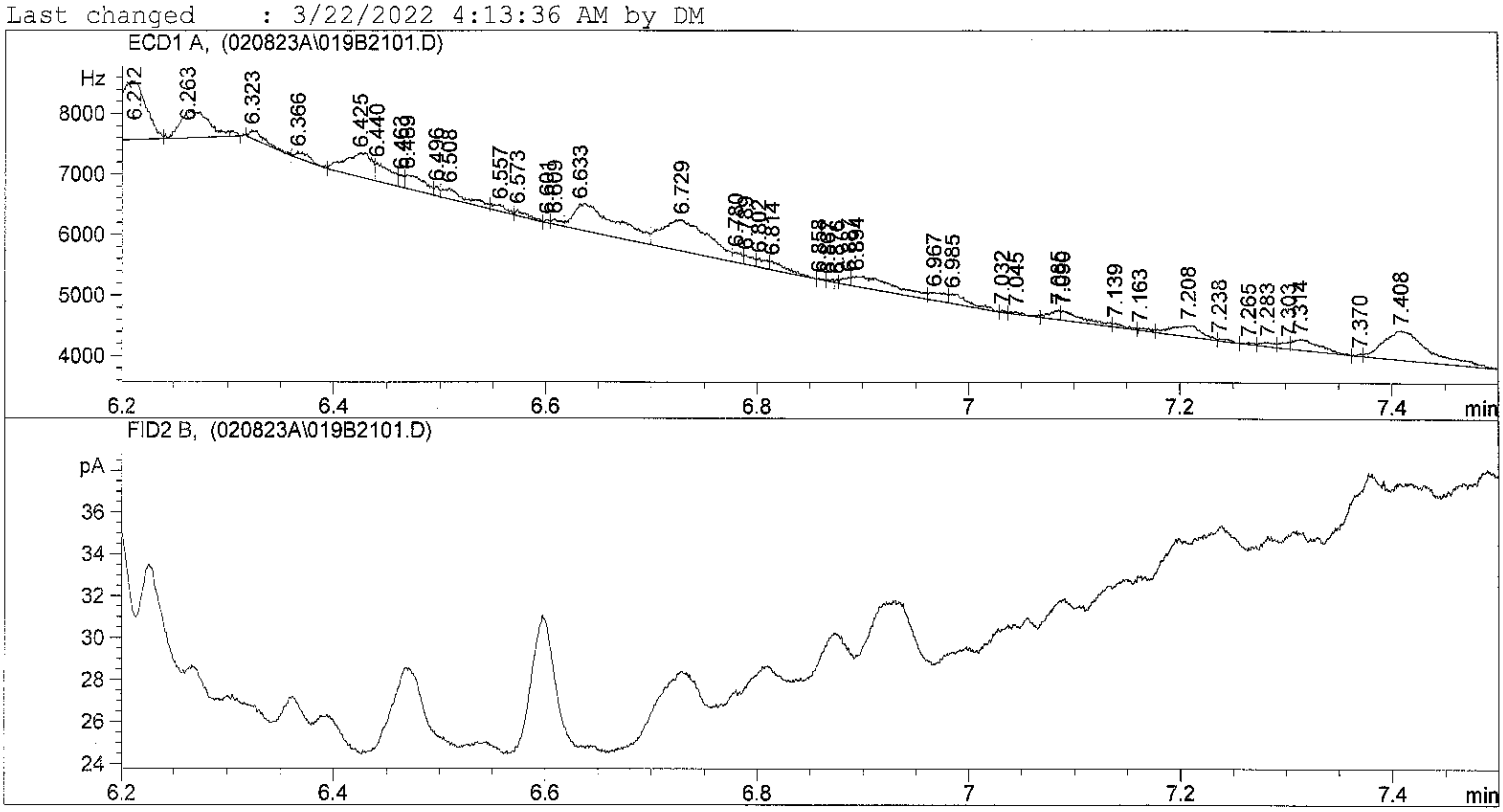


Area Percent Report

```
Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000

Signal 1: ECD1 A,
```

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.237	BV	0.0235	2419.62061	1264.72632	3.22916
2	5.286	VV	0.0130	562.35596	520.81628	0.75051
3	5.325	VV S	0.0250	4425.06494	2261.27002	5.90558
4	5.394	PV T	0.0206	1572.15210	924.20294	2.09815
5	5.423	VV T	3.61e-3	18.61086	85.90341	0.02484
6	5.427	VV T	3.94e-3	22.35274	94.52901	0.02983
7	5.446	VV T	0.0149	287.75580	245.34973	0.38403
8	5.483	VV T	0.0145	1187.89954	1055.14075	1.58534
9	5.514	VV T	0.0126	434.30908	416.84045	0.57962
10	5.559	VV T	0.0000	104.13596	62.59859	0.13898
11	5.591	VV S	0.0178	1.35156e4	1.14213e4	18.03754
12	5.953	VV S	0.0516	2.45973e4	7942.09131	32.82692
13	6.059	VV S	0.0581	7586.52100	2175.33960	10.12477
14	6.106	VV S	0.0288	3504.76587	2027.01819	4.67737
15	6.212	VV S	0.0611	3579.74951	975.71313	4.77744
16	6.263	VB S	0.0330	843.47784	449.58582	1.12568
17	6.323	BP	0.0118	139.45638	142.51315	0.18611

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	6.366	VP	0.0130	107.16020	99.60903	0.14301
19	6.425	VV	0.0206	687.61621	396.65891	0.91767
20	6.440	VV	0.0131	318.89841	302.41309	0.42559
21	6.463	VV	5.83e-3	72.02071	205.94337	0.09612
22	6.469	VV	0.0158	305.68805	234.74669	0.40796
23	6.496	VV	4.65e-3	49.97359	151.61334	0.06669
24	6.508	VB	0.0185	273.94391	178.21074	0.36560
25	6.557	BV	0.0116	98.56849	106.70483	0.13155
26	6.573	VP	9.14e-3	76.74326	104.88508	0.10242
27	6.601	VV	5.22e-3	18.67536	57.03016	0.02492
28	6.609	VV	8.37e-3	54.21465	88.20772	0.07235
29	6.633	VV	0.0371	1330.37878	423.35110	1.77549
30	6.729	VV	0.0374	1605.95142	517.11792	2.14326
31	6.780	VV	7.19e-3	92.48335	168.87825	0.12343
32	6.789	VV	8.40e-3	98.02603	150.43588	0.13082
33	6.802	VV	7.84e-3	91.57558	147.52583	0.12221
34	6.814	VP	0.0179	162.21581	151.32655	0.21649
35	6.858	VV	4.47e-3	7.92849	23.92841	0.01058
36	6.867	VV	5.43e-3	12.22854	30.81317	0.01632
37	6.876	VV	2.74e-3	10.79684	58.80437	0.01441
38	6.887	VV	6.36e-3	62.19981	125.92349	0.08301
39	6.894	VV	0.0386	563.03265	172.73343	0.75141
40	6.967	VV	0.0135	146.92349	135.26985	0.19608
41	6.985	VP	0.0157	217.69072	165.81888	0.29052
42	7.032	VV	3.38e-3	9.74179	40.91256	0.01300
43	7.045	VV	0.0113	40.68150	44.15631	0.05429
44	7.085	VV	8.48e-3	107.33881	158.84097	0.14325
45	7.090	VV	0.0173	233.33218	161.04059	0.31140
46	7.139	VV	9.47e-3	50.87004	66.89600	0.06789
47	7.163	VV	0.0118	34.14608	35.66110	0.04557
48	7.208	VV	0.0236	359.75800	184.33832	0.48012
49	7.238	VP	0.0103	30.73481	36.40301	0.04102
50	7.265	BV	7.33e-3	19.51213	32.83900	0.02604
51	7.283	VV	0.0103	66.87719	78.63998	0.08925
52	7.303	VV	8.32e-3	70.04484	108.68398	0.09348
53	7.314	VP	0.0224	322.63785	175.61378	0.43058
54	7.370	VV	5.32e-3	14.19121	42.25597	0.01894
55	7.408	VP	0.0364	1434.29749	486.71823	1.91418
56	7.518	VB	2.94e-3	6.10639	30.47848	0.00815
57	7.570	BV	0.0230	710.54547	366.72272	0.94828
58	7.621	VV	0.0100	50.18244	66.24860	0.06697
59	7.629	VB	5.82e-3	24.67569	57.40232	0.03293
60	7.706	PP	0.0114	38.90639	43.51796	0.05192
61	7.752	BP	3.35e-3	2.02414	8.00899	0.00270
62	7.768	VV	4.72e-3	8.90355	25.23209	0.01188
63	7.778	VV	5.21e-3	14.35326	34.79602	0.01916
64	7.785	VV	4.26e-3	10.25478	32.71450	0.01369
65	7.794	VPA	4.10e-3	4.11796	13.72698	0.00550
Totals :				7.49303e4	3.85947e4	

Results obtained with enhanced integrator!

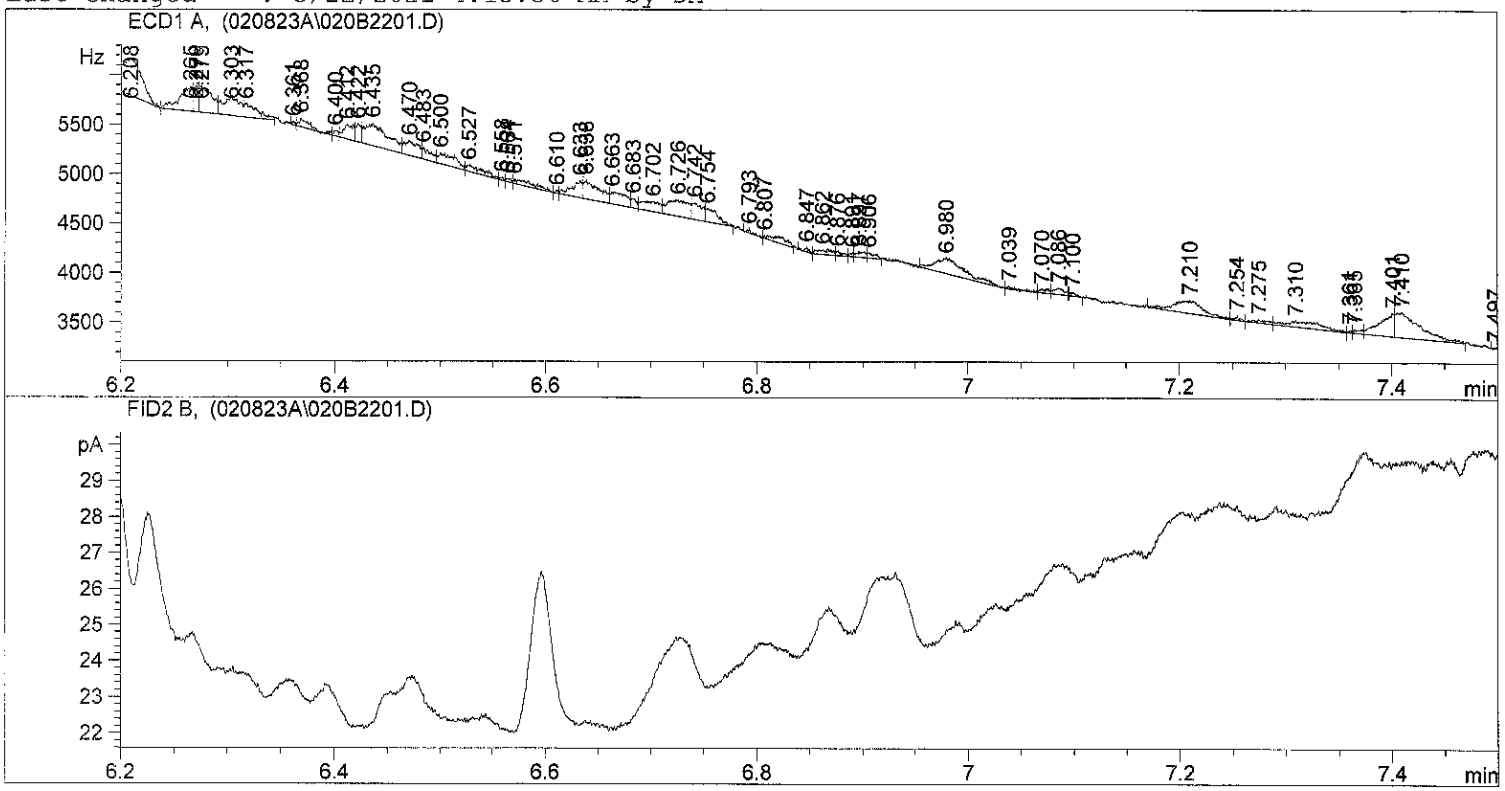
Signal 2: FID2 B,

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	5.373	PP	0.0189	48.28682	40.03429	58.49403
2	5.471	PV	0.0156	34.26318	27.02549	41.50597
Totals :				82.55000	67.05979	

Results obtained with enhanced integrator!

Injection Date : 2/8/2023 5:27:43 PM Seq. Line : 22
Sample Name : 23A0455 08 Location : Vial 20
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\020823A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.261	BV	0.0135	520.39014	476.58652	1.52229
2	5.266	VV	3.56e-3	121.81006	479.40112	0.35633
3	5.284	VV	0.0191	820.69189	524.61322	2.40076
4	5.322	VV	0.0178	1947.79907	1517.82703	5.69787
5	5.402	VV	0.0209	3205.76636	2045.38367	9.37779
6	5.449	VV	0.0188	523.90985	335.70975	1.53259
7	5.478	VV	0.0171	1035.84668	749.36530	3.03015
8	5.515	VP	0.0186	740.74249	509.38724	2.16688
9	5.554	VV	4.11e-3	15.15100	50.38619	0.04432
10	5.571	VV	8.86e-3	19.07338	32.42604	0.05580
11	5.591	VV	0.0176	385.25833	270.36435	1.12699
12	5.631	VV	0.0126	199.99344	200.39903	0.58504
13	5.650	VV	9.67e-3	162.04663	208.42871	0.47403
14	5.656	VV	5.57e-3	75.00025	183.25980	0.21940
15	5.693	VV	0.0279	1607.54395	696.19977	4.70253
16	5.726	VV	0.0138	465.11728	418.34750	1.36060
17	5.756	VV	0.0214	990.66083	561.19061	2.89797

Peak #	RetTime [min]	Type		Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.793	VV		0.0115	317.51035	341.00049	0.92881
19	5.800	VV		4.74e-3	112.93547	351.93875	0.33037
20	5.810	VV		0.0183	599.11212	403.86774	1.75258
21	5.839	VV		7.48e-3	139.15826	250.55188	0.40708
22	5.869	VV		0.0295	1980.86243	795.18488	5.79459
23	5.951	VV	S	0.0179	7059.39355	5460.95703	20.65076
24	6.058	VV	S	0.0546	3806.92285	1162.03137	11.13634
25	6.106	VV	S	0.0227	1295.61951	952.42236	3.79006
26	6.142	VB	S	0.0217	180.04485	138.55064	0.52668
27	6.183	BV		7.68e-3	46.07722	80.44444	0.13479
28	6.208	VP		0.0179	547.03381	367.88602	1.60023
29	6.265	VV		0.0105	200.66383	241.71364	0.58700
30	6.270	VV		4.43e-3	86.27673	262.61819	0.25238
31	6.275	VV		9.60e-3	213.89780	271.27515	0.62571
32	6.303	VV		0.0136	206.24965	185.11330	0.60334
33	6.317	VB		0.0115	122.23773	133.67453	0.35758
34	6.361	BV		2.85e-3	5.48298	31.26897	0.01604
35	6.368	VB		8.98e-3	60.22111	83.85785	0.17616
36	6.400	BV		3.96e-3	16.02166	52.52042	0.04687
37	6.412	VV		8.62e-3	95.21655	145.83568	0.27854
38	6.422	VV		4.60e-3	65.24400	181.12019	0.19086
39	6.435	VV		0.0184	344.76532	228.95265	1.00854
40	6.470	VV		0.0112	130.80334	149.37012	0.38264
41	6.483	VV		0.0104	71.76946	114.76947	0.20995
42	6.500	VV		0.0144	131.44949	109.56398	0.38453
43	6.527	VV		0.0149	78.65717	64.94153	0.23009
44	6.558	VP		3.69e-3	6.40751	28.96427	0.01874
45	6.564	VV		4.34e-3	10.83320	33.80051	0.03169
46	6.571	VP		0.0198	68.60813	41.20969	0.20070
47	6.610	VV		3.03e-3	5.19207	27.63861	0.01519
48	6.633	VV		9.87e-3	120.59748	170.09320	0.35278
49	6.638	VV		0.0131	200.09351	189.62090	0.58533
50	6.663	VV		0.0127	126.05051	119.91197	0.36873
51	6.683	VV		5.74e-3	31.75453	92.27688	0.09289
52	6.702	VV		0.0140	116.00909	101.17946	0.33936
53	6.726	VV		0.0174	231.91188	165.17680	0.67841
54	6.742	VV		8.16e-3	111.50635	167.53479	0.32619
55	6.754	VB		0.0100	106.34541	131.39085	0.31109
56	6.793	PP		3.98e-3	9.34256	39.15455	0.02733
57	6.807	VB		0.0331	69.45549	24.74660	0.20318
58	6.847	BP		3.91e-3	12.96445	45.69856	0.03792
59	6.862	VV		0.0122	47.43047	47.55722	0.13875
60	6.876	VV		6.10e-3	16.74283	38.26881	0.04898
61	6.891	VV		3.87e-3	9.14805	40.02658	0.02676
62	6.897	VV		9.06e-3	30.76611	56.61578	0.09000
63	6.906	VB		7.06e-3	27.46275	51.16493	0.08034
64	6.980	BP		0.0246	303.55576	151.55815	0.88799
65	7.039	VB		7.73e-3	11.71144	25.23767	0.03426
66	7.070	BB		8.76e-3	22.20738	34.26836	0.06496
67	7.086	BV		8.99e-3	43.53048	60.53471	0.12734
68	7.100	VP		5.60e-3	13.80494	37.39289	0.04038
69	7.210	BV		0.0228	238.71602	129.94548	0.69831
70	7.254	VP		4.59e-3	14.69641	40.94921	0.04299
71	7.275	VV		0.0114	30.25318	32.57539	0.08850
72	7.310	VP		0.0298	143.40654	58.85117	0.41951
73	7.361	VV		2.87e-3	4.70633	24.19251	0.01377
74	7.365	VV		9.44e-3	19.73490	34.85796	0.05773
75	7.401	VV		0.0120	220.10400	226.15703	0.64387
76	7.410	VB		0.0194	402.14273	249.01410	1.17638
77	7.497	BP		1.38e-3	4.95656e-1	7.42412	0.00145
78	7.509	BP		1.71e-3	1.30963	16.82720	0.00383
79	7.567	BV		0.0241	431.23602	212.27625	1.26149
80	7.612	VV		0.0139	67.65377	58.34454	0.19791
81	7.628	VB		0.0101	52.02253	64.15552	0.15218
82	7.653	BP		8.06e-3	18.17612	28.40988	0.05317

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
83	7.729	BP	4.07e-3	4.84650	16.30173	0.01418
84	7.757	PV	3.97e-3	6.20142	21.47292	0.01814
85	7.766	VV	2.48e-3	2.61195	16.17408	0.00764
86	7.783	VPA	0.0132	22.49613	24.77712	0.06581
Totals :				3.41847e4	2.50044e4	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

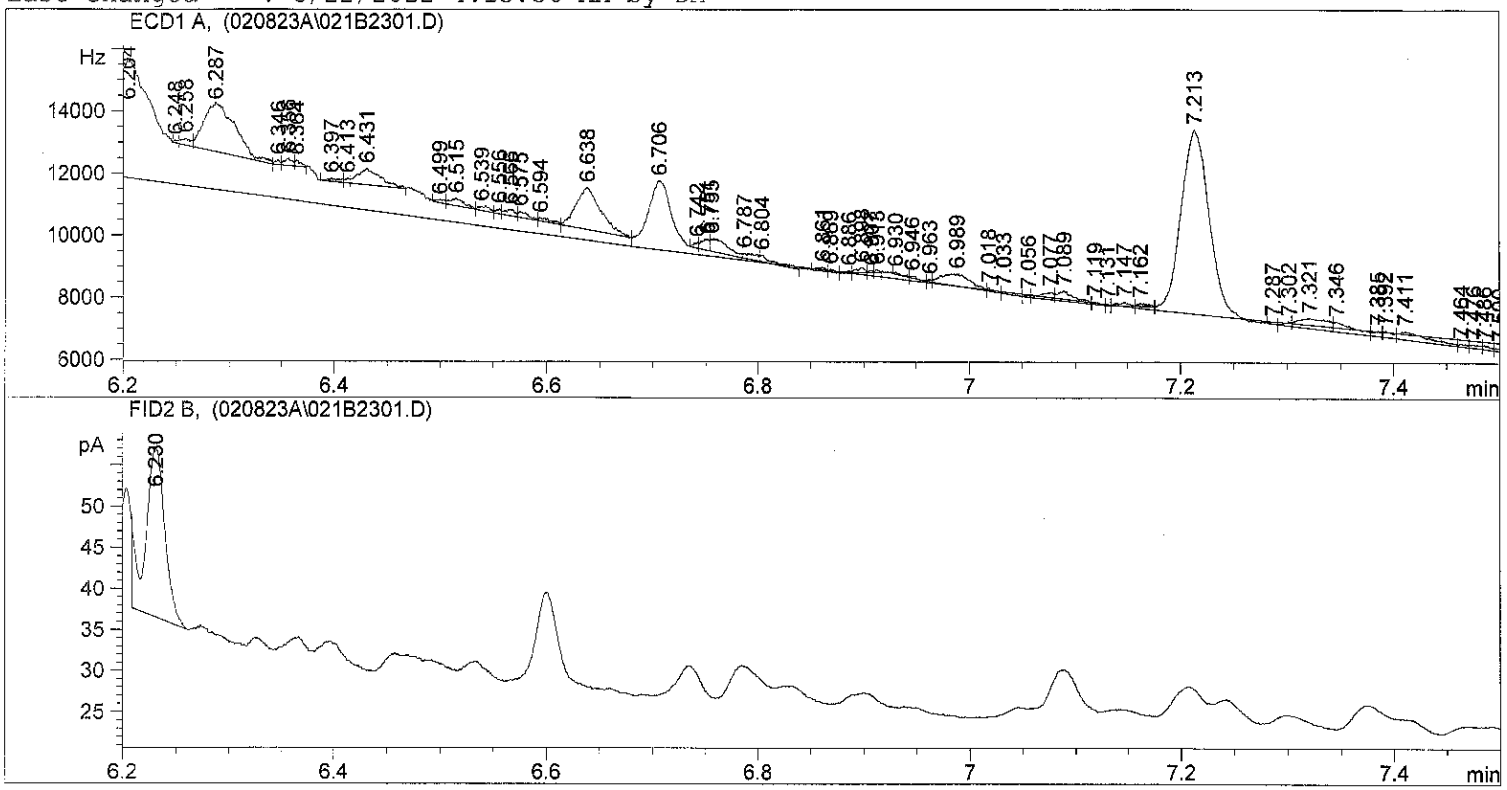
Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	5.370	PB	0.0165	28.98697	26.20373	1.000e2
Totals :				28.98697	26.20373	

Results obtained with enhanced integrator!

*** End of Report ***

Injection Date : 2/8/2023 5:38:57 PM Seq. Line : 23
Sample Name : 23A0455 15 Location : Vial 21
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\020823A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.233	BV S	0.0198	4856.70215	3404.08691	2.20832
2	5.272	BP T	0.0105	408.46576	534.92572	0.18573
3	5.290	PV T	5.63e-3	55.87286	129.49483	0.02541
4	5.315	PV S	0.0274	2977.41187	1305.31592	1.35381
5	5.342	BV T	6.57e-3	174.91557	379.87427	0.07953
6	5.347	VV T	6.05e-3	80.32185	221.10901	0.03652
7	5.404	VV S	0.0392	1.78616e4	7602.08203	8.12160
8	5.439	VV S	0.0914	1.30431e4	2379.30005	5.93061
9	5.493	BV T	0.0175	1843.38098	1334.64270	0.83818
10	5.513	VV T	8.46e-3	648.03815	937.64905	0.29466
11	5.558	PV T	0.0000	56.32514	312.67978	0.02561
12	5.629	VV S	0.0650	2.03274e4	5212.93652	9.24279
13	5.665	BV T	4.43e-3	31.76953	96.71845	0.01445
14	5.693	VV S	0.0360	1.29494e4	4286.96484	5.88803
15	5.737	BV T	4.14e-3	40.31799	133.04031	0.01833
16	5.770	VV S	0.0510	2.02349e4	4707.09082	9.20072
17	5.821	BV T	0.0128	1168.21558	1178.70972	0.53118

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.872	VV S	0.0464	3.25531e4	8548.57910	14.80173
19	5.924	BV T	4.99e-3	28.98237	96.72601	0.01318
20	5.938	PV T	5.68e-3	121.23772	278.46185	0.05513
21	5.950	PV T	6.59e-3	101.94518	198.58162	0.04635
22	5.964	PV T	0.0115	244.83160	277.33020	0.11132
23	5.984	PV T	7.32e-3	200.95999	383.05576	0.09138
24	6.049	PV S	0.0525	3.44044e4	7854.78369	15.64350
25	6.116	BV T	8.95e-3	300.82599	420.28970	0.13678
26	6.128	PV T	8.32e-3	273.25513	413.08517	0.12425
27	6.140	PV T	5.89e-3	118.12927	281.68759	0.05371
28	6.151	PV T	0.0165	302.81171	306.48807	0.13769
29	6.204	PV S	0.0925	2.99170e4	3788.90796	13.60311
30	6.248	BV T	5.47e-3	28.70823	87.45045	0.01305
31	6.258	PV T	7.94e-3	138.25345	219.85368	0.06286
32	6.287	PV T	0.0247	3237.27173	1566.00110	1.47197
33	6.346	PV T	4.10e-3	42.93591	143.16104	0.01952
34	6.356	PV T	6.81e-3	112.17905	217.86305	0.05101
35	6.364	PB T	6.45e-3	75.44937	194.87852	0.03431
36	6.397	BV T	0.0107	84.35562	101.97580	0.03836
37	6.413	PV T	5.20e-3	48.56475	155.68433	0.02208
38	6.431	PB T	0.0172	749.49756	526.22443	0.34079
39	6.499	BV T	9.96e-3	60.33896	100.96223	0.02744
40	6.515	PV T	0.0113	211.62204	235.85110	0.09622
41	6.539	PV T	9.97e-3	105.71199	131.56233	0.04807
42	6.556	PV T	4.21e-3	44.79974	162.60229	0.02037
43	6.566	PV T	8.55e-3	131.30325	192.58376	0.05970
44	6.575	PV T	0.0105	119.52810	189.48465	0.05435
45	6.594	PV T	0.0156	96.52158	103.27521	0.04389
46	6.638	PV T	0.0194	2164.08374	1341.95166	0.98400
47	6.706	PV S	0.0313	5693.49072	2225.19629	2.58880
48	6.742	BV T	4.87e-3	54.60026	183.55896	0.02483
49	6.751	PV T	6.88e-3	170.33965	350.15515	0.07745
50	6.755	PV T	0.0218	499.41547	381.70468	0.22708
51	6.787	PV T	0.0168	156.29817	154.82703	0.07107
52	6.804	PP T	0.0150	187.65517	208.06331	0.08533
53	6.861	BV T	7.28e-3	68.62886	131.67554	0.03121
54	6.869	PV T	6.49e-3	33.62879	86.33143	0.01529
55	6.886	PV T	5.61e-3	26.47222	64.19638	0.01204
56	6.898	PV T	8.12e-3	92.51480	165.56369	0.04207
57	6.907	PV T	5.05e-3	21.37634	70.53628	0.00972
58	6.913	PB T	3.40e-3	22.81631	94.96951	0.01037
59	6.930	BV T	7.21e-3	28.36379	65.54269	0.01290
60	6.946	PV T	5.88e-3	22.09955	62.61655	0.01005
61	6.963	PV T	3.75e-3	16.23915	72.15144	0.00738
62	6.989	PV T	0.0236	704.11737	384.21954	0.32016
63	7.018	PV T	5.62e-3	44.35401	103.15992	0.02017
64	7.033	PP T	4.54e-3	20.80394	61.65813	0.00946
65	7.056	PV T	3.37e-3	20.09393	84.74535	0.00914
66	7.077	PV T	0.0116	193.23224	230.83708	0.08786
67	7.089	PV T	0.0139	365.54559	320.58365	0.16621
68	7.119	PP T	6.19e-3	30.67703	82.58183	0.01395
69	7.131	PV T	2.81e-3	7.47307	44.36612	0.00340
70	7.147	PV T	9.42e-3	83.88305	116.28816	0.03814
71	7.162	PV T	8.09e-3	62.51225	97.35238	0.02842
72	7.213	PBAS	0.0102	4447.25732	5913.45703	2.02215
73	7.287	BV T	4.25e-3	15.44283	60.49364	0.00702
74	7.302	PV T	5.66e-3	56.47417	135.55626	0.02568
75	7.321	PV T	0.0230	632.60486	326.96094	0.28764
76	7.346	PV T	0.0158	400.51315	306.51059	0.18211
77	7.385	PV T	8.91e-3	91.38355	170.88799	0.04155
78	7.392	PV T	0.0104	126.08089	201.84753	0.05733
79	7.411	PV T	0.0225	497.51508	263.16751	0.22622
80	7.464	PV T	7.11e-3	43.59375	80.56269	0.01982
81	7.476	PV T	0.0110	68.90559	104.21461	0.03133
82	7.486	PV T	8.25e-3	60.39464	122.05819	0.02746

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
83	7.500	PV T	0.0110	115.48541	126.80671	0.05251
84	7.520	PV T	3.58e-3	16.33588	76.03506	0.00743
85	7.526	PV T	9.44e-3	40.56149	71.61162	0.01844
86	7.542	PB T	4.84e-3	10.28590	35.44796	0.00468
87	7.565	BV T	8.93e-3	58.93958	110.05386	0.02680
88	7.612	PV T	0.0153	306.11896	243.40079	0.13919
89	7.616	PV T	4.25e-3	61.86706	242.53885	0.02813
90	7.622	PV T	8.04e-3	159.78502	250.44521	0.07265
91	7.651	PV T	0.0163	354.51352	270.24701	0.16120
92	7.659	PV T	0.0151	323.55405	257.48996	0.14712
93	7.691	PV T	8.50e-3	125.27299	189.68860	0.05696
94	7.702	PV T	9.48e-3	144.34427	189.61220	0.06563
95	7.733	PV T	9.61e-3	80.21490	103.90588	0.03647
96	7.749	PV T	0.0184	240.29831	162.78424	0.10926
97	7.779	PV T	5.32e-3	25.35773	65.38680	0.01153
98	7.798	PBAT	6.96e-3	21.09942	42.71843	0.00959
Totals :				2.19928e5	7.86427e4	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

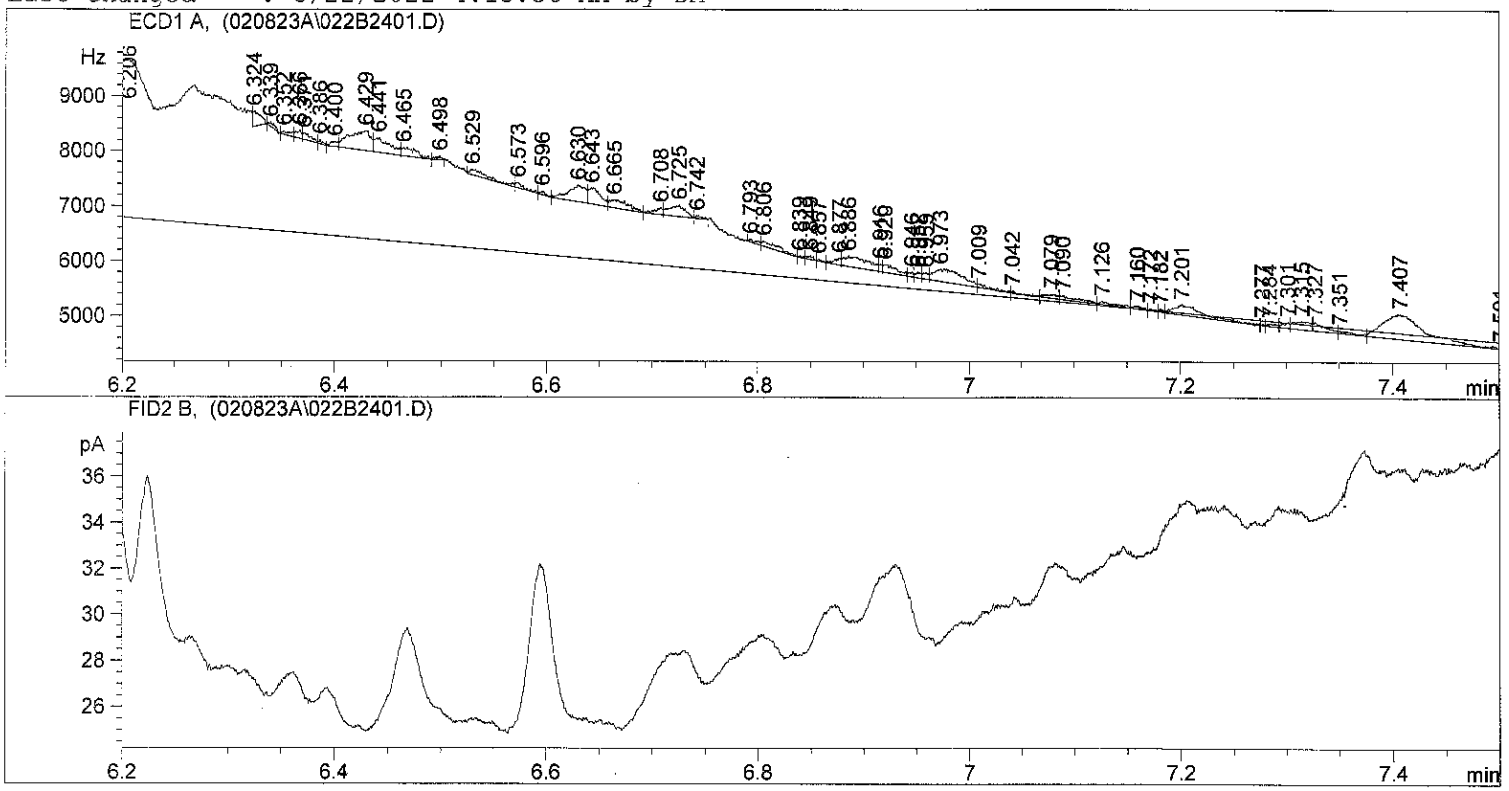
Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	5.286	BB	0.0187	39.11521	31.98866	33.38200
2	5.748	PB	0.0200	51.83291	36.05005	44.23564
3	6.230	BP	0.0192	26.22643	20.63893	22.38236
Totals :				117.17455	88.67764	

Results obtained with enhanced integrator!

*** End of Report ***

Injection Date : 2/8/2023 5:49:55 PM Seq. Line : 24
Sample Name : 23A0455 16 Location : Vial 22
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\020823A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.235	BV	0.0122	893.41229	912.28583	0.47561
2	5.256	VV	0.0164	1379.98523	1031.16321	0.73464
3	5.277	VV	3.99e-3	137.40721	503.16037	0.07315
4	5.289	VV	0.0117	588.52557	620.02527	0.31331
5	5.323	VV S	0.0261	4826.28418	2354.75635	2.56931
6	5.394	BV T	0.0197	2338.74341	1475.27063	1.24505
7	5.444	VV S	0.0328	1.65079e4	5972.96191	8.78811
8	5.512	VV S	0.3360	3.13887e4	1556.76672	16.71000
9	5.558	BV T	5.39e-3	41.77332	101.67970	0.02224
10	5.568	VV T	7.11e-3	93.50320	191.15031	0.04978
11	5.596	VV T	0.0152	741.73969	599.28198	0.39487
12	5.609	VV T	7.81e-3	436.91898	707.38971	0.23260
13	5.635	VV T	0.0195	1749.28259	1081.40137	0.93124
14	5.646	VV T	7.65e-3	431.17822	939.94049	0.22954
15	5.655	VV T	7.68e-3	532.65570	853.89417	0.28356
16	5.685	VV T	0.0284	3508.21265	1470.28467	1.86762
17	5.721	VV T	0.0198	758.79443	638.87915	0.40395

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	5.743	VV T	4.92e-3	186.78749	528.53601	0.09944
19	5.761	VV T	0.0214	1301.96387	729.76099	0.69311
20	5.797	VV T	3.93e-3	67.88743	237.61143	0.03614
21	5.813	VV T	0.0128	562.52155	538.20020	0.29946
22	5.870	VV T	0.0195	1760.80920	1098.72949	0.93738
23	5.952	VV S	0.0242	1.83612e4	1.01141e4	9.77471
24	6.055	VV S	0.0767	1.91126e4	4153.57520	10.17472
25	6.106	VV S	0.0405	9144.01758	3765.67480	4.86788
26	6.206	VB S	0.2829	6.40083e4	2886.17236	34.07525
27	6.324	BV T	8.48e-3	138.89418	272.90051	0.07394
28	6.339	VV T	6.16e-3	28.30924	76.64515	0.01507
29	6.352	PV T	9.03e-3	37.00634	68.32221	0.01970
30	6.366	PV T	5.83e-3	49.73809	142.06903	0.02648
31	6.371	PV T	9.13e-3	65.48466	119.56846	0.03486
32	6.386	PV T	3.08e-3	16.92598	73.75845	0.00901
33	6.400	PV T	7.34e-3	45.59251	92.65215	0.02427
34	6.429	PV T	0.0169	492.16748	360.69763	0.26201
35	6.441	PV T	0.0134	270.55017	266.58328	0.14403
36	6.465	PV T	0.0161	143.36963	148.39058	0.07632
37	6.498	PB T	4.45e-3	19.60231	62.73933	0.01044
38	6.529	BV T	0.0165	130.10268	94.53896	0.06926
39	6.573	PV T	7.13e-3	50.15653	95.45953	0.02670
40	6.596	PV T	4.65e-3	20.83192	66.66532	0.01109
41	6.630	PV T	0.0135	336.43283	300.55051	0.17910
42	6.643	PV T	9.89e-3	235.98605	290.08762	0.12563
43	6.665	PV T	0.0157	183.84489	142.01711	0.09787
44	6.708	PV T	6.45e-3	64.58149	128.81573	0.03438
45	6.725	PV T	0.0126	212.25096	205.80107	0.11299
46	6.742	PB T	6.03e-3	21.50431	47.94198	0.01145
47	6.793	BV T	7.07e-3	28.89644	53.77929	0.01538
48	6.806	PV T	0.0197	110.89352	93.70958	0.05903
49	6.839	PV T	4.51e-3	6.69448	24.75459	0.00356
50	6.849	PV T	5.12e-3	24.49169	66.16911	0.01304
51	6.857	PV T	3.98e-3	8.87354	37.11552	0.00472
52	6.877	PV T	5.55e-3	52.03508	122.58739	0.02770
53	6.886	PV T	0.0199	314.87909	188.72211	0.16763
54	6.916	PV T	3.61e-3	28.34982	130.94287	0.01509
55	6.920	PV T	0.0154	127.13515	137.23601	0.06768
56	6.946	PV T	4.68e-3	24.57658	82.39764	0.01308
57	6.952	PV T	5.19e-3	36.57047	92.96840	0.01947
58	6.959	PV T	5.92e-3	38.99433	109.70889	0.02076
59	6.973	PV T	0.0243	428.63217	210.86583	0.22819
60	7.009	PV T	0.0107	42.45747	66.14499	0.02260
61	7.042	PV T	0.0000	1.17685	34.98692	0.00063
62	7.079	PV T	0.0110	51.76327	68.94323	0.02756
63	7.090	PV T	0.0212	82.75124	65.10227	0.04405
64	7.126	PV T	0.0129	61.29456	58.37211	0.03263
65	7.160	PV T	8.28e-3	31.44535	50.41411	0.01674
66	7.172	PV T	6.08e-3	12.51634	34.30270	0.00666
67	7.182	PV T	5.40e-3	13.96731	43.08216	0.00744
68	7.201	PV T	0.0219	324.40662	179.62102	0.17270
69	7.277	PV T	1.99e-3	3.73750	31.36351	0.00199
70	7.284	PV T	7.54e-3	27.60105	45.10843	0.01469
71	7.301	PV T	5.41e-3	43.86067	106.39226	0.02335
72	7.315	PV T	0.0137	164.59674	144.86865	0.08762
73	7.327	PV T	0.0131	120.15894	152.42871	0.06397
74	7.351	PV T	0.0162	42.35708	43.70642	0.02255
75	7.407	PV T	0.0329	1218.42712	448.24634	0.64864
76	7.501	PV T	7.14e-3	11.89273	27.76315	0.00633
77	7.516	PV T	7.78e-3	11.76193	25.20459	0.00626
78	7.526	PV T	3.08e-3	6.02610	32.62728	0.00321
79	7.569	PV T	0.0262	698.78070	318.22977	0.37200
80	7.610	PV T	9.43e-3	64.03860	84.65043	0.03409
81	7.621	PB T	0.0118	94.49103	96.94470	0.05030
82	7.680	BP	0.0125	23.24058	22.48910	0.01237

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
83	7.714	BP	4.19e-3	5.37053	17.44198	0.00286
84	7.729	VP	2.50e-3	4.97105	27.63671	0.00265
85	7.747	BB	0.0114	19.54472	23.72107	0.01040
86	7.783	PP	3.23e-3	5.78527	25.66867	0.00308
Totals :				1.87844e5	5.17453e4	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

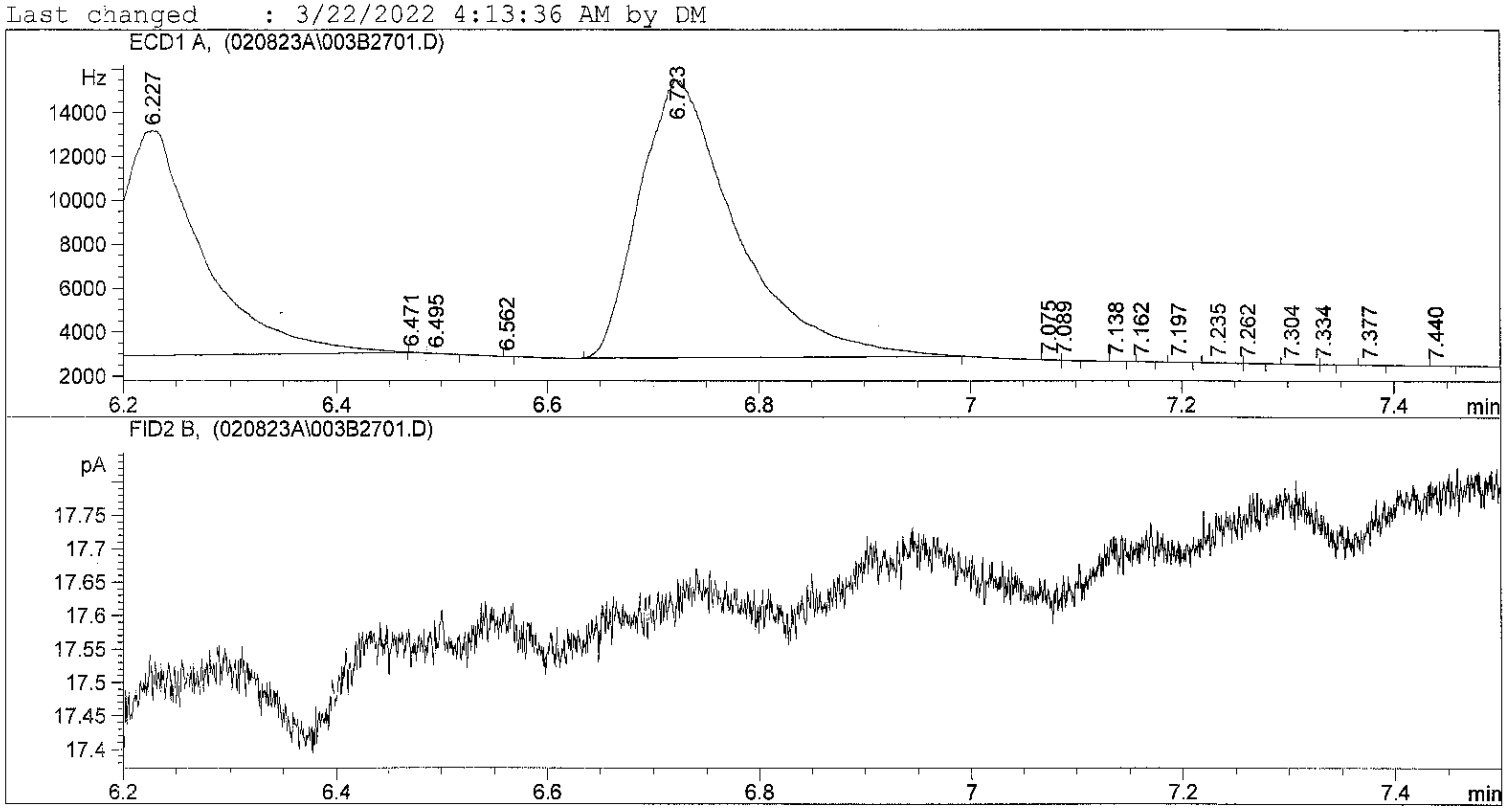
Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	5.314	BP	0.0332	96.11147	38.90276	42.07359
2	5.372	VP	0.0210	81.92999	54.99154	35.86553
3	5.468	PP	0.0150	24.36331	26.88041	10.66524
4	5.618	PP	0.0139	26.03181	31.98744	11.39564
Totals :				228.43657	152.76215	

Results obtained with enhanced integrator!

*** End of Report ***

Injection Date : 2/8/2023 6:23:34 PM Seq. Line : 27
Sample Name : CS4 Location : Vial 3
Acq. Operator : TW Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\2\SEQUENCE\020823A.S
Method : C:\HPCHEM\2\METHODS\DIOXIN.M
Last changed : 3/22/2022 4:13:36 AM by DM



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: ECD1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
1	5.536	PV S	0.0364	1.76288e5	6.11713e4	20.08161
2	5.632	VV S	0.0563	2.55138e5	7.55096e4	29.06370
3	5.694	VV S	0.0509	9.66349e4	3.16682e4	11.00805
4	5.742	VV S	0.0763	9.62766e4	2.10333e4	10.96723
5	5.988	VV S	0.0613	7.65823e4	2.08155e4	8.72379
6	6.140	VV S	0.0586	4.24865e4	1.20878e4	4.83980
7	6.227	VB S	0.0882	5.43197e4	1.02592e4	6.18776
8	6.471	BP	5.54e-3	3.50900	10.55976	0.00040
9	6.495	BP	0.0147	12.27942	10.12678	0.00140
10	6.562	PP	0.0000	9.41642e-3	6.00961	1.073e-6
11	6.723	PB S	0.0757	7.98298e4	1.26760e4	9.09372
12	7.075	BP	8.44e-3	17.86883	27.28891	0.00204
13	7.089	VP	7.53e-3	9.45862	15.92857	0.00108
14	7.138	BP	6.07e-3	4.31910	9.21160	0.00049
15	7.162	PB	6.20e-3	8.22465	16.55478	0.00094
16	7.197	PB	7.44e-3	9.17753	15.64439	0.00105
17	7.235	PP	0.0135	25.27478	23.13362	0.00288

Peak #	RetTime [min]	Type	Width [min]	Area [Hz*s]	Height [Hz]	Area %
18	7.262	VB	0.0126	12.55908	16.65518	0.00143
19	7.304	BP	7.03e-3	4.93139	11.68748	0.00056
20	7.334	BP	4.44e-3	4.16058	13.33784	0.00047
21	7.377	PB	0.0101	11.10235	13.33636	0.00126
22	7.440	BP	9.61e-3	10.55784	13.66822	0.00120
23	7.527	PP	0.0118	18.95027	20.44774	0.00216
24	7.554	VV	0.0148	23.40461	19.84617	0.00267
25	7.642	BV	0.0250	103.73544	49.50061	0.01182
26	7.677	VB	6.97e-3	7.83572	14.36204	0.00089
27	7.753	PB	2.82e-3	2.89944	15.21125	0.00033
28	7.770	BP	4.72e-3	3.38659	11.22379	0.00039
29	7.781	VP	7.40e-3	7.86547	13.50411	0.00090
Totals :				8.77857e5	2.45568e5	

Results obtained with enhanced integrator!

Signal 2: FID2 B,

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*** End of Report ***

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0265	Cleanup Type:	Sulfuric Acid
Cleanup Method:	EPA 3665 Sulfuric Acid Cleanup - uL	Analysis:	EPA 1613B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	BLB0228-BLK1	23031304	02/23/2023	
LCS	BLB0228-BS1	23031305	02/23/2023	
Reference	BLB0228-SRM1	23031306	02/23/2023	
LDW23-SC1045	23A0420-01	23031321	02/23/2023	
LDW23-SC1004	23A0420-08	23031504	02/23/2023	
LDW23-IT1051	23A0420-04	23031322	02/23/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0265

Matrix: Solid **Cleanup using: HRGCMS - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 2/28/2023 4:05:31PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0295-04	A	LDW23-SC1023B	A 04	20	20	1613B Dioxin	2/23/2023	DxP	
23A0417-01	C	LDW23-SS1127	C 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0417-03	C	LDW23-SS1095	C 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0417-05	C	LDW23-SS1089	C 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0418-01	C	LDW23-IT1136	C 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0418-02	C	LDW23-IT1142	C 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0418-10	C	LDW23-IT1135	C 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0419-02	C	LDW23-SS1045	C 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0419-04	C	LDW23-SS1135	C 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0419-05	C	LDW23-SS1136	C 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0419-08	C	LDW23-SS1142	C 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0419-09	C	LDW23-SS1202	C 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0420-01	C	LDW23-SC1045	C 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0420-04	C	LDW23-IT1051	C 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0420-08	C	LDW23-SC1004	C 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0455-03	B	LDW23-SS1031	B 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0455-08	B	LDW23-SS1023	B 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0455-15	B	LDW23-SS1051	B 01	20	20	1613B Dioxin	2/23/2023	DxP	
23A0455-16	B	LDW23-SS1052	B 01	20	20	1613B Dioxin	2/23/2023	DxP	
BLB0228-BLK1	-	Blank	-	20	20	-	2/23/2023	DxP	
BLB0228-BS1	-	LCS	-	20	20	-	2/23/2023	DxP	
BLB0228-DUP1	-	Duplicate	-	20	20	-	2/23/2023	DxP	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0265

Matrix: Solid **Cleanup using: HRGCMS - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 2/28/2023 4:05:31PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLB0228-SRM1	-	Reference	-	20	20	-	2/23/2023	DxP	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0266	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 1613B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-IT1051	23A0420-04	23031322	02/27/2023	
Blank	BLB0228-BLK1	23031304	02/27/2023	
LCS	BLB0228-BS1	23031305	02/27/2023	
LDW23-SC1045	23A0420-01	23031321	02/27/2023	
LDW23-SC1004	23A0420-08	23031504	02/27/2023	
Reference	BLB0228-SRM1	23031306	02/27/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0266

Matrix: Solid **Cleanup using: HRGCMS - EPA 3630C Silica Gel Cleanup - uL** **Printed: 2/28/2023 4:05:58PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0295-04	A	LDW23-SC1023B	A 04	20	20	1613B Dioxin	2/27/2023	DxP	
23A0417-01	C	LDW23-SS1127	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0417-03	C	LDW23-SS1095	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0417-05	C	LDW23-SS1089	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0418-01	C	LDW23-IT1136	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0418-02	C	LDW23-IT1142	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0418-10	C	LDW23-IT1135	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0419-02	C	LDW23-SS1045	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0419-04	C	LDW23-SS1135	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0419-05	C	LDW23-SS1136	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0419-08	C	LDW23-SS1142	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0419-09	C	LDW23-SS1202	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0420-01	C	LDW23-SC1045	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0420-04	C	LDW23-IT1051	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0420-08	C	LDW23-SC1004	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0455-03	B	LDW23-SS1031	B 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0455-08	B	LDW23-SS1023	B 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0455-15	B	LDW23-SS1051	B 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0455-16	B	LDW23-SS1052	B 01	20	20	1613B Dioxin	2/27/2023	DxP	
BLB0228-BLK1	-	Blank	-	20	20	-	2/27/2023	DxP	
BLB0228-BS1	-	LCS	-	20	20	-	2/27/2023	DxP	
BLB0228-DUP1	-	Duplicate	-	20	20	-	2/27/2023	DxP	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0266

Matrix: Solid **Cleanup using: HRGCMS - EPA 3630C Silica Gel Cleanup - uL** **Printed: 2/28/2023 4:05:58PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLB0228-SRM1	-	Reference	-	20	20	-	2/27/2023	DxP	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0267	Cleanup Type:	Florisil
Cleanup Method:	EPA 3620B Florisil Cleanup (uL)	Analysis:	EPA 1613B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-IT1051	23A0420-04	23031322	02/27/2023	
LCS	BLB0228-BS1	23031305	02/27/2023	
Blank	BLB0228-BLK1	23031304	02/27/2023	
Reference	BLB0228-SRM1	23031306	02/27/2023	
LDW23-SC1004	23A0420-08	23031504	02/27/2023	
LDW23-SC1045	23A0420-01	23031321	02/27/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0267

Matrix: Solid **Cleanup using: HRGCMS - EPA 3620B Florisil Cleanup (uL)** **Check Standard: CKK0015-FLO1** **Printed: 2/28/2023 4:06:18PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0295-04	A	LDW23-SC1023B	A 04	20	20	1613B Dioxin	2/27/2023	DxP	
23A0417-01	C	LDW23-SS1127	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0417-03	C	LDW23-SS1095	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0417-05	C	LDW23-SS1089	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0418-01	C	LDW23-IT1136	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0418-02	C	LDW23-IT1142	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0418-10	C	LDW23-IT1135	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0419-02	C	LDW23-SS1045	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0419-04	C	LDW23-SS1135	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0419-05	C	LDW23-SS1136	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0419-08	C	LDW23-SS1142	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0419-09	C	LDW23-SS1202	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0420-01	C	LDW23-SC1045	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0420-04	C	LDW23-IT1051	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0420-08	C	LDW23-SC1004	C 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0455-03	B	LDW23-SS1031	B 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0455-08	B	LDW23-SS1023	B 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0455-15	B	LDW23-SS1051	B 01	20	20	1613B Dioxin	2/27/2023	DxP	
23A0455-16	B	LDW23-SS1052	B 01	20	20	1613B Dioxin	2/27/2023	DxP	
BLB0228-BLK1	-	Blank	-	20	20	-	2/27/2023	DxP	
BLB0228-BS1	-	LCS	-	20	20	-	2/27/2023	DxP	
BLB0228-DUP1	-	Duplicate	-	20	20	-	2/27/2023	DxP	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0267

Matrix: Solid **Cleanup using: HRGCMS - EPA 3620B Florisil Cleanup (uL)** **Check Standard: CKK0015-FLO1** **Printed: 2/28/2023 4:06:18PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLB0228-SRM1	-	Reference	-	20	20	-	2/27/2023	DxP	

Analytical Resources, LLC
Analytical Chemists and Consultants

Blank

Form 1
METHOD BLANK DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLB0228-BLK1	File ID:	23031304
Sampled:	N/A	Prepared:	02/14/23 17:30	Analyzed:	03/13/23 12:41
Solids Wt%:		Preparation:	EPA 1613	Initial/Final:	10 g / 20 uL
Result Basis:	Dry	Sequence:	SLC0171	Calibration:	GC00015
Batch:	BLB0228	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

CAS NO.	COMPOUND	DF/Split	Ion Ratio	Ratio Limits	EDL	RL	Result	Units	Q
51207-31-9	2,3,7,8-TCDF	1	0.000	0.655-0.886	0.357	1.00	ND	ng/kg	U
1746-01-6	2,3,7,8-TCDD	1	0.000	0.655-0.886	0.145	1.00	ND	ng/kg	U
57117-41-6	1,2,3,7,8-PeCDF	1	0.000	1.318-1.783	0.187	1.00	ND	ng/kg	U
57117-31-4	2,3,4,7,8-PeCDF	1	0.000	1.318-1.783	0.166	1.00	ND	ng/kg	U
40321-76-4	1,2,3,7,8-PeCDD	1	0.000	1.318-1.783	0.244	1.00	ND	ng/kg	U
70648-26-9	1,2,3,4,7,8-HxCDF	1	0.000	1.054-1.426	0.120	1.00	ND	ng/kg	U
57117-44-9	1,2,3,6,7,8-HxCDF	1	0.000	1.054-1.426	0.126	1.00	ND	ng/kg	U
60851-34-5	2,3,4,6,7,8-HxCDF	1	0.000	1.054-1.426	0.131	1.00	ND	ng/kg	U
72918-21-9	1,2,3,7,8,9-HxCDF	1	0.000	1.054-1.426	0.172	1.00	ND	ng/kg	U
39227-28-6	1,2,3,4,7,8-HxCDD	1	0.000	1.054-1.426	0.162	1.00	ND	ng/kg	U
57653-85-7	1,2,3,6,7,8-HxCDD	1	0.000	1.054-1.426	0.154	1.00	ND	ng/kg	U
19408-74-3	1,2,3,7,8,9-HxCDD	1	0.000	1.054-1.426	0.174	1.00	ND	ng/kg	U
67562-39-4	1,2,3,4,6,7,8-HpCDF	1	1.300	0.893-1.208	0.167	1.00	0.361	ng/kg	EMPC, J
55673-89-7	1,2,3,4,7,8,9-HpCDF	1	0.000	0.893-1.208	0.277	1.00	ND	ng/kg	U
35822-46-9	1,2,3,4,6,7,8-HpCDD	1	1.202	0.893-1.208	0.239	2.50	0.220	ng/kg	J
39001-02-0	OCDF	1	0.000	0.757-1.024	0.752	2.50	ND	ng/kg	U
3268-87-9	OCDD	1	0.863	0.757-1.024	0.620	10.0	2.46	ng/kg	J

Homologue Groups

55722-27-5	Total TCDF	1	0.000			1.00	ND	ng/kg
41903-57-5	Total TCDD	1	0.000			1.00	ND	ng/kg
30402-15-4	Total PeCDF	1	0.000			1.00	ND	ng/kg
36088-22-9	Total PeCDD	1	0.000			1.00	ND	ng/kg
55684-94-1	Total HxCDF	1	0.000			1.00	ND	ng/kg
34465-46-8	Total HxCDD	1	0.000			1.00	ND	ng/kg
38998-75-3	Total HpCDF	1	0.000			1.00	ND	ng/kg
37871-00-4	Total HpCDD	1	0.000			1.00	0.220	ng/kg

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 0.007
Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 0.300

Blank

Form 2
METHOD BLANK DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	Analytical Resources, LLC			SDG:	23A0420
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLB0228-BLK1	File ID:	23031304
Sampled:	N/A	Prepared:	02/14/23 17:30	Analyzed:	03/13/23 12:41
Solids Wt%:	0.00	Preparation:	EPA 1613	Initial/Final:	10 g / 20 uL
Result Basis:	Dry	Sequence:	SLC0171	Calibration:	GC00015
Batch:	BLB0228	Instrument:	AUTOSPEC01	Column:	RTX-Dioxin2

Labels	DF/Split	Ion Ratio	Ratio Limits	EDL	% REC	QC LIMITS	Q
13C12-2,3,7,8-TCDF	1	0.759	0.655-0.886	0.29	93.0	24 - 169 %	
13C12-2,3,7,8-TCDD	1	0.784	0.655-0.886	0.35	113	25 - 164 %	
13C12-1,2,3,7,8-PeCDF	1	1.450	1.318-1.783	0.36	97.1	24 - 185 %	
13C12-2,3,4,7,8-PeCDF	1	1.505	1.318-1.783	0.40	98.9	21 - 178 %	
13C12-1,2,3,7,8-PeCDD	1	1.713	1.318-1.783	0.28	106	25 - 181 %	
13C12-1,2,3,4,7,8-HxCDF	1	0.505	0.434-0.587	0.42	109	26 - 152 %	
13C12-1,2,3,6,7,8-HxCDF	1	0.514	0.434-0.587	0.36	108	26 - 123 %	
13C12-2,3,4,6,7,8-HxCDF	1	0.500	0.434-0.587	0.44	106	28 - 136 %	
13C12-1,2,3,7,8,9-HxCDF	1	0.508	0.434-0.587	0.53	104	29 - 147 %	
13C12-1,2,3,4,7,8-HxCDD	1	1.268	1.054-1.426	0.35	122	32 - 141 %	
13C12-1,2,3,6,7,8-HxCDD	1	1.270	1.054-1.426	0.30	120	28 - 130 %	
13C12-1,2,3,4,6,7,8-HpCDF	1	0.438	0.374-0.506	0.56	88.7	28 - 143 %	
13C12-1,2,3,4,7,8,9-HpCDF	1	0.449	0.374-0.506	0.65	79.3	26 - 138 %	
13C12-1,2,3,4,6,7,8-HpCDD	1	1.031	0.893-1.208	0.39	91.2	23 - 140 %	
13C12-OCDD	1	0.848	0.757-1.024	0.49	76.0	17 - 157 %	
37Cl4-2,3,7,8-TCDD	1	328.000		0.11	93.2	35 - 197 %	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:10:59 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230313.mdb 13 Mar 2023 11:32:39
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: BLB0228-BLK1, Name: 23031304, Date: 13-Mar-2023, Time: 12:41:28, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF					0.702		0.770	1664	988								
12378-PeCDF					0.679		1.550	474	553								
23478-PeCDF					0.786		1.550	474	553								
123478-HxCDF					1.166		1.240	589	500								
234678-HxCDF					1.140		1.240	589	500								
123678-HxCDF					1.091		1.240	589	500								
123789-HxCDF					1.137		1.240	589	500								
1234678-HpCDF	38.615	1.000	1.937e2	1.489e2	1.003	1.300	1.050	434	435	1.81e3	1.82e3	4.2	4.2	YES	bb	bb	0.181
1234789-HpCDF					0.953		1.050	434	435								
OCDF					0.778		0.890	788	748								
2378-TCDD					1.149		0.770	1009	547								
12378-PeCDD					1.022		1.550	765	685								
123478-HxCDD					0.996		1.240	551	647								
123678-HxCDD					1.001		1.240	551	647								
123789-HxCDD					0.907		1.240	551	647								
1234678-HpCDD	40.119	1.000	1.142e2	9.495e1	1.039	1.202	1.050	552	486	1.82e3	2.05e3	3.3	4.2	NO	bb	db	0.110
OCDD	44.828	1.000	7.285e2	8.440e2	0.920	0.863	0.890	637	862	9.55e3	1.15e4	15.0	13.3	NO	bb	MM	1.230
13C-2378-TCDF	25.605	1.007	1.841e5	2.426e5	1.620	0.759	0.770	1819	1731	2.74e6	3.61e6	1505.4	2083.5	NO	bb	bb	92.983
13C-12378-PeCDF	29.758	1.171	2.019e5	1.393e5	1.240	1.450	1.550	1681	1682	2.87e6	2.03e6	1708.0	1205.1	NO	bb	bb	97.080
13C-23478-PeCDF	31.095	1.223	1.881e5	1.250e5	1.118	1.505	1.550	1681	1682	2.84e6	1.88e6	1687.4	1120.5	NO	bb	bb	98.882
13C-123478-HxCDF	34.738	0.955	1.020e5	2.019e5	1.168	0.505	0.510	1376	1586	1.56e6	3.05e6	1134.8	1921.5	NO	bd	bd	109.145
13C-123678-HxCDF	34.872	0.959	1.216e5	2.367e5	1.386	0.514	0.510	1376	1586	1.61e6	3.16e6	1168.4	1992.5	NO	db	dd	108.415
13C-234678-HxCDF	35.741	0.983	9.469e4	1.893e5	1.129	0.500	0.510	1376	1586	1.45e6	2.85e6	1057.4	1795.7	NO	bb	bb	105.508
13C-123789-HxCDF	36.766	1.011	7.768e4	1.530e5	0.932	0.508	0.510	1376	1586	1.12e6	2.25e6	817.7	1419.3	NO	bb	bb	103.877
13C-1234678-HpCDF	38.626	1.062	5.760e4	1.316e5	0.895	0.438	0.440	1317	1690	9.48e5	2.11e6	719.9	1247.8	NO	bb	bb	88.661
13C-1234789-HpCDF	40.844	1.123	4.511e4	1.004e5	0.770	0.449	0.440	1317	1690	6.13e5	1.37e6	465.1	808.8	NO	bb	bb	79.294
13C-1234-TCDD	25.421	0.000	1.232e5	1.601e5	1.000	0.770	0.770	1442	1562	1.95e6	2.52e6	1350.6	1610.8	NO	bb	bb	100.000
13C-2378-TCDD	26.240	1.032	1.627e5	2.076e5	1.152	0.784	0.770	1442	1562	2.46e6	3.13e6	1707.8	2001.3	NO	bb	bb	113.428
13C-12378-PeCDD	31.351	1.233	1.578e5	9.212e4	0.829	1.713	1.550	873	855	2.21e6	1.32e6	2526.7	1550.4	NO	bd	bb	106.463
13C-123478-HxCDD	35.863	0.986	1.621e5	1.278e5	0.995	1.268	1.240	1003	1071	2.49e6	1.98e6	2477.7	1844.8	NO	bd	bd	122.244
13C-123678-HxCDD	35.975	0.989	1.845e5	1.454e5	1.157	1.270	1.240	1003	1071	2.61e6	2.06e6	2602.7	1925.7	NO	db	db	119.659
13C-1234678-HpCDD	40.108	1.103	9.272e4	8.995e4	0.840	1.031	1.050	865	1080	1.28e6	1.20e6	1473.5	1110.6	NO	bb	bd	91.218
13C-OCDD	44.810	1.232	1.275e5	1.504e5	0.767	0.848	0.890	1151	1114	1.45e6	1.64e6	1257.5	1473.8	NO	bb	bd	151.907
13C-123789-HxCDD	36.365	0.000	1.322e5	1.061e5	1.000	1.246	1.240	1003	1071	1.99e6	1.62e6	1983.3	1508.0	NO	bb	bb	100.000
37CL-2378-TCDD	26.254	1.033	1.360e5		1.288			1078		1.98e6		1833.0			bb		37.285

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:10:59 Pacific Daylight Time

ID: BLB0228-BLK1, Name: 23031304, Date: 13-Mar-2023, Time: 12:41:28, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	1664	988								
1289-TCDF	27.102	1.059	2.153e2	1.473e2	0.678	1.461	0.770	1664	988	4.31e3	4.78e3	2.6	4.8	YES	bd	bb	0.125
13468-PECDF					1.246		1.550	940	1228								
12389-PECDF					0.496		1.550	474	553								
123468-HXCDF					1.169		1.240	589	500								
1368-TCDD					1.015		0.770	1009	547								
1289-TCDD					0.909		0.770	1009	547								
12479-PECDD					2.301		1.550	765	685								
12389-PECDD					1.184		1.550	765	685								
124679-HXCDD					1.115		1.240	551	647								
1234679-HPCDD	39.095	0.975	2.067e2	1.147e2	1.137	1.801	1.050	552	486	2.61e3	2.45e3	4.7	5.0	YES	bb	bb	0.155
Total-tetrafurans			0.000e0		0.727			1664		0.00e0							
Total-penta1			0.000e0					940		0.00e0							
Total-pentafurans			0.000e0		0.654			474		0.00e0							
Total-hexafurans			0.000e0		1.141			589		0.00e0							
Total-heptafurans			0.000e0		0.978			434		0.00e0							
Total-Furans			7.336e1		0.922			1664		2.22e3							0.047
Total-tetradioxins			0.000e0		1.024			1009		0.00e0							
Total-pentadioxins			0.000e0		1.502			765		0.00e0							
Total-hexadioxins			0.000e0		1.005			551		0.00e0							
Total-heptadioxins			1.142e2		1.088			552		1.82e3							0.110
Total-Dioxins			9.294e2		1.130			1009		1.28e4							1.385
Total-TEQ			1.003e3					1009		1.51e4							1.431
FUNCTION1 PFK			9.050e5					346852		1.57e7							
FUNCTION2 PFK			2.522e7					213757		1.25e7							0.000
FUNCTION3 PFK			6.356e5					295939		1.42e7							0.000
FUNCTION4 PFK			1.838e5					195017		4.75e6							
FUNCTION5 PFK			0.000e0					158007		0.00e0							
FUNCTION1 HXCD...			9.221e2					522		1.70e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			7.122e1					630		2.04e3							0.000
FUNCTION3 OCDPE			2.437e2					492		7.78e3							0.000
FUNCTION4 NCDPE			0.000e0					425		0.00e0							
FUNCTION5 DCDPE			1.550e2					793		6.07e3							0.000

Method: T:\Autospec\Methods\Dioxin230313.mdb 13 Mar 2023 11:32:39
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: BLB0228-BLK1, Name: 23031304, Date: 13-Mar-2023, Time: 12:41:28, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-Furans	21.25	7.336e1	1.105e2	0.922	0.66	0.77	1.3	NO	NO	db	db	0.047

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ID: BLB0228-BLK1, Name: 23031304, Date: 13-Mar-2023, Time: 12:41:28, Conditions: AUTOSPEC01, User: pk

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.12	1.142e2	9.495e1	1.039	1.20	1.05	3.3	YES	NO	bb	db	0.110

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-Dioxins	23.19	8.675e1	9.811e1	1.130	0.88	0.77	1.4	NO	NO	bb	bb	0.044
2	1234678-HpCDD	40.12	1.142e2	9.495e1	1.039	1.20	1.05	3.3	YES	NO	bb	db	0.110
3	OCDD	44.83	7.285e2	8.440e2	0.920	0.86	0.89	15.0	YES	NO	bb	MM	1.230

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-Furans	21.25	7.336e1	1.105e2	0.922	0.66	0.77	1.3	NO	NO	db	db	0.047
2	Total-Dioxins	23.19	8.675e1	9.811e1	1.130	0.88	0.77	1.4	NO	NO	bb	bb	0.044
3	1234678-HpCDD	40.12	1.142e2	9.495e1	1.039	1.20	1.05	3.3	YES	NO	bb	db	0.110
4	OCDD	44.83	7.285e2	8.440e2	0.920	0.86	0.89	15.0	YES	NO	bb	MM	1.230

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
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ID: BLB0228-BLK1, Name: 23031304, Date: 13-Mar-2023, Time: 12:41:28, Conditions: AUTOSPEC01, User: pk

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.44	2.034e3					0.4	NO		bb		
2	FUNCTION1 PFK	22.12	6.981e3					0.6	NO		bb		
3	FUNCTION1 PFK	22.03	1.605e4					1.8	NO		bb		
4	FUNCTION1 PFK	21.82	1.881e4					1.2	NO		bb		
5	FUNCTION1 PFK	21.68	9.963e4					2.2	NO		db		
6	FUNCTION1 PFK	21.54	5.973e4					2.9	NO		dd		
7	FUNCTION1 PFK	21.41	1.957e5					3.4	YES		dd		
8	FUNCTION1 PFK	21.28	6.428e4					3.3	YES		dd		
9	FUNCTION1 PFK	21.21	2.378e4					1.6	NO		dd		
10	FUNCTION1 PFK	21.16	4.958e4					2.1	NO		bd		
11	FUNCTION1 PFK	25.07	6.974e3					0.6	NO		bb		
12	FUNCTION1 PFK	24.97	2.901e4					1.7	NO		bb		
13	FUNCTION1 PFK	24.83	7.944e3					0.8	NO		bb		
14	FUNCTION1 PFK	24.69	1.906e3					0.4	NO		bb		
15	FUNCTION1 PFK	24.62	4.120e4					1.6	NO		db		
16	FUNCTION1 PFK	24.49	4.542e3					0.7	NO		bd		
17	FUNCTION1 PFK	24.43	2.948e3					0.6	NO		bb		
18	FUNCTION1 PFK	24.21	6.382e3					0.7	NO		bb		
19	FUNCTION1 PFK	24.08	2.669e4					1.5	NO		bb		
20	FUNCTION1 PFK	23.99	8.093e3					0.7	NO		bb		
21	FUNCTION1 PFK	23.81	1.628e4					1.1	NO		bb		
22	FUNCTION1 PFK	23.50	1.482e4					0.9	NO		bb		
23	FUNCTION1 PFK	23.23	1.454e4					1.4	NO		bb		
24	FUNCTION1 PFK	23.08	1.327e4					1.2	NO		bb		
25	FUNCTION1 PFK	22.86	2.522e4					1.2	NO		db		
26	FUNCTION1 PFK	22.79	2.303e4					1.7	NO		bd		
27	FUNCTION1 PFK	27.77	1.060e4					0.9	NO		db		
28	FUNCTION1 PFK	27.72	4.445e3					0.6	NO		bd		
29	FUNCTION1 PFK	27.36	2.510e4					1.3	NO		bb		
30	FUNCTION1 PFK	26.99	2.920e3					0.6	NO		bb		
31	FUNCTION1 PFK	26.55	7.199e3					0.8	NO		bb		
32	FUNCTION1 PFK	26.13	4.427e3					0.3	NO		bb		
33	FUNCTION1 PFK	25.76	1.986e4					1.0	NO		bb		
34	FUNCTION1 PFK	25.53	9.122e3					0.9	NO		bb		
35	FUNCTION1 PFK	25.44	2.058e3					0.4	NO		bb		
36	FUNCTION1 PFK	25.29	2.542e3					0.5	NO		bb		
37	FUNCTION1 PFK	25.24	3.723e4					1.6	NO		bb		

ID: BLB0228-BLK1, Name: 23031304, Date: 13-Mar-2023, Time: 12:41:28, Conditions: AUTOSPEC01, User: pk

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	32.13	1.528e5					4.3	YES		bb		0.000
2	FUNCTION2 PFK	31.81	2.884e5					9.7	YES		db		0.000
3	FUNCTION2 PFK	31.35	1.467e6					19.5	YES		dd		0.000
4	FUNCTION2 PFK	30.81	2.331e7					25.1	YES		bd		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	35.02	2.958e4					2.0	NO		bd		0.000
2	FUNCTION3 PFK	34.54	1.614e3					0.5	NO		bb		0.000
3	FUNCTION3 PFK	34.16	3.056e3					0.7	NO		bb		0.000
4	FUNCTION3 PFK	34.08	7.999e3					1.1	NO		db		0.000
5	FUNCTION3 PFK	34.03	1.308e4					1.7	NO		dd		0.000
6	FUNCTION3 PFK	33.99	9.745e3					1.6	NO		bd		0.000
7	FUNCTION3 PFK	33.82	1.184e4					1.1	NO		db		0.000
8	FUNCTION3 PFK	33.79	2.486e3					0.6	NO		bd		0.000
9	FUNCTION3 PFK	33.62	5.024e4					2.8	NO		db		0.000
10	FUNCTION3 PFK	33.53	6.525e4					3.8	YES		dd		0.000
11	FUNCTION3 PFK	33.42	1.254e5					5.6	YES		dd		0.000
12	FUNCTION3 PFK	33.39	6.899e4					5.0	YES		bd		0.000
13	FUNCTION3 PFK	32.98	7.818e3					1.3	NO		bb		0.000
14	FUNCTION3 PFK	32.76	2.542e3					0.8	NO		bb		0.000
15	FUNCTION3 PFK	32.71	1.771e4					1.9	NO		bb		0.000
16	FUNCTION3 PFK	37.40	5.084e3					0.8	NO		bb		0.000
17	FUNCTION3 PFK	37.17	2.599e4					1.9	NO		bb		0.000
18	FUNCTION3 PFK	36.01	5.273e3					0.8	NO		bb		0.000
19	FUNCTION3 PFK	35.94	1.311e3					0.4	NO		bb		0.000
20	FUNCTION3 PFK	35.61	1.561e4					1.3	NO		bb		0.000
21	FUNCTION3 PFK	35.54	3.528e3					0.6	NO		bb		0.000
22	FUNCTION3 PFK	35.45	7.803e3					1.1	NO		bb		0.000
23	FUNCTION3 PFK	35.37	5.597e4					2.5	NO		db		0.000
24	FUNCTION3 PFK	35.25	2.292e4					1.9	NO		dd		0.000
25	FUNCTION3 PFK	35.19	2.541e4					2.1	NO		dd		0.000
26	FUNCTION3 PFK	35.15	2.190e4					2.3	NO		dd		0.000
27	FUNCTION3 PFK	35.11	2.751e4					1.8	NO		dd		0.000

ID: BLB0228-BLK1, Name: 23031304, Date: 13-Mar-2023, Time: 12:41:28, Conditions: AUTOSPEC01, User: pk

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.85	1.064e4					2.0	NO		bd		
2	FUNCTION4 PFK	38.79	3.734e3					0.8	NO		bb		
3	FUNCTION4 PFK	37.78	1.251e4					1.6	NO		bb		
4	FUNCTION4 PFK	42.35	1.041e3					0.5	NO		bb		
5	FUNCTION4 PFK	42.19	4.827e3					1.1	NO		bb		
6	FUNCTION4 PFK	41.97	3.003e4					1.9	NO		bb		
7	FUNCTION4 PFK	41.78	5.169e3					1.2	NO		db		
8	FUNCTION4 PFK	41.72	1.294e4					1.4	NO		bd		
9	FUNCTION4 PFK	41.56	2.188e3					0.6	NO		bb		
10	FUNCTION4 PFK	40.79	1.471e4					1.3	NO		bb		
11	FUNCTION4 PFK	40.33	1.063e4					1.5	NO		bb		
12	FUNCTION4 PFK	40.16	1.497e4					1.6	NO		bb		
13	FUNCTION4 PFK	39.95	3.645e3					0.8	NO		db		
14	FUNCTION4 PFK	39.91	1.582e4					1.7	NO		bd		
15	FUNCTION4 PFK	39.15	6.063e3					1.2	NO		bb		
16	FUNCTION4 PFK	39.05	5.402e3					1.2	NO		db		
17	FUNCTION4 PFK	39.01	1.148e4					1.8	NO		dd		
18	FUNCTION4 PFK	38.89	1.805e4					2.2	NO		dd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.37	9.671e1					3.2	YES		bb		0.000
2	FUNCTION1 HXCD...	27.22	1.708e2					6.2	YES		db		0.000
3	FUNCTION1 HXCD...	27.09	2.420e2					9.9	YES		dd		0.000
4	FUNCTION1 HXCD...	27.02	8.251e1					2.3	NO		bd		0.000
5	FUNCTION1 HXCD...	26.06	7.357e1					1.5	NO		bb		0.000
6	FUNCTION1 HXCD...	25.83	9.536e1					2.1	NO		bb		0.000
7	FUNCTION1 HXCD...	23.74	7.831e1					4.5	YES		bb		0.000
8	FUNCTION1 HXCD...	21.34	8.288e1					2.9	NO		bb		0.000

ID: BLB0228-BLK1, Name: 23031304, Date: 13-Mar-2023, Time: 12:41:28, Conditions: AUTOSPEC01, User: pk

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.30	7.122e1					3.2	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	37.30	7.060e1					6.0	YES		bb		0.000
2	FUNCTION3 OCDPE	35.86	9.393e1					7.8	YES		bb		0.000
3	FUNCTION3 OCDPE	33.41	7.918e1					2.0	NO		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	43.38	8.392e1					3.8	YES		bb		0.000
2	FUNCTION5 DCDPE	43.30	7.108e1					3.8	YES		bb		0.000

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ID: BLB0228-BLK1, Name: 23031304, Date: 13-Mar-2023, Time: 12:41:28, Conditions: AUTOSPEC01, User: pk

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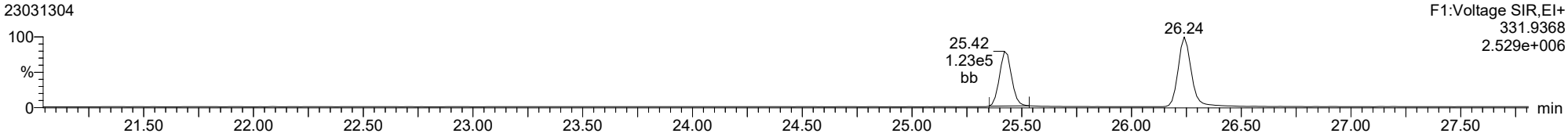

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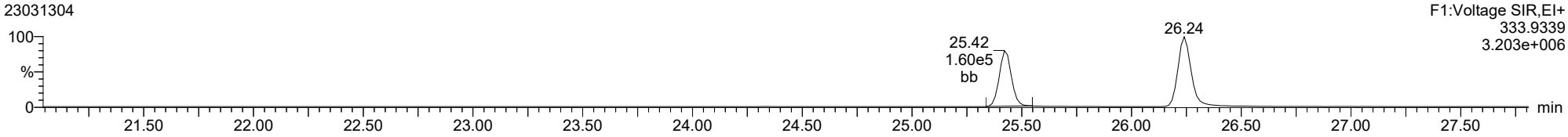

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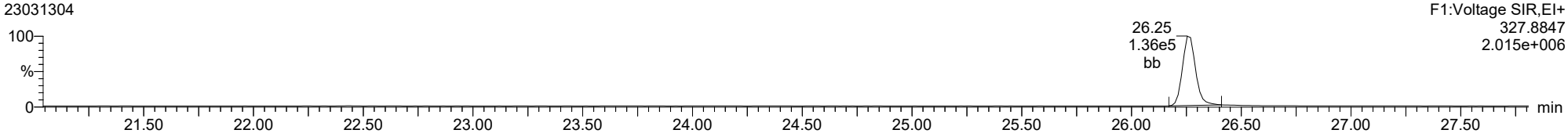

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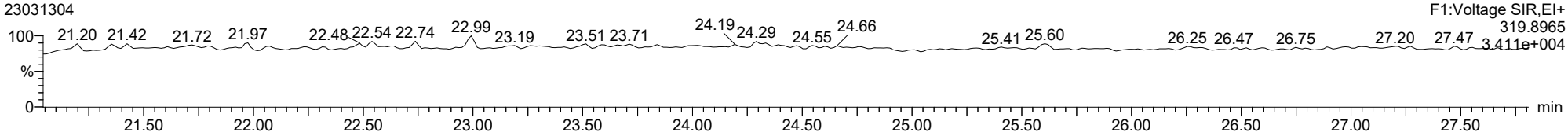

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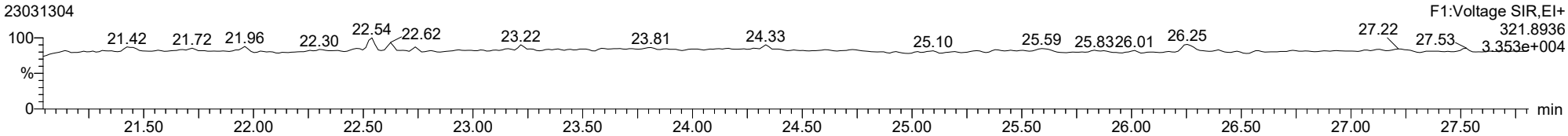

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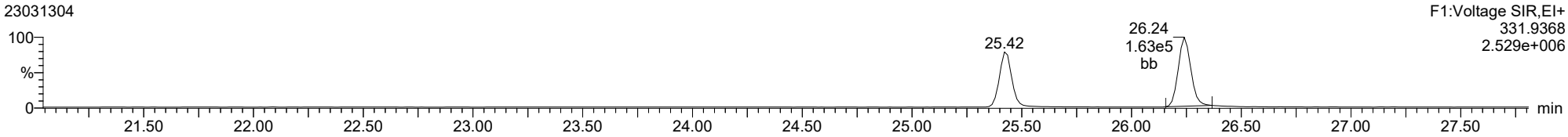

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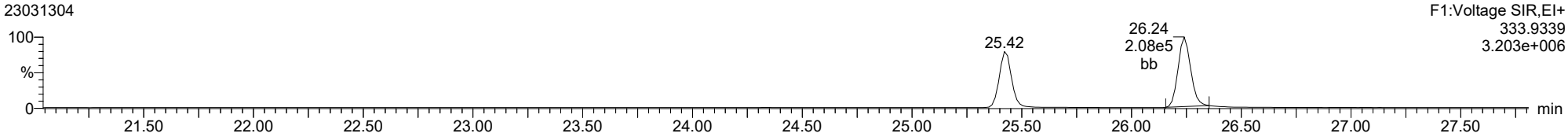

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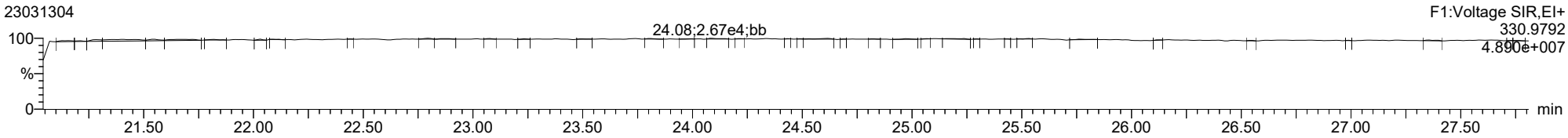

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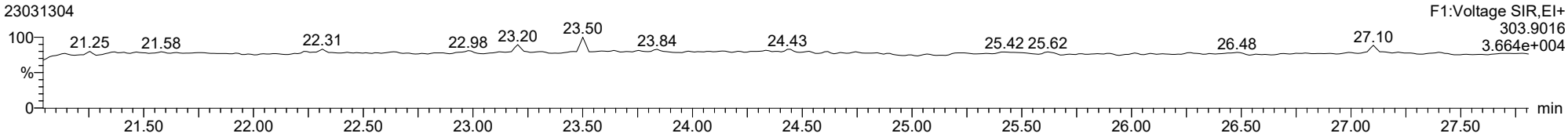
2378-TCDF



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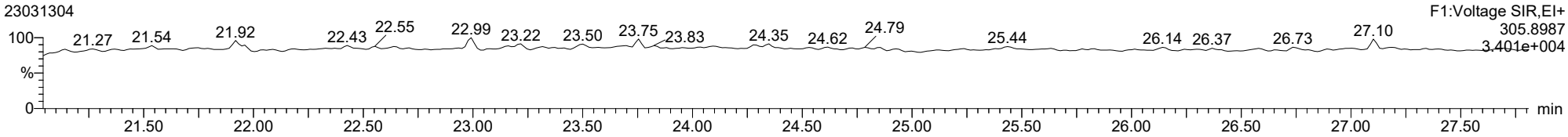

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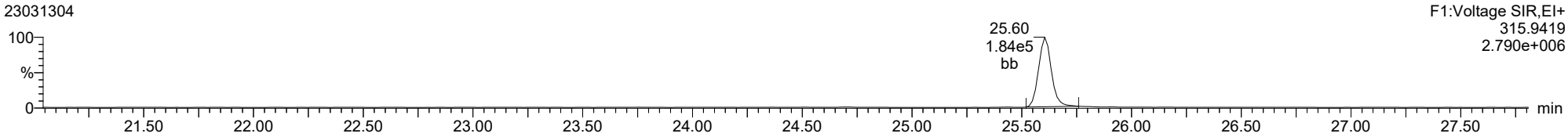

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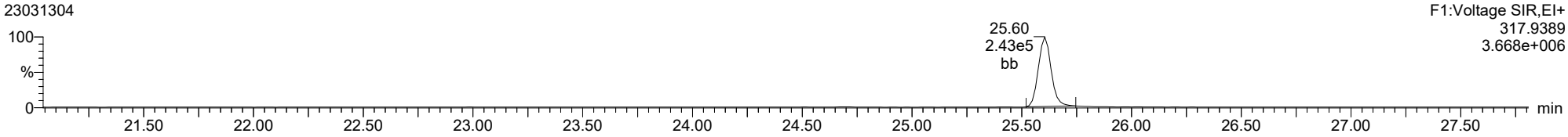
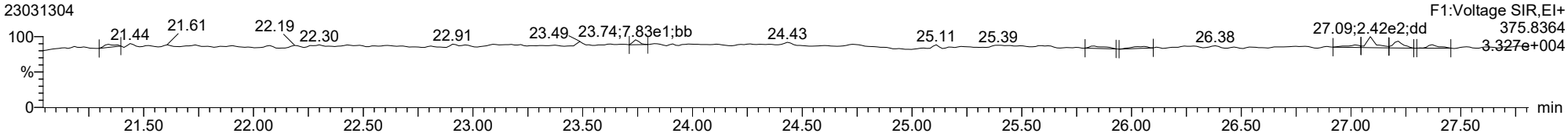


FUNCTION1 HXCDPE



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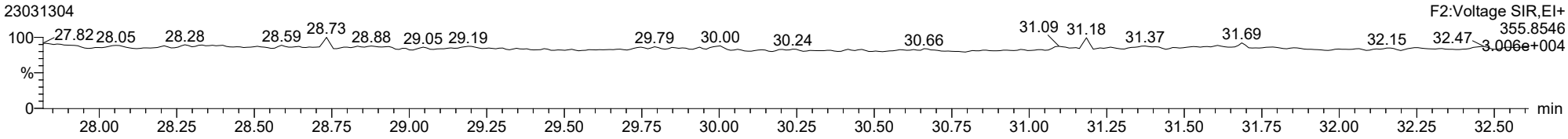
12378-PeCDD



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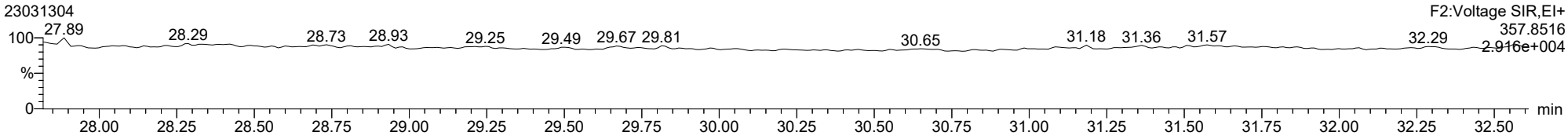

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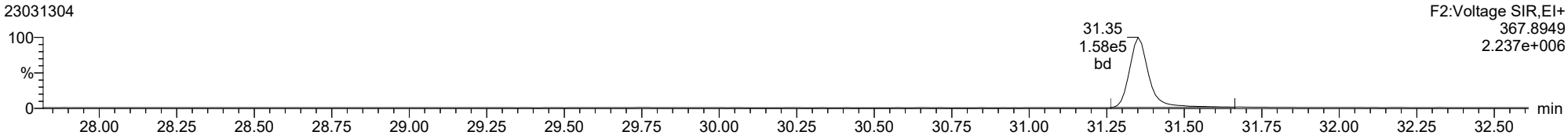

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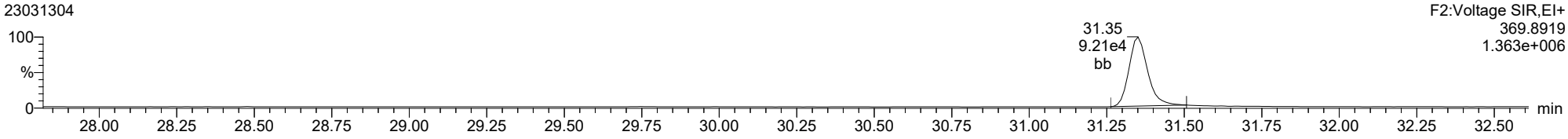

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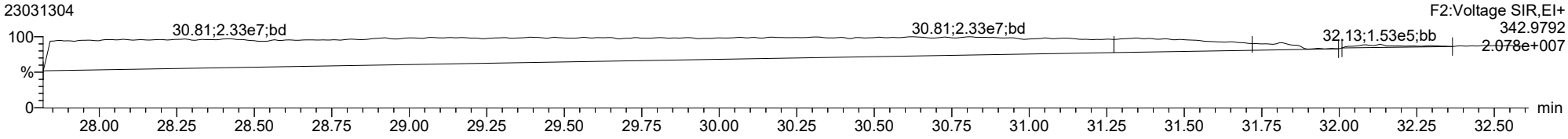

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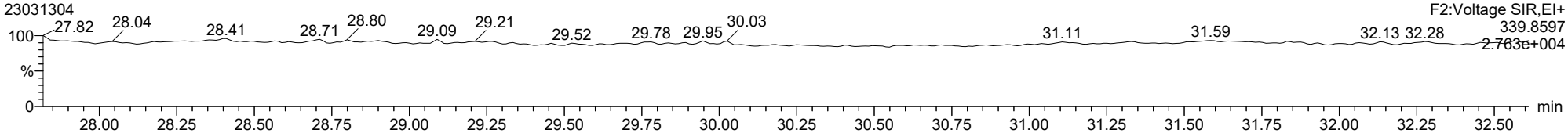

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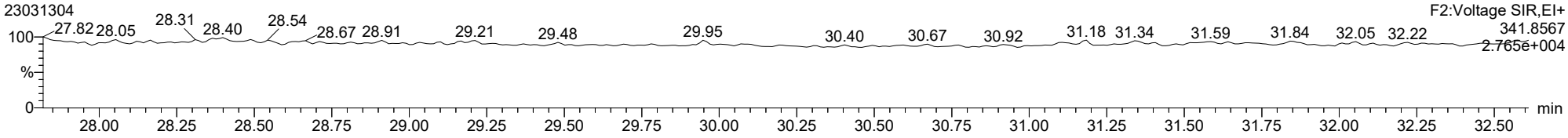

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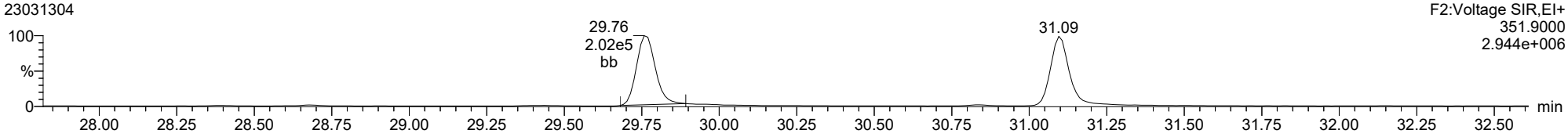

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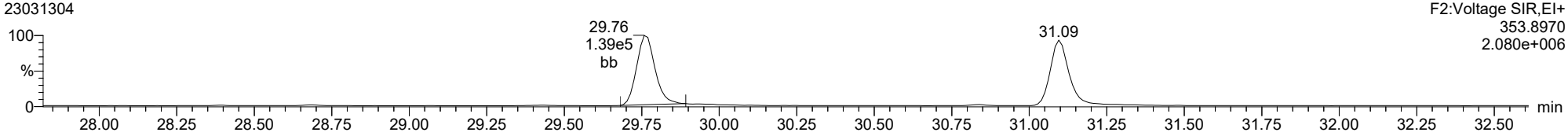
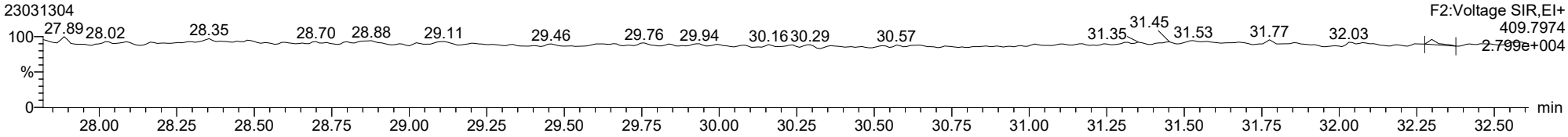


FUNCTION2 HPCDPE



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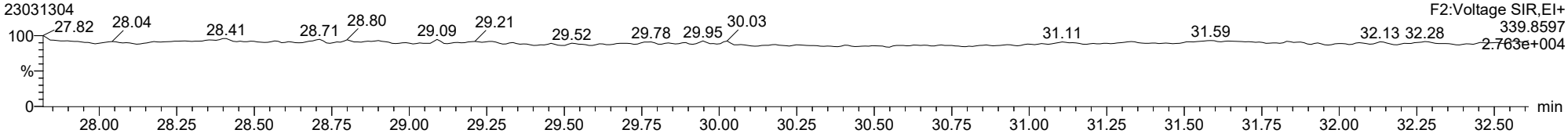
23478-PeCDF



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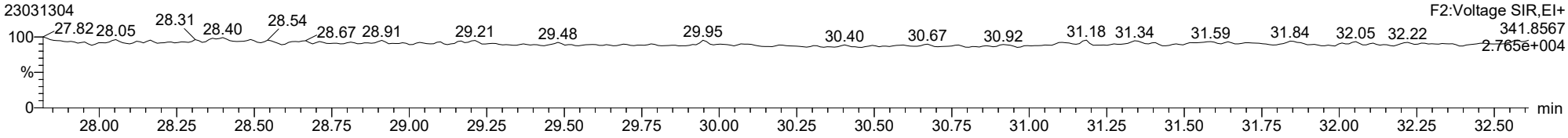

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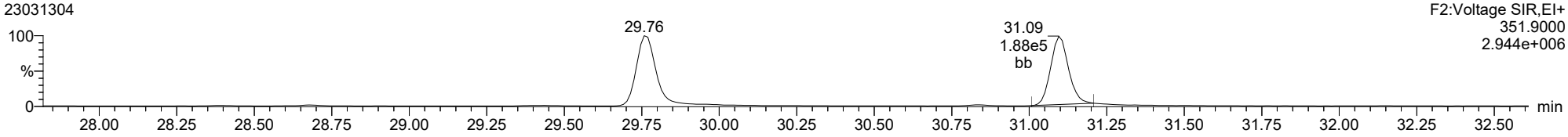

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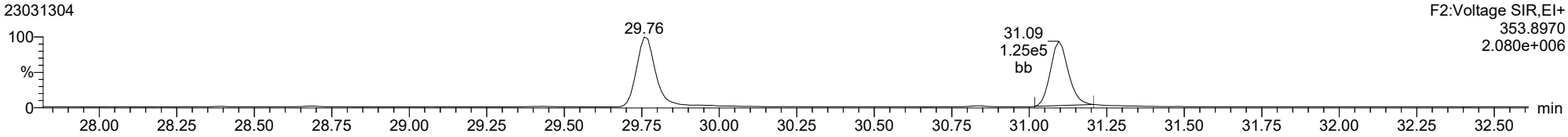

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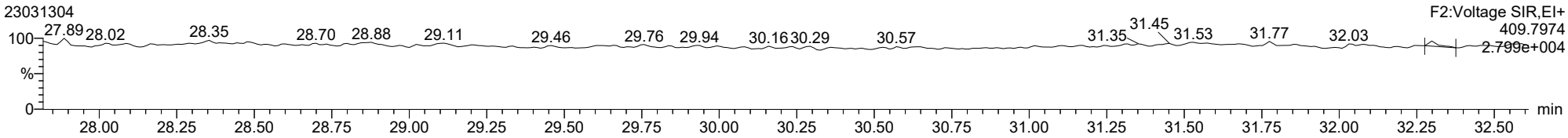

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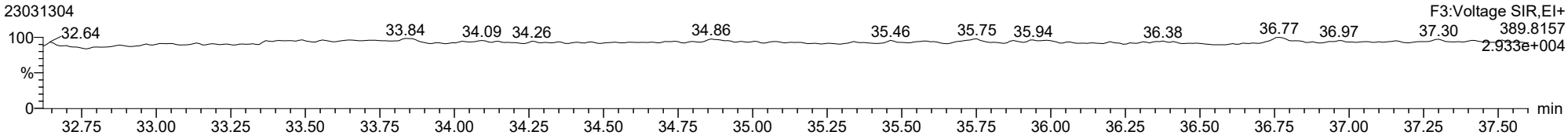
123478-HxCDD



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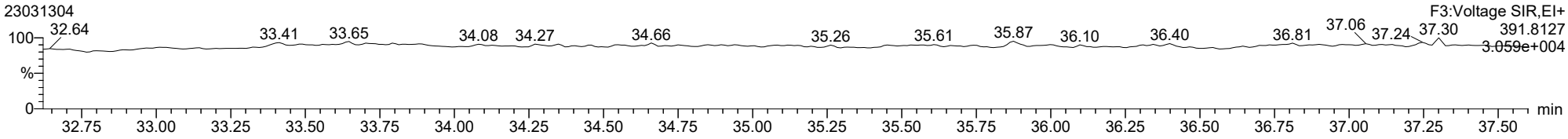

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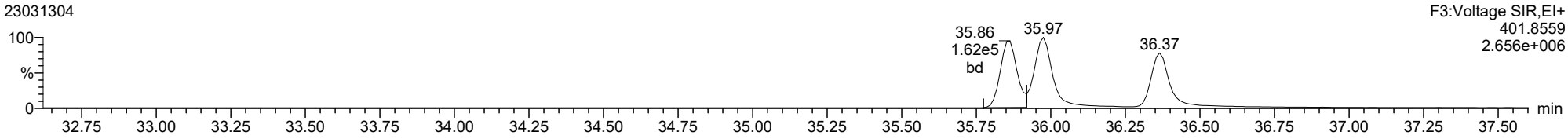

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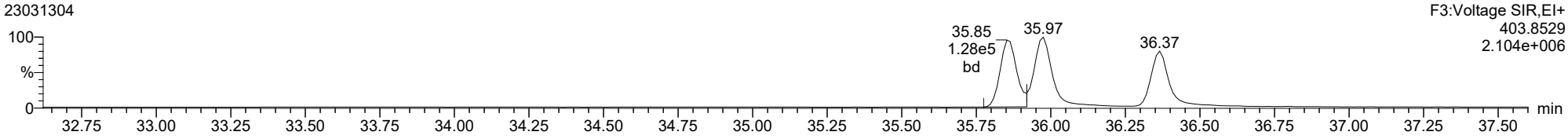

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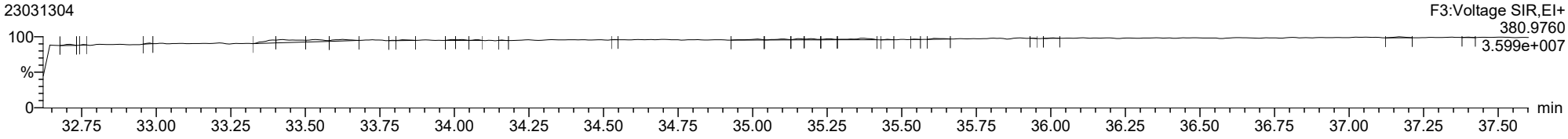

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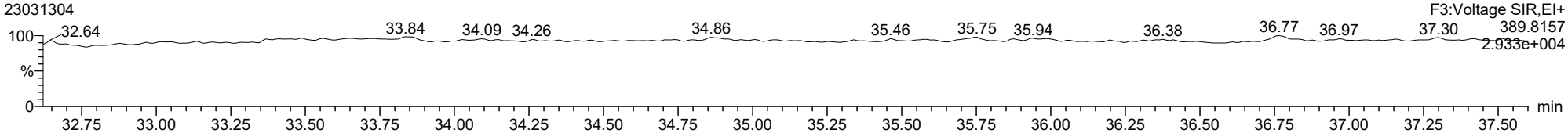

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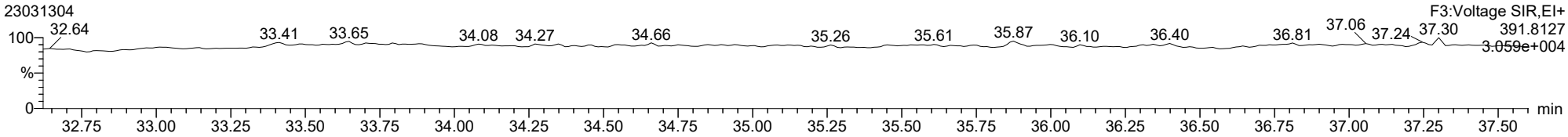

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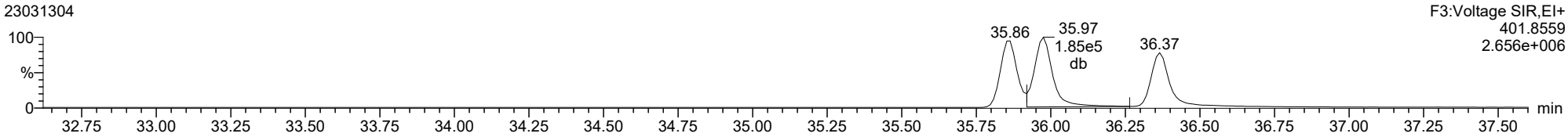

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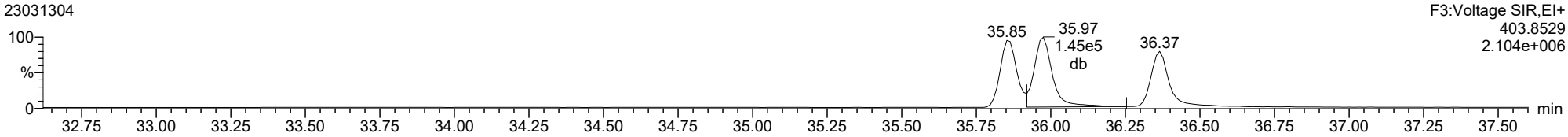

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ID: BLB0228-BLK1, Name: 23031304, Date: 13-Mar-2023, Time: 12:41:28, Conditions: AUTOSPEC01, User: pk

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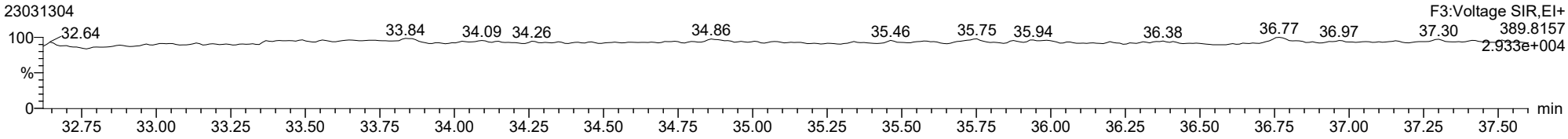

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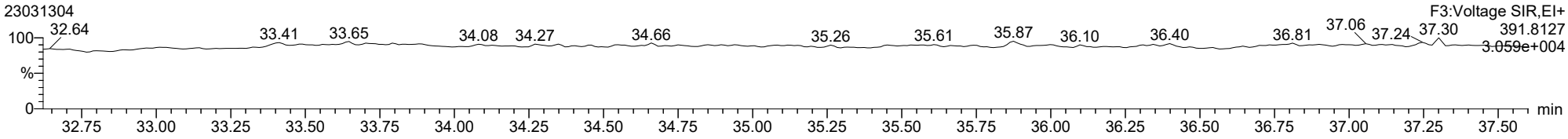

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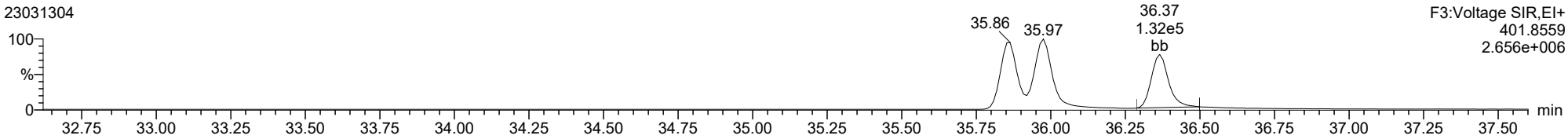

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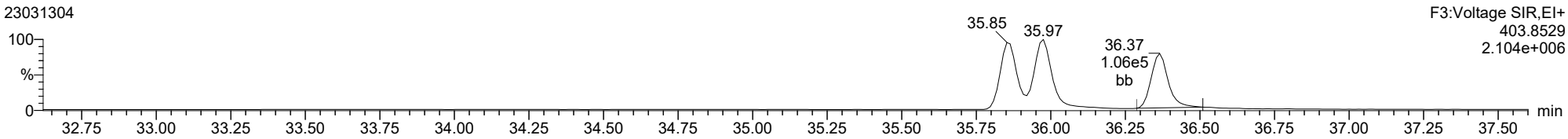

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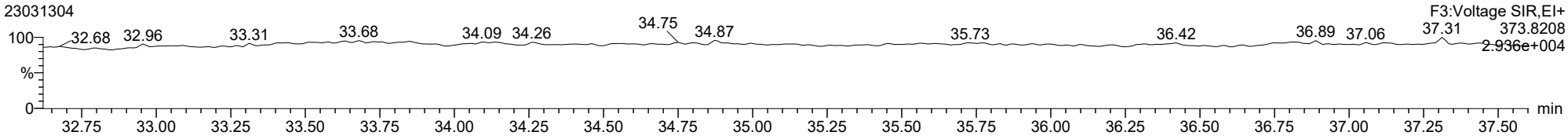

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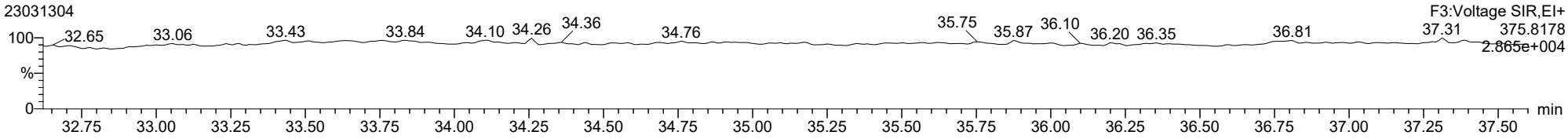

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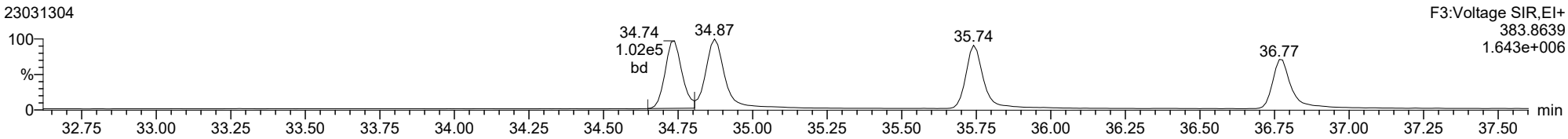

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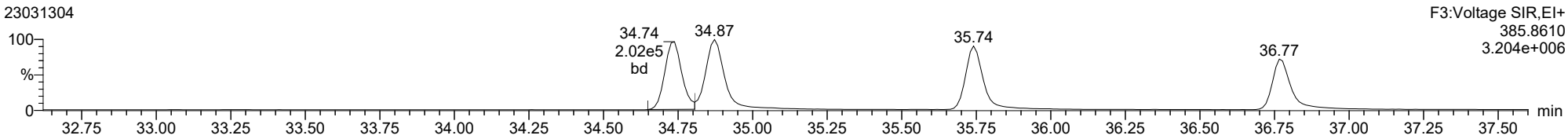

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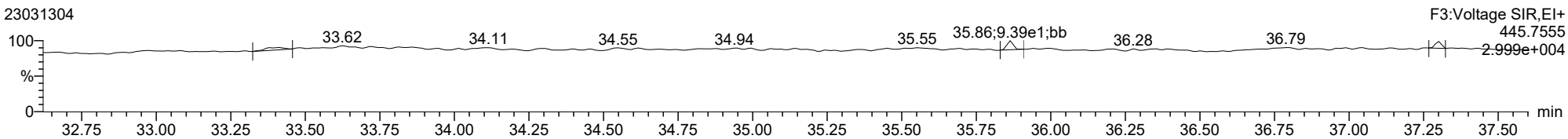

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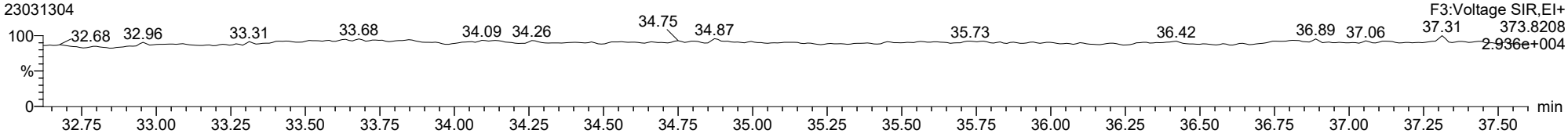

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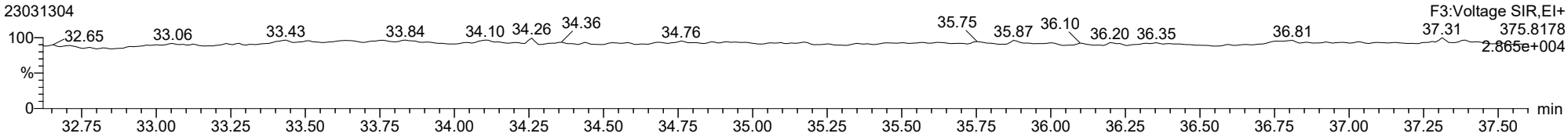

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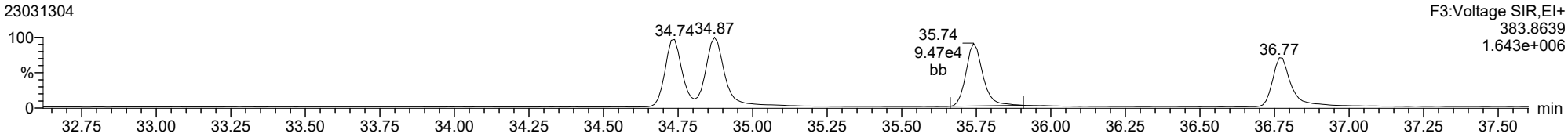

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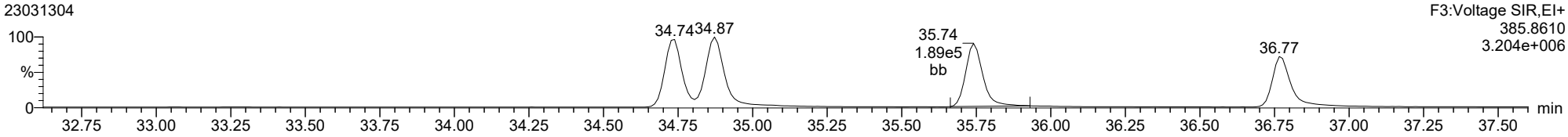

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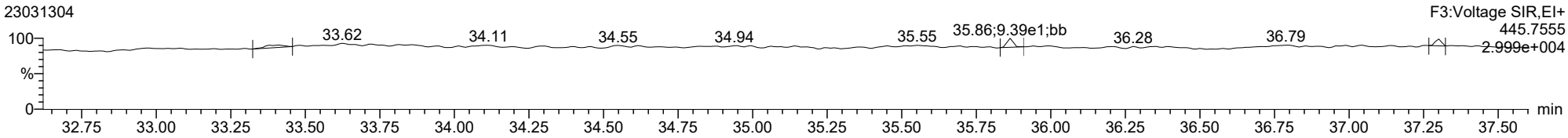

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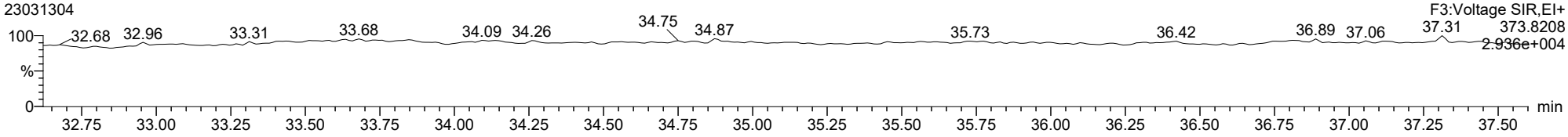

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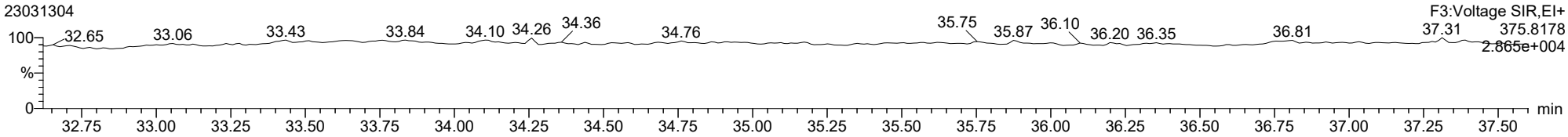

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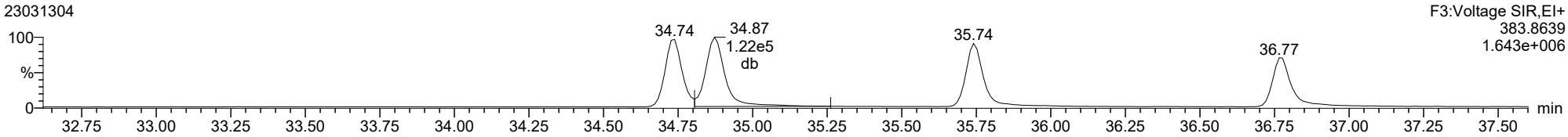

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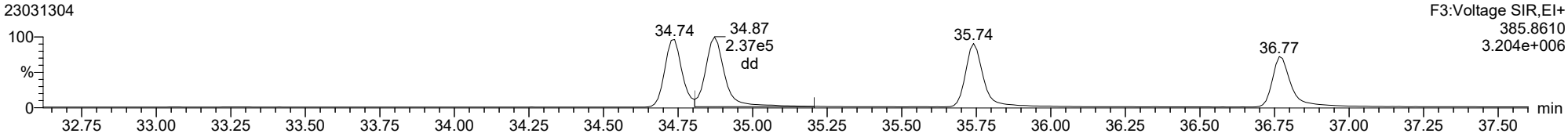

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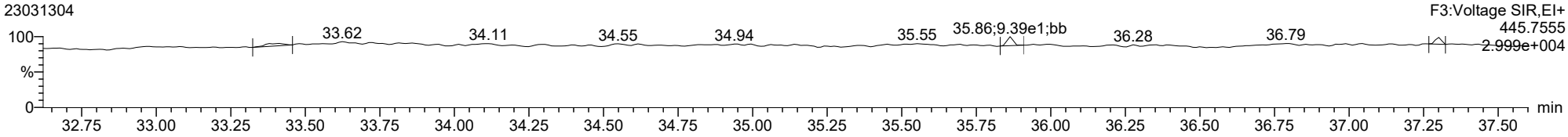

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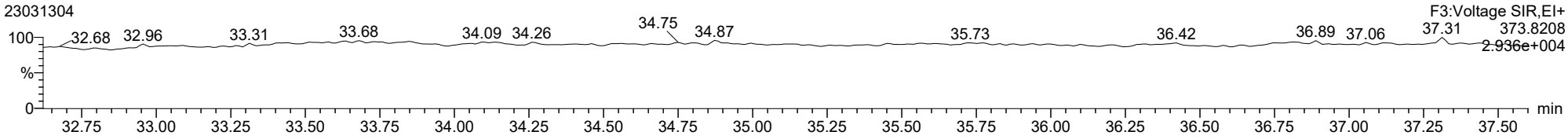

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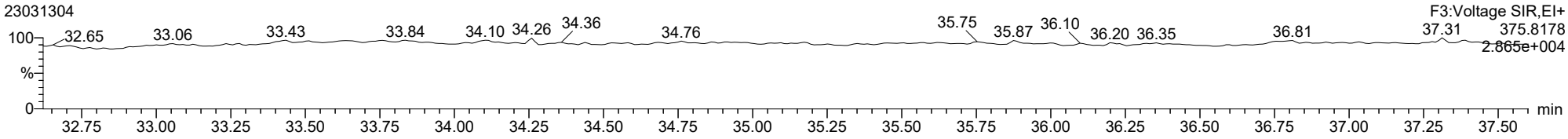

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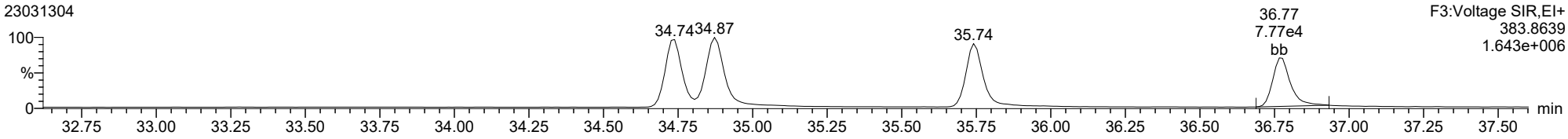

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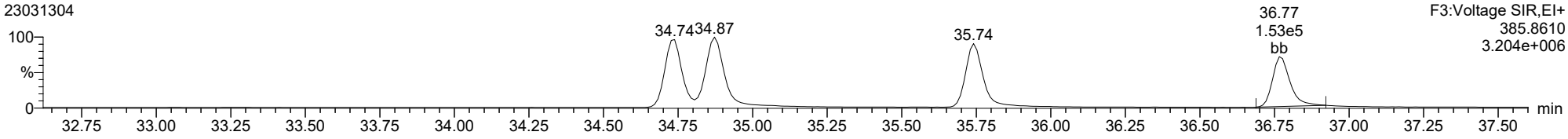

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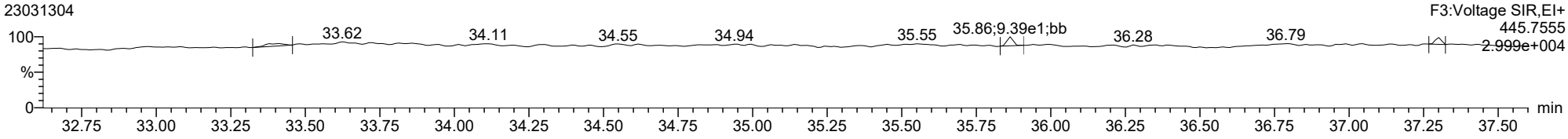

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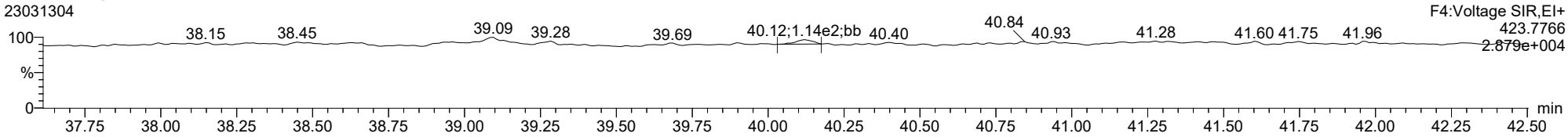

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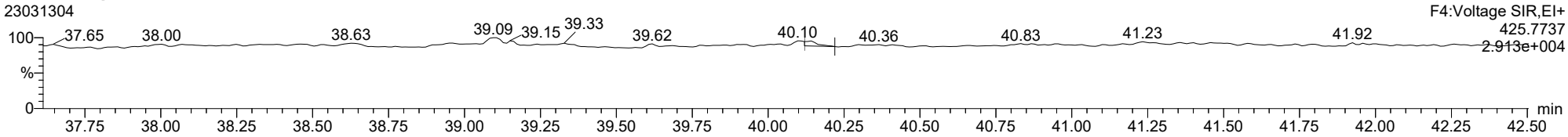

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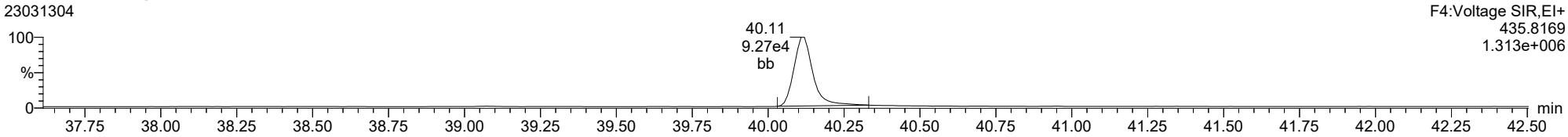

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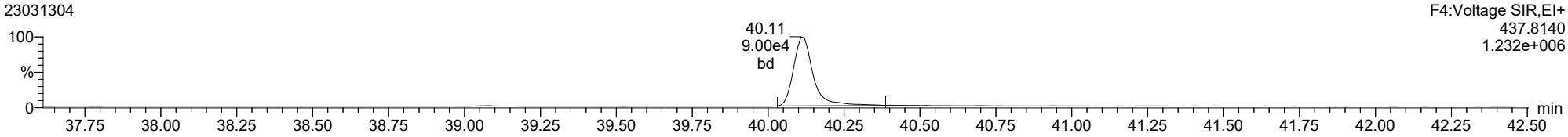

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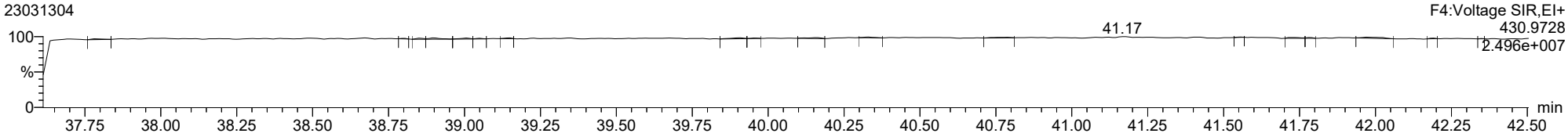

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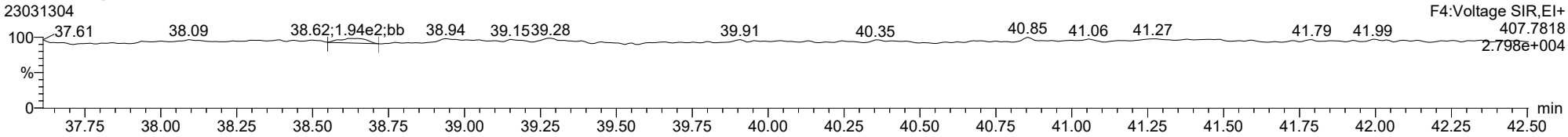

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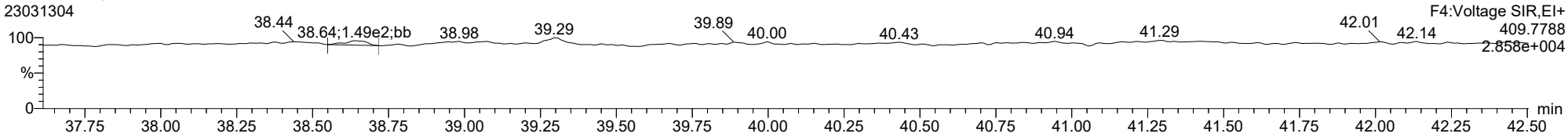

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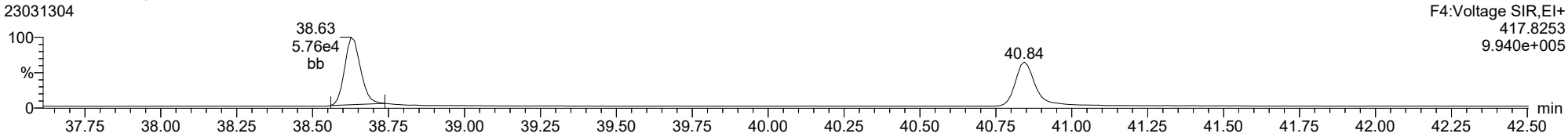

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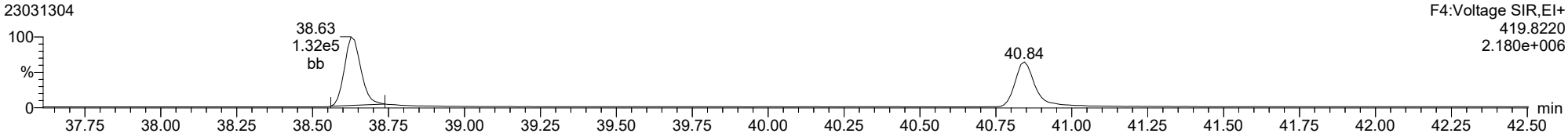

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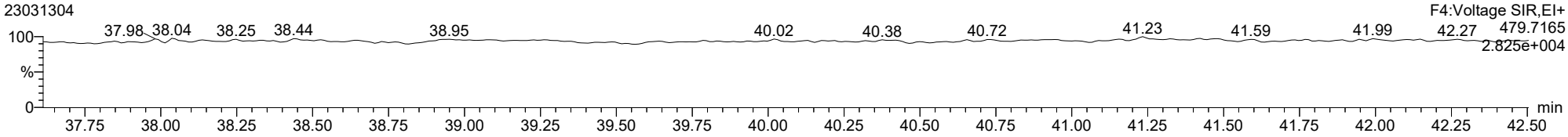

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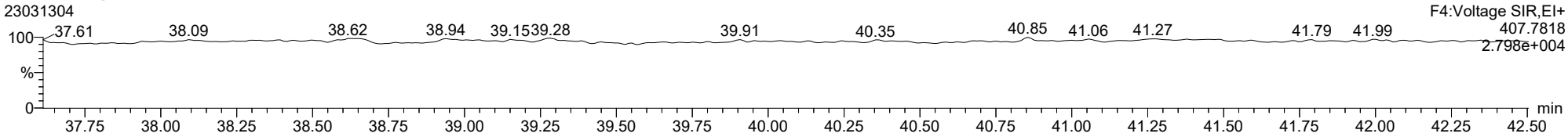

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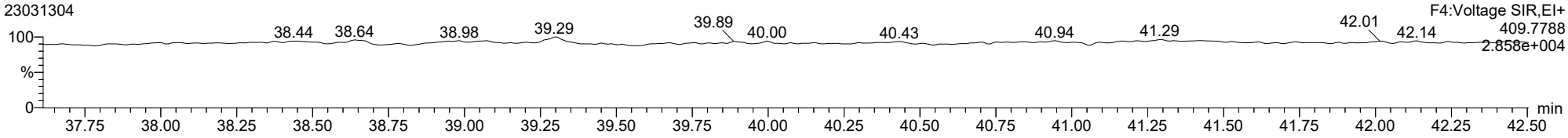

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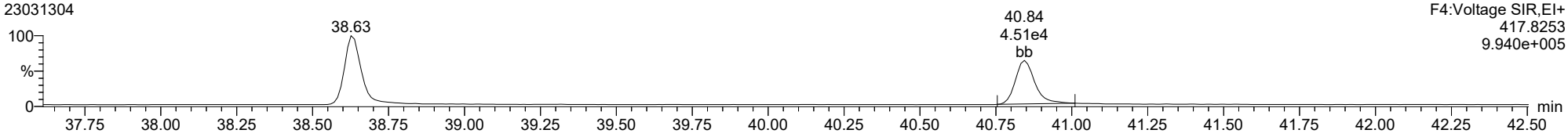

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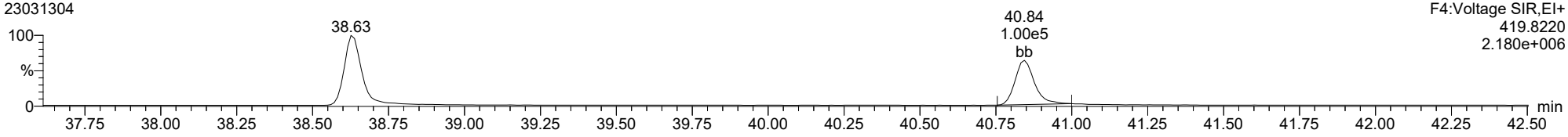

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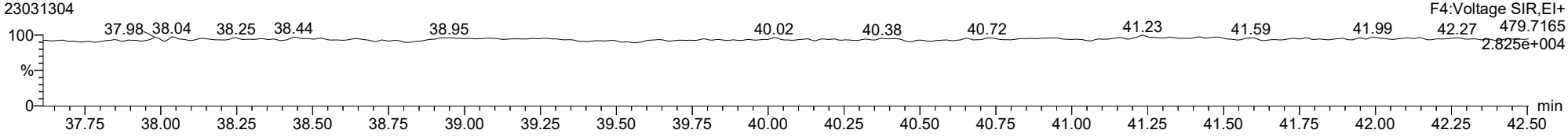

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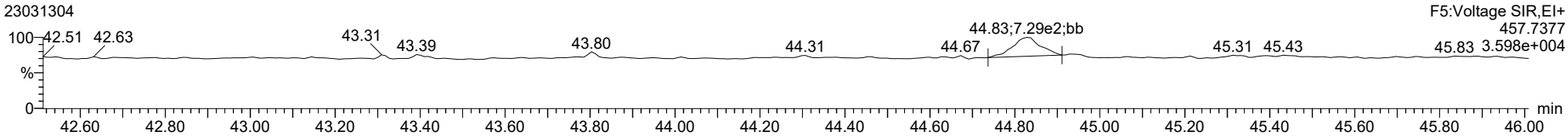

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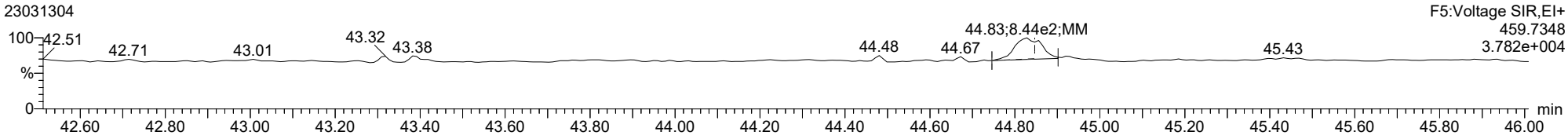

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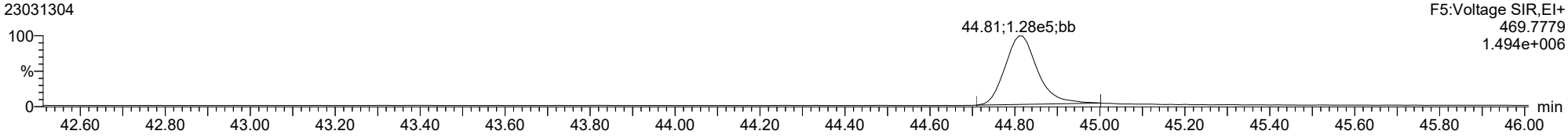

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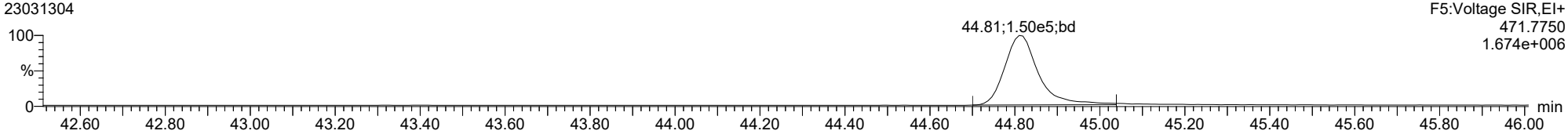

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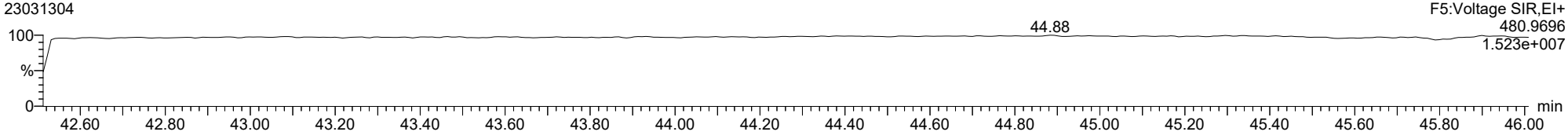

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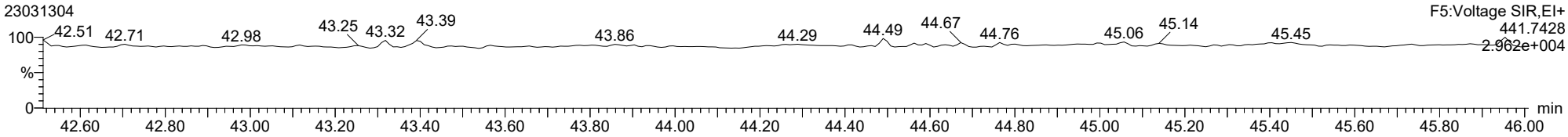
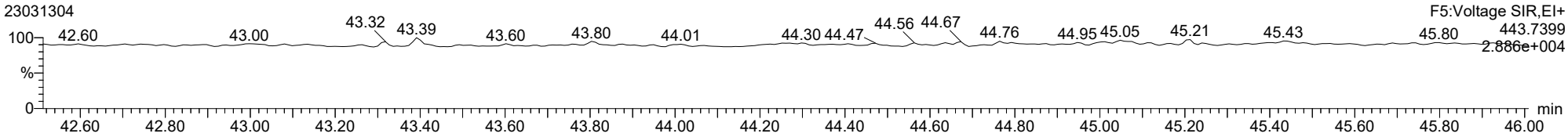
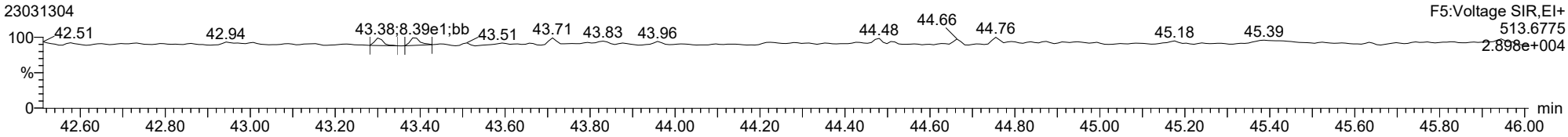


OCDF

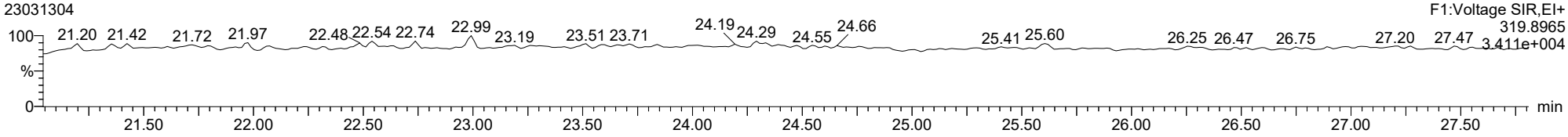


FUNCTION5 DCDPE

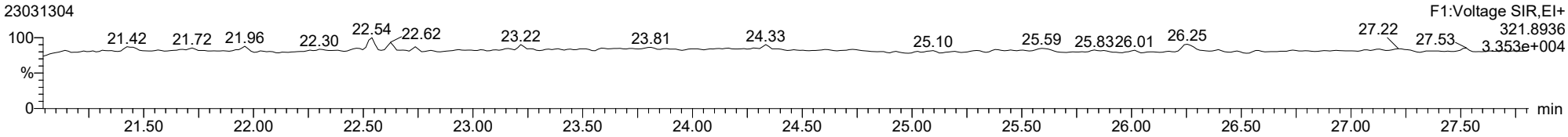


ID: BLB0228-BLK1, Name: 23031304, Date: 13-Mar-2023, Time: 12:41:28, Conditions: AUTOSPEC01, User: pk

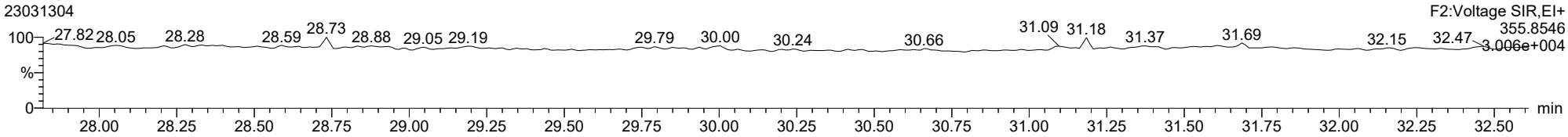
Total-tetradioxins



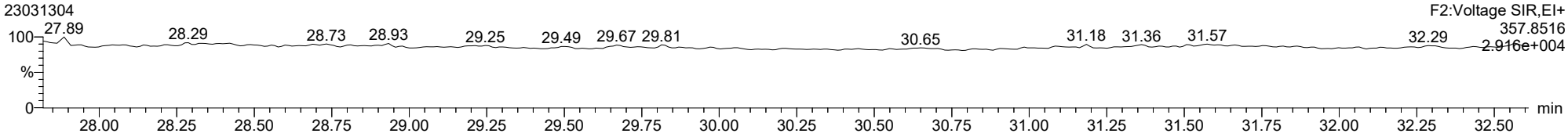
Total-tetradioxins



Total-pentadioxins

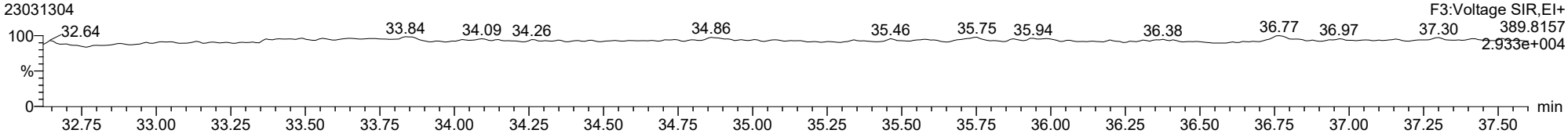


Total-pentadioxins

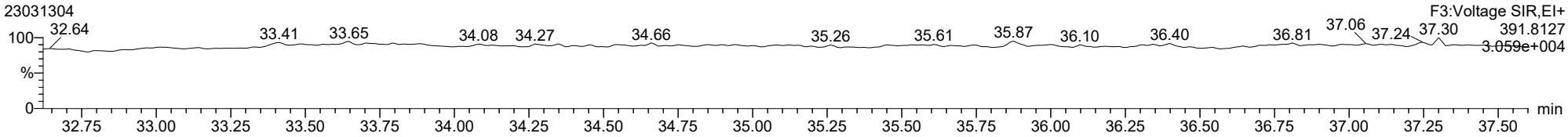


ID: BLB0228-BLK1, Name: 23031304, Date: 13-Mar-2023, Time: 12:41:28, Conditions: AUTOSPEC01, User: pk

Total-hexadioxins



Total-hexadioxins



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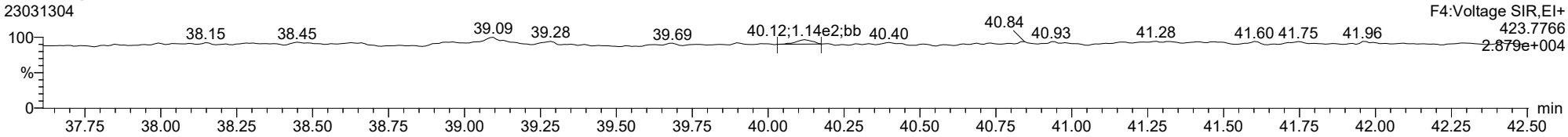
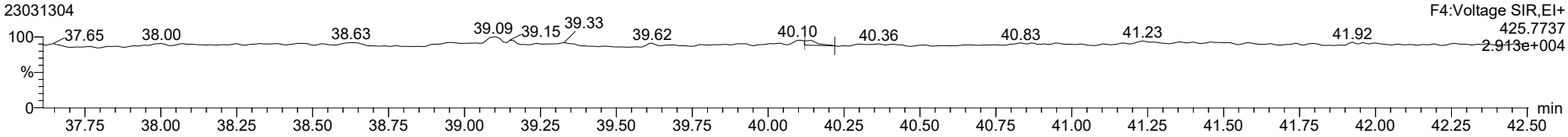
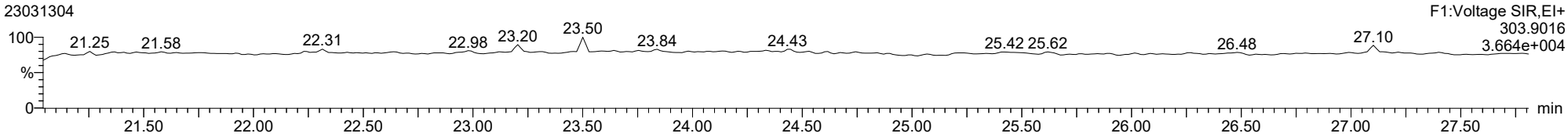


Total-heptadioxins

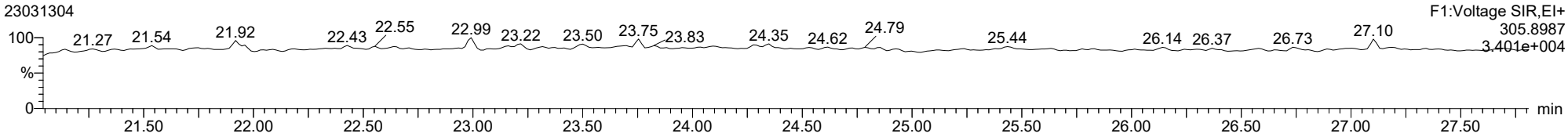


ID: BLB0228-BLK1, Name: 23031304, Date: 13-Mar-2023, Time: 12:41:28, Conditions: AUTOSPEC01, User: pk

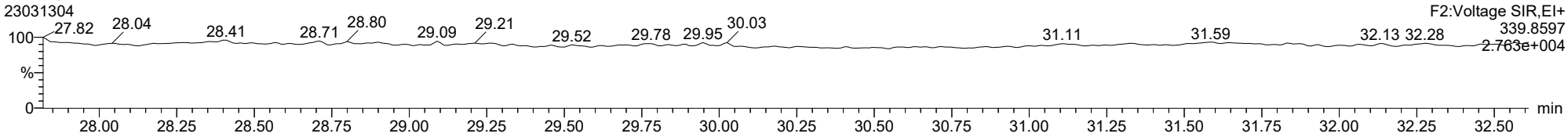
Total-tetrafurans



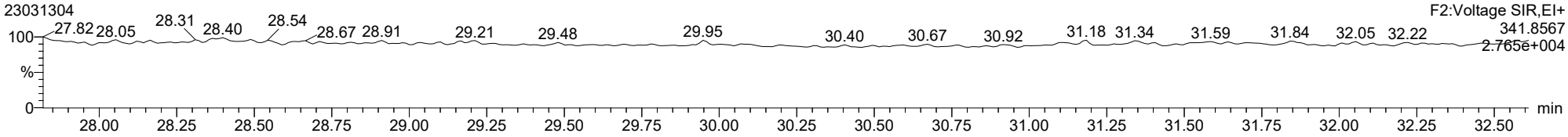
Total-tetrafurans



Total-pentafurans



Total-pentafurans



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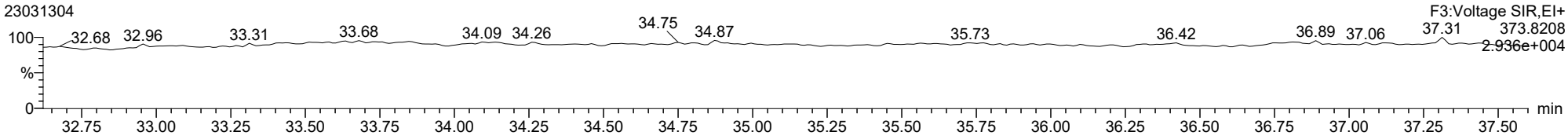
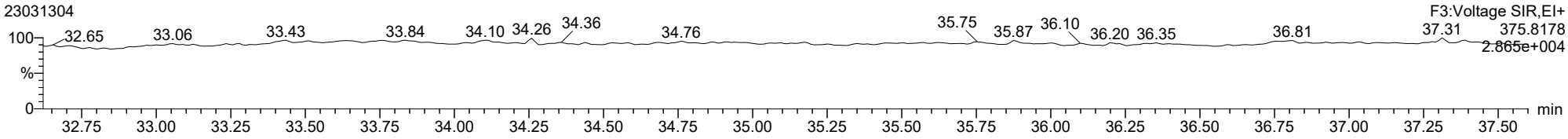
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:10:59 Pacific Daylight Time

ID: BLB0228-BLK1, Name: 23031304, Date: 13-Mar-2023, Time: 12:41:28, Conditions: AUTOSPEC01, User: pk

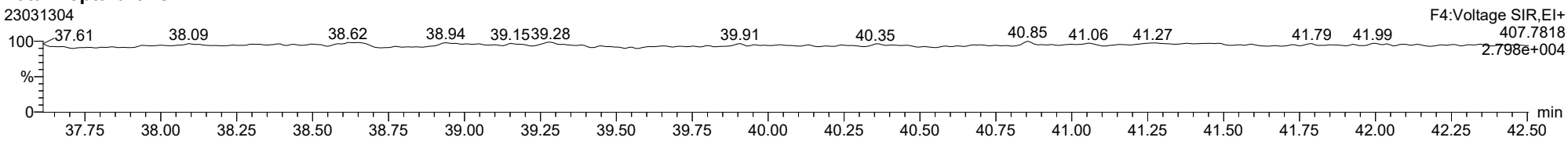
Total-hexafurans



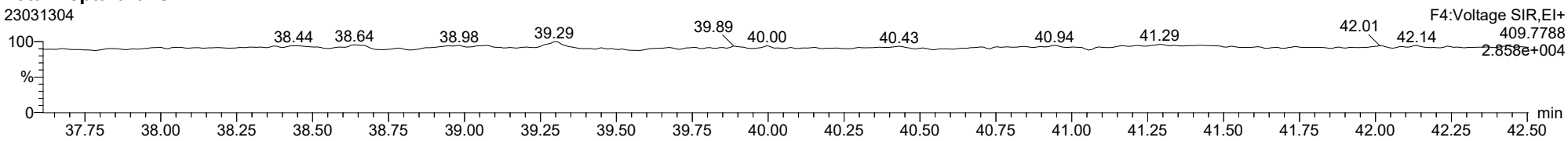
Total-hexafurans



Total-heptafurans



Total-heptafurans



LCS RECOVERY
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/13/23 13:29
Batch:	BLB0228	Laboratory ID:	BLB0228-BS1
Preparation:	EPA 1613	Sequence Name:	LCS
Initial/Final:	10 g / 20 uL		

COMPOUND	SPIKE ADDED (ng/kg wet)	LCS CONCENTRATION (ng/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
2,3,7,8-TCDF	20.0	18.0		90.0	75 - 158
2,3,7,8-TCDD	20.0	16.9		84.6	67 - 158
1,2,3,7,8-PeCDF	100	98.8		98.8	80 - 134
2,3,4,7,8-PeCDF	100	102		102	68 - 160
1,2,3,7,8-PeCDD	100	106		106	70 - 142
1,2,3,4,7,8-HxCDF	100	93.6		93.6	72 - 134
1,2,3,6,7,8-HxCDF	100	95.2		95.2	84 - 130
2,3,4,6,7,8-HxCDF	100	97.4		97.4	70 - 156
1,2,3,7,8,9-HxCDF	100	93.0		93.0	78 - 130
1,2,3,4,7,8-HxCDD	100	93.1		93.1	70 - 164
1,2,3,6,7,8-HxCDD	100	97.1		97.1	76 - 134
1,2,3,7,8,9-HxCDD	100	98.3		98.3	64 - 162
1,2,3,4,6,7,8-HpCDF	100	105	B	105	82 - 122
1,2,3,4,7,8,9-HpCDF	100	104		104	78 - 138
1,2,3,4,6,7,8-HpCDD	100	93.3	B	93.3	70 - 140
OCDF	200	185		92.5	63 - 170
OCDD	200	186	B	92.9	78 - 144

* Indicates values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:11:11 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230313.mdb 13 Mar 2023 11:32:39
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: BLB0228-BS1, Name: 23031305, Date: 13-Mar-2023, Time: 13:29:48, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.591	1.001	1.392e4	1.831e4	0.702	0.760	0.770	778	732	1.99e5	2.65e5	255.9	361.6	NO	bb	bb	8.997
12378-PeCDF	29.747	1.001	7.561e4	4.802e4	0.679	1.575	1.550	904	1223	1.09e6	6.69e5	1203.0	546.8	NO	bb	bb	49.402
23478-PeCDF	31.084	1.001	7.722e4	5.373e4	0.786	1.437	1.550	904	1223	1.13e6	7.37e5	1255.2	602.5	NO	bb	bb	50.941
123478-HxCDF	34.716	1.000	1.027e5	8.298e4	1.166	1.237	1.240	2181	1693	1.51e6	1.22e6	693.7	721.8	NO	bd	bd	46.810
234678-HxCDF	35.730	1.001	1.022e5	7.840e4	1.140	1.304	1.240	2181	1693	1.44e6	1.16e6	658.6	685.8	NO	bd	bb	48.702
123678-HxCDF	34.861	1.001	1.213e5	9.799e4	1.091	1.238	1.240	2181	1693	1.58e6	1.24e6	725.5	734.1	NO	dd	dd	47.609
123789-HxCDF	36.755	1.000	7.836e4	6.377e4	1.137	1.229	1.240	2181	1693	1.11e6	9.13e5	509.4	539.1	NO	bb	bb	46.520
1234678-HpCDF	38.615	1.000	5.881e4	5.852e4	1.003	1.005	1.050	1241	1240	8.76e5	8.66e5	706.3	698.0	NO	bd	bd	52.580
1234789-HpCDF	40.832	1.000	4.382e4	4.367e4	0.953	1.003	1.050	1241	1240	5.60e5	5.66e5	451.7	456.2	NO	bb	bd	52.024
OCDF	45.020	1.005	5.585e4	6.275e4	0.778	0.890	0.890	965	907	6.15e5	6.93e5	637.2	763.8	NO	bd	bb	92.516
2378-TCDD	26.226	1.001	1.761e4	2.119e4	1.149	0.831	0.770	1082	708	2.68e5	3.15e5	247.3	444.4	NO	bb	bb	8.459
12378-PeCDD	31.329	1.000	8.243e4	5.303e4	1.022	1.554	1.550	843	677	1.11e6	7.32e5	1317.8	1082.2	NO	bb	bd	53.123
123478-HxCDD	35.841	1.000	7.996e4	6.748e4	0.996	1.185	1.240	1218	927	1.29e6	1.09e6	1060.1	1176.2	NO	bd	bd	46.528
123678-HxCDD	35.952	1.000	1.000e5	8.195e4	1.001	1.221	1.240	1218	927	1.41e6	1.14e6	1157.0	1230.1	NO	db	db	48.571
123789-HxCDD	36.342	1.011	8.534e4	6.906e4	0.907	1.236	1.240	1218	927	1.18e6	9.47e5	967.5	1021.9	NO	bd	bd	49.148
1234678-HpCDD	40.097	1.000	5.590e4	5.059e4	1.039	1.105	1.050	850	702	7.52e5	7.22e5	884.7	1029.0	NO	bd	bb	46.653
OCDD	44.791	1.000	6.120e4	7.966e4	0.920	0.768	0.890	813	1480	7.42e5	8.88e5	913.3	599.9	NO	bb	bd	92.903
13C-2378-TCDF	25.562	1.007	2.181e5	2.926e5	1.620	0.745	0.770	1424	1325	3.23e6	4.32e6	2266.9	3259.8	NO	bb	bb	87.429
13C-12378-PeCDF	29.725	1.171	2.270e5	1.414e5	1.240	1.605	1.550	2109	1938	3.14e6	2.07e6	1490.4	1067.0	NO	bd	bb	82.384
13C-23478-PeCDF	31.062	1.223	1.964e5	1.306e5	1.118	1.504	1.550	2109	1938	2.91e6	1.93e6	1380.4	997.9	NO	bb	bb	81.141
13C-123478-HxCDF	34.705	0.955	1.137e5	2.264e5	1.168	0.502	0.510	1601	2077	1.66e6	3.31e6	1039.4	1594.6	NO	bd	bd	97.308
13C-123678-HxCDF	34.838	0.959	1.424e5	2.799e5	1.386	0.508	0.510	1601	2077	1.85e6	3.66e6	1156.3	1761.9	NO	dd	db	101.814
13C-234678-HxCDF	35.707	0.983	1.130e5	2.124e5	1.129	0.532	0.510	1601	2077	1.59e6	3.13e6	994.4	1508.1	NO	bd	bb	96.320
13C-123789-HxCDF	36.743	1.011	9.133e4	1.774e5	0.932	0.515	0.510	1601	2077	1.31e6	2.58e6	819.8	1240.7	NO	bb	bb	96.398
13C-1234678-HpCDF	38.604	1.063	6.693e4	1.556e5	0.895	0.430	0.440	1405	1588	1.06e6	2.47e6	756.4	1555.1	NO	bb	bb	83.079
13C-1234789-HpCDF	40.810	1.123	5.699e4	1.194e5	0.770	0.477	0.440	1405	1588	7.39e5	1.65e6	526.2	1040.3	NO	bd	bb	76.621
13C-1234-TCDD	25.393	0.000	1.587e5	2.018e5	1.000	0.786	0.770	1649	948	2.43e6	3.05e6	1472.4	3216.1	NO	bb	bb	100.000
13C-2378-TCDD	26.198	1.032	1.746e5	2.247e5	1.152	0.777	0.770	1649	948	2.60e6	3.37e6	1576.3	3551.6	NO	bb	bb	96.105
13C-12378-PeCDD	31.318	1.233	1.551e5	9.446e4	0.829	1.642	1.550	885	811	2.19e6	1.32e6	2475.7	1630.2	NO	bb	bb	83.513
13C-123478-HxCDD	35.830	0.986	1.777e5	1.406e5	0.995	1.263	1.240	1514	1621	2.75e6	2.17e6	1815.1	1340.6	NO	bd	bd	106.931
13C-123678-HxCDD	35.941	0.989	2.086e5	1.657e5	1.157	1.259	1.240	1514	1621	2.95e6	2.30e6	1945.6	1419.6	NO	db	dd	108.182
13C-1234678-HpCDD	40.086	1.103	1.130e5	1.067e5	0.840	1.059	1.050	1313	773	1.47e6	1.40e6	1116.4	1809.2	NO	bb	bb	87.408
13C-OCDD	44.782	1.233	1.613e5	1.684e5	0.767	0.958	0.890	1510	1133	1.81e6	1.95e6	1196.8	1724.5	NO	bd	bb	143.570
13C-123789-HxCDD	36.331	0.000	1.648e5	1.343e5	1.000	1.227	1.240	1514	1621	2.46e6	1.98e6	1622.5	1224.0	NO	bb	bb	100.000
37CL-2378-TCDD	26.226	1.033	1.412e5		1.288			864		2.05e6		2371.2			bb		30.423

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
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ID: BLB0228-BS1, Name: 23031305, Date: 13-Mar-2023, Time: 13:29:48, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	778	732								
1289-TCDF					0.678		0.770	778	732								
13468-PECDF					1.246		1.550	516	759								
12389-PECDF	32.109	1.080	5.481e2	1.664e2	0.496	3.294	1.550	904	1223	7.91e3	5.74e3	8.8	4.7	YES	bb	bd	0.391
123468-HXCDF					1.169		1.240	2181	1693								
1368-TCDD					1.015		0.770	1082	708								
1289-TCDD					0.909		0.770	1082	708								
12479-PECDD					2.301		1.550	843	677								
12389-PECDD					1.184		1.550	843	677								
124679-HXCDD					1.115		1.240	1218	927								
1234679-HPCDD	39.072	0.975	3.812e2	4.590e2	1.137	0.831	1.050	850	702	6.99e3	7.04e3	8.2	10.0	YES	bb	bb	0.336
Total-tetrafurans			1.392e4		0.727			778		1.99e5							8.997
Total-penta1			0.000e0					516		0.00e0							
Total-pentafurans			1.528e5		0.654			904		2.22e6							100.343
Total-hexafurans			4.045e5		1.141			2181		5.64e6							189.641
Total-heptafurans			1.026e5		0.978			1241		1.44e6							104.604
Total-Furans			7.297e5		0.922			778		1.01e7							496.102
Total-tetradioxins			1.761e4		1.024			1082		2.68e5							8.459
Total-pentadioxins			8.243e4		1.502			843		1.11e6							53.123
Total-hexadioxins			2.653e5		1.005			1218		3.88e6							144.248
Total-heptadioxins			5.590e4		1.088			850		7.52e5							46.653
Total-Dioxins			4.825e5		1.130			1082		6.75e6							345.386
Total-TEQ			1.212e6					1082		1.69e7							841.488
FUNCTION1 PFK			1.735e7					600163		1.21e8							
FUNCTION2 PFK			3.283e5					165868		9.35e6							0.000
FUNCTION3 PFK			4.378e5					264729		1.17e7							0.000
FUNCTION4 PFK			0.000e0					162481		0.00e0							
FUNCTION5 PFK			1.228e5					188625		4.25e6							
FUNCTION1 HXCD...			8.716e2					530		1.22e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			2.460e2					865		6.30e3							0.000
FUNCTION3 OCDPE			0.000e0					528		0.00e0							
FUNCTION4 NCDPE			7.658e1					686		2.16e3							0.000
FUNCTION5 DCDPE			1.113e2					574		2.28e3							0.000

Method: T:\Autospec\Methods\Dioxin230313.mdb 13 Mar 2023 11:32:39
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: BLB0228-BS1, Name: 23031305, Date: 13-Mar-2023, Time: 13:29:48, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.59	1.392e4	1.831e4	0.702	0.76	0.77	255.9	YES	NO	bb	bb	8.997

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.08	7.722e4	5.373e4	0.786	1.44	1.55	1255.2	YES	NO	bb	bb	50.941
2	12378-PeCDF	29.75	7.561e4	4.802e4	0.679	1.57	1.55	1203.0	YES	NO	bb	bb	49.402

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.75	7.836e4	6.377e4	1.137	1.23	1.24	509.4	YES	NO	bb	bb	46.520
2	234678-HxCDF	35.73	1.022e5	7.840e4	1.140	1.30	1.24	658.6	YES	NO	bd	bb	48.702
3	123678-HxCDF	34.86	1.213e5	9.799e4	1.091	1.24	1.24	725.5	YES	NO	dd	dd	47.609
4	123478-HxCDF	34.72	1.027e5	8.298e4	1.166	1.24	1.24	693.7	YES	NO	bd	bd	46.810

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.62	5.881e4	5.852e4	1.003	1.00	1.05	706.3	YES	NO	bd	bd	52.580
2	1234789-HpCDF	40.83	4.382e4	4.367e4	0.953	1.00	1.05	451.7	YES	NO	bb	bd	52.024

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.59	1.392e4	1.831e4	0.702	0.76	0.77	255.9	YES	NO	bb	bb	8.997
2	23478-PeCDF	31.08	7.722e4	5.373e4	0.786	1.44	1.55	1255.2	YES	NO	bb	bb	50.941
3	12378-PeCDF	29.75	7.561e4	4.802e4	0.679	1.57	1.55	1203.0	YES	NO	bb	bb	49.402
4	123789-HxCDF	36.75	7.836e4	6.377e4	1.137	1.23	1.24	509.4	YES	NO	bb	bb	46.520
5	234678-HxCDF	35.73	1.022e5	7.840e4	1.140	1.30	1.24	658.6	YES	NO	bd	bb	48.702
6	123678-HxCDF	34.86	1.213e5	9.799e4	1.091	1.24	1.24	725.5	YES	NO	dd	dd	47.609
7	123478-HxCDF	34.72	1.027e5	8.298e4	1.166	1.24	1.24	693.7	YES	NO	bd	bd	46.810
8	1234678-HpCDF	38.62	5.881e4	5.852e4	1.003	1.00	1.05	706.3	YES	NO	bd	bd	52.580
9	OCDF	45.02	5.585e4	6.275e4	0.778	0.89	0.89	637.2	YES	NO	bd	bb	92.516
10	1234789-HpCDF	40.83	4.382e4	4.367e4	0.953	1.00	1.05	451.7	YES	NO	bb	bd	52.024

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.23	1.761e4	2.119e4	1.149	0.83	0.77	247.3	YES	NO	bb	bb	8.459

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.33	8.243e4	5.303e4	1.022	1.55	1.55	1317.8	YES	NO	bb	bd	53.123

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.34	8.534e4	6.906e4	0.907	1.24	1.24	967.5	YES	NO	bd	bd	49.148
2	123678-HxCDD	35.95	1.000e5	8.195e4	1.001	1.22	1.24	1157.0	YES	NO	db	db	48.571
3	123478-HxCDD	35.84	7.996e4	6.748e4	0.996	1.18	1.24	1060.1	YES	NO	bd	bd	46.528

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.10	5.590e4	5.059e4	1.039	1.11	1.05	884.7	YES	NO	bd	bb	46.653

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.33	8.243e4	5.303e4	1.022	1.55	1.55	1317.8	YES	NO	bb	bd	53.123
2	2378-TCDD	26.23	1.761e4	2.119e4	1.149	0.83	0.77	247.3	YES	NO	bb	bb	8.459
3	123789-HxCDD	36.34	8.534e4	6.906e4	0.907	1.24	1.24	967.5	YES	NO	bd	bd	49.148
4	123678-HxCDD	35.95	1.000e5	8.195e4	1.001	1.22	1.24	1157.0	YES	NO	db	db	48.571
5	123478-HxCDD	35.84	7.996e4	6.748e4	0.996	1.18	1.24	1060.1	YES	NO	bd	bd	46.528
6	OCDD	44.79	6.120e4	7.966e4	0.920	0.77	0.89	913.3	YES	NO	bb	bd	92.903
7	1234678-HpCDD	40.10	5.590e4	5.059e4	1.039	1.11	1.05	884.7	YES	NO	bd	bb	46.653

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.59	1.392e4	1.831e4	0.702	0.76	0.77	255.9	YES	NO	bb	bb	8.997
2	23478-PeCDF	31.08	7.722e4	5.373e4	0.786	1.44	1.55	1255.2	YES	NO	bb	bb	50.941
3	12378-PeCDF	29.75	7.561e4	4.802e4	0.679	1.57	1.55	1203.0	YES	NO	bb	bb	49.402
4	123789-HxCDF	36.75	7.836e4	6.377e4	1.137	1.23	1.24	509.4	YES	NO	bb	bb	46.520
5	234678-HxCDF	35.73	1.022e5	7.840e4	1.140	1.30	1.24	658.6	YES	NO	bd	bb	48.702
6	123678-HxCDF	34.86	1.213e5	9.799e4	1.091	1.24	1.24	725.5	YES	NO	dd	dd	47.609
7	123478-HxCDF	34.72	1.027e5	8.298e4	1.166	1.24	1.24	693.7	YES	NO	bd	bd	46.810
8	1234678-HpCDF	38.62	5.881e4	5.852e4	1.003	1.00	1.05	706.3	YES	NO	bd	bd	52.580
9	OCDF	45.02	5.585e4	6.275e4	0.778	0.89	0.89	637.2	YES	NO	bd	bb	92.516
10	1234789-HpCDF	40.83	4.382e4	4.367e4	0.953	1.00	1.05	451.7	YES	NO	bb	bd	52.024
11	12378-PeCDD	31.33	8.243e4	5.303e4	1.022	1.55	1.55	1317.8	YES	NO	bb	bd	53.123
12	2378-TCDD	26.23	1.761e4	2.119e4	1.149	0.83	0.77	247.3	YES	NO	bb	bb	8.459
13	123789-HxCDD	36.34	8.534e4	6.906e4	0.907	1.24	1.24	967.5	YES	NO	bd	bd	49.148
14	123678-HxCDD	35.95	1.000e5	8.195e4	1.001	1.22	1.24	1157.0	YES	NO	db	db	48.571
15	123478-HxCDD	35.84	7.996e4	6.748e4	0.996	1.18	1.24	1060.1	YES	NO	bd	bd	46.528
16	OCDD	44.79	6.120e4	7.966e4	0.920	0.77	0.89	913.3	YES	NO	bb	bd	92.903
17	1234678-HpCDD	40.10	5.590e4	5.059e4	1.039	1.11	1.05	884.7	YES	NO	bd	bb	46.653

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.12	1.744e6					16.5	YES		db		
2	FUNCTION1 PFK	21.97	1.808e6					15.7	YES		bd		
3	FUNCTION1 PFK	21.69	8.669e5					13.4	YES		db		
4	FUNCTION1 PFK	21.54	1.837e6					11.4	YES		bd		
5	FUNCTION1 PFK	24.43	1.124e5					2.9	NO		dd		
6	FUNCTION1 PFK	24.36	1.357e5					2.9	NO		dd		
7	FUNCTION1 PFK	24.29	3.982e4					2.0	NO		dd		
8	FUNCTION1 PFK	24.23	3.873e4					1.3	NO		bd		
9	FUNCTION1 PFK	24.08	1.607e5					2.1	NO		db		
10	FUNCTION1 PFK	23.95	2.612e4					0.9	NO		bd		
11	FUNCTION1 PFK	23.74	8.008e4					2.9	NO		db		
12	FUNCTION1 PFK	23.73	4.341e5					2.8	NO		dd		
13	FUNCTION1 PFK	23.53	8.089e5					5.8	YES		dd		
14	FUNCTION1 PFK	23.34	6.122e5					7.4	YES		dd		
15	FUNCTION1 PFK	23.18	1.238e6					9.5	YES		bd		
16	FUNCTION1 PFK	22.89	8.705e5					13.7	YES		db		
17	FUNCTION1 PFK	22.79	1.101e6					14.9	YES		dd		
18	FUNCTION1 PFK	22.68	2.537e6					15.6	YES		dd		
19	FUNCTION1 PFK	22.36	7.609e5					17.2	YES		dd		
20	FUNCTION1 PFK	22.31	1.081e6					17.4	YES		bd		
21	FUNCTION1 PFK	27.60	1.527e5					2.6	NO		bd		
22	FUNCTION1 PFK	27.45	1.812e4					0.8	NO		db		
23	FUNCTION1 PFK	27.34	4.567e4					0.9	NO		bd		
24	FUNCTION1 PFK	27.23	6.466e3					0.3	NO		bb		
25	FUNCTION1 PFK	27.06	6.137e4					1.6	NO		bb		
26	FUNCTION1 PFK	26.83	7.738e4					0.9	NO		bb		
27	FUNCTION1 PFK	26.54	7.494e4					1.4	NO		db		
28	FUNCTION1 PFK	26.44	2.252e4					0.9	NO		dd		
29	FUNCTION1 PFK	26.38	1.878e4					0.9	NO		bd		
30	FUNCTION1 PFK	25.89	2.727e4					1.0	NO		bb		
31	FUNCTION1 PFK	25.24	1.070e5					2.5	NO		bb		
32	FUNCTION1 PFK	24.95	8.324e3					0.5	NO		db		
33	FUNCTION1 PFK	24.91	9.298e3					0.6	NO		bd		
34	FUNCTION1 PFK	24.79	3.785e4					0.7	NO		bb		
35	FUNCTION1 PFK	24.63	3.417e4					1.9	NO		db		
36	FUNCTION1 PFK	24.55	1.972e5					2.8	NO		dd		
37	FUNCTION1 PFK	27.68	1.577e5					3.8	YES		db		

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	29.17	7.001e3					1.3	NO		dd		0.000
2	FUNCTION2 PFK	29.12	4.018e3					1.1	NO		bd		0.000
3	FUNCTION2 PFK	29.00	5.025e3					1.0	NO		bb		0.000
4	FUNCTION2 PFK	28.92	1.080e4					1.5	NO		db		0.000
5	FUNCTION2 PFK	28.88	1.266e4					2.2	NO		dd		0.000
6	FUNCTION2 PFK	28.82	7.354e3					1.7	NO		bd		0.000
7	FUNCTION2 PFK	28.55	1.446e4					1.8	NO		db		0.000
8	FUNCTION2 PFK	28.47	1.182e4					1.7	NO		dd		0.000
9	FUNCTION2 PFK	28.40	8.416e3					1.2	NO		bd		0.000
10	FUNCTION2 PFK	28.19	2.612e3					0.8	NO		bb		0.000
11	FUNCTION2 PFK	28.14	1.311e3					0.7	NO		bb		0.000
12	FUNCTION2 PFK	28.10	7.726e3					1.9	NO		db		0.000
13	FUNCTION2 PFK	27.98	3.643e4					2.3	NO		dd		0.000
14	FUNCTION2 PFK	27.93	6.874e3					1.6	NO		bd		0.000
15	FUNCTION2 PFK	30.57	8.331e2					0.4	NO		bb		0.000
16	FUNCTION2 PFK	30.53	1.376e3					0.7	NO		bb		0.000
17	FUNCTION2 PFK	30.48	2.186e3					0.9	NO		db		0.000
18	FUNCTION2 PFK	30.45	4.545e3					1.0	NO		bd		0.000
19	FUNCTION2 PFK	30.16	9.947e3					1.2	NO		bb		0.000
20	FUNCTION2 PFK	29.93	1.032e3					0.4	NO		db		0.000
21	FUNCTION2 PFK	29.89	6.133e3					1.2	NO		bd		0.000
22	FUNCTION2 PFK	29.79	4.556e3					1.0	NO		db		0.000
23	FUNCTION2 PFK	29.75	2.804e3					0.9	NO		bd		0.000
24	FUNCTION2 PFK	29.70	5.406e3					1.3	NO		bb		0.000
25	FUNCTION2 PFK	29.65	1.517e3					0.8	NO		bb		0.000
26	FUNCTION2 PFK	29.56	5.226e3					1.3	NO		db		0.000
27	FUNCTION2 PFK	29.51	6.171e3					1.5	NO		bd		0.000
28	FUNCTION2 PFK	29.43	1.024e3					0.6	NO		bb		0.000
29	FUNCTION2 PFK	29.37	8.731e3					1.3	NO		bb		0.000
30	FUNCTION2 PFK	29.21	2.301e4					2.6	NO		db		0.000
31	FUNCTION2 PFK	32.40	5.172e3					1.1	NO		db		0.000
32	FUNCTION2 PFK	32.38	4.717e3					1.2	NO		dd		0.000
33	FUNCTION2 PFK	32.33	1.310e3					0.5	NO		bd		0.000
34	FUNCTION2 PFK	32.29	3.832e3					1.0	NO		bb		0.000
35	FUNCTION2 PFK	32.14	6.792e3					1.0	NO		db		0.000
36	FUNCTION2 PFK	32.09	5.253e3					1.2	NO		bd		0.000
37	FUNCTION2 PFK	31.99	7.529e3					1.4	NO		bb		0.000

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION2 PFK	31.38	7.840e3					1.6	NO		bb		0.000
39	FUNCTION2 PFK	31.28	1.229e4					1.6	NO		db		0.000
40	FUNCTION2 PFK	31.23	4.300e3					1.0	NO		bd		0.000
41	FUNCTION2 PFK	31.15	1.223e4					1.6	NO		db		0.000
42	FUNCTION2 PFK	31.11	3.914e3					0.9	NO		dd		0.000
43	FUNCTION2 PFK	31.04	4.301e3					1.0	NO		bd		0.000
44	FUNCTION2 PFK	30.84	1.331e4					1.8	NO		bb		0.000
45	FUNCTION2 PFK	30.73	1.447e4					1.8	NO		bb		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	35.07	1.024e4					1.3	NO		dd		0.000
2	FUNCTION3 PFK	35.03	2.123e4					1.8	NO		bd		0.000
3	FUNCTION3 PFK	34.96	1.763e4					1.5	NO		bb		0.000
4	FUNCTION3 PFK	34.86	7.016e3					1.0	NO		bb		0.000
5	FUNCTION3 PFK	34.46	7.878e3					1.3	NO		bb		0.000
6	FUNCTION3 PFK	34.37	1.632e3					0.6	NO		bb		0.000
7	FUNCTION3 PFK	34.31	1.373e4					0.9	NO		bb		0.000
8	FUNCTION3 PFK	34.18	7.981e3					1.0	NO		db		0.000
9	FUNCTION3 PFK	34.15	8.830e3					1.2	NO		bd		0.000
10	FUNCTION3 PFK	33.39	2.178e4					1.8	NO		bb		0.000
11	FUNCTION3 PFK	33.25	1.615e4					2.0	NO		bb		0.000
12	FUNCTION3 PFK	33.03	4.787e3					0.8	NO		bb		0.000
13	FUNCTION3 PFK	32.83	1.338e4					1.5	NO		db		0.000
14	FUNCTION3 PFK	32.78	5.787e3					1.2	NO		bd		0.000
15	FUNCTION3 PFK	32.72	7.601e3					1.0	NO		db		0.000
16	FUNCTION3 PFK	32.70	8.826e3					1.2	NO		bd		0.000
17	FUNCTION3 PFK	36.70	2.454e4					1.9	NO		bb		0.000
18	FUNCTION3 PFK	36.57	2.547e4					1.8	NO		bb		0.000
19	FUNCTION3 PFK	36.42	1.523e3					0.5	NO		bb		0.000
20	FUNCTION3 PFK	36.28	1.162e3					0.4	NO		bb		0.000
21	FUNCTION3 PFK	36.14	2.752e4					1.8	NO		bb		0.000
22	FUNCTION3 PFK	36.04	1.932e4					1.5	NO		db		0.000
23	FUNCTION3 PFK	35.94	2.732e4					2.2	NO		bd		0.000
24	FUNCTION3 PFK	35.75	1.358e3					0.5	NO		bb		0.000
25	FUNCTION3 PFK	35.72	3.386e3					0.7	NO		bb		0.000
26	FUNCTION3 PFK	35.64	6.572e3					1.0	NO		bb		0.000
27	FUNCTION3 PFK	35.55	1.232e3					0.4	NO		bb		0.000
28	FUNCTION3 PFK	35.51	7.944e3					1.1	NO		bb		0.000
29	FUNCTION3 PFK	35.43	4.003e3					0.9	NO		bb		0.000
30	FUNCTION3 PFK	35.32	2.796e4					1.7	NO		bb		0.000
31	FUNCTION3 PFK	35.17	1.076e3					0.4	NO		bb		0.000
32	FUNCTION3 PFK	35.12	6.532e3					1.0	NO		db		0.000
33	FUNCTION3 PFK	37.52	4.410e4					2.3	NO		bb		0.000
34	FUNCTION3 PFK	37.20	1.766e4					1.5	NO		bb		0.000
35	FUNCTION3 PFK	36.97	2.900e3					0.6	NO		bb		0.000
36	FUNCTION3 PFK	36.90	6.582e3					1.2	NO		bb		0.000
37	FUNCTION3 PFK	36.83	5.140e3					0.9	NO		bb		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.52	3.010e3					0.9	NO		bb		
2	FUNCTION5 PFK	43.27	8.001e2					0.5	NO		bb		
3	FUNCTION5 PFK	43.15	7.677e3					1.3	NO		bb		
4	FUNCTION5 PFK	43.01	1.600e4					1.1	NO		bb		
5	FUNCTION5 PFK	42.92	9.882e3					1.9	NO		db		
6	FUNCTION5 PFK	42.86	6.082e3					1.0	NO		bd		
7	FUNCTION5 PFK	42.69	5.496e3					1.0	NO		bb		
8	FUNCTION5 PFK	42.61	2.153e3					0.6	NO		bb		
9	FUNCTION5 PFK	42.57	7.375e2					0.4	NO		bb		
10	FUNCTION5 PFK	45.84	5.440e2					0.3	NO		bb		
11	FUNCTION5 PFK	45.78	9.032e2					0.5	NO		bb		
12	FUNCTION5 PFK	45.72	2.248e3					0.7	NO		bb		
13	FUNCTION5 PFK	45.48	4.377e3					0.9	NO		bb		
14	FUNCTION5 PFK	45.18	6.101e3					1.2	NO		bb		
15	FUNCTION5 PFK	44.64	7.416e3					1.2	NO		db		
16	FUNCTION5 PFK	44.58	9.522e3					1.5	NO		bd		
17	FUNCTION5 PFK	44.37	4.044e3					0.7	NO		bb		
18	FUNCTION5 PFK	44.33	3.260e3					0.8	NO		bb		
19	FUNCTION5 PFK	44.29	5.227e3					1.1	NO		bb		
20	FUNCTION5 PFK	44.11	9.388e3					1.3	NO		db		
21	FUNCTION5 PFK	44.06	7.642e3					1.7	NO		dd		
22	FUNCTION5 PFK	44.03	5.518e3					1.2	NO		bd		
23	FUNCTION5 PFK	43.82	4.807e3					0.7	NO		bb		

ID: BLB0228-BS1, Name: 23031305, Date: 13-Mar-2023, Time: 13:29:48, Conditions: AUTOSPEC01, User: pk

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	21.69	1.173e2					4.5	YES		bb		0.000
2	FUNCTION1 HXCD...	25.38	9.431e1					2.3	NO		bb		0.000
3	FUNCTION1 HXCD...	25.20	1.449e2					3.3	YES		bb		0.000
4	FUNCTION1 HXCD...	24.02	7.998e1					3.0	YES		bb		0.000
5	FUNCTION1 HXCD...	23.25	9.403e1					1.8	NO		db		0.000
6	FUNCTION1 HXCD...	23.12	9.975e1					2.3	NO		dd		0.000
7	FUNCTION1 HXCD...	22.89	1.339e2					3.1	YES		bd		0.000
8	FUNCTION1 HXCD...	21.96	1.075e2					2.8	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.51	7.524e1					3.4	YES		bb		0.000
2	FUNCTION2 HPCD...	31.01	9.072e1					2.2	NO		bb		0.000
3	FUNCTION2 HPCD...	29.35	8.002e1					1.7	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.52	7.658e1					3.2	YES		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	43.09	1.113e2					4.0	YES		bb		0.000

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ID: BLB0228-BS1, Name: 23031305, Date: 13-Mar-2023, Time: 13:29:48, Conditions: AUTOSPEC01, User: pk

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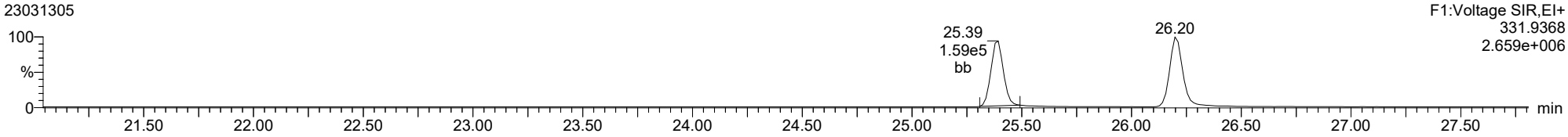

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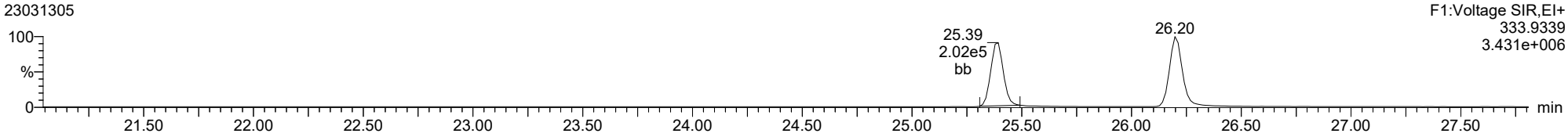
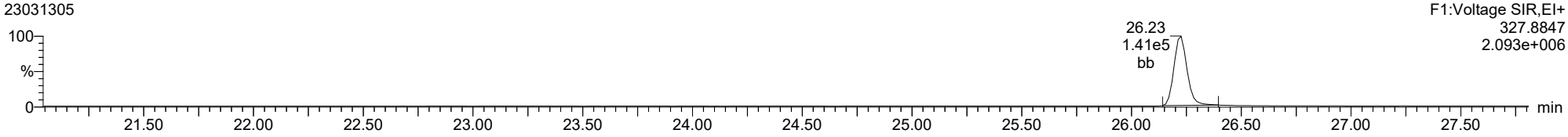


37CL-2378-TCDD



ID: BLB0228-BS1, Name: 23031305, Date: 13-Mar-2023, Time: 13:29:48, Conditions: AUTOSPEC01, User: pk

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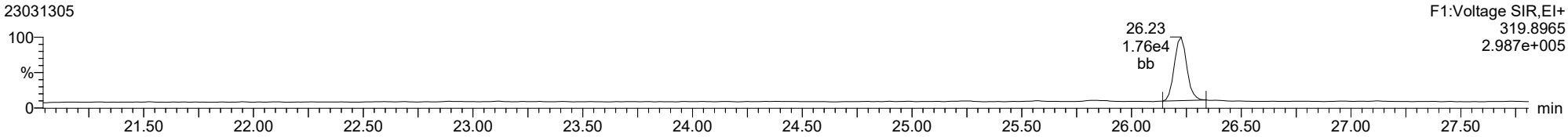

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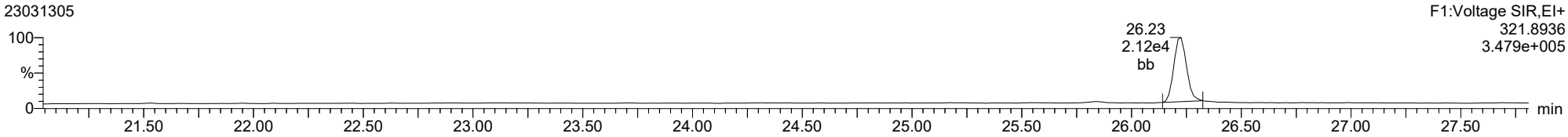

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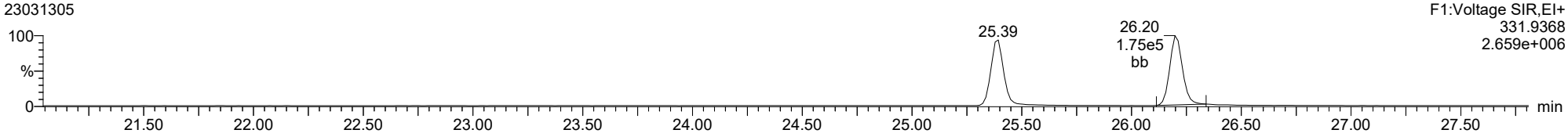

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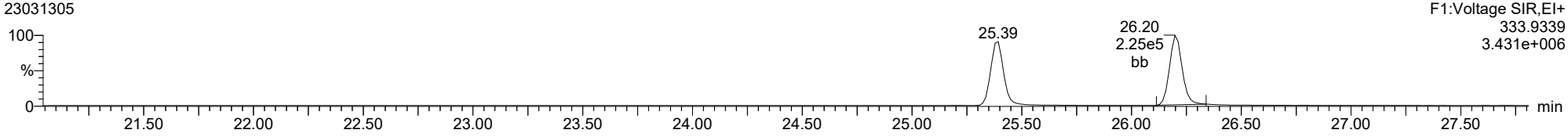

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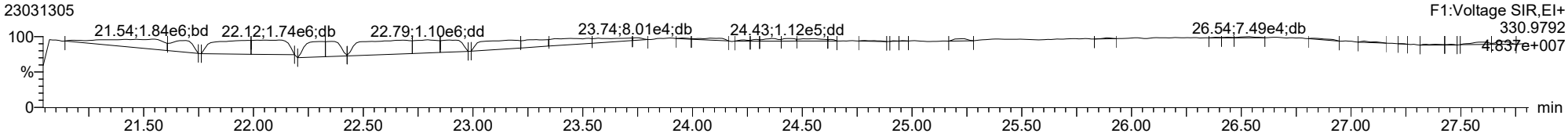

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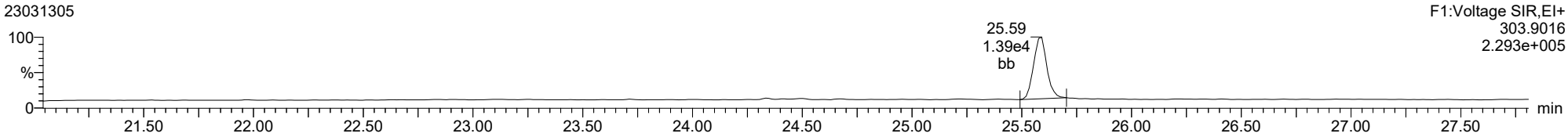

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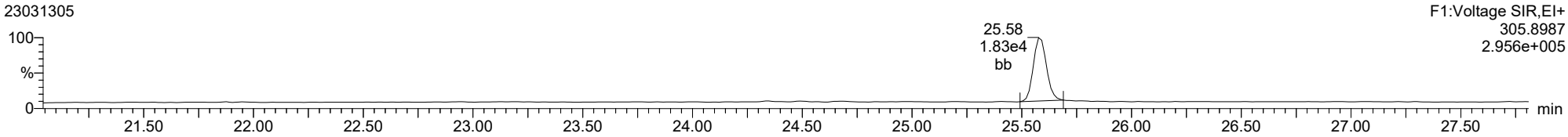

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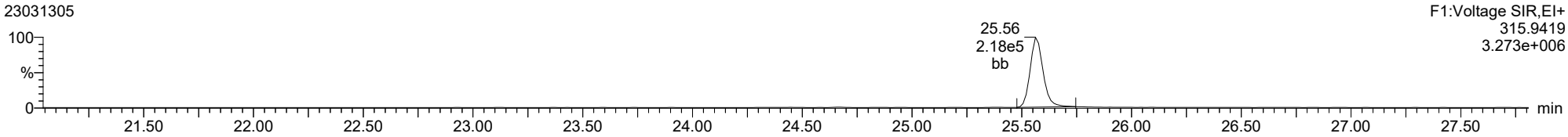

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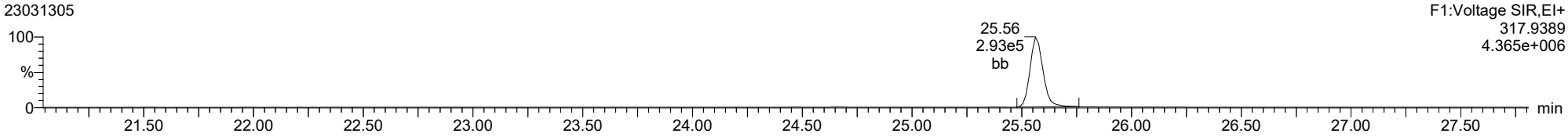
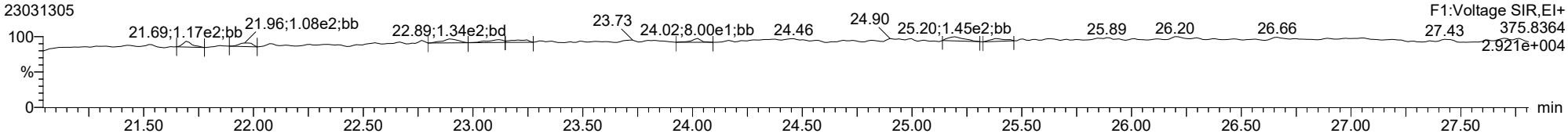
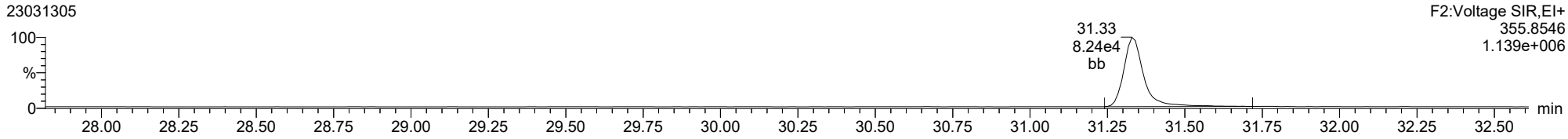


FUNCTION1 HXCDPE



ID: BLB0228-BS1, Name: 23031305, Date: 13-Mar-2023, Time: 13:29:48, Conditions: AUTOSPEC01, User: pk

12378-PeCDD



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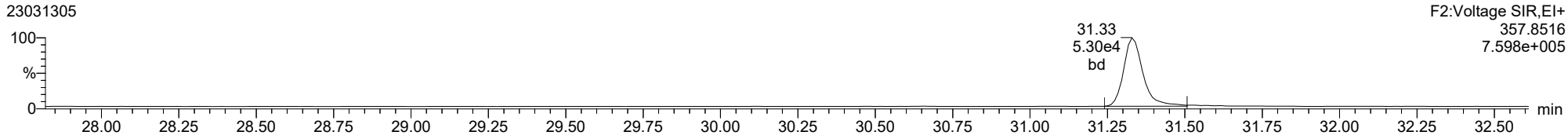

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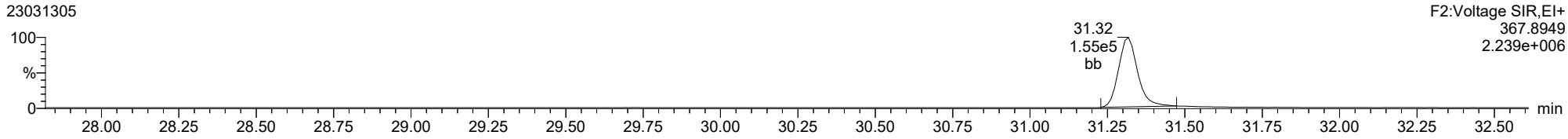

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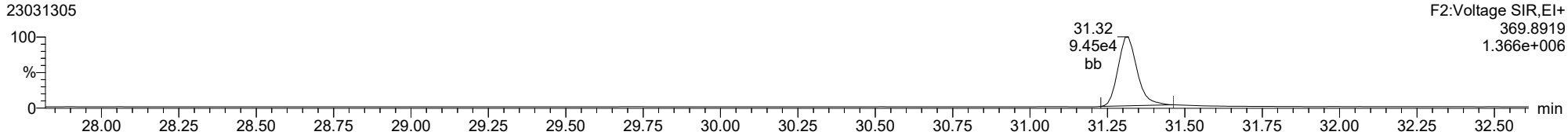
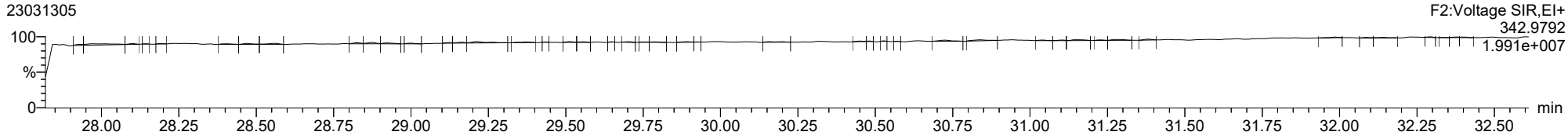


FUNCTION2 PFK



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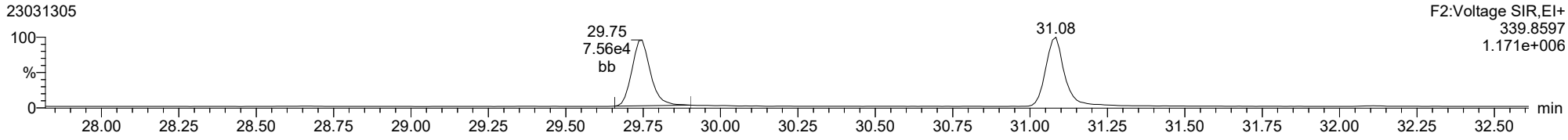

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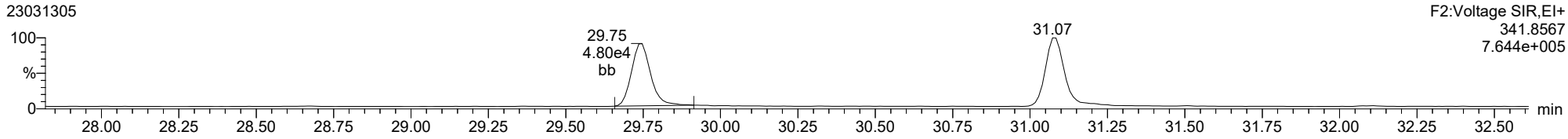

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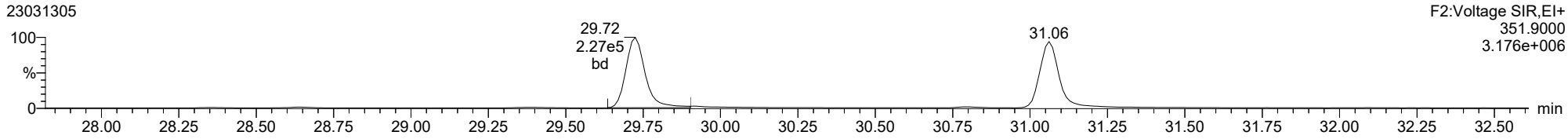

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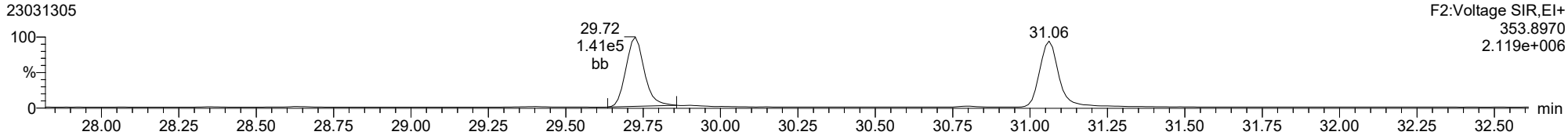
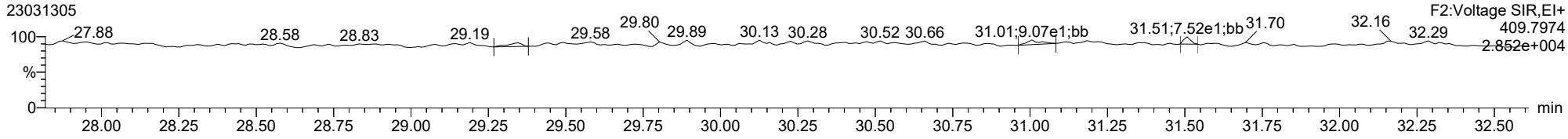


FUNCTION2 HPCDPE



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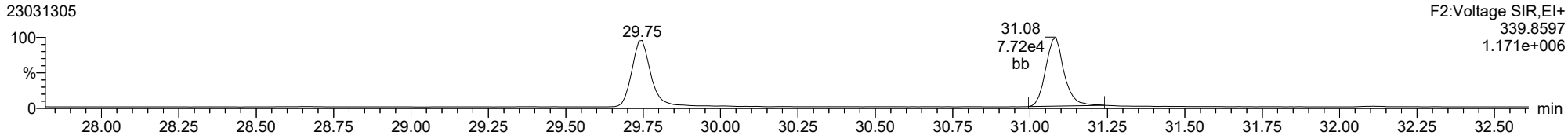

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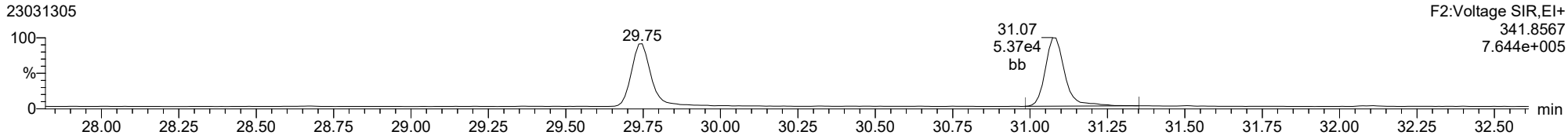

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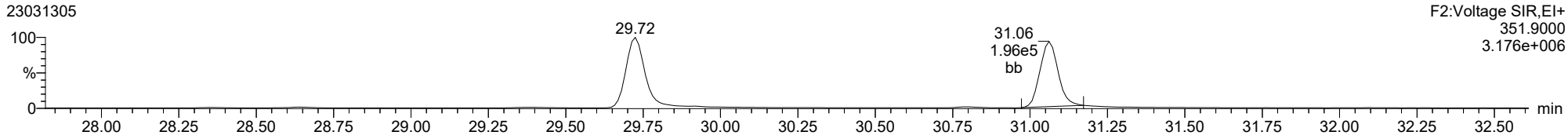

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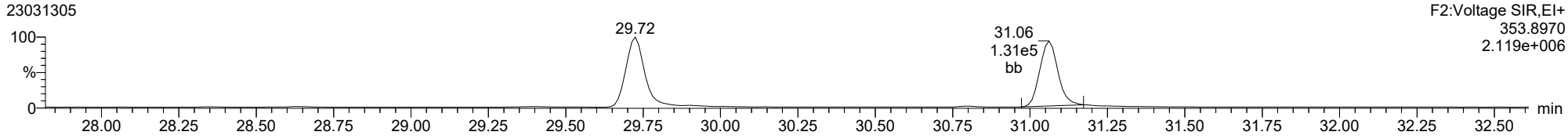

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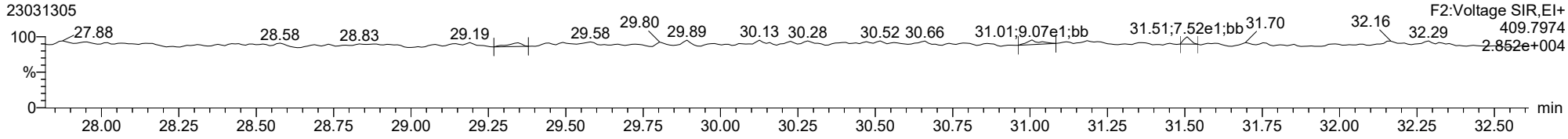

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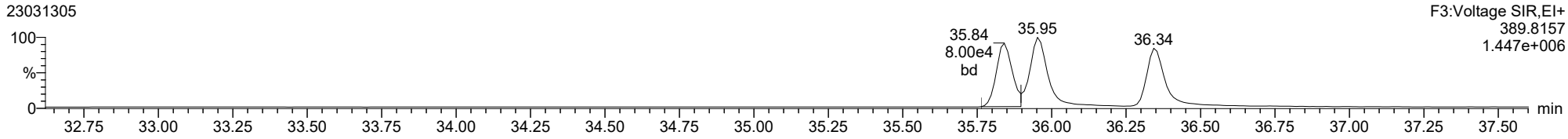
123478-HxCDD



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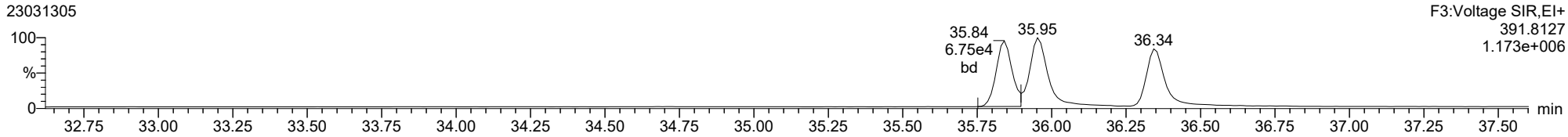

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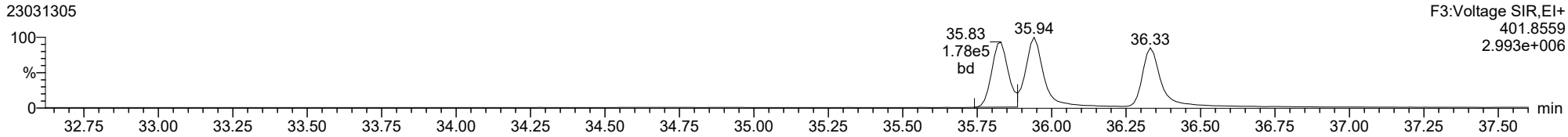

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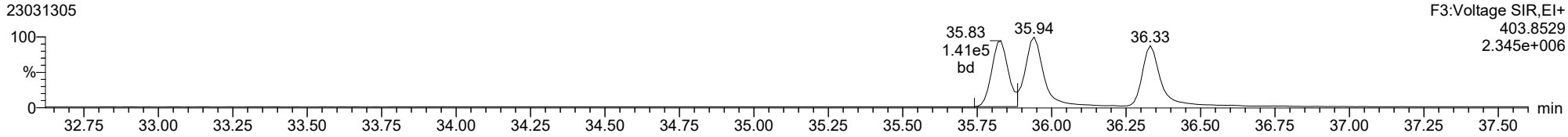

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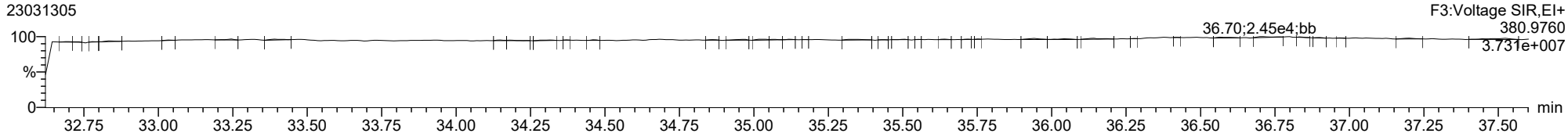

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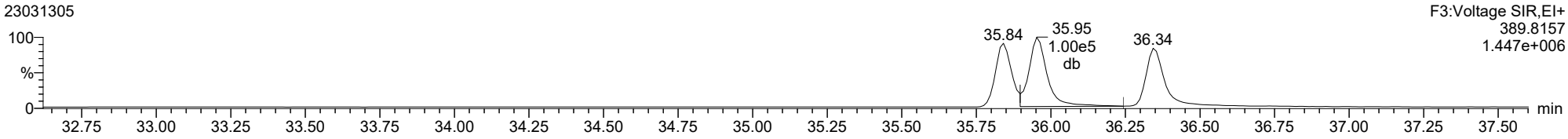

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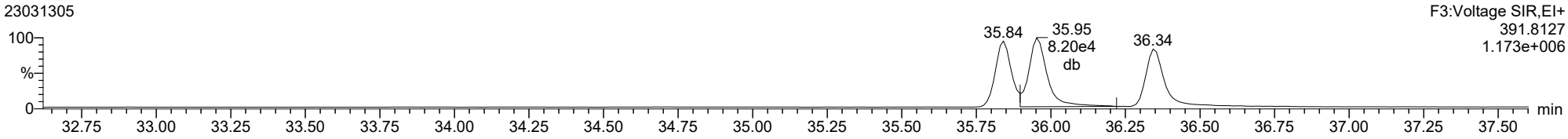

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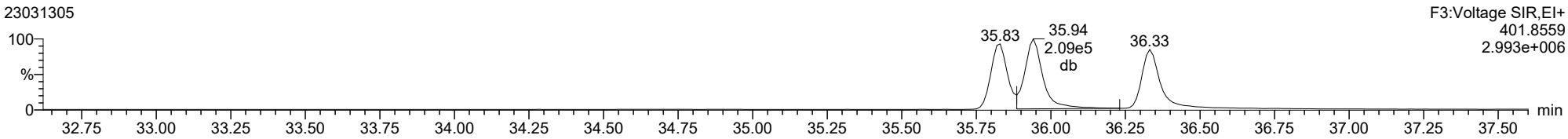

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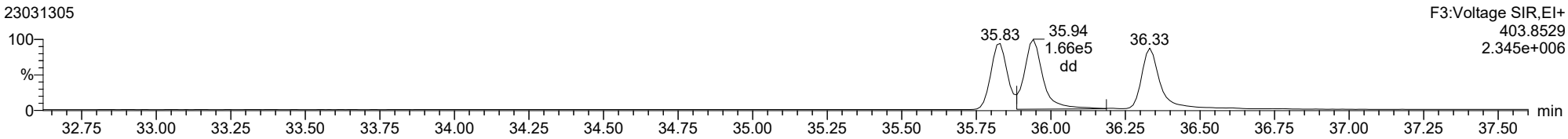

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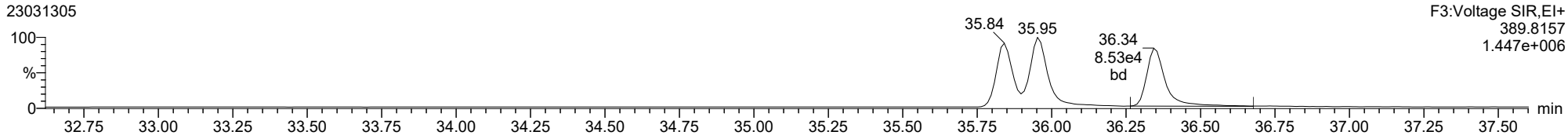

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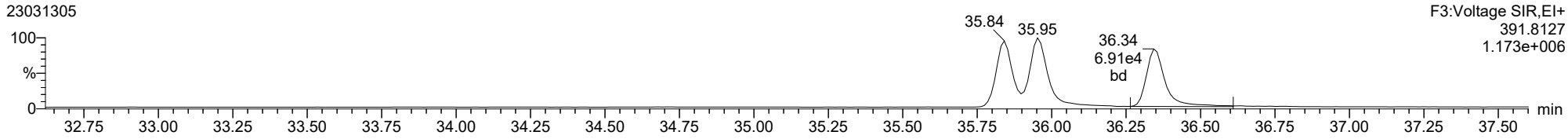

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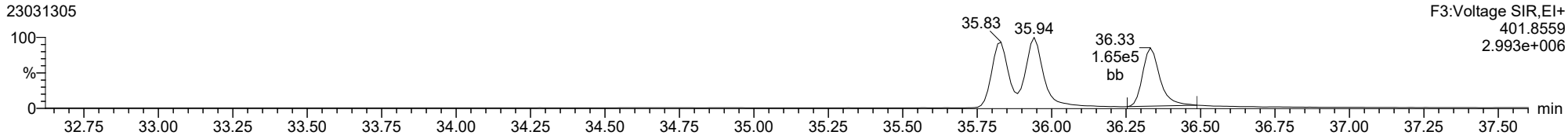

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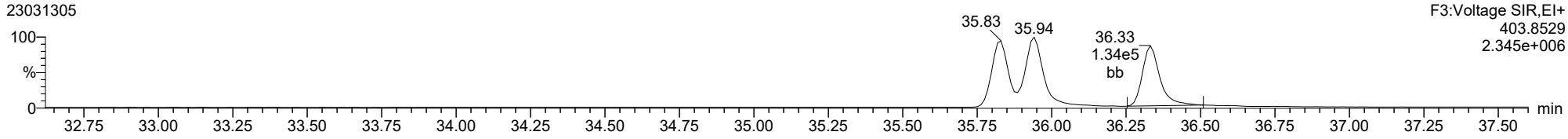

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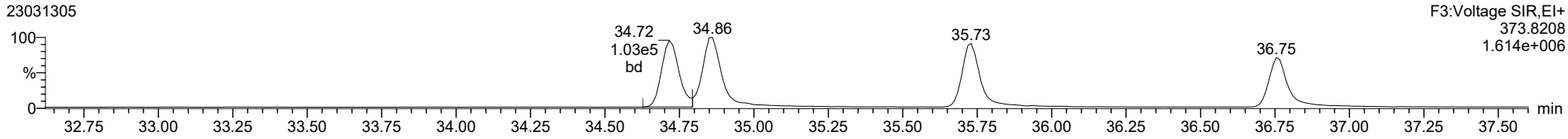

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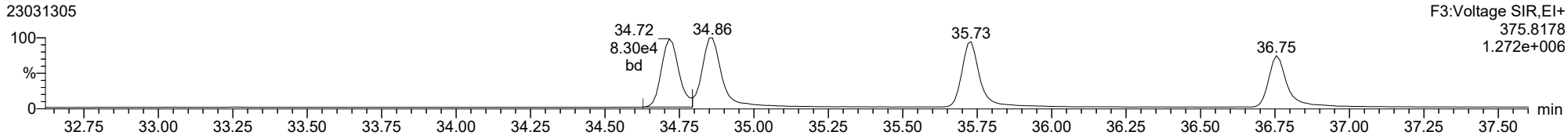

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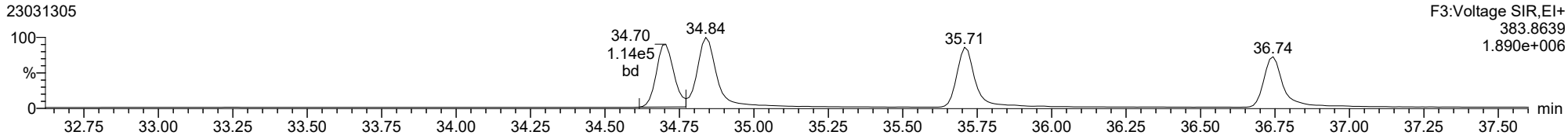

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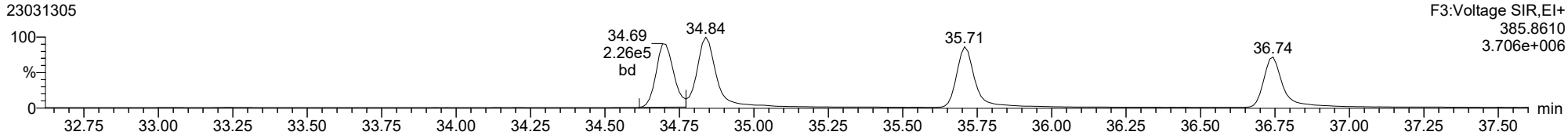

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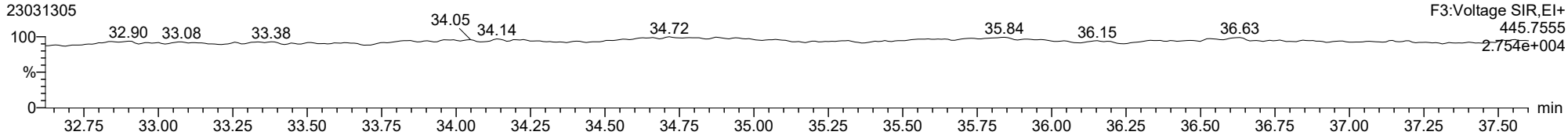

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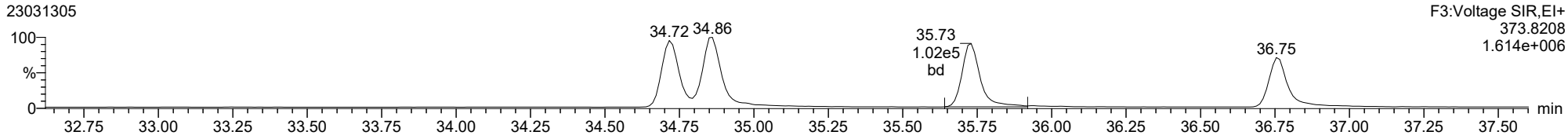

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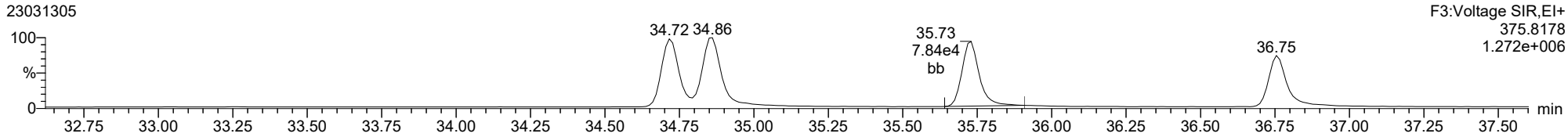

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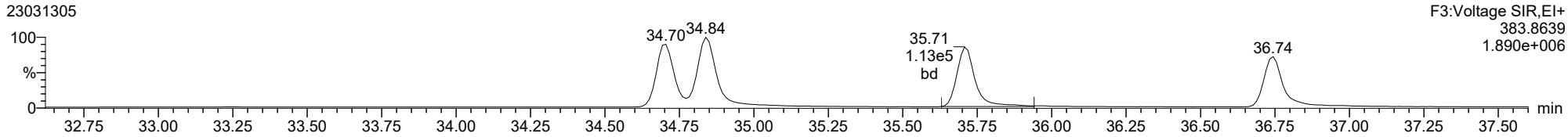

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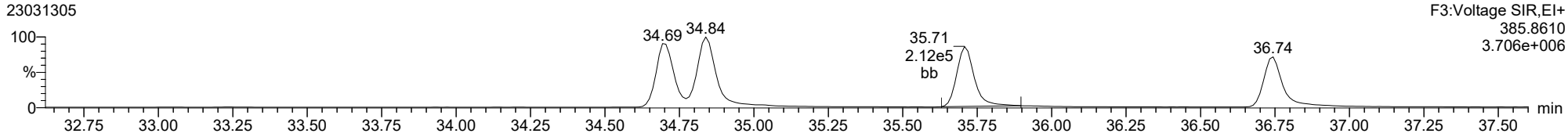

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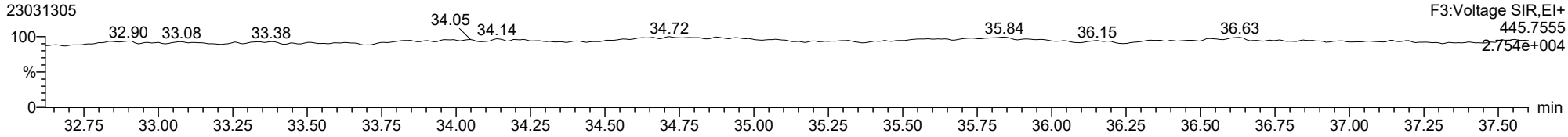

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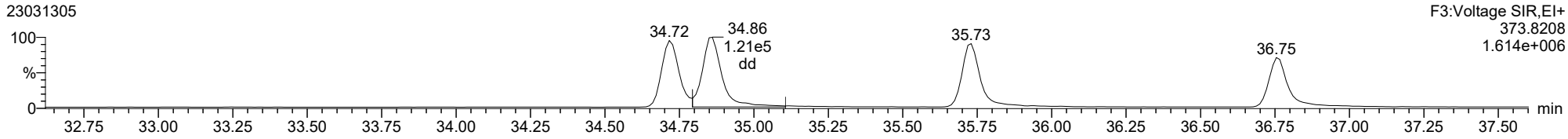

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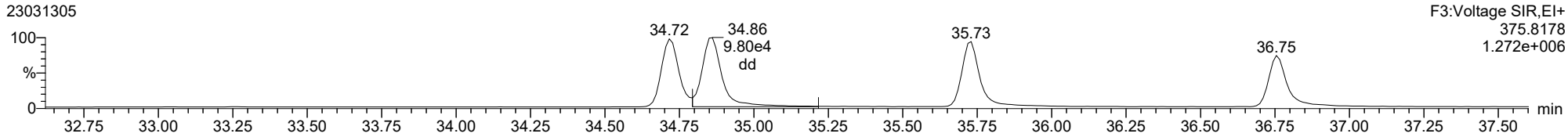

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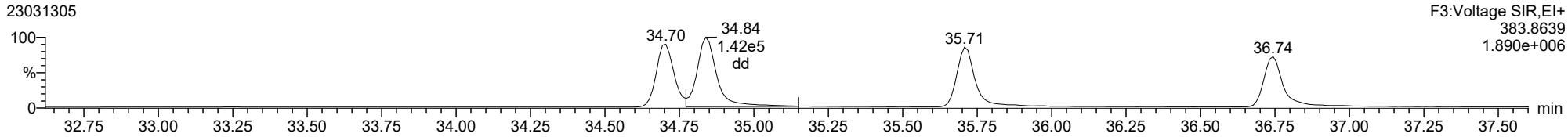

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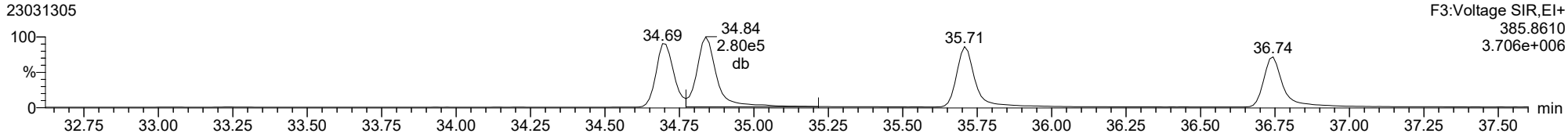

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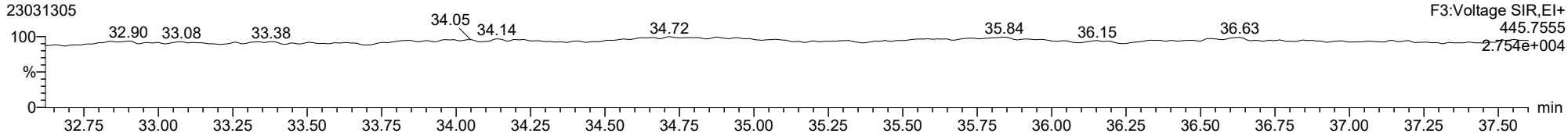

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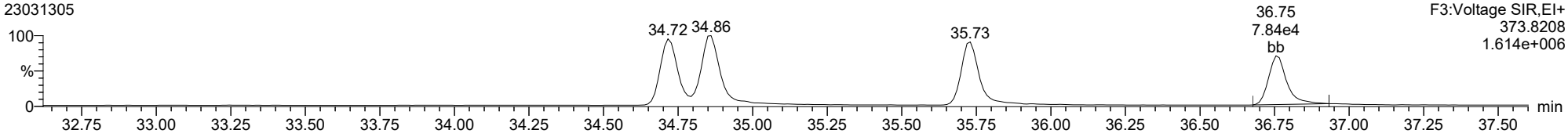

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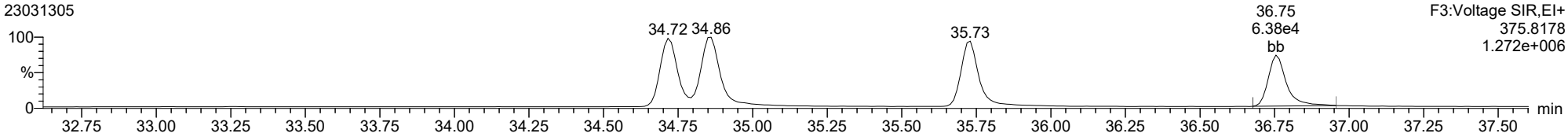

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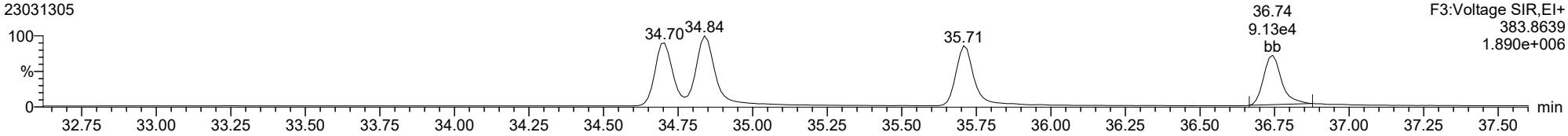

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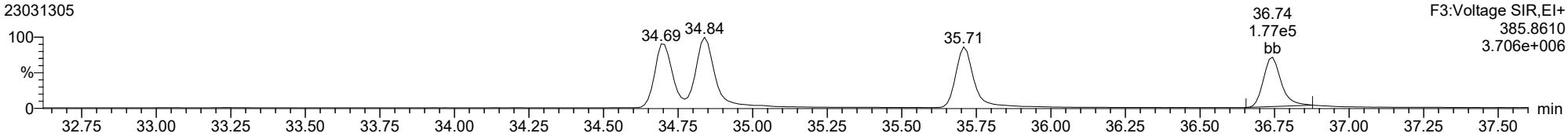

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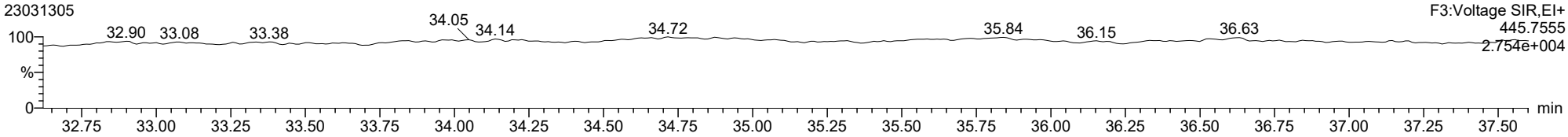

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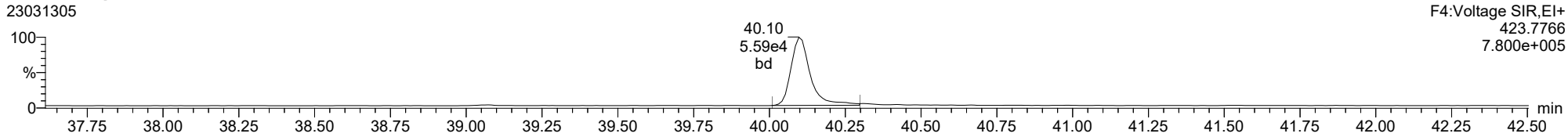

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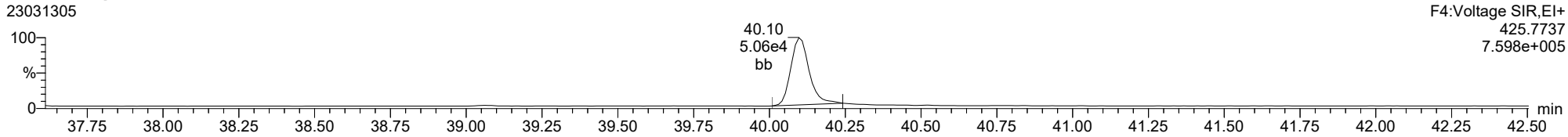

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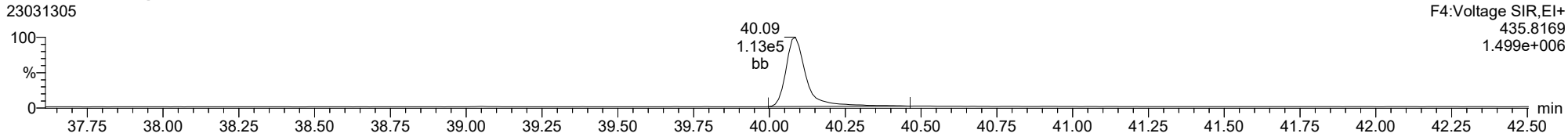

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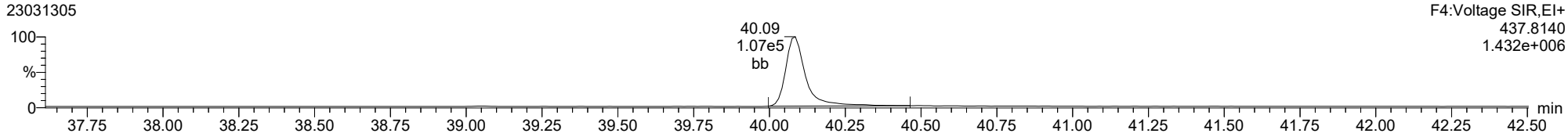

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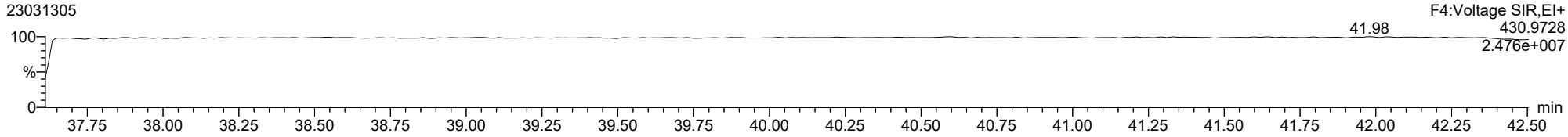

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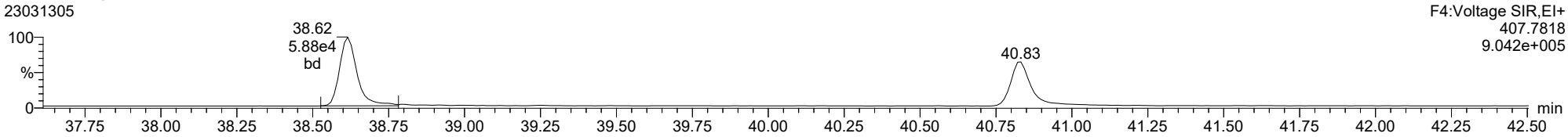

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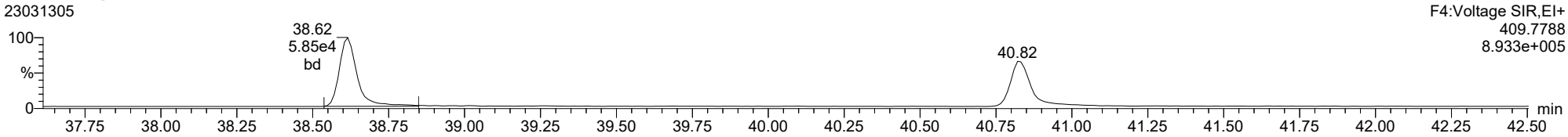

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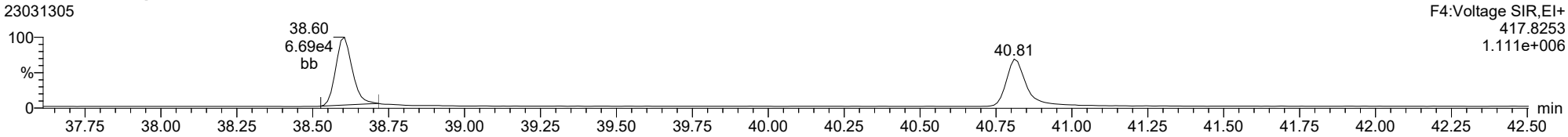

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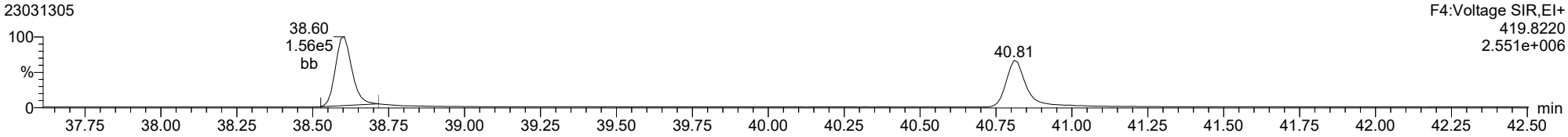

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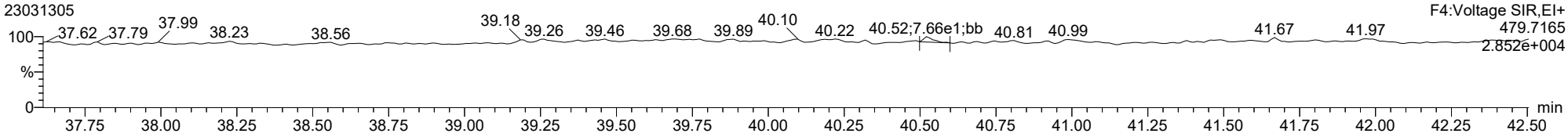

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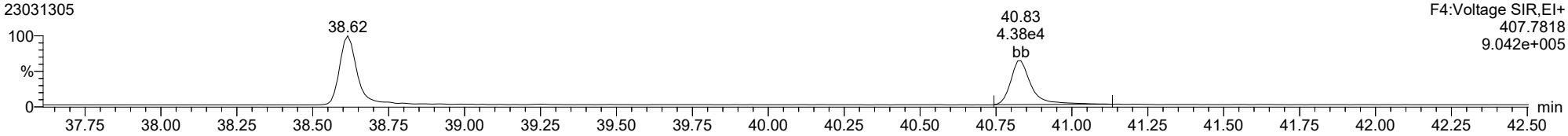

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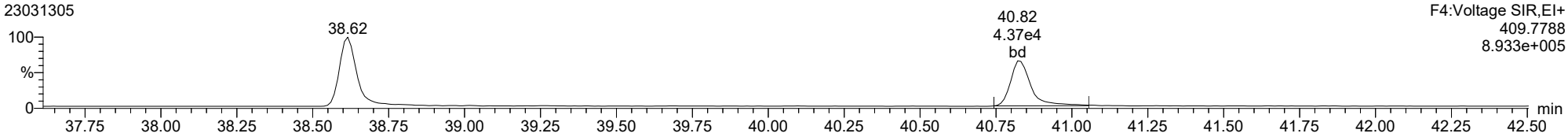

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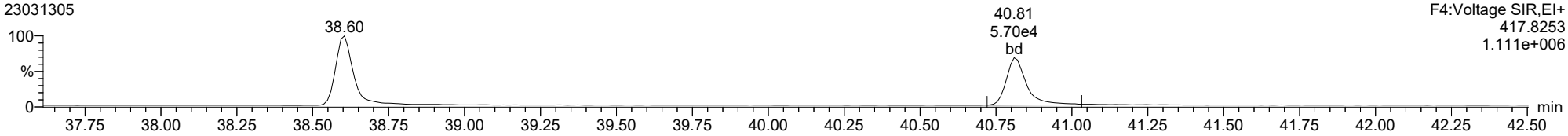

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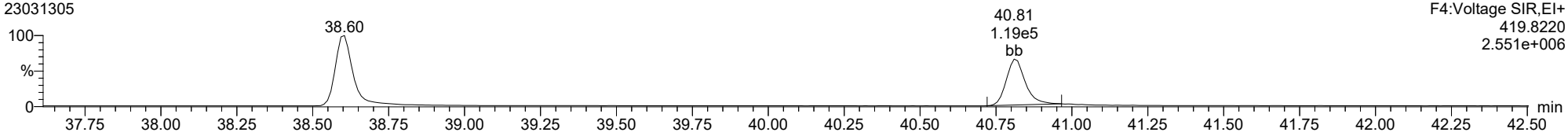

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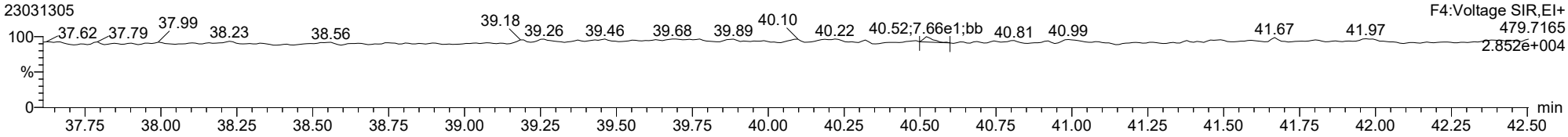

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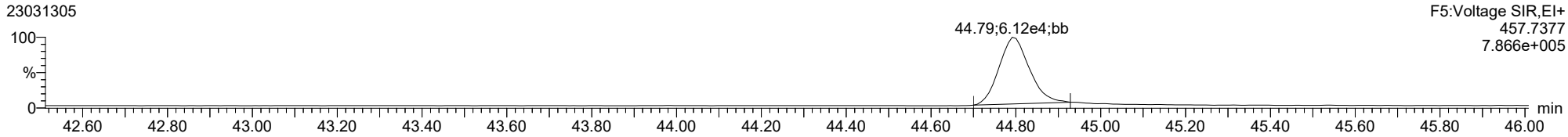

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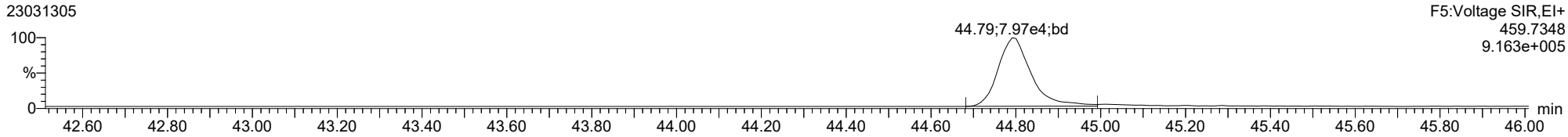

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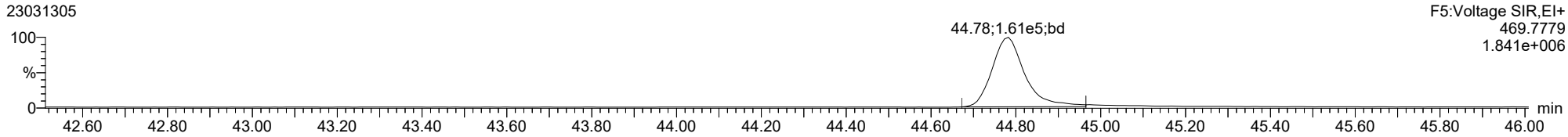

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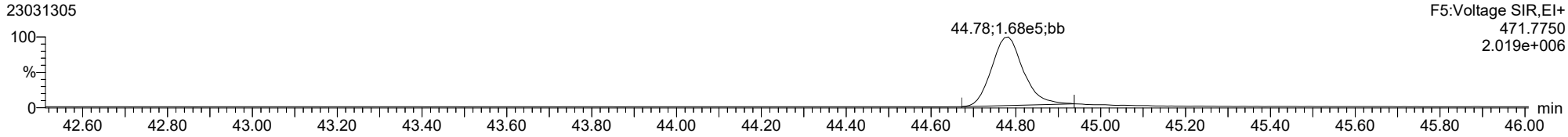

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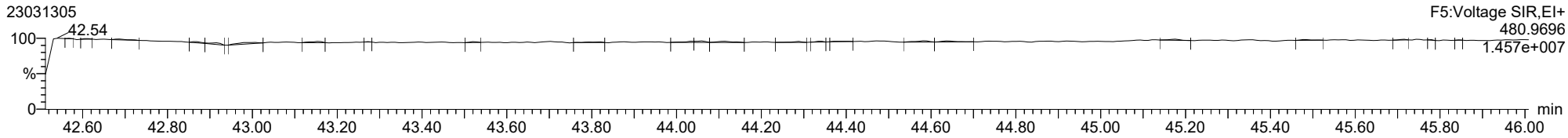

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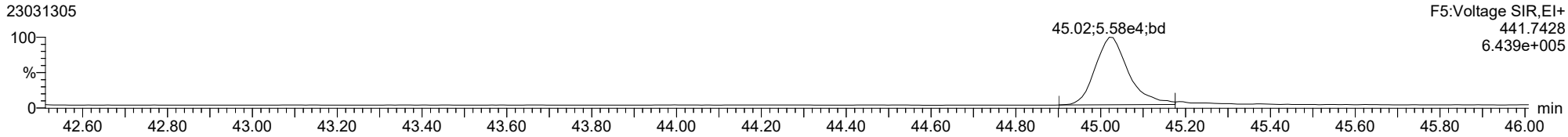
OCDF



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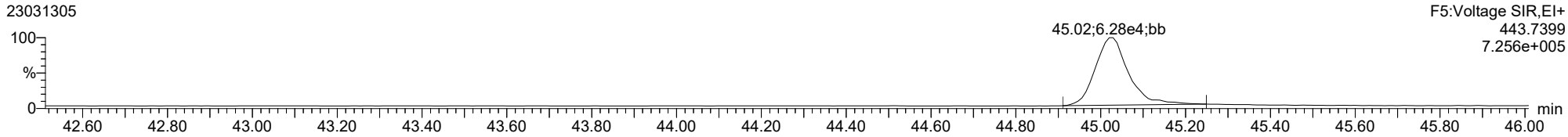

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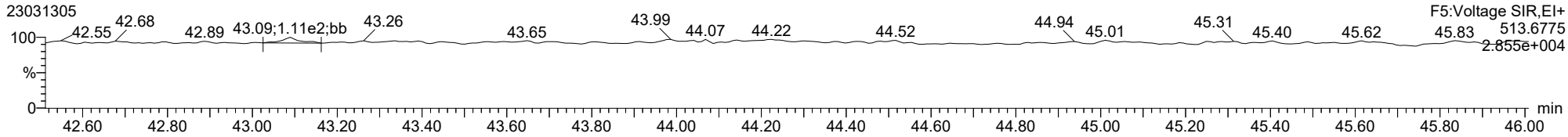

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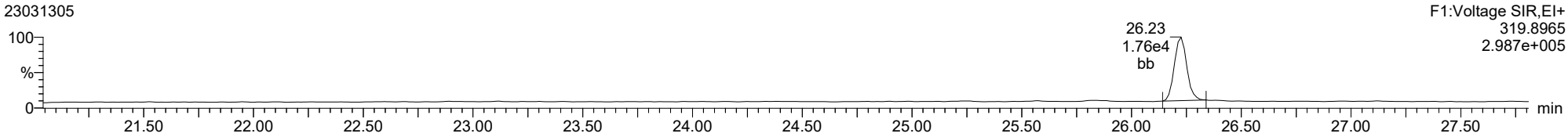
Total-tetradioxins



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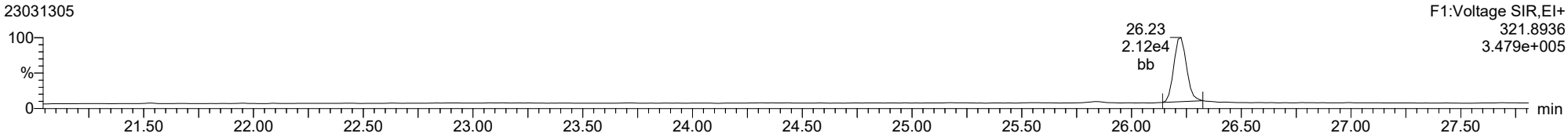

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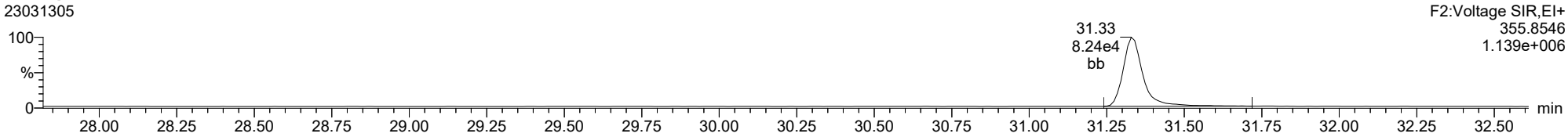
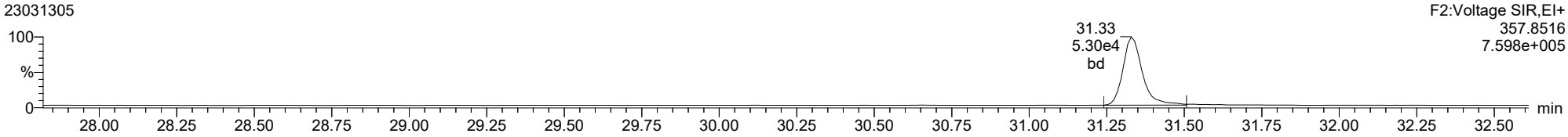
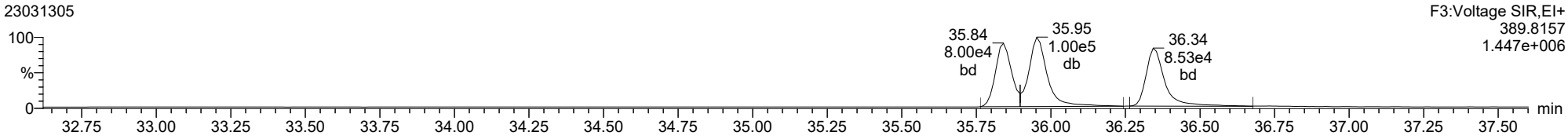


Total-pentadioxins

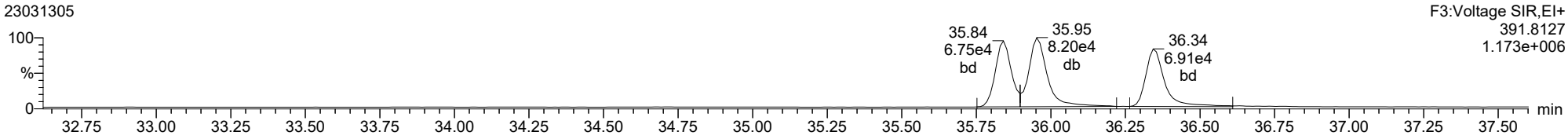


ID: BLB0228-BS1, Name: 23031305, Date: 13-Mar-2023, Time: 13:29:48, Conditions: AUTOSPEC01, User: pk

Total-hexadioxins



Total-hexadioxins



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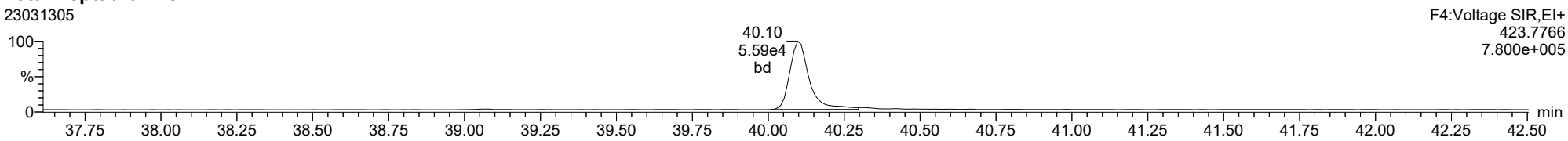

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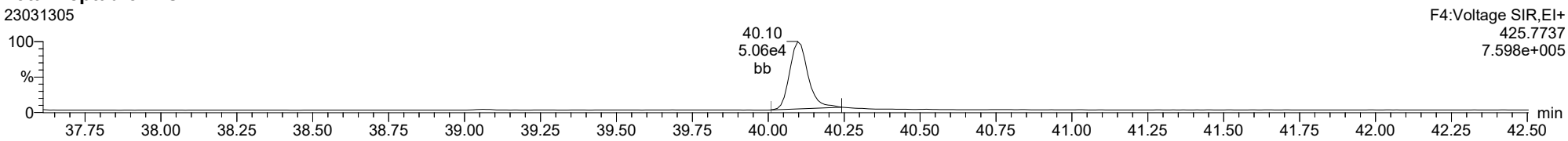
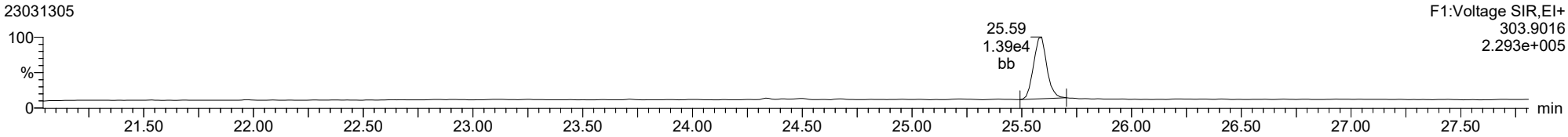
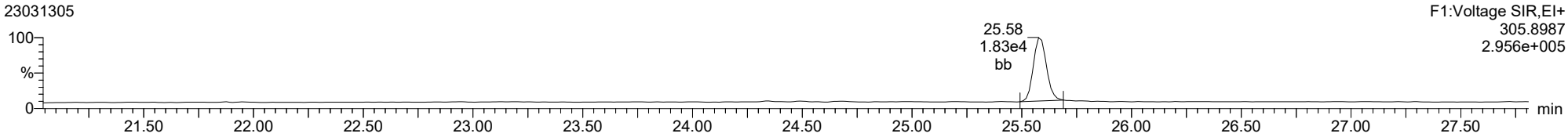


ID: BLB0228-BS1, Name: 23031305, Date: 13-Mar-2023, Time: 13:29:48, Conditions: AUTOSPEC01, User: pk

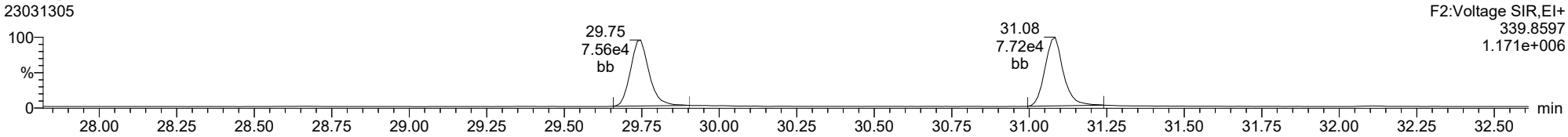
Total-tetrafurans



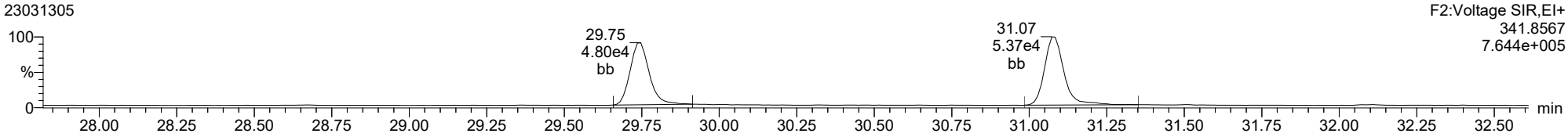
Total-tetrafurans



Total-pentafurans

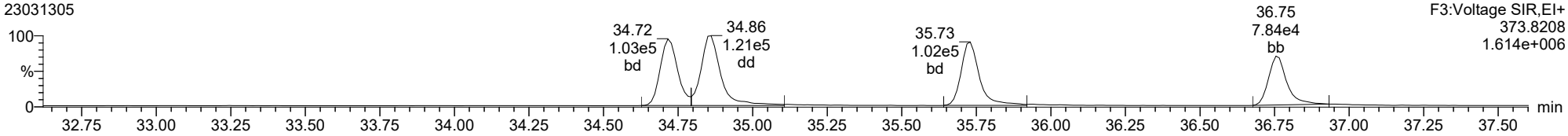


Total-pentafurans



ID: BLB0228-BS1, Name: 23031305, Date: 13-Mar-2023, Time: 13:29:48, Conditions: AUTOSPEC01, User: pk

Total-hexafurans



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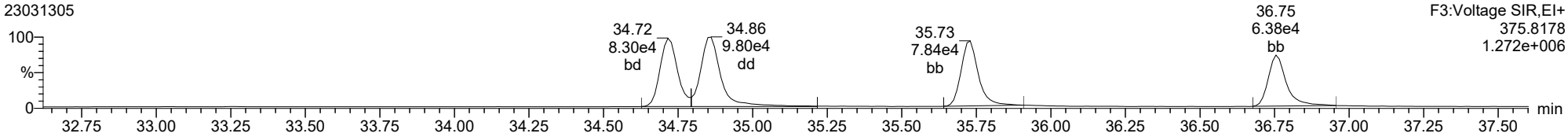
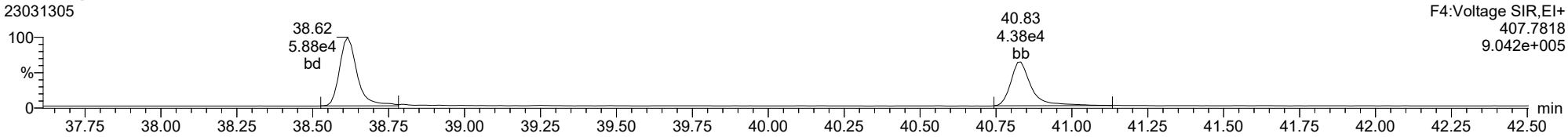
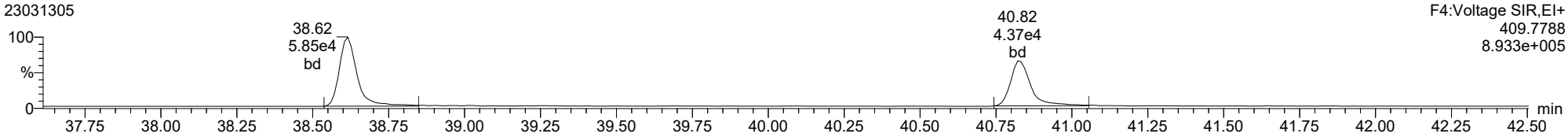


Total-heptafurans



Total-heptafurans



Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLB0228-SRM1
Batch: BLB0228
Initial/Final: 10 g / 20 uL
Preparation: EPA 1613
Analyzed: 03/13/2023 14:30
Standard ID: L001273
Expires: 08/05/2023
Standard Lot#: PSRM0172
Description: Puget Sound reference-SRM

ANALYTE	TRUE (ng/kg wet)	FOUND (ng/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
2,3,7,8-TCDF	1.1100	0.829	0.252	1.00	J	74.7	50 - 150
2,3,7,8-TCDD	1.0500	0.717	0.150	1.00	EMPC, J	68.3	50 - 150
1,2,3,7,8-PeCDF	1.2300	0.794	0.281	1.00	EMPC, J	64.6	50 - 150
2,3,4,7,8-PeCDF	1.0700	0.719	0.233	1.00	EMPC, J	67.2	50 - 150
1,2,3,7,8-PeCDD	1.0800	1.02	0.171	1.00	EMPC	94.7	50 - 150
1,2,3,4,7,8-HxCDF	3.0200	2.33	0.280	1.00		77.1	50 - 150
1,2,3,6,7,8-HxCDF	1.0900	0.892	0.200	1.00	EMPC, J	81.8	50 - 150
2,3,4,6,7,8-HxCDF	1.8300	1.84	0.170	1.00		100	50 - 150
1,2,3,7,8,9-HxCDF	0.51100	0.416	0.190	1.00	J	81.4	50 - 150
1,2,3,4,7,8-HxCDD	1.5900	1.32	0.170	1.00		83.3	50 - 150
1,2,3,6,7,8-HxCDD	3.8800	2.97	0.180	1.00		76.6	50 - 150
1,2,3,7,8,9-HxCDD	3.0400	2.40	0.220	1.00		79.0	50 - 150
1,2,3,4,6,7,8-HpCDF	18.700	16.1	0.225	1.00	B	85.8	50 - 150
1,2,3,4,7,8,9-HpCDF	1.6300	1.27	0.240	1.00		77.8	50 - 150
1,2,3,4,6,7,8-HpCDD	90.600	83.0	0.560	2.50	B	91.6	50 - 150
OCDF	58.400	43.9	1.10	2.50		75.2	50 - 150
OCDD	811.00	672	4.60	10.0	B	82.8	50 - 150

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:11:26 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230313.mdb 13 Mar 2023 11:32:39
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: BLB0228-SRM1, Name: 23031306, Date: 13-Mar-2023, Time: 14:30:11, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.619	1.001	6.627e2	9.040e2	0.702	0.733	0.770	1292	1041	9.83e3	1.45e4	7.6	13.9	NO	bd	bd	0.415
12378-PeCDF	29.780	1.001	8.723e2	4.642e2	0.679	1.879	1.550	1263	1049	1.36e4	7.81e3	10.8	7.4	YES	MM	bb	0.397
23478-PeCDF	31.117	1.001	9.221e2	4.957e2	0.786	1.860	1.550	1263	1049	1.11e4	7.10e3	8.8	6.8	YES	db	MM	0.359
123478-HxCDF	34.760	1.001	4.190e3	3.287e3	1.166	1.275	1.240	880	638	5.90e4	4.62e4	67.1	72.3	NO	bd	dd	1.165
234678-HxCDF	35.785	1.000	3.103e3	2.559e3	1.140	1.212	1.240	880	638	3.35e4	2.46e4	38.1	38.5	NO	bb	bb	0.918
123678-HxCDF	34.905	1.001	1.780e3	1.228e3	1.091	1.450	1.240	880	638	2.47e4	1.76e4	28.1	27.6	YES	db	db	0.446
123789-HxCDF	36.766	1.000	5.431e2	4.914e2	1.137	1.105	1.240	880	638	8.67e3	7.54e3	9.8	11.8	NO	bb	bd	0.208
1234678-HpCDF	38.648	1.000	1.072e4	1.105e4	1.003	0.970	1.050	751	901	1.76e5	2.01e5	234.2	223.1	NO	bb	bd	8.025
1234789-HpCDF	40.854	1.000	9.857e2	1.017e3	0.953	0.969	1.050	751	901	1.43e4	1.38e4	19.1	15.3	NO	bb	bb	0.634
OCDF	45.066	1.005	2.857e4	3.222e4	0.778	0.887	0.890	667	831	3.28e5	3.59e5	491.3	432.4	NO	bb	bb	21.970
2378-TCDD	26.254	1.001	7.542e2	1.243e3	1.149	0.607	0.770	1128	721	1.23e4	1.81e4	10.9	25.1	YES	bb	bd	0.359
12378-PeCDD	31.374	1.001	1.259e3	7.019e2	1.022	1.794	1.550	791	777	1.67e4	9.71e3	21.1	12.5	YES	bb	bb	0.511
123478-HxCDD	35.908	1.001	1.753e3	1.566e3	0.996	1.120	1.240	1358	856	2.71e4	2.47e4	19.9	28.8	NO	dd	bd	0.662
123678-HxCDD	36.019	1.000	4.732e3	3.841e3	1.001	1.232	1.240	1358	856	7.84e4	6.25e4	57.7	73.0	NO	dd	dd	1.485
123789-HxCDD	36.398	1.011	3.266e3	2.614e3	0.907	1.250	1.240	1358	856	4.98e4	3.80e4	36.7	44.4	NO	bb	bb	1.200
1234678-HpCDD	40.130	1.001	9.159e4	8.517e4	1.039	1.075	1.050	1024	1177	1.32e6	1.28e6	1285.2	1089.6	NO	bd	bb	41.483
OCDD	44.846	1.000	5.044e5	5.946e5	0.920	0.848	0.890	2121	1354	6.09e6	7.19e6	2869.6	5310.6	NO	bb	bb	335.817
13C-2378-TCDF	25.591	1.007	2.328e5	3.060e5	1.620	0.761	0.770	1724	1355	3.42e6	4.59e6	1981.1	3387.8	NO	bb	bb	72.916
13C-12378-PeCDF	29.758	1.171	2.958e5	1.996e5	1.240	1.482	1.550	1509	1630	4.34e6	2.95e6	2872.9	1810.9	NO	bb	bb	87.564
13C-23478-PeCDF	31.095	1.223	3.003e5	2.015e5	1.118	1.490	1.550	1509	1630	4.54e6	3.03e6	3008.2	1857.4	NO	bb	bb	98.425
13C-123478-HxCDF	34.738	0.955	1.854e5	3.652e5	1.168	0.508	0.510	1254	1393	2.72e6	5.43e6	2171.5	3899.0	NO	bd	bd	91.500
13C-123678-HxCDF	34.883	0.959	2.083e5	4.101e5	1.386	0.508	0.510	1254	1393	2.96e6	5.74e6	2359.5	4121.2	NO	dd	dd	86.591
13C-234678-HxCDF	35.774	0.983	1.842e5	3.568e5	1.129	0.516	0.510	1254	1393	2.76e6	5.33e6	2197.7	3827.4	NO	bb	bb	93.002
13C-123789-HxCDF	36.766	1.010	1.503e5	2.869e5	0.932	0.524	0.510	1254	1393	2.62e6	4.93e6	2088.9	3536.7	NO	bb	bb	91.109
13C-1234678-HpCDF	38.648	1.062	7.642e4	1.939e5	0.895	0.394	0.440	41942	1538	1.24e6	2.59e6	29.6	1686.3	NO	bb	bb	58.633
13C-1234789-HpCDF	40.843	1.122	1.010e5	2.306e5	0.770	0.438	0.440	41942	1538	1.40e6	3.22e6	33.4	2091.4	NO	bb	bb	83.650
13C-1234-TCDD	25.421	0.000	2.011e5	2.550e5	1.000	0.789	0.770	1861	1159	3.11e6	3.90e6	1672.6	3364.8	NO	bb	bb	100.000
13C-2378-TCDD	26.226	1.032	2.129e5	2.718e5	1.152	0.783	0.770	1861	1159	3.10e6	3.95e6	1665.5	3407.8	NO	bb	bb	92.229
13C-12378-PeCDD	31.351	1.233	2.312e5	1.441e5	0.829	1.605	1.550	1038	845	3.31e6	2.05e6	3189.4	2426.2	NO	bb	bb	99.282
13C-123478-HxCDD	35.886	0.986	2.797e5	2.239e5	0.995	1.249	1.240	950	1028	4.43e6	3.54e6	4663.8	3447.3	NO	bd	bd	98.263
13C-123678-HxCDD	36.008	0.990	3.199e5	2.567e5	1.157	1.246	1.240	950	1028	4.54e6	3.62e6	4779.2	3522.4	NO	db	db	96.777
13C-1234678-HpCDD	40.108	1.102	2.125e5	1.976e5	0.840	1.076	1.050	952	1140	3.18e6	2.97e6	3341.6	2606.5	NO	bb	bb	94.772
13C-OCDD	44.828	1.232	3.348e5	3.767e5	0.767	0.889	0.890	1326	845	4.02e6	4.51e6	3027.5	5332.9	NO	bb	bb	179.976
13C-123789-HxCDD	36.387	0.000	2.862e5	2.288e5	1.000	1.251	1.240	950	1028	4.54e6	3.63e6	4771.5	3528.3	NO	bb	bb	100.000
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Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:11:26 Pacific Daylight Time

ID: BLB0228-SRM1, Name: 23031306, Date: 13-Mar-2023, Time: 14:30:11, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.102	0.864	2.539e2	1.757e2	0.802	1.445	0.770	1292	1041	2.70e3	2.60e3	2.1	2.5	YES	bd	bd	0.099
1289-TCDF					0.678		0.770	1292	1041								
13468-PECDF	26.918	0.905	7.431e2	5.787e2	1.246	1.284	1.550	629	883	1.00e4	7.87e3	15.9	8.9	YES	bd	bd	0.214
12389-PECDF					0.496		1.550	1263	1049								
123468-HXCDF	33.078	0.952	3.855e3	2.841e3	1.169	1.357	1.240	880	638	5.95e4	4.52e4	67.6	70.8	NO	bd	bb	1.040
1368-TCDD	23.387	0.892	7.082e2	7.415e2	1.015	0.955	0.770	1128	721	1.01e4	1.08e4	9.0	14.9	YES	bd	bb	0.295
1289-TCDD					0.909		0.770	1128	721								
12479-PECDD	28.688	0.915	1.128e3	7.394e2	2.301	1.525	1.550	791	777	1.64e4	1.19e4	20.7	15.3	NO	db	db	0.216
12389-PECDD	31.774	1.013	2.903e2	1.769e2	1.184	1.641	1.550	791	777	4.94e3	3.40e3	6.2	4.4	NO	bb	bb	0.105
124679-HXCDD	33.858	0.943	1.165e4	9.893e3	1.115	1.177	1.240	1358	856	1.81e5	1.40e5	133.1	163.5	NO	bb	bb	3.834
1234679-HPCDD	39.094	0.975	1.243e5	1.263e5	1.137	0.984	1.050	1024	1177	2.03e6	2.04e6	1986.8	1730.6	NO	bb	bb	53.743
Total-tetrafurans			6.549e3		0.727			1292		8.84e4							3.940
Total-penta1			8.319e3					629		1.15e5							3.053
Total-pentafurans			2.870e3		0.654			1263		4.50e4							1.491
Total-hexafurans			4.018e4		1.141			880		5.89e5							11.756
Total-heptafurans			4.238e4		0.978			751		6.77e5							29.896
Total-Furans			1.289e5		0.922			1292		1.84e6							72.106
Total-tetradioxins			1.413e3		1.024			1128		1.91e4							0.611
Total-pentadioxins			3.425e3		1.502			791		5.41e4							0.911
Total-hexadioxins			2.440e4		1.005			1358		3.85e5							8.224
Total-heptadioxins			2.158e5		1.088			1024		3.35e6							95.226
Total-Dioxins			7.495e5		1.130			1128		9.90e6							440.790
Total-TEQ			8.783e5					1128		1.17e7							512.896
FUNCTION1 PFK			2.137e7					482895		1.69e7							
FUNCTION2 PFK			2.310e6					192997		1.29e7							0.000
FUNCTION3 PFK			1.905e7					1513220		1.08e8							0.000
FUNCTION4 PFK			3.741e7					234072		8.44e7							
FUNCTION5 PFK			0.000e0					147892		0.00e0							
FUNCTION1 HXCD...			1.524e3					696		2.47e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			1.522e2					643		2.97e3							0.000
FUNCTION3 OCDPE			1.030e3					685		1.53e4							0.000
FUNCTION4 NCDPE			5.842e3					464		9.80e4							0.000
FUNCTION5 DCDPE			0.000e0					471		0.00e0							

Method: T:\Autospec\Methods\Dioxin230313.mdb 13 Mar 2023 11:32:39
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: BLB0228-SRM1, Name: 23031306, Date: 13-Mar-2023, Time: 14:30:11, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.39	3.517e2	4.885e2	0.727	0.72	0.77	3.6	YES	NO	db	dd	0.215
2	Total-tetrafurans	23.26	4.638e2	5.455e2	0.727	0.85	0.77	4.5	YES	NO	dd	dd	0.258
3	Total-tetrafurans	22.95	7.639e2	1.115e3	0.727	0.69	0.77	10.1	YES	NO	bd	bd	0.480
4	Total-tetrafurans	25.83	5.230e2	6.192e2	0.727	0.84	0.77	5.0	YES	NO	dd	db	0.292
5	2378-TCDF	25.62	6.627e2	9.040e2	0.702	0.73	0.77	7.6	YES	NO	bd	bd	0.415
6	Total-tetrafurans	24.71	8.428e2	1.254e3	0.727	0.67	0.77	9.4	YES	NO	bb	bb	0.535
7	Total-tetrafurans	24.52	5.530e2	6.406e2	0.727	0.86	0.77	6.3	YES	NO	db	db	0.305
8	Total-tetrafurans	24.36	1.549e3	2.187e3	0.727	0.71	0.77	10.7	YES	NO	bd	bd	0.954
9	Total-tetrafurans	24.01	3.369e2	4.293e2	0.727	0.78	0.77	4.6	YES	NO	db	db	0.196
10	Total-tetrafurans	23.73	5.017e2	6.439e2	0.727	0.78	0.77	6.4	YES	NO	dd	dd	0.292

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-penta1	27.05	8.319e3	5.550e3		1.50	1.55	182.2	YES	NO	db	db	3.053

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	28.03	3.950e2	2.620e2	0.654	1.51	1.55	4.1	YES	NO	bb	bb	0.202
2	Total-pentafurans	29.99	6.877e2	4.685e2	0.654	1.47	1.55	11.7	YES	NO	dd	bb	0.355
3	Total-pentafurans	28.72	1.787e3	1.261e3	0.654	1.42	1.55	19.8	YES	NO	db	db	0.935

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.77	5.431e2	4.914e2	1.137	1.11	1.24	9.8	YES	NO	bb	bd	0.208
2	234678-HxCDF	35.79	3.103e3	2.559e3	1.140	1.21	1.24	38.1	YES	NO	bb	bb	0.918
3	123478-HxCDF	34.76	4.190e3	3.287e3	1.166	1.27	1.24	67.1	YES	NO	bd	dd	1.165
4	Total-hexafurans	34.60	5.456e2	3.981e2	1.141	1.37	1.24	9.4	YES	NO	bb	bd	0.154
5	Total-hexafurans	34.13	1.502e4	1.252e4	1.141	1.20	1.24	265.8	YES	NO	bb	bb	4.498
6	Total-hexafurans	33.81	3.661e2	3.068e2	1.141	1.19	1.24	6.7	YES	NO	bb	bb	0.110
7	Total-hexafurans	33.29	1.255e4	9.869e3	1.141	1.27	1.24	205.0	YES	NO	db	bb	3.662
8	123468-HXCDF	33.08	3.855e3	2.841e3	1.169	1.36	1.24	67.6	YES	NO	bd	bb	1.040

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HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	40.85	9.857e2	1.017e3	0.953	0.97	1.05	19.1	YES	NO	bb	bb	0.634
2	Total-heptafurans	39.29	3.068e4	3.184e4	0.978	0.96	1.05	648.8	YES	NO	bd	bd	21.237
3	1234678-HpCDF	38.65	1.072e4	1.105e4	1.003	0.97	1.05	234.2	YES	NO	bb	bd	8.025

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.39	3.517e2	4.885e2	0.727	0.72	0.77	3.6	YES	NO	db	dd	0.215
2	Total-tetrafurans	23.26	4.638e2	5.455e2	0.727	0.85	0.77	4.5	YES	NO	dd	dd	0.258
3	Total-tetrafurans	22.95	7.639e2	1.115e3	0.727	0.69	0.77	10.1	YES	NO	bd	bd	0.480
4	Total-tetrafurans	25.83	5.230e2	6.192e2	0.727	0.84	0.77	5.0	YES	NO	dd	db	0.292
5	2378-TCDF	25.62	6.627e2	9.040e2	0.702	0.73	0.77	7.6	YES	NO	bd	bd	0.415
6	Total-tetrafurans	24.71	8.428e2	1.254e3	0.727	0.67	0.77	9.4	YES	NO	bb	bb	0.535
7	Total-tetrafurans	24.52	5.530e2	6.406e2	0.727	0.86	0.77	6.3	YES	NO	db	db	0.305
8	Total-tetrafurans	24.36	1.549e3	2.187e3	0.727	0.71	0.77	10.7	YES	NO	bd	bd	0.954
9	Total-tetrafurans	24.01	3.369e2	4.293e2	0.727	0.78	0.77	4.6	YES	NO	db	db	0.196
10	Total-tetrafurans	23.73	5.017e2	6.439e2	0.727	0.78	0.77	6.4	YES	NO	dd	dd	0.292
11	Total-pentafurans	28.03	3.950e2	2.620e2	0.654	1.51	1.55	4.1	YES	NO	bb	bb	0.202
12	Total-pentafurans	29.99	6.877e2	4.685e2	0.654	1.47	1.55	11.7	YES	NO	dd	bb	0.355
13	Total-pentafurans	28.72	1.787e3	1.261e3	0.654	1.42	1.55	19.8	YES	NO	db	db	0.935
14	123789-HxCDF	36.77	5.431e2	4.914e2	1.137	1.11	1.24	9.8	YES	NO	bb	bd	0.208
15	234678-HxCDF	35.79	3.103e3	2.559e3	1.140	1.21	1.24	38.1	YES	NO	bb	bb	0.918
16	123478-HxCDF	34.76	4.190e3	3.287e3	1.166	1.27	1.24	67.1	YES	NO	bd	dd	1.165
17	Total-hexafurans	34.60	5.456e2	3.981e2	1.141	1.37	1.24	9.4	YES	NO	bb	bd	0.154
18	Total-hexafurans	34.13	1.502e4	1.252e4	1.141	1.20	1.24	265.8	YES	NO	bb	bb	4.498
19	Total-hexafurans	33.81	3.661e2	3.068e2	1.141	1.19	1.24	6.7	YES	NO	bb	bb	0.110
20	Total-hexafurans	33.29	1.255e4	9.869e3	1.141	1.27	1.24	205.0	YES	NO	db	bb	3.662
21	123468-HXCDF	33.08	3.855e3	2.841e3	1.169	1.36	1.24	67.6	YES	NO	bd	bb	1.040
22	1234789-HpCDF	40.85	9.857e2	1.017e3	0.953	0.97	1.05	19.1	YES	NO	bb	bb	0.634
23	Total-heptafurans	39.29	3.068e4	3.184e4	0.978	0.96	1.05	648.8	YES	NO	bd	bd	21.237
24	1234678-HpCDF	38.65	1.072e4	1.105e4	1.003	0.97	1.05	234.2	YES	NO	bb	bd	8.025
25	OCDF	45.07	2.857e4	3.222e4	0.778	0.89	0.89	491.3	YES	NO	bb	bb	21.970
26	Total-penta1	27.05	8.319e3	5.550e3		1.50	1.55	182.2	YES	NO	db	db	3.053

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TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.44	8.236e2	9.473e2	1.024	0.87	0.77	8.6	YES	NO	bd	bd	0.357
2	Total-tetradioxins	23.66	5.895e2	6.749e2	1.024	0.87	0.77	8.3	YES	NO	bb	bd	0.255

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.77	2.903e2	1.769e2	1.184	1.64	1.55	6.2	YES	NO	bb	bb	0.105
2	Total-pentadioxins	29.98	9.829e2	5.932e2	1.502	1.66	1.55	17.5	YES	NO	dd	bd	0.280
3	Total-pentadioxins	29.76	6.602e2	4.596e2	1.502	1.44	1.55	13.6	YES	NO	bd	bb	0.199
4	Total-pentadioxins	29.15	3.641e2	2.647e2	1.502	1.38	1.55	10.3	YES	NO	bd	bb	0.112
5	12479-PECDD	28.69	1.128e3	7.394e2	2.301	1.53	1.55	20.7	YES	NO	db	db	0.216

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexadioxins	34.64	2.258e3	1.955e3	1.005	1.15	1.24	27.4	YES	NO	bd	bb	0.776
2	124679-HXCDD	33.86	1.165e4	9.893e3	1.115	1.18	1.24	133.1	YES	NO	bb	bb	3.834
3	123789-HxCDD	36.40	3.266e3	2.614e3	0.907	1.25	1.24	36.7	YES	NO	bb	bb	1.200
4	Total-hexadioxins	36.17	7.488e2	6.937e2	1.005	1.08	1.24	9.0	YES	NO	db	db	0.266
5	123678-HxCDD	36.02	4.732e3	3.841e3	1.001	1.23	1.24	57.7	YES	NO	dd	dd	1.485
6	123478-HxCDD	35.91	1.753e3	1.566e3	0.996	1.12	1.24	19.9	YES	NO	dd	bd	0.662

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234679-HPCDD	39.09	1.243e5	1.263e5	1.137	0.98	1.05	1986.8	YES	NO	bb	bb	53.743
2	1234678-HpCDD	40.13	9.159e4	8.517e4	1.039	1.08	1.05	1285.2	YES	NO	bd	bb	41.483

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:11:26 Pacific Daylight Time

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.44	8.236e2	9.473e2	1.024	0.87	0.77	8.6	YES	NO	bd	bd	0.357
2	Total-tetradioxins	23.66	5.895e2	6.749e2	1.024	0.87	0.77	8.3	YES	NO	bb	bd	0.255
3	12389-PECDD	31.77	2.903e2	1.769e2	1.184	1.64	1.55	6.2	YES	NO	bb	bb	0.105
4	Total-pentadioxins	29.98	9.829e2	5.932e2	1.502	1.66	1.55	17.5	YES	NO	dd	bd	0.280
5	Total-pentadioxins	29.76	6.602e2	4.596e2	1.502	1.44	1.55	13.6	YES	NO	bd	bb	0.199
6	Total-pentadioxins	29.15	3.641e2	2.647e2	1.502	1.38	1.55	10.3	YES	NO	bd	bb	0.112
7	12479-PECDD	28.69	1.128e3	7.394e2	2.301	1.53	1.55	20.7	YES	NO	db	db	0.216
8	Total-hexadioxins	34.64	2.258e3	1.955e3	1.005	1.15	1.24	27.4	YES	NO	bd	bb	0.776
9	124679-HXCDD	33.86	1.165e4	9.893e3	1.115	1.18	1.24	133.1	YES	NO	bb	bb	3.834
10	123789-HxCDD	36.40	3.266e3	2.614e3	0.907	1.25	1.24	36.7	YES	NO	bb	bb	1.200
11	Total-hexadioxins	36.17	7.488e2	6.937e2	1.005	1.08	1.24	9.0	YES	NO	db	db	0.266
12	123678-HxCDD	36.02	4.732e3	3.841e3	1.001	1.23	1.24	57.7	YES	NO	dd	dd	1.485
13	123478-HxCDD	35.91	1.753e3	1.566e3	0.996	1.12	1.24	19.9	YES	NO	dd	bd	0.662
14	1234679-HPCDD	39.09	1.243e5	1.263e5	1.137	0.98	1.05	1986.8	YES	NO	bb	bb	53.743
15	1234678-HpCDD	40.13	9.159e4	8.517e4	1.039	1.08	1.05	1285.2	YES	NO	bd	bb	41.483
16	OCDD	44.85	5.044e5	5.946e5	0.920	0.85	0.89	2869.6	YES	NO	bb	bb	335.817

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.39	3.517e2	4.885e2	0.727	0.72	0.77	3.6	YES	NO	db	dd	0.215
2	Total-tetrafurans	23.26	4.638e2	5.455e2	0.727	0.85	0.77	4.5	YES	NO	dd	dd	0.258
3	Total-tetrafurans	22.95	7.639e2	1.115e3	0.727	0.69	0.77	10.1	YES	NO	bd	bd	0.480
4	Total-tetrafurans	25.83	5.230e2	6.192e2	0.727	0.84	0.77	5.0	YES	NO	dd	db	0.292
5	2378-TCDF	25.62	6.627e2	9.040e2	0.702	0.73	0.77	7.6	YES	NO	bd	bd	0.415
6	Total-tetrafurans	24.71	8.428e2	1.254e3	0.727	0.67	0.77	9.4	YES	NO	bb	bb	0.535
7	Total-tetrafurans	24.52	5.530e2	6.406e2	0.727	0.86	0.77	6.3	YES	NO	db	db	0.305
8	Total-tetrafurans	24.36	1.549e3	2.187e3	0.727	0.71	0.77	10.7	YES	NO	bd	bd	0.954
9	Total-tetrafurans	24.01	3.369e2	4.293e2	0.727	0.78	0.77	4.6	YES	NO	db	db	0.196
10	Total-tetrafurans	23.73	5.017e2	6.439e2	0.727	0.78	0.77	6.4	YES	NO	dd	dd	0.292
11	Total-pentafurans	28.03	3.950e2	2.620e2	0.654	1.51	1.55	4.1	YES	NO	bb	bb	0.202
12	Total-pentafurans	29.99	6.877e2	4.685e2	0.654	1.47	1.55	11.7	YES	NO	dd	bb	0.355
13	Total-pentafurans	28.72	1.787e3	1.261e3	0.654	1.42	1.55	19.8	YES	NO	db	db	0.935
14	123789-HxCDF	36.77	5.431e2	4.914e2	1.137	1.11	1.24	9.8	YES	NO	bb	bd	0.208
15	234678-HxCDF	35.79	3.103e3	2.559e3	1.140	1.21	1.24	38.1	YES	NO	bb	bb	0.918
16	123478-HxCDF	34.76	4.190e3	3.287e3	1.166	1.27	1.24	67.1	YES	NO	bd	dd	1.165
17	Total-hexafurans	34.60	5.456e2	3.981e2	1.141	1.37	1.24	9.4	YES	NO	bb	bd	0.154
18	Total-hexafurans	34.13	1.502e4	1.252e4	1.141	1.20	1.24	265.8	YES	NO	bb	bb	4.498
19	Total-hexafurans	33.81	3.661e2	3.068e2	1.141	1.19	1.24	6.7	YES	NO	bb	bb	0.110
20	Total-hexafurans	33.29	1.255e4	9.869e3	1.141	1.27	1.24	205.0	YES	NO	db	bb	3.662
21	123468-HXCDF	33.08	3.855e3	2.841e3	1.169	1.36	1.24	67.6	YES	NO	bd	bb	1.040
22	1234789-HpCDF	40.85	9.857e2	1.017e3	0.953	0.97	1.05	19.1	YES	NO	bb	bb	0.634
23	Total-heptafurans	39.29	3.068e4	3.184e4	0.978	0.96	1.05	648.8	YES	NO	bd	bd	21.237
24	1234678-HpCDF	38.65	1.072e4	1.105e4	1.003	0.97	1.05	234.2	YES	NO	bb	bd	8.025
25	OCDF	45.07	2.857e4	3.222e4	0.778	0.89	0.89	491.3	YES	NO	bb	bb	21.970
26	Total-penta1	27.05	8.319e3	5.550e3		1.50	1.55	182.2	YES	NO	db	db	3.053
27	Total-tetradioxins	25.44	8.236e2	9.473e2	1.024	0.87	0.77	8.6	YES	NO	bd	bd	0.357
28	Total-tetradioxins	23.66	5.895e2	6.749e2	1.024	0.87	0.77	8.3	YES	NO	bb	bd	0.255
29	12389-PECDD	31.77	2.903e2	1.769e2	1.184	1.64	1.55	6.2	YES	NO	bb	bb	0.105
30	Total-pentadioxins	29.98	9.829e2	5.932e2	1.502	1.66	1.55	17.5	YES	NO	dd	bd	0.280
31	Total-pentadioxins	29.76	6.602e2	4.596e2	1.502	1.44	1.55	13.6	YES	NO	bd	bb	0.199
32	Total-pentadioxins	29.15	3.641e2	2.647e2	1.502	1.38	1.55	10.3	YES	NO	bd	bb	0.112
33	12479-PECDD	28.69	1.128e3	7.394e2	2.301	1.53	1.55	20.7	YES	NO	db	db	0.216
34	Total-hexadioxins	34.64	2.258e3	1.955e3	1.005	1.15	1.24	27.4	YES	NO	bd	bb	0.776
35	124679-HXCDD	33.86	1.165e4	9.893e3	1.115	1.18	1.24	133.1	YES	NO	bb	bb	3.834
36	123789-HxCDD	36.40	3.266e3	2.614e3	0.907	1.25	1.24	36.7	YES	NO	bb	bb	1.200
37	Total-hexadioxins	36.17	7.488e2	6.937e2	1.005	1.08	1.24	9.0	YES	NO	db	db	0.266

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	123678-HxCDD	36.02	4.732e3	3.841e3	1.001	1.23	1.24	57.7	YES	NO	dd	dd	1.485
39	123478-HxCDD	35.91	1.753e3	1.566e3	0.996	1.12	1.24	19.9	YES	NO	dd	bd	0.662
40	1234679-HPCDD	39.09	1.243e5	1.263e5	1.137	0.98	1.05	1986.8	YES	NO	bb	bb	53.743
41	1234678-HpCDD	40.13	9.159e4	8.517e4	1.039	1.08	1.05	1285.2	YES	NO	bd	bb	41.483
42	OCDD	44.85	5.044e5	5.946e5	0.920	0.85	0.89	2869.6	YES	NO	bb	bb	335.817

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	25.86	1.362e7					12.7	YES		bb		
2	FUNCTION1 PFK	21.47	7.749e6					22.3	YES		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.93	4.790e4					4.2	YES		bb		0.000
2	FUNCTION2 PFK	29.62	5.932e5					1.7	NO		bb		0.000
3	FUNCTION2 PFK	29.19	1.290e5					10.7	YES		db		0.000
4	FUNCTION2 PFK	29.02	5.262e5					13.8	YES		dd		0.000
5	FUNCTION2 PFK	28.90	1.392e5					8.0	YES		bd		0.000
6	FUNCTION2 PFK	32.25	2.187e5					7.1	YES		bb		0.000
7	FUNCTION2 PFK	32.05	3.439e5					12.5	YES		db		0.000
8	FUNCTION2 PFK	31.84	3.118e5					8.9	YES		bd		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.18	6.825e5					7.2	YES		dd		0.000
2	FUNCTION3 PFK	37.11	1.943e5					3.6	YES		dd		0.000
3	FUNCTION3 PFK	37.07	6.151e5					7.7	YES		dd		0.000
4	FUNCTION3 PFK	36.98	9.574e5					7.9	YES		dd		0.000
5	FUNCTION3 PFK	36.92	4.395e5					8.0	YES		dd		0.000
6	FUNCTION3 PFK	36.88	1.926e6					9.3	YES		bd		0.000
7	FUNCTION3 PFK	36.46	9.934e6					10.9	YES		db		0.000
8	FUNCTION3 PFK	35.96	2.086e6					6.2	YES		dd		0.000
9	FUNCTION3 PFK	35.55	1.295e5					1.8	NO		bd		0.000
10	FUNCTION3 PFK	35.43	3.638e5					1.9	NO		bb		0.000
11	FUNCTION3 PFK	34.41	4.375e5					1.1	NO		bb		0.000
12	FUNCTION3 PFK	33.62	3.941e4					0.6	NO		bb		0.000
13	FUNCTION3 PFK	37.27	1.244e6					5.0	YES		db		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.15	1.379e7					9.1	YES		db		
2	FUNCTION4 PFK	38.80	8.132e5					81.0	YES		dd		
3	FUNCTION4 PFK	38.77	2.786e6					83.0	YES		bd		
4	FUNCTION4 PFK	38.50	4.872e6					99.4	YES		db		
5	FUNCTION4 PFK	38.04	1.515e7					88.1	YES		bd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ID: BLB0228-SRM1, Name: 23031306, Date: 13-Mar-2023, Time: 14:30:11, Conditions: AUTOSPEC01, User: pk

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	24.71	1.050e2					2.2	NO		bb		0.000
2	FUNCTION1 HXCD...	23.60	1.132e2					2.0	NO		bb		0.000
3	FUNCTION1 HXCD...	22.61	8.189e1					1.5	NO		bb		0.000
4	FUNCTION1 HXCD...	21.75	1.196e2					1.8	NO		bb		0.000
5	FUNCTION1 HXCD...	21.68	9.112e1					2.1	NO		bb		0.000
6	FUNCTION1 HXCD...	21.30	7.313e1					2.6	NO		bb		0.000
7	FUNCTION1 HXCD...	21.11	1.058e2					2.3	NO		bb		0.000
8	FUNCTION1 HXCD...	26.24	9.643e1					1.8	NO		bb		0.000
9	FUNCTION1 HXCD...	25.96	1.173e2					2.4	NO		bb		0.000
10	FUNCTION1 HXCD...	25.76	6.204e2					16.9	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	30.42	7.875e1					2.5	NO		bb		0.000
2	FUNCTION2 HPCD...	28.79	7.348e1					2.1	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	37.01	1.315e2					2.3	NO		db		0.000
2	FUNCTION3 OCDPE	36.84	1.742e2					2.7	NO		bd		0.000
3	FUNCTION3 OCDPE	36.39	2.427e2					3.5	YES		bb		0.000
4	FUNCTION3 OCDPE	36.01	1.093e2					3.2	YES		bb		0.000
5	FUNCTION3 OCDPE	35.58	7.623e1					2.9	NO		db		0.000
6	FUNCTION3 OCDPE	35.56	9.361e1					3.1	YES		bd		0.000
7	FUNCTION3 OCDPE	34.73	1.123e2					2.2	NO		bb		0.000
8	FUNCTION3 OCDPE	34.53	9.056e1					2.3	NO		bb		0.000

ID: BLB0228-SRM1, Name: 23031306, Date: 13-Mar-2023, Time: 14:30:11, Conditions: AUTOSPEC01, User: pk

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	38.26	5.842e3					211.2	YES		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
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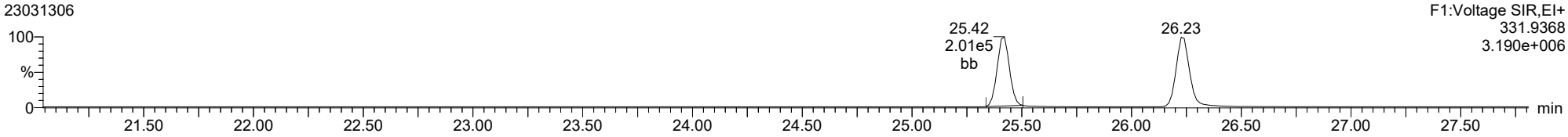

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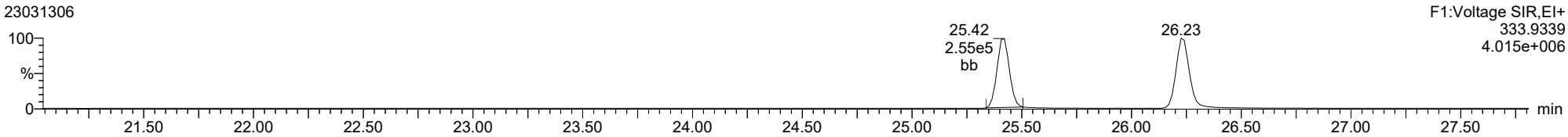

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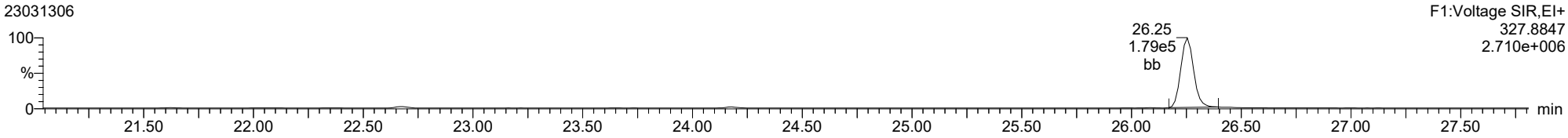

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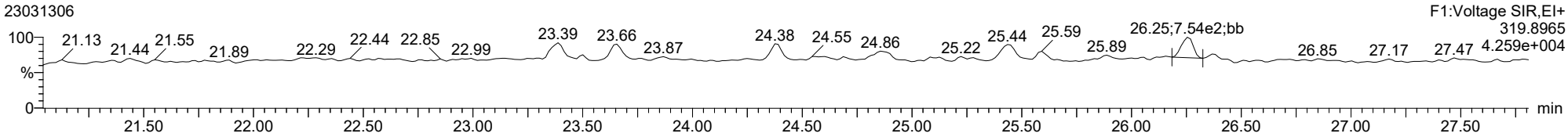

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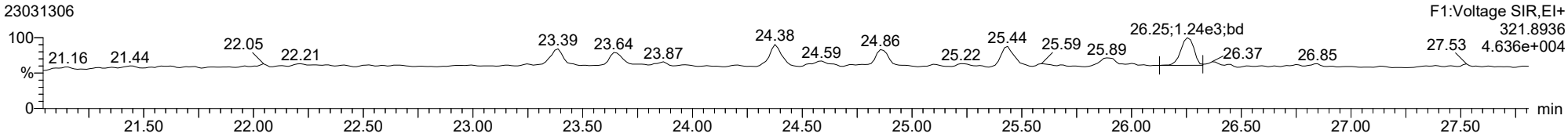

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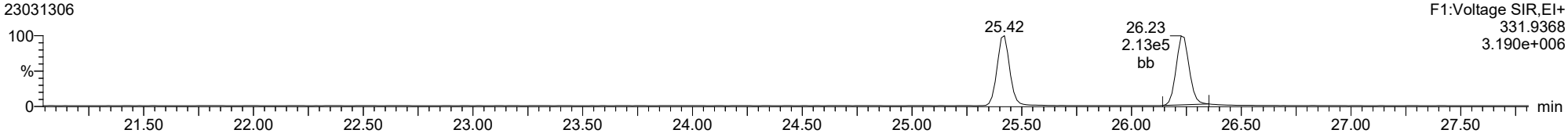

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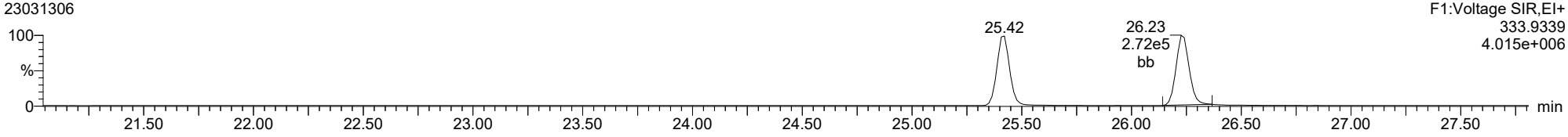

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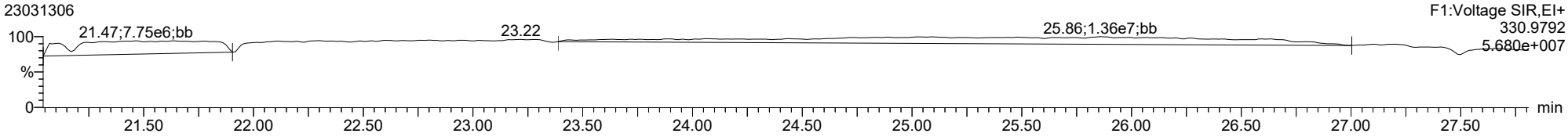

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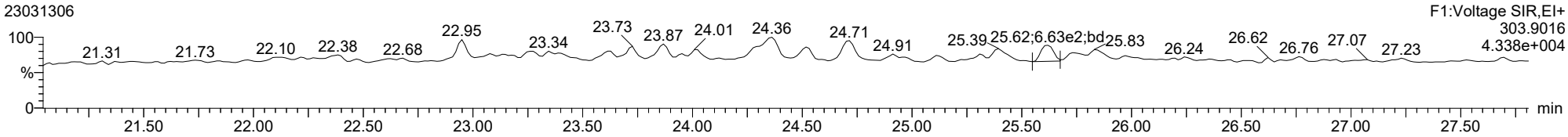

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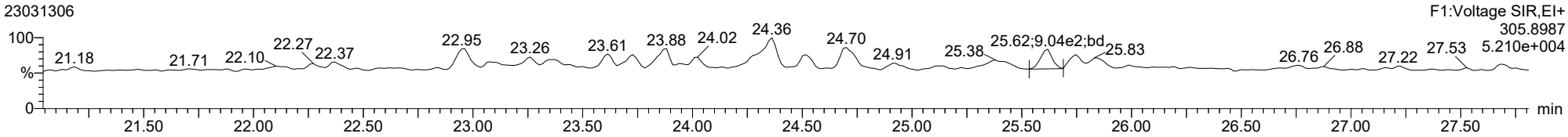

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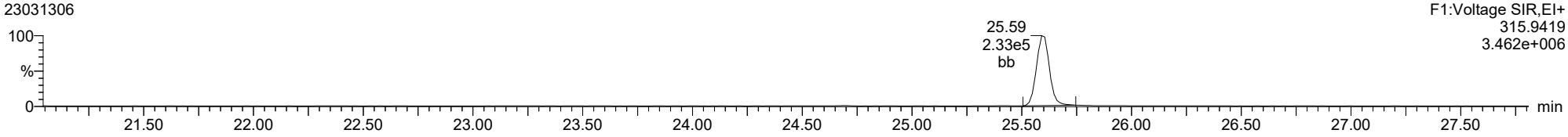

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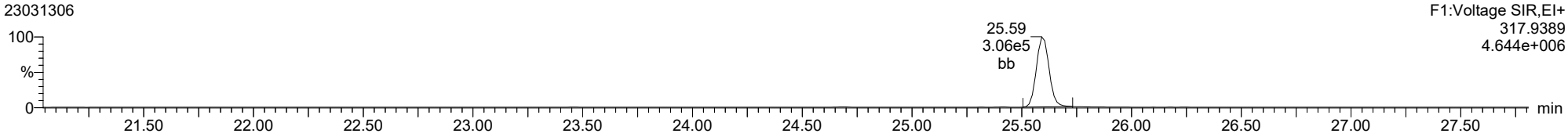

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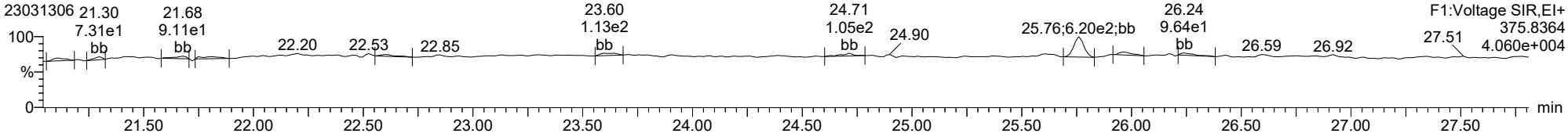

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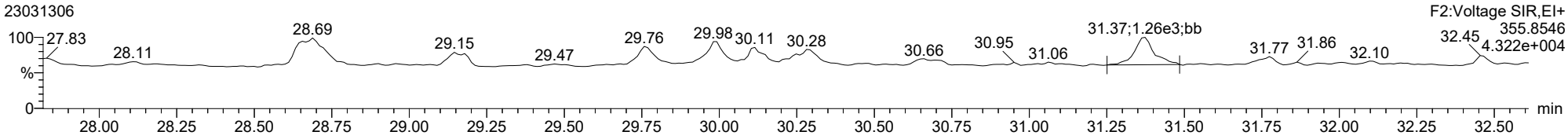

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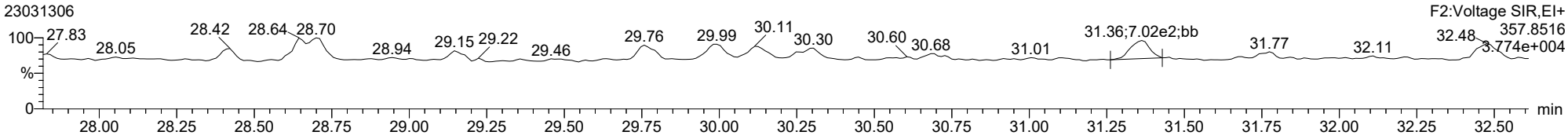

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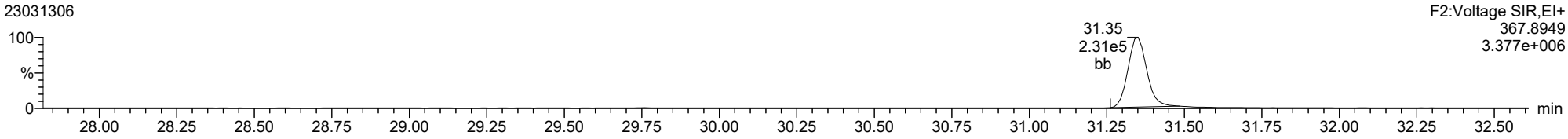

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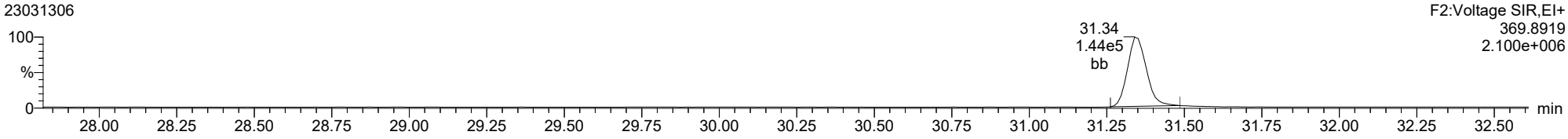

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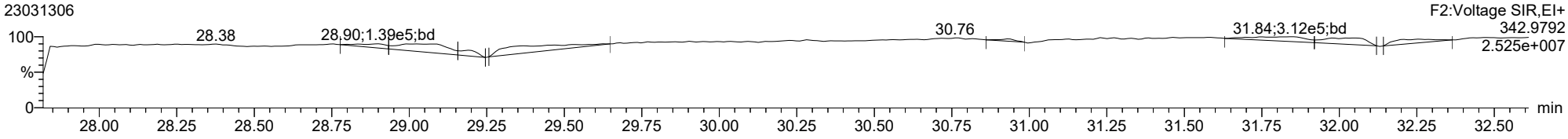

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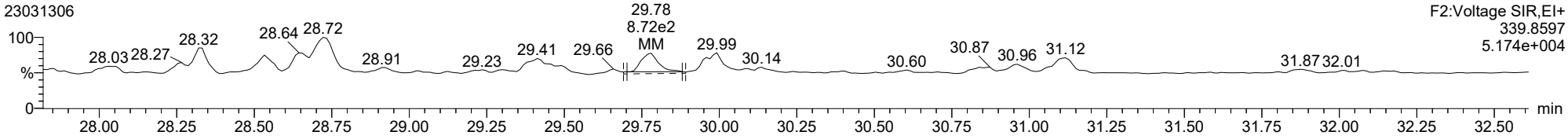

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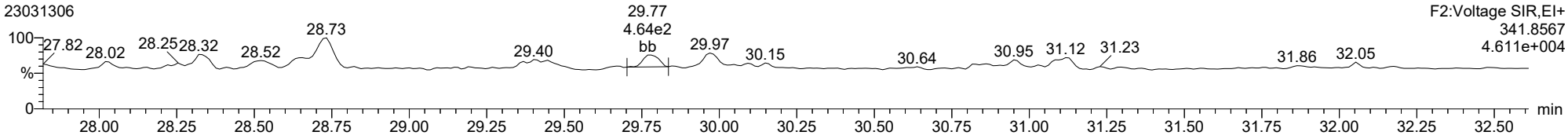

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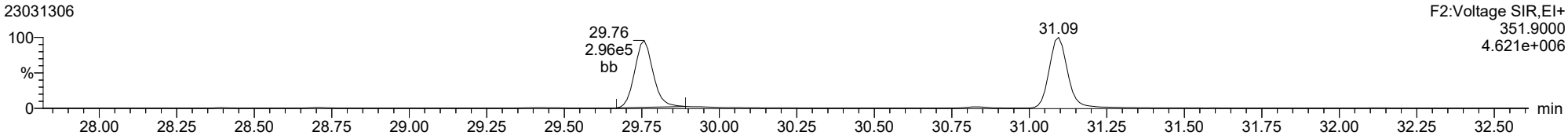

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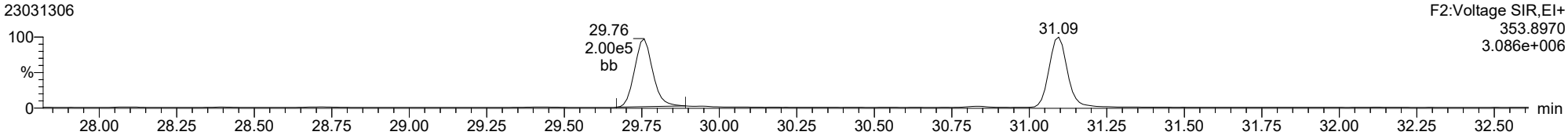
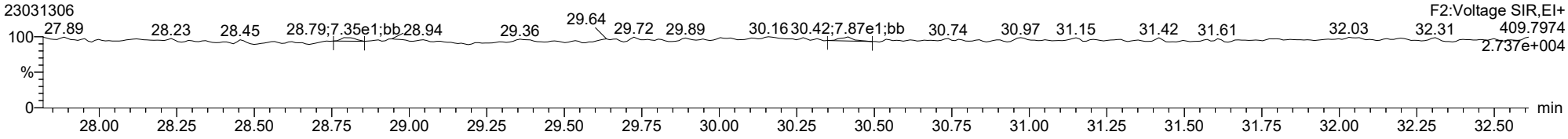


FUNCTION2 HPCDPE



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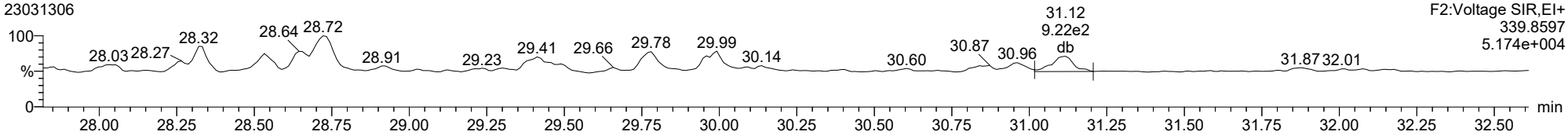

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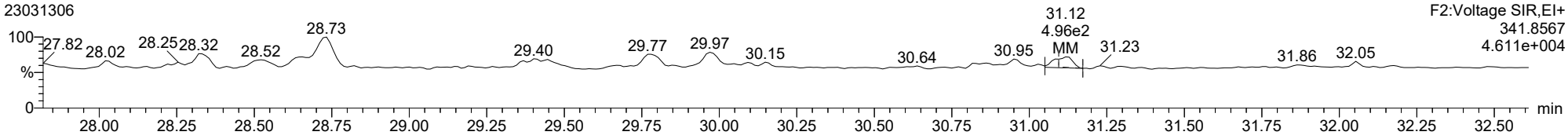

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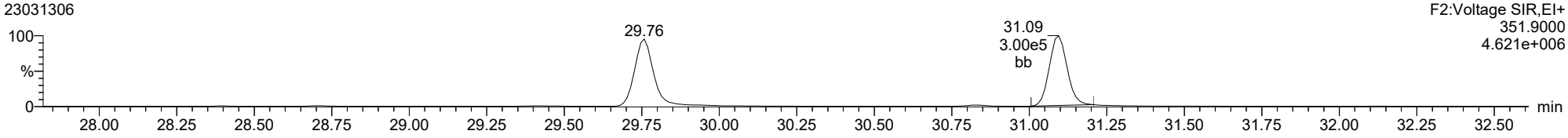

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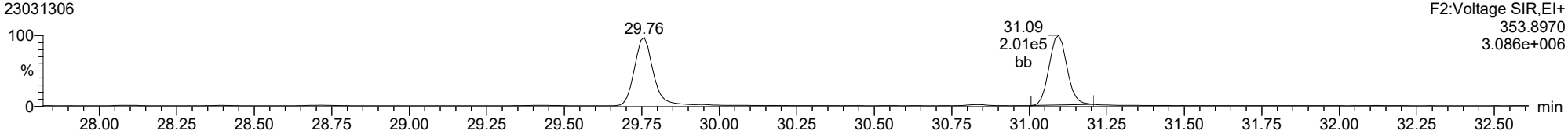

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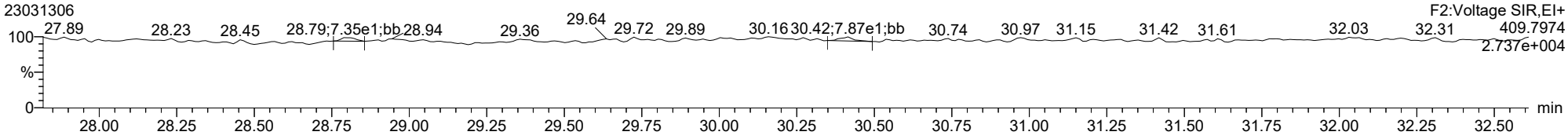

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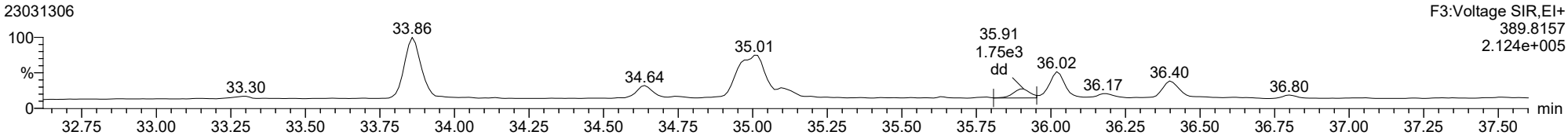

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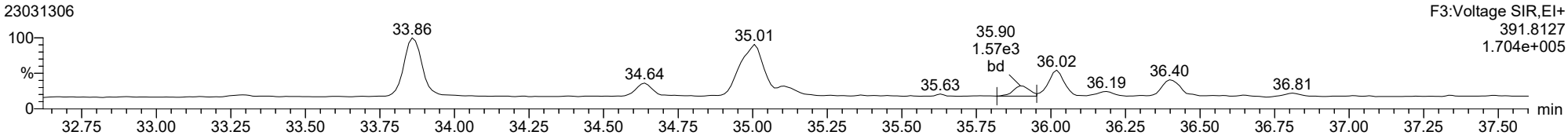

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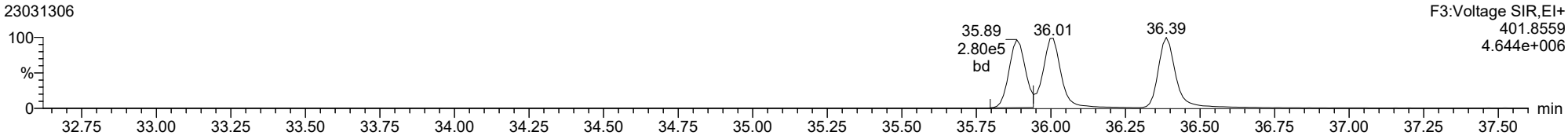

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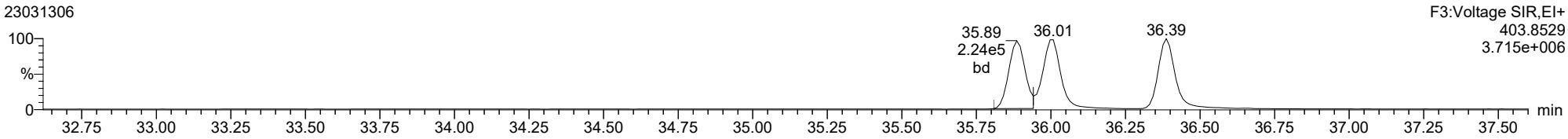

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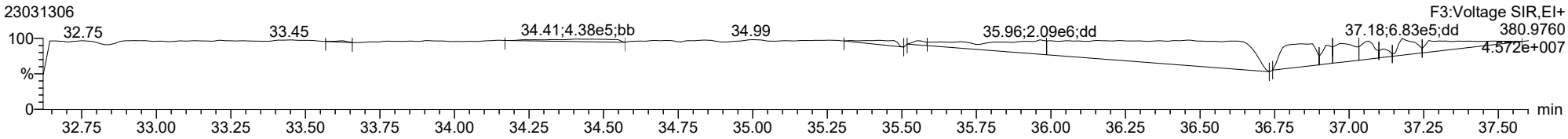

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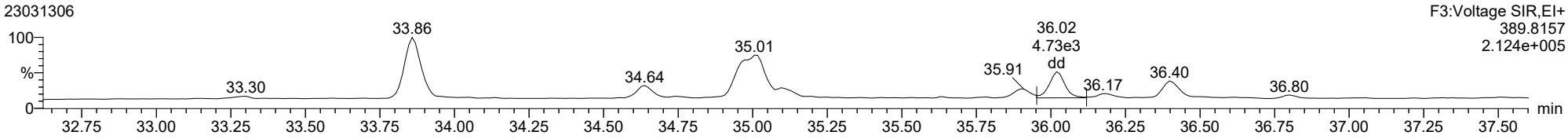
123678-HxCDD



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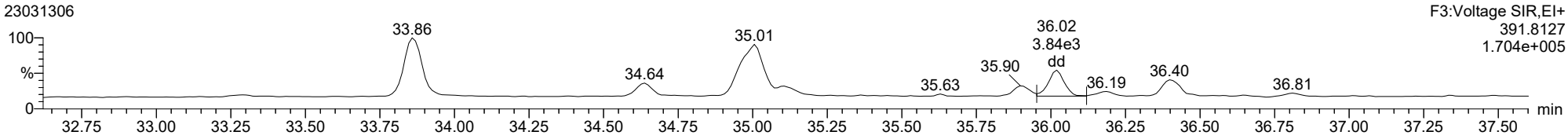

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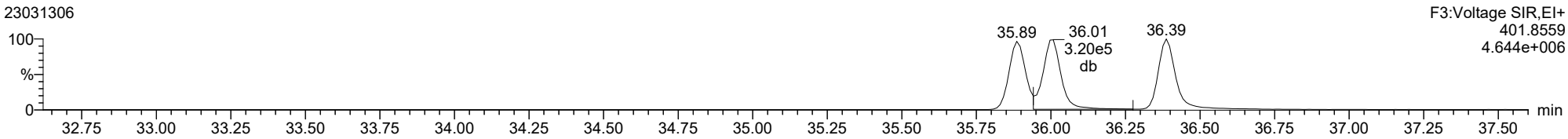

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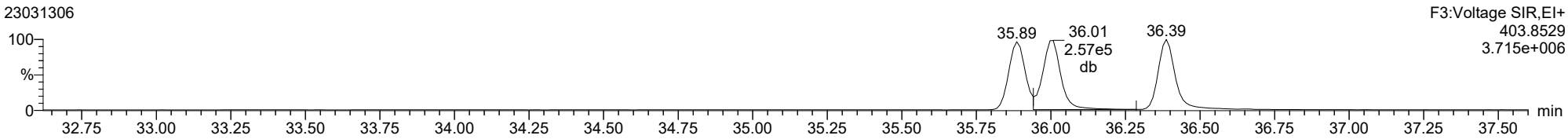

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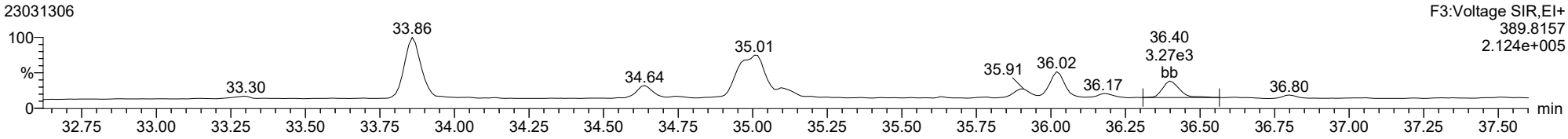

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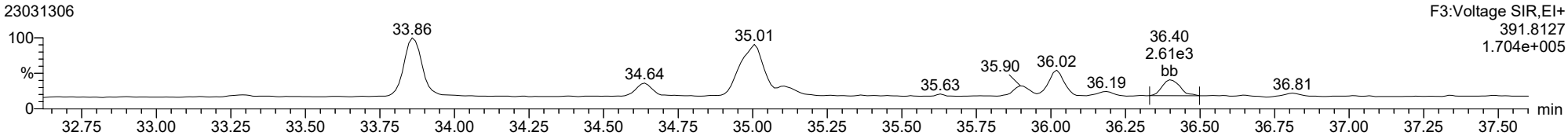

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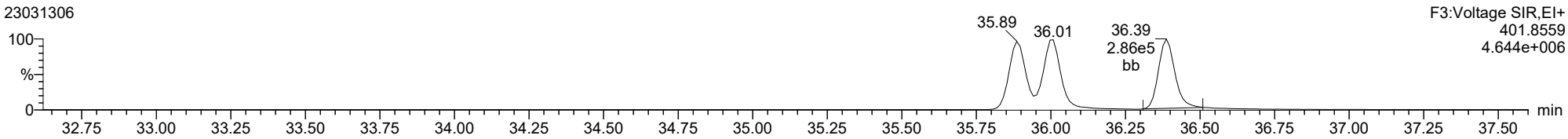

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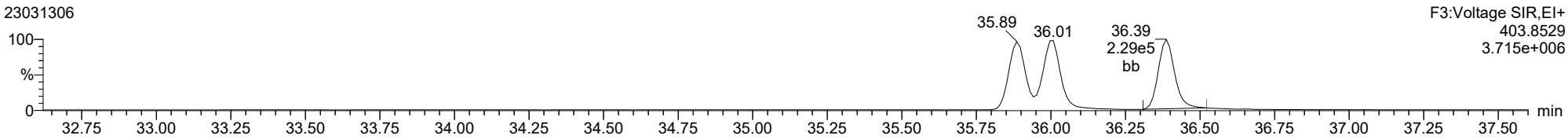

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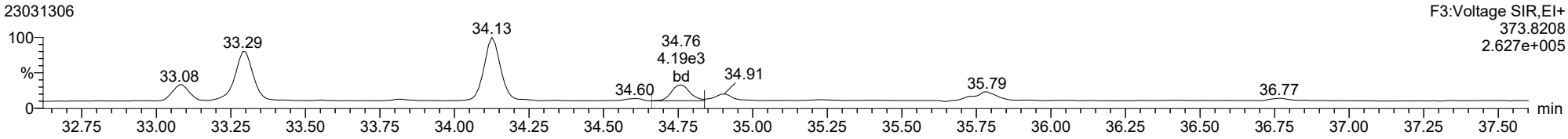

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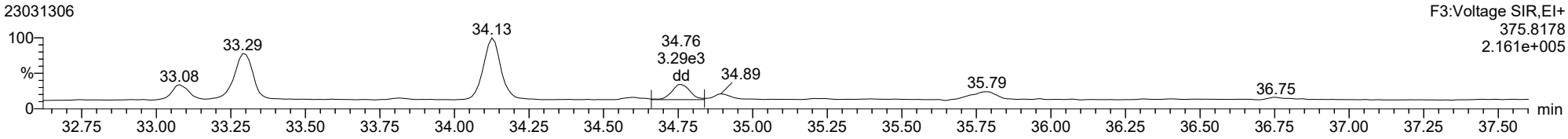

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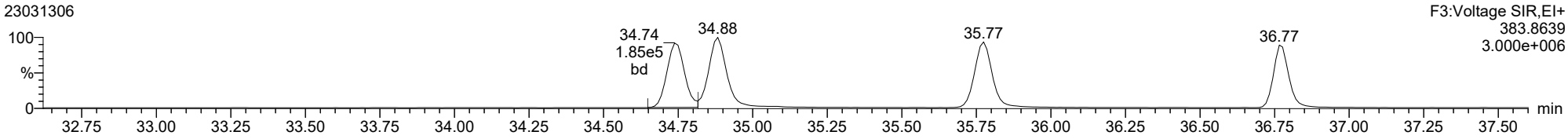

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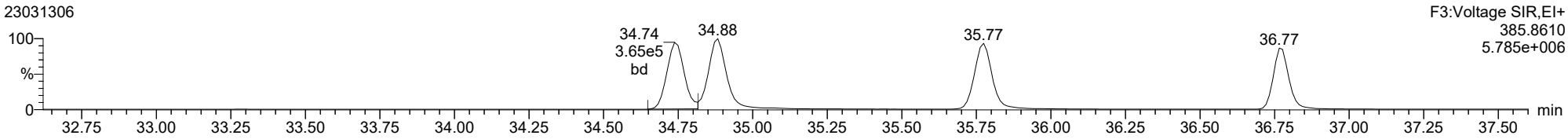

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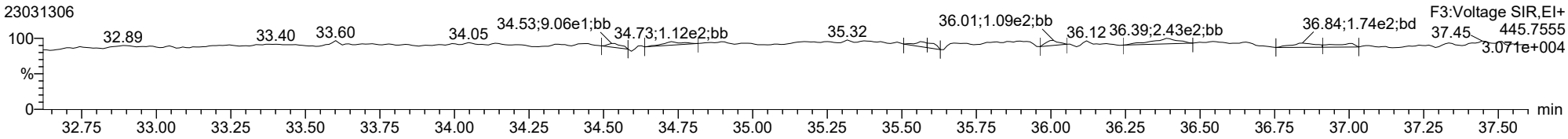

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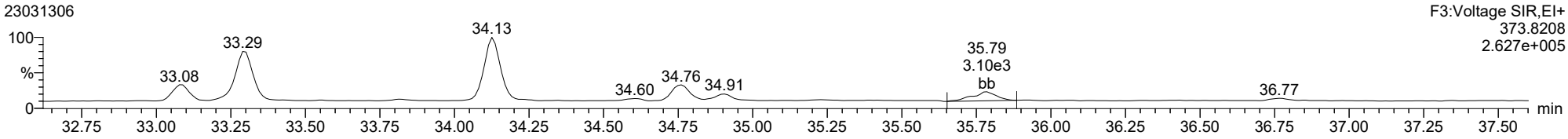

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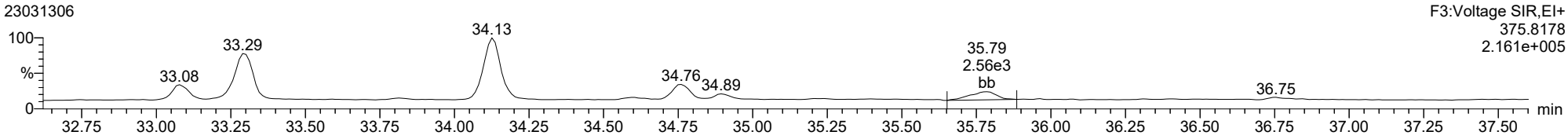

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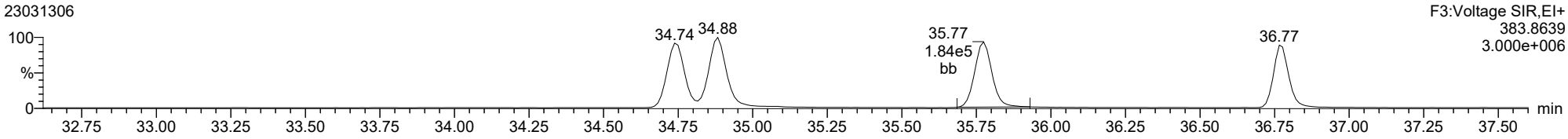

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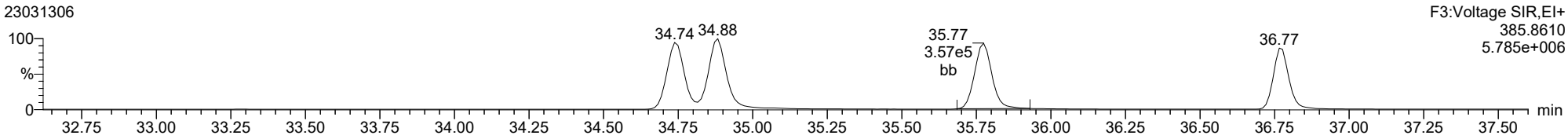

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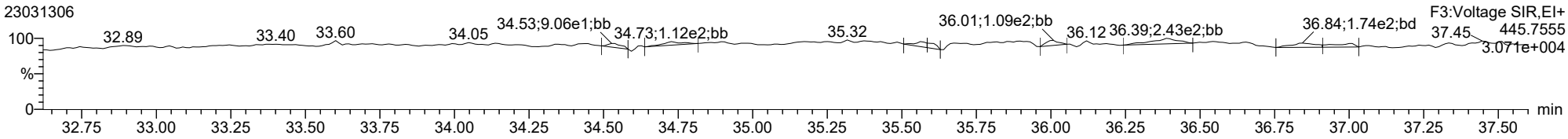

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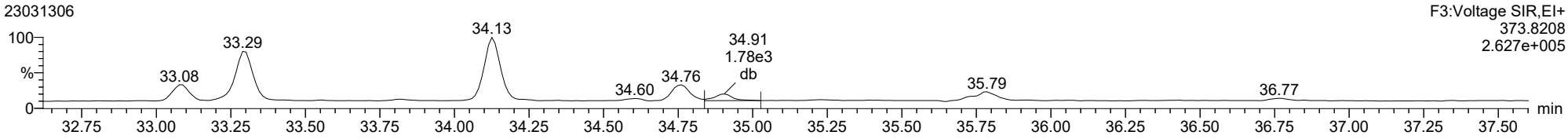

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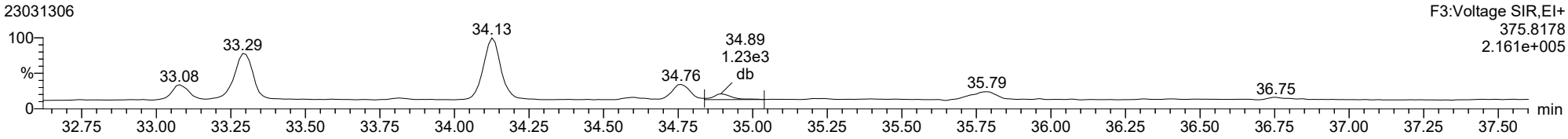

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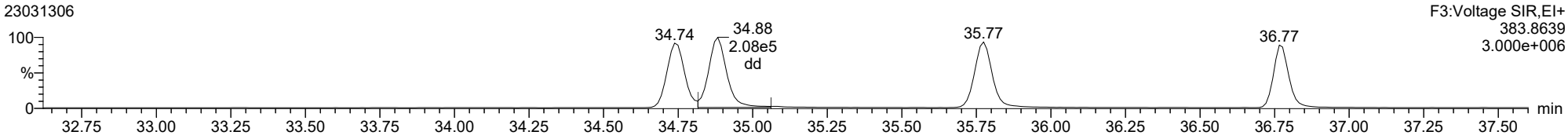

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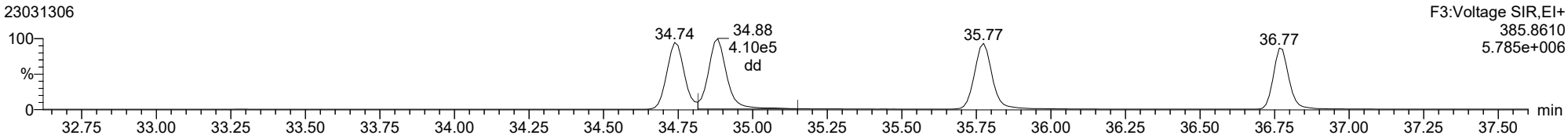

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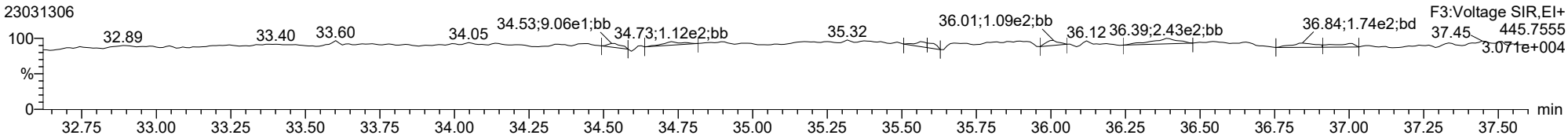

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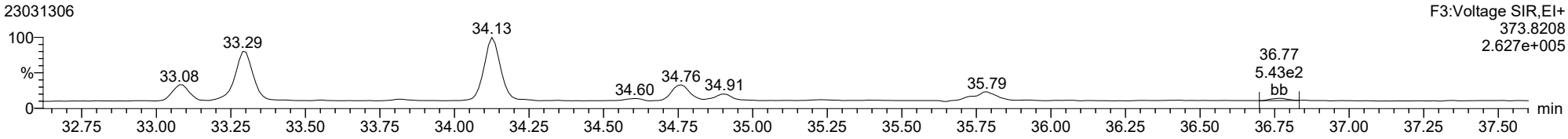

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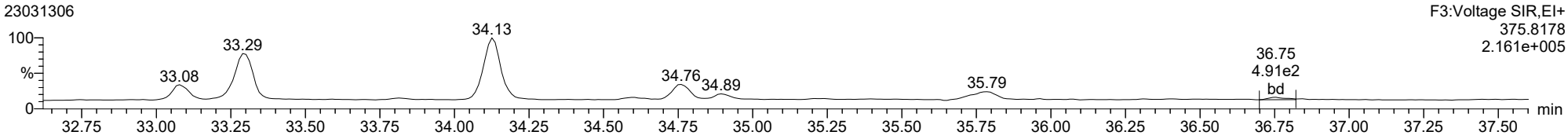

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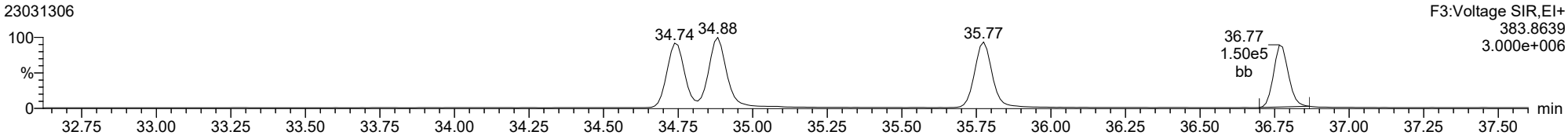

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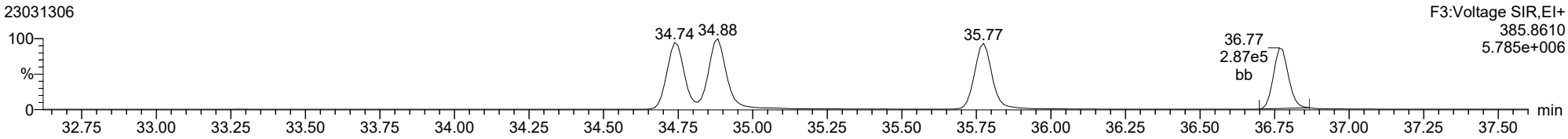

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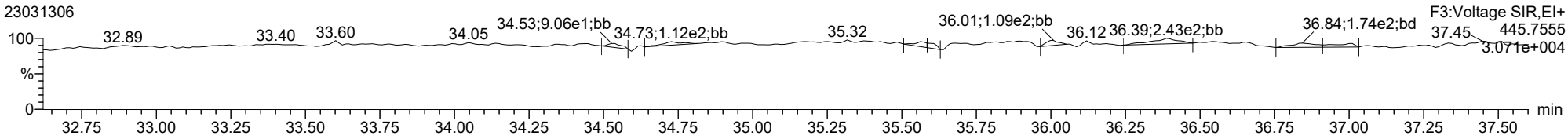

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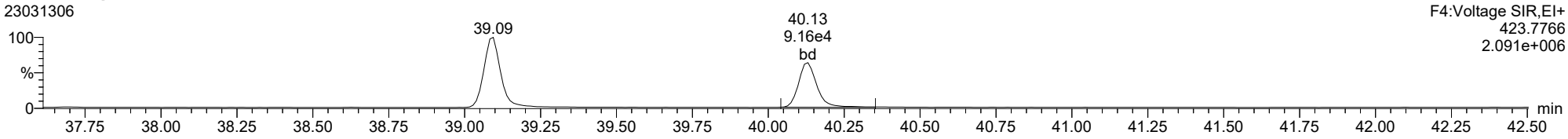

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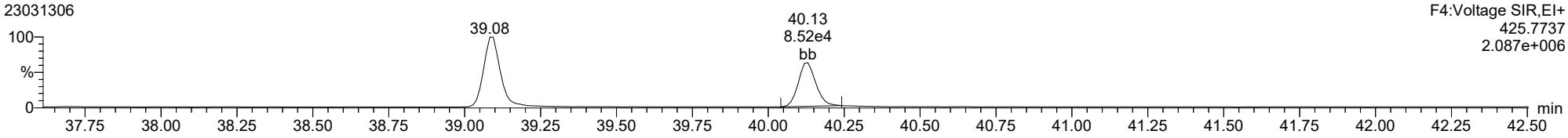

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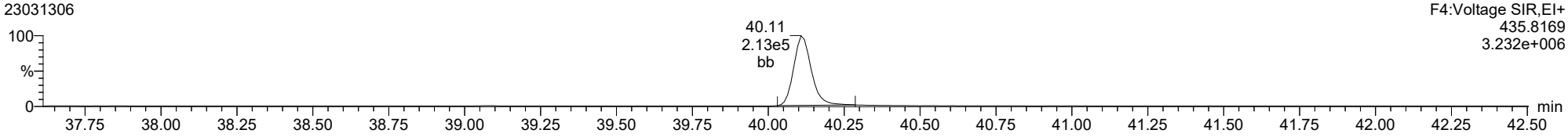

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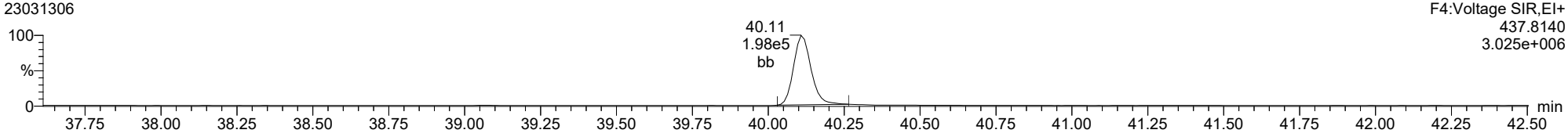

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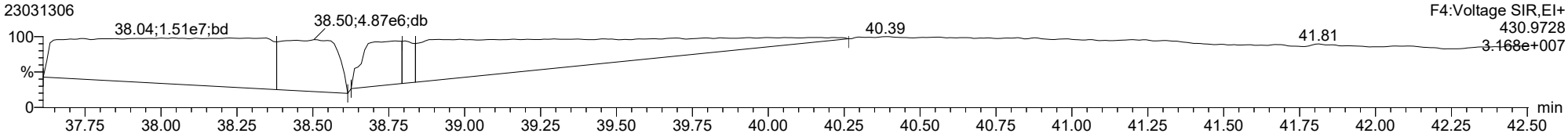

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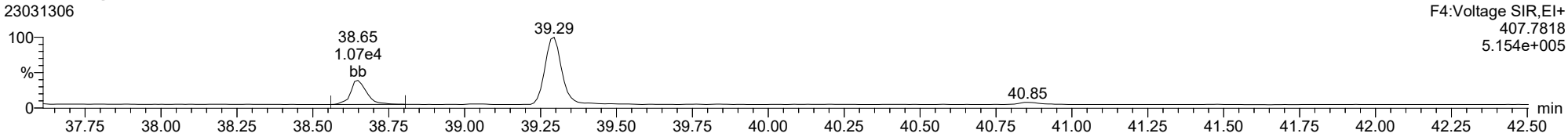

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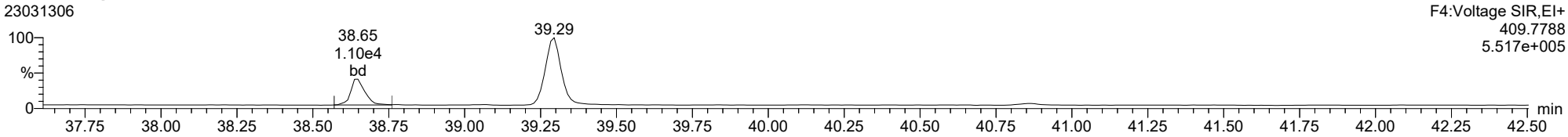

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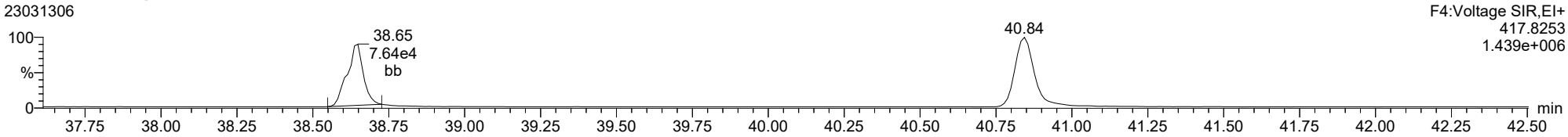

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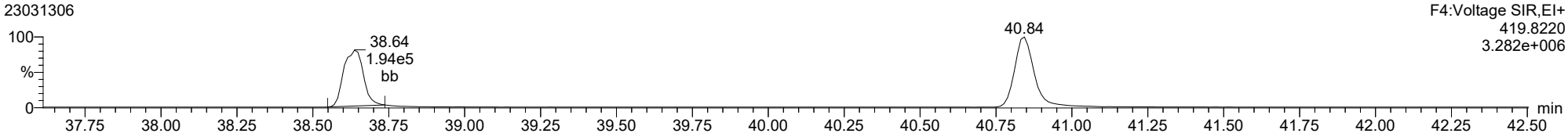

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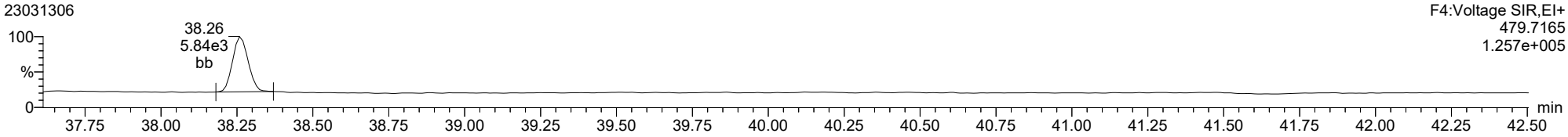

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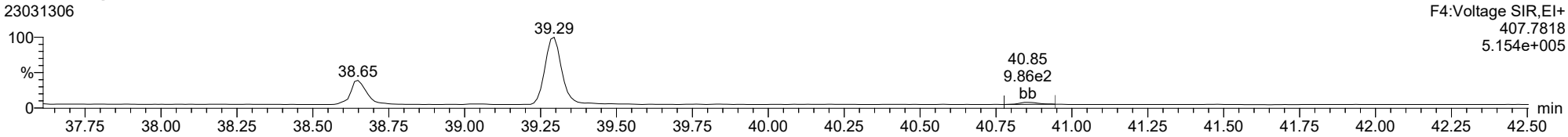

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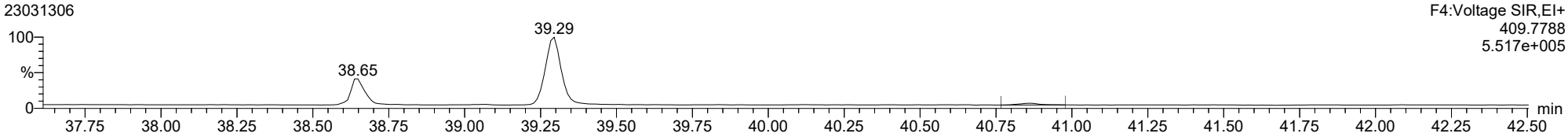

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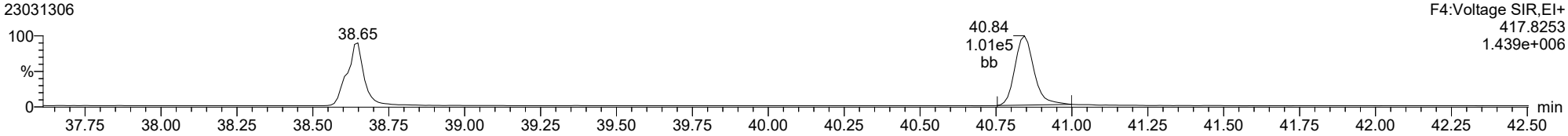

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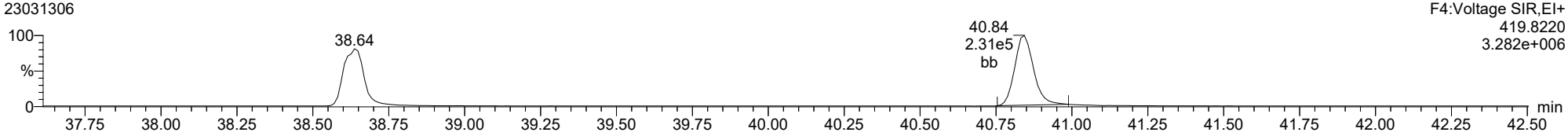

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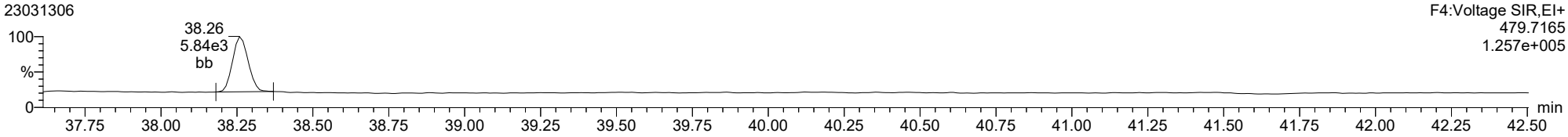

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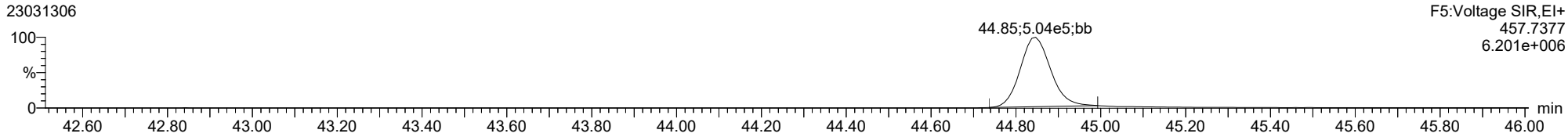
OCDD



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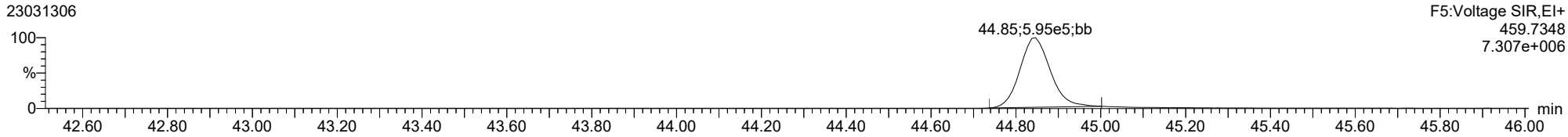

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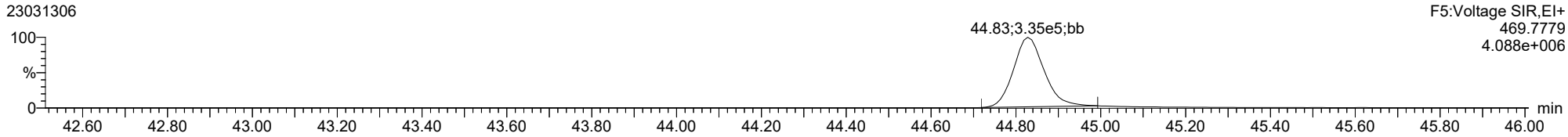

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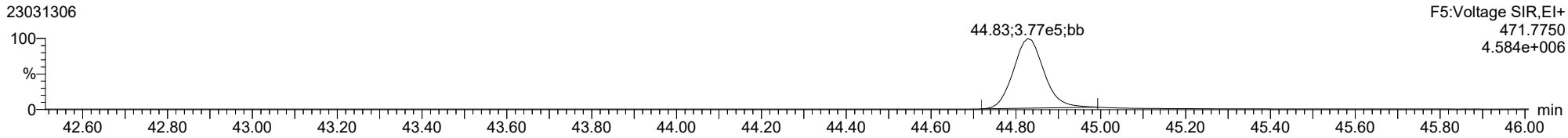
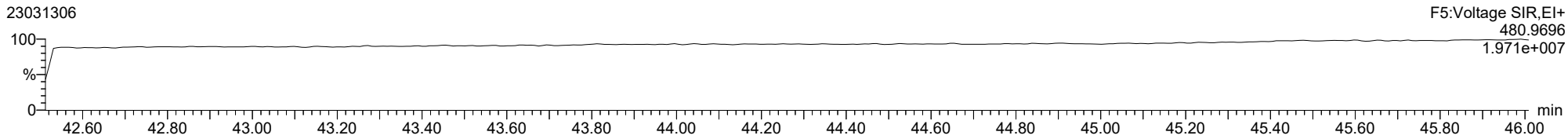


FUNCTION5 PFK



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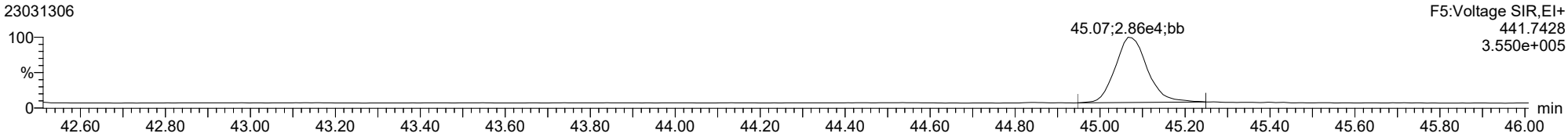

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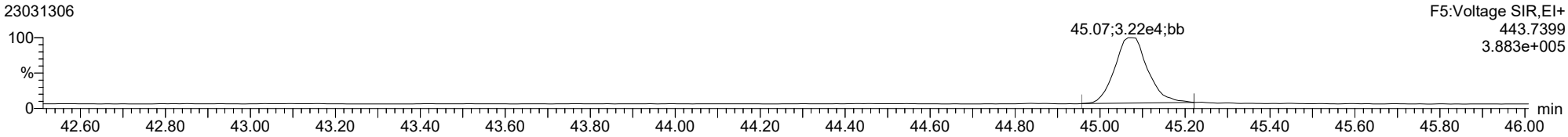
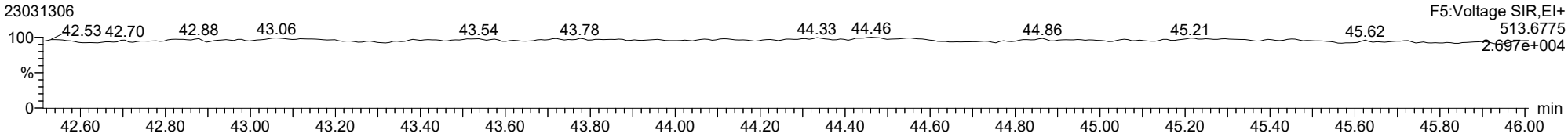


FUNCTION5 DCDPE



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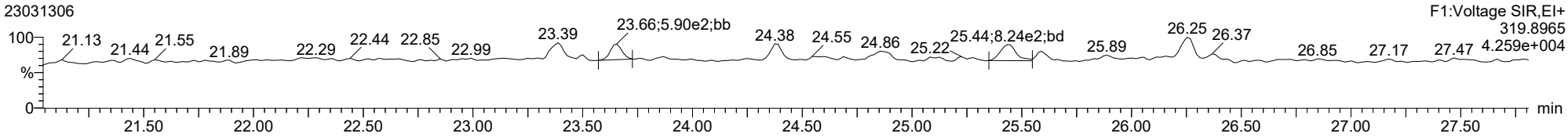
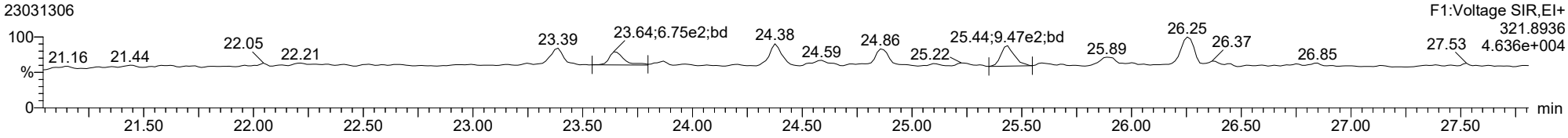
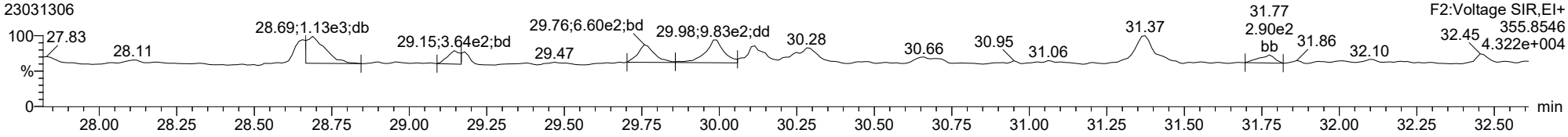
Total-tetradioxins



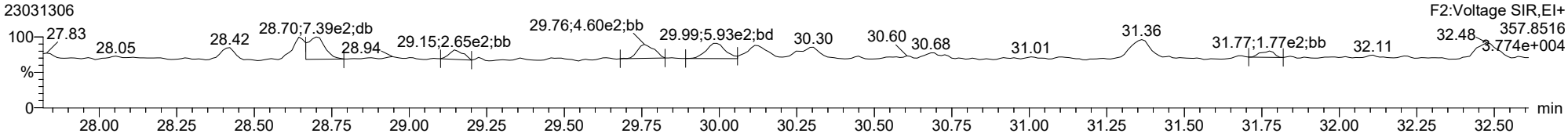
Total-tetradioxins



Total-pentadioxins

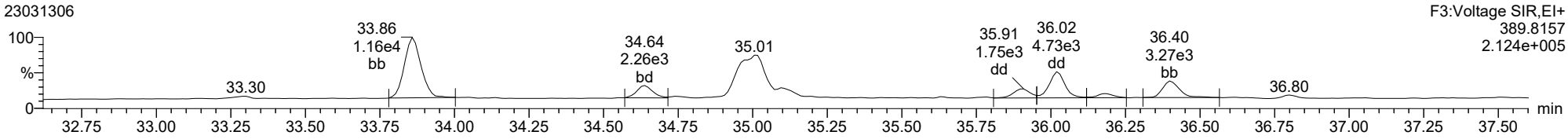


Total-pentadioxins

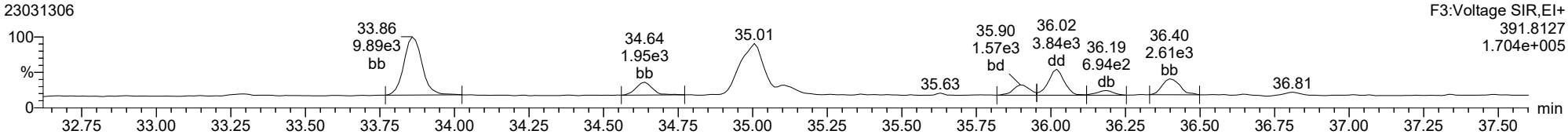


ID: BLB0228-SRM1, Name: 23031306, Date: 13-Mar-2023, Time: 14:30:11, Conditions: AUTOSPEC01, User: pk

Total-hexadioxins



Total-hexadioxins



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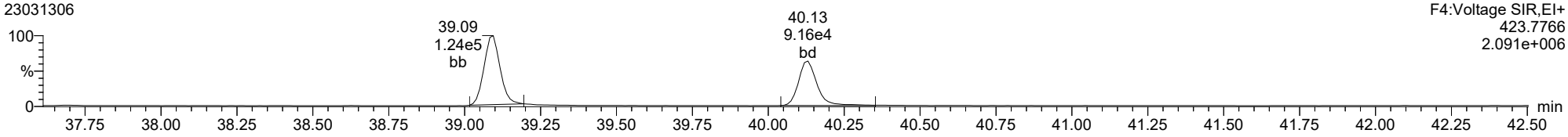
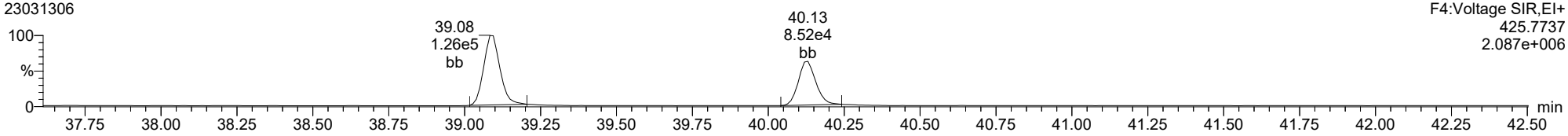
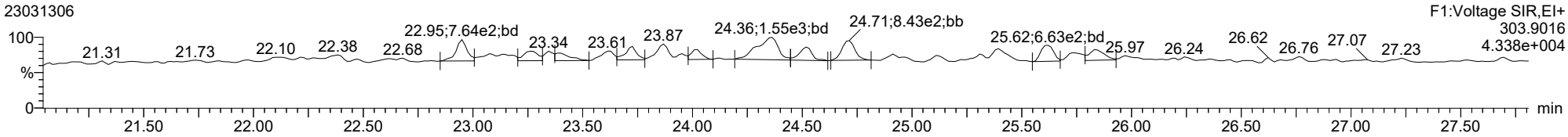


Total-heptadioxins

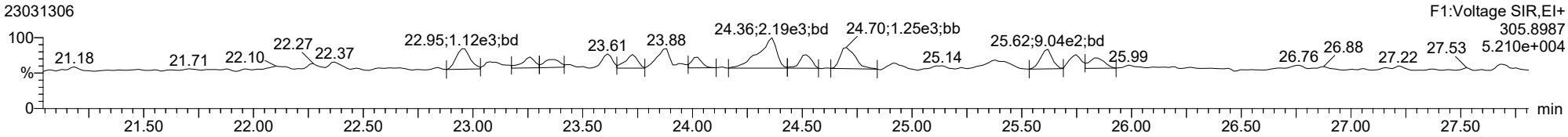


ID: BLB0228-SRM1, Name: 23031306, Date: 13-Mar-2023, Time: 14:30:11, Conditions: AUTOSPEC01, User: pk

Total-tetrafurans



Total-tetrafurans



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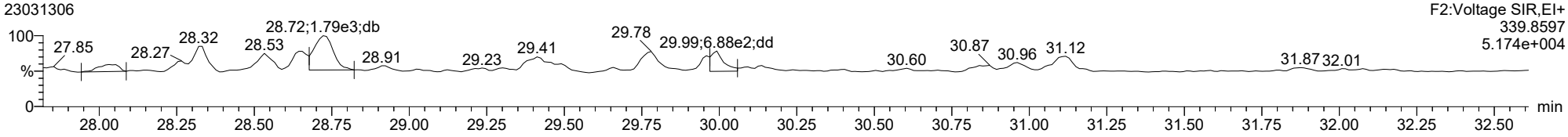

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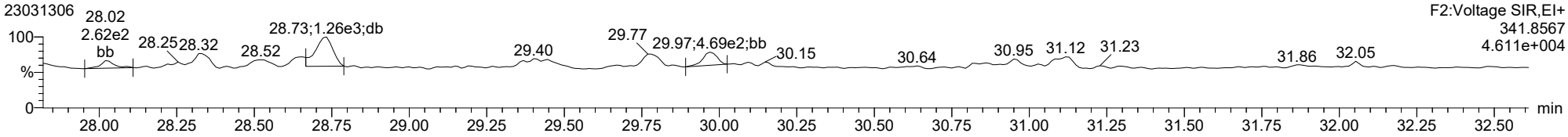

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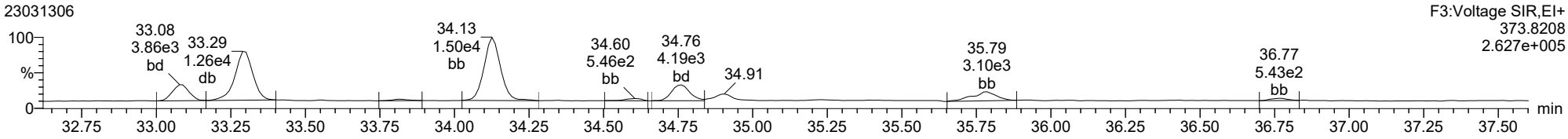
Total-hexafurans



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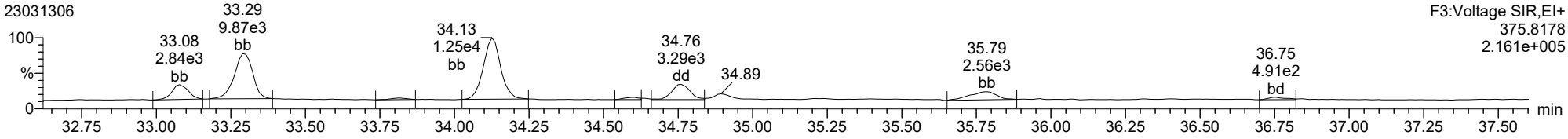

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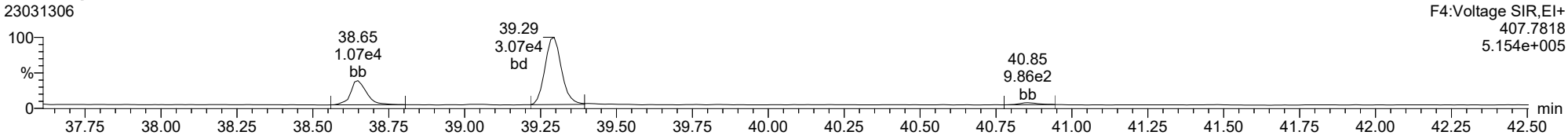

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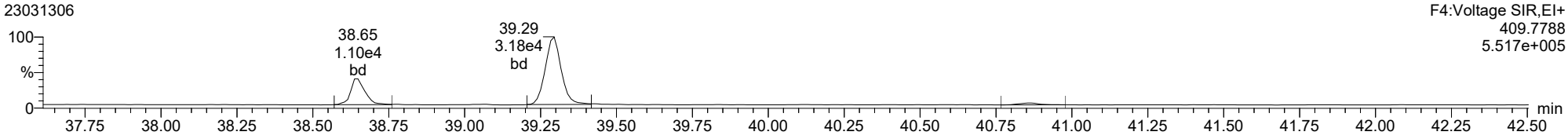

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00015	Instrument:	AUTOSPEC01
Calibration Date:	03/03/2023	Column (1):	RTX-Dioxin2

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
2,3,7,8-TCDF			0.5	0.6926363	2	0.6813224	10	0.7107923	40	0.719723	200	0.7031621
2,3,7,8-TCDD			0.5	1.116738	2	1.187915	10	1.134128	40	1.147736	200	1.156792
1,2,3,7,8-PeCDF	0.5	0.7064839	2.5	0.5889757	10	0.710829	50	0.6668491	200	0.6891968	1000	0.7130453
2,3,4,7,8-PeCDF	0.5	0.7979673	2.5	0.750268	10	0.8092124	50	0.7777683	200	0.7907891	1000	0.7910175
1,2,3,7,8-PeCDD	0.5	1.103364	2.5	0.959607	10	1.01992	50	1.019473	200	1.01999	1000	1.008719
1,2,3,4,7,8-HxCDF	0.5	1.217557	2.5	1.181192	10	1.149885	50	1.142227	200	1.15269	1000	1.152678
1,2,3,6,7,8-HxCDF	0.5	1.080855	2.5	1.053928	10	1.175308	50	1.102076	200	1.035098	1000	1.097184
2,3,4,6,7,8-HxCDF	0.5	1.045907	2.5	1.140857	10	1.199347	50	1.11691	200	1.197861	1000	1.13731
1,2,3,7,8,9-HxCDF	0.5	1.190403	2.5	1.119796	10	1.130872	50	1.147742	200	1.139146	1000	1.094601
1,2,3,4,7,8-HxCDD	0.5	1.079554	2.5	0.961704	10	0.973768	50	0.967789	200	0.9862736	1000	1.004325
1,2,3,6,7,8-HxCDD	0.5	0.9586431	2.5	0.9983677	10	0.9838912	50	1.030566	200	1.022077	1000	1.012084
1,2,3,7,8,9-HxCDD	0.5	0.930997	2.5	0.8854269	10	0.8092562	50	0.9267543	200	0.9251392	1000	0.9651099
1,2,3,4,6,7,8-HpCDF	0.5	0.934103	2.5	1.075239	10	1.011687	50	0.9661089	200	1.026311	1000	1.004508
1,2,3,4,7,8,9-HpCDF	0.5	0.8861422	2.5	0.8930411	10	1.006144	50	0.9387033	200	0.9934576	1000	1.001203
1,2,3,4,6,7,8-HpCDD	0.5	1.103772	2.5	0.971421	10	1.040117	50	1.038088	200	1.030577	1000	1.050103
OCDF	1	0.8118871	5	0.7091624	20	0.7657645	100	0.7266152	400	0.8162858	2000	0.8371317
OCDD			5	1.012935	20	0.8906655	100	0.878436	400	0.9061913	2000	0.9115405
13C12-2,3,7,8-TCDF	100	1.631571	100	1.588495	100	1.670669	100	1.492829	100	1.645068	100	1.692541
13C12-2,3,7,8-TCDD	100	1.103543	100	1.165686	100	1.103763	100	1.147762	100	1.181831	100	1.211872
13C12-1,2,3,7,8-PeCDF	100	1.373516	100	0.8861478	100	1.254697	100	1.157546	100	1.425701	100	1.345107
13C12-2,3,4,7,8-PeCDF	100	1.219579	100	0.8983995	100	1.113808	100	0.8611233	100	1.32733	100	1.286474
13C12-1,2,3,7,8-PeCDD	100	0.9177021	100	0.7002528	100	0.8365419	100	0.5962156	100	0.9821822	100	0.939983
13C12-1,2,3,4,7,8-HxCDF	100	1.152029	100	1.095885	100	1.513935	100	1.121285	100	1.094572	100	1.032122
13C12-1,2,3,6,7,8-HxCDF	100	1.353853	100	1.348693	100	1.689158	100	1.367383	100	1.37092	100	1.188788
13C12-2,3,4,6,7,8-HxCDF	100	1.092029	100	1.127896	100	1.240354	100	1.126074	100	1.087409	100	1.101774
13C12-1,2,3,7,8,9-HxCDF	100	0.8958406	100	0.9493947	100	0.9152119	100	0.9630403	100	0.8996667	100	0.9673701
13C12-1,2,3,4,7,8-HxCDD	100	0.9718531	100	0.9656819	100	1.113686	100	0.9864835	100	0.9766715	100	0.95586
13C12-1,2,3,6,7,8-HxCDD	100	1.184228	100	1.157253	100	1.278683	100	1.163318	100	1.111106	100	1.045546

INITIAL CALIBRATION DATA

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00015	Instrument:	AUTOSPEC01
Calibration Date:	03/03/2023	Column (1):	RTX-Dioxin2

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
13C12-1,2,3,4,6,7,8-HpCDF	100	0.7396157	100	0.9023055	100	1.063192	100	0.9589237	100	0.7622694	100	0.9449039
13C12-1,2,3,4,7,8,9-HpCDF	100	0.6488087	100	0.8119515	100	0.8176949	100	0.8667001	100	0.665459	100	0.8078955
13C12-1,2,3,4,6,7,8-HpCDD	100	0.724191	100	0.8737196	100	0.9555336	100	0.9094052	100	0.7229358	100	0.8549505
13C12-OCDD	200	0.701507	200	0.6312376	200	0.823691	200	0.8980531	200	0.7066522	200	0.8436876
37Cl4-2,3,7,8-TCDD	0.1	1.576039	0.5	1.320077	2	1.177166	10	1.132717	40	1.2366	200	1.284223
13C12-1,2,3,4-TCDD	100	1	100	1	100	1	100	1	100	1	100	1
13C12-1,2,3,7,8,9-HxCDD	100	1	100	1	100	1	100	1	100	1	100	1

INITIAL CALIBRATION DATA

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00015	Instrument:	AUTOSPEC01
Calibration Date:	03/03/2023	Column (1):	RTX-Dioxin2

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
2,3,7,8-TCDF	0.7015272	2.1			RSD ()	
2,3,7,8-TCDD	1.148662	2.3			RSD ()	
1,2,3,7,8-PeCDF	0.67923	7.0			RSD ()	
2,3,4,7,8-PeCDF	0.7861704	2.6			RSD ()	
1,2,3,7,8-PeCDD	1.021845	4.5			RSD ()	
1,2,3,4,7,8-HxCDF	1.166038	2.4			RSD ()	
1,2,3,6,7,8-HxCDF	1.090741	4.5			RSD ()	
2,3,4,6,7,8-HxCDF	1.139699	5.0			RSD ()	
1,2,3,7,8,9-HxCDF	1.137093	2.8			RSD ()	
1,2,3,4,7,8-HxCDD	0.9955689	4.4			RSD ()	
1,2,3,6,7,8-HxCDD	1.000938	2.7			RSD ()	
1,2,3,7,8,9-HxCDD	0.9071139	6.0			RSD ()	
1,2,3,4,6,7,8-HpCDF	1.002993	4.9			RSD ()	
1,2,3,4,7,8,9-HpCDF	0.9531152	5.8			RSD ()	
1,2,3,4,6,7,8-HpCDD	1.039013	4.1			RSD ()	
OCDF	0.7778078	6.7			RSD ()	
OCDD	0.9199537	5.8			RSD ()	
13C12-2,3,7,8-TCDF	1.620196	4.4			RSD ()	
13C12-2,3,7,8-TCDD	1.152409	3.8			RSD ()	
13C12-1,2,3,7,8-PeCDF	1.240452	15.9			RSD ()	
13C12-2,3,4,7,8-PeCDF	1.117786	17.7			RSD ()	
13C12-1,2,3,7,8-PeCDD	0.8288129	18.3			RSD ()	
13C12-1,2,3,4,7,8-HxCDF	1.168305	14.9			RSD ()	
13C12-1,2,3,6,7,8-HxCDF	1.386466	11.8			RSD ()	
13C12-2,3,4,6,7,8-HxCDF	1.129256	5.0			RSD ()	
13C12-1,2,3,7,8,9-HxCDF	0.9317541	3.4			RSD ()	
13C12-1,2,3,4,7,8-HxCDD	0.9950393	5.9			RSD ()	
13C12-1,2,3,6,7,8-HxCDD	1.156689	6.7			RSD ()	
13C12-1,2,3,4,6,7,8-HpCDF	0.8952017	13.8			RSD ()	
13C12-1,2,3,4,7,8,9-HpCDF	0.7697516	11.7			RSD ()	
13C12-1,2,3,4,6,7,8-HpCDD	0.8401226	11.5			RSD ()	

INITIAL CALIBRATION DATA

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00015	Instrument:	AUTOSPEC01
Calibration Date:	03/03/2023	Column (1):	RTX-Dioxin2

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
13C12-OCDD	0.7674714	13.4			RSD ()	
37Cl4-2,3,7,8-TCDD	1.287804	12.2			RSD ()	
13C12-1,2,3,4-TCDD	1	0.0			RSD ()	
13C12-1,2,3,7,8,9-HxCDD	1	0.0			RSD ()	

ANALYSIS SEQUENCE

SLC0045

Instrument: AUTOSPEC01 HRGCMS Column ID: K2310
Calibration ID: GC00015 Tune File: FEB0923_1-5
EM Voltage: 350 Resolution check times : 9:51, 18:18

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0045-ICV1	CS3W1	QC		1	K009821		03/03/2023 09:51	23030302	PK	
SLC0045-RES1	ISCW1	QC		2	L002084		03/03/2023 10:39	23030303	PK	
SLC0045-CAL1	CSLCW	QC		3	I005460		03/03/2023 11:28	23030304	PK	
SLC0045-CAL2	CS1CW	QC		4	I005456		03/03/2023 12:23	23030305	PK	
SLC0045-CAL3	CS2CW	QC		5	I005457		03/03/2023 13:16	23030306	PK	
SLC0045-CAL4	CS3CW	QC		6	K009821		03/03/2023 14:06	23030307	PK	
SLC0045-CAL5	CS4CW	QC		7	I005458		03/03/2023 14:59	23030308	PK	
SLC0045-CAL6	CS5CW	QC		8	I005459		03/03/2023 15:47	23030309	PK	
SLC0045-SCV1	ICVCW	QC		9	H008219		03/03/2023 16:36	23030310	PK	
SLC0045-CCV1	CS3V4	QC		10	K009821		03/03/2023 17:25	23030311	PK	
SLC0045-RES2	ISCV4	QC		11	L002084		03/03/2023 18:18	23030312	PK	

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 10:58:44 Pacific Standard Time

3/6/23 PK

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Calibrate		
Process Quantify		
Dataset Created		
Peak deleted	Sample:23030304, Compound:TD, RT:26.410	1
Peak deleted	Sample:23030304, Compound:OD, RT:44.990	1
Peak deleted	Sample:23030304, Compound:TF, RT:25.774	1
Pre modification peak	Sample:23030305, Compound:TF, RT:25.774	2
Peak modified	Sample:23030305, Compound:TF, RT:25.774	2
Pre modification peak	Sample:23030304, Compound:HPD, RT:40.261	1
Peak modified	Sample:23030304, Compound:HPD, RT:40.261	1
Peak deleted	Sample:23030308, Compound:PF, RT:32.328	5
Peak deleted	Sample:23030309, Compound:PF, RT:32.307	6
Peak deleted	Sample:23030309, Compound:HF, RT:33.220	6
Peak deleted	Sample:23030309, Compound:TD, RT:27.017	6
Peak deleted	Sample:23030309, Compound:PD, RT:31.995	6
Peak deleted	Sample:23030309, Compound:PD, RT:31.917	6
Peak deleted	Sample:23030308, Compound:HD, RT:34.000	5
Peak deleted	Sample:23030308, Compound:HPD, RT:39.225	5
Peak deleted	Sample:23030309, Compound:HPD, RT:39.214	6
Pre modification peak	Sample:23030305, Compound:OF, RT:45.237	2
Peak modified	Sample:23030305, Compound:OF, RT:45.237	2
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230303ICIH.qld'	

Dataset: T:\Autospec\Processed Data Batch\230303IHOP.qld
Last Altered: Monday, March 06, 2023 11:36:30 Pacific Standard Time
Printed: Monday, March 06, 2023 11:37:17 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.788	1.001	4.469e4	5.839e4	0.702	0.765	0.770	894	1638	6.87e5	9.09e5	769.3	554.8	NO	bb	bb	9.550
12378-PeCDF	29.956	1.001	2.355e5	1.540e5	0.679	1.529	1.550	2187	1572	3.61e6	2.40e6	1652.4	1526.9	NO	bb	bb	49.641
23478-PeCDF	31.293	1.001	2.214e5	1.482e5	0.786	1.494	1.550	2187	1572	3.41e6	2.30e6	1560.8	1464.8	NO	bb	bb	47.528
123478-HxCDF	34.914	1.001	2.600e5	2.102e5	1.166	1.237	1.240	1592	1910	4.13e6	3.31e6	2594.2	1730.9	NO	bd	bd	47.118
234678-HxCDF	35.917	1.001	2.733e5	2.175e5	1.140	1.257	1.240	1592	1910	4.33e6	3.47e6	2719.2	1818.9	NO	bb	bb	49.341
123678-HxCDF	35.048	1.000	2.727e5	2.151e5	1.091	1.268	1.240	1592	1910	4.23e6	3.33e6	2659.9	1743.3	NO	db	db	49.569
123789-HxCDF	36.941	1.000	2.420e5	1.912e5	1.137	1.266	1.240	1592	1910	3.95e6	3.13e6	2482.2	1637.3	NO	bb	bb	46.959
1234678-HpCDF	38.780	1.000	1.767e5	1.776e5	1.003	0.995	1.050	1849	2300	2.99e6	3.02e6	1618.0	1311.0	NO	bb	bb	47.490
1234789-HpCDF	41.019	1.000	1.595e5	1.575e5	0.953	1.013	1.050	1849	2300	2.36e6	2.33e6	1274.2	1012.6	NO	bb	bb	50.221
OCDF	45.246	1.005	2.326e5	2.612e5	0.778	0.891	0.890	910	1225	2.82e6	3.14e6	3100.2	2559.9	NO	bb	bb	88.591
2378-TCDD	26.438	1.001	5.709e4	7.150e4	1.149	0.798	0.770	1506	757	9.09e5	1.12e6	603.1	1485.0	NO	bb	bb	9.450
12378-PeCDD	31.549	1.001	2.156e5	1.424e5	1.022	1.514	1.550	2044	1419	3.32e6	2.17e6	1626.0	1530.4	NO	bb	bb	49.654
123478-HxCDD	36.028	1.000	2.225e5	1.815e5	0.996	1.226	1.240	1845	1377	3.65e6	2.93e6	1979.4	2130.4	NO	bd	bd	50.053
123678-HxCDD	36.150	1.000	2.361e5	1.995e5	1.001	1.184	1.240	1845	1377	3.83e6	3.15e6	2076.5	2285.7	NO	db	db	49.648
123789-HxCDD	36.529	1.011	2.267e5	1.883e5	0.907	1.204	1.240	1845	1377	3.65e6	3.02e6	1979.8	2191.3	NO	bb	bb	54.229
1234678-HpCDD	40.284	1.001	1.918e5	1.891e5	1.039	1.015	1.050	2026	1655	2.99e6	2.92e6	1477.4	1764.9	NO	bb	bb	47.619
OCDD	45.008	1.000	3.015e5	3.475e5	0.920	0.868	0.890	1418	1100	3.70e6	4.29e6	2606.9	3904.9	NO	bb	bb	98.432
13C-2378-TCDF	25.774	1.007	6.611e5	8.775e5	1.620	0.753	0.770	2458	1918	1.00e7	1.34e7	4080.0	6997.2	NO	bb	bb	94.015
13C-12378-PeCDF	29.934	1.169	6.937e5	4.618e5	1.240	1.502	1.550	2176	1857	1.07e7	7.10e6	4925.2	3826.5	NO	bb	bb	92.213
13C-23478-PeCDF	31.271	1.221	5.928e5	3.963e5	1.118	1.496	1.550	2176	1857	9.20e6	6.25e6	4229.1	3368.5	NO	bb	bb	87.601
13C-123478-HxCDF	34.891	0.955	2.871e5	5.687e5	1.168	0.505	0.510	1657	1593	4.56e6	9.04e6	2750.7	5674.1	NO	bd	bd	84.013
13C-123678-HxCDF	35.036	0.959	3.069e5	5.954e5	1.386	0.515	0.510	1657	1593	4.75e6	9.14e6	2868.0	5738.5	NO	db	db	74.642
13C-234678-HxCDF	35.894	0.983	2.954e5	5.775e5	1.129	0.512	0.510	1657	1593	4.85e6	9.48e6	2926.1	5951.0	NO	bb	bb	88.651
13C-123789-HxCDF	36.930	1.011	2.724e5	5.390e5	0.932	0.505	0.510	1657	1593	4.39e6	8.57e6	2648.2	5379.8	NO	bb	bb	99.871
13C-1234678-HpCDF	38.769	1.062	2.262e5	5.177e5	0.895	0.437	0.440	2036	2545	3.83e6	8.70e6	1881.8	3416.5	NO	bb	bb	95.295
13C-1234789-HpCDF	41.008	1.123	1.995e5	4.627e5	0.770	0.431	0.440	2036	2545	2.95e6	6.70e6	1450.8	2632.3	NO	bb	bb	98.667
13C-1234-TCDD	25.605	0.000	4.500e5	5.601e5	1.000	0.803	0.770	1910	1117	7.08e6	8.81e6	3705.2	7891.1	NO	bb	bb	100.000
13C-2378-TCDD	26.424	1.032	5.241e5	6.605e5	1.152	0.794	0.770	1910	1117	7.92e6	9.96e6	4144.8	8917.7	NO	bb	bb	101.762
13C-12378-PeCDD	31.527	1.231	4.348e5	2.708e5	0.829	1.606	1.550	951	872	6.72e6	4.16e6	7062.4	4771.1	NO	bb	bb	84.283
13C-123478-HxCDD	36.017	0.986	4.575e5	3.533e5	0.995	1.295	1.240	1714	1036	7.67e6	5.90e6	4475.1	5696.2	NO	bd	bd	93.458
13C-123678-HxCDD	36.139	0.990	4.929e5	3.835e5	1.157	1.285	1.240	1714	1036	7.72e6	6.07e6	4504.9	5859.4	NO	db	db	86.905
13C-1234678-HpCDD	40.262	1.103	3.870e5	3.828e5	0.840	1.011	1.050	1736	1260	5.92e6	5.62e6	3411.3	4462.2	NO	bb	bb	105.085
13C-OCDD	44.999	1.232	6.781e5	7.554e5	0.767	0.898	0.890	1440	1232	8.22e6	9.13e6	5710.3	7413.0	NO	bb	bb	214.218
13C-123789-HxCDD	36.518	0.000	4.889e5	3.830e5	1.000	1.277	1.240	1714	1036	7.91e6	6.13e6	4618.2	5918.8	NO	bb	bb	100.000
37CL-2378-TCDD	26.438	1.033	1.177e5		1.288			2053		1.80e6		877.6			bb		9.046

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Last Altered: Monday, March 06, 2023 11:36:30 Pacific Standard Time
Printed: Monday, March 06, 2023 11:37:17 Pacific Standard Time

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.285	0.865	4.825e4	6.619e4	0.802	0.729	0.770	894	1638	7.69e5	1.08e6	860.8	657.5	NO	bb	bb	9.280
1289-TCDF	27.286	1.059	4.233e4	5.922e4	0.678	0.715	0.770	894	1638	6.48e5	8.96e5	725.0	547.0	NO	db	db	9.735
13468-PECDF	27.145	0.907	4.529e5	2.964e5	1.246	1.528	1.550	639	866	7.07e6	4.64e6	11052.6	5356.5	NO	bb	bb	52.031
12389-PECDF	32.329	1.080	1.727e5	1.137e5	0.496	1.519	1.550	2187	1572	2.66e6	1.70e6	1217.2	1080.5	NO	bb	bb	49.938
123468-HXCDF	33.243	0.953	2.450e5	1.964e5	1.169	1.248	1.240	1592	1910	3.71e6	2.99e6	2333.1	1567.3	NO	bb	bb	44.113
1368-TCDD	23.571	0.892	5.082e4	6.674e4	1.015	0.761	0.770	1506	757	8.30e5	1.09e6	551.2	1438.0	NO	bb	bb	9.774
1289-TCDD	27.031	1.023	4.817e4	6.482e4	0.909	0.743	0.770	1506	757	7.39e5	9.76e5	490.7	1289.2	NO	bb	bb	10.496
12479-PECDD	28.831	0.914	4.117e5	2.743e5	2.301	1.501	1.550	2044	1419	3.99e6	2.64e6	1950.7	1862.6	NO	bb	bb	42.238
12389-PECDD	31.939	1.013	2.280e5	1.502e5	1.184	1.518	1.550	2044	1419	3.50e6	2.32e6	1711.4	1633.6	NO	bb	bb	45.288
124679-HXCDD	34.022	0.945	2.111e5	1.738e5	1.115	1.214	1.240	1845	1377	3.36e6	2.72e6	1819.4	1971.8	NO	bb	bb	42.563
1234679-HPCDD	39.236	0.975	2.063e5	2.043e5	1.137	1.010	1.050	2026	1655	3.38e6	3.38e6	1668.0	2041.4	NO	bb	bb	46.924
Total-tetrafurans			1.368e5		0.727			894		2.13e6							28.888
Total-penta1			4.529e5					639		7.07e6							52.031
Total-pentafurans			6.685e5		0.654			2187		1.03e7							156.333
Total-hexafurans			1.293e6		1.141			1592		2.04e7							237.100
Total-heptafurans			3.381e5		0.978			1849		5.38e6							98.217
Total-Furans			3.122e6		0.922			894		4.80e7							661.160
Total-tetradioxins			2.626e5		1.024			1506		3.74e6							49.711
Total-pentadioxins			8.563e5		1.502			2044		1.08e7							137.339
Total-hexadioxins			8.975e5		1.005			1845		1.45e7							196.701
Total-heptadioxins			3.982e5		1.088			2026		6.38e6							94.566
Total-Dioxins			2.716e6		1.130			1506		3.92e7							576.750
Total-TEQ			5.838e6					1506		8.72e7							1237.909
FUNCTION1 PFK			0.000e0					705807		0.00e0							
FUNCTION2 PFK			1.098e6					272509		2.65e6							0.000
FUNCTION3 PFK			8.030e5					419872		3.44e6							0.000
FUNCTION4 PFK			2.346e5					346452		6.90e6							
FUNCTION5 PFK			5.429e4					176842		2.44e6							
FUNCTION1 HXCD...			8.708e2					511		1.38e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			1.374e3					1181		2.70e4							0.000
FUNCTION3 OCDPE			4.232e2					570		6.10e3							0.000
FUNCTION4 NCDPE			7.938e2					683		4.57e3							0.000
FUNCTION5 DCDPE			0.000e0					526		0.00e0							

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Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.233e4	5.922e4	0.678	0.71	0.77	725.0	YES	NO	db	db	9.735
2	Total-tetrafurans	27.16	6.976e2	1.059e3	0.727	0.66	0.77	14.1	YES	NO	bd	bd	0.157
3	2378-TCDF	25.79	4.469e4	5.839e4	0.702	0.77	0.77	769.3	YES	NO	bb	bb	9.550
4	Total-tetrafurans	24.88	4.805e2	5.664e2	0.727	0.85	0.77	7.5	YES	NO	bb	bb	0.094
5	Total-tetrafurans	24.57	3.491e2	4.664e2	0.727	0.75	0.77	6.2	YES	NO	bd	bd	0.073
6	1368-TCDF	22.29	4.825e4	6.619e4	0.802	0.73	0.77	860.8	YES	NO	bb	bb	9.280

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.14	4.529e5	2.964e5	1.246	1.53	1.55	11052.6	YES	NO	bb	bb	52.031

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDF	29.96	2.355e5	1.540e5	0.679	1.53	1.55	1652.4	YES	NO	bb	bb	49.641
2	Total-pentafurans	28.81	3.891e4	2.579e4	0.654	1.51	1.55	273.1	YES	NO	bb	bb	9.226
3	12389-PECDF	32.33	1.727e5	1.137e5	0.496	1.52	1.55	1217.2	YES	NO	bb	bb	49.938
4	23478-PeCDF	31.29	2.214e5	1.482e5	0.786	1.49	1.55	1560.8	YES	NO	bb	bb	47.528

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.94	2.420e5	1.912e5	1.137	1.27	1.24	2482.2	YES	NO	bb	bb	46.959
2	234678-HxCDF	35.92	2.733e5	2.175e5	1.140	1.26	1.24	2719.2	YES	NO	bb	bb	49.341
3	123678-HxCDF	35.05	2.727e5	2.151e5	1.091	1.27	1.24	2659.9	YES	NO	db	db	49.569
4	123478-HxCDF	34.91	2.600e5	2.102e5	1.166	1.24	1.24	2594.2	YES	NO	bd	bd	47.118
5	123468-HXCDF	33.24	2.450e5	1.964e5	1.169	1.25	1.24	2333.1	YES	NO	bb	bb	44.113

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HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptafurans	41.38	1.097e2	1.037e2	0.978	1.06	1.05	1.8	NO	NO	bb	bb	0.031
2	1234789-HpCDF	41.02	1.595e5	1.575e5	0.953	1.01	1.05	1274.2	YES	NO	bb	bb	50.221
3	Total-heptafurans	39.45	1.654e3	1.420e3	0.978	1.17	1.05	14.3	YES	NO	bb	bb	0.447
4	Total-heptafurans	39.28	9.725e1	9.433e1	0.978	1.03	1.05	1.5	NO	NO	bb	bb	0.028
5	1234678-HpCDF	38.78	1.767e5	1.776e5	1.003	1.00	1.05	1618.0	YES	NO	bb	bb	47.490

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.233e4	5.922e4	0.678	0.71	0.77	725.0	YES	NO	db	db	9.735
2	Total-tetrafurans	27.16	6.976e2	1.059e3	0.727	0.66	0.77	14.1	YES	NO	bd	bd	0.157
3	2378-TCDF	25.79	4.469e4	5.839e4	0.702	0.77	0.77	769.3	YES	NO	bb	bb	9.550
4	Total-tetrafurans	24.88	4.805e2	5.664e2	0.727	0.85	0.77	7.5	YES	NO	bb	bb	0.094
5	Total-tetrafurans	24.57	3.491e2	4.664e2	0.727	0.75	0.77	6.2	YES	NO	bd	bd	0.073
6	1368-TCDF	22.29	4.825e4	6.619e4	0.802	0.73	0.77	860.8	YES	NO	bb	bb	9.280
7	12378-PeCDF	29.96	2.355e5	1.540e5	0.679	1.53	1.55	1652.4	YES	NO	bb	bb	49.641
8	Total-pentafurans	28.81	3.891e4	2.579e4	0.654	1.51	1.55	273.1	YES	NO	bb	bb	9.226
9	12389-PECDF	32.33	1.727e5	1.137e5	0.496	1.52	1.55	1217.2	YES	NO	bb	bb	49.938
10	23478-PeCDF	31.29	2.214e5	1.482e5	0.786	1.49	1.55	1560.8	YES	NO	bb	bb	47.528
11	123789-HxCDF	36.94	2.420e5	1.912e5	1.137	1.27	1.24	2482.2	YES	NO	bb	bb	46.959
12	234678-HxCDF	35.92	2.733e5	2.175e5	1.140	1.26	1.24	2719.2	YES	NO	bb	bb	49.341
13	123678-HxCDF	35.05	2.727e5	2.151e5	1.091	1.27	1.24	2659.9	YES	NO	db	db	49.569
14	123478-HxCDF	34.91	2.600e5	2.102e5	1.166	1.24	1.24	2594.2	YES	NO	bd	bd	47.118
15	123468-HXCDF	33.24	2.450e5	1.964e5	1.169	1.25	1.24	2333.1	YES	NO	bb	bb	44.113
16	Total-heptafurans	41.38	1.097e2	1.037e2	0.978	1.06	1.05	1.8	NO	NO	bb	bb	0.031
17	1234789-HpCDF	41.02	1.595e5	1.575e5	0.953	1.01	1.05	1274.2	YES	NO	bb	bb	50.221
18	Total-heptafurans	39.45	1.654e3	1.420e3	0.978	1.17	1.05	14.3	YES	NO	bb	bb	0.447
19	Total-heptafurans	39.28	9.725e1	9.433e1	0.978	1.03	1.05	1.5	NO	NO	bb	bb	0.028
20	1234678-HpCDF	38.78	1.767e5	1.776e5	1.003	1.00	1.05	1618.0	YES	NO	bb	bb	47.490
21	OCDF	45.25	2.326e5	2.612e5	0.778	0.89	0.89	3100.2	YES	NO	bb	bb	88.591
22	13468-PECDF	27.14	4.529e5	2.964e5	1.246	1.53	1.55	11052.6	YES	NO	bb	bb	52.031

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TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.57	5.082e4	6.674e4	1.015	0.76	0.77	551.2	YES	NO	bb	bb	9.774
2	1289-TCDD	27.03	4.817e4	6.482e4	0.909	0.74	0.77	490.7	YES	NO	bb	bb	10.496
3	2378-TCDD	26.44	5.709e4	7.150e4	1.149	0.80	0.77	603.1	YES	NO	bb	bb	9.450
4	Total-tetradioxins	26.11	8.149e4	1.045e5	1.024	0.78	0.77	583.1	YES	NO	bb	bb	15.330
5	Total-tetradioxins	25.62	2.499e4	3.156e4	1.024	0.79	0.77	257.1	YES	NO	bb	bb	4.660

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.94	2.280e5	1.502e5	1.184	1.52	1.55	1711.4	YES	NO	bb	bb	45.288
2	12378-PeCDD	31.55	2.156e5	1.424e5	1.022	1.51	1.55	1626.0	YES	NO	bb	bb	49.654
3	Total-pentadioxins	30.87	1.016e3	6.817e2	1.502	1.49	1.55	7.9	YES	NO	bb	bb	0.160
4	12479-PECDD	28.83	4.117e5	2.743e5	2.301	1.50	1.55	1950.7	YES	NO	bb	bb	42.238

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.53	2.267e5	1.883e5	0.907	1.20	1.24	1979.8	YES	NO	bb	bb	54.229
2	123678-HxCDD	36.15	2.361e5	1.995e5	1.001	1.18	1.24	2076.5	YES	NO	db	db	49.648
3	123478-HxCDD	36.03	2.225e5	1.815e5	0.996	1.23	1.24	1979.4	YES	NO	bd	bd	50.053
4	Total-hexadioxins	35.14	9.946e2	7.755e2	1.005	1.28	1.24	9.3	YES	NO	db	bd	0.209
5	124679-HXCDD	34.02	2.111e5	1.738e5	1.115	1.21	1.24	1819.4	YES	NO	bb	bb	42.563

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234679-HPCDD	39.24	2.063e5	2.043e5	1.137	1.01	1.05	1668.0	YES	NO	bb	bb	46.924
2	Total-heptadioxins	40.58	1.040e2	8.729e1	1.088	1.19	1.05	2.1	NO	NO	bb	bb	0.023
3	1234678-HpCDD	40.28	1.918e5	1.891e5	1.039	1.01	1.05	1477.4	YES	NO	bb	bb	47.619

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.57	5.082e4	6.674e4	1.015	0.76	0.77	551.2	YES	NO	bb	bb	9.774
2	1289-TCDD	27.03	4.817e4	6.482e4	0.909	0.74	0.77	490.7	YES	NO	bb	bb	10.496
3	2378-TCDD	26.44	5.709e4	7.150e4	1.149	0.80	0.77	603.1	YES	NO	bb	bb	9.450
4	Total-tetradioxins	26.11	8.149e4	1.045e5	1.024	0.78	0.77	583.1	YES	NO	bb	bb	15.330
5	Total-tetradioxins	25.62	2.499e4	3.156e4	1.024	0.79	0.77	257.1	YES	NO	bb	bb	4.660
6	12389-PECDD	31.94	2.280e5	1.502e5	1.184	1.52	1.55	1711.4	YES	NO	bb	bb	45.288
7	12378-PeCDD	31.55	2.156e5	1.424e5	1.022	1.51	1.55	1626.0	YES	NO	bb	bb	49.654
8	Total-pentadioxins	30.87	1.016e3	6.817e2	1.502	1.49	1.55	7.9	YES	NO	bb	bb	0.160
9	12479-PECDD	28.83	4.117e5	2.743e5	2.301	1.50	1.55	1950.7	YES	NO	bb	bb	42.238
10	123789-HxCDD	36.53	2.267e5	1.883e5	0.907	1.20	1.24	1979.8	YES	NO	bb	bb	54.229
11	123678-HxCDD	36.15	2.361e5	1.995e5	1.001	1.18	1.24	2076.5	YES	NO	db	db	49.648
12	123478-HxCDD	36.03	2.225e5	1.815e5	0.996	1.23	1.24	1979.4	YES	NO	bd	bd	50.053
13	Total-hexadioxins	35.14	9.946e2	7.755e2	1.005	1.28	1.24	9.3	YES	NO	db	bd	0.209
14	124679-HXCDD	34.02	2.111e5	1.738e5	1.115	1.21	1.24	1819.4	YES	NO	bb	bb	42.563
15	1234679-HPCDD	39.24	2.063e5	2.043e5	1.137	1.01	1.05	1668.0	YES	NO	bb	bb	46.924
16	Total-heptadioxins	40.58	1.040e2	8.729e1	1.088	1.19	1.05	2.1	NO	NO	bb	bb	0.023
17	1234678-HpCDD	40.28	1.918e5	1.891e5	1.039	1.01	1.05	1477.4	YES	NO	bb	bb	47.619
18	OCDD	45.01	3.015e5	3.475e5	0.920	0.87	0.89	2606.9	YES	NO	bb	bb	98.432

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.233e4	5.922e4	0.678	0.71	0.77	725.0	YES	NO	db	db	9.735
2	Total-tetrafurans	27.16	6.976e2	1.059e3	0.727	0.66	0.77	14.1	YES	NO	bd	bd	0.157
3	2378-TCDF	25.79	4.469e4	5.839e4	0.702	0.77	0.77	769.3	YES	NO	bb	bb	9.550
4	Total-tetrafurans	24.88	4.805e2	5.664e2	0.727	0.85	0.77	7.5	YES	NO	bb	bb	0.094
5	Total-tetrafurans	24.57	3.491e2	4.664e2	0.727	0.75	0.77	6.2	YES	NO	bd	bd	0.073
6	1368-TCDF	22.29	4.825e4	6.619e4	0.802	0.73	0.77	860.8	YES	NO	bb	bb	9.280
7	12378-PeCDF	29.96	2.355e5	1.540e5	0.679	1.53	1.55	1652.4	YES	NO	bb	bb	49.641
8	Total-pentafurans	28.81	3.891e4	2.579e4	0.654	1.51	1.55	273.1	YES	NO	bb	bb	9.226
9	12389-PECDF	32.33	1.727e5	1.137e5	0.496	1.52	1.55	1217.2	YES	NO	bb	bb	49.938
10	23478-PeCDF	31.29	2.214e5	1.482e5	0.786	1.49	1.55	1560.8	YES	NO	bb	bb	47.528
11	123789-HxCDF	36.94	2.420e5	1.912e5	1.137	1.27	1.24	2482.2	YES	NO	bb	bb	46.959
12	234678-HxCDF	35.92	2.733e5	2.175e5	1.140	1.26	1.24	2719.2	YES	NO	bb	bb	49.341
13	123678-HxCDF	35.05	2.727e5	2.151e5	1.091	1.27	1.24	2659.9	YES	NO	db	db	49.569
14	123478-HxCDF	34.91	2.600e5	2.102e5	1.166	1.24	1.24	2594.2	YES	NO	bd	bd	47.118
15	123468-HXCDF	33.24	2.450e5	1.964e5	1.169	1.25	1.24	2333.1	YES	NO	bb	bb	44.113
16	Total-heptafurans	41.38	1.097e2	1.037e2	0.978	1.06	1.05	1.8	NO	NO	bb	bb	0.031
17	1234789-HpCDF	41.02	1.595e5	1.575e5	0.953	1.01	1.05	1274.2	YES	NO	bb	bb	50.221
18	Total-heptafurans	39.45	1.654e3	1.420e3	0.978	1.17	1.05	14.3	YES	NO	bb	bb	0.447
19	Total-heptafurans	39.28	9.725e1	9.433e1	0.978	1.03	1.05	1.5	NO	NO	bb	bb	0.028
20	1234678-HpCDF	38.78	1.767e5	1.776e5	1.003	1.00	1.05	1618.0	YES	NO	bb	bb	47.490
21	OCDF	45.25	2.326e5	2.612e5	0.778	0.89	0.89	3100.2	YES	NO	bb	bb	88.591
22	13468-PECDF	27.14	4.529e5	2.964e5	1.246	1.53	1.55	11052.6	YES	NO	bb	bb	52.031
23	1368-TCDD	23.57	5.082e4	6.674e4	1.015	0.76	0.77	551.2	YES	NO	bb	bb	9.774
24	1289-TCDD	27.03	4.817e4	6.482e4	0.909	0.74	0.77	490.7	YES	NO	bb	bb	10.496
25	2378-TCDD	26.44	5.709e4	7.150e4	1.149	0.80	0.77	603.1	YES	NO	bb	bb	9.450
26	Total-tetradioxins	26.11	8.149e4	1.045e5	1.024	0.78	0.77	583.1	YES	NO	bb	bb	15.330
27	Total-tetradioxins	25.62	2.499e4	3.156e4	1.024	0.79	0.77	257.1	YES	NO	bb	bb	4.660
28	12389-PECDD	31.94	2.280e5	1.502e5	1.184	1.52	1.55	1711.4	YES	NO	bb	bb	45.288
29	12378-PeCDD	31.55	2.156e5	1.424e5	1.022	1.51	1.55	1626.0	YES	NO	bb	bb	49.654
30	Total-pentadioxins	30.87	1.016e3	6.817e2	1.502	1.49	1.55	7.9	YES	NO	bb	bb	0.160
31	12479-PECDD	28.83	4.117e5	2.743e5	2.301	1.50	1.55	1950.7	YES	NO	bb	bb	42.238
32	123789-HxCDD	36.53	2.267e5	1.883e5	0.907	1.20	1.24	1979.8	YES	NO	bb	bb	54.229
33	123678-HxCDD	36.15	2.361e5	1.995e5	1.001	1.18	1.24	2076.5	YES	NO	db	db	49.648
34	123478-HxCDD	36.03	2.225e5	1.815e5	0.996	1.23	1.24	1979.4	YES	NO	bd	bd	50.053
35	Total-hexadioxins	35.14	9.946e2	7.755e2	1.005	1.28	1.24	9.3	YES	NO	db	bd	0.209
36	124679-HXCDD	34.02	2.111e5	1.738e5	1.115	1.21	1.24	1819.4	YES	NO	bb	bb	42.563
37	1234679-HPCDD	39.24	2.063e5	2.043e5	1.137	1.01	1.05	1668.0	YES	NO	bb	bb	46.924

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	Total-heptadioxins	40.58	1.040e2	8.729e1	1.088	1.19	1.05	2.1	NO	NO	bb	bb	0.023
39	1234678-HpCDD	40.28	1.918e5	1.891e5	1.039	1.01	1.05	1477.4	YES	NO	bb	bb	47.619
40	OCDD	45.01	3.015e5	3.475e5	0.920	0.87	0.89	2606.9	YES	NO	bb	bb	98.432

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.96	1.058e5					1.1	NO		bb		0.000
2	FUNCTION2 PFK	30.15	5.471e5					3.7	YES		bb		0.000
3	FUNCTION2 PFK	28.28	4.455e5					4.9	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	35.89	2.667e5					4.7	YES		bb		0.000
2	FUNCTION3 PFK	33.03	5.362e5					3.5	YES		bb		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.07	4.905e4					2.0	NO		db		
2	FUNCTION4 PFK	37.96	1.071e4					1.3	NO		bd		
3	FUNCTION4 PFK	37.89	4.848e3					0.7	NO		bb		
4	FUNCTION4 PFK	42.18	1.359e4					1.2	NO		bb		
5	FUNCTION4 PFK	41.91	8.056e3					0.9	NO		db		
6	FUNCTION4 PFK	41.83	2.292e4					1.6	NO		bd		
7	FUNCTION4 PFK	41.77	1.673e4					1.5	NO		bb		
8	FUNCTION4 PFK	41.48	1.418e4					1.4	NO		bb		
9	FUNCTION4 PFK	41.32	2.104e3					0.5	NO		bb		
10	FUNCTION4 PFK	41.13	8.695e3					1.0	NO		bb		
11	FUNCTION4 PFK	40.63	8.163e3					0.8	NO		bb		
12	FUNCTION4 PFK	40.08	1.008e4					1.1	NO		db		
13	FUNCTION4 PFK	40.04	1.572e4					1.4	NO		bd		
14	FUNCTION4 PFK	39.51	7.181e3					1.0	NO		bb		
15	FUNCTION4 PFK	39.44	5.021e3					0.7	NO		bb		
16	FUNCTION4 PFK	38.96	9.511e3					1.3	NO		db		
17	FUNCTION4 PFK	38.92	2.806e4					1.5	NO		bd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.57	1.411e3					0.9	NO		bb		
2	FUNCTION5 PFK	45.95	2.307e4					3.9	YES		bb		
3	FUNCTION5 PFK	45.69	1.018e3					0.6	NO		bb		
4	FUNCTION5 PFK	45.54	1.146e3					0.7	NO		bb		
5	FUNCTION5 PFK	45.12	9.805e3					2.3	NO		bb		
6	FUNCTION5 PFK	44.83	5.276e3					1.3	NO		bb		
7	FUNCTION5 PFK	44.58	5.554e3					1.4	NO		bb		
8	FUNCTION5 PFK	44.38	2.760e3					0.9	NO		db		
9	FUNCTION5 PFK	44.35	3.252e3					1.1	NO		bd		
10	FUNCTION5 PFK	42.99	9.959e2					0.6	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	25.01	7.970e1					3.2	YES		bb		0.000
2	FUNCTION1 HXCD...	23.47	8.919e1					3.0	YES		db		0.000
3	FUNCTION1 HXCD...	23.40	8.065e1					2.9	NO		dd		0.000
4	FUNCTION1 HXCD...	23.32	1.305e2					3.4	YES		dd		0.000
5	FUNCTION1 HXCD...	23.22	1.146e2					2.8	NO		bd		0.000
6	FUNCTION1 HXCD...	22.41	7.936e1					4.3	YES		bb		0.000
7	FUNCTION1 HXCD...	27.40	7.698e1					2.2	NO		bb		0.000
8	FUNCTION1 HXCD...	27.14	1.376e2					3.3	YES		bb		0.000
9	FUNCTION1 HXCD...	25.79	8.222e1					1.9	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.53	2.999e2					2.9	NO		bb		0.000
2	FUNCTION2 HPCD...	31.17	3.219e2					4.5	YES		bb		0.000
3	FUNCTION2 HPCD...	29.58	8.369e1					1.2	NO		db		0.000
4	FUNCTION2 HPCD...	29.50	8.185e1					1.4	NO		bd		0.000
5	FUNCTION2 HPCD...	29.43	9.066e1					2.2	NO		bb		0.000
6	FUNCTION2 HPCD...	28.26	1.049e2					2.5	NO		db		0.000
7	FUNCTION2 HPCD...	28.22	1.658e2					2.8	NO		bd		0.000
8	FUNCTION2 HPCD...	28.15	1.360e2					3.3	YES		db		0.000
9	FUNCTION2 HPCD...	28.11	8.921e1					2.1	NO		bd		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.53	2.562e2					6.2	YES		bb		0.000
2	FUNCTION3 OCDPE	36.14	1.671e2					4.5	YES		bb		0.000

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ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	42.04	8.282e1					2.4	NO		bb		0.000
2	FUNCTION4 NCDPE	38.07	5.777e2					4.3	YES		bb		0.000
3	FUNCTION4 NCDPE	37.82	1.333e2					0.0	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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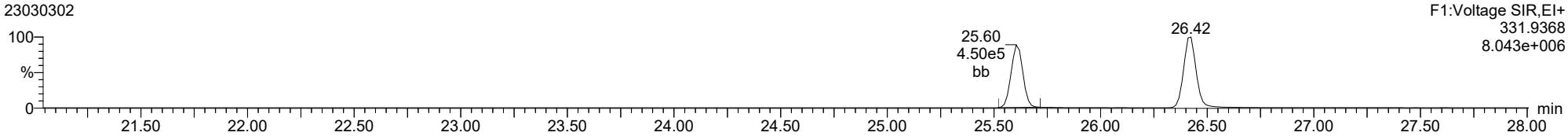
13C-1234-TCDD



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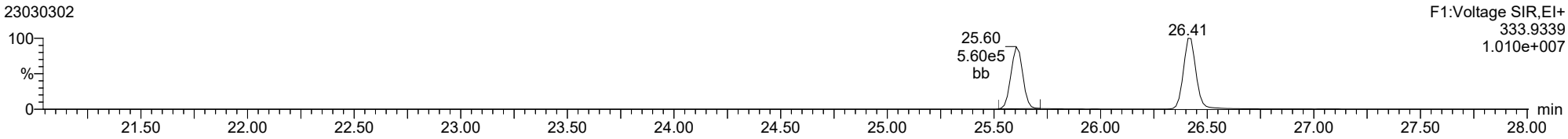
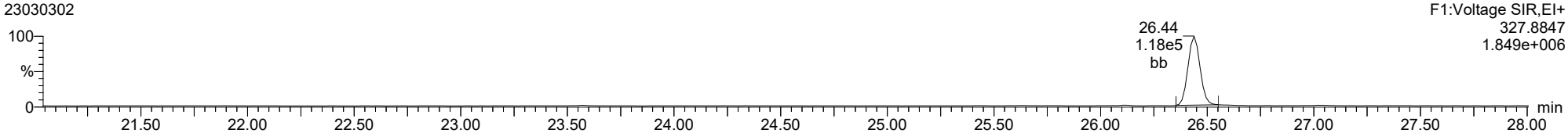


37CL-2378-TCDD



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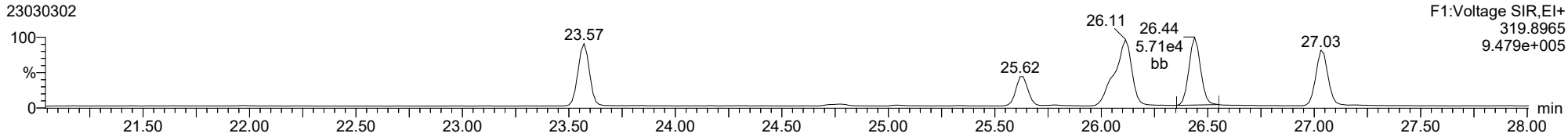
2378-TCDD



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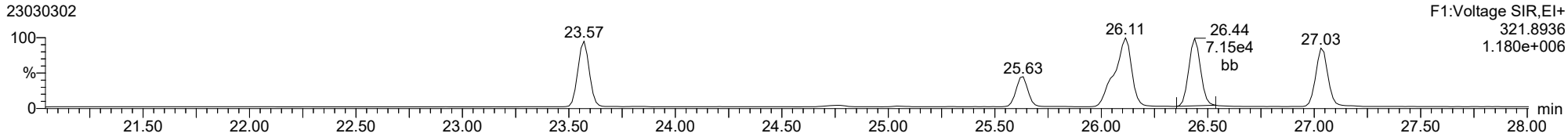

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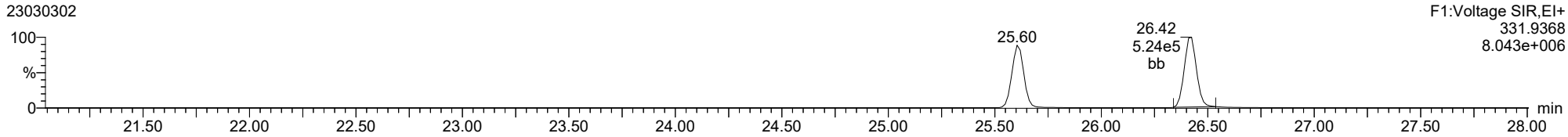

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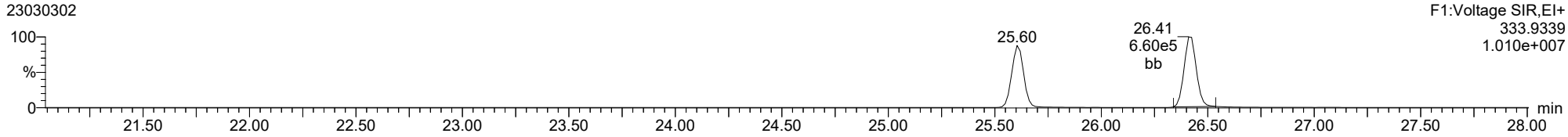
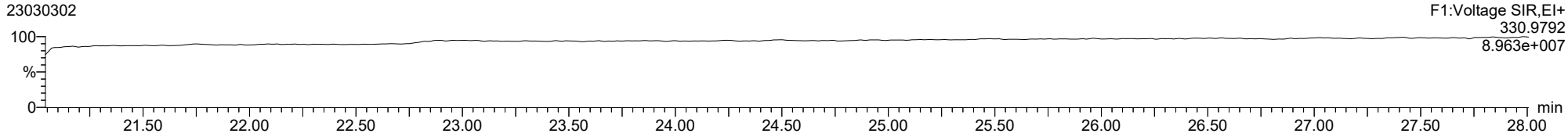


FUNCTION1 PFK



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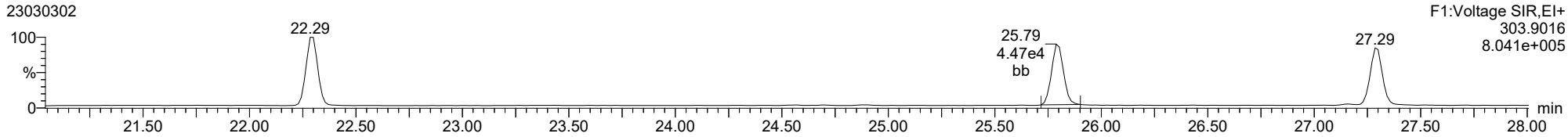
2378-TCDF



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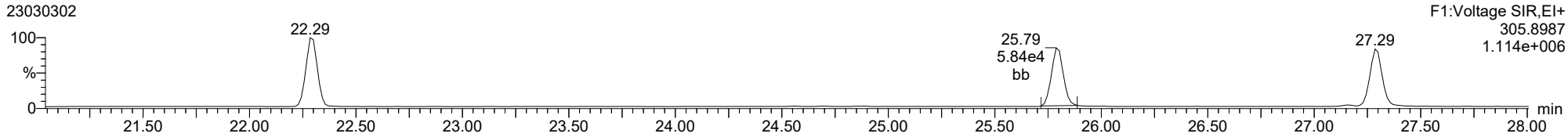

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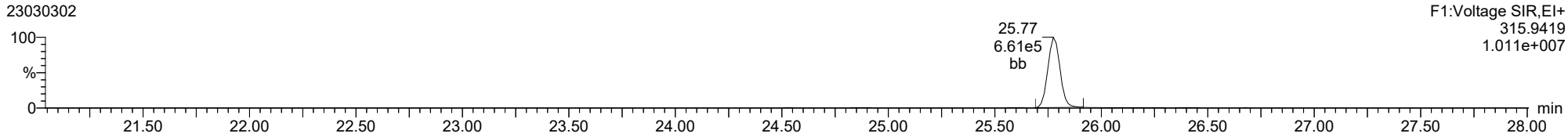

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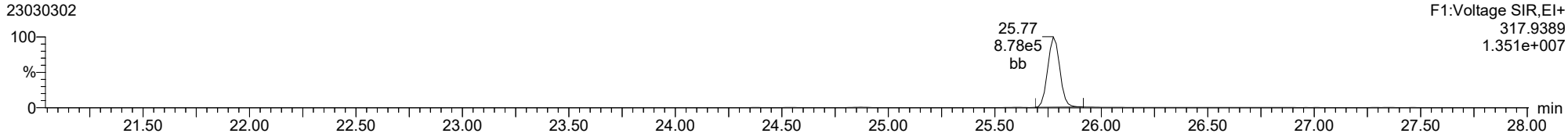

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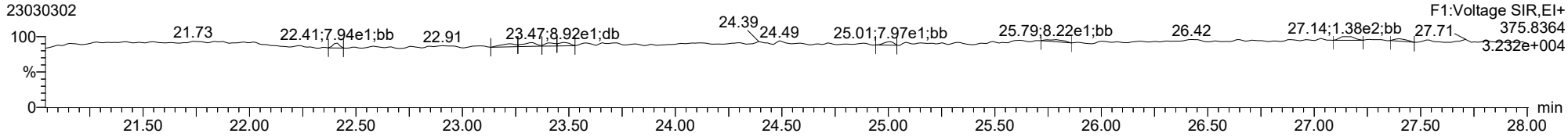

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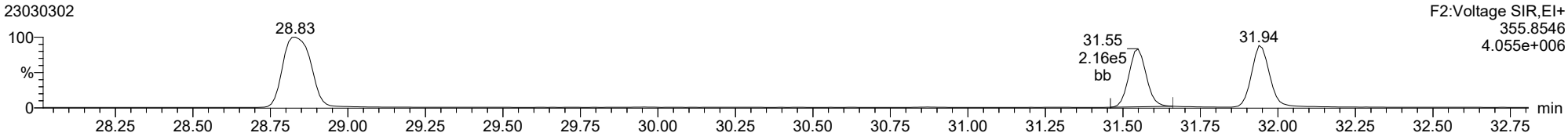
12378-PeCDD



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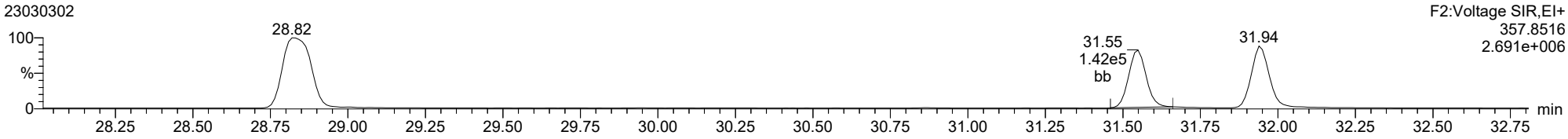

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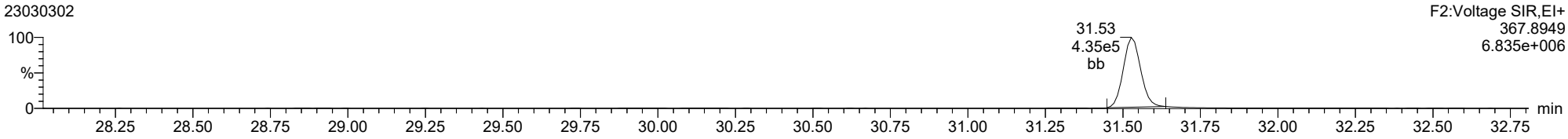

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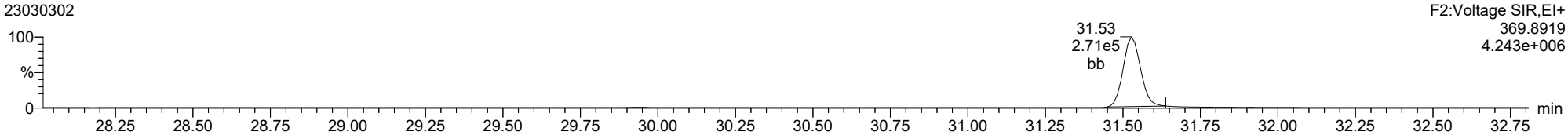

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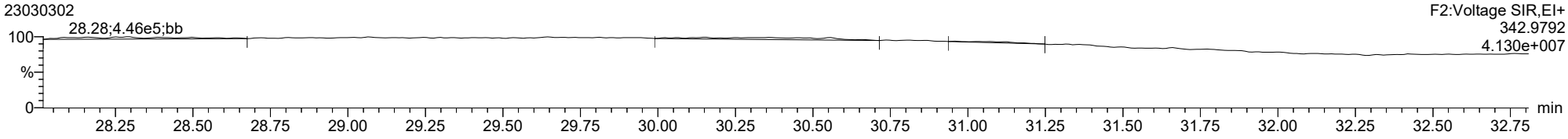

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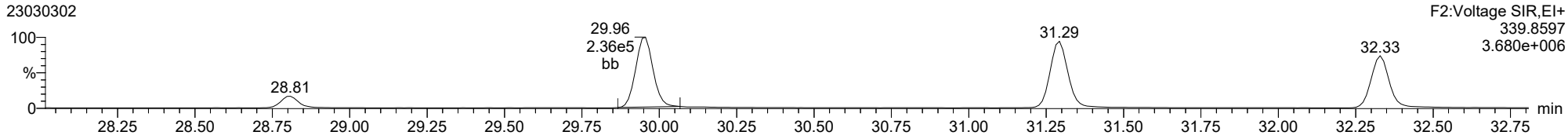

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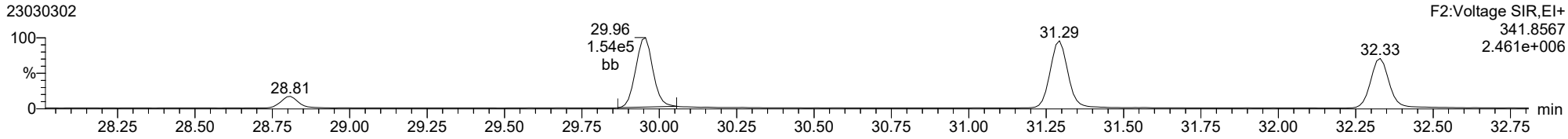

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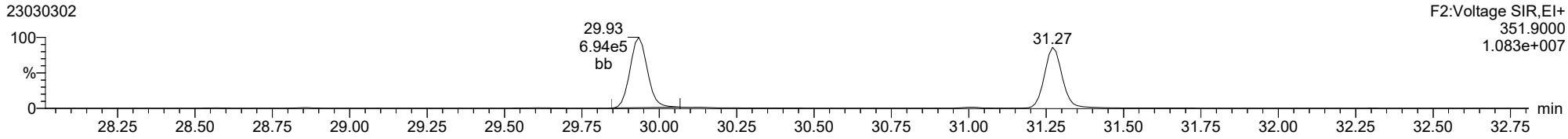

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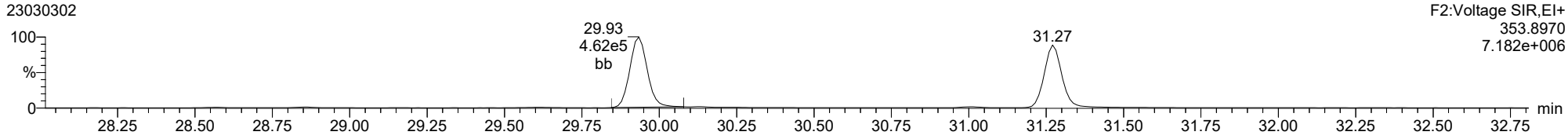

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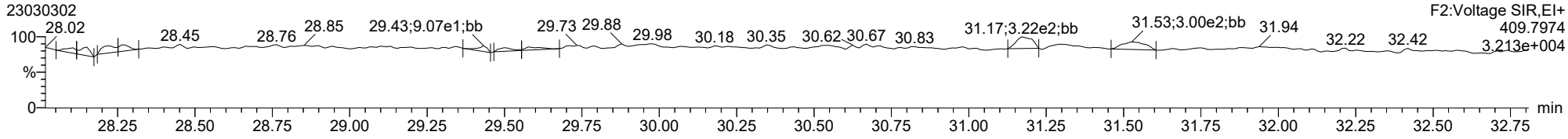

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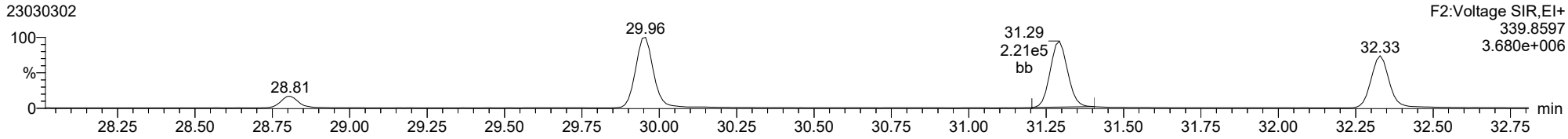
23478-PeCDF



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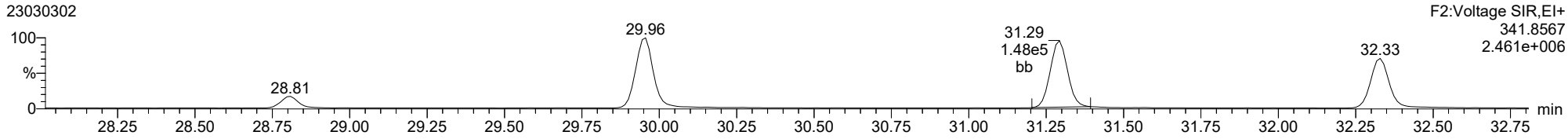

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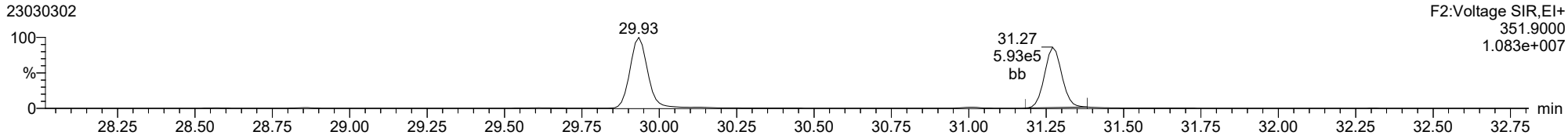

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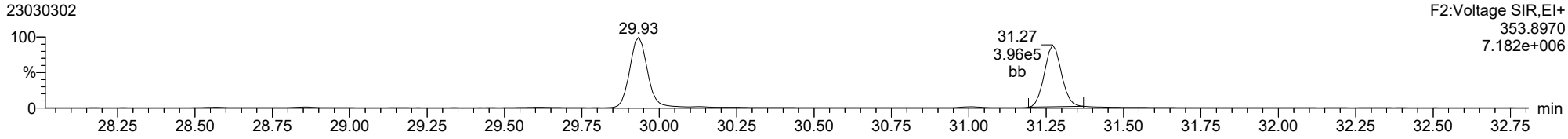

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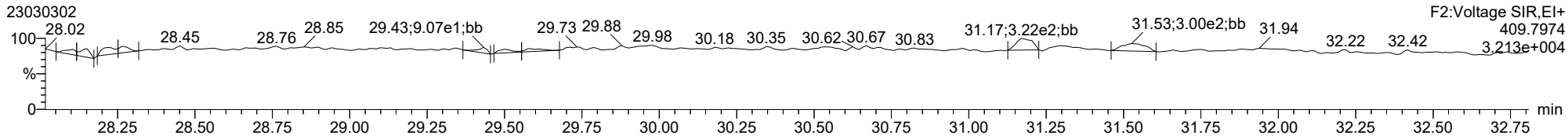

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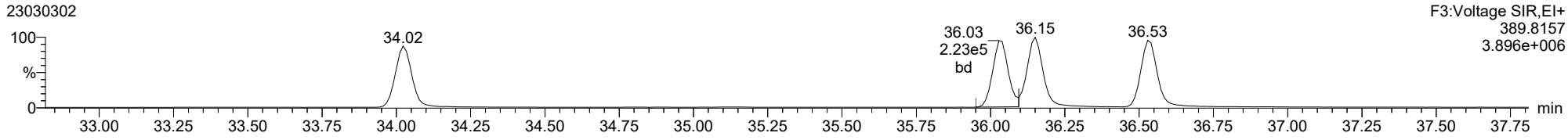

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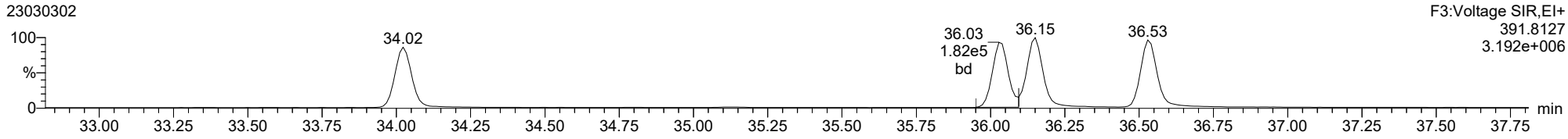

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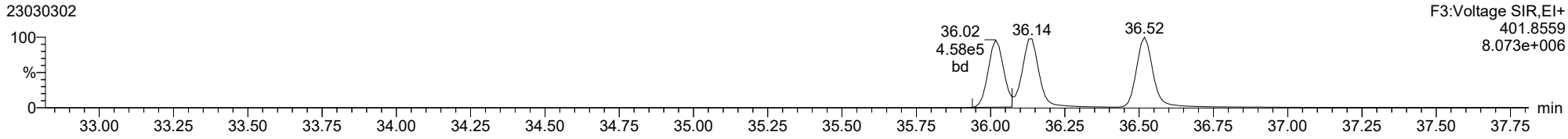

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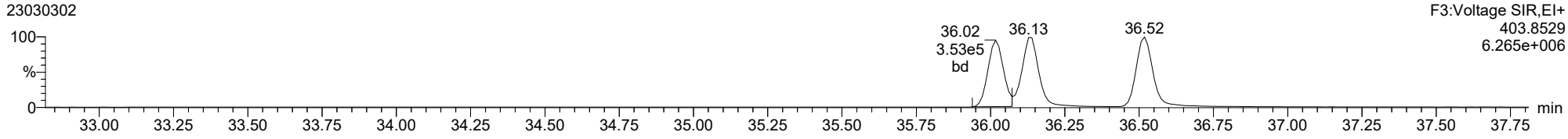
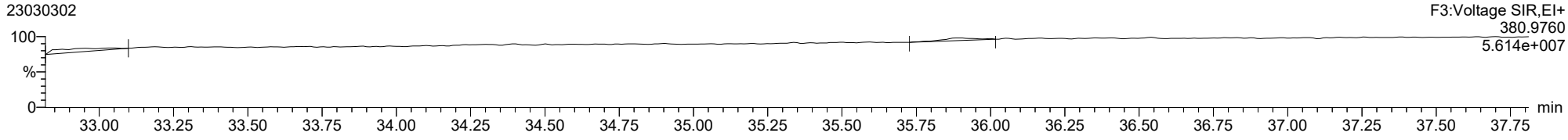


FUNCTION3 PFK



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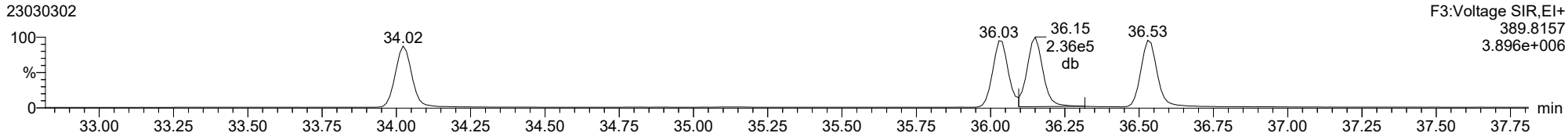

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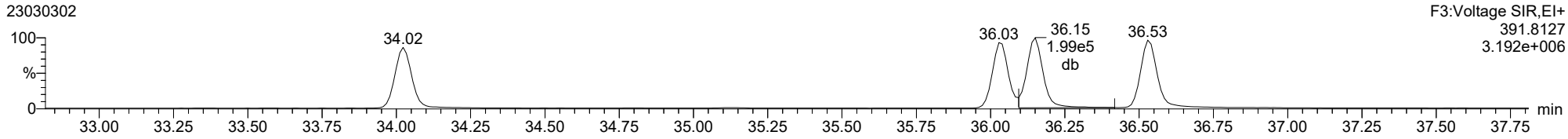

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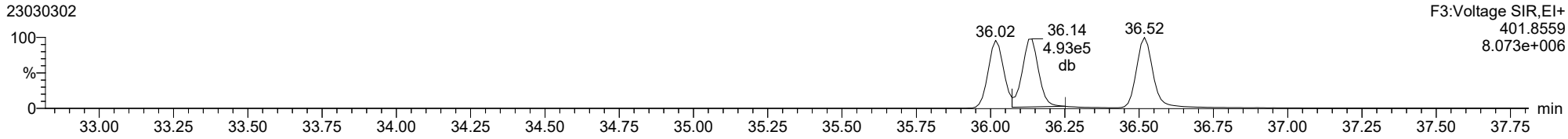

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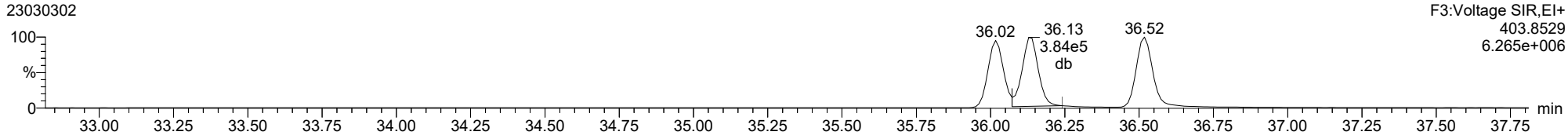

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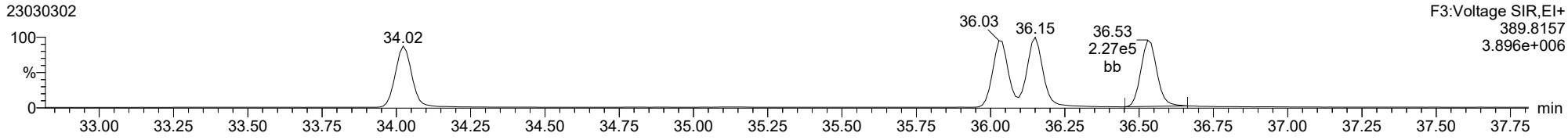

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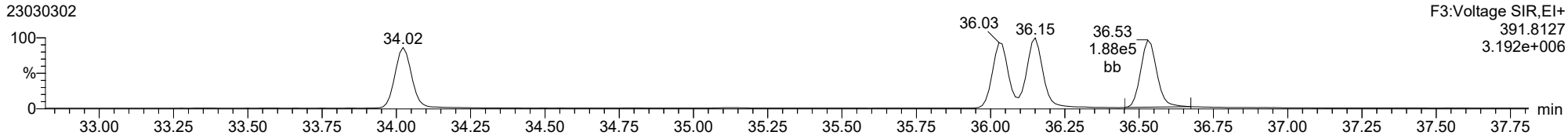

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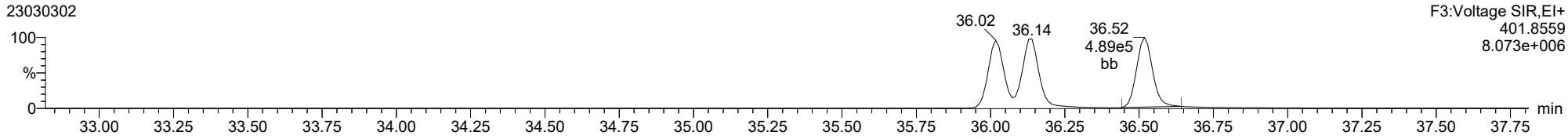

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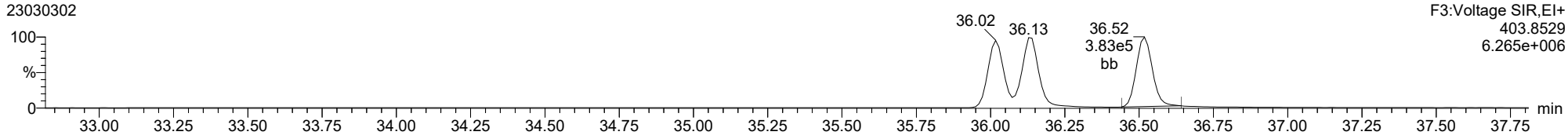

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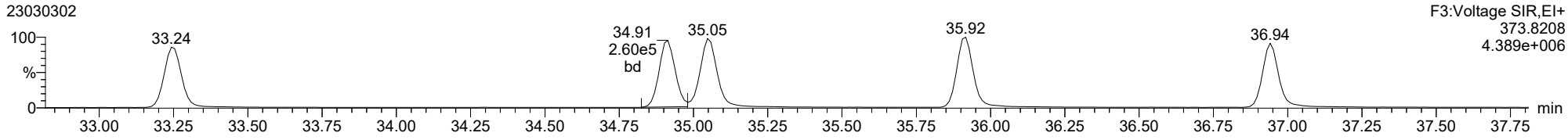

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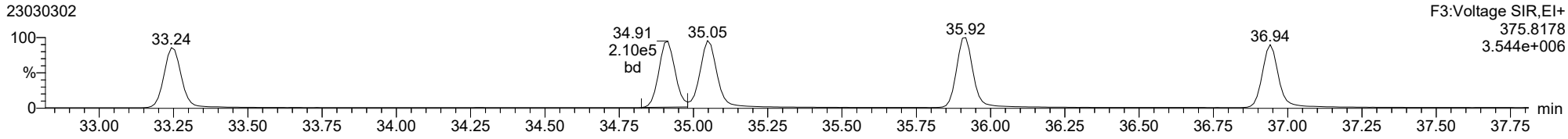

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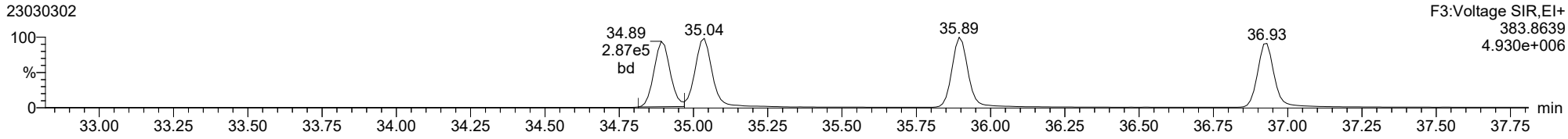

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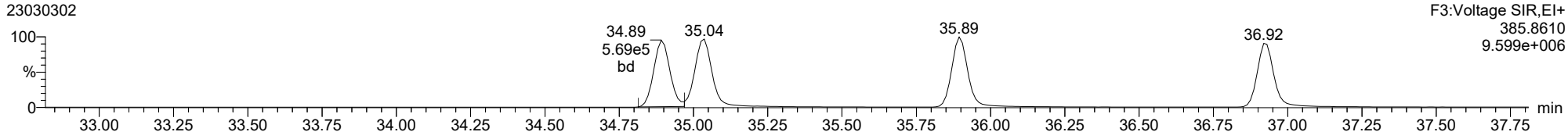

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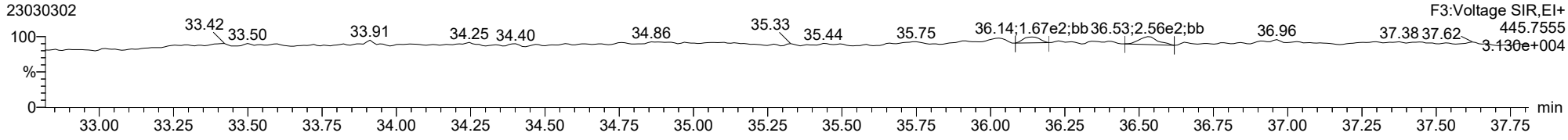

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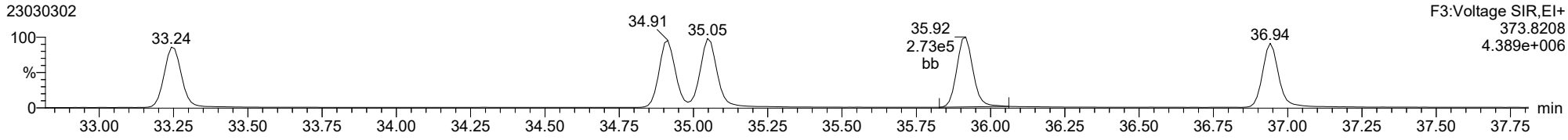
234678-HxCDF



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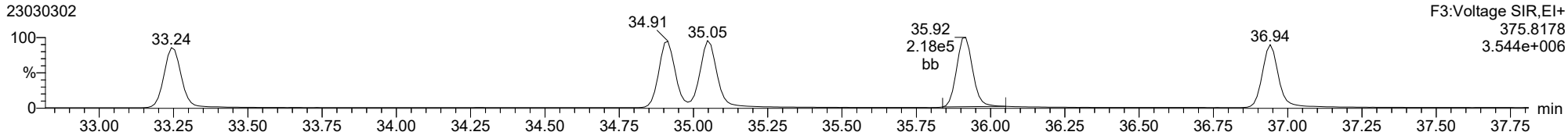

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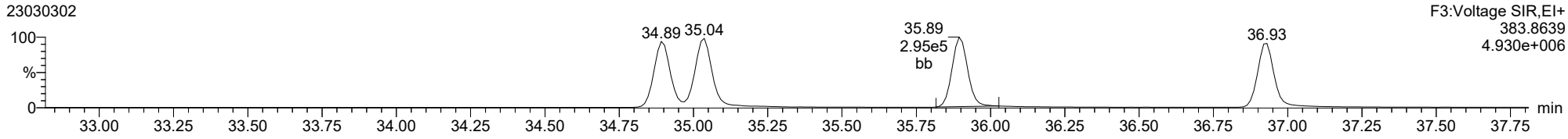

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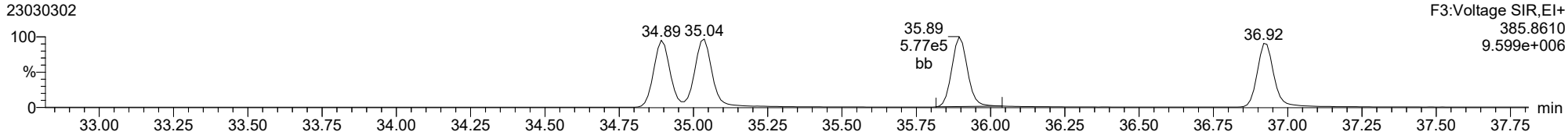

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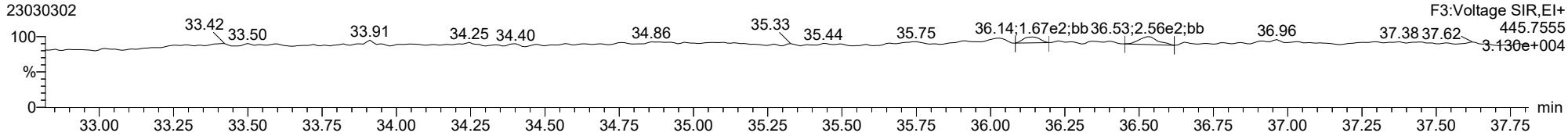

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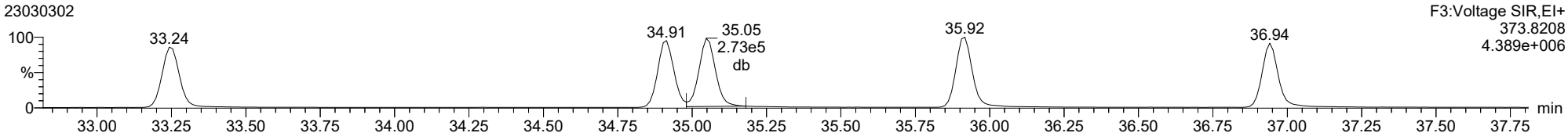

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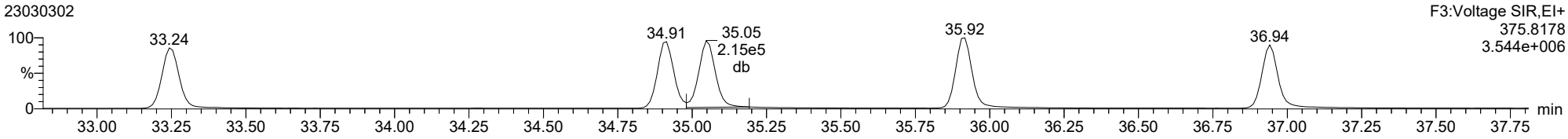

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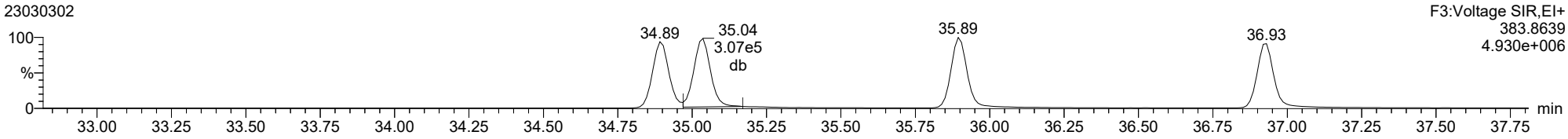

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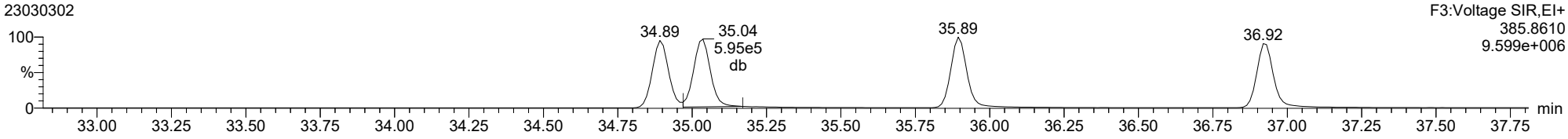
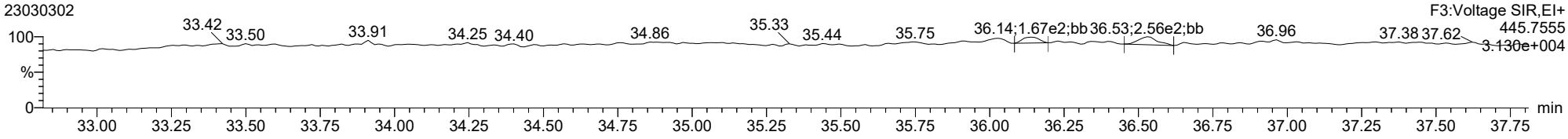


FUNCTION3 OCDPE



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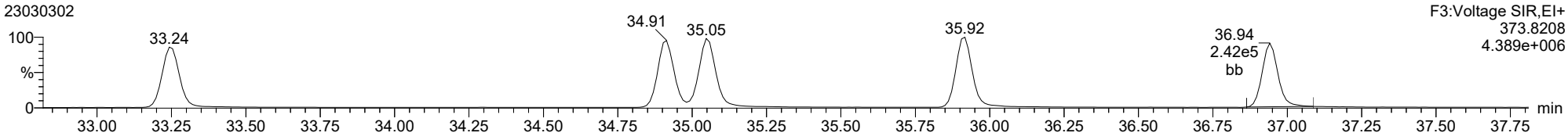

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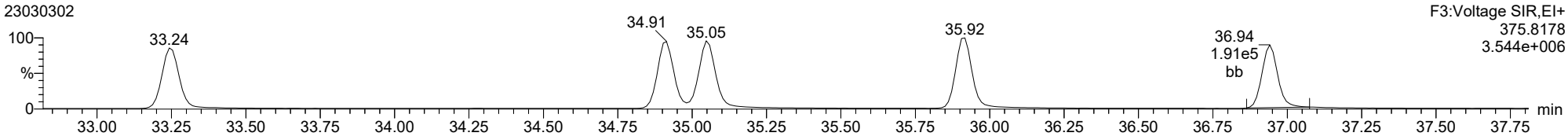

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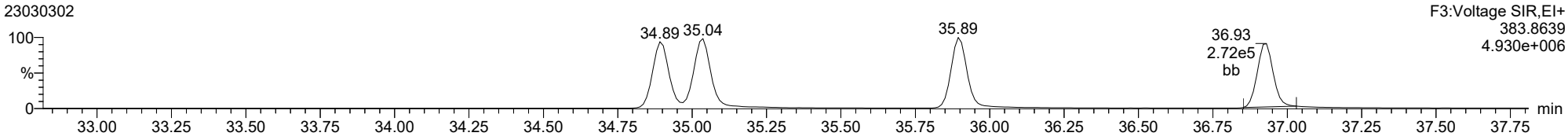

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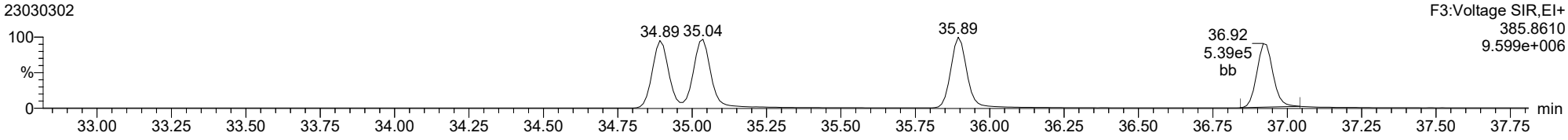

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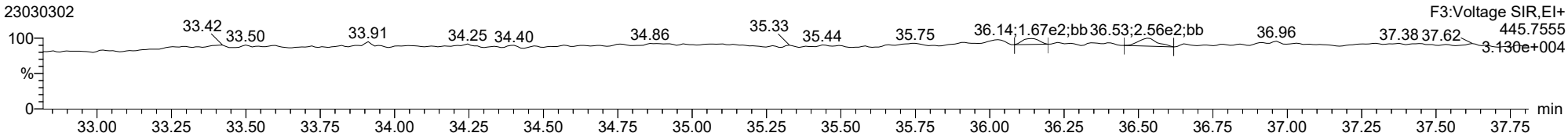

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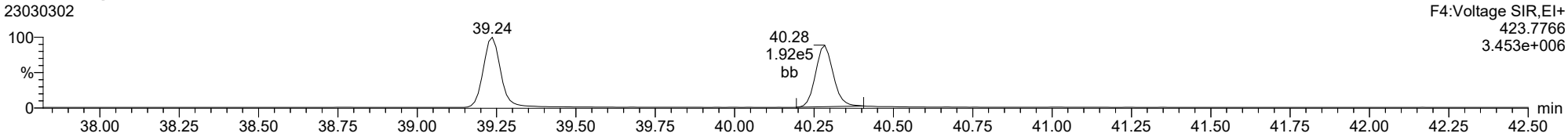

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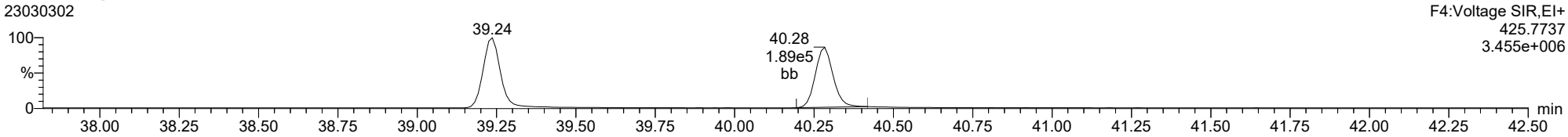

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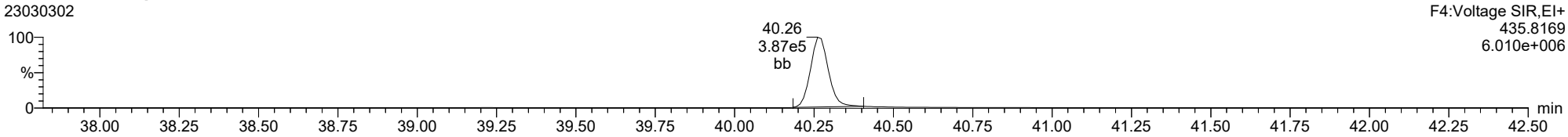

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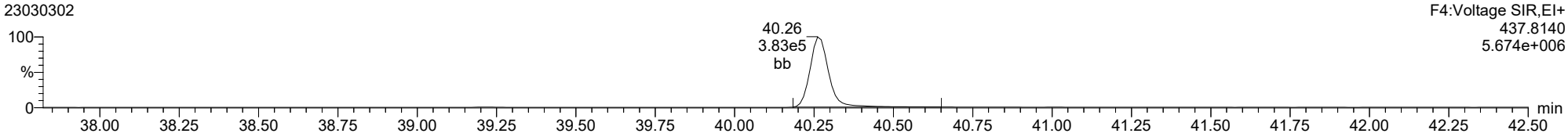

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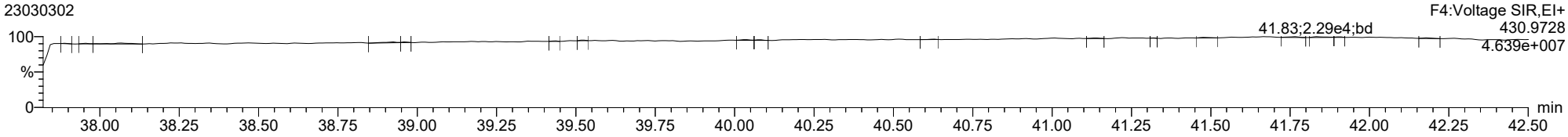

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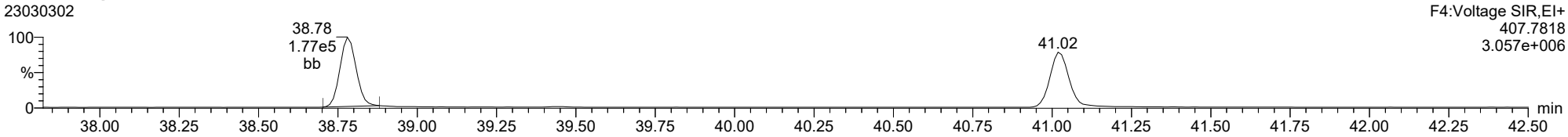

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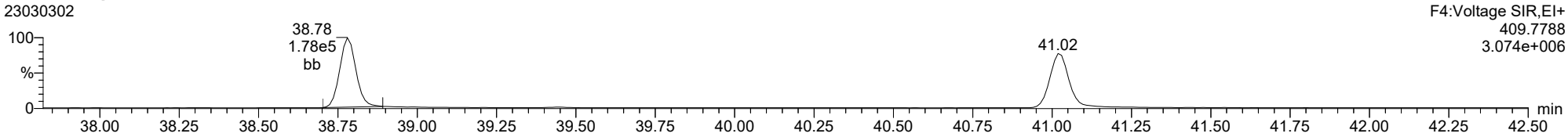

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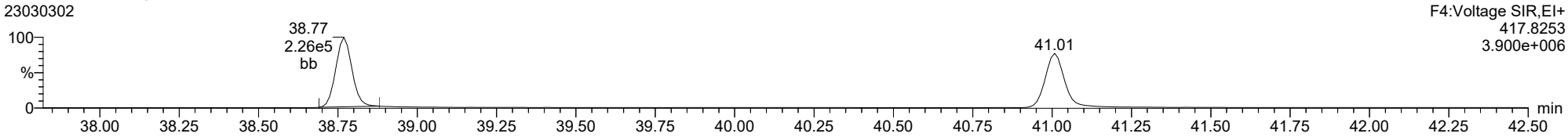

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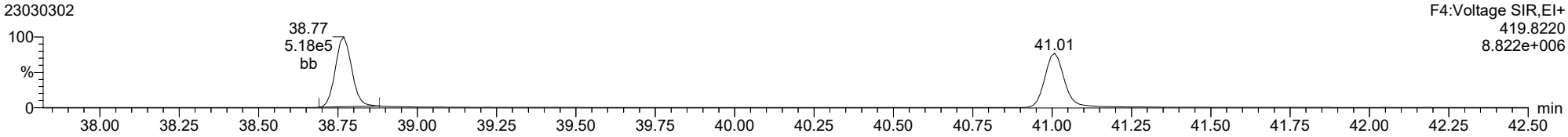

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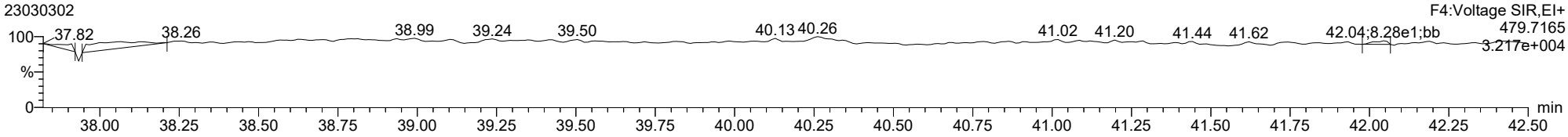

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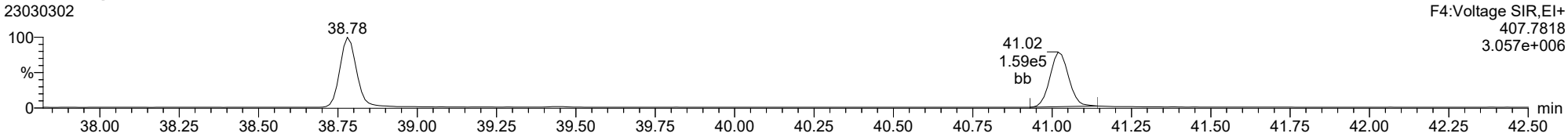

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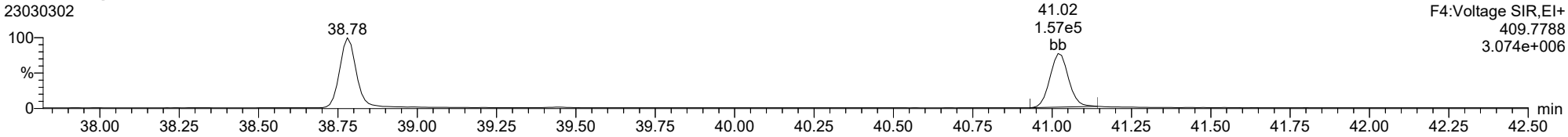

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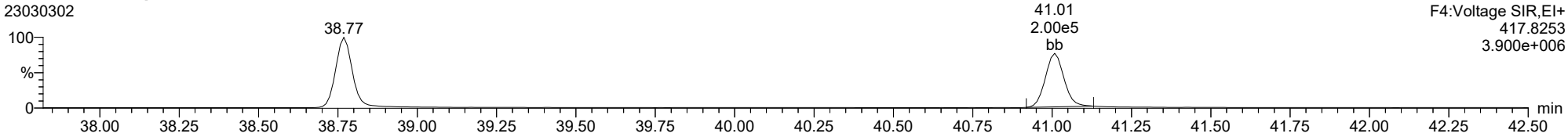

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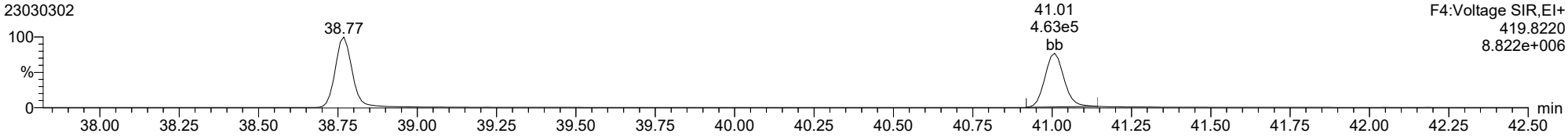

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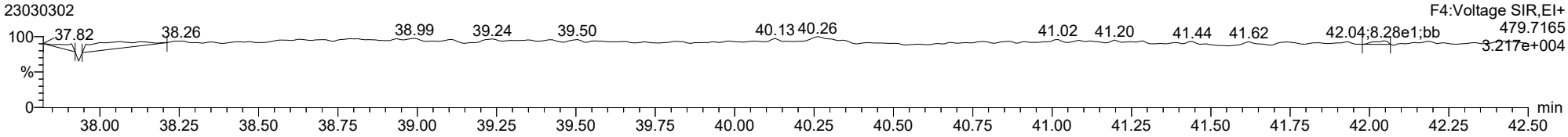

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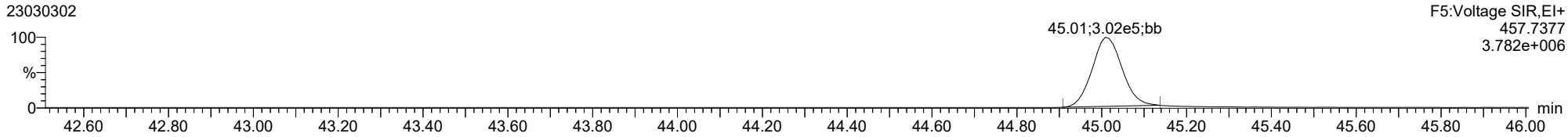

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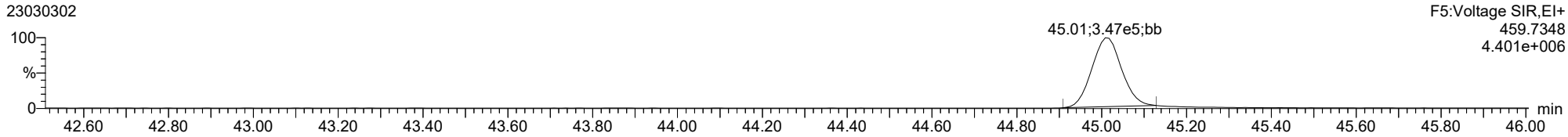

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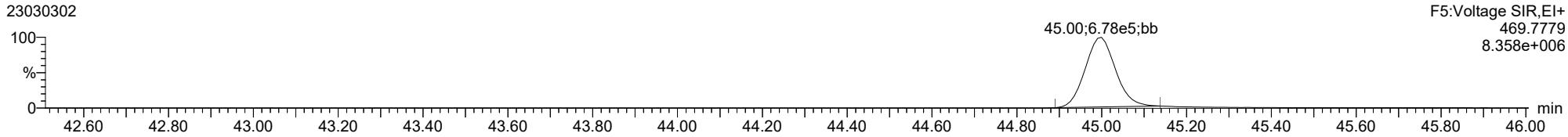

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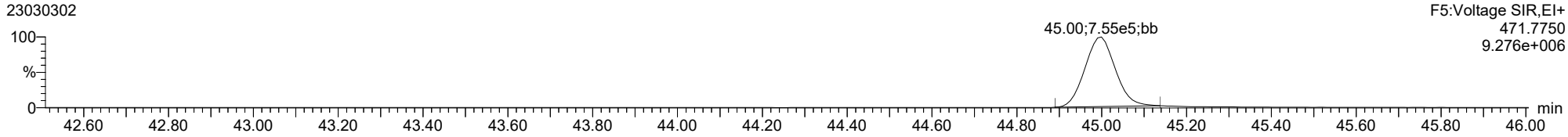

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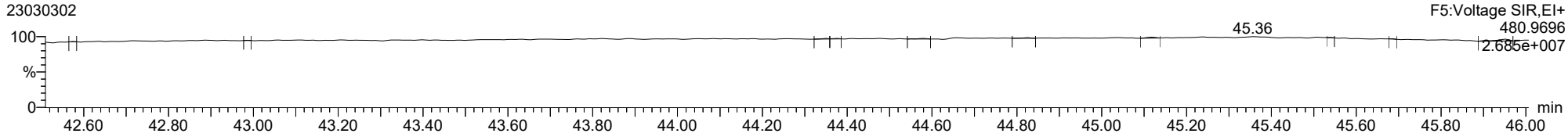

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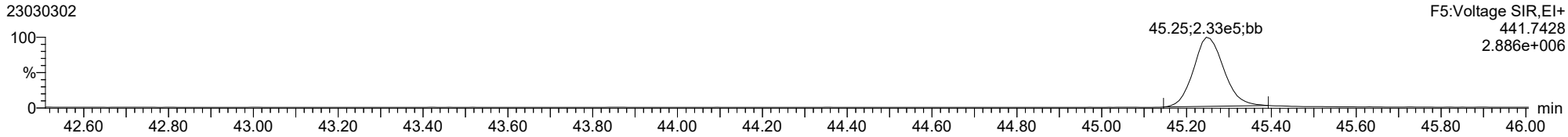

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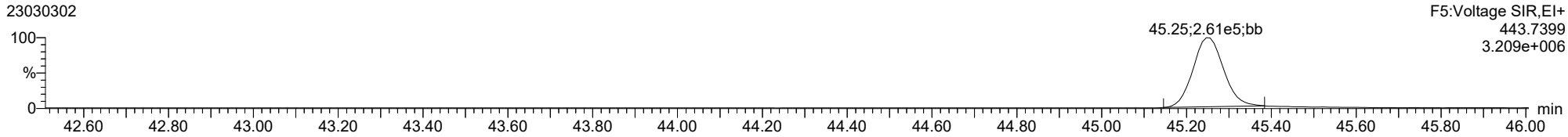

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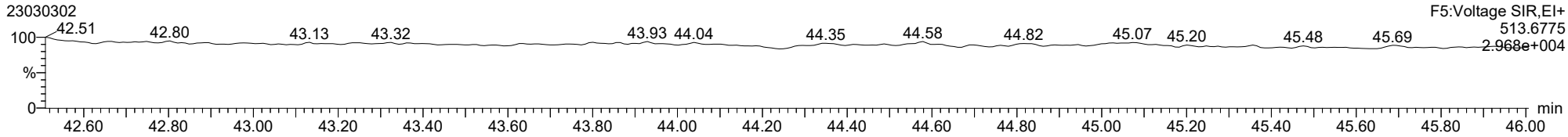

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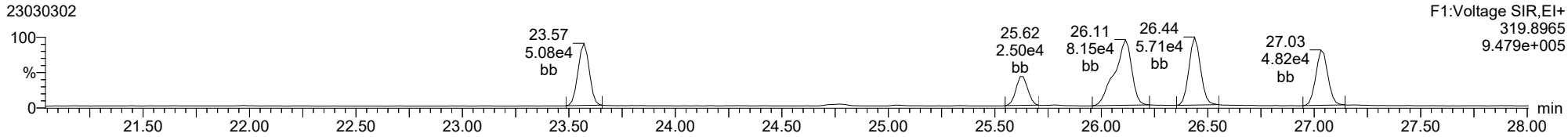
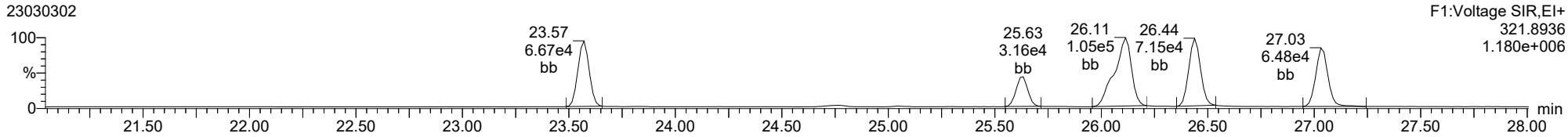
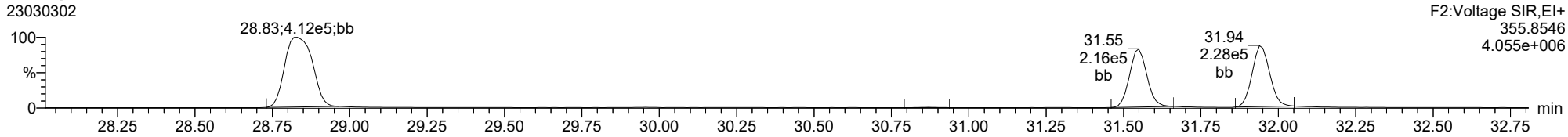


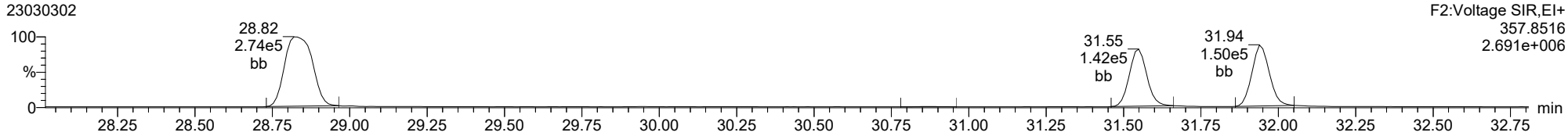
Total-tetradioxins



Total-pentadioxins



Total-pentadioxins



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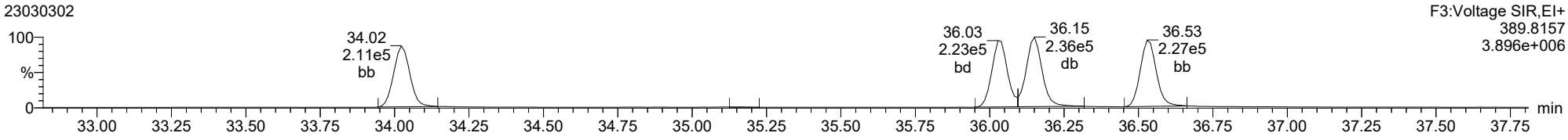

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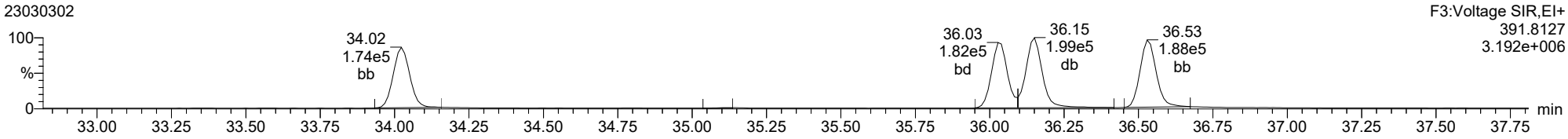

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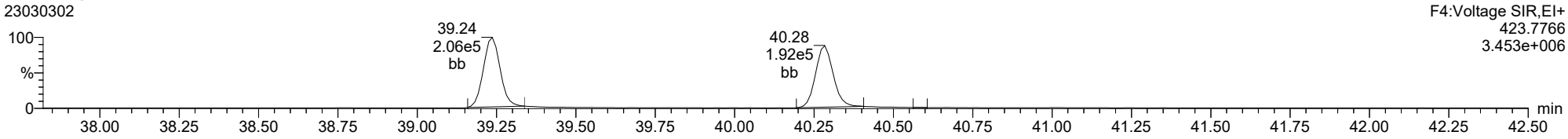

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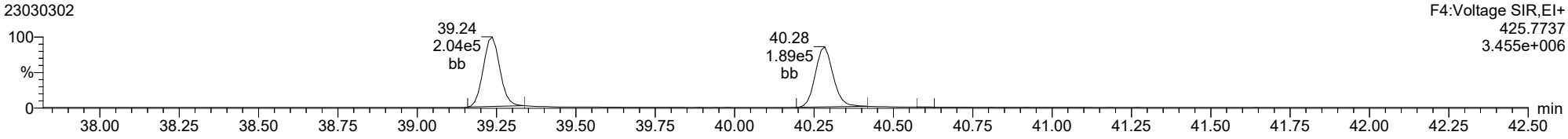

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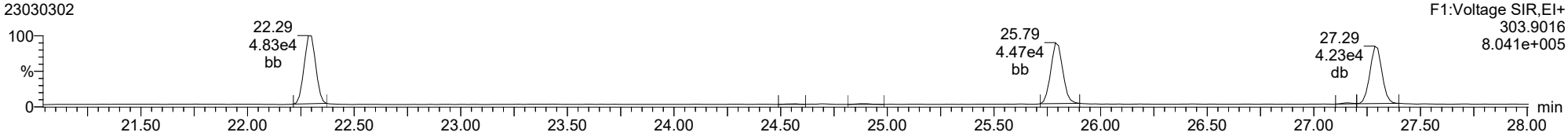
Total-tetrafurans



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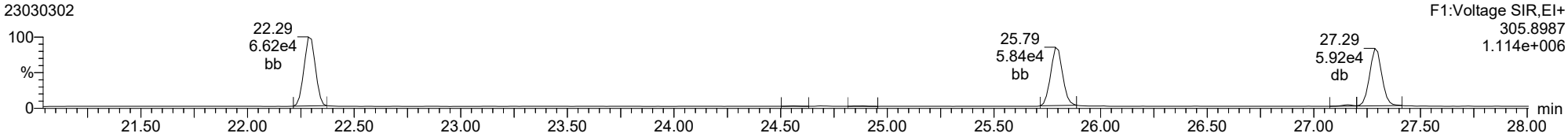

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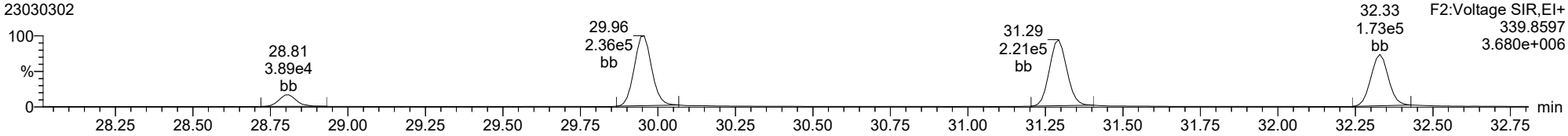

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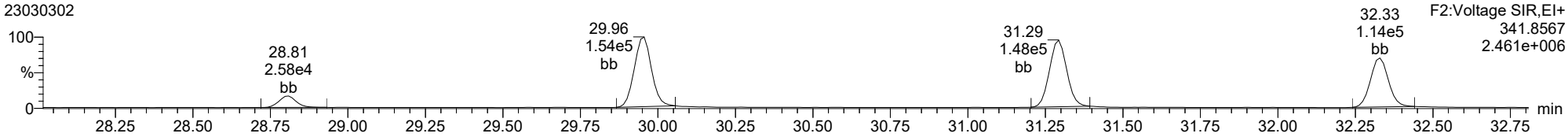

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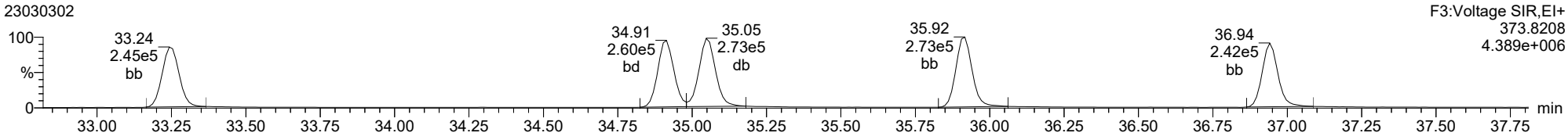

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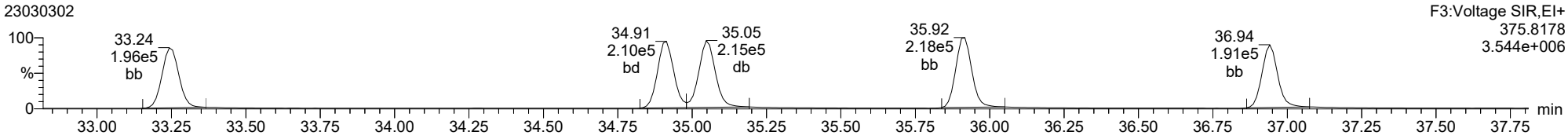

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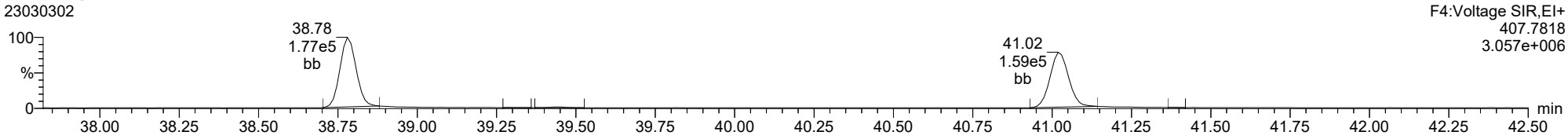

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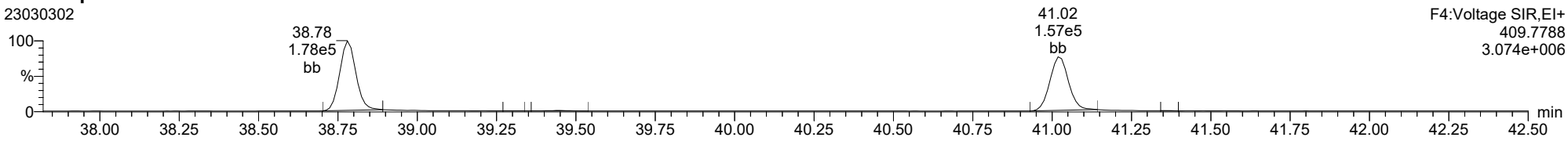

Printed: Friday, March 03, 2023 09:51:10 Pacific Standard Time

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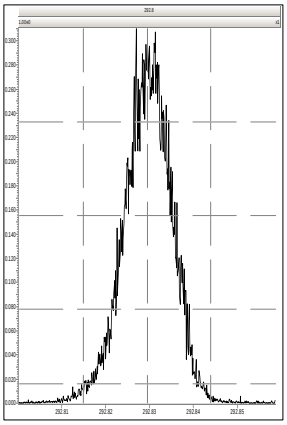

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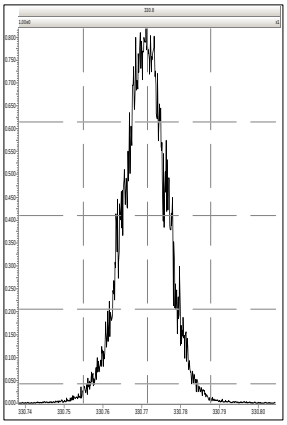

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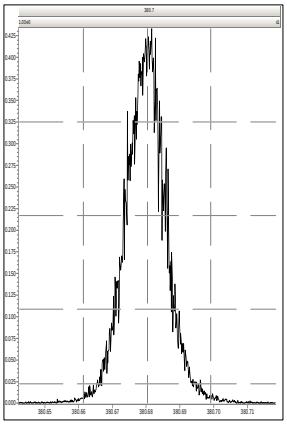

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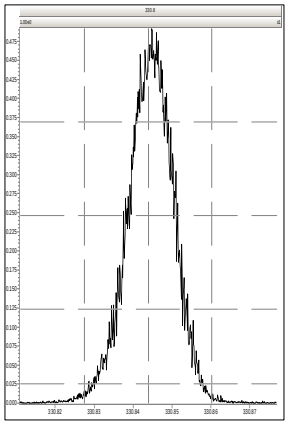

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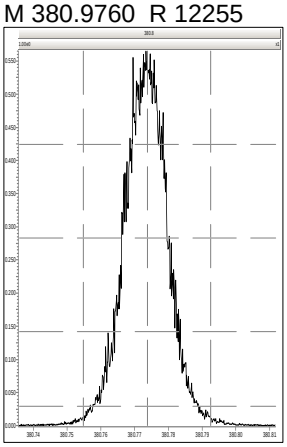

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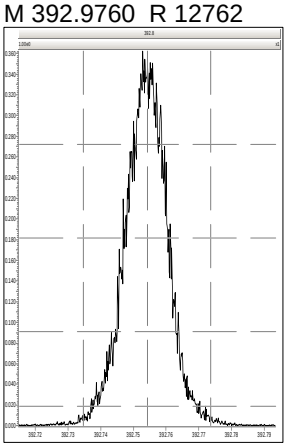

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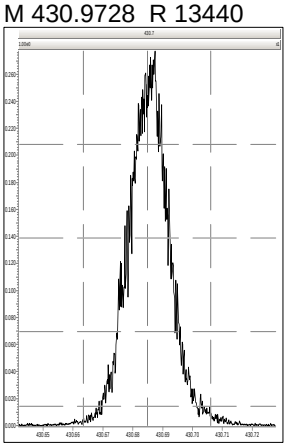

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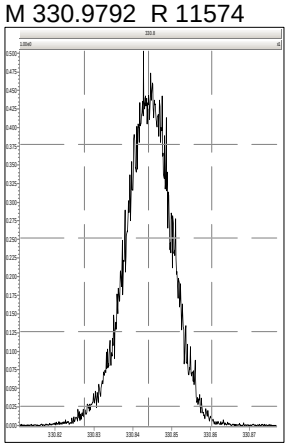

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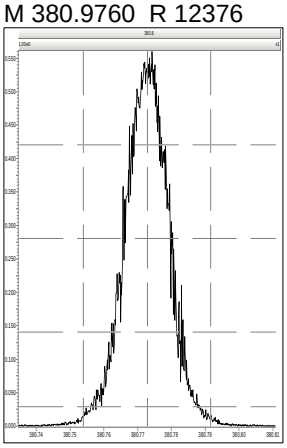
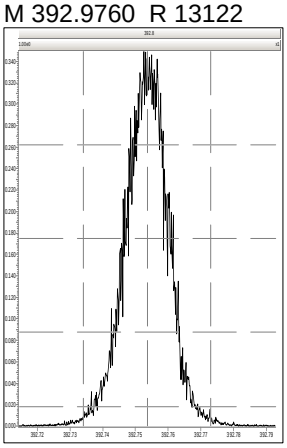
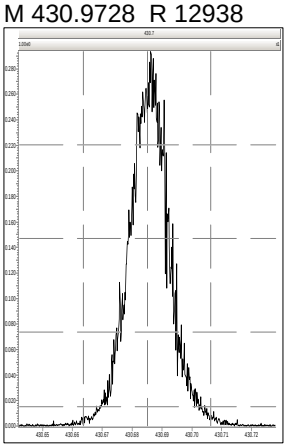


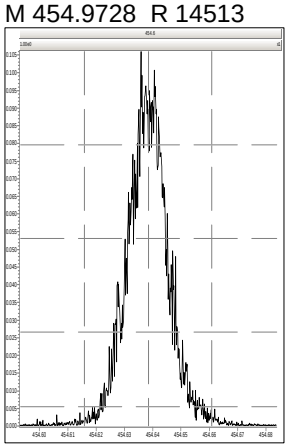
M 392.9760 R 13122



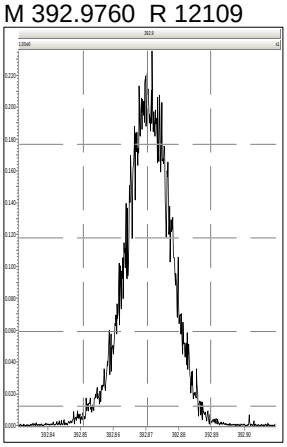
M 430.9728 R 12938



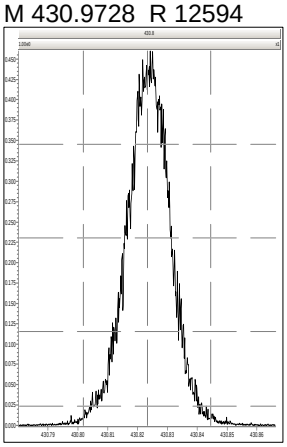
M 454.9728 R 14513



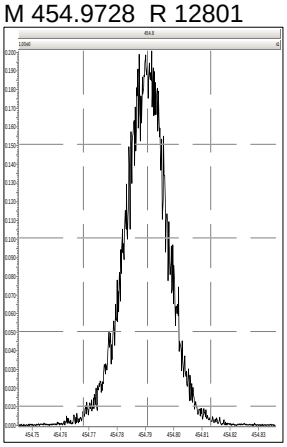
M 392.9760 R 12109



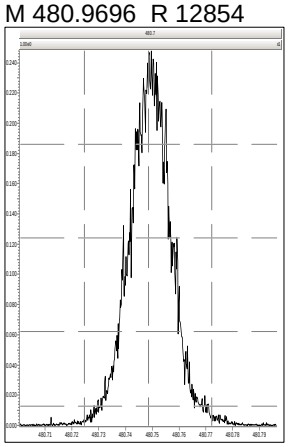
M 430.9728 R 12594



M 454.9728 R 12801

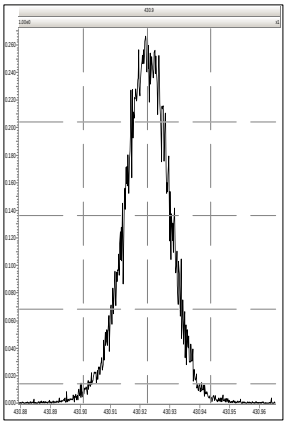


M 480.9696 R 12854

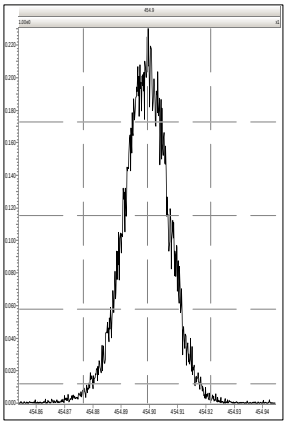


Printed: Friday, March 03, 2023 09:51:10 Pacific Standard Time

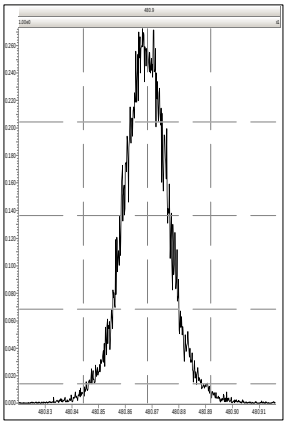
M 430.9728 R 12109



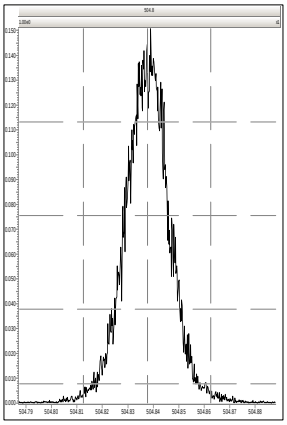
M 454.9728 R 12077



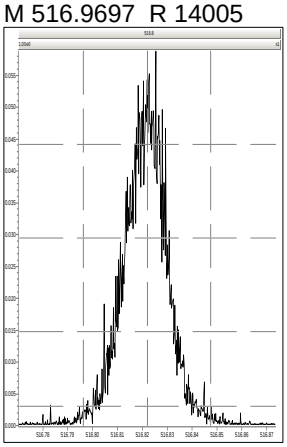
M 480.9696 R 11443

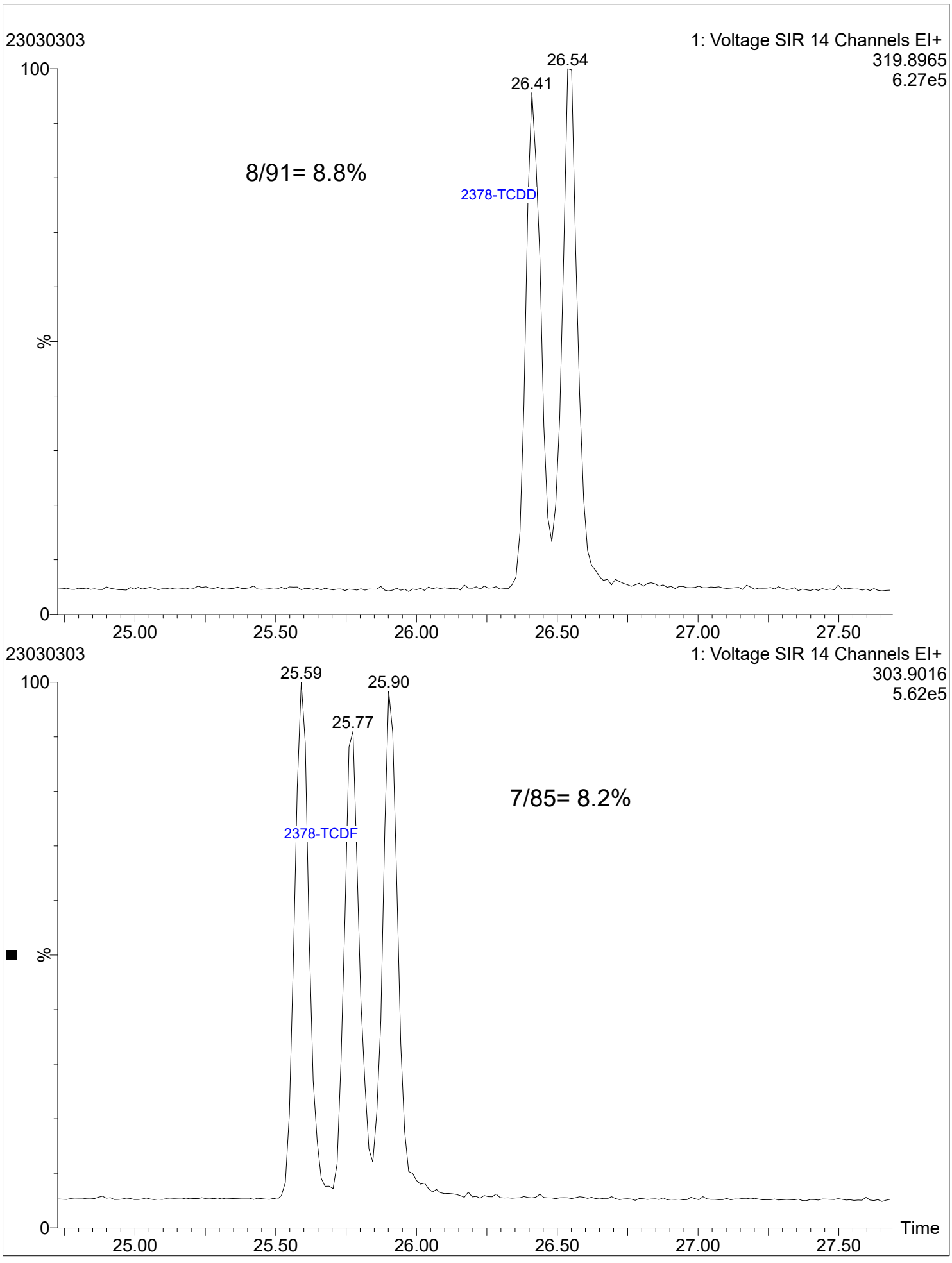


M 504.9696 R 12722



M 516.9697 R 14005




23030303
1: Voltage SIR 14 Channels EI+
319.8965
6.27e5
100
26.54
26.41
8/91= 8.8%
2378-TCDD
%
0
25.00
25.50
26.00
26.50
27.00
27.50
23030303
1: Voltage SIR 14 Channels EI+
303.9016
5.62e5
100
25.59
25.90
25.77
7/85= 8.2%
2378-TCDF
%
0
Time
25.00
25.50
26.00
26.50
27.00
27.50

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:33:58 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF					0.702		0.770	1141	1568								
12378-PeCDF	29.922	1.000	2.331e3	1.631e3	0.679	1.429	1.550	717	1165	3.89e4	2.49e4	54.3	21.4	NO	bb	bd	0.520
23478-PeCDF	31.270	1.001	2.446e3	1.527e3	0.786	1.602	1.550	717	1165	3.60e4	2.25e4	50.1	19.4	NO	bb	bb	0.508
123478-HxCDF	34.891	1.001	2.740e3	2.578e3	1.166	1.063	1.240	675	706	4.36e4	3.63e4	64.6	51.5	NO	bd	bd	0.522
234678-HxCDF	35.894	1.001	2.363e3	1.967e3	1.140	1.201	1.240	675	706	3.52e4	3.17e4	52.2	44.9	NO	bb	bb	0.459
123678-HxCDF	35.025	1.000	2.955e3	2.593e3	1.091	1.140	1.240	675	706	3.97e4	3.71e4	58.8	52.6	NO	db	dd	0.495
123789-HxCDF	36.919	1.000	2.292e3	1.751e3	1.137	1.309	1.240	675	706	3.51e4	2.45e4	52.0	34.7	NO	bd	bb	0.523
1234678-HpCDF	38.769	1.001	1.264e3	1.356e3	1.003	0.932	1.050	1176	1150	2.17e4	2.11e4	18.4	18.3	NO	bd	bb	0.466
1234789-HpCDF	40.997	1.000	1.144e3	1.036e3	0.953	1.105	1.050	1176	1150	1.78e4	1.51e4	15.1	13.1	NO	bb	bd	0.465
OCDF	45.228	1.006	2.105e3	2.214e3	0.778	0.951	0.890	762	984	2.31e4	2.16e4	30.2	22.0	NO	bb	bb	1.044
2378-TCDD					1.149		0.770	1186	741								
12378-PeCDD	31.527	1.001	2.628e3	1.506e3	1.022	1.745	1.550	935	615	3.66e4	1.58e4	39.1	25.7	NO	bb	bb	0.540
123478-HxCDD	36.016	1.001	2.113e3	1.865e3	0.996	1.133	1.240	725	812	3.30e4	2.93e4	45.6	36.1	NO	dd	bd	0.542
123678-HxCDD	36.128	1.001	2.428e3	1.876e3	1.001	1.294	1.240	725	812	3.70e4	2.39e4	51.1	29.5	NO	db	db	0.479
123789-HxCDD	36.507	1.011	2.154e3	1.651e3	0.907	1.304	1.240	725	812	3.30e4	2.34e4	45.5	28.9	NO	bd	bb	0.513
1234678-HpCDD	40.261	1.000	1.634e3	1.397e3	1.039	1.170	1.050	985	1205	2.31e4	2.24e4	23.5	18.6	NO	MM	bb	0.531
OCDD					0.920		0.890	1090	941								
13C-2378-TCDF	25.746	1.007	5.730e5	7.592e5	1.620	0.755	0.770	2498	2006	8.42e6	1.11e7	3371.3	5556.4	NO	bb	bb	100.702
13C-12378-PeCDF	29.911	1.169	6.805e5	4.409e5	1.240	1.543	1.550	2678	2220	9.20e6	6.10e6	3433.8	2749.3	NO	bb	bd	110.727
13C-23478-PeCDF	31.248	1.222	6.001e5	3.956e5	1.118	1.517	1.550	2678	2220	8.66e6	5.74e6	3235.2	2585.6	NO	bb	bb	109.107
13C-123478-HxCDF	34.869	0.955	2.965e5	5.770e5	1.168	0.514	0.510	1558	3112	4.38e6	8.54e6	2813.2	2745.5	NO	bd	bd	98.607
13C-123678-HxCDF	35.014	0.959	3.446e5	6.820e5	1.386	0.505	0.510	1558	3112	4.56e6	9.02e6	2927.1	2898.6	NO	db	dd	97.648
13C-234678-HxCDF	35.872	0.983	2.821e5	5.460e5	1.129	0.517	0.510	1558	3112	4.13e6	8.00e6	2652.6	2572.0	NO	bb	bb	96.703
13C-123789-HxCDF	36.908	1.011	2.282e5	4.511e5	0.932	0.506	0.510	1558	3112	3.31e6	6.47e6	2122.2	2079.8	NO	bb	bb	96.146
13C-1234678-HpCDF	38.746	1.062	1.794e5	3.814e5	0.895	0.470	0.440	2435	3572	2.60e6	5.93e6	1069.0	1659.1	NO	bd	bb	82.620
13C-1234789-HpCDF	40.986	1.123	1.404e5	3.516e5	0.770	0.399	0.440	2435	3572	1.98e6	4.51e6	813.8	1262.1	NO	bb	bb	84.288
13C-1234-TCDD	25.576	0.000	3.640e5	4.524e5	1.000	0.805	0.770	1931	1352	5.55e6	6.91e6	2875.2	5114.0	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.032	4.012e5	4.998e5	1.152	0.803	0.770	1931	1352	5.75e6	7.10e6	2979.4	5249.9	NO	bb	bb	95.760
13C-12378-PeCDD	31.504	1.232	4.613e5	2.880e5	0.829	1.602	1.550	1401	1533	6.70e6	4.14e6	4781.1	2700.1	NO	bb	bb	110.725
13C-123478-HxCDD	35.994	0.986	4.133e5	3.236e5	0.995	1.277	1.240	1744	1461	6.55e6	5.10e6	3756.0	3493.2	NO	bd	bd	97.670
13C-123678-HxCDD	36.106	0.989	5.195e5	3.785e5	1.157	1.372	1.240	1744	1461	6.84e6	5.29e6	3920.0	3622.3	NO	db	db	102.381
13C-1234678-HpCDD	40.250	1.103	2.785e5	2.707e5	0.840	1.029	1.050	1497	2275	3.82e6	3.65e6	2553.8	1605.5	NO	bb	bd	86.201
13C-OCDD	44.972	1.232	5.210e5	5.429e5	0.767	0.960	0.890	2989	1436	5.87e6	6.48e6	1964.2	4513.5	NO	bd	bb	182.810
13C-123789-HxCDD	36.496	0.000	4.181e5	3.402e5	1.000	1.229	1.240	1744	1461	6.11e6	4.85e6	3503.9	3317.8	NO	bb	bb	100.000
37CL-2378-TCDD	26.410	1.033	1.287e3		1.288			1959		1.53e4		7.8			db		0.122

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:33:58 Pacific Standard Time

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	1141	1568								
1289-TCDF					0.678		0.770	1141	1568								
13468-PECDF					1.246		1.550	669	893								
12389-PECDF					0.496		1.550	717	1165								
123468-HXCDF					1.169		1.240	675	706								
1368-TCDD					1.015		0.770	1186	741								
1289-TCDD					0.909		0.770	1186	741								
12479-PECDD					2.301		1.550	935	615								
12389-PECDD					1.184		1.550	935	615								
124679-HXCDD					1.115		1.240	725	812								
1234679-HPCDD					1.137		1.050	985	1205								
Total-tetrafurans			0.000e0		0.727			1141		0.00e0							
Total-penta1			0.000e0					669		0.00e0							
Total-pentafurans			4.777e3		0.654			717		7.49e4							1.028
Total-hexafurans			1.035e4		1.141			675		1.54e5							2.000
Total-heptafurans			2.408e3		0.978			1176		3.94e4							0.931
Total-Furans			1.971e4		0.922			1141		2.93e5							5.016
Total-tetradioxins			0.000e0		1.024			1186		0.00e0							
Total-pentadioxins			2.628e3		1.502			935		3.66e4							0.540
Total-hexadioxins			6.694e3		1.005			725		1.03e5							1.534
Total-heptadioxins			1.634e3		1.088			985		2.31e4							0.531
Total-Dioxins			1.096e4		1.130			1186		1.63e5							2.605
Total-TEQ			3.067e4					1186		4.55e5							7.621
FUNCTION1 PFK			3.116e6					620464		1.62e6							
FUNCTION2 PFK			1.698e6					301200		2.24e6							0.000
FUNCTION3 PFK			5.380e7					450736		2.93e7							0.000
FUNCTION4 PFK			1.391e7					291095		1.60e7							
FUNCTION5 PFK			7.208e4					238350		2.59e6							
FUNCTION1 HXCD...			4.809e2					559		5.84e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			8.084e2					933		1.50e4							0.000
FUNCTION3 OCDPE			0.000e0					494		0.00e0							
FUNCTION4 NCDPE			6.931e2					845		1.26e4							0.000
FUNCTION5 DCDPE			7.511e2					821		1.86e4							0.000

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.27	2.446e3	1.527e3	0.786	1.60	1.55	50.1	YES	NO	bb	bb	0.508
2	12378-PeCDF	29.92	2.331e3	1.631e3	0.679	1.43	1.55	54.3	YES	NO	bb	bd	0.520

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.92	2.292e3	1.751e3	1.137	1.31	1.24	52.0	YES	NO	bd	bb	0.523
2	234678-HxCDF	35.89	2.363e3	1.967e3	1.140	1.20	1.24	52.2	YES	NO	bb	bb	0.459
3	123678-HxCDF	35.03	2.955e3	2.593e3	1.091	1.14	1.24	58.8	YES	NO	db	dd	0.495
4	123478-HxCDF	34.89	2.740e3	2.578e3	1.166	1.06	1.24	64.6	YES	NO	bd	bd	0.522

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.77	1.264e3	1.356e3	1.003	0.93	1.05	18.4	YES	NO	bd	bb	0.466
2	1234789-HpCDF	41.00	1.144e3	1.036e3	0.953	1.10	1.05	15.1	YES	NO	bb	bd	0.465

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-Furans	21.68	7.033e1	1.021e2	0.922	0.69	0.77	1.5	NO	NO	bb	bb	0.014
2	123789-HxCDF	36.92	2.292e3	1.751e3	1.137	1.31	1.24	52.0	YES	NO	bd	bb	0.523
3	234678-HxCDF	35.89	2.363e3	1.967e3	1.140	1.20	1.24	52.2	YES	NO	bb	bb	0.459
4	123678-HxCDF	35.03	2.955e3	2.593e3	1.091	1.14	1.24	58.8	YES	NO	db	dd	0.495
5	123478-HxCDF	34.89	2.740e3	2.578e3	1.166	1.06	1.24	64.6	YES	NO	bd	bd	0.522
6	23478-PeCDF	31.27	2.446e3	1.527e3	0.786	1.60	1.55	50.1	YES	NO	bb	bb	0.508
7	12378-PeCDF	29.92	2.331e3	1.631e3	0.679	1.43	1.55	54.3	YES	NO	bb	bd	0.520
8	1234678-HpCDF	38.77	1.264e3	1.356e3	1.003	0.93	1.05	18.4	YES	NO	bd	bb	0.466
9	1234789-HpCDF	41.00	1.144e3	1.036e3	0.953	1.10	1.05	15.1	YES	NO	bb	bd	0.465
10	OCDF	45.23	2.105e3	2.214e3	0.778	0.95	0.89	30.2	YES	NO	bb	bb	1.044

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.53	2.628e3	1.506e3	1.022	1.75	1.55	39.1	YES	NO	bb	bb	0.540

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.51	2.154e3	1.651e3	0.907	1.30	1.24	45.5	YES	NO	bd	bb	0.513
2	123678-HxCDD	36.13	2.428e3	1.876e3	1.001	1.29	1.24	51.1	YES	NO	db	db	0.479
3	123478-HxCDD	36.02	2.113e3	1.865e3	0.996	1.13	1.24	45.6	YES	NO	dd	bd	0.542

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.26	1.634e3	1.397e3	1.039	1.17	1.05	23.5	YES	NO	MM	bb	0.531

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.53	2.628e3	1.506e3	1.022	1.75	1.55	39.1	YES	NO	bb	bb	0.540
2	123789-HxCDD	36.51	2.154e3	1.651e3	0.907	1.30	1.24	45.5	YES	NO	bd	bb	0.513
3	123678-HxCDD	36.13	2.428e3	1.876e3	1.001	1.29	1.24	51.1	YES	NO	db	db	0.479
4	123478-HxCDD	36.02	2.113e3	1.865e3	0.996	1.13	1.24	45.6	YES	NO	dd	bd	0.542
5	1234678-HpCDD	40.26	1.634e3	1.397e3	1.039	1.17	1.05	23.5	YES	NO	MM	bb	0.531

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-Furans	21.68	7.033e1	1.021e2	0.922	0.69	0.77	1.5	NO	NO	bb	bb	0.014
2	123789-HxCDF	36.92	2.292e3	1.751e3	1.137	1.31	1.24	52.0	YES	NO	bd	bb	0.523
3	234678-HxCDF	35.89	2.363e3	1.967e3	1.140	1.20	1.24	52.2	YES	NO	bb	bb	0.459
4	123678-HxCDF	35.03	2.955e3	2.593e3	1.091	1.14	1.24	58.8	YES	NO	db	dd	0.495
5	123478-HxCDF	34.89	2.740e3	2.578e3	1.166	1.06	1.24	64.6	YES	NO	bd	bd	0.522
6	23478-PeCDF	31.27	2.446e3	1.527e3	0.786	1.60	1.55	50.1	YES	NO	bb	bb	0.508
7	12378-PeCDF	29.92	2.331e3	1.631e3	0.679	1.43	1.55	54.3	YES	NO	bb	bd	0.520
8	1234678-HpCDF	38.77	1.264e3	1.356e3	1.003	0.93	1.05	18.4	YES	NO	bd	bb	0.466
9	1234789-HpCDF	41.00	1.144e3	1.036e3	0.953	1.10	1.05	15.1	YES	NO	bb	bd	0.465
10	OCDF	45.23	2.105e3	2.214e3	0.778	0.95	0.89	30.2	YES	NO	bb	bb	1.044
11	12378-PeCDD	31.53	2.628e3	1.506e3	1.022	1.75	1.55	39.1	YES	NO	bb	bb	0.540
12	123789-HxCDD	36.51	2.154e3	1.651e3	0.907	1.30	1.24	45.5	YES	NO	bd	bb	0.513
13	123678-HxCDD	36.13	2.428e3	1.876e3	1.001	1.29	1.24	51.1	YES	NO	db	db	0.479
14	123478-HxCDD	36.02	2.113e3	1.865e3	0.996	1.13	1.24	45.6	YES	NO	dd	bd	0.542
15	1234678-HpCDD	40.26	1.634e3	1.397e3	1.039	1.17	1.05	23.5	YES	NO	MM	bb	0.531

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	24.18	3.116e6					2.6	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.19	1.560e6					3.1	YES		bb		0.000
2	FUNCTION2 PFK	28.13	1.376e5					4.3	YES		bb		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.12	2.560e6					15.7	YES		db		0.000
2	FUNCTION3 PFK	36.37	7.058e6					24.4	YES		dd		0.000
3	FUNCTION3 PFK	36.11	4.418e7					24.8	YES		bd		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	42.43	1.404e5					1.6	NO		bb		
2	FUNCTION4 PFK	37.89	1.377e7					53.2	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.15	7.152e3					1.1	NO		bb		
2	FUNCTION5 PFK	45.07	1.178e3					0.5	NO		bb		
3	FUNCTION5 PFK	44.98	1.177e3					0.5	NO		bb		
4	FUNCTION5 PFK	44.19	7.772e3					0.8	NO		bb		
5	FUNCTION5 PFK	43.72	7.921e3					1.3	NO		bb		
6	FUNCTION5 PFK	43.60	4.474e3					0.7	NO		bb		
7	FUNCTION5 PFK	43.17	6.636e3					1.2	NO		bb		
8	FUNCTION5 PFK	43.01	5.001e3					0.7	NO		bb		
9	FUNCTION5 PFK	42.76	1.253e4					1.4	NO		bb		
10	FUNCTION5 PFK	45.91	8.220e3					0.4	NO		bb		
11	FUNCTION5 PFK	45.75	6.523e3					1.4	NO		bb		
12	FUNCTION5 PFK	45.25	3.501e3					0.7	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.60	9.542e1					2.4	NO		bb		0.000
2	FUNCTION1 HXCD...	26.42	7.837e1					1.9	NO		bb		0.000
3	FUNCTION1 HXCD...	25.58	1.709e2					3.5	YES		bb		0.000
4	FUNCTION1 HXCD...	23.40	1.362e2					2.7	NO		bb		0.000

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ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.36	1.308e2					1.8	NO		bb		0.000
2	FUNCTION2 HPCD...	31.75	8.377e1					1.7	NO		bb		0.000
3	FUNCTION2 HPCD...	31.30	1.170e2					2.2	NO		db		0.000
4	FUNCTION2 HPCD...	31.24	1.138e2					2.6	NO		bd		0.000
5	FUNCTION2 HPCD...	30.92	1.786e2					3.2	YES		bb		0.000
6	FUNCTION2 HPCD...	30.04	8.034e1					1.7	NO		bb		0.000
7	FUNCTION2 HPCD...	29.47	1.041e2					2.9	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	42.04	9.826e1					2.2	NO		bb		0.000
2	FUNCTION4 NCDPE	41.83	1.085e2					2.1	NO		bb		0.000
3	FUNCTION4 NCDPE	41.67	8.318e1					2.8	NO		db		0.000
4	FUNCTION4 NCDPE	41.58	1.047e2					2.5	NO		bd		0.000
5	FUNCTION4 NCDPE	41.32	1.741e2					2.4	NO		bb		0.000
6	FUNCTION4 NCDPE	41.15	1.244e2					2.8	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	43.53	7.557e1					1.5	NO		bb		0.000
2	FUNCTION5 DCDPE	43.39	1.767e2					2.9	NO		bb		0.000
3	FUNCTION5 DCDPE	43.31	8.303e1					2.9	NO		db		0.000
4	FUNCTION5 DCDPE	43.27	1.217e2					4.5	YES		bd		0.000
5	FUNCTION5 DCDPE	43.04	1.550e2					3.9	YES		bb		0.000
6	FUNCTION5 DCDPE	42.73	1.390e2					7.0	YES		bb		0.000

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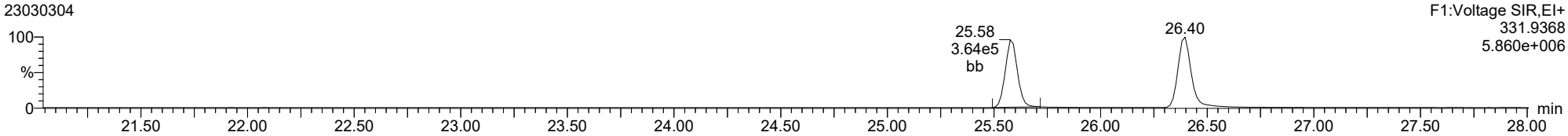

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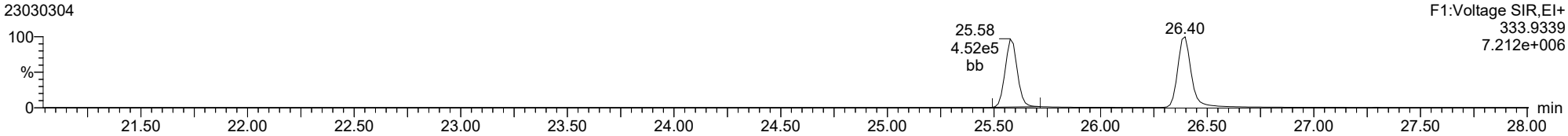

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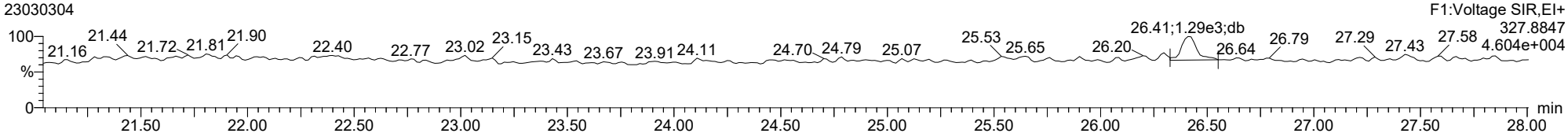

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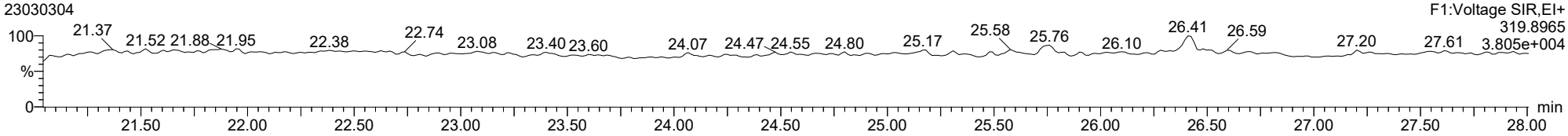

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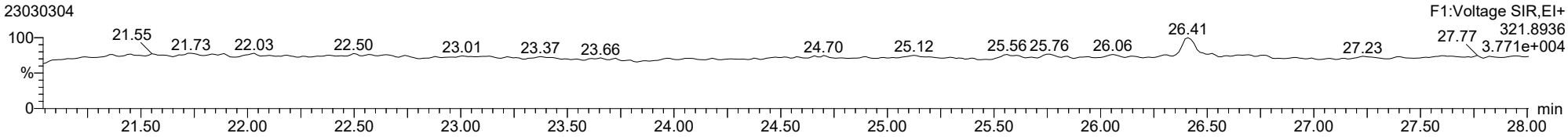

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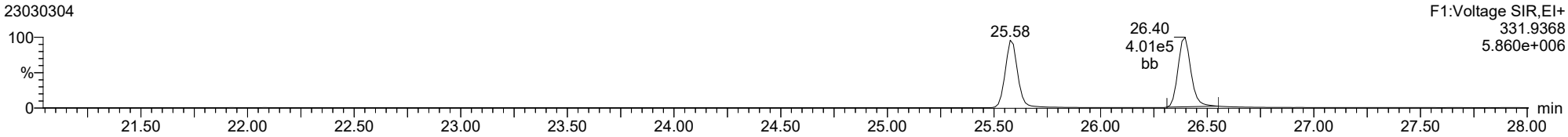

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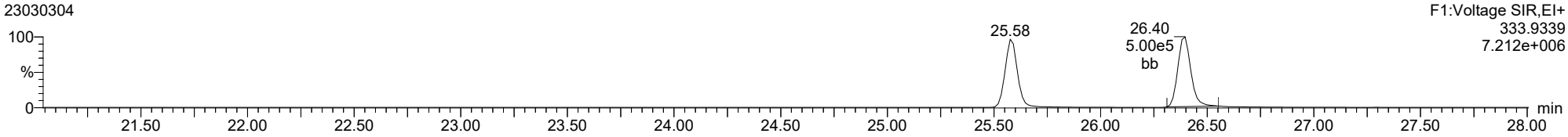

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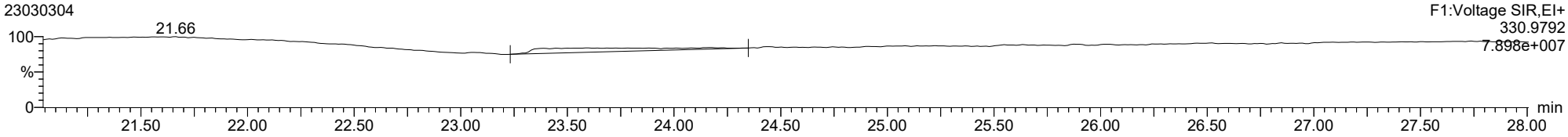

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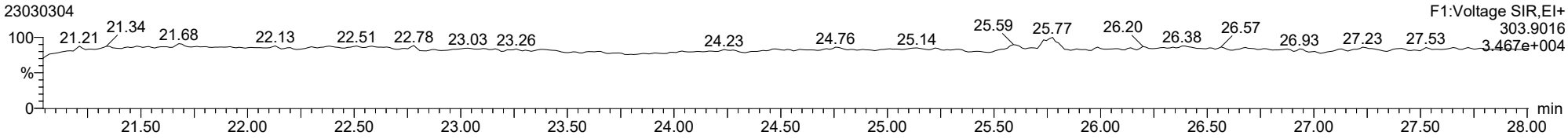

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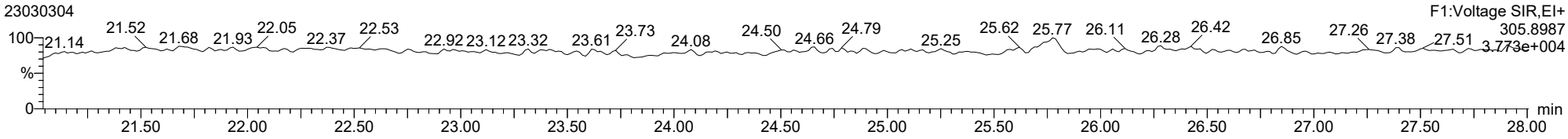

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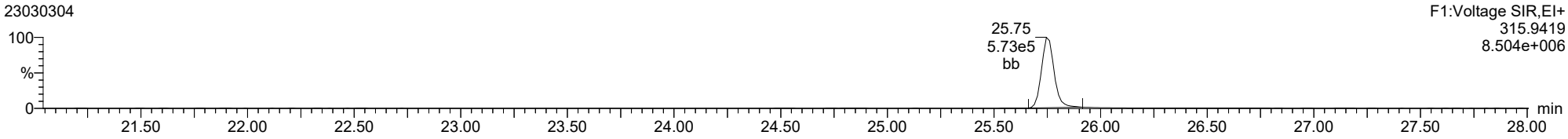

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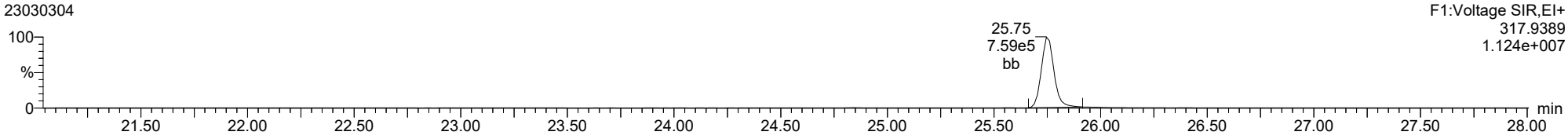

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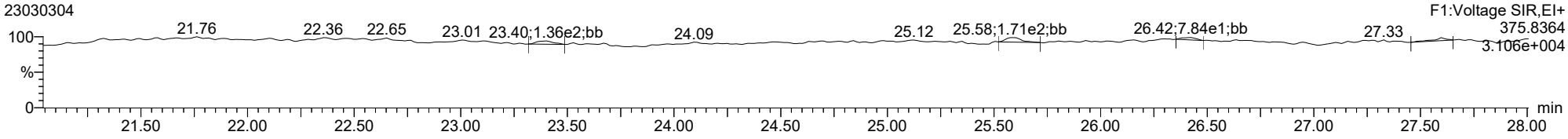

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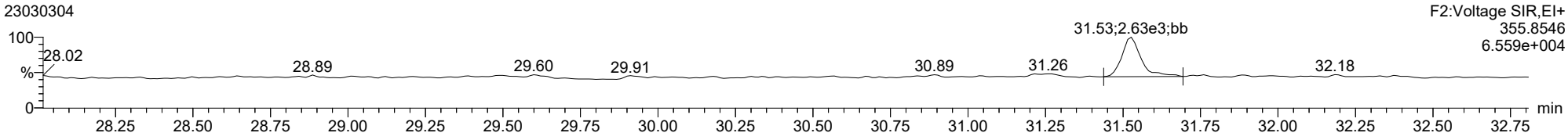

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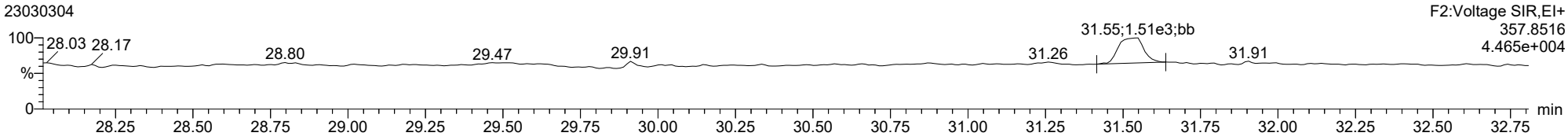

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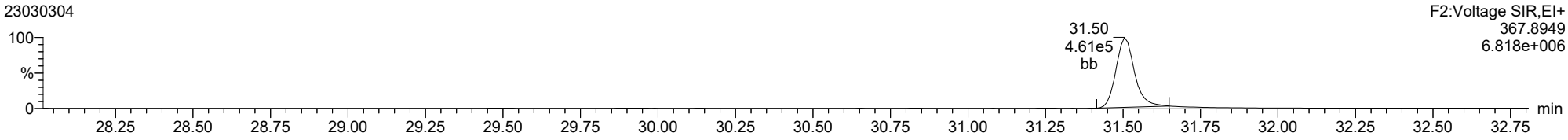

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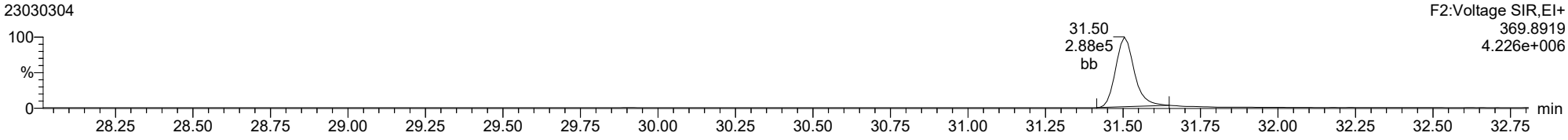
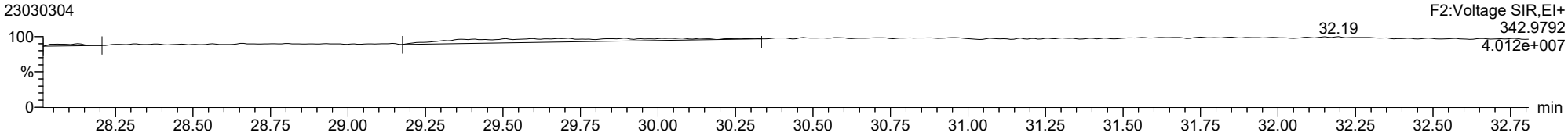


FUNCTION2 PFK



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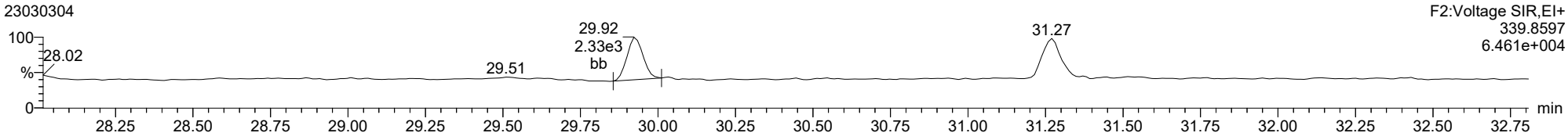

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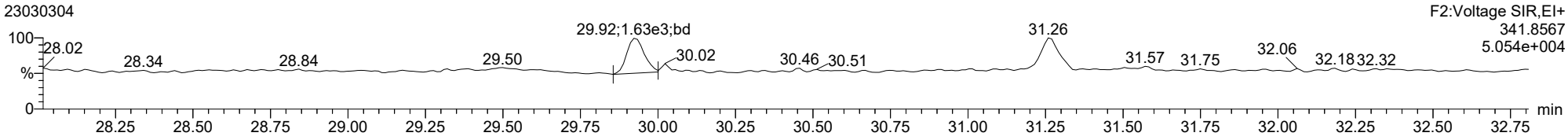

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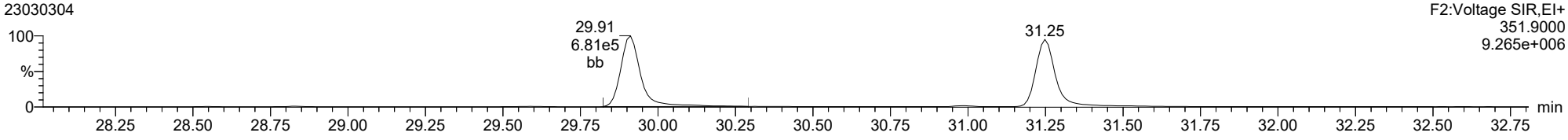

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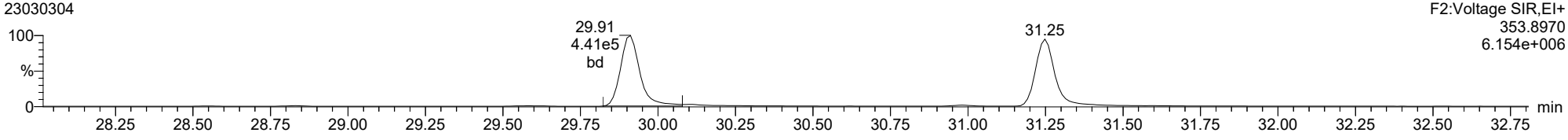
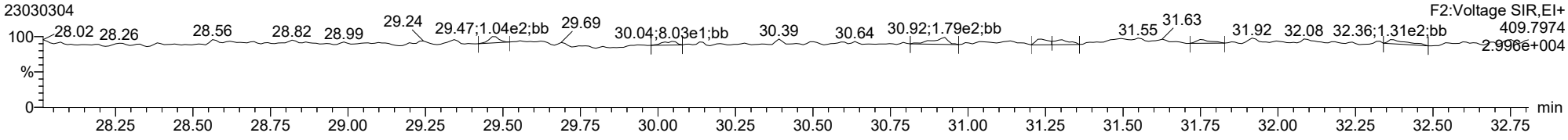


FUNCTION2 HPCDPE



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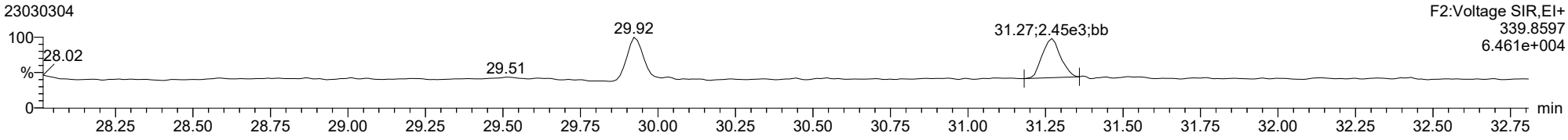
23478-PeCDF



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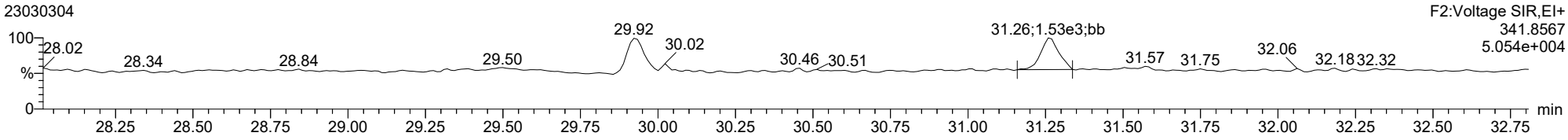

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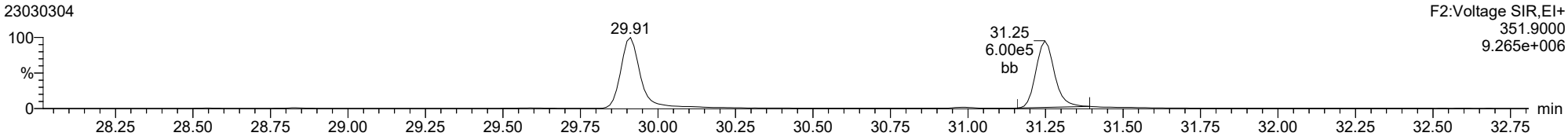

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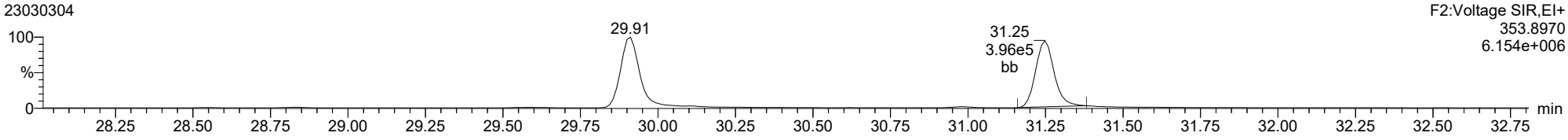
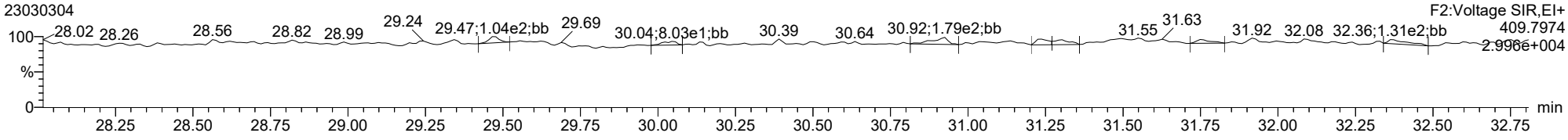


FUNCTION2 HPCDPE



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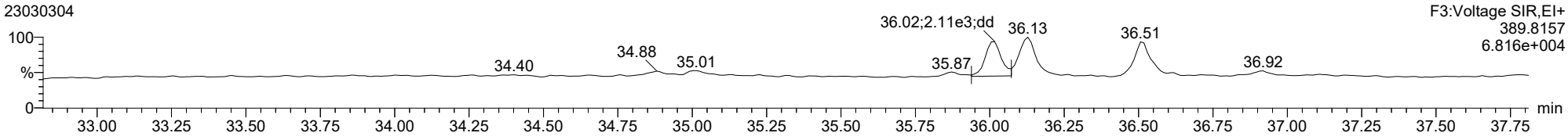

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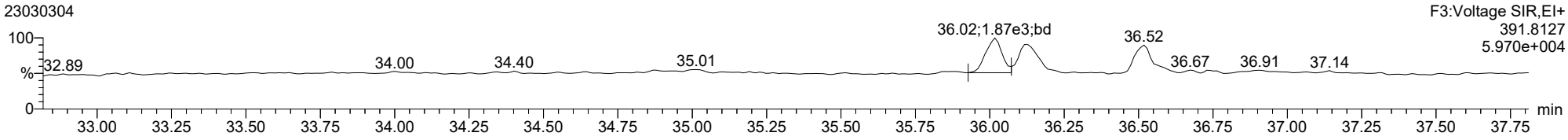

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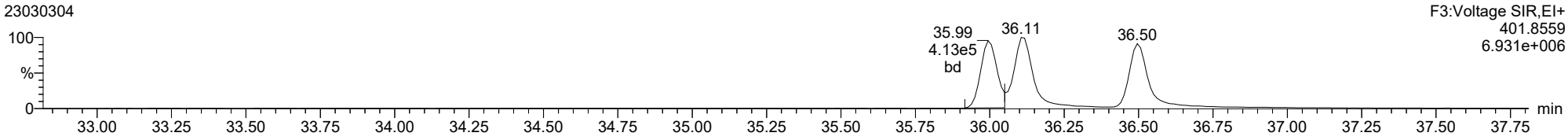

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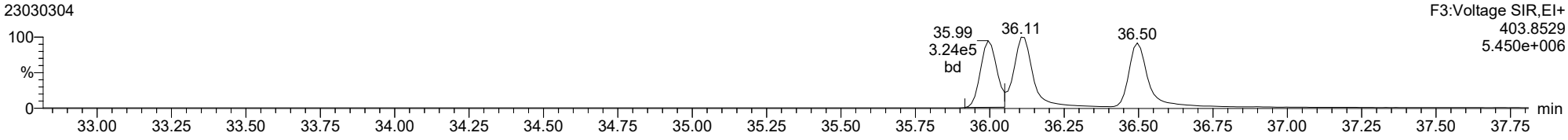

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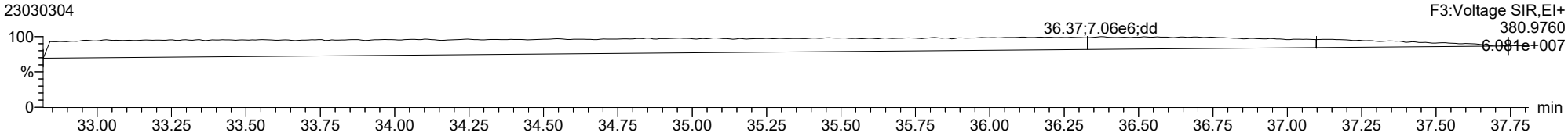

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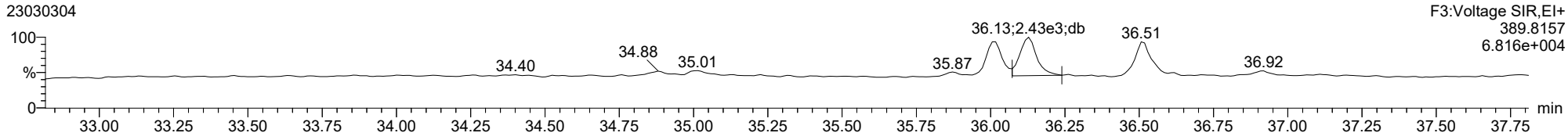

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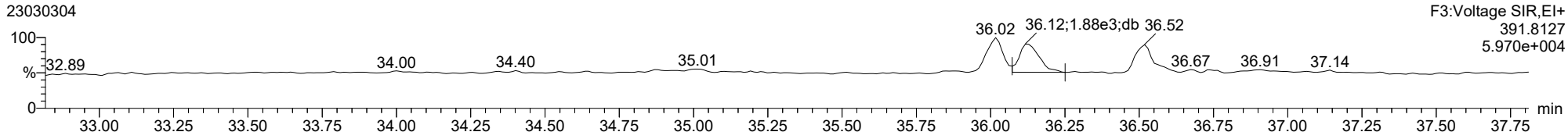

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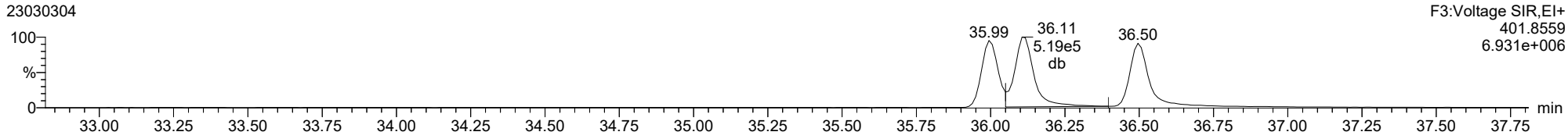

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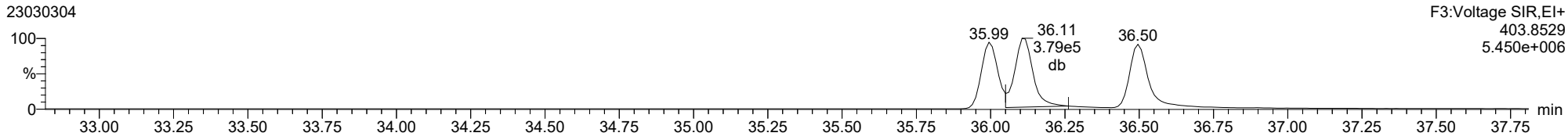

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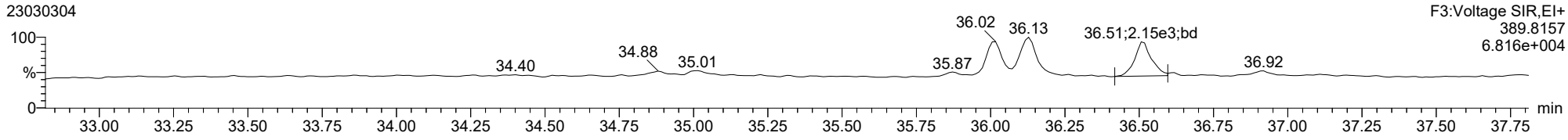

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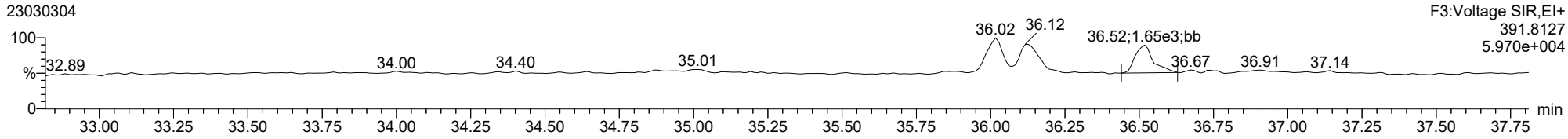

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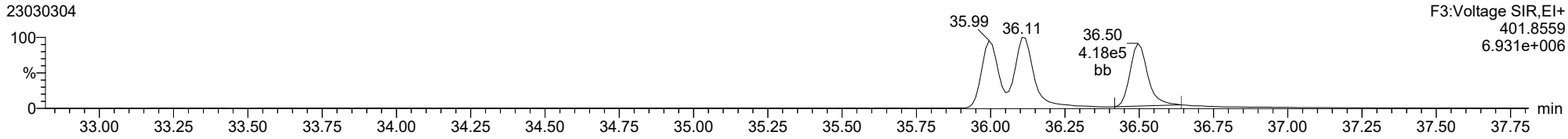

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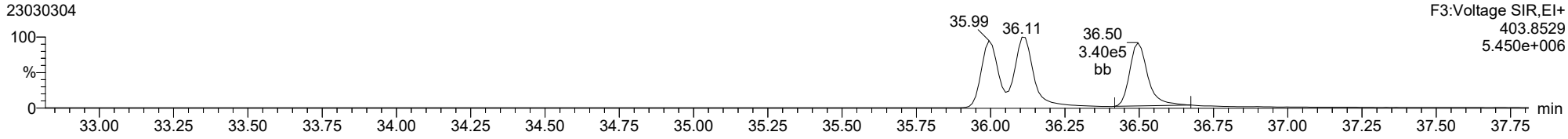

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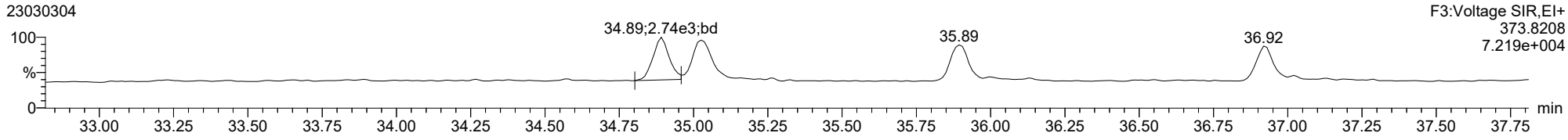

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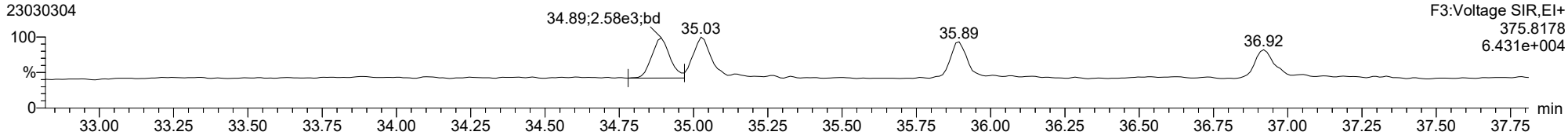

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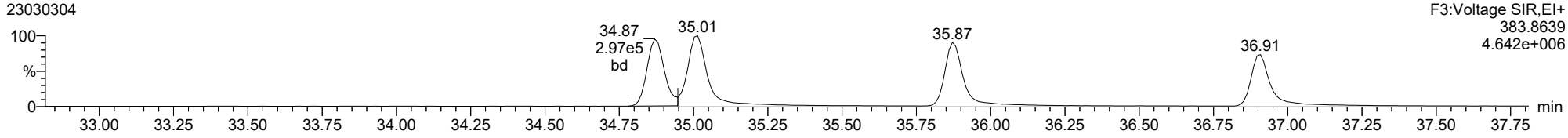

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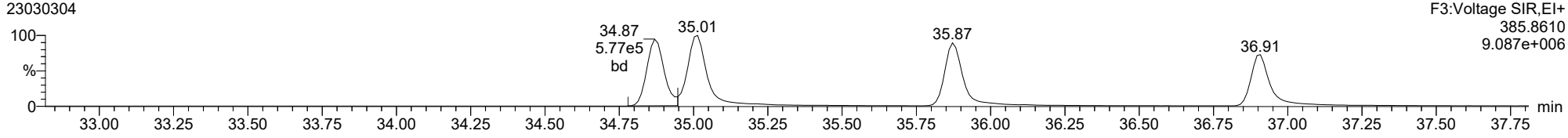

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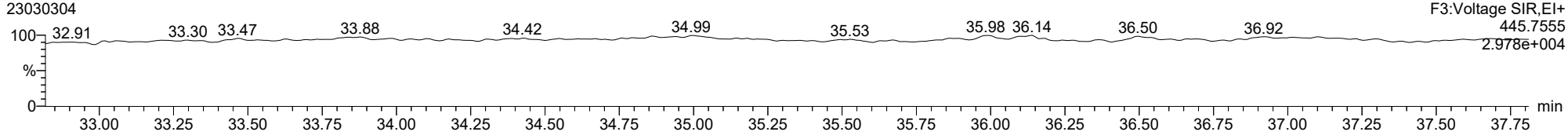

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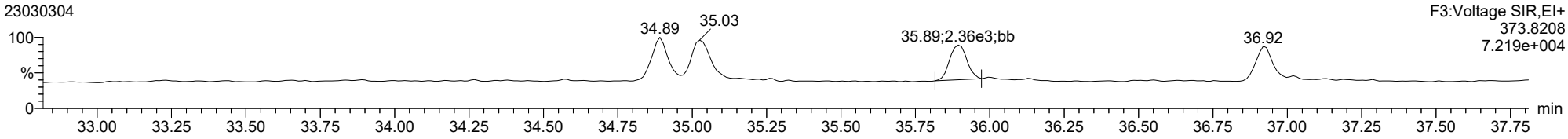

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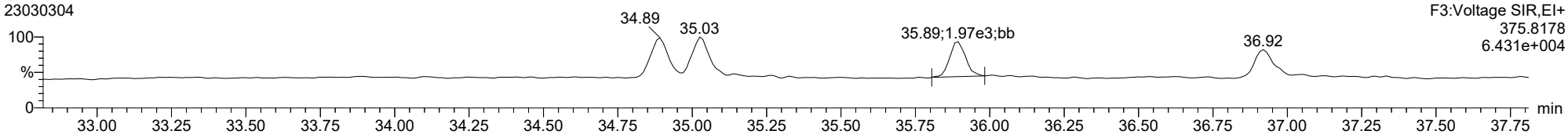

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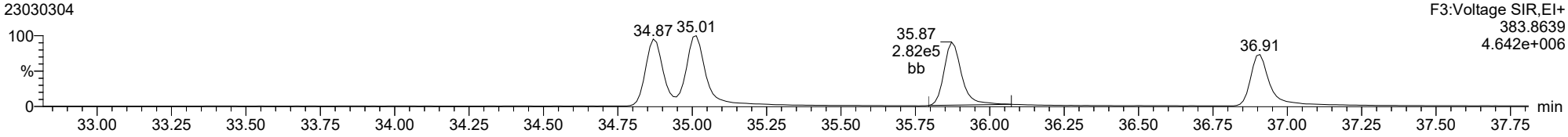

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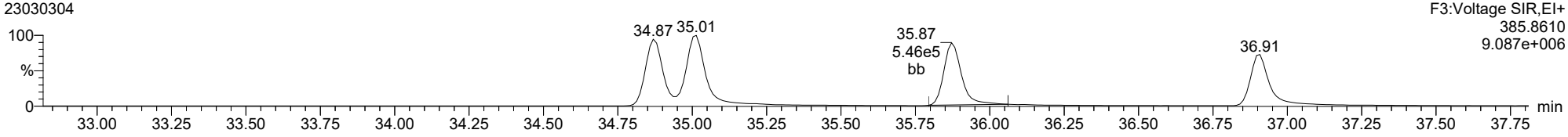
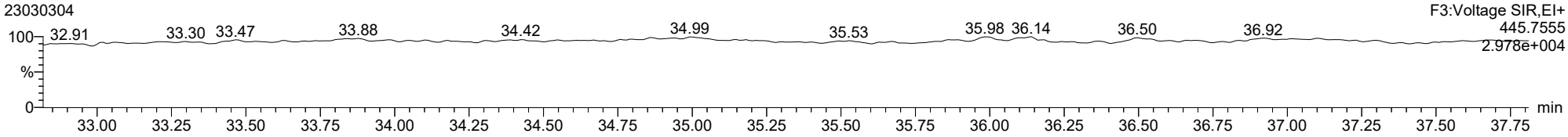


FUNCTION3 OCDPE



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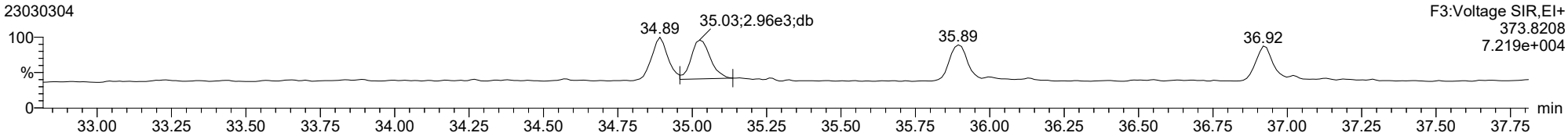

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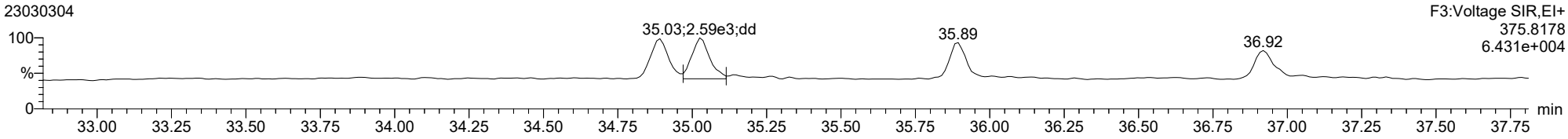

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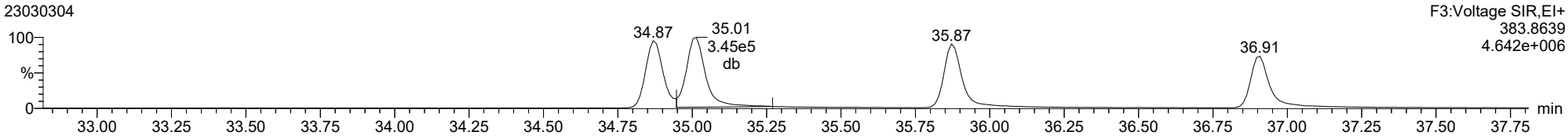

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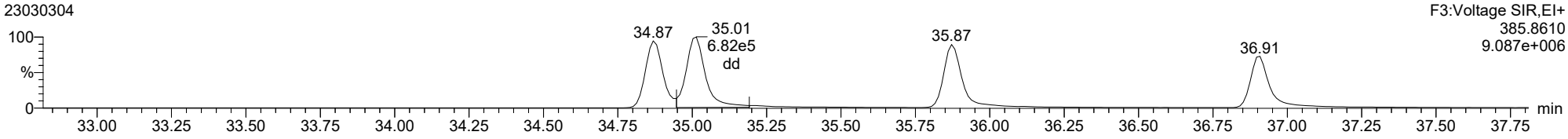
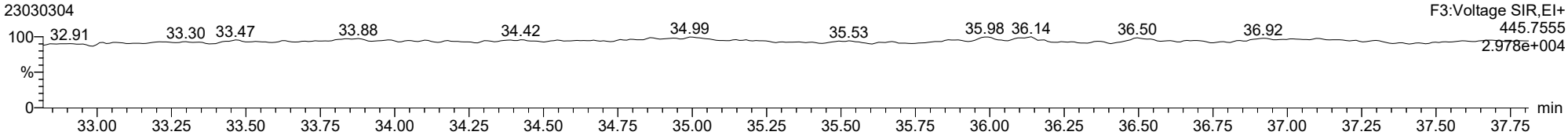


FUNCTION3 OCDPE



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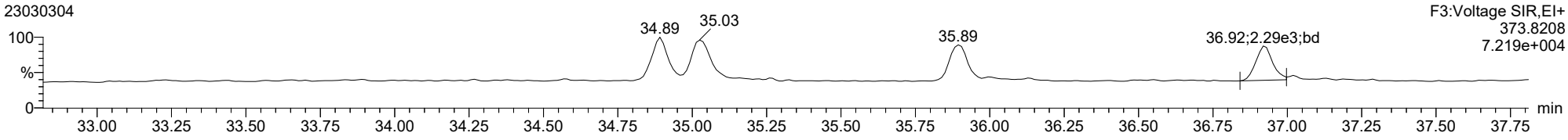

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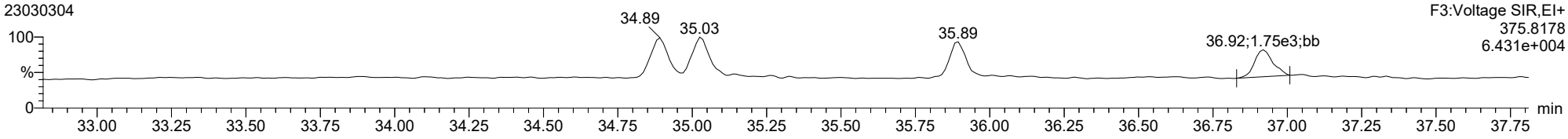

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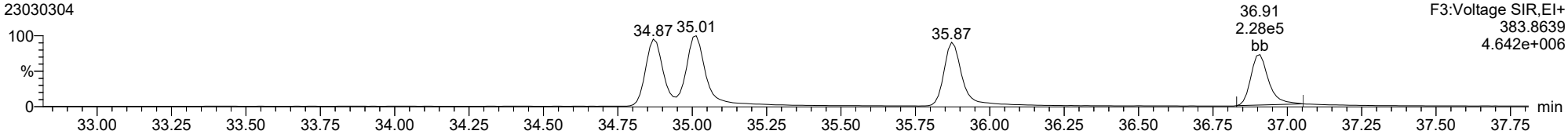

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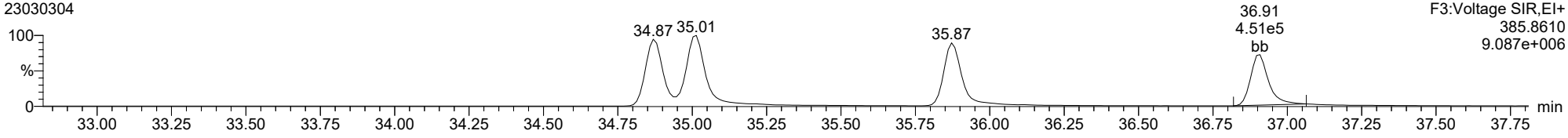
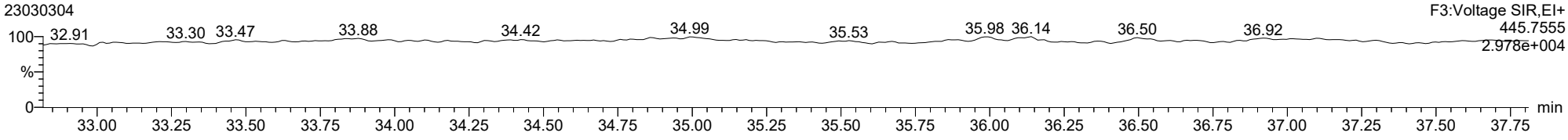


FUNCTION3 OCDPE



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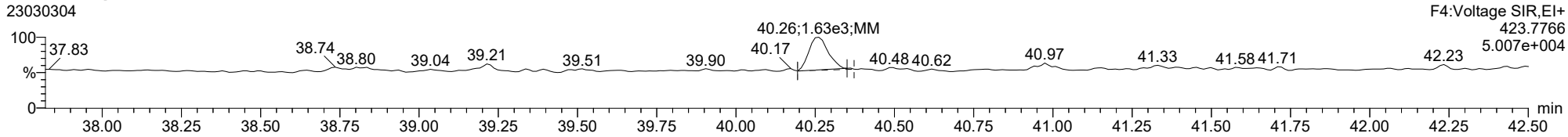
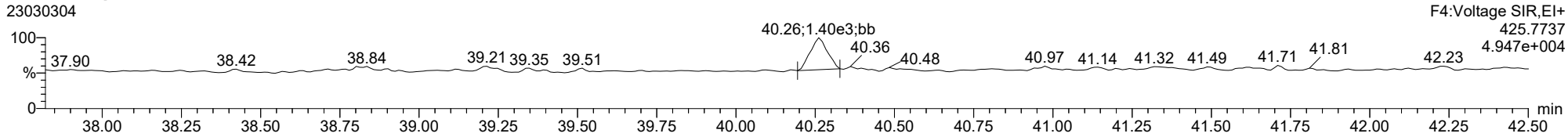
1234678-HpCDD



1234678-HpCDD



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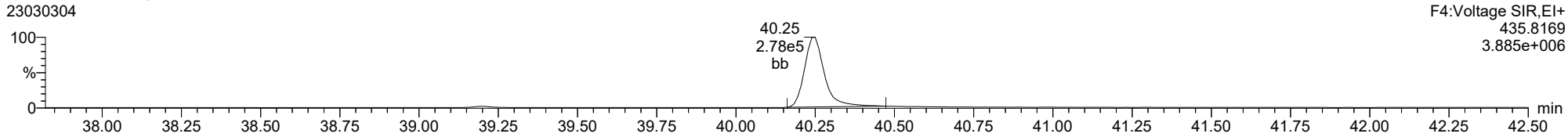

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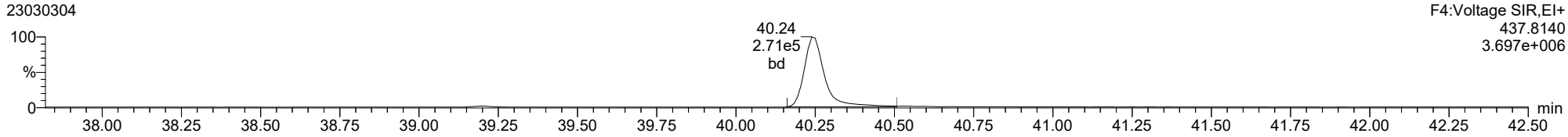
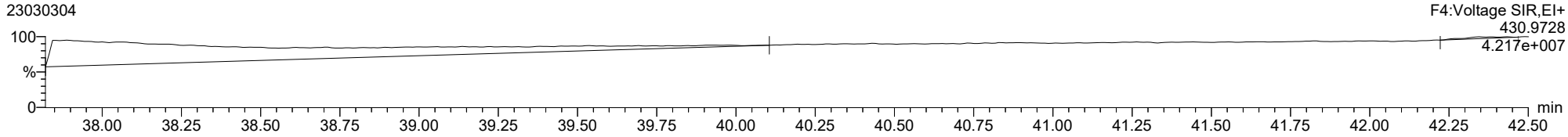


FUNCTION4 PFK



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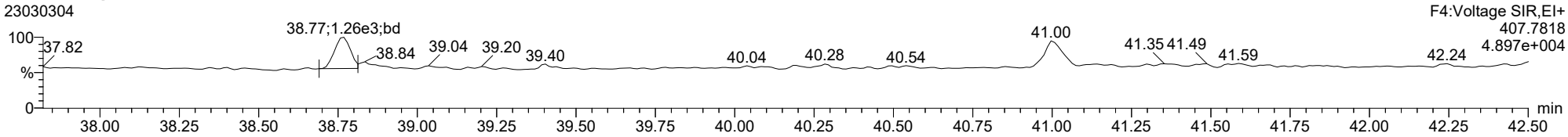

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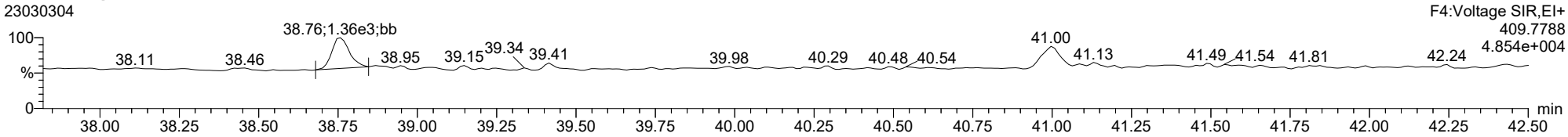

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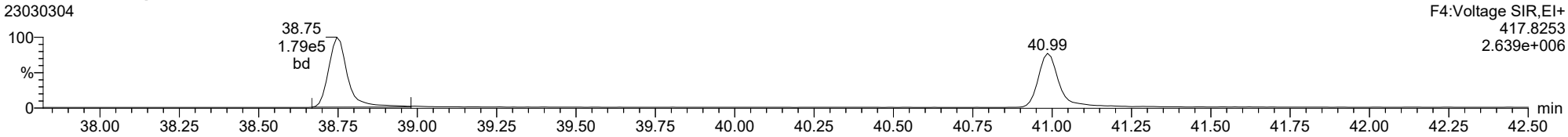

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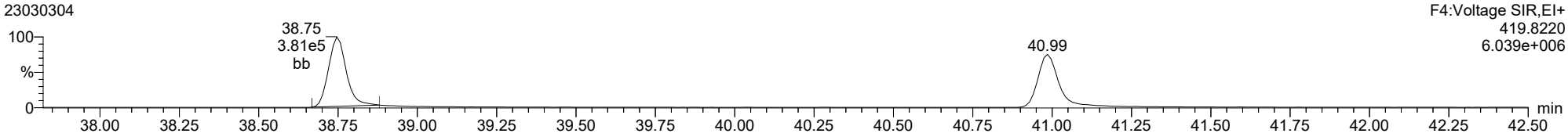
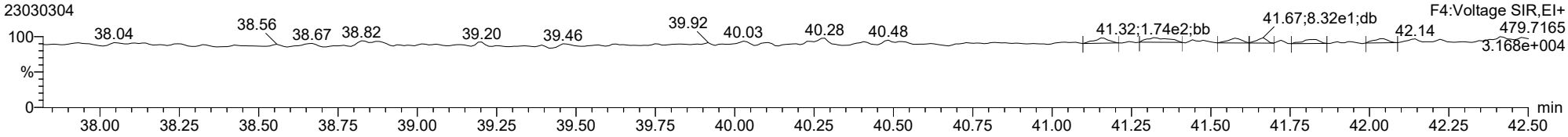


FUNCTION4 NCDPE



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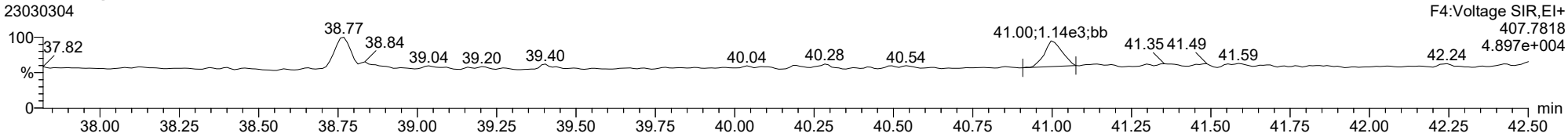

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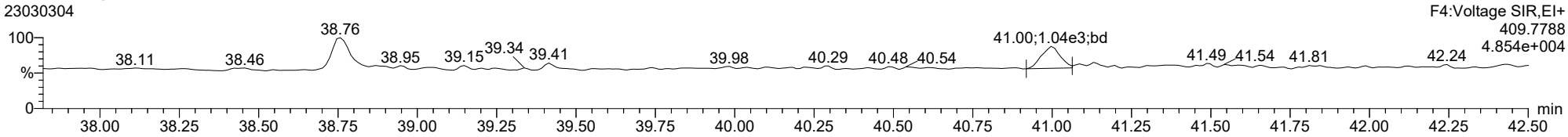

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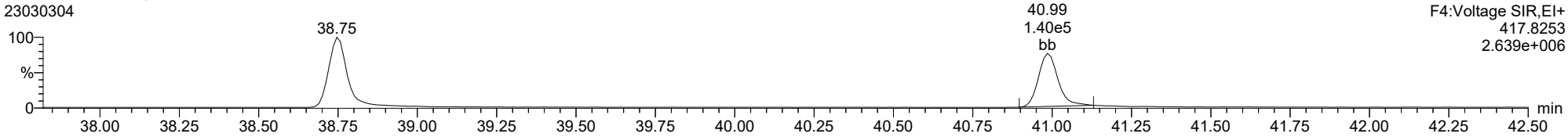

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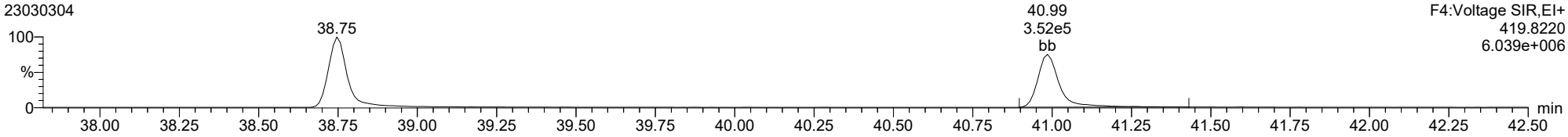
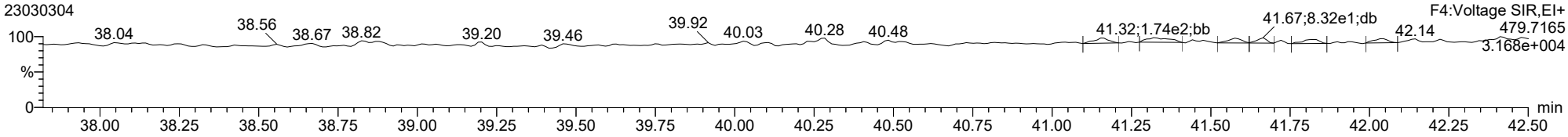


FUNCTION4 NCDPE



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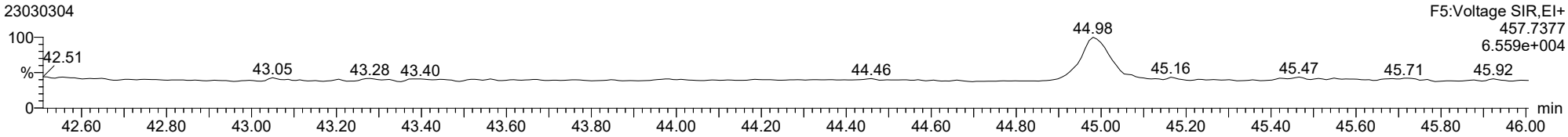
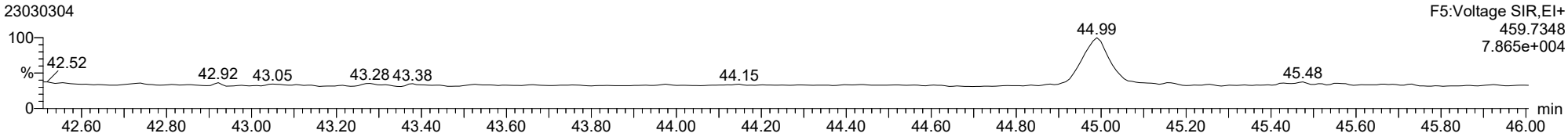
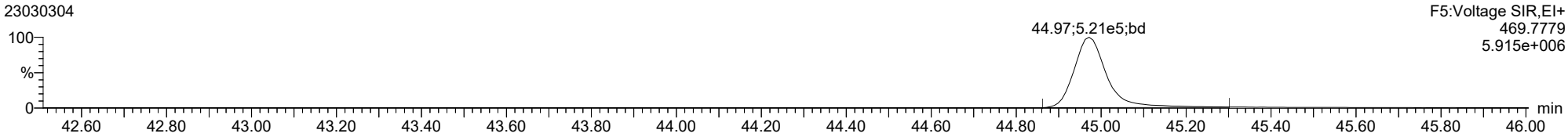
OCDD



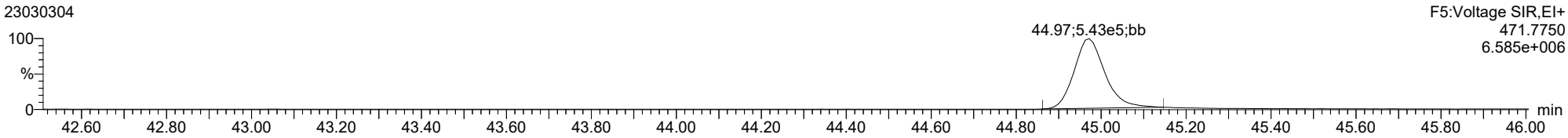
OCDD



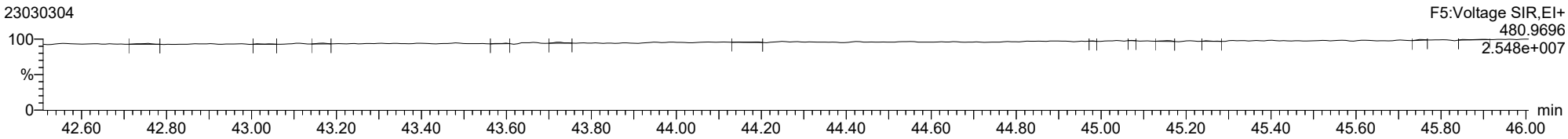
13C-OCDD



13C-OCDD



FUNCTION5 PFK



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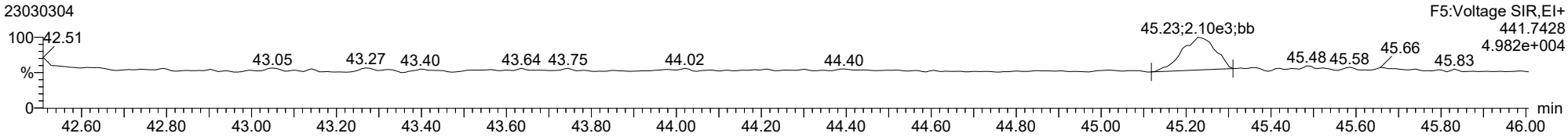
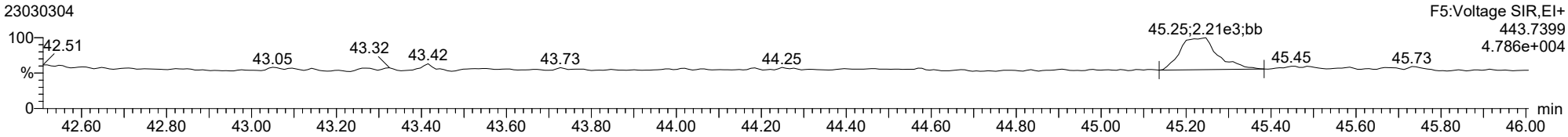
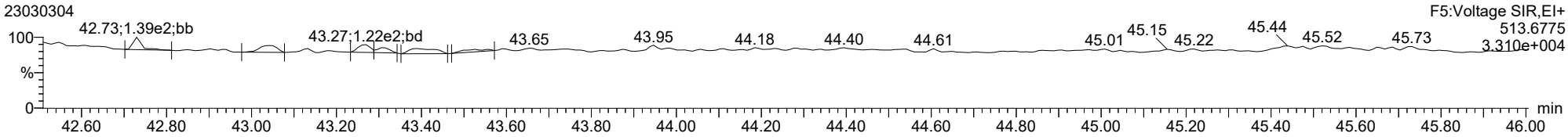
OCDF



OCDF



FUNCTION5 DCDPE



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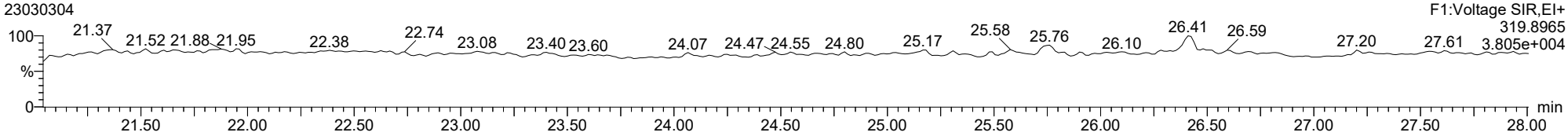
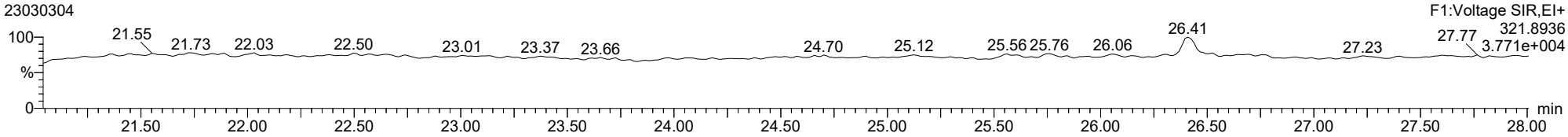
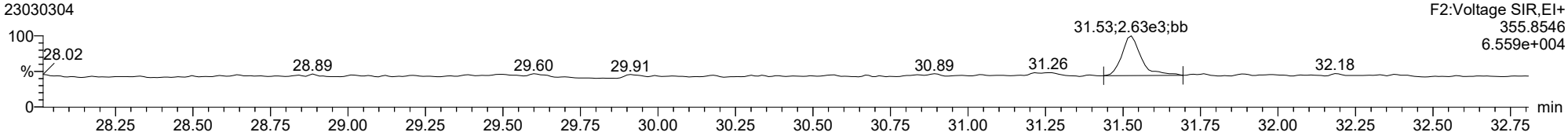
Total-tetradioxins



Total-tetradioxins



Total-pentadioxins



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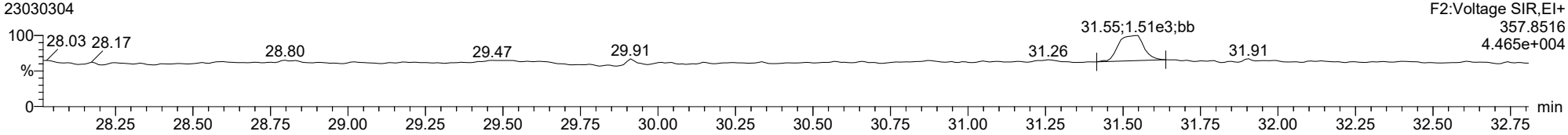

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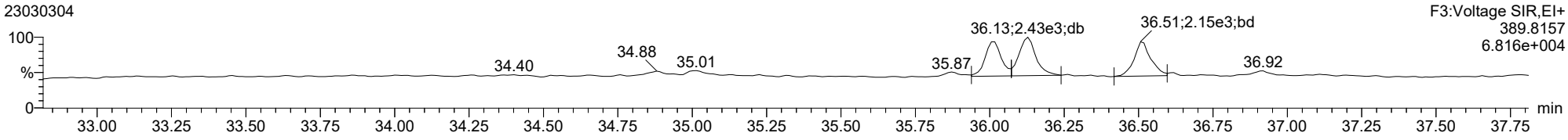
Total-hexadioxins



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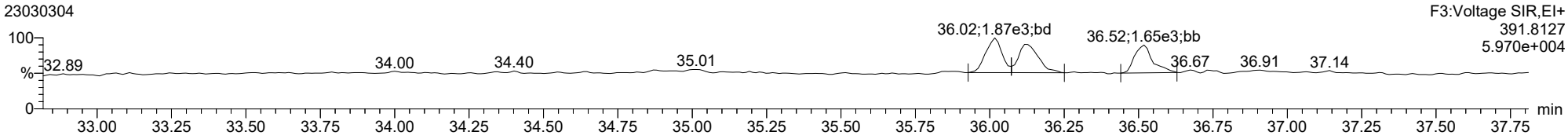

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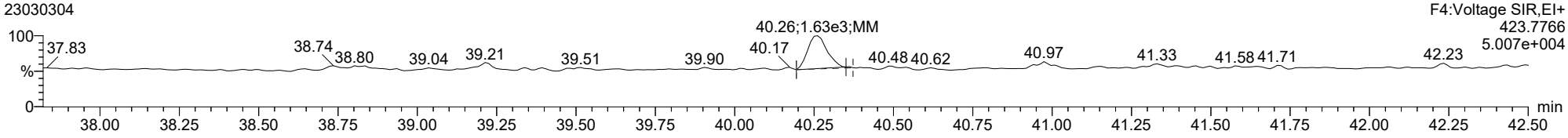
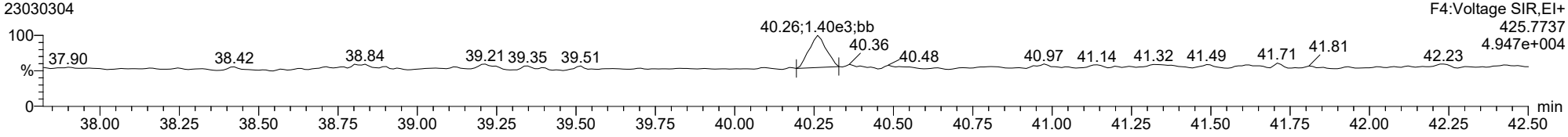


Total-heptadioxins



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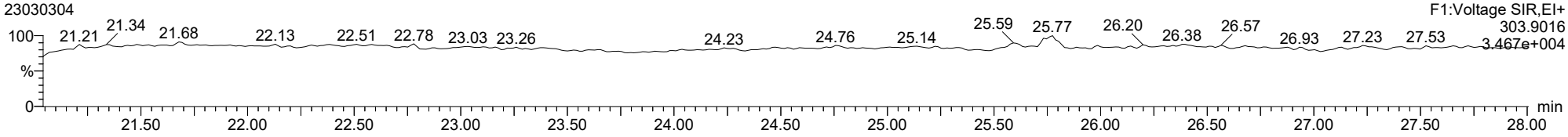
Total-tetrafurans



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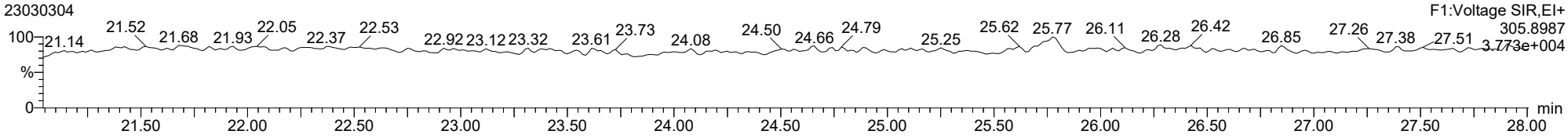

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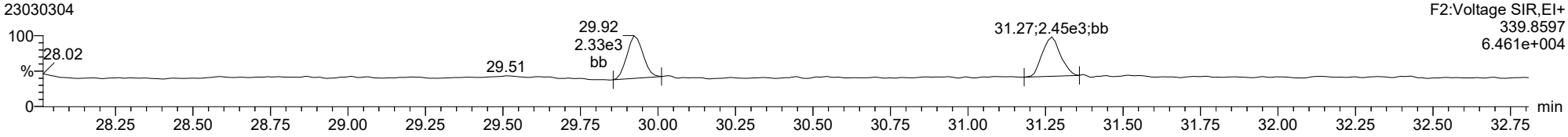

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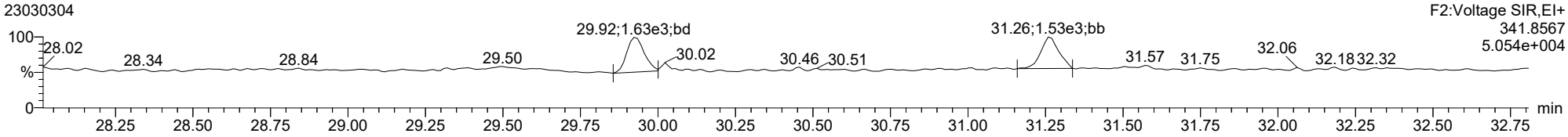

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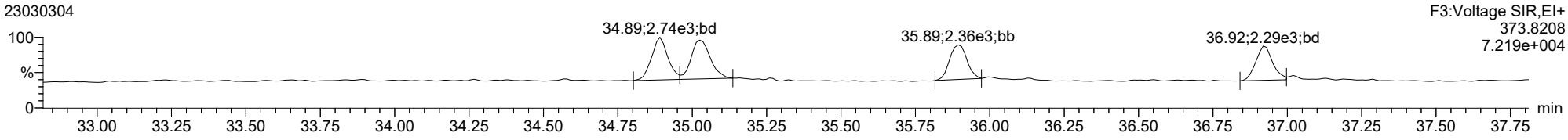
Total-hexafurans



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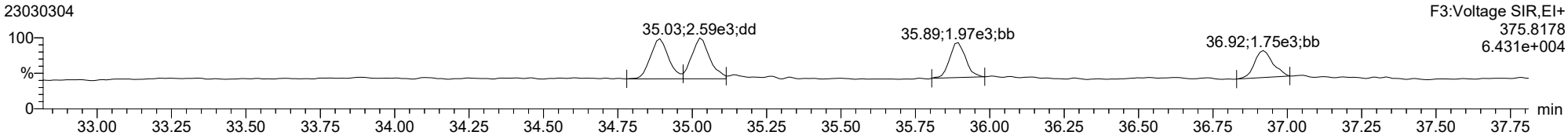

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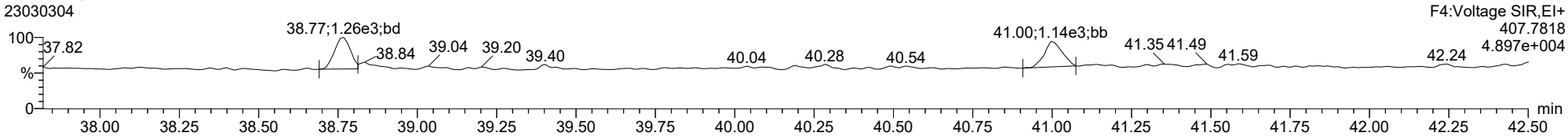
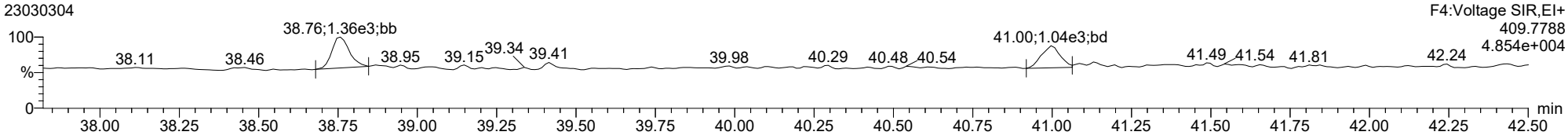


Total-heptafurans



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Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:34:10 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.788	1.001	1.705e3	2.516e3	0.702	0.678	0.770	886	1799	2.34e4	3.87e4	26.4	21.5	NO	bb	MM	0.494
12378-PeCDF	29.933	1.000	5.914e3	4.099e3	0.679	1.442	1.550	1151	1276	9.10e4	6.48e4	79.1	50.8	NO	bb	bb	2.168
23478-PeCDF	31.270	1.000	7.974e3	4.958e3	0.786	1.608	1.550	1151	1276	1.22e5	6.97e4	106.1	54.6	NO	bb	bb	2.386
123478-HxCDF	34.891	1.000	1.063e4	7.851e3	1.166	1.354	1.240	1046	1170	1.58e5	1.17e5	151.4	100.1	NO	bd	bd	2.532
234678-HxCDF	35.894	1.000	1.057e4	7.802e3	1.140	1.354	1.240	1046	1170	1.51e5	1.18e5	143.9	100.6	NO	bb	bb	2.503
123678-HxCDF	35.036	1.001	1.161e4	8.676e3	1.091	1.339	1.240	1046	1170	1.53e5	1.27e5	146.1	108.8	NO	dd	dd	2.416
123789-HxCDF	36.930	1.001	8.482e3	6.693e3	1.137	1.267	1.240	1046	1170	1.18e5	8.92e4	112.7	76.2	NO	bd	bb	2.462
1234678-HpCDF	38.768	1.000	7.253e3	6.596e3	1.003	1.100	1.050	811	627	1.05e5	9.73e4	128.9	155.1	NO	bb	bb	2.680
1234789-HpCDF	41.008	1.000	5.116e3	5.234e3	0.953	0.978	1.050	811	627	7.22e4	7.17e4	89.0	114.3	NO	bb	bb	2.342
OCDF	45.237	1.006	5.981e3	6.798e3	0.778	0.880	0.890	709	890	6.92e4	8.13e4	97.6	91.3	NO	MM	bd	4.559
2378-TCDD	26.424	1.001	2.272e3	2.723e3	1.149	0.834	0.770	1286	820	3.35e4	3.73e4	26.0	45.5	NO	bb	bb	0.486
12378-PeCDD	31.538	1.001	7.831e3	5.061e3	1.022	1.548	1.550	902	618	1.00e5	7.05e4	111.4	114.0	NO	bb	bd	2.348
123478-HxCDD	36.016	1.000	7.381e3	5.875e3	0.996	1.256	1.240	655	843	1.17e5	9.68e4	178.2	114.9	NO	bd	bd	2.415
123678-HxCDD	36.139	1.001	9.152e3	7.340e3	1.001	1.247	1.240	655	843	1.26e5	9.90e4	192.8	117.4	NO	db	dd	2.494
123789-HxCDD	36.518	1.011	7.480e3	5.936e3	0.907	1.260	1.240	655	843	1.06e5	8.62e4	162.4	102.3	NO	bd	bd	2.440
1234678-HpCDD	40.272	1.001	6.283e3	5.832e3	1.039	1.077	1.050	694	917	8.98e4	8.16e4	129.4	89.0	NO	bb	bd	2.337
OCDD	44.999	1.000	8.578e3	9.676e3	0.920	0.887	0.890	635	634	9.84e4	1.12e5	154.9	175.9	NO	bd	bb	5.505
13C-2378-TCDF	25.760	1.007	5.230e5	6.960e5	1.620	0.752	0.770	2566	1723	7.68e6	1.02e7	2994.2	5911.4	NO	bb	bb	98.043
13C-12378-PeCDF	29.922	1.169	4.082e5	2.718e5	1.240	1.502	1.550	3092	2294	5.44e6	3.64e6	1758.1	1584.9	NO	bd	bb	71.437
13C-23478-PeCDF	31.259	1.222	4.106e5	2.788e5	1.118	1.473	1.550	3092	2294	5.91e6	4.02e6	1912.5	1751.3	NO	bb	bb	80.373
13C-123478-HxCDF	34.880	0.955	2.117e5	4.140e5	1.168	0.511	0.510	1778	2186	3.18e6	6.21e6	1786.5	2841.3	NO	bd	bd	93.801
13C-123678-HxCDF	35.014	0.959	2.754e5	4.947e5	1.386	0.557	0.510	1778	2186	3.40e6	6.43e6	1911.3	2941.0	NO	db	db	97.276
13C-234678-HxCDF	35.882	0.983	2.122e5	4.318e5	1.129	0.491	0.510	1778	2186	3.04e6	5.98e6	1709.4	2734.1	NO	bb	bd	99.880
13C-123789-HxCDF	36.908	1.011	1.853e5	3.568e5	0.932	0.519	0.510	1778	2186	2.62e6	5.01e6	1471.0	2293.6	NO	bb	bb	101.893
13C-1234678-HpCDF	38.757	1.062	1.579e5	3.573e5	0.895	0.442	0.440	2049	3174	2.36e6	5.45e6	1151.3	1718.3	NO	bb	bb	100.794
13C-1234789-HpCDF	40.997	1.123	1.372e5	3.264e5	0.770	0.420	0.440	2049	3174	1.74e6	3.92e6	851.0	1236.7	NO	bd	bd	105.482
13C-1234-TCDD	25.591	0.000	3.429e5	4.245e5	1.000	0.808	0.770	2519	1748	5.22e6	6.49e6	2072.6	3712.2	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.031	3.982e5	4.964e5	1.152	0.802	0.770	2519	1748	5.51e6	6.93e6	2188.2	3962.8	NO	bb	bb	101.152
13C-12378-PeCDD	31.515	1.232	3.242e5	2.131e5	0.829	1.521	1.550	1586	877	4.46e6	2.78e6	2809.5	3168.1	NO	bb	bd	84.489
13C-123478-HxCDD	36.005	0.986	3.100e5	2.413e5	0.995	1.285	1.240	2517	1649	4.83e6	3.77e6	1920.9	2283.3	NO	bd	bd	97.050
13C-123678-HxCDD	36.117	0.989	3.700e5	2.908e5	1.157	1.273	1.240	2517	1649	5.06e6	4.03e6	2012.2	2442.3	NO	db	db	100.049
13C-1234678-HpCDD	40.250	1.102	2.556e5	2.433e5	0.840	1.051	1.050	2183	1602	3.48e6	3.29e6	1594.9	2052.3	NO	bb	bb	103.999
13C-OCDD	44.980	1.232	3.386e5	3.823e5	0.767	0.886	0.890	3187	1733	3.80e6	4.27e6	1193.7	2462.5	NO	bb	bb	164.498
13C-123789-HxCDD	36.507	0.000	3.194e5	2.515e5	1.000	1.270	1.240	2517	1649	4.46e6	3.59e6	1770.5	2177.4	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.033	5.065e3		1.288			2040		7.28e4		35.7			bb		0.513

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
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ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	886	1799								
1289-TCDF					0.678		0.770	886	1799								
13468-PECDF					1.246		1.550	811	1221								
12389-PECDF					0.496		1.550	1151	1276								
123468-HXCDF					1.169		1.240	1046	1170								
1368-TCDD					1.015		0.770	1286	820								
1289-TCDD					0.909		0.770	1286	820								
12479-PECDD					2.301		1.550	902	618								
12389-PECDD					1.184		1.550	902	618								
124679-HXCDD					1.115		1.240	655	843								
1234679-HPCDD					1.137		1.050	694	917								
Total-tetrafurans			1.705e3		0.727			886		2.34e4							0.494
Total-penta1			0.000e0					811		0.00e0							
Total-pentafurans			1.389e4		0.654			1151		2.13e5							4.554
Total-hexafurans			4.139e4		1.141			1046		5.82e5							9.938
Total-heptafurans			1.237e4		0.978			811		1.77e5							5.023
Total-Furans			7.533e4		0.922			886		1.06e6							24.566
Total-tetradioxins			2.272e3		1.024			1286		3.35e4							0.486
Total-pentadioxins			7.831e3		1.502			902		1.00e5							2.348
Total-hexadioxins			2.401e4		1.005			655		3.49e5							7.349
Total-heptadioxins			6.283e3		1.088			694		8.98e4							2.337
Total-Dioxins			4.898e4		1.130			1286		6.72e5							18.025
Total-TEQ			1.243e5					1286		1.74e6							42.592
FUNCTION1 PFK			0.000e0					501375		0.00e0							
FUNCTION2 PFK			7.687e6					300953		7.99e6							0.000
FUNCTION3 PFK			1.081e7					473463		1.95e7							0.000
FUNCTION4 PFK			1.035e7					332160		2.87e6							
FUNCTION5 PFK			6.101e5					195111		8.38e5							
FUNCTION1 HXCD...			6.739e2					611		6.36e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			7.361e2					923		1.83e4							0.000
FUNCTION3 OCDPE			2.008e2					596		2.61e3							0.000
FUNCTION4 NCDPE			9.397e1					539		1.40e3							0.000
FUNCTION5 DCDPE			1.677e2					561		3.39e3							0.000

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ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.79	1.705e3	2.516e3	0.702	0.68	0.77	26.4	YES	NO	bb	MM	0.494

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.27	7.974e3	4.958e3	0.786	1.61	1.55	106.1	YES	NO	bb	bb	2.386
2	12378-PeCDF	29.93	5.914e3	4.099e3	0.679	1.44	1.55	79.1	YES	NO	bb	bb	2.168

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.93	8.482e3	6.693e3	1.137	1.27	1.24	112.7	YES	NO	bd	bb	2.462
2	234678-HxCDF	35.89	1.057e4	7.802e3	1.140	1.35	1.24	143.9	YES	NO	bb	bb	2.503
3	Total-hexafurans	35.23	1.011e2	8.523e1	1.141	1.19	1.24	2.2	NO	NO	db	db	0.025
4	123678-HxCDF	35.04	1.161e4	8.676e3	1.091	1.34	1.24	146.1	YES	NO	dd	dd	2.416
5	123478-HxCDF	34.89	1.063e4	7.851e3	1.166	1.35	1.24	151.4	YES	NO	bd	bd	2.532

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.77	7.253e3	6.596e3	1.003	1.10	1.05	128.9	YES	NO	bb	bb	2.680
2	1234789-HpCDF	41.01	5.116e3	5.234e3	0.953	0.98	1.05	89.0	YES	NO	bb	bb	2.342

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.27	7.974e3	4.958e3	0.786	1.61	1.55	106.1	YES	NO	bb	bb	2.386
2	12378-PeCDF	29.93	5.914e3	4.099e3	0.679	1.44	1.55	79.1	YES	NO	bb	bb	2.168
3	2378-TCDF	25.79	1.705e3	2.516e3	0.702	0.68	0.77	26.4	YES	NO	bb	MM	0.494
4	123789-HxCDF	36.93	8.482e3	6.693e3	1.137	1.27	1.24	112.7	YES	NO	bd	bb	2.462
5	234678-HxCDF	35.89	1.057e4	7.802e3	1.140	1.35	1.24	143.9	YES	NO	bb	bb	2.503
6	Total-hexafurans	35.23	1.011e2	8.523e1	1.141	1.19	1.24	2.2	NO	NO	db	db	0.025
7	123678-HxCDF	35.04	1.161e4	8.676e3	1.091	1.34	1.24	146.1	YES	NO	dd	dd	2.416
8	123478-HxCDF	34.89	1.063e4	7.851e3	1.166	1.35	1.24	151.4	YES	NO	bd	bd	2.532
9	1234678-HpCDF	38.77	7.253e3	6.596e3	1.003	1.10	1.05	128.9	YES	NO	bb	bb	2.680
10	OCDF	45.24	5.981e3	6.798e3	0.778	0.88	0.89	97.6	YES	NO	MM	bd	4.559
11	1234789-HpCDF	41.01	5.116e3	5.234e3	0.953	0.98	1.05	89.0	YES	NO	bb	bb	2.342

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.42	2.272e3	2.723e3	1.149	0.83	0.77	26.0	YES	NO	bb	bb	0.486

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.54	7.831e3	5.061e3	1.022	1.55	1.55	111.4	YES	NO	bb	bd	2.348

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.52	7.480e3	5.936e3	0.907	1.26	1.24	162.4	YES	NO	bd	bd	2.440
2	123678-HxCDD	36.14	9.152e3	7.340e3	1.001	1.25	1.24	192.8	YES	NO	db	dd	2.494
3	123478-HxCDD	36.02	7.381e3	5.875e3	0.996	1.26	1.24	178.2	YES	NO	bd	bd	2.415

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.27	6.283e3	5.832e3	1.039	1.08	1.05	129.4	YES	NO	bb	bd	2.337

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.42	2.272e3	2.723e3	1.149	0.83	0.77	26.0	YES	NO	bb	bb	0.486
2	123789-HxCDD	36.52	7.480e3	5.936e3	0.907	1.26	1.24	162.4	YES	NO	bd	bd	2.440
3	123678-HxCDD	36.14	9.152e3	7.340e3	1.001	1.25	1.24	192.8	YES	NO	db	dd	2.494
4	123478-HxCDD	36.02	7.381e3	5.875e3	0.996	1.26	1.24	178.2	YES	NO	bd	bd	2.415
5	12378-PeCDD	31.54	7.831e3	5.061e3	1.022	1.55	1.55	111.4	YES	NO	bb	bd	2.348
6	1234678-HpCDD	40.27	6.283e3	5.832e3	1.039	1.08	1.05	129.4	YES	NO	bb	bd	2.337
7	OCDD	45.00	8.578e3	9.676e3	0.920	0.89	0.89	154.9	YES	NO	bd	bb	5.505

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.27	7.974e3	4.958e3	0.786	1.61	1.55	106.1	YES	NO	bb	bb	2.386
2	12378-PeCDF	29.93	5.914e3	4.099e3	0.679	1.44	1.55	79.1	YES	NO	bb	bb	2.168
3	2378-TCDF	25.79	1.705e3	2.516e3	0.702	0.68	0.77	26.4	YES	NO	bb	MM	0.494
4	123789-HxCDF	36.93	8.482e3	6.693e3	1.137	1.27	1.24	112.7	YES	NO	bd	bb	2.462
5	234678-HxCDF	35.89	1.057e4	7.802e3	1.140	1.35	1.24	143.9	YES	NO	bb	bb	2.503
6	Total-hexafurans	35.23	1.011e2	8.523e1	1.141	1.19	1.24	2.2	NO	NO	db	db	0.025
7	123678-HxCDF	35.04	1.161e4	8.676e3	1.091	1.34	1.24	146.1	YES	NO	dd	dd	2.416
8	123478-HxCDF	34.89	1.063e4	7.851e3	1.166	1.35	1.24	151.4	YES	NO	bd	bd	2.532
9	1234678-HpCDF	38.77	7.253e3	6.596e3	1.003	1.10	1.05	128.9	YES	NO	bb	bb	2.680
10	OCDF	45.24	5.981e3	6.798e3	0.778	0.88	0.89	97.6	YES	NO	MM	bd	4.559
11	1234789-HpCDF	41.01	5.116e3	5.234e3	0.953	0.98	1.05	89.0	YES	NO	bb	bb	2.342
12	2378-TCDD	26.42	2.272e3	2.723e3	1.149	0.83	0.77	26.0	YES	NO	bb	bb	0.486
13	123789-HxCDD	36.52	7.480e3	5.936e3	0.907	1.26	1.24	162.4	YES	NO	bd	bd	2.440
14	123678-HxCDD	36.14	9.152e3	7.340e3	1.001	1.25	1.24	192.8	YES	NO	db	dd	2.494
15	123478-HxCDD	36.02	7.381e3	5.875e3	0.996	1.26	1.24	178.2	YES	NO	bd	bd	2.415
16	12378-PeCDD	31.54	7.831e3	5.061e3	1.022	1.55	1.55	111.4	YES	NO	bb	bd	2.348
17	1234678-HpCDD	40.27	6.283e3	5.832e3	1.039	1.08	1.05	129.4	YES	NO	bb	bd	2.337
18	OCDD	45.00	8.578e3	9.676e3	0.920	0.89	0.89	154.9	YES	NO	bd	bb	5.505

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.41	6.929e5					4.3	YES		bb		0.000
2	FUNCTION2 PFK	28.05	6.994e6					22.3	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.60	1.788e4					1.3	NO		bb		0.000
2	FUNCTION3 PFK	36.61	1.585e4					1.4	NO		bb		0.000
3	FUNCTION3 PFK	36.53	6.942e3					0.8	NO		bb		0.000
4	FUNCTION3 PFK	33.99	9.502e3					0.9	NO		bb		0.000
5	FUNCTION3 PFK	33.78	4.298e6					7.0	YES		db		0.000
6	FUNCTION3 PFK	33.15	6.467e6					29.8	YES		bd		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.85	1.035e7					8.6	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.97	6.101e5					4.3	YES		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.27	8.033e1					1.9	NO		bb		0.000
2	FUNCTION1 HXCD...	24.98	2.706e2					3.4	YES		bb		0.000
3	FUNCTION1 HXCD...	22.17	1.286e2					2.0	NO		bb		0.000
4	FUNCTION1 HXCD...	21.47	8.089e1					1.9	NO		bb		0.000
5	FUNCTION1 HXCD...	21.17	1.135e2					1.3	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.66	1.045e2					4.3	YES		db		0.000
2	FUNCTION2 HPCD...	32.58	1.134e2					3.0	NO		bd		0.000
3	FUNCTION2 HPCD...	31.88	7.272e1					1.9	NO		bb		0.000
4	FUNCTION2 HPCD...	30.71	7.070e1					1.8	NO		bb		0.000
5	FUNCTION2 HPCD...	30.13	1.134e2					2.5	NO		bb		0.000
6	FUNCTION2 HPCD...	28.92	7.142e1					2.0	NO		bb		0.000
7	FUNCTION2 HPCD...	28.66	9.983e1					2.2	NO		bb		0.000
8	FUNCTION2 HPCD...	28.24	9.016e1					2.1	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.50	2.008e2					4.4	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.59	9.397e1					2.6	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	44.72	7.355e1					2.5	NO		bb		0.000
2	FUNCTION5 DCDPE	44.30	9.416e1					3.6	YES		bb		0.000

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

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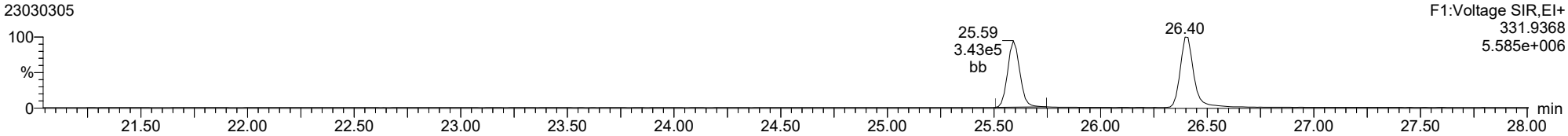

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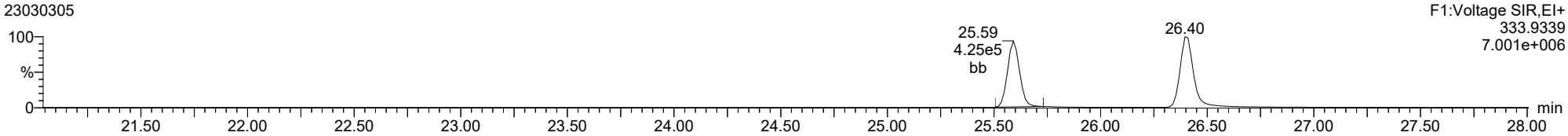

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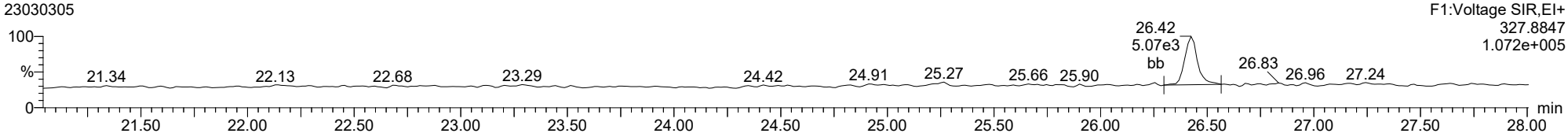

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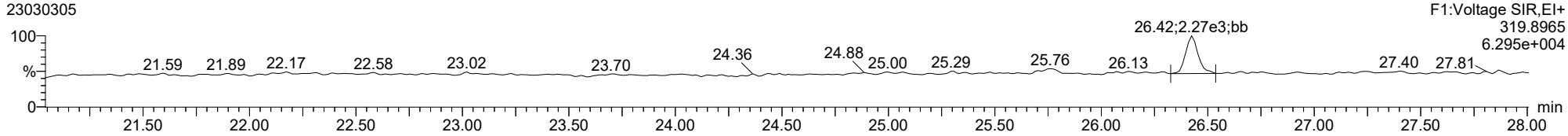

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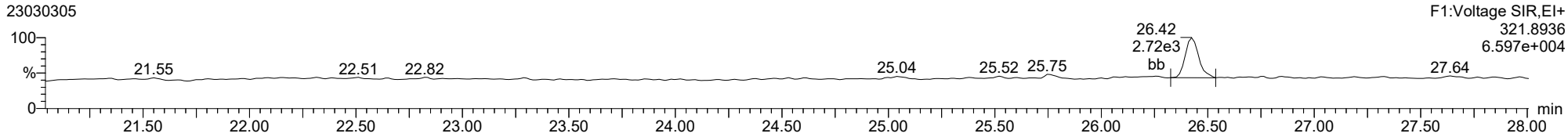

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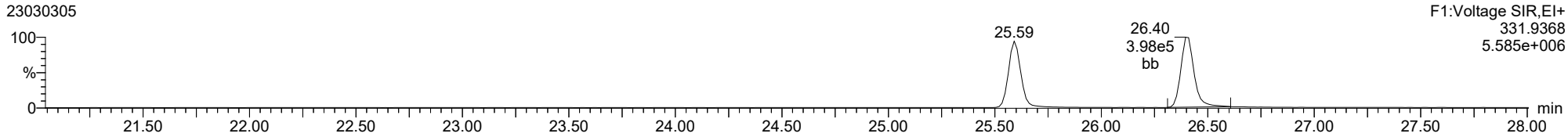

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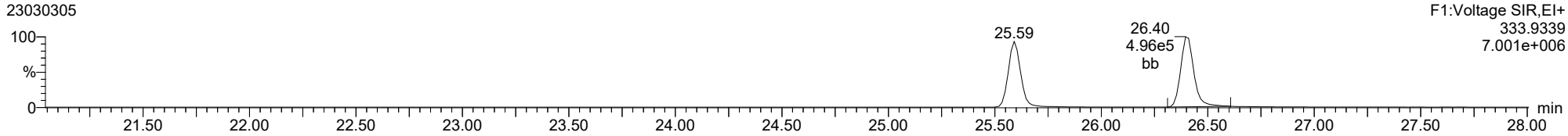

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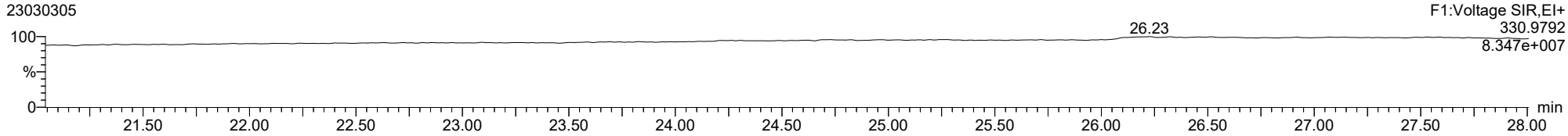

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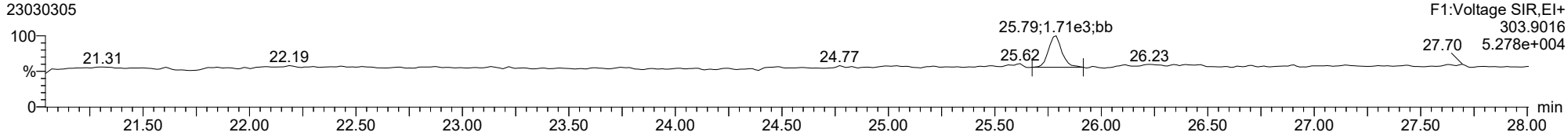

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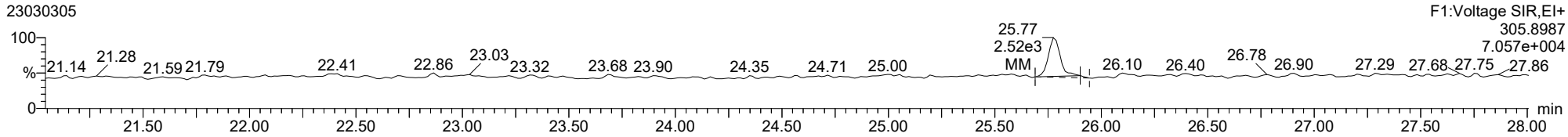

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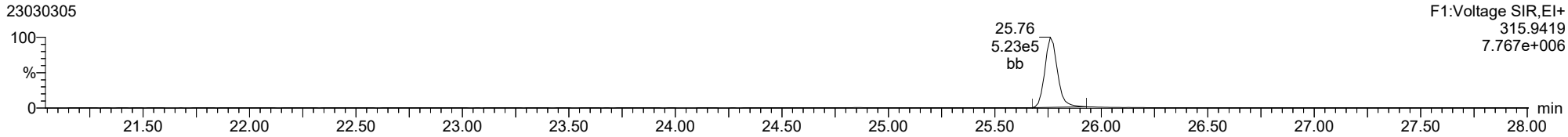

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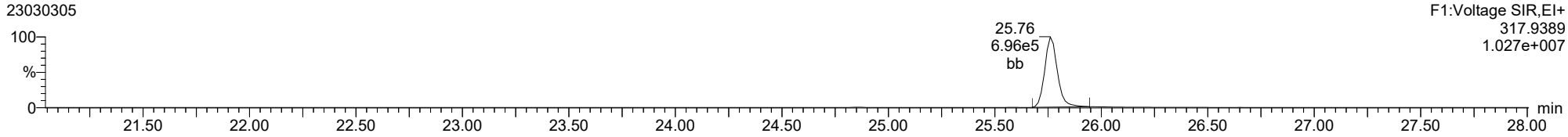

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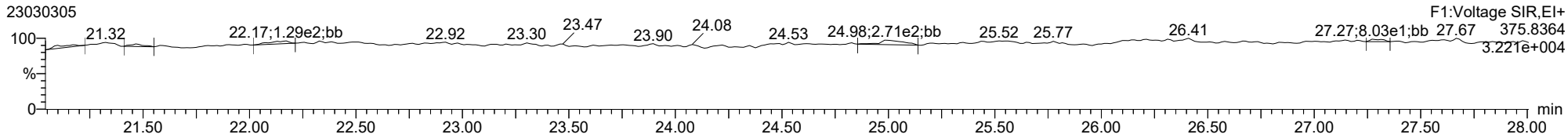

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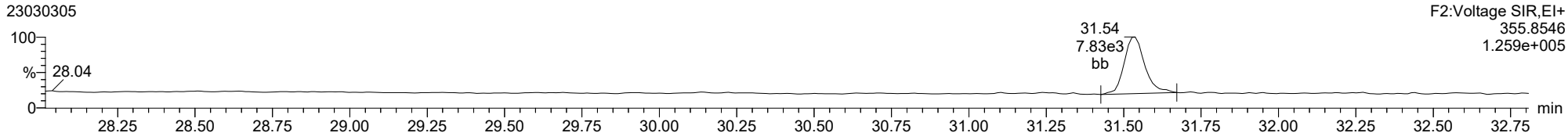
12378-PeCDD



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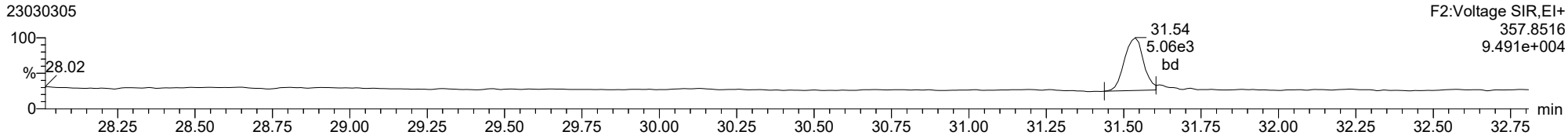

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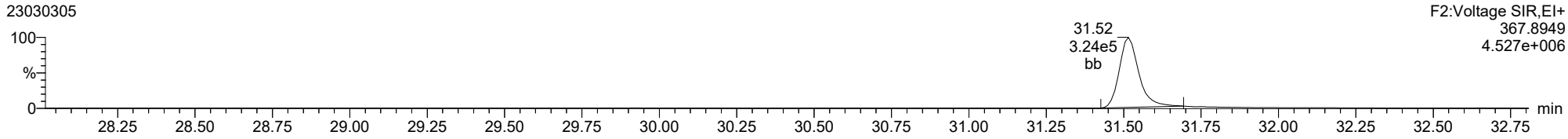

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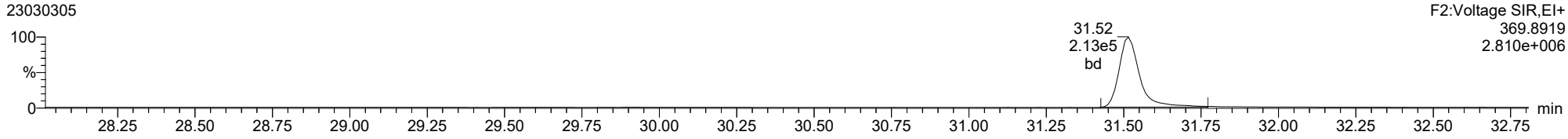

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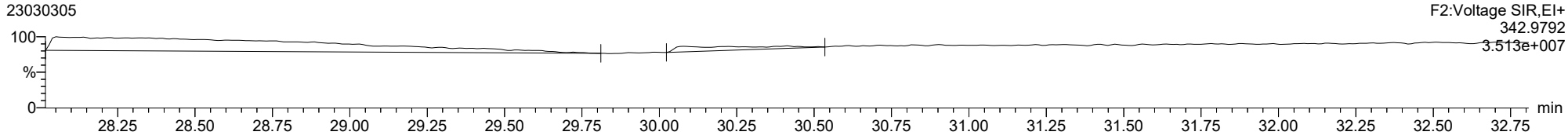

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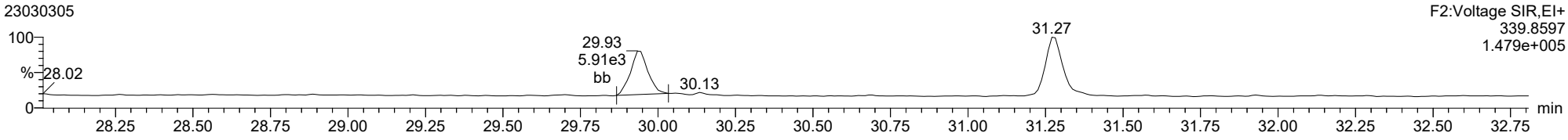

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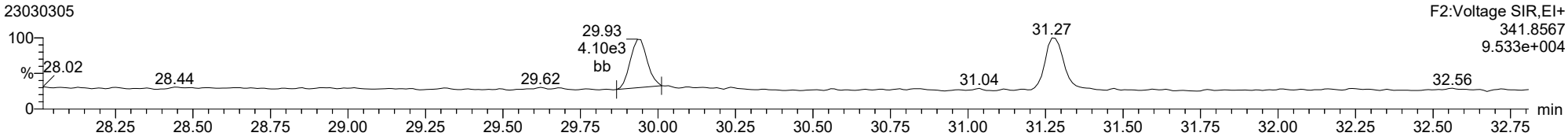

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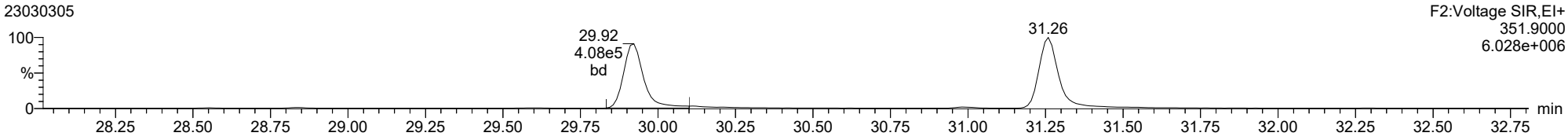

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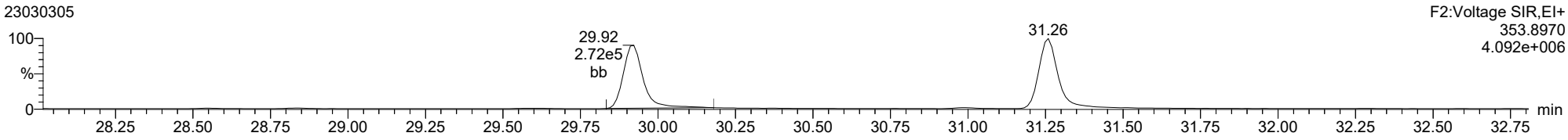

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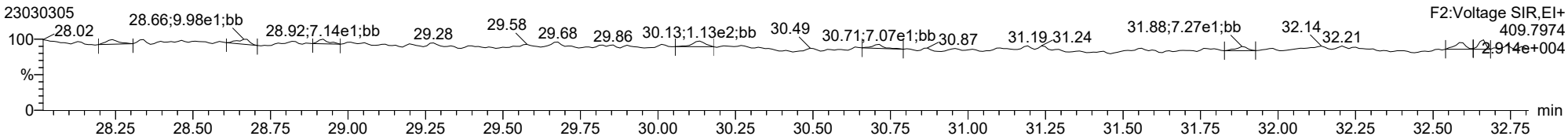

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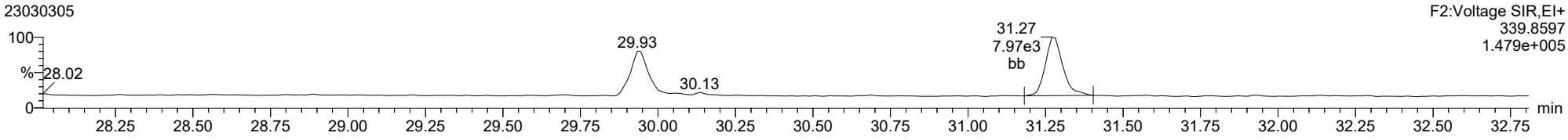
23478-PeCDF



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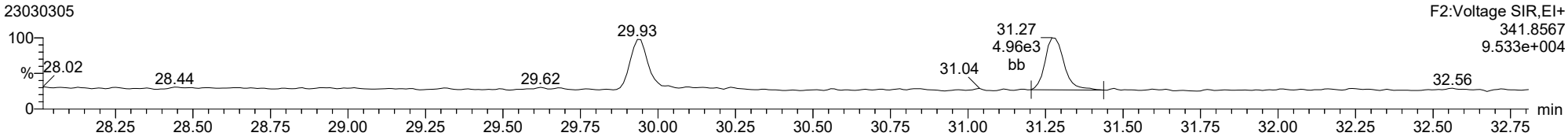

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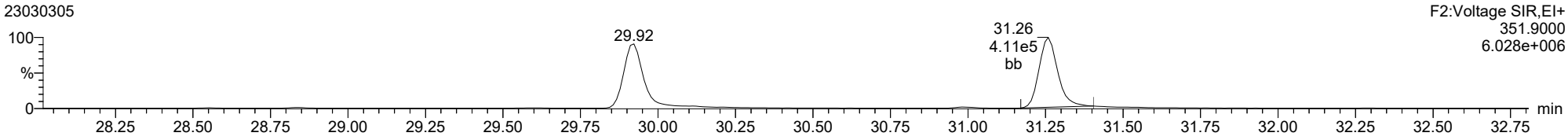

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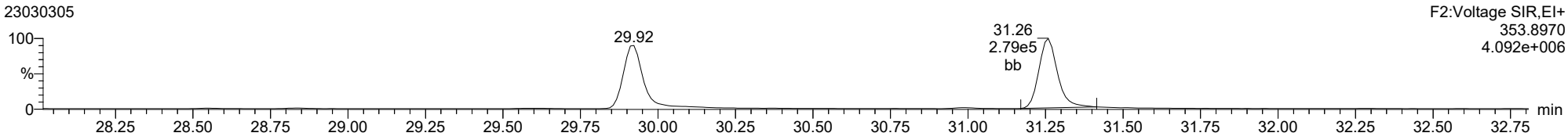

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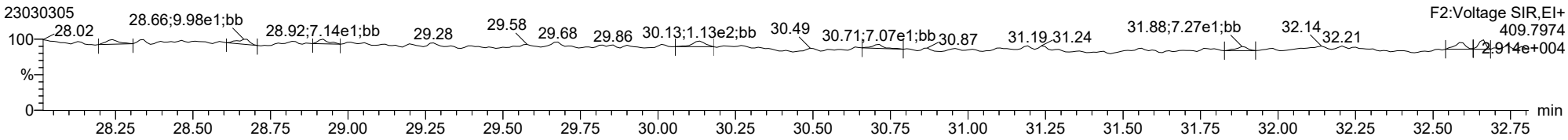

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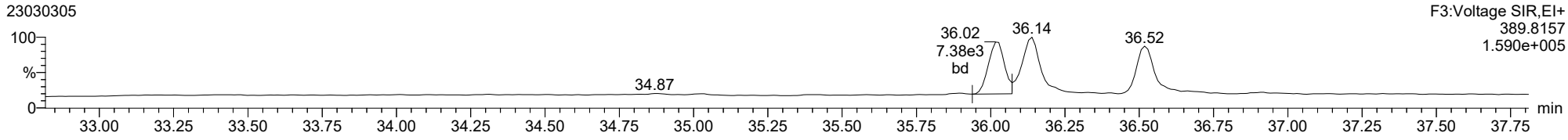

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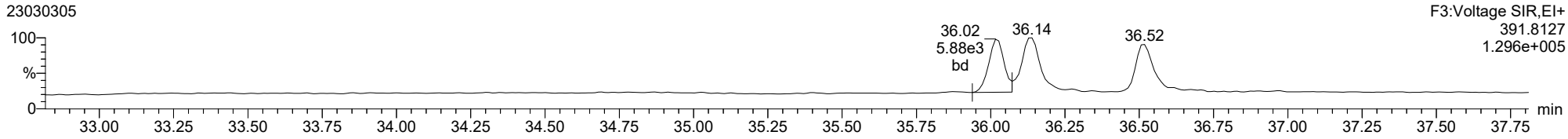

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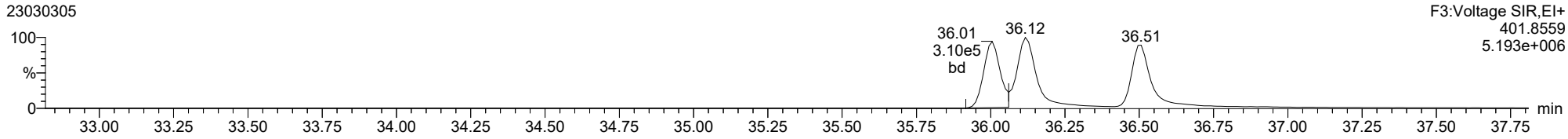

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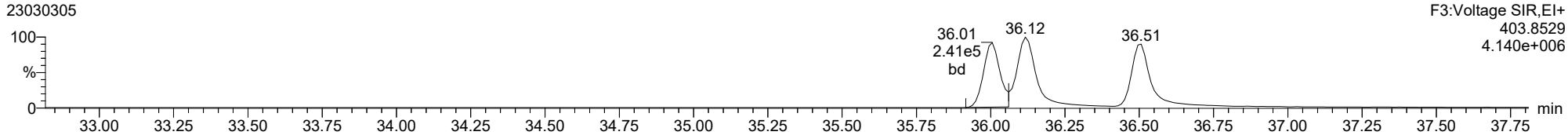

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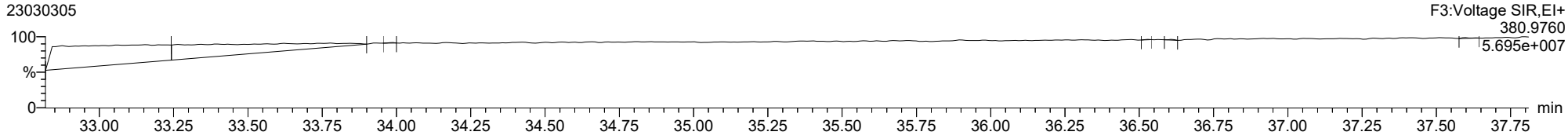

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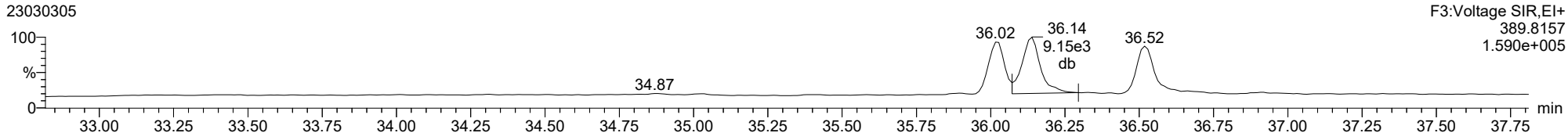

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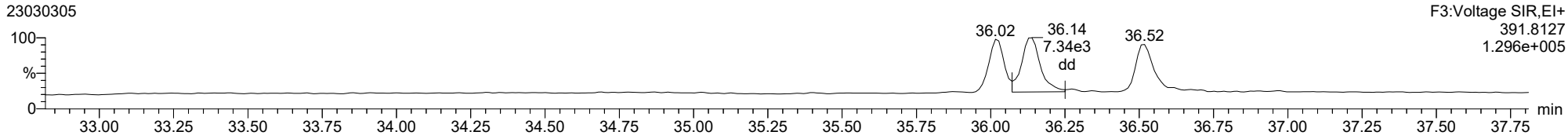

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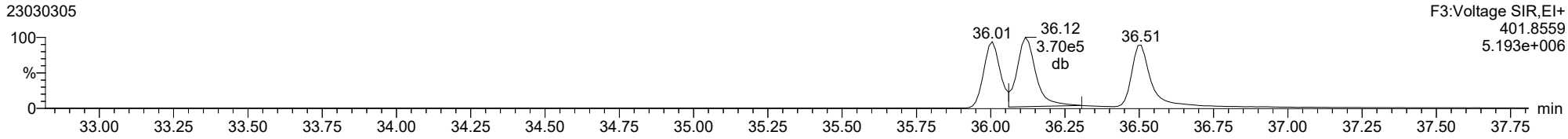

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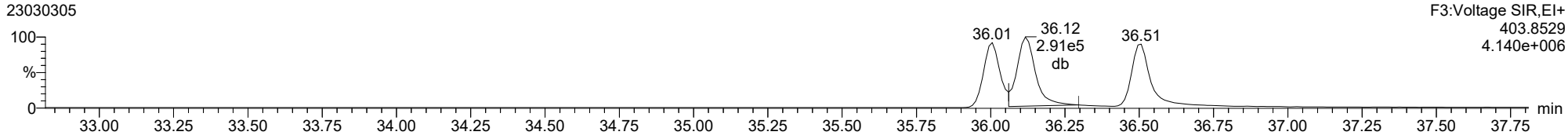

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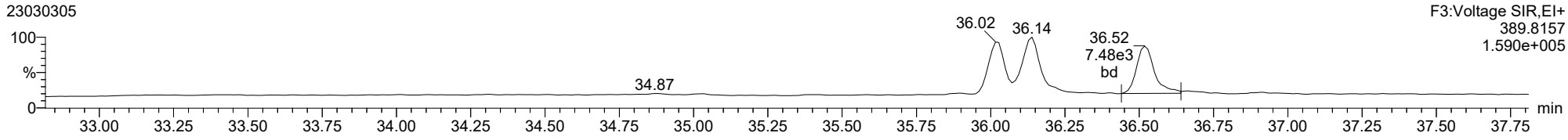

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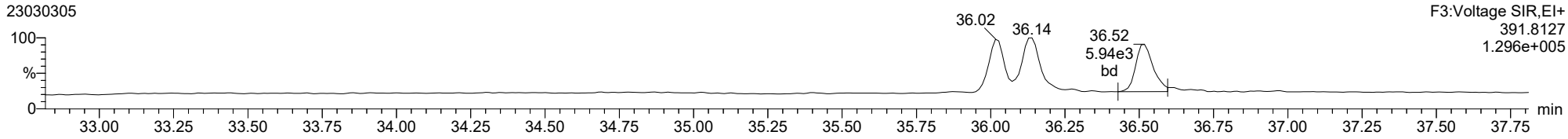

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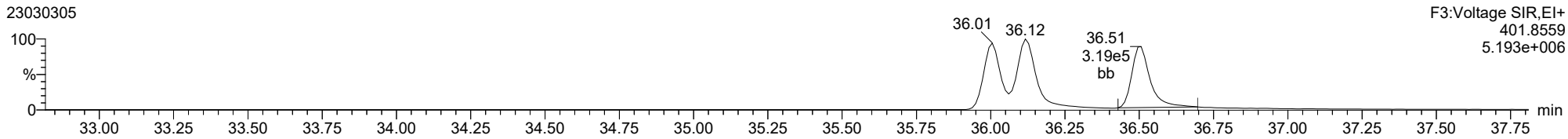

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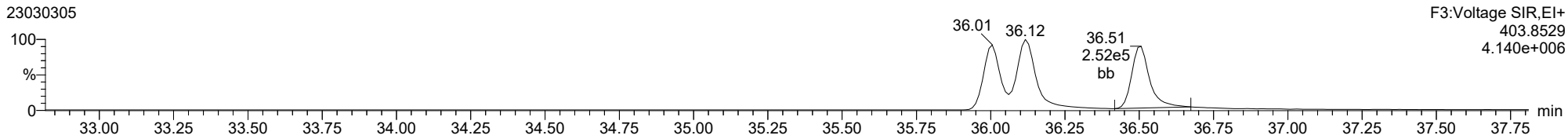

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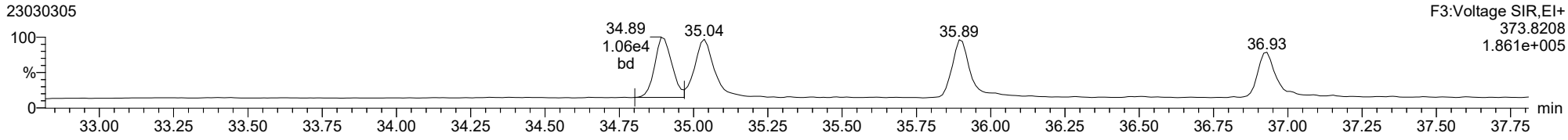

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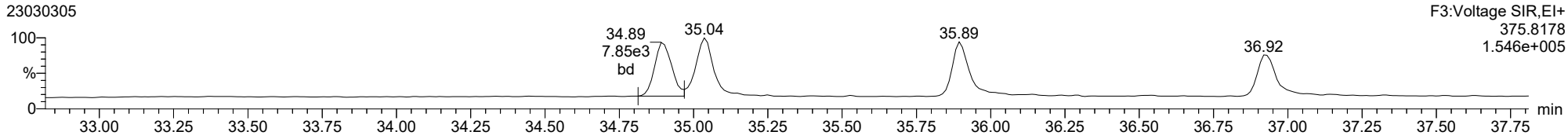

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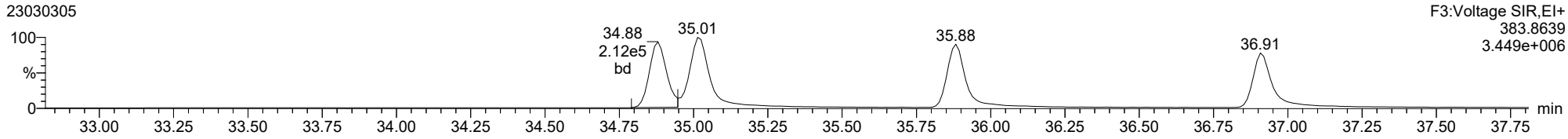

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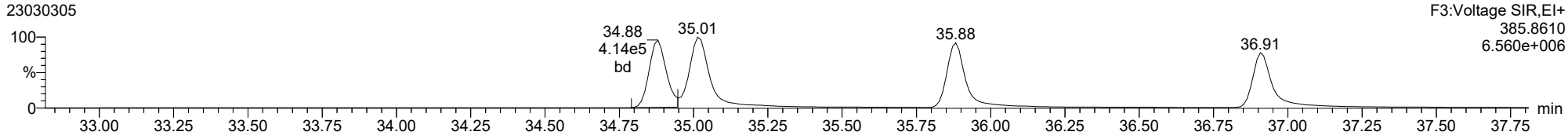

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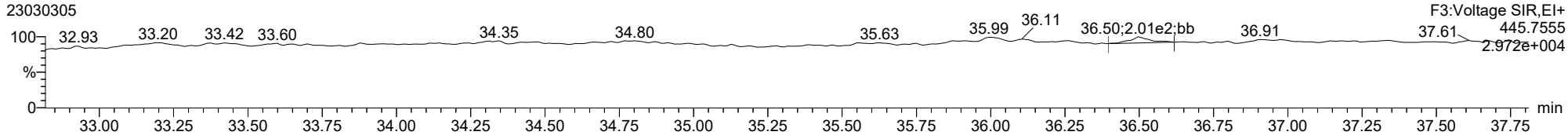

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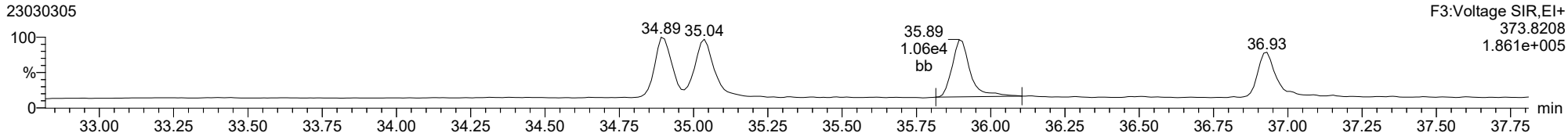
234678-HxCDF



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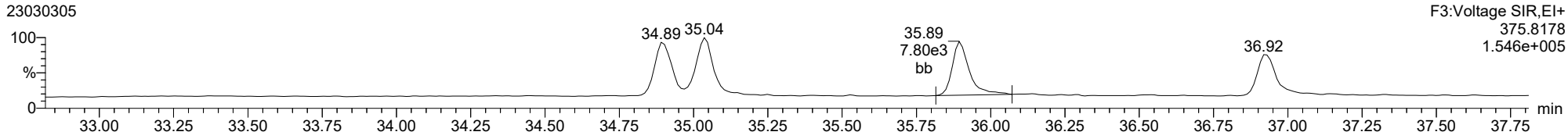

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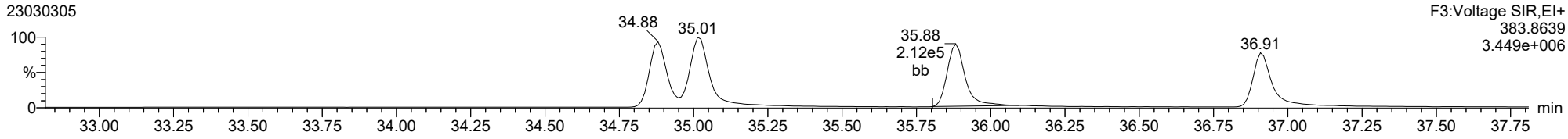

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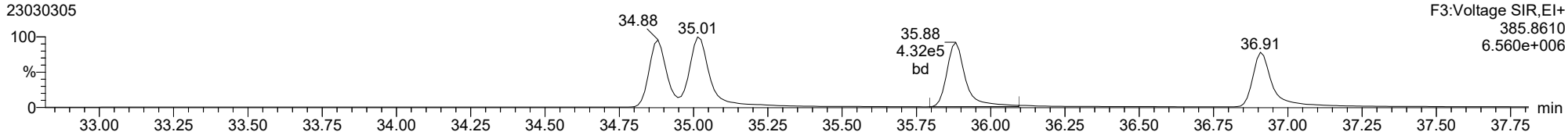

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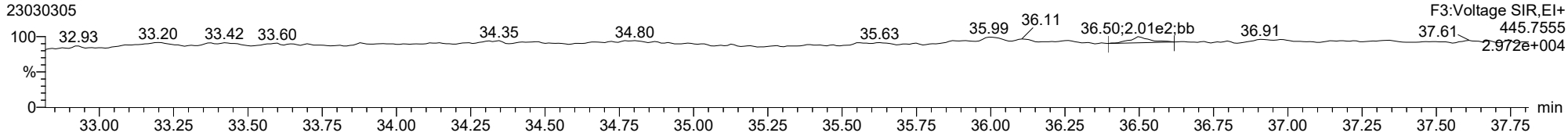

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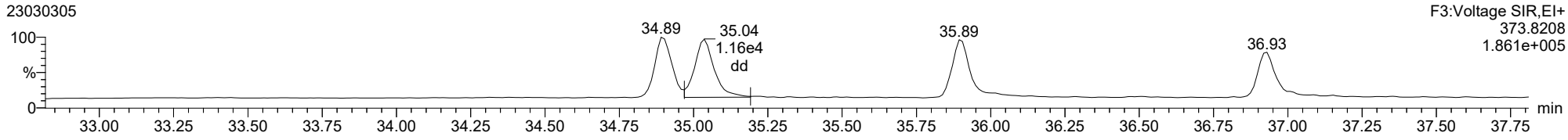

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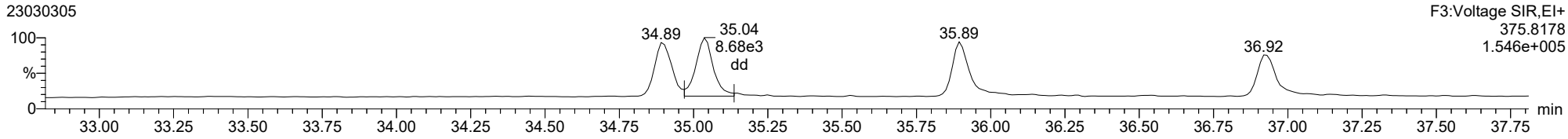

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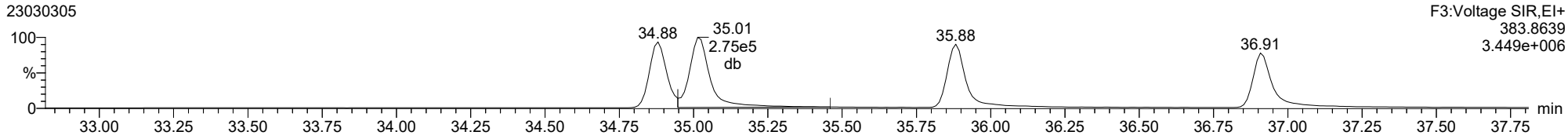

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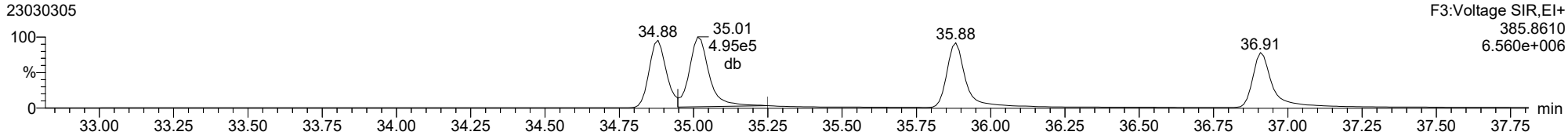

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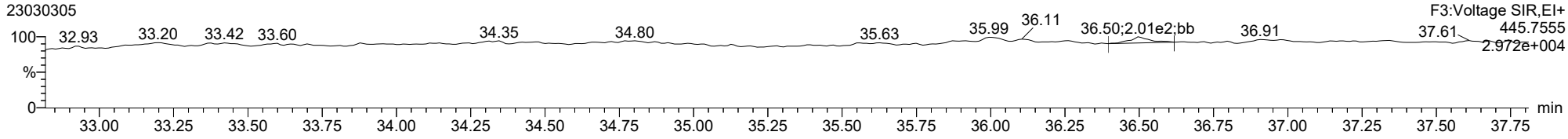

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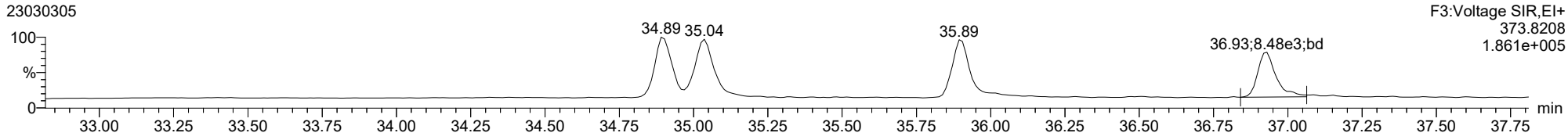

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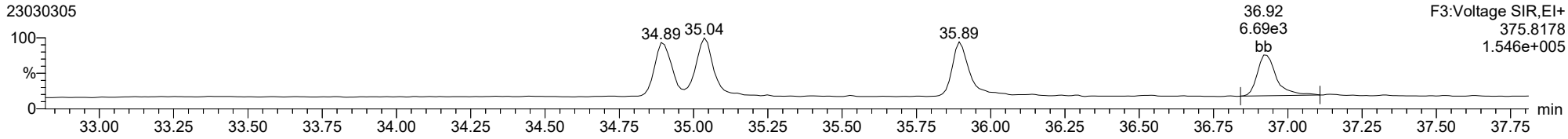

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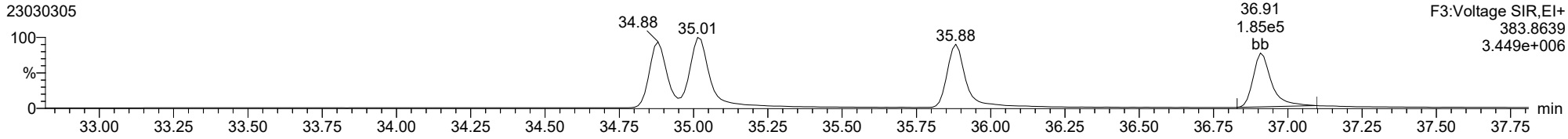

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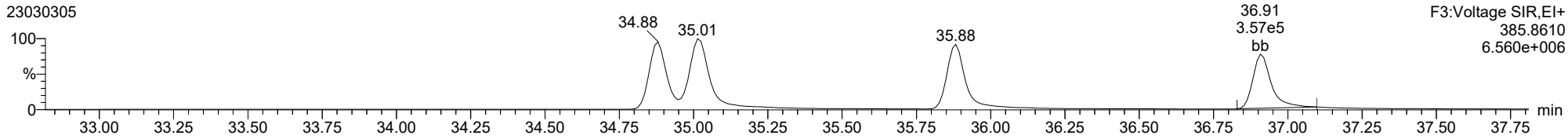
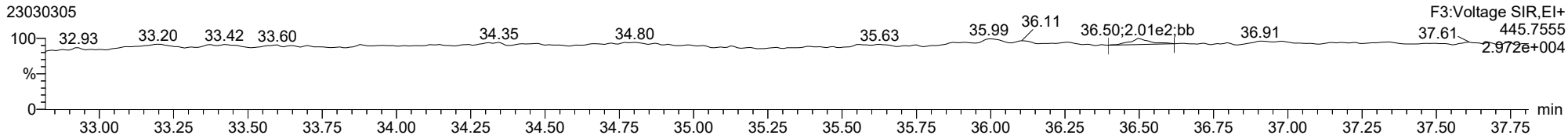


FUNCTION3 OCDPE



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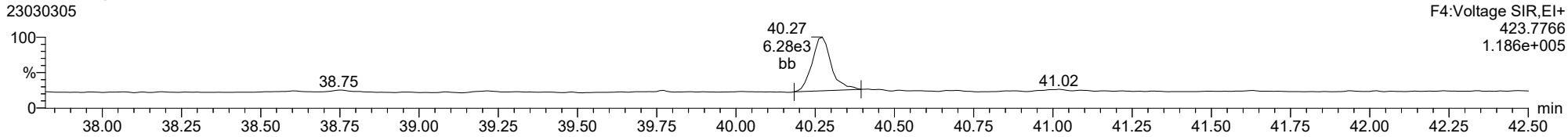

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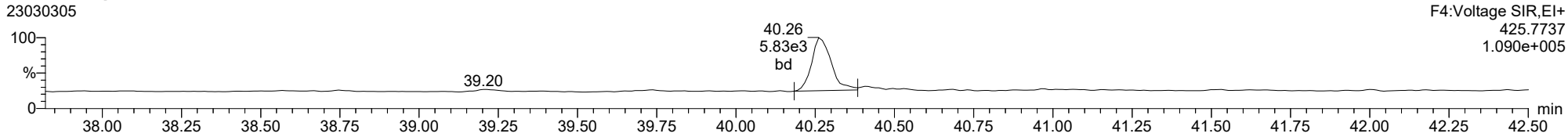

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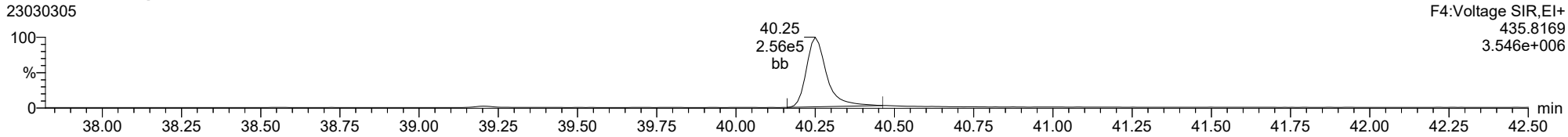

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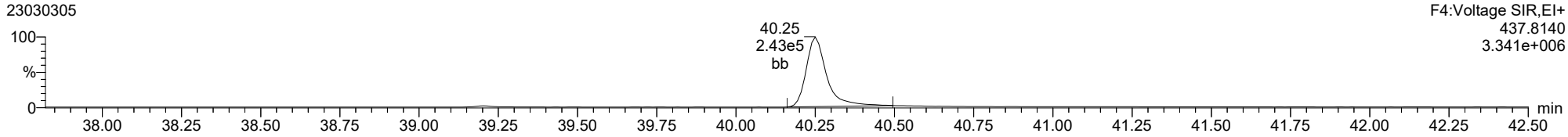
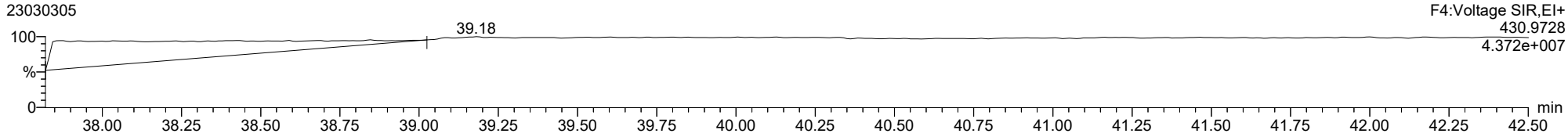


FUNCTION4 PFK



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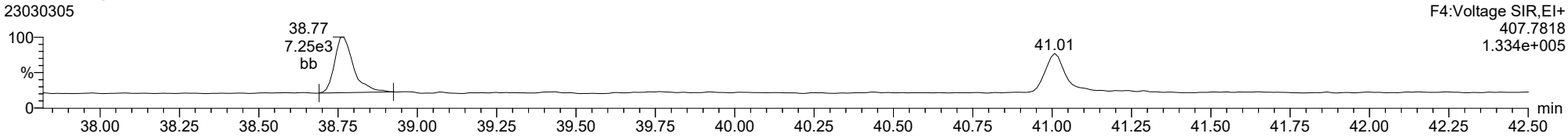

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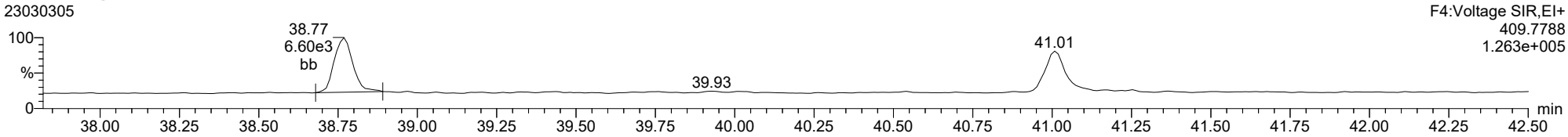

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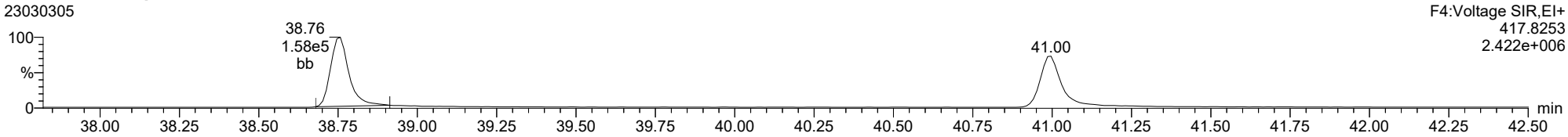

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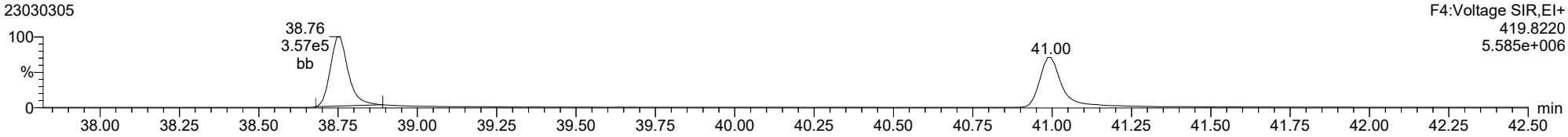
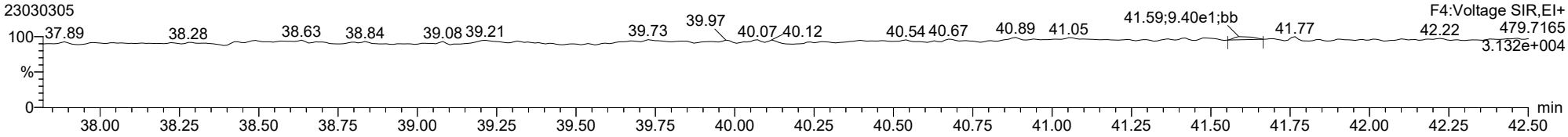


FUNCTION4 NCDPE



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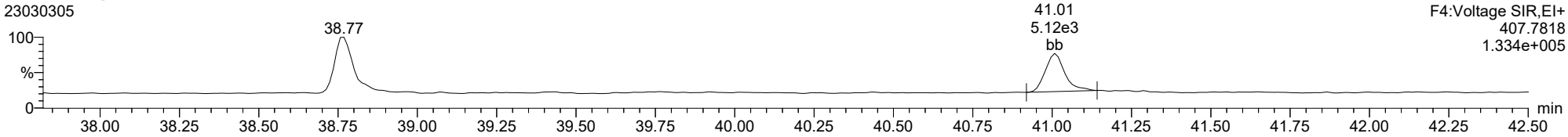

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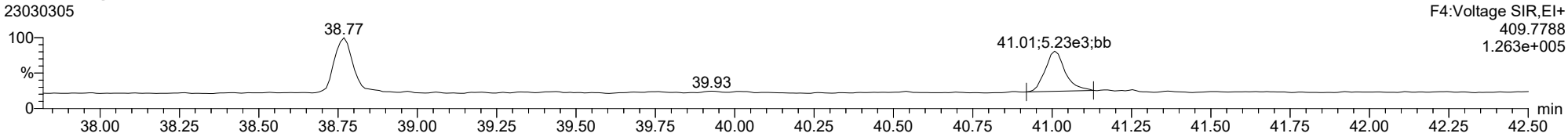

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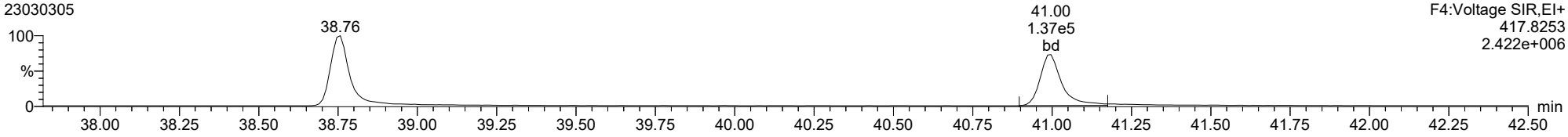

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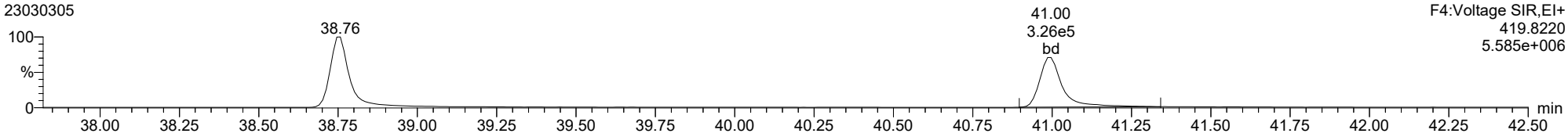
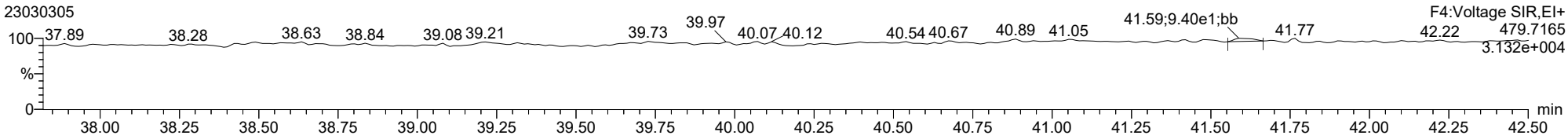


FUNCTION4 NCDPE



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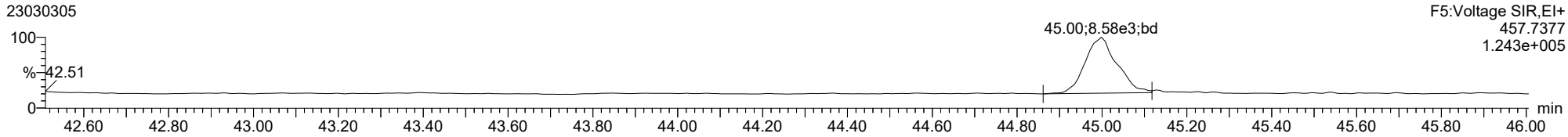

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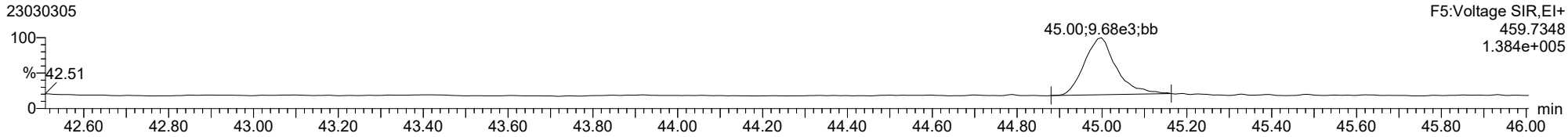

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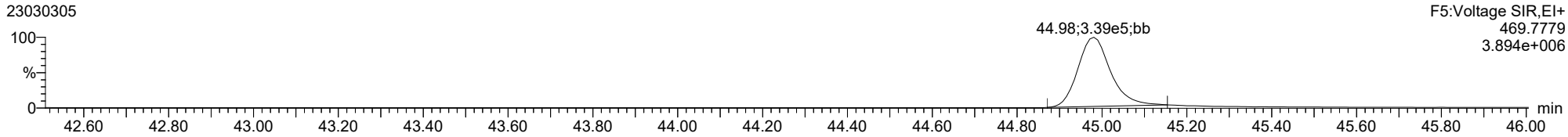

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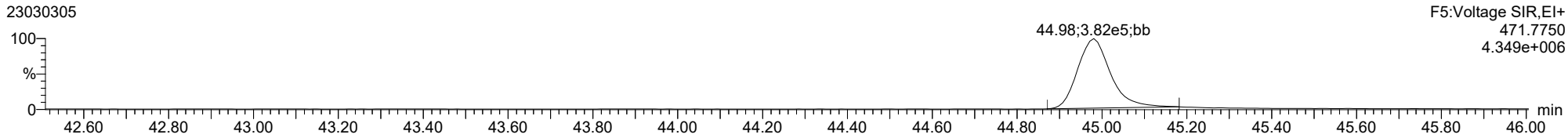
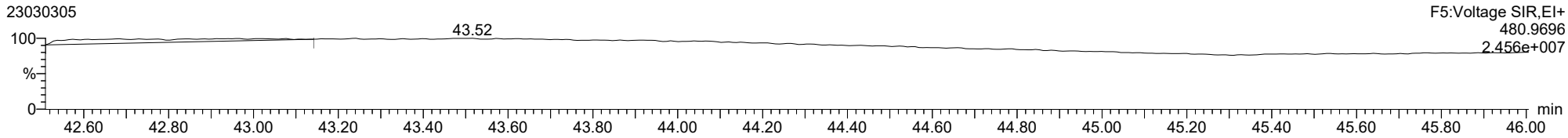


FUNCTION5 PFK



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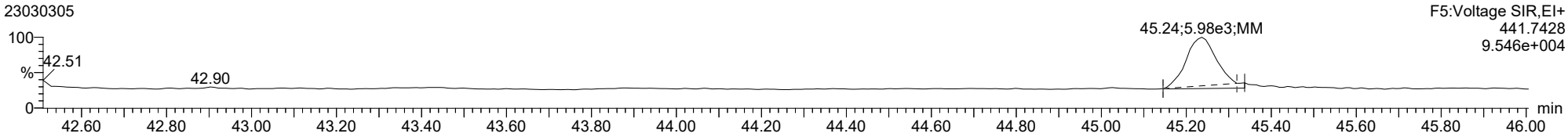
OCDF



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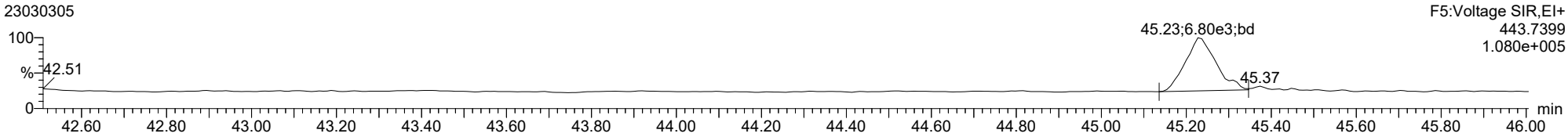
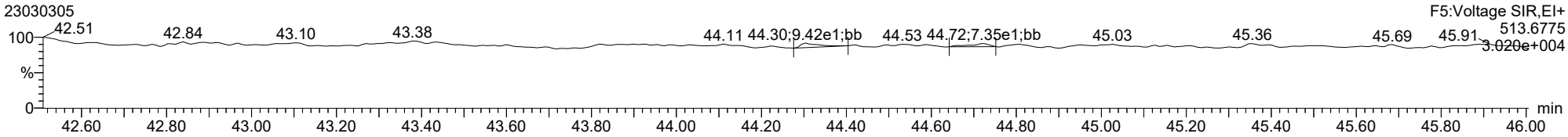


FUNCTION5 DCDPE



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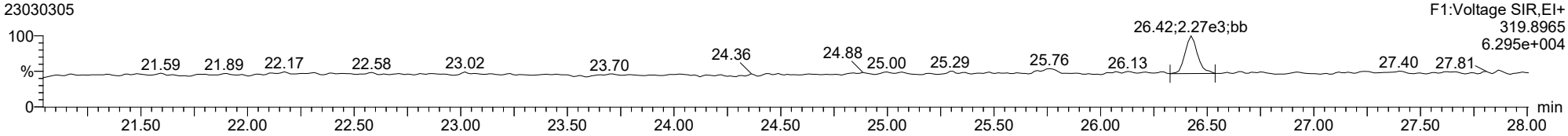
Total-tetradioxins



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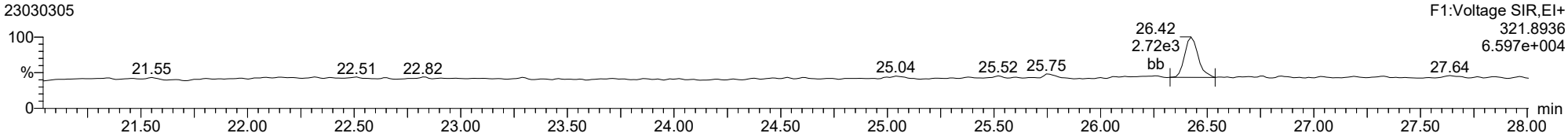
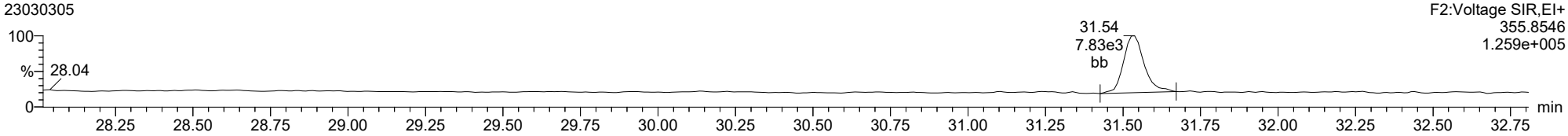
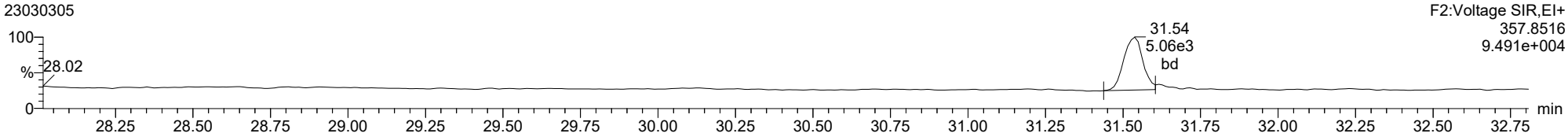


Total-pentadioxins



Total-pentadioxins



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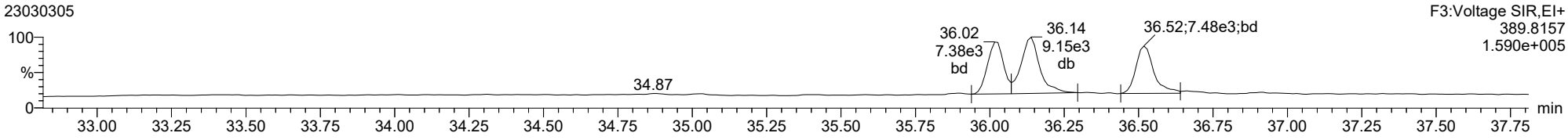
Total-hexadioxins



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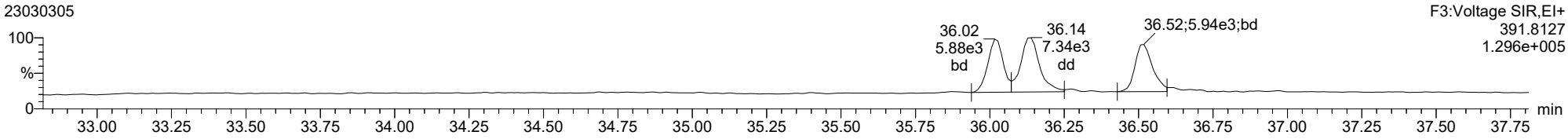

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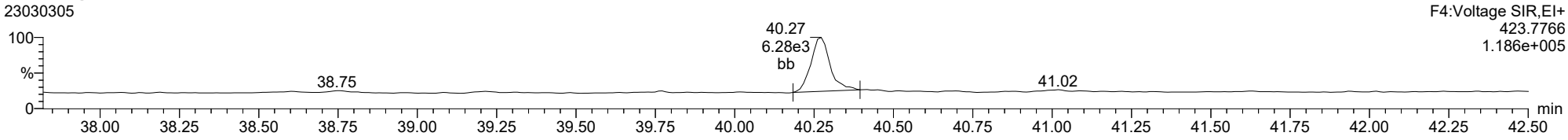

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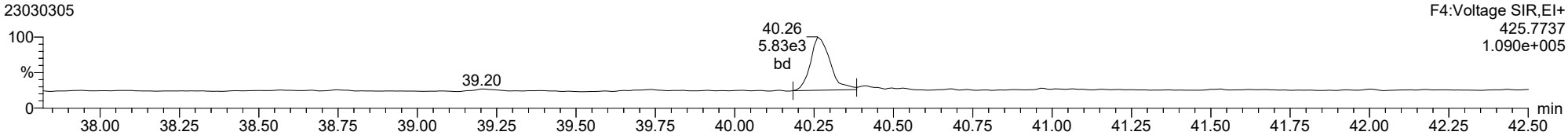

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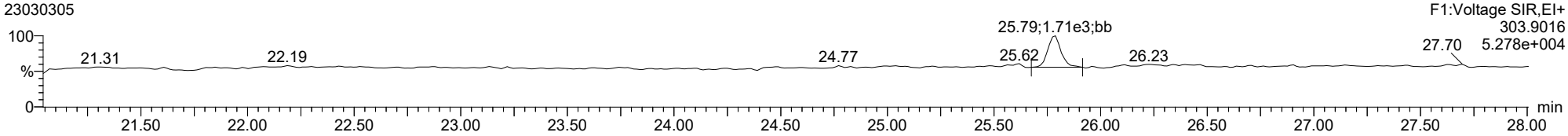
Total-tetrafurans



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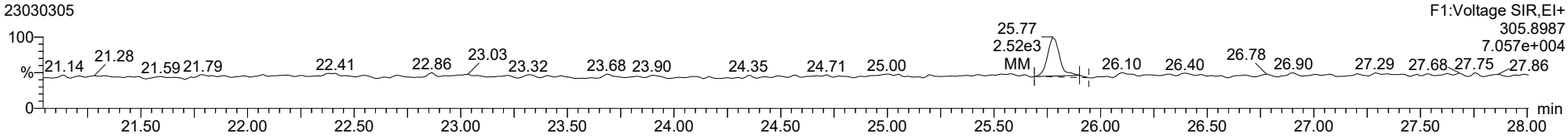
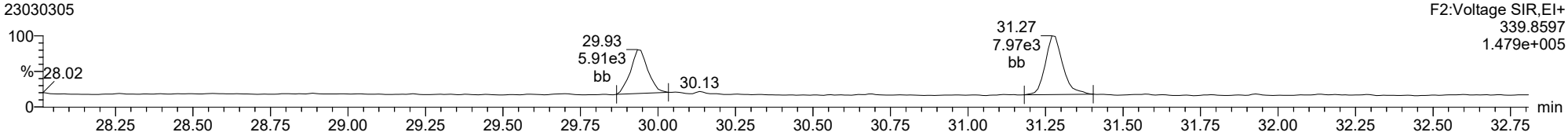


Total-pentafurans



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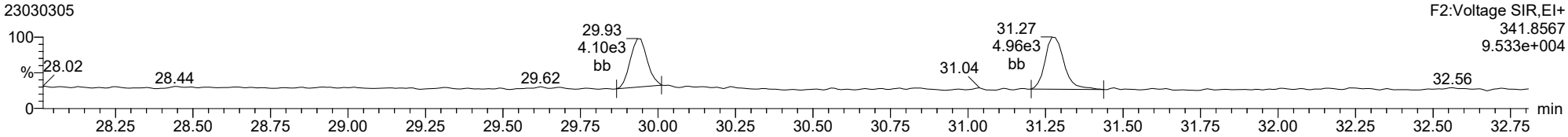

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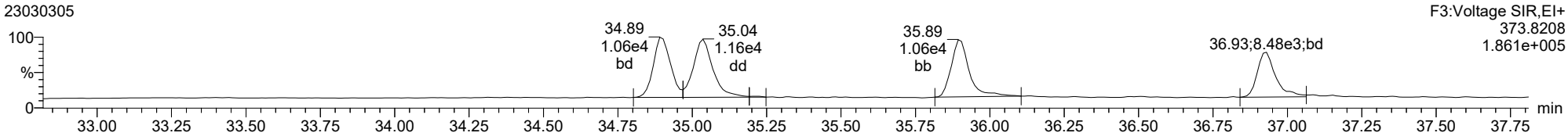

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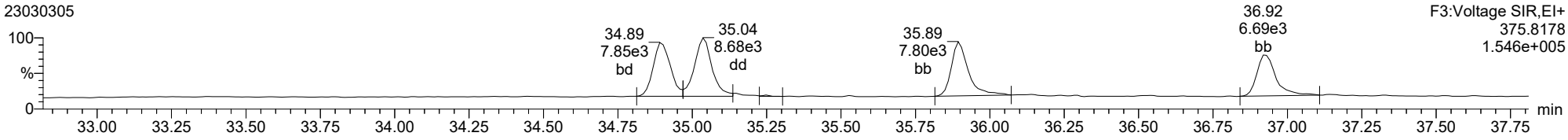
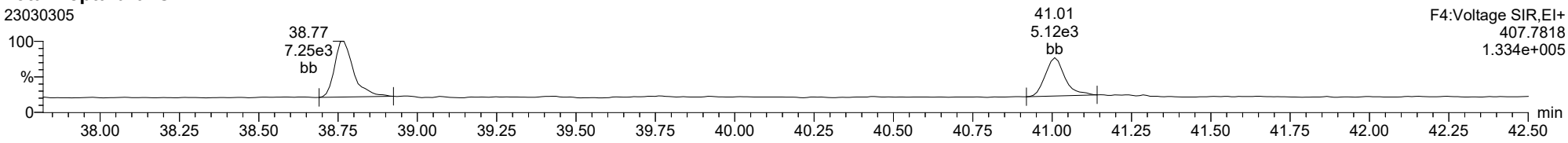


Total-heptafurans



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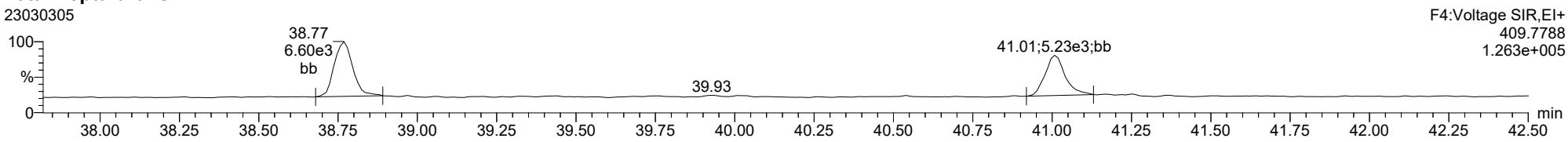

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ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.789	1.001	8.311e3	1.080e4	0.702	0.769	0.770	1017	2375	1.17e5	1.59e5	114.9	67.2	NO	bd	bb	1.942
12378-PeCDF	29.945	1.001	4.669e4	2.820e4	0.679	1.656	1.550	1114	1452	6.51e5	4.26e5	583.9	293.2	NO	bd	bb	10.465
23478-PeCDF	31.282	1.000	4.676e4	2.892e4	0.786	1.617	1.550	1114	1452	6.63e5	4.21e5	595.0	289.8	NO	bb	bb	10.293
123478-HxCDF	34.903	1.000	5.097e4	3.855e4	1.166	1.322	1.240	1081	974	7.67e5	5.88e5	709.2	604.2	NO	bd	bd	9.861
234678-HxCDF	35.906	1.000	4.287e4	3.364e4	1.140	1.274	1.240	1081	974	6.16e5	4.95e5	570.0	508.0	NO	bd	bb	10.523
123678-HxCDF	35.048	1.001	5.830e4	4.380e4	1.091	1.331	1.240	1081	974	7.78e5	6.16e5	719.4	632.0	NO	dd	db	10.775
123789-HxCDF	36.942	1.001	3.050e4	2.273e4	1.137	1.342	1.240	1081	974	4.14e5	3.24e5	383.3	332.2	NO	bb	bb	9.945
1234678-HpCDF	38.780	1.001	2.871e4	2.660e4	1.003	1.079	1.050	1234	1299	4.33e5	4.29e5	350.5	330.3	NO	bd	bb	10.087
1234789-HpCDF	41.020	1.000	2.198e4	2.032e4	0.953	1.082	1.050	1234	1299	3.09e5	2.76e5	250.5	212.3	NO	bb	bb	10.556
OCDF	45.247	1.006	3.160e4	3.327e4	0.778	0.950	0.890	832	1108	3.53e5	3.88e5	424.8	350.5	NO	bd	bb	19.690
2378-TCDD	26.438	1.001	9.033e3	1.299e4	1.149	0.696	0.770	1078	937	1.34e5	1.84e5	124.1	196.6	NO	bb	bb	2.068
12378-PeCDD	31.538	1.000	4.287e4	2.877e4	1.022	1.490	1.550	1012	882	6.26e5	3.88e5	618.4	440.6	NO	bb	bb	9.981
123478-HxCDD	36.028	1.001	3.011e4	2.566e4	0.996	1.173	1.240	1087	1355	4.81e5	4.17e5	442.1	307.5	NO	bd	bd	9.781
123678-HxCDD	36.140	1.000	3.660e4	2.810e4	1.001	1.303	1.240	1087	1355	5.13e5	3.98e5	471.9	293.4	NO	dd	db	9.830
123789-HxCDD	36.530	1.011	2.694e4	2.285e4	0.907	1.179	1.240	1087	1355	3.87e5	3.22e5	355.7	237.4	NO	bb	bb	8.921
1234678-HpCDD	40.273	1.000	2.448e4	2.664e4	1.039	0.919	1.050	853	881	3.43e5	3.58e5	402.1	405.9	NO	bb	bd	10.011
OCDD	45.009	1.000	3.531e4	4.015e4	0.920	0.879	0.890	1050	1012	4.08e5	4.99e5	388.3	492.6	NO	bb	bb	19.363
13C-2378-TCDF	25.774	1.007	6.035e5	7.993e5	1.620	0.755	0.770	2457	1835	8.64e6	1.14e7	3516.1	6186.3	NO	bb	bb	103.115
13C-12378-PeCDF	29.923	1.169	6.526e5	4.010e5	1.240	1.628	1.550	3002	2090	8.73e6	5.82e6	2907.1	2783.7	NO	bb	bb	101.148
13C-23478-PeCDF	31.271	1.221	5.554e5	3.799e5	1.118	1.462	1.550	3002	2090	8.01e6	5.41e6	2667.8	2586.4	NO	bb	bb	99.644
13C-123478-HxCDF	34.892	0.956	2.641e5	5.144e5	1.168	0.513	0.510	1857	2488	3.90e6	7.62e6	2100.8	3063.0	NO	bd	bd	129.584
13C-123678-HxCDF	35.026	0.959	2.932e5	5.755e5	1.386	0.510	0.510	1857	2488	4.18e6	8.13e6	2249.4	3269.5	NO	db	db	121.832
13C-234678-HxCDF	35.895	0.983	2.180e5	4.199e5	1.129	0.519	0.510	1857	2488	3.14e6	6.08e6	1689.2	2442.9	NO	bb	bb	109.838
13C-123789-HxCDF	36.920	1.011	1.570e5	3.137e5	0.932	0.501	0.510	1857	2488	2.29e6	4.45e6	1232.1	1790.1	NO	bb	bb	98.225
13C-1234678-HpCDF	38.758	1.062	1.644e5	3.823e5	0.895	0.430	0.440	2012	3375	2.57e6	5.95e6	1277.0	1763.6	NO	bb	bb	118.766
13C-1234789-HpCDF	40.998	1.123	1.271e5	2.934e5	0.770	0.433	0.440	2012	3375	1.71e6	4.02e6	850.7	1191.4	NO	bb	bb	106.228
13C-1234-TCDD	25.605	0.000	3.763e5	4.634e5	1.000	0.812	0.770	2552	2183	5.75e6	7.05e6	2254.8	3231.1	NO	bb	bb	100.000
13C-2378-TCDD	26.410	1.031	4.085e5	5.183e5	1.152	0.788	0.770	2552	2183	5.98e6	7.56e6	2342.4	3461.2	NO	bb	bb	95.779
13C-12378-PeCDD	31.527	1.231	4.337e5	2.688e5	0.829	1.614	1.550	1077	1542	6.15e6	3.74e6	5715.6	2425.2	NO	bb	bb	100.933
13C-123478-HxCDD	36.006	0.986	3.223e5	2.505e5	0.995	1.287	1.240	2237	1883	4.87e6	3.76e6	2175.2	1999.6	NO	bd	bd	111.924
13C-123678-HxCDD	36.129	0.990	3.608e5	2.967e5	1.157	1.216	1.240	2237	1883	5.10e6	4.02e6	2277.5	2137.4	NO	db	db	110.547
13C-1234678-HpCDD	40.262	1.103	2.573e5	2.341e5	0.840	1.099	1.050	2349	1481	3.41e6	3.22e6	1450.8	2172.3	NO	bd	bb	113.737
13C-OCDD	44.991	1.232	4.017e5	4.455e5	0.767	0.902	0.890	2278	1800	4.53e6	5.05e6	1990.6	2807.7	NO	bb	bb	214.651
13C-123789-HxCDD	36.507	0.000	2.902e5	2.240e5	1.000	1.296	1.240	2237	1883	4.20e6	3.27e6	1878.6	1737.5	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.032	1.977e4		1.288			2484		2.93e5		117.9			bb		1.828

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:34:24 Pacific Standard Time

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	1017	2375								
1289-TCDF					0.678		0.770	1017	2375								
13468-PECDF					1.246		1.550	633	1159								
12389-PECDF					0.496		1.550	1114	1452								
123468-HXCDF					1.169		1.240	1081	974								
1368-TCDD					1.015		0.770	1078	937								
1289-TCDD					0.909		0.770	1078	937								
12479-PECDD					2.301		1.550	1012	882								
12389-PECDD					1.184		1.550	1012	882								
124679-HXCDD					1.115		1.240	1087	1355								
1234679-HPCDD					1.137		1.050	853	881								
Total-tetrafurans			8.311e3		0.727			1017		1.17e5							1.942
Total-penta1			0.000e0					633		0.00e0							
Total-pentafurans			9.345e4		0.654			1114		1.31e6							20.758
Total-hexafurans			1.826e5		1.141			1081		2.58e6							41.105
Total-heptafurans			5.070e4		0.978			1234		7.42e5							20.643
Total-Furans			3.667e5		0.922			1017		5.10e6							104.140
Total-tetradioxins			9.033e3		1.024			1078		1.34e5							2.068
Total-pentadioxins			4.287e4		1.502			1012		6.26e5							9.981
Total-hexadioxins			9.364e4		1.005			1087		1.38e6							28.532
Total-heptadioxins			2.448e4		1.088			853		3.43e5							10.011
Total-Dioxins			2.053e5		1.130			1078		2.89e6							69.955
Total-TEQ			5.720e5					1078		7.99e6							174.095
FUNCTION1 PFK			1.995e6					567717		7.69e6							
FUNCTION2 PFK			1.258e5					282093		4.74e6							0.000
FUNCTION3 PFK			4.711e7					382868		3.34e7							0.000
FUNCTION4 PFK			2.092e7					278389		1.32e7							
FUNCTION5 PFK			6.777e4					239180		2.68e6							
FUNCTION1 HXCD...			0.000e0					613		0.00e0							
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			1.408e2					965		2.85e3							0.000
FUNCTION3 OCDPE			0.000e0					571		0.00e0							
FUNCTION4 NCDPE			3.810e2					638		4.39e3							0.000
FUNCTION5 DCDPE			0.000e0					603		0.00e0							

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.79	8.311e3	1.080e4	0.702	0.77	0.77	114.9	YES	NO	bd	bb	1.942

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.28	4.676e4	2.892e4	0.786	1.62	1.55	595.0	YES	NO	bb	bb	10.293
2	12378-PeCDF	29.94	4.669e4	2.820e4	0.679	1.66	1.55	583.9	YES	NO	bd	bb	10.465

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.94	3.050e4	2.273e4	1.137	1.34	1.24	383.3	YES	NO	bb	bb	9.945
2	234678-HxCDF	35.91	4.287e4	3.364e4	1.140	1.27	1.24	570.0	YES	NO	bd	bb	10.523
3	123678-HxCDF	35.05	5.830e4	4.380e4	1.091	1.33	1.24	719.4	YES	NO	dd	db	10.775
4	123478-HxCDF	34.90	5.097e4	3.855e4	1.166	1.32	1.24	709.2	YES	NO	bd	bd	9.861

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.02	2.198e4	2.032e4	0.953	1.08	1.05	250.5	YES	NO	bb	bb	10.556
2	1234678-HpCDF	38.78	2.871e4	2.660e4	1.003	1.08	1.05	350.5	YES	NO	bd	bb	10.087

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.28	4.676e4	2.892e4	0.786	1.62	1.55	595.0	YES	NO	bb	bb	10.293
2	12378-PeCDF	29.94	4.669e4	2.820e4	0.679	1.66	1.55	583.9	YES	NO	bd	bb	10.465
3	2378-TCDF	25.79	8.311e3	1.080e4	0.702	0.77	0.77	114.9	YES	NO	bd	bb	1.942
4	123789-HxCDF	36.94	3.050e4	2.273e4	1.137	1.34	1.24	383.3	YES	NO	bb	bb	9.945
5	234678-HxCDF	35.91	4.287e4	3.364e4	1.140	1.27	1.24	570.0	YES	NO	bd	bb	10.523
6	123678-HxCDF	35.05	5.830e4	4.380e4	1.091	1.33	1.24	719.4	YES	NO	dd	db	10.775
7	123478-HxCDF	34.90	5.097e4	3.855e4	1.166	1.32	1.24	709.2	YES	NO	bd	bd	9.861
8	1234789-HpCDF	41.02	2.198e4	2.032e4	0.953	1.08	1.05	250.5	YES	NO	bb	bb	10.556
9	1234678-HpCDF	38.78	2.871e4	2.660e4	1.003	1.08	1.05	350.5	YES	NO	bd	bb	10.087
10	OCDF	45.25	3.160e4	3.327e4	0.778	0.95	0.89	424.8	YES	NO	bd	bb	19.690

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.44	9.033e3	1.299e4	1.149	0.70	0.77	124.1	YES	NO	bb	bb	2.068

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.54	4.287e4	2.877e4	1.022	1.49	1.55	618.4	YES	NO	bb	bb	9.981

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.53	2.694e4	2.285e4	0.907	1.18	1.24	355.7	YES	NO	bb	bb	8.921
2	123678-HxCDD	36.14	3.660e4	2.810e4	1.001	1.30	1.24	471.9	YES	NO	dd	db	9.830
3	123478-HxCDD	36.03	3.011e4	2.566e4	0.996	1.17	1.24	442.1	YES	NO	bd	bd	9.781

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.27	2.448e4	2.664e4	1.039	0.92	1.05	402.1	YES	NO	bb	bd	10.011

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.54	4.287e4	2.877e4	1.022	1.49	1.55	618.4	YES	NO	bb	bb	9.981
2	2378-TCDD	26.44	9.033e3	1.299e4	1.149	0.70	0.77	124.1	YES	NO	bb	bb	2.068
3	123789-HxCDD	36.53	2.694e4	2.285e4	0.907	1.18	1.24	355.7	YES	NO	bb	bb	8.921
4	123678-HxCDD	36.14	3.660e4	2.810e4	1.001	1.30	1.24	471.9	YES	NO	dd	db	9.830
5	123478-HxCDD	36.03	3.011e4	2.566e4	0.996	1.17	1.24	442.1	YES	NO	bd	bd	9.781
6	1234678-HpCDD	40.27	2.448e4	2.664e4	1.039	0.92	1.05	402.1	YES	NO	bb	bd	10.011
7	OCDD	45.01	3.531e4	4.015e4	0.920	0.88	0.89	388.3	YES	NO	bb	bb	19.363

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.28	4.676e4	2.892e4	0.786	1.62	1.55	595.0	YES	NO	bb	bb	10.293
2	12378-PeCDF	29.94	4.669e4	2.820e4	0.679	1.66	1.55	583.9	YES	NO	bd	bb	10.465
3	2378-TCDF	25.79	8.311e3	1.080e4	0.702	0.77	0.77	114.9	YES	NO	bd	bb	1.942
4	123789-HxCDF	36.94	3.050e4	2.273e4	1.137	1.34	1.24	383.3	YES	NO	bb	bb	9.945
5	234678-HxCDF	35.91	4.287e4	3.364e4	1.140	1.27	1.24	570.0	YES	NO	bd	bb	10.523
6	123678-HxCDF	35.05	5.830e4	4.380e4	1.091	1.33	1.24	719.4	YES	NO	dd	db	10.775
7	123478-HxCDF	34.90	5.097e4	3.855e4	1.166	1.32	1.24	709.2	YES	NO	bd	bd	9.861
8	1234789-HpCDF	41.02	2.198e4	2.032e4	0.953	1.08	1.05	250.5	YES	NO	bb	bb	10.556
9	1234678-HpCDF	38.78	2.871e4	2.660e4	1.003	1.08	1.05	350.5	YES	NO	bd	bb	10.087
10	OCDF	45.25	3.160e4	3.327e4	0.778	0.95	0.89	424.8	YES	NO	bd	bb	19.690
11	12378-PeCDD	31.54	4.287e4	2.877e4	1.022	1.49	1.55	618.4	YES	NO	bb	bb	9.981
12	2378-TCDD	26.44	9.033e3	1.299e4	1.149	0.70	0.77	124.1	YES	NO	bb	bb	2.068
13	123789-HxCDD	36.53	2.694e4	2.285e4	0.907	1.18	1.24	355.7	YES	NO	bb	bb	8.921
14	123678-HxCDD	36.14	3.660e4	2.810e4	1.001	1.30	1.24	471.9	YES	NO	dd	db	9.830
15	123478-HxCDD	36.03	3.011e4	2.566e4	0.996	1.17	1.24	442.1	YES	NO	bd	bd	9.781
16	1234678-HpCDD	40.27	2.448e4	2.664e4	1.039	0.92	1.05	402.1	YES	NO	bb	bd	10.011
17	OCDD	45.01	3.531e4	4.015e4	0.920	0.88	0.89	388.3	YES	NO	bb	bb	19.363

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	25.73	8.333e5					6.7	YES		bb		
2	FUNCTION1 PFK	21.10	1.162e6					6.9	YES		bb		

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.61	1.110e4					1.3	NO		bb		0.000
2	FUNCTION2 PFK	28.31	1.183e4					1.5	NO		bb		0.000
3	FUNCTION2 PFK	31.85	7.066e3					1.3	NO		bb		0.000
4	FUNCTION2 PFK	31.75	1.168e4					1.4	NO		bb		0.000
5	FUNCTION2 PFK	30.95	1.613e4					2.1	NO		bb		0.000
6	FUNCTION2 PFK	30.06	7.806e3					1.3	NO		bb		0.000
7	FUNCTION2 PFK	29.77	1.198e4					1.4	NO		bb		0.000
8	FUNCTION2 PFK	29.47	1.476e4					2.1	NO		bb		0.000
9	FUNCTION2 PFK	29.28	1.360e4					2.0	NO		db		0.000
10	FUNCTION2 PFK	29.22	1.980e4					2.4	NO		bd		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	34.30	3.856e7					44.6	YES		db		0.000
2	FUNCTION3 PFK	33.18	8.558e6					42.7	YES		bd		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.24	1.285e7					8.2	YES		db		
2	FUNCTION4 PFK	38.41	8.070e6					39.3	YES		bd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.68	1.647e4					1.8	NO		bb		
2	FUNCTION5 PFK	45.75	3.282e3					1.0	NO		bb		
3	FUNCTION5 PFK	45.28	6.957e3					1.1	NO		bb		
4	FUNCTION5 PFK	44.90	6.364e3					1.0	NO		bb		
5	FUNCTION5 PFK	44.84	1.531e3					0.5	NO		bb		
6	FUNCTION5 PFK	44.40	6.282e3					1.0	NO		bb		
7	FUNCTION5 PFK	44.21	4.626e3					1.1	NO		bb		
8	FUNCTION5 PFK	44.03	7.842e3					1.2	NO		bb		
9	FUNCTION5 PFK	43.96	6.415e3					1.4	NO		bb		
10	FUNCTION5 PFK	43.84	7.992e3					1.2	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.54	1.408e2					3.0	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.65	1.069e2					1.9	NO		bb		0.000
2	FUNCTION4 NCDPE	40.25	1.358e2					2.2	NO		bb		0.000
3	FUNCTION4 NCDPE	41.02	1.383e2					2.8	NO		bb		0.000

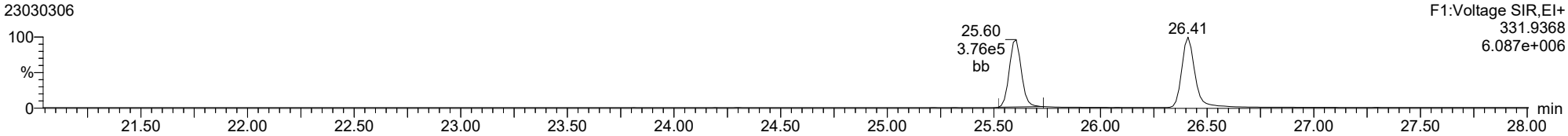
ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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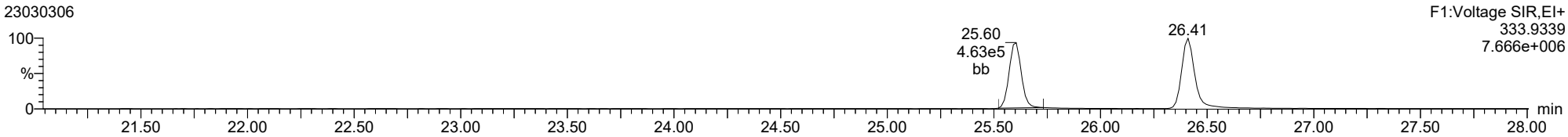

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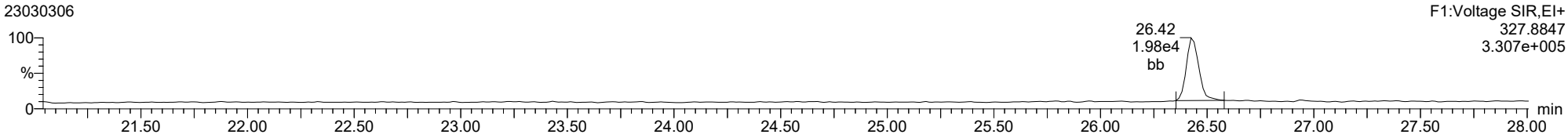

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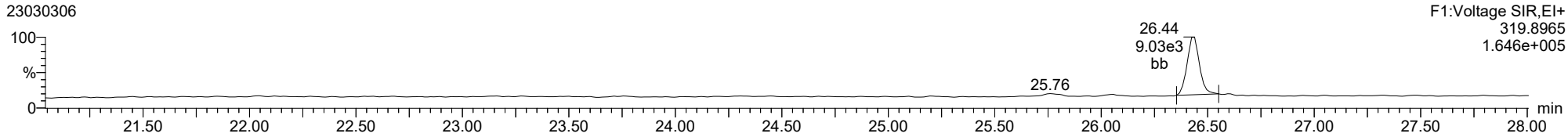
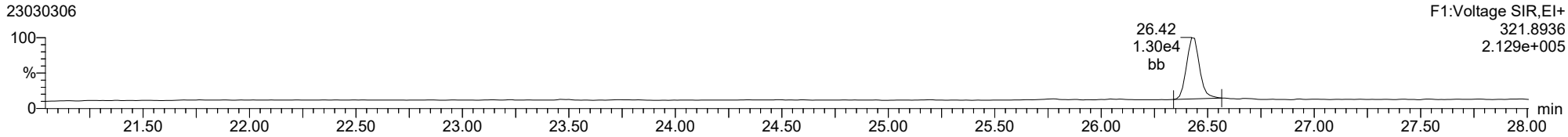
2378-TCDD



2378-TCDD



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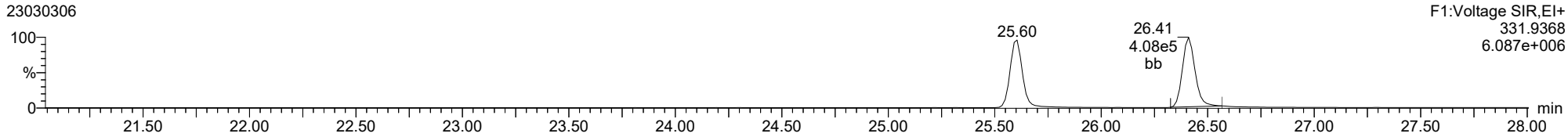

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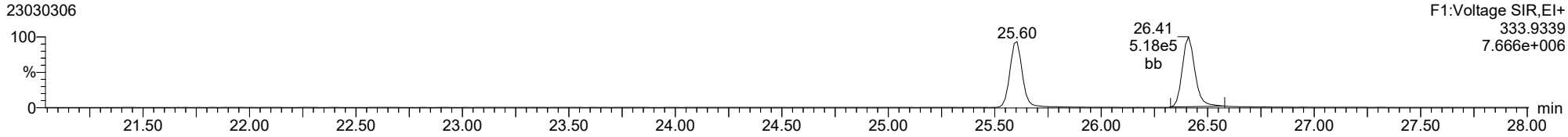

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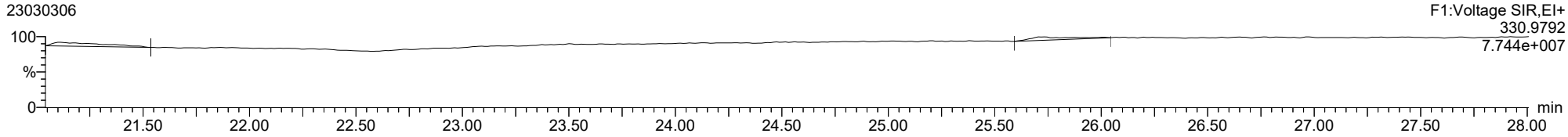

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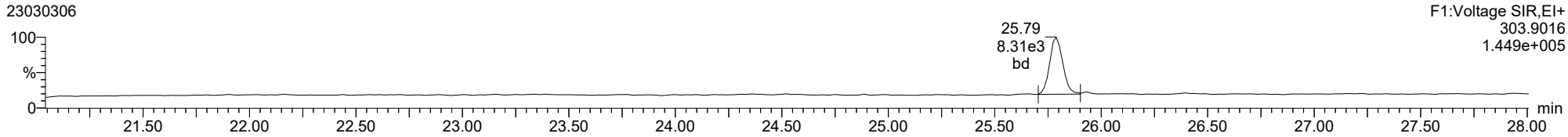

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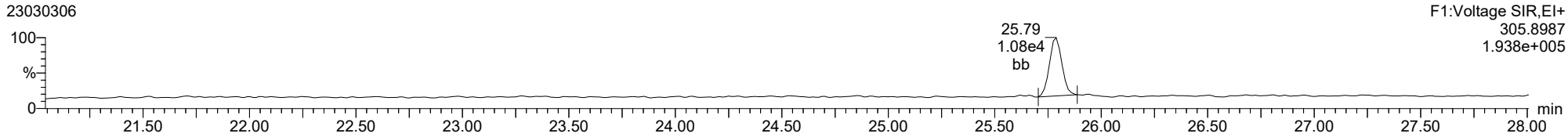

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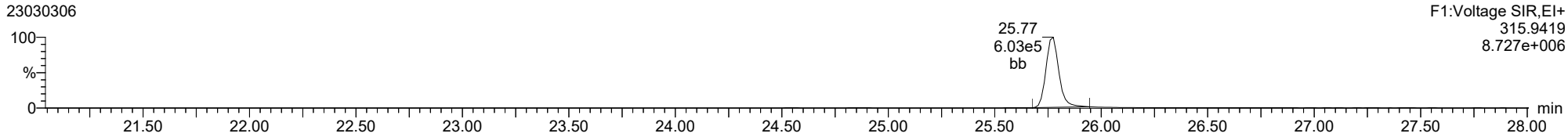

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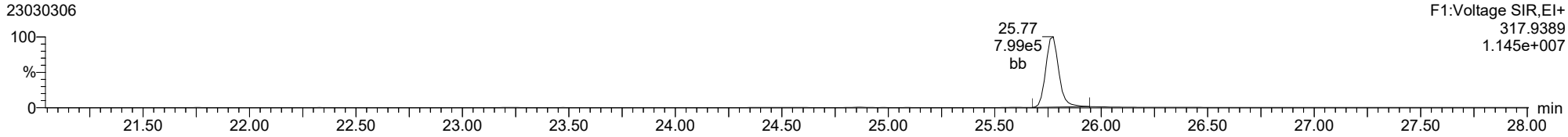

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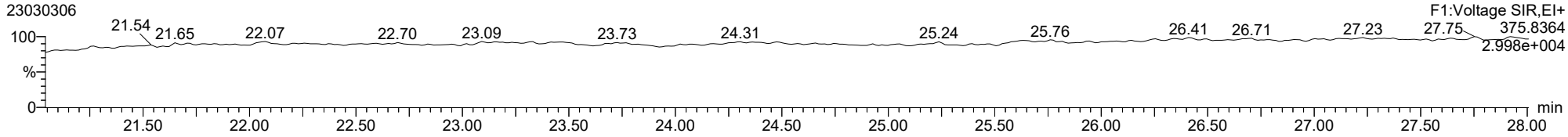

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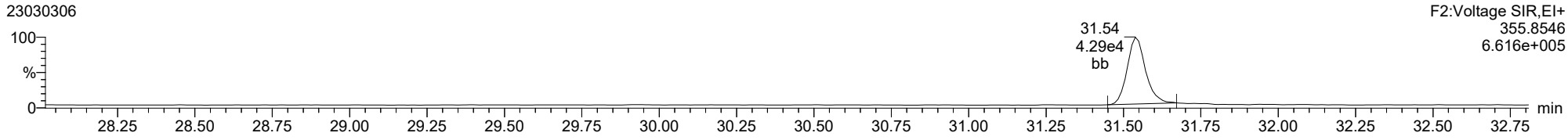
12378-PeCDD



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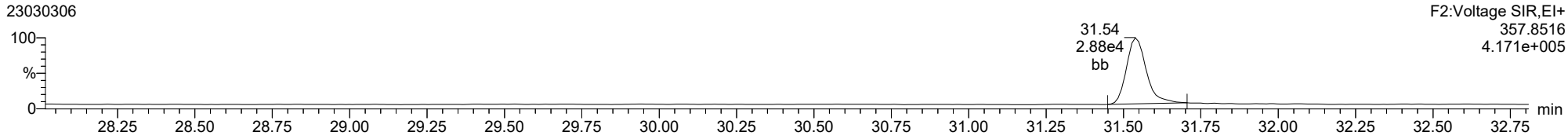

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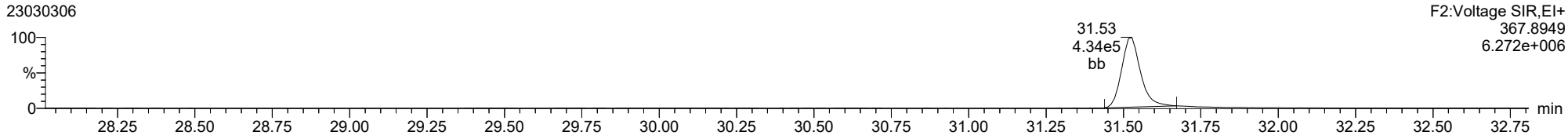

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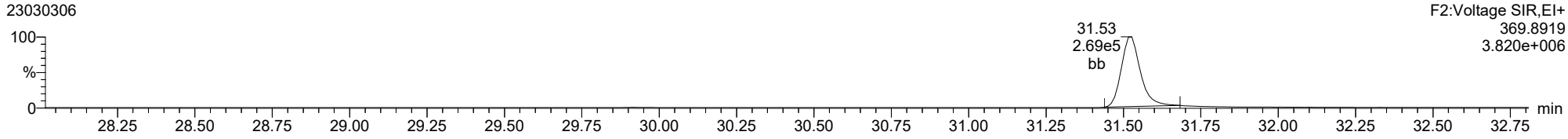

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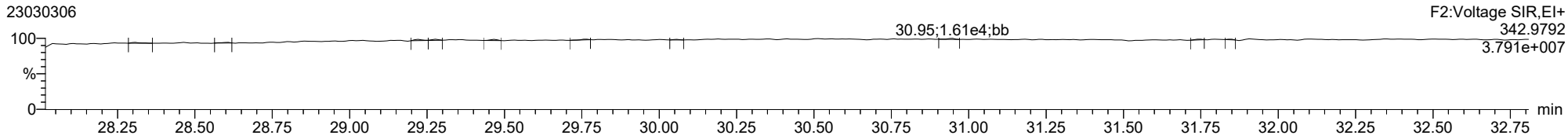

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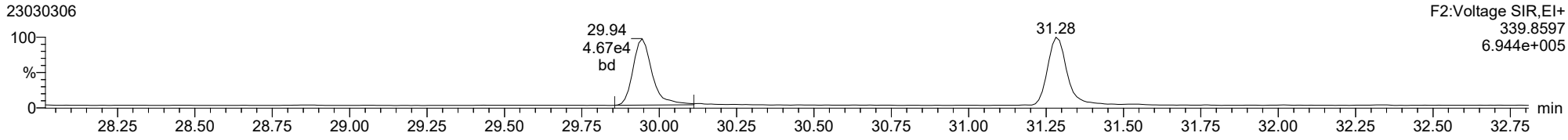
12378-PeCDF



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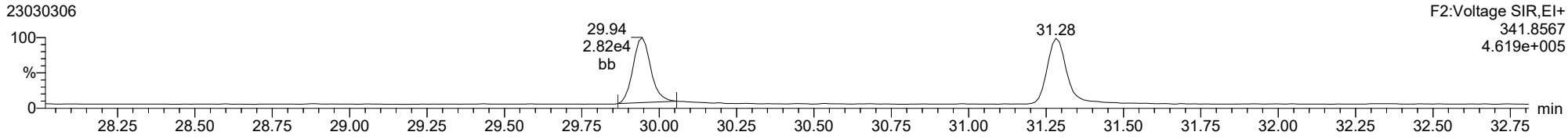

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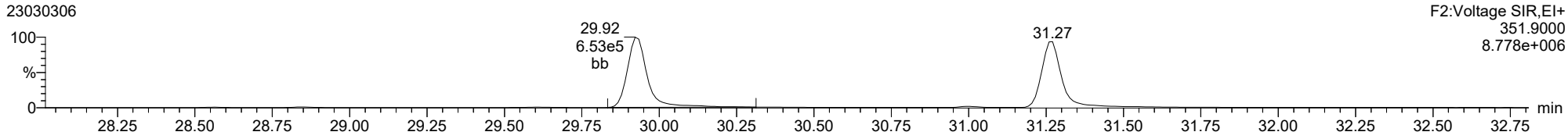

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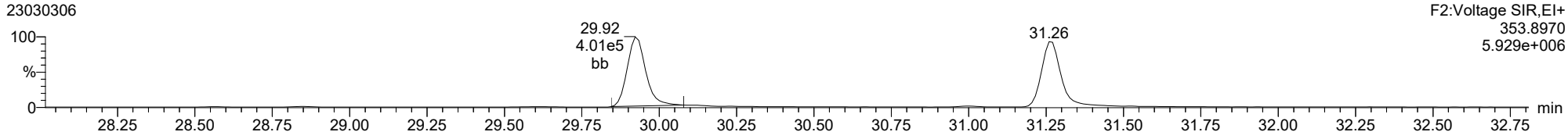
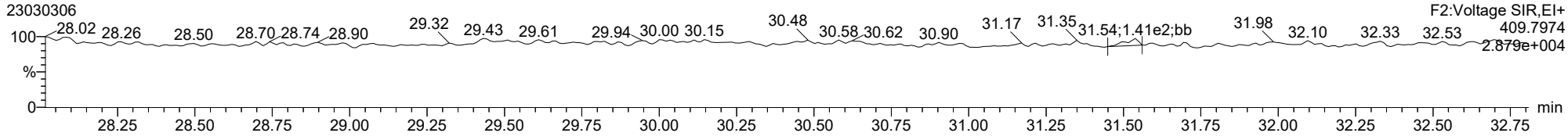


FUNCTION2 HPCDPE



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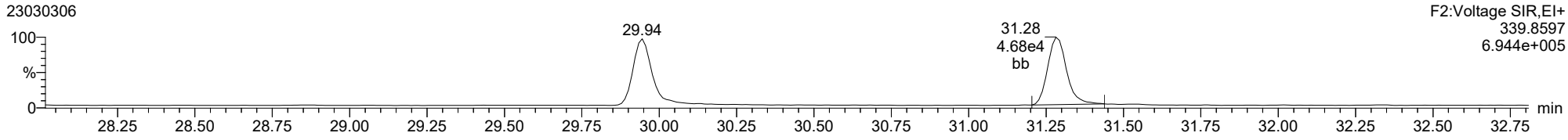
23478-PeCDF



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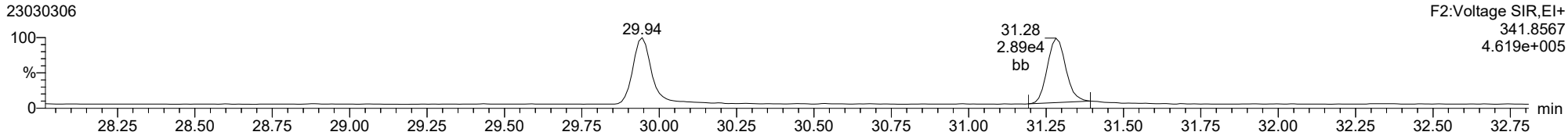

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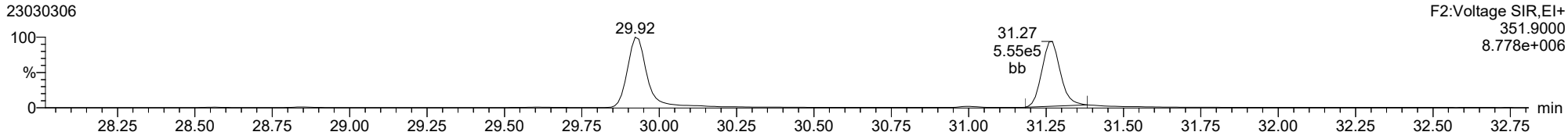

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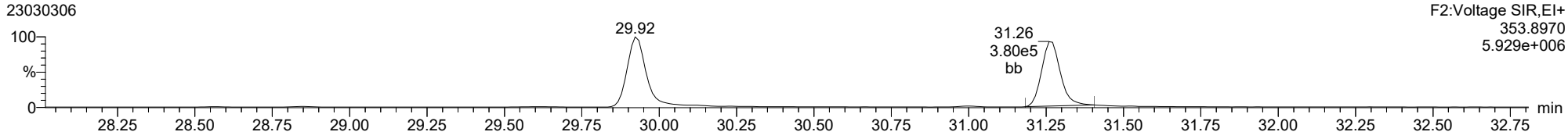

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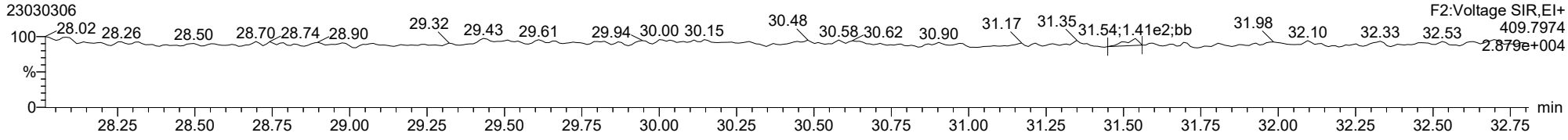

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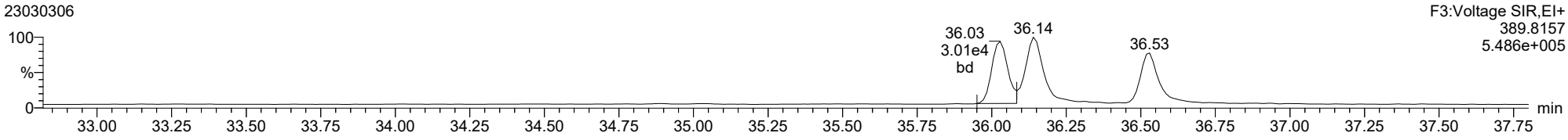

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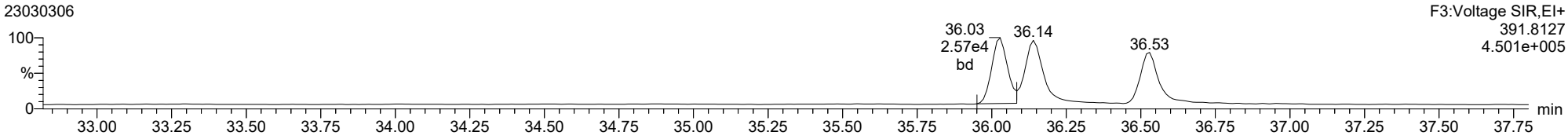

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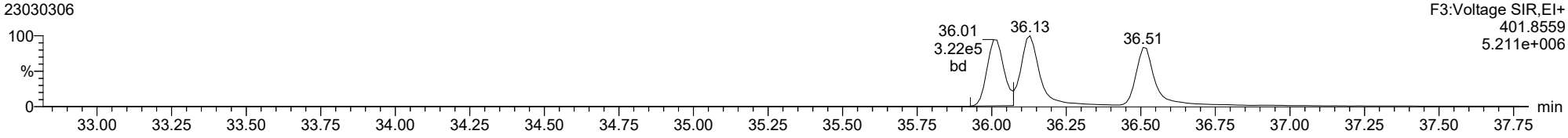

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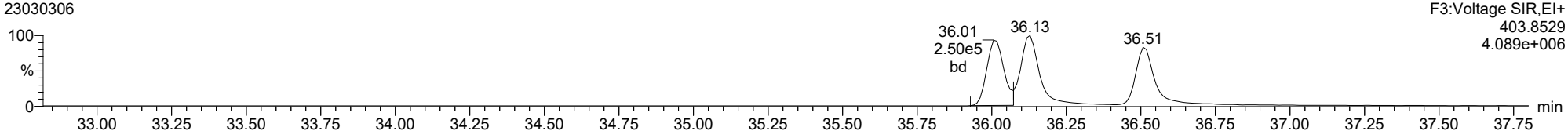
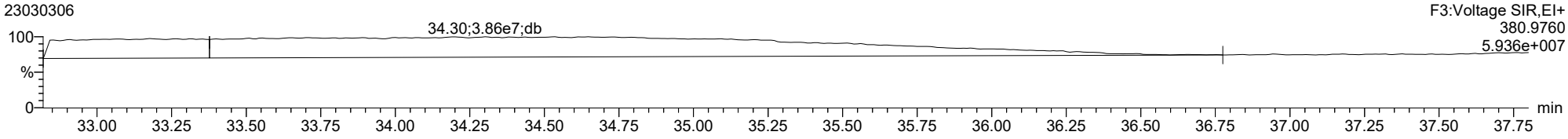


FUNCTION3 PFK



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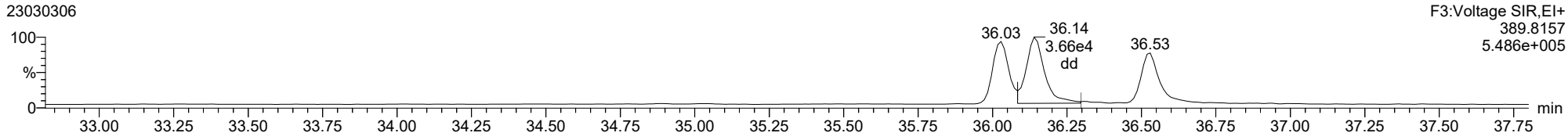

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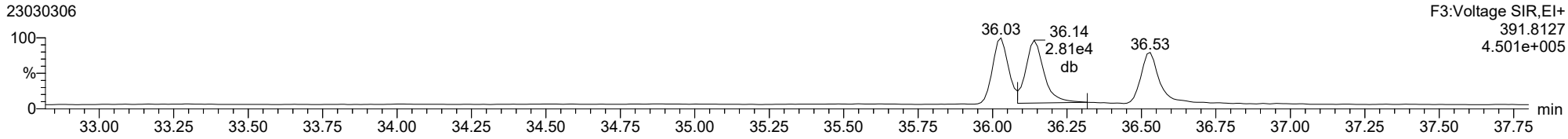

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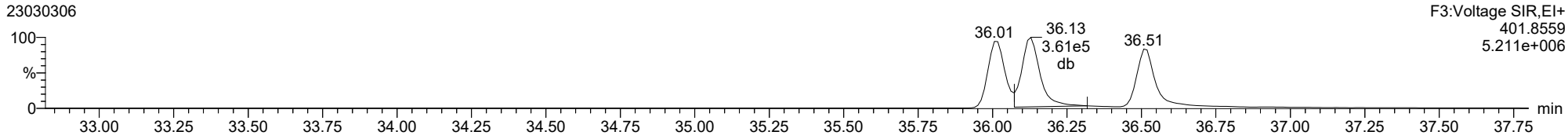

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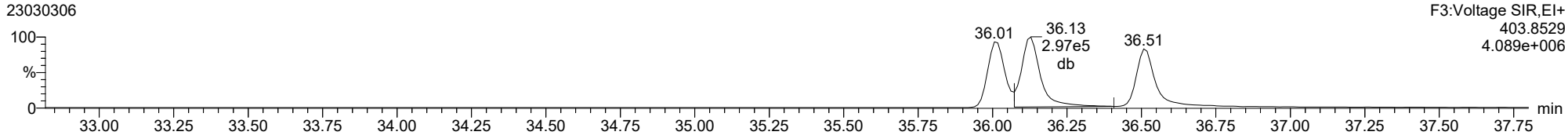

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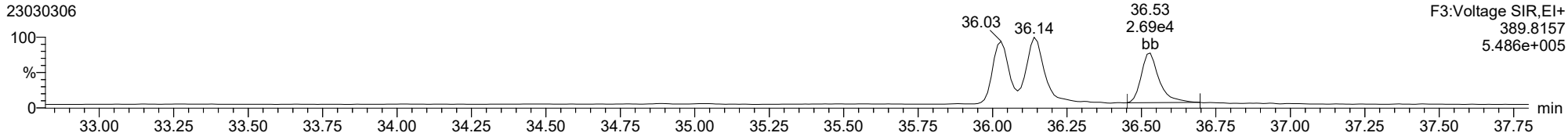

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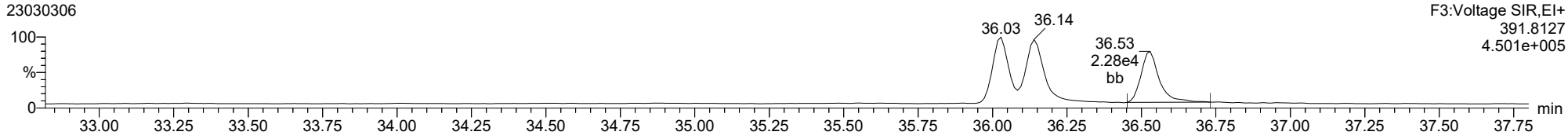

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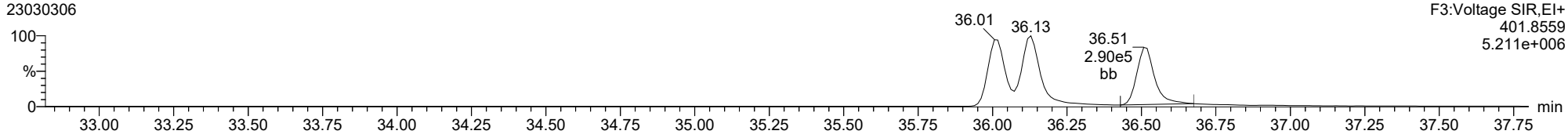

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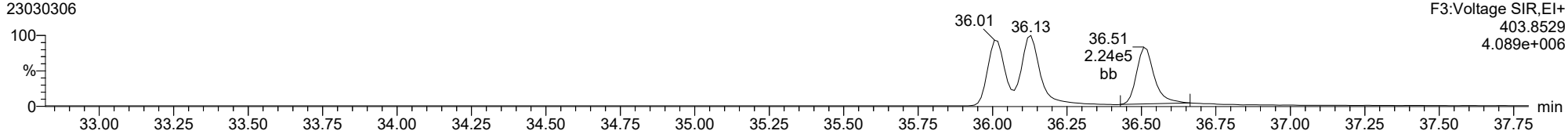

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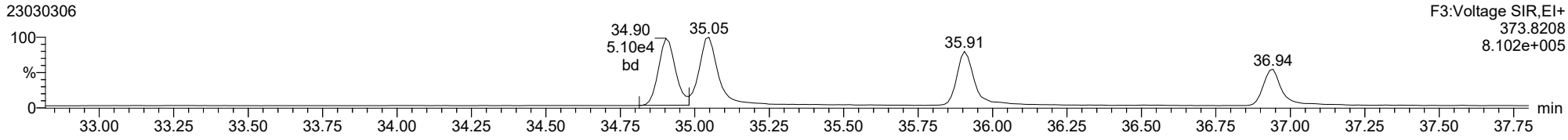
123478-HxCDF



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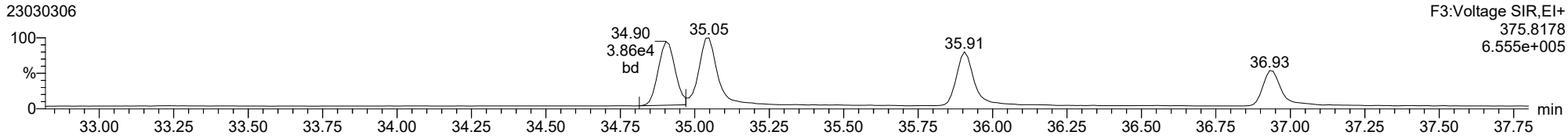

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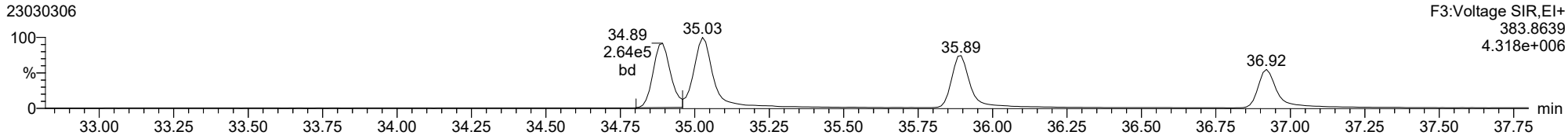

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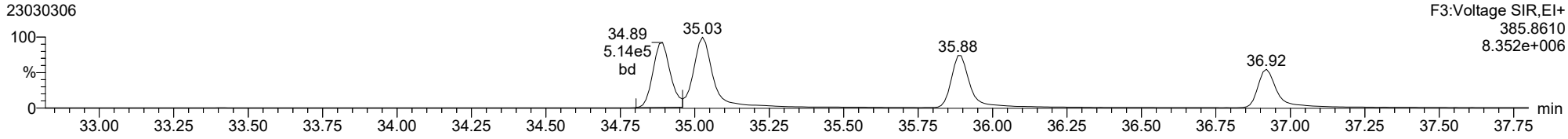
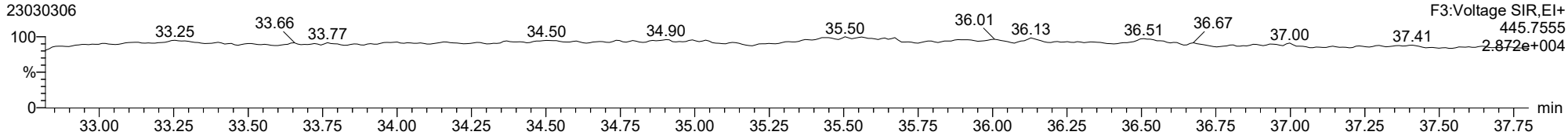


FUNCTION3 OCDPE



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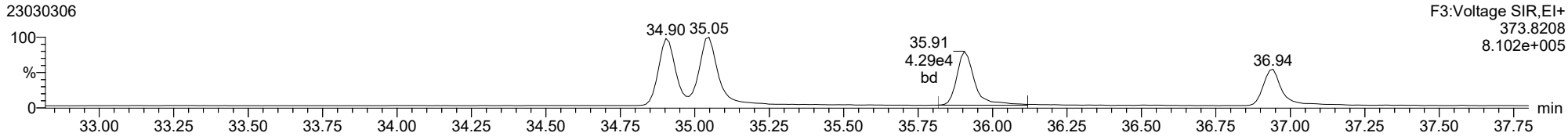
234678-HxCDF



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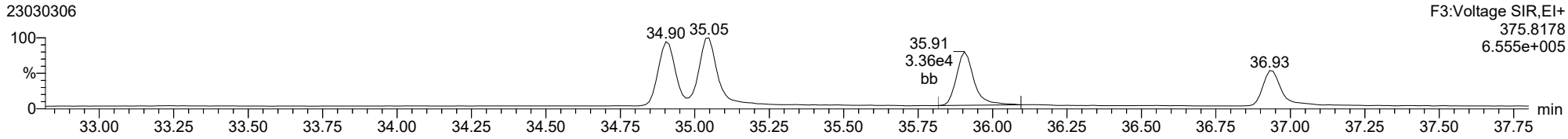

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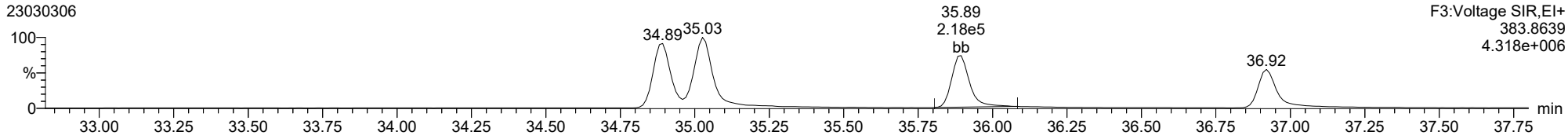

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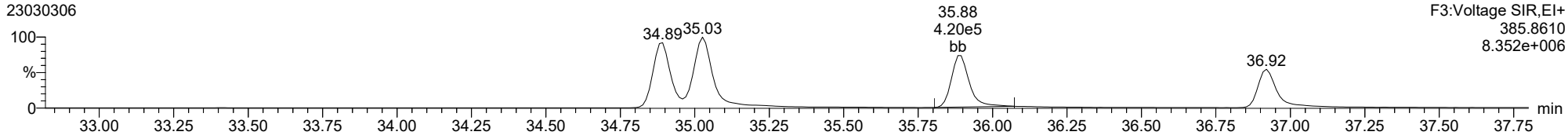
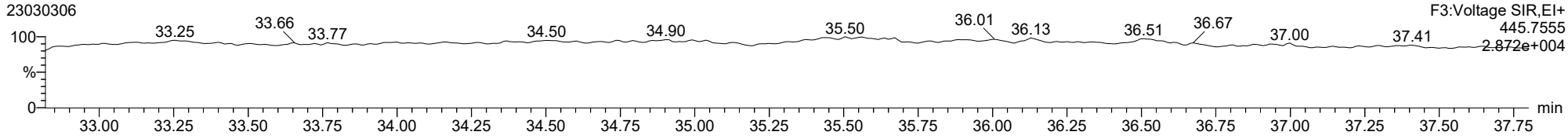


FUNCTION3 OCDPE



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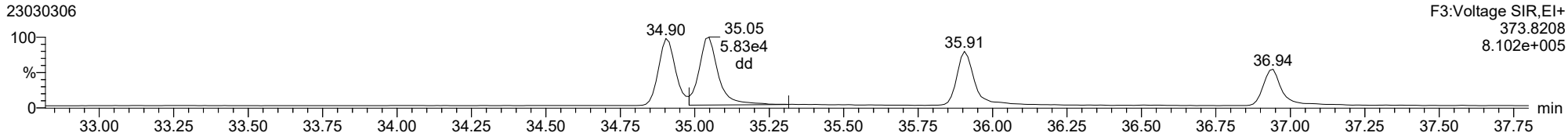
123678-HxCDF



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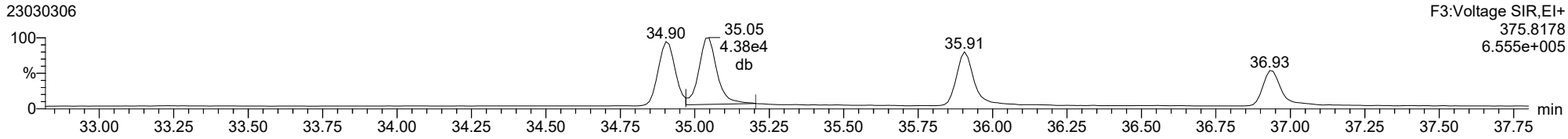

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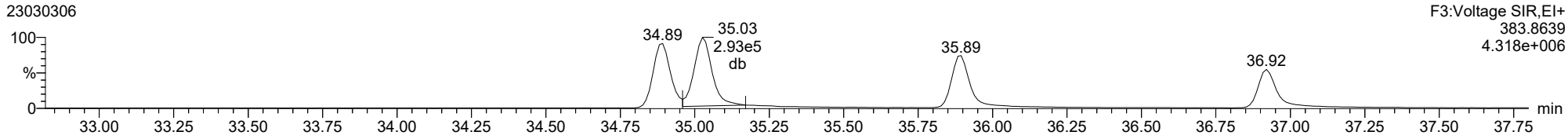

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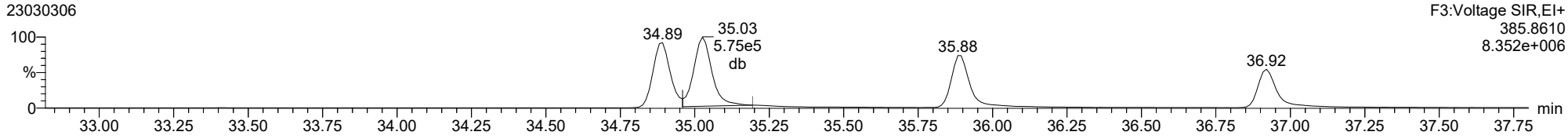

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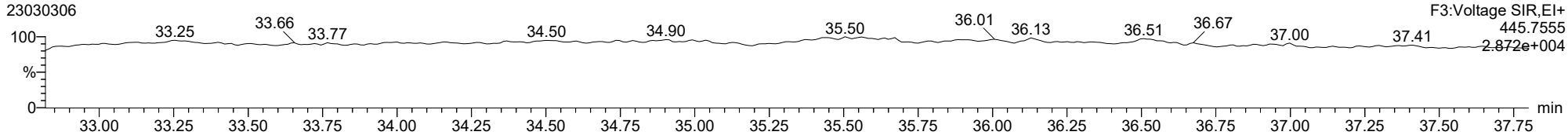

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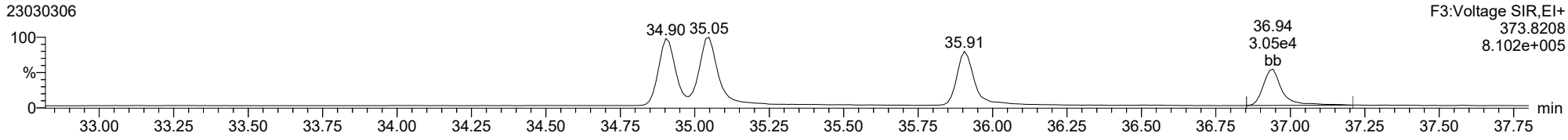

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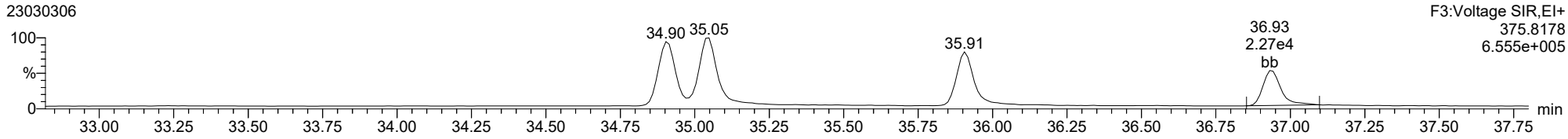

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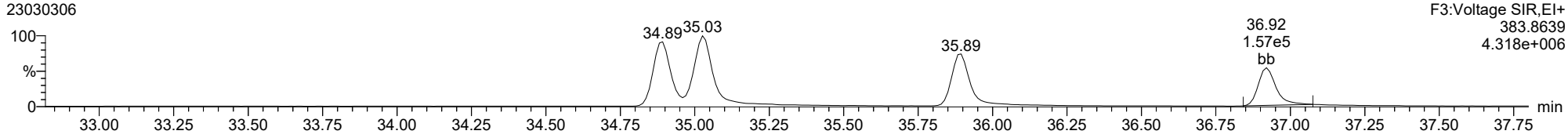

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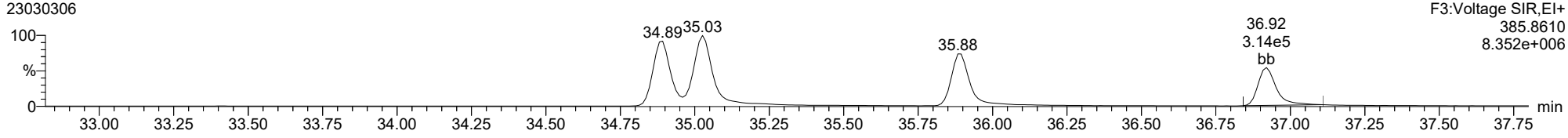

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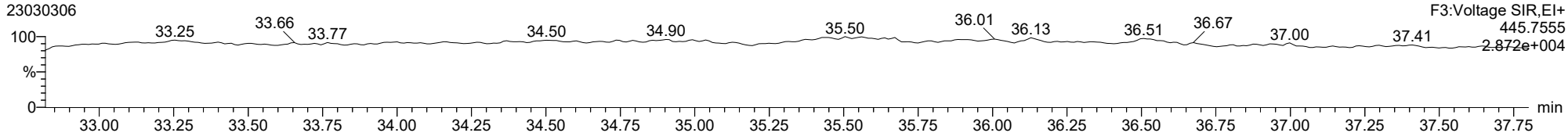

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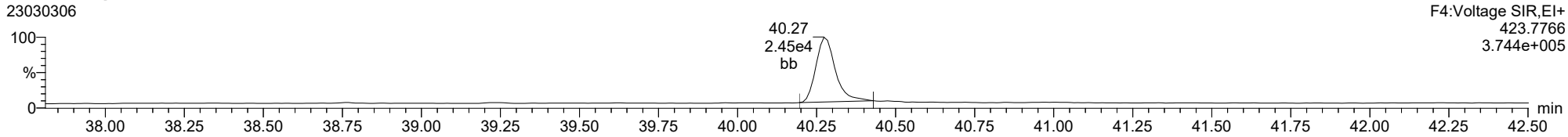

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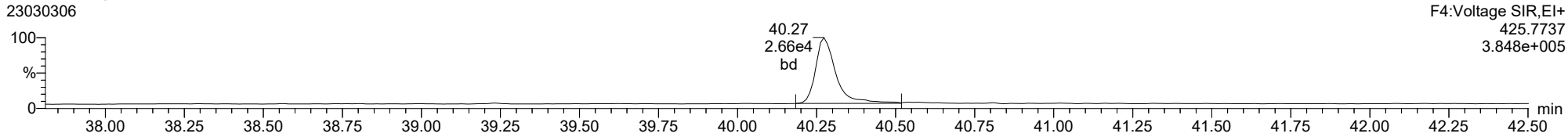

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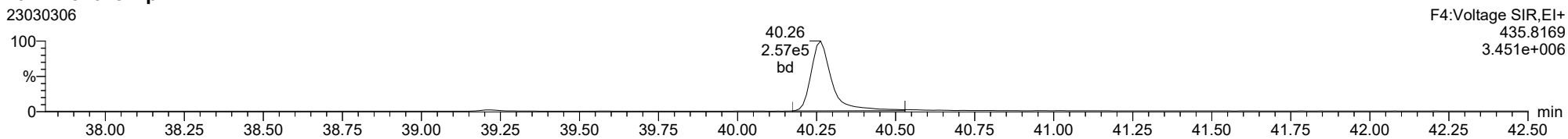

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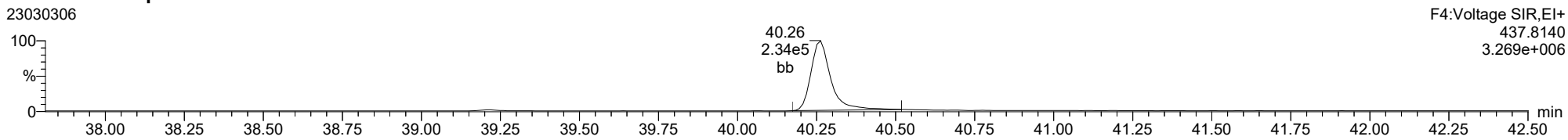

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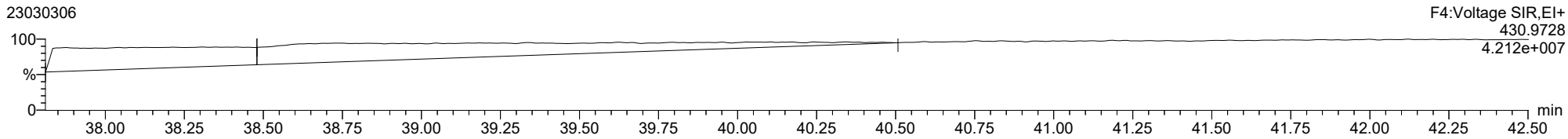

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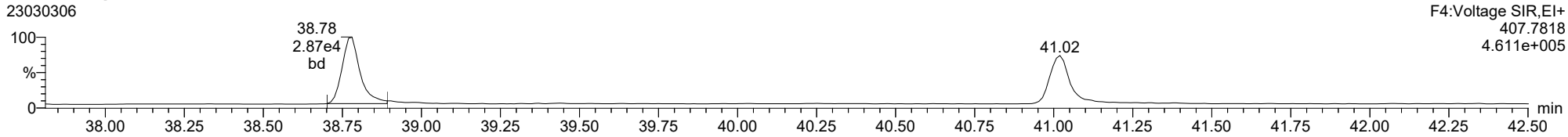

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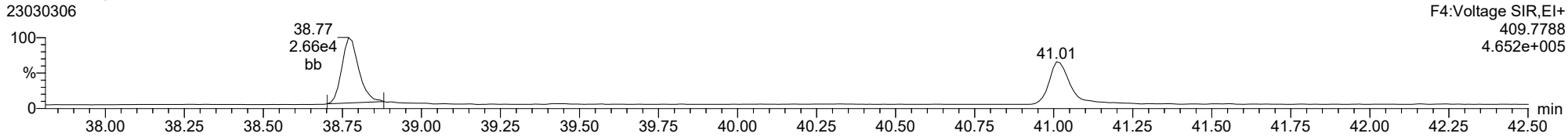

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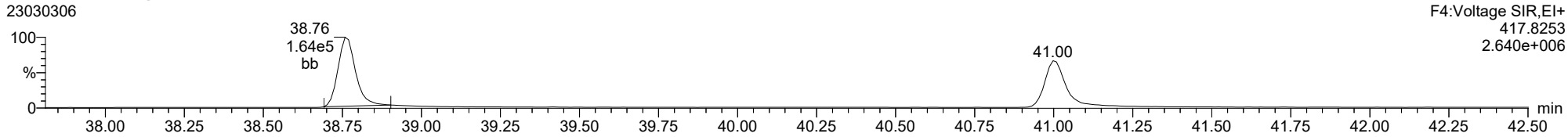

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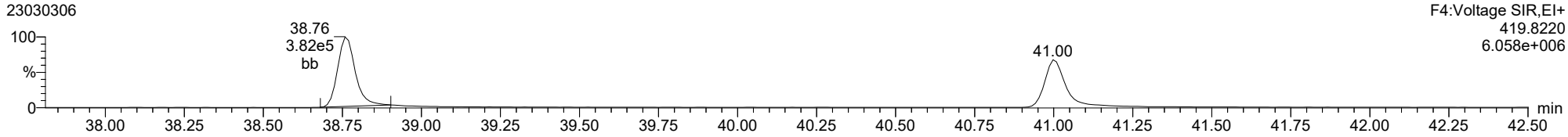

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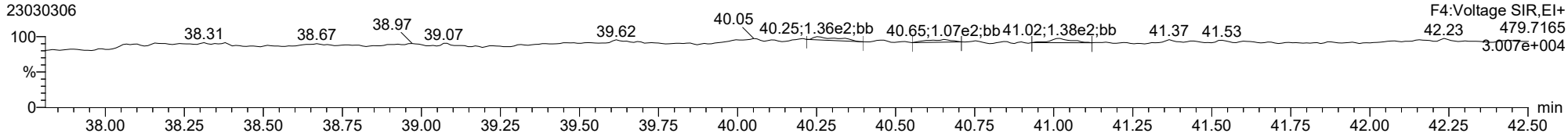

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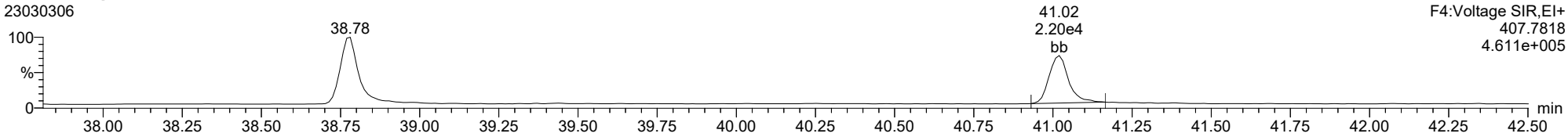

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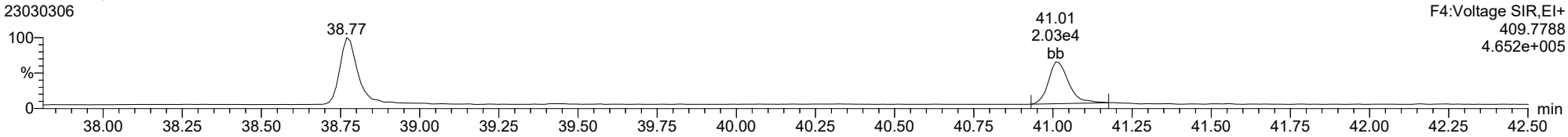

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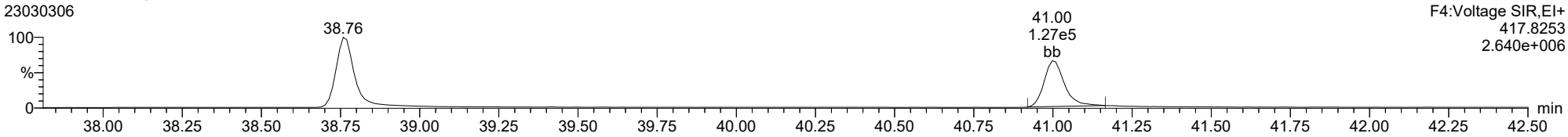

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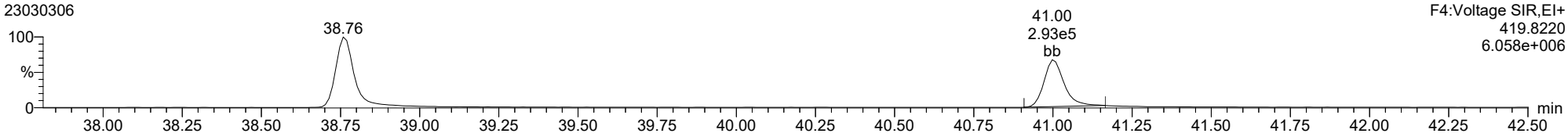

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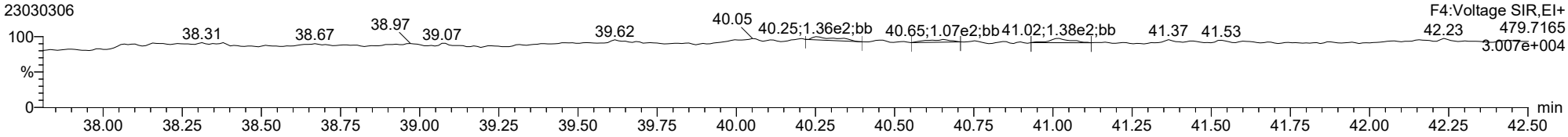

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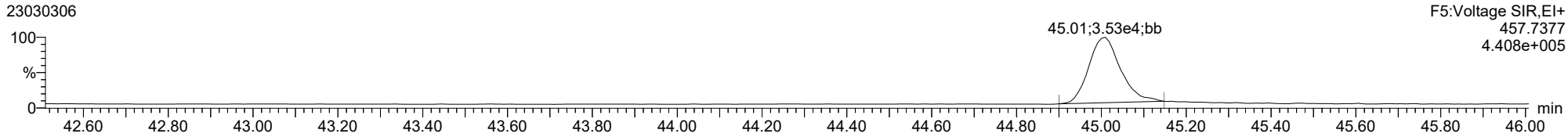

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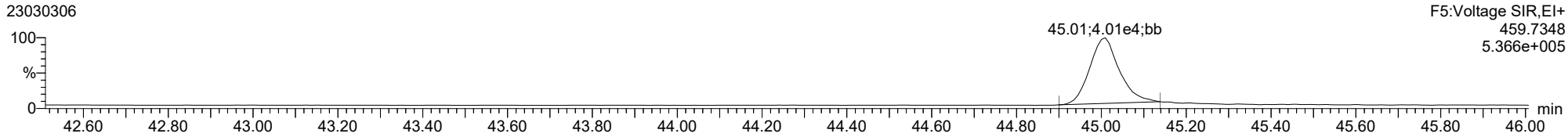

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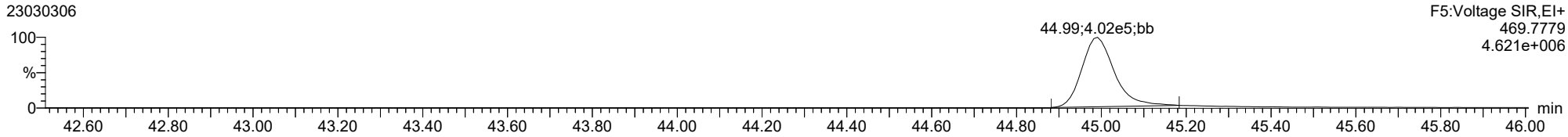

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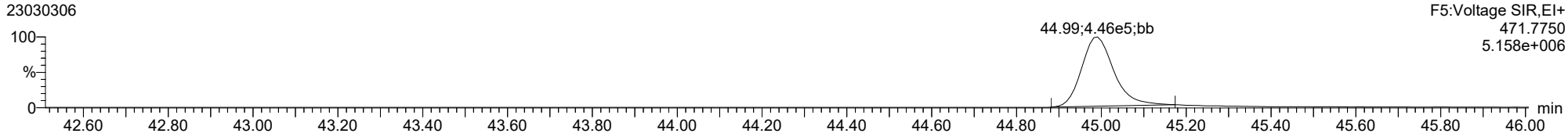

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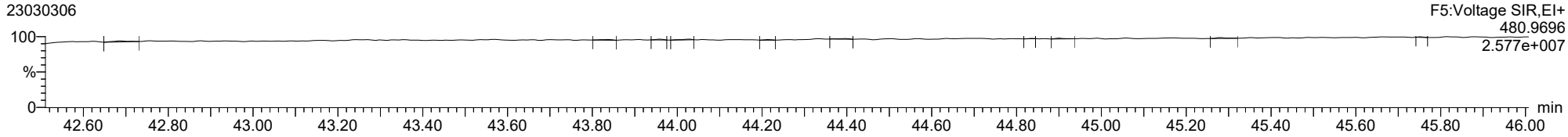

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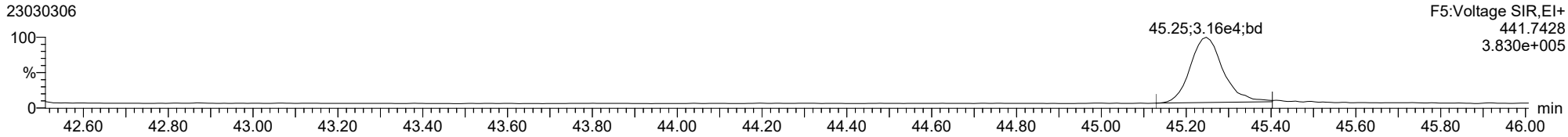

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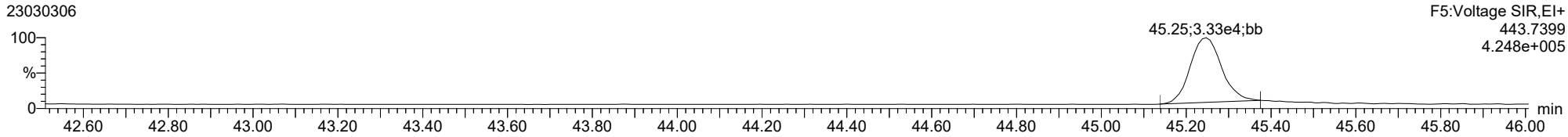

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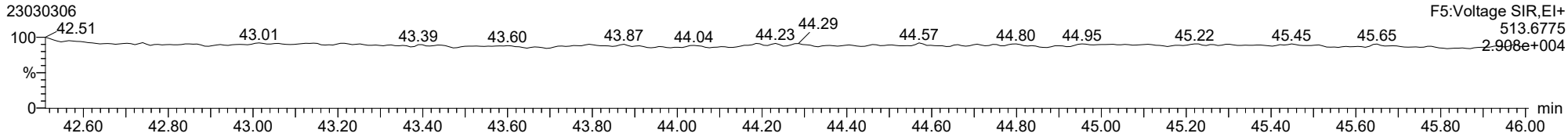

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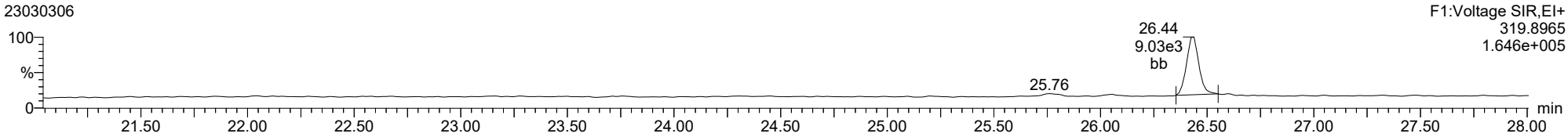

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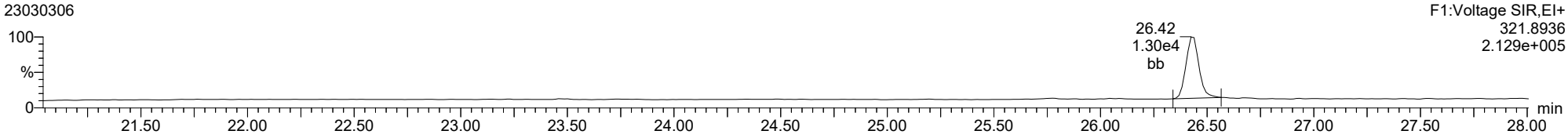

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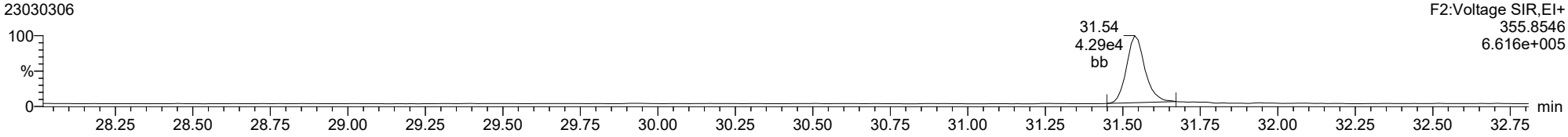

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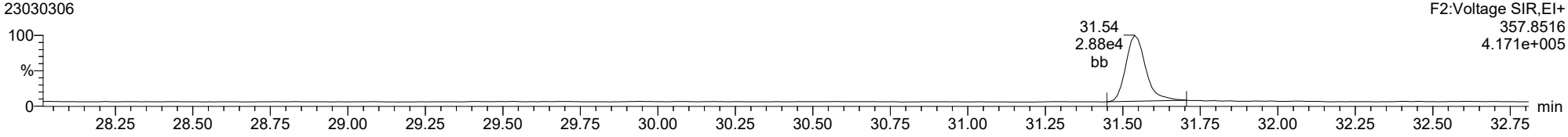

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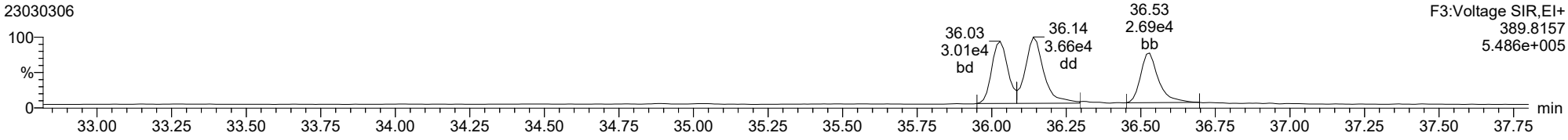

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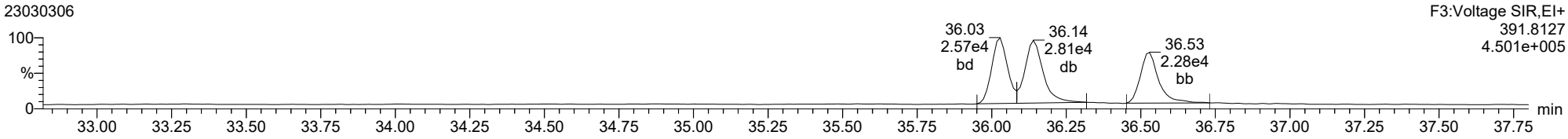

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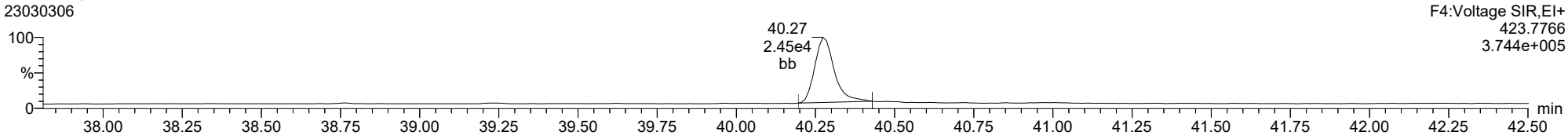

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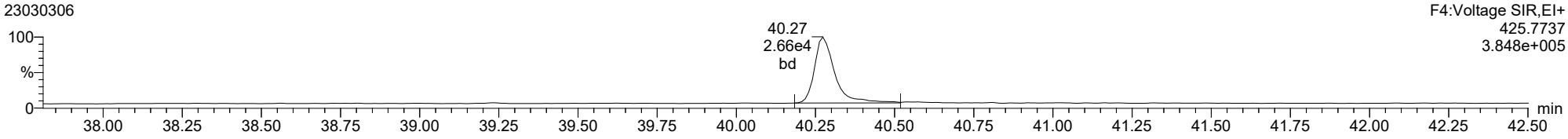

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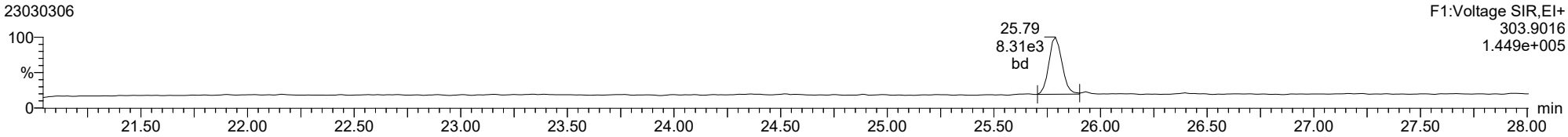
Total-tetrafurans



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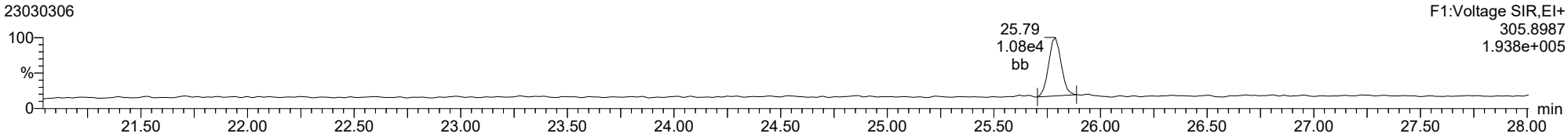

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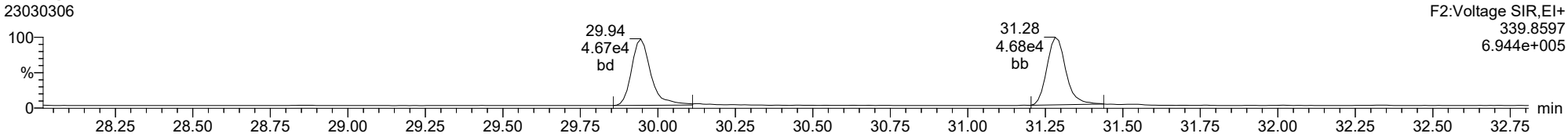

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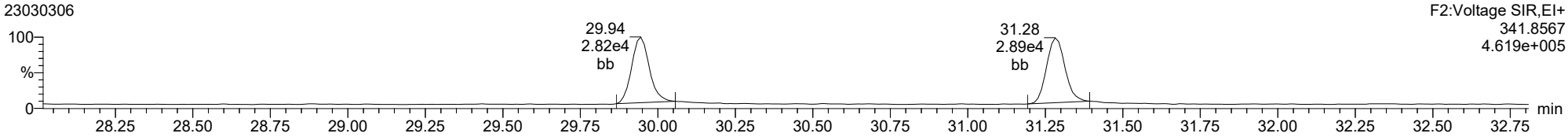

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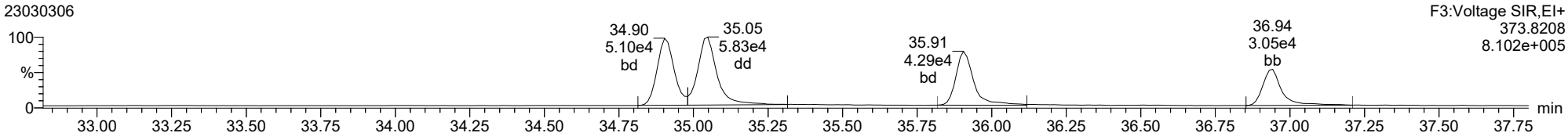

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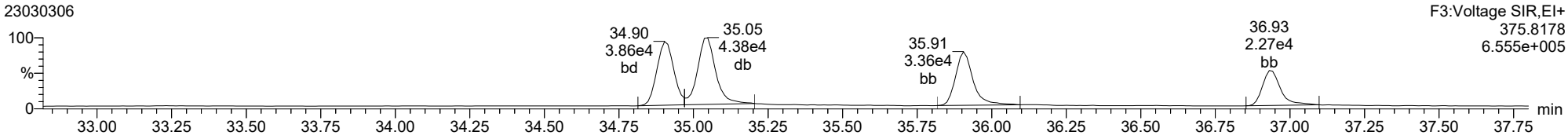

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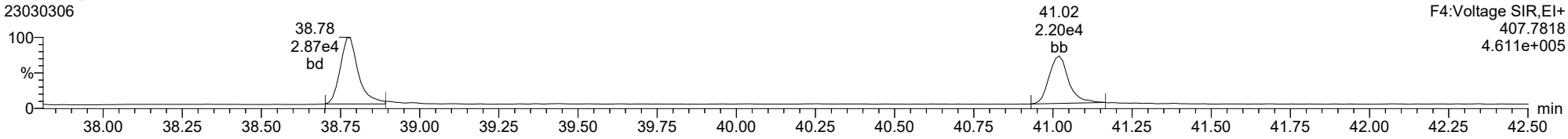

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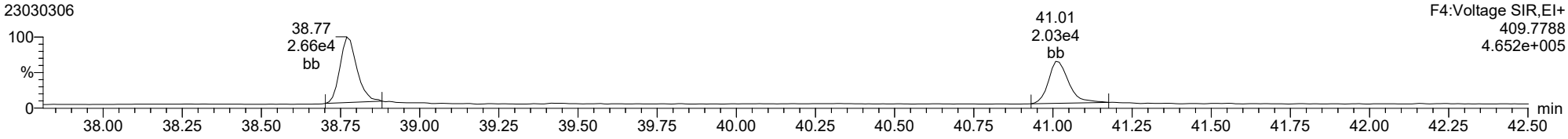

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ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.788	1.001	4.563e4	6.298e4	0.702	0.724	0.770	1455	2151	7.03e5	9.46e5	483.4	440.0	NO	bb	bb	10.132
12378-PeCDF	29.945	1.001	2.374e5	1.577e5	0.679	1.505	1.550	2714	2519	3.51e6	2.28e6	1294.3	903.8	NO	bb	bb	49.089
23478-PeCDF	31.282	1.001	2.063e5	1.364e5	0.786	1.512	1.550	2714	2519	3.03e6	1.99e6	1118.0	788.5	NO	bb	bb	49.466
123478-HxCDF	34.903	1.000	2.473e5	1.941e5	1.166	1.275	1.240	3008	2708	3.76e6	2.98e6	1248.4	1099.9	NO	bd	bd	48.979
234678-HxCDF	35.905	1.000	2.404e5	1.930e5	1.140	1.246	1.240	3008	2708	3.53e6	2.85e6	1172.2	1053.8	NO	bb	bb	49.000
123678-HxCDF	35.048	1.001	2.970e5	2.223e5	1.091	1.336	1.240	3008	2708	3.95e6	3.09e6	1312.5	1142.3	NO	db	db	50.520
123789-HxCDF	36.942	1.001	2.103e5	1.706e5	1.137	1.233	1.240	3008	2708	2.89e6	2.30e6	959.2	849.3	NO	bd	bd	50.468
1234678-HpCDF	38.780	1.000	1.592e5	1.601e5	1.003	0.994	1.050	2672	2189	2.51e6	2.53e6	939.2	1157.5	NO	bb	bb	48.161
1234789-HpCDF	41.019	1.000	1.361e5	1.443e5	0.953	0.943	1.050	2672	2189	1.84e6	1.86e6	689.1	851.7	NO	bb	bd	49.244
OCDF	45.247	1.006	2.019e5	2.478e5	0.778	0.815	0.890	1393	1380	2.32e6	2.62e6	1663.0	1900.3	NO	bb	bd	93.418
2378-TCDD	26.424	1.000	5.877e4	7.446e4	1.149	0.789	0.770	1483	1021	8.00e5	1.03e6	539.5	1013.7	NO	bd	bb	9.873
12378-PeCDD	31.538	1.000	1.890e5	1.221e5	1.022	1.548	1.550	1651	2172	2.74e6	1.77e6	1662.3	815.6	NO	bb	bb	49.884
123478-HxCDD	36.028	1.000	1.812e5	1.479e5	0.996	1.225	1.240	1690	2600	2.90e6	2.38e6	1717.5	913.7	NO	bd	bd	48.605
123678-HxCDD	36.139	1.000	2.270e5	1.862e5	1.001	1.219	1.240	1690	2600	3.05e6	2.54e6	1803.3	977.3	NO	db	db	51.480
123789-HxCDD	36.529	1.011	1.887e5	1.546e5	0.907	1.221	1.240	1690	2600	2.71e6	2.20e6	1606.4	846.3	NO	bb	bb	51.083
1234678-HpCDD	40.273	1.000	1.573e5	1.681e5	1.039	0.936	1.050	2523	2313	2.21e6	2.22e6	874.4	957.9	NO	bb	bd	49.956
OCDD	45.009	1.000	2.508e5	2.930e5	0.920	0.856	0.890	1279	1652	2.91e6	3.41e6	2272.5	2065.6	NO	bb	bb	95.487
13C-2378-TCDF	25.774	1.007	6.575e5	8.705e5	1.620	0.755	0.770	2127	1667	9.70e6	1.27e7	4562.2	7600.8	NO	bb	bb	92.139
13C-12378-PeCDF	29.922	1.169	7.106e5	4.742e5	1.240	1.498	1.550	3150	3257	9.76e6	6.54e6	3098.5	2009.5	NO	bd	bd	93.316
13C-23478-PeCDF	31.259	1.221	5.241e5	3.573e5	1.118	1.467	1.550	3150	3257	7.68e6	5.27e6	2437.6	1617.5	NO	bb	bb	77.038
13C-123478-HxCDF	34.891	0.956	2.605e5	5.124e5	1.168	0.508	0.510	2130	2302	3.94e6	7.71e6	1851.1	3349.5	NO	bd	bd	95.975
13C-123678-HxCDF	35.025	0.959	3.029e5	6.396e5	1.386	0.474	0.510	2130	2302	4.25e6	8.39e6	1994.1	3646.7	NO	db	db	98.624
13C-234678-HxCDF	35.894	0.983	2.705e5	5.057e5	1.129	0.535	0.510	2130	2302	3.77e6	7.17e6	1772.4	3115.7	NO	bd	bb	99.718
13C-123789-HxCDF	36.919	1.011	2.253e5	4.385e5	0.932	0.514	0.510	2130	2302	3.30e6	6.48e6	1548.0	2814.2	NO	bb	bb	103.358
13C-1234678-HpCDF	38.769	1.062	2.032e5	4.578e5	0.895	0.444	0.440	2209	3025	3.15e6	7.13e6	1428.1	2357.0	NO	bb	bb	107.118
13C-1234789-HpCDF	41.008	1.123	1.757e5	4.217e5	0.770	0.417	0.440	2209	3025	2.29e6	5.20e6	1036.4	1717.4	NO	bb	bb	112.595
13C-1234-TCDD	25.605	0.000	4.555e5	5.681e5	1.000	0.802	0.770	2485	1606	6.85e6	8.57e6	2757.9	5335.2	NO	bb	bb	100.000
13C-2378-TCDD	26.410	1.031	5.228e5	6.520e5	1.152	0.802	0.770	2485	1606	7.70e6	9.63e6	3097.5	5999.3	NO	bb	bb	99.597
13C-12378-PeCDD	31.527	1.231	3.747e5	2.356e5	0.829	1.590	1.550	1413	1348	5.28e6	3.29e6	3736.6	2437.5	NO	bb	bb	71.936
13C-123478-HxCDD	36.017	0.986	3.837e5	2.963e5	0.995	1.295	1.240	1796	1719	5.91e6	4.54e6	3293.9	2638.3	NO	bd	bd	99.140
13C-123678-HxCDD	36.128	0.989	4.675e5	3.344e5	1.157	1.398	1.240	1796	1719	6.38e6	4.87e6	3554.2	2831.4	NO	db	db	100.573
13C-1234678-HpCDD	40.262	1.102	3.210e5	3.059e5	0.840	1.049	1.050	2165	1959	4.38e6	4.15e6	2024.2	2117.7	NO	bb	bb	108.247
13C-OCDD	44.990	1.232	6.075e5	6.305e5	0.767	0.963	0.890	2629	1930	6.50e6	7.26e6	2473.3	3761.0	NO	bd	bb	234.029
13C-123789-HxCDD	36.518	0.000	3.849e5	3.043e5	1.000	1.265	1.240	1796	1719	5.52e6	4.36e6	3076.5	2537.0	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.032	1.159e5		1.288			2383		1.68e6		703.2			bb		8.796

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Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:34:37 Pacific Standard Time

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.285	0.865	5.143e4	7.104e4	0.802	0.724	0.770	1455	2151	8.64e5	1.17e6	593.7	544.2	NO	bb	bb	10.000
1289-TCDF	27.286	1.059	4.449e4	5.910e4	0.678	0.753	0.770	1455	2151	6.41e5	8.65e5	440.8	402.3	NO	bb	db	10.000
13468-PECDF	27.144	0.907	4.471e5	2.913e5	1.246	1.535	1.550	765	1431	6.85e6	4.42e6	8952.4	3092.4	NO	bb	bb	50.000
12389-PECDF	32.318	1.080	1.756e5	1.185e5	0.496	1.482	1.550	2714	2519	2.46e6	1.67e6	905.1	663.5	NO	bb	bb	50.000
123468-HXCDF	33.243	0.953	2.474e5	2.044e5	1.169	1.210	1.240	3008	2708	3.57e6	2.89e6	1187.3	1066.9	NO	bb	bd	50.000
1368-TCDD	23.557	0.892	5.333e4	6.596e4	1.015	0.808	0.770	1483	1021	8.25e5	1.09e6	556.5	1064.4	NO	bb	bb	10.000
1289-TCDD	27.031	1.023	4.649e4	6.027e4	0.909	0.771	0.770	1483	1021	6.71e5	8.87e5	452.4	868.9	NO	bb	bb	10.000
12479-PECDD	28.830	0.914	4.152e5	2.870e5	2.301	1.447	1.550	1651	2172	3.89e6	2.64e6	2354.1	1214.5	NO	bb	bd	50.000
12389-PECDD	31.939	1.013	2.202e5	1.409e5	1.184	1.563	1.550	1651	2172	2.97e6	1.93e6	1798.8	887.7	NO	bd	bd	50.000
124679-HXCDD	34.011	0.944	2.133e5	1.659e5	1.115	1.286	1.240	1690	2600	2.98e6	2.42e6	1762.3	930.8	NO	bd	bb	50.000
1234679-HPCDD	39.225	0.974	1.868e5	1.696e5	1.137	1.101	1.050	2523	2313	2.68e6	2.60e6	1062.7	1125.2	NO	bd	bb	50.000
Total-tetrafurans			1.415e5		0.727			1455		2.21e6							30.132
Total-penta1			4.471e5					765		6.85e6							50.000
Total-pentafurans			6.595e5		0.654			2714		9.58e6							158.378
Total-hexafurans			1.243e6		1.141			3008		1.77e7							249.074
Total-heptafurans			2.965e5		0.978			2672		4.37e6							97.824
Total-Furans			2.990e6		0.922			1455		4.30e7							678.826
Total-tetradioxins			2.666e5		1.024			1483		3.52e6							50.252
Total-pentadioxins			8.253e5		1.502			1651		9.61e6							150.025
Total-hexadioxins			8.102e5		1.005			1690		1.16e7							201.167
Total-heptadioxins			3.440e5		1.088			2523		4.89e6							99.956
Total-Dioxins			2.497e6		1.130			1483		3.26e7							596.887
Total-TEQ			5.487e6					1483		7.56e7							1275.713
FUNCTION1 PFK			2.078e5					640846		4.44e6							
FUNCTION2 PFK			1.544e7					302960		1.17e7							0.000
FUNCTION3 PFK			6.335e6					441696		3.43e7							0.000
FUNCTION4 PFK			1.606e7					302692		2.36e6							
FUNCTION5 PFK			3.357e4					240421		1.60e6							
FUNCTION1 HXCD...			1.444e3					587		1.68e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			9.034e2					1003		1.66e4							0.000
FUNCTION3 OCDPE			5.560e2					494		8.57e3							0.000
FUNCTION4 NCDPE			9.205e2					776		1.78e4							0.000
FUNCTION5 DCDPE			9.291e1					548		1.29e3							0.000

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Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.449e4	5.910e4	0.678	0.75	0.77	440.8	YES	NO	bb	db	10.000
2	2378-TCDF	25.79	4.563e4	6.298e4	0.702	0.72	0.77	483.4	YES	NO	bb	bb	10.132
3	1368-TCDF	22.29	5.143e4	7.104e4	0.802	0.72	0.77	593.7	YES	NO	bb	bb	10.000

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.14	4.471e5	2.913e5	1.246	1.53	1.55	8952.4	YES	NO	bb	bb	50.000

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.32	1.756e5	1.185e5	0.496	1.48	1.55	905.1	YES	NO	bb	bb	50.000
2	23478-PeCDF	31.28	2.063e5	1.364e5	0.786	1.51	1.55	1118.0	YES	NO	bb	bb	49.466
3	Total-pentafurans	30.13	4.319e2	3.264e2	0.654	1.32	1.55	1.8	NO	NO	bb	bb	0.112
4	12378-PeCDF	29.94	2.374e5	1.577e5	0.679	1.51	1.55	1294.3	YES	NO	bb	bb	49.089
5	Total-pentafurans	28.80	3.978e4	2.583e4	0.654	1.54	1.55	212.5	YES	NO	bb	bb	9.712

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexafurans	37.33	5.073e2	4.522e2	1.141	1.12	1.24	4.2	YES	NO	db	dd	0.107
2	123789-HxCDF	36.94	2.103e5	1.706e5	1.137	1.23	1.24	959.2	YES	NO	bd	bd	50.468
3	234678-HxCDF	35.91	2.404e5	1.930e5	1.140	1.25	1.24	1172.2	YES	NO	bb	bb	49.000
4	123678-HxCDF	35.05	2.970e5	2.223e5	1.091	1.34	1.24	1312.5	YES	NO	db	db	50.520
5	123478-HxCDF	34.90	2.473e5	1.941e5	1.166	1.27	1.24	1248.4	YES	NO	bd	bd	48.979
6	123468-HXCDF	33.24	2.474e5	2.044e5	1.169	1.21	1.24	1187.3	YES	NO	bb	bd	50.000

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.02	1.361e5	1.443e5	0.953	0.94	1.05	689.1	YES	NO	bb	bd	49.244
2	Total-heptafurans	39.44	1.302e3	1.273e3	0.978	1.02	1.05	8.5	YES	NO	bb	bb	0.418
3	1234678-HpCDF	38.78	1.592e5	1.601e5	1.003	0.99	1.05	939.2	YES	NO	bb	bb	48.161

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.449e4	5.910e4	0.678	0.75	0.77	440.8	YES	NO	bb	db	10.000
2	2378-TCDF	25.79	4.563e4	6.298e4	0.702	0.72	0.77	483.4	YES	NO	bb	bb	10.132
3	1368-TCDF	22.29	5.143e4	7.104e4	0.802	0.72	0.77	593.7	YES	NO	bb	bb	10.000
4	12389-PECDF	32.32	1.756e5	1.185e5	0.496	1.48	1.55	905.1	YES	NO	bb	bb	50.000
5	23478-PeCDF	31.28	2.063e5	1.364e5	0.786	1.51	1.55	1118.0	YES	NO	bb	bb	49.466
6	Total-pentafurans	30.13	4.319e2	3.264e2	0.654	1.32	1.55	1.8	NO	NO	bb	bb	0.112
7	12378-PeCDF	29.94	2.374e5	1.577e5	0.679	1.51	1.55	1294.3	YES	NO	bb	bb	49.089
8	Total-pentafurans	28.80	3.978e4	2.583e4	0.654	1.54	1.55	212.5	YES	NO	bb	bb	9.712
9	Total-hexafurans	37.33	5.073e2	4.522e2	1.141	1.12	1.24	4.2	YES	NO	db	dd	0.107
10	123789-HxCDF	36.94	2.103e5	1.706e5	1.137	1.23	1.24	959.2	YES	NO	bd	bd	50.468
11	234678-HxCDF	35.91	2.404e5	1.930e5	1.140	1.25	1.24	1172.2	YES	NO	bb	bb	49.000
12	123678-HxCDF	35.05	2.970e5	2.223e5	1.091	1.34	1.24	1312.5	YES	NO	db	db	50.520
13	123478-HxCDF	34.90	2.473e5	1.941e5	1.166	1.27	1.24	1248.4	YES	NO	bd	bd	48.979
14	123468-HXCDF	33.24	2.474e5	2.044e5	1.169	1.21	1.24	1187.3	YES	NO	bb	bd	50.000
15	1234789-HpCDF	41.02	1.361e5	1.443e5	0.953	0.94	1.05	689.1	YES	NO	bb	bd	49.244
16	Total-heptafurans	39.44	1.302e3	1.273e3	0.978	1.02	1.05	8.5	YES	NO	bb	bb	0.418
17	1234678-HpCDF	38.78	1.592e5	1.601e5	1.003	0.99	1.05	939.2	YES	NO	bb	bb	48.161
18	OCDF	45.25	2.019e5	2.478e5	0.778	0.81	0.89	1663.0	YES	NO	bb	bd	93.418
19	13468-PECDF	27.14	4.471e5	2.913e5	1.246	1.53	1.55	8952.4	YES	NO	bb	bb	50.000

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.56	5.333e4	6.596e4	1.015	0.81	0.77	556.5	YES	NO	bb	bb	10.000
2	1289-TCDD	27.03	4.649e4	6.027e4	0.909	0.77	0.77	452.4	YES	NO	bb	bb	10.000
3	2378-TCDD	26.42	5.877e4	7.446e4	1.149	0.79	0.77	539.5	YES	NO	bd	bb	9.873
4	Total-tetradioxins	26.10	8.105e4	1.035e5	1.024	0.78	0.77	553.1	YES	NO	bb	bb	15.333
5	Total-tetradioxins	25.62	2.642e4	3.299e4	1.024	0.80	0.77	267.0	YES	NO	bd	bb	4.937
6	Total-tetradioxins	25.04	5.856e2	7.161e2	1.024	0.82	0.77	7.0	YES	NO	bb	bb	0.108

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.94	2.202e5	1.409e5	1.184	1.56	1.55	1798.8	YES	NO	bd	bd	50.000
2	12378-PeCDD	31.54	1.890e5	1.221e5	1.022	1.55	1.55	1662.3	YES	NO	bb	bb	49.884
3	Total-pentadioxins	30.88	8.263e2	4.657e2	1.502	1.77	1.55	8.6	YES	NO	bb	bb	0.141
4	12479-PECDD	28.83	4.152e5	2.870e5	2.301	1.45	1.55	2354.1	YES	NO	bb	bd	50.000

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.53	1.887e5	1.546e5	0.907	1.22	1.24	1606.4	YES	NO	bb	bb	51.083
2	123678-HxCDD	36.14	2.270e5	1.862e5	1.001	1.22	1.24	1803.3	YES	NO	db	db	51.480
3	123478-HxCDD	36.03	1.812e5	1.479e5	0.996	1.23	1.24	1717.5	YES	NO	bd	bd	48.605
4	124679-HXCDD	34.01	2.133e5	1.659e5	1.115	1.29	1.24	1762.3	YES	NO	bd	bb	50.000

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.27	1.573e5	1.681e5	1.039	0.94	1.05	874.4	YES	NO	bb	bd	49.956
2	1234679-HPCDD	39.23	1.868e5	1.696e5	1.137	1.10	1.05	1062.7	YES	NO	bd	bb	50.000

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.56	5.333e4	6.596e4	1.015	0.81	0.77	556.5	YES	NO	bb	bb	10.000
2	1289-TCDD	27.03	4.649e4	6.027e4	0.909	0.77	0.77	452.4	YES	NO	bb	bb	10.000
3	2378-TCDD	26.42	5.877e4	7.446e4	1.149	0.79	0.77	539.5	YES	NO	bd	bb	9.873
4	Total-tetradioxins	26.10	8.105e4	1.035e5	1.024	0.78	0.77	553.1	YES	NO	bb	bb	15.333
5	Total-tetradioxins	25.62	2.642e4	3.299e4	1.024	0.80	0.77	267.0	YES	NO	bd	bb	4.937
6	Total-tetradioxins	25.04	5.856e2	7.161e2	1.024	0.82	0.77	7.0	YES	NO	bb	bb	0.108
7	12389-PECDD	31.94	2.202e5	1.409e5	1.184	1.56	1.55	1798.8	YES	NO	bd	bd	50.000
8	12378-PeCDD	31.54	1.890e5	1.221e5	1.022	1.55	1.55	1662.3	YES	NO	bb	bb	49.884
9	Total-pentadioxins	30.88	8.263e2	4.657e2	1.502	1.77	1.55	8.6	YES	NO	bb	bb	0.141
10	12479-PECDD	28.83	4.152e5	2.870e5	2.301	1.45	1.55	2354.1	YES	NO	bb	bd	50.000
11	123789-HxCDD	36.53	1.887e5	1.546e5	0.907	1.22	1.24	1606.4	YES	NO	bb	bb	51.083
12	123678-HxCDD	36.14	2.270e5	1.862e5	1.001	1.22	1.24	1803.3	YES	NO	db	db	51.480
13	123478-HxCDD	36.03	1.812e5	1.479e5	0.996	1.23	1.24	1717.5	YES	NO	bd	bd	48.605
14	124679-HXCDD	34.01	2.133e5	1.659e5	1.115	1.29	1.24	1762.3	YES	NO	bd	bb	50.000
15	1234678-HpCDD	40.27	1.573e5	1.681e5	1.039	0.94	1.05	874.4	YES	NO	bb	bd	49.956
16	1234679-HPCDD	39.23	1.868e5	1.696e5	1.137	1.10	1.05	1062.7	YES	NO	bd	bb	50.000
17	OCDD	45.01	2.508e5	2.930e5	0.920	0.86	0.89	2272.5	YES	NO	bb	bb	95.487

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.449e4	5.910e4	0.678	0.75	0.77	440.8	YES	NO	bb	db	10.000
2	2378-TCDF	25.79	4.563e4	6.298e4	0.702	0.72	0.77	483.4	YES	NO	bb	bb	10.132
3	1368-TCDF	22.29	5.143e4	7.104e4	0.802	0.72	0.77	593.7	YES	NO	bb	bb	10.000
4	12389-PECDF	32.32	1.756e5	1.185e5	0.496	1.48	1.55	905.1	YES	NO	bb	bb	50.000
5	23478-PeCDF	31.28	2.063e5	1.364e5	0.786	1.51	1.55	1118.0	YES	NO	bb	bb	49.466
6	Total-pentafurans	30.13	4.319e2	3.264e2	0.654	1.32	1.55	1.8	NO	NO	bb	bb	0.112
7	12378-PeCDF	29.94	2.374e5	1.577e5	0.679	1.51	1.55	1294.3	YES	NO	bb	bb	49.089
8	Total-pentafurans	28.80	3.978e4	2.583e4	0.654	1.54	1.55	212.5	YES	NO	bb	bb	9.712
9	Total-hexafurans	37.33	5.073e2	4.522e2	1.141	1.12	1.24	4.2	YES	NO	db	dd	0.107
10	123789-HxCDF	36.94	2.103e5	1.706e5	1.137	1.23	1.24	959.2	YES	NO	bd	bd	50.468
11	234678-HxCDF	35.91	2.404e5	1.930e5	1.140	1.25	1.24	1172.2	YES	NO	bb	bb	49.000
12	123678-HxCDF	35.05	2.970e5	2.223e5	1.091	1.34	1.24	1312.5	YES	NO	db	db	50.520
13	123478-HxCDF	34.90	2.473e5	1.941e5	1.166	1.27	1.24	1248.4	YES	NO	bd	bd	48.979
14	123468-HXCDF	33.24	2.474e5	2.044e5	1.169	1.21	1.24	1187.3	YES	NO	bb	bd	50.000
15	1234789-HpCDF	41.02	1.361e5	1.443e5	0.953	0.94	1.05	689.1	YES	NO	bb	bd	49.244
16	Total-heptafurans	39.44	1.302e3	1.273e3	0.978	1.02	1.05	8.5	YES	NO	bb	bb	0.418
17	1234678-HpCDF	38.78	1.592e5	1.601e5	1.003	0.99	1.05	939.2	YES	NO	bb	bb	48.161
18	OCDF	45.25	2.019e5	2.478e5	0.778	0.81	0.89	1663.0	YES	NO	bb	bd	93.418
19	13468-PECDF	27.14	4.471e5	2.913e5	1.246	1.53	1.55	8952.4	YES	NO	bb	bb	50.000
20	1368-TCDD	23.56	5.333e4	6.596e4	1.015	0.81	0.77	556.5	YES	NO	bb	bb	10.000
21	1289-TCDD	27.03	4.649e4	6.027e4	0.909	0.77	0.77	452.4	YES	NO	bb	bb	10.000
22	2378-TCDD	26.42	5.877e4	7.446e4	1.149	0.79	0.77	539.5	YES	NO	bd	bb	9.873
23	Total-tetradioxins	26.10	8.105e4	1.035e5	1.024	0.78	0.77	553.1	YES	NO	bb	bb	15.333
24	Total-tetradioxins	25.62	2.642e4	3.299e4	1.024	0.80	0.77	267.0	YES	NO	bd	bb	4.937
25	Total-tetradioxins	25.04	5.856e2	7.161e2	1.024	0.82	0.77	7.0	YES	NO	bb	bb	0.108
26	12389-PECDD	31.94	2.202e5	1.409e5	1.184	1.56	1.55	1798.8	YES	NO	bd	bd	50.000
27	12378-PeCDD	31.54	1.890e5	1.221e5	1.022	1.55	1.55	1662.3	YES	NO	bb	bb	49.884
28	Total-pentadioxins	30.88	8.263e2	4.657e2	1.502	1.77	1.55	8.6	YES	NO	bb	bb	0.141
29	12479-PECDD	28.83	4.152e5	2.870e5	2.301	1.45	1.55	2354.1	YES	NO	bb	bd	50.000
30	123789-HxCDD	36.53	1.887e5	1.546e5	0.907	1.22	1.24	1606.4	YES	NO	bb	bb	51.083
31	123678-HxCDD	36.14	2.270e5	1.862e5	1.001	1.22	1.24	1803.3	YES	NO	db	db	51.480
32	123478-HxCDD	36.03	1.812e5	1.479e5	0.996	1.23	1.24	1717.5	YES	NO	bd	bd	48.605
33	124679-HXCDD	34.01	2.133e5	1.659e5	1.115	1.29	1.24	1762.3	YES	NO	bd	bb	50.000
34	1234678-HpCDD	40.27	1.573e5	1.681e5	1.039	0.94	1.05	874.4	YES	NO	bb	bd	49.956
35	1234679-HPCDD	39.23	1.868e5	1.696e5	1.137	1.10	1.05	1062.7	YES	NO	bd	bb	50.000
36	OCDD	45.01	2.508e5	2.930e5	0.920	0.86	0.89	2272.5	YES	NO	bb	bb	95.487

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	27.24	1.621e5					3.0	YES		bb		
2	FUNCTION1 PFK	26.04	7.004e3					0.8	NO		bb		
3	FUNCTION1 PFK	25.20	1.505e4					1.0	NO		bb		
4	FUNCTION1 PFK	24.33	1.235e4					0.8	NO		bb		
5	FUNCTION1 PFK	23.94	5.589e3					0.6	NO		bb		
6	FUNCTION1 PFK	23.61	5.711e3					0.6	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	32.40	1.216e5					2.2	NO		bb		0.000
2	FUNCTION2 PFK	29.43	1.324e7					19.8	YES		db		0.000
3	FUNCTION2 PFK	28.41	2.080e6					16.6	YES		bd		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	33.64	4.177e4					1.9	NO		bb		0.000
2	FUNCTION3 PFK	33.49	1.199e5					5.0	YES		db		0.000
3	FUNCTION3 PFK	33.44	2.654e6					7.0	YES		dd		0.000
4	FUNCTION3 PFK	33.06	2.958e6					23.7	YES		bd		0.000
5	FUNCTION3 PFK	35.38	2.169e4					1.0	NO		bb		0.000
6	FUNCTION3 PFK	35.25	5.928e3					0.6	NO		bb		0.000
7	FUNCTION3 PFK	35.11	7.037e3					0.7	NO		bb		0.000
8	FUNCTION3 PFK	34.99	1.627e4					1.0	NO		bb		0.000
9	FUNCTION3 PFK	34.92	1.103e4					1.1	NO		db		0.000
10	FUNCTION3 PFK	34.86	1.305e4					1.0	NO		bd		0.000
11	FUNCTION3 PFK	34.80	9.642e3					0.9	NO		bb		0.000
12	FUNCTION3 PFK	34.66	1.233e4					0.9	NO		db		0.000
13	FUNCTION3 PFK	34.64	7.688e3					0.8	NO		bd		0.000
14	FUNCTION3 PFK	34.57	9.132e3					0.8	NO		bb		0.000
15	FUNCTION3 PFK	34.47	7.208e3					0.8	NO		bb		0.000
16	FUNCTION3 PFK	34.31	1.503e4					1.0	NO		bb		0.000
17	FUNCTION3 PFK	34.22	2.675e4					1.4	NO		bb		0.000
18	FUNCTION3 PFK	34.01	3.007e4					2.1	NO		db		0.000
19	FUNCTION3 PFK	33.97	1.328e4					1.1	NO		bd		0.000
20	FUNCTION3 PFK	33.91	6.249e3					0.6	NO		bb		0.000
21	FUNCTION3 PFK	36.99	2.219e4					1.1	NO		bd		0.000
22	FUNCTION3 PFK	36.87	2.133e3					0.4	NO		bb		0.000
23	FUNCTION3 PFK	36.83	5.225e3					0.6	NO		bb		0.000
24	FUNCTION3 PFK	36.70	4.929e4					1.7	NO		bb		0.000
25	FUNCTION3 PFK	36.43	1.980e4					1.2	NO		bb		0.000
26	FUNCTION3 PFK	36.38	7.184e3					0.9	NO		bb		0.000
27	FUNCTION3 PFK	36.27	4.220e3					0.5	NO		bb		0.000
28	FUNCTION3 PFK	36.24	2.102e3					0.4	NO		bb		0.000
29	FUNCTION3 PFK	36.19	3.748e3					0.5	NO		bb		0.000
30	FUNCTION3 PFK	35.87	3.133e4					1.6	NO		db		0.000
31	FUNCTION3 PFK	35.83	1.912e4					1.5	NO		bd		0.000
32	FUNCTION3 PFK	35.78	2.675e3					0.4	NO		db		0.000
33	FUNCTION3 PFK	35.74	3.023e4					1.5	NO		dd		0.000
34	FUNCTION3 PFK	35.67	1.673e4					1.4	NO		bd		0.000
35	FUNCTION3 PFK	35.58	2.145e4					1.4	NO		db		0.000
36	FUNCTION3 PFK	35.53	1.268e4					1.1	NO		bd		0.000
37	FUNCTION3 PFK	37.67	2.243e4					1.6	NO		bb		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION3 PFK	37.45	8.583e3					0.7	NO		db		0.000
39	FUNCTION3 PFK	37.43	4.891e3					0.7	NO		bd		0.000
40	FUNCTION3 PFK	37.30	6.956e3					0.6	NO		bb		0.000
41	FUNCTION3 PFK	37.23	5.682e3					0.7	NO		db		0.000
42	FUNCTION3 PFK	37.20	9.815e3					0.9	NO		dd		0.000
43	FUNCTION3 PFK	37.15	5.475e3					0.6	NO		dd		0.000
44	FUNCTION3 PFK	37.11	7.631e3					0.8	NO		bd		0.000
45	FUNCTION3 PFK	37.06	2.709e4					1.4	NO		db		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.40	1.889e5					2.4	NO		bb		
2	FUNCTION4 PFK	39.68	1.587e7					5.4	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.63	9.422e3					1.5	NO		bb		
2	FUNCTION5 PFK	43.24	1.576e3					0.7	NO		bb		
3	FUNCTION5 PFK	43.00	1.263e4					1.7	NO		bb		
4	FUNCTION5 PFK	45.90	6.371e3					1.4	NO		bb		
5	FUNCTION5 PFK	45.34	1.310e3					0.6	NO		bb		
6	FUNCTION5 PFK	43.79	2.270e3					0.7	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.16	2.360e2					3.4	YES		bb		0.000
2	FUNCTION1 HXCD...	26.52	1.410e2					3.2	YES		db		0.000
3	FUNCTION1 HXCD...	26.41	1.480e2					3.3	YES		bd		0.000
4	FUNCTION1 HXCD...	26.16	8.707e1					1.9	NO		db		0.000
5	FUNCTION1 HXCD...	26.10	7.515e1					2.1	NO		bd		0.000
6	FUNCTION1 HXCD...	25.79	8.971e1					2.2	NO		bb		0.000
7	FUNCTION1 HXCD...	25.63	1.156e2					2.5	NO		bb		0.000
8	FUNCTION1 HXCD...	24.52	1.119e2					2.7	NO		db		0.000
9	FUNCTION1 HXCD...	24.43	1.844e2					3.5	YES		bd		0.000
10	FUNCTION1 HXCD...	23.75	1.728e2					2.1	NO		bb		0.000
11	FUNCTION1 HXCD...	21.31	8.251e1					1.7	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.95	1.010e2					1.7	NO		bb		0.000
2	FUNCTION2 HPCD...	31.18	4.333e2					5.6	YES		bb		0.000
3	FUNCTION2 HPCD...	30.70	7.244e1					2.1	NO		bb		0.000
4	FUNCTION2 HPCD...	30.31	7.131e1					1.6	NO		bb		0.000
5	FUNCTION2 HPCD...	29.76	7.422e1					1.6	NO		bb		0.000
6	FUNCTION2 HPCD...	29.04	7.307e1					1.9	NO		bb		0.000
7	FUNCTION2 HPCD...	28.55	7.813e1					2.1	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.51	1.400e2					5.4	YES		bb		0.000
2	FUNCTION3 OCDPE	35.04	1.909e2					5.6	YES		db		0.000
3	FUNCTION3 OCDPE	34.94	2.251e2					6.4	YES		bd		0.000

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ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.60	9.374e1					3.5	YES		bb		0.000
2	FUNCTION4 NCDPE	40.25	1.903e2					3.2	YES		bb		0.000
3	FUNCTION4 NCDPE	39.09	7.390e1					1.9	NO		bb		0.000
4	FUNCTION4 NCDPE	38.97	7.768e1					2.4	NO		bb		0.000
5	FUNCTION4 NCDPE	41.21	8.604e1					3.3	YES		bb		0.000
6	FUNCTION4 NCDPE	41.01	1.089e2					3.1	YES		bb		0.000
7	FUNCTION4 NCDPE	40.86	1.930e2					2.9	NO		db		0.000
8	FUNCTION4 NCDPE	40.74	9.692e1					2.6	NO		bd		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	44.90	9.291e1					2.4	NO		bb		0.000

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Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:34:37 Pacific Standard Time

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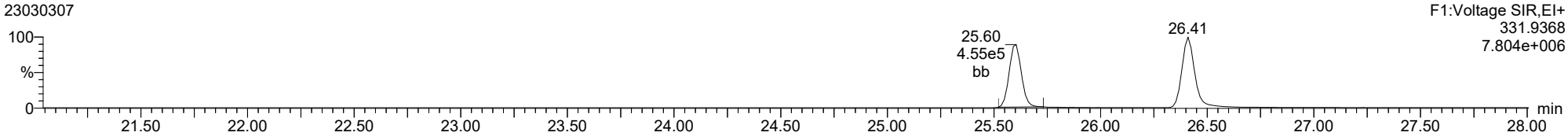
ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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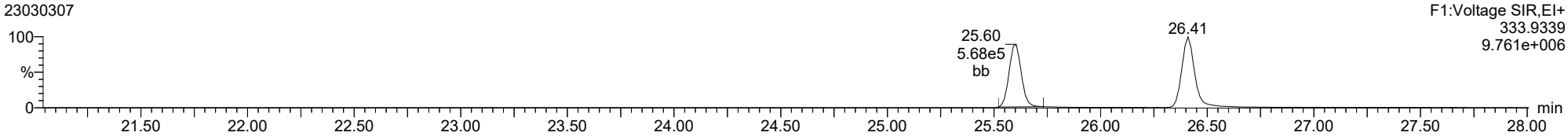

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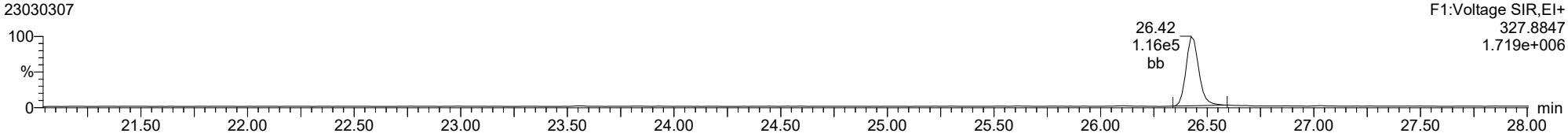

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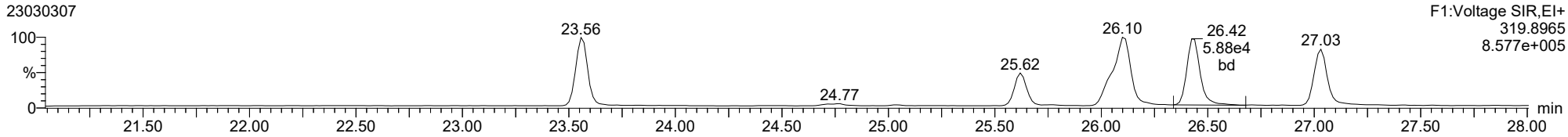
2378-TCDD



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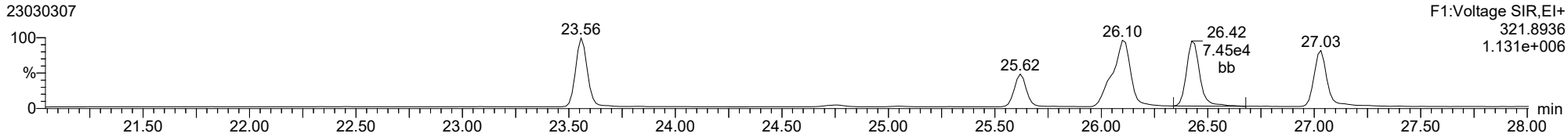
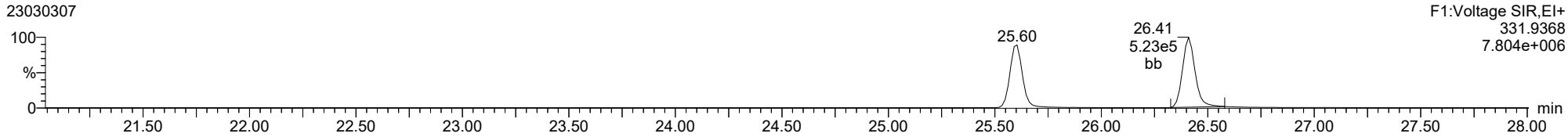
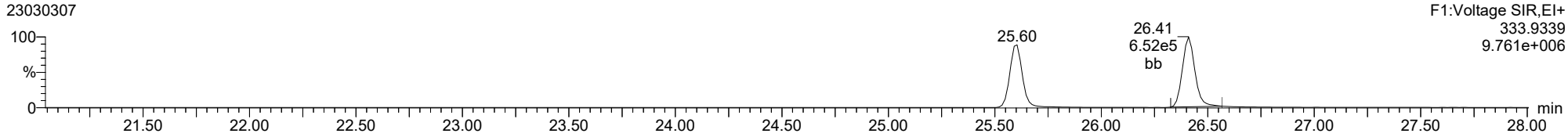


13C-2378-TCDD



13C-2378-TCDD



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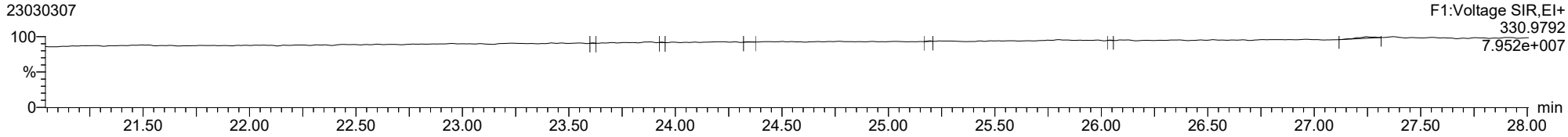

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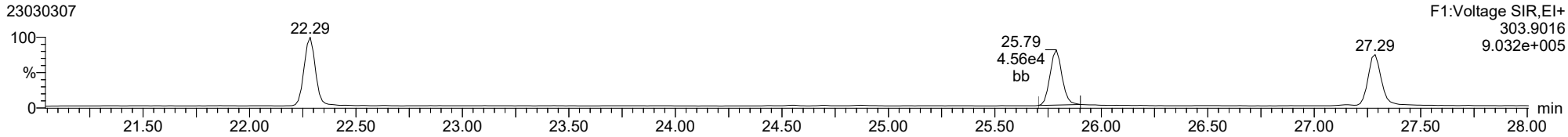
2378-TCDF



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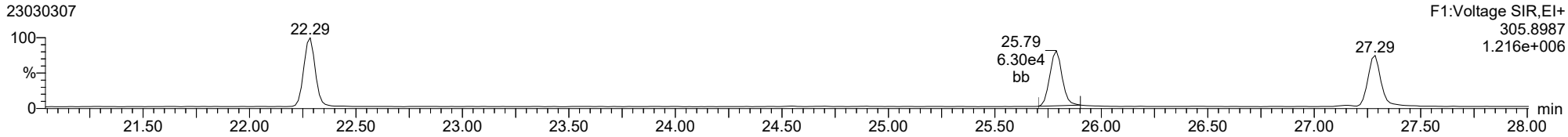

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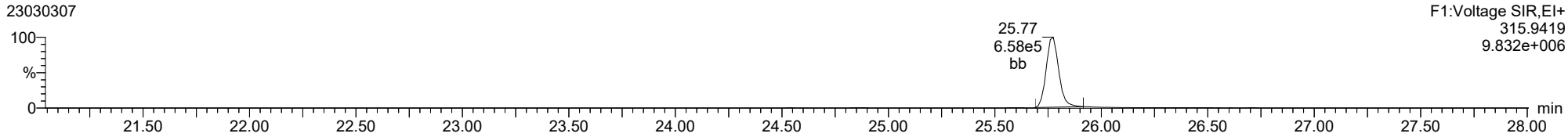

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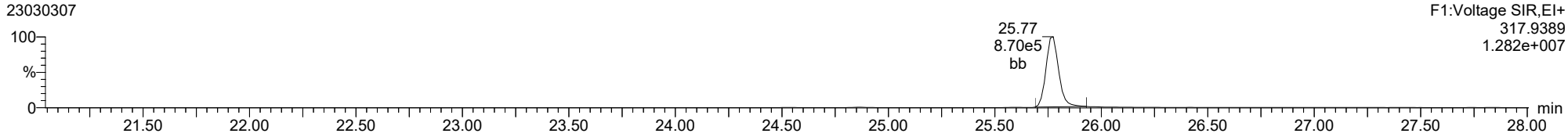

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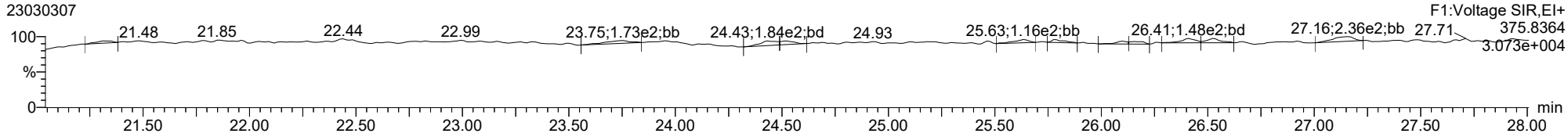

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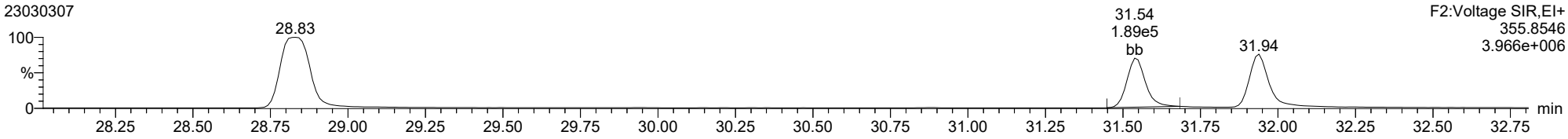
12378-PeCDD



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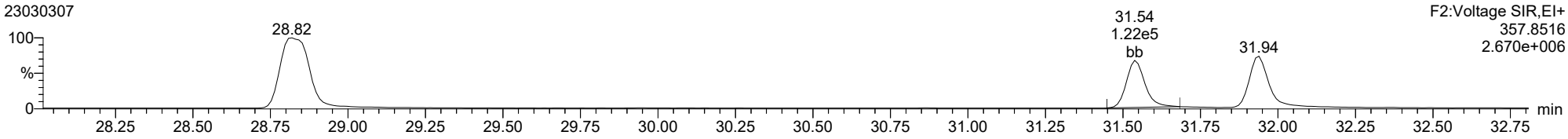

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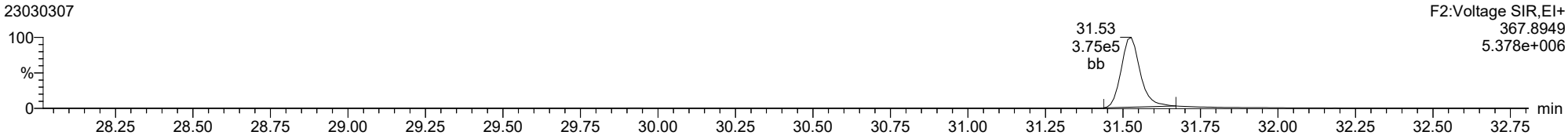

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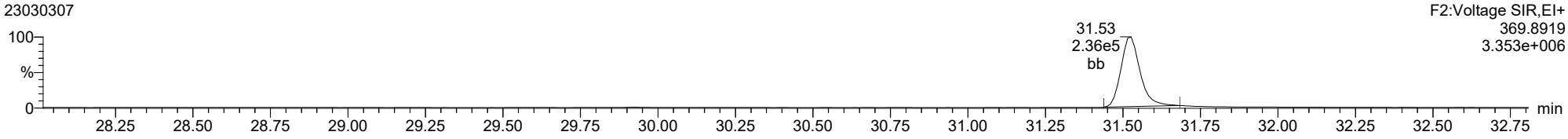

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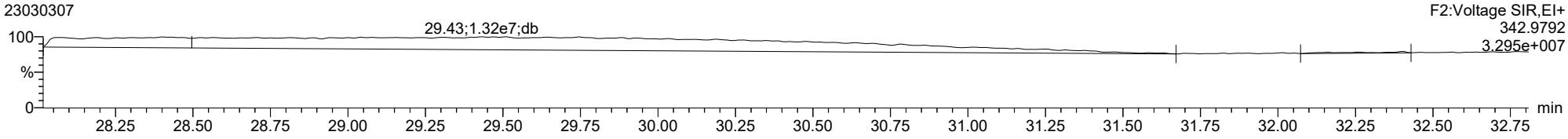

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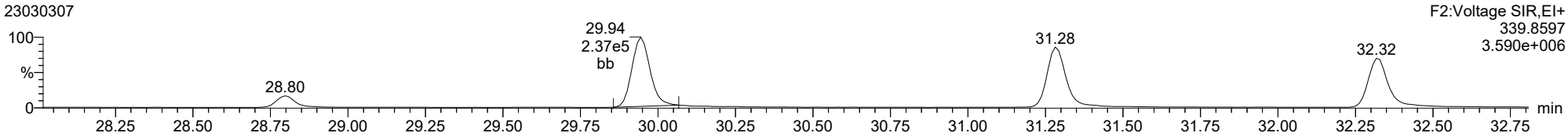
12378-PeCDF



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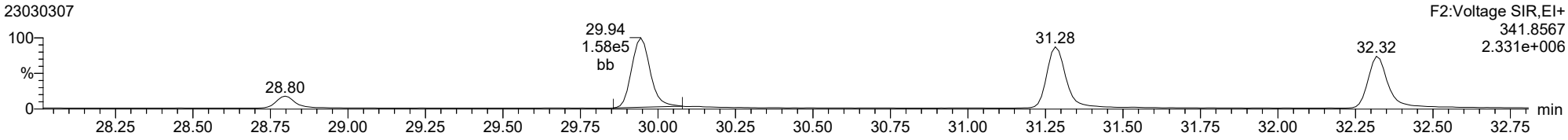

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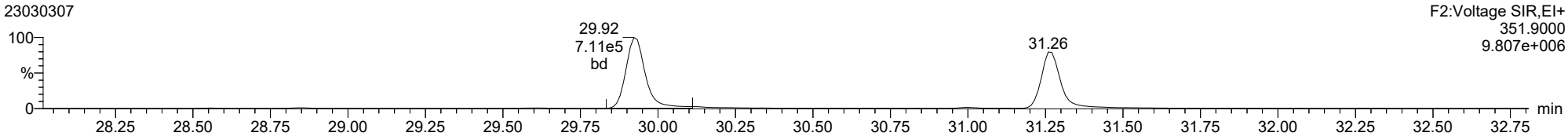

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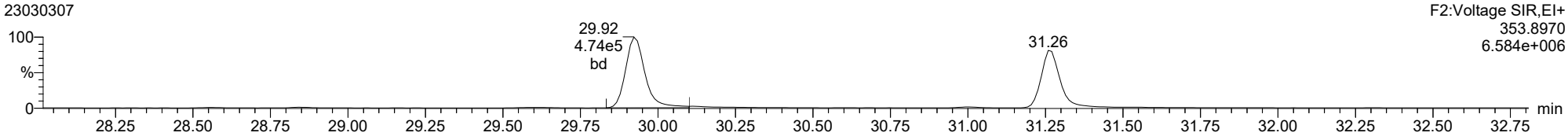
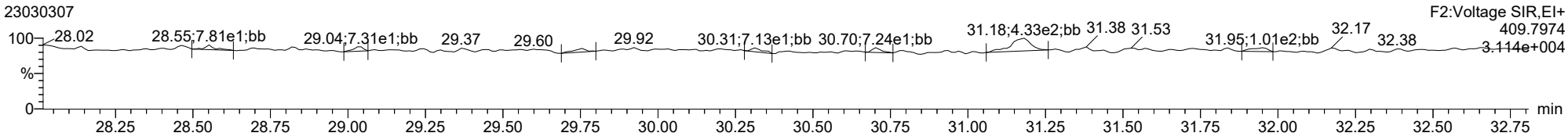


FUNCTION2 HPCDPE



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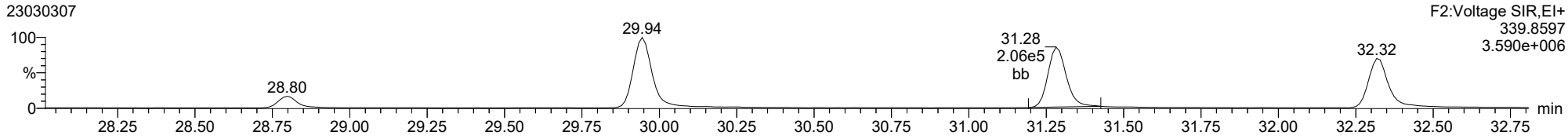
23478-PeCDF



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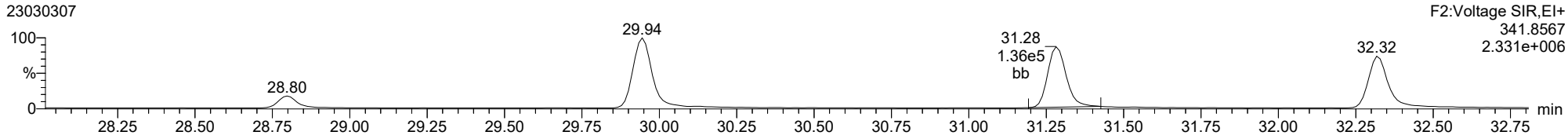

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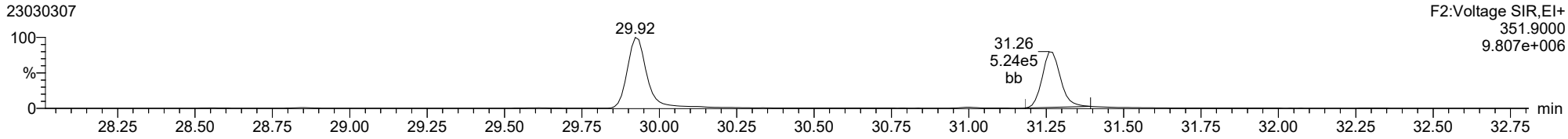

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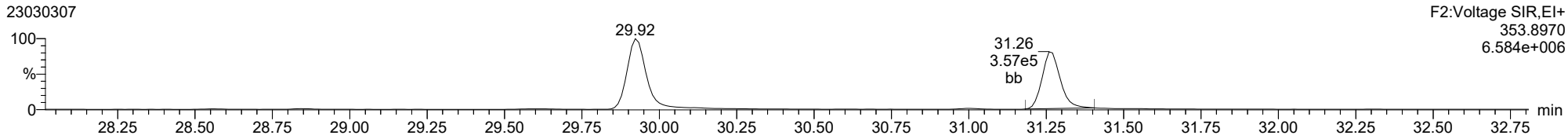

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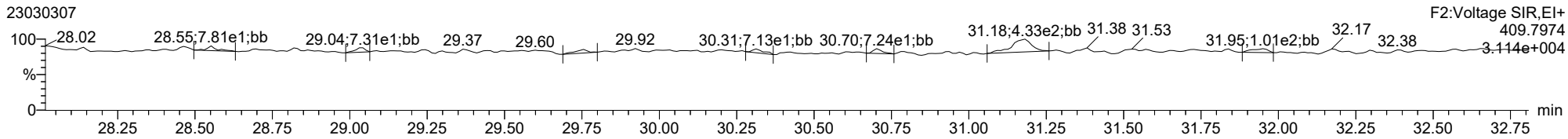

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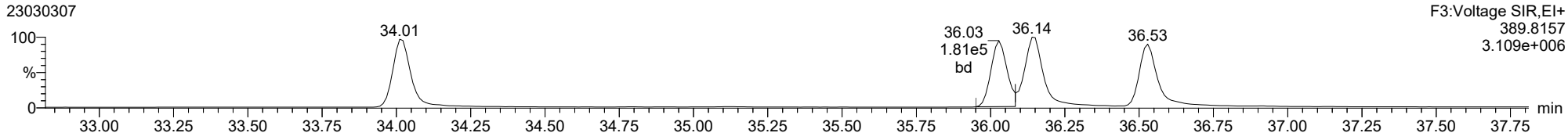

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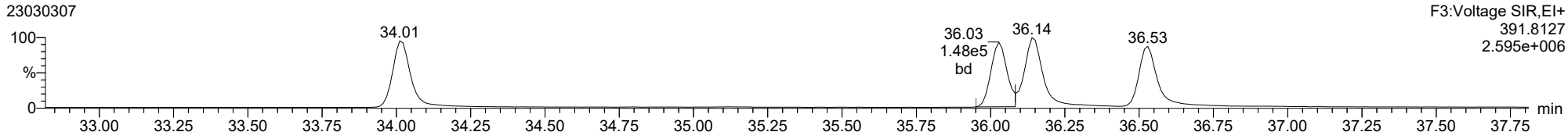

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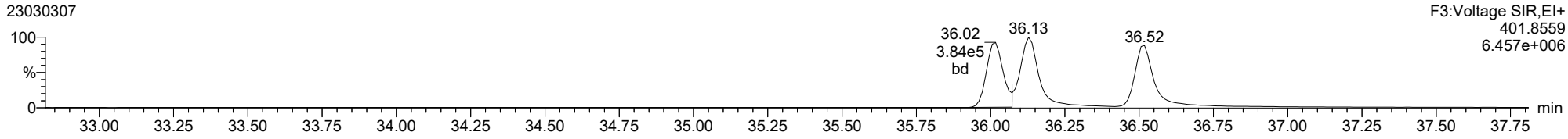

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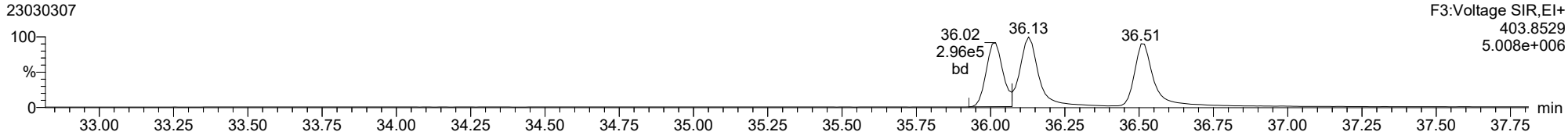

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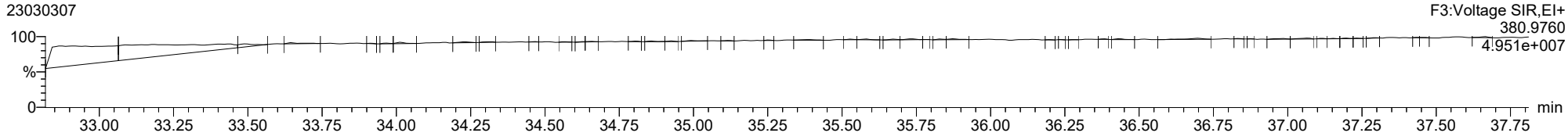

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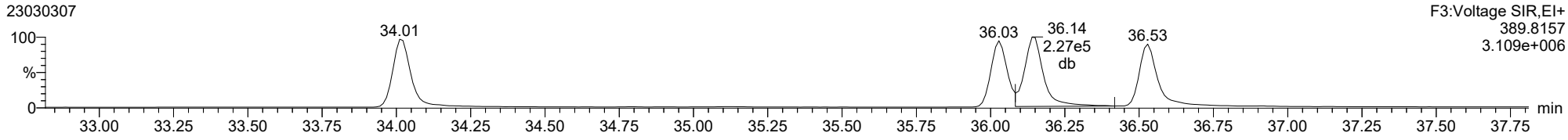

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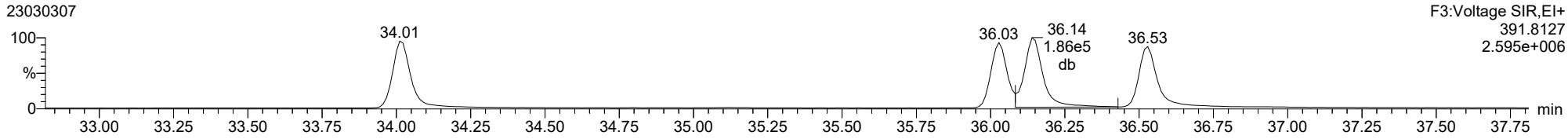

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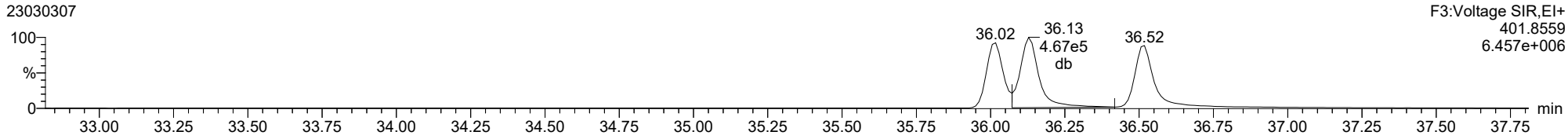

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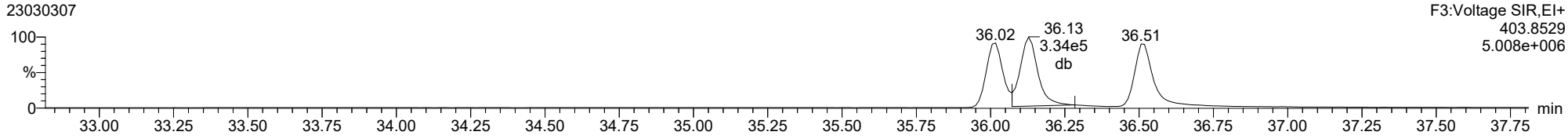

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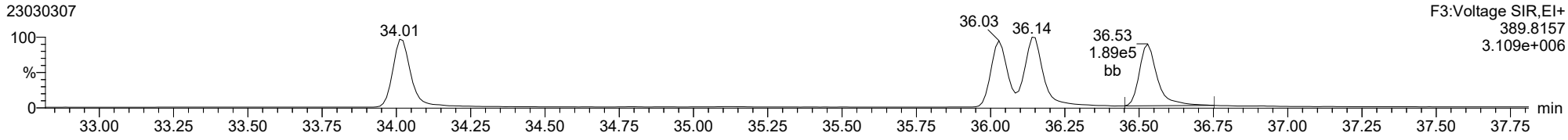

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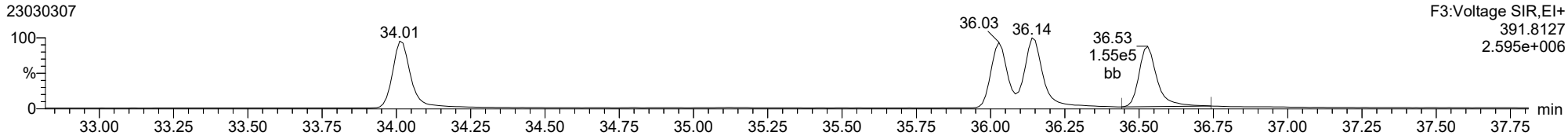

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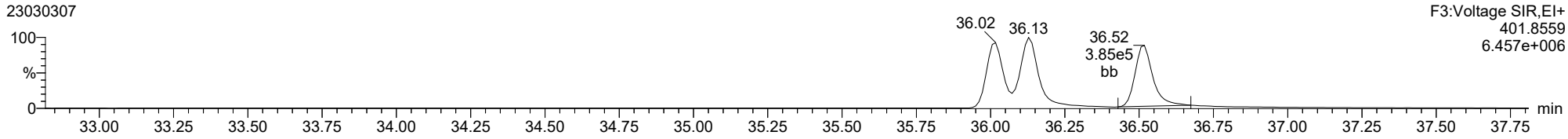

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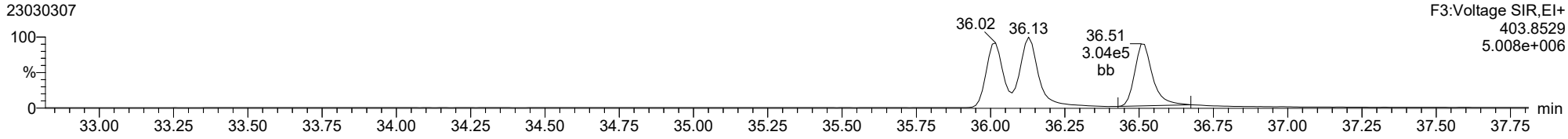

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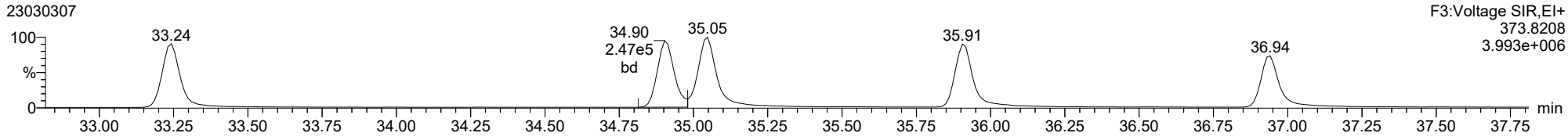

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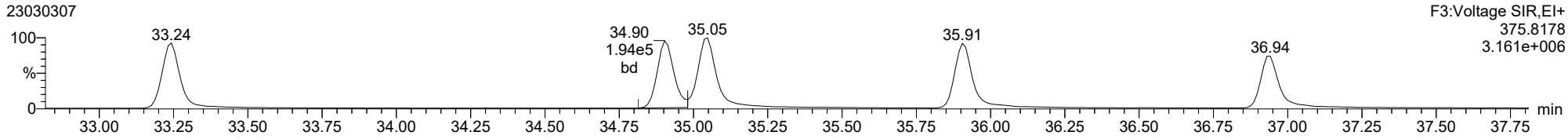

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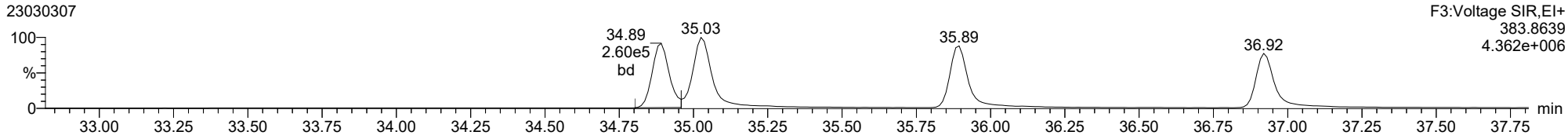

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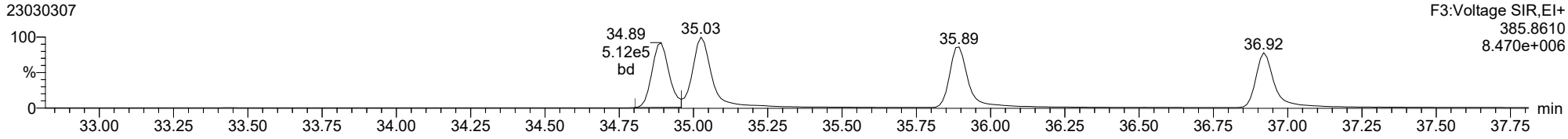
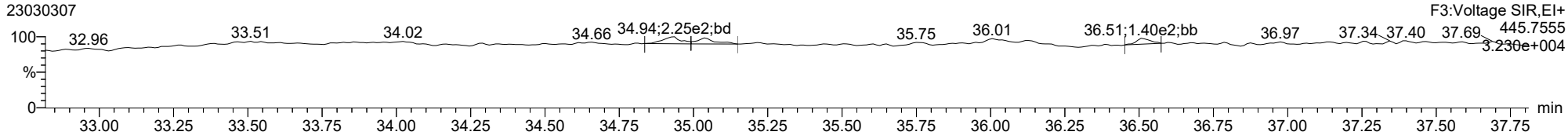


FUNCTION3 OCDPE



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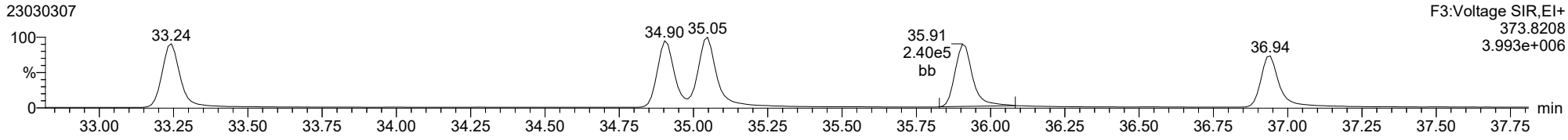
234678-HxCDF



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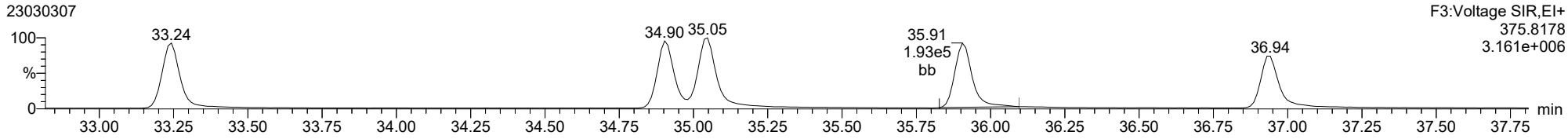

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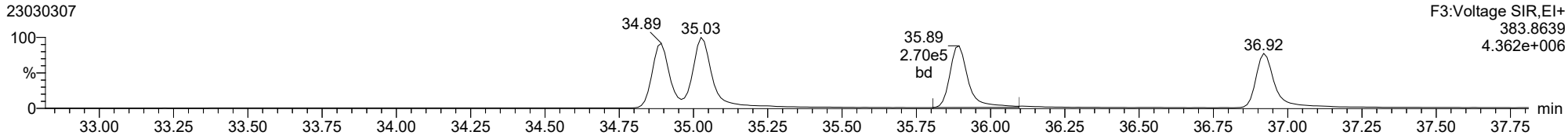

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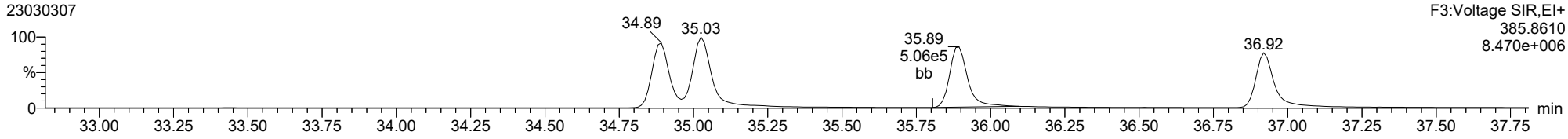
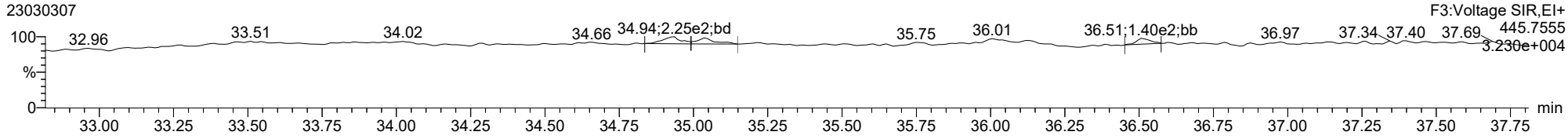


FUNCTION3 OCDPE



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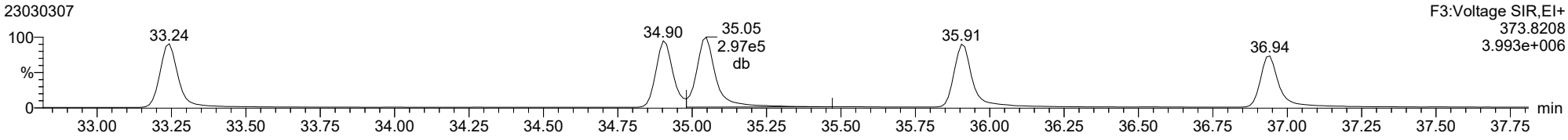

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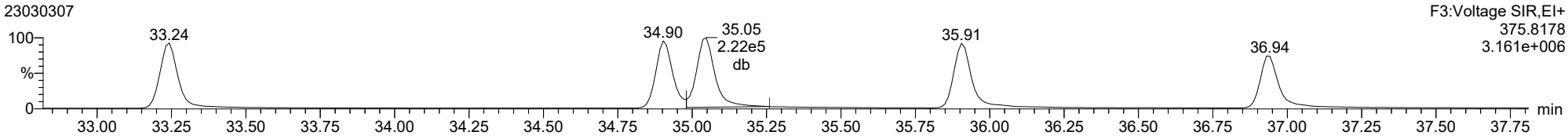

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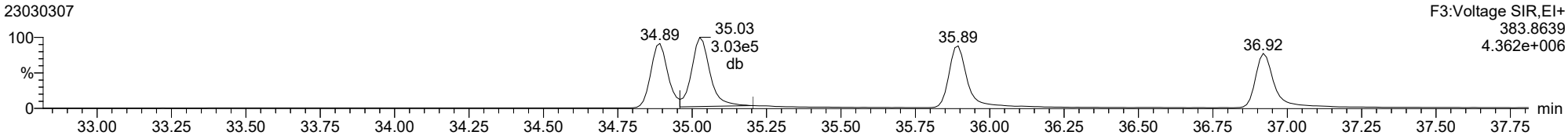

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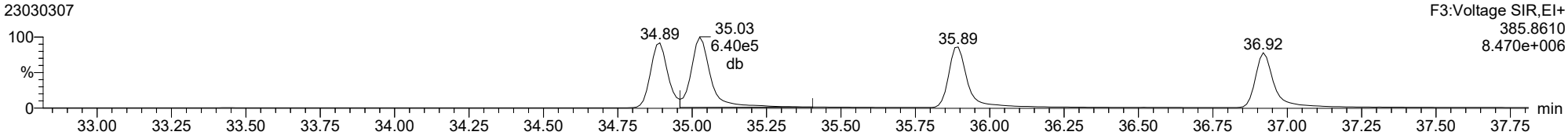

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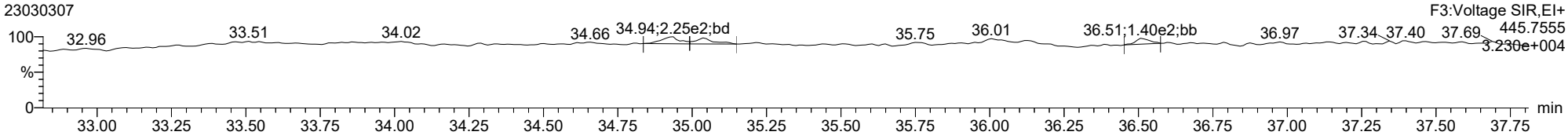

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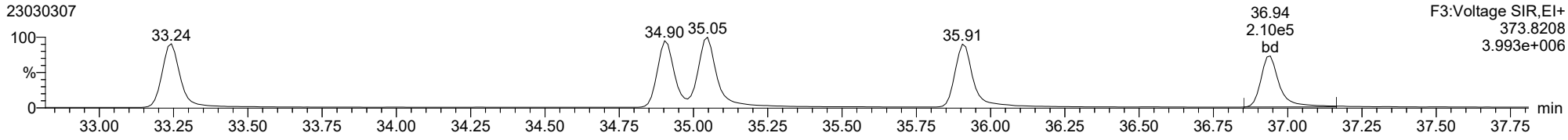

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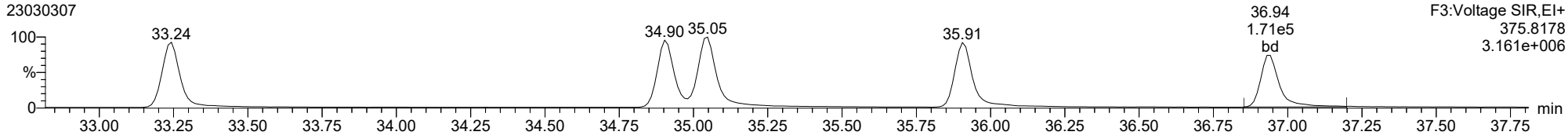

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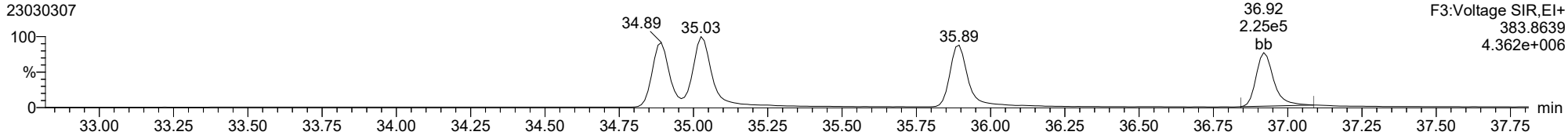

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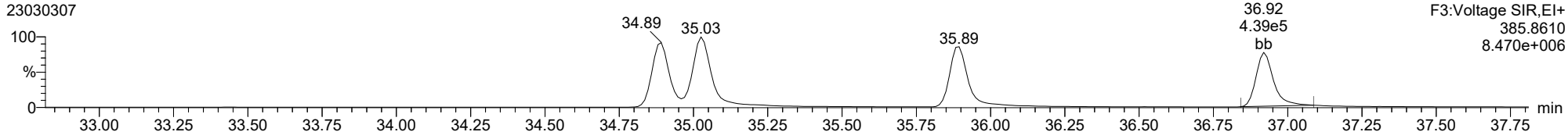

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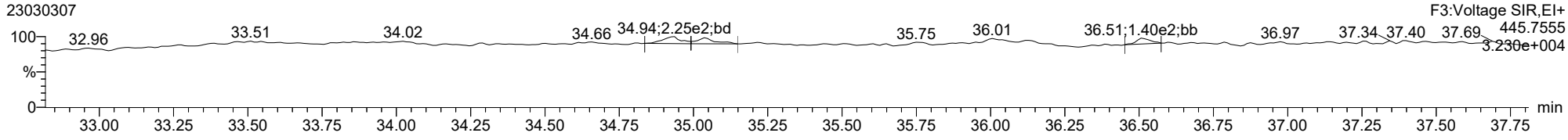

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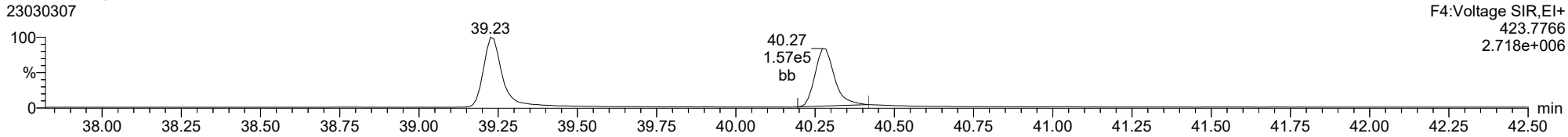

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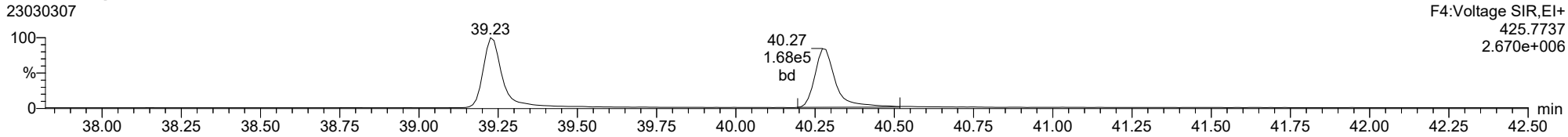

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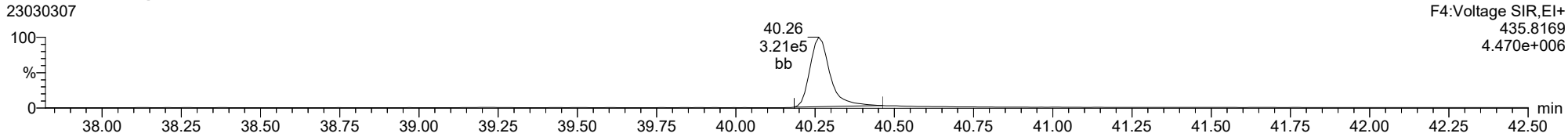

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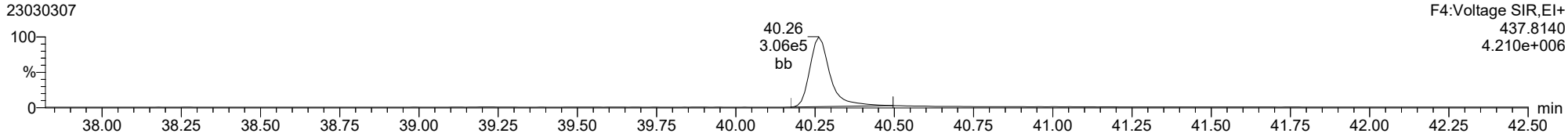

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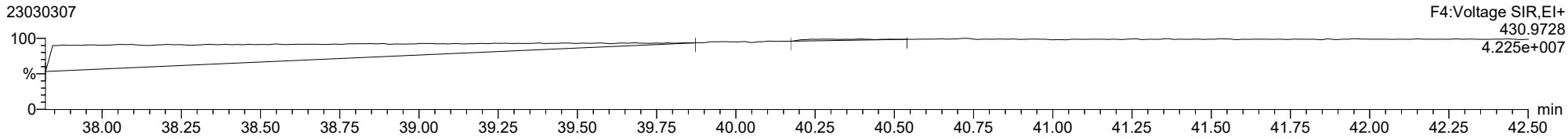

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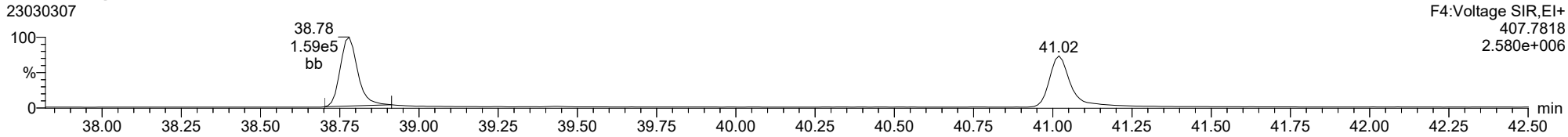

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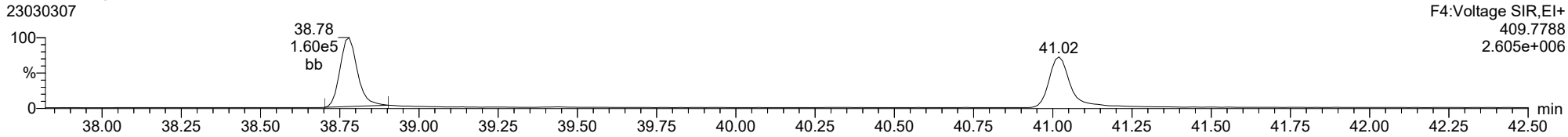

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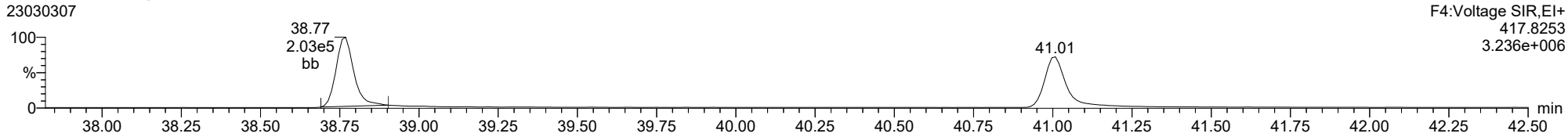

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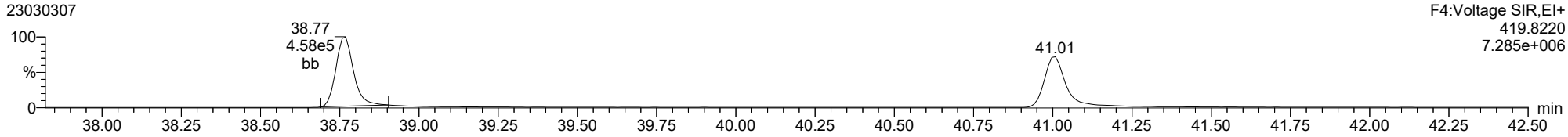

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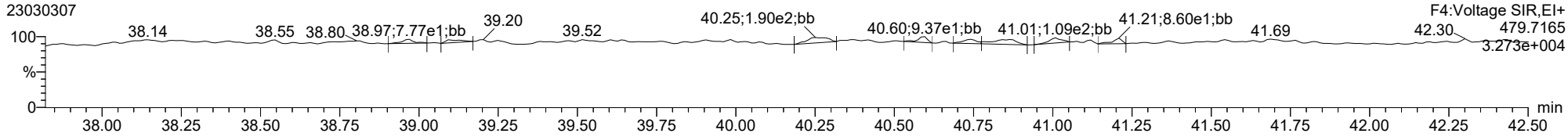

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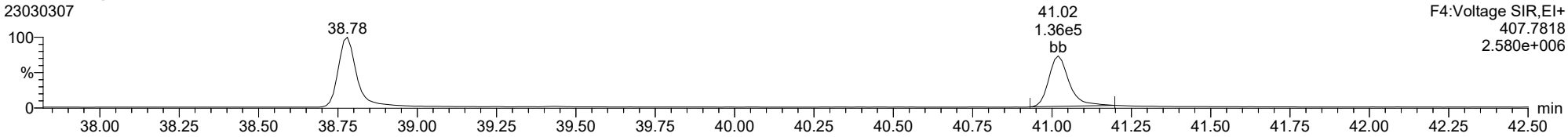

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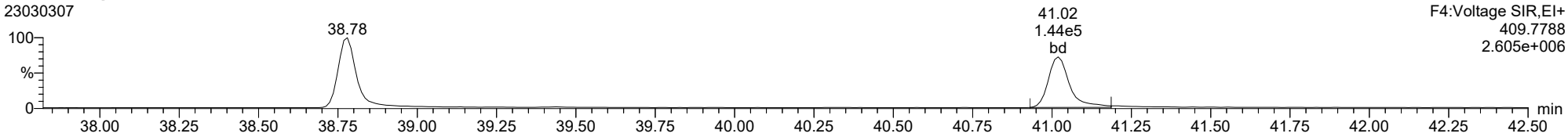

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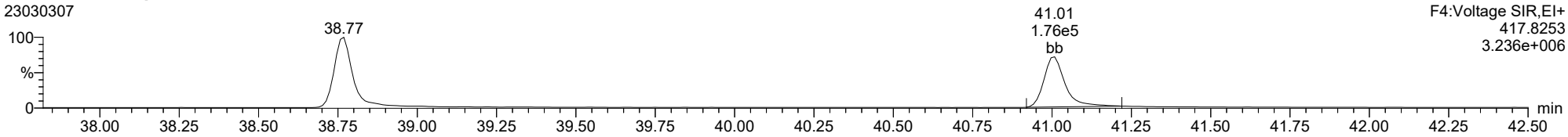

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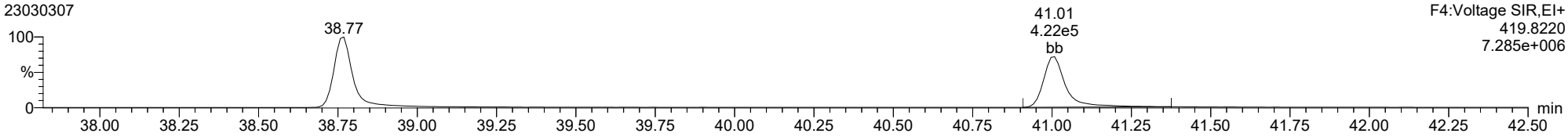

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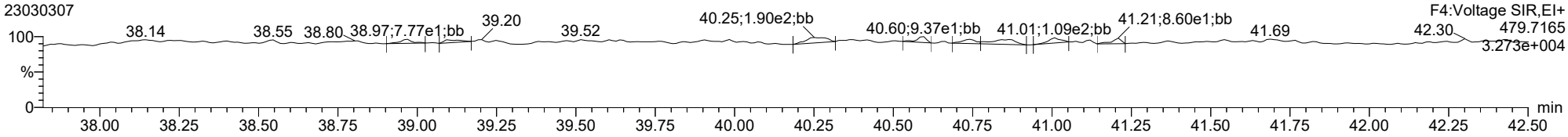

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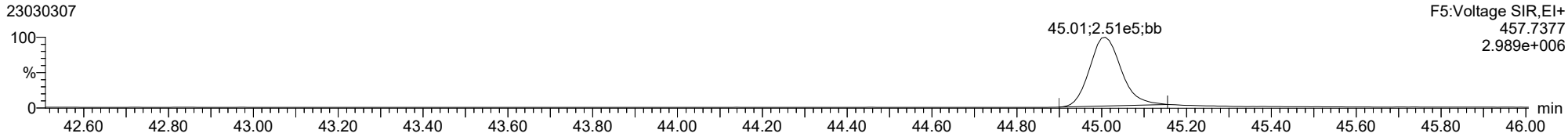

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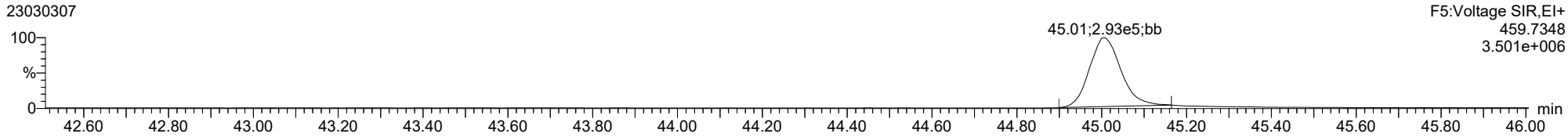

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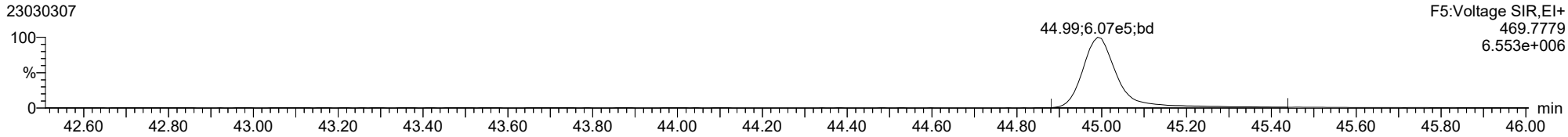

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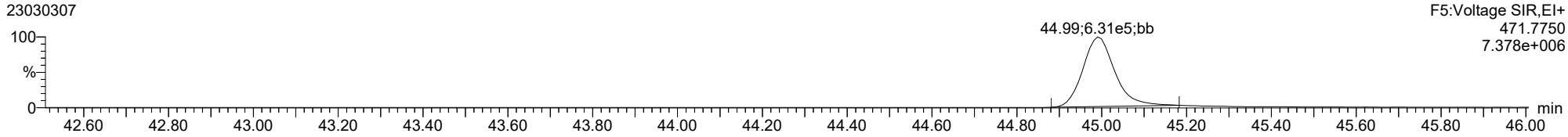

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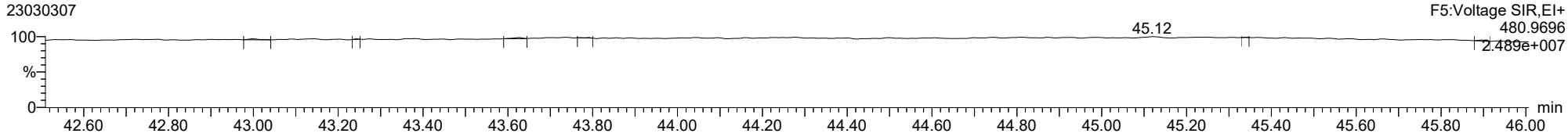

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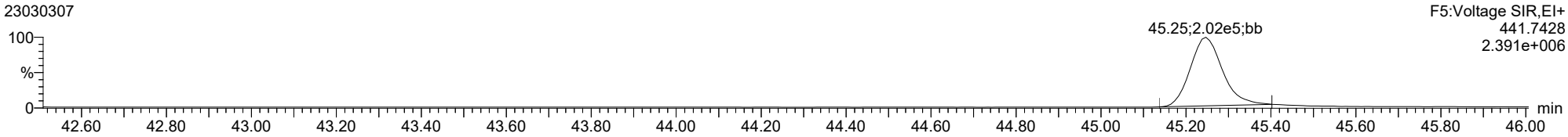

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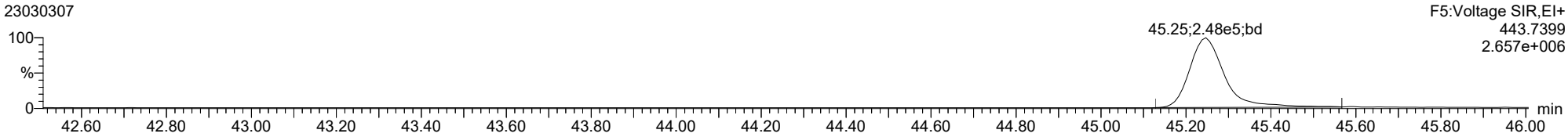

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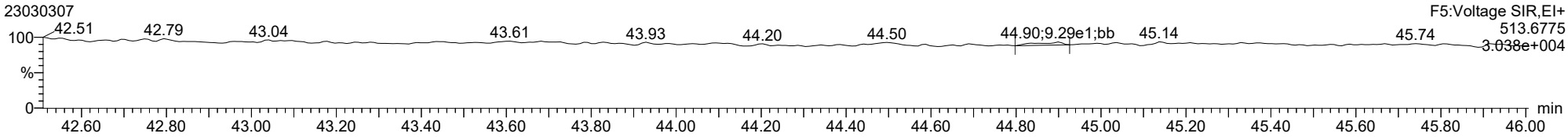

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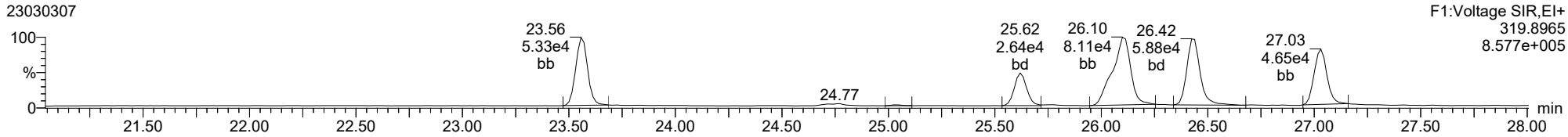
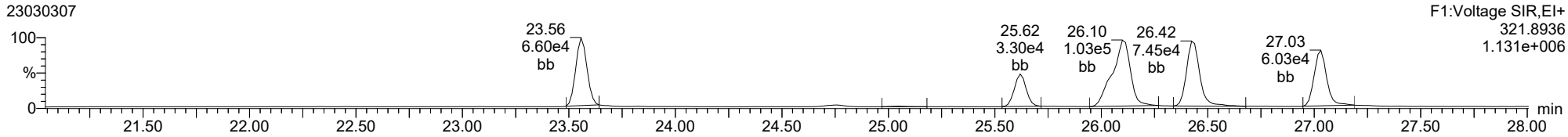
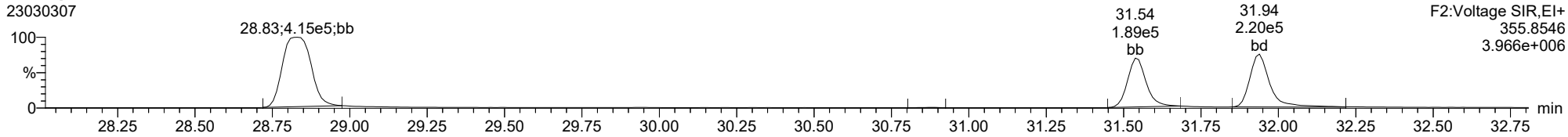
Total-tetradioxins



Total-tetradioxins



Total-pentadioxins



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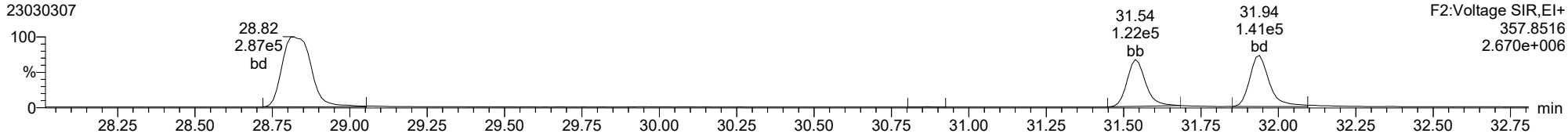

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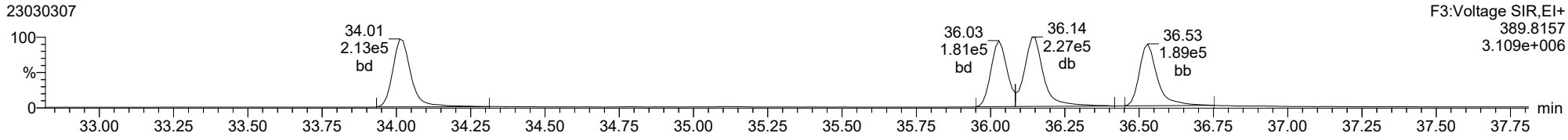

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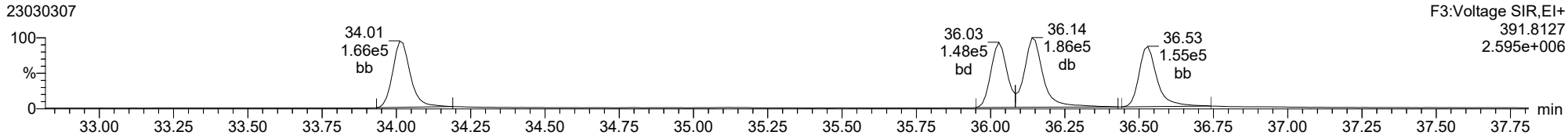

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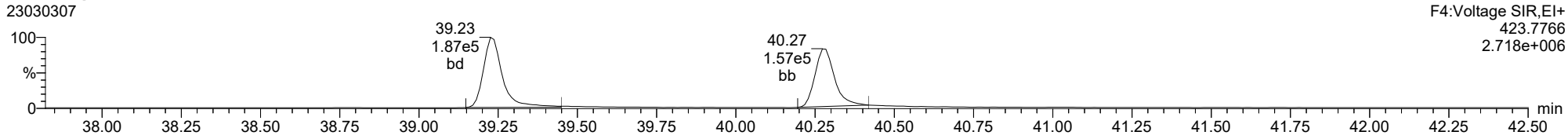

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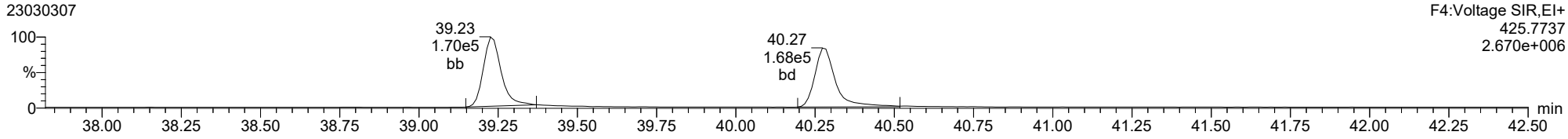

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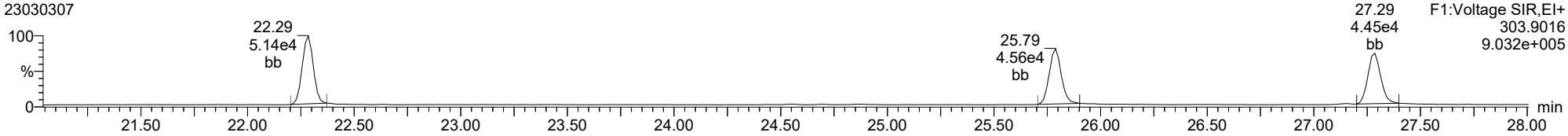
Total-tetrafurans



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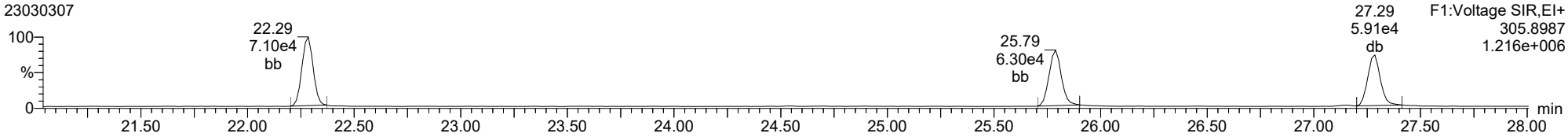

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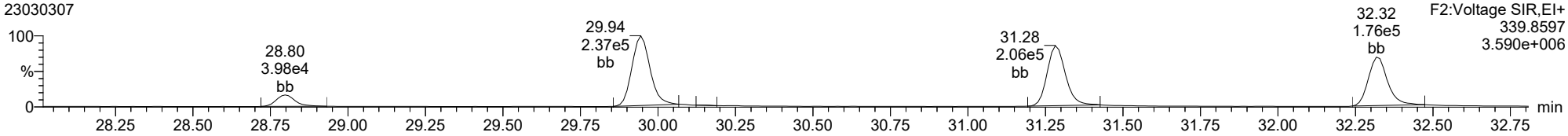

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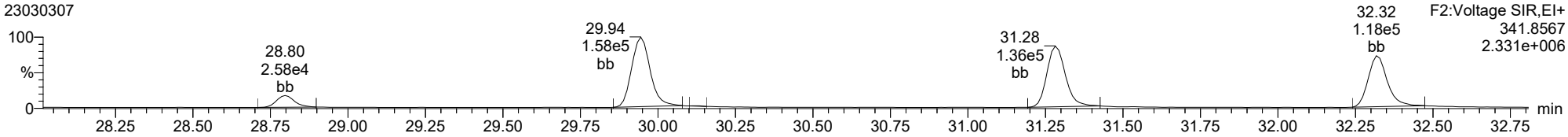

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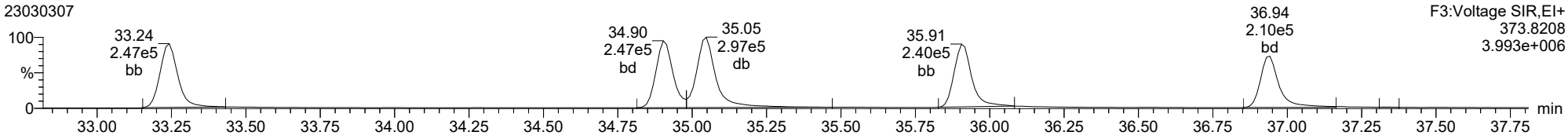

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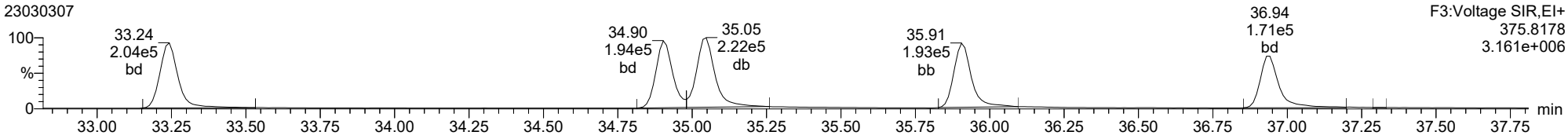

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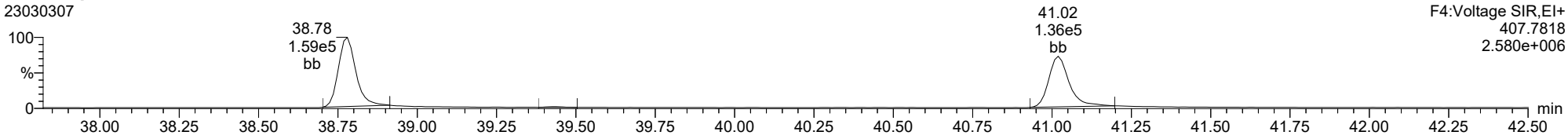

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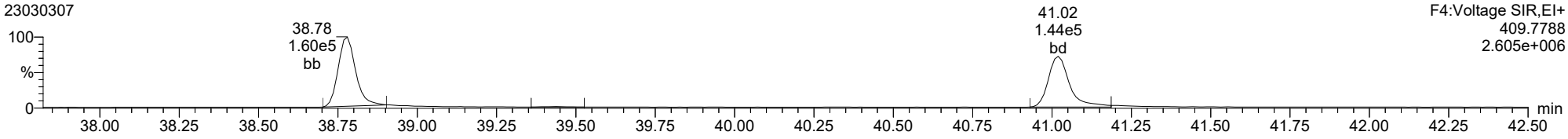

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Printed: Monday, March 06, 2023 11:34:51 Pacific Standard Time

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ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.788	1.001	2.145e5	2.910e5	0.702	0.737	0.770	1085	2356	3.19e6	4.36e6	2939.3	1849.8	NO	bb	bb	41.038
12378-PeCDF	29.944	1.000	1.256e6	8.416e5	0.679	1.492	1.550	4273	3650	1.86e7	1.25e7	4360.5	3425.9	NO	bb	bb	202.935
23478-PeCDF	31.292	1.001	1.346e6	8.943e5	0.786	1.505	1.550	4273	3650	2.02e7	1.34e7	4738.5	3680.0	NO	bb	bb	201.175
123478-HxCDF	34.913	1.001	1.546e6	1.218e6	1.166	1.269	1.240	1919	2508	2.36e7	1.86e7	12323.4	7421.9	NO	bd	bd	197.711
234678-HxCDF	35.916	1.001	1.547e6	1.307e6	1.140	1.184	1.240	1919	2508	2.33e7	1.85e7	12125.4	7387.3	NO	bb	bd	210.207
123678-HxCDF	35.047	1.000	1.740e6	1.369e6	1.091	1.271	1.240	1919	2508	2.57e7	2.04e7	13394.0	8153.6	NO	db	db	189.797
123789-HxCDF	36.941	1.000	1.209e6	1.036e6	1.137	1.167	1.240	1919	2508	1.81e7	1.44e7	9441.6	5749.5	NO	bb	bd	200.361
1234678-HpCDF	38.779	1.000	8.720e5	8.418e5	1.003	1.036	1.050	3326	3780	1.44e7	1.42e7	4339.3	3745.4	NO	bb	bb	204.650
1234789-HpCDF	41.019	1.000	7.221e5	7.262e5	0.953	0.994	1.050	3326	3780	1.01e7	1.02e7	3041.3	2689.4	NO	bb	bb	208.465
OCDF	45.255	1.006	1.195e6	1.333e6	0.778	0.897	0.890	1809	2070	1.43e7	1.59e7	7923.8	7701.9	NO	bb	bb	419.788
2378-TCDD	26.438	1.001	2.573e5	3.218e5	1.149	0.799	0.770	1559	1107	3.81e6	4.84e6	2446.0	4371.1	NO	bb	bb	39.968
12378-PeCDD	31.549	1.001	1.294e6	8.446e5	1.022	1.532	1.550	1566	1736	1.89e7	1.24e7	12077.0	7164.9	NO	bb	bb	199.637
123478-HxCDD	36.027	1.000	1.162e6	9.482e5	0.996	1.225	1.240	1816	1276	1.93e7	1.57e7	10622.2	12327.7	NO	bd	bd	198.133
123678-HxCDD	36.150	1.001	1.363e6	1.125e6	1.001	1.212	1.240	1816	1276	1.97e7	1.61e7	10823.8	12618.8	NO	db	db	204.224
123789-HxCDD	36.528	1.011	1.168e6	9.477e5	0.907	1.232	1.240	1816	1276	1.77e7	1.44e7	9764.9	11291.0	NO	bb	bb	203.974
1234678-HpCDD	40.283	1.001	8.284e5	8.038e5	1.039	1.031	1.050	3177	2938	1.22e7	1.19e7	3841.2	4046.8	NO	bb	bb	198.376
OCDD	45.008	1.000	1.293e6	1.512e6	0.920	0.855	0.890	1475	2373	1.59e7	1.85e7	10744.0	7810.6	NO	bb	bb	394.016
13C-2378-TCDF	25.774	1.007	7.645e5	9.914e5	1.620	0.771	0.770	1843	2282	1.15e7	1.49e7	6238.3	6526.6	NO	bb	bb	101.535
13C-12378-PeCDF	29.933	1.169	9.119e5	6.098e5	1.240	1.495	1.550	3738	4574	1.28e7	8.50e6	3418.3	1857.5	NO	bd	bd	114.934
13C-23478-PeCDF	31.270	1.221	8.522e5	5.645e5	1.118	1.510	1.550	3738	4574	1.28e7	8.47e6	3423.2	1851.3	NO	bb	bb	118.746
13C-123478-HxCDF	34.891	0.956	4.043e5	7.946e5	1.168	0.509	0.510	3379	2646	6.26e6	1.23e7	1851.5	4643.3	NO	bd	bd	93.689
13C-123678-HxCDF	35.036	0.959	5.122e5	9.895e5	1.386	0.518	0.510	3379	2646	6.72e6	1.32e7	1988.7	4975.1	NO	db	dd	98.879
13C-234678-HxCDF	35.894	0.983	4.066e5	7.845e5	1.129	0.518	0.510	3379	2646	6.03e6	1.18e7	1785.1	4452.3	NO	bb	bb	96.294
13C-123789-HxCDF	36.930	1.011	3.312e5	6.542e5	0.932	0.506	0.510	3379	2646	4.85e6	9.52e6	1434.9	3598.2	NO	bb	bb	96.556
13C-1234678-HpCDF	38.768	1.062	2.524e5	5.825e5	0.895	0.433	0.440	1935	3511	4.16e6	9.49e6	2148.5	2703.4	NO	bb	bb	85.151
13C-1234789-HpCDF	41.007	1.123	2.205e5	5.084e5	0.770	0.434	0.440	1935	3511	3.02e6	6.92e6	1559.8	1971.4	NO	bb	bb	86.451
13C-1234-TCDD	25.605	0.000	4.743e5	5.931e5	1.000	0.800	0.770	2271	1813	7.33e6	9.12e6	3228.4	5028.5	NO	bb	bb	100.000
13C-2378-TCDD	26.410	1.031	5.640e5	6.974e5	1.152	0.809	0.770	2271	1813	8.09e6	1.01e7	3563.4	5571.0	NO	bb	bb	102.553
13C-12378-PeCDD	31.526	1.231	6.480e5	4.003e5	0.829	1.619	1.550	1212	1529	9.47e6	5.85e6	7814.9	3827.1	NO	bb	bb	118.505
13C-123478-HxCDD	36.016	0.986	6.052e5	4.646e5	0.995	1.303	1.240	1807	1475	9.78e6	7.54e6	5412.5	5108.2	NO	bd	bd	98.154
13C-123678-HxCDD	36.127	0.989	6.753e5	5.418e5	1.157	1.246	1.240	1807	1475	1.01e7	8.01e6	5594.1	5426.8	NO	db	db	96.059
13C-1234678-HpCDD	40.261	1.102	3.968e5	3.950e5	0.840	1.005	1.050	2357	2248	5.68e6	5.37e6	2408.3	2387.8	NO	bb	bb	86.051
13C-OCDD	44.999	1.232	7.332e5	8.149e5	0.767	0.900	0.890	1459	1173	8.67e6	9.61e6	5943.8	8191.6	NO	bb	bb	184.151
13C-123789-HxCDD	36.518	0.000	6.173e5	4.781e5	1.000	1.291	1.240	1807	1475	9.34e6	7.24e6	5171.1	4908.4	NO	bb	bb	100.000
37CL-2378-TCDD	26.438	1.033	5.280e5		1.288			2576		7.74e6		3003.1			bb		38.410

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:34:51 Pacific Standard Time

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	1085	2356								
1289-TCDF					0.678		0.770	1085	2356								
13468-PECDF					1.246		1.550	728	1112								
12389-PECDF					0.496		1.550	4273	3650								
123468-HXCDF					1.169		1.240	1919	2508								
1368-TCDD					1.015		0.770	1559	1107								
1289-TCDD					0.909		0.770	1559	1107								
12479-PECDD					2.301		1.550	1566	1736								
12389-PECDD					1.184		1.550	1566	1736								
124679-HXCDD					1.115		1.240	1816	1276								
1234679-HPCDD					1.137		1.050	3177	2938								
Total-tetrafurans			2.178e5		0.727			1085		3.24e6							41.692
Total-penta1			0.000e0					728		0.00e0							
Total-pentafurans			2.604e6		0.654			4273		3.89e7							404.382
Total-hexafurans			6.043e6		1.141			1919		9.07e7							798.266
Total-heptafurans			1.594e6		0.978			3326		2.45e7							413.115
Total-Furans			1.165e7		0.922			1085		1.72e8							2077.243
Total-tetradioxins			2.634e5		1.024			1559		3.88e6							41.026
Total-pentadioxins			1.295e6		1.502			1566		1.89e7							199.743
Total-hexadioxins			3.693e6		1.005			1816		5.67e7							606.331
Total-heptadioxins			8.286e5		1.088			3177		1.22e7							198.425
Total-Dioxins			7.373e6		1.130			1559		1.08e8							1439.540
Total-TEQ			1.903e7					1559		2.79e8							3516.783
FUNCTION1 PFK			2.654e6					566854		2.19e6							
FUNCTION2 PFK			2.398e5					242860		6.75e6							0.000
FUNCTION3 PFK			5.441e7					394639		2.11e7							0.000
FUNCTION4 PFK			0.000e0					306708		0.00e0							
FUNCTION5 PFK			3.395e4					230570		1.65e6							
FUNCTION1 HXCD...			4.934e2					625		6.74e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			1.574e3					915		2.35e4							0.000
FUNCTION3 OCDPE			8.696e2					844		1.47e4							0.000
FUNCTION4 NCDPE			3.767e2					925		5.85e3							0.000
FUNCTION5 DCDPE			0.000e0					629		0.00e0							

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.79	2.145e5	2.910e5	0.702	0.74	0.77	2939.3	YES	NO	bb	bb	41.038
2	Total-tetrafurans	24.88	1.531e3	2.327e3	0.727	0.66	0.77	20.3	YES	NO	bb	bb	0.302
3	Total-tetrafurans	24.56	1.778e3	2.714e3	0.727	0.66	0.77	29.5	YES	NO	bb	bb	0.352

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	31.01	1.644e3	9.764e2	0.654	1.68	1.55	5.6	YES	NO	db	bd	0.273
2	12378-PeCDF	29.94	1.256e6	8.416e5	0.679	1.49	1.55	4360.5	YES	NO	bb	bb	202.935
3	23478-PeCDF	31.29	1.346e6	8.943e5	0.786	1.51	1.55	4738.5	YES	NO	bb	bb	201.175

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.94	1.209e6	1.036e6	1.137	1.17	1.24	9441.6	YES	NO	bb	bd	200.361
2	234678-HxCDF	35.92	1.547e6	1.307e6	1.140	1.18	1.24	12125.4	YES	NO	bb	bd	210.207
3	Total-hexafurans	35.77	1.562e2	1.389e2	1.141	1.12	1.24	3.4	NO	NO	bb	bb	0.021
4	123678-HxCDF	35.05	1.740e6	1.369e6	1.091	1.27	1.24	13394.0	YES	NO	db	db	189.797
5	123478-HxCDF	34.91	1.546e6	1.218e6	1.166	1.27	1.24	12323.4	YES	NO	bd	bd	197.711
6	Total-hexafurans	34.76	1.255e3	1.100e3	1.141	1.14	1.24	11.9	YES	NO	bb	bb	0.169

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.78	8.720e5	8.418e5	1.003	1.04	1.05	4339.3	YES	NO	bb	bb	204.650
2	1234789-HpCDF	41.02	7.221e5	7.262e5	0.953	0.99	1.05	3041.3	YES	NO	bb	bb	208.465

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.79	2.145e5	2.910e5	0.702	0.74	0.77	2939.3	YES	NO	bb	bb	41.038
2	Total-tetrafurans	24.88	1.531e3	2.327e3	0.727	0.66	0.77	20.3	YES	NO	bb	bb	0.302
3	Total-tetrafurans	24.56	1.778e3	2.714e3	0.727	0.66	0.77	29.5	YES	NO	bb	bb	0.352
4	Total-pentafurans	31.01	1.644e3	9.764e2	0.654	1.68	1.55	5.6	YES	NO	db	bd	0.273
5	12378-PeCDF	29.94	1.256e6	8.416e5	0.679	1.49	1.55	4360.5	YES	NO	bb	bb	202.935
6	23478-PeCDF	31.29	1.346e6	8.943e5	0.786	1.51	1.55	4738.5	YES	NO	bb	bb	201.175
7	123789-HxCDF	36.94	1.209e6	1.036e6	1.137	1.17	1.24	9441.6	YES	NO	bb	bd	200.361
8	234678-HxCDF	35.92	1.547e6	1.307e6	1.140	1.18	1.24	12125.4	YES	NO	bb	bd	210.207
9	Total-hexafurans	35.77	1.562e2	1.389e2	1.141	1.12	1.24	3.4	NO	NO	bb	bb	0.021
10	123678-HxCDF	35.05	1.740e6	1.369e6	1.091	1.27	1.24	13394.0	YES	NO	db	db	189.797
11	123478-HxCDF	34.91	1.546e6	1.218e6	1.166	1.27	1.24	12323.4	YES	NO	bd	bd	197.711
12	Total-hexafurans	34.76	1.255e3	1.100e3	1.141	1.14	1.24	11.9	YES	NO	bb	bb	0.169
13	1234678-HpCDF	38.78	8.720e5	8.418e5	1.003	1.04	1.05	4339.3	YES	NO	bb	bb	204.650
14	1234789-HpCDF	41.02	7.221e5	7.262e5	0.953	0.99	1.05	3041.3	YES	NO	bb	bb	208.465
15	OCDF	45.26	1.195e6	1.333e6	0.778	0.90	0.89	7923.8	YES	NO	bb	bb	419.788

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.44	2.573e5	3.218e5	1.149	0.80	0.77	2446.0	YES	NO	bb	bb	39.968
2	Total-tetradioxins	26.06	6.115e3	7.563e3	1.024	0.81	0.77	45.2	YES	NO	bb	bb	1.059

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.55	1.294e6	8.446e5	1.022	1.53	1.55	12077.0	YES	NO	bb	bb	199.637
2	Total-pentadioxins	29.94	9.896e2	6.778e2	1.502	1.46	1.55	7.8	YES	NO	bb	bb	0.106

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.53	1.168e6	9.477e5	0.907	1.23	1.24	9764.9	YES	NO	bb	bb	203.974
2	123678-HxCDD	36.15	1.363e6	1.125e6	1.001	1.21	1.24	10823.8	YES	NO	db	db	204.224
3	123478-HxCDD	36.03	1.162e6	9.482e5	0.996	1.23	1.24	10622.2	YES	NO	bd	bd	198.133

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HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptadioxins	40.57	2.148e2	2.026e2	1.088	1.06	1.05	2.3	NO	NO	bb	bb	0.048
2	1234678-HpCDD	40.28	8.284e5	8.038e5	1.039	1.03	1.05	3841.2	YES	NO	bb	bb	198.376

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.44	2.573e5	3.218e5	1.149	0.80	0.77	2446.0	YES	NO	bb	bb	39.968
2	Total-tetradioxins	26.06	6.115e3	7.563e3	1.024	0.81	0.77	45.2	YES	NO	bb	bb	1.059
3	12378-PeCDD	31.55	1.294e6	8.446e5	1.022	1.53	1.55	12077.0	YES	NO	bb	bb	199.637
4	Total-pentadioxins	29.94	9.896e2	6.778e2	1.502	1.46	1.55	7.8	YES	NO	bb	bb	0.106
5	123789-HxCDD	36.53	1.168e6	9.477e5	0.907	1.23	1.24	9764.9	YES	NO	bb	bb	203.974
6	123678-HxCDD	36.15	1.363e6	1.125e6	1.001	1.21	1.24	10823.8	YES	NO	db	db	204.224
7	123478-HxCDD	36.03	1.162e6	9.482e5	0.996	1.23	1.24	10622.2	YES	NO	bd	bd	198.133
8	Total-heptadioxins	40.57	2.148e2	2.026e2	1.088	1.06	1.05	2.3	NO	NO	bb	bb	0.048
9	1234678-HpCDD	40.28	8.284e5	8.038e5	1.039	1.03	1.05	3841.2	YES	NO	bb	bb	198.376
10	OCDD	45.01	1.293e6	1.512e6	0.920	0.86	0.89	10744.0	YES	NO	bb	bb	394.016

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.79	2.145e5	2.910e5	0.702	0.74	0.77	2939.3	YES	NO	bb	bb	41.038
2	Total-tetrafurans	24.88	1.531e3	2.327e3	0.727	0.66	0.77	20.3	YES	NO	bb	bb	0.302
3	Total-tetrafurans	24.56	1.778e3	2.714e3	0.727	0.66	0.77	29.5	YES	NO	bb	bb	0.352
4	Total-pentafurans	31.01	1.644e3	9.764e2	0.654	1.68	1.55	5.6	YES	NO	db	bd	0.273
5	12378-PeCDF	29.94	1.256e6	8.416e5	0.679	1.49	1.55	4360.5	YES	NO	bb	bb	202.935
6	23478-PeCDF	31.29	1.346e6	8.943e5	0.786	1.51	1.55	4738.5	YES	NO	bb	bb	201.175
7	123789-HxCDF	36.94	1.209e6	1.036e6	1.137	1.17	1.24	9441.6	YES	NO	bb	bd	200.361
8	234678-HxCDF	35.92	1.547e6	1.307e6	1.140	1.18	1.24	12125.4	YES	NO	bb	bd	210.207
9	Total-hexafurans	35.77	1.562e2	1.389e2	1.141	1.12	1.24	3.4	NO	NO	bb	bb	0.021
10	123678-HxCDF	35.05	1.740e6	1.369e6	1.091	1.27	1.24	13394.0	YES	NO	db	db	189.797
11	123478-HxCDF	34.91	1.546e6	1.218e6	1.166	1.27	1.24	12323.4	YES	NO	bd	bd	197.711
12	Total-hexafurans	34.76	1.255e3	1.100e3	1.141	1.14	1.24	11.9	YES	NO	bb	bb	0.169
13	1234678-HpCDF	38.78	8.720e5	8.418e5	1.003	1.04	1.05	4339.3	YES	NO	bb	bb	204.650
14	1234789-HpCDF	41.02	7.221e5	7.262e5	0.953	0.99	1.05	3041.3	YES	NO	bb	bb	208.465
15	OCDF	45.26	1.195e6	1.333e6	0.778	0.90	0.89	7923.8	YES	NO	bb	bb	419.788
16	2378-TCDD	26.44	2.573e5	3.218e5	1.149	0.80	0.77	2446.0	YES	NO	bb	bb	39.968
17	Total-tetradioxins	26.06	6.115e3	7.563e3	1.024	0.81	0.77	45.2	YES	NO	bb	bb	1.059
18	12378-PeCDD	31.55	1.294e6	8.446e5	1.022	1.53	1.55	12077.0	YES	NO	bb	bb	199.637
19	Total-pentadioxins	29.94	9.896e2	6.778e2	1.502	1.46	1.55	7.8	YES	NO	bb	bb	0.106
20	123789-HxCDD	36.53	1.168e6	9.477e5	0.907	1.23	1.24	9764.9	YES	NO	bb	bb	203.974
21	123678-HxCDD	36.15	1.363e6	1.125e6	1.001	1.21	1.24	10823.8	YES	NO	db	db	204.224
22	123478-HxCDD	36.03	1.162e6	9.482e5	0.996	1.23	1.24	10622.2	YES	NO	bd	bd	198.133
23	Total-heptadioxins	40.57	2.148e2	2.026e2	1.088	1.06	1.05	2.3	NO	NO	bb	bb	0.048
24	1234678-HpCDD	40.28	8.284e5	8.038e5	1.039	1.03	1.05	3841.2	YES	NO	bb	bb	198.376
25	OCDD	45.01	1.293e6	1.512e6	0.920	0.86	0.89	10744.0	YES	NO	bb	bb	394.016

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	26.75	1.219e6					0.4	NO		bb		
2	FUNCTION1 PFK	21.17	1.435e6					3.4	YES		bb		

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.26	4.048e3					0.9	NO		bb		0.000
2	FUNCTION2 PFK	28.22	4.511e3					0.9	NO		bb		0.000
3	FUNCTION2 PFK	28.09	1.180e4					1.6	NO		bb		0.000
4	FUNCTION2 PFK	32.40	7.400e3					1.4	NO		bd		0.000
5	FUNCTION2 PFK	31.78	3.780e3					0.8	NO		db		0.000
6	FUNCTION2 PFK	31.75	1.880e3					0.6	NO		bd		0.000
7	FUNCTION2 PFK	31.70	9.648e3					1.7	NO		db		0.000
8	FUNCTION2 PFK	31.63	2.054e4					2.2	NO		bd		0.000
9	FUNCTION2 PFK	31.52	5.247e4					2.4	NO		db		0.000
10	FUNCTION2 PFK	31.37	1.454e4					1.4	NO		bd		0.000
11	FUNCTION2 PFK	31.10	7.031e3					1.1	NO		bb		0.000
12	FUNCTION2 PFK	30.32	1.036e4					1.3	NO		bb		0.000
13	FUNCTION2 PFK	30.01	2.058e3					0.8	NO		bb		0.000
14	FUNCTION2 PFK	29.82	6.711e3					1.2	NO		db		0.000
15	FUNCTION2 PFK	29.78	1.288e4					1.7	NO		bd		0.000
16	FUNCTION2 PFK	29.02	5.997e3					0.8	NO		bb		0.000
17	FUNCTION2 PFK	28.82	2.827e4					1.7	NO		bb		0.000
18	FUNCTION2 PFK	28.47	4.519e3					0.9	NO		bb		0.000
19	FUNCTION2 PFK	28.42	5.823e3					1.1	NO		bb		0.000
20	FUNCTION2 PFK	32.71	1.137e4					1.6	NO		bb		0.000
21	FUNCTION2 PFK	32.44	1.418e4					1.8	NO		db		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	36.64	7.406e6					25.3	YES		db		0.000
2	FUNCTION3 PFK	36.25	4.701e7					28.1	YES		bd		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.68	7.516e3					1.5	NO		bb		
2	FUNCTION5 PFK	45.50	5.255e3					1.2	NO		bb		
3	FUNCTION5 PFK	43.66	5.108e3					1.2	NO		bb		
4	FUNCTION5 PFK	43.06	3.867e3					1.1	NO		bb		
5	FUNCTION5 PFK	42.63	1.220e4					2.1	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	21.64	8.072e1					1.8	NO		bb		0.000
2	FUNCTION1 HXCD...	21.44	1.165e2					2.1	NO		db		0.000
3	FUNCTION1 HXCD...	21.34	7.544e1					2.3	NO		bd		0.000
4	FUNCTION1 HXCD...	26.42	1.399e2					2.7	NO		bb		0.000
5	FUNCTION1 HXCD...	21.99	8.086e1					2.0	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.18	1.574e3					25.7	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.15	3.227e2					5.7	YES		db		0.000
2	FUNCTION3 OCDPE	36.03	2.331e2					4.4	YES		bd		0.000
3	FUNCTION3 OCDPE	35.36	1.234e2					4.0	YES		bb		0.000
4	FUNCTION3 OCDPE	35.06	1.904e2					3.3	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	39.00	2.677e2					3.2	YES		bb		0.000
2	FUNCTION4 NCDPE	38.18	1.090e2					3.1	YES		bb		0.000

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Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:34:51 Pacific Standard Time

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
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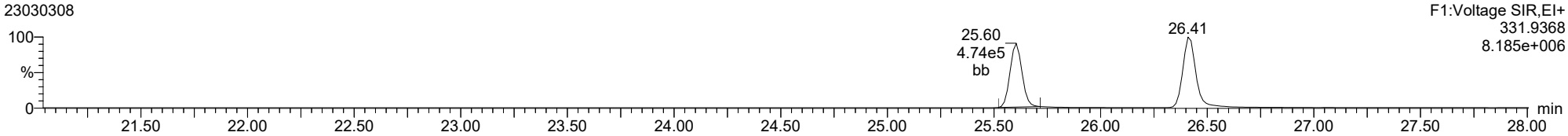
ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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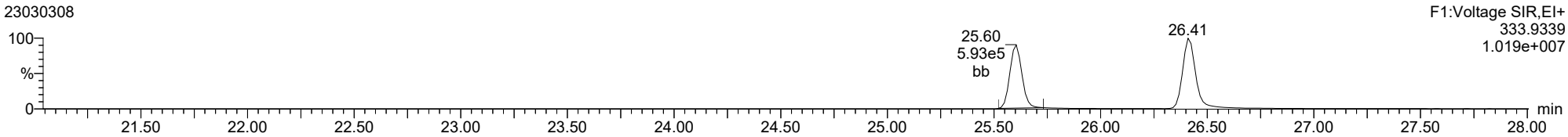

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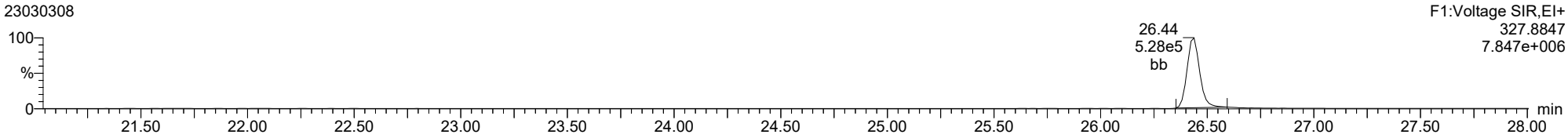

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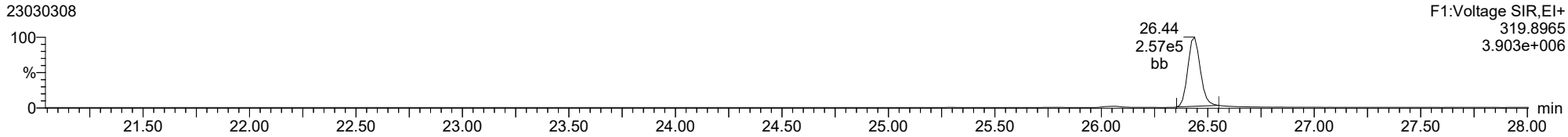

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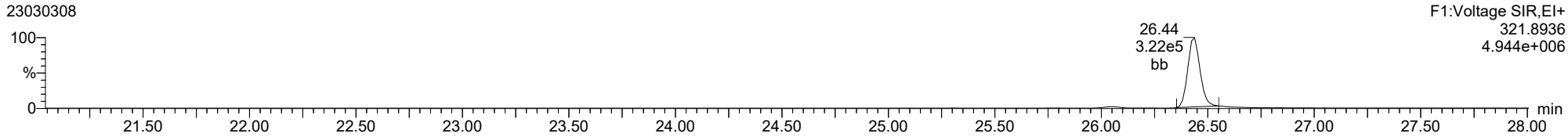

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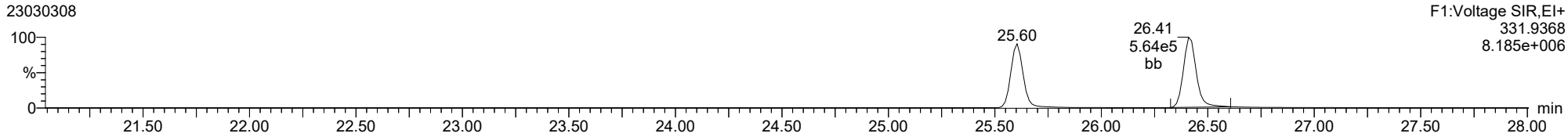

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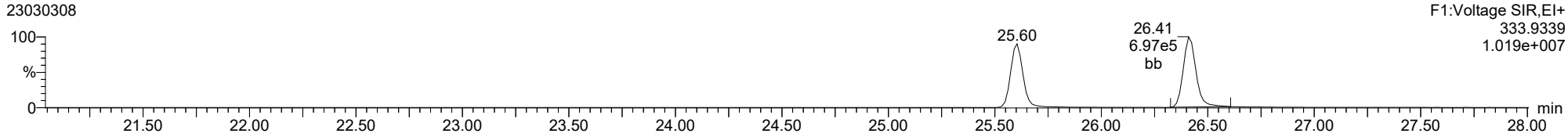

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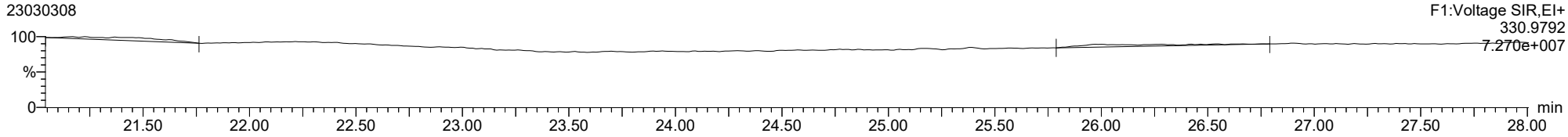

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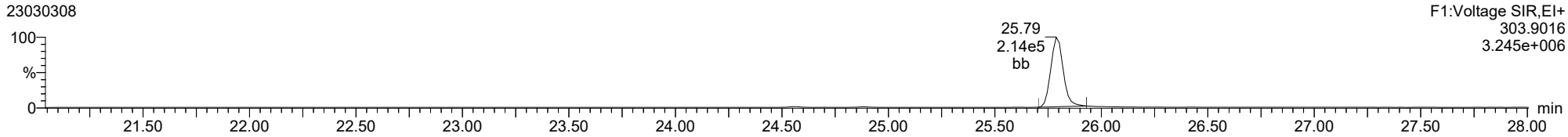

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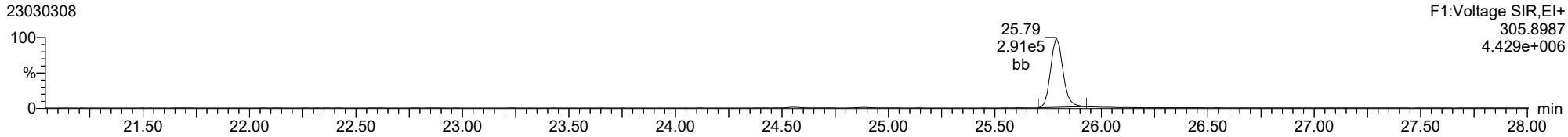

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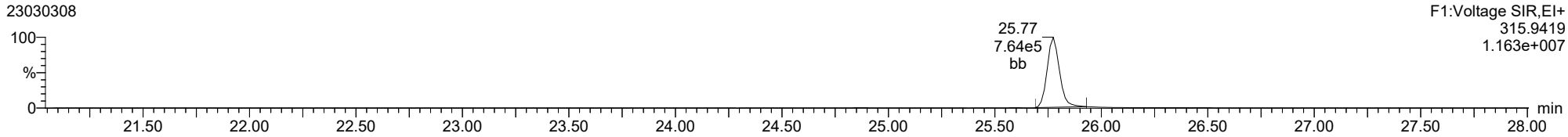

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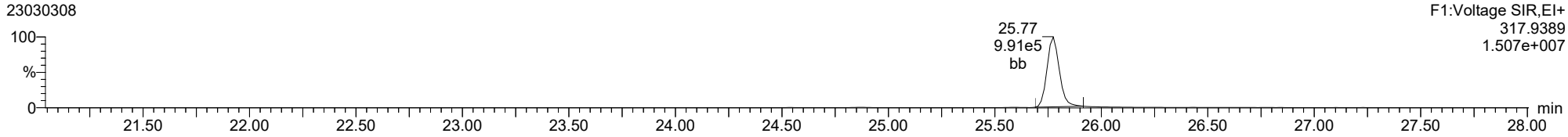

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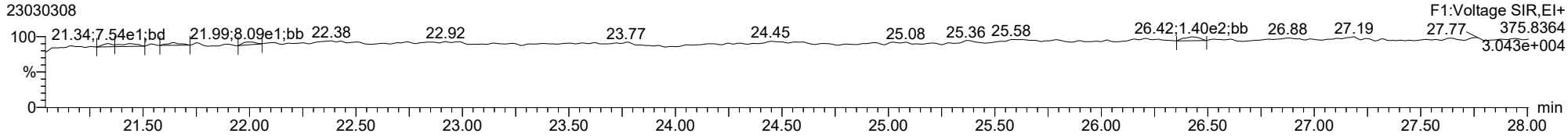

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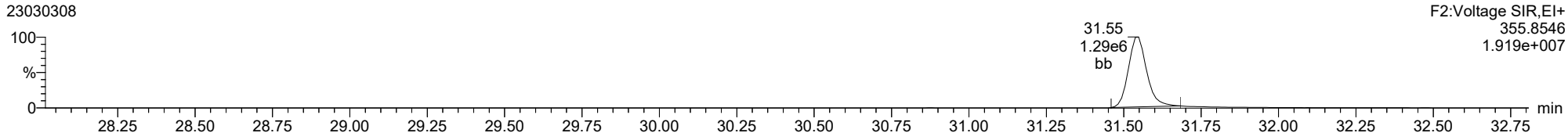

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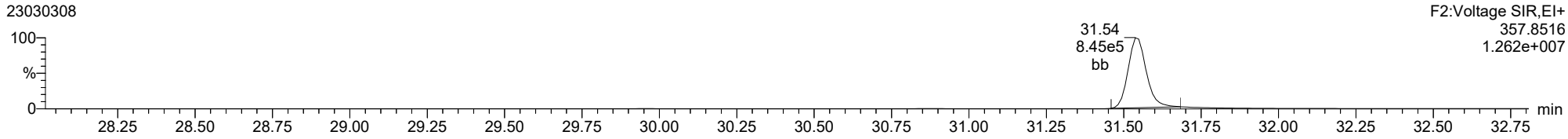

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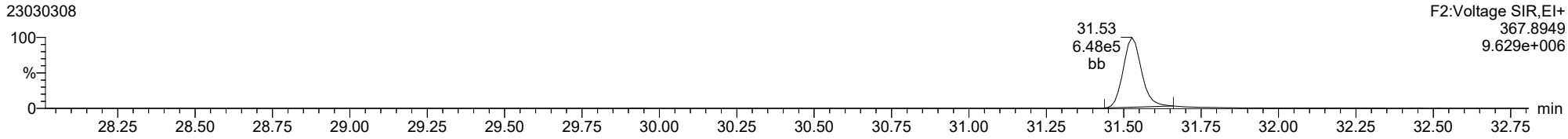

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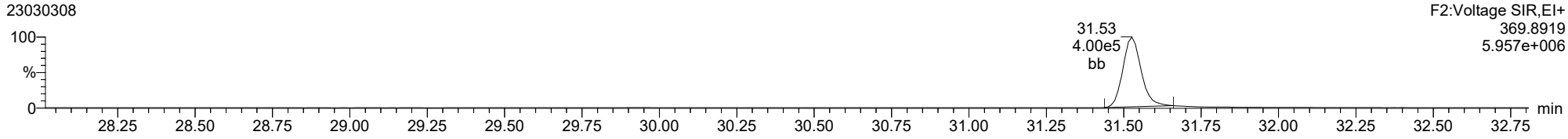

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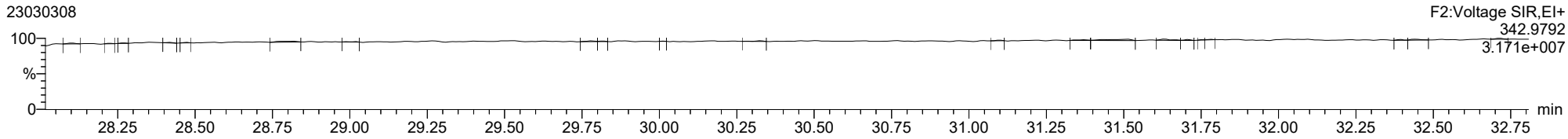

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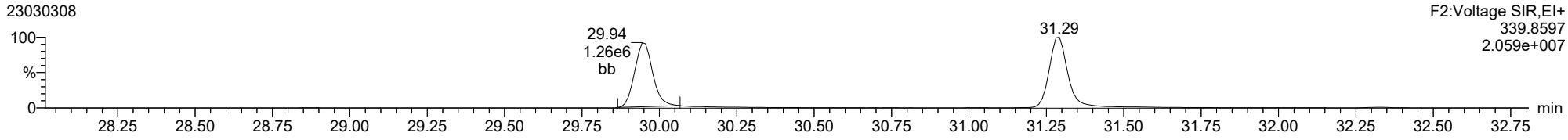

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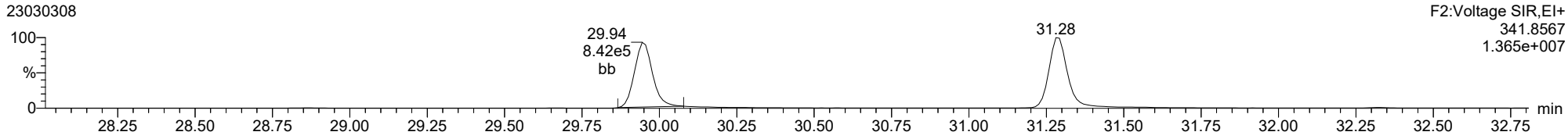

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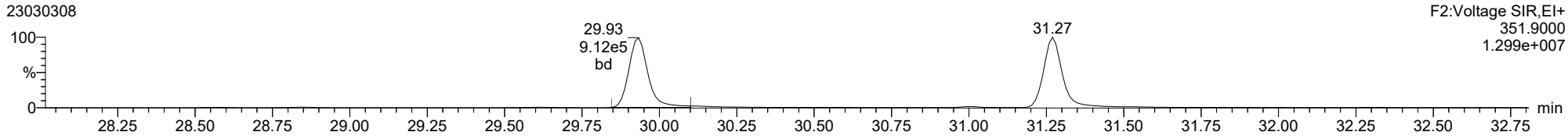

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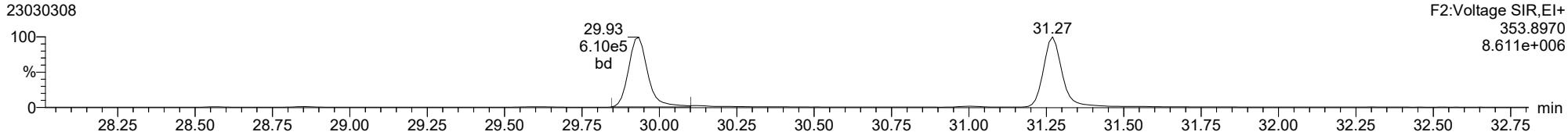

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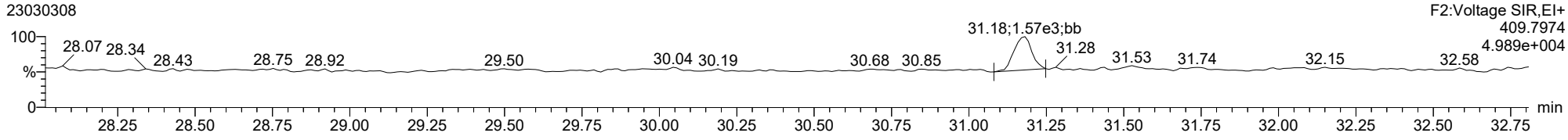

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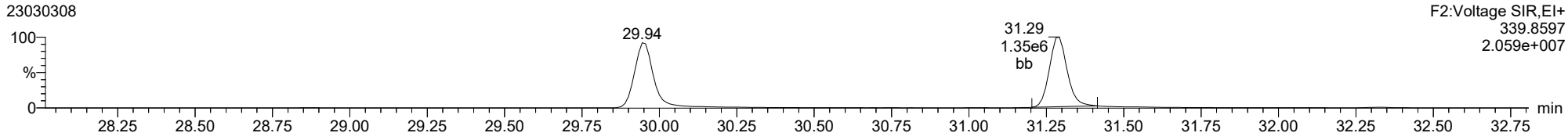
23478-PeCDF



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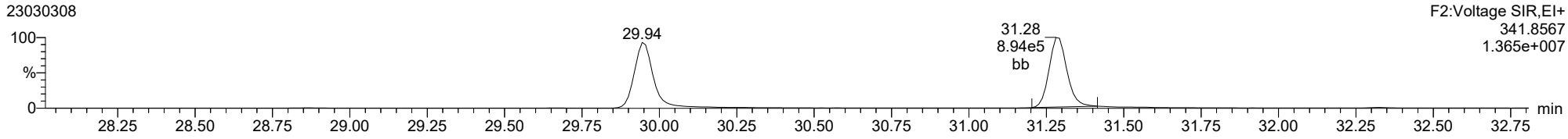

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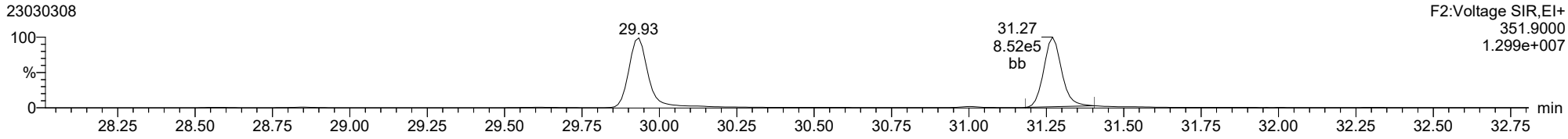

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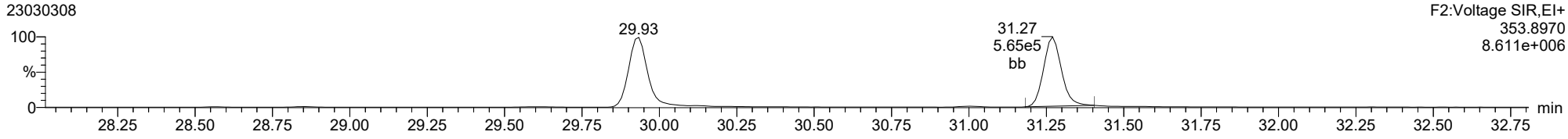

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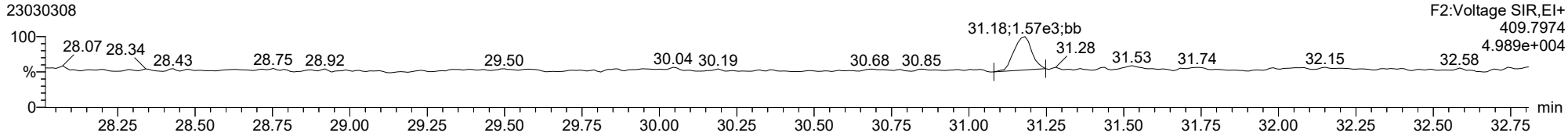

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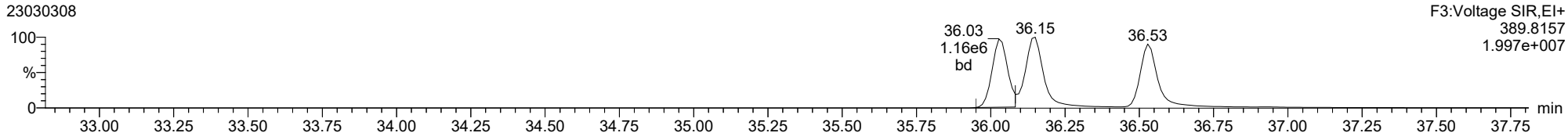
123478-HxCDD



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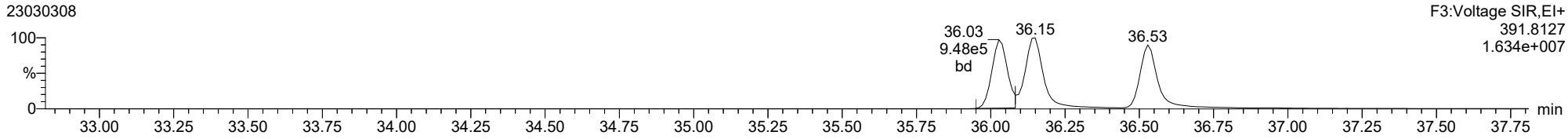

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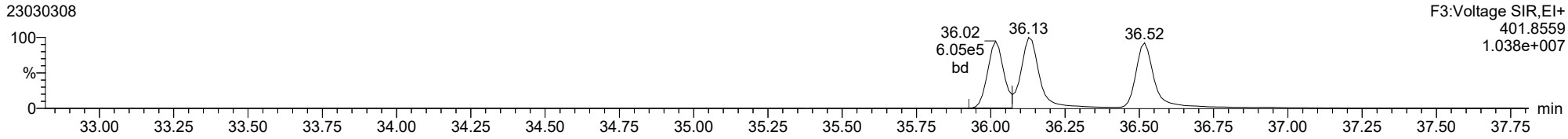

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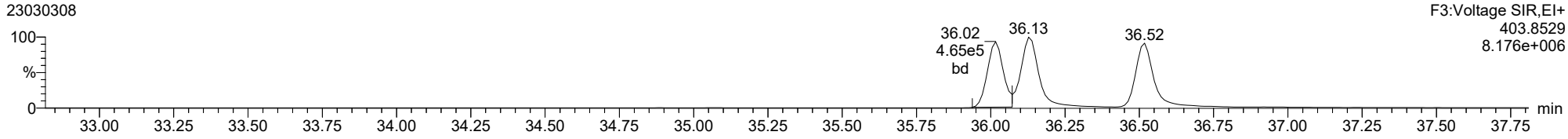

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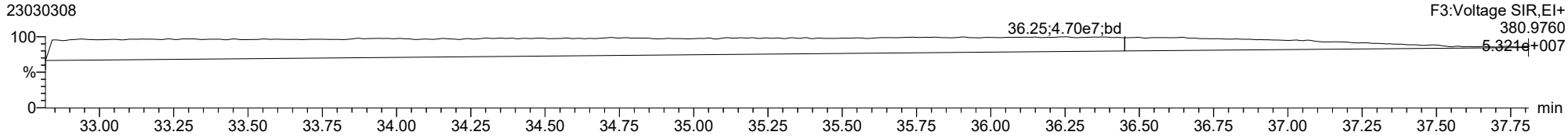

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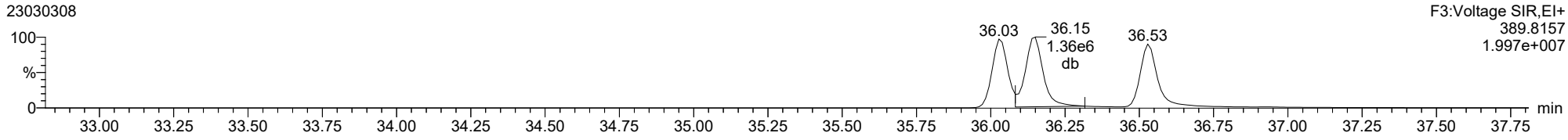

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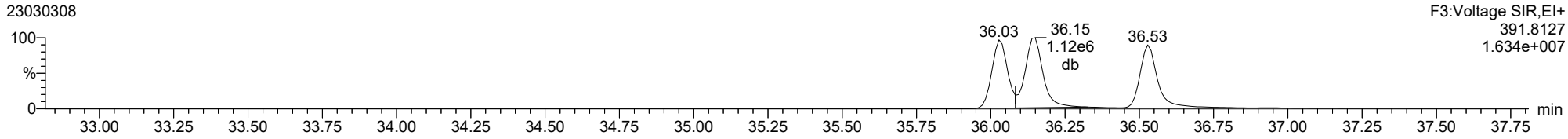

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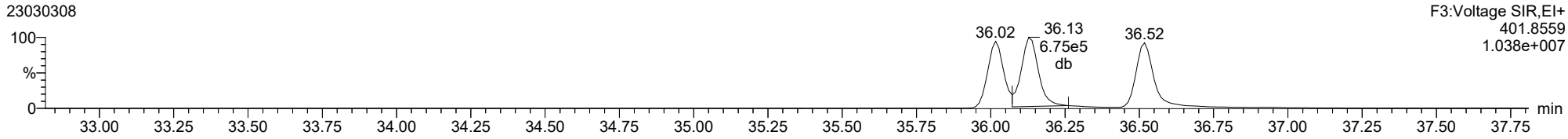

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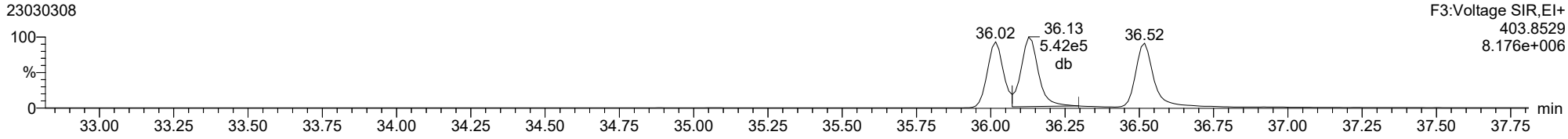

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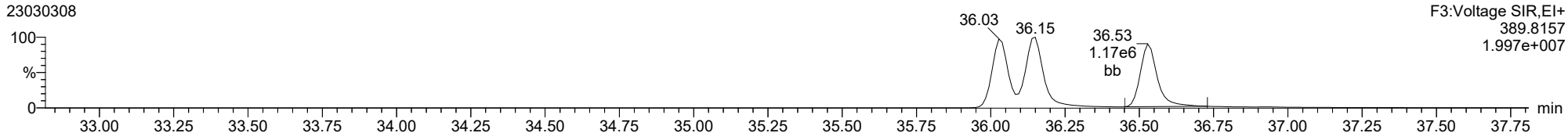

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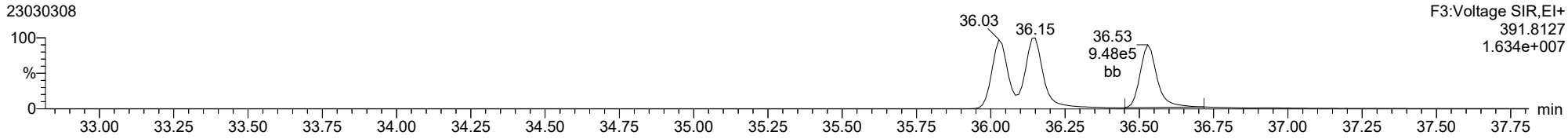

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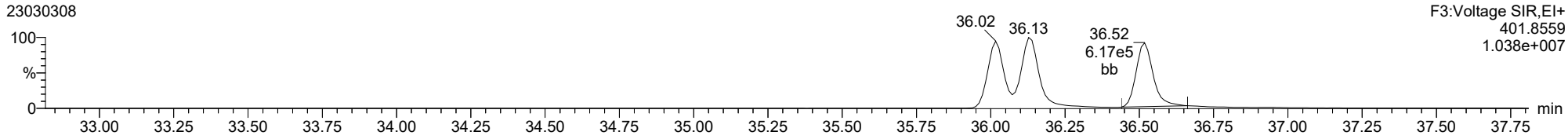

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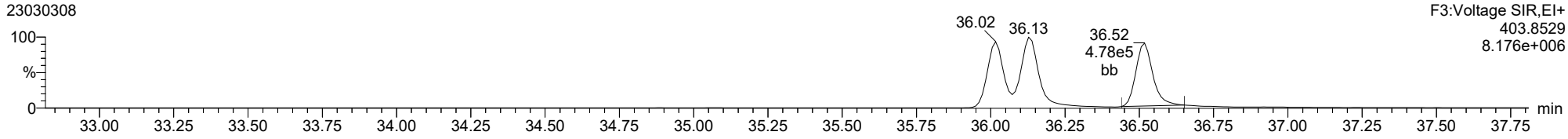

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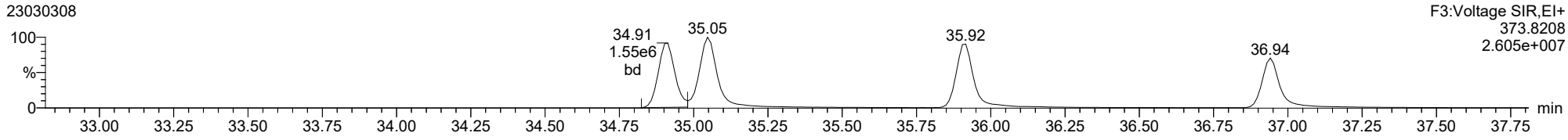

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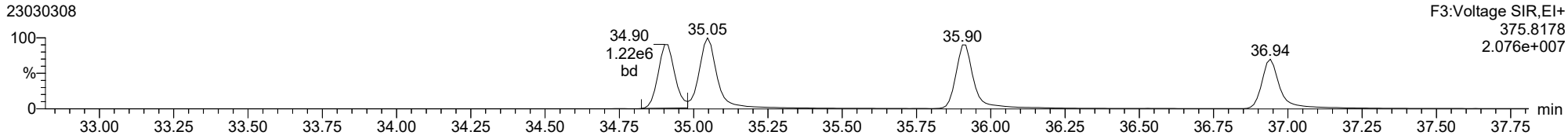

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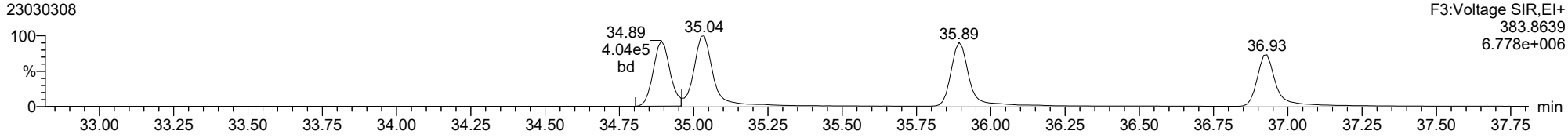

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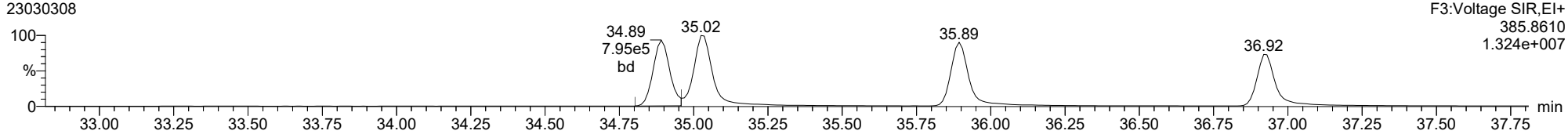

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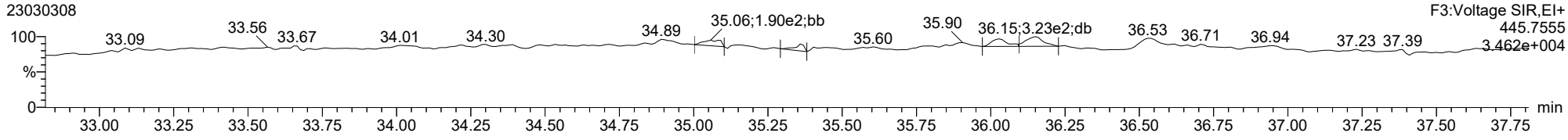

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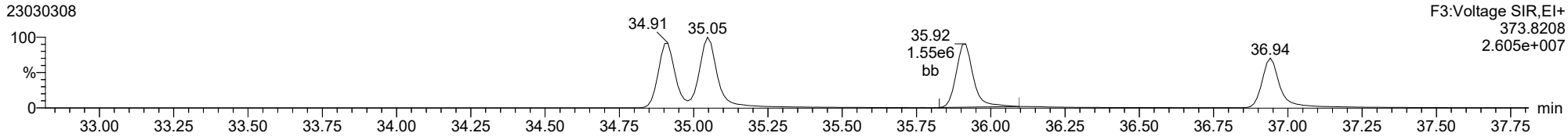

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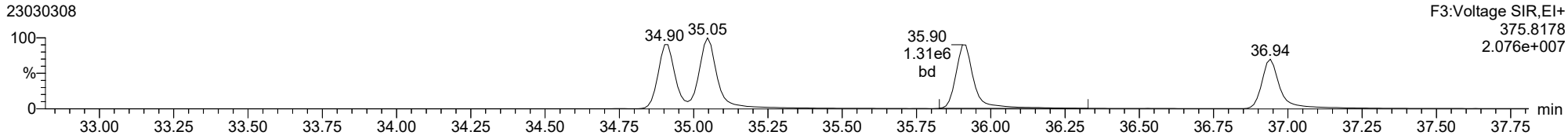

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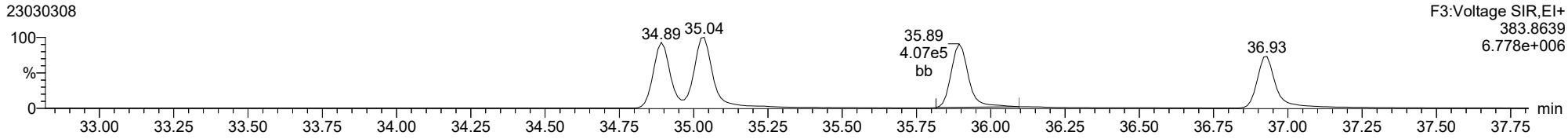

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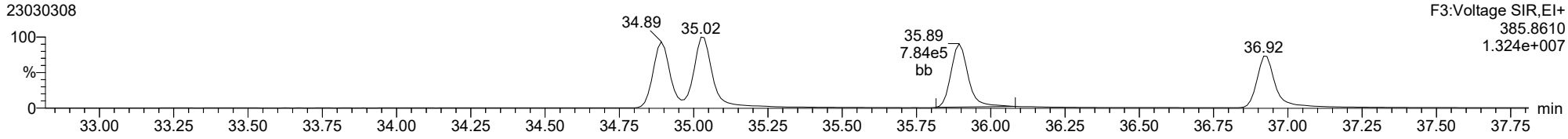

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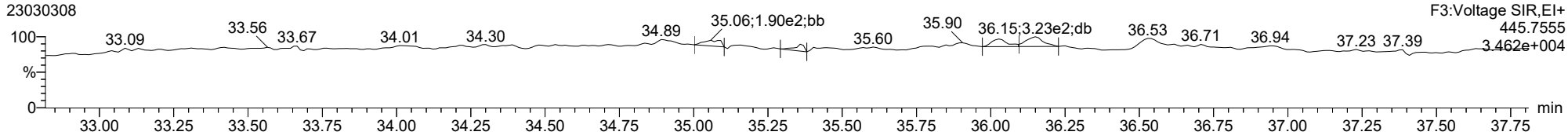

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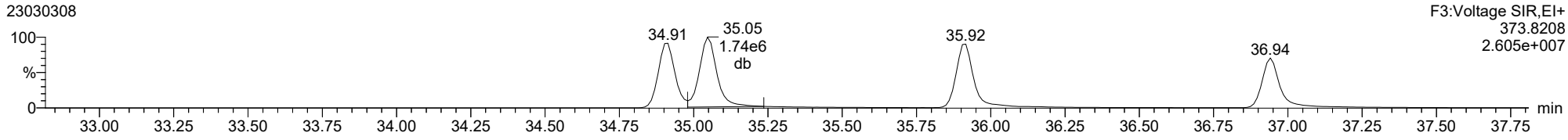

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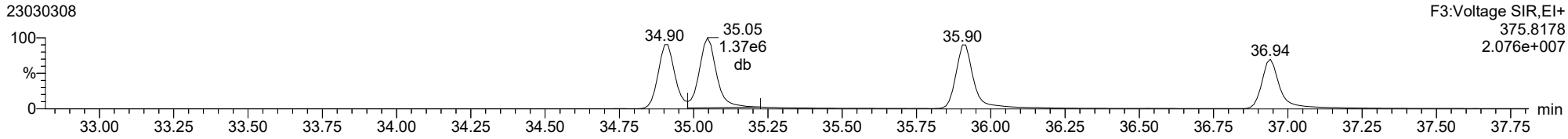

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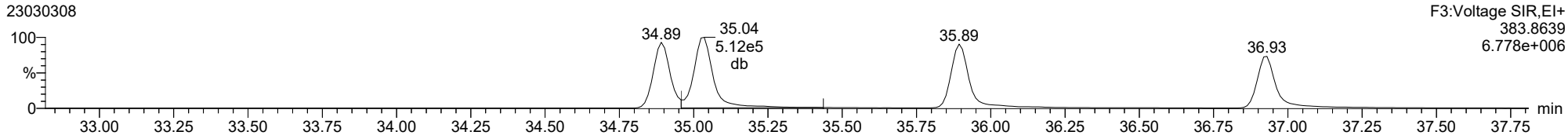

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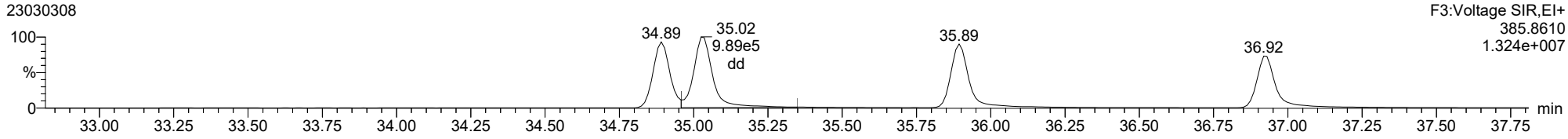

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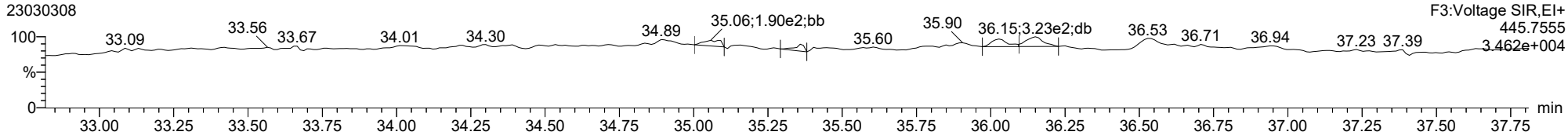

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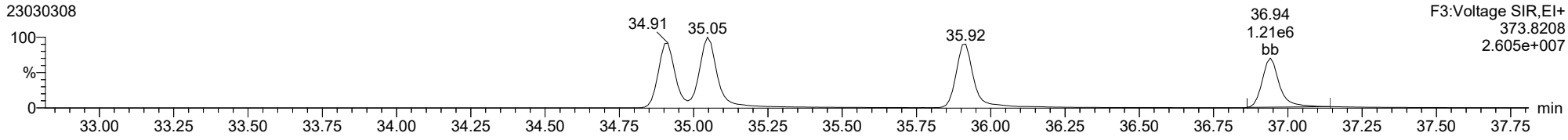

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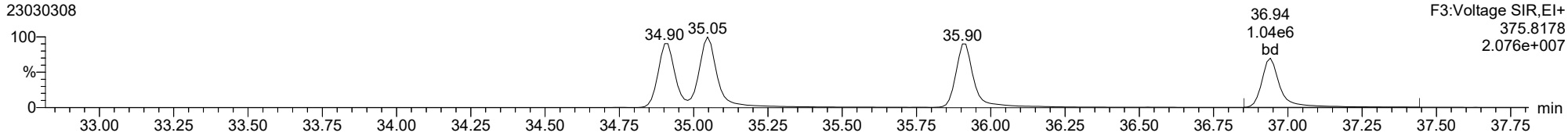

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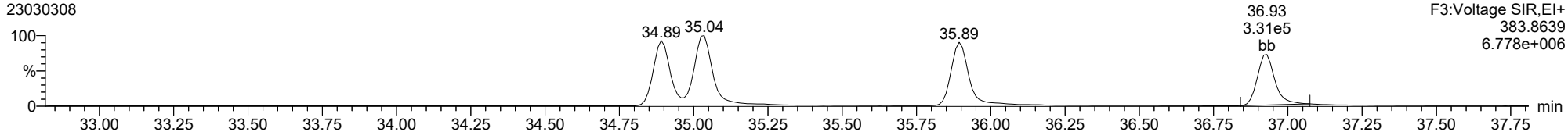

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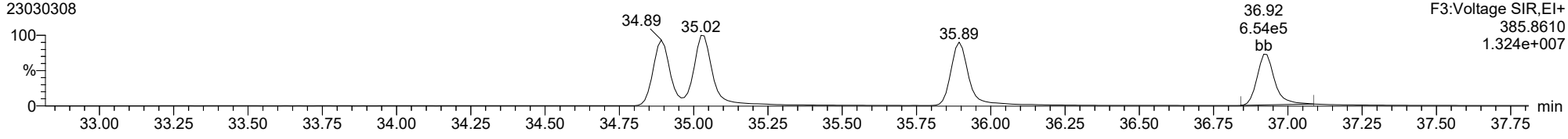

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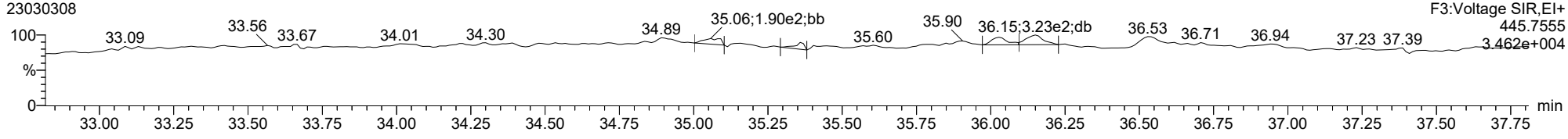

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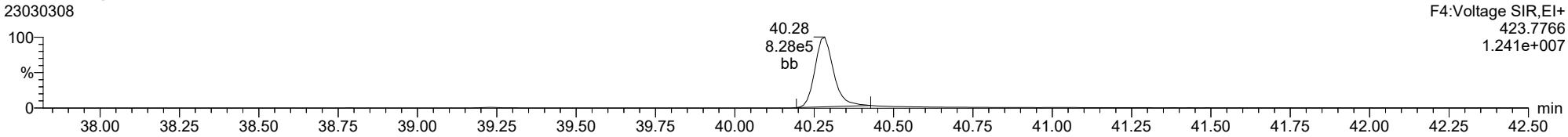

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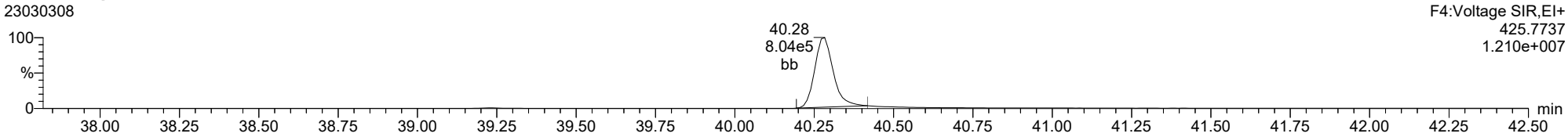

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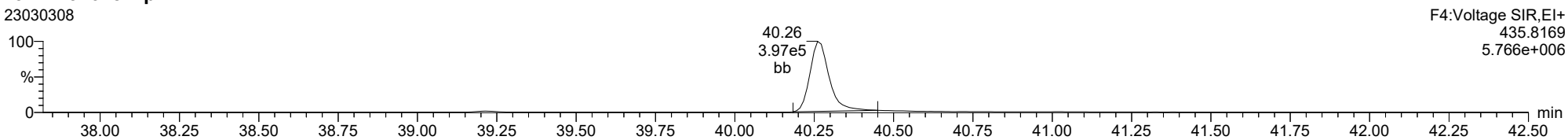

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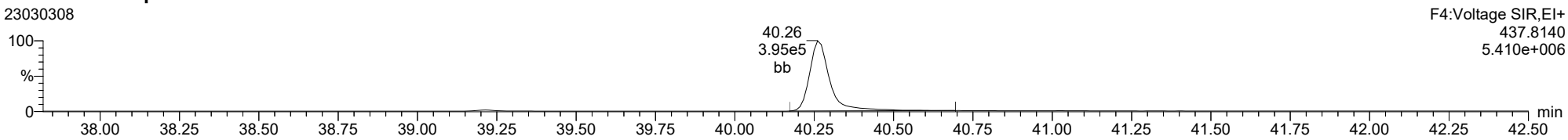

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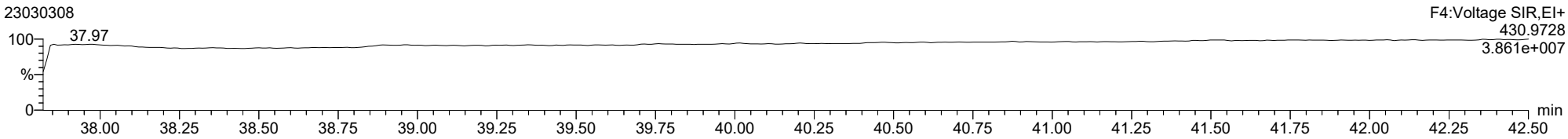

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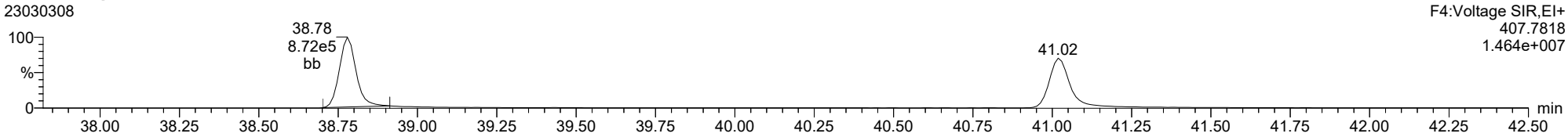

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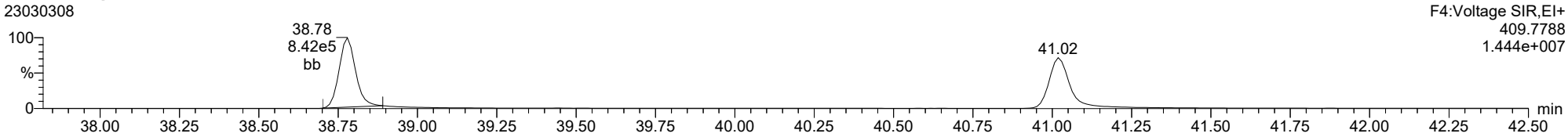

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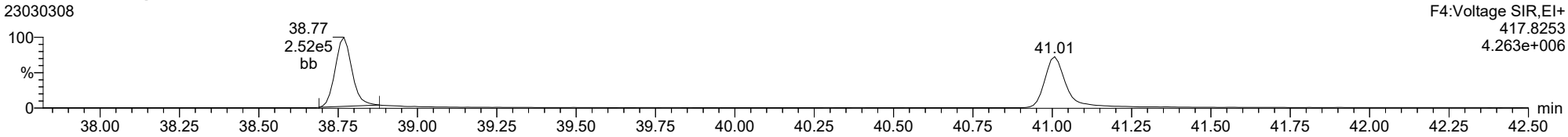

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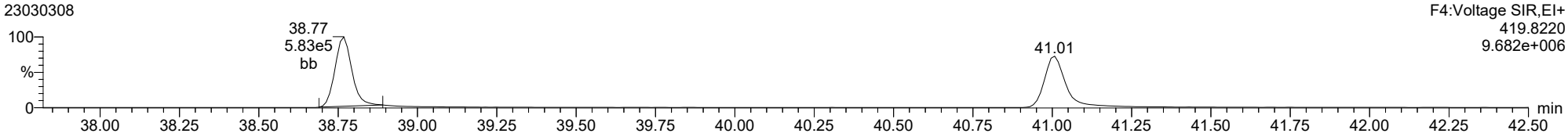

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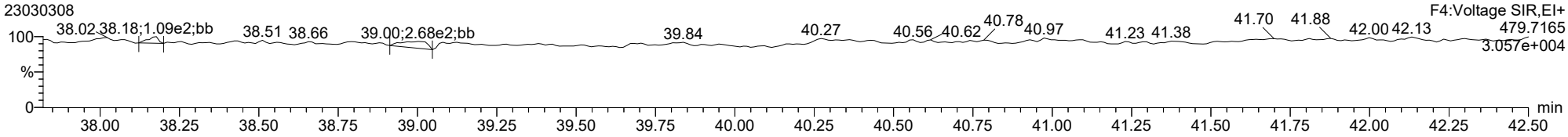

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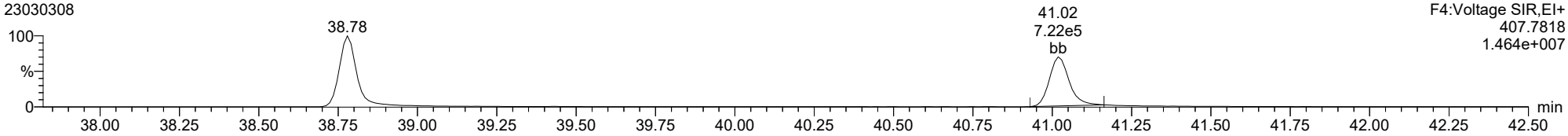

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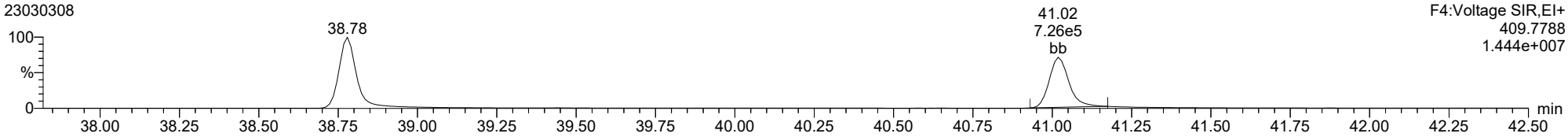

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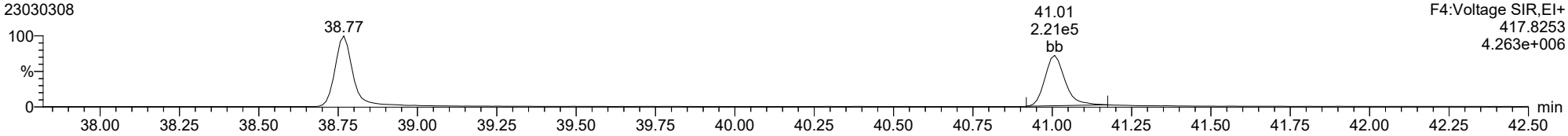

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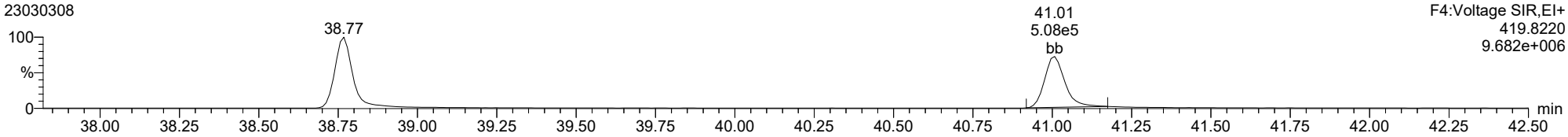

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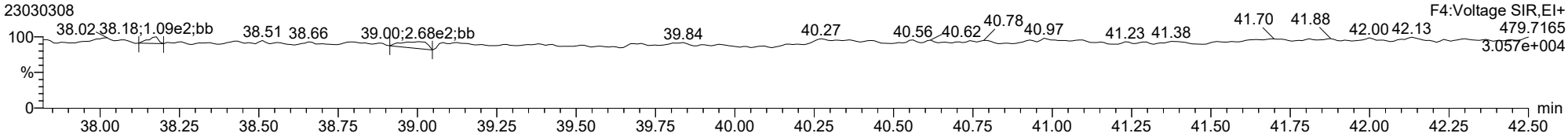

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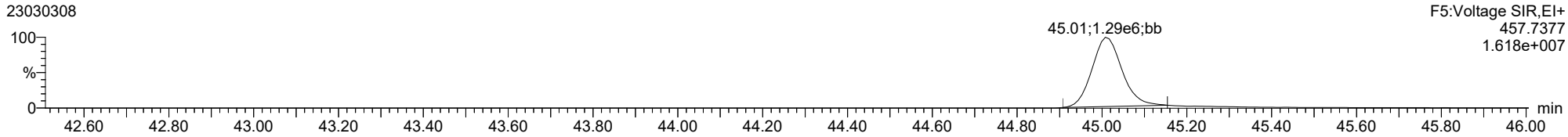

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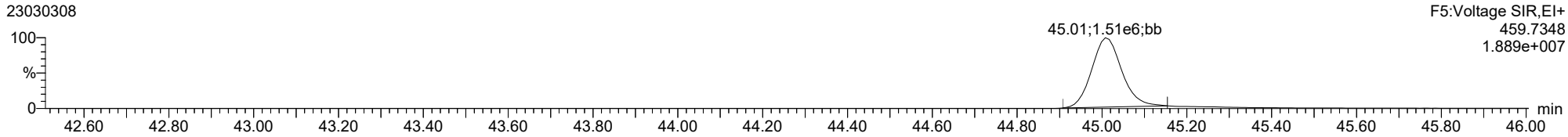
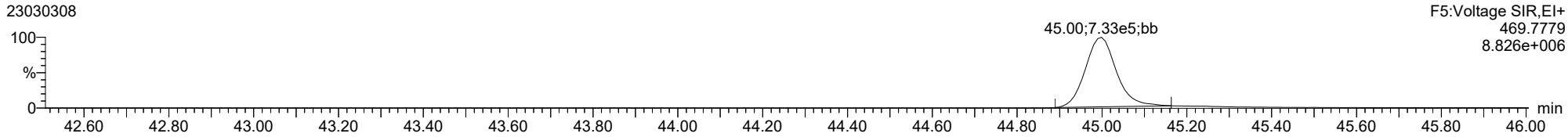
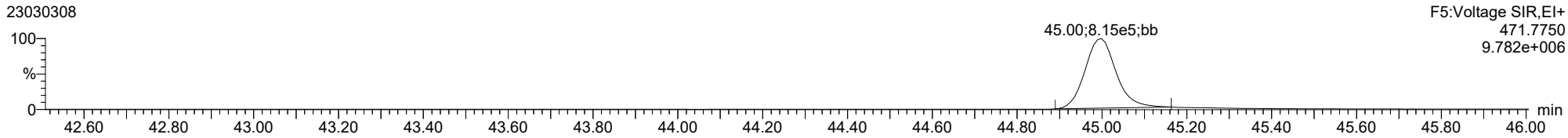


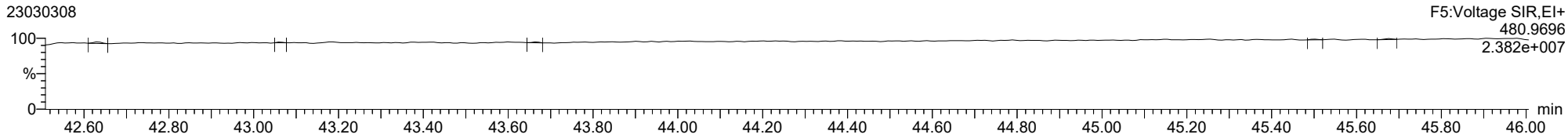
13C-OCDD



13C-OCDD

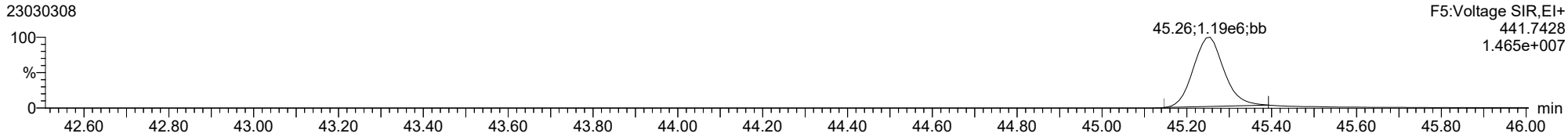


FUNCTION5 PFK



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

OCDF



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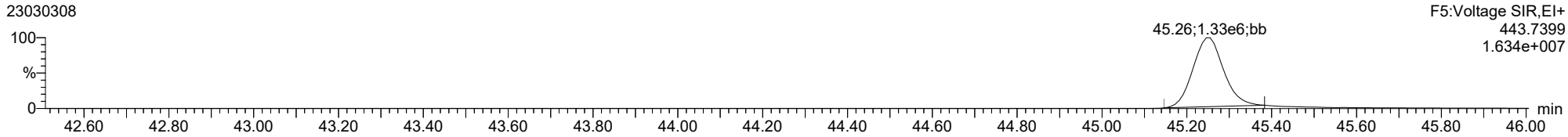
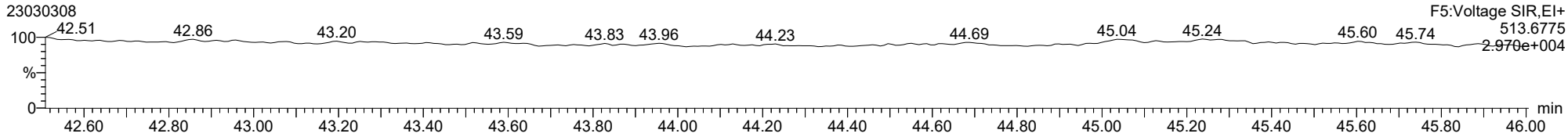


FUNCTION5 DCDPE



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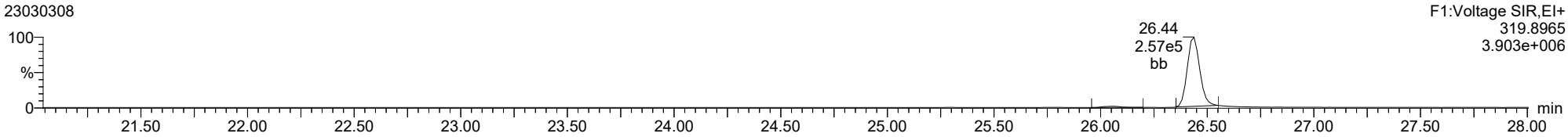
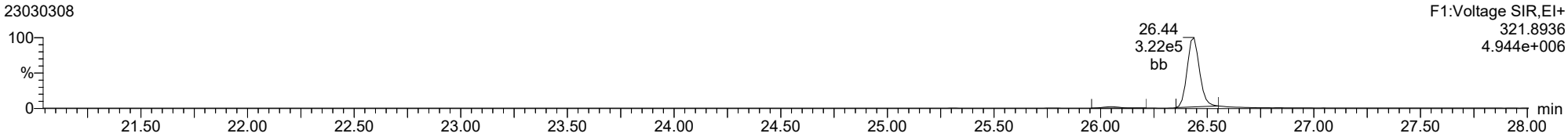
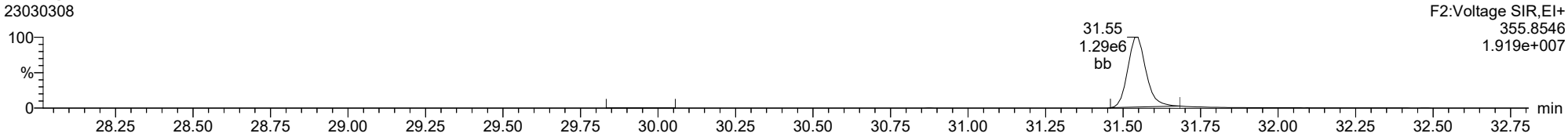
Total-tetradioxins



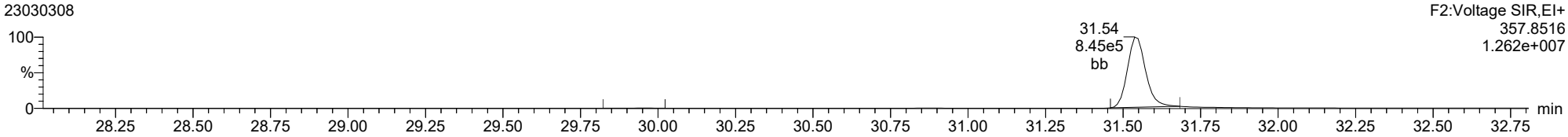
Total-tetradioxins



Total-pentadioxins



Total-pentadioxins



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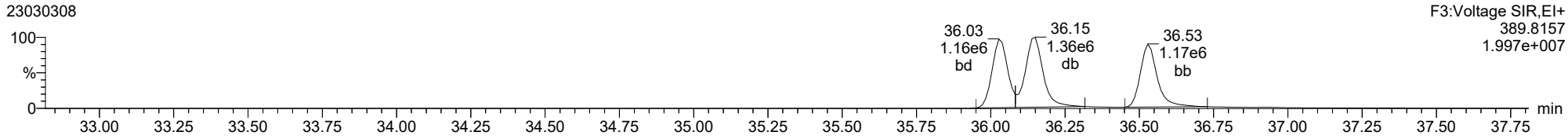
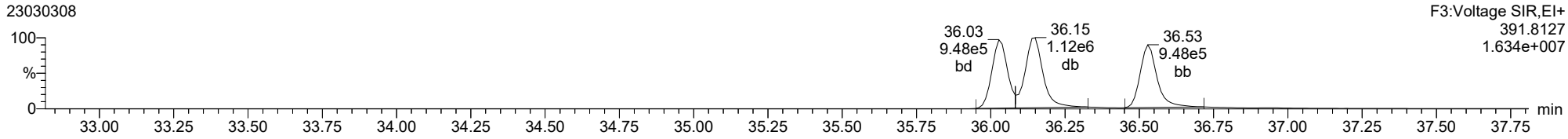
Total-hexadioxins



Total-hexadioxins



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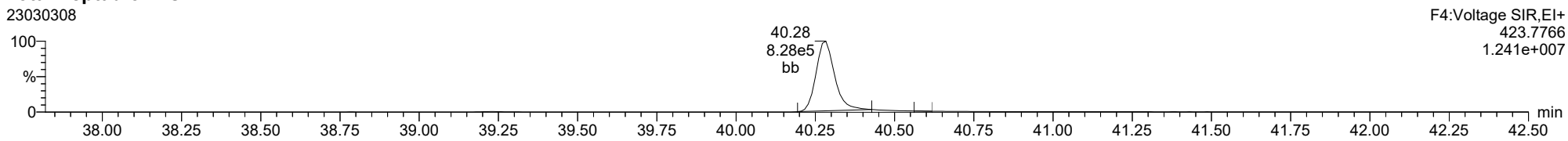
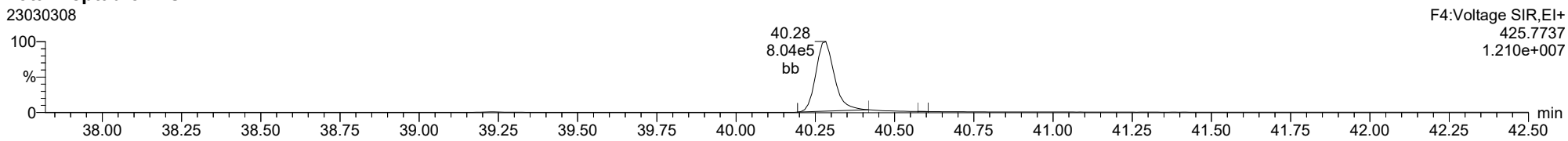


Total-heptadioxins



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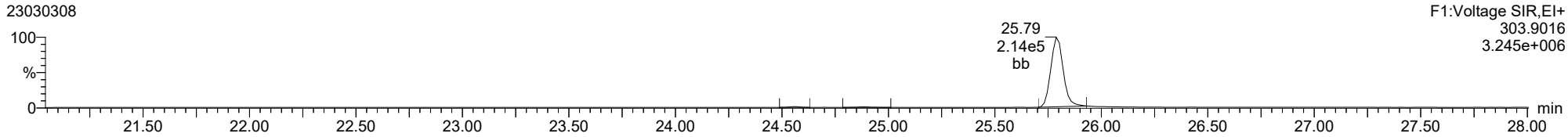
Total-tetrafurans



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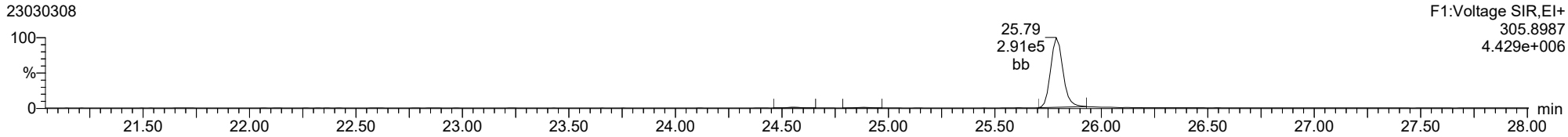
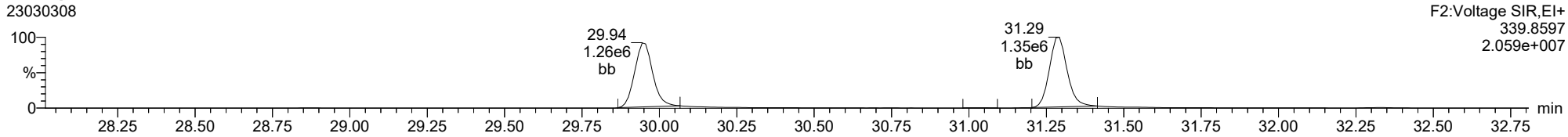
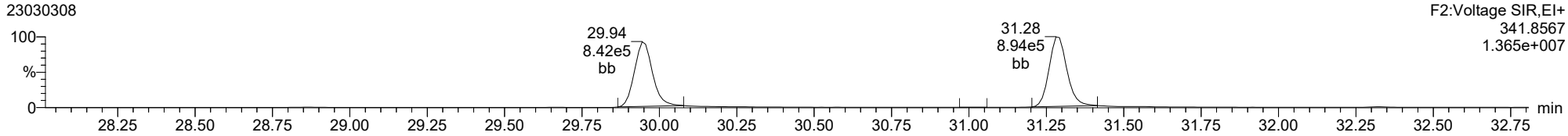


Total-pentafurans



Total-pentafurans



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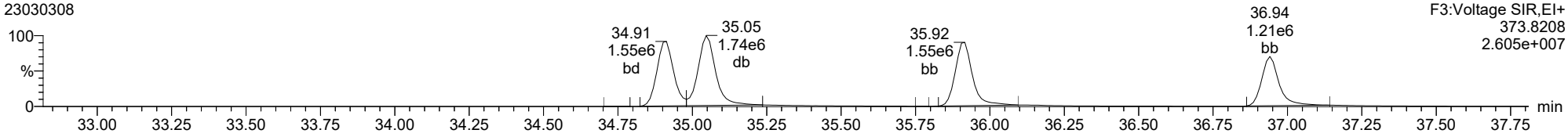
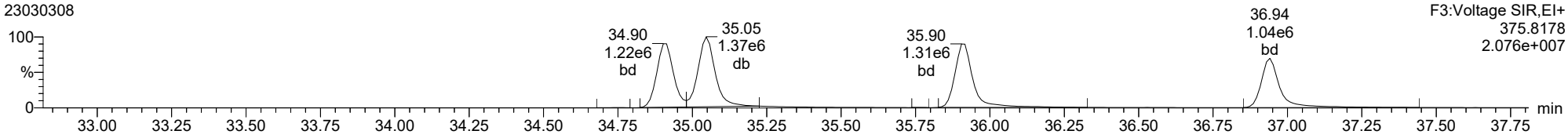
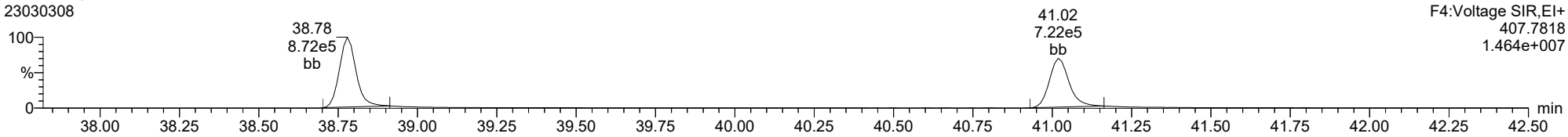
Total-hexafurans



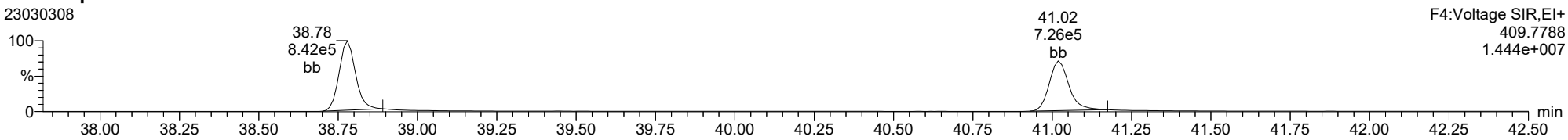
Total-hexafurans



Total-heptafurans



Total-heptafurans



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Printed: Monday, March 06, 2023 11:35:04 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.774	1.000	1.334e6	1.787e6	0.702	0.746	0.770	1816	2705	2.07e7	2.78e7	11389.3	10270.6	NO	bb	bb	200.466
12378-PeCDF	29.934	1.000	7.598e6	4.979e6	0.679	1.526	1.550	4787	5694	1.20e8	7.84e7	24983.0	13764.4	NO	bb	bb	1049.785
23478-PeCDF	31.271	1.000	8.034e6	5.310e6	0.786	1.513	1.550	4787	5694	1.23e8	8.18e7	25734.3	14361.4	NO	bb	bb	1006.165
123478-HxCDF	34.903	1.001	7.954e6	6.371e6	1.166	1.248	1.240	1657	3079	1.28e8	1.02e8	76946.6	33145.2	NO	bd	bd	988.542
234678-HxCDF	35.894	1.000	8.440e6	6.648e6	1.140	1.270	1.240	1657	3079	1.32e8	1.04e8	79492.3	33730.7	NO	bd	bd	997.904
123678-HxCDF	35.036	1.000	8.729e6	6.976e6	1.091	1.251	1.240	1657	3079	1.37e8	1.09e8	82564.4	35544.8	NO	db	db	1005.907
123789-HxCDF	36.930	1.000	7.107e6	5.643e6	1.137	1.259	1.240	1657	3079	1.15e8	9.05e7	69330.3	29396.1	NO	bb	bb	962.631
1234678-HpCDF	38.769	1.000	5.729e6	5.700e6	1.003	1.005	1.050	5984	6276	9.87e7	9.77e7	16498.3	15567.0	NO	bb	bb	1001.511
1234789-HpCDF	41.008	1.000	4.891e6	4.848e6	0.953	1.009	1.050	5984	6276	7.31e7	7.29e7	12213.8	11617.0	NO	bb	bb	1050.453
OCDF	45.246	1.006	8.007e6	9.001e6	0.778	0.890	0.890	617	1698	1.01e8	1.14e8	163878.0	67066.1	NO	bb	bb	2152.541
2378-TCDD	26.424	1.001	1.623e6	2.053e6	1.149	0.791	0.770	1583	1421	2.49e7	3.15e7	15719.4	22173.2	NO	bb	bb	201.416
12378-PeCDD	31.527	1.000	7.500e6	4.933e6	1.022	1.520	1.550	3207	3258	1.15e8	7.59e7	35906.6	23308.0	NO	bb	bb	987.154
123478-HxCDD	36.017	1.000	6.446e6	5.113e6	0.996	1.261	1.240	1269	1319	1.05e8	8.63e7	82869.7	65420.3	NO	bd	bd	1008.795
123678-HxCDD	36.139	1.001	6.944e6	5.798e6	1.001	1.198	1.240	1269	1319	1.11e8	8.98e7	87214.8	68064.1	NO	db	db	1011.135
123789-HxCDD	36.518	1.011	6.387e6	5.242e6	0.907	1.218	1.240	1269	1319	1.04e8	8.52e7	81996.1	64539.0	NO	bb	bb	1063.935
1234678-HpCDD	40.273	1.000	5.468e6	5.342e6	1.039	1.023	1.050	4639	3285	8.81e7	8.56e7	19002.3	26055.7	NO	bb	bb	1010.673
OCDD	45.008	1.000	8.523e6	9.997e6	0.920	0.853	0.890	1224	2738	1.09e8	1.28e8	89206.2	46574.8	NO	bb	bb	1981.710
13C-2378-TCDF	25.760	1.007	9.657e5	1.254e6	1.620	0.770	0.770	2759	1757	1.47e7	1.88e7	5325.4	10693.5	NO	bb	bb	104.465
13C-12378-PeCDF	29.923	1.169	1.058e6	7.059e5	1.240	1.499	1.550	2137	2181	1.59e7	1.06e7	7426.1	4845.6	NO	bb	bb	108.437
13C-23478-PeCDF	31.259	1.222	1.010e6	6.768e5	1.118	1.492	1.550	2137	2181	1.54e7	1.03e7	7192.1	4709.7	NO	bb	bb	115.091
13C-123478-HxCDF	34.880	0.955	4.197e5	8.230e5	1.168	0.510	0.510	2074	3087	6.86e6	1.33e7	3308.7	4323.9	NO	bd	bd	88.344
13C-123678-HxCDF	35.025	0.959	4.843e5	9.471e5	1.386	0.511	0.510	2074	3087	7.37e6	1.42e7	3551.0	4614.4	NO	db	db	85.742
13C-234678-HxCDF	35.883	0.983	4.483e5	8.783e5	1.129	0.510	0.510	2074	3087	6.95e6	1.37e7	3352.7	4438.0	NO	bd	bd	97.566
13C-123789-HxCDF	36.919	1.011	3.958e5	7.690e5	0.932	0.515	0.510	2074	3087	6.35e6	1.23e7	3061.9	3979.7	NO	bb	bb	103.822
13C-1234678-HpCDF	38.757	1.062	3.445e5	7.933e5	0.895	0.434	0.440	2404	3556	5.77e6	1.33e7	2401.1	3732.0	NO	bb	bb	105.552
13C-1234789-HpCDF	40.997	1.123	2.963e5	6.765e5	0.770	0.438	0.440	2404	3556	4.35e6	9.96e6	1811.4	2800.3	NO	bb	bb	104.955
13C-1234-TCDD	25.591	0.000	5.845e5	7.267e5	1.000	0.804	0.770	2994	1335	8.98e6	1.11e7	2999.9	8316.3	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.031	7.030e5	8.860e5	1.152	0.794	0.770	2994	1335	1.05e7	1.32e7	3492.1	9847.6	NO	bb	bb	105.160
13C-12378-PeCDD	31.515	1.232	7.626e5	4.699e5	0.829	1.623	1.550	1207	1205	1.17e7	7.16e6	9657.3	5939.7	NO	bb	bb	113.413
13C-123478-HxCDD	36.006	0.986	6.492e5	5.017e5	0.995	1.294	1.240	1422	1281	1.08e7	8.26e6	7562.7	6444.6	NO	bd	bd	96.063
13C-123678-HxCDD	36.117	0.989	7.072e5	5.517e5	1.157	1.282	1.240	1422	1281	1.11e7	8.74e6	7828.3	6824.3	NO	db	db	90.391
13C-1234678-HpCDD	40.262	1.103	5.341e5	4.953e5	0.840	1.078	1.050	2026	1583	8.10e6	7.45e6	3998.5	4702.7	NO	bb	bb	101.765
13C-OCDD	44.990	1.232	9.650e5	1.067e6	0.767	0.905	0.890	1467	1005	1.21e7	1.35e7	8264.7	13401.8	NO	bb	bb	219.862
13C-123789-HxCDD	36.507	0.000	6.722e5	5.319e5	1.000	1.264	1.240	1422	1281	1.10e7	8.62e6	7719.2	6727.3	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.033	3.368e6		1.288			2667		5.07e7		19022.1			bb		199.444

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
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Printed: Monday, March 06, 2023 11:35:04 Pacific Standard Time

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	1816	2705								
1289-TCDF					0.678		0.770	1816	2705								
13468-PECDF					1.246		1.550	665	1133								
12389-PECDF					0.496		1.550	4787	5694								
123468-HXCDF					1.169		1.240	1657	3079								
1368-TCDD					1.015		0.770	1583	1421								
1289-TCDD					0.909		0.770	1583	1421								
12479-PECDD					2.301		1.550	3207	3258								
12389-PECDD					1.184		1.550	3207	3258								
124679-HXCDD					1.115		1.240	1269	1319								
1234679-HPCDD					1.137		1.050	4639	3285								
Total-tetrafurans			1.355e6		0.727			1816		2.10e7							203.619
Total-penta1			0.000e0					665		0.00e0							
Total-pentafurans			1.567e7		0.654			4787		2.43e8							2061.969
Total-hexafurans			3.237e7		1.141			1657		5.13e8							3971.633
Total-heptafurans			1.063e7		0.978			5984		1.72e8							2053.620
Total-Furans			6.803e7		0.922			1816		1.05e9							10443.382
Total-tetradioxins			1.660e6		1.024			1583		2.53e7							206.551
Total-pentadioxins			7.518e6		1.502			3207		1.15e8							988.757
Total-hexadioxins			1.981e7		1.005			1269		3.20e8							3089.249
Total-heptadioxins			5.468e6		1.088			4639		8.81e7							1010.701
Total-Dioxins			4.298e7		1.130			1583		6.58e8							7276.969
Total-TEQ			1.110e8					1583		1.71e9							17720.350
FUNCTION1 PFK			8.364e4					590794		3.29e6							
FUNCTION2 PFK			1.452e7					287139		1.24e7							0.000
FUNCTION3 PFK			2.904e5					447834		7.86e6							0.000
FUNCTION4 PFK			1.983e5					258971		5.49e6							
FUNCTION5 PFK			1.360e5					213310		3.56e6							
FUNCTION1 HXCD...			9.848e2					660		1.37e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			9.974e3					875		1.52e5							0.000
FUNCTION3 OCDPE			5.118e3					487		5.72e4							0.000
FUNCTION4 NCDPE			1.842e3					616		1.81e4							0.000
FUNCTION5 DCDPE			3.423e3					534		2.47e4							0.000

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Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.77	1.334e6	1.787e6	0.702	0.75	0.77	11389.3	YES	NO	bb	bb	200.466
2	Total-tetrafurans	24.87	8.544e3	1.186e4	0.727	0.72	0.77	70.8	YES	NO	bb	bb	1.264
3	Total-tetrafurans	24.67	1.054e3	1.493e3	0.727	0.71	0.77	9.1	YES	NO	db	db	0.158
4	Total-tetrafurans	24.55	1.152e4	1.641e4	0.727	0.70	0.77	91.4	YES	NO	bd	bd	1.731

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.27	8.034e6	5.310e6	0.786	1.51	1.55	25734.3	YES	NO	bb	bb	1006.1...
2	Total-pentafurans	31.00	7.155e3	5.348e3	0.654	1.34	1.55	24.5	YES	NO	bb	bb	1.108
3	Total-pentafurans	30.22	6.707e3	3.991e3	0.654	1.68	1.55	18.6	YES	NO	bb	bb	0.948
4	12378-PeCDF	29.93	7.598e6	4.979e6	0.679	1.53	1.55	24983.0	YES	NO	bb	bb	1049.7...
5	Total-pentafurans	29.57	3.743e3	2.429e3	0.654	1.54	1.55	12.5	YES	NO	bd	bd	0.547
6	Total-pentafurans	28.85	2.348e4	1.505e4	0.654	1.56	1.55	59.4	YES	NO	bb	bb	3.415

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123678-HxCDF	35.04	8.729e6	6.976e6	1.091	1.25	1.24	82564.4	YES	NO	db	db	1005.9...
2	123478-HxCDF	34.90	7.954e6	6.371e6	1.166	1.25	1.24	76946.6	YES	NO	bd	bd	988.542
3	Total-hexafurans	34.75	7.748e3	5.706e3	1.141	1.36	1.24	87.3	YES	NO	bb	bb	0.913
4	Total-hexafurans	33.44	5.026e3	3.534e3	1.141	1.42	1.24	38.8	YES	NO	db	bb	0.581
5	123789-HxCDF	36.93	7.107e6	5.643e6	1.137	1.26	1.24	69330.3	YES	NO	bb	bb	962.631
6	Total-hexafurans	36.53	1.628e4	1.267e4	1.141	1.29	1.24	124.4	YES	NO	dd	bd	1.966
7	Total-hexafurans	36.13	1.100e5	8.424e4	1.141	1.31	1.24	706.6	YES	NO	dd	dd	13.189
8	234678-HxCDF	35.89	8.440e6	6.648e6	1.140	1.27	1.24	79492.3	YES	NO	bd	bd	997.904

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HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.01	4.891e6	4.848e6	0.953	1.01	1.05	12213.8	YES	NO	bb	bb	1050.4...
2	Total-heptafurans	39.43	9.256e3	7.833e3	0.978	1.18	1.05	24.5	YES	NO	bb	bb	1.656
3	1234678-HpCDF	38.77	5.729e6	5.700e6	1.003	1.01	1.05	16498.3	YES	NO	bb	bb	1001.5...

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.77	1.334e6	1.787e6	0.702	0.75	0.77	11389.3	YES	NO	bb	bb	200.466
2	Total-tetrafurans	24.87	8.544e3	1.186e4	0.727	0.72	0.77	70.8	YES	NO	bb	bb	1.264
3	Total-tetrafurans	24.67	1.054e3	1.493e3	0.727	0.71	0.77	9.1	YES	NO	db	db	0.158
4	Total-tetrafurans	24.55	1.152e4	1.641e4	0.727	0.70	0.77	91.4	YES	NO	bd	bd	1.731
5	23478-PeCDF	31.27	8.034e6	5.310e6	0.786	1.51	1.55	25734.3	YES	NO	bb	bb	1006.1...
6	Total-pentafurans	31.00	7.155e3	5.348e3	0.654	1.34	1.55	24.5	YES	NO	bb	bb	1.108
7	Total-pentafurans	30.22	6.707e3	3.991e3	0.654	1.68	1.55	18.6	YES	NO	bb	bb	0.948
8	12378-PeCDF	29.93	7.598e6	4.979e6	0.679	1.53	1.55	24983.0	YES	NO	bb	bb	1049.7...
9	Total-pentafurans	29.57	3.743e3	2.429e3	0.654	1.54	1.55	12.5	YES	NO	bd	bd	0.547
10	Total-pentafurans	28.85	2.348e4	1.505e4	0.654	1.56	1.55	59.4	YES	NO	bb	bb	3.415
11	123678-HxCDF	35.04	8.729e6	6.976e6	1.091	1.25	1.24	82564.4	YES	NO	db	db	1005.9...
12	123478-HxCDF	34.90	7.954e6	6.371e6	1.166	1.25	1.24	76946.6	YES	NO	bd	bd	988.542
13	Total-hexafurans	34.75	7.748e3	5.706e3	1.141	1.36	1.24	87.3	YES	NO	bb	bb	0.913
14	Total-hexafurans	33.44	5.026e3	3.534e3	1.141	1.42	1.24	38.8	YES	NO	db	bb	0.581
15	123789-HxCDF	36.93	7.107e6	5.643e6	1.137	1.26	1.24	69330.3	YES	NO	bb	bb	962.631
16	Total-hexafurans	36.53	1.628e4	1.267e4	1.141	1.29	1.24	124.4	YES	NO	dd	bd	1.966
17	Total-hexafurans	36.13	1.100e5	8.424e4	1.141	1.31	1.24	706.6	YES	NO	dd	dd	13.189
18	234678-HxCDF	35.89	8.440e6	6.648e6	1.140	1.27	1.24	79492.3	YES	NO	bd	bd	997.904
19	1234789-HpCDF	41.01	4.891e6	4.848e6	0.953	1.01	1.05	12213.8	YES	NO	bb	bb	1050.4...
20	Total-heptafurans	39.43	9.256e3	7.833e3	0.978	1.18	1.05	24.5	YES	NO	bb	bb	1.656
21	1234678-HpCDF	38.77	5.729e6	5.700e6	1.003	1.01	1.05	16498.3	YES	NO	bb	bb	1001.5...
22	OCDF	45.25	8.007e6	9.001e6	0.778	0.89	0.89	16387...	YES	NO	bb	bb	2152.5...

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.42	1.623e6	2.053e6	1.149	0.79	0.77	15719.4	YES	NO	bb	bb	201.416
2	Total-tetradioxins	26.03	3.492e4	4.469e4	1.024	0.78	0.77	261.5	YES	NO	bb	bb	4.891
3	Total-tetradioxins	25.59	3.088e2	4.283e2	1.024	0.72	0.77	3.2	YES	NO	bb	bb	0.045
4	Total-tetradioxins	25.29	1.293e3	1.946e3	1.024	0.66	0.77	15.2	YES	NO	bb	bb	0.199

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PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentadioxins	30.29	1.049e3	6.224e2	1.502	1.68	1.55	4.4	YES	NO	dd	db	0.090
2	Total-pentadioxins	30.15	1.847e3	1.302e3	1.502	1.42	1.55	8.1	YES	NO	dd	dd	0.170
3	Total-pentadioxins	29.93	6.137e3	4.352e3	1.502	1.41	1.55	24.1	YES	NO	bd	bd	0.567
4	12378-PeCDD	31.53	7.500e6	4.933e6	1.022	1.52	1.55	35906.6	YES	NO	bb	bb	987.154
5	Total-pentadioxins	30.86	8.777e3	5.596e3	1.502	1.57	1.55	39.8	YES	NO	bd	bb	0.776

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexadioxins	36.92	3.612e4	2.906e4	1.005	1.24	1.24	377.1	YES	NO	bb	bb	5.383
2	123789-HxCDD	36.52	6.387e6	5.242e6	0.907	1.22	1.24	81996.1	YES	NO	bb	bb	1063.9...
3	123678-HxCDD	36.14	6.944e6	5.798e6	1.001	1.20	1.24	87214.8	YES	NO	db	db	1011.1...
4	123478-HxCDD	36.02	6.446e6	5.113e6	0.996	1.26	1.24	82869.7	YES	NO	bd	bd	1008.7...

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptadioxins	40.66	1.670e2	1.486e2	1.088	1.12	1.05	0.0	NO	NO	bb	bb	0.028
2	1234678-HpCDD	40.27	5.468e6	5.342e6	1.039	1.02	1.05	19002.3	YES	NO	bb	bb	1010.6...

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:35:04 Pacific Standard Time

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.42	1.623e6	2.053e6	1.149	0.79	0.77	15719.4	YES	NO	bb	bb	201.416
2	Total-tetradioxins	26.03	3.492e4	4.469e4	1.024	0.78	0.77	261.5	YES	NO	bb	bb	4.891
3	Total-tetradioxins	25.59	3.088e2	4.283e2	1.024	0.72	0.77	3.2	YES	NO	bb	bb	0.045
4	Total-tetradioxins	25.29	1.293e3	1.946e3	1.024	0.66	0.77	15.2	YES	NO	bb	bb	0.199
5	Total-pentadioxins	30.29	1.049e3	6.224e2	1.502	1.68	1.55	4.4	YES	NO	dd	db	0.090
6	Total-pentadioxins	30.15	1.847e3	1.302e3	1.502	1.42	1.55	8.1	YES	NO	dd	dd	0.170
7	Total-pentadioxins	29.93	6.137e3	4.352e3	1.502	1.41	1.55	24.1	YES	NO	bd	bd	0.567
8	12378-PeCDD	31.53	7.500e6	4.933e6	1.022	1.52	1.55	35906.6	YES	NO	bb	bb	987.154
9	Total-pentadioxins	30.86	8.777e3	5.596e3	1.502	1.57	1.55	39.8	YES	NO	bd	bb	0.776
10	Total-hexadioxins	36.92	3.612e4	2.906e4	1.005	1.24	1.24	377.1	YES	NO	bb	bb	5.383
11	123789-HxCDD	36.52	6.387e6	5.242e6	0.907	1.22	1.24	81996.1	YES	NO	bb	bb	1063.9...
12	123678-HxCDD	36.14	6.944e6	5.798e6	1.001	1.20	1.24	87214.8	YES	NO	db	db	1011.1...
13	123478-HxCDD	36.02	6.446e6	5.113e6	0.996	1.26	1.24	82869.7	YES	NO	bd	bd	1008.7...
14	Total-heptadioxins	40.66	1.670e2	1.486e2	1.088	1.12	1.05	0.0	NO	NO	bb	bb	0.028
15	1234678-HpCDD	40.27	5.468e6	5.342e6	1.039	1.02	1.05	19002.3	YES	NO	bb	bb	1010.6...
16	OCDD	45.01	8.523e6	9.997e6	0.920	0.85	0.89	89206.2	YES	NO	bb	bb	1981.7...

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.77	1.334e6	1.787e6	0.702	0.75	0.77	11389.3	YES	NO	bb	bb	200.466
2	Total-tetrafurans	24.87	8.544e3	1.186e4	0.727	0.72	0.77	70.8	YES	NO	bb	bb	1.264
3	Total-tetrafurans	24.67	1.054e3	1.493e3	0.727	0.71	0.77	9.1	YES	NO	db	db	0.158
4	Total-tetrafurans	24.55	1.152e4	1.641e4	0.727	0.70	0.77	91.4	YES	NO	bd	bd	1.731
5	23478-PeCDF	31.27	8.034e6	5.310e6	0.786	1.51	1.55	25734.3	YES	NO	bb	bb	1006.1...
6	Total-pentafurans	31.00	7.155e3	5.348e3	0.654	1.34	1.55	24.5	YES	NO	bb	bb	1.108
7	Total-pentafurans	30.22	6.707e3	3.991e3	0.654	1.68	1.55	18.6	YES	NO	bb	bb	0.948
8	12378-PeCDF	29.93	7.598e6	4.979e6	0.679	1.53	1.55	24983.0	YES	NO	bb	bb	1049.7...
9	Total-pentafurans	29.57	3.743e3	2.429e3	0.654	1.54	1.55	12.5	YES	NO	bd	bd	0.547
10	Total-pentafurans	28.85	2.348e4	1.505e4	0.654	1.56	1.55	59.4	YES	NO	bb	bb	3.415
11	123678-HxCDF	35.04	8.729e6	6.976e6	1.091	1.25	1.24	82564.4	YES	NO	db	db	1005.9...
12	123478-HxCDF	34.90	7.954e6	6.371e6	1.166	1.25	1.24	76946.6	YES	NO	bd	bd	988.542
13	Total-hexafurans	34.75	7.748e3	5.706e3	1.141	1.36	1.24	87.3	YES	NO	bb	bb	0.913
14	Total-hexafurans	33.44	5.026e3	3.534e3	1.141	1.42	1.24	38.8	YES	NO	db	bb	0.581
15	123789-HxCDF	36.93	7.107e6	5.643e6	1.137	1.26	1.24	69330.3	YES	NO	bb	bb	962.631
16	Total-hexafurans	36.53	1.628e4	1.267e4	1.141	1.29	1.24	124.4	YES	NO	dd	bd	1.966
17	Total-hexafurans	36.13	1.100e5	8.424e4	1.141	1.31	1.24	706.6	YES	NO	dd	dd	13.189
18	234678-HxCDF	35.89	8.440e6	6.648e6	1.140	1.27	1.24	79492.3	YES	NO	bd	bd	997.904
19	1234789-HpCDF	41.01	4.891e6	4.848e6	0.953	1.01	1.05	12213.8	YES	NO	bb	bb	1050.4...
20	Total-heptafurans	39.43	9.256e3	7.833e3	0.978	1.18	1.05	24.5	YES	NO	bb	bb	1.656
21	1234678-HpCDF	38.77	5.729e6	5.700e6	1.003	1.01	1.05	16498.3	YES	NO	bb	bb	1001.5...
22	OCDF	45.25	8.007e6	9.001e6	0.778	0.89	0.89	16387...	YES	NO	bb	bb	2152.5...
23	2378-TCDD	26.42	1.623e6	2.053e6	1.149	0.79	0.77	15719.4	YES	NO	bb	bb	201.416
24	Total-tetradioxins	26.03	3.492e4	4.469e4	1.024	0.78	0.77	261.5	YES	NO	bb	bb	4.891
25	Total-tetradioxins	25.59	3.088e2	4.283e2	1.024	0.72	0.77	3.2	YES	NO	bb	bb	0.045
26	Total-tetradioxins	25.29	1.293e3	1.946e3	1.024	0.66	0.77	15.2	YES	NO	bb	bb	0.199
27	Total-pentadioxins	30.29	1.049e3	6.224e2	1.502	1.68	1.55	4.4	YES	NO	dd	db	0.090
28	Total-pentadioxins	30.15	1.847e3	1.302e3	1.502	1.42	1.55	8.1	YES	NO	dd	dd	0.170
29	Total-pentadioxins	29.93	6.137e3	4.352e3	1.502	1.41	1.55	24.1	YES	NO	bd	bd	0.567
30	12378-PeCDD	31.53	7.500e6	4.933e6	1.022	1.52	1.55	35906.6	YES	NO	bb	bb	987.154
31	Total-pentadioxins	30.86	8.777e3	5.596e3	1.502	1.57	1.55	39.8	YES	NO	bd	bb	0.776
32	Total-hexadioxins	36.92	3.612e4	2.906e4	1.005	1.24	1.24	377.1	YES	NO	bb	bb	5.383
33	123789-HxCDD	36.52	6.387e6	5.242e6	0.907	1.22	1.24	81996.1	YES	NO	bb	bb	1063.9...
34	123678-HxCDD	36.14	6.944e6	5.798e6	1.001	1.20	1.24	87214.8	YES	NO	db	db	1011.1...
35	123478-HxCDD	36.02	6.446e6	5.113e6	0.996	1.26	1.24	82869.7	YES	NO	bd	bd	1008.7...
36	Total-heptadioxins	40.66	1.670e2	1.486e2	1.088	1.12	1.05	0.0	NO	NO	bb	bb	0.028
37	1234678-HpCDD	40.27	5.468e6	5.342e6	1.039	1.02	1.05	19002.3	YES	NO	bb	bb	1010.6...

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	OCDD	45.01	8.523e6	9.997e6	0.920	0.85	0.89	89206.2	YES	NO	bb	bb	1981.7...

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	23.64	6.068e3					0.7	NO		bb		
2	FUNCTION1 PFK	21.78	2.376e4					1.4	NO		bb		
3	FUNCTION1 PFK	26.65	6.322e3					0.8	NO		bb		
4	FUNCTION1 PFK	26.20	6.018e3					0.7	NO		bb		
5	FUNCTION1 PFK	24.62	4.147e4					1.9	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	31.96	1.329e6					11.3	YES		db		0.000
2	FUNCTION2 PFK	29.68	9.729e6					13.1	YES		dd		0.000
3	FUNCTION2 PFK	29.12	3.197e6					12.0	YES		dd		0.000
4	FUNCTION2 PFK	28.11	2.639e5					6.8	YES		bd		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	35.58	5.268e3					0.6	NO		bb		0.000
2	FUNCTION3 PFK	35.20	2.459e4					1.4	NO		bb		0.000
3	FUNCTION3 PFK	34.94	1.904e4					1.3	NO		bb		0.000
4	FUNCTION3 PFK	34.64	1.893e4					1.6	NO		bb		0.000
5	FUNCTION3 PFK	34.45	3.091e4					1.7	NO		bb		0.000
6	FUNCTION3 PFK	34.20	2.876e3					0.6	NO		bb		0.000
7	FUNCTION3 PFK	34.01	8.291e4					2.8	NO		bb		0.000
8	FUNCTION3 PFK	37.45	2.878e4					1.5	NO		bb		0.000
9	FUNCTION3 PFK	37.14	1.025e4					1.2	NO		bb		0.000
10	FUNCTION3 PFK	36.92	2.201e4					1.4	NO		bb		0.000
11	FUNCTION3 PFK	36.82	6.882e3					0.7	NO		bb		0.000
12	FUNCTION3 PFK	36.27	2.697e4					1.6	NO		bb		0.000
13	FUNCTION3 PFK	35.83	1.096e4					1.2	NO		bb		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.36	1.487e4					2.2	NO		db		
2	FUNCTION4 PFK	40.28	5.399e4					2.8	NO		bd		
3	FUNCTION4 PFK	39.84	7.632e3					1.3	NO		bb		
4	FUNCTION4 PFK	39.63	5.817e3					1.3	NO		bb		
5	FUNCTION4 PFK	39.58	2.233e4					2.4	NO		bb		
6	FUNCTION4 PFK	39.26	1.840e3					0.6	NO		bb		
7	FUNCTION4 PFK	39.15	1.821e4					2.0	NO		bb		
8	FUNCTION4 PFK	38.75	4.539e3					0.9	NO		bb		
9	FUNCTION4 PFK	38.40	3.735e3					0.9	NO		bb		
10	FUNCTION4 PFK	42.22	2.101e4					1.9	NO		bb		
11	FUNCTION4 PFK	41.91	9.871e3					1.2	NO		bb		
12	FUNCTION4 PFK	41.56	2.609e4					2.3	NO		bb		
13	FUNCTION4 PFK	40.96	8.343e3					1.4	NO		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.55	1.986e4					1.8	NO		bb		
2	FUNCTION5 PFK	44.84	1.038e4					2.0	NO		bb		
3	FUNCTION5 PFK	44.32	5.641e3					1.1	NO		bb		
4	FUNCTION5 PFK	44.16	5.508e3					1.3	NO		bb		
5	FUNCTION5 PFK	43.92	3.533e3					1.2	NO		bb		
6	FUNCTION5 PFK	43.74	1.099e4					1.6	NO		bb		
7	FUNCTION5 PFK	43.65	5.197e4					3.3	YES		db		
8	FUNCTION5 PFK	43.53	1.828e4					2.1	NO		bd		
9	FUNCTION5 PFK	42.94	8.618e3					1.5	NO		bb		
10	FUNCTION5 PFK	42.73	1.271e3					0.6	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.02	8.181e1					1.9	NO		bb		0.000
2	FUNCTION1 HXCD...	26.42	2.971e2					5.1	YES		bb		0.000
3	FUNCTION1 HXCD...	25.83	8.848e1					2.3	NO		db		0.000
4	FUNCTION1 HXCD...	25.77	1.170e2					2.5	NO		dd		0.000
5	FUNCTION1 HXCD...	25.59	1.285e2					2.6	NO		bd		0.000
6	FUNCTION1 HXCD...	24.84	1.183e2					1.2	NO		bb		0.000
7	FUNCTION1 HXCD...	24.11	7.501e1					1.5	NO		bb		0.000
8	FUNCTION1 HXCD...	22.26	7.865e1					3.6	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.55	8.739e2					12.4	YES		bb		0.000
2	FUNCTION2 HPCD...	31.16	9.100e3					161.2	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.02	1.011e3					23.2	YES		dd		0.000
2	FUNCTION3 OCDPE	35.92	4.171e2					12.8	YES		bd		0.000
3	FUNCTION3 OCDPE	35.05	6.001e2					12.0	YES		db		0.000
4	FUNCTION3 OCDPE	34.90	4.386e2					11.4	YES		bd		0.000
5	FUNCTION3 OCDPE	36.94	5.713e2					12.4	YES		bb		0.000
6	FUNCTION3 OCDPE	36.52	9.647e2					21.7	YES		bb		0.000
7	FUNCTION3 OCDPE	36.14	1.116e3					24.0	YES		db		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.03	4.935e2					7.5	YES		bb		0.000
2	FUNCTION4 NCDPE	40.28	7.486e2					12.2	YES		bb		0.000
3	FUNCTION4 NCDPE	38.78	6.004e2					9.6	YES		bb		0.000

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ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	45.26	1.761e3					22.2	YES		db		0.000
2	FUNCTION5 DCDPE	45.02	1.661e3					24.0	YES		bd		0.000

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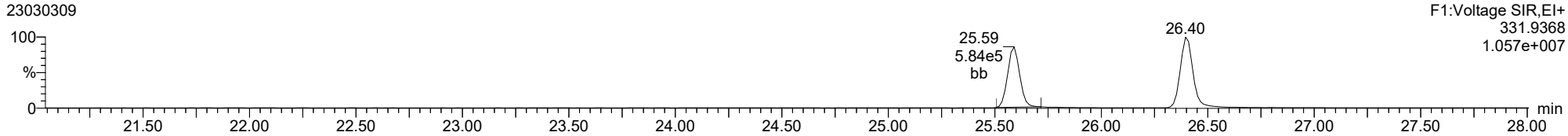

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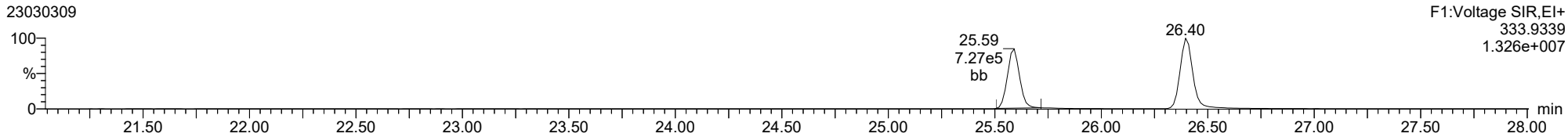

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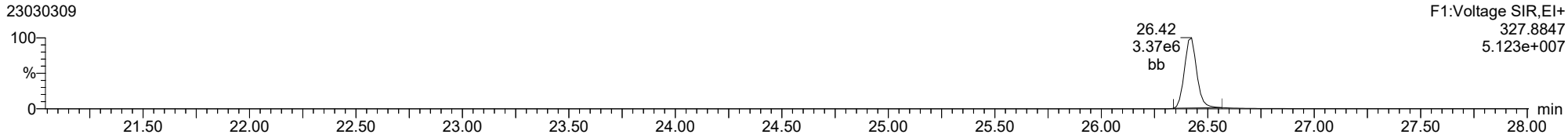

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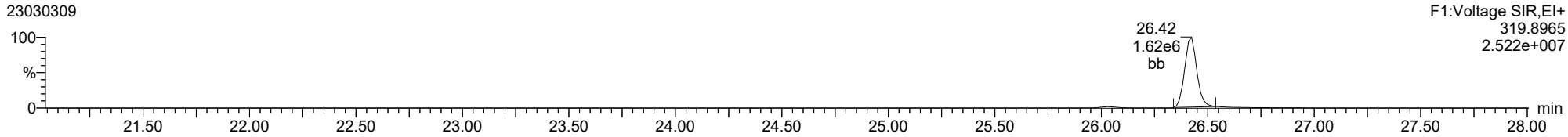

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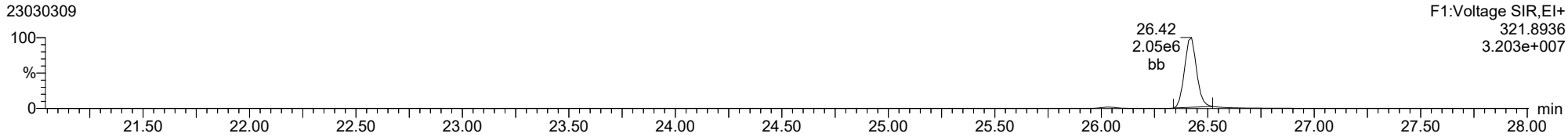

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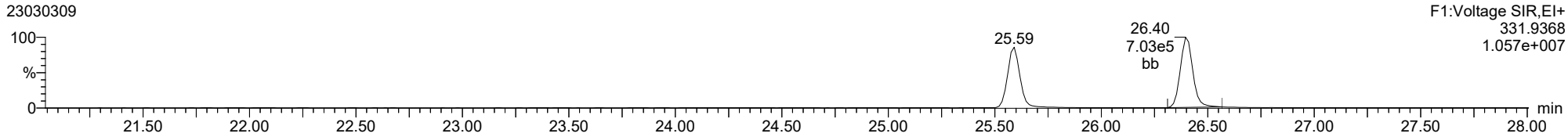

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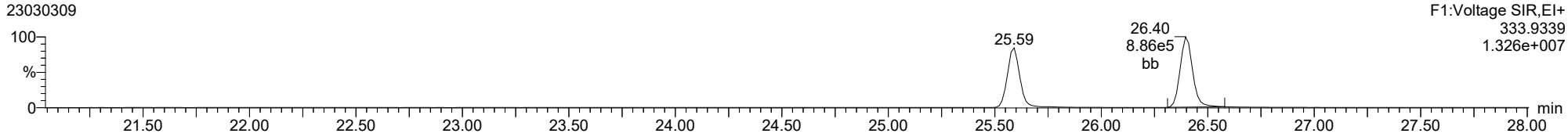

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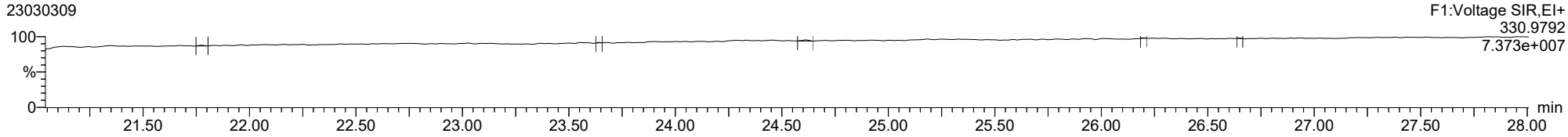

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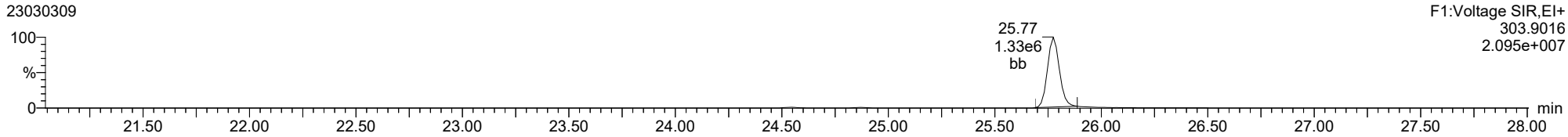

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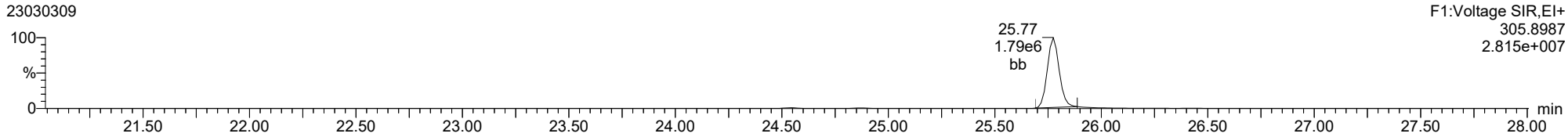

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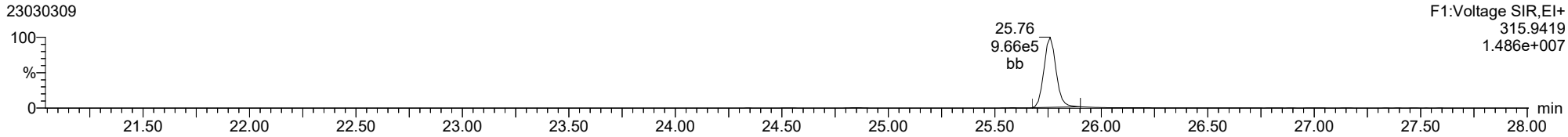

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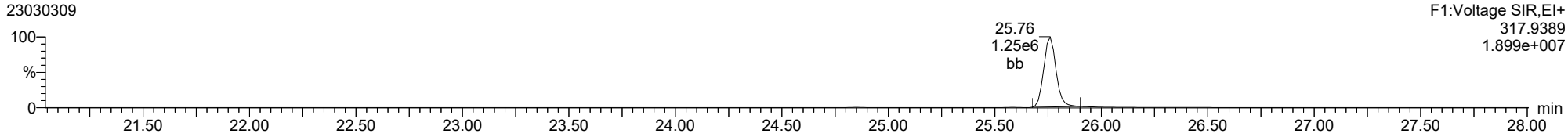

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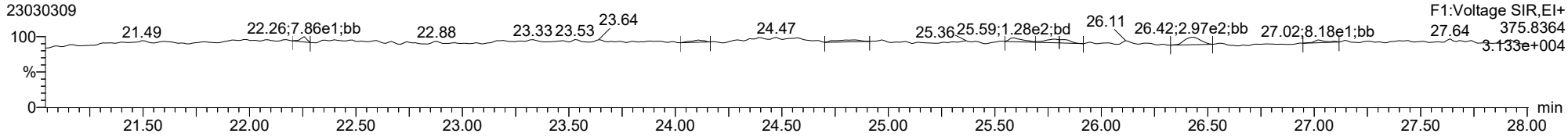

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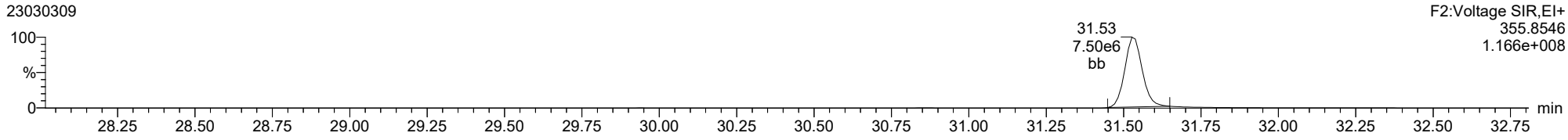
12378-PeCDD



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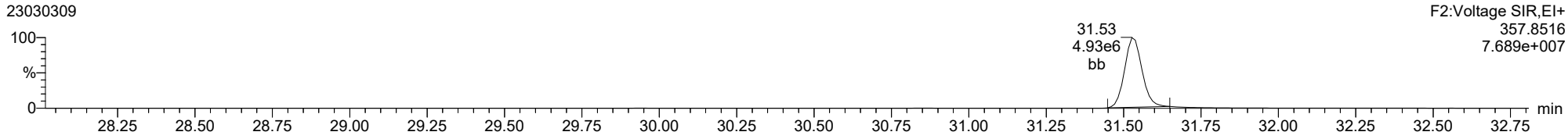

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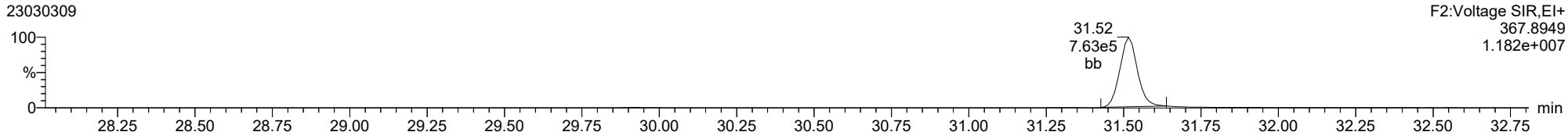

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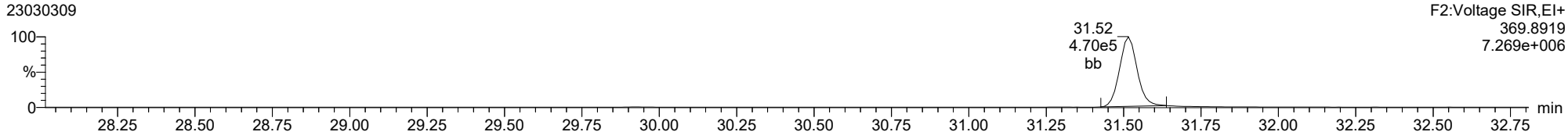

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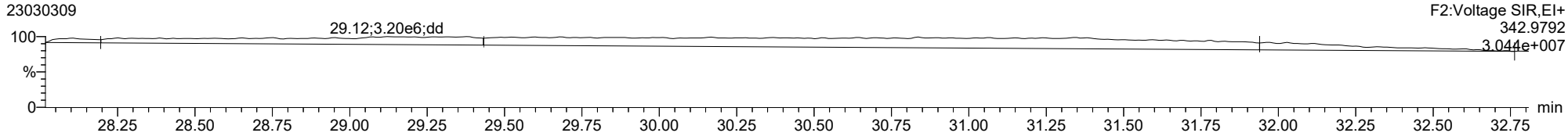

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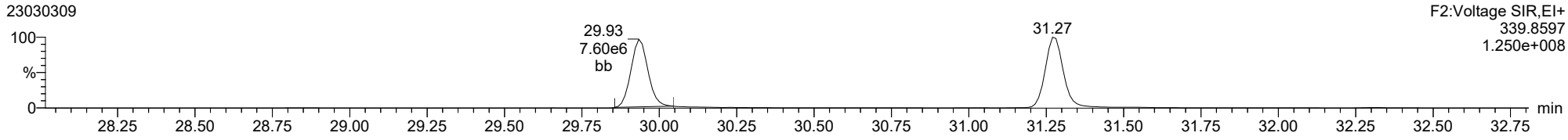

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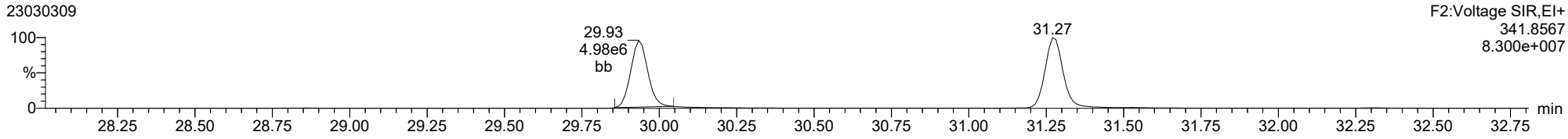

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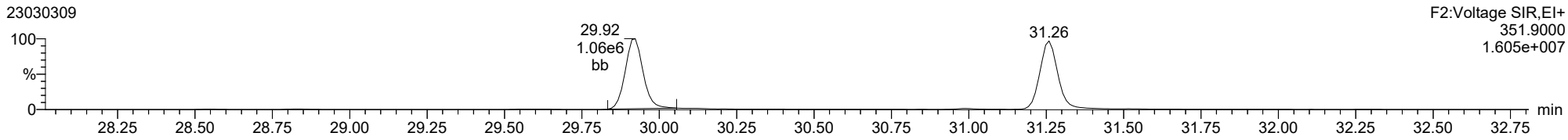

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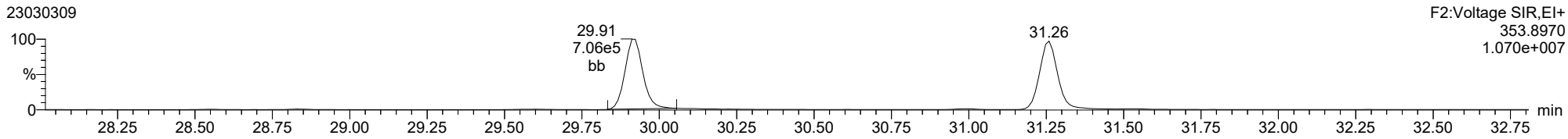
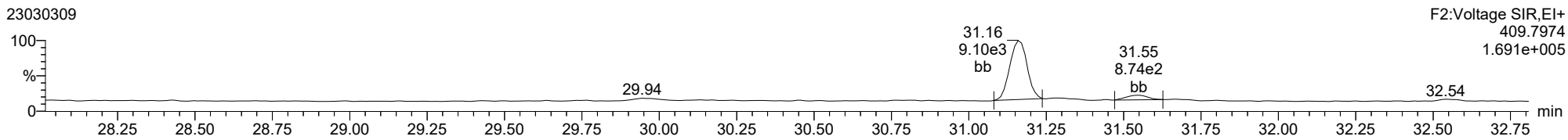


FUNCTION2 HPCDPE



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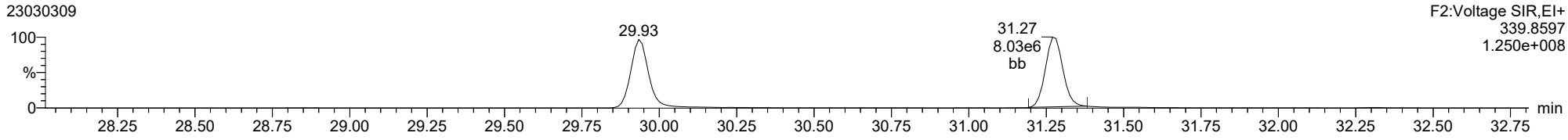
23478-PeCDF



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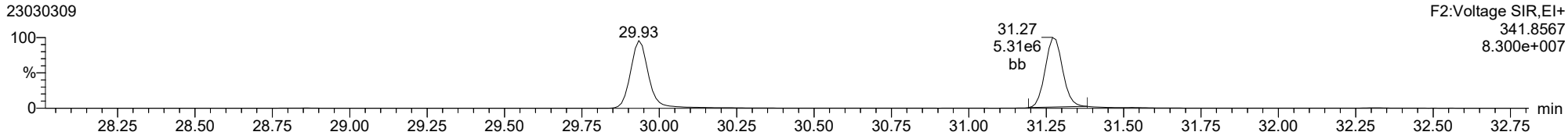

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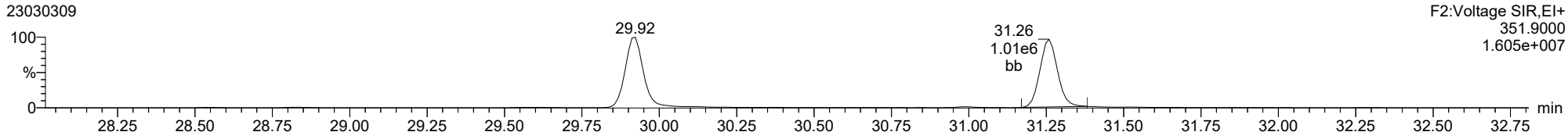

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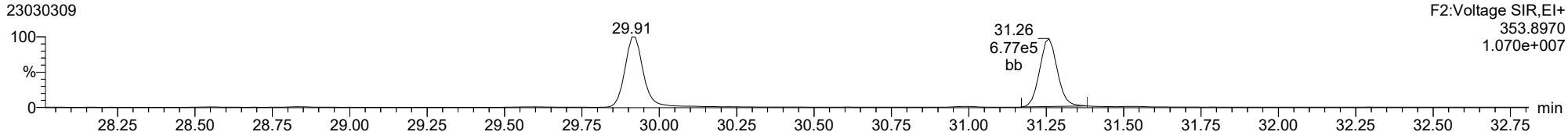

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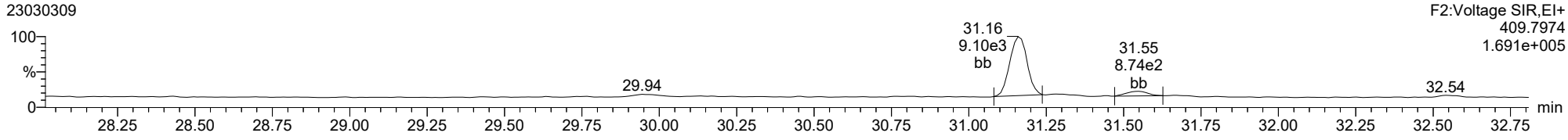

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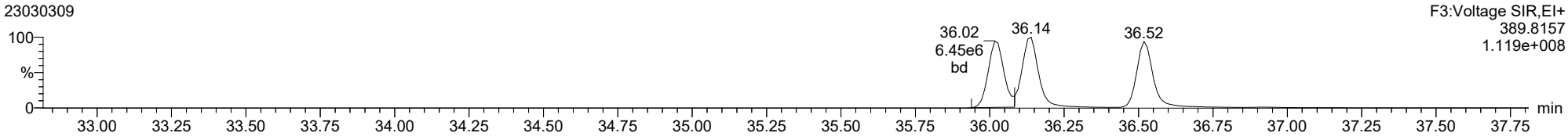

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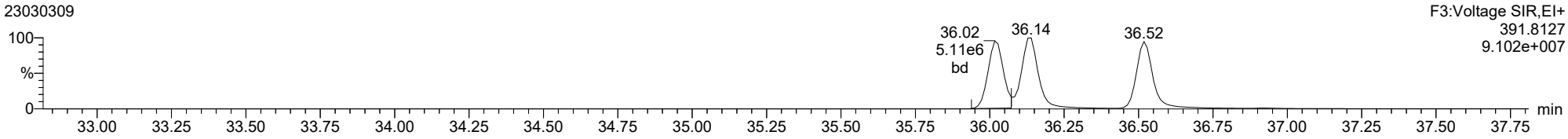

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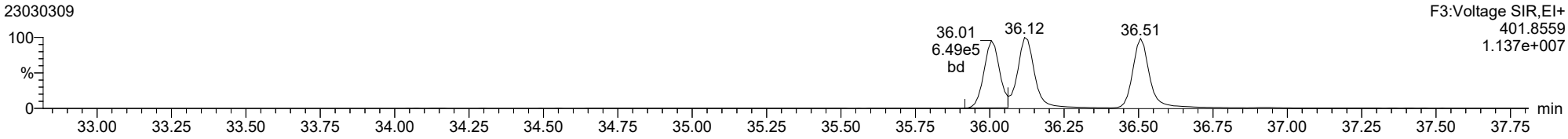

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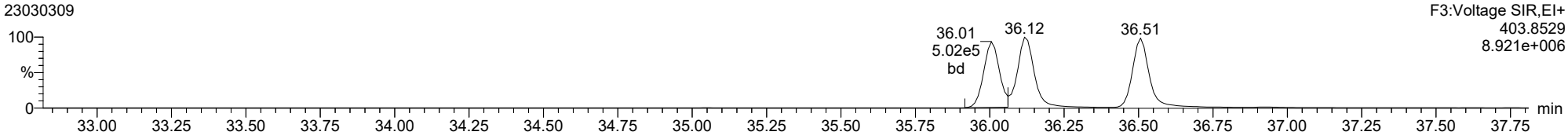

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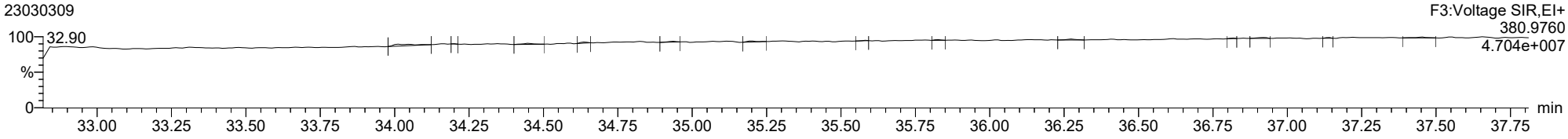

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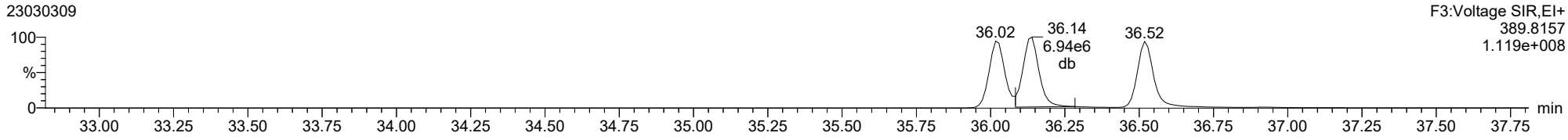

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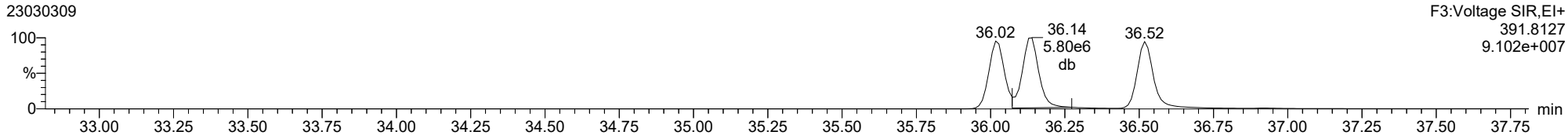

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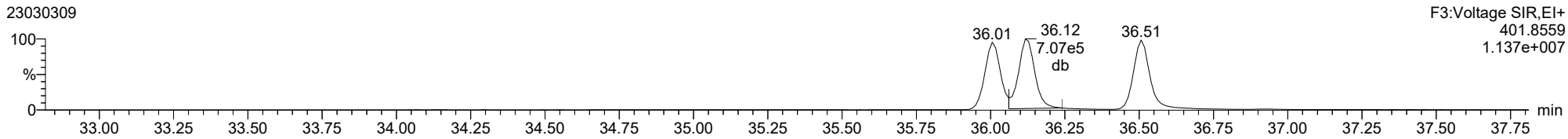

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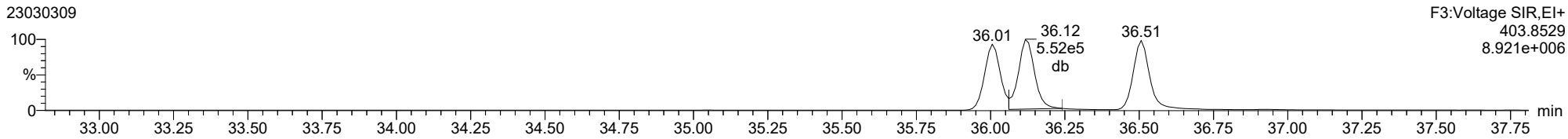

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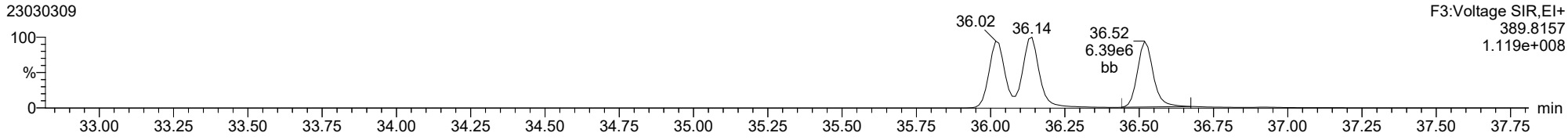

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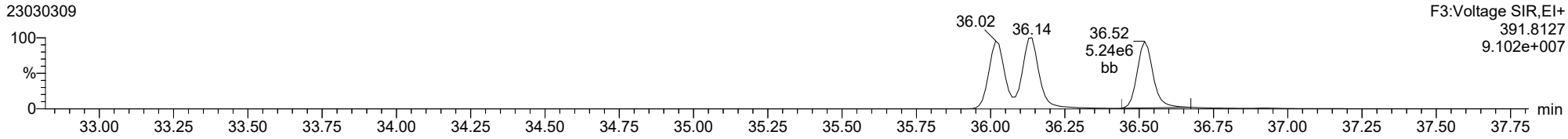

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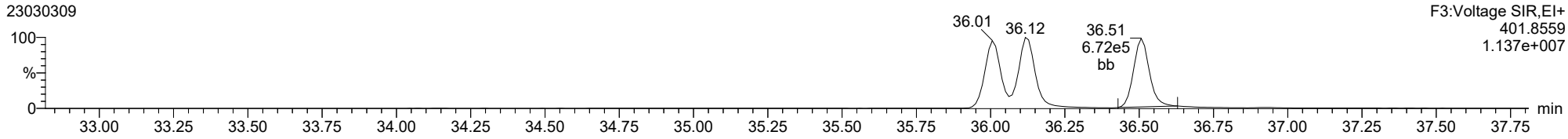

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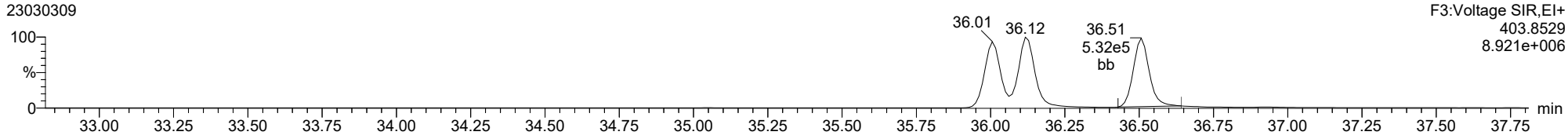

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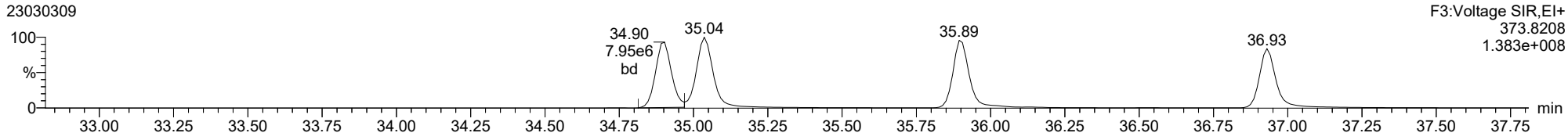

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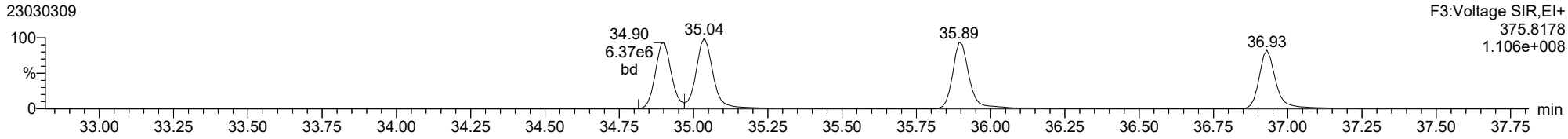

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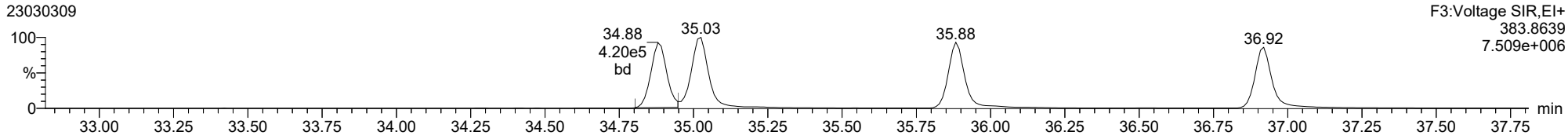

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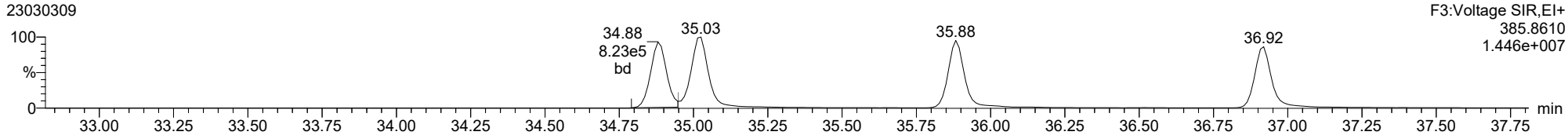

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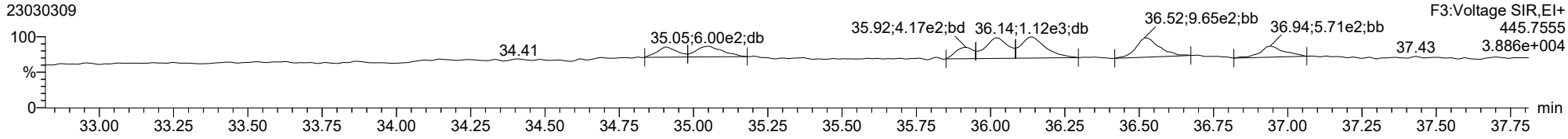

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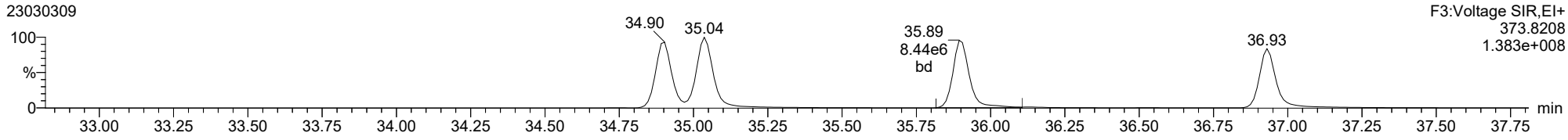

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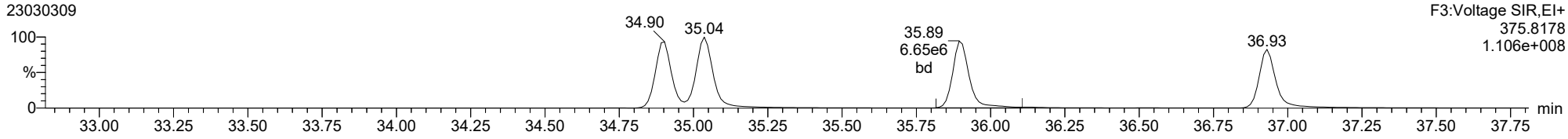

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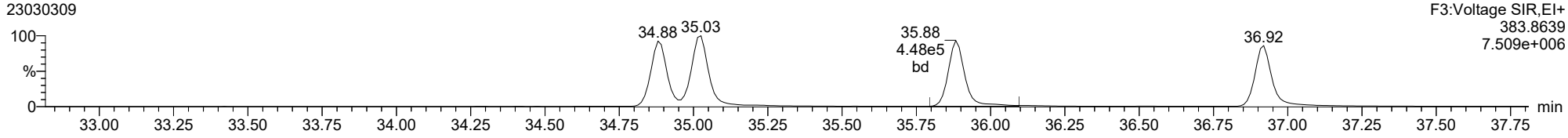

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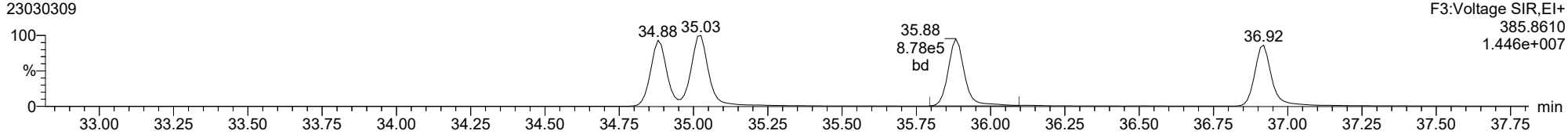

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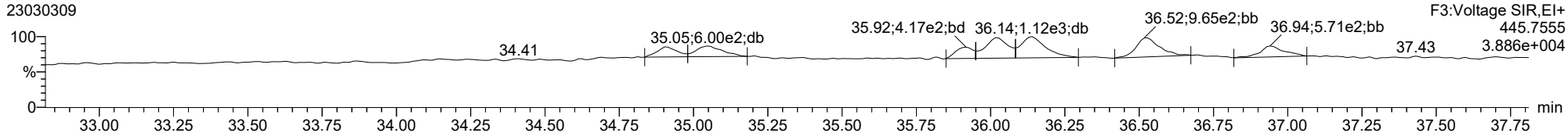

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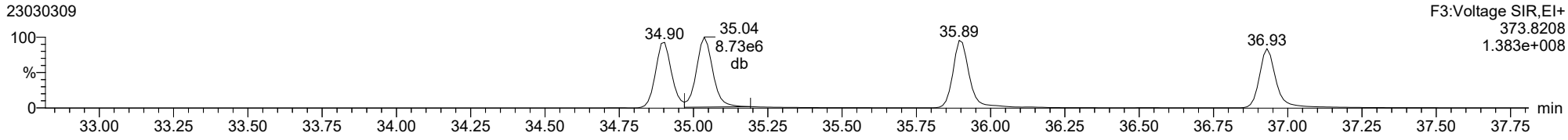

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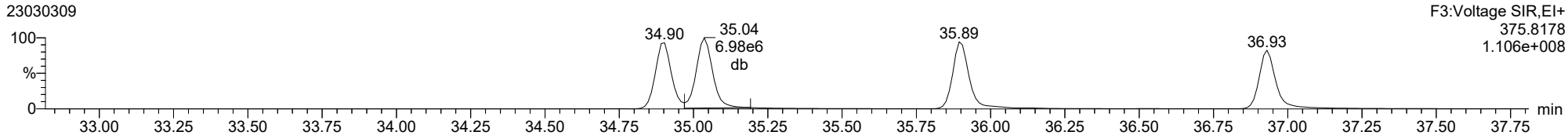

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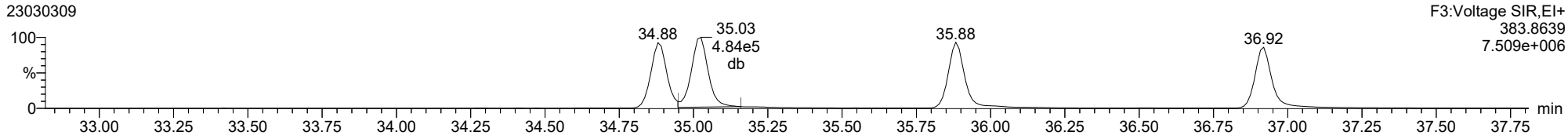

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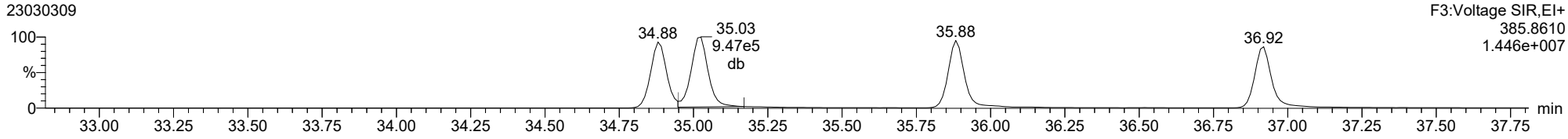

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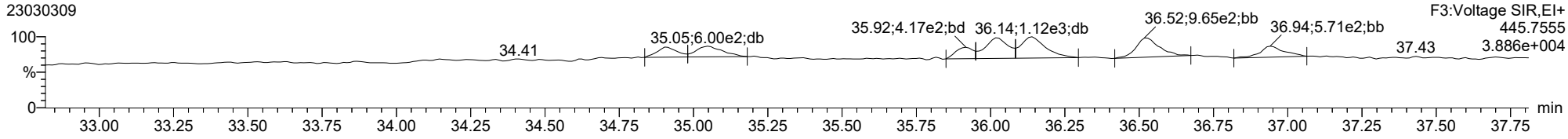

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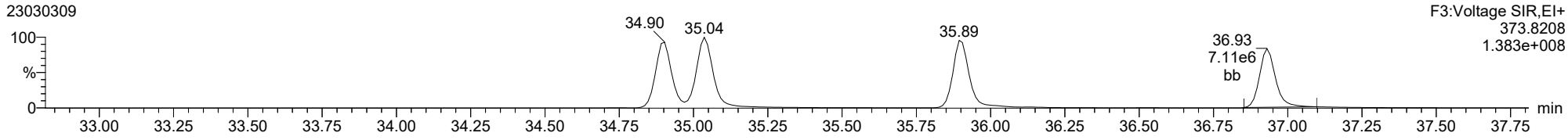

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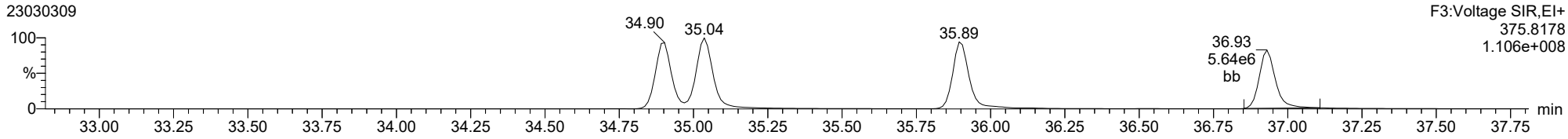

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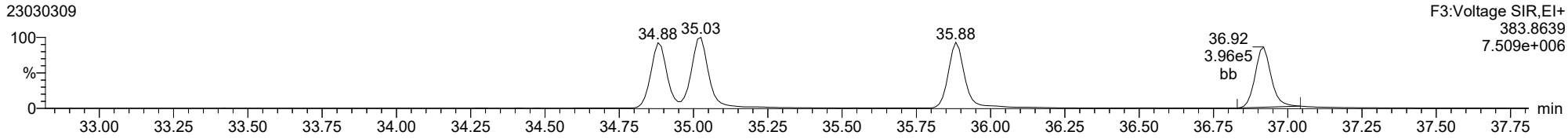

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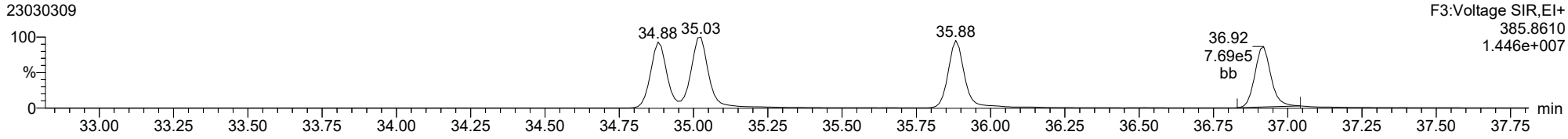

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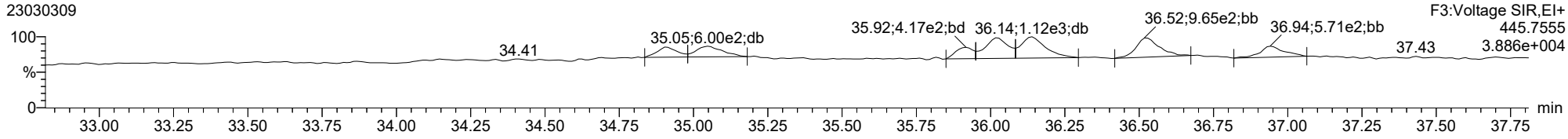

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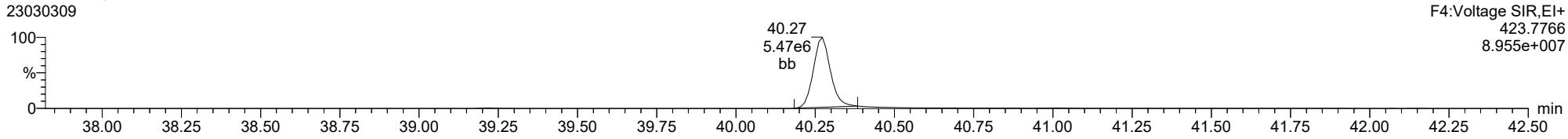

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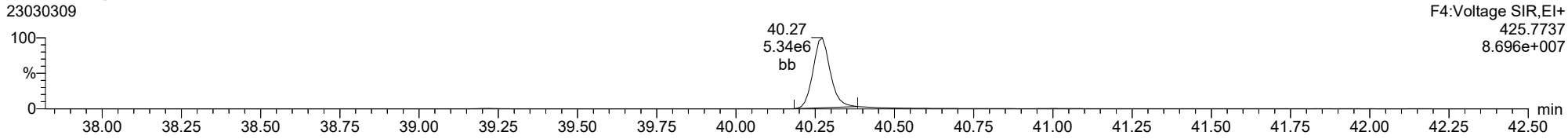

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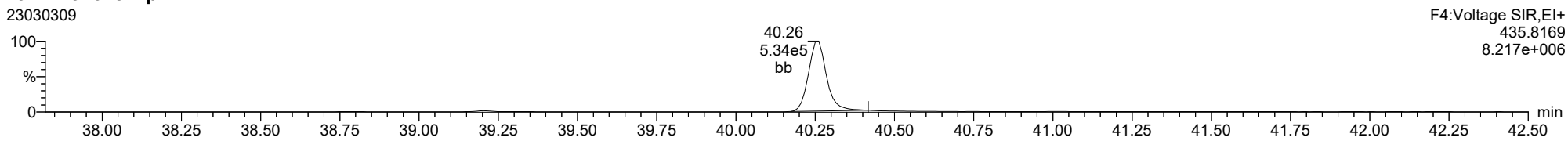

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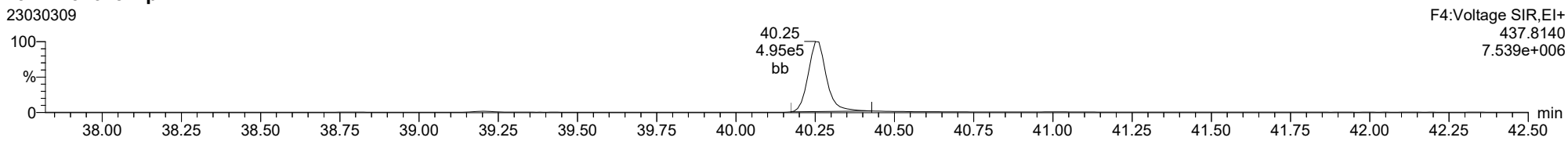

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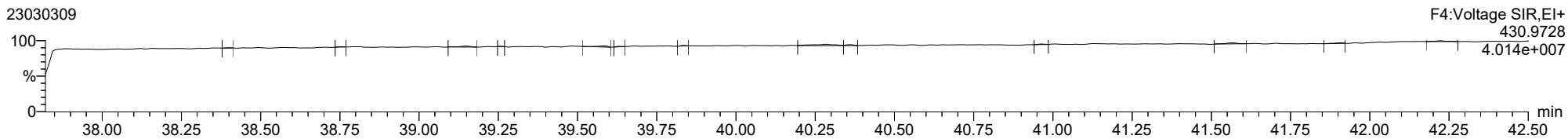

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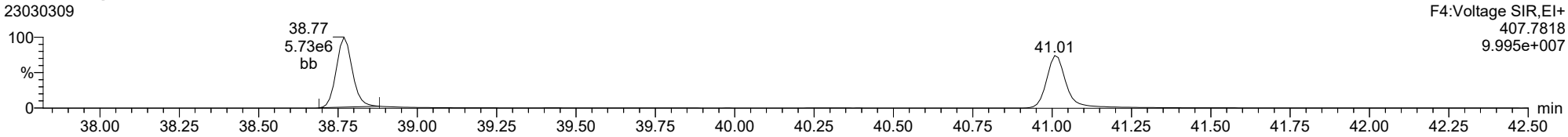

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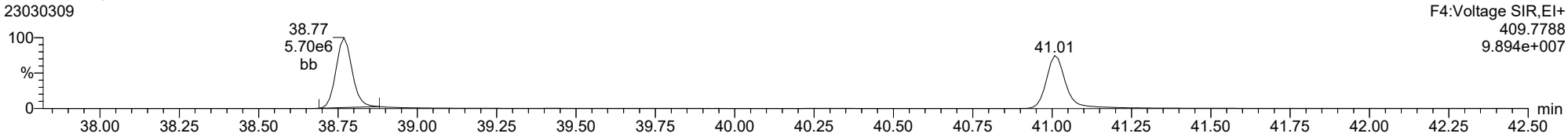

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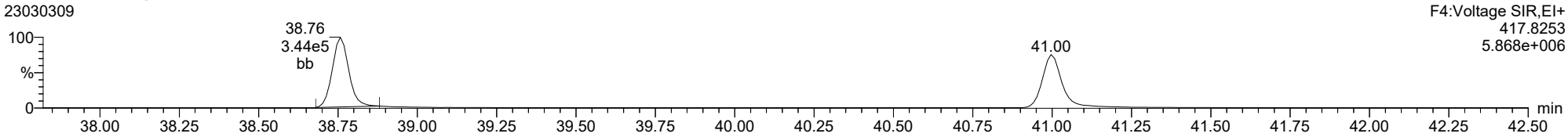

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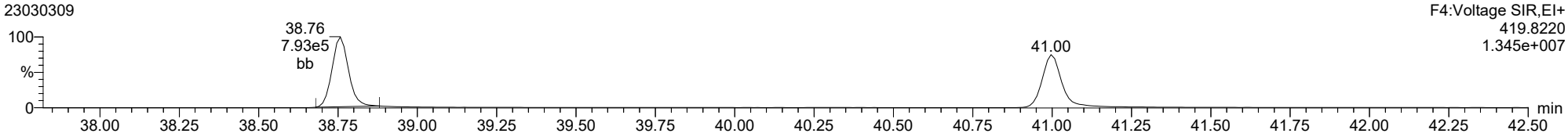

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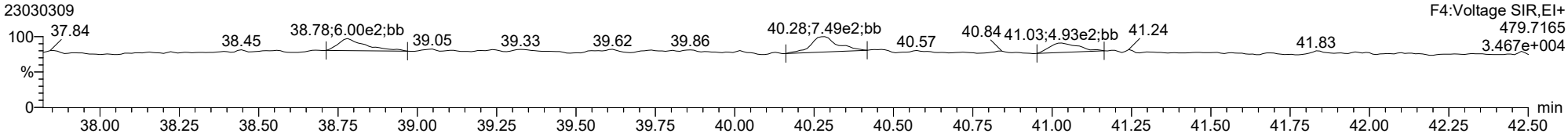

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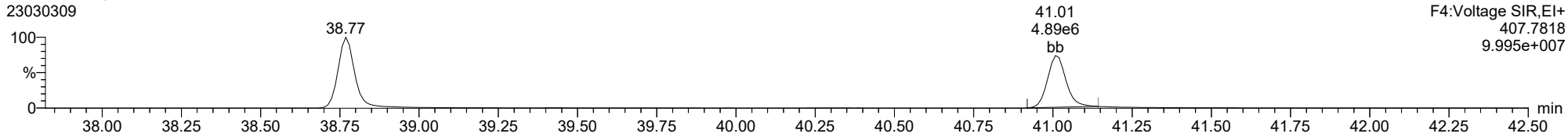

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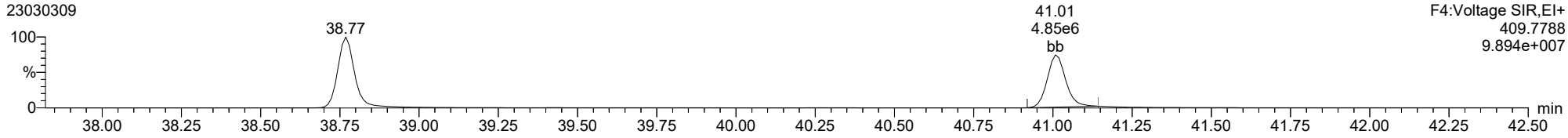

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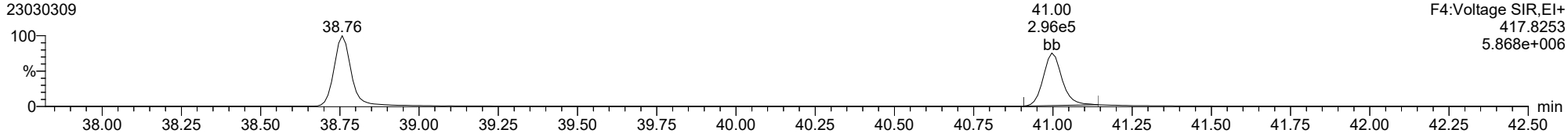

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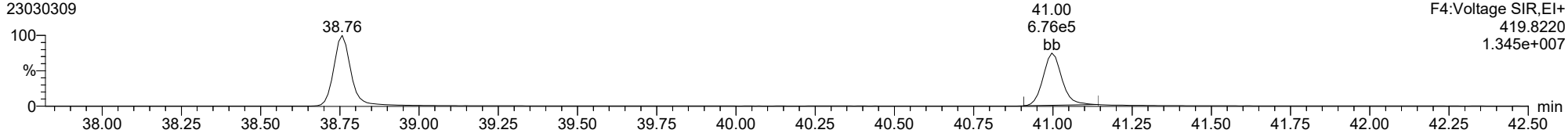

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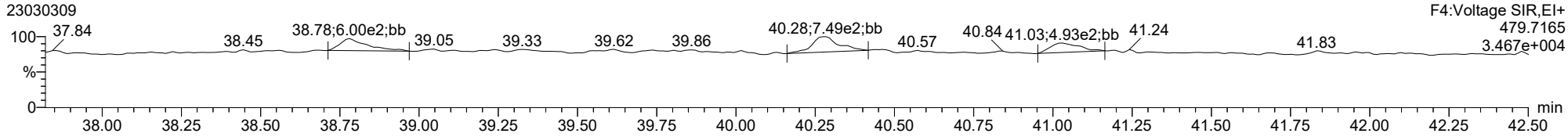

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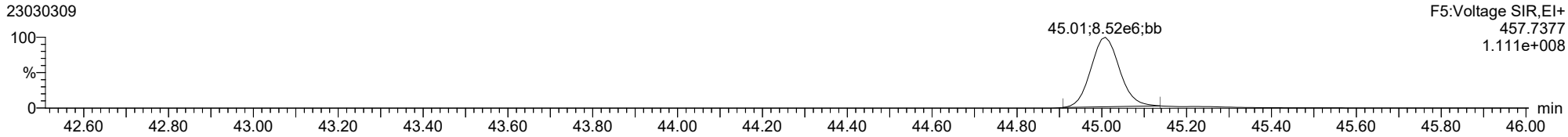

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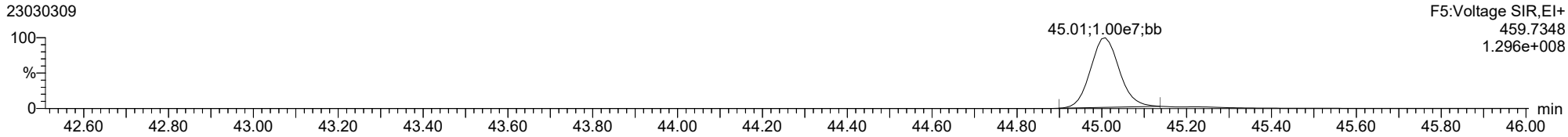

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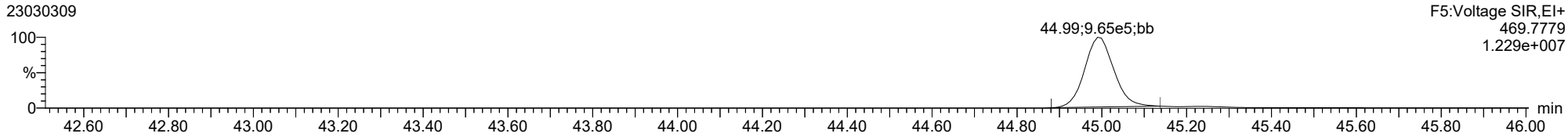

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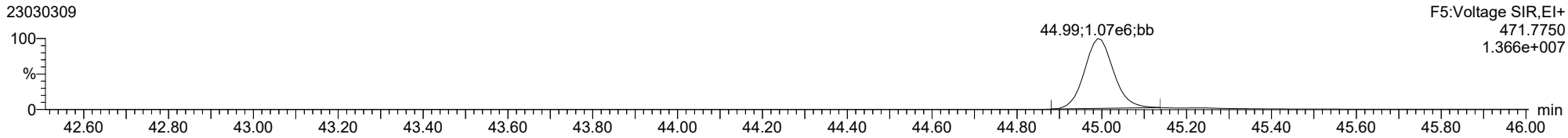

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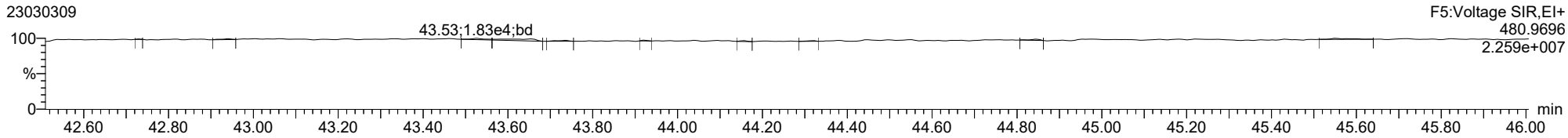

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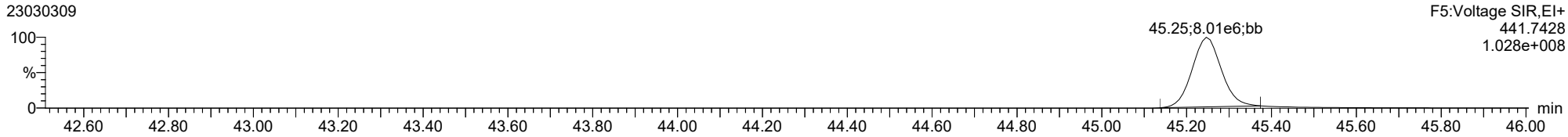
ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

OCDF



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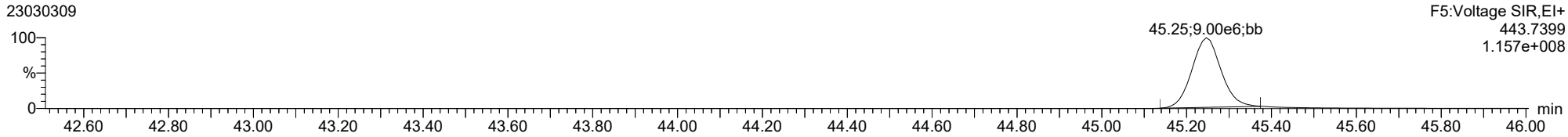

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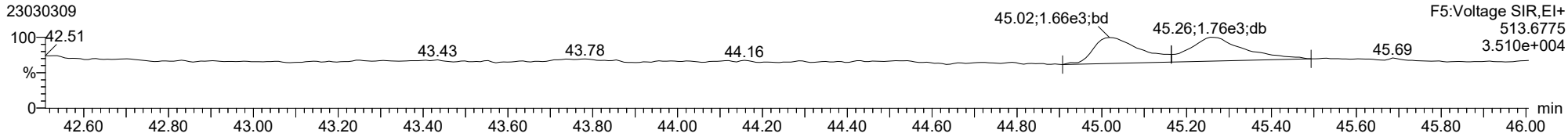

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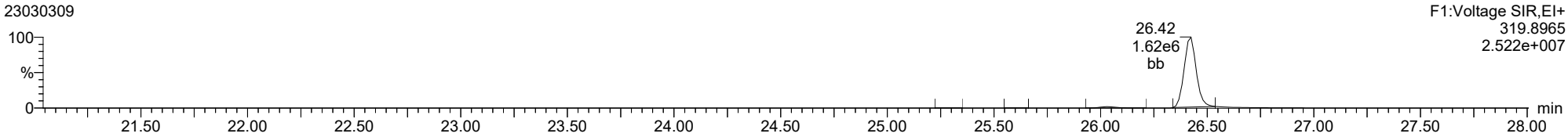
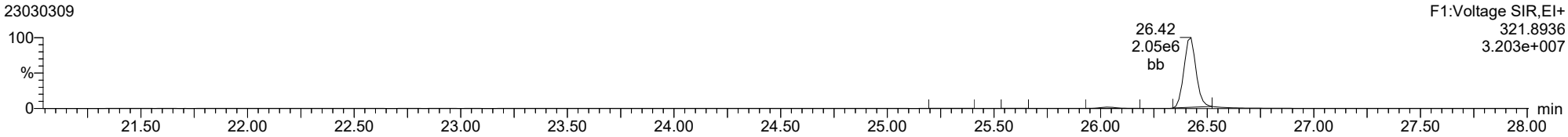
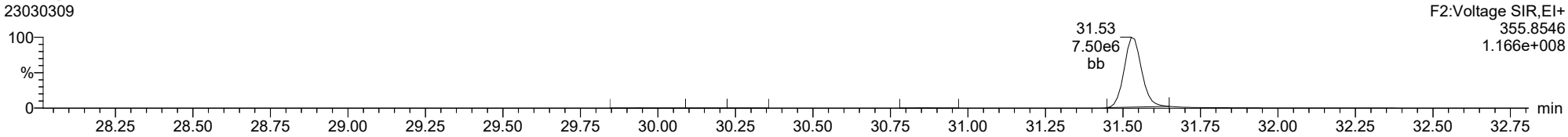
Total-tetradioxins



Total-tetradioxins



Total-pentadioxins



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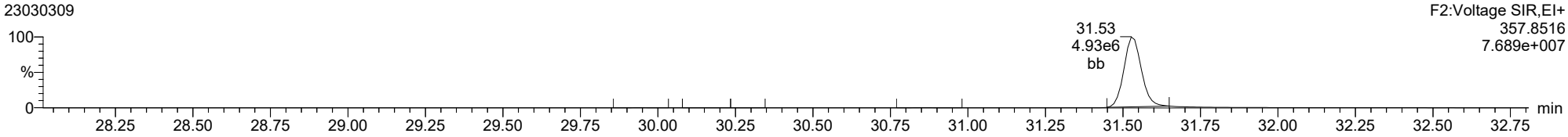

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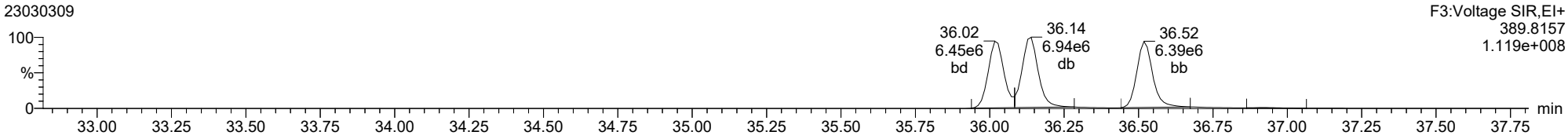
Total-hexadioxins



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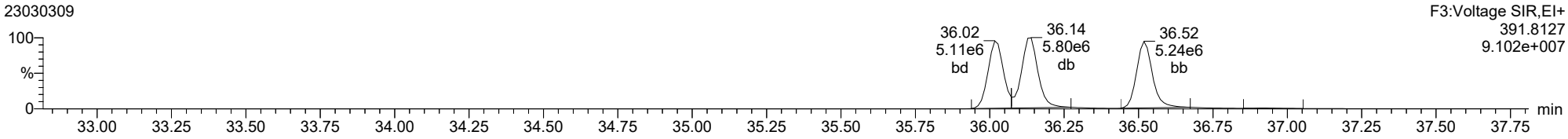

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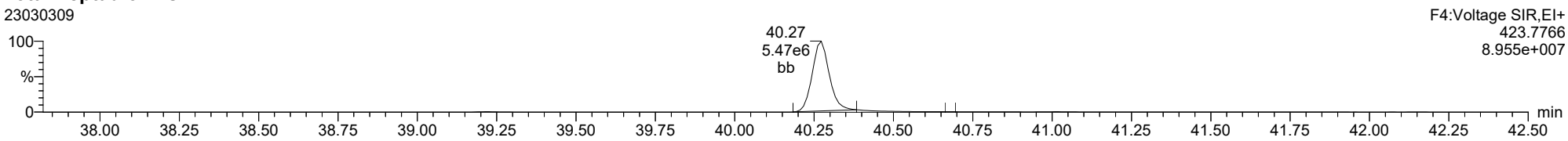

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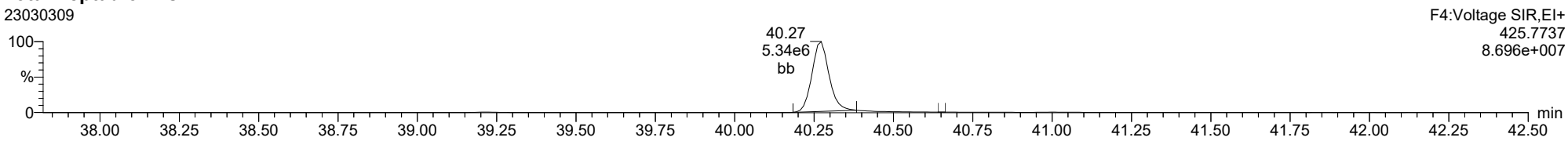

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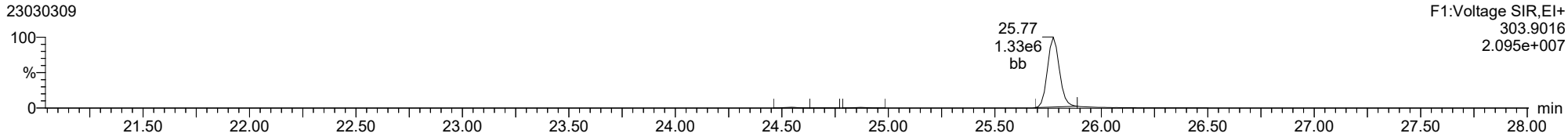
Total-tetrafurans



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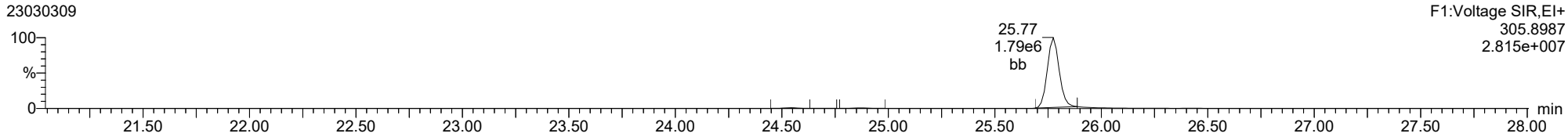

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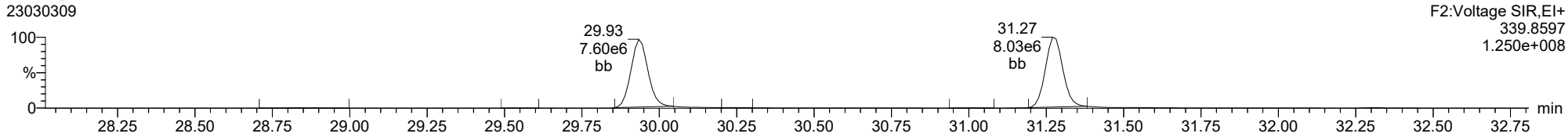

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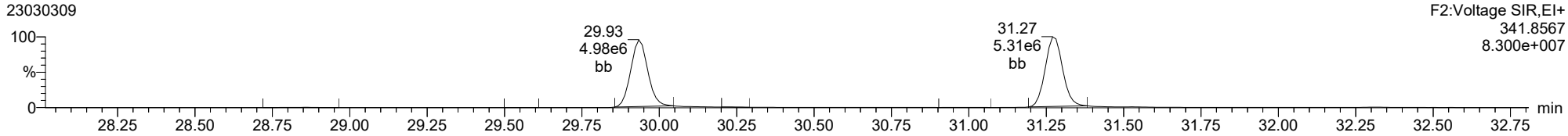

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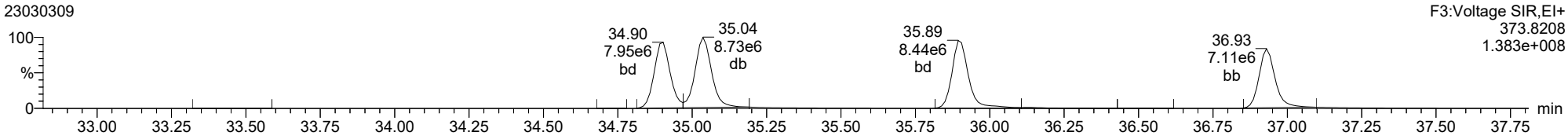
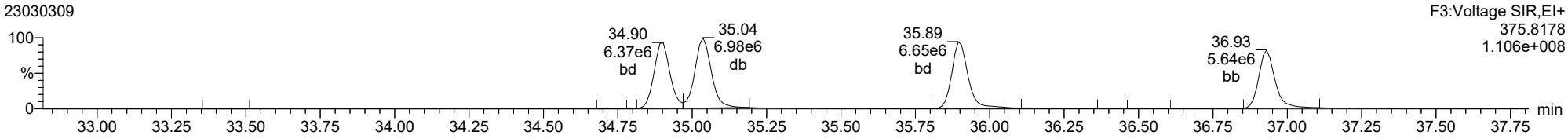
Total-hexafurans



Total-hexafurans



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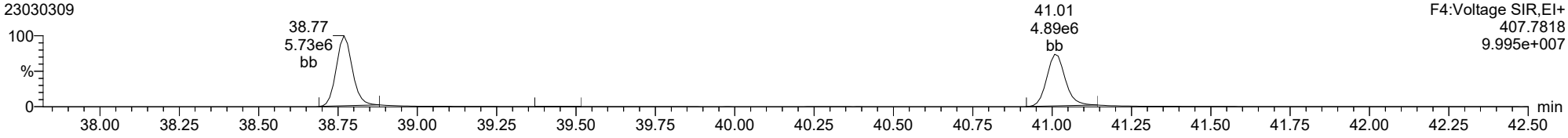

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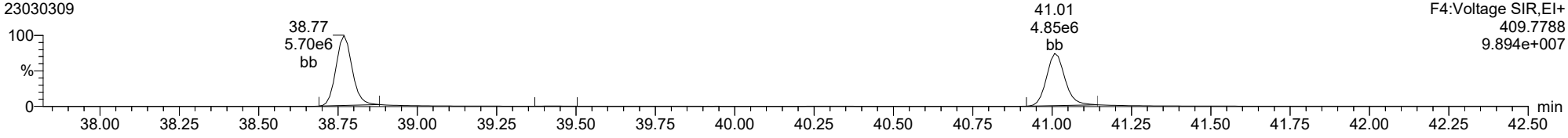

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Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.774	1.000	5.338e4	7.452e4	0.702	0.716	0.770	1163	2029	8.36e5	1.13e6	718.7	556.3	NO	bb	bb	9.838
12378-PeCDF	29.934	1.000	2.214e5	1.526e5	0.679	1.451	1.550	3022	2812	3.24e6	2.15e6	1073.8	764.7	NO	bb	bd	51.391
23478-PeCDF	31.271	1.000	2.350e5	1.508e5	0.786	1.559	1.550	3022	2812	3.42e6	2.23e6	1131.6	792.3	NO	bb	bb	48.980
123478-HxCDF	34.903	1.001	2.903e5	2.325e5	1.166	1.248	1.240	3142	2543	4.30e6	3.42e6	1370.1	1344.7	NO	bd	bd	48.245
234678-HxCDF	35.905	1.001	2.873e5	2.291e5	1.140	1.254	1.240	3142	2543	4.27e6	3.38e6	1358.7	1330.7	NO	bb	bb	50.224
123678-HxCDF	35.036	1.001	3.271e5	2.812e5	1.091	1.163	1.240	3142	2543	4.70e6	3.76e6	1497.0	1479.3	NO	db	db	47.992
123789-HxCDF	36.930	1.001	2.403e5	1.952e5	1.137	1.231	1.240	3142	2543	3.49e6	2.77e6	1110.7	1088.1	NO	bb	bb	49.077
1234678-HpCDF	38.769	1.000	2.051e5	2.017e5	1.003	1.017	1.050	2774	2508	3.29e6	3.29e6	1185.4	1309.8	NO	bb	bb	51.838
1234789-HpCDF	41.008	1.000	1.584e5	1.578e5	0.953	1.004	1.050	2774	2508	2.19e6	2.22e6	790.9	884.0	NO	bb	bb	48.461
OCDF	45.237	1.006	2.094e5	2.177e5	0.778	0.962	0.890	1876	1660	2.24e6	2.46e6	1194.3	1483.7	NO	bd	bb	103.506
2378-TCDD	26.424	1.001	6.583e4	8.225e4	1.149	0.800	0.770	1514	1206	9.92e5	1.24e6	654.9	1028.2	NO	bb	bb	9.815
12378-PeCDD	31.538	1.001	2.257e5	1.459e5	1.022	1.547	1.550	2000	2144	3.28e6	2.13e6	1638.2	994.7	NO	bb	bb	48.547
123478-HxCDD	36.016	1.000	2.316e5	1.815e5	0.996	1.276	1.240	2983	1710	3.62e6	3.01e6	1214.5	1762.3	NO	bd	bd	50.799
123678-HxCDD	36.139	1.001	2.694e5	2.159e5	1.001	1.248	1.240	2983	1710	3.76e6	3.05e6	1260.5	1785.9	NO	db	db	50.174
123789-HxCDD	36.518	1.011	2.330e5	1.844e5	0.907	1.263	1.240	2983	1710	3.29e6	2.69e6	1104.0	1571.7	NO	bd	bb	51.608
1234678-HpCDD	40.272	1.001	1.962e5	1.803e5	1.039	1.088	1.050	2922	2339	2.72e6	2.60e6	932.5	1113.0	NO	bd	bb	49.199
OCDD	44.999	1.000	2.234e5	2.618e5	0.920	0.853	0.890	1774	1393	2.65e6	3.06e6	1496.5	2199.2	NO	bb	bb	99.422
13C-2378-TCDF	25.760	1.007	7.988e5	1.054e6	1.620	0.758	0.770	2799	1492	1.21e7	1.60e7	4320.8	10737.9	NO	bb	bb	96.925
13C-12378-PeCDF	29.923	1.169	6.425e5	4.290e5	1.240	1.498	1.550	3398	4585	8.78e6	5.86e6	2583.4	1278.4	NO	bd	bd	73.193
13C-23478-PeCDF	31.259	1.222	6.035e5	3.982e5	1.118	1.515	1.550	3398	4585	8.73e6	5.79e6	2568.3	1261.6	NO	bb	bb	75.943
13C-123478-HxCDF	34.880	0.955	3.186e5	6.107e5	1.168	0.522	0.510	2913	2215	4.74e6	9.25e6	1627.4	4175.4	NO	bd	bd	92.972
13C-123678-HxCDF	35.014	0.959	3.885e5	7.735e5	1.386	0.502	0.510	2913	2215	5.29e6	1.03e7	1816.0	4636.7	NO	dd	db	97.958
13C-234678-HxCDF	35.883	0.983	3.009e5	6.013e5	1.129	0.500	0.510	2913	2215	4.56e6	8.94e6	1567.0	4037.6	NO	bb	bb	93.371
13C-123789-HxCDF	36.908	1.011	2.634e5	5.171e5	0.932	0.509	0.510	2913	2215	3.83e6	7.41e6	1313.2	3346.2	NO	bb	bb	97.906
13C-1234678-HpCDF	38.757	1.062	2.395e5	5.428e5	0.895	0.441	0.440	2666	4327	3.79e6	8.70e6	1422.6	2009.5	NO	bb	bb	102.148
13C-1234789-HpCDF	40.997	1.123	1.971e5	4.875e5	0.770	0.404	0.440	2666	4327	2.64e6	6.15e6	990.0	1422.1	NO	bb	bb	103.953
13C-1234-TCDD	25.591	0.000	5.239e5	6.562e5	1.000	0.798	0.770	2541	1448	8.13e6	1.01e7	3200.8	6994.1	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.031	5.859e5	7.277e5	1.152	0.805	0.770	2541	1448	8.48e6	1.06e7	3338.5	7327.1	NO	bb	bb	96.583
13C-12378-PeCDD	31.515	1.232	4.640e5	2.850e5	0.829	1.628	1.550	1690	813	6.82e6	4.16e6	4037.7	5122.1	NO	bb	bb	76.570
13C-123478-HxCDD	36.005	0.986	4.566e5	3.601e5	0.995	1.268	1.240	2230	1571	7.33e6	5.72e6	3288.3	3642.7	NO	bd	bd	95.938
13C-123678-HxCDD	36.117	0.989	5.277e5	4.388e5	1.157	1.203	1.240	2230	1571	7.53e6	5.98e6	3378.3	3806.0	NO	db	db	97.660
13C-1234678-HpCDD	40.250	1.102	3.788e5	3.578e5	0.840	1.059	1.050	1327	2781	5.06e6	4.73e6	3813.0	1700.4	NO	bd	bb	102.476
13C-OCDD	44.981	1.232	5.015e5	5.594e5	0.767	0.896	0.890	2228	1562	5.65e6	6.37e6	2536.4	4080.5	NO	bb	bb	161.563
13C-123789-HxCDD	36.507	0.000	4.814e5	3.742e5	1.000	1.287	1.240	2230	1571	7.02e6	5.48e6	3149.1	3490.5	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.033	1.324e5		1.288			2249		1.92e6		853.0			bb		8.714

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ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.271	0.865	6.666e4	8.755e4	0.802	0.761	0.770	1163	2029	1.09e6	1.45e6	933.7	713.4	NO	bb	bb	10.382
1289-TCDF	27.272	1.059	5.306e4	7.400e4	0.678	0.717	0.770	1163	2029	8.00e5	1.11e6	688.3	549.0	NO	bb	db	10.112
13468-PECDF	27.130	0.907	5.428e5	3.536e5	1.246	1.535	1.550	921	1306	8.56e6	5.56e6	9287.8	4254.6	NO	bb	bb	67.124
12389-PECDF	32.307	1.080	2.363e5	1.551e5	0.496	1.524	1.550	3022	2812	3.29e6	2.19e6	1088.1	777.6	NO	bb	bb	73.589
123468-HXCDF	33.231	0.953	3.102e5	2.472e5	1.169	1.255	1.240	3142	2543	4.60e6	3.67e6	1465.3	1443.2	NO	bb	bb	51.304
1368-TCDD	23.557	0.892	6.641e4	8.365e4	1.015	0.794	0.770	1514	1206	1.07e6	1.32e6	704.3	1092.4	NO	bb	bb	11.251
1289-TCDD	27.017	1.023	6.055e4	8.062e4	0.909	0.751	0.770	1514	1206	8.59e5	1.12e6	567.6	932.6	NO	bd	bd	11.826
12479-PECDD	28.819	0.914	4.776e5	3.067e5	2.301	1.557	1.550	2000	2144	4.46e6	2.89e6	2227.8	1348.6	NO	bb	bb	45.504
12389-PECDD	31.928	1.013	2.675e5	1.746e5	1.184	1.532	1.550	2000	2144	3.96e6	2.51e6	1980.6	1171.6	NO	bb	bb	49.870
124679-HXCDD	34.011	0.945	2.545e5	2.054e5	1.115	1.239	1.240	2983	1710	3.72e6	3.05e6	1245.7	1780.9	NO	bb	bb	50.484
1234679-HPCDD	39.225	0.975	2.082e5	2.022e5	1.137	1.029	1.050	2922	2339	3.21e6	3.09e6	1099.8	1322.5	NO	bb	bb	49.010
Total-tetrafurans			1.731e5		0.727			1163		2.72e6							30.332
Total-penta1			5.428e5					921		8.56e6							67.124
Total-pentafurans			7.375e5		0.654			3022		1.06e7							184.995
Total-hexafurans			1.455e6		1.141			3142		2.14e7							246.841
Total-heptafurans			3.635e5		0.978			2774		5.48e6							100.299
Total-Furans			3.482e6		0.922			1163		5.10e7							733.097
Total-tetradioxins			3.292e5		1.024			1514		4.53e6							56.345
Total-pentadioxins			9.708e5		1.502			2000		1.17e7							143.922
Total-hexadioxins			9.885e5		1.005			2983		1.44e7							203.065
Total-heptadioxins			4.044e5		1.088			2922		5.94e6							98.208
Total-Dioxins			2.916e6		1.130			1514		3.92e7							600.962
Total-TEQ			6.398e6					1514		9.02e7							1334.059
FUNCTION1 PFK			0.000e0					539943		0.00e0							
FUNCTION2 PFK			2.253e6					228820		1.84e6							0.000
FUNCTION3 PFK			3.977e4					386595		8.75e5							0.000
FUNCTION4 PFK			7.296e4					280107		2.70e6							
FUNCTION5 PFK			1.323e3					209307		1.46e5							
FUNCTION1 HXCD...			6.633e2					708		9.34e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			5.152e2					1165		9.44e3							0.000
FUNCTION3 OCDPE			5.246e2					459		6.83e3							0.000
FUNCTION4 NCDPE			4.889e2					641		6.04e3							0.000
FUNCTION5 DCDPE			0.000e0					644		0.00e0							

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ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	5.306e4	7.400e4	0.678	0.72	0.77	688.3	YES	NO	bb	db	10.112
2	2378-TCDF	25.77	5.338e4	7.452e4	0.702	0.72	0.77	718.7	YES	NO	bb	bb	9.838
3	1368-TCDF	22.27	6.666e4	8.755e4	0.802	0.76	0.77	933.7	YES	NO	bb	bb	10.382

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.13	5.428e5	3.536e5	1.246	1.54	1.55	9287.8	YES	NO	bb	bb	67.124

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.31	2.363e5	1.551e5	0.496	1.52	1.55	1088.1	YES	NO	bb	bb	73.589
2	23478-PeCDF	31.27	2.350e5	1.508e5	0.786	1.56	1.55	1131.6	YES	NO	bb	bb	48.980
3	12378-PeCDF	29.93	2.214e5	1.526e5	0.679	1.45	1.55	1073.8	YES	NO	bb	bd	51.391
4	Total-pentafurans	28.79	4.479e4	3.002e4	0.654	1.49	1.55	225.2	YES	NO	bb	bb	11.035

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123478-HxCDF	34.90	2.903e5	2.325e5	1.166	1.25	1.24	1370.1	YES	NO	bd	bd	48.245
2	123468-HXCDF	33.23	3.102e5	2.472e5	1.169	1.26	1.24	1465.3	YES	NO	bb	bb	51.304
3	123789-HxCDF	36.93	2.403e5	1.952e5	1.137	1.23	1.24	1110.7	YES	NO	bb	bb	49.077
4	234678-HxCDF	35.91	2.873e5	2.291e5	1.140	1.25	1.24	1358.7	YES	NO	bb	bb	50.224
5	123678-HxCDF	35.04	3.271e5	2.812e5	1.091	1.16	1.24	1497.0	YES	NO	db	db	47.992

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.77	2.051e5	2.017e5	1.003	1.02	1.05	1185.4	YES	NO	bb	bb	51.838
2	1234789-HpCDF	41.01	1.584e5	1.578e5	0.953	1.00	1.05	790.9	YES	NO	bb	bb	48.461

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	5.306e4	7.400e4	0.678	0.72	0.77	688.3	YES	NO	bb	db	10.112
2	2378-TCDF	25.77	5.338e4	7.452e4	0.702	0.72	0.77	718.7	YES	NO	bb	bb	9.838
3	1368-TCDF	22.27	6.666e4	8.755e4	0.802	0.76	0.77	933.7	YES	NO	bb	bb	10.382
4	12389-PECDF	32.31	2.363e5	1.551e5	0.496	1.52	1.55	1088.1	YES	NO	bb	bb	73.589
5	23478-PeCDF	31.27	2.350e5	1.508e5	0.786	1.56	1.55	1131.6	YES	NO	bb	bb	48.980
6	12378-PeCDF	29.93	2.214e5	1.526e5	0.679	1.45	1.55	1073.8	YES	NO	bb	bd	51.391
7	Total-pentafurans	28.79	4.479e4	3.002e4	0.654	1.49	1.55	225.2	YES	NO	bb	bb	11.035
8	123478-HxCDF	34.90	2.903e5	2.325e5	1.166	1.25	1.24	1370.1	YES	NO	bd	bd	48.245
9	123468-HXCDF	33.23	3.102e5	2.472e5	1.169	1.26	1.24	1465.3	YES	NO	bb	bb	51.304
10	123789-HxCDF	36.93	2.403e5	1.952e5	1.137	1.23	1.24	1110.7	YES	NO	bb	bb	49.077
11	234678-HxCDF	35.91	2.873e5	2.291e5	1.140	1.25	1.24	1358.7	YES	NO	bb	bb	50.224
12	123678-HxCDF	35.04	3.271e5	2.812e5	1.091	1.16	1.24	1497.0	YES	NO	db	db	47.992
13	1234678-HpCDF	38.77	2.051e5	2.017e5	1.003	1.02	1.05	1185.4	YES	NO	bb	bb	51.838
14	1234789-HpCDF	41.01	1.584e5	1.578e5	0.953	1.00	1.05	790.9	YES	NO	bb	bb	48.461
15	OCDF	45.24	2.094e5	2.177e5	0.778	0.96	0.89	1194.3	YES	NO	bd	bb	103.506
16	13468-PECDF	27.13	5.428e5	3.536e5	1.246	1.54	1.55	9287.8	YES	NO	bb	bb	67.124

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.60	3.327e4	3.983e4	1.024	0.84	0.77	333.8	YES	NO	bd	bb	5.433
2	Total-tetradioxins	25.04	8.004e2	1.202e3	1.024	0.67	0.77	7.4	YES	NO	bb	db	0.149
3	Total-tetradioxins	24.74	2.704e3	4.097e3	1.024	0.66	0.77	17.7	YES	NO	bb	bd	0.506
4	1368-TCDD	23.56	6.641e4	8.365e4	1.015	0.79	0.77	704.3	YES	NO	bb	bb	11.251
5	1289-TCDD	27.02	6.055e4	8.062e4	0.909	0.75	0.77	567.6	YES	NO	bd	bd	11.826
6	Total-tetradioxins	26.76	1.054e2	1.391e2	1.024	0.76	0.77	2.1	NO	NO	bb	bb	0.018
7	2378-TCDD	26.42	6.583e4	8.225e4	1.149	0.80	0.77	654.9	YES	NO	bb	bb	9.815
8	Total-tetradioxins	26.10	9.949e4	1.339e5	1.024	0.74	0.77	703.4	YES	NO	bb	bb	17.347

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.93	2.675e5	1.746e5	1.184	1.53	1.55	1980.6	YES	NO	bb	bb	49.870
2	12378-PeCDD	31.54	2.257e5	1.459e5	1.022	1.55	1.55	1638.2	YES	NO	bb	bb	48.547
3	12479-PECDD	28.82	4.776e5	3.067e5	2.301	1.56	1.55	2227.8	YES	NO	bb	bb	45.504

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	124679-HXCDD	34.01	2.545e5	2.054e5	1.115	1.24	1.24	1245.7	YES	NO	bb	bb	50.484
2	123789-HxCDD	36.52	2.330e5	1.844e5	0.907	1.26	1.24	1104.0	YES	NO	bd	bb	51.608
3	123678-HxCDD	36.14	2.694e5	2.159e5	1.001	1.25	1.24	1260.5	YES	NO	db	db	50.174
4	123478-HxCDD	36.02	2.316e5	1.815e5	0.996	1.28	1.24	1214.5	YES	NO	bd	bd	50.799

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234679-HPCDD	39.23	2.082e5	2.022e5	1.137	1.03	1.05	1099.8	YES	NO	bb	bb	49.010
2	1234678-HpCDD	40.27	1.962e5	1.803e5	1.039	1.09	1.05	932.5	YES	NO	bd	bb	49.199

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.60	3.327e4	3.983e4	1.024	0.84	0.77	333.8	YES	NO	bd	bb	5.433
2	Total-tetradioxins	25.04	8.004e2	1.202e3	1.024	0.67	0.77	7.4	YES	NO	bb	db	0.149
3	Total-tetradioxins	24.74	2.704e3	4.097e3	1.024	0.66	0.77	17.7	YES	NO	bb	bd	0.506
4	1368-TCDD	23.56	6.641e4	8.365e4	1.015	0.79	0.77	704.3	YES	NO	bb	bb	11.251
5	1289-TCDD	27.02	6.055e4	8.062e4	0.909	0.75	0.77	567.6	YES	NO	bd	bd	11.826
6	Total-tetradioxins	26.76	1.054e2	1.391e2	1.024	0.76	0.77	2.1	NO	NO	bb	bb	0.018
7	2378-TCDD	26.42	6.583e4	8.225e4	1.149	0.80	0.77	654.9	YES	NO	bb	bb	9.815
8	Total-tetradioxins	26.10	9.949e4	1.339e5	1.024	0.74	0.77	703.4	YES	NO	bb	bb	17.347
9	12389-PECDD	31.93	2.675e5	1.746e5	1.184	1.53	1.55	1980.6	YES	NO	bb	bb	49.870
10	12378-PeCDD	31.54	2.257e5	1.459e5	1.022	1.55	1.55	1638.2	YES	NO	bb	bb	48.547
11	12479-PECDD	28.82	4.776e5	3.067e5	2.301	1.56	1.55	2227.8	YES	NO	bb	bb	45.504
12	124679-HXCDD	34.01	2.545e5	2.054e5	1.115	1.24	1.24	1245.7	YES	NO	bb	bb	50.484
13	123789-HxCDD	36.52	2.330e5	1.844e5	0.907	1.26	1.24	1104.0	YES	NO	bd	bb	51.608
14	123678-HxCDD	36.14	2.694e5	2.159e5	1.001	1.25	1.24	1260.5	YES	NO	db	db	50.174
15	123478-HxCDD	36.02	2.316e5	1.815e5	0.996	1.28	1.24	1214.5	YES	NO	bd	bd	50.799
16	1234679-HPCDD	39.23	2.082e5	2.022e5	1.137	1.03	1.05	1099.8	YES	NO	bb	bb	49.010
17	1234678-HpCDD	40.27	1.962e5	1.803e5	1.039	1.09	1.05	932.5	YES	NO	bd	bb	49.199
18	OCDD	45.00	2.234e5	2.618e5	0.920	0.85	0.89	1496.5	YES	NO	bb	bb	99.422

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	5.306e4	7.400e4	0.678	0.72	0.77	688.3	YES	NO	bb	db	10.112
2	2378-TCDF	25.77	5.338e4	7.452e4	0.702	0.72	0.77	718.7	YES	NO	bb	bb	9.838
3	1368-TCDF	22.27	6.666e4	8.755e4	0.802	0.76	0.77	933.7	YES	NO	bb	bb	10.382
4	12389-PECDF	32.31	2.363e5	1.551e5	0.496	1.52	1.55	1088.1	YES	NO	bb	bb	73.589
5	23478-PeCDF	31.27	2.350e5	1.508e5	0.786	1.56	1.55	1131.6	YES	NO	bb	bb	48.980
6	12378-PeCDF	29.93	2.214e5	1.526e5	0.679	1.45	1.55	1073.8	YES	NO	bb	bd	51.391
7	Total-pentafurans	28.79	4.479e4	3.002e4	0.654	1.49	1.55	225.2	YES	NO	bb	bb	11.035
8	123478-HxCDF	34.90	2.903e5	2.325e5	1.166	1.25	1.24	1370.1	YES	NO	bd	bd	48.245
9	123468-HXCDF	33.23	3.102e5	2.472e5	1.169	1.26	1.24	1465.3	YES	NO	bb	bb	51.304
10	123789-HxCDF	36.93	2.403e5	1.952e5	1.137	1.23	1.24	1110.7	YES	NO	bb	bb	49.077
11	234678-HxCDF	35.91	2.873e5	2.291e5	1.140	1.25	1.24	1358.7	YES	NO	bb	bb	50.224
12	123678-HxCDF	35.04	3.271e5	2.812e5	1.091	1.16	1.24	1497.0	YES	NO	db	db	47.992
13	1234678-HpCDF	38.77	2.051e5	2.017e5	1.003	1.02	1.05	1185.4	YES	NO	bb	bb	51.838
14	1234789-HpCDF	41.01	1.584e5	1.578e5	0.953	1.00	1.05	790.9	YES	NO	bb	bb	48.461
15	OCDF	45.24	2.094e5	2.177e5	0.778	0.96	0.89	1194.3	YES	NO	bd	bb	103.506
16	13468-PECDF	27.13	5.428e5	3.536e5	1.246	1.54	1.55	9287.8	YES	NO	bb	bb	67.124
17	Total-tetradioxins	25.60	3.327e4	3.983e4	1.024	0.84	0.77	333.8	YES	NO	bd	bb	5.433
18	Total-tetradioxins	25.04	8.004e2	1.202e3	1.024	0.67	0.77	7.4	YES	NO	bb	db	0.149
19	Total-tetradioxins	24.74	2.704e3	4.097e3	1.024	0.66	0.77	17.7	YES	NO	bb	bd	0.506
20	1368-TCDD	23.56	6.641e4	8.365e4	1.015	0.79	0.77	704.3	YES	NO	bb	bb	11.251
21	1289-TCDD	27.02	6.055e4	8.062e4	0.909	0.75	0.77	567.6	YES	NO	bd	bd	11.826
22	Total-tetradioxins	26.76	1.054e2	1.391e2	1.024	0.76	0.77	2.1	NO	NO	bb	bb	0.018
23	2378-TCDD	26.42	6.583e4	8.225e4	1.149	0.80	0.77	654.9	YES	NO	bb	bb	9.815
24	Total-tetradioxins	26.10	9.949e4	1.339e5	1.024	0.74	0.77	703.4	YES	NO	bb	bb	17.347
25	12389-PECDD	31.93	2.675e5	1.746e5	1.184	1.53	1.55	1980.6	YES	NO	bb	bb	49.870
26	12378-PeCDD	31.54	2.257e5	1.459e5	1.022	1.55	1.55	1638.2	YES	NO	bb	bb	48.547
27	12479-PECDD	28.82	4.776e5	3.067e5	2.301	1.56	1.55	2227.8	YES	NO	bb	bb	45.504
28	124679-HXCDD	34.01	2.545e5	2.054e5	1.115	1.24	1.24	1245.7	YES	NO	bb	bb	50.484
29	123789-HxCDD	36.52	2.330e5	1.844e5	0.907	1.26	1.24	1104.0	YES	NO	bd	bb	51.608
30	123678-HxCDD	36.14	2.694e5	2.159e5	1.001	1.25	1.24	1260.5	YES	NO	db	db	50.174
31	123478-HxCDD	36.02	2.316e5	1.815e5	0.996	1.28	1.24	1214.5	YES	NO	bd	bd	50.799
32	1234679-HPCDD	39.23	2.082e5	2.022e5	1.137	1.03	1.05	1099.8	YES	NO	bb	bb	49.010
33	1234678-HpCDD	40.27	1.962e5	1.803e5	1.039	1.09	1.05	932.5	YES	NO	bd	bb	49.199
34	OCDD	45.00	2.234e5	2.618e5	0.920	0.85	0.89	1496.5	YES	NO	bb	bb	99.422

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.14	2.253e6					8.0	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	34.08	3.977e4					2.3	NO		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	41.32	4.162e3					0.8	NO		bb		
2	FUNCTION4 PFK	40.68	1.340e4					1.2	NO		bb		
3	FUNCTION4 PFK	40.50	1.024e4					1.3	NO		bb		
4	FUNCTION4 PFK	40.07	1.056e4					1.2	NO		bb		
5	FUNCTION4 PFK	39.50	1.007e4					1.4	NO		bb		
6	FUNCTION4 PFK	42.14	1.085e4					1.0	NO		bb		
7	FUNCTION4 PFK	42.10	6.400e3					1.1	NO		bb		
8	FUNCTION4 PFK	41.87	1.885e3					0.6	NO		bb		
9	FUNCTION4 PFK	41.61	5.389e3					0.9	NO		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.23	1.323e3					0.7	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	26.55	1.589e2					2.0	NO		db		0.000
2	FUNCTION1 HXCD...	26.42	1.755e2					3.2	YES		bd		0.000
3	FUNCTION1 HXCD...	25.59	9.854e1					1.9	NO		bb		0.000
4	FUNCTION1 HXCD...	23.87	7.096e1					1.9	NO		bb		0.000
5	FUNCTION1 HXCD...	23.56	8.003e1					2.4	NO		bb		0.000
6	FUNCTION1 HXCD...	22.40	7.940e1					1.8	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	30.33	1.101e2					1.7	NO		bb		0.000
2	FUNCTION2 HPCD...	28.89	7.875e1					1.7	NO		bb		0.000
3	FUNCTION2 HPCD...	31.17	3.263e2					4.7	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.51	1.586e2					5.0	YES		bb		0.000
2	FUNCTION3 OCDPE	36.13	1.909e2					4.9	YES		db		0.000
3	FUNCTION3 OCDPE	35.99	1.751e2					5.1	YES		bd		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.06	1.247e2					2.2	NO		db		0.000
2	FUNCTION4 NCDPE	40.94	7.187e1					1.7	NO		bd		0.000
3	FUNCTION4 NCDPE	40.37	7.003e1					1.7	NO		db		0.000
4	FUNCTION4 NCDPE	40.26	2.223e2					3.8	YES		bd		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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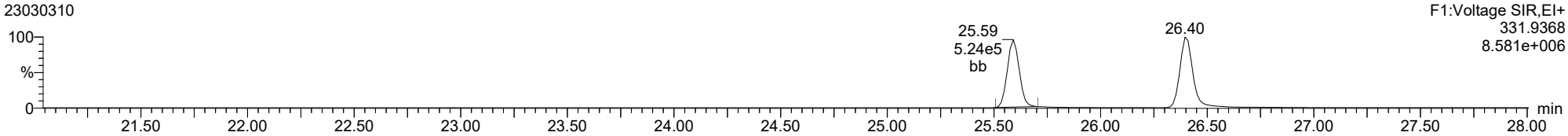
13C-1234-TCDD



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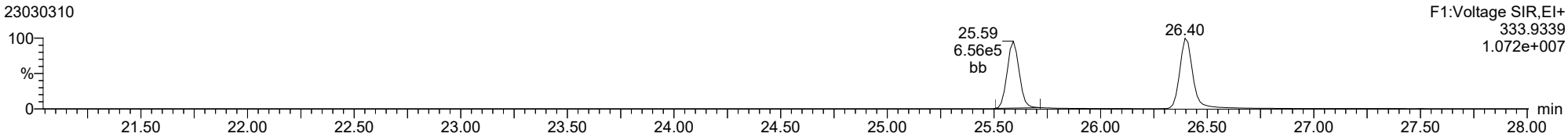

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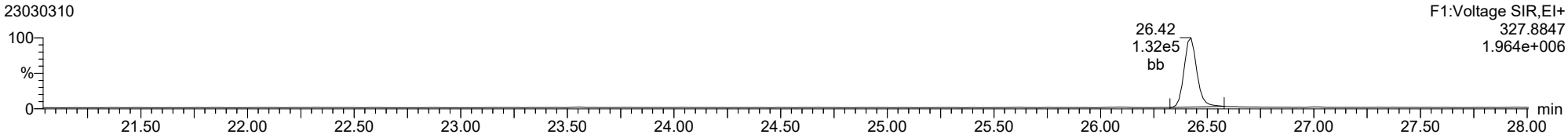

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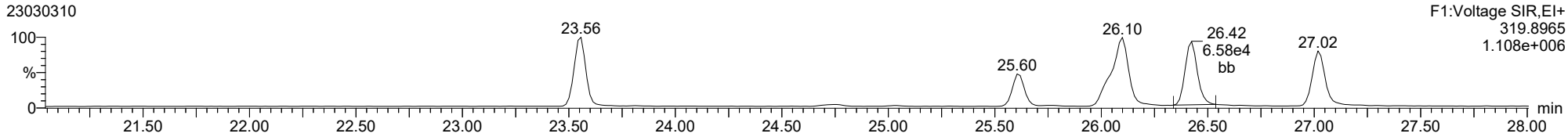
2378-TCDD



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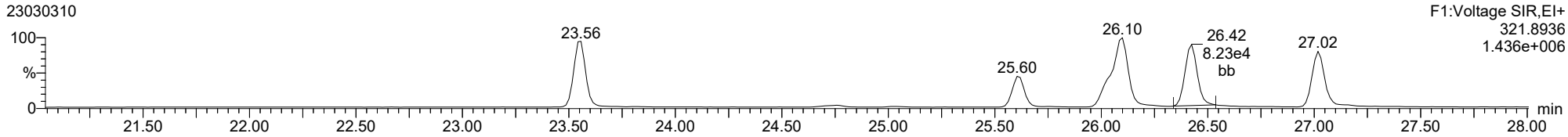
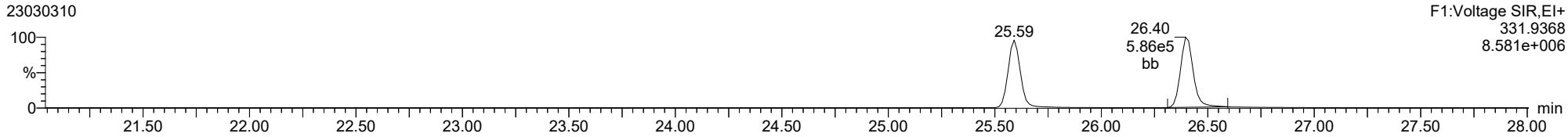


13C-2378-TCDD



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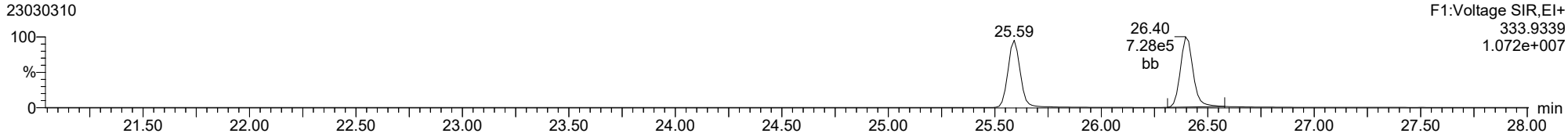

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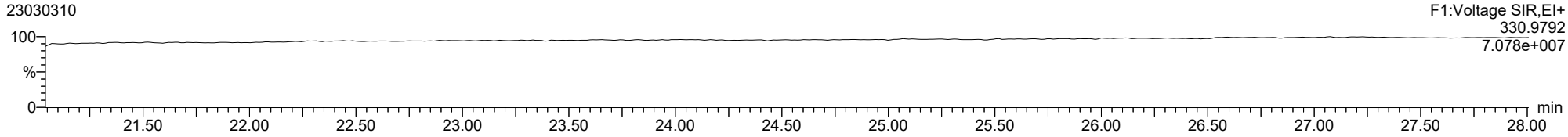

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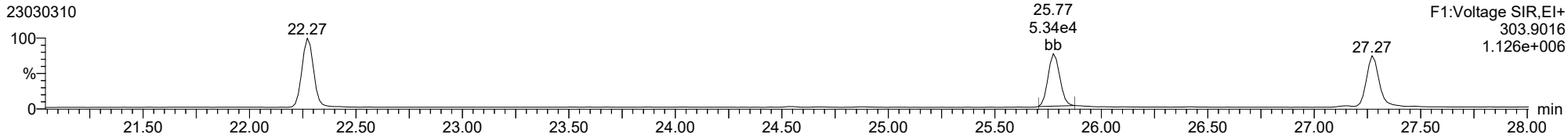
2378-TCDF



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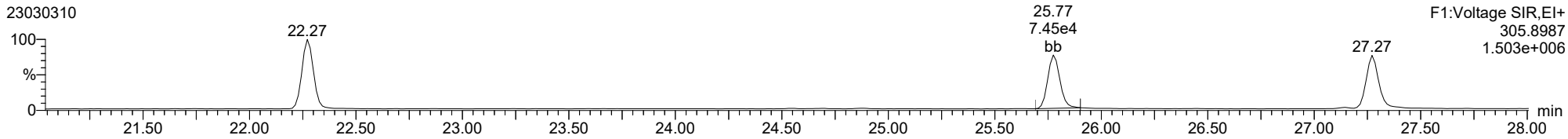

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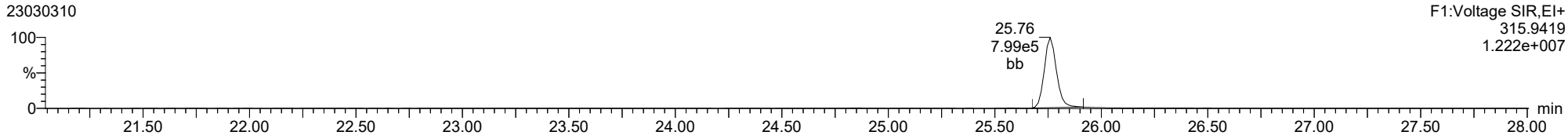

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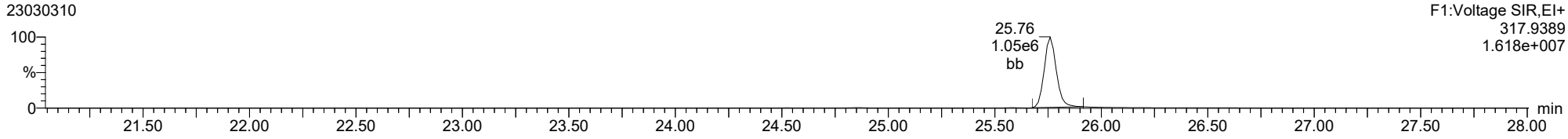

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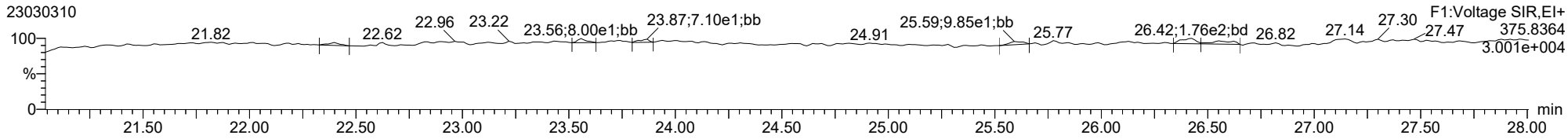

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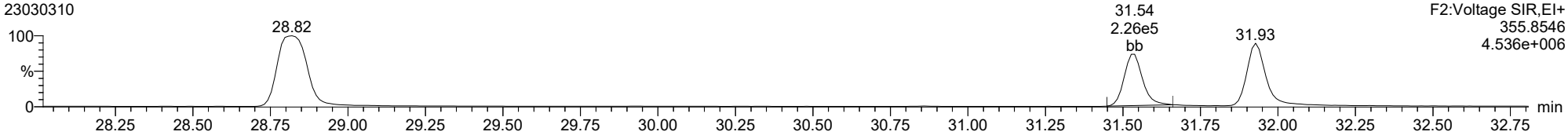
12378-PeCDD



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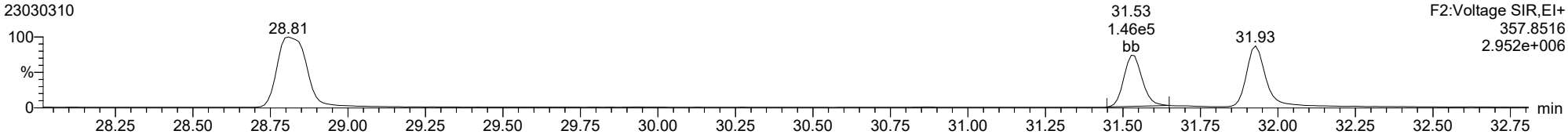

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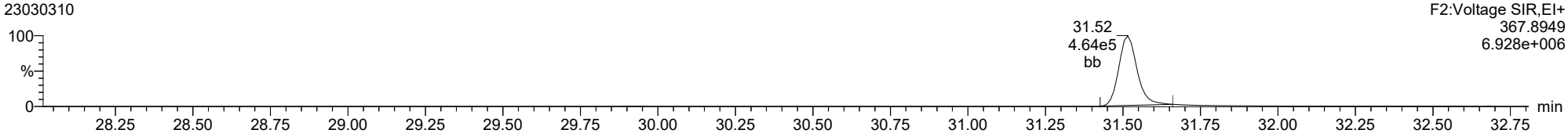

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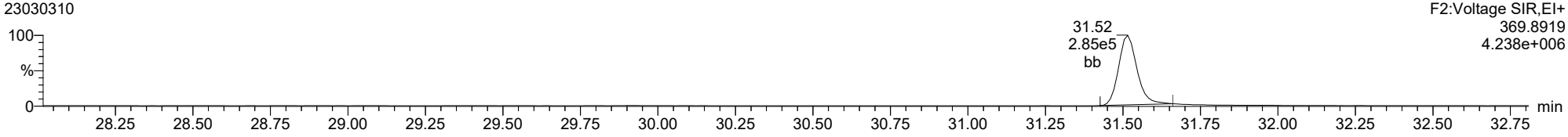

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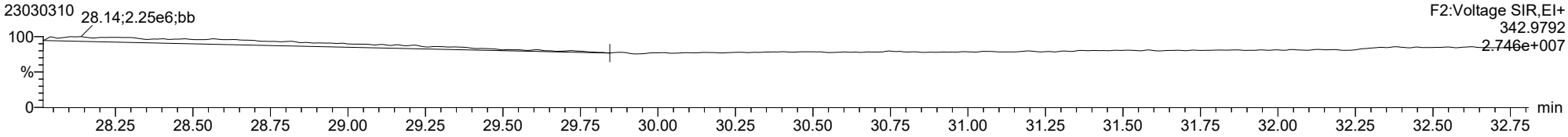

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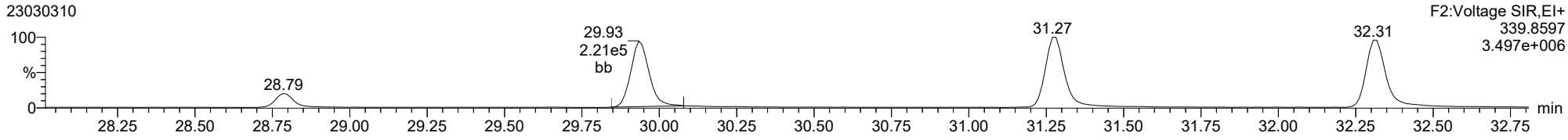
12378-PeCDF



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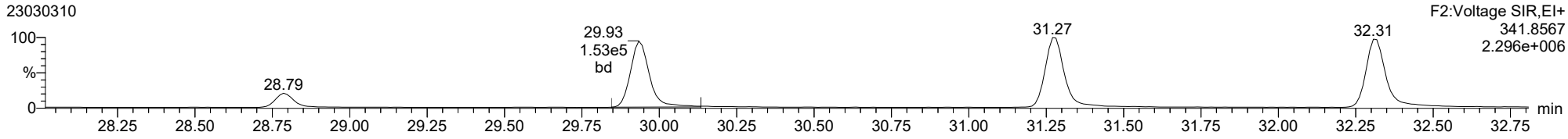

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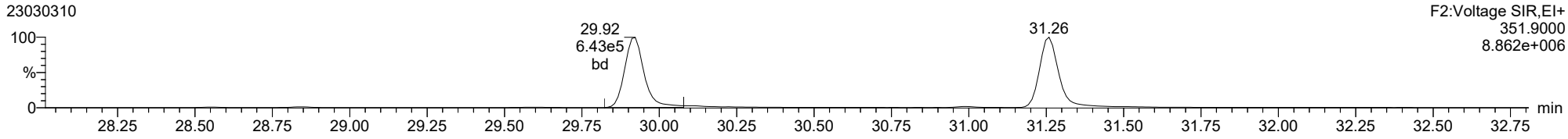

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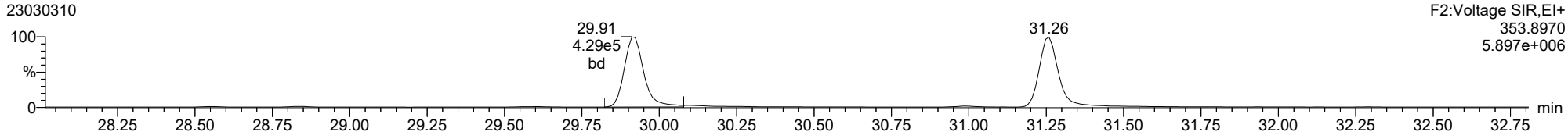
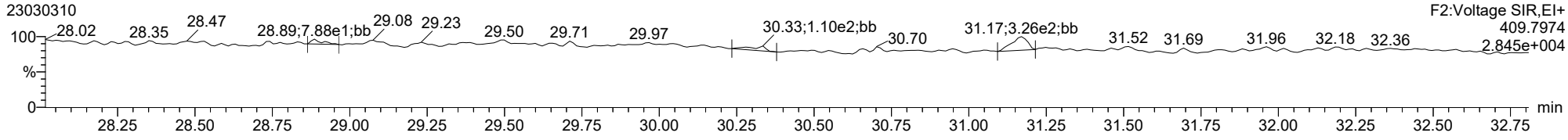


FUNCTION2 HPCDPE



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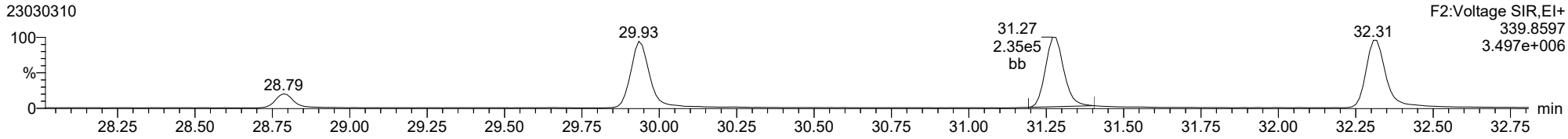
23478-PeCDF



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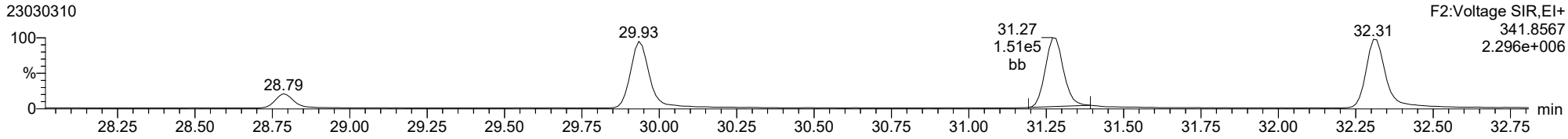

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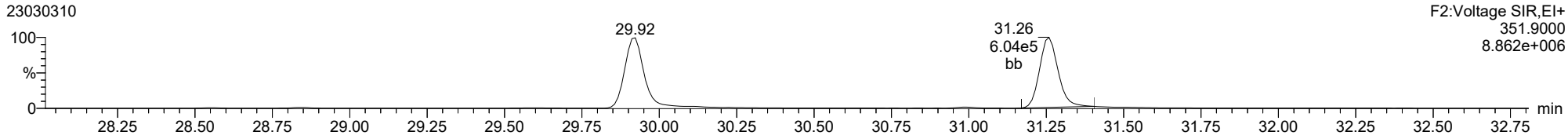

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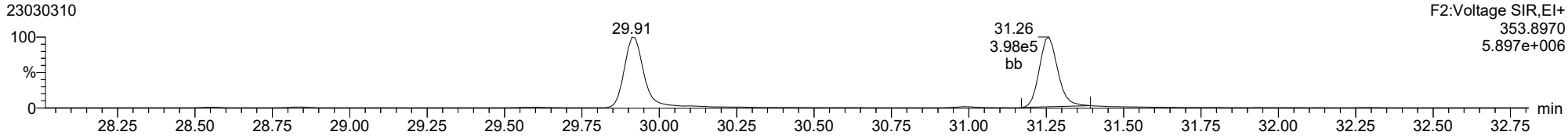

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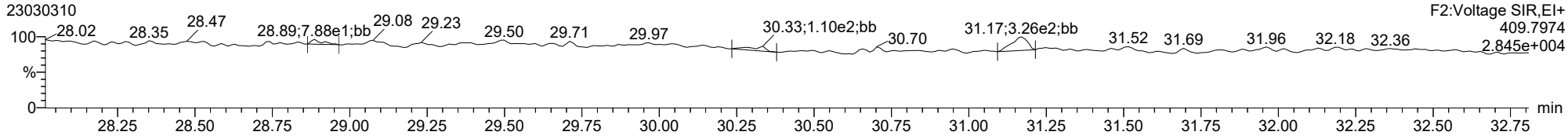

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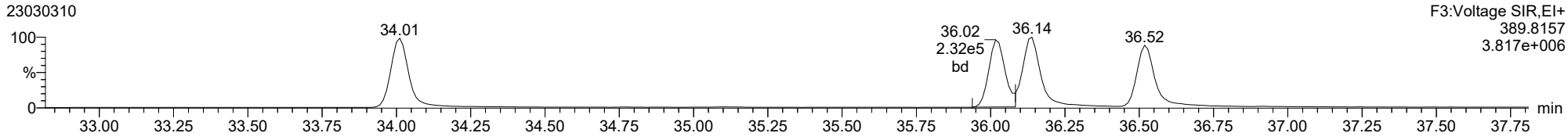

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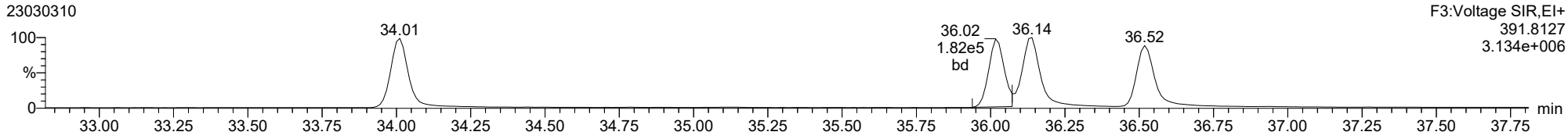

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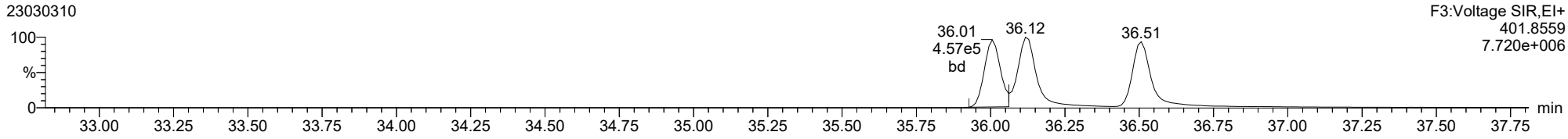

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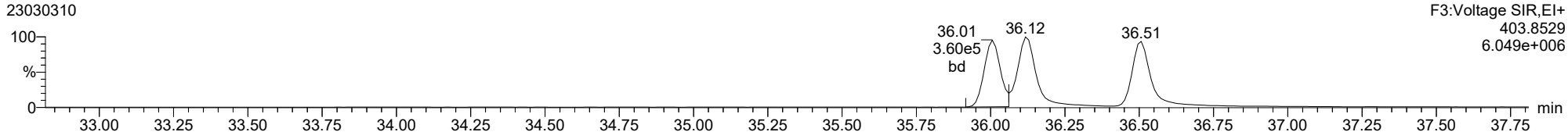

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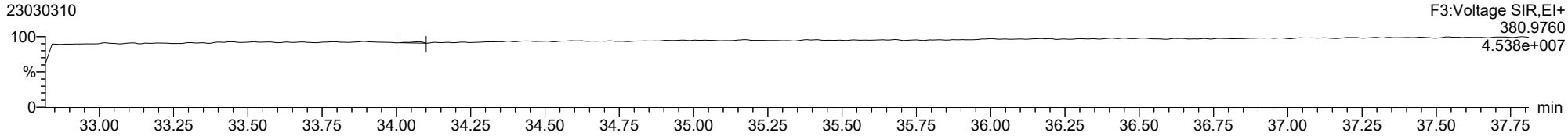

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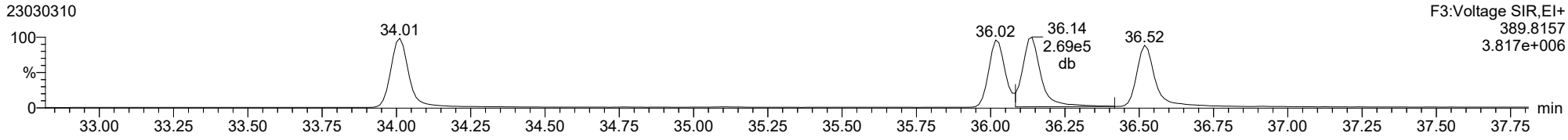

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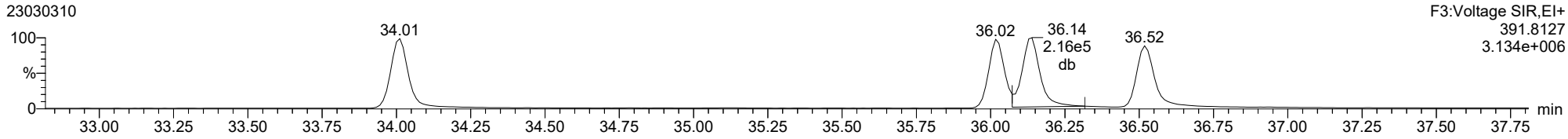

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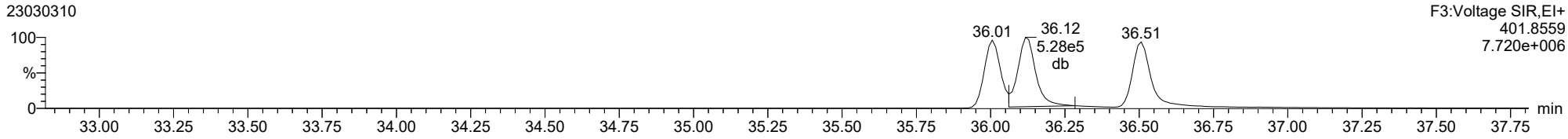

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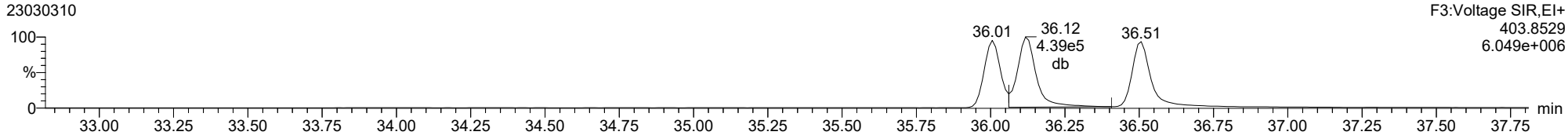

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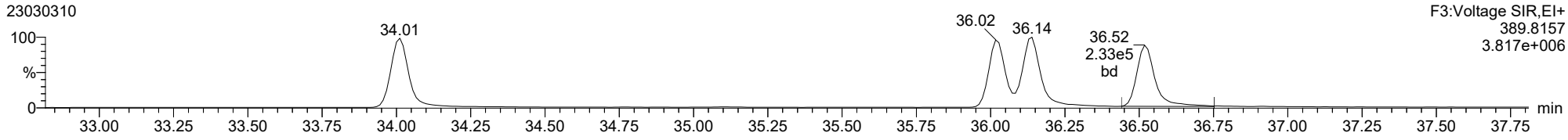

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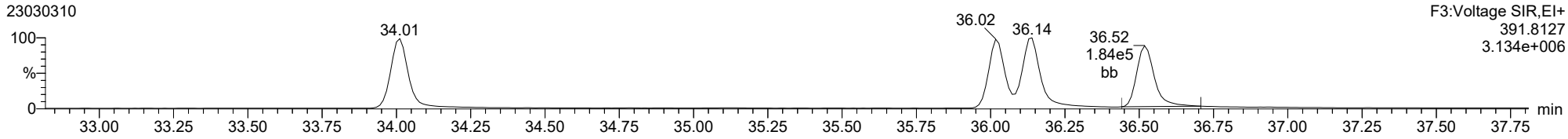

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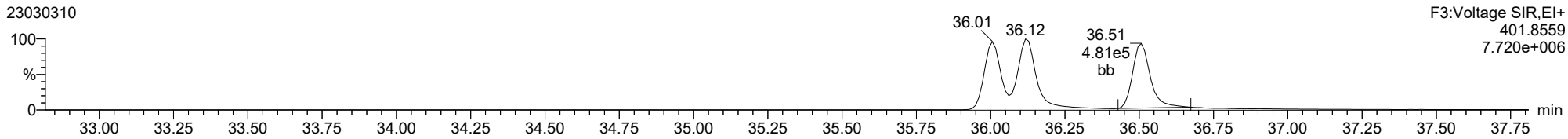

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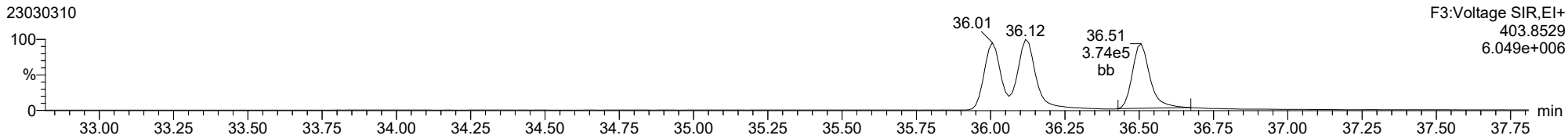

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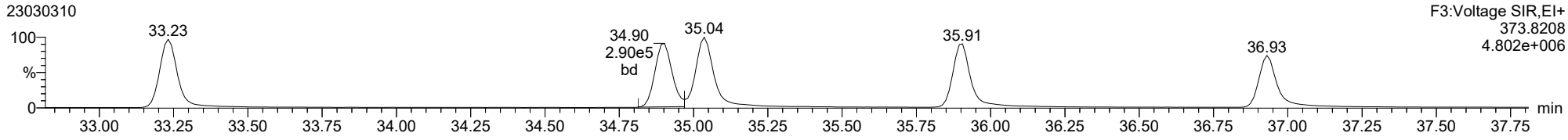

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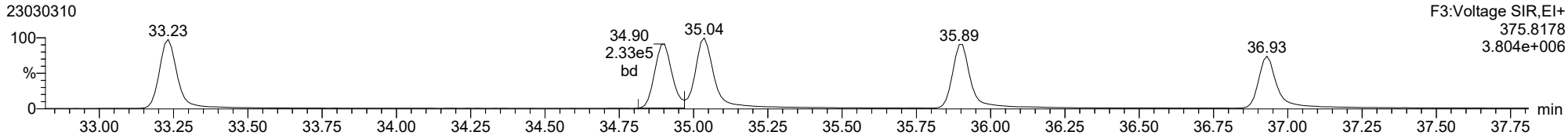

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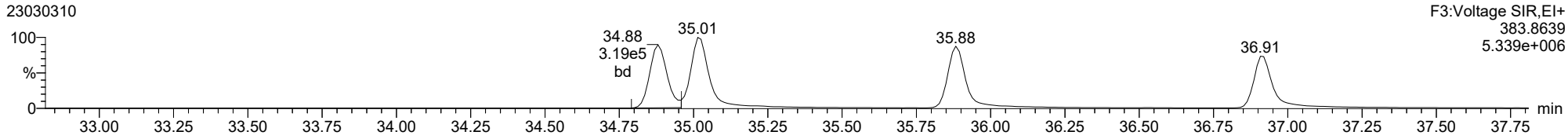

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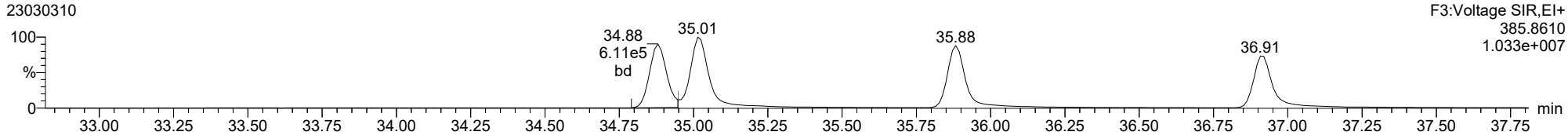

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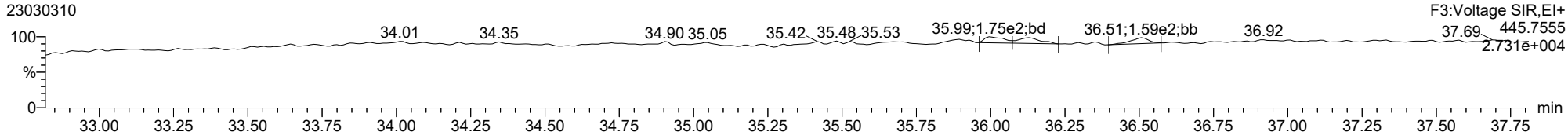

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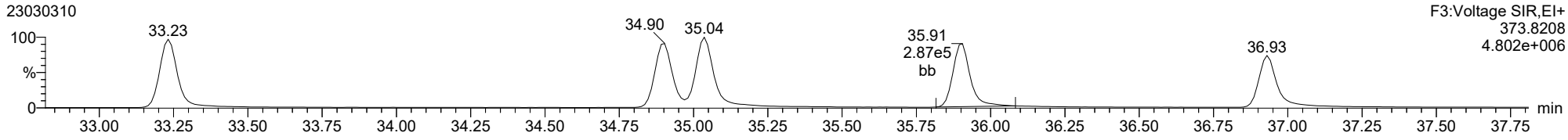
234678-HxCDF



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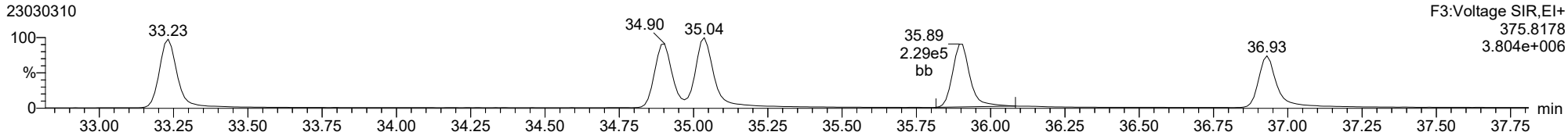

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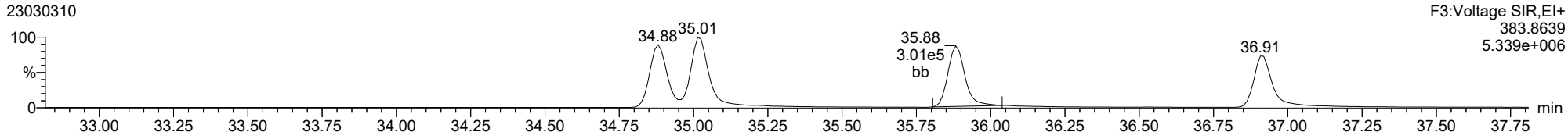

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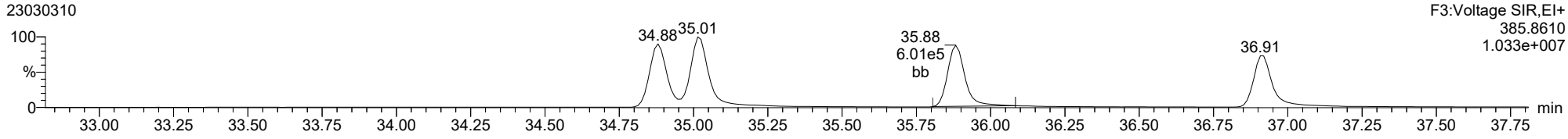
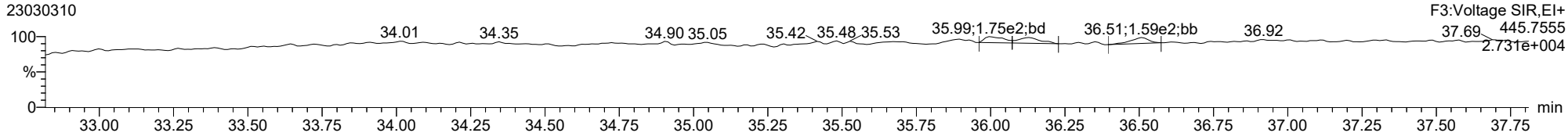


FUNCTION3 OCDPE



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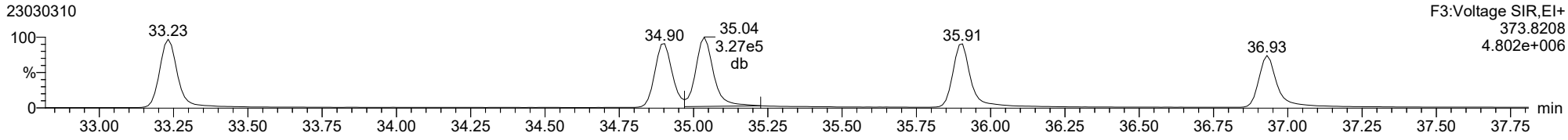

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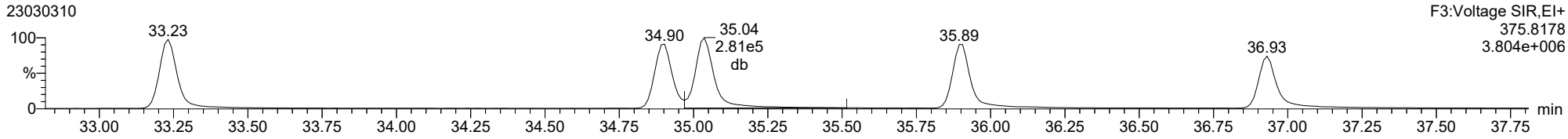

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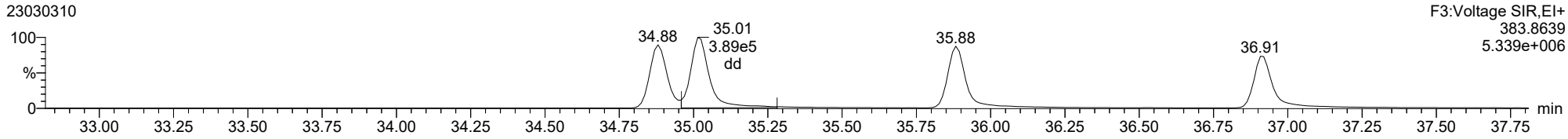

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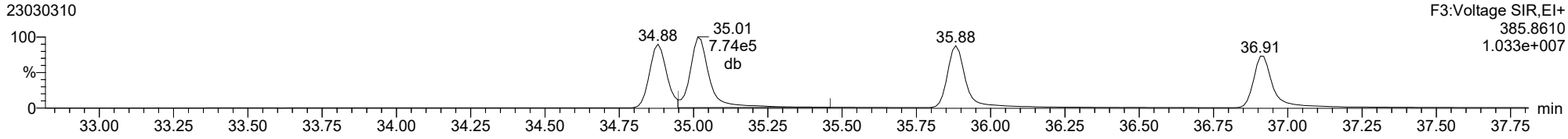

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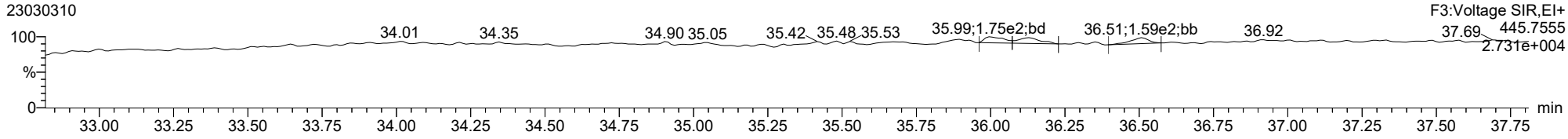

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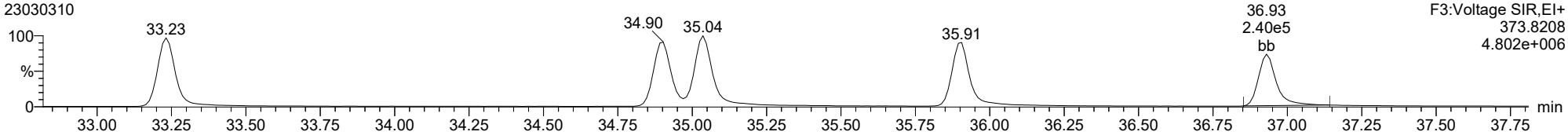

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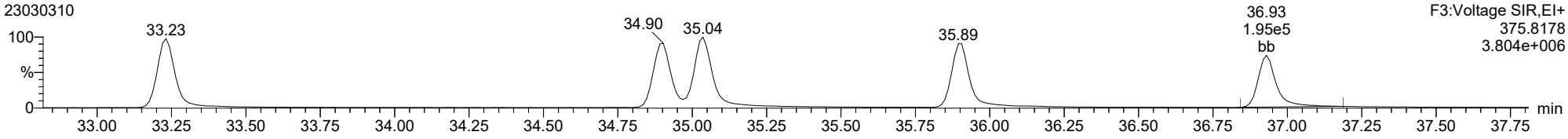

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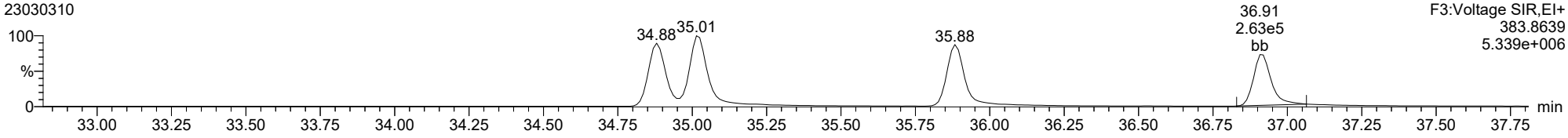

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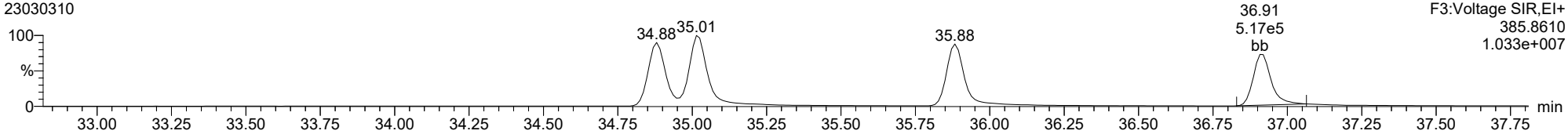

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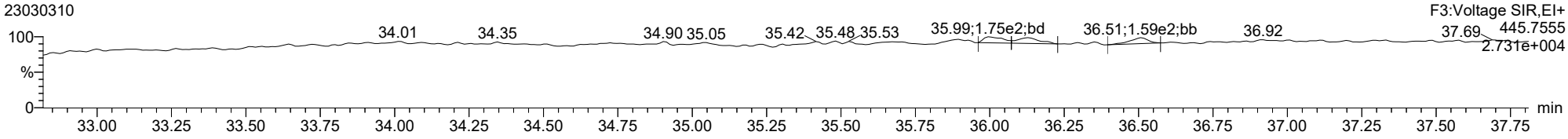

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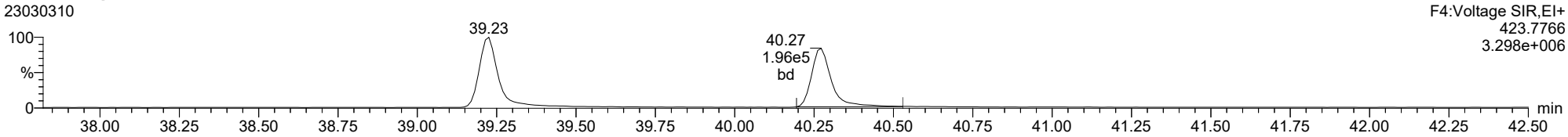

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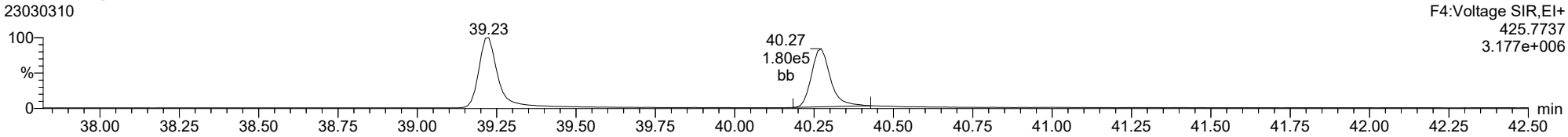

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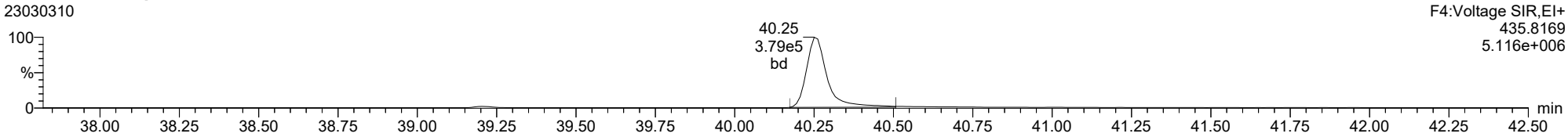

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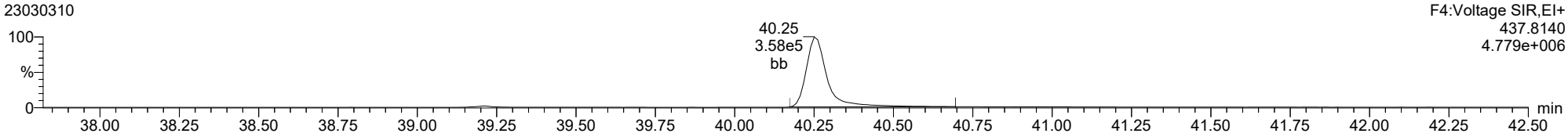
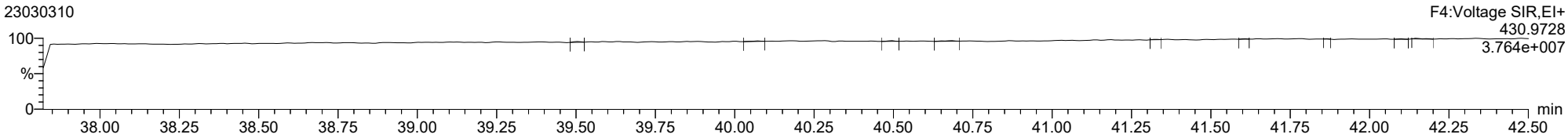


FUNCTION4 PFK



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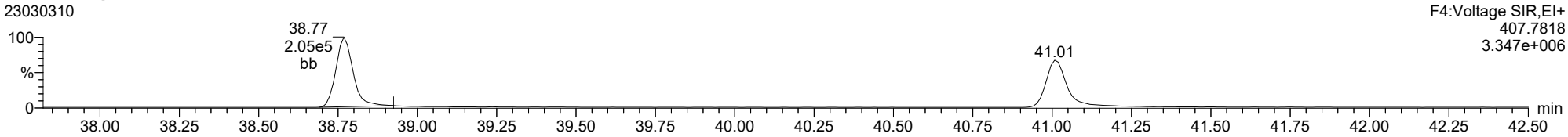

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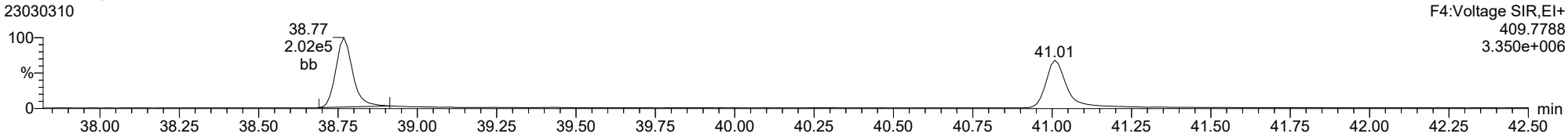

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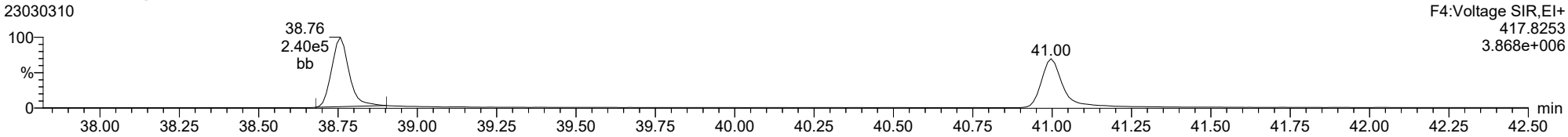

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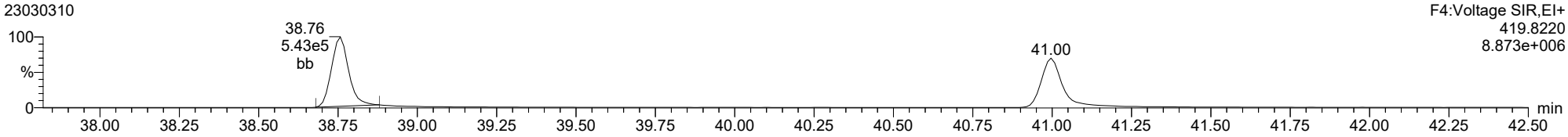

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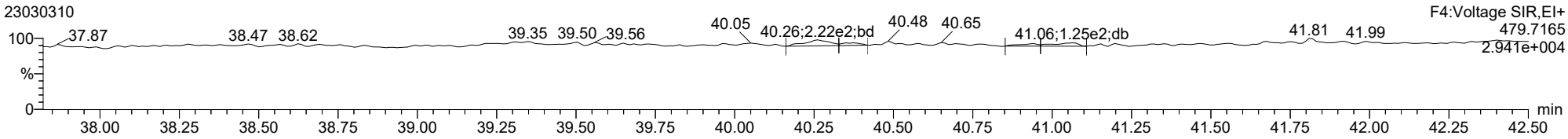

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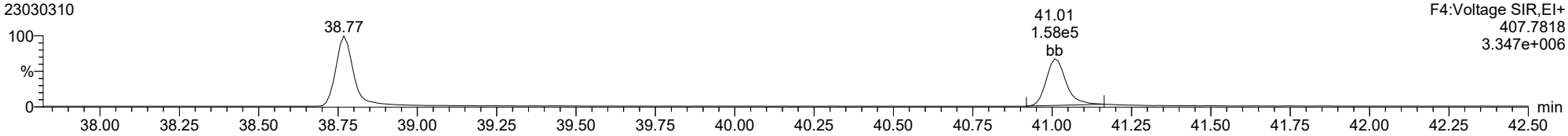

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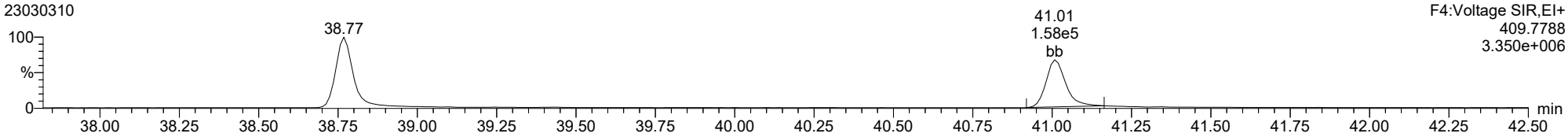

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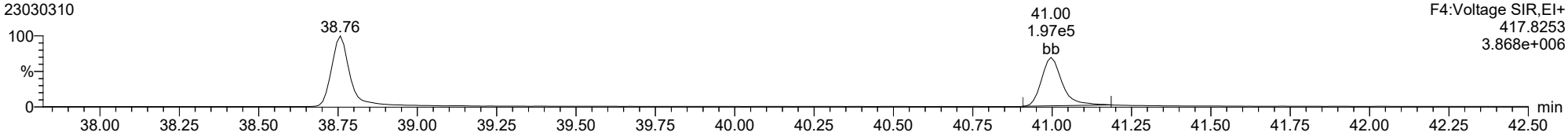

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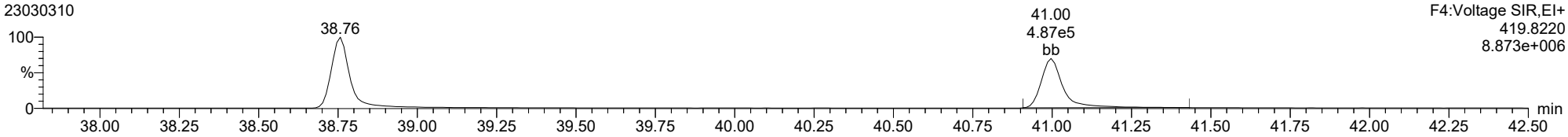
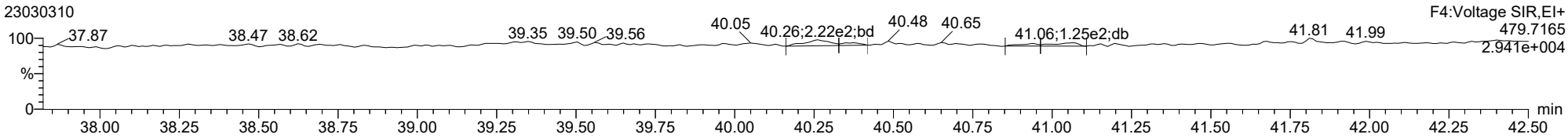


FUNCTION4 NCDPE



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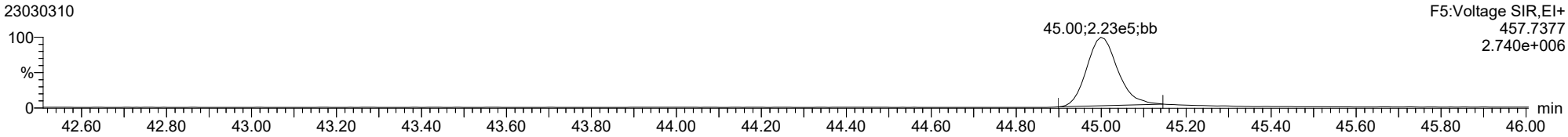

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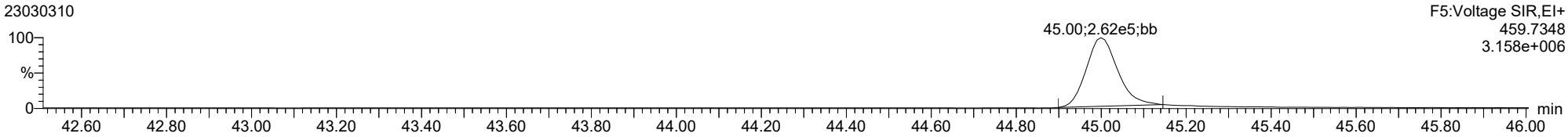

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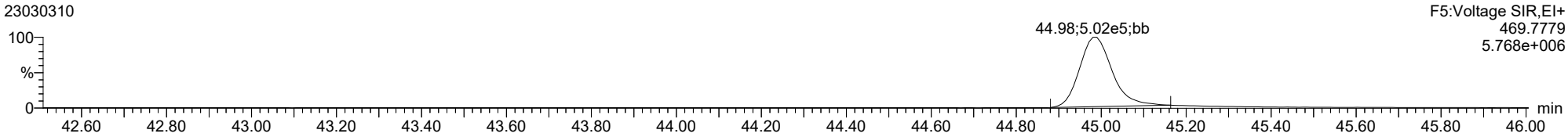

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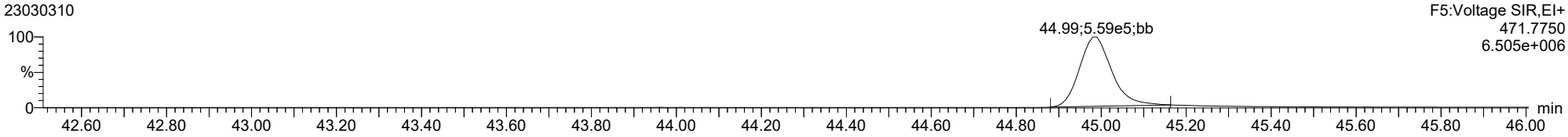

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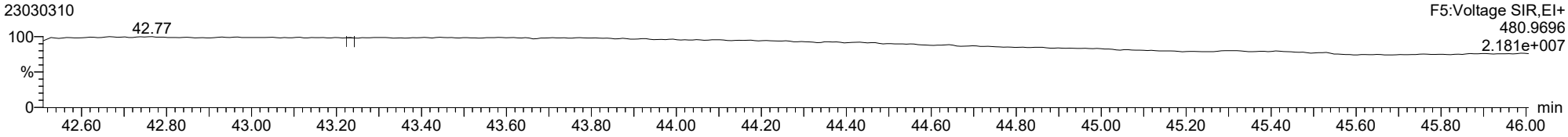

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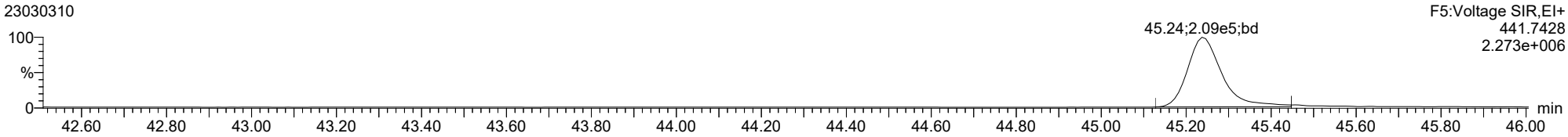

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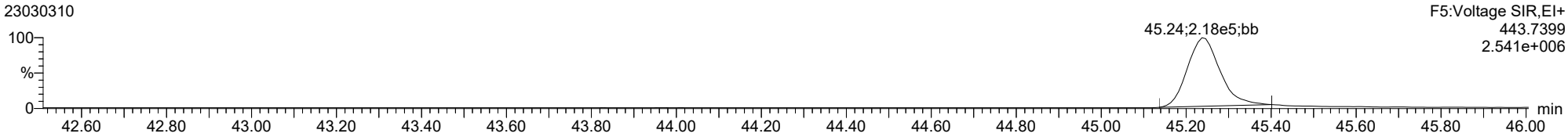
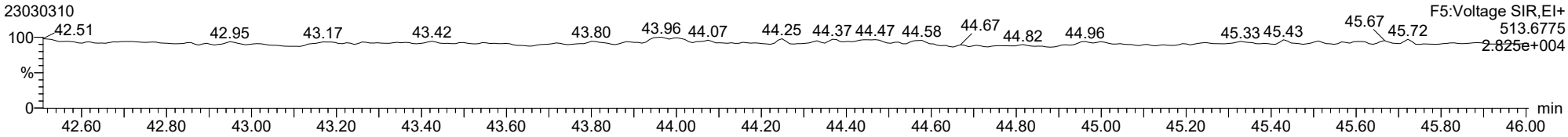


FUNCTION5 DCDPE



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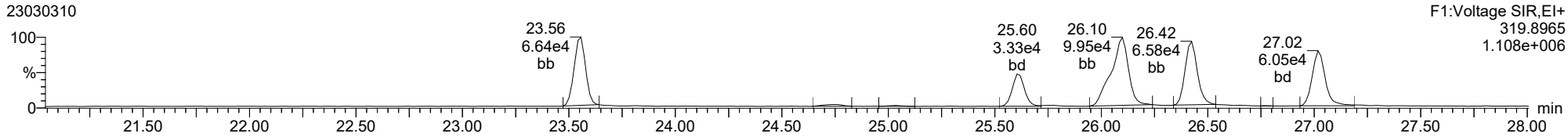
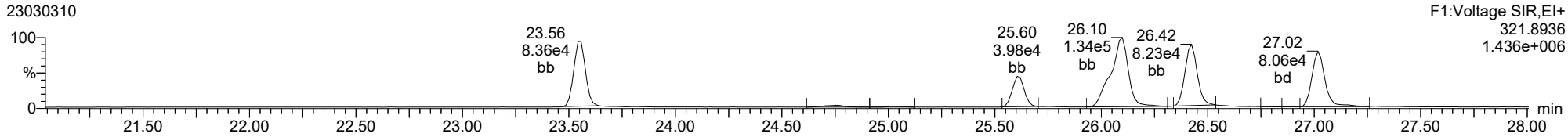
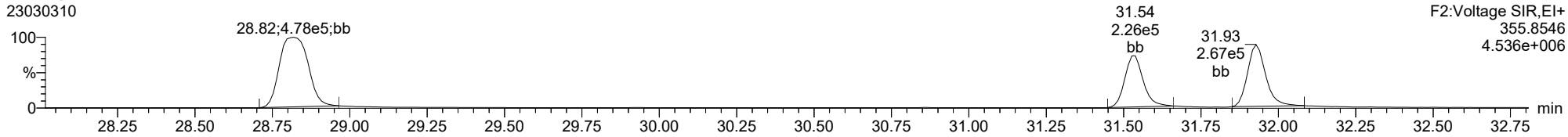
Total-tetradioxins



Total-tetradioxins



Total-pentadioxins



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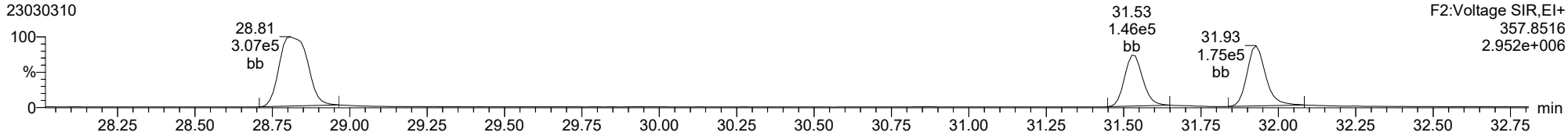

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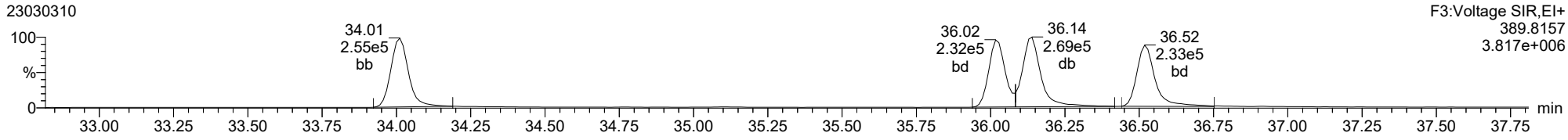
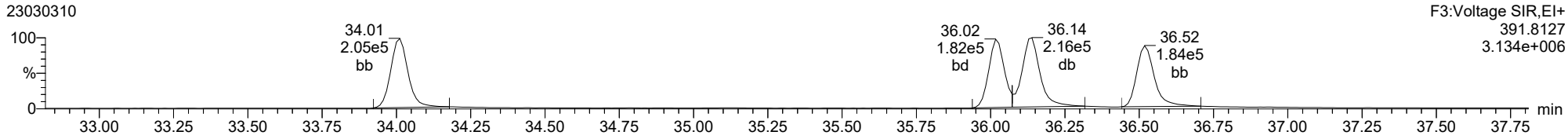
Total-hexadioxins



Total-hexadioxins



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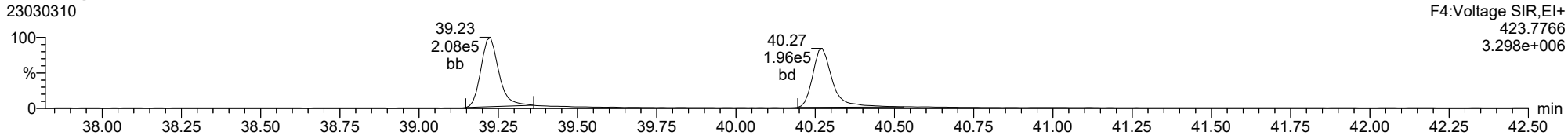
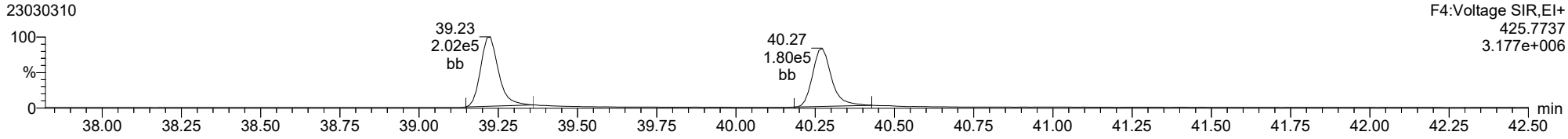


Total-heptadioxins



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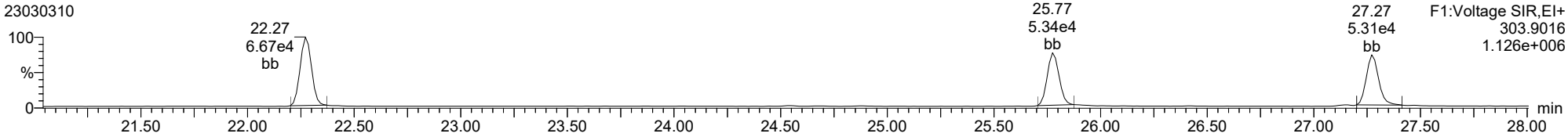
Total-tetrafurans



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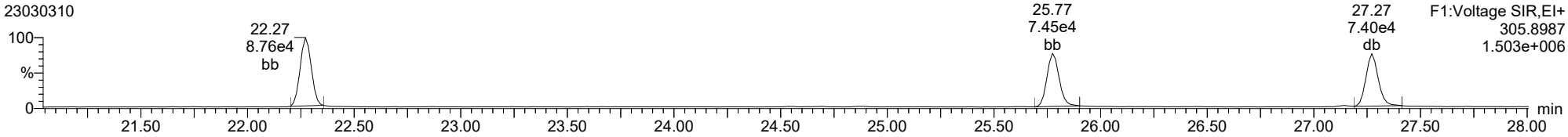

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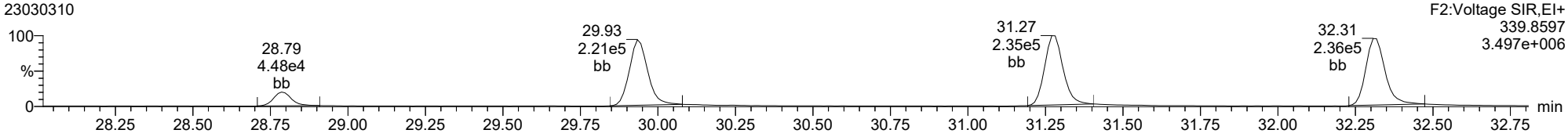

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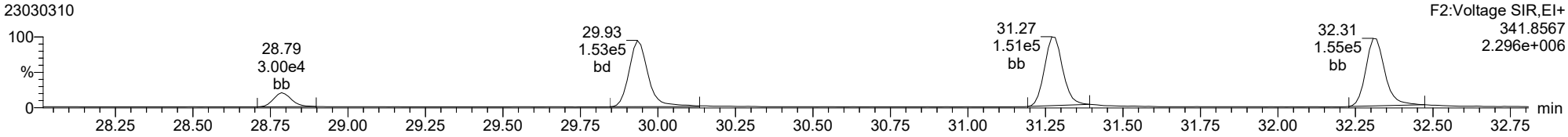

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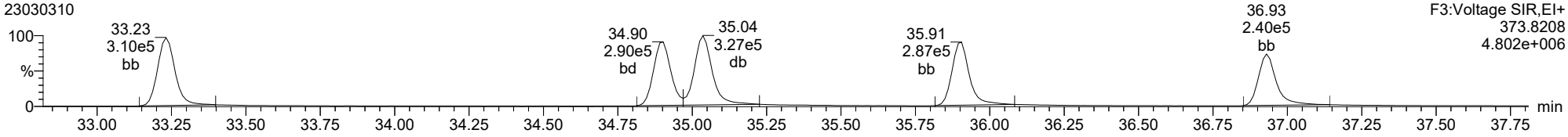
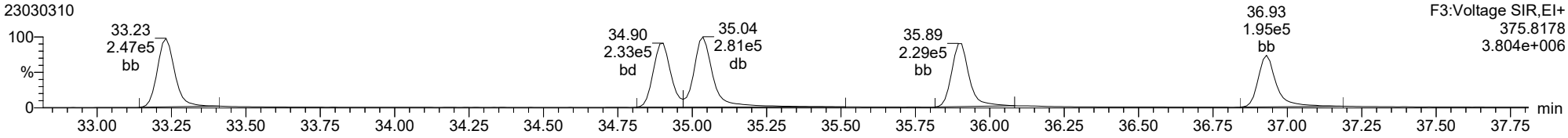
Total-hexafurans



Total-hexafurans



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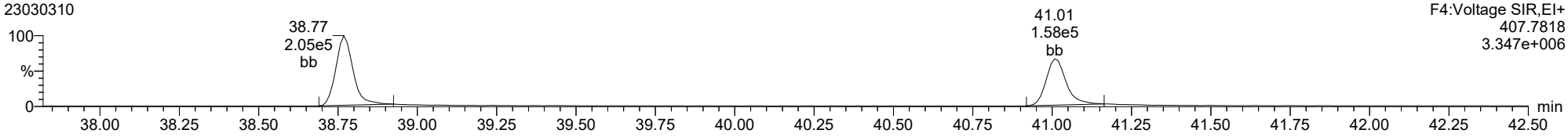
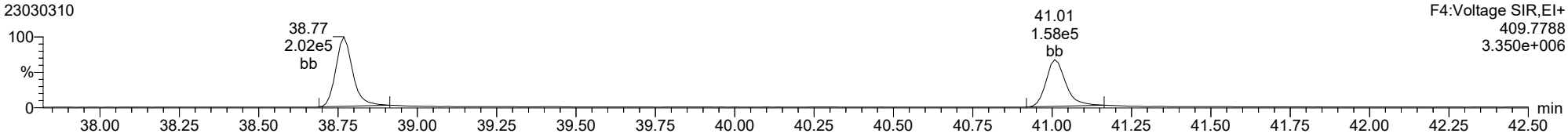


Total-heptafurans



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ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.774	1.000	4.131e4	5.488e4	0.702	0.753	0.770	1493	2220	6.02e5	8.13e5	403.0	366.2	NO	bb	bb	10.126
12378-PeCDF	29.934	1.000	2.094e5	1.387e5	0.679	1.510	1.550	3237	2768	3.10e6	2.08e6	956.2	750.8	NO	bb	bb	47.721
23478-PeCDF	31.282	1.001	2.189e5	1.466e5	0.786	1.493	1.550	3237	2768	3.25e6	2.13e6	1004.6	769.0	NO	bb	bb	48.580
123478-HxCDF	34.903	1.001	2.702e5	2.168e5	1.166	1.247	1.240	2948	2161	4.14e6	3.34e6	1404.3	1544.7	NO	bd	bd	47.304
234678-HxCDF	35.905	1.001	2.808e5	2.345e5	1.140	1.198	1.240	2948	2161	4.05e6	3.23e6	1375.6	1495.3	NO	bb	bd	52.050
123678-HxCDF	35.036	1.000	3.125e5	2.496e5	1.091	1.252	1.240	2948	2161	4.44e6	3.55e6	1506.3	1641.4	NO	db	db	51.387
123789-HxCDF	36.931	1.000	2.304e5	1.857e5	1.137	1.240	1.240	2948	2161	3.37e6	2.68e6	1143.7	1240.6	NO	bb	bb	48.904
1234678-HpCDF	38.769	1.000	1.725e5	1.737e5	1.003	0.993	1.050	2044	2260	2.71e6	2.74e6	1326.3	1210.9	NO	bb	bb	47.690
1234789-HpCDF	41.008	1.000	1.395e5	1.236e5	0.953	1.128	1.050	2044	2260	1.71e6	1.64e6	836.3	725.6	NO	bd	bb	53.601
OCDF	45.237	1.005	1.863e5	1.970e5	0.778	0.946	0.890	1162	1746	2.03e6	2.27e6	1745.6	1302.8	NO	bd	bb	95.021
2378-TCDD	26.424	1.001	4.111e4	5.488e4	1.149	0.749	0.770	1210	797	6.31e5	8.06e5	521.2	1010.5	NO	bb	bb	9.017
12378-PeCDD	31.538	1.001	2.212e5	1.442e5	1.022	1.534	1.550	2794	1649	3.14e6	2.05e6	1124.1	1244.9	NO	bb	bb	50.849
123478-HxCDD	36.017	1.000	2.147e5	1.744e5	0.996	1.231	1.240	3133	1871	3.31e6	2.68e6	1055.8	1434.4	NO	bd	bd	50.696
123678-HxCDD	36.139	1.001	2.532e5	2.091e5	1.001	1.211	1.240	3133	1871	3.49e6	2.85e6	1112.6	1520.4	NO	db	db	51.126
123789-HxCDD	36.518	1.011	2.114e5	1.814e5	0.907	1.166	1.240	3133	1871	3.08e6	2.54e6	982.1	1355.5	NO	bb	bd	51.723
1234678-HpCDD	40.273	1.000	1.700e5	1.663e5	1.039	1.022	1.050	1948	2105	2.22e6	2.15e6	1138.4	1022.1	NO	bd	bd	52.721
OCDD	45.000	1.000	2.152e5	2.483e5	0.920	0.867	0.890	885	1554	2.46e6	2.84e6	2785.0	1828.9	NO	bb	bb	97.150
13C-2378-TCDF	25.760	1.007	5.853e5	7.688e5	1.620	0.761	0.770	1921	2018	8.54e6	1.13e7	4445.5	5599.2	NO	bb	bb	89.420
13C-12378-PeCDF	29.923	1.169	6.466e5	4.272e5	1.240	1.513	1.550	2442	3390	8.85e6	5.90e6	3622.7	1739.1	NO	bb	bd	92.612
13C-23478-PeCDF	31.259	1.222	5.702e5	3.869e5	1.118	1.474	1.550	2442	3390	8.42e6	5.62e6	3447.3	1659.1	NO	bb	bb	91.616
13C-123478-HxCDF	34.881	0.955	2.992e5	5.837e5	1.168	0.513	0.510	2430	2952	4.46e6	8.67e6	1835.4	2935.2	NO	bd	bd	95.179
13C-123678-HxCDF	35.025	0.959	3.347e5	6.682e5	1.386	0.501	0.510	2430	2952	4.76e6	9.19e6	1958.9	3111.9	NO	db	db	91.102
13C-234678-HxCDF	35.883	0.983	2.956e5	5.730e5	1.129	0.516	0.510	2430	2952	4.27e6	8.35e6	1756.5	2829.2	NO	bb	bb	96.885
13C-123789-HxCDF	36.919	1.011	2.519e5	4.965e5	0.932	0.507	0.510	2430	2952	3.69e6	7.15e6	1518.9	2421.6	NO	bb	bb	101.167
13C-1234678-HpCDF	38.758	1.062	2.307e5	4.931e5	0.895	0.468	0.440	2487	3339	3.35e6	7.56e6	1347.2	2263.7	NO	bd	bb	101.839
13C-1234789-HpCDF	40.997	1.123	1.602e5	3.548e5	0.770	0.452	0.440	2487	3339	2.05e6	4.72e6	823.7	1413.6	NO	bb	bb	84.268
13C-1234-TCDD	25.591	0.000	4.152e5	5.195e5	1.000	0.799	0.770	2224	1360	6.53e6	8.14e6	2938.6	5984.1	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.031	4.083e5	5.184e5	1.152	0.788	0.770	2224	1360	5.76e6	7.36e6	2588.5	5411.0	NO	bb	bb	86.032
13C-12378-PeCDD	31.516	1.232	4.323e5	2.709e5	0.829	1.595	1.550	1217	913	6.32e6	3.99e6	5187.9	4362.9	NO	bb	bb	90.774
13C-123478-HxCDD	36.006	0.986	4.338e5	3.372e5	0.995	1.286	1.240	3851	1371	6.85e6	5.33e6	1778.6	3884.7	NO	bd	bd	97.589
13C-123678-HxCDD	36.117	0.989	5.114e5	3.919e5	1.157	1.305	1.240	3851	1371	7.20e6	5.65e6	1870.4	4120.3	NO	db	db	98.370
13C-1234678-HpCDD	40.262	1.103	3.166e5	2.972e5	0.840	1.065	1.050	1699	1520	4.20e6	3.95e6	2473.2	2598.3	NO	bb	bb	92.030
13C-OCDD	44.990	1.232	5.160e5	5.214e5	0.767	0.990	0.890	2001	1870	5.29e6	5.84e6	2645.0	3123.1	NO	bd	bb	170.247
13C-123789-HxCDD	36.507	0.000	4.452e5	3.487e5	1.000	1.277	1.240	3851	1371	6.49e6	5.07e6	1686.5	3694.9	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.033	9.071e4		1.288			1721		1.34e6		776.4			bb		7.536

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Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
Printed: Monday, March 06, 2023 14:47:33 Pacific Standard Time

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.271	0.865	5.764e4	7.805e4	0.802	0.738	0.770	1493	2220	9.22e5	1.25e6	617.6	564.2	NO	bb	bb	12.503
1289-TCDF	27.272	1.059	3.446e4	4.665e4	0.678	0.739	0.770	1493	2220	5.07e5	6.62e5	339.5	298.3	NO	bb	db	8.835
13468-PECDF	27.130	0.907	3.611e5	2.330e5	1.246	1.550	1.550	743	1090	5.44e6	3.55e6	7323.2	3255.0	NO	bb	bb	44.390
12389-PECDF	32.318	1.080	2.101e5	1.516e5	0.496	1.387	1.550	3237	2768	2.95e6	1.97e6	910.6	713.0	NO	bb	bd	67.866
123468-HXCDF	33.231	0.953	2.880e5	2.384e5	1.169	1.208	1.240	2948	2161	4.12e6	3.25e6	1397.4	1503.0	NO	bb	bb	51.002
1368-TCDD	23.557	0.892	5.668e4	7.180e4	1.015	0.789	0.770	1210	797	9.15e5	1.16e6	755.8	1460.4	NO	bb	bb	13.654
1289-TCDD	27.017	1.023	3.648e4	4.783e4	0.909	0.763	0.770	1210	797	5.40e5	6.90e5	445.8	865.4	NO	bb	bb	10.012
12479-PECDD	28.819	0.914	3.593e5	2.367e5	2.301	1.518	1.550	2794	1649	3.42e6	2.21e6	1224.5	1341.7	NO	bb	bb	36.832
12389-PECDD	31.928	1.013	2.423e5	1.700e5	1.184	1.426	1.550	2794	1649	3.48e6	2.31e6	1246.0	1399.4	NO	bb	bd	49.543
124679-HXCDD	34.011	0.945	2.330e5	1.909e5	1.115	1.220	1.240	3133	1871	3.38e6	2.76e6	1078.1	1473.6	NO	bb	bb	49.292
1234679-HPCDD	39.225	0.974	2.020e5	1.832e5	1.137	1.103	1.050	1948	2105	2.83e6	2.72e6	1451.0	1293.3	NO	bd	bb	55.196
Total-tetrafurans			1.346e5		0.727			1493		2.05e6							31.724
Total-penta1			3.611e5					743		5.44e6							44.390
Total-pentafurans			6.730e5		0.654			3237		9.80e6							172.856
Total-hexafurans			1.382e6		1.141			2948		2.01e7							250.647
Total-heptafurans			3.120e5		0.978			2044		4.42e6							101.291
Total-Furans			3.049e6		0.922			1493		4.39e7							695.930
Total-tetradioxins			2.249e5		1.024			1210		3.13e6							54.516
Total-pentadioxins			8.229e5		1.502			2794		1.00e7							137.223
Total-hexadioxins			9.123e5		1.005			3133		1.32e7							202.837
Total-heptadioxins			3.720e5		1.088			1948		5.04e6							107.918
Total-Dioxins			2.547e6		1.130			1210		3.39e7							599.643
Total-TEQ			5.596e6					1210		7.78e7							1295.573
FUNCTION1 PFK			7.521e6					557945		8.00e6							
FUNCTION2 PFK			4.110e5					226700		1.13e7							0.000
FUNCTION3 PFK			8.443e6					414812		2.82e6							0.000
FUNCTION4 PFK			2.598e7					304689		2.22e7							
FUNCTION5 PFK			7.163e4					189891		2.74e6							
FUNCTION1 HXCD...			3.794e2					593		5.61e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			8.042e2					818		1.73e4							0.000
FUNCTION3 OCDPE			9.563e1					429		1.87e3							0.000
FUNCTION4 NCDPE			0.000e0					545		0.00e0							
FUNCTION5 DCDPE			0.000e0					542		0.00e0							

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Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	3.446e4	4.665e4	0.678	0.74	0.77	339.5	YES	NO	bb	db	8.835
2	2378-TCDF	25.77	4.131e4	5.488e4	0.702	0.75	0.77	403.0	YES	NO	bb	bb	10.126
3	Total-tetrafurans	24.86	6.389e2	7.978e2	0.727	0.80	0.77	6.2	YES	NO	bb	bb	0.146
4	Total-tetrafurans	24.55	5.238e2	5.981e2	0.727	0.88	0.77	6.0	YES	NO	bb	bb	0.114
5	1368-TCDF	22.27	5.764e4	7.805e4	0.802	0.74	0.77	617.6	YES	NO	bb	bb	12.503

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.13	3.611e5	2.330e5	1.246	1.55	1.55	7323.2	YES	NO	bb	bb	44.390

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.32	2.101e5	1.516e5	0.496	1.39	1.55	910.6	YES	NO	bb	bd	67.866
2	23478-PeCDF	31.28	2.189e5	1.466e5	0.786	1.49	1.55	1004.6	YES	NO	bb	bb	48.580
3	12378-PeCDF	29.93	2.094e5	1.387e5	0.679	1.51	1.55	956.2	YES	NO	bb	bb	47.721
4	Total-pentafurans	28.80	3.458e4	2.311e4	0.654	1.50	1.55	155.8	YES	NO	bb	bb	8.688

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123478-HxCDF	34.90	2.702e5	2.168e5	1.166	1.25	1.24	1404.3	YES	NO	bd	bd	47.304
2	123468-HXCDF	33.23	2.880e5	2.384e5	1.169	1.21	1.24	1397.4	YES	NO	bb	bb	51.002
3	123789-HxCDF	36.93	2.304e5	1.857e5	1.137	1.24	1.24	1143.7	YES	NO	bb	bb	48.904
4	234678-HxCDF	35.91	2.808e5	2.345e5	1.140	1.20	1.24	1375.6	YES	NO	bb	bd	52.050
5	123678-HxCDF	35.04	3.125e5	2.496e5	1.091	1.25	1.24	1506.3	YES	NO	db	db	51.387

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.01	1.395e5	1.236e5	0.953	1.13	1.05	836.3	YES	NO	bd	bb	53.601
2	1234678-HpCDF	38.77	1.725e5	1.737e5	1.003	0.99	1.05	1326.3	YES	NO	bb	bb	47.690

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	3.446e4	4.665e4	0.678	0.74	0.77	339.5	YES	NO	bb	db	8.835
2	2378-TCDF	25.77	4.131e4	5.488e4	0.702	0.75	0.77	403.0	YES	NO	bb	bb	10.126
3	Total-tetrafurans	24.86	6.389e2	7.978e2	0.727	0.80	0.77	6.2	YES	NO	bb	bb	0.146
4	Total-tetrafurans	24.55	5.238e2	5.981e2	0.727	0.88	0.77	6.0	YES	NO	bb	bb	0.114
5	1368-TCDF	22.27	5.764e4	7.805e4	0.802	0.74	0.77	617.6	YES	NO	bb	bb	12.503
6	12389-PECDF	32.32	2.101e5	1.516e5	0.496	1.39	1.55	910.6	YES	NO	bb	bd	67.866
7	23478-PeCDF	31.28	2.189e5	1.466e5	0.786	1.49	1.55	1004.6	YES	NO	bb	bb	48.580
8	12378-PeCDF	29.93	2.094e5	1.387e5	0.679	1.51	1.55	956.2	YES	NO	bb	bb	47.721
9	Total-pentafurans	28.80	3.458e4	2.311e4	0.654	1.50	1.55	155.8	YES	NO	bb	bb	8.688
10	123478-HxCDF	34.90	2.702e5	2.168e5	1.166	1.25	1.24	1404.3	YES	NO	bd	bd	47.304
11	123468-HXCDF	33.23	2.880e5	2.384e5	1.169	1.21	1.24	1397.4	YES	NO	bb	bb	51.002
12	123789-HxCDF	36.93	2.304e5	1.857e5	1.137	1.24	1.24	1143.7	YES	NO	bb	bb	48.904
13	234678-HxCDF	35.91	2.808e5	2.345e5	1.140	1.20	1.24	1375.6	YES	NO	bb	bd	52.050
14	123678-HxCDF	35.04	3.125e5	2.496e5	1.091	1.25	1.24	1506.3	YES	NO	db	db	51.387
15	1234789-HpCDF	41.01	1.395e5	1.236e5	0.953	1.13	1.05	836.3	YES	NO	bd	bb	53.601
16	1234678-HpCDF	38.77	1.725e5	1.737e5	1.003	0.99	1.05	1326.3	YES	NO	bb	bb	47.690
17	OCDF	45.24	1.863e5	1.970e5	0.778	0.95	0.89	1745.6	YES	NO	bd	bb	95.021
18	13468-PECDF	27.13	3.611e5	2.330e5	1.246	1.55	1.55	7323.2	YES	NO	bb	bb	44.390

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.56	5.668e4	7.180e4	1.015	0.79	0.77	755.8	YES	NO	bb	bb	13.654
2	1289-TCDD	27.02	3.648e4	4.783e4	0.909	0.76	0.77	445.8	YES	NO	bb	bb	10.012
3	2378-TCDD	26.42	4.111e4	5.488e4	1.149	0.75	0.77	521.2	YES	NO	bb	bb	9.017
4	Total-tetradioxins	26.10	6.719e4	8.697e4	1.024	0.77	0.77	561.8	YES	NO	bb	bb	16.242
5	Total-tetradioxins	25.60	2.343e4	2.963e4	1.024	0.79	0.77	301.6	YES	NO	bb	bb	5.591

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.93	2.423e5	1.700e5	1.184	1.43	1.55	1246.0	YES	NO	bb	bd	49.543
2	12378-PeCDD	31.54	2.212e5	1.442e5	1.022	1.53	1.55	1124.1	YES	NO	bb	bb	50.849
3	12479-PECDD	28.82	3.593e5	2.367e5	2.301	1.52	1.55	1224.5	YES	NO	bb	bb	36.832

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	124679-HXCDD	34.01	2.330e5	1.909e5	1.115	1.22	1.24	1078.1	YES	NO	bb	bb	49.292
2	123789-HxCDD	36.52	2.114e5	1.814e5	0.907	1.17	1.24	982.1	YES	NO	bb	bd	51.723
3	123678-HxCDD	36.14	2.532e5	2.091e5	1.001	1.21	1.24	1112.6	YES	NO	db	db	51.126
4	123478-HxCDD	36.02	2.147e5	1.744e5	0.996	1.23	1.24	1055.8	YES	NO	bd	bd	50.696

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.27	1.700e5	1.663e5	1.039	1.02	1.05	1138.4	YES	NO	bd	bd	52.721
2	1234679-HPCDD	39.23	2.020e5	1.832e5	1.137	1.10	1.05	1451.0	YES	NO	bd	bb	55.196

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.56	5.668e4	7.180e4	1.015	0.79	0.77	755.8	YES	NO	bb	bb	13.654
2	1289-TCDD	27.02	3.648e4	4.783e4	0.909	0.76	0.77	445.8	YES	NO	bb	bb	10.012
3	2378-TCDD	26.42	4.111e4	5.488e4	1.149	0.75	0.77	521.2	YES	NO	bb	bb	9.017
4	Total-tetradioxins	26.10	6.719e4	8.697e4	1.024	0.77	0.77	561.8	YES	NO	bb	bb	16.242
5	Total-tetradioxins	25.60	2.343e4	2.963e4	1.024	0.79	0.77	301.6	YES	NO	bb	bb	5.591
6	12389-PECDD	31.93	2.423e5	1.700e5	1.184	1.43	1.55	1246.0	YES	NO	bb	bd	49.543
7	12378-PeCDD	31.54	2.212e5	1.442e5	1.022	1.53	1.55	1124.1	YES	NO	bb	bb	50.849
8	12479-PECDD	28.82	3.593e5	2.367e5	2.301	1.52	1.55	1224.5	YES	NO	bb	bb	36.832
9	124679-HXCDD	34.01	2.330e5	1.909e5	1.115	1.22	1.24	1078.1	YES	NO	bb	bb	49.292
10	123789-HxCDD	36.52	2.114e5	1.814e5	0.907	1.17	1.24	982.1	YES	NO	bb	bd	51.723
11	123678-HxCDD	36.14	2.532e5	2.091e5	1.001	1.21	1.24	1112.6	YES	NO	db	db	51.126
12	123478-HxCDD	36.02	2.147e5	1.744e5	0.996	1.23	1.24	1055.8	YES	NO	bd	bd	50.696
13	1234678-HpCDD	40.27	1.700e5	1.663e5	1.039	1.02	1.05	1138.4	YES	NO	bd	bd	52.721
14	1234679-HPCDD	39.23	2.020e5	1.832e5	1.137	1.10	1.05	1451.0	YES	NO	bd	bb	55.196
15	OCDD	45.00	2.152e5	2.483e5	0.920	0.87	0.89	2785.0	YES	NO	bb	bb	97.150

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	3.446e4	4.665e4	0.678	0.74	0.77	339.5	YES	NO	bb	db	8.835
2	2378-TCDF	25.77	4.131e4	5.488e4	0.702	0.75	0.77	403.0	YES	NO	bb	bb	10.126
3	Total-tetrafurans	24.86	6.389e2	7.978e2	0.727	0.80	0.77	6.2	YES	NO	bb	bb	0.146
4	Total-tetrafurans	24.55	5.238e2	5.981e2	0.727	0.88	0.77	6.0	YES	NO	bb	bb	0.114
5	1368-TCDF	22.27	5.764e4	7.805e4	0.802	0.74	0.77	617.6	YES	NO	bb	bb	12.503
6	12389-PECDF	32.32	2.101e5	1.516e5	0.496	1.39	1.55	910.6	YES	NO	bb	bd	67.866
7	23478-PeCDF	31.28	2.189e5	1.466e5	0.786	1.49	1.55	1004.6	YES	NO	bb	bb	48.580
8	12378-PeCDF	29.93	2.094e5	1.387e5	0.679	1.51	1.55	956.2	YES	NO	bb	bb	47.721
9	Total-pentafurans	28.80	3.458e4	2.311e4	0.654	1.50	1.55	155.8	YES	NO	bb	bb	8.688
10	123478-HxCDF	34.90	2.702e5	2.168e5	1.166	1.25	1.24	1404.3	YES	NO	bd	bd	47.304
11	123468-HXCDF	33.23	2.880e5	2.384e5	1.169	1.21	1.24	1397.4	YES	NO	bb	bb	51.002
12	123789-HxCDF	36.93	2.304e5	1.857e5	1.137	1.24	1.24	1143.7	YES	NO	bb	bb	48.904
13	234678-HxCDF	35.91	2.808e5	2.345e5	1.140	1.20	1.24	1375.6	YES	NO	bb	bd	52.050
14	123678-HxCDF	35.04	3.125e5	2.496e5	1.091	1.25	1.24	1506.3	YES	NO	db	db	51.387
15	1234789-HpCDF	41.01	1.395e5	1.236e5	0.953	1.13	1.05	836.3	YES	NO	bd	bb	53.601
16	1234678-HpCDF	38.77	1.725e5	1.737e5	1.003	0.99	1.05	1326.3	YES	NO	bb	bb	47.690
17	OCDF	45.24	1.863e5	1.970e5	0.778	0.95	0.89	1745.6	YES	NO	bd	bb	95.021
18	13468-PECDF	27.13	3.611e5	2.330e5	1.246	1.55	1.55	7323.2	YES	NO	bb	bb	44.390
19	1368-TCDD	23.56	5.668e4	7.180e4	1.015	0.79	0.77	755.8	YES	NO	bb	bb	13.654
20	1289-TCDD	27.02	3.648e4	4.783e4	0.909	0.76	0.77	445.8	YES	NO	bb	bb	10.012
21	2378-TCDD	26.42	4.111e4	5.488e4	1.149	0.75	0.77	521.2	YES	NO	bb	bb	9.017
22	Total-tetradioxins	26.10	6.719e4	8.697e4	1.024	0.77	0.77	561.8	YES	NO	bb	bb	16.242
23	Total-tetradioxins	25.60	2.343e4	2.963e4	1.024	0.79	0.77	301.6	YES	NO	bb	bb	5.591
24	12389-PECDD	31.93	2.423e5	1.700e5	1.184	1.43	1.55	1246.0	YES	NO	bb	bd	49.543
25	12378-PeCDD	31.54	2.212e5	1.442e5	1.022	1.53	1.55	1124.1	YES	NO	bb	bb	50.849
26	12479-PECDD	28.82	3.593e5	2.367e5	2.301	1.52	1.55	1224.5	YES	NO	bb	bb	36.832
27	124679-HXCDD	34.01	2.330e5	1.909e5	1.115	1.22	1.24	1078.1	YES	NO	bb	bb	49.292
28	123789-HxCDD	36.52	2.114e5	1.814e5	0.907	1.17	1.24	982.1	YES	NO	bb	bd	51.723
29	123678-HxCDD	36.14	2.532e5	2.091e5	1.001	1.21	1.24	1112.6	YES	NO	db	db	51.126
30	123478-HxCDD	36.02	2.147e5	1.744e5	0.996	1.23	1.24	1055.8	YES	NO	bd	bd	50.696
31	1234678-HpCDD	40.27	1.700e5	1.663e5	1.039	1.02	1.05	1138.4	YES	NO	bd	bd	52.721
32	1234679-HPCDD	39.23	2.020e5	1.832e5	1.137	1.10	1.05	1451.0	YES	NO	bd	bb	55.196
33	OCDD	45.00	2.152e5	2.483e5	0.920	0.87	0.89	2785.0	YES	NO	bb	bb	97.150

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.45	3.397e6					9.1	YES		db		
2	FUNCTION1 PFK	22.00	4.124e6					5.2	YES		bd		

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.25	2.674e4					2.5	NO		db		0.000
2	FUNCTION2 PFK	28.20	5.558e3					1.1	NO		dd		0.000
3	FUNCTION2 PFK	28.15	1.333e4					1.7	NO		bd		0.000
4	FUNCTION2 PFK	28.11	4.408e3					0.8	NO		bb		0.000
5	FUNCTION2 PFK	30.52	5.287e3					0.9	NO		bd		0.000
6	FUNCTION2 PFK	30.38	1.568e4					1.4	NO		bb		0.000
7	FUNCTION2 PFK	30.23	2.380e4					1.5	NO		db		0.000
8	FUNCTION2 PFK	30.10	2.694e4					1.7	NO		bd		0.000
9	FUNCTION2 PFK	29.99	2.076e3					0.5	NO		bb		0.000
10	FUNCTION2 PFK	29.89	7.421e3					1.2	NO		bb		0.000
11	FUNCTION2 PFK	29.80	6.022e3					0.5	NO		bb		0.000
12	FUNCTION2 PFK	29.62	1.101e4					1.2	NO		bb		0.000
13	FUNCTION2 PFK	29.52	2.200e4					2.0	NO		bb		0.000
14	FUNCTION2 PFK	29.42	7.036e3					1.0	NO		bb		0.000
15	FUNCTION2 PFK	29.29	2.309e4					2.2	NO		bb		0.000
16	FUNCTION2 PFK	29.03	1.036e4					1.7	NO		db		0.000
17	FUNCTION2 PFK	29.00	8.382e3					1.3	NO		bd		0.000
18	FUNCTION2 PFK	28.80	5.680e3					0.9	NO		bb		0.000
19	FUNCTION2 PFK	28.70	1.413e4					1.3	NO		bb		0.000
20	FUNCTION2 PFK	28.60	2.690e3					0.7	NO		bb		0.000
21	FUNCTION2 PFK	32.35	9.362e3					1.3	NO		bd		0.000
22	FUNCTION2 PFK	32.28	5.282e3					0.9	NO		bb		0.000
23	FUNCTION2 PFK	31.94	5.478e3					0.6	NO		bb		0.000
24	FUNCTION2 PFK	31.86	9.539e3					1.3	NO		bb		0.000
25	FUNCTION2 PFK	31.70	8.598e3					0.9	NO		bb		0.000
26	FUNCTION2 PFK	31.56	1.164e4					1.5	NO		bb		0.000
27	FUNCTION2 PFK	31.44	9.870e3					1.2	NO		bb		0.000
28	FUNCTION2 PFK	31.37	5.651e3					1.2	NO		bb		0.000
29	FUNCTION2 PFK	31.16	3.906e3					0.7	NO		db		0.000
30	FUNCTION2 PFK	31.10	5.259e3					1.0	NO		bd		0.000
31	FUNCTION2 PFK	31.00	2.220e3					0.5	NO		bb		0.000
32	FUNCTION2 PFK	30.93	4.197e3					0.6	NO		bb		0.000
33	FUNCTION2 PFK	30.84	1.813e4					1.7	NO		bb		0.000
34	FUNCTION2 PFK	30.68	6.046e3					1.3	NO		db		0.000
35	FUNCTION2 PFK	30.64	6.706e3					1.2	NO		dd		0.000
36	FUNCTION2 PFK	30.58	1.475e4					1.4	NO		dd		0.000
37	FUNCTION2 PFK	32.74	9.704e3					1.1	NO		bb		0.000

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION2 PFK	32.61	1.975e3					0.6	NO		bb		0.000
39	FUNCTION2 PFK	32.55	1.171e3					0.5	NO		bb		0.000
40	FUNCTION2 PFK	32.51	7.325e3					1.0	NO		db		0.000
41	FUNCTION2 PFK	32.45	9.340e3					1.3	NO		dd		0.000
42	FUNCTION2 PFK	32.41	1.322e4					1.9	NO		dd		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.70	5.175e4					1.9	NO		bb		0.000
2	FUNCTION3 PFK	35.52	3.681e5					3.3	YES		bb		0.000
3	FUNCTION3 PFK	34.42	8.023e6					1.5	NO		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.67	5.668e6					23.1	YES		db		
2	FUNCTION4 PFK	39.84	1.814e7					26.9	YES		dd		
3	FUNCTION4 PFK	38.09	2.173e6					22.8	YES		bd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.82	4.953e3					1.4	NO		bb		
2	FUNCTION5 PFK	45.79	4.078e3					1.3	NO		db		
3	FUNCTION5 PFK	45.76	2.296e3					0.8	NO		bd		
4	FUNCTION5 PFK	45.37	1.499e4					1.8	NO		bb		
5	FUNCTION5 PFK	45.31	3.040e3					1.0	NO		bb		
6	FUNCTION5 PFK	44.94	1.866e3					0.7	NO		bb		
7	FUNCTION5 PFK	44.62	4.342e3					1.3	NO		bb		
8	FUNCTION5 PFK	43.85	4.909e3					1.2	NO		bb		
9	FUNCTION5 PFK	43.55	9.698e3					1.7	NO		bb		
10	FUNCTION5 PFK	43.31	1.818e4					2.2	NO		bb		
11	FUNCTION5 PFK	43.18	3.274e3					1.0	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.14	7.703e1					2.6	NO		bb		0.000
2	FUNCTION1 HXCD...	25.58	1.369e2					3.0	NO		bb		0.000
3	FUNCTION1 HXCD...	24.29	7.654e1					1.4	NO		bb		0.000
4	FUNCTION1 HXCD...	23.49	8.895e1					2.4	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.41	1.026e2					2.4	NO		db		0.000
2	FUNCTION2 HPCD...	32.32	1.299e2					2.2	NO		bd		0.000
3	FUNCTION2 HPCD...	31.19	1.035e2					3.9	YES		db		0.000
4	FUNCTION2 HPCD...	31.15	2.274e2					6.9	YES		bd		0.000
5	FUNCTION2 HPCD...	29.21	1.504e2					2.9	NO		bb		0.000
6	FUNCTION2 HPCD...	28.77	9.035e1					2.8	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.51	9.563e1					4.4	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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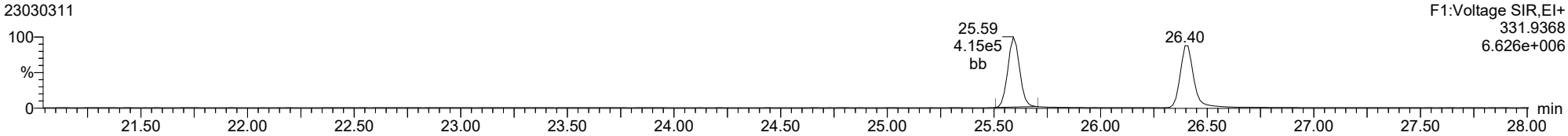
13C-1234-TCDD



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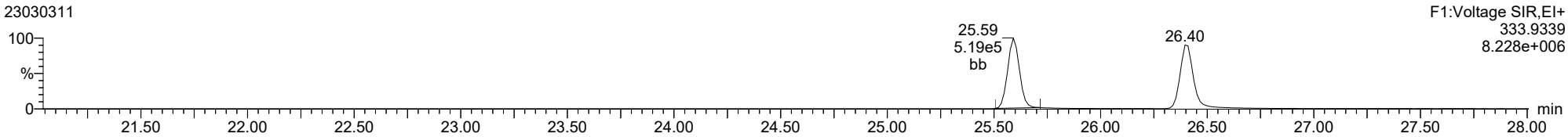

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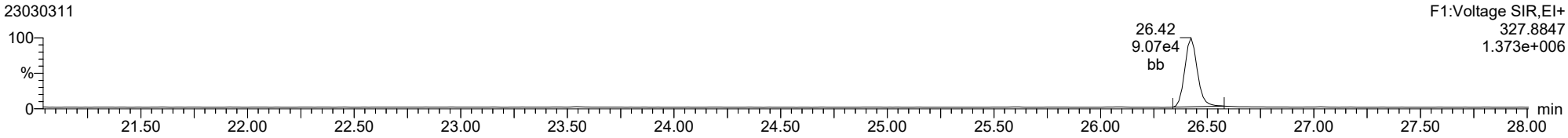

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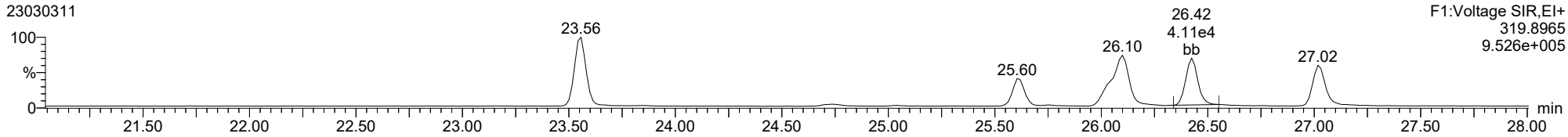

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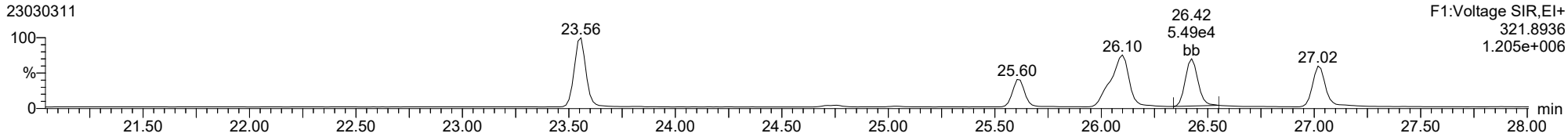

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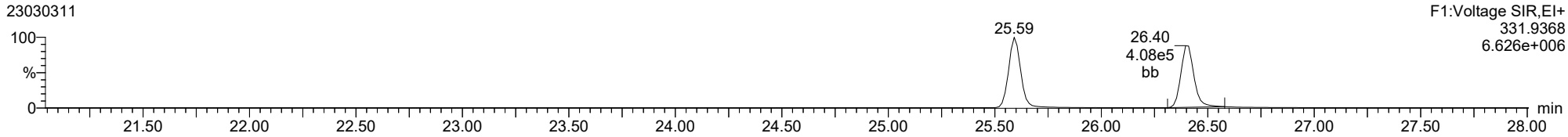

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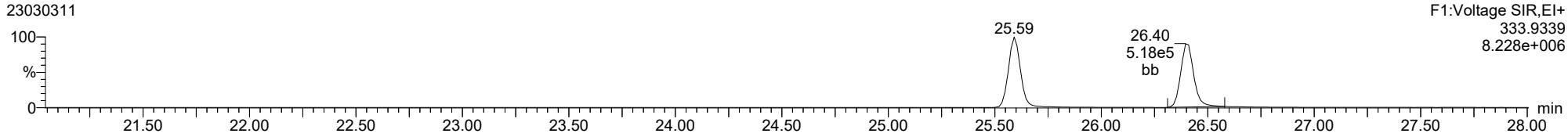

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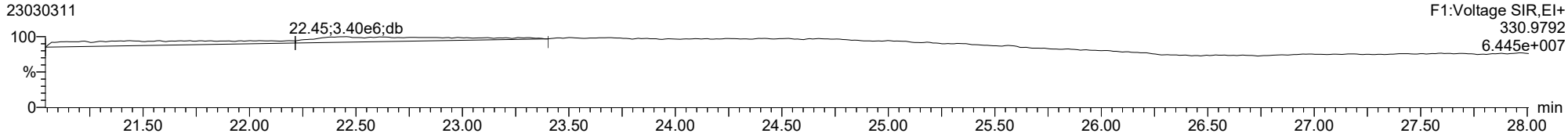

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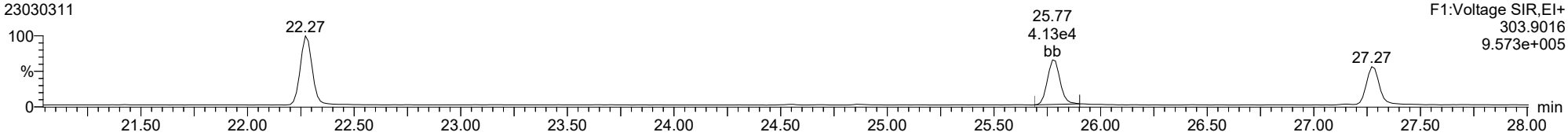
2378-TCDF



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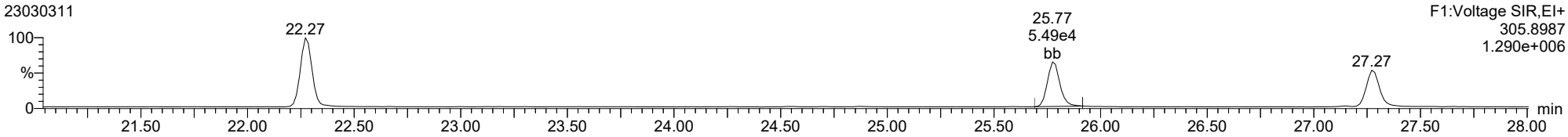

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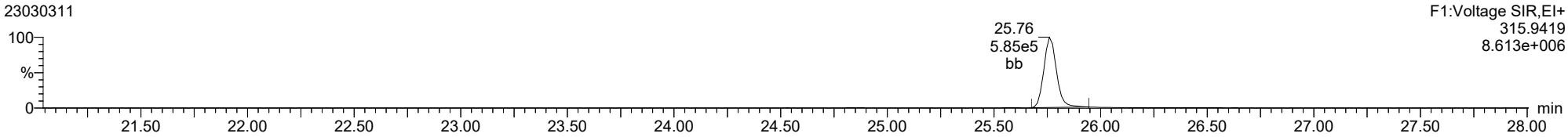

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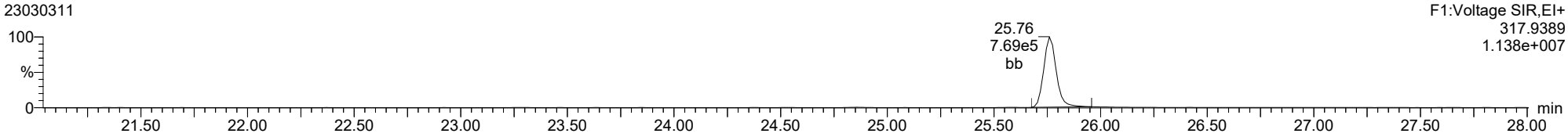

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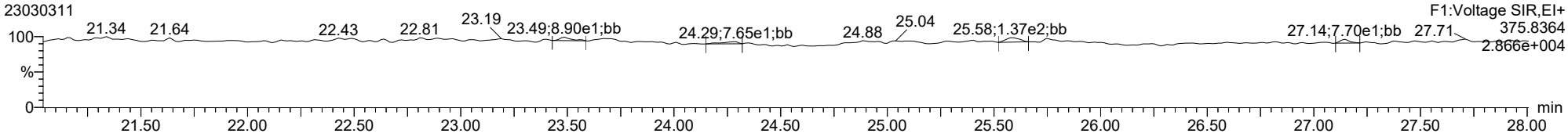

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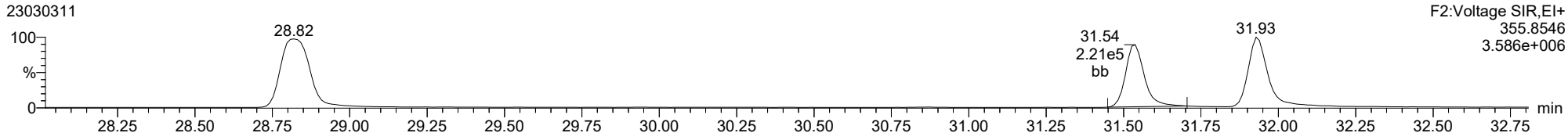

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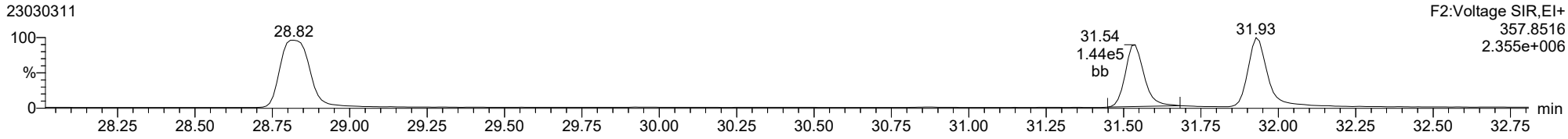

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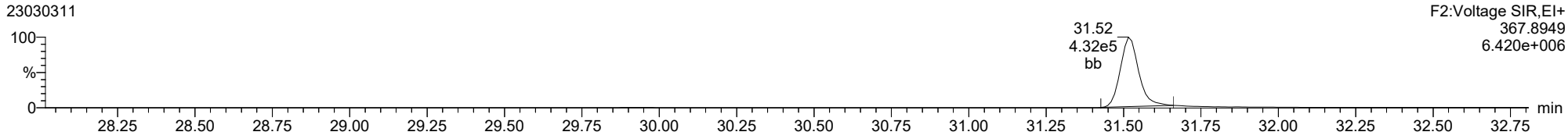

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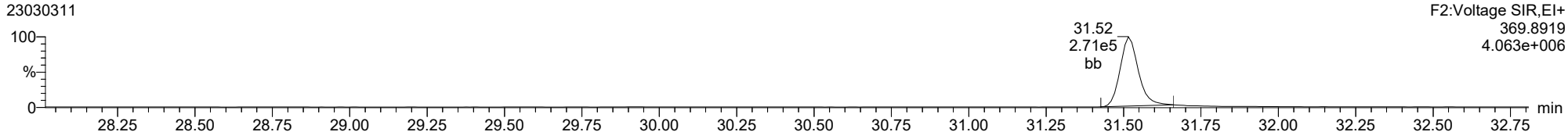

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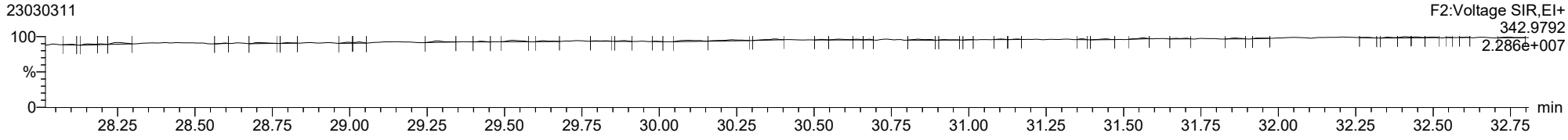

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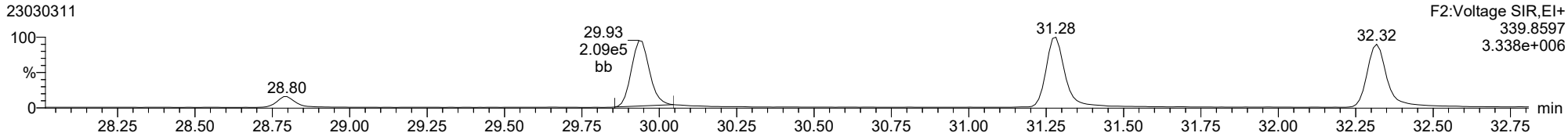

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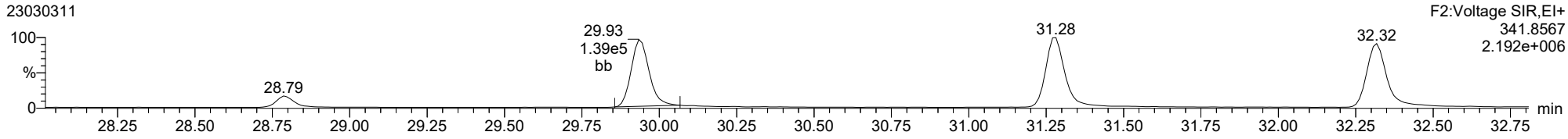

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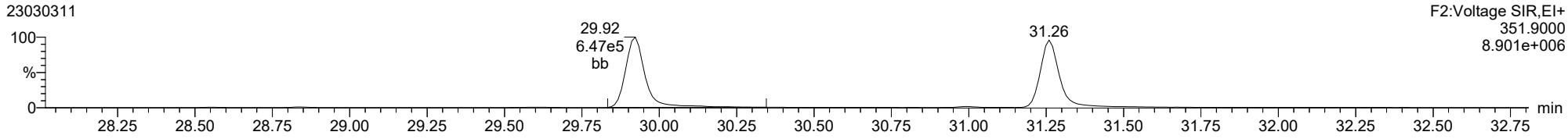

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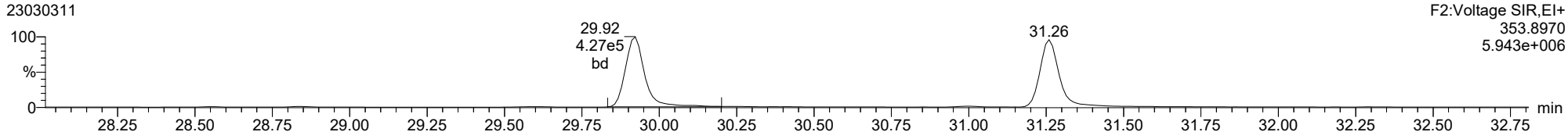

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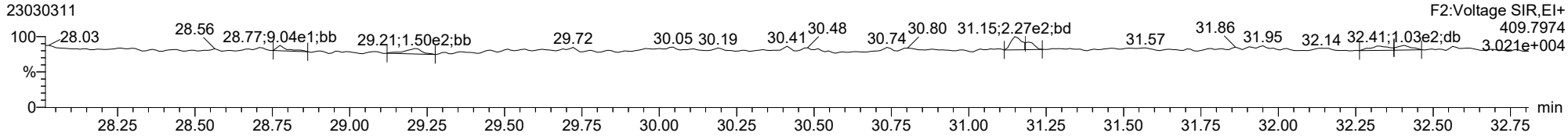

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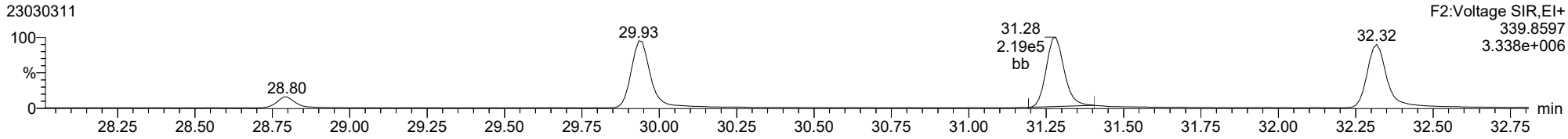

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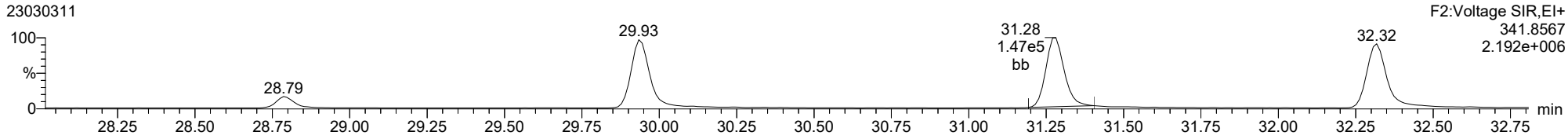

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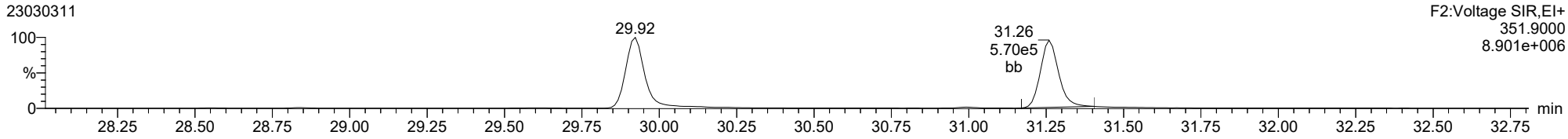

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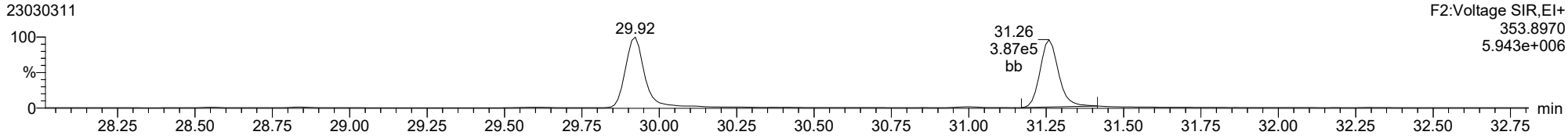

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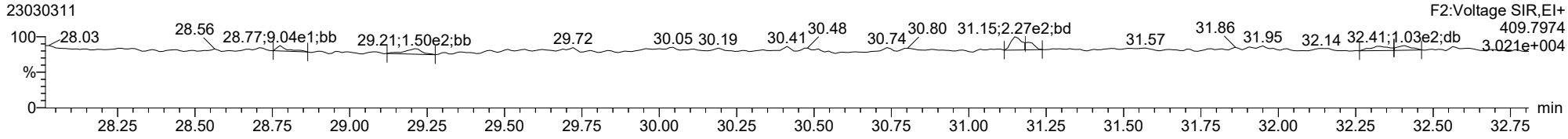

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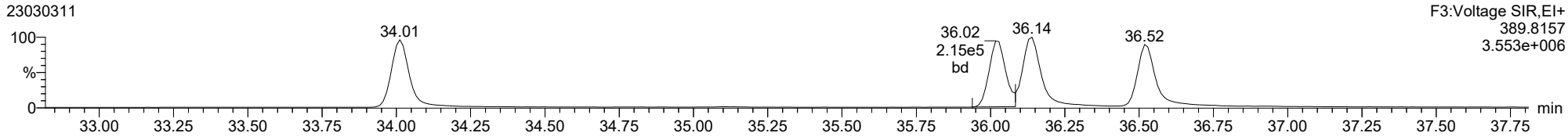

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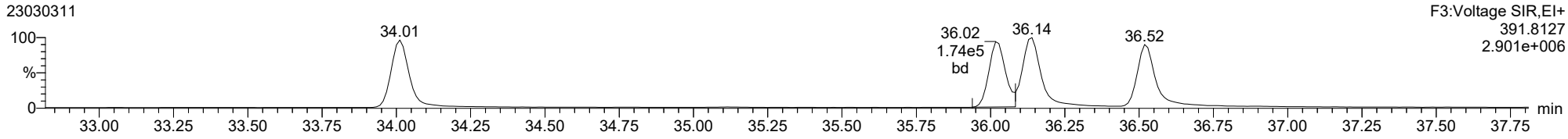

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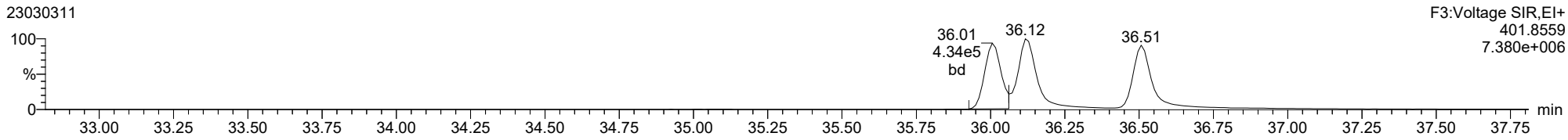

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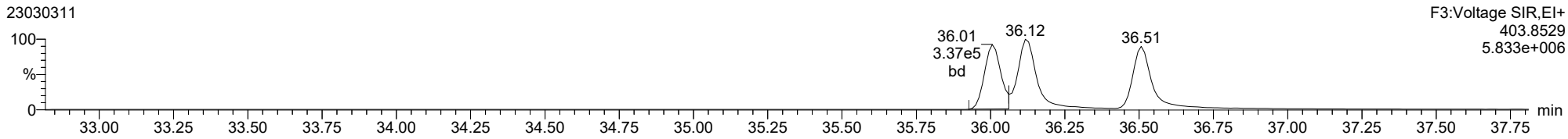

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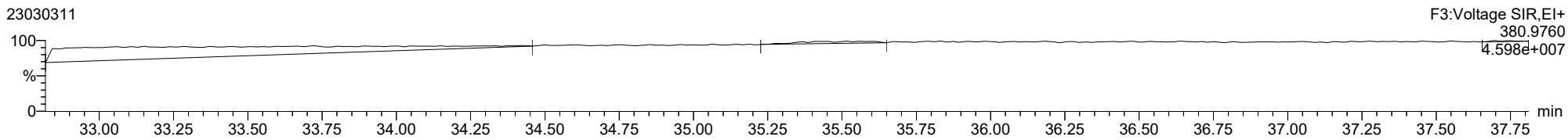

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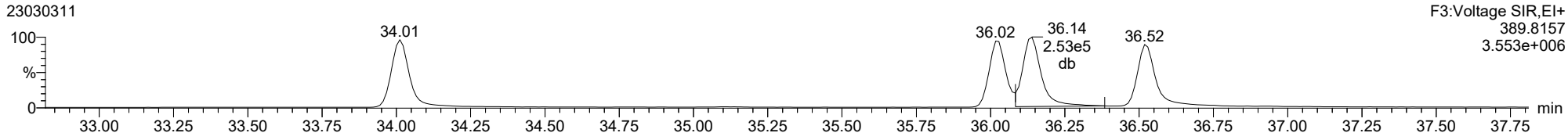

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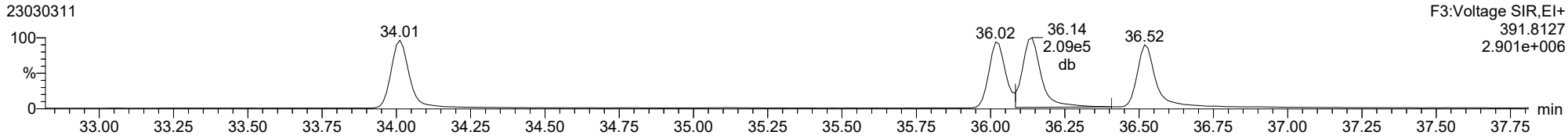

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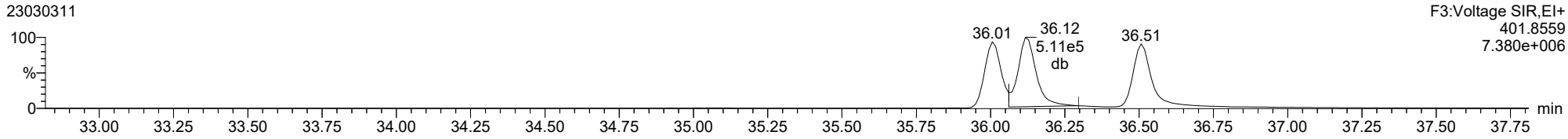

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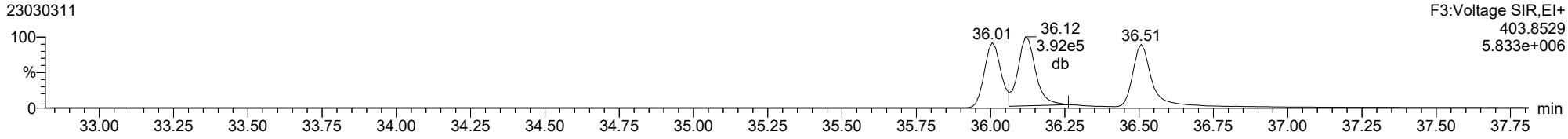

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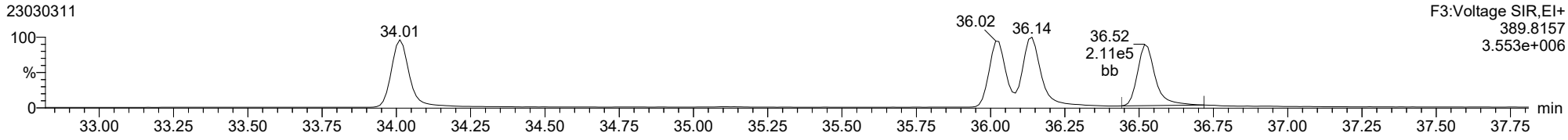

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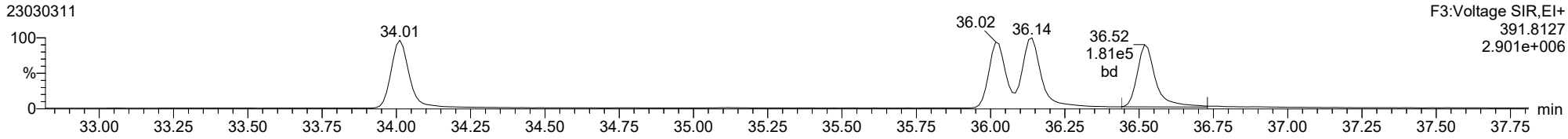

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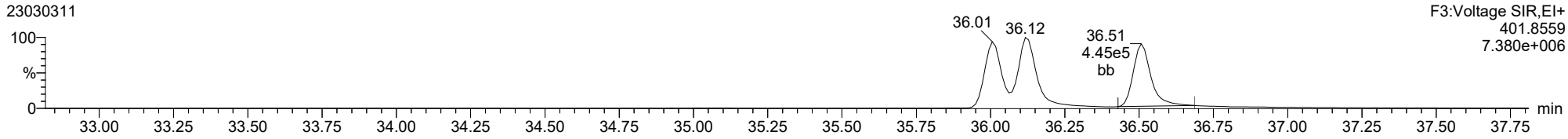

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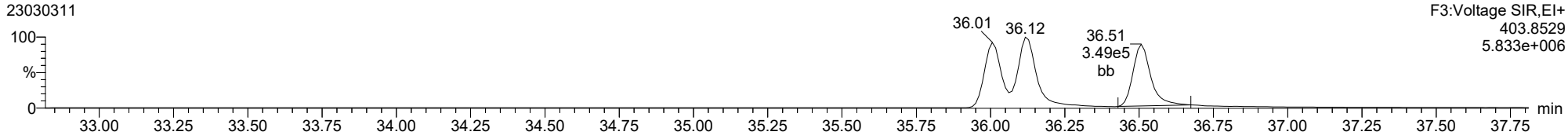

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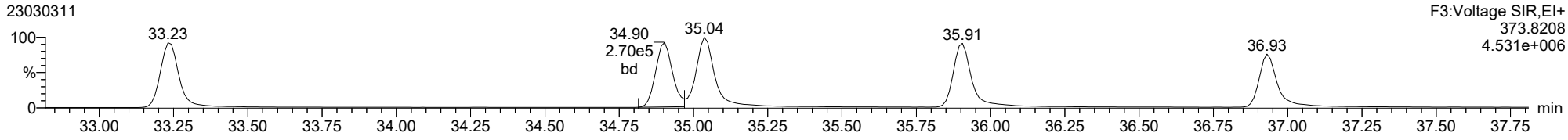

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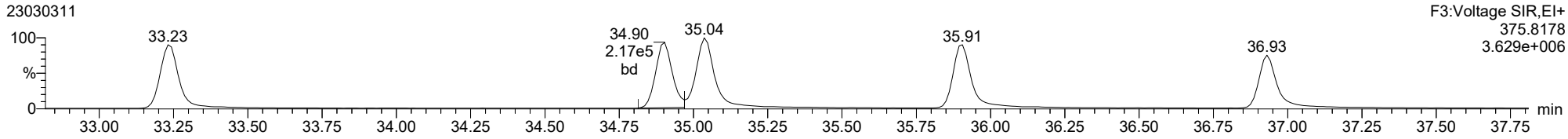

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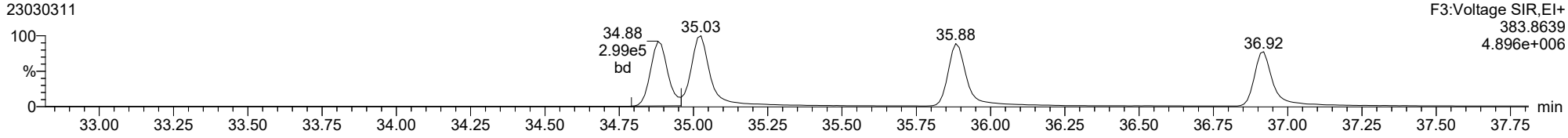

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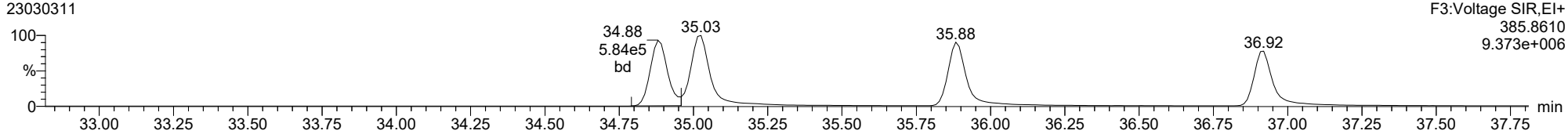

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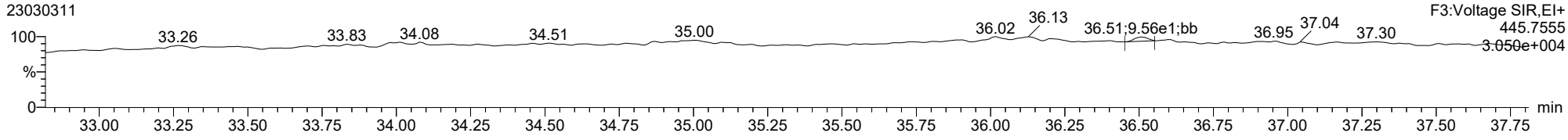

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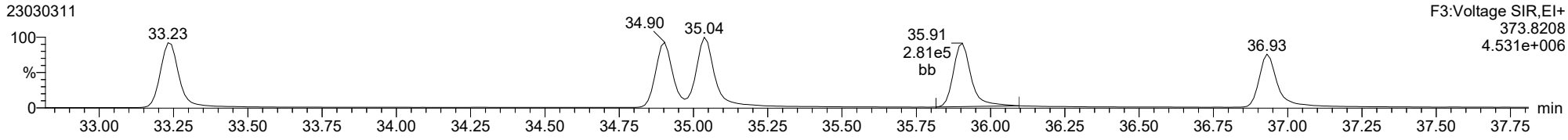

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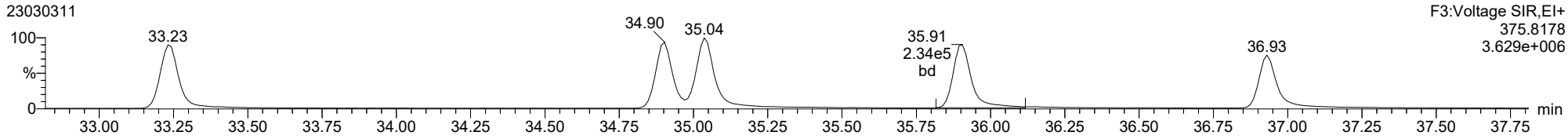

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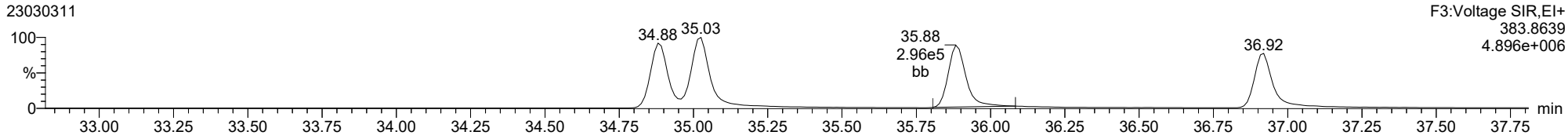

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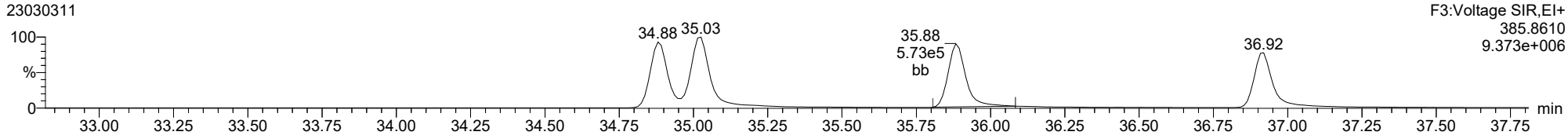

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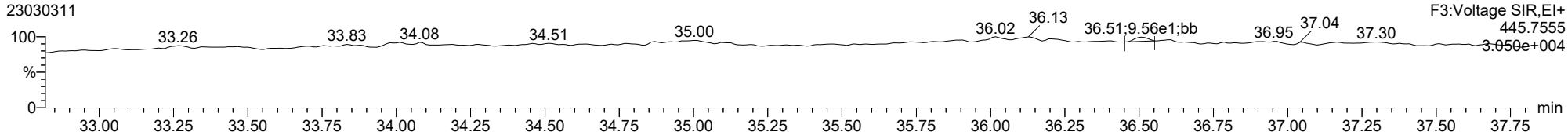

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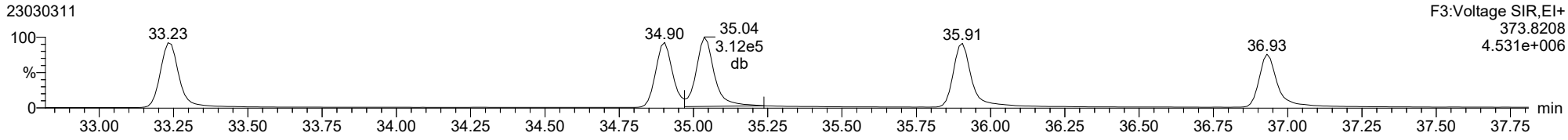

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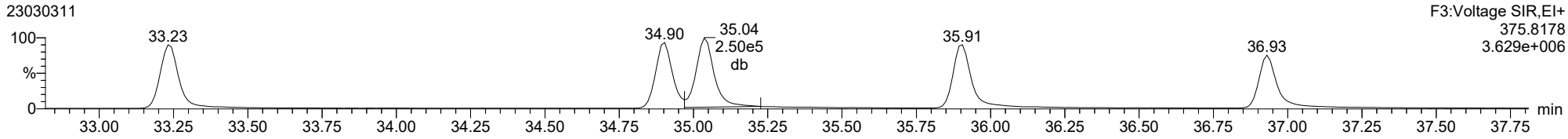

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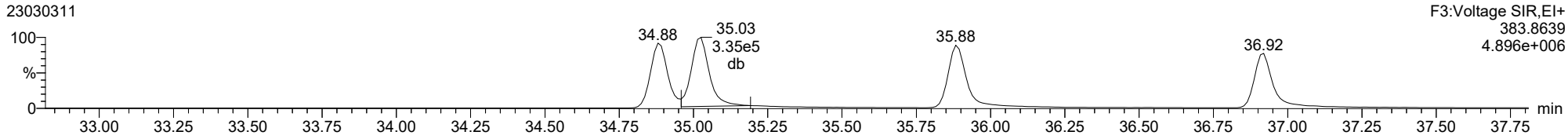

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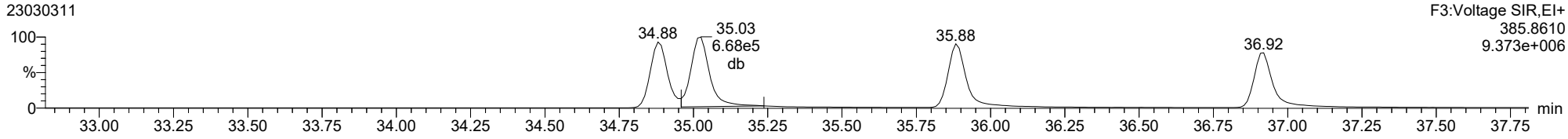

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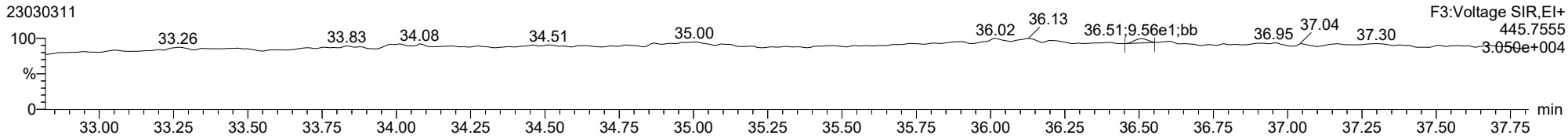

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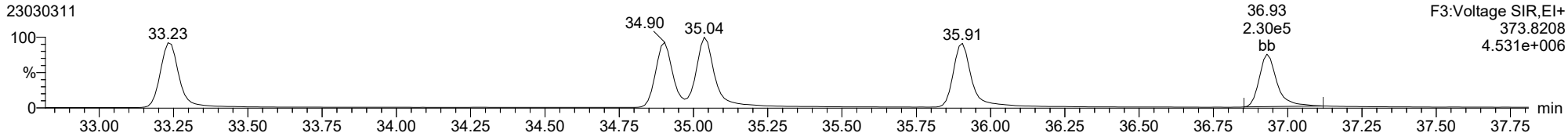

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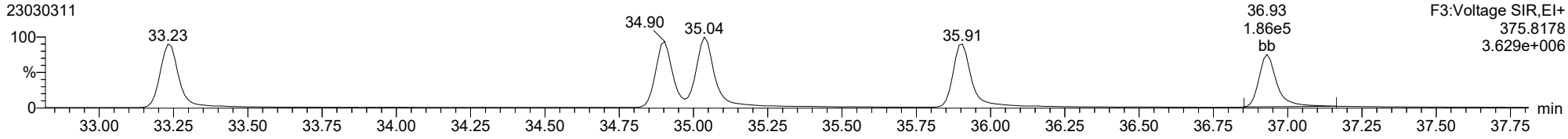

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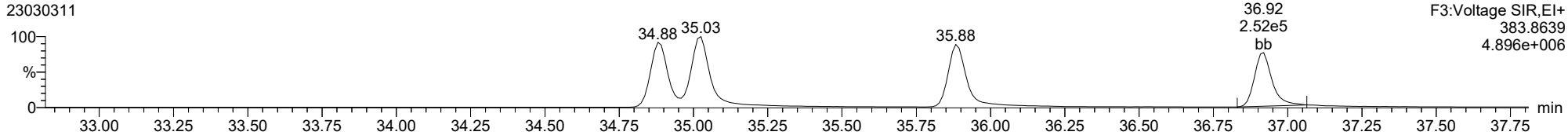

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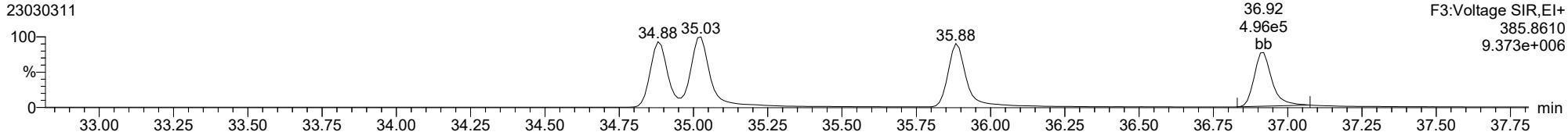

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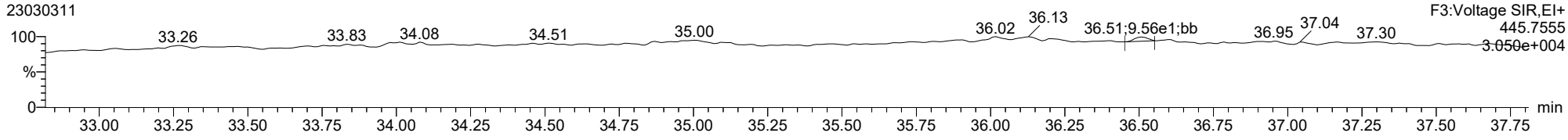

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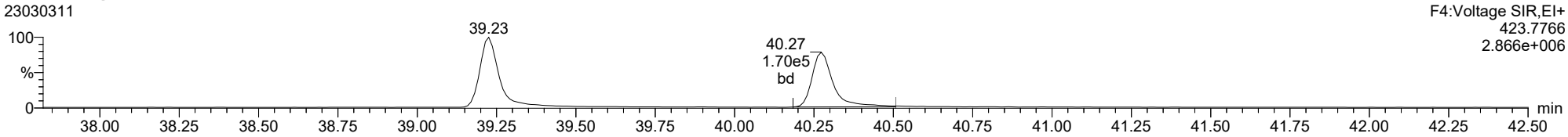

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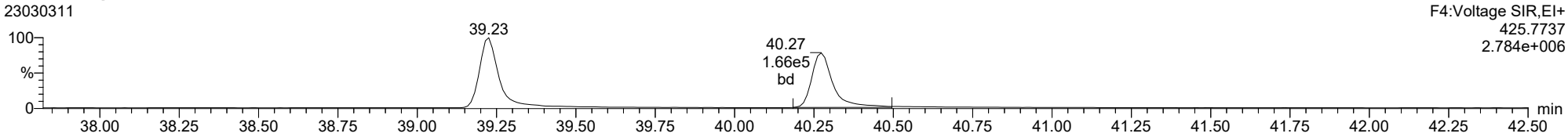

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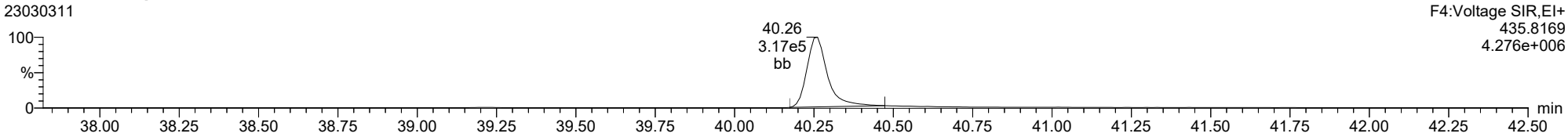

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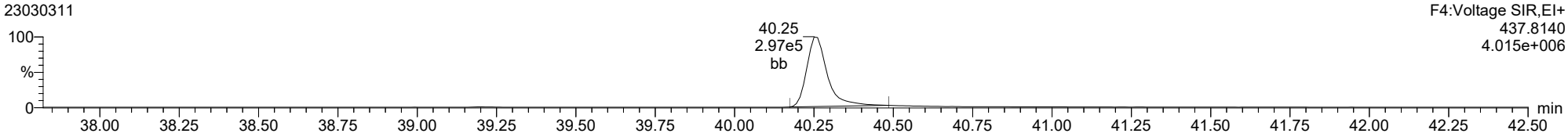

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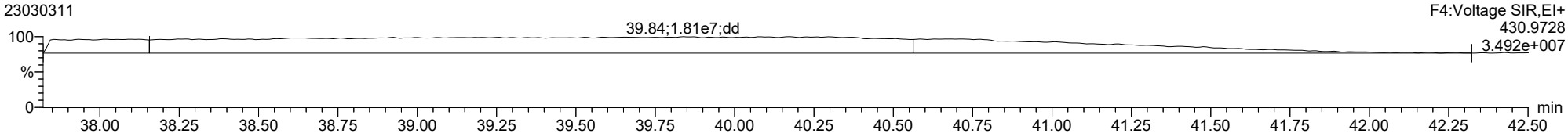

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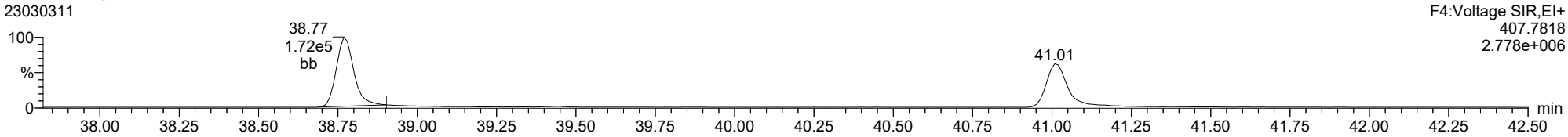

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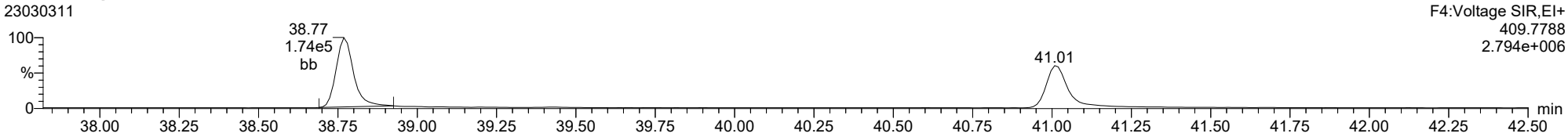

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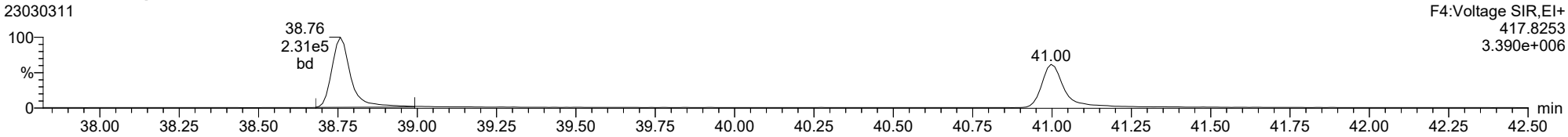

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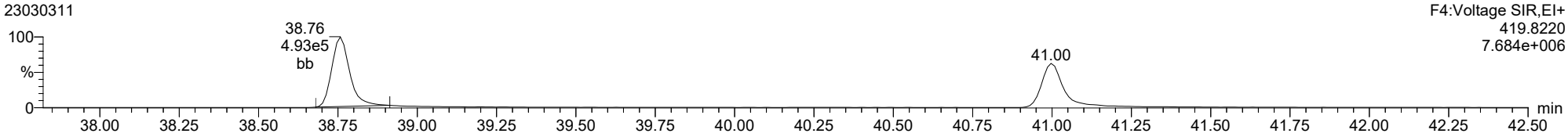

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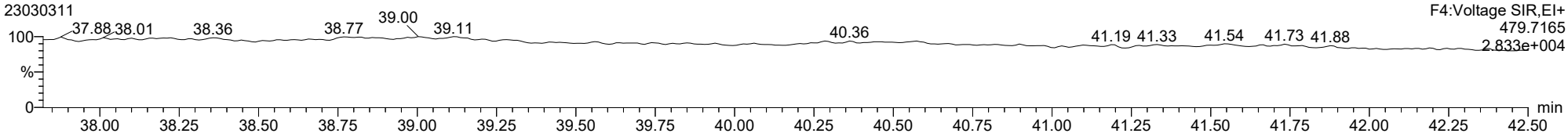

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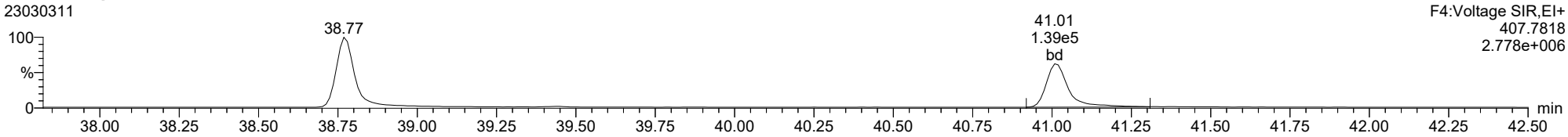

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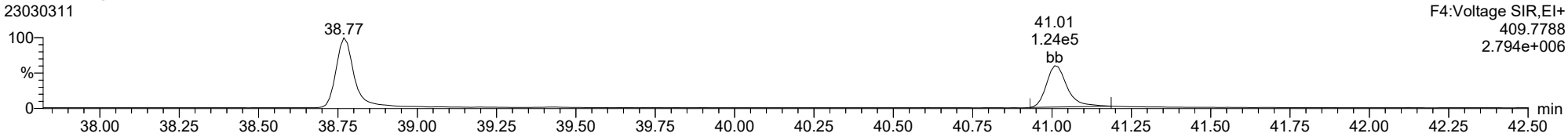

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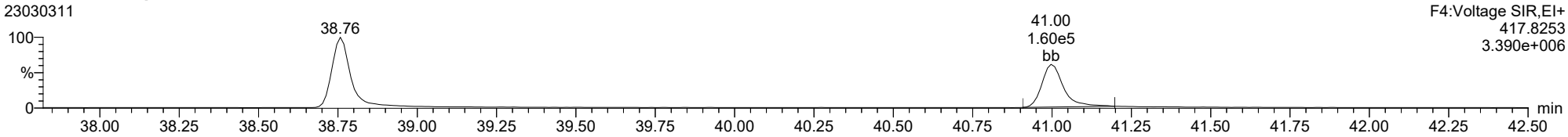

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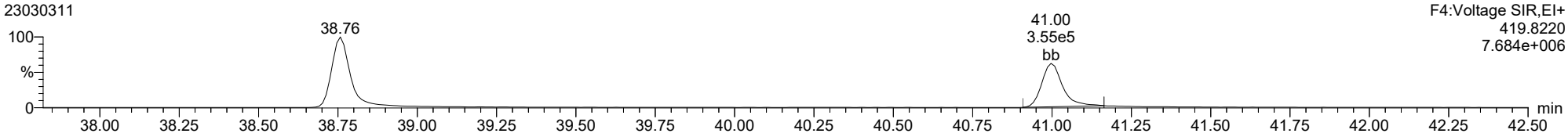

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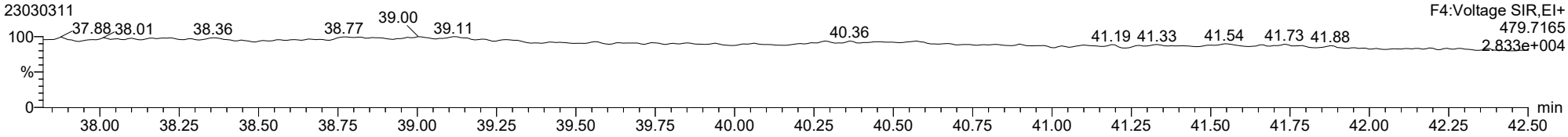

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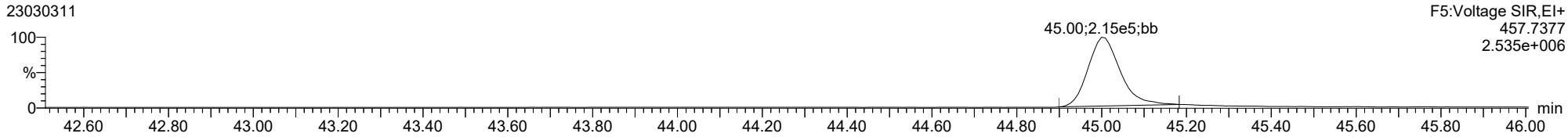

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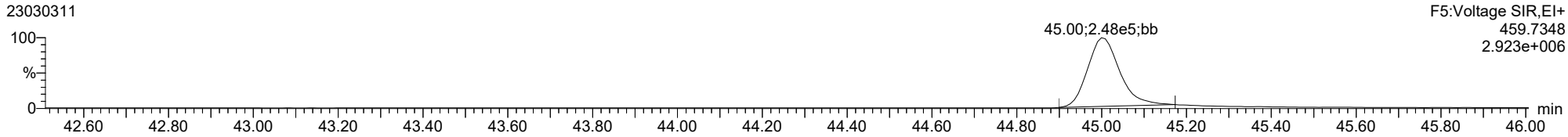

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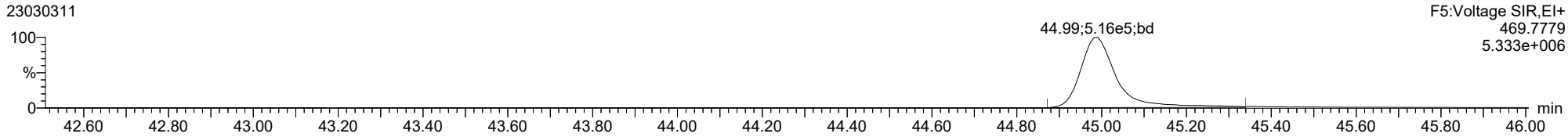

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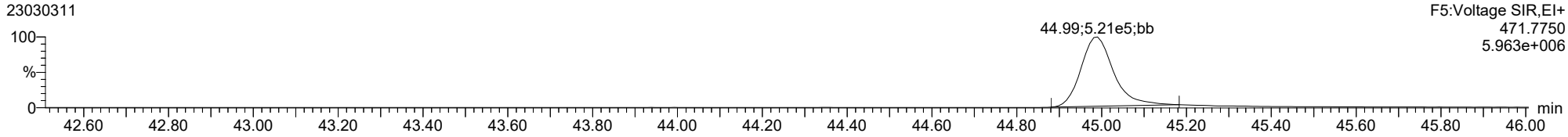
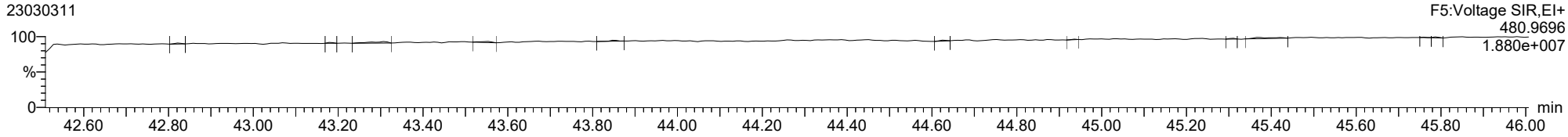


FUNCTION5 PFK



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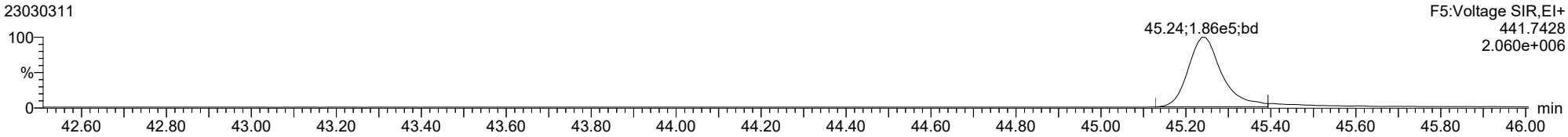

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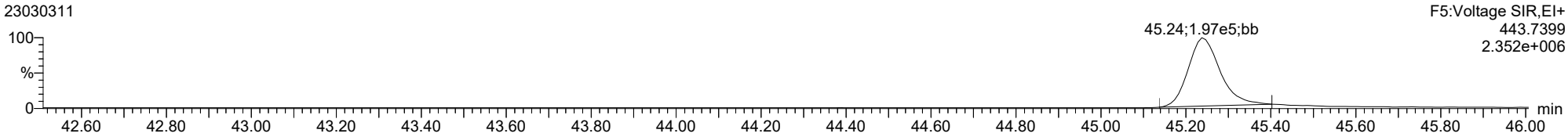

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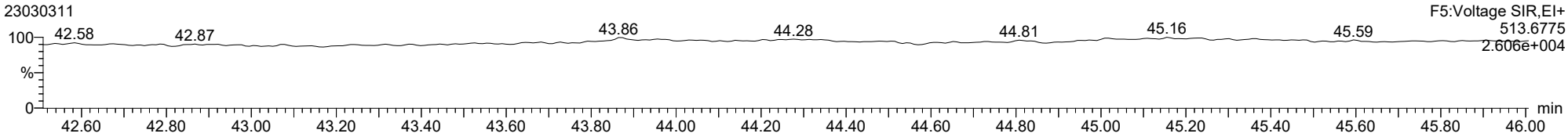

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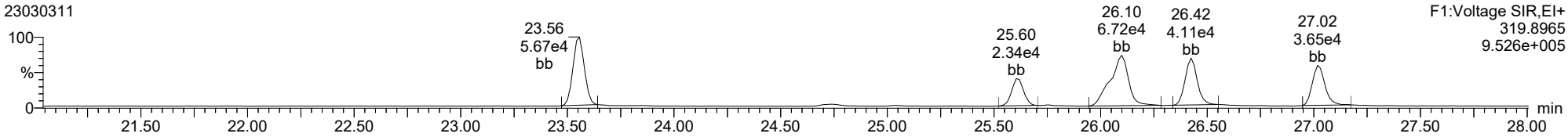
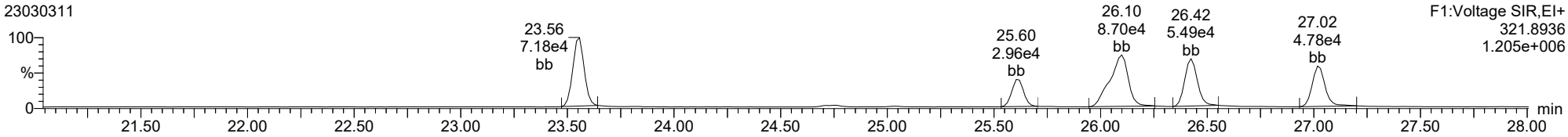


Total-tetradioxins



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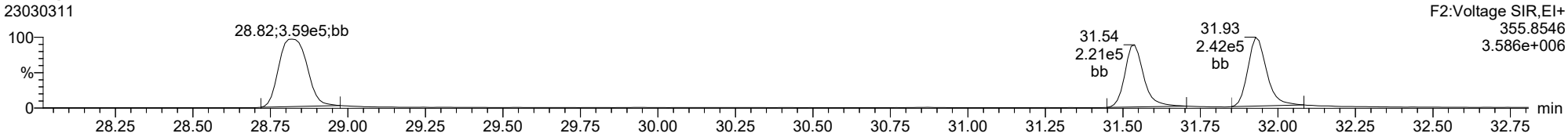

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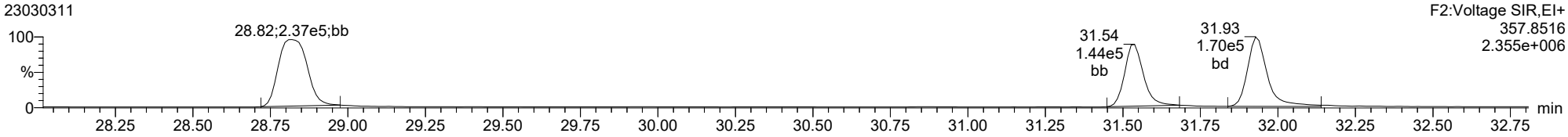

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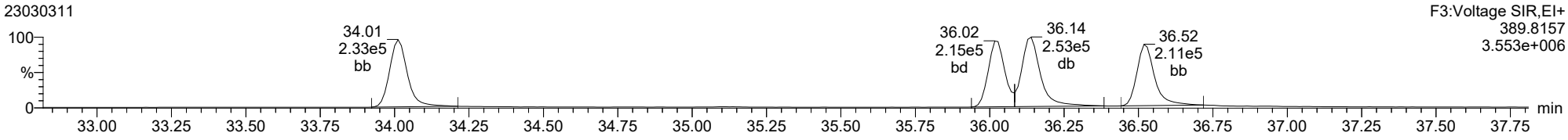
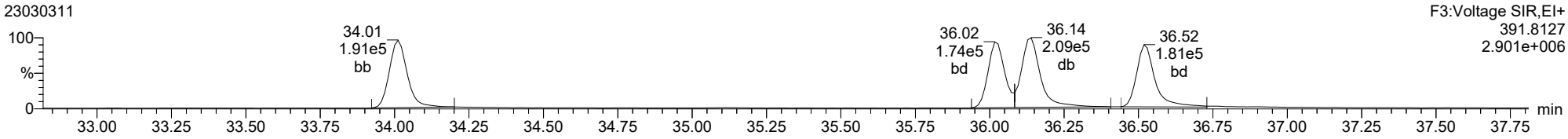


Total-hexadioxins



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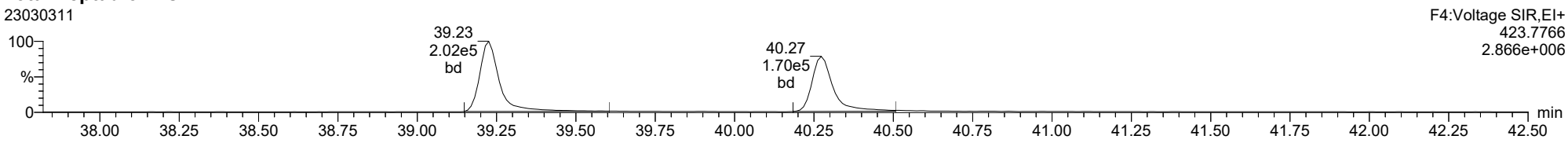

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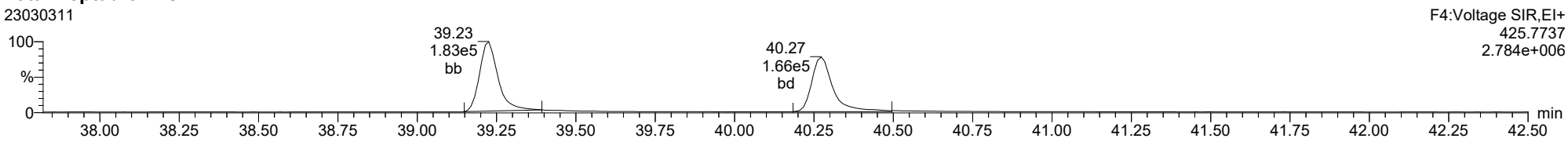

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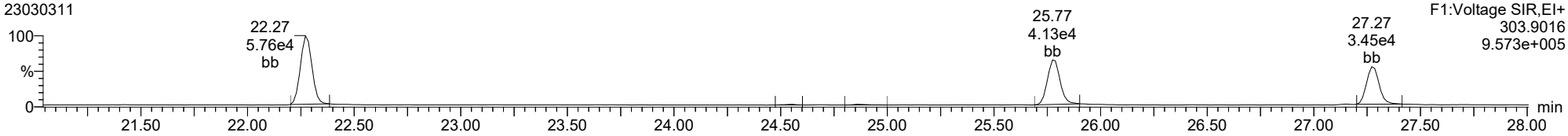
Total-tetrafurans



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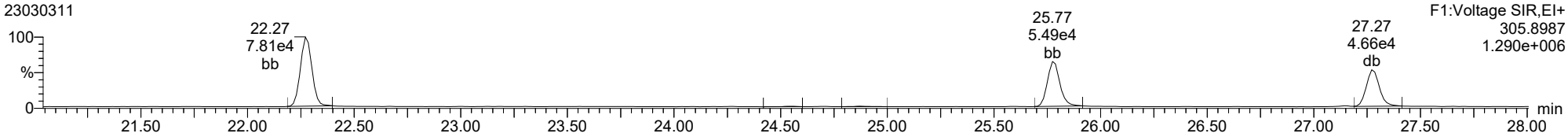

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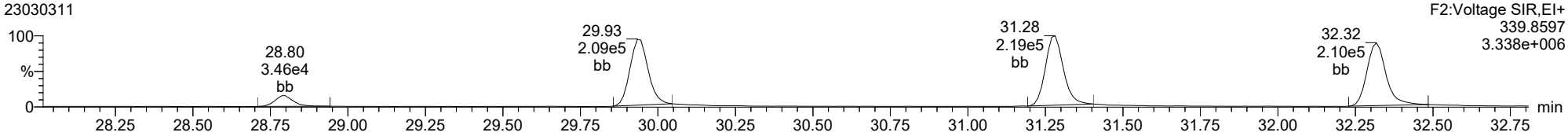

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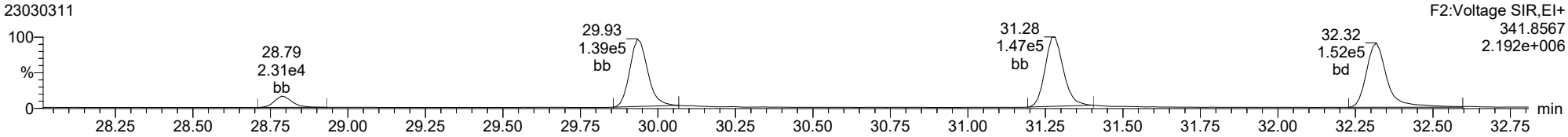

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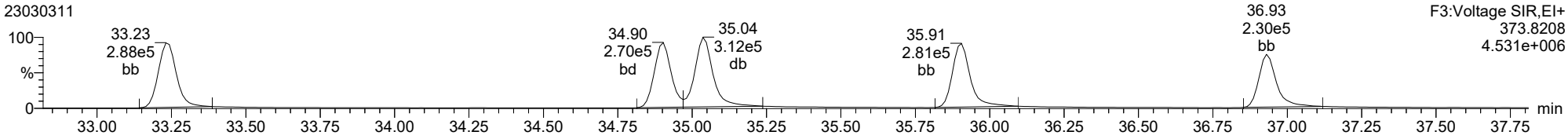
Total-hexafurans



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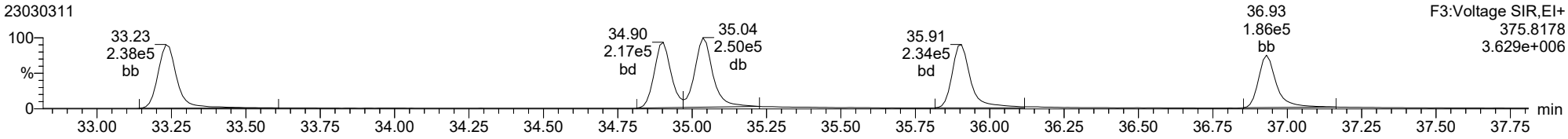

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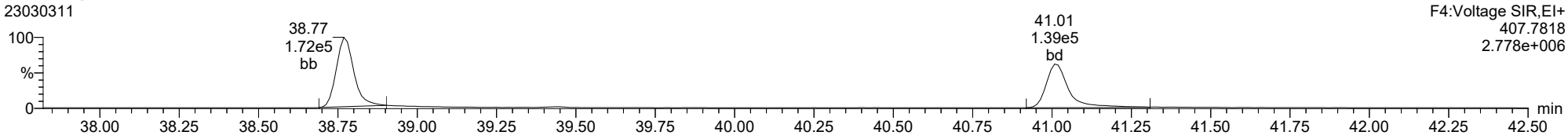

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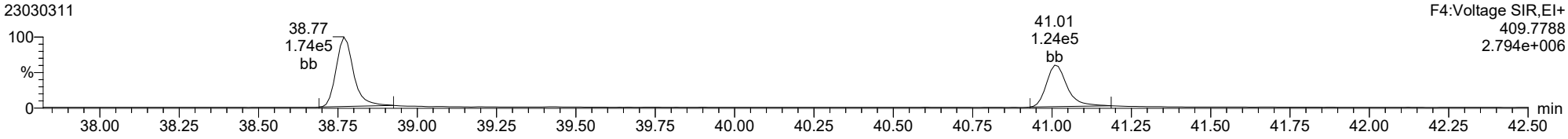

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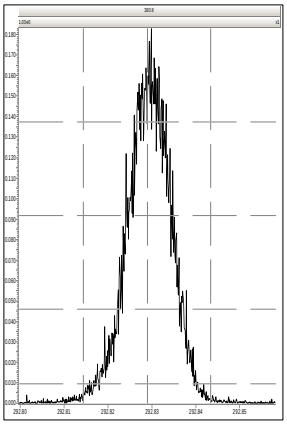

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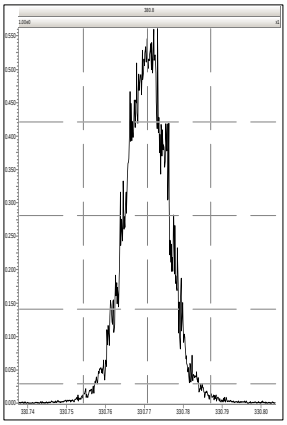

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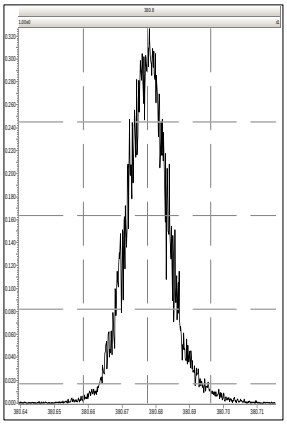

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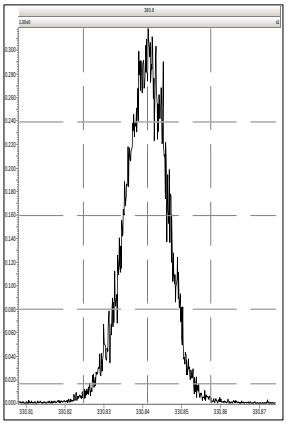

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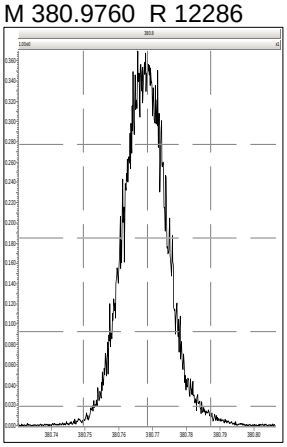

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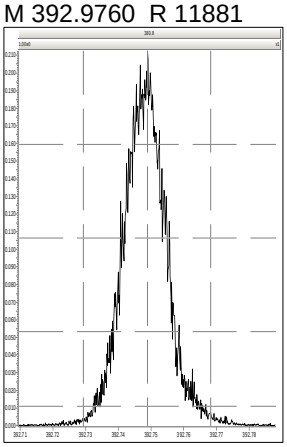

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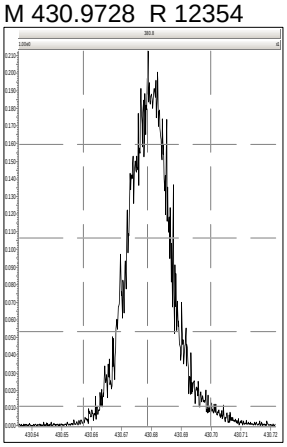

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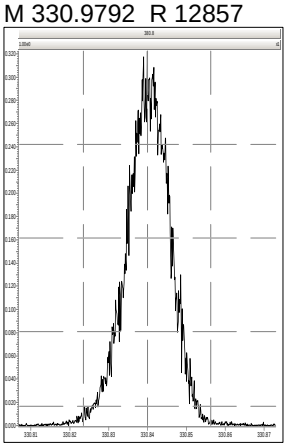

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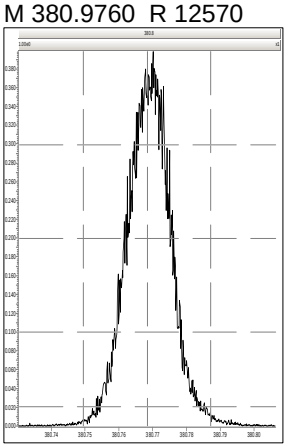

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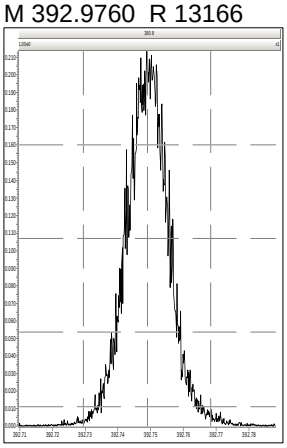
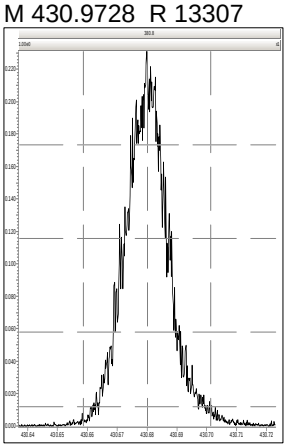
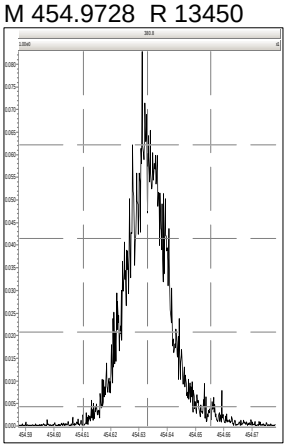


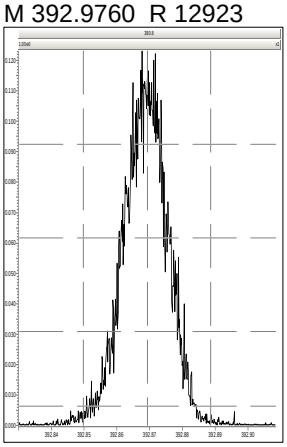
M 430.9728 R 13307



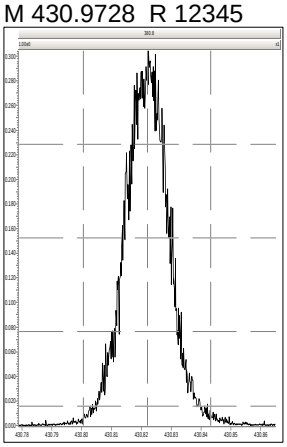
M 454.9728 R 13450



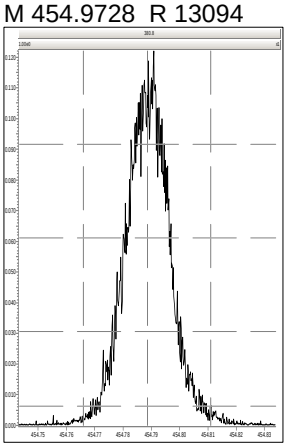
M 392.9760 R 12923



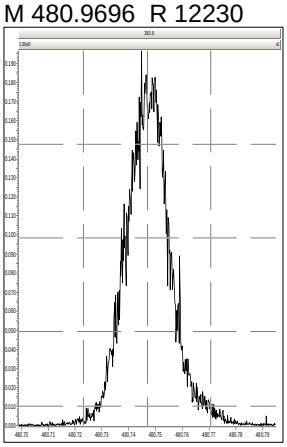
M 430.9728 R 12345



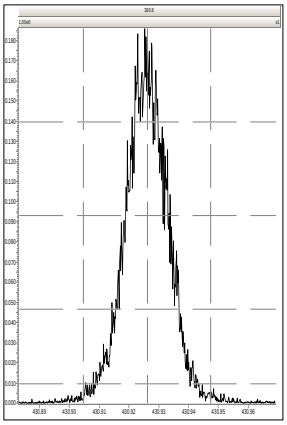
M 454.9728 R 13094



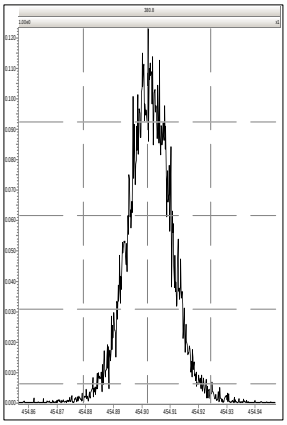
M 480.9696 R 12230



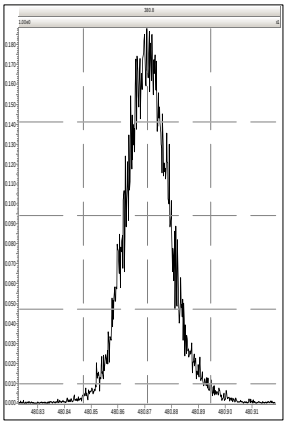
M 430.9728 R 12854



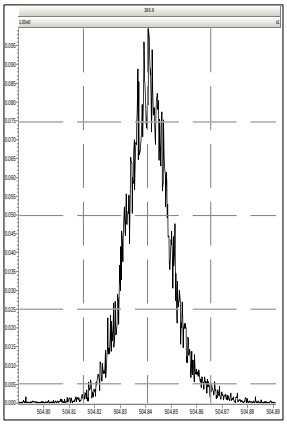
M 454.9728 R 13400



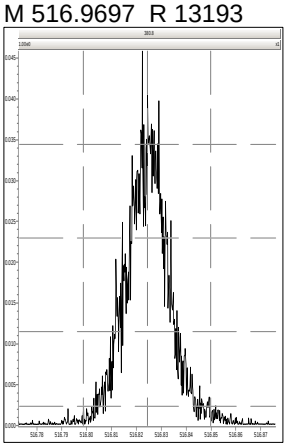
M 480.9696 R 11904

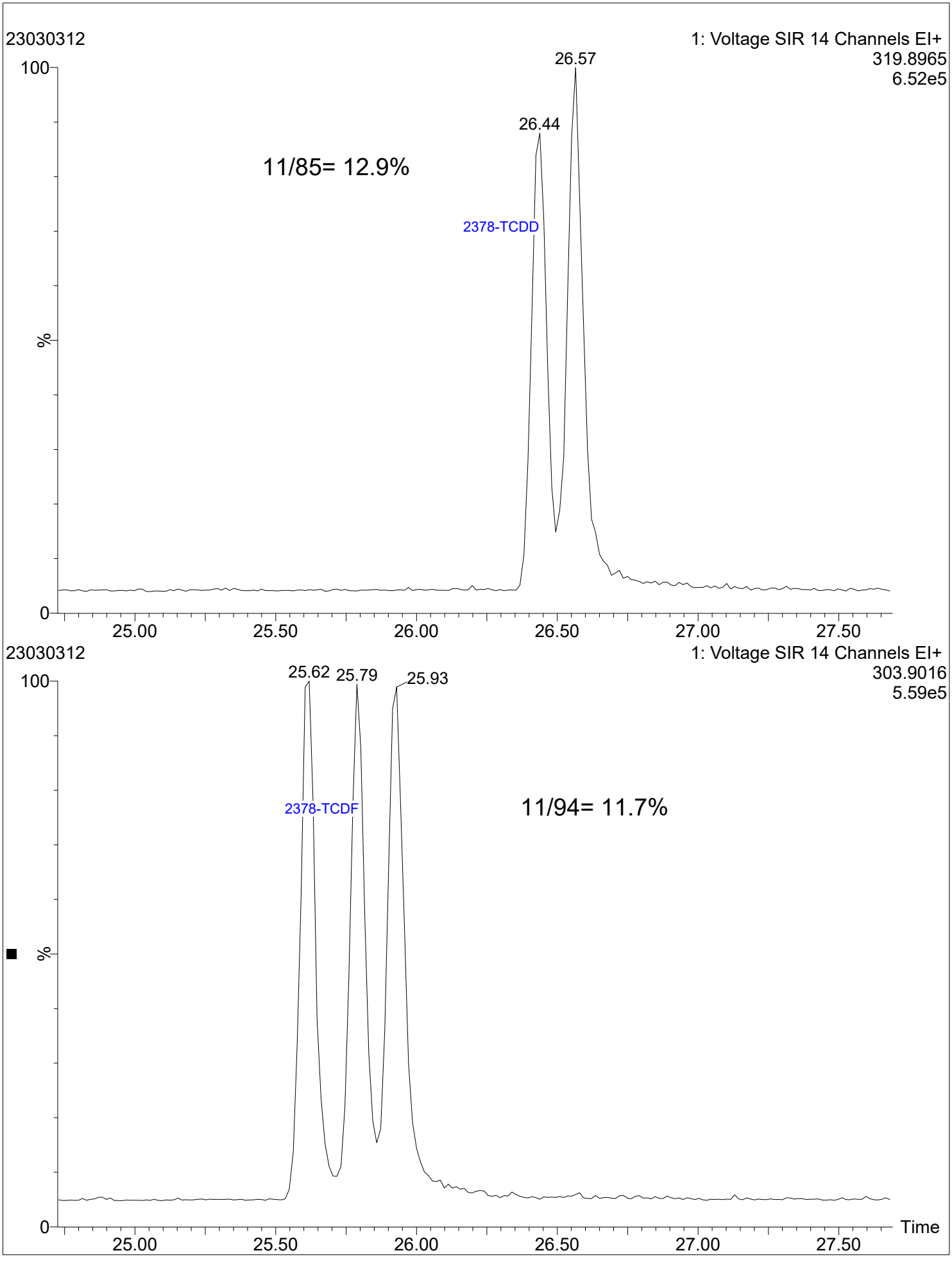


M 504.9696 R 12168



M 516.9697 R 13193




23030312
1: Voltage SIR 14 Channels EI+
319.8965
6.52e5
26.57
26.44
11/85= 12.9%
2378-TCDD
100
%
0
25.00
25.50
26.00
26.50
27.00
27.50
23030312
1: Voltage SIR 14 Channels EI+
303.9016
5.59e5
25.62
25.79
25.93
2378-TCDF
11/94= 11.7%
100
%
0
Time
25.00
25.50
26.00
26.50
27.00
27.50

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 1613B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Calibration: GC00015
Sequence: SLC0045

SDG: 23A0420
Project: AOC5 MR Phase 1
Laboratory ID: SLC0045-SCV1
Sequence Name: ICVCW
Standard ID: H008219

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
2,3,7,8-TCDF	10.000	9.84	-1.6	
2,3,7,8-TCDD	10.000	9.81	-1.9	
1,2,3,7,8-PeCDF	50.000	51.4	2.8	
2,3,4,7,8-PeCDF	50.000	49.0	-2.0	
1,2,3,7,8-PeCDD	50.000	48.5	-2.9	
1,2,3,4,7,8-HxCDF	50.000	48.2	-3.5	
1,2,3,6,7,8-HxCDF	50.000	48.0	-4.0	
2,3,4,6,7,8-HxCDF	50.000	50.2	0.4	
1,2,3,7,8,9-HxCDF	50.000	49.1	-1.8	
1,2,3,4,7,8-HxCDD	50.000	50.8	1.6	
1,2,3,6,7,8-HxCDD	50.000	50.2	0.3	
1,2,3,7,8,9-HxCDD	50.000	51.6	3.2	
1,2,3,4,6,7,8-HpCDF	50.000	51.8	3.7	
1,2,3,4,7,8,9-HpCDF	50.000	48.5	-3.1	
1,2,3,4,6,7,8-HpCDD	50.000	49.2	-1.6	
OCDF	100.00	104	3.5	
OCDD	100.00	99.4	-0.6	
13C12-2,3,7,8-TCDF	100.00	96.9	-3.1	
13C12-2,3,7,8-TCDD	100.00	96.6	-3.4	
13C12-1,2,3,7,8-PeCDF	100.00	73.2	-26.8	
13C12-2,3,4,7,8-PeCDF	100.00	75.9	-24.1	
13C12-1,2,3,7,8-PeCDD	100.00	76.6	-23.4	
13C12-1,2,3,4,7,8-HxCDF	100.00	93.0	-7.0	
13C12-1,2,3,6,7,8-HxCDF	100.00	98.0	-2.0	
13C12-2,3,4,6,7,8-HxCDF	100.00	93.4	-6.6	
13C12-1,2,3,7,8,9-HxCDF	100.00	97.9	-2.1	
13C12-1,2,3,4,7,8-HxCDD	100.00	95.9	-4.1	
13C12-1,2,3,6,7,8-HxCDD	100.00	97.7	-2.3	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	102	2.1	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	104	4.0	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	102	2.5	
13C12-OCDD	200.00	162	-19.2	
37Cl4-2,3,7,8-TCDD	10.000	8.71	-12.9	

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 1613B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Calibration: GC00015
Sequence: SLC0045

SDG: 23A0420
Project: AOC5 MR Phase 1
Laboratory ID: SLC0045-SCV1
Sequence Name: ICVCW
Standard ID: H008219

* Indicates values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00015
Laboratory ID: SLC0045-SCV1
Sequence: SLC0045
Standard ID: H008219

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
OCDF	100.00	104	3.5	
OCDD	100.00	99.4	-0.6	
13C12-2,3,7,8-TCDF	100.00	96.9	-3.1	
13C12-2,3,7,8-TCDD	100.00	96.6	-3.4	
13C12-1,2,3,7,8-PeCDF	100.00	73.2	-26.8	
13C12-2,3,4,7,8-PeCDF	100.00	75.9	-24.1	
13C12-1,2,3,7,8-PeCDD	100.00	76.6	-23.4	
13C12-1,2,3,4,7,8-HxCDF	100.00	93.0	-7.0	
13C12-1,2,3,6,7,8-HxCDF	100.00	98.0	-2.0	
13C12-2,3,4,6,7,8-HxCDF	100.00	93.4	-6.6	
13C12-1,2,3,7,8,9-HxCDF	100.00	97.9	-2.1	
13C12-1,2,3,4,7,8-HxCDD	100.00	95.9	-4.1	
13C12-1,2,3,6,7,8-HxCDD	100.00	97.7	-2.3	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	102	2.1	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	104	4.0	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	102	2.5	
13C12-OCDD	200.00	162	-19.2	
37Cl4-2,3,7,8-TCDD	10.000	8.71	-12.9	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23030302	Calibration Date:	03/03/2023
Sequence:	SLC0045	Injection Date:	03/03/23
Lab Sample ID:	SLC0045-ICV1	Injection Time:	09:51
Sequence Name:	CS3W1		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
2,3,7,8-TCDF	A	10.000	9.55	0.7015272	0.6699659		-4.5	+/-16
2,3,7,8-TCDD	A	10.000	9.45	1.1486620	1.0855020		-5.5	+/-22
1,2,3,7,8-PeCDF	A	50.000	49.6	0.6792300	0.6743560		-0.7	+/-18
2,3,4,7,8-PeCDF	A	50.000	47.5	0.7861704	0.7472986		-4.9	+/-18
1,2,3,7,8-PeCDD	A	50.000	49.7	1.0218450	1.0147700		-0.7	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	47.1	1.1660380	1.0988190		-5.8	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	49.6	1.0907410	1.0813380		-0.9	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	49.3	1.1396990	1.1246750		-1.3	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	47.0	1.1370930	1.0679460		-6.1	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	50.1	0.9955689	0.9966266		0.1	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	49.6	1.0009380	0.9938861		-0.7	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	54.2	0.9071139	0.9838286		8.5	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	47.5	1.0029930	0.9526502		-5.0	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	50.2	0.9531152	0.9573187		0.4	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	47.6	1.0390130	0.9895371		-4.8	+/-14
OCDF	A	100.00	88.6	0.7778078	0.6890651		-11.4	+/-37
OCDD	A	100.00	98.4	0.9199537	0.9055309		-1.6	+/-21
13C12-2,3,7,8-TCDF	A	100.00	94.0	1.6201960	1.5232274		-6.0	+/-29
13C12-2,3,7,8-TCDD	A	100.00	102	1.1524090	1.1727116		1.8	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	92.2	1.2404520	1.1438587		-7.8	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	87.6	1.1177860	0.9791895		-12.4	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	84.3	0.8288129	0.6985475		-15.7	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	84.0	1.1683050	0.9815313		-16.0	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	74.6	1.3864660	1.0348865		-25.4	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	88.7	1.1292560	1.0010969		-11.3	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	99.9	0.9317541	0.9305560		-0.1	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	93.5	0.9950393	0.9299453		-6.5	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	86.9	1.1566890	1.0052205		-13.1	+/-15
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	95.3	0.8952017	0.8530837		-4.7	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	98.7	0.7697516	0.7594900		-1.3	+/-23

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23030302	Calibration Date:	03/03/2023
Sequence:	SLC0045	Injection Date:	03/03/23
Lab Sample ID:	SLC0045-ICV1	Injection Time:	09:51
Sequence Name:	CS3W1		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	105	0.8401226	0.8828452		5.1	+/-28
13C12-OCDD	A	200.00	214	0.7674714	0.8220320		7.1	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	9.05	1.2878040	1.1649542		-9.5	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23031302	Calibration Date:	03/03/2023
Sequence:	SLC0171	Injection Date:	03/13/23
Lab Sample ID:	SLC0171-ICV1	Injection Time:	10:33
Sequence Name:	CS3Z1		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
2,3,7,8-TCDF	A	10.000	9.73	0.7015272	0.6826249		-2.7	+/-16
2,3,7,8-TCDD	A	10.000	9.04	1.1486620	1.0381370		-9.6	+/-22
1,2,3,7,8-PeCDF	A	50.000	52.2	0.6792300	0.7090053		4.4	+/-18
2,3,4,7,8-PeCDF	A	50.000	51.3	0.7861704	0.8063136		2.6	+/-18
1,2,3,7,8-PeCDD	A	50.000	48.1	1.0218450	0.9840025		-3.7	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	45.9	1.1660380	1.0693560		-8.3	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	47.9	1.0907410	1.0441740		-4.3	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	47.9	1.1396990	1.0922390		-4.2	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	46.2	1.1370930	1.0507810		-7.6	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	48.6	0.9955689	0.9673933		-2.8	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	45.2	1.0009380	0.9046456		-9.6	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	49.4	0.9071139	0.8968683		-1.1	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	50.3	1.0029930	1.0088890		0.6	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	50.3	0.9531152	0.9594089		0.7	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	48.9	1.0390130	1.0153950		-2.3	+/-14
OCDF	A	100.00	91.8	0.7778078	0.7142511		-8.2	+/-37
OCDD	A	100.00	94.6	0.9199537	0.8700619		-5.4	+/-21
13C12-2,3,7,8-TCDF	A	100.00	85.5	1.6201960	1.3857194		-14.5	+/-29
13C12-2,3,7,8-TCDD	A	100.00	98.8	1.1524090	1.1383528		-1.2	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	90.1	1.2404520	1.1175694		-9.9	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	96.7	1.1177860	1.0804681		-3.3	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	103	0.8288129	0.8506272		2.6	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	101	1.1683050	1.1797284		1.0	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	100	1.3864660	1.3915539		0.4	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	88.6	1.1292560	1.0004623		-11.4	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	95.2	0.9317541	0.8870995		-4.8	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	95.1	0.9950393	0.9464434		-4.9	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	104	1.1566890	1.2012880		3.9	+/-15
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	87.2	0.8952017	0.7807082		-12.8	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	87.0	0.7697516	0.6700234		-13.0	+/-23

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23031302	Calibration Date:	03/03/2023
Sequence:	SLC0171	Injection Date:	03/13/23
Lab Sample ID:	SLC0171-ICV1	Injection Time:	10:33
Sequence Name:	CS3Z1		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	93.2	0.8401226	0.7828292		-6.8	+/-28
13C12-OCDD	A	200.00	190	0.7674714	0.7306123		-4.8	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	8.81	1.2878040	1.1345628		-11.9	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:10:25 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230313.mdb 13 Mar 2023 11:32:39
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3Z1, Name: 23031302, Date: 13-Mar-2023, Time: 10:33:12, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.619	1.001	1.958e4	2.801e4	0.702	0.699	0.770	730	1458	2.84e5	3.95e5	388.3	270.6	NO	bb	bb	9.731
12378-PeCDF	29.780	1.001	1.207e5	7.865e4	0.679	1.534	1.550	1500	1523	1.68e6	1.10e6	1121.9	722.1	NO	bd	bd	52.192
23478-PeCDF	31.117	1.001	1.317e5	8.745e4	0.786	1.506	1.550	1500	1523	1.84e6	1.21e6	1229.5	791.3	NO	bb	bb	51.281
123478-HxCDF	34.749	1.001	1.561e5	1.244e5	1.166	1.254	1.240	1831	1113	2.34e6	1.87e6	1279.6	1679.0	NO	bd	bd	45.854
234678-HxCDF	35.752	1.000	1.317e5	1.112e5	1.140	1.185	1.240	1831	1113	1.90e6	1.54e6	1036.2	1383.6	NO	bb	bd	47.918
123678-HxCDF	34.883	1.000	1.785e5	1.446e5	1.091	1.234	1.240	1831	1113	2.35e6	1.87e6	1283.8	1682.9	NO	dd	dd	47.865
123789-HxCDF	36.788	1.001	1.143e5	9.300e4	1.137	1.229	1.240	1831	1113	1.56e6	1.27e6	853.0	1137.0	NO	bb	bb	46.205
1234678-HpCDF	38.638	1.000	8.716e4	8.797e4	1.003	0.991	1.050	1667	1599	1.31e6	1.34e6	784.2	838.6	NO	bd	bd	50.294
1234789-HpCDF	40.855	1.000	7.141e4	7.153e4	0.953	0.998	1.050	1667	1599	9.32e5	9.45e5	559.0	590.9	NO	bb	bd	50.330
OCDF	45.057	1.005	1.077e5	1.244e5	0.778	0.866	0.890	1614	868	1.18e6	1.36e6	728.6	1567.7	NO	bb	bd	91.829
2378-TCDD	26.254	1.000	2.548e4	3.398e4	1.149	0.750	0.770	922	829	3.79e5	4.88e5	410.5	589.1	NO	bb	bb	9.038
12378-PeCDD	31.362	1.000	1.260e5	8.453e4	1.022	1.491	1.550	2099	1516	1.77e6	1.17e6	841.4	773.9	NO	bb	bb	48.148
123478-HxCDD	35.863	1.000	1.110e5	9.259e4	0.996	1.199	1.240	1275	1610	1.71e6	1.42e6	1340.1	883.2	NO	bd	bd	48.585
123678-HxCDD	35.986	1.001	1.352e5	1.064e5	1.001	1.270	1.240	1275	1610	1.85e6	1.51e6	1450.8	937.0	NO	db	db	45.190
123789-HxCDD	36.376	1.012	1.189e5	9.528e4	0.907	1.248	1.240	1275	1610	1.64e6	1.35e6	1285.2	839.3	NO	bd	bb	49.435
1234678-HpCDD	40.131	1.001	8.862e4	8.812e4	1.039	1.006	1.050	1147	1661	1.20e6	1.16e6	1046.6	701.1	NO	bd	bd	48.863
OCDD	44.828	1.000	1.298e5	1.528e5	0.920	0.850	0.890	974	1032	1.54e6	1.79e6	1581.4	1735.0	NO	bb	bb	94.577
13C-2378-TCDF	25.605	1.007	3.045e5	3.926e5	1.620	0.776	0.770	1956	1317	4.21e6	5.49e6	2154.8	4167.4	NO	bb	bb	85.528
13C-12378-PeCDF	29.758	1.171	3.290e5	2.333e5	1.240	1.410	1.550	2054	1698	4.75e6	3.19e6	2312.9	1881.9	NO	bb	bd	90.094
13C-23478-PeCDF	31.095	1.223	3.229e5	2.207e5	1.118	1.462	1.550	2054	1698	4.66e6	3.14e6	2267.3	1851.3	NO	bb	bb	96.662
13C-123478-HxCDF	34.727	0.955	1.748e5	3.498e5	1.168	0.500	0.510	1798	1052	2.55e6	5.13e6	1420.6	4869.8	NO	bd	bd	100.978
13C-123678-HxCDF	34.872	0.959	2.050e5	4.138e5	1.386	0.495	0.510	1798	1052	2.74e6	5.35e6	1525.5	5082.1	NO	dd	db	100.367
13C-234678-HxCDF	35.741	0.983	1.515e5	2.934e5	1.129	0.517	0.510	1798	1052	2.15e6	4.17e6	1197.8	3961.0	NO	bb	bb	88.595
13C-123789-HxCDF	36.766	1.011	1.321e5	2.624e5	0.932	0.503	0.510	1798	1052	1.93e6	3.82e6	1074.8	3628.2	NO	bb	bb	95.207
13C-1234678-HpCDF	38.626	1.062	1.063e5	2.409e5	0.895	0.441	0.440	1529	2645	1.70e6	3.89e6	1111.7	1469.1	NO	bb	bb	87.210
13C-1234789-HpCDF	40.844	1.123	9.194e4	2.060e5	0.770	0.446	0.440	1529	2645	1.19e6	2.77e6	780.2	1048.7	NO	bb	bb	87.044
13C-1234-TCDD	25.421	0.000	2.231e5	2.800e5	1.000	0.797	0.770	1867	1215	3.44e6	4.30e6	1842.4	3539.8	NO	bb	bb	100.000
13C-2378-TCDD	26.240	1.032	2.525e5	3.203e5	1.152	0.788	0.770	1867	1215	3.70e6	4.72e6	1982.6	3883.6	NO	bb	bb	98.780
13C-12378-PeCDD	31.351	1.233	2.642e5	1.637e5	0.829	1.614	1.550	952	1028	3.68e6	2.28e6	3862.3	2219.2	NO	bb	bb	102.632
13C-123478-HxCDD	35.852	0.986	2.376e5	1.833e5	0.995	1.296	1.240	1302	1389	3.81e6	2.97e6	2926.0	2137.4	NO	bd	bd	95.116
13C-123678-HxCDD	35.964	0.989	2.978e5	2.364e5	1.157	1.260	1.240	1302	1389	3.86e6	3.10e6	2964.6	2231.6	NO	db	db	103.856
13C-1234678-HpCDD	40.109	1.103	1.797e5	1.684e5	0.840	1.067	1.050	1165	1381	2.36e6	2.23e6	2022.7	1618.5	NO	bd	bd	93.180
13C-OCDD	44.810	1.232	2.954e5	3.544e5	0.767	0.833	0.890	1316	1461	3.48e6	3.92e6	2642.6	2683.5	NO	bb	bd	190.395
13C-123789-HxCDD	36.365	0.000	2.483e5	1.964e5	1.000	1.264	1.240	1302	1389	3.53e6	2.82e6	2714.8	2027.1	NO	bb	bb	100.000
37CL-2378-TCDD	26.254	1.033	5.708e4		1.288			1549		8.15e5		526.2			bd		8.810

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:10:25 Pacific Daylight Time

ID: CS3Z1, Name: 23031302, Date: 13-Mar-2023, Time: 10:33:12, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.116	0.864	2.386e4	3.192e4	0.802	0.748	0.770	730	1458	3.72e5	5.06e5	510.0	347.2	NO	bb	bb	9.983
1289-TCDF	27.102	1.059	2.011e4	2.818e4	0.678	0.714	0.770	730	1458	2.67e5	3.79e5	365.4	260.1	NO	db	dd	10.217
13468-PECDF	26.975	0.906	2.528e5	1.678e5	1.246	1.506	1.550	578	735	3.77e6	2.50e6	6512.0	3403.2	NO	bb	bb	60.008
12389-PECDF	32.142	1.080	1.232e5	8.057e4	0.496	1.529	1.550	1500	1523	1.53e6	1.03e6	1019.6	673.4	NO	bd	bb	72.999
123468-HXCDF	33.078	0.952	1.772e5	1.426e5	1.169	1.242	1.240	1831	1113	2.47e6	1.97e6	1346.5	1771.0	NO	bd	bb	52.147
1368-TCDD	23.387	0.891	2.337e4	2.942e4	1.015	0.794	0.770	922	829	3.68e5	4.64e5	398.5	559.8	NO	bb	bb	9.078
1289-TCDD	26.862	1.024	2.097e4	2.807e4	0.909	0.747	0.770	922	829	2.95e5	4.03e5	320.3	486.4	NO	bb	bb	9.423
12479-PECDD	28.644	0.914	2.034e5	1.341e5	2.301	1.517	1.550	2099	1516	1.87e6	1.22e6	891.7	804.4	NO	bb	bb	34.265
12389-PECDD	31.764	1.013	1.474e5	9.781e4	1.184	1.507	1.550	2099	1516	1.96e6	1.30e6	935.0	857.0	NO	bd	bd	48.401
124679-HXCDD	33.858	0.944	1.543e5	1.263e5	1.115	1.222	1.240	1275	1610	2.11e6	1.70e6	1654.3	1053.1	NO	bd	bd	59.765
1234679-HPCDD	39.083	0.974	9.847e4	9.908e4	1.137	0.994	1.050	1147	1661	1.39e6	1.40e6	1212.6	845.1	NO	bb	bd	49.915
Total-tetrafurans			6.355e4		0.727			730		9.23e5							29.931
Total-penta1			2.528e5					578		3.77e6							60.008
Total-pentafurans			3.945e5		0.654			1500		5.32e6							185.178
Total-hexafurans			7.577e5		1.141			1831		1.06e7							239.989
Total-heptafurans			1.586e5		0.978			1667		2.24e6							100.624
Total-Furans			1.735e6		0.922			730		2.40e7							707.558
Total-tetradioxins			1.195e5		1.024			922		1.60e6							46.802
Total-pentadioxins			4.768e5		1.502			2099		5.60e6							130.814
Total-hexadioxins			5.202e5		1.005			1275		7.32e6							203.295
Total-heptadioxins			1.872e5		1.088			1147		2.60e6							98.826
Total-Dioxins			1.434e6		1.130			922		1.87e7							574.314
Total-TEQ			3.168e6					922		4.27e7							1281.873
FUNCTION1 PFK			9.911e6					530914		3.85e6							
FUNCTION2 PFK			5.719e4					227228		1.26e6							0.000
FUNCTION3 PFK			2.648e7					371093		1.45e7							0.000
FUNCTION4 PFK			0.000e0					217043		0.00e0							
FUNCTION5 PFK			7.247e4					151617		2.76e6							
FUNCTION1 HXCD...			8.768e1					454		7.49e2							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			2.754e2					628		6.79e3							0.000
FUNCTION3 OCDPE			1.465e2					456		1.59e3							0.000
FUNCTION4 NCDPE			8.353e1					558		1.14e3							0.000
FUNCTION5 DCDPE			0.000e0					516		0.00e0							

Method: T:\Autospec\Methods\Dioxin230313.mdb 13 Mar 2023 11:32:39
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3Z1, Name: 23031302, Date: 13-Mar-2023, Time: 10:33:12, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.10	2.011e4	2.818e4	0.678	0.71	0.77	365.4	YES	NO	db	dd	10.217
2	2378-TCDF	25.62	1.958e4	2.801e4	0.702	0.70	0.77	388.3	YES	NO	bb	bb	9.731
3	1368-TCDF	22.12	2.386e4	3.192e4	0.802	0.75	0.77	510.0	YES	NO	bb	bb	9.983

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	26.97	2.528e5	1.678e5	1.246	1.51	1.55	6512.0	YES	NO	bb	bb	60.008

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.14	1.232e5	8.057e4	0.496	1.53	1.55	1019.6	YES	NO	bd	bb	72.999
2	23478-PeCDF	31.12	1.317e5	8.745e4	0.786	1.51	1.55	1229.5	YES	NO	bb	bb	51.281
3	12378-PeCDF	29.78	1.207e5	7.865e4	0.679	1.53	1.55	1121.9	YES	NO	bd	bd	52.192
4	Total-pentafurans	28.63	1.892e4	1.256e4	0.654	1.51	1.55	179.1	YES	NO	bb	bb	8.706

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123678-HxCDF	34.88	1.785e5	1.446e5	1.091	1.23	1.24	1283.8	YES	NO	dd	dd	47.865
2	123478-HxCDF	34.75	1.561e5	1.244e5	1.166	1.25	1.24	1279.6	YES	NO	bd	bd	45.854
3	123468-HXCDF	33.08	1.772e5	1.426e5	1.169	1.24	1.24	1346.5	YES	NO	bd	bb	52.147
4	123789-HxCDF	36.79	1.143e5	9.300e4	1.137	1.23	1.24	853.0	YES	NO	bb	bb	46.205
5	234678-HxCDF	35.75	1.317e5	1.112e5	1.140	1.18	1.24	1036.2	YES	NO	bb	bd	47.918

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.64	8.716e4	8.797e4	1.003	0.99	1.05	784.2	YES	NO	bd	bd	50.294
2	1234789-HpCDF	40.85	7.141e4	7.153e4	0.953	1.00	1.05	559.0	YES	NO	bb	bd	50.330

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.10	2.011e4	2.818e4	0.678	0.71	0.77	365.4	YES	NO	db	dd	10.217
2	2378-TCDF	25.62	1.958e4	2.801e4	0.702	0.70	0.77	388.3	YES	NO	bb	bb	9.731
3	1368-TCDF	22.12	2.386e4	3.192e4	0.802	0.75	0.77	510.0	YES	NO	bb	bb	9.983
4	12389-PECDF	32.14	1.232e5	8.057e4	0.496	1.53	1.55	1019.6	YES	NO	bd	bb	72.999
5	23478-PeCDF	31.12	1.317e5	8.745e4	0.786	1.51	1.55	1229.5	YES	NO	bb	bb	51.281
6	12378-PeCDF	29.78	1.207e5	7.865e4	0.679	1.53	1.55	1121.9	YES	NO	bd	bd	52.192
7	Total-pentafurans	28.63	1.892e4	1.256e4	0.654	1.51	1.55	179.1	YES	NO	bb	bb	8.706
8	123678-HxCDF	34.88	1.785e5	1.446e5	1.091	1.23	1.24	1283.8	YES	NO	dd	dd	47.865
9	123478-HxCDF	34.75	1.561e5	1.244e5	1.166	1.25	1.24	1279.6	YES	NO	bd	bd	45.854
10	123468-HXCDF	33.08	1.772e5	1.426e5	1.169	1.24	1.24	1346.5	YES	NO	bd	bb	52.147
11	123789-HxCDF	36.79	1.143e5	9.300e4	1.137	1.23	1.24	853.0	YES	NO	bb	bb	46.205
12	234678-HxCDF	35.75	1.317e5	1.112e5	1.140	1.18	1.24	1036.2	YES	NO	bb	bd	47.918
13	1234678-HpCDF	38.64	8.716e4	8.797e4	1.003	0.99	1.05	784.2	YES	NO	bd	bd	50.294
14	1234789-HpCDF	40.85	7.141e4	7.153e4	0.953	1.00	1.05	559.0	YES	NO	bb	bd	50.330
15	OCDF	45.06	1.077e5	1.244e5	0.778	0.87	0.89	728.6	YES	NO	bb	bd	91.829
16	13468-PECDF	26.97	2.528e5	1.678e5	1.246	1.51	1.55	6512.0	YES	NO	bb	bb	60.008

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	26.86	2.097e4	2.807e4	0.909	0.75	0.77	320.3	YES	NO	bb	bb	9.423
2	2378-TCDD	26.25	2.548e4	3.398e4	1.149	0.75	0.77	410.5	YES	NO	bb	bb	9.038
3	Total-tetradioxins	25.93	3.707e4	4.740e4	1.024	0.78	0.77	400.5	YES	NO	bb	bb	14.400
4	Total-tetradioxins	25.44	1.227e4	1.541e4	1.024	0.80	0.77	196.5	YES	NO	bb	bb	4.720
5	Total-tetradioxins	24.87	3.712e2	4.769e2	1.024	0.78	0.77	5.4	YES	NO	bb	bb	0.145
6	1368-TCDD	23.39	2.337e4	2.942e4	1.015	0.79	0.77	398.5	YES	NO	bb	bb	9.078

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.76	1.474e5	9.781e4	1.184	1.51	1.55	935.0	YES	NO	bd	bd	48.401
2	12378-PeCDD	31.36	1.260e5	8.453e4	1.022	1.49	1.55	841.4	YES	NO	bb	bb	48.148
3	12479-PECDD	28.64	2.034e5	1.341e5	2.301	1.52	1.55	891.7	YES	NO	bb	bb	34.265

ID: CS3Z1, Name: 23031302, Date: 13-Mar-2023, Time: 10:33:12, Conditions: AUTOSPEC01, User: pk

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexadioxins	34.24	2.579e2	2.330e2	1.005	1.11	1.24	5.2	YES	NO	dd	db	0.102
2	124679-HXCDD	33.86	1.543e5	1.263e5	1.115	1.22	1.24	1654.3	YES	NO	bd	bd	59.765
3	123789-HxCDD	36.38	1.189e5	9.528e4	0.907	1.25	1.24	1285.2	YES	NO	bd	bb	49.435
4	123678-HxCDD	35.99	1.352e5	1.064e5	1.001	1.27	1.24	1450.8	YES	NO	db	db	45.190
5	123478-HxCDD	35.86	1.110e5	9.259e4	0.996	1.20	1.24	1340.1	YES	NO	bd	bd	48.585
6	Total-hexadioxins	34.98	5.841e2	4.611e2	1.005	1.27	1.24	7.6	YES	NO	db	db	0.218

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.13	8.862e4	8.812e4	1.039	1.01	1.05	1046.6	YES	NO	bd	bd	48.863
2	Total-heptadioxins	39.92	8.522e1	9.322e1	1.088	0.91	1.05	3.4	NO	NO	bb	bb	0.047
3	1234679-HPCDD	39.08	9.847e4	9.908e4	1.137	0.99	1.05	1212.6	YES	NO	bb	bd	49.915

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	26.86	2.097e4	2.807e4	0.909	0.75	0.77	320.3	YES	NO	bb	bb	9.423
2	2378-TCDD	26.25	2.548e4	3.398e4	1.149	0.75	0.77	410.5	YES	NO	bb	bb	9.038
3	Total-tetradioxins	25.93	3.707e4	4.740e4	1.024	0.78	0.77	400.5	YES	NO	bb	bb	14.400
4	Total-tetradioxins	25.44	1.227e4	1.541e4	1.024	0.80	0.77	196.5	YES	NO	bb	bb	4.720
5	Total-tetradioxins	24.87	3.712e2	4.769e2	1.024	0.78	0.77	5.4	YES	NO	bb	bb	0.145
6	1368-TCDD	23.39	2.337e4	2.942e4	1.015	0.79	0.77	398.5	YES	NO	bb	bb	9.078
7	12389-PECDD	31.76	1.474e5	9.781e4	1.184	1.51	1.55	935.0	YES	NO	bd	bd	48.401
8	12378-PeCDD	31.36	1.260e5	8.453e4	1.022	1.49	1.55	841.4	YES	NO	bb	bb	48.148
9	12479-PECDD	28.64	2.034e5	1.341e5	2.301	1.52	1.55	891.7	YES	NO	bb	bb	34.265
10	Total-hexadioxins	34.24	2.579e2	2.330e2	1.005	1.11	1.24	5.2	YES	NO	dd	db	0.102
11	124679-HXCDD	33.86	1.543e5	1.263e5	1.115	1.22	1.24	1654.3	YES	NO	bd	bd	59.765
12	123789-HxCDD	36.38	1.189e5	9.528e4	0.907	1.25	1.24	1285.2	YES	NO	bd	bb	49.435
13	123678-HxCDD	35.99	1.352e5	1.064e5	1.001	1.27	1.24	1450.8	YES	NO	db	db	45.190
14	123478-HxCDD	35.86	1.110e5	9.259e4	0.996	1.20	1.24	1340.1	YES	NO	bd	bd	48.585
15	Total-hexadioxins	34.98	5.841e2	4.611e2	1.005	1.27	1.24	7.6	YES	NO	db	db	0.218
16	1234678-HpCDD	40.13	8.862e4	8.812e4	1.039	1.01	1.05	1046.6	YES	NO	bd	bd	48.863
17	Total-heptadioxins	39.92	8.522e1	9.322e1	1.088	0.91	1.05	3.4	NO	NO	bb	bb	0.047
18	1234679-HPCDD	39.08	9.847e4	9.908e4	1.137	0.99	1.05	1212.6	YES	NO	bb	bd	49.915
19	OCDD	44.83	1.298e5	1.528e5	0.920	0.85	0.89	1581.4	YES	NO	bb	bb	94.577

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Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:10:25 Pacific Daylight Time

ID: CS3Z1, Name: 23031302, Date: 13-Mar-2023, Time: 10:33:12, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.10	2.011e4	2.818e4	0.678	0.71	0.77	365.4	YES	NO	db	dd	10.217
2	2378-TCDF	25.62	1.958e4	2.801e4	0.702	0.70	0.77	388.3	YES	NO	bb	bb	9.731
3	1368-TCDF	22.12	2.386e4	3.192e4	0.802	0.75	0.77	510.0	YES	NO	bb	bb	9.983
4	12389-PECDF	32.14	1.232e5	8.057e4	0.496	1.53	1.55	1019.6	YES	NO	bd	bb	72.999
5	23478-PeCDF	31.12	1.317e5	8.745e4	0.786	1.51	1.55	1229.5	YES	NO	bb	bb	51.281
6	12378-PeCDF	29.78	1.207e5	7.865e4	0.679	1.53	1.55	1121.9	YES	NO	bd	bd	52.192
7	Total-pentafurans	28.63	1.892e4	1.256e4	0.654	1.51	1.55	179.1	YES	NO	bb	bb	8.706
8	123678-HxCDF	34.88	1.785e5	1.446e5	1.091	1.23	1.24	1283.8	YES	NO	dd	dd	47.865
9	123478-HxCDF	34.75	1.561e5	1.244e5	1.166	1.25	1.24	1279.6	YES	NO	bd	bd	45.854
10	123468-HXCDF	33.08	1.772e5	1.426e5	1.169	1.24	1.24	1346.5	YES	NO	bd	bb	52.147
11	123789-HxCDF	36.79	1.143e5	9.300e4	1.137	1.23	1.24	853.0	YES	NO	bb	bb	46.205
12	234678-HxCDF	35.75	1.317e5	1.112e5	1.140	1.18	1.24	1036.2	YES	NO	bb	bd	47.918
13	1234678-HpCDF	38.64	8.716e4	8.797e4	1.003	0.99	1.05	784.2	YES	NO	bd	bd	50.294
14	1234789-HpCDF	40.85	7.141e4	7.153e4	0.953	1.00	1.05	559.0	YES	NO	bb	bd	50.330
15	OCDF	45.06	1.077e5	1.244e5	0.778	0.87	0.89	728.6	YES	NO	bb	bd	91.829
16	13468-PECDF	26.97	2.528e5	1.678e5	1.246	1.51	1.55	6512.0	YES	NO	bb	bb	60.008
17	1289-TCDD	26.86	2.097e4	2.807e4	0.909	0.75	0.77	320.3	YES	NO	bb	bb	9.423
18	2378-TCDD	26.25	2.548e4	3.398e4	1.149	0.75	0.77	410.5	YES	NO	bb	bb	9.038
19	Total-tetradioxins	25.93	3.707e4	4.740e4	1.024	0.78	0.77	400.5	YES	NO	bb	bb	14.400
20	Total-tetradioxins	25.44	1.227e4	1.541e4	1.024	0.80	0.77	196.5	YES	NO	bb	bb	4.720
21	Total-tetradioxins	24.87	3.712e2	4.769e2	1.024	0.78	0.77	5.4	YES	NO	bb	bb	0.145
22	1368-TCDD	23.39	2.337e4	2.942e4	1.015	0.79	0.77	398.5	YES	NO	bb	bb	9.078
23	12389-PECDD	31.76	1.474e5	9.781e4	1.184	1.51	1.55	935.0	YES	NO	bd	bd	48.401
24	12378-PeCDD	31.36	1.260e5	8.453e4	1.022	1.49	1.55	841.4	YES	NO	bb	bb	48.148
25	12479-PECDD	28.64	2.034e5	1.341e5	2.301	1.52	1.55	891.7	YES	NO	bb	bb	34.265
26	Total-hexadioxins	34.24	2.579e2	2.330e2	1.005	1.11	1.24	5.2	YES	NO	dd	db	0.102
27	124679-HXCDD	33.86	1.543e5	1.263e5	1.115	1.22	1.24	1654.3	YES	NO	bd	bd	59.765
28	123789-HxCDD	36.38	1.189e5	9.528e4	0.907	1.25	1.24	1285.2	YES	NO	bd	bb	49.435
29	123678-HxCDD	35.99	1.352e5	1.064e5	1.001	1.27	1.24	1450.8	YES	NO	db	db	45.190
30	123478-HxCDD	35.86	1.110e5	9.259e4	0.996	1.20	1.24	1340.1	YES	NO	bd	bd	48.585
31	Total-hexadioxins	34.98	5.841e2	4.611e2	1.005	1.27	1.24	7.6	YES	NO	db	db	0.218
32	1234678-HpCDD	40.13	8.862e4	8.812e4	1.039	1.01	1.05	1046.6	YES	NO	bd	bd	48.863
33	Total-heptadioxins	39.92	8.522e1	9.322e1	1.088	0.91	1.05	3.4	NO	NO	bb	bb	0.047
34	1234679-HPCDD	39.08	9.847e4	9.908e4	1.137	0.99	1.05	1212.6	YES	NO	bb	bd	49.915
35	OCDD	44.83	1.298e5	1.528e5	0.920	0.85	0.89	1581.4	YES	NO	bb	bb	94.577

ID: CS3Z1, Name: 23031302, Date: 13-Mar-2023, Time: 10:33:12, Conditions: AUTOSPEC01, User: pk

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.14	9.911e6					7.3	YES		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.20	3.338e4					2.9	NO		bb		0.000
2	FUNCTION2 PFK	27.91	2.381e4					2.6	NO		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	35.99	4.107e5					4.0	YES		bb		0.000
2	FUNCTION3 PFK	33.30	2.607e7					35.1	YES		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.29	4.735e3					1.5	NO		bb		
2	FUNCTION5 PFK	44.80	7.470e3					1.8	NO		db		
3	FUNCTION5 PFK	44.74	1.077e4					2.0	NO		dd		
4	FUNCTION5 PFK	44.70	6.282e3					1.1	NO		bd		
5	FUNCTION5 PFK	44.10	2.837e3					0.9	NO		bb		
6	FUNCTION5 PFK	43.73	8.156e2					0.6	NO		bb		
7	FUNCTION5 PFK	43.67	2.388e3					1.1	NO		bb		
8	FUNCTION5 PFK	43.32	5.413e3					1.4	NO		db		
9	FUNCTION5 PFK	43.25	8.945e3					2.0	NO		bd		
10	FUNCTION5 PFK	42.89	4.043e3					1.2	NO		bb		
11	FUNCTION5 PFK	42.82	6.456e3					1.7	NO		bb		
12	FUNCTION5 PFK	42.60	6.712e3					1.3	NO		bb		
13	FUNCTION5 PFK	45.80	5.606e3					1.4	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	22.31	8.768e1					1.7	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	30.98	9.936e1					3.6	YES		db		0.000
2	FUNCTION2 HPCD...	30.94	9.898e1					4.0	YES		bd		0.000
3	FUNCTION2 HPCD...	30.79	7.703e1					3.2	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.38	1.465e2					3.5	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.08	8.353e1					2.0	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
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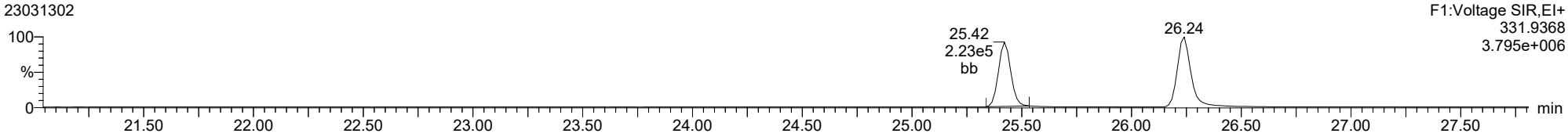

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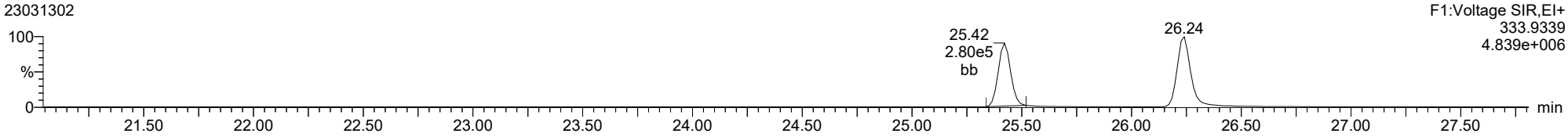

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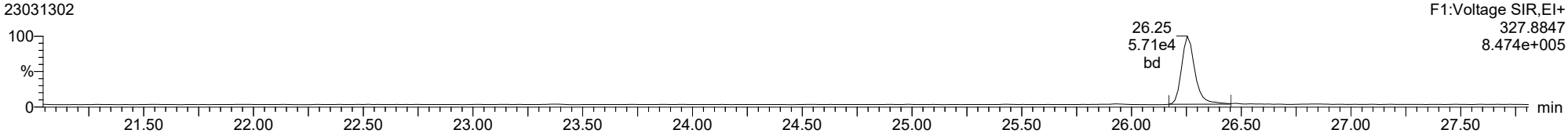

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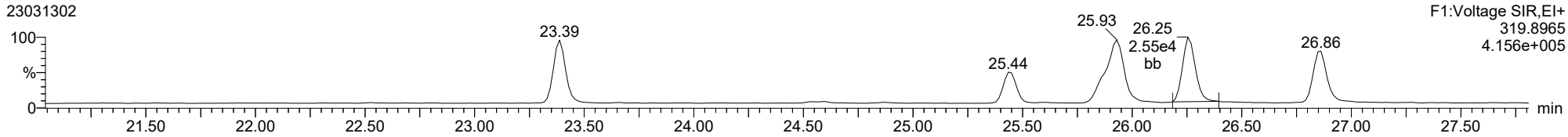

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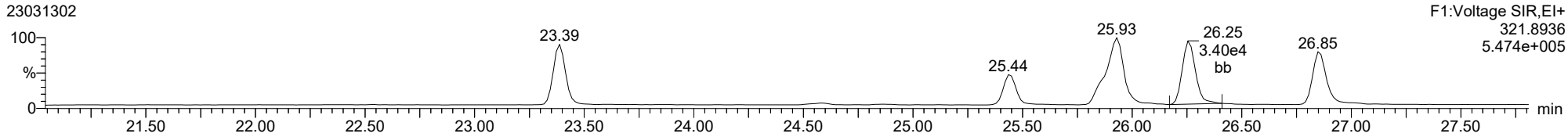

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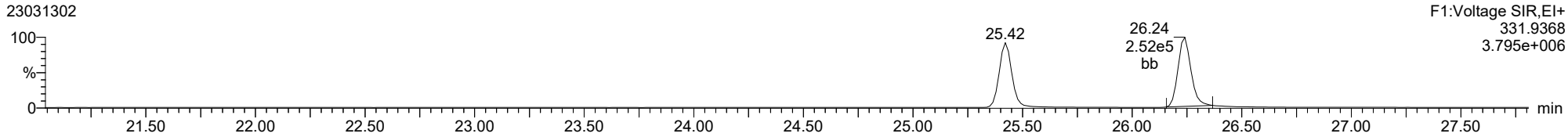

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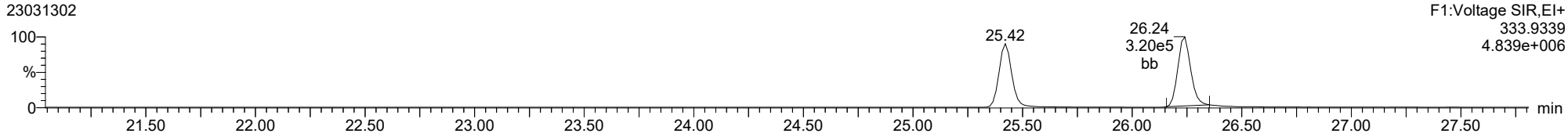

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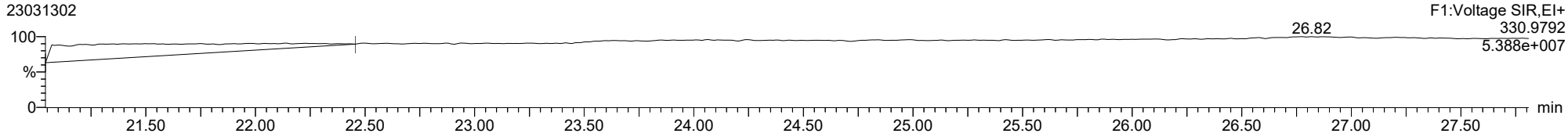

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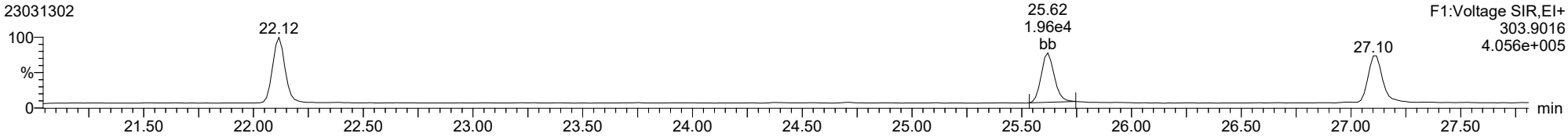

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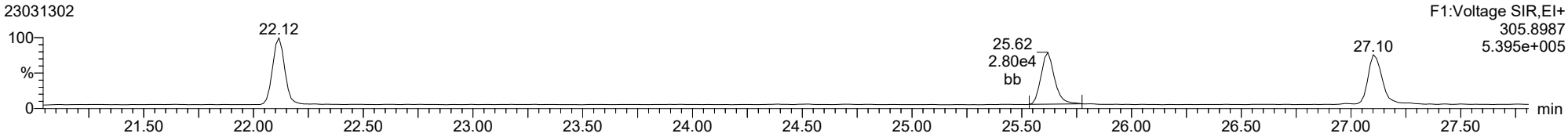

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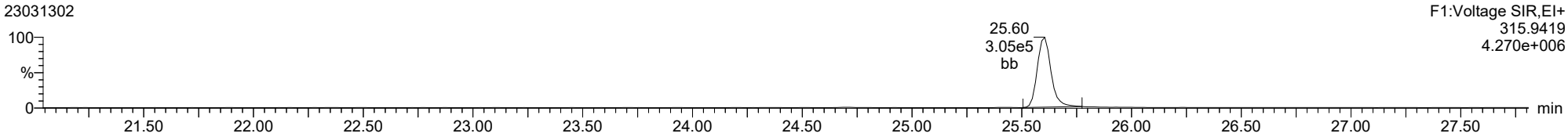

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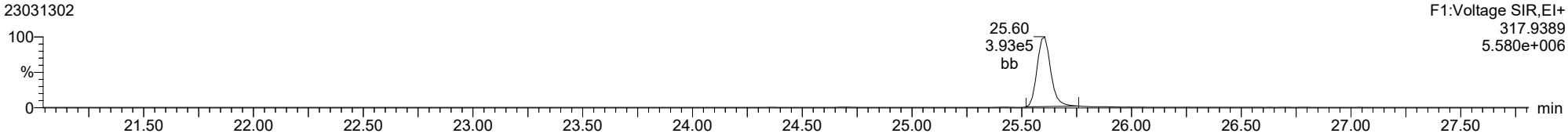

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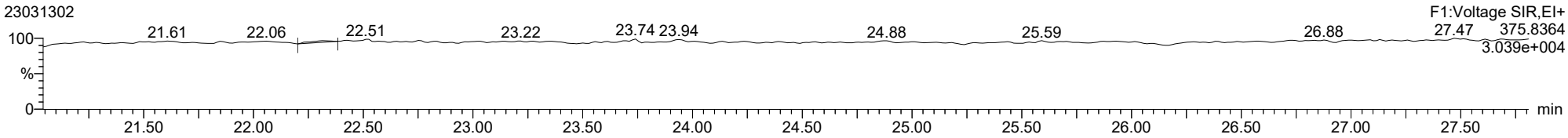
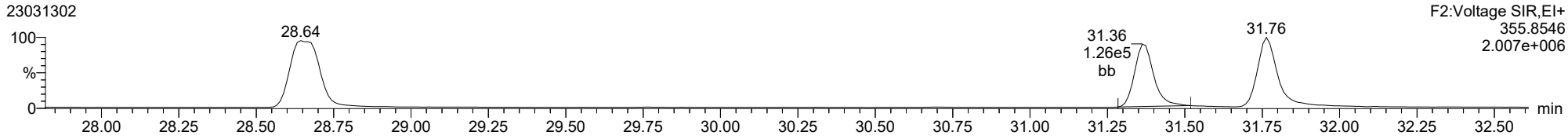
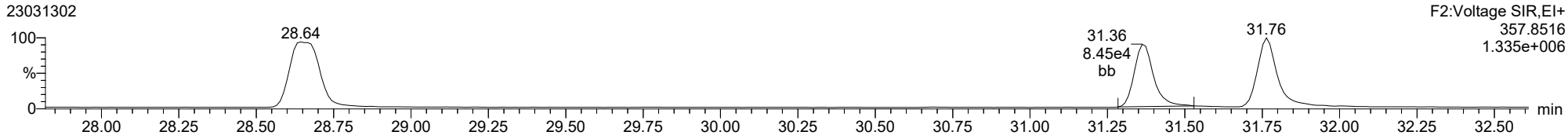


ID: CS3Z1, Name: 23031302, Date: 13-Mar-2023, Time: 10:33:12, Conditions: AUTOSPEC01, User: pk

12378-PeCDD



12378-PeCDD



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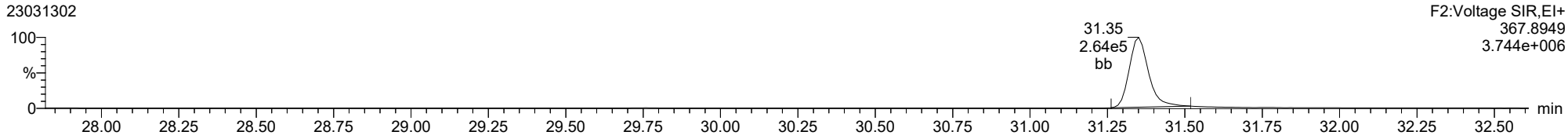

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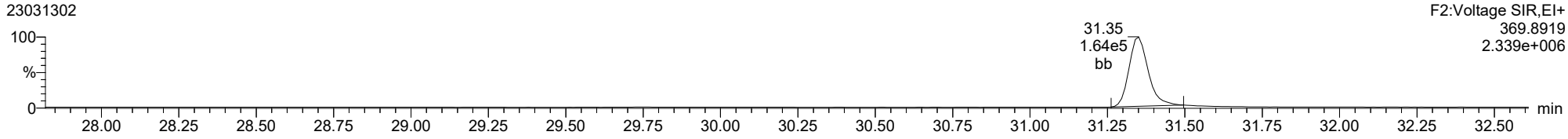

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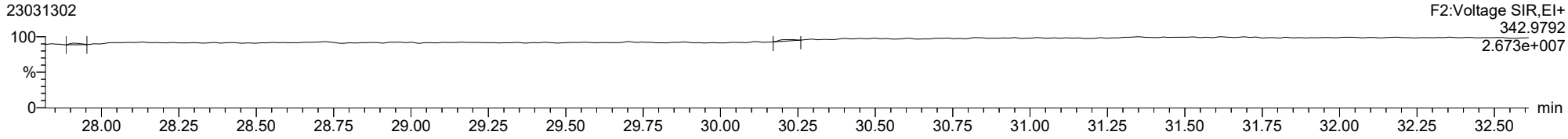

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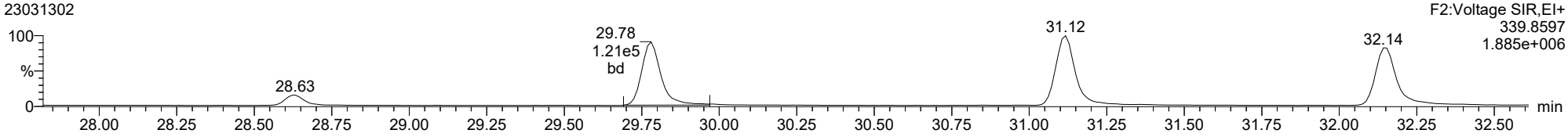
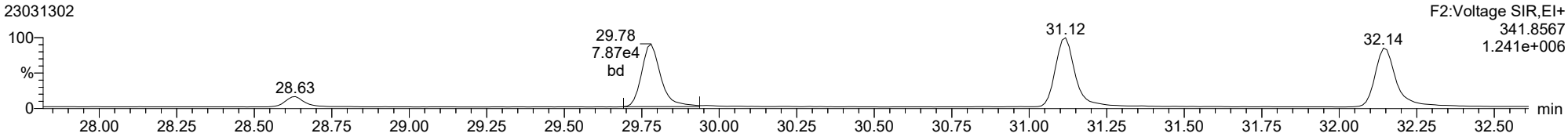
12378-PeCDF



12378-PeCDF



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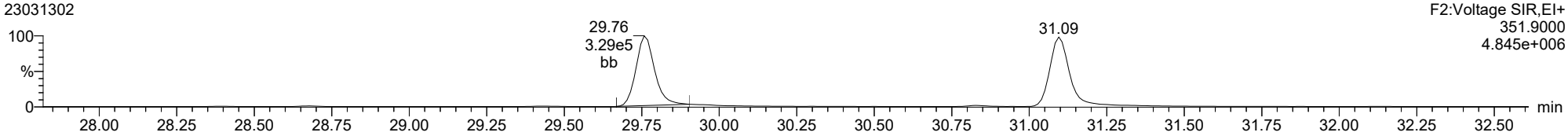

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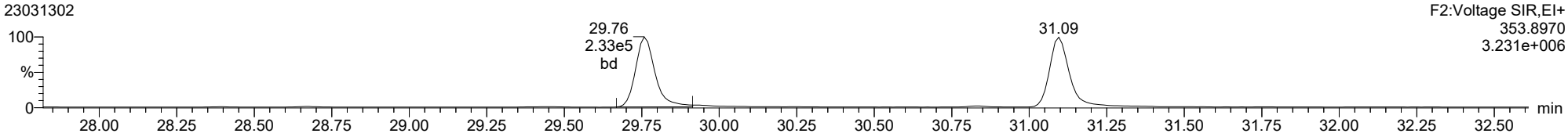

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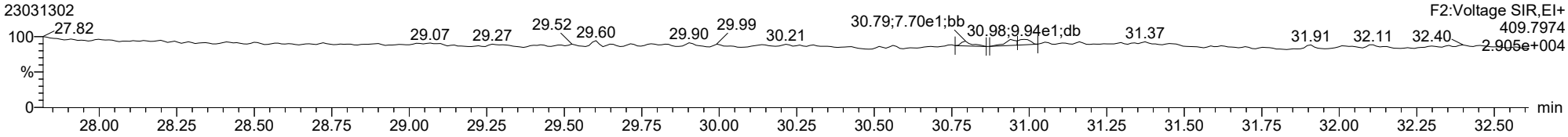

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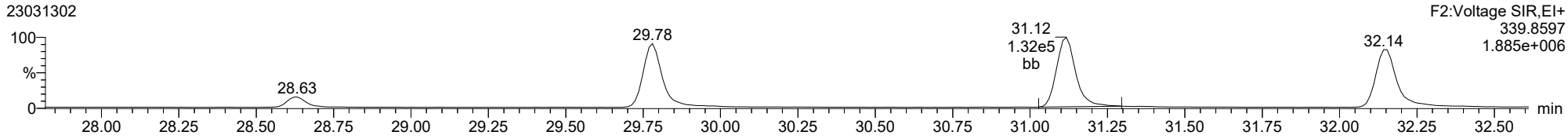

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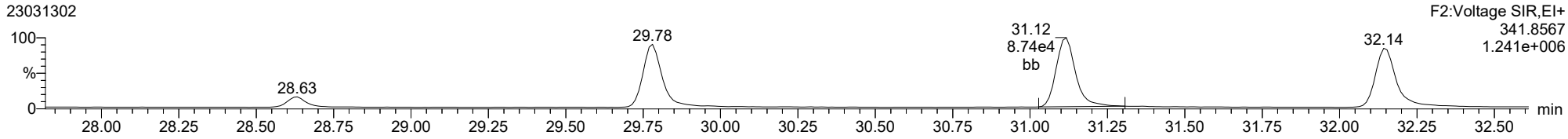

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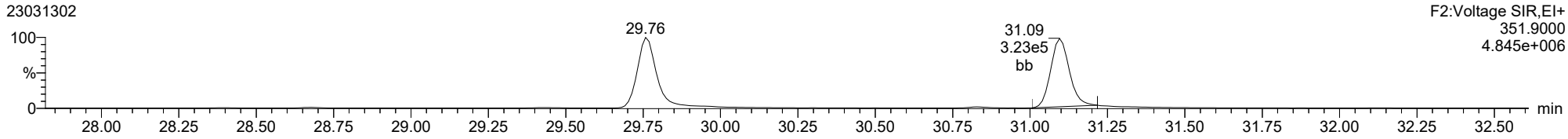

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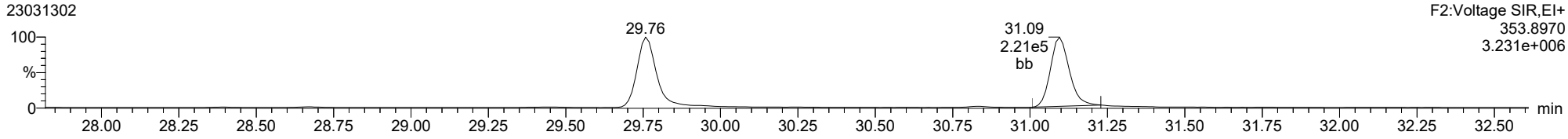

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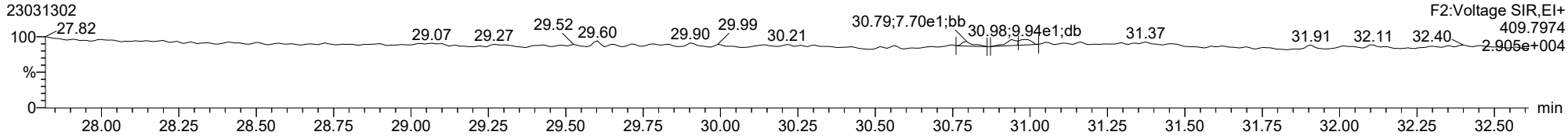

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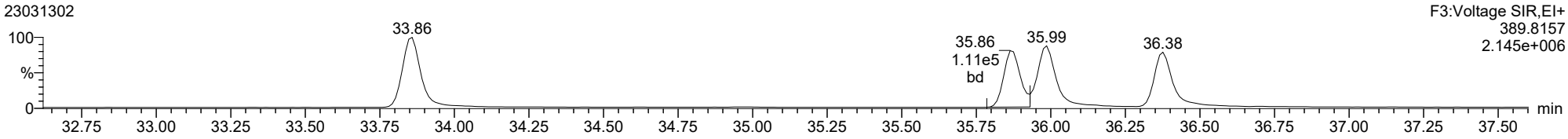

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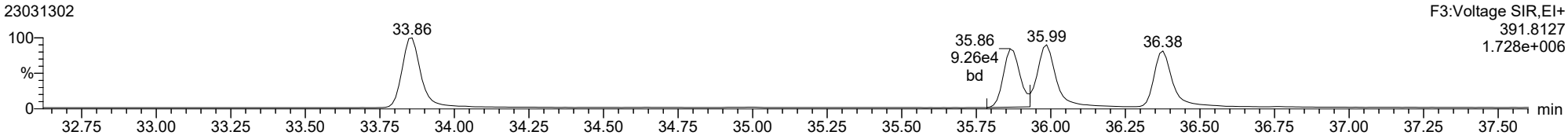

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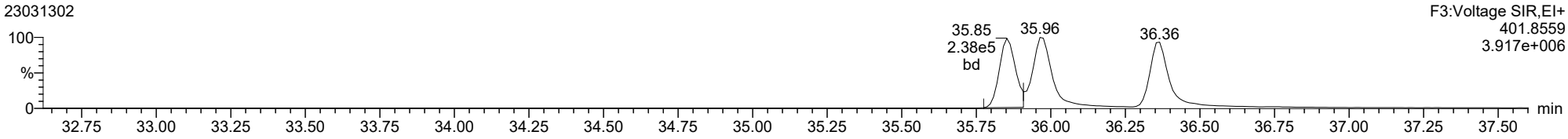

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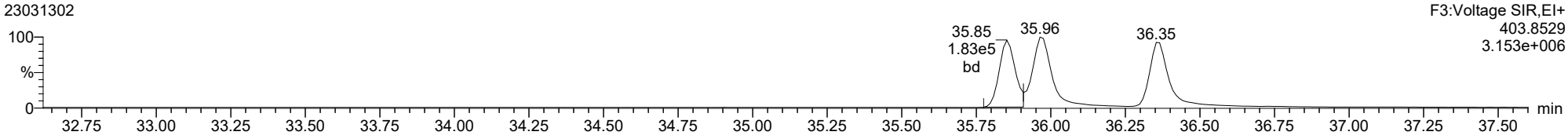

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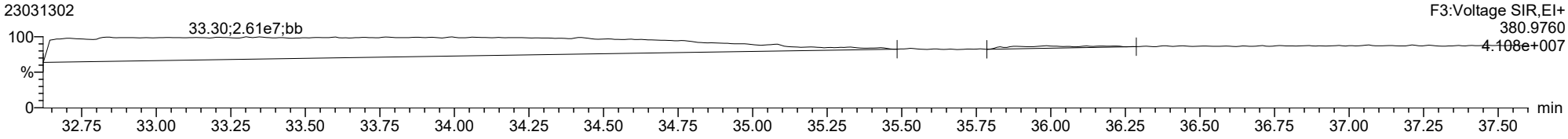

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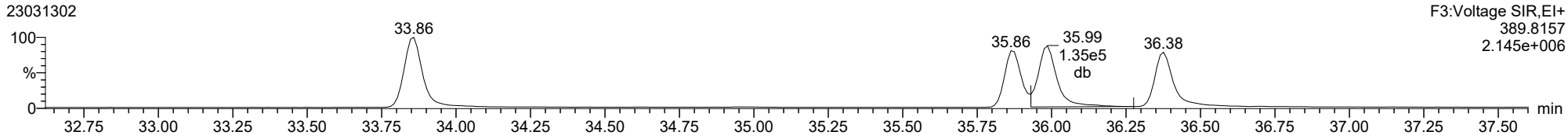

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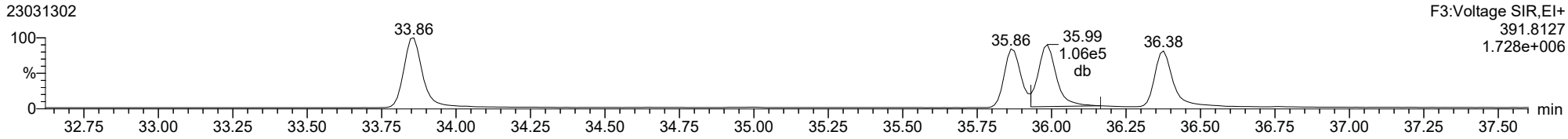

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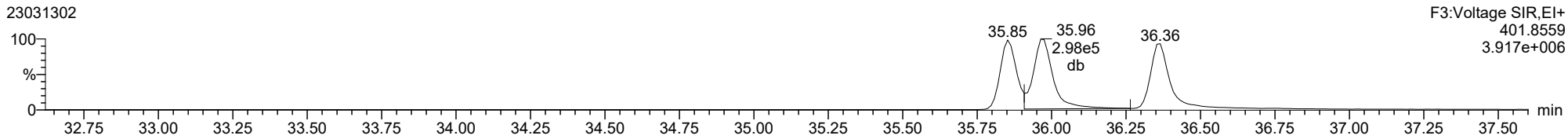

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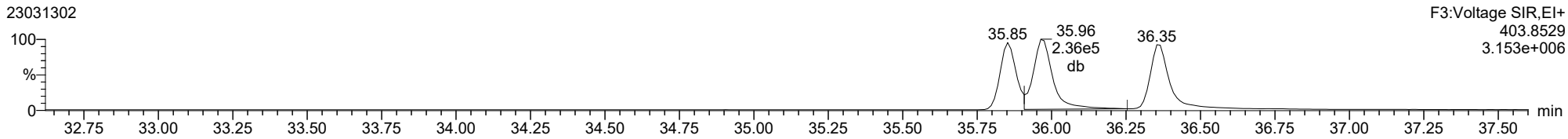

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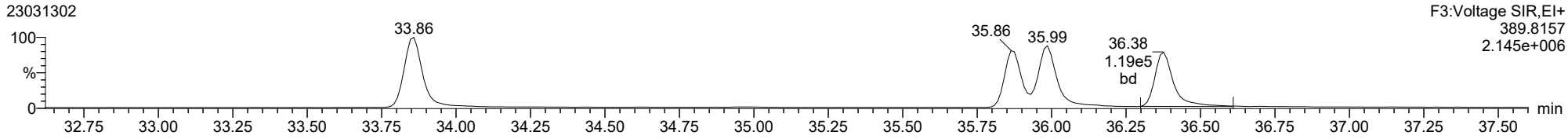

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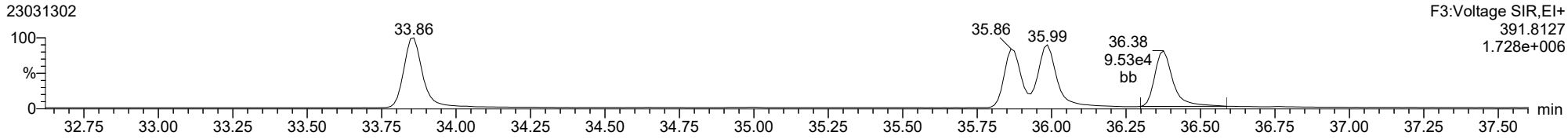

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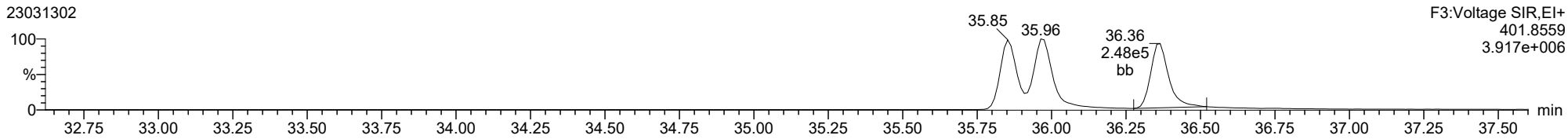

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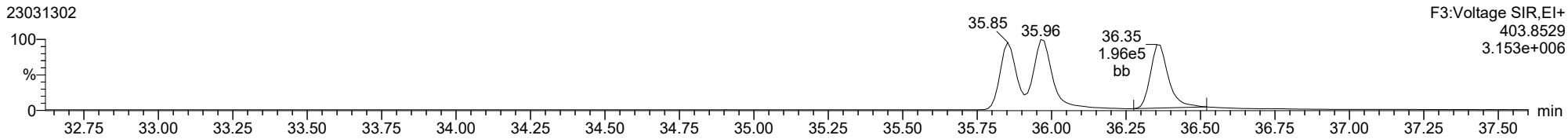

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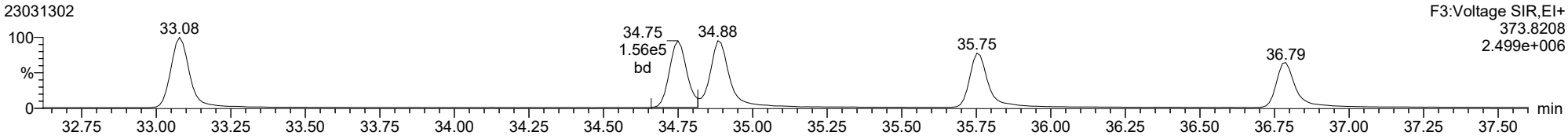

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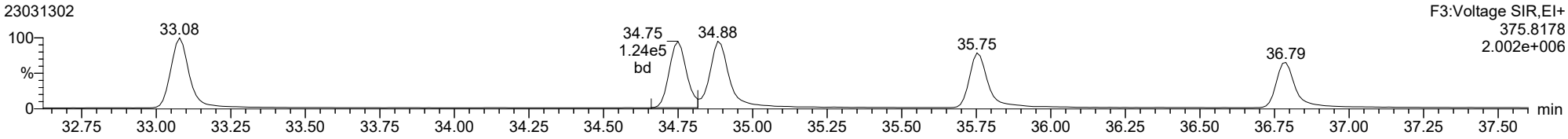

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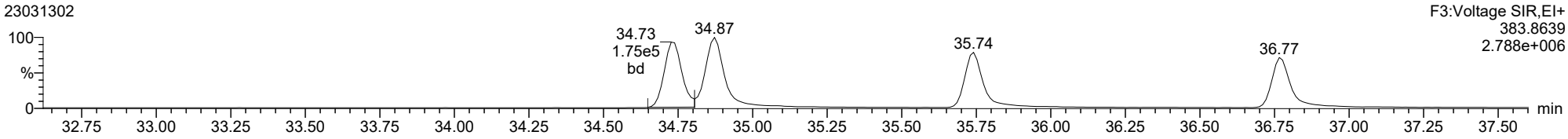

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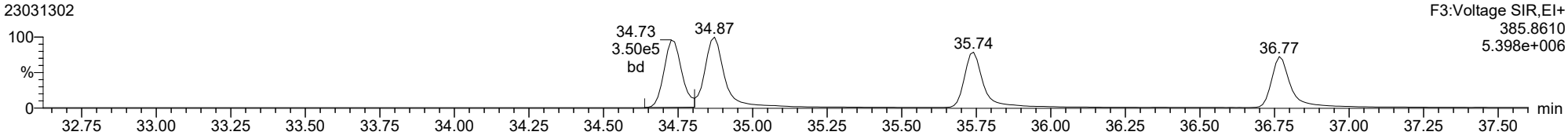

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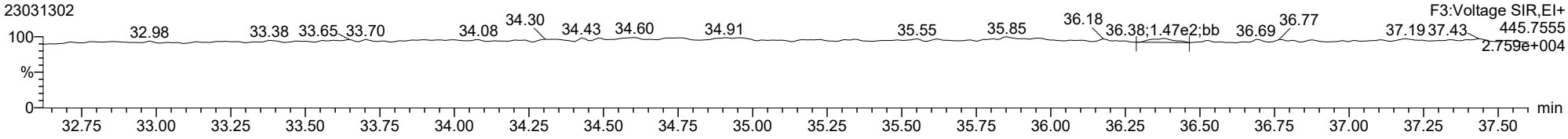

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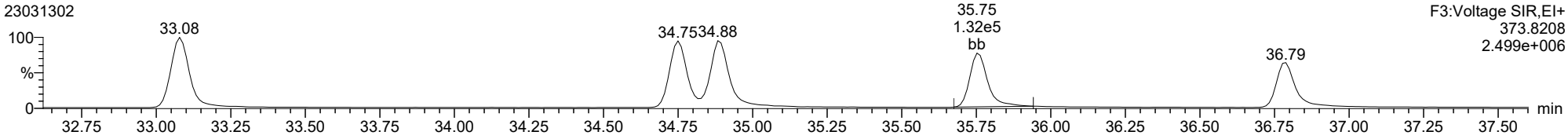

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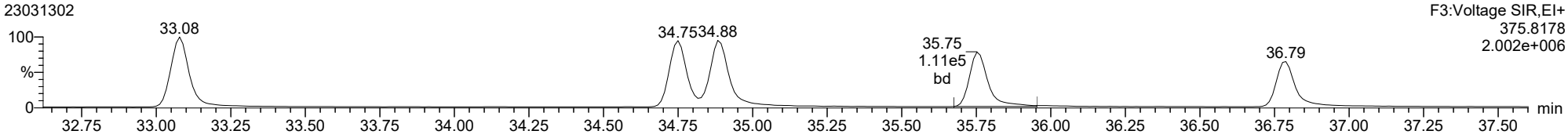

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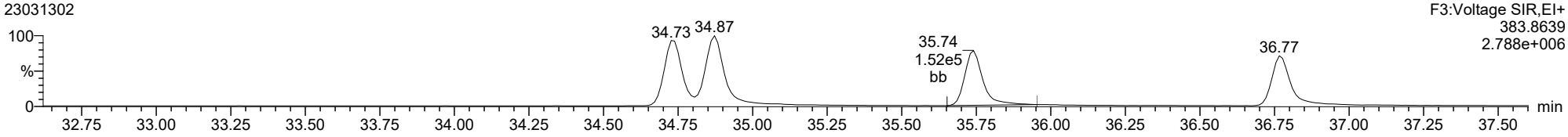

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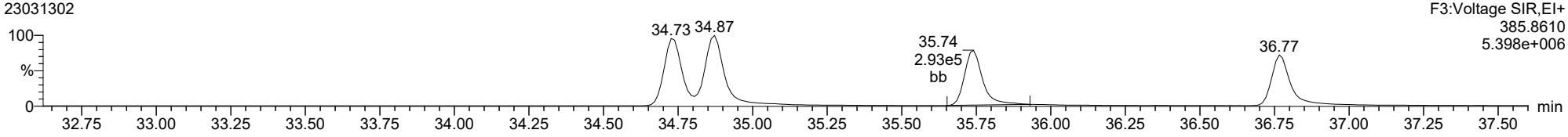

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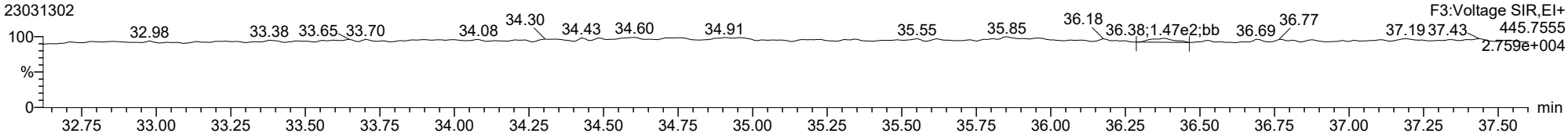

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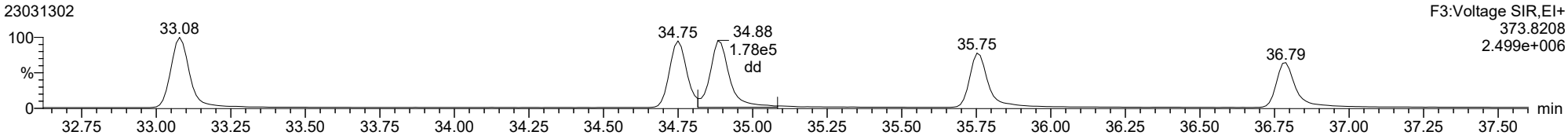

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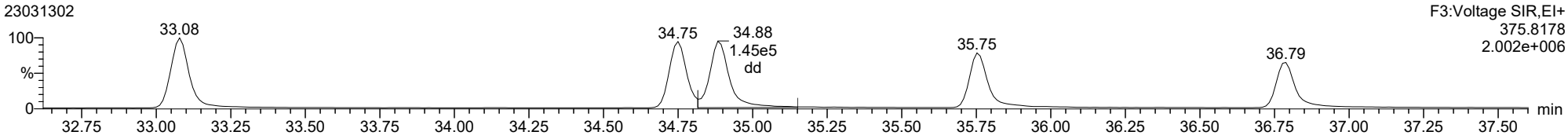

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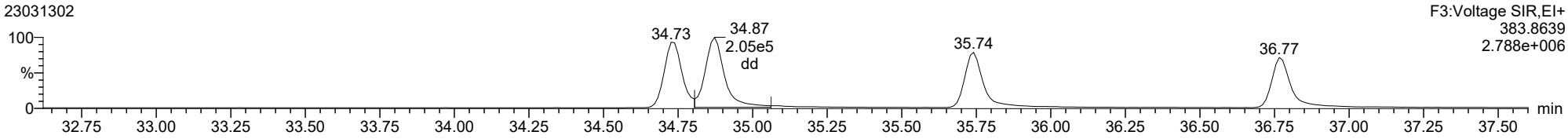

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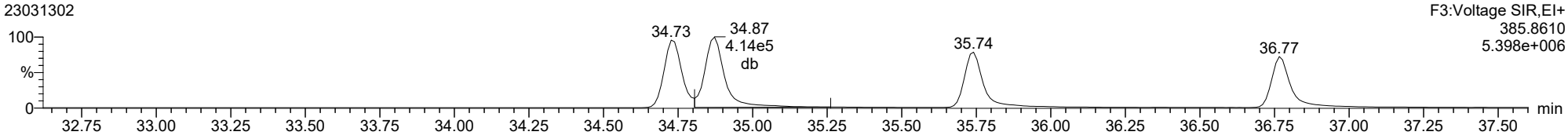

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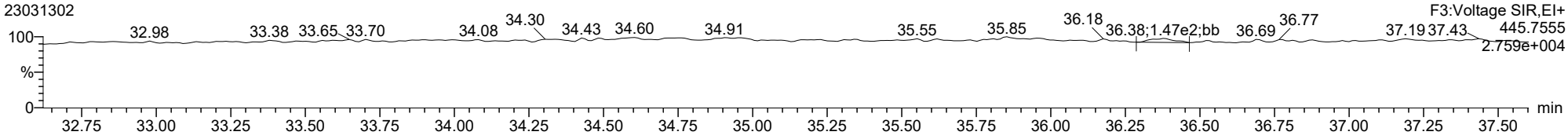

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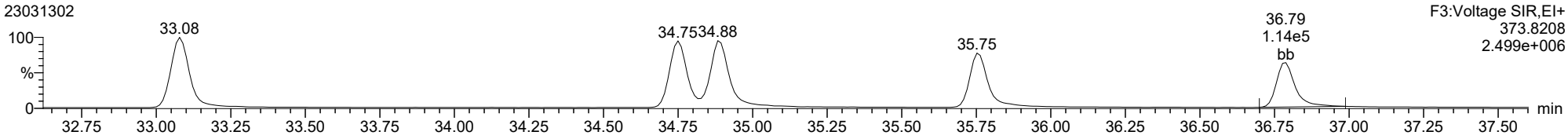

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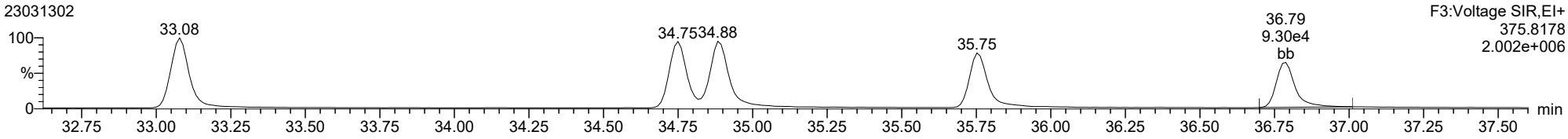

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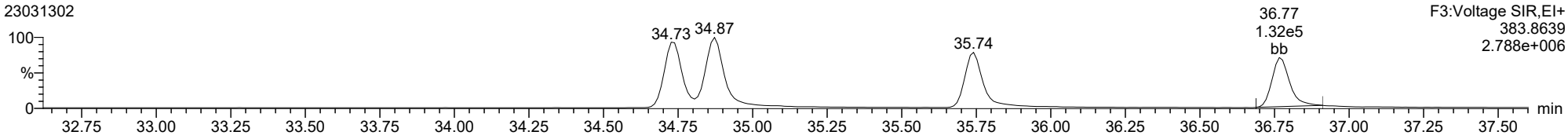

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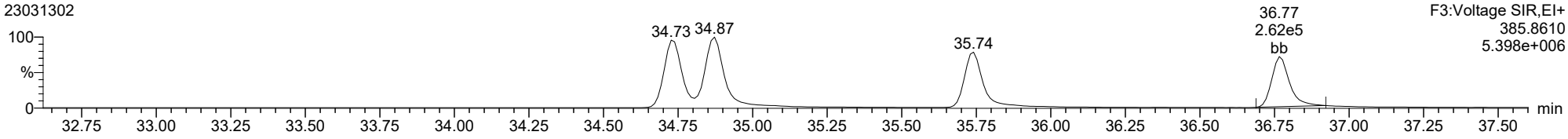

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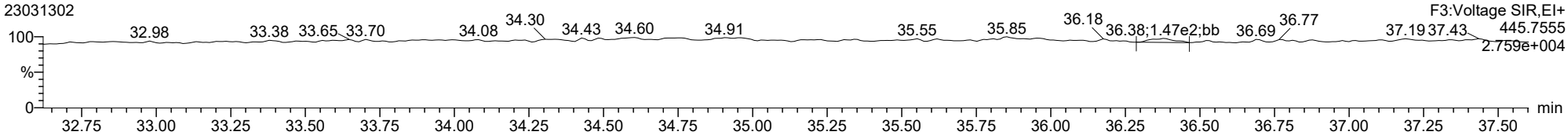

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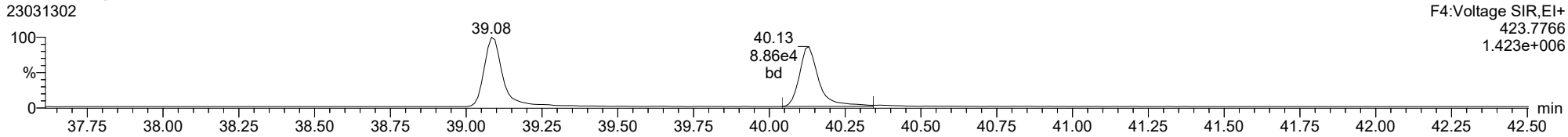

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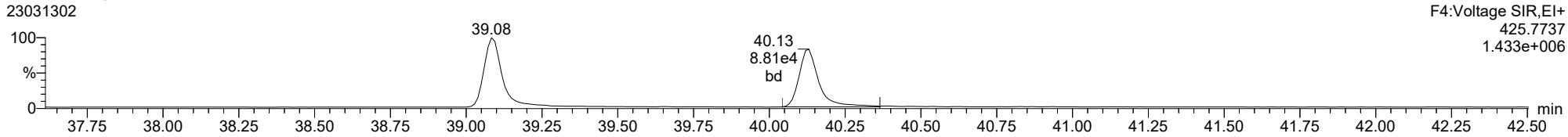

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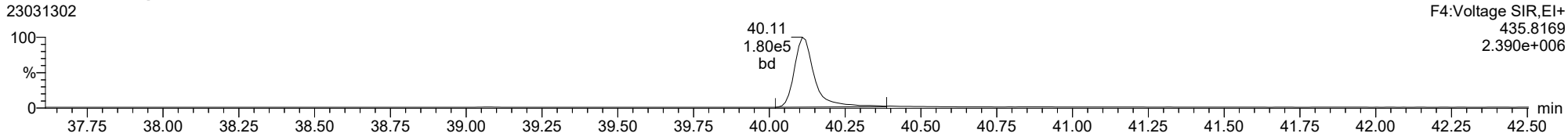

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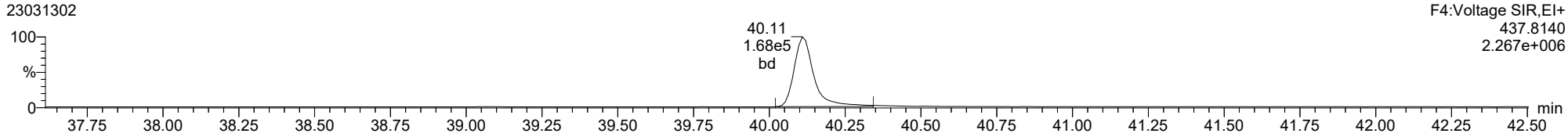

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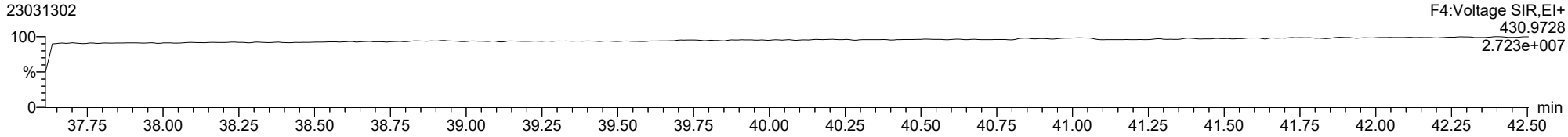

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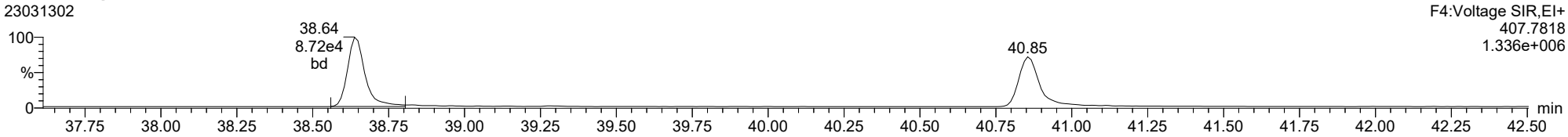

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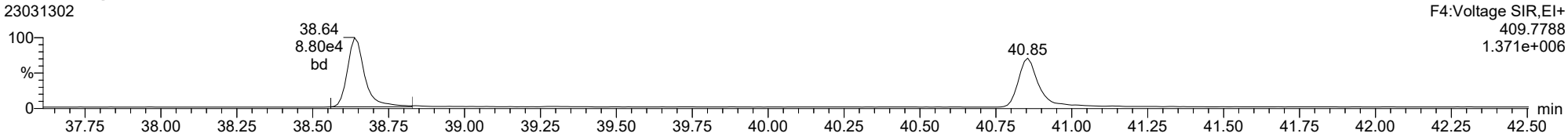

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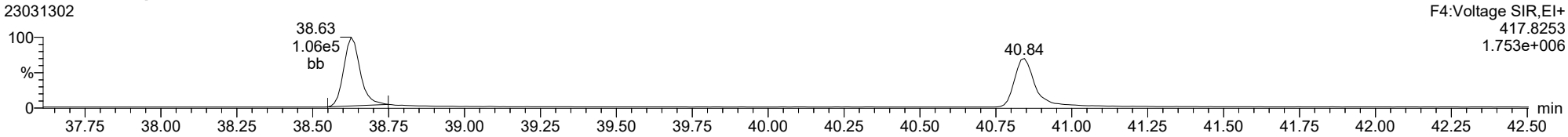

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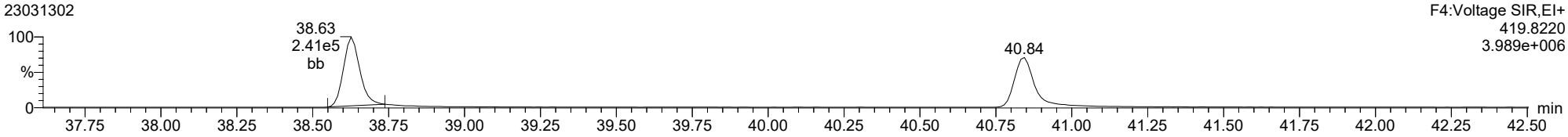

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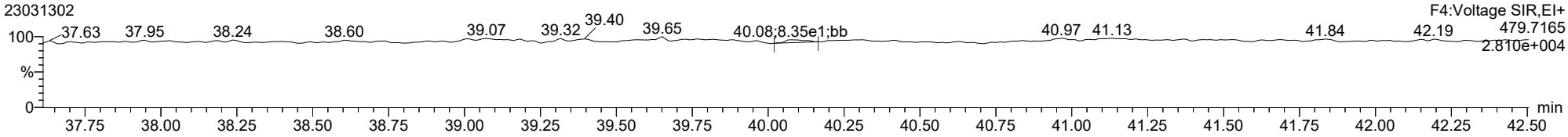

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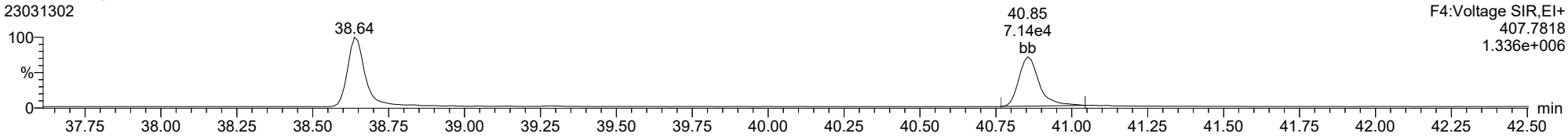

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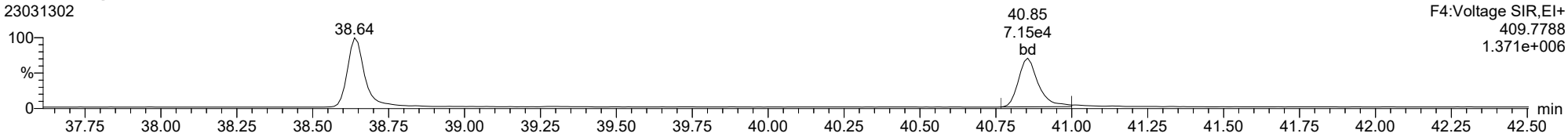

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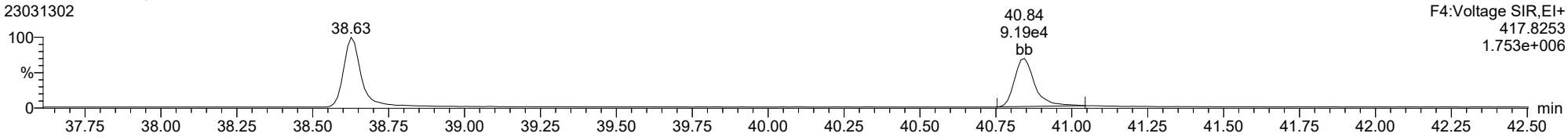

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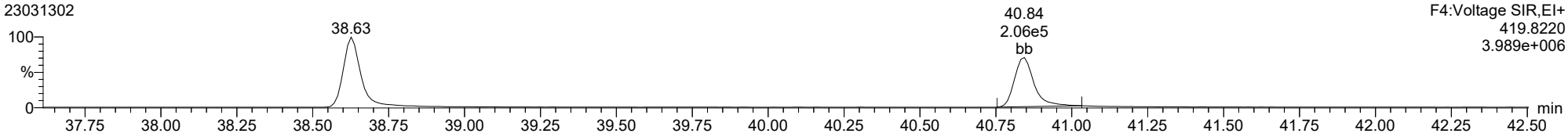

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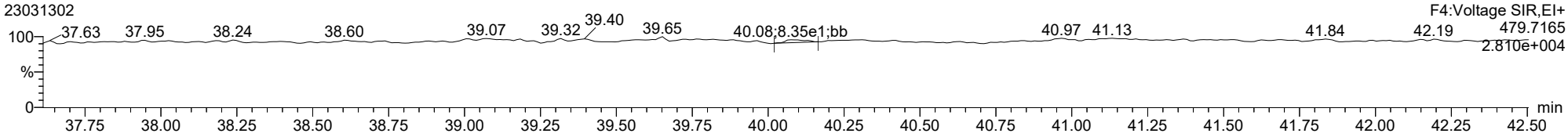

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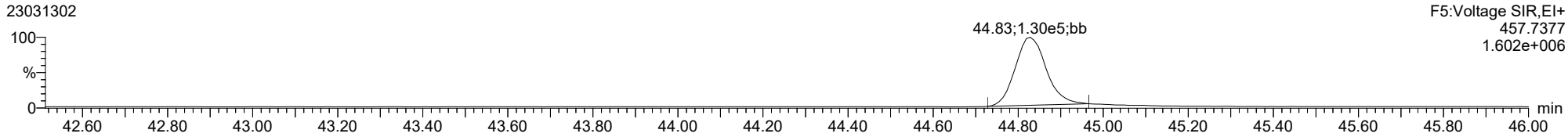

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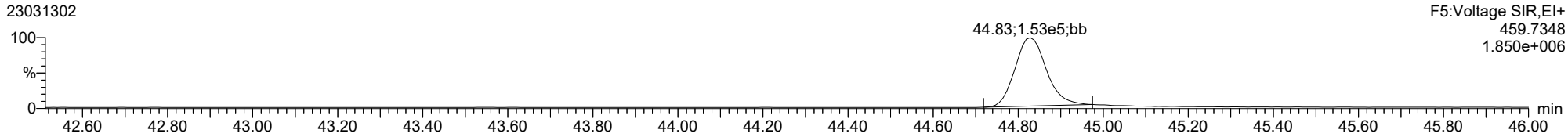

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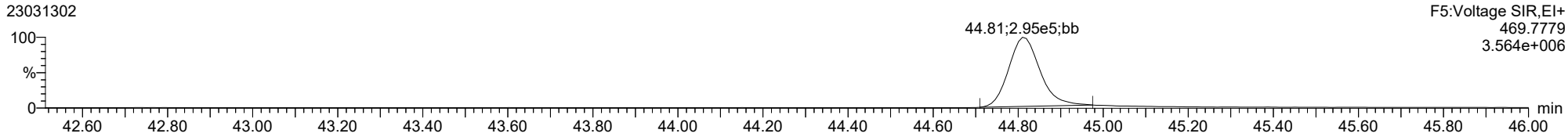

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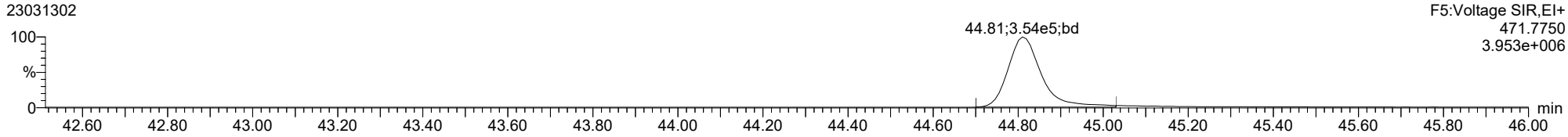

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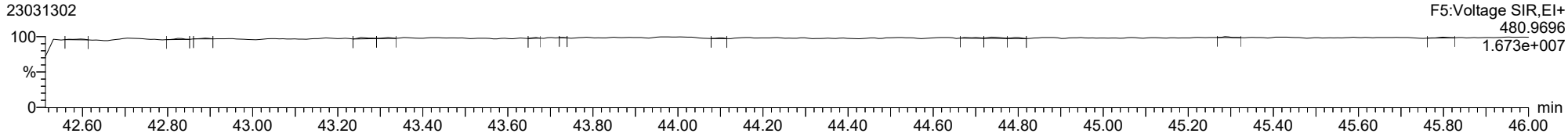

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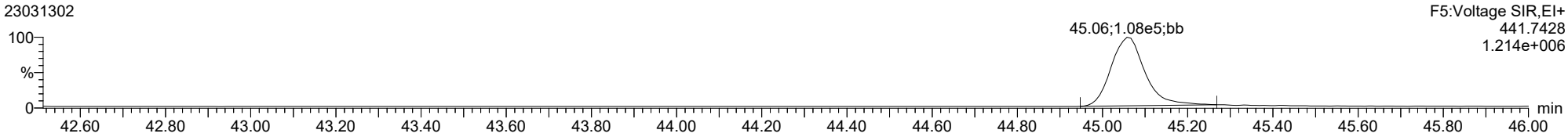

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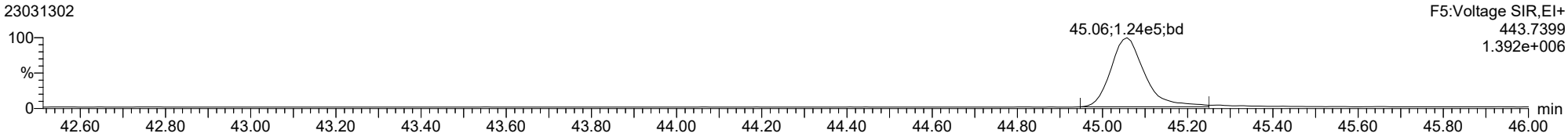

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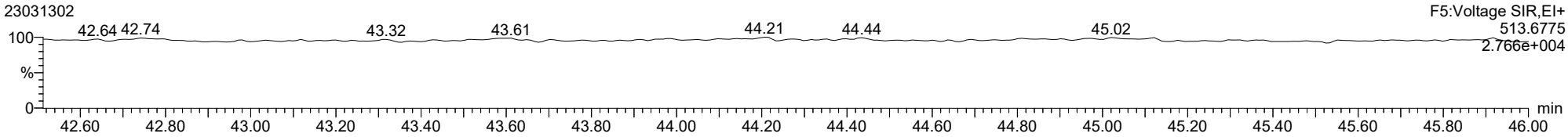

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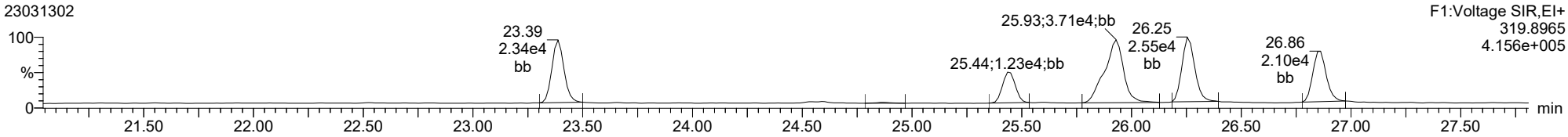

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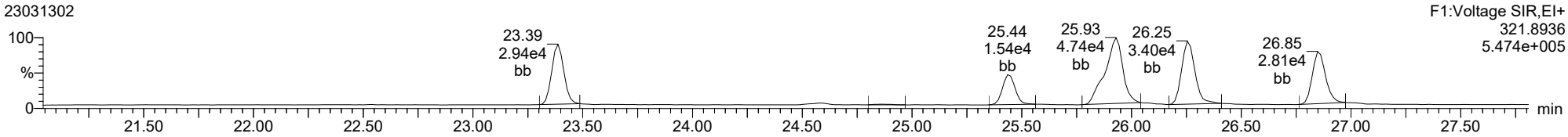

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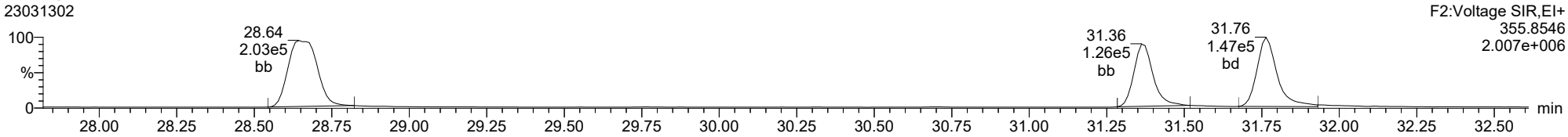

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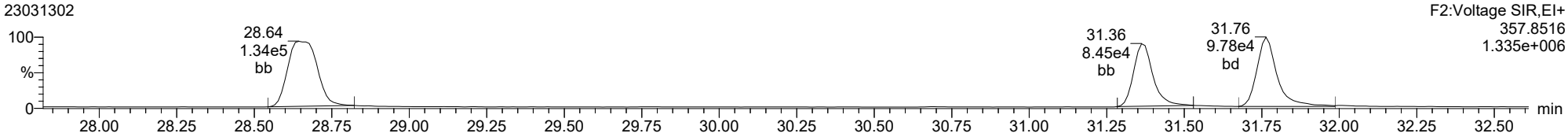

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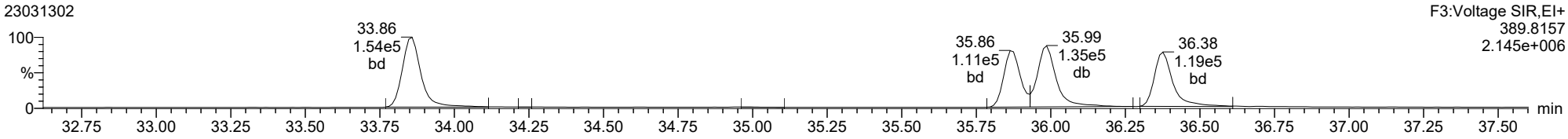

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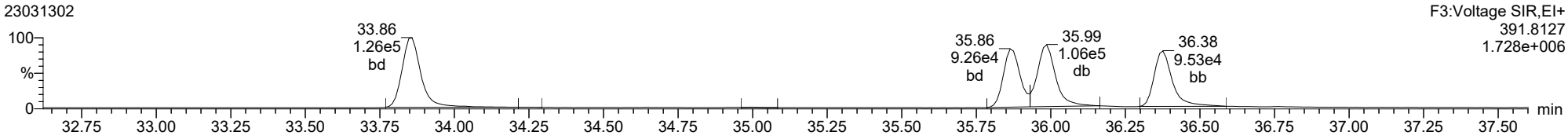

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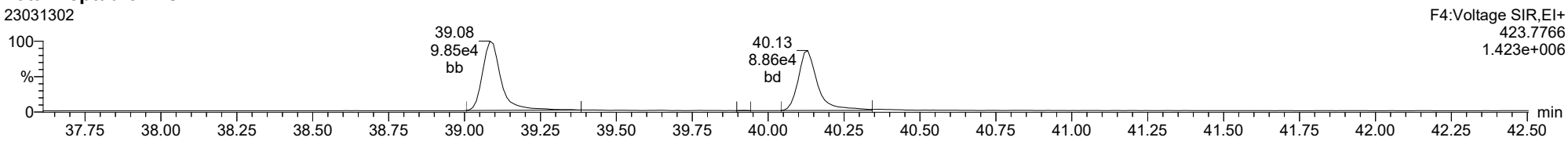

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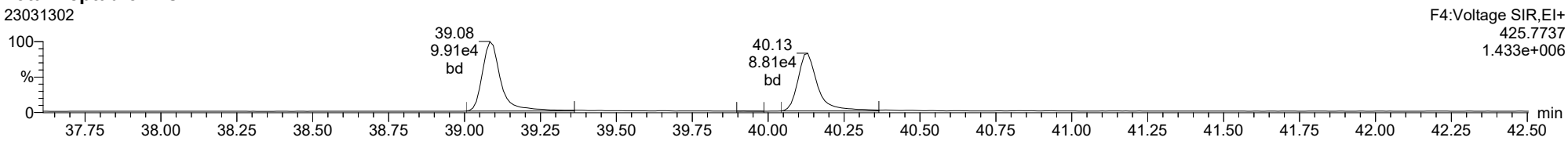

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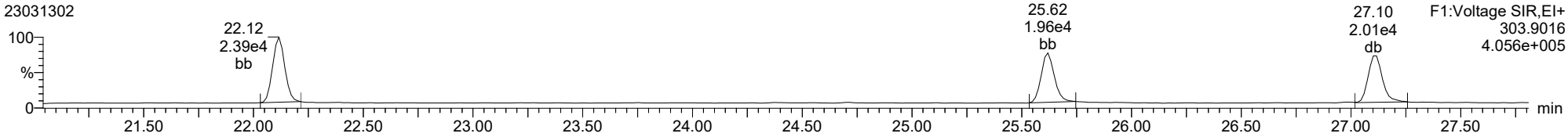

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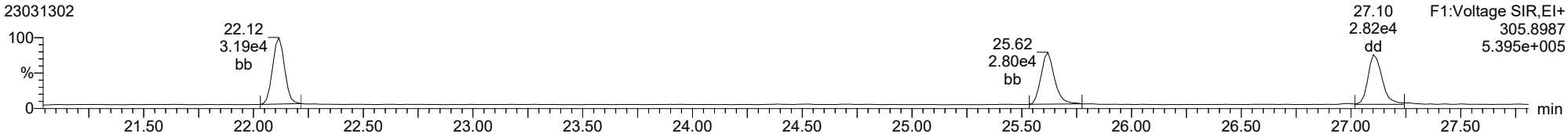

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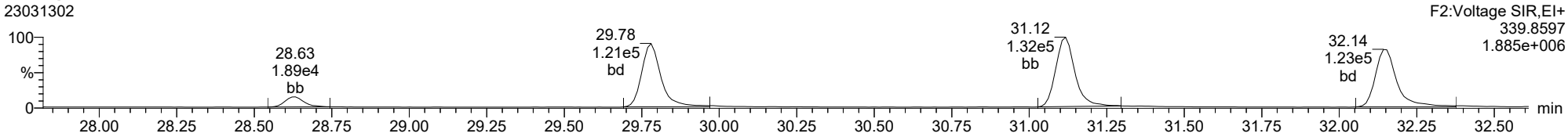

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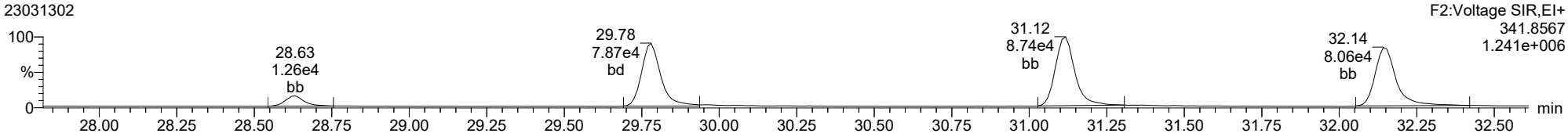

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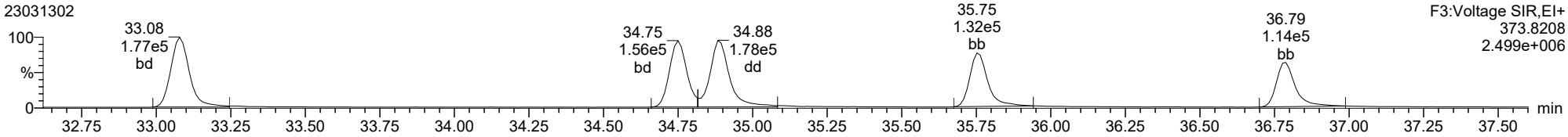

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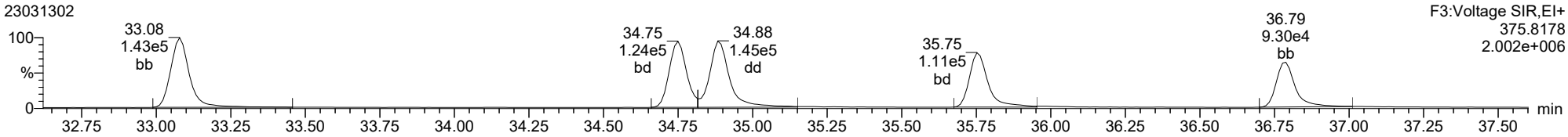

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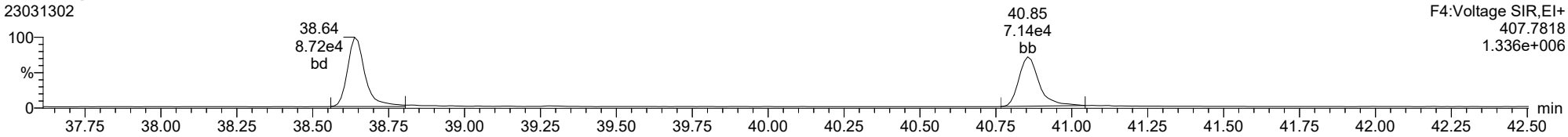

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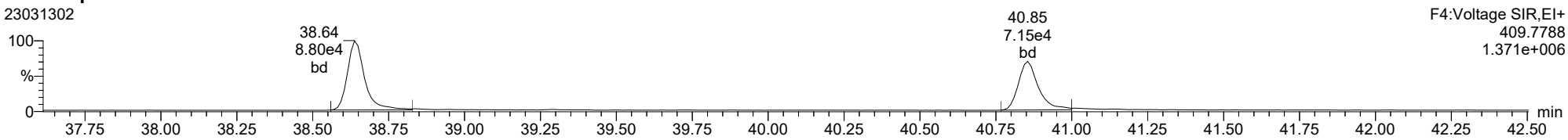

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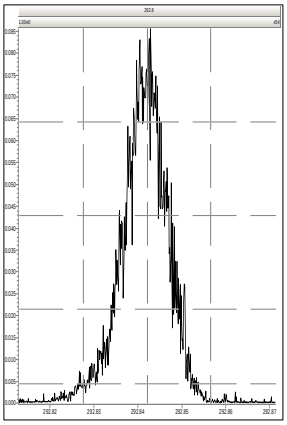

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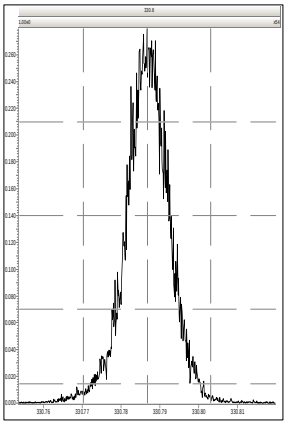

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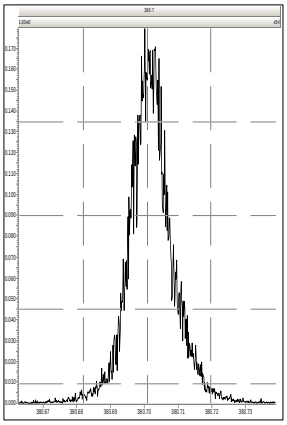

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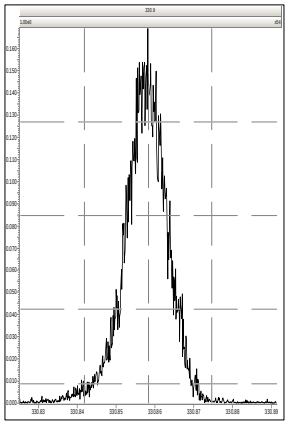

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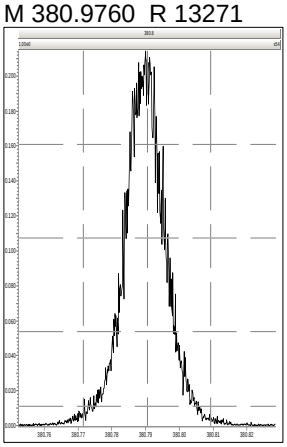

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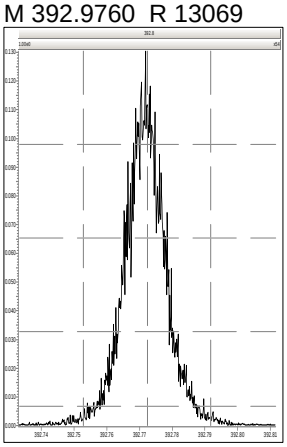

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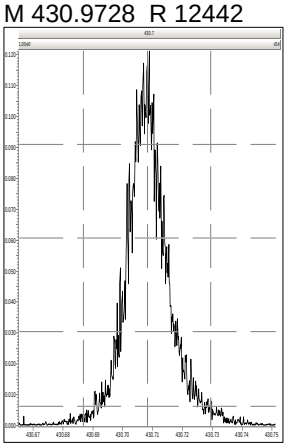

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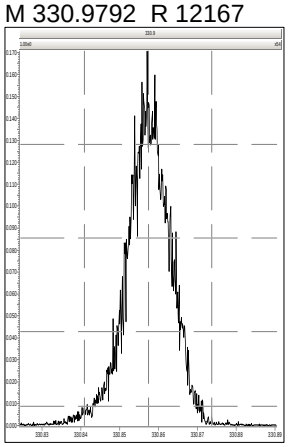

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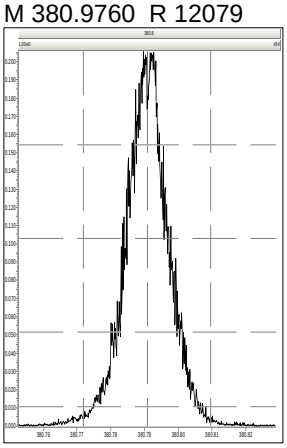

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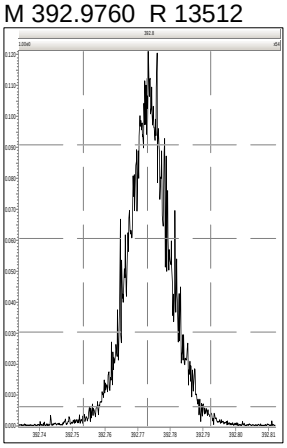

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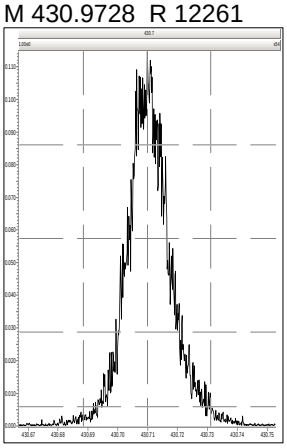

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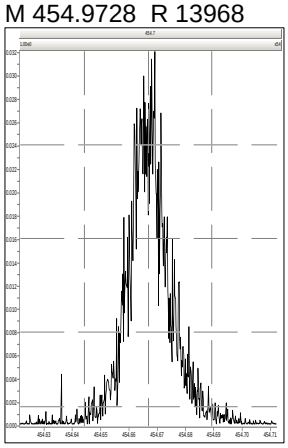

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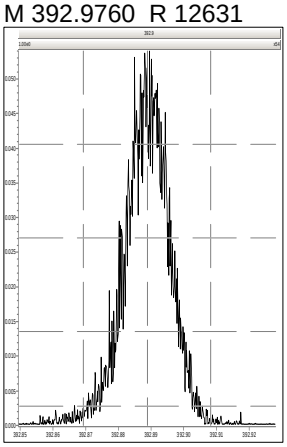

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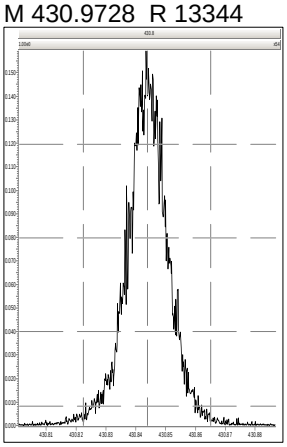

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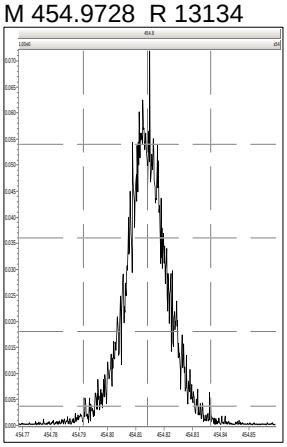

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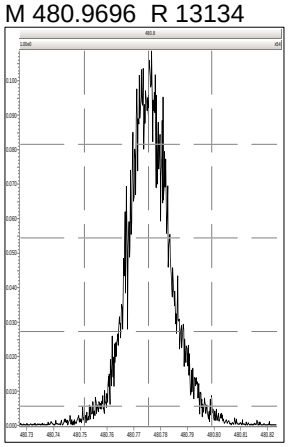
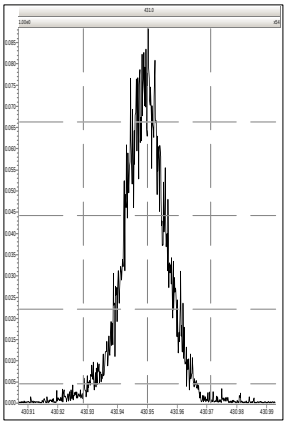
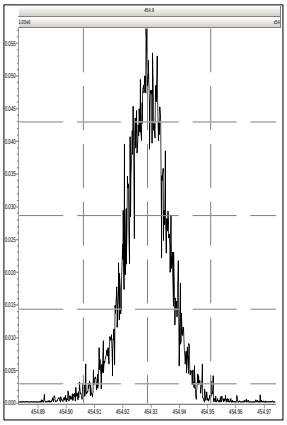


Printed: Monday, March 13, 2023 10:22:36 Pacific Daylight Time

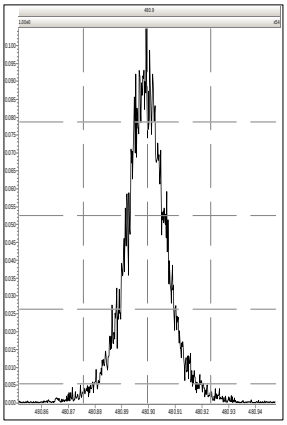
M 430.9728 R 13626



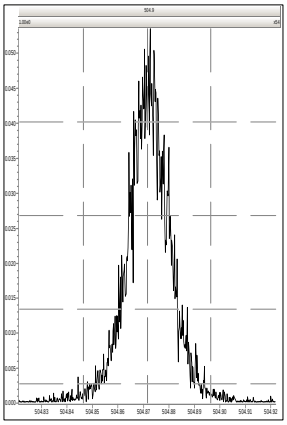
M 454.9728 R 13661



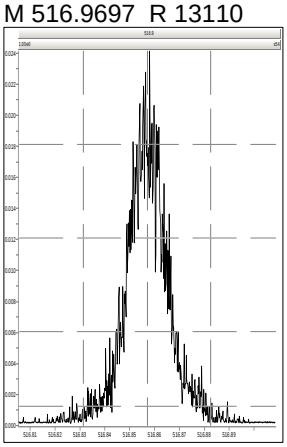
M 480.9696 R 13335

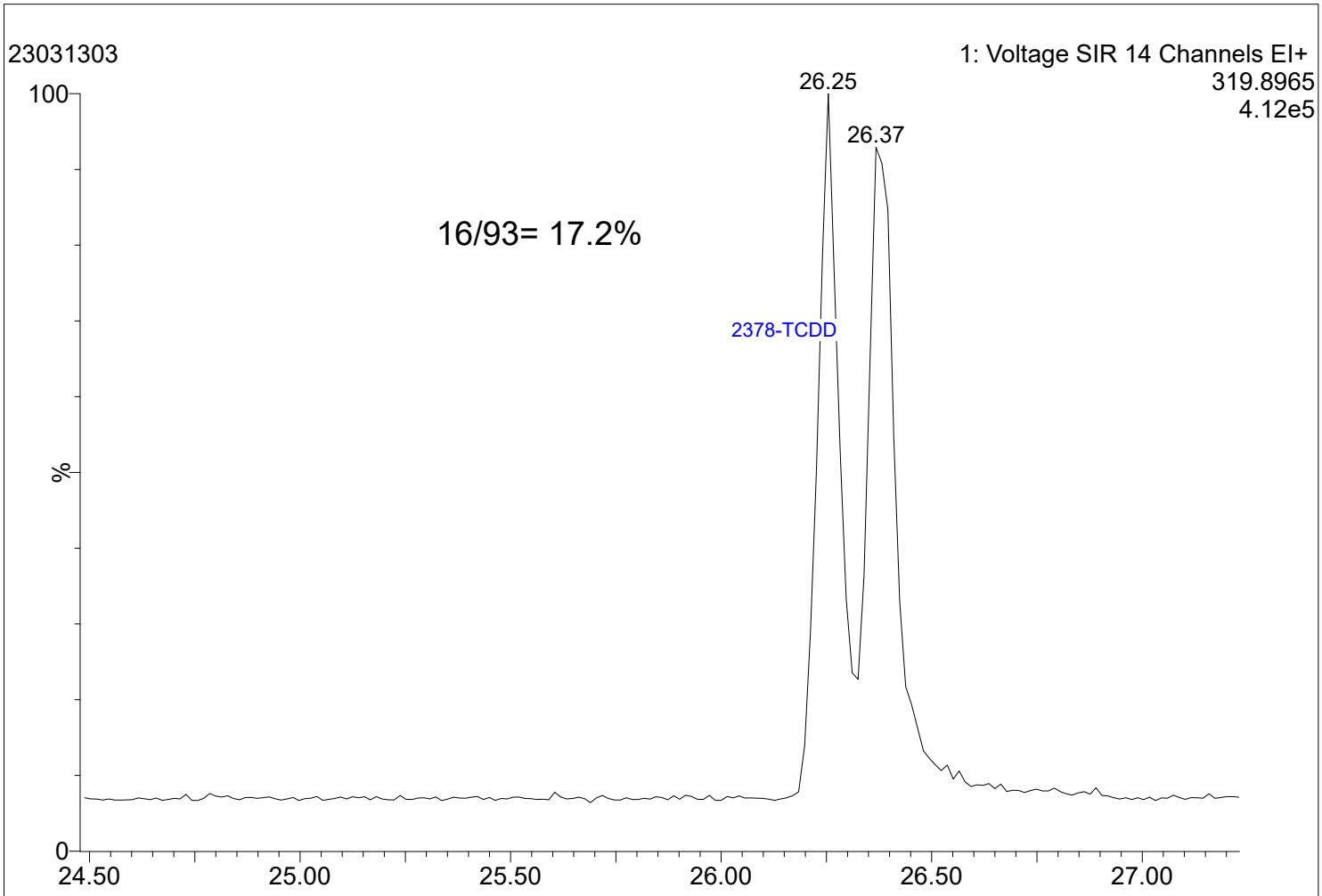


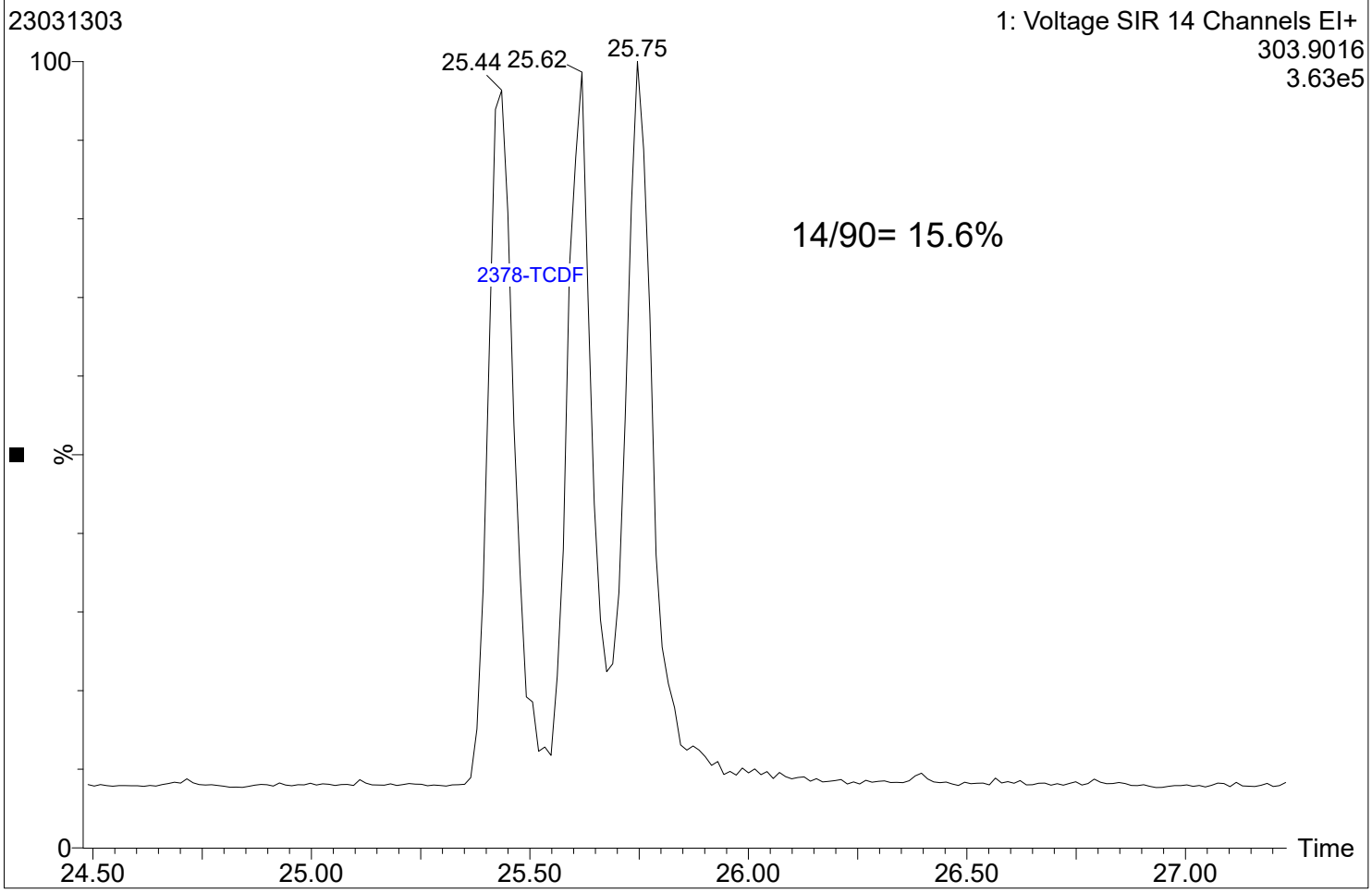
M 504.9696 R 14006



M 516.9697 R 13110




23031303
1: Voltage SIR 14 Channels EI+
319.8965
4.12e5
26.25
26.37
16/93= 17.2%
2378-TCDD
100
%
0
24.50
25.00
25.50
26.00
26.50
27.00


23031303
1: Voltage SIR 14 Channels EI+
303.9016
3.63e5
25.44
25.62
25.75
14/90= 15.6%
2378-TCDF
100
%
0
Time
24.50
25.00
25.50
26.00
26.50
27.00

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23031502	Calibration Date:	03/03/2023
Sequence:	SLC0176	Injection Date:	03/15/23
Lab Sample ID:	SLC0176-ICV1	Injection Time:	11:02
Sequence Name:	CS3Z4		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
2,3,7,8-TCDF	A	10.000	10.7	0.7015272	0.7491013		6.8	+/-16
2,3,7,8-TCDD	A	10.000	9.14	1.1486620	1.0495520		-8.6	+/-22
1,2,3,7,8-PeCDF	A	50.000	52.0	0.6792300	0.7069506		4.1	+/-18
2,3,4,7,8-PeCDF	A	50.000	49.9	0.7861704	0.7847233		-0.2	+/-18
1,2,3,7,8-PeCDD	A	50.000	50.1	1.0218450	1.0243230		0.2	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	48.3	1.1660380	1.1273660		-3.3	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	49.0	1.0907410	1.0690270		-2.0	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	50.7	1.1396990	1.1564260		1.5	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	48.0	1.1370930	1.0907050		-4.1	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	48.1	0.9955689	0.9568005		-3.9	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	47.3	1.0009380	0.9466622		-5.4	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	52.4	0.9071139	0.9499178		4.7	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	48.3	1.0029930	0.9680206		-3.5	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	52.0	0.9531152	0.9907253		3.9	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	50.2	1.0390130	1.0435310		0.4	+/-14
OCDF	A	100.00	95.3	0.7778078	0.7408728		-4.7	+/-37
OCDD	A	100.00	103	0.9199537	0.9435841		2.6	+/-21
13C12-2,3,7,8-TCDF	A	100.00	85.8	1.6201960	1.3896086		-14.2	+/-29
13C12-2,3,7,8-TCDD	A	100.00	100	1.1524090	1.1576123		0.5	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	80.0	1.2404520	0.9919367		-20.0	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	81.5	1.1177860	0.9107706		-18.5	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	83.2	0.8288129	0.6894064		-16.8	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	80.3	1.1683050	0.9384741		-19.7	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	71.8	1.3864660	0.9954735		-28.2	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	82.7	1.1292560	0.9343331		-17.3	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	90.8	0.9317541	0.8461563		-9.2	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	97.1	0.9950393	0.9661449		-2.9	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	85.9	1.1566890	0.9936743		-14.1	+/-15
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	83.7	0.8952017	0.7490321		-16.3	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	83.0	0.7697516	0.6387781		-17.0	+/-23

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23031502	Calibration Date:	03/03/2023
Sequence:	SLC0176	Injection Date:	03/15/23
Lab Sample ID:	SLC0176-ICV1	Injection Time:	11:02
Sequence Name:	CS3Z4		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	84.3	0.8401226	0.7086402		-15.7	+/-28
13C12-OCDD	A	200.00	151	0.7674714	0.5811518		-24.3	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	8.61	1.2878040	1.1090972		-13.9	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:57:12 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3Z4, Name: 23031502, Date: 15-Mar-2023, Time: 11:02:56, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.576	1.001	2.816e4	3.691e4	0.702	0.763	0.770	684	849	4.43e5	5.84e5	647.3	687.9	NO	bb	bb	10.678
12378-PeCDF	29.747	1.001	1.315e5	8.767e4	0.679	1.500	1.550	962	866	2.09e6	1.36e6	2175.8	1571.2	NO	bb	bb	52.041
23478-PeCDF	31.084	1.001	1.351e5	8.831e4	0.786	1.529	1.550	962	866	2.13e6	1.40e6	2215.9	1619.7	NO	bb	bb	49.908
123478-HxCDF	34.716	1.000	1.914e5	1.534e5	1.166	1.248	1.240	919	907	3.19e6	2.55e6	3473.9	2807.4	NO	bd	bd	48.342
234678-HxCDF	35.730	1.001	1.962e5	1.559e5	1.140	1.258	1.240	919	907	3.34e6	2.67e6	3633.5	2948.3	NO	bb	bb	50.734
123678-HxCDF	34.861	1.001	1.927e5	1.541e5	1.091	1.250	1.240	919	907	3.13e6	2.51e6	3407.8	2763.2	NO	db	dd	49.005
123789-HxCDF	36.755	1.000	1.661e5	1.346e5	1.137	1.234	1.240	919	907	2.73e6	2.17e6	2967.7	2396.5	NO	bd	bd	47.960
1234678-HpCDF	38.615	1.000	1.185e5	1.178e5	1.003	1.007	1.050	1014	1030	2.06e6	2.09e6	2027.8	2028.8	NO	bb	bb	48.257
1234789-HpCDF	40.832	1.000	1.034e5	1.028e5	0.953	1.006	1.050	1014	1030	1.61e6	1.58e6	1588.5	1537.0	NO	bb	bb	51.973
OCDF	45.029	1.005	1.325e5	1.481e5	0.778	0.895	0.890	657	818	1.68e6	1.88e6	2564.8	2297.2	NO	bb	bb	95.251
2378-TCDD	26.226	1.001	3.319e4	4.276e4	1.149	0.776	0.770	942	804	5.09e5	6.59e5	540.5	820.0	NO	bb	bd	9.137
12378-PeCDD	31.329	1.000	1.327e5	8.802e4	1.022	1.508	1.550	835	994	2.09e6	1.39e6	2499.8	1400.8	NO	bb	bb	50.121
123478-HxCDD	35.841	1.000	1.657e5	1.356e5	0.996	1.222	1.240	706	774	2.83e6	2.30e6	4009.0	2969.2	NO	bd	bd	48.053
123678-HxCDD	35.953	1.000	1.680e5	1.385e5	1.001	1.213	1.240	706	774	2.84e6	2.33e6	4015.9	3004.4	NO	db	db	47.289
123789-HxCDD	36.354	1.012	1.666e5	1.367e5	0.907	1.219	1.240	706	774	2.80e6	2.28e6	3965.6	2938.5	NO	bb	bb	52.359
1234678-HpCDD	40.097	1.000	1.225e5	1.185e5	1.039	1.034	1.050	816	836	2.05e6	2.00e6	2509.8	2392.0	NO	bb	bb	50.217
OCDD	44.801	1.000	1.673e5	1.901e5	0.920	0.880	0.890	1003	1039	2.16e6	2.46e6	2157.1	2369.8	NO	bb	bb	102.569
13C-2378-TCDF	25.562	1.007	3.751e5	4.935e5	1.620	0.760	0.770	1851	952	6.02e6	7.90e6	3251.0	8298.5	NO	bb	bb	85.768
13C-12378-PeCDF	29.725	1.171	3.752e5	2.449e5	1.240	1.532	1.550	1410	980	5.98e6	3.87e6	4245.1	3945.4	NO	bb	bb	79.966
13C-23478-PeCDF	31.062	1.224	3.438e5	2.255e5	1.118	1.524	1.550	1410	980	5.49e6	3.54e6	3897.5	3608.3	NO	bb	bb	81.480
13C-123478-HxCDF	34.705	0.955	1.950e5	4.167e5	1.168	0.468	0.510	1024	1263	3.45e6	6.94e6	3364.4	5492.7	NO	bb	bd	80.328
13C-123678-HxCDF	34.839	0.959	2.202e5	4.287e5	1.386	0.514	0.510	1024	1263	3.55e6	6.92e6	3462.5	5477.9	NO	dd	dd	71.799
13C-234678-HxCDF	35.708	0.983	2.059e5	4.031e5	1.129	0.511	0.510	1024	1263	3.40e6	6.71e6	3325.1	5310.7	NO	bb	bb	82.739
13C-123789-HxCDF	36.743	1.011	1.867e5	3.648e5	0.932	0.512	0.510	1024	1263	3.20e6	6.20e6	3124.8	4909.7	NO	bb	bb	90.813
13C-1234678-HpCDF	38.604	1.063	1.480e5	3.402e5	0.895	0.435	0.440	814	1216	2.65e6	6.09e6	3259.7	5007.9	NO	bb	bb	83.672
13C-1234789-HpCDF	40.810	1.123	1.283e5	2.881e5	0.770	0.445	0.440	814	1216	2.00e6	4.60e6	2457.4	3781.2	NO	bb	bb	82.985
13C-1234-TCDD	25.379	0.000	2.756e5	3.495e5	1.000	0.789	0.770	1244	696	4.42e6	5.62e6	3551.9	8078.4	NO	bb	bb	100.000
13C-2378-TCDD	26.198	1.032	3.197e5	4.039e5	1.152	0.792	0.770	1244	696	5.13e6	6.45e6	4126.0	9263.9	NO	bb	bb	100.452
13C-12378-PeCDD	31.318	1.234	2.672e5	1.637e5	0.829	1.632	1.550	892	567	4.14e6	2.51e6	4638.5	4432.4	NO	bb	bb	83.180
13C-123478-HxCDD	35.830	0.986	3.533e5	2.764e5	0.995	1.278	1.240	996	896	5.96e6	4.59e6	5985.3	5123.1	NO	bd	bd	97.096
13C-123678-HxCDD	35.942	0.989	3.644e5	2.833e5	1.157	1.286	1.240	996	896	6.19e6	4.85e6	6216.7	5415.0	NO	db	dd	85.907
13C-1234678-HpCDD	40.086	1.103	2.385e5	2.233e5	0.840	1.068	1.050	733	846	4.00e6	3.75e6	5462.9	4431.8	NO	bb	bb	84.350
13C-OCDD	44.783	1.233	3.606e5	3.970e5	0.767	0.908	0.890	880	1180	4.76e6	5.23e6	5410.1	4433.1	NO	bb	bb	151.446
13C-123789-HxCDD	36.332	0.000	3.679e5	2.838e5	1.000	1.296	1.240	996	896	6.22e6	4.75e6	6245.5	5298.8	NO	bb	bb	100.000
37CL-2378-TCDD	26.212	1.033	6.933e4		1.288			742		1.07e6		1444.8			bb		8.612

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:57:12 Pacific Daylight Time

ID: CS3Z4, Name: 23031502, Date: 15-Mar-2023, Time: 11:02:56, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.073	0.863	2.997e4	3.989e4	0.802	0.751	0.770	684	849	4.75e5	6.45e5	694.2	759.5	NO	bb	bb	10.034
1289-TCDF	27.074	1.059	2.668e4	3.495e4	0.678	0.763	0.770	684	849	4.02e5	5.33e5	588.1	627.5	NO	db	db	10.465
13468-PECDF	26.933	0.906	2.592e5	1.716e5	1.246	1.510	1.550	584	577	4.04e6	2.70e6	6920.4	4681.1	NO	bb	bb	55.741
12389-PECDF	32.109	1.080	1.343e5	8.957e4	0.496	1.499	1.550	962	866	2.10e6	1.43e6	2181.6	1657.7	NO	bb	bb	72.733
123468-HXCDF	33.045	0.952	1.758e5	1.388e5	1.169	1.267	1.240	919	907	2.77e6	2.21e6	3020.5	2435.0	NO	bb	bb	43.981
1368-TCDD	23.345	0.891	3.001e4	3.792e4	1.015	0.791	0.770	942	804	4.84e5	6.16e5	513.1	766.3	NO	bb	bb	9.246
1289-TCDD	26.819	1.024	3.035e4	3.755e4	0.909	0.808	0.770	942	804	4.69e5	5.85e5	497.6	728.5	NO	bb	bb	10.326
12479-PECDD	28.599	0.913	2.111e5	1.365e5	2.301	1.547	1.550	835	994	2.09e6	1.33e6	2496.6	1340.4	NO	bb	bb	35.046
12389-PECDD	31.730	1.013	1.562e5	1.002e5	1.184	1.559	1.550	835	994	2.47e6	1.58e6	2961.6	1585.9	NO	bb	bb	50.274
124679-HXCDD	33.825	0.944	1.596e5	1.323e5	1.115	1.207	1.240	706	774	2.61e6	2.14e6	3692.7	2763.6	NO	bb	bb	41.554
1234679-HPCDD	39.061	0.974	1.352e5	1.299e5	1.137	1.040	1.050	816	836	2.32e6	2.25e6	2850.1	2687.7	NO	bb	bb	50.485
Total-tetrafurans			8.635e4		0.727			684		1.34e6							31.755
Total-penta1			2.592e5					584		4.04e6							55.741
Total-pentafurans			4.208e5		0.654			962		6.64e6							183.245
Total-hexafurans			9.222e5		1.141			919		1.52e7							240.022
Total-heptafurans			2.231e5		0.978			1014		3.68e6							100.771
Total-Furans			2.044e6		0.922			684		3.26e7							706.785
Total-tetradioxins			1.586e5		1.024			942		2.24e6							48.667
Total-pentadioxins			5.000e5		1.502			835		6.65e6							135.441
Total-hexadioxins			6.599e5		1.005			706		1.11e7							189.255
Total-heptadioxins			2.576e5		1.088			816		4.37e6							100.702
Total-Dioxins			1.743e6		1.130			942		2.65e7							576.633
Total-TEQ			3.788e6					942		5.91e7							1283.418
FUNCTION1 PFK			8.159e4					342903		1.14e6							
FUNCTION2 PFK			3.495e5					203889		9.85e6							0.000
FUNCTION3 PFK			0.000e0					282294		0.00e0							
FUNCTION4 PFK			2.479e7					196557		6.98e6							
FUNCTION5 PFK			5.267e4					120149		1.99e6							
FUNCTION1 HXCD...			6.392e2					622		9.03e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			3.906e2					612		8.69e3							0.000
FUNCTION3 OCDPE			0.000e0					457		0.00e0							
FUNCTION4 NCDPE			8.503e1					621		1.93e3							0.000
FUNCTION5 DCDPE			7.719e1					682		1.34e3							0.000

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3Z4, Name: 23031502, Date: 15-Mar-2023, Time: 11:02:56, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.07	2.668e4	3.495e4	0.678	0.76	0.77	588.1	YES	NO	db	db	10.465
2	Total-tetrafurans	26.95	9.768e2	1.368e3	0.727	0.71	0.77	21.2	YES	NO	bd	bd	0.371
3	2378-TCDF	25.58	2.816e4	3.691e4	0.702	0.76	0.77	647.3	YES	NO	bb	bb	10.678
4	Total-tetrafurans	24.69	2.943e2	4.181e2	0.727	0.70	0.77	6.6	YES	NO	bb	bb	0.113
5	Total-tetrafurans	24.35	2.742e2	3.185e2	0.727	0.86	0.77	8.4	YES	NO	bb	bb	0.094
6	1368-TCDF	22.07	2.997e4	3.989e4	0.802	0.75	0.77	694.2	YES	NO	bb	bb	10.034

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	26.93	2.592e5	1.716e5	1.246	1.51	1.55	6920.4	YES	NO	bb	bb	55.741

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.11	1.343e5	8.957e4	0.496	1.50	1.55	2181.6	YES	NO	bb	bb	72.733
2	23478-PeCDF	31.08	1.351e5	8.831e4	0.786	1.53	1.55	2215.9	YES	NO	bb	bb	49.908
3	12378-PeCDF	29.75	1.315e5	8.767e4	0.679	1.50	1.55	2175.8	YES	NO	bb	bb	52.041
4	Total-pentafurans	28.60	2.001e4	1.329e4	0.654	1.51	1.55	326.6	YES	NO	bb	bb	8.563

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	234678-HxCDF	35.73	1.962e5	1.559e5	1.140	1.26	1.24	3633.5	YES	NO	bb	bb	50.734
2	123678-HxCDF	34.86	1.927e5	1.541e5	1.091	1.25	1.24	3407.8	YES	NO	db	dd	49.005
3	123478-HxCDF	34.72	1.914e5	1.534e5	1.166	1.25	1.24	3473.9	YES	NO	bd	bd	48.342
4	123468-HXCDF	33.04	1.758e5	1.388e5	1.169	1.27	1.24	3020.5	YES	NO	bb	bb	43.981
5	123789-HxCDF	36.75	1.661e5	1.346e5	1.137	1.23	1.24	2967.7	YES	NO	bd	bd	47.960

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HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptafurans	40.99	7.195e1	7.350e1	0.978	0.98	1.05	0.0	NO	NO	bb	bb	0.033
2	1234789-HpCDF	40.83	1.034e5	1.028e5	0.953	1.01	1.05	1588.5	YES	NO	bb	bb	51.973
3	Total-heptafurans	39.26	1.085e3	1.165e3	0.978	0.93	1.05	17.9	YES	NO	bb	bb	0.509
4	1234678-HpCDF	38.62	1.185e5	1.178e5	1.003	1.01	1.05	2027.8	YES	NO	bb	bb	48.257

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.07	2.668e4	3.495e4	0.678	0.76	0.77	588.1	YES	NO	db	db	10.465
2	Total-tetrafurans	26.95	9.768e2	1.368e3	0.727	0.71	0.77	21.2	YES	NO	bd	bd	0.371
3	2378-TCDF	25.58	2.816e4	3.691e4	0.702	0.76	0.77	647.3	YES	NO	bb	bb	10.678
4	Total-tetrafurans	24.69	2.943e2	4.181e2	0.727	0.70	0.77	6.6	YES	NO	bb	bb	0.113
5	Total-tetrafurans	24.35	2.742e2	3.185e2	0.727	0.86	0.77	8.4	YES	NO	bb	bb	0.094
6	1368-TCDF	22.07	2.997e4	3.989e4	0.802	0.75	0.77	694.2	YES	NO	bb	bb	10.034
7	12389-PECDF	32.11	1.343e5	8.957e4	0.496	1.50	1.55	2181.6	YES	NO	bb	bb	72.733
8	23478-PeCDF	31.08	1.351e5	8.831e4	0.786	1.53	1.55	2215.9	YES	NO	bb	bb	49.908
9	12378-PeCDF	29.75	1.315e5	8.767e4	0.679	1.50	1.55	2175.8	YES	NO	bb	bb	52.041
10	Total-pentafurans	28.60	2.001e4	1.329e4	0.654	1.51	1.55	326.6	YES	NO	bb	bb	8.563
11	234678-HxCDF	35.73	1.962e5	1.559e5	1.140	1.26	1.24	3633.5	YES	NO	bb	bb	50.734
12	123678-HxCDF	34.86	1.927e5	1.541e5	1.091	1.25	1.24	3407.8	YES	NO	db	dd	49.005
13	123478-HxCDF	34.72	1.914e5	1.534e5	1.166	1.25	1.24	3473.9	YES	NO	bd	bd	48.342
14	123468-HXCDF	33.04	1.758e5	1.388e5	1.169	1.27	1.24	3020.5	YES	NO	bb	bb	43.981
15	123789-HxCDF	36.75	1.661e5	1.346e5	1.137	1.23	1.24	2967.7	YES	NO	bd	bd	47.960
16	Total-heptafurans	40.99	7.195e1	7.350e1	0.978	0.98	1.05	0.0	NO	NO	bb	bb	0.033
17	1234789-HpCDF	40.83	1.034e5	1.028e5	0.953	1.01	1.05	1588.5	YES	NO	bb	bb	51.973
18	Total-heptafurans	39.26	1.085e3	1.165e3	0.978	0.93	1.05	17.9	YES	NO	bb	bb	0.509
19	1234678-HpCDF	38.62	1.185e5	1.178e5	1.003	1.01	1.05	2027.8	YES	NO	bb	bb	48.257
20	OCDF	45.03	1.325e5	1.481e5	0.778	0.89	0.89	2564.8	YES	NO	bb	bb	95.251
21	13468-PECDF	26.93	2.592e5	1.716e5	1.246	1.51	1.55	6920.4	YES	NO	bb	bb	55.741

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TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.23	3.319e4	4.276e4	1.149	0.78	0.77	540.5	YES	NO	bb	bd	9.137
2	Total-tetradioxins	25.90	4.919e4	6.319e4	1.024	0.78	0.77	542.7	YES	NO	bb	bb	15.163
3	Total-tetradioxins	25.41	1.541e4	1.912e4	1.024	0.81	0.77	271.6	YES	NO	bb	bb	4.659
4	Total-tetradioxins	24.83	4.333e2	5.728e2	1.024	0.76	0.77	7.3	YES	NO	bb	bb	0.136
5	1368-TCDD	23.34	3.001e4	3.792e4	1.015	0.79	0.77	513.1	YES	NO	bb	bb	9.246
6	1289-TCDD	26.82	3.035e4	3.755e4	0.909	0.81	0.77	497.6	YES	NO	bb	bb	10.326

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12479-PECDD	28.60	2.111e5	1.365e5	2.301	1.55	1.55	2496.6	YES	NO	bb	bb	35.046
2	12389-PECDD	31.73	1.562e5	1.002e5	1.184	1.56	1.55	2961.6	YES	NO	bb	bb	50.274
3	12378-PeCDD	31.33	1.327e5	8.802e4	1.022	1.51	1.55	2499.8	YES	NO	bb	bb	50.121

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123478-HxCDD	35.84	1.657e5	1.356e5	0.996	1.22	1.24	4009.0	YES	NO	bd	bd	48.053
2	124679-HXCDD	33.82	1.596e5	1.323e5	1.115	1.21	1.24	3692.7	YES	NO	bb	bb	41.554
3	123789-HxCDD	36.35	1.666e5	1.367e5	0.907	1.22	1.24	3965.6	YES	NO	bb	bb	52.359
4	123678-HxCDD	35.95	1.680e5	1.385e5	1.001	1.21	1.24	4015.9	YES	NO	db	db	47.289

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.10	1.225e5	1.185e5	1.039	1.03	1.05	2509.8	YES	NO	bb	bb	50.217
2	1234679-HPCDD	39.06	1.352e5	1.299e5	1.137	1.04	1.05	2850.1	YES	NO	bb	bb	50.485

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.23	3.319e4	4.276e4	1.149	0.78	0.77	540.5	YES	NO	bb	bd	9.137
2	Total-tetradioxins	25.90	4.919e4	6.319e4	1.024	0.78	0.77	542.7	YES	NO	bb	bb	15.163
3	Total-tetradioxins	25.41	1.541e4	1.912e4	1.024	0.81	0.77	271.6	YES	NO	bb	bb	4.659
4	Total-tetradioxins	24.83	4.333e2	5.728e2	1.024	0.76	0.77	7.3	YES	NO	bb	bb	0.136
5	1368-TCDD	23.34	3.001e4	3.792e4	1.015	0.79	0.77	513.1	YES	NO	bb	bb	9.246
6	12479-PECDD	28.60	2.111e5	1.365e5	2.301	1.55	1.55	2496.6	YES	NO	bb	bb	35.046
7	1289-TCDD	26.82	3.035e4	3.755e4	0.909	0.81	0.77	497.6	YES	NO	bb	bb	10.326
8	123478-HxCDD	35.84	1.657e5	1.356e5	0.996	1.22	1.24	4009.0	YES	NO	bd	bd	48.053
9	124679-HXCDD	33.82	1.596e5	1.323e5	1.115	1.21	1.24	3692.7	YES	NO	bb	bb	41.554
10	12389-PECDD	31.73	1.562e5	1.002e5	1.184	1.56	1.55	2961.6	YES	NO	bb	bb	50.274
11	12378-PeCDD	31.33	1.327e5	8.802e4	1.022	1.51	1.55	2499.8	YES	NO	bb	bb	50.121
12	123789-HxCDD	36.35	1.666e5	1.367e5	0.907	1.22	1.24	3965.6	YES	NO	bb	bb	52.359
13	123678-HxCDD	35.95	1.680e5	1.385e5	1.001	1.21	1.24	4015.9	YES	NO	db	db	47.289
14	OCDD	44.80	1.673e5	1.901e5	0.920	0.88	0.89	2157.1	YES	NO	bb	bb	102.569
15	1234678-HpCDD	40.10	1.225e5	1.185e5	1.039	1.03	1.05	2509.8	YES	NO	bb	bb	50.217
16	1234679-HPCDD	39.06	1.352e5	1.299e5	1.137	1.04	1.05	2850.1	YES	NO	bb	bb	50.485

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.07	2.668e4	3.495e4	0.678	0.76	0.77	588.1	YES	NO	db	db	10.465
2	Total-tetrafurans	26.95	9.768e2	1.368e3	0.727	0.71	0.77	21.2	YES	NO	bd	bd	0.371
3	2378-TCDF	25.58	2.816e4	3.691e4	0.702	0.76	0.77	647.3	YES	NO	bb	bb	10.678
4	Total-tetrafurans	24.69	2.943e2	4.181e2	0.727	0.70	0.77	6.6	YES	NO	bb	bb	0.113
5	Total-tetrafurans	24.35	2.742e2	3.185e2	0.727	0.86	0.77	8.4	YES	NO	bb	bb	0.094
6	1368-TCDF	22.07	2.997e4	3.989e4	0.802	0.75	0.77	694.2	YES	NO	bb	bb	10.034
7	12389-PECDF	32.11	1.343e5	8.957e4	0.496	1.50	1.55	2181.6	YES	NO	bb	bb	72.733
8	23478-PeCDF	31.08	1.351e5	8.831e4	0.786	1.53	1.55	2215.9	YES	NO	bb	bb	49.908
9	12378-PeCDF	29.75	1.315e5	8.767e4	0.679	1.50	1.55	2175.8	YES	NO	bb	bb	52.041
10	Total-pentafurans	28.60	2.001e4	1.329e4	0.654	1.51	1.55	326.6	YES	NO	bb	bb	8.563
11	234678-HxCDF	35.73	1.962e5	1.559e5	1.140	1.26	1.24	3633.5	YES	NO	bb	bb	50.734
12	123678-HxCDF	34.86	1.927e5	1.541e5	1.091	1.25	1.24	3407.8	YES	NO	db	dd	49.005
13	123478-HxCDF	34.72	1.914e5	1.534e5	1.166	1.25	1.24	3473.9	YES	NO	bd	bd	48.342
14	123468-HXCDF	33.04	1.758e5	1.388e5	1.169	1.27	1.24	3020.5	YES	NO	bb	bb	43.981
15	123789-HxCDF	36.75	1.661e5	1.346e5	1.137	1.23	1.24	2967.7	YES	NO	bd	bd	47.960
16	Total-heptafurans	40.99	7.195e1	7.350e1	0.978	0.98	1.05	0.0	NO	NO	bb	bb	0.033
17	1234789-HpCDF	40.83	1.034e5	1.028e5	0.953	1.01	1.05	1588.5	YES	NO	bb	bb	51.973
18	Total-heptafurans	39.26	1.085e3	1.165e3	0.978	0.93	1.05	17.9	YES	NO	bb	bb	0.509
19	1234678-HpCDF	38.62	1.185e5	1.178e5	1.003	1.01	1.05	2027.8	YES	NO	bb	bb	48.257
20	OCDF	45.03	1.325e5	1.481e5	0.778	0.89	0.89	2564.8	YES	NO	bb	bb	95.251
21	13468-PECDF	26.93	2.592e5	1.716e5	1.246	1.51	1.55	6920.4	YES	NO	bb	bb	55.741
22	2378-TCDD	26.23	3.319e4	4.276e4	1.149	0.78	0.77	540.5	YES	NO	bb	bd	9.137
23	Total-tetradioxins	25.90	4.919e4	6.319e4	1.024	0.78	0.77	542.7	YES	NO	bb	bb	15.163
24	Total-tetradioxins	25.41	1.541e4	1.912e4	1.024	0.81	0.77	271.6	YES	NO	bb	bb	4.659
25	Total-tetradioxins	24.83	4.333e2	5.728e2	1.024	0.76	0.77	7.3	YES	NO	bb	bb	0.136
26	1368-TCDD	23.34	3.001e4	3.792e4	1.015	0.79	0.77	513.1	YES	NO	bb	bb	9.246
27	12479-PECDD	28.60	2.111e5	1.365e5	2.301	1.55	1.55	2496.6	YES	NO	bb	bb	35.046
28	1289-TCDD	26.82	3.035e4	3.755e4	0.909	0.81	0.77	497.6	YES	NO	bb	bb	10.326
29	123478-HxCDD	35.84	1.657e5	1.356e5	0.996	1.22	1.24	4009.0	YES	NO	bd	bd	48.053
30	124679-HXCDD	33.82	1.596e5	1.323e5	1.115	1.21	1.24	3692.7	YES	NO	bb	bb	41.554
31	12389-PECDD	31.73	1.562e5	1.002e5	1.184	1.56	1.55	2961.6	YES	NO	bb	bb	50.274
32	12378-PeCDD	31.33	1.327e5	8.802e4	1.022	1.51	1.55	2499.8	YES	NO	bb	bb	50.121
33	123789-HxCDD	36.35	1.666e5	1.367e5	0.907	1.22	1.24	3965.6	YES	NO	bb	bb	52.359
34	123678-HxCDD	35.95	1.680e5	1.385e5	1.001	1.21	1.24	4015.9	YES	NO	db	db	47.289
35	OCDD	44.80	1.673e5	1.901e5	0.920	0.88	0.89	2157.1	YES	NO	bb	bb	102.569
36	1234678-HpCDD	40.10	1.225e5	1.185e5	1.039	1.03	1.05	2509.8	YES	NO	bb	bb	50.217
37	1234679-HPCDD	39.06	1.352e5	1.299e5	1.137	1.04	1.05	2850.1	YES	NO	bb	bb	50.485

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.92	8.159e4					3.3	YES		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.25	4.722e3					0.9	NO		db		0.000
2	FUNCTION2 PFK	30.20	1.048e4					1.8	NO		bd		0.000
3	FUNCTION2 PFK	30.16	5.443e3					1.5	NO		bb		0.000
4	FUNCTION2 PFK	29.99	4.735e3					1.1	NO		bb		0.000
5	FUNCTION2 PFK	29.85	8.188e3					1.6	NO		bb		0.000
6	FUNCTION2 PFK	28.86	3.376e4					1.8	NO		bb		0.000
7	FUNCTION2 PFK	28.37	7.243e3					1.4	NO		bb		0.000
8	FUNCTION2 PFK	28.23	1.434e3					0.6	NO		bb		0.000
9	FUNCTION2 PFK	28.15	1.876e4					1.4	NO		bb		0.000
10	FUNCTION2 PFK	28.08	2.293e4					3.0	NO		bb		0.000
11	FUNCTION2 PFK	27.92	1.627e4					3.3	YES		db		0.000
12	FUNCTION2 PFK	27.89	4.523e4					5.3	YES		bd		0.000
13	FUNCTION2 PFK	32.33	1.903e4					2.3	NO		dd		0.000
14	FUNCTION2 PFK	32.26	2.502e4					2.3	NO		dd		0.000
15	FUNCTION2 PFK	32.16	2.870e4					2.2	NO		dd		0.000
16	FUNCTION2 PFK	32.12	1.464e4					2.2	NO		bd		0.000
17	FUNCTION2 PFK	31.88	3.558e3					0.9	NO		db		0.000
18	FUNCTION2 PFK	31.84	3.277e3					0.6	NO		bd		0.000
19	FUNCTION2 PFK	31.43	5.894e3					1.1	NO		bb		0.000
20	FUNCTION2 PFK	31.28	4.211e3					1.1	NO		bb		0.000
21	FUNCTION2 PFK	31.08	6.813e3					1.3	NO		bb		0.000
22	FUNCTION2 PFK	30.95	1.061e3					0.5	NO		bb		0.000
23	FUNCTION2 PFK	30.83	5.301e3					1.1	NO		bb		0.000
24	FUNCTION2 PFK	30.77	6.751e3					1.0	NO		bb		0.000
25	FUNCTION2 PFK	30.63	5.403e3					1.1	NO		bb		0.000
26	FUNCTION2 PFK	30.53	1.851e3					0.8	NO		bb		0.000
27	FUNCTION2 PFK	30.48	2.038e3					0.9	NO		bb		0.000
28	FUNCTION2 PFK	30.43	6.557e3					1.2	NO		bb		0.000
29	FUNCTION2 PFK	32.54	1.021e4					1.7	NO		bb		0.000
30	FUNCTION2 PFK	32.40	1.997e4					2.2	NO		db		0.000

ID: CS3Z4, Name: 23031502, Date: 15-Mar-2023, Time: 11:02:56, Conditions: AUTOSPEC01, User: pk

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	39.28	2.479e7					35.5	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.27	3.769e3					1.3	NO		bb		
2	FUNCTION5 PFK	44.64	5.896e2					0.5	NO		bb		
3	FUNCTION5 PFK	44.58	4.275e3					1.5	NO		db		
4	FUNCTION5 PFK	44.54	4.461e3					1.5	NO		bd		
5	FUNCTION5 PFK	44.36	4.981e3					2.2	NO		bb		
6	FUNCTION5 PFK	44.30	1.159e3					0.7	NO		bb		
7	FUNCTION5 PFK	44.24	4.783e3					1.4	NO		bb		
8	FUNCTION5 PFK	44.12	5.458e3					1.6	NO		bb		
9	FUNCTION5 PFK	43.94	1.051e4					2.3	NO		bb		
10	FUNCTION5 PFK	43.33	4.153e3					1.4	NO		bb		
11	FUNCTION5 PFK	45.76	6.520e2					0.6	NO		bb		
12	FUNCTION5 PFK	45.58	7.881e3					1.6	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	26.72	1.042e2					1.8	NO		bb		0.000
2	FUNCTION1 HXCD...	26.47	7.762e1					4.4	YES		bb		0.000
3	FUNCTION1 HXCD...	24.91	1.528e2					2.3	NO		bb		0.000
4	FUNCTION1 HXCD...	23.78	1.417e2					2.5	NO		db		0.000
5	FUNCTION1 HXCD...	23.61	7.094e1					1.6	NO		bd		0.000
6	FUNCTION1 HXCD...	22.88	9.197e1					1.9	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ID: CS3Z4, Name: 23031502, Date: 15-Mar-2023, Time: 11:02:56, Conditions: AUTOSPEC01, User: pk

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	30.92	2.534e2					9.2	YES		bb		0.000
2	FUNCTION2 HPCD...	30.62	1.372e2					5.0	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.84	8.503e1					3.1	YES		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	44.78	7.719e1					2.0	NO		bb		0.000

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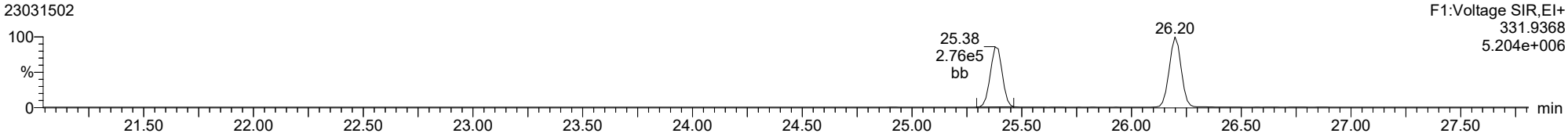

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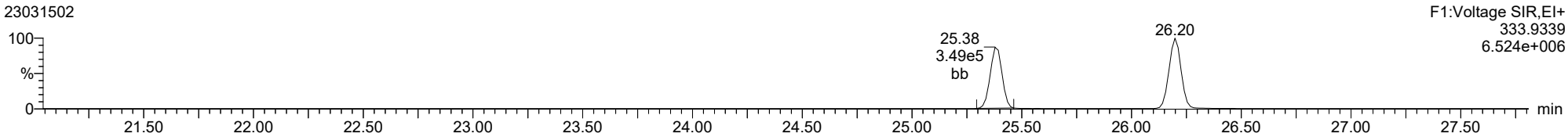

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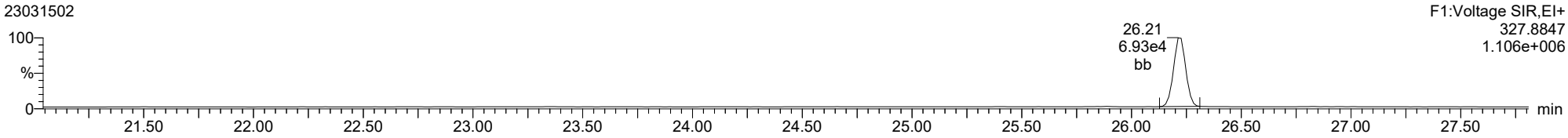

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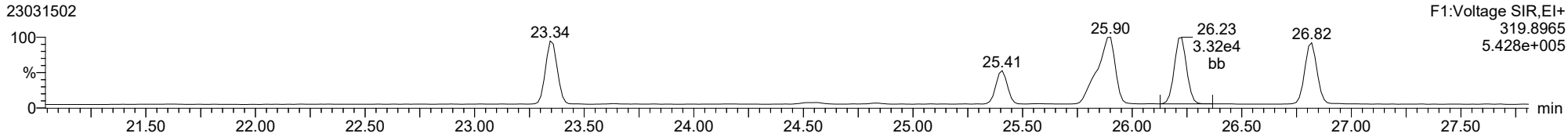

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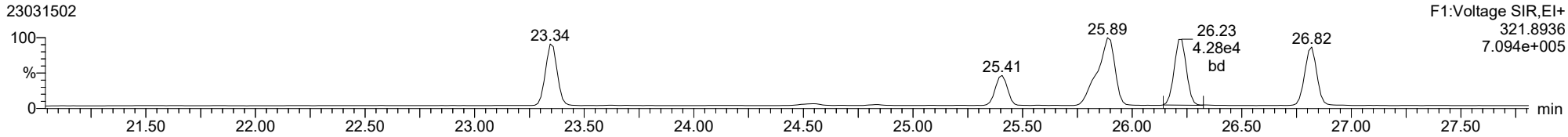

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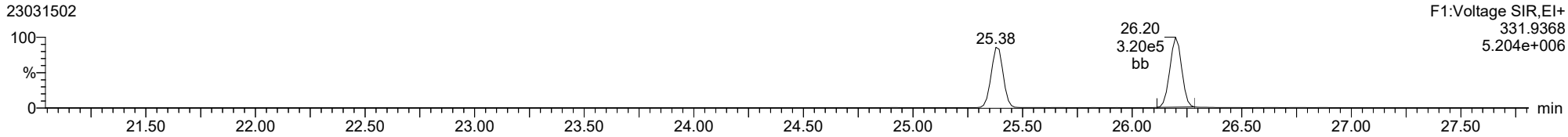

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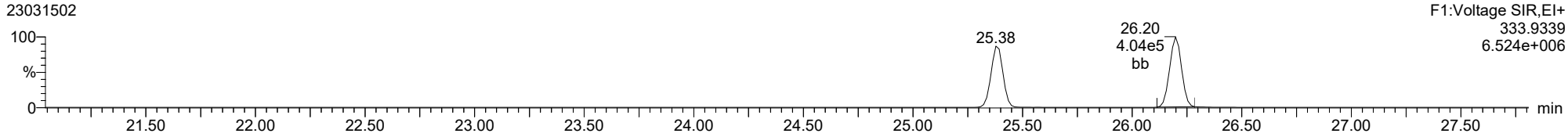

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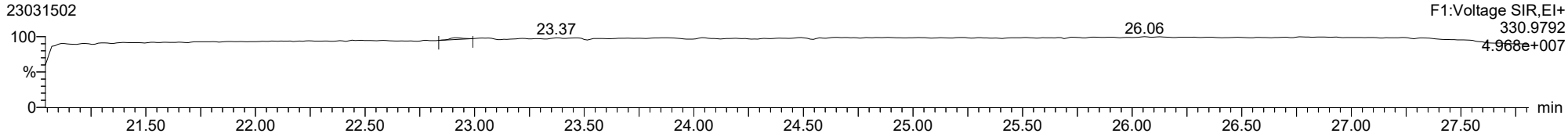

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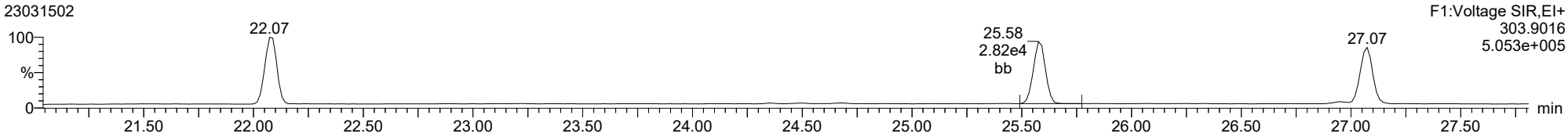

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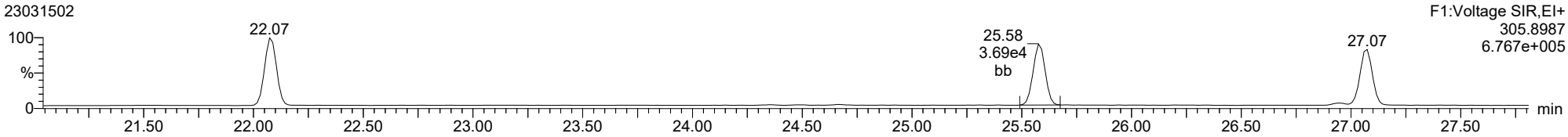

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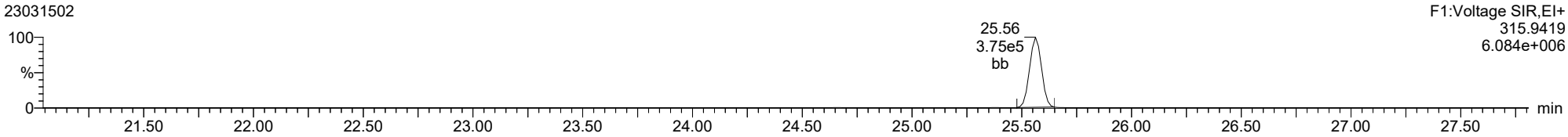

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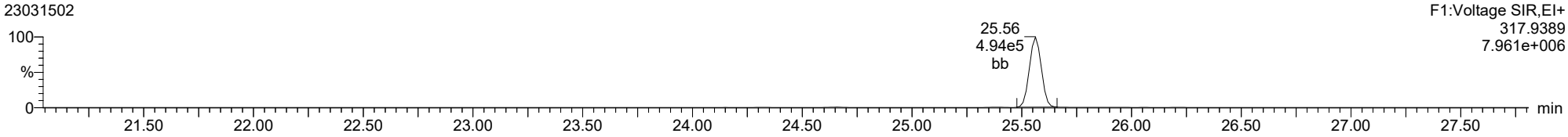
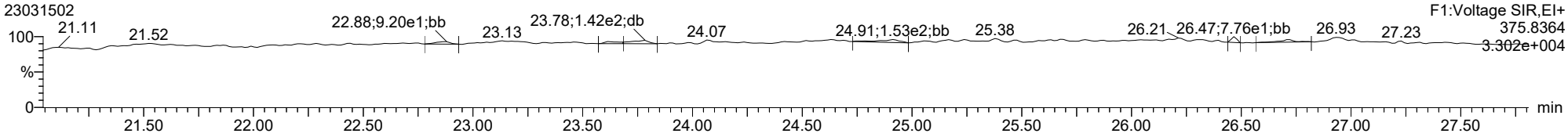


FUNCTION1 HXCDPE



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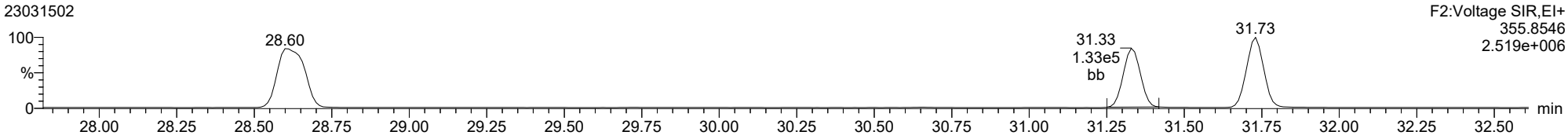
12378-PeCDD



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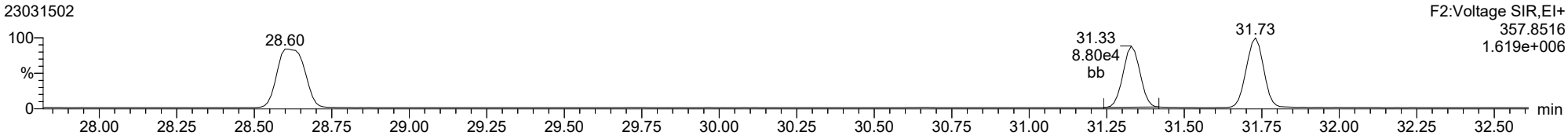

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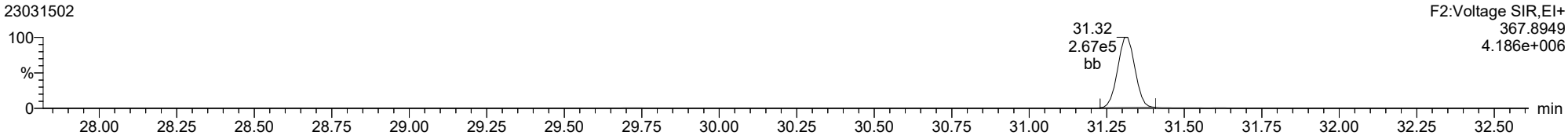

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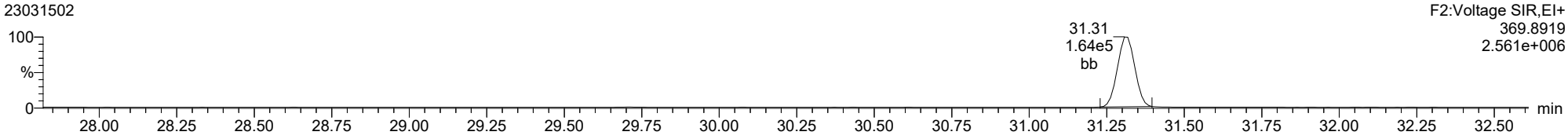

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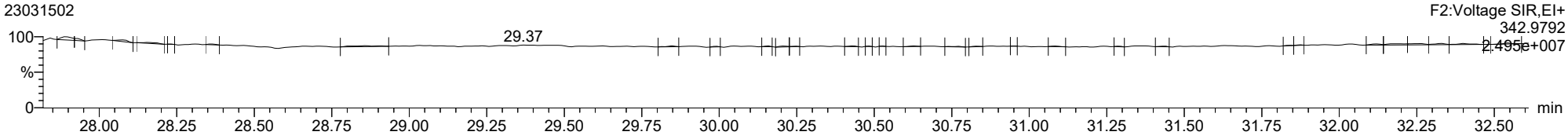

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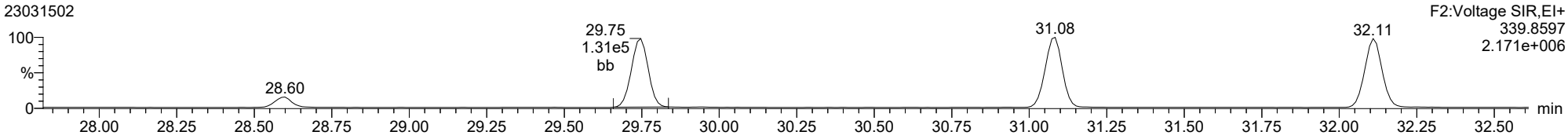

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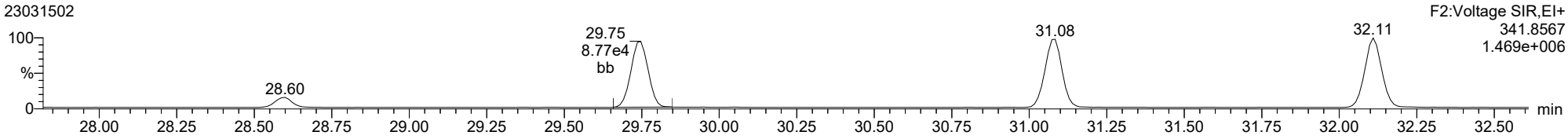

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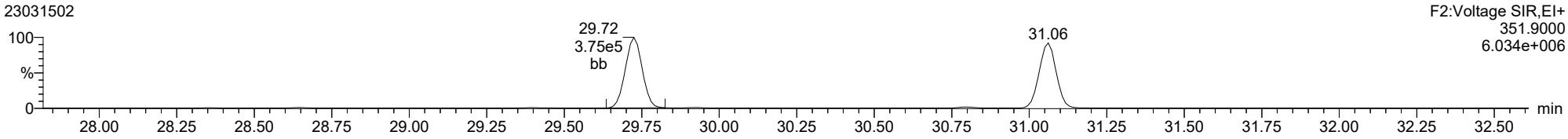

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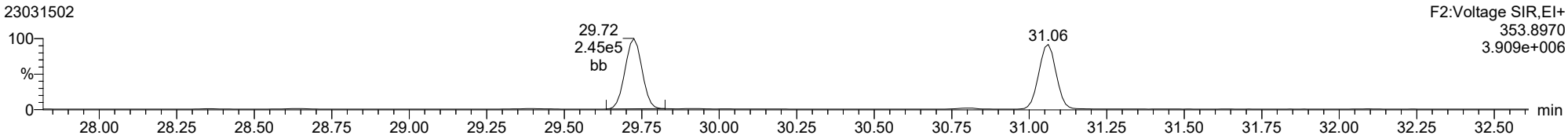
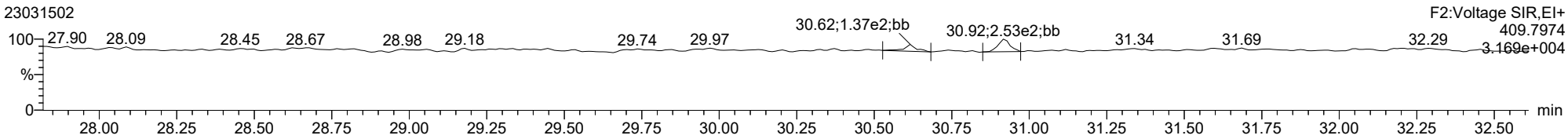


FUNCTION2 HPCDPE



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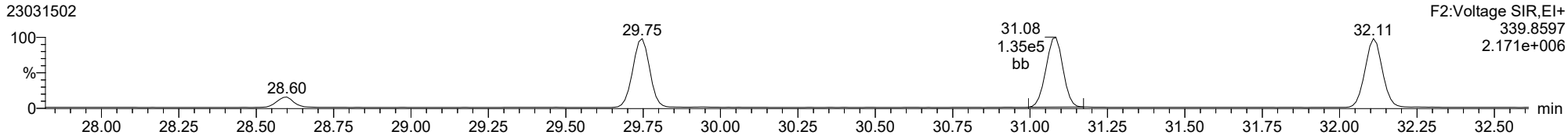

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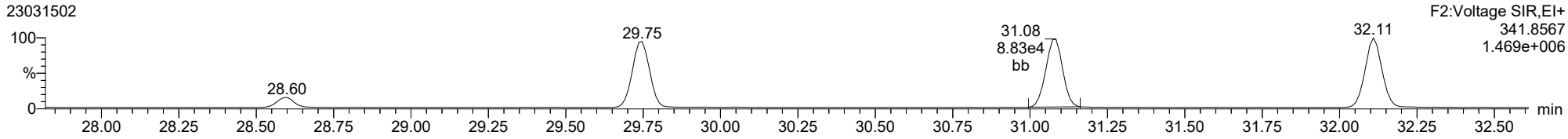

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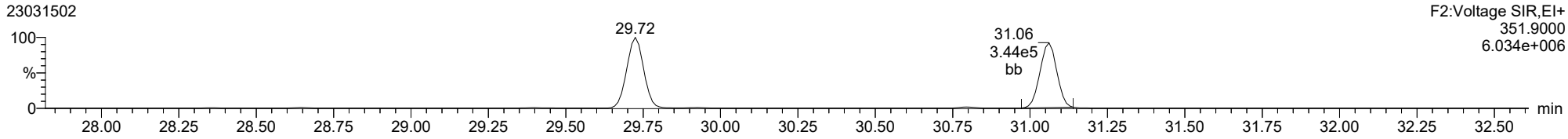

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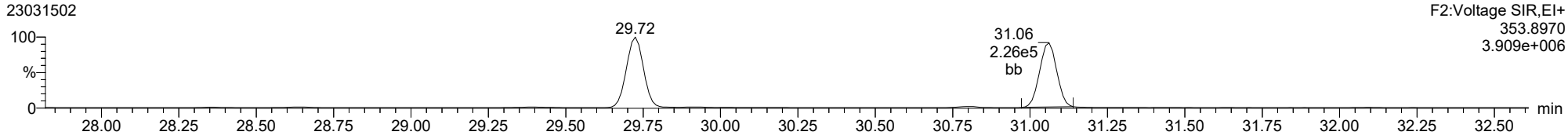

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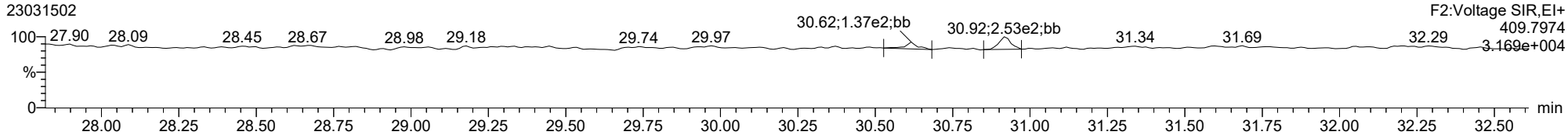

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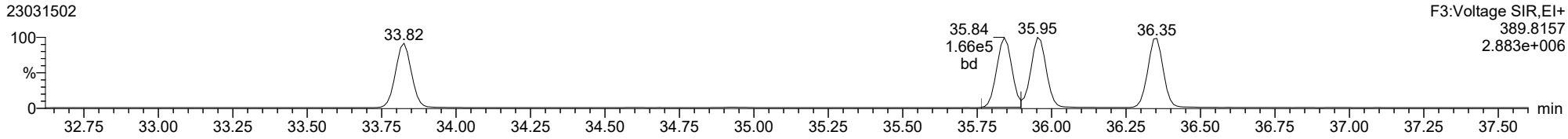

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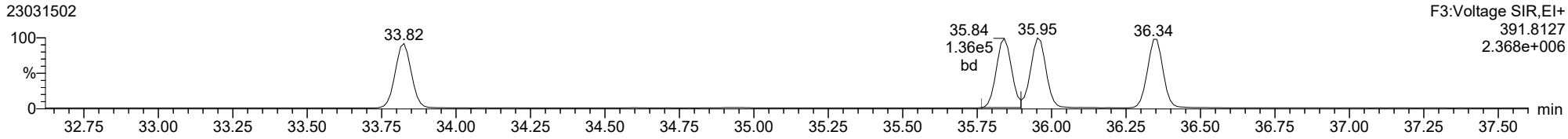

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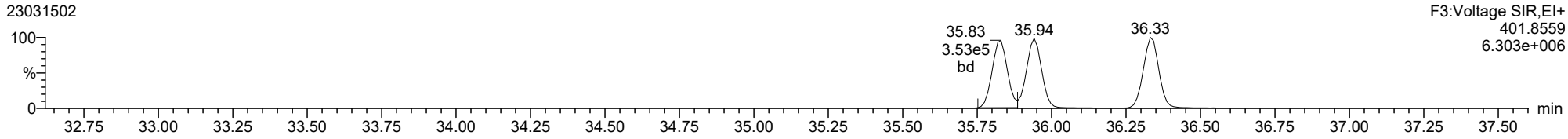

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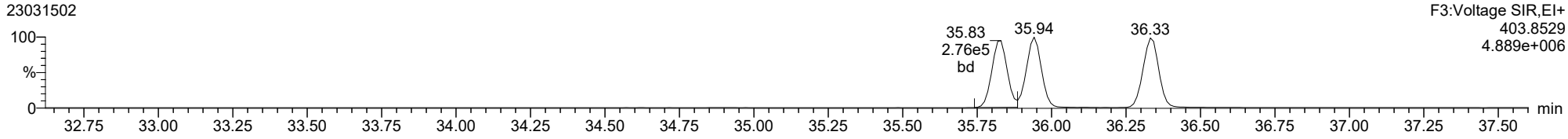

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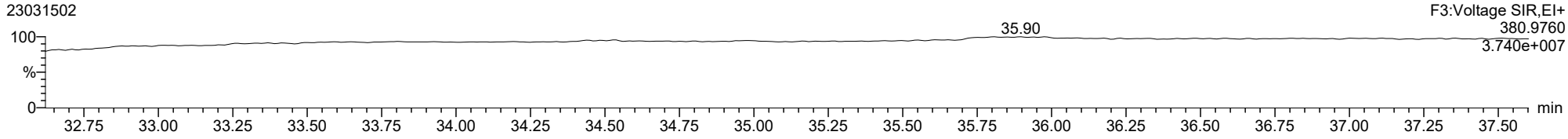

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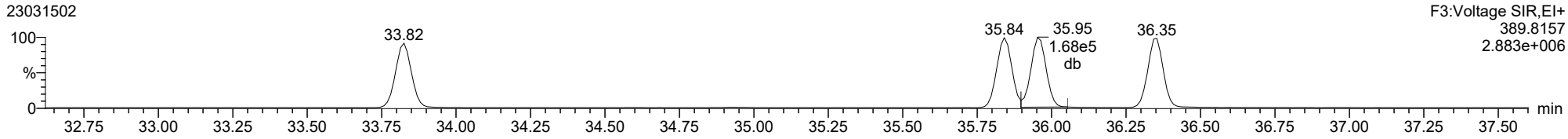

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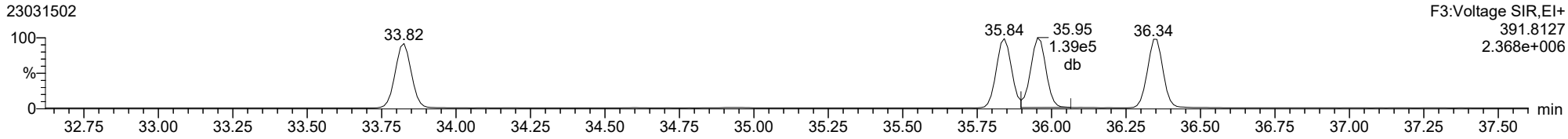

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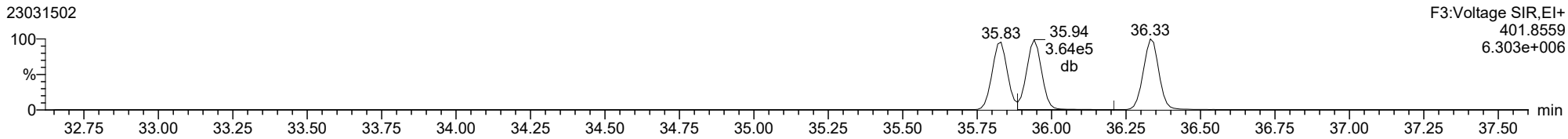

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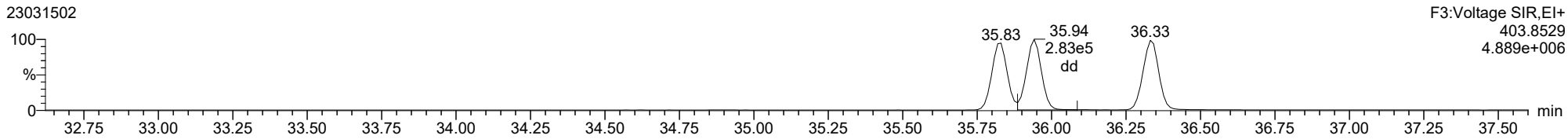

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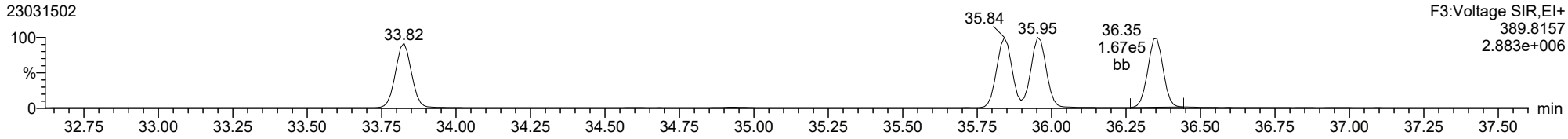

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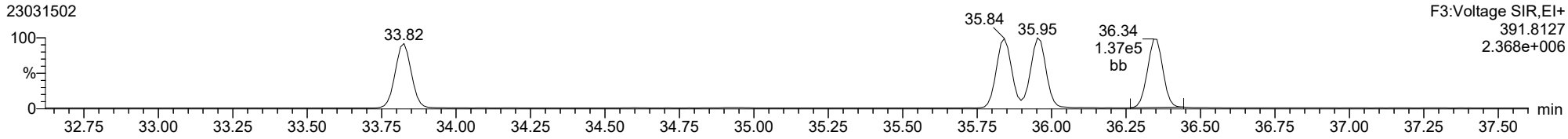

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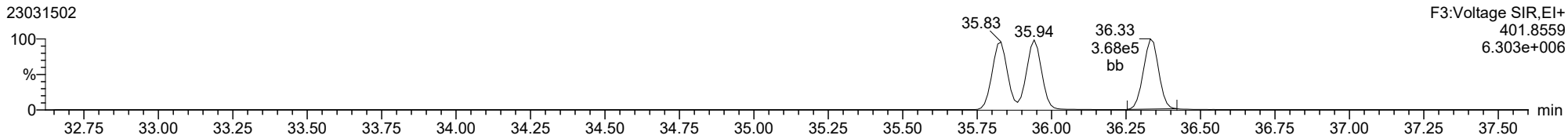

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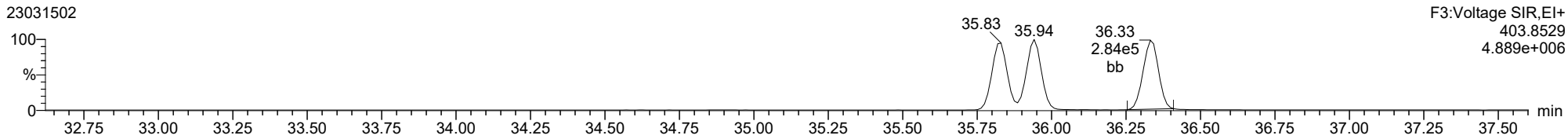

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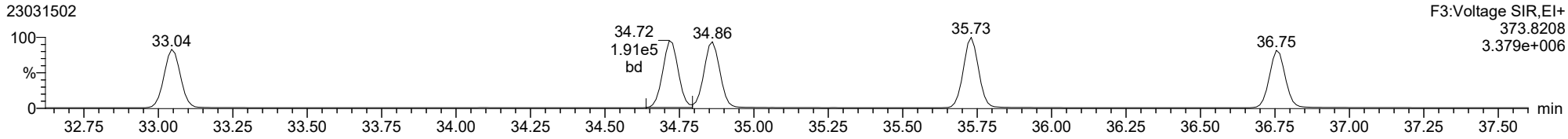

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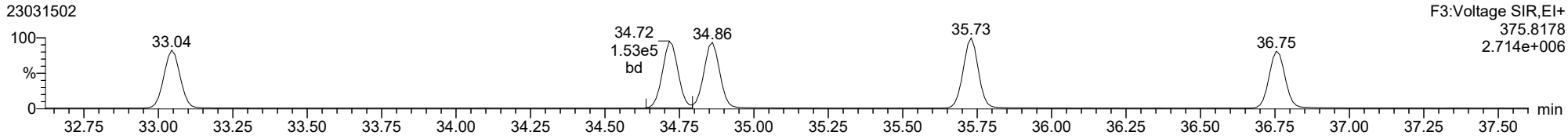

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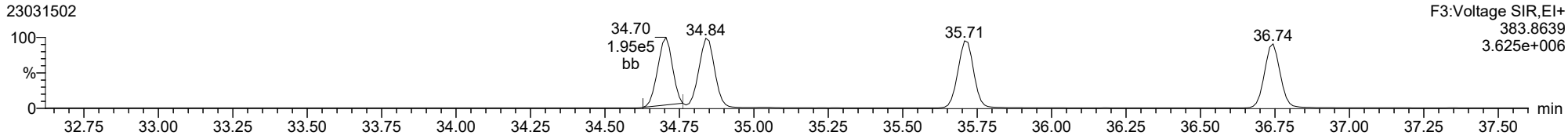

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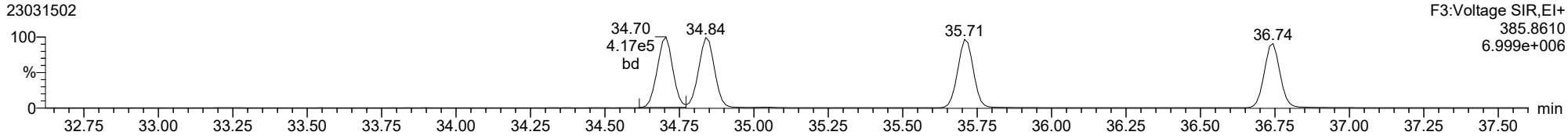

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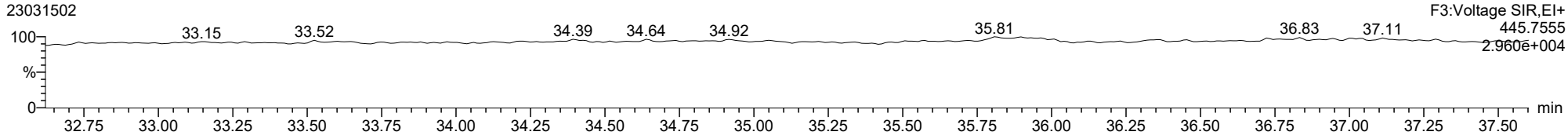

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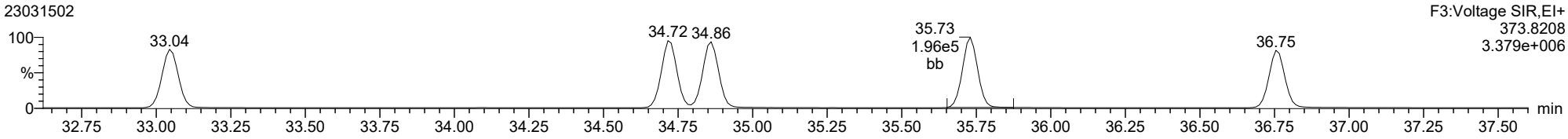

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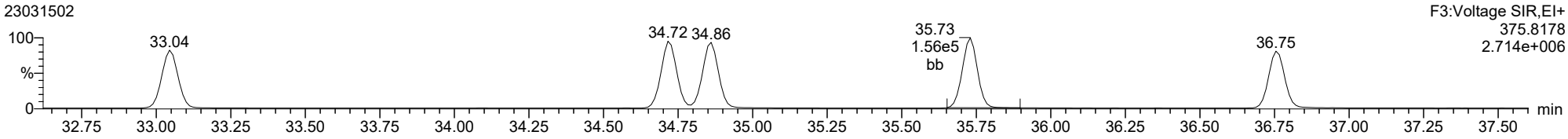

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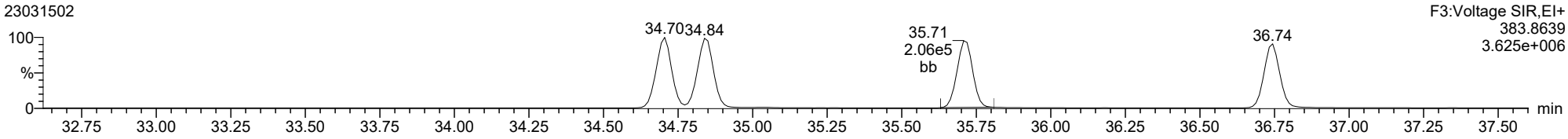

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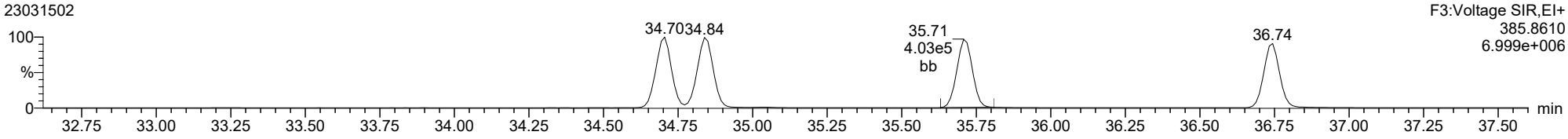

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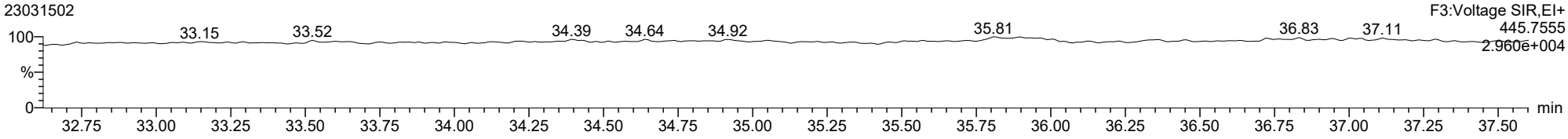

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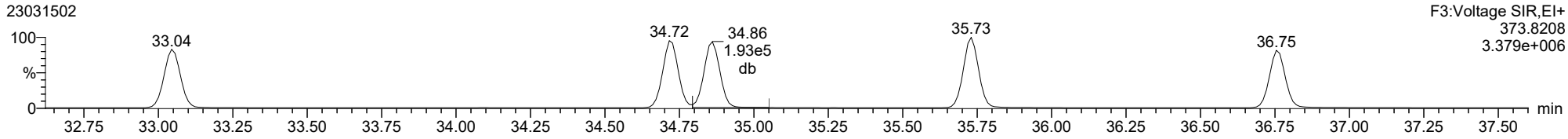

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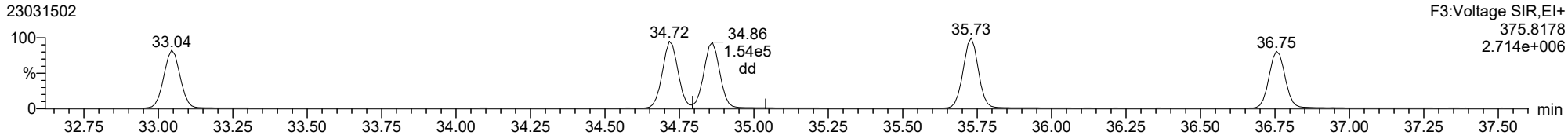

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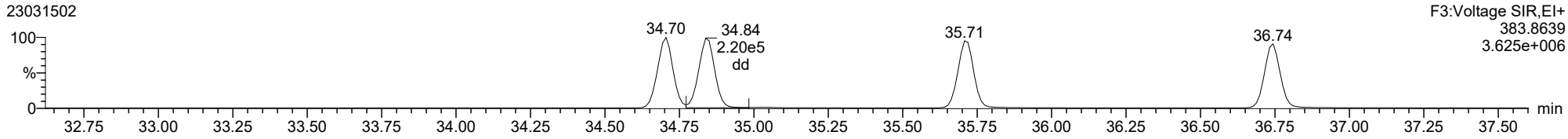

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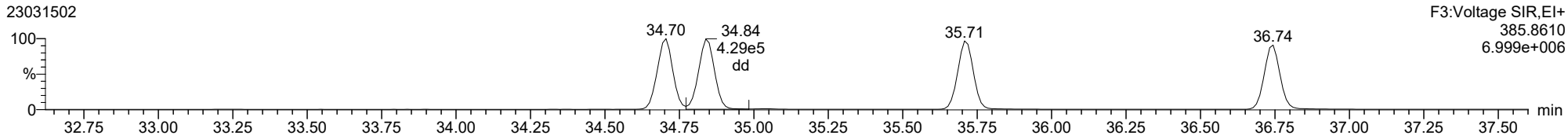

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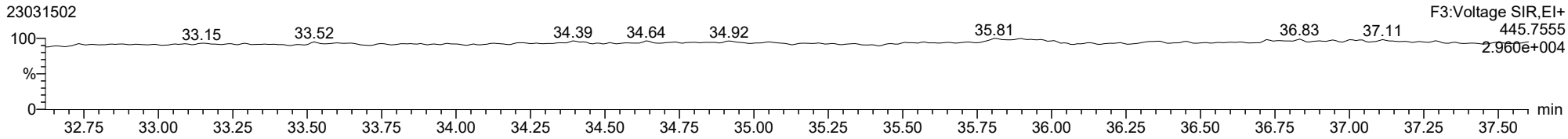

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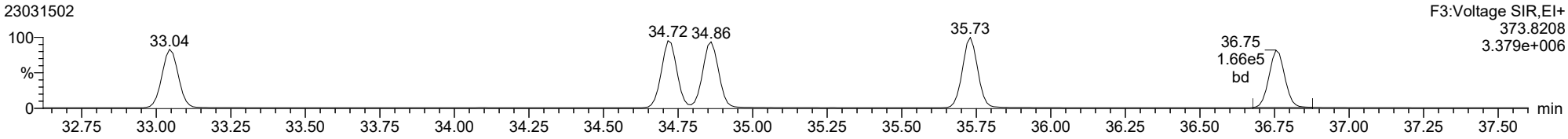

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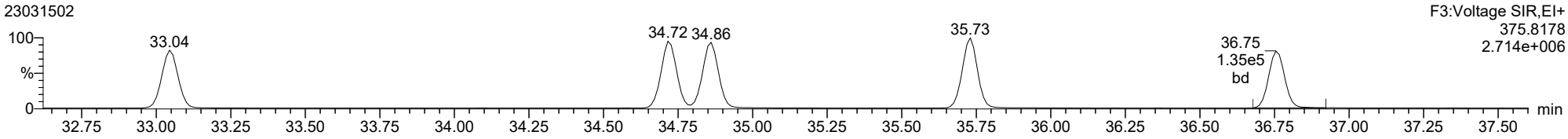

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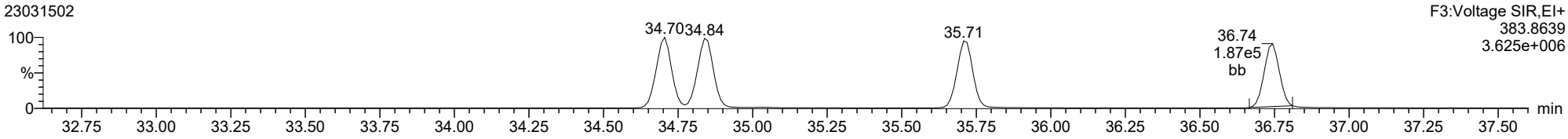

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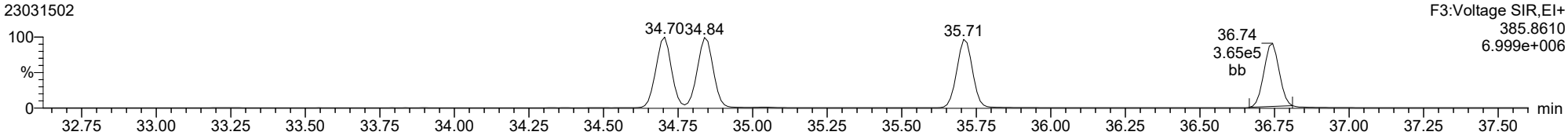

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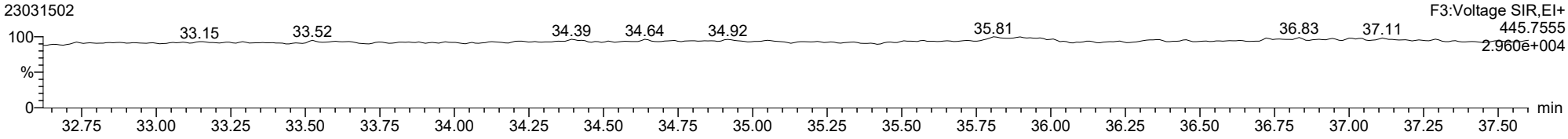

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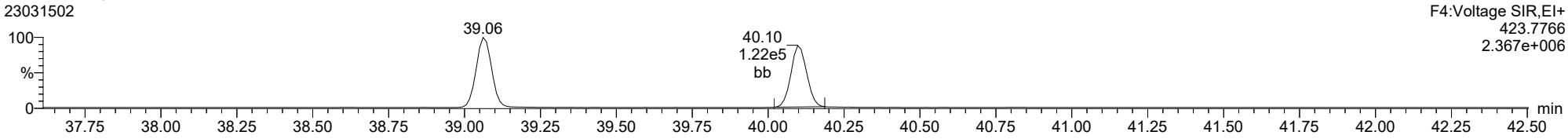

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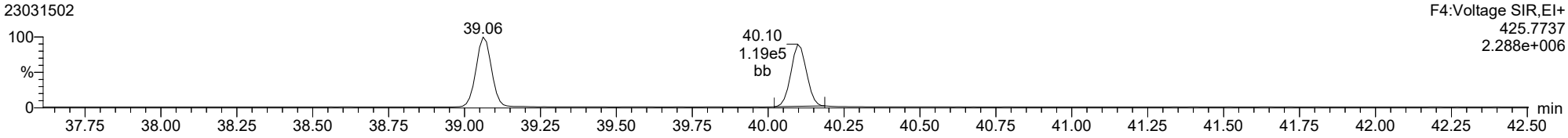

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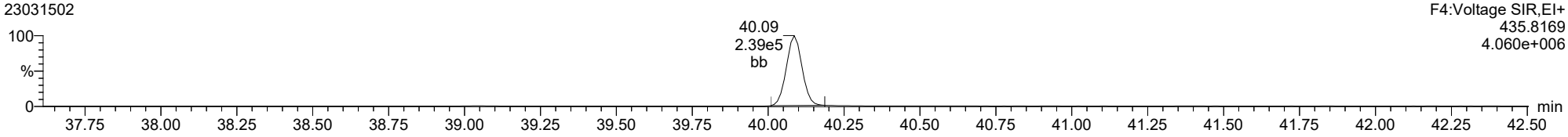

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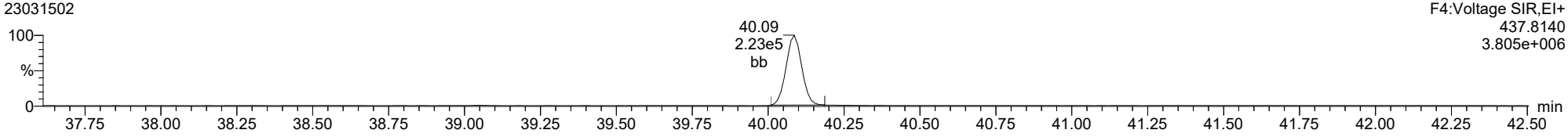

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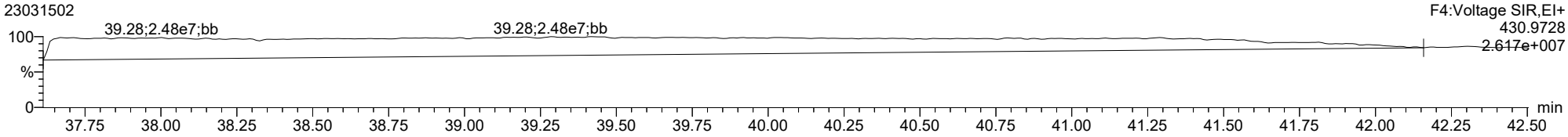

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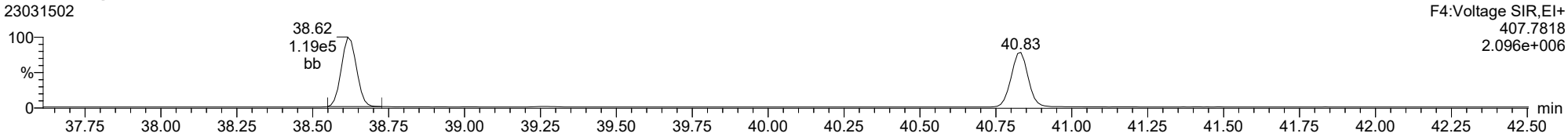

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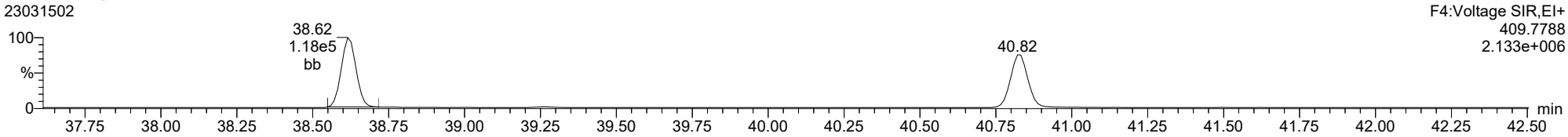

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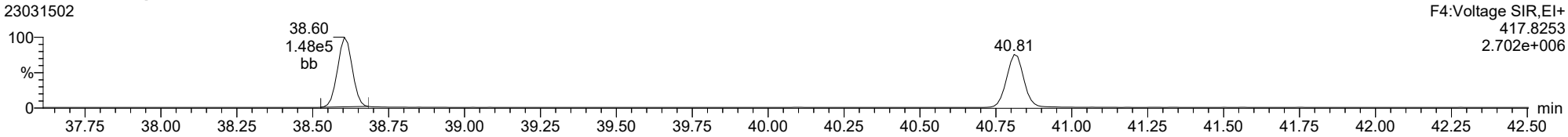

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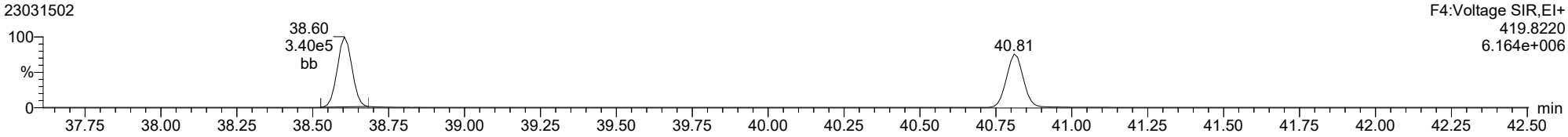

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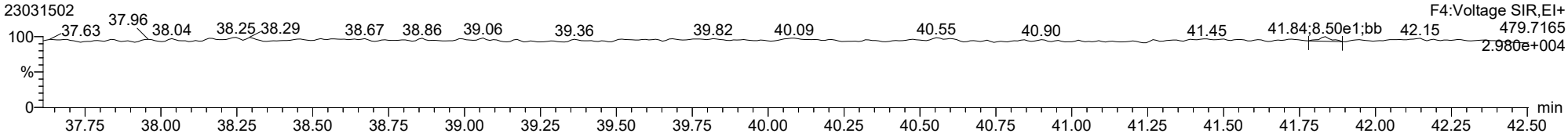

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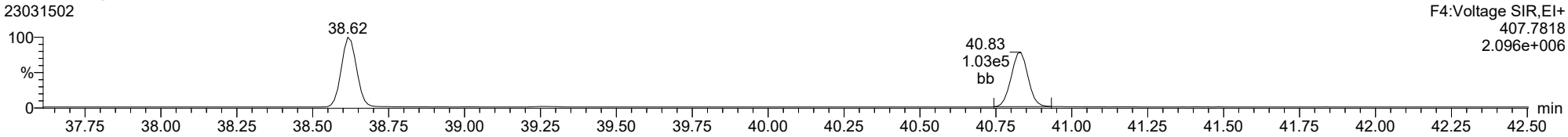

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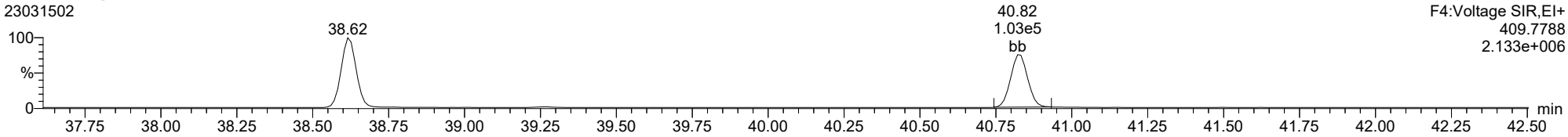

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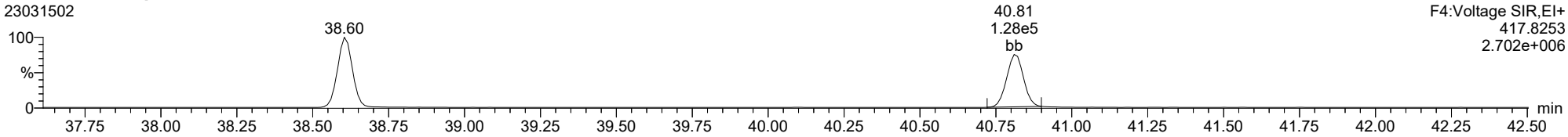

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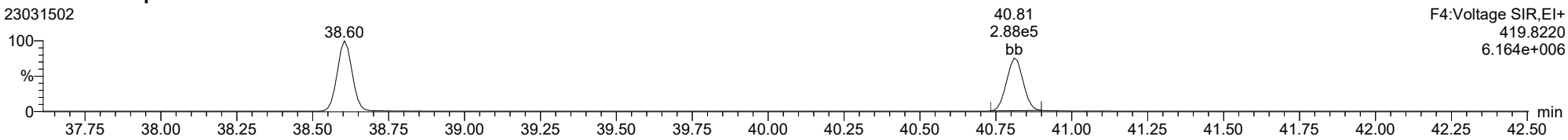

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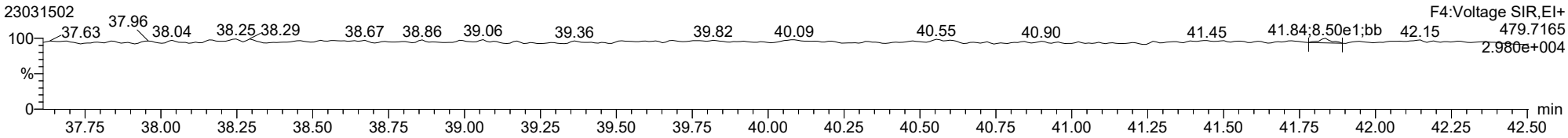

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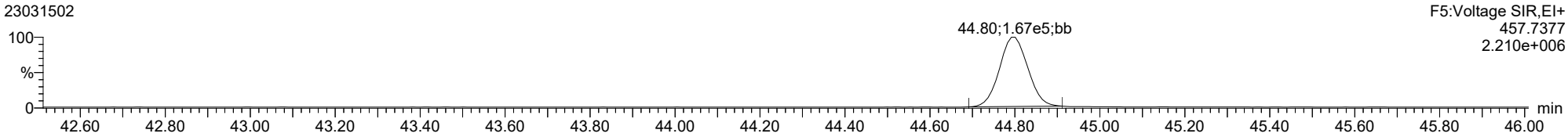

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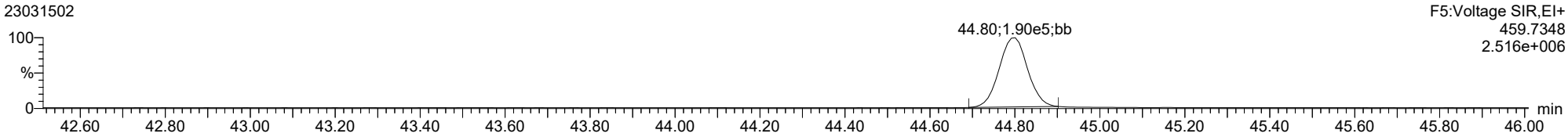

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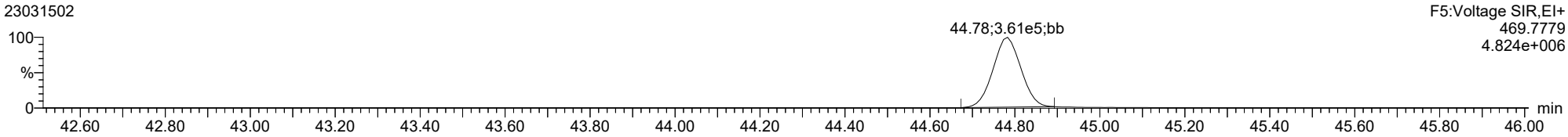

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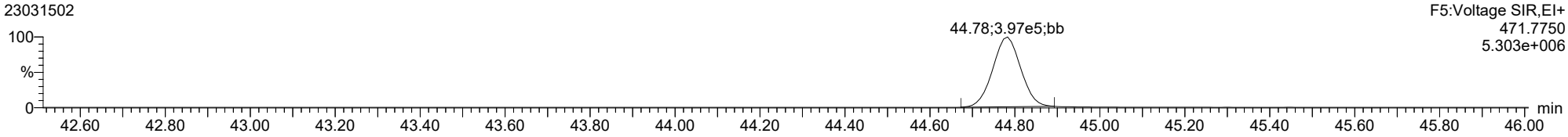
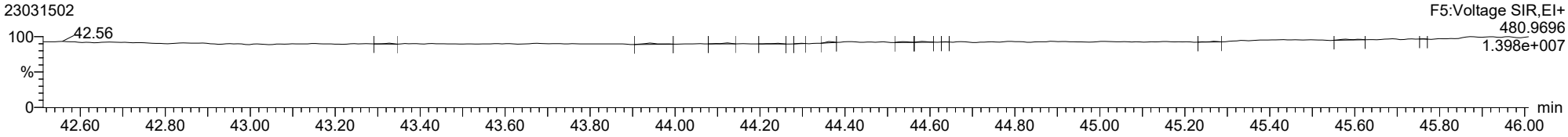


FUNCTION5 PFK



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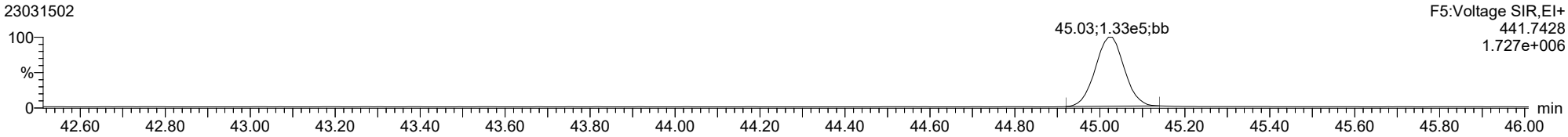

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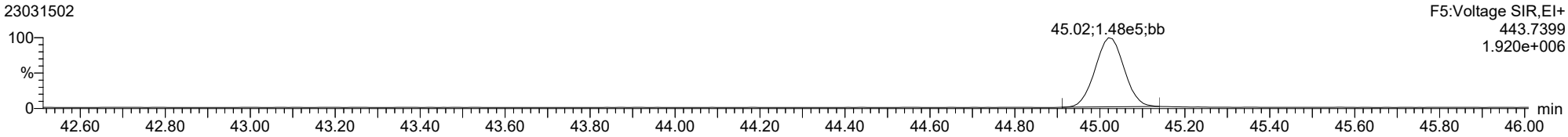

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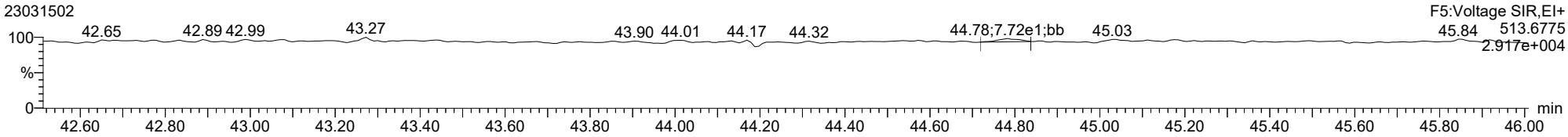

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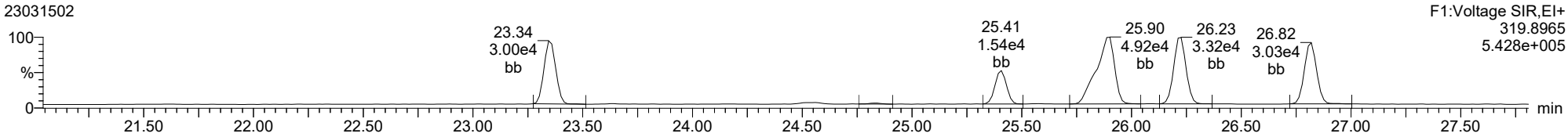

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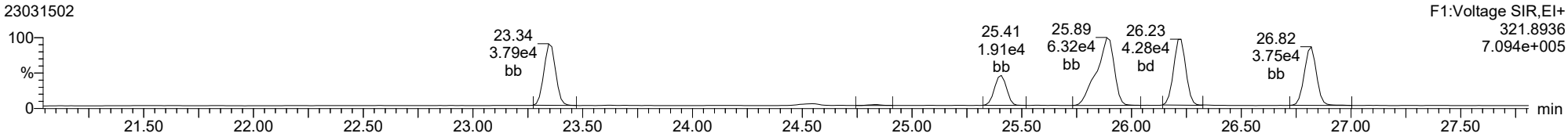

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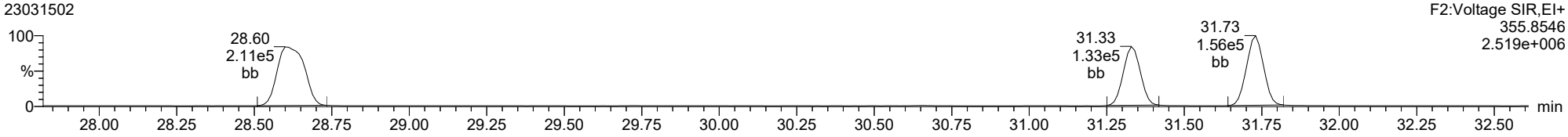
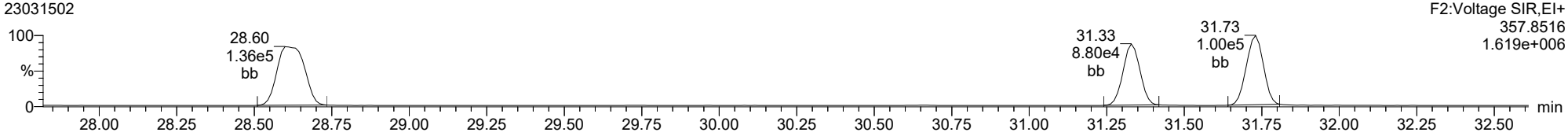
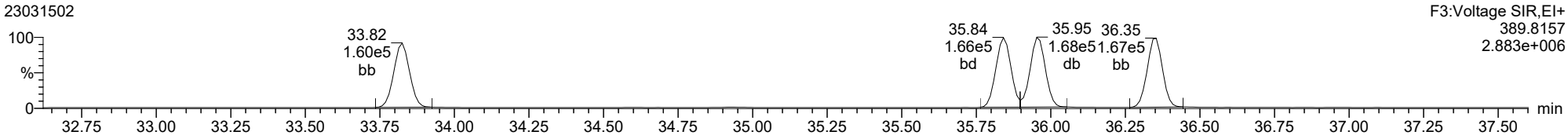


Total-pentadioxins

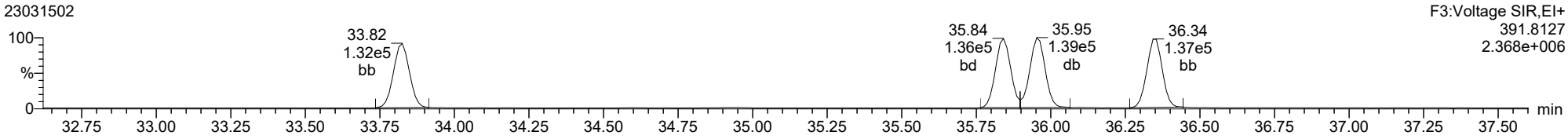


ID: CS3Z4, Name: 23031502, Date: 15-Mar-2023, Time: 11:02:56, Conditions: AUTOSPEC01, User: pk

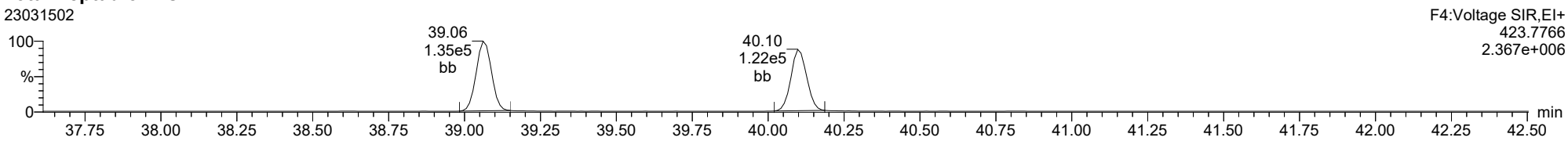
Total-hexadioxins



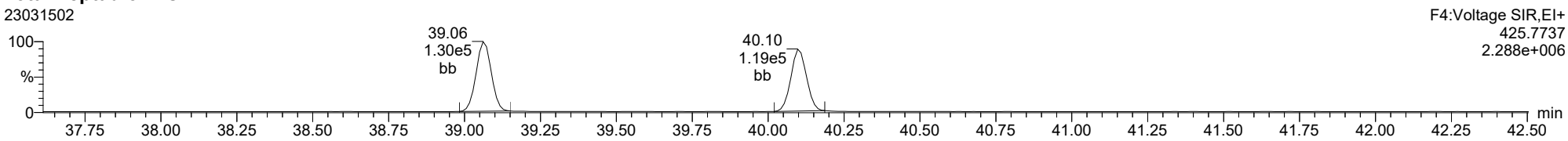
Total-hexadioxins



Total-heptadioxins



Total-heptadioxins



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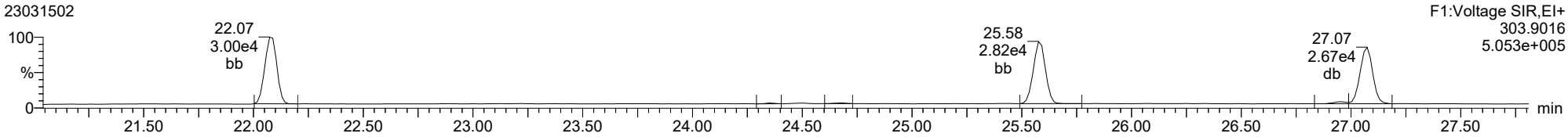
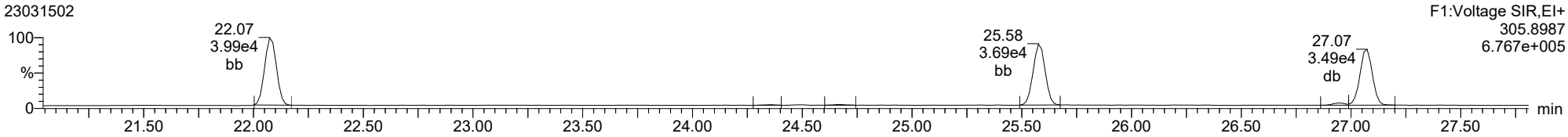
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:57:12 Pacific Daylight Time

ID: CS3Z4, Name: 23031502, Date: 15-Mar-2023, Time: 11:02:56, Conditions: AUTOSPEC01, User: pk

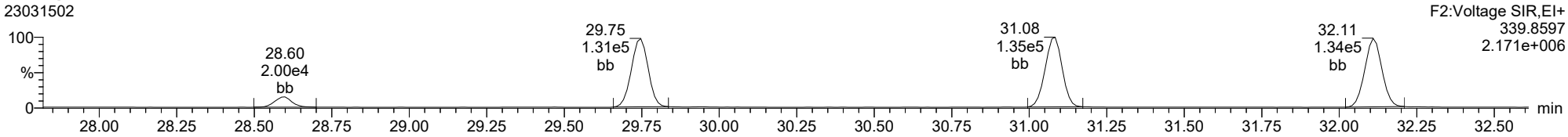
Total-tetrafurans



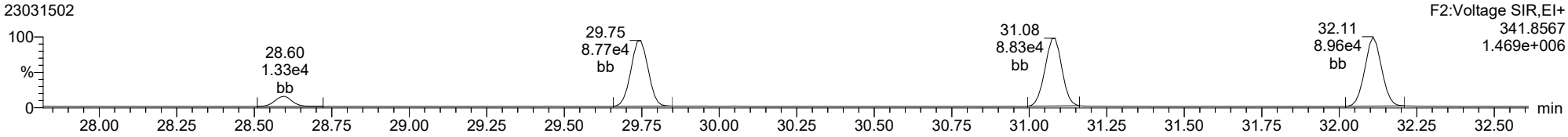
Total-tetrafurans



Total-pentafurans

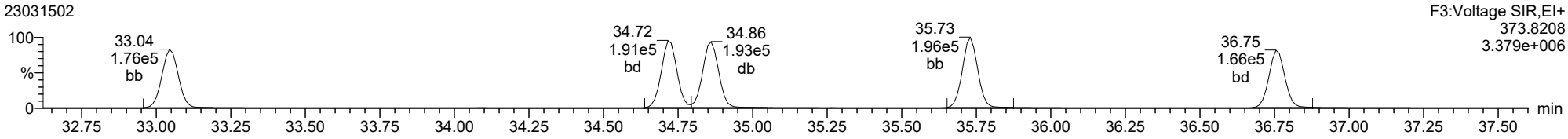


Total-pentafurans

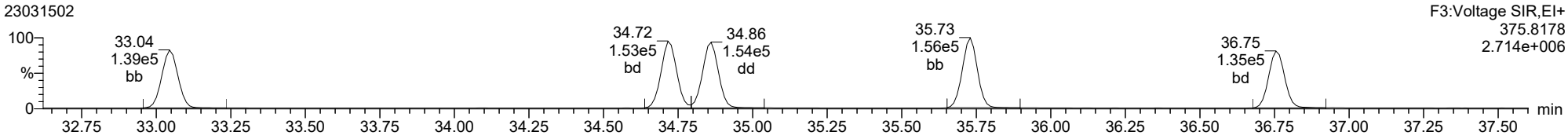


ID: CS3Z4, Name: 23031502, Date: 15-Mar-2023, Time: 11:02:56, Conditions: AUTOSPEC01, User: pk

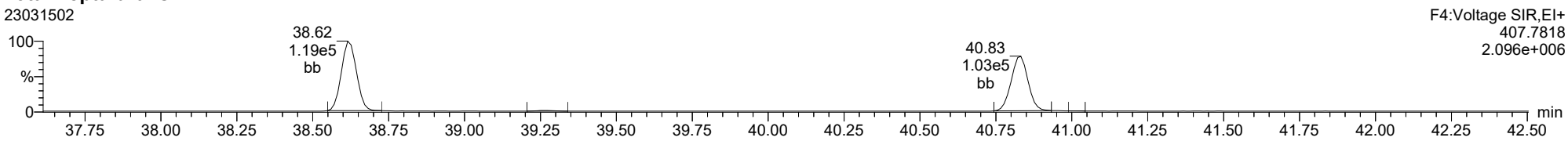
Total-hexafurans



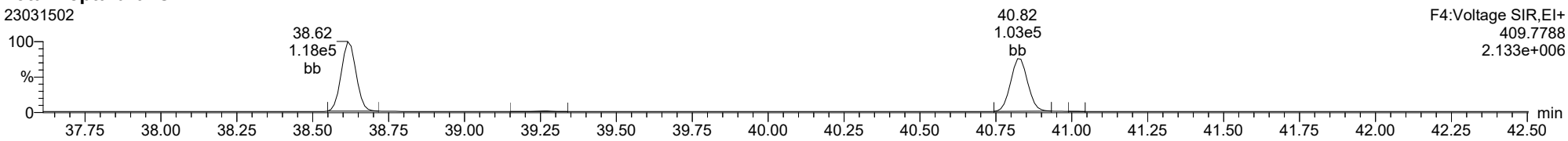
Total-hexafurans



Total-heptafurans

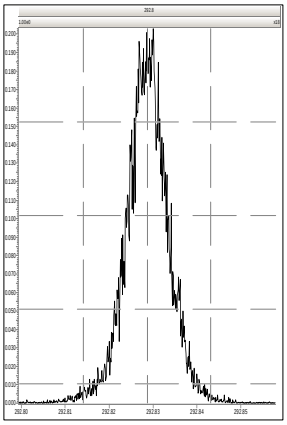


Total-heptafurans

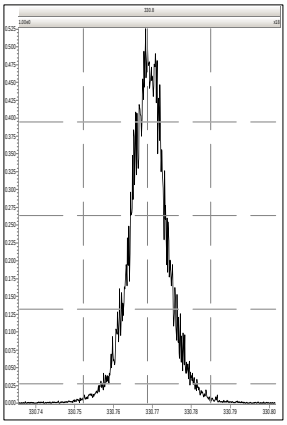


Printed: Wednesday, March 15, 2023 11:02:27 Pacific Daylight Time

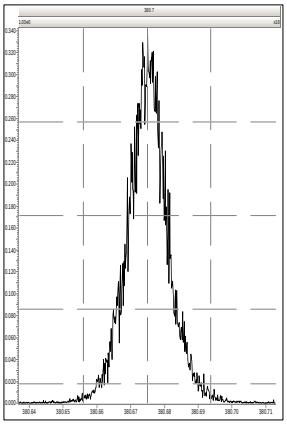
M 292.9824 R 13670



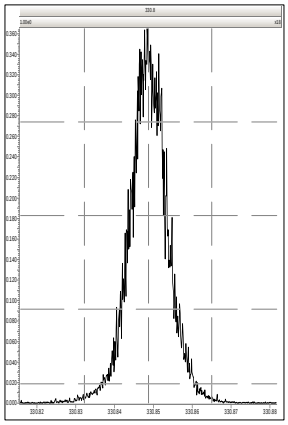
M 330.9792 R 13973



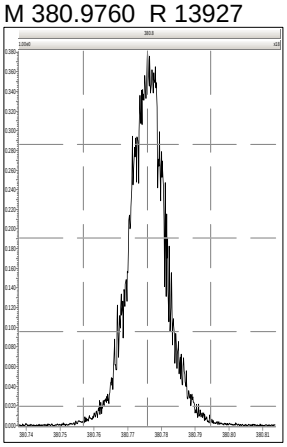
M 380.9760 R 13263



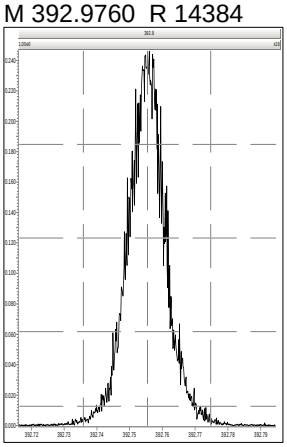
M 330.9792 R 14547



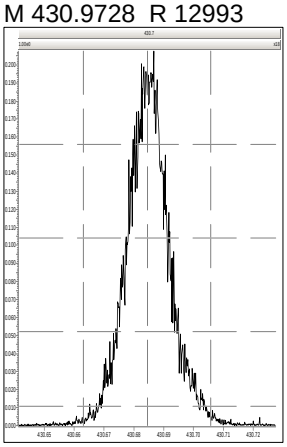
M 380.9760 R 13927



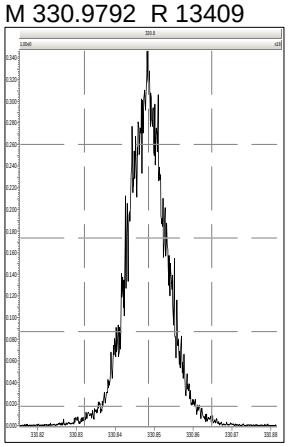
M 392.9760 R 14384



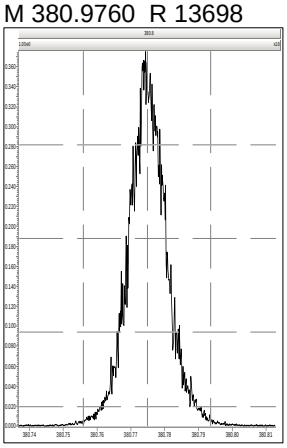
M 430.9728 R 12993



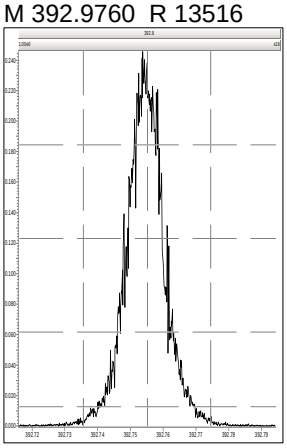
M 330.9792 R 13409



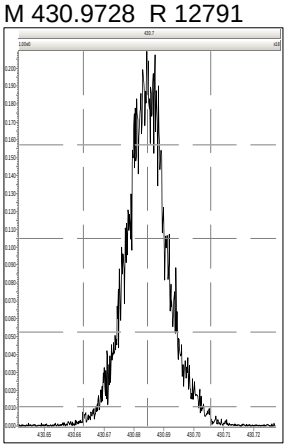
M 380.9760 R 13698



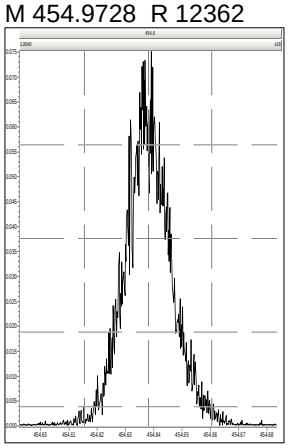
M 392.9760 R 13516



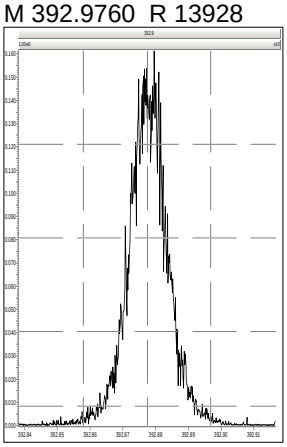
M 430.9728 R 12791



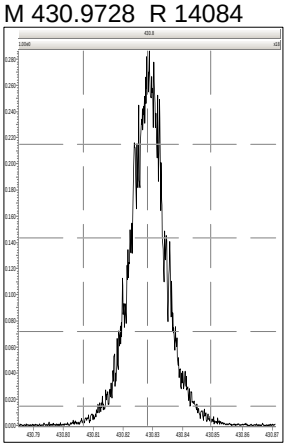
M 454.9728 R 12362



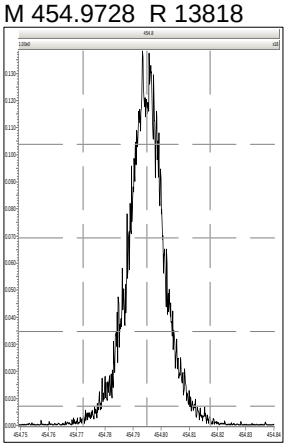
M 392.9760 R 13928



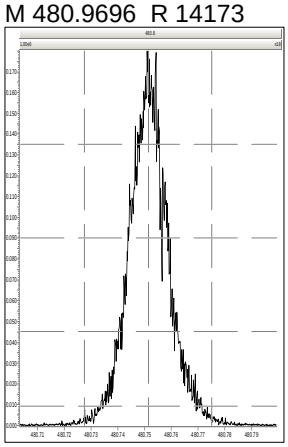
M 430.9728 R 14084



M 454.9728 R 13818

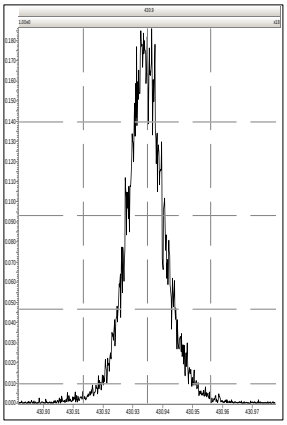


M 480.9696 R 14173

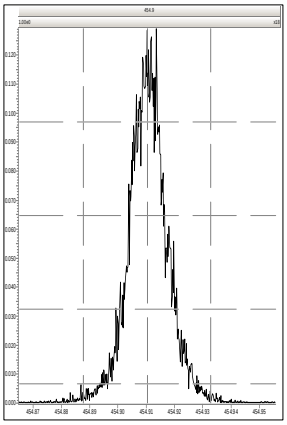


Printed: Wednesday, March 15, 2023 11:02:27 Pacific Daylight Time

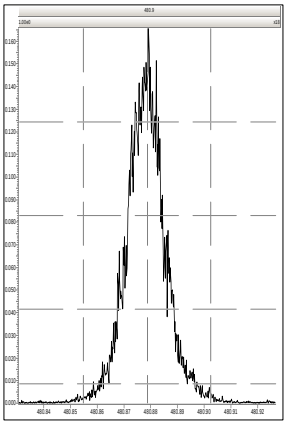
M 430.9728 R 13935



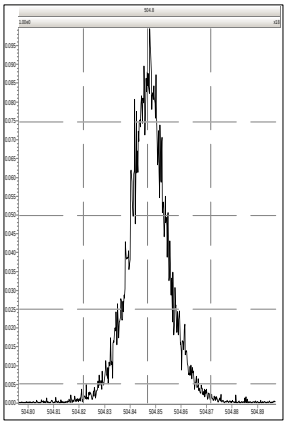
M 454.9728 R 15351



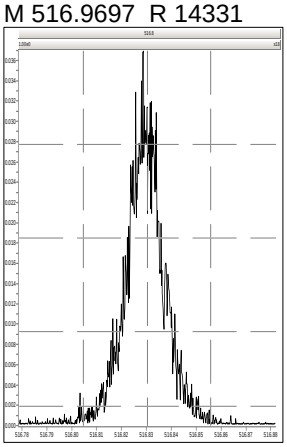
M 480.9696 R 13778

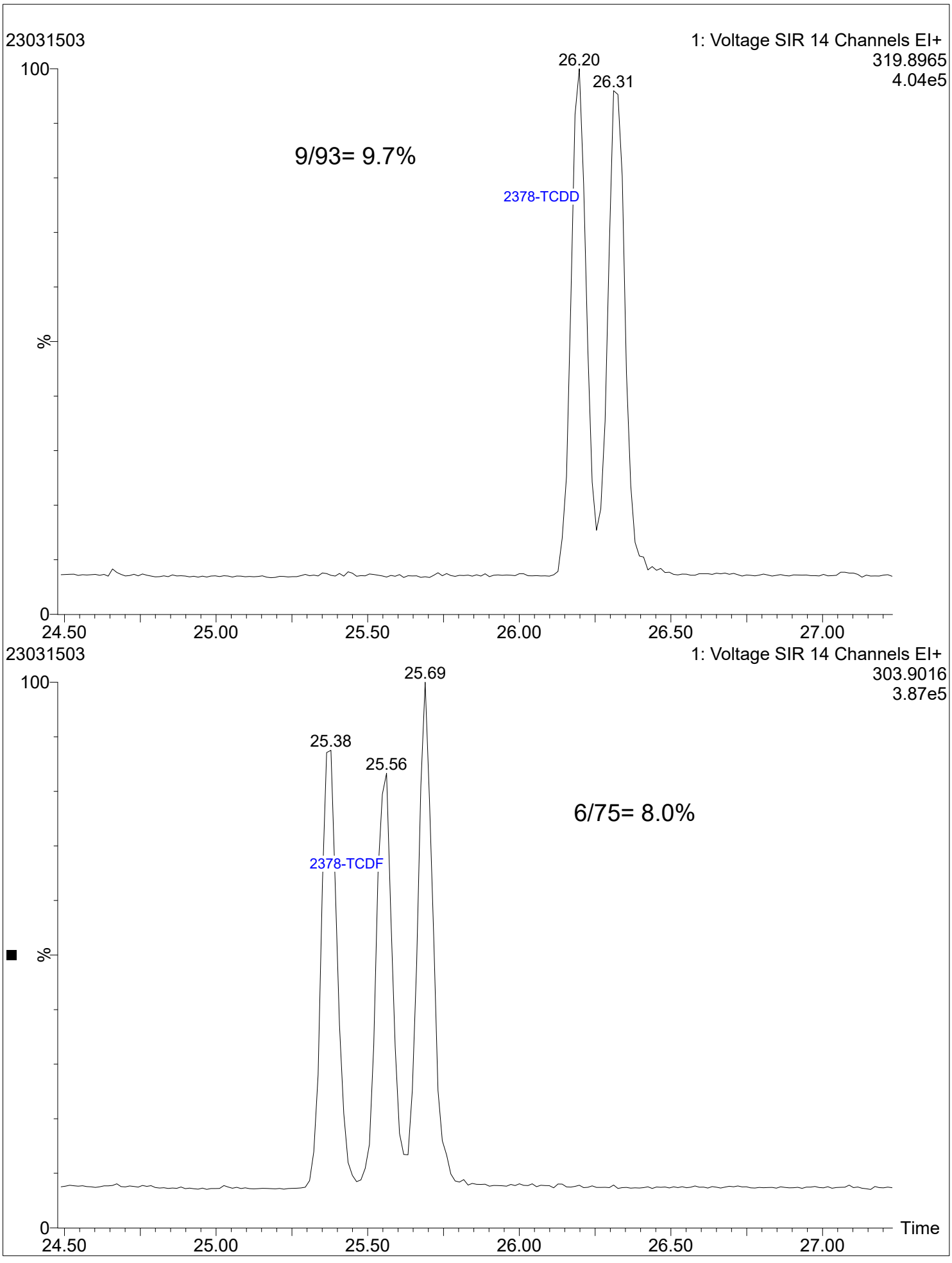


M 504.9696 R 13850



M 516.9697 R 14331




23031503
1: Voltage SIR 14 Channels EI+
319.8965
4.04e5
100
26.20
26.31
9/93= 9.7%
2378-TCDD
%
0
24.50
25.00
25.50
26.00
26.50
27.00
23031503
1: Voltage SIR 14 Channels EI+
303.9016
3.87e5
100
25.69
25.38
25.56
6/75= 8.0%
2378-TCDF
%
0
Time
24.50
25.00
25.50
26.00
26.50
27.00

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23030311	Calibration Date:	03/03/2023
Sequence:	SLC0045	Injection Date:	03/03/23
Lab Sample ID:	SLC0045-CCV1	Injection Time:	17:25
Sequence Name:	CS3V4		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
2,3,7,8-TCDF	A	10.000	10.1	0.7015272	0.7103909		1.3	+/-16
2,3,7,8-TCDD	A	10.000	9.02	1.1486620	1.0358000		-9.8	+/-22
1,2,3,7,8-PeCDF	A	50.000	47.7	0.6792300	0.6482723		-4.6	+/-18
2,3,4,7,8-PeCDF	A	50.000	48.6	0.7861704	0.7638484		-2.8	+/-18
1,2,3,7,8-PeCDD	A	50.000	50.8	1.0218450	1.0391930		1.7	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	47.3	1.1660380	1.1031690		-5.4	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	51.4	1.0907410	1.1209930		2.8	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	52.1	1.1396990	1.1864330		4.1	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	48.9	1.1370930	1.1121660		-2.2	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	50.7	0.9955689	1.0094320		1.4	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	51.1	1.0009380	1.0234880		2.3	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	51.7	0.9071139	0.9383686		3.4	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	47.7	1.0029930	0.9566603		-4.6	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	53.6	0.9531152	1.0217610		7.2	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	52.7	1.0390130	1.0955650		5.4	+/-14
OCDF	A	100.00	95.0	0.7778078	0.7390842		-5.0	+/-37
OCDD	A	100.00	97.1	0.9199537	0.8937318		-2.9	+/-21
13C12-2,3,7,8-TCDF	A	100.00	89.4	1.6201960	1.4487738		-10.6	+/-29
13C12-2,3,7,8-TCDD	A	100.00	86.0	1.1524090	0.9914363		-14.0	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	92.6	1.2404520	1.1488109		-7.4	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	91.6	1.1177860	1.0240744		-8.4	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	90.8	0.8288129	0.7523463		-9.2	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	95.2	1.1683050	1.1119828		-4.8	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	91.1	1.3864660	1.2630996		-8.9	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	96.9	1.1292560	1.0940819		-3.1	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	101	0.9317541	0.9426254		1.2	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	97.6	0.9950393	0.9710534		-2.4	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	98.4	1.1566890	1.1378328		-1.6	+/-15
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	102	0.8952017	0.9116661		1.8	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	84.3	0.7697516	0.6486548		-15.7	+/-23
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	92.0	0.8401226	0.7731635		-8.0	+/-28
13C12-OCDD	A	200.00	170	0.7674714	0.6532994		-14.9	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	7.54	1.2878040	0.9705402		-24.6	

* Values outside of QC limits

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23030310	Calibration Date:	03/03/2023
Sequence:	SLC0045	Injection Date:	03/03/23
Lab Sample ID:	SLC0045-SCV1	Injection Time:	16:36
Sequence Name:	ICVCW		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
2,3,7,8-TCDF	A	10.000	9.84	0.7015272	0.6901560		-1.6	
2,3,7,8-TCDD	A	10.000	9.81	1.1486620	1.1273700		-1.9	
1,2,3,7,8-PeCDF	A	50.000	51.4	0.6792300	0.6981249		2.8	
2,3,4,7,8-PeCDF	A	50.000	49.0	0.7861704	0.7701368		-2.0	
1,2,3,7,8-PeCDD	A	50.000	48.5	1.0218450	0.9921504		-2.9	
1,2,3,4,7,8-HxCDF	A	50.000	48.2	1.1660380	1.1251100		-3.5	
1,2,3,6,7,8-HxCDF	A	50.000	48.0	1.0907410	1.0469270		-4.0	
2,3,4,6,7,8-HxCDF	A	50.000	50.2	1.1396990	1.1448090		0.4	
1,2,3,7,8,9-HxCDF	A	50.000	49.1	1.1370930	1.1161010		-1.8	
1,2,3,4,7,8-HxCDD	A	50.000	50.8	0.9955689	1.0114830		1.6	
1,2,3,6,7,8-HxCDD	A	50.000	50.2	1.0009380	1.0044310		0.3	
1,2,3,7,8,9-HxCDD	A	50.000	51.6	0.9071139	8347.938		3.2	
1,2,3,4,6,7,8-HpCDF	A	50.000	51.8	1.0029930	1.0398620		3.7	
1,2,3,4,7,8,9-HpCDF	A	50.000	48.5	0.9531152	0.9237809		-3.1	
1,2,3,4,6,7,8-HpCDD	A	50.000	49.2	1.0390130	1.0223590		-1.6	
OCDF	A	100.00	104	0.7778078	0.8050743		3.5	
OCDD	A	100.00	99.4	0.9199537	0.9146365		-0.6	
13C12-2,3,7,8-TCDF	A	100.00	96.9	1.6201960	1.5703703		-3.1	
13C12-2,3,7,8-TCDD	A	100.00	96.6	1.1524090	1.1130294		-3.4	
13C12-1,2,3,7,8-PeCDF	A	100.00	73.2	1.2404520	0.9079224		-26.8	
13C12-2,3,4,7,8-PeCDF	A	100.00	75.9	1.1177860	0.8488817		-24.1	
13C12-1,2,3,7,8-PeCDD	A	100.00	76.6	0.8288129	0.6346243		-23.4	
13C12-1,2,3,4,7,8-HxCDF	A	100.00	93.0	1.1683050	1.0861993		-7.0	
13C12-1,2,3,6,7,8-HxCDF	A	100.00	98.0	1.3864660	1.3581552		-2.0	
13C12-2,3,4,6,7,8-HxCDF	A	100.00	93.4	1.1292560	1.0544008		-6.6	
13C12-1,2,3,7,8,9-HxCDF	A	100.00	97.9	0.9317541	0.9122440		-2.1	
13C12-1,2,3,4,7,8-HxCDD	A	100.00	95.9	0.9950393	0.9546162		-4.1	
13C12-1,2,3,6,7,8-HxCDD	A	100.00	97.7	1.1566890	1.1296183		-2.3	
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	102	0.8952017	0.9144345		2.1	
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	104	0.7697516	0.8001798		4.0	
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	102	0.8401226	0.8609226		2.5	
13C12-OCDD	A	200.00	162	0.7674714	0.6199758		-19.2	
37Cl4-2,3,7,8-TCDD	A	10.000	8.71	1.2878040	1.1221835		-12.9	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23031315	Calibration Date:	03/03/2023
Sequence:	SLC0171	Injection Date:	03/13/23
Lab Sample ID:	SLC0171-CCV1	Injection Time:	21:53
Sequence Name:	CS3Z2		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
2,3,7,8-TCDF	A	10.000	8.56	0.7015272	0.6007507		-14.4	+/-16	
2,3,7,8-TCDD	A	10.000	8.14	1.1486620	0.9350804		-18.6	+/-22	
1,2,3,7,8-PeCDF	A	50.000	52.9	0.6792300	0.7192166		5.9	+/-18	
2,3,4,7,8-PeCDF	A	50.000	49.0	0.7861704	0.7705335		-2.0	+/-18	
1,2,3,7,8-PeCDD	A	50.000	60.0	1.0218450	1.2258030		20.0	+/-22	
1,2,3,4,7,8-HxCDF	A	50.000	43.9	1.1660380	1.0227130		-12.3	+/-10	*
1,2,3,6,7,8-HxCDF	A	50.000	44.8	1.0907410	0.9778349		-10.4	+/-12	
2,3,4,6,7,8-HxCDF	A	50.000	46.0	1.1396990	1.0492100		-7.9	+/-12	
1,2,3,7,8,9-HxCDF	A	50.000	44.1	1.1370930	1.0021510		-11.9	+/-10	*
1,2,3,4,7,8-HxCDD	A	50.000	50.0	0.9955689	0.9952648		-0.03	+/-22	
1,2,3,6,7,8-HxCDD	A	50.000	50.9	1.0009380	1.0191710		1.8	+/-22	
1,2,3,7,8,9-HxCDD	A	50.000	53.2	0.9071139	0.9657033		6.5	+/-18	
1,2,3,4,6,7,8-HpCDF	A	50.000	44.2	1.0029930	0.8862351		-11.6	+/-10	*
1,2,3,4,7,8,9-HpCDF	A	50.000	47.5	0.9531152	0.9048948		-5.1	+/-14	
1,2,3,4,6,7,8-HpCDD	A	50.000	48.9	1.0390130	1.0164740		-2.2	+/-14	
OCDF	A	100.00	73.3	0.7778078	0.5698422		-26.7	+/-37	
OCDD	A	100.00	95.2	0.9199537	0.8756895		-4.8	+/-21	
13C12-2,3,7,8-TCDF	A	100.00	71.1	1.6201960	1.1517804		-28.9	+/-29	
13C12-2,3,7,8-TCDD	A	100.00	101	1.1524090	1.1647902		1.1	+/-18	
13C12-1,2,3,7,8-PeCDF	A	100.00	93.7	1.2404520	1.1623232		-6.3	+/-24	
13C12-2,3,4,7,8-PeCDF	A	100.00	99.9	1.1177860	1.1166880		-0.1	+/-23	
13C12-1,2,3,7,8-PeCDD	A	100.00	82.1	0.8288129	0.6805203		-17.9	+/-38	
13C12-1,2,3,4,7,8-HxCDF	A	100.00	96.9	1.1683050	1.1324418		-3.1	+/-24	
13C12-1,2,3,6,7,8-HxCDF	A	100.00	90.3	1.3864660	1.2513482		-9.7	+/-30	
13C12-2,3,4,6,7,8-HxCDF	A	100.00	95.6	1.1292560	1.0797885		-4.4	+/-27	
13C12-1,2,3,7,8,9-HxCDF	A	100.00	94.2	0.9317541	0.8775494		-5.8	+/-26	
13C12-1,2,3,4,7,8-HxCDD	A	100.00	97.5	0.9950393	0.9703836		-2.5	+/-15	
13C12-1,2,3,6,7,8-HxCDD	A	100.00	87.7	1.1566890	1.0149757		-12.3	+/-15	
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	79.9	0.8952017	0.7153888		-20.1	+/-22	
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	80.8	0.7697516	0.6222114		-19.2	+/-23	
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	82.4	0.8401226	0.6921071		-17.6	+/-28	
13C12-OCDD	A	200.00	179	0.7674714	0.6887809		-10.3	+/-52	
37Cl4-2,3,7,8-TCDD	A	10.000	8.22	1.2878040	1.0589536		-17.8		

* Values outside of QC limits

* Values outside of QC limits

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230313D1MID.qld
Last Altered: Tuesday, March 14, 2023 10:34:49 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:08:29 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230313.mdb 14 Mar 2023 10:34:25
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3Z2, Name: 23031315, Date: 13-Mar-2023, Time: 21:53:57, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.576	1.001	1.913e4	2.554e4	0.702	0.749	0.770	679	821	2.86e5	3.90e5	421.8	475.2	NO	bd	bb	8.563
12378-PeCDF	29.747	1.001	1.632e5	1.066e5	0.679	1.531	1.550	1265	1408	2.48e6	1.61e6	1963.8	1145.7	NO	bd	bd	52.944
23478-PeCDF	31.084	1.001	1.678e5	1.099e5	0.786	1.527	1.550	1265	1408	2.58e6	1.71e6	2043.2	1214.3	NO	bb	bb	49.005
123478-HxCDF	34.727	1.001	2.283e5	1.879e5	1.166	1.215	1.240	1370	974	3.60e6	2.98e6	2623.8	3065.2	NO	bd	bd	43.854
234678-HxCDF	35.730	1.000	2.267e5	1.804e5	1.140	1.257	1.240	1370	974	3.50e6	2.87e6	2556.7	2942.8	NO	bb	bb	46.030
123678-HxCDF	34.861	1.001	2.432e5	1.966e5	1.091	1.237	1.240	1370	974	3.81e6	3.12e6	2777.5	3204.2	NO	db	db	44.824
123789-HxCDF	36.766	1.001	1.740e5	1.421e5	1.137	1.224	1.240	1370	974	2.72e6	2.19e6	1988.2	2249.6	NO	bb	bb	44.066
1234678-HpCDF	38.626	1.001	1.111e5	1.168e5	1.003	0.951	1.050	959	906	1.83e6	1.92e6	1906.7	2114.9	NO	bb	bb	44.180
1234789-HpCDF	40.832	1.000	1.027e5	9.969e4	0.953	1.030	1.050	959	906	1.48e6	1.41e6	1538.7	1559.9	NO	bd	bd	47.470
OCDF	45.029	1.005	1.312e5	1.509e5	0.778	0.869	0.890	623	1327	1.62e6	1.88e6	2603.8	1413.0	NO	bb	bb	73.263
2378-TCDD	26.226	1.001	3.026e4	4.006e4	1.149	0.756	0.770	1222	701	4.46e5	6.09e5	364.6	868.0	NO	db	bb	8.141
12378-PeCDD	31.329	1.000	1.649e5	1.044e5	1.022	1.579	1.550	1219	1022	2.50e6	1.59e6	2054.5	1557.6	NO	bb	bb	59.980
123478-HxCDD	35.841	1.000	1.963e5	1.508e5	0.996	1.302	1.240	1107	907	3.19e6	2.54e6	2880.5	2801.9	NO	bd	bd	49.985
123678-HxCDD	35.964	1.001	2.032e5	1.685e5	1.001	1.206	1.240	1107	907	3.22e6	2.60e6	2905.1	2866.7	NO	db	dd	50.911
123789-HxCDD	36.354	1.012	1.908e5	1.537e5	0.907	1.241	1.240	1107	907	3.12e6	2.52e6	2817.5	2773.6	NO	bb	bb	53.229
1234678-HpCDD	40.108	1.001	1.272e5	1.256e5	1.039	1.013	1.050	1302	946	2.01e6	1.94e6	1541.0	2054.4	NO	bb	bb	48.915
OCDD	44.800	1.000	2.016e5	2.319e5	0.920	0.869	0.890	673	789	2.46e6	2.85e6	3663.9	3615.3	NO	bb	bb	95.188
13C-2378-TCDF	25.562	1.007	3.138e5	4.297e5	1.620	0.730	0.770	1352	1084	4.68e6	6.46e6	3459.6	5957.0	NO	bb	bb	71.089
13C-12378-PeCDF	29.725	1.171	4.498e5	3.006e5	1.240	1.496	1.550	1666	1420	6.93e6	4.63e6	4160.0	3262.9	NO	bb	bb	93.702
13C-23478-PeCDF	31.062	1.223	4.292e5	2.918e5	1.118	1.471	1.550	1666	1420	6.79e6	4.58e6	4075.2	3226.9	NO	bb	bb	99.902
13C-123478-HxCDF	34.705	0.955	2.725e5	5.416e5	1.168	0.503	0.510	1348	1534	4.35e6	8.61e6	3231.7	5610.7	NO	bd	bd	96.930
13C-123678-HxCDF	34.839	0.959	3.078e5	5.917e5	1.386	0.520	0.510	1348	1534	4.59e6	8.82e6	3403.4	5751.8	NO	dd	dd	90.255
13C-234678-HxCDF	35.719	0.983	2.615e5	5.146e5	1.129	0.508	0.510	1348	1534	4.10e6	8.01e6	3046.3	5219.9	NO	bb	bb	95.619
13C-123789-HxCDF	36.743	1.011	2.110e5	4.198e5	0.932	0.503	0.510	1348	1534	3.37e6	6.77e6	2502.1	4413.3	NO	bb	bb	94.183
13C-1234678-HpCDF	38.604	1.063	1.548e5	3.595e5	0.895	0.431	0.440	961	1889	2.58e6	6.10e6	2687.8	3227.7	NO	bb	bb	79.914
13C-1234789-HpCDF	40.821	1.124	1.355e5	3.117e5	0.770	0.435	0.440	961	1889	2.01e6	4.54e6	2095.0	2401.0	NO	bb	bb	80.833
13C-1234-TCDD	25.393	0.000	2.822e5	3.634e5	1.000	0.776	0.770	1227	953	4.36e6	5.62e6	3556.5	5894.5	NO	bb	bb	100.000
13C-2378-TCDD	26.198	1.032	3.289e5	4.231e5	1.152	0.777	0.770	1227	953	5.06e6	6.49e6	4123.4	6804.0	NO	bb	bb	101.074
13C-12378-PeCDD	31.318	1.233	2.771e5	1.622e5	0.829	1.708	1.550	696	753	4.16e6	2.52e6	5979.0	3351.8	NO	bb	bb	82.108
13C-123478-HxCDD	35.830	0.986	3.898e5	3.077e5	0.995	1.267	1.240	1306	905	6.64e6	5.23e6	5083.5	5786.4	NO	bd	bd	97.522
13C-123678-HxCDD	35.942	0.989	4.031e5	3.264e5	1.157	1.235	1.240	1306	905	6.08e6	5.04e6	4654.6	5576.6	NO	db	db	87.748
13C-1234678-HpCDD	40.086	1.103	2.565e5	2.410e5	0.840	1.064	1.050	927	940	4.08e6	3.78e6	4406.3	4024.8	NO	bb	bb	82.382
13C-OCDD	44.782	1.233	4.669e5	5.233e5	0.767	0.892	0.890	1825	1070	5.83e6	6.50e6	3193.0	6074.1	NO	bb	bb	179.494
13C-123789-HxCDD	36.331	0.000	3.941e5	3.247e5	1.000	1.214	1.240	1306	905	6.32e6	5.30e6	4836.5	5863.6	NO	bb	bb	100.000
37CL-2378-TCDD	26.226	1.033	6.837e4		1.288			1097		1.04e6		949.7			bb		8.223

Dataset: T:\Autospec\Processed Data Batch\230313D1MID.qld
Last Altered: Tuesday, March 14, 2023 10:34:49 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:08:29 Pacific Daylight Time

ID: CS3Z2, Name: 23031315, Date: 13-Mar-2023, Time: 21:53:57, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.073	0.863	2.127e4	3.098e4	0.802	0.687	0.770	679	821	3.38e5	4.98e5	497.1	606.8	NO	bb	bb	8.768
1289-TCDF	27.074	1.059	1.772e4	2.461e4	0.678	0.720	0.770	679	821	2.41e5	3.53e5	354.5	429.8	NO	db	dd	8.397
13468-PECDF	26.933	0.906	3.190e5	2.111e5	1.246	1.511	1.550	665	873	4.88e6	3.24e6	7332.6	3714.3	NO	bb	bb	56.671
12389-PECDF	32.109	1.080	1.588e5	1.058e5	0.496	1.501	1.550	1265	1408	2.34e6	1.55e6	1853.8	1101.6	NO	bb	bb	71.034
123468-HXCDF	33.045	0.952	2.235e5	1.826e5	1.169	1.224	1.240	1370	974	3.44e6	2.85e6	2509.9	2928.6	NO	bb	bb	42.672
1368-TCDD	23.345	0.891	2.765e4	3.569e4	1.015	0.775	0.770	1222	701	4.31e5	5.59e5	352.2	797.6	NO	bd	bb	8.296
1289-TCDD	26.819	1.024	2.656e4	3.490e4	0.909	0.761	0.770	1222	701	3.87e5	5.24e5	317.0	747.1	NO	bb	bb	8.994
12479-PECDD	28.611	0.914	2.597e5	1.719e5	2.301	1.511	1.550	1219	1022	2.50e6	1.64e6	2049.1	1601.0	NO	bb	bb	42.681
12389-PECDD	31.730	1.013	1.899e5	1.243e5	1.184	1.527	1.550	1219	1022	2.86e6	1.87e6	2345.3	1829.3	NO	bb	bb	60.427
124679-HXCDD	33.825	0.944	2.018e5	1.640e5	1.115	1.231	1.240	1107	907	3.14e6	2.58e6	2833.2	2842.6	NO	bb	bb	47.019
1234679-HPCDD	39.072	0.975	1.400e5	1.361e5	1.137	1.028	1.050	1302	946	2.30e6	2.26e6	1765.3	2389.5	NO	bb	bb	48.825
Total-tetrafurans			5.882e4		0.727			679		8.76e5							26.046
Total-penta1			3.190e5					665		4.88e6							56.671
Total-pentafurans			5.159e5		0.654			1265		7.82e6							182.085
Total-hexafurans			1.096e6		1.141			1370		1.71e7							221.447
Total-heptafurans			2.152e5		0.978			959		3.33e6							92.242
Total-Furans			2.336e6		0.922			679		3.56e7							651.755
Total-tetradioxins			1.438e5		1.024			1222		1.96e6							43.127
Total-pentadioxins			6.151e5		1.502			1219		7.87e6							163.243
Total-hexadioxins			7.940e5		1.005			1107		1.27e7							201.591
Total-heptadioxins			2.672e5		1.088			1302		4.30e6							97.741
Total-Dioxins			2.022e6		1.130			1222		2.93e7							600.890
Total-TEQ			4.357e6					1222		6.49e7							1252.645
FUNCTION1 PFK			4.577e7					400216		4.81e7							
FUNCTION2 PFK			2.896e5					220330		8.01e6							0.000
FUNCTION3 PFK			1.129e8					357332		3.62e7							0.000
FUNCTION4 PFK			2.660e5					258228		7.87e6							
FUNCTION5 PFK			1.745e5					171785		5.92e6							
FUNCTION1 HXCD...			4.886e2					458		6.64e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			1.186e2					898		1.70e3							0.000
FUNCTION3 OCDPE			7.147e2					493		9.25e3							0.000
FUNCTION4 NCDPE			2.533e2					552		4.31e3							0.000
FUNCTION5 DCDPE			0.000e0					455		0.00e0							

Method: T:\Autospec\Methods\Dioxin230313.mdb 14 Mar 2023 10:34:25
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.07	1.772e4	2.461e4	0.678	0.72	0.77	354.5	YES	NO	db	dd	8.397
2	Total-tetrafurans	26.95	6.870e2	1.032e3	0.727	0.67	0.77	16.3	YES	NO	bd	bd	0.318
3	2378-TCDF	25.58	1.913e4	2.554e4	0.702	0.75	0.77	421.8	YES	NO	bd	bb	8.563
4	1368-TCDF	22.07	2.127e4	3.098e4	0.802	0.69	0.77	497.1	YES	NO	bb	bb	8.768

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	26.93	3.190e5	2.111e5	1.246	1.51	1.55	7332.6	YES	NO	bb	bb	56.671

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	29.90	7.692e2	5.420e2	0.654	1.42	1.55	15.4	YES	NO	dd	db	0.273
2	12378-PeCDF	29.75	1.632e5	1.066e5	0.679	1.53	1.55	1963.8	YES	NO	bd	bd	52.944
3	Total-pentafurans	28.60	2.521e4	1.726e4	0.654	1.46	1.55	309.8	YES	NO	bb	bb	8.829
4	12389-PECDF	32.11	1.588e5	1.058e5	0.496	1.50	1.55	1853.8	YES	NO	bb	bb	71.034
5	23478-PeCDF	31.08	1.678e5	1.099e5	0.786	1.53	1.55	2043.2	YES	NO	bb	bb	49.005

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.77	1.740e5	1.421e5	1.137	1.22	1.24	1988.2	YES	NO	bb	bb	44.066
2	234678-HxCDF	35.73	2.267e5	1.804e5	1.140	1.26	1.24	2556.7	YES	NO	bb	bb	46.030
3	123678-HxCDF	34.86	2.432e5	1.966e5	1.091	1.24	1.24	2777.5	YES	NO	db	db	44.824
4	123478-HxCDF	34.73	2.283e5	1.879e5	1.166	1.22	1.24	2623.8	YES	NO	bd	bd	43.854
5	123468-HXCDF	33.04	2.235e5	1.826e5	1.169	1.22	1.24	2509.9	YES	NO	bb	bb	42.672

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptafurans	41.08	4.668e2	3.920e2	0.978	1.19	1.05	7.8	YES	NO	dd	db	0.183
2	1234789-HpCDF	40.83	1.027e5	9.969e4	0.953	1.03	1.05	1538.7	YES	NO	bd	bd	47.470
3	Total-heptafurans	39.27	9.623e2	9.653e2	0.978	1.00	1.05	15.1	YES	NO	bb	bb	0.410
4	1234678-HpCDF	38.63	1.111e5	1.168e5	1.003	0.95	1.05	1906.7	YES	NO	bb	bb	44.180

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.07	1.772e4	2.461e4	0.678	0.72	0.77	354.5	YES	NO	db	dd	8.397
2	Total-tetrafurans	26.95	6.870e2	1.032e3	0.727	0.67	0.77	16.3	YES	NO	bd	bd	0.318
3	2378-TCDF	25.58	1.913e4	2.554e4	0.702	0.75	0.77	421.8	YES	NO	bd	bb	8.563
4	1368-TCDF	22.07	2.127e4	3.098e4	0.802	0.69	0.77	497.1	YES	NO	bb	bb	8.768
5	Total-pentafurans	29.90	7.692e2	5.420e2	0.654	1.42	1.55	15.4	YES	NO	dd	db	0.273
6	12378-PeCDF	29.75	1.632e5	1.066e5	0.679	1.53	1.55	1963.8	YES	NO	bd	bd	52.944
7	Total-pentafurans	28.60	2.521e4	1.726e4	0.654	1.46	1.55	309.8	YES	NO	bb	bb	8.829
8	12389-PECDF	32.11	1.588e5	1.058e5	0.496	1.50	1.55	1853.8	YES	NO	bb	bb	71.034
9	23478-PeCDF	31.08	1.678e5	1.099e5	0.786	1.53	1.55	2043.2	YES	NO	bb	bb	49.005
10	123789-HxCDF	36.77	1.740e5	1.421e5	1.137	1.22	1.24	1988.2	YES	NO	bb	bb	44.066
11	234678-HxCDF	35.73	2.267e5	1.804e5	1.140	1.26	1.24	2556.7	YES	NO	bb	bb	46.030
12	123678-HxCDF	34.86	2.432e5	1.966e5	1.091	1.24	1.24	2777.5	YES	NO	db	db	44.824
13	123478-HxCDF	34.73	2.283e5	1.879e5	1.166	1.22	1.24	2623.8	YES	NO	bd	bd	43.854
14	123468-HXCDF	33.04	2.235e5	1.826e5	1.169	1.22	1.24	2509.9	YES	NO	bb	bb	42.672
15	Total-heptafurans	41.08	4.668e2	3.920e2	0.978	1.19	1.05	7.8	YES	NO	dd	db	0.183
16	1234789-HpCDF	40.83	1.027e5	9.969e4	0.953	1.03	1.05	1538.7	YES	NO	bd	bd	47.470
17	Total-heptafurans	39.27	9.623e2	9.653e2	0.978	1.00	1.05	15.1	YES	NO	bb	bb	0.410
18	1234678-HpCDF	38.63	1.111e5	1.168e5	1.003	0.95	1.05	1906.7	YES	NO	bb	bb	44.180
19	OCDF	45.03	1.312e5	1.509e5	0.778	0.87	0.89	2603.8	YES	NO	bb	bb	73.263
20	13468-PECDF	26.93	3.190e5	2.111e5	1.246	1.51	1.55	7332.6	YES	NO	bb	bb	56.671

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	26.82	2.656e4	3.490e4	0.909	0.76	0.77	317.0	YES	NO	bb	bb	8.994
2	2378-TCDD	26.23	3.026e4	4.006e4	1.149	0.76	0.77	364.6	YES	NO	db	bb	8.141
3	Total-tetradioxins	25.90	4.392e4	5.735e4	1.024	0.77	0.77	375.7	YES	NO	bd	bb	13.147
4	Total-tetradioxins	25.41	1.370e4	1.767e4	1.024	0.78	0.77	178.7	YES	NO	bd	bb	4.073
5	Total-tetradioxins	24.84	3.911e2	4.557e2	1.024	0.86	0.77	3.9	YES	NO	bb	bb	0.110
6	Total-tetradioxins	24.55	1.287e3	1.540e3	1.024	0.84	0.77	10.6	YES	NO	bb	bb	0.367
7	1368-TCDD	23.34	2.765e4	3.569e4	1.015	0.77	0.77	352.2	YES	NO	bd	bb	8.296

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PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.73	1.899e5	1.243e5	1.184	1.53	1.55	2345.3	YES	NO	bb	bb	60.427
2	12378-PeCDD	31.33	1.649e5	1.044e5	1.022	1.58	1.55	2054.5	YES	NO	bb	bb	59.980
3	Total-pentadioxins	30.66	6.576e2	3.734e2	1.502	1.76	1.55	8.3	YES	NO	bb	bb	0.156
4	12479-PECDD	28.61	2.597e5	1.719e5	2.301	1.51	1.55	2049.1	YES	NO	bb	bb	42.681

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123678-HxCDD	35.96	2.032e5	1.685e5	1.001	1.21	1.24	2905.1	YES	NO	db	dd	50.911
2	123478-HxCDD	35.84	1.963e5	1.508e5	0.996	1.30	1.24	2880.5	YES	NO	bd	bd	49.985
3	Total-hexadioxins	34.94	1.800e3	1.407e3	1.005	1.28	1.24	14.1	YES	NO	bb	bb	0.447
4	124679-HXCDD	33.82	2.018e5	1.640e5	1.115	1.23	1.24	2833.2	YES	NO	bb	bb	47.019
5	123789-HxCDD	36.35	1.908e5	1.537e5	0.907	1.24	1.24	2817.5	YES	NO	bb	bb	53.229

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.11	1.272e5	1.256e5	1.039	1.01	1.05	1541.0	YES	NO	bb	bb	48.915
2	1234679-HPCDD	39.07	1.400e5	1.361e5	1.137	1.03	1.05	1765.3	YES	NO	bb	bb	48.825

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Printed: Tuesday, March 14, 2023 11:08:29 Pacific Daylight Time

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	26.82	2.656e4	3.490e4	0.909	0.76	0.77	317.0	YES	NO	bb	bb	8.994
2	2378-TCDD	26.23	3.026e4	4.006e4	1.149	0.76	0.77	364.6	YES	NO	db	bb	8.141
3	Total-tetradioxins	25.90	4.392e4	5.735e4	1.024	0.77	0.77	375.7	YES	NO	bd	bb	13.147
4	Total-tetradioxins	25.41	1.370e4	1.767e4	1.024	0.78	0.77	178.7	YES	NO	bd	bb	4.073
5	Total-tetradioxins	24.84	3.911e2	4.557e2	1.024	0.86	0.77	3.9	YES	NO	bb	bb	0.110
6	Total-tetradioxins	24.55	1.287e3	1.540e3	1.024	0.84	0.77	10.6	YES	NO	bb	bb	0.367
7	1368-TCDD	23.34	2.765e4	3.569e4	1.015	0.77	0.77	352.2	YES	NO	bd	bb	8.296
8	12389-PECDD	31.73	1.899e5	1.243e5	1.184	1.53	1.55	2345.3	YES	NO	bb	bb	60.427
9	12378-PeCDD	31.33	1.649e5	1.044e5	1.022	1.58	1.55	2054.5	YES	NO	bb	bb	59.980
10	Total-pentadioxins	30.66	6.576e2	3.734e2	1.502	1.76	1.55	8.3	YES	NO	bb	bb	0.156
11	12479-PECDD	28.61	2.597e5	1.719e5	2.301	1.51	1.55	2049.1	YES	NO	bb	bb	42.681
12	123678-HxCDD	35.96	2.032e5	1.685e5	1.001	1.21	1.24	2905.1	YES	NO	db	dd	50.911
13	123478-HxCDD	35.84	1.963e5	1.508e5	0.996	1.30	1.24	2880.5	YES	NO	bd	bd	49.985
14	Total-hexadioxins	34.94	1.800e3	1.407e3	1.005	1.28	1.24	14.1	YES	NO	bb	bb	0.447
15	124679-HXCDD	33.82	2.018e5	1.640e5	1.115	1.23	1.24	2833.2	YES	NO	bb	bb	47.019
16	123789-HxCDD	36.35	1.908e5	1.537e5	0.907	1.24	1.24	2817.5	YES	NO	bb	bb	53.229
17	OCDD	44.80	2.016e5	2.319e5	0.920	0.87	0.89	3663.9	YES	NO	bb	bb	95.188
18	1234678-HpCDD	40.11	1.272e5	1.256e5	1.039	1.01	1.05	1541.0	YES	NO	bb	bb	48.915
19	1234679-HPCDD	39.07	1.400e5	1.361e5	1.137	1.03	1.05	1765.3	YES	NO	bb	bb	48.825

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.07	1.772e4	2.461e4	0.678	0.72	0.77	354.5	YES	NO	db	dd	8.397
2	Total-tetrafurans	26.95	6.870e2	1.032e3	0.727	0.67	0.77	16.3	YES	NO	bd	bd	0.318
3	2378-TCDF	25.58	1.913e4	2.554e4	0.702	0.75	0.77	421.8	YES	NO	bd	bb	8.563
4	1368-TCDF	22.07	2.127e4	3.098e4	0.802	0.69	0.77	497.1	YES	NO	bb	bb	8.768
5	Total-pentafurans	29.90	7.692e2	5.420e2	0.654	1.42	1.55	15.4	YES	NO	dd	db	0.273
6	12378-PeCDF	29.75	1.632e5	1.066e5	0.679	1.53	1.55	1963.8	YES	NO	bd	bd	52.944
7	Total-pentafurans	28.60	2.521e4	1.726e4	0.654	1.46	1.55	309.8	YES	NO	bb	bb	8.829
8	12389-PECDF	32.11	1.588e5	1.058e5	0.496	1.50	1.55	1853.8	YES	NO	bb	bb	71.034
9	23478-PeCDF	31.08	1.678e5	1.099e5	0.786	1.53	1.55	2043.2	YES	NO	bb	bb	49.005
10	123789-HxCDF	36.77	1.740e5	1.421e5	1.137	1.22	1.24	1988.2	YES	NO	bb	bb	44.066
11	234678-HxCDF	35.73	2.267e5	1.804e5	1.140	1.26	1.24	2556.7	YES	NO	bb	bb	46.030
12	123678-HxCDF	34.86	2.432e5	1.966e5	1.091	1.24	1.24	2777.5	YES	NO	db	db	44.824
13	123478-HxCDF	34.73	2.283e5	1.879e5	1.166	1.22	1.24	2623.8	YES	NO	bd	bd	43.854
14	123468-HXCDF	33.04	2.235e5	1.826e5	1.169	1.22	1.24	2509.9	YES	NO	bb	bb	42.672
15	Total-heptafurans	41.08	4.668e2	3.920e2	0.978	1.19	1.05	7.8	YES	NO	dd	db	0.183
16	1234789-HpCDF	40.83	1.027e5	9.969e4	0.953	1.03	1.05	1538.7	YES	NO	bd	bd	47.470
17	Total-heptafurans	39.27	9.623e2	9.653e2	0.978	1.00	1.05	15.1	YES	NO	bb	bb	0.410
18	1234678-HpCDF	38.63	1.111e5	1.168e5	1.003	0.95	1.05	1906.7	YES	NO	bb	bb	44.180
19	OCDF	45.03	1.312e5	1.509e5	0.778	0.87	0.89	2603.8	YES	NO	bb	bb	73.263
20	13468-PECDF	26.93	3.190e5	2.111e5	1.246	1.51	1.55	7332.6	YES	NO	bb	bb	56.671
21	1289-TCDD	26.82	2.656e4	3.490e4	0.909	0.76	0.77	317.0	YES	NO	bb	bb	8.994
22	2378-TCDD	26.23	3.026e4	4.006e4	1.149	0.76	0.77	364.6	YES	NO	db	bb	8.141
23	Total-tetradioxins	25.90	4.392e4	5.735e4	1.024	0.77	0.77	375.7	YES	NO	bd	bb	13.147
24	Total-tetradioxins	25.41	1.370e4	1.767e4	1.024	0.78	0.77	178.7	YES	NO	bd	bb	4.073
25	Total-tetradioxins	24.84	3.911e2	4.557e2	1.024	0.86	0.77	3.9	YES	NO	bb	bb	0.110
26	Total-tetradioxins	24.55	1.287e3	1.540e3	1.024	0.84	0.77	10.6	YES	NO	bb	bb	0.367
27	1368-TCDD	23.34	2.765e4	3.569e4	1.015	0.77	0.77	352.2	YES	NO	bd	bb	8.296
28	12389-PECDD	31.73	1.899e5	1.243e5	1.184	1.53	1.55	2345.3	YES	NO	bb	bb	60.427
29	12378-PeCDD	31.33	1.649e5	1.044e5	1.022	1.58	1.55	2054.5	YES	NO	bb	bb	59.980
30	Total-pentadioxins	30.66	6.576e2	3.734e2	1.502	1.76	1.55	8.3	YES	NO	bb	bb	0.156
31	12479-PECDD	28.61	2.597e5	1.719e5	2.301	1.51	1.55	2049.1	YES	NO	bb	bb	42.681
32	123678-HxCDD	35.96	2.032e5	1.685e5	1.001	1.21	1.24	2905.1	YES	NO	db	dd	50.911
33	123478-HxCDD	35.84	1.963e5	1.508e5	0.996	1.30	1.24	2880.5	YES	NO	bd	bd	49.985
34	Total-hexadioxins	34.94	1.800e3	1.407e3	1.005	1.28	1.24	14.1	YES	NO	bb	bb	0.447
35	124679-HXCDD	33.82	2.018e5	1.640e5	1.115	1.23	1.24	2833.2	YES	NO	bb	bb	47.019
36	123789-HxCDD	36.35	1.908e5	1.537e5	0.907	1.24	1.24	2817.5	YES	NO	bb	bb	53.229
37	OCDD	44.80	2.016e5	2.319e5	0.920	0.87	0.89	3663.9	YES	NO	bb	bb	95.188

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	1234678-HpCDD	40.11	1.272e5	1.256e5	1.039	1.01	1.05	1541.0	YES	NO	bb	bb	48.915
39	1234679-HPCDD	39.07	1.400e5	1.361e5	1.137	1.03	1.05	1765.3	YES	NO	bb	bb	48.825

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.29	1.642e7					41.5	YES		db		
2	FUNCTION1 PFK	21.18	2.935e7					78.7	YES		bd		

Dataset: T:\Autospec\Processed Data Batch\230313D1MID.qld
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Printed: Tuesday, March 14, 2023 11:08:29 Pacific Daylight Time

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.13	4.810e4					1.9	NO		bd		0.000
2	FUNCTION2 PFK	30.08	5.118e3					0.6	NO		bb		0.000
3	FUNCTION2 PFK	29.70	4.647e3					0.8	NO		bb		0.000
4	FUNCTION2 PFK	29.57	6.668e3					1.2	NO		bb		0.000
5	FUNCTION2 PFK	29.43	1.398e3					0.4	NO		bb		0.000
6	FUNCTION2 PFK	29.37	6.378e3					1.2	NO		bb		0.000
7	FUNCTION2 PFK	29.18	9.146e2					0.4	NO		bb		0.000
8	FUNCTION2 PFK	29.13	1.319e4					1.7	NO		db		0.000
9	FUNCTION2 PFK	29.08	9.109e3					1.4	NO		bd		0.000
10	FUNCTION2 PFK	28.72	3.818e3					0.7	NO		bb		0.000
11	FUNCTION2 PFK	28.48	7.877e3					1.1	NO		bb		0.000
12	FUNCTION2 PFK	28.41	4.982e3					1.0	NO		db		0.000
13	FUNCTION2 PFK	28.38	1.011e4					1.3	NO		bd		0.000
14	FUNCTION2 PFK	28.03	1.275e3					0.5	NO		bb		0.000
15	FUNCTION2 PFK	27.96	1.270e4					1.6	NO		db		0.000
16	FUNCTION2 PFK	27.92	1.112e4					1.5	NO		bd		0.000
17	FUNCTION2 PFK	32.49	1.175e3					0.5	NO		bb		0.000
18	FUNCTION2 PFK	32.44	9.839e3					0.9	NO		bb		0.000
19	FUNCTION2 PFK	32.29	7.997e3					1.4	NO		db		0.000
20	FUNCTION2 PFK	32.26	1.220e4					1.6	NO		bd		0.000
21	FUNCTION2 PFK	32.01	5.782e3					0.8	NO		bb		0.000
22	FUNCTION2 PFK	31.77	1.089e4					1.5	NO		bb		0.000
23	FUNCTION2 PFK	31.66	2.214e3					0.5	NO		bb		0.000
24	FUNCTION2 PFK	31.55	1.469e3					0.6	NO		bb		0.000
25	FUNCTION2 PFK	30.93	8.649e3					1.1	NO		bb		0.000
26	FUNCTION2 PFK	30.77	8.317e3					1.4	NO		db		0.000
27	FUNCTION2 PFK	30.74	1.546e4					1.6	NO		dd		0.000
28	FUNCTION2 PFK	30.65	2.392e4					1.9	NO		bd		0.000
29	FUNCTION2 PFK	30.56	1.094e4					1.4	NO		db		0.000
30	FUNCTION2 PFK	30.50	6.253e3					1.2	NO		bd		0.000
31	FUNCTION2 PFK	30.35	5.416e3					0.9	NO		db		0.000
32	FUNCTION2 PFK	30.30	1.172e4					1.7	NO		dd		0.000

ID: CS3Z2, Name: 23031315, Date: 13-Mar-2023, Time: 21:53:57, Conditions: AUTOSPEC01, User: pk

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	36.28	9.028e6					42.8	YES		db		0.000
2	FUNCTION3 PFK	35.62	1.039e8					58.4	YES		bd		0.000

ID: CS3Z2, Name: 23031315, Date: 13-Mar-2023, Time: 21:53:57, Conditions: AUTOSPEC01, User: pk

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.84	4.494e3					0.7	NO		bb		
2	FUNCTION4 PFK	38.74	2.544e3					0.6	NO		bb		
3	FUNCTION4 PFK	38.59	4.542e3					1.0	NO		bb		
4	FUNCTION4 PFK	38.55	5.887e3					1.1	NO		bb		
5	FUNCTION4 PFK	38.39	5.701e3					0.8	NO		bb		
6	FUNCTION4 PFK	38.21	1.420e4					1.1	NO		bb		
7	FUNCTION4 PFK	38.14	2.479e3					0.5	NO		bb		
8	FUNCTION4 PFK	38.02	6.495e3					1.0	NO		db		
9	FUNCTION4 PFK	37.99	1.004e4					1.2	NO		bd		
10	FUNCTION4 PFK	37.94	3.736e3					0.6	NO		bb		
11	FUNCTION4 PFK	37.82	1.701e4					1.4	NO		bb		
12	FUNCTION4 PFK	37.71	1.093e4					1.5	NO		bb		
13	FUNCTION4 PFK	41.40	8.811e2					0.3	NO		bb		
14	FUNCTION4 PFK	41.36	3.403e3					0.6	NO		bb		
15	FUNCTION4 PFK	41.24	8.113e2					0.3	NO		bb		
16	FUNCTION4 PFK	41.08	3.406e3					0.6	NO		bb		
17	FUNCTION4 PFK	40.93	8.032e3					0.9	NO		bb		
18	FUNCTION4 PFK	40.89	7.558e3					0.7	NO		db		
19	FUNCTION4 PFK	40.77	3.194e4					1.8	NO		bd		
20	FUNCTION4 PFK	40.54	1.014e4					0.9	NO		bb		
21	FUNCTION4 PFK	40.40	4.942e3					0.7	NO		bb		
22	FUNCTION4 PFK	40.26	2.297e4					1.0	NO		bb		
23	FUNCTION4 PFK	40.11	3.006e3					0.5	NO		bb		
24	FUNCTION4 PFK	39.82	2.831e3					0.5	NO		bb		
25	FUNCTION4 PFK	39.27	6.865e3					1.0	NO		bb		
26	FUNCTION4 PFK	39.15	6.947e3					0.6	NO		bb		
27	FUNCTION4 PFK	39.04	1.165e4					1.4	NO		bb		
28	FUNCTION4 PFK	38.94	3.518e3					0.7	NO		bb		
29	FUNCTION4 PFK	42.34	6.600e3					1.1	NO		bb		
30	FUNCTION4 PFK	42.20	2.682e3					0.6	NO		bb		
31	FUNCTION4 PFK	41.96	1.667e4					1.0	NO		bb		
32	FUNCTION4 PFK	41.76	5.790e3					0.6	NO		db		
33	FUNCTION4 PFK	41.70	3.459e3					0.7	NO		bd		
34	FUNCTION4 PFK	41.63	5.727e3					0.9	NO		bb		
35	FUNCTION4 PFK	41.58	8.143e3					1.0	NO		bb		

ID: CS3Z2, Name: 23031315, Date: 13-Mar-2023, Time: 21:53:57, Conditions: AUTOSPEC01, User: pk

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.37	2.748e3					0.7	NO		bb		
2	FUNCTION5 PFK	43.05	3.831e3					1.0	NO		bb		
3	FUNCTION5 PFK	42.81	9.929e2					0.6	NO		bb		
4	FUNCTION5 PFK	42.75	2.619e3					0.9	NO		bb		
5	FUNCTION5 PFK	42.69	6.920e3					1.6	NO		bb		
6	FUNCTION5 PFK	42.63	1.690e4					2.9	NO		bb		
7	FUNCTION5 PFK	42.59	2.795e3					1.2	NO		db		
8	FUNCTION5 PFK	42.57	5.369e3					1.5	NO		bd		
9	FUNCTION5 PFK	45.89	2.338e4					2.6	NO		db		
10	FUNCTION5 PFK	45.85	1.715e4					2.7	NO		dd		
11	FUNCTION5 PFK	45.80	8.888e3					2.1	NO		dd		
12	FUNCTION5 PFK	45.76	8.625e3					1.9	NO		dd		
13	FUNCTION5 PFK	45.72	1.202e4					1.9	NO		bd		
14	FUNCTION5 PFK	45.65	5.275e3					1.8	NO		db		
15	FUNCTION5 PFK	45.61	1.346e4					2.1	NO		bd		
16	FUNCTION5 PFK	45.44	1.556e4					1.6	NO		db		
17	FUNCTION5 PFK	45.35	2.842e3					0.9	NO		bd		
18	FUNCTION5 PFK	44.45	3.115e3					1.0	NO		bb		
19	FUNCTION5 PFK	44.38	5.119e3					1.6	NO		db		
20	FUNCTION5 PFK	44.35	5.402e3					1.2	NO		bd		
21	FUNCTION5 PFK	44.17	3.997e3					1.0	NO		bb		
22	FUNCTION5 PFK	44.05	7.468e3					1.6	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	25.96	9.648e1					3.5	YES		bb		0.000
2	FUNCTION1 HXCD...	27.68	1.178e2					2.9	NO		db		0.000
3	FUNCTION1 HXCD...	27.47	1.013e2					3.5	YES		bd		0.000
4	FUNCTION1 HXCD...	26.57	9.695e1					2.3	NO		bb		0.000
5	FUNCTION1 HXCD...	26.20	7.601e1					2.3	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	29.43	1.186e2					1.9	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.55	1.056e2					3.2	YES		db		0.000
2	FUNCTION3 OCDPE	36.34	2.187e2					5.5	YES		bd		0.000
3	FUNCTION3 OCDPE	35.94	2.470e2					5.2	YES		db		0.000
4	FUNCTION3 OCDPE	35.84	1.433e2					4.9	YES		bd		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.41	7.510e1					2.8	NO		bb		0.000
2	FUNCTION4 NCDPE	40.36	9.634e1					2.7	NO		bb		0.000
3	FUNCTION4 NCDPE	37.87	8.190e1					2.3	NO		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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ID: CS3Z2, Name: 23031315, Date: 13-Mar-2023, Time: 21:53:57, Conditions: AUTOSPEC01, User: pk

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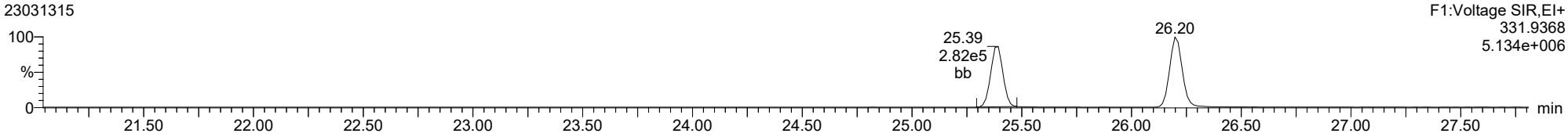

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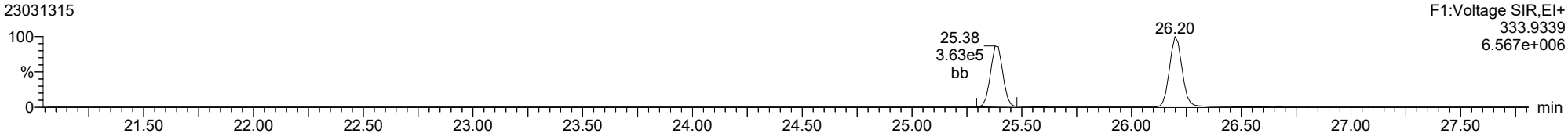

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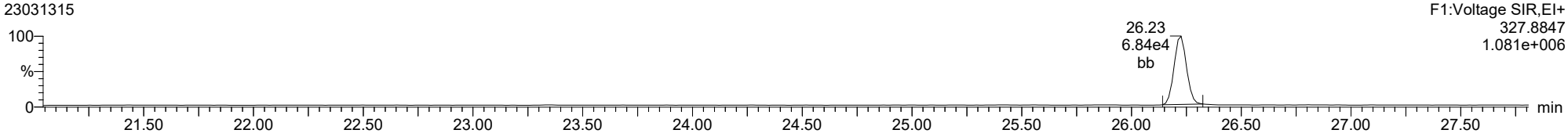

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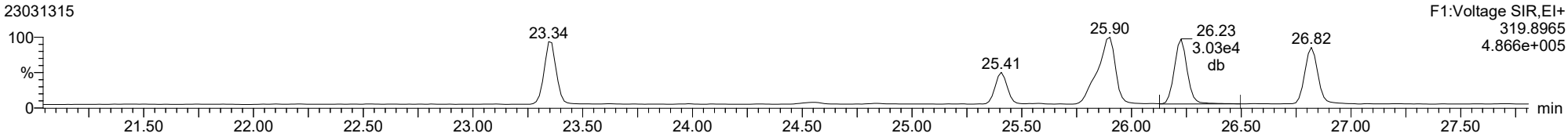

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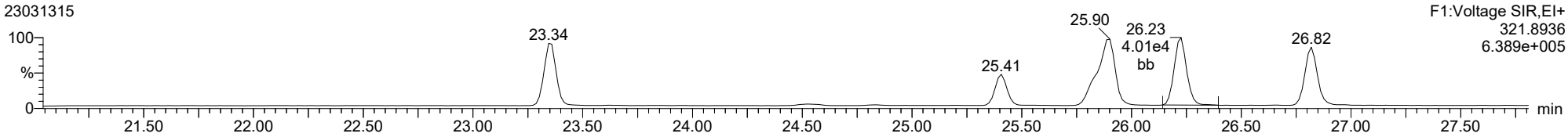

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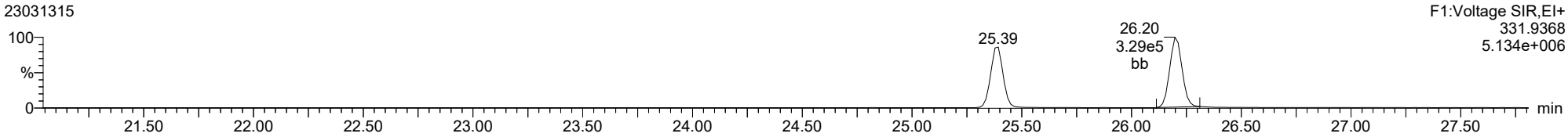

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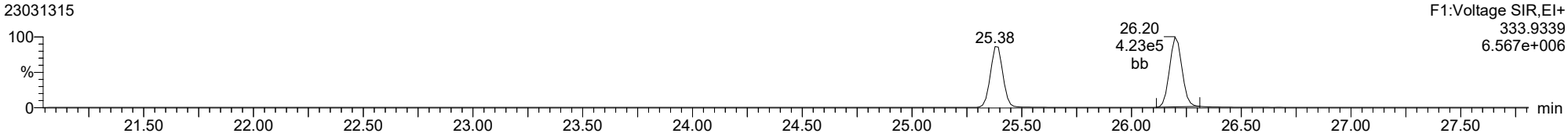

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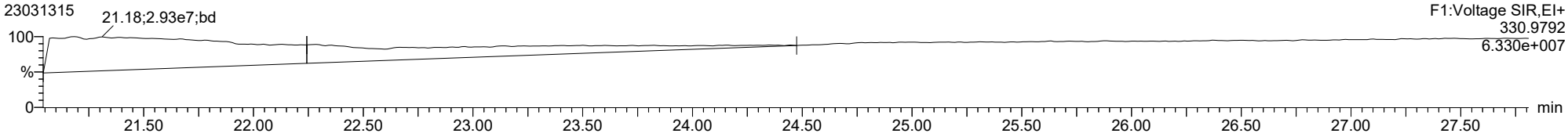

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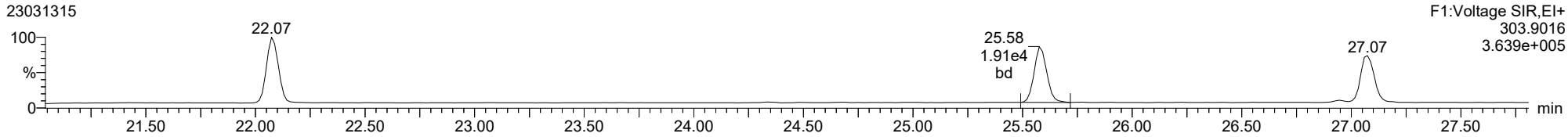

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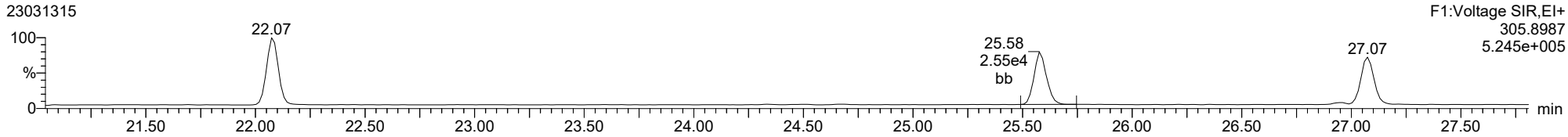

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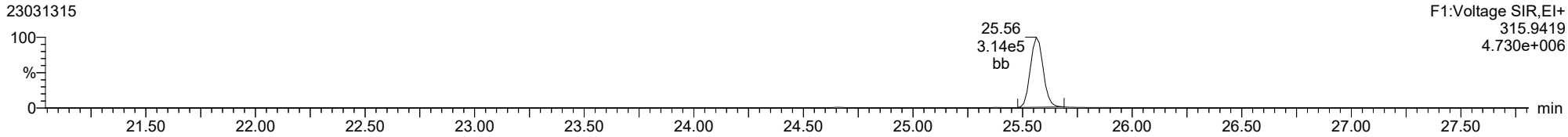

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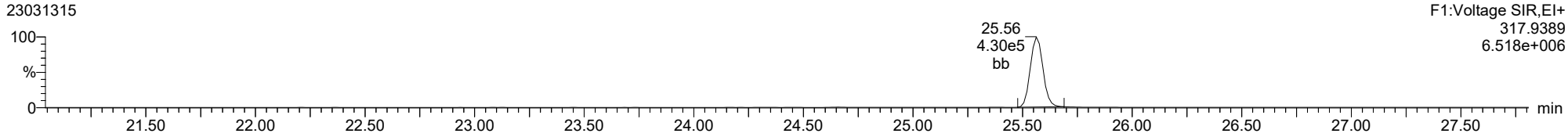

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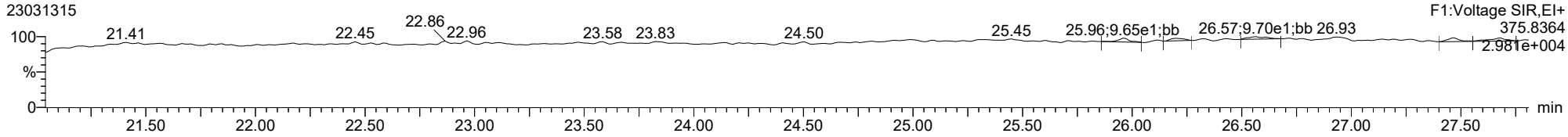

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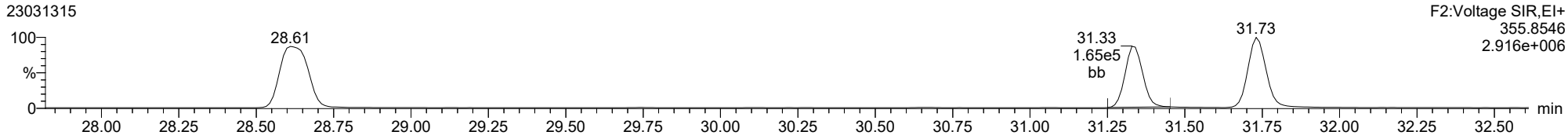

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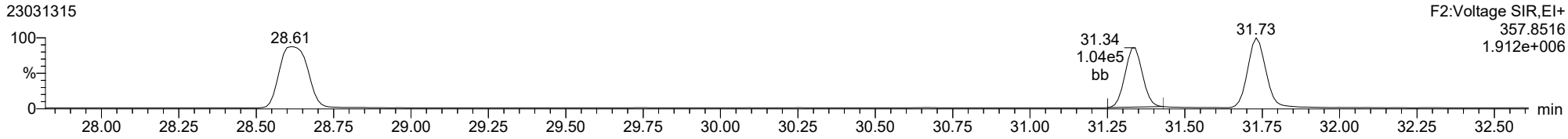

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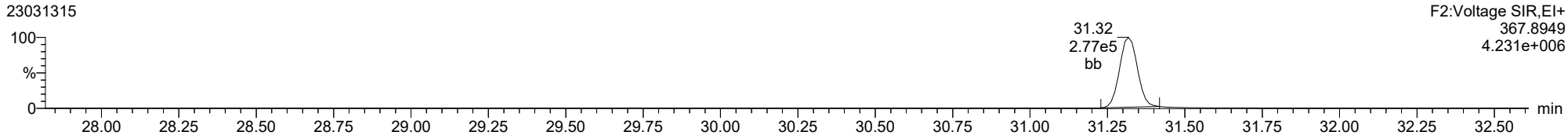

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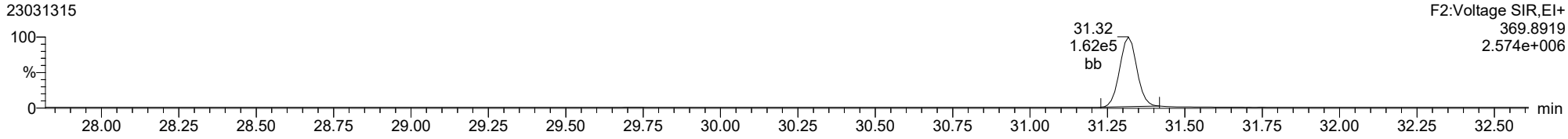

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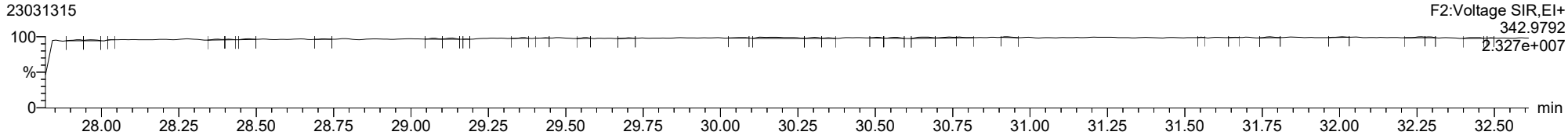

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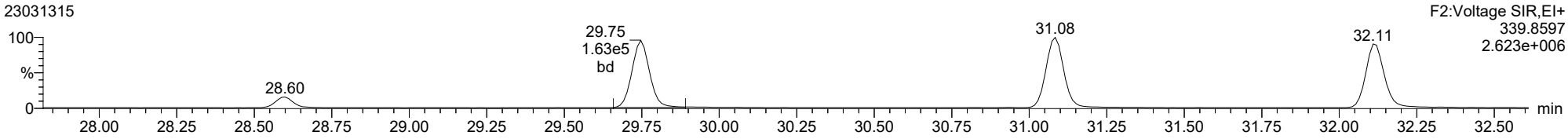

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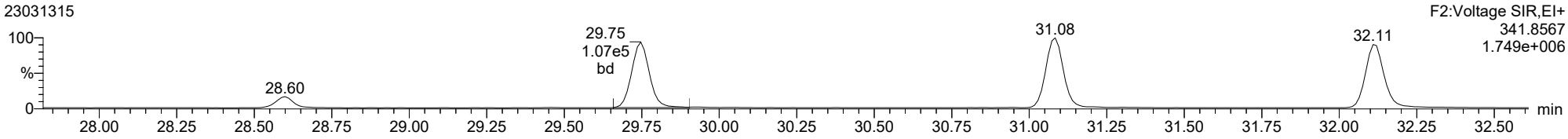

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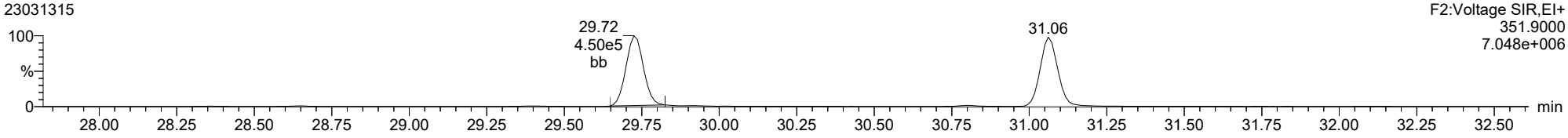

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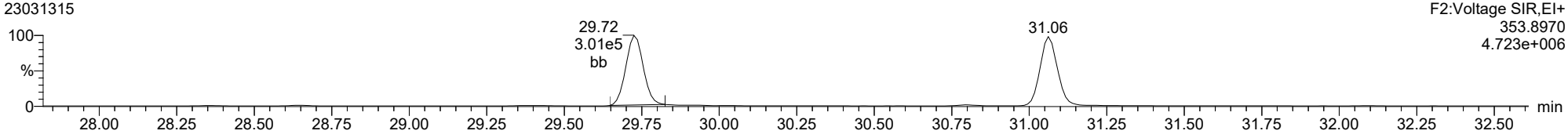

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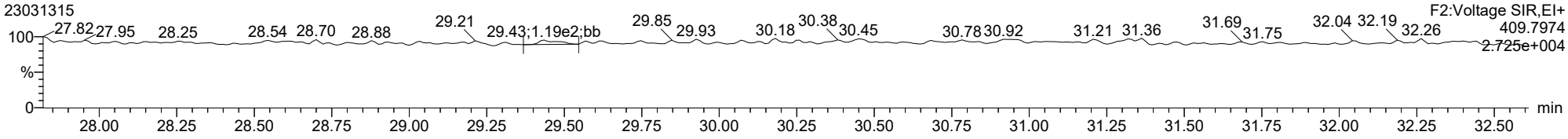

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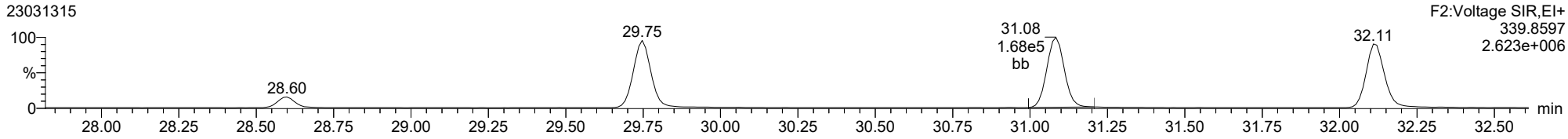
23478-PeCDF



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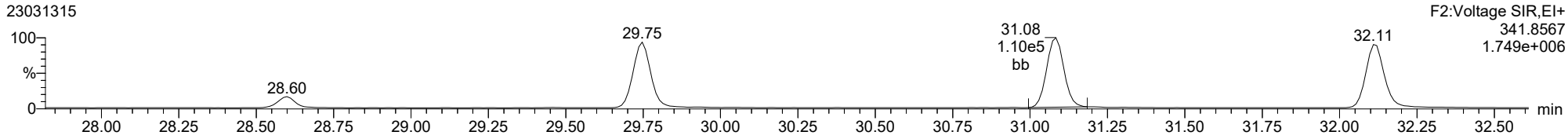

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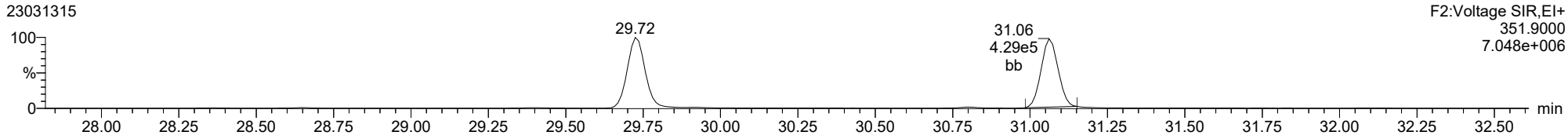

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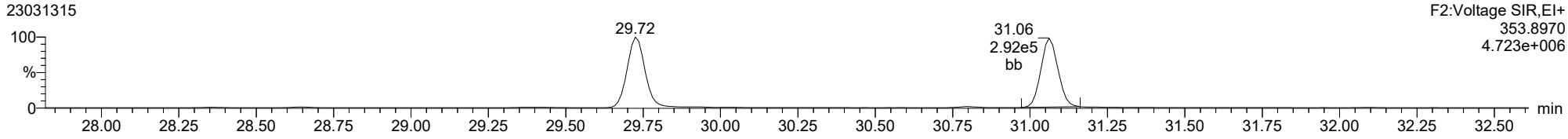
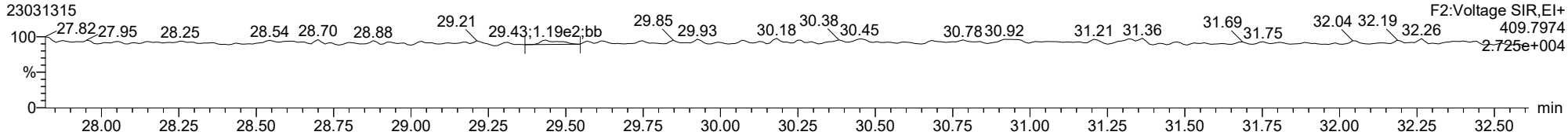


FUNCTION2 HPCDPE



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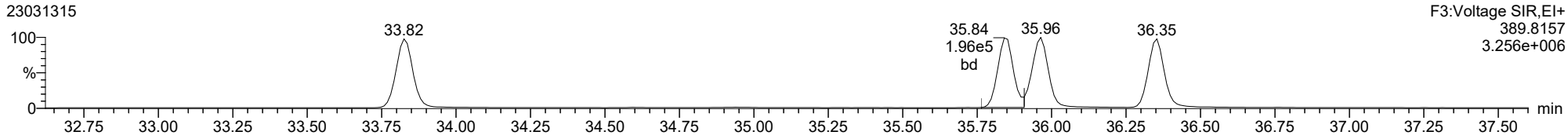

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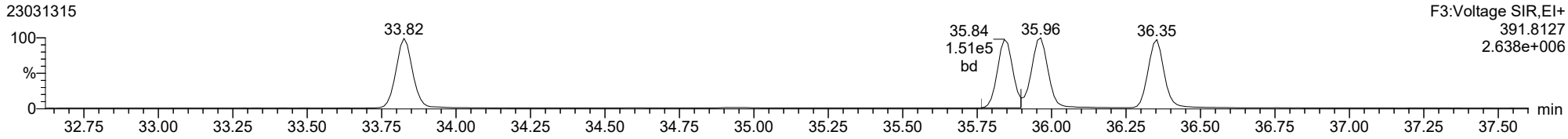

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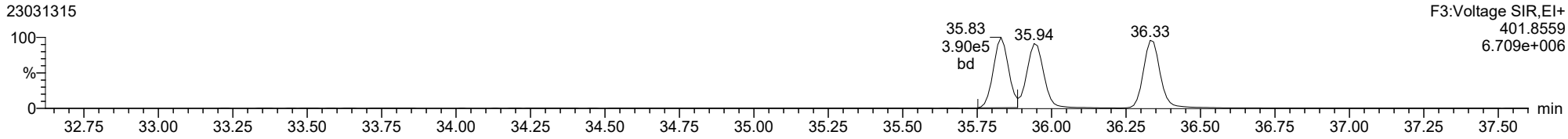

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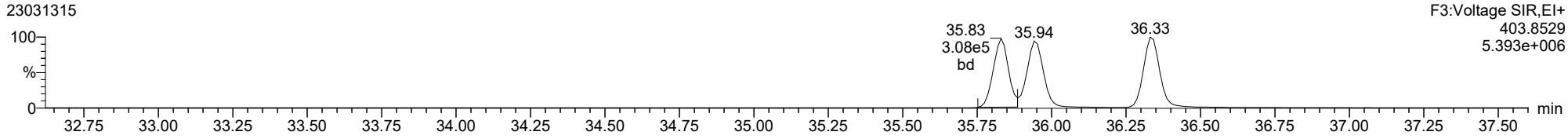

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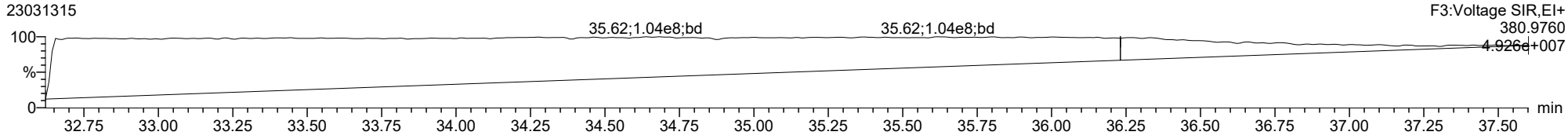

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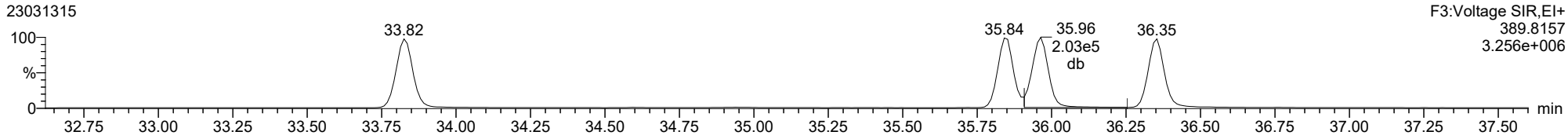

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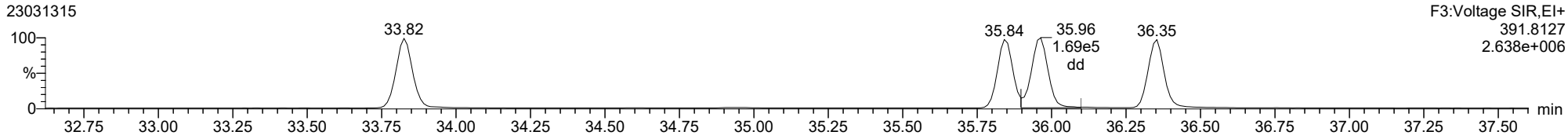

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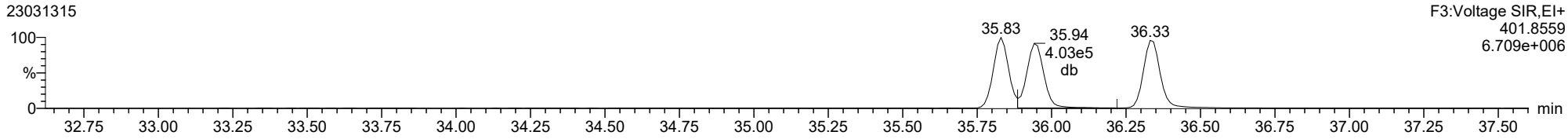

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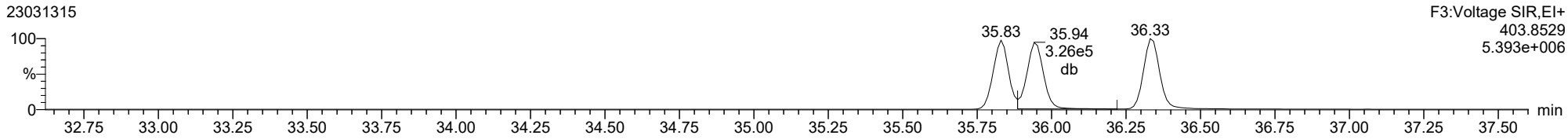

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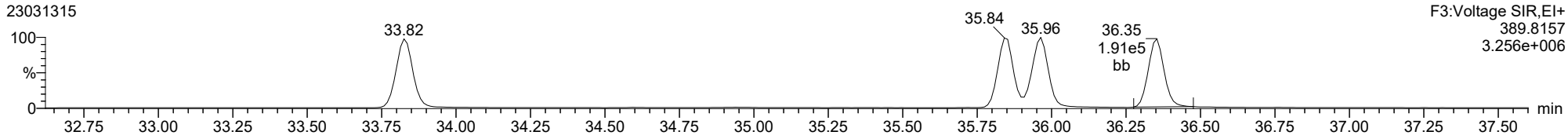

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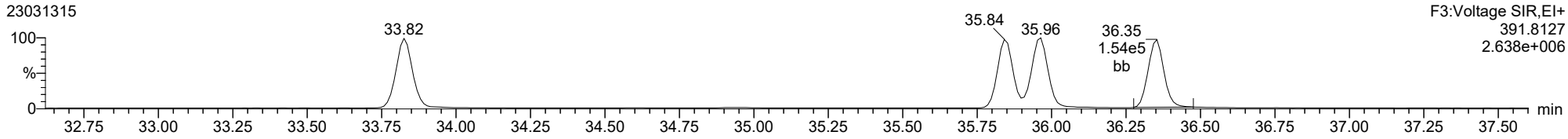

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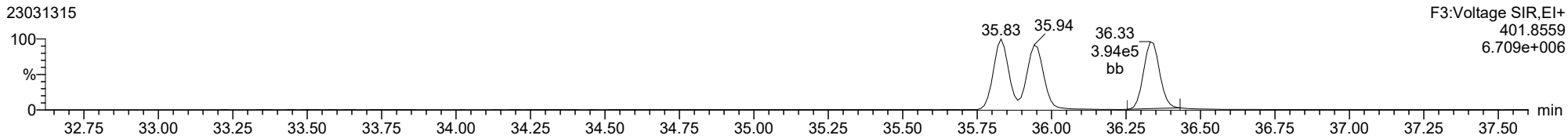

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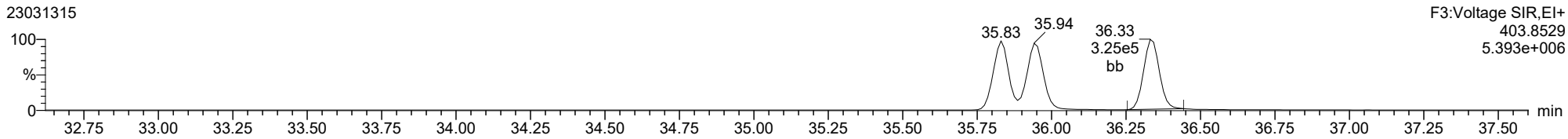

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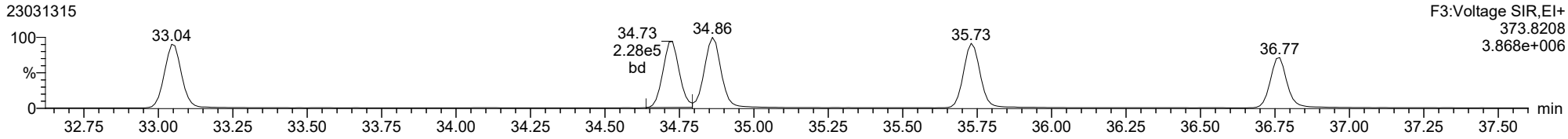

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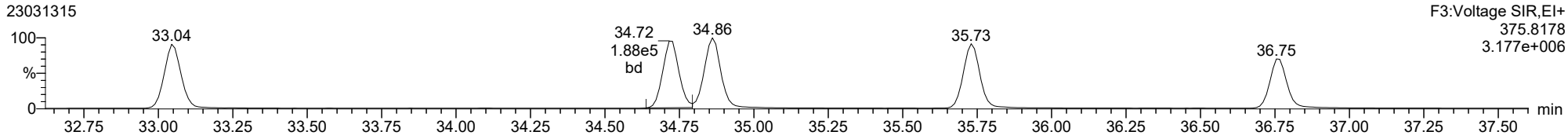

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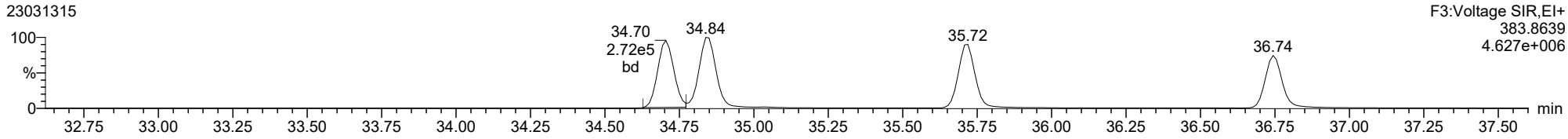

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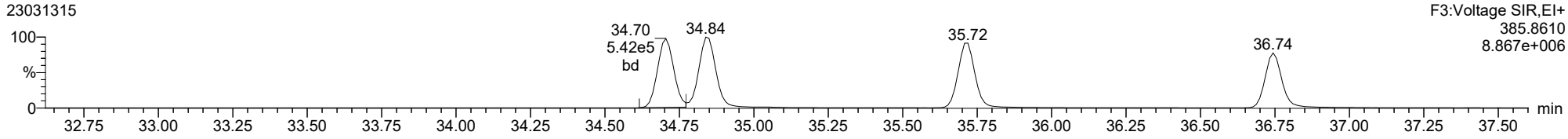

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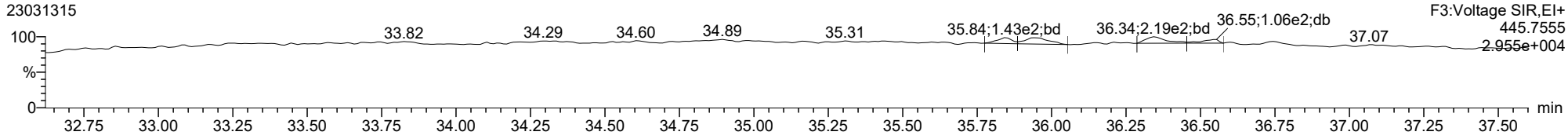

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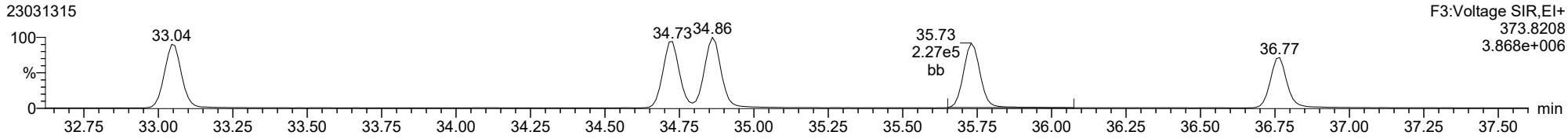

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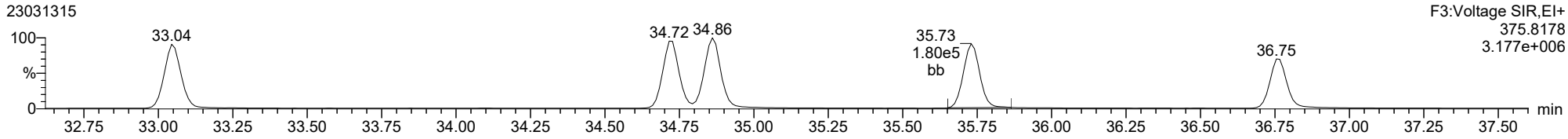

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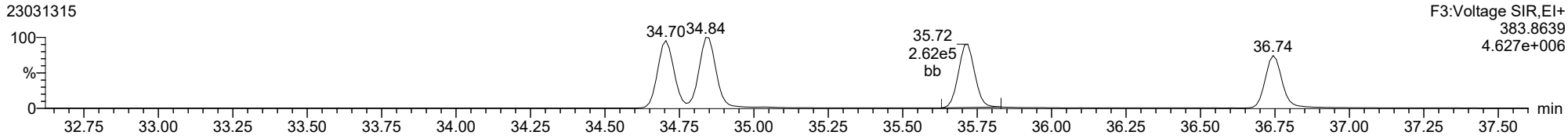

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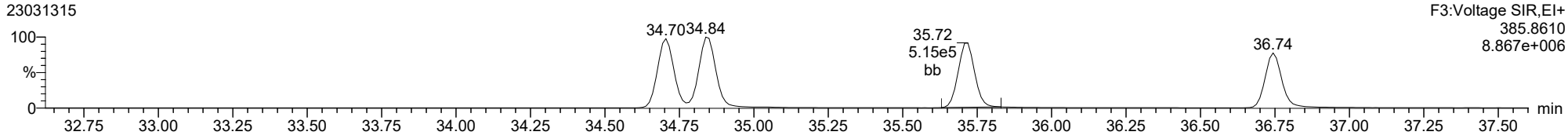

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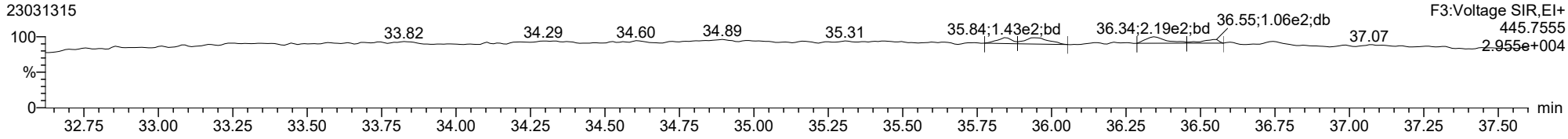

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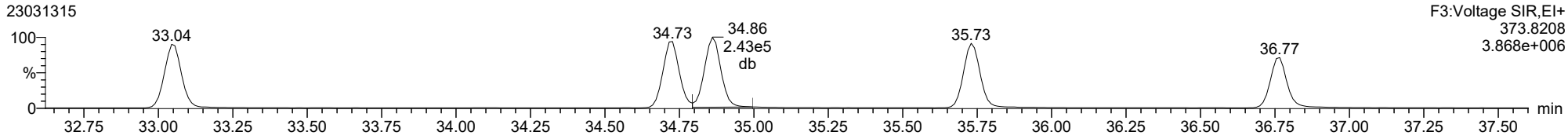

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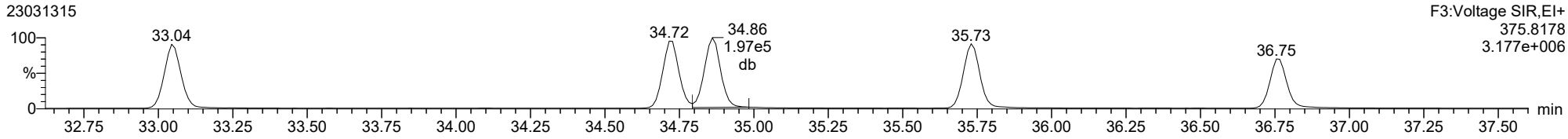

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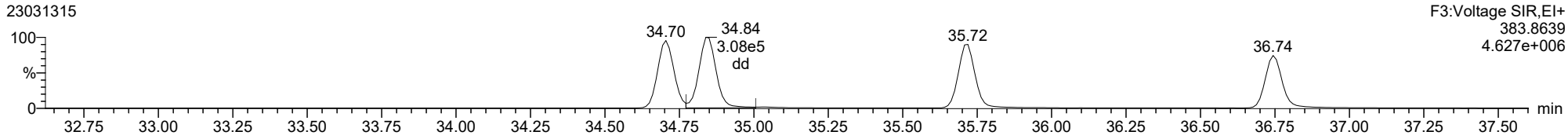

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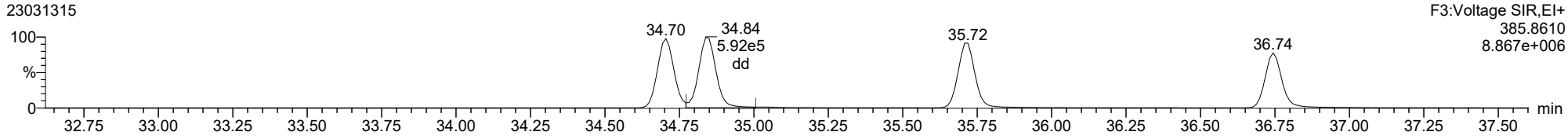

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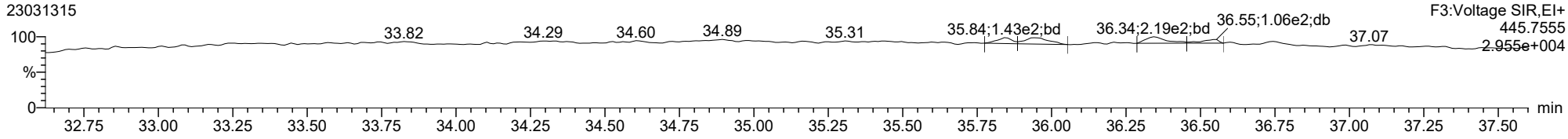

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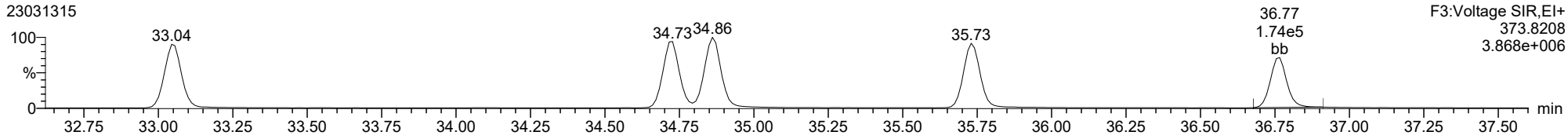

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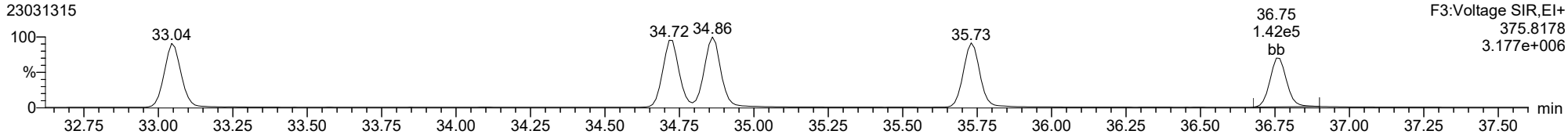

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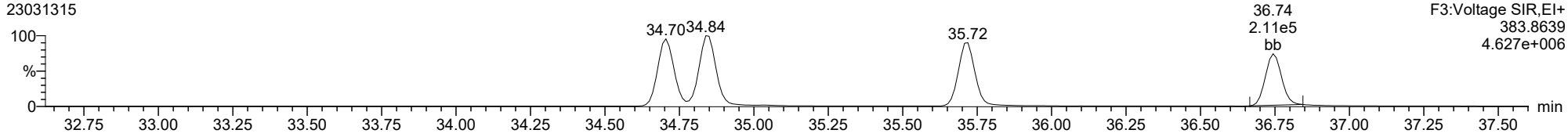

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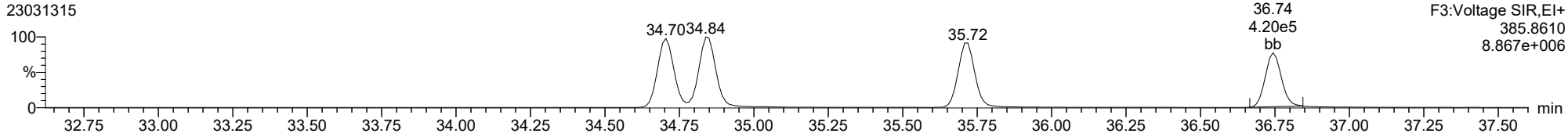
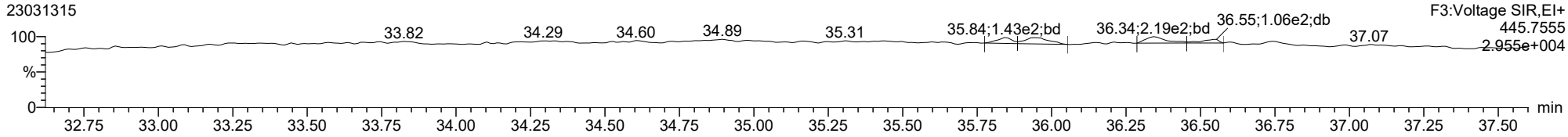


FUNCTION3 OCDPE



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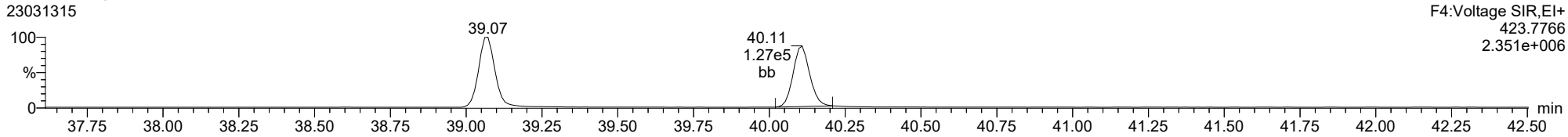
1234678-HpCDD



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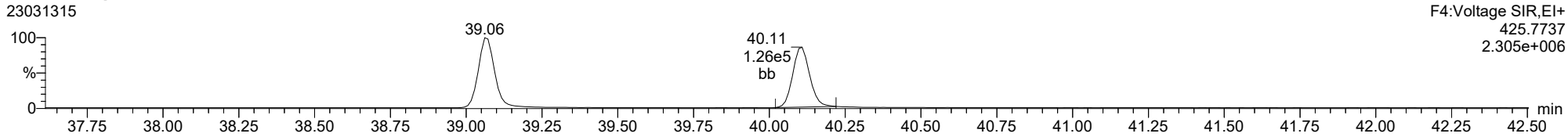

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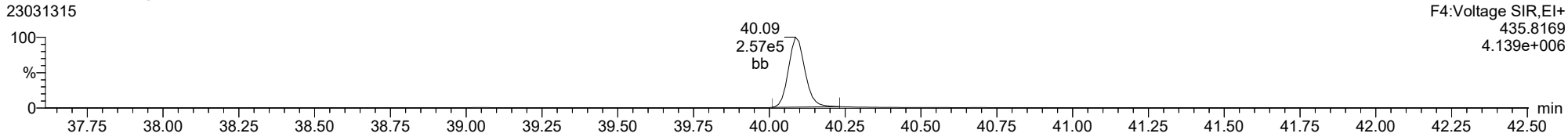

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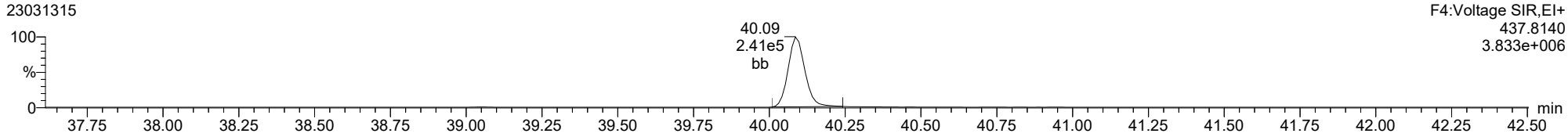

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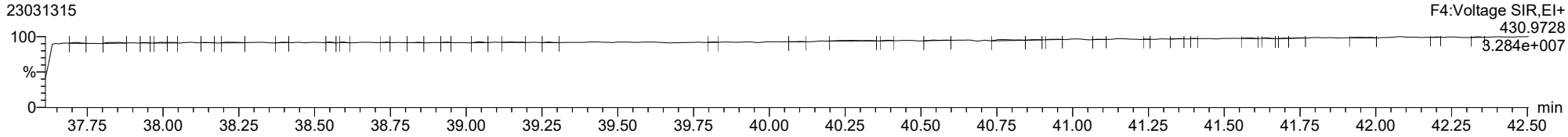

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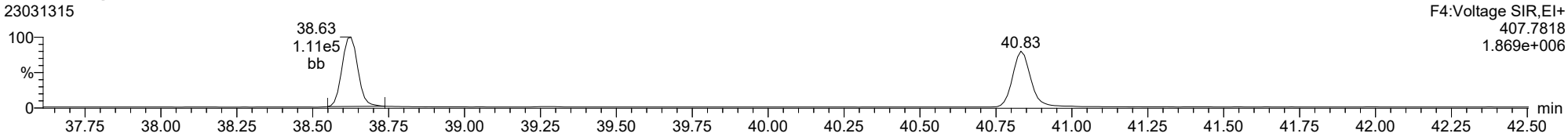

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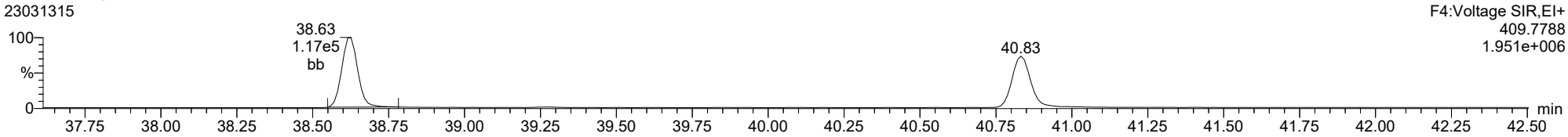

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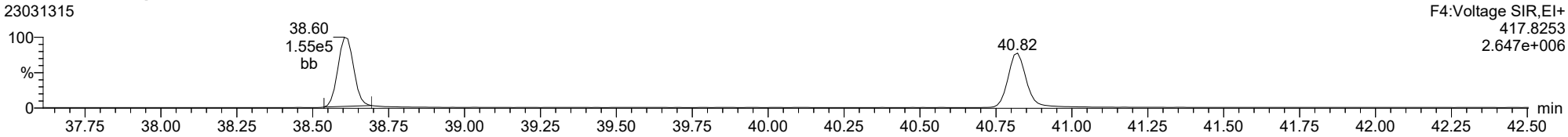

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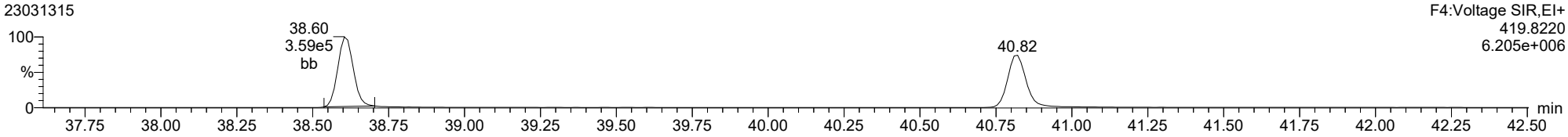

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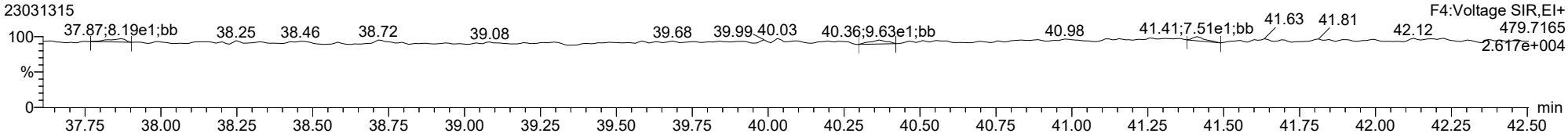

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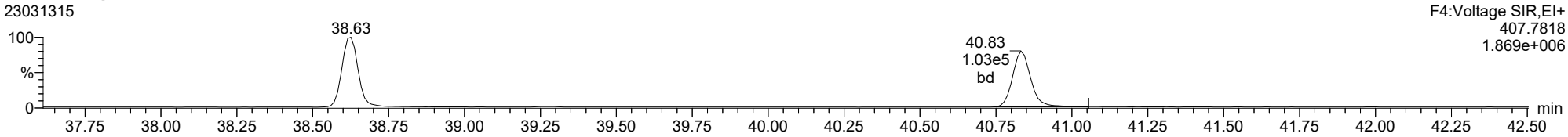

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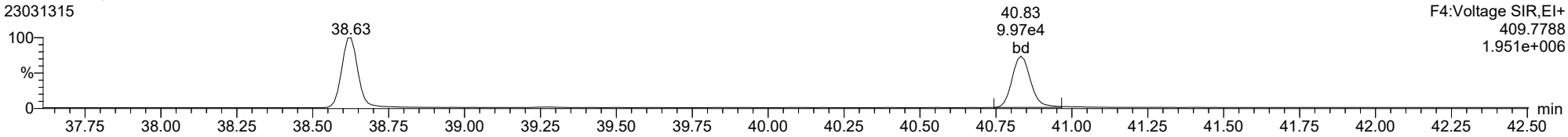

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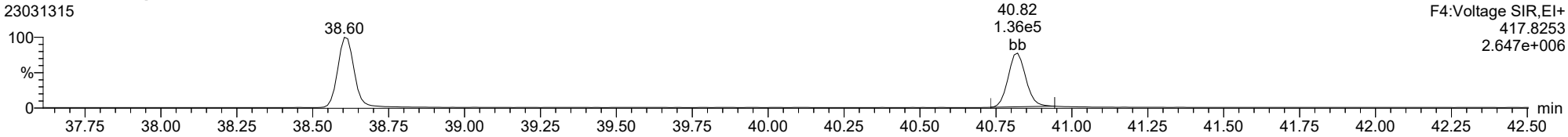

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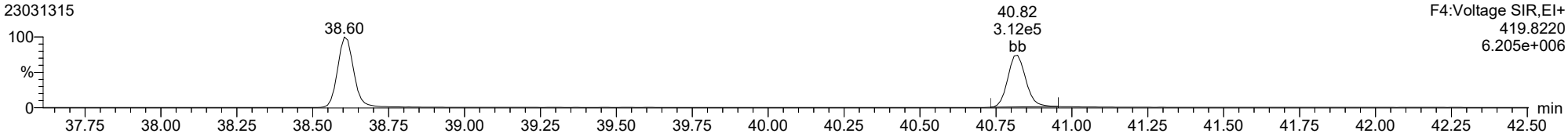
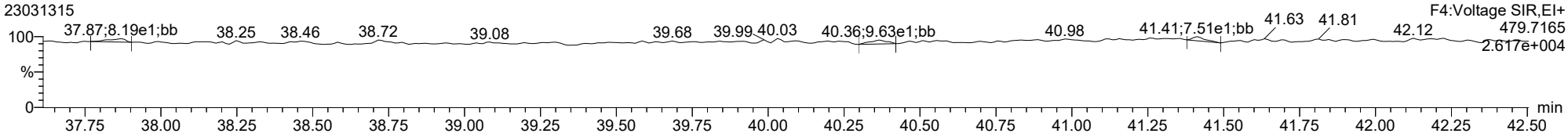


FUNCTION4 NCDPE



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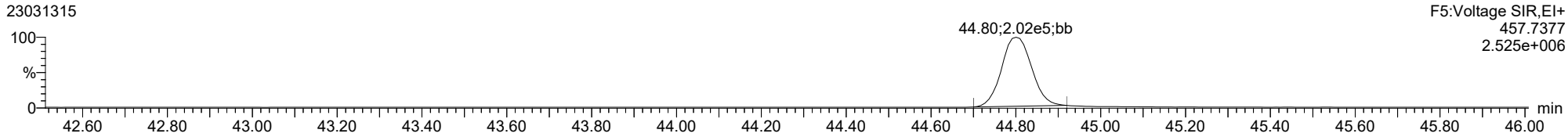

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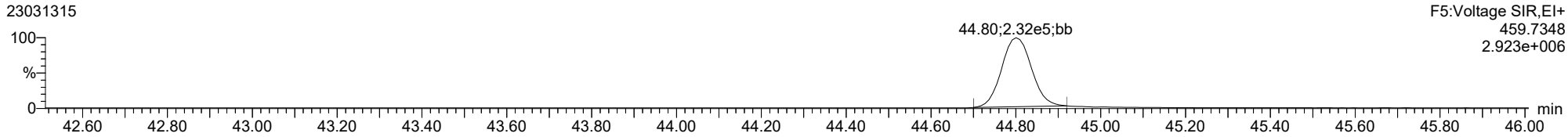
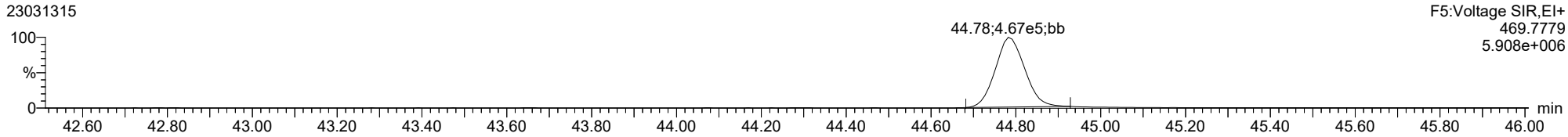


13C-OCDD



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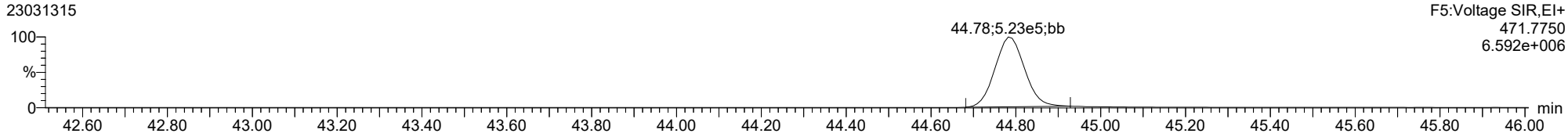
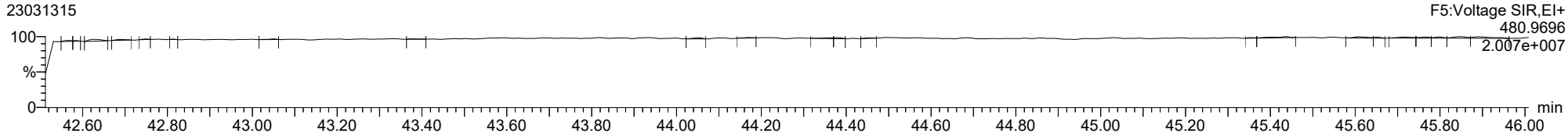


FUNCTION5 PFK



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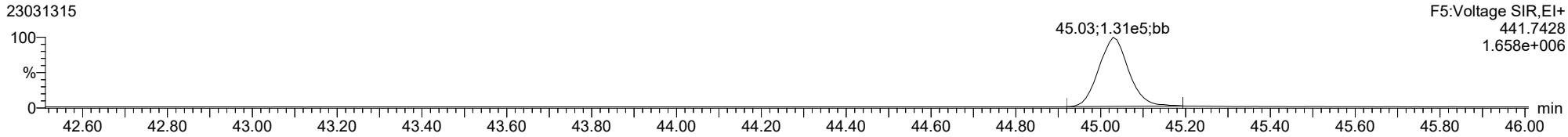

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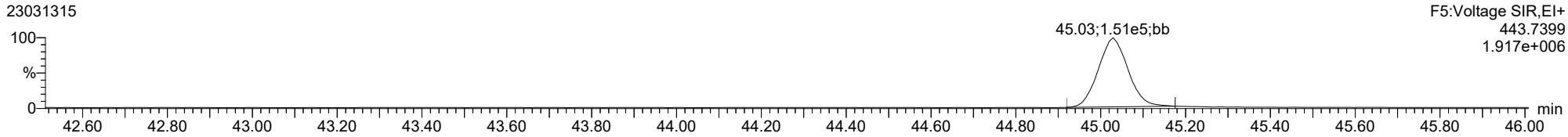
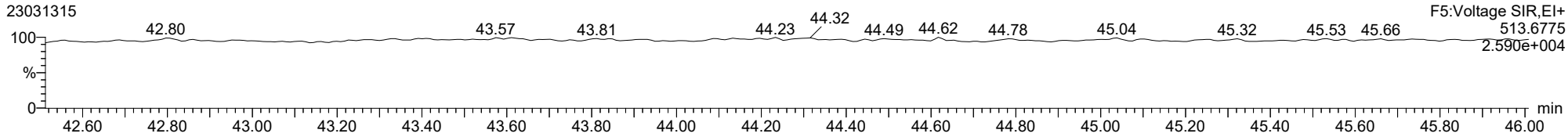


FUNCTION5 DCDPE



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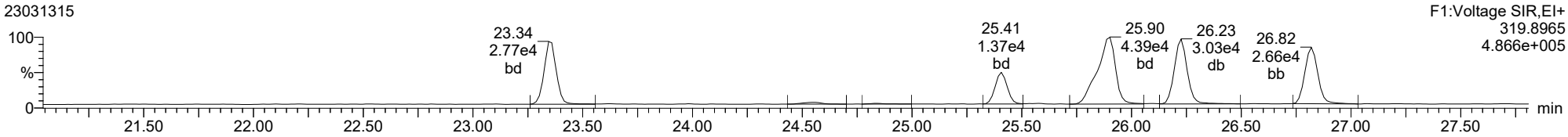

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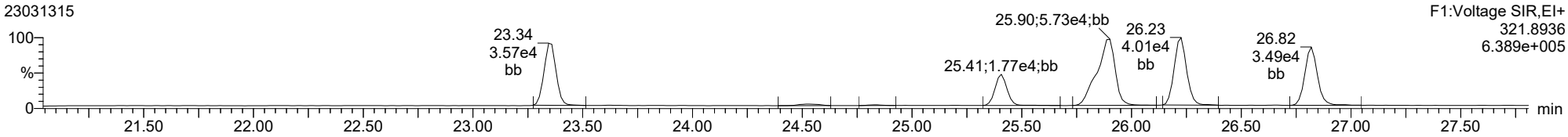

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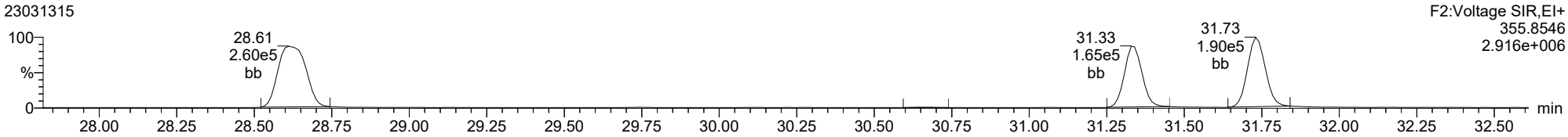

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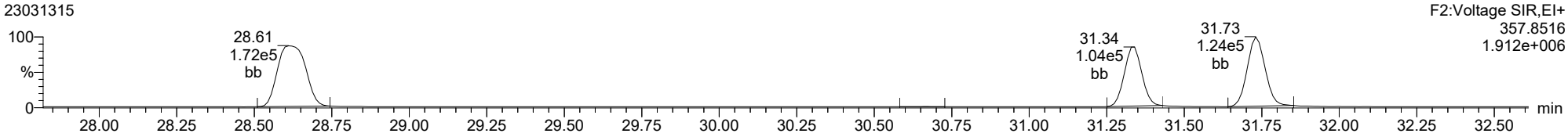

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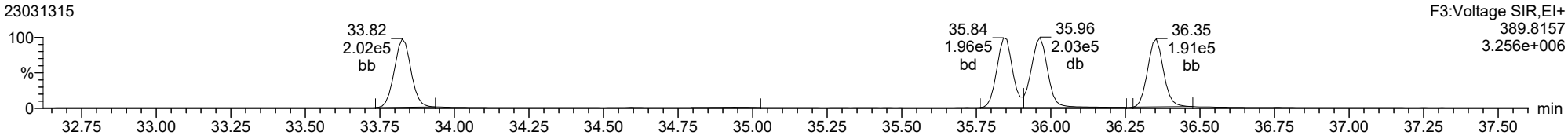
Total-hexadioxins



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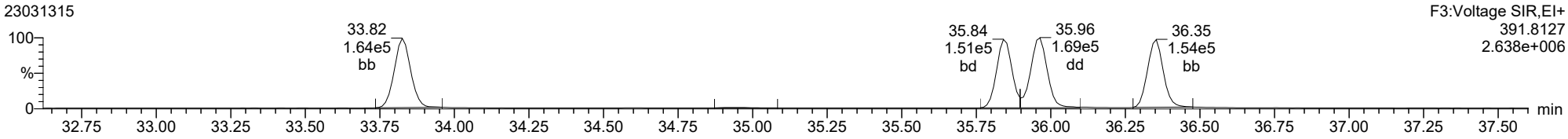

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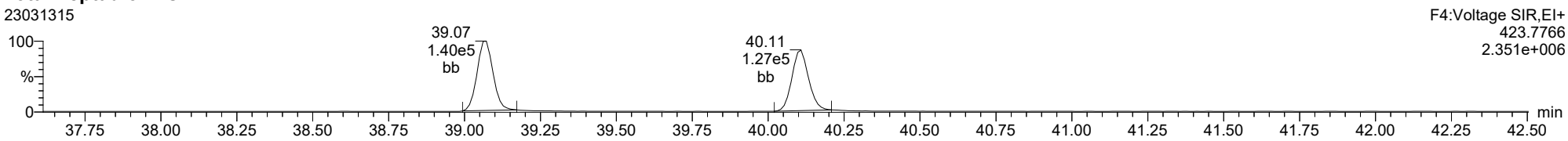

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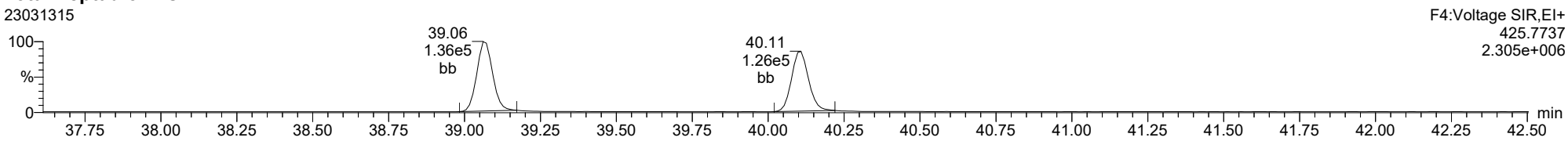

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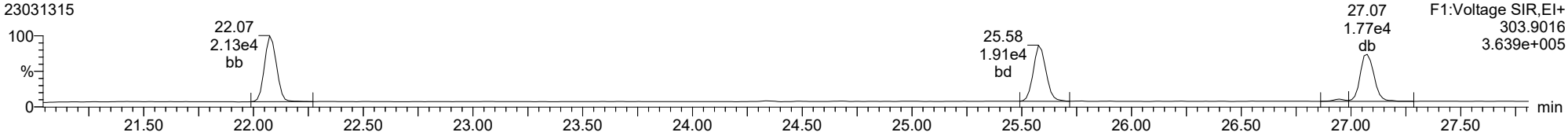

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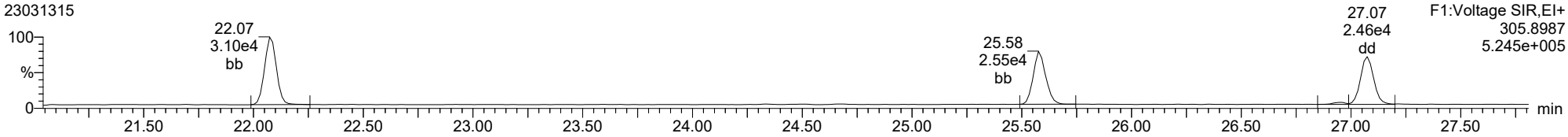

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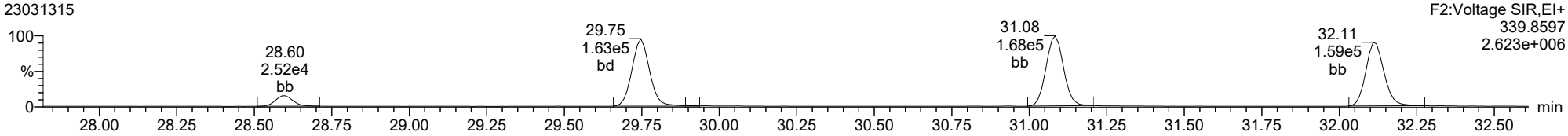

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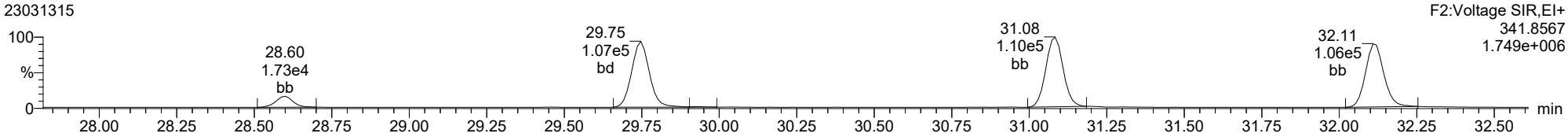

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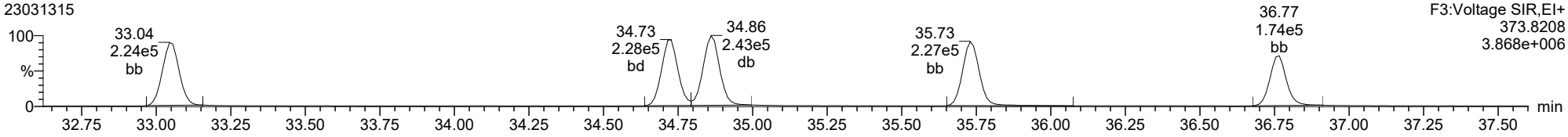

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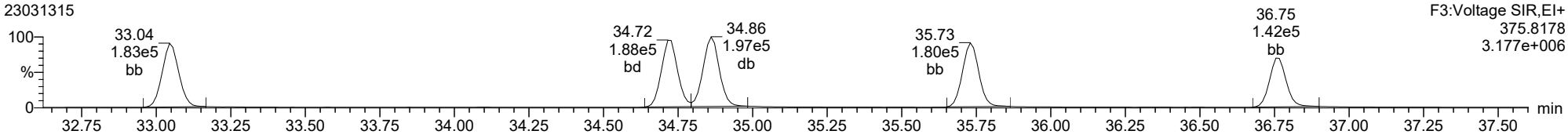

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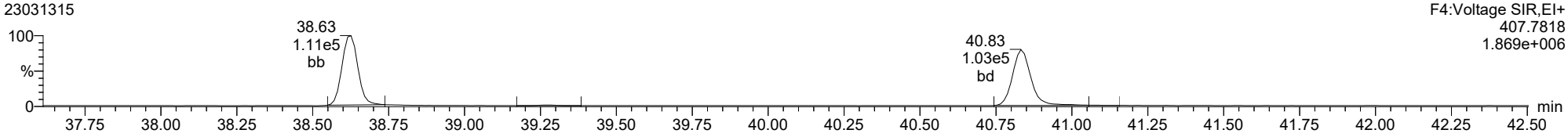

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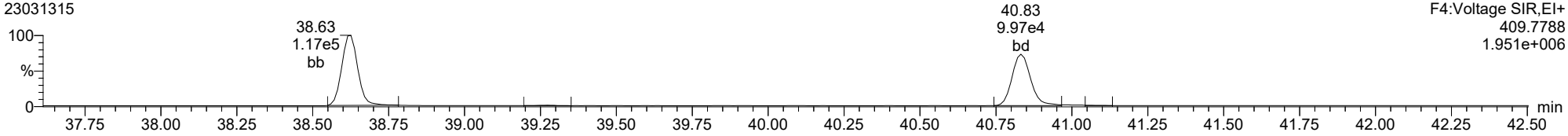

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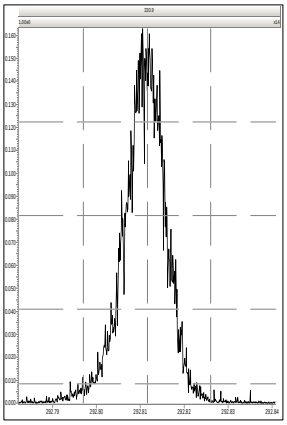

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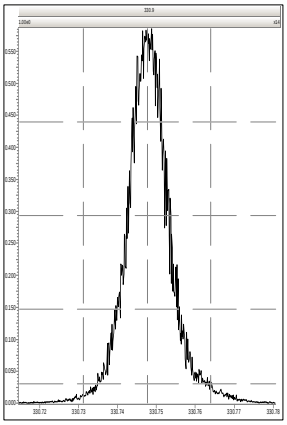
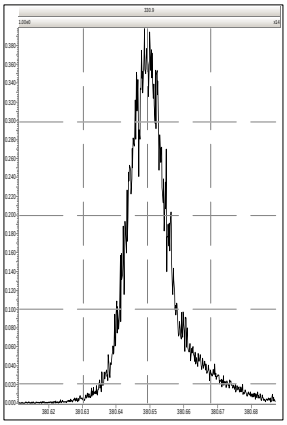


M 380.9760 R 10309



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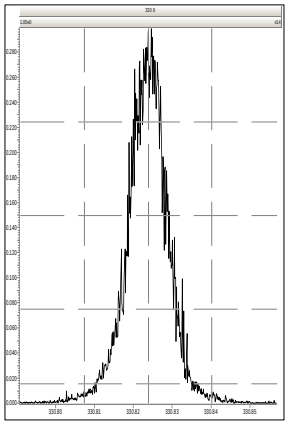

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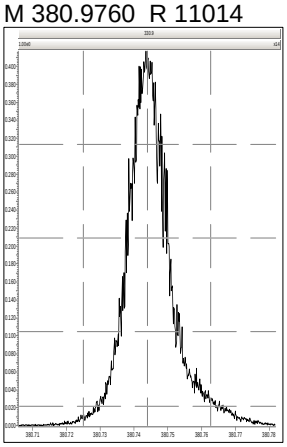

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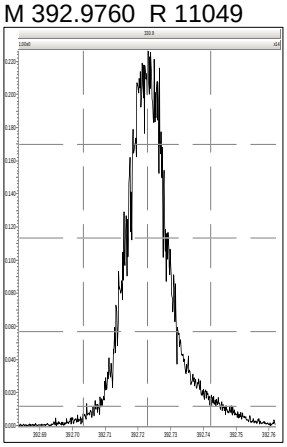

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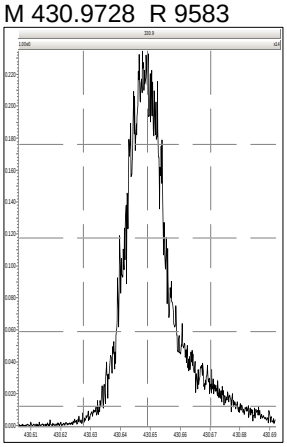

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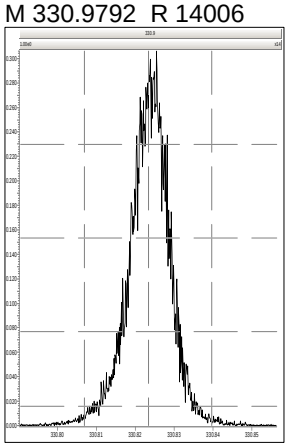

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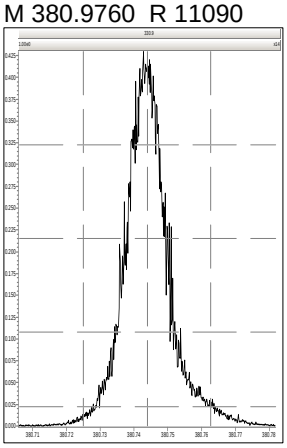

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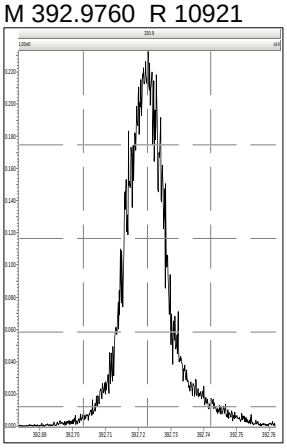

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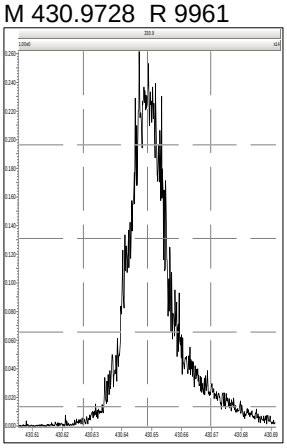

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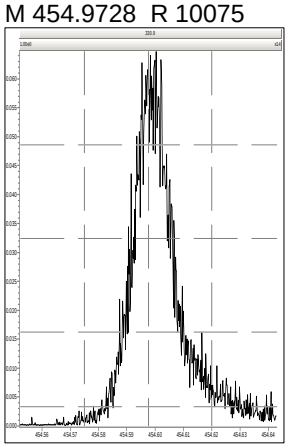

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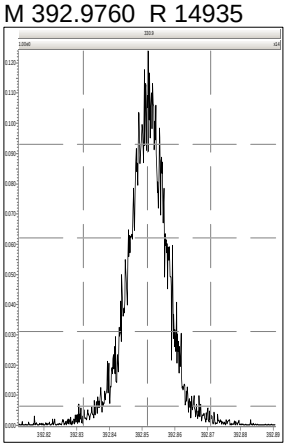

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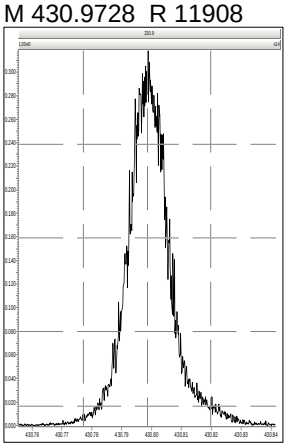
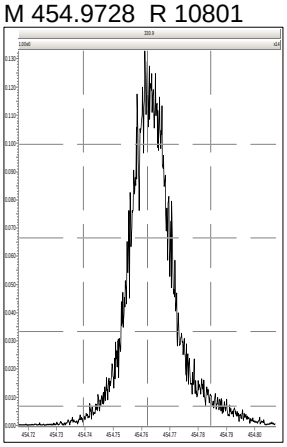


M 454.9728 R 10801



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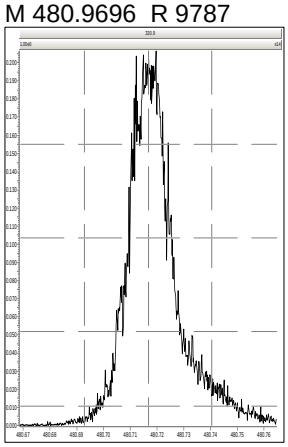

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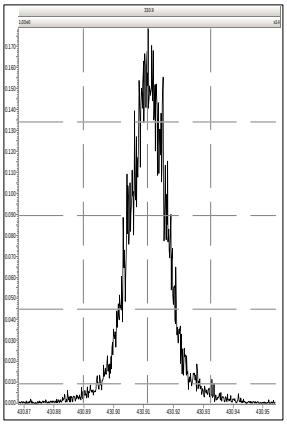

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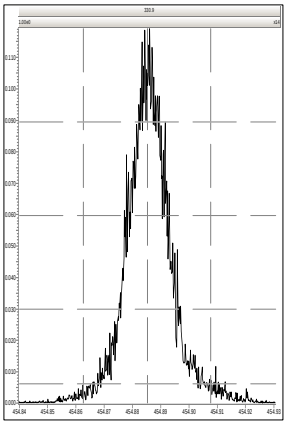

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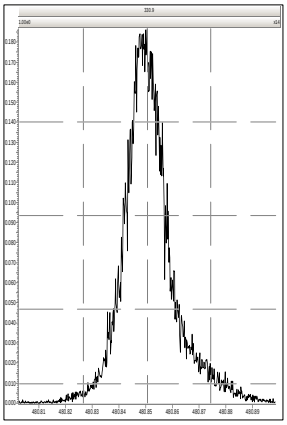

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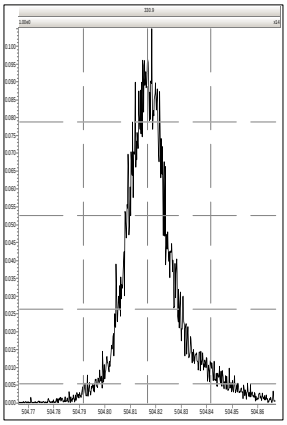
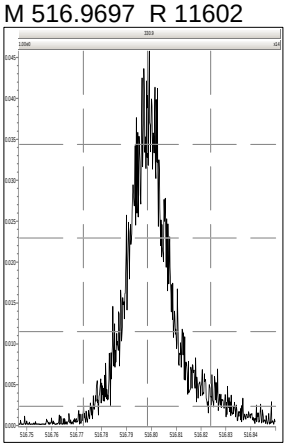
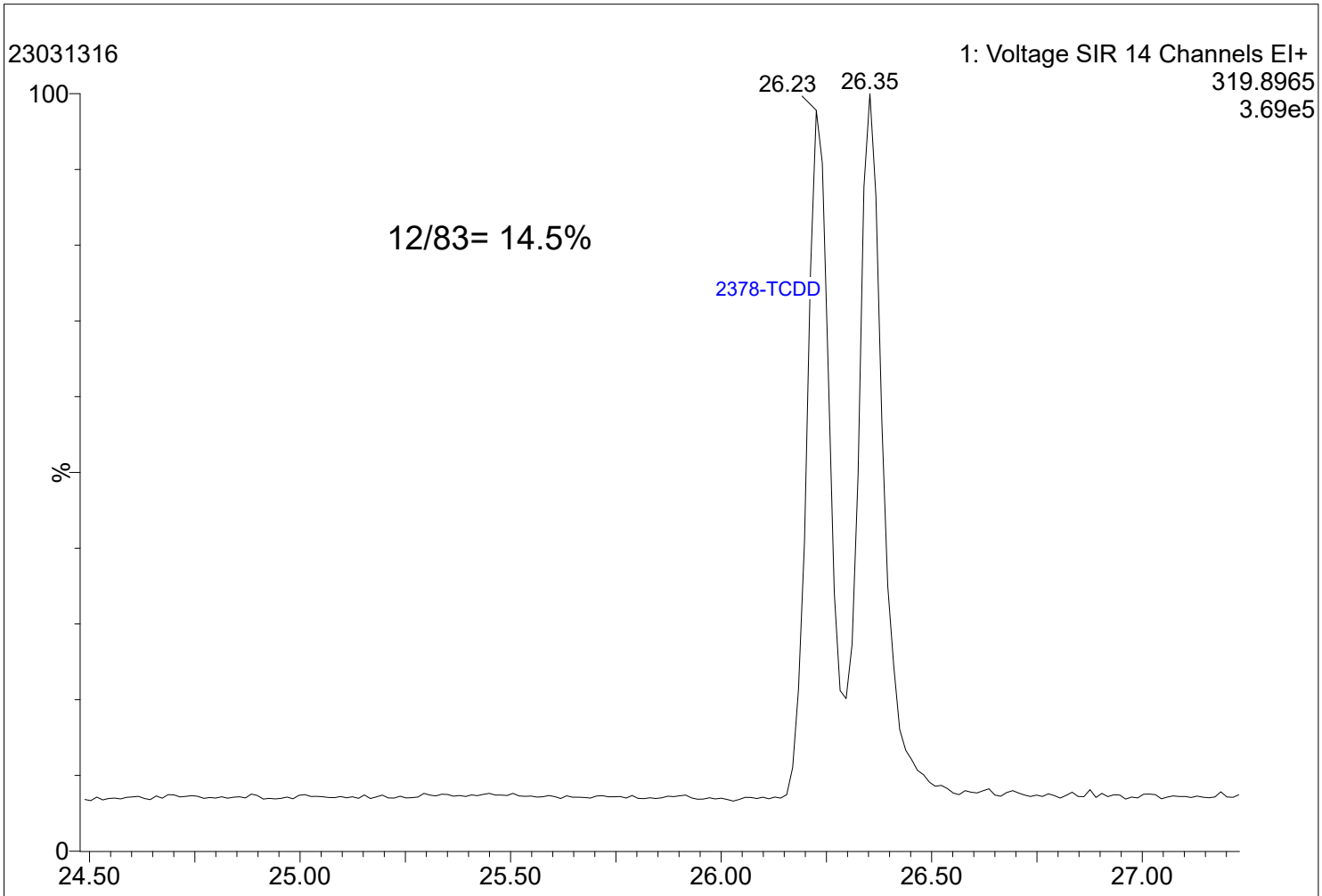


M 516.9697 R 11602

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%
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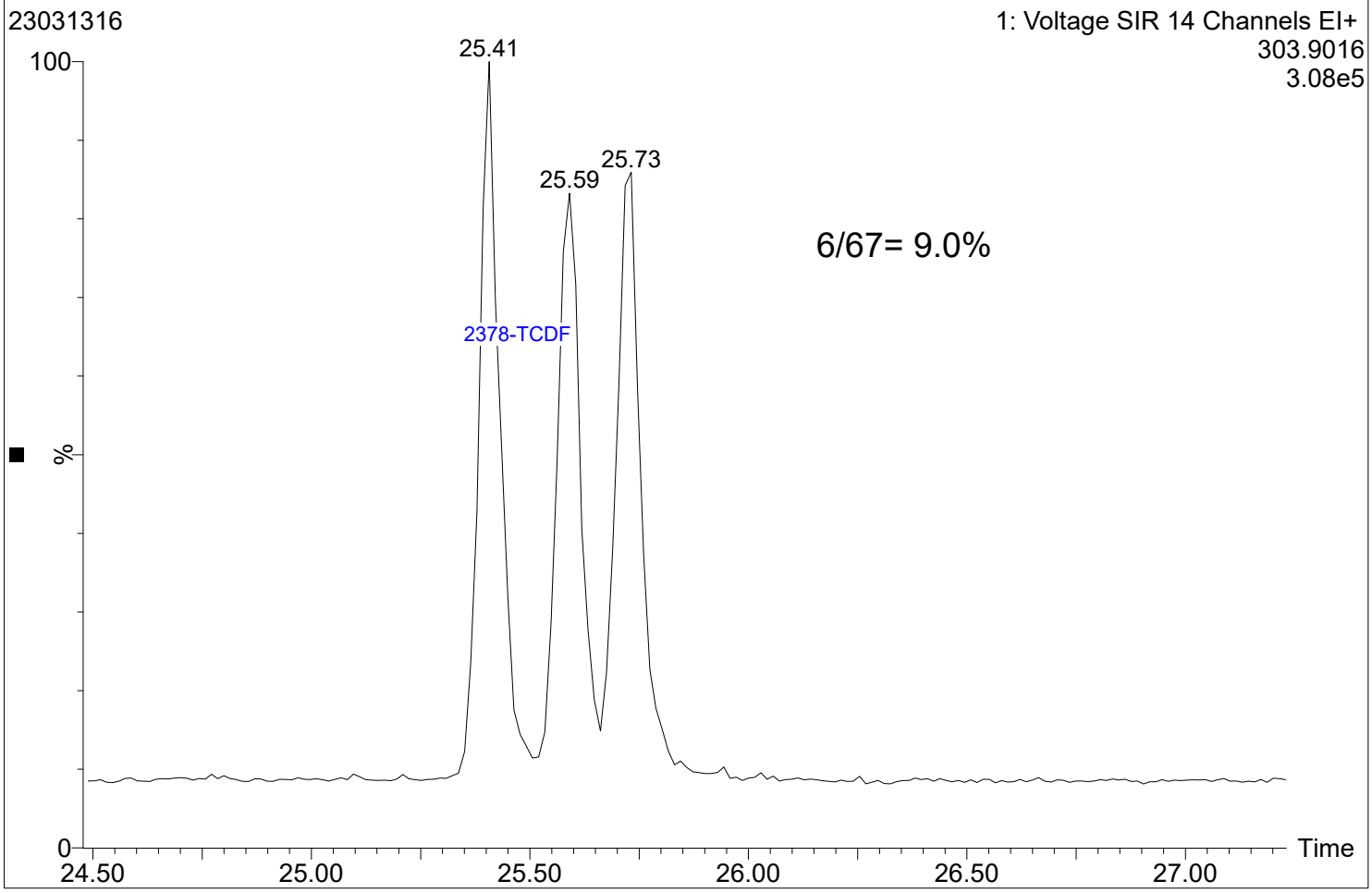
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%
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25.00
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27.00

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
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Sequence:	SLC0171	Injection Date:	03/14/23
Lab Sample ID:	SLC0171-CCV2	Injection Time:	04:32
Sequence Name:	CS3Z3		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
2,3,7,8-TCDF	A	10.000	8.40	0.7015272	0.5890817		-16.0	+/-16	
2,3,7,8-TCDD	A	10.000	8.48	1.1486620	0.9742742		-15.2	+/-22	
1,2,3,7,8-PeCDF	A	50.000	51.2	0.6792300	0.6957723		2.4	+/-18	
2,3,4,7,8-PeCDF	A	50.000	49.0	0.7861704	0.7697652		-2.1	+/-18	
1,2,3,7,8-PeCDD	A	50.000	59.9	1.0218450	1.2231540		19.7	+/-22	
1,2,3,4,7,8-HxCDF	A	50.000	43.0	1.1660380	1.0035360		-13.9	+/-10	*
1,2,3,6,7,8-HxCDF	A	50.000	44.3	1.0907410	0.9661884		-11.4	+/-12	
2,3,4,6,7,8-HxCDF	A	50.000	44.6	1.1396990	1.0162690		-10.8	+/-12	
1,2,3,7,8,9-HxCDF	A	50.000	43.9	1.1370930	0.9976068		-12.3	+/-10	*
1,2,3,4,7,8-HxCDD	A	50.000	52.0	0.9955689	1.0357970		4.0	+/-22	
1,2,3,6,7,8-HxCDD	A	50.000	48.3	1.0009380	0.9677817		-3.3	+/-22	
1,2,3,7,8,9-HxCDD	A	50.000	56.0	0.9071139	1.0152910		11.9	+/-18	
1,2,3,4,6,7,8-HpCDF	A	50.000	44.2	1.0029930	0.8868148		-11.6	+/-10	*
1,2,3,4,7,8,9-HpCDF	A	50.000	48.9	0.9531152	0.9314757		-2.3	+/-14	
1,2,3,4,6,7,8-HpCDD	A	50.000	49.6	1.0390130	1.0301190		-0.9	+/-14	
OCDF	A	100.00	71.2	0.7778078	0.5534402		-28.8	+/-37	
OCDD	A	100.00	96.2	0.9199537	0.8846520		-3.8	+/-21	
13C12-2,3,7,8-TCDF	A	100.00	70.9	1.6201960	1.1479927		-29.1	+/-29	*
13C12-2,3,7,8-TCDD	A	100.00	99.8	1.1524090	1.1499525		-0.2	+/-18	
13C12-1,2,3,7,8-PeCDF	A	100.00	88.3	1.2404520	1.0948003		-11.7	+/-24	
13C12-2,3,4,7,8-PeCDF	A	100.00	93.2	1.1177860	1.0416135		-6.8	+/-23	
13C12-1,2,3,7,8-PeCDD	A	100.00	76.7	0.8288129	0.6359217		-23.3	+/-38	
13C12-1,2,3,4,7,8-HxCDF	A	100.00	96.0	1.1683050	1.1219209		-4.0	+/-24	
13C12-1,2,3,6,7,8-HxCDF	A	100.00	86.0	1.3864660	1.1926834		-14.0	+/-30	
13C12-2,3,4,6,7,8-HxCDF	A	100.00	93.6	1.1292560	1.0575048		-6.4	+/-27	
13C12-1,2,3,7,8,9-HxCDF	A	100.00	98.3	0.9317541	0.9155520		-1.7	+/-26	
13C12-1,2,3,4,7,8-HxCDD	A	100.00	93.1	0.9950393	0.9266999		-6.9	+/-15	
13C12-1,2,3,6,7,8-HxCDD	A	100.00	87.2	1.1566890	1.0090645		-12.8	+/-15	
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	87.0	0.8952017	0.7785878		-13.0	+/-22	
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	92.1	0.7697516	0.7091954		-7.9	+/-23	
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	94.6	0.8401226	0.7950925		-5.4	+/-28	
13C12-OCDD	A	200.00	178	0.7674714	0.6834859		-10.9	+/-52	
37Cl4-2,3,7,8-TCDD	A	10.000	8.43	1.2878040	1.0859719		-15.7		

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230313D1CL.qld
Last Altered: Tuesday, March 14, 2023 10:35:58 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:03:44 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230313.mdb 14 Mar 2023 10:34:25
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3Z3, Name: 23031323, Date: 14-Mar-2023, Time: 04:32:57, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.577	1.001	2.018e4	2.913e4	0.702	0.693	0.770	562	887	2.92e5	4.23e5	520.0	477.4	NO	bb	bb	8.397
12378-PeCDF	29.736	1.001	1.662e5	1.114e5	0.679	1.492	1.550	1640	1406	2.53e6	1.71e6	1540.5	1213.9	NO	bb	bb	51.218
23478-PeCDF	31.073	1.001	1.764e5	1.158e5	0.786	1.523	1.550	1640	1406	2.76e6	1.79e6	1684.0	1273.1	NO	bb	bb	48.957
123478-HxCDF	34.716	1.001	2.140e5	1.742e5	1.166	1.228	1.240	1184	1096	3.26e6	2.68e6	2753.5	2444.4	NO	bd	bd	43.032
234678-HxCDF	35.719	1.000	2.046e5	1.660e5	1.140	1.233	1.240	1184	1096	3.29e6	2.68e6	2776.6	2442.1	NO	bb	bb	44.585
123678-HxCDF	34.850	1.001	2.181e5	1.793e5	1.091	1.216	1.240	1184	1096	3.37e6	2.75e6	2850.2	2509.0	NO	db	db	44.290
123789-HxCDF	36.755	1.001	1.704e5	1.445e5	1.137	1.179	1.240	1184	1096	2.53e6	2.12e6	2135.5	1934.4	NO	bb	bd	43.867
1234678-HpCDF	38.616	1.001	1.169e5	1.211e5	1.003	0.965	1.050	986	1201	1.90e6	1.95e6	1922.6	1623.5	NO	bb	bb	44.208
1234789-HpCDF	40.822	1.000	1.127e5	1.151e5	0.953	0.979	1.050	986	1201	1.59e6	1.62e6	1609.0	1351.3	NO	bd	bd	48.865
OCDF	45.021	1.006	1.190e5	1.419e5	0.778	0.838	0.890	1153	1227	1.46e6	1.72e6	1262.2	1402.6	NO	bb	bb	71.154
2378-TCDD	26.212	1.001	3.544e4	4.625e4	1.149	0.766	0.770	874	655	5.45e5	7.06e5	622.9	1077.5	NO	bd	bb	8.482
12378-PeCDD	31.318	1.000	1.737e5	1.098e5	1.022	1.582	1.550	1025	890	2.70e6	1.68e6	2632.9	1891.5	NO	bb	bb	59.850
123478-HxCDD	35.830	1.000	1.827e5	1.482e5	0.996	1.233	1.240	1291	1514	2.96e6	2.42e6	2294.3	1598.9	NO	bd	bd	52.020
123678-HxCDD	35.953	1.001	1.863e5	1.504e5	1.001	1.239	1.240	1291	1514	2.91e6	2.35e6	2251.8	1552.6	NO	db	db	48.344
123789-HxCDD	36.343	1.011	1.851e5	1.537e5	0.907	1.205	1.240	1291	1514	2.96e6	2.45e6	2290.5	1615.4	NO	bb	bb	55.963
1234678-HpCDD	40.097	1.001	1.396e5	1.428e5	1.039	0.978	1.050	1190	863	2.19e6	2.11e6	1839.3	2447.1	NO	bb	bd	49.572
OCDD	44.792	1.000	1.904e5	2.265e5	0.920	0.841	0.890	1308	1251	2.34e6	2.80e6	1791.2	2239.8	NO	bb	bb	96.163
13C-2378-TCDF	25.548	1.007	3.564e5	4.805e5	1.620	0.742	0.770	980	840	5.37e6	7.31e6	5484.1	8694.5	NO	bb	bb	70.855
13C-12378-PeCDF	29.714	1.171	4.793e5	3.189e5	1.240	1.503	1.550	2076	1780	7.40e6	4.89e6	3564.8	2750.6	NO	bb	bb	88.258
13C-23478-PeCDF	31.051	1.223	4.551e5	3.043e5	1.118	1.495	1.550	2076	1780	7.12e6	4.82e6	3428.6	2709.8	NO	bb	bb	93.185
13C-123478-HxCDF	34.694	0.955	2.590e5	5.147e5	1.168	0.503	0.510	1075	2071	4.14e6	8.12e6	3850.4	3918.5	NO	bd	bd	96.030
13C-123678-HxCDF	34.827	0.959	2.787e5	5.438e5	1.386	0.512	0.510	1075	2071	4.20e6	8.19e6	3904.6	3952.9	NO	dd	dd	86.023
13C-234678-HxCDF	35.708	0.983	2.445e5	4.848e5	1.129	0.504	0.510	1075	2071	3.86e6	7.56e6	3592.8	3651.2	NO	bb	bb	93.646
13C-123789-HxCDF	36.733	1.011	2.141e5	4.173e5	0.932	0.513	0.510	1075	2071	3.44e6	6.77e6	3196.1	3268.3	NO	bb	bb	98.261
13C-1234678-HpCDF	38.593	1.063	1.650e5	3.719e5	0.895	0.444	0.440	939	1281	2.73e6	6.22e6	2901.5	4852.4	NO	bb	bb	86.973
13C-1234789-HpCDF	40.811	1.124	1.491e5	3.400e5	0.770	0.438	0.440	939	1281	2.15e6	4.87e6	2289.1	3801.4	NO	bb	bb	92.133
13C-1234-TCDD	25.379	0.000	3.218e5	4.073e5	1.000	0.790	0.770	1355	794	5.04e6	6.32e6	3718.6	7966.3	NO	bb	bb	100.000
13C-2378-TCDD	26.184	1.032	3.665e5	4.720e5	1.152	0.776	0.770	1355	794	5.57e6	7.26e6	4113.0	9144.6	NO	bb	bb	99.787
13C-12378-PeCDD	31.307	1.234	2.898e5	1.738e5	0.829	1.668	1.550	578	602	4.52e6	2.63e6	7812.4	4365.4	NO	bb	bb	76.727
13C-123478-HxCDD	35.819	0.986	3.536e5	2.855e5	0.995	1.239	1.240	1421	1327	5.93e6	4.84e6	4169.4	3645.8	NO	bd	bd	93.132
13C-123678-HxCDD	35.931	0.989	3.907e5	3.051e5	1.157	1.281	1.240	1421	1327	6.11e6	4.73e6	4299.2	3569.4	NO	db	db	87.237
13C-1234678-HpCDD	40.075	1.103	2.805e5	2.678e5	0.840	1.048	1.050	958	1170	4.23e6	3.97e6	4414.8	3396.1	NO	bb	bd	94.640
13C-OCDD	44.774	1.233	4.445e5	4.982e5	0.767	0.892	0.890	853	1016	5.61e6	6.26e6	6581.0	6164.6	NO	bb	bb	178.114
13C-123789-HxCDD	36.320	0.000	3.817e5	3.079e5	1.000	1.240	1.240	1421	1327	6.11e6	4.96e6	4296.8	3739.1	NO	bb	bb	100.000
37CL-2378-TCDD	26.212	1.033	7.918e4		1.288			961		1.22e6		1264.7			bb		8.433

Dataset: T:\Autospec\Processed Data Batch\230313D1CL.qld
Last Altered: Tuesday, March 14, 2023 10:35:58 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 11:03:44 Pacific Daylight Time

ID: CS3Z3, Name: 23031323, Date: 14-Mar-2023, Time: 04:32:57, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.059	0.863	2.219e4	3.123e4	0.802	0.711	0.770	562	887	3.57e5	5.03e5	635.5	566.7	NO	bb	bb	7.963
1289-TCDF	27.060	1.059	1.957e4	2.844e4	0.678	0.688	0.770	562	887	3.00e5	4.15e5	533.6	467.9	NO	db	dd	8.461
13468-PECDF	26.933	0.906	3.433e5	2.301e5	1.246	1.492	1.550	551	756	5.27e6	3.52e6	9563.4	4651.4	NO	bb	bb	57.633
12389-PECDF	32.098	1.080	1.686e5	1.130e5	0.496	1.491	1.550	1640	1406	2.47e6	1.66e6	1508.3	1183.9	NO	bb	bb	71.080
123468-HXCDF	33.034	0.952	2.377e5	1.943e5	1.169	1.224	1.240	1184	1096	3.63e6	2.97e6	3065.6	2710.5	NO	bb	bb	47.758
1368-TCDD	23.345	0.892	2.881e4	3.798e4	1.015	0.759	0.770	874	655	4.32e5	5.91e5	493.7	901.2	NO	bb	bd	7.846
1289-TCDD	26.806	1.024	2.882e4	3.822e4	0.909	0.754	0.770	874	655	4.39e5	5.83e5	502.1	890.1	NO	bb	bd	8.799
12479-PECDD	28.600	0.914	2.891e5	1.842e5	2.301	1.569	1.550	1025	890	2.83e6	1.81e6	2763.0	2027.8	NO	bb	bb	44.357
12389-PECDD	31.719	1.013	2.023e5	1.324e5	1.184	1.527	1.550	1025	890	3.07e6	2.03e6	2996.6	2277.6	NO	bb	bb	60.995
124679-HXCDD	33.814	0.944	2.170e5	1.741e5	1.115	1.247	1.240	1291	1514	3.42e6	2.73e6	2644.7	1801.3	NO	bb	bb	54.864
1234679-HPCDD	39.061	0.975	1.504e5	1.487e5	1.137	1.011	1.050	1190	863	2.39e6	2.38e6	2012.2	2754.9	NO	bb	bb	47.980
Total-tetrafurans			6.302e4		0.727			562		9.69e5							25.218
Total-penta1			3.433e5					551		5.27e6							57.633
Total-pentafurans			5.375e5		0.654			1640		8.16e6							179.878
Total-hexafurans			1.045e6		1.141			1184		1.61e7							223.532
Total-heptafurans			2.296e5		0.978			986		3.48e6							93.073
Total-Furans			2.337e6		0.922			562		3.54e7							650.487
Total-tetradioxins			1.631e5		1.024			874		2.25e6							43.838
Total-pentadioxins			6.660e5		1.502			1025		8.62e6							165.397
Total-hexadioxins			7.729e5		1.005			1291		1.23e7							211.649
Total-heptadioxins			2.900e5		1.088			1190		4.58e6							97.552
Total-Dioxins			2.082e6		1.130			874		3.01e7							614.598
Total-TEQ			4.420e6					874		6.55e7							1265.085
FUNCTION1 PFK			0.000e0					313651		0.00e0							
FUNCTION2 PFK			3.651e6					130716		2.62e7							0.000
FUNCTION3 PFK			7.223e7					241830		2.87e7							0.000
FUNCTION4 PFK			1.140e7					197587		1.82e6							
FUNCTION5 PFK			3.525e6					135254		3.71e7							
FUNCTION1 HXCD...			2.721e2					380		4.07e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			0.000e0					611		0.00e0							
FUNCTION3 OCDPE			8.925e1					439		1.31e3							0.000
FUNCTION4 NCDPE			0.000e0					563		0.00e0							
FUNCTION5 DCDPE			0.000e0					583		0.00e0							

Method: T:\Autospec\Methods\Dioxin230313.mdb 14 Mar 2023 10:34:25
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3Z3, Name: 23031323, Date: 14-Mar-2023, Time: 04:32:57, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.06	1.957e4	2.844e4	0.678	0.69	0.77	533.6	YES	NO	db	dd	8.461
2	Total-tetrafurans	26.93	8.484e2	1.027e3	0.727	0.83	0.77	26.7	YES	NO	bd	bd	0.308
3	2378-TCDF	25.58	2.018e4	2.913e4	0.702	0.69	0.77	520.0	YES	NO	bb	bb	8.397
4	Total-tetrafurans	24.66	2.245e2	3.163e2	0.727	0.71	0.77	7.0	YES	NO	bb	bb	0.089
5	1368-TCDF	22.06	2.219e4	3.123e4	0.802	0.71	0.77	635.5	YES	NO	bb	bb	7.963

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	26.93	3.433e5	2.301e5	1.246	1.49	1.55	9563.4	YES	NO	bb	bb	57.633

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.10	1.686e5	1.130e5	0.496	1.49	1.55	1508.3	YES	NO	bb	bb	71.080
2	23478-PeCDF	31.07	1.764e5	1.158e5	0.786	1.52	1.55	1684.0	YES	NO	bb	bb	48.957
3	12378-PeCDF	29.74	1.662e5	1.114e5	0.679	1.49	1.55	1540.5	YES	NO	bb	bb	51.218
4	Total-pentafurans	28.59	2.628e4	1.764e4	0.654	1.49	1.55	242.8	YES	NO	bb	bb	8.623

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.76	1.704e5	1.445e5	1.137	1.18	1.24	2135.5	YES	NO	bb	bd	43.867
2	234678-HxCDF	35.72	2.046e5	1.660e5	1.140	1.23	1.24	2776.6	YES	NO	bb	bb	44.585
3	123678-HxCDF	34.85	2.181e5	1.793e5	1.091	1.22	1.24	2850.2	YES	NO	db	db	44.290
4	123478-HxCDF	34.72	2.140e5	1.742e5	1.166	1.23	1.24	2753.5	YES	NO	bd	bd	43.032
5	123468-HXCDF	33.03	2.377e5	1.943e5	1.169	1.22	1.24	3065.6	YES	NO	bb	bb	47.758

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	40.82	1.127e5	1.151e5	0.953	0.98	1.05	1609.0	YES	NO	bd	bd	48.865
2	1234678-HpCDF	38.62	1.169e5	1.211e5	1.003	0.97	1.05	1922.6	YES	NO	bb	bb	44.208

ID: CS3Z3, Name: 23031323, Date: 14-Mar-2023, Time: 04:32:57, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.06	1.957e4	2.844e4	0.678	0.69	0.77	533.6	YES	NO	db	dd	8.461
2	Total-tetrafurans	26.93	8.484e2	1.027e3	0.727	0.83	0.77	26.7	YES	NO	bd	bd	0.308
3	2378-TCDF	25.58	2.018e4	2.913e4	0.702	0.69	0.77	520.0	YES	NO	bb	bb	8.397
4	Total-tetrafurans	24.66	2.245e2	3.163e2	0.727	0.71	0.77	7.0	YES	NO	bb	bb	0.089
5	1368-TCDF	22.06	2.219e4	3.123e4	0.802	0.71	0.77	635.5	YES	NO	bb	bb	7.963
6	12389-PECDF	32.10	1.686e5	1.130e5	0.496	1.49	1.55	1508.3	YES	NO	bb	bb	71.080
7	23478-PeCDF	31.07	1.764e5	1.158e5	0.786	1.52	1.55	1684.0	YES	NO	bb	bb	48.957
8	12378-PeCDF	29.74	1.662e5	1.114e5	0.679	1.49	1.55	1540.5	YES	NO	bb	bb	51.218
9	Total-pentafurans	28.59	2.628e4	1.764e4	0.654	1.49	1.55	242.8	YES	NO	bb	bb	8.623
10	123789-HxCDF	36.76	1.704e5	1.445e5	1.137	1.18	1.24	2135.5	YES	NO	bb	bd	43.867
11	234678-HxCDF	35.72	2.046e5	1.660e5	1.140	1.23	1.24	2776.6	YES	NO	bb	bb	44.585
12	123678-HxCDF	34.85	2.181e5	1.793e5	1.091	1.22	1.24	2850.2	YES	NO	db	db	44.290
13	123478-HxCDF	34.72	2.140e5	1.742e5	1.166	1.23	1.24	2753.5	YES	NO	bd	bd	43.032
14	123468-HXCDF	33.03	2.377e5	1.943e5	1.169	1.22	1.24	3065.6	YES	NO	bb	bb	47.758
15	1234789-HpCDF	40.82	1.127e5	1.151e5	0.953	0.98	1.05	1609.0	YES	NO	bd	bd	48.865
16	1234678-HpCDF	38.62	1.169e5	1.211e5	1.003	0.97	1.05	1922.6	YES	NO	bb	bb	44.208
17	OCDF	45.02	1.190e5	1.419e5	0.778	0.84	0.89	1262.2	YES	NO	bb	bb	71.154
18	13468-PECDF	26.93	3.433e5	2.301e5	1.246	1.49	1.55	9563.4	YES	NO	bb	bb	57.633

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.39	1.565e4	2.109e4	1.024	0.74	0.77	278.5	YES	NO	bb	bb	4.278
2	Total-tetradioxins	24.83	3.849e2	5.542e2	1.024	0.69	0.77	7.1	YES	NO	bb	bb	0.109
3	Total-tetradioxins	24.53	1.272e3	1.891e3	1.024	0.67	0.77	15.6	YES	NO	bb	bd	0.368
4	1368-TCDD	23.34	2.881e4	3.798e4	1.015	0.76	0.77	493.7	YES	NO	bb	bd	7.846
5	1289-TCDD	26.81	2.882e4	3.822e4	0.909	0.75	0.77	502.1	YES	NO	bb	bd	8.799
6	2378-TCDD	26.21	3.544e4	4.625e4	1.149	0.77	0.77	622.9	YES	NO	bd	bb	8.482
7	Total-tetradioxins	25.89	5.271e4	6.713e4	1.024	0.79	0.77	650.4	YES	NO	bd	bb	13.956

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.72	2.023e5	1.324e5	1.184	1.53	1.55	2996.6	YES	NO	bb	bb	60.995
2	12378-PeCDD	31.32	1.737e5	1.098e5	1.022	1.58	1.55	2632.9	YES	NO	bb	bb	59.850
3	Total-pentadioxins	30.65	8.454e2	5.054e2	1.502	1.67	1.55	12.2	YES	NO	bb	bb	0.194
4	12479-PECDD	28.60	2.891e5	1.842e5	2.301	1.57	1.55	2763.0	YES	NO	bb	bb	44.357

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexadioxins	36.71	1.097e2	8.412e1	1.005	1.30	1.24	2.0	NO	NO	bb	bb	0.029
2	123789-HxCDD	36.34	1.851e5	1.537e5	0.907	1.20	1.24	2290.5	YES	NO	bb	bb	55.963
3	123678-HxCDD	35.95	1.863e5	1.504e5	1.001	1.24	1.24	2251.8	YES	NO	db	db	48.344
4	123478-HxCDD	35.83	1.827e5	1.482e5	0.996	1.23	1.24	2294.3	YES	NO	bd	bd	52.020
5	Total-hexadioxins	34.93	1.247e3	1.004e3	1.005	1.24	1.24	10.7	YES	NO	db	bb	0.336
6	Total-hexadioxins	34.59	3.498e2	2.730e2	1.005	1.28	1.24	4.9	YES	NO	bb	bb	0.093
7	124679-HXCDD	33.81	2.170e5	1.741e5	1.115	1.25	1.24	2644.7	YES	NO	bb	bb	54.864

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.10	1.396e5	1.428e5	1.039	0.98	1.05	1839.3	YES	NO	bb	bd	49.572
2	1234679-HPCDD	39.06	1.504e5	1.487e5	1.137	1.01	1.05	2012.2	YES	NO	bb	bb	47.980

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Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.39	1.565e4	2.109e4	1.024	0.74	0.77	278.5	YES	NO	bb	bb	4.278
2	Total-tetradioxins	24.83	3.849e2	5.542e2	1.024	0.69	0.77	7.1	YES	NO	bb	bb	0.109
3	Total-tetradioxins	24.53	1.272e3	1.891e3	1.024	0.67	0.77	15.6	YES	NO	bb	bd	0.368
4	1368-TCDD	23.34	2.881e4	3.798e4	1.015	0.76	0.77	493.7	YES	NO	bb	bd	7.846
5	1289-TCDD	26.81	2.882e4	3.822e4	0.909	0.75	0.77	502.1	YES	NO	bb	bd	8.799
6	2378-TCDD	26.21	3.544e4	4.625e4	1.149	0.77	0.77	622.9	YES	NO	bd	bb	8.482
7	Total-tetradioxins	25.89	5.271e4	6.713e4	1.024	0.79	0.77	650.4	YES	NO	bd	bb	13.956
8	12389-PECDD	31.72	2.023e5	1.324e5	1.184	1.53	1.55	2996.6	YES	NO	bb	bb	60.995
9	12378-PeCDD	31.32	1.737e5	1.098e5	1.022	1.58	1.55	2632.9	YES	NO	bb	bb	59.850
10	Total-pentadioxins	30.65	8.454e2	5.054e2	1.502	1.67	1.55	12.2	YES	NO	bb	bb	0.194
11	12479-PECDD	28.60	2.891e5	1.842e5	2.301	1.57	1.55	2763.0	YES	NO	bb	bb	44.357
12	Total-hexadioxins	36.71	1.097e2	8.412e1	1.005	1.30	1.24	2.0	NO	NO	bb	bb	0.029
13	123789-HxCDD	36.34	1.851e5	1.537e5	0.907	1.20	1.24	2290.5	YES	NO	bb	bb	55.963
14	123678-HxCDD	35.95	1.863e5	1.504e5	1.001	1.24	1.24	2251.8	YES	NO	db	db	48.344
15	123478-HxCDD	35.83	1.827e5	1.482e5	0.996	1.23	1.24	2294.3	YES	NO	bd	bd	52.020
16	Total-hexadioxins	34.93	1.247e3	1.004e3	1.005	1.24	1.24	10.7	YES	NO	db	bb	0.336
17	Total-hexadioxins	34.59	3.498e2	2.730e2	1.005	1.28	1.24	4.9	YES	NO	bb	bb	0.093
18	124679-HXCDD	33.81	2.170e5	1.741e5	1.115	1.25	1.24	2644.7	YES	NO	bb	bb	54.864
19	1234678-HpCDD	40.10	1.396e5	1.428e5	1.039	0.98	1.05	1839.3	YES	NO	bb	bd	49.572
20	1234679-HPCDD	39.06	1.504e5	1.487e5	1.137	1.01	1.05	2012.2	YES	NO	bb	bb	47.980
21	OCDD	44.79	1.904e5	2.265e5	0.920	0.84	0.89	1791.2	YES	NO	bb	bb	96.163

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.06	1.957e4	2.844e4	0.678	0.69	0.77	533.6	YES	NO	db	dd	8.461
2	Total-tetrafurans	26.93	8.484e2	1.027e3	0.727	0.83	0.77	26.7	YES	NO	bd	bd	0.308
3	2378-TCDF	25.58	2.018e4	2.913e4	0.702	0.69	0.77	520.0	YES	NO	bb	bb	8.397
4	Total-tetrafurans	24.66	2.245e2	3.163e2	0.727	0.71	0.77	7.0	YES	NO	bb	bb	0.089
5	1368-TCDF	22.06	2.219e4	3.123e4	0.802	0.71	0.77	635.5	YES	NO	bb	bb	7.963
6	12389-PECDF	32.10	1.686e5	1.130e5	0.496	1.49	1.55	1508.3	YES	NO	bb	bb	71.080
7	23478-PeCDF	31.07	1.764e5	1.158e5	0.786	1.52	1.55	1684.0	YES	NO	bb	bb	48.957
8	12378-PeCDF	29.74	1.662e5	1.114e5	0.679	1.49	1.55	1540.5	YES	NO	bb	bb	51.218
9	Total-pentafurans	28.59	2.628e4	1.764e4	0.654	1.49	1.55	242.8	YES	NO	bb	bb	8.623
10	123789-HxCDF	36.76	1.704e5	1.445e5	1.137	1.18	1.24	2135.5	YES	NO	bb	bd	43.867
11	234678-HxCDF	35.72	2.046e5	1.660e5	1.140	1.23	1.24	2776.6	YES	NO	bb	bb	44.585
12	123678-HxCDF	34.85	2.181e5	1.793e5	1.091	1.22	1.24	2850.2	YES	NO	db	db	44.290
13	123478-HxCDF	34.72	2.140e5	1.742e5	1.166	1.23	1.24	2753.5	YES	NO	bd	bd	43.032
14	123468-HXCDF	33.03	2.377e5	1.943e5	1.169	1.22	1.24	3065.6	YES	NO	bb	bb	47.758
15	1234789-HpCDF	40.82	1.127e5	1.151e5	0.953	0.98	1.05	1609.0	YES	NO	bd	bd	48.865
16	1234678-HpCDF	38.62	1.169e5	1.211e5	1.003	0.97	1.05	1922.6	YES	NO	bb	bb	44.208
17	OCDF	45.02	1.190e5	1.419e5	0.778	0.84	0.89	1262.2	YES	NO	bb	bb	71.154
18	13468-PECDF	26.93	3.433e5	2.301e5	1.246	1.49	1.55	9563.4	YES	NO	bb	bb	57.633
19	Total-tetradioxins	25.39	1.565e4	2.109e4	1.024	0.74	0.77	278.5	YES	NO	bb	bb	4.278
20	Total-tetradioxins	24.83	3.849e2	5.542e2	1.024	0.69	0.77	7.1	YES	NO	bb	bb	0.109
21	Total-tetradioxins	24.53	1.272e3	1.891e3	1.024	0.67	0.77	15.6	YES	NO	bb	bd	0.368
22	1368-TCDD	23.34	2.881e4	3.798e4	1.015	0.76	0.77	493.7	YES	NO	bb	bd	7.846
23	1289-TCDD	26.81	2.882e4	3.822e4	0.909	0.75	0.77	502.1	YES	NO	bb	bd	8.799
24	2378-TCDD	26.21	3.544e4	4.625e4	1.149	0.77	0.77	622.9	YES	NO	bd	bb	8.482
25	Total-tetradioxins	25.89	5.271e4	6.713e4	1.024	0.79	0.77	650.4	YES	NO	bd	bb	13.956
26	12389-PECDD	31.72	2.023e5	1.324e5	1.184	1.53	1.55	2996.6	YES	NO	bb	bb	60.995
27	12378-PeCDD	31.32	1.737e5	1.098e5	1.022	1.58	1.55	2632.9	YES	NO	bb	bb	59.850
28	Total-pentadioxins	30.65	8.454e2	5.054e2	1.502	1.67	1.55	12.2	YES	NO	bb	bb	0.194
29	12479-PECDD	28.60	2.891e5	1.842e5	2.301	1.57	1.55	2763.0	YES	NO	bb	bb	44.357
30	Total-hexadioxins	36.71	1.097e2	8.412e1	1.005	1.30	1.24	2.0	NO	NO	bb	bb	0.029
31	123789-HxCDD	36.34	1.851e5	1.537e5	0.907	1.20	1.24	2290.5	YES	NO	bb	bb	55.963
32	123678-HxCDD	35.95	1.863e5	1.504e5	1.001	1.24	1.24	2251.8	YES	NO	db	db	48.344
33	123478-HxCDD	35.83	1.827e5	1.482e5	0.996	1.23	1.24	2294.3	YES	NO	bd	bd	52.020
34	Total-hexadioxins	34.93	1.247e3	1.004e3	1.005	1.24	1.24	10.7	YES	NO	db	bb	0.336
35	Total-hexadioxins	34.59	3.498e2	2.730e2	1.005	1.28	1.24	4.9	YES	NO	bb	bb	0.093
36	124679-HXCDD	33.81	2.170e5	1.741e5	1.115	1.25	1.24	2644.7	YES	NO	bb	bb	54.864
37	1234678-HpCDD	40.10	1.396e5	1.428e5	1.039	0.98	1.05	1839.3	YES	NO	bb	bd	49.572

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	1234679-HPCDD	39.06	1.504e5	1.487e5	1.137	1.01	1.05	2012.2	YES	NO	bb	bb	47.980
39	OCDD	44.79	1.904e5	2.265e5	0.920	0.84	0.89	1791.2	YES	NO	bb	bb	96.163

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.25	1.124e6					32.3	YES		dd		0.000
2	FUNCTION2 PFK	28.20	2.469e5					35.2	YES		dd		0.000
3	FUNCTION2 PFK	28.12	1.489e6					39.3	YES		dd		0.000
4	FUNCTION2 PFK	27.88	5.140e5					51.1	YES		bd		0.000
5	FUNCTION2 PFK	31.34	1.526e3					0.7	NO		bb		0.000
6	FUNCTION2 PFK	31.15	2.341e3					0.7	NO		bb		0.000
7	FUNCTION2 PFK	31.02	1.278e4					1.5	NO		bb		0.000
8	FUNCTION2 PFK	30.39	7.833e3					1.2	NO		bb		0.000
9	FUNCTION2 PFK	30.24	1.589e4					1.9	NO		bb		0.000
10	FUNCTION2 PFK	30.13	9.519e3					1.9	NO		bb		0.000
11	FUNCTION2 PFK	29.87	9.649e2					0.7	NO		bb		0.000
12	FUNCTION2 PFK	29.83	2.173e3					0.8	NO		bb		0.000
13	FUNCTION2 PFK	29.70	3.731e3					0.7	NO		bb		0.000
14	FUNCTION2 PFK	29.51	2.741e3					0.9	NO		db		0.000
15	FUNCTION2 PFK	29.48	2.522e3					0.9	NO		bd		0.000
16	FUNCTION2 PFK	29.18	1.501e4					2.7	NO		db		0.000
17	FUNCTION2 PFK	29.11	1.955e4					2.7	NO		dd		0.000
18	FUNCTION2 PFK	29.03	1.211e4					2.3	NO		dd		0.000
19	FUNCTION2 PFK	28.98	2.057e4					2.1	NO		bd		0.000
20	FUNCTION2 PFK	28.66	9.807e4					9.5	YES		db		0.000
21	FUNCTION2 PFK	32.57	4.181e3					1.0	NO		bb		0.000
22	FUNCTION2 PFK	32.45	1.258e4					1.6	NO		bb		0.000
23	FUNCTION2 PFK	32.33	2.146e3					0.7	NO		bb		0.000
24	FUNCTION2 PFK	32.21	2.183e3					0.9	NO		bb		0.000
25	FUNCTION2 PFK	32.04	7.992e2					0.5	NO		db		0.000
26	FUNCTION2 PFK	32.00	6.525e3					1.8	NO		dd		0.000
27	FUNCTION2 PFK	31.90	1.525e4					2.4	NO		bd		0.000
28	FUNCTION2 PFK	31.85	5.893e2					0.4	NO		bb		0.000
29	FUNCTION2 PFK	31.75	1.813e3					0.7	NO		bb		0.000
30	FUNCTION2 PFK	31.41	3.511e3					1.2	NO		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	33.18	7.223e7					118.5	YES		bb		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.82	3.899e5					7.0	YES		bb		
2	FUNCTION4 PFK	39.40	1.101e7					2.2	NO		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.93	3.247e3					1.1	NO		db		
2	FUNCTION5 PFK	43.90	6.552e3					1.6	NO		dd		
3	FUNCTION5 PFK	43.85	7.769e3					1.8	NO		bd		
4	FUNCTION5 PFK	43.78	3.449e3					1.2	NO		bb		
5	FUNCTION5 PFK	43.73	6.217e3					1.0	NO		db		
6	FUNCTION5 PFK	43.67	4.584e3					1.3	NO		dd		
7	FUNCTION5 PFK	43.61	5.480e3					1.1	NO		bd		
8	FUNCTION5 PFK	43.40	7.173e4					8.1	YES		db		
9	FUNCTION5 PFK	43.36	3.179e4					9.2	YES		dd		
10	FUNCTION5 PFK	43.17	3.744e5					18.4	YES		dd		
11	FUNCTION5 PFK	43.08	2.574e5					22.7	YES		dd		
12	FUNCTION5 PFK	43.00	2.803e5					27.2	YES		dd		
13	FUNCTION5 PFK	42.87	5.390e5					34.0	YES		dd		
14	FUNCTION5 PFK	42.83	1.728e5					35.3	YES		dd		
15	FUNCTION5 PFK	42.61	1.227e6					47.3	YES		dd		
16	FUNCTION5 PFK	42.56	4.759e5					49.3	YES		bd		
17	FUNCTION5 PFK	45.97	1.296e3					0.6	NO		bb		
18	FUNCTION5 PFK	45.90	2.470e3					1.2	NO		bb		
19	FUNCTION5 PFK	45.76	4.998e3					1.4	NO		db		
20	FUNCTION5 PFK	45.70	6.648e3					1.5	NO		bd		
21	FUNCTION5 PFK	45.64	7.873e2					0.4	NO		db		
22	FUNCTION5 PFK	45.61	1.521e3					0.7	NO		bd		
23	FUNCTION5 PFK	45.41	3.457e3					1.2	NO		bb		
24	FUNCTION5 PFK	45.15	7.177e2					0.6	NO		bb		
25	FUNCTION5 PFK	45.11	2.416e3					0.7	NO		bb		
26	FUNCTION5 PFK	44.89	1.538e3					0.7	NO		bb		
27	FUNCTION5 PFK	44.49	5.985e3					1.4	NO		bb		
28	FUNCTION5 PFK	44.09	1.071e4					1.7	NO		db		
29	FUNCTION5 PFK	44.04	1.456e4					1.8	NO		bd		

ID: CS3Z3, Name: 23031323, Date: 14-Mar-2023, Time: 04:32:57, Conditions: AUTOSPEC01, User: pk

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	22.33	8.797e1					2.7	NO		bb		0.000
2	FUNCTION1 HXCD...	21.10	1.063e2					5.1	YES		bb		0.000
3	FUNCTION1 HXCD...	26.95	7.781e1					2.9	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	34.13	8.925e1					3.0	NO		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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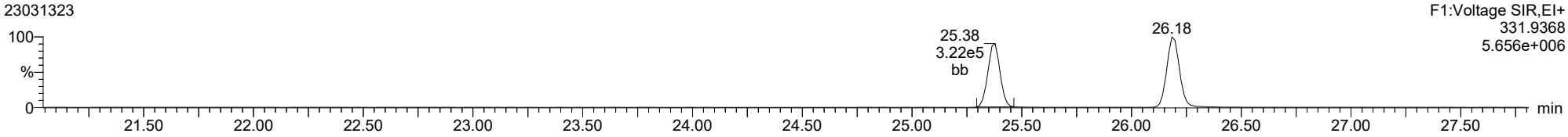
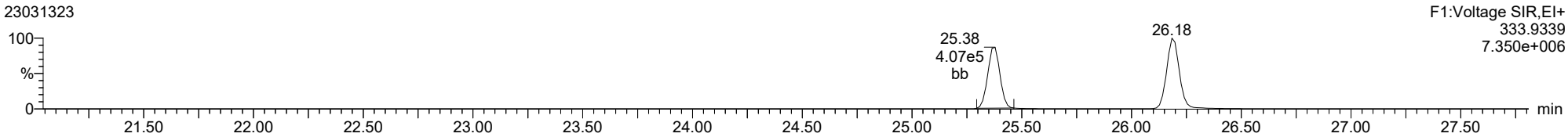
ID: CS3Z3, Name: 23031323, Date: 14-Mar-2023, Time: 04:32:57, Conditions: AUTOSPEC01, User: pk

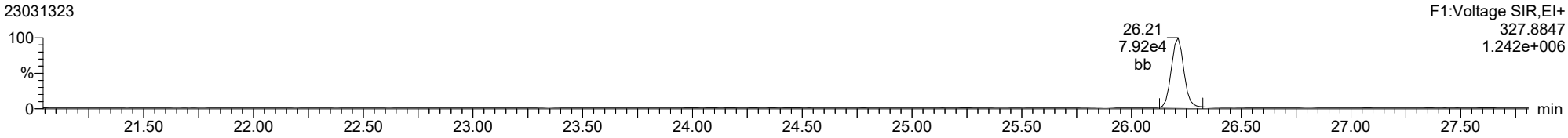
13C-1234-TCDD



13C-1234-TCDD

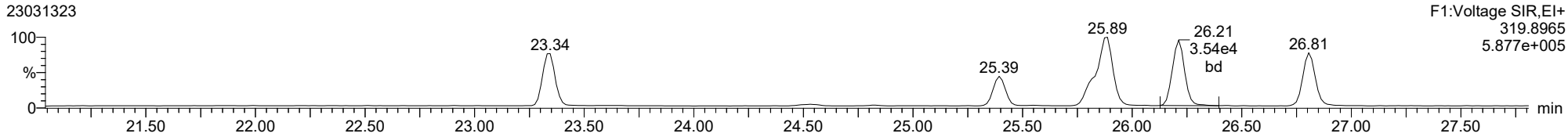


37CL-2378-TCDD



ID: CS3Z3, Name: 23031323, Date: 14-Mar-2023, Time: 04:32:57, Conditions: AUTOSPEC01, User: pk

2378-TCDD



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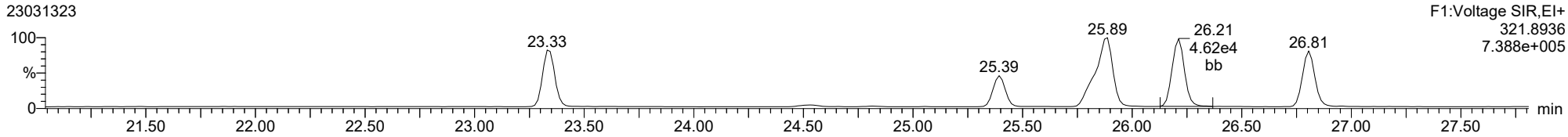

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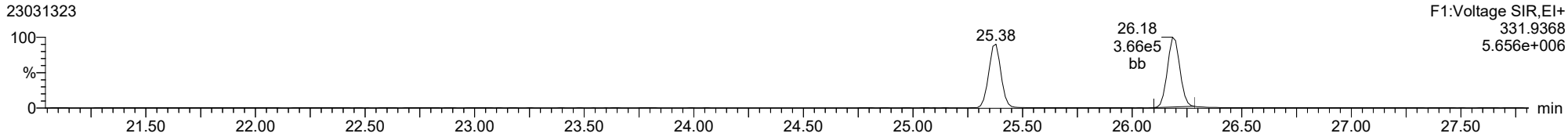

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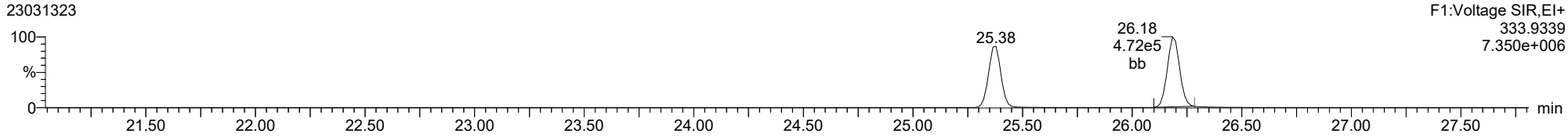
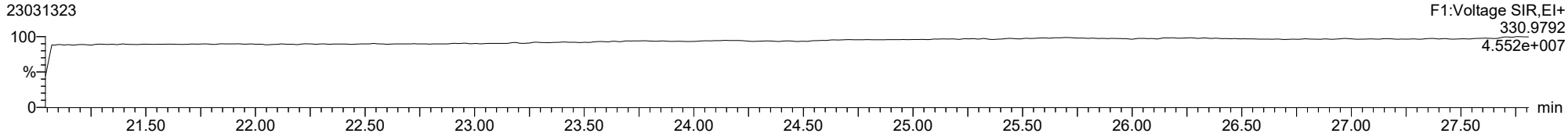


FUNCTION1 PFK



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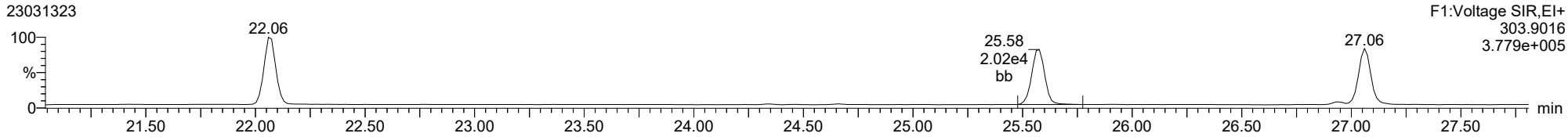
2378-TCDF



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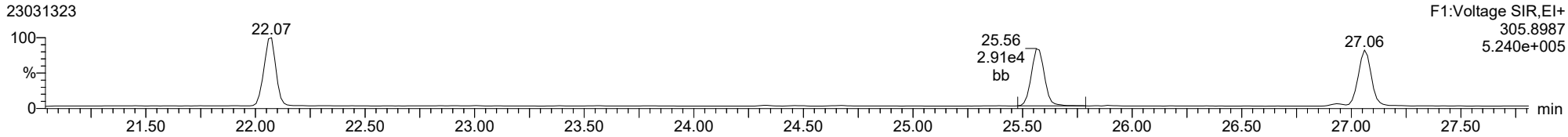

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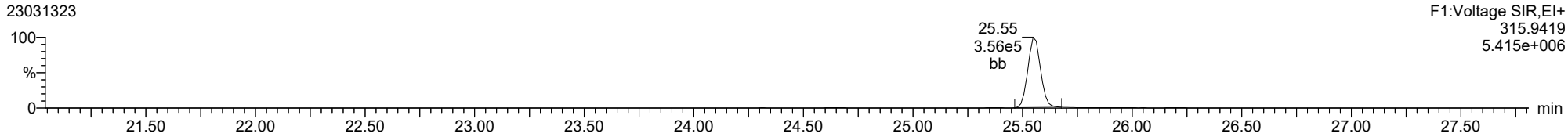

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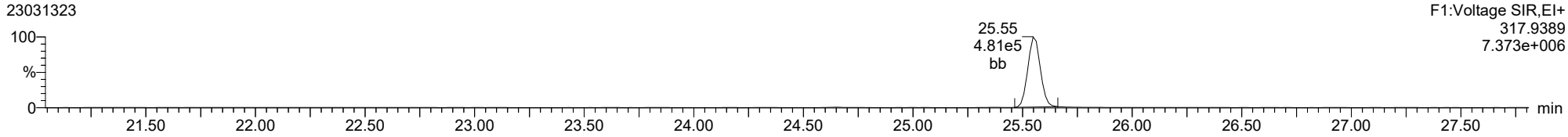
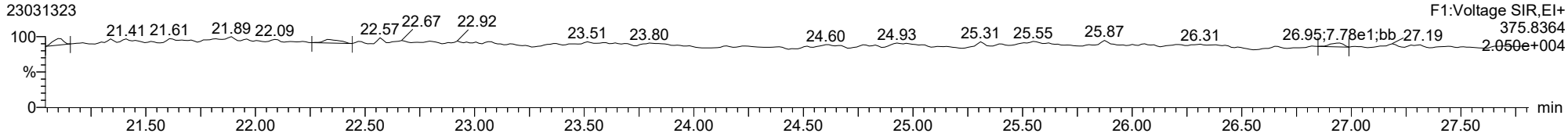
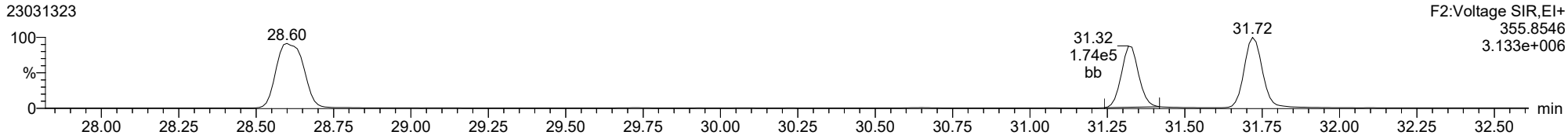


FUNCTION1 HXCDPE



ID: CS3Z3, Name: 23031323, Date: 14-Mar-2023, Time: 04:32:57, Conditions: AUTOSPEC01, User: pk

12378-PeCDD



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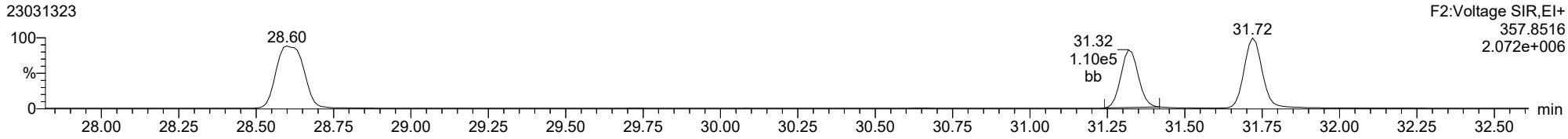

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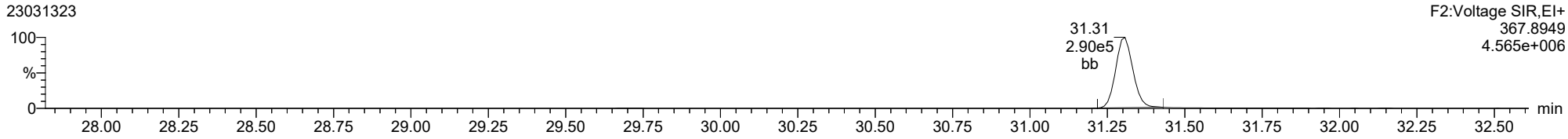

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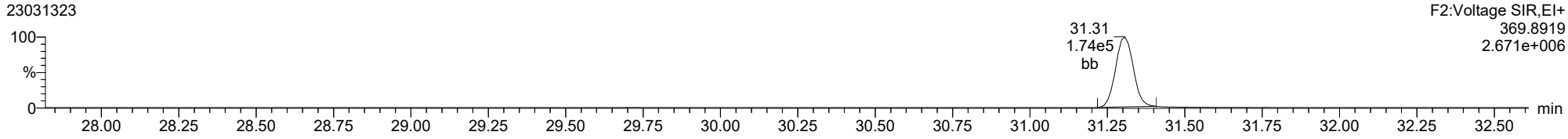

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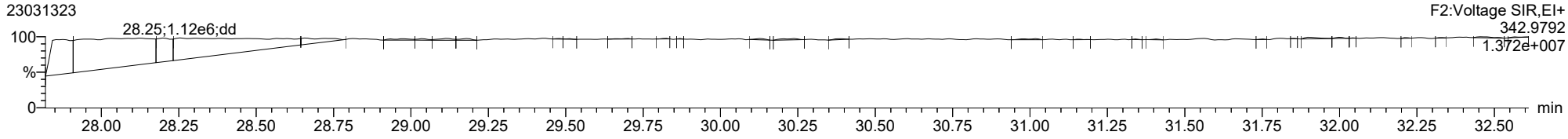

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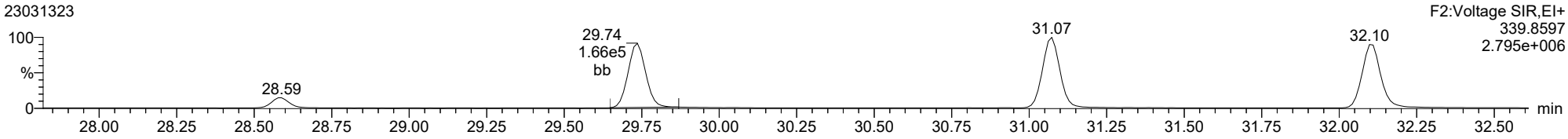

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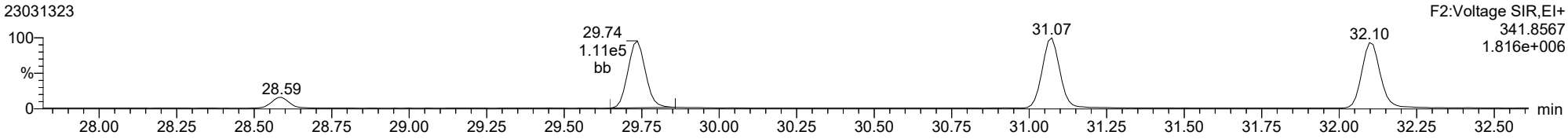

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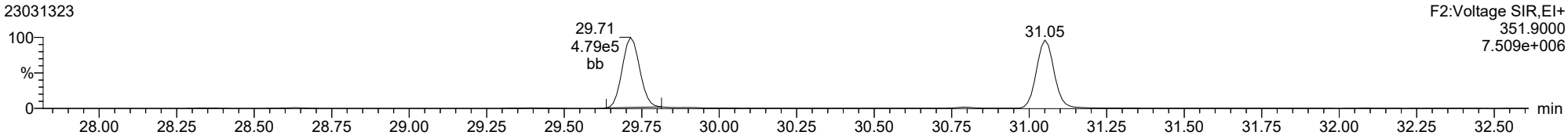

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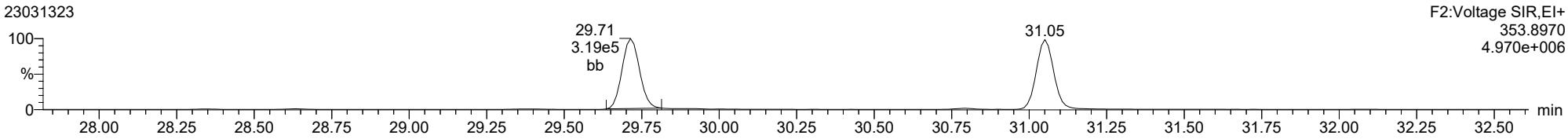
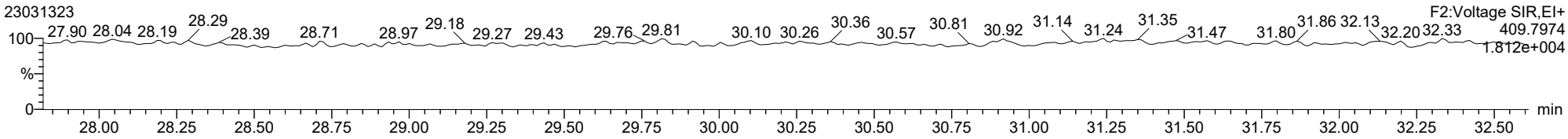


FUNCTION2 HPCDPE



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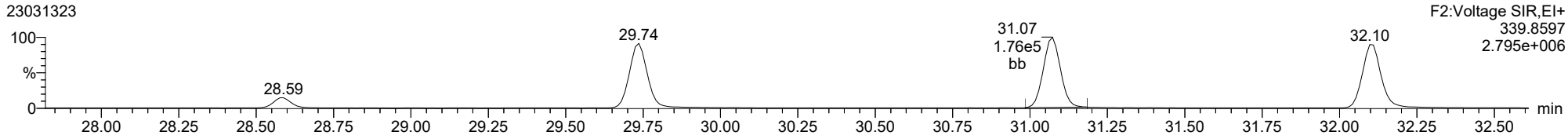

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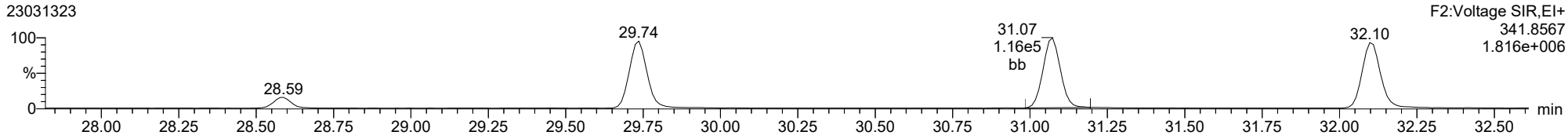

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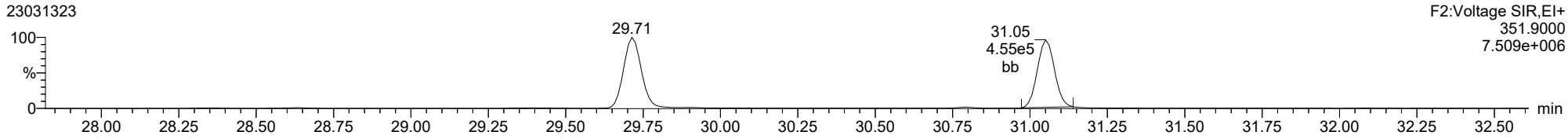

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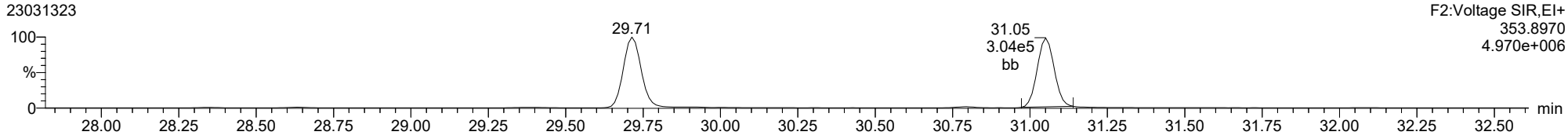

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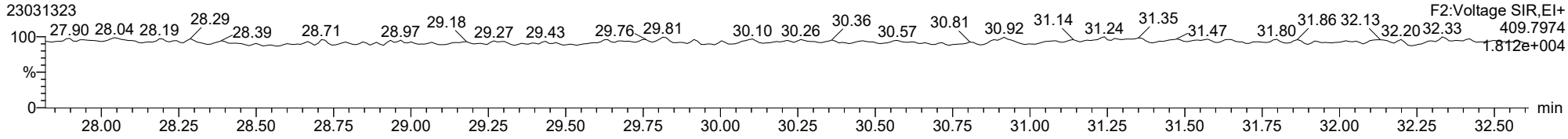

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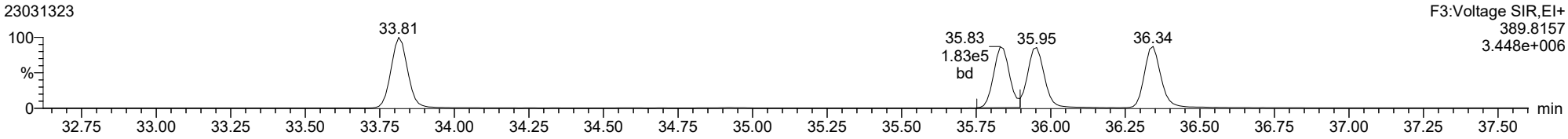
123478-HxCDD



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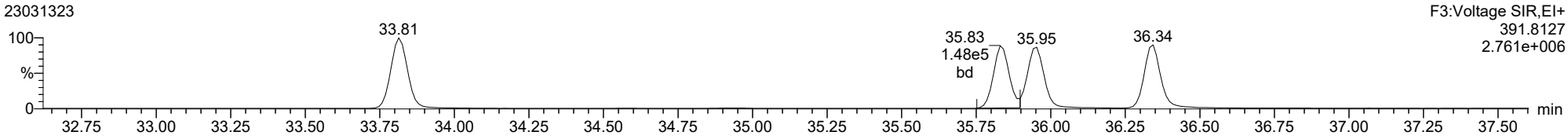

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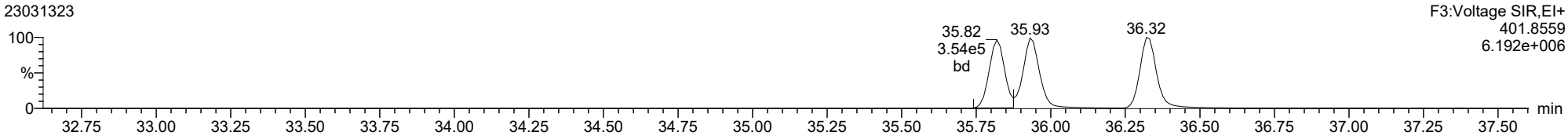

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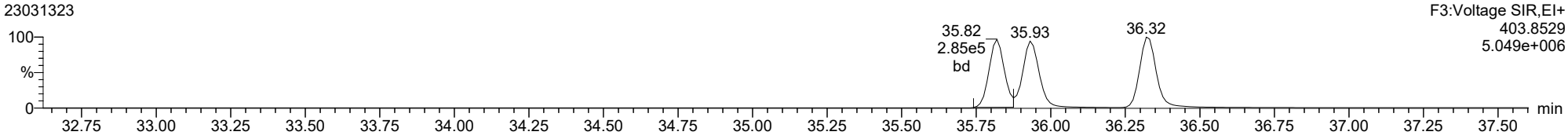

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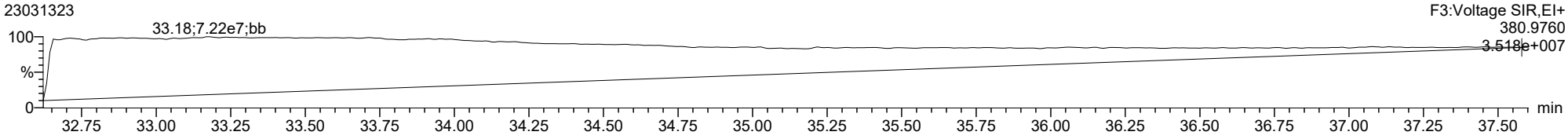

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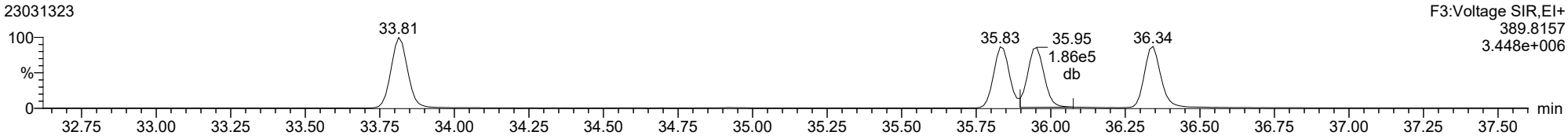

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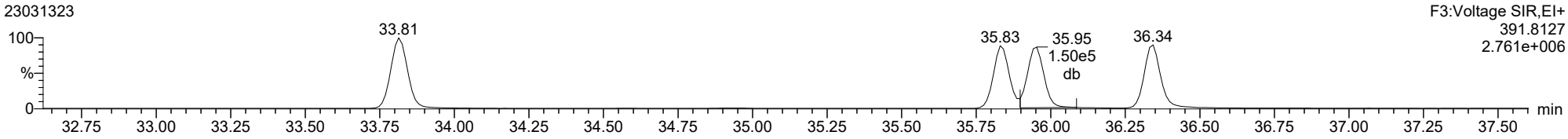

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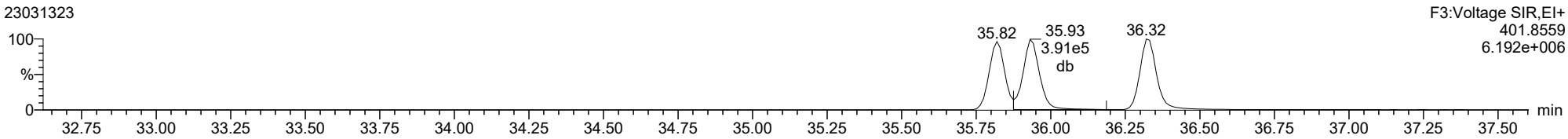

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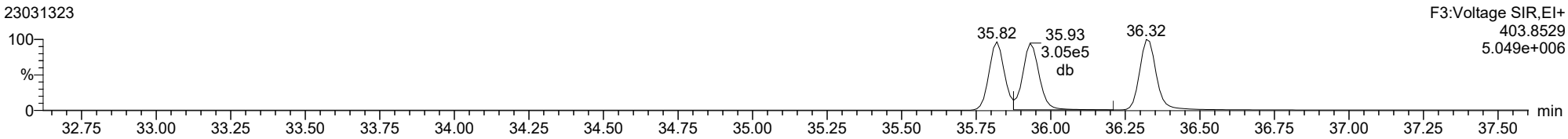

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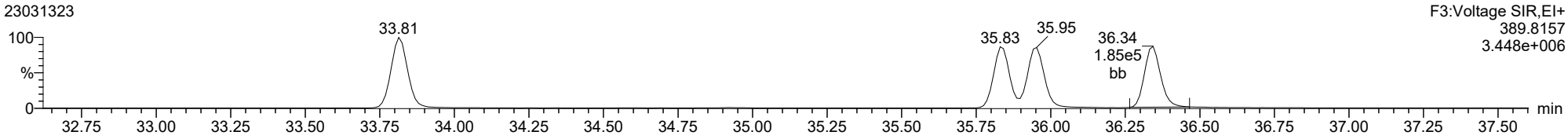

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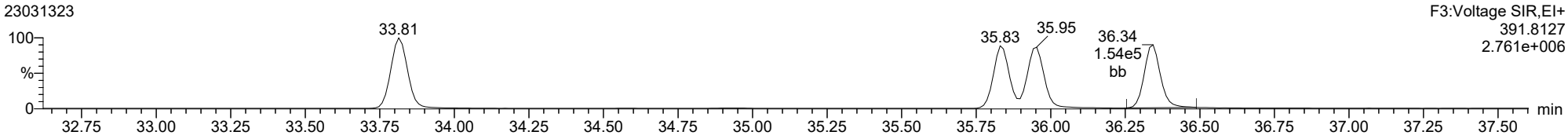

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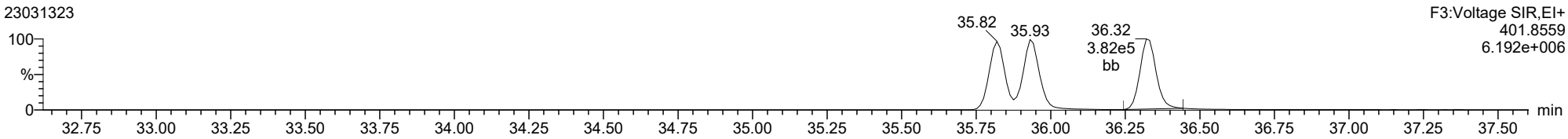

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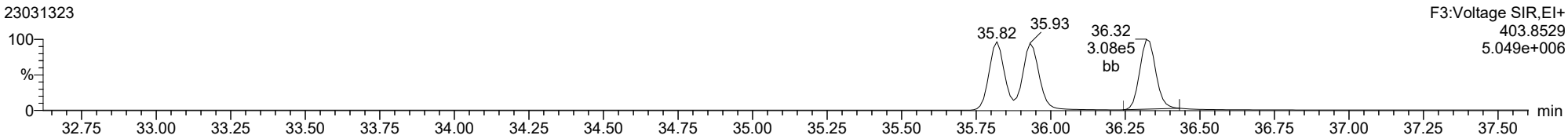

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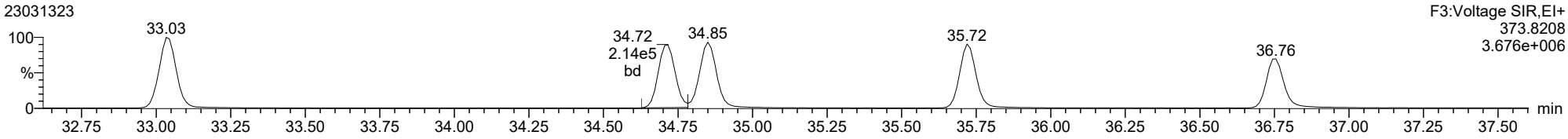

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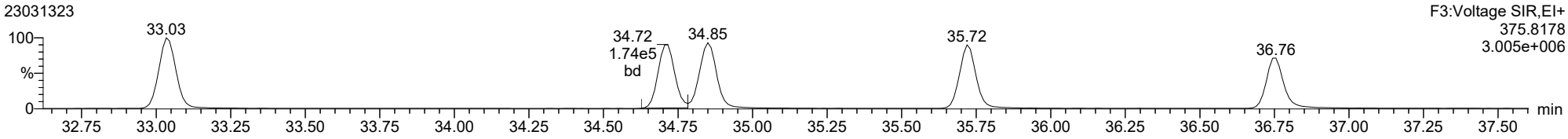

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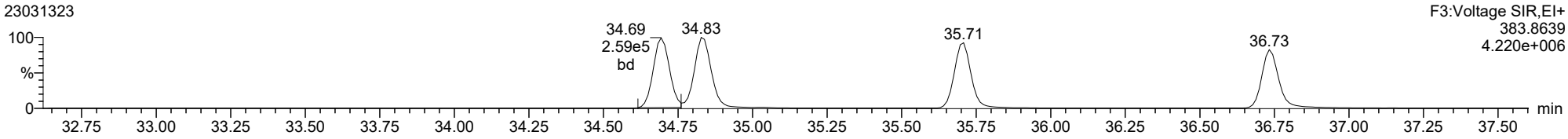

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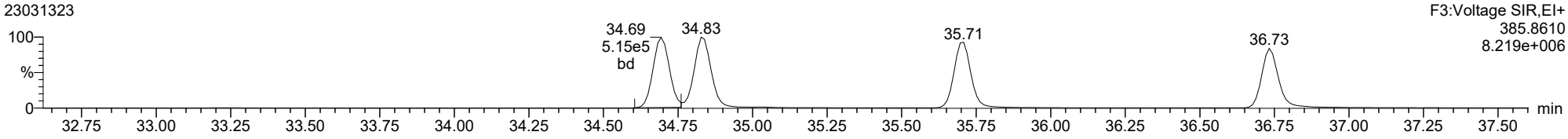
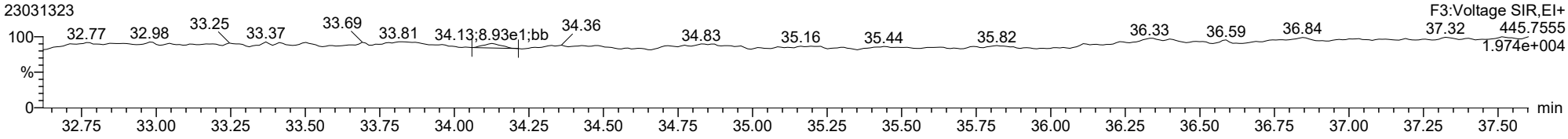


FUNCTION3 OCDPE



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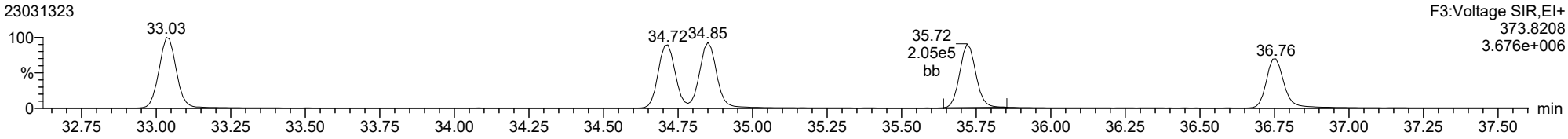

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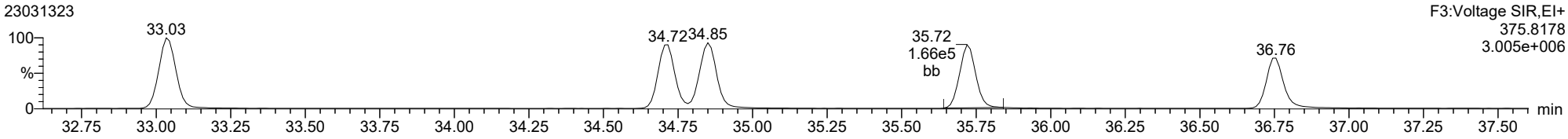

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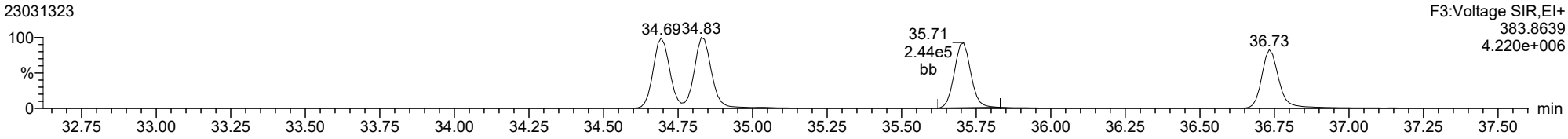

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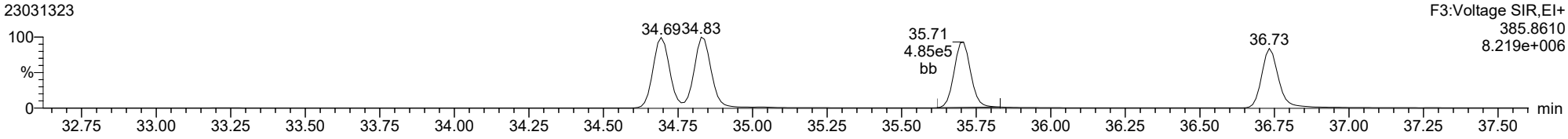

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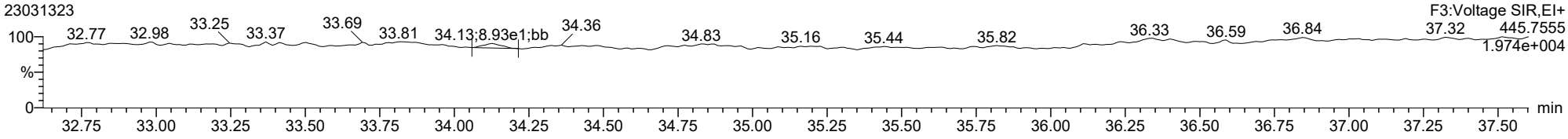

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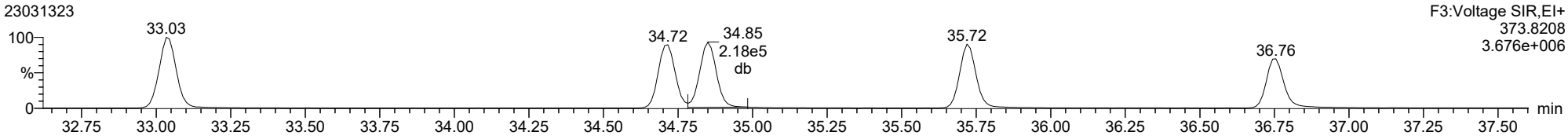

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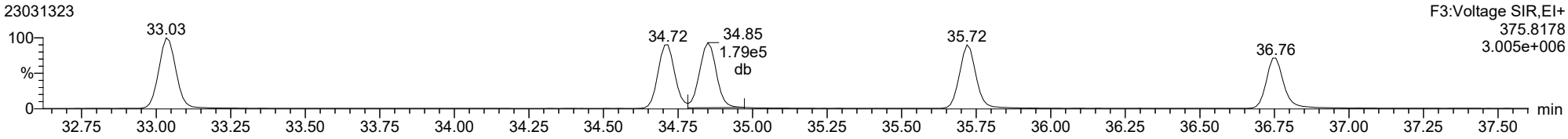

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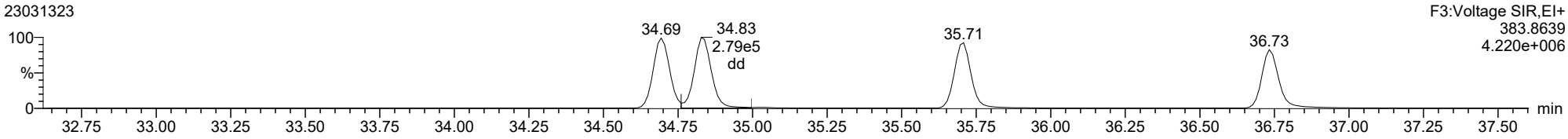

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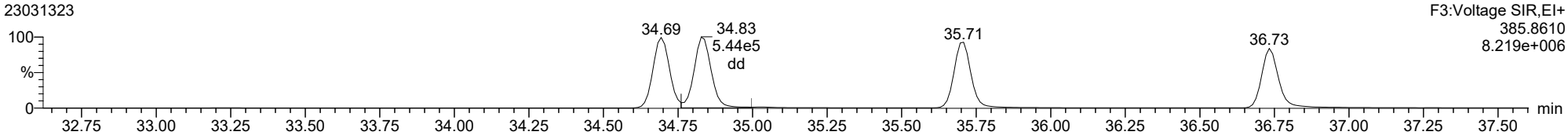

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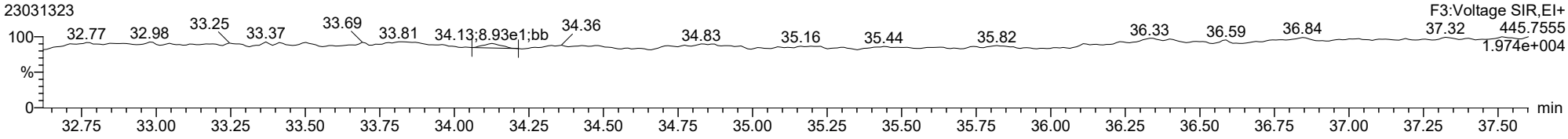

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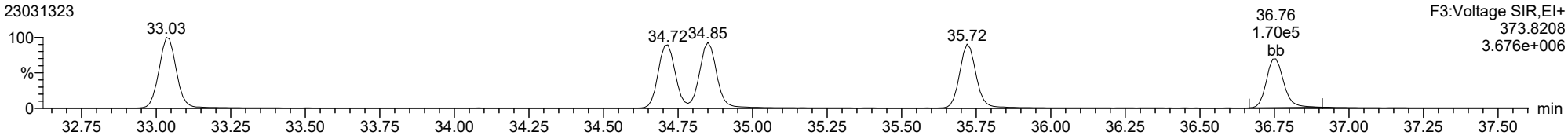

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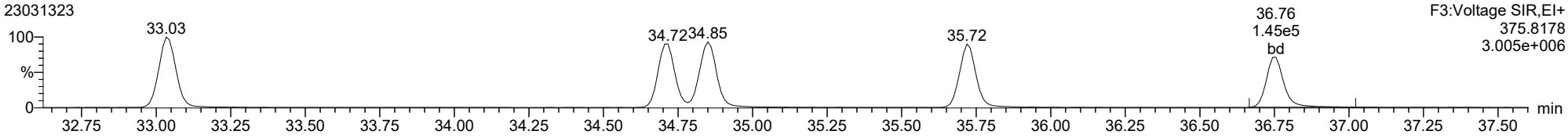

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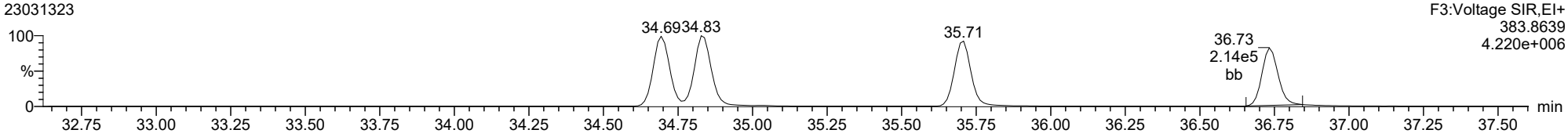

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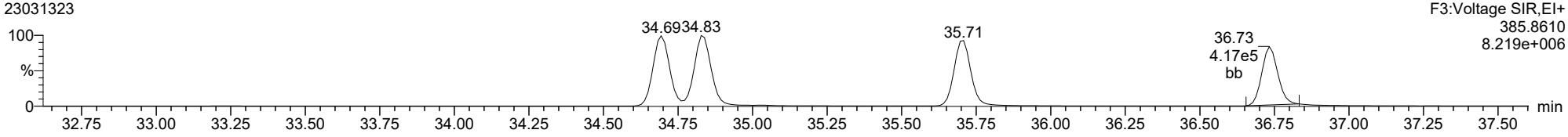

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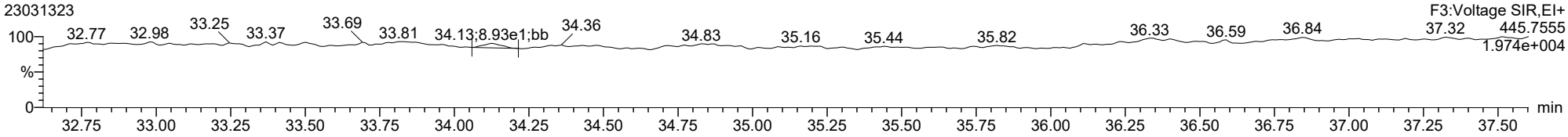

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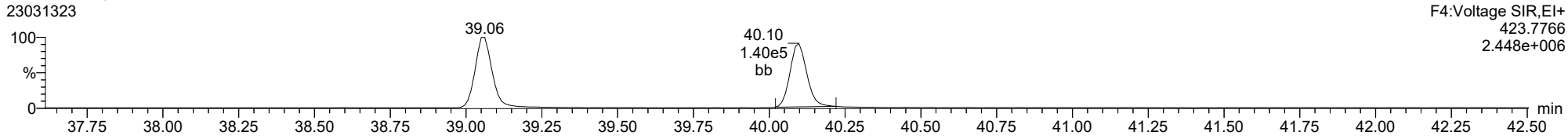

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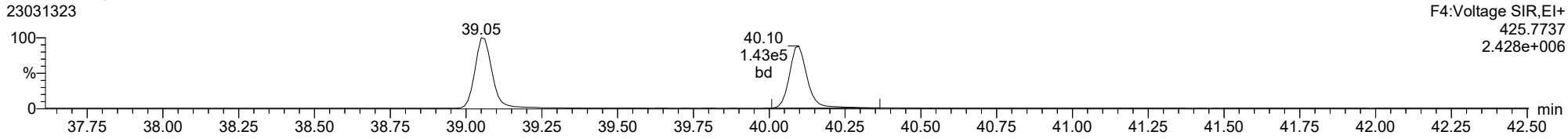

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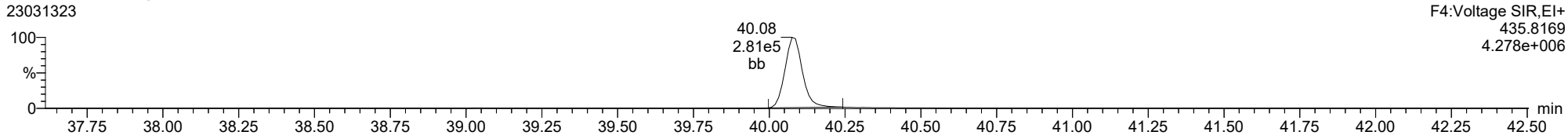

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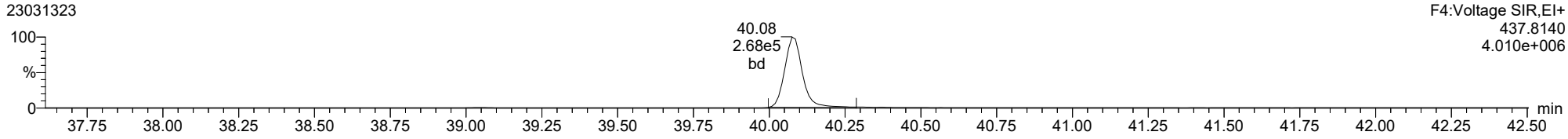
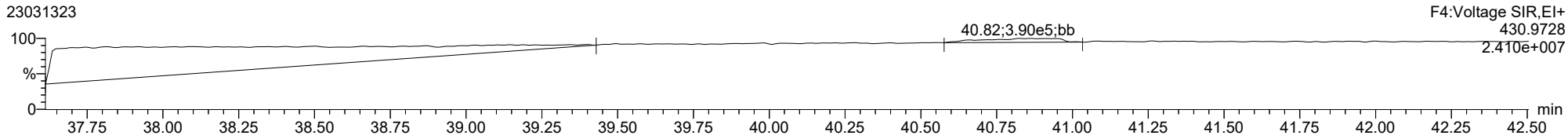


FUNCTION4 PFK



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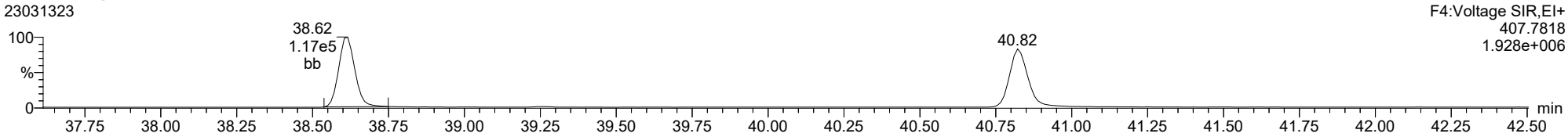

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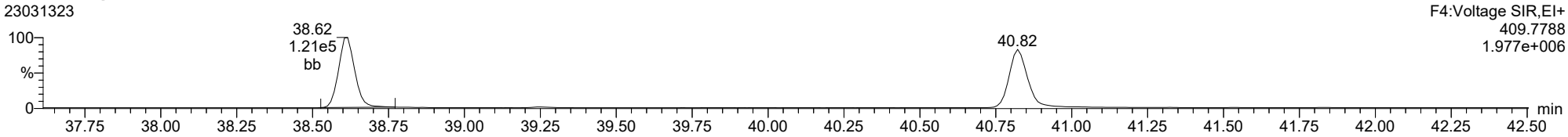

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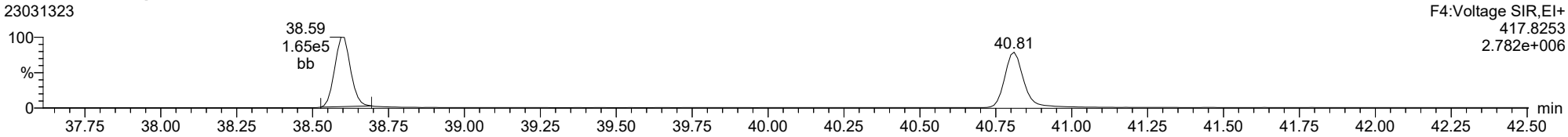

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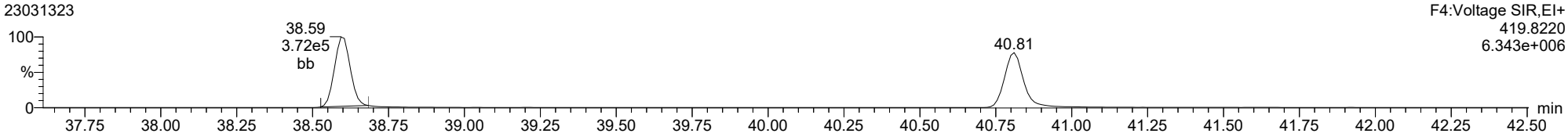
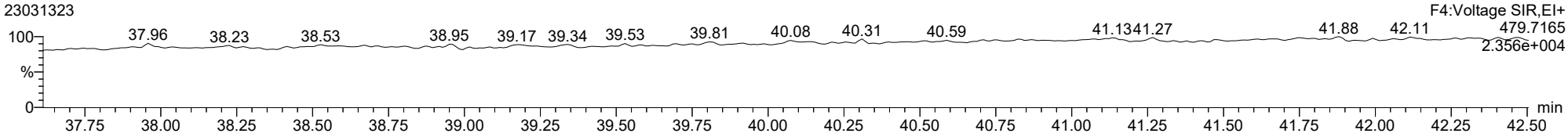


FUNCTION4 NCDPE



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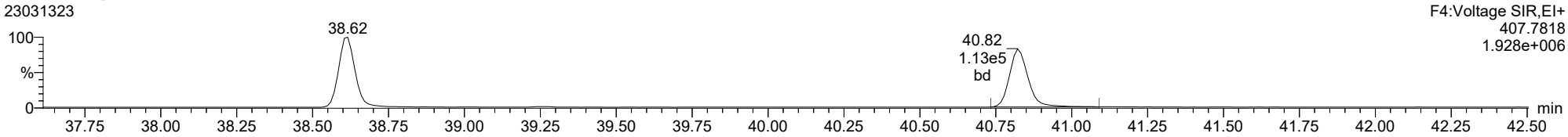

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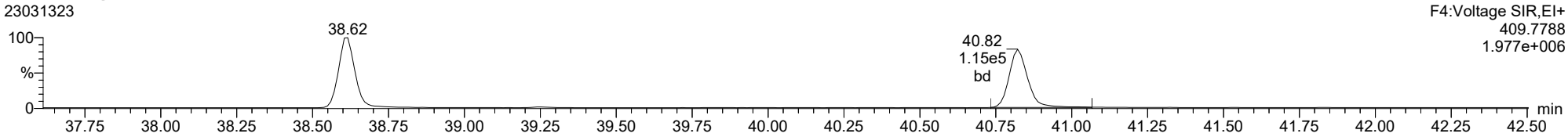

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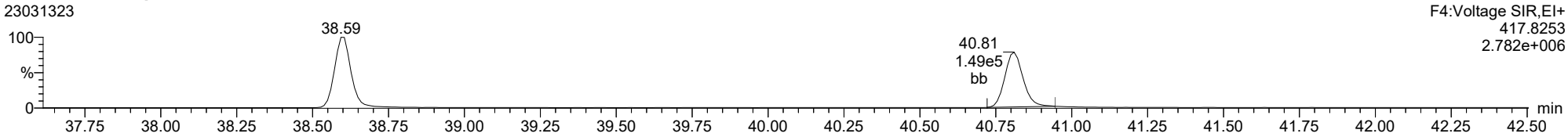

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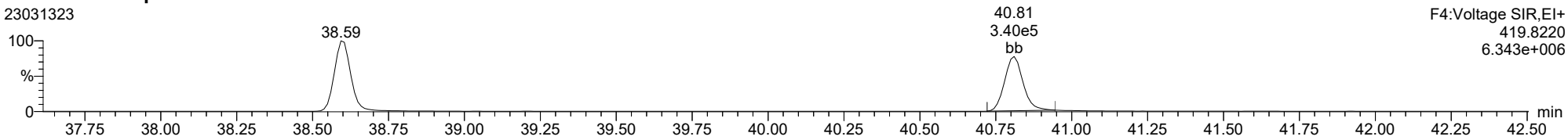

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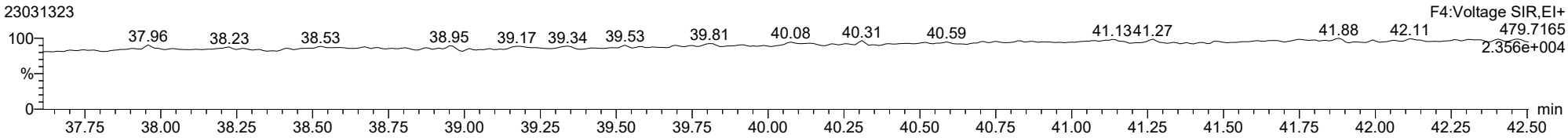

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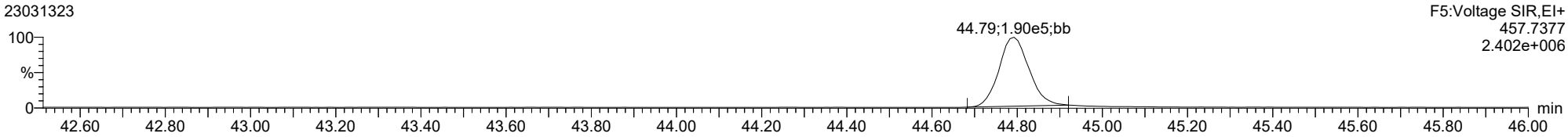

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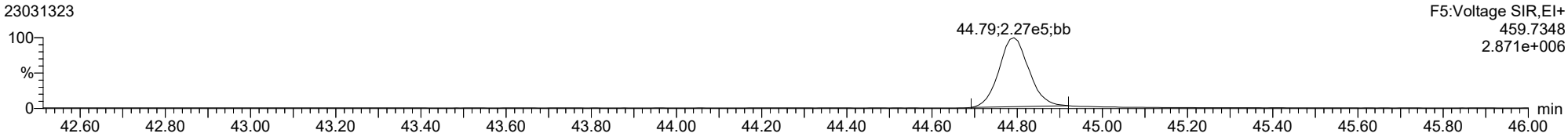

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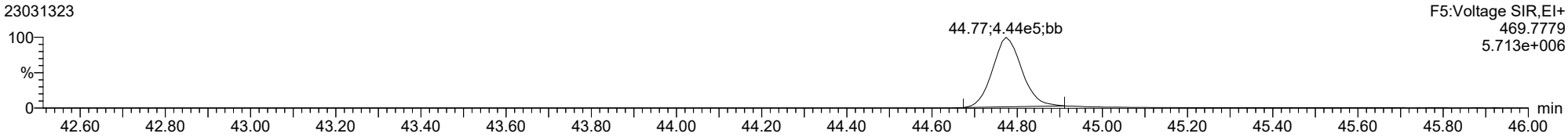

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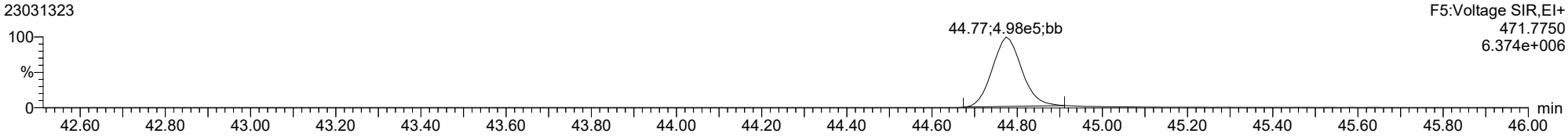
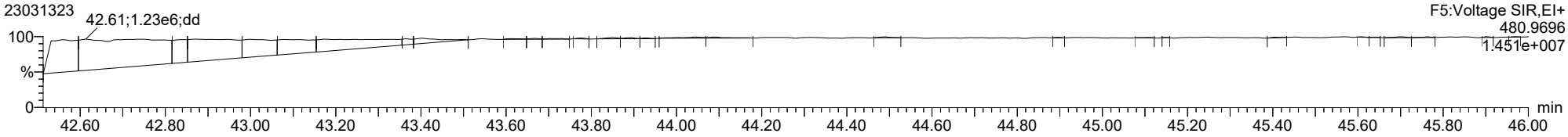


FUNCTION5 PFK



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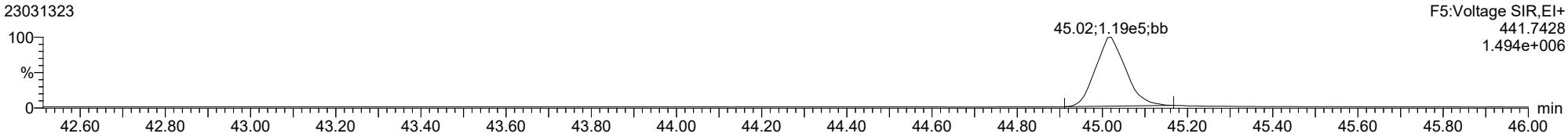

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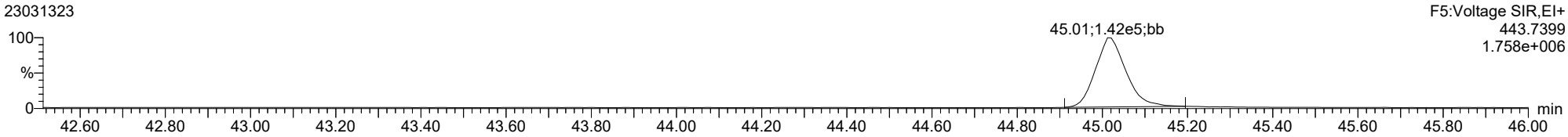
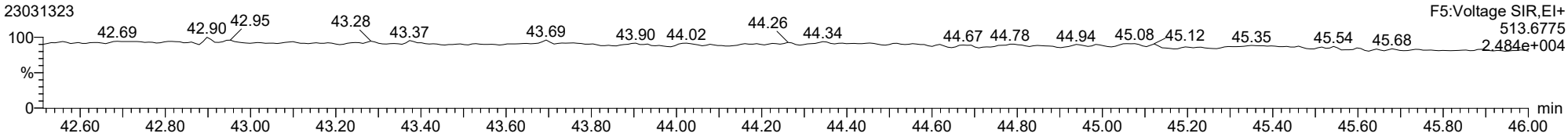


FUNCTION5 DCDPE



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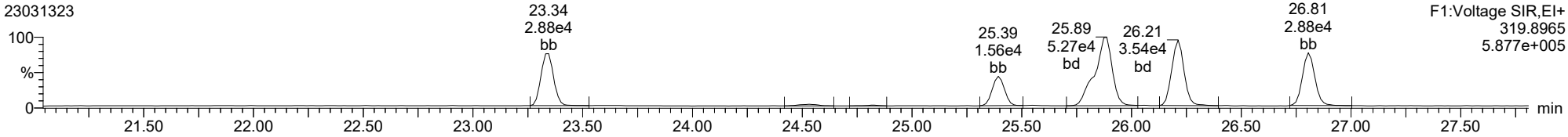
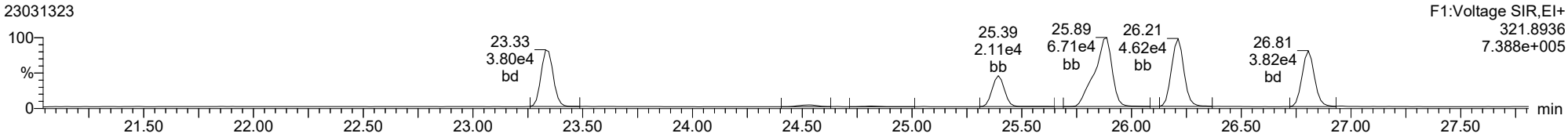
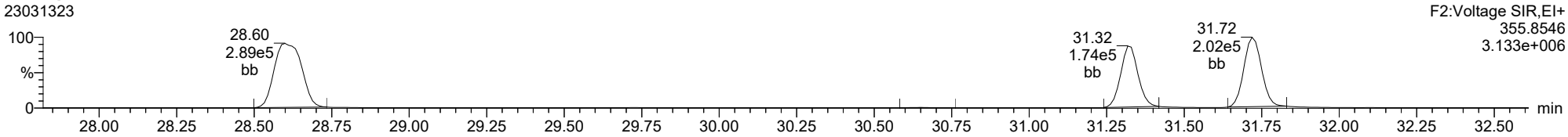
Total-tetradioxins



Total-tetradioxins



Total-pentadioxins



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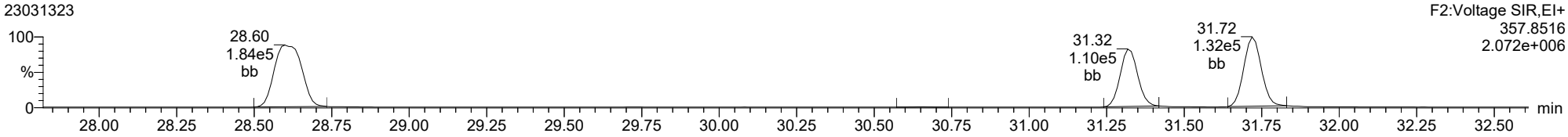

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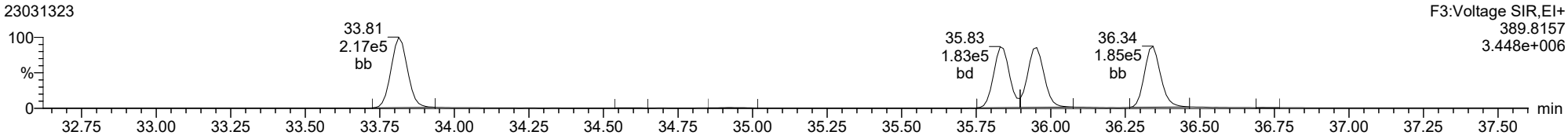
Total-hexadioxins



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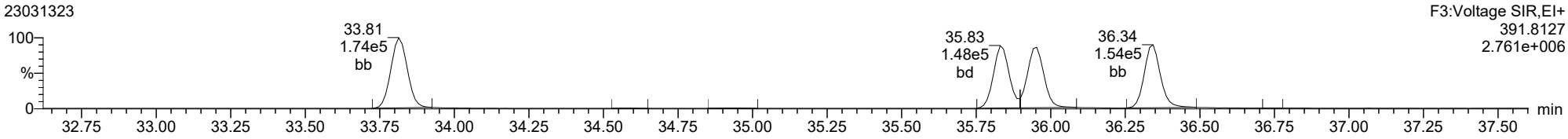
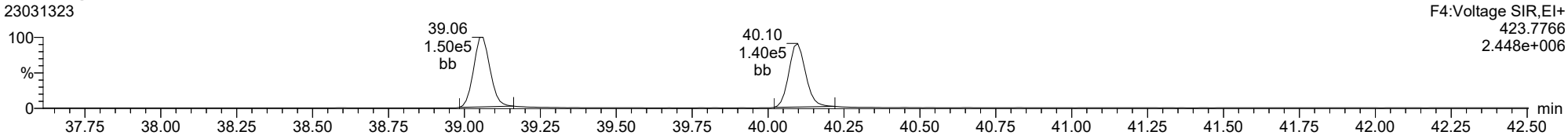


Total-heptadioxins



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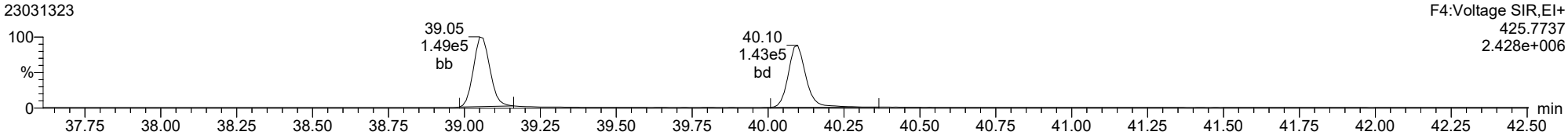

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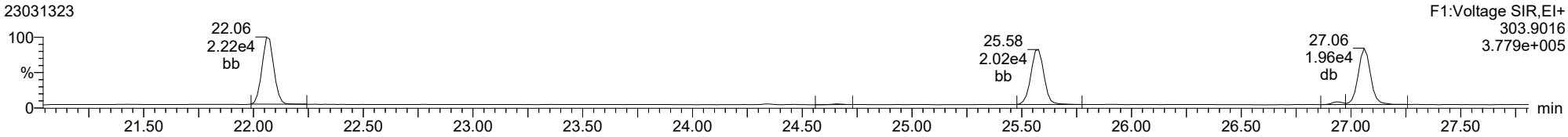
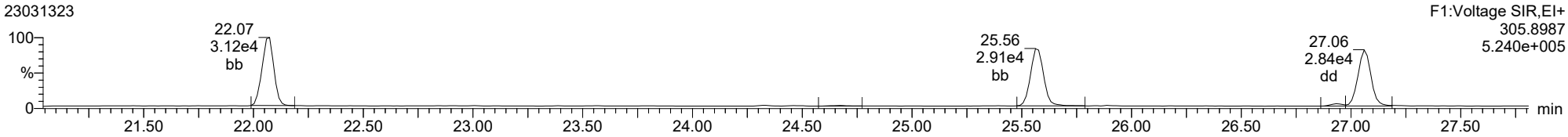
Total-tetrafurans



Total-tetrafurans



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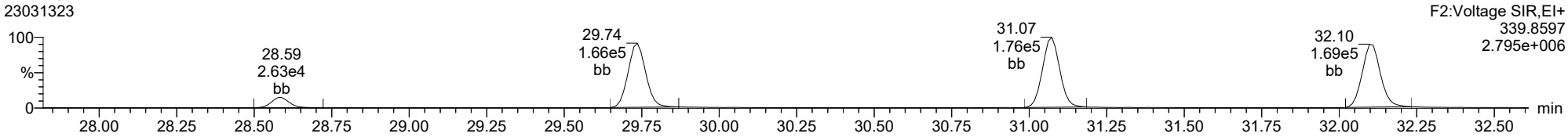

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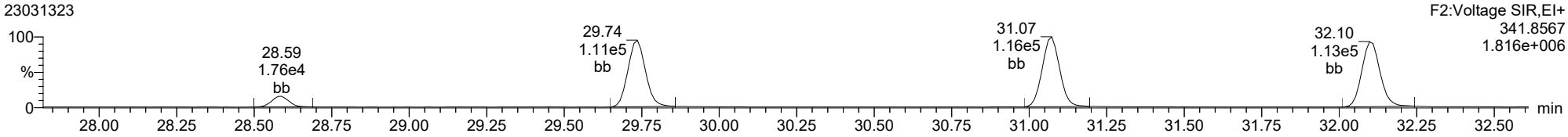

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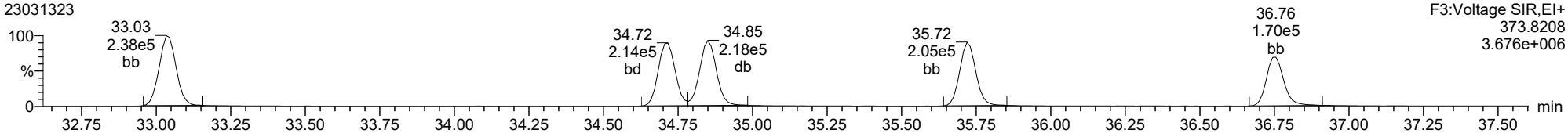

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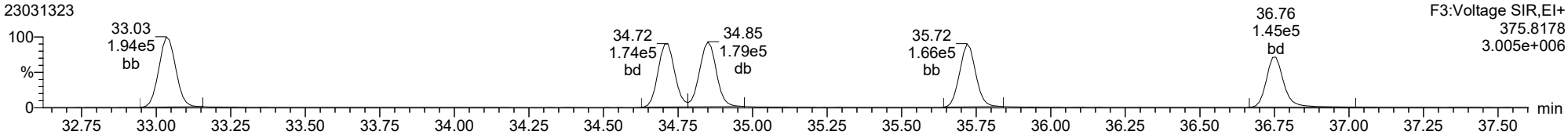

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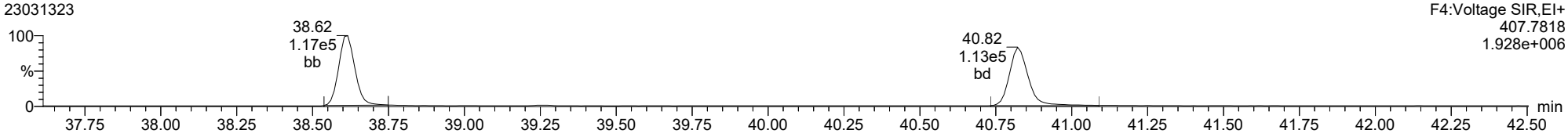

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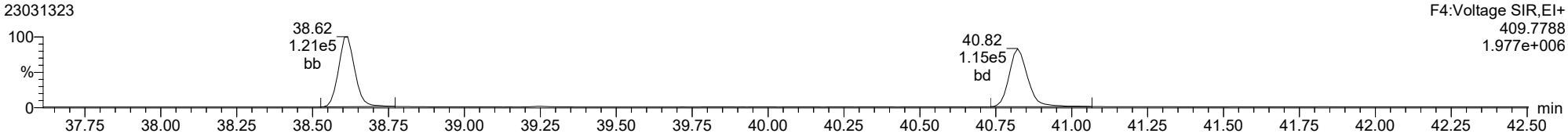
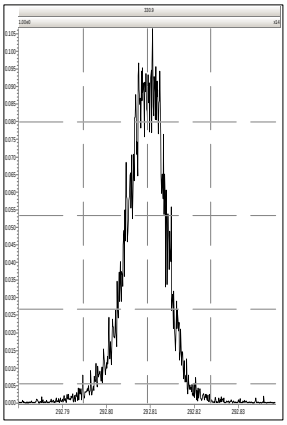
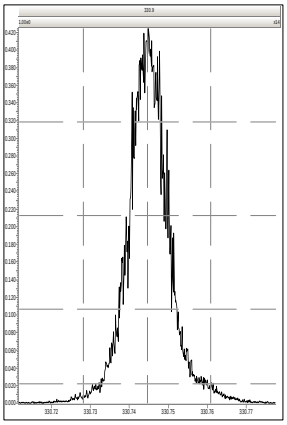


Printed: Tuesday, March 14, 2023 05:25:47 Pacific Daylight Time

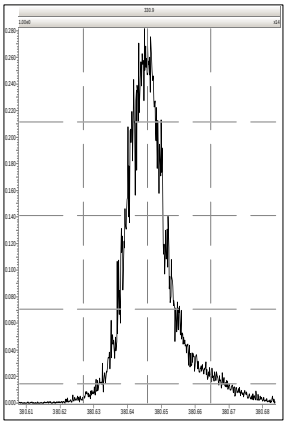
M 292.9824 R 13970



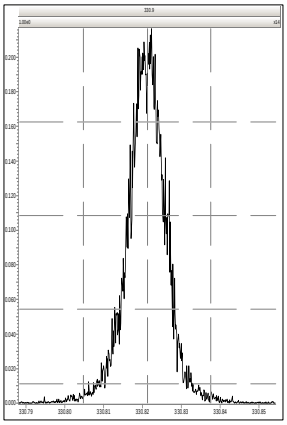
M 330.9792 R 12501



M 380.9760 R 10846



M 330.9792 R 15271



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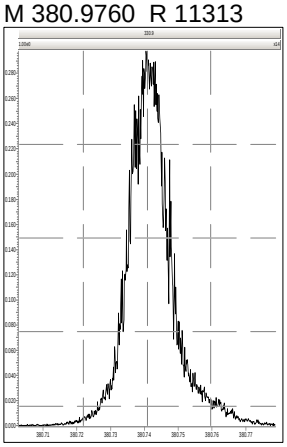

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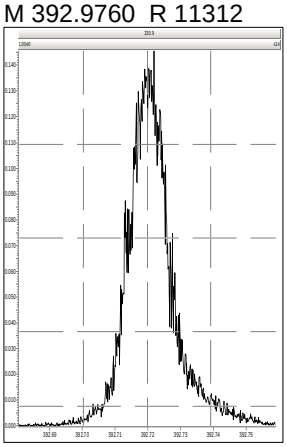
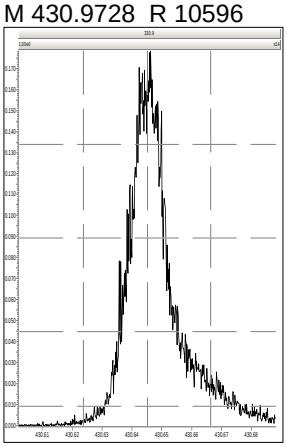


M 430.9728 R 10596



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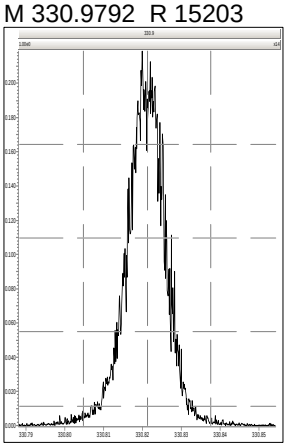

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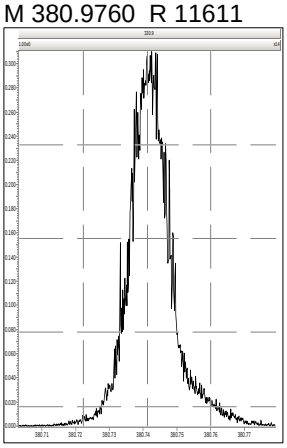

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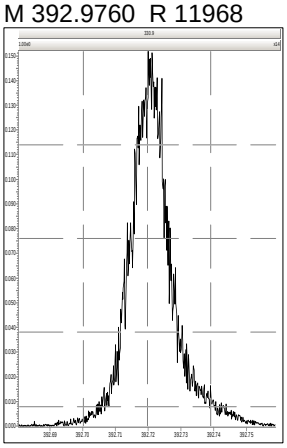
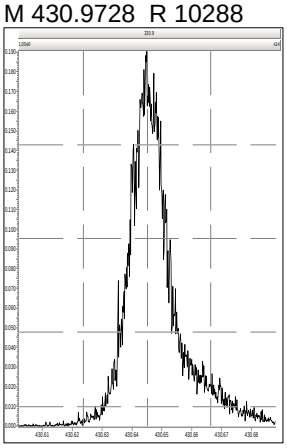


M 430.9728 R 10288



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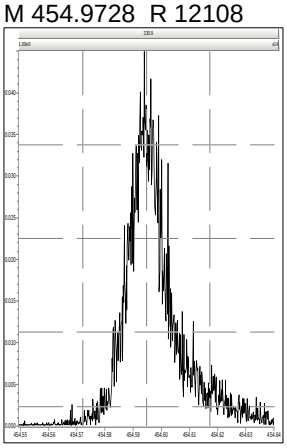

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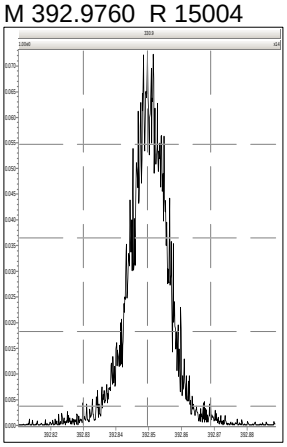

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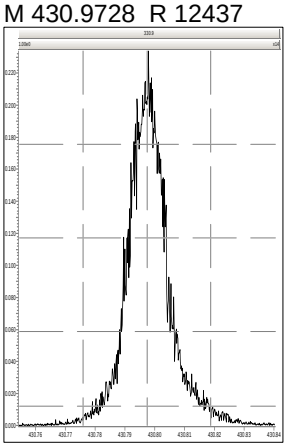
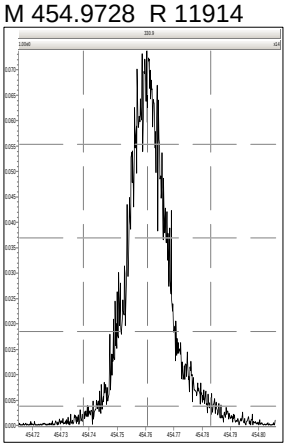
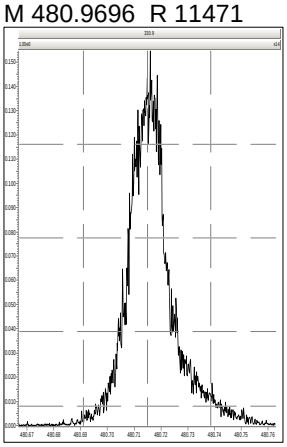


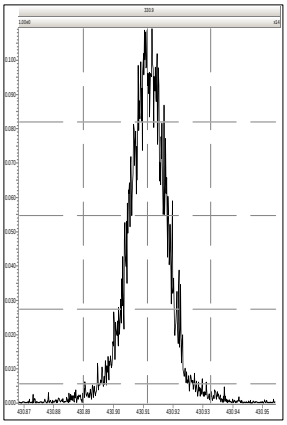
M 454.9728 R 11914



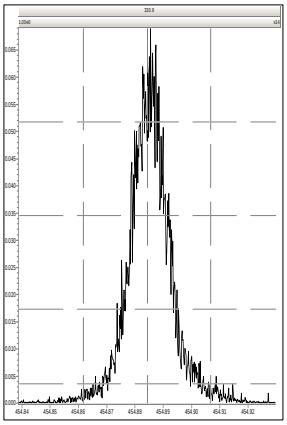
M 480.9696 R 11471



M 430.9728 R 14204



M 454.9728 R 14914



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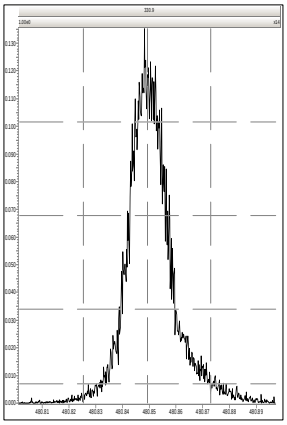

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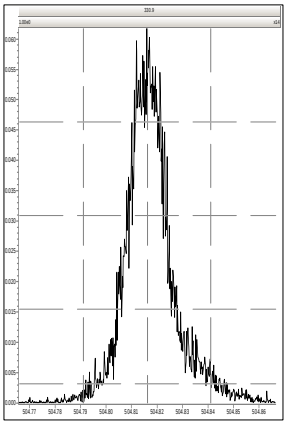
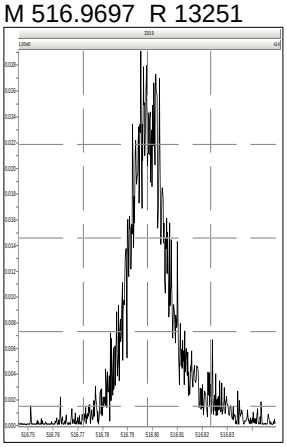
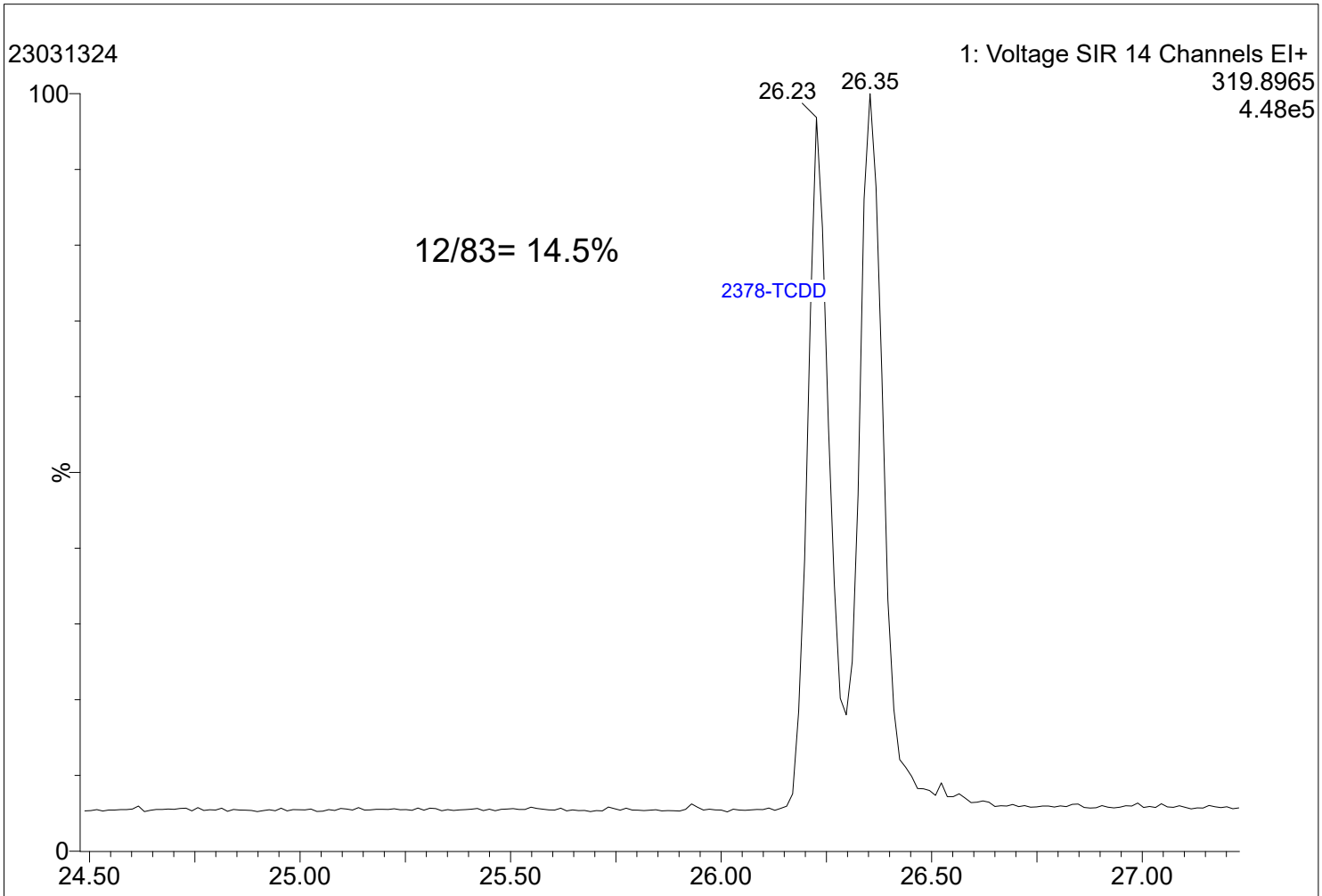
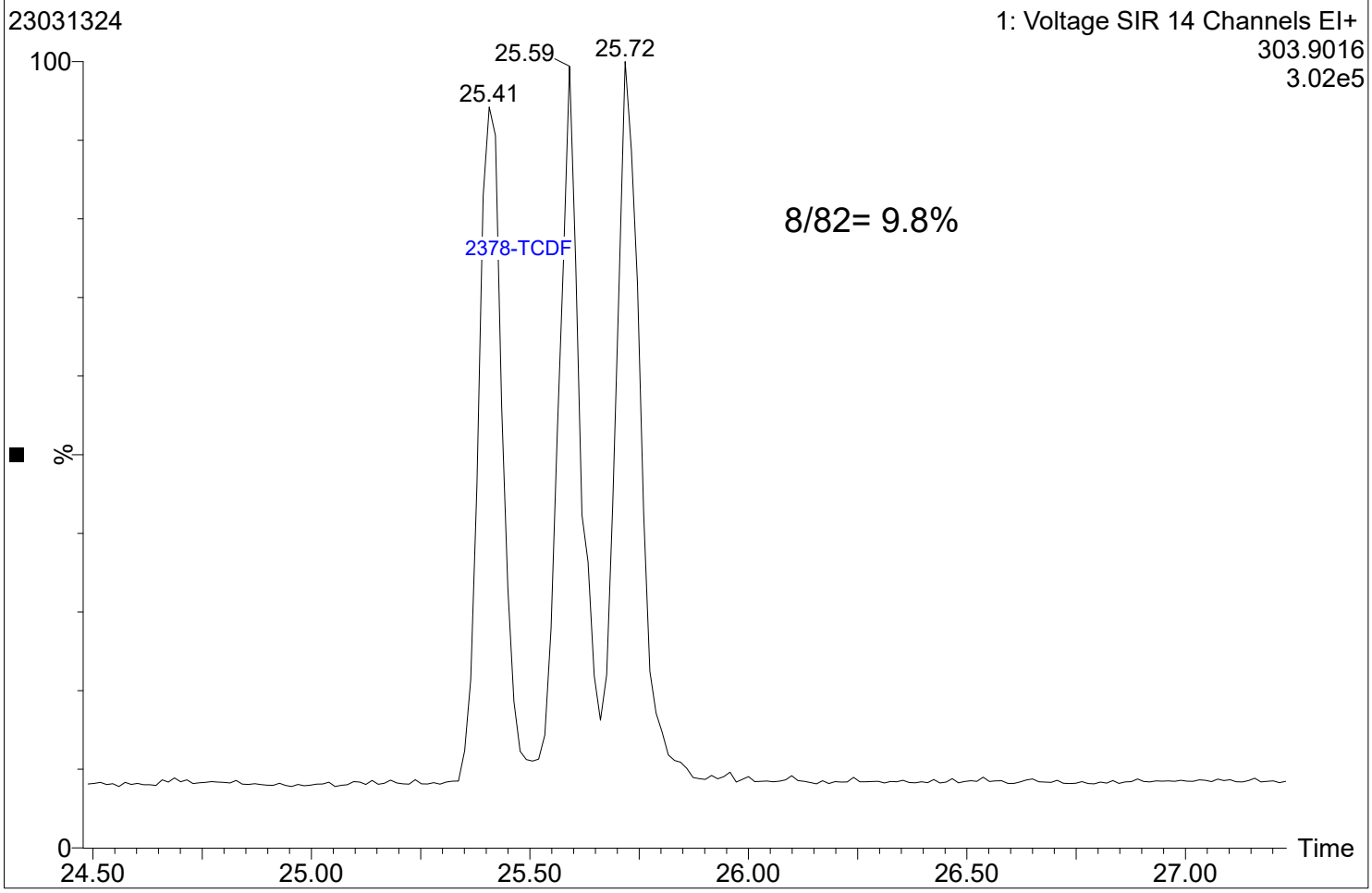


M 516.9697 R 13251




23031324
1: Voltage SIR 14 Channels EI+
319.8965
4.48e5
100
26.23
26.35
12/83= 14.5%
2378-TCDD
%
0
24.50
25.00
25.50
26.00
26.50
27.00


23031324
1: Voltage SIR 14 Channels EI+
303.9016
3.02e5
100
25.59
25.72
25.41
8/82= 9.8%
2378-TCDF
%
0
Time
24.50
25.00
25.50
26.00
26.50
27.00

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23031510	Calibration Date:	03/03/2023
Sequence:	SLC0176	Injection Date:	03/15/23
Lab Sample ID:	SLC0176-CCV1	Injection Time:	17:48
Sequence Name:	CS3Z5		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
2,3,7,8-TCDF	A	10.000	9.19	0.7015272	0.6449612		-8.1	+/-16	
2,3,7,8-TCDD	A	10.000	8.62	1.1486620	0.9904082		-13.8	+/-22	
1,2,3,7,8-PeCDF	A	50.000	46.8	0.6792300	0.6359218		-6.4	+/-18	
2,3,4,7,8-PeCDF	A	50.000	44.3	0.7861704	0.6964221		-11.4	+/-18	
1,2,3,7,8-PeCDD	A	50.000	46.8	1.0218450	0.9568295		-6.4	+/-22	
1,2,3,4,7,8-HxCDF	A	50.000	44.5	1.1660380	1.0380760		-11.0	+/-10	*
1,2,3,6,7,8-HxCDF	A	50.000	47.2	1.0907410	1.0286120		-5.7	+/-12	
2,3,4,6,7,8-HxCDF	A	50.000	46.7	1.1396990	1.0646360		-6.6	+/-12	
1,2,3,7,8,9-HxCDF	A	50.000	45.7	1.1370930	1.0384750		-8.7	+/-10	
1,2,3,4,7,8-HxCDD	A	50.000	45.7	0.9955689	0.9098876		-8.6	+/-22	
1,2,3,6,7,8-HxCDD	A	50.000	43.2	1.0009380	0.8641645		-13.7	+/-22	
1,2,3,7,8,9-HxCDD	A	50.000	46.3	0.9071139	0.8399319		-7.4	+/-18	
1,2,3,4,6,7,8-HpCDF	A	50.000	45.1	1.0029930	0.9046625		-9.8	+/-10	
1,2,3,4,7,8,9-HpCDF	A	50.000	47.7	0.9531152	0.9094624		-4.6	+/-14	
1,2,3,4,6,7,8-HpCDD	A	50.000	45.8	1.0390130	0.9507112		-8.5	+/-14	
OCDF	A	100.00	77.9	0.7778078	0.6058564		-22.1	+/-37	
OCDD	A	100.00	94.4	0.9199537	0.8682801		-5.6	+/-21	
13C12-2,3,7,8-TCDF	A	100.00	81.2	1.6201960	1.3150040		-18.8	+/-29	
13C12-2,3,7,8-TCDD	A	100.00	109	1.1524090	1.2608664		9.4	+/-18	
13C12-1,2,3,7,8-PeCDF	A	100.00	89.8	1.2404520	1.1144953		-10.2	+/-24	
13C12-2,3,4,7,8-PeCDF	A	100.00	91.7	1.1177860	1.0244712		-8.3	+/-23	
13C12-1,2,3,7,8-PeCDD	A	100.00	104	0.8288129	0.8582641		3.6	+/-38	
13C12-1,2,3,4,7,8-HxCDF	A	100.00	92.3	1.1683050	1.0787790		-7.7	+/-24	
13C12-1,2,3,6,7,8-HxCDF	A	100.00	82.6	1.3864660	1.1455117		-17.4	+/-30	
13C12-2,3,4,6,7,8-HxCDF	A	100.00	81.0	1.1292560	0.9150105		-19.0	+/-27	
13C12-1,2,3,7,8,9-HxCDF	A	100.00	81.1	0.9317541	0.7557350		-18.9	+/-26	
13C12-1,2,3,4,7,8-HxCDD	A	100.00	99.3	0.9950393	0.9879157		-0.7	+/-15	
13C12-1,2,3,6,7,8-HxCDD	A	100.00	89.4	1.1566890	1.0336339		-10.6	+/-15	
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	67.1	0.8952017	0.6010170		-32.9	+/-22	*
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	73.7	0.7697516	0.5674264		-26.3	+/-23	*
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	81.9	0.8401226	0.6882668		-18.1	+/-28	
13C12-OCDD	A	200.00	183	0.7674714	0.7035644		-8.3	+/-52	
37Cl4-2,3,7,8-TCDD	A	10.000	9.23	1.2878040	1.1889283		-7.7		

* Values outside of QC limits

* Values outside of QC limits

* Values outside of QC limits

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Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:59:13 Pacific Daylight Time

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Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3Z5, Name: 23031510, Date: 15-Mar-2023, Time: 17:48:31, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.548	1.000	1.979e4	2.712e4	0.702	0.730	0.770	701	853	3.10e5	4.12e5	442.7	483.7	NO	bb	bb	9.194
12378-PeCDF	29.725	1.001	1.171e5	7.894e4	0.679	1.483	1.550	942	813	1.85e6	1.23e6	1964.1	1511.5	NO	bb	bb	46.812
23478-PeCDF	31.062	1.001	1.184e5	7.896e4	0.786	1.499	1.550	942	813	1.86e6	1.22e6	1971.7	1505.9	NO	bb	bb	44.292
123478-HxCDF	34.705	1.001	2.097e5	1.702e5	1.166	1.233	1.240	1442	1122	3.41e6	2.75e6	2367.3	2452.8	NO	bd	bd	44.513
234678-HxCDF	35.718	1.001	1.827e5	1.478e5	1.140	1.236	1.240	1442	1122	2.94e6	2.38e6	2042.3	2122.8	NO	bb	bd	46.707
123678-HxCDF	34.838	1.000	2.211e5	1.786e5	1.091	1.238	1.240	1442	1122	3.45e6	2.83e6	2393.2	2521.5	NO	dd	db	47.152
123789-HxCDF	36.743	1.000	1.458e5	1.204e5	1.137	1.211	1.240	1442	1122	2.39e6	1.96e6	1656.1	1748.5	NO	bd	bd	45.664
1234678-HpCDF	38.604	1.000	9.033e4	9.412e4	1.003	0.960	1.050	900	854	1.56e6	1.60e6	1729.7	1872.8	NO	bb	bd	45.098
1234789-HpCDF	40.821	1.000	8.807e4	8.700e4	0.953	1.012	1.050	900	854	1.30e6	1.29e6	1449.3	1509.5	NO	bb	bb	47.710
OCDF	45.020	1.005	1.357e5	1.535e5	0.778	0.884	0.890	736	1056	1.69e6	1.88e6	2288.4	1785.3	NO	bb	bb	77.893
2378-TCDD	26.198	1.001	2.973e4	3.935e4	1.149	0.756	0.770	1171	720	4.67e5	6.03e5	398.6	838.0	NO	bb	bb	8.622
12378-PeCDD	31.306	1.000	1.355e5	9.163e4	1.022	1.479	1.550	1155	1038	2.14e6	1.46e6	1853.3	1405.8	NO	bb	bb	46.819
123478-HxCDD	35.830	1.001	1.678e5	1.372e5	0.996	1.223	1.240	1077	867	2.74e6	2.24e6	2540.5	2584.3	NO	bd	bd	45.697
123678-HxCDD	35.941	1.000	1.666e5	1.365e5	1.001	1.221	1.240	1077	867	2.87e6	2.31e6	2668.2	2667.0	NO	db	db	43.168
123789-HxCDD	36.331	1.011	1.574e5	1.306e5	0.907	1.206	1.240	1077	867	2.66e6	2.22e6	2472.9	2562.2	NO	bb	bb	46.297
1234678-HpCDD	40.086	1.000	1.123e5	1.097e5	1.039	1.023	1.050	1057	905	1.78e6	1.74e6	1688.2	1925.9	NO	bb	bb	45.751
OCDD	44.792	1.000	1.918e5	2.227e5	0.920	0.861	0.890	780	1028	2.48e6	2.85e6	3176.6	2774.7	NO	bb	bb	94.383
13C-2378-TCDF	25.534	1.007	3.124e5	4.150e5	1.620	0.753	0.770	1758	1133	4.89e6	6.59e6	2779.0	5815.4	NO	bb	bb	81.163
13C-12378-PeCDF	29.702	1.172	3.679e5	2.485e5	1.240	1.480	1.550	965	2263	5.78e6	3.94e6	5989.3	1739.0	NO	bb	bb	89.846
13C-23478-PeCDF	31.039	1.224	3.353e5	2.314e5	1.118	1.449	1.550	965	2263	5.43e6	3.68e6	5620.6	1628.2	NO	bb	bb	91.652
13C-123478-HxCDF	34.682	0.955	2.451e5	4.869e5	1.168	0.503	0.510	1041	1477	3.94e6	7.90e6	3784.8	5348.4	NO	bd	bd	92.337
13C-123678-HxCDF	34.827	0.959	2.610e5	5.163e5	1.386	0.506	0.510	1041	1477	4.14e6	8.18e6	3973.1	5538.5	NO	dd	dd	82.621
13C-234678-HxCDF	35.696	0.983	2.088e5	4.120e5	1.129	0.507	0.510	1041	1477	3.50e6	6.86e6	3364.7	4643.7	NO	bb	bb	81.028
13C-123789-HxCDF	36.732	1.011	1.728e5	3.400e5	0.932	0.508	0.510	1041	1477	2.86e6	5.64e6	2751.4	3821.1	NO	bb	bb	81.109
13C-1234678-HpCDF	38.593	1.063	1.238e5	2.840e5	0.895	0.436	0.440	925	1132	2.18e6	5.02e6	2354.9	4433.9	NO	bb	bb	67.138
13C-1234789-HpCDF	40.799	1.123	1.177e5	2.673e5	0.770	0.440	0.440	925	1132	1.79e6	4.11e6	1940.3	3630.9	NO	bb	bb	73.716
13C-1234-TCDD	25.351	0.000	2.407e5	3.125e5	1.000	0.770	0.770	1552	897	3.85e6	5.00e6	2479.5	5575.6	NO	bb	bb	100.000
13C-2378-TCDD	26.170	1.032	3.039e5	3.935e5	1.152	0.772	0.770	1552	897	4.67e6	6.13e6	3008.3	6840.5	NO	bb	bb	109.411
13C-12378-PeCDD	31.295	1.235	2.922e5	1.825e5	0.829	1.601	1.550	834	829	4.51e6	2.85e6	5406.3	3438.8	NO	bb	bb	103.553
13C-123478-HxCDD	35.808	0.986	3.744e5	2.959e5	0.995	1.265	1.240	1512	1015	6.36e6	5.02e6	4209.5	4952.1	NO	bd	bd	99.284
13C-123678-HxCDD	35.930	0.989	3.913e5	3.100e5	1.157	1.262	1.240	1512	1015	6.38e6	5.07e6	4220.0	4994.1	NO	db	db	89.361
13C-1234678-HpCDD	40.075	1.103	2.390e5	2.280e5	0.840	1.048	1.050	796	743	3.82e6	3.66e6	4801.3	4925.7	NO	bb	bb	81.925
13C-OCDD	44.773	1.233	4.481e5	5.066e5	0.767	0.885	0.890	935	896	5.68e6	6.49e6	6078.9	7247.3	NO	bb	bb	183.346
13C-123789-HxCDD	36.320	0.000	3.763e5	3.022e5	1.000	1.245	1.240	1512	1015	6.39e6	5.15e6	4230.2	5077.8	NO	bb	bb	100.000
37CL-2378-TCDD	26.198	1.033	6.576e4		1.288			1066		1.04e6		975.6			bb		9.232

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:59:13 Pacific Daylight Time

ID: CS3Z5, Name: 23031510, Date: 15-Mar-2023, Time: 17:48:31, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.045	0.863	2.008e4	2.842e4	0.802	0.706	0.770	701	853	3.19e5	4.58e5	455.0	536.8	NO	bb	bb	8.320
1289-TCDF	27.045	1.059	1.921e4	2.611e4	0.678	0.736	0.770	701	853	2.97e5	3.96e5	424.5	464.2	NO	db	db	9.190
13468-PECDF	26.918	0.906	2.773e5	1.834e5	1.246	1.512	1.550	810	839	4.38e6	2.88e6	5412.4	3431.5	NO	bb	bb	59.957
12389-PECDF	32.086	1.080	1.181e5	8.079e4	0.496	1.462	1.550	942	813	1.77e6	1.21e6	1874.1	1489.7	NO	bb	bb	65.009
123468-HXCDF	33.022	0.952	2.009e5	1.592e5	1.169	1.262	1.240	1442	1122	3.01e6	2.41e6	2090.1	2150.2	NO	bb	bb	42.092
1368-TCDD	23.316	0.891	2.305e4	3.108e4	1.015	0.742	0.770	1171	720	3.60e5	4.86e5	307.6	675.4	NO	bb	bb	7.644
1289-TCDD	26.791	1.024	2.446e4	3.167e4	0.909	0.772	0.770	1171	720	3.72e5	4.90e5	317.6	680.7	NO	bd	bb	8.857
12479-PECDD	28.588	0.914	2.164e5	1.433e5	2.301	1.510	1.550	1155	1038	2.15e6	1.42e6	1857.9	1365.9	NO	bb	bb	32.930
12389-PECDD	31.708	1.013	1.582e5	1.067e5	1.184	1.482	1.550	1155	1038	2.48e6	1.65e6	2145.7	1593.6	NO	bb	bb	47.149
124679-HXCDD	33.802	0.944	1.872e5	1.529e5	1.115	1.224	1.240	1077	867	2.93e6	2.42e6	2721.0	2788.5	NO	bb	bb	45.484
1234679-HPCDD	39.050	0.974	1.142e5	1.125e5	1.137	1.015	1.050	1057	905	1.99e6	1.95e6	1880.7	2157.7	NO	bb	bb	42.686
Total-tetrafurans			5.962e4		0.727			701		9.35e5							26.932
Total-penta1			2.773e5					810		4.38e6							59.957
Total-pentafurans			3.714e5		0.654			942		5.75e6							163.906
Total-hexafurans			9.602e5		1.141			1442		1.52e7							226.127
Total-heptafurans			1.793e5		0.978			900		2.88e6							93.232
Total-Furans			1.984e6		0.922			701		3.08e7							648.046
Total-tetradioxins			1.332e5		1.024			1171		1.86e6							43.066
Total-pentadioxins			5.101e5		1.502			1155		6.77e6							126.898
Total-hexadioxins			6.794e5		1.005			1077		1.12e7							180.765
Total-heptadioxins			2.264e5		1.088			1057		3.77e6							88.436
Total-Dioxins			1.741e6		1.130			1171		2.61e7							533.548
Total-TEQ			3.724e6					1171		5.69e7							1181.594
FUNCTION1 PFK			1.175e5					507385		2.52e6							
FUNCTION2 PFK			2.802e5					225143		5.89e6							0.000
FUNCTION3 PFK			3.346e7					405815		3.32e7							0.000
FUNCTION4 PFK			3.611e5					318803		9.28e6							
FUNCTION5 PFK			5.312e5					203453		1.20e7							
FUNCTION1 HXCD...			8.615e2					632		1.32e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			7.138e2					680		1.05e4							0.000
FUNCTION3 OCDPE			8.617e2					657		1.23e4							0.000
FUNCTION4 NCDPE			2.097e2					548		3.07e3							0.000
FUNCTION5 DCDPE			9.336e1					585		1.54e3							0.000

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.05	1.921e4	2.611e4	0.678	0.74	0.77	424.5	YES	NO	db	db	9.190
2	Total-tetrafurans	26.93	5.407e2	6.669e2	0.727	0.81	0.77	12.1	YES	NO	bd	bd	0.228
3	2378-TCDF	25.55	1.979e4	2.712e4	0.702	0.73	0.77	442.7	YES	NO	bb	bb	9.194
4	1368-TCDF	22.05	2.008e4	2.842e4	0.802	0.71	0.77	455.0	YES	NO	bb	bb	8.320

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	26.92	2.773e5	1.834e5	1.246	1.51	1.55	5412.4	YES	NO	bb	bb	59.957

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.09	1.181e5	8.079e4	0.496	1.46	1.55	1874.1	YES	NO	bb	bb	65.009
2	23478-PeCDF	31.06	1.184e5	7.896e4	0.786	1.50	1.55	1971.7	YES	NO	bb	bb	44.292
3	Total-pentafurans	30.91	2.336e2	1.696e2	0.654	1.38	1.55	5.0	YES	NO	bb	bb	0.104
4	12378-PeCDF	29.72	1.171e5	7.894e4	0.679	1.48	1.55	1964.1	YES	NO	bb	bb	46.812
5	Total-pentafurans	28.58	1.763e4	1.212e4	0.654	1.45	1.55	284.2	YES	NO	bb	bb	7.689

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.74	1.458e5	1.204e5	1.137	1.21	1.24	1656.1	YES	NO	bd	bd	45.664
2	234678-HxCDF	35.72	1.827e5	1.478e5	1.140	1.24	1.24	2042.3	YES	NO	bb	bd	46.707
3	123678-HxCDF	34.84	2.211e5	1.786e5	1.091	1.24	1.24	2393.2	YES	NO	dd	db	47.152
4	123478-HxCDF	34.70	2.097e5	1.702e5	1.166	1.23	1.24	2367.3	YES	NO	bd	bd	44.513
5	123468-HXCDF	33.02	2.009e5	1.592e5	1.169	1.26	1.24	2090.1	YES	NO	bb	bb	42.092

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	40.82	8.807e4	8.700e4	0.953	1.01	1.05	1449.3	YES	NO	bb	bb	47.710
2	Total-heptafurans	39.25	8.749e2	7.667e2	0.978	1.14	1.05	18.1	YES	NO	bb	bb	0.423
3	1234678-HpCDF	38.60	9.033e4	9.412e4	1.003	0.96	1.05	1729.7	YES	NO	bb	bd	45.098

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.05	1.921e4	2.611e4	0.678	0.74	0.77	424.5	YES	NO	db	db	9.190
2	Total-tetrafurans	26.93	5.407e2	6.669e2	0.727	0.81	0.77	12.1	YES	NO	bd	bd	0.228
3	2378-TCDF	25.55	1.979e4	2.712e4	0.702	0.73	0.77	442.7	YES	NO	bb	bb	9.194
4	1368-TCDF	22.05	2.008e4	2.842e4	0.802	0.71	0.77	455.0	YES	NO	bb	bb	8.320
5	12389-PECDF	32.09	1.181e5	8.079e4	0.496	1.46	1.55	1874.1	YES	NO	bb	bb	65.009
6	23478-PeCDF	31.06	1.184e5	7.896e4	0.786	1.50	1.55	1971.7	YES	NO	bb	bb	44.292
7	Total-pentafurans	30.91	2.336e2	1.696e2	0.654	1.38	1.55	5.0	YES	NO	bb	bb	0.104
8	12378-PeCDF	29.72	1.171e5	7.894e4	0.679	1.48	1.55	1964.1	YES	NO	bb	bb	46.812
9	Total-pentafurans	28.58	1.763e4	1.212e4	0.654	1.45	1.55	284.2	YES	NO	bb	bb	7.689
10	123789-HxCDF	36.74	1.458e5	1.204e5	1.137	1.21	1.24	1656.1	YES	NO	bd	bd	45.664
11	234678-HxCDF	35.72	1.827e5	1.478e5	1.140	1.24	1.24	2042.3	YES	NO	bb	bd	46.707
12	123678-HxCDF	34.84	2.211e5	1.786e5	1.091	1.24	1.24	2393.2	YES	NO	dd	db	47.152
13	123478-HxCDF	34.70	2.097e5	1.702e5	1.166	1.23	1.24	2367.3	YES	NO	bd	bd	44.513
14	123468-HXCDF	33.02	2.009e5	1.592e5	1.169	1.26	1.24	2090.1	YES	NO	bb	bb	42.092
15	1234789-HpCDF	40.82	8.807e4	8.700e4	0.953	1.01	1.05	1449.3	YES	NO	bb	bb	47.710
16	Total-heptafurans	39.25	8.749e2	7.667e2	0.978	1.14	1.05	18.1	YES	NO	bb	bb	0.423
17	1234678-HpCDF	38.60	9.033e4	9.412e4	1.003	0.96	1.05	1729.7	YES	NO	bb	bd	45.098
18	OCDF	45.02	1.357e5	1.535e5	0.778	0.88	0.89	2288.4	YES	NO	bb	bb	77.893
19	13468-PECDF	26.92	2.773e5	1.834e5	1.246	1.51	1.55	5412.4	YES	NO	bb	bb	59.957

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	26.79	2.446e4	3.167e4	0.909	0.77	0.77	317.6	YES	NO	bd	bb	8.857
2	2378-TCDD	26.20	2.973e4	3.935e4	1.149	0.76	0.77	398.6	YES	NO	bb	bb	8.622
3	Total-tetradioxins	25.86	4.154e4	5.400e4	1.024	0.77	0.77	377.0	YES	NO	bb	bd	13.374
4	Total-tetradioxins	25.38	1.310e4	1.653e4	1.024	0.79	0.77	177.2	YES	NO	bd	bd	4.148
5	Total-tetradioxins	24.52	1.356e3	1.639e3	1.024	0.83	0.77	12.1	YES	NO	bb	bb	0.419
6	1368-TCDD	23.32	2.305e4	3.108e4	1.015	0.74	0.77	307.6	YES	NO	bb	bb	7.644

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.71	1.582e5	1.067e5	1.184	1.48	1.55	2145.7	YES	NO	bb	bb	47.149
2	12378-PeCDD	31.31	1.355e5	9.163e4	1.022	1.48	1.55	1853.3	YES	NO	bb	bb	46.819
3	12479-PECDD	28.59	2.164e5	1.433e5	2.301	1.51	1.55	1857.9	YES	NO	bb	bb	32.930

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	124679-HXCDD	33.80	1.872e5	1.529e5	1.115	1.22	1.24	2721.0	YES	NO	bb	bb	45.484
2	123789-HxCDD	36.33	1.574e5	1.306e5	0.907	1.21	1.24	2472.9	YES	NO	bb	bb	46.297
3	123678-HxCDD	35.94	1.666e5	1.365e5	1.001	1.22	1.24	2668.2	YES	NO	db	db	43.168
4	123478-HxCDD	35.83	1.678e5	1.372e5	0.996	1.22	1.24	2540.5	YES	NO	bd	bd	45.697
5	Total-hexadioxins	34.58	4.486e2	3.746e2	1.005	1.20	1.24	6.5	YES	NO	bd	bb	0.119

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.09	1.123e5	1.097e5	1.039	1.02	1.05	1688.2	YES	NO	bb	bb	45.751
2	1234679-HPCDD	39.05	1.142e5	1.125e5	1.137	1.01	1.05	1880.7	YES	NO	bb	bb	42.686

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	26.79	2.446e4	3.167e4	0.909	0.77	0.77	317.6	YES	NO	bd	bb	8.857
2	2378-TCDD	26.20	2.973e4	3.935e4	1.149	0.76	0.77	398.6	YES	NO	bb	bb	8.622
3	Total-tetradioxins	25.86	4.154e4	5.400e4	1.024	0.77	0.77	377.0	YES	NO	bb	bd	13.374
4	Total-tetradioxins	25.38	1.310e4	1.653e4	1.024	0.79	0.77	177.2	YES	NO	bd	bd	4.148
5	Total-tetradioxins	24.52	1.356e3	1.639e3	1.024	0.83	0.77	12.1	YES	NO	bb	bb	0.419
6	1368-TCDD	23.32	2.305e4	3.108e4	1.015	0.74	0.77	307.6	YES	NO	bb	bb	7.644
7	124679-HXCDD	33.80	1.872e5	1.529e5	1.115	1.22	1.24	2721.0	YES	NO	bb	bb	45.484
8	12389-PECDD	31.71	1.582e5	1.067e5	1.184	1.48	1.55	2145.7	YES	NO	bb	bb	47.149
9	12378-PeCDD	31.31	1.355e5	9.163e4	1.022	1.48	1.55	1853.3	YES	NO	bb	bb	46.819
10	12479-PECDD	28.59	2.164e5	1.433e5	2.301	1.51	1.55	1857.9	YES	NO	bb	bb	32.930
11	123789-HxCDD	36.33	1.574e5	1.306e5	0.907	1.21	1.24	2472.9	YES	NO	bb	bb	46.297
12	123678-HxCDD	35.94	1.666e5	1.365e5	1.001	1.22	1.24	2668.2	YES	NO	db	db	43.168
13	123478-HxCDD	35.83	1.678e5	1.372e5	0.996	1.22	1.24	2540.5	YES	NO	bd	bd	45.697
14	Total-hexadioxins	34.58	4.486e2	3.746e2	1.005	1.20	1.24	6.5	YES	NO	bd	bb	0.119
15	1234678-HpCDD	40.09	1.123e5	1.097e5	1.039	1.02	1.05	1688.2	YES	NO	bb	bb	45.751
16	1234679-HPCDD	39.05	1.142e5	1.125e5	1.137	1.01	1.05	1880.7	YES	NO	bb	bb	42.686
17	OCDD	44.79	1.918e5	2.227e5	0.920	0.86	0.89	3176.6	YES	NO	bb	bb	94.383

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.05	1.921e4	2.611e4	0.678	0.74	0.77	424.5	YES	NO	db	db	9.190
2	Total-tetrafurans	26.93	5.407e2	6.669e2	0.727	0.81	0.77	12.1	YES	NO	bd	bd	0.228
3	2378-TCDF	25.55	1.979e4	2.712e4	0.702	0.73	0.77	442.7	YES	NO	bb	bb	9.194
4	1368-TCDF	22.05	2.008e4	2.842e4	0.802	0.71	0.77	455.0	YES	NO	bb	bb	8.320
5	12389-PECDF	32.09	1.181e5	8.079e4	0.496	1.46	1.55	1874.1	YES	NO	bb	bb	65.009
6	23478-PeCDF	31.06	1.184e5	7.896e4	0.786	1.50	1.55	1971.7	YES	NO	bb	bb	44.292
7	Total-pentafurans	30.91	2.336e2	1.696e2	0.654	1.38	1.55	5.0	YES	NO	bb	bb	0.104
8	12378-PeCDF	29.72	1.171e5	7.894e4	0.679	1.48	1.55	1964.1	YES	NO	bb	bb	46.812
9	Total-pentafurans	28.58	1.763e4	1.212e4	0.654	1.45	1.55	284.2	YES	NO	bb	bb	7.689
10	123789-HxCDF	36.74	1.458e5	1.204e5	1.137	1.21	1.24	1656.1	YES	NO	bd	bd	45.664
11	234678-HxCDF	35.72	1.827e5	1.478e5	1.140	1.24	1.24	2042.3	YES	NO	bb	bd	46.707
12	123678-HxCDF	34.84	2.211e5	1.786e5	1.091	1.24	1.24	2393.2	YES	NO	dd	db	47.152
13	123478-HxCDF	34.70	2.097e5	1.702e5	1.166	1.23	1.24	2367.3	YES	NO	bd	bd	44.513
14	123468-HXCDF	33.02	2.009e5	1.592e5	1.169	1.26	1.24	2090.1	YES	NO	bb	bb	42.092
15	1234789-HpCDF	40.82	8.807e4	8.700e4	0.953	1.01	1.05	1449.3	YES	NO	bb	bb	47.710
16	Total-heptafurans	39.25	8.749e2	7.667e2	0.978	1.14	1.05	18.1	YES	NO	bb	bb	0.423
17	1234678-HpCDF	38.60	9.033e4	9.412e4	1.003	0.96	1.05	1729.7	YES	NO	bb	bd	45.098
18	OCDF	45.02	1.357e5	1.535e5	0.778	0.88	0.89	2288.4	YES	NO	bb	bb	77.893
19	13468-PECDF	26.92	2.773e5	1.834e5	1.246	1.51	1.55	5412.4	YES	NO	bb	bb	59.957
20	1289-TCDD	26.79	2.446e4	3.167e4	0.909	0.77	0.77	317.6	YES	NO	bd	bb	8.857
21	2378-TCDD	26.20	2.973e4	3.935e4	1.149	0.76	0.77	398.6	YES	NO	bb	bb	8.622
22	Total-tetradioxins	25.86	4.154e4	5.400e4	1.024	0.77	0.77	377.0	YES	NO	bb	bd	13.374
23	Total-tetradioxins	25.38	1.310e4	1.653e4	1.024	0.79	0.77	177.2	YES	NO	bd	bd	4.148
24	Total-tetradioxins	24.52	1.356e3	1.639e3	1.024	0.83	0.77	12.1	YES	NO	bb	bb	0.419
25	1368-TCDD	23.32	2.305e4	3.108e4	1.015	0.74	0.77	307.6	YES	NO	bb	bb	7.644
26	124679-HXCDD	33.80	1.872e5	1.529e5	1.115	1.22	1.24	2721.0	YES	NO	bb	bb	45.484
27	12389-PECDD	31.71	1.582e5	1.067e5	1.184	1.48	1.55	2145.7	YES	NO	bb	bb	47.149
28	12378-PeCDD	31.31	1.355e5	9.163e4	1.022	1.48	1.55	1853.3	YES	NO	bb	bb	46.819
29	12479-PECDD	28.59	2.164e5	1.433e5	2.301	1.51	1.55	1857.9	YES	NO	bb	bb	32.930
30	123789-HxCDD	36.33	1.574e5	1.306e5	0.907	1.21	1.24	2472.9	YES	NO	bb	bb	46.297
31	123678-HxCDD	35.94	1.666e5	1.365e5	1.001	1.22	1.24	2668.2	YES	NO	db	db	43.168
32	123478-HxCDD	35.83	1.678e5	1.372e5	0.996	1.22	1.24	2540.5	YES	NO	bd	bd	45.697
33	Total-hexadioxins	34.58	4.486e2	3.746e2	1.005	1.20	1.24	6.5	YES	NO	bd	bb	0.119
34	1234678-HpCDD	40.09	1.123e5	1.097e5	1.039	1.02	1.05	1688.2	YES	NO	bb	bb	45.751
35	1234679-HPCDD	39.05	1.142e5	1.125e5	1.137	1.01	1.05	1880.7	YES	NO	bb	bb	42.686
36	OCDD	44.79	1.918e5	2.227e5	0.920	0.86	0.89	3176.6	YES	NO	bb	bb	94.383

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	26.03	9.098e4					3.1	YES		bb		
2	FUNCTION1 PFK	23.12	2.655e4					1.8	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	31.47	1.411e4					2.2	NO		bd		0.000
2	FUNCTION2 PFK	31.27	7.740e3					1.1	NO		bb		0.000
3	FUNCTION2 PFK	31.12	6.984e3					1.3	NO		bb		0.000
4	FUNCTION2 PFK	30.63	1.860e3					0.7	NO		bb		0.000
5	FUNCTION2 PFK	28.84	1.543e3					0.6	NO		bb		0.000
6	FUNCTION2 PFK	28.37	2.093e4					2.1	NO		db		0.000
7	FUNCTION2 PFK	28.29	8.837e3					1.8	NO		dd		0.000
8	FUNCTION2 PFK	28.21	3.579e4					2.6	NO		dd		0.000
9	FUNCTION2 PFK	28.04	8.404e4					3.2	YES		bd		0.000
10	FUNCTION2 PFK	32.41	8.720e3					1.6	NO		db		0.000
11	FUNCTION2 PFK	32.35	8.681e3					1.7	NO		bd		0.000
12	FUNCTION2 PFK	31.82	2.245e4					2.2	NO		bb		0.000
13	FUNCTION2 PFK	31.63	2.457e4					2.6	NO		bb		0.000
14	FUNCTION2 PFK	31.57	3.395e4					2.4	NO		db		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	34.97	8.636e6					26.0	YES		db		0.000
2	FUNCTION3 PFK	34.54	4.685e6					26.8	YES		dd		0.000
3	FUNCTION3 PFK	33.76	2.014e7					29.1	YES		bd		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	39.45	7.650e4					2.4	NO		bd		
2	FUNCTION4 PFK	39.13	1.144e4					0.9	NO		bb		
3	FUNCTION4 PFK	39.05	1.229e4					1.6	NO		bb		
4	FUNCTION4 PFK	38.51	3.008e4					1.7	NO		bb		
5	FUNCTION4 PFK	38.23	1.118e4					0.8	NO		bb		
6	FUNCTION4 PFK	38.05	6.338e3					0.9	NO		bb		
7	FUNCTION4 PFK	41.82	2.005e3					0.6	NO		bb		
8	FUNCTION4 PFK	41.71	3.645e3					0.7	NO		bb		
9	FUNCTION4 PFK	41.09	9.682e3					1.2	NO		bb		
10	FUNCTION4 PFK	40.97	2.867e4					1.9	NO		bb		
11	FUNCTION4 PFK	40.88	1.667e4					1.9	NO		db		
12	FUNCTION4 PFK	40.83	6.646e3					1.0	NO		bd		
13	FUNCTION4 PFK	40.63	1.060e4					1.3	NO		bb		
14	FUNCTION4 PFK	40.44	1.107e4					1.0	NO		db		
15	FUNCTION4 PFK	40.40	5.822e3					0.9	NO		bd		
16	FUNCTION4 PFK	40.28	1.400e3					0.4	NO		bb		
17	FUNCTION4 PFK	40.22	7.290e3					0.9	NO		bb		
18	FUNCTION4 PFK	40.16	2.657e4					2.1	NO		db		
19	FUNCTION4 PFK	40.12	1.255e4					1.5	NO		bd		
20	FUNCTION4 PFK	39.86	5.868e3					0.9	NO		db		
21	FUNCTION4 PFK	39.83	6.548e3					1.0	NO		bd		
22	FUNCTION4 PFK	39.60	2.265e4					1.4	NO		db		
23	FUNCTION4 PFK	42.19	3.256e4					1.6	NO		bb		
24	FUNCTION4 PFK	41.97	2.975e3					0.5	NO		bb		

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.57	7.714e3					1.6	NO		dd		
2	FUNCTION5 PFK	43.52	1.166e4					2.2	NO		bd		
3	FUNCTION5 PFK	43.46	5.463e3					1.3	NO		bb		
4	FUNCTION5 PFK	43.41	2.975e3					0.8	NO		bb		
5	FUNCTION5 PFK	43.31	4.615e3					1.1	NO		bb		
6	FUNCTION5 PFK	43.15	7.483e3					1.1	NO		bb		
7	FUNCTION5 PFK	42.94	5.587e2					0.3	NO		bb		
8	FUNCTION5 PFK	42.89	1.144e4					1.9	NO		db		
9	FUNCTION5 PFK	42.82	2.831e4					2.7	NO		dd		
10	FUNCTION5 PFK	42.79	3.996e4					3.8	YES		dd		
11	FUNCTION5 PFK	42.71	4.542e4					4.6	YES		dd		
12	FUNCTION5 PFK	42.68	8.908e4					5.2	YES		dd		
13	FUNCTION5 PFK	42.56	1.260e5					8.0	YES		bd		
14	FUNCTION5 PFK	45.20	3.646e3					0.9	NO		db		
15	FUNCTION5 PFK	45.17	1.181e4					1.6	NO		bd		
16	FUNCTION5 PFK	44.97	7.051e3					1.0	NO		db		
17	FUNCTION5 PFK	44.93	8.984e3					1.7	NO		dd		
18	FUNCTION5 PFK	44.84	2.140e4					1.7	NO		dd		
19	FUNCTION5 PFK	44.81	4.182e3					1.1	NO		dd		
20	FUNCTION5 PFK	44.77	2.664e3					0.8	NO		dd		
21	FUNCTION5 PFK	44.75	4.345e3					1.0	NO		dd		
22	FUNCTION5 PFK	44.72	5.279e3					1.1	NO		bd		
23	FUNCTION5 PFK	44.40	4.431e3					0.9	NO		bb		
24	FUNCTION5 PFK	44.22	5.649e3					1.1	NO		bb		
25	FUNCTION5 PFK	43.98	3.284e3					0.9	NO		db		
26	FUNCTION5 PFK	43.95	1.620e4					1.5	NO		bd		
27	FUNCTION5 PFK	43.86	7.936e3					1.6	NO		db		
28	FUNCTION5 PFK	43.79	9.367e3					0.9	NO		bd		
29	FUNCTION5 PFK	43.62	3.408e3					0.8	NO		db		
30	FUNCTION5 PFK	45.92	2.035e3					0.6	NO		db		
31	FUNCTION5 PFK	45.87	4.010e3					0.8	NO		bd		
32	FUNCTION5 PFK	45.83	3.737e3					1.2	NO		bb		
33	FUNCTION5 PFK	45.79	9.499e3					1.2	NO		bb		
34	FUNCTION5 PFK	45.64	2.065e3					0.6	NO		bb		
35	FUNCTION5 PFK	45.53	9.559e3					1.2	NO		bb		

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ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.43	1.258e2					2.8	NO		bb		0.000
2	FUNCTION1 HXCD...	27.27	8.085e1					2.0	NO		bb		0.000
3	FUNCTION1 HXCD...	26.90	1.461e2					4.0	YES		bb		0.000
4	FUNCTION1 HXCD...	25.53	8.349e1					1.6	NO		bb		0.000
5	FUNCTION1 HXCD...	23.68	7.671e1					2.7	NO		bb		0.000
6	FUNCTION1 HXCD...	23.44	9.696e1					2.2	NO		bb		0.000
7	FUNCTION1 HXCD...	22.21	8.301e1					2.1	NO		bb		0.000
8	FUNCTION1 HXCD...	21.88	9.170e1					1.6	NO		db		0.000
9	FUNCTION1 HXCD...	21.71	7.685e1					1.8	NO		bd		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.28	1.760e2					2.6	NO		bb		0.000
2	FUNCTION2 HPCD...	31.06	8.334e1					2.5	NO		bb		0.000
3	FUNCTION2 HPCD...	30.88	4.544e2					10.3	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.72	1.340e2					2.4	NO		bb		0.000
2	FUNCTION3 OCDPE	36.33	1.439e2					3.1	YES		bb		0.000
3	FUNCTION3 OCDPE	35.93	2.094e2					3.9	YES		db		0.000
4	FUNCTION3 OCDPE	35.81	1.864e2					3.6	YES		dd		0.000
5	FUNCTION3 OCDPE	35.72	9.432e1					3.1	YES		bd		0.000
6	FUNCTION3 OCDPE	34.69	9.370e1					2.6	NO		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.70	1.149e2					2.8	NO		bb		0.000
2	FUNCTION4 NCDPE	38.01	9.486e1					2.8	NO		bb		0.000

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ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	44.40	9.336e1					2.6	NO		bb		0.000

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Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:59:13 Pacific Daylight Time

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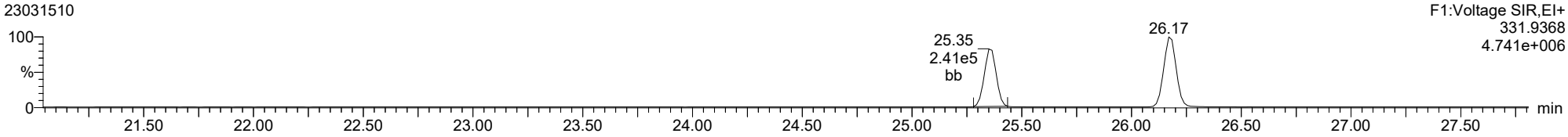
ID: CS3Z5, Name: 23031510, Date: 15-Mar-2023, Time: 17:48:31, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD



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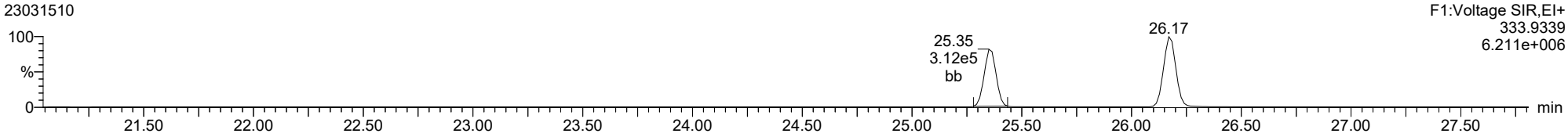

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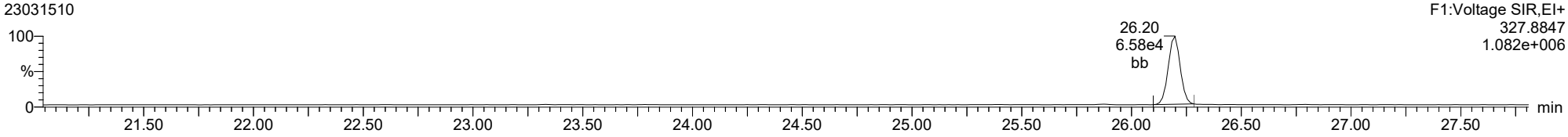

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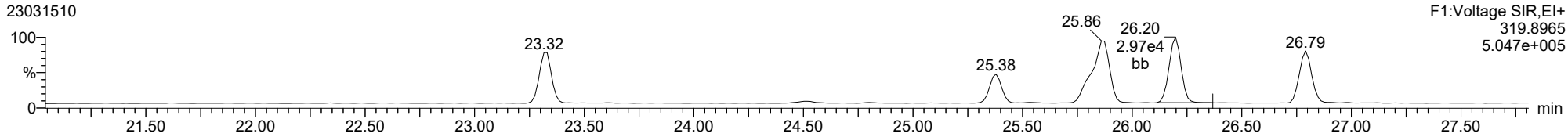
2378-TCDD



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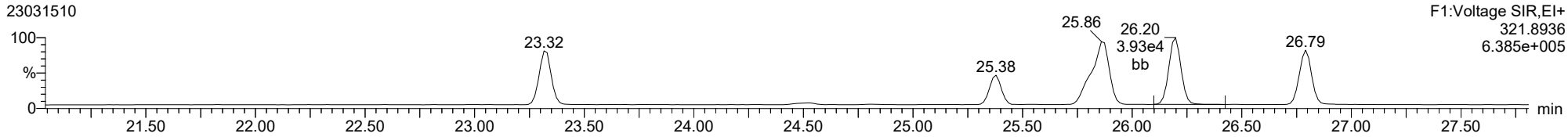

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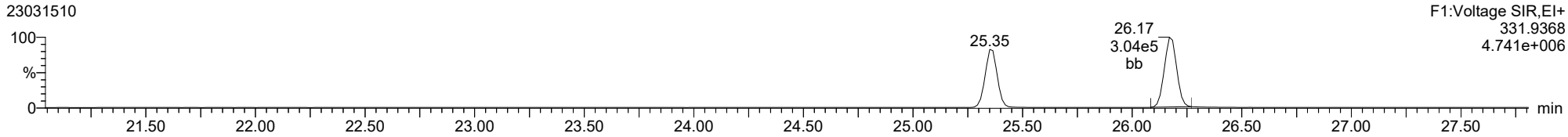

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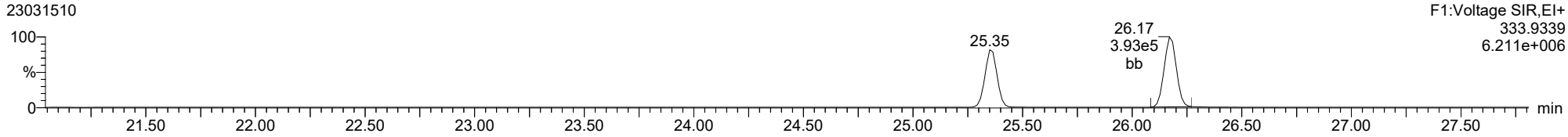

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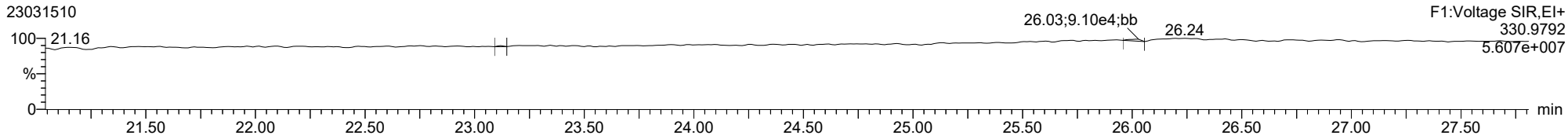

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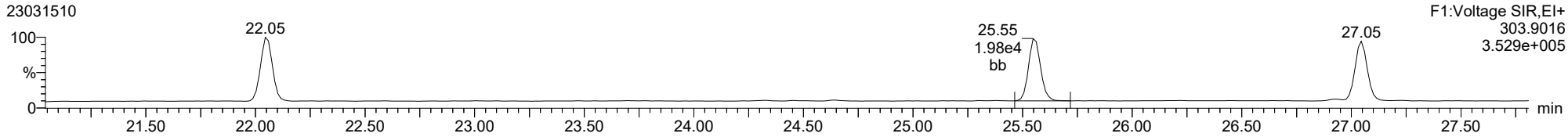
2378-TCDF



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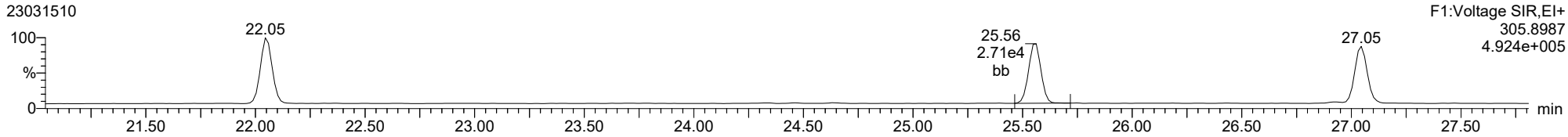
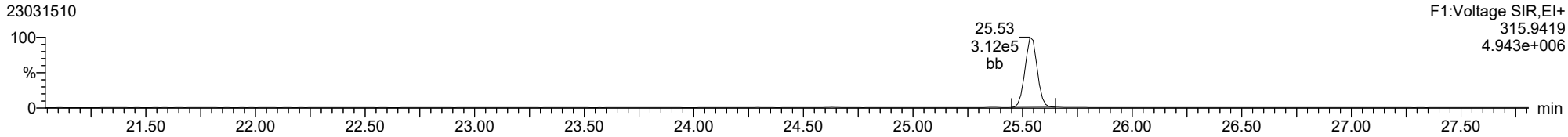


13C-2378-TCDF



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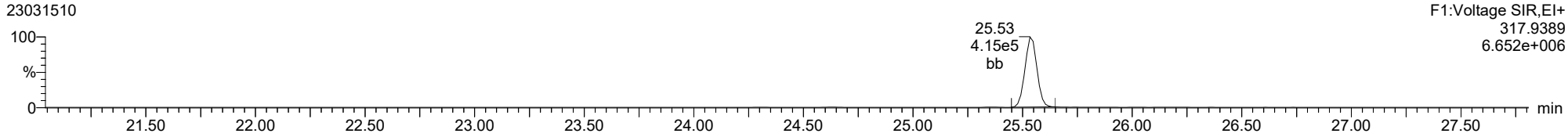

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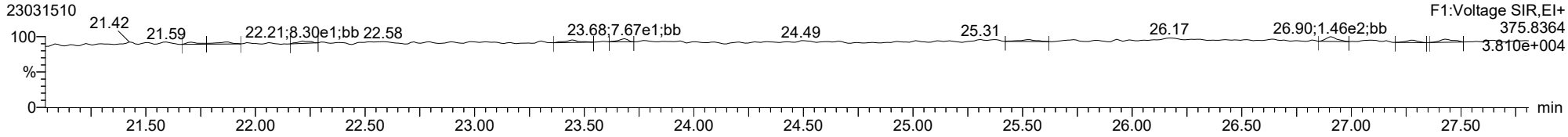

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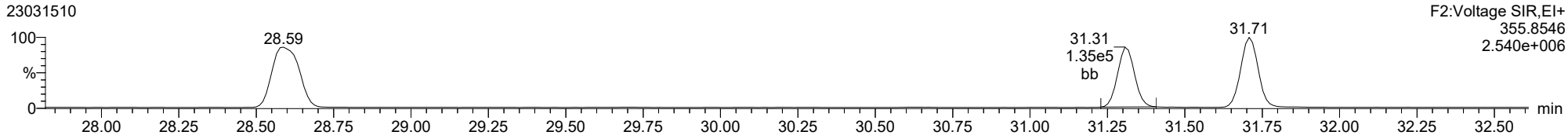
12378-PeCDD



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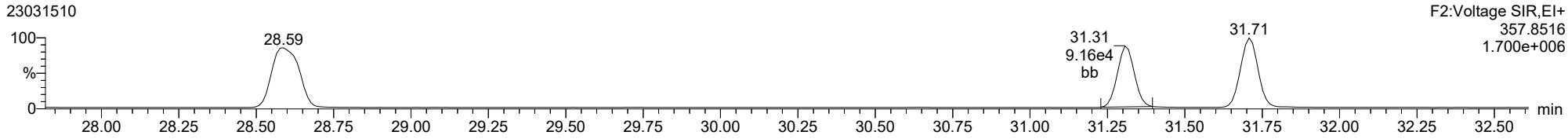

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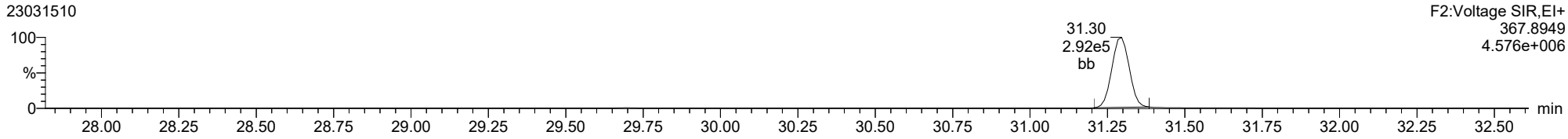

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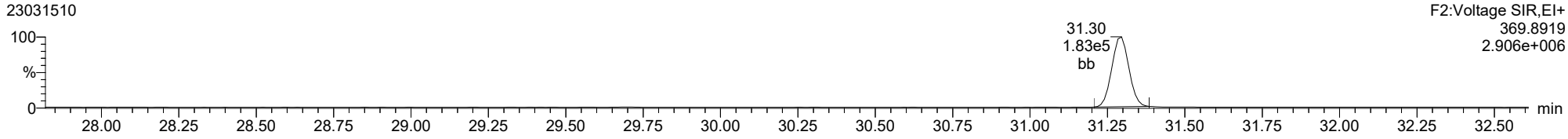

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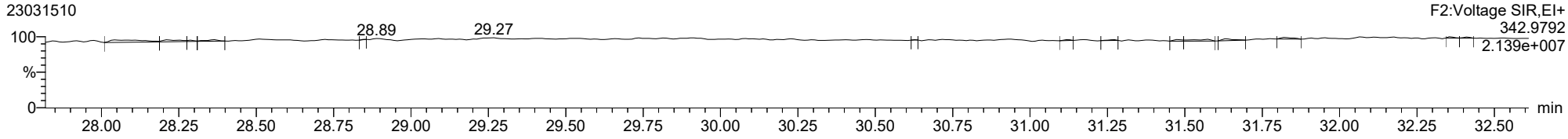

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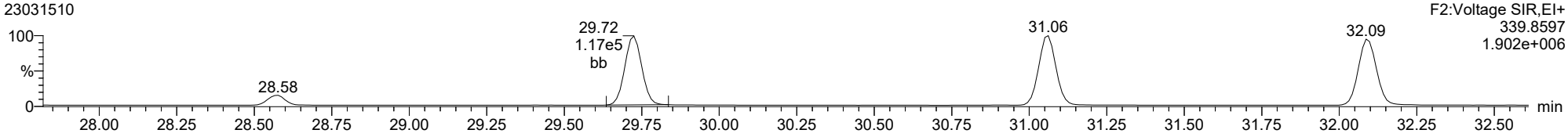
12378-PeCDF



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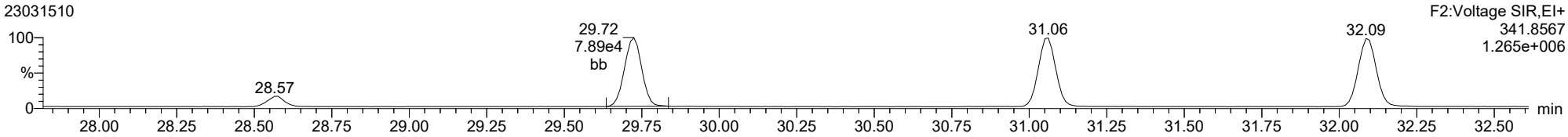

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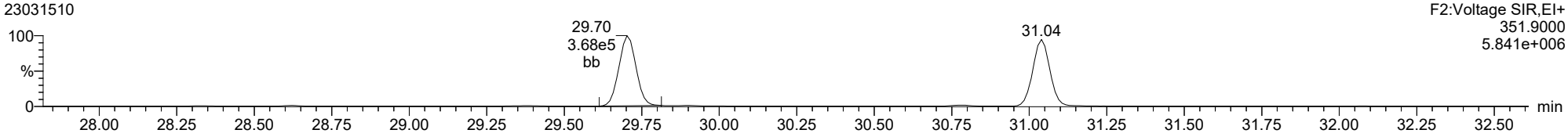

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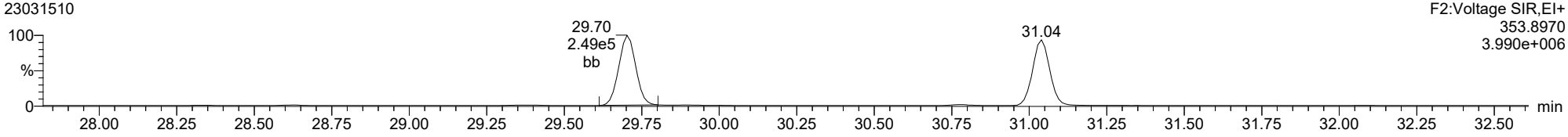

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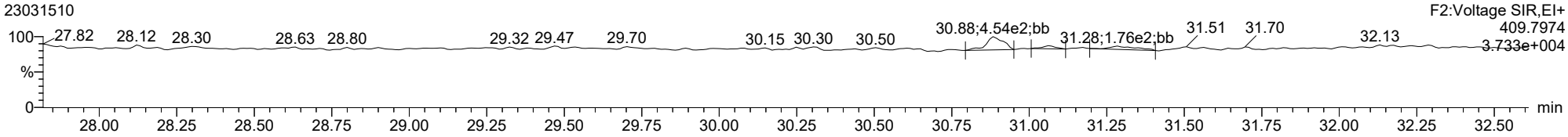

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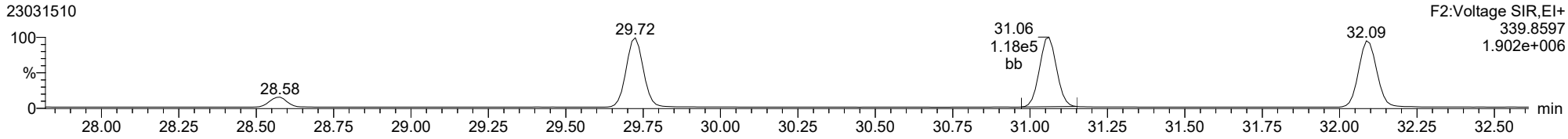
23478-PeCDF



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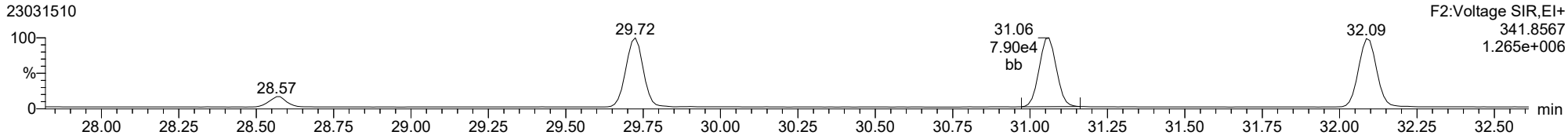

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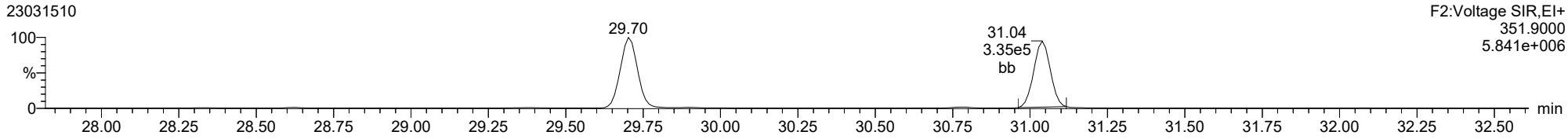

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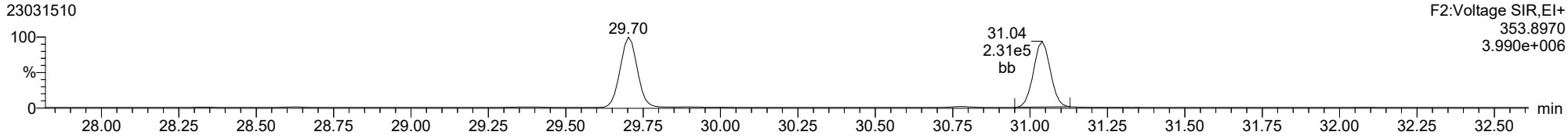

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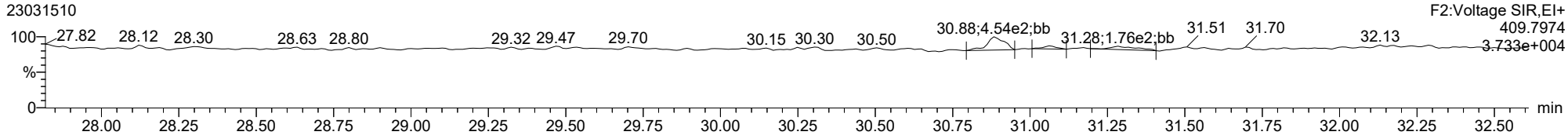

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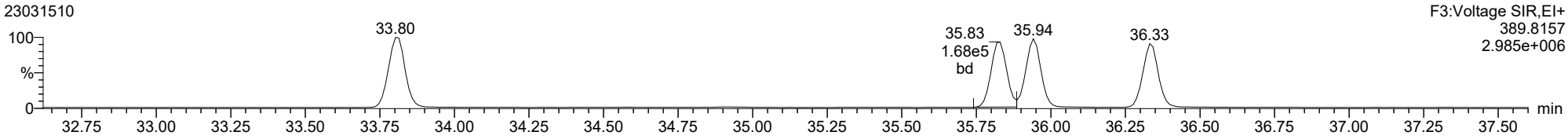

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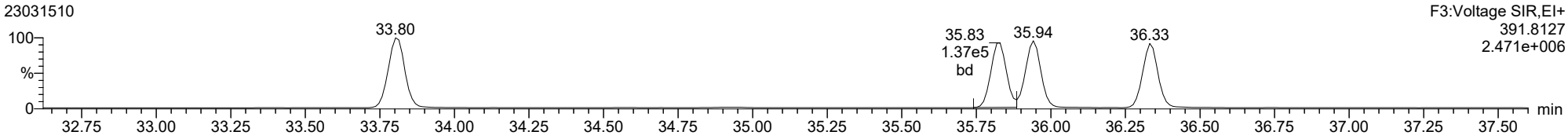

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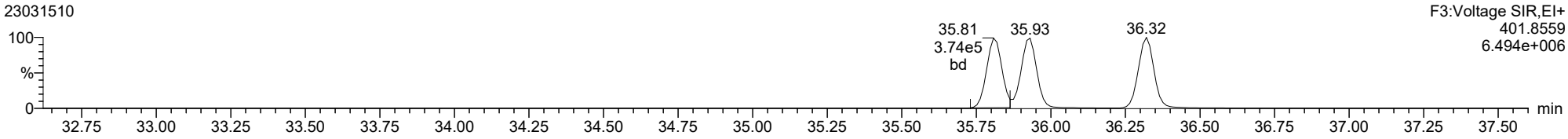

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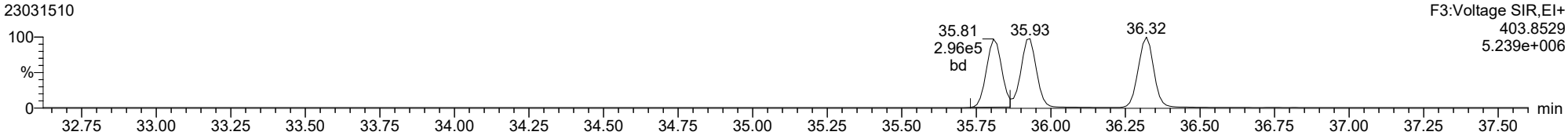
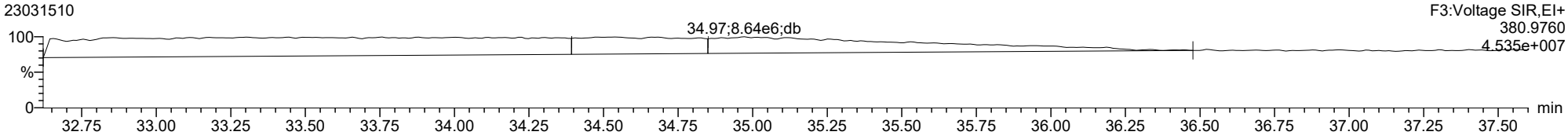


FUNCTION3 PFK



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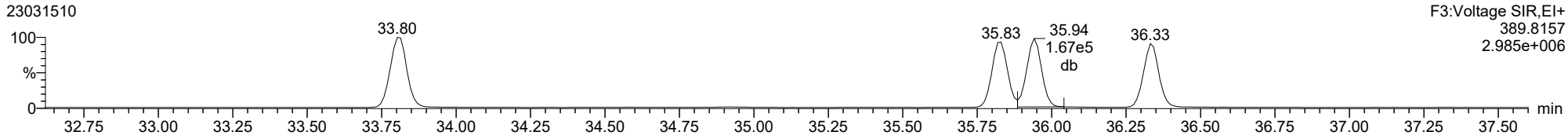

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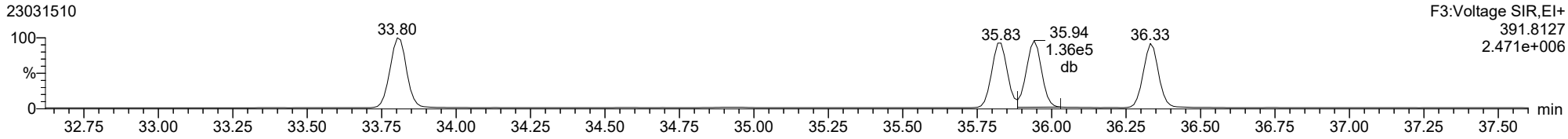

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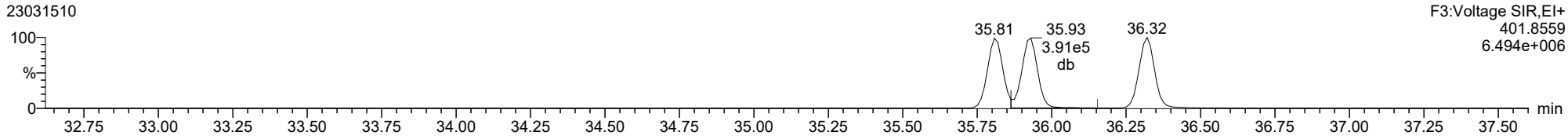

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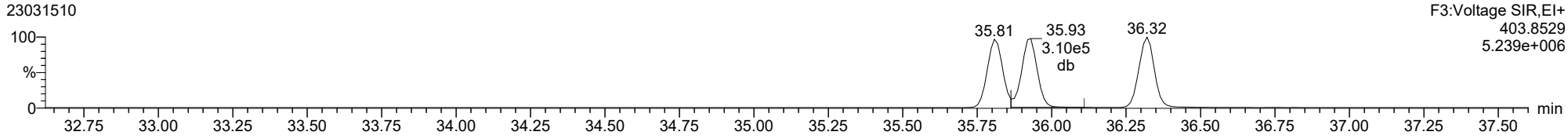

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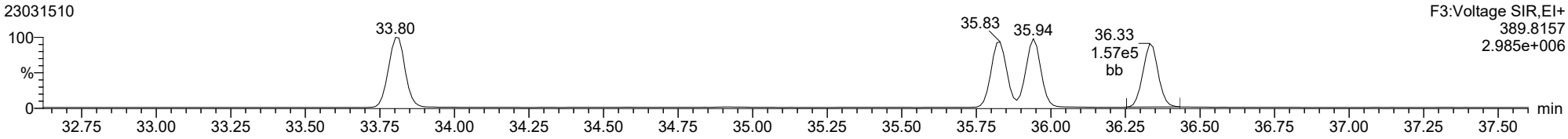

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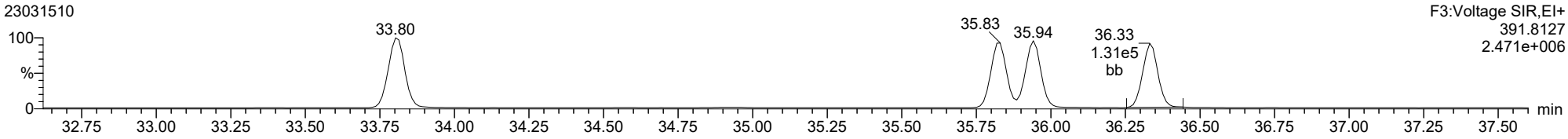

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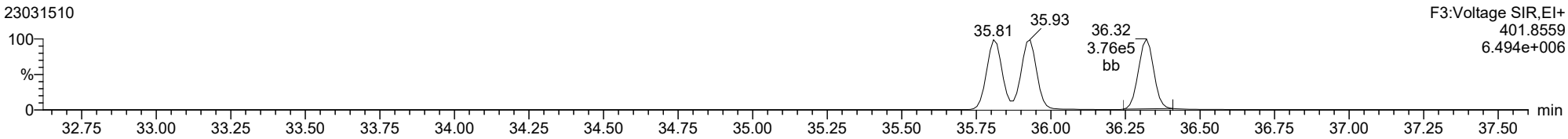

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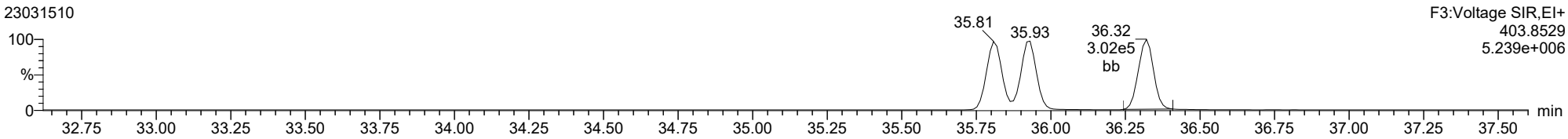

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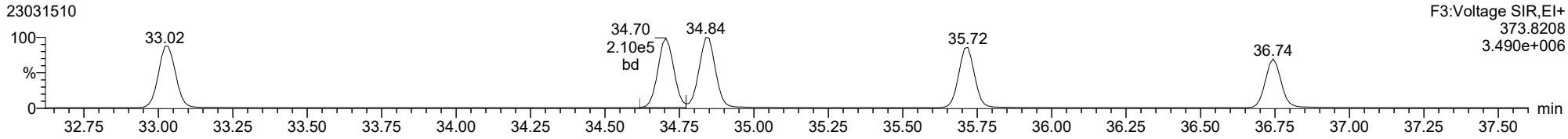

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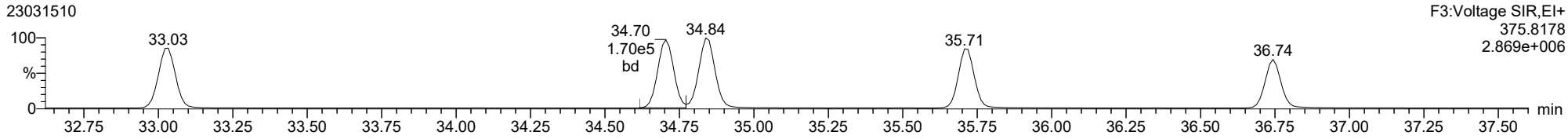

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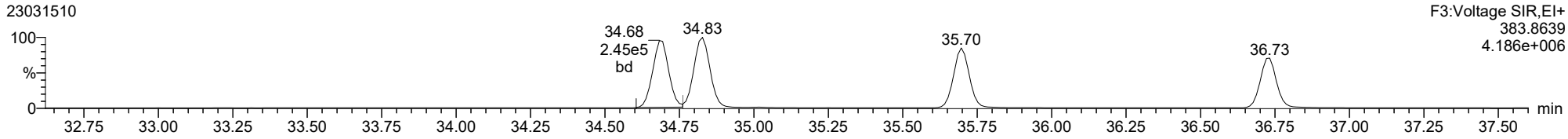

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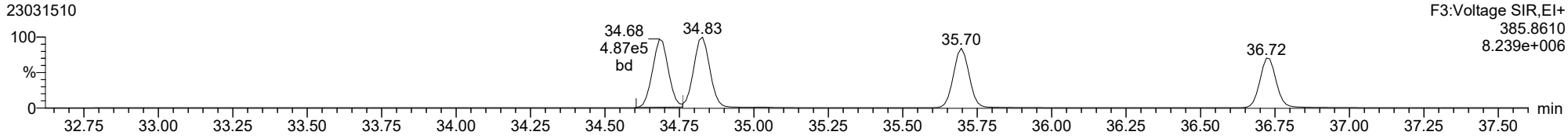

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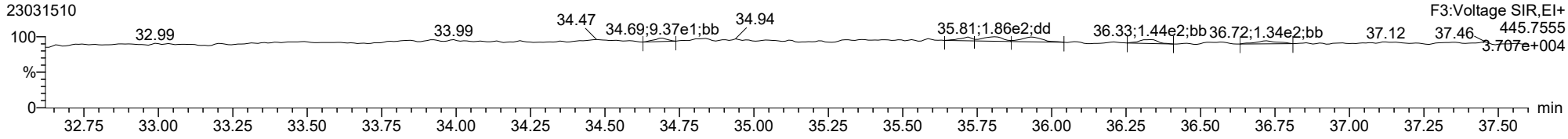

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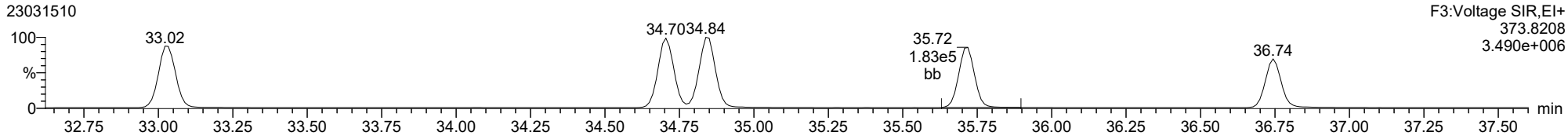
234678-HxCDF



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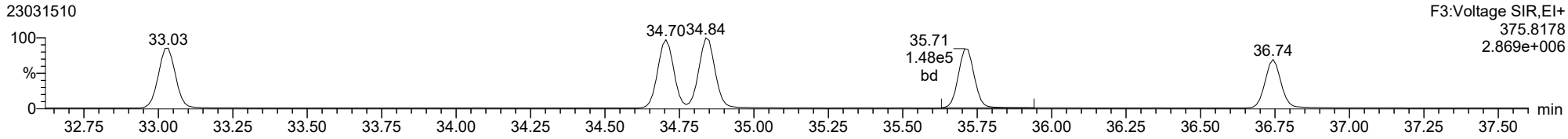

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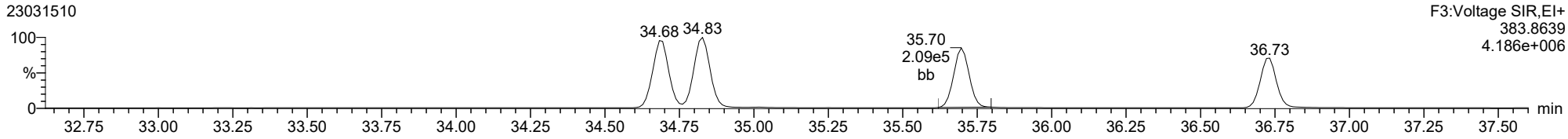

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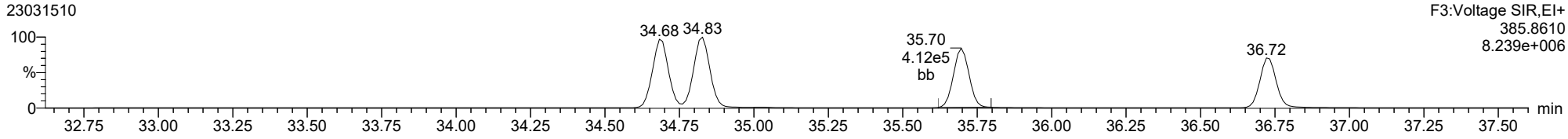

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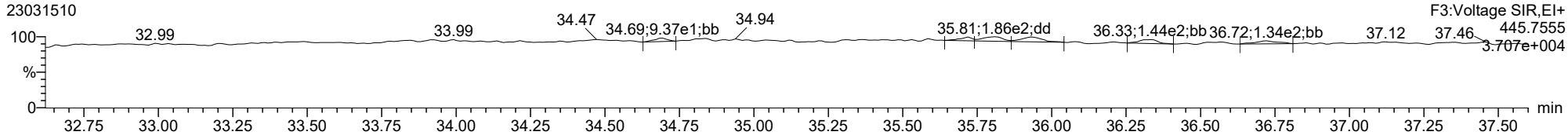

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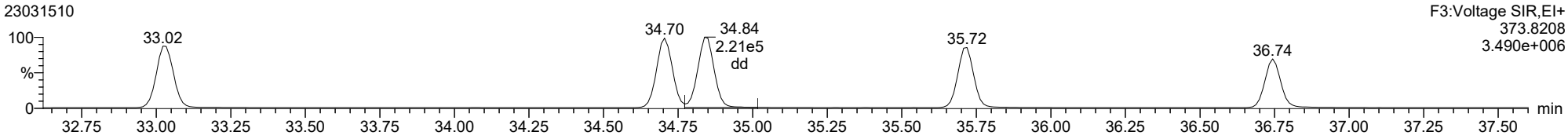

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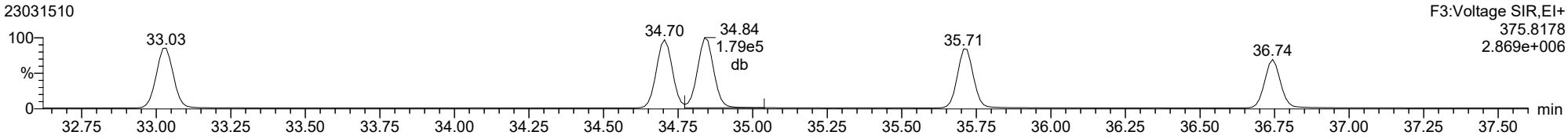

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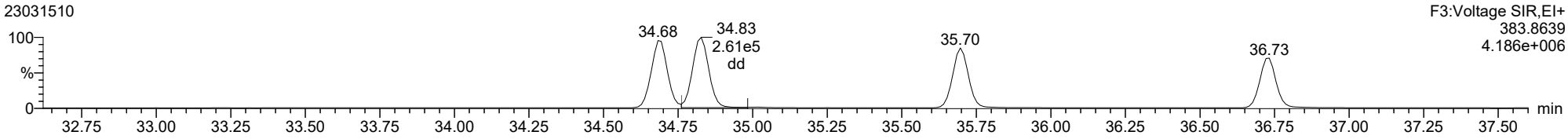

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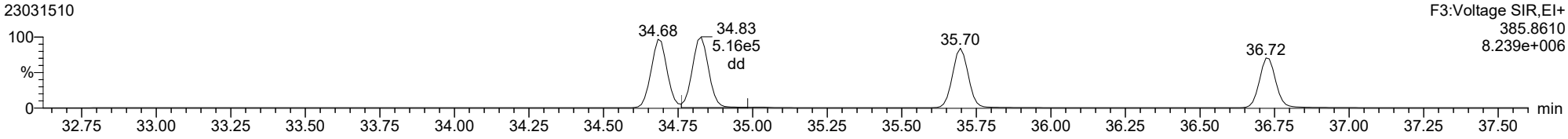
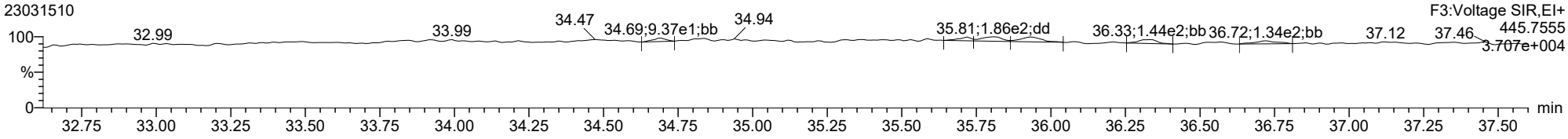


FUNCTION3 OCDPE



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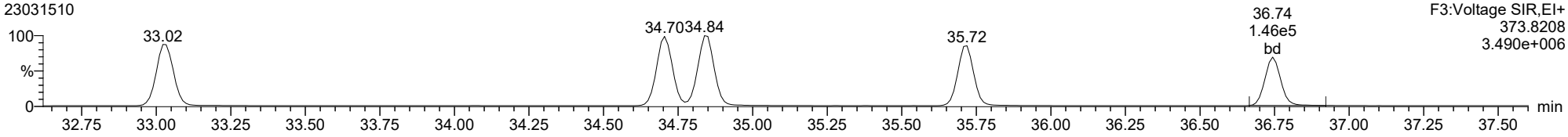

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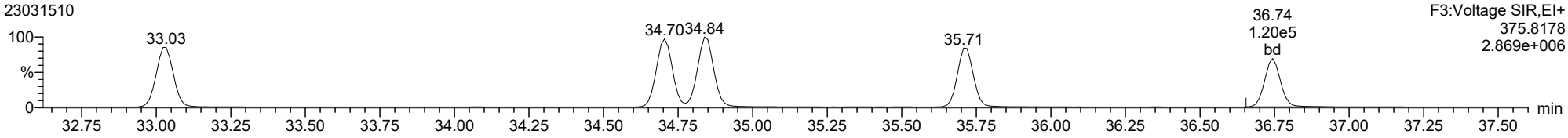

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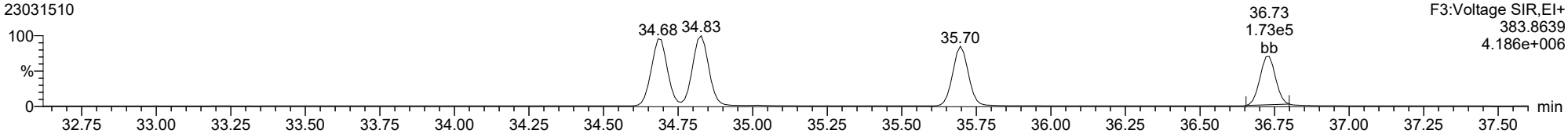

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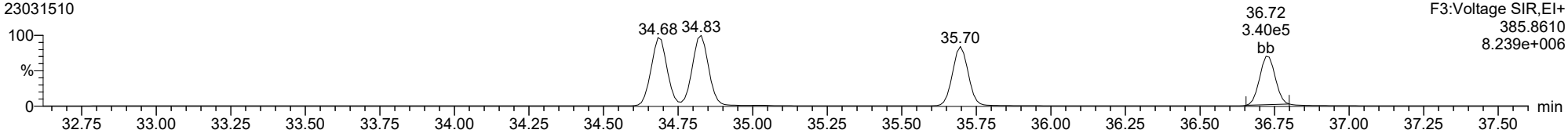

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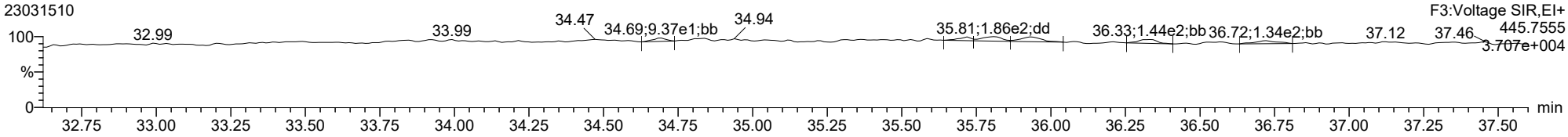

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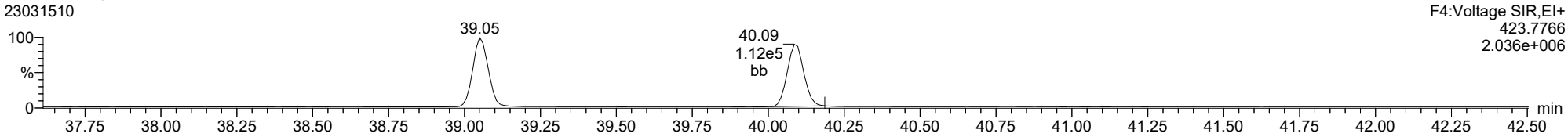

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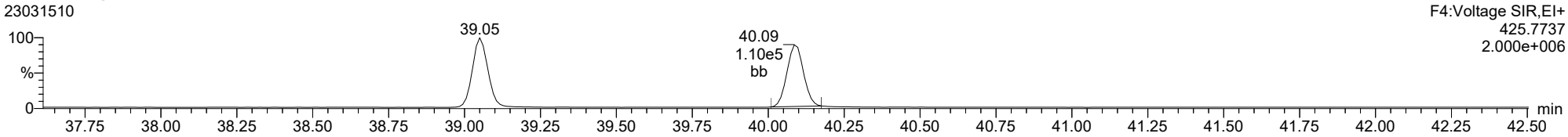

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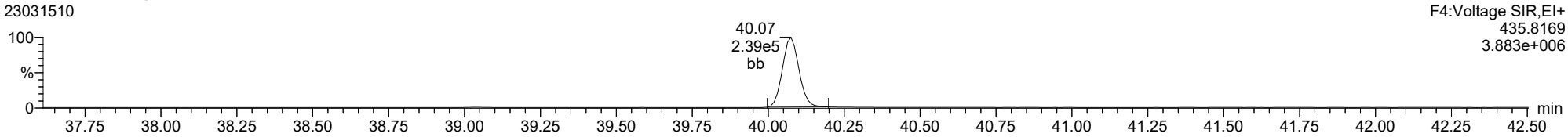

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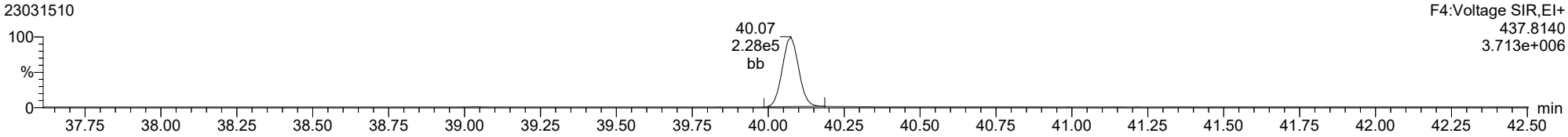

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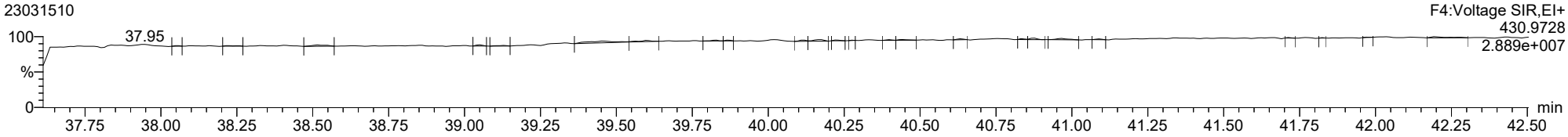

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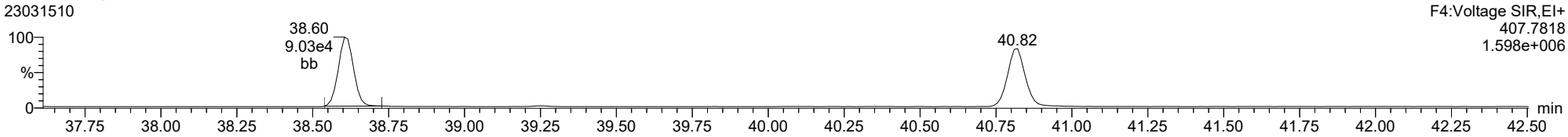

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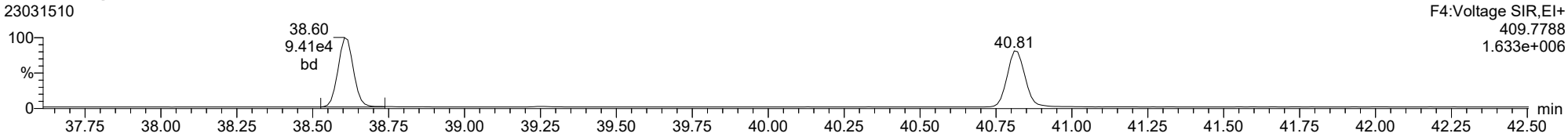

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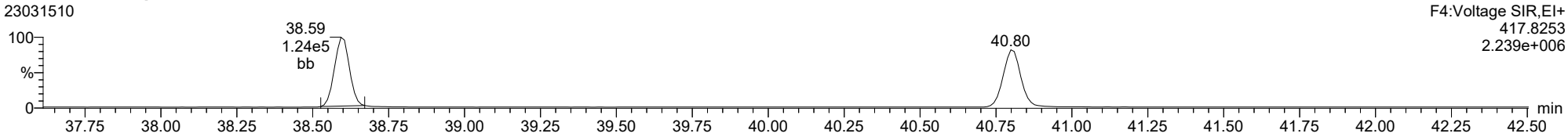

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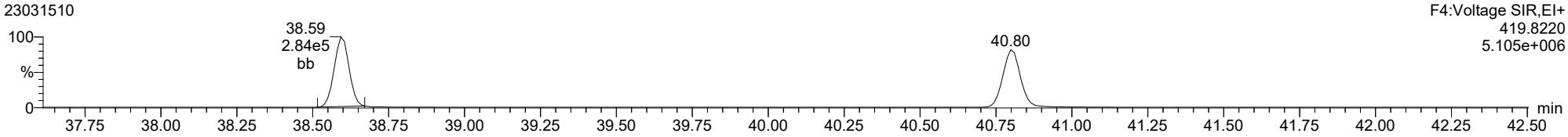

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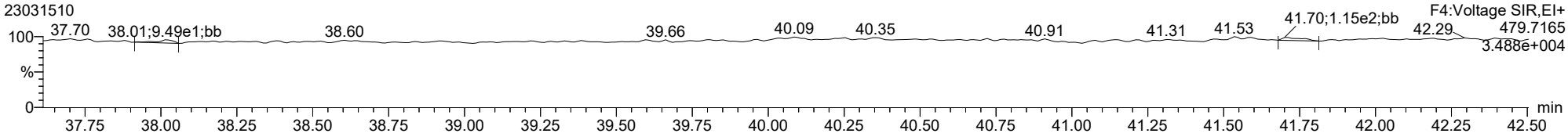

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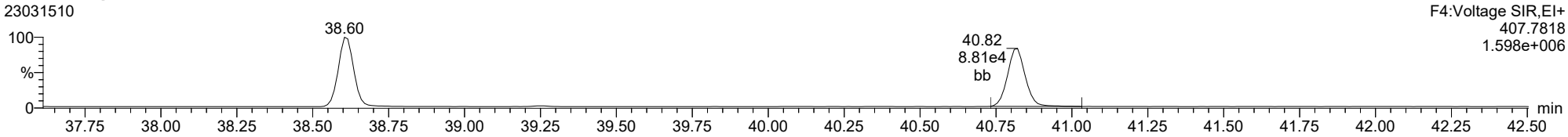

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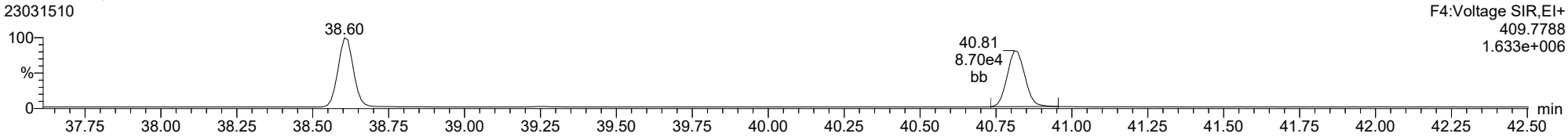

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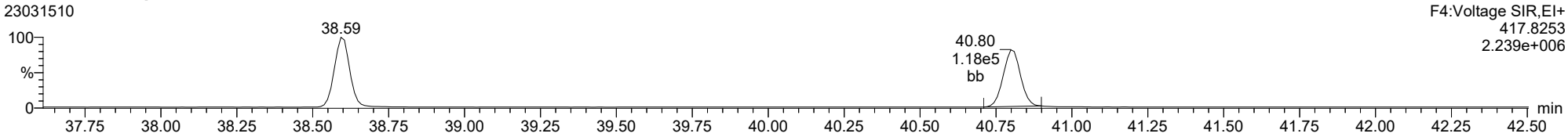

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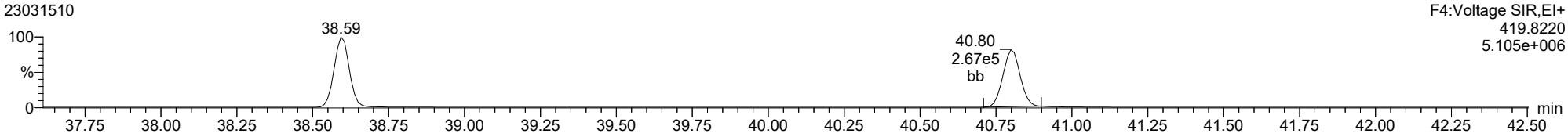

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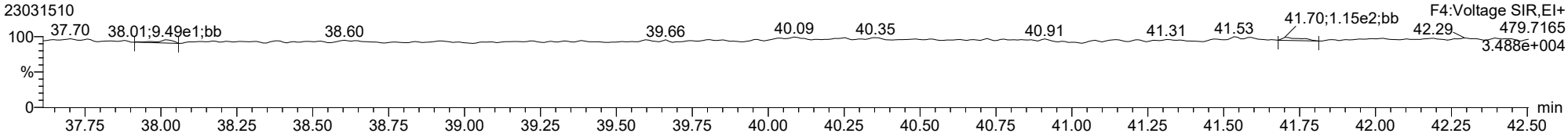

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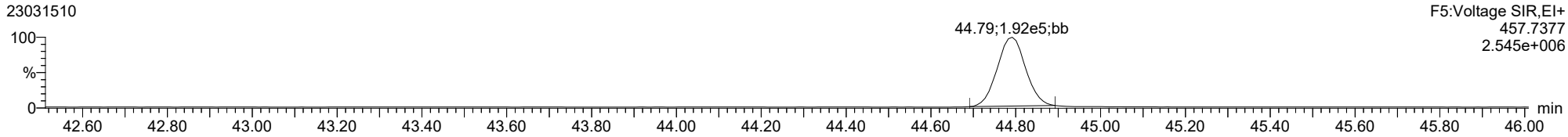

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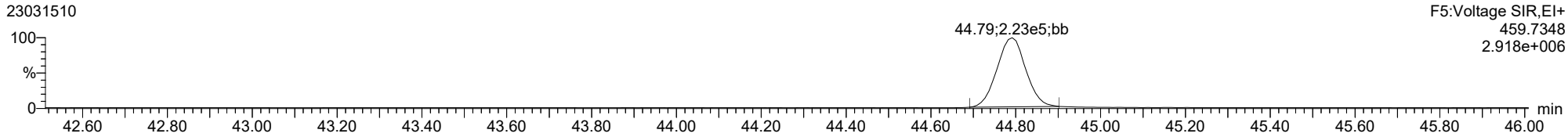

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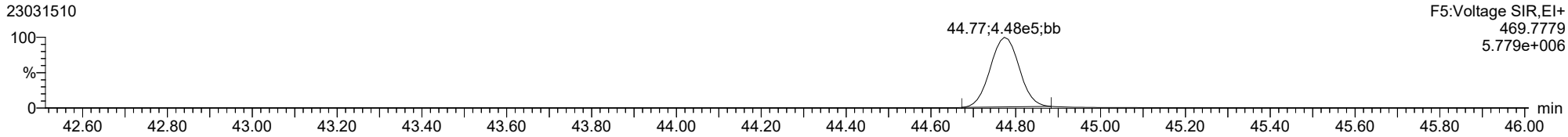

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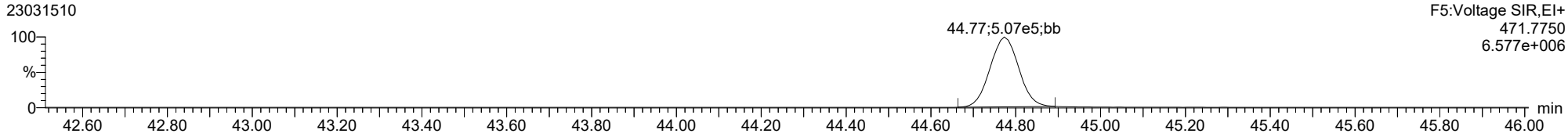

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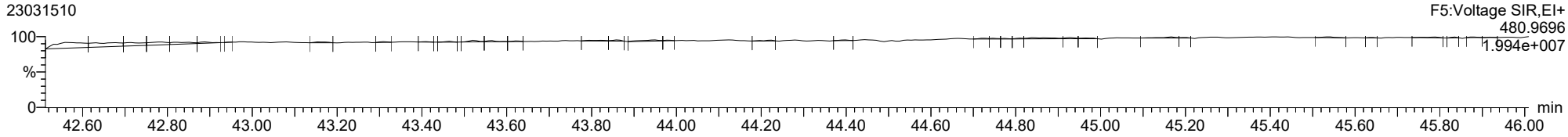

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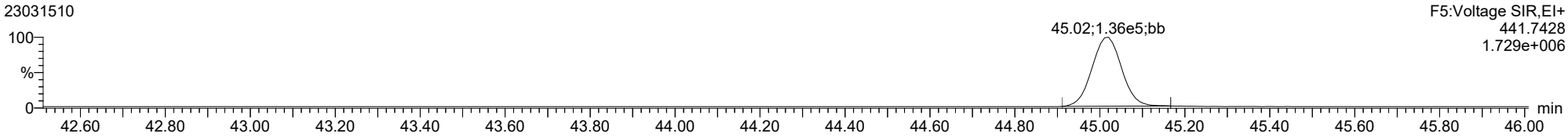

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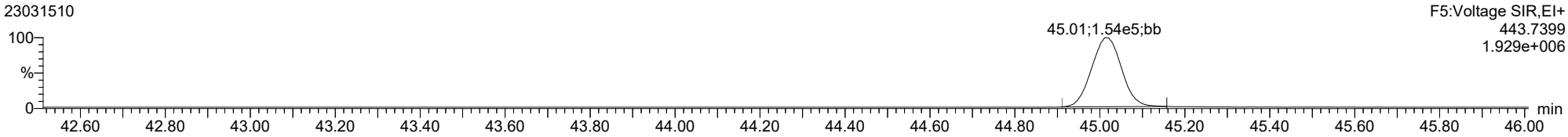

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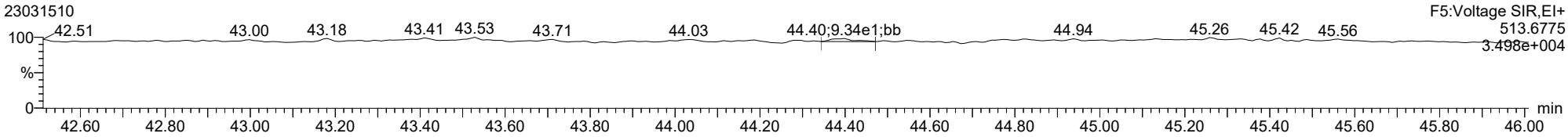

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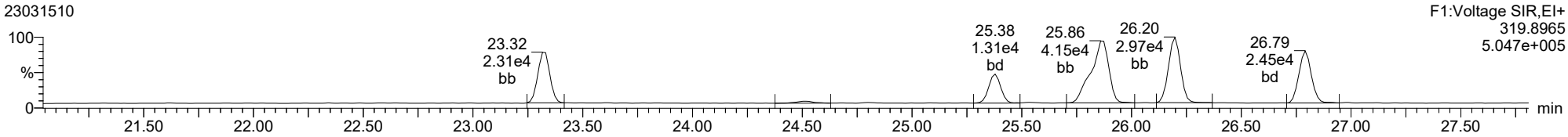

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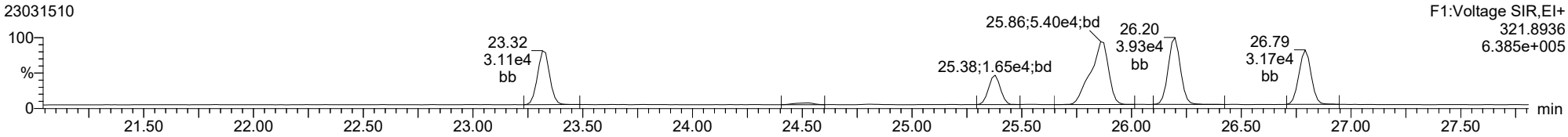

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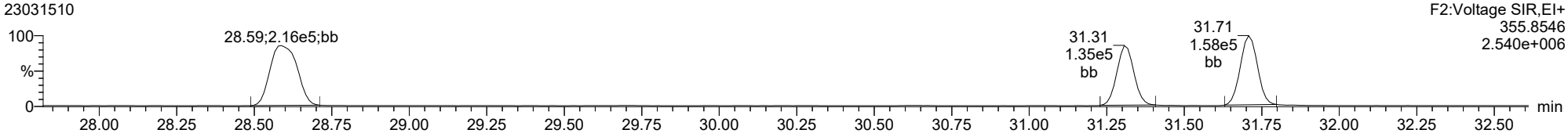

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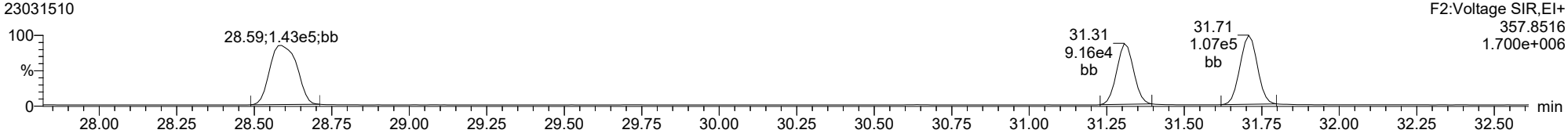

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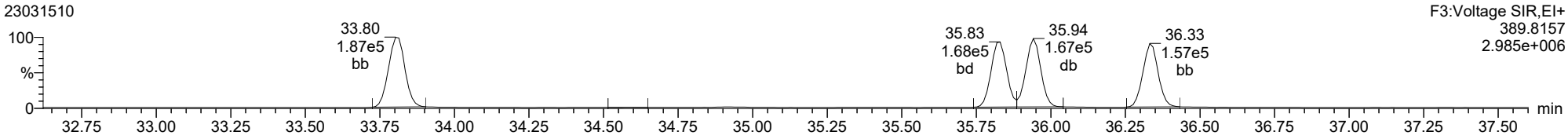

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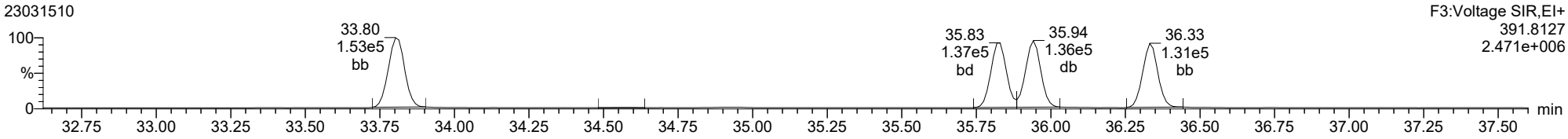

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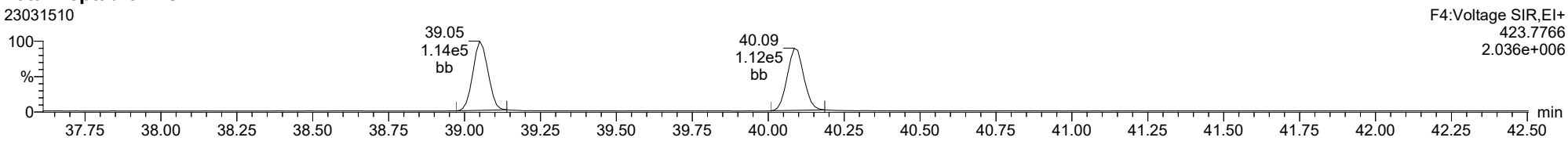

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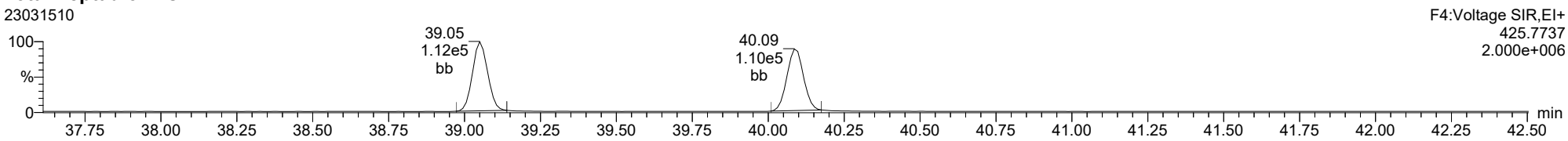

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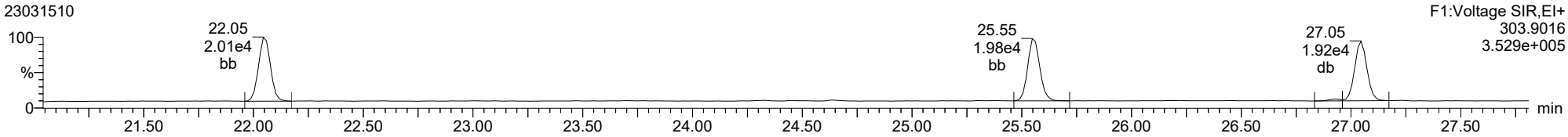
Total-tetrafurans



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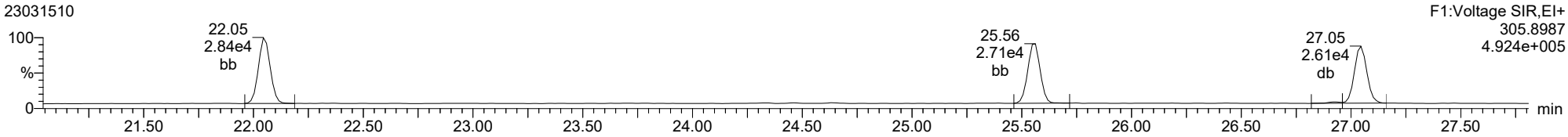

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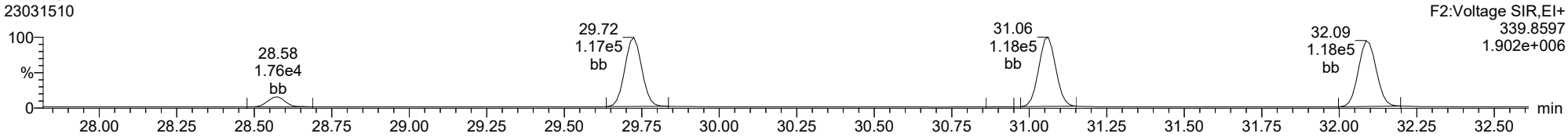

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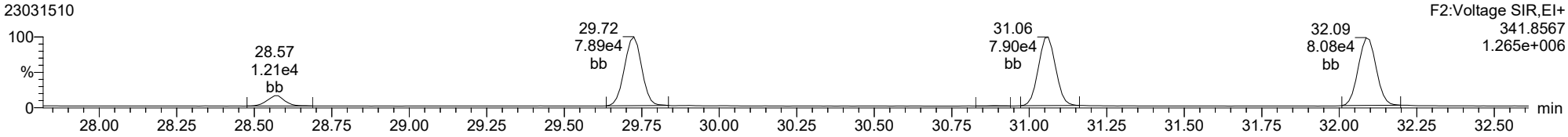

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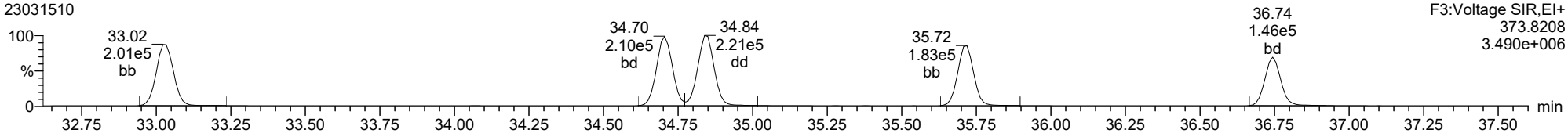

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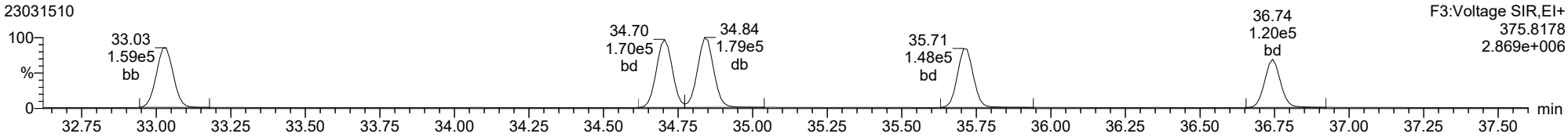

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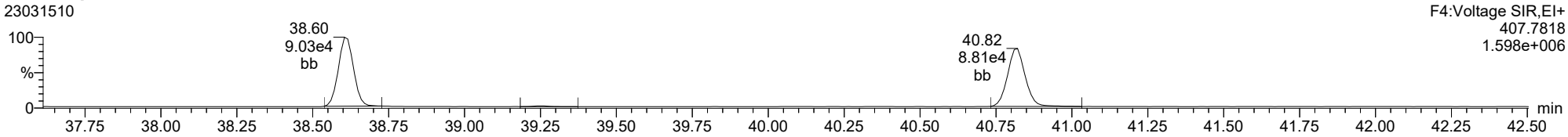

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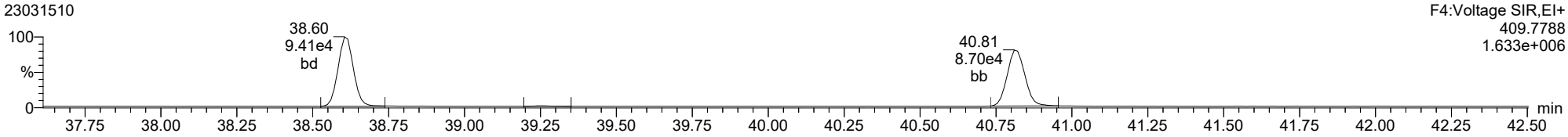

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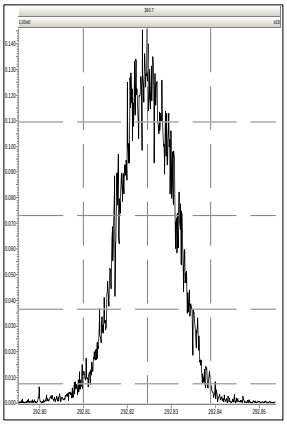

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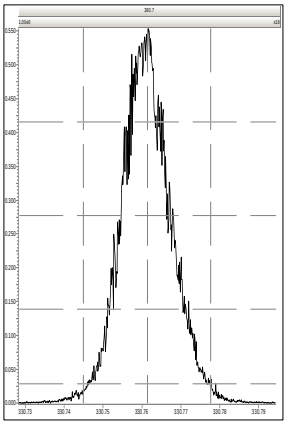

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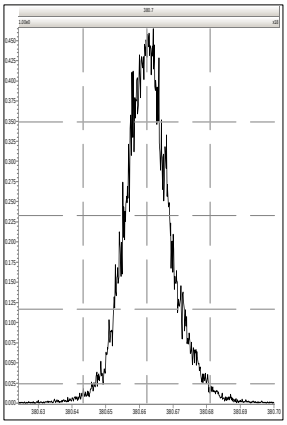

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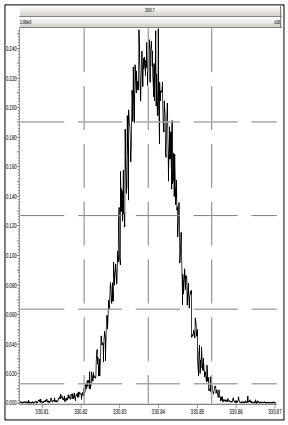

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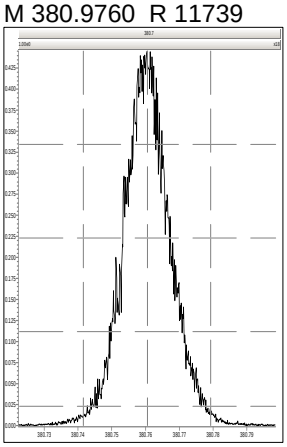

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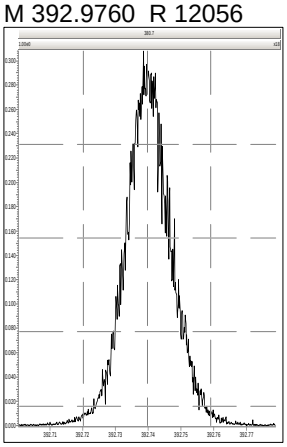

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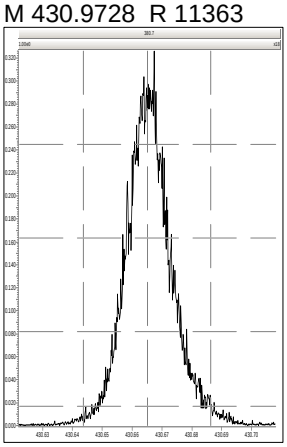
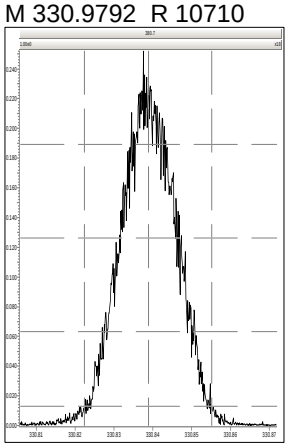
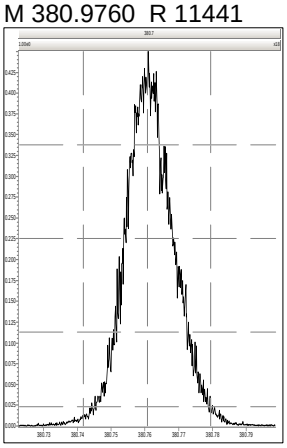


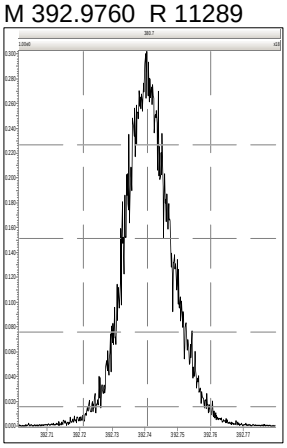
M 330.9792 R 10710



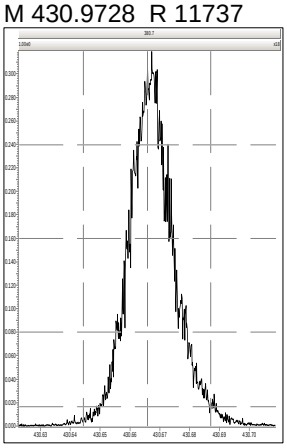
M 380.9760 R 11441



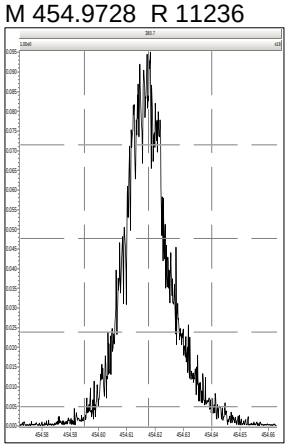
M 392.9760 R 11289



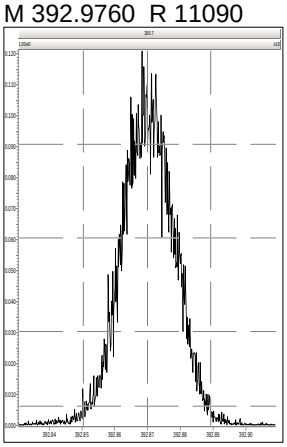
M 430.9728 R 11737



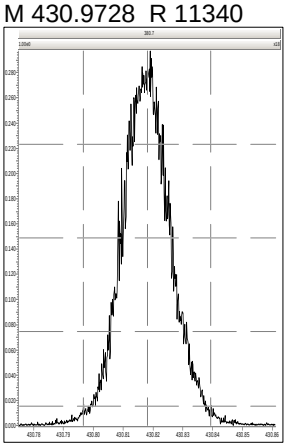
M 454.9728 R 11236



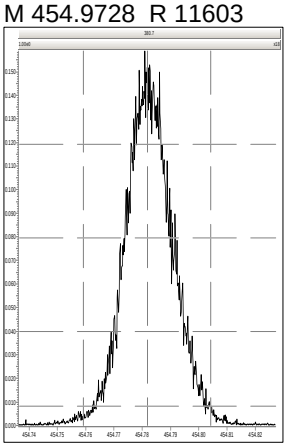
M 392.9760 R 11090



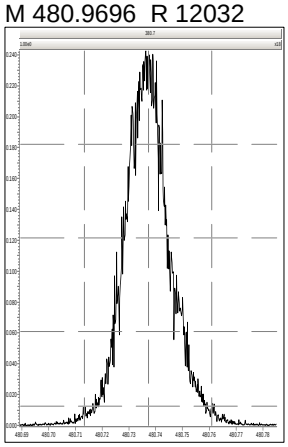
M 430.9728 R 11340



M 454.9728 R 11603

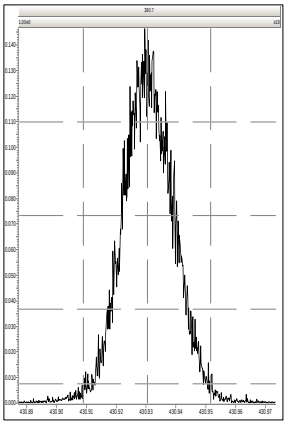


M 480.9696 R 12032

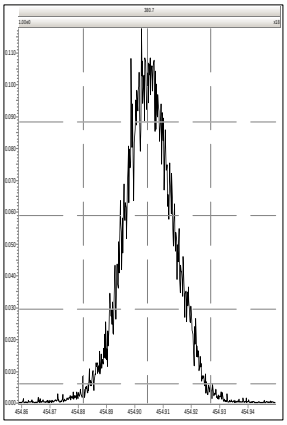


Printed: Wednesday, March 15, 2023 18:41:35 Pacific Daylight Time

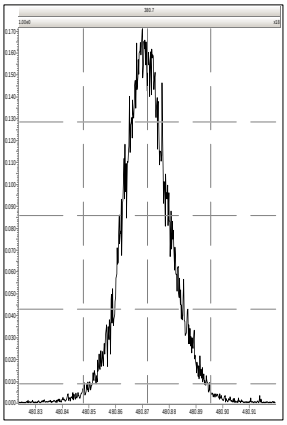
M 430.9728 R 11185



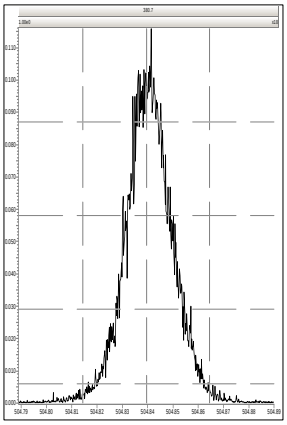
M 454.9728 R 11573



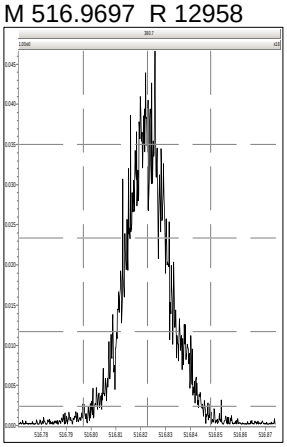
M 480.9696 R 10940

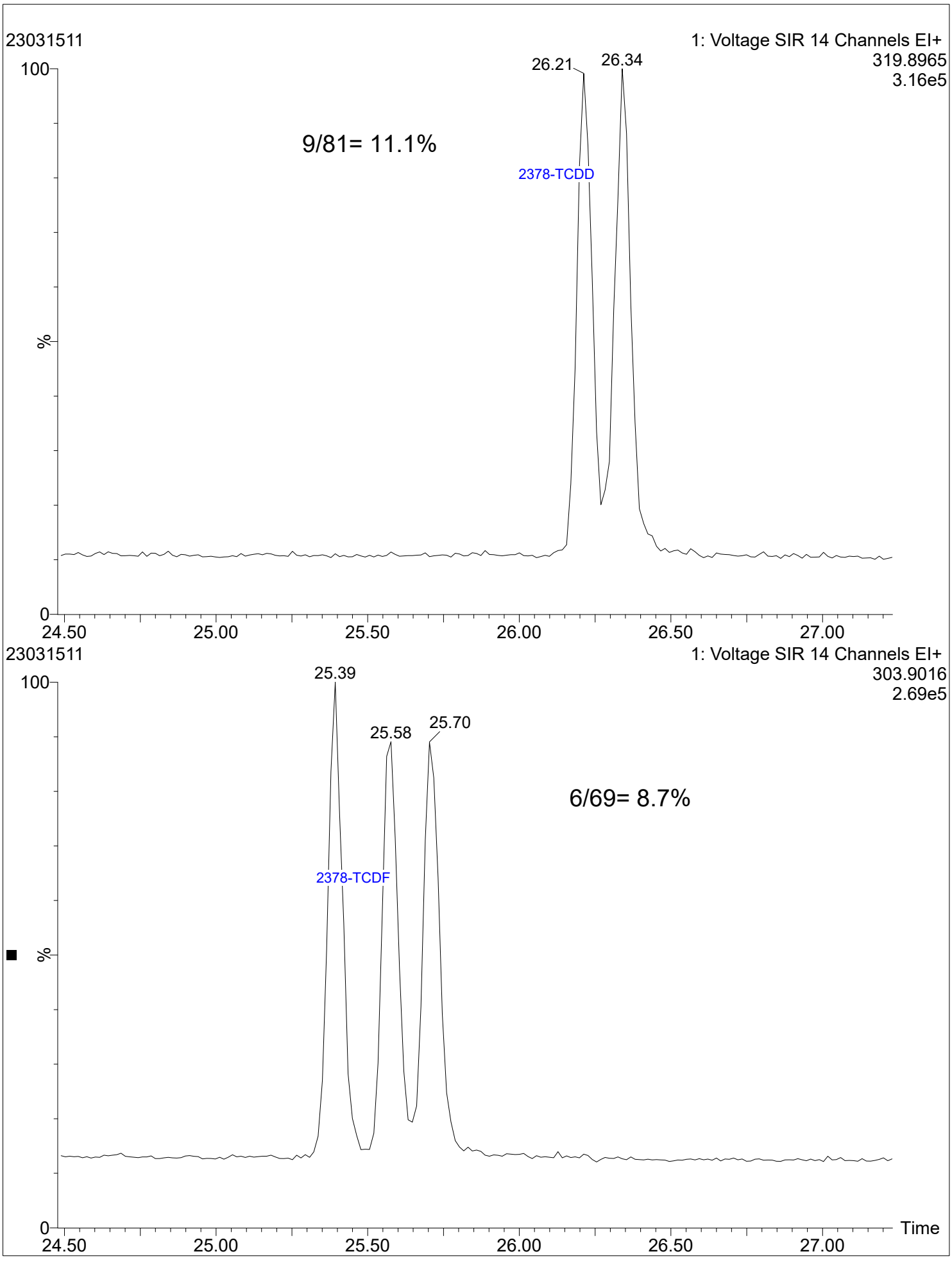


M 504.9696 R 12036



M 516.9697 R 12958




23031511
1: Voltage SIR 14 Channels EI+
319.8965
3.16e5
26.21
26.34
9/81= 11.1%
2378-TCDD
100
%
0
24.50
25.00
25.50
26.00
26.50
27.00
23031511
1: Voltage SIR 14 Channels EI+
303.9016
2.69e5
25.39
25.58
25.70
6/69= 8.7%
2378-TCDF
100
%
0
Time
24.50
25.00
25.50
26.00
26.50
27.00

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	AUTOSPEC01	Calibration:	GC00015
Lab File ID:	23031521	Calibration Date:	03/03/2023
Sequence:	SLC0176	Injection Date:	03/16/23
Lab Sample ID:	SLC0176-CCV2	Injection Time:	02:54
Sequence Name:	CS3Z6		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
2,3,7,8-TCDF	A	10.000	9.22	0.7015272	0.6469883		-7.8	+/-16	
2,3,7,8-TCDD	A	10.000	9.14	1.1486620	1.0495420		-8.6	+/-22	
1,2,3,7,8-PeCDF	A	50.000	46.4	0.6792300	0.6308803		-7.1	+/-18	
2,3,4,7,8-PeCDF	A	50.000	44.2	0.7861704	0.6949475		-11.6	+/-18	
1,2,3,7,8-PeCDD	A	50.000	48.9	1.0218450	0.9993182		-2.2	+/-22	
1,2,3,4,7,8-HxCDF	A	50.000	45.4	1.1660380	1.0584400		-9.2	+/-10	
1,2,3,6,7,8-HxCDF	A	50.000	47.1	1.0907410	1.0268190		-5.9	+/-12	
2,3,4,6,7,8-HxCDF	A	50.000	46.7	1.1396990	1.0645230		-6.6	+/-12	
1,2,3,7,8,9-HxCDF	A	50.000	46.2	1.1370930	1.0513660		-7.5	+/-10	
1,2,3,4,7,8-HxCDD	A	50.000	44.0	0.9955689	0.8762757		-12.0	+/-22	
1,2,3,6,7,8-HxCDD	A	50.000	42.3	1.0009380	0.8475773		-15.3	+/-22	
1,2,3,7,8,9-HxCDD	A	50.000	48.8	0.9071139	0.8846149		-2.5	+/-18	
1,2,3,4,6,7,8-HpCDF	A	50.000	45.1	1.0029930	0.9052528		-9.7	+/-10	
1,2,3,4,7,8,9-HpCDF	A	50.000	48.9	0.9531152	0.9317902		-2.2	+/-14	
1,2,3,4,6,7,8-HpCDD	A	50.000	47.6	1.0390130	0.9889239		-4.8	+/-14	
OCDF	A	100.00	79.4	0.7778078	0.6178842		-20.6	+/-37	
OCDD	A	100.00	96.0	0.9199537	0.8831553		-4.0	+/-21	
13C12-2,3,7,8-TCDF	A	100.00	84.0	1.6201960	1.3617259		-16.0	+/-29	
13C12-2,3,7,8-TCDD	A	100.00	101	1.1524090	1.1654504		1.1	+/-18	
13C12-1,2,3,7,8-PeCDF	A	100.00	89.0	1.2404520	1.1037280		-11.0	+/-24	
13C12-2,3,4,7,8-PeCDF	A	100.00	95.3	1.1177860	1.0656872		-4.7	+/-23	
13C12-1,2,3,7,8-PeCDD	A	100.00	98.2	0.8288129	0.8142999		-1.8	+/-38	
13C12-1,2,3,4,7,8-HxCDF	A	100.00	74.3	1.1683050	0.8681265		-25.7	+/-24	*
13C12-1,2,3,6,7,8-HxCDF	A	100.00	67.8	1.3864660	0.9407065		-32.2	+/-30	*
13C12-2,3,4,6,7,8-HxCDF	A	100.00	77.5	1.1292560	0.8753166		-22.5	+/-27	
13C12-1,2,3,7,8,9-HxCDF	A	100.00	85.5	0.9317541	0.7963141		-14.5	+/-26	
13C12-1,2,3,4,7,8-HxCDD	A	100.00	91.3	0.9950393	0.9085762		-8.7	+/-15	
13C12-1,2,3,6,7,8-HxCDD	A	100.00	86.4	1.1566890	0.9995953		-13.6	+/-15	
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	76.1	0.8952017	0.6813698		-23.9	+/-22	*
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	79.4	0.7697516	0.6112471		-20.6	+/-23	
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	83.7	0.8401226	0.7034531		-16.3	+/-28	
13C12-OCDD	A	200.00	201	0.7674714	0.7719532		0.6	+/-52	
37Cl4-2,3,7,8-TCDD	A	10.000	8.52	1.2878040	1.0966729		-14.8		

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 10:02:15 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin230315.mdb 16 Mar 2023 08:38:23
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 11:57:27

ID: CS3Z6, Name: 23031521, Date: 16-Mar-2023, Time: 02:54:10, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.548	1.001	1.260e4	1.712e4	0.702	0.736	0.770	641	655	1.97e5	2.67e5	306.9	407.7	NO	bb	bb	9.223
12378-PeCDF	29.713	1.000	7.069e4	4.677e4	0.679	1.512	1.550	952	848	1.08e6	7.23e5	1139.5	852.2	NO	bb	bb	46.441
23478-PeCDF	31.050	1.000	7.424e4	5.068e4	0.786	1.465	1.550	952	848	1.16e6	7.99e5	1216.9	941.7	NO	bb	bb	44.198
123478-HxCDF	34.704	1.001	1.027e5	8.457e4	1.166	1.215	1.240	1021	1060	1.62e6	1.31e6	1582.4	1240.1	NO	bd	bd	45.386
234678-HxCDF	35.707	1.000	1.045e5	8.547e4	1.140	1.222	1.240	1021	1060	1.64e6	1.36e6	1608.2	1285.0	NO	bb	bd	46.702
123678-HxCDF	34.838	1.000	1.083e5	8.859e4	1.091	1.222	1.240	1021	1060	1.62e6	1.34e6	1584.9	1266.9	NO	db	dd	47.070
123789-HxCDF	36.743	1.001	9.405e4	7.661e4	1.137	1.228	1.240	1021	1060	1.41e6	1.16e6	1384.1	1092.4	NO	bd	bd	46.230
1234678-HpCDF	38.604	1.000	6.306e4	6.268e4	1.003	1.006	1.050	763	992	1.01e6	1.03e6	1322.1	1043.7	NO	bd	bb	45.128
1234789-HpCDF	40.810	1.000	5.680e4	5.930e4	0.953	0.958	1.050	763	992	8.10e5	8.52e5	1062.2	858.8	NO	bd	bd	48.881
OCDF	45.020	1.005	8.945e4	1.050e5	0.778	0.852	0.890	1123	593	1.06e6	1.23e6	946.0	2080.5	NO	bd	bd	79.439
2378-TCDD	26.184	1.000	1.804e4	2.322e4	1.149	0.777	0.770	536	530	2.66e5	3.38e5	495.9	637.1	NO	dd	db	9.137
12378-PeCDD	31.306	1.001	8.330e4	5.396e4	1.022	1.544	1.550	1001	648	1.31e6	8.31e5	1307.9	1283.6	NO	bb	bb	48.898
123478-HxCDD	35.819	1.000	9.000e4	7.229e4	0.996	1.245	1.240	1107	1075	1.53e6	1.22e6	1380.4	1139.0	NO	bd	bd	44.009
123678-HxCDD	35.941	1.001	9.463e4	7.808e4	1.001	1.212	1.240	1107	1075	1.49e6	1.24e6	1349.5	1149.8	NO	db	db	42.339
123789-HxCDD	36.331	1.012	9.389e4	7.815e4	0.907	1.201	1.240	1107	1075	1.51e6	1.28e6	1365.8	1191.3	NO	bb	bb	48.760
1234678-HpCDD	40.085	1.000	7.137e4	7.044e4	1.039	1.013	1.050	1309	801	1.10e6	1.11e6	842.9	1391.1	NO	bb	bb	47.590
OCDD	44.791	1.000	1.277e5	1.503e5	0.920	0.850	0.890	763	929	1.63e6	1.90e6	2130.6	2046.2	NO	bb	bb	96.000
13C-2378-TCDF	25.534	1.007	1.978e5	2.615e5	1.620	0.757	0.770	1257	771	3.03e6	4.00e6	2412.7	5187.6	NO	bb	bb	84.047
13C-12378-PeCDF	29.702	1.172	2.219e5	1.504e5	1.240	1.475	1.550	909	1108	3.42e6	2.29e6	3755.7	2064.1	NO	bb	bb	88.978
13C-23478-PeCDF	31.039	1.224	2.146e5	1.449e5	1.118	1.481	1.550	909	1108	3.35e6	2.30e6	3688.1	2072.8	NO	bb	bb	95.339
13C-123478-HxCDF	34.682	0.955	1.216e5	2.324e5	1.168	0.523	0.510	1306	1636	1.94e6	3.70e6	1488.0	2259.7	NO	bd	bd	74.307
13C-123678-HxCDF	34.827	0.959	1.267e5	2.568e5	1.386	0.493	0.510	1306	1636	1.89e6	3.87e6	1446.2	2364.1	NO	dd	dd	67.849
13C-234678-HxCDF	35.696	0.983	1.216e5	2.353e5	1.129	0.517	0.510	1306	1636	1.95e6	3.80e6	1491.7	2321.6	NO	bd	bb	77.513
13C-123789-HxCDF	36.721	1.011	1.082e5	2.164e5	0.932	0.500	0.510	1306	1636	1.73e6	3.54e6	1327.7	2161.8	NO	bb	bb	85.464
13C-1234678-HpCDF	38.593	1.063	8.559e4	1.922e5	0.895	0.445	0.440	875	1359	1.42e6	3.24e6	1628.0	2387.1	NO	bb	bb	76.114
13C-1234789-HpCDF	40.799	1.123	7.426e4	1.749e5	0.770	0.424	0.440	875	1359	1.12e6	2.65e6	1283.2	1948.7	NO	bb	bb	79.408
13C-1234-TCDD	25.351	0.000	1.457e5	1.917e5	1.000	0.760	0.770	1304	665	2.36e6	3.14e6	1807.8	4717.4	NO	bb	bb	100.000
13C-2378-TCDD	26.170	1.032	1.701e5	2.231e5	1.152	0.762	0.770	1304	665	2.59e6	3.43e6	1989.2	5161.5	NO	bb	bb	101.132
13C-12378-PeCDD	31.284	1.234	1.680e5	1.067e5	0.829	1.576	1.550	524	545	2.54e6	1.64e6	4838.3	3008.5	NO	bb	bb	98.249
13C-123478-HxCDD	35.807	0.986	2.049e5	1.655e5	0.995	1.238	1.240	816	822	3.41e6	2.81e6	4177.6	3416.9	NO	bd	bd	91.311
13C-123678-HxCDD	35.919	0.989	2.260e5	1.815e5	1.157	1.245	1.240	816	822	3.48e6	2.81e6	4268.6	3421.6	NO	db	db	86.419
13C-1234678-HpCDD	40.074	1.103	1.446e5	1.422e5	0.840	1.016	1.050	746	735	2.21e6	2.18e6	2954.7	2967.3	NO	bb	bb	83.732
13C-OCDD	44.782	1.233	2.973e5	3.322e5	0.767	0.895	0.890	991	1276	3.64e6	4.08e6	3671.2	3197.7	NO	bb	bb	201.168
13C-123789-HxCDD	36.320	0.000	2.252e5	1.824e5	1.000	1.235	1.240	816	822	3.73e6	2.98e6	4566.0	3627.3	NO	bb	bb	100.000
37CL-2378-TCDD	26.184	1.033	3.700e4		1.288			1019		5.60e5		549.6			bb		8.516

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 10:02:15 Pacific Daylight Time

ID: CS3Z6, Name: 23031521, Date: 16-Mar-2023, Time: 02:54:10, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.045	0.863	1.368e4	1.897e4	0.802	0.721	0.770	641	655	2.20e5	3.07e5	342.6	469.0	NO	bb	bb	8.869
1289-TCDF	27.045	1.059	1.183e4	1.657e4	0.678	0.714	0.770	641	655	1.69e5	2.40e5	264.3	366.3	NO	db	dd	9.116
13468-PECDF	26.904	0.906	1.715e5	1.157e5	1.246	1.482	1.550	404	631	2.66e6	1.80e6	6593.9	2845.4	NO	bb	bb	61.889
12389-PECDF	32.086	1.080	6.556e4	4.453e4	0.496	1.472	1.550	952	848	9.59e5	6.61e5	1008.0	779.4	NO	bb	bb	59.567
123468-HXCDF	33.022	0.952	1.017e5	8.177e4	1.169	1.243	1.240	1021	1060	1.52e6	1.21e6	1490.6	1137.4	NO	bb	bb	44.334
1368-TCDD	23.316	0.891	1.595e4	2.068e4	1.015	0.771	0.770	536	530	2.60e5	3.35e5	485.4	631.5	NO	bd	bb	9.175
1289-TCDD	26.791	1.024	1.483e4	1.920e4	0.909	0.773	0.770	536	530	2.14e5	2.75e5	399.8	519.0	NO	bd	bb	9.525
12479-PECDD	28.577	0.914	1.274e5	8.605e4	2.301	1.480	1.550	1001	648	1.24e6	8.41e5	1235.7	1298.3	NO	bb	bb	33.762
12389-PECDD	31.708	1.013	8.978e4	6.045e4	1.184	1.485	1.550	1001	648	1.36e6	9.04e5	1355.8	1394.9	NO	bb	bb	46.206
124679-HXCDD	33.802	0.944	8.984e4	7.451e4	1.115	1.206	1.240	1107	1075	1.37e6	1.16e6	1238.7	1076.2	NO	bb	bb	39.778
1234679-HPCDD	39.049	0.974	7.683e4	7.411e4	1.137	1.037	1.050	1309	801	1.29e6	1.24e6	983.0	1542.6	NO	bb	bb	46.294
Total-tetrafurans			3.843e4		0.727			641		5.92e5							27.413
Total-penta1			1.715e5					404		2.66e6							61.889
Total-pentafurans			2.212e5		0.654			952		3.37e6							157.654
Total-hexafurans			5.112e5		1.141			1021		7.81e6							229.722
Total-heptafurans			1.201e5		0.978			763		1.82e6							94.211
Total-Furans			1.152e6		0.922			641		1.73e7							650.328
Total-tetradioxins			8.222e4		1.024			536		1.12e6							46.566
Total-pentadioxins			3.005e5		1.502			1001		3.91e6							128.866
Total-hexadioxins			3.684e5		1.005			1107		5.91e6							174.885
Total-heptadioxins			1.483e5		1.088			1309		2.39e6							93.944
Total-Dioxins			1.027e6		1.130			536		1.49e7							540.261
Total-TEQ			2.179e6					536		3.23e7							1190.589
FUNCTION1 PFK			2.552e5					474245		8.94e6							
FUNCTION2 PFK			3.735e5					89985		8.57e5							0.000
FUNCTION3 PFK			3.371e5					383880		9.65e6							0.000
FUNCTION4 PFK			3.037e5					235386		8.78e6							
FUNCTION5 PFK			2.619e4					163055		1.03e6							
FUNCTION1 HXCD...			8.257e1					328		8.96e2							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			2.190e2					658		5.45e3							0.000
FUNCTION3 OCDPE			0.000e0					297		0.00e0							
FUNCTION4 NCDPE			8.932e1					530		3.08e3							0.000
FUNCTION5 DCDPE			0.000e0					328		0.00e0							

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TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.05	1.183e4	1.657e4	0.678	0.71	0.77	264.3	YES	NO	db	dd	9.116
2	Total-tetrafurans	26.92	3.193e2	3.673e2	0.727	0.87	0.77	10.0	YES	NO	bd	bd	0.206
3	2378-TCDF	25.55	1.260e4	1.712e4	0.702	0.74	0.77	306.9	YES	NO	bb	bb	9.223
4	1368-TCDF	22.05	1.368e4	1.897e4	0.802	0.72	0.77	342.6	YES	NO	bb	bb	8.869

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	26.90	1.715e5	1.157e5	1.246	1.48	1.55	6593.9	YES	NO	bb	bb	61.889

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.09	6.556e4	4.453e4	0.496	1.47	1.55	1008.0	YES	NO	bb	bb	59.567
2	23478-PeCDF	31.05	7.424e4	5.068e4	0.786	1.46	1.55	1216.9	YES	NO	bb	bb	44.198
3	12378-PeCDF	29.71	7.069e4	4.677e4	0.679	1.51	1.55	1139.5	YES	NO	bb	bb	46.441
4	Total-pentafurans	28.57	1.066e4	7.159e3	0.654	1.49	1.55	179.2	YES	NO	bb	bb	7.448

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.74	9.405e4	7.661e4	1.137	1.23	1.24	1384.1	YES	NO	bd	bd	46.230
2	234678-HxCDF	35.71	1.045e5	8.547e4	1.140	1.22	1.24	1608.2	YES	NO	bb	bd	46.702
3	123678-HxCDF	34.84	1.083e5	8.859e4	1.091	1.22	1.24	1584.9	YES	NO	db	dd	47.070
4	123478-HxCDF	34.70	1.027e5	8.457e4	1.166	1.21	1.24	1582.4	YES	NO	bd	bd	45.386
5	123468-HXCDF	33.02	1.017e5	8.177e4	1.169	1.24	1.24	1490.6	YES	NO	bb	bb	44.334

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.60	6.306e4	6.268e4	1.003	1.01	1.05	1322.1	YES	NO	bd	bb	45.128
2	Total-heptafurans	41.05	2.461e2	2.744e2	0.978	0.90	1.05	6.1	YES	NO	dd	dd	0.202
3	1234789-HpCDF	40.81	5.680e4	5.930e4	0.953	0.96	1.05	1062.2	YES	NO	bd	bd	48.881

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Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.05	1.183e4	1.657e4	0.678	0.71	0.77	264.3	YES	NO	db	dd	9.116
2	Total-tetrafurans	26.92	3.193e2	3.673e2	0.727	0.87	0.77	10.0	YES	NO	bd	bd	0.206
3	2378-TCDF	25.55	1.260e4	1.712e4	0.702	0.74	0.77	306.9	YES	NO	bb	bb	9.223
4	1368-TCDF	22.05	1.368e4	1.897e4	0.802	0.72	0.77	342.6	YES	NO	bb	bb	8.869
5	12389-PECDF	32.09	6.556e4	4.453e4	0.496	1.47	1.55	1008.0	YES	NO	bb	bb	59.567
6	23478-PeCDF	31.05	7.424e4	5.068e4	0.786	1.46	1.55	1216.9	YES	NO	bb	bb	44.198
7	12378-PeCDF	29.71	7.069e4	4.677e4	0.679	1.51	1.55	1139.5	YES	NO	bb	bb	46.441
8	Total-pentafurans	28.57	1.066e4	7.159e3	0.654	1.49	1.55	179.2	YES	NO	bb	bb	7.448
9	123789-HxCDF	36.74	9.405e4	7.661e4	1.137	1.23	1.24	1384.1	YES	NO	bd	bd	46.230
10	234678-HxCDF	35.71	1.045e5	8.547e4	1.140	1.22	1.24	1608.2	YES	NO	bb	bd	46.702
11	123678-HxCDF	34.84	1.083e5	8.859e4	1.091	1.22	1.24	1584.9	YES	NO	db	dd	47.070
12	123478-HxCDF	34.70	1.027e5	8.457e4	1.166	1.21	1.24	1582.4	YES	NO	bd	bd	45.386
13	123468-HXCDF	33.02	1.017e5	8.177e4	1.169	1.24	1.24	1490.6	YES	NO	bb	bb	44.334
14	1234678-HpCDF	38.60	6.306e4	6.268e4	1.003	1.01	1.05	1322.1	YES	NO	bd	bb	45.128
15	Total-heptafurans	41.05	2.461e2	2.744e2	0.978	0.90	1.05	6.1	YES	NO	dd	dd	0.202
16	1234789-HpCDF	40.81	5.680e4	5.930e4	0.953	0.96	1.05	1062.2	YES	NO	bd	bd	48.881
17	OCDF	45.02	8.945e4	1.050e5	0.778	0.85	0.89	946.0	YES	NO	bd	bd	79.439
18	13468-PECDF	26.90	1.715e5	1.157e5	1.246	1.48	1.55	6593.9	YES	NO	bb	bb	61.889

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.18	1.804e4	2.322e4	1.149	0.78	0.77	495.9	YES	NO	dd	db	9.137
2	Total-tetradioxins	25.86	2.536e4	3.228e4	1.024	0.79	0.77	481.6	YES	NO	bd	bd	14.315
3	Total-tetradioxins	25.36	8.032e3	9.746e3	1.024	0.82	0.77	223.6	YES	NO	bb	bb	4.415
4	1368-TCDD	23.32	1.595e4	2.068e4	1.015	0.77	0.77	485.4	YES	NO	bd	bb	9.175
5	1289-TCDD	26.79	1.483e4	1.920e4	0.909	0.77	0.77	399.8	YES	NO	bd	bb	9.525

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.31	8.330e4	5.396e4	1.022	1.54	1.55	1307.9	YES	NO	bb	bb	48.898
2	12479-PECDD	28.58	1.274e5	8.605e4	2.301	1.48	1.55	1235.7	YES	NO	bb	bb	33.762
3	12389-PECDD	31.71	8.978e4	6.045e4	1.184	1.49	1.55	1355.8	YES	NO	bb	bb	46.206

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HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123678-HxCDD	35.94	9.463e4	7.808e4	1.001	1.21	1.24	1349.5	YES	NO	db	db	42.339
2	123478-HxCDD	35.82	9.000e4	7.229e4	0.996	1.24	1.24	1380.4	YES	NO	bd	bd	44.009
3	124679-HXCDD	33.80	8.984e4	7.451e4	1.115	1.21	1.24	1238.7	YES	NO	bb	bb	39.778
4	123789-HxCDD	36.33	9.389e4	7.815e4	0.907	1.20	1.24	1365.8	YES	NO	bb	bb	48.760

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.09	7.137e4	7.044e4	1.039	1.01	1.05	842.9	YES	NO	bb	bb	47.590
2	Total-heptadioxins	39.18	9.125e1	9.648e1	1.088	0.95	1.05	0.0	NO	NO	bb	bb	0.060
3	1234679-HPCDD	39.05	7.683e4	7.411e4	1.137	1.04	1.05	983.0	YES	NO	bb	bb	46.294

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.18	1.804e4	2.322e4	1.149	0.78	0.77	495.9	YES	NO	dd	db	9.137
2	Total-tetradioxins	25.86	2.536e4	3.228e4	1.024	0.79	0.77	481.6	YES	NO	bd	bd	14.315
3	Total-tetradioxins	25.36	8.032e3	9.746e3	1.024	0.82	0.77	223.6	YES	NO	bb	bb	4.415
4	1368-TCDD	23.32	1.595e4	2.068e4	1.015	0.77	0.77	485.4	YES	NO	bd	bb	9.175
5	12378-PeCDD	31.31	8.330e4	5.396e4	1.022	1.54	1.55	1307.9	YES	NO	bb	bb	48.898
6	12479-PECDD	28.58	1.274e5	8.605e4	2.301	1.48	1.55	1235.7	YES	NO	bb	bb	33.762
7	1289-TCDD	26.79	1.483e4	1.920e4	0.909	0.77	0.77	399.8	YES	NO	bd	bb	9.525
8	123678-HxCDD	35.94	9.463e4	7.808e4	1.001	1.21	1.24	1349.5	YES	NO	db	db	42.339
9	123478-HxCDD	35.82	9.000e4	7.229e4	0.996	1.24	1.24	1380.4	YES	NO	bd	bd	44.009
10	124679-HXCDD	33.80	8.984e4	7.451e4	1.115	1.21	1.24	1238.7	YES	NO	bb	bb	39.778
11	12389-PECDD	31.71	8.978e4	6.045e4	1.184	1.49	1.55	1355.8	YES	NO	bb	bb	46.206
12	123789-HxCDD	36.33	9.389e4	7.815e4	0.907	1.20	1.24	1365.8	YES	NO	bb	bb	48.760
13	OCDD	44.79	1.277e5	1.503e5	0.920	0.85	0.89	2130.6	YES	NO	bb	bb	96.000
14	1234678-HpCDD	40.09	7.137e4	7.044e4	1.039	1.01	1.05	842.9	YES	NO	bb	bb	47.590
15	Total-heptadioxins	39.18	9.125e1	9.648e1	1.088	0.95	1.05	0.0	NO	NO	bb	bb	0.060
16	1234679-HPCDD	39.05	7.683e4	7.411e4	1.137	1.04	1.05	983.0	YES	NO	bb	bb	46.294

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Printed: Thursday, March 16, 2023 10:02:15 Pacific Daylight Time

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TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.05	1.183e4	1.657e4	0.678	0.71	0.77	264.3	YES	NO	db	dd	9.116
2	Total-tetrafurans	26.92	3.193e2	3.673e2	0.727	0.87	0.77	10.0	YES	NO	bd	bd	0.206
3	2378-TCDF	25.55	1.260e4	1.712e4	0.702	0.74	0.77	306.9	YES	NO	bb	bb	9.223
4	1368-TCDF	22.05	1.368e4	1.897e4	0.802	0.72	0.77	342.6	YES	NO	bb	bb	8.869
5	12389-PECDF	32.09	6.556e4	4.453e4	0.496	1.47	1.55	1008.0	YES	NO	bb	bb	59.567
6	23478-PeCDF	31.05	7.424e4	5.068e4	0.786	1.46	1.55	1216.9	YES	NO	bb	bb	44.198
7	12378-PeCDF	29.71	7.069e4	4.677e4	0.679	1.51	1.55	1139.5	YES	NO	bb	bb	46.441
8	Total-pentafurans	28.57	1.066e4	7.159e3	0.654	1.49	1.55	179.2	YES	NO	bb	bb	7.448
9	123789-HxCDF	36.74	9.405e4	7.661e4	1.137	1.23	1.24	1384.1	YES	NO	bd	bd	46.230
10	234678-HxCDF	35.71	1.045e5	8.547e4	1.140	1.22	1.24	1608.2	YES	NO	bb	bd	46.702
11	123678-HxCDF	34.84	1.083e5	8.859e4	1.091	1.22	1.24	1584.9	YES	NO	db	dd	47.070
12	123478-HxCDF	34.70	1.027e5	8.457e4	1.166	1.21	1.24	1582.4	YES	NO	bd	bd	45.386
13	123468-HXCDF	33.02	1.017e5	8.177e4	1.169	1.24	1.24	1490.6	YES	NO	bb	bb	44.334
14	1234678-HpCDF	38.60	6.306e4	6.268e4	1.003	1.01	1.05	1322.1	YES	NO	bd	bb	45.128
15	Total-heptafurans	41.05	2.461e2	2.744e2	0.978	0.90	1.05	6.1	YES	NO	dd	dd	0.202
16	1234789-HpCDF	40.81	5.680e4	5.930e4	0.953	0.96	1.05	1062.2	YES	NO	bd	bd	48.881
17	OCDF	45.02	8.945e4	1.050e5	0.778	0.85	0.89	946.0	YES	NO	bd	bd	79.439
18	13468-PECDF	26.90	1.715e5	1.157e5	1.246	1.48	1.55	6593.9	YES	NO	bb	bb	61.889
19	2378-TCDD	26.18	1.804e4	2.322e4	1.149	0.78	0.77	495.9	YES	NO	dd	db	9.137
20	Total-tetradioxins	25.86	2.536e4	3.228e4	1.024	0.79	0.77	481.6	YES	NO	bd	bd	14.315
21	Total-tetradioxins	25.36	8.032e3	9.746e3	1.024	0.82	0.77	223.6	YES	NO	bb	bb	4.415
22	1368-TCDD	23.32	1.595e4	2.068e4	1.015	0.77	0.77	485.4	YES	NO	bd	bb	9.175
23	12378-PeCDD	31.31	8.330e4	5.396e4	1.022	1.54	1.55	1307.9	YES	NO	bb	bb	48.898
24	12479-PECDD	28.58	1.274e5	8.605e4	2.301	1.48	1.55	1235.7	YES	NO	bb	bb	33.762
25	1289-TCDD	26.79	1.483e4	1.920e4	0.909	0.77	0.77	399.8	YES	NO	bd	bb	9.525
26	123678-HxCDD	35.94	9.463e4	7.808e4	1.001	1.21	1.24	1349.5	YES	NO	db	db	42.339
27	123478-HxCDD	35.82	9.000e4	7.229e4	0.996	1.24	1.24	1380.4	YES	NO	bd	bd	44.009
28	124679-HXCDD	33.80	8.984e4	7.451e4	1.115	1.21	1.24	1238.7	YES	NO	bb	bb	39.778
29	12389-PECDD	31.71	8.978e4	6.045e4	1.184	1.49	1.55	1355.8	YES	NO	bb	bb	46.206
30	123789-HxCDD	36.33	9.389e4	7.815e4	0.907	1.20	1.24	1365.8	YES	NO	bb	bb	48.760
31	OCDD	44.79	1.277e5	1.503e5	0.920	0.85	0.89	2130.6	YES	NO	bb	bb	96.000
32	1234678-HpCDD	40.09	7.137e4	7.044e4	1.039	1.01	1.05	842.9	YES	NO	bb	bb	47.590
33	Total-heptadioxins	39.18	9.125e1	9.648e1	1.088	0.95	1.05	0.0	NO	NO	bb	bb	0.060
34	1234679-HPCDD	39.05	7.683e4	7.411e4	1.137	1.04	1.05	983.0	YES	NO	bb	bb	46.294

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PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	25.11	3.757e3					0.6	NO		bd		
2	FUNCTION1 PFK	24.76	3.994e3					0.6	NO		bb		
3	FUNCTION1 PFK	24.56	9.886e3					0.8	NO		db		
4	FUNCTION1 PFK	24.52	4.594e3					0.6	NO		bd		
5	FUNCTION1 PFK	24.15	4.921e3					0.7	NO		bb		
6	FUNCTION1 PFK	23.71	1.957e4					1.2	NO		bb		
7	FUNCTION1 PFK	23.20	3.542e3					0.5	NO		bb		
8	FUNCTION1 PFK	22.89	1.118e4					1.0	NO		bb		
9	FUNCTION1 PFK	22.82	3.333e4					1.4	NO		db		
10	FUNCTION1 PFK	22.75	2.314e4					1.2	NO		bd		
11	FUNCTION1 PFK	22.65	1.267e4					0.9	NO		bb		
12	FUNCTION1 PFK	22.21	2.008e4					1.0	NO		bb		
13	FUNCTION1 PFK	22.09	9.710e3					0.7	NO		bb		
14	FUNCTION1 PFK	21.24	1.536e4					1.1	NO		bb		
15	FUNCTION1 PFK	27.64	3.607e3					0.5	NO		bb		
16	FUNCTION1 PFK	27.60	3.982e3					0.6	NO		bb		
17	FUNCTION1 PFK	27.41	6.708e3					0.8	NO		bb		
18	FUNCTION1 PFK	27.36	1.669e4					1.2	NO		bb		
19	FUNCTION1 PFK	26.38	1.041e4					0.9	NO		bb		
20	FUNCTION1 PFK	25.63	8.797e3					0.9	NO		bb		
21	FUNCTION1 PFK	25.55	3.725e3					0.6	NO		bb		
22	FUNCTION1 PFK	25.20	2.553e4					1.0	NO		db		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	32.01	3.135e4					1.5	NO		bb		0.000
2	FUNCTION2 PFK	31.30	2.224e5					4.0	YES		bb		0.000
3	FUNCTION2 PFK	29.91	1.198e5					4.0	YES		bb		0.000

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PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	33.08	8.575e3					0.9	NO		bb		0.000
2	FUNCTION3 PFK	32.97	8.354e3					1.1	NO		bb		0.000
3	FUNCTION3 PFK	32.70	7.395e3					0.9	NO		bb		0.000
4	FUNCTION3 PFK	36.91	4.136e4					1.7	NO		bb		0.000
5	FUNCTION3 PFK	36.55	7.253e3					0.9	NO		bb		0.000
6	FUNCTION3 PFK	35.85	2.558e4					2.0	NO		bb		0.000
7	FUNCTION3 PFK	35.62	1.169e4					1.1	NO		bb		0.000
8	FUNCTION3 PFK	35.57	7.075e3					0.9	NO		bb		0.000
9	FUNCTION3 PFK	35.04	1.698e4					1.2	NO		bb		0.000
10	FUNCTION3 PFK	34.89	1.376e4					1.1	NO		bb		0.000
11	FUNCTION3 PFK	34.60	1.774e4					1.3	NO		db		0.000
12	FUNCTION3 PFK	34.53	1.127e4					1.1	NO		bd		0.000
13	FUNCTION3 PFK	34.21	2.220e3					0.5	NO		bb		0.000
14	FUNCTION3 PFK	34.14	4.065e3					0.6	NO		bb		0.000
15	FUNCTION3 PFK	34.04	3.839e3					0.7	NO		bb		0.000
16	FUNCTION3 PFK	33.85	3.503e4					2.1	NO		bb		0.000
17	FUNCTION3 PFK	33.45	1.051e4					1.1	NO		db		0.000
18	FUNCTION3 PFK	33.40	2.729e4					1.6	NO		dd		0.000
19	FUNCTION3 PFK	33.32	3.465e4					1.8	NO		bd		0.000
20	FUNCTION3 PFK	37.41	9.963e3					1.1	NO		bb		0.000
21	FUNCTION3 PFK	37.13	3.251e4					1.6	NO		bb		0.000

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PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	39.23	1.088e4					1.3	NO		db		
2	FUNCTION4 PFK	39.18	1.430e4					1.3	NO		bd		
3	FUNCTION4 PFK	39.04	4.917e3					1.1	NO		bb		
4	FUNCTION4 PFK	38.99	1.451e3					0.6	NO		bb		
5	FUNCTION4 PFK	38.94	2.358e4					1.9	NO		bb		
6	FUNCTION4 PFK	38.51	1.721e4					1.6	NO		bb		
7	FUNCTION4 PFK	38.31	7.894e3					1.3	NO		bb		
8	FUNCTION4 PFK	38.24	5.849e3					1.1	NO		db		
9	FUNCTION4 PFK	38.19	7.592e3					1.3	NO		bd		
10	FUNCTION4 PFK	38.14	6.944e3					0.7	NO		bb		
11	FUNCTION4 PFK	37.99	1.253e4					1.4	NO		bb		
12	FUNCTION4 PFK	37.89	3.032e3					0.6	NO		bb		
13	FUNCTION4 PFK	37.78	3.159e3					0.5	NO		bb		
14	FUNCTION4 PFK	42.28	5.355e3					1.0	NO		bb		
15	FUNCTION4 PFK	42.12	2.248e4					1.5	NO		db		
16	FUNCTION4 PFK	42.05	1.480e4					1.8	NO		dd		
17	FUNCTION4 PFK	41.96	2.330e4					2.0	NO		bd		
18	FUNCTION4 PFK	41.18	8.394e3					1.3	NO		bb		
19	FUNCTION4 PFK	40.88	8.104e3					1.2	NO		bb		
20	FUNCTION4 PFK	40.78	2.482e4					2.0	NO		db		
21	FUNCTION4 PFK	40.69	7.245e3					1.3	NO		bd		
22	FUNCTION4 PFK	40.58	7.510e3					1.3	NO		bb		
23	FUNCTION4 PFK	40.50	6.216e3					0.7	NO		bb		
24	FUNCTION4 PFK	39.94	1.490e4					1.7	NO		db		
25	FUNCTION4 PFK	39.91	9.594e3					1.4	NO		bd		
26	FUNCTION4 PFK	39.84	5.271e3					0.8	NO		db		
27	FUNCTION4 PFK	39.80	5.967e3					1.1	NO		dd		
28	FUNCTION4 PFK	39.76	8.318e3					1.2	NO		bd		
29	FUNCTION4 PFK	39.39	1.007e3					0.4	NO		bb		
30	FUNCTION4 PFK	42.44	1.611e3					0.6	NO		bb		
31	FUNCTION4 PFK	42.35	9.507e3					1.4	NO		bb		

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PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.82	9.281e3					1.9	NO		bb		
2	FUNCTION5 PFK	45.67	9.930e2					0.7	NO		bb		
3	FUNCTION5 PFK	43.67	4.997e3					1.7	NO		bb		
4	FUNCTION5 PFK	42.62	1.092e4					2.1	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	23.51	8.257e1					2.7	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	30.88	7.548e1					2.5	NO		bb		0.000
2	FUNCTION2 HPCD...	30.74	7.206e1					2.2	NO		bb		0.000
3	FUNCTION2 HPCD...	29.72	7.145e1					3.6	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.93	8.932e1					5.8	YES		bb		0.000

ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

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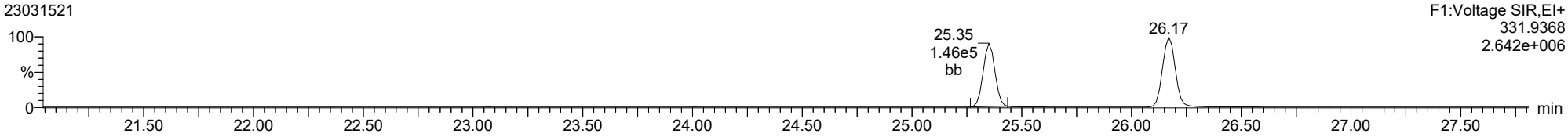

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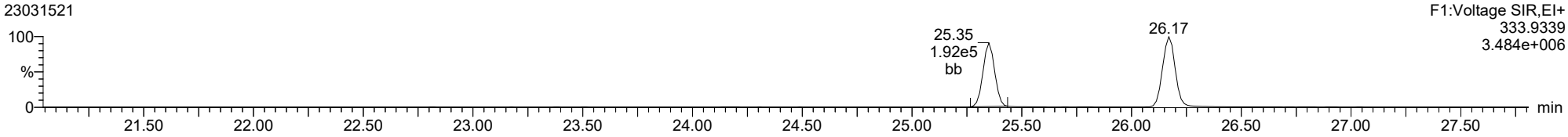

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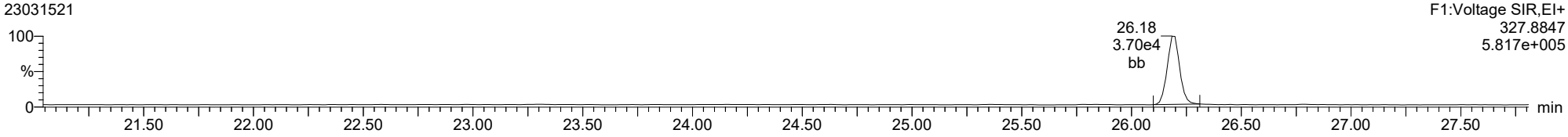

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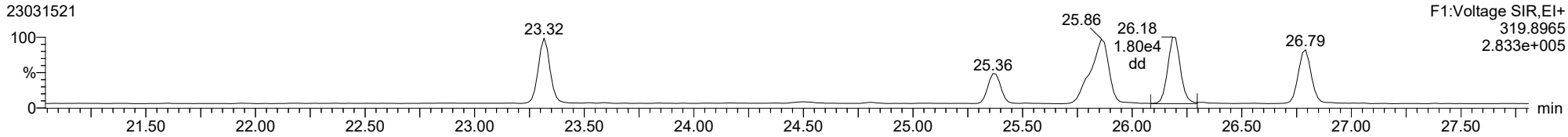

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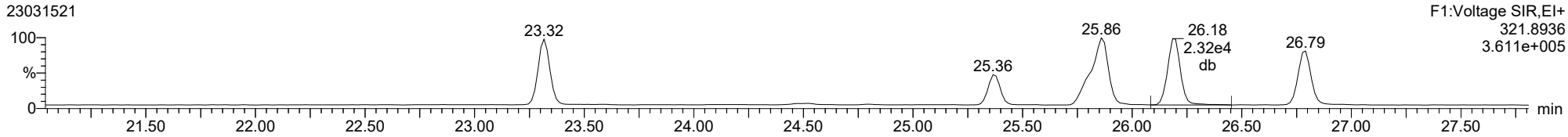

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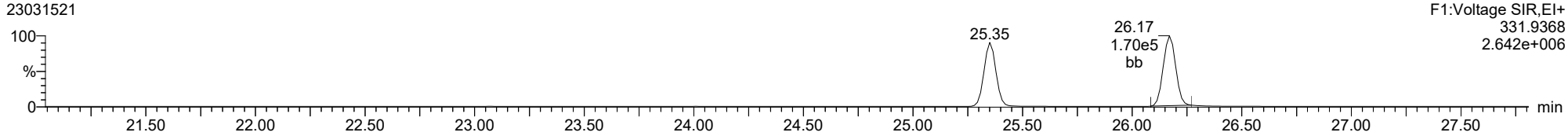

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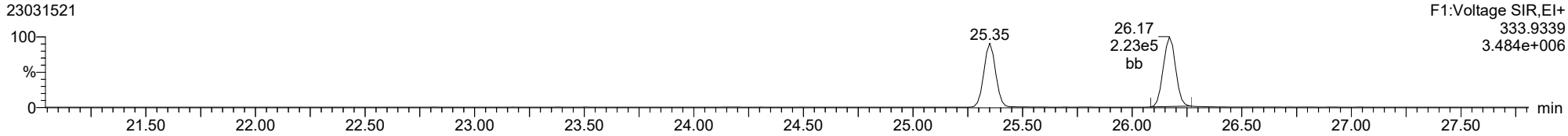

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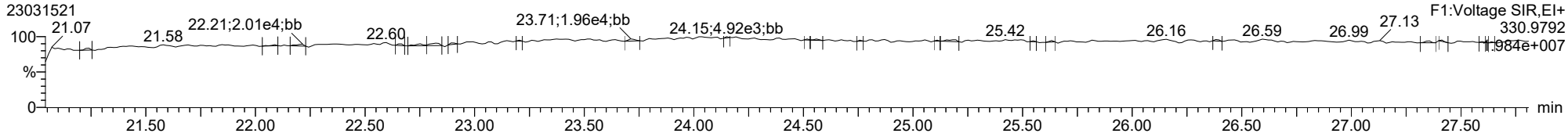

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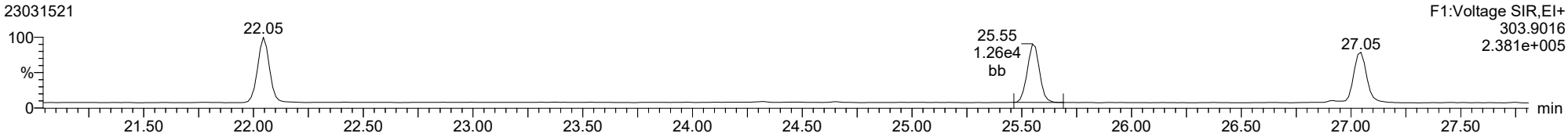

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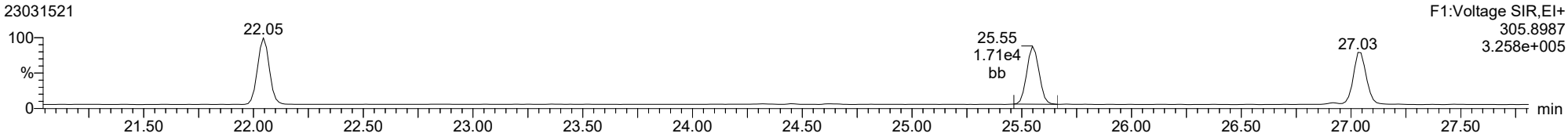

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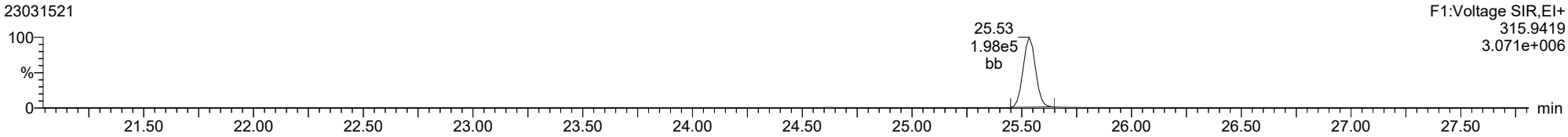

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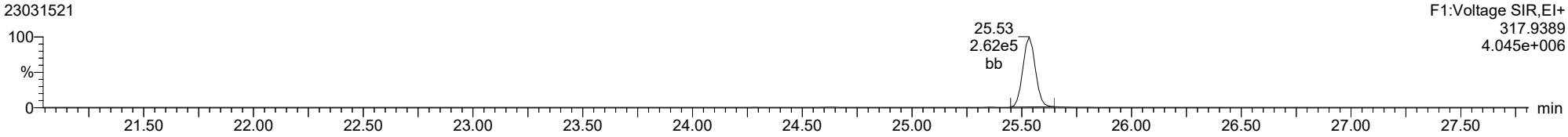

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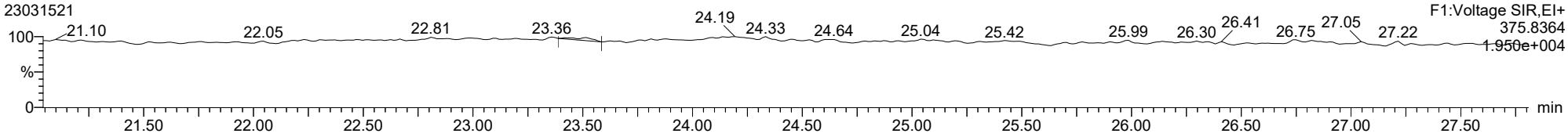

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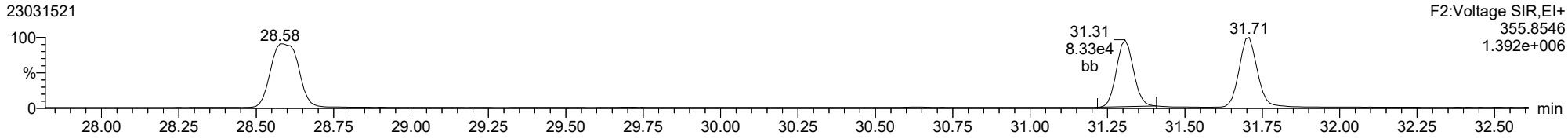

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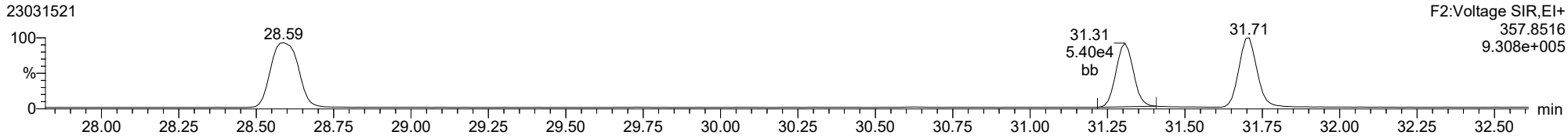

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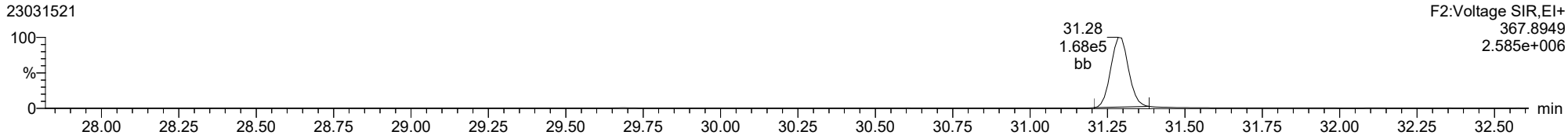

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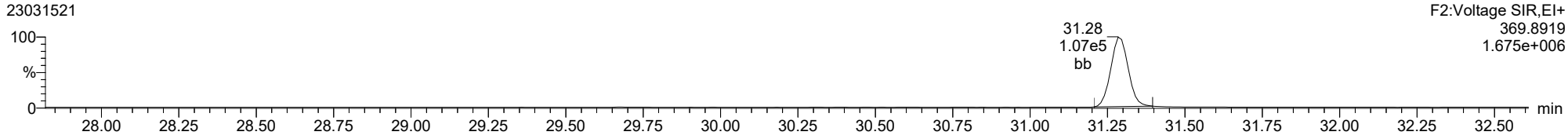

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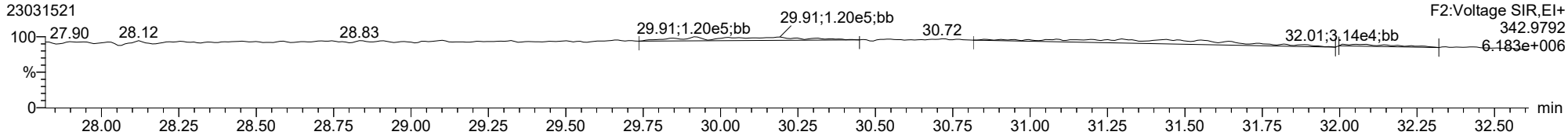

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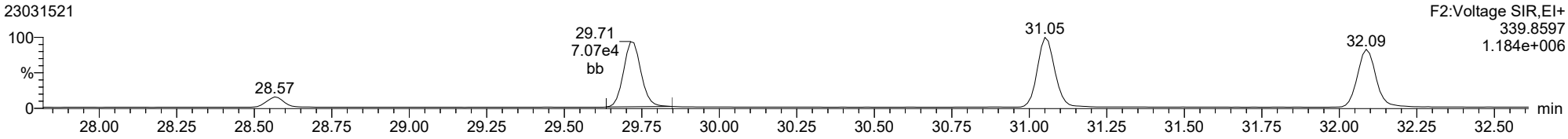

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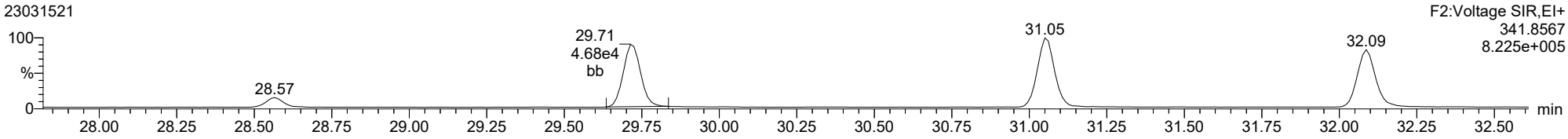

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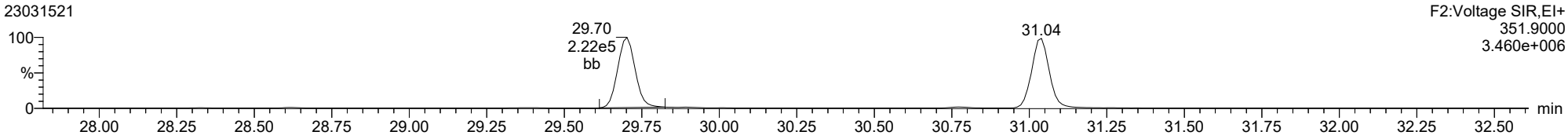

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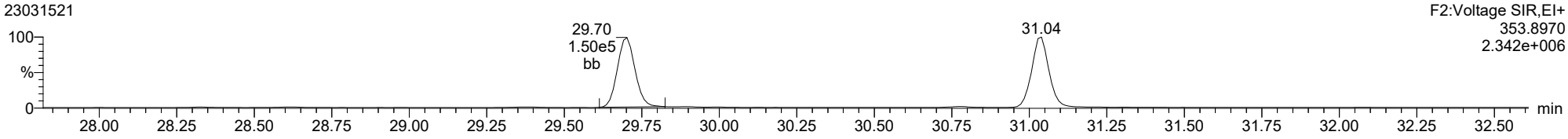

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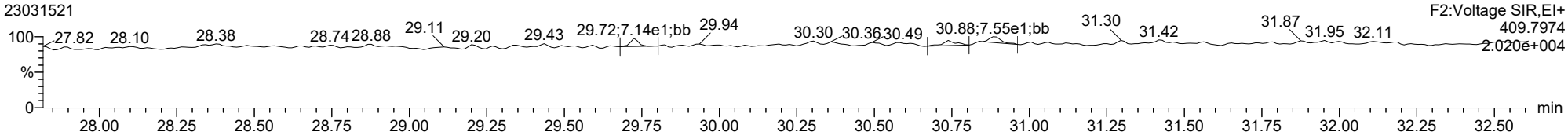

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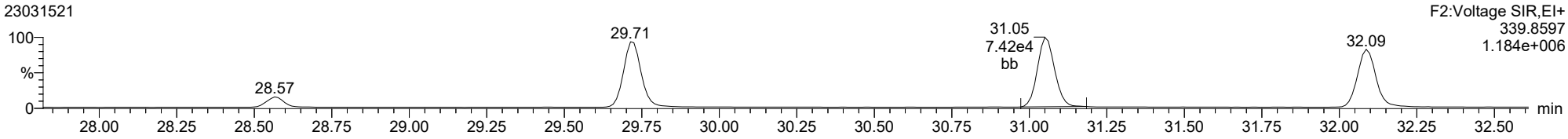

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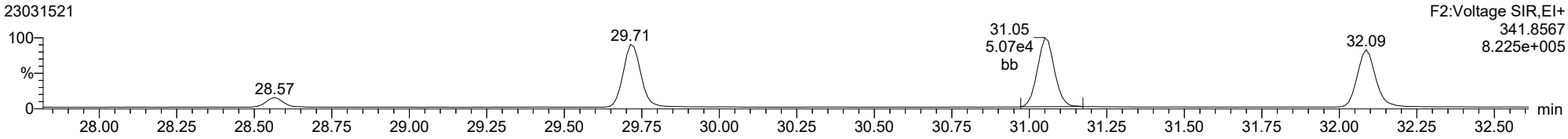

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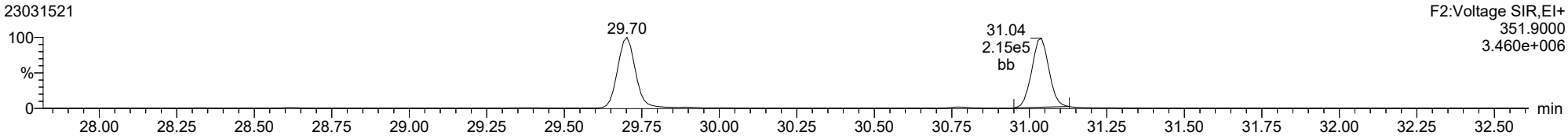

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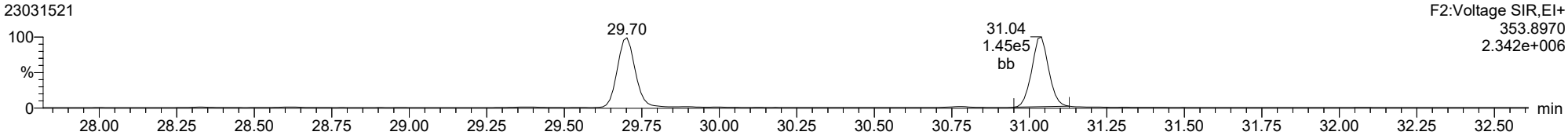

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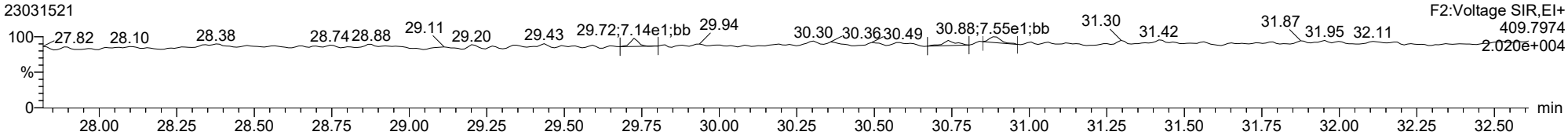

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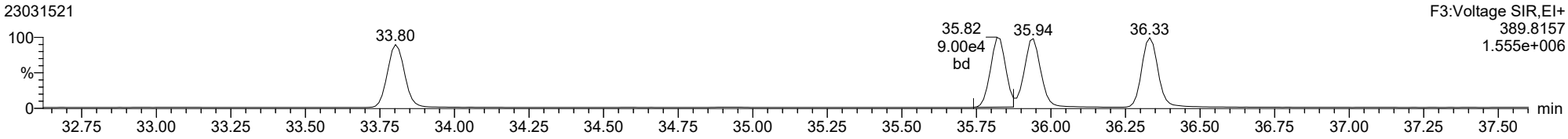
123478-HxCDD



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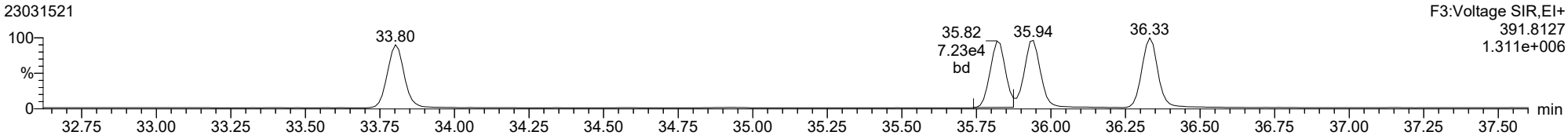

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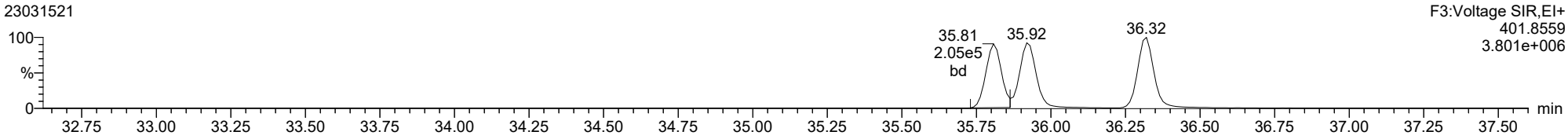

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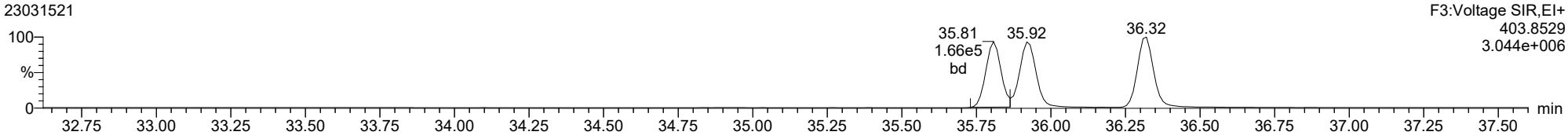

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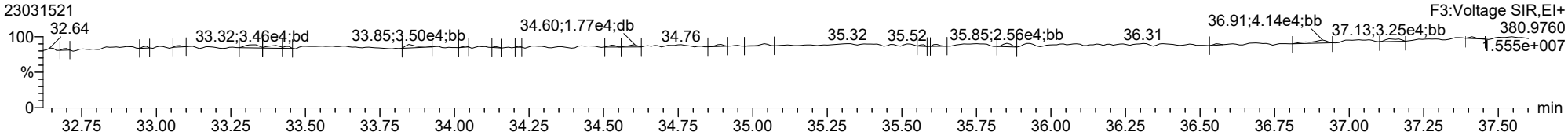

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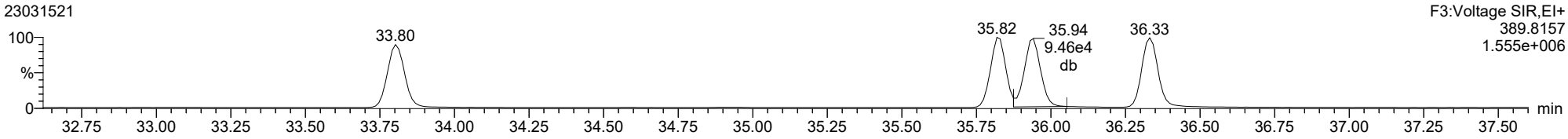

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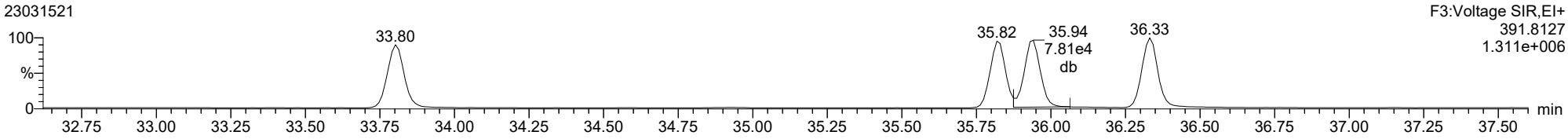

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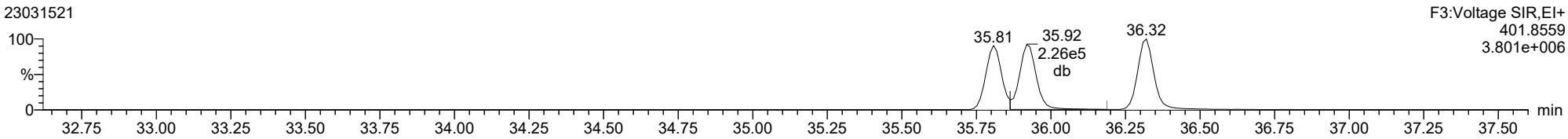

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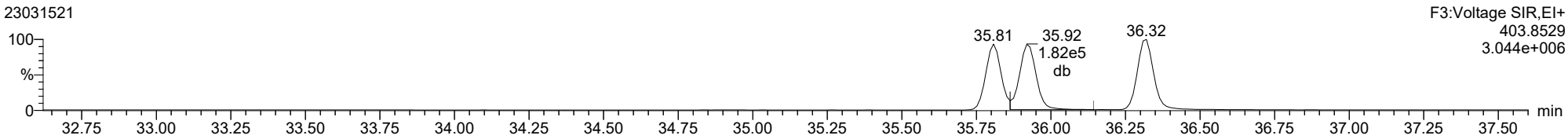

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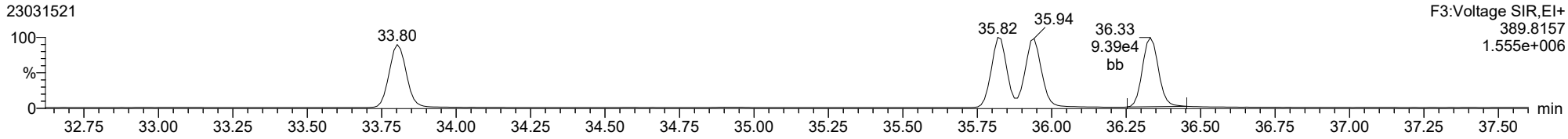

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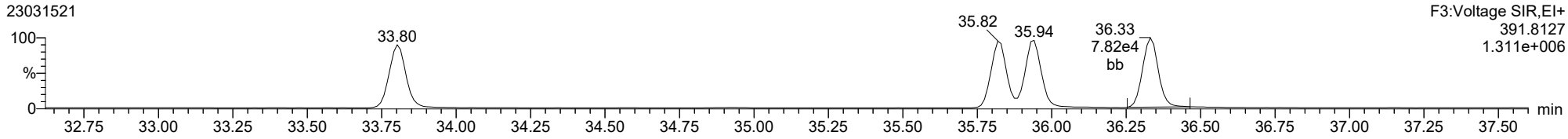

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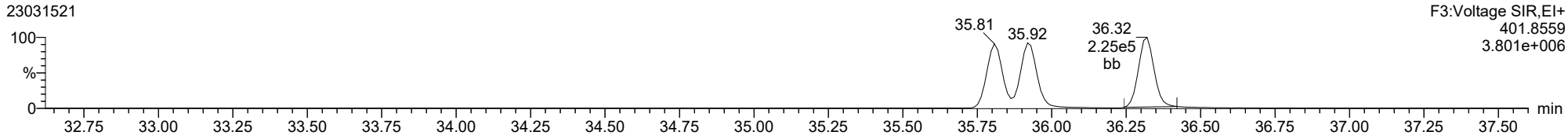

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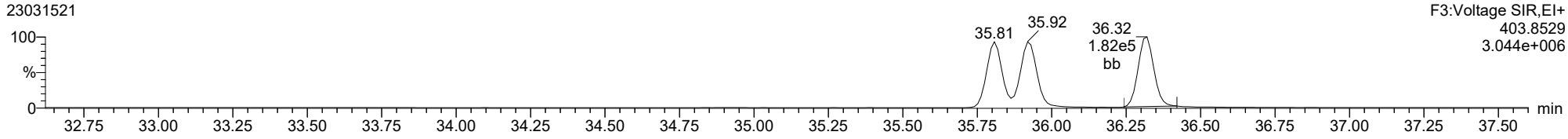

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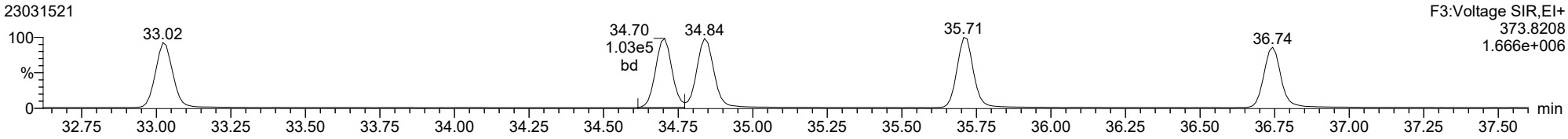

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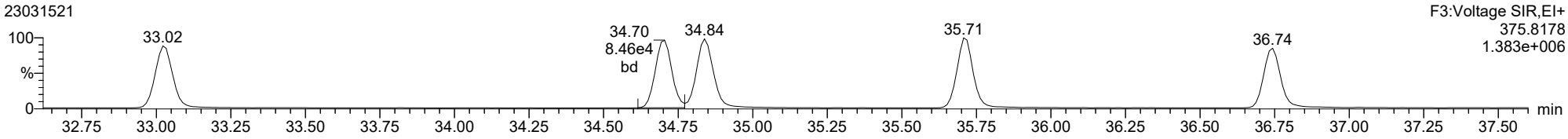

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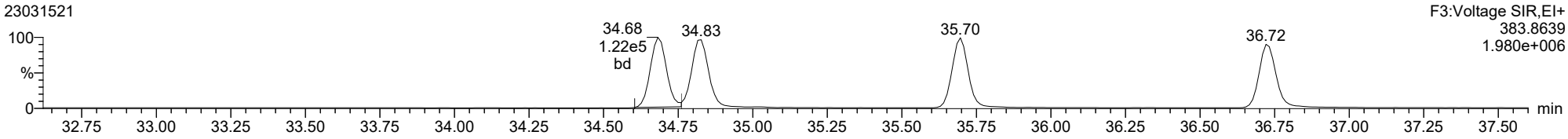

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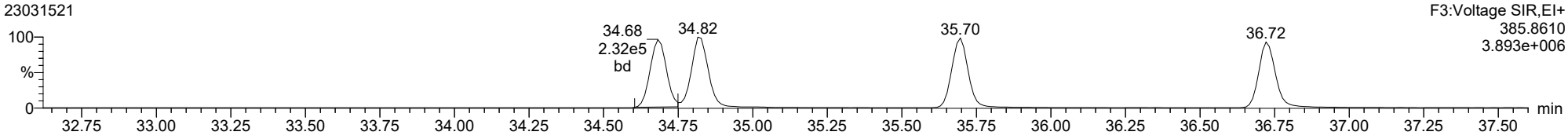

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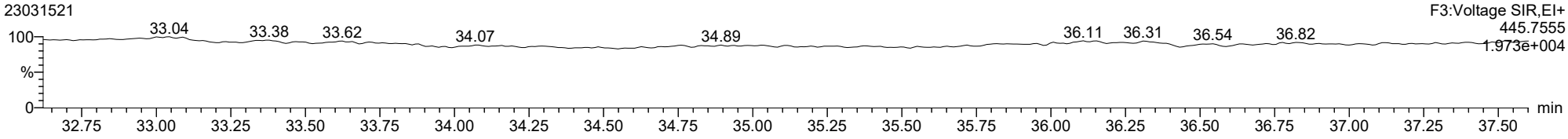

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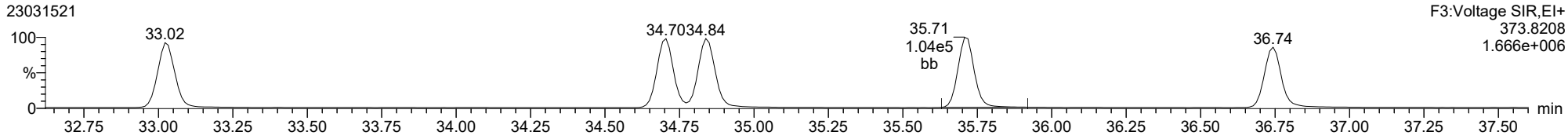

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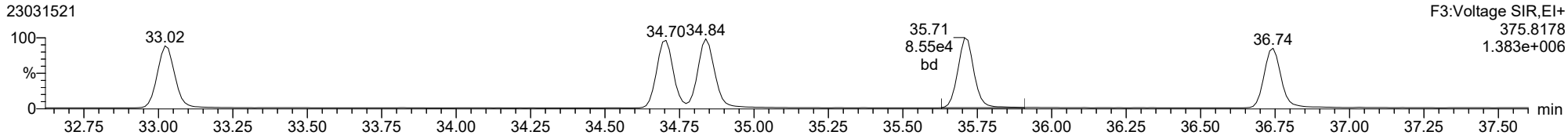

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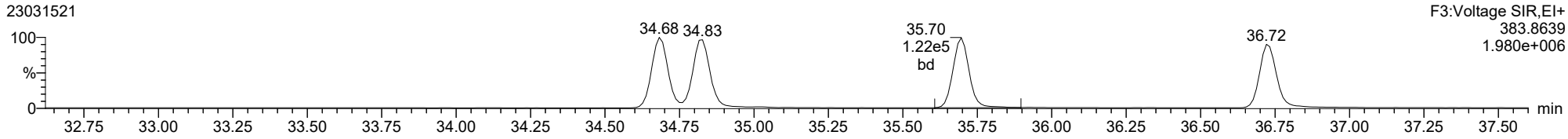

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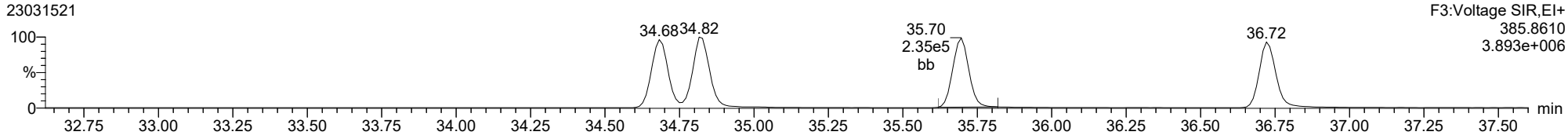

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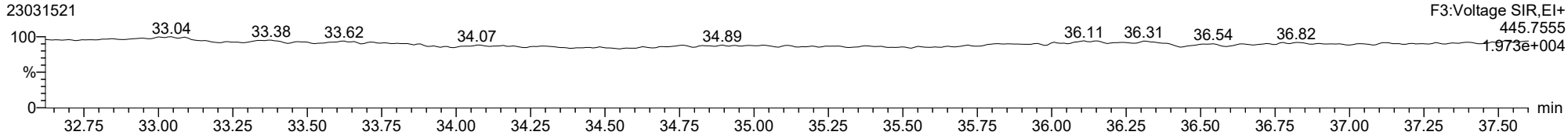

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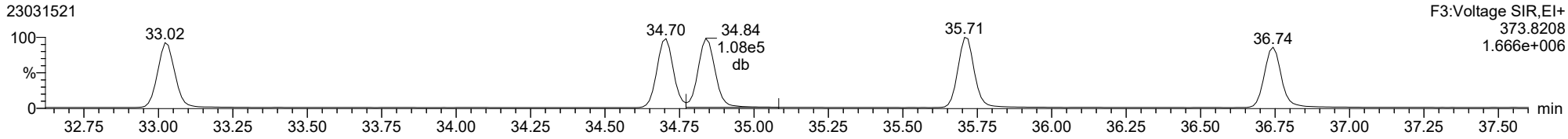

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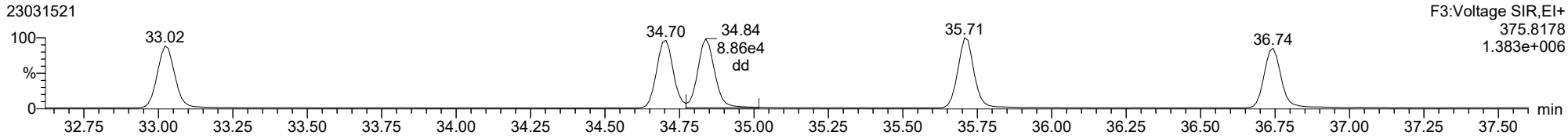

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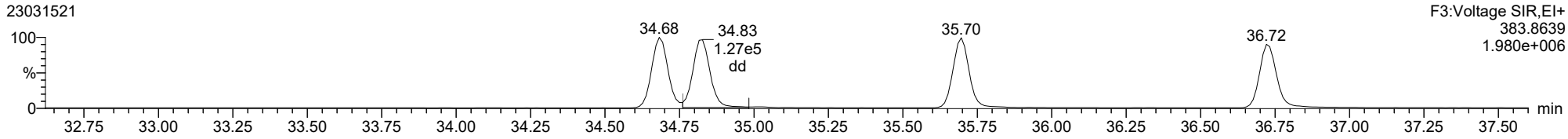

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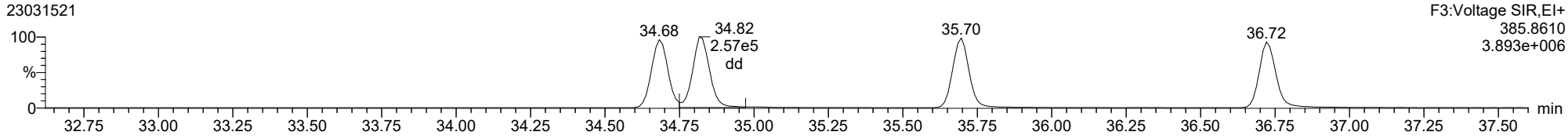
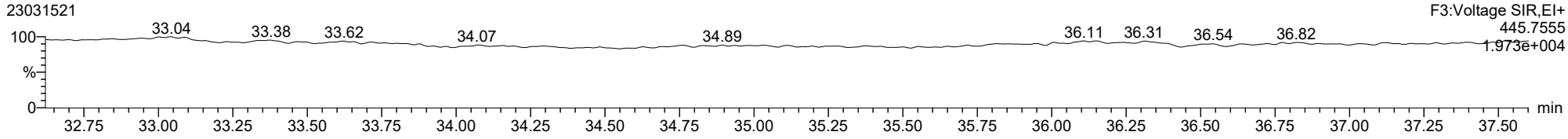


FUNCTION3 OCDPE



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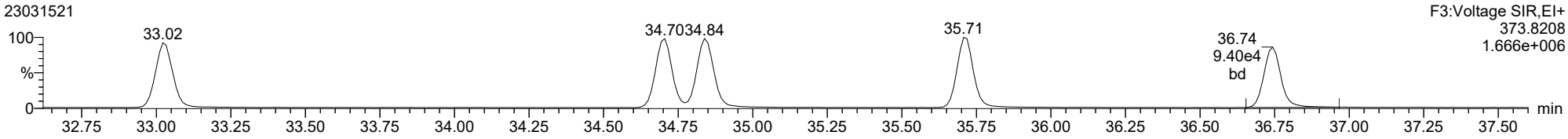

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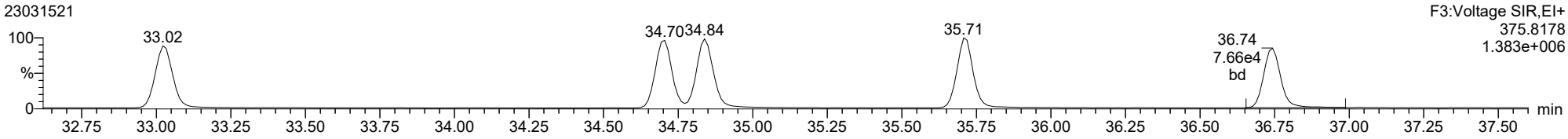

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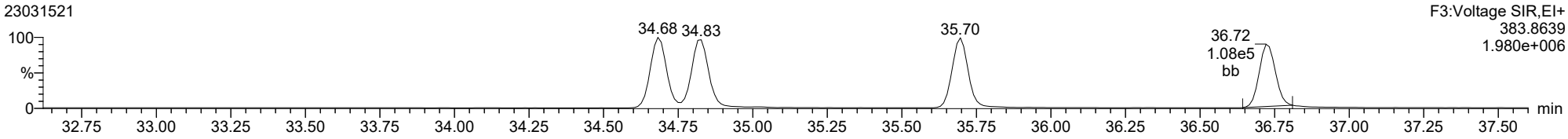

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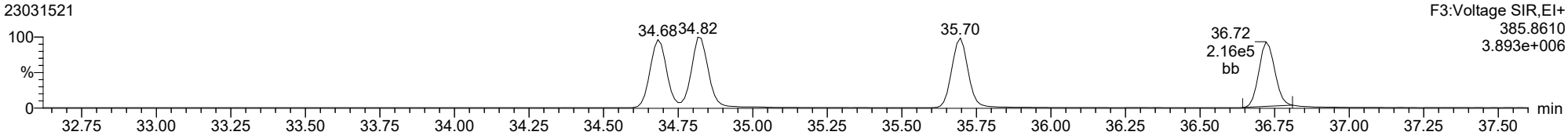

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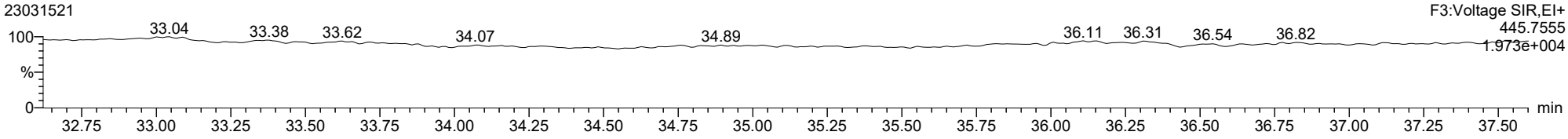

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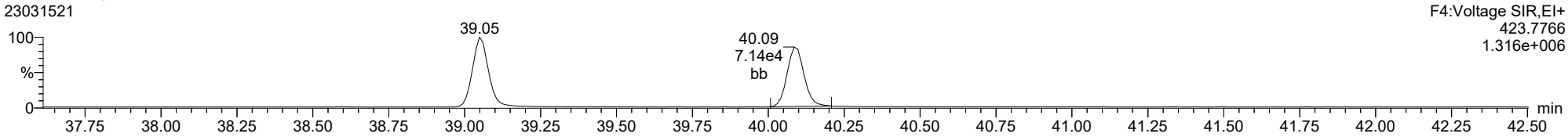

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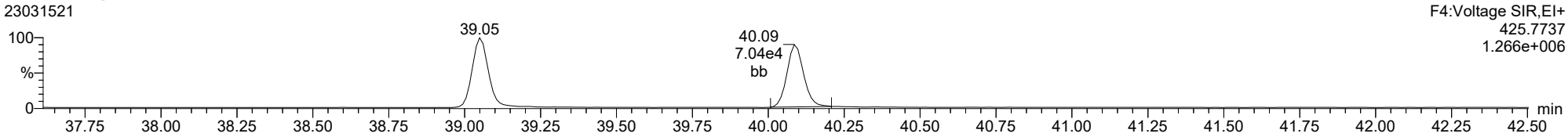

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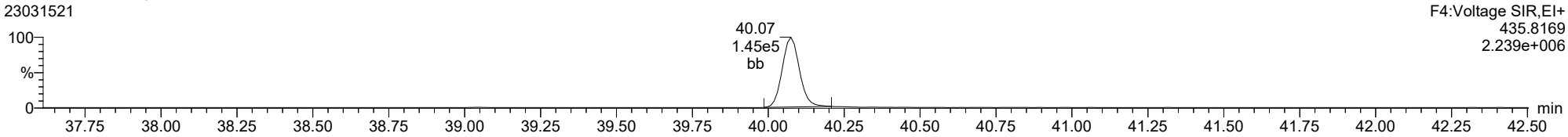

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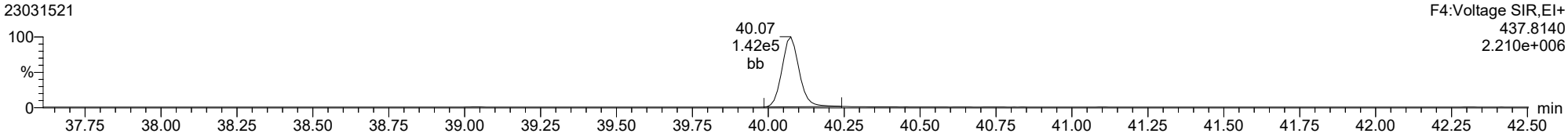

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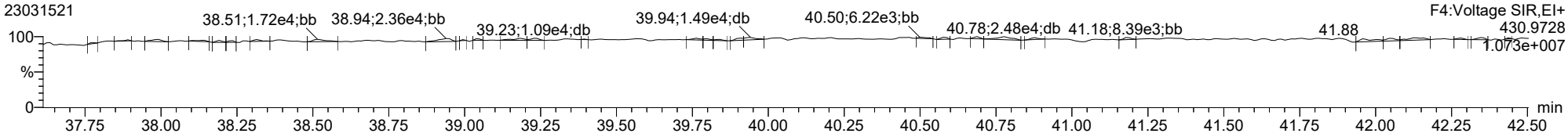

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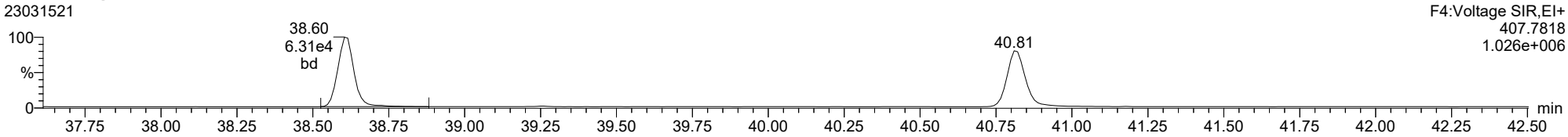

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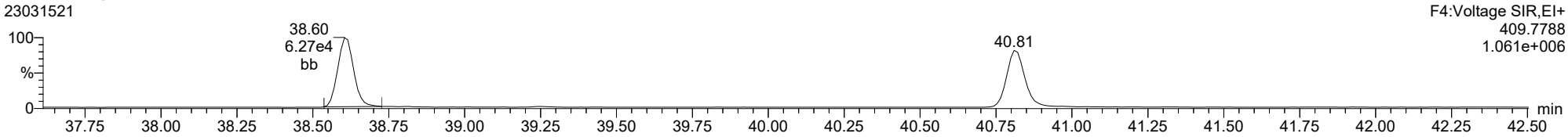

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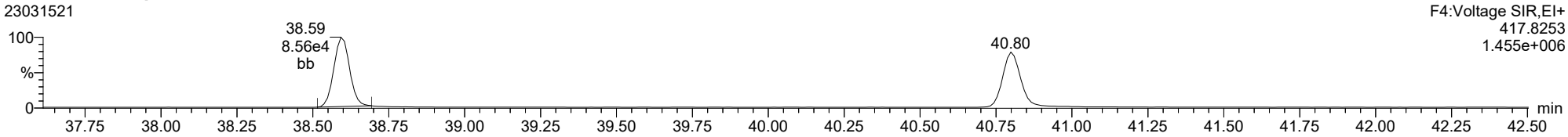

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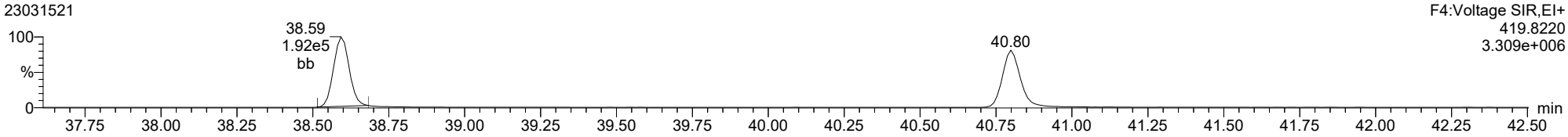

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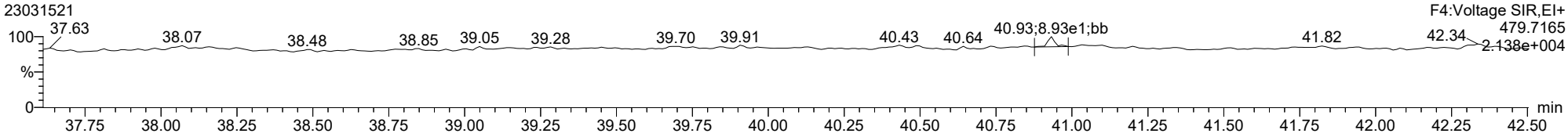

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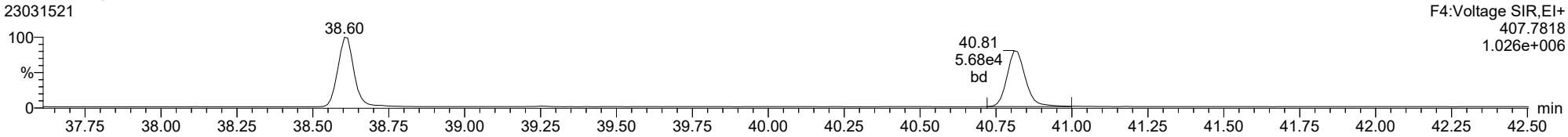

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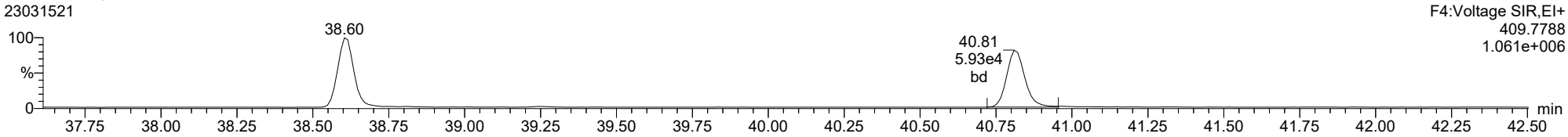

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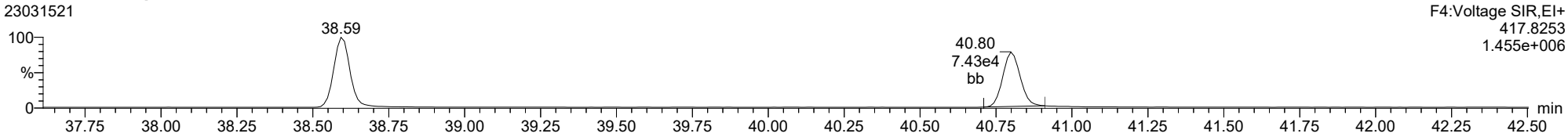

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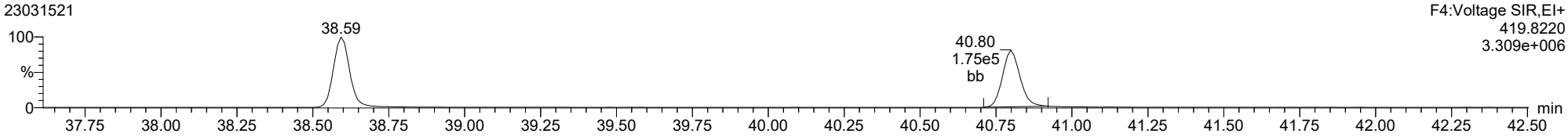

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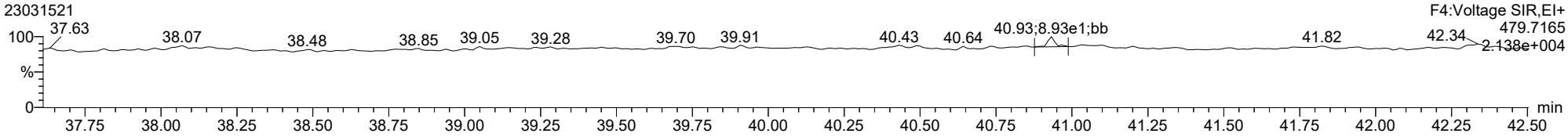

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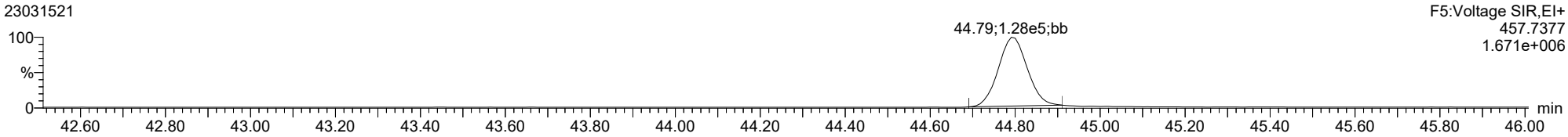

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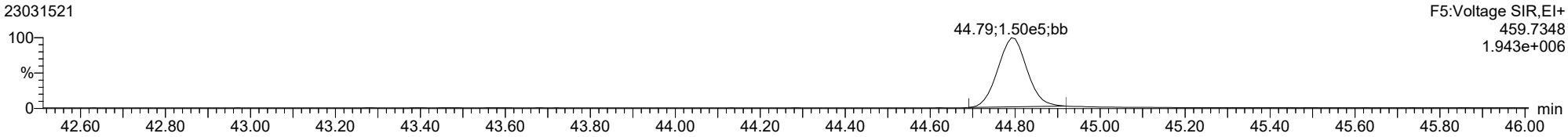
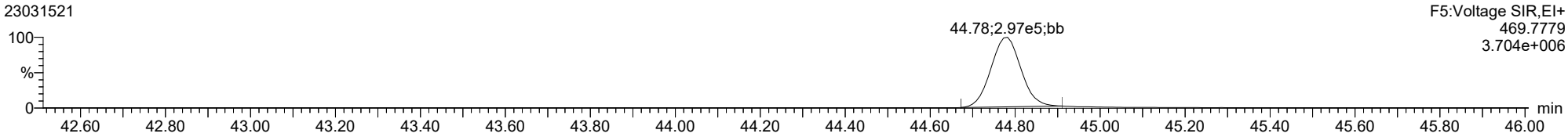


13C-OCDD



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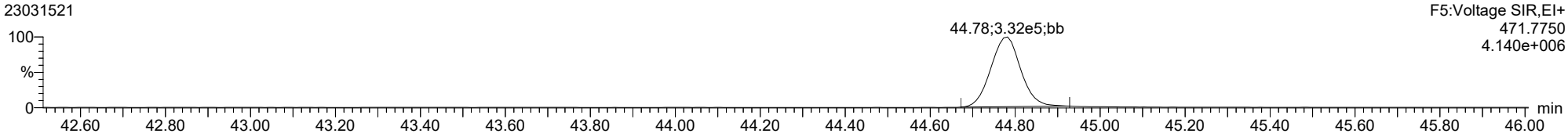
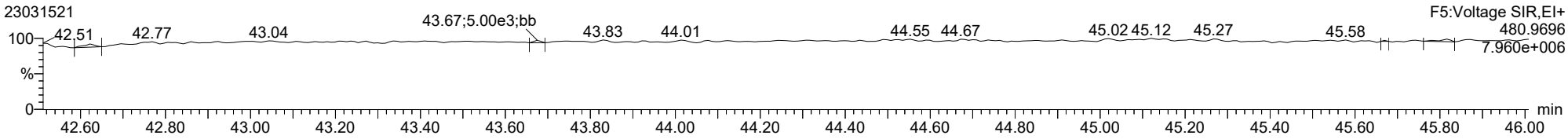


FUNCTION5 PFK



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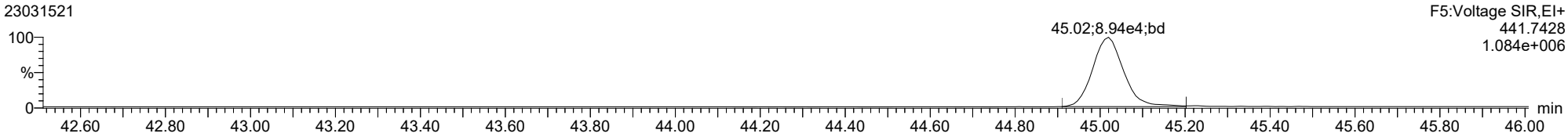
Printed: Thursday, March 16, 2023 10:02:15 Pacific Daylight Time

ID: CS3Z6, Name: 23031521, Date: 16-Mar-2023, Time: 02:54:10, Conditions: AUTOSPEC01, User: pk

OCDF



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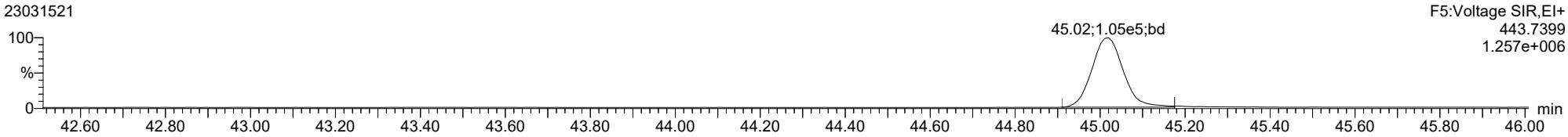

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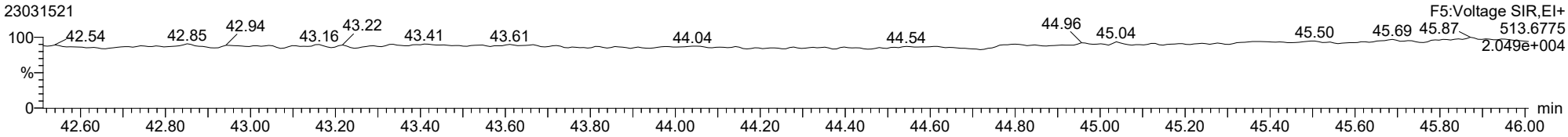

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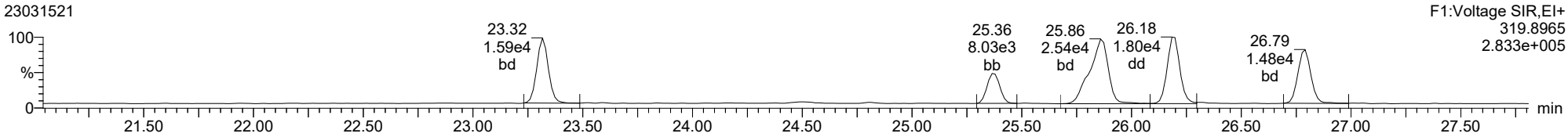
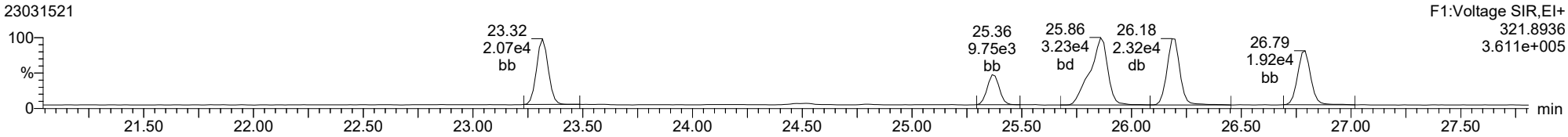


Total-tetradioxins



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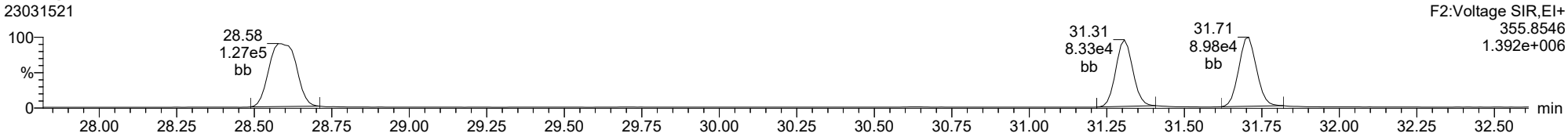
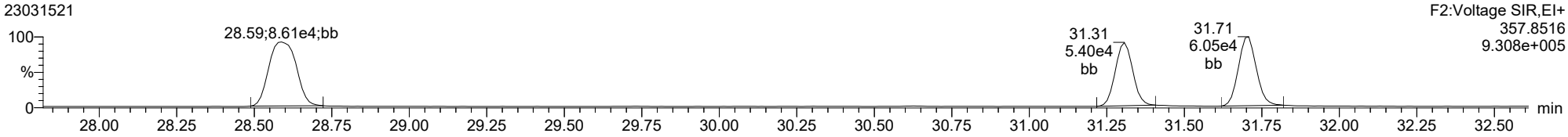


Total-pentadioxins



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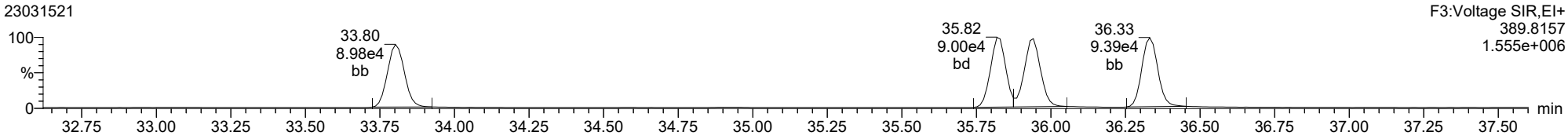
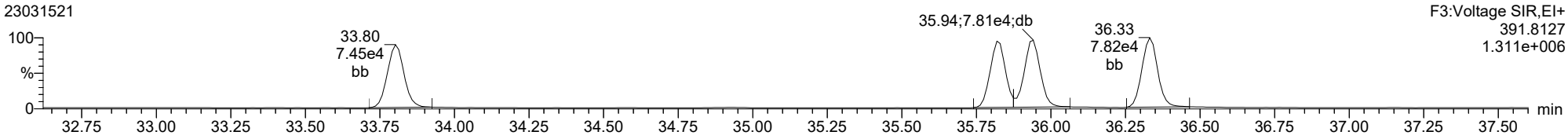
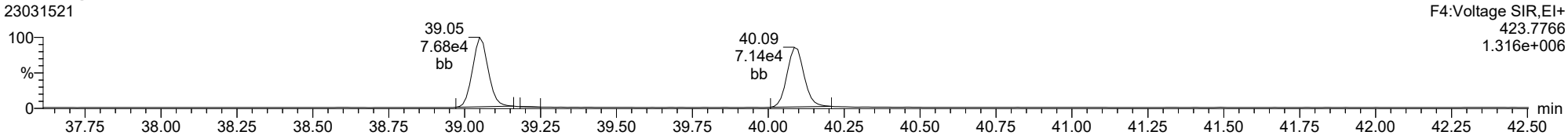


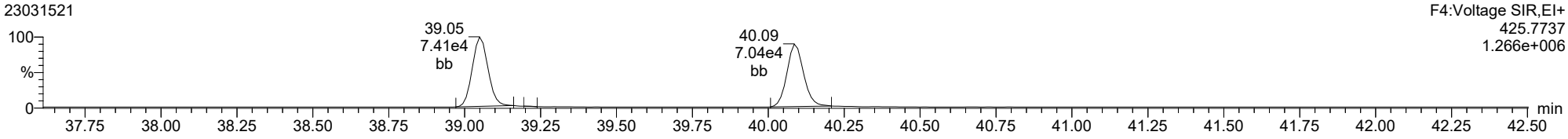
Total-hexadioxins



Total-heptadioxins

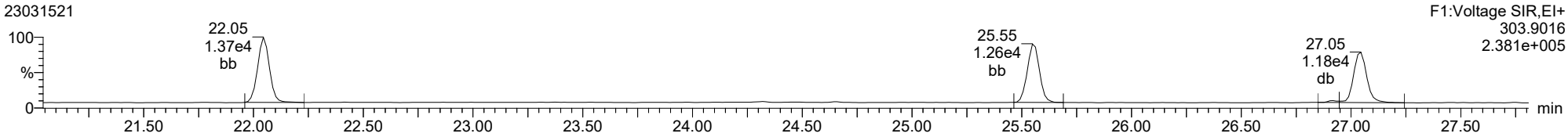


Total-heptadioxins



ID: CS3Z6, Name: 23031521, Date: 16-Mar-2023, Time: 02:54:10, Conditions: AUTOSPEC01, User: pk

Total-tetrafurans



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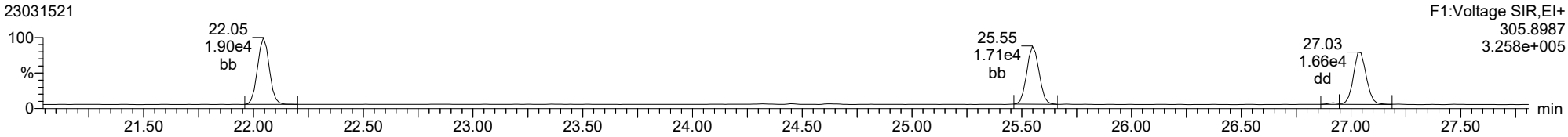

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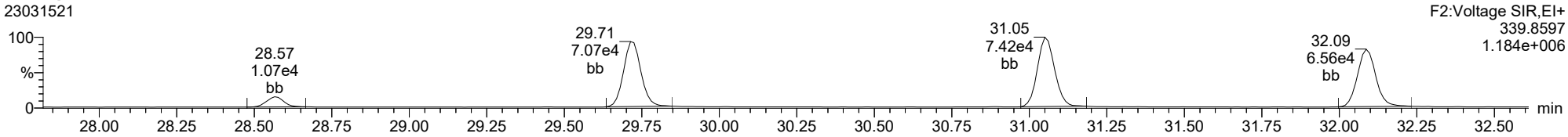
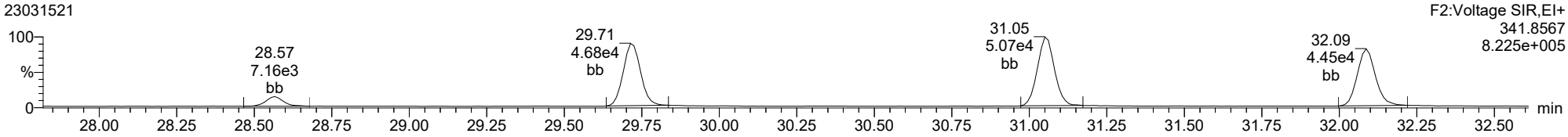


Total-pentafurans



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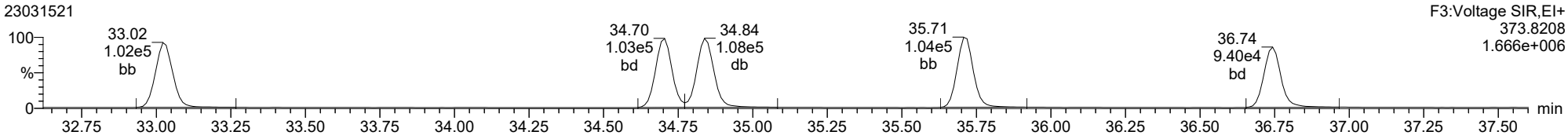
Total-hexafurans



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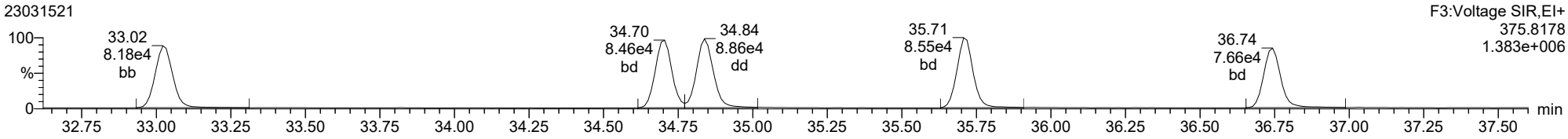

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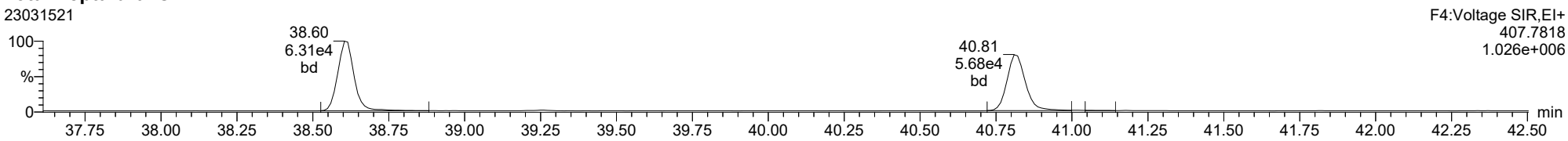

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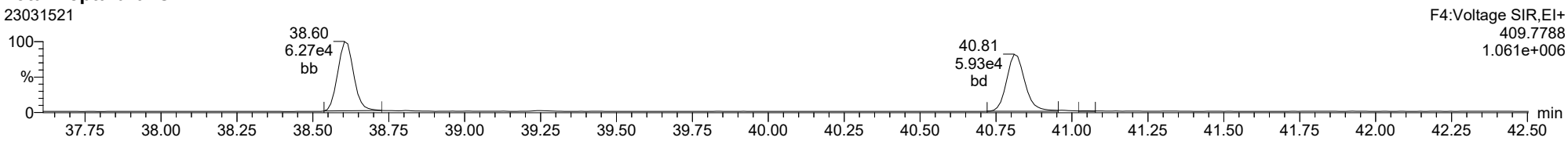

Printed: Thursday, March 16, 2023 03:47:00 Pacific Daylight Time

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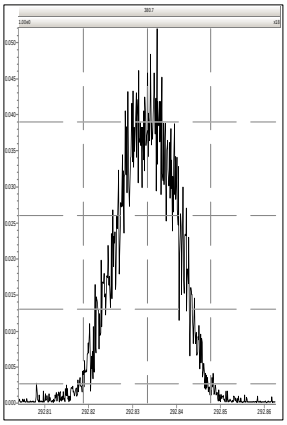
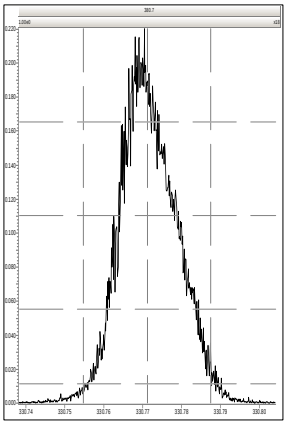


M 330.9792 R 10000



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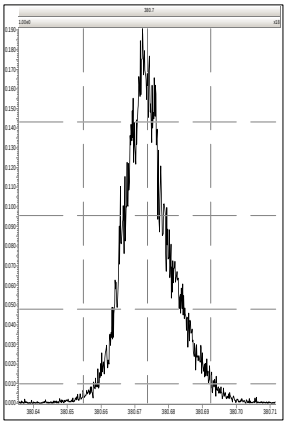

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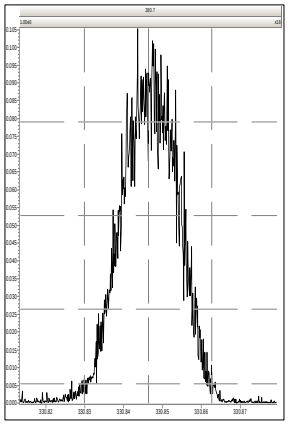

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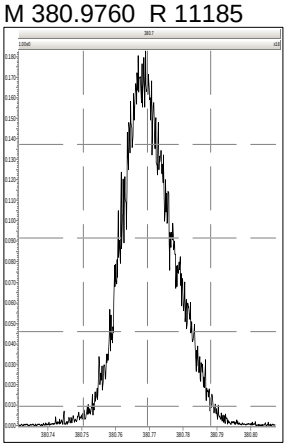

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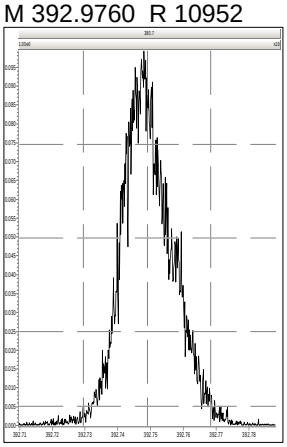

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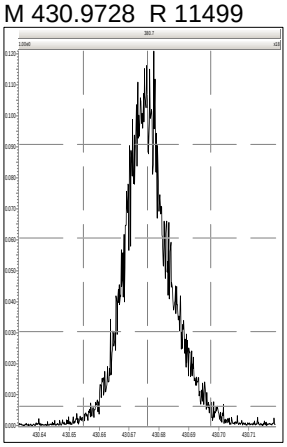

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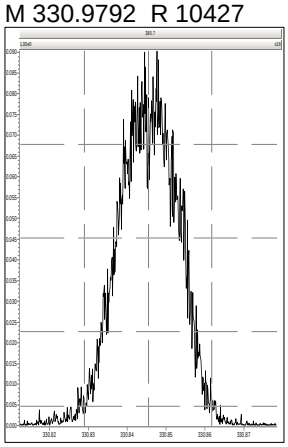
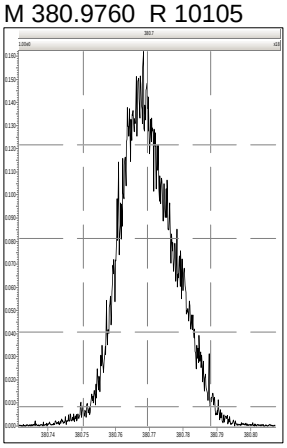


M 380.9760 R 10105



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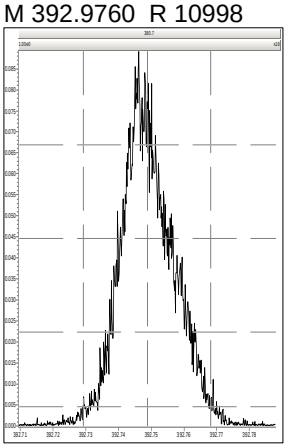

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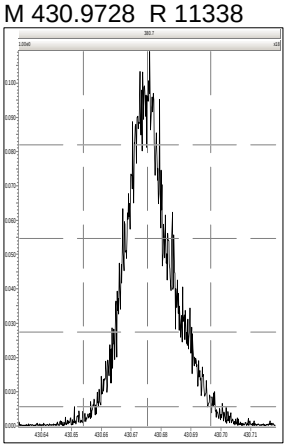

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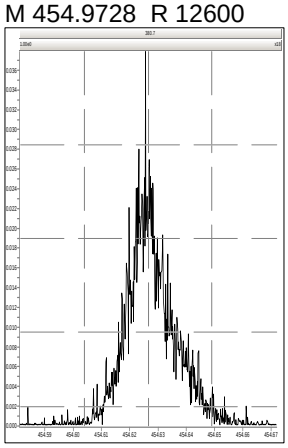

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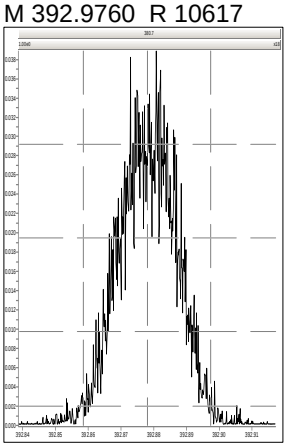

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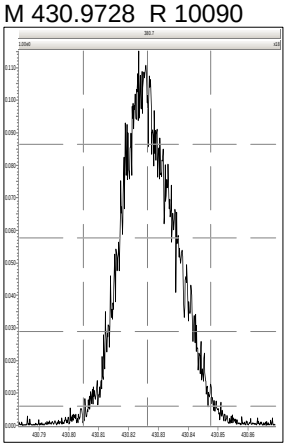

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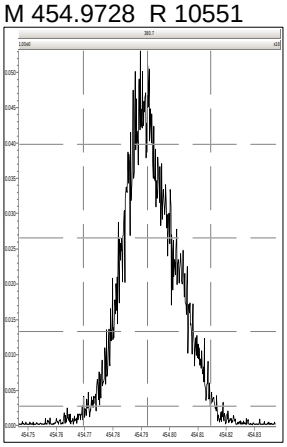

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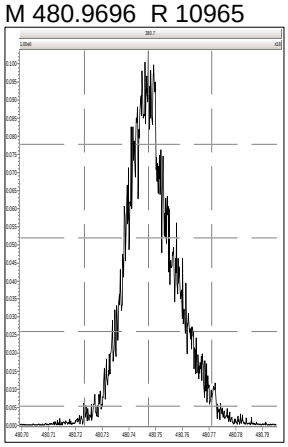

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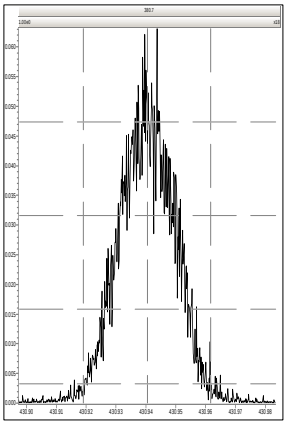

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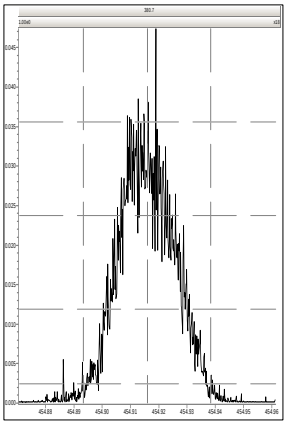

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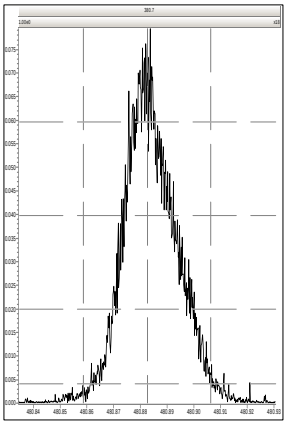

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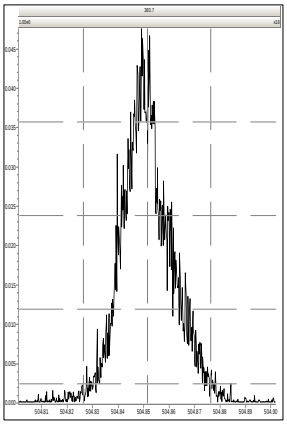
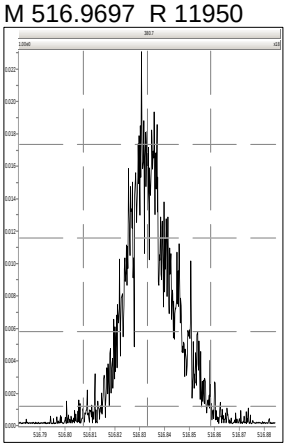
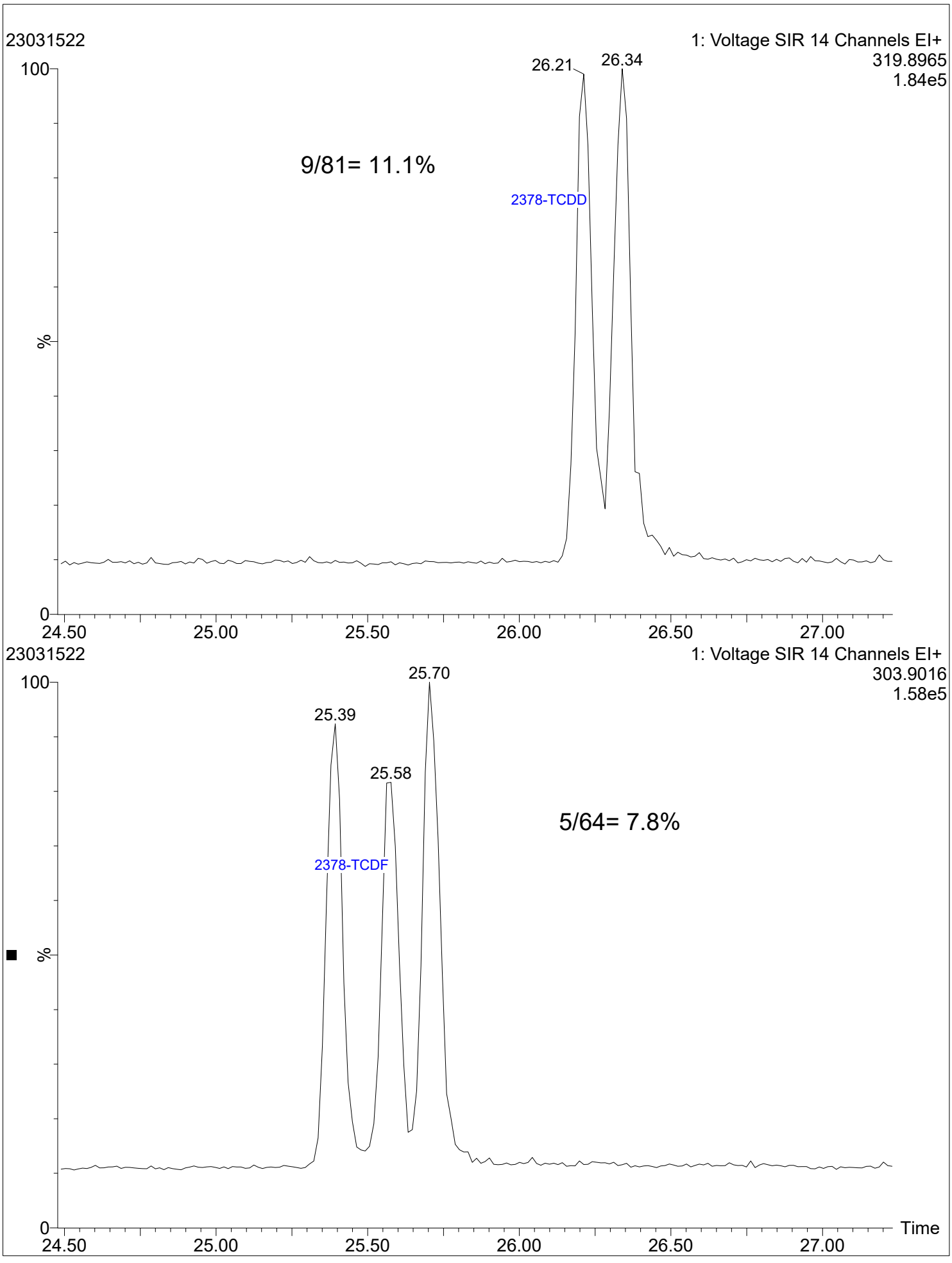


M 516.9697 R 11950

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1.84e5
26.21
26.34
9/81= 11.1%
2378-TCDD
100
%
0
24.50
25.00
25.50
26.00
26.50
27.00
23031522
1: Voltage SIR 14 Channels EI+
303.9016
1.58e5
25.70
25.39
25.58
5/64= 7.8%
2378-TCDF
100
%
0
Time
24.50
25.00
25.50
26.00
26.50
27.00

Analytical Resources, LLC
Analytical Chemists and Consultants

CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC SDG: 23A0420

Instrument .ID: AUTOSPEC01 Lab File ID: 23030303

Date Analyzed: 03/03/23 Time Analyzed: 10:39

Lab Sample ID: SLC0045-RES1 Sequence: SLC0045

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 8.8

3467-TCDF/2378-TCDF: 8.2

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0045-ICV1	CS3W1	23030302	03/03/2023	09:51
SLC0045-RES1	ISCW1	23030303	03/03/2023	10:39
SLC0045-CAL1	CSLCW	23030304	03/03/2023	11:28
SLC0045-CAL2	CS1CW	23030305	03/03/2023	12:23
SLC0045-CAL3	CS2CW	23030306	03/03/2023	13:16
SLC0045-CAL4	CS3CW	23030307	03/03/2023	14:06
SLC0045-CAL5	CS4CW	23030308	03/03/2023	14:59
SLC0045-CAL6	CS5CW	23030309	03/03/2023	15:47
SLC0045-SCV1	ICVCW	23030310	03/03/2023	16:36
SLC0045-CCV1	CS3V4	23030311	03/03/2023	17:25
SLC0045-RES2	ISCV4	23030312	03/03/2023	18:18

Analytical Resources, LLC
Analytical Chemists and Consultants

CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC
SDG: 23A0420
Instrument .ID: AUTOSPEC01
Lab File ID: 23030312
Date Analyzed: 03/03/23
Time Analyzed: 18:18
Lab Sample ID: SLC0045-RES2
Sequence: SLC0045

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 12.9

3467-TCDF/2378-TCDF: 11.7

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0045-ICV1	CS3W1	23030302	03/03/2023	09:51
SLC0045-RES1	ISCW1	23030303	03/03/2023	10:39
SLC0045-CAL1	CSLCW	23030304	03/03/2023	11:28
SLC0045-CAL2	CS1CW	23030305	03/03/2023	12:23
SLC0045-CAL3	CS2CW	23030306	03/03/2023	13:16
SLC0045-CAL4	CS3CW	23030307	03/03/2023	14:06
SLC0045-CAL5	CS4CW	23030308	03/03/2023	14:59
SLC0045-CAL6	CS5CW	23030309	03/03/2023	15:47
SLC0045-SCV1	ICVCW	23030310	03/03/2023	16:36
SLC0045-CCV1	CS3V4	23030311	03/03/2023	17:25
SLC0045-RES2	ISCV4	23030312	03/03/2023	18:18

Analytical Resources, LLC
Analytical Chemists and Consultants

CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC
SDG: 23A0420
Instrument .ID: AUTOSPEC01
Lab File ID: 23031303
Date Analyzed: 03/13/23
Time Analyzed: 11:27
Lab Sample ID: SLC0171-RES1
Sequence: SLC0171

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 17.2

3467-TCDF/2378-TCDF: 15.6

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0171-ICV1	CS3Z1	23031302	03/13/2023	10:33
SLC0171-RES1	ISCZ1	23031303	03/13/2023	11:27
BLB0228-BLK1	Blank	23031304	03/13/2023	12:41
BLB0228-BS1	LCS	23031305	03/13/2023	13:29
BLB0228-SRM1	Reference	23031306	03/13/2023	14:30
SLC0171-CCV1	CS3Z2	23031315	03/13/2023	21:53
SLC0171-RES2	ISCZ2	23031316	03/13/2023	22:46
23A0420-01	LDW23-SC1045	23031321	03/14/2023	02:54
23A0420-04	LDW23-IT1051	23031322	03/14/2023	03:43
SLC0171-CCV2	CS3Z3	23031323	03/14/2023	04:32
SLC0171-RES3	ISCZ3	23031324	03/14/2023	05:25

Analytical Resources, LLC
Analytical Chemists and Consultants

CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC
SDG: 23A0420
Instrument .ID: AUTOSPEC01
Lab File ID: 23031316
Date Analyzed: 03/13/23
Time Analyzed: 22:46
Lab Sample ID: SLC0171-RES2
Sequence: SLC0171

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 14.5

3467-TCDF/2378-TCDF: 9

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0171-ICV1	CS3Z1	23031302	03/13/2023	10:33
SLC0171-RES1	ISCZ1	23031303	03/13/2023	11:27
BLB0228-BLK1	Blank	23031304	03/13/2023	12:41
BLB0228-BS1	LCS	23031305	03/13/2023	13:29
BLB0228-SRM1	Reference	23031306	03/13/2023	14:30
SLC0171-CCV1	CS3Z2	23031315	03/13/2023	21:53
SLC0171-RES2	ISCZ2	23031316	03/13/2023	22:46
23A0420-01	LDW23-SC1045	23031321	03/14/2023	02:54
23A0420-04	LDW23-IT1051	23031322	03/14/2023	03:43
SLC0171-CCV2	CS3Z3	23031323	03/14/2023	04:32
SLC0171-RES3	ISCZ3	23031324	03/14/2023	05:25

Analytical Resources, LLC
Analytical Chemists and Consultants

CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC
SDG: 23A0420
Instrument .ID: AUTOSPEC01
Lab File ID: 23031324
Date Analyzed: 03/14/23
Time Analyzed: 05:25
Lab Sample ID: SLC0171-RES3
Sequence: SLC0171

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 14.5

3467-TCDF/2378-TCDF: 9.8

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0171-ICV1	CS3Z1	23031302	03/13/2023	10:33
SLC0171-RES1	ISCZ1	23031303	03/13/2023	11:27
BLB0228-BLK1	Blank	23031304	03/13/2023	12:41
BLB0228-BS1	LCS	23031305	03/13/2023	13:29
BLB0228-SRM1	Reference	23031306	03/13/2023	14:30
SLC0171-CCV1	CS3Z2	23031315	03/13/2023	21:53
SLC0171-RES2	ISCZ2	23031316	03/13/2023	22:46
23A0420-01	LDW23-SC1045	23031321	03/14/2023	02:54
23A0420-04	LDW23-IT1051	23031322	03/14/2023	03:43
SLC0171-CCV2	CS3Z3	23031323	03/14/2023	04:32
SLC0171-RES3	ISCZ3	23031324	03/14/2023	05:25

Analytical Resources, LLC
Analytical Chemists and Consultants

CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC SDG: 23A0420

Instrument .ID: AUTOSPEC01 Lab File ID: 23031503

Date Analyzed: 03/15/23 Time Analyzed: 11:54

Lab Sample ID: SLC0176-RES1 Sequence: SLC0176

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 9.7

3467-TCDF/2378-TCDF: 8

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0176-ICV1	CS3Z4	23031502	03/15/2023	11:02
SLC0176-RES1	ISCZ4	23031503	03/15/2023	11:54
23A0420-08	LDW23-SC1004	23031504	03/15/2023	12:48
SLC0176-CCV1	CS3Z5	23031510	03/15/2023	17:48
SLC0176-RES2	ISCZ5	23031511	03/15/2023	18:41
SLC0176-CCV2	CS3Z6	23031521	03/16/2023	02:54
SLC0176-RES3	ISCZ6	23031522	03/16/2023	03:47

Analytical Resources, LLC
Analytical Chemists and Consultants

CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC
SDG: 23A0420
Instrument .ID: AUTOSPEC01
Lab File ID: 23031511
Date Analyzed: 03/15/23
Time Analyzed: 18:41
Lab Sample ID: SLC0176-RES2
Sequence: SLC0176

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 11.1

3467-TCDF/2378-TCDF: 8.7

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0176-ICV1	CS3Z4	23031502	03/15/2023	11:02
SLC0176-RES1	ISCZ4	23031503	03/15/2023	11:54
23A0420-08	LDW23-SC1004	23031504	03/15/2023	12:48
SLC0176-CCV1	CS3Z5	23031510	03/15/2023	17:48
SLC0176-RES2	ISCZ5	23031511	03/15/2023	18:41
SLC0176-CCV2	CS3Z6	23031521	03/16/2023	02:54
SLC0176-RES3	ISCZ6	23031522	03/16/2023	03:47

Analytical Resources, LLC
Analytical Chemists and Consultants

CDD/CDF CHROMATOGRAPHIC RESOLUTION SUMMARY

EPA 1613B

Lab Name: Analytical Resources, LLC
SDG: 23A0420
Instrument .ID: AUTOSPEC01
Lab File ID: 23031522
Date Analyzed: 03/16/23
Time Analyzed: 03:47
Lab Sample ID: SLC0176-RES3
Sequence: SLC0176

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 11.1

3467-TCDF/2378-TCDF: 7.8

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0176-ICV1	CS3Z4	23031502	03/15/2023	11:02
SLC0176-RES1	ISCZ4	23031503	03/15/2023	11:54
23A0420-08	LDW23-SC1004	23031504	03/15/2023	12:48
SLC0176-CCV1	CS3Z5	23031510	03/15/2023	17:48
SLC0176-RES2	ISCZ5	23031511	03/15/2023	18:41
SLC0176-CCV2	CS3Z6	23031521	03/16/2023	02:54
SLC0176-RES3	ISCZ6	23031522	03/16/2023	03:47

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0045	Instrument:	AUTOSPEC01
		Calibration:	GC00015

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CS3W1	SLC0045-ICV1	23030302	NA	03/03/23 09:51
ISCW1	SLC0045-RES1	23030303	NA	03/03/23 10:39
CSLCW	SLC0045-CAL1	23030304	NA	03/03/23 11:28
CS1CW	SLC0045-CAL2	23030305	NA	03/03/23 12:23
CS2CW	SLC0045-CAL3	23030306	NA	03/03/23 13:16
CS3CW	SLC0045-CAL4	23030307	NA	03/03/23 14:06
CS4CW	SLC0045-CAL5	23030308	NA	03/03/23 14:59
CS5CW	SLC0045-CAL6	23030309	NA	03/03/23 15:47
ICVCW	SLC0045-SCV1	23030310	NA	03/03/23 16:36
CS3V4	SLC0045-CCV1	23030311	NA	03/03/23 17:25
ISCV4	SLC0045-RES2	23030312	NA	03/03/23 18:18

ANALYSIS SEQUENCE

SLC0045

Instrument: AUTOSPEC01 HRGCMS Column ID: K2310
Calibration ID: GC00015 Tune File: FEB0923_1-5
EM Voltage: 350 Resolution check times : 9:51, 18:18

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0045-ICV1	CS3W1	QC		1	K009821		03/03/2023 09:51	23030302	PK	
SLC0045-RES1	ISCW1	QC		2	L002084		03/03/2023 10:39	23030303	PK	
SLC0045-CAL1	CSLCW	QC		3	I005460		03/03/2023 11:28	23030304	PK	
SLC0045-CAL2	CS1CW	QC		4	I005456		03/03/2023 12:23	23030305	PK	
SLC0045-CAL3	CS2CW	QC		5	I005457		03/03/2023 13:16	23030306	PK	
SLC0045-CAL4	CS3CW	QC		6	K009821		03/03/2023 14:06	23030307	PK	
SLC0045-CAL5	CS4CW	QC		7	I005458		03/03/2023 14:59	23030308	PK	
SLC0045-CAL6	CS5CW	QC		8	I005459		03/03/2023 15:47	23030309	PK	
SLC0045-SCV1	ICVCW	QC		9	H008219		03/03/2023 16:36	23030310	PK	
SLC0045-CCV1	CS3V4	QC		10	K009821		03/03/2023 17:25	23030311	PK	
SLC0045-RES2	ISCV4	QC		11	L002084		03/03/2023 18:18	23030312	PK	

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 10:58:44 Pacific Standard Time

3/6/23 PK

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Calibrate		
Process Quantify		
Dataset Created		
Peak deleted	Sample:23030304, Compound:TD, RT:26.410	1
Peak deleted	Sample:23030304, Compound:OD, RT:44.990	1
Peak deleted	Sample:23030304, Compound:TF, RT:25.774	1
Pre modification peak	Sample:23030305, Compound:TF, RT:25.774	2
Peak modified	Sample:23030305, Compound:TF, RT:25.774	2
Pre modification peak	Sample:23030304, Compound:HPD, RT:40.261	1
Peak modified	Sample:23030304, Compound:HPD, RT:40.261	1
Peak deleted	Sample:23030308, Compound:PF, RT:32.328	5
Peak deleted	Sample:23030309, Compound:PF, RT:32.307	6
Peak deleted	Sample:23030309, Compound:HF, RT:33.220	6
Peak deleted	Sample:23030309, Compound:TD, RT:27.017	6
Peak deleted	Sample:23030309, Compound:PD, RT:31.995	6
Peak deleted	Sample:23030309, Compound:PD, RT:31.917	6
Peak deleted	Sample:23030308, Compound:HD, RT:34.000	5
Peak deleted	Sample:23030308, Compound:HPD, RT:39.225	5
Peak deleted	Sample:23030309, Compound:HPD, RT:39.214	6
Pre modification peak	Sample:23030305, Compound:OF, RT:45.237	2
Peak modified	Sample:23030305, Compound:OF, RT:45.237	2
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230303ICIH.qld'	

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0171	Instrument:	AUTOSPEC01
		Calibration:	GC00015

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CS3Z1	SLC0171-ICV1	23031302	NA	03/13/23 10:33
ISCZ1	SLC0171-RES1	23031303	NA	03/13/23 11:27
Blank	BLB0228-BLK1	23031304	Solid	03/13/23 12:41
LCS	BLB0228-BS1	23031305	Solid	03/13/23 13:29
Reference	BLB0228-SRM1	23031306	Solid	03/13/23 14:30
CS3Z2	SLC0171-CCV1	23031315	NA	03/13/23 21:53
ISCZ2	SLC0171-RES2	23031316	NA	03/13/23 22:46
LDW23-SC1045	23A0420-01	23031321	Solid	03/14/23 02:54
LDW23-IT1051	23A0420-04	23031322	Solid	03/14/23 03:43
CS3Z3	SLC0171-CCV2	23031323	NA	03/14/23 04:32
ISCZ3	SLC0171-RES3	23031324	NA	03/14/23 05:25

ANALYSIS SEQUENCE

SLC0171

Instrument: AUTOSPEC01 HRGCMS Column ID: K2310
Calibration ID: GC00015 Tune File: FEB0923_1-5
EM Voltage: 345 Resolution check times : 10:22, 22:46, 05:25

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0171-ICV1	CS3Z1	QC		1	K009821		03/13/2023 10:33	23031302	PK	
SLC0171-RES1	ISCZ1	QC		2	L002084		03/13/2023 11:27	23031303	PK	
BLB0228-BLK1	Blank	QC		3		K011414	03/13/2023 12:41	23031304	PK	
BLB0228-BS1	LCS	QC		4		K011414	03/13/2023 13:29	23031305	PK	
BLB0228-SRM1	Reference	QC		5		K011414	03/13/2023 14:30	23031306	PK	
BLB0228-DUP1	Duplicate	QC		6		K011414	03/13/2023 15:22	23031307	PK	
23A0417-01	LDW23-SS1127	1613B Dioxin	C 01	7		K011414	03/13/2023 16:10	23031308	PK	
23A0417-03	LDW23-SS1095	1613B Dioxin	C 01	8		K011414	03/13/2023 16:59	23031309	PK	
23A0417-05	LDW23-SS1089	1613B Dioxin	C 01	9		K011414	03/13/2023 17:48	23031310	PK	
23A0418-01	LDW23-IT1136	1613B Dioxin	C 01	10		K011414	03/13/2023 18:37	23031311	PK	
23A0418-02	LDW23-IT1142	1613B Dioxin	C 01	11		K011414	03/13/2023 19:26	23031312	PK	
23A0418-10	LDW23-IT1135	1613B Dioxin	C 01	12		K011414	03/13/2023 20:15	23031313	PK	
23A0419-02	LDW23-SS1045	1613B Dioxin	C 01	13		K011414	03/13/2023 21:04	23031314	PK	
SLC0171-CCV1	CS3Z2	QC		14	K009821		03/13/2023 21:53	23031315	PK	
SLC0171-RES2	ISCZ2	QC		15	L002084		03/13/2023 22:46	23031316	PK	
23A0419-04	LDW23-SS1135	1613B Dioxin	C 01	16		K011414	03/13/2023 23:38	23031317	PK	
23A0419-05	LDW23-SS1136	1613B Dioxin	C 01	17		K011414	03/14/2023 00:27	23031318	PK	
23A0419-08	LDW23-SS1142	1613B Dioxin	C 01	18		K011414	03/14/2023 01:16	23031319	PK	
23A0419-09	LDW23-SS1202	1613B Dioxin	C 01	19		K011414	03/14/2023 02:05	23031320	PK	
23A0420-01	LDW23-SC1045	1613B Dioxin	C 01	20		K011414	03/14/2023 02:54	23031321	PK	
23A0420-04	LDW23-IT1051	1613B Dioxin	C 01	21		K011414	03/14/2023 03:43	23031322	PK	
SLC0171-CCV2	CS3Z3	QC		22	K009821		03/14/2023 04:32	23031323	PK	

ANALYSIS SEQUENCE

SLC0171

Instrument: AUTOSPEC01 HRGCMS Column ID: K2310
Calibration ID: GC00015 Tune File: FEB0923_1-5
EM Voltage: 345 Resolution check times : 10:22, 22:46, 05:25

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0171-RES3	ISCZ3	QC		23	K003933		03/14/2023 05:25	23031324	PK	

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 09:56:22 Pacific Daylight Time 3/14/23 pk

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Quantify		
Dataset Created		
Peak deleted	Sample:23031316, Compound:13C-123789-HxCDD, RT:36.354	15
Peak deleted	Sample:23031324, Compound:13C-123789-HxCDD, RT:36.343	23
Peak deleted	Sample:23031303, Compound:13C-1234-TCDD, RT:25.421	2
Peak deleted	Sample:23031304, Compound:TD, RT:26.254	3
Pre modification peak	Sample:23031304, Compound:OD, RT:44.828	3
Peak modified	Sample:23031304, Compound:OD, RT:44.828	3
Pre modification peak	Sample:23031306, Compound:PF, RT:29.780	5
Peak modified	Sample:23031306, Compound:PF, RT:29.780	5
Pre modification peak	Sample:23031306, Compound:PF, RT:31.117	5
Peak modified	Sample:23031306, Compound:PF, RT:31.117	5
Pre modification peak	Sample:23031308, Compound:HF, RT:35.741	7
Peak modified	Sample:23031308, Compound:HF, RT:35.741	7
Pre modification peak	Sample:23031309, Compound:PF, RT:29.769	8
Peak modified	Sample:23031309, Compound:PF, RT:29.769	8
Pre modification peak	Sample:23031310, Compound:HF, RT:35.708	9
Peak modified	Sample:23031310, Compound:HF, RT:35.708	9
Peak deleted	Sample:23031313, Compound:PF, RT:29.725	12
Peak deleted	Sample:23031313, Compound:TD, RT:26.226	12
Pre modification peak	Sample:23031313, Compound:HD, RT:35.841	12
Peak modified	Sample:23031313, Compound:HD, RT:35.841	12
Pre modification peak	Sample:23031317, Compound:HF, RT:35.685	16
Peak modified	Sample:23031317, Compound:HF, RT:35.685	16
Pre modification peak	Sample:23031321, Compound:HF, RT:35.696	20
Peak modified	Sample:23031321, Compound:HF, RT:35.696	20
Pre modification peak	Sample:23031322, Compound:HF, RT:35.763	21
Peak modified	Sample:23031322, Compound:HF, RT:35.763	21
Pre modification peak	Sample:23031322, Compound:HF, RT:36.743	21
Peak modified	Sample:23031322, Compound:HF, RT:36.743	21
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230313D1.qld'	
Peak deleted	Sample:23031305, Compound:PF, RT:32.109	4
Peak deleted	Sample:23031305, Compound:HF, RT:36.175	4
Peak deleted	Sample:23031306, Compound:TD, RT:26.368	5
Peak deleted	Sample:23031306, Compound:HPD, RT:40.632	5
Peak deleted	Sample:23031307, Compound:PD, RT:30.694	6
Peak deleted	Sample:23031307, Compound:HD, RT:36.811	6
Peak deleted	Sample:23031308, Compound:TF, RT:24.108	7
Peak deleted	Sample:23031308, Compound:HF, RT:35.195	7
Peak deleted	Sample:23031308, Compound:HF, RT:36.198	7
Peak added	Sample:23031308, Compound:PD, RT:28.666	7
Peak added	Sample:23031308, Compound:PD, RT:28.677	7
Peak deleted	Sample:23031308, Compound:HD, RT:36.799	7
Peak deleted	Sample:23031308, Compound:HPD, RT:40.621	7
Peak deleted	Sample:23031309, Compound:HPD, RT:40.632	8
Peak deleted	Sample:23031310, Compound:PP, RT:27.385	9
Peak deleted	Sample:23031310, Compound:PP, RT:26.919	9
Peak deleted	Sample:23031310, Compound:HPD, RT:40.643	9
Peak deleted	Sample:23031311, Compound:TF, RT:24.616	10
Peak deleted	Sample:23031312, Compound:TF, RT:27.497	11
Peak deleted	Sample:23031312, Compound:PP, RT:26.890	11
Pre modification peak	Sample:23031312, Compound:PD, RT:28.599	11
Peak modified	Sample:23031312, Compound:PD, RT:28.599	11

Dataset: T:\Autospec\Processed Data Batch\230313D1.qld
Last Altered: Tuesday, March 14, 2023 09:54:11 Pacific Daylight Time
Printed: Tuesday, March 14, 2023 09:56:22 Pacific Daylight Time

Event	Details	Sample ID
Pre modification peak	Sample:23031312, Compound:PD, RT:28.621	11
Peak modified	Sample:23031312, Compound:PD, RT:28.621	11
Peak deleted	Sample:23031312, Compound:HD, RT:36.787	11
Peak deleted	Sample:23031312, Compound:HPD, RT:40.620	11
Peak deleted	Sample:23031313, Compound:TD, RT:25.534	12
Pre modification peak	Sample:23031314, Compound:PF, RT:28.733	13
Peak modified	Sample:23031314, Compound:PF, RT:28.733	13
Pre modification peak	Sample:23031314, Compound:PF, RT:28.722	13
Peak modified	Sample:23031314, Compound:PF, RT:28.722	13
Peak deleted	Sample:23031314, Compound:PF, RT:30.048	13
Pre modification peak	Sample:23031314, Compound:PF, RT:29.390	13
Peak modified	Sample:23031314, Compound:PF, RT:29.390	13
Pre modification peak	Sample:23031314, Compound:PF, RT:29.402	13
Peak modified	Sample:23031314, Compound:PF, RT:29.402	13
Peak deleted	Sample:23031314, Compound:HD, RT:36.799	13
Peak deleted	Sample:23031317, Compound:TD, RT:25.181	16
Peak deleted	Sample:23031318, Compound:HF, RT:32.911	17
Peak deleted	Sample:23031318, Compound:HD, RT:36.777	17
Peak deleted	Sample:23031319, Compound:HPF, RT:40.576	18
Peak deleted	Sample:23031319, Compound:HPF, RT:38.783	18
Peak deleted	Sample:23031319, Compound:HD, RT:36.777	18
Pre modification peak	Sample:23031321, Compound:PD, RT:30.070	20
Peak modified	Sample:23031321, Compound:PD, RT:30.070	20
Peak deleted	Sample:23031322, Compound:PF, RT:29.179	21
Pre modification peak	Sample:23031322, Compound:PF, RT:28.699	21
Peak modified	Sample:23031322, Compound:PF, RT:28.699	21
Peak deleted	Sample:23031322, Compound:PF, RT:28.388	21
Pre modification peak	Sample:23031322, Compound:PF, RT:28.699	21
Peak modified	Sample:23031322, Compound:PF, RT:28.699	21
Peak deleted	Sample:23031322, Compound:HPD, RT:40.632	21
Peak added	Sample:23031323, Compound:PD, RT:28.600	22
Peak added	Sample:23031323, Compound:PD, RT:28.600	22
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230313D1.qld'	

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0176	Instrument:	AUTOSPEC01
		Calibration:	GC00015

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CS3Z4	SLC0176-ICV1	23031502	NA	03/15/23 11:02
ISCZ4	SLC0176-RES1	23031503	NA	03/15/23 11:54
LDW23-SC1004	23A0420-08	23031504	Solid	03/15/23 12:48
CS3Z5	SLC0176-CCV1	23031510	NA	03/15/23 17:48
ISCZ5	SLC0176-RES2	23031511	NA	03/15/23 18:41
CS3Z6	SLC0176-CCV2	23031521	NA	03/16/23 02:54
ISCZ6	SLC0176-RES3	23031522	NA	03/16/23 03:47

ANALYSIS SEQUENCE

SLC0176

Instrument: AUTOSPEC01 HRGCMS Column ID: K2310
Calibration ID: GC00015 Tune File: FEB0923_1-5
EM Voltage: 345 Resolution check times : 11:02, 18:41, 03:47

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0176-ICV1	CS3Z4	QC		1	K009821		03/15/2023 11:02	23031502	PK	
SLC0176-RES1	ISCZ4	QC		2	L002084		03/15/2023 11:54	23031503	PK	
23A0420-08	LDW23-SC1004	1613B Dioxin	C 01	3		K011414	03/15/2023 12:48	23031504	PK	
23A0455-03	LDW23-SS1031	1613B Dioxin	B 01	4		K011414	03/15/2023 13:37	23031505	PK	
23A0455-08	LDW23-SS1023	1613B Dioxin	B 01	5		K011414	03/15/2023 14:33	23031506	PK	
23A0455-15	LDW23-SS1051	1613B Dioxin	B 01	6		K011414	03/15/2023 15:21	23031507	PK	
23A0455-16	LDW23-SS1052	1613B Dioxin	B 01	7		K011414	03/15/2023 16:10	23031508	PK	
23A0295-04	LDW23-SC1023B	1613B Dioxin	A 04	8		K011414	03/15/2023 16:59	23031509	PK	
SLC0176-CCV1	CS3Z5	QC		9	K009821		03/15/2023 17:48	23031510	PK	
SLC0176-RES2	ISCZ5	QC		10	L002084		03/15/2023 18:41	23031511	PK	
BLC0136-BLK1	Blank	QC		11		K011414	03/15/2023 19:33	23031512	PK	
BLC0136-BS1	LCS	QC		12		K011414	03/15/2023 20:22	23031513	PK	
BLC0136-SRM1	Reference	QC		13		K011414	03/15/2023 22:00	23031515	PK	
BLC0136-DUP1	Duplicate	QC		14		K011414	03/15/2023 21:11	23031514	PK	
23A0158-06	LDW23-SS1222	1613B Dioxin	C 02	15		K011414	03/15/2023 22:49	23031516	PK	
23A0158-07	LDW23-SS1215	1613B Dioxin	C 02	16		K011414	03/15/2023 23:38	23031517	PK	
23A0158-09	LDW23-SS1077	1613B Dioxin	C 02	17		K011414	03/16/2023 00:27	23031518	PK	
23A0158-10	LDW23-SS1070	1613B Dioxin	C 02	18		K011414	03/16/2023 01:16	23031519	PK	
23A0158-11	LDW23-SS1065	1613B Dioxin	C 02	19		K011414	03/16/2023 02:05	23031520	PK	
SLC0176-CCV2	CS3Z6	QC		20	K009821		03/16/2023 02:54	23031521	PK	
SLC0176-RES3	ISCZ6	QC		21	K003933		03/16/2023 03:47	23031522	PK	
23A0158-12	LDW23-SS1064	1613B Dioxin	C 02	22		K011414				

ANALYSIS SEQUENCE

SLC0176

Instrument: AUTOSPEC01 HRGCMS Column ID: K2310
Calibration ID: GC00015 Tune File: FEB0923_1-5
EM Voltage: 345 Resolution check times : 11:02, 18:41, 03:47

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
23A0158-13	LDW23-SS1060	1613B Dioxin	C 02	23		K011414				
23A0158-14	LDW23-SS1059	1613B Dioxin	C 02	24		K011414				
23A0158-15	LDW23-SS1053	1613B Dioxin	C 02	25		K011414				
23A0171-02	LDW23-SS1257	1613B Dioxin	A 05	26		K011414				
23A0171-04	LDW23-SS1245	1613B Dioxin	A 05	27		K011414				
23A0206-13	LDW23-SS1066	1613B Dioxin	C 02	28		K011414				
SLC0176-CCV3	CS3Z7	QC		29	K009821					
SLC0176-RES4	ISCZ7	QC		30	K003933					

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:13:35 Pacific Daylight Time 3/16/23 pk

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Quantify		
Dataset Created		
Peak deleted	Sample:23031503, Compound:13C-1234-TCDD, RT:25.351	2
Peak deleted	Sample:23031503, Compound:13C-123789-HxCDD, RT:36.309	2
Peak deleted	Sample:23031511, Compound:13C-123789-HxCDD, RT:36.343	10
Peak deleted	Sample:23031511, Compound:13C-1234-TCDD, RT:25.379	10
Peak deleted	Sample:23031522, Compound:13C-123789-HxCDD, RT:36.331	21
Pre modification peak	Sample:23031504, Compound:PF, RT:29.736	3
Peak modified	Sample:23031504, Compound:PF, RT:29.736	3
Pre modification peak	Sample:23031505, Compound:PF, RT:29.735	4
Peak modified	Sample:23031505, Compound:PF, RT:29.735	4
Pre modification peak	Sample:23031505, Compound:PF, RT:31.072	4
Peak modified	Sample:23031505, Compound:PF, RT:31.072	4
Pre modification peak	Sample:23031505, Compound:PF, RT:31.072	4
Peak modified	Sample:23031505, Compound:PF, RT:31.072	4
Pre modification peak	Sample:23031505, Compound:HF, RT:35.740	4
Peak modified	Sample:23031505, Compound:HF, RT:35.740	4
Pre modification peak	Sample:23031505, Compound:HF, RT:35.707	4
Peak modified	Sample:23031505, Compound:HF, RT:35.707	4
Peak added	Sample:23031505, Compound:HF, RT:35.740	4
Peak added	Sample:23031505, Compound:HF, RT:35.718	4
Peak deleted	Sample:23031506, Compound:PF, RT:29.747	5
Pre modification peak	Sample:23031506, Compound:HF, RT:35.741	5
Peak modified	Sample:23031506, Compound:HF, RT:35.741	5
Pre modification peak	Sample:23031506, Compound:HF, RT:35.719	5
Peak modified	Sample:23031506, Compound:HF, RT:35.719	5
Peak deleted	Sample:23031506, Compound:TD, RT:26.212	5
Pre modification peak	Sample:23031507, Compound:HF, RT:35.786	6
Peak modified	Sample:23031507, Compound:HF, RT:35.786	6
Pre modification peak	Sample:23031507, Compound:HPF, RT:40.899	6
Peak modified	Sample:23031507, Compound:HPF, RT:40.899	6
Peak deleted	Sample:23031508, Compound:TD, RT:26.212	7
Pre modification peak	Sample:23031509, Compound:PF, RT:29.747	8
Peak modified	Sample:23031509, Compound:PF, RT:29.747	8
Peak deleted	Sample:23031512, Compound:PD, RT:31.296	11
Pre modification peak	Sample:23031517, Compound:PF, RT:31.062	16
Peak modified	Sample:23031517, Compound:PF, RT:31.062	16
Pre modification peak	Sample:23031517, Compound:HF, RT:35.708	16
Peak modified	Sample:23031517, Compound:HF, RT:35.708	16
Peak deleted	Sample:23031517, Compound:HPF, RT:40.833	16
Pre modification peak	Sample:23031517, Compound:PD, RT:31.318	16
Peak modified	Sample:23031517, Compound:PD, RT:31.318	16
Pre modification peak	Sample:23031517, Compound:PD, RT:31.318	16
Peak modified	Sample:23031517, Compound:PD, RT:31.318	16
Pre modification peak	Sample:23031518, Compound:HF, RT:36.722	17
Peak modified	Sample:23031518, Compound:HF, RT:36.722	17
Pre modification peak	Sample:23031518, Compound:HF, RT:36.710	17
Peak modified	Sample:23031518, Compound:HF, RT:36.710	17
Pre modification peak	Sample:23031519, Compound:TD, RT:26.198	18
Peak modified	Sample:23031519, Compound:TD, RT:26.198	18
Pre modification peak	Sample:23031519, Compound:PD, RT:31.307	18
Peak modified	Sample:23031519, Compound:PD, RT:31.307	18
Pre modification peak	Sample:23031520, Compound:HF, RT:35.711	19

Dataset: T:\Autospec\Processed Data Batch\230315D1.qld
Last Altered: Thursday, March 16, 2023 09:12:10 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:13:35 Pacific Daylight Time

Event	Details	Sample ID
Peak modified	Sample:23031520, Compound:HF, RT:35.741	19
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230315D1.qld'	
Peak deleted	Sample:23031504, Compound:TF, RT:27.356	3
Pre modification peak	Sample:23031505, Compound:PF, RT:28.677	4
Peak modified	Sample:23031505, Compound:PF, RT:28.677	4
Pre modification peak	Sample:23031505, Compound:PF, RT:28.666	4
Peak modified	Sample:23031505, Compound:PF, RT:28.666	4
Pre modification peak	Sample:23031505, Compound:PF, RT:28.666	4
Peak modified	Sample:23031505, Compound:PF, RT:28.666	4
Peak added	Sample:23031505, Compound:HF, RT:35.685	4
Peak added	Sample:23031505, Compound:HF, RT:35.685	4
Peak deleted	Sample:23031506, Compound:TD, RT:25.407	5
Peak deleted	Sample:23031506, Compound:PD, RT:30.649	5
Peak deleted	Sample:23031507, Compound:TF, RT:27.187	6
Peak deleted	Sample:23031507, Compound:PF, RT:29.479	6
Peak deleted	Sample:23031507, Compound:PF, RT:28.310	6
Pre modification peak	Sample:23031507, Compound:PD, RT:28.655	6
Peak modified	Sample:23031507, Compound:PD, RT:28.655	6
Pre modification peak	Sample:23031507, Compound:PD, RT:28.644	6
Peak modified	Sample:23031507, Compound:PD, RT:28.644	6
Peak deleted	Sample:23031507, Compound:HD, RT:36.788	6
Peak added	Sample:23031508, Compound:HF, RT:35.696	7
Peak added	Sample:23031508, Compound:HF, RT:35.696	7
Peak deleted	Sample:23031508, Compound:TD, RT:25.379	7
Peak deleted	Sample:23031508, Compound:HD, RT:36.766	7
Peak deleted	Sample:23031516, Compound:TF, RT:24.051	15
Peak deleted	Sample:23031516, Compound:TD, RT:26.791	15
Peak added	Sample:23031516, Compound:TD, RT:23.330	15
Peak added	Sample:23031516, Compound:TD, RT:23.330	15
Peak deleted	Sample:23031517, Compound:TF, RT:25.336	16
Peak deleted	Sample:23031518, Compound:TF, RT:22.073	17
Peak deleted	Sample:23031518, Compound:TD, RT:26.791	17
Peak deleted	Sample:23031518, Compound:TD, RT:25.817	17
Peak deleted	Sample:23031518, Compound:TD, RT:25.379	17
Peak deleted	Sample:23031518, Compound:HD, RT:36.755	17
Peak added	Sample:23031519, Compound:PF, RT:28.655	18
Peak added	Sample:23031519, Compound:PF, RT:28.666	18
Peak deleted	Sample:23031519, Compound:PF, RT:28.956	18
Pre modification peak	Sample:23031520, Compound:PF, RT:28.655	19
Peak modified	Sample:23031520, Compound:PF, RT:28.655	19
Peak deleted	Sample:23031520, Compound:PF, RT:28.265	19
Pre modification peak	Sample:23031520, Compound:PF, RT:28.677	19
Peak modified	Sample:23031520, Compound:PF, RT:28.677	19
Peak added	Sample:23031520, Compound:HF, RT:35.685	19
Peak added	Sample:23031520, Compound:HF, RT:35.674	19
Peak deleted	Sample:23031520, Compound:TD, RT:23.811	19
Peak deleted	Sample:23031520, Compound:PD, RT:30.638	19
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230315D1.qld'	

Dataset: T:\Autospec\Processed Data Batch\230315SRM.qld
Last Altered: Thursday, March 16, 2023 09:35:30 Pacific Daylight Time
Printed: Thursday, March 16, 2023 09:36:30 Pacific Daylight Time 3/16/23 pk

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Quantify		
Dataset Created		
Peak deleted	Sample:23031514, Compound:TF, RT:24.065	1
Peak added	Sample:23031514, Compound:PF, RT:28.655	1
Peak added	Sample:23031514, Compound:PF, RT:28.655	1
Peak added	Sample:23031514, Compound:TD, RT:23.345	1
Peak added	Sample:23031514, Compound:TD, RT:23.345	1
Peak deleted	Sample:23031515, Compound:TF, RT:25.251	2
Peak deleted	Sample:23031515, Compound:TF, RT:24.870	2
Peak deleted	Sample:23031515, Compound:PD, RT:31.696	2
Peak deleted	Sample:23031515, Compound:HD, RT:36.754	2
Peak deleted	Sample:23031515, Compound:HPD, RT:39.205	2
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230315SRM.qld'	

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0045	Instrument:	AUTOSPEC01
Sample ID:	SLC0045-ICV1	Calibration:	GC00015
File ID:	23030302	Analyzed:	03/03/23 09:51

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	94.0	71 - 129	25.7745	25.76487	0.0096	N/A	
13C12-2,3,7,8-TCDD	100.00	102	82 - 118	26.4242	26.40287	0.0213	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	92.2	76 - 124	29.9337	29.92235	0.0114	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	87.6	77 - 123	31.2707	31.2611	0.0096	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	84.3	62 - 138	31.5268	31.5192	0.0076	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	84.0	76 - 124	34.8915	34.88393	0.0076	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	74.6	70 - 130	35.0363	35.02318	0.0131	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	88.7	73 - 127	35.8942	35.88653	0.0077	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	99.9	74 - 126	36.9303	36.91718	0.0131	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	93.5	85 - 115	36.0167	36.00728	0.0094	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	86.9	85 - 115	36.1393	36.12053	0.0188	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	95.3	78 - 122	38.7685	38.7593	0.0092	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	98.7	77 - 123	41.008	40.99867	0.0093	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	105	72 - 128	40.2615	40.25773	0.0038	N/A	
13C12-OCDD	200.00	107	48 - 152	44.9993	44.98705	0.0122	N/A	
37Cl4-2,3,7,8-TCDD	10.000	90.5	0 - 200	26.4383	26.42402	0.0143	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0045	Instrument:	AUTOSPEC01
Sample ID:	SLC0045-SCV1	Calibration:	GC00015
File ID:	23030310	Analyzed:	03/03/23 16:36

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	96.9	0 - 200	25.7602	25.76487	-0.0047	N/A	
13C12-2,3,7,8-TCDD	100.00	96.6	0 - 200	26.3958	26.40287	-0.0071	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	73.2	0 - 200	29.9225	29.92235	0.0001	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	75.9	0 - 200	31.2593	31.2611	-0.0018	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	76.6	0 - 200	31.5155	31.5192	-0.0037	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	93.0	0 - 200	34.8802	34.88393	-0.0037	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	98.0	0 - 200	35.014	35.02318	-0.0092	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	93.4	0 - 200	35.8828	35.88653	-0.0037	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	97.9	0 - 200	36.9078	36.91718	-0.0094	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	95.9	0 - 200	36.0053	36.00728	-0.0020	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	97.7	0 - 200	36.1168	36.12053	-0.0037	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	102	0 - 200	38.7573	38.7593	-0.0020	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	104	0 - 200	40.9967	40.99867	-0.0020	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	102	0 - 200	40.2502	40.25773	-0.0075	N/A	
13C12-OCDD	200.00	80.8	0 - 200	44.9807	44.98705	-0.0064	N/A	
37Cl4-2,3,7,8-TCDD	10.000	87.1	0 - 200	26.4242	26.42402	0.0002	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0045	Instrument:	AUTOSPEC01
Sample ID:	SLC0045-CCV1	Calibration:	GC00015
File ID:	23030311	Analyzed:	03/03/23 17:25

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	89.4	71 - 129	25.7602	25.76487	-0.0047	N/A	
13C12-2,3,7,8-TCDD	100.00	86.0	82 - 118	26.3958	26.40287	-0.0071	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	92.6	76 - 124	29.9225	29.92235	0.0001	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	91.6	77 - 123	31.2593	31.2611	-0.0018	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	90.8	62 - 138	31.5157	31.5192	-0.0035	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	95.2	76 - 124	34.8805	34.88393	-0.0034	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	91.1	70 - 130	35.0253	35.02318	0.0021	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	96.9	73 - 127	35.883	35.88653	-0.0035	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	101	74 - 126	36.9193	36.91718	0.0021	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	97.6	85 - 115	36.0057	36.00728	-0.0016	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	98.4	85 - 115	36.117	36.12053	-0.0035	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	102	78 - 122	38.7577	38.7593	-0.0016	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	84.3	77 - 123	40.997	40.99867	-0.0017	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	92.0	72 - 128	40.2617	40.25773	0.0040	N/A	
13C12-OCDD	200.00	85.1	48 - 152	44.9903	44.98705	0.0032	N/A	
37Cl4-2,3,7,8-TCDD	10.000	75.4	0 - 200	26.424	26.42402	0.0000	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0171	Instrument:	AUTOSPEC01
Sample ID:	SLC0171-ICV1	Calibration:	GC00015
File ID:	23031302	Analyzed:	03/13/23 10:33

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	85.5	71 - 129	25.6048	25.76487	-0.1601	N/A	
13C12-2,3,7,8-TCDD	100.00	98.8	82 - 118	26.2405	26.40287	-0.1624	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	90.1	76 - 124	29.758	29.92235	-0.1644	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	96.7	77 - 123	31.095	31.2611	-0.1661	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	103	62 - 138	31.3512	31.5192	-0.1680	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	101	76 - 124	34.727	34.88393	-0.1569	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	100	70 - 130	34.8718	35.02318	-0.1514	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	88.6	73 - 127	35.741	35.88653	-0.1455	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	95.2	74 - 126	36.7658	36.91718	-0.1514	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	95.1	85 - 115	35.8523	36.00728	-0.1550	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	104	85 - 115	35.9638	36.12053	-0.1567	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	87.2	78 - 122	38.6265	38.7593	-0.1328	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	87.0	77 - 123	40.8437	40.99867	-0.1550	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	93.2	72 - 128	40.1085	40.25773	-0.1492	N/A	
13C12-OCDD	200.00	95.2	48 - 152	44.8102	44.98705	-0.1769	N/A	
37Cl4-2,3,7,8-TCDD	10.000	88.1	0 - 200	26.2545	26.42402	-0.1695	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0171	Instrument:	AUTOSPEC01
Sample ID:	BLB0228-BLK1	Calibration:	GC00015
File ID:	23031304	Analyzed:	03/13/23 12:41

Surrogate Compound	Spike Level ng/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	200.00	93.0	24 - 169	25.6048	25.76487	-0.1601	N/A	
13C12-2,3,7,8-TCDD	200.00	113	25 - 164	26.2405	26.40287	-0.1624	N/A	
13C12-1,2,3,7,8-PeCDF	200.00	97.1	24 - 185	29.7582	29.92235	-0.1642	N/A	
13C12-2,3,4,7,8-PeCDF	200.00	98.9	21 - 178	31.095	31.2611	-0.1661	N/A	
13C12-1,2,3,7,8-PeCDD	200.00	106	25 - 181	31.3512	31.5192	-0.1680	N/A	
13C12-1,2,3,4,7,8-HxCDF	200.00	109	26 - 152	34.7382	34.88393	-0.1457	N/A	
13C12-1,2,3,6,7,8-HxCDF	200.00	108	26 - 123	34.8718	35.02318	-0.1514	N/A	
13C12-2,3,4,6,7,8-HxCDF	200.00	106	28 - 136	35.741	35.88653	-0.1455	N/A	
13C12-1,2,3,7,8,9-HxCDF	200.00	104	29 - 147	36.7658	36.91718	-0.1514	N/A	
13C12-1,2,3,4,7,8-HxCDD	200.00	122	32 - 141	35.8635	36.00728	-0.1438	N/A	
13C12-1,2,3,6,7,8-HxCDD	200.00	120	28 - 130	35.975	36.12053	-0.1455	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	200.00	88.7	28 - 143	38.6265	38.7593	-0.1328	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	200.00	79.3	26 - 138	40.8437	40.99867	-0.1550	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	200.00	91.2	23 - 140	40.1083	40.25773	-0.1494	N/A	
13C12-OCDD	400.00	76.0	17 - 157	44.81	44.98705	-0.1771	N/A	
37Cl4-2,3,7,8-TCDD	80.000	93.2	35 - 197	26.2545	26.42402	-0.1695	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0171	Instrument:	AUTOSPEC01
Sample ID:	BLB0228-BS1	Calibration:	GC00015
File ID:	23031305	Analyzed:	03/13/23 13:29

Surrogate Compound	Spike Level ng/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	200.00	87.4	24 - 169	25.5623	25.76487	-0.2026	N/A	
13C12-2,3,7,8-TCDD	200.00	96.1	25 - 164	26.198	26.40287	-0.2049	N/A	
13C12-1,2,3,7,8-PeCDF	200.00	82.4	24 - 185	29.7247	29.92235	-0.1977	N/A	
13C12-2,3,4,7,8-PeCDF	200.00	81.1	21 - 178	31.0615	31.2611	-0.1996	N/A	
13C12-1,2,3,7,8-PeCDD	200.00	83.5	25 - 181	31.3177	31.5192	-0.2015	N/A	
13C12-1,2,3,4,7,8-HxCDF	200.00	97.3	26 - 152	34.7047	34.88393	-0.1792	N/A	
13C12-1,2,3,6,7,8-HxCDF	200.00	102	26 - 123	34.8383	35.02318	-0.1849	N/A	
13C12-2,3,4,6,7,8-HxCDF	200.00	96.3	28 - 136	35.7073	35.88653	-0.1792	N/A	
13C12-1,2,3,7,8,9-HxCDF	200.00	96.4	29 - 147	36.7435	36.91718	-0.1737	N/A	
13C12-1,2,3,4,7,8-HxCDD	200.00	107	32 - 141	35.83	36.00728	-0.1773	N/A	
13C12-1,2,3,6,7,8-HxCDD	200.00	108	28 - 130	35.9413	36.12053	-0.1792	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	200.00	83.1	28 - 143	38.604	38.7593	-0.1553	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	200.00	76.6	26 - 138	40.8098	40.99867	-0.1889	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	200.00	87.4	23 - 140	40.0858	40.25773	-0.1719	N/A	
13C12-OCDD	400.00	71.8	17 - 157	44.7822	44.98705	-0.2049	N/A	
37Cl4-2,3,7,8-TCDD	80.000	76.1	35 - 197	26.2262	26.42402	-0.1978	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0171	Instrument:	AUTOSPEC01
Sample ID:	BLB0228-SRM1	Calibration:	GC00015
File ID:	23031306	Analyzed:	03/13/23 14:30

Surrogate Compound	Spike Level ng/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	200.00	72.9	24 - 169	25.5907	25.76487	-0.1742	N/A	
13C12-2,3,7,8-TCDD	200.00	92.2	25 - 164	26.2263	26.40287	-0.1766	N/A	
13C12-1,2,3,7,8-PeCDF	200.00	87.6	24 - 185	29.758	29.92235	-0.1644	N/A	
13C12-2,3,4,7,8-PeCDF	200.00	98.4	21 - 178	31.0948	31.2611	-0.1663	N/A	
13C12-1,2,3,7,8-PeCDD	200.00	99.3	25 - 181	31.3512	31.5192	-0.1680	N/A	
13C12-1,2,3,4,7,8-HxCDF	200.00	91.5	26 - 152	34.738	34.88393	-0.1459	N/A	
13C12-1,2,3,6,7,8-HxCDF	200.00	86.6	26 - 123	34.8828	35.02318	-0.1404	N/A	
13C12-2,3,4,6,7,8-HxCDF	200.00	93.0	28 - 136	35.774	35.88653	-0.1125	N/A	
13C12-1,2,3,7,8,9-HxCDF	200.00	91.1	29 - 147	36.7657	36.91718	-0.1515	N/A	
13C12-1,2,3,4,7,8-HxCDD	200.00	98.3	32 - 141	35.8855	36.00728	-0.1218	N/A	
13C12-1,2,3,6,7,8-HxCDD	200.00	96.8	28 - 130	36.008	36.12053	-0.1125	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	200.00	58.6	28 - 143	38.6485	38.7593	-0.1108	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	200.00	83.7	26 - 138	40.8433	40.99867	-0.1554	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	200.00	94.8	23 - 140	40.108	40.25773	-0.1497	N/A	
13C12-OCDD	400.00	90.0	17 - 157	44.828	44.98705	-0.1591	N/A	
37Cl4-2,3,7,8-TCDD	80.000	76.3	35 - 197	26.2545	26.42402	-0.1695	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0171	Instrument:	AUTOSPEC01
Sample ID:	SLC0171-CCV1	Calibration:	GC00015
File ID:	23031315	Analyzed:	03/13/23 21:53

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	71.1	71 - 129	25.5623	25.76487	-0.2026	N/A	
13C12-2,3,7,8-TCDD	100.00	101	82 - 118	26.198	26.40287	-0.2049	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	93.7	76 - 124	29.7247	29.92235	-0.1977	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	99.9	77 - 123	31.0617	31.2611	-0.1994	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	82.1	62 - 138	31.3178	31.5192	-0.2014	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	96.9	76 - 124	34.7047	34.88393	-0.1792	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	90.3	70 - 130	34.8385	35.02318	-0.1847	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	95.6	73 - 127	35.7187	35.88653	-0.1678	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	94.2	74 - 126	36.7435	36.91718	-0.1737	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	97.5	85 - 115	35.83	36.00728	-0.1773	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	87.7	85 - 115	35.9415	36.12053	-0.1790	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	79.9	78 - 122	38.604	38.7593	-0.1553	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	80.8	77 - 123	40.8212	40.99867	-0.1775	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	82.4	72 - 128	40.086	40.25773	-0.1717	N/A	
13C12-OCDD	200.00	89.7	48 - 152	44.7822	44.98705	-0.2049	N/A	
37Cl4-2,3,7,8-TCDD	10.000	82.2	0 - 200	26.2262	26.42402	-0.1978	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0171	Instrument:	AUTOSPEC01
Sample ID:	23A0420-01	Calibration:	GC00015
File ID:	23031321	Analyzed:	03/14/23 02:54

Surrogate Compound	Spike Level ng/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	199.35	63.3	24 - 169	25.5482	25.76487	-0.2167	N/A	
13C12-2,3,7,8-TCDD	199.35	87.1	25 - 164	26.198	26.40287	-0.2049	N/A	
13C12-1,2,3,7,8-PeCDF	199.35	72.4	24 - 185	29.7243	29.92235	-0.1981	N/A	
13C12-2,3,4,7,8-PeCDF	199.35	78.5	21 - 178	31.0613	31.2611	-0.1998	N/A	
13C12-1,2,3,7,8-PeCDD	199.35	60.6	25 - 181	31.3063	31.5192	-0.2129	N/A	
13C12-1,2,3,4,7,8-HxCDF	199.35	87.3	26 - 152	34.7043	34.88393	-0.1796	N/A	
13C12-1,2,3,6,7,8-HxCDF	199.35	80.6	26 - 123	34.838	35.02318	-0.1852	N/A	
13C12-2,3,4,6,7,8-HxCDF	199.35	88.2	28 - 136	35.7182	35.88653	-0.1683	N/A	
13C12-1,2,3,7,8,9-HxCDF	199.35	94.5	29 - 147	36.732	36.91718	-0.1852	N/A	
13C12-1,2,3,4,7,8-HxCDD	199.35	88.0	32 - 141	35.8407	36.00728	-0.1666	N/A	
13C12-1,2,3,6,7,8-HxCDD	199.35	82.5	28 - 130	35.9522	36.12053	-0.1683	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	199.35	74.9	28 - 143	38.6038	38.7593	-0.1555	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	199.35	79.6	26 - 138	40.8097	40.99867	-0.1890	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	199.35	85.1	23 - 140	40.0855	40.25773	-0.1722	N/A	
13C12-OCDD	398.70	75.9	17 - 157	44.7912	44.98705	-0.1959	N/A	
37Cl4-2,3,7,8-TCDD	79.739	73.6	35 - 197	26.2122	26.42402	-0.2118	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0171	Instrument:	AUTOSPEC01
Sample ID:	23A0420-04	Calibration:	GC00015
File ID:	23031322	Analyzed:	03/14/23 03:43

Surrogate Compound	Spike Level ng/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	198.39	67.4	24 - 169	25.5765	25.76487	-0.1884	N/A	
13C12-2,3,7,8-TCDD	198.39	95.6	25 - 164	26.2122	26.40287	-0.1907	N/A	
13C12-1,2,3,7,8-PeCDF	198.39	94.0	24 - 185	29.7357	29.92235	-0.1867	N/A	
13C12-2,3,4,7,8-PeCDF	198.39	99.8	21 - 178	31.0725	31.2611	-0.1886	N/A	
13C12-1,2,3,7,8-PeCDD	198.39	81.6	25 - 181	31.3288	31.5192	-0.1904	N/A	
13C12-1,2,3,4,7,8-HxCDF	198.39	97.7	26 - 152	34.727	34.88393	-0.1569	N/A	
13C12-1,2,3,6,7,8-HxCDF	198.39	85.8	26 - 123	34.8607	35.02318	-0.1625	N/A	
13C12-2,3,4,6,7,8-HxCDF	198.39	92.6	28 - 136	35.7408	35.88653	-0.1457	N/A	
13C12-1,2,3,7,8,9-HxCDF	198.39	102	29 - 147	36.7658	36.91718	-0.1514	N/A	
13C12-1,2,3,4,7,8-HxCDD	198.39	86.7	32 - 141	35.8635	36.00728	-0.1438	N/A	
13C12-1,2,3,6,7,8-HxCDD	198.39	78.7	28 - 130	35.9748	36.12053	-0.1457	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	198.39	80.1	28 - 143	38.6377	38.7593	-0.1216	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	198.39	75.2	26 - 138	40.8547	40.99867	-0.1440	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	198.39	78.2	23 - 140	40.1195	40.25773	-0.1382	N/A	
13C12-OCDD	396.79	69.6	17 - 157	44.8282	44.98705	-0.1589	N/A	
37Cl4-2,3,7,8-TCDD	79.357	84.0	35 - 197	26.2263	26.42402	-0.1977	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0171	Instrument:	AUTOSPEC01
Sample ID:	SLC0171-CCV2	Calibration:	GC00015
File ID:	23031323	Analyzed:	03/14/23 04:32

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	70.9	71 - 129	25.5483	25.76487	-0.2166	N/A	*
13C12-2,3,7,8-TCDD	100.00	99.8	82 - 118	26.184	26.40287	-0.2189	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	88.3	76 - 124	29.7137	29.92235	-0.2087	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	93.2	77 - 123	31.0505	31.2611	-0.2106	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	76.7	62 - 138	31.3068	31.5192	-0.2124	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	96.0	76 - 124	34.6938	34.88393	-0.1901	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	86.0	70 - 130	34.8275	35.02318	-0.1957	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	93.6	73 - 127	35.7077	35.88653	-0.1788	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	98.3	74 - 126	36.7327	36.91718	-0.1845	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	93.1	85 - 115	35.8192	36.00728	-0.1881	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	87.2	85 - 115	35.9305	36.12053	-0.1900	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	87.0	78 - 122	38.5933	38.7593	-0.1660	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	92.1	77 - 123	40.8105	40.99867	-0.1882	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	94.6	72 - 128	40.0752	40.25773	-0.1825	N/A	
13C12-OCDD	200.00	89.1	48 - 152	44.774	44.98705	-0.2131	N/A	
37Cl4-2,3,7,8-TCDD	10.000	84.3	0 - 200	26.2123	26.42402	-0.2117	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0176	Instrument:	AUTOSPEC01
Sample ID:	SLC0176-ICV1	Calibration:	GC00015
File ID:	23031502	Analyzed:	03/15/23 11:02

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	85.8	71 - 129	25.5623	25.76487	-0.2026	N/A	
13C12-2,3,7,8-TCDD	100.00	100	82 - 118	26.198	26.40287	-0.2049	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	80.0	76 - 124	29.7247	29.92235	-0.1977	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	81.5	77 - 123	31.0617	31.2611	-0.1994	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	83.2	62 - 138	31.3178	31.5192	-0.2014	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	80.3	76 - 124	34.7048	34.88393	-0.1791	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	71.8	70 - 130	34.8385	35.02318	-0.1847	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	82.7	73 - 127	35.7075	35.88653	-0.1790	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	90.8	74 - 126	36.7435	36.91718	-0.1737	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	97.1	85 - 115	35.8302	36.00728	-0.1771	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	85.9	85 - 115	35.9415	36.12053	-0.1790	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	83.7	78 - 122	38.6042	38.7593	-0.1551	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	83.0	77 - 123	40.8102	40.99867	-0.1885	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	84.3	72 - 128	40.086	40.25773	-0.1717	N/A	
13C12-OCDD	200.00	75.7	48 - 152	44.7825	44.98705	-0.2046	N/A	
37Cl4-2,3,7,8-TCDD	10.000	86.1	0 - 200	26.2122	26.42402	-0.2118	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0176	Instrument:	AUTOSPEC01
Sample ID:	23A0420-08	Calibration:	GC00015
File ID:	23031504	Analyzed:	03/15/23 12:48

Surrogate Compound	Spike Level ng/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	199.57	63.9	24 - 169	25.5483	25.76487	-0.2166	N/A	
13C12-2,3,7,8-TCDD	199.57	80.1	25 - 164	26.184	26.40287	-0.2189	N/A	
13C12-1,2,3,7,8-PeCDF	199.57	69.7	24 - 185	29.7135	29.92235	-0.2089	N/A	
13C12-2,3,4,7,8-PeCDF	199.57	74.3	21 - 178	31.0505	31.2611	-0.2106	N/A	
13C12-1,2,3,7,8-PeCDD	199.57	80.4	25 - 181	31.3067	31.5192	-0.2125	N/A	
13C12-1,2,3,4,7,8-HxCDF	199.57	66.4	26 - 152	34.7047	34.88393	-0.1792	N/A	
13C12-1,2,3,6,7,8-HxCDF	199.57	59.4	26 - 123	34.8385	35.02318	-0.1847	N/A	
13C12-2,3,4,6,7,8-HxCDF	199.57	66.6	28 - 136	35.7298	35.88653	-0.1567	N/A	
13C12-1,2,3,7,8,9-HxCDF	199.57	75.7	29 - 147	36.7325	36.91718	-0.1847	N/A	
13C12-1,2,3,4,7,8-HxCDD	199.57	79.1	32 - 141	35.8523	36.00728	-0.1550	N/A	
13C12-1,2,3,6,7,8-HxCDD	199.57	71.1	28 - 130	35.9638	36.12053	-0.1567	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	199.57	62.1	28 - 143	38.6042	38.7593	-0.1551	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	199.57	65.7	26 - 138	40.8102	40.99867	-0.1885	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	199.57	72.3	23 - 140	40.086	40.25773	-0.1717	N/A	
13C12-OCDD	399.13	70.9	17 - 157	44.7823	44.98705	-0.2048	N/A	
37Cl4-2,3,7,8-TCDD	79.827	65.6	35 - 197	26.2122	26.42402	-0.2118	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0176	Instrument:	AUTOSPEC01
Sample ID:	SLC0176-CCV1	Calibration:	GC00015
File ID:	23031510	Analyzed:	03/15/23 17:48

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	81.2	71 - 129	25.5342	25.76487	-0.2307	N/A	
13C12-2,3,7,8-TCDD	100.00	109	82 - 118	26.1697	26.40287	-0.2332	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	89.8	76 - 124	29.7023	29.92235	-0.2201	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	91.7	77 - 123	31.0392	31.2611	-0.2219	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	104	62 - 138	31.2955	31.5192	-0.2237	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	92.3	76 - 124	34.6825	34.88393	-0.2014	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	82.6	70 - 130	34.8273	35.02318	-0.1959	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	81.0	73 - 127	35.6963	35.88653	-0.1902	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	81.1	74 - 126	36.7323	36.91718	-0.1849	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	99.3	85 - 115	35.8077	36.00728	-0.1996	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	89.4	85 - 115	35.9303	36.12053	-0.1902	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	67.1	78 - 122	38.593	38.7593	-0.1663	N/A	*
13C12-1,2,3,4,7,8,9-HpCDF	100.00	73.7	77 - 123	40.799	40.99867	-0.1997	N/A	*
13C12-1,2,3,4,6,7,8-HpCDD	100.00	81.9	72 - 128	40.0748	40.25773	-0.1829	N/A	
13C12-OCDD	200.00	91.7	48 - 152	44.7732	44.98705	-0.2139	N/A	
37Cl4-2,3,7,8-TCDD	10.000	92.3	0 - 200	26.198	26.42402	-0.2260	N/A	

* Values outside of QC limits

SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0176	Instrument:	AUTOSPEC01
Sample ID:	SLC0176-CCV2	Calibration:	GC00015
File ID:	23031521	Analyzed:	03/16/23 02:54

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	84.0	71 - 129	25.5342	25.76487	-0.2307	N/A	
13C12-2,3,7,8-TCDD	100.00	101	82 - 118	26.1697	26.40287	-0.2332	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	89.0	76 - 124	29.7023	29.92235	-0.2201	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	95.3	77 - 123	31.0392	31.2611	-0.2219	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	98.2	62 - 138	31.2842	31.5192	-0.2350	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	74.3	76 - 124	34.6822	34.88393	-0.2017	N/A	*
13C12-1,2,3,6,7,8-HxCDF	100.00	67.8	70 - 130	34.827	35.02318	-0.1962	N/A	*
13C12-2,3,4,6,7,8-HxCDF	100.00	77.5	73 - 127	35.696	35.88653	-0.1905	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	85.5	74 - 126	36.721	36.91718	-0.1962	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	91.3	85 - 115	35.8075	36.00728	-0.1998	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	86.4	85 - 115	35.9188	36.12053	-0.2017	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	76.1	78 - 122	38.5927	38.7593	-0.1666	N/A	*
13C12-1,2,3,4,7,8,9-HpCDF	100.00	79.4	77 - 123	40.7985	40.99867	-0.2002	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	83.7	72 - 128	40.0743	40.25773	-0.1834	N/A	
13C12-OCDD	200.00	101	48 - 152	44.782	44.98705	-0.2051	N/A	
37Cl4-2,3,7,8-TCDD	10.000	85.2	0 - 200	26.1838	26.42402	-0.2402	N/A	

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1045 23A0420-01	01/19/23 08:10	01/19/23 15:55	02/14/23 17:30	26	365	03/14/23 02:54	27	365	
LDW23-IT1051 23A0420-04	01/19/23 09:55	01/19/23 15:55	02/14/23 17:30	26	365	03/14/23 03:43	27	365	
LDW23-SC1004 23A0420-08	01/19/23 11:55	01/19/23 15:55	02/14/23 17:30	26	365	03/15/23 12:48	29	365	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 1613B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: AUTOSPEC01

Analyte	MDL	RL	Units
2,3,7,8-TCDF	0.058	1.00	ng/kg
2,3,7,8-TCDD	0.150	1.00	ng/kg
1,2,3,7,8-PeCDF	0.240	1.00	ng/kg
2,3,4,7,8-PeCDF	0.220	1.00	ng/kg
1,2,3,7,8-PeCDD	0.170	1.00	ng/kg
1,2,3,4,7,8-HxCDF	0.280	1.00	ng/kg
1,2,3,6,7,8-HxCDF	0.200	1.00	ng/kg
2,3,4,6,7,8-HxCDF	0.170	1.00	ng/kg
1,2,3,7,8,9-HxCDF	0.190	1.00	ng/kg
1,2,3,4,7,8-HxCDD	0.170	1.00	ng/kg
1,2,3,6,7,8-HxCDD	0.180	1.00	ng/kg
1,2,3,7,8,9-HxCDD	0.220	1.00	ng/kg
1,2,3,4,6,7,8-HpCDF	0.210	1.00	ng/kg
1,2,3,4,7,8,9-HpCDF	0.240	1.00	ng/kg
1,2,3,4,6,7,8-HpCDD	0.560	2.50	ng/kg
OCDF	1.10	2.50	ng/kg
OCDD	4.60	10.0	ng/kg
Total TCDF		1.00	ng/kg
Total TCDD		1.00	ng/kg
Total PeCDF		1.00	ng/kg
Total PeCDD		1.00	ng/kg
Total HxCDF		1.00	ng/kg
Total HxCDD		1.00	ng/kg
Total HpCDF		1.00	ng/kg
Total HpCDD		1.00	ng/kg

CS3WT

Calibration and Verification Solution (EPA-1613CS3) combined with Window Defining and 2,3,7,8-TCDD Resolution Testing Congeners

PRODUCT CODE:	CS3WT
LOT NUMBER:	CS3WT0918
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/24/2018
LAST TESTED: (mm/dd/yyyy)	10/29/2018
EXPIRY DATE: (mm/dd/yyyy)	10/29/2025
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION:

CS3WT is a solution/mixture of native and $^{13}C_{12}$-labelled chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

CS3WT was designed and prepared to be used as a HRMS calibration standard according to U.S. EPA Method 1613B.

It is to be used for calibration verification in place of EPA-1613CS3 (Lot: 13CS30918). It also contains the PCDD and PCDF window defining congeners for a DB-5 (or equivalent) capillary column as well as the TCDD isomers required to test and confirm the resolution of 2,3,7,8-TCDD.

The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%. The individual native 2,3,7,8-substituted PCDD and PCDF congeners all have chemical purities of >98%; the other congeners (window defining and resolution testing) should only be considered semi-quantitative.

This current lot of CS3WT is to be used with the 1613 calibration solutions having the following lot numbers:

PRODUCT CODE	LOT NUMBER
EPA-1613CS1	13CS10918
EPA-1613CS2	13CS20918
EPA-1613CS3	13CS30918
EPA-1613CS4	13CS40918
EPA-1613CS5	13CS50918
EPA-1613CSL	13CSL0918
EPA-1613CS0.5	13CS0.50918

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.
- Only the 2,3,7,8-substituted PCDDs and PCDFs should be used for quantitation. The other congeners (window defining and 2378-TCDD resolution testing) should be considered semi-quantitative (within ±20% of their design value). Impurities have been identified where possible.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: CS3WT; Components and Concentrations (ng/ml, in nonane/4.5% toluene)

QUANTITATIVE ANALYTES (ng/ml, ±5%)

Native PCDDs & PCDFs:	
2,3,7,8-TCDD	10
2,3,7,8-TCDF	10
1,2,3,7,8-PeCDD	50
1,2,3,7,8-PeCDF	50
2,3,4,7,8-PeCDF	50
1,2,3,4,7,8-HxCDD	50
1,2,3,6,7,8-HxCDD	50
1,2,3,7,8,9-HxCDD	50
1,2,3,4,7,8-HxCDF	50
1,2,3,6,7,8-HxCDF	50
1,2,3,7,8,9-HxCDF	50
2,3,4,6,7,8-HxCDF	50
1,2,3,4,6,7,8-HpCDD *(WD)*	50
1,2,3,4,6,7,8-HpCDF *(WD)*	50
1,2,3,4,7,8,9-HpCDF *(WD)*	50
OCDD	100
OCDF	100

Labelled PCDDs & PCDFs:	
$^{13}C_{12}$-2,3,7,8-TCDD	100
$^{13}C_{12}$-2,3,7,8-TCDF	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100
$^{13}C_{12}$-OCDD	200

Cleanup Standard:	
$^{37}Cl_4$-2,3,7,8-TCDD	10

Internal Standards:	
$^{13}C_{12}$-1,2,3,4-TCDD	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100

WD – Window Definer

SEMI-QUANTITATIVE ANALYTES (ng/ml, ±20%)

Window Definers:*	
1,3,6,8-TCDD	10
1,2,8,9-TCDD	10
1,3,6,8-TCDF	10
1,2,8,9-TCDF	10
1,2,4,6,8/1,2,4,7,9-PeCDD	50
1,2,3,8,9-PeCDD	50
1,3,4,6,8-PeCDF	50
1,2,3,8,9-PeCDF	50
1,2,4,6,7,9-HxCDD	50
1,2,3,4,6,8-HxCDF	50
1,2,3,4,6,7,9-HpCDD	50

2378-TCDD Resolution Testing Isomers:	
1,2,3,4-TCDD	5
1,2,3,7/1,2,3,8-TCDD	5
1,2,3,9-TCDD	10

** 1,2,3,4,6,7-HxCDD (last eluting HxCDD) not included; coelutes with 1,2,3,7,8,9-HxCDD. Use 1,2,3,4,6,7,9-HpCDD to set window.*

** 1,2,3,4,8,9-HxCDF (last eluting HxCDF) not included; can interfere with 1,2,3,7,8,9-HxCDF. Use 1,2,3,4,6,7,8-HpCDF to set window.*

Certified By: _____ **Date:** 10/30/2018 (mm/dd/yyyy)

B.G. Chittim, General Manager

Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

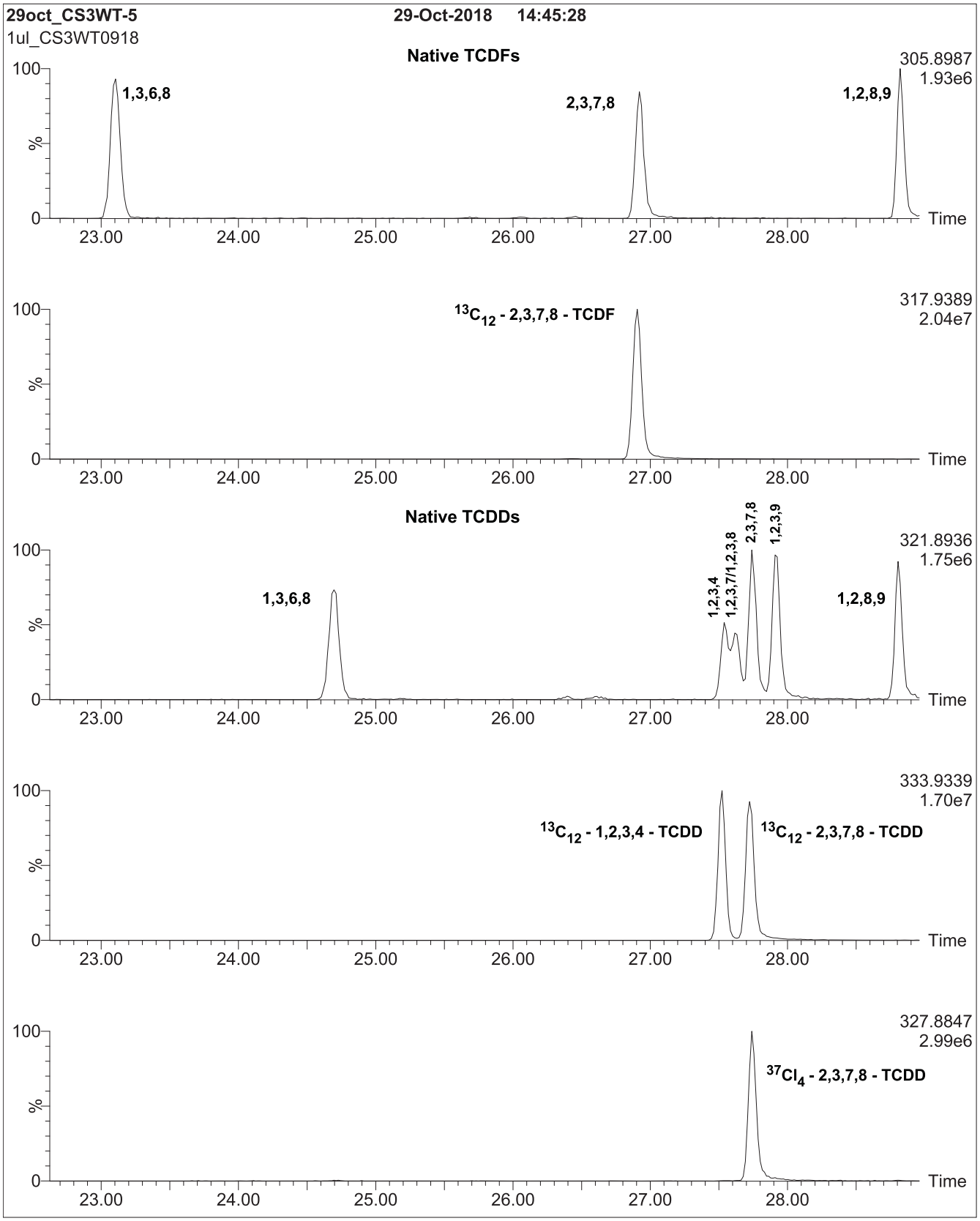


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

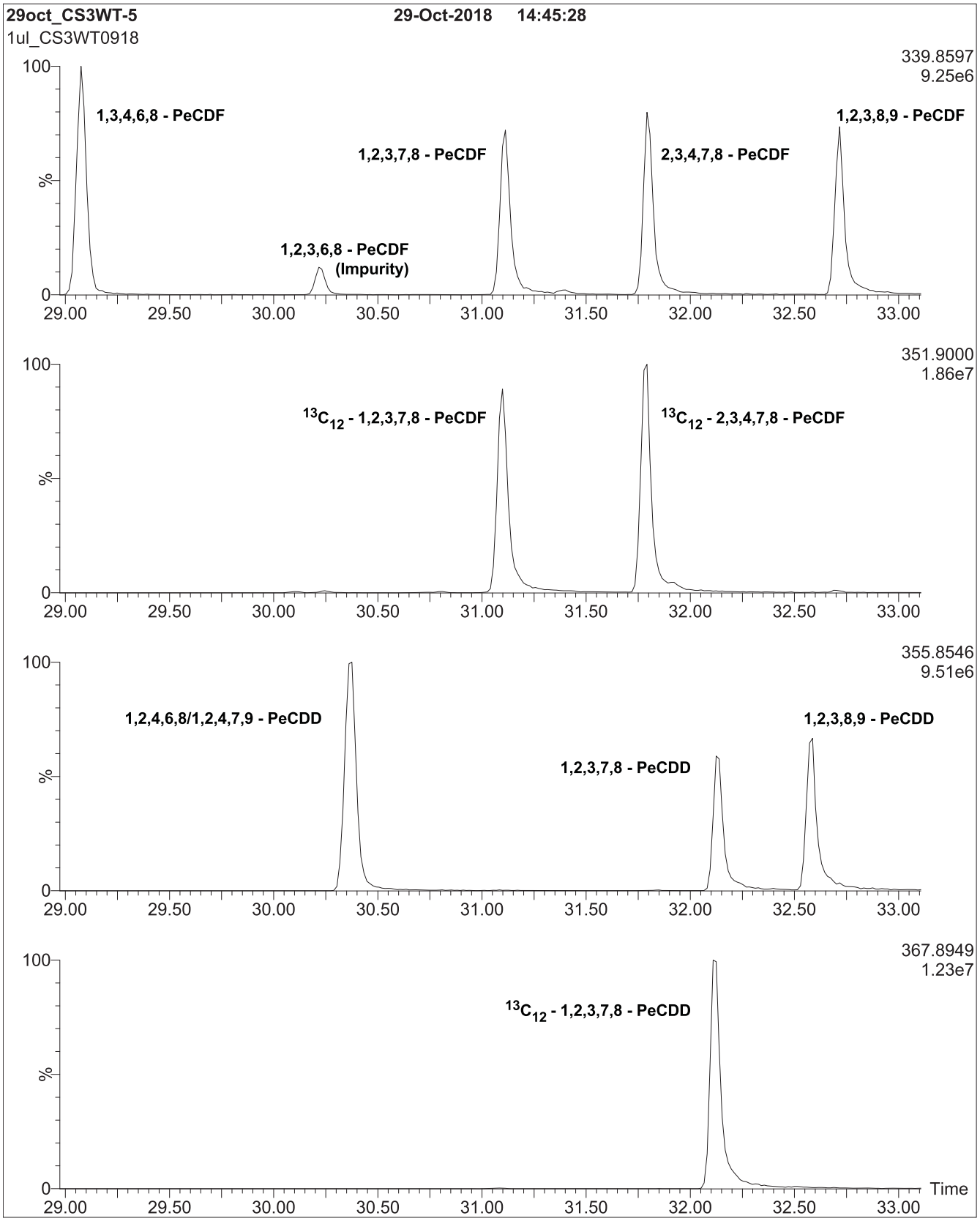


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

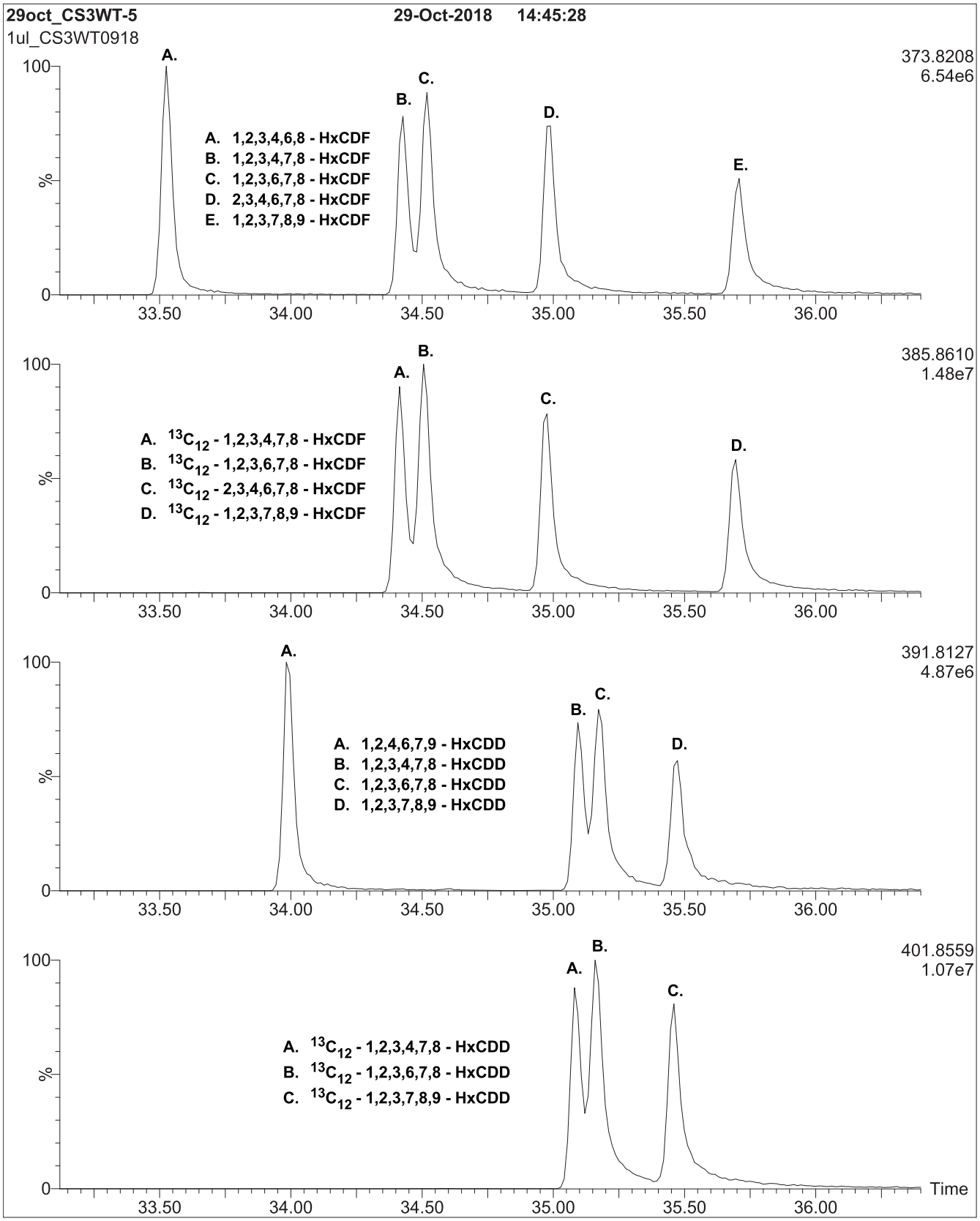


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

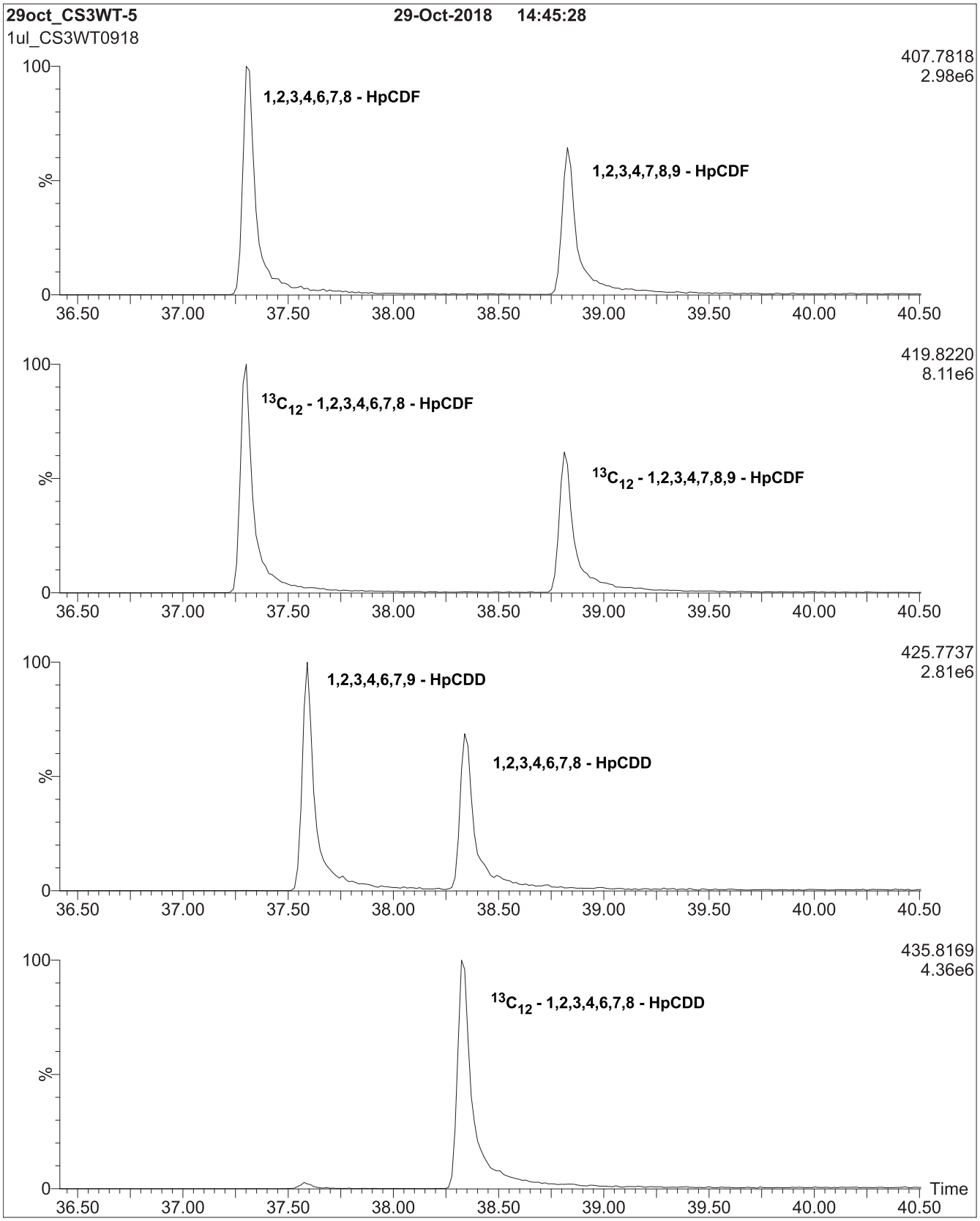
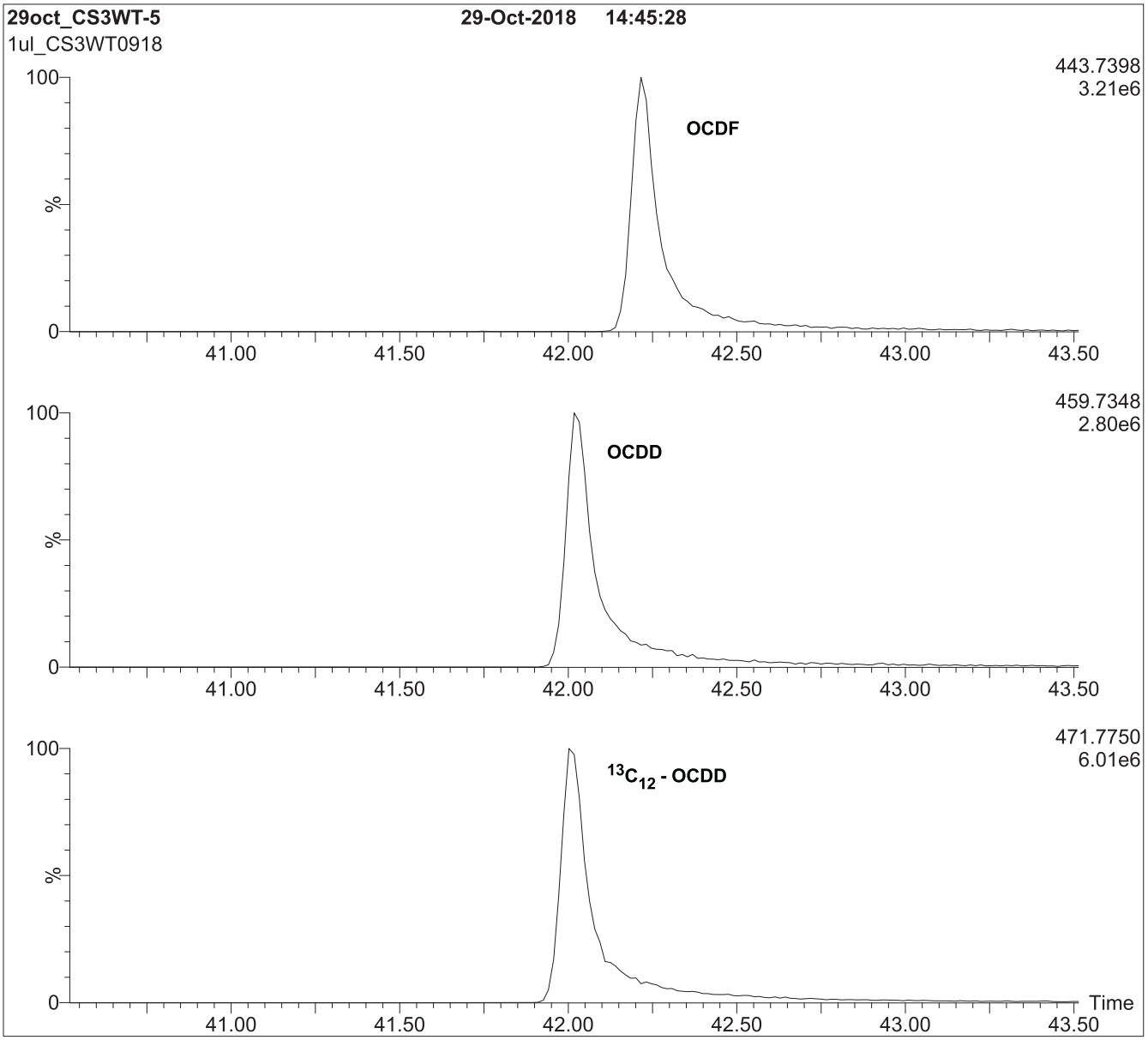


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow:	Constant at 1 ml/min	Oven:	150 °C (1 min)
Injector:	280 °C (Splitless Injection)		12 °C/min to 200 °C
Ionization:	EI+		3 °C/min to 235 °C
Detector:	280 °C		235 °C (8 min)
	SIR at 10,000 mass resolving power		8 °C/min to 310 °C
			310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CVS

U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5

PRODUCT CODES:	EPA-1613CVS	**LOT NUMBERS:**	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/22/2019
LAST TESTED: (mm/dd/yyyy)	10/24/2019
EXPIRY DATE: (mm/dd/yyyy)	10/24/2026
RECOMMENDED STORAGE:	Store ampoules in a cool, dark place

I005456
1613 CS1 CAL STD
Expires 10/24/2026
Prepared By Joshua Rains 6/23/2020

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$ and $^{37}Cl_4$) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Table B: 5-point HRGC/HRMS Calibration and RRF Summary
Table C: 7-point HRGC/HRMS Calibration and RRF Summary
Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

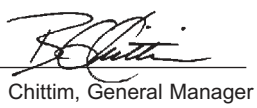
CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
Native PCDDs and PCDFs:	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CSL**	**CS0.5**
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By:  **Date:** 10/25/2019
(mm/dd/yyyy)

B.G. Chittim, General Manager

Table B: **EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

Table C: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); 7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

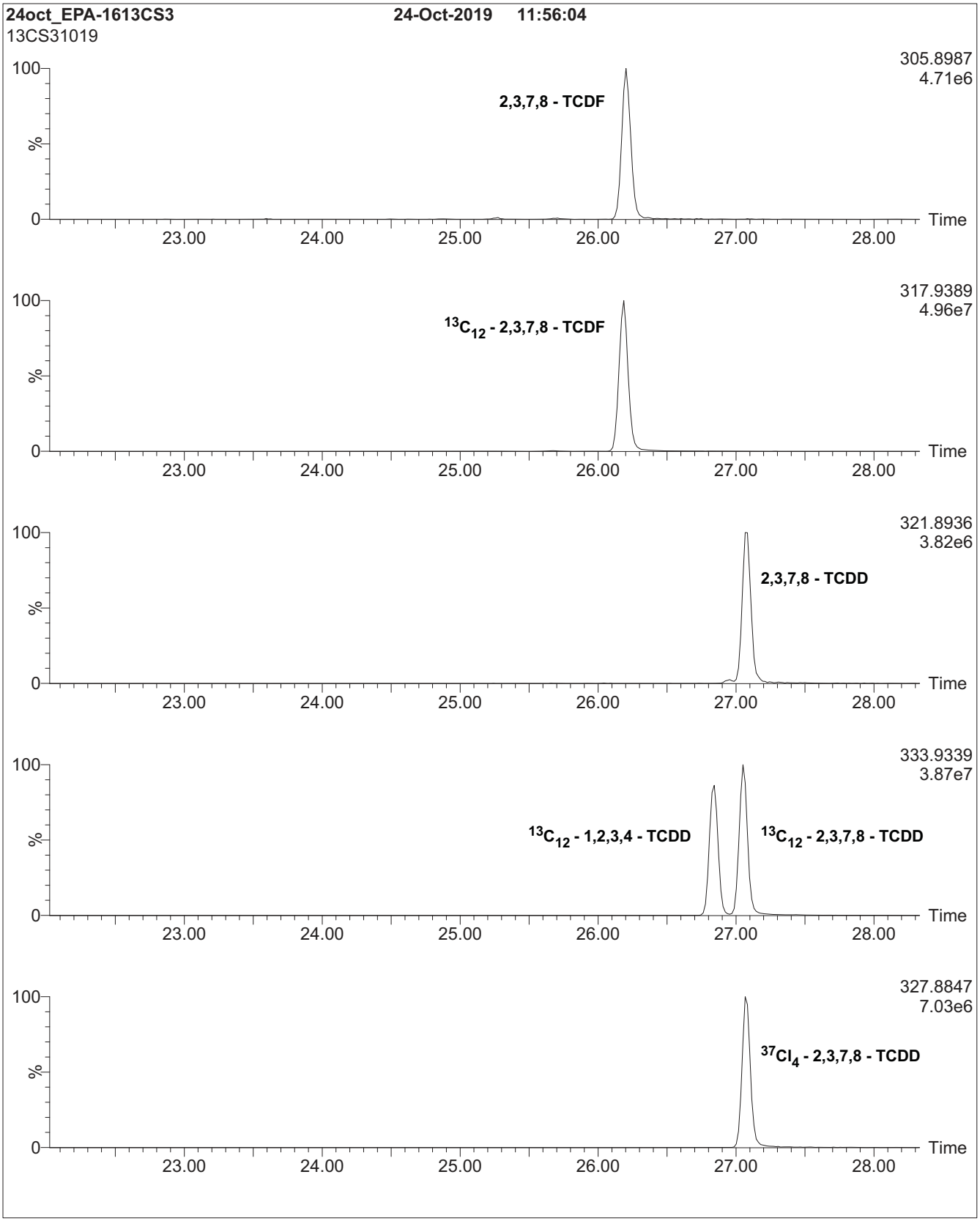


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

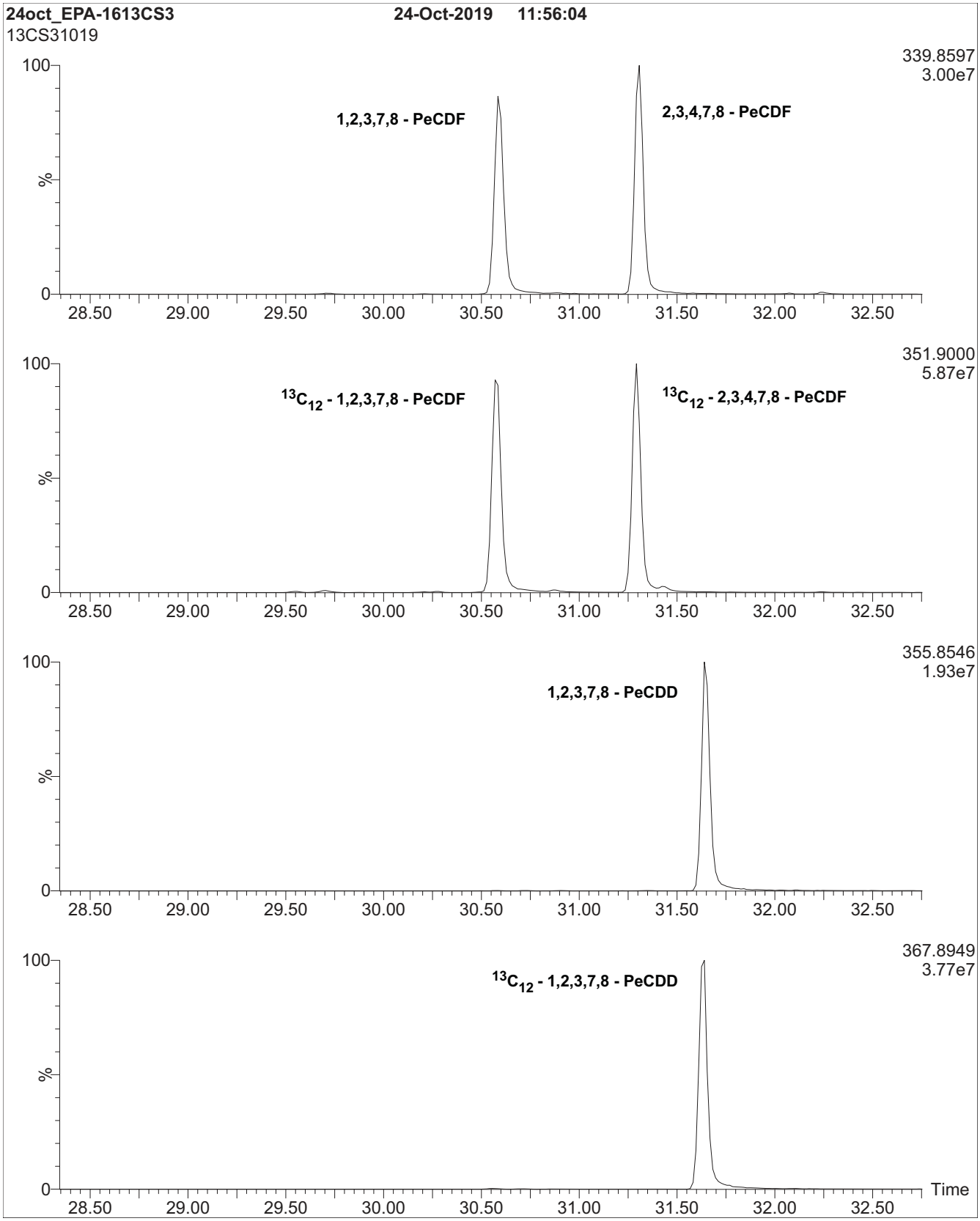


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

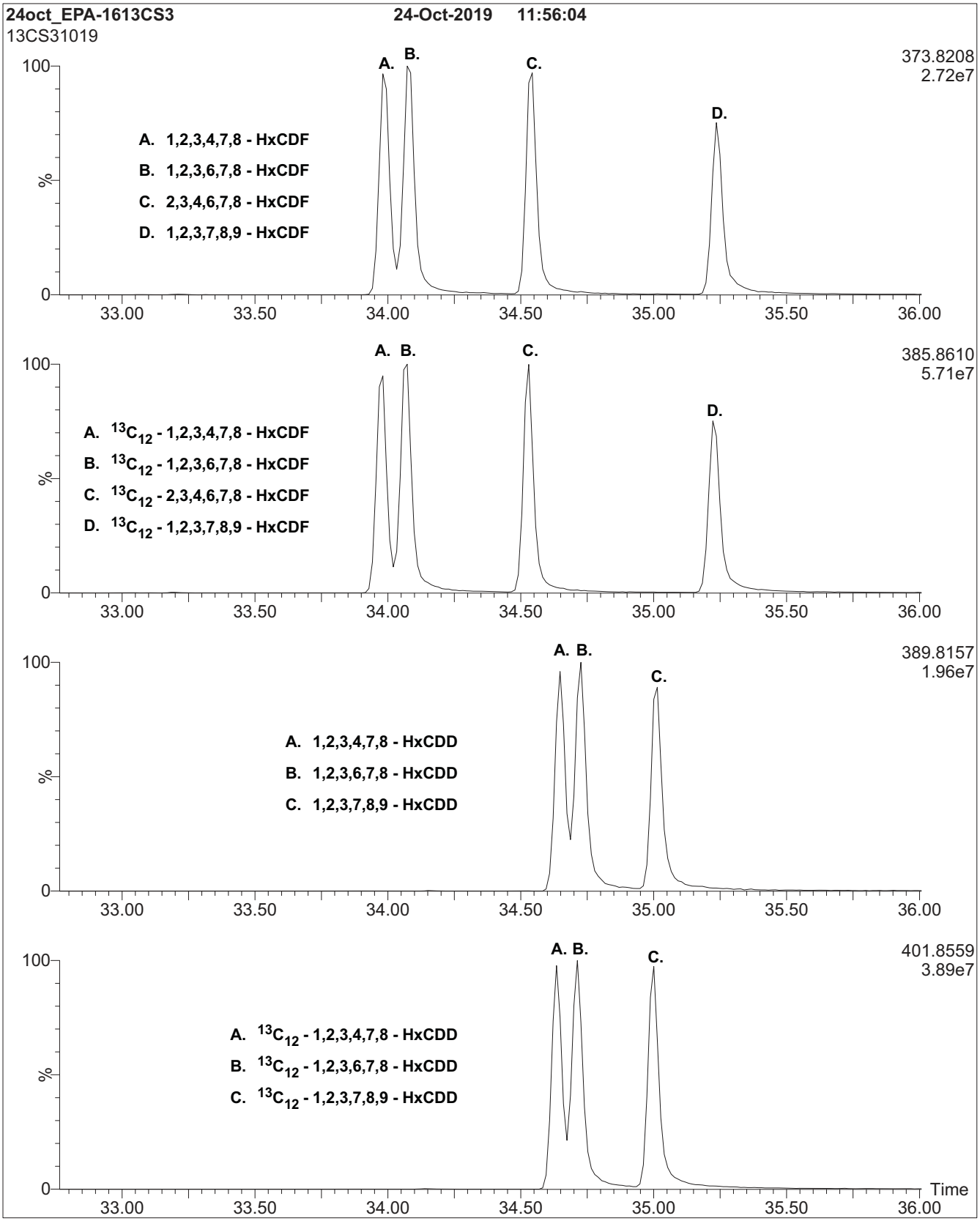


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

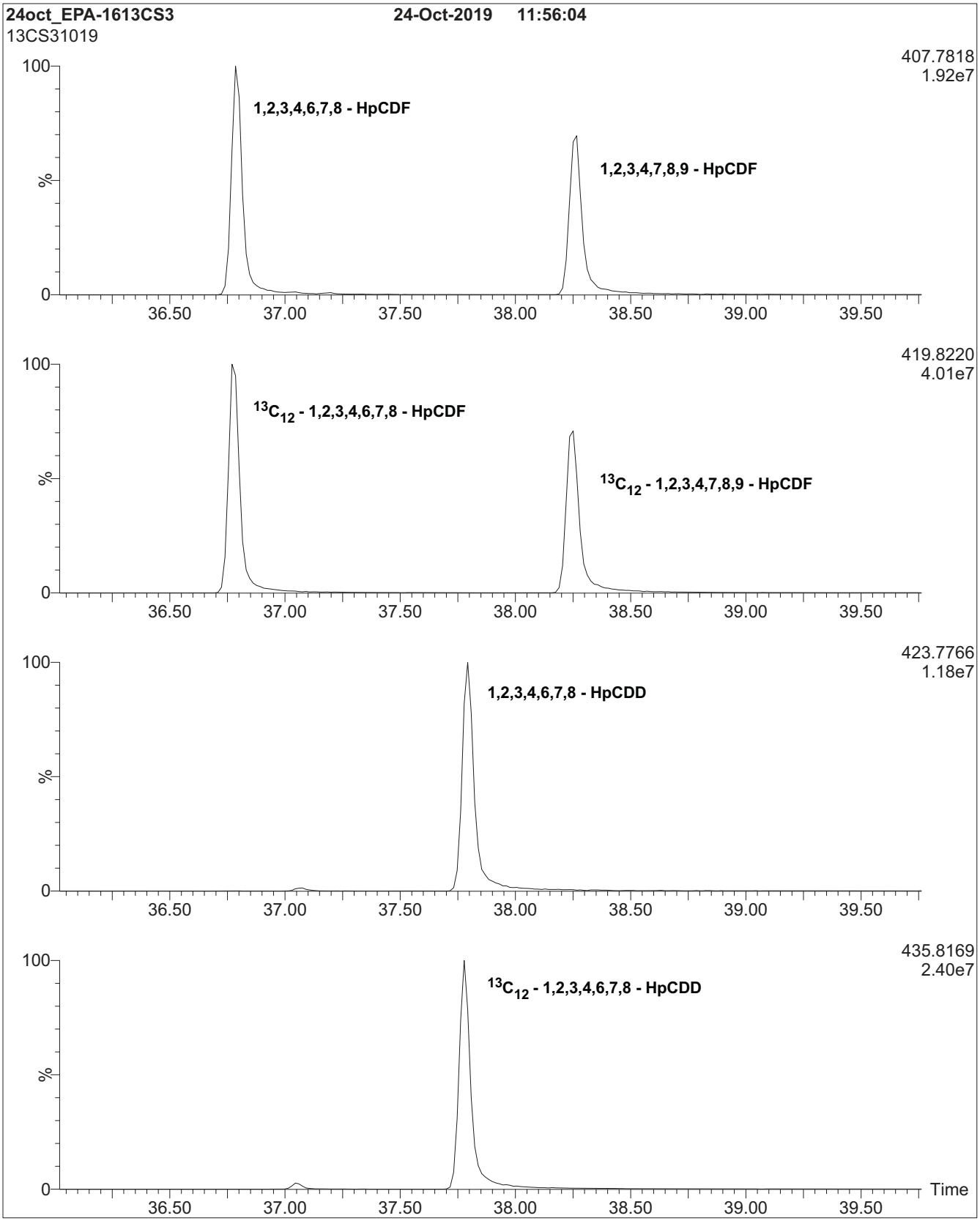
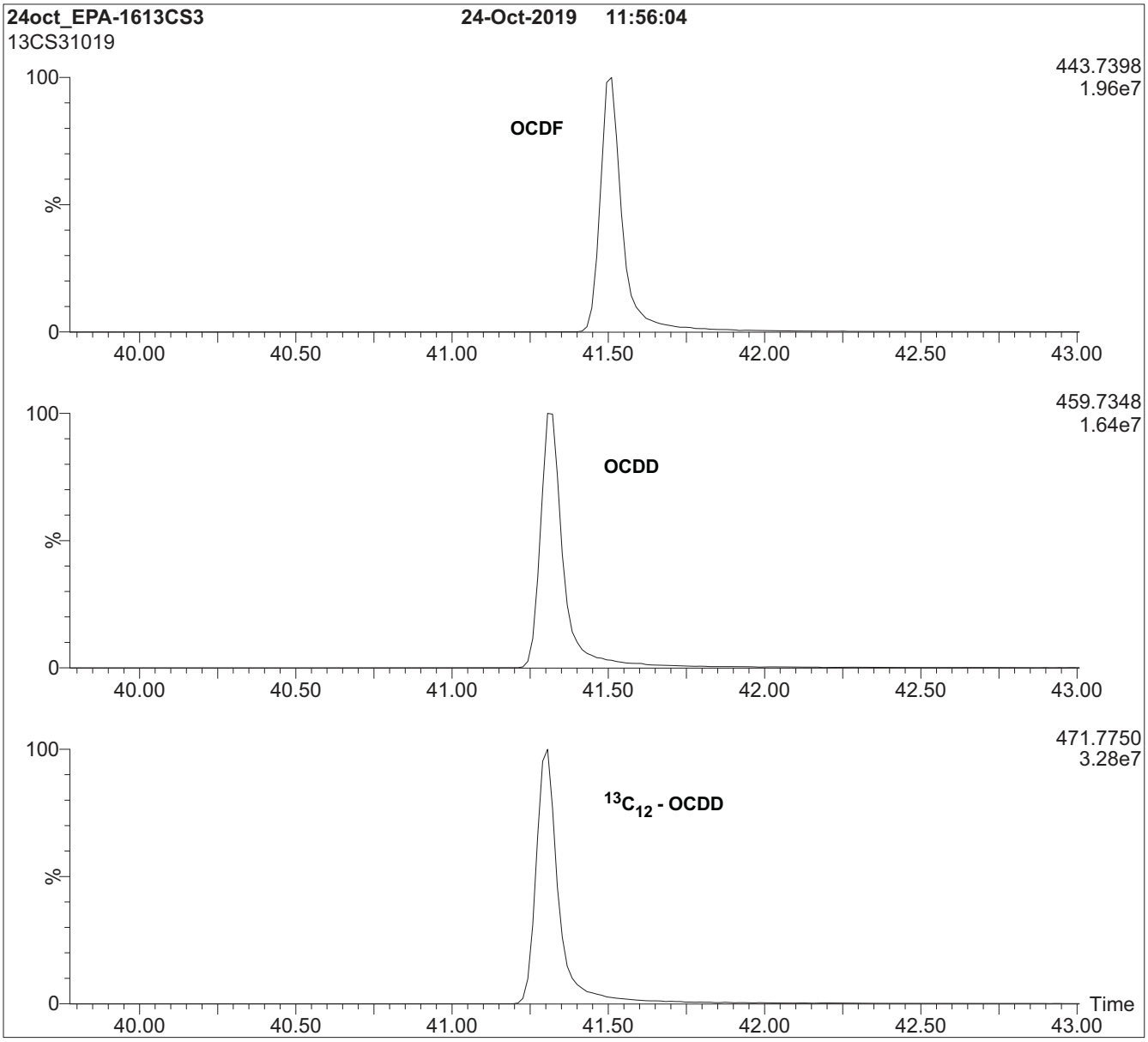


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow:	Constant at 1 ml/min	Oven:	150 °C (1 min)
Injector:	280 °C (Splitless Injection)		12 °C/min to 200 °C
Ionization:	EI+		3 °C/min to 235 °C
Detector:	280 °C		235 °C (8 min)
	SIR at 10,000 mass resolving power		8 °C/min to 310 °C
			310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CVS

U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5

PRODUCT CODES:	EPA-1613CVS	**LOT NUMBERS:**	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/22/2019
LAST TESTED: (mm/dd/yyyy)	10/24/2019
EXPIRY DATE: (mm/dd/yyyy)	10/24/2026
RECOMMENDED STORAGE:	Store ampoules in a cool, dark place

I005457
1613 CS2 CAL STD
Expires 10/24/2026
Prepared By Joshua Rains 6/23/2020

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$ and $^{37}Cl_4$) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Table B: 5-point HRGC/HRMS Calibration and RRF Summary
Table C: 7-point HRGC/HRMS Calibration and RRF Summary
Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

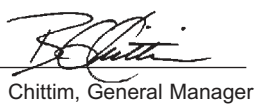
CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
Native PCDDs and PCDFs:	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CSL**	**CS0.5**
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By:  **Date:** 10/25/2019
(mm/dd/yyyy)

B.G. Chittim, General Manager

Table B: **EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

Table C: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); 7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

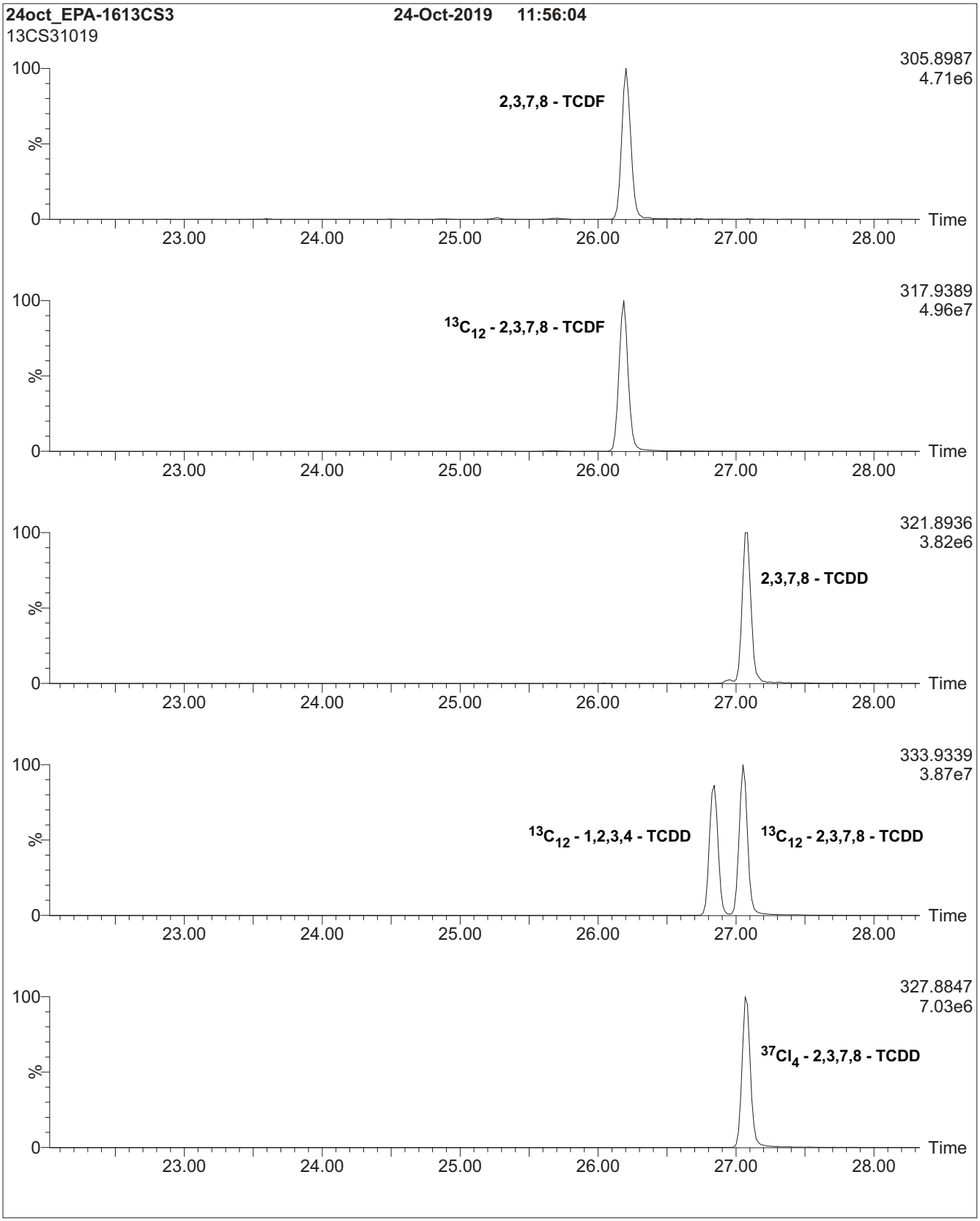


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

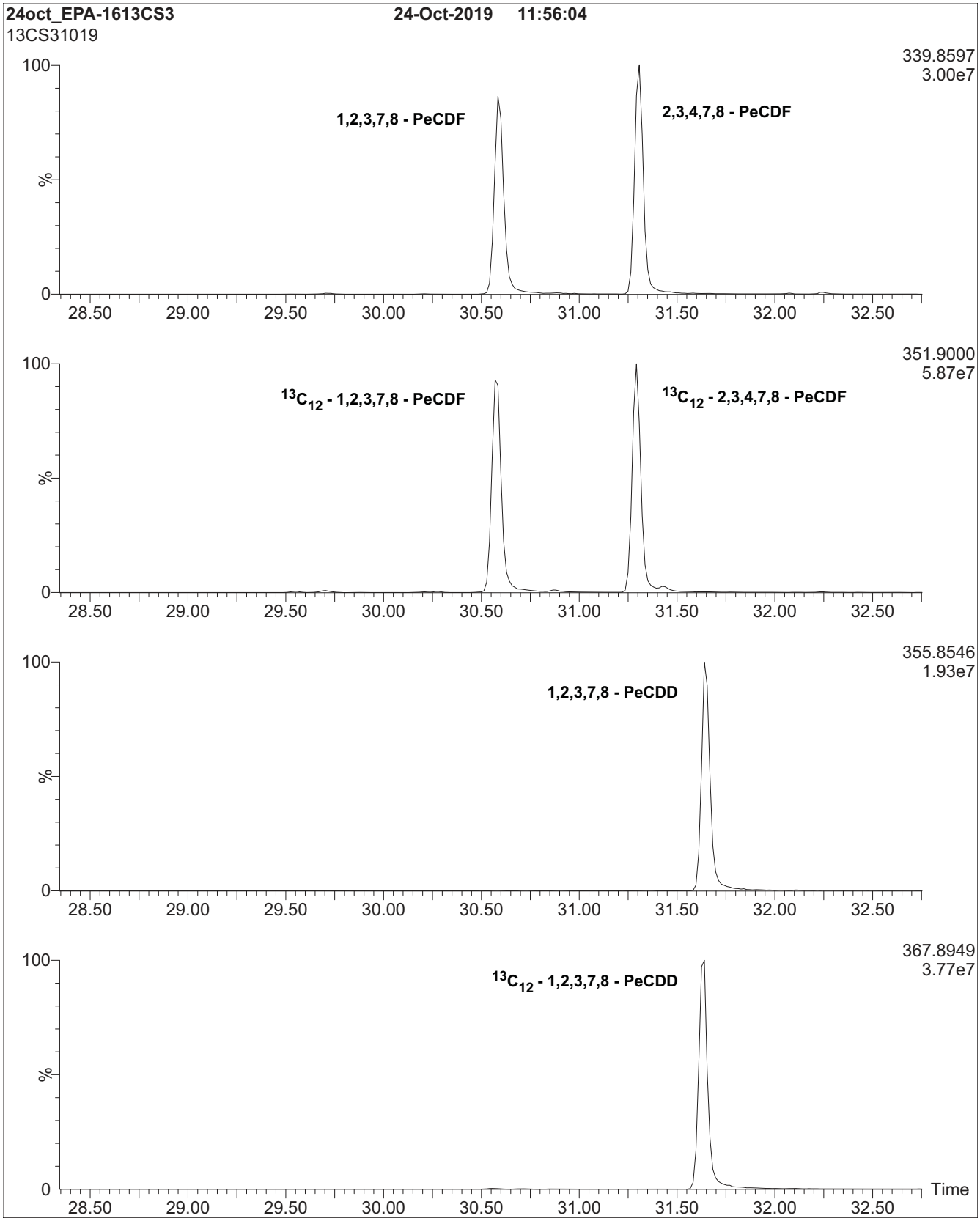


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

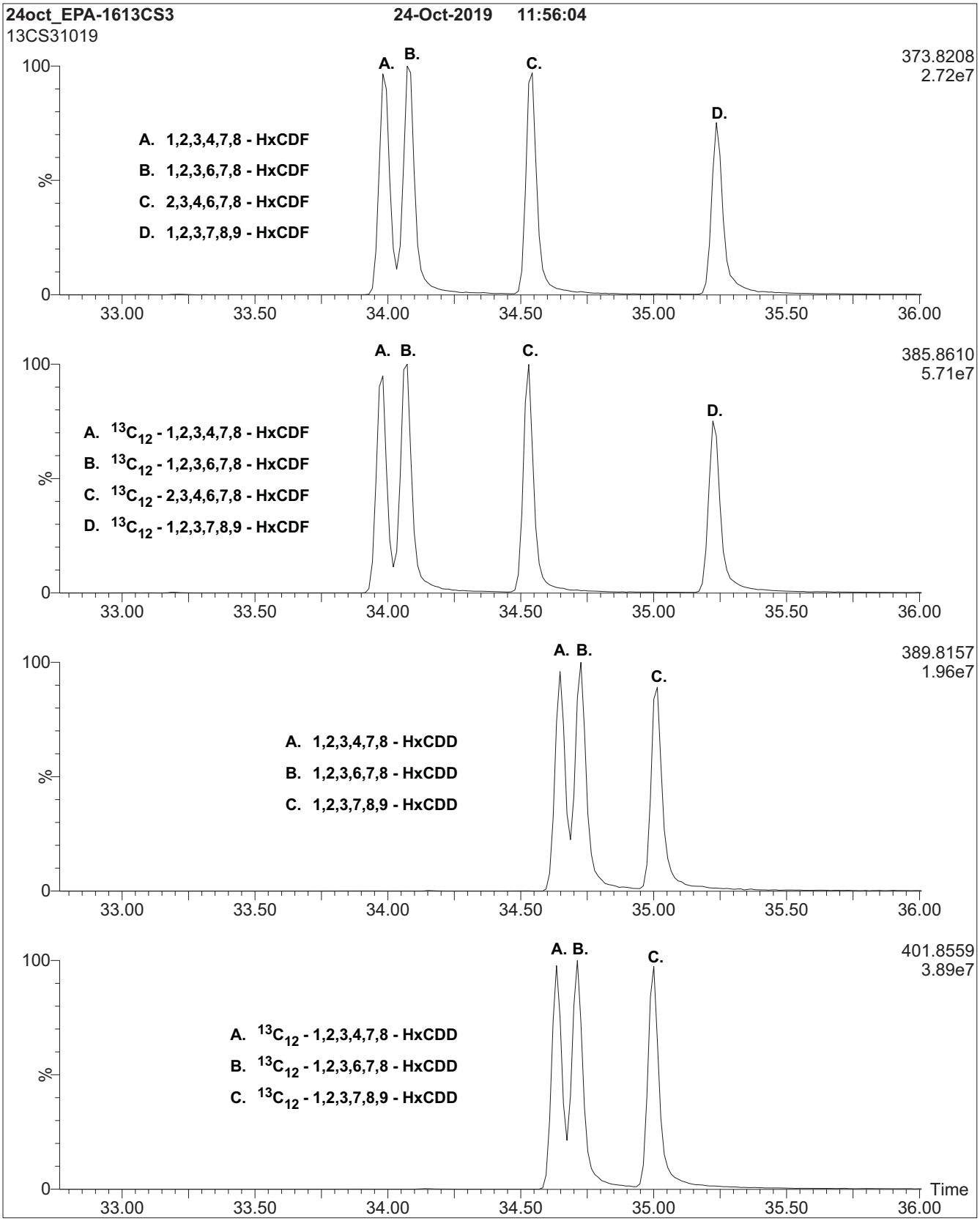


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

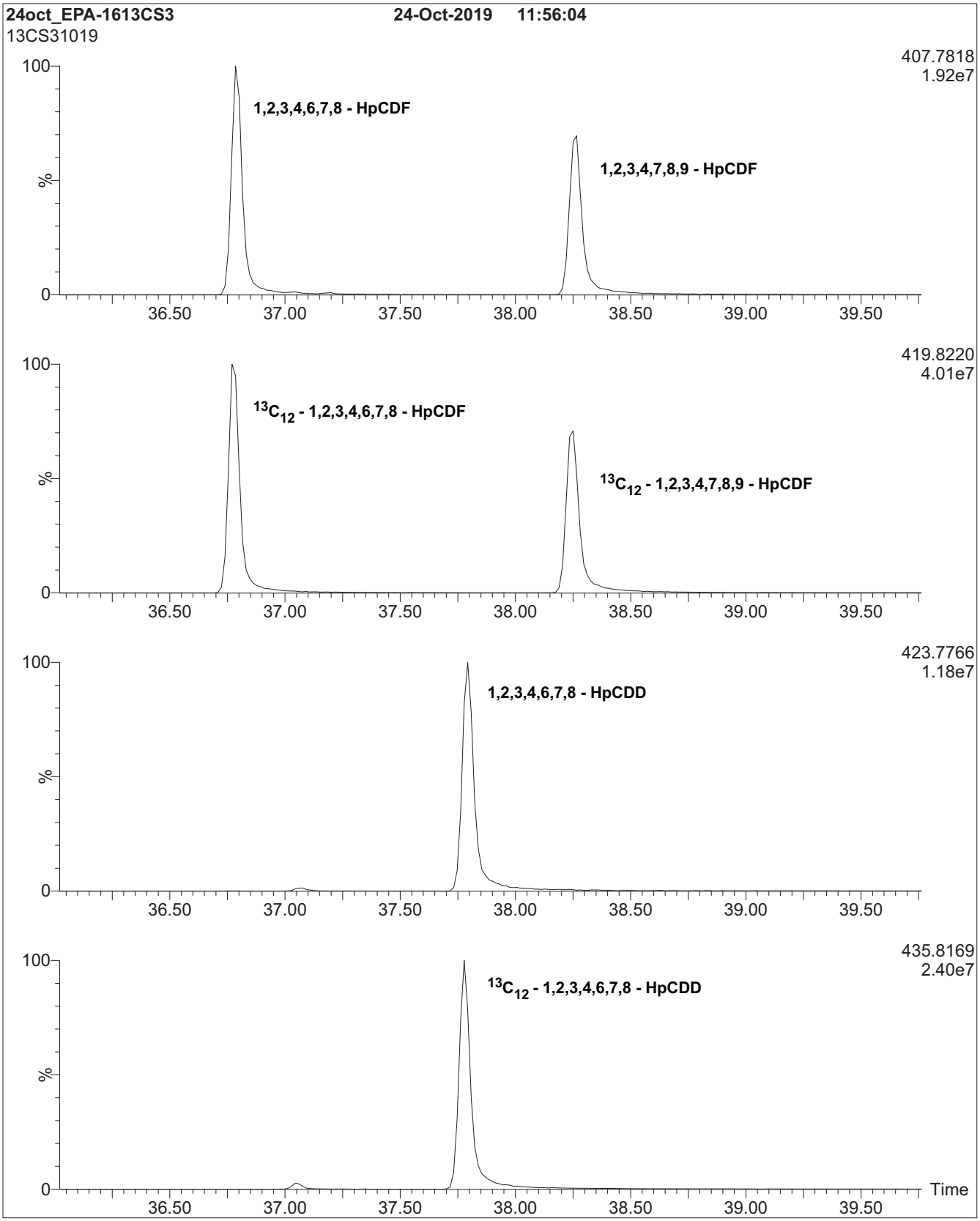
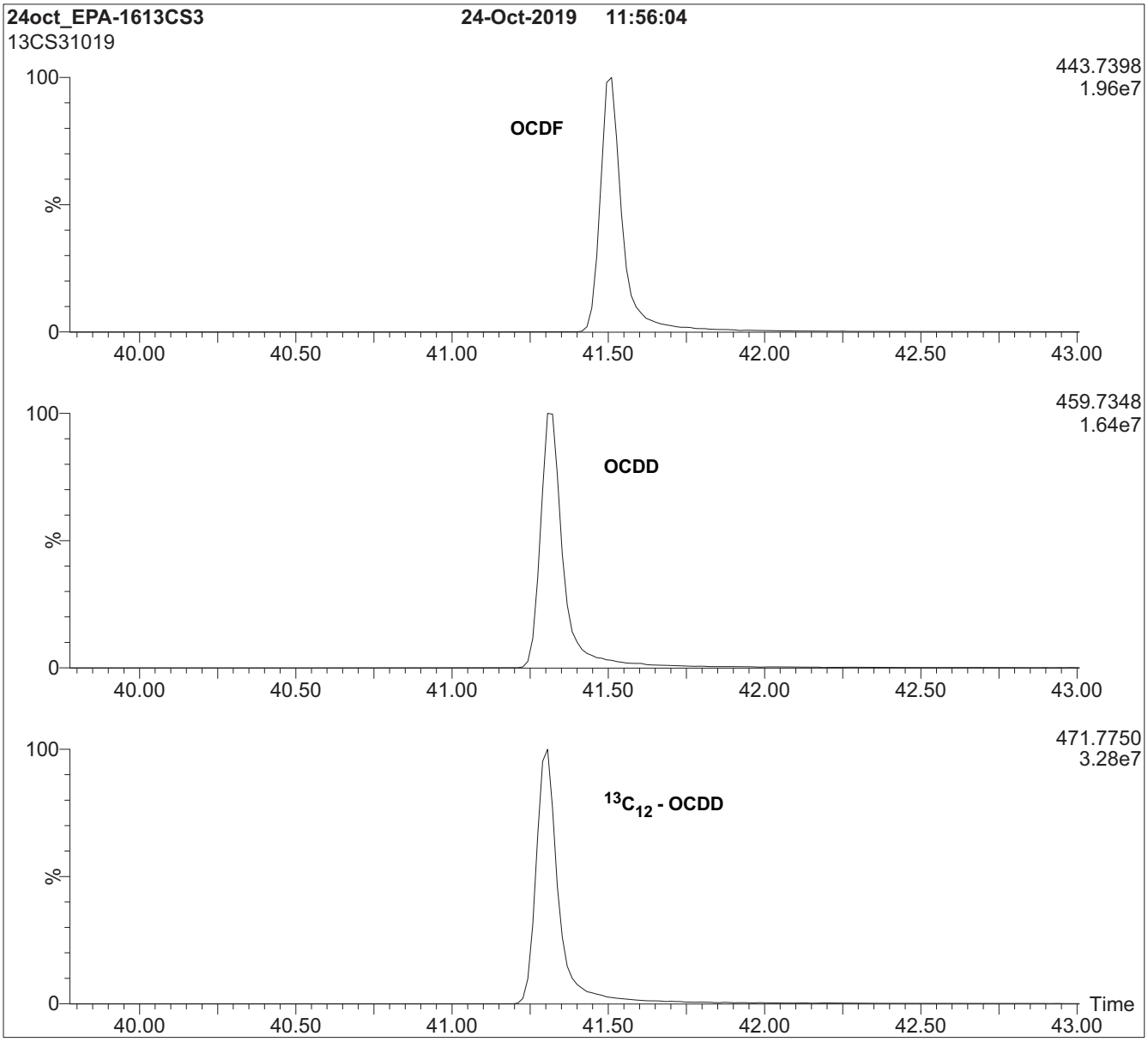


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow:	Constant at 1 ml/min	Oven:	150 °C (1 min)
Injector:	280 °C (Splitless Injection)		12 °C/min to 200 °C
Ionization:	EI+		3 °C/min to 235 °C
Detector:	280 °C		235 °C (8 min)
	SIR at 10,000 mass resolving power		8 °C/min to 310 °C
			310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CVS

U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5

PRODUCT CODES:	EPA-1613CVS	**LOT NUMBERS:**	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/22/2019
LAST TESTED: (mm/dd/yyyy)	10/24/2019
EXPIRY DATE: (mm/dd/yyyy)	10/24/2026
RECOMMENDED STORAGE:	Store ampoules in a cool, dark place

I005458
1613 CS4 CAL STD
Expires 10/24/2026
Prepared By Joshua Rains 6/23/2020

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$ and $^{37}Cl_4$) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Table B: 5-point HRGC/HRMS Calibration and RRF Summary
Table C: 7-point HRGC/HRMS Calibration and RRF Summary
Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
Native PCDDs and PCDFs:	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CSL**	**CS0.5**
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By: _____ **Date:** 10/25/2019
(mm/dd/yyyy)
B.G. Chittim, General Manager

Table B: **EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

Table C: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); 7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

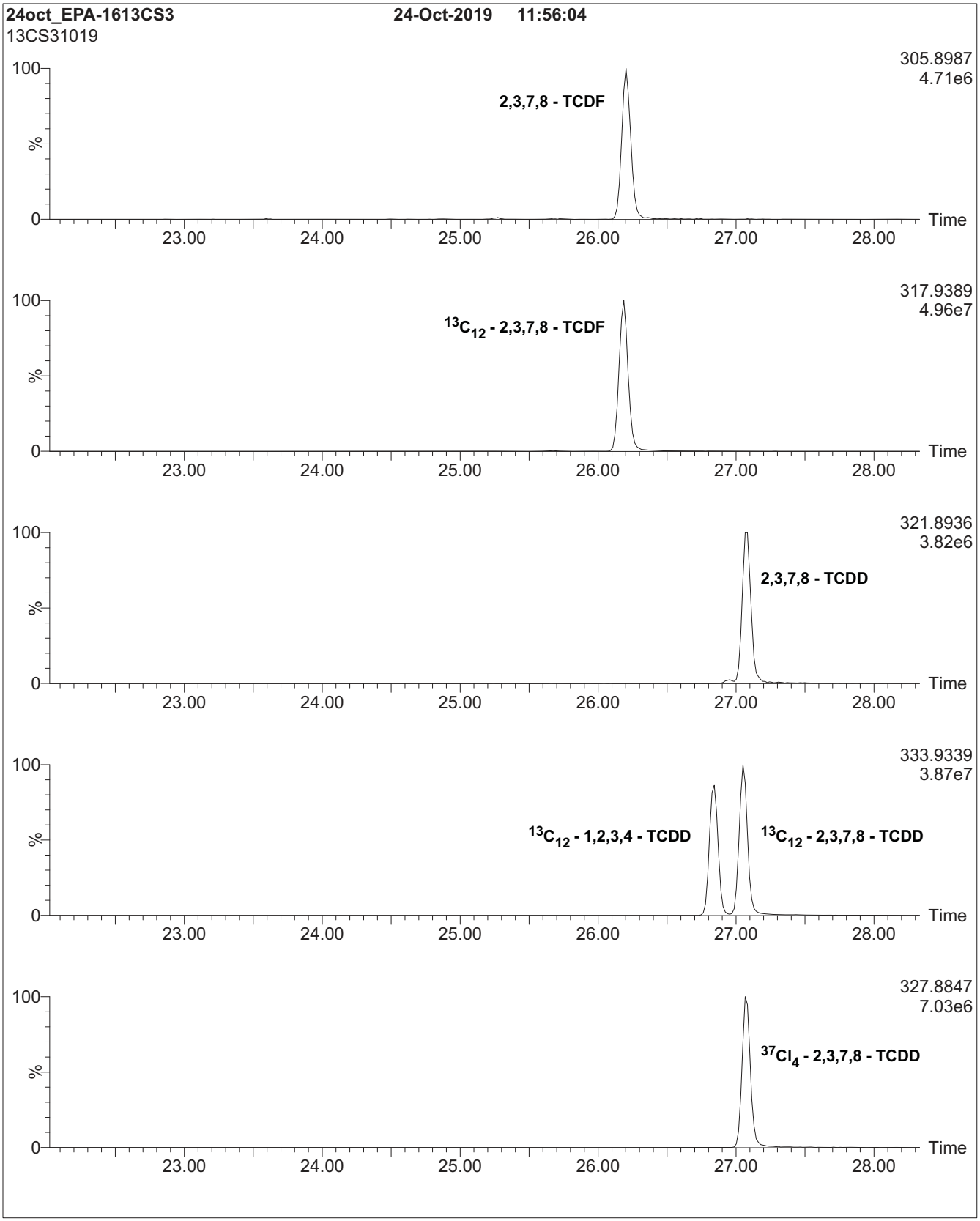


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

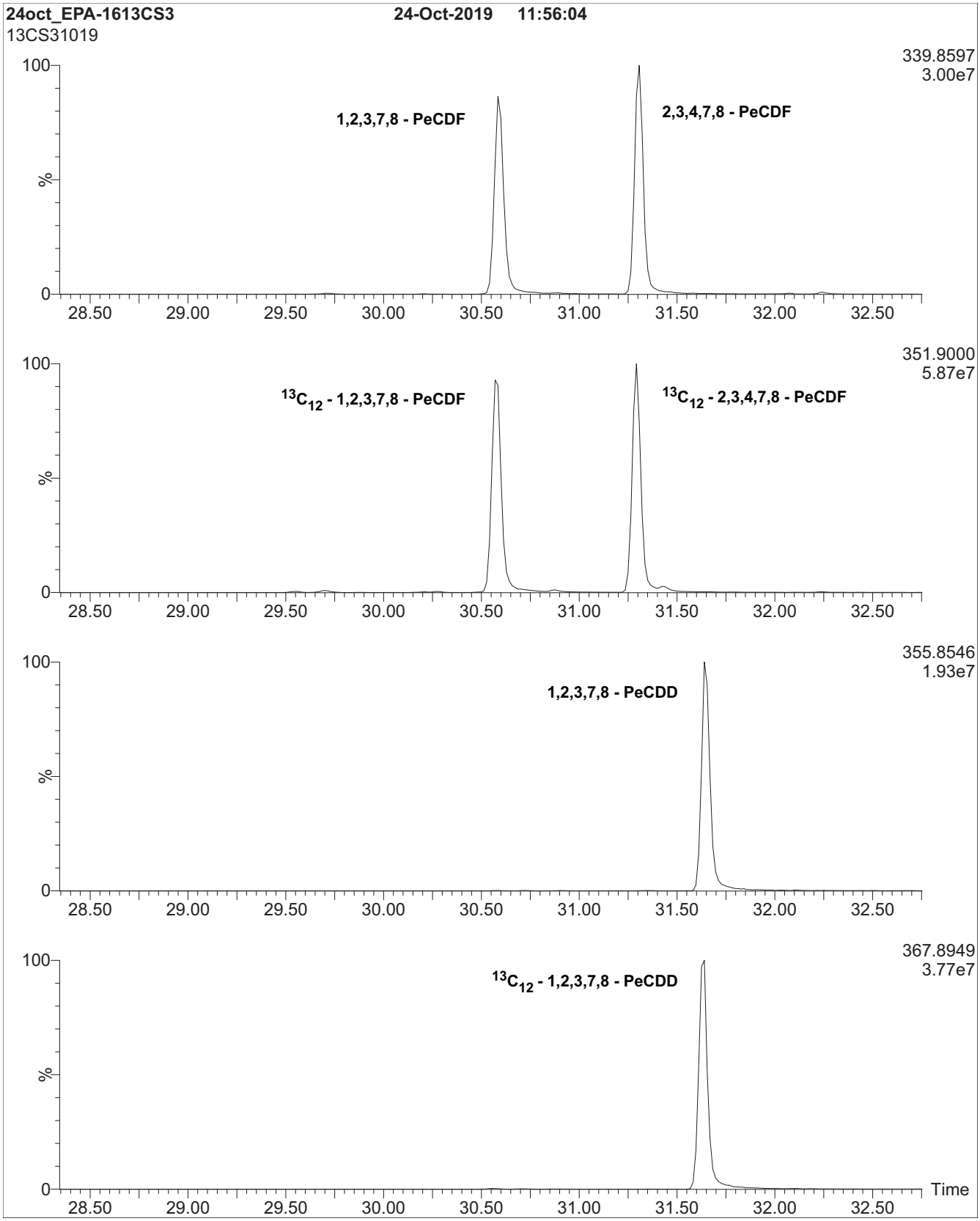


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

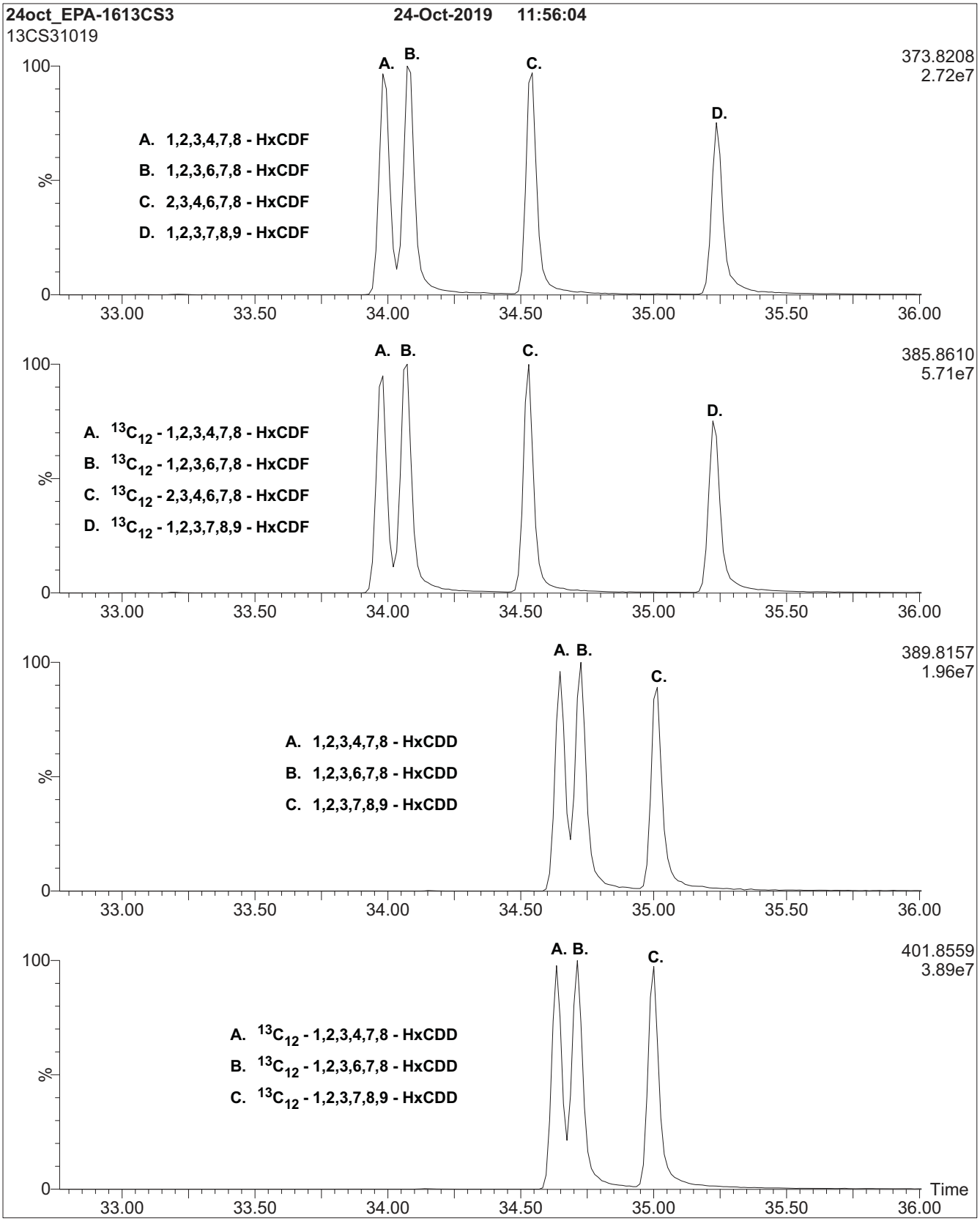


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

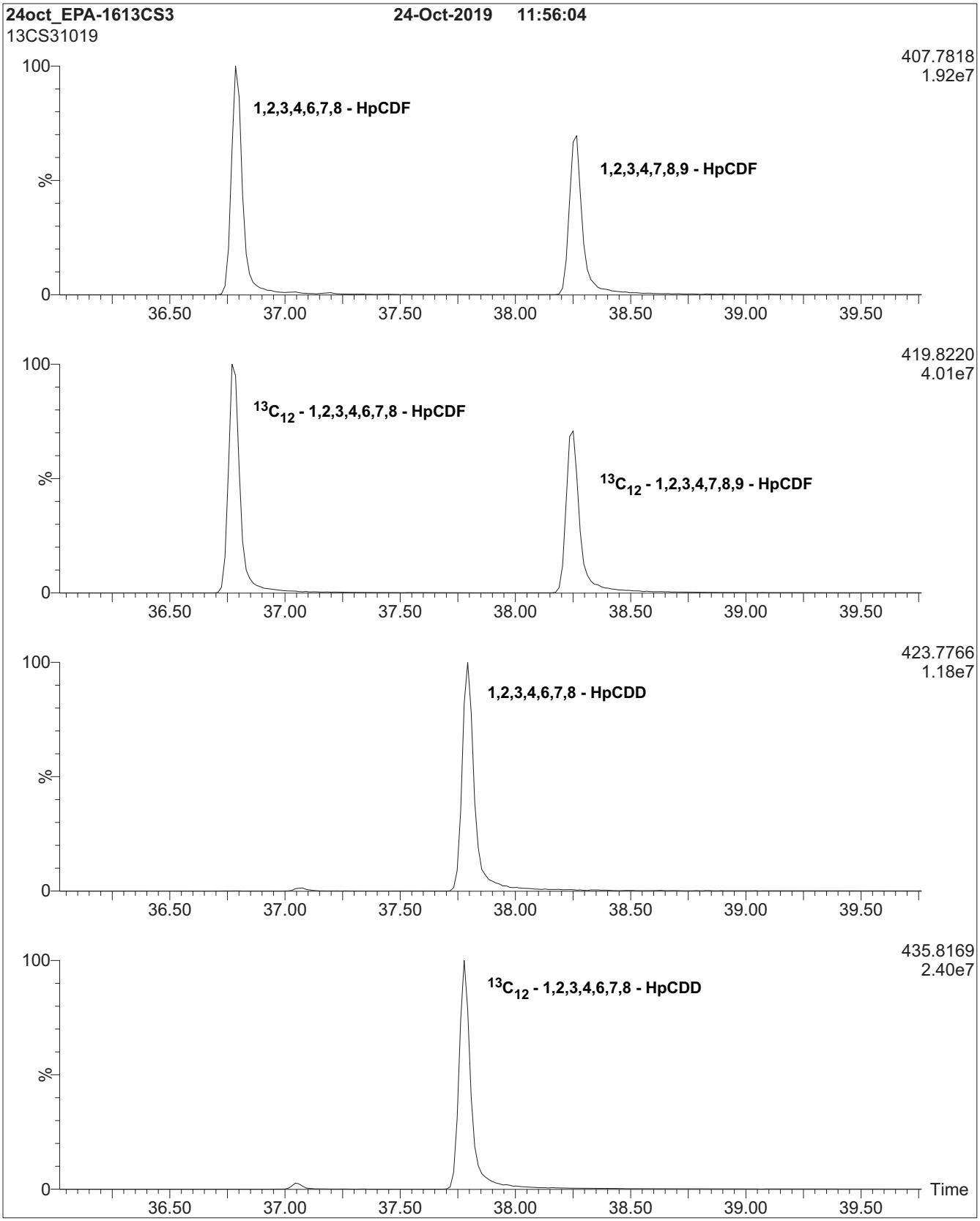
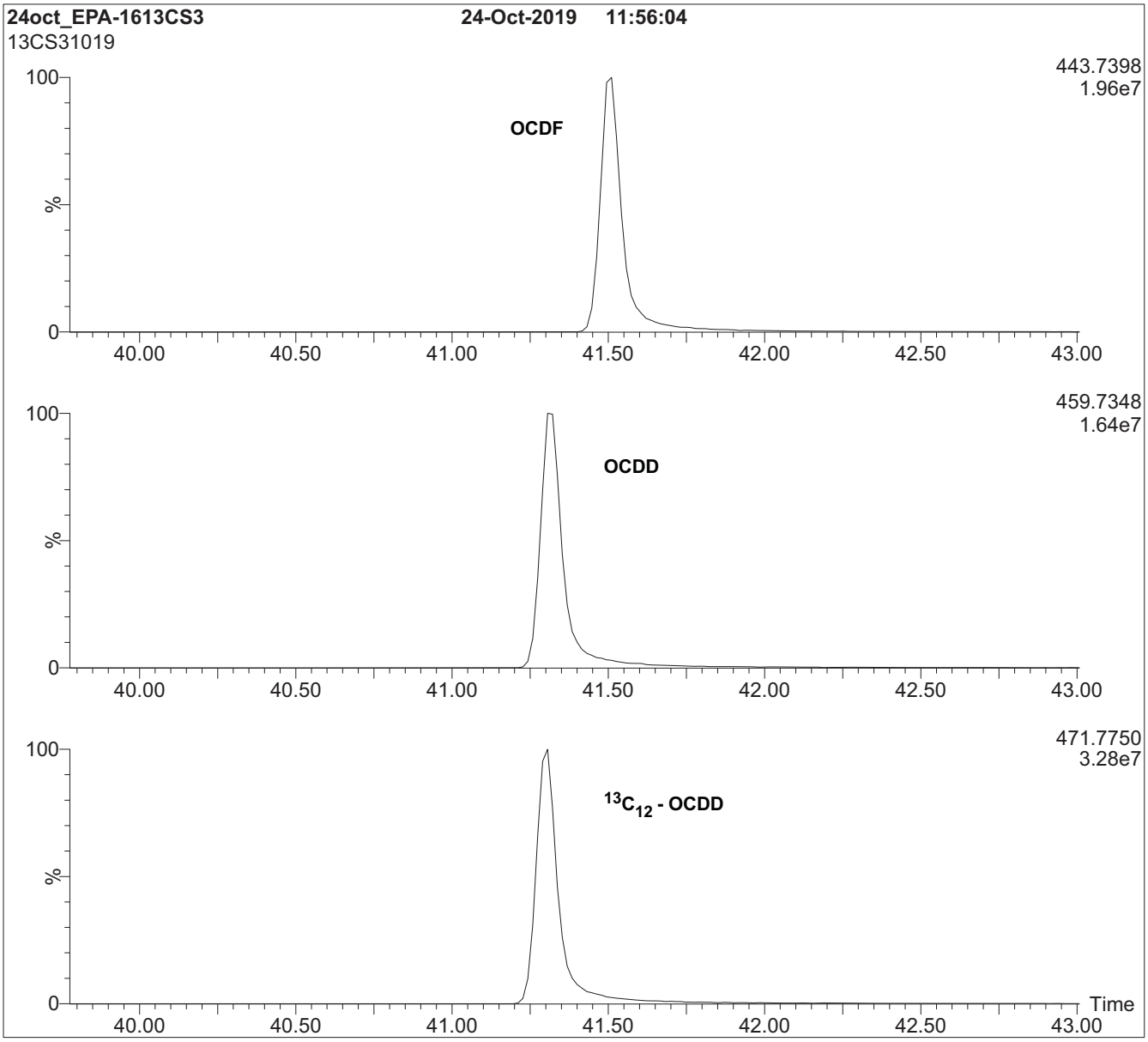


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow: Constant at 1 ml/min
Injector: 280 °C (Splitless Injection)
Ionization: EI+
Detector: 280 °C
SIR at 10,000 mass resolving power

Oven: 150 °C (1 min)
12 °C/min to 200 °C
3 °C/min to 235 °C
235 °C (8 min)
8 °C/min to 310 °C
310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CVS

U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5

PRODUCT CODES:	EPA-1613CVS	**LOT NUMBERS:**	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/22/2019
LAST TESTED: (mm/dd/yyyy)	10/24/2019
EXPIRY DATE: (mm/dd/yyyy)	10/24/2026
RECOMMENDED STORAGE:	Store ampoules in a cool, dark place

I005459
1613 CS5 CAL STD
Expires 10/24/2026
Prepared By Joshua Rains 6/23/2020

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$ and $^{37}Cl_4$) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Table B: 5-point HRGC/HRMS Calibration and RRF Summary
Table C: 7-point HRGC/HRMS Calibration and RRF Summary
Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
Native PCDDs and PCDFs:	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CSL**	**CS0.5**
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By: _____ **Date:** 10/25/2019
(mm/dd/yyyy)
B.G. Chittim, General Manager

Table B: **EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

Table C: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); 7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

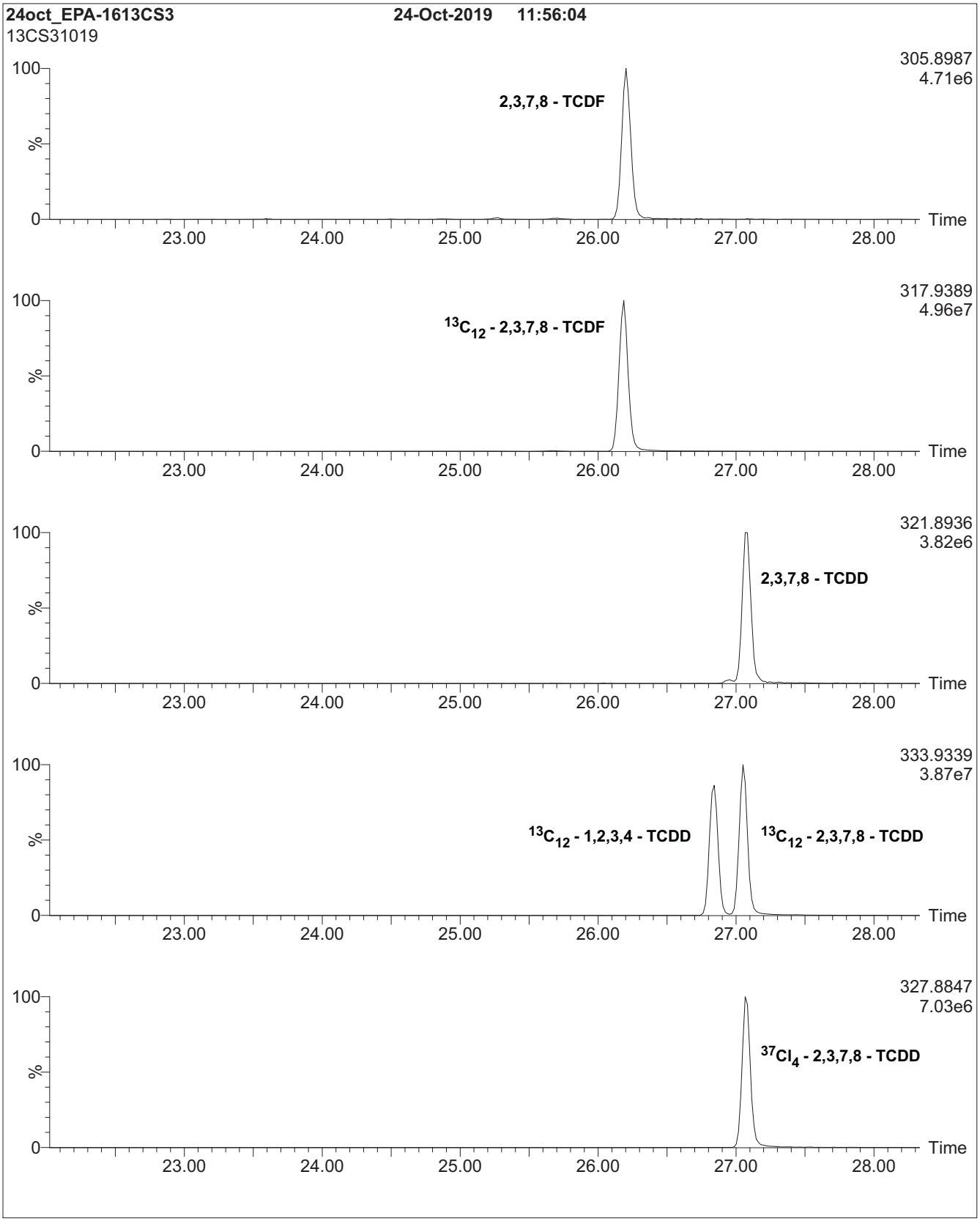


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

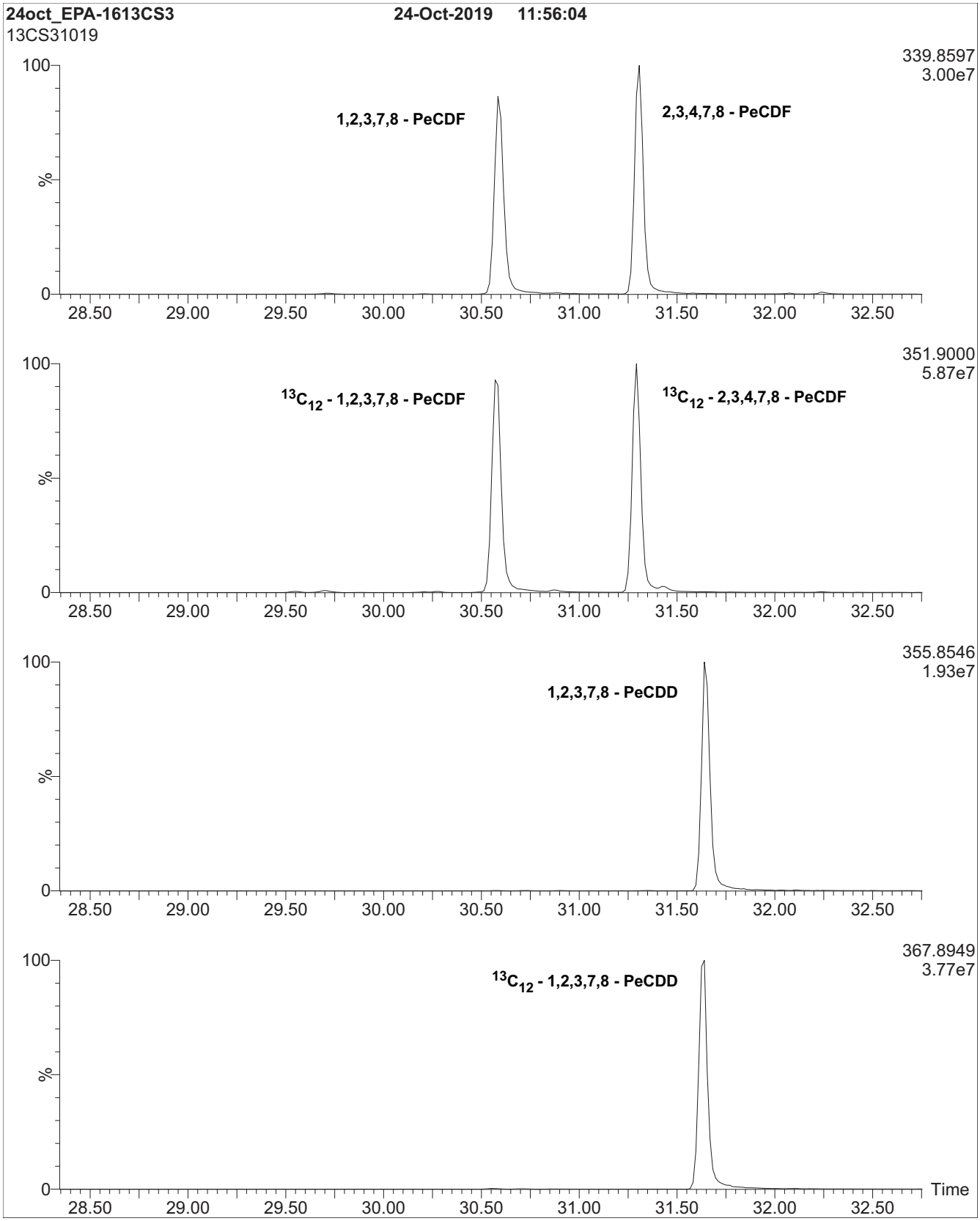


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

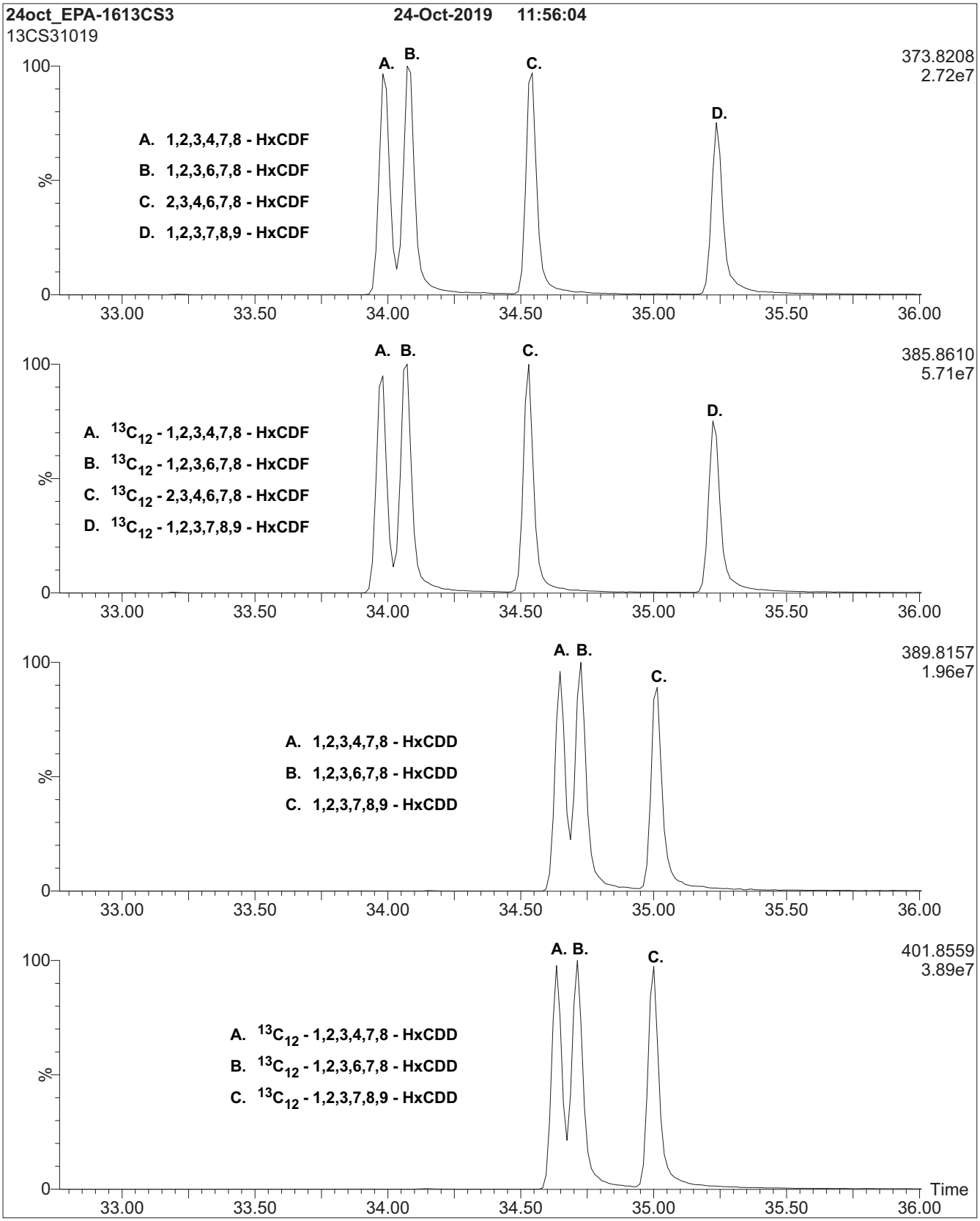


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

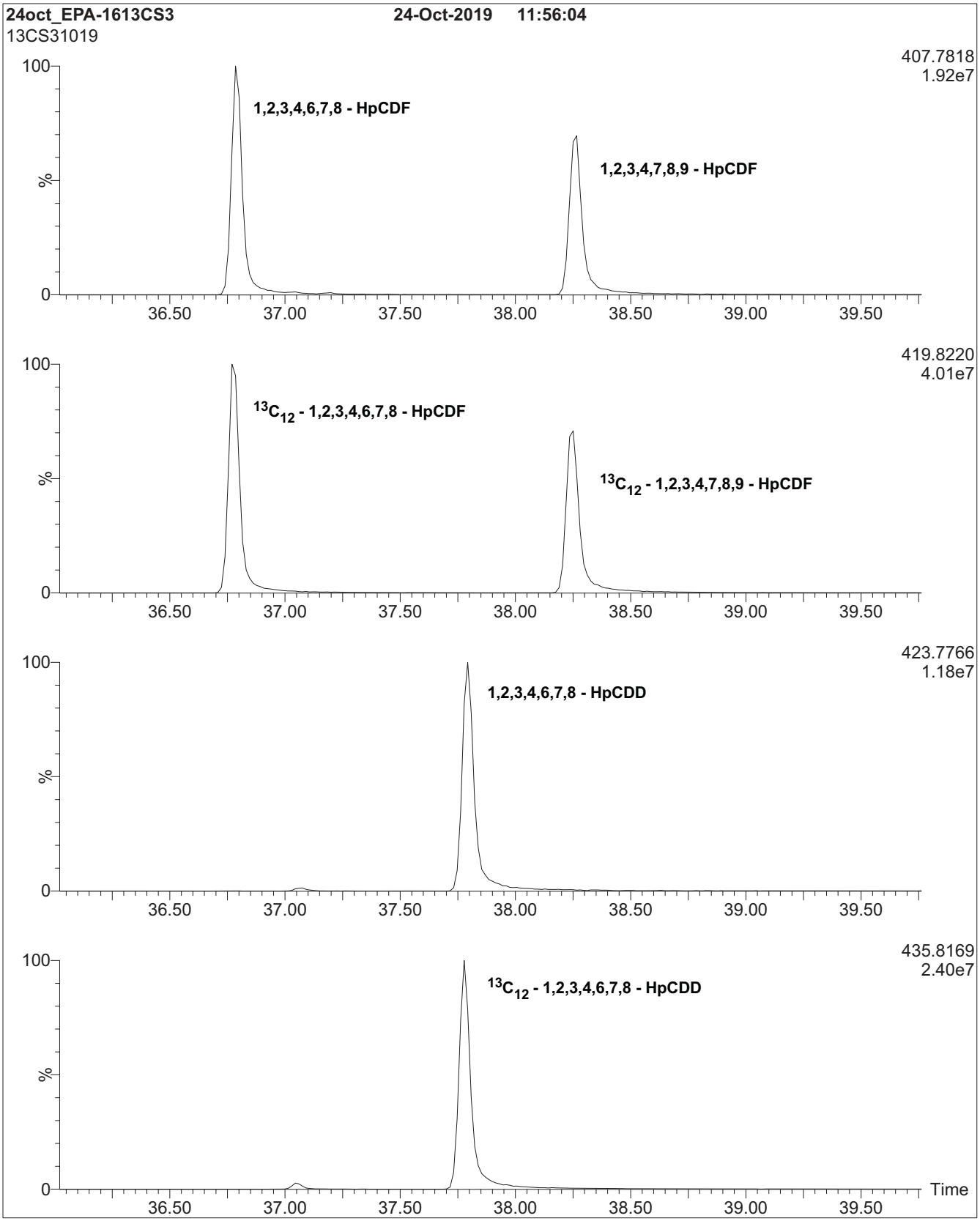
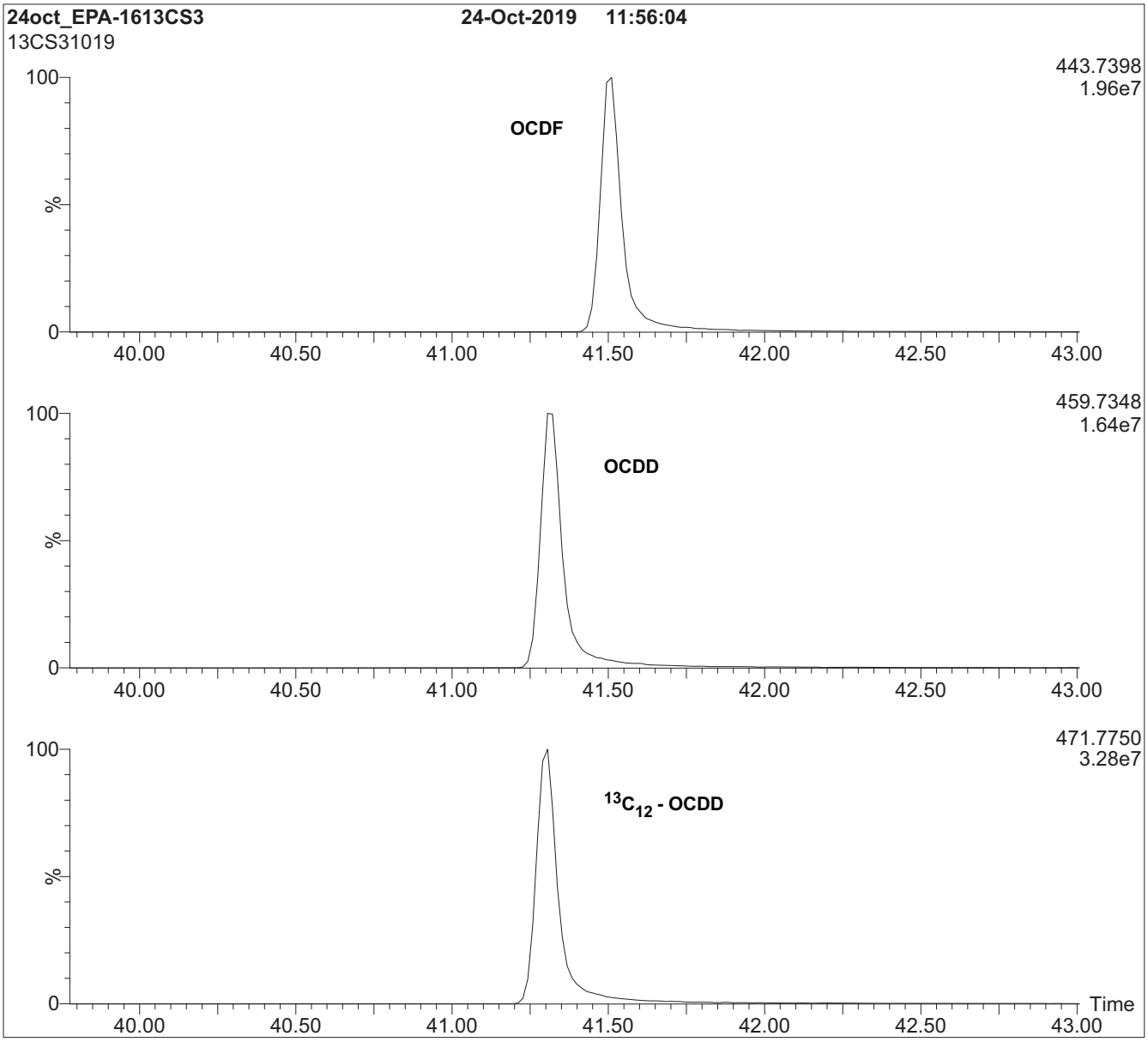


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow:	Constant at 1 ml/min	Oven:	150 °C (1 min)
Injector:	280 °C (Splitless Injection)		12 °C/min to 200 °C
Ionization:	EI+		3 °C/min to 235 °C
Detector:	280 °C		235 °C (8 min)
	SIR at 10,000 mass resolving power		8 °C/min to 310 °C
			310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CVS

U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5

PRODUCT CODES:	EPA-1613CVS	**LOT NUMBERS:**	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/22/2019
LAST TESTED: (mm/dd/yyyy)	10/24/2019
EXPIRY DATE: (mm/dd/yyyy)	10/24/2026
RECOMMENDED STORAGE:	Store ampoules in a cool, dark place

I005460
1613 CSL CAL STD
Expires 10/24/2026
Prepared By Joshua Rains 6/23/2020

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$ and $^{37}Cl_4$) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-$^{37}Cl_4$-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Table B: 5-point HRGC/HRMS Calibration and RRF Summary
Table C: 7-point HRGC/HRMS Calibration and RRF Summary
Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, ...x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

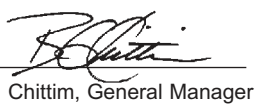
CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
Native PCDDs and PCDFs:	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CSL**	**CS0.5**
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
$^{13}C_{12}$-OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	100
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By:  **Date:** 10/25/2019
(mm/dd/yyyy)

B.G. Chittim, General Manager

Table B: **EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

Table C: **EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5); 7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
$^{13}C_{12}$-2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
$^{13}C_{12}$-1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
$^{13}C_{12}$-2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
$^{13}C_{12}$-2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
$^{13}C_{12}$-OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
$^{13}C_{12}$-1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$^{37}Cl_4$-2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

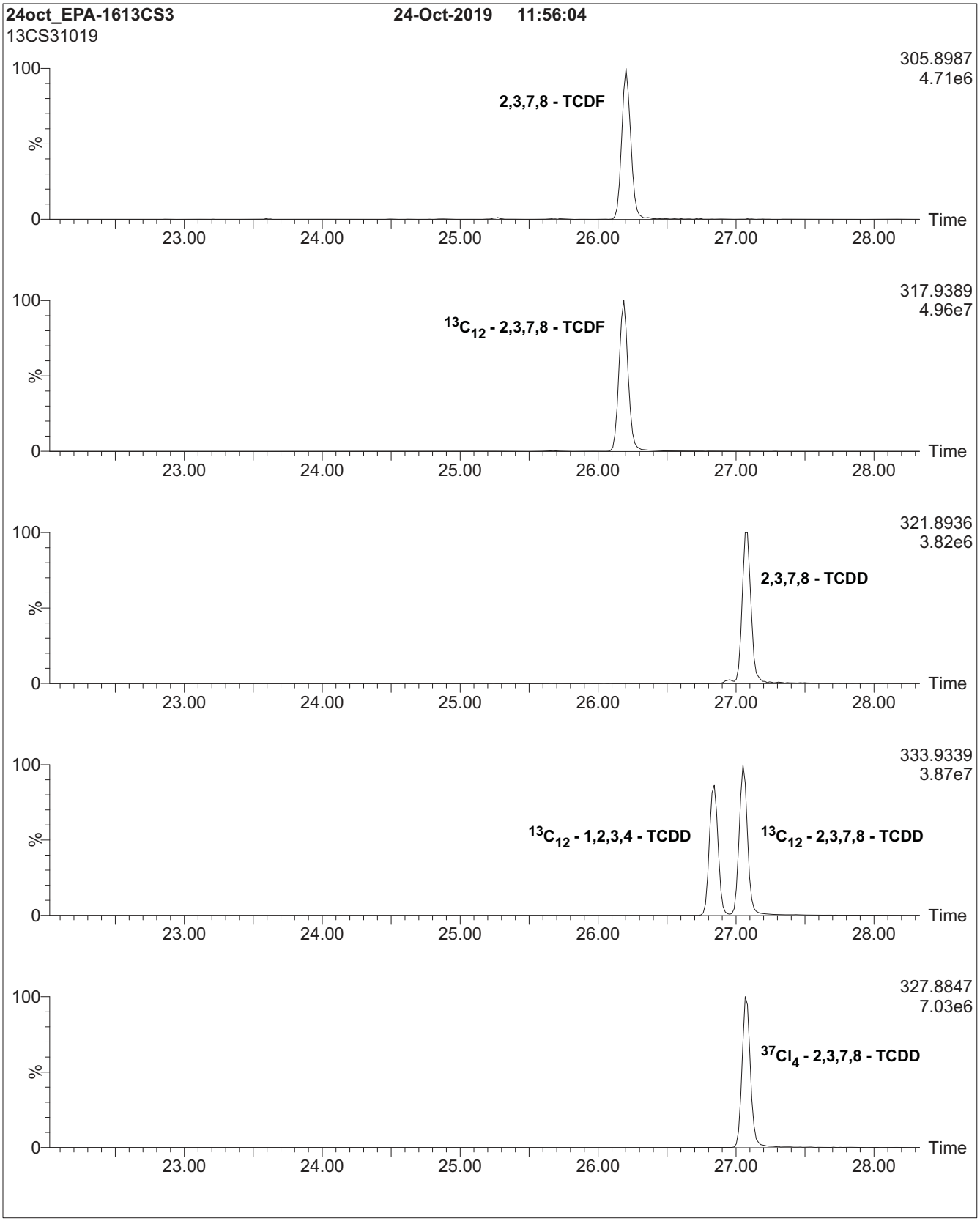


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

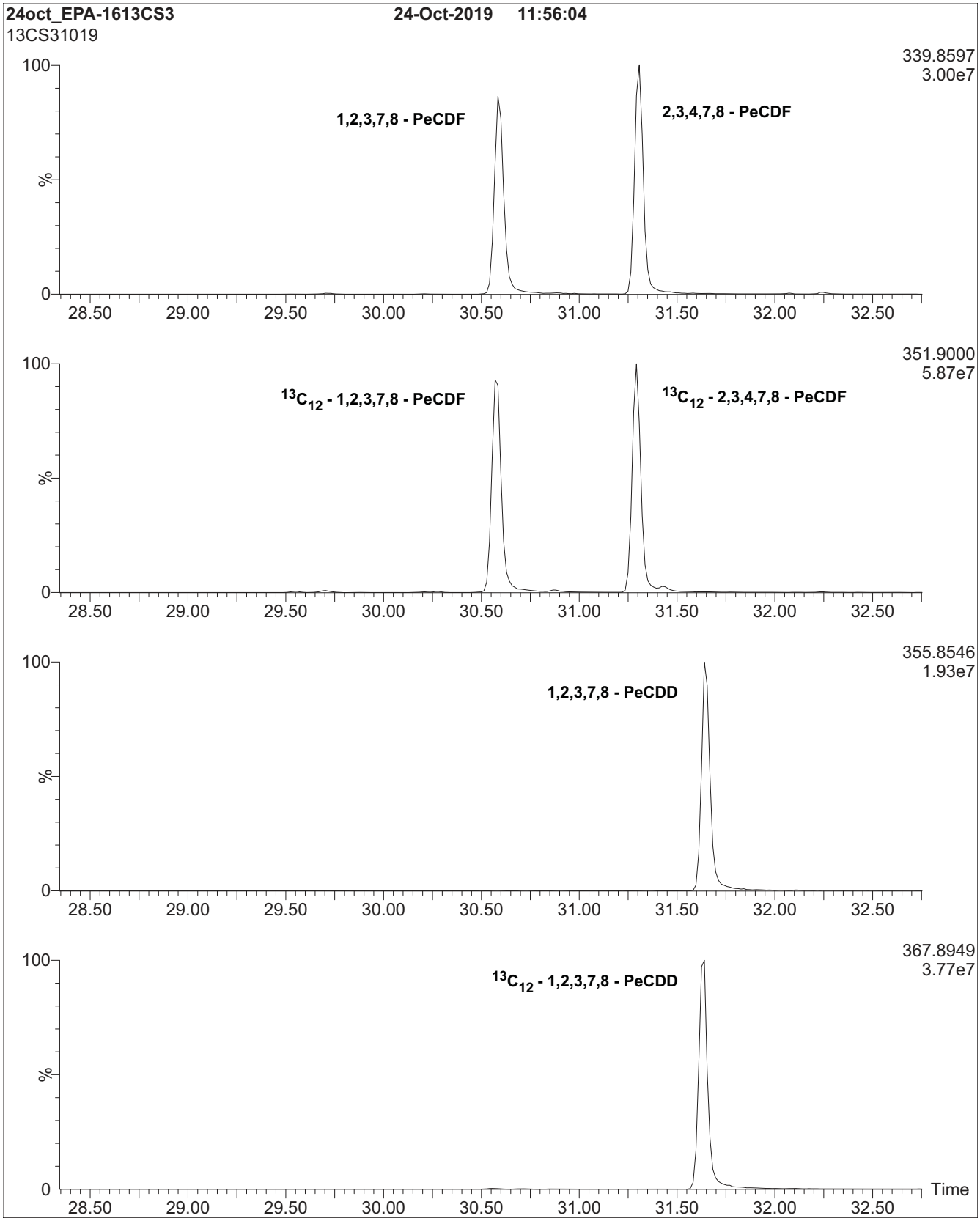


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**

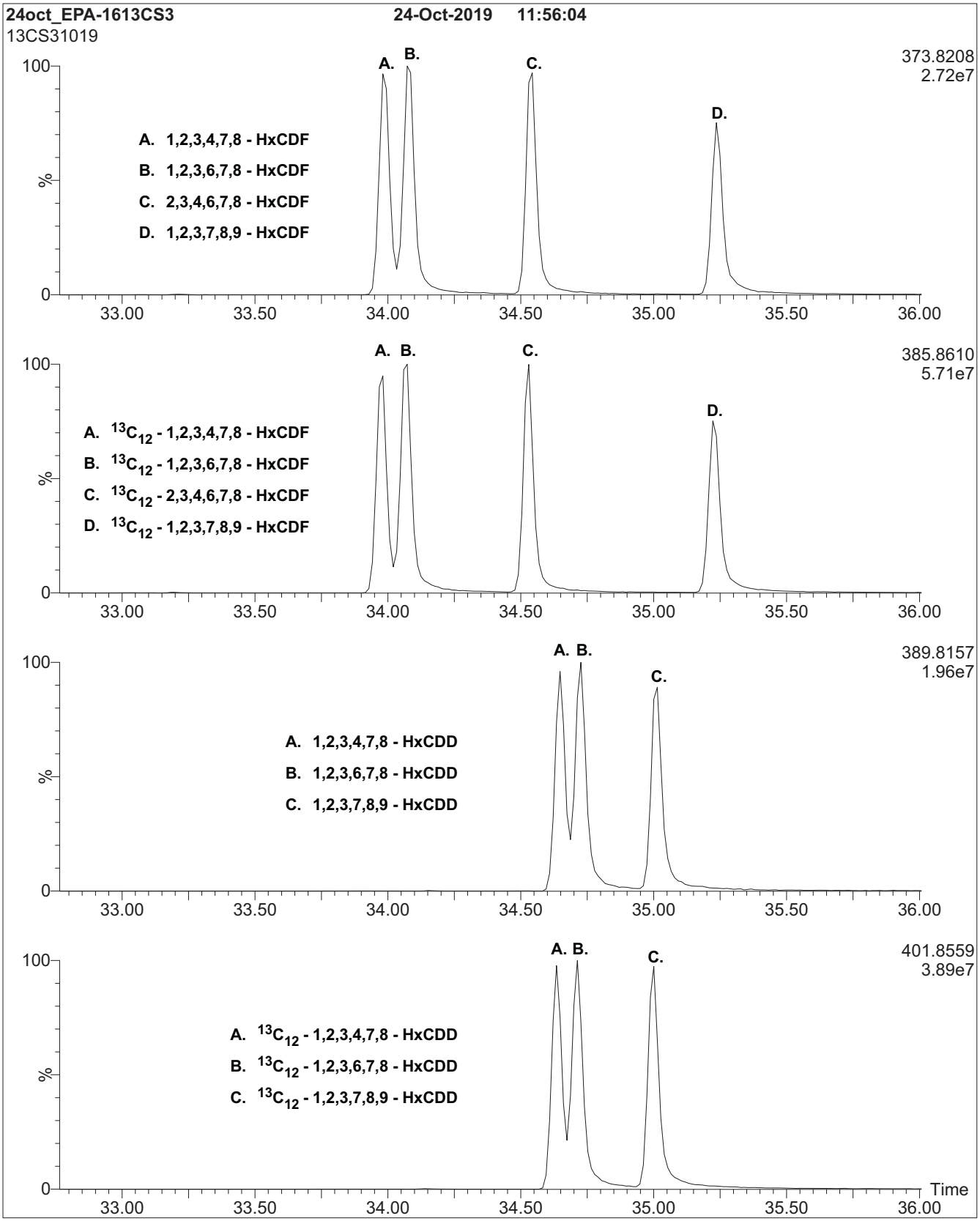
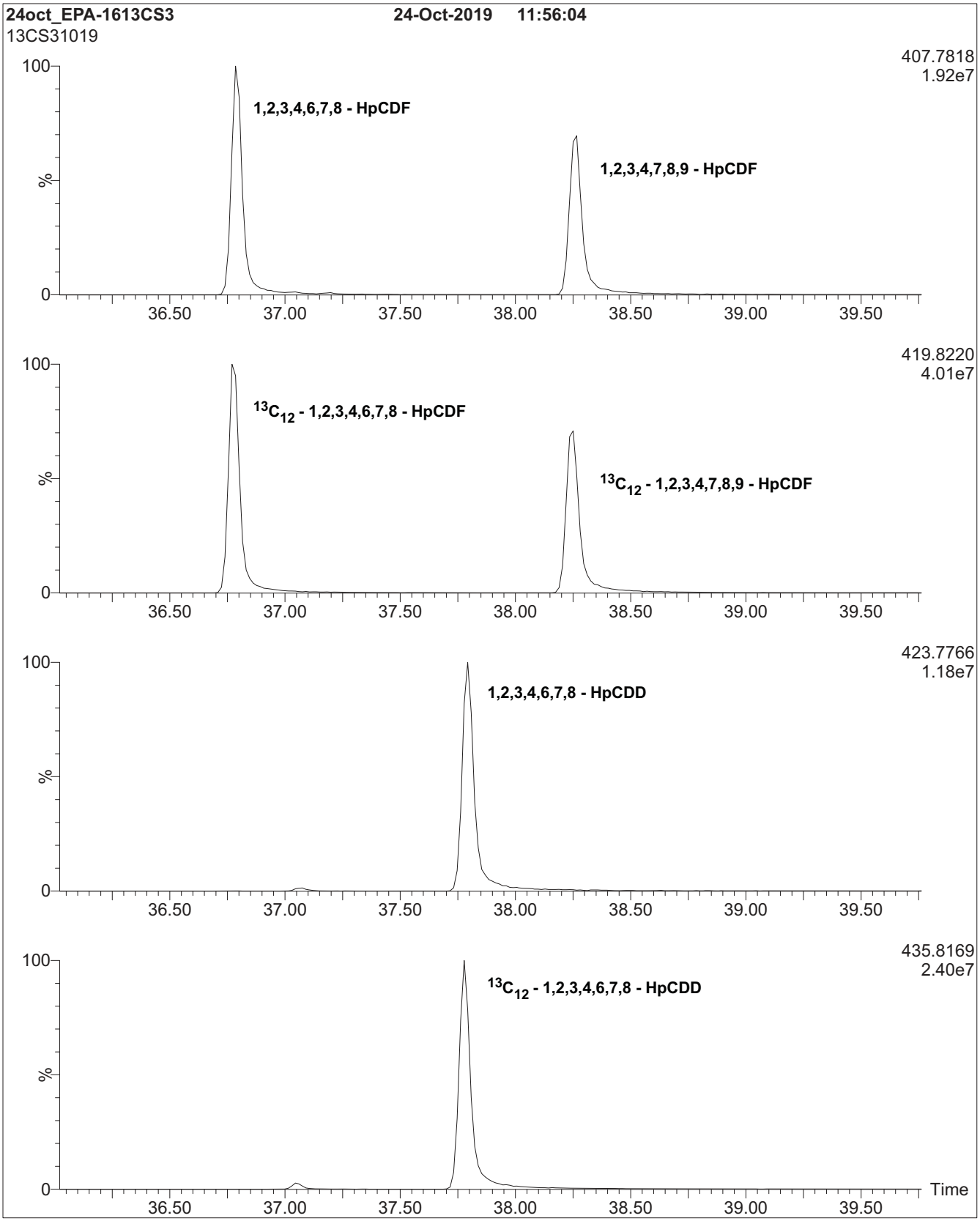


Figure 1: **EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)**



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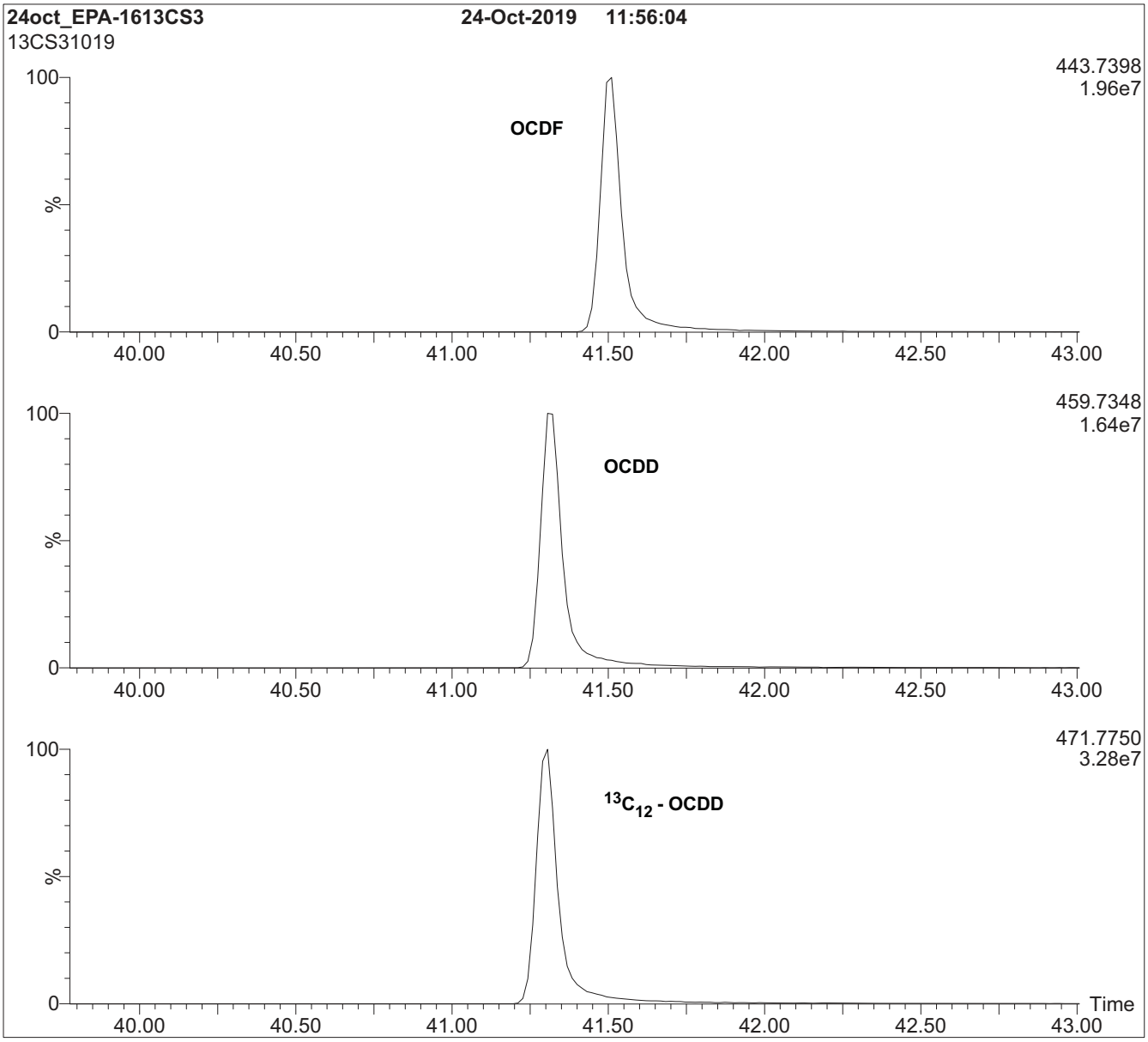

HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow: Constant at 1 ml/min
Injector: 280 °C (Splitless Injection)
Ionization: EI+
Detector: 280 °C
SIR at 10,000 mass resolving power

Oven: 150 °C (1 min)
12 °C/min to 200 °C
3 °C/min to 235 °C
235 °C (8 min)
8 °C/min to 310 °C
310 °C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

EPA-1613PAR

U.S. EPA Method 1613 Native PCDD/PCDF
Precision and Recovery Stock Solution

PRODUCT CODE:	EPA-1613PAR
LOT NUMBER:	13PAR1021
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/25/2021
LAST TESTED: (mm/dd/yyyy)	11/03/2021
EXPIRY DATE: (mm/dd/yyyy)	11/03/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

J013397
Read. JR
12/20/21

DESCRIPTION:

EPA-1613PAR is a solution/mixture of all the 2,3,7,8-substituted polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613PAR was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual PCDDs and PCDFs all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

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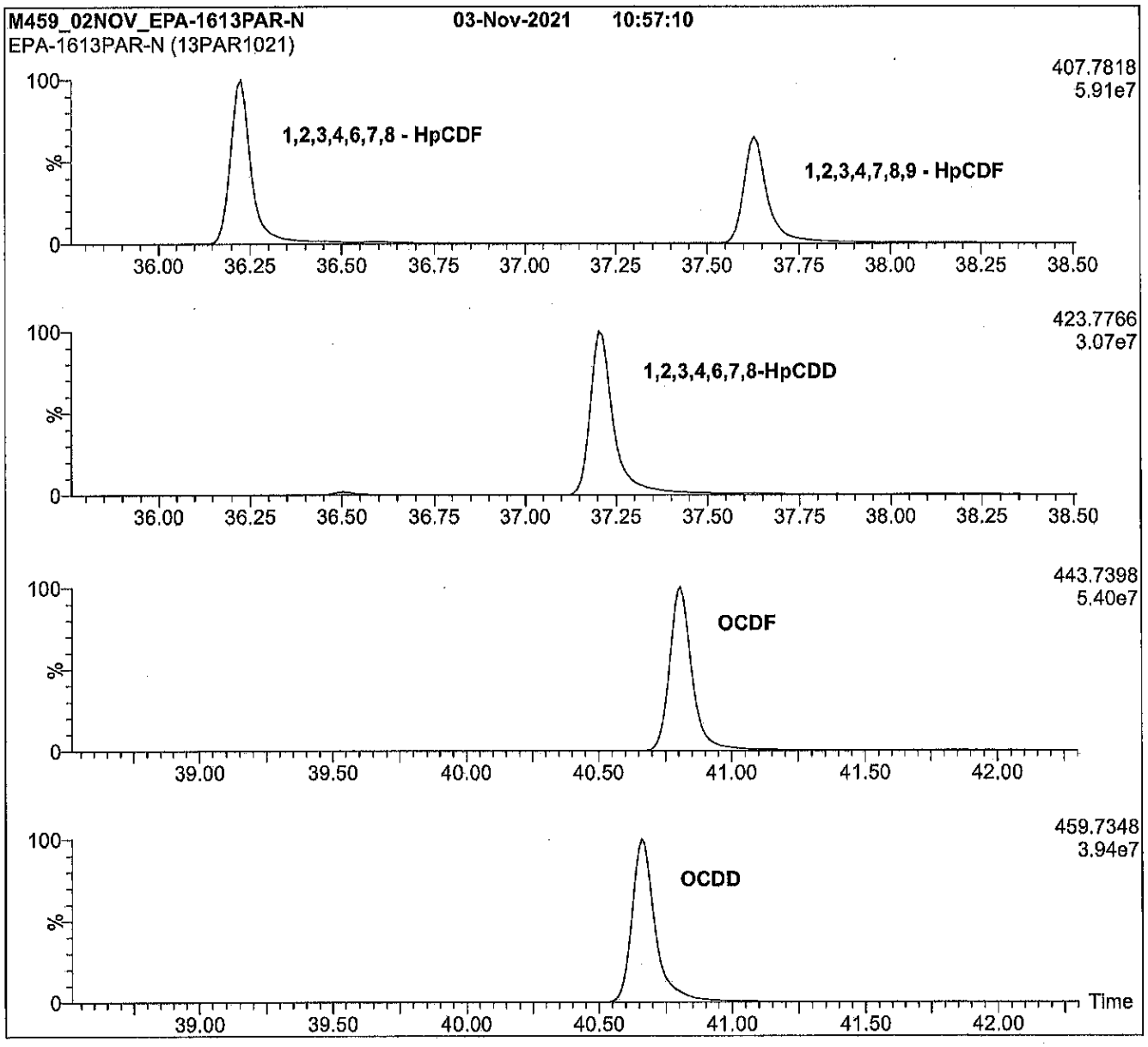
Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Table A: **EPA-1613PAR; Components and Concentrations (ng/mL, ± 5% in nonane/2.4% toluene)**

Compound	Acronym	CAS #	Concentration (ng/mL)
PCDDs:			
2,3,7,8-Tetrachlorodibenzo-*p*-dioxin	2,3,7,8-TCDD	1746-01-6	40.0
1,2,3,7,8-Pentachlorodibenzo-*p*-dioxin	1,2,3,7,8-PeCDD	40321-76-4	200
1,2,3,4,7,8-Hexachlorodibenzo-*p*-dioxin	1,2,3,4,7,8-HxCDD	39227-28-6	200
1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin	1,2,3,6,7,8-HxCDD	57653-85-7	200
1,2,3,7,8,9-Hexachlorodibenzo-*p*-dioxin	1,2,3,7,8,9-HxCDD	19408-74-3	200
1,2,3,4,6,7,8-Heptachlorodibenzo-*p*-dioxin	1,2,3,4,6,7,8-HpCDD	35822-46-9	200
Octachlorodibenzo-*p*-dioxin	OCDD	3268-87-9	400
PCDFs:			
2,3,7,8-Tetrachlorodibenzofuran	2,3,7,8-TCDF	51207-31-9	40.0
1,2,3,7,8-Pentachlorodibenzofuran	1,2,3,7,8-PeCDF	57117-41-6	200
2,3,4,7,8-Pentachlorodibenzofuran	2,3,4,7,8-PeCDF	57117-31-4	200
1,2,3,4,7,8-Hexachlorodibenzofuran	1,2,3,4,7,8-HxCDF	70648-26-9	200
1,2,3,6,7,8-Hexachlorodibenzofuran	1,2,3,6,7,8-HxCDF	57117-44-9	200
1,2,3,7,8,9-Hexachlorodibenzofuran	1,2,3,7,8,9-HxCDF	72918-21-9	200
2,3,4,6,7,8-Hexachlorodibenzofuran	2,3,4,6,7,8-HxCDF	60851-34-5	200
1,2,3,4,6,7,8-Heptachlorodibenzofuran	1,2,3,4,6,7,8-HpCDF	67562-39-4	200
1,2,3,4,7,8,9-Heptachlorodibenzofuran	1,2,3,4,7,8,9-HpCDF	55673-89-7	200
Octachlorodibenzofuran	OCDF	39001-02-0	400

Certified By: _____ **Date:** 11/05/2021
(mm/dd/yyyy)
B.G. Chittim, General Manager

Figure 1: **EPA-1613PAR; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613PAR

U.S. EPA Method 1613 Native PCDD/PCDF
Precision and Recovery Stock Solution

PRODUCT CODE:	EPA-1613PAR
LOT NUMBER:	13PAR1021
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/25/2021
LAST TESTED: (mm/dd/yyyy)	11/03/2021
EXPIRY DATE: (mm/dd/yyyy)	11/03/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

J013397
Recd. JR
12/20/21

DESCRIPTION:

EPA-1613PAR is a solution/mixture of all the 2,3,7,8-substituted polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613PAR was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual PCDDs and PCDFs all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

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Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613PAR; Components and Concentrations (ng/mL, ± 5% in nonane/2.4% toluene)**

Compound	Acronym	CAS #	Concentration (ng/mL)
PCDDs:			
2,3,7,8-Tetrachlorodibenzo-*p*-dioxin	2,3,7,8-TCDD	1746-01-6	40.0
1,2,3,7,8-Pentachlorodibenzo-*p*-dioxin	1,2,3,7,8-PeCDD	40321-76-4	200
1,2,3,4,7,8-Hexachlorodibenzo-*p*-dioxin	1,2,3,4,7,8-HxCDD	39227-28-6	200
1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin	1,2,3,6,7,8-HxCDD	57653-85-7	200
1,2,3,7,8,9-Hexachlorodibenzo-*p*-dioxin	1,2,3,7,8,9-HxCDD	19408-74-3	200
1,2,3,4,6,7,8-Heptachlorodibenzo-*p*-dioxin	1,2,3,4,6,7,8-HpCDD	35822-46-9	200
Octachlorodibenzo-*p*-dioxin	OCDD	3268-87-9	400
PCDFs:			
2,3,7,8-Tetrachlorodibenzofuran	2,3,7,8-TCDF	51207-31-9	40.0
1,2,3,7,8-Pentachlorodibenzofuran	1,2,3,7,8-PeCDF	57117-41-6	200
2,3,4,7,8-Pentachlorodibenzofuran	2,3,4,7,8-PeCDF	57117-31-4	200
1,2,3,4,7,8-Hexachlorodibenzofuran	1,2,3,4,7,8-HxCDF	70648-26-9	200
1,2,3,6,7,8-Hexachlorodibenzofuran	1,2,3,6,7,8-HxCDF	57117-44-9	200
1,2,3,7,8,9-Hexachlorodibenzofuran	1,2,3,7,8,9-HxCDF	72918-21-9	200
2,3,4,6,7,8-Hexachlorodibenzofuran	2,3,4,6,7,8-HxCDF	60851-34-5	200
1,2,3,4,6,7,8-Heptachlorodibenzofuran	1,2,3,4,6,7,8-HpCDF	67562-39-4	200
1,2,3,4,7,8,9-Heptachlorodibenzofuran	1,2,3,4,7,8,9-HpCDF	55673-89-7	200
Octachlorodibenzofuran	OCDF	39001-02-0	400

Certified By: _____ **Date:** 11/05/2021
(mm/dd/yyyy)
B.G. Chittim, General Manager

Figure 1: **EPA-1613PAR; HRGC/HRMS Data (60 m DB-5 Column)**

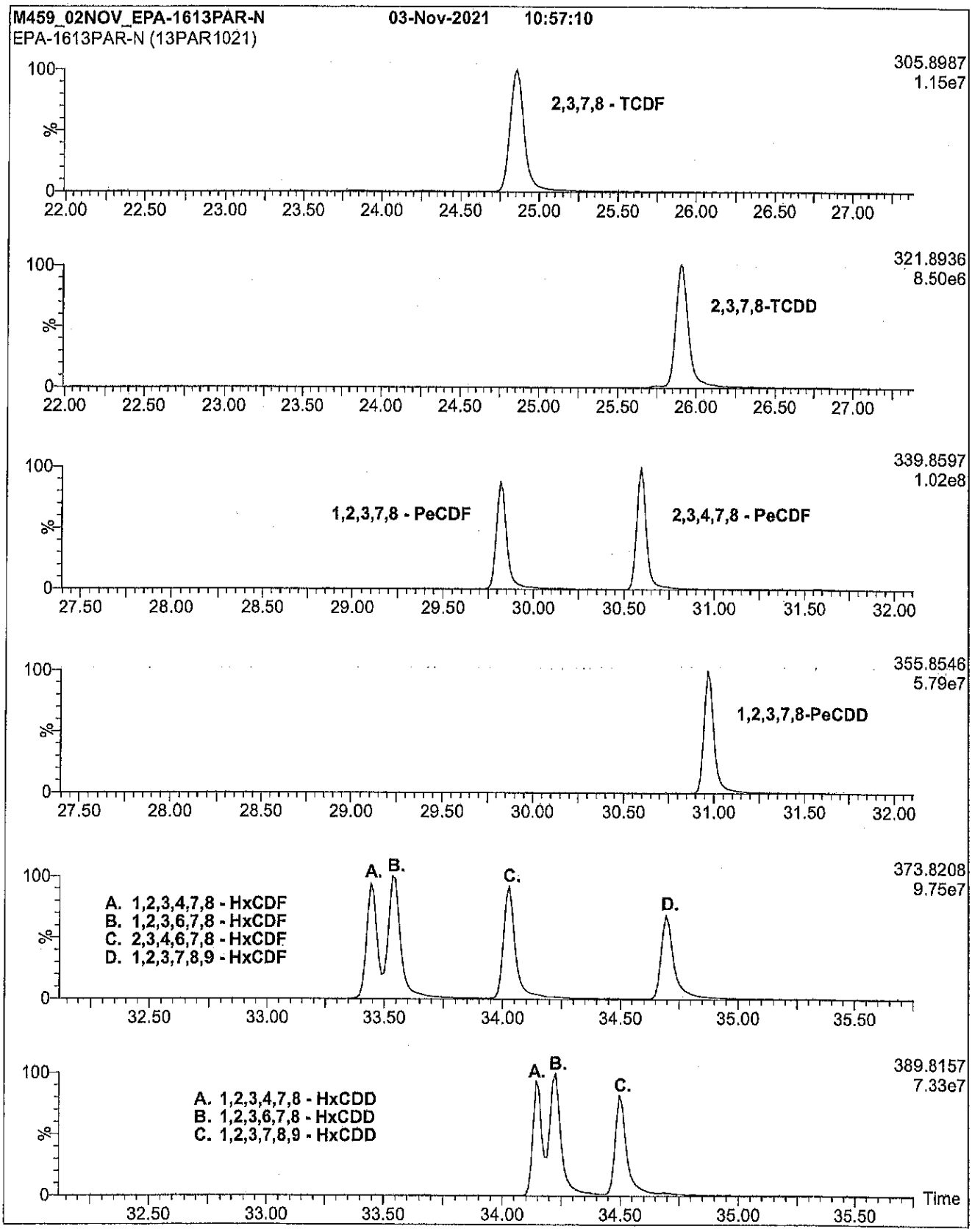
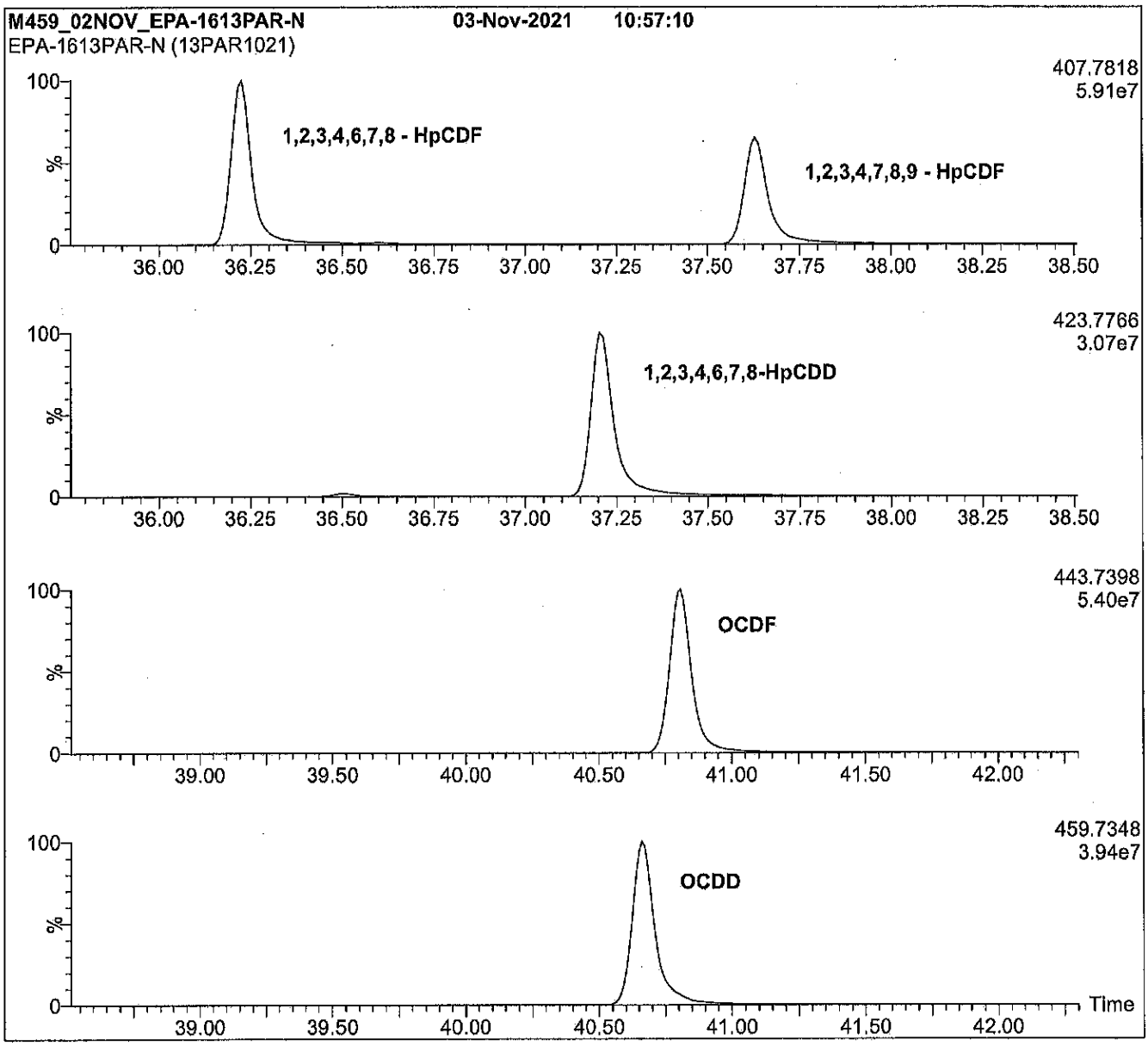


Figure 1: **EPA-1613PAR; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CSS

U.S. EPA Method 1613 Cleanup Standard Spiking Solution

PRODUCT CODE:	EPA-1613CSS
LOT NUMBER:	13CSS1021
SOLVENT(S):	Nonane
DATE PREPARED: (mm/dd/yyyy)	10/29/2021
LAST TESTED: (mm/dd/yyyy)	10/31/2021
EXPIRY DATE: (mm/dd/yyyy)	10/31/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION: K003104

EPA-1613CSS contains 2,3,7,8-($^{37}Cl_4$)tetrachlorodibenzo-*p*-dioxin at the concentration given in Table A.

EPA-1613CSS was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

2,3,7,8-($^{37}Cl_4$)Tetrachlorodibenzo-*p*-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

Table A: **EPA-1613CSS; Components and Concentrations (ng/mL, ± 5% in nonane)**

Compound	Acronym	CAS #	Concentration (ng/mL)
2,3,7,8-($^{37}Cl_4$)Tetrachlorodibenzo-*p*-dioxin	$^{37}Cl_4$-2,3,7,8-TCDD	85508-50-5	40.0

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Certified By: _____ **Date:** 11/05/2021 (mm/dd/yyyy)
B.G. Chittim, General Manager

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

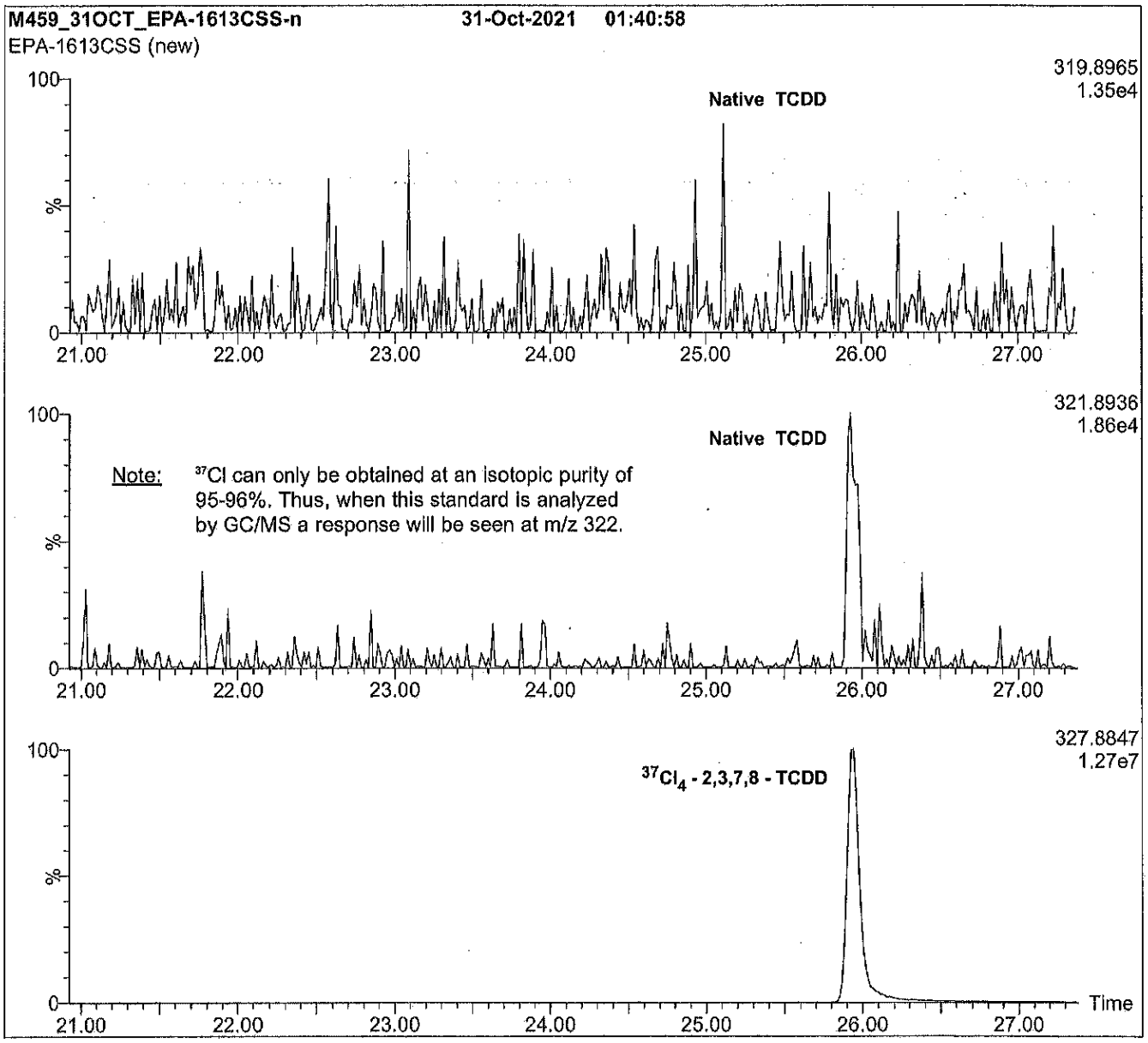
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **EPA-1613CSS; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

EPA-1613LCS

U.S. EPA Method 1613
Labelled Compound Stock Solution

PRODUCT CODE:	EPA-1613LCS
LOT NUMBER:	13LCS1021
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/29/2021
LAST TESTED: (mm/dd/yyyy)	10/31/2021
EXPIRY DATE: (mm/dd/yyyy)	10/31/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION: K3105

EPA-1613LCS is a solution/mixture of mass-labelled ($^{13}C_{12}$) polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613LCS was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

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Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613LCS; Components and Concentrations (ng/mL, ± 5% in nonane/3.2% toluene)**

Compound	Acronym	CAS #	Concentration (ng/mL)
Mass-Labelled PCDDs:			
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-2,3,7,8-TCDD	76523-40-5	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,7,8-PeCDD	109719-79-1	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	109719-80-4	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	109719-81-5	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	109719-83-7	100
Octachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-OCDD	114423-97-1	200
Mass-Labelled PCDFs:			
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,7,8-TCDF	89059-46-1	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,7,8-PeCDF	109719-77-9	100
2,3,4,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,4,7,8-PeCDF	116843-02-8	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	114423-98-2	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	116843-03-9	100
1,2,3,7,8,9-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	116843-04-0	100
2,3,4,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	116843-05-1	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	109719-84-8	100
1,2,3,4,7,8,9-Heptachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	109719-94-0	100

Certified By: _____ **Date:** 11/05/2021
(mm/dd/yyyy)
B.G. Chittim, General Manager

Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

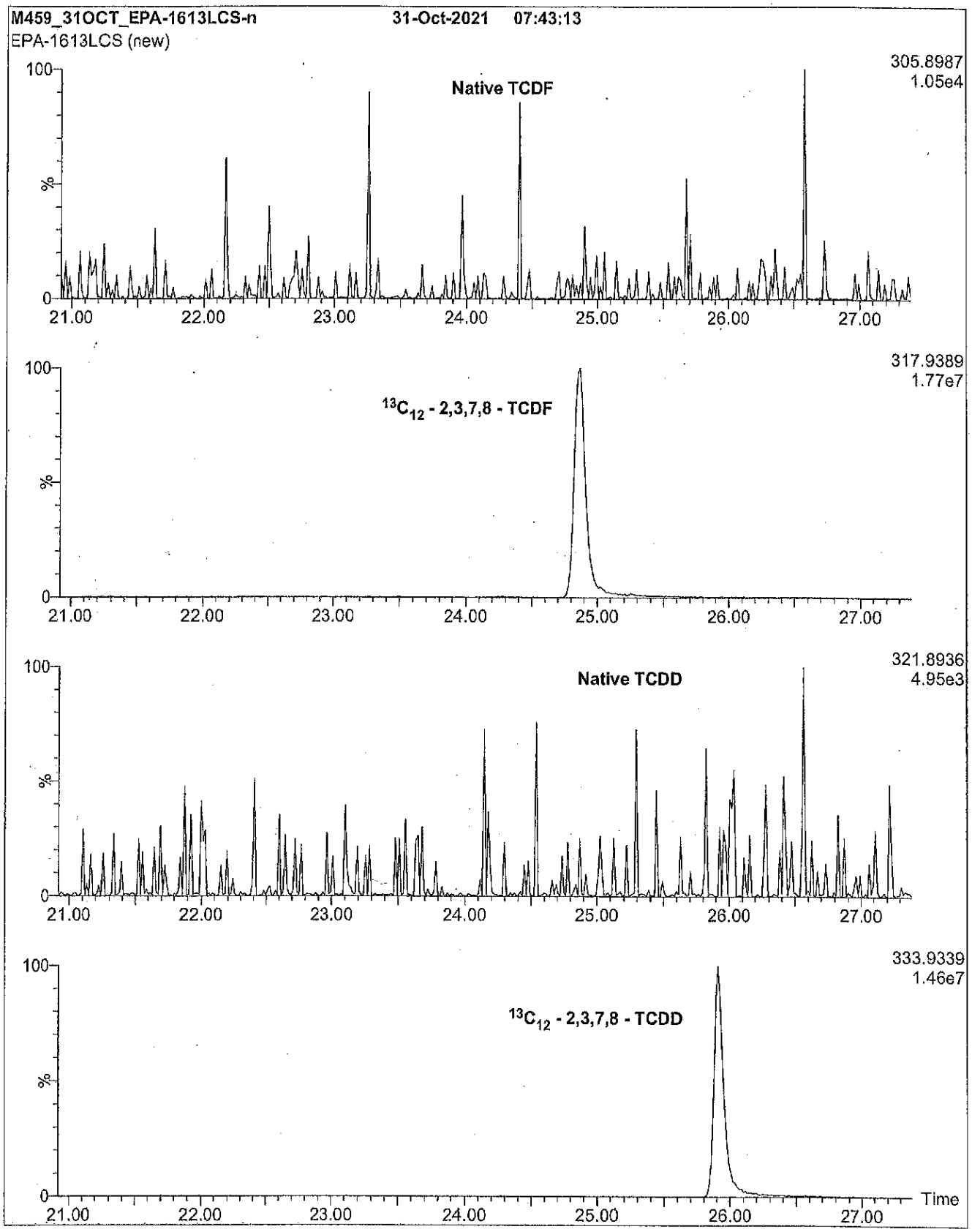


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

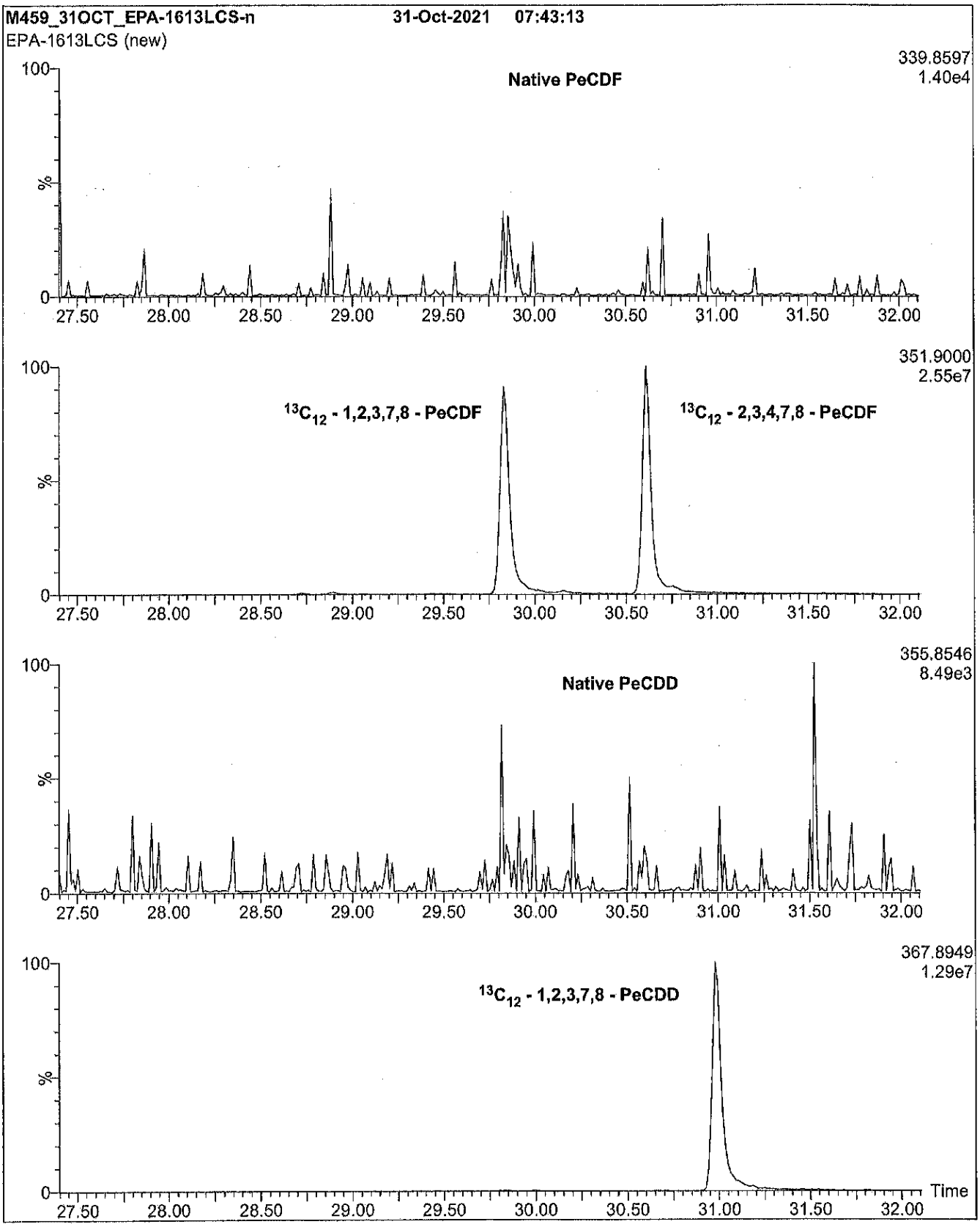


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

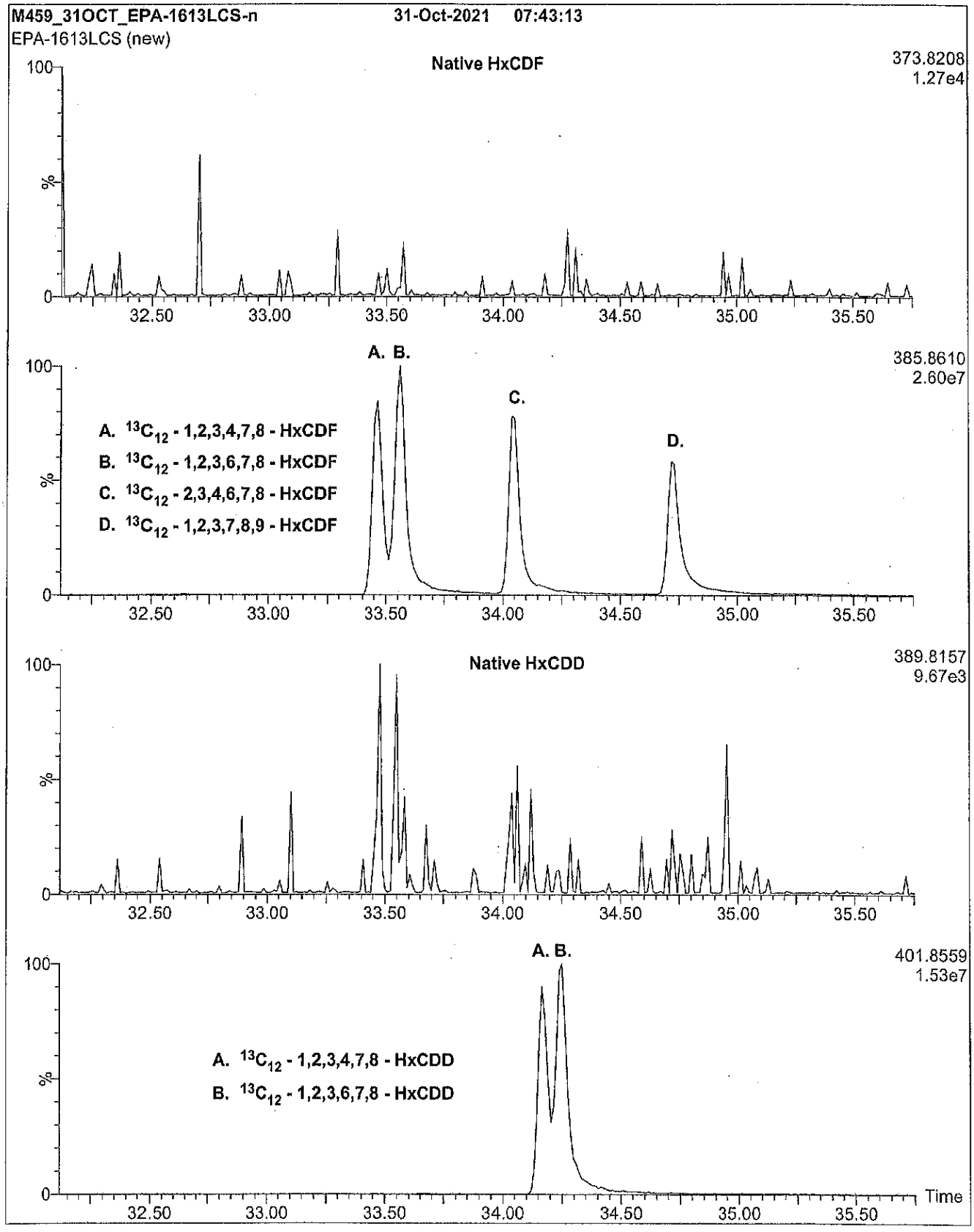


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

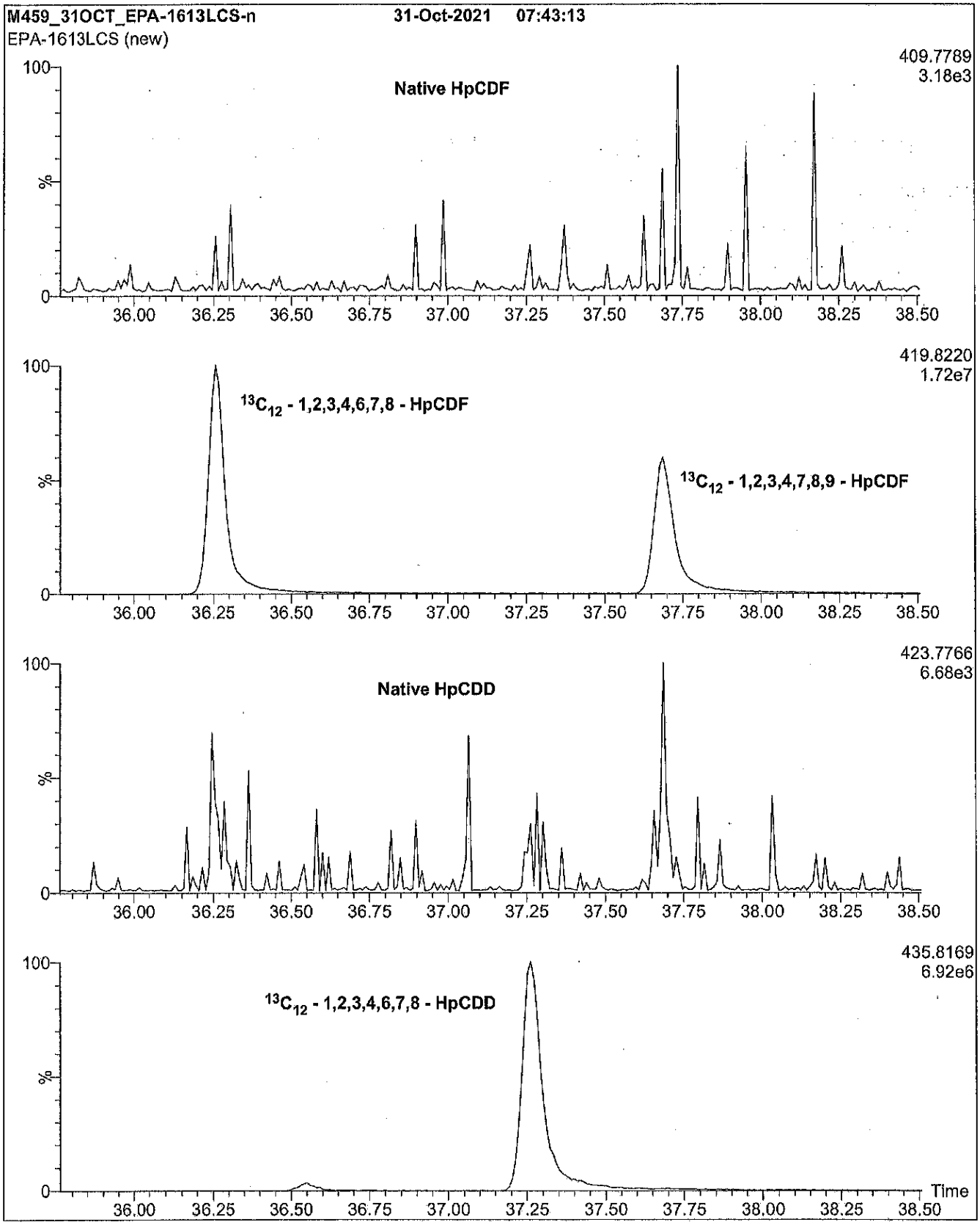
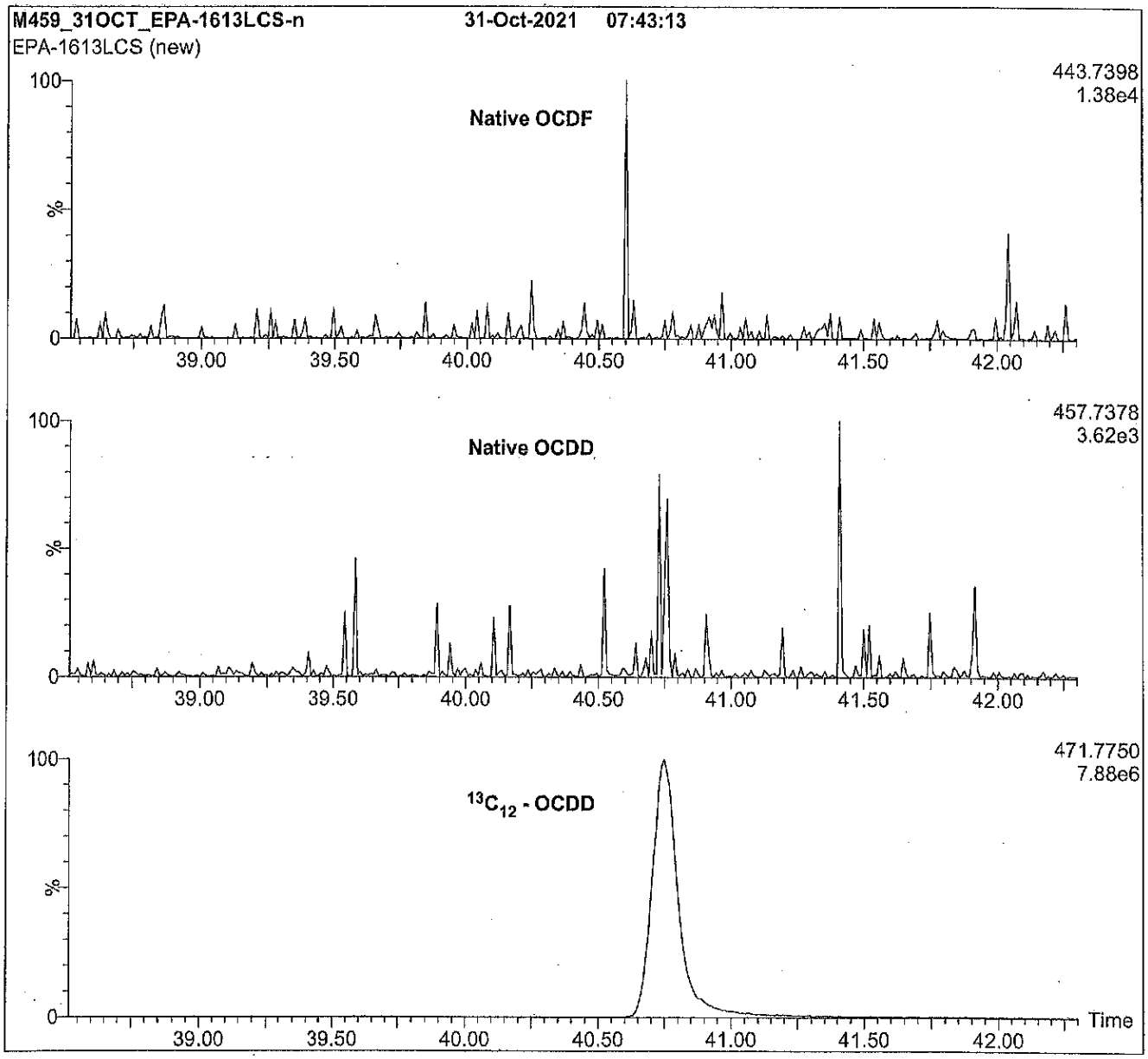


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

K9821

CS3WT

Calibration and Verification Solution (EPA-1613CS3) combined with Window Defining and 2,3,7,8-TCDD Resolution Testing Congeners

PRODUCT CODE:	CS3WT
LOT NUMBER:	CS3WT1021
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	11/01/2021
LAST TESTED: (mm/dd/yyyy)	11/02/2021
EXPIRY DATE: (mm/dd/yyyy)	11/02/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION:

CS3WT is a solution/mixture of native ($^{12}C_{12}$) and mass-labelled ($^{13}C_{12}$) polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Tables A and B.

CS3WT is an HRGC/HRMS calibration solution that was designed and prepared to be used according to U.S. EPA Method 1613, Revision B, in place of EPA-1613CS3 (lot: 13CS31021). Additionally, it contains the PCDD and PCDF isomers required to set retention time windows as well as test and establish isomer specificity for 2,3,7,8-TCDD on a DB-5 (or equivalent) capillary column.

The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-($^{37}Cl_4$)tetrachlorodibenzo-*p*-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%. The individual native 2,3,7,8-substituted PCDD and PCDF congeners all have chemical purities of >98%; the other congeners (window defining and resolution testing) should only be considered semi-quantitative.

This current lot of CS3WT is to be used with the 1613 calibration solutions having the following lot numbers:

PRODUCT CODE	LOT NUMBER
EPA-1613CS1	13CS11021
EPA-1613CS2	13CS21021
EPA-1613CS3	13CS31021
EPA-1613CS4	13CS41021
EPA-1613CS5	13CS51021
EPA-1613CSL	13CSL1021
EPA-1613CS0.5	13CS0.51021

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Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Form#:13, Issued 2004-11-10
Revision#:9, Revised 2020-12-23

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2,...x_n on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) has been assigned to the quantitative components in this product. A maximum combined percent relative uncertainty of ±20% has been assigned to the semi-quantitative components in this product.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **CS3WT; Quantitative Components and Concentrations (ng/mL, ± 5%, in nonane/4.5% toluene)**

Compound		Acronym	CAS #	Concentration (ng/mL)
Native PCDDs:	**Designation[a]**			
2,3,7,8-Tetrachlorodibenzo-*p*-dioxin		2,3,7,8-TCDD	1746-01-6	10.0
1,2,3,7,8-Pentachlorodibenzo-*p*-dioxin		1,2,3,7,8-PeCDD	40321-76-4	50.0
1,2,3,4,7,8-Hexachlorodibenzo-*p*-dioxin		1,2,3,4,7,8-HxCDD	39227-28-6	50.0
1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin		1,2,3,6,7,8-HxCDD	57653-85-7	50.0
1,2,3,7,8,9-Hexachlorodibenzo-*p*-dioxin	Last HxCDD[b]	1,2,3,7,8,9-HxCDD	19408-74-3	50.0
1,2,3,4,6,7,8-Heptachlorodibenzo-*p*-dioxin	Last HpCDD	1,2,3,4,6,7,8-HpCDD	35822-46-9	50.0
Octachlorodibenzo-*p*-dioxin		OCDD	3268-87-9	100
Native PCDFs:	**Designation[a]**			
2,3,7,8-Tetrachlorodibenzofuran		2,3,7,8-TCDF	51207-31-9	10.0
1,2,3,7,8-Pentachlorodibenzofuran		1,2,3,7,8-PeCDF	57117-41-6	50.0
2,3,4,7,8-Pentachlorodibenzofuran		2,3,4,7,8-PeCDF	57117-31-4	50.0
1,2,3,4,7,8-Hexachlorodibenzofuran		1,2,3,4,7,8-HxCDF	70648-26-9	50.0
1,2,3,6,7,8-Hexachlorodibenzofuran		1,2,3,6,7,8-HxCDF	57117-44-9	50.0
1,2,3,7,8,9-Hexachlorodibenzofuran		1,2,3,7,8,9-HxCDF	72918-21-9	50.0
2,3,4,6,7,8-Hexachlorodibenzofuran		2,3,4,6,7,8-HxCDF	60851-34-5	50.0
1,2,3,4,6,7,8-Heptachlorodibenzofuran	First HpCDF[c]	1,2,3,4,6,7,8-HpCDF	67562-39-4	50.0
1,2,3,4,7,8,9-Heptachlorodibenzofuran	Last HpCDF	1,2,3,4,7,8,9-HpCDF	55673-89-7	50.0
Octachlorodibenzofuran		OCDF	39001-02-0	100
Mass-Labelled PCDDs:				
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-2,3,7,8-TCDD	76523-40-5	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,7,8-PeCDD	109719-79-1	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	109719-80-4	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	109719-81-5	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	109719-83-7	100
Octachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-OCDD	114423-97-1	200
Mass-Labelled PCDFs:				
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-2,3,7,8-TCDF	89059-46-1	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,7,8-PeCDF	109719-77-9	100
2,3,4,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-2,3,4,7,8-PeCDF	116843-02-8	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	114423-98-2	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	116843-03-9	100
1,2,3,7,8,9-Hexachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	116843-04-0	100
2,3,4,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	116843-05-1	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	109719-84-8	100
1,2,3,4,7,8,9-Heptachloro($^{13}C_{12}$)dibenzofuran		$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	109719-94-0	100
Cleanup Standard:				
2,3,7,8-($^{37}Cl_4$)Tetrachlorodibenzo-*p*-dioxin		$^{37}Cl_4$-2,3,7,8-TCDD	85508-50-5	10.0
Internal Standards:				
1,2,3,4-Tetrachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,4-TCDD	114423-99-3	100
1,2,3,7,8,9-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin		$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	109719-82-6	100

[a] First/Last eluting isomer for the specified homologue group (see Table B for additional Window Definers).
[b, c] – see Table B for footnote.

Table B: **CS3WT; Semi-Quantitative Components and Concentrations (ng/mL, ± 20%, in nonane/4.5% toluene)**

Compound		Acronym	CAS #	Concentration (ng/mL)
PCDD Window Definers:	**Designation[a]**			
1,3,6,8-Tetrachlorodibenzo-*p*-dioxin	First TCDD	1,3,6,8-TCDD	33423-92-6	10.0
1,2,8,9-Tetrachlorodibenzo-*p*-dioxin	Last TCDD	1,2,8,9-TCDD	62470-54-6	10.0
1,2,4,6,8-/1,2,4,7,9-Pentachlorodibenzo-*p*-dioxin	First PeCDD	1,2,4,6,8-PeCDD 1,2,4,7,9-PeCDD	71998-76-0 82291-37-0	50.0[d]
1,2,3,8,9-Pentachlorodibenzo-*p*-dioxin	Last PeCDD	1,2,3,8,9-PeCDD	71925-18-3	50.0
1,2,4,6,7,9-Hexachlorodibenzo-*p*-dioxin	First HxCDD	1,2,4,6,7,9-HxCDD	39227-62-8	50.0
1,2,3,4,6,7,9-Heptachlorodibenzo-*p*-dioxin	First HpCDD	1,2,3,4,6,7,9-HpCDD	58200-70-7	50.0
PCDF Window Definers:	**Designation[a]**			
1,3,6,8-Tetrachlorodibenzofuran	First TCDF	1,3,6,8-TCDF	71998-72-6	10.0
1,2,8,9-Tetrachlorodibenzofuran	Last TCDF	1,2,8,9-TCDF	70648-22-5	10.0
1,3,4,6,8-Pentachlorodibenzofuran	First PeCDF	1,3,4,6,8-PeCDF	83704-55-6	50.0
1,2,3,8,9-Pentachlorodibenzofuran	Last PeCDF	1,2,3,8,9-PeCDF	83704-54-5	50.0
1,2,3,4,6,8-Hexachlorodibenzofuran	First HxCDF	1,2,3,4,6,8-HxCDF	69698-60-8	50.0
2,3,7,8-TCDD Resolution Testing Isomers:				
1,2,3,4-Tetrachlorodibenzo-*p*-dioxin		1,2,3,4-TCDD	30746-58-8	5.00
1,2,3,7-/1,2,3,8-Tetrachlorodibenzo-*p*-dioxin		1,2,3,7-TCDD 1,2,3,8-TCDD	67028-18-6 53555-02-5	5.00[d]
1,2,3,9-Tetrachlorodibenzo-*p*-dioxin		1,2,3,9-TCDD	71669-26-6	10.0

[a] First/Last eluting isomer for the specified homologue group (see Table A for additional Window Definers).

[b] 1,2,3,4,6,7-HxCDD (last eluting HxCDD) not included; coelutes with 1,2,3,7,8,9-HxCDD on a 60 m DB-5 column. Use 1,2,3,7,8,9-HxCDD (see Table A) and 1,2,3,4,6,7,9-HpCDD to approximate the end of the HxCDD window.

[c] 1,2,3,4,8,9-HxCDF (last eluting HxCDF) not included; can interfere with 1,2,3,7,8,9-HxCDF on a 60 m DB-5 column. Use 1,2,3,4,6,7,8-HpCDF (see Table A) to approximate the end of the HxCDF window.

[d] Total concentration of isomers.

Certified By: _____ **Date:** 11/05/2021 (mm/dd/yyyy)

B.G. Chittim, General Manager

Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

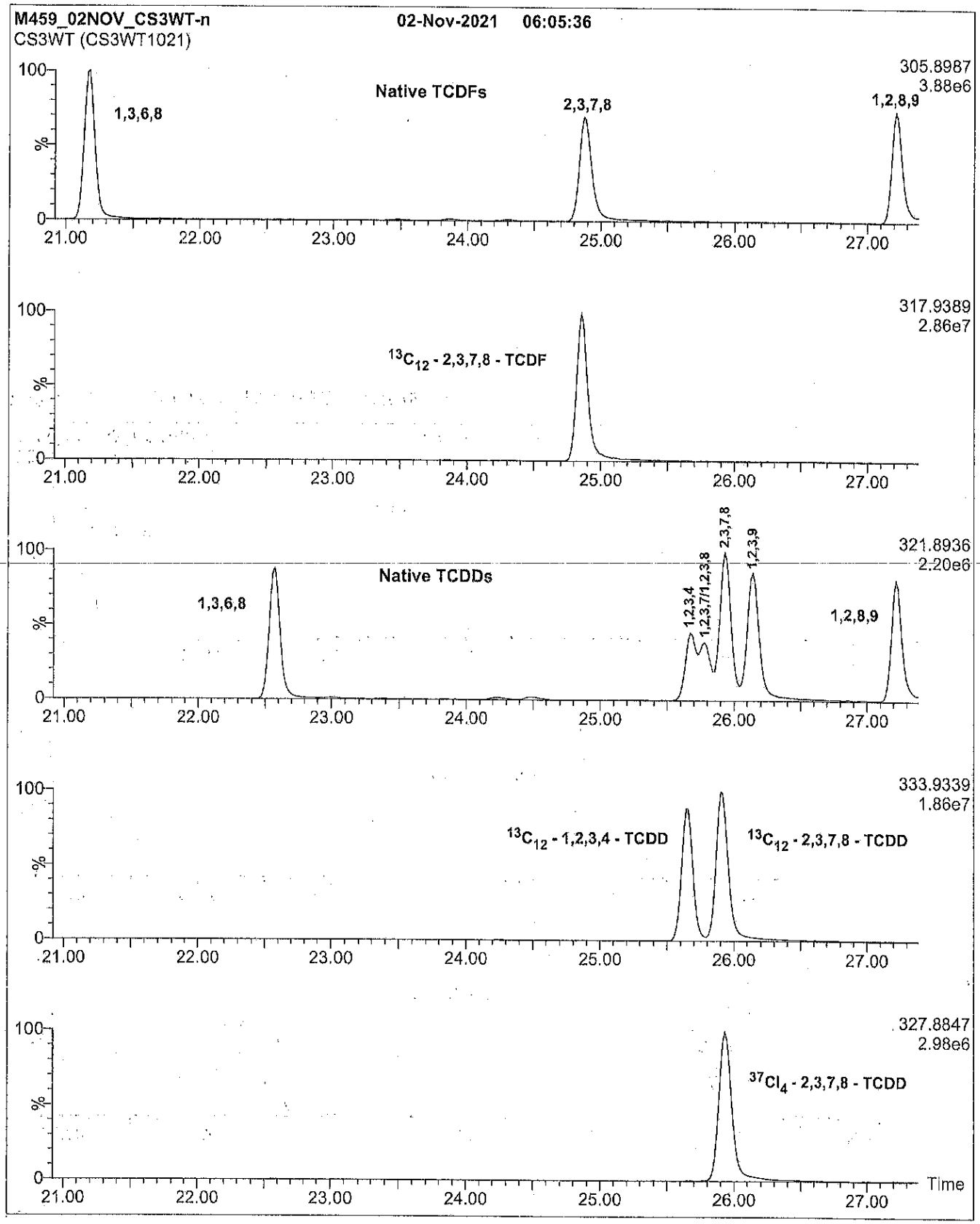


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

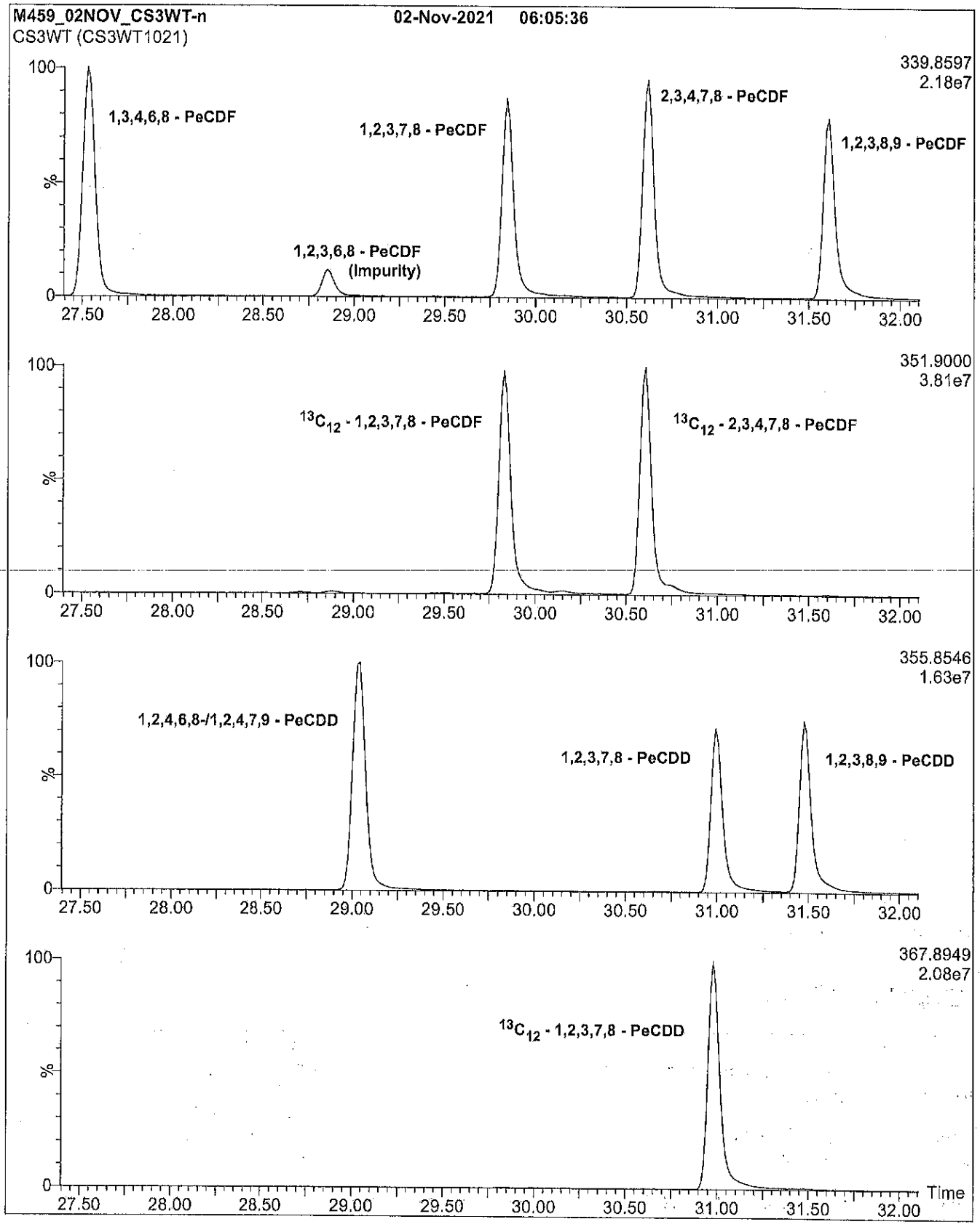


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

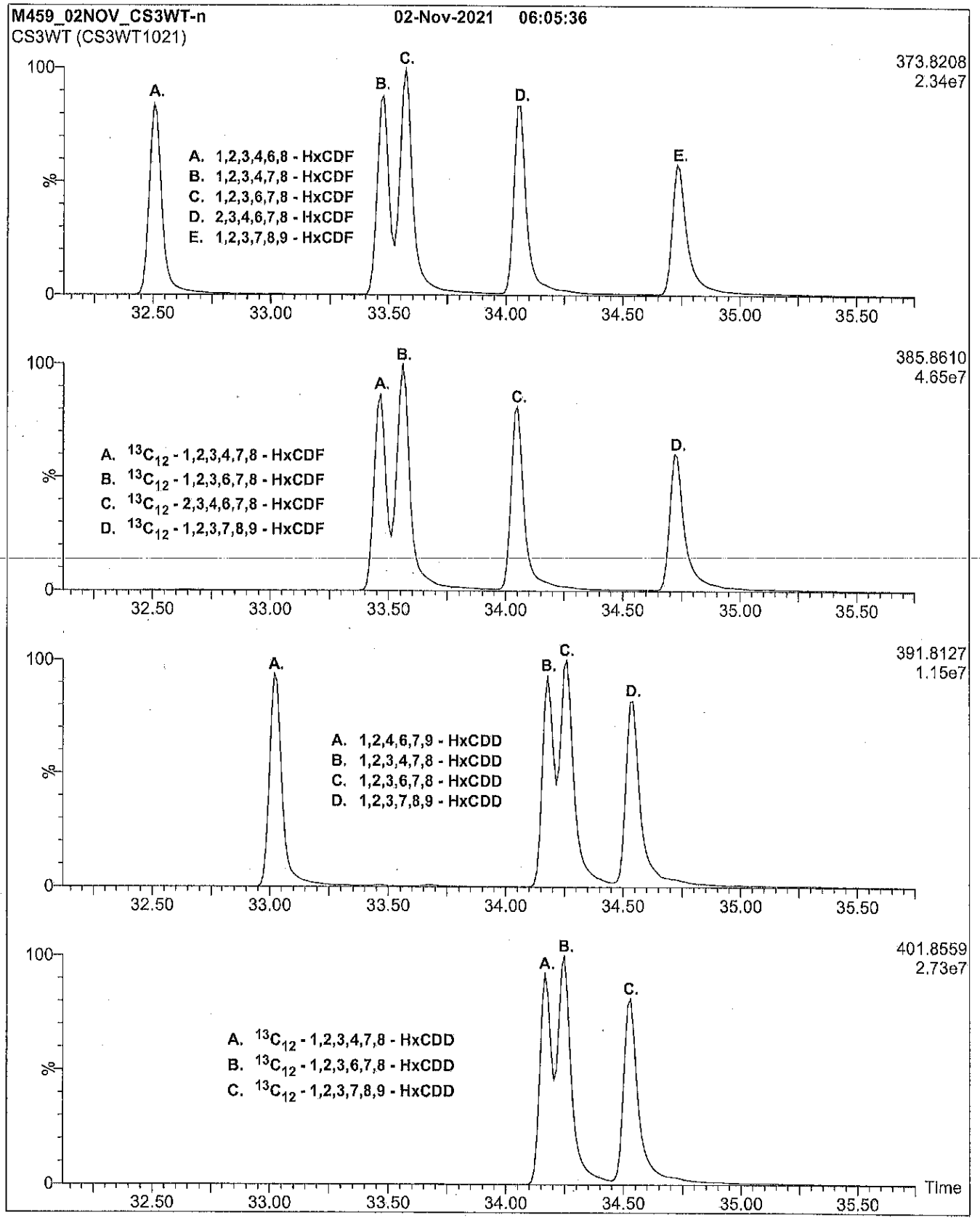


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**

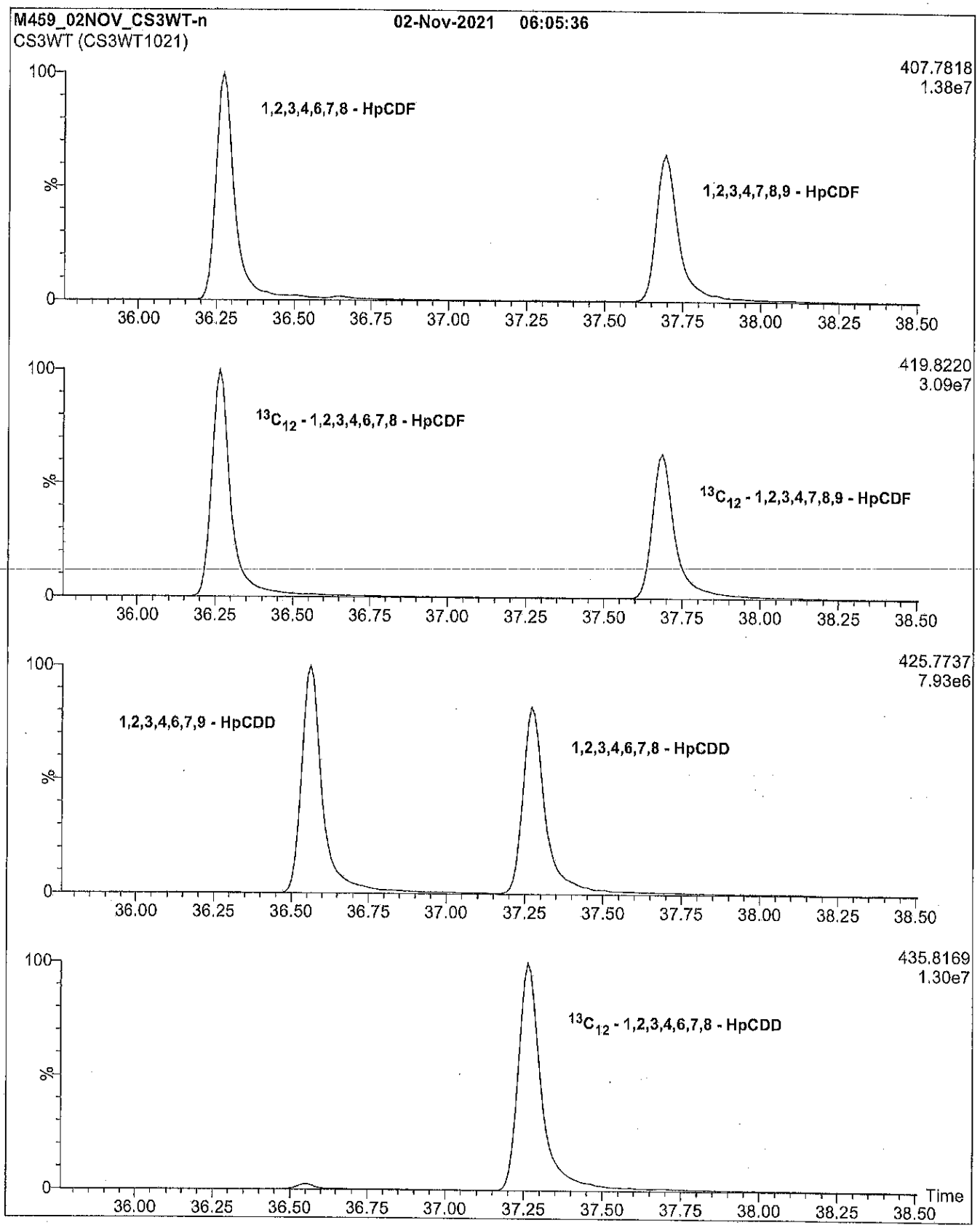
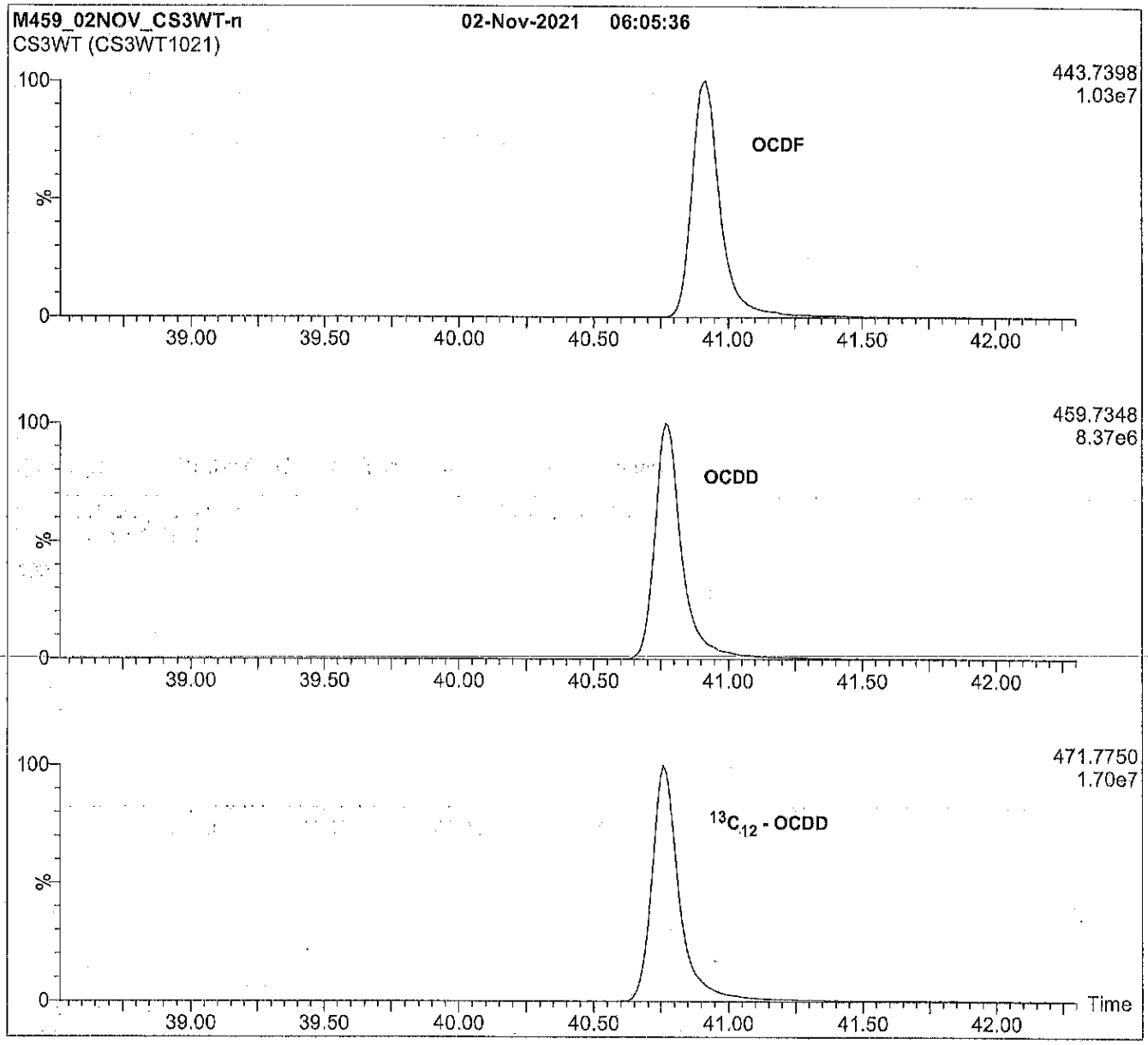


Figure 1: **CS3WT; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613LCS

U.S. EPA Method 1613
Labelled Compound Stock Solution

PRODUCT CODE:	EPA-1613LCS
LOT NUMBER:	13LCS1021
SOLVENT(S):	Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy)	10/29/2021
LAST TESTED: (mm/dd/yyyy)	10/31/2021
EXPIRY DATE: (mm/dd/yyyy)	10/31/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

K 9985
JK Reed
10/27/22

DESCRIPTION:

EPA-1613LCS is a solution/mixture of mass-labelled ($^{13}C_{12}$) polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613LCS was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual ^{13}C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots, x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **EPA-1613LCS; Components and Concentrations (ng/mL, ± 5% in nonane/3.2% toluene)**

Compound	Acronym	CAS #	Concentration (ng/mL)
Mass-Labelled PCDDs:			
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-2,3,7,8-TCDD	76523-40-5	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,7,8-PeCDD	109719-79-1	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	109719-80-4	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	109719-81-5	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	109719-83-7	100
Octachloro($^{13}C_{12}$)dibenzo-*p*-dioxin	$^{13}C_{12}$-OCDD	114423-97-1	200
Mass-Labelled PCDFs:			
2,3,7,8-Tetrachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,7,8-TCDF	89059-46-1	100
1,2,3,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,7,8-PeCDF	109719-77-9	100
2,3,4,7,8-Pentachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,4,7,8-PeCDF	116843-02-8	100
1,2,3,4,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	114423-98-2	100
1,2,3,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	116843-03-9	100
1,2,3,7,8,9-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	116843-04-0	100
2,3,4,6,7,8-Hexachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	116843-05-1	100
1,2,3,4,6,7,8-Heptachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	109719-84-8	100
1,2,3,4,7,8,9-Heptachloro($^{13}C_{12}$)dibenzofuran	$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	109719-94-0	100

Certified By: _____ **Date:** 11/05/2021
(mm/dd/yyyy)
B.G. Chittim, General Manager

Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

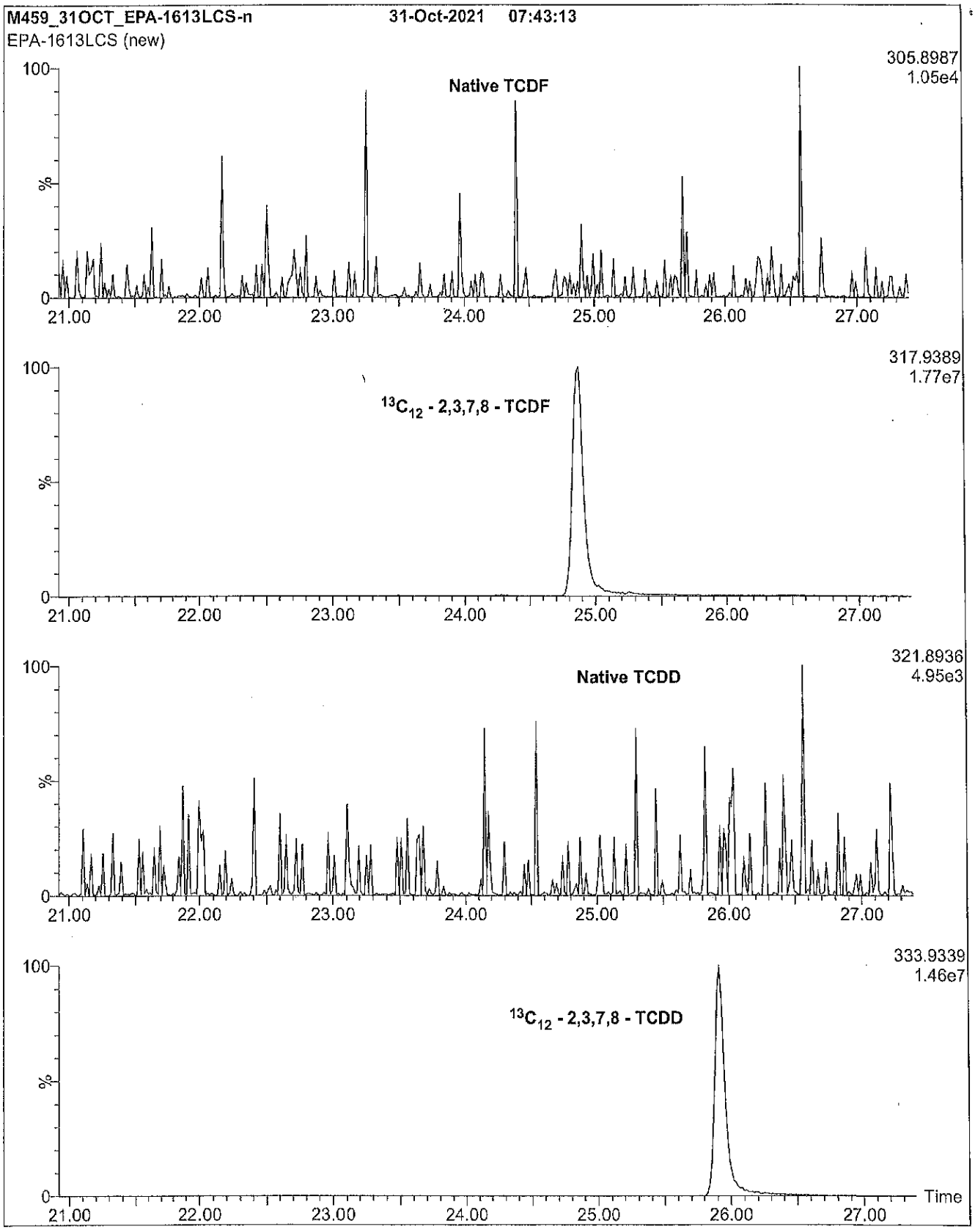


Figure 1: EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)

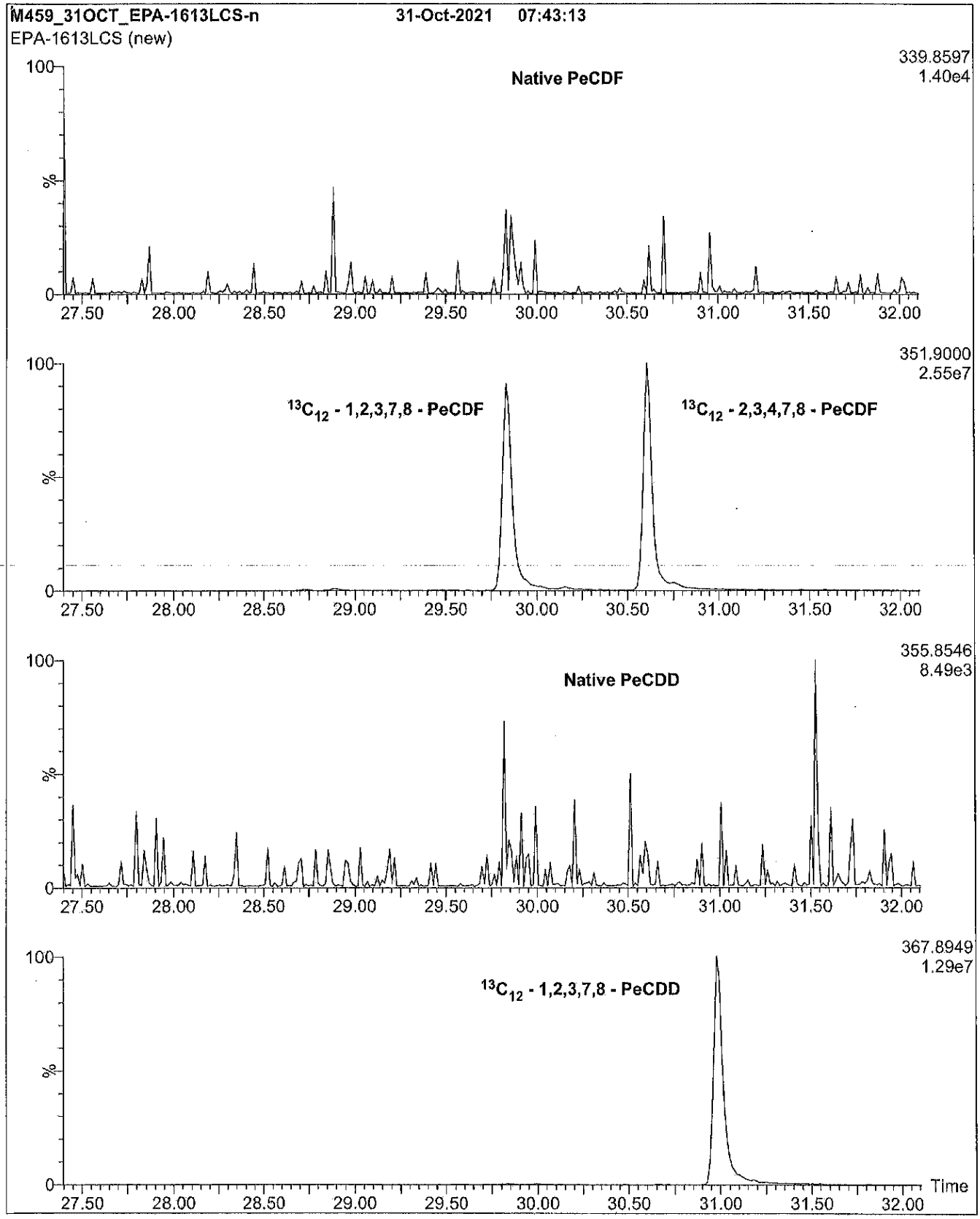


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

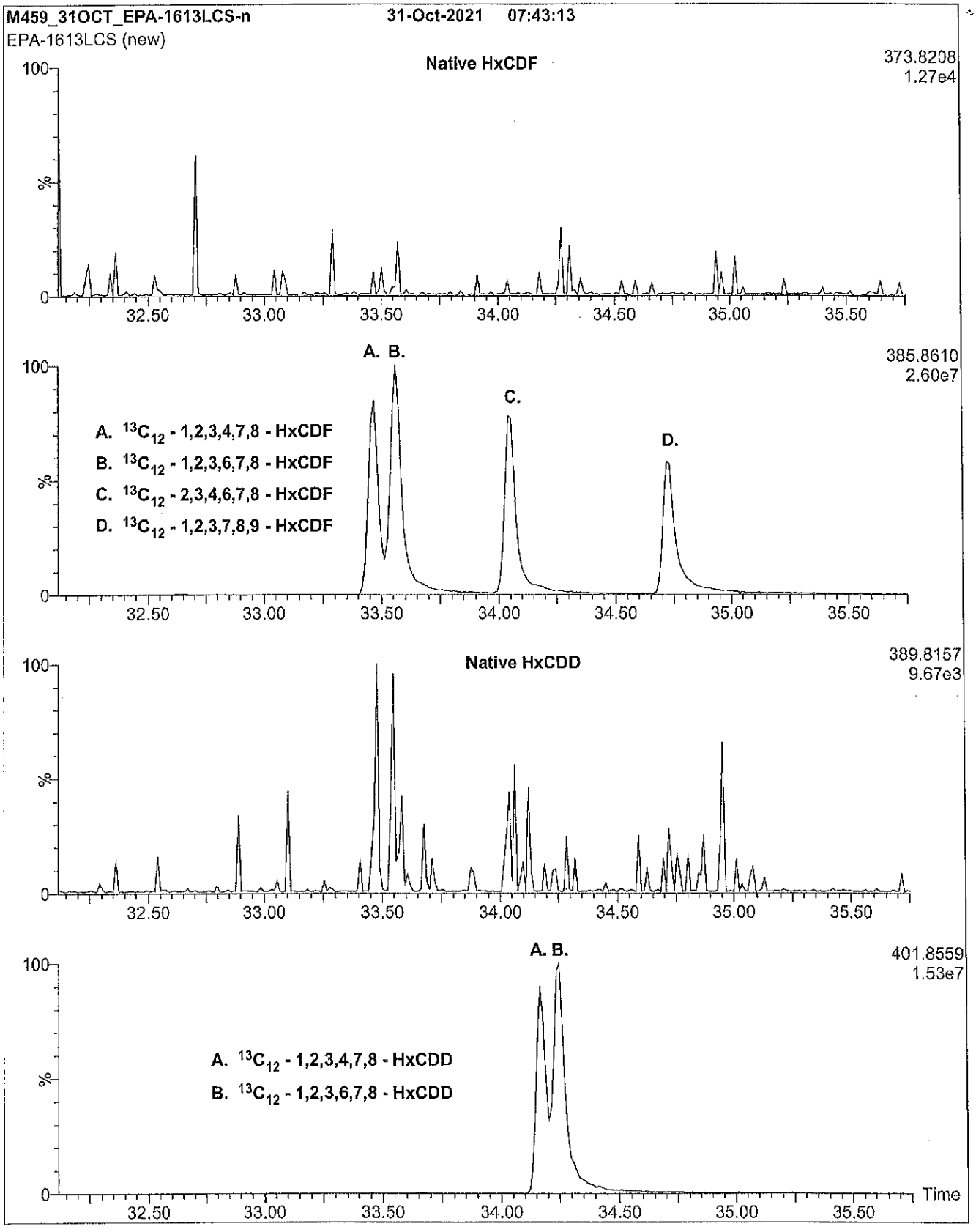


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**

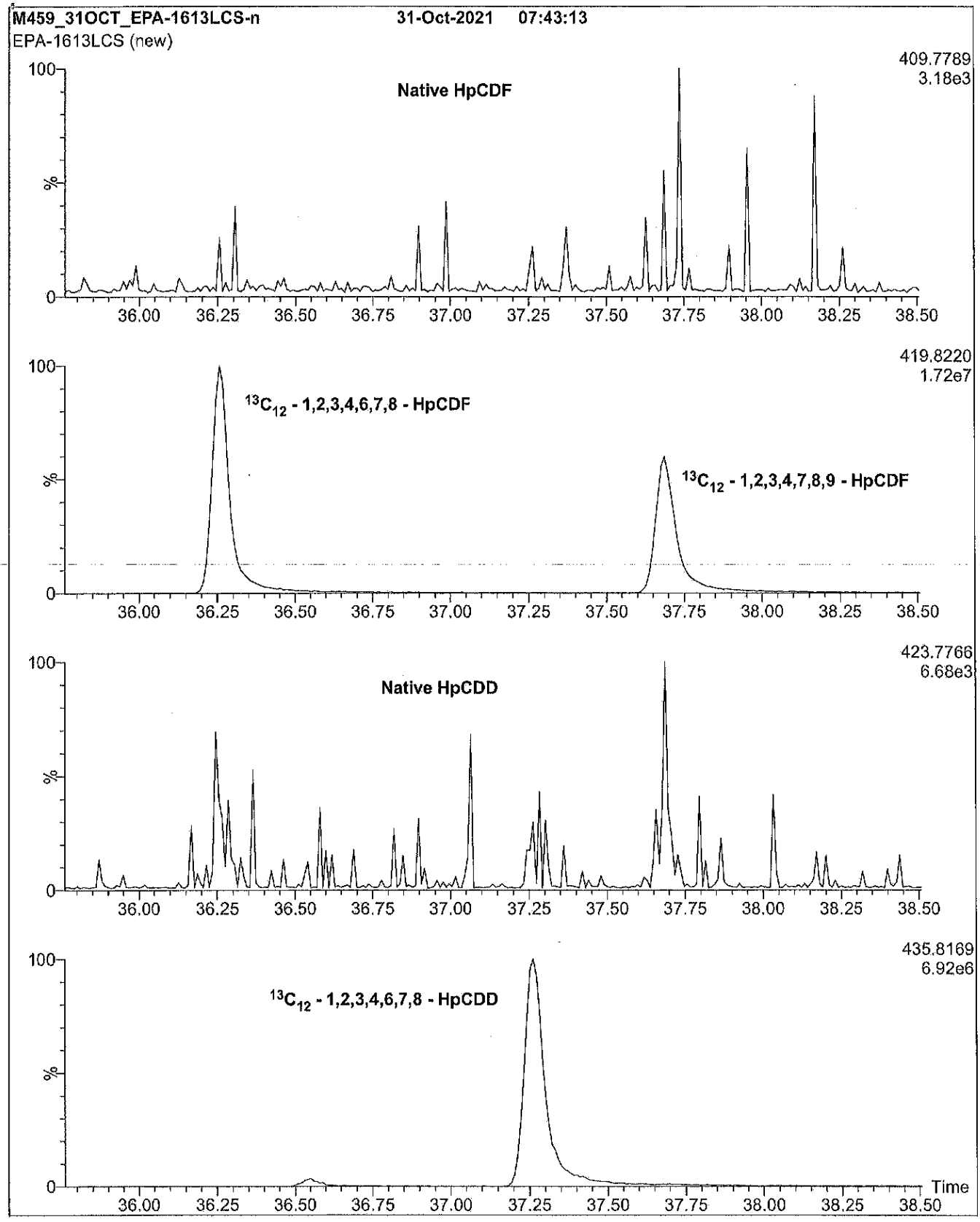
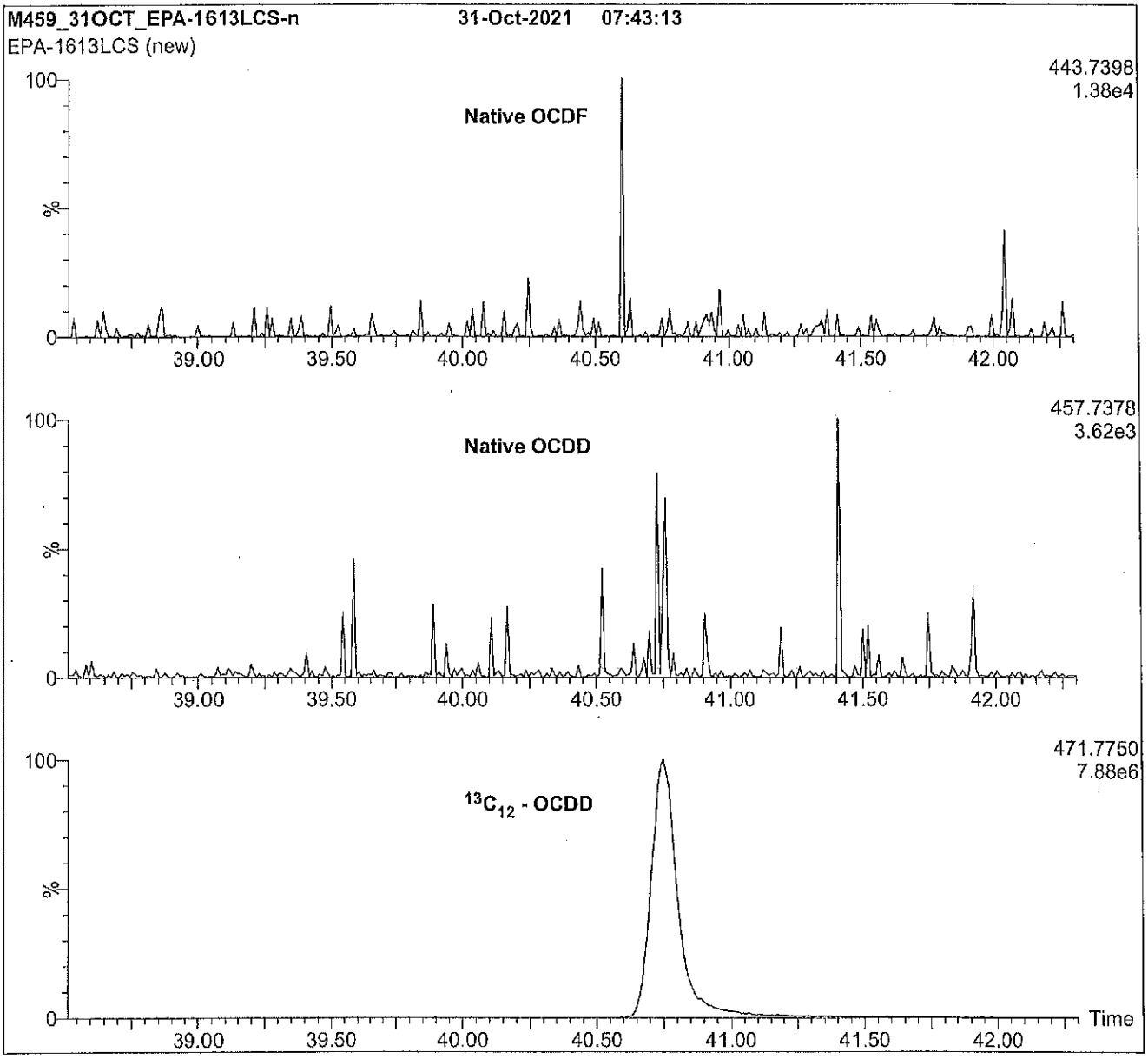


Figure 1: **EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

EPA-1613CSS

U.S. EPA Method 1613 Cleanup Standard Spiking Solution

PRODUCT CODE:	EPA-1613CSS
LOT NUMBER:	13CSS1021
SOLVENT(S):	Nonane
DATE PREPARED: (mm/dd/yyyy)	10/29/2021
LAST TESTED: (mm/dd/yyyy)	10/31/2021
EXPIRY DATE: (mm/dd/yyyy)	10/31/2028
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

K 9986
Recd. 10/27/22 JR

DESCRIPTION:

EPA-1613CSS contains 2,3,7,8-($^{37}Cl_4$)tetrachlorodibenzo-*p*-dioxin at the concentration given in Table A.

EPA-1613CSS was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

2,3,7,8-($^{37}Cl_4$)Tetrachlorodibenzo-*p*-dioxin has a chemical purity of >98% and an isotopic (^{37}Cl) purity of ≥95%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

Table A: **EPA-1613CSS; Components and Concentrations (ng/mL, ± 5% in nonane)**

Compound	Acronym	CAS #	Concentration (ng/mL)
2,3,7,8-($^{37}Cl_4$)Tetrachlorodibenzo-*p*-dioxin	$^{37}Cl_4$-2,3,7,8-TCDD	85508-50-5	40.0

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: _____ **Date:** 11/05/2021 (mm/dd/yyyy)
B.G. Chittim, General Manager

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

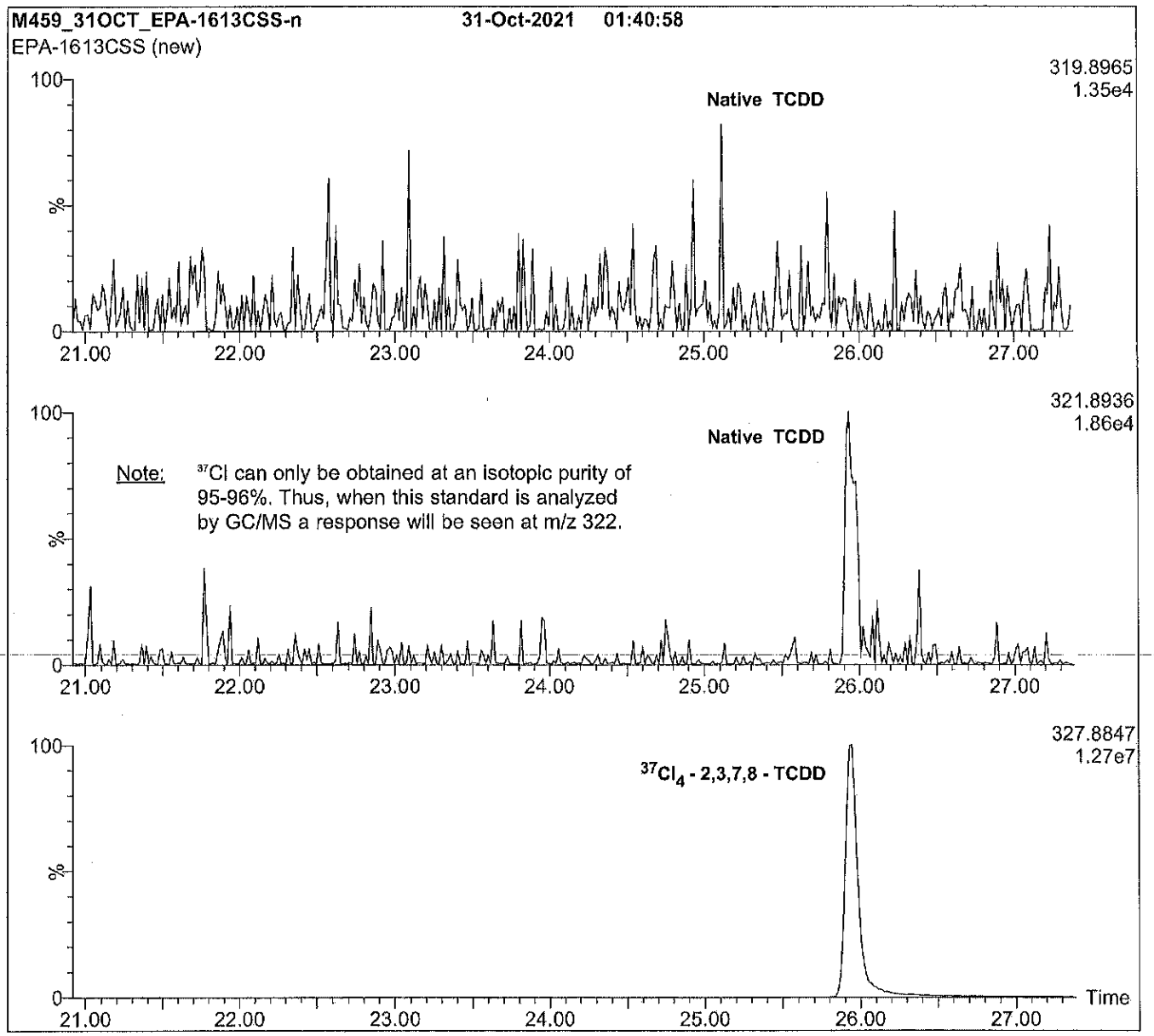
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **EPA-1613CSS; HRGC/HRMS Data (60 m DB-5 Column)**



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)

Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No. 15600

Order Number: CB015015 Date Shipped: 1/31/2023 AirBill No(s): 633163298570

From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. B
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712

To: SUE DUNNIHOO
ANALYTICAL RESOURCES INC.
4611 S. 134TH PLACE SUITE 100
TUKWILA WA 98168
250-695-6207

Sample ID	Qty	Description/Remarks	→ Catalogue Number
PSRM0172 - L441373	1	PUGET SOUND SEDIMENT RM	PS-SRM
PSRM0173 - L441374	1	PUGET SOUND SEDIMENT RM	PS-SRM
PSRM0174 - ~~L441374~~ JS 2/1/23 L441375	1	PUGET SOUND SEDIMENT RM	PS-SRM

01/31/2023

PUGET SOUND SRM FOR THE DUWAMISH AOC5 PROJECT

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	01/31/2023 (1400)	Jacob Shafer	02/06/23 1415
Custody Seal(s): Present/Absent	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Report No. 00, 9/11/2014 *SMP Version 3.3*

Analytical Resources, LLC
Analytical Chemists and Consultants

Analytical Standard Record

Standard ID: L002084

Printed: 3/2/2023 8:59:18AM

Description:	Dioxin ISC Mix	Expires:	24-Feb-2024
Standard Type:	Other	Prepared:	24-Feb-2023
Solvent:	Nonane	Prepared By:	Peter Kepler
Final Volume (mls):	1	Department:	HRGCMS
Vials:	1	Last Edit:	24-Feb-2023 11:19 by PK
Vendor:	NA	Lot #:	1234
Vendor Catalog #:			

Comments

Stock: H9902: 2378-TCDF, 3467-TCDF, 2348-TCDF, 1278-TCDD, 2378-TCDD. each @ 1000 ng/mL

10 ul to 1 mL FV in Nonane. Final Conc = 10 ng/mL. Analytes and units not available in Element.

Analyte	CAS Number	Concentration	Units
2,3,7,8-TCDF	51207-31-9	10	ug/mL
2,3,7,8-TCDD	1746-01-6	10	ug/mL

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SC1045

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-01 D	SDG:	23A0420
Sampled:	01/19/23 08:10	Prepared:	04/17/23 17:40	File ID:	SMM 04-18-23-079
% Solids:	51.63	Preparation:	SMM EPA 7471B	Analyzed:	04/18/23 14:14
Batch:	BLD0397	Sequence:	SLD0238	Initial/Final:	0.284 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GD00044

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.134	1	0.00716	0.0341	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SC1003

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-07 D	SDG:	23A0420
Sampled:	01/19/23 12:25	Prepared:	04/17/23 17:40	File ID:	SMM 04-18-23-080
% Solids:	50.97	Preparation:	SMM EPA 7471B	Analyzed:	04/18/23 14:17
Batch:	BLD0397	Sequence:	SLD0238	Initial/Final:	0.229 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GD00044

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.229	1	0.00900	0.0428	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SC1004

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-08 D	SDG:	23A0420
Sampled:	01/19/23 11:55	Prepared:	04/17/23 17:40	File ID:	SMM 04-18-23-081
% Solids:	57.39	Preparation:	SMM EPA 7471B	Analyzed:	04/18/23 14:19
Batch:	BLD0397	Sequence:	SLD0238	Initial/Final:	0.272 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GD00044

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.144	1	0.00673	0.0320	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SC1082

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-09 D	SDG:	23A0420
Sampled:	01/19/23 13:40	Prepared:	04/17/23 17:40	File ID:	SMM 04-18-23-088
% Solids:	56.61	Preparation:	SMM EPA 7471B	Analyzed:	04/18/23 14:36
Batch:	BLD0397	Sequence:	SLD0238	Initial/Final:	0.248 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GD00044

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	3.40	5	0.0374	0.178	D

PREPARATION BATCH SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLD0397 Batch Matrix: Solid
Preparation: SMM EPA 7471B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1045	23A0420-01	SMM 04-18-23-079	04/17/23 17:40	Store frozen; FROZEN VOLUME USED
LDW23-SC1003	23A0420-07	SMM 04-18-23-080	04/17/23 17:40	Store frozen; FROZEN VOLUME USED
LDW23-SC1004	23A0420-08	SMM 04-18-23-081	04/17/23 17:40	Store frozen; FROZEN VOLUME USED
LDW23-SC1082	23A0420-09	SMM 04-18-23-088	04/17/23 17:40	Store frozen; FROZEN VOLUME USED
Blank	BLD0397-BLK1	SMM 04-18-23-055	04/17/23 17:40	
LCS	BLD0397-BS1	SMM 04-18-23-056	04/17/23 17:40	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: SMM | Balance ID: BALIO | Matrix: soil
Analyst: AR | Block ID: 9 | Date: 4/17/23
Bath Temp: 96C | Start Time: 1644 | End Time: 1740

ARI Sample ID	Sample Bottle #	pH<2	Initial Weight (g) Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
23A417-01	D		0.247	50	1		
-02			0.224				
-03			0.250				
-04			0.217				
-05			0.281				
-06			0.219				
-07			0.222				
-08			0.293				
-09			0.214				
-10			0.214				
-11			0.233				
-12			0.249				
-13			0.208				
-14			0.236				
-15			0.261				
23A420-01			0.284				
-07			0.229				
-08			0.272				
-09			0.248				
BLD397-blk	—		—				23A417-01
-bs	—		—				
-dup	—		0.249				
-MS	—		0.252				
-MSD	—		0.248				
—	—	—	—	—	—	—	—

Chemical/Reagent ID:

HNO_3: L2678 | H_2SO_4: L922 | HCl: —
5% $K_2S_2O_8$: L3350 | 5% $KMnO_4$: K11727 | Digest Tube Lot: 2210117

Form I

METHOD BLANK DATA SHEET

EPA 7471B

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0420

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

Batch: BLD0397 | Laboratory ID: BLD0397-BLK1 | Prepared: 04/17/23 17:40

Matrix: Solid | Preparation: SMM EPA 7471B | Analyzed: 04/18/23 13:18

Sequence: SLD0238 | Calibration: GD00044 | Instrument: HYDRA

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	ND	1	0.00525	0.0250	U

LCS / LCS DUPLICATE RECOVERY

EPA 7471B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	04/18/23 13:21
Batch:	BLD0397	Laboratory ID:	BLD0397-BS1
Preparation:	SMM EPA 7471B	Sequence Name:	LCS
Initial/Final:	0.2 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Mercury	0.500	0.437		87.4	80 - 120

* Indicates values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 7471B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00044	Instrument:	HYDRA
Calibration Date:	04/18/2023 14:55		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Mercury	0	0	0.0001	6220000	0.0005	5798000	0.001	5633000	0.002	5694500	0.005	5670800

INITIAL CALIBRATION DATA

EPA 7471B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00044	Instrument:	HYDRA
Calibration Date:	04/18/2023 14:55		

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Mercury	4836050	49.2	1.0000		0.99	

SMM 04-18-23

SLD0238 GD00044

Method: ARI 5 ppb (NO 0.05) Operator: Admin Date of Analysis: 18 Apr 2023 10:42:59

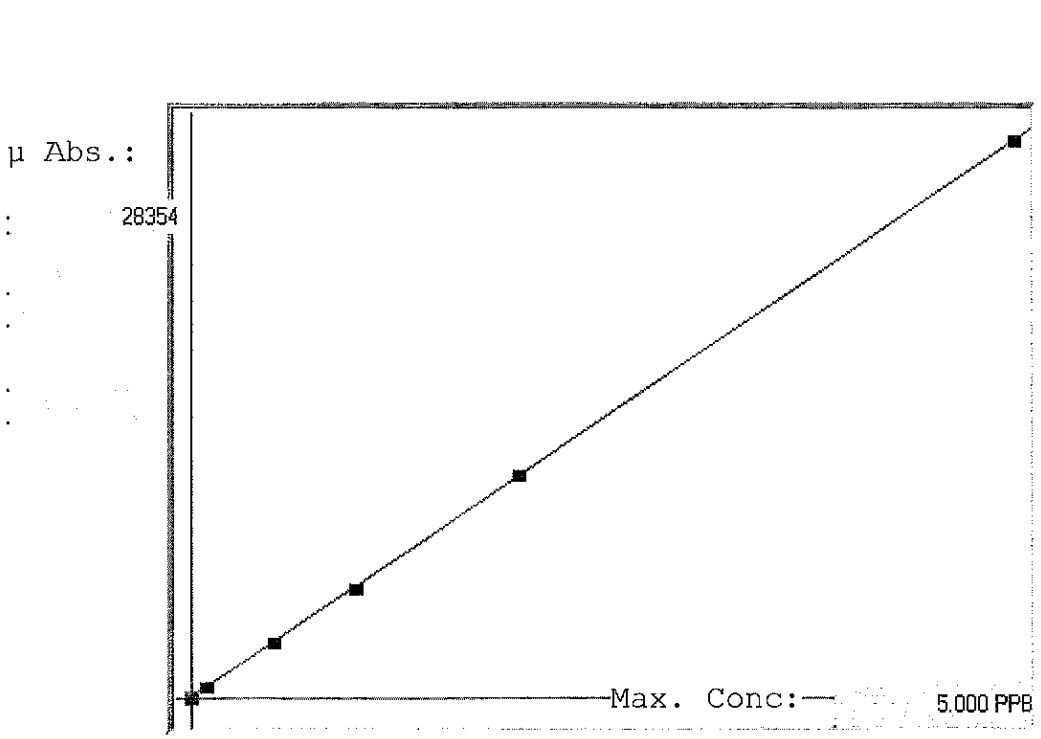
Sample ID	Mean	Units		Date	Method
SEQ-CAL1	41	PPB		18 Apr 2023 10:43:38	ARI 5 ppb (NO 0.05)
SEQ-CAL2	622	PPB		18 Apr 2023 10:45:59	ARI 5 ppb (NO 0.05)
SEQ-CAL3	2899	PPB		18 Apr 2023 10:48:21	ARI 5 ppb (NO 0.05)
SEQ-CAL4	5633	PPB		18 Apr 2023 10:50:42	ARI 5 ppb (NO 0.05)
SEQ-CAL5	11389	PPB		18 Apr 2023 10:53:02	ARI 5 ppb (NO 0.05)
SEQ-CAL6	28354	PPB		18 Apr 2023 10:55:22	ARI 5 ppb (NO 0.05)
SEQ-ICV	101.0% 4.0390	PPB	✓	18 Apr 2023 11:26:55	ARI 5 ppb (NO 0.05)
SEQ-ICB	-0.0069	PPB	✓	18 Apr 2023 11:29:14	ARI 5 ppb (NO 0.05)
SEQ-CRL	97.1% 0.0971	PPB	✓	18 Apr 2023 11:31:36	ARI 5 ppb (NO 0.05)
SEQ-CCV	102.1% 4.0836	PPB	✓	18 Apr 2023 11:33:57	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0074	PPB	✓	18 Apr 2023 11:36:15	ARI 5 ppb (NO 0.05)
BLD0366-BLK1	-0.0025	PPB		18 Apr 2023 11:38:36	ARI 5 ppb (NO 0.05)
BLD0366-BS1	1.7945	PPB	✓	18 Apr 2023 11:40:55	ARI 5 ppb (NO 0.05)
23C0774-01	0.3480	PPB		18 Apr 2023 11:43:14	ARI 5 ppb (NO 0.05)
BLD0366-DUP1	0.4567	PPB		18 Apr 2023 11:45:33	ARI 5 ppb (NO 0.05)
BLD0366-MS1	1.3197	PPB	✓	18 Apr 2023 11:47:52	ARI 5 ppb (NO 0.05)
BLD0366-MSD1	1.4154	PPB	✓	18 Apr 2023 11:50:11	ARI 5 ppb (NO 0.05)
23C0752-01	0.4056	PPB		18 Apr 2023 11:52:30	ARI 5 ppb (NO 0.05)
23C0752-02	0.7056	PPB		18 Apr 2023 11:54:49	ARI 5 ppb (NO 0.05)
23C0752-03	0.3333	PPB		18 Apr 2023 11:57:09	ARI 5 ppb (NO 0.05)
23C0752-04	0.5101	PPB		18 Apr 2023 11:59:29	ARI 5 ppb (NO 0.05)
SEQ-CCV	100.4% 4.0143	PPB	✓	18 Apr 2023 12:01:50	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0103	PPB	✓	18 Apr 2023 12:04:08	ARI 5 ppb (NO 0.05)
23C0752-06	0.4463	PPB		18 Apr 2023 12:06:29	ARI 5 ppb (NO 0.05)
23C0774-02	0.3073	PPB		18 Apr 2023 12:08:50	ARI 5 ppb (NO 0.05)
23C0774-03	0.3795	PPB		18 Apr 2023 12:11:11	ARI 5 ppb (NO 0.05)
23C0774-04	0.4909	PPB		18 Apr 2023 12:13:30	ARI 5 ppb (NO 0.05)
23C0774-05	0.4217	PPB		18 Apr 2023 12:15:49	ARI 5 ppb (NO 0.05)
23C0774-06	0.3910	PPB		18 Apr 2023 12:18:08	ARI 5 ppb (NO 0.05)
23C0774-07	0.3009	PPB		18 Apr 2023 12:20:27	ARI 5 ppb (NO 0.05)
23C0774-08	0.4248	PPB		18 Apr 2023 12:22:46	ARI 5 ppb (NO 0.05)
23C0774-09	0.4787	PPB		18 Apr 2023 12:25:05	ARI 5 ppb (NO 0.05)
23C0774-10	0.3613	PPB		18 Apr 2023 12:27:24	ARI 5 ppb (NO 0.05)
SEQ-CCV	97.4% 3.8947	PPB	✓	18 Apr 2023 12:29:45	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0094	PPB	✓	18 Apr 2023 12:32:03	ARI 5 ppb (NO 0.05)
23C0774-11	0.3332	PPB		18 Apr 2023 12:34:25	ARI 5 ppb (NO 0.05)
23C0774-12	0.4412	PPB		18 Apr 2023 12:36:45	ARI 5 ppb (NO 0.05)
23C0774-13	0.4327	PPB		18 Apr 2023 12:39:06	ARI 5 ppb (NO 0.05)
23C0774-14	0.3774	PPB		18 Apr 2023 12:41:27	ARI 5 ppb (NO 0.05)
BLD0395-BLK1	-0.0015	PPB		18 Apr 2023 12:43:48	ARI 5 ppb (NO 0.05)
BLD0395-BS1	1.7394	PPB	✓	18 Apr 2023 12:46:07	ARI 5 ppb (NO 0.05)
23A0326-01	0.3559	PPB		18 Apr 2023 12:48:26	ARI 5 ppb (NO 0.05)
BLD0395-DUP1	0.3831	PPB		18 Apr 2023 12:50:46	ARI 5 ppb (NO 0.05)
BLD0395-MS1	1.3299	PPB	✓	18 Apr 2023 12:53:05	ARI 5 ppb (NO 0.05)
BLD0395-MSD1	1.7590	PPB	✓	18 Apr 2023 12:55:25	ARI 5 ppb (NO 0.05)
SEQ-CCV	96.7% 3.8693	PPB	✓	18 Apr 2023 12:57:44	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0118	PPB	✓	18 Apr 2023 13:00:03	ARI 5 ppb (NO 0.05)
23A0326-02	0.3851	PPB		18 Apr 2023 13:02:26	ARI 5 ppb (NO 0.05)
23A0326-04	0.2588	PPB		18 Apr 2023 13:04:45	ARI 5 ppb (NO 0.05)
23A0326-05	0.4026	PPB		18 Apr 2023 13:07:05	ARI 5 ppb (NO 0.05)
23A0326-10	0.4821	PPB		18 Apr 2023 13:09:25	ARI 5 ppb (NO 0.05)
23A0326-11	0.2881	PPB		18 Apr 2023 13:11:46	ARI 5 ppb (NO 0.05)
23A0326-12	0.4171	PPB		18 Apr 2023 13:14:07	ARI 5 ppb (NO 0.05)
BLD0395-PS1	1.4477	PPB	✓	18 Apr 2023 13:16:28	ARI 5 ppb (NO 0.05)
BLD0397-BLK1	-0.0054	PPB		18 Apr 2023 13:18:47	ARI 5 ppb (NO 0.05)
BLD0397-BS1	1.7478	PPB	✓	18 Apr 2023 13:21:06	ARI 5 ppb (NO 0.05)
23A0417-01	0.6496	PPB		18 Apr 2023 13:23:26	ARI 5 ppb (NO 0.05)
SEQ-CCV	90.2% 3.6061	PPB	✓	18 Apr 2023 13:25:45	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0143	PPB	✓	18 Apr 2023 13:28:04	ARI 5 ppb (NO 0.05)
BLD0397-DUP1	0.2720	PPB		18 Apr 2023 13:30:26	ARI 5 ppb (NO 0.05)

SMM 04-18-23

Method: ARI 5 ppb (NO 0.05) Operator: Admin Date of Analysis: 18 Apr 2023 10:42:59

Sample ID	Mean	Units		Date	Method
BLD0397-MS1	1.3013	PPB	X	18 Apr 2023 13:32:45	ARI 5 ppb (NO 0.05)
BLD0397-MSD1	1.3720	PPB	X	18 Apr 2023 13:35:05	ARI 5 ppb (NO 0.05)
23A0417-02	0.3749	PPB		18 Apr 2023 13:37:25	ARI 5 ppb (NO 0.05)
23A0417-03	0.3667	PPB		18 Apr 2023 13:39:45	ARI 5 ppb (NO 0.05)
23A0417-04	0.3830	PPB		18 Apr 2023 13:42:05	ARI 5 ppb (NO 0.05)
23A0417-05	0.2081	PPB		18 Apr 2023 13:44:26	ARI 5 ppb (NO 0.05)
23A0417-06	0.3202	PPB		18 Apr 2023 13:46:46	ARI 5 ppb (NO 0.05)
23A0417-07	0.2233	PPB		18 Apr 2023 13:49:07	ARI 5 ppb (NO 0.05)
23A0417-08	0.9043	PPB		18 Apr 2023 13:51:27	ARI 5 ppb (NO 0.05)
SEQ-CCV	98.1% 3.9230	PPB	✓	18 Apr 2023 13:53:46	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0100	PPB	✓	18 Apr 2023 13:56:05	ARI 5 ppb (NO 0.05)
23A0417-09	0.2642	PPB		18 Apr 2023 13:58:26	ARI 5 ppb (NO 0.05)
23A0417-10	0.2636	PPB		18 Apr 2023 14:00:45	ARI 5 ppb (NO 0.05)
23A0417-11	0.2958	PPB		18 Apr 2023 14:03:05	ARI 5 ppb (NO 0.05)
23A0417-12	0.2787	PPB		18 Apr 2023 14:05:25	ARI 5 ppb (NO 0.05)
23A0417-13	0.2837	PPB		18 Apr 2023 14:07:45	ARI 5 ppb (NO 0.05)
23A0417-14	0.5607	PPB		18 Apr 2023 14:10:05	ARI 5 ppb (NO 0.05)
23A0417-15	0.2086	PPB		18 Apr 2023 14:12:24	ARI 5 ppb (NO 0.05)
23A0420-01	0.3929	PPB		18 Apr 2023 14:14:44	ARI 5 ppb (NO 0.05)
23A0420-07	0.5354	PPB		18 Apr 2023 14:17:04	ARI 5 ppb (NO 0.05)
23A0420-08	0.4502	PPB		18 Apr 2023 14:19:25	ARI 5 ppb (NO 0.05)
SEQ-CCV	98.5% 3.9388	PPB	✓	18 Apr 2023 14:21:46	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0098	PPB	✓	18 Apr 2023 14:24:05	ARI 5 ppb (NO 0.05)
~~23A0420-09~~	~~10.1167~~	~~PPB~~	Del	18 Apr 2023 14:26:26	ARI 5 ppb (NO 0.05)
BLD0397-PS1	1.9006	PPB	✓	18 Apr 2023 14:28:46	ARI 5 ppb (NO 0.05)
SEQ-CCV	99.7% 3.9878	PPB	✓	18 Apr 2023 14:31:08	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0103	PPB	✓	18 Apr 2023 14:33:26	ARI 5 ppb (NO 0.05)
23A0420-09	1.9110	PPB	5X	18 Apr 2023 14:36:03	ARI 5 ppb (NO 0.05)
SEQ-CCV	98.1% 3.9258	PPB	✓	18 Apr 2023 14:38:23	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0097	PPB	✓	18 Apr 2023 14:40:42	ARI 5 ppb (NO 0.05)

ARI 5 ppb (NO 0.05)



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
SEQ-CAL1 - Blank	0.000	0.000	0.000	41	0.000	41	41	41		
SEQ-CAL2 - 0.1 PPB	0.100	0.103	0.003	622	1.3 %	618	633	615		
SEQ-CAL3 - 0.5 PPB	0.500	0.505	0.005	2899	0.2 %	2901	2892	2905		
SEQ-CAL4 - 1.0 PPB	1.000	0.988	-0.012	5633	1.5 %	5527	5638	5734		
SEQ-CAL5 - 2.0 PPB	2.000	2.004	0.004	11389	0.8 %	11258	11427	11483		
SEQ-CAL6 - 5.0 PPB	5.000	5.000	0.000	28354	0.1 %	28315	28384	28363		

AOC

SWN

SMM

Work	ICPMS Samples	HG Samples
23A0157	10	10
23A0158	13	13
23A0179	12	12
23A0180	4	4
23A0206	14	14
23A0207	12	0
23A0249	8	7
23A0295	10	9
23A0313	8	5
23A0326	9	7
23A0328	11	11
23A0417	15	15
23A0418	11	0
23A0419	12	12
23A0420	5	4
23A0455	18	18
23A0467	9	9
23C0071	7	7
23C0107		
23C0108	5	5
23C0109	2	2
23C0752	5	5
22C0774	5 4	5 4
23D0008		
23D0037		
23D0063		
23D0136		

Mercury Analysis Log

Analyst: ML
Instrument: HYDRA

Date: 04/18/23
Page: 1 of 3

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments
SEQ	-CAL1	SMM	1X		
	-CAL2				
	-CAL3				
	-CAL4				
	-CAL5				
	-CAL6				
	-ICV			✓ 4.03	
	-ICB			✓ -0.006	
	-CRL			✓ 0.097	
	-CCV			✓ 4.08	
	-CCB			✓ -0.007	
BLD0366	-BLK1				
	-LCS1			✓ 1.794	89.7 1.R
23C0774	-01				
BLD0366	-DUP1				RPD = 27.01
	-MS1			✓ 1.319	97.1 1.R
	-MSD1			✓ 1.415	106.7 1.R
23C0752	-01				
	-02				
	-03				
	-04				
SEQ	-CCV			✓ 4.01	
	-CCB			✓ -0.010	
23C0752	-06				
23C0774	-02				
	-03				
	-04				
	-05				
	-06				
	-07				

Chemical/Reagent ID:
10% $SnCl_2$: L3091

14% NH_2OH/NaCl: L3351

Standard ID:
Standard: L4167-L4172

ICV/CCV: L4165

Mercury Analysis Log

Analyst: —

Instrument: ✓

Date: —

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
-08				
-09				
↓ -10				
SEQ -CCV			✓ 3.89	
↓ -CCB			✓ -0.009	
23C0774 -11				
-12				
-13				
↓ -14				
BLD0395 -BIK1				
↓ -BS1			✓ 1.739	86.9 %R
23A0326 -01				
BLD0395 -DUP1				
-MS1			✓ 1.329	97.4 %R
↓ -MSD1			✓ 1.759	140.3 %R
SEQ -CCV			✓ 3.86	
↓ -CCB			✓ -0.011	
23A0326 -02				
-04				
-05				
-10				
-11				
↓ -12				
BLD0395 -PS1			✓ 1.447	109.1 %R
BLD0397 -BIK1				
↓ -BS1			✓ 1.747	87.3 %R
23A0417 -01				
SEQ -CCV			✓ 3.60	
↓ -CCB				
BLD0397 -DUP1				NO RPD

Chemical/Reagent ID:

10% $SnCl_2$: —

14% NH_2OH/NaCl: —

Standard ID: —

Standard:

ICV/CCV: —

Mercury Analysis Log

Analyst: — Date: —

Instrument: — Page: 3 of 3

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
-MS1			x 1.301	65.1 %R
-MSD1			x 1.372	72.2 %R
23A0417 -02				
-03				
-04				
-05				
-06				
-07				
-08				
SEQ -CCV			√ 3.92	
-CCB			√ -0.01	
23A0417 -09				
-10				
-11				
-12				
-13				
-14				
-15				
23A0420 -01				
-07				
-08				
SEQ -CCV			√ 3.93	
-CCB			√ -0.009	
23A0420 -09				Rerun at d.1
BLD0397 -BS1			1.90	125.1 %R
SEQ -CCV			√ 3.98	
-CCB			√ -0.01	
23A0420 -09		5X		
SEQ -CCV		1X		
-CCB				

Chemical/Reagent ID:

10% $SnCl_2$: — 14% NH_2OH/NaCl: —

Standard ID: —

Standard: — ICV/CCV: —

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: HYDRA
Calibration: GD00044
Control Limt: +/- 20.00%
Sequence: SLD0238

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0238-ICV1	Mercury	0.0040000	0.00404	101	mg/L	EPA 7471B
SLD0238-CCV1	Mercury	0.0040000	0.00408	102	mg/L	EPA 7471B
SLD0238-CCV2	Mercury	0.0040000	0.00401	100	mg/L	EPA 7471B
SLD0238-CCV3	Mercury	0.0040000	0.00389	97.4	mg/L	EPA 7471B
SLD0238-CCV4	Mercury	0.0040000	0.00387	96.7	mg/L	EPA 7471B
SLD0238-CCV5	Mercury	0.0040000	0.00361	90.2	mg/L	EPA 7471B
SLD0238-CCV6	Mercury	0.0040000	0.00392	98.1	mg/L	EPA 7471B
SLD0238-CCV7	Mercury	0.0040000	0.00394	98.5	mg/L	EPA 7471B
SLD0238-CCV8	Mercury	0.0040000	0.00399	99.7	mg/L	EPA 7471B
SLD0238-CCV9	Mercury	0.0040000	0.00393	98.1	mg/L	EPA 7471B

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 7471B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: HYDRA
Sequence: SLD0238

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GD00044
Date Analyzed: 04/18/23 11:29

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0238-ICB1	Mercury	-0.000007	0.000021	0.000100	mg/L	
SLD0238-CCB1	Mercury	-0.000007	0.000021	0.000100	mg/L	
SLD0238-CCB2	Mercury	-0.000010	0.000021	0.000100	mg/L	
SLD0238-CCB3	Mercury	-0.000009	0.000021	0.000100	mg/L	
SLD0238-CCB4	Mercury	-0.000012	0.000021	0.000100	mg/L	
SLD0238-CCB5	Mercury	-0.000014	0.000021	0.000100	mg/L	
SLD0238-CCB6	Mercury	-0.000010	0.000021	0.000100	mg/L	
SLD0238-CCB7	Mercury	-0.000010	0.000021	0.000100	mg/L	
SLD0238-CCB8	Mercury	-0.000010	0.000021	0.000100	mg/L	
SLD0238-CCB9	Mercury	-0.000010	0.000021	0.000100	mg/L	

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0238
Instrument: HYDRA
Calibration: GD00044

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SLD0238-CAL1	SMM 04-18-23-001	NA	04/18/23 10:43
Cal Standard	SLD0238-CAL2	SMM 04-18-23-002	NA	04/18/23 10:45
Cal Standard	SLD0238-CAL3	SMM 04-18-23-003	NA	04/18/23 10:48
Cal Standard	SLD0238-CAL4	SMM 04-18-23-004	NA	04/18/23 10:50
Cal Standard	SLD0238-CAL5	SMM 04-18-23-005	NA	04/18/23 10:53
Cal Standard	SLD0238-CAL6	SMM 04-18-23-006	NA	04/18/23 10:55
Initial Cal Check	SLD0238-ICV1	SMM 04-18-23-007	NA	04/18/23 11:26
Initial Cal Blank	SLD0238-ICB1	SMM 04-18-23-008	NA	04/18/23 11:29
Instrument RL Check	SLD0238-CRL1	SMM 04-18-23-009	NA	04/18/23 11:31
Calibration Check	SLD0238-CCV1	SMM 04-18-23-010	NA	04/18/23 11:33
Calibration Blank	SLD0238-CCB1	SMM 04-18-23-011	NA	04/18/23 11:36
Calibration Check	SLD0238-CCV2	SMM 04-18-23-022	NA	04/18/23 12:01
Calibration Blank	SLD0238-CCB2	SMM 04-18-23-023	NA	04/18/23 12:04
Calibration Check	SLD0238-CCV3	SMM 04-18-23-034	NA	04/18/23 12:29
Calibration Blank	SLD0238-CCB3	SMM 04-18-23-035	NA	04/18/23 12:32
Calibration Check	SLD0238-CCV4	SMM 04-18-23-046	NA	04/18/23 12:57
Calibration Blank	SLD0238-CCB4	SMM 04-18-23-047	NA	04/18/23 13:00
Blank	BLD0397-BLK1	SMM 04-18-23-055	Solid	04/18/23 13:18
LCS	BLD0397-BS1	SMM 04-18-23-056	Solid	04/18/23 13:21
Calibration Check	SLD0238-CCV5	SMM 04-18-23-058	NA	04/18/23 13:25
Calibration Blank	SLD0238-CCB5	SMM 04-18-23-059	NA	04/18/23 13:28
Calibration Check	SLD0238-CCV6	SMM 04-18-23-070	NA	04/18/23 13:53
Calibration Blank	SLD0238-CCB6	SMM 04-18-23-071	NA	04/18/23 13:56
LDW23-SC1045	23A0420-01	SMM 04-18-23-079	Solid	04/18/23 14:14
LDW23-SC1003	23A0420-07	SMM 04-18-23-080	Solid	04/18/23 14:17
LDW23-SC1004	23A0420-08	SMM 04-18-23-081	Solid	04/18/23 14:19
Calibration Check	SLD0238-CCV7	SMM 04-18-23-082	NA	04/18/23 14:21
Calibration Blank	SLD0238-CCB7	SMM 04-18-23-083	NA	04/18/23 14:24
Calibration Check	SLD0238-CCV8	SMM 04-18-23-086	NA	04/18/23 14:31

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLD0238

SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: HYDRA
Calibration: GD00044

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLD0238-CCB8	SMM 04-18-23-087	NA	04/18/23 14:33
LDW23-SC1082	23A0420-09	SMM 04-18-23-088	Solid	04/18/23 14:36
Calibration Check	SLD0238-CCV9	SMM 04-18-23-089	NA	04/18/23 14:38
Calibration Blank	SLD0238-CCB9	SMM 04-18-23-090	NA	04/18/23 14:40

DETECTION LEVEL STANDARD
EPA 7471B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: HYDRA
Sequence: SLD0238

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GD00044
Lab Sample ID: SLD0238-CRL1

Analyte	True	Found	%R	Units	QC Limts
Mercury	0.000100	0.000097	97.1	mg/L	70 - 130

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1045 23A0420-01	01/19/23 08:10	01/19/23 15:55	04/17/23 17:40	88	180	04/18/23 14:14	89	180	
LDW23-SC1003 23A0420-07	01/19/23 12:25	01/19/23 15:55	04/17/23 17:40	88	180	04/18/23 14:17	89	180	
LDW23-SC1004 23A0420-08	01/19/23 11:55	01/19/23 15:55	04/17/23 17:40	88	180	04/18/23 14:19	89	180	
LDW23-SC1082 23A0420-09	01/19/23 13:40	01/19/23 15:55	04/17/23 17:40	88	180	04/18/23 14:36	89	180	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: HYDRA

Analyte	MDL	RL	Units
Mercury	0.00525	0.0250	mg/kg

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGHG1
Lot Number:	S2-HG711246
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Mercury
Starting Material:	Hg Metal
Starting Material Lot#:	1959
Starting Material Purity:	99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1000 ± 3 µg/mL

Density: 1.026 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **1004 ± 6 µg/mL**
ICP Assay NIST SRM 3133 Lot Number: 160921

Assay Method #2 **998 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **1001 ± 3 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000210	M	Eu	<	0.000210	O	Na		0.000626	M	Se	<	0.008100	M	Zn	<	0.000810
M	Al		0.000161	O	Fe	<	0.001600	M	Nb	<	0.000410	O	Si		0.000626	M	Zr	<	0.000410
M	As	<	0.002500	M	Ga	<	0.000210	M	Nd	<	0.000210	M	Sm	<	0.000210				
O	Au	<	0.001700	M	Gd	<	0.000210	O	Ni	<	0.001400	M	Sn	<	0.000410				
M	B	<	0.008500	M	Ge	<	0.000410	M	Os	<	0.003900	O	Sr	<	0.000110				
M	Ba	<	0.000210	M	Hf	<	0.000210	O	P	<	0.029000	M	Ta	<	0.000210				
O	Be	<	0.000110	s	Hg	<		M	Pb	<	0.000210	M	Tb	<	0.000210				
M	Bi	<	0.001100	M	Ho	<	0.000210	M	Pd	<	0.003500	M	Te	<	0.005700				
O	Ca		0.004754	M	In	<	0.000210	M	Pr	<	0.000210	M	Th	<	0.000210				
M	Cd	<	0.000210	M	Ir	<	0.000210	M	Pt	<	0.000210	O	Ti	<	0.000430				
M	Ce	<	0.000210	O	K		0.000731	M	Rb	<	0.000210	O	Tl	<	0.005400				
M	Co	<	0.000210	M	La	<	0.000210	M	Re	<	0.000210	M	Tm	<	0.000210				
O	Cr	<	0.003300	O	Li	<	0.000110	M	Rh	<	0.001100	M	U	<	0.000410				
M	Cs	<	0.000410	M	Lu	<	0.000210	M	Ru	<	0.000810	M	V	<	0.000210				
M	Cu	<	0.000810	O	Mg		0.000104	O	S	<	0.022000	M	W	<	0.001100				
M	Dy	<	0.000210	O	Mn	<	0.000430	M	Sb	<	0.000210	M	Y	<	0.000210				
M	Er	<	0.000210	M	Mo	<	0.000210	M	Sc	<	0.000210	M	Yb	<	0.000210				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+
Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.
Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.
Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 18, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 18, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	QCP-QCS-4
Lot Number:	R2-MEB695951
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	5 µg/mL ea: Mercury

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Mercury, Hg	**5.011 ± 0.023 µg/mL**		

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	061204
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The follow ing equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 20, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 20, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1045

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-01 D	SDG:	23A0420
Sampled:	01/19/23 08:10	Prepared:	01/20/23 15:22	File ID:	
% Solids:	51.63	Preparation:	No Prep Wet Chem	Analyzed:	01/20/23 15:42
Batch:	BLA0515	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	51.63	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1052

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-02 C	SDG:	23A0420
Sampled:	01/19/23 08:37	Prepared:	01/20/23 15:22	File ID:	
% Solids:	50.93	Preparation:	No Prep Wet Chem	Analyzed:	01/20/23 15:42
Batch:	BLA0515	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	50.93	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1057

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-03 C	SDG:	23A0420
Sampled:	01/19/23 09:16	Prepared:	01/20/23 15:22	File ID:	
% Solids:	54.25	Preparation:	No Prep Wet Chem	Analyzed:	01/20/23 15:42
Batch:	BLA0515	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	54.25	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-IT1051

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-04 D	SDG:	23A0420
Sampled:	01/19/23 09:55	Prepared:	01/20/23 15:22	File ID:	
% Solids:	67.13	Preparation:	No Prep Wet Chem	Analyzed:	01/20/23 15:42
Batch:	BLA0515	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	67.13	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1125

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-05 C	SDG:	23A0420
Sampled:	01/19/23 10:32	Prepared:	01/20/23 15:22	File ID:	
% Solids:	54.72	Preparation:	No Prep Wet Chem	Analyzed:	01/20/23 15:42
Batch:	BLA0515	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	54.72	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1132

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-06 C	SDG:	23A0420
Sampled:	01/19/23 10:46	Prepared:	01/20/23 15:22	File ID:	
% Solids:	54.86	Preparation:	No Prep Wet Chem	Analyzed:	01/20/23 15:42
Batch:	BLA0515	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	54.86	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1003

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-07 D	SDG:	23A0420
Sampled:	01/19/23 12:25	Prepared:	01/20/23 15:22	File ID:	
% Solids:	50.97	Preparation:	No Prep Wet Chem	Analyzed:	01/20/23 15:42
Batch:	BLA0515	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	50.97	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1004

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-08 D	SDG:	23A0420
Sampled:	01/19/23 11:55	Prepared:	01/20/23 15:22	File ID:	
% Solids:	57.39	Preparation:	No Prep Wet Chem	Analyzed:	01/20/23 15:42
Batch:	BLA0515	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	57.39	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1082

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-09 D	SDG:	23A0420
Sampled:	01/19/23 13:40	Prepared:	01/20/23 15:22	File ID:	
% Solids:	56.61	Preparation:	No Prep Wet Chem	Analyzed:	01/20/23 15:42
Batch:	BLA0515	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	56.61	1	0.04	0.04	

PREPARATION BATCH SUMMARY

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0515 Batch Matrix: Solid
Preparation: No Prep Wet Chem

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1045	23A0420-01		01/20/23 15:22	
LDW23-SC1052	23A0420-02		01/20/23 15:22	
LDW23-SC1057	23A0420-03		01/20/23 15:22	
LDW23-IT1051	23A0420-04		01/20/23 15:22	
LDW23-SC1125	23A0420-05		01/20/23 15:22	
LDW23-SC1132	23A0420-06		01/20/23 15:22	
LDW23-SC1003	23A0420-07		01/20/23 15:22	
LDW23-SC1004	23A0420-08		01/20/23 15:22	
LDW23-SC1082	23A0420-09		01/20/23 15:22	
Blank	BLA0515-BLK1		01/20/23 15:22	
LDW23-SC1045	BLA0515-DUP1		01/20/23 15:22	
LDW23-SC1045	BLA0515-DUP2		01/20/23 15:22	

TOTAL SOLIDS/VOLATILE SOLIDS (TS / TVS) BENCHSHEET for Solid samples

Method: PSEP 1986, SM2540, EPA 160.1

(dry at 104 (12-24 hr) then combust at 550 (30 min))

Batch:	BLA0515
Date:	1/20/2023 15:42
Analyst:	UW

Instrumentation			
Drying Ovens:	12	**Analytical Balance:**	BAL2
Muffle Furnace:	2		

Batch drying time				**Oven Temps, °C**	
record times as mm/dd/yy hh:mm		TS (%) calculated as:		Start Temp	104
date/time in oven:	1/20/2023 16:15	Final dry wt (g) = (Dry Wt - Tare Wt)		Dry Cycle 1	103
date/time out:	1/23/2023 7:05	TS = (Final Dry Wt)/ (grams Sample-Tare)		Dry Cycle 2	
elapsed hrs =	62.8	> 24 hr		Dry Cycle 3	

TVS (mg/kg dry wt) calculated as:
Final ash wt (g) = (min ash wt - tare wt)
TVS (mg/kg) = [(Dry wt-Ash wt)/ (dry weight)] *1,000,000
if ash wt > dry wt, "Chk for Err"
if dry wt-ash wt < 0.001 g, "< (1/dry wt)*1,000,000

Balance Calibration Check

Record weights to 4 places												
	Cal Weight ID:	CV-02	CV-02	CV-02	CV-02	CV-02		CV-02	CV-02	CV-02		
	Date & Time:	1/20/23 15:44	1/20/23 16:00	1/23/23 7:37								
Cal Wt (g):	10.0000	10.0000	10.0000	10.0000								
		Cal OK!	Cal OK!	Cal OK!								

Sample ID	Dish #	Tare Wt. (g)	Dish & Sample (g)	Dry Wt 104C (grams) 1	2	3	dry Wt (g)	TS (%)	Notes	ASH WT 550C (grams) 1	2	3	Ash Wt (g)	TVS (mg/kg)	TVS (%)	Notes
BLA0515-BLK1	48	0.8427	0.0000	0.8426			-0.0001	0.01%								
23A0385-01	49	0.8317	7.4537	4.5329			3.7012	55.89%								
23A0385-02	50	0.8031	4.0741	2.9520			2.1489	65.70%								
23A0393-01	51	0.7873	7.9179	2.4889			1.7016	23.86%								
23A0418-12	52	0.7989	9.0525	7.4733			6.6744	80.87%								
23A0420-01	53	0.7984	7.0781	4.0408			3.2424	51.63%								
BLA0515-DUP1	54	0.8002	6.7047	3.8322			3.0320	51.35%	RPD=0.5							
BLA0515-DUP2	55	0.8004	6.9989	3.9904			3.1900	51.46%	RSD=0.3							
23A0420-02	56	0.8315	7.0576	4.0027			3.1712	50.93%								
23A0420-03	57	0.8409	8.2695	4.8709			4.0300	54.25%								
23A0420-04	58	0.8417	8.5459	6.0137			5.1720	67.13%								
23A0420-05	59	0.7981	7.4412	4.4329			3.6348	54.72%								
23A0420-06	60	0.8148	8.2304	4.8833			4.0685	54.86%								
23A0420-07	61	0.7935	7.5475	4.2358			3.4423	50.97%								
23A0420-08	62	0.8010	8.2102	5.0528			4.2518	57.39%								
23A0420-09	63	0.8133	8.4055	5.1115			4.2982	56.61%								

Form I

METHOD BLANK DATA SHEET

SM 2540 G-97

TotalAnalytes

Blank

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0515
Laboratory ID: BLA0515-BLK1
Prepared: 01/20/23 15:22
Matrix: Solid
Preparation: No Prep Wet Chem
Analyzed: 01/20/23 15:42
Sequence:
Calibration:
Instrument: BAL2

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	ND	1	0.04	0.04	U

DUPLICATES

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0515-DUP1
Batch: BLA0515
Lab Source ID: 23A0420-01
Preparation: No Prep Wet Chem
Initial/Final: 5 g / 5 g
Source Sample Name: LDW23-SC1045
% Solids: 51.63

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Total Solids	20	51.63	51.35	0.548	

*: Values outside of QC limits
L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD

DUPLICATES

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0515-DUP2
Batch: BLA0515
Lab Source ID: 23A0420-01
Preparation: No Prep Wet Chem
Initial/Final: 5 g / 5 g
Source Sample Name: LDW23-SC1045
% Solids: 51.63

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Total Solids	20	51.63	51.46	0.328	

*: Values outside of QC limits
L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD

HOLDING TIME SUMMARY

Analysis: SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1045 23A0420-01	01/19/23 08:10	01/19/23 15:55	01/20/23 15:22	1	180	01/20/23 15:42	1	180	
LDW23-SC1052 23A0420-02	01/19/23 08:37	01/19/23 15:55	01/20/23 15:22	1	180	01/20/23 15:42	1	180	
LDW23-SC1057 23A0420-03	01/19/23 09:16	01/19/23 15:55	01/20/23 15:22	1	180	01/20/23 15:42	1	180	
LDW23-IT1051 23A0420-04	01/19/23 09:55	01/19/23 15:55	01/20/23 15:22	1	180	01/20/23 15:42	1	180	
LDW23-SC1125 23A0420-05	01/19/23 10:32	01/19/23 15:55	01/20/23 15:22	1	180	01/20/23 15:42	1	180	
LDW23-SC1132 23A0420-06	01/19/23 10:46	01/19/23 15:55	01/20/23 15:22	1	180	01/20/23 15:42	1	180	
LDW23-SC1003 23A0420-07	01/19/23 12:25	01/19/23 15:55	01/20/23 15:22	1	180	01/20/23 15:42	1	180	
LDW23-SC1004 23A0420-08	01/19/23 11:55	01/19/23 15:55	01/20/23 15:22	1	180	01/20/23 15:42	1	180	
LDW23-SC1082 23A0420-09	01/19/23 13:40	01/19/23 15:55	01/20/23 15:22	1	180	01/20/23 15:42	1	180	
Duplicate BLA0515-DUP1	01/19/23 08:10	01/19/23 15:55	01/20/23 15:22	1	180	01/20/23 15:42	1	180	
Duplicate BLA0515-DUP2	01/19/23 08:10	01/19/23 15:55	01/20/23 15:22	1	180	01/20/23 15:42	1	180	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument:

Analyte	MDL	RL	Units
Total Solids	0.04	0.04	%

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Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SC1045

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-01 D	SDG:	23A0420
Sampled:	01/19/23 08:10	Prepared:	04/18/23 16:53	File ID:	XDT_m1230502-066
% Solids:	51.63	Preparation:	SWN EPA 3050B	Analyzed:	05/02/23 18:42
Batch:	BLD0396	Sequence:	SLE0043	Initial/Final:	1.067 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00013

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	22.6	20	0.09	0.18	
7440-22-4	Silver	0.27	20	0.04	0.36	J

Analytical Resources, LLC
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Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SC1045

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-01 D	SDG:	23A0420
Sampled:	01/19/23 08:10	Prepared:	04/18/23 16:53	File ID:	XDT_m1230508-082
% Solids:	51.63	Preparation:	SWN EPA 3050B	Analyzed:	05/08/23 21:58
Batch:	BLD0396	Sequence:	SLE0138	Initial/Final:	1.067 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00030

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	25.8	100	2.36	4.54	D

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Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SC1003

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-07 D	SDG:	23A0420
Sampled:	01/19/23 12:25	Prepared:	04/18/23 16:53	File ID:	XDT_m1230502-067
% Solids:	50.97	Preparation:	SWN EPA 3050B	Analyzed:	05/02/23 18:46
Batch:	BLD0396	Sequence:	SLE0043	Initial/Final:	1.062 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00013

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	38.1	20	0.10	0.18	
7440-22-4	Silver	0.41	20	0.04	0.37	

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SC1003

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-07 D	SDG:	23A0420
Sampled:	01/19/23 12:25	Prepared:	04/18/23 16:53	File ID:	XDT_m1230509a-047
% Solids:	50.97	Preparation:	SWN EPA 3050B	Analyzed:	05/09/23 19:44
Batch:	BLD0396	Sequence:	SLE0163	Initial/Final:	1.062 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00034

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	32.8	100	2.40	4.62	D

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Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SC1004

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-08 D	SDG:	23A0420
Sampled:	01/19/23 11:55	Prepared:	04/18/23 16:53	File ID:	XDT_m1230502-068
% Solids:	57.39	Preparation:	SWN EPA 3050B	Analyzed:	05/02/23 18:50
Batch:	BLD0396	Sequence:	SLE0043	Initial/Final:	1.04 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00013

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	21.9	20	0.44	0.84	
7439-92-1	Lead	25.1	20	0.09	0.17	
7440-22-4	Silver	0.28	20	0.04	0.34	J

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Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SC1082

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-09 D	SDG:	23A0420
Sampled:	01/19/23 13:40	Prepared:	04/18/23 16:53	File ID:	XDT_m1230502-069
% Solids:	56.61	Preparation:	SWN EPA 3050B	Analyzed:	05/02/23 18:55
Batch:	BLD0396	Sequence:	SLE0043	Initial/Final:	1.08 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00013

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	80.8	20	0.09	0.16	
7440-22-4	Silver	0.39	20	0.04	0.33	

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SC1082

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-09 D	SDG:	23A0420
Sampled:	01/19/23 13:40	Prepared:	04/18/23 16:53	File ID:	XDT_m1230508-084
% Solids:	56.61	Preparation:	SWN EPA 3050B	Analyzed:	05/08/23 22:06
Batch:	BLD0396	Sequence:	SLE0138	Initial/Final:	1.08 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00030

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	23.9	100	2.13	4.09	D

PREPARATION BATCH SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLD0396 Batch Matrix: Solid
Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1045	23A0420-01	XDT_m1230508-082	04/18/23 16:53	
LDW23-SC1045	23A0420-01	XDT_m1230502-066	04/18/23 16:53	
LDW23-SC1003	23A0420-07	XDT_m1230509a-047	04/18/23 16:53	
LDW23-SC1003	23A0420-07	XDT_m1230502-067	04/18/23 16:53	
LDW23-SC1004	23A0420-08	XDT_m1230502-068	04/18/23 16:53	
LDW23-SC1082	23A0420-09	XDT_m1230508-084	04/18/23 16:53	
LDW23-SC1082	23A0420-09	XDT_m1230502-069	04/18/23 16:53	
Blank	BLD0396-BLK1	XDT_m1230501-150	04/14/23 16:53	
LCS	BLD0396-BS1	XDT_m1230501-151	04/14/23 16:53	

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Digestion Log

Analyst: MP Date: 4/18/23 Time: 1220-1815 Balance ID: BALIO

Matrix: Soil Block ID: 3 Block Temp: 96C Thermometer: 20-2

ARI Sample ID	Btl #	pH<2	Prep Code: SWN Initial Wt (g) Vol (mL)	Prep Code: SWN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
23A417-01	D		1.016	50			
-02			1.038				
-03			1.042				
-04			1.075				
-05			1.053				
-06			1.046				
-07			1.028				
-08			1.086				
-09			1.038				
-10			1.033				
-11			1.021				
-12			1.017				
-13			1.052				
-14			1.062				
-15			1.039				
23A420-01			1.067				
-04			1.063				
-07			1.062				
-08			1.040				
-09			1.080				
PBD396-blk	—		—				23A417-01
-bs	—		—				
-dup	—		1.018				
-MS	—		1.017				
-MSD	—		1.014				
—	—	—	—	—	—	—	—

Chemical/Reagent ID:

HNO_3: L24678 1:1 HNO_3: L23305 HCl: — H_2O_2: K210516

Tube Lot#: 2210117 Boiling Chip Lot#: — (DoD Only)

Form I

METHOD BLANK DATA SHEET

EPA 6020B

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0420

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

Batch: BLD0396 | Laboratory ID: BLD0396-BLK1 | Prepared: 04/14/23 16:53

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 05/02/23 03:21

Sequence: SLE0017 | Calibration: GE00007 | Instrument: ICPMS1

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium-52	ND	20	0.26	0.50	U
7439-92-1	Lead-208	ND	20	0.05	0.10	U
7440-22-4	Silver-107	ND	20	0.02	0.20	U

LCS / LCS DUPLICATE RECOVERY

EPA 6020B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	05/02/23 03:26
Batch:	BLD0396	Laboratory ID:	BLD0396-BS1
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Chromium-52	25.0	24.1		96.6	80 - 120
Lead-208	25.0	28.3		113	80 - 120
Silver-107	25.0	26.6		106	80 - 120

* Indicates values outside of QC limits

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00030	Instrument:	ICPMS1
Calibration Date:	05/08/2023 13:46		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Chromium-52	0	0	0.5	58752	10	28000.7	20	26691.55	50	25326.02	100	25598.6
Chromium-53	0	0	0.5	3710	10	3057.2	20	2958.15	50	2834.1	100	2828.08

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC
Instrument: ICPMS1
Calibration: GE00030
Calibration Date: 5/8/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Chromium-52	27394.81	68.1	0.9999		0.998	
Chromium-53	2564.588	50.6	0.9999		0.998	

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/8/23 **Analyst:** MB **Sequence:** SLEØ138 **Cal:** ~~GEØØ23Ø~~ GE00030

MB 5/8/23

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CAL1	LSØ73		
		-CAL2	L4627		
		-CAL3	L4628		
		-CAL4	L4629		
		-CAL5	LSØ47		
		-CAL6	L463Ø		
		-IBL1	—		
		-ICV1	L3575		
		-ICB1	LSØ73		
		-CCV1	LSØ47		
		-CCB1	LSØ73		
		-CRL1	L4627		
		-IFA1	L4688		V↑, Cr53↑
		-IFB1	L4689		↓
		-MCV1	L478Ø		
		-MCV2	L4781		
		-IBL2	—		(S6↑)
		-IBL3	—		
		-CCV2			
		-CCB2			
		BLEØ2Ø5-BLK1	REN		
		↓ -BS1	↓		
		23EØØ79-Ø1		5	Li↑ - Not Needed
		23EØØ23-Ø1	↓	2	↓ ↓

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/8/23 **Analyst:** MS **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted. MS 5/8/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23EΦΦ23-Φ2	REN	2	Li ↑ - Not Needed
		↓ -Φ3	↓	↓	↓ ↓
		↓ -Φ4	↓	↓	↓ ↓
		~~23EΦ~~ SEQ-IBL4			
		23EΦΦ2Φ-Φ1	REN	2	
		SEQ-IBL5			
		-CCV3			
		-CCB3			
	✓	-CAL1			
		-CCV4			
		↓ -CCB4			
		23CΦ715-Φ6	REN	5	
		↓ -Φ8	↓	↓	Se noisy Se NR
		23CΦ741-Φ2	↓	↓	
		23CΦ69Φ-Φ6	↓	↓	Se sl. noisy Se NR
		SEQ-IBL6			
		23CΦ69Φ-Φ2	REN	5	Se noisy - Value matches DLP
		BLΦΦ296-DLP1	↓	↓	
		↓ -MS1	↓	↓	
		↓ -MSD1	↓	↓	
		SEQ-IBL7			
		↓ -CCV5			
		↓ -CCB5			
		BLEΦΦ2Φ-BLK2	REN		Cd, Sb, Se, Tl only

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/8/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLEΦΦ2Φ-BS2	REN		Cd, Sb, Se, Tl only
		BLΦ755-BLK3	↓		Be only
		↓ -BS3	↓		↓
		230Φ313-Φ1	↓		Li, Sc↑ Be, Cr NR
		SEQ. IBL8			
		230Φ313-Φ1RE1	REN	5	Be, Cr only
		230Φ425-Φ1	↓	2	Li, Sc↑ - Not Needed
		230Φ413-Φ1RE1	↓		Zn only
		SEQ-IBL9			
		↓ -CCV6			
		↓ -CCB6			Gesl. noisy - %R of Analytes OK
		BLOΦ8Φ6-BLK2	REN		Cd, Sb, Se, Tl only
		↓ -BS2	↓		↓
		230Φ414-Φ2	↓		Sc↑ - Not Needed / Cd sl. noisy - Matches DUP / As, Cd, Cu, Sb Se, Tl, Zn only
		BLEΦΦ2Φ-DUP2	↓		↓ ↓ ↓
		↓ -MS2	↓		↓ ↓ ↓
		↓ -MSD2	↓		↓ ↓ ↓
		230Φ425-Φ2	↓	2	Li, Sc↑ No Mn
		BLOΦ8Φ6-DUP1	↓	↓	↓ ↓
		↓ -MS1	↓	↓	↓ ↓
		SEQ-IBLA			
		↓ -CCV7			
		↓ -CCB7			
	✓	↓ -CAL1			All but Cr, Cu, Pb, Se, Zn Removed

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/8/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted. MS 5/8/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCV8			
		↓ -CCB8			
		23AΦ417-Φ3	SWN	100	Cr only
		↓ -Φ8	↓	↓	↓
		↓ -14			
		23AΦ419-Φ2			
		↓ -Φ3			
		↓ -Φ8			
		23AΦ42Φ-Φ1			
	✓	↓ -Φ7			sc noisy
		↓ -Φ9	↓	↓	↓
		SEQ-IBLB			
		↓ -CCV9			
		↓ -CCB9			
		230Φ392-Φ1	~~REN~~ ~~SWN~~	100	Cr, Pb only
		23AΦ455-Φ9	SWN	↓	Cr only
		↓ -12	↓	↓	↓
		↓ -13			
		↓ -14			
		↓ -18			
		23AΦ437-Φ1			+Zn
		↓ -Φ2	↓	↓	↓
		230Φ371-Φ6			Pb only
		SEQ-IBLC			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/8/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted. MB 5/8/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCVA			
		↓ -CCBA			
		23CΦ69Φ-Φ6REI	REN	50	Se only
		23CΦ715-Φ8REI	↓	↓	↓
		230Φ297-Φ2	SWN	100	Cr only
		-Φ3			
		-Φ4			
		-Φ5			
		-Φ6			
		-Φ7			
		↓ -Φ8	↓	↓	Sc noisy Zn only
		SEQ-IBLD			
		↓ -CCVB			
		↓ -CCBB			Ge noisy - %R + Analytes OK
		23CΦ69Φ-Φ4	REN	5	Cr, Pb, Se only
		↓ -Φ8			Cr, Pb only
		↓ -1Φ			Sc, Tbsl. noisy - %R + Analytes OK
		23CΦ715-Φ2			
		↓ -Φ4	↓	↓	↓
		SEQ-IBLE			
		23DΦ3Φ6-Φ1	REN	2	Cu only
		23DΦ413-Φ1	↓		Pb only
		23DΦ376-Φ1	↓	20	↓
		SEQ-IBLF			(Sc, Tb Noisy)

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/8/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCVC			Cr^{52}↓
		-CCBC			
	√	-CAL1			
		-CCVD			
		-CCBD			Sc, Tb noisy - %R ↑Analytes OK
		230Φ377-Φ1	REN	5	Cr, Pb only
	√	230Φ442-Φ2			Sc↑ Cr only
		BLEΦΦ54-DUP3			
		-MS3			
		-MSD3			
		230Φ15Φ-11		10	
		BLDΦ559-DUP4			
		-MS4			
		-MSD4			
		SEQ-IBLG			
		-CCVE			
		-CCBE			
		230Φ388-Φ3	REN	20	
		-Φ4			
		-Φ5			
		-Φ6			
		SEQ-IBL11			(Cr^{53}?)
		230Φ386-Φ2	REN	20	Ge sl. noisy - %R ↑Analytes OK
		-Φ3			

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/8/23 **Analyst:** MB **Sequence:** ~~_____~~ **Cal:** ~~_____~~

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		230Φ386-Φ4	REN	20	
		SEQ-IBLI			(Cr53↑)
		-IBLJ			
		-CCVF			
		-CCBF			
		230Φ388-Φ1	REN	50	
		230Φ388-Φ7		20	
		230Φ386-Φ6		↓	
		-Φ5		5	
		SEQ-IBLK			
		230Φ386-Φ1	REN	5	Cr, Cu, Pb only
		BLDΦ811-DUP2			
		-MS2			
		SEQ-IBLL+M			
		-CCVG			
		-CCBG			
	✓	-CAL1			
		-CCVH			
		-CCBH			
		230Φ409-Φ2	REN		
		-Φ4			
		-Φ6			
		230Φ424-Φ1			Sc↑/Zn↑ No Zn
		SEQ-IBLN			

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/8/23 **Analyst:** MS **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted. MS 5/8/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23D0412-01	REN	2	Cu only
		BLD0807-DUP2	↓	↓	↓
		-MS2	↓	↓	↓
		-MSD2	↓	↓	↓
		SEQ-IBL0			
		-CCVI			Pb↑
		-CCBI			
		23D0444-01	REN		
		23D0463-01	↓		No Pb
		-02	↓		Sc↑ - Not Needed ↓
		-03	↓		↓
	✓	23D0464-01	↓		
	✓	-02	↓		Sc↑ Ge↓/Pb↑
		23D0466-01	↓		
		23D0516-01	↓		Sc↑ - Not Needed No Pb ↓
		-02	↓		↓
		SEQ-IBLP			
		-CCVJ			Cr↓/Pb↑
		-CCBJ			
		BLE0134-BLK1	REN		Cu, Zn only
		-BS1	↓		↓
		23D0513-01	↓		
		-02	↓		
	✓	-03	↓		Ge no. 54

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/8/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		230Φ52Φ-Φ1	REN		
		↓ -Φ2	↓	2	
		230Φ55Φ-Φ1	↓		
		↓ -Φ2	↓		
		SEQ-IBLQ			
		↓ -CCVK			Pb↑
		↓ -CCBK			
		230Φ47Φ-Φ1	REN		
		230Φ557-Φ1	↓		
		↓ -Φ2	↓		
		230Φ586-Φ1	↓		
		230Φ61Φ-Φ1	↓		Sc↑ - Not Needed
		SEQ-IBLR			
		↓ -CCVL			Cr↓/Pb↑ - Not Needed
		↓ -CCBL			
		Rinse/DI			
				MB 5/8/23	

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Monday, May 08, 2023 12:17:00
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.127
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	9412.8	9412.833	62.178	0.7	Standard
	In	114.9	72693.9	72693.940	1413.616	1.9	Standard
	U	238.1	99552.8	99552.832	2855.076	2.9	Standard
⌈	CeO	155.9	2325.2	0.023	0.001	2.3	Standard
| >	Ce	139.9	100038.3	100038.344	1875.325	1.9	Standard
⌊	Ce++	70.0	690.2	0.007	0.000	2.5	Standard
	Bkgd	220.0	1.0	1.000	0.391	39.1	Standard

Current Conditions File Data

Current Value	Description
0.91	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.91	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Start Time: 5/8/2023 12:16:59 PM
End Time: 5/8/2023 12:26:05 PM

STD Performance Check - [Passed] Optimum value(s): N/A
- Obtained Intensity (Be 9): 9412.83
- Obtained Intensity (In 115): 72693.94
- Obtained Intensity (U 238): 99552.83
- Obtained Intensity (Bkgd 220): 1.00
- Obtained Formula (Ce++ 70 / Ce 140): 0.007 (=690.22 / 100038.34)
- Obtained Formula (CeO 156 / Ce 140): 0.023 (=2325.19 / 100038.34)
- Obtained RSD (Be 9): 0.0066
- Obtained RSD (In 115): 0.0194
- Obtained RSD (U 238): 0.0287

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
1.00 mm	1.03 mm	83560.67

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 0.91
- Obtained Intensity (In 115): 87272.77
- Obtained Formula (CeO 156 / Ce 140): 0.0228 (=2561.23 / 112182.75)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
- Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.694)
- Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.702)
- Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.704)
- Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.690)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.998; Intercept = -15.25

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.993; Intercept = -14.58

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Optimization Status

Start Time: 5/8/2023 12:16:59 PM

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 5
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 9412.83
		Obtained Intensity (In 115): 72693.94
		Obtained Intensity (U 238): 99552.83
		Obtained Intensity (Bkgd 220): 1.00
		Obtained Formula (Ce++ 70 / Ce 140): 0.007 (=690.22 / 100038.34)
		Obtained Formula (CeO 156 / Ce 140): 0.023 (=2325.19 / 100038.34)
		Obtained RSD (Be 9): 0.0066
		Obtained RSD (In 115): 0.0194
		Obtained RSD (U 238): 0.0287

[Passed] Optimum value(s): N/A

Torch Alignment
	Optimization Settings:
		Method: Torch Alignment.mth.
		Intensity Criterion: In 115 Maximum

	Optimization Results:
		Vertical	Horizontal	Intensity
[Passed]	1.00 mm	1.03 mm	83560.67

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 0.89/0.96/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 87272.77
		Obtained Formula (CeO 156 / Ce 140): 0.0228 (=2561.23 / 112182.75)
[Passed] Optimum value(s): 0.91

Mass Calibration and Resolution
Optimization Settings:
Method: Tuning.mth.
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Iterations: 6
Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
Peak height (%) for Res. Opt.: 10

Optimization Results:
Initial Try
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.694)
Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.702)
Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.704)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.690)
[Passed] Optimum value(s): N/A

QID STD/DRC
Optimization Settings:
Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 0.998; Intercept = -15.25

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-15	52568.5
Mg	24	41	-14.5	49489.6
In	115	41	-12	84525.3
Ce	140	41	-12	114219
Pb	208	41	-11.5	60600.3
U	238	41	-11	107555

KED Mode QID
Optimization Settings:
Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 0.993; Intercept = -14.58

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-14.5	34666
Mg	24	41	-14	55282.8
In	115	41	-12	122769
Ce	140	41	-11	118715
Pb	208	41	-10.5	58632.1
U	238	41	-10.5	126877

End Time: 5/8/2023 12:26:05 PM

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Monday, May 08, 2023 12:26:10
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.133
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	10228.3	10228.261	133.277	1.3	Standard
	In	114.9	81391.4	81391.410	568.414	0.7	Standard
	U	238.1	108287.0	108286.959	1031.250	1.0	Standard
⌈	CeO	155.9	2567.6	0.024	0.001	3.4	Standard
| >	Ce	139.9	109006.9	109006.917	593.681	0.5	Standard
⌊	Ce++	70.0	1050.0	0.010	0.000	1.7	Standard
	Bkgd	220.0	0.5	0.533	0.298	55.9	Standard

Current Conditions File Data

Current Value	Description
0.91	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.91	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Start Time: 5/8/2023 12:26:09 PM
End Time: 5/8/2023 12:28:14 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 10228.26
Obtained Intensity (In 115): 81391.41
Obtained Intensity (U 238): 108286.96
Obtained Intensity (Bkgd 220): 0.53
Obtained Formula (Ce++ 70 / Ce 140): 0.010 (=1050.04 / 109006.92)
Obtained Formula (CeO 156 / Ce 140): 0.024 (=2567.63 / 109006.92)
Obtained RSD (Be 9): 0.0130
Obtained RSD (In 115): 0.0070
Obtained RSD (U 238): 0.0095

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Optimization Status

Start Time: 5/8/2023 12:26:09 PM

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 5
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 10228.26
		Obtained Intensity (In 115): 81391.41
		Obtained Intensity (U 238): 108286.96
		Obtained Intensity (Bkgd 220): 0.53
		Obtained Formula (Ce++ 70 / Ce 140): 0.010 (=1050.04 / 109006.92)
		Obtained Formula (CeO 156 / Ce 140): 0.024 (=2567.63 / 109006.92)
		Obtained RSD (Be 9): 0.0130
		Obtained RSD (In 115): 0.0070
		Obtained RSD (U 238): 0.0095

[Passed] Optimum value(s): N/A

End Time: 5/8/2023 12:28:14 PM

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 13:46:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L				200733	1	Standard
	Be	**9**		ug/L				1	100	Standard
	C	**13**		ug/L				46078	0	Standard
>	**Sc**	**45**		ug/L				385816	0	Standard
	V	**51**		ug/L				5757	1	Standard
	V-1	**51**		ug/L				1163	2	Standard
	Cr	**52**		ug/L				16947	0	Standard
	Cr	**53**		ug/L				446	4	Standard
	Mn	**55**		ug/L				422	4	Standard
>	**Ge**	**72**		ug/L				43685	1	KED
	Co	**59**		ug/L				1	173	KED
	Ni	**60**		ug/L				8	26	KED
	Ni	**62**		ug/L				2	114	KED
	Cu	**63**		ug/L				18	41	KED
	Cu	**65**		ug/L				12	9	KED
	Zn	**66**		ug/L				25	24	KED
	Zn	**67**		ug/L				5	57	KED
	As	**75**		ug/L				1	17	KED
	Se	**78**		ug/L				10	31	KED
	Y	**89**		ug/L				68377	1	Standard
	Kr	**83**		ug/L				55	5	Standard
>	**In-1**	**115**		ug/L				10145	3	KED
	Mo	**98**		ug/L				2	130	KED
	Cd	**111**		ug/L				6	9	KED
	Cd	**114**		ug/L				3	34	KED
>	**In**	**115**		ug/L				487580	0	Standard
	Ag	**107**		ug/L				34	30	Standard
	Sb	**121**		ug/L				52	11	Standard
	Sb	**123**		ug/L				50	14	Standard
	Ba	**135**		ug/L				24	15	Standard
	Ba	**137**		ug/L				34	17	Standard
>	**Tb**	**159**		ug/L				169960	0	Standard
	Tl	**205**		ug/L				41	14	Standard
	Pb	**208**		ug/L				184	20	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 13:51:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			200733	204651	0	Standard
	Be	**9**	**0.200**	ug/L	0.016	7	1	1575	7	Standard
	C	**13**		ug/L			46078	48338	2	Standard
>	**Sc**	**45**		ug/L			385816	391264	1	Standard
	V	**51**	**0.200**	ug/L	0.013	6	5757	11759	1	Standard
	V-1	**51**	**0.200**	ug/L	0.004	2	1163	7179	0	Standard
	Cr	**52**	**0.500**	ug/L	0.011	2	16947	29376	0	Standard
	Cr	**53**	**0.500**	ug/L	0.019	3	446	1855	4	Standard
	Mn	**55**	**0.500**	ug/L	0.013	2	422	19307	0	Standard
>	**Ge**	**72**		ug/L			43685	43427	0	KED
	Co	**59**	**0.200**	ug/L	0.007	3	1	1156	4	KED
	Ni	**60**	**0.500**	ug/L	0.031	6	8	911	6	KED
	Ni	**62**	**0.500**	ug/L	0.057	11	2	131	11	KED
	Cu	**63**	**0.500**	ug/L	0.018	3	18	2493	2	KED
	Cu	**65**	**0.500**	ug/L	0.010	1	12	1254	1	KED
	Zn	**66**	**6.000**	ug/L	0.091	1	25	3999	0	KED
	Zn	**67**	**6.000**	ug/L	0.514	8	5	592	8	KED
	As	**75**	**0.200**	ug/L	0.023	11	1	61	10	KED
	Se	**78**	**0.500**	ug/L	0.134	26	10	24	15	KED
	Y	**89**		ug/L			68377	69426	2	Standard
	Kr	**83**		ug/L			55	55	5	Standard
>	**In-1**	**115**		ug/L			10145	9722	0	KED
	Mo	**98**	**0.200**	ug/L	0.011	5	2	292	5	KED
	Cd	**111**	**0.100**	ug/L	0.013	13	6	30	10	KED
	Cd	**114**	**0.100**	ug/L	0.017	16	3	84	16	KED
>	**In**	**115**		ug/L			487580	503787	0	Standard
	Ag	**107**	**0.200**	ug/L	0.005	2	34	3376	1	Standard
	Sb	**121**	**0.200**	ug/L	0.003	1	52	3011	1	Standard
	Sb	**123**	**0.200**	ug/L	0.003	1	50	2249	1	Standard
	Ba	**135**	**0.500**	ug/L	0.013	2	24	2873	1	Standard
	Ba	**137**	**0.500**	ug/L	0.019	3	34	5208	3	Standard
>	**Tb**	**159**		ug/L			169960	172791	0	Standard
	Tl	**205**	**0.200**	ug/L	0.005	2	41	12182	2	Standard
	Pb	**208**	**0.100**	ug/L	0.002	1	184	8594	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 13:56:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			200733	206010	2	Standard
⌊	**Be**	**9**	**10.000**	ug/L	0.089	0	1	83270	1	Standard
	C	**13**		ug/L			46078	83575	2	Standard
⌈>	**Sc**	**45**		ug/L			385816	398855	0	Standard
⌈	**V**	**51**	**10.000**	ug/L	0.033	0	5757	322788	0	Standard
⌊	**V-1**	**51**	**10.000**	ug/L	0.004	0	1163	319446	0	Standard
⌈	**Cr**	**52**	**10.001**	ug/L	0.048	0	16947	280007	0	Standard
⌊	**Cr**	**53**	**10.001**	ug/L	0.100	0	446	30572	0	Standard
	Mn	**55**	**10.000**	ug/L	0.058	0	422	390746	0	Standard
⌈>	**Ge**	**72**		ug/L			43685	43597	0	KED
⌈	**Co**	**59**	**10.000**	ug/L	0.074	0	1	59236	0	KED
⌊	**Ni**	**60**	**9.999**	ug/L	0.119	1	8	17224	0	KED
⌈	**Ni**	**62**	**10.001**	ug/L	0.532	5	2	2738	4	KED
⌈	**Cu**	**63**	**9.999**	ug/L	0.162	1	18	48057	0	KED
⌊	**Cu**	**65**	**9.999**	ug/L	0.043	0	12	24306	0	KED
⌈	**Zn**	**66**	**9.998**	ug/L	0.421	4	25	6669	3	KED
⌊	**Zn**	**67**	**10.220**	ug/L	0.658	6	5	1074	5	KED
⌈	**As**	**75**	**10.000**	ug/L	0.296	2	1	3294	1	KED
⌊	**Se**	**78**	**10.002**	ug/L	0.644	6	10	328	5	KED
	Y	**89**		ug/L			68377	70390	0	Standard
	Kr	**83**		ug/L			55	54	27	Standard
⌈>	**In-1**	**115**		ug/L			10145	9734	4	KED
⌈	**Mo**	**98**	**10.000**	ug/L	0.436	4	2	15224	0	KED
⌈	**Cd**	**111**	**10.000**	ug/L	0.439	4	6	3388	0	KED
⌊	**Cd**	**114**	**10.000**	ug/L	0.482	4	3	8463	2	KED
⌈>	**In**	**115**		ug/L			487580	501414	0	Standard
⌈	**Ag**	**107**	**10.000**	ug/L	0.188	1	34	167648	2	Standard
⌈	**Sb**	**121**	**10.000**	ug/L	0.128	1	52	150012	0	Standard
⌊	**Sb**	**123**	**10.000**	ug/L	0.262	2	50	114754	2	Standard
⌈	**Ba**	**135**	**10.001**	ug/L	0.166	1	24	58308	1	Standard
⌊	**Ba**	**137**	**10.001**	ug/L	0.169	1	34	107734	1	Standard
⌈>	**Tb**	**159**		ug/L			169960	174512	1	Standard
⌈	**Tl**	**205**	**10.000**	ug/L	0.170	1	41	629022	1	Standard
⌊	**Pb**	**208**	**10.000**	ug/L	0.090	0	184	830772	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 14:02:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			200733	203898	2	Standard
	Be	**9**	**19.970**	ug/L	1.092	5	1	163448	2	Standard
	C	**13**		ug/L			46078	78175	0	Standard
>	**Sc**	**45**		ug/L			385816	398069	1	Standard
	V	**51**	**19.911**	ug/L	0.417	2	5757	624371	0	Standard
	V-1	**51**	**19.901**	ug/L	0.514	2	1163	620746	1	Standard
	Cr	**52**	**19.942**	ug/L	0.211	1	16947	533831	1	Standard
	Cr	**53**	**19.906**	ug/L	0.510	2	446	59163	1	Standard
	Mn	**55**	**19.904**	ug/L	0.135	0	422	761192	2	Standard
>	**Ge**	**72**		ug/L			43685	43234	0	KED
	Co	**59**	**19.878**	ug/L	0.312	1	1	113983	1	KED
	Ni	**60**	**19.922**	ug/L	0.314	1	8	33504	0	KED
	Ni	**62**	**19.921**	ug/L	0.233	1	2	5323	2	KED
	Cu	**63**	**19.880**	ug/L	0.216	1	18	92537	1	KED
	Cu	**65**	**19.894**	ug/L	0.498	2	12	46958	2	KED
	Zn	**66**	**19.838**	ug/L	0.144	0	25	12796	0	KED
	Zn	**67**	**20.246**	ug/L	0.266	1	5	2184	0	KED
	As	**75**	**19.925**	ug/L	0.320	1	1	6413	0	KED
	Se	**78**	**20.011**	ug/L	0.338	1	10	642	1	KED
	Y	**89**		ug/L			68377	69477	0	Standard
	Kr	**83**		ug/L			55	55	13	Standard
>	**In-1**	**115**		ug/L			10145	9727	3	KED
	Mo	**98**	**19.881**	ug/L	0.922	4	2	29549	1	KED
	Cd	**111**	**19.838**	ug/L	0.682	3	6	6506	0	KED
	Cd	**114**	**19.875**	ug/L	0.702	3	3	16406	1	KED
>	**In**	**115**		ug/L			487580	495406	2	Standard
	Ag	**107**	**19.889**	ug/L	0.951	4	34	322034	3	Standard
	Sb	**121**	**19.951**	ug/L	0.519	2	52	292758	2	Standard
	Sb	**123**	**19.917**	ug/L	0.490	2	50	222026	0	Standard
	Ba	**135**	**19.926**	ug/L	0.355	1	24	113069	1	Standard
	Ba	**137**	**19.925**	ug/L	0.285	1	34	208859	0	Standard
>	**Tb**	**159**		ug/L			169960	176142	1	Standard
	Tl	**205**	**19.849**	ug/L	0.517	2	41	1223114	1	Standard
	Pb	**208**	**19.857**	ug/L	0.312	1	184	1618403	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 14:07:30
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			200733	189749	4	Standard
⌊	**Be**	**9**	**50.201**	ug/L	2.173	4	1	390155	1	Standard
	C	**13**		ug/L			46078	52182	0	Standard
⌈>	**Sc**	**45**		ug/L			385816	379624	3	Standard
⌈	**V**	**51**	**50.259**	ug/L	1.359	2	5757	1533312	1	Standard
⌊	**V-1**	**51**	**50.239**	ug/L	1.080	2	1163	1528977	1	Standard
⌈	**Cr**	**52**	**50.106**	ug/L	1.610	3	16947	1266301	0	Standard
⌊	**Cr**	**53**	**50.039**	ug/L	0.938	1	446	141705	2	Standard
	Mn	**55**	**50.057**	ug/L	1.738	3	422	1834023	0	Standard
⌈>	**Ge**	**72**		ug/L			43685	42249	0	KED
⌈	**Co**	**59**	**49.839**	ug/L	0.292	0	1	274873	1	KED
⌊	**Ni**	**60**	**49.711**	ug/L	0.569	1	8	79398	1	KED
⌈	**Ni**	**62**	**49.864**	ug/L	0.801	1	2	12841	1	KED
⌈	**Cu**	**63**	**49.743**	ug/L	0.392	0	18	220566	1	KED
⌊	**Cu**	**65**	**49.671**	ug/L	0.494	0	12	110894	0	KED
⌈	**Zn**	**66**	**49.738**	ug/L	0.381	0	25	30570	1	KED
⌊	**Zn**	**67**	**49.698**	ug/L	0.401	0	5	5088	1	KED
⌈	**As**	**75**	**49.841**	ug/L	0.239	0	1	15430	1	KED
⌊	**Se**	**78**	**49.849**	ug/L	0.878	1	10	1527	1	KED
	Y	**89**		ug/L			68377	67634	3	Standard
	Kr	**83**		ug/L			55	50	9	Standard
⌈>	**In-1**	**115**		ug/L			10145	9214	1	KED
⌈	**Mo**	**98**	**50.248**	ug/L	1.302	2	2	72607	1	KED
⌈	**Cd**	**111**	**49.996**	ug/L	0.801	1	6	15528	0	KED
⌊	**Cd**	**114**	**50.008**	ug/L	0.624	1	3	39161	0	KED
⌈>	**In**	**115**		ug/L			487580	476405	4	Standard
⌈	**Ag**	**107**	**49.890**	ug/L	2.317	4	34	767757	1	Standard
⌈	**Sb**	**121**	**50.086**	ug/L	1.986	3	52	712138	0	Standard
⌊	**Sb**	**123**	**50.059**	ug/L	1.755	3	50	539383	0	Standard
⌈	**Ba**	**135**	**50.093**	ug/L	2.460	4	24	275529	1	Standard
⌊	**Ba**	**137**	**49.996**	ug/L	2.232	4	34	503163	0	Standard
⌈>	**Tb**	**159**		ug/L			169960	168552	3	Standard
⌈	**Tl**	**205**	**50.405**	ug/L	1.558	3	41	3096042	1	Standard
⌊	**Pb**	**208**	**50.197**	ug/L	1.424	2	184	3991442	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 14:14:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			200733	197916	1	Standard
	Be	**9**	**98.540**	ug/L	3.074	3	1	762416	1	Standard
	C	**13**		ug/L			46078	70484	1	Standard
>	**Sc**	**45**		ug/L			385816	388157	1	Standard
	V	**51**	**100.177**	ug/L	1.369	1	5757	3139817	2	Standard
	V-1	**51**	**100.055**	ug/L	1.502	1	1163	3119629	1	Standard
	Cr	**52**	**99.917**	ug/L	0.665	0	16947	2559860	1	Standard
	Cr	**53**	**99.483**	ug/L	1.696	1	446	282808	0	Standard
	Mn	**55**	**99.820**	ug/L	0.568	0	422	3719929	1	Standard
>	**Ge**	**72**		ug/L			43685	41376	1	KED
	Co	**59**	**100.306**	ug/L	1.518	1	1	547291	1	KED
	Ni	**60**	**100.008**	ug/L	1.729	1	8	156442	0	KED
	Ni	**62**	**99.771**	ug/L	2.079	2	2	24968	1	KED
	Cu	**63**	**99.877**	ug/L	0.881	0	18	431887	0	KED
	Cu	**65**	**99.957**	ug/L	1.043	1	12	218220	0	KED
	Zn	**66**	**99.750**	ug/L	2.433	2	25	59517	1	KED
	Zn	**67**	**99.263**	ug/L	1.280	1	5	9711	0	KED
	As	**75**	**100.305**	ug/L	1.750	1	1	30717	0	KED
	Se	**78**	**100.180**	ug/L	1.009	1	10	3013	0	KED
	Y	**89**		ug/L			68377	67970	1	Standard
	Kr	**83**		ug/L			55	68	12	Standard
>	**In-1**	**115**		ug/L			10145	9421	2	KED
	Mo	**98**	**99.775**	ug/L	2.669	2	2	146272	0	KED
	Cd	**111**	**99.115**	ug/L	2.885	2	6	30557	0	KED
	Cd	**114**	**99.541**	ug/L	3.193	3	3	78456	0	KED
>	**In**	**115**		ug/L			487580	469665	1	Standard
	Ag	**107**	**99.192**	ug/L	1.407	1	34	1467063	0	Standard
	Sb	**121**	**99.782**	ug/L	1.227	1	52	1389904	0	Standard
	Sb	**123**	**100.090**	ug/L	1.254	1	50	1067308	0	Standard
	Ba	**135**	**99.721**	ug/L	0.683	0	24	536514	2	Standard
	Ba	**137**	**99.448**	ug/L	0.631	0	34	970030	1	Standard
>	**Tb**	**159**		ug/L			169960	172255	1	Standard
	Tl	**205**	**98.997**	ug/L	0.932	0	41	6017341	0	Standard
	Pb	**208**	**98.978**	ug/L	1.152	1	184	7782834	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 14:22:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			200733	204281	0	Standard
⌊	**Be**	**9**	**0.000**	ug/L	0.000	89	1	3	34	Standard
	C	**13**		ug/L			46078	46071	1	Standard
⌈>	**Sc**	**45**		ug/L			385816	384884	1	Standard
|	**V**	**51**	**-0.009**	ug/L	0.001	12	5757	5468	1	Standard
|	**V-1**	**51**	**-0.006**	ug/L	0.001	19	1163	973	2	Standard
|	**Cr**	**52**	**-0.044**	ug/L	0.003	6	16947	15789	1	Standard
|	**Cr**	**53**	**-0.035**	ug/L	0.005	14	446	346	2	Standard
⌊	**Mn**	**55**	**0.000**	ug/L	0.000	52	422	437	2	Standard
⌈>	**Ge**	**72**		ug/L			43685	43123	1	KED
|	**Co**	**59**	**0.001**	ug/L	0.001	54	1	10	43	KED
|	**Ni**	**60**	**-0.003**	ug/L	0.001	43	8	3	50	KED
|	**Ni**	**62**	**0.005**	ug/L	0.013	250	2	3	86	KED
|	**Cu**	**63**	**0.004**	ug/L	0.001	18	18	35	8	KED
|	**Cu**	**65**	**0.000**	ug/L	0.001	276	12	12	17	KED
|	**Zn**	**66**	**-0.005**	ug/L	0.009	203	25	22	27	KED
|	**Zn**	**67**	**-0.012**	ug/L	0.010	87	5	4	24	KED
|	**As**	**75**	**0.012**	ug/L	0.005	39	1	5	28	KED
⌊	**Se**	**78**	**0.035**	ug/L	0.073	211	10	11	18	KED
	Y	**89**		ug/L			68377	67779	0	Standard
	Kr	**83**		ug/L			55	66	9	Standard
⌈>	**In-1**	**115**		ug/L			10145	10002	1	KED
|	**Mo**	**98**	**0.018**	ug/L	0.005	30	2	30	28	KED
|	**Cd**	**111**	**0.004**	ug/L	0.010	245	6	7	45	KED
⌊	**Cd**	**114**	**0.013**	ug/L	0.008	62	3	13	48	KED
⌈>	**In**	**115**		ug/L			487580	472547	1	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.000	9	34	86	5	Standard
|	**Sb**	**121**	**0.036**	ug/L	0.004	11	52	548	8	Standard
|	**Sb**	**123**	**0.038**	ug/L	0.005	14	50	459	12	Standard
|	**Ba**	**135**	**0.001**	ug/L	0.002	176	24	29	30	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.001	104	34	39	15	Standard
⌈>	**Tb**	**159**		ug/L			169960	169252	0	Standard
|	**Tl**	**205**	**0.005**	ug/L	0.001	9	41	365	8	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	14	184	379	7	Standard

Sample Information

Sample Date/Time: Monday, May 08, 2023 14:14:36
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.m
Mass Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

Calibration

Analyte	Mass	**r Corr Coef**	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**0.9996**	0.039	0.20	10	20	50	100
C	13							
Sc	45							
V	51	**1.0000**	0.081	0.20	10	20	50	100
V-1	51	**1.0000**	0.080	0.20	10	20	50	100
Cr	52	**1.0000**	0.066	0.50	10	20	50	100
Cr	53	**1.0000**	0.007	0.50	10	20	50	100
Mn	55	**1.0000**	0.096	0.50	10	20	50	100
Ge	72							
Co	59	**1.0000**	0.132	0.20	10	20	50	100
Ni	60	**1.0000**	0.038	0.50	10	20	50	100
Ni	62	**1.0000**	0.006	0.50	10	20	50	100
Cu	63	**1.0000**	0.105	0.50	10	20	50	100
Cu	65	**1.0000**	0.053	0.50	10	20	50	100
Zn	66	**1.0000**	0.014	6.00	10	20	50	100
Zn	67	**0.9999**	0.002	6.00	10	20	50	100
As	75	**1.0000**	0.007	0.20	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Y	89							
Kr	83							
In-1	115							
Mo	98	**1.0000**	0.156	0.20	10	20	50	100
Cd	111	**0.9999**	0.033	0.10	10	20	50	100
Cd	114	**1.0000**	0.084	0.10	10	20	50	100
In	115							
Ag	107	**0.9999**	0.031	0.20	10	20	50	100
Sb	121	**1.0000**	0.030	0.20	10	20	50	100
Sb	123	**1.0000**	0.023	0.20	10	20	50	100
Ba	135	**1.0000**	0.011	0.50	10	20	50	100
Ba	137	**0.9999**	0.021	0.50	10	20	50	100
Tb	159							
Tl	205	**0.9998**	0.353	0.20	10	20	50	100
Pb	208	**0.9998**	0.457	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 14:28:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			200733	199520	1	Standard
	Be	**9**	**50.820**	ug/L	1.114	2	1	396505	2	Standard
	C	**13**		ug/L			46078	53284	0	Standard
>	**Sc**	**45**		ug/L			385816	392474	1	Standard
	V	**51**	**50.104**	ug/L	0.951	1	5757	1590553	1	Standard
	V-1	**51**	**50.379**	ug/L	1.112	2	1163	1588612	1	Standard
	Cr	**52**	**50.659**	ug/L	0.525	1	16947	1320843	1	Standard
	Cr	**53**	**51.631**	ug/L	0.694	1	446	148634	0	Standard
	Mn	**55**	**50.853**	ug/L	0.896	1	422	1916105	1	Standard
>	**Ge**	**72**		ug/L			43685	42322	1	KED
	Co	**59**	**50.632**	ug/L	0.799	1	1	282562	0	KED
	Ni	**60**	**51.593**	ug/L	1.402	2	8	82543	1	KED
	Ni	**62**	**52.120**	ug/L	0.859	1	2	13342	0	KED
	Cu	**63**	**52.129**	ug/L	0.843	1	18	230556	0	KED
	Cu	**65**	**52.342**	ug/L	0.726	1	12	116882	0	KED
	Zn	**66**	**50.491**	ug/L	0.813	1	25	30827	0	KED
	Zn	**67**	**49.962**	ug/L	1.647	3	5	5001	1	KED
	As	**75**	**48.676**	ug/L	0.757	1	1	15248	1	KED
	Se	**78**	**78.771**	ug/L	1.471	1	10	2425	2	KED
	Y	**89**		ug/L			68377	68005	1	Standard
	Kr	**83**		ug/L			55	56	8	Standard
>	**In-1**	**115**		ug/L			10145	9793	0	KED
	Mo	**98**	**47.536**	ug/L	0.395	0	2	72475	0	KED
	Cd	**111**	**49.579**	ug/L	1.115	2	6	15899	2	KED
	Cd	**114**	**49.225**	ug/L	0.761	1	3	40354	1	KED
>	**In**	**115**		ug/L			487580	476402	1	Standard
	Ag	**107**	**53.664**	ug/L	0.647	1	34	805129	1	Standard
	Sb	**121**	**50.001**	ug/L	1.082	2	52	706420	0	Standard
	Sb	**123**	**50.712**	ug/L	0.973	1	50	548513	1	Standard
	Ba	**135**	**52.361**	ug/L	1.366	2	24	285657	1	Standard
	Ba	**137**	**53.452**	ug/L	0.917	1	34	528807	1	Standard
>	**Tb**	**159**		ug/L			169960	174564	1	Standard
	Tl	**205**	**51.914**	ug/L	0.429	0	41	3197812	0	Standard
	Pb	**208**	**51.925**	ug/L	1.158	2	184	4137410	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 14:36:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			200733	204281	3	Standard
⌊	**Be**	**9**	**0.001**	ug/L	0.001	62	1	10	47	Standard
	C	**13**		ug/L			46078	46422	0	Standard
⌈>	**Sc**	**45**		ug/L			385816	383458	1	Standard
⌈	**V**	**51**	**-0.008**	ug/L	0.006	73	5757	5474	2	Standard
⌈	**V-1**	**51**	**-0.006**	ug/L	0.002	35	1163	966	5	Standard
⌈	**Cr**	**52**	**-0.044**	ug/L	0.011	26	16947	15747	0	Standard
⌈	**Cr**	**53**	**-0.038**	ug/L	0.003	9	446	337	3	Standard
⌊	**Mn**	**55**	**0.001**	ug/L	0.002	128	422	467	13	Standard
⌈>	**Ge**	**72**		ug/L			43685	43213	0	KED
⌈	**Co**	**59**	**0.001**	ug/L	0.001	76	1	6	56	KED
⌈	**Ni**	**60**	**-0.000**	ug/L	0.003	862	8	7	66	KED
⌈	**Ni**	**62**	**0.003**	ug/L	0.004	167	2	3	34	KED
⌈	**Cu**	**63**	**0.000**	ug/L	0.002	539	18	19	40	KED
⌈	**Cu**	**65**	**0.000**	ug/L	0.001	374	12	12	22	KED
⌈	**Zn**	**66**	**-0.000**	ug/L	0.027	6545	25	24	68	KED
⌈	**Zn**	**67**	**-0.012**	ug/L	0.022	186	5	4	49	KED
⌈	**As**	**75**	**0.008**	ug/L	0.003	37	1	4	24	KED
⌊	**Se**	**78**	**-0.028**	ug/L	0.043	151	10	9	13	KED
	Y	**89**		ug/L			68377	68128	0	Standard
	Kr	**83**		ug/L			55	57	29	Standard
⌈>	**In-1**	**115**		ug/L			10145	9822	1	KED
⌈	**Mo**	**98**	**0.005**	ug/L	0.007	131	2	10	105	KED
⌈	**Cd**	**111**	**-0.007**	ug/L	0.002	24	6	3	15	KED
⌊	**Cd**	**114**	**0.009**	ug/L	0.007	75	3	10	55	KED
⌈>	**In**	**115**		ug/L			487580	465080	3	Standard
⌈	**Ag**	**107**	**0.003**	ug/L	0.001	47	34	74	25	Standard
⌈	**Sb**	**121**	**0.025**	ug/L	0.001	3	52	394	5	Standard
⌈	**Sb**	**123**	**0.024**	ug/L	0.003	11	50	296	7	Standard
⌈	**Ba**	**135**	**0.000**	ug/L	0.001	814	24	24	18	Standard
⌊	**Ba**	**137**	**-0.001**	ug/L	0.001	135	34	24	46	Standard
⌈>	**Tb**	**159**		ug/L			169960	168741	1	Standard
⌈	**Tl**	**205**	**0.005**	ug/L	0.002	38	41	320	32	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.002	84	184	321	34	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 14:42:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			200733	197127	0	Standard
	Be	**9**	**50.400**	ug/L	1.677	3	1	388471	2	Standard
	C	**13**		ug/L			46078	51636	1	Standard
>	**Sc**	**45**		ug/L			385816	387675	1	Standard
	V	**51**	**48.558**	ug/L	0.806	1	5757	1522762	1	Standard
	V-1	**51**	**48.819**	ug/L	0.766	1	1163	1520644	1	Standard
	Cr	**52**	**48.919**	ug/L	0.846	1	16947	1260199	0	Standard
	Cr	**53**	**49.838**	ug/L	0.808	1	446	141724	0	Standard
	Mn	**55**	**49.034**	ug/L	0.581	1	422	1824971	0	Standard
>	**Ge**	**72**		ug/L			43685	42484	1	KED
	Co	**59**	**49.257**	ug/L	0.678	1	1	275943	0	KED
	Ni	**60**	**49.905**	ug/L	0.962	1	8	80160	1	KED
	Ni	**62**	**48.564**	ug/L	1.117	2	2	12480	1	KED
	Cu	**63**	**49.643**	ug/L	0.662	1	18	220424	1	KED
	Cu	**65**	**50.130**	ug/L	0.582	1	12	112377	0	KED
	Zn	**66**	**50.451**	ug/L	0.858	1	25	30921	0	KED
	Zn	**67**	**50.948**	ug/L	1.138	2	5	5120	0	KED
	As	**75**	**49.551**	ug/L	0.268	0	1	15583	0	KED
	Se	**78**	**50.539**	ug/L	0.664	1	10	1565	0	KED
	Y	**89**		ug/L			68377	68030	1	Standard
	Kr	**83**		ug/L			55	57	14	Standard
>	**In-1**	**115**		ug/L			10145	9542	0	KED
	Mo	**98**	**48.598**	ug/L	0.416	0	2	72189	0	KED
	Cd	**111**	**49.920**	ug/L	0.344	0	6	15597	0	KED
	Cd	**114**	**49.955**	ug/L	0.756	1	3	39898	0	KED
>	**In**	**115**		ug/L			487580	472263	1	Standard
	Ag	**107**	**49.874**	ug/L	1.156	2	34	741913	2	Standard
	Sb	**121**	**48.747**	ug/L	0.385	0	52	682875	0	Standard
	Sb	**123**	**49.577**	ug/L	0.830	1	50	531614	0	Standard
	Ba	**135**	**49.322**	ug/L	0.945	1	24	266792	1	Standard
	Ba	**137**	**50.496**	ug/L	0.207	0	34	495305	0	Standard
>	**Tb**	**159**		ug/L			169960	172257	0	Standard
	Tl	**205**	**49.829**	ug/L	0.193	0	41	3028953	0	Standard
	Pb	**208**	**50.403**	ug/L	0.192	0	184	3963650	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 14:49:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			200733	200519	1	Standard
⌊	**Be**	**9**	**0.007**	ug/L	0.012	170	1	56	164	Standard
	C	**13**		ug/L			46078	45828	1	Standard
⌈>	**Sc**	**45**		ug/L			385816	384820	0	Standard
⎢	**V**	**51**	**-0.008**	ug/L	0.011	143	5757	5508	6	Standard
⎢	**V-1**	**51**	**-0.004**	ug/L	0.009	249	1163	1050	26	Standard
⎢	**Cr**	**52**	**-0.045**	ug/L	0.015	33	16947	15768	2	Standard
⎢	**Cr**	**53**	**-0.032**	ug/L	0.011	34	446	356	8	Standard
⌊	**Mn**	**55**	**0.004**	ug/L	0.008	185	422	580	50	Standard
⌈>	**Ge**	**72**		ug/L			43685	43475	0	KED
⎢	**Co**	**59**	**0.001**	ug/L	0.001	108	1	6	78	KED
⎢	**Ni**	**60**	**-0.003**	ug/L	0.001	43	8	3	50	KED
⎢	**Ni**	**62**	**-0.002**	ug/L	0.007	311	2	1	100	KED
⎢	**Cu**	**63**	**0.001**	ug/L	0.002	106	18	24	27	KED
⎢	**Cu**	**65**	**-0.001**	ug/L	0.001	93	12	8	32	KED
⎢	**Zn**	**66**	**0.006**	ug/L	0.005	76	25	29	9	KED
⎢	**Zn**	**67**	**0.006**	ug/L	0.010	158	5	6	17	KED
⎢	**As**	**75**	**0.006**	ug/L	0.002	39	1	3	20	KED
⌊	**Se**	**78**	**0.082**	ug/L	0.042	51	10	13	11	KED
	Y	**89**		ug/L			68377	66631	0	Standard
	Kr	**83**		ug/L			55	44	10	Standard
⌈>	**In-1**	**115**		ug/L			10145	9832	1	KED
⎢	**Mo**	**98**	**0.012**	ug/L	0.003	23	2	20	20	KED
⎢	**Cd**	**111**	**-0.001**	ug/L	0.008	604	6	5	50	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.001	50	3	4	19	KED
⌈>	**In**	**115**		ug/L			487580	473186	1	Standard
⎢	**Ag**	**107**	**0.005**	ug/L	0.005	109	34	102	74	Standard
⎢	**Sb**	**121**	**0.055**	ug/L	0.005	9	52	829	8	Standard
⎢	**Sb**	**123**	**0.055**	ug/L	0.007	13	50	638	13	Standard
⎢	**Ba**	**135**	**0.001**	ug/L	0.007	992	24	27	131	Standard
⌊	**Ba**	**137**	**0.004**	ug/L	0.010	248	34	74	135	Standard
⌈>	**Tb**	**159**		ug/L			169960	166711	2	Standard
⎢	**Tl**	**205**	**0.009**	ug/L	0.011	122	41	553	114	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.010	170	184	642	122	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 15:02:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			200733	200575	1	Standard
	Be	**9**	**0.200**	ug/L	0.001	0	1	1571	1	Standard
	C	**13**		ug/L			46078	61768	0	Standard
>	**Sc**	**45**		ug/L			385816	381312	1	Standard
	V	**51**	**0.192**	ug/L	0.009	4	5757	11588	1	Standard
	V-1	**51**	**0.188**	ug/L	0.006	3	1163	6915	1	Standard
	Cr	**52**	**0.498**	ug/L	0.005	1	16947	29195	1	Standard
	Cr	**53**	**0.489**	ug/L	0.015	2	446	1804	3	Standard
	Mn	**55**	**0.515**	ug/L	0.009	1	422	19283	0	Standard
>	**Ge**	**72**		ug/L			43685	44500	0	KED
	Co	**59**	**0.203**	ug/L	0.007	3	1	1195	3	KED
	Ni	**60**	**0.476**	ug/L	0.022	4	8	808	3	KED
	Ni	**62**	**0.474**	ug/L	0.082	17	2	130	16	KED
	Cu	**63**	**0.551**	ug/L	0.009	1	18	2581	1	KED
	Cu	**65**	**0.542**	ug/L	0.034	6	12	1283	6	KED
	Zn	**66**	**6.376**	ug/L	0.160	2	25	4116	2	KED
	Zn	**67**	**5.819**	ug/L	0.080	1	5	617	0	KED
	As	**75**	**0.227**	ug/L	0.030	13	1	76	12	KED
	Se	**78**	**0.545**	ug/L	0.136	25	10	28	16	KED
	Y	**89**		ug/L			68377	67445	2	Standard
	Kr	**83**		ug/L			55	48	13	Standard
>	**In-1**	**115**		ug/L			10145	10139	2	KED
	Mo	**98**	**0.205**	ug/L	0.026	12	2	325	11	KED
	Cd	**111**	**0.075**	ug/L	0.013	18	6	30	12	KED
	Cd	**114**	**0.115**	ug/L	0.010	8	3	100	9	KED
>	**In**	**115**		ug/L			487580	478884	2	Standard
	Ag	**107**	**0.205**	ug/L	0.006	2	34	3132	4	Standard
	Sb	**121**	**0.209**	ug/L	0.003	1	52	3014	0	Standard
	Sb	**123**	**0.206**	ug/L	0.004	2	50	2290	3	Standard
	Ba	**135**	**0.502**	ug/L	0.006	1	24	2777	1	Standard
	Ba	**137**	**0.499**	ug/L	0.004	0	34	4991	1	Standard
>	**Tb**	**159**		ug/L			169960	168392	1	Standard
	Tl	**205**	**0.196**	ug/L	0.005	2	41	11671	1	Standard
	Pb	**208**	**0.107**	ug/L	0.003	2	184	8389	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 15:07:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			200733	217138	0	Standard
	Be	**9**	**0.009**	ug/L	0.001	14	1	76	13	Standard
	C	**13**		ug/L			46078	190141	0	Standard
>	**Sc**	**45**		ug/L			385816	344920	1	Standard
	V	**51**	**0.068**	ug/L	0.023	33	5757	7050	10	Standard
	V-1	**51**	**1.650**	ug/L	0.022	1	1163	46734	0	Standard
	Cr	**52**	**0.606**	ug/L	0.019	3	16947	28863	1	Standard
	Cr	**53**	**6.167**	ug/L	0.157	2	446	15952	1	Standard
	Mn	**55**	**0.145**	ug/L	0.001	0	422	5163	1	Standard
>	**Ge**	**72**		ug/L			43685	36855	5	KED
	Co	**59**	**0.030**	ug/L	0.002	7	1	147	2	KED
	Ni	**60**	**0.112**	ug/L	0.015	12	8	163	13	KED
	Ni	**62**	**0.237**	ug/L	0.039	16	2	54	10	KED
	Cu	**63**	**0.041**	ug/L	0.004	9	18	174	4	KED
	Cu	**65**	**0.047**	ug/L	0.004	8	12	100	4	KED
	Zn	**66**	**0.309**	ug/L	0.051	16	25	184	9	KED
	Zn	**67**	**0.305**	ug/L	0.085	27	5	31	18	KED
	As	**75**	**0.041**	ug/L	0.017	40	1	12	30	KED
	Se	**78**	**0.086**	ug/L	0.100	116	10	11	18	KED
	Y	**89**		ug/L			68377	59783	0	Standard
	Kr	**83**		ug/L			55	153	3	Standard
>	**In-1**	**115**		ug/L			10145	8481	0	KED
	Mo	**98**	**393.172**	ug/L	1.898	0	2	519135	0	KED
	Cd	**111**	**0.090**	ug/L	0.016	17	6	30	14	KED
	Cd	**114**	**0.058**	ug/L	0.014	24	3	43	23	KED
>	**In**	**115**		ug/L			487580	467778	1	Standard
	Ag	**107**	**0.005**	ug/L	0.001	21	34	113	13	Standard
	Sb	**121**	**0.037**	ug/L	0.002	4	52	562	4	Standard
	Sb	**123**	**0.039**	ug/L	0.004	9	50	461	10	Standard
	Ba	**135**	**0.114**	ug/L	0.005	4	24	633	2	Standard
	Ba	**137**	**0.115**	ug/L	0.006	4	34	1149	3	Standard
>	**Tb**	**159**		ug/L			169960	174338	0	Standard
	Tl	**205**	**0.014**	ug/L	0.000	0	41	881	1	Standard
	Pb	**208**	**0.023**	ug/L	0.000	2	184	2017	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 15:12:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			200733	220837	2	Standard
	Be	**9**	**0.009**	ug/L	0.002	18	1	76	17	Standard
	C	**13**		ug/L			46078	187199	1	Standard
>	**Sc**	**45**		ug/L			385816	331280	2	Standard
	V	**51**	**0.057**	ug/L	0.037	65	5757	6463	13	Standard
	V-1	**51**	**1.581**	ug/L	0.027	1	1163	43049	2	Standard
	Cr	**52**	**19.038**	ug/L	0.245	1	16947	427981	0	Standard
	Cr	**53**	**24.636**	ug/L	0.253	1	446	60061	1	Standard
	Mn	**55**	**19.052**	ug/L	0.467	2	422	606053	1	Standard
>	**Ge**	**72**		ug/L			43685	35807	0	KED
	Co	**59**	**20.360**	ug/L	0.340	1	1	96135	0	KED
	Ni	**60**	**20.361**	ug/L	0.150	0	8	27573	1	KED
	Ni	**62**	**19.974**	ug/L	0.247	1	2	4328	1	KED
	Cu	**63**	**20.019**	ug/L	0.304	1	18	74926	1	KED
	Cu	**65**	**20.217**	ug/L	0.276	1	12	38203	0	KED
	Zn	**66**	**19.283**	ug/L	0.493	2	25	9974	2	KED
	Zn	**67**	**17.918**	ug/L	0.835	4	5	1520	3	KED
	As	**75**	**19.173**	ug/L	0.213	1	1	5082	1	KED
	Se	**78**	**0.072**	ug/L	0.091	126	10	10	23	KED
	Y	**89**		ug/L			68377	59524	2	Standard
	Kr	**83**		ug/L			55	144	17	Standard
>	**In-1**	**115**		ug/L			10145	8031	1	KED
	Mo	**98**	**390.423**	ug/L	6.729	1	2	488095	0	KED
	Cd	**111**	**19.329**	ug/L	0.474	2	6	5085	2	KED
	Cd	**114**	**19.090**	ug/L	0.090	0	3	12835	1	KED
>	**In**	**115**		ug/L			487580	472318	1	Standard
	Ag	**107**	**18.663**	ug/L	0.639	3	34	277571	2	Standard
	Sb	**121**	**0.033**	ug/L	0.004	13	52	507	10	Standard
	Sb	**123**	**0.035**	ug/L	0.004	10	50	424	8	Standard
	Ba	**135**	**0.105**	ug/L	0.004	4	24	590	2	Standard
	Ba	**137**	**0.102**	ug/L	0.004	4	34	1032	4	Standard
>	**Tb**	**159**		ug/L			169960	174624	1	Standard
	Tl	**205**	**0.008**	ug/L	0.000	5	41	539	5	Standard
	Pb	**208**	**0.018**	ug/L	0.000	2	184	1589	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 15:17:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			200733	198580	1	Standard
	Be	**9**	**192.971**	ug/L	5.942	3	1	1498050	1	Standard
	C	**13**		ug/L			46078	52861	0	Standard
>	**Sc**	**45**		ug/L			385816	329703	1	Standard
	V	**51**	**194.295**	ug/L	1.791	0	5757	5167412	0	Standard
	V-1	**51**	**194.285**	ug/L	1.978	1	1163	5144015	0	Standard
	Cr	**52**	**193.237**	ug/L	2.419	1	16947	4191180	0	Standard
	Cr	**53**	**193.190**	ug/L	3.826	1	446	466121	0	Standard
	Mn	**55**	**196.535**	ug/L	2.567	1	422	6219851	0	Standard
>	**Ge**	**72**		ug/L			43685	34850	0	KED
	Co	**59**	**196.999**	ug/L	3.441	1	1	905333	1	KED
	Ni	**60**	**193.679**	ug/L	1.640	0	8	255199	0	KED
	Ni	**62**	**196.323**	ug/L	1.798	0	2	41382	0	KED
	Cu	**63**	**193.455**	ug/L	2.274	1	18	704573	0	KED
	Cu	**65**	**195.620**	ug/L	2.238	1	12	359710	0	KED
	Zn	**66**	**194.318**	ug/L	1.441	0	25	97649	0	KED
	Zn	**67**	**192.170**	ug/L	1.963	1	5	15834	1	KED
	As	**75**	**193.753**	ug/L	2.539	1	1	49978	0	KED
	Se	**78**	**190.470**	ug/L	0.902	0	10	4818	0	KED
	Y	**89**		ug/L			68377	58666	0	Standard
	Kr	**83**		ug/L			55	144	5	Standard
>	**In-1**	**115**		ug/L			10145	7859	2	KED
	Mo	**98**	**201.741**	ug/L	4.106	2	2	246778	0	KED
	Cd	**111**	**198.691**	ug/L	3.346	1	6	51113	0	KED
	Cd	**114**	**196.839**	ug/L	3.084	1	3	129474	0	KED
>	**In**	**115**		ug/L			487580	444677	2	Standard
	Ag	**107**	**199.482**	ug/L	1.993	0	34	2793582	2	Standard
	Sb	**121**	**206.210**	ug/L	7.855	3	52	2717989	1	Standard
	Sb	**123**	**210.788**	ug/L	7.349	3	50	2126960	0	Standard
	Ba	**135**	**196.320**	ug/L	4.813	2	24	999486	0	Standard
	Ba	**137**	**195.636**	ug/L	6.844	3	34	1805595	0	Standard
>	**Tb**	**159**		ug/L			169960	167343	0	Standard
	Tl	**205**	**197.268**	ug/L	1.351	0	41	11648879	0	Standard
	Pb	**208**	**199.387**	ug/L	1.275	0	184	15231496	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 15:22:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			200733	187864	2	Standard
⌊	**Be**	**9**	**305.844**	ug/L	6.720	2	1	2246408	2	Standard
	C	**13**		ug/L			46078	55099	2	Standard
⌈>	**Sc**	**45**		ug/L			385816	329847	1	Standard
⎢	**V**	**51**	**300.301**	ug/L	2.571	0	5757	7988690	2	Standard
⎢	**V-1**	**51**	**299.011**	ug/L	2.128	0	1163	7920868	2	Standard
⎢	**Cr**	**52**	**298.732**	ug/L	2.524	0	16947	6474744	1	Standard
⎢	**Cr**	**53**	**294.183**	ug/L	2.973	1	446	709956	0	Standard
⌊	**Mn**	**55**	**296.315**	ug/L	2.265	0	422	9382007	0	Standard
⌈>	**Ge**	**72**		ug/L			43685	34561	1	KED
⎢	**Co**	**59**	**303.439**	ug/L	3.699	1	1	1383045	1	KED
⎢	**Ni**	**60**	**298.096**	ug/L	2.094	0	8	389538	0	KED
⎢	**Ni**	**62**	**298.968**	ug/L	2.199	0	2	62497	0	KED
⎢	**Cu**	**63**	**288.383**	ug/L	3.716	1	18	1041613	0	KED
⎢	**Cu**	**65**	**291.965**	ug/L	3.516	1	12	532408	0	KED
⎢	**Zn**	**66**	**283.744**	ug/L	4.887	1	25	141387	0	KED
⎢	**Zn**	**67**	**280.238**	ug/L	4.899	1	5	22893	0	KED
⎢	**As**	**75**	**296.015**	ug/L	4.225	1	1	75723	0	KED
⌊	**Se**	**78**	**283.440**	ug/L	6.018	2	10	7105	1	KED
	Y	**89**		ug/L			68377	57467	0	Standard
	Kr	**83**		ug/L			55	224	5	Standard
⌈>	**In-1**	**115**		ug/L			10145	7897	1	KED
⎢	**Mo**	**98**	**302.501**	ug/L	5.874	1	2	371843	0	KED
⎢	**Cd**	**111**	**290.836**	ug/L	6.492	2	6	75175	0	KED
⌊	**Cd**	**114**	**289.008**	ug/L	4.212	1	3	191027	0	KED
⌈>	**In**	**115**		ug/L			487580	433237	0	Standard
⎢	**Ag**	**107**	**291.792**	ug/L	5.354	1	34	3981186	1	Standard
⎢	**Sb**	**121**	**306.849**	ug/L	8.143	2	52	3942602	1	Standard
⎢	**Sb**	**123**	**316.103**	ug/L	3.500	1	50	3109492	0	Standard
⎢	**Ba**	**135**	**294.770**	ug/L	3.549	1	24	1462665	0	Standard
⌊	**Ba**	**137**	**314.392**	ug/L	6.696	2	34	2828528	1	Standard
⌈>	**Tb**	**159**		ug/L			169960	164568	0	Standard
⎢	**Tl**	**205**	**294.931**	ug/L	2.268	0	41	17127372	0	Standard
⌊	**Pb**	**208**	**299.049**	ug/L	1.176	0	184	22466602	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 15:30:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			200733	208942	1	Standard
	Be	**9**	**0.004**	ug/L	0.005	140	1	31	132	Standard
	C	**13**		ug/L			46078	51346	0	Standard
>	**Sc**	**45**		ug/L			385816	351416	0	Standard
	V	**51**	**-0.005**	ug/L	0.012	244	5757	5105	5	Standard
	V-1	**51**	**-0.001**	ug/L	0.003	250	1163	1028	6	Standard
	Cr	**52**	**-0.031**	ug/L	0.025	81	16947	14730	3	Standard
	Cr	**53**	**-0.018**	ug/L	0.008	47	446	360	6	Standard
	Mn	**55**	**0.017**	ug/L	0.008	46	422	948	27	Standard
>	**Ge**	**72**		ug/L			43685	39875	1	KED
	Co	**59**	**0.005**	ug/L	0.006	109	1	28	104	KED
	Ni	**60**	**0.011**	ug/L	0.002	22	8	23	16	KED
	Ni	**62**	**0.017**	ug/L	0.012	70	2	6	45	KED
	Cu	**63**	**0.013**	ug/L	0.007	53	18	70	41	KED
	Cu	**65**	**0.010**	ug/L	0.001	5	12	33	3	KED
	Zn	**66**	**0.056**	ug/L	0.024	43	25	55	24	KED
	Zn	**67**	**0.066**	ug/L	0.056	83	5	11	44	KED
	As	**75**	**0.017**	ug/L	0.001	5	1	6	4	KED
	Se	**78**	**-0.019**	ug/L	0.080	433	10	9	24	KED
	Y	**89**		ug/L			68377	60256	1	Standard
	Kr	**83**		ug/L			55	34	34	Standard
>	**In-1**	**115**		ug/L			10145	8835	0	KED
	Mo	**98**	**0.029**	ug/L	0.008	26	2	41	25	KED
	Cd	**111**	**0.004**	ug/L	0.008	216	6	6	37	KED
	Cd	**114**	**0.005**	ug/L	0.004	71	3	6	43	KED
>	**In**	**115**		ug/L			487580	465815	0	Standard
	Ag	**107**	**0.012**	ug/L	0.007	56	34	203	46	Standard
	Sb	**121**	**0.224**	ug/L	0.007	3	52	3141	2	Standard
	Sb	**123**	**0.225**	ug/L	0.009	4	50	2430	3	Standard
	Ba	**135**	**0.017**	ug/L	0.006	36	24	114	28	Standard
	Ba	**137**	**0.020**	ug/L	0.007	34	34	228	28	Standard
>	**Tb**	**159**		ug/L			169960	164079	0	Standard
	Tl	**205**	**0.021**	ug/L	0.005	24	41	1258	23	Standard
	Pb	**208**	**0.009**	ug/L	0.005	55	184	837	43	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 15:39:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			200733	203418	2	Standard
⌊	**Be**	**9**	**0.000**	ug/L	0.000	375	1	2	86	Standard
	C	**13**		ug/L			46078	51263	1	Standard
⌈>	**Sc**	**45**		ug/L			385816	354723	0	Standard
⎢	**V**	**51**	**-0.004**	ug/L	0.003	67	5757	5175	2	Standard
⎢	**V-1**	**51**	**-0.009**	ug/L	0.001	7	1163	804	1	Standard
⎢	**Cr**	**52**	**-0.024**	ug/L	0.008	33	16947	15015	1	Standard
⎢	**Cr**	**53**	**-0.043**	ug/L	0.009	19	446	298	6	Standard
⌊	**Mn**	**55**	**0.011**	ug/L	0.001	5	422	749	2	Standard
⌈>	**Ge**	**72**		ug/L			43685	40334	0	KED
⎢	**Co**	**59**	**0.000**	ug/L	0.000	93	1	3	50	KED
⎢	**Ni**	**60**	**0.007**	ug/L	0.005	76	8	17	43	KED
⎢	**Ni**	**62**	**0.011**	ug/L	0.005	40	2	5	21	KED
⎢	**Cu**	**63**	**0.008**	ug/L	0.002	25	18	50	17	KED
⎢	**Cu**	**65**	**0.007**	ug/L	0.001	14	12	26	8	KED
⎢	**Zn**	**66**	**0.059**	ug/L	0.005	7	25	57	5	KED
⎢	**Zn**	**67**	**0.031**	ug/L	0.064	205	5	8	74	KED
⎢	**As**	**75**	**0.007**	ug/L	0.002	32	1	3	19	KED
⌊	**Se**	**78**	**0.002**	ug/L	0.025	1244	10	9	7	KED
	Y	**89**		ug/L			68377	60695	0	Standard
	Kr	**83**		ug/L			55	45	16	Standard
⌈>	**In-1**	**115**		ug/L			10145	9142	0	KED
⎢	**Mo**	**98**	**0.011**	ug/L	0.003	25	2	17	22	KED
⎢	**Cd**	**111**	**-0.006**	ug/L	0.007	113	6	3	62	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.003	163	3	4	54	KED
⌈>	**In**	**115**		ug/L			487580	466661	0	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.001	94	34	45	25	Standard
⎢	**Sb**	**121**	**0.071**	ug/L	0.005	6	52	1038	6	Standard
⎢	**Sb**	**123**	**0.073**	ug/L	0.005	7	50	818	7	Standard
⎢	**Ba**	**135**	**0.021**	ug/L	0.006	28	24	137	24	Standard
⌊	**Ba**	**137**	**0.023**	ug/L	0.007	32	34	256	28	Standard
⌈>	**Tb**	**159**		ug/L			169960	163696	0	Standard
⎢	**Tl**	**205**	**0.006**	ug/L	0.000	7	41	398	6	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	16	184	387	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 15:45:57
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			200733	206460	1	Standard
	Be	**9**	**49.378**	ug/L	0.464	0	1	398651	0	Standard
	C	**13**		ug/L			46078	50960	0	Standard
>	**Sc**	**45**		ug/L			385816	361579	1	Standard
	V	**51**	**47.641**	ug/L	0.724	1	5757	1393592	0	Standard
	V-1	**51**	**47.906**	ug/L	0.802	1	1163	1391816	0	Standard
	Cr	**52**	**47.971**	ug/L	0.484	1	16947	1153056	0	Standard
	Cr	**53**	**48.905**	ug/L	0.735	1	446	129727	0	Standard
	Mn	**55**	**48.912**	ug/L	0.273	0	422	1698034	0	Standard
>	**Ge**	**72**		ug/L			43685	40618	1	KED
	Co	**59**	**49.024**	ug/L	0.455	0	1	262593	0	KED
	Ni	**60**	**49.605**	ug/L	0.205	0	8	76189	1	KED
	Ni	**62**	**49.548**	ug/L	1.033	2	2	12174	1	KED
	Cu	**63**	**49.101**	ug/L	0.890	1	18	208432	0	KED
	Cu	**65**	**50.308**	ug/L	1.240	2	12	107817	1	KED
	Zn	**66**	**50.526**	ug/L	0.774	1	25	29608	0	KED
	Zn	**67**	**49.665**	ug/L	1.575	3	5	4772	2	KED
	As	**75**	**48.733**	ug/L	0.671	1	1	14652	0	KED
	Se	**78**	**48.504**	ug/L	0.803	1	10	1437	1	KED
	Y	**89**		ug/L			68377	61513	2	Standard
	Kr	**83**		ug/L			55	55	22	Standard
>	**In-1**	**115**		ug/L			10145	9157	1	KED
	Mo	**98**	**48.424**	ug/L	0.636	1	2	69021	0	KED
	Cd	**111**	**49.245**	ug/L	1.049	2	6	14763	0	KED
	Cd	**114**	**49.709**	ug/L	0.179	0	3	38102	1	KED
>	**In**	**115**		ug/L			487580	464745	0	Standard
	Ag	**107**	**49.666**	ug/L	0.591	1	34	727012	1	Standard
	Sb	**121**	**49.749**	ug/L	0.527	1	52	685857	1	Standard
	Sb	**123**	**50.501**	ug/L	0.313	0	50	532972	0	Standard
	Ba	**135**	**49.872**	ug/L	1.221	2	24	265511	2	Standard
	Ba	**137**	**49.537**	ug/L	0.782	1	34	478160	1	Standard
>	**Tb**	**159**		ug/L			169960	168304	1	Standard
	Tl	**205**	**50.871**	ug/L	0.624	1	41	3020989	0	Standard
	Pb	**208**	**50.952**	ug/L	1.296	2	184	3913680	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 15:53:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			200733	202733	1	Standard
⌊	**Be**	**9**	**0.000**	ug/L	0.001	243	1	4	137	Standard
	C	**13**		ug/L			46078	46593	1	Standard
⌈>	**Sc**	**45**		ug/L			385816	352808	0	Standard
⌈	**V**	**51**	**-0.011**	ug/L	0.002	22	5757	4945	0	Standard
⌈	**V-1**	**51**	**-0.012**	ug/L	0.001	12	1163	728	5	Standard
⌈	**Cr**	**52**	**-0.050**	ug/L	0.006	11	16947	14335	0	Standard
⌈	**Cr**	**53**	**-0.053**	ug/L	0.003	6	446	271	3	Standard
⌊	**Mn**	**55**	**0.002**	ug/L	0.000	14	422	455	2	Standard
⌈>	**Ge**	**72**		ug/L			43685	40695	0	KED
⌈	**Co**	**59**	**0.000**	ug/L	0.000	92	1	3	50	KED
⌈	**Ni**	**60**	**-0.002**	ug/L	0.001	40	8	5	21	KED
⌈	**Ni**	**62**	**-0.002**	ug/L	0.000	3	2	1		KED
⌈	**Cu**	**63**	**0.001**	ug/L	0.000	24	18	22	4	KED
⌈	**Cu**	**65**	**-0.001**	ug/L	0.002	135	12	8	48	KED
⌈	**Zn**	**66**	**0.013**	ug/L	0.008	59	25	31	14	KED
⌈	**Zn**	**67**	**0.011**	ug/L	0.041	386	5	6	62	KED
⌈	**As**	**75**	**0.007**	ug/L	0.004	54	1	3	32	KED
⌊	**Se**	**78**	**-0.045**	ug/L	0.032	72	10	8	11	KED
	Y	**89**		ug/L			68377	60893	2	Standard
	Kr	**83**		ug/L			55	42	21	Standard
⌈>	**In-1**	**115**		ug/L			10145	9346	1	KED
⌈	**Mo**	**98**	**0.009**	ug/L	0.003	37	2	14	33	KED
⌈	**Cd**	**111**	**-0.002**	ug/L	0.004	250	6	5	21	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.001	61	3	1	104	KED
⌈>	**In**	**115**		ug/L			487580	454747	1	Standard
⌈	**Ag**	**107**	**0.002**	ug/L	0.001	33	34	65	16	Standard
⌈	**Sb**	**121**	**0.075**	ug/L	0.003	3	52	1059	3	Standard
⌈	**Sb**	**123**	**0.074**	ug/L	0.006	7	50	809	8	Standard
⌈	**Ba**	**135**	**-0.001**	ug/L	0.000	42	24	19	10	Standard
⌊	**Ba**	**137**	**-0.000**	ug/L	0.001	537	34	31	23	Standard
⌈>	**Tb**	**159**		ug/L			169960	161746	1	Standard
⌈	**Tl**	**205**	**0.005**	ug/L	0.001	12	41	312	12	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	19	184	285	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0205-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 16:01:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	Li	6		ug/L			200733	210829	3	Standard
	Be	9	0.001	ug/L	0.000	90	1	6	62	Standard
	C	13		ug/L			46078	68375	0	Standard
>	Sc	45		ug/L			385816	365082	0	Standard
	V	51	-0.004	ug/L	0.002	60	5757	5328	1	Standard
	V-1	51	-0.009	ug/L	0.002	21	1163	839	6	Standard
	Cr	52	0.013	ug/L	0.008	57	16947	16352	1	Standard
	Cr	53	-0.004	ug/L	0.007	191	446	412	4	Standard
	Mn	55	0.039	ug/L	0.000	0	422	1759	0	Standard
>	Ge	72		ug/L			43685	41040	0	KED
	Co	59	0.002	ug/L	0.000	21	1	12	17	KED
	Ni	60	0.005	ug/L	0.005	94	8	15	48	KED
	Ni	62	0.011	ug/L	0.004	40	2	5	21	KED
	Cu	63	0.024	ug/L	0.006	24	18	121	20	KED
	Cu	65	0.018	ug/L	0.002	9	12	50	7	KED
	Zn	66	1.564	ug/L	0.015	0	25	949	1	KED
	Zn	67	1.456	ug/L	0.196	13	5	146	13	KED
	As	75	0.012	ug/L	0.004	32	1	5	24	KED
	Se	78	0.047	ug/L	0.079	167	10	11	21	KED
	Y	89		ug/L			68377	61902	2	Standard
	Kr	83		ug/L			55	52	11	Standard
>	In-1	115		ug/L			10145	9360	0	KED
	Mo	98	0.017	ug/L	0.006	36	2	26	33	KED
	Cd	111	-0.001	ug/L	0.002	329	6	5	10	KED
	Cd	114	0.003	ug/L	0.009	287	3	5	133	KED
>	In	115		ug/L			487580	480502	4	Standard
	Ag	107	0.001	ug/L	0.001	234	34	43	48	Standard
	Sb	121	0.040	ug/L	0.004	9	52	617	4	Standard
	Sb	123	0.041	ug/L	0.001	2	50	500	5	Standard
	Ba	135	0.125	ug/L	0.005	3	24	711	1	Standard
	Ba	137	0.123	ug/L	0.006	4	34	1262	5	Standard
>	Tb	159		ug/L			169960	165319	1	Standard
	Tl	205	0.004	ug/L	0.000	4	41	264	2	Standard
	Pb	208	0.009	ug/L	0.001	8	184	828	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0205-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 16:06:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	Li	6		ug/L			200733	196371	5	Standard
	Be	9	27.564	ug/L	1.014	3	1	211386	2	Standard
	C	13		ug/L			46078	68018	0	Standard
>	Sc	45		ug/L			385816	350518	4	Standard
	V	51	26.814	ug/L	1.842	6	5757	761115	2	Standard
	V-1	51	26.985	ug/L	1.888	6	1163	758925	2	Standard
	Cr	52	27.544	ug/L	0.901	3	16947	647753	1	Standard
	Cr	53	28.155	ug/L	1.078	3	446	72495	1	Standard
	Mn	55	27.839	ug/L	1.052	3	422	936023	1	Standard
>	Ge	72		ug/L			43685	40174	0	KED
	Co	59	26.893	ug/L	0.278	1	1	142479	0	KED
	Ni	60	26.830	ug/L	0.195	0	8	40760	0	KED
	Ni	62	27.401	ug/L	0.051	0	2	6660	1	KED
	Cu	63	26.933	ug/L	0.140	0	18	113103	1	KED
	Cu	65	27.445	ug/L	0.250	0	12	58191	1	KED
	Zn	66	89.018	ug/L	0.278	0	25	51581	0	KED
	Zn	67	85.175	ug/L	0.606	0	5	8093	1	KED
	As	75	26.309	ug/L	0.466	1	1	7824	0	KED
	Se	78	82.313	ug/L	1.546	1	10	2405	0	KED
	Y	89		ug/L			68377	61012	4	Standard
	Kr	83		ug/L			55	49	24	Standard
>	In-1	115		ug/L			10145	8988	1	KED
	Mo	98	25.106	ug/L	0.258	1	2	35131	0	KED
	Cd	111	26.739	ug/L	0.624	2	6	7872	1	KED
	Cd	114	27.160	ug/L	0.444	1	3	20434	0	KED
>	In	115		ug/L			487580	442596	5	Standard
	Ag	107	27.715	ug/L	1.285	4	34	385863	2	Standard
	Sb	121	26.519	ug/L	1.407	5	52	347552	0	Standard
	Sb	123	26.690	ug/L	1.580	5	50	267728	0	Standard
	Ba	135	28.548	ug/L	1.737	6	24	144456	1	Standard
	Ba	137	28.536	ug/L	1.456	5	34	261893	1	Standard
>	Tb	159		ug/L			169960	163230	3	Standard
	Tl	205	27.310	ug/L	1.076	3	41	1571771	0	Standard
	Pb	208	27.656	ug/L	1.190	4	184	2059195	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0079-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, May 08, 2023 16:12:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			200733	297425	2	Standard
Be	9	0.000	ug/L	0.000	23	1	8	13	Standard
C	13		ug/L			46078	181840	1	Standard
Sc	45		ug/L			385816	354117	2	Standard
V	51	0.112	ug/L	0.014	12	5757	8481	3	Standard
V-1	51	0.043	ug/L	0.001	2	1163	2299	2	Standard
Cr	52	0.676	ug/L	0.043	6	16947	31240	2	Standard
Cr	53	0.442	ug/L	0.011	2	446	1553	3	Standard
Mn	55	4.679	ug/L	0.135	2	422	159364	0	Standard
Ge	72		ug/L			43685	38910	1	KED
Co	59	0.093	ug/L	0.007	7	1	476	8	KED
Ni	60	1.151	ug/L	0.050	4	8	1699	3	KED
Ni	62	1.110	ug/L	0.041	3	2	263	3	KED
Cu	63	0.081	ug/L	0.003	3	18	344	2	KED
Cu	65	0.078	ug/L	0.005	6	12	170	7	KED
Zn	66	0.865	ug/L	0.017	1	25	507	2	KED
Zn	67	1.021	ug/L	0.212	20	5	99	20	KED
As	75	0.115	ug/L	0.009	8	1	34	7	KED
Se	78	0.091	ug/L	0.119	130	10	11	28	KED
Y	89		ug/L			68377	61434	0	Standard
Kr	83		ug/L			55	46	34	Standard
In-1	115		ug/L			10145	8679	1	KED
Mo	98	0.419	ug/L	0.020	4	2	567	5	KED
Cd	111	0.006	ug/L	0.002	26	6	6	7	KED
Cd	114	0.014	ug/L	0.002	17	3	12	14	KED
In	115		ug/L			487580	480043	1	Standard
Ag	107	0.000	ug/L	0.000	120	34	39	13	Standard
Sb	121	0.068	ug/L	0.003	4	52	1019	4	Standard
Sb	123	0.069	ug/L	0.007	9	50	799	8	Standard
Ba	135	1.728	ug/L	0.014	0	24	9527	1	Standard
Ba	137	1.723	ug/L	0.055	3	34	17204	1	Standard
Tb	159		ug/L			169960	168409	0	Standard
Tl	205	0.003	ug/L	0.000	9	41	196	8	Standard
Pb	208	0.024	ug/L	0.002	6	184	2010	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0023-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 08, 2023 16:20:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			200733	519917	0	Standard
Be	9	0.001	ug/L	0.000	32	1	19	24	Standard
C	13		ug/L			46078	85419	0	Standard
Sc	45		ug/L			385816	331033	0	Standard
V	51	0.563	ug/L	0.006	1	5757	19950	1	Standard
V-1	51	0.590	ug/L	0.016	2	1163	16688	2	Standard
Cr	52	3.297	ug/L	0.023	0	16947	86088	0	Standard
Cr	53	3.429	ug/L	0.025	0	446	8684	0	Standard
Mn	55	3.269	ug/L	0.019	0	422	104246	0	Standard
Ge	72		ug/L			43685	35299	1	KED
Co	59	0.183	ug/L	0.004	2	1	853	1	KED
Ni	60	0.419	ug/L	0.018	4	8	566	3	KED
Ni	62	0.383	ug/L	0.065	17	2	83	15	KED
Cu	63	2.734	ug/L	0.040	1	18	10098	0	KED
Cu	65	2.734	ug/L	0.103	3	12	5099	2	KED
Zn	66	1.728	ug/L	0.110	6	25	899	5	KED
Zn	67	1.648	ug/L	0.234	14	5	142	14	KED
As	75	0.066	ug/L	0.004	5	1	18	4	KED
Se	78	0.121	ug/L	0.059	49	10	11	12	KED
Y	89		ug/L			68377	57156	1	Standard
Kr	83		ug/L			55	46	19	Standard
In-1	115		ug/L			10145	7994	3	KED
Mo	98	3.699	ug/L	0.026	0	2	4605	3	KED
Cd	111	0.138	ug/L	0.015	10	6	40	12	KED
Cd	114	0.124	ug/L	0.011	9	3	85	10	KED
In	115		ug/L			487580	450842	1	Standard
Ag	107	-0.000	ug/L	0.001	833	34	31	30	Standard
Sb	121	0.126	ug/L	0.004	2	52	1731	2	Standard
Sb	123	0.134	ug/L	0.003	2	50	1415	3	Standard
Ba	135	0.519	ug/L	0.004	0	24	2705	2	Standard
Ba	137	0.505	ug/L	0.019	3	34	4764	4	Standard
Tb	159		ug/L			169960	163157	0	Standard
Tl	205	0.006	ug/L	0.000	7	41	388	5	Standard
Pb	208	0.009	ug/L	0.000	4	184	837	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0023-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 08, 2023 16:26:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			200733	538741	2	Standard
Be	9	0.000	ug/L	0.000	130	1	11	72	Standard
C	13		ug/L			46078	69718	0	Standard
Sc	45		ug/L			385816	320336	0	Standard
V	51	0.524	ug/L	0.024	4	5757	18296	3	Standard
V-1	51	0.572	ug/L	0.004	0	1163	15679	0	Standard
Cr	52	4.501	ug/L	0.058	1	16947	108604	1	Standard
Cr	53	4.723	ug/L	0.057	1	446	11435	1	Standard
Mn	55	3.311	ug/L	0.008	0	422	102163	0	Standard
Ge	72		ug/L			43685	34120	0	KED
Co	59	0.095	ug/L	0.002	1	1	427	1	KED
Ni	60	0.339	ug/L	0.016	4	8	444	5	KED
Ni	62	0.332	ug/L	0.086	25	2	70	24	KED
Cu	63	2.729	ug/L	0.047	1	18	9744	1	KED
Cu	65	2.716	ug/L	0.036	1	12	4899	0	KED
Zn	66	1.880	ug/L	0.117	6	25	944	7	KED
Zn	67	1.456	ug/L	0.157	10	5	121	10	KED
As	75	0.049	ug/L	0.012	24	1	13	21	KED
Se	78	-0.029	ug/L	0.119	411	10	7	39	KED
Y	89		ug/L			68377	56934	1	Standard
Kr	83		ug/L			55	46	21	Standard
In-1	115		ug/L			10145	7511	1	KED
Mo	98	3.631	ug/L	0.167	4	2	4245	3	KED
Cd	111	0.072	ug/L	0.014	19	6	22	15	KED
Cd	114	0.068	ug/L	0.023	34	3	44	32	KED
In	115		ug/L			487580	444662	0	Standard
Ag	107	-0.000	ug/L	0.001	216	34	27	30	Standard
Sb	121	0.191	ug/L	0.001	0	52	2571	0	Standard
Sb	123	0.191	ug/L	0.002	1	50	1973	0	Standard
Ba	135	0.495	ug/L	0.008	1	24	2543	1	Standard
Ba	137	0.490	ug/L	0.011	2	34	4556	2	Standard
Tb	159		ug/L			169960	162116	0	Standard
Tl	205	0.005	ug/L	0.001	15	41	346	14	Standard
Pb	208	0.011	ug/L	0.001	5	184	982	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0023-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 08, 2023 16:31:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			200733	525776	1	Standard
Be	9	0.000	ug/L	0.000	459	1	5	57	Standard
C	13		ug/L			46078	63298	0	Standard
Sc	45		ug/L			385816	317562	1	Standard
V	51	0.493	ug/L	0.037	7	5757	17356	5	Standard
V-1	51	0.553	ug/L	0.006	1	1163	15057	1	Standard
Cr	52	6.098	ug/L	0.080	1	16947	140900	0	Standard
Cr	53	6.381	ug/L	0.054	0	446	15186	1	Standard
Mn	55	3.688	ug/L	0.065	1	422	112755	0	Standard
Ge	72		ug/L			43685	33638	2	KED
Co	59	0.068	ug/L	0.003	4	1	301	3	KED
Ni	60	0.296	ug/L	0.029	9	8	383	10	KED
Ni	62	0.308	ug/L	0.065	21	2	64	22	KED
Cu	63	2.836	ug/L	0.068	2	18	9979	0	KED
Cu	65	2.848	ug/L	0.140	4	12	5061	2	KED
Zn	66	1.938	ug/L	0.009	0	25	959	2	KED
Zn	67	1.739	ug/L	0.166	9	5	142	11	KED
As	75	0.049	ug/L	0.007	14	1	13	10	KED
Se	78	0.035	ug/L	0.076	214	10	8	18	KED
Y	89		ug/L			68377	56642	0	Standard
Kr	83		ug/L			55	45	28	Standard
In-1	115		ug/L			10145	7338	1	KED
Mo	98	3.621	ug/L	0.010	0	2	4138	1	KED
Cd	111	0.040	ug/L	0.015	37	6	13	25	KED
Cd	114	0.037	ug/L	0.009	24	3	25	24	KED
In	115		ug/L			487580	448012	0	Standard
Ag	107	0.001	ug/L	0.000	12	34	40	2	Standard
Sb	121	0.230	ug/L	0.003	1	52	3108	1	Standard
Sb	123	0.239	ug/L	0.011	4	50	2476	4	Standard
Ba	135	0.529	ug/L	0.005	0	24	2736	1	Standard
Ba	137	0.515	ug/L	0.020	3	34	4823	3	Standard
Tb	159		ug/L			169960	160898	0	Standard
Tl	205	0.005	ug/L	0.000	8	41	312	7	Standard
Pb	208	0.010	ug/L	0.001	7	184	935	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0023-04
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 08, 2023 16:37:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			200733	446190	2	Standard
Be	9	0.000	ug/L	0.000	263	1	6	103	Standard
C	13		ug/L			46078	61933	0	Standard
Sc	45		ug/L			385816	309079	0	Standard
V	51	0.422	ug/L	0.043	10	5757	15140	7	Standard
V-1	51	0.562	ug/L	0.006	1	1163	14876	1	Standard
Cr	52	19.993	ug/L	0.178	0	16947	418703	0	Standard
Cr	53	20.738	ug/L	0.311	1	446	47229	0	Standard
Mn	55	4.545	ug/L	0.062	1	422	135191	0	Standard
Ge	72		ug/L			43685	32999	1	KED
Co	59	0.066	ug/L	0.004	5	1	288	7	KED
Ni	60	0.407	ug/L	0.024	5	8	514	7	KED
Ni	62	0.426	ug/L	0.047	10	2	86	12	KED
Cu	63	3.874	ug/L	0.056	1	18	13371	0	KED
Cu	65	3.869	ug/L	0.060	1	12	6746	2	KED
Zn	66	2.957	ug/L	0.203	6	25	1426	6	KED
Zn	67	2.730	ug/L	0.288	10	5	217	9	KED
As	75	0.058	ug/L	0.012	20	1	15	19	KED
Se	78	0.203	ug/L	0.041	20	10	12	6	KED
Y	89		ug/L			68377	56637	1	Standard
Kr	83		ug/L			55	55	30	Standard
In-1	115		ug/L			10145	7450	3	KED
Mo	98	3.102	ug/L	0.111	3	2	3598	3	KED
Cd	111	0.038	ug/L	0.019	51	6	13	35	KED
Cd	114	0.038	ug/L	0.015	40	3	26	38	KED
In	115		ug/L			487580	442367	1	Standard
Ag	107	0.001	ug/L	0.000	50	34	38	7	Standard
Sb	121	0.233	ug/L	0.009	4	52	3102	3	Standard
Sb	123	0.240	ug/L	0.011	4	50	2457	2	Standard
Ba	135	0.593	ug/L	0.013	2	24	3025	0	Standard
Ba	137	0.583	ug/L	0.009	1	34	5385	2	Standard
Tb	159		ug/L			169960	161507	0	Standard
Tl	205	0.005	ug/L	0.001	11	41	325	10	Standard
Pb	208	0.150	ug/L	0.004	2	184	11240	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 16:44:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			200733	221095	2	Standard
	Be	**9**	**0.000**	ug/L	0.000	256	1	2	43	Standard
	C	**13**		ug/L			46078	49079	1	Standard
>	**Sc**	**45**		ug/L			385816	324784	0	Standard
	V	**51**	**0.058**	ug/L	0.001	1	5757	6362	0	Standard
	V-1	**51**	**-0.020**	ug/L	0.001	3	1163	470	3	Standard
	Cr	**52**	**0.211**	ug/L	0.007	3	16947	18756	0	Standard
	Cr	**53**	**-0.059**	ug/L	0.007	11	446	235	6	Standard
	Mn	**55**	**0.005**	ug/L	0.000	6	422	507	2	Standard
>	**Ge**	**72**		ug/L			43685	35953	6	KED
	Co	**59**	**0.000**	ug/L	0.001	146	1	3	69	KED
	Ni	**60**	**-0.001**	ug/L	0.004	687	8	5	88	KED
	Ni	**62**	**-0.001**	ug/L	0.008	977	2	1	100	KED
	Cu	**63**	**0.002**	ug/L	0.000	21	18	23	12	KED
	Cu	**65**	**0.004**	ug/L	0.006	144	12	17	58	KED
	Zn	**66**	**0.040**	ug/L	0.018	45	25	41	27	KED
	Zn	**67**	**0.028**	ug/L	0.033	116	5	6	31	KED
	As	**75**	**0.006**	ug/L	0.005	84	1	3	50	KED
	Se	**78**	**0.046**	ug/L	0.038	84	10	9	13	KED
	Y	**89**		ug/L			68377	58063	1	Standard
	Kr	**83**		ug/L			55	37	7	Standard
>	**In-1**	**115**		ug/L			10145	8461	0	KED
	Mo	**98**	**0.001**	ug/L	0.001	88	2	3	47	KED
	Cd	**111**	**-0.009**	ug/L	0.007	79	6	2	78	KED
	Cd	**114**	**0.004**	ug/L	0.003	65	3	5	33	KED
>	**In**	**115**		ug/L			487580	472607	2	Standard
	Ag	**107**	**-0.001**	ug/L	0.001	83	34	24	33	Standard
	Sb	**121**	**0.004**	ug/L	0.000	10	52	106	3	Standard
	Sb	**123**	**0.003**	ug/L	0.001	27	50	83	9	Standard
	Ba	**135**	**-0.000**	ug/L	0.003	1450	24	22	60	Standard
	Ba	**137**	**0.000**	ug/L	0.001	689	34	36	43	Standard
>	**Tb**	**159**		ug/L			169960	161887	0	Standard
	Tl	**205**	**0.001**	ug/L	0.000	36	41	76	17	Standard
	Pb	**208**	**0.002**	ug/L	0.000	11	184	288	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0020-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 08, 2023 16:49:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			200733	237065	2	Standard
	Be	**9**	**0.000**	ug/L	0.000	5	1	3	0	Standard
	C	**13**		ug/L			46078	60747	1	Standard
>	**Sc**	**45**		ug/L			385816	363913	0	Standard
	V	**51**	**2.345**	ug/L	0.031	1	5757	74218	1	Standard
	V-1	**51**	**2.876**	ug/L	0.040	1	1163	85146	1	Standard
	Cr	**52**	**0.150**	ug/L	0.010	6	16947	19554	1	Standard
	Cr	**53**	**1.985**	ug/L	0.037	1	446	5704	1	Standard
	Mn	**55**	**0.949**	ug/L	0.019	1	422	33552	1	Standard
>	**Ge**	**72**		ug/L			43685	36587	1	KED
	Co	**59**	**0.014**	ug/L	0.004	29	1	68	29	KED
	Ni	**60**	**0.171**	ug/L	0.011	6	8	243	5	KED
	Ni	**62**	**0.209**	ug/L	0.029	13	2	48	12	KED
	Cu	**63**	**0.161**	ug/L	0.009	5	18	632	5	KED
	Cu	**65**	**0.156**	ug/L	0.014	8	12	310	7	KED
	Zn	**66**	**1.153**	ug/L	0.049	4	25	629	5	KED
	Zn	**67**	**1.245**	ug/L	0.092	7	5	112	6	KED
	As	**75**	**5.629**	ug/L	0.132	2	1	1525	1	KED
	Se	**78**	**0.006**	ug/L	0.169	2666	10	8	49	KED
	Y	**89**		ug/L			68377	56803	1	Standard
	Kr	**83**		ug/L			55	38	22	Standard
>	**In-1**	**115**		ug/L			10145	8112	0	KED
	Mo	**98**	**6.614**	ug/L	0.105	1	2	8354	2	KED
	Cd	**111**	**0.011**	ug/L	0.000	1	6	7	0	KED
	Cd	**114**	**0.015**	ug/L	0.006	38	3	12	31	KED
>	**In**	**115**		ug/L			487580	454313	1	Standard
	Ag	**107**	**0.003**	ug/L	0.000	13	34	80	7	Standard
	Sb	**121**	**1.100**	ug/L	0.018	1	52	14869	1	Standard
	Sb	**123**	**1.136**	ug/L	0.021	1	50	11768	0	Standard
	Ba	**135**	**2.879**	ug/L	0.059	2	24	15003	1	Standard
	Ba	**137**	**2.839**	ug/L	0.080	2	34	26811	1	Standard
>	**Tb**	**159**		ug/L			169960	165131	1	Standard
	Tl	**205**	**0.003**	ug/L	0.000	9	41	238	7	Standard
	Pb	**208**	**0.029**	ug/L	0.001	3	184	2347	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 16:54:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			200733	214725	0	Standard
⌊	**Be**	**9**	**-0.000**	ug/L	0.000	78	1	0	173	Standard
	C	**13**		ug/L			46078	48759	0	Standard
⌈>	**Sc**	**45**		ug/L			385816	325305	1	Standard
⎢	**V**	**51**	**0.027**	ug/L	0.003	12	5757	5553	0	Standard
⎢	**V-1**	**51**	**-0.010**	ug/L	0.001	12	1163	715	3	Standard
⎢	**Cr**	**52**	**0.094**	ug/L	0.017	17	16947	16295	0	Standard
⎢	**Cr**	**53**	**-0.034**	ug/L	0.009	25	446	293	5	Standard
⌊	**Mn**	**55**	**0.004**	ug/L	0.001	26	422	465	5	Standard
⌈>	**Ge**	**72**		ug/L			43685	37227	2	KED
⎢	**Co**	**59**	**0.000**	ug/L	0.000	242	1	2	86	KED
⎢	**Ni**	**60**	**-0.001**	ug/L	0.003	298	8	5	66	KED
⎢	**Ni**	**62**	**-0.001**	ug/L	0.009	770	2	1	100	KED
⎢	**Cu**	**63**	**0.003**	ug/L	0.002	82	18	26	32	KED
⎢	**Cu**	**65**	**-0.001**	ug/L	0.001	189	12	8	32	KED
⎢	**Zn**	**66**	**0.044**	ug/L	0.023	53	25	45	25	KED
⎢	**Zn**	**67**	**0.003**	ug/L	0.026	973	5	5	43	KED
⎢	**As**	**75**	**0.003**	ug/L	0.007	207	1	2	81	KED
⌊	**Se**	**78**	**-0.013**	ug/L	0.018	138	10	8	8	KED
	Y	**89**		ug/L			68377	56228	0	Standard
	Kr	**83**		ug/L			55	37	33	Standard
⌈>	**In-1**	**115**		ug/L			10145	8385	3	KED
⎢	**Mo**	**98**	**0.001**	ug/L	0.002	285	2	2	105	KED
⎢	**Cd**	**111**	**-0.002**	ug/L	0.002	116	6	4	12	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.003	199	3	3	54	KED
⌈>	**In**	**115**		ug/L			487580	453002	2	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.000	16	34	16	17	Standard
⎢	**Sb**	**121**	**0.002**	ug/L	0.000	9	52	82	4	Standard
⎢	**Sb**	**123**	**0.000**	ug/L	0.001	289	50	50	18	Standard
⎢	**Ba**	**135**	**0.001**	ug/L	0.002	203	24	27	37	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.001	185	34	38	26	Standard
⌈>	**Tb**	**159**		ug/L			169960	159561	1	Standard
⎢	**Tl**	**205**	**0.001**	ug/L	0.000	21	41	86	9	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	3	184	298	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 16:59:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			200733	206314	1	Standard
	Be	**9**	**48.845**	ug/L	2.329	4	1	393852	2	Standard
	C	**13**		ug/L			46078	49049	0	Standard
>	**Sc**	**45**		ug/L			385816	333597	1	Standard
	V	**51**	**47.189**	ug/L	0.553	1	5757	1273661	1	Standard
	V-1	**51**	**47.489**	ug/L	0.537	1	1163	1272986	0	Standard
	Cr	**52**	**48.160**	ug/L	0.207	0	16947	1068045	1	Standard
	Cr	**53**	**49.227**	ug/L	0.687	1	446	120473	1	Standard
	Mn	**55**	**49.426**	ug/L	0.818	1	422	1583099	1	Standard
>	**Ge**	**72**		ug/L			43685	37590	1	KED
	Co	**59**	**49.611**	ug/L	0.803	1	1	245931	1	KED
	Ni	**60**	**50.249**	ug/L	0.941	1	8	71413	0	KED
	Ni	**62**	**49.873**	ug/L	0.821	1	2	11340	1	KED
	Cu	**63**	**50.644**	ug/L	1.214	2	18	198935	1	KED
	Cu	**65**	**50.792**	ug/L	0.609	1	12	100744	0	KED
	Zn	**66**	**51.664**	ug/L	0.926	1	25	28016	0	KED
	Zn	**67**	**51.237**	ug/L	2.053	4	5	4555	2	KED
	As	**75**	**48.912**	ug/L	0.639	1	1	13609	0	KED
	Se	**78**	**49.548**	ug/L	1.207	2	10	1358	1	KED
	Y	**89**		ug/L			68377	59582	1	Standard
	Kr	**83**		ug/L			55	48	39	Standard
>	**In-1**	**115**		ug/L			10145	8405	1	KED
	Mo	**98**	**48.750**	ug/L	1.084	2	2	63776	0	KED
	Cd	**111**	**49.969**	ug/L	0.402	0	6	13752	1	KED
	Cd	**114**	**50.237**	ug/L	0.971	1	3	35342	1	KED
>	**In**	**115**		ug/L			487580	456103	1	Standard
	Ag	**107**	**50.352**	ug/L	0.123	0	34	723332	1	Standard
	Sb	**121**	**49.703**	ug/L	0.666	1	52	672467	2	Standard
	Sb	**123**	**50.073**	ug/L	0.670	1	50	518598	1	Standard
	Ba	**135**	**49.038**	ug/L	0.765	1	24	256172	0	Standard
	Ba	**137**	**48.378**	ug/L	0.490	1	34	458260	0	Standard
>	**Tb**	**159**		ug/L			169960	165518	1	Standard
	Tl	**205**	**51.774**	ug/L	0.230	0	41	3024229	1	Standard
	Pb	**208**	**51.991**	ug/L	0.429	0	184	3928345	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 17:07:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			200733	205216	1	Standard
⌊	**Be**	**9**	**0.000**	ug/L	0.000	239	1	3	91	Standard
	C	**13**		ug/L			46078	45480	0	Standard
⌈>	**Sc**	**45**		ug/L			385816	330598	0	Standard
⌈	**V**	**51**	**-0.024**	ug/L	0.001	5	5757	4299	0	Standard
⌈	**V-1**	**51**	**-0.018**	ug/L	0.001	5	1163	518	5	Standard
⌈	**Cr**	**52**	**-0.094**	ug/L	0.008	8	16947	12484	1	Standard
⌈	**Cr**	**53**	**-0.075**	ug/L	0.005	7	446	201	7	Standard
⌊	**Mn**	**55**	**0.002**	ug/L	0.000	13	422	435	2	Standard
⌈>	**Ge**	**72**		ug/L			43685	38111	0	KED
⌈	**Co**	**59**	**0.000**	ug/L	0.000	769	1	1	100	KED
⌈	**Ni**	**60**	**0.000**	ug/L	0.002	773	8	7	43	KED
⌈	**Ni**	**62**	**-0.001**	ug/L	0.008	600	2	1	100	KED
⌈	**Cu**	**63**	**0.001**	ug/L	0.002	156	18	20	32	KED
⌈	**Cu**	**65**	**0.002**	ug/L	0.003	177	12	13	43	KED
⌈	**Zn**	**66**	**0.004**	ug/L	0.020	546	25	24	44	KED
⌈	**Zn**	**67**	**0.008**	ug/L	0.042	531	5	5	66	KED
⌈	**As**	**75**	**0.010**	ug/L	0.010	92	1	4	61	KED
⌊	**Se**	**78**	**0.062**	ug/L	0.144	231	10	10	35	KED
	Y	**89**		ug/L			68377	56824	3	Standard
	Kr	**83**		ug/L			55	44	30	Standard
⌈>	**In-1**	**115**		ug/L			10145	8600	2	KED
⌈	**Mo**	**98**	**0.012**	ug/L	0.005	40	2	17	34	KED
⌈	**Cd**	**111**	**-0.000**	ug/L	0.010	159416	6	5	57	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.001	471	3	2	44	KED
⌈>	**In**	**115**		ug/L			487580	455872	0	Standard
⌈	**Ag**	**107**	**0.001**	ug/L	0.000	57	34	44	15	Standard
⌈	**Sb**	**121**	**0.049**	ug/L	0.002	4	52	707	3	Standard
⌈	**Sb**	**123**	**0.051**	ug/L	0.002	3	50	573	2	Standard
⌈	**Ba**	**135**	**-0.001**	ug/L	0.002	249	24	19	52	Standard
⌊	**Ba**	**137**	**-0.000**	ug/L	0.001	1305	34	31	34	Standard
⌈>	**Tb**	**159**		ug/L			169960	160165	1	Standard
⌈	**Tl**	**205**	**0.002**	ug/L	0.000	16	41	179	13	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	19	184	290	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 17:14:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L				207130	2	Standard
	Be	**9**		ug/L				1	100	Standard
	C	**13**		ug/L				45629	1	Standard
>	**Sc**	**45**		ug/L				328642	2	Standard
	V	**51**		ug/L				4356	1	Standard
	V-1	**51**		ug/L				536	1	Standard
	Cr	**52**		ug/L				12713	1	Standard
	Cr	**53**		ug/L				214	6	Standard
	Mn	**55**		ug/L				389	3	Standard
>	**Ge**	**72**		ug/L				37884	0	KED
	Co	**59**		ug/L				6	17	KED
	Ni	**60**		ug/L				7	25	KED
	Ni	**62**		ug/L				2	43	KED
	Cu	**63**		ug/L				17	33	KED
	Cu	**65**		ug/L				12	32	KED
	Zn	**66**		ug/L				19	58	KED
	Zn	**67**		ug/L				1		KED
	As	**75**		ug/L				2	44	KED
	Se	**78**		ug/L				10	9	KED
	Y	**89**		ug/L				57818	0	Standard
	Kr	**83**		ug/L				53	30	Standard
>	**In-1**	**115**		ug/L				8810	1	KED
	Mo	**98**		ug/L				11	2	KED
	Cd	**111**		ug/L				3	56	KED
	Cd	**114**		ug/L				3	90	KED
>	**In**	**115**		ug/L				459508	2	Standard
	Ag	**107**		ug/L				27	8	Standard
	Sb	**121**		ug/L				274	3	Standard
	Sb	**123**		ug/L				194	14	Standard
	Ba	**135**		ug/L				10	36	Standard
	Ba	**137**		ug/L				9	20	Standard
>	**Tb**	**159**		ug/L				161360	0	Standard
	Tl	**205**		ug/L				98	11	Standard
	Pb	**208**		ug/L				140	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 17:19:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			207130	204035	1	Standard
⌊	**Be**	**9**	**48.913**	ug/L	0.134	0	1	390293	2	Standard
	C	**13**		ug/L			45629	50360	1	Standard
⌈>	**Sc**	**45**		ug/L			328642	345153	0	Standard
⎢	**V**	**51**	**47.792**	ug/L	0.200	0	4356	1334058	1	Standard
⎢	**V-1**	**51**	**47.955**	ug/L	0.301	0	536	1329643	1	Standard
⎢	**Cr**	**52**	**48.582**	ug/L	0.723	1	12713	1112660	1	Standard
⎢	**Cr**	**53**	**49.165**	ug/L	0.622	1	214	124318	0	Standard
⌊	**Mn**	**55**	**49.300**	ug/L	0.345	0	389	1633794	0	Standard
⌈>	**Ge**	**72**		ug/L			37884	39048	1	KED
⎢	**Co**	**59**	**49.656**	ug/L	1.622	3	6	255640	1	KED
⎢	**Ni**	**60**	**49.428**	ug/L	1.252	2	7	72966	1	KED
⎢	**Ni**	**62**	**49.668**	ug/L	1.153	2	2	11730	0	KED
⎢	**Cu**	**63**	**49.966**	ug/L	0.407	0	17	203914	0	KED
⎢	**Cu**	**65**	**50.286**	ug/L	1.069	2	12	103597	0	KED
⎢	**Zn**	**66**	**51.204**	ug/L	0.619	1	19	28846	1	KED
⎢	**Zn**	**67**	**50.121**	ug/L	1.292	2	1	4626	1	KED
⎢	**As**	**75**	**49.230**	ug/L	0.882	1	2	14229	0	KED
⌊	**Se**	**78**	**49.511**	ug/L	1.890	3	10	1411	2	KED
	Y	**89**		ug/L			57818	59159	2	Standard
	Kr	**83**		ug/L			53	37	2	Standard
⌈>	**In-1**	**115**		ug/L			8810	8725	1	KED
⎢	**Mo**	**98**	**48.841**	ug/L	0.636	1	11	66347	0	KED
⎢	**Cd**	**111**	**50.405**	ug/L	0.947	1	3	14398	1	KED
⌊	**Cd**	**114**	**50.195**	ug/L	0.918	1	3	36658	0	KED
⌈>	**In**	**115**		ug/L			459508	450816	2	Standard
⎢	**Ag**	**107**	**51.019**	ug/L	1.758	3	27	723947	0	Standard
⎢	**Sb**	**121**	**50.032**	ug/L	1.660	3	274	668862	0	Standard
⎢	**Sb**	**123**	**51.108**	ug/L	1.344	2	194	523089	0	Standard
⎢	**Ba**	**135**	**49.841**	ug/L	2.335	4	10	257136	1	Standard
⌊	**Ba**	**137**	**50.631**	ug/L	2.260	4	9	473635	1	Standard
⌈>	**Tb**	**159**		ug/L			161360	167629	1	Standard
⎢	**Tl**	**205**	**51.338**	ug/L	1.359	2	98	3036322	1	Standard
⌊	**Pb**	**208**	**51.170**	ug/L	0.689	1	140	3915364	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 17:27:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			207130	202938	2	Standard
	Be	**9**	**0.000**	ug/L	0.000	5	1	3	0	Standard
	C	**13**		ug/L			45629	44056	1	Standard
>	**Sc**	**45**		ug/L			328642	337658	1	Standard
	V	**51**	**-0.001**	ug/L	0.005	531	4356	4451	1	Standard
	V-1	**51**	**-0.001**	ug/L	0.001	182	536	530	6	Standard
	Cr	**52**	**-0.005**	ug/L	0.011	207	12713	12943	0	Standard
	Cr	**53**	**-0.005**	ug/L	0.001	19	214	208	1	Standard
	Mn	**55**	**-0.001**	ug/L	0.000	67	389	380	4	Standard
>	**Ge**	**72**		ug/L			37884	39376	0	KED
	Co	**59**	**0.002**	ug/L	0.005	246	6	17	155	KED
	Ni	**60**	**0.001**	ug/L	0.008	732	7	9	121	KED
	Ni	**62**	**0.005**	ug/L	0.008	163	2	3	50	KED
	Cu	**63**	**0.004**	ug/L	0.006	169	17	32	76	KED
	Cu	**65**	**0.002**	ug/L	0.002	108	12	17	29	KED
	Zn	**66**	**-0.016**	ug/L	0.003	20	19	11	16	KED
	Zn	**67**	**-0.001**	ug/L	0.035	3895	1	1	173	KED
	As	**75**	**0.005**	ug/L	0.002	48	2	4	16	KED
	Se	**78**	**0.046**	ug/L	0.068	148	10	12	16	KED
	Y	**89**		ug/L			57818	58552	1	Standard
	Kr	**83**		ug/L			53	45	23	Standard
>	**In-1**	**115**		ug/L			8810	8842	2	KED
	Mo	**98**	**0.001**	ug/L	0.003	500	11	12	37	KED
	Cd	**111**	**0.003**	ug/L	0.007	206	3	4	44	KED
	Cd	**114**	**0.000**	ug/L	0.003	12755	3	3	52	KED
>	**In**	**115**		ug/L			459508	454613	0	Standard
	Ag	**107**	**0.001**	ug/L	0.001	77	27	40	25	Standard
	Sb	**121**	**0.038**	ug/L	0.004	10	274	784	6	Standard
	Sb	**123**	**0.038**	ug/L	0.006	15	194	583	10	Standard
	Ba	**135**	**0.001**	ug/L	0.001	214	10	13	42	Standard
	Ba	**137**	**0.000**	ug/L	0.000	320	9	10	40	Standard
>	**Tb**	**159**		ug/L			161360	158802	1	Standard
	Tl	**205**	**0.001**	ug/L	0.001	39	98	172	18	Standard
	Pb	**208**	**0.001**	ug/L	0.000	48	140	209	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0715-06
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, May 08, 2023 17:34:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
[>	**Li**	**6**		ug/L			207130	210318	2	Standard
[	**Be**	**9**	**0.000**	ug/L	0.000	38	1	4	24	Standard
	C	**13**		ug/L			45629	97069	1	Standard
[>	**Sc**	**45**		ug/L			328642	342399	0	Standard
[	**V**	**51**	**4.217**	ug/L	0.053	1	4356	120890	0	Standard
[	**V-1**	**51**	**5.280**	ug/L	0.086	1	536	145726	1	Standard
[	**Cr**	**52**	**25.476**	ug/L	0.244	0	12713	585154	0	Standard
[	**Cr**	**53**	**29.490**	ug/L	0.327	1	214	74064	0	Standard
[	**Mn**	**55**	**0.126**	ug/L	0.002	1	389	4560	1	Standard
[>	**Ge**	**72**		ug/L			37884	33868	1	KED
[	**Co**	**59**	**0.465**	ug/L	0.010	2	6	2083	3	KED
[	**Ni**	**60**	**1.301**	ug/L	0.073	5	7	1671	4	KED
[	**Ni**	**62**	**1.333**	ug/L	0.130	9	2	275	11	KED
[	**Cu**	**63**	**0.223**	ug/L	0.011	4	17	803	4	KED
[	**Cu**	**65**	**0.208**	ug/L	0.011	5	12	383	6	KED
[	**Zn**	**66**	**0.305**	ug/L	0.015	4	19	166	3	KED
[	**Zn**	**67**	**0.494**	ug/L	0.120	24	1	41	23	KED
[	**As**	**75**	**12.860**	ug/L	0.243	1	2	3225	0	KED
[	**Se**	**78**	**6.824**	ug/L	0.190	2	10	176	1	KED
	Y	**89**		ug/L			57818	55135	2	Standard
	Kr	**83**		ug/L			53	48	16	Standard
[>	**In-1**	**115**		ug/L			8810	7802	2	KED
[	**Mo**	**98**	**11.223**	ug/L	0.378	3	11	13634	0	KED
[	**Cd**	**111**	**0.007**	ug/L	0.007	102	3	4	34	KED
[	**Cd**	**114**	**0.004**	ug/L	0.005	134	3	5	57	KED
[>	**In**	**115**		ug/L			459508	432026	0	Standard
[	**Ag**	**107**	**0.000**	ug/L	0.001	395	27	27	32	Standard
[	**Sb**	**121**	**0.179**	ug/L	0.002	0	274	2546	1	Standard
[	**Sb**	**123**	**0.179**	ug/L	0.001	0	194	1943	0	Standard
[	**Ba**	**135**	**2.606**	ug/L	0.056	2	10	12903	1	Standard
[	**Ba**	**137**	**2.613**	ug/L	0.018	0	9	23457	0	Standard
[>	**Tb**	**159**		ug/L			161360	158626	1	Standard
[	**Tl**	**205**	**0.003**	ug/L	0.001	21	98	248	12	Standard
[	**Pb**	**208**	**0.004**	ug/L	0.000	6	140	456	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0715-08
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, May 08, 2023 17:39:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			207130	220577	3	Standard
Be	9	-0.000	ug/L	0.000	0	1	0		Standard
C	13		ug/L			45629	96334	0	Standard
Sc	45		ug/L			328642	332606	1	Standard
V	51	4.103	ug/L	0.079	1	4356	114419	2	Standard
V-1	51	4.997	ug/L	0.053	1	536	133994	0	Standard
Cr	52	25.019	ug/L	0.106	0	12713	558467	1	Standard
Cr	53	28.431	ug/L	0.339	1	214	69366	0	Standard
Mn	55	0.124	ug/L	0.004	2	389	4350	2	Standard
Ge	72		ug/L			37884	33043	0	KED
Co	59	0.469	ug/L	0.021	4	6	2047	5	KED
Ni	60	1.294	ug/L	0.019	1	7	1622	0	KED
Ni	62	1.399	ug/L	0.130	9	2	281	9	KED
Cu	63	0.182	ug/L	0.017	9	17	645	8	KED
Cu	65	0.194	ug/L	0.021	11	12	349	10	KED
Zn	66	0.187	ug/L	0.052	27	19	106	22	KED
Zn	67	0.312	ug/L	0.086	27	1	26	25	KED
As	75	12.691	ug/L	0.190	1	2	3106	1	KED
Se	78	6.304	ug/L	0.869	13	10	160	12	KED
Y	89		ug/L			57818	55884	2	Standard
Kr	83		ug/L			53	55	9	Standard
In-1	115		ug/L			8810	7462	0	KED
Mo	98	11.097	ug/L	0.134	1	11	12900	0	KED
Cd	111	0.005	ug/L	0.008	170	3	4	48	KED
Cd	114	0.005	ug/L	0.006	124	3	6	62	KED
In	115		ug/L			459508	432766	1	Standard
Ag	107	-0.000	ug/L	0.000	51	27	20	14	Standard
Sb	121	0.164	ug/L	0.007	4	274	2364	2	Standard
Sb	123	0.176	ug/L	0.007	3	194	1907	2	Standard
Ba	135	2.624	ug/L	0.120	4	10	13015	3	Standard
Ba	137	2.625	ug/L	0.017	0	9	23597	0	Standard
Tb	159		ug/L			161360	159424	0	Standard
Tl	205	0.002	ug/L	0.000	18	98	236	10	Standard
Pb	208	0.002	ug/L	0.000	14	140	309	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0741-02
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, May 08, 2023 17:44:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
[>	Li	6		ug/L			207130	217667	2	Standard
[	Be	9	0.002	ug/L	0.001	27	1	17	26	Standard
	C	13		ug/L			45629	105294	1	Standard
[>	Sc	45		ug/L			328642	373421	1	Standard
[	V	51	0.251	ug/L	0.016	6	4356	12497	2	Standard
[	V-1	51	0.408	ug/L	0.007	1	536	12842	0	Standard
[	Cr	52	0.097	ug/L	0.018	18	12713	16822	0	Standard
[	Cr	53	0.647	ug/L	0.027	4	214	2011	4	Standard
[	Mn	55	544.707	ug/L	10.324	1	389	19521752	0	Standard
[>	Ge	72		ug/L			37884	34769	0	KED
[	Co	59	0.084	ug/L	0.005	6	6	390	7	KED
[	Ni	60	0.205	ug/L	0.011	5	7	276	5	KED
[	Ni	62	0.282	ug/L	0.033	11	2	61	11	KED
[	Cu	63	0.043	ug/L	0.008	19	17	170	17	KED
[	Cu	65	0.043	ug/L	0.004	9	12	90	7	KED
[	Zn	66	0.169	ug/L	0.048	28	19	102	24	KED
[	Zn	67	1.100	ug/L	0.171	15	1	92	14	KED
[	As	75	0.207	ug/L	0.041	19	2	55	19	KED
[	Se	78	-0.124	ug/L	0.131	105	10	6	48	KED
	Y	89		ug/L			57818	58430	1	Standard
	Kr	83		ug/L			53	72	11	Standard
[>	In-1	115		ug/L			8810	7922	1	KED
[	Mo	98	0.013	ug/L	0.005	40	11	26	24	KED
[	Cd	111	0.009	ug/L	0.006	65	3	5	26	KED
[	Cd	114	0.005	ug/L	0.005	98	3	6	48	KED
[>	In	115		ug/L			459508	447708	0	Standard
[	Ag	107	0.000	ug/L	0.000	114	27	31	18	Standard
[	Sb	121	0.013	ug/L	0.002	11	274	444	5	Standard
[	Sb	123	0.020	ug/L	0.001	5	194	393	3	Standard
[	Ba	135	19.638	ug/L	0.315	1	10	100713	1	Standard
[	Ba	137	19.364	ug/L	0.091	0	9	180057	0	Standard
[>	Tb	159		ug/L			161360	163252	1	Standard
[	Tl	205	0.000	ug/L	0.000	94	98	124	19	Standard
[	Pb	208	0.005	ug/L	0.000	5	140	551	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0690-06
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, May 08, 2023 17:51:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
[>	**Li**	**6**		ug/L			207130	221859	1	Standard
[	**Be**	**9**	**0.001**	ug/L	0.001	116	1	6	83	Standard
	C	**13**		ug/L			45629	98367	0	Standard
[>	**Sc**	**45**		ug/L			328642	333583	0	Standard
[	**V**	**51**	**4.079**	ug/L	0.091	2	4356	114078	2	Standard
[	**V-1**	**51**	**5.918**	ug/L	0.093	1	536	159065	1	Standard
[	**Cr**	**52**	**2.139**	ug/L	0.028	1	12713	59674	0	Standard
[	**Cr**	**53**	**8.572**	ug/L	0.039	0	214	21129	1	Standard
[	**Mn**	**55**	**0.066**	ug/L	0.005	6	389	2497	5	Standard
[>	**Ge**	**72**		ug/L			37884	31593	1	KED
[	**Co**	**59**	**1.173**	ug/L	0.032	2	6	4890	2	KED
[	**Ni**	**60**	**0.549**	ug/L	0.025	4	7	661	3	KED
[	**Ni**	**62**	**0.564**	ug/L	0.042	7	2	109	7	KED
[	**Cu**	**63**	**0.270**	ug/L	0.014	5	17	906	3	KED
[	**Cu**	**65**	**0.284**	ug/L	0.006	2	12	483	0	KED
[	**Zn**	**66**	**0.306**	ug/L	0.078	25	19	155	22	KED
[	**Zn**	**67**	**0.804**	ug/L	0.106	13	1	61	11	KED
[	**As**	**75**	**15.902**	ug/L	0.263	1	2	3720	0	KED
[	**Se**	**78**	**9.711**	ug/L	0.586	6	10	231	6	KED
	Y	**89**		ug/L			57818	54577	2	Standard
	Kr	**83**		ug/L			53	53	25	Standard
[>	**In-1**	**115**		ug/L			8810	7179	0	KED
[	**Mo**	**98**	**8.006**	ug/L	0.200	2	11	8956	2	KED
[	**Cd**	**111**	**0.005**	ug/L	0.005	84	3	4	26	KED
[	**Cd**	**114**	**0.001**	ug/L	0.003	374	3	3	54	KED
[>	**In**	**115**		ug/L			459508	426352	0	Standard
[	**Ag**	**107**	**0.000**	ug/L	0.000	687	27	26	18	Standard
[	**Sb**	**121**	**0.120**	ug/L	0.005	4	274	1777	3	Standard
[	**Sb**	**123**	**0.133**	ug/L	0.008	5	194	1463	4	Standard
[	**Ba**	**135**	**9.603**	ug/L	0.127	1	10	46903	0	Standard
[	**Ba**	**137**	**9.480**	ug/L	0.065	0	9	83948	0	Standard
[>	**Tb**	**159**		ug/L			161360	161100	1	Standard
[	**Tl**	**205**	**0.002**	ug/L	0.000	21	98	207	9	Standard
[	**Pb**	**208**	**0.003**	ug/L	0.000	9	140	370	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 17:56:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			207130	226567	1	Standard
	Be	**9**	**0.000**	ug/L	0.000	203	1	3	69	Standard
	C	**13**		ug/L			45629	50720	0	Standard
>	**Sc**	**45**		ug/L			328642	322417	0	Standard
	V	**51**	**0.058**	ug/L	0.004	7	4356	5781	1	Standard
	V-1	**51**	**0.034**	ug/L	0.001	3	536	1404	2	Standard
	Cr	**52**	**0.210**	ug/L	0.005	2	12713	16915	0	Standard
	Cr	**53**	**0.128**	ug/L	0.009	6	214	511	4	Standard
	Mn	**55**	**0.011**	ug/L	0.009	85	389	718	40	Standard
>	**Ge**	**72**		ug/L			37884	37988	1	KED
	Co	**59**	**-0.001**	ug/L	0.000	21	6	1	86	KED
	Ni	**60**	**-0.001**	ug/L	0.004	264	7	5	88	KED
	Ni	**62**	**0.011**	ug/L	0.019	174	2	5	86	KED
	Cu	**63**	**0.004**	ug/L	0.001	34	17	33	16	KED
	Cu	**65**	**0.002**	ug/L	0.003	215	12	15	45	KED
	Zn	**66**	**0.077**	ug/L	0.032	42	19	61	27	KED
	Zn	**67**	**0.106**	ug/L	0.022	20	1	11	16	KED
	As	**75**	**-0.001**	ug/L	0.002	212	2	2	28	KED
	Se	**78**	**-0.094**	ug/L	0.073	77	10	8	24	KED
	Y	**89**		ug/L			57818	57664	2	Standard
	Kr	**83**		ug/L			53	45	35	Standard
>	**In-1**	**115**		ug/L			8810	8425	0	KED
	Mo	**98**	**-0.005**	ug/L	0.002	47	11	3	81	KED
	Cd	**111**	**0.001**	ug/L	0.004	727	3	3	31	KED
	Cd	**114**	**0.003**	ug/L	0.010	354	3	5	126	KED
>	**In**	**115**		ug/L			459508	462406	3	Standard
	Ag	**107**	**-0.001**	ug/L	0.000	24	27	16	13	Standard
	Sb	**121**	**-0.013**	ug/L	0.002	13	274	96	21	Standard
	Sb	**123**	**-0.011**	ug/L	0.002	13	194	75	18	Standard
	Ba	**135**	**0.004**	ug/L	0.001	27	10	31	15	Standard
	Ba	**137**	**0.004**	ug/L	0.001	34	9	45	24	Standard
>	**Tb**	**159**		ug/L			161360	162187	0	Standard
	Tl	**205**	**0.001**	ug/L	0.000	14	98	160	4	Standard
	Pb	**208**	**0.001**	ug/L	0.000	12	140	187	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0690-02
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, May 08, 2023 18:01:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	Li	6		ug/L			207130	215425	2	Standard
	Be	9	0.000	ug/L	0.000	180	1	3	86	Standard
	C	13		ug/L			45629	95855	1	Standard
>	Sc	45		ug/L			328642	330803	0	Standard
	V	51	2.050	ug/L	0.046	2	4356	59048	2	Standard
	V-1	51	3.228	ug/L	0.032	0	536	86284	1	Standard
	Cr	52	0.427	ug/L	0.004	0	12713	22054	0	Standard
	Cr	53	4.541	ug/L	0.068	1	214	11202	1	Standard
	Mn	55	0.042	ug/L	0.002	5	389	1721	3	Standard
>	Ge	72		ug/L			37884	32666	0	KED
	Co	59	0.003	ug/L	0.001	27	6	17	19	KED
	Ni	60	0.036	ug/L	0.004	10	7	50	8	KED
	Ni	62	0.072	ug/L	0.034	46	2	16	40	KED
	Cu	63	0.096	ug/L	0.012	12	17	342	11	KED
	Cu	65	0.105	ug/L	0.014	13	12	190	12	KED
	Zn	66	0.277	ug/L	0.029	10	19	147	9	KED
	Zn	67	0.447	ug/L	0.046	10	1	36	10	KED
	As	75	5.345	ug/L	0.122	2	2	1294	1	KED
	Se	78	11.157	ug/L	1.188	10	10	273	9	KED
	Y	89		ug/L			57818	54170	1	Standard
	Kr	83		ug/L			53	56	10	Standard
>	In-1	115		ug/L			8810	7305	1	KED
	Mo	98	13.201	ug/L	0.288	2	11	15019	1	KED
	Cd	111	0.008	ug/L	0.008	105	3	4	40	KED
	Cd	114	0.006	ug/L	0.012	193	3	6	105	KED
>	In	115		ug/L			459508	419207	1	Standard
	Ag	107	0.000	ug/L	0.000	140	27	29	19	Standard
	Sb	121	0.105	ug/L	0.001	0	274	1552	2	Standard
	Sb	123	0.109	ug/L	0.012	10	194	1218	8	Standard
	Ba	135	3.140	ug/L	0.060	1	10	15089	3	Standard
	Ba	137	3.102	ug/L	0.054	1	9	27016	1	Standard
>	Tb	159		ug/L			161360	158634	1	Standard
	Tl	205	0.000	ug/L	0.000	131	98	107	12	Standard
	Pb	208	0.003	ug/L	0.000	3	140	328	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0296-DUP1
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, May 08, 2023 18:06:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	Li	6		ug/L			207130	215963	1	Standard
	Be	9	-0.000	ug/L	0.000	81	1	0	173	Standard
	C	13		ug/L			45629	94231	0	Standard
>	Sc	45		ug/L			328642	316430	0	Standard
	V	51	2.062	ug/L	0.017	0	4356	56773	1	Standard
	V-1	51	3.263	ug/L	0.014	0	536	83413	0	Standard
	Cr	52	0.424	ug/L	0.007	1	12713	21032	0	Standard
	Cr	53	4.619	ug/L	0.028	0	214	10896	0	Standard
	Mn	55	0.075	ug/L	0.002	2	389	2647	2	Standard
>	Ge	72		ug/L			37884	31668	0	KED
	Co	59	0.002	ug/L	0.001	43	6	14	27	KED
	Ni	60	0.030	ug/L	0.016	55	7	41	46	KED
	Ni	62	0.095	ug/L	0.030	31	2	20	28	KED
	Cu	63	0.085	ug/L	0.007	8	17	296	7	KED
	Cu	65	0.092	ug/L	0.014	15	12	163	15	KED
	Zn	66	0.209	ug/L	0.020	9	19	111	8	KED
	Zn	67	0.233	ug/L	0.044	19	1	19	17	KED
	As	75	5.312	ug/L	0.121	2	2	1247	1	KED
	Se	78	11.537	ug/L	0.229	1	10	273	2	KED
	Y	89		ug/L			57818	53961	1	Standard
	Kr	83		ug/L			53	56	27	Standard
>	In-1	115		ug/L			8810	7229	2	KED
	Mo	98	12.941	ug/L	0.673	5	11	14559	2	KED
	Cd	111	0.007	ug/L	0.004	62	3	4	24	KED
	Cd	114	0.003	ug/L	0.005	145	3	5	58	KED
>	In	115		ug/L			459508	414428	2	Standard
	Ag	107	-0.001	ug/L	0.000	30	27	13	20	Standard
	Sb	121	0.102	ug/L	0.005	4	274	1501	2	Standard
	Sb	123	0.108	ug/L	0.007	6	194	1192	4	Standard
	Ba	135	3.079	ug/L	0.054	1	10	14621	0	Standard
	Ba	137	3.053	ug/L	0.110	3	9	26271	1	Standard
>	Tb	159		ug/L			161360	157031	0	Standard
	Tl	205	0.000	ug/L	0.000	374	98	100	17	Standard
	Pb	208	0.002	ug/L	0.000	10	140	314	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0296-MS1
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, May 08, 2023 18:12:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	Li	6		ug/L			207130	217386	0	Standard
	Be	9	4.657	ug/L	0.033	0	1	39590	0	Standard
	C	13		ug/L			45629	93067	0	Standard
>	Sc	45		ug/L			328642	316101	0	Standard
	V	51	6.322	ug/L	0.065	1	4356	165246	0	Standard
	V-1	51	7.515	ug/L	0.125	1	536	191237	1	Standard
	Cr	52	4.588	ug/L	0.058	1	12713	107304	0	Standard
	Cr	53	8.752	ug/L	0.256	2	214	20437	2	Standard
	Mn	55	4.300	ug/L	0.076	1	389	130844	1	Standard
>	Ge	72		ug/L			37884	31622	1	KED
	Co	59	5.460	ug/L	0.058	1	6	22776	2	KED
	Ni	60	5.377	ug/L	0.082	1	7	6435	1	KED
	Ni	62	5.677	ug/L	0.146	2	2	1087	2	KED
	Cu	63	5.356	ug/L	0.116	2	17	17711	1	KED
	Cu	65	5.330	ug/L	0.023	0	12	8902	1	KED
	Zn	66	16.369	ug/L	0.335	2	19	7478	1	KED
	Zn	67	16.092	ug/L	0.671	4	1	1204	5	KED
	As	75	10.524	ug/L	0.137	1	2	2465	0	KED
	Se	78	27.494	ug/L	0.959	3	10	638	2	KED
	Y	89		ug/L			57818	54018	1	Standard
	Kr	83		ug/L			53	55	16	Standard
>	In-1	115		ug/L			8810	6872	5	KED
	Mo	98	19.329	ug/L	0.693	3	11	20662	1	KED
	Cd	111	5.163	ug/L	0.201	3	3	1162	3	KED
	Cd	114	5.344	ug/L	0.228	4	3	3073	2	KED
>	In	115		ug/L			459508	418646	1	Standard
	Ag	107	4.835	ug/L	0.068	1	27	63774	0	Standard
	Sb	121	5.529	ug/L	0.063	1	274	68901	1	Standard
	Sb	123	5.633	ug/L	0.111	1	194	53722	1	Standard
	Ba	135	8.205	ug/L	0.098	1	10	39354	1	Standard
	Ba	137	8.089	ug/L	0.040	0	9	70341	0	Standard
>	Tb	159		ug/L			161360	157687	1	Standard
	Tl	205	5.036	ug/L	0.119	2	98	280283	1	Standard
	Pb	208	5.193	ug/L	0.149	2	140	373832	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0296-MSD1
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, May 08, 2023 18:18:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	Li	6		ug/L			207130	216718	2	Standard
	Be	9	4.672	ug/L	0.209	4	1	39576	2	Standard
	C	13		ug/L			45629	90619	0	Standard
>	Sc	45		ug/L			328642	318254	0	Standard
	V	51	6.308	ug/L	0.055	0	4356	166015	0	Standard
	V-1	51	7.506	ug/L	0.043	0	536	192323	0	Standard
	Cr	52	4.566	ug/L	0.063	1	12713	107572	0	Standard
	Cr	53	8.748	ug/L	0.068	0	214	20568	0	Standard
	Mn	55	4.292	ug/L	0.011	0	389	131510	0	Standard
>	Ge	72		ug/L			37884	31787	0	KED
	Co	59	5.508	ug/L	0.057	1	6	23093	0	KED
	Ni	60	5.405	ug/L	0.088	1	7	6502	0	KED
	Ni	62	5.299	ug/L	0.171	3	2	1020	3	KED
	Cu	63	5.250	ug/L	0.052	0	17	17455	0	KED
	Cu	65	5.377	ug/L	0.030	0	12	9028	0	KED
	Zn	66	16.322	ug/L	0.371	2	19	7496	2	KED
	Zn	67	15.676	ug/L	0.875	5	1	1179	5	KED
	As	75	10.587	ug/L	0.085	0	2	2493	1	KED
	Se	78	27.529	ug/L	0.556	2	10	643	2	KED
	Y	89		ug/L			57818	53686	0	Standard
	Kr	83		ug/L			53	53	19	Standard
>	In-1	115		ug/L			8810	7091	1	KED
	Mo	98	19.072	ug/L	0.355	1	11	21063	1	KED
	Cd	111	5.036	ug/L	0.133	2	3	1171	1	KED
	Cd	114	5.044	ug/L	0.127	2	3	2996	1	KED
>	In	115		ug/L			459508	418053	0	Standard
	Ag	107	4.878	ug/L	0.040	0	27	64249	0	Standard
	Sb	121	5.554	ug/L	0.060	1	274	69123	1	Standard
	Sb	123	5.688	ug/L	0.022	0	194	54170	0	Standard
	Ba	135	8.331	ug/L	0.065	0	10	39901	0	Standard
	Ba	137	8.115	ug/L	0.096	1	9	70463	0	Standard
>	Tb	159		ug/L			161360	157983	1	Standard
	Tl	205	5.082	ug/L	0.067	1	98	283374	0	Standard
	Pb	208	5.205	ug/L	0.015	0	140	375481	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 18:23:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			207130	225875	1	Standard
⌊	**Be**	**9**	**0.000**	ug/L	0.001	900	1	2	173	Standard
	C	**13**		ug/L			45629	49436	1	Standard
⌈>	**Sc**	**45**		ug/L			328642	319890	1	Standard
⌈	**V**	**51**	**0.048**	ug/L	0.005	10	4356	5488	1	Standard
⌊	**V-1**	**51**	**0.027**	ug/L	0.004	15	536	1219	7	Standard
⌈	**Cr**	**52**	**0.179**	ug/L	0.007	3	12713	16131	0	Standard
⌊	**Cr**	**53**	**0.106**	ug/L	0.006	6	214	457	2	Standard
⌊	**Mn**	**55**	**0.005**	ug/L	0.001	15	389	531	3	Standard
⌈>	**Ge**	**72**		ug/L			37884	36420	1	KED
⌈	**Co**	**59**	**-0.000**	ug/L	0.001	565	6	5	108	KED
⌊	**Ni**	**60**	**0.000**	ug/L	0.002	1069	7	7	43	KED
⌈	**Ni**	**62**	**0.009**	ug/L	0.005	57	2	4	24	KED
⌊	**Cu**	**63**	**0.007**	ug/L	0.000	2	17	43	2	KED
⌈	**Cu**	**65**	**0.002**	ug/L	0.003	143	12	15	38	KED
⌊	**Zn**	**66**	**0.023**	ug/L	0.025	108	19	31	41	KED
⌈	**Zn**	**67**	**0.060**	ug/L	0.033	55	1	6	41	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.008	1111	2	2	88	KED
⌊	**Se**	**78**	**-0.129**	ug/L	0.027	20	10	6	9	KED
	Y	**89**		ug/L			57818	56663	2	Standard
	Kr	**83**		ug/L			53	37	17	Standard
⌈>	**In-1**	**115**		ug/L			8810	8202	1	KED
⌈	**Mo**	**98**	**-0.006**	ug/L	0.002	26	11	2	95	KED
⌊	**Cd**	**111**	**-0.001**	ug/L	0.004	244	3	2	33	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.002	89	3	4	24	KED
⌈>	**In**	**115**		ug/L			459508	473846	3	Standard
⌈	**Ag**	**107**	**-0.000**	ug/L	0.000	104	27	20	32	Standard
⌈	**Sb**	**121**	**-0.015**	ug/L	0.001	3	274	72	13	Standard
⌊	**Sb**	**123**	**-0.014**	ug/L	0.001	6	194	49	21	Standard
⌈	**Ba**	**135**	**0.001**	ug/L	0.000	36	10	18	15	Standard
⌊	**Ba**	**137**	**0.004**	ug/L	0.002	42	9	49	31	Standard
⌈>	**Tb**	**159**		ug/L			161360	164502	0	Standard
⌈	**Tl**	**205**	**0.001**	ug/L	0.000	17	98	181	7	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	42	140	221	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 18:29:01
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			207130	218483	1	Standard
	Be	**9**	**48.970**	ug/L	1.208	2	1	418303	1	Standard
	C	**13**		ug/L			45629	49085	0	Standard
>	**Sc**	**45**		ug/L			328642	320005	0	Standard
	V	**51**	**45.963**	ug/L	0.531	1	4356	1189578	0	Standard
	V-1	**51**	**46.461**	ug/L	0.639	1	536	1194249	0	Standard
	Cr	**52**	**46.853**	ug/L	0.194	0	12713	995370	0	Standard
	Cr	**53**	**48.614**	ug/L	0.568	1	214	113970	0	Standard
	Mn	**55**	**48.098**	ug/L	0.643	1	389	1477811	1	Standard
>	**Ge**	**72**		ug/L			37884	36776	0	KED
	Co	**59**	**50.100**	ug/L	0.151	0	6	242988	0	KED
	Ni	**60**	**50.226**	ug/L	0.799	1	7	69842	0	KED
	Ni	**62**	**49.574**	ug/L	0.543	1	2	11030	1	KED
	Cu	**63**	**50.964**	ug/L	0.597	1	17	195892	0	KED
	Cu	**65**	**50.276**	ug/L	0.708	1	12	97567	0	KED
	Zn	**66**	**51.408**	ug/L	1.039	2	19	27273	1	KED
	Zn	**67**	**49.841**	ug/L	0.848	1	1	4333	1	KED
	As	**75**	**48.343**	ug/L	0.700	1	2	13161	0	KED
	Se	**78**	**48.334**	ug/L	0.657	1	10	1298	0	KED
	Y	**89**		ug/L			57818	58091	0	Standard
	Kr	**83**		ug/L			53	46	4	Standard
>	**In-1**	**115**		ug/L			8810	8384	0	KED
	Mo	**98**	**47.518**	ug/L	0.538	1	11	62035	1	KED
	Cd	**111**	**49.856**	ug/L	0.398	0	3	13687	1	KED
	Cd	**114**	**49.952**	ug/L	0.213	0	3	35060	0	KED
>	**In**	**115**		ug/L			459508	459213	1	Standard
	Ag	**107**	**50.625**	ug/L	0.637	1	27	732128	1	Standard
	Sb	**121**	**49.691**	ug/L	0.566	1	274	677144	2	Standard
	Sb	**123**	**50.757**	ug/L	0.262	0	194	529430	1	Standard
	Ba	**135**	**48.598**	ug/L	0.999	2	10	255567	0	Standard
	Ba	**137**	**47.716**	ug/L	0.258	0	9	455098	2	Standard
>	**Tb**	**159**		ug/L			161360	167135	0	Standard
	Tl	**205**	**52.529**	ug/L	0.855	1	98	3098135	1	Standard
	Pb	**208**	**52.322**	ug/L	0.691	1	140	3991863	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 18:36:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			207130	213814	2	Standard
⌊	**Be**	**9**	**0.000**	ug/L	0.000	93	1	3	34	Standard
	C	**13**		ug/L			45629	45598	0	Standard
⌈>	**Sc**	**45**		ug/L			328642	325303	1	Standard
|	**V**	**51**	**-0.007**	ug/L	0.002	36	4356	4137	2	Standard
|	**V-1**	**51**	**0.003**	ug/L	0.001	29	536	596	4	Standard
|	**Cr**	**52**	**-0.023**	ug/L	0.002	7	12713	12091	1	Standard
|	**Cr**	**53**	**0.009**	ug/L	0.008	85	214	233	7	Standard
⌊	**Mn**	**55**	**0.000**	ug/L	0.001	436	389	390	4	Standard
⌈>	**Ge**	**72**		ug/L			37884	37876	0	KED
|	**Co**	**59**	**-0.001**	ug/L	0.000	34	6	3	34	KED
|	**Ni**	**60**	**-0.003**	ug/L	0.003	130	7	3	132	KED
|	**Ni**	**62**	**0.022**	ug/L	0.015	65	2	7	43	KED
|	**Cu**	**63**	**0.001**	ug/L	0.001	88	17	20	14	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.001	41	12	5	57	KED
|	**Zn**	**66**	**-0.016**	ug/L	0.016	101	19	10	83	KED
|	**Zn**	**67**	**0.014**	ug/L	0.012	85	1	3	34	KED
|	**As**	**75**	**0.002**	ug/L	0.005	301	2	3	42	KED
⌊	**Se**	**78**	**-0.025**	ug/L	0.059	236	10	9	16	KED
	Y	**89**		ug/L			57818	57170	0	Standard
	Kr	**83**		ug/L			53	31	27	Standard
⌈>	**In-1**	**115**		ug/L			8810	8700	1	KED
|	**Mo**	**98**	**0.000**	ug/L	0.003	2816	11	11	32	KED
|	**Cd**	**111**	**0.007**	ug/L	0.008	122	3	5	44	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.001	42	3	1	90	KED
⌈>	**In**	**115**		ug/L			459508	460124	0	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.000	22	27	36	5	Standard
|	**Sb**	**121**	**0.029**	ug/L	0.002	5	274	670	3	Standard
|	**Sb**	**123**	**0.030**	ug/L	0.003	11	194	510	6	Standard
|	**Ba**	**135**	**0.001**	ug/L	0.001	193	10	13	43	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.000	44	9	18	21	Standard
⌈>	**Tb**	**159**		ug/L			161360	160974	1	Standard
|	**Tl**	**205**	**0.002**	ug/L	0.001	30	98	196	13	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	36	140	213	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0020-BLK2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 18:42:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			207130	220048	0	Standard
	Be	**9**	**0.000**	ug/L	0.000	120	1	4	65	Standard
	C	**13**		ug/L			45629	78202	1	Standard
>	**Sc**	**45**		ug/L			328642	327210	0	Standard
	V	**51**	**0.009**	ug/L	0.005	60	4356	4566	2	Standard
	V-1	**51**	**0.008**	ug/L	0.002	21	536	737	5	Standard
	Cr	**52**	**0.045**	ug/L	0.001	2	12713	13617	0	Standard
	Cr	**53**	**0.042**	ug/L	0.014	34	214	314	11	Standard
	Mn	**55**	**0.037**	ug/L	0.002	5	389	1545	4	Standard
>	**Ge**	**72**		ug/L			37884	38486	0	KED
	Co	**59**	**0.000**	ug/L	0.002	436	6	8	96	KED
	Ni	**60**	**0.003**	ug/L	0.008	246	7	12	96	KED
	Ni	**62**	**-0.003**	ug/L	0.008	279	2	1	100	KED
	Cu	**63**	**0.026**	ug/L	0.009	33	17	123	28	KED
	Cu	**65**	**0.025**	ug/L	0.007	28	12	62	22	KED
	Zn	**66**	**0.340**	ug/L	0.045	13	19	208	12	KED
	Zn	**67**	**0.313**	ug/L	0.095	30	1	30	28	KED
	As	**75**	**0.002**	ug/L	0.004	292	2	3	37	KED
	Se	**78**	**-0.097**	ug/L	0.069	71	10	8	23	KED
	Y	**89**		ug/L			57818	57902	1	Standard
	Kr	**83**		ug/L			53	46	26	Standard
>	**In-1**	**115**		ug/L			8810	8808	3	KED
	Mo	**98**	**0.003**	ug/L	0.007	204	11	15	59	KED
	Cd	**111**	**-0.008**	ug/L	0.004	50	3	1	86	KED
	Cd	**114**	**0.002**	ug/L	0.001	86	3	4	21	KED
>	**In**	**115**		ug/L			459508	462470	2	Standard
	Ag	**107**	**-0.000**	ug/L	0.001	120	27	20	39	Standard
	Sb	**121**	**0.005**	ug/L	0.002	42	274	339	8	Standard
	Sb	**123**	**0.004**	ug/L	0.002	54	194	234	10	Standard
	Ba	**135**	**0.142**	ug/L	0.007	5	10	760	5	Standard
	Ba	**137**	**0.148**	ug/L	0.004	2	9	1434	1	Standard
>	**Tb**	**159**		ug/L			161360	164499	0	Standard
	Tl	**205**	**-0.000**	ug/L	0.000	241	98	92	21	Standard
	Pb	**208**	**0.003**	ug/L	0.000	7	140	359	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0020-BS2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 18:47:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	Li	6		ug/L			207130	218369	4	Standard
	Be	9	25.832	ug/L	1.483	5	1	220259	3	Standard
	C	13		ug/L			45629	86128	2	Standard
>	Sc	45		ug/L			328642	337646	1	Standard
	V	51	24.960	ug/L	0.867	3	4356	683408	1	Standard
	V-1	51	25.052	ug/L	0.921	3	536	679447	1	Standard
	Cr	52	25.647	ug/L	0.812	3	12713	580616	1	Standard
	Cr	53	25.981	ug/L	1.012	3	214	64343	2	Standard
	Mn	55	25.735	ug/L	1.042	4	389	834093	2	Standard
>	Ge	72		ug/L			37884	38610	0	KED
	Co	59	27.144	ug/L	0.250	0	6	138217	1	KED
	Ni	60	27.260	ug/L	0.326	1	7	39800	0	KED
	Ni	62	27.024	ug/L	0.338	1	2	6313	0	KED
	Cu	63	27.203	ug/L	0.365	1	17	109781	0	KED
	Cu	65	27.251	ug/L	0.294	1	12	55526	0	KED
	Zn	66	87.616	ug/L	1.710	1	19	48787	1	KED
	Zn	67	83.342	ug/L	1.034	1	1	7607	1	KED
	As	75	26.066	ug/L	0.156	0	2	7452	0	KED
	Se	78	83.743	ug/L	0.729	0	10	2353	0	KED
	Y	89		ug/L			57818	59425	3	Standard
	Kr	83		ug/L			53	50	34	Standard
>	In-1	115		ug/L			8810	8555	2	KED
	Mo	98	25.436	ug/L	0.679	2	11	33877	0	KED
	Cd	111	26.744	ug/L	1.260	4	3	7488	2	KED
	Cd	114	26.573	ug/L	0.844	3	3	19026	1	KED
>	In	115		ug/L			459508	457799	0	Standard
	Ag	107	26.992	ug/L	0.991	3	27	389136	2	Standard
	Sb	121	25.955	ug/L	0.309	1	274	352695	0	Standard
	Sb	123	26.641	ug/L	0.225	0	194	277115	0	Standard
	Ba	135	26.051	ug/L	0.521	2	10	136596	1	Standard
	Ba	137	26.280	ug/L	0.480	1	9	249873	1	Standard
>	Tb	159		ug/L			161360	167888	1	Standard
	Tl	205	26.317	ug/L	0.591	2	98	1558990	1	Standard
	Pb	208	26.681	ug/L	0.369	1	140	2044829	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0755-BLK3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 18:54:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			207130	217557	0	Standard
	Be	**9**	**0.000**	ug/L	0.000	52	1	5	33	Standard
	C	**13**		ug/L			45629	80211	0	Standard
>	**Sc**	**45**		ug/L			328642	327061	1	Standard
	V	**51**	**0.010**	ug/L	0.003	28	4356	4604	1	Standard
	V-1	**51**	**0.002**	ug/L	0.001	26	536	595	4	Standard
	Cr	**52**	**0.062**	ug/L	0.015	24	12713	13984	1	Standard
	Cr	**53**	**0.035**	ug/L	0.004	12	214	298	1	Standard
	Mn	**55**	**0.070**	ug/L	0.004	5	389	2593	2	Standard
>	**Ge**	**72**		ug/L			37884	39057	0	KED
	Co	**59**	**0.002**	ug/L	0.004	206	6	16	124	KED
	Ni	**60**	**0.012**	ug/L	0.009	74	7	25	51	KED
	Ni	**62**	**0.021**	ug/L	0.008	38	2	7	25	KED
	Cu	**63**	**0.015**	ug/L	0.003	17	17	80	13	KED
	Cu	**65**	**0.013**	ug/L	0.003	21	12	38	15	KED
	Zn	**66**	**0.232**	ug/L	0.031	13	19	151	11	KED
	Zn	**67**	**0.247**	ug/L	0.160	64	1	24	60	KED
	As	**75**	**0.001**	ug/L	0.002	316	2	3	22	KED
	Se	**78**	**-0.087**	ug/L	0.025	28	10	8	8	KED
	Y	**89**		ug/L			57818	57815	0	Standard
	Kr	**83**		ug/L			53	36	34	Standard
>	**In-1**	**115**		ug/L			8810	8931	1	KED
	Mo	**98**	**0.011**	ug/L	0.008	69	11	26	38	KED
	Cd	**111**	**0.009**	ug/L	0.002	19	3	6	9	KED
	Cd	**114**	**0.001**	ug/L	0.003	491	3	4	53	KED
>	**In**	**115**		ug/L			459508	461014	2	Standard
	Ag	**107**	**-0.000**	ug/L	0.000	225	27	26	7	Standard
	Sb	**121**	**-0.008**	ug/L	0.001	7	274	160	3	Standard
	Sb	**123**	**-0.006**	ug/L	0.002	34	194	133	13	Standard
	Ba	**135**	**0.201**	ug/L	0.016	7	10	1071	5	Standard
	Ba	**137**	**0.207**	ug/L	0.002	0	9	1986	2	Standard
>	**Tb**	**159**		ug/L			161360	164492	0	Standard
	Tl	**205**	**0.000**	ug/L	0.000	51	98	118	7	Standard
	Pb	**208**	**0.004**	ug/L	0.000	4	140	428	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0755-BS3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 18:59:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			207130	205527	5	Standard
	Be	**9**	**26.082**	ug/L	0.463	1	1	209496	3	Standard
	C	**13**		ug/L			45629	84394	0	Standard
>	**Sc**	**45**		ug/L			328642	329048	4	Standard
	V	**51**	**25.357**	ug/L	1.111	4	4356	675903	1	Standard
	V-1	**51**	**25.544**	ug/L	1.207	4	536	674440	1	Standard
	Cr	**52**	**26.044**	ug/L	0.725	2	12713	574077	2	Standard
	Cr	**53**	**26.710**	ug/L	1.096	4	214	64402	1	Standard
	Mn	**55**	**26.292**	ug/L	0.836	3	389	829996	1	Standard
>	**Ge**	**72**		ug/L			37884	38912	0	KED
	Co	**59**	**26.238**	ug/L	0.262	1	6	134651	0	KED
	Ni	**60**	**26.079**	ug/L	0.433	1	7	38377	1	KED
	Ni	**62**	**26.173**	ug/L	0.801	3	2	6161	2	KED
	Cu	**63**	**26.260**	ug/L	0.032	0	17	106811	0	KED
	Cu	**65**	**26.354**	ug/L	0.062	0	12	54122	0	KED
	Zn	**66**	**84.354**	ug/L	0.782	0	19	47341	0	KED
	Zn	**67**	**79.514**	ug/L	2.905	3	1	7313	3	KED
	As	**75**	**25.292**	ug/L	0.257	1	2	7287	0	KED
	Se	**78**	**81.315**	ug/L	1.462	1	10	2303	0	KED
	Y	**89**		ug/L			57818	56579	5	Standard
	Kr	**83**		ug/L			53	57	8	Standard
>	**In-1**	**115**		ug/L			8810	8761	1	KED
	Mo	**98**	**25.312**	ug/L	0.990	3	11	34520	2	KED
	Cd	**111**	**25.559**	ug/L	0.629	2	3	7332	0	KED
	Cd	**114**	**25.639**	ug/L	0.716	2	3	18801	0	KED
>	**In**	**115**		ug/L			459508	443651	5	Standard
	Ag	**107**	**26.664**	ug/L	1.676	6	27	371853	2	Standard
	Sb	**121**	**26.681**	ug/L	1.278	4	274	350783	0	Standard
	Sb	**123**	**27.206**	ug/L	1.612	5	194	273712	1	Standard
	Ba	**135**	**25.973**	ug/L	1.548	5	10	131720	0	Standard
	Ba	**137**	**26.296**	ug/L	1.384	5	9	241865	1	Standard
>	**Tb**	**159**		ug/L			161360	164426	4	Standard
	Tl	**205**	**26.056**	ug/L	1.299	4	98	1509744	1	Standard
	Pb	**208**	**26.462**	ug/L	1.363	5	140	1983320	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0313-01
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 19:06:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			207130	385334	1	Standard
Be	9	0.000	ug/L	0.000	325	1	4	65	Standard
C	13		ug/L			45629	98235	1	Standard
Sc	45		ug/L			328642	425295	1	Standard
V	51	0.387	ug/L	0.039	10	4356	18890	7	Standard
V-1	51	3.296	ug/L	0.053	1	536	113225	0	Standard
Cr	52	0.315	ug/L	0.022	7	12713	25219	0	Standard
Cr	53	10.528	ug/L	0.187	1	214	33017	0	Standard
Mn	55	6.110	ug/L	0.094	1	389	249928	0	Standard
Ge	72		ug/L			37884	34718	0	KED
Co	59	0.643	ug/L	0.028	4	6	2949	4	KED
Ni	60	2.581	ug/L	0.069	2	7	3395	2	KED
Ni	62	2.487	ug/L	0.072	2	2	524	2	KED
Cu	63	0.538	ug/L	0.007	1	17	1968	1	KED
Cu	65	0.551	ug/L	0.019	3	12	1019	4	KED
Zn	66	5.379	ug/L	0.143	2	19	2710	2	KED
Zn	67	8.195	ug/L	0.338	4	1	674	4	KED
As	75	7.023	ug/L	0.087	1	2	1807	2	KED
Se	78	3.309	ug/L	0.164	4	10	93	4	KED
Y	89		ug/L			57818	55835	1	Standard
Kr	83		ug/L			53	62	24	Standard
In-1	115		ug/L			8810	7897	1	KED
Mo	98	89.881	ug/L	1.369	1	11	110505	0	KED
Cd	111	0.015	ug/L	0.007	50	3	6	28	KED
Cd	114	0.010	ug/L	0.009	90	3	9	61	KED
In	115		ug/L			459508	420837	1	Standard
Ag	107	0.002	ug/L	0.001	48	27	54	26	Standard
Sb	121	0.210	ug/L	0.008	3	274	2874	2	Standard
Sb	123	0.222	ug/L	0.006	2	194	2303	3	Standard
Ba	135	63.913	ug/L	0.668	1	10	308067	0	Standard
Ba	137	63.916	ug/L	0.065	0	9	558647	1	Standard
Tb	159		ug/L			161360	163891	1	Standard
Tl	205	0.069	ug/L	0.003	4	98	4064	3	Standard
Pb	208	0.062	ug/L	0.001	1	140	4816	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL8
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 19:13:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			207130	222270	0	Standard
	Be	**9**	**-0.000**	ug/L	0.000	0	1	0		Standard
	C	**13**		ug/L			45629	49461	0	Standard
>	**Sc**	**45**		ug/L			328642	334763	1	Standard
	V	**51**	**0.040**	ug/L	0.003	7	4356	5524	0	Standard
	V-1	**51**	**0.040**	ug/L	0.000	0	536	1625	2	Standard
	Cr	**52**	**0.142**	ug/L	0.012	8	12713	16068	1	Standard
	Cr	**53**	**0.143**	ug/L	0.003	2	214	568	2	Standard
	Mn	**55**	**0.003**	ug/L	0.000	2	389	503	2	Standard
>	**Ge**	**72**		ug/L			37884	39863	0	KED
	Co	**59**	**-0.001**	ug/L	0.000	31	6	3	34	KED
	Ni	**60**	**-0.002**	ug/L	0.002	143	7	5	57	KED
	Ni	**62**	**0.010**	ug/L	0.016	164	2	5	78	KED
	Cu	**63**	**0.002**	ug/L	0.001	66	17	27	22	KED
	Cu	**65**	**0.000**	ug/L	0.001	19287	12	12	8	KED
	Zn	**66**	**0.030**	ug/L	0.011	37	19	38	17	KED
	Zn	**67**	**0.039**	ug/L	0.040	102	1	5	66	KED
	As	**75**	**0.001**	ug/L	0.001	163	2	3	8	KED
	Se	**78**	**-0.102**	ug/L	0.026	25	10	8	9	KED
	Y	**89**		ug/L			57818	57998	2	Standard
	Kr	**83**		ug/L			53	50	11	Standard
>	**In-1**	**115**		ug/L			8810	8744	1	KED
	Mo	**98**	**-0.003**	ug/L	0.002	66	11	6	45	KED
	Cd	**111**	**-0.003**	ug/L	0.010	316	3	2	114	KED
	Cd	**114**	**-0.001**	ug/L	0.005	928	3	3	114	KED
>	**In**	**115**		ug/L			459508	454989	0	Standard
	Ag	**107**	**-0.000**	ug/L	0.000	375	27	26	15	Standard
	Sb	**121**	**-0.015**	ug/L	0.001	8	274	66	24	Standard
	Sb	**123**	**-0.012**	ug/L	0.001	10	194	68	20	Standard
	Ba	**135**	**0.002**	ug/L	0.002	87	10	19	40	Standard
	Ba	**137**	**0.005**	ug/L	0.001	12	9	52	10	Standard
>	**Tb**	**159**		ug/L			161360	164390	0	Standard
	Tl	**205**	**0.001**	ug/L	0.000	49	98	149	16	Standard
	Pb	**208**	**0.001**	ug/L	0.000	33	140	185	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0313-01RE1
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, May 08, 2023 19:19:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			207130	254102	2	Standard
	Be	**9**	**-0.000**	ug/L	0.000	102	1	1	86	Standard
	C	**13**		ug/L			45629	55432	0	Standard
>	**Sc**	**45**		ug/L			328642	351482	0	Standard
	V	**51**	**0.096**	ug/L	0.018	18	4356	7367	6	Standard
	V-1	**51**	**1.146**	ug/L	0.012	1	536	32905	0	Standard
	Cr	**52**	**0.070**	ug/L	0.007	10	12713	15221	1	Standard
	Cr	**53**	**3.757**	ug/L	0.059	1	214	9887	1	Standard
	Mn	**55**	**1.663**	ug/L	0.002	0	389	56519	0	Standard
>	**Ge**	**72**		ug/L			37884	37106	1	KED
	Co	**59**	**0.131**	ug/L	0.012	9	6	648	10	KED
	Ni	**60**	**0.554**	ug/L	0.031	5	7	784	5	KED
	Ni	**62**	**0.580**	ug/L	0.029	4	2	132	5	KED
	Cu	**63**	**0.127**	ug/L	0.011	8	17	507	9	KED
	Cu	**65**	**0.113**	ug/L	0.016	14	12	232	14	KED
	Zn	**66**	**1.238**	ug/L	0.084	6	19	681	7	KED
	Zn	**67**	**1.717**	ug/L	0.088	5	1	152	4	KED
	As	**75**	**1.505**	ug/L	0.013	0	2	416	0	KED
	Se	**78**	**0.709**	ug/L	0.119	16	10	29	10	KED
	Y	**89**		ug/L			57818	57040	1	Standard
	Kr	**83**		ug/L			53	45	29	Standard
>	**In-1**	**115**		ug/L			8810	8259	0	KED
	Mo	**98**	**17.940**	ug/L	0.304	1	11	23077	1	KED
	Cd	**111**	**0.016**	ug/L	0.011	65	3	7	37	KED
	Cd	**114**	**0.009**	ug/L	0.008	96	3	9	60	KED
>	**In**	**115**		ug/L			459508	456324	0	Standard
	Ag	**107**	**-0.000**	ug/L	0.000	57	27	22	13	Standard
	Sb	**121**	**0.032**	ug/L	0.001	1	274	704	1	Standard
	Sb	**123**	**0.036**	ug/L	0.005	15	194	562	10	Standard
	Ba	**135**	**12.579**	ug/L	0.123	0	10	65761	1	Standard
	Ba	**137**	**12.552**	ug/L	0.095	0	9	118967	1	Standard
>	**Tb**	**159**		ug/L			161360	166054	0	Standard
	Tl	**205**	**0.015**	ug/L	0.000	2	98	988	1	Standard
	Pb	**208**	**0.016**	ug/L	0.002	9	140	1328	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0425-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 08, 2023 19:25:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			207130	367025	1	Standard
Be	9	0.001	ug/L	0.000	17	1	22	14	Standard
C	13		ug/L			45629	60260	1	Standard
Sc	45		ug/L			328642	493812	1	Standard
V	51	0.737	ug/L	0.018	2	4356	35882	1	Standard
V-1	51	1.040	ug/L	0.017	1	536	42035	0	Standard
Cr	52	0.104	ug/L	0.008	7	12713	22484	0	Standard
Cr	53	1.159	ug/L	0.015	1	214	4508	1	Standard
Mn	55	41.215	ug/L	0.402	0	389	1954174	0	Standard
Ge	72		ug/L			37884	33915	0	KED
Co	59	2.747	ug/L	0.010	0	6	12292	0	KED
Ni	60	10.490	ug/L	0.042	0	7	13459	0	KED
Ni	62	10.680	ug/L	0.208	1	2	2193	1	KED
Cu	63	0.230	ug/L	0.014	6	17	831	6	KED
Cu	65	0.242	ug/L	0.007	3	12	443	3	KED
Zn	66	2.726	ug/L	0.116	4	19	1350	4	KED
Zn	67	4.177	ug/L	0.326	7	1	336	7	KED
As	75	0.273	ug/L	0.009	3	2	71	3	KED
Se	78	45.180	ug/L	0.912	2	10	1119	2	KED
Y	89		ug/L			57818	55002	1	Standard
Kr	83		ug/L			53	38	21	Standard
In-1	115		ug/L			8810	7716	2	KED
Mo	98	13.319	ug/L	0.493	3	11	16004	2	KED
Cd	111	0.075	ug/L	0.006	7	3	21	4	KED
Cd	114	0.081	ug/L	0.011	13	3	55	15	KED
In	115		ug/L			459508	422713	1	Standard
Ag	107	-0.000	ug/L	0.000	176	27	22	21	Standard
Sb	121	0.026	ug/L	0.003	12	274	581	6	Standard
Sb	123	0.031	ug/L	0.002	6	194	476	3	Standard
Ba	135	40.860	ug/L	0.863	2	10	197826	1	Standard
Ba	137	40.094	ug/L	0.941	2	9	351979	2	Standard
Tb	159		ug/L			161360	157272	0	Standard
Tl	205	0.013	ug/L	0.000	2	98	808	1	Standard
Pb	208	0.011	ug/L	0.001	11	140	930	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0413-01RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 19:32:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
[>	**Li**	**6**		ug/L			207130	213060	2	Standard
[	**Be**	**9**	**0.005**	ug/L	0.000	9	1	43	8	Standard
	C	**13**		ug/L			45629	88541	0	Standard
[>	**Sc**	**45**		ug/L			328642	368672	0	Standard
[	**V**	**51**	**0.409**	ug/L	0.010	2	4356	17030	2	Standard
[	**V-1**	**51**	**0.563**	ug/L	0.006	1	536	17264	1	Standard
[	**Cr**	**52**	**0.272**	ug/L	0.006	2	12713	20843	1	Standard
[	**Cr**	**53**	**0.812**	ug/L	0.011	1	214	2430	0	Standard
[	**Mn**	**55**	**10.858**	ug/L	0.203	1	389	384650	1	Standard
[>	**Ge**	**72**		ug/L			37884	36981	0	KED
[	**Co**	**59**	**0.332**	ug/L	0.017	5	6	1624	4	KED
[	**Ni**	**60**	**1.890**	ug/L	0.054	2	7	2649	2	KED
[	**Ni**	**62**	**1.811**	ug/L	0.104	5	2	407	6	KED
[	**Cu**	**63**	**10.832**	ug/L	0.068	0	17	41882	1	KED
[	**Cu**	**65**	**10.994**	ug/L	0.163	1	12	21466	2	KED
[	**Zn**	**66**	**52.520**	ug/L	0.288	0	19	28020	0	KED
[	**Zn**	**67**	**49.432**	ug/L	0.607	1	1	4322	1	KED
[	**As**	**75**	**0.191**	ug/L	0.006	3	2	55	3	KED
[	**Se**	**78**	**0.056**	ug/L	0.016	29	10	11	4	KED
	Y	**89**		ug/L			57818	71048	0	Standard
	Kr	**83**		ug/L			53	38	34	Standard
[>	**In-1**	**115**		ug/L			8810	8523	2	KED
[	**Mo**	**98**	**0.324**	ug/L	0.013	3	11	440	5	KED
[	**Cd**	**111**	**0.214**	ug/L	0.037	17	3	62	13	KED
[	**Cd**	**114**	**0.244**	ug/L	0.016	6	3	177	5	KED
[>	**In**	**115**		ug/L			459508	454302	1	Standard
[	**Ag**	**107**	**0.006**	ug/L	0.001	19	27	116	15	Standard
[	**Sb**	**121**	**0.474**	ug/L	0.010	2	274	6666	3	Standard
[	**Sb**	**123**	**0.480**	ug/L	0.007	1	194	5147	1	Standard
[	**Ba**	**135**	**17.546**	ug/L	0.182	1	10	91314	1	Standard
[	**Ba**	**137**	**17.518**	ug/L	0.203	1	9	165284	1	Standard
[>	**Tb**	**159**		ug/L			161360	164560	1	Standard
[	**Tl**	**205**	**0.003**	ug/L	0.000	10	98	262	6	Standard
[	**Pb**	**208**	**3.746**	ug/L	0.052	1	140	281555	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL9
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 19:39:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			207130	202638	8	Standard
⌊	**Be**	**9**	**0.000**	ug/L	0.000	178	1	3	69	Standard
	C	**13**		ug/L			45629	47505	1	Standard
⌈>	**Sc**	**45**		ug/L			328642	296718	8	Standard
⌈	**V**	**51**	**0.006**	ug/L	0.009	166	4356	4055	4	Standard
⌊	**V-1**	**51**	**0.006**	ug/L	0.002	38	536	622	0	Standard
⌈	**Cr**	**52**	**0.022**	ug/L	0.040	183	12713	11854	2	Standard
⌊	**Cr**	**53**	**0.023**	ug/L	0.020	88	214	241	10	Standard
	Mn	**55**	**0.003**	ug/L	0.001	35	389	426	2	Standard
⌈>	**Ge**	**72**		ug/L			37884	36552	0	KED
⌈	**Co**	**59**	**-0.001**	ug/L	0.000	61	6	2	86	KED
⌊	**Ni**	**60**	**-0.003**	ug/L	0.001	53	7	3	50	KED
⌈	**Ni**	**62**	**0.009**	ug/L	0.013	145	2	4	65	KED
⌈	**Cu**	**63**	**0.005**	ug/L	0.002	38	17	34	19	KED
⌊	**Cu**	**65**	**0.004**	ug/L	0.003	88	12	19	34	KED
⌈	**Zn**	**66**	**0.007**	ug/L	0.016	224	19	22	38	KED
⌊	**Zn**	**67**	**0.023**	ug/L	0.022	96	1	3	50	KED
⌈	**As**	**75**	**-0.003**	ug/L	0.003	110	2	1	50	KED
⌊	**Se**	**78**	**-0.093**	ug/L	0.073	78	10	7	25	KED
	Y	**89**		ug/L			57818	52936	6	Standard
	Kr	**83**		ug/L			53	38	32	Standard
⌈>	**In-1**	**115**		ug/L			8810	8392	1	KED
⌈	**Mo**	**98**	**-0.007**	ug/L	0.002	25	11	2	96	KED
⌊	**Cd**	**111**	**-0.005**	ug/L	0.004	70	3	1	50	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.005	1948	3	3	112	KED
⌈>	**In**	**115**		ug/L			459508	434144	7	Standard
⌈	**Ag**	**107**	**-0.001**	ug/L	0.001	81	27	16	35	Standard
⌈	**Sb**	**121**	**-0.017**	ug/L	0.000	2	274	41	19	Standard
⌊	**Sb**	**123**	**-0.015**	ug/L	0.001	5	194	37	17	Standard
⌈	**Ba**	**135**	**0.004**	ug/L	0.000	4	10	32	5	Standard
⌊	**Ba**	**137**	**0.004**	ug/L	0.001	16	9	46	19	Standard
⌈>	**Tb**	**159**		ug/L			161360	152358	7	Standard
⌈	**Tl**	**205**	**-0.001**	ug/L	0.000	9	98	50	15	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	21	140	195	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 19:44:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			207130	208280	0	Standard
	Be	**9**	**48.813**	ug/L	1.055	2	1	397564	1	Standard
	C	**13**		ug/L			45629	48053	3	Standard
>	**Sc**	**45**		ug/L			328642	326693	1	Standard
	V	**51**	**45.866**	ug/L	0.199	0	4356	1211994	1	Standard
	V-1	**51**	**46.235**	ug/L	0.183	0	536	1213400	1	Standard
	Cr	**52**	**47.140**	ug/L	0.357	0	12713	1022275	0	Standard
	Cr	**53**	**48.450**	ug/L	0.181	0	214	115966	1	Standard
	Mn	**55**	**48.532**	ug/L	0.251	0	389	1522301	0	Standard
>	**Ge**	**72**		ug/L			37884	37814	1	KED
	Co	**59**	**49.406**	ug/L	0.198	0	6	246378	1	KED
	Ni	**60**	**49.810**	ug/L	1.271	2	7	71205	1	KED
	Ni	**62**	**49.204**	ug/L	0.617	1	2	11255	1	KED
	Cu	**63**	**49.633**	ug/L	0.675	1	17	196143	0	KED
	Cu	**65**	**50.396**	ug/L	0.504	1	12	100556	0	KED
	Zn	**66**	**51.246**	ug/L	0.140	0	19	27957	1	KED
	Zn	**67**	**50.900**	ug/L	0.510	1	1	4550	0	KED
	As	**75**	**48.741**	ug/L	0.540	1	2	13644	1	KED
	Se	**78**	**48.370**	ug/L	1.815	3	10	1335	3	KED
	Y	**89**		ug/L			57818	56145	1	Standard
	Kr	**83**		ug/L			53	37	25	Standard
>	**In-1**	**115**		ug/L			8810	8359	1	KED
	Mo	**98**	**48.605**	ug/L	1.191	2	11	63249	0	KED
	Cd	**111**	**50.833**	ug/L	0.438	0	3	13912	1	KED
	Cd	**114**	**51.129**	ug/L	1.688	3	3	35768	1	KED
>	**In**	**115**		ug/L			459508	445077	1	Standard
	Ag	**107**	**50.031**	ug/L	0.386	0	27	701289	1	Standard
	Sb	**121**	**49.490**	ug/L	1.815	3	274	653414	2	Standard
	Sb	**123**	**50.830**	ug/L	0.713	1	194	513798	0	Standard
	Ba	**135**	**49.111**	ug/L	1.536	3	10	250275	1	Standard
	Ba	**137**	**48.723**	ug/L	1.451	2	9	450224	1	Standard
>	**Tb**	**159**		ug/L			161360	165242	0	Standard
	Tl	**205**	**52.000**	ug/L	0.623	1	98	3032136	0	Standard
	Pb	**208**	**51.620**	ug/L	0.269	0	140	3894032	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 19:52:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			207130	210359	0	Standard
	Be	**9**	**0.000**	ug/L	0.000	178	1	3	69	Standard
	C	**13**		ug/L			45629	44207	1	Standard
>	**Sc**	**45**		ug/L			328642	318355	0	Standard
	V	**51**	**-0.004**	ug/L	0.003	72	4356	4117	1	Standard
	V-1	**51**	**-0.002**	ug/L	0.001	46	536	480	3	Standard
	Cr	**52**	**-0.017**	ug/L	0.010	56	12713	11953	2	Standard
	Cr	**53**	**-0.009**	ug/L	0.008	86	214	187	10	Standard
	Mn	**55**	**-0.000**	ug/L	0.001	205	389	369	5	Standard
>	**Ge**	**72**		ug/L			37884	36250	7	KED
	Co	**59**	**-0.001**	ug/L	0.000	69	6	3	69	KED
	Ni	**60**	**0.001**	ug/L	0.002	276	7	8	35	KED
	Ni	**62**	**0.004**	ug/L	0.006	156	2	3	34	KED
	Cu	**63**	**0.002**	ug/L	0.003	110	17	25	43	KED
	Cu	**65**	**-0.001**	ug/L	0.001	204	12	10	28	KED
	Zn	**66**	**-0.018**	ug/L	0.009	49	19	9	52	KED
	Zn	**67**	**0.031**	ug/L	0.028	87	1	4	49	KED
	As	**75**	**0.001**	ug/L	0.002	382	2	2	16	KED
	Se	**78**	**-0.058**	ug/L	0.033	56	10	8	2	KED
	Y	**89**		ug/L			57818	55096	1	Standard
	Kr	**83**		ug/L			53	34	15	Standard
>	**In-1**	**115**		ug/L			8810	8672	0	KED
	Mo	**98**	**0.003**	ug/L	0.004	124	11	15	32	KED
	Cd	**111**	**0.002**	ug/L	0.005	208	3	4	35	KED
	Cd	**114**	**0.004**	ug/L	0.006	130	3	6	59	KED
>	**In**	**115**		ug/L			459508	435029	1	Standard
	Ag	**107**	**0.001**	ug/L	0.001	111	27	40	39	Standard
	Sb	**121**	**0.026**	ug/L	0.002	7	274	599	5	Standard
	Sb	**123**	**0.031**	ug/L	0.004	13	194	486	7	Standard
	Ba	**135**	**0.000**	ug/L	0.000	81	10	12	17	Standard
	Ba	**137**	**0.001**	ug/L	0.001	95	9	19	50	Standard
>	**Tb**	**159**		ug/L			161360	158431	1	Standard
	Tl	**205**	**0.001**	ug/L	0.000	16	98	155	5	Standard
	Pb	**208**	**0.001**	ug/L	0.000	14	140	217	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0806-BLK2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 19:59:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			207130	210098	1	Standard
	Be	**9**	**0.000**	ug/L	0.000	489	1	2	114	Standard
	C	**13**		ug/L			45629	67261	0	Standard
>	**Sc**	**45**		ug/L			328642	325655	0	Standard
	V	**51**	**0.009**	ug/L	0.009	104	4356	4553	5	Standard
	V-1	**51**	**0.001**	ug/L	0.001	94	536	552	3	Standard
	Cr	**52**	**0.079**	ug/L	0.020	25	12713	14274	2	Standard
	Cr	**53**	**0.051**	ug/L	0.010	19	214	333	7	Standard
	Mn	**55**	**0.080**	ug/L	0.002	2	389	2900	2	Standard
>	**Ge**	**72**		ug/L			37884	38279	1	KED
	Co	**59**	**0.001**	ug/L	0.001	105	6	9	34	KED
	Ni	**60**	**0.005**	ug/L	0.004	81	7	14	39	KED
	Ni	**62**	**0.011**	ug/L	0.019	174	2	5	86	KED
	Cu	**63**	**0.025**	ug/L	0.009	33	17	119	30	KED
	Cu	**65**	**0.022**	ug/L	0.001	5	12	56	5	KED
	Zn	**66**	**0.297**	ug/L	0.041	13	19	183	10	KED
	Zn	**67**	**0.329**	ug/L	0.115	34	1	31	34	KED
	As	**75**	**-0.004**	ug/L	0.001	26	2	1	15	KED
	Se	**78**	**0.019**	ug/L	0.045	238	10	11	10	KED
	Y	**89**		ug/L			57818	56167	1	Standard
	Kr	**83**		ug/L			53	34	9	Standard
>	**In-1**	**115**		ug/L			8810	8820	0	KED
	Mo	**98**	**0.002**	ug/L	0.003	123	11	14	26	KED
	Cd	**111**	**0.006**	ug/L	0.015	270	3	5	84	KED
	Cd	**114**	**-0.003**	ug/L	0.004	125	3	1	279	KED
>	**In**	**115**		ug/L			459508	445903	1	Standard
	Ag	**107**	**-0.000**	ug/L	0.000	21	27	21	5	Standard
	Sb	**121**	**0.002**	ug/L	0.001	44	274	288	2	Standard
	Sb	**123**	**0.002**	ug/L	0.001	30	194	212	3	Standard
	Ba	**135**	**0.011**	ug/L	0.003	24	10	67	19	Standard
	Ba	**137**	**0.013**	ug/L	0.001	8	9	130	8	Standard
>	**Tb**	**159**		ug/L			161360	160456	0	Standard
	Tl	**205**	**-0.000**	ug/L	0.000	111	98	81	21	Standard
	Pb	**208**	**0.011**	ug/L	0.001	8	140	909	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0806-BS2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 20:04:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	Li	6		ug/L			207130	214341	2	Standard
	Be	9	24.739	ug/L	0.298	1	1	207358	2	Standard
	C	13		ug/L			45629	70495	0	Standard
>	Sc	45		ug/L			328642	334938	3	Standard
	V	51	24.617	ug/L	0.784	3	4356	668499	0	Standard
	V-1	51	24.794	ug/L	0.679	2	536	666970	0	Standard
	Cr	52	25.244	ug/L	0.867	3	12713	566923	1	Standard
	Cr	53	25.876	ug/L	0.523	2	214	63573	1	Standard
	Mn	55	25.648	ug/L	0.773	3	389	824485	1	Standard
>	Ge	72		ug/L			37884	38470	0	KED
	Co	59	26.644	ug/L	0.517	1	6	135176	1	KED
	Ni	60	26.317	ug/L	0.247	0	7	38287	1	KED
	Ni	62	26.094	ug/L	0.227	0	2	6074	1	KED
	Cu	63	26.121	ug/L	0.374	1	17	105034	0	KED
	Cu	65	26.387	ug/L	0.329	1	12	53573	1	KED
	Zn	66	84.326	ug/L	1.005	1	19	46789	1	KED
	Zn	67	80.956	ug/L	0.916	1	1	7362	0	KED
	As	75	25.411	ug/L	0.179	0	2	7238	0	KED
	Se	78	81.471	ug/L	1.370	1	10	2281	1	KED
	Y	89		ug/L			57818	57316	2	Standard
	Kr	83		ug/L			53	48	29	Standard
>	In-1	115		ug/L			8810	8483	0	KED
	Mo	98	25.489	ug/L	0.111	0	11	33673	0	KED
	Cd	111	26.321	ug/L	0.304	1	3	7312	1	KED
	Cd	114	26.266	ug/L	0.129	0	3	18655	0	KED
>	In	115		ug/L			459508	454817	0	Standard
	Ag	107	26.079	ug/L	0.523	2	27	373604	2	Standard
	Sb	121	25.505	ug/L	0.356	1	274	344319	0	Standard
	Sb	123	26.008	ug/L	0.276	1	194	268772	0	Standard
	Ba	135	25.985	ug/L	0.183	0	10	135383	1	Standard
	Ba	137	25.755	ug/L	0.401	1	9	243274	0	Standard
>	Tb	159		ug/L			161360	164215	0	Standard
	Tl	205	25.881	ug/L	0.348	1	98	1499853	1	Standard
	Pb	208	26.584	ug/L	0.364	1	140	1992894	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0414-02
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 20:10:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			207130	206310	2	Standard
Be	9	0.003	ug/L	0.001	28	1	25	26	Standard
C	13		ug/L			45629	76276	0	Standard
Sc	45		ug/L			328642	420695	1	Standard
V	51	0.407	ug/L	0.014	3	4356	19385	1	Standard
V-1	51	0.650	ug/L	0.009	1	536	22655	0	Standard
Cr	52	-0.015	ug/L	0.011	70	12713	15863	1	Standard
Cr	53	0.833	ug/L	0.012	1	214	2838	2	Standard
Mn	55	166.799	ug/L	2.416	1	389	6735674	0	Standard
Ge	72		ug/L			37884	34203	0	KED
Co	59	0.690	ug/L	0.014	1	6	3118	2	KED
Ni	60	7.456	ug/L	0.164	2	7	9649	2	KED
Ni	62	7.567	ug/L	0.088	1	2	1567	1	KED
Cu	63	4.131	ug/L	0.087	2	17	14782	2	KED
Cu	65	4.124	ug/L	0.032	0	12	7454	1	KED
Zn	66	1.745	ug/L	0.111	6	19	878	6	KED
Zn	67	2.673	ug/L	0.124	4	1	217	4	KED
As	75	0.617	ug/L	0.041	6	2	158	7	KED
Se	78	8.857	ug/L	0.169	1	10	229	1	KED
Y	89		ug/L			57818	70467	1	Standard
Kr	83		ug/L			53	66	8	Standard
In-1	115		ug/L			8810	7843	1	KED
Mo	98	3.432	ug/L	0.108	3	11	4199	2	KED
Cd	111	1.010	ug/L	0.091	9	3	262	8	KED
Cd	114	1.036	ug/L	0.089	8	3	683	7	KED
In	115		ug/L			459508	429643	2	Standard
Ag	107	0.003	ug/L	0.001	31	27	62	21	Standard
Sb	121	0.440	ug/L	0.019	4	274	5855	1	Standard
Sb	123	0.444	ug/L	0.009	2	194	4509	2	Standard
Ba	135	20.648	ug/L	0.448	2	10	101580	0	Standard
Ba	137	20.313	ug/L	0.544	2	9	181181	1	Standard
Tb	159		ug/L			161360	159200	1	Standard
Tl	205	0.006	ug/L	0.003	41	98	440	30	Standard
Pb	208	0.114	ug/L	0.004	3	140	8425	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0020-DUP2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 20:17:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	Li	6		ug/L			207130	211835	1	Standard
	Be	9	0.001	ug/L	0.000	36	1	12	31	Standard
	C	13		ug/L			45629	75639	0	Standard
>	Sc	45		ug/L			328642	427003	1	Standard
	V	51	0.394	ug/L	0.022	5	4356	19197	2	Standard
	V-1	51	0.636	ug/L	0.015	2	536	22487	0	Standard
	Cr	52	-0.041	ug/L	0.004	10	12713	15380	1	Standard
	Cr	53	0.804	ug/L	0.020	2	214	2790	4	Standard
	Mn	55	162.852	ug/L	4.237	2	389	6673522	0	Standard
>	Ge	72		ug/L			37884	33567	0	KED
	Co	59	0.717	ug/L	0.023	3	6	3178	3	KED
	Ni	60	7.571	ug/L	0.100	1	7	9615	1	KED
	Ni	62	7.601	ug/L	0.308	4	2	1545	4	KED
	Cu	63	4.132	ug/L	0.066	1	17	14511	1	KED
	Cu	65	4.217	ug/L	0.038	0	12	7478	0	KED
	Zn	66	1.869	ug/L	0.079	4	19	921	4	KED
	Zn	67	2.788	ug/L	0.362	12	1	222	12	KED
	As	75	0.592	ug/L	0.026	4	2	149	4	KED
	Se	78	9.138	ug/L	0.437	4	10	231	4	KED
	Y	89		ug/L			57818	71033	1	Standard
	Kr	83		ug/L			53	57	22	Standard
>	In-1	115		ug/L			8810	7892	0	KED
	Mo	98	3.368	ug/L	0.054	1	11	4148	2	KED
	Cd	111	0.991	ug/L	0.050	5	3	259	5	KED
	Cd	114	1.066	ug/L	0.042	3	3	707	3	KED
>	In	115		ug/L			459508	436359	1	Standard
	Ag	107	0.002	ug/L	0.001	37	27	58	20	Standard
	Sb	121	0.435	ug/L	0.018	4	274	5885	2	Standard
	Sb	123	0.433	ug/L	0.018	4	194	4471	2	Standard
	Ba	135	20.622	ug/L	0.031	0	10	103077	1	Standard
	Ba	137	20.208	ug/L	0.473	2	9	183098	0	Standard
>	Tb	159		ug/L			161360	162862	0	Standard
	Tl	205	0.005	ug/L	0.000	5	98	395	4	Standard
	Pb	208	0.105	ug/L	0.001	0	140	7979	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0020-MS2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 20:22:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			207130	207137	0	Standard
Be	9	24.192	ug/L	0.332	1	1	195955	1	Standard
C	13		ug/L			45629	69814	0	Standard
Sc	45		ug/L			328642	423434	1	Standard
V	51	17.484	ug/L	0.198	1	4356	602236	0	Standard
V-1	51	17.721	ug/L	0.241	1	536	603149	0	Standard
Cr	52	17.073	ug/L	0.240	1	12713	490317	0	Standard
Cr	53	17.900	ug/L	0.374	2	214	55697	0	Standard
Mn	55	181.844	ug/L	3.082	1	389	7390927	0	Standard
Ge	72		ug/L			37884	32795	0	KED
Co	59	27.919	ug/L	0.211	0	6	120757	0	KED
Ni	60	33.884	ug/L	0.111	0	7	42022	0	KED
Ni	62	33.842	ug/L	0.437	1	2	6715	1	KED
Cu	63	29.757	ug/L	0.263	0	17	102007	0	KED
Cu	65	29.936	ug/L	0.316	1	12	51813	1	KED
Zn	66	80.859	ug/L	1.120	1	19	38249	1	KED
Zn	67	78.246	ug/L	0.395	0	1	6066	0	KED
As	75	26.361	ug/L	0.341	1	2	6401	1	KED
Se	78	87.153	ug/L	0.404	0	10	2080	0	KED
Y	89		ug/L			57818	71405	1	Standard
Kr	83		ug/L			53	76	35	Standard
In-1	115		ug/L			8810	7534	2	KED
Mo	98	29.272	ug/L	0.805	2	11	34329	1	KED
Cd	111	26.557	ug/L	0.292	1	3	6552	2	KED
Cd	114	26.172	ug/L	0.973	3	3	16501	2	KED
In	115		ug/L			459508	430580	2	Standard
Ag	107	24.727	ug/L	0.395	1	27	335276	0	Standard
Sb	121	25.995	ug/L	0.644	2	274	332148	0	Standard
Sb	123	26.303	ug/L	0.511	1	194	257278	0	Standard
Ba	135	46.470	ug/L	1.678	3	10	229086	1	Standard
Ba	137	45.861	ug/L	1.012	2	9	410006	0	Standard
Tb	159		ug/L			161360	161317	0	Standard
Tl	205	26.049	ug/L	0.051	0	98	1482979	0	Standard
Pb	208	26.137	ug/L	0.047	0	140	1924891	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0020-MSD2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 20:27:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			207130	211986	0	Standard
Be	9	24.056	ug/L	0.269	1	1	199416	0	Standard
C	13		ug/L			45629	68468	1	Standard
Sc	45		ug/L			328642	427315	0	Standard
V	51	17.208	ug/L	0.093	0	4356	598303	0	Standard
V-1	51	17.458	ug/L	0.061	0	536	599699	0	Standard
Cr	52	16.777	ug/L	0.168	1	12713	486545	0	Standard
Cr	53	17.648	ug/L	0.226	1	214	55426	0	Standard
Mn	55	178.588	ug/L	1.678	0	389	7325849	0	Standard
Ge	72		ug/L			37884	32955	0	KED
Co	59	28.058	ug/L	0.057	0	6	121948	0	KED
Ni	60	34.499	ug/L	0.283	0	7	42994	1	KED
Ni	62	34.073	ug/L	0.867	2	2	6793	2	KED
Cu	63	29.964	ug/L	0.214	0	17	103214	0	KED
Cu	65	29.946	ug/L	0.285	0	12	52080	0	KED
Zn	66	80.196	ug/L	0.913	1	19	38118	0	KED
Zn	67	76.263	ug/L	0.798	1	1	5941	0	KED
As	75	26.650	ug/L	0.171	0	2	6503	0	KED
Se	78	86.423	ug/L	2.987	3	10	2072	3	KED
Y	89		ug/L			57818	73089	1	Standard
Kr	83		ug/L			53	92	9	Standard
In-1	115		ug/L			8810	7642	0	KED
Mo	98	29.346	ug/L	0.532	1	11	34919	0	KED
Cd	111	26.131	ug/L	0.089	0	3	6540	1	KED
Cd	114	26.333	ug/L	0.449	1	3	16846	1	KED
In	115		ug/L			459508	431993	2	Standard
Ag	107	25.201	ug/L	0.352	1	27	342815	1	Standard
Sb	121	26.374	ug/L	0.613	2	274	338053	0	Standard
Sb	123	26.856	ug/L	0.607	2	194	263502	0	Standard
Ba	135	46.824	ug/L	1.363	2	10	231571	0	Standard
Ba	137	46.003	ug/L	1.374	2	9	412511	0	Standard
Tb	159		ug/L			161360	163958	1	Standard
Tl	205	25.596	ug/L	0.440	1	98	1480901	0	Standard
Pb	208	26.150	ug/L	0.435	1	140	1957223	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0425-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 08, 2023 20:34:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			207130	374572	1	Standard
Be	9	0.002	ug/L	0.000	14	1	32	11	Standard
C	13		ug/L			45629	59746	0	Standard
Sc	45		ug/L			328642	499838	1	Standard
V	51	0.677	ug/L	0.020	2	4356	33887	1	Standard
V-1	51	0.959	ug/L	0.022	2	536	39295	1	Standard
Cr	52	0.057	ug/L	0.002	3	12713	21217	1	Standard
Cr	53	1.040	ug/L	0.018	1	214	4127	1	Standard
Mn	55	39.637	ug/L	0.515	1	389	1902387	1	Standard
Ge	72		ug/L			37884	33303	0	KED
Co	59	2.733	ug/L	0.024	0	6	12006	0	KED
Ni	60	10.101	ug/L	0.113	1	7	12726	1	KED
Ni	62	9.960	ug/L	0.237	2	2	2008	2	KED
Cu	63	0.258	ug/L	0.009	3	17	913	2	KED
Cu	65	0.280	ug/L	0.014	5	12	502	5	KED
Zn	66	2.396	ug/L	0.041	1	19	1167	1	KED
Zn	67	3.988	ug/L	0.031	0	1	315	0	KED
As	75	0.258	ug/L	0.026	9	2	66	9	KED
Se	78	43.364	ug/L	1.207	2	10	1055	2	KED
Y	89		ug/L			57818	56019	0	Standard
Kr	83		ug/L			53	48	35	Standard
In-1	115		ug/L			8810	7492	3	KED
Mo	98	13.022	ug/L	0.342	2	11	15188	1	KED
Cd	111	0.102	ug/L	0.011	11	3	27	11	KED
Cd	114	0.081	ug/L	0.024	29	3	53	26	KED
In	115		ug/L			459508	428096	1	Standard
Ag	107	0.003	ug/L	0.001	35	27	66	21	Standard
Sb	121	0.029	ug/L	0.002	8	274	627	5	Standard
Sb	123	0.037	ug/L	0.003	8	194	541	5	Standard
Ba	135	39.516	ug/L	0.364	0	10	193783	1	Standard
Ba	137	38.503	ug/L	0.476	1	9	342313	0	Standard
Tb	159		ug/L			161360	159512	0	Standard
Tl	205	0.014	ug/L	0.001	7	98	878	6	Standard
Pb	208	0.012	ug/L	0.001	7	140	993	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0806-DUP1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 08, 2023 20:39:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			207130	362232	1	Standard
Be	9	0.001	ug/L	0.000	22	1	19	17	Standard
C	13		ug/L			45629	59710	1	Standard
Sc	45		ug/L			328642	470218	0	Standard
V	51	0.687	ug/L	0.017	2	4356	32259	1	Standard
V-1	51	0.991	ug/L	0.018	1	536	38173	1	Standard
Cr	52	0.079	ug/L	0.012	15	12713	20633	0	Standard
Cr	53	1.139	ug/L	0.018	1	214	4222	1	Standard
Mn	55	40.202	ug/L	0.533	1	389	1815063	0	Standard
Ge	72		ug/L			37884	31846	1	KED
Co	59	2.725	ug/L	0.058	2	6	11447	0	KED
Ni	60	10.303	ug/L	0.254	2	7	12408	0	KED
Ni	62	10.453	ug/L	0.563	5	2	2014	4	KED
Cu	63	0.212	ug/L	0.014	6	17	720	4	KED
Cu	65	0.215	ug/L	0.016	7	12	370	5	KED
Zn	66	2.644	ug/L	0.018	0	19	1230	2	KED
Zn	67	4.306	ug/L	0.217	5	1	325	5	KED
As	75	0.241	ug/L	0.018	7	2	59	5	KED
Se	78	43.573	ug/L	0.630	1	10	1014	1	KED
Y	89		ug/L			57818	52872	1	Standard
Kr	83		ug/L			53	35	21	Standard
In-1	115		ug/L			8810	7335	0	KED
Mo	98	12.703	ug/L	0.157	1	11	14515	0	KED
Cd	111	0.079	ug/L	0.008	10	3	21	8	KED
Cd	114	0.084	ug/L	0.026	31	3	54	29	KED
In	115		ug/L			459508	418694	1	Standard
Ag	107	-0.000	ug/L	0.000	5180	27	24	20	Standard
Sb	121	0.031	ug/L	0.004	11	274	640	6	Standard
Sb	123	0.030	ug/L	0.002	5	194	461	2	Standard
Ba	135	39.035	ug/L	0.708	1	10	187194	1	Standard
Ba	137	38.294	ug/L	0.475	1	9	332980	0	Standard
Tb	159		ug/L			161360	155542	1	Standard
Tl	205	0.013	ug/L	0.000	2	98	803	2	Standard
Pb	208	0.007	ug/L	0.001	8	140	645	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0806-MS1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 08, 2023 20:44:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			207130	366906	0	Standard
Be	9	6.835	ug/L	0.064	0	1	98077	1	Standard
C	13		ug/L			45629	59785	1	Standard
Sc	45		ug/L			328642	483479	0	Standard
V	51	7.712	ug/L	0.100	1	4356	306890	0	Standard
V-1	51	8.095	ug/L	0.097	1	536	315014	0	Standard
Cr	52	7.063	ug/L	0.101	1	12713	242593	1	Standard
Cr	53	8.399	ug/L	0.078	0	214	30010	0	Standard
Mn	55	47.969	ug/L	0.929	1	389	2226642	1	Standard
Ge	72		ug/L			37884	31601	0	KED
Co	59	16.090	ug/L	0.095	0	6	67061	0	KED
Ni	60	23.026	ug/L	0.440	1	7	27517	1	KED
Ni	62	23.784	ug/L	0.674	2	2	4548	2	KED
Cu	63	13.020	ug/L	0.009	0	17	43017	0	KED
Cu	65	13.003	ug/L	0.252	1	12	21690	1	KED
Zn	66	42.693	ug/L	0.702	1	19	19466	1	KED
Zn	67	41.146	ug/L	0.978	2	1	3074	2	KED
As	75	12.882	ug/L	0.116	0	2	3015	0	KED
Se	78	82.386	ug/L	0.795	0	10	1895	0	KED
Y	89		ug/L			57818	53726	3	Standard
Kr	83		ug/L			53	47	4	Standard
In-1	115		ug/L			8810	6982	1	KED
Mo	98	26.245	ug/L	0.563	2	11	28532	1	KED
Cd	111	12.832	ug/L	0.262	2	3	2935	1	KED
Cd	114	13.082	ug/L	0.310	2	3	7646	0	KED
In	115		ug/L			459508	418609	0	Standard
Ag	107	12.531	ug/L	0.355	2	27	165247	3	Standard
Sb	121	13.015	ug/L	0.106	0	274	161844	0	Standard
Sb	123	13.236	ug/L	0.423	3	194	125983	3	Standard
Ba	135	51.731	ug/L	0.826	1	10	248047	1	Standard
Ba	137	50.971	ug/L	0.066	0	9	443149	0	Standard
Tb	159		ug/L			161360	157906	1	Standard
Tl	205	13.177	ug/L	0.120	0	98	734418	2	Standard
Pb	208	13.168	ug/L	0.030	0	140	949345	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLA
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 20:50:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			207130	215834	4	Standard
⌊	**Be**	**9**	**0.001**	ug/L	0.001	104	1	6	69	Standard
	C	**13**		ug/L			45629	46010	0	Standard
⌈>	**Sc**	**45**		ug/L			328642	299900	0	Standard
⎢	**V**	**51**	**0.014**	ug/L	0.001	9	4356	4308	1	Standard
⎢	**V-1**	**51**	**0.007**	ug/L	0.001	19	536	654	5	Standard
⎢	**Cr**	**52**	**0.059**	ug/L	0.003	4	12713	12759	0	Standard
⎢	**Cr**	**53**	**0.035**	ug/L	0.001	3	214	273	1	Standard
⌊	**Mn**	**55**	**0.007**	ug/L	0.009	120	389	567	45	Standard
⌈>	**Ge**	**72**		ug/L			37884	35055	0	KED
⎢	**Co**	**59**	**-0.001**	ug/L	0.000	48	6	1	173	KED
⎢	**Ni**	**60**	**-0.001**	ug/L	0.003	278	7	5	66	KED
⎢	**Ni**	**62**	**0.004**	ug/L	0.011	267	2	3	69	KED
⎢	**Cu**	**63**	**0.003**	ug/L	0.001	16	17	28	6	KED
⎢	**Cu**	**65**	**0.001**	ug/L	0.002	173	12	13	28	KED
⎢	**Zn**	**66**	**0.002**	ug/L	0.010	607	19	19	26	KED
⎢	**Zn**	**67**	**0.040**	ug/L	0.035	87	1	5	57	KED
⎢	**As**	**75**	**-0.004**	ug/L	0.005	112	2	1	75	KED
⌊	**Se**	**78**	**0.014**	ug/L	0.110	808	10	10	26	KED
	Y	**89**		ug/L			57818	53985	1	Standard
	Kr	**83**		ug/L			53	39	33	Standard
⌈>	**In-1**	**115**		ug/L			8810	8073	0	KED
⎢	**Mo**	**98**	**0.013**	ug/L	0.024	189	11	26	114	KED
⎢	**Cd**	**111**	**-0.001**	ug/L	0.007	556	3	2	66	KED
⌊	**Cd**	**114**	**0.006**	ug/L	0.012	212	3	7	114	KED
⌈>	**In**	**115**		ug/L			459508	448879	1	Standard
⎢	**Ag**	**107**	**0.000**	ug/L	0.001	177	27	33	36	Standard
⎢	**Sb**	**121**	**-0.015**	ug/L	0.001	5	274	67	13	Standard
⎢	**Sb**	**123**	**-0.012**	ug/L	0.002	17	194	62	35	Standard
⎢	**Ba**	**135**	**0.008**	ug/L	0.008	95	10	52	75	Standard
⌊	**Ba**	**137**	**0.006**	ug/L	0.005	71	9	69	61	Standard
⌈>	**Tb**	**159**		ug/L			161360	159130	1	Standard
⎢	**Tl**	**205**	**0.001**	ug/L	0.001	148	98	147	51	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.001	57	140	285	29	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 20:55:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			207130	217739	2	Standard
	Be	**9**	**47.928**	ug/L	1.022	2	1	407981	0	Standard
	C	**13**		ug/L			45629	47055	1	Standard
>	**Sc**	**45**		ug/L			328642	311380	2	Standard
	V	**51**	**45.925**	ug/L	0.983	2	4356	1156268	0	Standard
	V-1	**51**	**46.365**	ug/L	0.927	1	536	1159427	0	Standard
	Cr	**52**	**46.816**	ug/L	1.155	2	12713	967462	0	Standard
	Cr	**53**	**48.373**	ug/L	0.749	1	214	110333	1	Standard
	Mn	**55**	**48.332**	ug/L	1.615	3	389	1444340	1	Standard
>	**Ge**	**72**		ug/L			37884	35248	0	KED
	Co	**59**	**51.178**	ug/L	0.360	0	6	237902	0	KED
	Ni	**60**	**51.193**	ug/L	0.747	1	7	68229	0	KED
	Ni	**62**	**50.917**	ug/L	0.456	0	2	10857	0	KED
	Cu	**63**	**50.292**	ug/L	0.271	0	17	185282	0	KED
	Cu	**65**	**50.889**	ug/L	0.940	1	12	94654	1	KED
	Zn	**66**	**52.093**	ug/L	0.882	1	19	26489	1	KED
	Zn	**67**	**51.686**	ug/L	1.220	2	1	4307	1	KED
	As	**75**	**49.146**	ug/L	0.909	1	2	12824	1	KED
	Se	**78**	**50.034**	ug/L	1.539	3	10	1287	2	KED
	Y	**89**		ug/L			57818	55457	1	Standard
	Kr	**83**		ug/L			53	38	29	Standard
>	**In-1**	**115**		ug/L			8810	7882	2	KED
	Mo	**98**	**48.888**	ug/L	1.349	2	11	59977	0	KED
	Cd	**111**	**50.706**	ug/L	0.742	1	3	13084	1	KED
	Cd	**114**	**50.979**	ug/L	1.351	2	3	33626	0	KED
>	**In**	**115**		ug/L			459508	452154	0	Standard
	Ag	**107**	**50.223**	ug/L	0.780	1	27	715284	2	Standard
	Sb	**121**	**49.543**	ug/L	0.883	1	274	664661	1	Standard
	Sb	**123**	**50.810**	ug/L	0.154	0	194	521851	0	Standard
	Ba	**135**	**48.594**	ug/L	0.367	0	10	251671	0	Standard
	Ba	**137**	**47.600**	ug/L	0.244	0	9	446988	0	Standard
>	**Tb**	**159**		ug/L			161360	163855	0	Standard
	Tl	**205**	**53.835**	ug/L	0.407	0	98	3112838	0	Standard
	Pb	**208**	**53.647**	ug/L	0.194	0	140	4012972	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 21:03:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			207130	211044	1	Standard
⌊	**Be**	**9**	**0.000**	ug/L	0.000	375	1	2	86	Standard
	C	**13**		ug/L			45629	43343	1	Standard
⌈>	**Sc**	**45**		ug/L			328642	303261	0	Standard
⌈	**V**	**51**	**-0.012**	ug/L	0.001	6	4356	3733	0	Standard
⌈	**V-1**	**51**	**-0.005**	ug/L	0.001	13	536	364	3	Standard
⌈	**Cr**	**52**	**-0.040**	ug/L	0.001	1	12713	10939	0	Standard
⌈	**Cr**	**53**	**-0.018**	ug/L	0.004	23	214	158	5	Standard
⌊	**Mn**	**55**	**-0.001**	ug/L	0.001	159	389	343	8	Standard
⌈>	**Ge**	**72**		ug/L			37884	36017	0	KED
⌈	**Co**	**59**	**-0.000**	ug/L	0.001	182	6	4	65	KED
⌈	**Ni**	**60**	**-0.003**	ug/L	0.002	71	7	3	91	KED
⌈	**Ni**	**62**	**0.003**	ug/L	0.013	382	2	3	91	KED
⌈	**Cu**	**63**	**0.001**	ug/L	0.001	55	17	21	13	KED
⌈	**Cu**	**65**	**-0.001**	ug/L	0.001	42	12	8	12	KED
⌈	**Zn**	**66**	**0.037**	ug/L	0.017	45	19	38	22	KED
⌈	**Zn**	**67**	**0.031**	ug/L	0.013	41	1	4	24	KED
⌈	**As**	**75**	**0.003**	ug/L	0.006	215	2	3	47	KED
⌊	**Se**	**78**	**-0.040**	ug/L	0.154	384	10	9	44	KED
	Y	**89**		ug/L			57818	53771	1	Standard
	Kr	**83**		ug/L			53	34	22	Standard
⌈>	**In-1**	**115**		ug/L			8810	8169	2	KED
⌈	**Mo**	**98**	**0.005**	ug/L	0.003	63	11	17	24	KED
⌈	**Cd**	**111**	**-0.001**	ug/L	0.004	264	3	2	33	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.005	1508	3	3	91	KED
⌈>	**In**	**115**		ug/L			459508	441466	1	Standard
⌈	**Ag**	**107**	**0.001**	ug/L	0.001	62	27	37	17	Standard
⌈	**Sb**	**121**	**0.031**	ug/L	0.004	13	274	667	7	Standard
⌈	**Sb**	**123**	**0.031**	ug/L	0.001	1	194	500	2	Standard
⌈	**Ba**	**135**	**-0.001**	ug/L	0.001	138	10	6	68	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.000	95	9	10	10	Standard
⌈>	**Tb**	**159**		ug/L			161360	155571	0	Standard
⌈	**Tl**	**205**	**0.001**	ug/L	0.001	57	98	144	20	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	26	140	240	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 21:14:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				42888	0	Standard
⎡>	**Sc**	**45**		ug/L				302132	0	Standard
⎢	**Cr**	**52**		ug/L				10612	1	Standard
⎣	**Cr**	**53**		ug/L				141	6	Standard
⎡>	**Ge**	**72**		ug/L				35050	10	KED
⎢	**Cu**	**63**		ug/L				19	26	KED
⎢	**Cu**	**65**		ug/L				13	34	KED
⎢	**Zn**	**66**		ug/L				23	28	KED
⎢	**Zn**	**67**		ug/L				6	83	KED
⎣	**Se**	**78**		ug/L				8	33	KED
	Y	**89**		ug/L				53239	0	Standard
	Kr	**83**		ug/L				40	23	Standard
⎡>	**Tb**	**159**		ug/L				163923	2	Standard
⎣	**Pb**	**208**		ug/L				156	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 21:18:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	46281	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	309875	2	Standard
|	**Cr**	**52**	**46.320**	ug/L	1.479	3	10612	951512	0	Standard
⌊	**Cr**	**53**	**48.000**	ug/L	1.132	2	141	108885	0	Standard
⌈>	**Ge**	**72**		ug/L			35050	36648	0	KED
|	**Cu**	**63**	**50.630**	ug/L	0.543	1	19	193940	1	KED
|	**Cu**	**65**	**50.876**	ug/L	0.362	0	13	98394	1	KED
|	**Zn**	**66**	**50.834**	ug/L	0.841	1	23	26881	1	KED
|	**Zn**	**67**	**50.962**	ug/L	1.886	3	6	4421	3	KED
⌊	**Se**	**78**	**49.180**	ug/L	0.817	1	8	1314	0	KED
	Y	**89**		ug/L			53239	54909	0	Standard
	Kr	**83**		ug/L			40	51	22	Standard
⌈>	**Tb**	**159**		ug/L			163923	167766	1	Standard
⌊	**Pb**	**208**	**53.711**	ug/L	0.536	0	156	4113290	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 21:25:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	43270	2	Standard
⌈>	**Sc**	**45**		ug/L			302132	293275	1	Standard
|	**Cr**	**52**	**0.035**	ug/L	0.009	26	10612	10969	0	Standard
⌊	**Cr**	**53**	**-0.006**	ug/L	0.004	57	141	123	4	Standard
⌈>	**Ge**	**72**		ug/L			35050	37191	1	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.002	262	19	17	37	KED
|	**Cu**	**65**	**0.000**	ug/L	0.001	485	13	15	12	KED
|	**Zn**	**66**	**0.007**	ug/L	0.019	267	23	28	33	KED
|	**Zn**	**67**	**-0.034**	ug/L	0.045	131	6	4	89	KED
⌊	**Se**	**78**	**-0.031**	ug/L	0.065	212	8	7	23	KED
	Y	**89**		ug/L			53239	52812	4	Standard
	Kr	**83**		ug/L			40	38	22	Standard
⌈>	**Tb**	**159**		ug/L			163923	161214	2	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	27	156	213	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-03
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 21:31:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	52043	2	Standard
⌈>	**Sc**	**45**		ug/L			302132	342606	2	Standard
|	**Cr**	**52**	**2.428**	ug/L	0.033	1	10612	66574	1	Standard
⌊	**Cr**	**53**	**2.580**	ug/L	0.044	1	141	6622	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	38413	1	KED
|	**Cu**	**63**	**6.076**	ug/L	0.208	3	19	24406	2	KED
|	**Cu**	**65**	**6.034**	ug/L	0.112	1	13	12243	0	KED
|	**Zn**	**66**	**15.036**	ug/L	0.244	1	23	8352	1	KED
|	**Zn**	**67**	**13.889**	ug/L	1.012	7	6	1267	6	KED
⌊	**Se**	**78**	**0.027**	ug/L	0.096	360	8	9	26	KED
	Y	**89**		ug/L			53239	93581	1	Standard
	Kr	**83**		ug/L			40	48	8	Standard
⌈>	**Tb**	**159**		ug/L			163923	175928	0	Standard
⌊	**Pb**	**208**	**2.654**	ug/L	0.012	0	156	213352	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-08
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 21:38:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	51581	0	Standard
⎡>	**Sc**	**45**		ug/L			302132	357830	1	Standard
⎢	**Cr**	**52**	**2.883**	ug/L	0.068	2	10612	80197	0	Standard
⎣	**Cr**	**53**	**3.052**	ug/L	0.042	1	141	8152	1	Standard
⎡>	**Ge**	**72**		ug/L			35050	39046	0	KED
⎢	**Cu**	**63**	**5.166**	ug/L	0.065	1	19	21103	0	KED
⎢	**Cu**	**65**	**5.181**	ug/L	0.086	1	13	10689	2	KED
⎢	**Zn**	**66**	**96.580**	ug/L	0.689	0	23	54396	1	KED
⎢	**Zn**	**67**	**90.839**	ug/L	1.196	1	6	8391	1	KED
⎣	**Se**	**78**	**0.131**	ug/L	0.056	42	8	12	12	KED
	Y	**89**		ug/L			53239	112467	0	Standard
	Kr	**83**		ug/L			40	50	35	Standard
⎡>	**Tb**	**159**		ug/L			163923	179042	0	Standard
⎣	**Pb**	**208**	**1.911**	ug/L	0.030	1	156	156356	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-14
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 21:42:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	52021	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	357010	0	Standard
|	**Cr**	**52**	**3.128**	ug/L	0.027	0	10612	85746	0	Standard
⌊	**Cr**	**53**	**3.317**	ug/L	0.037	1	141	8828	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	37641	1	KED
|	**Cu**	**63**	**5.650**	ug/L	0.115	2	19	22243	1	KED
|	**Cu**	**65**	**5.775**	ug/L	0.170	2	13	11484	3	KED
|	**Zn**	**66**	**11.667**	ug/L	0.327	2	23	6354	1	KED
|	**Zn**	**67**	**11.534**	ug/L	0.391	3	6	1033	4	KED
⌊	**Se**	**78**	**0.198**	ug/L	0.072	36	8	14	12	KED
	Y	**89**		ug/L			53239	114011	0	Standard
	Kr	**83**		ug/L			40	45	17	Standard
⌈>	**Tb**	**159**		ug/L			163923	174876	1	Standard
⌊	**Pb**	**208**	**2.502**	ug/L	0.027	1	156	199891	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-02
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 21:46:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	53015	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	348753	0	Standard
|	**Cr**	**52**	**2.623**	ug/L	0.028	1	10612	72229	0	Standard
⌊	**Cr**	**53**	**2.757**	ug/L	0.029	1	141	7194	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	38384	0	KED
|	**Cu**	**63**	**5.838**	ug/L	0.064	1	19	23442	1	KED
|	**Cu**	**65**	**5.799**	ug/L	0.100	1	13	11758	0	KED
|	**Zn**	**66**	**11.816**	ug/L	0.265	2	23	6564	2	KED
|	**Zn**	**67**	**11.250**	ug/L	0.658	5	6	1027	5	KED
⌊	**Se**	**78**	**0.060**	ug/L	0.079	132	8	10	20	KED
	Y	**89**		ug/L			53239	98907	0	Standard
	Kr	**83**		ug/L			40	42	9	Standard
⌈>	**Tb**	**159**		ug/L			163923	177903	2	Standard
⌊	**Pb**	**208**	**2.514**	ug/L	0.074	2	156	204263	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-03
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 21:50:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	51886	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	342497	2	Standard
|	**Cr**	**52**	**2.676**	ug/L	0.026	0	10612	72116	1	Standard
⌊	**Cr**	**53**	**2.831**	ug/L	0.044	1	141	7249	2	Standard
⌈>	**Ge**	**72**		ug/L			35050	37718	1	KED
|	**Cu**	**63**	**7.558**	ug/L	0.097	1	19	29817	2	KED
|	**Cu**	**65**	**7.570**	ug/L	0.126	1	13	15080	2	KED
|	**Zn**	**66**	**12.456**	ug/L	0.103	0	23	6799	1	KED
|	**Zn**	**67**	**11.817**	ug/L	0.639	5	6	1060	5	KED
⌊	**Se**	**78**	**0.084**	ug/L	0.035	42	8	11	9	KED
	Y	**89**		ug/L			53239	97017	1	Standard
	Kr	**83**		ug/L			40	39	19	Standard
⌈>	**Tb**	**159**		ug/L			163923	172969	2	Standard
⌊	**Pb**	**208**	**2.778**	ug/L	0.044	1	156	219448	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-08
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 21:54:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	51792	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	336647	1	Standard
|	**Cr**	**52**	**2.721**	ug/L	0.054	1	10612	71884	1	Standard
⌊	**Cr**	**53**	**2.833**	ug/L	0.100	3	141	7133	3	Standard
⌈>	**Ge**	**72**		ug/L			35050	38227	0	KED
|	**Cu**	**63**	**5.672**	ug/L	0.049	0	19	22680	0	KED
|	**Cu**	**65**	**5.521**	ug/L	0.065	1	13	11151	0	KED
|	**Zn**	**66**	**12.318**	ug/L	0.310	2	23	6813	2	KED
|	**Zn**	**67**	**11.846**	ug/L	0.367	3	6	1078	3	KED
⌊	**Se**	**78**	**0.133**	ug/L	0.154	115	8	12	32	KED
	Y	**89**		ug/L			53239	88326	2	Standard
	Kr	**83**		ug/L			40	43	7	Standard
⌈>	**Tb**	**159**		ug/L			163923	174114	0	Standard
⌊	**Pb**	**208**	**4.230**	ug/L	0.081	1	156	336340	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0420-01
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 21:58:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	51894	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	359288	2	Standard
|	**Cr**	**52**	**2.841**	ug/L	0.032	1	10612	79544	1	Standard
⌊	**Cr**	**53**	**2.956**	ug/L	0.103	3	141	7930	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	37913	1	KED
|	**Cu**	**63**	**5.989**	ug/L	0.122	2	19	23747	1	KED
|	**Cu**	**65**	**5.943**	ug/L	0.224	3	13	11901	2	KED
|	**Zn**	**66**	**12.281**	ug/L	0.453	3	23	6736	2	KED
|	**Zn**	**67**	**12.111**	ug/L	0.218	1	6	1092	1	KED
⌊	**Se**	**78**	**0.057**	ug/L	0.022	37	8	10	5	KED
	Y	**89**		ug/L			53239	104074	1	Standard
	Kr	**83**		ug/L			40	34	16	Standard
⌈>	**Tb**	**159**		ug/L			163923	176586	0	Standard
⌊	**Pb**	**208**	**2.471**	ug/L	0.014	0	156	199395	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0420-07
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 22:02:14

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	52905	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	317212	20	Standard
|	**Cr**	**52**	**3.973**	ug/L	0.936	23	10612	91120	2	Standard
⌊	**Cr**	**53**	**4.069**	ug/L	0.781	19	141	9340	3	Standard
⌈>	**Ge**	**72**		ug/L			35050	37927	0	KED
|	**Cu**	**63**	**8.384**	ug/L	0.069	0	19	33250	0	KED
|	**Cu**	**65**	**8.519**	ug/L	0.252	2	13	17060	2	KED
|	**Zn**	**66**	**15.835**	ug/L	0.122	0	23	8683	1	KED
|	**Zn**	**67**	**15.171**	ug/L	0.441	2	6	1367	3	KED
⌊	**Se**	**78**	**0.173**	ug/L	0.079	45	8	13	16	KED
	Y	**89**		ug/L			53239	103440	14	Standard
	Kr	**83**		ug/L			40	56	21	Standard
⌈>	**Tb**	**159**		ug/L			163923	158899	20	Standard
⌊	**Pb**	**208**	**4.833**	ug/L	1.068	22	156	340338	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0420-09
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 22:06:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	52032	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	354132	1	Standard
|	**Cr**	**52**	**2.919**	ug/L	0.030	1	10612	80217	1	Standard
⌊	**Cr**	**53**	**3.089**	ug/L	0.046	1	141	8164	0	Standard
⌈>	**Ge**	**72**		ug/L			35050	38167	0	KED
|	**Cu**	**63**	**5.257**	ug/L	0.106	2	19	20991	2	KED
|	**Cu**	**65**	**5.304**	ug/L	0.043	0	13	10697	1	KED
|	**Zn**	**66**	**11.918**	ug/L	0.037	0	23	6583	0	KED
|	**Zn**	**67**	**12.135**	ug/L	0.297	2	6	1102	2	KED
⌊	**Se**	**78**	**0.188**	ug/L	0.053	28	8	14	10	KED
	Y	**89**		ug/L			53239	108637	3	Standard
	Kr	**83**		ug/L			40	33	11	Standard
⌈>	**Tb**	**159**		ug/L			163923	175636	1	Standard
⌊	**Pb**	**208**	**9.566**	ug/L	0.163	1	156	767048	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLB
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 22:11:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	43977	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	301757	1	Standard
|	**Cr**	**52**	**-0.004**	ug/L	0.003	66	10612	10521	1	Standard
⌊	**Cr**	**53**	**-0.002**	ug/L	0.006	267	141	135	11	Standard
⌈>	**Ge**	**72**		ug/L			35050	37853	0	KED
|	**Cu**	**63**	**0.000**	ug/L	0.001	1323	19	20	24	KED
|	**Cu**	**65**	**0.001**	ug/L	0.003	243	13	17	29	KED
|	**Zn**	**66**	**0.000**	ug/L	0.012	292864	23	25	26	KED
|	**Zn**	**67**	**-0.056**	ug/L	0.025	44	6	2	86	KED
⌊	**Se**	**78**	**-0.054**	ug/L	0.032	59	8	7	11	KED
	Y	**89**		ug/L			53239	52968	4	Standard
	Kr	**83**		ug/L			40	31	15	Standard
⌈>	**Tb**	**159**		ug/L			163923	160246	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	20	156	243	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 22:15:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	47228	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	323705	1	Standard
|	**Cr**	**52**	**47.158**	ug/L	0.620	1	10612	1012075	0	Standard
⌊	**Cr**	**53**	**47.603**	ug/L	1.281	2	141	112809	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	37894	0	KED
|	**Cu**	**63**	**49.576**	ug/L	0.177	0	19	196364	1	KED
|	**Cu**	**65**	**50.079**	ug/L	0.167	0	13	100148	0	KED
|	**Zn**	**66**	**50.170**	ug/L	0.694	1	23	27435	1	KED
|	**Zn**	**67**	**50.916**	ug/L	1.678	3	6	4567	2	KED
⌊	**Se**	**78**	**49.486**	ug/L	0.812	1	8	1367	1	KED
	Y	**89**		ug/L			53239	56276	0	Standard
	Kr	**83**		ug/L			40	41	13	Standard
⌈>	**Tb**	**159**		ug/L			163923	171524	1	Standard
⌊	**Pb**	**208**	**52.928**	ug/L	0.667	1	156	4144071	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 22:22:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	44316	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	316564	0	Standard
|	**Cr**	**52**	**0.022**	ug/L	0.011	52	10612	11571	2	Standard
⌊	**Cr**	**53**	**0.005**	ug/L	0.001	28	141	158	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	38988	1	KED
|	**Cu**	**63**	**0.001**	ug/L	0.001	102	19	24	15	KED
|	**Cu**	**65**	**-0.004**	ug/L	0.001	38	13	8	35	KED
|	**Zn**	**66**	**0.004**	ug/L	0.018	404	23	28	34	KED
|	**Zn**	**67**	**-0.016**	ug/L	0.023	148	6	6	34	KED
⌊	**Se**	**78**	**-0.029**	ug/L	0.041	142	8	8	14	KED
	Y	**89**		ug/L			53239	53863	1	Standard
	Kr	**83**		ug/L			40	39	40	Standard
⌈>	**Tb**	**159**		ug/L			163923	163552	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	28	156	252	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0392-01
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 22:26:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	55412	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	334168	1	Standard
|	**Cr**	**52**	**1.753**	ug/L	0.047	2	10612	50142	0	Standard
⌊	**Cr**	**53**	**2.121**	ug/L	0.016	0	141	5338	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	38793	0	KED
|	**Cu**	**63**	**8.727**	ug/L	0.126	1	19	35401	1	KED
|	**Cu**	**65**	**8.860**	ug/L	0.394	4	13	18147	3	KED
|	**Zn**	**66**	**127.693**	ug/L	2.766	2	23	71436	1	KED
|	**Zn**	**67**	**117.593**	ug/L	2.307	1	6	10788	1	KED
⌊	**Se**	**78**	**-0.066**	ug/L	0.044	66	8	7	16	KED
	Y	**89**		ug/L			53239	65151	2	Standard
	Kr	**83**		ug/L			40	28	24	Standard
⌈>	**Tb**	**159**		ug/L			163923	170210	0	Standard
⌊	**Pb**	**208**	**2.661**	ug/L	0.029	1	156	206918	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-09
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 22:30:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	53410	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	360523	1	Standard
|	**Cr**	**52**	**2.664**	ug/L	0.073	2	10612	75625	1	Standard
⌊	**Cr**	**53**	**2.782**	ug/L	0.080	2	141	7501	2	Standard
⌈>	**Ge**	**72**		ug/L			35050	39074	0	KED
|	**Cu**	**63**	**4.926**	ug/L	0.115	2	19	20138	2	KED
|	**Cu**	**65**	**5.026**	ug/L	0.051	1	13	10378	0	KED
|	**Zn**	**66**	**10.664**	ug/L	0.266	2	23	6033	1	KED
|	**Zn**	**67**	**10.834**	ug/L	0.110	1	6	1008	1	KED
⌊	**Se**	**78**	**0.127**	ug/L	0.025	19	8	12	5	KED
	Y	**89**		ug/L			53239	110622	1	Standard
	Kr	**83**		ug/L			40	45	18	Standard
⌈>	**Tb**	**159**		ug/L			163923	176505	1	Standard
⌊	**Pb**	**208**	**1.694**	ug/L	0.044	2	156	136676	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-12
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 22:34:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	53834	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	354932	1	Standard
|	**Cr**	**52**	**2.809**	ug/L	0.087	3	10612	77816	1	Standard
⌊	**Cr**	**53**	**2.919**	ug/L	0.084	2	141	7741	2	Standard
⌈>	**Ge**	**72**		ug/L			35050	38812	1	KED
|	**Cu**	**63**	**5.915**	ug/L	0.096	1	19	24013	2	KED
|	**Cu**	**65**	**5.973**	ug/L	0.096	1	13	12249	2	KED
|	**Zn**	**66**	**12.099**	ug/L	0.248	2	23	6797	3	KED
|	**Zn**	**67**	**11.281**	ug/L	0.371	3	6	1042	3	KED
⌊	**Se**	**78**	**0.073**	ug/L	0.049	66	8	11	11	KED
	Y	**89**		ug/L			53239	103237	2	Standard
	Kr	**83**		ug/L			40	39	32	Standard
⌈>	**Tb**	**159**		ug/L			163923	175945	1	Standard
⌊	**Pb**	**208**	**2.567**	ug/L	0.010	0	156	206328	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-13
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 22:38:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	52658	2	Standard
⌈>	**Sc**	**45**		ug/L			302132	352630	1	Standard
|	**Cr**	**52**	**2.795**	ug/L	0.020	0	10612	76992	0	Standard
⌊	**Cr**	**53**	**2.939**	ug/L	0.059	1	141	7743	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	39064	0	KED
|	**Cu**	**63**	**6.072**	ug/L	0.033	0	19	24809	0	KED
|	**Cu**	**65**	**6.045**	ug/L	0.127	2	13	12476	2	KED
|	**Zn**	**66**	**12.490**	ug/L	0.169	1	23	7060	0	KED
|	**Zn**	**67**	**12.519**	ug/L	0.666	5	6	1163	5	KED
⌊	**Se**	**78**	**0.076**	ug/L	0.093	122	8	11	23	KED
	Y	**89**		ug/L			53239	101465	0	Standard
	Kr	**83**		ug/L			40	52	19	Standard
⌈>	**Tb**	**159**		ug/L			163923	175659	0	Standard
⌊	**Pb**	**208**	**2.674**	ug/L	0.020	0	156	214583	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-14
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 22:42:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	52172	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	359692	3	Standard
|	**Cr**	**52**	**2.868**	ug/L	0.072	2	10612	80248	1	Standard
⌊	**Cr**	**53**	**2.974**	ug/L	0.040	1	141	7989	2	Standard
⌈>	**Ge**	**72**		ug/L			35050	38680	0	KED
|	**Cu**	**63**	**6.111**	ug/L	0.096	1	19	24721	0	KED
|	**Cu**	**65**	**6.307**	ug/L	0.079	1	13	12887	1	KED
|	**Zn**	**66**	**12.549**	ug/L	0.166	1	23	7023	0	KED
|	**Zn**	**67**	**11.434**	ug/L	0.412	3	6	1052	2	KED
⌊	**Se**	**78**	**0.093**	ug/L	0.038	40	8	11	8	KED
	Y	**89**		ug/L			53239	103860	0	Standard
	Kr	**83**		ug/L			40	43	14	Standard
⌈>	**Tb**	**159**		ug/L			163923	175734	1	Standard
⌊	**Pb**	**208**	**3.258**	ug/L	0.009	0	156	261521	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-18
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 22:46:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	51057	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	353148	1	Standard
|	**Cr**	**52**	**3.402**	ug/L	0.050	1	10612	91159	0	Standard
⌊	**Cr**	**53**	**3.577**	ug/L	0.105	2	141	9401	2	Standard
⌈>	**Ge**	**72**		ug/L			35050	38943	1	KED
|	**Cu**	**63**	**7.133**	ug/L	0.066	0	19	29056	2	KED
|	**Cu**	**65**	**7.270**	ug/L	0.057	0	13	14952	1	KED
|	**Zn**	**66**	**19.435**	ug/L	0.562	2	23	10935	1	KED
|	**Zn**	**67**	**18.283**	ug/L	0.652	3	6	1690	3	KED
⌊	**Se**	**78**	**0.021**	ug/L	0.055	259	8	9	14	KED
	Y	**89**		ug/L			53239	91187	1	Standard
	Kr	**83**		ug/L			40	48	19	Standard
⌈>	**Tb**	**159**		ug/L			163923	175118	0	Standard
⌊	**Pb**	**208**	**3.025**	ug/L	0.033	1	156	242019	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0437-01
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 22:50:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	57768	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	354247	1	Standard
|	**Cr**	**52**	**11.224**	ug/L	0.198	1	10612	273077	1	Standard
⌊	**Cr**	**53**	**11.535**	ug/L	0.119	1	141	30048	2	Standard
⌈>	**Ge**	**72**		ug/L			35050	39353	1	KED
|	**Cu**	**63**	**24.853**	ug/L	0.389	1	19	102222	0	KED
|	**Cu**	**65**	**24.685**	ug/L	0.824	3	13	51256	1	KED
|	**Zn**	**66**	**63.800**	ug/L	1.044	1	23	36219	0	KED
|	**Zn**	**67**	**59.777**	ug/L	0.658	1	6	5567	1	KED
⌊	**Se**	**78**	**0.093**	ug/L	0.018	19	8	11	2	KED
	Y	**89**		ug/L			53239	100201	1	Standard
	Kr	**83**		ug/L			40	41	21	Standard
⌈>	**Tb**	**159**		ug/L			163923	176970	0	Standard
⌊	**Pb**	**208**	**11.329**	ug/L	0.132	1	156	915356	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0437-02
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 22:54:01
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	57413	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	352347	1	Standard
|	**Cr**	**52**	**9.865**	ug/L	0.256	2	10612	240208	1	Standard
⌊	**Cr**	**53**	**10.132**	ug/L	0.121	1	141	26274	2	Standard
⌈>	**Ge**	**72**		ug/L			35050	39460	0	KED
|	**Cu**	**63**	**13.918**	ug/L	0.186	1	19	57417	1	KED
|	**Cu**	**65**	**13.941**	ug/L	0.174	1	13	29040	0	KED
|	**Zn**	**66**	**49.576**	ug/L	0.376	0	23	28229	0	KED
|	**Zn**	**67**	**47.264**	ug/L	0.445	0	6	4415	1	KED
⌊	**Se**	**78**	**0.032**	ug/L	0.026	81	8	10	7	KED
	Y	**89**		ug/L			53239	96075	1	Standard
	Kr	**83**		ug/L			40	36	32	Standard
⌈>	**Tb**	**159**		ug/L			163923	176826	0	Standard
⌊	**Pb**	**208**	**8.304**	ug/L	0.116	1	156	670465	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0371-06
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 22:58:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	55455	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	351158	2	Standard
|	**Cr**	**52**	**3.419**	ug/L	0.041	1	10612	91058	2	Standard
⌊	**Cr**	**53**	**3.506**	ug/L	0.023	0	141	9166	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	39579	1	KED
|	**Cu**	**63**	**3.997**	ug/L	0.059	1	19	16554	1	KED
|	**Cu**	**65**	**3.917**	ug/L	0.112	2	13	8194	1	KED
|	**Zn**	**66**	**6.744**	ug/L	0.125	1	23	3874	0	KED
|	**Zn**	**67**	**6.853**	ug/L	0.235	3	6	648	3	KED
⌊	**Se**	**78**	**0.066**	ug/L	0.016	24	8	11	4	KED
	Y	**89**		ug/L			53239	86975	2	Standard
	Kr	**83**		ug/L			40	40	17	Standard
⌈>	**Tb**	**159**		ug/L			163923	173901	1	Standard
⌊	**Pb**	**208**	**131.202**	ug/L	0.976	0	156	10415558	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLC
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 23:02:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	44701	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	318647	1	Standard
|	**Cr**	**52**	**-0.011**	ug/L	0.010	89	10612	10968	2	Standard
⌊	**Cr**	**53**	**-0.004**	ug/L	0.002	48	141	139	3	Standard
⌈>	**Ge**	**72**		ug/L			35050	37928	0	KED
|	**Cu**	**63**	**0.002**	ug/L	0.001	58	19	26	12	KED
|	**Cu**	**65**	**0.003**	ug/L	0.002	79	13	20	19	KED
|	**Zn**	**66**	**0.012**	ug/L	0.010	87	23	31	18	KED
|	**Zn**	**67**	**-0.028**	ug/L	0.032	114	6	5	57	KED
⌊	**Se**	**78**	**0.051**	ug/L	0.043	84	8	10	12	KED
	Y	**89**		ug/L			53239	55088	1	Standard
	Kr	**83**		ug/L			40	37	24	Standard
⌈>	**Tb**	**159**		ug/L			163923	163979	1	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.000	1	156	652	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 23:06:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	47104	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	328595	1	Standard
|	**Cr**	**52**	**47.799**	ug/L	0.603	1	10612	1041212	0	Standard
⌊	**Cr**	**53**	**48.408**	ug/L	0.296	0	141	116480	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	38543	0	KED
|	**Cu**	**63**	**49.525**	ug/L	0.347	0	19	199518	0	KED
|	**Cu**	**65**	**50.041**	ug/L	0.399	0	13	101782	0	KED
|	**Zn**	**66**	**50.938**	ug/L	1.210	2	23	28329	1	KED
|	**Zn**	**67**	**50.458**	ug/L	0.772	1	6	4604	2	KED
⌊	**Se**	**78**	**49.828**	ug/L	0.226	0	8	1400	0	KED
	Y	**89**		ug/L			53239	57748	1	Standard
	Kr	**83**		ug/L			40	39	13	Standard
⌈>	**Tb**	**159**		ug/L			163923	170968	0	Standard
⌊	**Pb**	**208**	**53.510**	ug/L	0.402	0	156	4176499	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 23:12:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	43625	2	Standard
⌈>	**Sc**	**45**		ug/L			302132	327038	0	Standard
|	**Cr**	**52**	**0.029**	ug/L	0.005	18	10612	12110	1	Standard
⌊	**Cr**	**53**	**-0.007**	ug/L	0.004	63	141	137	7	Standard
⌈>	**Ge**	**72**		ug/L			35050	39597	1	KED
|	**Cu**	**63**	**0.000**	ug/L	0.002	967	19	22	30	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.005	408	13	13	74	KED
|	**Zn**	**66**	**-0.003**	ug/L	0.026	842	23	24	58	KED
|	**Zn**	**67**	**-0.002**	ug/L	0.062	2499	6	7	75	KED
⌊	**Se**	**78**	**0.017**	ug/L	0.074	425	8	9	22	KED
	Y	**89**		ug/L			53239	56027	2	Standard
	Kr	**83**		ug/L			40	31	43	Standard
⌈>	**Tb**	**159**		ug/L			163923	169178	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	69	156	266	28	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0690-06RE1
Sample Dil Factor: 50
Comments:
Sample Date/Time: Monday, May 08, 2023 23:16:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	51017	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	321063	1	Standard
|	**Cr**	**52**	**0.410**	ug/L	0.011	2	10612	19910	1	Standard
⌊	**Cr**	**53**	**0.962**	ug/L	0.031	3	141	2409	3	Standard
⌈>	**Ge**	**72**		ug/L			35050	38347	0	KED
|	**Cu**	**63**	**0.029**	ug/L	0.001	4	19	137	3	KED
|	**Cu**	**65**	**0.028**	ug/L	0.006	21	13	72	16	KED
|	**Zn**	**66**	**0.043**	ug/L	0.011	25	23	49	11	KED
|	**Zn**	**67**	**0.105**	ug/L	0.055	52	6	17	29	KED
⌊	**Se**	**78**	**1.053**	ug/L	0.239	22	8	38	16	KED
	Y	**89**		ug/L			53239	55881	1	Standard
	Kr	**83**		ug/L			40	30	16	Standard
⌈>	**Tb**	**159**		ug/L			163923	168305	0	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	2	156	445	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0715-08RE1
Sample Dil Factor: 50
Comments:
Sample Date/Time: Monday, May 08, 2023 23:20:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	50681	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	323549	1	Standard
|	**Cr**	**52**	**2.936**	ug/L	0.054	1	10612	73636	0	Standard
⌊	**Cr**	**53**	**3.643**	ug/L	0.033	0	141	8770	0	Standard
⌈>	**Ge**	**72**		ug/L			35050	37840	0	KED
|	**Cu**	**63**	**0.024**	ug/L	0.003	10	19	113	8	KED
|	**Cu**	**65**	**0.026**	ug/L	0.001	3	13	66	2	KED
|	**Zn**	**66**	**0.079**	ug/L	0.007	9	23	68	5	KED
|	**Zn**	**67**	**0.001**	ug/L	0.022	2241	6	7	25	KED
⌊	**Se**	**78**	**0.537**	ug/L	0.157	29	8	23	18	KED
	Y	**89**		ug/L			53239	57206	1	Standard
	Kr	**83**		ug/L			40	31	27	Standard
⌈>	**Tb**	**159**		ug/L			163923	168139	1	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.001	16	156	449	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0297-02
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 23:24:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	52689	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	342218	0	Standard
|	**Cr**	**52**	**1.711**	ug/L	0.047	2	10612	50400	1	Standard
⌊	**Cr**	**53**	**1.799**	ug/L	0.037	2	141	4662	2	Standard
⌈>	**Ge**	**72**		ug/L			35050	38058	2	KED
|	**Cu**	**63**	**3.565**	ug/L	0.135	3	19	14194	1	KED
|	**Cu**	**65**	**3.600**	ug/L	0.133	3	13	7240	1	KED
|	**Zn**	**66**	**9.519**	ug/L	0.180	1	23	5247	1	KED
|	**Zn**	**67**	**9.392**	ug/L	0.386	4	6	852	3	KED
⌊	**Se**	**78**	**0.127**	ug/L	0.104	81	8	12	25	KED
	Y	**89**		ug/L			53239	88682	1	Standard
	Kr	**83**		ug/L			40	42	12	Standard
⌈>	**Tb**	**159**		ug/L			163923	174505	1	Standard
⌊	**Pb**	**208**	**2.109**	ug/L	0.021	0	156	168148	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0297-03
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 23:28:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	53560	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	350367	0	Standard
|	**Cr**	**52**	**3.151**	ug/L	0.017	0	10612	84688	0	Standard
⌊	**Cr**	**53**	**3.257**	ug/L	0.082	2	141	8508	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	38949	1	KED
|	**Cu**	**63**	**7.948**	ug/L	0.105	1	19	32370	0	KED
|	**Cu**	**65**	**7.980**	ug/L	0.110	1	13	16414	0	KED
|	**Zn**	**66**	**16.249**	ug/L	0.300	1	23	9148	0	KED
|	**Zn**	**67**	**17.631**	ug/L	0.368	2	6	1631	3	KED
⌊	**Se**	**78**	**0.141**	ug/L	0.086	60	8	13	16	KED
	Y	**89**		ug/L			53239	100864	0	Standard
	Kr	**83**		ug/L			40	40	47	Standard
⌈>	**Tb**	**159**		ug/L			163923	176927	1	Standard
⌊	**Pb**	**208**	**6.111**	ug/L	0.065	1	156	493679	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0297-04
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 23:32:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	54237	0	Standard
⎡>	**Sc**	**45**		ug/L			302132	348811	0	Standard
⎢	**Cr**	**52**	**2.582**	ug/L	0.072	2	10612	71303	2	Standard
⎣	**Cr**	**53**	**2.704**	ug/L	0.057	2	141	7061	2	Standard
⎡>	**Ge**	**72**		ug/L			35050	37939	1	KED
⎢	**Cu**	**63**	**5.079**	ug/L	0.045	0	19	20157	1	KED
⎢	**Cu**	**65**	**5.084**	ug/L	0.094	1	13	10191	0	KED
⎢	**Zn**	**66**	**11.840**	ug/L	0.195	1	23	6500	0	KED
⎢	**Zn**	**67**	**11.806**	ug/L	0.616	5	6	1066	6	KED
⎣	**Se**	**78**	**0.191**	ug/L	0.168	88	8	14	33	KED
	Y	**89**		ug/L			53239	103954	3	Standard
	Kr	**83**		ug/L			40	31	33	Standard
⎡>	**Tb**	**159**		ug/L			163923	178077	1	Standard
⎣	**Pb**	**208**	**4.961**	ug/L	0.123	2	156	403333	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0297-05
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 23:36:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	57582	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	344254	1	Standard
|	**Cr**	**52**	**3.561**	ug/L	0.080	2	10612	92461	0	Standard
⌊	**Cr**	**53**	**3.668**	ug/L	0.044	1	141	9395	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	38885	0	KED
|	**Cu**	**63**	**7.837**	ug/L	0.115	1	19	31866	0	KED
|	**Cu**	**65**	**7.876**	ug/L	0.197	2	13	16172	1	KED
|	**Zn**	**66**	**44.514**	ug/L	0.868	1	23	24979	1	KED
|	**Zn**	**67**	**43.305**	ug/L	1.166	2	6	3987	3	KED
⌊	**Se**	**78**	**-0.012**	ug/L	0.022	184	8	8	6	KED
	Y	**89**		ug/L			53239	88112	2	Standard
	Kr	**83**		ug/L			40	41	7	Standard
⌈>	**Tb**	**159**		ug/L			163923	174890	1	Standard
⌊	**Pb**	**208**	**6.727**	ug/L	0.131	1	156	537079	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0297-06
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 23:40:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	59048	2	Standard
⎡>	**Sc**	**45**		ug/L			302132	339409	1	Standard
⎢	**Cr**	**52**	**2.585**	ug/L	0.021	0	10612	69436	1	Standard
⎣	**Cr**	**53**	**2.660**	ug/L	0.037	1	141	6760	0	Standard
⎡>	**Ge**	**72**		ug/L			35050	38822	0	KED
⎢	**Cu**	**63**	**6.600**	ug/L	0.112	1	19	26797	1	KED
⎢	**Cu**	**65**	**6.666**	ug/L	0.048	0	13	13670	0	KED
⎢	**Zn**	**66**	**38.367**	ug/L	0.371	0	23	21499	0	KED
⎢	**Zn**	**67**	**35.918**	ug/L	1.106	3	6	3303	2	KED
⎣	**Se**	**78**	**0.062**	ug/L	0.065	105	8	10	16	KED
	Y	**89**		ug/L			53239	83693	2	Standard
	Kr	**83**		ug/L			40	35	17	Standard
⎡>	**Tb**	**159**		ug/L			163923	174863	0	Standard
⎣	**Pb**	**208**	**1.939**	ug/L	0.002	0	156	154926	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0297-07
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 23:44:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	59601	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	343545	1	Standard
|	**Cr**	**52**	**3.603**	ug/L	0.015	0	10612	93219	1	Standard
⌊	**Cr**	**53**	**3.761**	ug/L	0.086	2	141	9608	2	Standard
⌈>	**Ge**	**72**		ug/L			35050	38869	1	KED
|	**Cu**	**63**	**8.524**	ug/L	0.057	0	19	34647	1	KED
|	**Cu**	**65**	**8.647**	ug/L	0.146	1	13	17748	1	KED
|	**Zn**	**66**	**41.502**	ug/L	0.518	1	23	23280	0	KED
|	**Zn**	**67**	**38.455**	ug/L	1.831	4	6	3538	3	KED
⌊	**Se**	**78**	**0.033**	ug/L	0.112	337	8	10	31	KED
	Y	**89**		ug/L			53239	88559	1	Standard
	Kr	**83**		ug/L			40	43	26	Standard
⌈>	**Tb**	**159**		ug/L			163923	174213	0	Standard
⌊	**Pb**	**208**	**1.480**	ug/L	0.009	0	156	117881	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0297-08
Sample Dil Factor: 100
Comments:
Sample Date/Time: Monday, May 08, 2023 23:48:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	62072	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	318845	10	Standard
|	**Cr**	**52**	**2.629**	ug/L	0.318	12	10612	65697	0	Standard
⌊	**Cr**	**53**	**2.683**	ug/L	0.322	11	141	6353	0	Standard
⌈>	**Ge**	**72**		ug/L			35050	38927	1	KED
|	**Cu**	**63**	**7.477**	ug/L	0.148	1	19	30433	0	KED
|	**Cu**	**65**	**7.598**	ug/L	0.166	2	13	15619	1	KED
|	**Zn**	**66**	**54.353**	ug/L	0.416	0	23	30527	0	KED
|	**Zn**	**67**	**53.232**	ug/L	1.282	2	6	4904	1	KED
⌊	**Se**	**78**	**0.024**	ug/L	0.077	318	8	9	20	KED
	Y	**89**		ug/L			53239	70240	6	Standard
	Kr	**83**		ug/L			40	33	38	Standard
⌈>	**Tb**	**159**		ug/L			163923	163483	7	Standard
⌊	**Pb**	**208**	**1.556**	ug/L	0.130	8	156	115792	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLD
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 23:52:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	44524	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	320571	2	Standard
|	**Cr**	**52**	**-0.000**	ug/L	0.012	2649	10612	11246	0	Standard
⌊	**Cr**	**53**	**-0.003**	ug/L	0.005	167	141	143	7	Standard
⌈>	**Ge**	**72**		ug/L			35050	38234	0	KED
|	**Cu**	**63**	**0.005**	ug/L	0.001	28	19	41	14	KED
|	**Cu**	**65**	**0.004**	ug/L	0.002	43	13	22	14	KED
|	**Zn**	**66**	**0.030**	ug/L	0.017	58	23	41	22	KED
|	**Zn**	**67**	**-0.035**	ug/L	0.044	125	6	4	89	KED
⌊	**Se**	**78**	**-0.014**	ug/L	0.073	522	8	8	22	KED
	Y	**89**		ug/L			53239	55909	3	Standard
	Kr	**83**		ug/L			40	41	4	Standard
⌈>	**Tb**	**159**		ug/L			163923	166947	0	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.001	48	156	322	24	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 08, 2023 23:56:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	47001	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	328007	1	Standard
|	**Cr**	**52**	**46.885**	ug/L	0.516	1	10612	1019759	1	Standard
⌊	**Cr**	**53**	**47.827**	ug/L	0.215	0	141	114878	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	38646	0	KED
|	**Cu**	**63**	**49.621**	ug/L	0.400	0	19	200436	0	KED
|	**Cu**	**65**	**49.495**	ug/L	0.459	0	13	100942	0	KED
|	**Zn**	**66**	**50.732**	ug/L	0.257	0	23	28292	0	KED
|	**Zn**	**67**	**50.174**	ug/L	0.512	1	6	4590	1	KED
⌊	**Se**	**78**	**47.862**	ug/L	0.823	1	8	1349	1	KED
	Y	**89**		ug/L			53239	56922	3	Standard
	Kr	**83**		ug/L			40	45	13	Standard
⌈>	**Tb**	**159**		ug/L			163923	171077	0	Standard
⌊	**Pb**	**208**	**53.363**	ug/L	0.428	0	156	4167657	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 00:03:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	43747	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	322445	0	Standard
|	**Cr**	**52**	**0.025**	ug/L	0.010	37	10612	11863	2	Standard
⌊	**Cr**	**53**	**-0.001**	ug/L	0.006	475	141	147	9	Standard
⌈>	**Ge**	**72**		ug/L			35050	35601	12	KED
|	**Cu**	**63**	**0.001**	ug/L	0.002	202	19	22	22	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.003	88	13	8	48	KED
|	**Zn**	**66**	**0.021**	ug/L	0.011	53	23	34	19	KED
|	**Zn**	**67**	**-0.030**	ug/L	0.021	72	6	4	24	KED
⌊	**Se**	**78**	**-0.001**	ug/L	0.063	4576	8	8	14	KED
	Y	**89**		ug/L			53239	55915	2	Standard
	Kr	**83**		ug/L			40	38	25	Standard
⌈>	**Tb**	**159**		ug/L			163923	167124	0	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	900	156	157	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0690-04
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 00:07:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	54014	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	291531	1	Standard
|	**Cr**	**52**	**1.011**	ug/L	0.028	2	10612	29554	1	Standard
⌊	**Cr**	**53**	**5.000**	ug/L	0.128	2	141	10794	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	29018	0	KED
|	**Cu**	**63**	**0.151**	ug/L	0.009	6	19	473	5	KED
|	**Cu**	**65**	**0.149**	ug/L	0.016	10	13	240	10	KED
|	**Zn**	**66**	**0.216**	ug/L	0.022	10	23	109	8	KED
|	**Zn**	**67**	**0.416**	ug/L	0.111	26	6	34	22	KED
⌊	**Se**	**78**	**18.955**	ug/L	0.209	1	8	405	0	KED
	Y	**89**		ug/L			53239	51491	0	Standard
	Kr	**83**		ug/L			40	57	13	Standard
⌈>	**Tb**	**159**		ug/L			163923	152930	1	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.001	12	156	480	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0690-08
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 00:10:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	53805	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	297657	1	Standard
|	**Cr**	**52**	**44.506**	ug/L	0.403	0	10612	879003	1	Standard
⌊	**Cr**	**53**	**47.904**	ug/L	0.474	0	141	104408	0	Standard
⌈>	**Ge**	**72**		ug/L			35050	29920	2	KED
|	**Cu**	**63**	**0.150**	ug/L	0.003	2	19	486	2	KED
|	**Cu**	**65**	**0.167**	ug/L	0.009	5	13	275	4	KED
|	**Zn**	**66**	**0.189**	ug/L	0.043	22	23	101	19	KED
|	**Zn**	**67**	**0.321**	ug/L	0.122	37	6	28	29	KED
⌊	**Se**	**78**	**6.688**	ug/L	0.346	5	8	151	2	KED
	Y	**89**		ug/L			53239	52140	1	Standard
	Kr	**83**		ug/L			40	54	4	Standard
⌈>	**Tb**	**159**		ug/L			163923	156472	1	Standard
⌊	**Pb**	**208**	**0.012**	ug/L	0.000	0	156	987	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0690-10
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 00:15:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	53111	2	Standard
⌈>	**Sc**	**45**		ug/L			302132	271025	6	Standard
|	**Cr**	**52**	**7.179**	ug/L	0.563	7	10612	136679	2	Standard
⌊	**Cr**	**53**	**10.230**	ug/L	0.566	5	141	20356	2	Standard
⌈>	**Ge**	**72**		ug/L			35050	28793	1	KED
|	**Cu**	**63**	**0.258**	ug/L	0.028	10	19	791	9	KED
|	**Cu**	**65**	**0.258**	ug/L	0.018	6	13	402	5	KED
|	**Zn**	**66**	**0.215**	ug/L	0.026	12	23	108	9	KED
|	**Zn**	**67**	**0.420**	ug/L	0.007	1	6	34	0	KED
⌊	**Se**	**78**	**14.335**	ug/L	0.318	2	8	305	3	KED
	Y	**89**		ug/L			53239	49137	5	Standard
	Kr	**83**		ug/L			40	62	17	Standard
⌈>	**Tb**	**159**		ug/L			163923	145869	7	Standard
⌊	**Pb**	**208**	**0.021**	ug/L	0.002	7	156	1540	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0715-02
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 00:20:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	46542	2	Standard
⌈>	**Sc**	**45**		ug/L			302132	304921	1	Standard
|	**Cr**	**52**	**0.550**	ug/L	0.016	2	10612	21697	0	Standard
⌊	**Cr**	**53**	**2.587**	ug/L	0.041	1	141	5911	0	Standard
⌈>	**Ge**	**72**		ug/L			35050	31291	2	KED
|	**Cu**	**63**	**0.154**	ug/L	0.006	4	19	520	5	KED
|	**Cu**	**65**	**0.144**	ug/L	0.007	5	13	250	6	KED
|	**Zn**	**66**	**0.177**	ug/L	0.016	8	23	100	8	KED
|	**Zn**	**67**	**0.534**	ug/L	0.118	22	6	45	19	KED
⌊	**Se**	**78**	**2.551**	ug/L	0.049	1	8	65	3	KED
	Y	**89**		ug/L			53239	53674	2	Standard
	Kr	**83**		ug/L			40	38	10	Standard
⌈>	**Tb**	**159**		ug/L			163923	158742	0	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.000	9	156	485	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0715-04
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 00:25:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	46142	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	281003	1	Standard
|	**Cr**	**52**	**58.255**	ug/L	0.373	0	10612	1083054	1	Standard
⌊	**Cr**	**53**	**61.471**	ug/L	0.448	0	141	126465	2	Standard
⌈>	**Ge**	**72**		ug/L			35050	28463	0	KED
|	**Cu**	**63**	**0.282**	ug/L	0.014	4	19	854	4	KED
|	**Cu**	**65**	**0.283**	ug/L	0.026	9	13	436	9	KED
|	**Zn**	**66**	**0.678**	ug/L	0.081	11	23	297	10	KED
|	**Zn**	**67**	**0.784**	ug/L	0.117	14	6	58	13	KED
⌊	**Se**	**78**	**8.481**	ug/L	0.433	5	8	181	4	KED
	Y	**89**		ug/L			53239	51483	2	Standard
	Kr	**83**		ug/L			40	53	23	Standard
⌈>	**Tb**	**159**		ug/L			163923	152451	1	Standard
⌊	**Pb**	**208**	**0.011**	ug/L	0.000	3	156	902	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 00:28:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	41307	2	Standard
⌈>	**Sc**	**45**		ug/L			302132	273683	2	Standard
|	**Cr**	**52**	**0.146**	ug/L	0.009	6	10612	12235	0	Standard
⌊	**Cr**	**53**	**0.116**	ug/L	0.013	11	141	360	5	Standard
⌈>	**Ge**	**72**		ug/L			35050	33589	1	KED
|	**Cu**	**63**	**0.003**	ug/L	0.001	43	19	29	16	KED
|	**Cu**	**65**	**0.001**	ug/L	0.001	188	13	14	15	KED
|	**Zn**	**66**	**0.018**	ug/L	0.004	24	23	31	7	KED
|	**Zn**	**67**	**-0.004**	ug/L	0.037	917	6	6	45	KED
⌊	**Se**	**78**	**0.003**	ug/L	0.030	1175	8	8	9	KED
	Y	**89**		ug/L			53239	53673	2	Standard
	Kr	**83**		ug/L			40	29	25	Standard
⌈>	**Tb**	**159**		ug/L			163923	159862	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.003	86	156	400	52	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0306-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 09, 2023 00:32:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	57794	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	320978	2	Standard
|	**Cr**	**52**	**0.828**	ug/L	0.010	1	10612	28688	1	Standard
⌊	**Cr**	**53**	**1.648**	ug/L	0.025	1	141	4020	4	Standard
⌈>	**Ge**	**72**		ug/L			35050	33411	2	KED
|	**Cu**	**63**	**6.026**	ug/L	0.181	3	19	21052	1	KED
|	**Cu**	**65**	**6.007**	ug/L	0.180	2	13	10599	0	KED
|	**Zn**	**66**	**6.398**	ug/L	0.180	2	23	3105	4	KED
|	**Zn**	**67**	**6.382**	ug/L	0.217	3	6	510	2	KED
⌊	**Se**	**78**	**0.128**	ug/L	0.068	53	8	10	15	KED
	Y	**89**		ug/L			53239	55153	3	Standard
	Kr	**83**		ug/L			40	31	15	Standard
⌈>	**Tb**	**159**		ug/L			163923	166189	1	Standard
⌊	**Pb**	**208**	**0.089**	ug/L	0.002	2	156	6918	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0413-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 00:36:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	98212	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	332802	1	Standard
|	**Cr**	**52**	**0.248**	ug/L	0.006	2	10612	17095	2	Standard
⌊	**Cr**	**53**	**0.735**	ug/L	0.016	2	141	1943	3	Standard
⌈>	**Ge**	**72**		ug/L			35050	34319	0	KED
|	**Cu**	**63**	**10.928**	ug/L	0.087	0	19	39216	1	KED
|	**Cu**	**65**	**11.102**	ug/L	0.054	0	13	20118	0	KED
|	**Zn**	**66**	**52.077**	ug/L	0.519	0	23	25788	0	KED
|	**Zn**	**67**	**48.517**	ug/L	0.274	0	6	3942	0	KED
⌊	**Se**	**78**	**-0.057**	ug/L	0.039	68	8	6	14	KED
	Y	**89**		ug/L			53239	69657	1	Standard
	Kr	**83**		ug/L			40	40	24	Standard
⌈>	**Tb**	**159**		ug/L			163923	169047	2	Standard
⌊	**Pb**	**208**	**3.943**	ug/L	0.174	4	156	304209	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0376-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 00:40:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	83384	2	Standard
⌈>	**Sc**	**45**		ug/L			302132	296424	3	Standard
|	**Cr**	**52**	**80.306**	ug/L	1.942	2	10612	1570389	1	Standard
⌊	**Cr**	**53**	**81.545**	ug/L	2.251	2	141	176810	0	Standard
⌈>	**Ge**	**72**		ug/L			35050	33616	0	KED
|	**Cu**	**63**	**1.485**	ug/L	0.025	1	19	5235	1	KED
|	**Cu**	**65**	**1.488**	ug/L	0.036	2	13	2652	1	KED
|	**Zn**	**66**	**74.176**	ug/L	1.011	1	23	35970	1	KED
|	**Zn**	**67**	**69.216**	ug/L	1.337	1	6	5505	1	KED
⌊	**Se**	**78**	**-0.071**	ug/L	0.100	141	8	6	39	KED
	Y	**89**		ug/L			53239	54912	1	Standard
	Kr	**83**		ug/L			40	31	19	Standard
⌈>	**Tb**	**159**		ug/L			163923	163968	0	Standard
⌊	**Pb**	**208**	**0.117**	ug/L	0.002	1	156	8890	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLF
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 00:44:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	42189	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	264794	12	Standard
|	**Cr**	**52**	**0.073**	ug/L	0.066	90	10612	10479	3	Standard
⌊	**Cr**	**53**	**0.021**	ug/L	0.010	48	141	162	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	33710	1	KED
|	**Cu**	**63**	**0.002**	ug/L	0.002	91	19	24	23	KED
|	**Cu**	**65**	**0.001**	ug/L	0.002	211	13	15	25	KED
|	**Zn**	**66**	**0.027**	ug/L	0.004	15	23	35	6	KED
|	**Zn**	**67**	**-0.029**	ug/L	0.013	46	6	4	24	KED
⌊	**Se**	**78**	**-0.000**	ug/L	0.040	29740	8	7	11	KED
	Y	**89**		ug/L			53239	49746	13	Standard
	Kr	**83**		ug/L			40	43	47	Standard
⌈>	**Tb**	**159**		ug/L			163923	151423	11	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	5	156	274	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVC
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 00:48:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	45532	1	Standard
⌈>	**Sc**	**45**		ug/L			302132	293828	2	Standard
|	**Cr**	**52**	**44.876**	ug/L	0.796	1	10612	874633	0	Standard
⌊	**Cr**	**53**	**45.725**	ug/L	0.485	1	141	98378	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	34388	0	KED
|	**Cu**	**63**	**51.260**	ug/L	0.340	0	19	184246	0	KED
|	**Cu**	**65**	**51.158**	ug/L	0.342	0	13	92838	0	KED
|	**Zn**	**66**	**50.886**	ug/L	0.344	0	23	25252	1	KED
|	**Zn**	**67**	**50.165**	ug/L	1.664	3	6	4083	2	KED
⌊	**Se**	**78**	**49.001**	ug/L	1.770	3	8	1228	2	KED
	Y	**89**		ug/L			53239	54698	0	Standard
	Kr	**83**		ug/L			40	39	12	Standard
⌈>	**Tb**	**159**		ug/L			163923	166755	1	Standard
⌊	**Pb**	**208**	**54.953**	ug/L	0.998	1	156	4182741	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBC
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 00:55:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42888	41552	0	Standard
⌈>	**Sc**	**45**		ug/L			302132	287406	1	Standard
|	**Cr**	**52**	**-0.022**	ug/L	0.007	34	10612	9688	2	Standard
⌊	**Cr**	**53**	**0.003**	ug/L	0.002	56	141	140	1	Standard
⌈>	**Ge**	**72**		ug/L			35050	34820	1	KED
|	**Cu**	**63**	**0.001**	ug/L	0.001	122	19	22	17	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.002	230	13	12	22	KED
|	**Zn**	**66**	**0.003**	ug/L	0.007	241	23	24	13	KED
|	**Zn**	**67**	**-0.084**	ug/L	0.000	0	6	0		KED
⌊	**Se**	**78**	**0.028**	ug/L	0.071	255	8	8	19	KED
	Y	**89**		ug/L			53239	54230	3	Standard
	Kr	**83**		ug/L			40	26	52	Standard
⌈>	**Tb**	**159**		ug/L			163923	160418	2	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	52	156	185	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 00:59:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				41477	2	Standard
⌈>	**Sc**	**45**		ug/L				292152	1	Standard
|	**Cr**	**52**		ug/L				10008	3	Standard
⌊	**Cr**	**53**		ug/L				167	23	Standard
⌈>	**Ge**	**72**		ug/L				34377	1	KED
|	**Cu**	**63**		ug/L				15	12	KED
|	**Cu**	**65**		ug/L				10	57	KED
|	**Zn**	**66**		ug/L				17	11	KED
|	**Zn**	**67**		ug/L				3	0	KED
⌊	**Se**	**78**		ug/L				7	26	KED
	Y	**89**		ug/L				53948	3	Standard
	Kr	**83**		ug/L				30	34	Standard
⌈>	**Tb**	**159**		ug/L				160568	1	Standard
⌊	**Pb**	**208**		ug/L				822	138	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVD
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 01:03:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	44762	1	Standard
⌈>	**Sc**	**45**		ug/L			292152	296552	0	Standard
|	**Cr**	**52**	**45.702**	ug/L	0.250	0	10008	898761	0	Standard
⌊	**Cr**	**53**	**47.048**	ug/L	0.437	0	167	102203	0	Standard
⌈>	**Ge**	**72**		ug/L			34377	35487	0	KED
|	**Cu**	**63**	**50.450**	ug/L	0.120	0	15	187128	0	KED
|	**Cu**	**65**	**50.481**	ug/L	0.258	0	10	94534	0	KED
|	**Zn**	**66**	**51.510**	ug/L	0.164	0	17	26371	0	KED
|	**Zn**	**67**	**52.036**	ug/L	0.830	1	3	4368	1	KED
⌊	**Se**	**78**	**48.902**	ug/L	0.522	1	7	1265	0	KED
	Y	**89**		ug/L			53948	53942	1	Standard
	Kr	**83**		ug/L			30	39	35	Standard
⌈>	**Tb**	**159**		ug/L			160568	162907	1	Standard
⌊	**Pb**	**208**	**55.241**	ug/L	0.667	1	822	4109124	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBD
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 01:09:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	42423	2	Standard
⌈>	**Sc**	**45**		ug/L			292152	277565	10	Standard
|	**Cr**	**52**	**0.027**	ug/L	0.055	204	10008	9928	1	Standard
⌊	**Cr**	**53**	**-0.019**	ug/L	0.014	72	167	119	10	Standard
⌈>	**Ge**	**72**		ug/L			34377	36391	0	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.001	130	15	13	28	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.001	115	10	8	24	KED
|	**Zn**	**66**	**0.013**	ug/L	0.021	162	17	24	42	KED
|	**Zn**	**67**	**-0.017**	ug/L	0.034	199	3	2	114	KED
⌊	**Se**	**78**	**0.068**	ug/L	0.031	45	7	9	7	KED
	Y	**89**		ug/L			53948	49647	11	Standard
	Kr	**83**		ug/L			30	43	22	Standard
⌈>	**Tb**	**159**		ug/L			160568	152288	8	Standard
⌊	**Pb**	**208**	**-0.008**	ug/L	0.000	5	822	207	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0377-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 01:13:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	194262	0	Standard
⌈>	**Sc**	**45**		ug/L			292152	308896	1	Standard
|	**Cr**	**52**	**42.475**	ug/L	0.515	1	10008	870767	1	Standard
⌊	**Cr**	**53**	**43.455**	ug/L	1.225	2	167	98313	1	Standard
⌈>	**Ge**	**72**		ug/L			34377	33418	0	KED
|	**Cu**	**63**	**1.709**	ug/L	0.009	0	15	5985	0	KED
|	**Cu**	**65**	**1.660**	ug/L	0.011	0	10	2936	0	KED
|	**Zn**	**66**	**37.840**	ug/L	0.681	1	17	18248	2	KED
|	**Zn**	**67**	**34.474**	ug/L	0.199	0	3	2726	0	KED
⌊	**Se**	**78**	**0.049**	ug/L	0.048	98	7	8	14	KED
	Y	**89**		ug/L			53948	54552	2	Standard
	Kr	**83**		ug/L			30	35	12	Standard
⌈>	**Tb**	**159**		ug/L			160568	163736	0	Standard
⌊	**Pb**	**208**	**0.074**	ug/L	0.001	1	822	6345	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0442-02
Sample Dil Factor: 5
Comments:

DEL

Sample Date/Time: Tuesday, May 09, 2023 01:17:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	56881	0	Standard
⌈>	**Sc**	**45**		ug/L			292152	390070	2	Standard
|	**Cr**	**52**	**-0.045**	ug/L	0.006	12	10008	12200	2	Standard
⌊	**Cr**	**53**	**0.150**	ug/L	0.015	9	167	653	8	Standard
⌈>	**Ge**	**72**		ug/L			34377	34655	1	KED
|	**Cu**	**63**	**0.023**	ug/L	0.004	19	15	99	17	KED
|	**Cu**	**65**	**0.013**	ug/L	0.002	19	10	33	13	KED
|	**Zn**	**66**	**0.184**	ug/L	0.022	11	17	109	8	KED
|	**Zn**	**67**	**0.325**	ug/L	0.129	39	3	30	34	KED
⌊	**Se**	**78**	**0.022**	ug/L	0.119	548	7	7	38	KED
	Y	**89**		ug/L			53948	61113	2	Standard
	Kr	**83**		ug/L			30	32	35	Standard
⌈>	**Tb**	**159**		ug/L			160568	166296	2	Standard
⌊	**Pb**	**208**	**-0.004**	ug/L	0.002	44	822	584	18	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0054-DUP3
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 01:21:39

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	55558	0	Standard
>	**Sc**	**45**		ug/L			292152	388816	1	Standard
	Cr	**52**	**-0.036**	ug/L	0.007	18	10008	12390	0	Standard
	Cr	**53**	**0.152**	ug/L	0.009	5	167	655	4	Standard
>	**Ge**	**72**		ug/L			34377	33597	8	KED
	Cu	**63**	**0.019**	ug/L	0.007	36	15	83	36	KED
	Cu	**65**	**0.017**	ug/L	0.007	38	10	39	23	KED
	Zn	**66**	**0.124**	ug/L	0.010	7	17	76	13	KED
	Zn	**67**	**0.294**	ug/L	0.110	37	3	26	25	KED
	Se	**78**	**0.072**	ug/L	0.039	55	7	8	16	KED
	Y	**89**		ug/L			53948	63462	1	Standard
	Kr	**83**		ug/L			30	38	26	Standard
>	**Tb**	**159**		ug/L			160568	169707	1	Standard
	Pb	**208**	**-0.005**	ug/L	0.000	4	822	498	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0054-MS3
Sample Dil Factor: 5
Comments:
DEL
Sample Date/Time: Tuesday, May 09, 2023 01:25:30
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	55045	1	Standard
⌈>	**Sc**	**45**		ug/L			292152	367036	1	Standard
|	**Cr**	**52**	**4.187**	ug/L	0.053	1	10008	113325	2	Standard
⌊	**Cr**	**53**	**4.514**	ug/L	0.060	1	167	12328	1	Standard
⌈>	**Ge**	**72**		ug/L			34377	36441	0	KED
|	**Cu**	**63**	**5.679**	ug/L	0.115	2	15	21643	1	KED
|	**Cu**	**65**	**5.646**	ug/L	0.067	1	10	10867	0	KED
|	**Zn**	**66**	**18.111**	ug/L	0.262	1	17	9533	1	KED
|	**Zn**	**67**	**17.272**	ug/L	0.847	4	3	1491	4	KED
⌊	**Se**	**78**	**17.243**	ug/L	0.455	2	7	463	2	KED
	Y	**89**		ug/L			53948	61534	3	Standard
	Kr	**83**		ug/L			30	36	9	Standard
⌈>	**Tb**	**159**		ug/L			160568	168290	0	Standard
⌊	**Pb**	**208**	**5.894**	ug/L	0.089	1	822	453675	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0054-MSD3
Sample Dil Factor: 5
DEL
Comments:
Sample Date/Time: Tuesday, May 09, 2023 01:29:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	54897	1	Standard
⌈>	**Sc**	**45**		ug/L			292152	362279	0	Standard
|	**Cr**	**52**	**4.268**	ug/L	0.081	1	10008	113793	1	Standard
⌊	**Cr**	**53**	**4.536**	ug/L	0.056	1	167	12226	1	Standard
⌈>	**Ge**	**72**		ug/L			34377	35836	0	KED
|	**Cu**	**63**	**5.600**	ug/L	0.087	1	15	20989	1	KED
|	**Cu**	**65**	**5.726**	ug/L	0.100	1	10	10837	1	KED
|	**Zn**	**66**	**18.171**	ug/L	0.107	0	17	9406	0	KED
|	**Zn**	**67**	**17.667**	ug/L	0.133	0	3	1500	0	KED
⌊	**Se**	**78**	**16.976**	ug/L	0.408	2	7	448	2	KED
	Y	**89**		ug/L			53948	62771	1	Standard
	Kr	**83**		ug/L			30	34	13	Standard
⌈>	**Tb**	**159**		ug/L			160568	170136	0	Standard
⌊	**Pb**	**208**	**5.796**	ug/L	0.030	0	822	451000	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0150-11
Sample Dil Factor: 10
Comments:
Sample Date/Time: Tuesday, May 09, 2023 01:37:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	53237	0	Standard
⌈>	**Sc**	**45**		ug/L			292152	335080	0	Standard
|	**Cr**	**52**	**0.172**	ug/L	0.009	5	10008	15251	1	Standard
⌊	**Cr**	**53**	**0.301**	ug/L	0.010	3	167	929	2	Standard
⌈>	**Ge**	**72**		ug/L			34377	37796	0	KED
|	**Cu**	**63**	**0.205**	ug/L	0.022	10	15	825	10	KED
|	**Cu**	**65**	**0.215**	ug/L	0.020	9	10	440	9	KED
|	**Zn**	**66**	**0.299**	ug/L	0.020	6	17	181	6	KED
|	**Zn**	**67**	**0.856**	ug/L	0.025	2	3	80	2	KED
⌊	**Se**	**78**	**0.050**	ug/L	0.096	192	7	9	28	KED
	Y	**89**		ug/L			53948	58451	3	Standard
	Kr	**83**		ug/L			30	41	32	Standard
⌈>	**Tb**	**159**		ug/L			160568	168999	1	Standard
⌊	**Pb**	**208**	**0.011**	ug/L	0.001	7	822	1730	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0559-DUP4
Sample Dil Factor: 10
Comments:
Sample Date/Time: Tuesday, May 09, 2023 01:41:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	53157	0	Standard
⌈>	**Sc**	**45**		ug/L			292152	336180	0	Standard
|	**Cr**	**52**	**0.173**	ug/L	0.006	3	10008	15331	1	Standard
⌊	**Cr**	**53**	**0.283**	ug/L	0.011	3	167	888	2	Standard
⌈>	**Ge**	**72**		ug/L			34377	37662	1	KED
|	**Cu**	**63**	**0.205**	ug/L	0.004	1	15	822	0	KED
|	**Cu**	**65**	**0.204**	ug/L	0.016	7	10	416	5	KED
|	**Zn**	**66**	**0.191**	ug/L	0.067	35	17	122	31	KED
|	**Zn**	**67**	**0.737**	ug/L	0.095	12	3	69	13	KED
⌊	**Se**	**78**	**0.015**	ug/L	0.091	593	7	8	29	KED
	Y	**89**		ug/L			53948	59266	1	Standard
	Kr	**83**		ug/L			30	31	3	Standard
⌈>	**Tb**	**159**		ug/L			160568	169488	2	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.001	9	822	1407	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0559-MS4
Sample Dil Factor: 10
Comments:
Sample Date/Time: Tuesday, May 09, 2023 01:45:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	54048	0	Standard
⌈>	**Sc**	**45**		ug/L			292152	338837	2	Standard
|	**Cr**	**52**	**2.615**	ug/L	0.065	2	10008	69678	1	Standard
⌊	**Cr**	**53**	**2.766**	ug/L	0.069	2	167	7046	0	Standard
⌈>	**Ge**	**72**		ug/L			34377	37800	1	KED
|	**Cu**	**63**	**3.070**	ug/L	0.019	0	15	12145	1	KED
|	**Cu**	**65**	**3.134**	ug/L	0.089	2	10	6262	3	KED
|	**Zn**	**66**	**9.512**	ug/L	0.257	2	17	5202	2	KED
|	**Zn**	**67**	**9.629**	ug/L	0.466	4	3	864	6	KED
⌊	**Se**	**78**	**8.588**	ug/L	0.524	6	7	243	6	KED
	Y	**89**		ug/L			53948	58787	2	Standard
	Kr	**83**		ug/L			30	29	13	Standard
⌈>	**Tb**	**159**		ug/L			160568	171234	0	Standard
⌊	**Pb**	**208**	**3.002**	ug/L	0.023	0	822	235550	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0559-MSD4
Sample Dil Factor: 10
Comments:
Sample Date/Time: Tuesday, May 09, 2023 01:50:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	53876	0	Standard
⌈>	**Sc**	**45**		ug/L			292152	334600	1	Standard
|	**Cr**	**52**	**2.609**	ug/L	0.039	1	10008	68705	1	Standard
⌊	**Cr**	**53**	**2.729**	ug/L	0.048	1	167	6869	0	Standard
⌈>	**Ge**	**72**		ug/L			34377	37604	1	KED
|	**Cu**	**63**	**3.082**	ug/L	0.016	0	15	12130	0	KED
|	**Cu**	**65**	**3.071**	ug/L	0.138	4	10	6102	3	KED
|	**Zn**	**66**	**12.701**	ug/L	0.194	1	17	6903	0	KED
|	**Zn**	**67**	**12.794**	ug/L	0.537	4	3	1140	3	KED
⌊	**Se**	**78**	**9.015**	ug/L	0.241	2	7	253	3	KED
	Y	**89**		ug/L			53948	57865	3	Standard
	Kr	**83**		ug/L			30	41	14	Standard
⌈>	**Tb**	**159**		ug/L			160568	169708	0	Standard
⌊	**Pb**	**208**	**2.976**	ug/L	0.021	0	822	231461	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLG
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 01:54:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	43747	0	Standard
⌈>	**Sc**	**45**		ug/L			292152	304647	0	Standard
|	**Cr**	**52**	**0.047**	ug/L	0.002	3	10008	11381	0	Standard
⌊	**Cr**	**53**	**-0.023**	ug/L	0.009	41	167	123	17	Standard
⌈>	**Ge**	**72**		ug/L			34377	37060	1	KED
|	**Cu**	**63**	**0.005**	ug/L	0.004	72	15	36	41	KED
|	**Cu**	**65**	**0.002**	ug/L	0.004	260	10	13	56	KED
|	**Zn**	**66**	**0.018**	ug/L	0.008	42	17	27	14	KED
|	**Zn**	**67**	**-0.011**	ug/L	0.013	118	3	3	34	KED
⌊	**Se**	**78**	**0.038**	ug/L	0.099	261	7	8	29	KED
	Y	**89**		ug/L			53948	54412	0	Standard
	Kr	**83**		ug/L			30	34	25	Standard
⌈>	**Tb**	**159**		ug/L			160568	164212	2	Standard
⌊	**Pb**	**208**	**-0.008**	ug/L	0.000	1	822	272	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 01:58:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	44926	1	Standard
⌈>	**Sc**	**45**		ug/L			292152	310211	1	Standard
|	**Cr**	**52**	**45.943**	ug/L	0.402	0	10008	945012	0	Standard
⌊	**Cr**	**53**	**47.433**	ug/L	0.666	1	167	107790	2	Standard
⌈>	**Ge**	**72**		ug/L			34377	36522	0	KED
|	**Cu**	**63**	**50.150**	ug/L	0.401	0	15	191444	1	KED
|	**Cu**	**65**	**50.029**	ug/L	0.529	1	10	96418	0	KED
|	**Zn**	**66**	**51.233**	ug/L	0.750	1	17	26993	0	KED
|	**Zn**	**67**	**49.308**	ug/L	0.372	0	3	4260	0	KED
⌊	**Se**	**78**	**49.058**	ug/L	0.245	0	7	1306	1	KED
	Y	**89**		ug/L			53948	55414	1	Standard
	Kr	**83**		ug/L			30	43	41	Standard
⌈>	**Tb**	**159**		ug/L			160568	165719	1	Standard
⌊	**Pb**	**208**	**54.558**	ug/L	0.167	0	822	4128160	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 02:05:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	42568	1	Standard
⌈>	**Sc**	**45**		ug/L			292152	303915	1	Standard
|	**Cr**	**52**	**0.032**	ug/L	0.004	13	10008	11045	1	Standard
⌊	**Cr**	**53**	**-0.021**	ug/L	0.006	30	167	127	10	Standard
⌈>	**Ge**	**72**		ug/L			34377	37522	1	KED
|	**Cu**	**63**	**-0.000**	ug/L	0.001	242	15	15	21	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.002	1663	10	10	44	KED
|	**Zn**	**66**	**-0.001**	ug/L	0.016	2359	17	18	46	KED
|	**Zn**	**67**	**-0.004**	ug/L	0.022	571	3	3	50	KED
⌊	**Se**	**78**	**-0.016**	ug/L	0.020	124	7	7	6	KED
	Y	**89**		ug/L			53948	54035	0	Standard
	Kr	**83**		ug/L			30	29	29	Standard
⌈>	**Tb**	**159**		ug/L			160568	162628	0	Standard
⌊	**Pb**	**208**	**-0.005**	ug/L	0.006	124	822	448	106	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0388-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 02:09:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	54379	3	Standard
⌈>	**Sc**	**45**		ug/L			292152	291454	3	Standard
|	**Cr**	**52**	**0.563**	ug/L	0.016	2	10008	20749	3	Standard
⌊	**Cr**	**53**	**16.960**	ug/L	0.609	3	167	36320	5	Standard
⌈>	**Ge**	**72**		ug/L			34377	30550	1	KED
|	**Cu**	**63**	**1.102**	ug/L	0.011	0	15	3530	0	KED
|	**Cu**	**65**	**1.186**	ug/L	0.027	2	10	1920	2	KED
|	**Zn**	**66**	**2.852**	ug/L	0.150	5	17	1271	4	KED
|	**Zn**	**67**	**2.742**	ug/L	0.227	8	3	201	7	KED
⌊	**Se**	**78**	**0.168**	ug/L	0.179	106	7	10	37	KED
	Y	**89**		ug/L			53948	48542	4	Standard
	Kr	**83**		ug/L			30	148	18	Standard
⌈>	**Tb**	**159**		ug/L			160568	146920	1	Standard
⌊	**Pb**	**208**	**0.014**	ug/L	0.001	5	822	1684	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0388-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 02:13:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	58066	1	Standard
⌈>	**Sc**	**45**		ug/L			292152	302663	2	Standard
|	**Cr**	**52**	**0.676**	ug/L	0.025	3	10008	23778	1	Standard
⌊	**Cr**	**53**	**20.132**	ug/L	0.162	0	167	44739	2	Standard
⌈>	**Ge**	**72**		ug/L			34377	32206	0	KED
|	**Cu**	**63**	**0.674**	ug/L	0.024	3	15	2281	3	KED
|	**Cu**	**65**	**0.669**	ug/L	0.033	4	10	1146	4	KED
|	**Zn**	**66**	**2.289**	ug/L	0.044	1	17	1078	2	KED
|	**Zn**	**67**	**2.429**	ug/L	0.432	17	3	188	17	KED
⌊	**Se**	**78**	**0.338**	ug/L	0.198	58	7	14	30	KED
	Y	**89**		ug/L			53948	48485	1	Standard
	Kr	**83**		ug/L			30	121	15	Standard
⌈>	**Tb**	**159**		ug/L			160568	150245	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	9	822	1000	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0388-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 02:17:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	60784	0	Standard
⌈>	**Sc**	**45**		ug/L			292152	308202	1	Standard
|	**Cr**	**52**	**0.900**	ug/L	0.037	4	10008	28734	1	Standard
⌊	**Cr**	**53**	**28.508**	ug/L	0.188	0	167	64432	1	Standard
⌈>	**Ge**	**72**		ug/L			34377	32680	0	KED
|	**Cu**	**63**	**7.343**	ug/L	0.080	1	15	25093	1	KED
|	**Cu**	**65**	**7.372**	ug/L	0.171	2	10	12720	1	KED
|	**Zn**	**66**	**6.823**	ug/L	0.033	0	17	3230	0	KED
|	**Zn**	**67**	**6.670**	ug/L	0.531	7	3	518	7	KED
⌊	**Se**	**78**	**0.221**	ug/L	0.201	91	7	12	38	KED
	Y	**89**		ug/L			53948	47418	1	Standard
	Kr	**83**		ug/L			30	157	4	Standard
⌈>	**Tb**	**159**		ug/L			160568	151858	3	Standard
⌊	**Pb**	**208**	**0.099**	ug/L	0.003	2	822	7663	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0388-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 02:23:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	58312	1	Standard
⌈>	**Sc**	**45**		ug/L			292152	307426	2	Standard
|	**Cr**	**52**	**0.704**	ug/L	0.020	2	10008	24710	1	Standard
⌊	**Cr**	**53**	**21.508**	ug/L	0.116	0	167	48531	2	Standard
⌈>	**Ge**	**72**		ug/L			34377	32898	0	KED
|	**Cu**	**63**	**1.634**	ug/L	0.017	1	15	5634	0	KED
|	**Cu**	**65**	**1.650**	ug/L	0.064	3	10	2873	3	KED
|	**Zn**	**66**	**4.817**	ug/L	0.285	5	17	2301	6	KED
|	**Zn**	**67**	**4.240**	ug/L	0.635	14	3	333	14	KED
⌊	**Se**	**78**	**0.191**	ug/L	0.150	78	7	11	30	KED
	Y	**89**		ug/L			53948	49331	3	Standard
	Kr	**83**		ug/L			30	135	7	Standard
⌈>	**Tb**	**159**		ug/L			160568	154555	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	13	822	926	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLH
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 02:27:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	45309	0	Standard
⌈>	**Sc**	**45**		ug/L			292152	309925	2	Standard
|	**Cr**	**52**	**0.424**	ug/L	0.019	4	10008	19230	0	Standard
⌊	**Cr**	**53**	**0.827**	ug/L	0.021	2	167	2050	0	Standard
⌈>	**Ge**	**72**		ug/L			34377	38385	0	KED
|	**Cu**	**63**	**0.006**	ug/L	0.003	48	15	39	28	KED
|	**Cu**	**65**	**0.003**	ug/L	0.001	32	10	17	11	KED
|	**Zn**	**66**	**0.036**	ug/L	0.012	34	17	39	18	KED
|	**Zn**	**67**	**0.023**	ug/L	0.087	377	3	6	124	KED
⌊	**Se**	**78**	**0.004**	ug/L	0.044	1244	7	8	14	KED
	Y	**89**		ug/L			53948	52254	1	Standard
	Kr	**83**		ug/L			30	43	27	Standard
⌈>	**Tb**	**159**		ug/L			160568	157596	1	Standard
⌊	**Pb**	**208**	**-0.007**	ug/L	0.000	2	822	311	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0386-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 02:31:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41477	57733	1	Standard
>	Sc	45		ug/L			292152	306408	1	Standard
	Cr	52	0.760	ug/L	0.005	0	10008	25773	1	Standard
	Cr	53	22.203	ug/L	0.260	1	167	49923	0	Standard
>	Ge	72		ug/L			34377	30625	8	KED
	Cu	63	1.176	ug/L	0.098	8	15	3761	2	KED
	Cu	65	1.170	ug/L	0.108	9	10	1890	2	KED
	Zn	66	4.887	ug/L	0.411	8	17	2163	3	KED
	Zn	67	4.733	ug/L	0.483	10	3	344	1	KED
	Se	78	0.356	ug/L	0.110	30	7	14	9	KED
	Y	89		ug/L			53948	48836	1	Standard
	Kr	83		ug/L			30	207	12	Standard
>	Tb	159		ug/L			160568	151466	0	Standard
	Pb	208	0.009	ug/L	0.001	7	822	1396	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0386-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 02:35:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	59887	1	Standard
⌈>	**Sc**	**45**		ug/L			292152	312815	1	Standard
|	**Cr**	**52**	**0.773**	ug/L	0.008	1	10008	26563	0	Standard
⌊	**Cr**	**53**	**26.402**	ug/L	0.253	0	167	60573	0	Standard
⌈>	**Ge**	**72**		ug/L			34377	32987	0	KED
|	**Cu**	**63**	**0.545**	ug/L	0.022	4	15	1892	3	KED
|	**Cu**	**65**	**0.546**	ug/L	0.027	4	10	960	4	KED
|	**Zn**	**66**	**1.814**	ug/L	0.093	5	17	879	5	KED
|	**Zn**	**67**	**1.631**	ug/L	0.285	17	3	130	16	KED
⌊	**Se**	**78**	**0.295**	ug/L	0.088	29	7	14	14	KED
	Y	**89**		ug/L			53948	47685	0	Standard
	Kr	**83**		ug/L			30	258	13	Standard
⌈>	**Tb**	**159**		ug/L			160568	154315	2	Standard
⌊	**Pb**	**208**	**0.014**	ug/L	0.001	3	822	1786	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0386-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 02:40:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	54599	1	Standard
⌈>	**Sc**	**45**		ug/L			292152	285183	15	Standard
|	**Cr**	**52**	**0.424**	ug/L	0.108	25	10008	17499	4	Standard
⌊	**Cr**	**53**	**8.098**	ug/L	1.202	14	167	16801	1	Standard
⌈>	**Ge**	**72**		ug/L			34377	34902	0	KED
|	**Cu**	**63**	**1.627**	ug/L	0.032	1	15	5949	2	KED
|	**Cu**	**65**	**1.644**	ug/L	0.048	2	10	3037	2	KED
|	**Zn**	**66**	**4.644**	ug/L	0.033	0	17	2354	1	KED
|	**Zn**	**67**	**5.665**	ug/L	0.223	3	3	471	3	KED
⌊	**Se**	**78**	**0.078**	ug/L	0.136	174	7	9	35	KED
	Y	**89**		ug/L			53948	47161	16	Standard
	Kr	**83**		ug/L			30	90	33	Standard
⌈>	**Tb**	**159**		ug/L			160568	145282	15	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.002	957	822	717	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 02:45:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	45069	1	Standard
⌈>	**Sc**	**45**		ug/L			292152	314364	1	Standard
|	**Cr**	**52**	**0.303**	ug/L	0.007	2	10008	17017	0	Standard
⌊	**Cr**	**53**	**0.627**	ug/L	0.013	2	167	1622	0	Standard
⌈>	**Ge**	**72**		ug/L			34377	38343	1	KED
|	**Cu**	**63**	**0.005**	ug/L	0.003	52	15	37	28	KED
|	**Cu**	**65**	**0.004**	ug/L	0.003	83	10	18	31	KED
|	**Zn**	**66**	**0.024**	ug/L	0.004	16	17	32	5	KED
|	**Zn**	**67**	**-0.005**	ug/L	0.056	1161	3	3	132	KED
⌊	**Se**	**78**	**-0.076**	ug/L	0.034	44	7	6	16	KED
	Y	**89**		ug/L			53948	54090	1	Standard
	Kr	**83**		ug/L			30	39	39	Standard
⌈>	**Tb**	**159**		ug/L			160568	164977	0	Standard
⌊	**Pb**	**208**	**-0.007**	ug/L	0.000	6	822	301	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLJ
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 02:49:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	44642	0	Standard
⌈>	**Sc**	**45**		ug/L			292152	303063	1	Standard
|	**Cr**	**52**	**0.262**	ug/L	0.014	5	10008	15595	1	Standard
⌊	**Cr**	**53**	**0.422**	ug/L	0.005	1	167	1108	2	Standard
⌈>	**Ge**	**72**		ug/L			34377	37073	1	KED
|	**Cu**	**63**	**0.006**	ug/L	0.002	37	15	40	20	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.003	3019	10	10	56	KED
|	**Zn**	**66**	**0.024**	ug/L	0.012	49	17	31	18	KED
|	**Zn**	**67**	**0.004**	ug/L	0.025	668	3	4	49	KED
⌊	**Se**	**78**	**0.037**	ug/L	0.048	127	7	8	15	KED
	Y	**89**		ug/L			53948	53454	3	Standard
	Kr	**83**		ug/L			30	34	20	Standard
⌈>	**Tb**	**159**		ug/L			160568	163942	0	Standard
⌊	**Pb**	**208**	**-0.007**	ug/L	0.000	1	822	289	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVF
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 02:53:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	45932	0	Standard
⌈>	**Sc**	**45**		ug/L			292152	305570	1	Standard
|	**Cr**	**52**	**45.755**	ug/L	0.898	1	10008	926943	0	Standard
⌊	**Cr**	**53**	**47.396**	ug/L	0.582	1	167	106077	0	Standard
⌈>	**Ge**	**72**		ug/L			34377	35646	1	KED
|	**Cu**	**63**	**50.476**	ug/L	0.708	1	15	188031	0	KED
|	**Cu**	**65**	**50.484**	ug/L	1.243	2	10	94936	0	KED
|	**Zn**	**66**	**51.954**	ug/L	1.064	2	17	26711	0	KED
|	**Zn**	**67**	**49.413**	ug/L	0.938	1	3	4166	1	KED
⌊	**Se**	**78**	**49.132**	ug/L	1.651	3	7	1276	1	KED
	Y	**89**		ug/L			53948	53916	0	Standard
	Kr	**83**		ug/L			30	38	25	Standard
⌈>	**Tb**	**159**		ug/L			160568	167288	0	Standard
⌊	**Pb**	**208**	**53.462**	ug/L	0.458	0	822	4083664	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBF
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 02:59:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	43235	1	Standard
⌈>	**Sc**	**45**		ug/L			292152	296382	1	Standard
|	**Cr**	**52**	**0.028**	ug/L	0.018	66	10008	10689	2	Standard
⌊	**Cr**	**53**	**0.163**	ug/L	0.010	5	167	523	4	Standard
⌈>	**Ge**	**72**		ug/L			34377	36250	0	KED
|	**Cu**	**63**	**0.002**	ug/L	0.002	81	15	25	30	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.002	850	10	10	47	KED
|	**Zn**	**66**	**0.019**	ug/L	0.024	128	17	27	45	KED
|	**Zn**	**67**	**-0.002**	ug/L	0.000	9	3	3	0	KED
⌊	**Se**	**78**	**0.050**	ug/L	0.055	108	7	9	16	KED
	Y	**89**		ug/L			53948	53011	3	Standard
	Kr	**83**		ug/L			30	29	26	Standard
⌈>	**Tb**	**159**		ug/L			160568	162704	1	Standard
⌊	**Pb**	**208**	**-0.009**	ug/L	0.000	3	822	188	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0388-01
Sample Dil Factor: 50
Comments:
Sample Date/Time: Tuesday, May 09, 2023 03:03:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	51809	2	Standard
⌈>	**Sc**	**45**		ug/L			292152	306944	1	Standard
|	**Cr**	**52**	**0.709**	ug/L	0.020	2	10008	24785	0	Standard
⌊	**Cr**	**53**	**2.269**	ug/L	0.082	3	167	5267	2	Standard
⌈>	**Ge**	**72**		ug/L			34377	36587	1	KED
|	**Cu**	**63**	**41.407**	ug/L	2.407	5	15	158255	4	KED
|	**Cu**	**65**	**41.649**	ug/L	2.059	4	10	80375	3	KED
|	**Zn**	**66**	**19.846**	ug/L	1.070	5	17	10480	3	KED
|	**Zn**	**67**	**18.882**	ug/L	0.599	3	3	1636	1	KED
⌊	**Se**	**78**	**0.016**	ug/L	0.124	755	7	8	40	KED
	Y	**89**		ug/L			53948	56539	2	Standard
	Kr	**83**		ug/L			30	33	20	Standard
⌈>	**Tb**	**159**		ug/L			160568	165317	1	Standard
⌊	**Pb**	**208**	**0.672**	ug/L	0.014	2	822	51550	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0388-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 03:07:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	52113	1	Standard
⌈>	**Sc**	**45**		ug/L			292152	303342	1	Standard
|	**Cr**	**52**	**0.776**	ug/L	0.016	2	10008	25825	0	Standard
⌊	**Cr**	**53**	**8.285**	ug/L	0.117	1	167	18555	2	Standard
⌈>	**Ge**	**72**		ug/L			34377	34517	0	KED
|	**Cu**	**63**	**29.765**	ug/L	0.373	1	15	107383	0	KED
|	**Cu**	**65**	**29.776**	ug/L	0.789	2	10	54233	1	KED
|	**Zn**	**66**	**14.646**	ug/L	0.191	1	17	7305	1	KED
|	**Zn**	**67**	**13.995**	ug/L	0.347	2	3	1145	2	KED
⌊	**Se**	**78**	**0.011**	ug/L	0.059	518	7	7	19	KED
	Y	**89**		ug/L			53948	54199	4	Standard
	Kr	**83**		ug/L			30	44	15	Standard
⌈>	**Tb**	**159**		ug/L			160568	158716	0	Standard
⌊	**Pb**	**208**	**0.445**	ug/L	0.004	0	822	33062	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0386-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 03:12:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	55727	2	Standard
⌈>	**Sc**	**45**		ug/L			292152	299394	1	Standard
|	**Cr**	**52**	**0.598**	ug/L	0.016	2	10008	22000	1	Standard
⌊	**Cr**	**53**	**16.546**	ug/L	0.228	1	167	36397	1	Standard
⌈>	**Ge**	**72**		ug/L			34377	31753	1	KED
|	**Cu**	**63**	**1.045**	ug/L	0.015	1	15	3481	1	KED
|	**Cu**	**65**	**1.031**	ug/L	0.050	4	10	1735	3	KED
|	**Zn**	**66**	**2.239**	ug/L	0.190	8	17	1040	7	KED
|	**Zn**	**67**	**3.207**	ug/L	0.437	13	3	244	14	KED
⌊	**Se**	**78**	**0.202**	ug/L	0.129	63	7	11	24	KED
	Y	**89**		ug/L			53948	48932	2	Standard
	Kr	**83**		ug/L			30	118	10	Standard
⌈>	**Tb**	**159**		ug/L			160568	153035	1	Standard
⌊	**Pb**	**208**	**0.022**	ug/L	0.001	3	822	2342	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0386-05
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 03:17:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	55906	0	Standard
⌈>	**Sc**	**45**		ug/L			292152	310954	1	Standard
|	**Cr**	**52**	**0.241**	ug/L	0.019	7	10008	15565	1	Standard
⌊	**Cr**	**53**	**0.870**	ug/L	0.025	2	167	2156	2	Standard
⌈>	**Ge**	**72**		ug/L			34377	35879	0	KED
|	**Cu**	**63**	**9.732**	ug/L	0.149	1	15	36505	0	KED
|	**Cu**	**65**	**9.813**	ug/L	0.292	2	10	18584	2	KED
|	**Zn**	**66**	**3.178**	ug/L	0.104	3	17	1661	2	KED
|	**Zn**	**67**	**2.823**	ug/L	0.403	14	3	243	13	KED
⌊	**Se**	**78**	**-0.030**	ug/L	0.078	262	7	6	29	KED
	Y	**89**		ug/L			53948	56331	1	Standard
	Kr	**83**		ug/L			30	36	7	Standard
⌈>	**Tb**	**159**		ug/L			160568	166307	0	Standard
⌊	**Pb**	**208**	**0.486**	ug/L	0.007	1	822	37771	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLK
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 03:21:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	43395	1	Standard
⌈>	**Sc**	**45**		ug/L			292152	291114	0	Standard
|	**Cr**	**52**	**0.126**	ug/L	0.009	7	10008	12377	0	Standard
⌊	**Cr**	**53**	**0.315**	ug/L	0.009	2	167	837	1	Standard
⌈>	**Ge**	**72**		ug/L			34377	35158	0	KED
|	**Cu**	**63**	**0.002**	ug/L	0.002	113	15	22	36	KED
|	**Cu**	**65**	**0.001**	ug/L	0.003	265	10	12	48	KED
|	**Zn**	**66**	**0.004**	ug/L	0.012	286	17	19	31	KED
|	**Zn**	**67**	**-0.001**	ug/L	0.040	3610	3	3	86	KED
⌊	**Se**	**78**	**0.048**	ug/L	0.109	225	7	8	31	KED
	Y	**89**		ug/L			53948	53032	1	Standard
	Kr	**83**		ug/L			30	27	3	Standard
⌈>	**Tb**	**159**		ug/L			160568	161963	1	Standard
⌊	**Pb**	**208**	**-0.009**	ug/L	0.000	3	822	193	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0386-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 03:25:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41477	56245	1	Standard
⌈>	Sc	45		ug/L			292152	298561	1	Standard
|	Cr	52	0.281	ug/L	0.023	8	10008	15716	1	Standard
⌊	Cr	53	1.142	ug/L	0.043	3	167	2663	2	Standard
⌈>	Ge	72		ug/L			34377	35690	0	KED
|	Cu	63	18.296	ug/L	0.135	0	15	68262	0	KED
|	Cu	65	18.575	ug/L	0.198	1	10	34988	0	KED
|	Zn	66	7.793	ug/L	0.335	4	17	4026	3	KED
|	Zn	67	7.307	ug/L	0.243	3	3	620	3	KED
⌊	Se	78	0.050	ug/L	0.018	35	7	8	5	KED
	Y	89		ug/L			53948	55315	2	Standard
	Kr	83		ug/L			30	33	41	Standard
⌈>	Tb	159		ug/L			160568	165184	0	Standard
⌊	Pb	208	0.817	ug/L	0.013	1	822	62474	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0811-DUP2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 03:30:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41477	56074	1	Standard
⌈>	Sc	45		ug/L			292152	299216	1	Standard
|	Cr	52	0.295	ug/L	0.010	3	10008	16045	0	Standard
⌊	Cr	53	1.118	ug/L	0.032	2	167	2619	3	Standard
⌈>	Ge	72		ug/L			34377	35860	1	KED
|	Cu	63	18.583	ug/L	0.308	1	15	69658	1	KED
|	Cu	65	18.788	ug/L	0.278	1	10	35557	0	KED
|	Zn	66	7.616	ug/L	0.122	1	17	3954	0	KED
|	Zn	67	6.772	ug/L	0.373	5	3	577	4	KED
⌊	Se	78	0.004	ug/L	0.064	1521	7	7	22	KED
	Y	89		ug/L			53948	53472	2	Standard
	Kr	83		ug/L			30	22	30	Standard
⌈>	Tb	159		ug/L			160568	163255	0	Standard
⌊	Pb	208	0.825	ug/L	0.004	0	822	62308	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0811-MS2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 03:35:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41477	55799	2	Standard
⌈>	Sc	45		ug/L			292152	298668	1	Standard
|	Cr	52	5.101	ug/L	0.108	2	10008	110099	0	Standard
⌊	Cr	53	5.978	ug/L	0.092	1	167	13226	1	Standard
⌈>	Ge	72		ug/L			34377	35795	0	KED
|	Cu	63	23.655	ug/L	0.415	1	15	88510	1	KED
|	Cu	65	23.819	ug/L	0.259	1	10	44999	1	KED
|	Zn	66	25.331	ug/L	0.334	1	17	13090	1	KED
|	Zn	67	24.230	ug/L	0.692	2	3	2054	3	KED
⌊	Se	78	16.952	ug/L	0.555	3	7	447	3	KED
	Y	89		ug/L			53948	54710	0	Standard
	Kr	83		ug/L			30	32	0	Standard
⌈>	Tb	159		ug/L			160568	163860	1	Standard
⌊	Pb	208	6.611	ug/L	0.073	1	822	495297	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLL
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 03:39:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	42935	0	Standard
⌈>	**Sc**	**45**		ug/L			292152	285891	0	Standard
|	**Cr**	**52**	**0.137**	ug/L	0.001	0	10008	12364	1	Standard
⌊	**Cr**	**53**	**0.110**	ug/L	0.005	4	167	395	3	Standard
⌈>	**Ge**	**72**		ug/L			34377	34968	0	KED
|	**Cu**	**63**	**0.003**	ug/L	0.003	98	15	27	42	KED
|	**Cu**	**65**	**0.002**	ug/L	0.003	189	10	13	42	KED
|	**Zn**	**66**	**0.011**	ug/L	0.020	185	17	22	44	KED
|	**Zn**	**67**	**0.007**	ug/L	0.035	517	3	4	65	KED
⌊	**Se**	**78**	**-0.023**	ug/L	0.055	235	7	6	20	KED
	Y	**89**		ug/L			53948	51378	1	Standard
	Kr	**83**		ug/L			30	40	12	Standard
⌈>	**Tb**	**159**		ug/L			160568	159793	0	Standard
⌊	**Pb**	**208**	**-0.009**	ug/L	0.000	2	822	187	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLM
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 03:43:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	42668	0	Standard
⌈>	**Sc**	**45**		ug/L			292152	285631	1	Standard
|	**Cr**	**52**	**0.122**	ug/L	0.002	1	10008	12079	1	Standard
⌊	**Cr**	**53**	**0.086**	ug/L	0.008	9	167	344	5	Standard
⌈>	**Ge**	**72**		ug/L			34377	34482	1	KED
|	**Cu**	**63**	**0.009**	ug/L	0.007	76	15	46	52	KED
|	**Cu**	**65**	**0.007**	ug/L	0.005	70	10	23	40	KED
|	**Zn**	**66**	**0.027**	ug/L	0.007	25	17	30	10	KED
|	**Zn**	**67**	**-0.008**	ug/L	0.013	163	3	3	34	KED
⌊	**Se**	**78**	**0.043**	ug/L	0.046	107	7	8	14	KED
	Y	**89**		ug/L			53948	50649	3	Standard
	Kr	**83**		ug/L			30	26	56	Standard
⌈>	**Tb**	**159**		ug/L			160568	158940	0	Standard
⌊	**Pb**	**208**	**-0.009**	ug/L	0.000	1	822	171	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVG
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 03:47:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	44977	0	Standard
⌈>	**Sc**	**45**		ug/L			292152	291043	1	Standard
|	**Cr**	**52**	**45.630**	ug/L	0.297	0	10008	880657	1	Standard
⌊	**Cr**	**53**	**46.318**	ug/L	1.159	2	167	98727	0	Standard
⌈>	**Ge**	**72**		ug/L			34377	34636	2	KED
|	**Cu**	**63**	**50.245**	ug/L	2.209	4	15	181781	2	KED
|	**Cu**	**65**	**50.075**	ug/L	2.353	4	10	91462	2	KED
|	**Zn**	**66**	**50.354**	ug/L	2.469	4	17	25145	3	KED
|	**Zn**	**67**	**49.525**	ug/L	3.223	6	3	4054	4	KED
⌊	**Se**	**78**	**47.317**	ug/L	3.493	7	7	1193	4	KED
	Y	**89**		ug/L			53948	51988	3	Standard
	Kr	**83**		ug/L			30	33	14	Standard
⌈>	**Tb**	**159**		ug/L			160568	162203	0	Standard
⌊	**Pb**	**208**	**54.455**	ug/L	0.778	1	822	4032737	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBG
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 03:54:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41477	42556	2	Standard
⌈>	**Sc**	**45**		ug/L			292152	290738	1	Standard
|	**Cr**	**52**	**0.020**	ug/L	0.005	27	10008	10333	1	Standard
⌊	**Cr**	**53**	**0.036**	ug/L	0.001	2	167	243	2	Standard
⌈>	**Ge**	**72**		ug/L			34377	35187	0	KED
|	**Cu**	**63**	**0.005**	ug/L	0.004	82	15	33	43	KED
|	**Cu**	**65**	**0.006**	ug/L	0.008	144	10	20	72	KED
|	**Zn**	**66**	**0.000**	ug/L	0.012	2372	17	17	32	KED
|	**Zn**	**67**	**-0.024**	ug/L	0.000	0	3	1		KED
⌊	**Se**	**78**	**0.012**	ug/L	0.121	996	7	7	38	KED
	Y	**89**		ug/L			53948	52524	0	Standard
	Kr	**83**		ug/L			30	37	41	Standard
⌈>	**Tb**	**159**		ug/L			160568	161435	1	Standard
⌊	**Pb**	**208**	**-0.009**	ug/L	0.000	1	822	143	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 03:58:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				42057	0	Standard
⎡>	**Sc**	**45**		ug/L				285615	0	Standard
⎢	**Cr**	**52**		ug/L				10174	3	Standard
⎣	**Cr**	**53**		ug/L				233	3	Standard
⎡>	**Ge**	**72**		ug/L				35218	0	KED
⎢	**Cu**	**63**		ug/L				12	8	KED
⎢	**Cu**	**65**		ug/L				6	62	KED
⎢	**Zn**	**66**		ug/L				24	24	KED
⎢	**Zn**	**67**		ug/L				3	50	KED
⎣	**Se**	**78**		ug/L				8	8	KED
	Y	**89**		ug/L				52603	1	Standard
	Kr	**83**		ug/L				36	24	Standard
⎡>	**Tb**	**159**		ug/L				162198	0	Standard
⎣	**Pb**	**208**		ug/L				142	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVH
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 04:02:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	43544	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	296725	0	Standard
|	**Cr**	**52**	**46.216**	ug/L	0.139	0	10174	909678	0	Standard
⌊	**Cr**	**53**	**46.870**	ug/L	0.490	1	233	101950	0	Standard
⌈>	**Ge**	**72**		ug/L			35218	34944	1	KED
|	**Cu**	**63**	**50.415**	ug/L	0.977	1	12	184107	0	KED
|	**Cu**	**65**	**51.093**	ug/L	0.836	1	6	94200	0	KED
|	**Zn**	**66**	**50.926**	ug/L	1.350	2	24	25680	2	KED
|	**Zn**	**67**	**51.052**	ug/L	0.100	0	3	4220	1	KED
⌊	**Se**	**78**	**48.767**	ug/L	0.511	1	8	1243	1	KED
	Y	**89**		ug/L			52603	53942	1	Standard
	Kr	**83**		ug/L			36	38	8	Standard
⌈>	**Tb**	**159**		ug/L			162198	164972	1	Standard
⌊	**Pb**	**208**	**55.041**	ug/L	0.472	0	142	4144857	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBH
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 04:08:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	42459	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	291722	1	Standard
|	**Cr**	**52**	**-0.003**	ug/L	0.004	131	10174	10330	1	Standard
⌊	**Cr**	**53**	**-0.025**	ug/L	0.002	6	233	186	1	Standard
⌈>	**Ge**	**72**		ug/L			35218	36053	0	KED
|	**Cu**	**63**	**0.003**	ug/L	0.001	37	12	26	18	KED
|	**Cu**	**65**	**0.003**	ug/L	0.001	36	6	12	17	KED
|	**Zn**	**66**	**-0.002**	ug/L	0.010	416	24	23	20	KED
|	**Zn**	**67**	**-0.001**	ug/L	0.045	5191	3	3	100	KED
⌊	**Se**	**78**	**-0.006**	ug/L	0.011	188	8	8	3	KED
	Y	**89**		ug/L			52603	53210	2	Standard
	Kr	**83**		ug/L			36	35	11	Standard
⌈>	**Tb**	**159**		ug/L			162198	162661	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	74	142	157	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0409-02
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 04:12:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	87083	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	332170	1	Standard
|	**Cr**	**52**	**5.210**	ug/L	0.018	0	10174	125287	0	Standard
⌊	**Cr**	**53**	**8.765**	ug/L	0.163	1	233	21568	3	Standard
⌈>	**Ge**	**72**		ug/L			35218	32848	0	KED
|	**Cu**	**63**	**12.568**	ug/L	0.046	0	12	43157	0	KED
|	**Cu**	**65**	**12.556**	ug/L	0.101	0	6	21767	0	KED
|	**Zn**	**66**	**28.989**	ug/L	0.849	2	24	13750	2	KED
|	**Zn**	**67**	**27.687**	ug/L	1.244	4	3	2153	4	KED
⌊	**Se**	**78**	**0.044**	ug/L	0.024	55	8	9	6	KED
	Y	**89**		ug/L			52603	54596	2	Standard
	Kr	**83**		ug/L			36	40	16	Standard
⌈>	**Tb**	**159**		ug/L			162198	160506	1	Standard
⌊	**Pb**	**208**	**1.385**	ug/L	0.026	1	142	101618	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0409-04
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 04:16:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	83955	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	319790	1	Standard
|	**Cr**	**52**	**4.635**	ug/L	0.037	0	10174	108559	0	Standard
⌊	**Cr**	**53**	**8.845**	ug/L	0.110	1	233	20945	1	Standard
⌈>	**Ge**	**72**		ug/L			35218	32486	0	KED
|	**Cu**	**63**	**10.634**	ug/L	0.162	1	12	36119	2	KED
|	**Cu**	**65**	**10.679**	ug/L	0.029	0	6	18310	0	KED
|	**Zn**	**66**	**13.516**	ug/L	0.285	2	24	6353	2	KED
|	**Zn**	**67**	**13.701**	ug/L	0.470	3	3	1055	2	KED
⌊	**Se**	**78**	**0.121**	ug/L	0.057	47	8	10	11	KED
	Y	**89**		ug/L			52603	52619	4	Standard
	Kr	**83**		ug/L			36	38	39	Standard
⌈>	**Tb**	**159**		ug/L			162198	158570	0	Standard
⌊	**Pb**	**208**	**1.120**	ug/L	0.013	1	142	81245	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0409-06
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 04:20:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	88589	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	326815	1	Standard
|	**Cr**	**52**	**5.453**	ug/L	0.110	2	10174	128474	0	Standard
⌊	**Cr**	**53**	**10.123**	ug/L	0.070	0	233	24460	0	Standard
⌈>	**Ge**	**72**		ug/L			35218	32054	0	KED
|	**Cu**	**63**	**13.288**	ug/L	0.126	0	12	44529	1	KED
|	**Cu**	**65**	**13.258**	ug/L	0.223	1	6	22430	2	KED
|	**Zn**	**66**	**31.099**	ug/L	0.980	3	24	14392	2	KED
|	**Zn**	**67**	**30.563**	ug/L	0.154	0	3	2318	1	KED
⌊	**Se**	**78**	**0.108**	ug/L	0.097	89	8	10	22	KED
	Y	**89**		ug/L			52603	54389	1	Standard
	Kr	**83**		ug/L			36	30	28	Standard
⌈>	**Tb**	**159**		ug/L			162198	159451	0	Standard
⌊	**Pb**	**208**	**1.465**	ug/L	0.025	1	142	106792	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0424-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 04:24:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	87725	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	399776	1	Standard
|	**Cr**	**52**	**2.068**	ug/L	0.038	1	10174	68436	0	Standard
⌊	**Cr**	**53**	**2.611**	ug/L	0.017	0	233	7962	1	Standard
⌈>	**Ge**	**72**		ug/L			35218	30765	2	KED
|	**Cu**	**63**	**10.953**	ug/L	0.237	2	12	35217	0	KED
|	**Cu**	**65**	**10.934**	ug/L	0.362	3	6	17746	1	KED
|	**Zn**	**66**	**432.264**	ug/L	13.716	3	24	191667	1	KED
|	**Zn**	**67**	**408.378**	ug/L	9.667	2	3	29687	0	KED
⌊	**Se**	**78**	**0.332**	ug/L	0.062	18	8	15	11	KED
	Y	**89**		ug/L			52603	63710	3	Standard
	Kr	**83**		ug/L			36	29	22	Standard
⌈>	**Tb**	**159**		ug/L			162198	159721	0	Standard
⌊	**Pb**	**208**	**2.719**	ug/L	0.017	0	142	198430	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLN
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 04:28:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	41752	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	277293	2	Standard
|	**Cr**	**52**	**-0.007**	ug/L	0.018	244	10174	9740	1	Standard
⌊	**Cr**	**53**	**0.052**	ug/L	0.010	19	233	331	4	Standard
⌈>	**Ge**	**72**		ug/L			35218	32949	2	KED
|	**Cu**	**63**	**0.002**	ug/L	0.000	10	12	20	5	KED
|	**Cu**	**65**	**0.004**	ug/L	0.002	61	6	12	31	KED
|	**Zn**	**66**	**0.010**	ug/L	0.015	146	24	27	24	KED
|	**Zn**	**67**	**0.052**	ug/L	0.043	82	3	7	43	KED
⌊	**Se**	**78**	**-0.008**	ug/L	0.057	675	8	7	15	KED
	Y	**89**		ug/L			52603	50968	1	Standard
	Kr	**83**		ug/L			36	27	24	Standard
⌈>	**Tb**	**159**		ug/L			162198	157681	2	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	53	142	217	18	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0412-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 09, 2023 04:32:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	57713	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	340893	1	Standard
|	**Cr**	**52**	**-0.049**	ug/L	0.006	12	10174	11042	0	Standard
⌊	**Cr**	**53**	**0.704**	ug/L	0.034	4	233	2034	4	Standard
⌈>	**Ge**	**72**		ug/L			35218	32315	1	KED
|	**Cu**	**63**	**0.699**	ug/L	0.028	4	12	2373	3	KED
|	**Cu**	**65**	**0.686**	ug/L	0.018	2	6	1174	1	KED
|	**Zn**	**66**	**0.849**	ug/L	0.063	7	24	417	8	KED
|	**Zn**	**67**	**0.936**	ug/L	0.070	7	3	74	6	KED
⌊	**Se**	**78**	**-0.005**	ug/L	0.004	75	8	7	0	KED
	Y	**89**		ug/L			52603	56907	2	Standard
	Kr	**83**		ug/L			36	28	17	Standard
⌈>	**Tb**	**159**		ug/L			162198	160493	2	Standard
⌊	**Pb**	**208**	**0.009**	ug/L	0.001	10	142	774	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0807-DUP2
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 09, 2023 04:36:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	57663	1	Standard
⎡>	**Sc**	**45**		ug/L			285615	342006	1	Standard
⎢	**Cr**	**52**	**-0.039**	ug/L	0.002	5	10174	11300	0	Standard
⎣	**Cr**	**53**	**0.730**	ug/L	0.010	1	233	2105	1	Standard
⎡>	**Ge**	**72**		ug/L			35218	32249	1	KED
⎢	**Cu**	**63**	**0.698**	ug/L	0.020	2	12	2362	3	KED
⎢	**Cu**	**65**	**0.690**	ug/L	0.021	2	6	1179	1	KED
⎢	**Zn**	**66**	**0.772**	ug/L	0.024	3	24	380	1	KED
⎢	**Zn**	**67**	**1.003**	ug/L	0.086	8	3	80	9	KED
⎣	**Se**	**78**	**-0.024**	ug/L	0.031	127	8	7	11	KED
	Y	**89**		ug/L			52603	55552	1	Standard
	Kr	**83**		ug/L			36	30	12	Standard
⎡>	**Tb**	**159**		ug/L			162198	157992	1	Standard
⎣	**Pb**	**208**	**0.005**	ug/L	0.001	11	142	525	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0807-MS2
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 09, 2023 04:40:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	57483	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	341076	1	Standard
|	**Cr**	**52**	**9.448**	ug/L	0.049	0	10174	223411	0	Standard
⌊	**Cr**	**53**	**10.486**	ug/L	0.150	1	233	26433	1	Standard
⌈>	**Ge**	**72**		ug/L			35218	31816	0	KED
|	**Cu**	**63**	**14.624**	ug/L	0.155	1	12	48638	0	KED
|	**Cu**	**65**	**14.694**	ug/L	0.146	0	6	24673	0	KED
|	**Zn**	**66**	**44.099**	ug/L	0.688	1	24	20249	0	KED
|	**Zn**	**67**	**41.190**	ug/L	0.663	1	3	3100	0	KED
⌊	**Se**	**78**	**40.631**	ug/L	0.348	0	8	944	1	KED
	Y	**89**		ug/L			52603	55805	0	Standard
	Kr	**83**		ug/L			36	31	34	Standard
⌈>	**Tb**	**159**		ug/L			162198	158630	1	Standard
⌊	**Pb**	**208**	**14.776**	ug/L	0.129	0	142	1070060	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0807-MSD2
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 09, 2023 04:45:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	58062	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	341519	0	Standard
|	**Cr**	**52**	**9.352**	ug/L	0.103	1	10174	221564	0	Standard
⌊	**Cr**	**53**	**10.386**	ug/L	0.110	1	233	26219	0	Standard
⌈>	**Ge**	**72**		ug/L			35218	32788	1	KED
|	**Cu**	**63**	**14.242**	ug/L	0.110	0	12	48815	0	KED
|	**Cu**	**65**	**14.148**	ug/L	0.100	0	6	24483	1	KED
|	**Zn**	**66**	**42.769**	ug/L	0.408	0	24	20239	0	KED
|	**Zn**	**67**	**41.389**	ug/L	1.757	4	3	3211	5	KED
⌊	**Se**	**78**	**40.259**	ug/L	0.132	0	8	964	1	KED
	Y	**89**		ug/L			52603	56568	2	Standard
	Kr	**83**		ug/L			36	31	12	Standard
⌈>	**Tb**	**159**		ug/L			162198	158322	1	Standard
⌊	**Pb**	**208**	**14.646**	ug/L	0.140	0	142	1058670	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLO
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 04:49:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	40969	2	Standard
⌈>	**Sc**	**45**		ug/L			285615	273968	1	Standard
|	**Cr**	**52**	**0.032**	ug/L	0.012	36	10174	10331	3	Standard
⌊	**Cr**	**53**	**0.039**	ug/L	0.012	31	233	303	7	Standard
⌈>	**Ge**	**72**		ug/L			35218	32532	0	KED
|	**Cu**	**63**	**0.005**	ug/L	0.001	30	12	27	17	KED
|	**Cu**	**65**	**0.003**	ug/L	0.005	149	6	11	72	KED
|	**Zn**	**66**	**-0.004**	ug/L	0.012	294	24	20	28	KED
|	**Zn**	**67**	**-0.021**	ug/L	0.025	118	3	1	100	KED
⌊	**Se**	**78**	**-0.046**	ug/L	0.001	2	8	7	0	KED
	Y	**89**		ug/L			52603	50008	1	Standard
	Kr	**83**		ug/L			36	29	35	Standard
⌈>	**Tb**	**159**		ug/L			162198	155483	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	13	142	274	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 04:53:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	43136	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	277739	1	Standard
|	**Cr**	**52**	**44.979**	ug/L	1.010	2	10174	828905	2	Standard
⌊	**Cr**	**53**	**46.481**	ug/L	0.712	1	233	94633	1	Standard
⌈>	**Ge**	**72**		ug/L			35218	32536	1	KED
|	**Cu**	**63**	**50.817**	ug/L	0.836	1	12	172776	0	KED
|	**Cu**	**65**	**51.314**	ug/L	1.554	3	6	88067	1	KED
|	**Zn**	**66**	**52.163**	ug/L	1.887	3	24	24480	1	KED
|	**Zn**	**67**	**49.223**	ug/L	0.347	0	3	3788	1	KED
⌊	**Se**	**78**	**49.575**	ug/L	0.502	1	8	1176	1	KED
	Y	**89**		ug/L			52603	52313	1	Standard
	Kr	**83**		ug/L			36	41	9	Standard
⌈>	**Tb**	**159**		ug/L			162198	160104	0	Standard
⌊	**Pb**	**208**	**55.569**	ug/L	0.718	1	142	4061386	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 05:00:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	40261	2	Standard
⌈>	**Sc**	**45**		ug/L			285615	275125	1	Standard
|	**Cr**	**52**	**-0.031**	ug/L	0.005	14	10174	9240	1	Standard
⌊	**Cr**	**53**	**-0.043**	ug/L	0.006	14	233	139	7	Standard
⌈>	**Ge**	**72**		ug/L			35218	33407	1	KED
|	**Cu**	**63**	**0.004**	ug/L	0.007	160	12	26	87	KED
|	**Cu**	**65**	**0.006**	ug/L	0.005	86	6	16	54	KED
|	**Zn**	**66**	**-0.015**	ug/L	0.016	110	24	15	48	KED
|	**Zn**	**67**	**-0.005**	ug/L	0.037	693	3	3	91	KED
⌊	**Se**	**78**	**0.018**	ug/L	0.113	626	8	8	31	KED
	Y	**89**		ug/L			52603	51064	1	Standard
	Kr	**83**		ug/L			36	36	18	Standard
⌈>	**Tb**	**159**		ug/L			162198	158568	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	1447	142	140	20	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0444-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 05:04:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	76869	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	297830	2	Standard
|	**Cr**	**52**	**0.664**	ug/L	0.020	3	10174	23569	1	Standard
⌊	**Cr**	**53**	**0.782**	ug/L	0.026	3	233	1947	3	Standard
⌈>	**Ge**	**72**		ug/L			35218	33756	1	KED
|	**Cu**	**63**	**12.787**	ug/L	0.430	3	12	45109	2	KED
|	**Cu**	**65**	**13.112**	ug/L	0.162	1	6	23358	0	KED
|	**Zn**	**66**	**54.569**	ug/L	0.866	1	24	26575	0	KED
|	**Zn**	**67**	**50.464**	ug/L	1.524	3	3	4029	3	KED
⌊	**Se**	**78**	**0.034**	ug/L	0.042	124	8	9	12	KED
	Y	**89**		ug/L			52603	53579	2	Standard
	Kr	**83**		ug/L			36	35	30	Standard
⌈>	**Tb**	**159**		ug/L			162198	162324	0	Standard
⌊	**Pb**	**208**	**0.701**	ug/L	0.004	0	142	52083	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0463-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 05:08:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	78700	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	324608	1	Standard
|	**Cr**	**52**	**0.274**	ug/L	0.013	4	10174	17402	1	Standard
⌊	**Cr**	**53**	**1.147**	ug/L	0.013	1	233	2987	1	Standard
⌈>	**Ge**	**72**		ug/L			35218	31897	0	KED
|	**Cu**	**63**	**2.324**	ug/L	0.031	1	12	7759	0	KED
|	**Cu**	**65**	**2.359**	ug/L	0.046	1	6	3975	1	KED
|	**Zn**	**66**	**7.774**	ug/L	0.226	2	24	3596	2	KED
|	**Zn**	**67**	**7.306**	ug/L	0.106	1	3	554	1	KED
⌊	**Se**	**78**	**0.063**	ug/L	0.057	90	8	9	14	KED
	Y	**89**		ug/L			52603	55403	1	Standard
	Kr	**83**		ug/L			36	31	6	Standard
⌈>	**Tb**	**159**		ug/L			162198	161991	0	Standard
⌊	**Pb**	**208**	**0.242**	ug/L	0.001	0	142	18070	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0463-02
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 05:12:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42057	76708	0	Standard
>	Sc	45		ug/L			285615	377641	2	Standard
	Cr	52	0.142	ug/L	0.010	7	10174	16952	0	Standard
	Cr	53	0.902	ug/L	0.009	0	233	2800	1	Standard
>	Ge	72		ug/L			35218	31673	1	KED
	Cu	63	1.184	ug/L	0.028	2	12	3929	1	KED
	Cu	65	1.226	ug/L	0.019	1	6	2054	1	KED
	Zn	66	4.426	ug/L	0.239	5	24	2042	4	KED
	Zn	67	4.610	ug/L	0.357	7	3	348	8	KED
	Se	78	-0.018	ug/L	0.106	607	8	7	32	KED
	Y	89		ug/L			52603	53485	1	Standard
	Kr	83		ug/L			36	39	18	Standard
>	Tb	159		ug/L			162198	157785	0	Standard
	Pb	208	0.287	ug/L	0.004	1	142	20792	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0463-03
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 05:16:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	72998	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	332598	0	Standard
|	**Cr**	**52**	**0.294**	ug/L	0.008	2	10174	18251	1	Standard
⌊	**Cr**	**53**	**1.351**	ug/L	0.043	3	233	3559	3	Standard
⌈>	**Ge**	**72**		ug/L			35218	31759	1	KED
|	**Cu**	**63**	**2.279**	ug/L	0.048	2	12	7574	2	KED
|	**Cu**	**65**	**2.235**	ug/L	0.035	1	6	3752	3	KED
|	**Zn**	**66**	**14.671**	ug/L	0.195	1	24	6738	0	KED
|	**Zn**	**67**	**13.853**	ug/L	0.487	3	3	1043	3	KED
⌊	**Se**	**78**	**-0.085**	ug/L	0.124	145	8	5	45	KED
	Y	**89**		ug/L			52603	53307	2	Standard
	Kr	**83**		ug/L			36	31	7	Standard
⌈>	**Tb**	**159**		ug/L			162198	158103	2	Standard
⌊	**Pb**	**208**	**0.584**	ug/L	0.007	1	142	42266	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0464-01
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Tuesday, May 09, 2023 05:19:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	75864	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	311363	0	Standard
|	**Cr**	**52**	**0.401**	ug/L	0.004	0	10174	19274	0	Standard
⌊	**Cr**	**53**	**0.719**	ug/L	0.022	3	233	1891	1	Standard
⌈>	**Ge**	**72**		ug/L			35218	31716	0	KED
|	**Cu**	**63**	**2.822**	ug/L	0.032	1	12	9364	1	KED
|	**Cu**	**65**	**2.906**	ug/L	0.062	2	6	4868	2	KED
|	**Zn**	**66**	**37.558**	ug/L	0.931	2	24	17195	2	KED
|	**Zn**	**67**	**35.244**	ug/L	0.522	1	3	2645	1	KED
⌊	**Se**	**78**	**0.017**	ug/L	0.170	1020	8	8	46	KED
	Y	**89**		ug/L			52603	57375	2	Standard
	Kr	**83**		ug/L			36	33	37	Standard
⌈>	**Tb**	**159**		ug/L			162198	158274	0	Standard
⌊	**Pb**	**208**	**0.327**	ug/L	0.006	1	142	23742	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0464-02
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Tuesday, May 09, 2023 05:23:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	60108	2	Standard
>	**Sc**	**45**		ug/L			285615	249199	1	Standard
	Cr	**52**	**0.471**	ug/L	0.009	1	10174	16579	2	Standard
	Cr	**53**	**0.567**	ug/L	0.010	1	233	1237	2	Standard
>	**Ge**	**72**		ug/L			35218	23441	0	KED
	Cu	**63**	**6.184**	ug/L	0.069	1	12	15159	1	KED
	Cu	**65**	**6.263**	ug/L	0.131	2	6	7750	2	KED
	Zn	**66**	**31.502**	ug/L	0.531	1	24	10662	1	KED
	Zn	**67**	**30.726**	ug/L	0.088	0	3	1704	0	KED
	Se	**78**	**0.414**	ug/L	0.120	28	8	12	15	KED
	Y	**89**		ug/L			52603	449621	0	Standard
	Kr	**83**		ug/L			36	101	19	Standard
>	**Tb**	**159**		ug/L			162198	161677	0	Standard
	Pb	**208**	**395.137**	ug/L	3.933	0	142	29162514	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0466-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 05:27:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	83768	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	308817	2	Standard
|	**Cr**	**52**	**0.920**	ug/L	0.025	2	10174	29612	0	Standard
⌊	**Cr**	**53**	**1.340**	ug/L	0.028	2	233	3280	3	Standard
⌈>	**Ge**	**72**		ug/L			35218	27173	1	KED
|	**Cu**	**63**	**1.428**	ug/L	0.042	2	12	4064	2	KED
|	**Cu**	**65**	**1.380**	ug/L	0.029	2	6	1983	1	KED
|	**Zn**	**66**	**2.810**	ug/L	0.071	2	24	1119	2	KED
|	**Zn**	**67**	**2.689**	ug/L	0.393	14	3	175	15	KED
⌊	**Se**	**78**	**0.063**	ug/L	0.153	243	8	7	37	KED
	Y	**89**		ug/L			52603	56277	1	Standard
	Kr	**83**		ug/L			36	28	17	Standard
⌈>	**Tb**	**159**		ug/L			162198	152077	1	Standard
⌊	**Pb**	**208**	**0.266**	ug/L	0.002	0	142	18581	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0516-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 05:31:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42057	67168	1	Standard
⌈>	Sc	45		ug/L			285615	363298	1	Standard
|	Cr	52	-0.072	ug/L	0.002	2	10174	11219	1	Standard
⌊	Cr	53	0.279	ug/L	0.004	1	233	1037	0	Standard
⌈>	Ge	72		ug/L			35218	28321	1	KED
|	Cu	63	8.068	ug/L	0.106	1	12	23889	1	KED
|	Cu	65	8.064	ug/L	0.136	1	6	12055	2	KED
|	Zn	66	11.020	ug/L	0.093	0	24	4519	1	KED
|	Zn	67	10.785	ug/L	0.725	6	3	725	7	KED
⌊	Se	78	-0.053	ug/L	0.112	211	8	5	37	KED
	Y	89		ug/L			52603	51793	2	Standard
	Kr	83		ug/L			36	35	39	Standard
⌈>	Tb	159		ug/L			162198	153817	0	Standard
⌊	Pb	208	0.148	ug/L	0.002	1	142	10555	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0516-02
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 05:35:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	65113	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	343856	1	Standard
|	**Cr**	**52**	**-0.071**	ug/L	0.010	13	10174	10652	2	Standard
⌊	**Cr**	**53**	**0.222**	ug/L	0.012	5	233	838	2	Standard
⌈>	**Ge**	**72**		ug/L			35218	28514	1	KED
|	**Cu**	**63**	**8.346**	ug/L	0.102	1	12	24884	2	KED
|	**Cu**	**65**	**8.416**	ug/L	0.240	2	6	12664	1	KED
|	**Zn**	**66**	**11.601**	ug/L	0.401	3	24	4788	3	KED
|	**Zn**	**67**	**11.315**	ug/L	0.218	1	3	765	3	KED
⌊	**Se**	**78**	**0.013**	ug/L	0.057	421	8	7	16	KED
	Y	**89**		ug/L			52603	51790	2	Standard
	Kr	**83**		ug/L			36	25	18	Standard
⌈>	**Tb**	**159**		ug/L			162198	150993	0	Standard
⌊	**Pb**	**208**	**0.160**	ug/L	0.004	2	142	11174	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLP
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 05:39:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	39031	2	Standard
⌈>	**Sc**	**45**		ug/L			285615	240777	1	Standard
|	**Cr**	**52**	**-0.055**	ug/L	0.011	20	10174	7714	0	Standard
⌊	**Cr**	**53**	**0.002**	ug/L	0.008	446	233	200	6	Standard
⌈>	**Ge**	**72**		ug/L			35218	29523	1	KED
|	**Cu**	**63**	**0.004**	ug/L	0.001	20	12	23	12	KED
|	**Cu**	**65**	**0.004**	ug/L	0.001	29	6	11	16	KED
|	**Zn**	**66**	**0.002**	ug/L	0.024	1371	24	20	48	KED
|	**Zn**	**67**	**0.055**	ug/L	0.058	106	3	6	56	KED
⌊	**Se**	**78**	**-0.068**	ug/L	0.057	84	8	5	20	KED
	Y	**89**		ug/L			52603	48579	1	Standard
	Kr	**83**		ug/L			36	21	22	Standard
⌈>	**Tb**	**159**		ug/L			162198	149035	0	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	16	142	320	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVJ
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 05:43:30
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	39085	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	245914	0	Standard
|	**Cr**	**52**	**43.741**	ug/L	0.746	1	10174	714004	1	Standard
⌊	**Cr**	**53**	**44.215**	ug/L	0.804	1	233	79719	1	Standard
⌈>	**Ge**	**72**		ug/L			35218	29416	0	KED
|	**Cu**	**63**	**50.629**	ug/L	0.212	0	12	155661	0	KED
|	**Cu**	**65**	**51.168**	ug/L	0.300	0	6	79425	0	KED
|	**Zn**	**66**	**51.599**	ug/L	0.865	1	24	21903	1	KED
|	**Zn**	**67**	**49.009**	ug/L	0.242	0	3	3410	0	KED
⌊	**Se**	**78**	**48.911**	ug/L	1.463	2	8	1049	3	KED
	Y	**89**		ug/L			52603	49971	1	Standard
	Kr	**83**		ug/L			36	41	12	Standard
⌈>	**Tb**	**159**		ug/L			162198	155110	1	Standard
⌊	**Pb**	**208**	**57.022**	ug/L	0.825	1	142	4037267	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBJ
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 05:50:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	38521	2	Standard
⌈>	**Sc**	**45**		ug/L			285615	252597	1	Standard
|	**Cr**	**52**	**-0.042**	ug/L	0.009	20	10174	8296	2	Standard
⌊	**Cr**	**53**	**-0.030**	ug/L	0.007	22	233	151	7	Standard
⌈>	**Ge**	**72**		ug/L			35218	30610	0	KED
|	**Cu**	**63**	**0.004**	ug/L	0.004	85	12	25	48	KED
|	**Cu**	**65**	**0.002**	ug/L	0.002	93	6	9	40	KED
|	**Zn**	**66**	**-0.013**	ug/L	0.007	56	24	15	21	KED
|	**Zn**	**67**	**0.016**	ug/L	0.015	95	3	4	24	KED
⌊	**Se**	**78**	**-0.035**	ug/L	0.079	228	8	6	26	KED
	Y	**89**		ug/L			52603	49438	1	Standard
	Kr	**83**		ug/L			36	33	3	Standard
⌈>	**Tb**	**159**		ug/L			162198	152120	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	68	142	165	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0134-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 05:54:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	56777	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	257805	1	Standard
|	**Cr**	**52**	**0.063**	ug/L	0.003	4	10174	10244	1	Standard
⌊	**Cr**	**53**	**0.050**	ug/L	0.011	21	233	306	6	Standard
⌈>	**Ge**	**72**		ug/L			35218	30672	0	KED
|	**Cu**	**63**	**0.057**	ug/L	0.003	5	12	193	4	KED
|	**Cu**	**65**	**0.053**	ug/L	0.005	9	6	91	9	KED
|	**Zn**	**66**	**0.673**	ug/L	0.052	7	24	318	7	KED
|	**Zn**	**67**	**0.655**	ug/L	0.213	32	3	50	30	KED
⌊	**Se**	**78**	**0.000**	ug/L	0.056	14413	8	7	16	KED
	Y	**89**		ug/L			52603	50117	2	Standard
	Kr	**83**		ug/L			36	45	21	Standard
⌈>	**Tb**	**159**		ug/L			162198	154192	0	Standard
⌊	**Pb**	**208**	**0.015**	ug/L	0.000	0	142	1217	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0134-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 05:58:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	58675	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	258242	2	Standard
|	**Cr**	**52**	**23.205**	ug/L	0.638	2	10174	401932	1	Standard
⌊	**Cr**	**53**	**23.904**	ug/L	0.699	2	233	45338	1	Standard
⌈>	**Ge**	**72**		ug/L			35218	29846	1	KED
|	**Cu**	**63**	**27.484**	ug/L	0.589	2	12	85721	0	KED
|	**Cu**	**65**	**27.750**	ug/L	0.101	0	6	43706	1	KED
|	**Zn**	**66**	**87.617**	ug/L	1.758	2	24	37717	1	KED
|	**Zn**	**67**	**84.385**	ug/L	1.937	2	3	5955	2	KED
⌊	**Se**	**78**	**82.538**	ug/L	0.545	0	8	1792	1	KED
	Y	**89**		ug/L			52603	49562	2	Standard
	Kr	**83**		ug/L			36	35	21	Standard
⌈>	**Tb**	**159**		ug/L			162198	154710	0	Standard
⌊	**Pb**	**208**	**29.903**	ug/L	0.144	0	142	2112082	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0513-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 06:02:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	67966	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	297277	2	Standard
|	**Cr**	**52**	**0.901**	ug/L	0.035	3	10174	28145	0	Standard
⌊	**Cr**	**53**	**1.008**	ug/L	0.059	5	233	2434	4	Standard
⌈>	**Ge**	**72**		ug/L			35218	29183	0	KED
|	**Cu**	**63**	**6.206**	ug/L	0.034	0	12	18938	0	KED
|	**Cu**	**65**	**6.175**	ug/L	0.056	0	6	9514	1	KED
|	**Zn**	**66**	**8.876**	ug/L	0.243	2	24	3754	2	KED
|	**Zn**	**67**	**8.902**	ug/L	0.579	6	3	617	6	KED
⌊	**Se**	**78**	**0.019**	ug/L	0.136	706	8	7	37	KED
	Y	**89**		ug/L			52603	58436	1	Standard
	Kr	**83**		ug/L			36	36	22	Standard
⌈>	**Tb**	**159**		ug/L			162198	153041	0	Standard
⌊	**Pb**	**208**	**0.953**	ug/L	0.002	0	142	66730	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0513-02
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 06:06:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	66793	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	252612	1	Standard
|	**Cr**	**52**	**0.295**	ug/L	0.025	8	10174	13875	1	Standard
⌊	**Cr**	**53**	**0.830**	ug/L	0.025	2	233	1740	0	Standard
⌈>	**Ge**	**72**		ug/L			35218	29610	0	KED
|	**Cu**	**63**	**2.104**	ug/L	0.027	1	12	6522	1	KED
|	**Cu**	**65**	**2.136**	ug/L	0.044	2	6	3341	1	KED
|	**Zn**	**66**	**36.184**	ug/L	0.257	0	24	15467	1	KED
|	**Zn**	**67**	**34.264**	ug/L	1.150	3	3	2400	2	KED
⌊	**Se**	**78**	**0.022**	ug/L	0.112	503	8	7	30	KED
	Y	**89**		ug/L			52603	51859	1	Standard
	Kr	**83**		ug/L			36	28	17	Standard
⌈>	**Tb**	**159**		ug/L			162198	153735	1	Standard
⌊	**Pb**	**208**	**0.133**	ug/L	0.002	1	142	9464	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0513-03

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Tuesday, May 09, 2023 06:10:00

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	67962	1	Standard
>	**Sc**	**45**		ug/L			285615	288137	1	Standard
	Cr	**52**	**0.409**	ug/L	0.014	3	10174	17985	1	Standard
	Cr	**53**	**0.912**	ug/L	0.016	1	233	2157	1	Standard
>	**Ge**	**72**		ug/L			35218	28289	8	KED
	Cu	**63**	**10.347**	ug/L	0.815	7	12	30469	1	KED
	Cu	**65**	**10.463**	ug/L	1.036	9	6	15538	1	KED
	Zn	**66**	**39.585**	ug/L	3.144	7	24	16094	0	KED
	Zn	**67**	**37.837**	ug/L	3.991	10	3	2518	2	KED
	Se	**78**	**-0.019**	ug/L	0.092	478	8	6	19	KED
	Y	**89**		ug/L			52603	53644	0	Standard
	Kr	**83**		ug/L			36	33	21	Standard
>	**Tb**	**159**		ug/L			162198	152637	0	Standard
	Pb	**208**	**0.265**	ug/L	0.001	0	142	18621	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0520-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 06:13:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	74002	2	Standard
⌈>	**Sc**	**45**		ug/L			285615	270162	1	Standard
|	**Cr**	**52**	**0.938**	ug/L	0.009	0	10174	26237	1	Standard
⌊	**Cr**	**53**	**1.149**	ug/L	0.002	0	233	2492	1	Standard
⌈>	**Ge**	**72**		ug/L			35218	29844	0	KED
|	**Cu**	**63**	**7.238**	ug/L	0.158	2	12	22584	1	KED
|	**Cu**	**65**	**7.269**	ug/L	0.086	1	6	11452	1	KED
|	**Zn**	**66**	**76.973**	ug/L	0.739	0	24	33139	1	KED
|	**Zn**	**67**	**72.603**	ug/L	2.455	3	3	5123	2	KED
⌊	**Se**	**78**	**0.002**	ug/L	0.094	5179	8	7	28	KED
	Y	**89**		ug/L			52603	55944	2	Standard
	Kr	**83**		ug/L			36	34	11	Standard
⌈>	**Tb**	**159**		ug/L			162198	156254	0	Standard
⌊	**Pb**	**208**	**1.070**	ug/L	0.012	1	142	76426	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0520-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 09, 2023 06:17:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	59644	3	Standard
⌈>	**Sc**	**45**		ug/L			285615	270956	1	Standard
|	**Cr**	**52**	**1.059**	ug/L	0.053	4	10174	28450	2	Standard
⌊	**Cr**	**53**	**1.251**	ug/L	0.024	1	233	2700	2	Standard
⌈>	**Ge**	**72**		ug/L			35218	29642	0	KED
|	**Cu**	**63**	**6.263**	ug/L	0.050	0	12	19413	0	KED
|	**Cu**	**65**	**6.399**	ug/L	0.108	1	6	10012	0	KED
|	**Zn**	**66**	**50.010**	ug/L	1.102	2	24	21390	1	KED
|	**Zn**	**67**	**46.663**	ug/L	1.348	2	3	3272	2	KED
⌊	**Se**	**78**	**0.019**	ug/L	0.094	492	8	7	25	KED
	Y	**89**		ug/L			52603	54100	2	Standard
	Kr	**83**		ug/L			36	34	14	Standard
⌈>	**Tb**	**159**		ug/L			162198	153991	1	Standard
⌊	**Pb**	**208**	**1.646**	ug/L	0.025	1	142	115861	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0550-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 06:21:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	66179	2	Standard
⌈>	**Sc**	**45**		ug/L			285615	280707	1	Standard
|	**Cr**	**52**	**1.173**	ug/L	0.018	1	10174	31582	0	Standard
⌊	**Cr**	**53**	**1.602**	ug/L	0.033	2	233	3517	2	Standard
⌈>	**Ge**	**72**		ug/L			35218	30224	3	KED
|	**Cu**	**63**	**7.472**	ug/L	0.322	4	12	23592	1	KED
|	**Cu**	**65**	**7.556**	ug/L	0.244	3	6	12050	2	KED
|	**Zn**	**66**	**38.580**	ug/L	1.137	2	24	16822	1	KED
|	**Zn**	**67**	**36.632**	ug/L	2.163	5	3	2619	6	KED
⌊	**Se**	**78**	**-0.062**	ug/L	0.083	135	8	6	31	KED
	Y	**89**		ug/L			52603	59787	1	Standard
	Kr	**83**		ug/L			36	38	21	Standard
⌈>	**Tb**	**159**		ug/L			162198	155773	1	Standard
⌊	**Pb**	**208**	**2.926**	ug/L	0.038	1	142	208209	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0550-02
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 06:25:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	65487	2	Standard
⌈>	**Sc**	**45**		ug/L			285615	275931	2	Standard
|	**Cr**	**52**	**0.920**	ug/L	0.047	5	10174	26458	0	Standard
⌊	**Cr**	**53**	**1.218**	ug/L	0.036	2	233	2683	2	Standard
⌈>	**Ge**	**72**		ug/L			35218	31290	1	KED
|	**Cu**	**63**	**3.485**	ug/L	0.082	2	12	11407	1	KED
|	**Cu**	**65**	**3.490**	ug/L	0.118	3	6	5765	2	KED
|	**Zn**	**66**	**17.568**	ug/L	0.135	0	24	7946	0	KED
|	**Zn**	**67**	**16.802**	ug/L	0.834	4	3	1245	4	KED
⌊	**Se**	**78**	**0.024**	ug/L	0.145	598	8	8	38	KED
	Y	**89**		ug/L			52603	58204	3	Standard
	Kr	**83**		ug/L			36	29	7	Standard
⌈>	**Tb**	**159**		ug/L			162198	156780	1	Standard
⌊	**Pb**	**208**	**1.985**	ug/L	0.037	1	142	142187	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLQ
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 06:29:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	39045	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	251584	1	Standard
|	**Cr**	**52**	**-0.066**	ug/L	0.008	11	10174	7878	1	Standard
⌊	**Cr**	**53**	**-0.040**	ug/L	0.007	18	233	131	10	Standard
⌈>	**Ge**	**72**		ug/L			35218	30375	1	KED
|	**Cu**	**63**	**0.003**	ug/L	0.002	80	12	20	37	KED
|	**Cu**	**65**	**0.003**	ug/L	0.003	76	6	10	36	KED
|	**Zn**	**66**	**-0.001**	ug/L	0.014	1105	24	20	30	KED
|	**Zn**	**67**	**0.007**	ug/L	0.027	360	3	3	50	KED
⌊	**Se**	**78**	**-0.067**	ug/L	0.021	31	8	6	6	KED
	Y	**89**		ug/L			52603	48982	1	Standard
	Kr	**83**		ug/L			36	27	16	Standard
⌈>	**Tb**	**159**		ug/L			162198	150245	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	32	142	215	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVK
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 06:33:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	40027	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	261120	0	Standard
|	**Cr**	**52**	**45.385**	ug/L	0.220	0	10174	786303	0	Standard
⌊	**Cr**	**53**	**46.013**	ug/L	0.743	1	233	88076	1	Standard
⌈>	**Ge**	**72**		ug/L			35218	30911	0	KED
|	**Cu**	**63**	**51.134**	ug/L	0.323	0	12	165199	0	KED
|	**Cu**	**65**	**51.181**	ug/L	0.495	0	6	83479	0	KED
|	**Zn**	**66**	**52.243**	ug/L	0.243	0	24	23302	0	KED
|	**Zn**	**67**	**51.157**	ug/L	1.463	2	3	3740	1	KED
⌊	**Se**	**78**	**49.333**	ug/L	0.498	1	8	1112	0	KED
	Y	**89**		ug/L			52603	50941	1	Standard
	Kr	**83**		ug/L			36	35	15	Standard
⌈>	**Tb**	**159**		ug/L			162198	156864	0	Standard
⌊	**Pb**	**208**	**56.909**	ug/L	0.246	0	142	4075266	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBK
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 06:40:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	39163	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	261522	2	Standard
|	**Cr**	**52**	**-0.051**	ug/L	0.007	14	10174	8444	1	Standard
⌊	**Cr**	**53**	**-0.059**	ug/L	0.003	4	233	100	4	Standard
⌈>	**Ge**	**72**		ug/L			35218	31777	0	KED
|	**Cu**	**63**	**0.002**	ug/L	0.001	32	12	18	11	KED
|	**Cu**	**65**	**0.003**	ug/L	0.003	88	6	11	44	KED
|	**Zn**	**66**	**-0.021**	ug/L	0.013	62	24	12	50	KED
|	**Zn**	**67**	**-0.020**	ug/L	0.025	124	3	1	100	KED
⌊	**Se**	**78**	**0.004**	ug/L	0.061	1449	8	8	17	KED
	Y	**89**		ug/L			52603	50038	1	Standard
	Kr	**83**		ug/L			36	32	23	Standard
⌈>	**Tb**	**159**		ug/L			162198	153730	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	80	142	145	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0470-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 06:44:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	77069	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	344063	2	Standard
|	**Cr**	**52**	**0.405**	ug/L	0.022	5	10174	21394	2	Standard
⌊	**Cr**	**53**	**1.207**	ug/L	0.009	0	233	3319	2	Standard
⌈>	**Ge**	**72**		ug/L			35218	31085	0	KED
|	**Cu**	**63**	**2.334**	ug/L	0.030	1	12	7595	2	KED
|	**Cu**	**65**	**2.336**	ug/L	0.036	1	6	3837	1	KED
|	**Zn**	**66**	**12.625**	ug/L	0.271	2	24	5679	2	KED
|	**Zn**	**67**	**11.837**	ug/L	0.130	1	3	873	1	KED
⌊	**Se**	**78**	**0.152**	ug/L	0.066	43	8	11	13	KED
	Y	**89**		ug/L			52603	57839	2	Standard
	Kr	**83**		ug/L			36	26	28	Standard
⌈>	**Tb**	**159**		ug/L			162198	155044	0	Standard
⌊	**Pb**	**208**	**0.124**	ug/L	0.002	1	142	8879	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0557-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 06:48:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	70288	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	275602	0	Standard
|	**Cr**	**52**	**0.872**	ug/L	0.015	1	10174	25568	0	Standard
⌊	**Cr**	**53**	**0.994**	ug/L	0.019	1	233	2229	2	Standard
⌈>	**Ge**	**72**		ug/L			35218	31433	0	KED
|	**Cu**	**63**	**11.356**	ug/L	0.314	2	12	37317	2	KED
|	**Cu**	**65**	**11.283**	ug/L	0.211	1	6	18719	1	KED
|	**Zn**	**66**	**64.225**	ug/L	1.138	1	24	29127	1	KED
|	**Zn**	**67**	**59.642**	ug/L	0.735	1	3	4434	1	KED
⌊	**Se**	**78**	**0.055**	ug/L	0.044	80	8	9	10	KED
	Y	**89**		ug/L			52603	52972	1	Standard
	Kr	**83**		ug/L			36	29	16	Standard
⌈>	**Tb**	**159**		ug/L			162198	155896	0	Standard
⌊	**Pb**	**208**	**1.211**	ug/L	0.009	0	142	86343	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0557-02
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 06:52:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	75583	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	305643	2	Standard
|	**Cr**	**52**	**0.123**	ug/L	0.003	2	10174	13359	2	Standard
⌊	**Cr**	**53**	**0.217**	ug/L	0.023	10	233	735	4	Standard
⌈>	**Ge**	**72**		ug/L			35218	30596	2	KED
|	**Cu**	**63**	**5.417**	ug/L	0.078	1	12	17331	1	KED
|	**Cu**	**65**	**5.305**	ug/L	0.122	2	6	8567	0	KED
|	**Zn**	**66**	**4.060**	ug/L	0.163	4	24	1811	3	KED
|	**Zn**	**67**	**3.976**	ug/L	0.026	0	3	290	2	KED
⌊	**Se**	**78**	**0.096**	ug/L	0.063	65	8	9	12	KED
	Y	**89**		ug/L			52603	51812	1	Standard
	Kr	**83**		ug/L			36	38	5	Standard
⌈>	**Tb**	**159**		ug/L			162198	154190	1	Standard
⌊	**Pb**	**208**	**0.115**	ug/L	0.004	3	142	8254	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0586-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 06:55:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	83968	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	274397	1	Standard
|	**Cr**	**52**	**0.655**	ug/L	0.013	2	10174	21556	0	Standard
⌊	**Cr**	**53**	**0.675**	ug/L	0.020	2	233	1578	2	Standard
⌈>	**Ge**	**72**		ug/L			35218	30966	1	KED
|	**Cu**	**63**	**9.130**	ug/L	0.128	1	12	29555	0	KED
|	**Cu**	**65**	**9.346**	ug/L	0.258	2	6	15273	1	KED
|	**Zn**	**66**	**64.659**	ug/L	1.019	1	24	28886	1	KED
|	**Zn**	**67**	**58.981**	ug/L	0.739	1	3	4320	1	KED
⌊	**Se**	**78**	**0.067**	ug/L	0.021	30	8	9	6	KED
	Y	**89**		ug/L			52603	56525	1	Standard
	Kr	**83**		ug/L			36	36	5	Standard
⌈>	**Tb**	**159**		ug/L			162198	156729	0	Standard
⌊	**Pb**	**208**	**0.294**	ug/L	0.003	1	142	21155	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0610-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 06:59:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	66613	2	Standard
⌈>	**Sc**	**45**		ug/L			285615	364163	0	Standard
|	**Cr**	**52**	**0.042**	ug/L	0.005	11	10174	13981	0	Standard
⌊	**Cr**	**53**	**0.294**	ug/L	0.007	2	233	1081	2	Standard
⌈>	**Ge**	**72**		ug/L			35218	29043	0	KED
|	**Cu**	**63**	**2.053**	ug/L	0.028	1	12	6242	1	KED
|	**Cu**	**65**	**2.161**	ug/L	0.065	3	6	3316	2	KED
|	**Zn**	**66**	**4.679**	ug/L	0.075	1	24	1979	1	KED
|	**Zn**	**67**	**4.709**	ug/L	0.040	0	3	326	0	KED
⌊	**Se**	**78**	**-0.033**	ug/L	0.003	9	8	6	0	KED
	Y	**89**		ug/L			52603	58974	2	Standard
	Kr	**83**		ug/L			36	34	38	Standard
⌈>	**Tb**	**159**		ug/L			162198	152356	1	Standard
⌊	**Pb**	**208**	**0.085**	ug/L	0.002	1	142	6051	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLR
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 07:03:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	39475	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	260134	1	Standard
|	**Cr**	**52**	**0.005**	ug/L	0.009	182	10174	9348	0	Standard
⌊	**Cr**	**53**	**-0.044**	ug/L	0.005	11	233	130	6	Standard
⌈>	**Ge**	**72**		ug/L			35218	30386	1	KED
|	**Cu**	**63**	**0.003**	ug/L	0.003	87	12	20	41	KED
|	**Cu**	**65**	**0.005**	ug/L	0.002	41	6	13	24	KED
|	**Zn**	**66**	**-0.010**	ug/L	0.014	144	24	16	37	KED
|	**Zn**	**67**	**0.025**	ug/L	0.015	58	3	5	21	KED
⌊	**Se**	**78**	**0.049**	ug/L	0.052	105	8	8	12	KED
	Y	**89**		ug/L			52603	48206	2	Standard
	Kr	**83**		ug/L			36	34	14	Standard
⌈>	**Tb**	**159**		ug/L			162198	150373	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	6	142	216	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVL
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 07:07:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	41106	2	Standard
⌈>	**Sc**	**45**		ug/L			285615	263449	1	Standard
|	**Cr**	**52**	**44.231**	ug/L	0.696	1	10174	773228	0	Standard
⌊	**Cr**	**53**	**44.932**	ug/L	0.129	0	233	86779	1	Standard
⌈>	**Ge**	**72**		ug/L			35218	30595	0	KED
|	**Cu**	**63**	**51.336**	ug/L	0.634	1	12	164152	0	KED
|	**Cu**	**65**	**51.576**	ug/L	0.992	1	6	83259	1	KED
|	**Zn**	**66**	**51.396**	ug/L	0.310	0	24	22691	1	KED
|	**Zn**	**67**	**51.385**	ug/L	1.330	2	3	3718	1	KED
⌊	**Se**	**78**	**48.102**	ug/L	1.441	2	8	1073	2	KED
	Y	**89**		ug/L			52603	49243	1	Standard
	Kr	**83**		ug/L			36	35	8	Standard
⌈>	**Tb**	**159**		ug/L			162198	154481	0	Standard
⌊	**Pb**	**208**	**57.156**	ug/L	0.735	1	142	4030706	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBL
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 07:14:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	39833	0	Standard
⌈>	**Sc**	**45**		ug/L			285615	260233	2	Standard
|	**Cr**	**52**	**-0.048**	ug/L	0.010	20	10174	8457	0	Standard
⌊	**Cr**	**53**	**-0.063**	ug/L	0.003	4	233	93	5	Standard
⌈>	**Ge**	**72**		ug/L			35218	31931	1	KED
|	**Cu**	**63**	**0.012**	ug/L	0.015	124	12	50	95	KED
|	**Cu**	**65**	**0.012**	ug/L	0.019	158	6	26	123	KED
|	**Zn**	**66**	**-0.006**	ug/L	0.025	418	24	19	60	KED
|	**Zn**	**67**	**0.013**	ug/L	0.038	293	3	4	65	KED
⌊	**Se**	**78**	**-0.034**	ug/L	0.040	119	8	7	13	KED
	Y	**89**		ug/L			52603	49521	0	Standard
	Kr	**83**		ug/L			36	30	10	Standard
⌈>	**Tb**	**159**		ug/L			162198	153935	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	100	142	156	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 07:18:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	45540	2	Standard
⌈>	**Sc**	**45**		ug/L			285615	287055	1	Standard
|	**Cr**	**52**	**-0.053**	ug/L	0.003	6	10174	9222	1	Standard
⌊	**Cr**	**53**	**-0.066**	ug/L	0.007	11	233	95	14	Standard
⌈>	**Ge**	**72**		ug/L			35218	31825	0	KED
|	**Cu**	**63**	**0.009**	ug/L	0.003	37	12	42	26	KED
|	**Cu**	**65**	**0.012**	ug/L	0.003	23	6	25	18	KED
|	**Zn**	**66**	**0.120**	ug/L	0.011	9	24	76	5	KED
|	**Zn**	**67**	**0.072**	ug/L	0.052	71	3	8	44	KED
⌊	**Se**	**78**	**-0.053**	ug/L	0.084	159	8	6	28	KED
	Y	**89**		ug/L			52603	55336	1	Standard
	Kr	**83**		ug/L			36	32	31	Standard
⌈>	**Tb**	**159**		ug/L			162198	164851	1	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.001	13	142	445	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 07:22:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	45242	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	283016	2	Standard
|	**Cr**	**52**	**-0.046**	ug/L	0.017	36	10174	9223	1	Standard
⌊	**Cr**	**53**	**-0.067**	ug/L	0.002	2	233	93	4	Standard
⌈>	**Ge**	**72**		ug/L			35218	31444	1	KED
|	**Cu**	**63**	**0.012**	ug/L	0.004	34	12	49	26	KED
|	**Cu**	**65**	**0.012**	ug/L	0.004	32	6	25	24	KED
|	**Zn**	**66**	**0.087**	ug/L	0.033	38	24	60	25	KED
|	**Zn**	**67**	**0.065**	ug/L	0.038	58	3	8	35	KED
⌊	**Se**	**78**	**0.021**	ug/L	0.077	371	8	8	21	KED
	Y	**89**		ug/L			52603	55528	2	Standard
	Kr	**83**		ug/L			36	31	19	Standard
⌈>	**Tb**	**159**		ug/L			162198	165397	0	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	2	142	467	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 07:26:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	45048	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	280274	2	Standard
|	**Cr**	**52**	**-0.037**	ug/L	0.006	15	10174	9296	2	Standard
⌊	**Cr**	**53**	**-0.064**	ug/L	0.004	6	233	99	5	Standard
⌈>	**Ge**	**72**		ug/L			35218	31659	1	KED
|	**Cu**	**63**	**0.011**	ug/L	0.002	15	12	46	10	KED
|	**Cu**	**65**	**0.011**	ug/L	0.006	55	6	24	42	KED
|	**Zn**	**66**	**0.100**	ug/L	0.011	10	24	67	8	KED
|	**Zn**	**67**	**0.074**	ug/L	0.075	102	3	8	61	KED
⌊	**Se**	**78**	**-0.017**	ug/L	0.057	341	8	7	16	KED
	Y	**89**		ug/L			52603	54784	0	Standard
	Kr	**83**		ug/L			36	26	30	Standard
⌈>	**Tb**	**159**		ug/L			162198	162453	1	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.000	10	142	480	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 07:30:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	40030	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	245877	3	Standard
|	**Cr**	**52**	**-0.023**	ug/L	0.027	118	10174	8376	2	Standard
⌊	**Cr**	**53**	**-0.064**	ug/L	0.004	6	233	85	4	Standard
⌈>	**Ge**	**72**		ug/L			35218	31239	0	KED
|	**Cu**	**63**	**-0.000**	ug/L	0.001	448	12	10	20	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.001	93	6	4	24	KED
|	**Zn**	**66**	**-0.025**	ug/L	0.019	75	24	10	84	KED
|	**Zn**	**67**	**-0.029**	ug/L	0.015	52	3	1	86	KED
⌊	**Se**	**78**	**-0.025**	ug/L	0.024	93	8	7	7	KED
	Y	**89**		ug/L			52603	45934	1	Standard
	Kr	**83**		ug/L			36	25	35	Standard
⌈>	**Tb**	**159**		ug/L			162198	145027	0	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	13	142	60	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 07:34:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	40922	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	251008	2	Standard
|	**Cr**	**52**	**-0.031**	ug/L	0.011	37	10174	8436	0	Standard
⌊	**Cr**	**53**	**-0.061**	ug/L	0.004	7	233	93	7	Standard
⌈>	**Ge**	**72**		ug/L			35218	31094	1	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.001	130	12	8	32	KED
|	**Cu**	**65**	**0.000**	ug/L	0.002	3004	6	5	66	KED
|	**Zn**	**66**	**-0.023**	ug/L	0.013	54	24	10	50	KED
|	**Zn**	**67**	**0.006**	ug/L	0.045	777	3	3	86	KED
⌊	**Se**	**78**	**-0.023**	ug/L	0.089	390	8	7	26	KED
	Y	**89**		ug/L			52603	47322	1	Standard
	Kr	**83**		ug/L			36	26	15	Standard
⌈>	**Tb**	**159**		ug/L			162198	147134	0	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	16	142	73	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 07:38:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050823_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42057	41044	1	Standard
⌈>	**Sc**	**45**		ug/L			285615	249589	0	Standard
|	**Cr**	**52**	**-0.022**	ug/L	0.012	52	10174	8533	2	Standard
⌊	**Cr**	**53**	**-0.062**	ug/L	0.008	12	233	90	15	Standard
⌈>	**Ge**	**72**		ug/L			35218	30893	0	KED
|	**Cu**	**63**	**0.001**	ug/L	0.002	313	12	13	51	KED
|	**Cu**	**65**	**0.001**	ug/L	0.001	80	6	6	15	KED
|	**Zn**	**66**	**-0.022**	ug/L	0.011	51	24	11	44	KED
|	**Zn**	**67**	**0.007**	ug/L	0.045	686	3	3	86	KED
⌊	**Se**	**78**	**0.000**	ug/L	0.034	7269	8	7	9	KED
	Y	**89**		ug/L			52603	46014	2	Standard
	Kr	**83**		ug/L			36	33	12	Standard
⌈>	**Tb**	**159**		ug/L			162198	146186	0	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	7	142	59	9	Standard

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00034	Instrument:	ICPMS1
Calibration Date:	05/09/2023 15:21		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Chromium-52	0	0	0.5	52696	10	25665.6	20	24896	50	23824.18	100	24100.37
Chromium-53	0	0	0.5	3292	10	2783.5	20	2747.15	50	2666.92	100	2605

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC
Instrument: ICPMS1
Calibration: GE00034
Calibration Date: 5/9/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Chromium-52	25197.03	66.3	0.9999		0.998	
Chromium-53	2349.095	50.1	0.9998		0.998	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/9/23 **Analyst:** MB **Sequence:** SLEΦ163 **Cal:** GEΦΦΦ34

All corrections made by analyst unless otherwise noted. MB 5/9/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CAL1	L5224		
		~~-CAL3~~ -CAL2	L5225		
		-CAL3	L5226		
		-CAL4	L5227		
		-CAL5	L5228		
		-CAL6	L5229		
		-IBL1	—		
		-ICV1	L3575		
	✓	-ICB1	—		Std Mode noisy
		-ICB1	L5224		
		-CCV1	L5228		
	✓	-CCB1	—		Std Mode noisy
		-CCB1	L5224		
		-CRL1	L5225		
	✓	-IFA1	—		Std Mode noisy
		-IFB1	L4689		
		-IFA1	L4688		Cr^{53} ↑
	✓	-HCV1	—		Ba^{137} ↓
		-HCV2	L4781		
		-HCV1	L4780		
		-IBL2	—		
		-IBL3	—		
		-CCV2			
		-CCB2			

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/9/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted. MS 5/9/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLEΦ256-BLK1	REN		
		↓ -BS1			Ge noisy - %R, Values + Analytes OK
		23EΦ192-Φ1		5	
		23EΦ179-Φ1		2	Sc, In, Tb noisy - %R + Analytes OK
		23EΦ141-Φ1		5	
		23EΦΦ96-Φ1		2	
		23DΦ453-Φ1	↓	↓	Ge, In-1 ↓ Cd, Cu, Ni, Zn NR
		SEQ-IBL4			
		23DΦ595-Φ1	REN	20	Zn↑ Zn NR
		SEQ-IBL5			
		-CCV3			Ba137 ↓ - Not Needed
		-CCB3			
	✓	-CAL1			Al, Co, Mo, Se Removed
		-CCV4			Ba137 ↓
		-CCB4			
		BLEΦ119-BLK1	REN		
	✓	↓ -BS1			Ge noisy
		↓ -BS1			
		BLEΦ134-BLK2			As, Cd, Cr, Ni, Pb only
		↓ -BS2	↓		↓
		23DΦ297-Φ8	SWN	100	Cr only
		23AΦ42D-Φ7	↓	↓	↓
		23DΦ595-ΦIRE1	REN	↓	Zn only
		23DΦ453-ΦIRE1	↓	10	Cd, Cu, Ni, Zn only

Analytical Resources, Incorporated
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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/9/23 **Analyst:** MB **Sequence:** ~~~~ **Cal:** ~~~~

All corrections made by analyst unless otherwise noted. MB 5/9/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-IBL6			
		↓ -CCV5			Ba 137↓
		↓ -CCB5			
		23CΦ715-Φ2	REN	5	Cr only
		↓ -Φ4	↓	50	↓
		23CΦ69Φ-Φ8		↓	
		↓ -1Φ		20	
		↓ -Φ4		10	
		230Φ514-Φ5		5	Sc↑/Mn↑ Ag, Cd, Ni only
		BLEΦΦ78-DUP2		↓	↓ / Ge noisy - %R + Analytes O/C / Values match parent.
		↓ -MS2			↓ Ag %R↓
		↓ -MSD2	↓	↓	↓ ↓
		SEQ-IBL7			
		↓ -CCV6			
		↓ -CCB6			
✓		↓ -CAL1			Sc, Tb noisy
✓		↓ ~~-CCV7~~CAL1			Ag, Ba, Mn Removed
		↓ -CCV7			
		↓ -CCB7			
		BLDΦ687-BLK1	SWN	20	Zn↑ (35.926 / 32.362) - Re-run to Confirm No Zn
		↓ -BS1	↓	↓	↓
		BLEΦ208-BLK1	REN		Cu only
		↓ -BS1	↓		↓
		↓ -SRL1	↓	5	↓

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/9/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted. MB 5/9/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		230Φ242-Φ5REI	REN		Sc↑ - Not Needed Cu only
		BLEΦ2Φ8 - DUP1	↓	↓	↓ ↓ ↓
		↓ -MS1	↓	↓	↓
		↓ -PS1	↓	↓	Co Conc K47Φ9 ↓ ↓ ↓
		SEQ-IBL8			
		↓ -CCV8			
		↓ -CCB8			
		BLEΦ125-BLK1	SWN	20	
		↓ -BS1	↓	↓	
		230Φ233-~~Φ7~~REI	REN		Cu only
		230Φ234-Φ7REI	↓		↓
		230Φ241-Φ2REI	↓		Sc↑ - Not Needed
		↓ -Φ4REI	↓		↓ ↓
		230Φ242-Φ2REI	↓		
		↓ -Φ4REI	↓		Sc↑ - Not Needed ↓
		230Φ3Φ6-Φ1	↓	2	Cr only
		SEQ-IBL9			
		↓ -CCV9			
		↓ -CCB9			
		230Φ393-Φ9	SWN	20	Sc↑ - Not Needed
		↓ -13	↓	↓	
		-14	↓	↓	
		-2Φ	↓	↓	Sc↑ - Not Needed
		↓ -Φ7	↓	↓	↓ ↓

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/9/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLEΦ125-DUP1	SWN	20	Sc↑ - Not Needed
		-MS1	↓	↓	↓ ↓ /As STL ↓
		-MSD1			
		-PS1	↓	↓	60mL K7409 ↓ ↓
		SEQ-IBLA			
		-CCVA			
		-CCBA			
		230Φ393-21	SWN	20	Sc↑ - Not Needed
		-23	↓	↓	↓ ↓
		230Φ394-Φ3			
		-Φ5			↓
		-Φ1			No Cr, Pb, Zn
		BLDΦ687-DUP1			↓
		-MS1			
		-MSD1			
		-PS1	↓	↓	60mL K7409 / Sc↑ ↓
		SEQ-IBLB			
		-CCVB			
		-CCBB			Pb noisy
	✓	230Φ394-Φ7	SWN	20	Sc↑ - Not Needed
		-Φ9	↓	↓	↓ ↓
		-1Φ			
	✓	-13	↓	↓	
		230Φ348-Φ1	REN	↓	No Pb

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/9/23 **Analyst:** MS **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-IBLC			
		230Φ376-Φ1	REN	100	Cr only
		230Φ424-Φ1	↓	5	Zn only
		230Φ374-Φ3	↓	2	Cd, Cu only
		SEQ-IBLD			
		-CCVC			Pb?
		-CCBC			
		230Φ513-Φ3	REN		
		230Φ452-Φ1	↓	2	No Pb
		230Φ462-Φ1	↓	↓	↓
		230Φ480-Φ1	↓	↓	Ge, In⁻¹↓ Cr only
		SEQ-IBLE			
		230Φ442-Φ2	REN	20	Cr only
		BLEΦΦ54-DUP3	↓	↓	↓
		-MS3	↓	↓	↓
		-MSD3	↓	↓	↓
		SEQ-IBLF			
		-CCVD			
		-CCBD			
		230Φ537-Φ5	REN		Sc↑ No Cr
		BLEΦ12Φ-DUP2	↓		↓ ↓
		-MS2	↓		↓ ↓
		-MSD2	↓		
		SEQ-IBLG			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/9/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted. MB 5/9/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		230Φ464-Φ2	REN	20	Pb only
		↓ -Φ1	↓		↓
		230Φ516-Φ1	↓		Sc† - Not Needed
		↓ -Φ2	↓		↓ ↓ ↓
		SEQ-IBLH			
		-CCVE			
		↓ -CCBE			
		230Φ463-Φ1	REN		Pb only
		-Φ2	↓		Sc† - Not Needed ↓
		↓ -Φ3	↓		↓
		230Φ477-Φ5	↓	5	
		-17	↓	2	
		↓ -19	↓	↓	
		BLEΦΦ77-DUP1	↓	↓	
	OK ✓	-MS1	↓	↓	Ge noisy Pb only
		↓ -MSD1	↓	↓	
		SEQ-IBLI			
		-CCVF			
		↓ -CCBF			
					Remaining CV tubes empty -
					End of usable data
		MB	5/9/23		

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Tuesday, May 09, 2023 12:18:16
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.134
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	9586.5	9586.549	68.777	0.7	Standard
	In	114.9	71985.5	71985.472	993.919	1.4	Standard
	U	238.1	96089.6	96089.638	954.703	1.0	Standard
⌈	CeO	155.9	2059.6	0.020	0.000	2.4	Standard
| >	Ce	139.9	102412.2	102412.184	475.304	0.5	Standard
⌊	Ce++	70.0	977.8	0.010	0.000	2.3	Standard
	Bkgd	220.0	0.5	0.467	0.183	39.1	Standard

Current Conditions File Data

Current Value	Description
0.91	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.91	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Start Time: 5/9/2023 12:18:11 PM
End Time: 5/9/2023 12:24:32 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 9586.55
Obtained Intensity (In 115): 71985.47
Obtained Intensity (U 238): 96089.64
Obtained Intensity (Bkgd 220): 0.47
Obtained Formula (Ce++ 70 / Ce 140): 0.010 (=977.83 / 102412.18)
Obtained Formula (CeO 156 / Ce 140): 0.020 (=2059.62 / 102412.18)
Obtained RSD (Be 9): 0.0072
Obtained RSD (In 115): 0.0138
Obtained RSD (U 238): 0.0099

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Optimization Status

Start Time: 5/9/2023 12:18:11 PM

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000
Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: CeO 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 9586.55
Obtained Intensity (In 115): 71985.47
Obtained Intensity (U 238): 96089.64
Obtained Intensity (Bkgd 220): 0.47
Obtained Formula (Ce++ 70 / Ce 140): 0.010 (=977.83 / 102412.18)
Obtained Formula (CeO 156 / Ce 140): 0.020 (=2059.62 / 102412.18)
Obtained RSD (Be 9): 0.0072
Obtained RSD (In 115): 0.0138
Obtained RSD (U 238): 0.0099

[Passed] Optimum value(s): N/A

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.
Intensity Criterion: In 115 Maximum

Optimization Results:

[Cancelled]

End Time: 5/9/2023 12:24:32 PM

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Tuesday, May 09, 2023 12:31:48
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.141
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	11009.8	11009.842	178.493	1.6	Standard
	In	114.9	77649.3	77649.347	893.969	1.2	Standard
	U	238.1	102175.4	102175.448	1799.462	1.8	Standard
⌈	CeO	155.9	2593.5	0.024	0.000	2.1	Standard
| >	Ce	139.9	110114.7	110114.713	947.804	0.9	Standard
⌊	Ce++	70.0	1356.3	0.012	0.000	1.9	Standard
	Bkgd	220.0	0.5	0.467	0.139	29.9	Standard

Current Conditions File Data

Current Value	Description
0.92	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.92	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Start Time: 5/9/2023 12:24:37 PM
End Time: 5/9/2023 12:33:53 PM

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.78 mm	0.99 mm	75718.13

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 0.92
Obtained Intensity (In 115): 85176.17
Obtained Formula (CeO 156 / Ce 140): 0.0219 (=2374.20 / 108222.38)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.691)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.710)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.698)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.693)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.997; Intercept = -14.40

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.995; Intercept = -13.81

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 11009.84
Obtained Intensity (In 115): 77649.35
Obtained Intensity (U 238): 102175.45
Obtained Intensity (Bkgd 220): 0.47
Obtained Formula (Ce++ 70 / Ce 140): 0.012 (=1356.26 / 110114.71)
Obtained Formula (CeO 156 / Ce 140): 0.024 (=2593.50 / 110114.71)
Obtained RSD (Be 9): 0.0162
Obtained RSD (In 115): 0.0115
Obtained RSD (U 238): 0.0176

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Optimization Status

Start Time: 5/9/2023 12:24:37 PM

Torch Alignment
	Optimization Settings:
		Method: Torch Alignment.mth.
		Intensity Criterion: In 115 Maximum

	Optimization Results:
		Vertical	Horizontal	Intensity
[Passed]	0.78 mm	0.99 mm	75718.13

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 0.89/0.96/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 85176.17
		Obtained Formula (CeO 156 / Ce 140): 0.0219 (=2374.20 / 108222.38)
[Passed] Optimum value(s): 0.92

Mass Calibration and Resolution
	Optimization Settings:
		Method: Tuning.mth.
		MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
		Iterations: 6
		Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
		Peak height (%) for Res. Opt.: 10

	Optimization Results:
	Initial Try
		Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.691)
		Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.710)
		Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.698)
		Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.693)
[Passed] Optimum value(s): N/A

QID STD/DRC
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 0.997; Intercept = -14.40

	Analyte	Mass	Points	DAC	MaxIntensity

Li	7	41	-14.5	55363.1
Mg	24	41	-14.5	53532.1
In	115	41	-13	82332.6
Ce	140	41	-12	113235
Pb	208	41	-11	58262.6
U	238	41	-11.5	105395

KED Mode QID
Optimization Settings:
Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 0.995; Intercept = -13.81

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-14	37068
Mg	24	41	-14	57523.6
In	115	41	-12	121119
Ce	140	41	-11	119203
Pb	208	41	-10.5	54174.5
U	238	41	-10.5	126490

STD Performance Check
Optimization Settings:
Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000
Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: CeO 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:
Initial Try
Obtained Intensity (Be 9): 11009.84
Obtained Intensity (In 115): 77649.35
Obtained Intensity (U 238): 102175.45
Obtained Intensity (Bkgd 220): 0.47
Obtained Formula (Ce++ 70 / Ce 140): 0.012 (=1356.26 / 110114.71)
Obtained Formula (CeO 156 / Ce 140): 0.024 (=2593.50 / 110114.71)
Obtained RSD (Be 9): 0.0162
Obtained RSD (In 115): 0.0115
Obtained RSD (U 238): 0.0176

[Passed] Optimum value(s): N/A

End Time: 5/9/2023 12:33:53 PM

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 15:21:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				41563	2	Standard
>	**Sc**	**45**		ug/L				330809	3	Standard
	Al	**27**		ug/L				2334	3	Standard
	Cr	**52**		ug/L				13927	3	Standard
	Cr	**53**		ug/L				305	13	Standard
	Mn	**55**		ug/L				504	10	Standard
>	**Ge**	**72**		ug/L				39846	0	KED
	Co	**59**		ug/L				61	115	KED
	Ni	**60**		ug/L				59	45	KED
	Ni	**62**		ug/L				10	61	KED
	Cu	**63**		ug/L				67	77	KED
	Cu	**65**		ug/L				26	67	KED
	Zn	**66**		ug/L				22	39	KED
	Zn	**67**		ug/L				3	91	KED
	As	**75**		ug/L				5	52	KED
	Se	**78**		ug/L				11	15	KED
	Kr	**83**		ug/L				53	4	Standard
>	**In-1**	**115**		ug/L				9311	3	KED
	Mo	**98**		ug/L				10	35	KED
	Cd	**111**		ug/L				2	24	KED
	Cd	**114**		ug/L				8	36	KED
>	**In**	**115**		ug/L				399419	5	Standard
	Ag	**107**		ug/L				46	27	Standard
	Ba	**135**		ug/L				15	25	Standard
	Ba	**137**		ug/L				37	10	Standard
>	**Tb**	**159**		ug/L				173053	2	Standard
	Pb	**208**		ug/L				201	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 15:26:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	42798	0	Standard
⌈>	**Sc**	**45**		ug/L			330809	347123	0	Standard
|	**Al**	**27**	**20.000**	ug/L	0.473	2	2334	510670	1	Standard
|	**Cr**	**52**	**0.500**	ug/L	0.011	2	13927	26348	0	Standard
|	**Cr**	**53**	**0.500**	ug/L	0.027	5	305	1646	5	Standard
⌊	**Mn**	**55**	**0.500**	ug/L	0.008	1	504	17661	0	Standard
⌈>	**Ge**	**72**		ug/L			39846	39869	1	KED
|	**Co**	**59**	**0.200**	ug/L	0.010	4	61	1193	4	KED
|	**Ni**	**60**	**0.500**	ug/L	0.020	4	59	852	4	KED
|	**Ni**	**62**	**0.500**	ug/L	0.017	3	10	130	3	KED
|	**Cu**	**63**	**0.500**	ug/L	0.007	1	67	2915	2	KED
|	**Cu**	**65**	**0.500**	ug/L	0.011	2	26	1502	1	KED
|	**Zn**	**66**	**6.000**	ug/L	0.234	3	22	3861	3	KED
|	**Zn**	**67**	**6.000**	ug/L	0.179	2	3	581	2	KED
|	**As**	**75**	**0.200**	ug/L	0.025	12	5	64	11	KED
⌊	**Se**	**78**	**0.500**	ug/L	0.078	15	11	24	7	KED
	Kr	**83**		ug/L			53	56	5	Standard
⌈>	**In-1**	**115**		ug/L			9311	9467	1	KED
|	**Mo**	**98**	**0.200**	ug/L	0.005	2	10	301	2	KED
|	**Cd**	**111**	**0.100**	ug/L	0.019	19	2	41	19	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.010	9	8	71	7	KED
⌈>	**In**	**115**		ug/L			399419	418159	0	Standard
|	**Ag**	**107**	**0.200**	ug/L	0.001	0	46	3110	0	Standard
|	**Ba**	**135**	**0.500**	ug/L	0.026	5	15	2765	4	Standard
⌊	**Ba**	**137**	**0.500**	ug/L	0.011	2	37	5223	1	Standard
⌈>	**Tb**	**159**		ug/L			173053	178365	0	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.001	0	201	9244	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 15:30:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	45757	1	Standard
⌈>	**Sc**	**45**		ug/L			330809	352525	1	Standard
|	**Al**	**27**	**1000.010**	ug/L	30.286	3	2334	26468702	2	Standard
|	**Cr**	**52**	**10.000**	ug/L	0.380	3	13927	256656	2	Standard
|	**Cr**	**53**	**10.001**	ug/L	0.246	2	305	27835	1	Standard
⌊	**Mn**	**55**	**10.000**	ug/L	0.200	1	504	354551	1	Standard
⌈>	**Ge**	**72**		ug/L			39846	40554	1	KED
|	**Co**	**59**	**10.000**	ug/L	0.201	2	61	57570	1	KED
|	**Ni**	**60**	**10.001**	ug/L	0.381	3	59	17107	2	KED
|	**Ni**	**62**	**10.001**	ug/L	0.245	2	10	2591	1	KED
|	**Cu**	**63**	**9.994**	ug/L	0.252	2	67	47151	1	KED
|	**Cu**	**65**	**9.993**	ug/L	0.097	0	26	23688	0	KED
|	**Zn**	**66**	**10.081**	ug/L	0.410	4	22	6733	2	KED
|	**Zn**	**67**	**10.198**	ug/L	0.331	3	3	1061	2	KED
|	**As**	**75**	**10.000**	ug/L	0.232	2	5	3228	0	KED
⌊	**Se**	**78**	**10.004**	ug/L	0.511	5	11	324	4	KED
	Kr	**83**		ug/L			53	57	8	Standard
⌈>	**In-1**	**115**		ug/L			9311	9322	2	KED
|	**Mo**	**98**	**10.000**	ug/L	0.399	3	10	15075	1	KED
|	**Cd**	**111**	**10.000**	ug/L	0.264	2	2	3395	1	KED
⌊	**Cd**	**114**	**10.000**	ug/L	0.282	2	8	8537	1	KED
⌈>	**In**	**115**		ug/L			399419	423194	2	Standard
|	**Ag**	**107**	**10.000**	ug/L	0.180	1	46	152775	1	Standard
|	**Ba**	**135**	**10.000**	ug/L	0.335	3	15	54787	0	Standard
⌊	**Ba**	**137**	**10.000**	ug/L	0.179	1	37	104428	1	Standard
⌈>	**Tb**	**159**		ug/L			173053	183421	0	Standard
⌊	**Pb**	**208**	**10.000**	ug/L	0.099	0	201	877644	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 15:36:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	47595	3	Standard
⎡>	**Sc**	**45**		ug/L			330809	351739	1	Standard
⎢	**Al**	**27**	**2000.805**	ug/L	34.694	1	2334	52926238	1	Standard
⎢	**Cr**	**52**	**20.004**	ug/L	0.381	1	13927	497920	1	Standard
⎢	**Cr**	**53**	**19.979**	ug/L	0.398	1	305	54943	1	Standard
⎣	**Mn**	**55**	**20.010**	ug/L	0.446	2	504	708686	1	Standard
⎡>	**Ge**	**72**		ug/L			39846	40958	0	KED
⎢	**Co**	**59**	**19.897**	ug/L	0.485	2	61	113307	1	KED
⎢	**Ni**	**60**	**19.844**	ug/L	0.317	1	59	33205	0	KED
⎢	**Ni**	**62**	**20.073**	ug/L	0.428	2	10	5320	2	KED
⎢	**Cu**	**63**	**19.922**	ug/L	0.288	1	67	93414	0	KED
⎢	**Cu**	**65**	**19.913**	ug/L	0.369	1	26	46833	1	KED
⎢	**Zn**	**66**	**19.726**	ug/L	0.119	0	22	12777	1	KED
⎢	**Zn**	**67**	**20.012**	ug/L	0.361	1	3	2104	1	KED
⎢	**As**	**75**	**19.936**	ug/L	0.225	1	5	6413	0	KED
⎣	**Se**	**78**	**20.063**	ug/L	0.208	1	11	653	0	KED
	Kr	**83**		ug/L			53	40	50	Standard
⎡>	**In-1**	**115**		ug/L			9311	9471	1	KED
⎢	**Mo**	**98**	**19.891**	ug/L	0.453	2	10	29817	0	KED
⎢	**Cd**	**111**	**19.822**	ug/L	0.606	3	2	6602	2	KED
⎣	**Cd**	**114**	**19.951**	ug/L	0.173	0	8	17137	1	KED
⎡>	**In**	**115**		ug/L			399419	429169	0	Standard
⎢	**Ag**	**107**	**19.856**	ug/L	0.529	2	46	299080	2	Standard
⎢	**Ba**	**135**	**20.009**	ug/L	0.126	0	15	111436	0	Standard
⎣	**Ba**	**137**	**19.925**	ug/L	0.122	0	37	207952	0	Standard
⎡>	**Tb**	**159**		ug/L			173053	183959	0	Standard
⎣	**Pb**	**208**	**19.983**	ug/L	0.203	1	201	1752724	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 15:41:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	44736	2	Standard
⌈>	**Sc**	**45**		ug/L			330809	349834	2	Standard
|	**Al**	**27**	**5002.670**	ug/L	85.281	1	2334	131936826	0	Standard
|	**Cr**	**52**	**49.828**	ug/L	0.750	1	13927	1191209	1	Standard
|	**Cr**	**53**	**49.818**	ug/L	0.724	1	305	133346	1	Standard
⌊	**Mn**	**55**	**49.804**	ug/L	0.314	0	504	1720189	2	Standard
⌈>	**Ge**	**72**		ug/L			39846	38077	3	KED
|	**Co**	**59**	**50.393**	ug/L	1.802	3	61	277406	0	KED
|	**Ni**	**60**	**50.261**	ug/L	1.344	2	59	80152	1	KED
|	**Ni**	**62**	**50.388**	ug/L	1.324	2	10	12894	2	KED
|	**Cu**	**63**	**50.072**	ug/L	1.547	3	67	219611	0	KED
|	**Cu**	**65**	**50.227**	ug/L	1.888	3	26	112257	1	KED
|	**Zn**	**66**	**50.095**	ug/L	1.624	3	22	30379	0	KED
|	**Zn**	**67**	**49.990**	ug/L	3.682	7	3	4873	5	KED
|	**As**	**75**	**50.336**	ug/L	1.209	2	5	15561	1	KED
⌊	**Se**	**78**	**50.148**	ug/L	0.560	1	11	1525	3	KED
	Kr	**83**		ug/L			53	56	3	Standard
⌈>	**In-1**	**115**		ug/L			9311	9162	4	KED
|	**Mo**	**98**	**50.124**	ug/L	2.310	4	10	73507	0	KED
|	**Cd**	**111**	**49.897**	ug/L	1.611	3	2	15901	0	KED
⌊	**Cd**	**114**	**49.751**	ug/L	2.030	4	8	40283	0	KED
⌈>	**In**	**115**		ug/L			399419	409733	3	Standard
|	**Ag**	**107**	**50.048**	ug/L	1.939	3	46	722531	0	Standard
|	**Ba**	**135**	**50.484**	ug/L	2.046	4	15	281808	1	Standard
⌊	**Ba**	**137**	**50.201**	ug/L	1.586	3	37	510053	0	Standard
⌈>	**Tb**	**159**		ug/L			173053	182863	1	Standard
⌊	**Pb**	**208**	**50.182**	ug/L	0.587	1	201	4455474	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 15:48:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	47319	1	Standard
⌈>	**Sc**	**45**		ug/L			330809	347968	1	Standard
|	**Al**	**27**	**9993.856**	ug/L	146.775	1	2334	261673101	0	Standard
|	**Cr**	**52**	**100.449**	ug/L	0.719	0	13927	2410037	0	Standard
|	**Cr**	**53**	**99.516**	ug/L	1.213	1	305	260500	2	Standard
⌊	**Mn**	**55**	**100.210**	ug/L	1.155	1	504	3466669	2	Standard
⌈>	**Ge**	**72**		ug/L			39846	38576	1	KED
|	**Co**	**59**	**99.502**	ug/L	0.924	0	61	546242	1	KED
|	**Ni**	**60**	**99.028**	ug/L	1.562	1	59	154979	0	KED
|	**Ni**	**62**	**98.838**	ug/L	3.763	3	10	24662	2	KED
|	**Cu**	**63**	**98.803**	ug/L	1.257	1	67	422414	1	KED
|	**Cu**	**65**	**98.726**	ug/L	1.132	1	26	214583	1	KED
|	**Zn**	**66**	**98.730**	ug/L	1.593	1	22	58237	0	KED
|	**Zn**	**67**	**99.578**	ug/L	0.802	0	3	9708	0	KED
|	**As**	**75**	**99.575**	ug/L	1.193	1	5	30761	0	KED
⌊	**Se**	**78**	**98.973**	ug/L	1.063	1	11	2939	2	KED
	Kr	**83**		ug/L			53	64	15	Standard
⌈>	**In-1**	**115**		ug/L			9311	9233	2	KED
|	**Mo**	**98**	**99.424**	ug/L	2.178	2	10	144285	0	KED
|	**Cd**	**111**	**99.240**	ug/L	2.879	2	2	31093	0	KED
⌊	**Cd**	**114**	**99.174**	ug/L	2.885	2	8	78791	0	KED
⌈>	**In**	**115**		ug/L			399419	407313	4	Standard
|	**Ag**	**107**	**99.778**	ug/L	3.274	3	46	1421330	1	Standard
|	**Ba**	**135**	**98.997**	ug/L	2.050	2	15	531703	2	Standard
⌊	**Ba**	**137**	**99.876**	ug/L	2.237	2	37	1004628	2	Standard
⌈>	**Tb**	**159**		ug/L			173053	182429	0	Standard
⌊	**Pb**	**208**	**99.600**	ug/L	2.205	2	201	8706750	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 15:55:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	41474	0	Standard
⎡>	**Sc**	**45**		ug/L			330809	337191	2	Standard
⎢	**Al**	**27**	**0.037**	ug/L	0.020	52	2334	3320	16	Standard
⎢	**Cr**	**52**	**0.002**	ug/L	0.012	558	13927	14239	1	Standard
⎢	**Cr**	**53**	**-0.012**	ug/L	0.005	43	305	281	2	Standard
⎣	**Mn**	**55**	**0.002**	ug/L	0.001	48	504	571	2	Standard
⎡>	**Ge**	**72**		ug/L			39846	39354	1	KED
⎢	**Co**	**59**	**-0.008**	ug/L	0.002	27	61	13	90	KED
⎢	**Ni**	**60**	**-0.015**	ug/L	0.003	20	59	34	14	KED
⎢	**Ni**	**62**	**-0.007**	ug/L	0.016	225	10	8	44	KED
⎢	**Cu**	**63**	**-0.009**	ug/L	0.001	16	67	29	19	KED
⎢	**Cu**	**65**	**-0.001**	ug/L	0.001	144	26	23	12	KED
⎢	**Zn**	**66**	**0.027**	ug/L	0.014	50	22	38	21	KED
⎢	**Zn**	**67**	**0.000**	ug/L	0.011	3252	3	3	34	KED
⎢	**As**	**75**	**0.004**	ug/L	0.004	97	5	7	17	KED
⎣	**Se**	**78**	**-0.002**	ug/L	0.198	8521	11	11	55	KED
	Kr	**83**		ug/L			53	52	24	Standard
⎡>	**In-1**	**115**		ug/L			9311	9513	2	KED
⎢	**Mo**	**98**	**0.026**	ug/L	0.006	22	10	50	18	KED
⎢	**Cd**	**111**	**0.017**	ug/L	0.006	33	2	7	25	KED
⎣	**Cd**	**114**	**0.003**	ug/L	0.004	121	8	10	26	KED
⎡>	**In**	**115**		ug/L			399419	403042	1	Standard
⎢	**Ag**	**107**	**0.003**	ug/L	0.000	13	46	90	5	Standard
⎢	**Ba**	**135**	**0.002**	ug/L	0.001	27	15	25	11	Standard
⎣	**Ba**	**137**	**0.001**	ug/L	0.001	70	37	49	16	Standard
⎡>	**Tb**	**159**		ug/L			173053	176176	0	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.000	13	201	379	5	Standard

Sample Information

Sample Date/Time: Tuesday, May 09, 2023 15:48:11
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.m
Mass Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

Calibration

Analyte	Mass	**r Corr Coef**	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Sc	45							
Al	27	**1.0000**	0.075	20.00	1000	2000	5000	10000
Cr	52	**1.0000**	0.069	0.50	10	20	50	100
Cr	53	**1.0000**	0.008	0.50	10	20	50	100
Mn	55	**1.0000**	0.099	0.50	10	20	50	100
Ge	72							
Co	59	**0.9999**	0.142	0.20	10	20	50	100
Ni	60	**0.9998**	0.041	0.50	10	20	50	100
Ni	62	**0.9997**	0.006	0.50	10	20	50	100
Cu	63	**0.9998**	0.111	0.50	10	20	50	100
Cu	65	**0.9997**	0.056	0.50	10	20	50	100
Zn	66	**0.9997**	0.015	6.00	10	20	50	100
Zn	67	**1.0000**	0.003	6.00	10	20	50	100
As	75	**0.9999**	0.008	0.20	10	20	50	100
Se	78	**0.9998**	0.001	0.50	10	20	50	100
Kr	83							
In-1	115							
Mo	98	**0.9999**	0.157	0.20	10	20	50	100
Cd	111	**0.9999**	0.034	0.10	10	20	50	100
Cd	114	**0.9999**	0.086	0.10	10	20	50	100
In	115							
Ag	107	**1.0000**	0.035	0.20	10	20	50	100
Ba	135	**0.9998**	0.013	0.50	10	20	50	100
Ba	137	**1.0000**	0.025	0.50	10	20	50	100
Tb	159							
Pb	208	**1.0000**	0.479	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:02:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	51030	0	Standard
⌈>	**Sc**	**45**		ug/L			330809	348289	1	Standard
|	**Al**	**27**	**5055.142**	ug/L	67.080	1	2334	132481604	0	Standard
|	**Cr**	**52**	**49.900**	ug/L	0.534	1	13927	1205645	0	Standard
|	**Cr**	**53**	**51.349**	ug/L	1.082	2	305	134661	1	Standard
⌊	**Mn**	**55**	**50.670**	ug/L	0.765	1	504	1754341	0	Standard
⌈>	**Ge**	**72**		ug/L			39846	39763	1	KED
|	**Co**	**59**	**49.745**	ug/L	0.122	0	61	281520	0	KED
|	**Ni**	**60**	**51.058**	ug/L	1.053	2	59	82393	1	KED
|	**Ni**	**62**	**51.063**	ug/L	1.423	2	10	13140	1	KED
|	**Cu**	**63**	**51.738**	ug/L	0.675	1	67	228017	0	KED
|	**Cu**	**65**	**51.510**	ug/L	0.653	1	26	115416	1	KED
|	**Zn**	**66**	**49.322**	ug/L	0.636	1	22	30000	0	KED
|	**Zn**	**67**	**50.105**	ug/L	1.472	2	3	5037	2	KED
|	**As**	**75**	**47.612**	ug/L	0.736	1	5	15163	0	KED
⌊	**Se**	**78**	**79.129**	ug/L	2.195	2	11	2424	3	KED
	Kr	**83**		ug/L			53	51	7	Standard
⌈>	**In-1**	**115**		ug/L			9311	9456	2	KED
|	**Mo**	**98**	**48.824**	ug/L	0.912	1	10	72575	0	KED
|	**Cd**	**111**	**50.002**	ug/L	1.123	2	2	16048	0	KED
⌊	**Cd**	**114**	**49.630**	ug/L	0.920	1	8	40393	0	KED
⌈>	**In**	**115**		ug/L			399419	407713	2	Standard
|	**Ag**	**107**	**51.697**	ug/L	1.768	3	46	737324	0	Standard
|	**Ba**	**135**	**51.629**	ug/L	2.097	4	15	277557	2	Standard
⌊	**Ba**	**137**	**51.335**	ug/L	2.490	4	37	516748	2	Standard
⌈>	**Tb**	**159**		ug/L			173053	182624	0	Standard
⌊	**Pb**	**208**	**51.461**	ug/L	0.294	0	201	4503392	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Tuesday, May 09, 2023 16:09:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	41853	1	Standard
>	Sc	45		ug/L			330809	321169	12	Standard
	Al	27	0.024	ug/L	0.010	40	2334	2819	4	Standard
	Cr	52	0.036	ug/L	0.071	199	13927	14178	2	Standard
	Cr	53	-0.007	ug/L	0.015	200	305	276	5	Standard
	Mn	55	0.002	ug/L	0.002	129	504	540	1	Standard
>	Ge	72		ug/L			39846	39840	0	KED
	Co	59	-0.009	ug/L	0.001	11	61	12	48	KED
	Ni	60	-0.012	ug/L	0.005	38	59	39	20	KED
	Ni	62	-0.010	ug/L	0.019	189	10	8	58	KED
	Cu	63	-0.008	ug/L	0.003	39	67	29	48	KED
	Cu	65	-0.004	ug/L	0.002	59	26	17	26	KED
	Zn	66	0.007	ug/L	0.005	72	22	26	12	KED
	Zn	67	0.025	ug/L	0.051	199	3	5	88	KED
	As	75	-0.005	ug/L	0.003	59	5	4	22	KED
	Se	78	0.006	ug/L	0.055	989	11	11	14	KED
	Kr	83		ug/L			53	43	15	Standard
>	In-1	115		ug/L			9311	9420	1	KED
	Mo	98	0.013	ug/L	0.007	52	10	30	32	KED
	Cd	111	0.011	ug/L	0.003	25	2	5	16	KED
	Cd	114	-0.002	ug/L	0.011	680	8	6	129	KED
>	In	115		ug/L			399419	373010	11	Standard
	Ag	107	0.003	ug/L	0.002	70	46	77	24	Standard
	Ba	135	0.001	ug/L	0.001	70	15	20	30	Standard
	Ba	137	0.002	ug/L	0.001	24	37	55	3	Standard
>	Tb	159		ug/L			173053	162830	8	Standard
	Pb	208	0.002	ug/L	0.000	19	201	343	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:14:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	41843	0	Standard
⌈>	**Sc**	**45**		ug/L			330809	342999	1	Standard
|	**Al**	**27**	**-0.006**	ug/L	0.005	88	2334	2271	5	Standard
|	**Cr**	**52**	**-0.012**	ug/L	0.017	146	13927	14160	2	Standard
|	**Cr**	**53**	**-0.020**	ug/L	0.007	35	305	265	6	Standard
⌊	**Mn**	**55**	**-0.001**	ug/L	0.000	71	504	500	3	Standard
⌈>	**Ge**	**72**		ug/L			39846	39973	1	KED
|	**Co**	**59**	**-0.009**	ug/L	0.000	3	61	9	20	KED
|	**Ni**	**60**	**-0.016**	ug/L	0.004	27	59	33	21	KED
|	**Ni**	**62**	**0.015**	ug/L	0.015	101	10	14	27	KED
|	**Cu**	**63**	**-0.010**	ug/L	0.001	13	67	22	30	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.003	91	26	18	39	KED
|	**Zn**	**66**	**0.022**	ug/L	0.014	65	22	35	24	KED
|	**Zn**	**67**	**0.013**	ug/L	0.030	232	3	4	65	KED
|	**As**	**75**	**-0.011**	ug/L	0.002	19	5	2	32	KED
⌊	**Se**	**78**	**-0.012**	ug/L	0.077	669	11	10	21	KED
	Kr	**83**		ug/L			53	49	13	Standard
⌈>	**In-1**	**115**		ug/L			9311	9338	1	KED
|	**Mo**	**98**	**0.002**	ug/L	0.006	351	10	13	66	KED
|	**Cd**	**111**	**0.011**	ug/L	0.006	52	2	5	33	KED
⌊	**Cd**	**114**	**-0.007**	ug/L	0.001	18	8	2	45	KED
⌈>	**In**	**115**		ug/L			399419	407275	1	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.001	2365	46	47	20	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.001	77	15	24	27	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.001	91	37	47	18	Standard
⌈>	**Tb**	**159**		ug/L			173053	175538	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	31	201	287	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:20:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	43825	1	Standard
⌈>	**Sc**	**45**		ug/L			330809	351713	1	Standard
|	**Al**	**27**	**5017.324**	ug/L	66.831	1	2334	132780299	1	Standard
|	**Cr**	**52**	**49.123**	ug/L	1.476	3	13927	1198689	2	Standard
|	**Cr**	**53**	**51.619**	ug/L	0.692	1	305	136698	0	Standard
⌊	**Mn**	**55**	**49.606**	ug/L	0.908	1	504	1734249	0	Standard
⌈>	**Ge**	**72**		ug/L			39846	40000	1	KED
|	**Co**	**59**	**48.873**	ug/L	1.174	2	61	278172	0	KED
|	**Ni**	**60**	**49.785**	ug/L	0.823	1	59	80817	0	KED
|	**Ni**	**62**	**50.064**	ug/L	1.069	2	10	12960	0	KED
|	**Cu**	**63**	**50.263**	ug/L	1.422	2	67	222822	2	KED
|	**Cu**	**65**	**50.231**	ug/L	0.497	0	26	113218	1	KED
|	**Zn**	**66**	**50.271**	ug/L	0.721	1	22	30759	0	KED
|	**Zn**	**67**	**50.586**	ug/L	2.193	4	3	5113	2	KED
|	**As**	**75**	**49.273**	ug/L	0.700	1	5	15785	0	KED
⌊	**Se**	**78**	**50.457**	ug/L	1.106	2	11	1558	1	KED
	Kr	**83**		ug/L			53	58	29	Standard
⌈>	**In-1**	**115**		ug/L			9311	9554	1	KED
|	**Mo**	**98**	**49.118**	ug/L	0.330	0	10	73793	0	KED
|	**Cd**	**111**	**49.809**	ug/L	0.460	0	2	16157	0	KED
⌊	**Cd**	**114**	**49.890**	ug/L	0.661	1	8	41037	0	KED
⌈>	**In**	**115**		ug/L			399419	420946	0	Standard
|	**Ag**	**107**	**50.017**	ug/L	0.387	0	46	737019	0	Standard
|	**Ba**	**135**	**48.935**	ug/L	1.070	2	15	271777	1	Standard
⌊	**Ba**	**137**	**49.517**	ug/L	1.055	2	37	515090	1	Standard
⌈>	**Tb**	**159**		ug/L			173053	183933	0	Standard
⌊	**Pb**	**208**	**50.246**	ug/L	0.471	0	201	4428518	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:27:45

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	41468	2	Standard
>	Sc	45		ug/L			330809	325907	10	Standard
	Al	27	0.264	ug/L	0.444	168	2334	9241	128	Standard
	Cr	52	0.030	ug/L	0.049	165	13927	14310	3	Standard
	Cr	53	-0.010	ug/L	0.013	124	305	274	11	Standard
	Mn	55	0.006	ug/L	0.007	122	504	687	40	Standard
>	Ge	72		ug/L			39846	40680	0	KED
	Co	59	-0.009	ug/L	0.001	7	61	9	40	KED
	Ni	60	-0.013	ug/L	0.007	54	59	39	29	KED
	Ni	62	-0.013	ug/L	0.019	150	10	7	66	KED
	Cu	63	-0.004	ug/L	0.004	88	67	48	35	KED
	Cu	65	-0.004	ug/L	0.002	54	26	17	29	KED
	Zn	66	0.026	ug/L	0.022	85	22	38	35	KED
	Zn	67	0.030	ug/L	0.039	127	3	6	62	KED
	As	75	-0.004	ug/L	0.010	258	5	4	65	KED
	Se	78	-0.004	ug/L	0.091	2092	11	11	24	KED
	Kr	83		ug/L			53	49	13	Standard
>	In-1	115		ug/L			9311	9519	3	KED
	Mo	98	0.010	ug/L	0.009	89	10	26	51	KED
	Cd	111	0.012	ug/L	0.004	37	2	6	24	KED
	Cd	114	-0.006	ug/L	0.004	58	8	3	96	KED
>	In	115		ug/L			399419	387542	11	Standard
	Ag	107	0.005	ug/L	0.006	116	46	119	77	Standard
	Ba	135	0.007	ug/L	0.007	102	15	52	79	Standard
	Ba	137	0.005	ug/L	0.005	98	37	85	61	Standard
>	Tb	159		ug/L			173053	167051	11	Standard
	Pb	208	0.005	ug/L	0.005	89	201	624	67	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:32:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	42147	0	Standard
⎡>	**Sc**	**45**		ug/L			330809	340888	1	Standard
⎢	**Al**	**27**	**0.003**	ug/L	0.003	86	2334	2482	3	Standard
⎢	**Cr**	**52**	**0.001**	ug/L	0.004	592	13927	14368	1	Standard
⎢	**Cr**	**53**	**-0.015**	ug/L	0.016	108	305	277	16	Standard
⎣	**Mn**	**55**	**-0.001**	ug/L	0.001	104	504	493	6	Standard
⎡>	**Ge**	**72**		ug/L			39846	39995	1	KED
⎢	**Co**	**59**	**-0.010**	ug/L	0.000	3	61	6	31	KED
⎢	**Ni**	**60**	**-0.010**	ug/L	0.005	52	59	43	17	KED
⎢	**Ni**	**62**	**-0.020**	ug/L	0.015	76	10	5	66	KED
⎢	**Cu**	**63**	**-0.007**	ug/L	0.001	7	67	37	5	KED
⎢	**Cu**	**65**	**-0.005**	ug/L	0.001	21	26	15	13	KED
⎢	**Zn**	**66**	**0.027**	ug/L	0.006	23	22	38	11	KED
⎢	**Zn**	**67**	**0.013**	ug/L	0.022	175	3	4	49	KED
⎢	**As**	**75**	**-0.007**	ug/L	0.002	33	5	3	19	KED
⎣	**Se**	**78**	**-0.007**	ug/L	0.036	517	11	11	8	KED
	Kr	**83**		ug/L			53	47	17	Standard
⎡>	**In-1**	**115**		ug/L			9311	9242	1	KED
⎢	**Mo**	**98**	**0.002**	ug/L	0.003	138	10	14	32	KED
⎢	**Cd**	**111**	**0.005**	ug/L	0.013	258	2	3	108	KED
⎣	**Cd**	**114**	**-0.005**	ug/L	0.004	78	8	3	90	KED
⎡>	**In**	**115**		ug/L			399419	405205	1	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.001	120	46	38	27	Standard
⎢	**Ba**	**135**	**0.001**	ug/L	0.000	19	15	22	4	Standard
⎣	**Ba**	**137**	**0.001**	ug/L	0.001	81	37	48	17	Standard
⎡>	**Tb**	**159**		ug/L			173053	174170	1	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.000	9	201	391	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:39:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	41773	0	Standard
⌈>	**Sc**	**45**		ug/L			330809	348291	1	Standard
|	**Al**	**27**	**19.792**	ug/L	0.092	0	2334	521196	1	Standard
|	**Cr**	**52**	**0.488**	ug/L	0.018	3	13927	26303	0	Standard
|	**Cr**	**53**	**0.510**	ug/L	0.011	2	305	1655	1	Standard
⌊	**Mn**	**55**	**0.502**	ug/L	0.005	1	504	17922	1	Standard
⌈>	**Ge**	**72**		ug/L			39846	41006	0	KED
|	**Co**	**59**	**0.194**	ug/L	0.005	2	61	1194	1	KED
|	**Ni**	**60**	**0.477**	ug/L	0.028	5	59	853	4	KED
|	**Ni**	**62**	**0.513**	ug/L	0.020	3	10	147	4	KED
|	**Cu**	**63**	**0.703**	ug/L	0.023	3	67	3265	2	KED
|	**Cu**	**65**	**0.709**	ug/L	0.009	1	26	1665	1	KED
|	**Zn**	**66**	**6.199**	ug/L	0.134	2	22	3908	2	KED
|	**Zn**	**67**	**5.777**	ug/L	0.453	7	3	601	7	KED
|	**As**	**75**	**0.206**	ug/L	0.027	12	5	73	12	KED
⌊	**Se**	**78**	**0.565**	ug/L	0.190	33	11	29	19	KED
	Kr	**83**		ug/L			53	41	25	Standard
⌈>	**In-1**	**115**		ug/L			9311	9695	0	KED
|	**Mo**	**98**	**0.185**	ug/L	0.019	10	10	293	9	KED
|	**Cd**	**111**	**0.097**	ug/L	0.026	26	2	34	24	KED
⌊	**Cd**	**114**	**0.095**	ug/L	0.013	13	8	87	11	KED
⌈>	**In**	**115**		ug/L			399419	413454	3	Standard
|	**Ag**	**107**	**0.217**	ug/L	0.002	0	46	3192	3	Standard
|	**Ba**	**135**	**0.520**	ug/L	0.027	5	15	2854	5	Standard
⌊	**Ba**	**137**	**0.516**	ug/L	0.032	6	37	5303	3	Standard
⌈>	**Tb**	**159**		ug/L			173053	178882	0	Standard
⌊	**Pb**	**208**	**0.104**	ug/L	0.000	0	201	9154	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments: DEL
Sample Date/Time: Tuesday, May 09, 2023 16:44:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	178413	0	Standard
>	Sc	45		ug/L			330809	319836	10	Standard
	Al	27	20673.419	ug/L	2512.933	12	2334	493384416	1	Standard
	Cr	52	0.693	ug/L	0.143	20	13927	28445	0	Standard
	Cr	53	3.584	ug/L	0.380	10	305	8844	1	Standard
	Mn	55	0.198	ug/L	0.027	13	504	6708	2	Standard
>	Ge	72		ug/L			39846	35200	1	KED
	Co	59	0.022	ug/L	0.003	14	61	163	8	KED
	Ni	60	0.094	ug/L	0.008	8	59	186	6	KED
	Ni	62	0.150	ug/L	0.028	18	10	43	15	KED
	Cu	63	0.031	ug/L	0.005	16	67	180	11	KED
	Cu	65	0.039	ug/L	0.004	11	26	100	9	KED
	Zn	66	0.280	ug/L	0.050	17	22	170	14	KED
	Zn	67	0.311	ug/L	0.033	10	3	30	10	KED
	As	75	0.024	ug/L	0.012	51	5	12	28	KED
	Se	78	-0.058	ug/L	0.060	103	11	8	20	KED
	Kr	83		ug/L			53	127	5	Standard
>	In-1	115		ug/L			9311	8388	2	KED
	Mo	98	393.408	ug/L	9.298	2	10	518636	0	KED
	Cd	111	0.089	ug/L	0.013	14	2	27	11	KED
	Cd	114	0.053	ug/L	0.011	20	8	45	18	KED
>	In	115		ug/L			399419	421531	9	Standard
	Ag	107	0.004	ug/L	0.001	34	46	110	8	Standard
	Ba	135	0.106	ug/L	0.002	2	15	606	7	Standard
	Ba	137	0.105	ug/L	0.014	13	37	1120	4	Standard
>	Tb	159		ug/L			173053	165411	10	Standard
	Pb	208	0.025	ug/L	0.003	14	201	2125	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:49:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	175638	0	Standard
>	**Sc**	**45**		ug/L			330809	339423	1	Standard
	Al	**27**	**18992.057**	ug/L	45.740	0	2334	485118632	1	Standard
	Cr	**52**	**19.239**	ug/L	0.158	0	13927	461816	0	Standard
	Cr	**53**	**22.578**	ug/L	0.085	0	305	57886	0	Standard
	Mn	**55**	**19.193**	ug/L	0.108	0	504	647999	0	Standard
>	**Ge**	**72**		ug/L			39846	34003	1	KED
	Co	**59**	**20.391**	ug/L	0.289	1	61	98695	0	KED
	Ni	**60**	**20.684**	ug/L	0.321	1	59	28576	2	KED
	Ni	**62**	**20.454**	ug/L	0.331	1	10	4507	2	KED
	Cu	**63**	**20.310**	ug/L	0.427	2	67	76567	1	KED
	Cu	**65**	**20.188**	ug/L	0.219	1	26	38689	0	KED
	Zn	**66**	**19.206**	ug/L	0.248	1	22	10000	0	KED
	Zn	**67**	**17.986**	ug/L	0.386	2	3	1548	2	KED
	As	**75**	**18.983**	ug/L	0.260	1	5	5172	0	KED
	Se	**78**	**0.069**	ug/L	0.056	82	11	11	14	KED
	Kr	**83**		ug/L			53	140	2	Standard
>	**In-1**	**115**		ug/L			9311	7800	2	KED
	Mo	**98**	**406.780**	ug/L	8.263	2	10	498752	0	KED
	Cd	**111**	**19.887**	ug/L	0.241	1	2	5267	0	KED
	Cd	**114**	**19.859**	ug/L	0.698	3	8	13335	1	KED
>	**In**	**115**		ug/L			399419	458230	2	Standard
	Ag	**107**	**16.458**	ug/L	0.235	1	46	263970	0	Standard
	Ba	**135**	**0.100**	ug/L	0.006	6	15	619	4	Standard
	Ba	**137**	**0.091**	ug/L	0.002	2	37	1078	4	Standard
>	**Tb**	**159**		ug/L			173053	175568	1	Standard
	Pb	**208**	**0.016**	ug/L	0.001	3	201	1560	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:54:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	170222	1	Standard
>	**Sc**	**45**		ug/L			330809	324648	2	Standard
	Al	**27**	**19352.192**	ug/L	285.516	1	2334	472726211	1	Standard
	Cr	**52**	**0.610**	ug/L	0.011	1	13927	27229	1	Standard
	Cr	**53**	**3.638**	ug/L	0.057	1	305	9175	3	Standard
	Mn	**55**	**0.176**	ug/L	0.003	1	504	6185	2	Standard
>	**Ge**	**72**		ug/L			39846	33021	1	KED
	Co	**59**	**0.025**	ug/L	0.003	14	61	168	11	KED
	Ni	**60**	**0.098**	ug/L	0.011	10	59	179	9	KED
	Ni	**62**	**0.139**	ug/L	0.007	5	10	38	5	KED
	Cu	**63**	**0.035**	ug/L	0.007	21	67	182	15	KED
	Cu	**65**	**0.042**	ug/L	0.008	19	26	99	13	KED
	Zn	**66**	**0.318**	ug/L	0.021	6	22	179	7	KED
	Zn	**67**	**0.197**	ug/L	0.069	34	3	19	30	KED
	As	**75**	**0.021**	ug/L	0.011	52	5	10	28	KED
	Se	**78**	**-0.010**	ug/L	0.158	1561	11	9	42	KED
	Kr	**83**		ug/L			53	132	13	Standard
>	**In-1**	**115**		ug/L			9311	7621	0	KED
	Mo	**98**	**403.581**	ug/L	2.915	0	10	483596	0	KED
	Cd	**111**	**0.083**	ug/L	0.014	16	2	23	15	KED
	Cd	**114**	**0.072**	ug/L	0.022	30	8	53	27	KED
>	**In**	**115**		ug/L			399419	454995	0	Standard
	Ag	**107**	**0.003**	ug/L	0.001	32	46	105	16	Standard
	Ba	**135**	**0.108**	ug/L	0.008	7	15	662	7	Standard
	Ba	**137**	**0.100**	ug/L	0.002	2	37	1167	2	Standard
>	**Tb**	**159**		ug/L			173053	173976	1	Standard
	Pb	**208**	**0.024**	ug/L	0.002	7	201	2168	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:59:26

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	48313	0	Standard
>	Sc	45		ug/L			330809	322847	0	Standard
	Al	27	19741.425	ug/L	71.368	0	2334	479639166	1	Standard
	Cr	52	198.542	ug/L	3.145	1	13927	4406890	2	Standard
	Cr	53	196.647	ug/L	0.344	0	305	477271	1	Standard
	Mn	55	201.779	ug/L	1.576	0	504	6475346	1	Standard
>	Ge	72		ug/L			39846	32623	0	KED
	Co	59	201.561	ug/L	1.970	0	61	935703	0	KED
	Ni	60	199.185	ug/L	3.001	1	59	263614	1	KED
	Ni	62	199.266	ug/L	1.436	0	10	42052	0	KED
	Cu	63	197.593	ug/L	2.018	1	67	714373	1	KED
	Cu	65	197.712	ug/L	1.492	0	26	363393	0	KED
	Zn	66	193.134	ug/L	0.267	0	22	96338	0	KED
	Zn	67	190.315	ug/L	4.102	2	3	15690	2	KED
	As	75	193.494	ug/L	1.405	0	5	50549	0	KED
	Se	78	191.006	ug/L	1.616	0	11	4787	1	KED
	Kr	83		ug/L			53	150	19	Standard
>	In-1	115		ug/L			9311	7778	1	KED
	Mo	98	201.948	ug/L	3.842	1	10	246930	0	KED
	Cd	111	194.681	ug/L	4.559	2	2	51396	0	KED
	Cd	114	197.729	ug/L	3.254	1	8	132379	0	KED
>	In	115		ug/L			399419	428093	2	Standard
	Ag	107	182.281	ug/L	4.583	2	46	2730498	1	Standard
	Ba	135	183.680	ug/L	3.486	1	15	1037101	1	Standard
	Ba	137	179.582	ug/L	3.813	2	37	1899009	0	Standard
>	Tb	159		ug/L			173053	172141	1	Standard
	Pb	208	205.647	ug/L	3.213	1	201	16960392	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:04:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	52276	0	Standard
⎡>	**Sc**	**45**		ug/L			330809	313429	3	Standard
⎢	**Al**	**27**	**31005.746**	ug/L	562.243	1	2334	731037211	1	Standard
⎢	**Cr**	**52**	**303.658**	ug/L	3.359	1	13927	6535199	2	Standard
⎢	**Cr**	**53**	**303.033**	ug/L	4.581	1	305	713647	1	Standard
⎣	**Mn**	**55**	**306.141**	ug/L	5.471	1	504	9533969	1	Standard
⎡>	**Ge**	**72**		ug/L			39846	32028	0	KED
⎢	**Co**	**59**	**307.176**	ug/L	0.922	0	61	1399949	0	KED
⎢	**Ni**	**60**	**303.679**	ug/L	2.108	0	59	394535	0	KED
⎢	**Ni**	**62**	**300.015**	ug/L	3.229	1	10	62152	0	KED
⎢	**Cu**	**63**	**298.175**	ug/L	1.109	0	67	1058290	0	KED
⎢	**Cu**	**65**	**292.324**	ug/L	4.504	1	26	527452	1	KED
⎢	**Zn**	**66**	**287.385**	ug/L	1.986	0	22	140723	0	KED
⎢	**Zn**	**67**	**280.785**	ug/L	2.491	0	3	22725	0	KED
⎢	**As**	**75**	**294.201**	ug/L	0.913	0	5	75455	0	KED
⎣	**Se**	**78**	**286.480**	ug/L	2.751	0	11	7045	1	KED
	Kr	**83**		ug/L			53	203	8	Standard
⎡>	**In-1**	**115**		ug/L			9311	7480	1	KED
⎢	**Mo**	**98**	**317.999**	ug/L	6.026	1	10	373953	1	KED
⎢	**Cd**	**111**	**295.955**	ug/L	4.835	1	2	75149	0	KED
⎣	**Cd**	**114**	**297.848**	ug/L	4.774	1	8	191772	0	KED
⎡>	**In**	**115**		ug/L			399419	399361	1	Standard
⎢	**Ag**	**107**	**285.536**	ug/L	7.252	2	46	3990262	0	Standard
⎢	**Ba**	**135**	**286.739**	ug/L	3.966	1	15	1510698	1	Standard
⎣	**Ba**	**137**	**298.906**	ug/L	2.154	0	37	2949511	1	Standard
⎡>	**Tb**	**159**		ug/L			173053	165043	0	Standard
⎣	**Pb**	**208**	**309.892**	ug/L	1.883	0	201	24508496	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:11:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	49173	1	Standard
⎡>	**Sc**	**45**		ug/L			330809	326774	2	Standard
⎢	**Al**	**27**	**19953.876**	ug/L	257.214	1	2334	490586538	1	Standard
⎢	**Cr**	**52**	**196.013**	ug/L	1.902	0	13927	4403434	2	Standard
⎢	**Cr**	**53**	**194.069**	ug/L	4.740	2	305	476559	0	Standard
⎣	**Mn**	**55**	**196.114**	ug/L	1.447	0	504	6370172	2	Standard
⎡>	**Ge**	**72**		ug/L			39846	33834	1	KED
⎢	**Co**	**59**	**199.526**	ug/L	1.362	0	61	960591	0	KED
⎢	**Ni**	**60**	**198.863**	ug/L	2.970	1	59	272911	0	KED
⎢	**Ni**	**62**	**198.206**	ug/L	3.678	1	10	43374	0	KED
⎢	**Cu**	**63**	**197.328**	ug/L	2.319	1	67	739866	1	KED
⎢	**Cu**	**65**	**196.798**	ug/L	0.431	0	26	375141	1	KED
⎢	**Zn**	**66**	**194.119**	ug/L	3.134	1	22	100408	0	KED
⎢	**Zn**	**67**	**193.033**	ug/L	3.419	1	3	16502	0	KED
⎢	**As**	**75**	**195.521**	ug/L	2.148	1	5	52970	0	KED
⎣	**Se**	**78**	**192.073**	ug/L	3.589	1	11	4992	0	KED
	Kr	**83**		ug/L			53	131	13	Standard
⎡>	**In-1**	**115**		ug/L			9311	7916	0	KED
⎢	**Mo**	**98**	**205.102**	ug/L	2.356	1	10	255288	0	KED
⎢	**Cd**	**111**	**198.168**	ug/L	0.577	0	2	53261	0	KED
⎣	**Cd**	**114**	**200.016**	ug/L	0.351	0	8	136315	0	KED
⎡>	**In**	**115**		ug/L			399419	410271	3	Standard
⎢	**Ag**	**107**	**183.336**	ug/L	2.976	1	46	2632172	2	Standard
⎢	**Ba**	**135**	**191.519**	ug/L	5.381	2	15	1036079	1	Standard
⎣	**Ba**	**137**	**186.709**	ug/L	2.306	1	37	1892433	2	Standard
⎡>	**Tb**	**159**		ug/L			173053	169948	1	Standard
⎣	**Pb**	**208**	**204.831**	ug/L	0.905	0	201	16680119	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:16:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	44220	1	Standard
⌈>	**Sc**	**45**		ug/L			330809	328384	0	Standard
|	**Al**	**27**	**0.139**	ug/L	0.019	13	2334	5739	7	Standard
|	**Cr**	**52**	**-0.030**	ug/L	0.010	33	13927	13160	1	Standard
|	**Cr**	**53**	**-0.005**	ug/L	0.004	92	305	291	2	Standard
⌊	**Mn**	**55**	**0.016**	ug/L	0.001	3	504	1019	2	Standard
⌈>	**Ge**	**72**		ug/L			39846	35764	0	KED
|	**Co**	**59**	**0.079**	ug/L	0.076	96	61	453	84	KED
|	**Ni**	**60**	**0.073**	ug/L	0.069	93	59	158	61	KED
|	**Ni**	**62**	**0.071**	ug/L	0.062	87	10	26	53	KED
|	**Cu**	**63**	**0.089**	ug/L	0.075	84	67	411	71	KED
|	**Cu**	**65**	**0.086**	ug/L	0.066	77	26	195	67	KED
|	**Zn**	**66**	**0.158**	ug/L	0.082	52	22	106	41	KED
|	**Zn**	**67**	**0.222**	ug/L	0.171	76	3	22	66	KED
|	**As**	**75**	**0.088**	ug/L	0.068	76	5	30	62	KED
⌊	**Se**	**78**	**0.026**	ug/L	0.017	67	11	10	3	KED
	Kr	**83**		ug/L			53	41	5	Standard
⌈>	**In-1**	**115**		ug/L			9311	8209	1	KED
|	**Mo**	**98**	**0.064**	ug/L	0.014	22	10	92	20	KED
|	**Cd**	**111**	**0.010**	ug/L	0.007	66	2	4	40	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.004	55	8	12	23	KED
⌈>	**In**	**115**		ug/L			399419	436393	1	Standard
|	**Ag**	**107**	**0.011**	ug/L	0.001	10	46	213	7	Standard
|	**Ba**	**135**	**0.020**	ug/L	0.001	2	15	131	2	Standard
⌊	**Ba**	**137**	**0.017**	ug/L	0.002	14	37	224	10	Standard
⌈>	**Tb**	**159**		ug/L			173053	168280	0	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.000	4	201	748	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:23:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	44378	0	Standard
⎡>	**Sc**	**45**		ug/L			330809	331508	1	Standard
⎢	**Al**	**27**	**0.125**	ug/L	0.088	70	2334	5461	41	Standard
⎢	**Cr**	**52**	**-0.010**	ug/L	0.011	112	13927	13730	2	Standard
⎢	**Cr**	**53**	**-0.011**	ug/L	0.002	18	305	277	3	Standard
⎣	**Mn**	**55**	**0.013**	ug/L	0.001	8	504	932	4	Standard
⎡>	**Ge**	**72**		ug/L			39846	36934	1	KED
⎢	**Co**	**59**	**-0.007**	ug/L	0.002	21	61	19	40	KED
⎢	**Ni**	**60**	**-0.009**	ug/L	0.004	41	59	41	13	KED
⎢	**Ni**	**62**	**0.001**	ug/L	0.017	2500	10	10	39	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.003	366	67	59	23	KED
⎢	**Cu**	**65**	**0.006**	ug/L	0.005	98	26	35	30	KED
⎢	**Zn**	**66**	**0.084**	ug/L	0.022	26	22	67	18	KED
⎢	**Zn**	**67**	**0.132**	ug/L	0.035	26	3	15	21	KED
⎢	**As**	**75**	**0.001**	ug/L	0.001	44	5	5	4	KED
⎣	**Se**	**78**	**-0.057**	ug/L	0.054	96	11	8	18	KED
	Kr	**83**		ug/L			53	42	13	Standard
⎡>	**In-1**	**115**		ug/L			9311	8509	1	KED
⎢	**Mo**	**98**	**0.039**	ug/L	0.032	80	10	62	68	KED
⎢	**Cd**	**111**	**0.023**	ug/L	0.034	151	2	8	115	KED
⎣	**Cd**	**114**	**0.004**	ug/L	0.005	119	8	10	36	KED
⎡>	**In**	**115**		ug/L			399419	429063	4	Standard
⎢	**Ag**	**107**	**0.004**	ug/L	0.001	19	46	102	10	Standard
⎢	**Ba**	**135**	**0.019**	ug/L	0.001	6	15	122	8	Standard
⎣	**Ba**	**137**	**0.015**	ug/L	0.001	7	37	200	7	Standard
⎡>	**Tb**	**159**		ug/L			173053	170125	1	Standard
⎣	**Pb**	**208**	**0.005**	ug/L	0.001	23	201	606	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:29:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	44583	1	Standard
⌈>	**Sc**	**45**		ug/L			330809	339834	1	Standard
|	**Al**	**27**	**5030.884**	ug/L	56.550	1	2334	128648322	0	Standard
|	**Cr**	**52**	**48.940**	ug/L	0.467	0	13927	1154071	0	Standard
|	**Cr**	**53**	**51.004**	ug/L	1.079	2	305	130528	2	Standard
⌊	**Mn**	**55**	**49.483**	ug/L	0.497	1	504	1671832	1	Standard
⌈>	**Ge**	**72**		ug/L			39846	36604	0	KED
|	**Co**	**59**	**50.587**	ug/L	0.991	1	61	263538	1	KED
|	**Ni**	**60**	**51.447**	ug/L	0.418	0	59	76431	0	KED
|	**Ni**	**62**	**51.192**	ug/L	0.463	0	10	12129	1	KED
|	**Cu**	**63**	**52.315**	ug/L	0.490	0	67	212254	0	KED
|	**Cu**	**65**	**52.209**	ug/L	0.649	1	26	107694	1	KED
|	**Zn**	**66**	**51.627**	ug/L	1.298	2	22	28906	1	KED
|	**Zn**	**67**	**51.769**	ug/L	1.778	3	3	4790	3	KED
|	**As**	**75**	**49.425**	ug/L	0.419	0	5	14491	0	KED
⌊	**Se**	**78**	**49.963**	ug/L	1.840	3	11	1412	2	KED
	Kr	**83**		ug/L			53	38	33	Standard
⌈>	**In-1**	**115**		ug/L			9311	8386	2	KED
|	**Mo**	**98**	**51.538**	ug/L	0.722	1	10	67950	0	KED
|	**Cd**	**111**	**52.327**	ug/L	0.646	1	2	14897	1	KED
⌊	**Cd**	**114**	**52.728**	ug/L	1.376	2	8	38058	0	KED
⌈>	**In**	**115**		ug/L			399419	427513	2	Standard
|	**Ag**	**107**	**47.359**	ug/L	0.435	0	46	708747	2	Standard
|	**Ba**	**135**	**48.344**	ug/L	0.506	1	15	272667	2	Standard
⌊	**Ba**	**137**	**48.160**	ug/L	0.598	1	37	508704	1	Standard
⌈>	**Tb**	**159**		ug/L			173053	176247	1	Standard
⌊	**Pb**	**208**	**51.551**	ug/L	1.150	2	201	4353163	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:36:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	42969	1	Standard
⌈>	**Sc**	**45**		ug/L			330809	334273	0	Standard
|	**Al**	**27**	**0.053**	ug/L	0.005	8	2334	3696	2	Standard
|	**Cr**	**52**	**-0.024**	ug/L	0.013	53	13927	13523	2	Standard
|	**Cr**	**53**	**-0.029**	ug/L	0.005	15	305	236	5	Standard
⌊	**Mn**	**55**	**0.001**	ug/L	0.001	41	504	554	3	Standard
⌈>	**Ge**	**72**		ug/L			39846	37744	0	KED
|	**Co**	**59**	**-0.008**	ug/L	0.001	9	61	16	24	KED
|	**Ni**	**60**	**-0.025**	ug/L	0.002	8	59	17	19	KED
|	**Ni**	**62**	**-0.019**	ug/L	0.021	110	10	5	88	KED
|	**Cu**	**63**	**-0.007**	ug/L	0.001	12	67	36	9	KED
|	**Cu**	**65**	**0.000**	ug/L	0.001	158	26	25	4	KED
|	**Zn**	**66**	**0.013**	ug/L	0.025	191	22	28	50	KED
|	**Zn**	**67**	**0.042**	ug/L	0.011	26	3	6	15	KED
|	**As**	**75**	**-0.006**	ug/L	0.003	47	5	3	21	KED
⌊	**Se**	**78**	**-0.078**	ug/L	0.107	136	11	8	36	KED
	Kr	**83**		ug/L			53	50	35	Standard
⌈>	**In-1**	**115**		ug/L			9311	8708	3	KED
|	**Mo**	**98**	**0.027**	ug/L	0.015	54	10	47	43	KED
|	**Cd**	**111**	**0.016**	ug/L	0.027	162	2	6	114	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.012	298	8	10	84	KED
⌈>	**In**	**115**		ug/L			399419	429969	3	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.000	7	46	106	3	Standard
|	**Ba**	**135**	**0.003**	ug/L	0.001	20	15	35	13	Standard
⌊	**Ba**	**137**	**0.002**	ug/L	0.001	79	37	59	23	Standard
⌈>	**Tb**	**159**		ug/L			173053	170863	1	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.001	14	201	521	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0256-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:44:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			41563	61493	1	Standard
> Sc	45		ug/L			330809	344234	0	Standard
Al	27	0.907	ug/L	0.001	0	2334	25925	0	Standard
Cr	52	0.021	ug/L	0.012	59	13927	14984	1	Standard
Cr	53	-0.000	ug/L	0.006	2089	305	317	4	Standard
Mn	55	0.032	ug/L	0.001	3	504	1619	2	Standard
> Ge	72		ug/L			39846	38337	1	KED
Co	59	-0.008	ug/L	0.001	18	61	16	48	KED
Ni	60	-0.017	ug/L	0.008	46	59	29	40	KED
Ni	62	-0.029	ug/L	0.005	15	10	3	34	KED
Cu	63	0.071	ug/L	0.008	10	67	368	9	KED
Cu	65	0.070	ug/L	0.006	8	26	175	6	KED
Zn	66	0.477	ug/L	0.030	6	22	300	7	KED
Zn	67	0.473	ug/L	0.074	15	3	48	14	KED
As	75	-0.008	ug/L	0.006	76	5	3	51	KED
Se	78	-0.068	ug/L	0.087	128	11	8	29	KED
Kr	83		ug/L			53	48	13	Standard
> In-1	115		ug/L			9311	9099	2	KED
Mo	98	0.021	ug/L	0.007	31	10	40	22	KED
Cd	111	0.007	ug/L	0.007	98	2	4	49	KED
Cd	114	-0.001	ug/L	0.007	550	8	6	79	KED
> In	115		ug/L			399419	433020	0	Standard
Ag	107	0.000	ug/L	0.000	154	46	53	10	Standard
Ba	135	0.039	ug/L	0.004	10	15	237	8	Standard
Ba	137	0.036	ug/L	0.004	9	37	426	8	Standard
> Tb	159		ug/L			173053	175697	0	Standard
Pb	208	0.002	ug/L	0.000	16	201	345	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0256-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:49:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			41563	68216	0	Standard
> Sc	45		ug/L			330809	346232	1	Standard
Al	27	5121.085	ug/L	60.412	1	2334	133433342	2	Standard
Cr	52	24.481	ug/L	0.104	0	13927	595482	1	Standard
Cr	53	25.383	ug/L	0.167	0	305	66347	1	Standard
Mn	55	24.899	ug/L	0.150	0	504	857407	2	Standard
> Ge	72		ug/L			39846	35317	8	KED
Co	59	26.753	ug/L	2.525	9	61	133789	1	KED
Ni	60	26.926	ug/L	2.427	9	59	38426	0	KED
Ni	62	27.390	ug/L	2.719	9	10	6231	1	KED
Cu	63	27.216	ug/L	2.442	8	67	106032	0	KED
Cu	65	26.994	ug/L	2.474	9	26	53454	0	KED
Zn	66	85.006	ug/L	8.681	10	22	45650	1	KED
Zn	67	81.130	ug/L	7.965	9	3	7203	1	KED
As	75	25.961	ug/L	2.582	9	5	7305	1	KED
Se	78	82.535	ug/L	7.381	8	11	2234	2	KED
Kr	83		ug/L			53	55	18	Standard
> In-1	115		ug/L			9311	8647	2	KED
Mo	98	26.090	ug/L	0.866	3	10	35465	1	KED
Cd	111	25.295	ug/L	0.424	1	2	7427	2	KED
Cd	114	25.797	ug/L	0.357	1	8	19210	2	KED
> In	115		ug/L			399419	436102	2	Standard
Ag	107	23.945	ug/L	0.432	1	46	365595	3	Standard
Ba	135	24.901	ug/L	0.238	0	15	143271	1	Standard
Ba	137	23.729	ug/L	0.674	2	37	255658	1	Standard
> Tb	159		ug/L			173053	175809	0	Standard
Pb	208	25.404	ug/L	0.092	0	201	2140350	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0192-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:55:30
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	189824	1	Standard
>	Sc	45		ug/L			330809	331540	2	Standard
	Al	27	1.055	ug/L	0.051	4	2334	28633	1	Standard
	Cr	52	0.905	ug/L	0.025	2	13927	34507	1	Standard
	Cr	53	0.670	ug/L	0.031	4	305	1973	3	Standard
	Mn	55	83.790	ug/L	1.019	1	504	2760980	1	Standard
>	Ge	72		ug/L			39846	33686	0	KED
	Co	59	0.190	ug/L	0.009	4	61	961	3	KED
	Ni	60	1.186	ug/L	0.027	2	59	1669	2	KED
	Ni	62	1.168	ug/L	0.008	0	10	263	0	KED
	Cu	63	0.028	ug/L	0.009	31	67	162	19	KED
	Cu	65	0.045	ug/L	0.012	26	26	106	20	KED
	Zn	66	0.648	ug/L	0.106	16	22	352	14	KED
	Zn	67	1.110	ug/L	0.041	3	3	97	3	KED
	As	75	0.062	ug/L	0.008	13	5	21	9	KED
	Se	78	0.005	ug/L	0.117	2564	11	9	32	KED
	Kr	83		ug/L			53	47	30	Standard
>	In-1	115		ug/L			9311	7843	0	KED
	Mo	98	0.839	ug/L	0.052	6	10	1043	6	KED
	Cd	111	0.016	ug/L	0.006	35	2	6	24	KED
	Cd	114	-0.001	ug/L	0.004	341	8	5	47	KED
>	In	115		ug/L			399419	438145	3	Standard
	Ag	107	0.001	ug/L	0.000	41	46	69	14	Standard
	Ba	135	6.922	ug/L	0.227	3	15	40002	0	Standard
	Ba	137	6.605	ug/L	0.216	3	37	71503	0	Standard
>	Tb	159		ug/L			173053	165981	0	Standard
	Pb	208	0.004	ug/L	0.000	7	201	493	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0179-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:01:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	60398	0	Standard
>	Sc	45		ug/L			330809	328186	8	Standard
	Al	27	15.112	ug/L	1.215	8	2334	373789	1	Standard
	Cr	52	0.283	ug/L	0.081	28	13927	20086	1	Standard
	Cr	53	0.263	ug/L	0.031	11	305	948	5	Standard
	Mn	55	9.726	ug/L	0.747	7	504	316375	2	Standard
>	Ge	72		ug/L			39846	35095	2	KED
	Co	59	0.116	ug/L	0.007	6	61	632	3	KED
	Ni	60	0.381	ug/L	0.037	9	59	593	7	KED
	Ni	62	0.392	ug/L	0.060	15	10	98	11	KED
	Cu	63	3.614	ug/L	0.039	1	67	14113	1	KED
	Cu	65	3.598	ug/L	0.074	2	26	7135	1	KED
	Zn	66	260.001	ug/L	4.512	1	22	139476	0	KED
	Zn	67	244.228	ug/L	2.847	1	3	21657	1	KED
	As	75	0.349	ug/L	0.016	4	5	103	2	KED
	Se	78	-0.032	ug/L	0.066	205	11	9	21	KED
	Kr	83		ug/L			53	47	17	Standard
>	In-1	115		ug/L			9311	8284	0	KED
	Mo	98	0.221	ug/L	0.015	6	10	297	6	KED
	Cd	111	0.689	ug/L	0.039	5	2	195	5	KED
	Cd	114	0.647	ug/L	0.053	8	8	468	8	KED
>	In	115		ug/L			399419	432019	9	Standard
	Ag	107	0.002	ug/L	0.002	76	46	81	26	Standard
	Ba	135	8.602	ug/L	1.029	11	15	48689	2	Standard
	Ba	137	8.317	ug/L	0.889	10	37	88242	0	Standard
>	Tb	159		ug/L			173053	161522	8	Standard
	Pb	208	0.219	ug/L	0.019	8	201	17064	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0141-05
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:07:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	52924	1	Standard
>	Sc	45		ug/L			330809	341461	2	Standard
	Al	27	61.633	ug/L	1.682	2	2334	1585403	0	Standard
	Cr	52	2.785	ug/L	0.117	4	13927	79499	1	Standard
	Cr	53	2.701	ug/L	0.043	1	305	7244	2	Standard
	Mn	55	3.301	ug/L	0.051	1	504	112539	2	Standard
>	Ge	72		ug/L			39846	34352	1	KED
	Co	59	0.006	ug/L	0.004	72	61	82	24	KED
	Ni	60	0.135	ug/L	0.008	5	59	239	3	KED
	Ni	62	0.155	ug/L	0.036	23	10	43	19	KED
	Cu	63	1.180	ug/L	0.018	1	67	4549	0	KED
	Cu	65	1.199	ug/L	0.041	3	26	2342	1	KED
	Zn	66	0.794	ug/L	0.103	12	22	436	12	KED
	Zn	67	0.657	ug/L	0.150	22	3	59	21	KED
	As	75	0.014	ug/L	0.019	138	5	8	57	KED
	Se	78	0.006	ug/L	0.095	1513	11	9	24	KED
	Kr	83		ug/L			53	48	27	Standard
>	In-1	115		ug/L			9311	7763	1	KED
	Mo	98	1.043	ug/L	0.034	3	10	1281	1	KED
	Cd	111	0.004	ug/L	0.011	283	2	2	100	KED
	Cd	114	-0.004	ug/L	0.002	41	8	4	25	KED
>	In	115		ug/L			399419	447020	2	Standard
	Ag	107	-0.001	ug/L	0.000	28	46	34	15	Standard
	Ba	135	0.241	ug/L	0.009	3	15	1436	4	Standard
	Ba	137	0.222	ug/L	0.010	4	37	2487	2	Standard
>	Tb	159		ug/L			173053	169100	0	Standard
	Pb	208	0.006	ug/L	0.000	3	201	680	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0096-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:13:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			41563	470063	1	Standard
> Sc	45		ug/L			330809	323722	3	Standard
Al	27	6.095	ug/L	0.160	2	2334	150693	1	Standard
Cr	52	2.267	ug/L	0.039	1	13927	63915	1	Standard
Cr	53	1.877	ug/L	0.044	2	305	4863	0	Standard
Mn	55	12.516	ug/L	0.179	1	504	403110	1	Standard
> Ge	72		ug/L			39846	30290	0	KED
Co	59	0.238	ug/L	0.021	8	61	1072	9	KED
Ni	60	4.271	ug/L	0.073	1	59	5291	0	KED
Ni	62	4.169	ug/L	0.409	9	10	825	10	KED
Cu	63	3.098	ug/L	0.034	1	67	10448	0	KED
Cu	65	3.043	ug/L	0.049	1	26	5211	1	KED
Zn	66	4.701	ug/L	0.224	4	22	2193	4	KED
Zn	67	6.665	ug/L	0.386	5	3	512	4	KED
As	75	0.085	ug/L	0.012	14	5	25	12	KED
Se	78	0.085	ug/L	0.229	269	11	10	49	KED
Kr	83		ug/L			53	56	8	Standard
> In-1	115		ug/L			9311	7086	1	KED
Mo	98	3.459	ug/L	0.034	0	10	3862	2	KED
Cd	111	0.063	ug/L	0.020	31	2	16	28	KED
Cd	114	0.043	ug/L	0.002	5	8	32	6	KED
> In	115		ug/L			399419	439580	3	Standard
Ag	107	-0.001	ug/L	0.001	44	46	31	24	Standard
Ba	135	43.924	ug/L	1.330	3	15	254601	0	Standard
Ba	137	41.233	ug/L	1.244	3	37	447652	0	Standard
> Tb	159		ug/L			173053	163713	1	Standard
Pb	208	0.049	ug/L	0.001	2	201	4006	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0453-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:19:30
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			41563	467188	1	Standard
> Sc	45		ug/L			330809	264702	2	Standard
Al	27	1.789	ug/L	0.065	3	2334	37484	1	Standard
Cr	52	2.326	ug/L	0.014	0	13927	53347	2	Standard
Cr	53	2.016	ug/L	0.029	1	305	4253	2	Standard
Mn	55	90.714	ug/L	0.679	0	504	2386795	2	Standard
> Ge	72		ug/L			39846	23335	1	KED
Co	59	0.924	ug/L	0.015	1	61	3103	0	KED
Ni	60	8.803	ug/L	0.077	0	59	8367	2	KED
Ni	62	8.517	ug/L	0.394	4	10	1291	4	KED
Cu	63	1.575	ug/L	0.058	3	67	4113	5	KED
Cu	65	1.629	ug/L	0.015	0	26	2156	1	KED
Zn	66	9.219	ug/L	0.134	1	22	3301	1	KED
Zn	67	9.015	ug/L	0.346	3	3	533	3	KED
As	75	0.181	ug/L	0.019	10	5	37	10	KED
Se	78	0.030	ug/L	0.197	666	11	7	49	KED
Kr	83		ug/L			53	76	7	Standard
> In-1	115		ug/L			9311	5637	1	KED
Mo	98	4.020	ug/L	0.093	2	10	3568	1	KED
Cd	111	0.129	ug/L	0.025	18	2	26	16	KED
Cd	114	0.086	ug/L	0.024	28	8	46	23	KED
> In	115		ug/L			399419	364153	1	Standard
Ag	107	0.001	ug/L	0.000	42	46	53	8	Standard
Ba	135	14.760	ug/L	0.168	1	15	70933	2	Standard
Ba	137	13.836	ug/L	0.067	0	37	124533	0	Standard
> Tb	159		ug/L			173053	145714	0	Standard
Pb	208	0.013	ug/L	0.001	4	201	1095	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:24:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	45606	1	Standard
⎡>	**Sc**	**45**		ug/L			330809	307255	2	Standard
⎢	**Al**	**27**	**0.016**	ug/L	0.004	26	2334	2527	0	Standard
⎢	**Cr**	**52**	**0.139**	ug/L	0.010	7	13927	15868	2	Standard
⎢	**Cr**	**53**	**-0.023**	ug/L	0.004	18	305	231	4	Standard
⎣	**Mn**	**55**	**0.002**	ug/L	0.000	20	504	536	2	Standard
⎡>	**Ge**	**72**		ug/L			39846	32401	1	KED
⎢	**Co**	**59**	**-0.010**	ug/L	0.000	4	61	5	33	KED
⎢	**Ni**	**60**	**-0.024**	ug/L	0.004	14	59	15	30	KED
⎢	**Ni**	**62**	**-0.024**	ug/L	0.015	65	10	3	86	KED
⎢	**Cu**	**63**	**-0.005**	ug/L	0.004	73	67	35	38	KED
⎢	**Cu**	**65**	**-0.001**	ug/L	0.002	291	26	19	20	KED
⎢	**Zn**	**66**	**0.145**	ug/L	0.025	17	22	90	15	KED
⎢	**Zn**	**67**	**0.239**	ug/L	0.165	69	3	22	62	KED
⎢	**As**	**75**	**-0.010**	ug/L	0.002	19	5	2	26	KED
⎣	**Se**	**78**	**-0.061**	ug/L	0.128	208	11	7	42	KED
	Kr	**83**		ug/L			53	37	26	Standard
⎡>	**In-1**	**115**		ug/L			9311	7506	1	KED
⎢	**Mo**	**98**	**-0.004**	ug/L	0.001	22	10	3	29	KED
⎢	**Cd**	**111**	**0.007**	ug/L	0.004	64	2	3	31	KED
⎣	**Cd**	**114**	**-0.004**	ug/L	0.009	259	8	4	142	KED
⎡>	**In**	**115**		ug/L			399419	444777	1	Standard
⎢	**Ag**	**107**	**-0.002**	ug/L	0.000	21	46	19	36	Standard
⎢	**Ba**	**135**	**0.007**	ug/L	0.002	33	15	57	21	Standard
⎣	**Ba**	**137**	**0.006**	ug/L	0.002	29	37	109	18	Standard
⎡>	**Tb**	**159**		ug/L			173053	162882	2	Standard
⎣	**Pb**	**208**	**0.004**	ug/L	0.001	11	201	540	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0595-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:29:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			41563	217510	1	Standard
> Sc	45		ug/L			330809	342435	1	Standard
Al	27	31.824	ug/L	0.499	1	2334	822422	1	Standard
Cr	52	19.730	ug/L	0.247	1	13927	477459	2	Standard
Cr	53	20.893	ug/L	0.184	0	305	54064	0	Standard
Mn	55	39.455	ug/L	0.383	0	504	1343286	0	Standard
> Ge	72		ug/L			39846	33867	0	KED
Co	59	0.242	ug/L	0.009	3	61	1217	3	KED
Ni	60	9.441	ug/L	0.159	1	59	13019	1	KED
Ni	62	9.301	ug/L	0.119	1	10	2046	1	KED
Cu	63	2.664	ug/L	0.025	0	67	10056	0	KED
Cu	65	2.573	ug/L	0.048	1	26	4931	1	KED
Zn	66	312.435	ug/L	5.661	1	22	161764	1	KED
Zn	67	290.044	ug/L	0.893	0	3	24823	0	KED
As	75	0.016	ug/L	0.004	23	5	9	10	KED
Se	78	-0.141	ug/L	0.058	41	11	5	25	KED
Kr	83		ug/L			53	42	15	Standard
> In-1	115		ug/L			9311	7696	1	KED
Mo	98	0.158	ug/L	0.016	9	10	200	7	KED
Cd	111	0.702	ug/L	0.030	4	2	185	4	KED
Cd	114	0.730	ug/L	0.032	4	8	490	4	KED
> In	115		ug/L			399419	472892	1	Standard
Ag	107	-0.000	ug/L	0.001	454	46	52	21	Standard
Ba	135	3.767	ug/L	0.076	2	15	23519	0	Standard
Ba	137	3.536	ug/L	0.078	2	37	41354	1	Standard
> Tb	159		ug/L			173053	170648	0	Standard
Pb	208	0.155	ug/L	0.004	2	201	12854	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:35:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	43564	2	Standard
⎡>	**Sc**	**45**		ug/L			330809	314941	1	Standard
⎢	**Al**	**27**	**0.014**	ug/L	0.003	20	2334	2549	2	Standard
⎢	**Cr**	**52**	**-0.038**	ug/L	0.007	18	13927	12445	1	Standard
⎢	**Cr**	**53**	**-0.034**	ug/L	0.006	16	305	210	7	Standard
⎣	**Mn**	**55**	**0.001**	ug/L	0.001	215	504	500	8	Standard
⎡>	**Ge**	**72**		ug/L			39846	34168	1	KED
⎢	**Co**	**59**	**-0.010**	ug/L	0.000	3	61	3	50	KED
⎢	**Ni**	**60**	**-0.024**	ug/L	0.004	17	59	17	33	KED
⎢	**Ni**	**62**	**-0.025**	ug/L	0.000	0	10	3	0	KED
⎢	**Cu**	**63**	**-0.006**	ug/L	0.001	11	67	35	6	KED
⎢	**Cu**	**65**	**0.001**	ug/L	0.004	374	26	24	27	KED
⎢	**Zn**	**66**	**0.158**	ug/L	0.027	17	22	101	13	KED
⎢	**Zn**	**67**	**0.093**	ug/L	0.033	35	3	10	26	KED
⎢	**As**	**75**	**-0.012**	ug/L	0.005	45	5	1	83	KED
⎣	**Se**	**78**	**-0.051**	ug/L	0.024	48	11	8	8	KED
	Kr	**83**		ug/L			53	38	19	Standard
⎡>	**In-1**	**115**		ug/L			9311	7896	0	KED
⎢	**Mo**	**98**	**-0.004**	ug/L	0.003	73	10	4	71	KED
⎢	**Cd**	**111**	**0.007**	ug/L	0.007	98	2	3	50	KED
⎣	**Cd**	**114**	**-0.006**	ug/L	0.003	59	8	3	72	KED
⎡>	**In**	**115**		ug/L			399419	463464	1	Standard
⎢	**Ag**	**107**	**-0.002**	ug/L	0.001	28	46	24	35	Standard
⎢	**Ba**	**135**	**0.007**	ug/L	0.003	35	15	61	24	Standard
⎣	**Ba**	**137**	**0.006**	ug/L	0.001	14	37	113	9	Standard
⎡>	**Tb**	**159**		ug/L			173053	165309	0	Standard
⎣	**Pb**	**208**	**0.004**	ug/L	0.000	9	201	539	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:40:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	43588	1	Standard
>	**Sc**	**45**		ug/L			330809	337577	3	Standard
	Al	**27**	**4990.853**	ug/L	138.174	2	2334	126726667	1	Standard
	Cr	**52**	**48.378**	ug/L	1.262	2	13927	1132847	0	Standard
	Cr	**53**	**50.449**	ug/L	0.708	1	305	128222	1	Standard
	Mn	**55**	**50.233**	ug/L	0.526	1	504	1685718	2	Standard
>	**Ge**	**72**		ug/L			39846	34741	1	KED
	Co	**59**	**50.848**	ug/L	0.098	0	61	251423	1	KED
	Ni	**60**	**51.512**	ug/L	0.883	1	59	72624	0	KED
	Ni	**62**	**51.601**	ug/L	0.648	1	10	11602	1	KED
	Cu	**63**	**52.642**	ug/L	0.697	1	67	202695	0	KED
	Cu	**65**	**52.433**	ug/L	0.794	1	26	102631	0	KED
	Zn	**66**	**52.649**	ug/L	0.949	1	22	27976	0	KED
	Zn	**67**	**52.513**	ug/L	2.147	4	3	4611	3	KED
	As	**75**	**49.237**	ug/L	1.014	2	5	13699	1	KED
	Se	**78**	**50.234**	ug/L	0.652	1	11	1348	0	KED
	Kr	**83**		ug/L			53	49	7	Standard
>	**In-1**	**115**		ug/L			9311	8141	0	KED
	Mo	**98**	**50.976**	ug/L	0.810	1	10	65258	1	KED
	Cd	**111**	**51.337**	ug/L	0.106	0	2	14190	0	KED
	Cd	**114**	**51.796**	ug/L	0.528	1	8	36304	0	KED
>	**In**	**115**		ug/L			399419	465743	0	Standard
	Ag	**107**	**44.992**	ug/L	0.986	2	46	733544	2	Standard
	Ba	**135**	**45.534**	ug/L	0.929	2	15	279803	1	Standard
	Ba	**137**	**43.749**	ug/L	0.819	1	37	503512	1	Standard
>	**Tb**	**159**		ug/L			173053	175419	0	Standard
	Pb	**208**	**53.785**	ug/L	0.549	1	201	4520944	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:47:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	42485	0	Standard
⌈>	**Sc**	**45**		ug/L			330809	312260	3	Standard
|	**Al**	**27**	**0.043**	ug/L	0.006	14	2334	3217	5	Standard
|	**Cr**	**52**	**-0.030**	ug/L	0.019	62	13927	12501	1	Standard
|	**Cr**	**53**	**-0.048**	ug/L	0.004	8	305	175	7	Standard
⌊	**Mn**	**55**	**-0.000**	ug/L	0.000	67	504	470	3	Standard
⌈>	**Ge**	**72**		ug/L			39846	35618	1	KED
|	**Co**	**59**	**-0.010**	ug/L	0.001	8	61	6	62	KED
|	**Ni**	**60**	**-0.026**	ug/L	0.005	19	59	15	45	KED
|	**Ni**	**62**	**-0.028**	ug/L	0.010	33	10	3	69	KED
|	**Cu**	**63**	**-0.009**	ug/L	0.001	11	67	24	15	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.004	136	26	17	44	KED
|	**Zn**	**66**	**0.035**	ug/L	0.006	17	22	38	10	KED
|	**Zn**	**67**	**0.068**	ug/L	0.086	126	3	8	86	KED
|	**As**	**75**	**-0.006**	ug/L	0.005	85	5	3	37	KED
⌊	**Se**	**78**	**-0.035**	ug/L	0.092	264	11	9	29	KED
	Kr	**83**		ug/L			53	46	2	Standard
⌈>	**In-1**	**115**		ug/L			9311	8219	2	KED
|	**Mo**	**98**	**0.010**	ug/L	0.006	62	10	22	37	KED
|	**Cd**	**111**	**0.008**	ug/L	0.014	179	2	4	93	KED
⌊	**Cd**	**114**	**-0.005**	ug/L	0.006	112	8	3	106	KED
⌈>	**In**	**115**		ug/L			399419	435446	4	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.000	63	46	60	12	Standard
|	**Ba**	**135**	**0.001**	ug/L	0.002	149	15	23	44	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.001	78	37	50	13	Standard
⌈>	**Tb**	**159**		ug/L			173053	162511	4	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	11	201	514	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:54:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				42090	0	Standard
⌈>	**Sc**	**45**		ug/L				332961	2	Standard
|	**Cr**	**52**		ug/L				12895	2	Standard
|	**Cr**	**53**		ug/L				187	6	Standard
⌊	**Mn**	**55**		ug/L				424	3	Standard
⌈>	**Ge**	**72**		ug/L				35628	1	KED
|	**Ni**	**60**		ug/L				10	26	KED
|	**Ni**	**62**		ug/L				2	86	KED
|	**Cu**	**63**		ug/L				12	37	KED
|	**Cu**	**65**		ug/L				10	47	KED
|	**Zn**	**66**		ug/L				20	39	KED
|	**Zn**	**67**		ug/L				2	43	KED
⌊	**As**	**75**		ug/L				3	34	KED
	Kr	**83**		ug/L				45	4	Standard
⌈>	**In-1**	**115**		ug/L				8466	3	KED
|	**Cd**	**111**		ug/L				1	34	KED
⌊	**Cd**	**114**		ug/L				3	52	KED
⌈>	**In**	**115**		ug/L				448865	1	Standard
|	**Ag**	**107**		ug/L				40	9	Standard
|	**Ba**	**135**		ug/L				11	44	Standard
⌊	**Ba**	**137**		ug/L				19	5	Standard
⌈>	**Tb**	**159**		ug/L				168501	1	Standard
⌊	**Pb**	**208**		ug/L				172	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:59:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	42861	2	Standard
>	**Sc**	**45**		ug/L			332961	342352	1	Standard
	Cr	**52**	**48.393**	ug/L	0.603	1	12895	1148797	2	Standard
	Cr	**53**	**50.240**	ug/L	0.892	1	187	129428	2	Standard
	Mn	**55**	**49.914**	ug/L	0.939	1	424	1698864	2	Standard
>	**Ge**	**72**		ug/L			35628	36455	0	KED
	Ni	**60**	**51.317**	ug/L	0.584	1	10	75887	0	KED
	Ni	**62**	**52.179**	ug/L	0.556	1	2	12304	0	KED
	Cu	**63**	**52.820**	ug/L	0.430	0	12	213390	0	KED
	Cu	**65**	**52.452**	ug/L	0.162	0	10	107736	0	KED
	Zn	**66**	**51.454**	ug/L	0.954	1	20	28694	1	KED
	Zn	**67**	**50.889**	ug/L	0.102	0	2	4690	0	KED
	As	**75**	**49.075**	ug/L	0.432	0	3	14328	0	KED
	Kr	**83**		ug/L			45	52	24	Standard
>	**In-1**	**115**		ug/L			8466	8452	1	KED
	Cd	**111**	**50.990**	ug/L	0.707	1	1	14631	0	KED
	Cd	**114**	**51.137**	ug/L	0.782	1	3	37206	0	KED
>	**In**	**115**		ug/L			448865	462302	1	Standard
	Ag	**107**	**45.329**	ug/L	0.211	0	40	733525	1	Standard
	Ba	**135**	**46.066**	ug/L	1.132	2	11	280911	0	Standard
	Ba	**137**	**44.112**	ug/L	0.954	2	19	503821	0	Standard
>	**Tb**	**159**		ug/L			168501	176683	1	Standard
	Pb	**208**	**52.096**	ug/L	0.628	1	172	4410480	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:06:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	43305	0	Standard
⌈>	**Sc**	**45**		ug/L			332961	328091	3	Standard
|	**Cr**	**52**	**-0.003**	ug/L	0.021	824	12895	12638	1	Standard
|	**Cr**	**53**	**-0.002**	ug/L	0.007	364	187	180	8	Standard
⌊	**Mn**	**55**	**-0.001**	ug/L	0.001	97	424	396	8	Standard
⌈>	**Ge**	**72**		ug/L			35628	37144	2	KED
|	**Ni**	**60**	**-0.002**	ug/L	0.004	246	10	8	61	KED
|	**Ni**	**62**	**0.005**	ug/L	0.008	160	2	3	50	KED
|	**Cu**	**63**	**0.003**	ug/L	0.001	56	12	24	24	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.003	373	10	8	75	KED
|	**Zn**	**66**	**-0.004**	ug/L	0.013	353	20	19	36	KED
|	**Zn**	**67**	**0.032**	ug/L	0.034	104	2	5	57	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.002	223	3	3	24	KED
	Kr	**83**		ug/L			45	29	30	Standard
⌈>	**In-1**	**115**		ug/L			8466	8638	2	KED
|	**Cd**	**111**	**0.033**	ug/L	0.059	176	1	11	152	KED
⌊	**Cd**	**114**	**0.034**	ug/L	0.046	136	3	29	119	KED
⌈>	**In**	**115**		ug/L			448865	441677	2	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	73	40	62	24	Standard
|	**Ba**	**135**	**-0.001**	ug/L	0.000	54	11	7	25	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.001	328	19	20	24	Standard
⌈>	**Tb**	**159**		ug/L			168501	167164	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	34	172	233	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0119-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:14:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42090	69068	0	Standard
>	Sc	45		ug/L			332961	339062	1	Standard
	Cr	52	0.181	ug/L	0.004	2	12895	17337	1	Standard
	Cr	53	0.157	ug/L	0.005	2	187	589	3	Standard
	Mn	55	0.145	ug/L	0.001	0	424	5314	1	Standard
>	Ge	72		ug/L			35628	37186	1	KED
	Ni	60	0.016	ug/L	0.004	26	10	34	16	KED
	Ni	62	0.007	ug/L	0.012	162	2	4	65	KED
	Cu	63	0.080	ug/L	0.007	8	12	342	9	KED
	Cu	65	0.082	ug/L	0.013	15	10	182	13	KED
	Zn	66	2.195	ug/L	0.033	1	20	1268	0	KED
	Zn	67	2.421	ug/L	0.311	12	2	229	11	KED
	As	75	-0.003	ug/L	0.004	142	3	2	52	KED
	Kr	83		ug/L			45	41	18	Standard
>	In-1	115		ug/L			8466	8759	2	KED
	Cd	111	0.010	ug/L	0.006	59	1	4	40	KED
	Cd	114	0.003	ug/L	0.003	80	3	6	34	KED
>	In	115		ug/L			448865	455179	2	Standard
	Ag	107	0.000	ug/L	0.001	1022	40	41	18	Standard
	Ba	135	0.057	ug/L	0.010	18	11	354	15	Standard
	Ba	137	0.051	ug/L	0.001	1	19	593	4	Standard
>	Tb	159		ug/L			168501	172687	0	Standard
	Pb	208	0.014	ug/L	0.001	4	172	1316	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0119-BS1
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Tuesday, May 09, 2023 19:18:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	65913	0	Standard
⌈>	**Sc**	**45**		ug/L			332961	337655	1	Standard
|	**Cr**	**52**	**24.707**	ug/L	0.281	1	12895	584791	1	Standard
|	**Cr**	**53**	**25.988**	ug/L	0.282	1	187	66120	2	Standard
⌊	**Mn**	**55**	**25.988**	ug/L	0.313	1	424	872658	2	Standard
⌈>	**Ge**	**72**		ug/L			35628	34015	11	KED
|	**Ni**	**60**	**28.928**	ug/L	3.451	11	10	39543	0	KED
|	**Ni**	**62**	**28.971**	ug/L	3.148	10	2	6321	1	KED
|	**Cu**	**63**	**29.976**	ug/L	3.547	11	12	111942	0	KED
|	**Cu**	**65**	**29.702**	ug/L	3.366	11	10	56417	1	KED
|	**Zn**	**66**	**92.071**	ug/L	10.538	11	20	47464	1	KED
|	**Zn**	**67**	**86.466**	ug/L	8.847	10	2	7373	2	KED
⌊	**As**	**75**	**26.430**	ug/L	3.010	11	3	7137	1	KED
	Kr	**83**		ug/L			45	52	18	Standard
⌈>	**In-1**	**115**		ug/L			8466	8450	2	KED
|	**Cd**	**111**	**26.183**	ug/L	0.785	2	1	7513	4	KED
⌊	**Cd**	**114**	**25.912**	ug/L	0.660	2	3	18853	3	KED
⌈>	**In**	**115**		ug/L			448865	445725	2	Standard
|	**Ag**	**107**	**24.031**	ug/L	0.079	0	40	374977	2	Standard
|	**Ba**	**135**	**24.589**	ug/L	0.460	1	11	144563	0	Standard
⌊	**Ba**	**137**	**23.305**	ug/L	0.435	1	19	256642	1	Standard
⌈>	**Tb**	**159**		ug/L			168501	171848	1	Standard
⌊	**Pb**	**208**	**27.383**	ug/L	0.294	1	172	2254912	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0119-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:24:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42090	66007	3	Standard
>	Sc	45		ug/L			332961	335680	0	Standard
	Cr	52	25.125	ug/L	0.269	1	12895	590992	0	Standard
	Cr	53	26.262	ug/L	0.360	1	187	66416	0	Standard
	Mn	55	26.567	ug/L	0.430	1	424	886840	2	Standard
>	Ge	72		ug/L			35628	36217	1	KED
	Ni	60	26.843	ug/L	0.265	0	10	39440	1	KED
	Ni	62	26.232	ug/L	0.186	0	2	6147	2	KED
	Cu	63	28.057	ug/L	0.145	0	12	112608	1	KED
	Cu	65	27.702	ug/L	0.192	0	10	56528	0	KED
	Zn	66	87.024	ug/L	0.889	1	20	48202	1	KED
	Zn	67	80.670	ug/L	1.801	2	2	7384	2	KED
	As	75	24.830	ug/L	0.352	1	3	7202	0	KED
	Kr	83		ug/L			45	45	24	Standard
>	In-1	115		ug/L			8466	8619	2	KED
	Cd	111	26.006	ug/L	0.880	3	1	7607	1	KED
	Cd	114	25.666	ug/L	0.481	1	3	19046	3	KED
>	In	115		ug/L			448865	461265	1	Standard
	Ag	107	23.687	ug/L	0.621	2	40	382366	1	Standard
	Ba	135	23.848	ug/L	0.457	1	11	145107	0	Standard
	Ba	137	22.774	ug/L	0.436	1	19	259535	0	Standard
>	Tb	159		ug/L			168501	172071	1	Standard
	Pb	208	27.496	ug/L	0.504	1	172	2266962	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0134-BLK2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:29:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42090	64759	1	Standard
>	Sc	45		ug/L			332961	333825	0	Standard
	Cr	52	0.150	ug/L	0.017	11	12895	16368	1	Standard
	Cr	53	0.098	ug/L	0.001	1	187	433	0	Standard
	Mn	55	0.382	ug/L	0.007	1	424	13092	1	Standard
>	Ge	72		ug/L			35628	36493	0	KED
	Ni	60	0.011	ug/L	0.004	34	10	27	21	KED
	Ni	62	0.021	ug/L	0.014	65	2	7	43	KED
	Cu	63	0.061	ug/L	0.004	6	12	257	6	KED
	Cu	65	0.057	ug/L	0.004	6	10	127	6	KED
	Zn	66	0.632	ug/L	0.030	4	20	373	5	KED
	Zn	67	0.674	ug/L	0.051	7	2	64	7	KED
	As	75	-0.001	ug/L	0.002	115	3	2	16	KED
	Kr	83		ug/L			45	43	15	Standard
>	In-1	115		ug/L			8466	8432	2	KED
	Cd	111	0.006	ug/L	0.005	95	1	3	45	KED
	Cd	114	-0.002	ug/L	0.001	63	3	2	52	KED
>	In	115		ug/L			448865	446651	1	Standard
	Ag	107	0.002	ug/L	0.001	22	40	76	11	Standard
	Ba	135	0.135	ug/L	0.003	2	11	808	2	Standard
	Ba	137	0.138	ug/L	0.008	6	19	1536	4	Standard
>	Tb	159		ug/L			168501	170397	0	Standard
	Pb	208	0.014	ug/L	0.000	2	172	1323	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0134-BS2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:33:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42090	71232	1	Standard
>	Sc	45		ug/L			332961	346017	4	Standard
	Cr	52	26.359	ug/L	0.539	2	12895	638177	2	Standard
	Cr	53	26.857	ug/L	0.944	3	187	69946	1	Standard
	Mn	55	27.397	ug/L	0.898	3	424	941818	0	Standard
>	Ge	72		ug/L			35628	37051	0	KED
	Ni	60	27.210	ug/L	0.160	0	10	40901	0	KED
	Ni	62	27.077	ug/L	0.546	2	2	6490	1	KED
	Cu	63	27.661	ug/L	0.364	1	12	113578	1	KED
	Cu	65	27.335	ug/L	0.171	0	10	57069	0	KED
	Zn	66	87.930	ug/L	2.293	2	20	49824	2	KED
	Zn	67	84.630	ug/L	1.547	1	2	7925	1	KED
	As	75	26.088	ug/L	0.110	0	3	7743	0	KED
	Kr	83		ug/L			45	43	19	Standard
>	In-1	115		ug/L			8466	8673	1	KED
	Cd	111	26.748	ug/L	0.446	1	1	7876	1	KED
	Cd	114	26.501	ug/L	0.294	1	3	19788	0	KED
>	In	115		ug/L			448865	446416	4	Standard
	Ag	107	24.717	ug/L	0.883	3	40	385850	1	Standard
	Ba	135	25.657	ug/L	1.120	4	11	150929	0	Standard
	Ba	137	24.866	ug/L	1.144	4	19	273928	0	Standard
>	Tb	159		ug/L			168501	174613	1	Standard
	Pb	208	27.396	ug/L	0.538	1	172	2291862	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0297-08
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:39:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	63336	1	Standard
>	**Sc**	**45**		ug/L			332961	361093	0	Standard
	Cr	**52**	**2.659**	ug/L	0.037	1	12895	79801	1	Standard
	Cr	**53**	**2.804**	ug/L	0.029	1	187	7809	0	Standard
	Mn	**55**	**20.060**	ug/L	0.199	0	424	720449	1	Standard
>	**Ge**	**72**		ug/L			35628	38084	1	KED
	Ni	**60**	**1.908**	ug/L	0.071	3	10	2957	1	KED
	Ni	**62**	**2.012**	ug/L	0.197	9	2	497	8	KED
	Cu	**63**	**8.245**	ug/L	0.289	3	12	34803	3	KED
	Cu	**65**	**8.023**	ug/L	0.246	3	10	17218	1	KED
	Zn	**66**	**58.360**	ug/L	0.766	1	20	33994	1	KED
	Zn	**67**	**54.364**	ug/L	0.893	1	2	5234	2	KED
	As	**75**	**0.298**	ug/L	0.021	6	3	94	8	KED
	Kr	**83**		ug/L			45	36	10	Standard
>	**In-1**	**115**		ug/L			8466	9035	0	KED
	Cd	**111**	**0.142**	ug/L	0.014	10	1	45	10	KED
	Cd	**114**	**0.127**	ug/L	0.014	10	3	103	11	KED
>	**In**	**115**		ug/L			448865	454440	2	Standard
	Ag	**107**	**0.016**	ug/L	0.001	3	40	297	5	Standard
	Ba	**135**	**34.910**	ug/L	0.298	0	11	209327	2	Standard
	Ba	**137**	**33.851**	ug/L	0.731	2	19	380014	0	Standard
>	**Tb**	**159**		ug/L			168501	176044	2	Standard
	Pb	**208**	**1.550**	ug/L	0.017	1	172	130891	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0420-07
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:44:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	57200	1	Standard
⌈>	**Sc**	**45**		ug/L			332961	394052	1	Standard
|	**Cr**	**52**	**3.550**	ug/L	0.045	1	12895	111142	1	Standard
|	**Cr**	**53**	**3.770**	ug/L	0.025	0	187	11382	0	Standard
⌊	**Mn**	**55**	**35.202**	ug/L	0.529	1	424	1379290	2	Standard
⌈>	**Ge**	**72**		ug/L			35628	38427	0	KED
|	**Ni**	**60**	**3.195**	ug/L	0.048	1	10	4990	0	KED
|	**Ni**	**62**	**3.067**	ug/L	0.150	4	2	765	5	KED
|	**Cu**	**63**	**8.997**	ug/L	0.227	2	12	38323	2	KED
|	**Cu**	**65**	**8.861**	ug/L	0.055	0	10	19193	1	KED
|	**Zn**	**66**	**16.189**	ug/L	0.177	1	20	9531	0	KED
|	**Zn**	**67**	**15.504**	ug/L	0.281	1	2	1508	1	KED
⌊	**As**	**75**	**1.747**	ug/L	0.039	2	3	540	1	KED
	Kr	**83**		ug/L			45	50	20	Standard
⌈>	**In-1**	**115**		ug/L			8466	8966	2	KED
|	**Cd**	**111**	**0.058**	ug/L	0.022	38	1	19	32	KED
⌊	**Cd**	**114**	**0.056**	ug/L	0.025	43	3	47	41	KED
⌈>	**In**	**115**		ug/L			448865	451130	0	Standard
|	**Ag**	**107**	**0.045**	ug/L	0.001	1	40	747	1	Standard
|	**Ba**	**135**	**9.899**	ug/L	0.110	1	11	58931	0	Standard
⌊	**Ba**	**137**	**9.514**	ug/L	0.045	0	19	106082	0	Standard
⌈>	**Tb**	**159**		ug/L			168501	182935	0	Standard
⌊	**Pb**	**208**	**4.120**	ug/L	0.046	1	172	361352	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0595-01RE1
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:48:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	86976	0	Standard
⌈>	**Sc**	**45**		ug/L			332961	350786	1	Standard
|	**Cr**	**52**	**4.243**	ug/L	0.071	1	12895	115582	0	Standard
|	**Cr**	**53**	**4.406**	ug/L	0.060	1	187	11808	1	Standard
⌊	**Mn**	**55**	**8.323**	ug/L	0.022	0	424	290623	1	Standard
⌈>	**Ge**	**72**		ug/L			35628	38226	1	KED
|	**Ni**	**60**	**1.962**	ug/L	0.009	0	10	3053	1	KED
|	**Ni**	**62**	**1.984**	ug/L	0.144	7	2	493	8	KED
|	**Cu**	**63**	**0.540**	ug/L	0.014	2	12	2302	1	KED
|	**Cu**	**65**	**0.534**	ug/L	0.015	2	10	1160	1	KED
|	**Zn**	**66**	**64.841**	ug/L	1.522	2	20	37905	1	KED
|	**Zn**	**67**	**59.897**	ug/L	1.863	3	2	5787	2	KED
⌊	**As**	**75**	**0.002**	ug/L	0.003	188	3	3	27	KED
	Kr	**83**		ug/L			45	49	16	Standard
⌈>	**In-1**	**115**		ug/L			8466	8893	0	KED
|	**Cd**	**111**	**0.149**	ug/L	0.010	6	1	46	6	KED
⌊	**Cd**	**114**	**0.141**	ug/L	0.008	5	3	111	5	KED
⌈>	**In**	**115**		ug/L			448865	460930	2	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	44	40	33	11	Standard
|	**Ba**	**135**	**0.814**	ug/L	0.043	5	11	4957	2	Standard
⌊	**Ba**	**137**	**0.775**	ug/L	0.018	2	19	8846	1	Standard
⌈>	**Tb**	**159**		ug/L			168501	173712	0	Standard
⌊	**Pb**	**208**	**0.058**	ug/L	0.001	0	172	4972	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0453-01RE1
Sample Dil Factor: 10
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:53:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	160873	1	Standard
⌈>	**Sc**	**45**		ug/L			332961	319215	1	Standard
|	**Cr**	**52**	**0.694**	ug/L	0.020	2	12895	27543	2	Standard
|	**Cr**	**53**	**0.492**	ug/L	0.016	3	187	1358	3	Standard
⌊	**Mn**	**55**	**18.991**	ug/L	0.252	1	424	602918	1	Standard
⌈>	**Ge**	**72**		ug/L			35628	31894	0	KED
|	**Ni**	**60**	**1.833**	ug/L	0.037	2	10	2380	1	KED
|	**Ni**	**62**	**1.692**	ug/L	0.259	15	2	351	14	KED
|	**Cu**	**63**	**0.341**	ug/L	0.012	3	12	1217	2	KED
|	**Cu**	**65**	**0.349**	ug/L	0.005	1	10	636	0	KED
|	**Zn**	**66**	**2.228**	ug/L	0.061	2	20	1104	2	KED
|	**Zn**	**67**	**2.398**	ug/L	0.051	2	2	195	2	KED
⌊	**As**	**75**	**0.037**	ug/L	0.011	29	3	12	22	KED
	Kr	**83**		ug/L			45	40	17	Standard
⌈>	**In-1**	**115**		ug/L			8466	7512	1	KED
|	**Cd**	**111**	**0.034**	ug/L	0.009	26	1	10	23	KED
⌊	**Cd**	**114**	**0.030**	ug/L	0.017	56	3	22	47	KED
⌈>	**In**	**115**		ug/L			448865	434309	1	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	230	40	38	5	Standard
|	**Ba**	**135**	**2.900**	ug/L	0.038	1	11	16628	0	Standard
⌊	**Ba**	**137**	**2.774**	ug/L	0.007	0	19	29791	2	Standard
⌈>	**Tb**	**159**		ug/L			168501	164060	1	Standard
⌊	**Pb**	**208**	**0.028**	ug/L	0.001	2	172	2397	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:57:28
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	45612	0	Standard
⌈>	**Sc**	**45**		ug/L			332961	316987	2	Standard
|	**Cr**	**52**	**0.186**	ug/L	0.031	16	12895	16303	2	Standard
|	**Cr**	**53**	**0.014**	ug/L	0.005	34	187	211	6	Standard
⌊	**Mn**	**55**	**0.006**	ug/L	0.000	6	424	589	1	Standard
⌈>	**Ge**	**72**		ug/L			35628	34677	0	KED
|	**Ni**	**60**	**0.000**	ug/L	0.002	764	10	10	20	KED
|	**Ni**	**62**	**0.000**	ug/L	0.005	1626	2	2	43	KED
|	**Cu**	**63**	**0.008**	ug/L	0.001	19	12	41	14	KED
|	**Cu**	**65**	**0.006**	ug/L	0.003	60	10	20	32	KED
|	**Zn**	**66**	**0.131**	ug/L	0.024	18	20	89	14	KED
|	**Zn**	**67**	**0.117**	ug/L	0.026	22	2	12	17	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.002	147	3	2	20	KED
	Kr	**83**		ug/L			45	43	0	Standard
⌈>	**In-1**	**115**		ug/L			8466	7845	2	KED
|	**Cd**	**111**	**0.008**	ug/L	0.008	101	1	3	56	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	302	3	4	65	KED
⌈>	**In**	**115**		ug/L			448865	441414	2	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.000	85	40	31	24	Standard
|	**Ba**	**135**	**0.007**	ug/L	0.002	33	11	54	28	Standard
⌊	**Ba**	**137**	**0.008**	ug/L	0.002	21	19	106	15	Standard
⌈>	**Tb**	**159**		ug/L			168501	161328	1	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	5	172	499	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:01:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	43287	1	Standard
>	**Sc**	**45**		ug/L			332961	331897	2	Standard
	Cr	**52**	**48.217**	ug/L	0.398	0	12895	1109511	1	Standard
	Cr	**53**	**49.743**	ug/L	0.721	1	187	124207	1	Standard
	Mn	**55**	**49.306**	ug/L	0.636	1	424	1626734	1	Standard
>	**Ge**	**72**		ug/L			35628	34508	1	KED
	Ni	**60**	**52.467**	ug/L	0.830	1	10	73432	0	KED
	Ni	**62**	**52.382**	ug/L	0.571	1	2	11691	0	KED
	Cu	**63**	**53.232**	ug/L	1.745	3	12	203489	1	KED
	Cu	**65**	**52.855**	ug/L	1.433	2	10	102731	0	KED
	Zn	**66**	**53.194**	ug/L	1.136	2	20	28074	0	KED
	Zn	**67**	**51.354**	ug/L	2.201	4	2	4478	2	KED
	As	**75**	**49.582**	ug/L	1.327	2	3	13699	0	KED
	Kr	**83**		ug/L			45	50	9	Standard
>	**In-1**	**115**		ug/L			8466	7968	2	KED
	Cd	**111**	**52.053**	ug/L	1.431	2	1	14075	0	KED
	Cd	**114**	**52.906**	ug/L	0.442	0	3	36290	2	KED
>	**In**	**115**		ug/L			448865	449953	3	Standard
	Ag	**107**	**45.191**	ug/L	1.998	4	40	711151	1	Standard
	Ba	**135**	**45.689**	ug/L	0.752	1	11	271161	2	Standard
	Ba	**137**	**44.108**	ug/L	1.306	2	19	490120	0	Standard
>	**Tb**	**159**		ug/L			168501	169763	1	Standard
	Pb	**208**	**53.053**	ug/L	0.593	1	172	4315405	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:09:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	42299	1	Standard
⌈>	**Sc**	**45**		ug/L			332961	324014	2	Standard
|	**Cr**	**52**	**-0.011**	ug/L	0.004	35	12895	12291	2	Standard
|	**Cr**	**53**	**-0.006**	ug/L	0.010	156	187	166	11	Standard
⌊	**Mn**	**55**	**-0.001**	ug/L	0.000	1	424	384	2	Standard
⌈>	**Ge**	**72**		ug/L			35628	36283	0	KED
|	**Ni**	**60**	**0.000**	ug/L	0.003	1217	10	11	44	KED
|	**Ni**	**62**	**0.003**	ug/L	0.013	488	2	3	91	KED
|	**Cu**	**63**	**0.004**	ug/L	0.002	63	12	27	34	KED
|	**Cu**	**65**	**0.002**	ug/L	0.005	258	10	13	67	KED
|	**Zn**	**66**	**0.001**	ug/L	0.015	2913	20	20	39	KED
|	**Zn**	**67**	**0.020**	ug/L	0.031	156	2	4	65	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.005	2146	3	3	43	KED
	Kr	**83**		ug/L			45	43	4	Standard
⌈>	**In-1**	**115**		ug/L			8466	8302	2	KED
|	**Cd**	**111**	**0.009**	ug/L	0.005	52	1	4	35	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	386	3	4	67	KED
⌈>	**In**	**115**		ug/L			448865	450959	3	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	136	40	56	41	Standard
|	**Ba**	**135**	**0.001**	ug/L	0.001	132	11	14	30	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.000	91	19	24	15	Standard
⌈>	**Tb**	**159**		ug/L			168501	165161	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	16	172	229	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0715-02
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:15:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	52300	1	Standard
⌈>	**Sc**	**45**		ug/L			332961	356794	1	Standard
|	**Cr**	**52**	**0.610**	ug/L	0.013	2	12895	28735	2	Standard
|	**Cr**	**53**	**2.613**	ug/L	0.100	3	187	7208	4	Standard
⌊	**Mn**	**55**	**0.119**	ug/L	0.003	2	424	4680	1	Standard
⌈>	**Ge**	**72**		ug/L			35628	32041	0	KED
|	**Ni**	**60**	**0.621**	ug/L	0.036	5	10	816	5	KED
|	**Ni**	**62**	**0.681**	ug/L	0.002	0	2	143	0	KED
|	**Cu**	**63**	**0.187**	ug/L	0.009	4	12	675	4	KED
|	**Cu**	**65**	**0.195**	ug/L	0.014	6	10	361	6	KED
|	**Zn**	**66**	**0.315**	ug/L	0.062	19	20	172	17	KED
|	**Zn**	**67**	**0.937**	ug/L	0.156	16	2	78	15	KED
⌊	**As**	**75**	**20.112**	ug/L	0.129	0	3	5162	1	KED
	Kr	**83**		ug/L			45	33	25	Standard
⌈>	**In-1**	**115**		ug/L			8466	7504	1	KED
|	**Cd**	**111**	**0.024**	ug/L	0.007	29	1	7	25	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.003	30	3	10	21	KED
⌈>	**In**	**115**		ug/L			448865	419320	1	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.001	239	40	41	25	Standard
|	**Ba**	**135**	**7.144**	ug/L	0.105	1	11	39531	0	Standard
⌊	**Ba**	**137**	**6.762**	ug/L	0.169	2	19	70067	1	Standard
⌈>	**Tb**	**159**		ug/L			168501	155378	0	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.001	10	172	637	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0715-04
Sample Dil Factor: 50
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:23:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	48545	1	Standard
⌈>	**Sc**	**45**		ug/L			332961	320770	1	Standard
|	**Cr**	**52**	**7.376**	ug/L	0.083	1	12895	174567	0	Standard
|	**Cr**	**53**	**8.209**	ug/L	0.082	1	187	19964	2	Standard
⌊	**Mn**	**55**	**0.300**	ug/L	0.005	1	424	9974	2	Standard
⌈>	**Ge**	**72**		ug/L			35628	34764	0	KED
|	**Ni**	**60**	**0.364**	ug/L	0.010	2	10	524	3	KED
|	**Ni**	**62**	**0.364**	ug/L	0.020	5	2	84	5	KED
|	**Cu**	**63**	**0.030**	ug/L	0.004	13	12	128	12	KED
|	**Cu**	**65**	**0.036**	ug/L	0.009	25	10	80	21	KED
|	**Zn**	**66**	**0.094**	ug/L	0.026	27	20	69	19	KED
|	**Zn**	**67**	**0.102**	ug/L	0.076	74	2	11	57	KED
⌊	**As**	**75**	**1.011**	ug/L	0.056	5	3	284	5	KED
	Kr	**83**		ug/L			45	40	4	Standard
⌈>	**In-1**	**115**		ug/L			8466	8083	1	KED
|	**Cd**	**111**	**0.008**	ug/L	0.000	2	1	3	0	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.000	23	3	3	2	KED
⌈>	**In**	**115**		ug/L			448865	426257	1	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.001	51	40	19	52	Standard
|	**Ba**	**135**	**0.338**	ug/L	0.007	1	11	1913	2	Standard
⌊	**Ba**	**137**	**0.319**	ug/L	0.005	1	19	3376	2	Standard
⌈>	**Tb**	**159**		ug/L			168501	162748	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	13	172	264	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0690-08
Sample Dil Factor: 50
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:27:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	48889	1	Standard
⌈>	**Sc**	**45**		ug/L			332961	325697	0	Standard
|	**Cr**	**52**	**5.646**	ug/L	0.053	0	12895	138635	0	Standard
|	**Cr**	**53**	**6.214**	ug/L	0.037	0	187	15387	0	Standard
⌊	**Mn**	**55**	**0.009**	ug/L	0.000	4	424	722	2	Standard
⌈>	**Ge**	**72**		ug/L			35628	34543	0	KED
|	**Ni**	**60**	**0.247**	ug/L	0.015	6	10	356	6	KED
|	**Ni**	**62**	**0.256**	ug/L	0.027	10	2	59	9	KED
|	**Cu**	**63**	**0.031**	ug/L	0.003	8	12	129	7	KED
|	**Cu**	**65**	**0.034**	ug/L	0.007	18	10	76	16	KED
|	**Zn**	**66**	**0.473**	ug/L	0.030	6	20	269	5	KED
|	**Zn**	**67**	**0.394**	ug/L	0.078	19	2	36	18	KED
⌊	**As**	**75**	**1.092**	ug/L	0.061	5	3	305	5	KED
	Kr	**83**		ug/L			45	38	19	Standard
⌈>	**In-1**	**115**		ug/L			8466	7880	0	KED
|	**Cd**	**111**	**0.000**	ug/L	0.002	501	1	1	34	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.001	104	3	2	41	KED
⌈>	**In**	**115**		ug/L			448865	433236	2	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.000	26	40	25	11	Standard
|	**Ba**	**135**	**0.278**	ug/L	0.006	2	11	1597	0	Standard
⌊	**Ba**	**137**	**0.267**	ug/L	0.009	3	19	2877	1	Standard
⌈>	**Tb**	**159**		ug/L			168501	161495	0	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	2	172	500	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0690-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:32:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42090	47524	1	Standard
⌈>	Sc	45		ug/L			332961	327851	2	Standard
|	Cr	52	2.057	ug/L	0.062	3	12895	58899	1	Standard
|	Cr	53	3.096	ug/L	0.066	2	187	7809	1	Standard
⌊	Mn	55	0.375	ug/L	0.013	3	424	12638	3	Standard
⌈>	Ge	72		ug/L			35628	32720	2	KED
|	Ni	60	0.102	ug/L	0.017	16	10	145	13	KED
|	Ni	62	0.122	ug/L	0.049	40	2	27	34	KED
|	Cu	63	0.081	ug/L	0.005	5	12	304	6	KED
|	Cu	65	0.086	ug/L	0.006	6	10	166	4	KED
|	Zn	66	0.078	ug/L	0.008	9	20	57	6	KED
|	Zn	67	0.210	ug/L	0.060	28	2	19	24	KED
⌊	As	75	7.798	ug/L	0.153	1	3	2045	2	KED
	Kr	83		ug/L			45	38	12	Standard
⌈>	In-1	115		ug/L			8466	7701	0	KED
|	Cd	111	0.018	ug/L	0.014	78	1	6	59	KED
⌊	Cd	114	0.007	ug/L	0.006	81	3	8	48	KED
⌈>	In	115		ug/L			448865	425752	0	Standard
|	Ag	107	-0.001	ug/L	0.001	115	40	27	41	Standard
|	Ba	135	0.619	ug/L	0.016	2	11	3489	3	Standard
⌊	Ba	137	0.571	ug/L	0.009	1	19	6025	1	Standard
⌈>	Tb	159		ug/L			168501	159571	1	Standard
⌊	Pb	208	0.006	ug/L	0.000	4	172	584	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0690-04
Sample Dil Factor: 10
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:37:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	47730	1	Standard
⌈>	**Sc**	**45**		ug/L			332961	327913	2	Standard
|	**Cr**	**52**	**0.625**	ug/L	0.030	4	12895	26739	0	Standard
|	**Cr**	**53**	**2.347**	ug/L	0.050	2	187	5966	3	Standard
⌊	**Mn**	**55**	**0.064**	ug/L	0.001	1	424	2507	2	Standard
⌈>	**Ge**	**72**		ug/L			35628	30481	2	KED
|	**Ni**	**60**	**0.190**	ug/L	0.027	14	10	245	15	KED
|	**Ni**	**62**	**0.215**	ug/L	0.035	16	2	44	13	KED
|	**Cu**	**63**	**0.079**	ug/L	0.008	10	12	278	8	KED
|	**Cu**	**65**	**0.077**	ug/L	0.014	17	10	140	17	KED
|	**Zn**	**66**	**0.143**	ug/L	0.030	21	20	83	14	KED
|	**Zn**	**67**	**0.377**	ug/L	0.049	12	2	31	9	KED
⌊	**As**	**75**	**2.965**	ug/L	0.089	3	3	726	3	KED
	Kr	**83**		ug/L			45	68	7	Standard
⌈>	**In-1**	**115**		ug/L			8466	7063	2	KED
|	**Cd**	**111**	**0.012**	ug/L	0.005	42	1	4	26	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.000	15	3	3	0	KED
⌈>	**In**	**115**		ug/L			448865	407878	1	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.000	24	40	14	37	Standard
|	**Ba**	**135**	**2.081**	ug/L	0.047	2	11	11205	0	Standard
⌊	**Ba**	**137**	**1.954**	ug/L	0.041	2	19	19707	1	Standard
⌈>	**Tb**	**159**		ug/L			168501	153180	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	6	172	267	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0514-05
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:42:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			42090	70596	2	Standard
> Sc	45		ug/L			332961	437667	1	Standard
Cr	52	-0.067	ug/L	0.002	3	12895	14927	1	Standard
Cr	53	0.125	ug/L	0.010	7	187	658	6	Standard
Mn	55	508.121	ug/L	6.931	1	424	22107272	2	Standard
> Ge	72		ug/L			35628	33171	0	KED
Ni	60	1.112	ug/L	0.040	3	10	1505	3	KED
Ni	62	1.164	ug/L	0.061	5	2	252	5	KED
Cu	63	0.053	ug/L	0.008	15	12	207	14	KED
Cu	65	0.055	ug/L	0.012	22	10	112	20	KED
Zn	66	0.208	ug/L	0.015	7	20	124	6	KED
Zn	67	0.585	ug/L	0.126	21	2	51	20	KED
As	75	0.454	ug/L	0.042	9	3	123	8	KED
Kr	83		ug/L			45	57	10	Standard
> In-1	115		ug/L			8466	7545	2	KED
Cd	111	0.014	ug/L	0.010	68	1	5	47	KED
Cd	114	-0.001	ug/L	0.002	330	3	2	36	KED
> In	115		ug/L			448865	437788	1	Standard
Ag	107	-0.001	ug/L	0.000	35	40	27	15	Standard
Ba	135	5.646	ug/L	0.072	1	11	32620	1	Standard
Ba	137	5.339	ug/L	0.108	2	19	57759	0	Standard
> Tb	159		ug/L			168501	165429	0	Standard
Pb	208	0.004	ug/L	0.000	8	172	477	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0078-DUP2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:47:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			42090	71387	0	Standard
> Sc	45		ug/L			332961	443812	1	Standard
Cr	52	-0.068	ug/L	0.006	9	12895	15110	1	Standard
Cr	53	0.117	ug/L	0.002	1	187	640	0	Standard
Mn	55	521.770	ug/L	5.051	0	424	23018673	2	Standard
> Ge	72		ug/L			35628	32218	13	KED
Ni	60	1.192	ug/L	0.116	9	10	1553	4	KED
Ni	62	1.176	ug/L	0.166	14	2	244	5	KED
Cu	63	0.030	ug/L	0.002	5	12	119	17	KED
Cu	65	0.037	ug/L	0.003	9	10	75	12	KED
Zn	66	0.227	ug/L	0.034	15	20	129	15	KED
Zn	67	0.514	ug/L	0.190	37	2	43	37	KED
As	75	0.518	ug/L	0.057	10	3	135	5	KED
Kr	83		ug/L			45	65	23	Standard
> In-1	115		ug/L			8466	7883	4	KED
Cd	111	0.002	ug/L	0.000	21	1	1		KED
Cd	114	-0.003	ug/L	0.003	99	3	1	124	KED
> In	115		ug/L			448865	434051	3	Standard
Ag	107	-0.000	ug/L	0.001	1373	40	38	30	Standard
Ba	135	5.771	ug/L	0.180	3	11	33038	1	Standard
Ba	137	5.561	ug/L	0.151	2	19	59628	0	Standard
> Tb	159		ug/L			168501	165671	0	Standard
Pb	208	0.003	ug/L	0.000	4	172	405	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0078-MS2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:51:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			42090	72202	0	Standard
> Sc	45		ug/L			332961	462187	1	Standard
Cr	52	3.572	ug/L	0.061	1	12895	131028	1	Standard
Cr	53	3.915	ug/L	0.032	0	187	13852	0	Standard
Mn	55	509.984	ug/L	8.970	1	424	23427369	1	Standard
> Ge	72		ug/L			35628	34548	1	KED
Ni	60	6.410	ug/L	0.118	1	10	8991	1	KED
Ni	62	6.161	ug/L	0.106	1	2	1379	2	KED
Cu	63	5.418	ug/L	0.103	1	12	20754	2	KED
Cu	65	5.288	ug/L	0.074	1	10	10300	0	KED
Zn	66	17.741	ug/L	0.543	3	20	9387	2	KED
Zn	67	16.561	ug/L	0.933	5	2	1447	4	KED
As	75	5.669	ug/L	0.046	0	3	1571	2	KED
Kr	83		ug/L			45	64	16	Standard
> In-1	115		ug/L			8466	7940	1	KED
Cd	111	5.395	ug/L	0.103	1	1	1455	2	KED
Cd	114	5.263	ug/L	0.142	2	3	3600	2	KED
> In	115		ug/L			448865	446477	3	Standard
Ag	107	2.929	ug/L	0.027	0	40	45802	2	Standard
Ba	135	10.484	ug/L	0.341	3	11	61719	0	Standard
Ba	137	10.141	ug/L	0.316	3	19	111820	1	Standard
> Tb	159		ug/L			168501	170696	0	Standard
Pb	208	5.338	ug/L	0.085	1	172	436800	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0078-MSD2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:56:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42090	95606	1	Standard
>	Sc	45		ug/L			332961	450474	3	Standard
	Cr	52	3.727	ug/L	0.114	3	12895	132425	1	Standard
	Cr	53	4.039	ug/L	0.051	1	187	13919	2	Standard
	Mn	55	510.734	ug/L	12.728	2	424	22856765	1	Standard
>	Ge	72		ug/L			35628	34841	0	KED
	Ni	60	6.663	ug/L	0.158	2	10	9425	2	KED
	Ni	62	6.766	ug/L	0.218	3	2	1527	3	KED
	Cu	63	5.651	ug/L	0.050	0	12	21828	0	KED
	Cu	65	5.542	ug/L	0.130	2	10	10886	2	KED
	Zn	66	17.477	ug/L	0.397	2	20	9328	2	KED
	Zn	67	17.318	ug/L	0.369	2	2	1527	1	KED
	As	75	5.815	ug/L	0.052	0	3	1625	0	KED
	Kr	83		ug/L			45	65	37	Standard
>	In-1	115		ug/L			8466	7886	1	KED
	Cd	111	5.500	ug/L	0.161	2	1	1473	2	KED
	Cd	114	5.709	ug/L	0.102	1	3	3879	1	KED
>	In	115		ug/L			448865	426508	2	Standard
	Ag	107	3.413	ug/L	0.035	1	40	50989	2	Standard
	Ba	135	10.864	ug/L	0.031	0	11	61145	2	Standard
	Ba	137	10.452	ug/L	0.155	1	19	110153	1	Standard
>	Tb	159		ug/L			168501	165456	0	Standard
	Pb	208	5.581	ug/L	0.042	0	172	442650	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:00:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	53251	0	Standard
⌈>	**Sc**	**45**		ug/L			332961	325225	2	Standard
|	**Cr**	**52**	**0.004**	ug/L	0.007	166	12895	12687	1	Standard
|	**Cr**	**53**	**-0.004**	ug/L	0.008	195	187	173	12	Standard
⌊	**Mn**	**55**	**0.009**	ug/L	0.001	10	424	720	6	Standard
⌈>	**Ge**	**72**		ug/L			35628	35314	0	KED
|	**Ni**	**60**	**0.000**	ug/L	0.004	6081	10	10	56	KED
|	**Ni**	**62**	**0.011**	ug/L	0.013	114	2	5	57	KED
|	**Cu**	**63**	**0.006**	ug/L	0.003	45	12	36	29	KED
|	**Cu**	**65**	**0.003**	ug/L	0.002	62	10	16	24	KED
|	**Zn**	**66**	**0.166**	ug/L	0.016	9	20	109	7	KED
|	**Zn**	**67**	**0.085**	ug/L	0.032	37	2	10	28	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.004	113	3	2	58	KED
	Kr	**83**		ug/L			45	40	40	Standard
⌈>	**In-1**	**115**		ug/L			8466	7995	3	KED
|	**Cd**	**111**	**0.013**	ug/L	0.004	33	1	5	21	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.003	252	3	4	49	KED
⌈>	**In**	**115**		ug/L			448865	437984	1	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.000	33	40	29	9	Standard
|	**Ba**	**135**	**0.010**	ug/L	0.002	24	11	66	18	Standard
⌊	**Ba**	**137**	**0.010**	ug/L	0.001	12	19	126	12	Standard
⌈>	**Tb**	**159**		ug/L			168501	163101	0	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.000	5	172	530	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:05:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	47786	2	Standard
⌈>	**Sc**	**45**		ug/L			332961	334412	2	Standard
|	**Cr**	**52**	**48.035**	ug/L	0.975	2	12895	1113580	0	Standard
|	**Cr**	**53**	**50.321**	ug/L	1.009	2	187	126584	0	Standard
⌊	**Mn**	**55**	**49.267**	ug/L	0.882	1	424	1637587	0	Standard
⌈>	**Ge**	**72**		ug/L			35628	36436	0	KED
|	**Ni**	**60**	**50.588**	ug/L	0.832	1	10	74766	1	KED
|	**Ni**	**62**	**50.542**	ug/L	0.700	1	2	11912	0	KED
|	**Cu**	**63**	**51.479**	ug/L	0.931	1	12	207845	1	KED
|	**Cu**	**65**	**51.241**	ug/L	0.707	1	10	105191	1	KED
|	**Zn**	**66**	**51.907**	ug/L	1.181	2	20	28931	1	KED
|	**Zn**	**67**	**52.131**	ug/L	1.746	3	2	4801	2	KED
⌊	**As**	**75**	**48.479**	ug/L	0.486	1	3	14147	1	KED
	Kr	**83**		ug/L			45	43	31	Standard
⌈>	**In-1**	**115**		ug/L			8466	8246	2	KED
|	**Cd**	**111**	**51.464**	ug/L	0.597	1	1	14408	2	KED
⌊	**Cd**	**114**	**52.063**	ug/L	1.573	3	3	36945	0	KED
⌈>	**In**	**115**		ug/L			448865	426451	2	Standard
|	**Ag**	**107**	**47.034**	ug/L	1.428	3	40	701805	1	Standard
|	**Ba**	**135**	**48.092**	ug/L	1.046	2	11	270504	0	Standard
⌊	**Ba**	**137**	**46.543**	ug/L	1.325	2	19	490268	0	Standard
⌈>	**Tb**	**159**		ug/L			168501	167617	1	Standard
⌊	**Pb**	**208**	**52.950**	ug/L	1.170	2	172	4252260	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:12:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	45868	1	Standard
⌈>	**Sc**	**45**		ug/L			332961	332999	0	Standard
|	**Cr**	**52**	**0.007**	ug/L	0.018	269	12895	13047	2	Standard
|	**Cr**	**53**	**-0.010**	ug/L	0.003	27	187	163	4	Standard
⌊	**Mn**	**55**	**0.004**	ug/L	0.001	23	424	545	4	Standard
⌈>	**Ge**	**72**		ug/L			35628	37183	1	KED
|	**Ni**	**60**	**-0.002**	ug/L	0.002	124	10	8	32	KED
|	**Ni**	**62**	**-0.001**	ug/L	0.009	1712	2	2	86	KED
|	**Cu**	**63**	**0.004**	ug/L	0.003	75	12	27	39	KED
|	**Cu**	**65**	**0.000**	ug/L	0.000	534	10	10	10	KED
|	**Zn**	**66**	**-0.005**	ug/L	0.013	255	20	18	39	KED
|	**Zn**	**67**	**0.006**	ug/L	0.031	537	2	3	91	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.003	721	3	3	31	KED
	Kr	**83**		ug/L			45	42	21	Standard
⌈>	**In-1**	**115**		ug/L			8466	8876	1	KED
|	**Cd**	**111**	**0.005**	ug/L	0.007	132	1	3	62	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.002	44	3	1	93	KED
⌈>	**In**	**115**		ug/L			448865	446461	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	68	40	64	25	Standard
|	**Ba**	**135**	**-0.000**	ug/L	0.001	453	11	10	54	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.001	266	19	24	50	Standard
⌈>	**Tb**	**159**		ug/L			168501	163711	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	43	172	267	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:22:08

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				44394	1	Standard
>	**Sc**	**45**		ug/L				294037	11	Standard
	Cr	**52**		ug/L				13085	5	Standard
	Cr	**53**		ug/L				150	10	Standard
>	**Ge**	**72**		ug/L				37522	1	KED
	Ni	**60**		ug/L				6	45	KED
	Ni	**62**		ug/L				1	86	KED
	Cu	**63**		ug/L				27	10	KED
	Cu	**65**		ug/L				9	34	KED
	Zn	**66**		ug/L				19	10	KED
	Zn	**67**		ug/L				3	50	KED
	As	**75**		ug/L				1	33	KED
	Kr	**83**		ug/L				56	7	Standard
>	**In-1**	**115**		ug/L				8889	0	KED
	Cd	**111**		ug/L				5	16	KED
	Cd	**114**		ug/L				5	22	KED
>	**Tb**	**159**		ug/L				151668	11	Standard
	Pb	**208**		ug/L				135	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:28:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				43915	1	Standard
⎡>	**Sc**	**45**		ug/L				332530	1	Standard
⎢	**Cr**	**52**		ug/L				13137	2	Standard
⎣	**Cr**	**53**		ug/L				163	8	Standard
⎡>	**Ge**	**72**		ug/L				37776	1	KED
⎢	**Ni**	**60**		ug/L				3	100	KED
⎢	**Ni**	**62**		ug/L				0	173	KED
⎢	**Cu**	**63**		ug/L				18	23	KED
⎢	**Cu**	**65**		ug/L				6	41	KED
⎢	**Zn**	**66**		ug/L				19	14	KED
⎢	**Zn**	**67**		ug/L				3	50	KED
⎣	**As**	**75**		ug/L				3	27	KED
	Kr	**83**		ug/L				41	37	Standard
⎡>	**In-1**	**115**		ug/L				8842	2	KED
⎢	**Cd**	**111**		ug/L				3	56	KED
⎣	**Cd**	**114**		ug/L				3	52	KED
⎡>	**Tb**	**159**		ug/L				167464	1	Standard
⎣	**Pb**	**208**		ug/L				168	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:32:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	44013	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	345315	1	Standard
|	**Cr**	**52**	**48.430**	ug/L	0.364	0	13137	1159781	1	Standard
⌊	**Cr**	**53**	**50.466**	ug/L	0.276	0	163	131090	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	37535	1	KED
|	**Ni**	**60**	**51.615**	ug/L	0.193	0	3	78581	1	KED
|	**Ni**	**62**	**51.720**	ug/L	1.419	2	0	12552	1	KED
|	**Cu**	**63**	**51.953**	ug/L	1.352	2	18	216053	1	KED
|	**Cu**	**65**	**51.914**	ug/L	0.930	1	6	109764	0	KED
|	**Zn**	**66**	**52.174**	ug/L	0.673	1	19	29953	0	KED
|	**Zn**	**67**	**51.599**	ug/L	1.919	3	3	4896	2	KED
⌊	**As**	**75**	**49.265**	ug/L	1.350	2	3	14806	1	KED
	Kr	**83**		ug/L			41	43	35	Standard
⌈>	**In-1**	**115**		ug/L			8842	8388	3	KED
|	**Cd**	**111**	**53.409**	ug/L	1.286	2	3	15204	0	KED
⌊	**Cd**	**114**	**53.226**	ug/L	1.663	3	3	38412	1	KED
⌈>	**Tb**	**159**		ug/L			167464	178280	0	Standard
⌊	**Pb**	**208**	**51.042**	ug/L	0.222	0	168	4360458	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:39:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	43824	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	333583	3	Standard
|	**Cr**	**52**	**0.009**	ug/L	0.015	167	13137	13372	1	Standard
⌊	**Cr**	**53**	**0.007**	ug/L	0.004	49	163	181	8	Standard
⌈>	**Ge**	**72**		ug/L			37776	38104	1	KED
|	**Ni**	**60**	**0.007**	ug/L	0.004	55	3	14	39	KED
|	**Ni**	**62**	**0.015**	ug/L	0.004	28	0	4	24	KED
|	**Cu**	**63**	**0.003**	ug/L	0.002	79	18	29	29	KED
|	**Cu**	**65**	**0.005**	ug/L	0.002	38	6	17	22	KED
|	**Zn**	**66**	**0.027**	ug/L	0.020	72	19	35	32	KED
|	**Zn**	**67**	**0.032**	ug/L	0.063	196	3	6	87	KED
⌊	**As**	**75**	**0.002**	ug/L	0.005	196	3	4	34	KED
	Kr	**83**		ug/L			41	38	46	Standard
⌈>	**In-1**	**115**		ug/L			8842	8742	2	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.002	190	3	3	17	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.003	316	3	3	71	KED
⌈>	**Tb**	**159**		ug/L			167464	166881	2	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	19	168	325	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:43:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	62037	1	Standard
> Sc	45		ug/L			332530	347080	2	Standard
Cr	52	0.031	ug/L	0.005	16	13137	14448	1	Standard
Cr	53	0.005	ug/L	0.010	215	163	181	12	Standard
> Ge	72		ug/L			37776	38309	1	KED
Ni	60	0.007	ug/L	0.004	59	3	13	41	KED
Ni	62	0.013	ug/L	0.008	61	0	3	50	KED
Cu	63	0.125	ug/L	0.012	9	18	551	10	KED
Cu	65	0.115	ug/L	0.014	12	6	255	12	KED
Zn	66	33.926	ug/L	0.792	2	19	19883	0	KED
Zn	67	32.362	ug/L	1.440	4	3	3136	4	KED
As	75	0.006	ug/L	0.004	59	3	5	19	KED
Kr	83		ug/L			41	43	11	Standard
> In-1	115		ug/L			8842	8684	1	KED
Cd	111	0.007	ug/L	0.002	28	3	5	10	KED
Cd	114	0.002	ug/L	0.004	194	3	5	61	KED
> Tb	159		ug/L			167464	175053	1	Standard
Pb	208	0.018	ug/L	0.000	2	168	1720	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:48:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	55964	1	Standard
>	Sc	45		ug/L			332530	348781	1	Standard
	Cr	52	25.581	ug/L	0.308	1	13137	625219	0	Standard
	Cr	53	26.533	ug/L	0.436	1	163	69689	0	Standard
>	Ge	72		ug/L			37776	37596	1	KED
	Ni	60	27.129	ug/L	0.800	2	3	41364	2	KED
	Ni	62	27.295	ug/L	0.314	1	0	6637	0	KED
	Cu	63	28.464	ug/L	0.375	1	18	118589	0	KED
	Cu	65	27.649	ug/L	0.309	1	6	58563	0	KED
	Zn	66	83.613	ug/L	1.820	2	19	48068	1	KED
	Zn	67	79.563	ug/L	0.952	1	3	7561	0	KED
	As	75	24.908	ug/L	0.390	1	3	7501	0	KED
	Kr	83		ug/L			41	52	11	Standard
>	In-1	115		ug/L			8842	8766	3	KED
	Cd	111	25.724	ug/L	1.511	5	3	7649	3	KED
	Cd	114	25.913	ug/L	1.096	4	3	19540	1	KED
>	Tb	159		ug/L			167464	175745	2	Standard
	Pb	208	27.587	ug/L	0.599	2	168	2322573	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0208-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:52:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	68316	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	346906	0	Standard
|	**Cr**	**52**	**0.167**	ug/L	0.013	8	13137	17663	1	Standard
⌊	**Cr**	**53**	**0.165**	ug/L	0.011	6	163	600	5	Standard
⌈>	**Ge**	**72**		ug/L			37776	38158	1	KED
|	**Ni**	**60**	**0.021**	ug/L	0.002	8	3	36	7	KED
|	**Ni**	**62**	**0.031**	ug/L	0.019	61	0	8	58	KED
|	**Cu**	**63**	**0.065**	ug/L	0.006	9	18	292	10	KED
|	**Cu**	**65**	**0.074**	ug/L	0.012	16	6	165	14	KED
|	**Zn**	**66**	**0.800**	ug/L	0.018	2	19	486	2	KED
|	**Zn**	**67**	**0.665**	ug/L	0.024	3	3	67	1	KED
⌊	**As**	**75**	**0.002**	ug/L	0.001	70	3	4	11	KED
	Kr	**83**		ug/L			41	37	25	Standard
⌈>	**In-1**	**115**		ug/L			8842	8908	1	KED
|	**Cd**	**111**	**0.006**	ug/L	0.008	128	3	5	44	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.003	342	3	4	54	KED
⌈>	**Tb**	**159**		ug/L			167464	175571	0	Standard
⌊	**Pb**	**208**	**0.016**	ug/L	0.000	0	168	1534	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0208-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:56:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	70513	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	340977	0	Standard
|	**Cr**	**52**	**26.792**	ug/L	0.741	2	13137	639498	2	Standard
⌊	**Cr**	**53**	**27.440**	ug/L	0.720	2	163	70453	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	37350	0	KED
|	**Ni**	**60**	**27.844**	ug/L	0.715	2	3	42182	2	KED
|	**Ni**	**62**	**27.618**	ug/L	0.845	3	0	6672	2	KED
|	**Cu**	**63**	**29.062**	ug/L	0.250	0	18	120299	0	KED
|	**Cu**	**65**	**28.942**	ug/L	0.654	2	6	60904	2	KED
|	**Zn**	**66**	**85.225**	ug/L	0.981	1	19	48680	0	KED
|	**Zn**	**67**	**81.664**	ug/L	1.825	2	3	7710	2	KED
⌊	**As**	**75**	**24.868**	ug/L	0.445	1	3	7440	1	KED
	Kr	**83**		ug/L			41	46	13	Standard
⌈>	**In-1**	**115**		ug/L			8842	8589	0	KED
|	**Cd**	**111**	**27.026**	ug/L	0.307	1	3	7884	1	KED
⌊	**Cd**	**114**	**27.268**	ug/L	0.351	1	3	20164	0	KED
⌈>	**Tb**	**159**		ug/L			167464	174528	2	Standard
⌊	**Pb**	**208**	**28.417**	ug/L	0.753	2	168	2375611	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0208-SRL1
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:00:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	56294	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	364897	2	Standard
|	**Cr**	**52**	**0.034**	ug/L	0.015	42	13137	15263	0	Standard
⌊	**Cr**	**53**	**0.110**	ug/L	0.011	10	163	479	5	Standard
⌈>	**Ge**	**72**		ug/L			37776	38320	0	KED
|	**Ni**	**60**	**0.053**	ug/L	0.010	18	3	86	17	KED
|	**Ni**	**62**	**0.084**	ug/L	0.004	4	0	21	5	KED
|	**Cu**	**63**	**0.222**	ug/L	0.008	3	18	960	3	KED
|	**Cu**	**65**	**0.205**	ug/L	0.030	14	6	449	14	KED
|	**Zn**	**66**	**3.738**	ug/L	0.074	1	19	2209	2	KED
|	**Zn**	**67**	**3.704**	ug/L	0.267	7	3	362	7	KED
⌊	**As**	**75**	**0.048**	ug/L	0.004	8	3	18	6	KED
	Kr	**83**		ug/L			41	52	4	Standard
⌈>	**In-1**	**115**		ug/L			8842	8883	2	KED
|	**Cd**	**111**	**0.003**	ug/L	0.003	109	3	4	24	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.003	188	3	4	43	KED
⌈>	**Tb**	**159**		ug/L			167464	176441	0	Standard
⌊	**Pb**	**208**	**0.039**	ug/L	0.001	3	168	3494	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0242-05RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:05:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	76912	1	Standard
>	Sc	45		ug/L			332530	444365	1	Standard
	Cr	52	0.100	ug/L	0.010	10	13137	20587	0	Standard
	Cr	53	0.437	ug/L	0.013	2	163	1677	3	Standard
>	Ge	72		ug/L			37776	36973	1	KED
	Ni	60	0.239	ug/L	0.021	8	3	362	7	KED
	Ni	62	0.228	ug/L	0.014	6	0	55	6	KED
	Cu	63	1.050	ug/L	0.032	3	18	4317	2	KED
	Cu	65	1.030	ug/L	0.044	4	6	2152	4	KED
	Zn	66	17.774	ug/L	0.160	0	19	10065	1	KED
	Zn	67	16.568	ug/L	0.542	3	3	1551	2	KED
	As	75	0.226	ug/L	0.025	11	3	70	10	KED
	Kr	83		ug/L			41	36	32	Standard
>	In-1	115		ug/L			8842	8602	0	KED
	Cd	111	0.022	ug/L	0.012	55	3	9	36	KED
	Cd	114	0.018	ug/L	0.009	51	3	16	41	KED
>	Tb	159		ug/L			167464	174508	0	Standard
	Pb	208	0.062	ug/L	0.002	3	168	5375	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0208-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:09:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	76857	1	Standard
>	Sc	45		ug/L			332530	437824	3	Standard
	Cr	52	0.059	ug/L	0.022	37	13137	19067	1	Standard
	Cr	53	0.387	ug/L	0.008	2	163	1488	2	Standard
>	Ge	72		ug/L			37776	37707	0	KED
	Ni	60	0.227	ug/L	0.013	5	3	351	6	KED
	Ni	62	0.203	ug/L	0.038	18	0	50	19	KED
	Cu	63	0.998	ug/L	0.019	1	18	4186	1	KED
	Cu	65	0.977	ug/L	0.025	2	6	2082	2	KED
	Zn	66	16.419	ug/L	0.148	0	19	9484	1	KED
	Zn	67	15.015	ug/L	0.185	1	3	1434	1	KED
	As	75	0.223	ug/L	0.018	8	3	70	7	KED
	Kr	83		ug/L			41	32	11	Standard
>	In-1	115		ug/L			8842	8683	4	KED
	Cd	111	0.023	ug/L	0.017	71	3	10	44	KED
	Cd	114	0.016	ug/L	0.005	28	3	15	19	KED
>	Tb	159		ug/L			167464	174167	0	Standard
	Pb	208	0.066	ug/L	0.001	0	168	5688	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0208-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:13:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	75146	1	Standard
>	Sc	45		ug/L			332530	449351	2	Standard
	Cr	52	19.623	ug/L	0.227	1	13137	621972	1	Standard
	Cr	53	20.787	ug/L	0.318	1	163	70380	1	Standard
>	Ge	72		ug/L			37776	36643	1	KED
	Ni	60	27.907	ug/L	0.176	0	3	41481	1	KED
	Ni	62	27.534	ug/L	0.652	2	0	6524	1	KED
	Cu	63	29.770	ug/L	0.496	1	18	120886	0	KED
	Cu	65	29.215	ug/L	0.054	0	6	60316	1	KED
	Zn	66	102.880	ug/L	2.940	2	19	57638	2	KED
	Zn	67	97.201	ug/L	3.698	3	3	9000	2	KED
	As	75	26.102	ug/L	0.599	2	3	7661	1	KED
	Kr	83		ug/L			41	53	25	Standard
>	In-1	115		ug/L			8842	8348	3	KED
	Cd	111	27.232	ug/L	1.149	4	3	7713	0	KED
	Cd	114	26.870	ug/L	1.264	4	3	19293	1	KED
>	Tb	159		ug/L			167464	174115	1	Standard
	Pb	208	27.929	ug/L	0.331	1	168	2330062	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0208-PS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:18:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	74500	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	448428	2	Standard
|	**Cr**	**52**	**18.411**	ug/L	0.505	2	13137	583315	0	Standard
⌊	**Cr**	**53**	**19.610**	ug/L	0.368	1	163	66270	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	36582	0	KED
|	**Ni**	**60**	**26.321**	ug/L	0.770	2	3	39050	2	KED
|	**Ni**	**62**	**26.246**	ug/L	0.679	2	0	6209	1	KED
|	**Cu**	**63**	**28.038**	ug/L	0.651	2	18	113662	1	KED
|	**Cu**	**65**	**27.689**	ug/L	0.520	1	6	57068	1	KED
|	**Zn**	**66**	**97.332**	ug/L	0.474	0	19	54451	1	KED
|	**Zn**	**67**	**91.477**	ug/L	0.614	0	3	8459	0	KED
⌊	**As**	**75**	**24.170**	ug/L	0.230	0	3	7083	1	KED
	Kr	**83**		ug/L			41	48	25	Standard
⌈>	**In-1**	**115**		ug/L			8842	8407	1	KED
|	**Cd**	**111**	**25.243**	ug/L	0.734	2	3	7204	0	KED
⌊	**Cd**	**114**	**25.620**	ug/L	0.330	1	3	18542	1	KED
⌈>	**Tb**	**159**		ug/L			167464	173813	0	Standard
⌊	**Pb**	**208**	**26.463**	ug/L	0.021	0	168	2204193	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL8
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:22:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	43198	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	330611	1	Standard
|	**Cr**	**52**	**0.084**	ug/L	0.003	3	13137	14960	1	Standard
⌊	**Cr**	**53**	**0.018**	ug/L	0.007	39	163	206	8	Standard
⌈>	**Ge**	**72**		ug/L			37776	35888	2	KED
|	**Ni**	**60**	**0.004**	ug/L	0.004	113	3	8	65	KED
|	**Ni**	**62**	**0.017**	ug/L	0.005	28	0	4	24	KED
|	**Cu**	**63**	**0.003**	ug/L	0.002	62	18	27	21	KED
|	**Cu**	**65**	**0.005**	ug/L	0.002	49	6	16	29	KED
|	**Zn**	**66**	**0.026**	ug/L	0.011	44	19	33	20	KED
|	**Zn**	**67**	**0.002**	ug/L	0.054	3569	3	3	132	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.003	74	3	2	34	KED
	Kr	**83**		ug/L			41	43	15	Standard
⌈>	**In-1**	**115**		ug/L			8842	8399	0	KED
|	**Cd**	**111**	**0.012**	ug/L	0.012	100	3	6	49	KED
⌊	**Cd**	**114**	**0.013**	ug/L	0.003	26	3	12	17	KED
⌈>	**Tb**	**159**		ug/L			167464	167100	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	6	168	383	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:26:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	43520	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	335932	2	Standard
|	**Cr**	**52**	**48.728**	ug/L	0.629	1	13137	1135038	1	Standard
⌊	**Cr**	**53**	**50.393**	ug/L	0.986	1	163	127316	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	36161	1	KED
|	**Ni**	**60**	**51.453**	ug/L	0.476	0	3	75462	1	KED
|	**Ni**	**62**	**52.383**	ug/L	1.697	3	0	12247	1	KED
|	**Cu**	**63**	**52.881**	ug/L	0.742	1	18	211893	1	KED
|	**Cu**	**65**	**51.554**	ug/L	1.263	2	6	105019	2	KED
|	**Zn**	**66**	**51.978**	ug/L	0.717	1	19	28748	0	KED
|	**Zn**	**67**	**52.618**	ug/L	2.696	5	3	4808	3	KED
⌊	**As**	**75**	**50.206**	ug/L	1.150	2	3	14536	0	KED
	Kr	**83**		ug/L			41	57	27	Standard
⌈>	**In-1**	**115**		ug/L			8842	8530	2	KED
|	**Cd**	**111**	**51.308**	ug/L	1.633	3	3	14855	1	KED
⌊	**Cd**	**114**	**50.964**	ug/L	1.073	2	3	37415	0	KED
⌈>	**Tb**	**159**		ug/L			167464	172417	0	Standard
⌊	**Pb**	**208**	**52.646**	ug/L	0.174	0	168	4349601	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:33:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	42389	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	334806	3	Standard
|	**Cr**	**52**	**-0.003**	ug/L	0.020	624	13137	13145	0	Standard
⌊	**Cr**	**53**	**0.005**	ug/L	0.003	61	163	178	6	Standard
⌈>	**Ge**	**72**		ug/L			37776	37571	1	KED
|	**Ni**	**60**	**0.007**	ug/L	0.004	59	3	13	43	KED
|	**Ni**	**62**	**0.010**	ug/L	0.005	43	0	3	34	KED
|	**Cu**	**63**	**0.006**	ug/L	0.002	31	18	41	18	KED
|	**Cu**	**65**	**0.006**	ug/L	0.003	58	6	19	36	KED
|	**Zn**	**66**	**0.058**	ug/L	0.019	33	19	52	19	KED
|	**Zn**	**67**	**0.041**	ug/L	0.054	132	3	7	66	KED
⌊	**As**	**75**	**0.002**	ug/L	0.001	66	3	4	11	KED
	Kr	**83**		ug/L			41	43	14	Standard
⌈>	**In-1**	**115**		ug/L			8842	9047	1	KED
|	**Cd**	**111**	**0.004**	ug/L	0.005	138	3	4	34	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.002	1193	3	3	52	KED
⌈>	**Tb**	**159**		ug/L			167464	169661	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	21	168	344	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0125-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:38:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	62547	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	345150	2	Standard
|	**Cr**	**52**	**0.028**	ug/L	0.015	52	13137	14297	0	Standard
⌊	**Cr**	**53**	**0.007**	ug/L	0.007	98	163	187	7	Standard
⌈>	**Ge**	**72**		ug/L			37776	37095	0	KED
|	**Ni**	**60**	**0.006**	ug/L	0.003	43	3	12	31	KED
|	**Ni**	**62**	**0.008**	ug/L	0.009	114	0	2	86	KED
|	**Cu**	**63**	**0.109**	ug/L	0.004	3	18	464	3	KED
|	**Cu**	**65**	**0.107**	ug/L	0.015	14	6	231	14	KED
|	**Zn**	**66**	**0.297**	ug/L	0.047	15	19	187	13	KED
|	**Zn**	**67**	**0.211**	ug/L	0.030	14	3	23	12	KED
⌊	**As**	**75**	**0.003**	ug/L	0.006	196	3	4	37	KED
	Kr	**83**		ug/L			41	41	36	Standard
⌈>	**In-1**	**115**		ug/L			8842	8524	0	KED
|	**Cd**	**111**	**0.005**	ug/L	0.011	237	3	4	69	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.007	292	3	5	95	KED
⌈>	**Tb**	**159**		ug/L			167464	174714	0	Standard
⌊	**Pb**	**208**	**0.034**	ug/L	0.001	1	168	3057	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0125-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:42:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	56862	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	340124	0	Standard
|	**Cr**	**52**	**25.906**	ug/L	0.166	0	13137	617323	0	Standard
⌊	**Cr**	**53**	**26.617**	ug/L	0.150	0	163	68182	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	36992	2	KED
|	**Ni**	**60**	**26.317**	ug/L	0.848	3	3	39471	2	KED
|	**Ni**	**62**	**26.449**	ug/L	0.618	2	0	6326	1	KED
|	**Cu**	**63**	**27.689**	ug/L	0.479	1	18	113488	1	KED
|	**Cu**	**65**	**27.446**	ug/L	0.903	3	6	57177	2	KED
|	**Zn**	**66**	**81.047**	ug/L	2.298	2	19	45827	0	KED
|	**Zn**	**67**	**76.525**	ug/L	4.022	5	3	7149	2	KED
⌊	**As**	**75**	**24.424**	ug/L	0.752	3	3	7233	0	KED
	Kr	**83**		ug/L			41	50	10	Standard
⌈>	**In-1**	**115**		ug/L			8842	8795	2	KED
|	**Cd**	**111**	**25.001**	ug/L	0.805	3	3	7464	1	KED
⌊	**Cd**	**114**	**25.248**	ug/L	0.671	2	3	19110	0	KED
⌈>	**Tb**	**159**		ug/L			167464	173556	1	Standard
⌊	**Pb**	**208**	**28.160**	ug/L	0.718	2	168	2341304	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0233-07RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:46:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	74224	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	399147	1	Standard
|	**Cr**	**52**	**0.093**	ug/L	0.012	13	13137	18319	1	Standard
⌊	**Cr**	**53**	**0.364**	ug/L	0.026	7	163	1287	6	Standard
⌈>	**Ge**	**72**		ug/L			37776	36948	1	KED
|	**Ni**	**60**	**0.228**	ug/L	0.012	5	3	345	6	KED
|	**Ni**	**62**	**0.217**	ug/L	0.059	27	0	52	28	KED
|	**Cu**	**63**	**1.061**	ug/L	0.005	0	18	4363	1	KED
|	**Cu**	**65**	**1.099**	ug/L	0.031	2	6	2293	1	KED
|	**Zn**	**66**	**30.820**	ug/L	0.640	2	19	17427	2	KED
|	**Zn**	**67**	**28.194**	ug/L	0.428	1	3	2635	1	KED
⌊	**As**	**75**	**0.269**	ug/L	0.030	11	3	83	9	KED
	Kr	**83**		ug/L			41	38	18	Standard
⌈>	**In-1**	**115**		ug/L			8842	8589	2	KED
|	**Cd**	**111**	**0.015**	ug/L	0.009	61	3	7	33	KED
⌊	**Cd**	**114**	**0.014**	ug/L	0.007	46	3	14	34	KED
⌈>	**Tb**	**159**		ug/L			167464	172580	0	Standard
⌊	**Pb**	**208**	**0.164**	ug/L	0.008	4	168	13754	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0234-07RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:51:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	76777	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	345129	2	Standard
|	**Cr**	**52**	**0.326**	ug/L	0.023	7	13137	21331	0	Standard
⌊	**Cr**	**53**	**0.321**	ug/L	0.013	4	163	1001	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	37771	0	KED
|	**Ni**	**60**	**0.357**	ug/L	0.033	9	3	550	9	KED
|	**Ni**	**62**	**0.416**	ug/L	0.050	12	0	102	11	KED
|	**Cu**	**63**	**2.900**	ug/L	0.056	1	18	12154	1	KED
|	**Cu**	**65**	**2.763**	ug/L	0.059	2	6	5886	2	KED
|	**Zn**	**66**	**40.410**	ug/L	0.822	2	19	23353	1	KED
|	**Zn**	**67**	**37.762**	ug/L	1.072	2	3	3608	3	KED
⌊	**As**	**75**	**0.132**	ug/L	0.005	4	3	43	3	KED
	Kr	**83**		ug/L			41	40	12	Standard
⌈>	**In-1**	**115**		ug/L			8842	8686	2	KED
|	**Cd**	**111**	**0.066**	ug/L	0.004	6	3	22	7	KED
⌊	**Cd**	**114**	**0.062**	ug/L	0.008	13	3	50	14	KED
⌈>	**Tb**	**159**		ug/L			167464	173154	0	Standard
⌊	**Pb**	**208**	**0.203**	ug/L	0.003	1	168	17028	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0241-02RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:55:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	74576	1	Standard
> Sc	45		ug/L			332530	443077	2	Standard
Cr	52	0.039	ug/L	0.009	23	13137	18677	1	Standard
Cr	53	1.115	ug/L	0.023	2	163	3929	4	Standard
> Ge	72		ug/L			37776	36516	1	KED
Ni	60	0.167	ug/L	0.009	5	3	251	5	KED
Ni	62	0.180	ug/L	0.012	6	0	43	6	KED
Cu	63	0.681	ug/L	0.035	5	18	2774	4	KED
Cu	65	0.676	ug/L	0.030	4	6	1396	3	KED
Zn	66	5.417	ug/L	0.076	1	19	3042	0	KED
Zn	67	5.476	ug/L	0.418	7	3	509	8	KED
As	75	0.179	ug/L	0.017	9	3	55	9	KED
Kr	83		ug/L			41	43	30	Standard
> In-1	115		ug/L			8842	8398	0	KED
Cd	111	0.024	ug/L	0.010	42	3	10	28	KED
Cd	114	0.036	ug/L	0.006	17	3	29	15	KED
> Tb	159		ug/L			167464	172232	0	Standard
Pb	208	0.058	ug/L	0.002	3	168	4934	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0241-04RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:59:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	75881	0	Standard
> Sc	45		ug/L			332530	435318	0	Standard
Cr	52	0.044	ug/L	0.004	9	13137	18495	0	Standard
Cr	53	0.549	ug/L	0.027	4	163	2008	4	Standard
> Ge	72		ug/L			37776	35980	0	KED
Ni	60	0.261	ug/L	0.012	4	3	384	4	KED
Ni	62	0.300	ug/L	0.033	10	0	70	10	KED
Cu	63	0.431	ug/L	0.014	3	18	1737	3	KED
Cu	65	0.428	ug/L	0.017	3	6	873	4	KED
Zn	66	3.432	ug/L	0.061	1	19	1906	2	KED
Zn	67	3.158	ug/L	0.385	12	3	290	12	KED
As	75	0.239	ug/L	0.013	5	3	72	5	KED
Kr	83		ug/L			41	41	27	Standard
> In-1	115		ug/L			8842	8470	1	KED
Cd	111	0.005	ug/L	0.003	67	3	4	20	KED
Cd	114	0.009	ug/L	0.008	86	3	10	56	KED
> Tb	159		ug/L			167464	170221	2	Standard
Pb	208	0.071	ug/L	0.004	6	168	5945	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0242-02RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:04:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	70929	2	Standard
⌈>	Sc	45		ug/L			332530	366663	3	Standard
|	Cr	52	0.141	ug/L	0.016	11	13137	18034	3	Standard
⌊	Cr	53	0.261	ug/L	0.017	6	163	898	2	Standard
⌈>	Ge	72		ug/L			37776	36506	0	KED
|	Ni	60	0.169	ug/L	0.018	10	3	253	11	KED
|	Ni	62	0.180	ug/L	0.075	41	0	43	41	KED
|	Cu	63	1.181	ug/L	0.045	3	18	4795	4	KED
|	Cu	65	1.190	ug/L	0.005	0	6	2454	0	KED
|	Zn	66	5.681	ug/L	0.043	0	19	3189	0	KED
|	Zn	67	5.523	ug/L	0.413	7	3	513	6	KED
⌊	As	75	0.155	ug/L	0.008	5	3	48	4	KED
	Kr	83		ug/L			41	33	27	Standard
⌈>	In-1	115		ug/L			8842	8459	2	KED
|	Cd	111	0.022	ug/L	0.014	63	3	9	43	KED
⌊	Cd	114	0.016	ug/L	0.006	38	3	15	27	KED
⌈>	Tb	159		ug/L			167464	167584	2	Standard
⌊	Pb	208	0.158	ug/L	0.004	2	168	12822	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0242-04RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:08:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	72229	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	450211	1	Standard
|	**Cr**	**52**	**-0.003**	ug/L	0.008	263	13137	17686	0	Standard
⌊	**Cr**	**53**	**0.381**	ug/L	0.016	4	163	1508	5	Standard
⌈>	**Ge**	**72**		ug/L			37776	36744	1	KED
|	**Ni**	**60**	**0.197**	ug/L	0.028	14	3	296	13	KED
|	**Ni**	**62**	**0.195**	ug/L	0.022	11	0	46	10	KED
|	**Cu**	**63**	**0.921**	ug/L	0.020	2	18	3769	1	KED
|	**Cu**	**65**	**0.905**	ug/L	0.032	3	6	1880	2	KED
|	**Zn**	**66**	**11.312**	ug/L	0.078	0	19	6372	0	KED
|	**Zn**	**67**	**10.795**	ug/L	0.912	8	3	1005	8	KED
⌊	**As**	**75**	**0.215**	ug/L	0.017	7	3	66	8	KED
	Kr	**83**		ug/L			41	40	7	Standard
⌈>	**In-1**	**115**		ug/L			8842	8332	0	KED
|	**Cd**	**111**	**0.014**	ug/L	0.002	13	3	7	7	KED
⌊	**Cd**	**114**	**0.010**	ug/L	0.010	93	3	10	63	KED
⌈>	**Tb**	**159**		ug/L			167464	171471	0	Standard
⌊	**Pb**	**208**	**0.051**	ug/L	0.001	2	168	4341	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0306-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:12:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	62149	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	399512	0	Standard
|	**Cr**	**52**	**0.879**	ug/L	0.013	1	13137	39849	0	Standard
⌊	**Cr**	**53**	**1.638**	ug/L	0.060	3	163	5110	3	Standard
⌈>	**Ge**	**72**		ug/L			37776	36585	0	KED
|	**Ni**	**60**	**0.537**	ug/L	0.023	4	3	800	3	KED
|	**Ni**	**62**	**0.564**	ug/L	0.071	12	0	133	12	KED
|	**Cu**	**63**	**6.167**	ug/L	0.117	1	18	25016	1	KED
|	**Cu**	**65**	**6.092**	ug/L	0.118	1	6	12561	1	KED
|	**Zn**	**66**	**6.496**	ug/L	0.201	3	19	3651	2	KED
|	**Zn**	**67**	**5.908**	ug/L	0.388	6	3	549	6	KED
⌊	**As**	**75**	**0.226**	ug/L	0.016	7	3	69	7	KED
	Kr	**83**		ug/L			41	40	40	Standard
⌈>	**In-1**	**115**		ug/L			8842	8487	1	KED
|	**Cd**	**111**	**0.004**	ug/L	0.002	56	3	4	12	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.006	104	3	7	54	KED
⌈>	**Tb**	**159**		ug/L			167464	171494	1	Standard
⌊	**Pb**	**208**	**0.087**	ug/L	0.002	2	168	7332	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL9
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:17:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	42974	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	330444	2	Standard
|	**Cr**	**52**	**0.068**	ug/L	0.016	23	13137	14596	0	Standard
⌊	**Cr**	**53**	**0.037**	ug/L	0.003	9	163	254	4	Standard
⌈>	**Ge**	**72**		ug/L			37776	36594	1	KED
|	**Ni**	**60**	**0.005**	ug/L	0.003	68	3	10	44	KED
|	**Ni**	**62**	**0.005**	ug/L	0.008	146	0	1	100	KED
|	**Cu**	**63**	**0.001**	ug/L	0.001	131	18	22	24	KED
|	**Cu**	**65**	**0.004**	ug/L	0.003	76	6	14	39	KED
|	**Zn**	**66**	**0.009**	ug/L	0.006	61	19	24	12	KED
|	**Zn**	**67**	**0.015**	ug/L	0.043	287	3	5	78	KED
⌊	**As**	**75**	**-0.002**	ug/L	0.004	178	3	2	44	KED
	Kr	**83**		ug/L			41	39	15	Standard
⌈>	**In-1**	**115**		ug/L			8842	8511	3	KED
|	**Cd**	**111**	**0.005**	ug/L	0.006	127	3	4	40	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.001	42	3	1	90	KED
⌈>	**Tb**	**159**		ug/L			167464	168885	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.001	23	168	344	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:21:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	42548	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	333394	2	Standard
|	**Cr**	**52**	**49.412**	ug/L	0.917	1	13137	1141947	1	Standard
⌊	**Cr**	**53**	**50.587**	ug/L	0.712	1	163	126853	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	37567	0	KED
|	**Ni**	**60**	**49.823**	ug/L	0.826	1	3	75911	0	KED
|	**Ni**	**62**	**50.531**	ug/L	0.964	1	0	12277	1	KED
|	**Cu**	**63**	**51.458**	ug/L	1.137	2	18	214201	1	KED
|	**Cu**	**65**	**51.146**	ug/L	1.094	2	6	108239	1	KED
|	**Zn**	**66**	**50.488**	ug/L	1.536	3	19	29009	2	KED
|	**Zn**	**67**	**49.685**	ug/L	1.143	2	3	4719	1	KED
⌊	**As**	**75**	**48.971**	ug/L	0.794	1	3	14733	0	KED
	Kr	**83**		ug/L			41	43	14	Standard
⌈>	**In-1**	**115**		ug/L			8842	8531	1	KED
|	**Cd**	**111**	**51.024**	ug/L	0.924	1	3	14778	0	KED
⌊	**Cd**	**114**	**50.921**	ug/L	0.679	1	3	37395	0	KED
⌈>	**Tb**	**159**		ug/L			167464	173325	0	Standard
⌊	**Pb**	**208**	**52.418**	ug/L	0.476	0	168	4353637	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:28:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	42388	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	329230	2	Standard
|	**Cr**	**52**	**0.004**	ug/L	0.006	174	13137	13086	2	Standard
⌊	**Cr**	**53**	**0.006**	ug/L	0.003	52	163	176	5	Standard
⌈>	**Ge**	**72**		ug/L			37776	38020	2	KED
|	**Ni**	**60**	**0.004**	ug/L	0.002	60	3	10	39	KED
|	**Ni**	**62**	**0.003**	ug/L	0.004	174	0	1	86	KED
|	**Cu**	**63**	**0.004**	ug/L	0.001	29	18	37	15	KED
|	**Cu**	**65**	**0.004**	ug/L	0.002	58	6	15	33	KED
|	**Zn**	**66**	**0.044**	ug/L	0.003	6	19	45	2	KED
|	**Zn**	**67**	**0.020**	ug/L	0.001	6	3	5	0	KED
⌊	**As**	**75**	**0.002**	ug/L	0.007	353	3	4	50	KED
	Kr	**83**		ug/L			41	41	5	Standard
⌈>	**In-1**	**115**		ug/L			8842	8830	2	KED
|	**Cd**	**111**	**0.003**	ug/L	0.004	125	3	4	24	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.007	191	3	6	85	KED
⌈>	**Tb**	**159**		ug/L			167464	166899	0	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	13	168	336	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:32:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	66723	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	436323	1	Standard
|	**Cr**	**52**	**10.898**	ug/L	0.175	1	13137	343071	1	Standard
⌊	**Cr**	**53**	**11.531**	ug/L	0.217	1	163	38005	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	39265	0	KED
|	**Ni**	**60**	**11.220**	ug/L	0.408	3	3	17874	4	KED
|	**Ni**	**62**	**11.389**	ug/L	0.583	5	0	2892	4	KED
|	**Cu**	**63**	**83.576**	ug/L	1.813	2	18	363650	1	KED
|	**Cu**	**65**	**82.672**	ug/L	2.864	3	6	182875	3	KED
|	**Zn**	**66**	**51.989**	ug/L	1.551	2	19	31225	2	KED
|	**Zn**	**67**	**50.028**	ug/L	2.582	5	3	4967	5	KED
⌊	**As**	**75**	**2.691**	ug/L	0.095	3	3	849	4	KED
	Kr	**83**		ug/L			41	62	14	Standard
⌈>	**In-1**	**115**		ug/L			8842	8921	0	KED
|	**Cd**	**111**	**0.048**	ug/L	0.024	48	3	18	39	KED
⌊	**Cd**	**114**	**0.047**	ug/L	0.005	10	3	39	8	KED
⌈>	**Tb**	**159**		ug/L			167464	202039	1	Standard
⌊	**Pb**	**208**	**21.218**	ug/L	0.173	0	168	2054225	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-13
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:37:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	67326	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	405383	0	Standard
|	**Cr**	**52**	**5.534**	ug/L	0.041	0	13137	169760	1	Standard
⌊	**Cr**	**53**	**5.823**	ug/L	0.096	1	163	17933	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	38501	0	KED
|	**Ni**	**60**	**5.198**	ug/L	0.138	2	3	8120	2	KED
|	**Ni**	**62**	**5.389**	ug/L	0.284	5	0	1342	5	KED
|	**Cu**	**63**	**7.733**	ug/L	0.211	2	18	33013	2	KED
|	**Cu**	**65**	**7.764**	ug/L	0.132	1	6	16845	0	KED
|	**Zn**	**66**	**16.565**	ug/L	0.256	1	19	9770	2	KED
|	**Zn**	**67**	**16.270**	ug/L	0.176	1	3	1586	1	KED
⌊	**As**	**75**	**2.005**	ug/L	0.035	1	3	621	2	KED
	Kr	**83**		ug/L			41	60	15	Standard
⌈>	**In-1**	**115**		ug/L			8842	9013	2	KED
|	**Cd**	**111**	**0.029**	ug/L	0.012	41	3	12	27	KED
⌊	**Cd**	**114**	**0.025**	ug/L	0.008	33	3	22	29	KED
⌈>	**Tb**	**159**		ug/L			167464	191409	1	Standard
⌊	**Pb**	**208**	**1.651**	ug/L	0.012	0	168	151611	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-14
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:41:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	62010	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	396910	2	Standard
|	**Cr**	**52**	**5.907**	ug/L	0.107	1	13137	176332	2	Standard
⌊	**Cr**	**53**	**6.271**	ug/L	0.177	2	163	18885	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	38078	2	KED
|	**Ni**	**60**	**6.273**	ug/L	0.129	2	3	9688	0	KED
|	**Ni**	**62**	**6.519**	ug/L	0.094	1	0	1605	1	KED
|	**Cu**	**63**	**8.704**	ug/L	0.147	1	18	36737	0	KED
|	**Cu**	**65**	**8.597**	ug/L	0.126	1	6	18448	1	KED
|	**Zn**	**66**	**21.517**	ug/L	0.621	2	19	12540	1	KED
|	**Zn**	**67**	**20.880**	ug/L	1.103	5	3	2012	4	KED
⌊	**As**	**75**	**2.029**	ug/L	0.067	3	3	622	2	KED
	Kr	**83**		ug/L			41	55	1	Standard
⌈>	**In-1**	**115**		ug/L			8842	8871	1	KED
|	**Cd**	**111**	**0.026**	ug/L	0.000	1	3	11	0	KED
⌊	**Cd**	**114**	**0.026**	ug/L	0.008	31	3	23	25	KED
⌈>	**Tb**	**159**		ug/L			167464	195670	1	Standard
⌊	**Pb**	**208**	**4.908**	ug/L	0.084	1	168	460307	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-20
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:45:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	66438	0	Standard
> Sc	45		ug/L			332530	462113	1	Standard
Cr	52	20.411	ug/L	0.220	1	13137	664650	1	Standard
Cr	53	21.236	ug/L	0.219	1	163	73949	1	Standard
> Ge	72		ug/L			37776	38097	0	KED
Ni	60	31.446	ug/L	0.215	0	3	48594	0	KED
Ni	62	32.287	ug/L	0.803	2	0	7955	1	KED
Cu	63	88.628	ug/L	1.675	1	18	374155	1	KED
Cu	65	87.028	ug/L	0.493	0	6	186790	0	KED
Zn	66	154.491	ug/L	2.342	1	19	89996	1	KED
Zn	67	147.083	ug/L	1.849	1	3	14162	1	KED
As	75	33.201	ug/L	0.342	1	3	10131	0	KED
Kr	83		ug/L			41	73	18	Standard
> In-1	115		ug/L			8842	9033	3	KED
Cd	111	0.156	ug/L	0.019	11	3	51	11	KED
Cd	114	0.165	ug/L	0.016	9	3	132	8	KED
> Tb	159		ug/L			167464	202074	1	Standard
Pb	208	260.681	ug/L	4.402	1	168	25237660	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:50:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	68568	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	474461	3	Standard
|	**Cr**	**52**	**17.106**	ug/L	0.112	0	13137	574925	2	Standard
⌊	**Cr**	**53**	**17.591**	ug/L	0.457	2	163	62903	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	38147	0	KED
|	**Ni**	**60**	**21.266**	ug/L	0.193	0	3	32905	0	KED
|	**Ni**	**62**	**22.907**	ug/L	0.399	1	0	5651	1	KED
|	**Cu**	**63**	**283.918**	ug/L	0.854	0	18	1200179	0	KED
|	**Cu**	**65**	**280.972**	ug/L	5.354	1	6	603841	1	KED
|	**Zn**	**66**	**750.180**	ug/L	6.407	0	19	437502	1	KED
|	**Zn**	**67**	**699.606**	ug/L	13.303	1	3	67440	2	KED
⌊	**As**	**75**	**108.894**	ug/L	0.491	0	3	33265	0	KED
	Kr	**83**		ug/L			41	81	21	Standard
⌈>	**In-1**	**115**		ug/L			8842	9882	2	KED
|	**Cd**	**111**	**0.450**	ug/L	0.020	4	3	154	6	KED
⌊	**Cd**	**114**	**0.431**	ug/L	0.009	2	3	370	4	KED
⌈>	**Tb**	**159**		ug/L			167464	201624	1	Standard
⌊	**Pb**	**208**	**91.183**	ug/L	0.525	0	168	8809198	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0125-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:54:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	68640	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	441223	2	Standard
|	**Cr**	**52**	**14.020**	ug/L	0.106	0	13137	441331	1	Standard
⌊	**Cr**	**53**	**14.729**	ug/L	0.347	2	163	49025	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	38819	0	KED
|	**Ni**	**60**	**18.959**	ug/L	0.127	0	3	29854	0	KED
|	**Ni**	**62**	**19.834**	ug/L	0.297	1	0	4979	0	KED
|	**Cu**	**63**	**170.114**	ug/L	2.552	1	18	731747	0	KED
|	**Cu**	**65**	**167.923**	ug/L	2.713	1	6	367221	0	KED
|	**Zn**	**66**	**521.315**	ug/L	7.460	1	19	309368	0	KED
|	**Zn**	**67**	**479.525**	ug/L	5.573	1	3	47039	1	KED
⌊	**As**	**75**	**90.023**	ug/L	0.504	0	3	27985	0	KED
	Kr	**83**		ug/L			41	69	19	Standard
⌈>	**In-1**	**115**		ug/L			8842	9782	0	KED
|	**Cd**	**111**	**0.370**	ug/L	0.040	10	3	126	10	KED
⌊	**Cd**	**114**	**0.339**	ug/L	0.021	6	3	289	6	KED
⌈>	**Tb**	**159**		ug/L			167464	192460	0	Standard
⌊	**Pb**	**208**	**74.707**	ug/L	0.688	0	168	6889594	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0125-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:58:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	64979	0	Standard
> Sc	45		ug/L			332530	443054	3	Standard
Cr	52	32.752	ug/L	0.884	2	13137	1011590	2	Standard
Cr	53	33.634	ug/L	0.732	2	163	112139	2	Standard
> Ge	72		ug/L			37776	38076	1	KED
Ni	60	44.611	ug/L	0.566	1	3	68892	0	KED
Ni	62	45.904	ug/L	0.710	1	0	11303	0	KED
Cu	63	226.950	ug/L	2.733	1	18	957497	0	KED
Cu	65	224.794	ug/L	3.385	1	6	482181	1	KED
Zn	66	727.010	ug/L	6.400	0	19	423174	0	KED
Zn	67	674.445	ug/L	9.860	1	3	64885	0	KED
As STL	75	118.812	ug/L	1.379	1	3	36224	0	KED
Kr	83		ug/L			41	88	18	Standard
> In-1	115		ug/L			8842	10027	2	KED
Cd	111	22.076	ug/L	0.252	1	3	7517	1	KED
Cd	114	22.305	ug/L	0.731	3	3	19247	1	KED
> Tb	159		ug/L			167464	202859	0	Standard
Pb	208	106.766	ug/L	1.718	1	168	10378358	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0125-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:03:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte		Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C		13		ug/L			43915	63821	1	Standard
>	Sc		45		ug/L			332530	482519	1	Standard
	Cr		52	33.598	ug/L	0.237	0	13137	1130057	1	Standard
	Cr		53	35.142	ug/L	0.527	1	163	127615	0	Standard
>	Ge		72		ug/L			37776	38241	2	KED
	Ni		60	45.464	ug/L	0.909	1	3	70499	0	KED
	Ni		62	46.724	ug/L	1.626	3	0	11550	1	KED
	Cu		63	272.207	ug/L	4.578	1	18	1153275	1	KED
	Cu		65	270.487	ug/L	6.941	2	6	582520	0	KED
	Zn		66	906.004	ug/L	32.281	3	19	529409	1	KED
	Zn		67	853.472	ug/L	20.287	2	3	82443	0	KED
	As	STL	75	127.779	ug/L	3.747	2	3	39113	0	KED
	Kr		83		ug/L			41	79	9	Standard
>	In-1		115		ug/L			8842	9965	1	KED
	Cd		111	22.310	ug/L	0.461	2	3	7550	0	KED
	Cd		114	22.403	ug/L	0.312	1	3	19220	0	KED
>	Tb		159		ug/L			167464	204527	2	Standard
	Pb		208	118.630	ug/L	2.493	2	168	11623211	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0125-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:07:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	69915	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	466397	0	Standard
|	**Cr**	**52**	**35.260**	ug/L	0.668	1	13137	1145388	1	Standard
⌊	**Cr**	**53**	**37.223**	ug/L	0.861	2	163	130646	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	37837	1	KED
|	**Ni**	**60**	**47.571**	ug/L	0.927	1	3	72998	0	KED
|	**Ni**	**62**	**48.020**	ug/L	1.262	2	0	11749	1	KED
|	**Cu**	**63**	**307.495**	ug/L	3.938	1	18	1289200	0	KED
|	**Cu**	**65**	**307.168**	ug/L	4.154	1	6	654744	1	KED
|	**Zn**	**66**	**835.974**	ug/L	8.518	1	19	483546	0	KED
|	**Zn**	**67**	**772.877**	ug/L	9.960	1	3	73894	1	KED
⌊	**As**	**75**	**133.851**	ug/L	1.174	0	3	40555	0	KED
	Kr	**83**		ug/L			41	90	25	Standard
⌈>	**In-1**	**115**		ug/L			8842	9966	3	KED
|	**Cd**	**111**	**22.228**	ug/L	1.367	6	3	7513	2	KED
⌊	**Cd**	**114**	**22.249**	ug/L	0.602	2	3	19082	2	KED
⌈>	**Tb**	**159**		ug/L			167464	199422	3	Standard
⌊	**Pb**	**208**	**116.825**	ug/L	3.030	2	168	11157835	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLA
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:11:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	44297	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	334004	1	Standard
|	**Cr**	**52**	**0.005**	ug/L	0.004	84	13137	13312	1	Standard
⌊	**Cr**	**53**	**0.014**	ug/L	0.009	62	163	199	12	Standard
⌈>	**Ge**	**72**		ug/L			37776	38577	0	KED
|	**Ni**	**60**	**0.032**	ug/L	0.004	12	3	54	11	KED
|	**Ni**	**62**	**0.025**	ug/L	0.005	17	0	6	15	KED
|	**Cu**	**63**	**0.024**	ug/L	0.006	24	18	121	19	KED
|	**Cu**	**65**	**0.022**	ug/L	0.010	48	6	53	41	KED
|	**Zn**	**66**	**0.090**	ug/L	0.006	6	19	73	5	KED
|	**Zn**	**67**	**0.019**	ug/L	0.039	209	3	5	66	KED
⌊	**As**	**75**	**0.004**	ug/L	0.001	21	3	4	5	KED
	Kr	**83**		ug/L			41	45	32	Standard
⌈>	**In-1**	**115**		ug/L			8842	8526	2	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.004	93	3	2	49	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.007	262	3	5	91	KED
⌈>	**Tb**	**159**		ug/L			167464	166472	0	Standard
⌊	**Pb**	**208**	**0.019**	ug/L	0.023	120	168	1661	107	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:15:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	43932	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	338852	2	Standard
|	**Cr**	**52**	**48.884**	ug/L	0.354	0	13137	1148454	2	Standard
⌊	**Cr**	**53**	**50.640**	ug/L	0.774	1	163	129058	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	37996	0	KED
|	**Ni**	**60**	**50.320**	ug/L	0.691	1	3	77551	1	KED
|	**Ni**	**62**	**51.453**	ug/L	0.796	1	0	12644	1	KED
|	**Cu**	**63**	**51.393**	ug/L	1.258	2	18	216406	2	KED
|	**Cu**	**65**	**50.813**	ug/L	0.763	1	6	108779	1	KED
|	**Zn**	**66**	**50.104**	ug/L	1.662	3	19	29124	3	KED
|	**Zn**	**67**	**50.777**	ug/L	2.174	4	3	4878	4	KED
⌊	**As**	**75**	**48.552**	ug/L	0.783	1	3	14775	1	KED
	Kr	**83**		ug/L			41	53	17	Standard
⌈>	**In-1**	**115**		ug/L			8842	8658	0	KED
|	**Cd**	**111**	**51.235**	ug/L	0.583	1	3	15064	1	KED
⌊	**Cd**	**114**	**51.309**	ug/L	0.946	1	3	38248	1	KED
⌈>	**Tb**	**159**		ug/L			167464	175902	1	Standard
⌊	**Pb**	**208**	**51.253**	ug/L	0.598	1	168	4320031	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:23:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	43964	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	334079	0	Standard
|	**Cr**	**52**	**0.026**	ug/L	0.013	49	13137	13799	1	Standard
⌊	**Cr**	**53**	**0.011**	ug/L	0.002	22	163	191	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	39048	1	KED
|	**Ni**	**60**	**0.032**	ug/L	0.005	16	3	54	16	KED
|	**Ni**	**62**	**0.032**	ug/L	0.011	34	0	8	32	KED
|	**Cu**	**63**	**0.008**	ug/L	0.001	13	18	55	10	KED
|	**Cu**	**65**	**0.013**	ug/L	0.002	18	6	36	13	KED
|	**Zn**	**66**	**0.047**	ug/L	0.010	21	19	48	12	KED
|	**Zn**	**67**	**0.018**	ug/L	0.020	111	3	5	33	KED
⌊	**As**	**75**	**0.006**	ug/L	0.006	109	3	5	34	KED
	Kr	**83**		ug/L			41	43	17	Standard
⌈>	**In-1**	**115**		ug/L			8842	9015	1	KED
|	**Cd**	**111**	**0.011**	ug/L	0.008	67	3	6	31	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.004	368	3	3	99	KED
⌈>	**Tb**	**159**		ug/L			167464	166890	0	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.003	63	168	490	41	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-21
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:27:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	76459	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	461439	0	Standard
|	**Cr**	**52**	**12.189**	ug/L	0.295	2	13137	403683	2	Standard
⌊	**Cr**	**53**	**12.803**	ug/L	0.219	1	163	44609	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	37976	1	KED
|	**Ni**	**60**	**16.382**	ug/L	0.209	1	3	25233	0	KED
|	**Ni**	**62**	**16.220**	ug/L	0.083	0	0	3984	1	KED
|	**Cu**	**63**	**36.293**	ug/L	0.522	1	18	152726	0	KED
|	**Cu**	**65**	**36.329**	ug/L	0.560	1	6	77721	0	KED
|	**Zn**	**66**	**45.816**	ug/L	0.248	0	19	26617	0	KED
|	**Zn**	**67**	**47.056**	ug/L	0.705	1	3	4518	1	KED
⌊	**As**	**75**	**4.690**	ug/L	0.109	2	3	1429	1	KED
	Kr	**83**		ug/L			41	73	17	Standard
⌈>	**In-1**	**115**		ug/L			8842	8736	1	KED
|	**Cd**	**111**	**0.189**	ug/L	0.005	2	3	59	0	KED
⌊	**Cd**	**114**	**0.181**	ug/L	0.021	11	3	139	9	KED
⌈>	**Tb**	**159**		ug/L			167464	199366	0	Standard
⌊	**Pb**	**208**	**41.556**	ug/L	0.032	0	168	3970092	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-23
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:31:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	74830	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	441642	1	Standard
|	**Cr**	**52**	**36.623**	ug/L	0.591	1	13137	1125730	0	Standard
⌊	**Cr**	**53**	**38.064**	ug/L	0.664	1	163	126487	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	37988	1	KED
|	**Ni**	**60**	**12.386**	ug/L	0.114	0	3	19086	0	KED
|	**Ni**	**62**	**12.278**	ug/L	0.158	1	0	3017	2	KED
|	**Cu**	**63**	**18.922**	ug/L	0.137	0	18	79667	0	KED
|	**Cu**	**65**	**18.771**	ug/L	0.346	1	6	40175	1	KED
|	**Zn**	**66**	**76.354**	ug/L	1.903	2	19	44354	1	KED
|	**Zn**	**67**	**70.776**	ug/L	1.377	1	3	6798	3	KED
⌊	**As**	**75**	**4.424**	ug/L	0.039	0	3	1349	1	KED
	Kr	**83**		ug/L			41	60	15	Standard
⌈>	**In-1**	**115**		ug/L			8842	8705	0	KED
|	**Cd**	**111**	**0.056**	ug/L	0.012	21	3	20	17	KED
⌊	**Cd**	**114**	**0.056**	ug/L	0.016	29	3	45	26	KED
⌈>	**Tb**	**159**		ug/L			167464	202711	1	Standard
⌊	**Pb**	**208**	**19.184**	ug/L	0.279	1	168	1863408	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:36:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	81204	1	Standard
> Sc	45		ug/L			332530	472048	1	Standard
Cr	52	12.545	ug/L	0.284	2	13137	424433	1	Standard
Cr	53	13.034	ug/L	0.074	0	163	46453	1	Standard
> Ge	72		ug/L			37776	36942	2	KED
Ni	60	18.823	ug/L	0.885	4	3	28185	2	KED
Ni	62	19.288	ug/L	0.654	3	0	4607	2	KED
Cu	63	24.315	ug/L	0.458	1	18	99529	1	KED
Cu	65	23.991	ug/L	0.649	2	6	49914	0	KED
Zn	66	53.439	ug/L	1.514	2	19	30186	1	KED
Zn	67	51.980	ug/L	2.300	4	3	4852	1	KED
As	75	5.112	ug/L	0.171	3	3	1514	0	KED
Kr	83		ug/L			41	81	9	Standard
> In-1	115		ug/L			8842	8543	1	KED
Cd	111	0.058	ug/L	0.018	31	3	20	25	KED
Cd	114	0.050	ug/L	0.025	50	3	40	44	KED
> Tb	159		ug/L			167464	199198	1	Standard
Pb	208	17.282	ug/L	0.244	1	168	1649623	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:40:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	104122	1	Standard
> Sc	45		ug/L			332530	515038	2	Standard
Cr	52	42.055	ug/L	0.636	1	13137	1504361	1	Standard
Cr	53	43.668	ug/L	1.081	2	163	169139	0	Standard
> Ge	72		ug/L			37776	37168	0	KED
Ni	60	29.403	ug/L	0.197	0	3	44330	1	KED
Ni	62	29.969	ug/L	0.413	1	0	7204	1	KED
Cu	63	111.651	ug/L	0.972	0	18	459853	0	KED
Cu	65	110.342	ug/L	1.453	1	6	231057	1	KED
Zn	66	254.634	ug/L	4.479	1	19	144692	1	KED
Zn	67	247.089	ug/L	3.927	1	3	23208	1	KED
As	75	12.428	ug/L	0.299	2	3	3701	1	KED
Kr	83		ug/L			41	103	14	Standard
> In-1	115		ug/L			8842	8430	0	KED
Cd	111	4.208	ug/L	0.169	4	3	1207	4	KED
Cd	114	4.054	ug/L	0.070	1	3	2945	1	KED
> Tb	159		ug/L			167464	200896	0	Standard
Pb	208	408.445	ug/L	5.918	1	168	39318569	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:44:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	80379	2	Standard
>	Sc	45		ug/L			332530	492398	2	Standard
	Cr	52	9.571	ug/L	0.119	1	13137	342383	1	Standard
	Cr	53	10.237	ug/L	0.247	2	163	38095	0	Standard
>	Ge	72		ug/L			37776	37178	0	KED
	Ni	60	11.606	ug/L	0.109	0	3	17504	1	KED
	Ni	62	11.670	ug/L	0.022	0	0	2806	0	KED
	Cu	63	26.298	ug/L	0.073	0	18	108361	0	KED
	Cu	65	26.251	ug/L	0.059	0	6	54988	0	KED
	Zn	66	53.995	ug/L	0.132	0	19	30707	0	KED
	Zn	67	52.139	ug/L	1.110	2	3	4901	2	KED
	As	75	5.517	ug/L	0.126	2	3	1646	2	KED
	Kr	83		ug/L			41	83	25	Standard
>	In-1	115		ug/L			8842	8301	0	KED
	Cd	111	0.156	ug/L	0.022	13	3	47	13	KED
	Cd	114	0.115	ug/L	0.022	19	3	85	18	KED
>	Tb	159		ug/L			167464	199826	1	Standard
	Pb	208	9.842	ug/L	0.134	1	168	942472	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:48:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	82668	1	Standard
>	Sc	45		ug/L			332530	494273	1	Standard
	Cr	52	9.506	ug/L	0.087	0	13137	341547	2	Standard
	Cr	53	9.949	ug/L	0.082	0	163	37186	1	Standard
>	Ge	72		ug/L			37776	36431	1	KED
	Ni	60	11.662	ug/L	0.255	2	3	17233	1	KED
	Ni	62	11.870	ug/L	0.391	3	0	2797	2	KED
	Cu	63	26.350	ug/L	0.347	1	18	106385	1	KED
	Cu	65	26.538	ug/L	0.453	1	6	54465	0	KED
	Zn	66	53.674	ug/L	0.468	0	19	29910	0	KED
	Zn	67	52.192	ug/L	2.084	3	3	4806	2	KED
	As	75	5.362	ug/L	0.201	3	3	1567	2	KED
	Kr	83		ug/L			41	81	25	Standard
>	In-1	115		ug/L			8842	8368	0	KED
	Cd	111	0.161	ug/L	0.036	22	3	48	19	KED
	Cd	114	0.156	ug/L	0.027	17	3	115	16	KED
>	Tb	159		ug/L			167464	199076	0	Standard
	Pb	208	9.259	ug/L	0.108	1	168	883390	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:53:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	71590	0	Standard
> Sc	45		ug/L			332530	503058	1	Standard
Cr	52	25.876	ug/L	0.129	0	13137	912014	2	Standard
Cr	53	26.979	ug/L	0.634	2	163	102192	1	Standard
> Ge	72		ug/L			37776	36318	1	KED
Ni	60	37.848	ug/L	0.892	2	3	55740	0	KED
Ni	62	38.324	ug/L	1.404	3	0	8998	1	KED
Cu	63	53.461	ug/L	0.892	1	18	215132	0	KED
Cu	65	53.011	ug/L	0.820	1	6	108451	0	KED
Zn	66	132.730	ug/L	2.404	1	19	73694	0	KED
Zn	67	126.505	ug/L	4.423	3	3	11609	2	KED
As	75	29.176	ug/L	0.295	1	3	8487	0	KED
Kr	83		ug/L			41	84	10	Standard
> In-1	115		ug/L			8842	8355	3	KED
Cd	111	25.260	ug/L	1.145	4	3	7160	0	KED
Cd	114	25.612	ug/L	1.387	5	3	18402	2	KED
> Tb	159		ug/L			167464	196213	0	Standard
Pb	208	32.065	ug/L	0.358	1	168	3014752	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:57:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	68041	1	Standard
> Sc	45		ug/L			332530	482139	3	Standard
Cr	52	26.101	ug/L	0.795	3	13137	880882	0	Standard
Cr	53	27.226	ug/L	0.886	3	163	98786	1	Standard
> Ge	72		ug/L			37776	36287	1	KED
Ni	60	36.992	ug/L	0.610	1	3	54440	1	KED
Ni	62	37.272	ug/L	0.787	2	0	8748	2	KED
Cu	63	51.809	ug/L	0.821	1	18	208314	0	KED
Cu	65	51.139	ug/L	0.883	1	6	104533	0	KED
Zn	66	131.098	ug/L	2.376	1	19	72730	0	KED
Zn	67	126.543	ug/L	2.352	1	3	11604	0	KED
As	75	28.833	ug/L	0.529	1	3	8379	0	KED
Kr	83		ug/L			41	90	18	Standard
> In-1	115		ug/L			8842	8417	1	KED
Cd	111	24.845	ug/L	0.751	3	3	7100	1	KED
Cd	114	24.876	ug/L	0.405	1	3	18025	1	KED
> Tb	159		ug/L			167464	196091	0	Standard
Pb	208	31.674	ug/L	0.256	0	168	2976369	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:01:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	79982	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	491748	1	Standard
|	**Cr**	**52**	**26.095**	ug/L	0.043	0	13137	898859	1	Standard
⌊	**Cr**	**53**	**27.271**	ug/L	0.408	1	163	100981	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	36127	0	KED
|	**Ni**	**60**	**37.312**	ug/L	0.492	1	3	54672	0	KED
|	**Ni**	**62**	**38.098**	ug/L	1.551	4	0	8900	3	KED
|	**Cu**	**63**	**53.233**	ug/L	0.315	0	18	213124	0	KED
|	**Cu**	**65**	**52.745**	ug/L	1.040	1	6	107347	1	KED
|	**Zn**	**66**	**133.882**	ug/L	2.016	1	19	73958	1	KED
|	**Zn**	**67**	**128.460**	ug/L	2.300	1	3	11729	1	KED
⌊	**As**	**75**	**29.795**	ug/L	0.468	1	3	8622	1	KED
	Kr	**83**		ug/L			41	88	20	Standard
⌈>	**In-1**	**115**		ug/L			8842	8361	0	KED
|	**Cd**	**111**	**24.504**	ug/L	0.453	1	3	6957	1	KED
⌊	**Cd**	**114**	**25.134**	ug/L	0.476	1	3	18091	1	KED
⌈>	**Tb**	**159**		ug/L			167464	198248	0	Standard
⌊	**Pb**	**208**	**32.328**	ug/L	0.284	0	168	3071107	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:06:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	43677	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	326255	1	Standard
|	**Cr**	**52**	**-0.008**	ug/L	0.011	131	13137	12707	1	Standard
⌊	**Cr**	**53**	**-0.000**	ug/L	0.006	1816	163	159	10	Standard
⌈>	**Ge**	**72**		ug/L			37776	36578	0	KED
|	**Ni**	**60**	**0.022**	ug/L	0.006	28	3	35	24	KED
|	**Ni**	**62**	**0.019**	ug/L	0.012	65	0	5	57	KED
|	**Cu**	**63**	**0.007**	ug/L	0.002	27	18	47	17	KED
|	**Cu**	**65**	**0.007**	ug/L	0.002	28	6	20	19	KED
|	**Zn**	**66**	**0.017**	ug/L	0.011	67	19	28	23	KED
|	**Zn**	**67**	**0.008**	ug/L	0.023	292	3	4	49	KED
⌊	**As**	**75**	**0.006**	ug/L	0.004	57	3	5	20	KED
	Kr	**83**		ug/L			41	45	12	Standard
⌈>	**In-1**	**115**		ug/L			8842	8279	3	KED
|	**Cd**	**111**	**0.002**	ug/L	0.004	190	3	3	25	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.003	429	3	3	68	KED
⌈>	**Tb**	**159**		ug/L			167464	169477	0	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	6	168	502	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:10:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	44281	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	327572	1	Standard
|	**Cr**	**52**	**49.143**	ug/L	0.606	1	13137	1116097	1	Standard
⌊	**Cr**	**53**	**51.123**	ug/L	0.652	1	163	125962	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	36951	1	KED
|	**Ni**	**60**	**50.058**	ug/L	0.801	1	3	75018	0	KED
|	**Ni**	**62**	**51.286**	ug/L	1.408	2	0	12254	1	KED
|	**Cu**	**63**	**52.089**	ug/L	0.729	1	18	213286	0	KED
|	**Cu**	**65**	**50.905**	ug/L	0.828	1	6	105966	0	KED
|	**Zn**	**66**	**51.112**	ug/L	0.820	1	19	28888	0	KED
|	**Zn**	**67**	**50.082**	ug/L	1.029	2	3	4679	1	KED
⌊	**As**	**75**	**49.036**	ug/L	0.301	0	3	14511	0	KED
	Kr	**83**		ug/L			41	42	26	Standard
⌈>	**In-1**	**115**		ug/L			8842	8166	2	KED
|	**Cd**	**111**	**52.272**	ug/L	2.000	3	3	14484	1	KED
⌊	**Cd**	**114**	**52.871**	ug/L	1.570	2	3	37150	1	KED
⌈>	**Tb**	**159**		ug/L			167464	170308	1	Standard
⌊	**Pb**	**208**	**52.307**	ug/L	0.701	1	168	4268418	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:17:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	43109	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	325612	2	Standard
|	**Cr**	**52**	**0.072**	ug/L	0.081	113	13137	14450	11	Standard
⌊	**Cr**	**53**	**0.043**	ug/L	0.073	167	163	263	65	Standard
⌈>	**Ge**	**72**		ug/L			37776	37436	0	KED
|	**Ni**	**60**	**0.022**	ug/L	0.001	4	3	36	2	KED
|	**Ni**	**62**	**0.034**	ug/L	0.012	35	0	8	32	KED
|	**Cu**	**63**	**0.002**	ug/L	0.001	62	18	26	18	KED
|	**Cu**	**65**	**0.007**	ug/L	0.003	40	6	21	28	KED
|	**Zn**	**66**	**0.055**	ug/L	0.008	14	19	50	9	KED
|	**Zn**	**67**	**0.061**	ug/L	0.061	100	3	9	60	KED
⌊	**As**	**75**	**0.002**	ug/L	0.002	137	3	4	17	KED
	Kr	**83**		ug/L			41	46	36	Standard
⌈>	**In-1**	**115**		ug/L			8842	8597	1	KED
|	**Cd**	**111**	**0.004**	ug/L	0.002	57	3	4	12	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	434	3	4	65	KED
⌈>	**Tb**	**159**		ug/L			167464	166649	0	Standard
⌊	**Pb**	**208**	**0.071**	ug/L	0.117	165	168	5784	160	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-07
Sample Dil Factor: 20
Comments:

DEL

Sample Date/Time: Wednesday, May 10, 2023 01:21:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	70476	0	Standard
>	**Sc**	**45**		ug/L			332530	454088	3	Standard
	Cr	**52**	**9.274**	ug/L	0.428	4	13137	306227	1	Standard
	Cr	**53**	**9.649**	ug/L	0.149	1	163	33129	2	Standard
>	**Ge**	**72**		ug/L			37776	36804	1	KED
	Ni	**60**	**22.087**	ug/L	0.339	1	3	32971	1	KED
	Ni	**62**	**22.142**	ug/L	0.760	3	0	5269	2	KED
	Cu	**63**	**19.212**	ug/L	0.292	1	18	78360	0	KED
	Cu	**65**	**19.361**	ug/L	0.221	1	6	40153	2	KED
	Zn	**66**	**37.347**	ug/L	0.956	2	19	21027	1	KED
	Zn	**67**	**37.471**	ug/L	1.236	3	3	3487	2	KED
	As	**75**	**8.119**	ug/L	0.110	1	3	2396	1	KED
	Kr	**83**		ug/L			41	63	4	Standard
>	**In-1**	**115**		ug/L			8842	8379	0	KED
	Cd	**111**	**0.037**	ug/L	0.005	13	3	13	10	KED
	Cd	**114**	**0.036**	ug/L	0.007	18	3	29	16	KED
>	**Tb**	**159**		ug/L			167464	196394	1	Standard
	Pb	**208**	**2.250**	ug/L	0.026	1	168	211933	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:26:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	72031	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	442093	2	Standard
|	**Cr**	**52**	**71.717**	ug/L	0.932	1	13137	2189974	1	Standard
⌊	**Cr**	**53**	**71.999**	ug/L	1.413	1	163	239287	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	36891	1	KED
|	**Ni**	**60**	**97.415**	ug/L	0.453	0	3	145757	1	KED
|	**Ni**	**62**	**97.295**	ug/L	2.058	2	0	23211	1	KED
|	**Cu**	**63**	**88.365**	ug/L	1.177	1	18	361204	0	KED
|	**Cu**	**65**	**86.840**	ug/L	0.681	0	6	180475	0	KED
|	**Zn**	**66**	**74.426**	ug/L	0.937	1	19	41987	0	KED
|	**Zn**	**67**	**70.743**	ug/L	2.634	3	3	6595	2	KED
⌊	**As**	**75**	**6.223**	ug/L	0.215	3	3	1841	2	KED
	Kr	**83**		ug/L			41	67	18	Standard
⌈>	**In-1**	**115**		ug/L			8842	8311	1	KED
|	**Cd**	**111**	**0.162**	ug/L	0.034	20	3	48	18	KED
⌊	**Cd**	**114**	**0.159**	ug/L	0.028	17	3	117	15	KED
⌈>	**Tb**	**159**		ug/L			167464	187180	0	Standard
⌊	**Pb**	**208**	**62.709**	ug/L	0.140	0	168	5624709	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:30:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	77713	0	Standard
>	**Sc**	**45**		ug/L			332530	463736	2	Standard
	Cr	**52**	**18.360**	ug/L	0.384	2	13137	601715	1	Standard
	Cr	**53**	**18.974**	ug/L	0.106	0	163	66328	1	Standard
>	**Ge**	**72**		ug/L			37776	36456	0	KED
	Ni	**60**	**36.857**	ug/L	0.266	0	3	54500	0	KED
	Ni	**62**	**38.090**	ug/L	0.927	2	0	8981	2	KED
	Cu	**63**	**45.515**	ug/L	0.433	0	18	183884	0	KED
	Cu	**65**	**44.346**	ug/L	0.798	1	6	91082	1	KED
	Zn	**66**	**212.240**	ug/L	1.662	0	19	118305	1	KED
	Zn	**67**	**201.442**	ug/L	2.984	1	3	18559	1	KED
	As	**75**	**4.068**	ug/L	0.084	2	3	1191	2	KED
	Kr	**83**		ug/L			41	99	5	Standard
>	**In-1**	**115**		ug/L			8842	8237	0	KED
	Cd	**111**	**0.439**	ug/L	0.063	14	3	126	13	KED
	Cd	**114**	**0.369**	ug/L	0.075	20	3	264	19	KED
>	**Tb**	**159**		ug/L			167464	194681	0	Standard
	Pb	**208**	**83.272**	ug/L	1.545	1	168	7767545	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-13
Sample Dil Factor: 20
Comments:

DEL

Sample Date/Time: Wednesday, May 10, 2023 01:34:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	61975	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	412337	2	Standard
|	**Cr**	**52**	**10.299**	ug/L	0.174	1	13137	307251	1	Standard
⌊	**Cr**	**53**	**10.905**	ug/L	0.163	1	163	33978	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	36196	0	KED
|	**Ni**	**60**	**12.289**	ug/L	0.209	1	3	18043	1	KED
|	**Ni**	**62**	**12.165**	ug/L	0.203	1	0	2848	2	KED
|	**Cu**	**63**	**34.043**	ug/L	0.303	0	18	136557	0	KED
|	**Cu**	**65**	**33.882**	ug/L	0.449	1	6	69094	0	KED
|	**Zn**	**66**	**71.033**	ug/L	0.609	0	19	39323	1	KED
|	**Zn**	**67**	**68.352**	ug/L	1.054	1	3	6254	0	KED
⌊	**As**	**75**	**4.810**	ug/L	0.056	1	3	1397	1	KED
	Kr	**83**		ug/L			41	69	32	Standard
⌈>	**In-1**	**115**		ug/L			8842	8353	2	KED
|	**Cd**	**111**	**0.114**	ug/L	0.028	24	3	35	20	KED
⌊	**Cd**	**114**	**0.130**	ug/L	0.026	20	3	97	18	KED
⌈>	**Tb**	**159**		ug/L			167464	189703	2	Standard
⌊	**Pb**	**208**	**32.329**	ug/L	0.882	2	168	2937649	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0348-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:39:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	61599	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	286969	2	Standard
|	**Cr**	**52**	**0.441**	ug/L	0.019	4	13137	20001	3	Standard
⌊	**Cr**	**53**	**1.624**	ug/L	0.010	0	163	3641	3	Standard
⌈>	**Ge**	**72**		ug/L			37776	28084	0	KED
|	**Ni**	**60**	**1.437**	ug/L	0.031	2	3	1640	2	KED
|	**Ni**	**62**	**1.427**	ug/L	0.124	8	0	259	8	KED
|	**Cu**	**63**	**1.953**	ug/L	0.018	0	18	6090	1	KED
|	**Cu**	**65**	**1.982**	ug/L	0.015	0	6	3141	0	KED
|	**Zn**	**66**	**17.083**	ug/L	0.234	1	19	7349	1	KED
|	**Zn**	**67**	**16.172**	ug/L	0.402	2	3	1150	3	KED
⌊	**As**	**75**	**1.246**	ug/L	0.040	3	3	283	3	KED
	Kr	**83**		ug/L			41	55	5	Standard
⌈>	**In-1**	**115**		ug/L			8842	6511	3	KED
|	**Cd**	**111**	**0.020**	ug/L	0.011	53	3	6	31	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.004	42	3	7	26	KED
⌈>	**Tb**	**159**		ug/L			167464	148231	2	Standard
⌊	**Pb**	**208**	**0.125**	ug/L	0.003	2	168	8997	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLC
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:43:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	39153	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	310974	3	Standard
|	**Cr**	**52**	**0.048**	ug/L	0.020	42	13137	13306	0	Standard
⌊	**Cr**	**53**	**0.023**	ug/L	0.006	25	163	206	3	Standard
⌈>	**Ge**	**72**		ug/L			37776	32860	0	KED
|	**Ni**	**60**	**0.018**	ug/L	0.008	43	3	26	37	KED
|	**Ni**	**62**	**0.024**	ug/L	0.009	36	0	5	33	KED
|	**Cu**	**63**	**0.014**	ug/L	0.003	20	18	66	15	KED
|	**Cu**	**65**	**0.016**	ug/L	0.001	8	6	34	6	KED
|	**Zn**	**66**	**0.015**	ug/L	0.025	162	19	24	50	KED
|	**Zn**	**67**	**0.029**	ug/L	0.022	77	3	5	33	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.003	63	3	2	35	KED
	Kr	**83**		ug/L			41	39	22	Standard
⌈>	**In-1**	**115**		ug/L			8842	7552	1	KED
|	**Cd**	**111**	**-0.000**	ug/L	0.004	857	3	2	33	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.005	387	3	2	122	KED
⌈>	**Tb**	**159**		ug/L			167464	163041	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.001	31	168	389	19	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0376-01
Sample Dil Factor: 100
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:48:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	54293	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	314660	0	Standard
|	**Cr**	**52**	**18.960**	ug/L	0.231	1	13137	421315	1	Standard
⌊	**Cr**	**53**	**19.668**	ug/L	0.106	0	163	46650	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	34247	1	KED
|	**Ni**	**60**	**0.246**	ug/L	0.027	10	3	344	11	KED
|	**Ni**	**62**	**0.304**	ug/L	0.071	23	0	67	22	KED
|	**Cu**	**63**	**0.337**	ug/L	0.010	3	18	1295	2	KED
|	**Cu**	**65**	**0.338**	ug/L	0.027	8	6	657	6	KED
|	**Zn**	**66**	**15.872**	ug/L	0.273	1	19	8326	0	KED
|	**Zn**	**67**	**14.432**	ug/L	0.867	6	3	1252	7	KED
⌊	**As**	**75**	**0.037**	ug/L	0.005	13	3	13	11	KED
	Kr	**83**		ug/L			41	38	35	Standard
⌈>	**In-1**	**115**		ug/L			8842	7536	0	KED
|	**Cd**	**111**	**0.138**	ug/L	0.034	24	3	38	22	KED
⌊	**Cd**	**114**	**0.133**	ug/L	0.007	5	3	89	5	KED
⌈>	**Tb**	**159**		ug/L			167464	161968	1	Standard
⌊	**Pb**	**208**	**0.029**	ug/L	0.001	3	168	2419	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0424-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:52:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	52553	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	344015	2	Standard
|	**Cr**	**52**	**0.601**	ug/L	0.021	3	13137	27749	1	Standard
⌊	**Cr**	**53**	**0.738**	ug/L	0.008	1	163	2076	3	Standard
⌈>	**Ge**	**72**		ug/L			37776	33048	1	KED
|	**Ni**	**60**	**0.694**	ug/L	0.028	4	3	933	2	KED
|	**Ni**	**62**	**0.734**	ug/L	0.055	7	0	157	6	KED
|	**Cu**	**63**	**2.449**	ug/L	0.069	2	18	8982	1	KED
|	**Cu**	**65**	**2.435**	ug/L	0.057	2	6	4539	0	KED
|	**Zn**	**66**	**96.648**	ug/L	0.645	0	19	48842	1	KED
|	**Zn**	**67**	**89.752**	ug/L	1.689	1	3	7497	2	KED
⌊	**As**	**75**	**0.583**	ug/L	0.052	8	3	157	7	KED
	Kr	**83**		ug/L			41	44	8	Standard
⌈>	**In-1**	**115**		ug/L			8842	7616	0	KED
|	**Cd**	**111**	**0.101**	ug/L	0.009	9	3	29	8	KED
⌊	**Cd**	**114**	**0.098**	ug/L	0.028	28	3	67	26	KED
⌈>	**Tb**	**159**		ug/L			167464	163481	0	Standard
⌊	**Pb**	**208**	**0.576**	ug/L	0.008	1	168	45305	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0374-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:57:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	61358	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	298471	1	Standard
|	**Cr**	**52**	**1.328**	ug/L	0.021	1	13137	38953	2	Standard
⌊	**Cr**	**53**	**2.563**	ug/L	0.053	2	163	5892	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	27150	0	KED
|	**Ni**	**60**	**1.039**	ug/L	0.074	7	3	1146	7	KED
|	**Ni**	**62**	**1.053**	ug/L	0.117	11	0	185	10	KED
|	**Cu**	**63**	**1.883**	ug/L	0.021	1	18	5678	0	KED
|	**Cu**	**65**	**1.814**	ug/L	0.030	1	6	2779	0	KED
|	**Zn**	**66**	**1.534**	ug/L	0.015	0	19	650	1	KED
|	**Zn**	**67**	**2.394**	ug/L	0.039	1	3	166	0	KED
⌊	**As**	**75**	**0.708**	ug/L	0.026	3	3	156	4	KED
	Kr	**83**		ug/L			41	41	34	Standard
⌈>	**In-1**	**115**		ug/L			8842	6456	0	KED
|	**Cd**	**111**	**0.016**	ug/L	0.005	32	3	6	18	KED
⌊	**Cd**	**114**	**0.015**	ug/L	0.021	144	3	10	107	KED
⌈>	**Tb**	**159**		ug/L			167464	147508	0	Standard
⌊	**Pb**	**208**	**0.111**	ug/L	0.002	1	168	8025	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLD
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:01:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	38378	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	289398	3	Standard
|	**Cr**	**52**	**0.106**	ug/L	0.021	19	13137	13531	0	Standard
⌊	**Cr**	**53**	**0.045**	ug/L	0.009	19	163	240	10	Standard
⌈>	**Ge**	**72**		ug/L			37776	31531	0	KED
|	**Ni**	**60**	**0.007**	ug/L	0.002	31	3	12	22	KED
|	**Ni**	**62**	**0.016**	ug/L	0.009	58	0	3	50	KED
|	**Cu**	**63**	**0.003**	ug/L	0.002	70	18	25	28	KED
|	**Cu**	**65**	**0.004**	ug/L	0.004	102	6	13	57	KED
|	**Zn**	**66**	**0.007**	ug/L	0.006	94	19	19	14	KED
|	**Zn**	**67**	**0.024**	ug/L	0.028	115	3	5	43	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.003	75	3	2	35	KED
	Kr	**83**		ug/L			41	43	4	Standard
⌈>	**In-1**	**115**		ug/L			8842	6362	13	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.004	68	3	1	43	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.006	471	3	3	102	KED
⌈>	**Tb**	**159**		ug/L			167464	151430	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	7	168	375	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVC
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:05:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	38042	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	295762	1	Standard
|	**Cr**	**52**	**48.297**	ug/L	0.492	1	13137	990587	1	Standard
⌊	**Cr**	**53**	**49.856**	ug/L	0.557	1	163	110910	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	30706	0	KED
|	**Ni**	**60**	**52.052**	ug/L	0.958	1	3	64831	2	KED
|	**Ni**	**62**	**52.337**	ug/L	0.771	1	0	10394	1	KED
|	**Cu**	**63**	**53.747**	ug/L	0.463	0	18	182888	0	KED
|	**Cu**	**65**	**53.307**	ug/L	0.946	1	6	92214	1	KED
|	**Zn**	**66**	**52.519**	ug/L	0.263	0	19	24668	0	KED
|	**Zn**	**67**	**52.163**	ug/L	1.222	2	3	4050	3	KED
⌊	**As**	**75**	**49.513**	ug/L	0.209	0	3	12176	0	KED
	Kr	**83**		ug/L			41	48	23	Standard
⌈>	**In-1**	**115**		ug/L			8842	6949	0	KED
|	**Cd**	**111**	**53.499**	ug/L	0.617	1	3	12624	1	KED
⌊	**Cd**	**114**	**53.285**	ug/L	0.173	0	3	31879	0	KED
⌈>	**Tb**	**159**		ug/L			167464	157054	0	Standard
⌊	**Pb**	**208**	**56.321**	ug/L	0.244	0	168	4238669	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBC
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:12:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	38212	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	292625	2	Standard
|	**Cr**	**52**	**-0.027**	ug/L	0.006	23	13137	11014	1	Standard
⌊	**Cr**	**53**	**-0.002**	ug/L	0.004	176	163	138	5	Standard
⌈>	**Ge**	**72**		ug/L			37776	31710	0	KED
|	**Ni**	**60**	**0.014**	ug/L	0.003	21	3	20	18	KED
|	**Ni**	**62**	**0.010**	ug/L	0.021	219	0	2	173	KED
|	**Cu**	**63**	**0.005**	ug/L	0.004	80	18	33	43	KED
|	**Cu**	**65**	**0.009**	ug/L	0.005	54	6	21	39	KED
|	**Zn**	**66**	**0.038**	ug/L	0.029	76	19	34	40	KED
|	**Zn**	**67**	**0.055**	ug/L	0.063	113	3	7	66	KED
⌊	**As**	**75**	**0.004**	ug/L	0.005	111	3	4	29	KED
	Kr	**83**		ug/L			41	36	2	Standard
⌈>	**In-1**	**115**		ug/L			8842	7448	0	KED
|	**Cd**	**111**	**0.005**	ug/L	0.002	49	3	4	13	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.005	704	3	3	94	KED
⌈>	**Tb**	**159**		ug/L			167464	154637	1	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.005	91	168	587	66	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0513-03
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:17:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	76459	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	347951	1	Standard
|	**Cr**	**52**	**0.493**	ug/L	0.017	3	13137	25506	1	Standard
⌊	**Cr**	**53**	**0.822**	ug/L	0.022	2	163	2319	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	31974	0	KED
|	**Ni**	**60**	**1.158**	ug/L	0.038	3	3	1504	2	KED
|	**Ni**	**62**	**1.220**	ug/L	0.067	5	0	252	4	KED
|	**Cu**	**63**	**10.068**	ug/L	0.063	0	18	35687	1	KED
|	**Cu**	**65**	**10.009**	ug/L	0.326	3	6	18033	2	KED
|	**Zn**	**66**	**37.583**	ug/L	0.607	1	19	18387	1	KED
|	**Zn**	**67**	**34.815**	ug/L	0.410	1	3	2816	1	KED
⌊	**As**	**75**	**0.241**	ug/L	0.029	11	3	64	10	KED
	Kr	**83**		ug/L			41	45	12	Standard
⌈>	**In-1**	**115**		ug/L			8842	7250	1	KED
|	**Cd**	**111**	**0.044**	ug/L	0.013	30	3	13	24	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.043	1995	3	1	1511	KED
⌈>	**Tb**	**159**		ug/L			167464	159305	0	Standard
⌊	**Pb**	**208**	**0.255**	ug/L	0.004	1	168	19634	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0452-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:21:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	265955	1	Standard
>	Sc	45		ug/L			332530	286954	2	Standard
	Cr	52	2.337	ug/L	0.054	2	13137	57271	1	Standard
	Cr	53	2.168	ug/L	0.013	0	163	4814	3	Standard
>	Ge	72		ug/L			37776	27762	1	KED
	Ni	60	4.031	ug/L	0.085	2	3	4540	0	KED
	Ni	62	4.109	ug/L	0.167	4	0	738	5	KED
	Cu	63	0.480	ug/L	0.019	3	18	1490	5	KED
	Cu	65	0.462	ug/L	0.024	5	6	727	6	KED
	Zn	66	3.074	ug/L	0.105	3	19	1318	1	KED
	Zn	67	3.103	ug/L	0.461	14	3	220	14	KED
	As	75	0.162	ug/L	0.004	2	3	38	3	KED
	Kr	83		ug/L			41	52	31	Standard
>	In-1	115		ug/L			8842	6337	1	KED
	Cd	111	0.027	ug/L	0.007	26	3	8	17	KED
	Cd	114	0.019	ug/L	0.009	49	3	12	40	KED
>	Tb	159		ug/L			167464	146445	0	Standard
	Pb	208	0.048	ug/L	0.000	0	168	3531	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0462-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:25:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	57550	0	Standard
>	Sc	45		ug/L			332530	362170	3	Standard
	Cr	52	0.024	ug/L	0.004	14	13137	14910	2	Standard
	Cr	53	0.805	ug/L	0.026	3	163	2367	1	Standard
>	Ge	72		ug/L			37776	30582	0	KED
	Ni	60	1.767	ug/L	0.052	2	3	2194	2	KED
	Ni	62	1.654	ug/L	0.208	12	0	327	12	KED
	Cu	63	0.327	ug/L	0.003	1	18	1123	0	KED
	Cu	65	0.340	ug/L	0.017	4	6	591	4	KED
	Zn	66	1.162	ug/L	0.024	2	19	559	1	KED
	Zn	67	1.521	ug/L	0.207	13	3	120	13	KED
	As	75	0.307	ug/L	0.014	4	3	78	4	KED
	Kr	83		ug/L			41	46	46	Standard
>	In-1	115		ug/L			8842	6969	1	KED
	Cd	111	0.021	ug/L	0.011	51	3	7	33	KED
	Cd	114	0.012	ug/L	0.007	57	3	9	39	KED
>	Tb	159		ug/L			167464	154961	1	Standard
	Pb	208	0.031	ug/L	0.001	3	168	2438	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0480-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:31:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	293918	1	Standard
>	Sc	45		ug/L			332530	245721	3	Standard
	Cr	52	16.818	ug/L	0.337	2	13137	292820	1	Standard
	Cr	53	17.000	ug/L	0.117	0	163	31500	2	Standard
>	Ge	72		ug/L			37776	21688	0	KED
	Ni	60	4.067	ug/L	0.112	2	3	3579	2	KED
	Ni	62	4.411	ug/L	0.111	2	0	619	1	KED
	Cu	63	0.280	ug/L	0.014	5	18	684	5	KED
	Cu	65	0.280	ug/L	0.045	15	6	346	15	KED
	Zn	66	26.903	ug/L	0.577	2	19	8929	1	KED
	Zn	67	24.123	ug/L	0.949	3	3	1323	3	KED
	As	75	0.097	ug/L	0.016	16	3	18	14	KED
	Kr	83		ug/L			41	84	10	Standard
>	In-1	115		ug/L			8842	5227	2	KED
	Cd	111	0.457	ug/L	0.043	9	3	83	10	KED
	Cd	114	0.436	ug/L	0.073	16	3	198	14	KED
>	Tb	159		ug/L			167464	133894	1	Standard
	Pb	208	0.061	ug/L	0.001	1	168	4043	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:36:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	41033	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	288885	0	Standard
|	**Cr**	**52**	**0.021**	ug/L	0.013	59	13137	11833	1	Standard
⌊	**Cr**	**53**	**-0.008**	ug/L	0.005	66	163	124	8	Standard
⌈>	**Ge**	**72**		ug/L			37776	30510	0	KED
|	**Ni**	**60**	**0.016**	ug/L	0.007	44	3	22	38	KED
|	**Ni**	**62**	**0.043**	ug/L	0.024	57	0	8	53	KED
|	**Cu**	**63**	**0.016**	ug/L	0.005	29	18	67	21	KED
|	**Cu**	**65**	**0.015**	ug/L	0.002	10	6	31	9	KED
|	**Zn**	**66**	**0.046**	ug/L	0.035	76	19	37	44	KED
|	**Zn**	**67**	**0.059**	ug/L	0.001	1	3	7	0	KED
⌊	**As**	**75**	**0.000**	ug/L	0.006	2166	3	3	48	KED
	Kr	**83**		ug/L			41	41	16	Standard
⌈>	**In-1**	**115**		ug/L			8842	7030	1	KED
|	**Cd**	**111**	**0.007**	ug/L	0.011	164	3	4	61	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.005	494	3	2	120	KED
⌈>	**Tb**	**159**		ug/L			167464	155077	0	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	15	168	360	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0442-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:40:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	47786	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	320614	2	Standard
|	**Cr**	**52**	**-0.047**	ug/L	0.009	20	13137	11634	0	Standard
⌊	**Cr**	**53**	**0.036**	ug/L	0.011	29	163	243	10	Standard
⌈>	**Ge**	**72**		ug/L			37776	31329	0	KED
|	**Ni**	**60**	**0.028**	ug/L	0.016	55	3	39	51	KED
|	**Ni**	**62**	**0.041**	ug/L	0.027	65	0	8	61	KED
|	**Cu**	**63**	**0.022**	ug/L	0.004	17	18	90	15	KED
|	**Cu**	**65**	**0.019**	ug/L	0.006	34	6	38	28	KED
|	**Zn**	**66**	**0.083**	ug/L	0.010	11	19	55	8	KED
|	**Zn**	**67**	**0.049**	ug/L	0.061	125	3	6	68	KED
⌊	**As**	**75**	**0.486**	ug/L	0.014	2	3	124	3	KED
	Kr	**83**		ug/L			41	34	20	Standard
⌈>	**In-1**	**115**		ug/L			8842	7187	0	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.006	497	3	2	57	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.002	172	3	2	45	KED
⌈>	**Tb**	**159**		ug/L			167464	158377	0	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	3	168	288	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0054-DUP3
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:45:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	48580	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	319845	2	Standard
|	**Cr**	**52**	**-0.036**	ug/L	0.017	48	13137	11846	0	Standard
⌊	**Cr**	**53**	**0.043**	ug/L	0.001	1	163	260	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	31872	1	KED
|	**Ni**	**60**	**0.025**	ug/L	0.006	21	3	36	21	KED
|	**Ni**	**62**	**0.031**	ug/L	0.035	111	0	6	103	KED
|	**Cu**	**63**	**0.013**	ug/L	0.005	42	18	59	29	KED
|	**Cu**	**65**	**0.008**	ug/L	0.001	17	6	19	11	KED
|	**Zn**	**66**	**0.044**	ug/L	0.014	32	19	38	17	KED
|	**Zn**	**67**	**0.102**	ug/L	0.061	59	3	11	44	KED
⌊	**As**	**75**	**0.478**	ug/L	0.027	5	3	125	6	KED
	Kr	**83**		ug/L			41	37	10	Standard
⌈>	**In-1**	**115**		ug/L			8842	7282	4	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.006	260	3	2	65	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.009	330	3	4	119	KED
⌈>	**Tb**	**159**		ug/L			167464	159075	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	56	168	194	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0054-MS3
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:49:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	48650	0	Standard
⌈>	Sc	45		ug/L			332530	325593	1	Standard
|	Cr	52	1.193	ug/L	0.022	1	13137	39485	2	Standard
⌊	Cr	53	1.337	ug/L	0.017	1	163	3429	2	Standard
⌈>	Ge	72		ug/L			37776	32790	0	KED
|	Ni	60	1.435	ug/L	0.050	3	3	1911	3	KED
|	Ni	62	1.465	ug/L	0.096	6	0	311	6	KED
|	Cu	63	1.500	ug/L	0.023	1	18	5464	1	KED
|	Cu	65	1.465	ug/L	0.049	3	6	2711	3	KED
|	Zn	66	4.740	ug/L	0.030	0	19	2393	1	KED
|	Zn	67	4.520	ug/L	0.268	5	3	377	5	KED
⌊	As	75	1.824	ug/L	0.010	0	3	482	0	KED
	Kr	83		ug/L			41	33	23	Standard
⌈>	In-1	115		ug/L			8842	7441	1	KED
|	Cd	111	1.426	ug/L	0.024	1	3	363	0	KED
⌊	Cd	114	1.443	ug/L	0.006	0	3	927	1	KED
⌈>	Tb	159		ug/L			167464	160535	1	Standard
⌊	Pb	208	1.474	ug/L	0.013	0	168	113578	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0054-MSD3
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:55:28
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	48789	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	331932	2	Standard
|	**Cr**	**52**	**1.181**	ug/L	0.058	4	13137	39951	0	Standard
⌊	**Cr**	**53**	**1.291**	ug/L	0.018	1	163	3380	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	33311	0	KED
|	**Ni**	**60**	**1.423**	ug/L	0.054	3	3	1926	3	KED
|	**Ni**	**62**	**1.530**	ug/L	0.057	3	0	330	4	KED
|	**Cu**	**63**	**1.462**	ug/L	0.039	2	18	5412	2	KED
|	**Cu**	**65**	**1.474**	ug/L	0.006	0	6	2771	0	KED
|	**Zn**	**66**	**4.603**	ug/L	0.074	1	19	2361	2	KED
|	**Zn**	**67**	**4.744**	ug/L	0.403	8	3	402	7	KED
⌊	**As**	**75**	**1.748**	ug/L	0.053	3	3	469	3	KED
	Kr	**83**		ug/L			41	36	20	Standard
⌈>	**In-1**	**115**		ug/L			8842	7697	1	KED
|	**Cd**	**111**	**1.404**	ug/L	0.108	7	3	369	7	KED
⌊	**Cd**	**114**	**1.441**	ug/L	0.078	5	3	958	6	KED
⌈>	**Tb**	**159**		ug/L			167464	161131	0	Standard
⌊	**Pb**	**208**	**1.477**	ug/L	0.014	0	168	114240	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLF
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:59:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	39941	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	297917	1	Standard
|	**Cr**	**52**	**-0.003**	ug/L	0.006	189	13137	11703	1	Standard
⌊	**Cr**	**53**	**-0.012**	ug/L	0.005	40	163	119	10	Standard
⌈>	**Ge**	**72**		ug/L			37776	32565	0	KED
|	**Ni**	**60**	**0.010**	ug/L	0.001	9	3	15	6	KED
|	**Ni**	**62**	**0.018**	ug/L	0.019	101	0	4	89	KED
|	**Cu**	**63**	**0.002**	ug/L	0.002	77	18	24	27	KED
|	**Cu**	**65**	**0.004**	ug/L	0.003	68	6	13	37	KED
|	**Zn**	**66**	**0.013**	ug/L	0.010	74	19	23	20	KED
|	**Zn**	**67**	**0.060**	ug/L	0.035	58	3	8	35	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.004	107	3	2	44	KED
	Kr	**83**		ug/L			41	43	11	Standard
⌈>	**In-1**	**115**		ug/L			8842	7480	1	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.011	675	3	2	108	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.000	17	3	3	1	KED
⌈>	**Tb**	**159**		ug/L			167464	156350	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	2	168	356	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVD
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:04:01
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	41313	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	307356	1	Standard
|	**Cr**	**52**	**47.979**	ug/L	0.793	1	13137	1022914	2	Standard
⌊	**Cr**	**53**	**50.150**	ug/L	0.721	1	163	115964	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	32572	0	KED
|	**Ni**	**60**	**51.583**	ug/L	0.408	0	3	68147	0	KED
|	**Ni**	**62**	**52.891**	ug/L	0.595	1	0	11142	0	KED
|	**Cu**	**63**	**53.300**	ug/L	0.755	1	18	192386	0	KED
|	**Cu**	**65**	**52.686**	ug/L	0.416	0	6	96684	0	KED
|	**Zn**	**66**	**52.944**	ug/L	0.643	1	19	26378	0	KED
|	**Zn**	**67**	**52.503**	ug/L	2.007	3	3	4324	3	KED
⌊	**As**	**75**	**50.119**	ug/L	0.059	0	3	13074	0	KED
	Kr	**83**		ug/L			41	54	13	Standard
⌈>	**In-1**	**115**		ug/L			8842	7538	0	KED
|	**Cd**	**111**	**51.519**	ug/L	0.413	0	3	13188	0	KED
⌊	**Cd**	**114**	**51.630**	ug/L	0.578	1	3	33508	0	KED
⌈>	**Tb**	**159**		ug/L			167464	162469	1	Standard
⌊	**Pb**	**208**	**53.772**	ug/L	1.113	2	168	4185920	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBD
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:11:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	40689	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	303870	2	Standard
|	**Cr**	**52**	**-0.009**	ug/L	0.004	40	13137	11822	2	Standard
⌊	**Cr**	**53**	**-0.012**	ug/L	0.004	28	163	121	8	Standard
⌈>	**Ge**	**72**		ug/L			37776	33588	2	KED
|	**Ni**	**60**	**0.007**	ug/L	0.002	21	3	13	14	KED
|	**Ni**	**62**	**0.012**	ug/L	0.010	85	0	3	69	KED
|	**Cu**	**63**	**0.005**	ug/L	0.001	27	18	36	13	KED
|	**Cu**	**65**	**0.006**	ug/L	0.002	42	6	17	29	KED
|	**Zn**	**66**	**0.053**	ug/L	0.022	41	19	44	23	KED
|	**Zn**	**67**	**-0.003**	ug/L	0.046	1477	3	3	124	KED
⌊	**As**	**75**	**0.005**	ug/L	0.002	33	3	4	11	KED
	Kr	**83**		ug/L			41	41	16	Standard
⌈>	**In-1**	**115**		ug/L			8842	7761	2	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.007	1066	3	2	66	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.002	559	3	3	34	KED
⌈>	**Tb**	**159**		ug/L			167464	158746	0	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	8	168	313	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0537-05
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:15:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	85852	1	Standard
>	Sc	45		ug/L			332530	667261	4	Standard
	Cr	52	0.012	ug/L	0.014	110	13137	26909	2	Standard
	Cr	53	0.491	ug/L	0.004	0	163	2787	4	Standard
>	Ge	72		ug/L			37776	29764	0	KED
	Ni	60	0.700	ug/L	0.025	3	3	848	3	KED
	Ni	62	0.779	ug/L	0.053	6	0	150	6	KED
	Cu	63	0.380	ug/L	0.028	7	18	1267	7	KED
	Cu	65	0.401	ug/L	0.019	4	6	678	4	KED
	Zn	66	1.572	ug/L	0.120	7	19	730	8	KED
	Zn	67	2.408	ug/L	0.032	1	3	184	1	KED
	As	75	4.400	ug/L	0.049	1	3	1051	0	KED
	Kr	83		ug/L			41	50	20	Standard
>	In-1	115		ug/L			8842	6861	1	KED
	Cd	111	0.014	ug/L	0.005	34	3	6	18	KED
	Cd	114	0.002	ug/L	0.005	244	3	4	71	KED
>	Tb	159		ug/L			167464	156691	1	Standard
	Pb	208	0.035	ug/L	0.002	5	168	2756	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0120-DUP2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:19:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	86976	0	Standard
> Sc	45		ug/L			332530	644087	3	Standard
Cr	52	0.052	ug/L	0.024	46	13137	27696	0	Standard
Cr	53	0.524	ug/L	0.027	5	163	2851	1	Standard
> Ge	72		ug/L			37776	30041	0	KED
Ni	60	0.766	ug/L	0.024	3	3	935	2	KED
Ni	62	0.814	ug/L	0.105	12	0	158	12	KED
Cu	63	0.224	ug/L	0.002	1	18	761	0	KED
Cu	65	0.234	ug/L	0.016	6	6	401	6	KED
Zn	66	1.462	ug/L	0.170	11	19	687	11	KED
Zn	67	2.310	ug/L	0.089	3	3	178	4	KED
As	75	4.454	ug/L	0.057	1	3	1074	0	KED
Kr	83		ug/L			41	44	39	Standard
> In-1	115		ug/L			8842	6849	1	KED
Cd	111	0.011	ug/L	0.015	131	3	5	66	KED
Cd	114	-0.002	ug/L	0.000	2	3	1	3	KED
> Tb	159		ug/L			167464	153022	1	Standard
Pb	208	0.027	ug/L	0.001	4	168	2098	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0120-MS2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:24:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	86232	1	Standard
> Sc	45		ug/L			332530	621648	2	Standard
Cr	52	11.436	ug/L	0.224	1	13137	511653	0	Standard
Cr	53	12.330	ug/L	0.162	1	163	57879	1	Standard
> Ge	72		ug/L			37776	29580	0	KED
Ni	60	26.864	ug/L	0.309	1	3	32230	0	KED
Ni	62	26.764	ug/L	0.540	2	0	5120	1	KED
Cu	63	25.690	ug/L	0.096	0	18	84222	0	KED
Cu	65	25.571	ug/L	0.335	1	6	42617	1	KED
Zn	66	76.056	ug/L	0.605	0	19	34406	0	KED
Zn	67	72.263	ug/L	1.184	1	3	5403	0	KED
As	75	28.724	ug/L	0.258	0	3	6806	0	KED
Kr	83		ug/L			41	73	31	Standard
> In-1	115		ug/L			8842	6837	2	KED
Cd	111	24.223	ug/L	0.549	2	3	5623	1	KED
Cd	114	25.016	ug/L	0.566	2	3	14721	1	KED
> Tb	159		ug/L			167464	155552	0	Standard
Pb	208	25.119	ug/L	0.471	1	168	1872259	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0120-MSD2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:30:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	85695	0	Standard
> Sc	45		ug/L			332530	641390	2	Standard
Cr	52	11.527	ug/L	0.212	1	13137	531914	1	Standard
Cr	53	12.350	ug/L	0.132	1	163	59819	2	Standard
> Ge	72		ug/L			37776	30276	0	KED
Ni	60	27.346	ug/L	0.428	1	3	33583	1	KED
Ni	62	27.615	ug/L	0.121	0	0	5408	0	KED
Cu	63	26.248	ug/L	0.503	1	18	88073	1	KED
Cu	65	26.164	ug/L	0.339	1	6	44631	1	KED
Zn	66	77.475	ug/L	1.231	1	19	35874	1	KED
Zn	67	74.471	ug/L	0.256	0	3	5700	0	KED
As	75	29.345	ug/L	0.019	0	3	7117	0	KED
Kr	83		ug/L			41	64	18	Standard
> In-1	115		ug/L			8842	6798	1	KED
Cd	111	25.904	ug/L	0.121	0	3	5980	0	KED
Cd	114	25.925	ug/L	0.289	1	3	15173	1	KED
> Tb	159		ug/L			167464	154708	1	Standard
Pb	208	25.748	ug/L	0.468	1	168	1908435	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLG
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:34:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	41894	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	306227	1	Standard
|	**Cr**	**52**	**0.012**	ug/L	0.006	50	13137	12358	1	Standard
⌊	**Cr**	**53**	**0.015**	ug/L	0.003	19	163	184	4	Standard
⌈>	**Ge**	**72**		ug/L			37776	34308	1	KED
|	**Ni**	**60**	**0.016**	ug/L	0.006	35	3	26	29	KED
|	**Ni**	**62**	**0.026**	ug/L	0.005	20	0	6	17	KED
|	**Cu**	**63**	**0.001**	ug/L	0.002	166	18	20	32	KED
|	**Cu**	**65**	**0.004**	ug/L	0.004	117	6	13	62	KED
|	**Zn**	**66**	**-0.007**	ug/L	0.009	118	19	13	31	KED
|	**Zn**	**67**	**-0.003**	ug/L	0.013	406	3	3	34	KED
⌊	**As**	**75**	**0.002**	ug/L	0.004	156	3	3	24	KED
	Kr	**83**		ug/L			41	44	39	Standard
⌈>	**In-1**	**115**		ug/L			8842	7536	1	KED
|	**Cd**	**111**	**0.005**	ug/L	0.010	209	3	4	58	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.002	51	3	1	94	KED
⌈>	**Tb**	**159**		ug/L			167464	162505	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	37	168	188	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0464-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:38:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	49663	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	311893	0	Standard
|	**Cr**	**52**	**0.095**	ug/L	0.008	8	13137	14357	0	Standard
⌊	**Cr**	**53**	**0.047**	ug/L	0.007	13	163	263	5	Standard
⌈>	**Ge**	**72**		ug/L			37776	33466	0	KED
|	**Ni**	**60**	**1.346**	ug/L	0.049	3	3	1829	3	KED
|	**Ni**	**62**	**1.370**	ug/L	0.010	0	0	297	0	KED
|	**Cu**	**63**	**0.376**	ug/L	0.020	5	18	1412	5	KED
|	**Cu**	**65**	**0.360**	ug/L	0.036	10	6	684	9	KED
|	**Zn**	**66**	**3.781**	ug/L	0.068	1	19	1951	2	KED
|	**Zn**	**67**	**3.721**	ug/L	0.411	11	3	318	11	KED
⌊	**As**	**75**	**0.029**	ug/L	0.009	31	3	10	22	KED
	Kr	**83**		ug/L			41	43	4	Standard
⌈>	**In-1**	**115**		ug/L			8842	7513	0	KED
|	**Cd**	**111**	**0.033**	ug/L	0.004	11	3	11	8	KED
⌊	**Cd**	**114**	**0.033**	ug/L	0.018	54	3	24	48	KED
⌈>	**Tb**	**159**		ug/L			167464	161396	0	Standard
⌊	**Pb**	**208**	**22.116**	ug/L	0.149	0	168	1710473	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0464-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:42:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	82109	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	353902	2	Standard
|	**Cr**	**52**	**0.475**	ug/L	0.001	0	13137	25491	2	Standard
⌊	**Cr**	**53**	**0.635**	ug/L	0.016	2	163	1860	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	33788	1	KED
|	**Ni**	**60**	**1.118**	ug/L	0.053	4	3	1535	4	KED
|	**Ni**	**62**	**1.148**	ug/L	0.044	3	0	251	5	KED
|	**Cu**	**63**	**2.887**	ug/L	0.089	3	18	10821	1	KED
|	**Cu**	**65**	**2.885**	ug/L	0.137	4	6	5495	3	KED
|	**Zn**	**66**	**37.145**	ug/L	0.817	2	19	19199	0	KED
|	**Zn**	**67**	**34.845**	ug/L	2.256	6	3	2976	5	KED
⌊	**As**	**75**	**0.417**	ug/L	0.030	7	3	116	7	KED
	Kr	**83**		ug/L			41	37	16	Standard
⌈>	**In-1**	**115**		ug/L			8842	7633	2	KED
|	**Cd**	**111**	**0.024**	ug/L	0.003	14	3	9	11	KED
⌊	**Cd**	**114**	**0.009**	ug/L	0.010	111	3	9	72	KED
⌈>	**Tb**	**159**		ug/L			167464	160202	1	Standard
⌊	**Pb**	**208**	**0.318**	ug/L	0.001	0	168	24536	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0516-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:47:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	78090	1	Standard
> Sc	45		ug/L			332530	495888	2	Standard
Cr	52	-0.047	ug/L	0.009	18	13137	17972	0	Standard
Cr	53	0.242	ug/L	0.009	3	163	1144	5	Standard
> Ge	72		ug/L			37776	32026	0	KED
Ni	60	0.573	ug/L	0.048	8	3	747	8	KED
Ni	62	0.638	ug/L	0.028	4	0	132	5	KED
Cu	63	8.279	ug/L	0.030	0	18	29395	0	KED
Cu	65	8.201	ug/L	0.059	0	6	14802	0	KED
Zn	66	10.896	ug/L	0.392	3	19	5350	3	KED
Zn	67	11.156	ug/L	0.398	3	3	906	3	KED
As	75	0.462	ug/L	0.037	8	3	121	8	KED
Kr	83		ug/L			41	36	32	Standard
> In-1	115		ug/L			8842	7235	1	KED
Cd	111	0.015	ug/L	0.011	74	3	6	42	KED
Cd	114	0.010	ug/L	0.003	26	3	9	19	KED
> Tb	159		ug/L			167464	158033	0	Standard
Pb	208	0.138	ug/L	0.002	1	168	10624	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0516-02
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:51:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	77753	0	Standard
Sc	45		ug/L			332530	473153	1	Standard
Cr	52	-0.039	ug/L	0.012	31	13137	17412	2	Standard
Cr	53	0.211	ug/L	0.016	7	163	982	4	Standard
Ge	72		ug/L			37776	31704	1	KED
Ni	60	0.545	ug/L	0.007	1	3	704	0	KED
Ni	62	0.552	ug/L	0.012	2	0	113	0	KED
Cu	63	8.586	ug/L	0.051	0	18	30181	1	KED
Cu	65	8.449	ug/L	0.052	0	6	15095	1	KED
Zn	66	11.587	ug/L	0.188	1	19	5631	0	KED
Zn	67	11.038	ug/L	0.629	5	3	887	6	KED
As	75	0.474	ug/L	0.036	7	3	123	6	KED
Kr	83		ug/L			41	43	2	Standard
In-1	115		ug/L			8842	6965	3	KED
Cd	111	0.014	ug/L	0.002	17	3	6	9	KED
Cd	114	0.015	ug/L	0.007	47	3	12	37	KED
Tb	159		ug/L			167464	156180	1	Standard
Pb	208	0.146	ug/L	0.003	1	168	11068	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLH
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:55:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	41383	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	298913	1	Standard
|	**Cr**	**52**	**0.030**	ug/L	0.006	19	13137	12422	1	Standard
⌊	**Cr**	**53**	**0.004**	ug/L	0.008	169	163	156	11	Standard
⌈>	**Ge**	**72**		ug/L			37776	32004	1	KED
|	**Ni**	**60**	**0.029**	ug/L	0.007	23	3	40	22	KED
|	**Ni**	**62**	**0.037**	ug/L	0.005	13	0	8	13	KED
|	**Cu**	**63**	**0.002**	ug/L	0.002	108	18	22	32	KED
|	**Cu**	**65**	**0.005**	ug/L	0.001	24	6	14	15	KED
|	**Zn**	**66**	**-0.011**	ug/L	0.010	93	19	11	44	KED
|	**Zn**	**67**	**-0.024**	ug/L	0.014	55	3	1	86	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.003	69	3	2	35	KED
	Kr	**83**		ug/L			41	36	13	Standard
⌈>	**In-1**	**115**		ug/L			8842	7289	1	KED
|	**Cd**	**111**	**0.000**	ug/L	0.010	201378	3	2	88	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.002	166	3	2	47	KED
⌈>	**Tb**	**159**		ug/L			167464	153715	0	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	28	168	122	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:00:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	40791	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	294234	0	Standard
|	**Cr**	**52**	**48.631**	ug/L	0.411	0	13137	992252	0	Standard
⌊	**Cr**	**53**	**50.210**	ug/L	0.306	0	163	111136	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	32220	0	KED
|	**Ni**	**60**	**51.598**	ug/L	0.887	1	3	67431	1	KED
|	**Ni**	**62**	**52.138**	ug/L	0.502	0	0	10865	1	KED
|	**Cu**	**63**	**52.800**	ug/L	0.882	1	18	188520	1	KED
|	**Cu**	**65**	**52.733**	ug/L	0.669	1	6	95724	1	KED
|	**Zn**	**66**	**51.702**	ug/L	0.419	0	19	25482	0	KED
|	**Zn**	**67**	**51.349**	ug/L	1.347	2	3	4183	2	KED
⌊	**As**	**75**	**49.786**	ug/L	0.584	1	3	12847	0	KED
	Kr	**83**		ug/L			41	40	19	Standard
⌈>	**In-1**	**115**		ug/L			8842	7370	0	KED
|	**Cd**	**111**	**50.635**	ug/L	0.976	1	3	12672	2	KED
⌊	**Cd**	**114**	**51.640**	ug/L	0.932	1	3	32766	1	KED
⌈>	**Tb**	**159**		ug/L			167464	155724	0	Standard
⌊	**Pb**	**208**	**54.900**	ug/L	0.496	0	168	4096616	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:07:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	40961	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	290438	2	Standard
|	**Cr**	**52**	**0.028**	ug/L	0.012	43	13137	12031	2	Standard
⌊	**Cr**	**53**	**0.001**	ug/L	0.005	383	163	145	4	Standard
⌈>	**Ge**	**72**		ug/L			37776	32490	1	KED
|	**Ni**	**60**	**0.036**	ug/L	0.006	15	3	50	13	KED
|	**Ni**	**62**	**0.046**	ug/L	0.023	51	0	10	47	KED
|	**Cu**	**63**	**0.006**	ug/L	0.003	59	18	36	34	KED
|	**Cu**	**65**	**0.009**	ug/L	0.005	61	6	21	43	KED
|	**Zn**	**66**	**0.045**	ug/L	0.012	27	19	39	14	KED
|	**Zn**	**67**	**0.045**	ug/L	0.013	27	3	6	15	KED
⌊	**As**	**75**	**0.006**	ug/L	0.005	80	3	4	26	KED
	Kr	**83**		ug/L			41	46	4	Standard
⌈>	**In-1**	**115**		ug/L			8842	7601	1	KED
|	**Cd**	**111**	**0.004**	ug/L	0.015	341	3	4	93	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.006	72	3	8	46	KED
⌈>	**Tb**	**159**		ug/L			167464	151027	3	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.001	29	168	323	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0463-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:11:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	83717	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	363338	2	Standard
|	**Cr**	**52**	**0.327**	ug/L	0.009	2	13137	22486	1	Standard
⌊	**Cr**	**53**	**1.216**	ug/L	0.059	4	163	3495	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	31225	0	KED
|	**Ni**	**60**	**0.744**	ug/L	0.043	5	3	944	5	KED
|	**Ni**	**62**	**0.865**	ug/L	0.063	7	0	175	7	KED
|	**Cu**	**63**	**2.413**	ug/L	0.019	0	18	8366	1	KED
|	**Cu**	**65**	**2.401**	ug/L	0.079	3	6	4229	2	KED
|	**Zn**	**66**	**8.259**	ug/L	0.099	1	19	3958	0	KED
|	**Zn**	**67**	**8.006**	ug/L	0.381	4	3	634	5	KED
⌊	**As**	**75**	**0.493**	ug/L	0.018	3	3	126	3	KED
	Kr	**83**		ug/L			41	39	31	Standard
⌈>	**In-1**	**115**		ug/L			8842	7314	1	KED
|	**Cd**	**111**	**0.013**	ug/L	0.008	64	3	6	32	KED
⌊	**Cd**	**114**	**0.009**	ug/L	0.002	22	3	8	13	KED
⌈>	**Tb**	**159**		ug/L			167464	157428	1	Standard
⌊	**Pb**	**208**	**0.237**	ug/L	0.002	0	168	18050	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0463-02
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:15:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	81905	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	438260	0	Standard
|	**Cr**	**52**	**0.154**	ug/L	0.016	10	13137	21930	1	Standard
⌊	**Cr**	**53**	**0.939**	ug/L	0.009	0	163	3306	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	30901	1	KED
|	**Ni**	**60**	**1.108**	ug/L	0.010	0	3	1391	0	KED
|	**Ni**	**62**	**1.131**	ug/L	0.030	2	0	226	3	KED
|	**Cu**	**63**	**1.257**	ug/L	0.005	0	18	4320	1	KED
|	**Cu**	**65**	**1.229**	ug/L	0.020	1	6	2145	1	KED
|	**Zn**	**66**	**4.583**	ug/L	0.167	3	19	2181	3	KED
|	**Zn**	**67**	**4.549**	ug/L	0.448	9	3	358	8	KED
⌊	**As**	**75**	**2.164**	ug/L	0.026	1	3	538	1	KED
	Kr	**83**		ug/L			41	35	20	Standard
⌈>	**In-1**	**115**		ug/L			8842	7163	1	KED
|	**Cd**	**111**	**0.009**	ug/L	0.010	108	3	5	47	KED
⌊	**Cd**	**114**	**0.013**	ug/L	0.006	48	3	10	35	KED
⌈>	**Tb**	**159**		ug/L			167464	155570	0	Standard
⌊	**Pb**	**208**	**0.277**	ug/L	0.001	0	168	20812	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0463-03
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:20:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	78076	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	379664	0	Standard
|	**Cr**	**52**	**0.323**	ug/L	0.004	1	13137	23406	0	Standard
⌊	**Cr**	**53**	**1.227**	ug/L	0.026	2	163	3685	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	31456	1	KED
|	**Ni**	**60**	**1.005**	ug/L	0.036	3	3	1285	3	KED
|	**Ni**	**62**	**0.983**	ug/L	0.085	8	0	200	9	KED
|	**Cu**	**63**	**2.355**	ug/L	0.058	2	18	8222	1	KED
|	**Cu**	**65**	**2.322**	ug/L	0.021	0	6	4120	1	KED
|	**Zn**	**66**	**15.119**	ug/L	0.335	2	19	7286	1	KED
|	**Zn**	**67**	**13.996**	ug/L	0.042	0	3	1115	1	KED
⌊	**As**	**75**	**0.875**	ug/L	0.082	9	3	223	9	KED
	Kr	**83**		ug/L			41	37	17	Standard
⌈>	**In-1**	**115**		ug/L			8842	6933	0	KED
|	**Cd**	**111**	**0.011**	ug/L	0.006	53	3	5	26	KED
⌊	**Cd**	**114**	**0.019**	ug/L	0.008	44	3	14	35	KED
⌈>	**Tb**	**159**		ug/L			167464	156437	1	Standard
⌊	**Pb**	**208**	**0.569**	ug/L	0.010	1	168	42773	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-05
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:24:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	51217	3	Standard
⌈>	Sc	45		ug/L			332530	369725	1	Standard
|	Cr	52	3.076	ug/L	0.013	0	13137	92552	1	Standard
⌊	Cr	53	3.394	ug/L	0.057	1	163	9610	2	Standard
⌈>	Ge	72		ug/L			37776	32054	0	KED
|	Ni	60	4.549	ug/L	0.075	1	3	5918	2	KED
|	Ni	62	4.668	ug/L	0.062	1	0	968	2	KED
|	Cu	63	20.250	ug/L	0.575	2	18	71932	2	KED
|	Cu	65	20.417	ug/L	0.086	0	6	36874	0	KED
|	Zn	66	31.506	ug/L	0.106	0	19	15455	1	KED
|	Zn	67	29.705	ug/L	0.839	2	3	2409	2	KED
⌊	As	75	9.571	ug/L	0.330	3	3	2459	2	KED
	Kr	83		ug/L			41	34	3	Standard
⌈>	In-1	115		ug/L			8842	7221	0	KED
|	Cd	111	0.526	ug/L	0.059	11	3	131	11	KED
⌊	Cd	114	0.584	ug/L	0.044	7	3	366	8	KED
⌈>	Tb	159		ug/L			167464	159535	0	Standard
⌊	Pb	208	6.386	ug/L	0.144	2	168	488338	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-17
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:28:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	57372	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	336010	2	Standard
|	**Cr**	**52**	**0.833**	ug/L	0.009	1	13137	32452	3	Standard
⌊	**Cr**	**53**	**1.024**	ug/L	0.024	2	163	2749	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	32424	0	KED
|	**Ni**	**60**	**1.213**	ug/L	0.078	6	3	1598	7	KED
|	**Ni**	**62**	**1.203**	ug/L	0.071	5	0	252	5	KED
|	**Cu**	**63**	**3.894**	ug/L	0.086	2	18	14007	2	KED
|	**Cu**	**65**	**3.853**	ug/L	0.105	2	6	7043	2	KED
|	**Zn**	**66**	**18.808**	ug/L	0.275	1	19	9338	0	KED
|	**Zn**	**67**	**18.352**	ug/L	0.434	2	3	1506	1	KED
⌊	**As**	**75**	**1.022**	ug/L	0.029	2	3	268	3	KED
	Kr	**83**		ug/L			41	37	5	Standard
⌈>	**In-1**	**115**		ug/L			8842	7196	2	KED
|	**Cd**	**111**	**0.008**	ug/L	0.006	82	3	4	34	KED
⌊	**Cd**	**114**	**0.013**	ug/L	0.009	70	3	11	52	KED
⌈>	**Tb**	**159**		ug/L			167464	158062	0	Standard
⌊	**Pb**	**208**	**0.378**	ug/L	0.005	1	168	28792	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-19
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:32:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	59659	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	351435	2	Standard
|	**Cr**	**52**	**0.489**	ug/L	0.018	3	13137	25644	0	Standard
⌊	**Cr**	**53**	**0.593**	ug/L	0.031	5	163	1738	5	Standard
⌈>	**Ge**	**72**		ug/L			37776	32751	0	KED
|	**Ni**	**60**	**1.387**	ug/L	0.087	6	3	1845	6	KED
|	**Ni**	**62**	**1.664**	ug/L	0.083	4	0	353	4	KED
|	**Cu**	**63**	**4.561**	ug/L	0.022	0	18	16568	0	KED
|	**Cu**	**65**	**4.677**	ug/L	0.064	1	6	8635	1	KED
|	**Zn**	**66**	**1.677**	ug/L	0.094	5	19	856	5	KED
|	**Zn**	**67**	**1.932**	ug/L	0.086	4	3	163	4	KED
⌊	**As**	**75**	**1.329**	ug/L	0.071	5	3	351	4	KED
	Kr	**83**		ug/L			41	33	21	Standard
⌈>	**In-1**	**115**		ug/L			8842	7377	0	KED
|	**Cd**	**111**	**0.006**	ug/L	0.015	249	3	4	86	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.006	226	3	4	80	KED
⌈>	**Tb**	**159**		ug/L			167464	157325	0	Standard
⌊	**Pb**	**208**	**0.214**	ug/L	0.001	0	168	16290	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0077-DUP1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:37:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	59738	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	352960	1	Standard
|	**Cr**	**52**	**0.552**	ug/L	0.015	2	13137	27295	2	Standard
⌊	**Cr**	**53**	**0.668**	ug/L	0.027	4	163	1945	4	Standard
⌈>	**Ge**	**72**		ug/L			37776	32935	1	KED
|	**Ni**	**60**	**1.370**	ug/L	0.064	4	3	1833	3	KED
|	**Ni**	**62**	**1.362**	ug/L	0.202	14	0	290	13	KED
|	**Cu**	**63**	**4.578**	ug/L	0.125	2	18	16719	1	KED
|	**Cu**	**65**	**4.461**	ug/L	0.134	3	6	8279	1	KED
|	**Zn**	**66**	**1.727**	ug/L	0.029	1	19	886	0	KED
|	**Zn**	**67**	**1.951**	ug/L	0.004	0	3	165	1	KED
⌊	**As**	**75**	**1.306**	ug/L	0.059	4	3	347	5	KED
	Kr	**83**		ug/L			41	43	11	Standard
⌈>	**In-1**	**115**		ug/L			8842	7237	0	KED
|	**Cd**	**111**	**0.003**	ug/L	0.002	87	3	3	15	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.005	92	3	6	46	KED
⌈>	**Tb**	**159**		ug/L			167464	159690	0	Standard
⌊	**Pb**	**208**	**0.210**	ug/L	0.002	0	168	16248	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0077-MS1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:41:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	60127	1	Standard
>	Sc	45		ug/L			332530	360257	0	Standard
	Cr	52	11.376	ug/L	0.162	1	13137	295102	1	Standard
	Cr	53	11.802	ug/L	0.259	2	163	32122	2	Standard
>	Ge	72		ug/L			37776	30101	12	KED
	Ni	60	16.661	ug/L	2.330	13	3	20103	0	KED
	Ni	62	17.130	ug/L	2.307	13	0	3297	0	KED
	Cu	63	20.887	ug/L	2.960	14	18	68850	1	KED
	Cu	65	20.775	ug/L	2.501	12	6	34877	1	KED
	Zn	66	49.868	ug/L	6.159	12	19	22725	2	KED
	Zn	67	47.467	ug/L	7.462	15	3	3565	2	KED
	As	75	15.372	ug/L	2.287	14	3	3661	1	KED
	Kr	83		ug/L			41	32	21	Standard
>	In-1	115		ug/L			8842	7505	4	KED
	Cd	111	13.381	ug/L	0.587	4	3	3408	0	KED
	Cd	114	13.622	ug/L	0.889	6	3	8787	2	KED
>	Tb	159		ug/L			167464	160575	0	Standard
	Pb	208	14.304	ug/L	0.216	1	168	1100714	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0077-MSD1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:47:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	58395	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	355338	1	Standard
|	**Cr**	**52**	**11.009**	ug/L	0.575	5	13137	282155	5	Standard
⌊	**Cr**	**53**	**11.525**	ug/L	0.625	5	163	30949	6	Standard
⌈>	**Ge**	**72**		ug/L			37776	33018	0	KED
|	**Ni**	**60**	**15.045**	ug/L	0.157	1	3	20151	0	KED
|	**Ni**	**62**	**14.924**	ug/L	0.333	2	0	3187	2	KED
|	**Cu**	**63**	**19.087**	ug/L	0.317	1	18	69854	2	KED
|	**Cu**	**65**	**18.751**	ug/L	0.012	0	6	34885	0	KED
|	**Zn**	**66**	**45.054**	ug/L	0.034	0	19	22758	0	KED
|	**Zn**	**67**	**43.555**	ug/L	0.609	1	3	3637	1	KED
⌊	**As**	**75**	**14.007**	ug/L	0.196	1	3	3706	1	KED
	Kr	**83**		ug/L			41	52	12	Standard
⌈>	**In-1**	**115**		ug/L			8842	7573	0	KED
|	**Cd**	**111**	**13.397**	ug/L	0.223	1	3	3447	1	KED
⌊	**Cd**	**114**	**13.597**	ug/L	0.059	0	3	8867	0	KED
⌈>	**Tb**	**159**		ug/L			167464	160670	0	Standard
⌊	**Pb**	**208**	**13.927**	ug/L	0.657	4	168	1072141	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLI
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:51:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	40799	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	296429	3	Standard
|	**Cr**	**52**	**0.020**	ug/L	0.017	87	13137	12102	0	Standard
⌊	**Cr**	**53**	**0.001**	ug/L	0.007	1019	163	146	7	Standard
⌈>	**Ge**	**72**		ug/L			37776	32321	0	KED
|	**Ni**	**60**	**0.034**	ug/L	0.010	28	3	48	26	KED
|	**Ni**	**62**	**0.040**	ug/L	0.006	13	0	8	12	KED
|	**Cu**	**63**	**0.002**	ug/L	0.000	18	18	21	5	KED
|	**Cu**	**65**	**0.004**	ug/L	0.001	31	6	12	17	KED
|	**Zn**	**66**	**0.001**	ug/L	0.004	619	19	17	11	KED
|	**Zn**	**67**	**-0.009**	ug/L	0.014	157	3	2	43	KED
⌊	**As**	**75**	**-0.002**	ug/L	0.001	44	3	2	10	KED
	Kr	**83**		ug/L			41	40	8	Standard
⌈>	**In-1**	**115**		ug/L			8842	7345	1	KED
|	**Cd**	**111**	**0.010**	ug/L	0.008	80	3	5	36	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.006	147	3	5	66	KED
⌈>	**Tb**	**159**		ug/L			167464	154332	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	67	168	190	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVF
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:56:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	41620	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	296349	2	Standard
|	**Cr**	**52**	**48.679**	ug/L	1.034	2	13137	1000116	1	Standard
⌊	**Cr**	**53**	**51.001**	ug/L	1.433	2	163	113664	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	32571	1	KED
|	**Ni**	**60**	**51.432**	ug/L	1.177	2	3	67930	0	KED
|	**Ni**	**62**	**52.709**	ug/L	0.110	0	0	11103	1	KED
|	**Cu**	**63**	**52.502**	ug/L	0.434	0	18	189495	0	KED
|	**Cu**	**65**	**53.198**	ug/L	0.347	0	6	97619	1	KED
|	**Zn**	**66**	**52.597**	ug/L	0.263	0	19	26204	1	KED
|	**Zn**	**67**	**52.705**	ug/L	1.710	3	3	4339	2	KED
⌊	**As**	**75**	**49.987**	ug/L	0.631	1	3	13039	1	KED
	Kr	**83**		ug/L			41	48	6	Standard
⌈>	**In-1**	**115**		ug/L			8842	7424	3	KED
|	**Cd**	**111**	**51.648**	ug/L	2.278	4	3	13005	0	KED
⌊	**Cd**	**114**	**51.934**	ug/L	1.496	2	3	33167	0	KED
⌈>	**Tb**	**159**		ug/L			167464	158559	1	Standard
⌊	**Pb**	**208**	**54.279**	ug/L	0.484	0	168	4123875	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBF
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 05:03:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	40643	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	291714	0	Standard
|	**Cr**	**52**	**0.021**	ug/L	0.010	49	13137	11943	2	Standard
⌊	**Cr**	**53**	**-0.003**	ug/L	0.008	256	163	136	13	Standard
⌈>	**Ge**	**72**		ug/L			37776	33501	1	KED
|	**Ni**	**60**	**0.036**	ug/L	0.004	12	3	52	11	KED
|	**Ni**	**62**	**0.044**	ug/L	0.018	40	0	10	39	KED
|	**Cu**	**63**	**0.007**	ug/L	0.002	24	18	42	13	KED
|	**Cu**	**65**	**0.006**	ug/L	0.005	70	6	18	46	KED
|	**Zn**	**66**	**0.057**	ug/L	0.013	22	19	46	12	KED
|	**Zn**	**67**	**0.073**	ug/L	0.047	64	3	9	40	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.006	3391	3	3	48	KED
	Kr	**83**		ug/L			41	37	22	Standard
⌈>	**In-1**	**115**		ug/L			8842	7698	0	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.004	219	3	2	43	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.003	472	3	3	51	KED
⌈>	**Tb**	**159**		ug/L			167464	151940	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	17	168	331	8	Standard

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00007
Control Limt: +/- 10.00%
Sequence: SLE0017

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0017-ICV1	Chromium-52	50.000	50.7	101	ug/L	EPA 6020B
	Chromium-53	50.000	50.0	99.9	ug/L	EPA 6020B
	Lead-208	50.000	51.2	102	ug/L	EPA 6020B
	Silver-107	50.000	52.3	105	ug/L	EPA 6020B
SLE0017-CCV1	Chromium-52	50.000	49.6	99.3	ug/L	EPA 6020B
	Chromium-53	50.000	48.9	97.8	ug/L	EPA 6020B
	Lead-208	50.000	50.7	101	ug/L	EPA 6020B
	Silver-107	50.000	50.9	102	ug/L	EPA 6020B
SLE0017-CCV2	Chromium-52	50.000	49.2	98.5	ug/L	EPA 6020B
	Chromium-53	50.000	49.1	98.2	ug/L	EPA 6020B
	Lead-208	50.000	51.4	103	ug/L	EPA 6020B
	Silver-107	50.000	50.6	101	ug/L	EPA 6020B
SLE0017-CCV3	Chromium-52	50.000	49.0	98.0	ug/L	EPA 6020B
	Chromium-53	50.000	48.9	97.7	ug/L	EPA 6020B
	Lead-208	50.000	52.2	104	ug/L	EPA 6020B
	Silver-107	50.000	49.6	99.2	ug/L	EPA 6020B
SLE0017-CCV4	Chromium-52	50.000	47.9	95.9	ug/L	EPA 6020B
	Chromium-53	50.000	47.8	95.6	ug/L	EPA 6020B
	Lead-208	50.000	54.1	108	ug/L	EPA 6020B
	Silver-107	50.000	49.2	98.4	ug/L	EPA 6020B
SLE0017-CCV5	Chromium-52	50.000	47.5	95.0	ug/L	EPA 6020B
	Chromium-53	50.000	47.0	93.9	ug/L	EPA 6020B
	Lead-208	50.000	54.1	108	ug/L	EPA 6020B
	Silver-107	50.000	50.4	101	ug/L	EPA 6020B
SLE0017-CCV6	Chromium-52	50.000	48.1	96.3	ug/L	EPA 6020B
	Chromium-53	50.000	47.6	95.2	ug/L	EPA 6020B
	Lead-208	50.000	53.5	107	ug/L	EPA 6020B
	Silver-107	50.000	50.4	101	ug/L	EPA 6020B
SLE0017-CCV7	Chromium-52	50.000	47.3	94.6	ug/L	EPA 6020B
	Chromium-53	50.000	47.1	94.2	ug/L	EPA 6020B
	Lead-208	50.000	53.0	106	ug/L	EPA 6020B
	Silver-107	50.000	50.6	101	ug/L	EPA 6020B
SLE0017-CCV8	Chromium-52	50.000	48.1	96.3	ug/L	EPA 6020B
	Chromium-53	50.000	48.0	95.9	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00007
Control Limt: +/- 10.00%
Sequence: SLE0017

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0017-CCV8	Lead-208	50.000	52.3	105	ug/L	EPA 6020B
	Silver-107	50.000	50.3	101	ug/L	EPA 6020B
SLE0017-CCV9	Chromium-52	50.000	47.6	95.2	ug/L	EPA 6020B
	Chromium-53	50.000	47.7	95.4	ug/L	EPA 6020B
	Lead-208	50.000	52.5	105	ug/L	EPA 6020B
	Silver-107	50.000	51.7	103	ug/L	EPA 6020B
SLE0017-CCVA	Chromium-52	50.000	47.9	95.9	ug/L	EPA 6020B
	Chromium-53	50.000	47.4	94.8	ug/L	EPA 6020B
	Lead-208	50.000	53.5	107	ug/L	EPA 6020B
	Silver-107	50.000	51.0	102	ug/L	EPA 6020B
SLE0017-CCVB	Chromium-52	50.000	48.3	96.6	ug/L	EPA 6020B
	Chromium-53	50.000	47.8	95.7	ug/L	EPA 6020B
	Lead-208	50.000	52.8	106	ug/L	EPA 6020B
	Silver-107	50.000	51.0	102	ug/L	EPA 6020B
SLE0017-CCVC	Chromium-52	50.000	47.0	93.9	ug/L	EPA 6020B
	Chromium-53	50.000	47.0	94.0	ug/L	EPA 6020B
	Lead-208	50.000	54.5	109	ug/L	EPA 6020B
	Silver-107	50.000	50.5	101	ug/L	EPA 6020B
SLE0017-CCVD	Chromium-52	50.000	46.8	93.6	ug/L	EPA 6020B
	Chromium-53	50.000	47.4	94.7	ug/L	EPA 6020B
	Lead-208	50.000	54.8	110	ug/L	EPA 6020B
	Silver-107	50.000	50.0	100	ug/L	EPA 6020B
SLE0017-CCVE	Chromium-52	50.000	47.4	94.8	ug/L	EPA 6020B
	Chromium-53	50.000	48.0	95.9	ug/L	EPA 6020B
	Lead-208	50.000	54.5	109	ug/L	EPA 6020B
	Silver-107	50.000	51.5	103	ug/L	EPA 6020B
SLE0017-CCVF	Chromium-52	50.000	47.1	94.3	ug/L	EPA 6020B
	Chromium-53	50.000	47.1	94.3	ug/L	EPA 6020B
	Lead-208	50.000	54.5	109	ug/L	EPA 6020B
	Silver-107	50.000	50.6	101	ug/L	EPA 6020B
SLE0017-CCVG	Chromium-52	50.000	47.0	94.0	ug/L	EPA 6020B
	Chromium-53	50.000	46.8	93.6	ug/L	EPA 6020B
	Lead-208	50.000	54.1	108	ug/L	EPA 6020B
	Silver-107	50.000	49.9	99.9	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Control Limt: +/- 10.00%

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Sequence: SLE0017

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0017-CCVH	Chromium-52	50.000	46.8	93.6	ug/L	EPA 6020B
	Chromium-53	50.000	47.3	94.6	ug/L	EPA 6020B
	Lead-208	50.000	54.6	109	ug/L	EPA 6020B
	Silver-107	50.000	49.8	99.6	ug/L	EPA 6020B
SLE0017-CCVI	Chromium-52	50.000	47.0	94.0	ug/L	EPA 6020B
	Chromium-53	50.000	47.0	94.0	ug/L	EPA 6020B
	Lead-208	50.000	53.8	108	ug/L	EPA 6020B
	Silver-107	50.000	49.8	99.6	ug/L	EPA 6020B
SLE0017-CCVJ	Chromium-52	50.000	47.2	94.5	ug/L	EPA 6020B
	Chromium-53	50.000	47.5	95.0	ug/L	EPA 6020B
	Lead-208	50.000	54.6	109	ug/L	EPA 6020B
	Silver-107	50.000	51.7	103	ug/L	EPA 6020B
SLE0017-CCVK	Chromium-52	50.000	47.7	95.3	ug/L	EPA 6020B
	Chromium-53	50.000	46.9	93.7	ug/L	EPA 6020B
	Lead-208	50.000	54.4	109	ug/L	EPA 6020B
	Silver-107	50.000	50.6	101	ug/L	EPA 6020B
SLE0017-CCVL	Chromium-52	50.000	45.2	90.5	ug/L	EPA 6020B
	Chromium-53	50.000	45.7	91.4	ug/L	EPA 6020B
	Lead-208	50.000	57.5	115	ug/L	EPA 6020B
	Silver-107	50.000	49.9	99.7	ug/L	EPA 6020B

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00013
Control Limt: +/- 10.00%
Sequence: SLE0043

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0043-ICV1	Chromium-52	50.000	50.6	101	ug/L	EPA 6020B
	Chromium-53	50.000	51.5	103	ug/L	EPA 6020B
	Lead-208	50.000	51.5	103	ug/L	EPA 6020B
	Silver-107	50.000	52.3	105	ug/L	EPA 6020B
SLE0043-CCV1	Chromium-52	50.000	49.1	98.1	ug/L	EPA 6020B
	Chromium-53	50.000	50.0	100	ug/L	EPA 6020B
	Lead-208	50.000	50.5	101	ug/L	EPA 6020B
	Silver-107	50.000	49.9	99.7	ug/L	EPA 6020B
SLE0043-CCV2	Chromium-52	50.000	49.4	98.7	ug/L	EPA 6020B
	Chromium-53	50.000	49.3	98.5	ug/L	EPA 6020B
	Lead-208	50.000	52.1	104	ug/L	EPA 6020B
	Silver-107	50.000	49.3	98.6	ug/L	EPA 6020B
SLE0043-CCV3	Chromium-52	50.000	48.6	97.2	ug/L	EPA 6020B
	Chromium-53	50.000	49.4	98.7	ug/L	EPA 6020B
	Lead-208	50.000	50.7	101	ug/L	EPA 6020B
	Silver-107	50.000	49.1	98.1	ug/L	EPA 6020B
SLE0043-CCV4	Chromium-52	50.000	50.0	100	ug/L	EPA 6020B
	Chromium-53	50.000	50.2	100	ug/L	EPA 6020B
	Lead-208	50.000	52.0	104	ug/L	EPA 6020B
	Silver-107	50.000	50.1	100	ug/L	EPA 6020B
SLE0043-CCV5	Chromium-52	50.000	49.8	99.7	ug/L	EPA 6020B
	Chromium-53	50.000	50.6	101	ug/L	EPA 6020B
	Lead-208	50.000	51.5	103	ug/L	EPA 6020B
	Silver-107	50.000	50.7	101	ug/L	EPA 6020B
SLE0043-CCV6	Chromium-52	50.000	49.6	99.1	ug/L	EPA 6020B
	Chromium-53	50.000	50.3	101	ug/L	EPA 6020B
	Lead-208	50.000	52.7	105	ug/L	EPA 6020B
	Silver-107	50.000	50.7	101	ug/L	EPA 6020B
SLE0043-CCV7	Chromium-52	50.000	50.0	100	ug/L	EPA 6020B
	Chromium-53	50.000	50.6	101	ug/L	EPA 6020B
	Lead-208	50.000	54.2	108	ug/L	EPA 6020B
	Silver-107	50.000	51.5	103	ug/L	EPA 6020B
SLE0043-CCV8	Chromium-52	50.000	49.7	99.3	ug/L	EPA 6020B
	Chromium-53	50.000	50.3	101	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00013
Control Limt: +/- 10.00%
Sequence: SLE0043

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0043-CCV8	Lead-208	50.000	54.5	109	ug/L	EPA 6020B
	Silver-107	50.000	50.7	101	ug/L	EPA 6020B
SLE0043-CCV9	Chromium-52	50.000	50.6	101	ug/L	EPA 6020B
	Chromium-53	50.000	51.2	102	ug/L	EPA 6020B
	Lead-208	50.000	54.5	109	ug/L	EPA 6020B
	Silver-107	50.000	50.8	102	ug/L	EPA 6020B
SLE0043-CCVA	Chromium-52	50.000	50.0	100	ug/L	EPA 6020B
	Chromium-53	50.000	50.4	101	ug/L	EPA 6020B
	Lead-208	50.000	53.6	107	ug/L	EPA 6020B
	Silver-107	50.000	50.5	101	ug/L	EPA 6020B
SLE0043-CCVB	Chromium-52	50.000	50.1	100	ug/L	EPA 6020B
	Chromium-53	50.000	50.9	102	ug/L	EPA 6020B
	Lead-208	50.000	55.4	111	ug/L	EPA 6020B
	Silver-107	50.000	49.9	99.9	ug/L	EPA 6020B
SLE0043-CCVC	Chromium-52	50.000	50.1	100	ug/L	EPA 6020B
	Chromium-53	50.000	50.5	101	ug/L	EPA 6020B
	Lead-208	50.000	55.4	111	ug/L	EPA 6020B
	Silver-107	50.000	49.3	98.5	ug/L	EPA 6020B
SLE0043-CCVD	Chromium-52	50.000	49.8	99.5	ug/L	EPA 6020B
	Chromium-53	50.000	51.0	102	ug/L	EPA 6020B
	Lead-208	50.000	56.3	113	ug/L	EPA 6020B
	Silver-107	50.000	49.6	99.1	ug/L	EPA 6020B
SLE0043-CCVE	Chromium-52	50.000	50.0	100	ug/L	EPA 6020B
	Chromium-53	50.000	50.6	101	ug/L	EPA 6020B
	Lead-208	50.000	55.3	111	ug/L	EPA 6020B
	Silver-107	50.000	50.0	100	ug/L	EPA 6020B
SLE0043-CCVF	Chromium-52	50.000	51.0	102	ug/L	EPA 6020B
	Chromium-53	50.000	50.8	102	ug/L	EPA 6020B
	Lead-208	50.000	56.2	112	ug/L	EPA 6020B
	Silver-107	50.000	49.1	98.1	ug/L	EPA 6020B
SLE0043-CCVG	Chromium-52	50.000	49.7	99.4	ug/L	EPA 6020B
	Chromium-53	50.000	50.7	101	ug/L	EPA 6020B
	Lead-208	50.000	56.6	113	ug/L	EPA 6020B
	Silver-107	50.000	49.5	98.9	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00013
Control Limt: +/- 10.00%
Sequence: SLE0043

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0043-CCVH	Chromium-52	50.000	52.7	105	ug/L	EPA 6020B
	Chromium-53	50.000	53.4	107	ug/L	EPA 6020B
	Lead-208	50.000	60.1	120	ug/L	EPA 6020B
	Silver-107	50.000	52.8	106	ug/L	EPA 6020B
SLE0043-CCVI	Chromium-52	50.000	49.3	98.6	ug/L	EPA 6020B
	Chromium-53	50.000	50.1	100	ug/L	EPA 6020B
	Lead-208	50.000	58.4	117	ug/L	EPA 6020B
	Silver-107	50.000	49.0	98.0	ug/L	EPA 6020B
SLE0043-CCVJ	Chromium-52	50.000	49.7	99.4	ug/L	EPA 6020B
	Chromium-53	50.000	50.2	100	ug/L	EPA 6020B
	Lead-208	50.000	57.9	116	ug/L	EPA 6020B
	Silver-107	50.000	49.2	98.5	ug/L	EPA 6020B
SLE0043-CCVK	Chromium-52	50.000	50.5	101	ug/L	EPA 6020B
	Chromium-53	50.000	51.8	104	ug/L	EPA 6020B
	Lead-208	50.000	57.8	116	ug/L	EPA 6020B
	Silver-107	50.000	49.8	99.6	ug/L	EPA 6020B

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00030
Control Limt: +/- 10.00%
Sequence: SLE0138

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0138-ICV1	Chromium-52	50.000	50.7	101	ug/L	EPA 6020B
	Chromium-53	50.000	51.6	103	ug/L	EPA 6020B
SLE0138-CCV1	Chromium-52	50.000	48.9	97.8	ug/L	EPA 6020B
	Chromium-53	50.000	49.8	99.7	ug/L	EPA 6020B
SLE0138-CCV2	Chromium-52	50.000	48.0	95.9	ug/L	EPA 6020B
	Chromium-53	50.000	48.9	97.8	ug/L	EPA 6020B
SLE0138-CCV3	Chromium-52	50.000	48.2	96.3	ug/L	EPA 6020B
	Chromium-53	50.000	49.2	98.5	ug/L	EPA 6020B
SLE0138-CCV4	Chromium-52	50.000	48.6	97.2	ug/L	EPA 6020B
	Chromium-53	50.000	49.2	98.3	ug/L	EPA 6020B
SLE0138-CCV5	Chromium-52	50.000	46.9	93.7	ug/L	EPA 6020B
	Chromium-53	50.000	48.6	97.2	ug/L	EPA 6020B
SLE0138-CCV6	Chromium-52	50.000	47.1	94.3	ug/L	EPA 6020B
	Chromium-53	50.000	48.5	96.9	ug/L	EPA 6020B
SLE0138-CCV7	Chromium-52	50.000	46.8	93.6	ug/L	EPA 6020B
	Chromium-53	50.000	48.4	96.7	ug/L	EPA 6020B
SLE0138-CCV8	Chromium-52	50.000	46.3	92.6	ug/L	EPA 6020B
	Chromium-53	50.000	48.0	96.0	ug/L	EPA 6020B
SLE0138-CCV9	Chromium-52	50.000	47.2	94.3	ug/L	EPA 6020B
	Chromium-53	50.000	47.6	95.2	ug/L	EPA 6020B
SLE0138-CCVA	Chromium-52	50.000	47.8	95.6	ug/L	EPA 6020B
	Chromium-53	50.000	48.4	96.8	ug/L	EPA 6020B
SLE0138-CCVB	Chromium-52	50.000	46.9	93.8	ug/L	EPA 6020B
	Chromium-53	50.000	47.8	95.7	ug/L	EPA 6020B
SLE0138-CCVC	Chromium-52	50.000	44.9	89.8	ug/L	EPA 6020B
	Chromium-53	50.000	45.7	91.5	ug/L	EPA 6020B
SLE0138-CCVD	Chromium-52	50.000	45.7	91.4	ug/L	EPA 6020B
	Chromium-53	50.000	47.0	94.1	ug/L	EPA 6020B
SLE0138-CCVE	Chromium-52	50.000	45.9	91.9	ug/L	EPA 6020B
	Chromium-53	50.000	47.4	94.9	ug/L	EPA 6020B
SLE0138-CCVF	Chromium-52	50.000	45.8	91.5	ug/L	EPA 6020B
	Chromium-53	50.000	47.4	94.8	ug/L	EPA 6020B
SLE0138-CCVG	Chromium-52	50.000	45.6	91.3	ug/L	EPA 6020B
	Chromium-53	50.000	46.3	92.6	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00030
Control Limt: +/- 10.00%
Sequence: SLE0138

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0138-CCVH	Chromium-52	50.000	46.2	92.4	ug/L	EPA 6020B
	Chromium-53	50.000	46.9	93.7	ug/L	EPA 6020B
SLE0138-CCVI	Chromium-52	50.000	45.0	90.0	ug/L	EPA 6020B
	Chromium-53	50.000	46.5	93.0	ug/L	EPA 6020B
SLE0138-CCVJ	Chromium-52	50.000	43.7	87.5	ug/L	EPA 6020B
	Chromium-53	50.000	44.2	88.4	ug/L	EPA 6020B
SLE0138-CCVK	Chromium-52	50.000	45.4	90.8	ug/L	EPA 6020B
	Chromium-53	50.000	46.0	92.0	ug/L	EPA 6020B
SLE0138-CCVL	Chromium-52	50.000	44.2	88.5	ug/L	EPA 6020B
	Chromium-53	50.000	44.9	89.9	ug/L	EPA 6020B

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Control Limt: +/- 10.00%
Sequence: SLE0163

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0163-ICV1	Chromium-52	50.000	49.9	99.8	ug/L	EPA 6020B
	Chromium-53	50.000	51.3	103	ug/L	EPA 6020B
SLE0163-CCV1	Chromium-52	50.000	49.1	98.2	ug/L	EPA 6020B
	Chromium-53	50.000	51.6	103	ug/L	EPA 6020B
SLE0163-CCV2	Chromium-52	50.000	48.9	97.9	ug/L	EPA 6020B
	Chromium-53	50.000	51.0	102	ug/L	EPA 6020B
SLE0163-CCV3	Chromium-52	50.000	48.4	96.8	ug/L	EPA 6020B
	Chromium-53	50.000	50.4	101	ug/L	EPA 6020B
SLE0163-CCV4	Chromium-52	50.000	48.4	96.8	ug/L	EPA 6020B
	Chromium-53	50.000	50.2	100	ug/L	EPA 6020B
SLE0163-CCV5	Chromium-52	50.000	48.2	96.4	ug/L	EPA 6020B
	Chromium-53	50.000	49.7	99.5	ug/L	EPA 6020B
SLE0163-CCV6	Chromium-52	50.000	48.0	96.1	ug/L	EPA 6020B
	Chromium-53	50.000	50.3	101	ug/L	EPA 6020B
SLE0163-CCV7	Chromium-52	50.000	48.4	96.9	ug/L	EPA 6020B
	Chromium-53	50.000	50.5	101	ug/L	EPA 6020B
SLE0163-CCV8	Chromium-52	50.000	48.7	97.5	ug/L	EPA 6020B
	Chromium-53	50.000	50.4	101	ug/L	EPA 6020B
SLE0163-CCV9	Chromium-52	50.000	49.4	98.8	ug/L	EPA 6020B
	Chromium-53	50.000	50.6	101	ug/L	EPA 6020B
SLE0163-CCVA	Chromium-52	50.000	48.9	97.8	ug/L	EPA 6020B
	Chromium-53	50.000	50.6	101	ug/L	EPA 6020B
SLE0163-CCVB	Chromium-52	50.000	49.1	98.3	ug/L	EPA 6020B
	Chromium-53	50.000	51.1	102	ug/L	EPA 6020B
SLE0163-CCVC	Chromium-52	50.000	48.3	96.6	ug/L	EPA 6020B
	Chromium-53	50.000	49.9	99.7	ug/L	EPA 6020B
SLE0163-CCVD	Chromium-52	50.000	48.0	96.0	ug/L	EPA 6020B
	Chromium-53	50.000	50.2	100	ug/L	EPA 6020B
SLE0163-CCVE	Chromium-52	50.000	48.6	97.3	ug/L	EPA 6020B
	Chromium-53	50.000	50.2	100	ug/L	EPA 6020B
SLE0163-CCVF	Chromium-52	50.000	48.7	97.4	ug/L	EPA 6020B
	Chromium-53	50.000	51.0	102	ug/L	EPA 6020B

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Date Analyzed: 05/01/23 15:43

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0017-IBL1	Chromium-52	0.0150	0.26	0.500	ug/L	
SLE0017-IBL1	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLE0017-IBL1	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0017-IBL1	Silver-107	0.00400	0.022	0.200	ug/L	
SLE0017-ICB1	Chromium-52	-0.0130	0.26	0.500	ug/L	
SLE0017-ICB1	Chromium-53	-0.00100	0.239	0.500	ug/L	
SLE0017-ICB1	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0017-ICB1	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0017-CCB1	Chromium-52	-0.00600	0.26	0.500	ug/L	
SLE0017-CCB1	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLE0017-CCB1	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0017-CCB1	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0017-IBL2	Chromium-52	0.00800	0.26	0.500	ug/L	
SLE0017-IBL2	Chromium-53	0.0470	0.239	0.500	ug/L	
SLE0017-IBL2	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0017-IBL2	Silver-107	0.0100	0.022	0.200	ug/L	
SLE0017-CCB2	Chromium-52	-0.00400	0.26	0.500	ug/L	
SLE0017-CCB2	Chromium-53	0.0240	0.239	0.500	ug/L	
SLE0017-CCB2	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0017-CCB2	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0017-IBL3	Chromium-52	0.00300	0.26	0.500	ug/L	
SLE0017-IBL3	Chromium-53	0.0640	0.239	0.500	ug/L	
SLE0017-IBL3	Lead-208	0.0110	0.0513	0.100	ug/L	
SLE0017-IBL3	Silver-107	-0.00300	0.022	0.200	ug/L	
SLE0017-CCB3	Chromium-52	-0.0300	0.26	0.500	ug/L	
SLE0017-CCB3	Chromium-53	0.00800	0.239	0.500	ug/L	
SLE0017-CCB3	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0017-CCB3	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0017-IBL4	Chromium-52	-0.00700	0.26	0.500	ug/L	
SLE0017-IBL4	Chromium-53	0.0470	0.239	0.500	ug/L	
SLE0017-IBL4	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0017-IBL4	Silver-107	-0.00400	0.022	0.200	ug/L	
SLE0017-CCB4	Chromium-52	-0.0500	0.26	0.500	ug/L	
SLE0017-CCB4	Chromium-53	0.00300	0.239	0.500	ug/L	
SLE0017-CCB4	Lead-208	0.00	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Date Analyzed: 05/01/23 19:15

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0017-CCB4	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0017-IBL5	Chromium-52	0.0700	0.26	0.500	ug/L	
SLE0017-IBL5	Chromium-53	0.0140	0.239	0.500	ug/L	
SLE0017-IBL5	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0017-IBL5	Silver-107	-0.00600	0.022	0.200	ug/L	
SLE0017-CCB5	Chromium-52	-0.0600	0.26	0.500	ug/L	
SLE0017-CCB5	Chromium-53	-0.00900	0.239	0.500	ug/L	
SLE0017-CCB5	Lead-208	-0.00200	0.0513	0.100	ug/L	
SLE0017-CCB5	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0017-CCB6	Chromium-52	-0.0170	0.26	0.500	ug/L	
SLE0017-CCB6	Chromium-53	-0.00600	0.239	0.500	ug/L	
SLE0017-CCB6	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0017-CCB6	Silver-107	0.00400	0.022	0.200	ug/L	
SLE0017-IBL6	Chromium-52	0.0980	0.26	0.500	ug/L	
SLE0017-IBL6	Chromium-53	0.0150	0.239	0.500	ug/L	
SLE0017-IBL6	Lead-208	0.00400	0.0513	0.100	ug/L	
SLE0017-IBL6	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0017-IBL7	Chromium-52	0.0310	0.26	0.500	ug/L	
SLE0017-IBL7	Chromium-53	-0.00200	0.239	0.500	ug/L	
SLE0017-IBL7	Lead-208	0.00800	0.0513	0.100	ug/L	
SLE0017-IBL7	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0017-CCB7	Chromium-52	-0.0120	0.26	0.500	ug/L	
SLE0017-CCB7	Chromium-53	-0.0150	0.239	0.500	ug/L	
SLE0017-CCB7	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0017-CCB7	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0017-IBL8	Chromium-52	0.0190	0.26	0.500	ug/L	
SLE0017-IBL8	Chromium-53	0.00700	0.239	0.500	ug/L	
SLE0017-IBL8	Lead-208	0.00800	0.0513	0.100	ug/L	
SLE0017-IBL8	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0017-CCB8	Chromium-52	-0.0140	0.26	0.500	ug/L	
SLE0017-CCB8	Chromium-53	-0.00200	0.239	0.500	ug/L	
SLE0017-CCB8	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0017-CCB8	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0017-IBL9	Chromium-52	0.0210	0.26	0.500	ug/L	
SLE0017-IBL9	Chromium-53	0.0110	0.239	0.500	ug/L	
SLE0017-IBL9	Lead-208	0.00700	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Date Analyzed: 05/01/23 23:42

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0017-IBL9	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0017-CCB9	Chromium-52	0.0110	0.26	0.500	ug/L	
SLE0017-CCB9	Chromium-53	0.00	0.239	0.500	ug/L	
SLE0017-CCB9	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0017-CCB9	Silver-107	0.00	0.022	0.200	ug/L	
SLE0017-IBLA	Chromium-52	0.0490	0.26	0.500	ug/L	
SLE0017-IBLA	Chromium-53	0.299	0.239	0.500	ug/L	
SLE0017-IBLA	Lead-208	0.00800	0.0513	0.100	ug/L	
SLE0017-IBLA	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0017-CCBA	Chromium-52	0.0260	0.26	0.500	ug/L	
SLE0017-CCBA	Chromium-53	0.121	0.239	0.500	ug/L	
SLE0017-CCBA	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0017-CCBA	Silver-107	0.00	0.022	0.200	ug/L	
SLE0017-CCBB	Chromium-52	-0.00800	0.26	0.500	ug/L	
SLE0017-CCBB	Chromium-53	-0.0380	0.239	0.500	ug/L	
SLE0017-CCBB	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0017-CCBB	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0017-IBLB	Chromium-52	0.0210	0.26	0.500	ug/L	
SLE0017-IBLB	Chromium-53	0.148	0.239	0.500	ug/L	
SLE0017-IBLB	Lead-208	0.00800	0.0513	0.100	ug/L	
SLE0017-IBLB	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0017-CCBC	Chromium-52	-0.0550	0.26	0.500	ug/L	
SLE0017-CCBC	Chromium-53	0.0180	0.239	0.500	ug/L	
SLE0017-CCBC	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0017-CCBC	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0017-IBLC	Chromium-52	-0.0420	0.26	0.500	ug/L	
SLE0017-IBLC	Chromium-53	0.0140	0.239	0.500	ug/L	
SLE0017-IBLC	Lead-208	0.00800	0.0513	0.100	ug/L	
SLE0017-IBLC	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0017-CCBD	Chromium-52	-0.0520	0.26	0.500	ug/L	
SLE0017-CCBD	Chromium-53	-0.0430	0.239	0.500	ug/L	
SLE0017-CCBD	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0017-CCBD	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0017-IBLD	Chromium-52	-0.0270	0.26	0.500	ug/L	
SLE0017-IBLD	Chromium-53	-0.0750	0.239	0.500	ug/L	
SLE0017-IBLD	Lead-208	0.0130	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Date Analyzed: 05/02/23 04:04

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0017-IBLD	Silver-107	0.00400	0.022	0.200	ug/L	
SLE0017-CCBE	Chromium-52	-0.0460	0.26	0.500	ug/L	
SLE0017-CCBE	Chromium-53	-0.0880	0.239	0.500	ug/L	
SLE0017-CCBE	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0017-CCBE	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0017-IBLE	Chromium-52	-0.00800	0.26	0.500	ug/L	
SLE0017-IBLE	Chromium-53	-0.0430	0.239	0.500	ug/L	
SLE0017-IBLE	Lead-208	0.00800	0.0513	0.100	ug/L	
SLE0017-IBLE	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0017-IBLF	Chromium-52	-0.0340	0.26	0.500	ug/L	
SLE0017-IBLF	Chromium-53	-0.0650	0.239	0.500	ug/L	
SLE0017-IBLF	Lead-208	0.0110	0.0513	0.100	ug/L	
SLE0017-IBLF	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0017-CCBF	Chromium-52	-0.0510	0.26	0.500	ug/L	
SLE0017-CCBF	Chromium-53	-0.0880	0.239	0.500	ug/L	
SLE0017-CCBF	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0017-CCBF	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0017-CCBG	Chromium-52	-0.0120	0.26	0.500	ug/L	
SLE0017-CCBG	Chromium-53	-0.00900	0.239	0.500	ug/L	
SLE0017-CCBG	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0017-CCBG	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0017-IBLG	Chromium-52	0.0330	0.26	0.500	ug/L	
SLE0017-IBLG	Chromium-53	0.0310	0.239	0.500	ug/L	
SLE0017-IBLG	Lead-208	0.00500	0.0513	0.100	ug/L	
SLE0017-IBLG	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0017-IBLH	Chromium-52	0.0280	0.26	0.500	ug/L	
SLE0017-IBLH	Chromium-53	0.0250	0.239	0.500	ug/L	
SLE0017-IBLH	Lead-208	0.00500	0.0513	0.100	ug/L	
SLE0017-IBLH	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0017-CCBH	Chromium-52	-0.0170	0.26	0.500	ug/L	
SLE0017-CCBH	Chromium-53	0.00	0.239	0.500	ug/L	
SLE0017-CCBH	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0017-CCBH	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0017-IBLI	Chromium-52	0.0130	0.26	0.500	ug/L	
SLE0017-IBLI	Chromium-53	0.0180	0.239	0.500	ug/L	
SLE0017-IBLI	Lead-208	0.00700	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Date Analyzed: 05/02/23 06:50

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0017-IBLI	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0017-IBLJ	Chromium-52	-0.0140	0.26	0.500	ug/L	
SLE0017-IBLJ	Chromium-53	-0.0130	0.239	0.500	ug/L	
SLE0017-IBLJ	Lead-208	0.00600	0.0513	0.100	ug/L	
SLE0017-IBLJ	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0017-CCBI	Chromium-52	-0.0170	0.26	0.500	ug/L	
SLE0017-CCBI	Chromium-53	-0.0180	0.239	0.500	ug/L	
SLE0017-CCBI	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0017-CCBI	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0017-IBLK	Chromium-52	0.0130	0.26	0.500	ug/L	
SLE0017-IBLK	Chromium-53	0.0450	0.239	0.500	ug/L	
SLE0017-IBLK	Lead-208	0.00600	0.0513	0.100	ug/L	
SLE0017-IBLK	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0017-IBLL	Chromium-52	-0.0450	0.26	0.500	ug/L	
SLE0017-IBLL	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLE0017-IBLL	Lead-208	0.00900	0.0513	0.100	ug/L	
SLE0017-IBLL	Silver-107	0.00500	0.022	0.200	ug/L	
SLE0017-CCBJ	Chromium-52	-0.0230	0.26	0.500	ug/L	
SLE0017-CCBJ	Chromium-53	-0.0160	0.239	0.500	ug/L	
SLE0017-CCBJ	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0017-CCBJ	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0017-IBLM	Chromium-52	-0.0160	0.26	0.500	ug/L	
SLE0017-IBLM	Chromium-53	-0.00800	0.239	0.500	ug/L	
SLE0017-IBLM	Lead-208	0.00600	0.0513	0.100	ug/L	
SLE0017-IBLM	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0017-IBLN	Chromium-52	-0.0370	0.26	0.500	ug/L	
SLE0017-IBLN	Chromium-53	-0.00700	0.239	0.500	ug/L	
SLE0017-IBLN	Lead-208	0.0110	0.0513	0.100	ug/L	
SLE0017-IBLN	Silver-107	0.00600	0.022	0.200	ug/L	
SLE0017-CCBK	Chromium-52	-0.0240	0.26	0.500	ug/L	
SLE0017-CCBK	Chromium-53	-0.0200	0.239	0.500	ug/L	
SLE0017-CCBK	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0017-CCBK	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0017-IBLO	Chromium-52	-0.0610	0.26	0.500	ug/L	
SLE0017-IBLO	Chromium-53	-0.00600	0.239	0.500	ug/L	
SLE0017-IBLO	Lead-208	0.00800	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Date Analyzed: 05/02/23 10:11

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0017-IBLO	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0017-CCBL	Chromium-52	-0.0830	0.26	0.500	ug/L	
SLE0017-CCBL	Chromium-53	-0.0170	0.239	0.500	ug/L	
SLE0017-CCBL	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0017-CCBL	Silver-107	0.00200	0.022	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0043

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00013
Date Analyzed: 05/02/23 14:19

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0043-IBL1	Chromium-52	0.00100	0.26	0.500	ug/L	
SLE0043-IBL1	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLE0043-IBL1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0043-IBL1	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0043-ICB1	Chromium-52	0.0110	0.26	0.500	ug/L	
SLE0043-ICB1	Chromium-53	-0.00900	0.239	0.500	ug/L	
SLE0043-ICB1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0043-ICB1	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0043-CCB1	Chromium-52	0.00500	0.26	0.500	ug/L	
SLE0043-CCB1	Chromium-53	-0.0100	0.239	0.500	ug/L	
SLE0043-CCB1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0043-CCB1	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0043-IBL2	Chromium-52	0.100	0.26	0.500	ug/L	
SLE0043-IBL2	Chromium-53	0.131	0.239	0.500	ug/L	
SLE0043-IBL2	Lead-208	0.113	0.0513	0.100	ug/L	
SLE0043-IBL2	Silver-107	0.113	0.022	0.200	ug/L	
SLE0043-IBL3	Chromium-52	-0.0110	0.26	0.500	ug/L	
SLE0043-IBL3	Chromium-53	0.0160	0.239	0.500	ug/L	
SLE0043-IBL3	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0043-IBL3	Silver-107	0.00400	0.022	0.200	ug/L	
SLE0043-CCB2	Chromium-52	-0.0100	0.26	0.500	ug/L	
SLE0043-CCB2	Chromium-53	0.00400	0.239	0.500	ug/L	
SLE0043-CCB2	Lead-208	0.00300	0.0513	0.100	ug/L	
SLE0043-CCB2	Silver-107	0.00600	0.022	0.200	ug/L	
SLE0043-IBL4	Chromium-52	-0.00800	0.26	0.500	ug/L	
SLE0043-IBL4	Chromium-53	0.0820	0.239	0.500	ug/L	
SLE0043-IBL4	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0043-IBL4	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0043-CCB3	Chromium-52	-0.0160	0.26	0.500	ug/L	
SLE0043-CCB3	Chromium-53	0.0180	0.239	0.500	ug/L	
SLE0043-CCB3	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0043-CCB3	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0043-CCB4	Chromium-52	0.00	0.26	0.500	ug/L	
SLE0043-CCB4	Chromium-53	-0.00600	0.239	0.500	ug/L	
SLE0043-CCB4	Lead-208	0.00100	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0043

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00013
Date Analyzed: 05/02/23 17:18

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0043-CCB4	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0043-CCB5	Chromium-52	0.00800	0.26	0.500	ug/L	
SLE0043-CCB5	Chromium-53	-0.0150	0.239	0.500	ug/L	
SLE0043-CCB5	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0043-CCB5	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0043-CCB6	Chromium-52	-0.0140	0.26	0.500	ug/L	
SLE0043-CCB6	Chromium-53	-0.0230	0.239	0.500	ug/L	
SLE0043-CCB6	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0043-CCB6	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0043-CCB7	Chromium-52	0.00700	0.26	0.500	ug/L	
SLE0043-CCB7	Chromium-53	-0.0190	0.239	0.500	ug/L	
SLE0043-CCB7	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0043-CCB7	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0043-CCB8	Chromium-52	-0.0210	0.26	0.500	ug/L	
SLE0043-CCB8	Chromium-53	-0.0250	0.239	0.500	ug/L	
SLE0043-CCB8	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0043-CCB8	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0043-CCB9	Chromium-52	-0.0130	0.26	0.500	ug/L	
SLE0043-CCB9	Chromium-53	-0.0280	0.239	0.500	ug/L	
SLE0043-CCB9	Lead-208	0.00300	0.0513	0.100	ug/L	
SLE0043-CCB9	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0043-CCBA	Chromium-52	-0.0110	0.26	0.500	ug/L	
SLE0043-CCBA	Chromium-53	0.00400	0.239	0.500	ug/L	
SLE0043-CCBA	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0043-CCBA	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0043-IBL5	Chromium-52	-0.0200	0.26	0.500	ug/L	
SLE0043-IBL5	Chromium-53	-0.0110	0.239	0.500	ug/L	
SLE0043-IBL5	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0043-IBL5	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0043-CCBB	Chromium-52	-0.0310	0.26	0.500	ug/L	
SLE0043-CCBB	Chromium-53	-0.00700	0.239	0.500	ug/L	
SLE0043-CCBB	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0043-CCBB	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0043-IBL6	Chromium-52	0.0350	0.26	0.500	ug/L	
SLE0043-IBL6	Chromium-53	0.0120	0.239	0.500	ug/L	
SLE0043-IBL6	Lead-208	0.00200	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0043

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00013
Date Analyzed: 05/02/23 23:43

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0043-IBL6	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0043-IBL7	Chromium-52	-0.0210	0.26	0.500	ug/L	
SLE0043-IBL7	Chromium-53	0.0290	0.239	0.500	ug/L	
SLE0043-IBL7	Lead-208	0.00300	0.0513	0.100	ug/L	
SLE0043-IBL7	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0043-CCBC	Chromium-52	-0.0450	0.26	0.500	ug/L	
SLE0043-CCBC	Chromium-53	0.0110	0.239	0.500	ug/L	
SLE0043-CCBC	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0043-CCBC	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0043-IBL8	Chromium-52	-0.0430	0.26	0.500	ug/L	
SLE0043-IBL8	Chromium-53	0.0200	0.239	0.500	ug/L	
SLE0043-IBL8	Lead-208	0.00300	0.0513	0.100	ug/L	
SLE0043-IBL8	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0043-CCBD	Chromium-52	-0.0360	0.26	0.500	ug/L	
SLE0043-CCBD	Chromium-53	0.00900	0.239	0.500	ug/L	
SLE0043-CCBD	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0043-CCBD	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0043-IBL9	Chromium-52	-0.00100	0.26	0.500	ug/L	
SLE0043-IBL9	Chromium-53	0.325	0.239	0.500	ug/L	
SLE0043-IBL9	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0043-IBL9	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0043-CCBE	Chromium-52	-0.0380	0.26	0.500	ug/L	
SLE0043-CCBE	Chromium-53	0.133	0.239	0.500	ug/L	
SLE0043-CCBE	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0043-CCBE	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0043-CCBF	Chromium-52	0.00400	0.26	0.500	ug/L	
SLE0043-CCBF	Chromium-53	-0.0270	0.239	0.500	ug/L	
SLE0043-CCBF	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0043-CCBF	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0043-IBLA	Chromium-52	-0.00700	0.26	0.500	ug/L	
SLE0043-IBLA	Chromium-53	0.0290	0.239	0.500	ug/L	
SLE0043-IBLA	Lead-208	0.00300	0.0513	0.100	ug/L	
SLE0043-IBLA	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0043-CCBG	Chromium-52	0.0110	0.26	0.500	ug/L	
SLE0043-CCBG	Chromium-53	-0.0490	0.239	0.500	ug/L	
SLE0043-CCBG	Lead-208	0.00	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0043

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00013
Date Analyzed: 05/03/23 03:06

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0043-CCBG	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0043-IBLB	Chromium-52	0.00100	0.26	0.500	ug/L	
SLE0043-IBLB	Chromium-53	-0.0220	0.239	0.500	ug/L	
SLE0043-IBLB	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0043-IBLB	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0043-CCBH	Chromium-52	-0.0180	0.26	0.500	ug/L	
SLE0043-CCBH	Chromium-53	-0.0670	0.239	0.500	ug/L	
SLE0043-CCBH	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0043-CCBH	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0043-IBLC	Chromium-52	-0.00800	0.26	0.500	ug/L	
SLE0043-IBLC	Chromium-53	-0.0600	0.239	0.500	ug/L	
SLE0043-IBLC	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0043-IBLC	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0043-CCBI	Chromium-52	-0.0150	0.26	0.500	ug/L	
SLE0043-CCBI	Chromium-53	-0.0950	0.239	0.500	ug/L	
SLE0043-CCBI	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0043-CCBI	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0043-IBLD	Chromium-52	0.0780	0.26	0.500	ug/L	
SLE0043-IBLD	Chromium-53	0.0800	0.239	0.500	ug/L	
SLE0043-IBLD	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0043-IBLD	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0043-CCBJ	Chromium-52	-0.00300	0.26	0.500	ug/L	
SLE0043-CCBJ	Chromium-53	-0.0520	0.239	0.500	ug/L	
SLE0043-CCBJ	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0043-CCBJ	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0043-IBLE	Chromium-52	0.0270	0.26	0.500	ug/L	
SLE0043-IBLE	Chromium-53	0.266	0.239	0.500	ug/L	
SLE0043-IBLE	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0043-IBLE	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0043-CCBK	Chromium-52	0.0510	0.26	0.500	ug/L	
SLE0043-CCBK	Chromium-53	0.0500	0.239	0.500	ug/L	
SLE0043-CCBK	Lead-208	0.0320	0.0513	0.100	ug/L	
SLE0043-CCBK	Silver-107	0.0250	0.022	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0138

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00030
Date Analyzed: 05/08/23 14:22

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0138-IBL1	Chromium-52	-0.0440	0.26	0.500	ug/L	
SLE0138-IBL1	Chromium-53	-0.0350	0.239	0.500	ug/L	
SLE0138-ICB1	Chromium-52	-0.0440	0.26	0.500	ug/L	
SLE0138-ICB1	Chromium-53	-0.0380	0.239	0.500	ug/L	
SLE0138-CCB1	Chromium-52	-0.0450	0.26	0.500	ug/L	
SLE0138-CCB1	Chromium-53	-0.0320	0.239	0.500	ug/L	
SLE0138-IBL2	Chromium-52	-0.0310	0.26	0.500	ug/L	
SLE0138-IBL2	Chromium-53	-0.0180	0.239	0.500	ug/L	
SLE0138-IBL3	Chromium-52	-0.0240	0.26	0.500	ug/L	
SLE0138-IBL3	Chromium-53	-0.0430	0.239	0.500	ug/L	
SLE0138-CCB2	Chromium-52	-0.0500	0.26	0.500	ug/L	
SLE0138-CCB2	Chromium-53	-0.0530	0.239	0.500	ug/L	
SLE0138-IBL4	Chromium-52	0.211	0.26	0.500	ug/L	
SLE0138-IBL4	Chromium-53	-0.0590	0.239	0.500	ug/L	
SLE0138-IBL5	Chromium-52	0.0940	0.26	0.500	ug/L	
SLE0138-IBL5	Chromium-53	-0.0340	0.239	0.500	ug/L	
SLE0138-CCB3	Chromium-52	-0.0940	0.26	0.500	ug/L	
SLE0138-CCB3	Chromium-53	-0.0750	0.239	0.500	ug/L	
SLE0138-CCB4	Chromium-52	-0.00500	0.26	0.500	ug/L	
SLE0138-CCB4	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLE0138-IBL6	Chromium-52	0.210	0.26	0.500	ug/L	
SLE0138-IBL6	Chromium-53	0.128	0.239	0.500	ug/L	
SLE0138-IBL7	Chromium-52	0.179	0.26	0.500	ug/L	
SLE0138-IBL7	Chromium-53	0.106	0.239	0.500	ug/L	
SLE0138-CCB5	Chromium-52	-0.0230	0.26	0.500	ug/L	
SLE0138-CCB5	Chromium-53	0.00900	0.239	0.500	ug/L	
SLE0138-IBL8	Chromium-52	0.142	0.26	0.500	ug/L	
SLE0138-IBL8	Chromium-53	0.143	0.239	0.500	ug/L	
SLE0138-IBL9	Chromium-52	0.0220	0.26	0.500	ug/L	
SLE0138-IBL9	Chromium-53	0.0230	0.239	0.500	ug/L	
SLE0138-CCB6	Chromium-52	-0.0170	0.26	0.500	ug/L	
SLE0138-CCB6	Chromium-53	-0.00900	0.239	0.500	ug/L	
SLE0138-IBLA	Chromium-52	0.0590	0.26	0.500	ug/L	
SLE0138-IBLA	Chromium-53	0.0350	0.239	0.500	ug/L	
SLE0138-CCB7	Chromium-52	-0.0400	0.26	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0138

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00030
Date Analyzed: 05/08/23 21:03

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0138-CCB7	Chromium-53	-0.0180	0.239	0.500	ug/L	
SLE0138-CCB8	Chromium-52	0.0350	0.26	0.500	ug/L	
SLE0138-CCB8	Chromium-53	-0.00600	0.239	0.500	ug/L	
SLE0138-IBLB	Chromium-52	-0.00400	0.26	0.500	ug/L	
SLE0138-IBLB	Chromium-53	-0.00200	0.239	0.500	ug/L	
SLE0138-CCB9	Chromium-52	0.0220	0.26	0.500	ug/L	
SLE0138-CCB9	Chromium-53	0.00500	0.239	0.500	ug/L	
SLE0138-IBLC	Chromium-52	-0.0110	0.26	0.500	ug/L	
SLE0138-IBLC	Chromium-53	-0.00400	0.239	0.500	ug/L	
SLE0138-CCBA	Chromium-52	0.0290	0.26	0.500	ug/L	
SLE0138-CCBA	Chromium-53	-0.00700	0.239	0.500	ug/L	
SLE0138-IBLD	Chromium-52	0.00	0.26	0.500	ug/L	
SLE0138-IBLD	Chromium-53	-0.00300	0.239	0.500	ug/L	
SLE0138-CCBB	Chromium-52	0.0250	0.26	0.500	ug/L	
SLE0138-CCBB	Chromium-53	-0.00100	0.239	0.500	ug/L	
SLE0138-IBLE	Chromium-52	0.146	0.26	0.500	ug/L	
SLE0138-IBLE	Chromium-53	0.116	0.239	0.500	ug/L	
SLE0138-IBLF	Chromium-52	0.0730	0.26	0.500	ug/L	
SLE0138-IBLF	Chromium-53	0.0210	0.239	0.500	ug/L	
SLE0138-CCBC	Chromium-52	-0.0220	0.26	0.500	ug/L	
SLE0138-CCBC	Chromium-53	0.00300	0.239	0.500	ug/L	
SLE0138-CCBD	Chromium-52	0.0270	0.26	0.500	ug/L	
SLE0138-CCBD	Chromium-53	-0.0190	0.239	0.500	ug/L	
SLE0138-IBLG	Chromium-52	0.0470	0.26	0.500	ug/L	
SLE0138-IBLG	Chromium-53	-0.0230	0.239	0.500	ug/L	
SLE0138-CCBE	Chromium-52	0.0320	0.26	0.500	ug/L	
SLE0138-CCBE	Chromium-53	-0.0210	0.239	0.500	ug/L	
SLE0138-IBLH	Chromium-52	0.424	0.26	0.500	ug/L	
SLE0138-IBLH	Chromium-53	0.827	0.239	0.500	ug/L	
SLE0138-IBLI	Chromium-52	0.303	0.26	0.500	ug/L	
SLE0138-IBLI	Chromium-53	0.627	0.239	0.500	ug/L	
SLE0138-IBLJ	Chromium-52	0.262	0.26	0.500	ug/L	
SLE0138-IBLJ	Chromium-53	0.422	0.239	0.500	ug/L	
SLE0138-CCBF	Chromium-52	0.0280	0.26	0.500	ug/L	
SLE0138-CCBF	Chromium-53	0.163	0.239	0.500	ug/L	
SLE0138-IBLK	Chromium-52	0.126	0.26	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0138

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00030
Date Analyzed: 05/09/23 03:21

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0138-IBLK	Chromium-53	0.315	0.239	0.500	ug/L	
SLE0138-IBLL	Chromium-52	0.137	0.26	0.500	ug/L	
SLE0138-IBLL	Chromium-53	0.110	0.239	0.500	ug/L	
SLE0138-IBLM	Chromium-52	0.122	0.26	0.500	ug/L	
SLE0138-IBLM	Chromium-53	0.0860	0.239	0.500	ug/L	
SLE0138-CCBG	Chromium-52	0.0200	0.26	0.500	ug/L	
SLE0138-CCBG	Chromium-53	0.0360	0.239	0.500	ug/L	
SLE0138-CCBH	Chromium-52	-0.00300	0.26	0.500	ug/L	
SLE0138-CCBH	Chromium-53	-0.0250	0.239	0.500	ug/L	
SLE0138-IBLN	Chromium-52	-0.00700	0.26	0.500	ug/L	
SLE0138-IBLN	Chromium-53	0.0520	0.239	0.500	ug/L	
SLE0138-IBLO	Chromium-52	0.0320	0.26	0.500	ug/L	
SLE0138-IBLO	Chromium-53	0.0390	0.239	0.500	ug/L	
SLE0138-CCBI	Chromium-52	-0.0310	0.26	0.500	ug/L	
SLE0138-CCBI	Chromium-53	-0.0430	0.239	0.500	ug/L	
SLE0138-IBLP	Chromium-52	-0.0550	0.26	0.500	ug/L	
SLE0138-IBLP	Chromium-53	0.00200	0.239	0.500	ug/L	
SLE0138-CCBJ	Chromium-52	-0.0420	0.26	0.500	ug/L	
SLE0138-CCBJ	Chromium-53	-0.0300	0.239	0.500	ug/L	
SLE0138-IBLQ	Chromium-52	-0.0660	0.26	0.500	ug/L	
SLE0138-IBLQ	Chromium-53	-0.0400	0.239	0.500	ug/L	
SLE0138-CCBK	Chromium-52	-0.0510	0.26	0.500	ug/L	
SLE0138-CCBK	Chromium-53	-0.0590	0.239	0.500	ug/L	
SLE0138-IBLR	Chromium-52	0.00500	0.26	0.500	ug/L	
SLE0138-IBLR	Chromium-53	-0.0440	0.239	0.500	ug/L	
SLE0138-CCBL	Chromium-52	-0.0480	0.26	0.500	ug/L	
SLE0138-CCBL	Chromium-53	-0.0630	0.239	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0163

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00034
Date Analyzed: 05/09/23 15:55

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0163-IBL1	Chromium-52	0.00200	0.26	0.500	ug/L	
SLE0163-IBL1	Chromium-53	-0.0120	0.239	0.500	ug/L	
SLE0163-ICB1	Chromium-52	-0.0120	0.26	0.500	ug/L	
SLE0163-ICB1	Chromium-53	-0.0200	0.239	0.500	ug/L	
SLE0163-CCB1	Chromium-52	0.00100	0.26	0.500	ug/L	
SLE0163-CCB1	Chromium-53	-0.0150	0.239	0.500	ug/L	
SLE0163-IBL2	Chromium-52	-0.0300	0.26	0.500	ug/L	
SLE0163-IBL2	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLE0163-IBL3	Chromium-52	-0.0100	0.26	0.500	ug/L	
SLE0163-IBL3	Chromium-53	-0.0110	0.239	0.500	ug/L	
SLE0163-CCB2	Chromium-52	-0.0240	0.26	0.500	ug/L	
SLE0163-CCB2	Chromium-53	-0.0290	0.239	0.500	ug/L	
SLE0163-IBL4	Chromium-52	0.139	0.26	0.500	ug/L	
SLE0163-IBL4	Chromium-53	-0.0230	0.239	0.500	ug/L	
SLE0163-IBL5	Chromium-52	-0.0380	0.26	0.500	ug/L	
SLE0163-IBL5	Chromium-53	-0.0340	0.239	0.500	ug/L	
SLE0163-CCB3	Chromium-52	-0.0300	0.26	0.500	ug/L	
SLE0163-CCB3	Chromium-53	-0.0480	0.239	0.500	ug/L	
SLE0163-CCB4	Chromium-52	-0.00300	0.26	0.500	ug/L	
SLE0163-CCB4	Chromium-53	-0.00200	0.239	0.500	ug/L	
SLE0163-IBL6	Chromium-52	0.186	0.26	0.500	ug/L	
SLE0163-IBL6	Chromium-53	0.0140	0.239	0.500	ug/L	
SLE0163-CCB5	Chromium-52	-0.0110	0.26	0.500	ug/L	
SLE0163-CCB5	Chromium-53	-0.00600	0.239	0.500	ug/L	
SLE0163-IBL7	Chromium-52	0.00400	0.26	0.500	ug/L	
SLE0163-IBL7	Chromium-53	-0.00400	0.239	0.500	ug/L	
SLE0163-CCB6	Chromium-52	0.00700	0.26	0.500	ug/L	
SLE0163-CCB6	Chromium-53	-0.0100	0.239	0.500	ug/L	
SLE0163-CCB7	Chromium-52	0.00900	0.26	0.500	ug/L	
SLE0163-CCB7	Chromium-53	0.00700	0.239	0.500	ug/L	
SLE0163-IBL8	Chromium-52	0.0840	0.26	0.500	ug/L	
SLE0163-IBL8	Chromium-53	0.0180	0.239	0.500	ug/L	
SLE0163-CCB8	Chromium-52	-0.00300	0.26	0.500	ug/L	
SLE0163-CCB8	Chromium-53	0.00500	0.239	0.500	ug/L	
SLE0163-IBL9	Chromium-52	0.0680	0.26	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0163

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00034
Date Analyzed: 05/09/23 23:17

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0163-IBL9	Chromium-53	0.0370	0.239	0.500	ug/L	
SLE0163-CCB9	Chromium-52	0.00400	0.26	0.500	ug/L	
SLE0163-CCB9	Chromium-53	0.00600	0.239	0.500	ug/L	
SLE0163-IBLA	Chromium-52	0.00500	0.26	0.500	ug/L	
SLE0163-IBLA	Chromium-53	0.0140	0.239	0.500	ug/L	
SLE0163-CCBA	Chromium-52	0.0260	0.26	0.500	ug/L	
SLE0163-CCBA	Chromium-53	0.0110	0.239	0.500	ug/L	
SLE0163-IBLB	Chromium-52	-0.00800	0.26	0.500	ug/L	
SLE0163-IBLB	Chromium-53	0.00	0.239	0.500	ug/L	
SLE0163-CCBB	Chromium-52	0.0720	0.26	0.500	ug/L	
SLE0163-CCBB	Chromium-53	0.0430	0.239	0.500	ug/L	
SLE0163-IBLC	Chromium-52	0.0480	0.26	0.500	ug/L	
SLE0163-IBLC	Chromium-53	0.0230	0.239	0.500	ug/L	
SLE0163-IBLD	Chromium-52	0.106	0.26	0.500	ug/L	
SLE0163-IBLD	Chromium-53	0.0450	0.239	0.500	ug/L	
SLE0163-CCBC	Chromium-52	-0.0270	0.26	0.500	ug/L	
SLE0163-CCBC	Chromium-53	-0.00200	0.239	0.500	ug/L	
SLE0163-IBLE	Chromium-52	0.0210	0.26	0.500	ug/L	
SLE0163-IBLE	Chromium-53	-0.00800	0.239	0.500	ug/L	
SLE0163-IBLF	Chromium-52	-0.00300	0.26	0.500	ug/L	
SLE0163-IBLF	Chromium-53	-0.0120	0.239	0.500	ug/L	
SLE0163-CCBD	Chromium-52	-0.00900	0.26	0.500	ug/L	
SLE0163-CCBD	Chromium-53	-0.0120	0.239	0.500	ug/L	
SLE0163-IBLG	Chromium-52	0.0120	0.26	0.500	ug/L	
SLE0163-IBLG	Chromium-53	0.0150	0.239	0.500	ug/L	
SLE0163-IBLH	Chromium-52	0.0300	0.26	0.500	ug/L	
SLE0163-IBLH	Chromium-53	0.00400	0.239	0.500	ug/L	
SLE0163-CCBE	Chromium-52	0.0280	0.26	0.500	ug/L	
SLE0163-CCBE	Chromium-53	0.00100	0.239	0.500	ug/L	
SLE0163-IBLI	Chromium-52	0.0200	0.26	0.500	ug/L	
SLE0163-IBLI	Chromium-53	0.00100	0.239	0.500	ug/L	
SLE0163-CCBF	Chromium-52	0.0210	0.26	0.500	ug/L	
SLE0163-CCBF	Chromium-53	-0.00300	0.239	0.500	ug/L	

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0017
Instrument: ICPMS1
Calibration: GE00007

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLE0017-CAL1	XDT_m1230501-013	NA	05/01/23 15:09
CAL 1 - LOW CHECK	SLE0017-CAL2	XDT_m1230501-014	NA	05/01/23 15:14
CAL 2	SLE0017-CAL3	XDT_m1230501-015	NA	05/01/23 15:19
CAL 3	SLE0017-CAL4	XDT_m1230501-016	NA	05/01/23 15:24
CAL 4	SLE0017-CAL5	XDT_m1230501-017	NA	05/01/23 15:29
CAL 5	SLE0017-CAL6	XDT_m1230501-018	NA	05/01/23 15:36
RINSE	SLE0017-IBL1	XDT_m1230501-019	NA	05/01/23 15:43
Initial Cal Check	SLE0017-ICV1	XDT_m1230501-021	NA	05/01/23 15:49
Initial Cal Blank	SLE0017-ICB1	XDT_m1230501-022	NA	05/01/23 15:57
Calibration Check	SLE0017-CCV1	XDT_m1230501-023	NA	05/01/23 16:02
Calibration Blank	SLE0017-CCB1	XDT_m1230501-024	NA	05/01/23 16:09
Instrument RL Check	SLE0017-CRL1	XDT_m1230501-027	NA	05/01/23 16:29
Interference Check A	SLE0017-IFA1	XDT_m1230501-028	NA	05/01/23 16:34
Interference Check B	SLE0017-IFB1	XDT_m1230501-029	NA	05/01/23 16:38
LR200	SLE0017-HCV1	XDT_m1230501-030	NA	05/01/23 16:43
LR300	SLE0017-HCV2	XDT_m1230501-031	NA	05/01/23 16:48
Instrument Blank	SLE0017-IBL2	XDT_m1230501-032	NA	05/01/23 16:55
Calibration Check	SLE0017-CCV2	XDT_m1230501-033	NA	05/01/23 17:02
Calibration Blank	SLE0017-CCB2	XDT_m1230501-034	NA	05/01/23 17:09
ZZZZZ	BLD0785-BLK2	XDT_m1230501-037	Water	05/01/23 17:26
ZZZZZ	BLD0785-BS2	XDT_m1230501-038	Water	05/01/23 17:31
ZZZZZ	23C0678-09	XDT_m1230501-042	Water	05/01/23 17:50
ZZZZZ	23C0678-08	XDT_m1230501-043	Water	05/01/23 17:55
Instrument Blank	SLE0017-IBL3	XDT_m1230501-044	NA	05/01/23 18:00
Calibration Check	SLE0017-CCV3	XDT_m1230501-045	NA	05/01/23 18:05
Calibration Blank	SLE0017-CCB3	XDT_m1230501-046	NA	05/01/23 18:12
ZZZZZ	23C0690-01	XDT_m1230501-052	Water	05/01/23 18:43
ZZZZZ	23C0690-01	XDT_m1230501-052	Water	05/01/23 18:43
ZZZZZ	23C0690-01	XDT_m1230501-052	Water	05/01/23 18:43

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00007

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23C0690-01	XDT_m1230501-052	Water	05/01/23 18:43
ZZZZZ	23C0690-01	XDT_m1230501-052	Water	05/01/23 18:43
ZZZZZ	BLD0292-DUP2	XDT_m1230501-053	Water	05/01/23 18:49
ZZZZZ	BLD0292-MS2	XDT_m1230501-054	Water	05/01/23 18:53
ZZZZZ	BLD0292-MSD2	XDT_m1230501-055	Water	05/01/23 18:58
Instrument Blank	SLE0017-IBL4	XDT_m1230501-056	NA	05/01/23 19:03
Calibration Check	SLE0017-CCV4	XDT_m1230501-057	NA	05/01/23 19:08
Calibration Blank	SLE0017-CCB4	XDT_m1230501-058	NA	05/01/23 19:15
ZZZZZ	23C0584-02	XDT_m1230501-059	Water	05/01/23 19:21
ZZZZZ	23C0584-02	XDT_m1230501-059	Water	05/01/23 19:21
ZZZZZ	23C0584-02	XDT_m1230501-059	Water	05/01/23 19:21
ZZZZZ	23C0584-02	XDT_m1230501-059	Water	05/01/23 19:21
ZZZZZ	23D0525-10	XDT_m1230501_PRE-066	Water	05/01/23 19:59
ZZZZZ	23D0525-11	XDT_m1230501_PRE-067	Water	05/01/23 20:04
Instrument Blank	SLE0017-IBL5	XDT_m1230501-068	NA	05/01/23 20:09
Calibration Check	SLE0017-CCV5	XDT_m1230501-069	NA	05/01/23 20:13
Calibration Blank	SLE0017-CCB5	XDT_m1230501-070	NA	05/01/23 20:21
Calibration Check	SLE0017-CCV6	XDT_m1230501-073	NA	05/01/23 20:42
Calibration Blank	SLE0017-CCB6	XDT_m1230501-074	NA	05/01/23 20:49
ZZZZZ	23D0525-09	XDT_m1230501-076	Water	05/01/23 21:04
ZZZZZ	23D0525-12	XDT_m1230501-077	Water	05/01/23 21:08
Instrument Blank	SLE0017-IBL6	XDT_m1230501-078	NA	05/01/23 21:14
ZZZZZ	23D0525-08	XDT_m1230501-079	Water	05/01/23 21:19
ZZZZZ	23D0525-07	XDT_m1230501-080	Water	05/01/23 21:24
ZZZZZ	BLD0785-DUP2	XDT_m1230501-081	Water	05/01/23 21:29
ZZZZZ	BLD0785-MS2	XDT_m1230501-082	Water	05/01/23 21:34
ZZZZZ	BLD0785-MSD2	XDT_m1230501-083	Water	05/01/23 21:40
Instrument Blank	SLE0017-IBL7	XDT_m1230501-084	NA	05/01/23 21:44
Calibration Check	SLE0017-CCV7	XDT_m1230501-085	NA	05/01/23 21:49

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00007

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLE0017-CCB7	XDT_m1230501-086	NA	05/01/23 21:56
ZZZZZ	23C0584-01	XDT_m1230501-093	Water	05/01/23 22:28
ZZZZZ	23C0584-01	XDT_m1230501-093	Water	05/01/23 22:28
ZZZZZ	BLD0180-DUP3	XDT_m1230501-094	Water	05/01/23 22:33
ZZZZZ	BLD0180-MS3	XDT_m1230501-095	Water	05/01/23 22:39
Instrument Blank	SLE0017-IBL8	XDT_m1230501-096	NA	05/01/23 22:43
Calibration Check	SLE0017-CCV8	XDT_m1230501-097	NA	05/01/23 22:48
Calibration Blank	SLE0017-CCB8	XDT_m1230501-098	NA	05/01/23 22:55
Instrument Blank	SLE0017-IBL9	XDT_m1230501-108	NA	05/01/23 23:42
Calibration Check	SLE0017-CCV9	XDT_m1230501-109	NA	05/01/23 23:47
Calibration Blank	SLE0017-CCB9	XDT_m1230501-110	NA	05/01/23 23:54
Instrument Blank	SLE0017-IBLA	XDT_m1230501-120	NA	05/02/23 00:44
Calibration Check	SLE0017-CCVA	XDT_m1230501-121	NA	05/02/23 00:49
Calibration Blank	SLE0017-CCBA	XDT_m1230501-122	NA	05/02/23 00:56
Calibration Check	SLE0017-CCVB	XDT_m1230501-124	NA	05/02/23 01:05
Calibration Blank	SLE0017-CCBB	XDT_m1230501-125	NA	05/02/23 01:12
ZZZZZ	23C0584-04	XDT_m1230501-126	Water	05/02/23 01:17
ZZZZZ	23C0584-03	XDT_m1230501-127	Water	05/02/23 01:22
ZZZZZ	23C0584-03	XDT_m1230501-127	Water	05/02/23 01:22
ZZZZZ	23C0584-13	XDT_m1230501-128	Water	05/02/23 01:26
ZZZZZ	23C0584-13	XDT_m1230501-128	Water	05/02/23 01:26
ZZZZZ	23C0584-05	XDT_m1230501-129	Water	05/02/23 01:31
ZZZZZ	23C0584-05	XDT_m1230501-129	Water	05/02/23 01:31
ZZZZZ	23C0584-07	XDT_m1230501-130	Water	05/02/23 01:35
ZZZZZ	23C0584-07	XDT_m1230501-130	Water	05/02/23 01:35
ZZZZZ	23C0584-09	XDT_m1230501-131	Water	05/02/23 01:40
ZZZZZ	23C0584-09	XDT_m1230501-131	Water	05/02/23 01:40
ZZZZZ	23C0584-11	XDT_m1230501-132	Water	05/02/23 01:46
ZZZZZ	23C0584-11	XDT_m1230501-132	Water	05/02/23 01:46

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0017
Instrument: ICPMS1
Calibration: GE00007

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLE0017-IBLB	XDT_m1230501-135	NA	05/02/23 02:03
Calibration Check	SLE0017-CCVC	XDT_m1230501-136	NA	05/02/23 02:07
Calibration Blank	SLE0017-CCBC	XDT_m1230501-137	NA	05/02/23 02:15
ZZZZZ	23C0584-14	XDT_m1230501-138	Water	05/02/23 02:19
ZZZZZ	23C0584-15	XDT_m1230501-139	Water	05/02/23 02:24
ZZZZZ	23C0584-16	XDT_m1230501-140	Water	05/02/23 02:28
ZZZZZ	23C0584-17	XDT_m1230501-141	Water	05/02/23 02:33
ZZZZZ	23C0584-18	XDT_m1230501-142	Water	05/02/23 02:37
ZZZZZ	23C0584-19	XDT_m1230501-143	Water	05/02/23 02:42
ZZZZZ	23C0584-20	XDT_m1230501-144	Water	05/02/23 02:48
Instrument Blank	SLE0017-IBLC	XDT_m1230501-147	NA	05/02/23 03:05
Calibration Check	SLE0017-CCVD	XDT_m1230501-148	NA	05/02/23 03:10
Calibration Blank	SLE0017-CCBD	XDT_m1230501-149	NA	05/02/23 03:17
Blank	BLD0396-BLK1	XDT_m1230501-150	Solid	05/02/23 03:21
LCS	BLD0396-BS1	XDT_m1230501-151	Solid	05/02/23 03:26
ZZZZZ	23D0062-02	XDT_m1230501-152	Water	05/02/23 03:31
ZZZZZ	23D0062-04	XDT_m1230501-153	Water	05/02/23 03:35
ZZZZZ	23D0062-06	XDT_m1230501-154	Water	05/02/23 03:40
ZZZZZ	23D0062-08	XDT_m1230501-155	Water	05/02/23 03:44
Instrument Blank	SLE0017-IBLD	XDT_m1230501-159	NA	05/02/23 04:04
Calibration Check	SLE0017-CCVE	XDT_m1230501-160	NA	05/02/23 04:08
Calibration Blank	SLE0017-CCBE	XDT_m1230501-161	NA	05/02/23 04:16
ZZZZZ	BLD0452-BLK1	XDT_m1230501-162	Solid	05/02/23 04:20
ZZZZZ	BLD0452-BS1	XDT_m1230501-163	Solid	05/02/23 04:25
ZZZZZ	23C0658-01	XDT_m1230501-164	Water	05/02/23 04:29
ZZZZZ	23C0658-05	XDT_m1230501-165	Water	05/02/23 04:34
ZZZZZ	23C0690-07	XDT_m1230501-166	Water	05/02/23 04:40
Instrument Blank	SLE0017-IBLE	XDT_m1230501-167	NA	05/02/23 04:45
Instrument Blank	SLE0017-IBLF	XDT_m1230501-171	NA	05/02/23 05:04

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0017
Instrument: ICPMS1
Calibration: GE00007

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Check	SLE0017-CCVF	XDT_m1230501-172	NA	05/02/23 05:08
Calibration Blank	SLE0017-CCBF	XDT_m1230501-173	NA	05/02/23 05:16
Calibration Check	SLE0017-CCVG	XDT_m1230501-175	NA	05/02/23 05:25
Calibration Blank	SLE0017-CCBG	XDT_m1230501-176	NA	05/02/23 05:32
ZZZZZ	BLD0504-BLK1	XDT_m1230501-177	Solid	05/02/23 05:36
ZZZZZ	BLD0504-BS1	XDT_m1230501-178	Solid	05/02/23 05:41
ZZZZZ	23C0715-03	XDT_m1230501-179	Water	05/02/23 05:46
ZZZZZ	23C0715-05	XDT_m1230501-180	Water	05/02/23 05:51
ZZZZZ	23C0715-07	XDT_m1230501-181	Water	05/02/23 05:56
Instrument Blank	SLE0017-IBLG	XDT_m1230501-182	NA	05/02/23 06:01
Instrument Blank	SLE0017-IBLH	XDT_m1230501-186	NA	05/02/23 06:20
Calibration Check	SLE0017-CCVH	XDT_m1230501-187	NA	05/02/23 06:24
Calibration Blank	SLE0017-CCBH	XDT_m1230501-188	NA	05/02/23 06:32
Instrument Blank	SLE0017-IBLI	XDT_m1230501-192	NA	05/02/23 06:50
ZZZZZ	23A0417-01	XDT_m1230501-193	Solid	05/02/23 06:55
ZZZZZ	23A0417-01	XDT_m1230501-193	Solid	05/02/23 06:55
ZZZZZ	23A0417-01	XDT_m1230501-193	Solid	05/02/23 06:55
Instrument Blank	SLE0017-IBLJ	XDT_m1230501-198	NA	05/02/23 07:18
Calibration Check	SLE0017-CCVI	XDT_m1230501-199	NA	05/02/23 07:22
Calibration Blank	SLE0017-CCBI	XDT_m1230501-200	NA	05/02/23 07:29
Instrument Blank	SLE0017-IBLK	XDT_m1230501-204	NA	05/02/23 07:48
ZZZZZ	23A0419-01	XDT_m1230501-205	Solid	05/02/23 07:53
ZZZZZ	23A0419-01	XDT_m1230501-205	Solid	05/02/23 07:53
ZZZZZ	23A0419-01	XDT_m1230501-205	Solid	05/02/23 07:53
ZZZZZ	BLD0452-DUP1	XDT_m1230501-206	Solid	05/02/23 07:57
ZZZZZ	BLD0452-MS1	XDT_m1230501-207	Solid	05/02/23 08:02
ZZZZZ	BLD0452-MSD1	XDT_m1230501-208	Solid	05/02/23 08:06
ZZZZZ	BLD0452-PS1	XDT_m1230501-209	Solid	05/02/23 08:11
Instrument Blank	SLE0017-IBLL	XDT_m1230501-210	NA	05/02/23 08:15

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0017
SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00007

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Check	SLE0017-CCVJ	XDT_m1230501-211	NA	05/02/23 08:20
Calibration Blank	SLE0017-CCBJ	XDT_m1230501-212	NA	05/02/23 08:27
Instrument Blank	SLE0017-IBLM	XDT_m1230501-216	NA	05/02/23 08:46
ZZZZZ	23A0455-01	XDT_m1230501-217	Solid	05/02/23 08:50
ZZZZZ	23A0455-01	XDT_m1230501-217	Solid	05/02/23 08:50
ZZZZZ	23A0455-01	XDT_m1230501-217	Solid	05/02/23 08:50
ZZZZZ	BLD0504-DUP1	XDT_m1230501-218	Solid	05/02/23 08:55
ZZZZZ	BLD0504-MS1	XDT_m1230501-219	Solid	05/02/23 08:59
ZZZZZ	BLD0504-MSD1	XDT_m1230501-220	Solid	05/02/23 09:04
ZZZZZ	BLD0504-PS1	XDT_m1230501-221	Solid	05/02/23 09:08
Instrument Blank	SLE0017-IBLN	XDT_m1230501-222	NA	05/02/23 09:13
Calibration Check	SLE0017-CCVK	XDT_m1230501-223	NA	05/02/23 09:18
Calibration Blank	SLE0017-CCBK	XDT_m1230501-224	NA	05/02/23 09:25
Instrument Blank	SLE0017-IBLO	XDT_m1230501-234	NA	05/02/23 10:11
Calibration Check	SLE0017-CCVL	XDT_m1230501-235	NA	05/02/23 10:15
Calibration Blank	SLE0017-CCBL	XDT_m1230501-236	NA	05/02/23 10:22

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0043	Instrument:	ICPMS1
		Calibration:	GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLE0043-CAL1	XDT_m1230502-013	NA	05/02/23 13:47
CAL 1 - LOW CHECK	SLE0043-CAL2	XDT_m1230502-014	NA	05/02/23 13:52
CAL 2	SLE0043-CAL3	XDT_m1230502-015	NA	05/02/23 13:56
CAL 3	SLE0043-CAL4	XDT_m1230502-016	NA	05/02/23 14:01
CAL 4	SLE0043-CAL5	XDT_m1230502-017	NA	05/02/23 14:06
CAL 5	SLE0043-CAL6	XDT_m1230502-018	NA	05/02/23 14:12
RINSE	SLE0043-IBL1	XDT_m1230502-019	NA	05/02/23 14:19
Initial Cal Check	SLE0043-ICV1	XDT_m1230502-021	NA	05/02/23 14:30
Initial Cal Blank	SLE0043-ICB1	XDT_m1230502-022	NA	05/02/23 14:37
Calibration Check	SLE0043-CCV1	XDT_m1230502-023	NA	05/02/23 14:42
Calibration Blank	SLE0043-CCB1	XDT_m1230502-024	NA	05/02/23 14:49
Instrument RL Check	SLE0043-CRL1	XDT_m1230502-026	NA	05/02/23 15:04
Interference Check A	SLE0043-IFA1	XDT_m1230502-027	NA	05/02/23 15:08
Interference Check B	SLE0043-IFB1	XDT_m1230502-028	NA	05/02/23 15:13
LR200	SLE0043-HCV1	XDT_m1230502-029	NA	05/02/23 15:18
LR300	SLE0043-HCV2	XDT_m1230502-030	NA	05/02/23 15:22
Instrument Blank	SLE0043-IBL2	XDT_m1230502-031	NA	05/02/23 15:31
Instrument Blank	SLE0043-IBL3	XDT_m1230502-032	NA	05/02/23 15:37
Calibration Check	SLE0043-CCV2	XDT_m1230502-034	NA	05/02/23 15:50
Calibration Blank	SLE0043-CCB2	XDT_m1230502-035	NA	05/02/23 15:57
Instrument Blank	SLE0043-IBL4	XDT_m1230502-044	NA	05/02/23 16:49
Calibration Check	SLE0043-CCV3	XDT_m1230502-045	NA	05/02/23 16:54
Calibration Blank	SLE0043-CCB3	XDT_m1230502-046	NA	05/02/23 17:01
Calibration Check	SLE0043-CCV4	XDT_m1230502-048	NA	05/02/23 17:11
Calibration Blank	SLE0043-CCB4	XDT_m1230502-049	NA	05/02/23 17:18
ZZZZZ	23A0417-02	XDT_m1230502-050	Solid	05/02/23 17:24
ZZZZZ	23A0417-02	XDT_m1230502-050	Solid	05/02/23 17:24
ZZZZZ	23A0417-02	XDT_m1230502-050	Solid	05/02/23 17:24
ZZZZZ	23A0417-03	XDT_m1230502-051	Solid	05/02/23 17:28

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0043
Instrument: ICPMS1
Calibration: GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0417-03	XDT_m1230502-051	Solid	05/02/23 17:28
ZZZZZ	23A0417-04	XDT_m1230502-052	Solid	05/02/23 17:32
ZZZZZ	23A0417-04	XDT_m1230502-052	Solid	05/02/23 17:32
ZZZZZ	23A0417-04	XDT_m1230502-052	Solid	05/02/23 17:32
ZZZZZ	23A0417-05	XDT_m1230502-053	Solid	05/02/23 17:37
ZZZZZ	23A0417-05	XDT_m1230502-053	Solid	05/02/23 17:37
ZZZZZ	23A0417-05	XDT_m1230502-053	Solid	05/02/23 17:37
ZZZZZ	23A0417-06	XDT_m1230502-054	Solid	05/02/23 17:41
ZZZZZ	23A0417-06	XDT_m1230502-054	Solid	05/02/23 17:41
ZZZZZ	23A0417-06	XDT_m1230502-054	Solid	05/02/23 17:41
ZZZZZ	23A0417-07	XDT_m1230502-055	Solid	05/02/23 17:46
ZZZZZ	23A0417-07	XDT_m1230502-055	Solid	05/02/23 17:46
ZZZZZ	23A0417-07	XDT_m1230502-055	Solid	05/02/23 17:46
ZZZZZ	23A0417-08	XDT_m1230502-056	Solid	05/02/23 17:50
ZZZZZ	23A0417-08	XDT_m1230502-056	Solid	05/02/23 17:50
ZZZZZ	23A0417-09	XDT_m1230502-057	Solid	05/02/23 17:55
ZZZZZ	23A0417-09	XDT_m1230502-057	Solid	05/02/23 17:55
ZZZZZ	23A0417-09	XDT_m1230502-057	Solid	05/02/23 17:55
ZZZZZ	23A0417-10	XDT_m1230502-058	Solid	05/02/23 17:59
ZZZZZ	23A0417-10	XDT_m1230502-058	Solid	05/02/23 17:59
ZZZZZ	23A0417-10	XDT_m1230502-058	Solid	05/02/23 17:59
ZZZZZ	23A0417-11	XDT_m1230502-059	Solid	05/02/23 18:03
ZZZZZ	23A0417-11	XDT_m1230502-059	Solid	05/02/23 18:03
ZZZZZ	23A0417-11	XDT_m1230502-059	Solid	05/02/23 18:03
Calibration Check	SLE0043-CCV5	XDT_m1230502-060	NA	05/02/23 18:09
Calibration Blank	SLE0043-CCB5	XDT_m1230502-061	NA	05/02/23 18:16
ZZZZZ	23A0417-12	XDT_m1230502-062	Solid	05/02/23 18:24
ZZZZZ	23A0417-12	XDT_m1230502-062	Solid	05/02/23 18:24
ZZZZZ	23A0417-12	XDT_m1230502-062	Solid	05/02/23 18:24

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0043
Instrument: ICPMS1
Calibration: GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0417-13	XDT_m1230502-063	Solid	05/02/23 18:28
ZZZZZ	23A0417-13	XDT_m1230502-063	Solid	05/02/23 18:28
ZZZZZ	23A0417-13	XDT_m1230502-063	Solid	05/02/23 18:28
ZZZZZ	23A0417-14	XDT_m1230502-064	Solid	05/02/23 18:33
ZZZZZ	23A0417-14	XDT_m1230502-064	Solid	05/02/23 18:33
ZZZZZ	23A0417-15	XDT_m1230502-065	Solid	05/02/23 18:37
ZZZZZ	23A0417-15	XDT_m1230502-065	Solid	05/02/23 18:37
ZZZZZ	23A0417-15	XDT_m1230502-065	Solid	05/02/23 18:37
LDW23-SC1045	23A0420-01	XDT_m1230502-066	Solid	05/02/23 18:42
LDW23-SC1045	23A0420-01	XDT_m1230502-066	Solid	05/02/23 18:42
LDW23-SC1003	23A0420-07	XDT_m1230502-067	Solid	05/02/23 18:46
LDW23-SC1003	23A0420-07	XDT_m1230502-067	Solid	05/02/23 18:46
LDW23-SC1004	23A0420-08	XDT_m1230502-068	Solid	05/02/23 18:50
LDW23-SC1004	23A0420-08	XDT_m1230502-068	Solid	05/02/23 18:50
LDW23-SC1004	23A0420-08	XDT_m1230502-068	Solid	05/02/23 18:50
LDW23-SC1082	23A0420-09	XDT_m1230502-069	Solid	05/02/23 18:55
LDW23-SC1082	23A0420-09	XDT_m1230502-069	Solid	05/02/23 18:55
ZZZZZ	23A0419-02	XDT_m1230502-070	Solid	05/02/23 18:59
ZZZZZ	23A0419-02	XDT_m1230502-070	Solid	05/02/23 18:59
Calibration Check	SLE0043-CCV6	XDT_m1230502-072	NA	05/02/23 19:09
Calibration Blank	SLE0043-CCB6	XDT_m1230502-073	NA	05/02/23 19:16
ZZZZZ	23A0419-04	XDT_m1230502-080	Solid	05/02/23 19:47
ZZZZZ	23A0419-04	XDT_m1230502-080	Solid	05/02/23 19:47
ZZZZZ	23A0419-04	XDT_m1230502-080	Solid	05/02/23 19:47
ZZZZZ	23A0419-05	XDT_m1230502-081	Solid	05/02/23 19:52
ZZZZZ	23A0419-05	XDT_m1230502-081	Solid	05/02/23 19:52
ZZZZZ	23A0419-05	XDT_m1230502-081	Solid	05/02/23 19:52
ZZZZZ	23A0419-06	XDT_m1230502-082	Solid	05/02/23 19:56
ZZZZZ	23A0419-06	XDT_m1230502-082	Solid	05/02/23 19:56

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0043
Instrument: ICPMS1
Calibration: GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0419-06	XDT_m1230502-082	Solid	05/02/23 19:56
ZZZZZ	23A0419-07	XDT_m1230502-083	Solid	05/02/23 20:00
ZZZZZ	23A0419-07	XDT_m1230502-083	Solid	05/02/23 20:00
ZZZZZ	23A0419-07	XDT_m1230502-083	Solid	05/02/23 20:00
Calibration Check	SLE0043-CCV7	XDT_m1230502-084	NA	05/02/23 20:06
Calibration Blank	SLE0043-CCB7	XDT_m1230502-085	NA	05/02/23 20:13
ZZZZZ	23A0419-09	XDT_m1230502-087	Solid	05/02/23 20:22
ZZZZZ	23A0419-09	XDT_m1230502-087	Solid	05/02/23 20:22
ZZZZZ	23A0419-09	XDT_m1230502-087	Solid	05/02/23 20:22
ZZZZZ	23A0419-10	XDT_m1230502-088	Solid	05/02/23 20:26
ZZZZZ	23A0419-10	XDT_m1230502-088	Solid	05/02/23 20:26
ZZZZZ	23A0419-10	XDT_m1230502-088	Solid	05/02/23 20:26
ZZZZZ	23A0419-11	XDT_m1230502-089	Solid	05/02/23 20:31
ZZZZZ	23A0419-11	XDT_m1230502-089	Solid	05/02/23 20:31
ZZZZZ	23A0419-11	XDT_m1230502-089	Solid	05/02/23 20:31
ZZZZZ	23A0419-12	XDT_m1230502-090	Solid	05/02/23 20:35
ZZZZZ	23A0419-12	XDT_m1230502-090	Solid	05/02/23 20:35
ZZZZZ	23A0419-12	XDT_m1230502-090	Solid	05/02/23 20:35
ZZZZZ	23C0752-01	XDT_m1230502-091	Solid	05/02/23 20:40
ZZZZZ	23C0752-01	XDT_m1230502-091	Solid	05/02/23 20:40
ZZZZZ	23C0752-01	XDT_m1230502-091	Solid	05/02/23 20:40
ZZZZZ	23C0752-02	XDT_m1230502-092	Solid	05/02/23 20:44
ZZZZZ	23C0752-02	XDT_m1230502-092	Solid	05/02/23 20:44
ZZZZZ	23C0752-02	XDT_m1230502-092	Solid	05/02/23 20:44
ZZZZZ	23C0752-03	XDT_m1230502-093	Solid	05/02/23 20:49
ZZZZZ	23C0752-03	XDT_m1230502-093	Solid	05/02/23 20:49
ZZZZZ	23C0752-03	XDT_m1230502-093	Solid	05/02/23 20:49
ZZZZZ	23C0752-04	XDT_m1230502-094	Solid	05/02/23 20:53
ZZZZZ	23C0752-04	XDT_m1230502-094	Solid	05/02/23 20:53

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0043
Instrument: ICPMS1
Calibration: GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23C0752-04	XDT_m1230502-094	Solid	05/02/23 20:53
ZZZZZ	23C0752-06	XDT_m1230502-095	Solid	05/02/23 20:58
ZZZZZ	23C0752-06	XDT_m1230502-095	Solid	05/02/23 20:58
ZZZZZ	23C0752-06	XDT_m1230502-095	Solid	05/02/23 20:58
Calibration Check	SLE0043-CCV8	XDT_m1230502-096	NA	05/02/23 21:03
Calibration Blank	SLE0043-CCB8	XDT_m1230502-097	NA	05/02/23 21:10
ZZZZZ	23A0455-02	XDT_m1230502-098	Solid	05/02/23 21:15
ZZZZZ	23A0455-02	XDT_m1230502-098	Solid	05/02/23 21:15
ZZZZZ	23A0455-02	XDT_m1230502-098	Solid	05/02/23 21:15
ZZZZZ	23A0455-03	XDT_m1230502-099	Solid	05/02/23 21:19
ZZZZZ	23A0455-03	XDT_m1230502-099	Solid	05/02/23 21:19
ZZZZZ	23A0455-03	XDT_m1230502-099	Solid	05/02/23 21:19
ZZZZZ	23A0455-04	XDT_m1230502-100	Solid	05/02/23 21:24
ZZZZZ	23A0455-04	XDT_m1230502-100	Solid	05/02/23 21:24
ZZZZZ	23A0455-04	XDT_m1230502-100	Solid	05/02/23 21:24
ZZZZZ	23A0455-05	XDT_m1230502-101	Solid	05/02/23 21:28
ZZZZZ	23A0455-05	XDT_m1230502-101	Solid	05/02/23 21:28
ZZZZZ	23A0455-05	XDT_m1230502-101	Solid	05/02/23 21:28
ZZZZZ	23A0455-06	XDT_m1230502-102	Solid	05/02/23 21:32
ZZZZZ	23A0455-06	XDT_m1230502-102	Solid	05/02/23 21:32
ZZZZZ	23A0455-06	XDT_m1230502-102	Solid	05/02/23 21:32
ZZZZZ	23A0455-07	XDT_m1230502-103	Solid	05/02/23 21:37
ZZZZZ	23A0455-07	XDT_m1230502-103	Solid	05/02/23 21:37
ZZZZZ	23A0455-07	XDT_m1230502-103	Solid	05/02/23 21:37
ZZZZZ	23A0455-08	XDT_m1230502-104	Solid	05/02/23 21:41
ZZZZZ	23A0455-08	XDT_m1230502-104	Solid	05/02/23 21:41
ZZZZZ	23A0455-08	XDT_m1230502-104	Solid	05/02/23 21:41
ZZZZZ	23A0455-10	XDT_m1230502-106	Solid	05/02/23 21:50
ZZZZZ	23A0455-10	XDT_m1230502-106	Solid	05/02/23 21:50

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0043

SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0455-10	XDT_m1230502-106	Solid	05/02/23 21:50
ZZZZZ	23A0455-11	XDT_m1230502-107	Solid	05/02/23 21:55
ZZZZZ	23A0455-11	XDT_m1230502-107	Solid	05/02/23 21:55
ZZZZZ	23A0455-11	XDT_m1230502-107	Solid	05/02/23 21:55
Calibration Check	SLE0043-CCV9	XDT_m1230502-108	NA	05/02/23 22:00
Calibration Blank	SLE0043-CCB9	XDT_m1230502-109	NA	05/02/23 22:07
Calibration Check	SLE0043-CCVA	XDT_m1230502-111	NA	05/02/23 22:16
Calibration Blank	SLE0043-CCBA	XDT_m1230502-112	NA	05/02/23 22:23
ZZZZZ	23A0455-12	XDT_m1230502-113	Solid	05/02/23 22:28
ZZZZZ	23A0455-13	XDT_m1230502-114	Solid	05/02/23 22:32
ZZZZZ	23A0455-14	XDT_m1230502-115	Solid	05/02/23 22:37
ZZZZZ	23A0455-15	XDT_m1230502-116	Solid	05/02/23 22:41
ZZZZZ	23A0455-15	XDT_m1230502-116	Solid	05/02/23 22:41
ZZZZZ	23A0455-16	XDT_m1230502-117	Solid	05/02/23 22:45
ZZZZZ	23A0455-16	XDT_m1230502-117	Solid	05/02/23 22:45
ZZZZZ	23A0455-17	XDT_m1230502-118	Solid	05/02/23 22:50
ZZZZZ	23A0455-17	XDT_m1230502-118	Solid	05/02/23 22:50
Instrument Blank	SLE0043-IBL5	XDT_m1230502-122	NA	05/02/23 23:07
Calibration Check	SLE0043-CCVB	XDT_m1230502-123	NA	05/02/23 23:12
Calibration Blank	SLE0043-CCBB	XDT_m1230502-124	NA	05/02/23 23:19
Instrument Blank	SLE0043-IBL6	XDT_m1230502-129	NA	05/02/23 23:43
Instrument Blank	SLE0043-IBL7	XDT_m1230502-134	NA	05/03/23 00:07
Calibration Check	SLE0043-CCVC	XDT_m1230502-135	NA	05/03/23 00:11
Calibration Blank	SLE0043-CCBC	XDT_m1230502-136	NA	05/03/23 00:18
Instrument Blank	SLE0043-IBL8	XDT_m1230502-146	NA	05/03/23 01:06
Calibration Check	SLE0043-CCVD	XDT_m1230502-147	NA	05/03/23 01:10
Calibration Blank	SLE0043-CCBD	XDT_m1230502-148	NA	05/03/23 01:17
Instrument Blank	SLE0043-IBL9	XDT_m1230502-158	NA	05/03/23 01:56
Calibration Check	SLE0043-CCVE	XDT_m1230502-159	NA	05/03/23 02:00

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0043

SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLE0043-CCBE	XDT_m1230502-160	NA	05/03/23 02:06
Calibration Check	SLE0043-CCVF	XDT_m1230502-162	NA	05/03/23 02:14
Calibration Blank	SLE0043-CCBF	XDT_m1230502-163	NA	05/03/23 02:20
Instrument Blank	SLE0043-IBLA	XDT_m1230502-173	NA	05/03/23 02:56
Calibration Check	SLE0043-CCVG	XDT_m1230502-174	NA	05/03/23 03:00
Calibration Blank	SLE0043-CCBG	XDT_m1230502-175	NA	05/03/23 03:06
Instrument Blank	SLE0043-IBLB	XDT_m1230502-185	NA	05/03/23 03:43
Calibration Check	SLE0043-CCVH	XDT_m1230502-186	NA	05/03/23 03:47
Calibration Blank	SLE0043-CCBH	XDT_m1230502-187	NA	05/03/23 03:53
Instrument Blank	SLE0043-IBLC	XDT_m1230502-197	NA	05/03/23 04:29
Calibration Check	SLE0043-CCVI	XDT_m1230502-198	NA	05/03/23 04:33
Calibration Blank	SLE0043-CCBI	XDT_m1230502-199	NA	05/03/23 04:39
Instrument Blank	SLE0043-IBLD	XDT_m1230502-209	NA	05/03/23 05:16
Calibration Check	SLE0043-CCVJ	XDT_m1230502-210	NA	05/03/23 05:21
Calibration Blank	SLE0043-CCBJ	XDT_m1230502-211	NA	05/03/23 05:27
Instrument Blank	SLE0043-IBLE	XDT_m1230502-221	NA	05/03/23 06:04
Calibration Check	SLE0043-CCVK	XDT_m1230502-222	NA	05/03/23 06:08
Calibration Blank	SLE0043-CCBK	XDT_m1230502-223	NA	05/03/23 06:12

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0138	Instrument:	ICPMS1
		Calibration:	GE00030

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLE0138-CAL1	XDT_m1230508-001	NA	05/08/23 13:46
CAL 1 - LOW CHECK	SLE0138-CAL2	XDT_m1230508-002	NA	05/08/23 13:51
CAL 2	SLE0138-CAL3	XDT_m1230508-003	NA	05/08/23 13:56
CAL 3	SLE0138-CAL4	XDT_m1230508-004	NA	05/08/23 14:02
CAL 4	SLE0138-CAL5	XDT_m1230508-005	NA	05/08/23 14:07
CAL 5	SLE0138-CAL6	XDT_m1230508-006	NA	05/08/23 14:14
RINSE	SLE0138-IBL1	XDT_m1230508-007	NA	05/08/23 14:22
Initial Cal Check	SLE0138-ICV1	XDT_m1230508-009	NA	05/08/23 14:28
Initial Cal Blank	SLE0138-ICB1	XDT_m1230508-010	NA	05/08/23 14:36
Calibration Check	SLE0138-CCV1	XDT_m1230508-011	NA	05/08/23 14:42
Calibration Blank	SLE0138-CCB1	XDT_m1230508-012	NA	05/08/23 14:49
Instrument RL Check	SLE0138-CRL1	XDT_m1230508-013	NA	05/08/23 15:02
Interference Check A	SLE0138-IFA1	XDT_m1230508-014	NA	05/08/23 15:07
Interference Check B	SLE0138-IFB1	XDT_m1230508-015	NA	05/08/23 15:12
LR200	SLE0138-HCV1	XDT_m1230508-016	NA	05/08/23 15:17
LR300	SLE0138-HCV2	XDT_m1230508-017	NA	05/08/23 15:22
Instrument Blank	SLE0138-IBL2	XDT_m1230508-018	NA	05/08/23 15:30
Instrument Blank	SLE0138-IBL3	XDT_m1230508-019	NA	05/08/23 15:39
Calibration Check	SLE0138-CCV2	XDT_m1230508-020	NA	05/08/23 15:45
Calibration Blank	SLE0138-CCB2	XDT_m1230508-021	NA	05/08/23 15:53
ZZZZZ	BLE0205-BLK1	XDT_m1230508-022	Water	05/08/23 16:01
ZZZZZ	BLE0205-BS1	XDT_m1230508-023	Water	05/08/23 16:06
Instrument Blank	SLE0138-IBL4	XDT_m1230508-029	NA	05/08/23 16:44
Instrument Blank	SLE0138-IBL5	XDT_m1230508-031	NA	05/08/23 16:54
Calibration Check	SLE0138-CCV3	XDT_m1230508-032	NA	05/08/23 16:59
Calibration Blank	SLE0138-CCB3	XDT_m1230508-033	NA	05/08/23 17:07
Calibration Check	SLE0138-CCV4	XDT_m1230508-035	NA	05/08/23 17:19
Calibration Blank	SLE0138-CCB4	XDT_m1230508-036	NA	05/08/23 17:27
ZZZZZ	23C0715-06	XDT_m1230508-037	Water	05/08/23 17:34

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0138	Instrument:	ICPMS1
		Calibration:	GE00030

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23C0715-06	XDT_m1230508-037	Water	05/08/23 17:34
ZZZZZ	23C0715-06	XDT_m1230508-037	Water	05/08/23 17:34
ZZZZZ	23C0715-06	XDT_m1230508-037	Water	05/08/23 17:34
ZZZZZ	23C0715-06	XDT_m1230508-037	Water	05/08/23 17:34
ZZZZZ	23C0715-06	XDT_m1230508-037	Water	05/08/23 17:34
ZZZZZ	23C0715-08	XDT_m1230508-038	Water	05/08/23 17:39
ZZZZZ	23C0715-08	XDT_m1230508-038	Water	05/08/23 17:39
ZZZZZ	23C0715-08	XDT_m1230508-038	Water	05/08/23 17:39
ZZZZZ	23C0715-08	XDT_m1230508-038	Water	05/08/23 17:39
ZZZZZ	23C0715-08	XDT_m1230508-038	Water	05/08/23 17:39
ZZZZZ	23C0715-08	XDT_m1230508-038	Water	05/08/23 17:39
ZZZZZ	23C0741-02	XDT_m1230508-039	Water	05/08/23 17:44
ZZZZZ	23C0741-02	XDT_m1230508-039	Water	05/08/23 17:44
ZZZZZ	23C0741-02	XDT_m1230508-039	Water	05/08/23 17:44
ZZZZZ	23C0741-02	XDT_m1230508-039	Water	05/08/23 17:44
ZZZZZ	23C0741-02	XDT_m1230508-039	Water	05/08/23 17:44
ZZZZZ	23C0741-02	XDT_m1230508-039	Water	05/08/23 17:44
ZZZZZ	23C0690-06	XDT_m1230508-040	Water	05/08/23 17:51
ZZZZZ	23C0690-06	XDT_m1230508-040	Water	05/08/23 17:51
ZZZZZ	23C0690-06	XDT_m1230508-040	Water	05/08/23 17:51
ZZZZZ	23C0690-06	XDT_m1230508-040	Water	05/08/23 17:51
Instrument Blank	SLE0138-IBL6	XDT_m1230508-041	NA	05/08/23 17:56
ZZZZZ	23C0690-02	XDT_m1230508-042	Water	05/08/23 18:01
ZZZZZ	23C0690-02	XDT_m1230508-042	Water	05/08/23 18:01
ZZZZZ	23C0690-02	XDT_m1230508-042	Water	05/08/23 18:01
ZZZZZ	23C0690-02	XDT_m1230508-042	Water	05/08/23 18:01
ZZZZZ	23C0690-02	XDT_m1230508-042	Water	05/08/23 18:01
ZZZZZ	23C0690-02	XDT_m1230508-042	Water	05/08/23 18:01
ZZZZZ	23C0690-02	XDT_m1230508-042	Water	05/08/23 18:01

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0138

SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00030

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23C0690-02	XDT_m1230508-042	Water	05/08/23 18:01
Instrument Blank	SLE0138-IBL7	XDT_m1230508-046	NA	05/08/23 18:23
Calibration Check	SLE0138-CCV5	XDT_m1230508-047	NA	05/08/23 18:29
Calibration Blank	SLE0138-CCB5	XDT_m1230508-048	NA	05/08/23 18:36
Instrument Blank	SLE0138-IBL8	XDT_m1230508-054	NA	05/08/23 19:13
ZZZZZ	23D0425-01	XDT_m1230508-056	Water	05/08/23 19:25
ZZZZZ	23D0425-01	XDT_m1230508-056	Water	05/08/23 19:25
Instrument Blank	SLE0138-IBL9	XDT_m1230508-058	NA	05/08/23 19:39
Calibration Check	SLE0138-CCV6	XDT_m1230508-059	NA	05/08/23 19:44
Calibration Blank	SLE0138-CCB6	XDT_m1230508-060	NA	05/08/23 19:52
ZZZZZ	23D0414-02	XDT_m1230508-063	Water	05/08/23 20:10
ZZZZZ	23D0414-02	XDT_m1230508-063	Water	05/08/23 20:10
ZZZZZ	23D0425-02	XDT_m1230508-067	Water	05/08/23 20:34
ZZZZZ	23D0425-02	XDT_m1230508-067	Water	05/08/23 20:34
Instrument Blank	SLE0138-IBLA	XDT_m1230508-070	NA	05/08/23 20:50
Calibration Check	SLE0138-CCV7	XDT_m1230508-071	NA	05/08/23 20:55
Calibration Blank	SLE0138-CCB7	XDT_m1230508-072	NA	05/08/23 21:03
Calibration Check	SLE0138-CCV8	XDT_m1230508-074	NA	05/08/23 21:18
Calibration Blank	SLE0138-CCB8	XDT_m1230508-075	NA	05/08/23 21:25
ZZZZZ	23A0417-03	XDT_m1230508-076	Solid	05/08/23 21:31
ZZZZZ	23A0417-08	XDT_m1230508-077	Solid	05/08/23 21:38
ZZZZZ	23A0417-14	XDT_m1230508-078	Solid	05/08/23 21:42
ZZZZZ	23A0419-02	XDT_m1230508-079	Solid	05/08/23 21:46
ZZZZZ	23A0419-03	XDT_m1230508-080	Solid	05/08/23 21:50
ZZZZZ	23A0419-08	XDT_m1230508-081	Solid	05/08/23 21:54
LDW23-SC1045	23A0420-01	XDT_m1230508-082	Solid	05/08/23 21:58
LDW23-SC1082	23A0420-09	XDT_m1230508-084	Solid	05/08/23 22:06
Instrument Blank	SLE0138-IBLB	XDT_m1230508-085	NA	05/08/23 22:11
Calibration Check	SLE0138-CCV9	XDT_m1230508-086	NA	05/08/23 22:15

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0138
Instrument: ICPMS1
Calibration: GE00030

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLE0138-CCB9	XDT_m1230508-087	NA	05/08/23 22:22
ZZZZZ	23A0455-09	XDT_m1230508-089	Solid	05/08/23 22:30
ZZZZZ	23A0455-12	XDT_m1230508-090	Solid	05/08/23 22:34
ZZZZZ	23A0455-13	XDT_m1230508-091	Solid	05/08/23 22:38
ZZZZZ	23A0455-14	XDT_m1230508-092	Solid	05/08/23 22:42
ZZZZZ	23A0455-18	XDT_m1230508-093	Solid	05/08/23 22:46
Instrument Blank	SLE0138-IBLC	XDT_m1230508-097	NA	05/08/23 23:02
Calibration Check	SLE0138-CCVA	XDT_m1230508-098	NA	05/08/23 23:06
Calibration Blank	SLE0138-CCBA	XDT_m1230508-099	NA	05/08/23 23:12
ZZZZZ	23D0297-02	XDT_m1230508-102	Solid	05/08/23 23:24
ZZZZZ	23D0297-03	XDT_m1230508-103	Solid	05/08/23 23:28
ZZZZZ	23D0297-04	XDT_m1230508-104	Solid	05/08/23 23:32
ZZZZZ	23D0297-05	XDT_m1230508-105	Solid	05/08/23 23:36
ZZZZZ	23D0297-06	XDT_m1230508-106	Solid	05/08/23 23:40
ZZZZZ	23D0297-07	XDT_m1230508-107	Solid	05/08/23 23:44
Instrument Blank	SLE0138-IBLD	XDT_m1230508-109	NA	05/08/23 23:52
Calibration Check	SLE0138-CCVB	XDT_m1230508-110	NA	05/08/23 23:56
Calibration Blank	SLE0138-CCBB	XDT_m1230508-111	NA	05/09/23 00:03
ZZZZZ	23C0690-04	XDT_m1230508-112	Water	05/09/23 00:07
ZZZZZ	23C0690-08	XDT_m1230508-113	Water	05/09/23 00:10
ZZZZZ	23C0690-10	XDT_m1230508-114	Water	05/09/23 00:15
ZZZZZ	23C0715-02	XDT_m1230508-115	Water	05/09/23 00:20
ZZZZZ	23C0715-04	XDT_m1230508-116	Water	05/09/23 00:25
Instrument Blank	SLE0138-IBLE	XDT_m1230508-117	NA	05/09/23 00:28
Instrument Blank	SLE0138-IBLF	XDT_m1230508-121	NA	05/09/23 00:44
Calibration Check	SLE0138-CCVC	XDT_m1230508-122	NA	05/09/23 00:48
Calibration Blank	SLE0138-CCBC	XDT_m1230508-123	NA	05/09/23 00:55
Calibration Check	SLE0138-CCVD	XDT_m1230508-125	NA	05/09/23 01:03
Calibration Blank	SLE0138-CCBD	XDT_m1230508-126	NA	05/09/23 01:09

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0138

SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00030

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLE0138-IBLG	XDT_m1230508-136	NA	05/09/23 01:54
Calibration Check	SLE0138-CCVE	XDT_m1230508-137	NA	05/09/23 01:58
Calibration Blank	SLE0138-CCBE	XDT_m1230508-138	NA	05/09/23 02:05
Instrument Blank	SLE0138-IBLH	XDT_m1230508-143	NA	05/09/23 02:27
Instrument Blank	SLE0138-IBLI	XDT_m1230508-147	NA	05/09/23 02:45
Instrument Blank	SLE0138-IBLJ	XDT_m1230508-148	NA	05/09/23 02:49
Calibration Check	SLE0138-CCVF	XDT_m1230508-149	NA	05/09/23 02:53
Calibration Blank	SLE0138-CCBF	XDT_m1230508-150	NA	05/09/23 02:59
Instrument Blank	SLE0138-IBLK	XDT_m1230508-155	NA	05/09/23 03:21
Instrument Blank	SLE0138-IBLL	XDT_m1230508-159	NA	05/09/23 03:39
Instrument Blank	SLE0138-IBLM	XDT_m1230508-160	NA	05/09/23 03:43
Calibration Check	SLE0138-CCVG	XDT_m1230508-161	NA	05/09/23 03:47
Calibration Blank	SLE0138-CCBG	XDT_m1230508-162	NA	05/09/23 03:54
Calibration Check	SLE0138-CCVH	XDT_m1230508-164	NA	05/09/23 04:02
Calibration Blank	SLE0138-CCBH	XDT_m1230508-165	NA	05/09/23 04:08
Instrument Blank	SLE0138-IBLN	XDT_m1230508-170	NA	05/09/23 04:28
Instrument Blank	SLE0138-IBLO	XDT_m1230508-175	NA	05/09/23 04:49
Calibration Check	SLE0138-CCVI	XDT_m1230508-176	NA	05/09/23 04:53
Calibration Blank	SLE0138-CCBI	XDT_m1230508-177	NA	05/09/23 05:00
Instrument Blank	SLE0138-IBLP	XDT_m1230508-187	NA	05/09/23 05:39
Calibration Check	SLE0138-CCVJ	XDT_m1230508-188	NA	05/09/23 05:43
Calibration Blank	SLE0138-CCBJ	XDT_m1230508-189	NA	05/09/23 05:50
Instrument Blank	SLE0138-IBLQ	XDT_m1230508-199	NA	05/09/23 06:29
Calibration Check	SLE0138-CCVK	XDT_m1230508-200	NA	05/09/23 06:33
Calibration Blank	SLE0138-CCBK	XDT_m1230508-201	NA	05/09/23 06:40
Instrument Blank	SLE0138-IBLR	XDT_m1230508-207	NA	05/09/23 07:03
Calibration Check	SLE0138-CCVL	XDT_m1230508-208	NA	05/09/23 07:07
Calibration Blank	SLE0138-CCBL	XDT_m1230508-209	NA	05/09/23 07:14

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0163	Instrument:	ICPMS1
		Calibration:	GE00034

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLE0163-CAL1	XDT_m1230509a-001	NA	05/09/23 15:21
CAL 1 - LOW CHECK	SLE0163-CAL2	XDT_m1230509a-002	NA	05/09/23 15:26
CAL 2	SLE0163-CAL3	XDT_m1230509a-003	NA	05/09/23 15:30
CAL 3	SLE0163-CAL4	XDT_m1230509a-004	NA	05/09/23 15:36
CAL 4	SLE0163-CAL5	XDT_m1230509a-005	NA	05/09/23 15:41
CAL 5	SLE0163-CAL6	XDT_m1230509a-006	NA	05/09/23 15:48
RINSE	SLE0163-IBL1	XDT_m1230509a-007	NA	05/09/23 15:55
Initial Cal Check	SLE0163-ICV1	XDT_m1230509a-009	NA	05/09/23 16:02
Initial Cal Blank	SLE0163-ICB1	XDT_m1230509a-011	NA	05/09/23 16:14
Calibration Check	SLE0163-CCV1	XDT_m1230509a-012	NA	05/09/23 16:20
Calibration Blank	SLE0163-CCB1	XDT_m1230509a-014	NA	05/09/23 16:32
Instrument RL Check	SLE0163-CRL1	XDT_m1230509a-015	NA	05/09/23 16:39
Interference Check B	SLE0163-IFB1	XDT_m1230509a-017	NA	05/09/23 16:49
Interference Check A	SLE0163-IFA1	XDT_m1230509a-018	NA	05/09/23 16:54
LR300	SLE0163-HCV2	XDT_m1230509a-020	NA	05/09/23 17:04
LR200	SLE0163-HCV1	XDT_m1230509a-021	NA	05/09/23 17:11
Instrument Blank	SLE0163-IBL2	XDT_m1230509a-022	NA	05/09/23 17:16
Instrument Blank	SLE0163-IBL3	XDT_m1230509a-023	NA	05/09/23 17:23
Calibration Check	SLE0163-CCV2	XDT_m1230509a-024	NA	05/09/23 17:29
Calibration Blank	SLE0163-CCB2	XDT_m1230509a-025	NA	05/09/23 17:36
ZZZZZ	BLE0256-BLK1	XDT_m1230509a-026	Water	05/09/23 17:44
ZZZZZ	BLE0256-BS1	XDT_m1230509a-027	Water	05/09/23 17:49
Instrument Blank	SLE0163-IBL4	XDT_m1230509a-033	NA	05/09/23 18:24
Instrument Blank	SLE0163-IBL5	XDT_m1230509a-035	NA	05/09/23 18:35
Calibration Check	SLE0163-CCV3	XDT_m1230509a-036	NA	05/09/23 18:40
Calibration Blank	SLE0163-CCB3	XDT_m1230509a-037	NA	05/09/23 18:47
Calibration Check	SLE0163-CCV4	XDT_m1230509a-039	NA	05/09/23 18:59
Calibration Blank	SLE0163-CCB4	XDT_m1230509a-040	NA	05/09/23 19:06
ZZZZZ	23D0297-08	XDT_m1230509a-046	Solid	05/09/23 19:39

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0163

SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00034

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LDW23-SC1003	23A0420-07	XDT_m1230509a-047	Solid	05/09/23 19:44
Instrument Blank	SLE0163-IBL6	XDT_m1230509a-050	NA	05/09/23 19:57
Calibration Check	SLE0163-CCV5	XDT_m1230509a-051	NA	05/09/23 20:01
Calibration Blank	SLE0163-CCB5	XDT_m1230509a-052	NA	05/09/23 20:09
ZZZZZ	23C0715-02	XDT_m1230509a-053	Water	05/09/23 20:15
ZZZZZ	23C0715-04	XDT_m1230509a-054	Water	05/09/23 20:23
ZZZZZ	23C0690-08	XDT_m1230509a-055	Water	05/09/23 20:27
ZZZZZ	23C0690-10	XDT_m1230509a-056	Water	05/09/23 20:32
ZZZZZ	23C0690-04	XDT_m1230509a-057	Water	05/09/23 20:37
Instrument Blank	SLE0163-IBL7	XDT_m1230509a-062	NA	05/09/23 21:00
Calibration Check	SLE0163-CCV6	XDT_m1230509a-063	NA	05/09/23 21:05
Calibration Blank	SLE0163-CCB6	XDT_m1230509a-064	NA	05/09/23 21:12
Calibration Check	SLE0163-CCV7	XDT_m1230509a-067	NA	05/09/23 21:32
Calibration Blank	SLE0163-CCB7	XDT_m1230509a-068	NA	05/09/23 21:39
ZZZZZ	BLD0687-BLK1	XDT_m1230509a-069	Solid	05/09/23 21:43
ZZZZZ	BLD0687-BS1	XDT_m1230509a-070	Solid	05/09/23 21:48
Instrument Blank	SLE0163-IBL8	XDT_m1230509a-078	NA	05/09/23 22:22
Calibration Check	SLE0163-CCV8	XDT_m1230509a-079	NA	05/09/23 22:26
Calibration Blank	SLE0163-CCB8	XDT_m1230509a-080	NA	05/09/23 22:33
Instrument Blank	SLE0163-IBL9	XDT_m1230509a-090	NA	05/09/23 23:17
Calibration Check	SLE0163-CCV9	XDT_m1230509a-091	NA	05/09/23 23:21
Calibration Blank	SLE0163-CCB9	XDT_m1230509a-092	NA	05/09/23 23:28
Instrument Blank	SLE0163-IBLA	XDT_m1230509a-102	NA	05/10/23 00:11
Calibration Check	SLE0163-CCVA	XDT_m1230509a-103	NA	05/10/23 00:15
Calibration Blank	SLE0163-CCBA	XDT_m1230509a-104	NA	05/10/23 00:23
Instrument Blank	SLE0163-IBLB	XDT_m1230509a-114	NA	05/10/23 01:06
Calibration Check	SLE0163-CCVB	XDT_m1230509a-115	NA	05/10/23 01:10
Calibration Blank	SLE0163-CCBB	XDT_m1230509a-116	NA	05/10/23 01:17
Instrument Blank	SLE0163-IBLC	XDT_m1230509a-122	NA	05/10/23 01:43

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0163

SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00034

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLE0163-IBLD	XDT_m1230509a-126	NA	05/10/23 02:01
Calibration Check	SLE0163-CCVC	XDT_m1230509a-127	NA	05/10/23 02:05
Calibration Blank	SLE0163-CCBC	XDT_m1230509a-128	NA	05/10/23 02:12
Instrument Blank	SLE0163-IBLE	XDT_m1230509a-133	NA	05/10/23 02:36
Instrument Blank	SLE0163-IBLF	XDT_m1230509a-138	NA	05/10/23 02:59
Calibration Check	SLE0163-CCVD	XDT_m1230509a-139	NA	05/10/23 03:04
Calibration Blank	SLE0163-CCBD	XDT_m1230509a-140	NA	05/10/23 03:11
Instrument Blank	SLE0163-IBLG	XDT_m1230509a-145	NA	05/10/23 03:34
Instrument Blank	SLE0163-IBLH	XDT_m1230509a-150	NA	05/10/23 03:55
Calibration Check	SLE0163-CCVE	XDT_m1230509a-151	NA	05/10/23 04:00
Calibration Blank	SLE0163-CCBE	XDT_m1230509a-152	NA	05/10/23 04:07
ZZZZZ	23D0477-05	XDT_m1230509a-156	Water	05/10/23 04:24
ZZZZZ	23D0477-17	XDT_m1230509a-157	Water	05/10/23 04:28
ZZZZZ	23D0477-19	XDT_m1230509a-158	Water	05/10/23 04:32
Instrument Blank	SLE0163-IBLI	XDT_m1230509a-162	NA	05/10/23 04:51
Calibration Check	SLE0163-CCVF	XDT_m1230509a-163	NA	05/10/23 04:56
Calibration Blank	SLE0163-CCBF	XDT_m1230509a-164	NA	05/10/23 05:03

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00007
Sequence: SLE0017
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0017-IFA1	Chromium-52	0	0.6540		ug/L
	Chromium-53	0	4.7850		ug/L
	Lead-208	0	0.0330		ug/L
	Silver-107	0	0.0400		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00007
Sequence: SLE0017
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0017-IFB1	Chromium-52	20.000	19.156	95.8	ug/L
	Chromium-53	20.000	23.432	117	ug/L
	Lead-208	0	0.0140		ug/L
	Silver-107	20.000	18.383	91.9	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00013
Sequence: SLE0043
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0043-IFA1	Chromium-52	0	0.6710		ug/L
	Chromium-53	0	4.4590		ug/L
	Lead-208	0	0.0370		ug/L
	Silver-107	0	0.0150		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00013
Sequence: SLE0043
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0043-IFB1	Chromium-52	20.000	19.543	97.7	ug/L
	Chromium-53	20.000	23.879	119	ug/L
	Lead-208	0	0.0200		ug/L
	Silver-107	20.000	18.302	91.5	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00030
Sequence: SLE0138
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0138-IFA1	Chromium-52	0	0.6060		ug/L
	Chromium-53	0	6.1670		ug/L

* Indicates %R outside of QC limits
NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00030
Sequence: SLE0138
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0138-IFB1	Chromium-52	20.000	19.038	95.2	ug/L
	Chromium-53	20.000	24.636	123	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Sequence: SLE0163
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0163-IFA1	Chromium-52	0	0.6100		ug/L
	Chromium-53	0	3.6380		ug/L

* Indicates %R outside of QC limits
NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Sequence: SLE0163
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0163-IFB1	Chromium-52	20.000	19.239	96.2	ug/L
	Chromium-53	20.000	22.578	113	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00007
Sequence: SLE0017
Lab Sample ID: SLE0017-CRL1

Analyte	True	Found	%R	Units	QC Limts
Chromium-52	0.50000	0.471	94.2	ug/L	50 - 150
Chromium-53	0.50000	0.467	93.4	ug/L	50 - 150
Lead-208	0.10000	0.0950	95.0	ug/L	50 - 150
Silver-107	0.20000	0.192	96.0	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00013
Sequence: SLE0043
Lab Sample ID: SLE0043-CRL1

Analyte	True	Found	%R	Units	QC Limts
Chromium-52	0.50000	0.518	104	ug/L	50 - 150
Chromium-53	0.50000	0.521	104	ug/L	50 - 150
Lead-208	0.10000	0.105	105	ug/L	50 - 150
Silver-107	0.20000	0.216	108	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00030
Sequence: SLE0138
Lab Sample ID: SLE0138-CRL1

Analyte	True	Found	%R	Units	QC Limts
Chromium-52	0.50000	0.498	99.6	ug/L	50 - 150
Chromium-53	0.50000	0.489	97.8	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Sequence: SLE0163
Lab Sample ID: SLE0163-CRL1

Analyte	True	Found	%R	Units	QC Limts
Chromium-52	0.50000	0.488	97.6	ug/L	50 - 150
Chromium-53	0.50000	0.510	102	ug/L	50 - 150

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00007
Laboratory ID: SLE0017-HCV1
Sequence: SLE0017
Standard ID: L004780

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	191	-4.7	10.00
Chromium-53	200.00	188	-5.9	10.00
Lead-208	200.00	205	2.5	10.00
Silver-107	200.00	195	-2.4	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00007
Laboratory ID: SLE0017-HCV2
Sequence: SLE0017
Standard ID: L004781

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	296	-1.4	10.00
Chromium-53	300.00	290	-3.4	10.00
Lead-208	300.00	315	5.1	10.00
Silver-107	300.00	290	-3.3	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00013
Laboratory ID: SLE0043-HCV1
Sequence: SLE0043
Standard ID: L004780

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	194	-2.9	10.00
Chromium-53	200.00	196	-1.9	10.00
Lead-208	200.00	212	5.9	10.00
Silver-107	200.00	189	-5.3	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00013
Laboratory ID: SLE0043-HCV2
Sequence: SLE0043
Standard ID: L004781

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	303	1.1	10.00
Chromium-53	300.00	300	0.08	10.00
Lead-208	300.00	337	12.5	10.00
Silver-107	300.00	293	-2.3	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00030
Laboratory ID: SLE0138-HCV1
Sequence: SLE0138
Standard ID: L004780

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	193	-3.4	10.00
Chromium-53	200.00	193	-3.4	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00030
Laboratory ID: SLE0138-HCV2
Sequence: SLE0138
Standard ID: L004781

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	299	-0.4	10.00
Chromium-53	300.00	294	-1.9	10.00

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00034
Laboratory ID: SLE0163-HCV1
Sequence: SLE0163
Standard ID: L004780

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	196	-2.0	10.00
Chromium-53	200.00	194	-3.0	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00034
Laboratory ID: SLE0163-HCV2
Sequence: SLE0163
Standard ID: L004781

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	304	1.2	10.00
Chromium-53	300.00	303	1.0	10.00

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 6020B

Laboratory: Analytical Resources, LLC SDG: 23A0420

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1045 23A0420-01	01/19/23 08:10	01/19/23 15:55	04/18/23 16:53	89	180	05/08/23 21:58	110	180	
LDW23-SC1045 23A0420-01	01/19/23 08:10	01/19/23 15:55	04/18/23 16:53	89	180	05/02/23 18:42	103	180	
LDW23-SC1003 23A0420-07	01/19/23 12:25	01/19/23 15:55	04/18/23 16:53	89	180	05/09/23 19:44	110	180	
LDW23-SC1003 23A0420-07	01/19/23 12:25	01/19/23 15:55	04/18/23 16:53	89	180	05/02/23 18:46	103	180	
LDW23-SC1004 23A0420-08	01/19/23 11:55	01/19/23 15:55	04/18/23 16:53	89	180	05/02/23 18:50	103	180	
LDW23-SC1082 23A0420-09	01/19/23 13:40	01/19/23 15:55	04/18/23 16:53	89	180	05/08/23 22:06	109	180	
LDW23-SC1082 23A0420-09	01/19/23 13:40	01/19/23 15:55	04/18/23 16:53	89	180	05/02/23 18:55	103	180	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ICPMS1

Analyte	MDL	RL	Units
Chromium-52	0.26	0.50	mg/kg
Chromium-53	0.24	0.50	mg/kg
Lead-208	0.05	0.10	mg/kg
Silver-107	0.02	0.20	mg/kg

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCU10
Lot Number:	P2-CU682108
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Copper
Starting Material:	Cu Metal
Starting Material Lot#:	2095
Starting Material Purity:	99.9996%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10013 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9977 ± 50 µg/mL**
ICP Assay NIST SRM 3114 Lot Number: 121207

Assay Method #2 **10024 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10007 ± 46 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.007542	M	Eu	<	0.000942	O	Na		0.001434	M	Se	<	0.016971	M	Zn	<	0.005657
O	Al	<	0.000609	O	Fe		0.008700	M	Nb	<	0.000942	O	Si		0.003052	M	Zr	<	0.000942
M	As	<	0.010371	M	Ga	<	0.000942	M	Nd	<	0.000942	M	Sm	<	0.000942				
M	Au	<	0.001885	M	Gd	<	0.000942	M	Ni		0.003781	M	Sn	<	0.005657				
O	B		0.003663	M	Ge	<	0.005657	M	Os	<	0.000942	M	Sr	<	0.000942				
M	Ba		0.004253	M	Hf	<	0.000942	O	P	<	0.031668	M	Ta	<	0.000942				
M	Be	<	0.000942	O	Hg	<	0.007064	M	Pb		0.005789	M	Tb	<	0.000942				
M	Bi	<	0.000942	M	Ho	<	0.000942	M	Pd	<	0.000942	M	Te	<	0.004714				
O	Ca		0.002304	M	In	<	0.000942	M	Pr	<	0.000942	M	Th	<	0.000942				
M	Cd	<	0.000942	M	Ir	<	0.000942	M	Pt	<	0.000942	O	Ti	<	0.002801				
M	Ce	<	0.000942	O	K		0.000763	M	Rb	<	0.000942	M	Tl	<	0.000942				
M	Co		0.001890	M	La	<	0.000942	M	Re	<	0.000942	M	Tm	<	0.000942				
M	Cr	<	0.005657	O	Li	<	0.000243	i	Rh	<		M	U	<	0.000942				
M	Cs	<	0.000942	M	Lu	<	0.000942	M	Ru	<	0.039588	M	V	<	0.003771				
s	Cu	<		O	Mg		0.000320	O	S		0.007174	M	W	<	0.005657				
M	Dy	<	0.000942	O	Mn		0.000793	M	Sb	<	0.001885	M	Y	<	0.000942				
M	Er	<	0.000942	M	Mo	<	0.005657	M	Sc	<	0.000942	M	Yb	<	0.000942				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 63.55 +2 6 $Cu(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cu Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 63 amu	10 ppt	n/a	40Ar23Na 47Ti16O, 14N12C37Cl, 16O12C35Cl, 23Na40Ca
ICP-OES 219.958 nm	0.01/.002 µg/mL	1	Th, Ta, Nb, U, Hf
ICP-OES 224.700 nm	0.01/.001 µg/mL	1	Pb, Ir, Ni, W
ICP-OES 324.754 nm	0.06/.001 µg/mL		Nb, U, Th, Mo, Hf

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 24, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 24, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGPB10
Lot Number:	S2-PB713228
Matrix:	0.5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Lead
Starting Material:	Lead Nitrate
Starting Material Lot#:	2343
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10042 ± 31 µg/mL

Density: 1.015 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10024 ± 41 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

Assay Method #2 **10054 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	M	Na		0.001470	M	Se	<	0.009100	O	Zn	0.006155
O	Al		0.017098	O	Fe		0.002496	M	Nb	<	0.000310	O	Si		0.003761	O	Zr	< 0.001700
M	As	<	0.003100	M	Ga	<	0.000310	M	Nd	<	0.000310	M	Sm	<	0.000310			
M	Au	<	0.000910	M	Gd	<	0.000310	O	Ni		0.001709	M	Sn	<	0.001300			
O	B	<	0.005600	M	Ge	<	0.002200	M	Os	<	0.000310	O	Sr		0.000444			
O	Ba		0.007865	M	Hf	<	0.000310	O	P	<	0.038000	M	Ta	<	0.000310			
O	Be	<	0.000320	M	Hg	<	0.002200	s	Pb	<		M	Tb	<	0.000610			
M	Bi	<	0.028000	M	Ho	<	0.000310	M	Pd	<	0.000610	M	Te	<	0.000310			
O	Ca		0.019834	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.000310			
O	Cd	<	0.000630	M	Ir	<	0.000310	M	Pt	<	0.000910	O	Ti		0.005129			
M	Ce		0.004787	O	K		0.008207	M	Rb	<	0.006700	M	Tl	<	0.016000			
M	Co	<	0.000610	M	La	<	0.001900	M	Re	<	0.000310	M	Tm	<	0.000310			
O	Cr	<	0.001500	O	Li	<	0.000110	O	Rh	<	0.007700	M	U	<	0.000310			
M	Cs	<	0.006100	M	Lu	<	0.000310	M	Ru	<	0.001300	M	V	<	0.001600			
M	Cu	<	0.001600	O	Mg		0.003317	O	S	<	0.052000	M	W	<	0.000910			
M	Dy	<	0.000310	O	Mn	<	0.001600	O	Sb	<	0.015000	M	Y	<	0.000310			
M	Er	<	0.000310	M	Mo	<	0.000610	O	Sc	<	0.000630	M	Yb	<	0.000310			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 $Pb(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, HF and HNO_3. Avoid H_2SO_4. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.

Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H_2O / HNO_3); Oxides (The many different Pb oxides are soluble in HNO_3 with the exception of PbO_2 which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H_2O / HNO_3); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

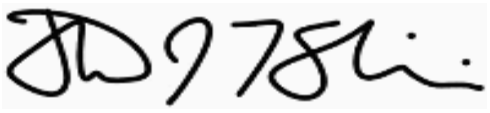
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGZN10
Lot Number:	S2-ZN711249
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Zinc
Starting Material:	Zinc Metal
Starting Material Lot#:	2349
Starting Material Purity:	99.9988%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9981 ± 56 µg/mL**
ICP Assay NIST SRM 3168a Lot Number: 120629

Assay Method #2 **9987 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10002 ± 32 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002000	M	Eu	<	0.000500	O	Na		0.008713	M	Se	<	0.048000	s	Zn	<	
O	Al	<	0.011000	O	Fe		0.015467	M	Nb	<	0.000500	O	Si		0.007842	M	Zr	<	0.000500
O	As	<	0.012000	M	Ga	<	0.004900	M	Nd	<	0.000500	M	Sm	<	0.000500				
M	Au	<	0.006500	M	Gd	<	0.000500	O	Ni		0.003049	M	Sn		0.002614				
O	B	<	0.019000	M	Ge	<	0.009100	M	Os	<	0.000500	M	Sr	<	0.000500				
M	Ba	<	0.000500	M	Hf	<	0.000500	O	P	<	0.059000	M	Ta	<	0.000500				
O	Be	<	0.000230	O	Hg	<	0.003800	M	Pb		0.016774	M	Tb	<	0.000500				
M	Bi	<	0.002400	M	Ho	<	0.000500	M	Pd	<	0.001000	M	Te	<	0.017000				
O	Ca		0.052283	M	In	<	0.003500	M	Pr	<	0.000500	M	Th	<	0.000500				
O	Cd		0.000588	M	Ir	<	0.001000	M	Pt	<	0.000500	M	Ti	<	0.002000				
M	Ce	<	0.000500	O	K		0.017209	M	Rb	<	0.002500	M	Tl	<	0.000500				
M	Co		0.000653	M	La	<	0.000500	M	Re	<	0.000500	M	Tm	<	0.000500				
O	Cr		0.001089	O	Li	<	0.000230	M	Rh	<	0.000500	M	U	<	0.000500				
M	Cs	<	0.000500	M	Lu	<	0.000500	M	Ru	<	0.005000	M	V	<	0.000500				
O	Cu		0.001938	O	Mg		0.000871	O	S	<	0.048000	M	W	<	0.001000				
M	Dy	<	0.000500	O	Mn		0.000172	M	Sb	<	0.004300	M	Y	<	0.000500				
M	Er	<	0.000500	M	Mo	<	0.001500	O	Sc	<	0.000900	M	Yb	<	0.000500				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 65.39 +2 4 Zn(OH)(aq)1+
Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media forming insoluble carbonate and hydroxide. Stable with most metals and inorganic anions in acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
Zn Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3); Organic based (dry ash at 4500C and dissolve ash in HCl) (sulfuric/peroxide acid digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 66 amu	7 ppt	N/A	50Ti16O,50Cr16O, 50V16O, 34S16O2, 32S16O18O, 32S17O2, 33S16O17O, 32S34S, 33S2
ICP-OES 202.548 nm	0.004/0.0002 µg/mL	1	Nb, Cu, Co, Hf
ICP-OES 206.200 nm	0.006/0.0006 µg/mL	1	Sb, Ta, Bi, Os
ICP-OES 213.856 nm	0.002/0.0004 µg/mL	1	Ni, Cu, V

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 22, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

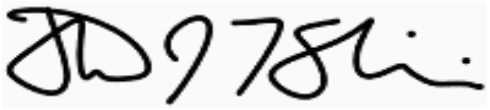
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSE10
Lot Number:	S2-SE711004
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Selenium
Starting Material:	Se Metal
Starting Material Lot#:	1962
Starting Material Purity:	99.9991%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9955 ± 61 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9955 ± 50 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002242	M	Eu	<	0.000373	O	Na		0.013654	s	Se	<		O	Zn		0.002374
M	Al		0.004450	M	Fe		0.008478	O	Nb	<	0.002975	O	Si		0.006249	M	Zr	<	0.001868
O	As	<	0.022040	M	Ga	<	0.000373	M	Nd	<	0.000373	M	Sm	<	0.000373				
M	Au	<	0.000373	M	Gd	<	0.000373	O	Ni		0.001843	M	Sn		0.000847				
O	B	<	0.007714	M	Ge	<	0.002616	M	Os	<	0.000373	M	Sr	<	0.001121				
M	Ba	<	0.001495	M	Hf	<	0.000373	O	P	<	0.022040	M	Ta	<	0.000373				
M	Be	<	0.001495	M	Hg	<	0.002240	M	Pb		0.006358	M	Tb	<	0.006353				
M	Bi	<	0.000373	M	Ho	<	0.000373	M	Pd	<	0.000373	M	Te	<	0.012707				
O	Ca		0.006530	M	In	<	0.000373	M	Pr	<	0.001495	M	Th	<	0.002990				
M	Cd		0.001165	M	Ir	<	0.000373	M	Pt	<	0.000373	M	Ti	<	0.003363				
M	Ce	<	0.000373	O	K		0.001999	M	Rb	<	0.001868	M	Tl		0.008584				
M	Co	<	0.000373	M	La	<	0.001121	M	Re	<	0.000373	M	Tm	<	0.000373				
M	Cr		0.002861	O	Li		0.000062	M	Rh	<	0.000373	M	U	<	0.000373				
M	Cs	<	0.001121	M	Lu	<	0.000373	M	Ru	<	0.001493	M	V	<	0.000747				
M	Cu	<	0.000747	O	Mg		0.001156	O	S		0.024591	M	W	<	0.002242				
M	Dy	<	0.000373	M	Mn	<	0.000373	M	Sb	<	0.002242	M	Y	<	0.000373				
M	Er	<	0.000373	O	Mo	<	0.003195	M	Sc	<	0.001121	M	Yb	<	0.000373				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H_2SeO_3

Chemical Compatibility -Soluble in HCl, HNO_3,H_3PO_4, H_2SO_4 and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO_3or HNO_3 / HF); Organic Matrices (acid digestion with hot concentrated H_2SO_4 accompanied by the careful dropwise addition of H_2O_2 until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 17, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO10
Lot Number:	S2-MO706255
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	10 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10026 ± 47 µg/mL

Density: 1.011 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10032 ± 68 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

Assay Method #2 **10020 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.008739	M	Se	<	0.008000	M	Zn		0.005942
M	Al		0.005592	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.001747				
M	Ba		0.016778	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.062920	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Ti	<	0.032000				
M	Ce	<	0.008300	M	K		1.293372	M	Rb		0.045442	M	Tl		0.012584				
M	Co		0.005942	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.005243	O	Li		0.000594	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.005243	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.022371	M	Mg		0.005592	i	S	<		M	W		0.873900				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.015031	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br16O,190Os2+,190Pt2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 04, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 04, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTL10
Lot Number:	T2-TL714687
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Thallium
Starting Material:	TlNO3
Starting Material Lot#:	2118
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10030 ± 42 µg/mL

Density: 1.036 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10040 ± 43 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 151215

Assay Method #2 **10010 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL(

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000200	O	Na		0.002489	M	Se	<	0.011019	O	Zn		0.002298
O	Al	<	0.004184	O	Fe	<	0.002824	M	Nb	<	0.000200	O	Si		0.003760	M	Zr	<	0.000200
M	As	<	0.002003	M	Ga	<	0.000200	M	Nd	<	0.000200	M	Sm	<	0.000200				
O	Au	<	0.002824	M	Gd	<	0.000200	M	Ni		0.001724	M	Sn	<	0.000601				
O	B	<	0.004184	M	Ge	<	0.000801	M	Os	<	0.000198	O	Sr	<	0.000313				
M	Ba	<	0.000400	M	Hf	<	0.000200	O	P	<	0.010460	M	Ta	<	0.000200				
O	Be	<	0.000104	M	Hg	<	0.000794	M	Pb		0.000811	M	Tb	<	0.000200				
M	Bi	<	0.005209	M	Ho	<	0.000200	M	Pd	<	0.000400	M	Te	<	0.005008				
O	Ca		0.002436	M	In	<	0.000200	M	Pr	<	0.000200	M	Th	<	0.000200				
M	Cd		0.001318	M	Ir	<	0.000198	M	Pt	<	0.000801	O	Ti	<	0.001255				
M	Ce	<	0.000200	O	K		0.006175	M	Rb	<	0.000200	s	Tl	<					
M	Co	<	0.000601	M	La	<	0.000200	M	Re	<	0.000200	M	Tm	<	0.000200				
M	Cr	<	0.000801	O	Li	<	0.000177	M	Rh	<	0.000200	M	U	<	0.000200				
M	Cs	<	0.003606	M	Lu	<	0.000200	M	Ru	<	0.000397	M	V	<	0.002203				
M	Cu	<	0.001001	O	Mg		0.000529	O	S	<	0.015690	M	W	<	0.000601				
M	Dy	<	0.000200	M	Mn	<	0.000801	M	Sb	<	0.000400	M	Y	<	0.000200				
M	Er	<	0.000200	M	Mo	<	0.001202	O	Sc	<	0.000711	M	Yb	<	0.000200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Tl(H2O)61+
Chemical Compatibility - Soluble in HCl, HNO3, and H2SO4. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Tl Containing Samples)Preparation and Solution) -Metal (Best dissolved in HNO3 which forms chiefly the Tl1+ ion.); Oxide (The thallous oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 08, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **February 08, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

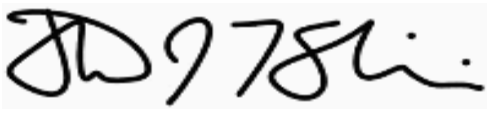
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCD10
Lot Number:	S2-CD710508
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cadmium
Starting Material:	Cd Metal
Starting Material Lot#:	1953
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10008 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10010 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #2 **10011 ± 30 µg/mL**
ICP Assay NIST SRM 3108 Lot Number: 130116

Assay Method #3 **10003 ± 30 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag	<	0.003200	O	Eu	<	0.002500	O	Na		0.005499	M	Se	<	0.005700	O	Zn	<	0.001100
O	Al		0.008903	O	Fe		0.000602	M	Nb	<	0.000400	O	Si		0.016758	O	Zr	<	0.002600
M	As	<	0.003600	M	Ga	<	0.001200	M	Nd	<	0.000800	M	Sm	<	0.000400				
M	Au	<	0.000810	M	Gd	<	0.000400	M	Ni	<	0.003600	M	Sn	<	0.003200				
O	B		0.004189	O	Ge	<	0.012000	M	Os	<	0.000810	O	Sr	<	0.000330				
M	Ba	<	0.002400	M	Hf	<	0.000400	O	P	<	0.022000	M	Ta	<	0.000800				
M	Be	<	0.000400	M	Hg	<	0.001700	M	Pb	<	0.002400	M	Tb	<	0.000400				
M	Bi	<	0.000400	M	Ho	<	0.000400	M	Pd	<	0.001200	M	Te	<	0.008000				
O	Ca		0.011259	O	In	<	0.013000	M	Pr	<	0.000400	M	Th	<	0.000400				
s	Cd	<		M	Ir	<	0.000410	M	Pt	<	0.000400	O	Ti		0.000602				
M	Ce	<	0.000400	O	K		0.005237	M	Rb	<	0.004400	M	Tl		0.000523				
M	Co	<	0.000400	M	La	<	0.000400	M	Re	<	0.000400	M	Tm	<	0.000400				
O	Cr	<	0.005100	O	Li	<	0.000054	M	Rh	<	0.000400	M	U	<	0.000400				
M	Cs	<	0.002400	M	Lu	<	0.000400	M	Ru	<	0.002500	M	V	<	0.002000				
O	Cu	<	0.004800	O	Mg		0.000288	O	S	<	0.022000	M	W	<	0.000400				
M	Dy	<	0.000400	O	Mn	<	0.000860	O	Sb	<	0.018000	M	Y	<	0.000400				
M	Er	<	0.000400	M	Mo	<	0.001600	O	Sc	<	0.000430	M	Yb	<	0.000400				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 112.41 +2 4 Cd2(OH) (aq)3+ and Cd(OH)(aq)

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 , and HF. Avoid basic media forming insoluble carbonate and hydroxide.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO3 / LDPE container.

Cd Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (soluble in HCl or HNO3); Ores (dissolve in HCl /HNO3 then take to fumes with H2SO4. The silica and lead sulfate are filtered off after the addition of water); Organic based (dry ash at 450°C and dissolve ash in HCl), (sulfuric / peroxide acid digestion).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 111 amu	11 ppt	n/a	95Mo16O
ICP-OES 214.438 nm	0.003 / 0.0003 µg/mL	1	Pt, Ir
ICP-OES 226.502 nm	0.003 / 0.0003 µg/mL	1	Ir
ICP-OES 228.802 nm	0.003 / 0.0003 µg/mL	1	Co, Ir, As, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 01, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 01, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMN10
Lot Number:	S2-MN704240
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Manganese
Starting Material:	Mn Metal
Starting Material Lot#:	2275
Starting Material Purity:	99.9909%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10011 ± 30 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9989 ± 69 µg/mL**
ICP Assay NIST SRM 3132 Lot Number: 050429

Assay Method #2 **10011 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10024 ± 47 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001500	M	Eu	<	0.000730	O	Na		0.176097	M	Se	<	0.006600	M	Zn		0.009925
O	Al		0.004322	M	Fe	<	0.650000	M	Nb	<	0.000730	O	Si		0.097654	M	Zr	<	0.000730
M	As	<	0.008000	M	Ga		0.004322	M	Nd	<	0.001500	M	Sm	<	0.000730				
M	Au	<	0.000730	M	Gd	<	0.000730	M	Ni		0.024013	M	Sn	<	0.002200				
M	B		0.068838	M	Ge	<	0.004400	M	Os	<	0.000730	O	Sr		0.000928				
M	Ba	<	0.001500	M	Hf	<	0.000730	i	P	<		M	Ta	<	0.000730				
M	Be	<	0.000730	M	Hg	<	0.002200	M	Pb		0.007364	M	Tb	<	0.000730				
M	Bi	<	0.003000	M	Ho	<	0.000730	M	Pd	<	0.000730	M	Te	<	0.019000				
O	Ca		0.062434	M	In	<	0.003000	M	Pr	<	0.000730	M	Th	<	0.000730				
M	Cd	<	0.001500	M	Ir	<	0.000730	M	Pt	<	0.000730	O	Ti	<	0.006500				
M	Ce	<	0.007300	O	K		0.006403	M	Rb	<	0.006600	M	Tl	<	0.000730				
O	Co		0.014728	M	La	<	0.003000	M	Re	<	0.000730	M	Tm	<	0.000730				
O	Cr		0.272151	O	Li		0.000416	M	Rh	<	0.003000	M	U	<	0.001500				
M	Cs	<	0.000730	M	Lu	<	0.000730	M	Ru	<	0.004400	M	V	<	0.000730				
O	Cu		0.007684	O	Mg		0.320177	i	S	<		M	W	<	0.004400				
M	Dy	<	0.001500	s	Mn	<		M	Sb	<	0.021000	O	Y		0.001360				
M	Er	<	0.001500	M	Mo		0.010245	O	Sc	<	0.004100	M	Yb	<	0.000730				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 54.94 +2 6 $Mn(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO_3/LDPE container.

Mn Containing Samples (Preparation and Solution) -Metal (Soluble in dilute acids); Oxides (Soluble in dilute acids); Ores (Dissolve with HCl. If silica is present add HF and then fume off silica by adding H_2SO_4 and heat to SO_3 fumes - dense white fumes).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 55 amu	10 ppt	n/a	40Ar14N1H,39K16O,37Cl18O,40Ar15N,38Ar17O,36Ar18O1H ,38Ar16O1H,37Cl17O1H,23Na32S
ICP-OES 257.610 nm	0.0014 / 0.00002 µg/mL	1	Ce, W, Re
ICP-OES 259.373 nm	0.0016 / 0.00002 µg/mL	1	U, Ta, Mo, Fe, Nb
ICP-OES 260.569 nm	0.0021 / 0.00002 µg/mL	1	Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 17, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSB10
Lot Number:	R2-SB688559
Matrix:	3% (v/v) HNO3 3% (w/v) tartaric acid
Value / Analyte(s):	10 000 µg/mL ea: Antimony
Starting Material:	Antimony Metal
Starting Material Lot#:	1857
Starting Material Purity:	99.9894%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10003 ± 47 µg/mL

Density: 1.061 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10003 ± 41 µg/mL**
ICP Assay NIST SRM 3102a Lot Number: 140911

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000300	O	Na		0.140000	M	Se	<	0.007300	O	Zn		0.005000
M	Al		0.003200	O	Fe		0.060000	M	Nb	<	0.000100	O	Si		0.150000	O	Zr	<	0.006300
M	As	<	0.004400	M	Ga	<	0.000400	M	Nd	<	0.000100	M	Sm	<	0.000100				
M	Au	<	0.000210	M	Gd	<	0.000100	O	Ni		0.004800	M	Sn	<	0.001800				
M	B	<	0.011000	M	Ge	<	0.000600	M	Os	<	0.000110	O	Sr		0.000750				
O	Ba	<	0.004900	M	Hf	<	0.000100	O	P		0.540000	M	Ta		0.003300				
M	Be	<	0.000400	M	Hg	<	0.000110	M	Pb	<	0.000400	M	Tb	<	0.000100				
M	Bi	<	0.000200	M	Ho	<	0.000100	M	Pd	<	0.000210	M	Te	<	0.000600				
O	Ca		0.110000	M	In	<	0.000100	M	Pr	<	0.001600	M	Th	<	0.000100				
M	Cd	<	0.000200	M	Ir	<	0.000110	M	Pt	<	0.000600	M	Ti	<	0.002800				
M	Ce		0.006500	O	K		0.020000	M	Rb	<	0.001000	M	Tl	<	0.000100				
M	Co	<	0.000200	O	La	<	0.016000	M	Re	<	0.000100	M	Tm	<	0.000100				
M	Cr		0.006900	O	Li	<	0.000430	M	Rh	<	0.000300	M	U	<	0.000100				
M	Cs	<	0.000200	M	Lu	<	0.000100	M	Ru	<	0.000310	M	V	<	0.000800				
M	Cu	<	0.000600	O	Mg		0.021000	n	S	<		M	W	<	0.000200				
M	Dy	<	0.000100	O	Mn		0.001900	s	Sb	<		M	Y	<	0.000100				
M	Er	<	0.000100	M	Mo	<	0.000500	O	Sc	<	0.002300	M	Yb	<	0.000100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO3 / LDPE container.

Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H2O / HF / HNO3 mixture); Oxides (Soluble in HCl and tartaric acid or H2O / HF / HNO3 mixtures); Ores (fusion with Na2CO3 in Pt0 followed by dissolving the fuseate in a H2O / HF / HNO3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 30, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 30, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAS10
Lot Number:	T2-AS718260
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Arsenic
Starting Material:	As Metal
Starting Material Lot#:	2208
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10060 ± 40 µg/mL

Density: 1.037 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10062 ± 46 µg/mL**
ICP Assay NIST SRM 3103a Lot Number: 100818

Assay Method #2 **10055 ± 76 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.003200	M	Eu	< 0.000530	O	Na	0.032544	M	Se	< 0.006300	O	Zn	0.001952			
M	Al	0.007593	O	Fe	0.001475	O	Nb	< 0.012000	O	Si	0.238658	O	Zr	< 0.004100			
s	As	<	M	Ga	< 0.000530	M	Nd	< 0.000530	M	Sm	< 0.000530						
M	Au	< 0.003100	M	Gd	< 0.000530	M	Ni	< 0.002100	M	Sn	< 0.000530						
M	B	0.026035	M	Ge	< 0.001600	M	Os	< 0.000520	M	Sr	< 0.000530						
M	Ba	< 0.000530	M	Hf	< 0.000530	O	P	< 0.043000	M	Ta	< 0.000530						
O	Be	< 0.000360	M	Hg	< 0.001600	M	Pb	< 0.002100	M	Tb	< 0.000530						
M	Bi	< 0.000530	M	Ho	< 0.000530	M	Pd	< 0.001100	M	Te	< 0.004700						
O	Ca	0.004339	M	In	< 0.023000	M	Pr	< 0.005300	M	Th	< 0.000530						
M	Cd	< 0.001100	M	Ir	< 0.000520	M	Pt	< 0.000530	O	Ti	< 0.002300						
M	Ce	< 0.000530	O	K	0.002061	M	Rb	< 0.000530	M	Tl	< 0.000530						
M	Co	< 0.000530	M	La	< 0.001100	M	Re	< 0.000530	M	Tm	< 0.000530						
O	Cr	< 0.001800	O	Li	< 0.000120	M	Rh	< 0.000530	M	U	< 0.000530						
M	Cs	< 0.005300	M	Lu	< 0.000530	M	Ru	< 0.000520	M	V	< 0.002700						
M	Cu	< 0.001600	O	Mg	0.000154	O	S	0.028205	M	W	< 0.012000						
M	Dy	< 0.000530	O	Mn	0.000154	M	Sb	< 0.000530	M	Y	< 0.000530						
M	Er	< 0.000530	M	Mo	< 0.000530	O	Sc	< 0.001700	M	Yb	< 0.000530						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphic form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37Cl,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBA10
Lot Number:	R2-BA692576
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Barium
Starting Material:	Barium Nitrate
Starting Material Lot#:	1969
Starting Material Purity:	99.9982%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.025 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10018 ± 50 µg/mL** ICP Assay NIST SRM 3104a Lot Number: 140909
Assay Method #2	**10023 ± 31 µg/mL** Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #3	**10023 ± 30 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000410	O	Eu	<	0.005200	O	Na		0.004610	M	Se	<	0.003700	O	Zn		0.000658
M	Al	<	0.003100	O	Fe		0.015707	M	Nb	<	0.000210	O	Si		0.005573	M	Zr	<	0.001300
M	As	<	0.001300	M	Ga	<	0.000210	M	Nd	<	0.000210	O	Sm	<	0.021000				
M	Au	<	0.001300	M	Gd	<	0.000210	M	Ni	<	0.000810	M	Sn	<	0.000410				
O	B	<	0.005200	M	Ge	<	0.002500	M	Os	<	0.000410	O	Sr		0.003850				
s	Ba	<		M	Hf	<	0.000810	O	P	<	0.026000	M	Ta	<	0.000410				
O	Be	<	0.000320	M	Hg	<	0.000210	M	Pb	<	0.002300	M	Tb	<	0.000210				
M	Bi	<	0.000210	M	Ho	<	0.000210	M	Pd	<	0.000210	M	Te	<	0.001900				
O	Ca		0.007093	M	In	<	0.000210	M	Pr	<	0.000210	M	Th	<	0.000210				
M	Cd	<	0.000210	M	Ir	<	0.000210	M	Pt	<	0.000210	M	Ti	<	0.002100				
M	Ce	<	0.001300	O	K		0.035467	M	Rb	<	0.002100	M	Tl	<	0.000210				
M	Co	<	0.000410	O	La	<	0.005200	M	Re	<	0.000210	M	Tm	<	0.000410				
M	Cr	<	0.001700	O	Li	<	0.000630	M	Rh	<	0.000210	M	U	<	0.000210				
M	Cs	<	0.003300	M	Lu	<	0.001700	M	Ru	<	0.000210	O	V	<	0.005200				
M	Cu	<	0.001300	O	Mg		0.000861	O	S		0.268539	M	W	<	0.000410				
M	Dy	<	0.000210	M	Mn	<	0.000410	M	Sb	<	0.001300	O	Y	<	0.005200				
M	Er	<	0.001300	M	Mo	<	0.000410	M	Sc	<	0.000410	M	Yb	<	0.001300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 137.33 +2 6 $Ba(H_2O)_6^{+2}$
Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, iodate, molybdate, sulfite and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1 -10,000 ppm solutions chemically stable for years in 1-3.5% HNO_3 / LDPE container.
Ba Containing Samples (Preparation and Solution) -Metal(is best dissolved in diluted HNO_3); Ores(Carbonate fusion in Pt0 followed by HCl dissolution. If sulfate is present dissolve the fuseate using HCl / tartaric acid to prevent $BaSO_4$ precipitate); Organic Matrices (dry ash and dissolve in dilute HCl.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 138 amu	1 ppt	N/A	122Sn16O, 122Te16O
ICP-OES 230.424 nm	0.004/0.0005 µg/mL	1	Mo, Ir, Co
ICP-OES 233.527 nm	0.004/0.0003 µg/mL	1	
ICP-OES 455.403 nm	0.002/0.0001 µg/mL	1	Zr, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 11, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 11, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBE10
Lot Number:	R2-BE692992
Matrix:	6% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Beryllium
Starting Material:	Beryllium Acetate
Starting Material Lot#:	2281
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10032 ± 41 µg/mL

Density: 1.128 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10042 ± 67 µg/mL**
ICP Assay NIST SRM 3105a Lot Number: 090514

Assay Method #2 **10025 ± 51 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001100	M	Eu	<	0.000270	O	Na		0.040962	M	Se	<	0.005000	M	Zn		0.013054
O	Al		0.016205	O	Fe		0.015754	M	Nb	<	0.000270	O	Si		0.024307	O	Zr	<	0.001900
M	As	<	0.002900	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270				
M	Au	<	0.000520	M	Gd	<	0.000270	M	Ni	<	0.003700	M	Sn	<	0.000790				
M	B	<	0.091000	M	Ge	<	0.000270	M	Os	<	0.000260	M	Sr		0.000630				
M	Ba		0.002700	M	Hf	<	0.000270	O	P	<	0.066000	M	Ta	<	0.000270				
s	Be	<		M	Hg	<	0.000520	M	Pb	<	0.000270	M	Tb	<	0.000270				
M	Bi	<	0.000530	M	Ho	<	0.000270	M	Pd	<	0.000520	M	Te	<	0.003700				
O	Ca		0.072022	M	In	<	0.000790	M	Pr	<	0.000270	M	Th	<	0.000270				
M	Cd	<	0.000790	M	Ir	<	0.000260	M	Pt	<	0.000270	O	Ti	<	0.000400				
M	Ce	<	0.000270	O	K		0.045014	M	Rb	<	0.000270	M	Tl	<	0.000790				
O	Co	<	0.003200	M	La	<	0.000270	M	Re	<	0.000270	M	Tm	<	0.000270				
O	Cr	<	0.001800	O	Li	<	0.000660	M	Rh	<	0.001100	M	U	<	0.000270				
M	Cs		0.001440	M	Lu	<	0.000270	M	Ru	<	0.000260	M	V	<	0.000790				
M	Cu	<	0.002100	O	Mg		0.016205	i	S	<		M	W	<	0.000530				
M	Dy	<	0.000270	M	Mn		0.001215	M	Sb	<	0.000270	M	Y	<	0.000270				
M	Er	<	0.000270	M	Mo	<	0.000530	O	Sc	<	0.000930	M	Yb	<	0.000270				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 9.01 +2 4 $Be(H_2O)_4^{+2}$

Chemical Compatibility -Soluble in HCl, HNO_3, H_2SO_4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1 % HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 5-10 % HNO_3 / LDPE container.

Be Containing Samples (Preparation and Solution) - Meta l(is best dissolved in diluted H_2SO_4); BeO (boiling nitric, hydrochloric, or sulfuric acids or KHSO4 fusion); Ores (H_2SO_4/HF digestion or carbonate fusion in Pt0); Organic Matrices (sulfuric/peroxide digestion or nitric/sulfuric/perchloric acid decomposition, or dry ash and dissolution according to the BeO procedure above).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 9 amu	4 ppt	N/A	
ICP-OES 234.861 nm	0.0003/0.00016 µg/mL	1	Fe, Ta, Mo
ICP-OES 313.042 nm	0.0003/0.00009 µg/mL	1	V, Ce, U
ICP-OES 313.107 nm	0.0007/0.0005 µg/mL	1	Ce, Th, Tm

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

11.1 Certification Issue Date

May 13, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 13, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.4 Revision Status

- Revision 1 - Revised on Thursday, Jan 14, 2021 by utruong. Revision was made for the following reason: Modified Section 7 Chemical Form in Solution.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCO10
Lot Number:	R2-CO695285
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cobalt
Starting Material:	Co Metal
Starting Material Lot#:	2326
Starting Material Purity:	99.9934%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10012 ± 31 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10031 ± 67 µg/mL**
ICP Assay NIST SRM 3113 Lot Number: 190630

Assay Method #2 **10019 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10000 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	0.014660	M	Eu	<	0.000590	O	Na	0.007534	M	Se	<	0.019000	M	Zn	0.003461	
M	Al	< 0.024000	M	Fe	0.050905	M	Nb	<	0.000590	O	Si	0.075340	M	Zr	<	0.001200	
i	As	<	M	Ga	<	0.000590	M	Nd	<	0.000590	M	Sm	<	0.000590			
M	Au	< 0.004100	M	Gd	<	0.000590	O	Ni	0.427608	M	Sn	<	0.001200				
M	B	< 0.031000	M	Ge	<	0.003000	M	Os	<	0.000590	O	Sr	<	0.000260			
M	Ba	< 0.000590	M	Hf	<	0.000590	n	P	<		M	Ta	<	0.001200			
O	Be	< 0.001300	M	Hg	<	0.001800	M	Pb	0.003257	M	Tb	<	0.000590				
M	Bi	< 0.003000	M	Ho	<	0.000590	M	Pd	<	0.000590	M	Te	<	0.005300			
O	Ca	0.010588	M	In	<	0.001200	M	Pr	<	0.000590	M	Th	<	0.000590			
M	Cd	< 0.004700	M	Ir	<	0.001200	M	Pt	<	0.002400	M	Ti	<	0.014000			
M	Ce	< 0.000590	O	K	0.008144	M	Rb	<	0.000590	M	Tl	0.002647					
s	Co	<	M	La	<	0.000590	M	Re	<	0.000590	M	Tm	<	0.000590			
M	Cr	< 0.021000	O	Li	<	0.000130	M	Rh	<	0.000590	M	U	<	0.000590			
M	Cs	< 0.002400	M	Lu	<	0.000590	M	Ru	<	0.007100	O	V	<	0.000880			
M	Cu	0.189369	O	Mg	0.001893	n	S	<		M	W	<	0.000590				
M	Dy	< 0.000590	M	Mn	<	0.001800	M	Sb	<	0.003600	M	Y	<	0.000590			
M	Er	< 0.000590	M	Mo	<	0.002400	O	Sc	<	0.001600	M	Yb	<	0.000590			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.93 +2 6 $Co(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Co Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 59 amu	2 ppt	n/a	42Ca16O1H , 40Ar18O1H , 36Ar23Na, 43Ca16O, 24Mg35Cl
ICP-OES 228.616 nm	0.01/0.001 µg/mL	1	
ICP-OES 237.862 nm	0.01/0.002 µg/mL	1	W, Re, Al, Ta
ICP-OES 238.892 nm	0.01/0.002 µg/mL	1	Fe, W, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 04, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 04, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAG10
Lot Number:	S2-AG712977
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Silver
Starting Material:	Ag Shot
Starting Material Lot#:	2289
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10051 ± 30 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10051 ± 52 µg/mL** ICP Assay NIST SRM 3151 Lot Number: 160729
Assay Method #2	**10051 ± 19 µg/mL** Volhard NIST SRM 999c Lot Number: 999c
Assay Method #3	**10049 ± 31 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s	Ag	<		M	Eu	<	0.000260	O	Na		0.003811	M	Se	<	0.003900	O	Zn		0.048146
M	Al		0.002688	O	Fe		0.006419	M	Nb	<	0.000260	O	Si		0.005215	M	Zr	<	0.000260
M	As	<	0.001100	M	Ga	<	0.000260	M	Nd	<	0.000260	M	Sm	<	0.000260				
M	Au	<	0.000260	M	Gd	<	0.000260	O	Ni		0.001765	M	Sn		0.020060				
O	B	<	0.004300	M	Ge	<	0.002300	M	Os	<	0.001100	O	Sr	<	0.000110				
M	Ba	<	0.000520	M	Hf	<	0.000260	O	P	<	0.017000	M	Ta	<	0.000260				
O	Be	<	0.001100	M	Hg	<	0.000770	M	Pb	<	0.003600	M	Tb	<	0.000260				
M	Bi		0.004814	M	Ho	<	0.000260	M	Pd		0.044134	M	Te	<	0.009000				
O	Ca		0.005215	M	In		0.003691	M	Pr	<	0.000260	M	Th	<	0.000260				
M	Cd	<	0.000260	M	Ir	<	0.000520	M	Pt	<	0.001100	O	Ti	<	0.000440				
M	Ce	<	0.002100	O	K	<	0.008700	M	Rb	<	0.001100	M	Tl	<	0.004100				
O	Co	<	0.000330	M	La	<	0.000260	M	Re	<	0.000260	M	Tm	<	0.000260				
O	Cr	<	0.002500	O	Li	<	0.000110	M	Rh	<	0.000520	M	U	<	0.000260				
M	Cs	<	0.002600	M	Lu	<	0.000260	M	Ru	<	0.000260	M	V	<	0.000260				
O	Cu		0.357085	O	Mg		0.001203	O	S	<	0.017000	M	W	<	0.000260				
M	Dy	<	0.000260	O	Mn	<	0.000220	M	Sb	<	0.014000	M	Y	<	0.000260				
M	Er	<	0.000260	M	Mo	<	0.000260	O	Sc	<	0.000220	M	Yb	<	0.000260				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 107.87 +1 6 $Ag(H_2O)_6^+$

Chemical Compatibility -Stable in HNO_3, and HF. Avoid basic media. Ag forms more insoluble salts than any other metal. It also is subject to photochemical reduction to the metal in HCl media although 10 µg/mL solutions in 10% HCl [$AgCl_{x1-x}$] are commonly used in the analytical laboratory. The most common solubility problems exist with arsenate, arsenite , bromide, chloride, iodide, carbonate , chromate, cyanide, iodate, oxalate, oxide, sulfate, sulfide, tartrate, and thiocyanate in aqueous media. The addition of nitric acid renders many of these salts soluble.

Stability - 2-100 ppb levels stable for 75+ days when mixed with equivalent levels of all other elements including the precious metals (where chloride is present) when in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Ag Containing Samples (Preparation and Solution) -Metal (Soluble in HNO_3); Oxides (Soluble in HNO_3); Ores (Digestion with conc. HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 107 amu	1 ppt	N/A	91Zr16O
ICP-OES 243.779 nm	0.12/0.01 µg/mL	1	Mn, Th, Ni, Rh
ICP-OES 328.068 nm	0.007/0.0007 µg/mL	1	Ce, Rh, V
ICP-OES 338.289 nm	0.013/0.001 µg/mL	1	Ce, Cr, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCR(3)10
Lot Number:	S2-CR709784
Matrix:	10% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Chromium
Starting Material:	Cr Metal
Starting Material Lot#:	2328
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10027 ± 41 µg/mL

Density: 1.072 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10027 ± 40 µg/mL**
ICP Assay NIST SRM 3112a Lot Number: 170630

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001700	M	Eu	<	0.003400	O	Na		0.090372	M	Se	<	0.012000	O	Zn	<	0.006100
M	Al		0.034916	O	Fe		0.246471	M	Nb	<	0.017000	n	Si	<		M	Zr	<	0.007800
M	As	<	0.028000	O	Ga	<	0.013000	M	Nd	<	0.013000	M	Sm	<	0.006900				
M	Au	<	0.001700	M	Gd	<	0.000560	M	Ni		0.016020	M	Sn		0.006983				
O	B	<	0.025000	O	Ge	<	0.014000	M	Os	<	0.000560	M	Sr		0.006367				
M	Ba	<	0.008900	M	Hf	<	0.000560	i	P	<		M	Ta	<	0.000560				
M	Be	<	0.013000	M	Hg	<	0.001700	M	Pb		0.010064	M	Tb	<	0.000560				
M	Bi	<	0.002300	M	Ho	<	0.000560	M	Pd	<	0.021000	M	Te	<	0.010000				
O	Ca		0.075995	M	In	<	0.000560	M	Pr	<	0.001700	M	Th	<	0.000560				
M	Cd	<	0.000560	M	Ir	<	0.000560	M	Pt	<	0.001200	O	Ti		0.013555				
M	Ce	<	0.001200	O	K		0.043132	i	Rb	<		M	Tl	<	0.000560				
M	Co	<	0.002600	M	La	<	0.001200	M	Re	<	0.001200	O	Tm	<	0.013000				
s	Cr	<		O	Li		0.000390	M	Rh	<	0.095000	M	U	<	0.000560				
M	Cs	<	0.007800	M	Lu	<	0.000560	M	Ru	<	0.087000	O	V		0.014993				
O	Cu		0.007599	O	Mg		0.000883	i	S	<		M	W	<	0.049000				
M	Dy	<	0.000560	M	Mn		0.008626	M	Sb	<	0.003400	M	Y	<	0.001700				
M	Er	<	0.019000	M	Mo	<	0.032000	M	Sc		0.003080	M	Yb	<	0.000560				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 52.00 +3 6 $Cr(H_2O)_6^{3+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cr3 Containing Samples (Preparation and Solution) -Metal (soluble in HCl); Oxides/Ores (Chrome ore/oxides are very difficult to dissolve. The following procedures [A-D] are commonly used: A. Fusion with $KHSO_4$ and extraction with hot KCl. The residue fused with Na_2CO_3 and $KClO_3$, 3:1. B. Fusion with $NaKSO_4$ and NaF 2:1, C. Fusion with magnesia or lime and sodium or potassium carbonates, 4:1. D. Fusion with Na_2O_2 or NaOH and KNO_3 or NaOH and Na_2O_2. Nickel, iron, copper, or silver crucibles should be used for D. Platinum may be used for A, <, C); Organic Matrices (ash at 4500C followed by one of the fusion methods above or sulfuric/hydrogen peroxide acid digestions may be applicable to non oxide containing samples).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 52 amu	40 ppt	N/A	36S16O, 36Ar16O - The 50Cr, 53Cr, 54Cr lines suffer from many more potential interferences from sulfur, chlorine and argon compounds of oxygen, nitrogen and carbon.
ICP-OES 205.552 nm	0.006/0.0008 µg/mL	1	Os
ICP-OES 276.654 nm	0.01/0.001 µg/mL	1	Cu, Ta, V
ICP-OES 284.325 nm	0.008/0.0007 µg/mL	1	

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 26, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 26, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNI10
Lot Number:	P2-NI686384
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Nickel
Starting Material:	Ni Metal
Starting Material Lot#:	2277 and 2282
Starting Material Purity:	99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9979 ± 30 µg/mL

Density: 1.038 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9971 ± 54 µg/mL**
ICP Assay NIST SRM 3136 Lot Number: 120619

Assay Method #2 **9970 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **9993 ± 33 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.002606	M	Eu	<	0.001100	O	Na		0.004965	O	Se	<	0.067000	M	Zn		0.006578
M	Al	<	0.013000	O	Fe		0.018618	M	Nb	<	0.001100	O	Si		0.010923	M	Zr	<	0.001100
O	As	<	0.067000	M	Ga	<	0.001100	M	Nd	<	0.001100	M	Sm	<	0.001100				
M	Au	<	0.002100	M	Gd	<	0.001100	s	Ni	<		M	Sn	<	0.016000				
M	B	<	0.017000	M	Ge	<	0.004200	M	Os		0.002110	O	Sr	<	0.000940				
M	Ba	<	0.001100	M	Hf	<	0.001100	i	P	<		M	Ta	<	0.001100				
O	Be	<	0.000410	M	Hg		0.014895	M	Pb		0.006578	M	Tb	<	0.001100				
M	Bi	<	0.004200	M	Ho	<	0.001100	M	Pd	<	0.001100	M	Te	<	0.015000				
O	Ca		0.003351	M	In	<	0.001100	M	Pr	<	0.001100	M	Th	<	0.001100				
M	Cd		0.001365	M	Ir		0.004716	M	Pt	<	0.001100	M	Ti	<	0.004200				
M	Ce	<	0.001100	O	K		0.004716	M	Rb	<	0.001100	M	Tl	<	0.001100				
O	Co		0.017377	M	La	<	0.001100	M	Re		0.001737	M	Tm	<	0.001100				
O	Cr	<	0.006700	O	Li	<	0.000140	M	Rh	<	0.006300	M	U	<	0.001100				
M	Cs	<	0.007300	M	Lu	<	0.001100	M	Ru	<	0.019000	M	V	<	0.002100				
M	Cu		0.004096	O	Mg		0.000372	i	S	<		M	W	<	0.006300				
M	Dy	<	0.001100	O	Mn	<	0.001900	M	Sb		0.005833	O	Y	<	0.000540				
M	Er	<	0.001100	M	Mo	<	0.008400	M	Sc	<	0.002100	M	Yb	<	0.001100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.69 +2 6 Ni(H2O)62+

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Ni Containing Samples (Preparation and Solution) -Metal (Soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 60 amu	100 ppt	n/a	43Ca16O1H , 44Ca16O, 23Na37Cl
ICP-OES 221.647 nm	0.01 / 0.0009 µg/mL	1	Si
ICP-OES 231.604 nm	0.02 / 0.002 µg/mL	1	Sb, Ta, Co
ICP-OES 232.003 nm	0.02 / 0.006 µg/mL	1	Cr, Re, Os, Nb, Ag, Pt, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 02, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 02, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGV10
Lot Number:	S2-V711005
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Vanadium
Starting Material:	Vanadium Pentoxide
Starting Material Lot#:	1782
Starting Material Purity:	99.9877%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10014 ± 30 µg/mL

Density: 1.104 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10017 ± 42 µg/mL**
ICP Assay NIST SRM 3165 Lot Number: 160906

Assay Method #2 **10013 ± 30 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000110	M	Eu	<	0.000110	O	Na		0.120000	M	Se	<	0.009400	M	Zn	0.009400
O	Al		0.120000	O	Fe		0.460000	M	Nb	<	0.001300	O	Si		0.270000	M	Zr	< 0.002900
M	As	<	0.000210	M	Ga	<	0.009300	M	Nd	<	0.000610	M	Sm	<	0.000110			
M	Au	<	0.004700	M	Gd	<	0.000110	M	Ni		0.012000	M	Sn		0.003900			
M	B		0.051000	M	Ge	<	0.000410	M	Os	<	0.000110	O	Sr		0.007100			
M	Ba		0.003600	M	Hf	<	0.000110	O	P	<	0.034000	M	Ta	<	0.000110			
O	Be	<	0.000560	M	Hg	<	0.000410	M	Pb		0.001400	M	Tb	<	0.000110			
M	Bi	<	0.000210	M	Ho	<	0.000110	M	Pd	<	0.000410	M	Te	<	0.000110			
O	Ca		0.730000	M	In	<	0.000110	M	Pr	<	0.000110	M	Th	<	0.000210			
M	Cd	<	0.000610	M	Ir	<	0.000110	M	Pt	<	0.000110	M	Ti		0.017000			
M	Ce	<	0.000610	M	K		0.052000	M	Rb	<	0.000310	M	Tl	<	0.000110			
M	Co	<	0.001300	M	La	<	0.000410	M	Re		0.001700	M	Tm	<	0.000110			
O	Cr		0.170000	M	Li	<	0.000810	M	Rh	<	0.000110	M	U	<	0.000410			
M	Cs		0.005600	M	Lu	<	0.000110	M	Ru	<	0.000110	s	V	<				
M	Cu	<	0.001300	M	Mg		0.053000	i	S	<		M	W		0.002000			
M	Dy	<	0.000110	M	Mn		0.007900	M	Sb		0.078000	M	Y	<	0.000110			
M	Er	<	0.000110	M	Mo		0.094000	M	Sc	<	0.000410	M	Yb	<	0.000110			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 50.94 +5 6 H2V10O284-

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4, HF, H3PO4 and strong basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

V Containing Samples (Preparation and Solution) -Metal (Fusion with NaOH or KOH in Ni0 or Na2CO3 / KNO3); Oxides (V2O3 - use HCl, V2O4 - use HCl or HNO3, V2O5 - use concentrated acids); Ores (Na2CO3 / KNO3 in Pt0 caution - nitrates attack Pto followed by water extraction of fuseate); Organic Matrices (Ash at 450 EC followed by dissolving according to V2O5 above) .

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 51 amu	4 ppt	N/A	34S16O1H, 35Cl16O, 38Ar13C, 36Ar15N, 36Ar14N1H, 37Cl14N,36S15N, 33S18O, 34S17O, 102Ru+2,02Pd+2
ICP-OES 290.882 nm	0.008 / 0.0008 µg/mL	1	Hf, Nb
ICP-OES 292.402 nm	0.006 / 0.001 µg/mL	1	Th
ICP-OES 309.311 nm	0.005 / 0.001 µg/mL	1	Mg, U, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

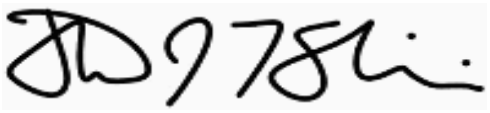
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAL10
Lot Number:	T2-AL716102
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Aluminum
Starting Material:	Aluminum Nitrate Nonahydrate
Starting Material Lot#:	2460
Starting Material Purity:	99.9938%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10049 ± 31 µg/mL

Density: 1.087 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10059 ± 40 µg/mL**
ICP Assay NIST SRM 3101a Lot Number: 140903

Assay Method #2 **10044 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10049 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002100	M	Eu	<	0.002100	O	Na		0.352819	M	Se	<	0.005200	M	Zn	0.006018
s	Al	<		O	Fe		0.074714	M	Nb	<	0.000520	O	Si		0.017848	O	Zr	0.004358
M	As		0.008716	O	Ga		0.112072	M	Nd	<	0.000520	M	Sm	<	0.000520			
M	Au	<	0.008400	M	Gd	<	0.001100	O	Ni	<	0.006000	M	Sn		0.000747			
O	B	<	0.014000	M	Ge	<	0.005200	M	Os	<	0.000650	O	Sr		0.000518			
O	Ba		0.012867	M	Hf	<	0.004100	n	P	<		M	Ta	<	0.000520			
O	Be	<	0.000270	M	Hg	<	0.002000	M	Pb		0.002282	M	Tb	<	0.000520			
M	Bi		0.001930	M	Ho	<	0.000520	M	Pd	<	0.000520	M	Te	<	0.001100			
O	Ca		0.076790	M	In	<	0.002100	M	Pr	<	0.000520	M	Th	<	0.000520			
M	Cd	<	0.000520	M	Ir	<	0.000650	M	Pt	<	0.000520	O	Ti		0.001930			
M	Ce	<	0.001100	O	K		0.043583	M	Rb	<	0.000520	M	Tl	<	0.000520			
O	Co	<	0.005400	M	La	<	0.002100	M	Re	<	0.000520	M	Tm	<	0.000520			
O	Cr		0.006018	O	Li		0.000112	M	Rh	<	0.000520	M	U	<	0.000520			
M	Cs		0.000643	M	Lu	<	0.000520	M	Ru	<	0.002000	M	V		0.001286			
O	Cu	<	0.008300	O	Mg		0.068488	i	S	<		M	W	<	0.009800			
M	Dy	<	0.002100	O	Mn		0.000913	M	Sb	<	0.003100	M	Y	<	0.001100			
M	Er	<	0.000520	M	Mo		0.005396	O	Sc	<	0.000950	M	Yb	<	0.000520			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H2O)6+3
Chemical Compatibility -Soluble in HCl, HNO3, v F and v 2SO4. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)4(H2O)21- species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); a- Al2O3 (Na2CO3 fusion in Pt0);
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 22, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

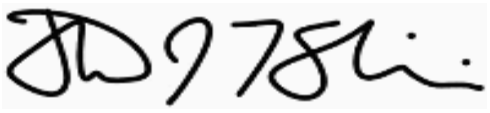
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGK10
Lot Number:	S2-K711973
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Potassium
Starting Material:	KNO3
Starting Material Lot#:	2313
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.024 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9987 ± 24 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **10004 ± 84 µg/mL**
ICP Assay NIST SRM 3141a Lot Number: 140813

Assay Method #3 **10007 ± 45 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001400	M	Eu	<	0.000660	O	Na		0.246220	M	Se	<	0.007900	O	Zn		0.018056
O	Al		0.001592	O	Fe		0.005909	M	Nb	<	0.000660	O	Si		0.011490	O	Zr	<	0.001600
M	As	<	0.005300	M	Ga	<	0.000660	M	Nd	<	0.000660	M	Sm	<	0.000660				
M	Au	<	0.002000	M	Gd	<	0.000660	O	Ni	<	0.004900	M	Sn	<	0.000660				
O	B	<	0.005600	M	Ge	<	0.002000	M	Os	<	0.003300	O	Sr		0.000055				
O	Ba	<	0.000860	M	Hf	<	0.000660	O	P	<	0.032000	M	Ta	<	0.000660				
O	Be	<	0.000082	M	Hg	<	0.002000	M	Pb	<	0.002300	M	Tb	<	0.000660				
M	Bi	<	0.006600	M	Ho	<	0.000660	M	Pd	<	0.000660	M	Te	<	0.017000				
O	Ca		0.031187	M	In	<	0.000660	M	Pr	<	0.000660	M	Th	<	0.000660				
O	Cd	<	0.000450	M	Ir	<	0.000660	M	Pt	<	0.002700	M	Ti	<	0.000660				
M	Ce	<	0.000660	s	K	<		M	Rb		0.476026	M	Tl	<	0.000660				
O	Co	<	0.000780	M	La	<	0.000660	M	Re	<	0.000660	M	Tm	<	0.000660				
O	Cr		0.000541	O	Li	<	0.000084	M	Rh	<	0.000660	M	U	<	0.000660				
M	Cs	<	0.000660	M	Lu	<	0.000660	M	Ru	<	0.000660	O	V	<	0.001100				
M	Cu	<	0.002700	O	Mg		0.006237	O	S		0.027905	M	W	<	0.000660				
M	Dy	<	0.000660	O	Mn		0.000476	M	Sb	<	0.000660	M	Y	<	0.000660				
M	Er	<	0.000660	M	Mo	<	0.000660	O	Sc	<	0.000340	O	Yb	<	0.000270				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 39.10 +1 (6) K+(aq)
Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Avoid use of HClO4 due to insolubility of the perchlorate. Stable with all metals and inorganic anions except ClO4-.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
K Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Sodium carbonate fusion in Pt0 followed by HCl dissolution-blank levels of K in sodium carbonate critical); Organic Matrices (Sulfuric/peroxide digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 39 amu	10 ppt	n/a	38ArH, 23Na16O, 78Se
ICP-OES 404.721 nm	1.1 / 0.05 µg/mL	1	U, Ce
ICP-OES 766.490 nm	0.4 / 0.001 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 771.531 nm	1.0 / 0.03 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 10, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 10, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

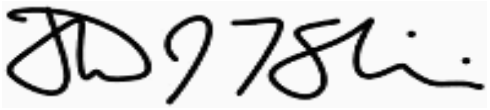
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMG10
Lot Number:	S2-MG704239
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Magnesium
Starting Material:	Magnesium Metal
Starting Material Lot#:	2168
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10053 ± 30 µg/mL

Density: 1.053 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10022 ± 62 µg/mL**
ICP Assay NIST SRM 3131a Lot Number: 140110

Assay Method #2 **10078 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10033 ± 26 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.002106	M	Eu	<	0.000910	O	Na		0.071075	O	Se	<	0.048000	O	Zn		0.003299
M	Al		0.003553	M	Fe		0.002538	M	Nb	<	0.000460	O	Si	<	0.032000	O	Zr	<	0.002700
M	As	<	0.001400	M	Ga	<	0.000460	M	Nd	<	0.000910	M	Sm	<	0.000460				
M	Au	<	0.001400	M	Gd	<	0.000460	O	Ni	<	0.001600	M	Sn	<	0.002300				
O	B		0.006853	M	Ge	<	0.001400	M	Os	<	0.000460	O	Sr		0.000279				
O	Ba		0.000964	M	Hf	<	0.000460	O	P		0.015230	M	Ta	<	0.000460				
O	Be	<	0.000120	M	Hg	<	0.000460	M	Pb	<	0.000460	M	Tb	<	0.000460				
M	Bi	<	0.000460	M	Ho	<	0.000460	M	Pd	<	0.003200	M	Te	<	0.007300				
O	Ca		0.053306	M	In	<	0.000460	M	Pr	<	0.000460	M	Th	<	0.000460				
O	Cd	<	0.000360	M	Ir	<	0.000460	M	Pt	<	0.001900	O	Ti	<	0.001700				
M	Ce	<	0.002300	M	K		0.048229	M	Rb		0.002411	M	Tl		0.003046				
M	Co	<	0.000910	M	La	<	0.002800	M	Re	<	0.000460	M	Tm	<	0.000460				
M	Cr	<	0.002300	O	Li		0.027922	M	Rh	<	0.000460	M	U	<	0.000460				
M	Cs		0.001040	M	Lu	<	0.000460	M	Ru	<	0.000460	M	V	<	0.000460				
O	Cu	<	0.003000	s	Mg	<		O	S	<	0.190000	M	W	<	0.000460				
M	Dy	<	0.000460	O	Mn		0.015230	M	Sb		0.020814	O	Y	<	0.000720				
M	Er	<	0.000460	M	Mo	<	0.000910	O	Sc	<	0.000480	M	Yb	<	0.000460				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 24.31 +2 6 $Mg(H_2O)_6^{+2}$

Chemical Compatibility -Soluble in HCl, HNO_3, and H_2SO_4 avoid HF, H_3PO_4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicates, carbonates, hydroxides, oxides, and tungstates in neutral and slightly acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO_3 / LDPE container.

Mg Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Oxide (Readily soluble in above compatible aqueous acidic solutions); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric / peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 24 amu	42 ppt	n/a	7Li17O, 48Ti+2 , 48Ca+2
ICP-OES 279.553 nm	0.0002 / 0.00003 µg/mL	1	Th
ICP-OES 280.270 nm	0.0003 / 0.00005 µg/mL	1	U, V
ICP-OES 285.213 nm	0.002 / 0.00003 µg/mL	1	U, Hf, Cr, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 23, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 23, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCA10
Lot Number:	T2-CA716103
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Calcium
Starting Material:	CaCO3
Starting Material Lot#:	2472
Starting Material Purity:	99.9950%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10005 ± 30 µg/mL

Density: 1.039 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10005 ± 45 µg/mL** ICP Assay NIST SRM 3109a Lot Number: 130213
Assay Method #2	**10005 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10005 ± 31 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001200	M	Eu	<	0.001200	O	Na		0.006112	M	Se	<	0.024000	M	Zn		0.005362
M	Al		0.065419	O	Fe		0.009115	M	Nb	<	0.001200	O	Si		0.139417	O	Zr	<	0.006700
O	As	<	0.013000	M	Ga	<	0.015000	M	Nd	<	0.020000	M	Sm	<	0.001200				
M	Au	<	0.017000	M	Gd	<	0.004800	O	Ni		0.000793	M	Sn	<	0.003600				
O	B		0.001179	M	Ge	<	0.003600	M	Os	<	0.001200	M	Sr		0.081505				
O	Ba		0.002788	M	Hf	<	0.001200	O	P	<	0.041000	M	Ta	<	0.001200				
O	Be	<	0.000410	M	Hg	<	0.004800	M	Pb		0.001608	M	Tb	<	0.001200				
M	Bi		0.001608	M	Ho	<	0.001200	M	Pd	<	0.001200	M	Te	<	0.003600				
s	Ca	<		M	In	<	0.001200	M	Pr		0.000257	M	Th	<	0.001200				
O	Cd	<	0.001300	M	Ir	<	0.001200	M	Pt	<	0.003600	O	Ti	<	0.001900				
M	Ce		0.001029	O	K		0.009759	M	Rb	<	0.001200	M	Tl	<	0.001200				
O	Co		0.000418	M	La		0.001823	M	Re	<	0.001200	M	Tm	<	0.001200				
O	Cr		0.003324	O	Li	<	0.007300	M	Rh	<	0.001200	M	U		0.002144				
M	Cs		0.007399	M	Lu		0.000128	M	Ru	<	0.001200	M	V		0.001286				
O	Cu	<	0.011000	M	Mg		1.286934	O	S		0.055767	O	W	<	0.024000				
M	Dy	<	0.002400	O	Mn		0.004611	M	Sb	<	0.009600	O	Y		0.000536				
M	Er	<	0.002400	M	Mo		0.003539	O	Sc	<	0.001400	M	Yb	<	0.001200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 40.08 +2 6 Ca(H2O)6+2
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H2SO4, vF, v3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.
Ca Containing Samples)Preparation and Solution) -Metal (best dissolved in diluted HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (dry ash and dissolution in dilute HCl. Do not heat when dissolving to avoid precipitation of SiO2). The oxide, hydroxide, carbonate, phosphate, and fluoride of calcium are soluble in % levels of HCl or HNO3. The sulfates (gypsum, anhydrite, etc.), certain silicates, and complex compounds require fusion with Na2CO3 followed by HCl / water dissolution. Note that contamination is a very real problem when analyzing for trace levels.
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 44 amu	1200 ppt	n/a	16O212C, 28Si16O, 88Sr
ICP-OES 393.366 nm	0.0002 / 0.00004 µg/mL	1	U, Ce
ICP-OES 396.847 nm	0.0005 / 0.00006 µg/mL	1	Th
ICP-OES 422.673 nm	0.01 / 0.001 µg/mL	1	Ge

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 14, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 14, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

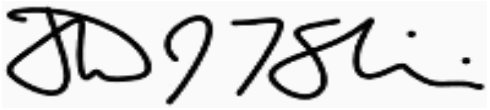
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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Christiansburg, VA 24073 USA
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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNA10
Lot Number:	T2-NA717221
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Sodium
Starting Material:	Na2CO3
Starting Material Lot#:	2358 and 2453
Starting Material Purity:	99.9977%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9977 ± 30 µg/mL

Density: 1.033 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9974 ± 18 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **9977 ± 34 µg/mL**
ICP Assay NIST SRM 3152a Lot Number: 200413

Assay Method #3 **9987 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000930	M	Eu	<	0.000930	s	Na	<		M	Se	<	0.003800	O	Zn		0.000138
M	Al		0.004409	O	Fe		0.002393	M	Nb	<	0.000930	O	Si		0.056696	O	Zr	<	0.003200
O	As	<	0.023000	M	Ga	<	0.000930	M	Nd	<	0.000930	M	Sm	<	0.000930				
O	Au	<	0.004100	M	Gd	<	0.000930	O	Ni	<	0.003000	M	Sn	<	0.002800				
O	B		0.001385	M	Ge	<	0.004700	M	Os	<	0.000930	O	Sr		0.000251				
M	Ba		0.004031	M	Hf	<	0.000930	O	P		0.010205	M	Ta	<	0.000930				
O	Be	<	0.000130	M	Hg	<	0.000930	M	Pb	<	0.000930	M	Tb	<	0.000930				
M	Bi	<	0.000930	M	Ho	<	0.000930	M	Pd	<	0.000930	M	Te	<	0.001900				
O	Ca		0.176388	M	In	<	0.000930	M	Pr	<	0.000930	M	Th		0.000352				
O	Cd	<	0.000860	M	Ir	<	0.000930	M	Pt	<	0.000930	O	Ti		0.000592				
M	Ce	<	0.001900	O	K		0.302380	M	Rb	<	0.000930	M	Tl	<	0.000930				
O	Co	<	0.001800	O	La	<	0.002100	M	Re	<	0.000930	M	Tm	<	0.000930				
M	Cr	<	0.002800	O	Li		0.000031	M	Rh	<	0.000930	M	U	<	0.000930				
M	Cs	<	0.000930	M	Lu	<	0.000930	M	Ru	<	0.001900	O	V	<	0.001600				
O	Cu	<	0.003900	O	Mg		0.026458	O	S		0.040317	O	W	<	0.028000				
M	Dy	<	0.000930	O	Mn	<	0.000740	M	Sb	<	0.000930	O	Y	<	0.000860				
M	Er	<	0.000930	O	Mo	<	0.003600	O	Sc	<	0.000610	O	Yb	<	0.000250				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 20, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 20, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

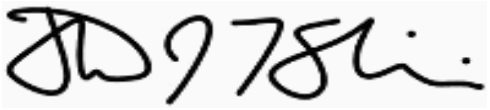
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGU1
Lot Number:	S2-U707914
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Uranium
Starting Material:	Uranyl Nitrate Hexahydrate
Starting Material Lot#:	P2-2322
Starting Material Purity:	99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 5 µg/mL

Density: 1.010 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3164 Lot Number: 080521

Assay Method #2 **1001 ± 6 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000270	M	Eu	<	0.000270	M	Na	<	0.011000	M	Se	<	0.009300	M	Zn	0.002358
M	Al	<	0.011000	M	Fe		0.003222	M	Nb	<	0.000270	M	Si	<	0.160000	M	Zr	< 0.001100
M	As	<	0.002400	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270			
M	Au	<	0.000270	M	Gd	<	0.000270	M	Ni	<	0.020000	M	Sn	<	0.011000			
M	B	<	0.000270	M	Ge	<	0.000800	M	Os	<	0.001900	M	Sr	<	0.000270			
M	Ba	<	0.003800	M	Hf	<	0.000270	i	P	<		M	Ta	<	0.000270			
M	Be	<	0.000270	M	Hg	<	0.000540	M	Pb	<	0.002200	M	Tb	<	0.000270			
M	Bi	<	0.000270	M	Ho	<	0.000270	M	Pd	<	0.000540	M	Te	<	0.003800			
M	Ca	<	0.140000	M	In	<	0.000270	M	Pr	<	0.000270	M	Th		0.000129			
M	Cd	<	0.000270	M	Ir	<	0.000270	M	Pt	<	0.000270	M	Ti	<	0.002700			
M	Ce	<	0.000540	O	K	<	0.250000	M	Rb	<	0.000800	M	Tl	<	0.000270			
M	Co	<	0.000800	M	La		0.000117	M	Re	<	0.064000	M	Tm	<	0.000270			
M	Cr		0.000943	M	Li	<	0.003000	M	Rh	<	0.000270	s	U	<				
M	Cs		0.000106	M	Lu	<	0.000270	M	Ru	<	0.000540	M	V	<	0.000540			
M	Cu	<	0.001100	M	Mg	<	0.003000	i	S	<		M	W	<	0.000540			
M	Dy	<	0.000270	M	Mn	<	0.006900	M	Sb	<	0.000270	M	Y	<	0.000270			
M	Er	<	0.000270	M	Mo	<	0.006400	M	Sc	<	0.000540	M	Yb	<	0.000270			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 238.03 +6 8 UO22+(uranyl)
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H3PO4. H2SO4 and HF matrices should not be a problem depending upon [U]. Although the UO22+ ion is distinctly basic, any U+4 will precipitate in basic media. UO22+salts are generally soluble in water and UO22+ is stable with most metals and inorganic anions. The uranyl phosphate is insoluble in water. UF4 and UF6 are water soluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
U Containing Samples (Preparation and Solution) -Metal (Dissolves rapidly in HCl and HNO3); Oxide (Soluble in HNO3); Ores (Digest for 1-2 hours with 1 gram of ore to 30 mL 1:1 HNO3. Silica insolubles are removed by filtration after bringing the sample to fumes with conc. H2SO4.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 238 amu	2 ppt	N/A	206Pb16O2
ICP-OES 263.553 nm	0.3 / 0.01 µg/mL	1	Ce, Ir, Th, Rh, W, Zr, Ta, Ti, V, Hf, Fe, Re, Ru
ICP-OES 367.007 nm	0.3 / 0.02 µg/mL	1	Th, Ce
ICP-OES 385.958 nm	0.3 / 0.01 µg/mL	1	Th, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-2
Lot Number:	T2-MEB719895
Matrix:	3% (v/v) HNO3 tr. HF
Value / Analyte(s):	2.5 µg/mL ea: Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**2.499 ± 0.015 µg/mL**	**Molybdenum, Mo**	**2.500 ± 0.017 µg/mL**

Density: 1.014 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sb	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

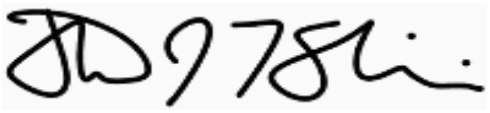
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-3
Lot Number:	T2-MEB719896
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	250 µg/mL ea:

Aluminum, Calcium,
Iron, Potassium,
Magnesium, Sodium,

4 µg/mL ea:
Selenium,

2.5 µg/mL ea:

Thorium,	Thallium,
Uranium,	Vanadium,
Zinc,	Manganese,
Cadmium,	Cobalt,
Chromium,	Copper,
Arsenic,	Barium,
Beryllium,	Nickel,
Lead,	Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	250.0 ± 0.9 µg/mL	Arsenic, As	2.500 ± 0.018 µg/mL
Barium, Ba	2.501 ± 0.013 µg/mL	Beryllium, Be	2.501 ± 0.015 µg/mL
Cadmium, Cd	2.501 ± 0.013 µg/mL	Calcium, Ca	250.0 ± 1.3 µg/mL
Chromium, Cr	2.500 ± 0.015 µg/mL	Cobalt, Co	2.500 ± 0.014 µg/mL
Copper, Cu	2.500 ± 0.014 µg/mL	Iron, Fe	250.0 ± 1.0 µg/mL
Lead, Pb	2.500 ± 0.013 µg/mL	Magnesium, Mg	250.0 ± 1.3 µg/mL
Manganese, Mn	2.500 ± 0.014 µg/mL	Nickel, Ni	2.500 ± 0.014 µg/mL
Potassium, K	250.0 ± 1.2 µg/mL	Selenium, Se	4.002 ± 0.024 µg/mL
Silver, Ag	2.501 ± 0.017 µg/mL	Sodium, Na	250.0 ± 1.2 µg/mL
Thallium, Tl	2.500 ± 0.017 µg/mL	Thorium, Th	2.499 ± 0.013 µg/mL
Uranium, U	2.501 ± 0.015 µg/mL	Vanadium, V	2.500 ± 0.014 µg/mL
Zinc, Zn	2.500 ± 0.014 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2

V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
Zn	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

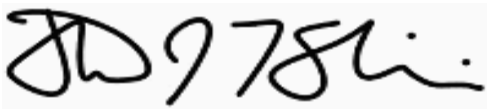
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-6020ICS-0A10
Lot Number:	T2-MEB719898
Matrix:	1.4% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Chloride,
	200 µg/mL ea: Carbon,
	100 µg/mL ea: Calcium, Aluminum, Iron, Potassium, Magnesium, Sodium, Phosphorus, Sulfur,
	2 µg/mL ea: Titanium, Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**100.0 ± 0.4 µg/mL**	**Calcium, Ca**	**100.0 ± 0.5 µg/mL**
Carbon, C	**200.1 ± 0.5 µg/mL**	**Chloride, Cl**	**1 000 ± 5 µg/mL**
Iron, Fe	**100.0 ± 0.5 µg/mL**	**Magnesium, Mg**	**100.0 ± 0.5 µg/mL**
Molybdenum, Mo	**2.001 ± 0.014 µg/mL**	**Phosphorus, P**	**100.0 ± 0.6 µg/mL**
Potassium, K	**100.0 ± 0.5 µg/mL**	**Sodium, Na**	**100.0 ± 0.5 µg/mL**
Sulfur, S	**100.0 ± 0.5 µg/mL**	**Titanium, Ti**	**2.001 ± 0.015 µg/mL**

Density: 1.009 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 07, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 07, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

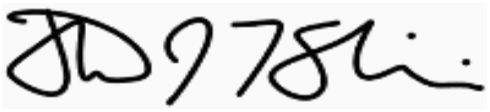
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SC1045

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-01 D	SDG:	23A0420
Sampled:	01/19/23 08:10	Prepared:	04/18/23 16:53	File ID:	XDT_m1230502-066
% Solids:	51.63	Preparation:	SWN EPA 3050B	Analyzed:	05/02/23 18:42
Batch:	BLD0396	Sequence:	SLE0043	Initial/Final:	1.067 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00013

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	11.7	20	0.07	0.36	
7440-43-9	Cadmium	0.32	20	0.05	0.18	
7440-50-8	Copper	52.2	20	0.32	0.91	B
7440-66-6	Zinc	104	20	5.3	10.9	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-IT1051

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-04 D	SDG:	23A0420
Sampled:	01/19/23 09:55	Prepared:	04/18/23 16:53	File ID:	XDT_m1230502-079
% Solids:	67.13	Preparation:	SWN EPA 3050B	Analyzed:	05/02/23 19:43
Batch:	BLD0396	Sequence:	SLE0043	Initial/Final:	1.063 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00013

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	23.1	20	0.05	0.28	

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Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SC1003

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-07 D	SDG:	23A0420
Sampled:	01/19/23 12:25	Prepared:	04/18/23 16:53	File ID:	XDT_m1230502-067
% Solids:	50.97	Preparation:	SWN EPA 3050B	Analyzed:	05/02/23 18:46
Batch:	BLD0396	Sequence:	SLE0043	Initial/Final:	1.062 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00013

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	16.0	20	0.07	0.37	
7440-43-9	Cadmium	0.42	20	0.06	0.18	
7440-50-8	Copper	75.0	20	0.65	0.92	B
7440-66-6	Zinc	131	20	5.4	11.1	

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Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SC1004

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-08 D	SDG:	23A0420
Sampled:	01/19/23 11:55	Prepared:	04/18/23 16:53	File ID:	XDT_m1230502-068
% Solids:	57.39	Preparation:	SWN EPA 3050B	Analyzed:	05/02/23 18:50
Batch:	BLD0396	Sequence:	SLE0043	Initial/Final:	1.04 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00013

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	9.76	20	0.06	0.34	
7440-43-9	Cadmium	0.29	20	0.05	0.17	
7440-50-8	Copper	54.6	20	0.29	0.84	B
7440-66-6	Zinc	101	20	4.9	10.1	

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Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SC1082

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-09 D	SDG:	23A0420
Sampled:	01/19/23 13:40	Prepared:	04/18/23 16:53	File ID:	XDT_m1230502-069
% Solids:	56.61	Preparation:	SWN EPA 3050B	Analyzed:	05/02/23 18:55
Batch:	BLD0396	Sequence:	SLE0043	Initial/Final:	1.08 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00013

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	10.2	20	0.06	0.33	
7440-43-9	Cadmium	0.46	20	0.05	0.16	
7440-50-8	Copper	42.9	20	0.28	0.82	B
7440-66-6	Zinc	92.0	20	4.8	9.8	

PREPARATION BATCH SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC SDG: 23A0420

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

Batch: BLD0396 Batch Matrix: Solid Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1045	23A0420-01	XDT_m1230502-066	04/18/23 16:53	
LDW23-IT1051	23A0420-04	XDT_m1230502-079	04/18/23 16:53	
LDW23-SC1003	23A0420-07	XDT_m1230502-067	04/18/23 16:53	
LDW23-SC1004	23A0420-08	XDT_m1230502-068	04/18/23 16:53	
LDW23-SC1082	23A0420-09	XDT_m1230502-069	04/18/23 16:53	
Blank	BLD0396-BLK1	XDT_m1230501-150	04/14/23 16:53	
LCS	BLD0396-BS1	XDT_m1230501-151	04/14/23 16:53	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: MP Date: 4/18/23 Time: 1220-1815 Balance ID: BALIO

Matrix: Soil Block ID: 3 Block Temp: 96C Thermometer: 20-2

ARI Sample ID	Btl #	pH<2	Prep Code: SWN Initial Wt (g) Vol (mL)	Prep Code: SWN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
234417-01	D		1.016	50			
-02			1.038				
-03			1.042				
-04			1.075				
-05			1.053				
-06			1.046				
-07			1.028				
-08			1.086				
-09			1.038				
-10			1.033				
-11			1.021				
-12			1.012				
-13			1.052				
-14			1.062				
-15			1.039				
234420-01			1.067				
-04			1.063				
-07			1.062				
-08			1.040				
-09			1.080				
PBD396-blk	—		—				234417-01
-bs	—		—				
-dup	—		1.018				
-MS	—		1.017				
-MSD	—		1.014				
—	—	—	—	—	—	—	—

Chemical/Reagent ID:

HNO_3: L24678 1:1 HNO_3: L33605 HCl: — H_2O_2: K110516

Tube Lot#: 2210117 Boiling Chip Lot#: — (DoD Only)

Form I

METHOD BLANK DATA SHEET

EPA 6020B UCT-KED

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0420

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

Batch: BLD0396 | Laboratory ID: BLD0396-BLK1 | Prepared: 04/14/23 16:53

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 05/02/23 03:21

Sequence: SLE0017 | Calibration: GE00007 | Instrument: ICPMS1

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic-75a	ND	20	0.04	0.20	U
7440-43-9	Cadmium-111	ND	20	0.03	0.10	U
7440-50-8	Copper-63	0.29	20	0.17	0.50	J
7440-50-8	Copper-65	ND	20	0.35	0.50	U
7440-66-6	Zinc-66	ND	20	2.9	6.0	U

LCS / LCS DUPLICATE RECOVERY

EPA 6020B UCT-KED

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	05/02/23 03:26
Batch:	BLD0396	Laboratory ID:	BLD0396-BS1
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Arsenic-75a	25.0	24.8		99.3	80 - 120
Cadmium-111	25.0	25.8		103	80 - 120
Copper-63	25.0	28.3	B	113	80 - 120
Copper-65	25.0	28.2	B	113	80 - 120
Zinc-66	80.0	83.9		105	80 - 120

* Indicates values outside of QC limits

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00007	Instrument:	ICPMS1
Calibration Date:	05/01/2023 15:09		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Silver-107	0	0	0.2	22930	10	22474.8	20	22084.9	50	21252.08	100	20882.41
Chromium-52	0	0	0.5	73122	10	31470.5	20	29751.2	50	28230.68	100	27662.22
Chromium-53	0	0	0.5	3658	10	3423.5	20	3351.35	50	3271.16	100	3198.51
Lead-208	0	0	0.1	104790	10	99159.8	20	96064.45	50	96430.36	100	91786.07

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC
Instrument: ICPMS1
Calibration: GE00007
Calibration Date: 5/1/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Silver-107	18270.7	49.2	0.9998		0.998	
Chromium-52	31706.1	74.0	0.9999		0.998	
Chromium-53	2817.087	49.3	0.9998		0.998	
Lead-208	81371.78	49.3	0.9994		0.998	

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00007
Instrument: ICPMS1
Calibration Date: 05/01/2023 15:09

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Arsenic-75a	0	0	0.2	340	10	356.2	20	355.05	50	346.54	100	343.07
Cadmium-111	0	0	0.1	440	10	378.4	20	359.6	50	358.48	100	351.15
Cadmium-114	0	0	0.1	910	10	934.1	20	942.15	50	922.18	100	908.4
Copper-63	0	0	0.5	11154	10	5224.2	20	5190.7	50	4946.72	100	4794.8
Copper-65	0	0	0.5	5866	10	2686.1	20	2671.85	50	2563.78	100	2459.64
Zinc-66	0	0	6	666.6667	10	705.1	20	684.2	50	669.04	100	639.07
Zinc-67	0	0	6	104.6667	10	118.4	20	118.15	50	110.9	100	108.75

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Instrument: ICPMS1
Calibration: GE00007
Calibration Date: 5/1/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Arsenic-75a	290.1433	49.0	0.9999		0.998	
Cadmium-111	314.605	50.1	0.9999		0.998	
Cadmium-114	769.4717	49.0	0.9999		0.998	
Copper-63	5218.403	67.9	0.9997		0.998	
Copper-65	2707.895	68.9	0.9995		0.998	
Zinc-66	560.6794	49.1	0.9994		0.998	
Zinc-67	93.47778	49.3	0.9996		0.998	

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/1/23 **Analyst:** MS **Sequence:** SLEØØ17 **Cal:** GEØØØØ7

All corrections made by analyst unless otherwise noted. MS 5/1/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
	✓	SEQ-CAL1			
		-CAL2			
		-CAL3			
		-CAL4			
		-CAL5			
		-CAL6			Ge noisy
	↓	-IBL1			
		SEQ-~~1~~ CAL1	L484Ø		
		-CAL2	L4627		Ge sl. noisy-%R & Analytes OK
		-CAL3	L4628		
		-CAL4	L4629		
		-CAL5	L4779		
		-CAL6	L463Ø		
		-IBL1	—		
		-ICV1	L3575		
		-ICB1	L484Ø		
		-CCV1	L4779		
		-CCB1	L484Ø		
	✓	-CRL1	—		Cr↑
	✓	-CRL1	—		↓
		-CRL1	L4627		Re-poured
		-IFA1	L4688		V^{-1}, Cr^{53}↑
		-IFB1	L4689		V^{-1}↑
		-MCV1	L478Ø		

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/1/23 **Analyst:** MS **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-HCV2	L4781		
		-IBL2	—		
		-CCV2			
		-CCB2			
		BLEΦΦ18-BLK1	REN		Li, Sc, In, Tb sl. noisy - XRd Analytes OK
		-BS1			
		BLDΦ785-BLK2			Cr only
		-BS2			
		23DΦ633-Φ1		10	
		23DΦ637-Φ1		↓	
		23DΦ508-Φ1		2	
		23CΦ678-Φ9			Tl only
		-Φ8			
		SEQ-IBL3			
		-CCV3			
		-CCB3			
		BLDΦ296-BLK2	REN		Cr, V only
		-BS2			
		BLDΦ439-BLK2			Cr only
		-BS2			
		23CΦ732-Φ1			Tl only
		23CΦ69Φ-Φ1		20	Ag, Be, Cr, Mn*, Pb, Tl only
		BLDΦ292-Dup2			
		-MS2			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/1/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted. MB 5/1/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLΦ292-MSD2	REN	20	Ag, Be, Cr, Pb, Tl only
		SEQ-IBL4			
		↓ -CCV4			
		↓ -CCB4			
		23CΦ584-Φ2	REN	2	Ag, Be, Fe, V only
		BLΦ181-DUP3	↓	↓	↓
		↓ -MS3			
		230Φ67Φ-Φ1			
		230Φ612-Φ1			
		230Φ599-Φ1		↓	Li↑ - Not Needed
		230Φ611-Φ1			
		230Φ525-1Φ		2	Li↑ - Not Needed Cr only
		↓ -11	↓	↓	↓ ↓ Cr, Cu only
		SEQ-IBL5			
		↓ -CCV5			
		↓ -CCB5			
	✓	↓ -CAL1			Be, Ni, Tl, V Removed
	✓	↓ -CCV6			Std Made noisy
		~~-CCB6~~ CCV6			
		↓ -CCB6			
		230Φ137-Φ2	REN		Cr only
		230Φ525-Φ9	↓		↓
		↓ -12	↓		↓
		SEQ-IBL6			

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/1/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		230Φ525-Φ8	REN	5	Cr only
		↓ -Φ7	↓	↓	↓
		BLDΦ785-DUP2	↓	↓	↓
		↓ -MS2	↓	↓	↓
		↓ -MSD2	↓	↓	↓
		SEQ-IBL7			
		↓ -CCV7			
		↓ -CCB7			
		230ΦΦΦ2-Φ1	REN		Fe, Mn only
		↓ -Φ2	↓		↓
		↓ -Φ5	↓		↓
		↓ -Φ6	↓		↓
		↓ -Φ3	↓	2	↓
		↓ -Φ4	↓	↓	Sc, Si noisy - % Rec analytes OK ↓
		23CΦ584-Φ1	↓	↓	Ag, Fe only
		BLDΦ18Φ-DUP3	↓	↓	↓
		↓ -MS3	↓	↓	↓
		SEQ-IBL8			
		↓ -CCV8			
		↓ -CCB8			
		23CΦ672-13	REN		Fe, Pb only
		↓ -14	↓		↓
678→672		↓ -Φ2	↓		↓
		↓ -Φ1	↓		

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/1/23 **Analyst:** MS **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23C0672-03	REN		
		-04			
		-05			
		-06			
		-07			
		SEQ-IBL9			
		-CCV9			
		-CCB9			
		23C0672-08	REN		
		-09			
		-10			
		-11			Sc? No Fe
		-12			
		-15			Sc? No Fe
		-16			↓ ↓
		2300370-01			Co only
		-03		5	↓
		SEQ-IBLA			
		-CCVA			
		-CCBA			
	✓	-CAL1			
		-CCVB			
		-CCBB			
		23C0584-04	REN	20	Mn only

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/1/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted. MB 5/1/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23C0584-03	REN	20	Fe, Mn only
		-13		↓	
		-05			Sc, Sr, Mn Sl. noisy - OK
		-07			
		-09			
		-11			↓
		23D0215-01		2	Cu, Pb only
		23D0248-01	↓	100	As only
		SEQ-IBLB			
		-CCVC			
		-CCBC			
		23C0584-14	REN		Fe only
		-15			↓
		-16			
		-17			
		-18			
		-19			
		-20			↓
		23D0211-01			Pb only
		-02	↓		↓
		SEQ-IBLC			
		-CCVD			
		-CCBD			
		BLD0396-BLK1	SWN	20	Cu, Pb ½RL (0.291 / 0.279)

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/1/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted. MB 5/1/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLDΦ396-BS1	SLWN	20	
		230ΦΦ62-Φ2	REN		Cr only
		-Φ4	↓		↓
		-Φ6	↓		↓
		-Φ8	↓		↓
		BLDΦ439-DUP2	↓		↓
		-MS2	↓		↓
		-MSD2	↓		Sc groups 1, noisy - % Rs values OK
		SEQ-IBLD			
		-CCVE			
		-CCBE			
		BLDΦ452-BLK1	SLWN	20	Cu ~ ½RL (0.302 0.300)
		-BS1	↓	↓	
		23CΦ658-Φ1	REN	↓	Fe only
		-Φ5	↓	↓	↓
		23CΦ69Φ-Φ7	↓	↓	↓
		SEQ-IBLE			
		23DΦ137-Φ1	REN	2	Cr only
		BLDΦ592-DUP4	↓	↓	↓
		-MS4	↓	↓	↓
		SEQ-IBLF			
		-CCVF			
		-CCBF			
	✓	-CAL1			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/1/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCVG			
		↓ -CCBG			
		BLQ0504-BLK1	SWN	20	Cu > ½RL (0.287 / 0.280)
		↓ -BS1	↓	↓	
		23C0715-03	REN		Fe only
		↓ -05	↓		↓
		↓ -07	↓	↓	
		SEQ-IBLG			
		2300135-02	REN		Pb only
		BLQ0509-DUP3	↓		↓
		↓ -MS3	↓		Sc↑ - Not Needed
		SEQ-IBLH			
		↓ -CCVH			
		↓ -CCBH			
		2300202-01	REN		Pb only
		BLQ0659-DUP2	↓		↓
		↓ -MS2	↓		↓
		SEQ-IBLI			
		23A0417-01	SWN	20	Cu >10x BLK conc.
		BLQ0396-DUP1	↓	↓	Cu, Pb RPD↑
		↓ -MS1	↓	↓	
		↓ -MSD1	↓	↓	
		↓ -PS1	↓	↓	Cu in K7409
		SEQ-IBLJ			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/1/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted. MB 5/1/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCVI			
		↓ -CCBI			
		23DΦ262-Φ1	REN		Fe, Mn, Pb only
		BLDΦ717-DUP3	↓		↓
		↓ -MS3	↓		Mn STL ↓
		SEQ-IBLK			
		23AΦ419-Φ1	SWN	20	Cu>10x BLK conc. Nb Zn
		BLDΦ452-DUP1	↓	↓	Cr, Cu RPD↑ ↓
		↓ -MS1	↓	↓	Zn↑/Cu, Pb %R↑ ↓
		↓ -MSD1	↓	↓	↓ /As, Pb %R↑ /Cu RPD↑ ↓
		↓ -PS1	↓	↓	60 mL K7409 ↓
		SEQ-IBLL			
		↓ -CCVJ			
		↓ -CCBJ			
		23DΦ375-Φ2	REN		
		BLEΦΦ18-DUP1	↓		
		↓ -MS1	↓		
		SEQ-IBLM			
		23AΦ455-Φ1	SWN	20	Cu>10x BLK conc.
		BLΦΦ5Φ4-DUP1	↓	↓	Cr RPD↑
		↓ -MS1	↓	↓	
		↓ -MSD1	↓	↓	~~Ag %R↑~~ Ag RPD↑
		↓ -PS1	↓	↓	60 mL K7409 / Sc↑ - Not Needed
		SEQ-IBLN			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/1/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample iD	Prep Code	Dilution	Comments
		SEQ-CCVK			
		↓ -CCBK			
		23CΦ736-Φ4	REN		Mn only
		-Φ6	↓		↓
		-Φ8			
		-1Φ			Sc sl. noisy - %R ✓ Analytes OK
		-12			
		↓ -Φ2			
		BLDΦ381-DUP1			
		↓ -MS1			Mn %R ↓ (73%)
		↓ -MSD1	↓		↓
		SEQ-IBL0			
		↓ -CCVL			PBT - Not Needed
		↓ -CCBL			
		Rinse/DI			

MB 5/1/23

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Monday, May 01, 2023 13:02:05
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.079
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	7795.9	7795.861	173.397	2.2	Standard
	In	114.9	81566.8	81566.756	959.485	1.2	Standard
	U	238.1	87583.6	87583.631	1928.908	2.2	Standard
⌈	CeO	155.9	2559.8	0.022	0.000	1.7	Standard
| >	Ce	139.9	114075.6	114075.618	1891.885	1.7	Standard
⌊	Ce++	70.0	1021.0	0.009	0.000	1.3	Standard
	Bkgd	220.0	0.9	0.933	0.608	65.1	Standard

Current Conditions File Data

Current Value	Description
0.92	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.92	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Monday, May 01, 2023 13:12:35
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.086
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	9584.9	9584.948	90.617	0.9	Standard
	In	114.9	106555.9	106555.943	932.423	0.9	Standard
	U	238.1	120593.6	120593.644	2060.674	1.7	Standard
⌈	CeO	155.9	3353.4	0.023	0.000	1.6	Standard
| >	Ce	139.9	143770.1	143770.113	1813.946	1.3	Standard
⌊	Ce++	70.0	1521.5	0.011	0.000	1.7	Standard
	Bkgd	220.0	1.0	1.033	0.217	21.0	Standard

Current Conditions File Data

Current Value	Description
0.92	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.92	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Start Time: 5/1/2023 1:01:17 PM
End Time: 5/1/2023 1:14:39 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 7795.86
Obtained Intensity (In 115): 81566.76
Obtained Intensity (U 238): 87583.63
Obtained Intensity (Bkgd 220): 0.93
Obtained Formula (Ce++ 70 / Ce 140): 0.009 (=1021.04 / 114075.62)
Obtained Formula (CeO 156 / Ce 140): 0.022 (=2559.76 / 114075.62)
Obtained RSD (Be 9): 0.0222
Obtained RSD (In 115): 0.0118
Obtained RSD (U 238): 0.0220

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.77 mm	1.01 mm	111755.42

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 0.92
Obtained Intensity (In 115): 114617.97
Obtained Formula (CeO 156 / Ce 140): 0.0225 (=3297.38 / 146433.67)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.707)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.693)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.699)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.700)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.993; Intercept = -14.96

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.997; Intercept = -14.31

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 9584.95
Obtained Intensity (In 115): 106555.94
Obtained Intensity (U 238): 120593.64
Obtained Intensity (Bkgd 220): 1.03
Obtained Formula (Ce++ 70 / Ce 140): 0.011 (=1521.55 / 143770.11)
Obtained Formula (CeO 156 / Ce 140): 0.023 (=3353.39 / 143770.11)
Obtained RSD (Be 9): 0.0095
Obtained RSD (In 115): 0.0088
Obtained RSD (U 238): 0.0171

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Optimization Status

Start Time: 5/1/2023 1:01:17 PM

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 5
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 7795.86
		Obtained Intensity (In 115): 81566.76
		Obtained Intensity (U 238): 87583.63
		Obtained Intensity (Bkgd 220): 0.93
		Obtained Formula (Ce++ 70 / Ce 140): 0.009 (=1021.04 / 114075.62)
		Obtained Formula (CeO 156 / Ce 140): 0.022 (=2559.76 / 114075.62)
		Obtained RSD (Be 9): 0.0222
		Obtained RSD (In 115): 0.0118
		Obtained RSD (U 238): 0.0220

[Passed] Optimum value(s): N/A

Torch Alignment
	Optimization Settings:
		Method: Torch Alignment.mth.
		Intensity Criterion: In 115 Maximum

	Optimization Results:
		Vertical	Horizontal	Intensity
[Passed]	0.77 mm	1.01 mm	111755.42

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 0.89/0.96/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 114617.97
		Obtained Formula (CeO 156 / Ce 140): 0.0225 (=3297.38 / 146433.67)
[Passed] Optimum value(s): 0.92

Mass Calibration and Resolution
	Optimization Settings:
		Method: Tuning.mth.
		MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
		Iterations: 6
		Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
		Peak height (%) for Res. Opt.: 10

	Optimization Results:
	Initial Try
		Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.721)
		Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.716)
		Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.708)
		Target/Obtained mass (238.05/237.975), Target/Obtained resolution (0.7/0.686) - <Target not achieved>
		[Failed]
	Retry 1
		Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.707)
		Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.693)
		Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.699)
		Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.700)
[Passed] Optimum value(s): N/A

QID STD/DRC
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 0.993; Intercept = -14.96

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-15	50794.1
Mg	24	41	-15	60094.1
In	115	41	-11.5	110647
Ce	140	41	-11.5	151293
Pb	208	41	-11.5	72873.4
U	238	41	-11.5	124641

KED Mode QID
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 0.997; Intercept = -14.31

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-14.5	32104
Mg	24	41	-14.5	68861.6
In	115	41	-12	153609
Ce	140	41	-11	147780
Pb	208	41	-10.5	68114
U	238	41	-10.5	141307

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 5
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 9584.95
		Obtained Intensity (In 115): 106555.94
		Obtained Intensity (U 238): 120593.64
		Obtained Intensity (Bkgd 220): 1.03
		Obtained Formula (Ce++ 70 / Ce 140): 0.011 (=1521.55 / 143770.11)
		Obtained Formula (CeO 156 / Ce 140): 0.023 (=3353.39 / 143770.11)
		Obtained RSD (Be 9): 0.0095
		Obtained RSD (In 115): 0.0088
		Obtained RSD (U 238): 0.0171

[Passed] Optimum value(s): N/A

End Time: 5/1/2023 1:14:39 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDual.swz

Start Time: 5/1/2023 1:18:08 PM
End Time: 5/1/2023 1:31:37 PM

Detector Voltages - [Passed]
	Pulse Stage Voltage - [Passed] Optimum value(s): 1000
	Analog Stage Voltage - [Passed] Optimum value(s): -1600
	Pulse Stage Voltage (Fine-tune) - [Passed] Optimum value(s): 1000

Dual Detector Calibration
	Points Collected: 401
	Calibration unsuccessful for some masses due to insufficient pulse/analog crossover points

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDual.swz

Optimization Status

Start Time: 5/1/2023 1:18:08 PM

Detector Voltages
	Pulse Stage Voltage Optimization Settings:
		Method: Pulse Stage Optimization.mth.
			Initial Try - Start/End/Step: 800/1300/50.
			Retry 1 - Start/End/Step: 800/1800/50.
		Optimization Criterion (Pulse 76): 0.1

	Analog Stage Voltage Optimization Settings:
		Method: Analog Stage Optimization.mth.
		Initial Try - Start/End: -1300/-1900.
		Retry 1 - Start/End: -1300/-2400.
		Optimization Criterion (Analog 80): Target Gain 10000

	Pulse Stage Voltage Results:
	Initial Try

		Intensity Obtained For Criterion (Pulse 76): 67772.38
[Passed] Optimum value(s): 1000
	Analog Stage Voltage Results:
	Initial Try
		Interim Gain Values: 10892.7 (-1600V)
		Analyte: Analog 80
		ACEM(volts): -1600
		Achieved Gain: 10892.7
		Achieved NMax: 1.14936e+009
		Conversion Factor: 0.111366
		Passes: 1
		Points Collected: 31
		Points Used: 3
		Coefficient: 0.999999
[Passed] Optimum value(s): -1600
	Pulse Stage Voltage (Fine-tune) Results:
	Initial Try

		Intensity Obtained For Criterion (Pulse 76): 68657.59
[Passed] Optimum value(s): 1000

Dual Detector Calibration
	Optimization Settings:
		Method: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\DualDetectorNew.mth.
			Initial Try - Start/End/Step: -20/0/0.05.

	Optimization Results:
	Initial Try
	Points Collected: 401
	Calibration unsuccessful for some masses due to insufficient pulse/analog crossover points

End Time: 5/1/2023 1:31:37 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDual.swz

Start Time: 5/1/2023 1:32:04 PM
End Time: 5/1/2023 1:39:33 PM

Dual Detector Calibration
Points Collected: 401
Calibration unsuccessful for some masses due to insufficient pulse/analog crossover points

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDual.swz

Optimization Status

Start Time: 5/1/2023 1:32:04 PM

Dual Detector Calibration
Optimization Settings:
Method: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\DualDetectorNew.mth.
Initial Try - Start/End/Step: -20/0/0.05.

Optimization Results:
Initial Try
Points Collected: 401
Calibration unsuccessful for some masses due to insufficient pulse/analog crossover points

End Time: 5/1/2023 1:39:33 PM

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Monday, May 01, 2023 13:50:19
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.094
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	9499.6	9499.558	180.707	1.9	Standard
	In	114.9	110213.3	110213.319	548.496	0.5	Standard
	U	238.1	125298.7	125298.667	1231.967	1.0	Standard
⌈	CeO	155.9	3418.2	0.024	0.001	3.0	Standard
| >	Ce	139.9	145023.3	145023.302	1229.787	0.8	Standard
⌊	Ce++	70.0	1569.0	0.011	0.000	3.2	Standard
	Bkgd	220.0	1.5	1.500	0.993	66.2	Standard

Current Conditions File Data

Current Value	Description
0.92	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.92	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDual.swz

Start Time: 5/1/2023 1:50:18 PM
End Time: 5/1/2023 1:52:23 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 9499.56
Obtained Intensity (In 115): 110213.32
Obtained Intensity (U 238): 125298.67
Obtained Intensity (Bkgd 220): 1.50
Obtained Formula (Ce++ 70 / Ce 140): 0.011 (=1569.02 / 145023.30)
Obtained Formula (CeO 156 / Ce 140): 0.024 (=3418.21 / 145023.30)
Obtained RSD (Be 9): 0.0190
Obtained RSD (In 115): 0.0050
Obtained RSD (U 238): 0.0098

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDual.swz

Optimization Status

Start Time: 5/1/2023 1:50:18 PM

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000
Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 10
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: CeO 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 9499.56
Obtained Intensity (In 115): 110213.32
Obtained Intensity (U 238): 125298.67
Obtained Intensity (Bkgd 220): 1.50
Obtained Formula (Ce++ 70 / Ce 140): 0.011 (=1569.02 / 145023.30)
Obtained Formula (CeO 156 / Ce 140): 0.024 (=3418.21 / 145023.30)
Obtained RSD (Be 9): 0.0190
Obtained RSD (In 115): 0.0050
Obtained RSD (U 238): 0.0098

[Passed] Optimum value(s): N/A

End Time: 5/1/2023 1:52:23 PM

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 14:29:47

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	**6**		ug/L				982998	1	Standard
Be	**9**		ug/L				1	86	Standard
C	**13**		ug/L				45123	0	Standard
Sc	**45**		ug/L				841869	1	Standard
V	**51**		ug/L				7647	1	Standard
V-1	**51**		ug/L				414	3	Standard
Cr	**52**		ug/L				22572	0	Standard
Cr	**53**		ug/L				237	5	Standard
Fe	**54**		ug/L				90566	0	Standard
Fe	**57**		ug/L				21936	2	Standard
Mn	**55**		ug/L				948	3	Standard
Ge	**72**		ug/L				47034	6	KED
Ni	**60**		ug/L				81	6	KED
Ni	**62**		ug/L				17	22	KED
Cu	**63**		ug/L				158	9	KED
Cu	**65**		ug/L				86	11	KED
Zn	**66**		ug/L				119	9	KED
Zn	**67**		ug/L				26	35	KED
As	**75**		ug/L				5	25	KED
Y	**89**		ug/L				433311	4	Standard
Kr	**83**		ug/L				71	8	Standard
In-1	**115**		ug/L				11971	1	KED
Cd	**111**		ug/L				3	17	KED
Cd	**114**		ug/L				4	67	KED
In	**115**		ug/L				681993	1	Standard
Ag	**107**		ug/L				191	10	Standard
Tb	**159**		ug/L				1558961	1	Standard
Tl	**205**		ug/L				645	4	Standard
Pb	**208**		ug/L				898	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Monday, May 01, 2023 14:34:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			982998	991188	2	Standard
⌊	**Be**	**9**	**0.200**	ug/L	0.002	0	1	1562	2	Standard
	C	**13**		ug/L			45123	47781	0	Standard
⌈>	**Sc**	**45**		ug/L			841869	868664	1	Standard
⌈	**V**	**51**	**0.200**	ug/L	0.013	6	7647	14191	1	Standard
⌊	**V-1**	**51**	**0.200**	ug/L	0.005	2	414	7137	1	Standard
⌈	**Cr**	**52**	**0.500**	ug/L	0.029	5	22572	36731	0	Standard
⌊	**Cr**	**53**	**0.500**	ug/L	0.001	0	237	1895	2	Standard
⌈	**Fe**	**54**	**36.000**	ug/L	0.557	1	90566	197001	1	Standard
⌊	**Fe**	**57**	**36.000**	ug/L	0.429	1	21936	63285	1	Standard
⌊	**Mn**	**55**	**0.500**	ug/L	0.004	0	948	22531	2	Standard
⌈>	**Ge**	**72**		ug/L			47034	48547	0	KED
⌈	**Ni**	**60**	**0.500**	ug/L	0.017	3	81	873	2	KED
⌊	**Ni**	**62**	**0.500**	ug/L	0.061	12	17	154	10	KED
⌈	**Cu**	**63**	**0.500**	ug/L	0.007	1	158	5998	1	KED
⌊	**Cu**	**65**	**0.500**	ug/L	0.018	3	86	3140	2	KED
⌈	**Zn**	**66**	**6.000**	ug/L	0.142	2	119	4147	2	KED
⌊	**Zn**	**67**	**6.000**	ug/L	0.501	8	26	648	8	KED
⌊	**As**	**75**	**0.200**	ug/L	0.018	8	5	79	7	KED
	Y	**89**		ug/L			433311	437462	1	Standard
	Kr	**83**		ug/L			71	71	7	Standard
⌈>	**In-1**	**115**		ug/L			11971	10980	2	KED
⌈	**Cd**	**111**	**0.100**	ug/L	0.017	16	3	45	17	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.010	10	4	98	10	KED
⌈>	**In**	**115**		ug/L			681993	695592	1	Standard
⌊	**Ag**	**107**	**0.200**	ug/L	0.009	4	191	4857	2	Standard
⌈>	**Tb**	**159**		ug/L			1558961	1580101	1	Standard
⌈	**Tl**	**205**	**0.200**	ug/L	0.002	1	645	15809	0	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.001	0	898	10964	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 14:39:16

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			982998	996701	3	Standard
	Be	**9**	**10.000**	ug/L	0.545	5	1	76857	2	Standard
	C	**13**		ug/L			45123	61143	1	Standard
>	**Sc**	**45**		ug/L			841869	876730	1	Standard
	V	**51**	**10.000**	ug/L	0.331	3	7647	352771	1	Standard
	V-1	**51**	**10.000**	ug/L	0.332	3	414	348064	2	Standard
	Cr	**52**	**10.002**	ug/L	0.193	1	22572	315892	1	Standard
	Cr	**53**	**10.000**	ug/L	0.117	1	237	34190	0	Standard
	Fe	**54**	**999.996**	ug/L	11.410	1	90566	2989647	0	Standard
	Fe	**57**	**1000.027**	ug/L	8.595	0	21936	1186541	1	Standard
	Mn	**55**	**10.001**	ug/L	0.041	0	948	449202	1	Standard
>	**Ge**	**72**		ug/L			47034	49060	1	KED
	Ni	**60**	**10.003**	ug/L	0.077	0	81	18575	1	KED
	Ni	**62**	**10.002**	ug/L	0.506	5	17	2960	3	KED
	Cu	**63**	**9.970**	ug/L	0.228	2	158	54029	1	KED
	Cu	**65**	**9.968**	ug/L	0.111	1	86	26981	1	KED
	Zn	**66**	**10.108**	ug/L	0.285	2	119	7185	2	KED
	Zn	**67**	**10.184**	ug/L	0.514	5	26	1150	3	KED
	As	**75**	**10.000**	ug/L	0.089	0	5	3592	0	KED
	Y	**89**		ug/L			433311	448405	1	Standard
	Kr	**83**		ug/L			71	82	11	Standard
>	**In-1**	**115**		ug/L			11971	11383	2	KED
	Cd	**111**	**10.000**	ug/L	0.282	2	3	3763	1	KED
	Cd	**114**	**10.000**	ug/L	0.223	2	4	9664	2	KED
>	**In**	**115**		ug/L			681993	716546	0	Standard
	Ag	**107**	**10.000**	ug/L	0.256	2	191	240052	2	Standard
>	**Tb**	**159**		ug/L			1558961	1601181	1	Standard
	Tl	**205**	**10.000**	ug/L	0.125	1	645	784082	2	Standard
	Pb	**208**	**10.000**	ug/L	0.095	0	898	1026001	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 14:44:14

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			982998	1001374	3	Standard
	Be	**9**	**19.836**	ug/L	0.326	1	1	148439	1	Standard
	C	**13**		ug/L			45123	60594	0	Standard
>	**Sc**	**45**		ug/L			841869	873091	0	Standard
	V	**51**	**19.930**	ug/L	0.245	1	7647	683129	1	Standard
	V-1	**51**	**19.900**	ug/L	0.221	1	414	675976	1	Standard
	Cr	**52**	**19.980**	ug/L	0.428	2	22572	602908	2	Standard
	Cr	**53**	**19.878**	ug/L	0.291	1	237	65841	1	Standard
	Fe	**54**	**1993.236**	ug/L	28.236	1	90566	5764878	1	Standard
	Fe	**57**	**1998.853**	ug/L	10.707	0	21936	2333786	1	Standard
	Mn	**55**	**19.904**	ug/L	0.299	1	948	872670	1	Standard
>	**Ge**	**72**		ug/L			47034	49134	0	KED
	Ni	**60**	**19.807**	ug/L	0.134	0	81	35391	1	KED
	Ni	**62**	**19.959**	ug/L	0.133	0	17	5854	1	KED
	Cu	**63**	**19.823**	ug/L	0.146	0	158	103771	1	KED
	Cu	**65**	**19.925**	ug/L	0.360	1	86	53122	1	KED
	Zn	**66**	**19.881**	ug/L	0.537	2	119	13796	3	KED
	Zn	**67**	**20.086**	ug/L	0.909	4	26	2275	5	KED
	As	**75**	**19.868**	ug/L	0.120	0	5	6960	1	KED
	Y	**89**		ug/L			433311	451418	1	Standard
	Kr	**83**		ug/L			71	76	11	Standard
>	**In-1**	**115**		ug/L			11971	11437	0	KED
	Cd	**111**	**19.916**	ug/L	0.397	1	3	7405	1	KED
	Cd	**114**	**19.841**	ug/L	0.228	1	4	18671	1	KED
>	**In**	**115**		ug/L			681993	694259	3	Standard
	Ag	**107**	**19.934**	ug/L	0.643	3	191	457125	1	Standard
>	**Tb**	**159**		ug/L			1558961	1608023	0	Standard
	Tl	**205**	**19.910**	ug/L	0.221	1	645	1539440	1	Standard
	Pb	**208**	**19.860**	ug/L	0.155	0	898	1989968	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Monday, May 01, 2023 14:49:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			982998	986813	2	Standard
⌊	**Be**	**9**	**50.088**	ug/L	1.152	2	1	372641	0	Standard
	C	**13**		ug/L			45123	43988	1	Standard
⌈>	**Sc**	**45**		ug/L			841869	861629	0	Standard
⌈	**V**	**51**	**50.114**	ug/L	0.338	0	7647	1702442	0	Standard
⌊	**V-1**	**51**	**50.145**	ug/L	0.506	1	414	1704989	1	Standard
⌈	**Cr**	**52**	**49.943**	ug/L	0.473	0	22572	1444364	0	Standard
⌊	**Cr**	**53**	**50.048**	ug/L	0.793	1	237	164027	1	Standard
⌈	**Fe**	**54**	**4996.901**	ug/L	64.360	1	90566	14080027	1	Standard
⌊	**Fe**	**57**	**4992.886**	ug/L	67.804	1	21936	5679094	1	Standard
⌊	**Mn**	**55**	**49.990**	ug/L	1.217	2	948	2159441	2	Standard
⌈>	**Ge**	**72**		ug/L			47034	47606	2	KED
⌈	**Ni**	**60**	**50.036**	ug/L	0.857	1	81	86788	1	KED
⌊	**Ni**	**62**	**50.018**	ug/L	1.680	3	17	14207	1	KED
⌈	**Cu**	**63**	**49.925**	ug/L	1.656	3	158	250935	0	KED
⌊	**Cu**	**65**	**49.959**	ug/L	0.717	1	86	128373	1	KED
⌈	**Zn**	**66**	**49.992**	ug/L	1.178	2	119	33388	0	KED
⌊	**Zn**	**67**	**50.067**	ug/L	0.732	1	26	5487	2	KED
⌊	**As**	**75**	**50.095**	ug/L	1.324	2	5	17150	0	KED
	Y	**89**		ug/L			433311	437275	4	Standard
	Kr	**83**		ug/L			71	71	11	Standard
⌈>	**In-1**	**115**		ug/L			11971	11080	4	KED
⌈	**Cd**	**111**	**49.952**	ug/L	3.097	6	3	17870	1	KED
⌊	**Cd**	**114**	**49.964**	ug/L	3.672	7	4	45282	3	KED
⌈>	**In**	**115**		ug/L			681993	676574	1	Standard
⌊	**Ag**	**107**	**49.808**	ug/L	1.084	2	191	1092536	1	Standard
⌈>	**Tb**	**159**		ug/L			1558961	1579685	1	Standard
⌈	**Tl**	**205**	**50.075**	ug/L	0.854	1	645	3830501	0	Standard
⌊	**Pb**	**208**	**50.037**	ug/L	0.983	1	898	4941254	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 14:56:10

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			982998	950929	1	Standard
	Be	**9**	**99.541**	ug/L	1.797	1	1	702986	0	Standard
	C	**13**		ug/L			45123	55031	0	Standard
>	**Sc**	**45**		ug/L			841869	856398	0	Standard
	V	**51**	**99.626**	ug/L	0.903	0	7647	3314968	1	Standard
	V-1	**51**	**99.645**	ug/L	0.823	0	414	3327640	0	Standard
	Cr	**52**	**99.485**	ug/L	0.153	0	22572	2789547	0	Standard
	Cr	**53**	**99.552**	ug/L	1.108	1	237	319271	0	Standard
	Fe	**54**	**9889.492**	ug/L	51.800	0	90566	26629032	0	Standard
	Fe	**57**	**9947.623**	ug/L	97.692	0	21936	11031877	1	Standard
	Mn	**55**	**99.590**	ug/L	1.371	1	948	4217019	1	Standard
>	**Ge**	**72**		ug/L			47034	45458	10	KED
	Ni	**60**	**100.844**	ug/L	9.263	9	81	170734	2	KED
	Ni	**62**	**100.644**	ug/L	9.424	9	17	27713	2	KED
	Cu	**63**	**100.552**	ug/L	9.653	9	158	488513	1	KED
	Cu	**65**	**100.353**	ug/L	10.545	10	86	247330	0	KED
	Zn	**66**	**100.464**	ug/L	9.442	9	119	64552	1	KED
	Zn	**67**	**100.457**	ug/L	6.397	6	26	10601	4	KED
	As	**75**	**101.061**	ug/L	10.220	10	5	34019	1	KED
	Y	**89**		ug/L			433311	429531	2	Standard
	Kr	**83**		ug/L			71	79	10	Standard
>	**In-1**	**115**		ug/L			11971	11377	0	KED
	Cd	**111**	**99.239**	ug/L	0.429	0	3	35616	0	KED
	Cd	**114**	**99.351**	ug/L	0.765	0	4	90697	1	KED
>	**In**	**115**		ug/L			681993	654088	3	Standard
	Ag	**107**	**99.928**	ug/L	2.641	2	191	2112750	0	Standard
>	**Tb**	**159**		ug/L			1558961	1553742	2	Standard
	Tl	**205**	**99.438**	ug/L	1.808	1	645	7342812	1	Standard
	Pb	**208**	**99.466**	ug/L	0.850	0	898	9491992	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 15:03:39

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			982998	978886	0	Standard
⌊	**Be**	**9**	**0.000**	ug/L	0.000	173	1	2	86	Standard
	C	**13**		ug/L			45123	42848	1	Standard
⌈>	**Sc**	**45**		ug/L			841869	851128	0	Standard
⌈	**V**	**51**	**0.001**	ug/L	0.006	466	7647	7774	2	Standard
⌊	**V-1**	**51**	**-0.002**	ug/L	0.000	2	414	363	0	Standard
⌈	**Cr**	**52**	**0.001**	ug/L	0.022	1640	22572	22855	2	Standard
⌊	**Cr**	**53**	**-0.009**	ug/L	0.004	42	237	212	5	Standard
⌈	**Fe**	**54**	**0.906**	ug/L	1.339	147	90566	93960	3	Standard
⌊	**Fe**	**57**	**-0.526**	ug/L	0.205	39	21936	21598	0	Standard
⌊	**Mn**	**55**	**-0.003**	ug/L	0.000	11	948	832	0	Standard
⌈>	**Ge**	**72**		ug/L			47034	50069	1	KED
⌈	**Ni**	**60**	**0.018**	ug/L	0.013	68	81	120	18	KED
⌊	**Ni**	**62**	**-0.002**	ug/L	0.009	611	17	17	16	KED
⌈	**Cu**	**63**	**-0.002**	ug/L	0.002	127	158	158	8	KED
⌊	**Cu**	**65**	**-0.005**	ug/L	0.008	164	86	80	24	KED
⌈	**Zn**	**66**	**-0.041**	ug/L	0.024	59	119	97	17	KED
⌊	**Zn**	**67**	**-0.085**	ug/L	0.054	62	26	18	33	KED
⌊	**As**	**75**	**0.002**	ug/L	0.004	270	5	6	26	KED
	Y	**89**		ug/L			433311	438427	2	Standard
	Kr	**83**		ug/L			71	70	7	Standard
⌈>	**In-1**	**115**		ug/L			11971	11979	0	KED
⌈	**Cd**	**111**	**0.005**	ug/L	0.005	105	3	5	39	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.001	43	4	6	16	KED
⌈>	**In**	**115**		ug/L			681993	669734	1	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.001	12	191	293	6	Standard
⌈>	**Tb**	**159**		ug/L			1558961	1528630	0	Standard
⌈	**Tl**	**205**	**0.006**	ug/L	0.001	8	645	1102	3	Standard
⌊	**Pb**	**208**	**-0.002**	ug/L	0.001	29	898	699	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 15:09:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L				984787	1	Standard
⌊	**Be**	**9**		ug/L				3	124	Standard
	C	**13**		ug/L				42921	0	Standard
⌈>	**Sc**	**45**		ug/L				850595	1	Standard
|	**V**	**51**		ug/L				7786	1	Standard
|	**V-1**	**51**		ug/L				362	5	Standard
|	**Cr**	**52**		ug/L				22890	1	Standard
|	**Cr**	**53**		ug/L				212	9	Standard
|	**Fe**	**54**		ug/L				90788	0	Standard
|	**Fe**	**57**		ug/L				21922	2	Standard
⌊	**Mn**	**55**		ug/L				774	1	Standard
⌈>	**Ge**	**72**		ug/L				48940	1	KED
|	**Ni**	**60**		ug/L				80	20	KED
|	**Ni**	**62**		ug/L				16	17	KED
|	**Cu**	**63**		ug/L				137	10	KED
|	**Cu**	**65**		ug/L				67	29	KED
|	**Zn**	**66**		ug/L				85	13	KED
|	**Zn**	**67**		ug/L				17	11	KED
⌊	**As**	**75**		ug/L				5	23	KED
	Y	**89**		ug/L				438010	1	Standard
	Kr	**83**		ug/L				58	15	Standard
⌈>	**In-1**	**115**		ug/L				11681	0	KED
|	**Cd**	**111**		ug/L				5	66	KED
⌊	**Cd**	**114**		ug/L				6	62	KED
⌈>	**In**	**115**		ug/L				671207	2	Standard
⌊	**Ag**	**107**		ug/L				227	6	Standard
⌈>	**Tb**	**159**		ug/L				1536215	0	Standard
|	**Tl**	**205**		ug/L				715	6	Standard
⌊	**Pb**	**208**		ug/L				628	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 15:14:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			984787	951819	1	Standard
⌊	**Be**	**9**	**0.200**	ug/L	0.008	4	3	1516	2	Standard
	C	**13**		ug/L			42921	46860	1	Standard
⌈>	**Sc**	**45**		ug/L			850595	849364	1	Standard
⎢	**V**	**51**	**0.200**	ug/L	0.009	4	7786	14164	3	Standard
⎢	**V-1**	**51**	**0.200**	ug/L	0.004	1	362	6964	1	Standard
⎢	**Cr**	**52**	**0.500**	ug/L	0.023	4	22890	36561	3	Standard
⎢	**Cr**	**53**	**0.500**	ug/L	0.028	5	212	1829	4	Standard
⎢	**Fe**	**54**	**36.000**	ug/L	0.552	1	90788	197214	1	Standard
⎢	**Fe**	**57**	**36.000**	ug/L	1.165	3	21922	62303	1	Standard
⌊	**Mn**	**55**	**0.500**	ug/L	0.008	1	774	22453	2	Standard
⌈>	**Ge**	**72**		ug/L			48940	46094	7	KED
⎢	**Ni**	**60**	**0.500**	ug/L	0.032	6	80	890	10	KED
⎢	**Ni**	**62**	**0.500**	ug/L	0.068	13	16	146	15	KED
⎢	**Cu**	**63**	**0.500**	ug/L	0.011	2	137	5577	9	KED
⎢	**Cu**	**65**	**0.500**	ug/L	0.017	3	67	2933	10	KED
⎢	**Zn**	**66**	**6.000**	ug/L	0.122	2	85	4000	5	KED
⎢	**Zn**	**67**	**6.000**	ug/L	0.225	3	17	628	8	KED
⌊	**As**	**75**	**0.200**	ug/L	0.005	2	5	68	8	KED
	Y	**89**		ug/L			438010	437460	1	Standard
	Kr	**83**		ug/L			58	68	22	Standard
⌈>	**In-1**	**115**		ug/L			11681	11528	0	KED
⎢	**Cd**	**111**	**0.100**	ug/L	0.009	9	5	44	8	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.010	10	6	91	9	KED
⌈>	**In**	**115**		ug/L			671207	665121	2	Standard
⌊	**Ag**	**107**	**0.200**	ug/L	0.004	2	227	4586	3	Standard
⌈>	**Tb**	**159**		ug/L			1536215	1512647	1	Standard
⎢	**Tl**	**205**	**0.200**	ug/L	0.003	1	715	15424	1	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.001	0	628	10479	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 15:19:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			984787	983478	2	Standard
⌊	**Be**	**9**	**10.000**	ug/L	0.053	0	3	75849	1	Standard
	C	**13**		ug/L			42921	60107	0	Standard
⌈>	**Sc**	**45**		ug/L			850595	869411	1	Standard
⎢	**V**	**51**	**10.000**	ug/L	0.149	1	7786	351205	0	Standard
⎢	**V-1**	**51**	**10.000**	ug/L	0.179	1	362	347058	0	Standard
⎢	**Cr**	**52**	**10.001**	ug/L	0.179	1	22890	314705	0	Standard
⎢	**Cr**	**53**	**10.001**	ug/L	0.275	2	212	34235	1	Standard
⎢	**Fe**	**54**	**999.951**	ug/L	23.783	2	90788	3011775	0	Standard
⎢	**Fe**	**57**	**1000.002**	ug/L	10.955	1	21922	1173500	0	Standard
⌊	**Mn**	**55**	**10.000**	ug/L	0.245	2	774	445725	0	Standard
⌈>	**Ge**	**72**		ug/L			48940	49159	0	KED
⎢	**Ni**	**60**	**10.001**	ug/L	0.101	1	80	17967	1	KED
⎢	**Ni**	**62**	**10.002**	ug/L	0.175	1	16	2981	2	KED
⎢	**Cu**	**63**	**9.969**	ug/L	0.166	1	137	52242	0	KED
⎢	**Cu**	**65**	**9.968**	ug/L	0.221	2	67	26861	2	KED
⎢	**Zn**	**66**	**9.997**	ug/L	0.311	3	85	7051	2	KED
⎢	**Zn**	**67**	**10.183**	ug/L	0.545	5	17	1184	4	KED
⌊	**As**	**75**	**10.000**	ug/L	0.136	1	5	3562	2	KED
	Y	**89**		ug/L			438010	432409	2	Standard
	Kr	**83**		ug/L			58	74	5	Standard
⌈>	**In-1**	**115**		ug/L			11681	11523	0	KED
⎢	**Cd**	**111**	**10.000**	ug/L	0.280	2	5	3784	2	KED
⌊	**Cd**	**114**	**10.000**	ug/L	0.257	2	6	9341	2	KED
⌈>	**In**	**115**		ug/L			671207	674809	1	Standard
⌊	**Ag**	**107**	**10.000**	ug/L	0.229	2	227	224748	1	Standard
⌈>	**Tb**	**159**		ug/L			1536215	1562151	0	Standard
⎢	**Tl**	**205**	**10.000**	ug/L	0.045	0	715	755077	0	Standard
⌊	**Pb**	**208**	**10.000**	ug/L	0.114	1	628	991598	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 15:24:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	958196	2	Standard
	Be	**9**	**20.060**	ug/L	0.453	2	3	150008	1	Standard
	C	**13**		ug/L			42921	57274	0	Standard
>	**Sc**	**45**		ug/L			850595	864664	1	Standard
	V	**51**	**19.988**	ug/L	0.214	1	7786	688660	1	Standard
	V-1	**51**	**19.988**	ug/L	0.195	0	362	688003	1	Standard
	Cr	**52**	**19.946**	ug/L	0.161	0	22890	595024	0	Standard
	Cr	**53**	**19.948**	ug/L	0.297	1	212	67027	0	Standard
	Fe	**54**	**1985.175**	ug/L	20.141	1	90788	5691282	1	Standard
	Fe	**57**	**2006.387**	ug/L	37.344	1	21922	2349217	2	Standard
	Mn	**55**	**19.929**	ug/L	0.139	0	774	870510	1	Standard
>	**Ge**	**72**		ug/L			48940	49642	2	KED
	Ni	**60**	**19.931**	ug/L	0.386	1	80	35579	0	KED
	Ni	**62**	**20.007**	ug/L	0.082	0	16	6014	2	KED
	Cu	**63**	**19.928**	ug/L	0.297	1	137	103814	0	KED
	Cu	**65**	**19.931**	ug/L	0.317	1	67	53437	2	KED
	Zn	**66**	**19.825**	ug/L	0.372	1	85	13684	1	KED
	Zn	**67**	**20.065**	ug/L	0.188	0	17	2363	1	KED
	As	**75**	**19.953**	ug/L	0.457	2	5	7101	0	KED
	Y	**89**		ug/L			438010	430951	1	Standard
	Kr	**83**		ug/L			58	66	12	Standard
>	**In-1**	**115**		ug/L			11681	11413	0	KED
	Cd	**111**	**19.835**	ug/L	0.157	0	5	7192	1	KED
	Cd	**114**	**20.073**	ug/L	0.074	0	6	18843	0	KED
>	**In**	**115**		ug/L			671207	673466	0	Standard
	Ag	**107**	**19.939**	ug/L	0.168	0	227	441698	0	Standard
>	**Tb**	**159**		ug/L			1536215	1574481	1	Standard
	Tl	**205**	**19.939**	ug/L	0.406	2	715	1498308	1	Standard
	Pb	**208**	**19.842**	ug/L	0.310	1	628	1921289	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 15:29:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			984787	974027	1	Standard
⌊	**Be**	**9**	**49.848**	ug/L	0.208	0	3	373340	1	Standard
	C	**13**		ug/L			42921	43959	0	Standard
⌈>	**Sc**	**45**		ug/L			850595	847672	1	Standard
⌈	**V**	**51**	**49.974**	ug/L	0.537	1	7786	1671904	0	Standard
⌊	**V-1**	**51**	**49.990**	ug/L	0.588	1	362	1684585	0	Standard
⌈	**Cr**	**52**	**49.902**	ug/L	0.872	1	22890	1411534	1	Standard
⌊	**Cr**	**53**	**49.958**	ug/L	0.809	1	212	163558	0	Standard
⌈	**Fe**	**54**	**4999.204**	ug/L	61.081	1	90788	13901319	0	Standard
⌊	**Fe**	**57**	**4989.421**	ug/L	34.888	0	21922	5634814	0	Standard
⌊	**Mn**	**55**	**50.073**	ug/L	1.536	3	774	2158434	2	Standard
⌈>	**Ge**	**72**		ug/L			48940	48638	1	KED
⌈	**Ni**	**60**	**50.050**	ug/L	0.730	1	80	87873	0	KED
⌊	**Ni**	**62**	**49.706**	ug/L	0.910	1	16	14199	1	KED
⌈	**Cu**	**63**	**49.742**	ug/L	0.637	1	137	247336	0	KED
⌊	**Cu**	**65**	**49.803**	ug/L	0.818	1	67	128189	1	KED
⌈	**Zn**	**66**	**49.937**	ug/L	0.620	1	85	33452	0	KED
⌊	**Zn**	**67**	**49.683**	ug/L	0.478	0	17	5545	1	KED
⌊	**As**	**75**	**49.949**	ug/L	0.423	0	5	17327	0	KED
	Y	**89**		ug/L			438010	432420	0	Standard
	Kr	**83**		ug/L			58	78	18	Standard
⌈>	**In-1**	**115**		ug/L			11681	11112	3	KED
⌈	**Cd**	**111**	**50.138**	ug/L	2.045	4	5	17924	1	KED
⌊	**Cd**	**114**	**50.083**	ug/L	1.986	3	6	46109	1	KED
⌈>	**In**	**115**		ug/L			671207	658946	1	Standard
⌊	**Ag**	**107**	**49.838**	ug/L	0.790	1	227	1062604	0	Standard
⌈>	**Tb**	**159**		ug/L			1536215	1555024	2	Standard
⌈	**Tl**	**205**	**50.097**	ug/L	0.934	1	715	3752961	1	Standard
⌊	**Pb**	**208**	**50.072**	ug/L	1.050	2	628	4821518	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 15:36:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			984787	940412	3	Standard
⌊	**Be**	**9**	**99.764**	ug/L	1.435	1	3	715831	3	Standard
	C	**13**		ug/L			42921	54129	0	Standard
⌈>	**Sc**	**45**		ug/L			850595	830631	1	Standard
⎢	**V**	**51**	**100.093**	ug/L	3.591	3	7786	3283250	2	Standard
⎢	**V-1**	**51**	**100.033**	ug/L	3.481	3	362	3305979	2	Standard
⎢	**Cr**	**52**	**100.143**	ug/L	1.366	1	22890	2766222	0	Standard
⎢	**Cr**	**53**	**99.945**	ug/L	1.055	1	212	319851	0	Standard
⎢	**Fe**	**54**	**9949.879**	ug/L	141.359	1	90788	26581269	1	Standard
⎢	**Fe**	**57**	**9951.760**	ug/L	121.774	1	21922	10817989	0	Standard
⌊	**Mn**	**55**	**99.939**	ug/L	2.310	2	774	4211967	1	Standard
⌈>	**Ge**	**72**		ug/L			48940	47832	0	KED
⎢	**Ni**	**60**	**99.302**	ug/L	1.218	1	80	167499	0	KED
⎢	**Ni**	**62**	**99.576**	ug/L	0.687	0	16	27568	0	KED
⎢	**Cu**	**63**	**99.549**	ug/L	0.996	1	137	479480	0	KED
⎢	**Cu**	**65**	**99.337**	ug/L	1.449	1	67	245964	1	KED
⎢	**Zn**	**66**	**99.316**	ug/L	1.487	1	85	63907	0	KED
⎢	**Zn**	**67**	**99.821**	ug/L	1.378	1	17	10875	1	KED
⌊	**As**	**75**	**100.131**	ug/L	0.243	0	5	34307	0	KED
	Y	**89**		ug/L			438010	435901	0	Standard
	Kr	**83**		ug/L			58	98	14	Standard
⌈>	**In-1**	**115**		ug/L			11681	11464	0	KED
⎢	**Cd**	**111**	**98.834**	ug/L	1.168	1	5	35115	1	KED
⌊	**Cd**	**114**	**98.940**	ug/L	0.455	0	6	90840	1	KED
⌈>	**In**	**115**		ug/L			671207	634247	2	Standard
⌊	**Ag**	**107**	**100.412**	ug/L	5.217	5	227	2088241	3	Standard
⌈>	**Tb**	**159**		ug/L			1536215	1509944	1	Standard
⎢	**Tl**	**205**	**99.642**	ug/L	1.161	1	715	7162642	0	Standard
⌊	**Pb**	**208**	**99.568**	ug/L	1.060	1	628	9178607	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 15:43:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			984787	971268	1	Standard
⌊	**Be**	**9**	**0.000**	ug/L	0.001	122	3	6	62	Standard
	C	**13**		ug/L			42921	43244	1	Standard
⌈>	**Sc**	**45**		ug/L			850595	849823	0	Standard
⎢	**V**	**51**	**0.005**	ug/L	0.003	60	7786	7944	0	Standard
⎢	**V-1**	**51**	**-0.001**	ug/L	0.001	71	362	330	6	Standard
⎢	**Cr**	**52**	**0.015**	ug/L	0.005	33	22890	23296	0	Standard
⎢	**Cr**	**53**	**-0.005**	ug/L	0.004	89	212	197	7	Standard
⎢	**Fe**	**54**	**0.981**	ug/L	0.335	34	90788	93381	1	Standard
⎢	**Fe**	**57**	**0.291**	ug/L	0.612	210	21922	22225	3	Standard
⌊	**Mn**	**55**	**0.000**	ug/L	0.001	291	774	789	5	Standard
⌈>	**Ge**	**72**		ug/L			48940	49316	0	KED
⎢	**Ni**	**60**	**0.016**	ug/L	0.012	77	80	108	19	KED
⎢	**Ni**	**62**	**0.008**	ug/L	0.041	480	16	19	60	KED
⎢	**Cu**	**63**	**0.002**	ug/L	0.006	244	137	150	18	KED
⎢	**Cu**	**65**	**0.005**	ug/L	0.003	56	67	81	8	KED
⎢	**Zn**	**66**	**0.030**	ug/L	0.013	43	85	106	8	KED
⎢	**Zn**	**67**	**0.010**	ug/L	0.026	255	17	18	15	KED
⌊	**As**	**75**	**0.004**	ug/L	0.004	98	5	6	21	KED
	Y	**89**		ug/L			438010	435496	2	Standard
	Kr	**83**		ug/L			58	74	20	Standard
⌈>	**In-1**	**115**		ug/L			11681	11764	0	KED
⎢	**Cd**	**111**	**-0.000**	ug/L	0.005	5204	5	5	28	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.005	926	6	5	88	KED
⌈>	**In**	**115**		ug/L			671207	665659	1	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.000	9	227	317	3	Standard
⌈>	**Tb**	**159**		ug/L			1536215	1519650	1	Standard
⎢	**Tl**	**205**	**0.005**	ug/L	0.001	22	715	1048	7	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	99	628	664	7	Standard

Sample Information

Sample Date/Time: Monday, May 01, 2023 15:36:09
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.m
Mass Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

Calibration

Analyte	Mass	**r Corr Coef**	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**1.0000**	0.008	0.20	10	20	50	100
C	13							
Sc	45							
V	51	**1.0000**	0.039	0.20	10	20	50	100
V-1	51	**1.0000**	0.040	0.20	10	20	50	100
Cr	52	**1.0000**	0.033	0.50	10	20	50	100
Cr	53	**1.0000**	0.004	0.50	10	20	50	100
Fe	54	**1.0000**	0.003	36.00	1000	2000	5000	10000
Fe	57	**1.0000**	0.001	36.00	1000	2000	5000	10000
Mn	55	**1.0000**	0.051	0.50	10	20	50	100
Ge	72							
Ni	60	**0.9999**	0.035	0.50	10	20	50	100
Ni	62	**0.9999**	0.006	0.50	10	20	50	100
Cu	63	**0.9999**	0.101	0.50	10	20	50	100
Cu	65	**0.9999**	0.052	0.50	10	20	50	100
Zn	66	**0.9999**	0.013	6.00	10	20	50	100
Zn	67	**1.0000**	0.002	6.00	10	20	50	100
As	75	**1.0000**	0.007	0.20	10	20	50	100
Y	89							
Kr	83							
In-1	115							
Cd	111	**0.9998**	0.031	0.10	10	20	50	100
Cd	114	**0.9998**	0.080	0.10	10	20	50	100
In	115							
Ag	107	**1.0000**	0.033	0.20	10	20	50	100
Tb	159							
Tl	205	**1.0000**	0.048	0.20	10	20	50	100
Pb	208	**1.0000**	0.061	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 15:49:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	970508	3	Standard
	Be	**9**	**49.301**	ug/L	1.688	3	3	364809	1	Standard
	C	**13**		ug/L			42921	51833	1	Standard
>	**Sc**	**45**		ug/L			850595	871334	0	Standard
	V	**51**	**49.964**	ug/L	0.365	0	7786	1723648	0	Standard
	V-1	**51**	**49.751**	ug/L	0.389	0	362	1725315	0	Standard
	Cr	**52**	**50.701**	ug/L	0.473	0	22890	1480829	1	Standard
	Cr	**53**	**49.971**	ug/L	0.685	1	212	167866	0	Standard
	Fe	**54**	**5046.859**	ug/L	102.243	2	90788	14189084	1	Standard
	Fe	**57**	**5117.003**	ug/L	96.681	1	21922	5845669	0	Standard
	Mn	**55**	**50.406**	ug/L	0.390	0	774	2229317	1	Standard
>	**Ge**	**72**		ug/L			48940	48814	2	KED
	Ni	**60**	**51.721**	ug/L	1.425	2	80	89042	1	KED
	Ni	**62**	**52.556**	ug/L	1.086	2	16	14854	1	KED
	Cu	**63**	**53.194**	ug/L	0.598	1	137	261502	1	KED
	Cu	**65**	**52.258**	ug/L	1.035	1	67	132047	0	KED
	Zn	**66**	**51.355**	ug/L	0.485	0	85	33765	1	KED
	Zn	**67**	**51.091**	ug/L	1.738	3	17	5686	2	KED
	As	**75**	**48.131**	ug/L	0.896	1	5	16827	0	KED
	Y	**89**		ug/L			438010	432646	0	Standard
	Kr	**83**		ug/L			58	66	10	Standard
>	**In-1**	**115**		ug/L			11681	11657	0	KED
	Cd	**111**	**50.433**	ug/L	0.159	0	5	18223	0	KED
	Cd	**114**	**50.564**	ug/L	0.312	0	6	47208	0	KED
>	**In**	**115**		ug/L			671207	650935	2	Standard
	Ag	**107**	**52.337**	ug/L	1.354	2	227	1117333	0	Standard
>	**Tb**	**159**		ug/L			1536215	1560731	1	Standard
	Tl	**205**	**51.529**	ug/L	0.469	0	715	3829039	1	Standard
	Pb	**208**	**51.150**	ug/L	0.879	1	628	4873575	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 15:57:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	982741	4	Standard
	Be	**9**	**0.001**	ug/L	0.000	83	3	7	50	Standard
	C	**13**		ug/L			42921	43013	0	Standard
>	**Sc**	**45**		ug/L			850595	845083	1	Standard
	V	**51**	**-0.004**	ug/L	0.008	200	7786	7592	2	Standard
	V-1	**51**	**-0.001**	ug/L	0.000	43	362	331	4	Standard
	Cr	**52**	**-0.013**	ug/L	0.026	205	22890	22380	2	Standard
	Cr	**53**	**-0.001**	ug/L	0.004	323	212	206	7	Standard
	Fe	**54**	**0.210**	ug/L	0.567	270	90788	90776	2	Standard
	Fe	**57**	**-0.023**	ug/L	0.025	108	21922	21754	1	Standard
	Mn	**55**	**-0.000**	ug/L	0.001	319	774	759	5	Standard
>	**Ge**	**72**		ug/L			48940	48664	1	KED
	Ni	**60**	**-0.006**	ug/L	0.002	39	80	69	6	KED
	Ni	**62**	**-0.002**	ug/L	0.025	1152	16	15	45	KED
	Cu	**63**	**0.002**	ug/L	0.002	112	137	146	5	KED
	Cu	**65**	**0.000**	ug/L	0.004	2185	67	67	13	KED
	Zn	**66**	**0.016**	ug/L	0.019	115	85	95	14	KED
	Zn	**67**	**-0.039**	ug/L	0.055	142	17	12	45	KED
	As	**75**	**0.001**	ug/L	0.004	258	5	5	24	KED
	Y	**89**		ug/L			438010	422227	1	Standard
	Kr	**83**		ug/L			58	54	29	Standard
>	**In-1**	**115**		ug/L			11681	11792	1	KED
	Cd	**111**	**-0.004**	ug/L	0.006	156	5	4	44	KED
	Cd	**114**	**-0.001**	ug/L	0.002	208	6	4	45	KED
>	**In**	**115**		ug/L			671207	650420	1	Standard
	Ag	**107**	**0.002**	ug/L	0.001	49	227	271	10	Standard
>	**Tb**	**159**		ug/L			1536215	1486139	1	Standard
	Tl	**205**	**0.001**	ug/L	0.000	61	715	742	3	Standard
	Pb	**208**	**-0.000**	ug/L	0.000	68	628	584	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 16:02:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	979721	1	Standard
	Be	**9**	**49.467**	ug/L	2.010	4	3	369578	2	Standard
	C	**13**		ug/L			42921	43743	0	Standard
>	**Sc**	**45**		ug/L			850595	868111	1	Standard
	V	**51**	**49.449**	ug/L	1.145	2	7786	1699260	1	Standard
	V-1	**51**	**49.225**	ug/L	1.114	2	362	1700414	0	Standard
	Cr	**52**	**49.643**	ug/L	0.939	1	22890	1444839	1	Standard
	Cr	**53**	**48.896**	ug/L	0.754	1	212	163635	0	Standard
	Fe	**54**	**4991.238**	ug/L	58.400	1	90788	13982399	1	Standard
	Fe	**57**	**4978.452**	ug/L	26.445	0	21922	5667952	2	Standard
	Mn	**55**	**50.470**	ug/L	1.007	1	774	2223310	0	Standard
>	**Ge**	**72**		ug/L			48940	49488	1	KED
	Ni	**60**	**49.578**	ug/L	1.051	2	80	86552	1	KED
	Ni	**62**	**50.613**	ug/L	0.382	0	16	14505	0	KED
	Cu	**63**	**50.803**	ug/L	0.404	0	137	253237	1	KED
	Cu	**65**	**50.206**	ug/L	0.520	1	67	128640	0	KED
	Zn	**66**	**51.077**	ug/L	0.607	1	85	34046	0	KED
	Zn	**67**	**49.731**	ug/L	0.293	0	17	5614	0	KED
	As	**75**	**49.657**	ug/L	0.761	1	5	17603	0	KED
	Y	**89**		ug/L			438010	439618	1	Standard
	Kr	**83**		ug/L			58	78	17	Standard
>	**In-1**	**115**		ug/L			11681	11419	1	KED
	Cd	**111**	**51.998**	ug/L	1.375	2	5	18399	1	KED
	Cd	**114**	**50.914**	ug/L	1.535	3	6	46548	1	KED
>	**In**	**115**		ug/L			671207	660756	2	Standard
	Ag	**107**	**50.867**	ug/L	0.787	1	227	1102585	1	Standard
>	**Tb**	**159**		ug/L			1536215	1540098	1	Standard
	Tl	**205**	**50.991**	ug/L	0.929	1	715	3738724	0	Standard
	Pb	**208**	**50.690**	ug/L	0.685	1	628	4766265	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 16:09:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			984787	983615	1	Standard
⌊	**Be**	**9**	**0.000**	ug/L	0.000	9	3	3	0	Standard
	C	**13**		ug/L			42921	42181	2	Standard
⌈>	**Sc**	**45**		ug/L			850595	851326	1	Standard
⌈	**V**	**51**	**-0.002**	ug/L	0.004	278	7786	7741	1	Standard
⌊	**V-1**	**51**	**-0.001**	ug/L	0.000	30	362	317	3	Standard
⌈	**Cr**	**52**	**-0.006**	ug/L	0.021	369	22890	22751	1	Standard
⌊	**Cr**	**53**	**-0.005**	ug/L	0.007	154	212	196	11	Standard
⌈	**Fe**	**54**	**0.640**	ug/L	0.875	136	90788	92595	1	Standard
⌊	**Fe**	**57**	**-0.212**	ug/L	0.369	174	21922	21702	0	Standard
⌊	**Mn**	**55**	**0.000**	ug/L	0.001	1332	774	779	5	Standard
⌈>	**Ge**	**72**		ug/L			48940	49884	0	KED
⌈	**Ni**	**60**	**-0.007**	ug/L	0.002	29	80	69	5	KED
⌊	**Ni**	**62**	**-0.006**	ug/L	0.013	235	16	15	25	KED
⌈	**Cu**	**63**	**-0.003**	ug/L	0.005	181	137	126	19	KED
⌊	**Cu**	**65**	**0.000**	ug/L	0.004	800	67	70	14	KED
⌈	**Zn**	**66**	**0.036**	ug/L	0.013	36	85	111	8	KED
⌊	**Zn**	**67**	**-0.003**	ug/L	0.033	1148	17	17	22	KED
⌊	**As**	**75**	**0.002**	ug/L	0.006	385	5	5	36	KED
	Y	**89**		ug/L			438010	422014	1	Standard
	Kr	**83**		ug/L			58	67	10	Standard
⌈>	**In-1**	**115**		ug/L			11681	12000	1	KED
⌈	**Cd**	**111**	**0.026**	ug/L	0.028	106	5	15	66	KED
⌊	**Cd**	**114**	**0.026**	ug/L	0.026	99	6	31	78	KED
⌈>	**In**	**115**		ug/L			671207	649526	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	73	227	246	7	Standard
⌈>	**Tb**	**159**		ug/L			1536215	1485680	0	Standard
⌈	**Tl**	**205**	**0.001**	ug/L	0.001	112	715	757	9	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	27	628	646	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Monday, May 01, 2023 16:14:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	977799	0	Standard
	Be	**9**	**0.199**	ug/L	0.005	2	3	1486	2	Standard
	C	**13**		ug/L			42921	55652	2	Standard
>	**Sc**	**45**		ug/L			850595	852249	0	Standard
	V	**51**	**0.197**	ug/L	0.009	4	7786	14406	1	Standard
	V-1	**51**	**0.194**	ug/L	0.004	1	362	6928	1	Standard
	Cr	**52**	**0.517**	ug/L	0.013	2	22890	37467	1	Standard
	Cr	**53**	**0.497**	ug/L	0.011	2	212	1842	2	Standard
	Fe	**54**	**38.854**	ug/L	1.240	3	90788	197135	2	Standard
	Fe	**57**	**37.068**	ug/L	0.491	1	21922	63227	0	Standard
	Mn	**55**	**0.503**	ug/L	0.009	1	774	22529	1	Standard
>	**Ge**	**72**		ug/L			48940	49268	2	KED
	Ni	**60**	**0.482**	ug/L	0.034	7	80	916	4	KED
	Ni	**62**	**0.534**	ug/L	0.025	4	16	168	3	KED
	Cu	**63**	**0.818**	ug/L	0.005	0	137	4194	1	KED
	Cu	**65**	**0.821**	ug/L	0.051	6	67	2159	4	KED
	Zn	**66**	**6.475**	ug/L	0.031	0	85	4372	2	KED
	Zn	**67**	**5.653**	ug/L	0.311	5	17	650	3	KED
	As	**75**	**0.207**	ug/L	0.020	9	5	78	7	KED
	Y	**89**		ug/L			438010	430561	1	Standard
	Kr	**83**		ug/L			58	83	17	Standard
>	**In-1**	**115**		ug/L			11681	11821	0	KED
	Cd	**111**	**0.094**	ug/L	0.010	10	5	40	8	KED
	Cd	**114**	**0.101**	ug/L	0.006	5	6	101	5	KED
>	**In**	**115**		ug/L			671207	656387	0	Standard
	Ag	**107**	**0.205**	ug/L	0.003	1	227	4644	2	Standard
>	**Tb**	**159**		ug/L			1536215	1530072	0	Standard
	Tl	**205**	**0.195**	ug/L	0.004	1	715	14887	2	Standard
	Pb	**208**	**0.104**	ug/L	0.003	2	628	10364	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
DEL
Sample Date/Time: Monday, May 01, 2023 16:19:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	998293	2	Standard
	Be	**9**	**0.207**	ug/L	0.007	3	3	1580	3	Standard
	C	**13**		ug/L			42921	54373	2	Standard
>	**Sc**	**45**		ug/L			850595	852711	2	Standard
	V	**51**	**0.201**	ug/L	0.006	2	7786	14549	0	Standard
	V-1	**51**	**0.195**	ug/L	0.002	1	362	6984	2	Standard
	Cr	**52**	**0.521**	ug/L	0.013	2	22890	37597	1	Standard
	Cr	**53**	**0.492**	ug/L	0.007	1	212	1829	3	Standard
	Fe	**54**	**39.570**	ug/L	1.035	2	90788	199140	0	Standard
	Fe	**57**	**37.926**	ug/L	1.158	3	21922	64204	1	Standard
	Mn	**55**	**0.508**	ug/L	0.013	2	774	22750	0	Standard
>	**Ge**	**72**		ug/L			48940	49723	1	KED
	Ni	**60**	**0.500**	ug/L	0.029	5	80	956	3	KED
	Ni	**62**	**0.551**	ug/L	0.039	7	16	175	6	KED
	Cu	**63**	**0.905**	ug/L	0.003	0	137	4672	1	KED
	Cu	**65**	**0.913**	ug/L	0.025	2	67	2417	1	KED
	Zn	**66**	**6.130**	ug/L	0.188	3	85	4184	4	KED
	Zn	**67**	**5.968**	ug/L	0.255	4	17	692	2	KED
	As	**75**	**0.198**	ug/L	0.010	4	5	75	3	KED
	Y	**89**		ug/L			438010	438574	3	Standard
	Kr	**83**		ug/L			58	69	19	Standard
>	**In-1**	**115**		ug/L			11681	11816	1	KED
	Cd	**111**	**0.106**	ug/L	0.010	9	5	44	8	KED
	Cd	**114**	**0.103**	ug/L	0.025	24	6	103	22	KED
>	**In**	**115**		ug/L			671207	654653	1	Standard
	Ag	**107**	**0.207**	ug/L	0.005	2	227	4676	3	Standard
>	**Tb**	**159**		ug/L			1536215	1506801	0	Standard
	Tl	**205**	**0.200**	ug/L	0.004	1	715	15075	1	Standard
	Pb	**208**	**0.104**	ug/L	0.001	1	628	10224	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 16:29:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			984787	987306	2	Standard
⌊	**Be**	**9**	**0.189**	ug/L	0.010	5	3	1425	7	Standard
	C	**13**		ug/L			42921	40291	0	Standard
⌈>	**Sc**	**45**		ug/L			850595	856745	0	Standard
⌈	**V**	**51**	**0.180**	ug/L	0.012	6	7786	13920	2	Standard
⌊	**V-1**	**51**	**0.182**	ug/L	0.005	2	362	6561	1	Standard
⌈	**Cr**	**52**	**0.471**	ug/L	0.017	3	22890	36359	1	Standard
⌊	**Cr**	**53**	**0.467**	ug/L	0.016	3	212	1755	3	Standard
⌈	**Fe**	**54**	**35.892**	ug/L	0.894	2	90788	190023	1	Standard
⌊	**Fe**	**57**	**34.932**	ug/L	0.531	1	21922	61174	1	Standard
⌊	**Mn**	**55**	**0.470**	ug/L	0.008	1	774	21220	1	Standard
⌈>	**Ge**	**72**		ug/L			48940	51221	1	KED
⌈	**Ni**	**60**	**0.477**	ug/L	0.017	3	80	945	2	KED
⌊	**Ni**	**62**	**0.432**	ug/L	0.010	2	16	145	3	KED
⌈	**Cu**	**63**	**0.495**	ug/L	0.029	5	137	2694	4	KED
⌊	**Cu**	**65**	**0.507**	ug/L	0.016	3	67	1414	2	KED
⌈	**Zn**	**66**	**6.001**	ug/L	0.246	4	85	4219	3	KED
⌊	**Zn**	**67**	**5.192**	ug/L	0.224	4	17	622	4	KED
⌊	**As**	**75**	**0.190**	ug/L	0.012	6	5	74	4	KED
	Y	**89**		ug/L			438010	426584	1	Standard
	Kr	**83**		ug/L			58	69	16	Standard
⌈>	**In-1**	**115**		ug/L			11681	12495	2	KED
⌈	**Cd**	**111**	**0.089**	ug/L	0.014	15	5	40	12	KED
⌊	**Cd**	**114**	**0.093**	ug/L	0.009	9	6	99	10	KED
⌈>	**In**	**115**		ug/L			671207	661170	2	Standard
⌊	**Ag**	**107**	**0.192**	ug/L	0.006	3	227	4393	2	Standard
⌈>	**Tb**	**159**		ug/L			1536215	1519771	0	Standard
⌈	**Tl**	**205**	**0.182**	ug/L	0.000	0	715	13878	0	Standard
⌊	**Pb**	**208**	**0.095**	ug/L	0.001	1	628	9422	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 16:34:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1098731	1	Standard
	Be	**9**	**0.008**	ug/L	0.001	17	3	69	16	Standard
	C	**13**		ug/L			42921	180266	0	Standard
>	**Sc**	**45**		ug/L			850595	870063	1	Standard
	V	**51**	**0.060**	ug/L	0.014	22	7786	10029	3	Standard
	V-1	**51**	**1.316**	ug/L	0.033	2	362	45920	1	Standard
	Cr	**52**	**0.654**	ug/L	0.020	3	22890	42193	0	Standard
	Cr	**53**	**4.785**	ug/L	0.080	1	212	16245	0	Standard
	Fe	**54**	**18965.339**	ug/L	26.100	0	90788	52990551	0	Standard
	Fe	**57**	**18733.165**	ug/L	497.284	2	21922	21308980	1	Standard
	Mn	**55**	**0.109**	ug/L	0.004	4	774	5592	2	Standard
>	**Ge**	**72**		ug/L			48940	47717	0	KED
	Ni	**60**	**0.080**	ug/L	0.016	20	80	213	13	KED
	Ni	**62**	**0.151**	ug/L	0.077	51	16	57	37	KED
	Cu	**63**	**0.028**	ug/L	0.005	18	137	268	8	KED
	Cu	**65**	**0.036**	ug/L	0.006	17	67	154	10	KED
	Zn	**66**	**0.336**	ug/L	0.008	2	85	299	1	KED
	Zn	**67**	**0.384**	ug/L	0.055	14	17	58	9	KED
	As	**75**	**0.028**	ug/L	0.006	19	5	14	13	KED
	Y	**89**		ug/L			438010	428496	2	Standard
	Kr	**83**		ug/L			58	165	15	Standard
>	**In-1**	**115**		ug/L			11681	11040	1	KED
	Cd	**111**	**0.077**	ug/L	0.017	21	5	31	16	KED
	Cd	**114**	**0.068**	ug/L	0.017	24	6	65	20	KED
>	**In**	**115**		ug/L			671207	660228	2	Standard
	Ag	**107**	**0.040**	ug/L	0.004	9	227	1090	4	Standard
>	**Tb**	**159**		ug/L			1536215	1567936	1	Standard
	Tl	**205**	**0.011**	ug/L	0.000	3	715	1557	3	Standard
	Pb	**208**	**0.033**	ug/L	0.001	2	628	3843	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 16:38:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1097961	4	Standard
	Be	**9**	**0.008**	ug/L	0.001	8	3	73	12	Standard
	C	**13**		ug/L			42921	183512	0	Standard
>	**Sc**	**45**		ug/L			850595	852802	0	Standard
	V	**51**	**-0.168**	ug/L	0.055	32	7786	2155	85	Standard
	V-1	**51**	**1.312**	ug/L	0.013	0	362	44888	1	Standard
	Cr	**52**	**19.156**	ug/L	0.289	1	22890	561874	1	Standard
	Cr	**53**	**23.432**	ug/L	0.362	1	212	77157	1	Standard
	Fe	**54**	**18911.588**	ug/L	146.885	0	90788	51792847	0	Standard
	Fe	**57**	**18529.660**	ug/L	387.238	2	21922	20663185	2	Standard
	Mn	**55**	**18.719**	ug/L	0.184	0	774	810757	1	Standard
>	**Ge**	**72**		ug/L			48940	47182	0	KED
	Ni	**60**	**20.821**	ug/L	0.480	2	80	34706	2	KED
	Ni	**62**	**20.920**	ug/L	0.350	1	16	5726	1	KED
	Cu	**63**	**20.681**	ug/L	0.162	0	137	98367	0	KED
	Cu	**65**	**20.452**	ug/L	0.139	0	67	50004	0	KED
	Zn	**66**	**19.307**	ug/L	0.126	0	85	12322	0	KED
	Zn	**67**	**17.401**	ug/L	0.716	4	17	1883	4	KED
	As	**75**	**19.287**	ug/L	0.311	1	5	6522	1	KED
	Y	**89**		ug/L			438010	427891	2	Standard
	Kr	**83**		ug/L			58	153	19	Standard
>	**In-1**	**115**		ug/L			11681	10407	1	KED
	Cd	**111**	**19.912**	ug/L	0.461	2	5	6425	1	KED
	Cd	**114**	**19.692**	ug/L	0.411	2	6	16415	1	KED
>	**In**	**115**		ug/L			671207	659393	1	Standard
	Ag	**107**	**18.383**	ug/L	0.366	1	227	397831	1	Standard
>	**Tb**	**159**		ug/L			1536215	1579592	0	Standard
	Tl	**205**	**0.005**	ug/L	0.000	9	715	1112	2	Standard
	Pb	**208**	**0.014**	ug/L	0.000	0	628	2040	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 16:43:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1017872	1	Standard
	Be	**9**	**184.250**	ug/L	2.233	1	3	1430652	0	Standard
	C	**13**		ug/L			42921	51210	0	Standard
>	**Sc**	**45**		ug/L			850595	810803	0	Standard
	V	**51**	**193.929**	ug/L	4.856	2	7786	6203060	1	Standard
	V-1	**51**	**193.136**	ug/L	6.020	3	362	6230602	2	Standard
	Cr	**52**	**190.679**	ug/L	1.654	0	22890	5121835	0	Standard
	Cr	**53**	**188.159**	ug/L	4.885	2	212	587575	1	Standard
	Fe	**54**	**18895.232**	ug/L	161.381	0	90788	49196879	0	Standard
	Fe	**57**	**18957.171**	ug/L	351.593	1	21922	20095643	0	Standard
	Mn	**55**	**190.407**	ug/L	4.231	2	774	7832940	1	Standard
>	**Ge**	**72**		ug/L			48940	45136	0	KED
	Ni	**60**	**197.301**	ug/L	0.508	0	80	313988	0	KED
	Ni	**62**	**201.358**	ug/L	3.479	1	16	52589	1	KED
	Cu	**63**	**198.003**	ug/L	1.646	0	137	899845	0	KED
	Cu	**65**	**193.916**	ug/L	1.939	0	67	453019	0	KED
	Zn	**66**	**197.989**	ug/L	1.694	0	85	120150	0	KED
	Zn	**67**	**189.837**	ug/L	2.888	1	17	19502	1	KED
	As	**75**	**195.116**	ug/L	1.209	0	5	63078	0	KED
	Y	**89**		ug/L			438010	411359	2	Standard
	Kr	**83**		ug/L			58	156	9	Standard
>	**In-1**	**115**		ug/L			11681	10158	1	KED
	Cd	**111**	**201.384**	ug/L	3.016	1	5	63387	0	KED
	Cd	**114**	**200.276**	ug/L	3.207	1	6	162907	0	KED
>	**In**	**115**		ug/L			671207	623270	1	Standard
	Ag	**107**	**195.188**	ug/L	6.342	3	227	3989578	1	Standard
>	**Tb**	**159**		ug/L			1536215	1475110	0	Standard
	Tl	**205**	**207.071**	ug/L	4.580	2	715	14540988	1	Standard
	Pb	**208**	**204.937**	ug/L	3.239	1	628	18455921	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 16:48:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			984787	935608	1	Standard
⌊	**Be**	**9**	**296.456**	ug/L	2.260	0	3	2116051	1	Standard
	C	**13**		ug/L			42921	52472	1	Standard
⌈>	**Sc**	**45**		ug/L			850595	781974	0	Standard
⌈	**V**	**51**	**299.121**	ug/L	3.411	1	7786	9225806	2	Standard
⌊	**V-1**	**51**	**297.336**	ug/L	3.592	1	362	9253350	2	Standard
⌈	**Cr**	**52**	**295.735**	ug/L	3.207	1	22890	7649789	1	Standard
⌊	**Cr**	**53**	**289.945**	ug/L	4.797	1	212	873234	1	Standard
⌈	**Fe**	**54**	**29461.341**	ug/L	178.135	0	90788	73936856	1	Standard
⌊	**Fe**	**57**	**29488.356**	ug/L	172.926	0	21922	30141313	1	Standard
⌊	**Mn**	**55**	**294.188**	ug/L	7.440	2	774	11673709	2	Standard
⌈>	**Ge**	**72**		ug/L			48940	43166	0	KED
⌈	**Ni**	**60**	**304.671**	ug/L	5.500	1	80	463608	1	KED
⌊	**Ni**	**62**	**305.228**	ug/L	4.607	1	16	76228	0	KED
⌈	**Cu**	**63**	**297.292**	ug/L	1.753	0	137	1292012	0	KED
⌊	**Cu**	**65**	**295.476**	ug/L	5.268	1	67	660137	2	KED
⌈	**Zn**	**66**	**288.659**	ug/L	4.867	1	85	167482	1	KED
⌊	**Zn**	**67**	**285.457**	ug/L	2.371	0	17	28038	0	KED
⌊	**As**	**75**	**298.444**	ug/L	2.926	0	5	92264	0	KED
	Y	**89**		ug/L			438010	387379	1	Standard
	Kr	**83**		ug/L			58	240	10	Standard
⌈>	**In-1**	**115**		ug/L			11681	9872	0	KED
⌈	**Cd**	**111**	**303.342**	ug/L	2.153	0	5	92804	0	KED
⌊	**Cd**	**114**	**299.719**	ug/L	4.746	1	6	236958	0	KED
⌈>	**In**	**115**		ug/L			671207	585871	3	Standard
⌊	**Ag**	**107**	**290.105**	ug/L	10.358	3	227	5571038	0	Standard
⌈>	**Tb**	**159**		ug/L			1536215	1391521	2	Standard
⌈	**Tl**	**205**	**317.328**	ug/L	8.833	2	715	21014655	0	Standard
⌊	**Pb**	**208**	**315.288**	ug/L	8.887	2	628	26776578	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 16:55:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1048577	1	Standard
	Be	**9**	**0.002**	ug/L	0.001	66	3	17	52	Standard
	C	**13**		ug/L			42921	52918	1	Standard
>	**Sc**	**45**		ug/L			850595	837614	0	Standard
	V	**51**	**0.006**	ug/L	0.004	69	7786	7862	2	Standard
	V-1	**51**	**0.018**	ug/L	0.001	4	362	950	3	Standard
	Cr	**52**	**0.008**	ug/L	0.011	144	22890	22757	1	Standard
	Cr	**53**	**0.047**	ug/L	0.007	14	212	361	5	Standard
	Fe	**54**	**1.376**	ug/L	0.338	24	90788	93094	0	Standard
	Fe	**57**	**-1.285**	ug/L	0.600	46	21922	20180	3	Standard
	Mn	**55**	**0.002**	ug/L	0.001	50	774	857	5	Standard
>	**Ge**	**72**		ug/L			48940	49264	1	KED
	Ni	**60**	**-0.013**	ug/L	0.008	60	80	57	25	KED
	Ni	**62**	**0.011**	ug/L	0.029	263	16	19	40	KED
	Cu	**63**	**-0.010**	ug/L	0.002	20	137	87	13	KED
	Cu	**65**	**-0.012**	ug/L	0.003	20	67	37	15	KED
	Zn	**66**	**-0.051**	ug/L	0.007	14	85	52	7	KED
	Zn	**67**	**-0.092**	ug/L	0.010	11	17	6	15	KED
	As	**75**	**0.063**	ug/L	0.003	5	5	27	5	KED
	Y	**89**		ug/L			438010	413762	1	Standard
	Kr	**83**		ug/L			58	66	15	Standard
>	**In-1**	**115**		ug/L			11681	11612	1	KED
	Cd	**111**	**-0.001**	ug/L	0.003	415	5	5	20	KED
	Cd	**114**	**0.004**	ug/L	0.000	7	6	9	1	KED
>	**In**	**115**		ug/L			671207	666966	2	Standard
	Ag	**107**	**0.010**	ug/L	0.001	5	227	445	3	Standard
>	**Tb**	**159**		ug/L			1536215	1535094	1	Standard
	Tl	**205**	**0.020**	ug/L	0.000	2	715	2173	0	Standard
	Pb	**208**	**0.000**	ug/L	0.001	221	628	655	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 17:02:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1032589	2	Standard
	Be	**9**	**48.106**	ug/L	1.040	2	3	378892	1	Standard
	C	**13**		ug/L			42921	44408	1	Standard
>	**Sc**	**45**		ug/L			850595	842412	1	Standard
	V	**51**	**49.540**	ug/L	1.357	2	7786	1651930	1	Standard
	V-1	**51**	**49.491**	ug/L	1.584	3	362	1658870	1	Standard
	Cr	**52**	**49.246**	ug/L	0.612	1	22890	1391160	1	Standard
	Cr	**53**	**49.092**	ug/L	1.150	2	212	159420	0	Standard
	Fe	**54**	**5024.292**	ug/L	137.166	2	90788	13657501	2	Standard
	Fe	**57**	**5085.714**	ug/L	29.478	0	21922	5618194	2	Standard
	Mn	**55**	**50.104**	ug/L	0.267	0	774	2142387	1	Standard
>	**Ge**	**72**		ug/L			48940	49256	1	KED
	Ni	**60**	**51.238**	ug/L	1.137	2	80	89023	0	KED
	Ni	**62**	**51.246**	ug/L	1.886	3	16	14613	2	KED
	Cu	**63**	**52.018**	ug/L	0.272	0	137	258075	1	KED
	Cu	**65**	**51.056**	ug/L	0.547	1	67	130202	0	KED
	Zn	**66**	**51.733**	ug/L	1.046	2	85	34317	0	KED
	Zn	**67**	**51.144**	ug/L	1.021	1	17	5746	2	KED
	As	**75**	**50.099**	ug/L	0.873	1	5	17675	0	KED
	Y	**89**		ug/L			438010	425979	3	Standard
	Kr	**83**		ug/L			58	53	29	Standard
>	**In-1**	**115**		ug/L			11681	11649	1	KED
	Cd	**111**	**50.186**	ug/L	0.375	0	5	18120	0	KED
	Cd	**114**	**50.602**	ug/L	0.701	1	6	47206	0	KED
>	**In**	**115**		ug/L			671207	647745	1	Standard
	Ag	**107**	**50.623**	ug/L	0.701	1	227	1075747	0	Standard
>	**Tb**	**159**		ug/L			1536215	1538411	0	Standard
	Tl	**205**	**51.584**	ug/L	0.340	0	715	3778752	0	Standard
	Pb	**208**	**51.382**	ug/L	0.475	0	628	4826761	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 17:09:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	999617	1	Standard
	Be	**9**	**0.001**	ug/L	0.000	45	3	8	26	Standard
	C	**13**		ug/L			42921	44496	0	Standard
>	**Sc**	**45**		ug/L			850595	815817	2	Standard
	V	**51**	**-0.000**	ug/L	0.005	1290	7786	7455	2	Standard
	V-1	**51**	**0.008**	ug/L	0.001	10	362	611	5	Standard
	Cr	**52**	**-0.004**	ug/L	0.015	408	22890	21847	1	Standard
	Cr	**53**	**0.024**	ug/L	0.008	31	212	280	6	Standard
	Fe	**54**	**0.642**	ug/L	1.069	166	90788	88715	1	Standard
	Fe	**57**	**-0.054**	ug/L	0.267	489	21922	20962	1	Standard
	Mn	**55**	**-0.000**	ug/L	0.001	5547	774	741	6	Standard
>	**Ge**	**72**		ug/L			48940	48766	1	KED
	Ni	**60**	**-0.013**	ug/L	0.010	76	80	56	30	KED
	Ni	**62**	**-0.022**	ug/L	0.011	48	16	10	28	KED
	Cu	**63**	**-0.004**	ug/L	0.003	72	137	118	11	KED
	Cu	**65**	**-0.001**	ug/L	0.010	655	67	64	38	KED
	Zn	**66**	**0.008**	ug/L	0.021	262	85	90	15	KED
	Zn	**67**	**-0.034**	ug/L	0.029	84	17	13	24	KED
	As	**75**	**0.020**	ug/L	0.008	40	5	11	24	KED
	Y	**89**		ug/L			438010	409997	1	Standard
	Kr	**83**		ug/L			58	73	16	Standard
>	**In-1**	**115**		ug/L			11681	11391	0	KED
	Cd	**111**	**-0.004**	ug/L	0.008	188	5	4	66	KED
	Cd	**114**	**0.000**	ug/L	0.001	488	6	6	16	KED
>	**In**	**115**		ug/L			671207	659544	2	Standard
	Ag	**107**	**0.002**	ug/L	0.001	29	227	266	4	Standard
>	**Tb**	**159**		ug/L			1536215	1478203	0	Standard
	Tl	**205**	**0.004**	ug/L	0.001	15	715	1001	4	Standard
	Pb	**208**	**0.000**	ug/L	0.000	762	628	608	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0018-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 17:16:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
[>	Li	6		ug/L			984787	971103	7	Standard
[	Be	9	0.000	ug/L	0.000	201	3	5	78	Standard
	C	13		ug/L			42921	59593	1	Standard
[>	Sc	45		ug/L			850595	808057	6	Standard
[	V	51	0.014	ug/L	0.012	84	7786	7822	3	Standard
[	V-1	51	0.013	ug/L	0.002	14	362	760	1	Standard
[	Cr	52	0.034	ug/L	0.032	93	22890	22617	3	Standard
[	Cr	53	0.031	ug/L	0.003	9	212	297	8	Standard
[	Fe	54	3.952	ug/L	1.482	37	90788	96312	3	Standard
[	Fe	57	1.160	ug/L	0.399	34	21922	22031	5	Standard
[	Mn	55	0.034	ug/L	0.002	4	774	2112	5	Standard
[>	Ge	72		ug/L			48940	50114	0	KED
[	Ni	60	-0.024	ug/L	0.004	16	80	40	17	KED
[	Ni	62	-0.019	ug/L	0.006	33	16	11	16	KED
[	Cu	63	-0.002	ug/L	0.003	190	137	132	12	KED
[	Cu	65	0.003	ug/L	0.006	215	67	76	20	KED
[	Zn	66	0.059	ug/L	0.034	57	85	127	17	KED
[	Zn	67	0.052	ug/L	0.058	111	17	23	28	KED
[	As	75	0.009	ug/L	0.007	81	5	8	31	KED
	Y	89		ug/L			438010	401946	8	Standard
	Kr	83		ug/L			58	56	21	Standard
[>	In-1	115		ug/L			11681	11786	0	KED
[	Cd	111	-0.004	ug/L	0.003	87	5	4	24	KED
[	Cd	114	-0.002	ug/L	0.004	200	6	4	94	KED
[>	In	115		ug/L			671207	627248	6	Standard
[	Ag	107	-0.001	ug/L	0.001	35	227	182	10	Standard
[>	Tb	159		ug/L			1536215	1454737	6	Standard
[	Tl	205	0.001	ug/L	0.000	59	715	732	9	Standard
[	Pb	208	-0.001	ug/L	0.000	29	628	509	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0018-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 17:21:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1001553	2	Standard
	Be	**9**	**25.164**	ug/L	0.455	1	3	192322	3	Standard
	C	**13**		ug/L			42921	63501	1	Standard
>	**Sc**	**45**		ug/L			850595	831381	0	Standard
	V	**51**	**25.681**	ug/L	0.206	0	7786	849026	1	Standard
	V-1	**51**	**25.603**	ug/L	0.180	0	362	847420	1	Standard
	Cr	**52**	**26.002**	ug/L	0.286	1	22890	735520	1	Standard
	Cr	**53**	**25.738**	ug/L	0.421	1	212	82600	1	Standard
	Fe	**54**	**5085.762**	ug/L	36.403	0	90788	13643244	0	Standard
	Fe	**57**	**5051.964**	ug/L	54.308	1	21922	5507673	1	Standard
	Mn	**55**	**26.078**	ug/L	0.295	1	774	1100852	1	Standard
>	**Ge**	**72**		ug/L			48940	47395	1	KED
	Ni	**60**	**27.187**	ug/L	0.363	1	80	45500	2	KED
	Ni	**62**	**27.292**	ug/L	1.776	6	16	7498	6	KED
	Cu	**63**	**27.251**	ug/L	0.396	1	137	130139	1	KED
	Cu	**65**	**26.856**	ug/L	0.682	2	67	65918	1	KED
	Zn	**66**	**86.087**	ug/L	2.845	3	85	54883	1	KED
	Zn	**67**	**81.101**	ug/L	1.842	2	17	8756	1	KED
	As	**75**	**25.961**	ug/L	0.283	1	5	8816	0	KED
	Y	**89**		ug/L			438010	415807	0	Standard
	Kr	**83**		ug/L			58	69	30	Standard
>	**In-1**	**115**		ug/L			11681	10981	1	KED
	Cd	**111**	**27.069**	ug/L	0.619	2	5	9214	0	KED
	Cd	**114**	**26.662**	ug/L	0.554	2	6	23448	1	KED
>	**In**	**115**		ug/L			671207	632274	1	Standard
	Ag	**107**	**26.488**	ug/L	0.540	2	227	549604	2	Standard
>	**Tb**	**159**		ug/L			1536215	1490379	1	Standard
	Tl	**205**	**26.159**	ug/L	0.346	1	715	1856495	0	Standard
	Pb	**208**	**26.504**	ug/L	0.431	1	628	2411830	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0785-BLK2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 17:26:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1021241	0	Standard
	Be	**9**	**0.009**	ug/L	0.014	159	3	72	152	Standard
	C	**13**		ug/L			42921	82047	0	Standard
>	**Sc**	**45**		ug/L			850595	847672	0	Standard
	V	**51**	**0.033**	ug/L	0.016	47	7786	8856	5	Standard
	V-1	**51**	**0.022**	ug/L	0.015	66	362	1118	44	Standard
	Cr	**52**	**0.114**	ug/L	0.019	16	22890	26004	2	Standard
	Cr	**53**	**0.077**	ug/L	0.013	17	212	464	9	Standard
	Fe	**54**	**6.046**	ug/L	3.272	54	90788	106892	8	Standard
	Fe	**57**	**2.497**	ug/L	2.991	119	21922	24608	13	Standard
	Mn	**55**	**0.023**	ug/L	0.016	69	774	1753	38	Standard
>	**Ge**	**72**		ug/L			48940	48343	0	KED
	Ni	**60**	**-0.033**	ug/L	0.005	15	80	23	36	KED
	Ni	**62**	**-0.027**	ug/L	0.016	59	16	8	49	KED
	Cu	**63**	**0.004**	ug/L	0.001	28	137	156	3	KED
	Cu	**65**	**0.003**	ug/L	0.006	214	67	73	19	KED
	Zn	**66**	**7.301**	ug/L	0.096	1	85	4826	1	KED
	Zn	**67**	**6.608**	ug/L	0.298	4	17	743	4	KED
	As	**75**	**0.007**	ug/L	0.005	68	5	7	22	KED
	Y	**89**		ug/L			438010	415512	2	Standard
	Kr	**83**		ug/L			58	58	17	Standard
>	**In-1**	**115**		ug/L			11681	11321	0	KED
	Cd	**111**	**-0.002**	ug/L	0.005	212	5	4	34	KED
	Cd	**114**	**-0.005**	ug/L	0.002	47	6	1	114	KED
>	**In**	**115**		ug/L			671207	652320	0	Standard
	Ag	**107**	**0.011**	ug/L	0.019	167	227	466	88	Standard
>	**Tb**	**159**		ug/L			1536215	1491295	1	Standard
	Tl	**205**	**0.010**	ug/L	0.016	168	715	1372	82	Standard
	Pb	**208**	**0.009**	ug/L	0.016	188	628	1377	104	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0785-BS2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 17:31:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1006263	4	Standard
	Be	**9**	**25.077**	ug/L	1.622	6	3	192117	1	Standard
	C	**13**		ug/L			42921	89236	1	Standard
>	**Sc**	**45**		ug/L			850595	828686	5	Standard
	V	**51**	**26.086**	ug/L	1.450	5	7786	857919	1	Standard
	V-1	**51**	**26.082**	ug/L	1.463	5	362	858818	1	Standard
	Cr	**52**	**26.382**	ug/L	1.566	5	22890	742063	0	Standard
	Cr	**53**	**26.359**	ug/L	1.622	6	212	84140	0	Standard
	Fe	**54**	**5335.485**	ug/L	261.622	4	90788	14238667	0	Standard
	Fe	**57**	**5243.307**	ug/L	269.360	5	21922	5686927	0	Standard
	Mn	**55**	**26.093**	ug/L	1.414	5	774	1095821	0	Standard
>	**Ge**	**72**		ug/L			48940	48224	1	KED
	Ni	**60**	**26.469**	ug/L	0.564	2	80	45060	0	KED
	Ni	**62**	**26.216**	ug/L	0.558	2	16	7329	2	KED
	Cu	**63**	**27.039**	ug/L	0.539	1	137	131374	0	KED
	Cu	**65**	**26.948**	ug/L	0.550	2	67	67303	0	KED
	Zn	**66**	**86.670**	ug/L	3.743	4	85	56211	2	KED
	Zn	**67**	**80.775**	ug/L	0.659	0	17	8877	2	KED
	As	**75**	**25.698**	ug/L	0.625	2	5	8877	0	KED
	Y	**89**		ug/L			438010	419005	3	Standard
	Kr	**83**		ug/L			58	61	15	Standard
>	**In-1**	**115**		ug/L			11681	11198	2	KED
	Cd	**111**	**26.849**	ug/L	0.667	2	5	9318	1	KED
	Cd	**114**	**26.398**	ug/L	0.754	2	6	23667	0	KED
>	**In**	**115**		ug/L			671207	633181	3	Standard
	Ag	**107**	**26.695**	ug/L	0.913	3	227	554286	0	Standard
>	**Tb**	**159**		ug/L			1536215	1494014	4	Standard
	Tl	**205**	**26.279**	ug/L	1.459	5	715	1866423	0	Standard
	Pb	**208**	**26.690**	ug/L	1.186	4	628	2431643	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0633-01
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 01, 2023 17:36:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1089609	0	Standard
	Be	**9**	**0.000**	ug/L	0.001	281	3	5	86	Standard
	C	**13**		ug/L			42921	135349	2	Standard
>	**Sc**	**45**		ug/L			850595	836053	0	Standard
	V	**51**	**-0.007**	ug/L	0.011	154	7786	7406	4	Standard
	V-1	**51**	**0.028**	ug/L	0.000	1	362	1285	1	Standard
	Cr	**52**	**6.854**	ug/L	0.144	2	22890	211513	1	Standard
	Cr	**53**	**6.752**	ug/L	0.124	1	212	21943	1	Standard
	Fe	**54**	**260.709**	ug/L	4.245	1	90788	787929	0	Standard
	Fe	**57**	**289.057**	ug/L	4.536	1	21922	337190	0	Standard
	Mn	**55**	**5.524**	ug/L	0.091	1	774	235065	0	Standard
>	**Ge**	**72**		ug/L			48940	48339	0	KED
	Ni	**60**	**0.671**	ug/L	0.023	3	80	1222	3	KED
	Ni	**62**	**0.636**	ug/L	0.041	6	16	194	6	KED
	Cu	**63**	**0.387**	ug/L	0.024	6	137	2021	6	KED
	Cu	**65**	**0.385**	ug/L	0.003	0	67	1029	1	KED
	Zn	**66**	**3.876**	ug/L	0.033	0	85	2602	1	KED
	Zn	**67**	**3.472**	ug/L	0.128	3	17	398	4	KED
	As	**75**	**0.046**	ug/L	0.003	6	5	20	5	KED
	Y	**89**		ug/L			438010	420697	0	Standard
	Kr	**83**		ug/L			58	48	32	Standard
>	**In-1**	**115**		ug/L			11681	11044	0	KED
	Cd	**111**	**0.020**	ug/L	0.003	13	5	12	7	KED
	Cd	**114**	**0.018**	ug/L	0.002	12	6	21	8	KED
>	**In**	**115**		ug/L			671207	660375	1	Standard
	Ag	**107**	**0.002**	ug/L	0.002	65	227	273	12	Standard
>	**Tb**	**159**		ug/L			1536215	1516832	1	Standard
	Tl	**205**	**0.000**	ug/L	0.001	1234	715	709	5	Standard
	Pb	**208**	**0.018**	ug/L	0.001	3	628	2297	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0637-01
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 01, 2023 17:40:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	991058	0	Standard
	Be	**9**	**0.007**	ug/L	0.004	54	3	58	51	Standard
	C	**13**		ug/L			42921	60824	2	Standard
>	**Sc**	**45**		ug/L			850595	841290	0	Standard
	V	**51**	**-0.007**	ug/L	0.063	883	7786	7469	28	Standard
	V-1	**51**	**0.333**	ug/L	0.008	2	362	11508	1	Standard
	Cr	**52**	**11.708**	ug/L	0.074	0	22890	347557	0	Standard
	Cr	**53**	**12.458**	ug/L	0.300	2	212	40565	1	Standard
	Fe	**54**	**30.934**	ug/L	2.604	8	90788	173203	3	Standard
	Fe	**57**	**26.211**	ug/L	0.948	3	21922	50482	1	Standard
	Mn	**55**	**0.565**	ug/L	0.009	1	774	24865	1	Standard
>	**Ge**	**72**		ug/L			48940	48082	0	KED
	Ni	**60**	**1.236**	ug/L	0.034	2	80	2172	2	KED
	Ni	**62**	**1.156**	ug/L	0.041	3	16	337	3	KED
	Cu	**63**	**3.559**	ug/L	0.034	0	137	17364	0	KED
	Cu	**65**	**3.549**	ug/L	0.075	2	67	8898	2	KED
	Zn	**66**	**7.589**	ug/L	0.313	4	85	4986	3	KED
	Zn	**67**	**6.895**	ug/L	0.306	4	17	770	4	KED
	As	**75**	**0.037**	ug/L	0.005	13	5	17	10	KED
	Y	**89**		ug/L			438010	407210	0	Standard
	Kr	**83**		ug/L			58	67	14	Standard
>	**In-1**	**115**		ug/L			11681	10374	3	KED
	Cd	**111**	**0.244**	ug/L	0.040	16	5	83	15	KED
	Cd	**114**	**0.293**	ug/L	0.023	7	6	248	5	KED
>	**In**	**115**		ug/L			671207	644318	0	Standard
	Ag	**107**	**0.010**	ug/L	0.012	118	227	434	58	Standard
>	**Tb**	**159**		ug/L			1536215	1501788	0	Standard
	Tl	**205**	**0.004**	ug/L	0.010	218	715	1020	68	Standard
	Pb	**208**	**0.108**	ug/L	0.010	9	628	10475	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0508-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 01, 2023 17:45:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			984787	1066909	1	Standard
⌊	**Be**	**9**	**0.001**	ug/L	0.001	82	3	9	52	Standard
	C	**13**		ug/L			42921	545992	1	Standard
⌈>	**Sc**	**45**		ug/L			850595	789173	0	Standard
⌈	**V**	**51**	**0.273**	ug/L	0.009	3	7786	15726	2	Standard
⌊	**V-1**	**51**	**0.117**	ug/L	0.003	2	362	4018	2	Standard
⌈	**Cr**	**52**	**1.493**	ug/L	0.003	0	22890	60099	0	Standard
⌊	**Cr**	**53**	**0.938**	ug/L	0.019	2	212	3046	1	Standard
⌈	**Fe**	**54**	**858.335**	ug/L	14.043	1	90788	2255778	2	Standard
⌊	**Fe**	**57**	**1182.209**	ug/L	15.625	1	21922	1238946	1	Standard
⌊	**Mn**	**55**	**7.749**	ug/L	0.073	0	774	310999	0	Standard
⌈>	**Ge**	**72**		ug/L			48940	42183	1	KED
⌈	**Ni**	**60**	**2.620**	ug/L	0.136	5	80	3963	3	KED
⌊	**Ni**	**62**	**2.575**	ug/L	0.046	1	16	642	0	KED
⌈	**Cu**	**63**	**3.636**	ug/L	0.134	3	137	15555	3	KED
⌊	**Cu**	**65**	**3.629**	ug/L	0.074	2	67	7979	2	KED
⌈	**Zn**	**66**	**4.558**	ug/L	0.190	4	85	2658	5	KED
⌊	**Zn**	**67**	**4.724**	ug/L	0.271	5	17	467	5	KED
⌊	**As**	**75**	**0.124**	ug/L	0.018	14	5	41	11	KED
	Y	**89**		ug/L			438010	404891	2	Standard
	Kr	**83**		ug/L			58	64	19	Standard
⌈>	**In-1**	**115**		ug/L			11681	9855	2	KED
⌈	**Cd**	**111**	**0.111**	ug/L	0.016	14	5	38	11	KED
⌊	**Cd**	**114**	**0.104**	ug/L	0.011	10	6	87	12	KED
⌈>	**In**	**115**		ug/L			671207	606689	0	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.001	68	227	166	15	Standard
⌈>	**Tb**	**159**		ug/L			1536215	1530136	1	Standard
⌈	**Tl**	**205**	**-0.001**	ug/L	0.001	35	715	608	7	Standard
⌊	**Pb**	**208**	**0.032**	ug/L	0.001	2	628	3614	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0678-09
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 17:50:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			984787	1023725	1	Standard
⌊	**Be**	**9**	**0.003**	ug/L	0.001	46	3	24	39	Standard
	C	**13**		ug/L			42921	112047	1	Standard
⌈>	**Sc**	**45**		ug/L			850595	996000	1	Standard
⌈	**V**	**51**	**0.421**	ug/L	0.014	3	7786	25633	1	Standard
⌊	**V-1**	**51**	**0.626**	ug/L	0.013	2	362	25223	0	Standard
⌈	**Cr**	**52**	**0.348**	ug/L	0.012	3	22890	38228	0	Standard
⌊	**Cr**	**53**	**1.027**	ug/L	0.013	1	212	4188	0	Standard
⌈	**Fe**	**54**	**4327.273**	ug/L	73.664	1	90788	13924686	3	Standard
⌊	**Fe**	**57**	**4454.814**	ug/L	89.189	2	21922	5822381	3	Standard
⌊	**Mn**	**55**	**460.473**	ug/L	5.058	1	774	23270104	1	Standard
⌈>	**Ge**	**72**		ug/L			48940	42541	1	KED
⌈	**Ni**	**60**	**0.913**	ug/L	0.012	1	80	1438	1	KED
⌊	**Ni**	**62**	**0.902**	ug/L	0.054	6	16	236	4	KED
⌈	**Cu**	**63**	**0.434**	ug/L	0.019	4	137	1977	2	KED
⌊	**Cu**	**65**	**0.431**	ug/L	0.029	6	67	1007	5	KED
⌈	**Zn**	**66**	**1.787**	ug/L	0.043	2	85	1095	3	KED
⌊	**Zn**	**67**	**5.295**	ug/L	0.251	4	17	526	3	KED
⌊	**As**	**75**	**0.529**	ug/L	0.045	8	5	165	8	KED
	Y	**89**		ug/L			438010	403589	1	Standard
	Kr	**83**		ug/L			58	89	9	Standard
⌈>	**In-1**	**115**		ug/L			11681	9789	0	KED
⌈	**Cd**	**111**	**0.004**	ug/L	0.013	320	5	6	65	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.002	218	6	5	32	KED
⌈>	**In**	**115**		ug/L			671207	612244	2	Standard
⌊	**Ag**	**107**	**0.020**	ug/L	0.001	7	227	602	3	Standard
⌈>	**Tb**	**159**		ug/L			1536215	1503722	0	Standard
⌈	**Tl**	**205**	**-0.002**	ug/L	0.000	16	715	563	3	Standard
⌊	**Pb**	**208**	**0.037**	ug/L	0.002	5	628	4011	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0678-08
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 17:55:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1024265	0	Standard
	Be	**9**	**0.004**	ug/L	0.000	7	3	31	6	Standard
	C	**13**		ug/L			42921	105871	0	Standard
>	**Sc**	**45**		ug/L			850595	997136	1	Standard
	V	**51**	**0.604**	ug/L	0.017	2	7786	32853	1	Standard
	V-1	**51**	**0.787**	ug/L	0.019	2	362	31653	1	Standard
	Cr	**52**	**0.423**	ug/L	0.010	2	22890	40742	1	Standard
	Cr	**53**	**1.034**	ug/L	0.021	2	212	4219	0	Standard
	Fe	**54**	**4365.795**	ug/L	16.899	0	90788	14061352	1	Standard
	Fe	**57**	**4560.310**	ug/L	18.180	0	21922	5965176	1	Standard
	Mn	**55**	**452.150**	ug/L	5.463	1	774	22877831	2	Standard
>	**Ge**	**72**		ug/L			48940	43191	0	KED
	Ni	**60**	**0.870**	ug/L	0.049	5	80	1395	5	KED
	Ni	**62**	**0.915**	ug/L	0.068	7	16	243	6	KED
	Cu	**63**	**0.540**	ug/L	0.010	1	137	2471	1	KED
	Cu	**65**	**0.537**	ug/L	0.008	1	67	1259	1	KED
	Zn	**66**	**4.513**	ug/L	0.107	2	85	2694	2	KED
	Zn	**67**	**8.048**	ug/L	0.274	3	17	805	3	KED
	As	**75**	**0.740**	ug/L	0.050	6	5	233	6	KED
	Y	**89**		ug/L			438010	397246	3	Standard
	Kr	**83**		ug/L			58	90	12	Standard
>	**In-1**	**115**		ug/L			11681	9914	2	KED
	Cd	**111**	**0.025**	ug/L	0.017	67	5	12	42	KED
	Cd	**114**	**0.017**	ug/L	0.008	46	6	18	34	KED
>	**In**	**115**		ug/L			671207	602174	0	Standard
	Ag	**107**	**0.019**	ug/L	0.000	2	227	573	1	Standard
>	**Tb**	**159**		ug/L			1536215	1513952	1	Standard
	Tl	**205**	**-0.002**	ug/L	0.000	8	715	553	0	Standard
	Pb	**208**	**0.327**	ug/L	0.002	0	628	30865	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 18:00:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			984787	1065082	2	Standard
⌊	**Be**	**9**	**-0.000**	ug/L	0.000	369	3	3	34	Standard
	C	**13**		ug/L			42921	53705	1	Standard
⌈>	**Sc**	**45**		ug/L			850595	823472	1	Standard
⎢	**V**	**51**	**0.001**	ug/L	0.003	314	7786	7566	1	Standard
⎢	**V-1**	**51**	**0.020**	ug/L	0.002	9	362	990	4	Standard
⎢	**Cr**	**52**	**0.003**	ug/L	0.006	203	22890	22237	1	Standard
⎢	**Cr**	**53**	**0.064**	ug/L	0.007	10	212	409	3	Standard
⎢	**Fe**	**54**	**2.176**	ug/L	0.492	22	90788	93635	1	Standard
⎢	**Fe**	**57**	**-2.157**	ug/L	0.400	18	21922	18906	3	Standard
⌊	**Mn**	**55**	**0.035**	ug/L	0.015	43	774	2208	29	Standard
⌈>	**Ge**	**72**		ug/L			48940	48050	1	KED
⎢	**Ni**	**60**	**0.065**	ug/L	0.004	6	80	189	2	KED
⎢	**Ni**	**62**	**0.067**	ug/L	0.028	42	16	34	22	KED
⎢	**Cu**	**63**	**0.028**	ug/L	0.001	4	137	271	0	KED
⎢	**Cu**	**65**	**0.028**	ug/L	0.007	23	67	136	11	KED
⎢	**Zn**	**66**	**0.419**	ug/L	0.038	8	85	354	7	KED
⎢	**Zn**	**67**	**0.492**	ug/L	0.156	31	17	70	23	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.002	48	5	3	20	KED
	Y	**89**		ug/L			438010	405919	1	Standard
	Kr	**83**		ug/L			58	50	5	Standard
⌈>	**In-1**	**115**		ug/L			11681	10837	2	KED
⎢	**Cd**	**111**	**-0.006**	ug/L	0.004	64	5	3	45	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.004	184	6	7	44	KED
⌈>	**In**	**115**		ug/L			671207	665568	0	Standard
⌊	**Ag**	**107**	**-0.003**	ug/L	0.000	14	227	161	5	Standard
⌈>	**Tb**	**159**		ug/L			1536215	1500566	0	Standard
⎢	**Tl**	**205**	**-0.002**	ug/L	0.000	8	715	526	3	Standard
⌊	**Pb**	**208**	**0.011**	ug/L	0.001	7	628	1611	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 18:05:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1059909	1	Standard
	Be	**9**	**47.804**	ug/L	1.608	3	3	386411	1	Standard
	C	**13**		ug/L			42921	45187	0	Standard
>	**Sc**	**45**		ug/L			850595	823319	1	Standard
	V	**51**	**47.698**	ug/L	0.239	0	7786	1555087	1	Standard
	V-1	**51**	**47.671**	ug/L	0.371	0	362	1562058	1	Standard
	Cr	**52**	**49.002**	ug/L	0.317	0	22890	1353002	1	Standard
	Cr	**53**	**48.868**	ug/L	0.560	1	212	155118	1	Standard
	Fe	**54**	**5061.994**	ug/L	38.571	0	90788	13447128	0	Standard
	Fe	**57**	**5051.712**	ug/L	72.525	1	21922	5453130	0	Standard
	Mn	**55**	**50.469**	ug/L	0.490	0	774	2108923	1	Standard
>	**Ge**	**72**		ug/L			48940	47567	1	KED
	Ni	**60**	**51.668**	ug/L	1.078	2	80	86688	0	KED
	Ni	**62**	**51.561**	ug/L	1.799	3	16	14198	1	KED
	Cu	**63**	**52.039**	ug/L	1.997	3	137	249219	2	KED
	Cu	**65**	**52.748**	ug/L	1.257	2	67	129875	0	KED
	Zn	**66**	**52.340**	ug/L	0.703	1	85	33529	0	KED
	Zn	**67**	**51.417**	ug/L	1.595	3	17	5576	1	KED
	As	**75**	**49.886**	ug/L	1.209	2	5	16994	0	KED
	Y	**89**		ug/L			438010	414503	0	Standard
	Kr	**83**		ug/L			58	57	20	Standard
>	**In-1**	**115**		ug/L			11681	10696	0	KED
	Cd	**111**	**52.155**	ug/L	0.713	1	5	17291	1	KED
	Cd	**114**	**51.499**	ug/L	0.115	0	6	44119	1	KED
>	**In**	**115**		ug/L			671207	654527	0	Standard
	Ag	**107**	**49.623**	ug/L	1.149	2	227	1065636	1	Standard
>	**Tb**	**159**		ug/L			1536215	1534820	0	Standard
	Tl	**205**	**52.342**	ug/L	0.183	0	715	3825268	0	Standard
	Pb	**208**	**52.224**	ug/L	0.422	0	628	4894279	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 18:12:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			984787	1060394	3	Standard
⌊	**Be**	**9**	**-0.000**	ug/L	0.000	1407	3	3	91	Standard
	C	**13**		ug/L			42921	44311	0	Standard
⌈>	**Sc**	**45**		ug/L			850595	808653	1	Standard
⎢	**V**	**51**	**-0.007**	ug/L	0.003	48	7786	7194	2	Standard
⎢	**V-1**	**51**	**0.005**	ug/L	0.001	18	362	494	5	Standard
⎢	**Cr**	**52**	**-0.030**	ug/L	0.004	14	22890	20975	1	Standard
⎢	**Cr**	**53**	**0.008**	ug/L	0.007	83	212	227	8	Standard
⎢	**Fe**	**54**	**0.513**	ug/L	0.205	40	90788	87638	0	Standard
⎢	**Fe**	**57**	**-1.575**	ug/L	0.337	21	21922	19179	2	Standard
⌊	**Mn**	**55**	**-0.000**	ug/L	0.000	86	774	718	2	Standard
⌈>	**Ge**	**72**		ug/L			48940	48095	2	KED
⎢	**Ni**	**60**	**-0.022**	ug/L	0.003	13	80	40	11	KED
⎢	**Ni**	**62**	**-0.022**	ug/L	0.009	39	16	10	21	KED
⎢	**Cu**	**63**	**-0.000**	ug/L	0.001	336	137	134	4	KED
⎢	**Cu**	**65**	**-0.002**	ug/L	0.003	109	67	60	12	KED
⎢	**Zn**	**66**	**0.045**	ug/L	0.014	31	85	113	7	KED
⎢	**Zn**	**67**	**0.032**	ug/L	0.053	164	17	20	27	KED
⌊	**As**	**75**	**0.004**	ug/L	0.007	172	5	6	41	KED
	Y	**89**		ug/L			438010	395858	0	Standard
	Kr	**83**		ug/L			58	64	8	Standard
⌈>	**In-1**	**115**		ug/L			11681	11093	1	KED
⎢	**Cd**	**111**	**-0.003**	ug/L	0.006	214	5	4	49	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.003	371	6	4	59	KED
⌈>	**In**	**115**		ug/L			671207	642552	1	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.001	44	227	177	9	Standard
⌈>	**Tb**	**159**		ug/L			1536215	1488394	1	Standard
⎢	**Tl**	**205**	**-0.000**	ug/L	0.001	236	715	674	6	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	177	628	587	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0296-BLK2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 18:18:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1057489	2	Standard
	Be	**9**	**0.002**	ug/L	0.002	93	3	21	79	Standard
	C	**13**		ug/L			42921	84995	2	Standard
>	**Sc**	**45**		ug/L			850595	835517	1	Standard
	V	**51**	**0.011**	ug/L	0.006	51	7786	8014	1	Standard
	V-1	**51**	**0.009**	ug/L	0.002	24	362	643	10	Standard
	Cr	**52**	**0.075**	ug/L	0.013	17	22890	24538	1	Standard
	Cr	**53**	**0.064**	ug/L	0.003	4	212	415	3	Standard
	Fe	**54**	**5.121**	ug/L	0.534	10	90788	102890	1	Standard
	Fe	**57**	**2.897**	ug/L	0.350	12	21922	24693	1	Standard
	Mn	**55**	**0.061**	ug/L	0.015	24	774	3332	17	Standard
>	**Ge**	**72**		ug/L			48940	47810	0	KED
	Ni	**60**	**-0.033**	ug/L	0.003	9	80	22	22	KED
	Ni	**62**	**-0.042**	ug/L	0.004	9	16	4	24	KED
	Cu	**63**	**0.020**	ug/L	0.004	21	137	231	9	KED
	Cu	**65**	**0.022**	ug/L	0.006	29	67	120	13	KED
	Zn	**66**	**0.084**	ug/L	0.029	34	85	137	14	KED
	Zn	**67**	**0.103**	ug/L	0.019	18	17	27	7	KED
	As	**75**	**-0.001**	ug/L	0.001	243	5	4	10	KED
	Y	**89**		ug/L			438010	410503	2	Standard
	Kr	**83**		ug/L			58	56	16	Standard
>	**In-1**	**115**		ug/L			11681	11086	1	KED
	Cd	**111**	**-0.011**	ug/L	0.002	13	5	1	34	KED
	Cd	**114**	**-0.002**	ug/L	0.002	92	6	3	57	KED
>	**In**	**115**		ug/L			671207	664954	2	Standard
	Ag	**107**	**-0.002**	ug/L	0.003	137	227	176	40	Standard
>	**Tb**	**159**		ug/L			1536215	1506347	0	Standard
	Tl	**205**	**0.002**	ug/L	0.004	231	715	811	31	Standard
	Pb	**208**	**0.002**	ug/L	0.004	199	628	787	43	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0296-BS2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 18:22:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1059028	0	Standard
	Be	**9**	**24.614**	ug/L	0.174	0	3	198874	0	Standard
	C	**13**		ug/L			42921	87360	1	Standard
>	**Sc**	**45**		ug/L			850595	821442	1	Standard
	V	**51**	**25.560**	ug/L	0.236	0	7786	834863	0	Standard
	V-1	**51**	**25.387**	ug/L	0.328	1	362	830093	0	Standard
	Cr	**52**	**25.699**	ug/L	0.428	1	22890	718559	2	Standard
	Cr	**53**	**25.125**	ug/L	0.189	0	212	79672	1	Standard
	Fe	**54**	**1.987**	ug/L	0.232	11	90788	92907	1	Standard
	Fe	**57**	**-1.989**	ug/L	0.490	24	21922	19035	2	Standard
	Mn	**55**	**26.084**	ug/L	0.034	0	774	1087895	1	Standard
>	**Ge**	**72**		ug/L			48940	48618	2	KED
	Ni	**60**	**26.879**	ug/L	0.381	1	80	46135	0	KED
	Ni	**62**	**27.389**	ug/L	0.838	3	16	7718	2	KED
	Cu	**63**	**28.183**	ug/L	0.763	2	137	138030	0	KED
	Cu	**65**	**27.872**	ug/L	0.743	2	67	70168	0	KED
	Zn	**66**	**87.431**	ug/L	2.267	2	85	57183	1	KED
	Zn	**67**	**82.398**	ug/L	0.862	1	17	9127	2	KED
	As	**75**	**25.558**	ug/L	0.452	1	5	8902	1	KED
	Y	**89**		ug/L			438010	403203	1	Standard
	Kr	**83**		ug/L			58	55	6	Standard
>	**In-1**	**115**		ug/L			11681	10905	1	KED
	Cd	**111**	**27.268**	ug/L	0.478	1	5	9218	0	KED
	Cd	**114**	**26.981**	ug/L	0.530	1	6	23563	0	KED
>	**In**	**115**		ug/L			671207	662164	1	Standard
	Ag	**107**	**26.608**	ug/L	0.296	1	227	578265	3	Standard
>	**Tb**	**159**		ug/L			1536215	1514045	0	Standard
	Tl	**205**	**26.648**	ug/L	0.340	1	715	1921473	1	Standard
	Pb	**208**	**27.169**	ug/L	0.145	0	628	2512050	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0439-BLK2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 18:27:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			984787	1057481	1	Standard
⌊	**Be**	**9**	**0.001**	ug/L	0.001	114	3	10	75	Standard
	C	**13**		ug/L			42921	70672	0	Standard
⌈>	**Sc**	**45**		ug/L			850595	823716	1	Standard
⎢	**V**	**51**	**0.018**	ug/L	0.002	13	7786	8135	2	Standard
⎢	**V-1**	**51**	**0.017**	ug/L	0.003	16	362	912	10	Standard
⎢	**Cr**	**52**	**0.142**	ug/L	0.012	8	22890	26039	2	Standard
⎢	**Cr**	**53**	**0.135**	ug/L	0.004	2	212	632	2	Standard
⎢	**Fe**	**54**	**4.114**	ug/L	1.240	30	90788	98749	1	Standard
⎢	**Fe**	**57**	**-0.078**	ug/L	0.314	400	21922	21142	1	Standard
⌊	**Mn**	**55**	**0.060**	ug/L	0.003	4	774	3263	1	Standard
⌈>	**Ge**	**72**		ug/L			48940	47483	0	KED
⎢	**Ni**	**60**	**0.064**	ug/L	0.010	16	80	185	9	KED
⎢	**Ni**	**62**	**0.053**	ug/L	0.043	80	16	30	37	KED
⎢	**Cu**	**63**	**0.087**	ug/L	0.002	2	137	549	2	KED
⎢	**Cu**	**65**	**0.096**	ug/L	0.010	9	67	302	8	KED
⎢	**Zn**	**66**	**0.238**	ug/L	0.031	13	85	234	7	KED
⎢	**Zn**	**67**	**0.234**	ug/L	0.170	72	17	41	43	KED
⌊	**As**	**75**	**-0.003**	ug/L	0.004	156	5	3	36	KED
	Y	**89**		ug/L			438010	407918	2	Standard
	Kr	**83**		ug/L			58	49	16	Standard
⌈>	**In-1**	**115**		ug/L			11681	11180	2	KED
⎢	**Cd**	**111**	**-0.005**	ug/L	0.007	158	5	3	66	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.004	141	6	3	95	KED
⌈>	**In**	**115**		ug/L			671207	667498	1	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.001	312	227	221	6	Standard
⌈>	**Tb**	**159**		ug/L			1536215	1508797	1	Standard
⎢	**Tl**	**205**	**-0.000**	ug/L	0.001	820	715	695	8	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.000	3	628	1244	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0439-BS2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 18:32:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1045964	4	Standard
	Be	**9**	**24.369**	ug/L	1.165	4	3	194228	1	Standard
	C	**13**		ug/L			42921	69095	1	Standard
>	**Sc**	**45**		ug/L			850595	834044	1	Standard
	V	**51**	**24.647**	ug/L	0.293	1	7786	817686	0	Standard
	V-1	**51**	**24.719**	ug/L	0.427	1	362	820653	0	Standard
	Cr	**52**	**24.688**	ug/L	0.345	1	22890	701731	1	Standard
	Cr	**53**	**24.925**	ug/L	0.544	2	212	80244	1	Standard
	Fe	**54**	**5128.630**	ug/L	129.215	2	90788	13799366	1	Standard
	Fe	**57**	**5163.339**	ug/L	51.014	0	21922	5646997	2	Standard
	Mn	**55**	**25.270**	ug/L	0.393	1	774	1070125	1	Standard
>	**Ge**	**72**		ug/L			48940	47245	0	KED
	Ni	**60**	**26.269**	ug/L	0.022	0	80	43825	0	KED
	Ni	**62**	**26.066**	ug/L	0.156	0	16	7140	1	KED
	Cu	**63**	**26.511**	ug/L	0.056	0	137	126226	0	KED
	Cu	**65**	**26.412**	ug/L	0.701	2	67	64636	2	KED
	Zn	**66**	**85.725**	ug/L	1.592	1	85	54498	1	KED
	Zn	**67**	**79.772**	ug/L	1.112	1	17	8587	1	KED
	As	**75**	**25.404**	ug/L	0.242	0	5	8600	0	KED
	Y	**89**		ug/L			438010	405432	2	Standard
	Kr	**83**		ug/L			58	68	26	Standard
>	**In-1**	**115**		ug/L			11681	10953	1	KED
	Cd	**111**	**26.194**	ug/L	0.602	2	5	8893	0	KED
	Cd	**114**	**25.717**	ug/L	0.623	2	6	22558	1	KED
>	**In**	**115**		ug/L			671207	644763	1	Standard
	Ag	**107**	**25.194**	ug/L	0.612	2	227	533002	1	Standard
>	**Tb**	**159**		ug/L			1536215	1519798	0	Standard
	Tl	**205**	**25.239**	ug/L	0.252	0	715	1826877	1	Standard
	Pb	**208**	**25.537**	ug/L	0.092	0	628	2370159	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0732-01
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 18:37:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1047256	1	Standard
	Be	**9**	**0.010**	ug/L	0.001	7	3	80	7	Standard
	C	**13**		ug/L			42921	77011	1	Standard
>	**Sc**	**45**		ug/L			850595	827530	1	Standard
	V	**51**	**2.588**	ug/L	0.083	3	7786	91954	2	Standard
	V-1	**51**	**2.688**	ug/L	0.064	2	362	88850	2	Standard
	Cr	**52**	**0.427**	ug/L	0.060	13	22890	33934	5	Standard
	Cr	**53**	**0.827**	ug/L	0.015	1	212	2841	1	Standard
	Fe	**54**	**37.733**	ug/L	0.104	0	90788	188425	1	Standard
	Fe	**57**	**440.832**	ug/L	4.743	1	21922	497824	1	Standard
	Mn	**55**	**9.937**	ug/L	0.237	2	774	417908	1	Standard
>	**Ge**	**72**		ug/L			48940	40120	0	KED
	Ni	**60**	**0.753**	ug/L	0.045	5	80	1130	5	KED
	Ni	**62**	**0.623**	ug/L	0.090	14	16	158	12	KED
	Cu	**63**	**1.309**	ug/L	0.022	1	137	5400	1	KED
	Cu	**65**	**1.270**	ug/L	0.029	2	67	2692	1	KED
	Zn	**66**	**2.086**	ug/L	0.090	4	85	1194	4	KED
	Zn	**67**	**2.336**	ug/L	0.195	8	17	227	8	KED
	As	**75**	**1.459**	ug/L	0.081	5	5	423	5	KED
	Y	**89**		ug/L			438010	389828	0	Standard
	Kr	**83**		ug/L			58	71	9	Standard
>	**In-1**	**115**		ug/L			11681	9333	0	KED
	Cd	**111**	**0.030**	ug/L	0.009	29	5	13	18	KED
	Cd	**114**	**0.026**	ug/L	0.008	32	6	23	25	KED
>	**In**	**115**		ug/L			671207	573111	1	Standard
	Ag	**107**	**0.000**	ug/L	0.000	100	227	201	5	Standard
>	**Tb**	**159**		ug/L			1536215	1470837	1	Standard
	Tl	**205**	**0.059**	ug/L	0.001	2	715	4838	2	Standard
	Pb	**208**	**0.168**	ug/L	0.002	1	628	15697	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0690-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, May 01, 2023 18:43:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	Li	6		ug/L			984787	1115536	1	Standard
	Be	9	-0.000	ug/L	0.000	115	3	1	100	Standard
	C	13		ug/L			42921	52408	0	Standard
>	Sc	45		ug/L			850595	818462	0	Standard
	V	51	0.561	ug/L	0.014	2	7786	25584	1	Standard
	V-1	51	0.872	ug/L	0.010	1	362	28754	1	Standard
	Cr	52	0.039	ug/L	0.006	15	22890	23079	0	Standard
	Cr	53	1.084	ug/L	0.013	1	212	3621	1	Standard
	Fe	54	-0.352	ug/L	0.363	102	90788	86432	1	Standard
	Fe	57	2.146	ug/L	0.318	14	21922	23388	1	Standard
	Mn	55	0.008	ug/L	0.000	4	774	1072	1	Standard
>	Ge	72		ug/L			48940	44711	1	KED
	Ni	60	-0.030	ug/L	0.004	12	80	25	24	KED
	Ni	62	-0.036	ug/L	0.008	21	16	5	33	KED
	Cu	63	0.010	ug/L	0.005	52	137	169	12	KED
	Cu	65	0.006	ug/L	0.005	84	67	76	16	KED
	Zn	66	0.172	ug/L	0.022	12	85	181	5	KED
	Zn	67	0.108	ug/L	0.004	4	17	26	0	KED
	As	75	1.258	ug/L	0.007	0	5	407	1	KED
	Y	89		ug/L			438010	403889	0	Standard
	Kr	83		ug/L			58	59	13	Standard
>	In-1	115		ug/L			11681	10041	2	KED
	Cd	111	-0.004	ug/L	0.008	211	5	3	66	KED
	Cd	114	-0.000	ug/L	0.003	938	6	4	56	KED
>	In	115		ug/L			671207	641184	0	Standard
	Ag	107	-0.005	ug/L	0.001	16	227	114	15	Standard
>	Tb	159		ug/L			1536215	1523757	0	Standard
	Tl	205	-0.002	ug/L	0.001	37	715	560	10	Standard
	Pb	208	-0.002	ug/L	0.000	25	628	478	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0292-DUP2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, May 01, 2023 18:49:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	Li	6		ug/L			984787	1081045	1	Standard
	Be	9	0.000	ug/L	0.000	1077	3	3	86	Standard
	C	13		ug/L			42921	53608	0	Standard
>	Sc	45		ug/L			850595	806801	1	Standard
	V	51	0.578	ug/L	0.006	1	7786	25768	0	Standard
	V-1	51	0.898	ug/L	0.017	1	362	29166	0	Standard
	Cr	52	0.066	ug/L	0.007	11	22890	23472	1	Standard
	Cr	53	1.139	ug/L	0.041	3	212	3739	2	Standard
	Fe	54	0.041	ug/L	1.114	2720	90788	86192	1	Standard
	Fe	57	3.067	ug/L	0.195	6	21922	24024	1	Standard
	Mn	55	0.006	ug/L	0.000	6	774	960	1	Standard
>	Ge	72		ug/L			48940	43709	2	KED
	Ni	60	-0.038	ug/L	0.003	8	80	13	37	KED
	Ni	62	-0.031	ug/L	0.016	52	16	6	56	KED
	Cu	63	0.001	ug/L	0.007	750	137	126	23	KED
	Cu	65	0.007	ug/L	0.005	74	67	77	18	KED
	Zn	66	-0.033	ug/L	0.010	29	85	57	12	KED
	Zn	67	-0.001	ug/L	0.033	4180	17	15	21	KED
	As	75	1.357	ug/L	0.062	4	5	429	4	KED
	Y	89		ug/L			438010	409761	1	Standard
	Kr	83		ug/L			58	57	6	Standard
>	In-1	115		ug/L			11681	9853	2	KED
	Cd	111	-0.005	ug/L	0.006	115	5	3	62	KED
	Cd	114	-0.000	ug/L	0.002	1343	6	4	24	KED
>	In	115		ug/L			671207	643240	2	Standard
	Ag	107	-0.005	ug/L	0.001	13	227	113	13	Standard
>	Tb	159		ug/L			1536215	1510932	1	Standard
	Tl	205	-0.003	ug/L	0.001	25	715	511	9	Standard
	Pb	208	-0.004	ug/L	0.000	7	628	281	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0292-MS2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, May 01, 2023 18:53:57
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1057450	2	Standard
	Be	**9**	**1.244**	ug/L	0.044	3	3	10032	2	Standard
	C	**13**		ug/L			42921	53202	0	Standard
>	**Sc**	**45**		ug/L			850595	808314	1	Standard
	V	**51**	**1.734**	ug/L	0.046	2	7786	62612	1	Standard
	V-1	**51**	**2.077**	ug/L	0.042	2	362	67136	1	Standard
	Cr	**52**	**1.240**	ug/L	0.014	1	22890	54813	1	Standard
	Cr	**53**	**2.390**	ug/L	0.042	1	212	7640	1	Standard
	Fe	**54**	**256.095**	ug/L	2.909	1	90788	749795	0	Standard
	Fe	**57**	**245.524**	ug/L	5.652	2	21922	280064	2	Standard
	Mn	**55**	**1.229**	ug/L	0.028	2	774	51136	1	Standard
>	**Ge**	**72**		ug/L			48940	43890	0	KED
	Ni	**60**	**1.351**	ug/L	0.033	2	80	2162	2	KED
	Ni	**62**	**1.417**	ug/L	0.078	5	16	374	4	KED
	Cu	**63**	**1.420**	ug/L	0.028	1	137	6398	1	KED
	Cu	**65**	**1.421**	ug/L	0.048	3	67	3287	3	KED
	Zn	**66**	**4.492**	ug/L	0.211	4	85	2725	4	KED
	Zn	**67**	**4.170**	ug/L	0.367	8	17	431	8	KED
	As	**75**	**2.586**	ug/L	0.059	2	5	817	2	KED
	Y	**89**		ug/L			438010	407616	0	Standard
	Kr	**83**		ug/L			58	67	19	Standard
>	**In-1**	**115**		ug/L			11681	9705	1	KED
	Cd	**111**	**1.298**	ug/L	0.088	6	5	394	5	KED
	Cd	**114**	**1.344**	ug/L	0.029	2	6	1049	2	KED
>	**In**	**115**		ug/L			671207	634343	2	Standard
	Ag	**107**	**1.246**	ug/L	0.016	1	227	26144	1	Standard
>	**Tb**	**159**		ug/L			1536215	1533957	1	Standard
	Tl	**205**	**1.304**	ug/L	0.018	1	715	95898	0	Standard
	Pb	**208**	**1.323**	ug/L	0.009	0	628	124540	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0292-MSD2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, May 01, 2023 18:58:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	Li	6		ug/L			984787	1045825	1	Standard
	Be	9	1.234	ug/L	0.013	1	3	9845	0	Standard
	C	13		ug/L			42921	53997	0	Standard
>	Sc	45		ug/L			850595	791565	0	Standard
	V	51	1.790	ug/L	0.033	1	7786	63091	1	Standard
	V-1	51	2.135	ug/L	0.036	1	362	67587	0	Standard
	Cr	52	1.290	ug/L	0.040	3	22890	54992	2	Standard
	Cr	53	2.446	ug/L	0.025	1	212	7652	0	Standard
	Fe	54	260.061	ug/L	3.492	1	90788	744434	1	Standard
	Fe	57	252.318	ug/L	4.459	1	21922	281262	0	Standard
	Mn	55	1.256	ug/L	0.007	0	774	51173	0	Standard
>	Ge	72		ug/L			48940	44002	1	KED
	Ni	60	1.428	ug/L	0.033	2	80	2286	2	KED
	Ni	62	1.317	ug/L	0.072	5	16	349	3	KED
	Cu	63	1.434	ug/L	0.055	3	137	6475	2	KED
	Cu	65	1.384	ug/L	0.029	2	67	3213	3	KED
	Zn	66	4.350	ug/L	0.084	1	85	2648	0	KED
	Zn	67	4.472	ug/L	0.100	2	17	462	1	KED
	As	75	2.614	ug/L	0.079	3	5	828	4	KED
	Y	89		ug/L			438010	400966	3	Standard
	Kr	83		ug/L			58	58	13	Standard
>	In-1	115		ug/L			11681	9879	1	KED
	Cd	111	1.369	ug/L	0.110	8	5	423	7	KED
	Cd	114	1.366	ug/L	0.066	4	6	1085	3	KED
>	In	115		ug/L			671207	625994	1	Standard
	Ag	107	1.273	ug/L	0.029	2	227	26348	1	Standard
>	Tb	159		ug/L			1536215	1482609	0	Standard
	Tl	205	1.354	ug/L	0.022	1	715	96257	1	Standard
	Pb	208	1.367	ug/L	0.010	0	628	124348	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 19:03:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1075555	1	Standard
	Be	**9**	**-0.000**	ug/L	0.000	731	3	3	69	Standard
	C	**13**		ug/L			42921	52886	0	Standard
>	**Sc**	**45**		ug/L			850595	779776	0	Standard
	V	**51**	**0.000**	ug/L	0.001	262	7786	7151	1	Standard
	V-1	**51**	**0.016**	ug/L	0.001	3	362	841	1	Standard
	Cr	**52**	**-0.007**	ug/L	0.005	71	22890	20815	0	Standard
	Cr	**53**	**0.047**	ug/L	0.007	15	212	334	5	Standard
	Fe	**54**	**1.614**	ug/L	0.253	15	90788	87259	0	Standard
	Fe	**57**	**1.763**	ug/L	0.248	14	21922	21892	1	Standard
	Mn	**55**	**0.002**	ug/L	0.001	36	774	800	3	Standard
>	**Ge**	**72**		ug/L			48940	45292	1	KED
	Ni	**60**	**-0.008**	ug/L	0.006	79	80	61	14	KED
	Ni	**62**	**-0.022**	ug/L	0.022	102	16	9	60	KED
	Cu	**63**	**-0.006**	ug/L	0.001	22	137	102	7	KED
	Cu	**65**	**-0.007**	ug/L	0.004	68	67	47	24	KED
	Zn	**66**	**0.083**	ug/L	0.030	36	85	129	12	KED
	Zn	**67**	**0.037**	ug/L	0.059	160	17	19	31	KED
	As	**75**	**-0.004**	ug/L	0.004	101	5	3	34	KED
	Y	**89**		ug/L			438010	402439	1	Standard
	Kr	**83**		ug/L			58	57	14	Standard
>	**In-1**	**115**		ug/L			11681	10218	3	KED
	Cd	**111**	**-0.006**	ug/L	0.007	112	5	3	69	KED
	Cd	**114**	**-0.002**	ug/L	0.004	227	6	3	91	KED
>	**In**	**115**		ug/L			671207	637092	1	Standard
	Ag	**107**	**-0.004**	ug/L	0.000	10	227	132	5	Standard
>	**Tb**	**159**		ug/L			1536215	1481916	0	Standard
	Tl	**205**	**-0.003**	ug/L	0.000	10	715	487	5	Standard
	Pb	**208**	**0.000**	ug/L	0.000	244	628	619	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 19:08:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1046851	1	Standard
	Be	**9**	**47.555**	ug/L	1.046	2	3	379740	1	Standard
	C	**13**		ug/L			42921	43628	0	Standard
>	**Sc**	**45**		ug/L			850595	798480	1	Standard
	V	**51**	**47.984**	ug/L	0.516	1	7786	1517123	0	Standard
	V-1	**51**	**47.945**	ug/L	0.477	0	362	1523734	1	Standard
	Cr	**52**	**47.926**	ug/L	1.170	2	22890	1283707	1	Standard
	Cr	**53**	**47.802**	ug/L	0.164	0	212	147173	1	Standard
	Fe	**54**	**5120.291**	ug/L	10.229	0	90788	13191578	0	Standard
	Fe	**57**	**5096.092**	ug/L	58.412	1	21922	5336145	2	Standard
	Mn	**55**	**48.665**	ug/L	0.536	1	774	1972223	0	Standard
>	**Ge**	**72**		ug/L			48940	45563	0	KED
	Ni	**60**	**51.937**	ug/L	1.163	2	80	83480	1	KED
	Ni	**62**	**52.568**	ug/L	2.507	4	16	13867	3	KED
	Cu	**63**	**52.895**	ug/L	0.697	1	137	242737	0	KED
	Cu	**65**	**53.039**	ug/L	0.671	1	67	125126	1	KED
	Zn	**66**	**52.306**	ug/L	0.349	0	85	32100	0	KED
	Zn	**67**	**51.821**	ug/L	0.998	1	17	5386	2	KED
	As	**75**	**50.306**	ug/L	0.304	0	5	16420	0	KED
	Y	**89**		ug/L			438010	404937	0	Standard
	Kr	**83**		ug/L			58	50	10	Standard
>	**In-1**	**115**		ug/L			11681	10590	1	KED
	Cd	**111**	**51.824**	ug/L	0.794	1	5	17011	1	KED
	Cd	**114**	**51.548**	ug/L	1.031	2	6	43718	1	KED
>	**In**	**115**		ug/L			671207	657530	2	Standard
	Ag	**107**	**49.207**	ug/L	2.098	4	227	1060988	2	Standard
>	**Tb**	**159**		ug/L			1536215	1492805	1	Standard
	Tl	**205**	**54.772**	ug/L	0.123	0	715	3893325	1	Standard
	Pb	**208**	**54.064**	ug/L	0.637	1	628	4927469	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 19:15:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			984787	1025830	2	Standard
⌊	**Be**	**9**	**-0.000**	ug/L	0.001	4373	3	3	124	Standard
	C	**13**		ug/L			42921	44553	1	Standard
⌈>	**Sc**	**45**		ug/L			850595	788392	1	Standard
⎢	**V**	**51**	**-0.013**	ug/L	0.003	26	7786	6821	2	Standard
⎢	**V-1**	**51**	**0.003**	ug/L	0.000	10	362	424	2	Standard
⎢	**Cr**	**52**	**-0.050**	ug/L	0.006	11	22890	19912	1	Standard
⎢	**Cr**	**53**	**0.003**	ug/L	0.006	251	212	204	8	Standard
⎢	**Fe**	**54**	**0.305**	ug/L	0.782	256	90788	84905	1	Standard
⎢	**Fe**	**57**	**-0.541**	ug/L	0.265	48	21922	19758	0	Standard
⌊	**Mn**	**55**	**-0.002**	ug/L	0.000	27	774	649	1	Standard
⌈>	**Ge**	**72**		ug/L			48940	46700	0	KED
⎢	**Ni**	**60**	**-0.024**	ug/L	0.005	19	80	36	21	KED
⎢	**Ni**	**62**	**-0.051**	ug/L	0.000	0	16	1		KED
⎢	**Cu**	**63**	**-0.004**	ug/L	0.002	36	137	111	6	KED
⎢	**Cu**	**65**	**-0.002**	ug/L	0.005	282	67	60	21	KED
⎢	**Zn**	**66**	**-0.006**	ug/L	0.020	334	85	78	15	KED
⎢	**Zn**	**67**	**-0.011**	ug/L	0.018	171	17	15	12	KED
⌊	**As**	**75**	**-0.005**	ug/L	0.002	54	5	3	24	KED
	Y	**89**		ug/L			438010	403055	0	Standard
	Kr	**83**		ug/L			58	47	16	Standard
⌈>	**In-1**	**115**		ug/L			11681	10833	2	KED
⎢	**Cd**	**111**	**-0.005**	ug/L	0.007	160	5	3	66	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.007	3709	6	5	119	KED
⌈>	**In**	**115**		ug/L			671207	647354	0	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.001	54	227	172	14	Standard
⌈>	**Tb**	**159**		ug/L			1536215	1492180	1	Standard
⎢	**Tl**	**205**	**-0.001**	ug/L	0.000	54	715	638	6	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	74	628	573	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 01, 2023 19:21:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1011745	2	Standard
	Be	**9**	**0.001**	ug/L	0.000	73	3	7	43	Standard
	C	**13**		ug/L			42921	64232	1	Standard
>	**Sc**	**45**		ug/L			850595	913663	0	Standard
	V	**51**	**0.559**	ug/L	0.007	1	7786	28492	1	Standard
	V-1	**51**	**0.644**	ug/L	0.007	1	362	23818	0	Standard
	Cr	**52**	**-0.063**	ug/L	0.009	14	22890	22678	2	Standard
	Cr	**53**	**0.239**	ug/L	0.009	3	212	1067	2	Standard
	Fe	**54**	**97.599**	ug/L	1.786	1	90788	383369	1	Standard
	Fe	**57**	**119.411**	ug/L	1.204	1	21922	166056	1	Standard
	Mn	**55**	**58.475**	ug/L	1.251	2	774	2711466	1	Standard
>	**Ge**	**72**		ug/L			48940	46921	1	KED
	Ni	**60**	**1.207**	ug/L	0.105	8	80	2071	6	KED
	Ni	**62**	**1.090**	ug/L	0.083	7	16	311	7	KED
	Cu	**63**	**0.129**	ug/L	0.003	2	137	742	2	KED
	Cu	**65**	**0.126**	ug/L	0.027	21	67	370	16	KED
	Zn	**66**	**0.504**	ug/L	0.039	7	85	400	5	KED
	Zn	**67**	**0.841**	ug/L	0.230	27	17	106	22	KED
	As	**75**	**0.149**	ug/L	0.008	5	5	54	5	KED
	Y	**89**		ug/L			438010	401459	1	Standard
	Kr	**83**		ug/L			58	40	10	Standard
>	**In-1**	**115**		ug/L			11681	10387	1	KED
	Cd	**111**	**0.014**	ug/L	0.000	2	5	9	0	KED
	Cd	**114**	**0.006**	ug/L	0.005	79	6	10	37	KED
>	**In**	**115**		ug/L			671207	646901	2	Standard
	Ag	**107**	**-0.004**	ug/L	0.001	38	227	143	19	Standard
>	**Tb**	**159**		ug/L			1536215	1531402	1	Standard
	Tl	**205**	**-0.002**	ug/L	0.000	14	715	575	2	Standard
	Pb	**208**	**0.001**	ug/L	0.000	51	628	717	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0181-DUP3
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 01, 2023 19:26:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1018060	4	Standard
	Be	**9**	**0.001**	ug/L	0.001	121	3	8	75	Standard
	C	**13**		ug/L			42921	66510	1	Standard
>	**Sc**	**45**		ug/L			850595	899125	1	Standard
	V	**51**	**0.560**	ug/L	0.016	2	7786	28084	1	Standard
	V-1	**51**	**0.641**	ug/L	0.011	1	362	23298	1	Standard
	Cr	**52**	**-0.043**	ug/L	0.002	3	22890	22926	0	Standard
	Cr	**53**	**0.241**	ug/L	0.015	6	212	1060	5	Standard
	Fe	**54**	**99.314**	ug/L	1.750	1	90788	382203	1	Standard
	Fe	**57**	**117.379**	ug/L	4.052	3	21922	160994	1	Standard
	Mn	**55**	**58.622**	ug/L	1.207	2	774	2674819	0	Standard
>	**Ge**	**72**		ug/L			48940	45585	1	KED
	Ni	**60**	**1.202**	ug/L	0.046	3	80	2006	4	KED
	Ni	**62**	**1.202**	ug/L	0.112	9	16	332	7	KED
	Cu	**63**	**0.138**	ug/L	0.003	2	137	760	3	KED
	Cu	**65**	**0.134**	ug/L	0.018	13	67	378	10	KED
	Zn	**66**	**0.523**	ug/L	0.023	4	85	400	3	KED
	Zn	**67**	**0.815**	ug/L	0.181	22	17	100	18	KED
	As	**75**	**0.174**	ug/L	0.012	6	5	61	7	KED
	Y	**89**		ug/L			438010	404344	1	Standard
	Kr	**83**		ug/L			58	52	14	Standard
>	**In-1**	**115**		ug/L			11681	10334	0	KED
	Cd	**111**	**0.010**	ug/L	0.011	106	5	8	40	KED
	Cd	**114**	**0.005**	ug/L	0.005	95	6	9	41	KED
>	**In**	**115**		ug/L			671207	641574	2	Standard
	Ag	**107**	**-0.004**	ug/L	0.001	14	227	135	10	Standard
>	**Tb**	**159**		ug/L			1536215	1493320	0	Standard
	Tl	**205**	**-0.001**	ug/L	0.000	25	715	596	3	Standard
	Pb	**208**	**0.026**	ug/L	0.002	7	628	2971	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0181-MS3
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 01, 2023 19:31:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1007054	1	Standard
	Be	**9**	**12.568**	ug/L	0.360	2	3	96545	2	Standard
	C	**13**		ug/L			42921	63362	0	Standard
>	**Sc**	**45**		ug/L			850595	900533	0	Standard
	V	**51**	**11.473**	ug/L	0.241	2	7786	415357	1	Standard
	V-1	**51**	**11.541**	ug/L	0.205	1	362	413899	0	Standard
	Cr	**52**	**10.926**	ug/L	0.159	1	22890	348785	0	Standard
	Cr	**53**	**11.167**	ug/L	0.010	0	212	38946	0	Standard
	Fe	**54**	**2404.979**	ug/L	15.701	0	90788	7038734	0	Standard
	Fe	**57**	**2404.181**	ug/L	21.825	0	21922	2851213	1	Standard
	Mn	**55**	**67.979**	ug/L	0.373	0	774	3106839	0	Standard
>	**Ge**	**72**		ug/L			48940	44855	0	KED
	Ni	**60**	**14.498**	ug/L	0.228	1	80	22996	1	KED
	Ni	**62**	**14.498**	ug/L	0.640	4	16	3777	4	KED
	Cu	**63**	**13.494**	ug/L	0.155	1	137	61058	0	KED
	Cu	**65**	**13.332**	ug/L	0.328	2	67	31010	2	KED
	Zn	**66**	**43.378**	ug/L	0.204	0	85	26222	0	KED
	Zn	**67**	**40.338**	ug/L	0.488	1	17	4130	1	KED
	As	**75**	**13.317**	ug/L	0.048	0	5	4282	0	KED
	Y	**89**		ug/L			438010	407657	1	Standard
	Kr	**83**		ug/L			58	53	9	Standard
>	**In-1**	**115**		ug/L			11681	10270	0	KED
	Cd	**111**	**13.208**	ug/L	0.498	3	5	4208	3	KED
	Cd	**114**	**12.739**	ug/L	0.111	0	6	10482	0	KED
>	**In**	**115**		ug/L			671207	628243	3	Standard
	Ag	**107**	**12.560**	ug/L	0.414	3	227	258878	0	Standard
>	**Tb**	**159**		ug/L			1536215	1498948	1	Standard
	Tl	**205**	**12.965**	ug/L	0.304	2	715	925644	0	Standard
	Pb	**208**	**13.077**	ug/L	0.308	2	628	1196991	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0670-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 01, 2023 19:37:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1046537	2	Standard
	Be	**9**	**0.001**	ug/L	0.001	73	3	10	47	Standard
	C	**13**		ug/L			42921	139291	2	Standard
>	**Sc**	**45**		ug/L			850595	804321	1	Standard
	V	**51**	**0.137**	ug/L	0.010	7	7786	11721	3	Standard
	V-1	**51**	**0.211**	ug/L	0.004	2	362	7083	1	Standard
	Cr	**52**	**0.273**	ug/L	0.002	0	22890	28876	1	Standard
	Cr	**53**	**0.510**	ug/L	0.020	3	212	1779	3	Standard
	Fe	**54**	**110.970**	ug/L	1.574	1	90788	371954	0	Standard
	Fe	**57**	**107.577**	ug/L	3.090	2	21922	133728	1	Standard
	Mn	**55**	**42.129**	ug/L	0.880	2	774	1719793	1	Standard
>	**Ge**	**72**		ug/L			48940	45222	0	KED
	Ni	**60**	**1.449**	ug/L	0.031	2	80	2383	2	KED
	Ni	**62**	**1.356**	ug/L	0.086	6	16	370	6	KED
	Cu	**63**	**4.769**	ug/L	0.042	0	137	21837	0	KED
	Cu	**65**	**4.721**	ug/L	0.091	1	67	11112	2	KED
	Zn	**66**	**50.893**	ug/L	0.943	1	85	31004	2	KED
	Zn	**67**	**48.357**	ug/L	0.459	0	17	4989	1	KED
	As	**75**	**0.223**	ug/L	0.009	4	5	76	3	KED
	Y	**89**		ug/L			438010	405532	2	Standard
	Kr	**83**		ug/L			58	59	17	Standard
>	**In-1**	**115**		ug/L			11681	10533	1	KED
	Cd	**111**	**3.532**	ug/L	0.155	4	5	1157	4	KED
	Cd	**114**	**2.936**	ug/L	0.020	0	6	2482	2	KED
>	**In**	**115**		ug/L			671207	622105	0	Standard
	Ag	**107**	**0.008**	ug/L	0.000	2	227	380	1	Standard
>	**Tb**	**159**		ug/L			1536215	1440452	1	Standard
	Tl	**205**	**0.008**	ug/L	0.001	7	715	1236	2	Standard
	Pb	**208**	**0.273**	ug/L	0.003	1	628	24636	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0612-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 01, 2023 19:42:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1032745	1	Standard
	Be	**9**	**0.000**	ug/L	0.001	120	3	6	62	Standard
	C	**13**		ug/L			42921	60327	2	Standard
>	**Sc**	**45**		ug/L			850595	817185	1	Standard
	V	**51**	**2.860**	ug/L	0.116	4	7786	99557	2	Standard
	V-1	**51**	**2.912**	ug/L	0.058	1	362	95041	1	Standard
	Cr	**52**	**1.220**	ug/L	0.081	6	22890	54853	2	Standard
	Cr	**53**	**1.446**	ug/L	0.196	13	212	4754	13	Standard
	Fe	**54**	**668.446**	ug/L	21.821	3	90788	1837787	1	Standard
	Fe	**57**	**633.724**	ug/L	13.358	2	21922	697426	1	Standard
	Mn	**55**	**23.876**	ug/L	0.297	1	774	990667	1	Standard
>	**Ge**	**72**		ug/L			48940	46725	0	KED
	Ni	**60**	**5.653**	ug/L	0.052	0	80	9387	0	KED
	Ni	**62**	**5.502**	ug/L	0.163	2	16	1502	2	KED
	Cu	**63**	**7.916**	ug/L	0.106	1	137	37366	0	KED
	Cu	**65**	**7.785**	ug/L	0.082	1	67	18888	0	KED
	Zn	**66**	**17.470**	ug/L	0.355	2	85	11048	1	KED
	Zn	**67**	**15.726**	ug/L	1.276	8	17	1687	8	KED
	As	**75**	**0.031**	ug/L	0.011	35	5	15	24	KED
	Y	**89**		ug/L			438010	408714	0	Standard
	Kr	**83**		ug/L			58	64	21	Standard
>	**In-1**	**115**		ug/L			11681	10795	0	KED
	Cd	**111**	**-0.001**	ug/L	0.007	1090	5	5	47	KED
	Cd	**114**	**0.002**	ug/L	0.005	240	6	7	59	KED
>	**In**	**115**		ug/L			671207	642719	1	Standard
	Ag	**107**	**0.001**	ug/L	0.000	31	227	235	2	Standard
>	**Tb**	**159**		ug/L			1536215	1506684	1	Standard
	Tl	**205**	**0.002**	ug/L	0.001	34	715	858	5	Standard
	Pb	**208**	**0.922**	ug/L	0.008	0	628	85424	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0599-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 01, 2023 19:48:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			984787	1364590	2	Standard
Be	9	0.000	ug/L	0.000	6400	3	4	65	Standard
C	13		ug/L			42921	468306	1	Standard
Sc	45		ug/L			850595	799878	1	Standard
V	51	0.165	ug/L	0.019	11	7786	12534	3	Standard
V-1	51	0.066	ug/L	0.001	1	362	2426	1	Standard
Cr	52	4.229	ug/L	0.108	2	22890	133076	0	Standard
Cr	53	3.769	ug/L	0.064	1	212	11805	0	Standard
Fe	54	938.131	ug/L	11.043	1	90788	2491016	2	Standard
Fe	57	1179.535	ug/L	22.766	1	21922	1253239	3	Standard
Mn	55	96.344	ug/L	2.851	2	774	3909717	1	Standard
Ge	72		ug/L			48940	41831	1	KED
Ni	60	4.762	ug/L	0.186	3	80	7088	2	KED
Ni	62	4.817	ug/L	0.096	1	16	1179	2	KED
Cu	63	0.343	ug/L	0.027	7	137	1560	6	KED
Cu	65	0.343	ug/L	0.010	2	67	800	1	KED
Zn	66	4.774	ug/L	0.081	1	85	2756	2	KED
Zn	67	4.951	ug/L	0.197	3	17	485	3	KED
As	75	0.132	ug/L	0.013	9	5	43	7	KED
Y	89		ug/L			438010	393913	0	Standard
Kr	83		ug/L			58	66	4	Standard
In-1	115		ug/L			11681	9701	0	KED
Cd	111	0.046	ug/L	0.010	20	5	18	16	KED
Cd	114	0.049	ug/L	0.012	25	6	43	22	KED
In	115		ug/L			671207	598527	1	Standard
Ag	107	-0.002	ug/L	0.001	40	227	161	10	Standard
Tb	159		ug/L			1536215	1471863	0	Standard
Tl	205	-0.003	ug/L	0.001	22	715	443	12	Standard
Pb	208	0.021	ug/L	0.001	3	628	2513	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0611-01
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 19:53:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1060722	0	Standard
	Be	**9**	**0.001**	ug/L	0.001	141	3	8	86	Standard
	C	**13**		ug/L			42921	95516	0	Standard
>	**Sc**	**45**		ug/L			850595	848461	1	Standard
	V	**51**	**0.129**	ug/L	0.006	4	7786	12075	0	Standard
	V-1	**51**	**0.236**	ug/L	0.004	1	362	8324	0	Standard
	Cr	**52**	**0.478**	ug/L	0.035	7	22890	36210	1	Standard
	Cr	**53**	**0.821**	ug/L	0.027	3	212	2892	1	Standard
	Fe	**54**	**508.298**	ug/L	9.878	1	90788	1472842	1	Standard
	Fe	**57**	**529.293**	ug/L	7.271	1	21922	608412	1	Standard
	Mn	**55**	**161.488**	ug/L	2.536	1	774	6951605	0	Standard
>	**Ge**	**72**		ug/L			48940	44664	0	KED
	Ni	**60**	**14.244**	ug/L	0.179	1	80	22498	0	KED
	Ni	**62**	**13.867**	ug/L	0.339	2	16	3597	2	KED
	Cu	**63**	**6.732**	ug/L	0.078	1	137	30396	0	KED
	Cu	**65**	**6.633**	ug/L	0.147	2	67	15393	1	KED
	Zn	**66**	**222.107**	ug/L	1.633	0	85	133374	1	KED
	Zn	**67**	**205.103**	ug/L	1.622	0	17	20850	1	KED
	As	**75**	**0.372**	ug/L	0.008	2	5	123	1	KED
	Y	**89**		ug/L			438010	399660	1	Standard
	Kr	**83**		ug/L			58	73	16	Standard
>	**In-1**	**115**		ug/L			11681	10192	1	KED
	Cd	**111**	**0.298**	ug/L	0.047	15	5	99	13	KED
	Cd	**114**	**0.318**	ug/L	0.039	12	6	264	12	KED
>	**In**	**115**		ug/L			671207	621850	0	Standard
	Ag	**107**	**-0.001**	ug/L	0.001	58	227	187	7	Standard
>	**Tb**	**159**		ug/L			1536215	1503149	1	Standard
	Tl	**205**	**-0.000**	ug/L	0.000	62	715	678	1	Standard
	Pb	**208**	**0.169**	ug/L	0.007	3	628	16083	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0525-10
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 01, 2023 19:59:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
Li	6		ug/L			984787	1544265	2	Standard
Be	9	0.000	ug/L	0.000	145	3	7	50	Standard
C	13		ug/L			42921	98521	1	Standard
Sc	45		ug/L			850595	760451	0	Standard
V	51	1.299	ug/L	0.021	1	7786	45879	1	Standard
V-1	51	1.373	ug/L	0.014	0	362	41864	1	Standard
Cr	52	1.110	ug/L	0.025	2	22890	48298	1	Standard
Cr	53	1.360	ug/L	0.015	1	212	4173	1	Standard
Fe	54	33.210	ug/L	1.011	3	90788	162131	1	Standard
Fe	57	61.844	ug/L	1.101	1	21922	81030	1	Standard
Mn	55	7.918	ug/L	0.126	1	774	306211	1	Standard
Ge	72		ug/L			48940	39434	0	KED
Ni	60	1.689	ug/L	0.038	2	80	2411	1	KED
Ni	62	1.526	ug/L	0.086	5	16	361	4	KED
Cu	63	8.124	ug/L	0.020	0	137	32362	0	KED
Cu	65	7.901	ug/L	0.048	0	67	16178	0	KED
Zn	66	7.432	ug/L	0.035	0	85	4006	0	KED
Zn	67	6.905	ug/L	0.375	5	17	633	5	KED
As	75	0.143	ug/L	0.018	12	5	44	11	KED
Y	89		ug/L			438010	388282	3	Standard
Kr	83		ug/L			58	54	16	Standard
In-1	115		ug/L			11681	8990	1	KED
Cd	111	0.004	ug/L	0.002	60	5	5	10	KED
Cd	114	0.010	ug/L	0.008	83	6	11	51	KED
In	115		ug/L			671207	556654	1	Standard
Ag	107	-0.005	ug/L	0.000	7	227	94	7	Standard
Tb	159		ug/L			1536215	1430062	1	Standard
Tl	205	0.002	ug/L	0.000	9	715	831	2	Standard
Pb	208	0.296	ug/L	0.005	1	628	26457	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0525-11
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 01, 2023 20:04:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	Li	6		ug/L			984787	1715218	3	Standard
	Be	9	0.000	ug/L	0.000	113	3	6	17	Standard
	C	13		ug/L			42921	106866	0	Standard
>	Sc	45		ug/L			850595	735013	1	Standard
	V	51	1.721	ug/L	0.011	0	7786	56590	1	Standard
	V-1	51	1.828	ug/L	0.012	0	362	53772	1	Standard
	Cr	52	1.365	ug/L	0.017	1	22890	52867	1	Standard
	Cr	53	1.727	ug/L	0.018	1	212	5072	2	Standard
	Fe	54	42.226	ug/L	0.782	1	90788	177955	1	Standard
	Fe	57	78.035	ug/L	1.755	2	21922	93874	2	Standard
	Mn	55	10.538	ug/L	0.105	0	774	393691	1	Standard
>	Ge	72		ug/L			48940	37282	0	KED
	Ni	60	2.361	ug/L	0.060	2	80	3164	3	KED
	Ni	62	2.450	ug/L	0.062	2	16	540	2	KED
	Cu	63	11.027	ug/L	0.148	1	137	41488	0	KED
	Cu	65	10.945	ug/L	0.110	1	67	21168	0	KED
	Zn	66	9.808	ug/L	0.071	0	85	4978	1	KED
	Zn	67	8.745	ug/L	0.526	6	17	754	4	KED
	As	75	0.187	ug/L	0.019	10	5	53	8	KED
	Y	89		ug/L			438010	367289	0	Standard
	Kr	83		ug/L			58	73	7	Standard
>	In-1	115		ug/L			11681	8510	0	KED
	Cd	111	-0.000	ug/L	0.012	6618	5	4	74	KED
	Cd	114	0.014	ug/L	0.000	2	6	13	1	KED
>	In	115		ug/L			671207	551801	1	Standard
	Ag	107	-0.006	ug/L	0.001	17	227	85	20	Standard
>	Tb	159		ug/L			1536215	1410250	0	Standard
	Tl	205	0.004	ug/L	0.002	40	715	915	11	Standard
	Pb	208	0.362	ug/L	0.001	0	628	31781	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 20:09:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1146067	0	Standard
	Be	**9**	**-0.000**	ug/L	0.000	252	3	2	114	Standard
	C	**13**		ug/L			42921	54540	2	Standard
>	**Sc**	**45**		ug/L			850595	797904	1	Standard
	V	**51**	**0.016**	ug/L	0.003	17	7786	7810	2	Standard
	V-1	**51**	**-0.000**	ug/L	0.000	121	362	332	4	Standard
	Cr	**52**	**0.070**	ug/L	0.006	8	22890	23320	1	Standard
	Cr	**53**	**0.014**	ug/L	0.007	47	212	243	7	Standard
	Fe	**54**	**1.321**	ug/L	0.299	22	90788	88536	0	Standard
	Fe	**57**	**17.699**	ug/L	0.735	4	21922	39005	1	Standard
	Mn	**55**	**0.005**	ug/L	0.001	13	774	915	1	Standard
>	**Ge**	**72**		ug/L			48940	45920	0	KED
	Ni	**60**	**-0.017**	ug/L	0.004	24	80	48	13	KED
	Ni	**62**	**-0.023**	ug/L	0.026	113	16	9	72	KED
	Cu	**63**	**-0.003**	ug/L	0.005	181	137	116	19	KED
	Cu	**65**	**-0.003**	ug/L	0.001	34	67	56	5	KED
	Zn	**66**	**0.048**	ug/L	0.021	44	85	109	11	KED
	Zn	**67**	**0.053**	ug/L	0.060	114	17	21	28	KED
	As	**75**	**-0.007**	ug/L	0.001	20	5	2	20	KED
	Y	**89**		ug/L			438010	400146	1	Standard
	Kr	**83**		ug/L			58	50	31	Standard
>	**In-1**	**115**		ug/L			11681	10103	2	KED
	Cd	**111**	**-0.005**	ug/L	0.002	34	5	3	15	KED
	Cd	**114**	**-0.001**	ug/L	0.004	295	6	4	67	KED
>	**In**	**115**		ug/L			671207	631524	0	Standard
	Ag	**107**	**-0.006**	ug/L	0.000	7	227	91	9	Standard
>	**Tb**	**159**		ug/L			1536215	1501507	1	Standard
	Tl	**205**	**-0.003**	ug/L	0.000	5	715	459	2	Standard
	Pb	**208**	**-0.000**	ug/L	0.001	532	628	605	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 20:13:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
>	**Li**	**6**		ug/L			984787	1051500	1	Standard
	Be	**9**	**47.600**	ug/L	1.284	2	3	381793	1	Standard
	C	**13**		ug/L			42921	44886	1	Standard
>	**Sc**	**45**		ug/L			850595	789991	1	Standard
	V	**51**	**47.254**	ug/L	0.649	1	7786	1478157	0	Standard
	V-1	**51**	**47.091**	ug/L	0.657	1	362	1480458	0	Standard
	Cr	**52**	**47.511**	ug/L	1.036	2	22890	1259124	0	Standard
	Cr	**53**	**46.962**	ug/L	1.057	2	212	143016	0	Standard
	Fe	**54**	**5046.464**	ug/L	90.163	1	90788	12863806	2	Standard
	Fe	**57**	**4964.469**	ug/L	96.887	1	21922	5144257	3	Standard
	Mn	**55**	**47.558**	ug/L	0.304	0	774	1907071	2	Standard
>	**Ge**	**72**		ug/L			48940	45058	1	KED
	Ni	**60**	**52.874**	ug/L	0.385	0	80	84047	0	KED
	Ni	**62**	**51.858**	ug/L	0.552	1	16	13531	0	KED
	Cu	**63**	**53.094**	ug/L	1.251	2	137	240922	1	KED
	Cu	**65**	**52.032**	ug/L	0.581	1	67	121394	1	KED
	Zn	**66**	**51.619**	ug/L	0.120	0	85	31330	1	KED
	Zn	**67**	**50.172**	ug/L	1.272	2	17	5156	1	KED
	As	**75**	**49.335**	ug/L	0.316	0	5	15924	1	KED
	Y	**89**		ug/L			438010	401667	0	Standard
	Kr	**83**		ug/L			58	50	30	Standard
>	**In-1**	**115**		ug/L			11681	10090	2	KED
	Cd	**111**	**50.910**	ug/L	0.890	1	5	15919	0	KED
	Cd	**114**	**51.101**	ug/L	1.321	2	6	41282	0	KED
>	**In**	**115**		ug/L			671207	631886	3	Standard
	Ag	**107**	**50.398**	ug/L	2.817	5	227	1043544	2	Standard
>	**Tb**	**159**		ug/L			1536215	1494954	0	Standard
	Tl	**205**	**54.517**	ug/L	0.608	1	715	3880809	1	Standard
	Pb	**208**	**54.148**	ug/L	0.178	0	628	4942795	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 20:21:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
⌈>	**Li**	**6**		ug/L			984787	1034789	0	Standard
⌊	**Be**	**9**	**-0.000**	ug/L	0.000	2213	3	3	124	Standard
	C	**13**		ug/L			42921	42496	2	Standard
⌈>	**Sc**	**45**		ug/L			850595	764976	1	Standard
⌈	**V**	**51**	**-0.018**	ug/L	0.002	8	7786	6471	0	Standard
⌊	**V-1**	**51**	**-0.002**	ug/L	0.000	14	362	249	3	Standard
⌈	**Cr**	**52**	**-0.060**	ug/L	0.007	12	22890	19066	0	Standard
⌊	**Cr**	**53**	**-0.009**	ug/L	0.003	37	212	164	4	Standard
⌈	**Fe**	**54**	**0.958**	ug/L	0.731	76	90788	83986	1	Standard
⌊	**Fe**	**57**	**0.064**	ug/L	0.574	895	21922	19775	1	Standard
⌊	**Mn**	**55**	**-0.003**	ug/L	0.001	22	774	588	4	Standard
⌈>	**Ge**	**72**		ug/L			48940	46129	1	KED
⌈	**Ni**	**60**	**-0.028**	ug/L	0.005	18	80	29	30	KED
⌊	**Ni**	**62**	**-0.034**	ug/L	0.018	52	16	6	75	KED
⌈	**Cu**	**63**	**-0.011**	ug/L	0.005	41	137	76	29	KED
⌊	**Cu**	**65**	**-0.011**	ug/L	0.006	54	67	38	35	KED
⌈	**Zn**	**66**	**-0.037**	ug/L	0.018	48	85	57	19	KED
⌊	**Zn**	**67**	**-0.063**	ug/L	0.019	30	17	9	20	KED
⌊	**As**	**75**	**-0.005**	ug/L	0.004	72	5	3	37	KED
	Y	**89**		ug/L			438010	386221	0	Standard
	Kr	**83**		ug/L			58	50	9	Standard
⌈>	**In-1**	**115**		ug/L			11681	10523	2	KED
⌈	**Cd**	**111**	**-0.006**	ug/L	0.010	163	5	3	105	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.001	95	6	4	26	KED
⌈>	**In**	**115**		ug/L			671207	612064	1	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.000	17	227	157	4	Standard
⌈>	**Tb**	**159**		ug/L			1536215	1434460	1	Standard
⌈	**Tl**	**205**	**-0.001**	ug/L	0.001	49	715	587	5	Standard
⌊	**Pb**	**208**	**-0.002**	ug/L	0.000	19	628	389	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 20:30:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				40288	0	Standard
>	**Sc**	**45**		ug/L				754240	0	Standard
	Cr	**52**		ug/L				19104	0	Standard
	Cr	**53**		ug/L				152	8	Standard
	Fe	**54**		ug/L				83156	0	Standard
	Fe	**57**		ug/L				19734	1	Standard
	Mn	**55**		ug/L				501	4	Standard
>	**Ge**	**72**		ug/L				46335	0	KED
	Cu	**63**		ug/L				52	18	KED
	Cu	**65**		ug/L				27	27	KED
	Zn	**66**		ug/L				27	17	KED
	Zn	**67**		ug/L				8	66	KED
	As	**75**		ug/L				3	12	KED
	Y	**89**		ug/L				375682	0	Standard
	Kr	**83**		ug/L				51	29	Standard
>	**In-1**	**115**		ug/L				10677	1	KED
	Cd	**111**		ug/L				4	58	KED
	Cd	**114**		ug/L				3	87	KED
>	**In**	**115**		ug/L				621777	1	Standard
	Ag	**107**		ug/L				111	10	Standard
>	**Tb**	**159**		ug/L				1460500	0	Standard
	Pb	**208**		ug/L				229	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 20:34:58

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	41928	2	Standard
>	**Sc**	**45**		ug/L			754240	699493	11	Standard
	Cr	**52**	**49.232**	ug/L	2.985	6	19104	1153911	12	Standard
	Cr	**53**	**49.323**	ug/L	2.757	5	152	132803	10	Standard
	Fe	**54**	**5296.009**	ug/L	310.840	5	83156	11937008	10	Standard
	Fe	**57**	**5278.797**	ug/L	263.816	4	19734	4834998	10	Standard
	Mn	**55**	**49.959**	ug/L	2.184	4	501	1772468	11	Standard
>	**Ge**	**72**		ug/L			46335	46371	0	KED
	Cu	**63**	**51.659**	ug/L	0.414	0	52	241207	0	KED
	Cu	**65**	**51.215**	ug/L	1.259	2	27	122928	2	KED
	Zn	**66**	**51.503**	ug/L	0.845	1	27	32116	1	KED
	Zn	**67**	**51.683**	ug/L	1.084	2	8	5458	2	KED
	As	**75**	**49.048**	ug/L	0.379	0	3	16292	0	KED
	Y	**89**		ug/L			375682	354292	11	Standard
	Kr	**83**		ug/L			51	71	22	Standard
>	**In-1**	**115**		ug/L			10677	10253	1	KED
	Cd	**111**	**51.644**	ug/L	0.177	0	4	16412	0	KED
	Cd	**114**	**52.000**	ug/L	0.591	1	3	42699	0	KED
>	**In**	**115**		ug/L			621777	545415	13	Standard
	Ag	**107**	**52.688**	ug/L	2.526	4	111	941423	12	Standard
>	**Tb**	**159**		ug/L			1460500	1357097	7	Standard
	Pb	**208**	**55.157**	ug/L	3.272	5	229	4565797	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 20:42:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	43322	0	Standard
⌈>	**Sc**	**45**		ug/L			754240	775616	2	Standard
|	**Cr**	**52**	**48.125**	ug/L	0.236	0	19104	1251114	2	Standard
|	**Cr**	**53**	**47.586**	ug/L	0.166	0	152	142283	2	Standard
|	**Fe**	**54**	**5140.488**	ug/L	48.493	0	83156	12865578	1	Standard
|	**Fe**	**57**	**5067.306**	ug/L	126.053	2	19734	5152653	2	Standard
⌊	**Mn**	**55**	**48.525**	ug/L	0.781	1	501	1909692	0	Standard
⌈>	**Ge**	**72**		ug/L			46335	46730	0	KED
|	**Cu**	**63**	**51.464**	ug/L	0.841	1	52	242141	0	KED
|	**Cu**	**65**	**51.657**	ug/L	0.822	1	27	124944	0	KED
|	**Zn**	**66**	**51.371**	ug/L	0.285	0	27	32283	1	KED
|	**Zn**	**67**	**51.356**	ug/L	0.219	0	8	5466	0	KED
⌊	**As**	**75**	**49.796**	ug/L	0.542	1	3	16669	1	KED
	Y	**89**		ug/L			375682	385653	4	Standard
	Kr	**83**		ug/L			51	61	18	Standard
⌈>	**In-1**	**115**		ug/L			10677	10729	1	KED
|	**Cd**	**111**	**51.455**	ug/L	0.983	1	4	17108	0	KED
⌊	**Cd**	**114**	**51.660**	ug/L	0.744	1	3	44383	0	KED
⌈>	**In**	**115**		ug/L			621777	596160	1	Standard
⌊	**Ag**	**107**	**50.409**	ug/L	1.320	2	111	985739	1	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1479204	1	Standard
⌊	**Pb**	**208**	**53.457**	ug/L	0.892	1	229	4826946	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 20:49:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	40958	1	Standard
⌈>	**Sc**	**45**		ug/L			754240	781839	1	Standard
|	**Cr**	**52**	**-0.017**	ug/L	0.022	123	19104	19349	1	Standard
|	**Cr**	**53**	**-0.006**	ug/L	0.004	62	152	139	7	Standard
|	**Fe**	**54**	**-0.071**	ug/L	0.224	315	83156	86025	1	Standard
|	**Fe**	**57**	**-1.190**	ug/L	0.292	24	19734	19238	0	Standard
⌊	**Mn**	**55**	**0.000**	ug/L	0.000	78	501	535	3	Standard
⌈>	**Ge**	**72**		ug/L			46335	47285	0	KED
|	**Cu**	**63**	**0.022**	ug/L	0.036	163	52	158	108	KED
|	**Cu**	**65**	**0.023**	ug/L	0.037	164	27	83	108	KED
|	**Zn**	**66**	**0.026**	ug/L	0.046	173	27	45	63	KED
|	**Zn**	**67**	**0.028**	ug/L	0.062	220	8	11	57	KED
⌊	**As**	**75**	**0.024**	ug/L	0.041	170	3	11	114	KED
	Y	**89**		ug/L			375682	387613	0	Standard
	Kr	**83**		ug/L			51	57	9	Standard
⌈>	**In-1**	**115**		ug/L			10677	11086	2	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.004	201	4	3	41	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.003	160	3	2	94	KED
⌈>	**In**	**115**		ug/L			621777	604852	3	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.001	29	111	193	10	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1489051	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	11	229	305	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0137-02
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 20:57:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	79292	2	Standard
>	Sc	45		ug/L			754240	889684	1	Standard
	Cr	52	0.129	ug/L	0.032	25	19104	26317	2	Standard
	Cr	53	0.508	ug/L	0.014	2	152	1920	1	Standard
	Fe	54	524.107	ug/L	8.554	1	83156	1592652	0	Standard
	Fe	57	517.354	ug/L	20.992	4	19734	624346	3	Standard
	Mn	55	37.121	ug/L	0.650	1	501	1676325	2	Standard
>	Ge	72		ug/L			46335	47820	0	KED
	Cu	63	0.672	ug/L	0.008	1	52	3291	1	KED
	Cu	65	0.652	ug/L	0.011	1	27	1641	2	KED
	Zn	66	5.007	ug/L	0.056	1	27	3246	0	KED
	Zn	67	4.668	ug/L	0.208	4	8	516	4	KED
	As	75	0.159	ug/L	0.014	9	3	58	9	KED
	Y	89		ug/L			375682	400149	1	Standard
	Kr	83		ug/L			51	45	24	Standard
>	In-1	115		ug/L			10677	11387	2	KED
	Cd	111	0.000	ug/L	0.006	2956	4	4	49	KED
	Cd	114	0.007	ug/L	0.005	75	3	10	46	KED
>	In	115		ug/L			621777	618237	3	Standard
	Ag	107	0.004	ug/L	0.001	31	111	183	9	Standard
>	Tb	159		ug/L			1460500	1513427	0	Standard
	Pb	208	0.008	ug/L	0.000	4	229	992	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0525-09
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 21:04:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	111383	2	Standard
⌈>	**Sc**	**45**		ug/L			754240	765608	2	Standard
|	**Cr**	**52**	**0.982**	ug/L	0.027	2	19104	44182	1	Standard
|	**Cr**	**53**	**1.185**	ug/L	0.015	1	152	3649	1	Standard
|	**Fe**	**54**	**47.061**	ug/L	1.734	3	83156	199889	2	Standard
|	**Fe**	**57**	**71.087**	ug/L	0.622	0	19734	91118	1	Standard
⌊	**Mn**	**55**	**8.311**	ug/L	0.113	1	501	323305	1	Standard
⌈>	**Ge**	**72**		ug/L			46335	39486	0	KED
|	**Cu**	**63**	**8.944**	ug/L	0.121	1	52	35598	1	KED
|	**Cu**	**65**	**8.868**	ug/L	0.083	0	27	18145	1	KED
|	**Zn**	**66**	**6.292**	ug/L	0.270	4	27	3362	4	KED
|	**Zn**	**67**	**5.938**	ug/L	0.317	5	8	540	5	KED
⌊	**As**	**75**	**0.123**	ug/L	0.022	17	3	37	16	KED
	Y	**89**		ug/L			375682	380420	2	Standard
	Kr	**83**		ug/L			51	66	21	Standard
⌈>	**In-1**	**115**		ug/L			10677	9185	0	KED
|	**Cd**	**111**	**0.022**	ug/L	0.002	7	4	9	5	KED
⌊	**Cd**	**114**	**0.010**	ug/L	0.001	12	3	10	9	KED
⌈>	**In**	**115**		ug/L			621777	556025	0	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.001	437	111	97	11	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1435858	0	Standard
⌊	**Pb**	**208**	**0.243**	ug/L	0.003	1	229	21545	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0525-12
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 21:08:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	91019	3	Standard
⌈>	**Sc**	**45**		ug/L			754240	804574	2	Standard
|	**Cr**	**52**	**0.384**	ug/L	0.005	1	19104	30570	2	Standard
|	**Cr**	**53**	**0.276**	ug/L	0.010	3	152	1017	0	Standard
|	**Fe**	**54**	**15.812**	ug/L	0.304	1	83156	129485	2	Standard
|	**Fe**	**57**	**21.239**	ug/L	0.248	1	19734	43367	2	Standard
⌊	**Mn**	**55**	**0.151**	ug/L	0.004	2	501	6689	2	Standard
⌈>	**Ge**	**72**		ug/L			46335	47422	0	KED
|	**Cu**	**63**	**0.107**	ug/L	0.012	11	52	562	11	KED
|	**Cu**	**65**	**0.116**	ug/L	0.018	15	27	314	14	KED
|	**Zn**	**66**	**0.352**	ug/L	0.031	8	27	252	8	KED
|	**Zn**	**67**	**0.299**	ug/L	0.086	28	8	40	22	KED
⌊	**As**	**75**	**0.012**	ug/L	0.002	19	3	7	9	KED
	Y	**89**		ug/L			375682	408549	2	Standard
	Kr	**83**		ug/L			51	48	16	Standard
⌈>	**In-1**	**115**		ug/L			10677	10761	0	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.006	549	4	3	50	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.004	1225	3	4	95	KED
⌈>	**In**	**115**		ug/L			621777	642381	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	34	111	100	6	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1531480	2	Standard
⌊	**Pb**	**208**	**0.009**	ug/L	0.000	4	229	1109	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 21:14:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	51876	0	Standard
⌈>	**Sc**	**45**		ug/L			754240	764070	2	Standard
|	**Cr**	**52**	**0.098**	ug/L	0.012	12	19104	21808	1	Standard
|	**Cr**	**53**	**0.015**	ug/L	0.002	11	152	199	3	Standard
|	**Fe**	**54**	**0.209**	ug/L	0.125	59	83156	84758	2	Standard
|	**Fe**	**57**	**17.021**	ug/L	0.514	3	19734	36973	2	Standard
⌊	**Mn**	**55**	**0.008**	ug/L	0.001	9	501	800	2	Standard
⌈>	**Ge**	**72**		ug/L			46335	46548	1	KED
|	**Cu**	**63**	**0.010**	ug/L	0.004	40	52	98	18	KED
|	**Cu**	**65**	**0.011**	ug/L	0.002	20	27	54	10	KED
|	**Zn**	**66**	**0.143**	ug/L	0.011	7	27	117	5	KED
|	**Zn**	**67**	**0.096**	ug/L	0.029	30	8	18	15	KED
⌊	**As**	**75**	**-0.006**	ug/L	0.003	52	3	1	62	KED
	Y	**89**		ug/L			375682	384121	0	Standard
	Kr	**83**		ug/L			51	50	31	Standard
⌈>	**In-1**	**115**		ug/L			10677	10617	1	KED
|	**Cd**	**111**	**-0.008**	ug/L	0.004	58	4	1	91	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.003	372	3	3	72	KED
⌈>	**In**	**115**		ug/L			621777	619258	2	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.000	18	111	74	8	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1477611	0	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.001	12	229	589	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0525-08
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, May 01, 2023 21:19:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	68423	0	Standard
⌈>	**Sc**	**45**		ug/L			754240	778418	2	Standard
|	**Cr**	**52**	**5.740**	ug/L	0.078	1	19104	167103	1	Standard
|	**Cr**	**53**	**5.741**	ug/L	0.067	1	152	17362	2	Standard
|	**Fe**	**54**	**23.796**	ug/L	0.830	3	83156	145223	3	Standard
|	**Fe**	**57**	**47.038**	ug/L	1.298	2	19734	68175	0	Standard
⌊	**Mn**	**55**	**2.423**	ug/L	0.015	0	501	96192	1	Standard
⌈>	**Ge**	**72**		ug/L			46335	43981	0	KED
|	**Cu**	**63**	**2.974**	ug/L	0.072	2	52	13220	2	KED
|	**Cu**	**65**	**2.931**	ug/L	0.044	1	27	6696	1	KED
|	**Zn**	**66**	**1.908**	ug/L	0.091	4	27	1153	4	KED
|	**Zn**	**67**	**1.616**	ug/L	0.270	16	8	169	16	KED
⌊	**As**	**75**	**0.027**	ug/L	0.008	29	3	12	21	KED
	Y	**89**		ug/L			375682	385819	1	Standard
	Kr	**83**		ug/L			51	61	3	Standard
⌈>	**In-1**	**115**		ug/L			10677	9996	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.005	158	4	2	57	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.002	33	3	9	20	KED
⌈>	**In**	**115**		ug/L			621777	603148	2	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.001	195	111	99	19	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1477250	1	Standard
⌊	**Pb**	**208**	**0.107**	ug/L	0.001	0	229	9904	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0525-07
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, May 01, 2023 21:24:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	67190	0	Standard
⌈>	**Sc**	**45**		ug/L			754240	775012	1	Standard
|	**Cr**	**52**	**3.707**	ug/L	0.049	1	19104	114418	1	Standard
|	**Cr**	**53**	**3.712**	ug/L	0.027	0	152	11234	1	Standard
|	**Fe**	**54**	**17.160**	ug/L	1.091	6	83156	128094	3	Standard
|	**Fe**	**57**	**38.603**	ug/L	1.199	3	19734	59354	2	Standard
⌊	**Mn**	**55**	**1.960**	ug/L	0.014	0	501	77597	0	Standard
⌈>	**Ge**	**72**		ug/L			46335	44501	1	KED
|	**Cu**	**63**	**2.970**	ug/L	0.039	1	52	13352	0	KED
|	**Cu**	**65**	**2.913**	ug/L	0.084	2	27	6733	1	KED
|	**Zn**	**66**	**1.429**	ug/L	0.075	5	27	881	5	KED
|	**Zn**	**67**	**1.150**	ug/L	0.140	12	8	124	13	KED
⌊	**As**	**75**	**0.023**	ug/L	0.008	34	3	11	24	KED
	Y	**89**		ug/L			375682	380818	0	Standard
	Kr	**83**		ug/L			51	51	14	Standard
⌈>	**In-1**	**115**		ug/L			10677	10017	2	KED
|	**Cd**	**111**	**0.004**	ug/L	0.008	195	4	5	47	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.002	32	3	9	21	KED
⌈>	**In**	**115**		ug/L			621777	594563	3	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	29	111	84	9	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1466307	2	Standard
⌊	**Pb**	**208**	**0.013**	ug/L	0.000	0	229	1365	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0785-DUP2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, May 01, 2023 21:29:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	67868	2	Standard
⌈>	**Sc**	**45**		ug/L			754240	775545	2	Standard
|	**Cr**	**52**	**3.672**	ug/L	0.088	2	19104	113582	2	Standard
|	**Cr**	**53**	**3.610**	ug/L	0.094	2	152	10937	3	Standard
|	**Fe**	**54**	**15.910**	ug/L	0.819	5	83156	125042	1	Standard
|	**Fe**	**57**	**39.272**	ug/L	1.070	2	19734	60073	2	Standard
⌊	**Mn**	**55**	**1.928**	ug/L	0.044	2	501	76371	1	Standard
⌈>	**Ge**	**72**		ug/L			46335	44033	1	KED
|	**Cu**	**63**	**2.992**	ug/L	0.014	0	52	13313	1	KED
|	**Cu**	**65**	**2.893**	ug/L	0.017	0	27	6619	1	KED
|	**Zn**	**66**	**1.327**	ug/L	0.059	4	27	811	4	KED
|	**Zn**	**67**	**1.165**	ug/L	0.107	9	8	124	7	KED
⌊	**As**	**75**	**0.022**	ug/L	0.007	33	3	10	22	KED
	Y	**89**		ug/L			375682	387547	2	Standard
	Kr	**83**		ug/L			51	40	17	Standard
⌈>	**In-1**	**115**		ug/L			10677	10154	1	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.005	106	4	2	57	KED
⌊	**Cd**	**114**	**0.006**	ug/L	0.004	64	3	8	35	KED
⌈>	**In**	**115**		ug/L			621777	590037	0	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.001	75	111	80	24	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1482691	1	Standard
⌊	**Pb**	**208**	**0.010**	ug/L	0.000	2	229	1156	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0785-MS2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, May 01, 2023 21:34:30
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	63051	1	Standard
⌈>	**Sc**	**45**		ug/L			754240	758607	2	Standard
|	**Cr**	**52**	**8.495**	ug/L	0.116	1	19104	231783	1	Standard
|	**Cr**	**53**	**8.468**	ug/L	0.047	0	152	24889	2	Standard
|	**Fe**	**54**	**1047.525**	ug/L	16.524	1	83156	2630591	0	Standard
|	**Fe**	**57**	**1016.159**	ug/L	13.759	1	19734	1026676	1	Standard
⌊	**Mn**	**55**	**6.939**	ug/L	0.104	1	501	267543	0	Standard
⌈>	**Ge**	**72**		ug/L			46335	44474	1	KED
|	**Cu**	**63**	**8.384**	ug/L	0.224	2	52	37578	1	KED
|	**Cu**	**65**	**8.173**	ug/L	0.095	1	27	18837	2	KED
|	**Zn**	**66**	**18.728**	ug/L	0.253	1	27	11216	0	KED
|	**Zn**	**67**	**17.474**	ug/L	0.082	0	8	1775	1	KED
⌊	**As**	**75**	**5.200**	ug/L	0.148	2	3	1659	2	KED
	Y	**89**		ug/L			375682	382435	0	Standard
	Kr	**83**		ug/L			51	48	11	Standard
⌈>	**In-1**	**115**		ug/L			10677	9885	1	KED
|	**Cd**	**111**	**5.434**	ug/L	0.211	3	4	1667	2	KED
⌊	**Cd**	**114**	**5.348**	ug/L	0.075	1	3	4236	0	KED
⌈>	**In**	**115**		ug/L			621777	609177	1	Standard
⌊	**Ag**	**107**	**5.027**	ug/L	0.032	0	111	100575	1	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1476822	1	Standard
⌊	**Pb**	**208**	**5.539**	ug/L	0.092	1	229	499598	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0785-MSD2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Monday, May 01, 2023 21:40:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	63378	3	Standard
⌈>	**Sc**	**45**		ug/L			754240	774249	2	Standard
|	**Cr**	**52**	**8.304**	ug/L	0.094	1	19104	231688	1	Standard
|	**Cr**	**53**	**8.487**	ug/L	0.110	1	152	25459	2	Standard
|	**Fe**	**54**	**1042.800**	ug/L	16.664	1	83156	2672987	0	Standard
|	**Fe**	**57**	**1012.075**	ug/L	19.375	1	19734	1043573	1	Standard
⌊	**Mn**	**55**	**6.923**	ug/L	0.108	1	501	272427	1	Standard
⌈>	**Ge**	**72**		ug/L			46335	44585	0	KED
|	**Cu**	**63**	**8.528**	ug/L	0.012	0	52	38329	0	KED
|	**Cu**	**65**	**8.338**	ug/L	0.184	2	27	19265	1	KED
|	**Zn**	**66**	**18.302**	ug/L	0.142	0	27	10990	1	KED
|	**Zn**	**67**	**17.436**	ug/L	0.156	0	8	1775	1	KED
⌊	**As**	**75**	**5.408**	ug/L	0.052	0	3	1730	0	KED
	Y	**89**		ug/L			375682	391975	2	Standard
	Kr	**83**		ug/L			51	57	15	Standard
⌈>	**In-1**	**115**		ug/L			10677	10076	1	KED
|	**Cd**	**111**	**5.396**	ug/L	0.124	2	4	1688	1	KED
⌊	**Cd**	**114**	**5.416**	ug/L	0.115	2	3	4373	0	KED
⌈>	**In**	**115**		ug/L			621777	596559	0	Standard
⌊	**Ag**	**107**	**5.229**	ug/L	0.057	1	111	102444	0	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1474364	0	Standard
⌊	**Pb**	**208**	**5.559**	ug/L	0.011	0	229	500593	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 21:44:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	48740	1	Standard
⌈>	**Sc**	**45**		ug/L			754240	783155	1	Standard
|	**Cr**	**52**	**0.031**	ug/L	0.030	96	19104	20623	2	Standard
|	**Cr**	**53**	**-0.002**	ug/L	0.006	269	152	152	11	Standard
|	**Fe**	**54**	**0.448**	ug/L	1.551	345	83156	87443	3	Standard
|	**Fe**	**57**	**6.302**	ug/L	0.782	12	19734	26931	1	Standard
⌊	**Mn**	**55**	**0.014**	ug/L	0.000	2	501	1094	0	Standard
⌈>	**Ge**	**72**		ug/L			46335	46268	0	KED
|	**Cu**	**63**	**0.027**	ug/L	0.003	9	52	177	7	KED
|	**Cu**	**65**	**0.021**	ug/L	0.007	34	27	78	22	KED
|	**Zn**	**66**	**0.265**	ug/L	0.042	15	27	192	13	KED
|	**Zn**	**67**	**0.229**	ug/L	0.017	7	8	32	5	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.001	33	3	2	20	KED
	Y	**89**		ug/L			375682	388556	3	Standard
	Kr	**83**		ug/L			51	43	27	Standard
⌈>	**In-1**	**115**		ug/L			10677	10676	2	KED
|	**Cd**	**111**	**0.006**	ug/L	0.009	155	4	6	50	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.002	109	3	5	35	KED
⌈>	**In**	**115**		ug/L			621777	619553	1	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.000	12	111	144	2	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1500773	0	Standard
⌊	**Pb**	**208**	**0.008**	ug/L	0.000	3	229	942	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 21:49:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	43292	2	Standard
⌈>	**Sc**	**45**		ug/L			754240	777905	1	Standard
|	**Cr**	**52**	**47.318**	ug/L	1.387	2	19104	1233611	1	Standard
|	**Cr**	**53**	**47.097**	ug/L	0.534	1	152	141215	0	Standard
|	**Fe**	**54**	**5003.419**	ug/L	110.186	2	83156	12561896	2	Standard
|	**Fe**	**57**	**4965.672**	ug/L	174.906	3	19734	5064349	2	Standard
⌊	**Mn**	**55**	**47.986**	ug/L	0.461	0	501	1894350	1	Standard
⌈>	**Ge**	**72**		ug/L			46335	46309	0	KED
|	**Cu**	**63**	**52.339**	ug/L	0.950	1	52	244061	2	KED
|	**Cu**	**65**	**51.706**	ug/L	0.051	0	27	123945	0	KED
|	**Zn**	**66**	**52.150**	ug/L	0.701	1	27	32474	0	KED
|	**Zn**	**67**	**50.716**	ug/L	1.729	3	8	5348	2	KED
⌊	**As**	**75**	**49.541**	ug/L	0.803	1	3	16433	0	KED
	Y	**89**		ug/L			375682	400598	0	Standard
	Kr	**83**		ug/L			51	73	1	Standard
⌈>	**In-1**	**115**		ug/L			10677	10646	1	KED
|	**Cd**	**111**	**51.230**	ug/L	1.308	2	4	16901	1	KED
⌊	**Cd**	**114**	**50.222**	ug/L	1.697	3	3	42810	2	KED
⌈>	**In**	**115**		ug/L			621777	609682	1	Standard
⌊	**Ag**	**107**	**50.640**	ug/L	0.591	1	111	1012937	1	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1511758	0	Standard
⌊	**Pb**	**208**	**53.014**	ug/L	0.617	1	229	4892970	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 21:56:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	41203	1	Standard
⌈>	**Sc**	**45**		ug/L			754240	777461	2	Standard
|	**Cr**	**52**	**-0.012**	ug/L	0.015	122	19104	19367	0	Standard
|	**Cr**	**53**	**-0.015**	ug/L	0.003	17	152	111	4	Standard
|	**Fe**	**54**	**-0.210**	ug/L	1.019	485	83156	85151	0	Standard
|	**Fe**	**57**	**-0.653**	ug/L	0.367	56	19734	19673	1	Standard
⌊	**Mn**	**55**	**-0.000**	ug/L	0.001	276	501	506	5	Standard
⌈>	**Ge**	**72**		ug/L			46335	47523	0	KED
|	**Cu**	**63**	**0.001**	ug/L	0.001	116	52	58	9	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.002	183	27	26	18	KED
|	**Zn**	**66**	**0.015**	ug/L	0.016	107	27	38	26	KED
|	**Zn**	**67**	**-0.025**	ug/L	0.018	69	8	5	33	KED
⌊	**As**	**75**	**0.000**	ug/L	0.007	3856	3	3	56	KED
	Y	**89**		ug/L			375682	391556	2	Standard
	Kr	**83**		ug/L			51	47	28	Standard
⌈>	**In-1**	**115**		ug/L			10677	11021	1	KED
|	**Cd**	**111**	**-0.000**	ug/L	0.004	1135	4	4	35	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.004	189	3	5	58	KED
⌈>	**In**	**115**		ug/L			621777	623768	2	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.000	10	111	156	1	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1484167	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	46	229	299	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0002-01
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 22:01:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	83661	2	Standard
>	**Sc**	**45**		ug/L			754240	819367	3	Standard
	Cr	**52**	**0.439**	ug/L	0.025	5	19104	32617	1	Standard
	Cr	**53**	**0.775**	ug/L	0.025	3	152	2611	4	Standard
	Fe	**54**	**389.182**	ug/L	7.813	2	83156	1112177	1	Standard
	Fe	**57**	**396.693**	ug/L	8.820	2	19734	445806	1	Standard
	Mn	**55**	**3.771**	ug/L	0.118	3	501	157234	0	Standard
>	**Ge**	**72**		ug/L			46335	45165	1	KED
	Cu	**63**	**2.508**	ug/L	0.055	2	52	11452	0	KED
	Cu	**65**	**2.443**	ug/L	0.040	1	27	5737	1	KED
	Zn	**66**	**3.939**	ug/L	0.181	4	27	2417	4	KED
	Zn	**67**	**3.903**	ug/L	0.023	0	8	408	0	KED
	As	**75**	**0.994**	ug/L	0.016	1	3	325	0	KED
	Y	**89**		ug/L			375682	407141	3	Standard
	Kr	**83**		ug/L			51	46	37	Standard
>	**In-1**	**115**		ug/L			10677	10439	2	KED
	Cd	**111**	**0.010**	ug/L	0.009	91	4	7	41	KED
	Cd	**114**	**0.016**	ug/L	0.005	29	3	16	23	KED
>	**In**	**115**		ug/L			621777	612600	1	Standard
	Ag	**107**	**0.002**	ug/L	0.000	14	111	154	4	Standard
>	**Tb**	**159**		ug/L			1460500	1484800	0	Standard
	Pb	**208**	**0.110**	ug/L	0.001	0	229	10245	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0002-02
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 22:05:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	81118	0	Standard
⌈>	**Sc**	**45**		ug/L			754240	810918	0	Standard
|	**Cr**	**52**	**0.396**	ug/L	0.002	0	19104	31137	0	Standard
|	**Cr**	**53**	**0.729**	ug/L	0.007	0	152	2439	1	Standard
|	**Fe**	**54**	**304.877**	ug/L	1.627	0	83156	881970	1	Standard
|	**Fe**	**57**	**319.546**	ug/L	4.535	1	19734	359700	1	Standard
⌊	**Mn**	**55**	**0.929**	ug/L	0.008	0	501	38784	1	Standard
⌈>	**Ge**	**72**		ug/L			46335	45356	0	KED
|	**Cu**	**63**	**2.411**	ug/L	0.057	2	52	11060	2	KED
|	**Cu**	**65**	**2.358**	ug/L	0.008	0	27	5561	0	KED
|	**Zn**	**66**	**5.693**	ug/L	0.088	1	27	3496	0	KED
|	**Zn**	**67**	**5.319**	ug/L	0.067	1	8	556	1	KED
⌊	**As**	**75**	**0.971**	ug/L	0.031	3	3	319	3	KED
	Y	**89**		ug/L			375682	400350	1	Standard
	Kr	**83**		ug/L			51	51	23	Standard
⌈>	**In-1**	**115**		ug/L			10677	10385	0	KED
|	**Cd**	**111**	**0.001**	ug/L	0.006	458	4	4	44	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.006	92	3	9	56	KED
⌈>	**In**	**115**		ug/L			621777	608628	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	79	111	129	13	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1500350	1	Standard
⌊	**Pb**	**208**	**0.076**	ug/L	0.001	1	229	7203	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0002-05
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 22:10:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	82125	1	Standard
⌈>	**Sc**	**45**		ug/L			754240	834249	1	Standard
|	**Cr**	**52**	**0.488**	ug/L	0.009	1	19104	34565	2	Standard
|	**Cr**	**53**	**0.728**	ug/L	0.015	2	152	2507	3	Standard
|	**Fe**	**54**	**918.012**	ug/L	4.300	0	83156	2546988	0	Standard
|	**Fe**	**57**	**910.731**	ug/L	23.313	2	19734	1014412	3	Standard
⌊	**Mn**	**55**	**215.482**	ug/L	3.441	1	501	9122194	2	Standard
⌈>	**Ge**	**72**		ug/L			46335	45840	1	KED
|	**Cu**	**63**	**3.710**	ug/L	0.083	2	52	17172	3	KED
|	**Cu**	**65**	**3.631**	ug/L	0.070	1	27	8640	1	KED
|	**Zn**	**66**	**29.828**	ug/L	0.120	0	27	18399	0	KED
|	**Zn**	**67**	**28.066**	ug/L	0.840	2	8	2933	2	KED
⌊	**As**	**75**	**1.508**	ug/L	0.043	2	3	498	1	KED
	Y	**89**		ug/L			375682	397596	3	Standard
	Kr	**83**		ug/L			51	86	15	Standard
⌈>	**In-1**	**115**		ug/L			10677	10704	1	KED
|	**Cd**	**111**	**0.027**	ug/L	0.011	42	4	13	27	KED
⌊	**Cd**	**114**	**0.031**	ug/L	0.011	33	3	30	28	KED
⌈>	**In**	**115**		ug/L			621777	605853	1	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.001	15	111	192	8	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1489252	1	Standard
⌊	**Pb**	**208**	**0.176**	ug/L	0.002	0	229	16270	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0002-06
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 22:14:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	85536	1	Standard
⌈>	**Sc**	**45**		ug/L			754240	839061	2	Standard
|	**Cr**	**52**	**0.454**	ug/L	0.026	5	19104	33817	2	Standard
|	**Cr**	**53**	**0.682**	ug/L	0.012	1	152	2372	3	Standard
|	**Fe**	**54**	**664.333**	ug/L	10.715	1	83156	1879519	2	Standard
|	**Fe**	**57**	**674.371**	ug/L	13.685	2	19734	761015	2	Standard
⌊	**Mn**	**55**	**209.159**	ug/L	5.275	2	501	8902791	1	Standard
⌈>	**Ge**	**72**		ug/L			46335	45262	1	KED
|	**Cu**	**63**	**3.419**	ug/L	0.052	1	52	15626	0	KED
|	**Cu**	**65**	**3.451**	ug/L	0.086	2	27	8108	1	KED
|	**Zn**	**66**	**27.384**	ug/L	0.430	1	27	16679	1	KED
|	**Zn**	**67**	**25.764**	ug/L	0.515	1	8	2659	1	KED
⌊	**As**	**75**	**1.315**	ug/L	0.045	3	3	429	2	KED
	Y	**89**		ug/L			375682	395576	2	Standard
	Kr	**83**		ug/L			51	80	6	Standard
⌈>	**In-1**	**115**		ug/L			10677	10453	1	KED
|	**Cd**	**111**	**0.020**	ug/L	0.016	82	4	10	50	KED
⌊	**Cd**	**114**	**0.029**	ug/L	0.007	24	3	27	21	KED
⌈>	**In**	**115**		ug/L			621777	620506	2	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.002	78	111	158	20	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1521734	0	Standard
⌊	**Pb**	**208**	**0.127**	ug/L	0.002	1	229	12080	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0002-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 01, 2023 22:19:28
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	69023	1	Standard
⌈>	**Sc**	**45**		ug/L			754240	802896	1	Standard
|	**Cr**	**52**	**1.277**	ug/L	0.068	5	19104	54151	2	Standard
|	**Cr**	**53**	**1.330**	ug/L	0.016	1	152	4274	1	Standard
|	**Fe**	**54**	**541.878**	ug/L	10.849	2	83156	1483115	1	Standard
|	**Fe**	**57**	**517.555**	ug/L	1.154	0	19734	563798	1	Standard
⌊	**Mn**	**55**	**60.832**	ug/L	1.199	1	501	2478456	1	Standard
⌈>	**Ge**	**72**		ug/L			46335	47111	0	KED
|	**Cu**	**63**	**7.228**	ug/L	0.170	2	52	34332	1	KED
|	**Cu**	**65**	**7.291**	ug/L	0.095	1	27	17804	2	KED
|	**Zn**	**66**	**108.599**	ug/L	0.237	0	27	68770	0	KED
|	**Zn**	**67**	**98.968**	ug/L	1.568	1	8	10611	0	KED
⌊	**As**	**75**	**0.654**	ug/L	0.038	5	3	224	5	KED
	Y	**89**		ug/L			375682	390456	4	Standard
	Kr	**83**		ug/L			51	49	13	Standard
⌈>	**In-1**	**115**		ug/L			10677	11086	0	KED
|	**Cd**	**111**	**0.102**	ug/L	0.006	5	4	39	5	KED
⌊	**Cd**	**114**	**0.105**	ug/L	0.023	22	3	96	21	KED
⌈>	**In**	**115**		ug/L			621777	632710	2	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.001	17	111	188	8	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1502082	0	Standard
⌊	**Pb**	**208**	**0.979**	ug/L	0.014	1	229	89976	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0002-04
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 01, 2023 22:24:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	72690	2	Standard
>	Sc	45		ug/L			754240	758411	8	Standard
	Cr	52	1.201	ug/L	0.122	10	19104	49102	2	Standard
	Cr	53	1.238	ug/L	0.100	8	152	3754	3	Standard
	Fe	54	147.468	ug/L	10.248	6	83156	440817	2	Standard
	Fe	57	138.078	ug/L	10.728	7	19734	156069	2	Standard
	Mn	55	52.051	ug/L	3.507	6	501	1996900	3	Standard
>	Ge	72		ug/L			46335	48261	1	KED
	Cu	63	6.216	ug/L	0.132	2	52	30249	1	KED
	Cu	65	6.235	ug/L	0.155	2	27	15598	1	KED
	Zn	66	114.352	ug/L	1.466	1	27	74174	0	KED
	Zn	67	104.697	ug/L	0.759	0	8	11499	1	KED
	As	75	0.416	ug/L	0.011	2	3	147	1	KED
	Y	89		ug/L			375682	381173	10	Standard
	Kr	83		ug/L			51	66	15	Standard
>	In-1	115		ug/L			10677	11098	1	KED
	Cd	111	0.092	ug/L	0.017	18	4	35	17	KED
	Cd	114	0.088	ug/L	0.008	8	3	82	9	KED
>	In	115		ug/L			621777	588499	9	Standard
	Ag	107	0.002	ug/L	0.001	72	111	142	25	Standard
>	Tb	159		ug/L			1460500	1441409	8	Standard
	Pb	208	0.485	ug/L	0.046	9	229	42679	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 01, 2023 22:28:57
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	67058	1	Standard
>	Sc	45		ug/L			754240	884163	1	Standard
	Cr	52	0.014	ug/L	0.011	82	19104	22797	1	Standard
	Cr	53	0.224	ug/L	0.019	8	152	940	6	Standard
	Fe	54	155.586	ug/L	3.467	2	83156	538536	2	Standard
	Fe	57	173.685	ug/L	0.468	0	19734	223724	1	Standard
	Mn	55	68.903	ug/L	0.299	0	501	3091589	0	Standard
>	Ge	72		ug/L			46335	46681	1	KED
	Cu	63	0.191	ug/L	0.007	3	52	948	1	KED
	Cu	65	0.176	ug/L	0.017	9	27	452	10	KED
	Zn	66	3.133	ug/L	0.150	4	27	1992	3	KED
	Zn	67	3.205	ug/L	0.355	11	8	348	10	KED
	As	75	0.289	ug/L	0.017	5	3	100	3	KED
	Y	89		ug/L			375682	395303	1	Standard
	Kr	83		ug/L			51	59	16	Standard
>	In-1	115		ug/L			10677	10903	0	KED
	Cd	111	0.018	ug/L	0.013	75	4	10	44	KED
	Cd	114	0.022	ug/L	0.005	22	3	23	19	KED
>	In	115		ug/L			621777	607232	4	Standard
	Ag	107	0.000	ug/L	0.001	327	111	114	19	Standard
>	Tb	159		ug/L			1460500	1502941	0	Standard
	Pb	208	0.057	ug/L	0.001	1	229	5431	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0180-DUP3
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 01, 2023 22:33:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	66749	1	Standard
⌈>	**Sc**	**45**		ug/L			754240	882215	2	Standard
|	**Cr**	**52**	**-0.013**	ug/L	0.024	189	19104	21968	1	Standard
|	**Cr**	**53**	**0.228**	ug/L	0.003	1	152	954	2	Standard
|	**Fe**	**54**	**159.187**	ug/L	0.975	0	83156	547500	2	Standard
|	**Fe**	**57**	**177.878**	ug/L	4.314	2	19734	228128	4	Standard
⌊	**Mn**	**55**	**68.938**	ug/L	1.321	1	501	3087154	3	Standard
⌈>	**Ge**	**72**		ug/L			46335	44688	1	KED
|	**Cu**	**63**	**0.138**	ug/L	0.005	3	52	670	2	KED
|	**Cu**	**65**	**0.148**	ug/L	0.012	7	27	370	8	KED
|	**Zn**	**66**	**0.900**	ug/L	0.085	9	27	566	7	KED
|	**Zn**	**67**	**1.289**	ug/L	0.118	9	8	139	9	KED
⌊	**As**	**75**	**0.301**	ug/L	0.021	7	3	100	8	KED
	Y	**89**		ug/L			375682	375257	2	Standard
	Kr	**83**		ug/L			51	120	89	Standard
⌈>	**In-1**	**115**		ug/L			10677	10681	2	KED
|	**Cd**	**111**	**0.018**	ug/L	0.011	59	4	10	32	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.006	51	3	13	38	KED
⌈>	**In**	**115**		ug/L			621777	596622	5	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.006	166	111	175	61	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1475161	3	Standard
⌊	**Pb**	**208**	**0.049**	ug/L	0.005	9	229	4628	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0180-MS3
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 01, 2023 22:39:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	64999	1	Standard
⌈>	Sc	45		ug/L			754240	876069	1	Standard
|	Cr	52	11.021	ug/L	0.234	2	19104	340631	1	Standard
|	Cr	53	11.337	ug/L	0.117	1	152	38420	2	Standard
|	Fe	54	2528.705	ug/L	29.559	1	83156	7198103	2	Standard
|	Fe	57	2535.815	ug/L	49.115	1	19734	2924370	1	Standard
⌊	Mn	55	83.729	ug/L	1.085	1	501	3721815	0	Standard
⌈>	Ge	72		ug/L			46335	45986	0	KED
|	Cu	63	13.473	ug/L	0.268	1	52	62417	1	KED
|	Cu	65	13.206	ug/L	0.123	0	27	31457	1	KED
|	Zn	66	42.837	ug/L	0.519	1	27	26496	1	KED
|	Zn	67	39.116	ug/L	1.167	2	8	4099	3	KED
⌊	As	75	13.376	ug/L	0.093	0	3	4408	0	KED
	Y	89		ug/L			375682	393857	3	Standard
	Kr	83		ug/L			51	62	31	Standard
⌈>	In-1	115		ug/L			10677	10714	1	KED
|	Cd	111	13.112	ug/L	0.185	1	4	4357	0	KED
⌊	Cd	114	12.899	ug/L	0.202	1	3	11070	1	KED
⌈>	In	115		ug/L			621777	606818	2	Standard
⌊	Ag	107	12.985	ug/L	0.334	2	111	258474	0	Standard
⌈>	Tb	159		ug/L			1460500	1504075	1	Standard
⌊	Pb	208	13.583	ug/L	0.233	1	229	1247373	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL8
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 22:43:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	47566	0	Standard
⌈>	**Sc**	**45**		ug/L			754240	772044	2	Standard
|	**Cr**	**52**	**0.019**	ug/L	0.014	72	19104	20031	1	Standard
|	**Cr**	**53**	**0.007**	ug/L	0.003	35	152	177	2	Standard
|	**Fe**	**54**	**0.084**	ug/L	0.939	1111	83156	85283	0	Standard
|	**Fe**	**57**	**-3.303**	ug/L	0.465	14	19734	16860	0	Standard
⌊	**Mn**	**55**	**0.018**	ug/L	0.001	6	501	1215	2	Standard
⌈>	**Ge**	**72**		ug/L			46335	46406	0	KED
|	**Cu**	**63**	**0.031**	ug/L	0.014	43	52	198	32	KED
|	**Cu**	**65**	**0.038**	ug/L	0.021	53	27	120	41	KED
|	**Zn**	**66**	**0.310**	ug/L	0.055	17	27	221	15	KED
|	**Zn**	**67**	**0.240**	ug/L	0.054	22	8	33	17	KED
⌊	**As**	**75**	**0.005**	ug/L	0.016	330	3	5	96	KED
	Y	**89**		ug/L			375682	379583	2	Standard
	Kr	**83**		ug/L			51	59	38	Standard
⌈>	**In-1**	**115**		ug/L			10677	10798	1	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.003	57	4	2	49	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.002	234	3	2	77	KED
⌈>	**In**	**115**		ug/L			621777	615662	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	38	111	127	2	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1464422	0	Standard
⌊	**Pb**	**208**	**0.008**	ug/L	0.000	4	229	931	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 22:48:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	44086	2	Standard
⌈>	**Sc**	**45**		ug/L			754240	789128	0	Standard
|	**Cr**	**52**	**48.135**	ug/L	0.737	1	19104	1273062	1	Standard
|	**Cr**	**53**	**47.971**	ug/L	0.741	1	152	145928	1	Standard
|	**Fe**	**54**	**5064.330**	ug/L	55.845	1	83156	12898544	1	Standard
|	**Fe**	**57**	**5077.407**	ug/L	43.092	0	19734	5254230	0	Standard
⌊	**Mn**	**55**	**48.976**	ug/L	0.638	1	501	1961531	1	Standard
⌈>	**Ge**	**72**		ug/L			46335	46768	0	KED
|	**Cu**	**63**	**51.093**	ug/L	0.463	0	52	240605	0	KED
|	**Cu**	**65**	**50.351**	ug/L	0.729	1	27	121889	1	KED
|	**Zn**	**66**	**51.409**	ug/L	0.969	1	27	32331	1	KED
|	**Zn**	**67**	**50.663**	ug/L	0.221	0	8	5397	0	KED
⌊	**As**	**75**	**49.562**	ug/L	0.192	0	3	16604	0	KED
	Y	**89**		ug/L			375682	396866	1	Standard
	Kr	**83**		ug/L			51	52	11	Standard
⌈>	**In-1**	**115**		ug/L			10677	10910	1	KED
|	**Cd**	**111**	**50.742**	ug/L	1.108	2	4	17155	0	KED
⌊	**Cd**	**114**	**50.871**	ug/L	1.304	2	3	44439	0	KED
⌈>	**In**	**115**		ug/L			621777	602230	0	Standard
⌊	**Ag**	**107**	**50.317**	ug/L	0.582	1	111	994110	0	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1507981	0	Standard
⌊	**Pb**	**208**	**52.338**	ug/L	0.091	0	229	4818832	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 22:55:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	42338	0	Standard
⌈>	**Sc**	**45**		ug/L			754240	796758	1	Standard
|	**Cr**	**52**	**-0.014**	ug/L	0.009	65	19104	19822	0	Standard
|	**Cr**	**53**	**-0.002**	ug/L	0.002	75	152	154	2	Standard
|	**Fe**	**54**	**0.111**	ug/L	0.692	624	83156	88117	1	Standard
|	**Fe**	**57**	**-1.673**	ug/L	0.714	42	19734	19100	2	Standard
⌊	**Mn**	**55**	**0.001**	ug/L	0.001	56	501	586	5	Standard
⌈>	**Ge**	**72**		ug/L			46335	47641	2	KED
|	**Cu**	**63**	**0.002**	ug/L	0.002	92	52	64	16	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.004	228	27	24	33	KED
|	**Zn**	**66**	**0.004**	ug/L	0.009	254	27	31	21	KED
|	**Zn**	**67**	**-0.038**	ug/L	0.026	68	8	4	65	KED
⌊	**As**	**75**	**0.003**	ug/L	0.011	394	3	4	72	KED
	Y	**89**		ug/L			375682	382444	1	Standard
	Kr	**83**		ug/L			51	42	22	Standard
⌈>	**In-1**	**115**		ug/L			10677	11457	0	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.005	263	4	3	43	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.003	193	3	2	119	KED
⌈>	**In**	**115**		ug/L			621777	620819	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	46	111	130	6	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1474572	2	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	28	229	302	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0672-13
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 23:00:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	72636	1	Standard
⌈>	**Sc**	**45**		ug/L			754240	872831	1	Standard
|	**Cr**	**52**	**0.082**	ug/L	0.004	5	19104	24475	1	Standard
|	**Cr**	**53**	**0.367**	ug/L	0.011	3	152	1409	2	Standard
|	**Fe**	**54**	**6.197**	ug/L	0.907	14	83156	113542	0	Standard
|	**Fe**	**57**	**27.182**	ug/L	0.971	3	19734	53821	1	Standard
⌊	**Mn**	**55**	**0.100**	ug/L	0.001	0	501	5016	2	Standard
⌈>	**Ge**	**72**		ug/L			46335	46504	0	KED
|	**Cu**	**63**	**731.537**	ug/L	5.293	0	52	3424823	0	KED
|	**Cu**	**65**	**707.673**	ug/L	5.975	0	27	1703245	1	KED
|	**Zn**	**66**	**12.341**	ug/L	0.369	2	27	7738	2	KED
|	**Zn**	**67**	**11.324**	ug/L	0.477	4	8	1205	3	KED
⌊	**As**	**75**	**0.191**	ug/L	0.001	0	3	67	1	KED
	Y	**89**		ug/L			375682	387018	0	Standard
	Kr	**83**		ug/L			51	46	6	Standard
⌈>	**In-1**	**115**		ug/L			10677	11043	2	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.003	38	4	1	50	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.000	16	3	5	1	KED
⌈>	**In**	**115**		ug/L			621777	612406	0	Standard
⌊	**Ag**	**107**	**0.009**	ug/L	0.002	17	111	286	10	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1483453	0	Standard
⌊	**Pb**	**208**	**1.362**	ug/L	0.028	2	229	123588	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0672-14
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 23:04:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	71736	0	Standard
⌈>	**Sc**	**45**		ug/L			754240	892169	2	Standard
|	**Cr**	**52**	**0.188**	ug/L	0.012	6	19104	28126	1	Standard
|	**Cr**	**53**	**0.544**	ug/L	0.028	5	152	2047	2	Standard
|	**Fe**	**54**	**4.488**	ug/L	0.419	9	83156	111208	3	Standard
|	**Fe**	**57**	**29.092**	ug/L	1.156	3	19734	57226	1	Standard
⌊	**Mn**	**55**	**0.148**	ug/L	0.001	0	501	7285	1	Standard
⌈>	**Ge**	**72**		ug/L			46335	45925	0	KED
|	**Cu**	**63**	**486.229**	ug/L	8.413	1	52	2247924	1	KED
|	**Cu**	**65**	**463.254**	ug/L	5.112	1	27	1101006	0	KED
|	**Zn**	**66**	**10.963**	ug/L	0.124	1	27	6792	1	KED
|	**Zn**	**67**	**10.386**	ug/L	0.938	9	8	1092	8	KED
⌊	**As**	**75**	**0.369**	ug/L	0.027	7	3	125	6	KED
	Y	**89**		ug/L			375682	385099	1	Standard
	Kr	**83**		ug/L			51	38	37	Standard
⌈>	**In-1**	**115**		ug/L			10677	10684	1	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.005	517	4	3	43	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.005	274	3	2	216	KED
⌈>	**In**	**115**		ug/L			621777	601772	0	Standard
⌊	**Ag**	**107**	**0.008**	ug/L	0.001	18	111	257	10	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1489099	1	Standard
⌊	**Pb**	**208**	**2.409**	ug/L	0.029	1	229	219197	0	Standard

23C0672

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~23C0678~~-02
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 23:09:04
Number of Replicates: 3

MB 5/1/23

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	74425	0	Standard
>	**Sc**	**45**		ug/L			754240	856815	2	Standard
	Cr	**52**	**0.144**	ug/L	0.012	8	19104	25763	3	Standard
	Cr	**53**	**0.383**	ug/L	0.001	0	152	1435	2	Standard
	Fe	**54**	**1.499**	ug/L	0.733	48	83156	98556	1	Standard
	Fe	**57**	**23.338**	ug/L	0.931	3	19734	48527	2	Standard
	Mn	**55**	**0.080**	ug/L	0.001	1	501	4029	2	Standard
>	**Ge**	**72**		ug/L			46335	46120	0	KED
	Cu	**63**	**330.043**	ug/L	3.850	1	52	1532406	0	KED
	Cu	**65**	**329.787**	ug/L	2.943	0	27	787141	0	KED
	Zn	**66**	**19.584**	ug/L	0.363	1	27	12163	1	KED
	Zn	**67**	**17.978**	ug/L	0.445	2	8	1894	2	KED
	As	**75**	**0.155**	ug/L	0.014	8	3	55	8	KED
	Y	**89**		ug/L			375682	386478	1	Standard
	Kr	**83**		ug/L			51	56	14	Standard
>	**In-1**	**115**		ug/L			10677	10591	1	KED
	Cd	**111**	**-0.002**	ug/L	0.011	640	4	3	103	KED
	Cd	**114**	**0.007**	ug/L	0.011	149	3	9	94	KED
>	**In**	**115**		ug/L			621777	596904	1	Standard
	Ag	**107**	**0.029**	ug/L	0.001	3	111	671	2	Standard
>	**Tb**	**159**		ug/L			1460500	1489521	1	Standard
	Pb	**208**	**0.236**	ug/L	0.004	1	229	21697	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0672-01
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 23:13:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	71934	0	Standard
>	Sc	45		ug/L			754240	917053	2	Standard
	Cr	52	0.080	ug/L	0.002	2	19104	25661	2	Standard
	Cr	53	0.442	ug/L	0.015	3	152	1744	2	Standard
	Fe	54	1.083	ug/L	0.164	15	83156	104284	2	Standard
	Fe	57	20.221	ug/L	0.568	2	19734	48207	1	Standard
	Mn	55	1.909	ug/L	0.004	0	501	89455	2	Standard
>	Ge	72		ug/L			46335	46015	0	KED
	Cu	63	82.311	ug/L	0.776	0	52	381338	0	KED
	Cu	65	81.093	ug/L	1.531	1	27	193124	1	KED
	Zn	66	2.166	ug/L	0.067	3	27	1367	3	KED
	Zn	67	2.021	ug/L	0.055	2	8	219	3	KED
	As	75	0.322	ug/L	0.006	1	3	110	2	KED
	Y	89		ug/L			375682	382573	1	Standard
	Kr	83		ug/L			51	46	6	Standard
>	In-1	115		ug/L			10677	10763	2	KED
	Cd	111	-0.008	ug/L	0.006	78	4	1	124	KED
	Cd	114	0.003	ug/L	0.003	83	3	6	34	KED
>	In	115		ug/L			621777	605165	1	Standard
	Ag	107	0.004	ug/L	0.001	18	111	194	9	Standard
>	Tb	159		ug/L			1460500	1484648	0	Standard
	Pb	208	0.132	ug/L	0.001	1	229	12233	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0672-03
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 23:17:57
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	73045	1	Standard
>	Sc	45		ug/L			754240	888669	1	Standard
	Cr	52	0.109	ug/L	0.004	3	19104	25701	2	Standard
	Cr	53	0.408	ug/L	0.019	4	152	1575	2	Standard
	Fe	54	5.373	ug/L	0.902	16	83156	113257	0	Standard
	Fe	57	14.228	ug/L	0.493	3	19734	39771	2	Standard
	Mn	55	0.331	ug/L	0.003	1	501	15536	1	Standard
>	Ge	72		ug/L			46335	45794	0	KED
	Cu	63	48.389	ug/L	0.166	0	52	223136	0	KED
	Cu	65	47.642	ug/L	0.735	1	27	112933	1	KED
	Zn	66	4.340	ug/L	0.072	1	27	2698	1	KED
	Zn	67	4.061	ug/L	0.210	5	8	431	5	KED
	As	75	0.445	ug/L	0.027	6	3	149	5	KED
	Y	89		ug/L			375682	387652	0	Standard
	Kr	83		ug/L			51	43	6	Standard
>	In-1	115		ug/L			10677	10573	1	KED
	Cd	111	0.000	ug/L	0.002	1352	4	4	13	KED
	Cd	114	-0.003	ug/L	0.002	72	3	0	225	KED
>	In	115		ug/L			621777	590349	2	Standard
	Ag	107	0.020	ug/L	0.001	6	111	495	3	Standard
>	Tb	159		ug/L			1460500	1469638	2	Standard
	Pb	208	0.094	ug/L	0.003	2	229	8637	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0672-04
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 23:22:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	72770	2	Standard
>	Sc	45		ug/L			754240	866550	1	Standard
	Cr	52	0.062	ug/L	0.012	19	19104	23710	2	Standard
	Cr	53	0.266	ug/L	0.004	1	152	1064	1	Standard
	Fe	54	4.903	ug/L	0.071	1	83156	109159	1	Standard
	Fe	57	6.960	ug/L	0.516	7	19734	30554	3	Standard
	Mn	55	1.461	ug/L	0.002	0	501	64831	1	Standard
>	Ge	72		ug/L			46335	47526	1	KED
	Cu	63	19.625	ug/L	0.754	3	52	93911	2	KED
	Cu	65	19.304	ug/L	1.212	6	27	47468	4	KED
	Zn	66	3.022	ug/L	0.154	5	27	1957	4	KED
	Zn	67	2.725	ug/L	0.145	5	8	302	4	KED
	As	75	0.143	ug/L	0.028	19	3	52	16	KED
	Y	89		ug/L			375682	385286	0	Standard
	Kr	83		ug/L			51	44	23	Standard
>	In-1	115		ug/L			10677	10531	0	KED
	Cd	111	0.001	ug/L	0.007	637	4	4	53	KED
	Cd	114	0.005	ug/L	0.006	122	3	7	63	KED
>	In	115		ug/L			621777	596554	2	Standard
	Ag	107	0.004	ug/L	0.001	19	111	186	8	Standard
>	Tb	159		ug/L			1460500	1478920	1	Standard
	Pb	208	0.043	ug/L	0.001	2	229	4153	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0672-05
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 23:26:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	74350	2	Standard
>	Sc	45		ug/L			754240	869694	0	Standard
	Cr	52	0.029	ug/L	0.006	21	19104	22856	0	Standard
	Cr	53	0.253	ug/L	0.007	2	152	1024	2	Standard
	Fe	54	3.563	ug/L	0.713	20	83156	105825	2	Standard
	Fe	57	6.552	ug/L	0.137	2	19734	30198	1	Standard
	Mn	55	7.137	ug/L	0.005	0	501	315531	0	Standard
>	Ge	72		ug/L			46335	46154	1	KED
	Cu	63	40.109	ug/L	0.505	1	52	186432	2	KED
	Cu	65	39.367	ug/L	0.226	0	27	94060	1	KED
	Zn	66	2.213	ug/L	0.040	1	27	1400	1	KED
	Zn	67	2.146	ug/L	0.310	14	8	233	14	KED
	As	75	0.148	ug/L	0.001	0	3	52	1	KED
	Y	89		ug/L			375682	378772	0	Standard
	Kr	83		ug/L			51	46	6	Standard
>	In-1	115		ug/L			10677	10596	1	KED
	Cd	111	-0.003	ug/L	0.003	122	4	3	34	KED
	Cd	114	0.002	ug/L	0.006	291	3	5	92	KED
>	In	115		ug/L			621777	601823	2	Standard
	Ag	107	0.001	ug/L	0.001	63	111	130	8	Standard
>	Tb	159		ug/L			1460500	1475693	0	Standard
	Pb	208	0.063	ug/L	0.001	1	229	5898	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0672-06
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 23:31:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	72394	1	Standard
>	Sc	45		ug/L			754240	866478	2	Standard
	Cr	52	0.050	ug/L	0.012	23	19104	23381	1	Standard
	Cr	53	0.259	ug/L	0.011	4	152	1040	5	Standard
	Fe	54	1.466	ug/L	0.252	17	83156	99609	2	Standard
	Fe	57	5.952	ug/L	0.476	8	19734	29403	2	Standard
	Mn	55	30.406	ug/L	0.588	1	501	1337120	1	Standard
>	Ge	72		ug/L			46335	46318	0	KED
	Cu	63	4.730	ug/L	0.038	0	52	22107	0	KED
	Cu	65	4.639	ug/L	0.052	1	27	11147	1	KED
	Zn	66	3.286	ug/L	0.081	2	27	2073	2	KED
	Zn	67	3.116	ug/L	0.338	10	8	336	10	KED
	As	75	0.142	ug/L	0.013	9	3	50	8	KED
	Y	89		ug/L			375682	388147	5	Standard
	Kr	83		ug/L			51	55	12	Standard
>	In-1	115		ug/L			10677	10626	1	KED
	Cd	111	0.011	ug/L	0.003	23	4	7	12	KED
	Cd	114	0.006	ug/L	0.004	58	3	8	35	KED
>	In	115		ug/L			621777	622045	3	Standard
	Ag	107	-0.001	ug/L	0.001	90	111	92	18	Standard
>	Tb	159		ug/L			1460500	1504185	1	Standard
	Pb	208	0.088	ug/L	0.002	1	229	8357	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0672-07
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 23:37:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	73480	0	Standard
>	Sc	45		ug/L			754240	887140	2	Standard
	Cr	52	0.037	ug/L	0.008	22	19104	23543	2	Standard
	Cr	53	0.241	ug/L	0.005	1	152	1004	4	Standard
	Fe	54	3.556	ug/L	0.848	23	83156	107880	1	Standard
	Fe	57	5.687	ug/L	0.272	4	19734	29807	3	Standard
	Mn	55	0.475	ug/L	0.014	2	501	21960	0	Standard
>	Ge	72		ug/L			46335	48078	1	KED
	Cu	63	12.460	ug/L	0.059	0	52	60358	0	KED
	Cu	65	12.440	ug/L	0.308	2	27	30978	2	KED
	Zn	66	1.784	ug/L	0.037	2	27	1181	1	KED
	Zn	67	1.785	ug/L	0.051	2	8	203	3	KED
	As	75	0.165	ug/L	0.010	5	3	60	6	KED
	Y	89		ug/L			375682	384168	3	Standard
	Kr	83		ug/L			51	55	5	Standard
>	In-1	115		ug/L			10677	11270	2	KED
	Cd	111	0.001	ug/L	0.003	231	4	4	20	KED
	Cd	114	0.001	ug/L	0.002	189	3	4	39	KED
>	In	115		ug/L			621777	625602	1	Standard
	Ag	107	0.003	ug/L	0.001	30	111	168	11	Standard
>	Tb	159		ug/L			1460500	1516866	0	Standard
	Pb	208	0.056	ug/L	0.001	0	229	5393	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL9
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 23:42:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	47978	2	Standard
⌈>	**Sc**	**45**		ug/L			754240	783403	2	Standard
|	**Cr**	**52**	**0.021**	ug/L	0.020	92	19104	20385	0	Standard
|	**Cr**	**53**	**0.011**	ug/L	0.005	45	152	193	10	Standard
|	**Fe**	**54**	**0.285**	ug/L	0.518	182	83156	87075	2	Standard
|	**Fe**	**57**	**-1.953**	ug/L	0.494	25	19734	18492	2	Standard
⌊	**Mn**	**55**	**0.018**	ug/L	0.002	9	501	1251	8	Standard
⌈>	**Ge**	**72**		ug/L			46335	47123	0	KED
|	**Cu**	**63**	**0.023**	ug/L	0.005	19	52	164	13	KED
|	**Cu**	**65**	**0.021**	ug/L	0.007	30	27	80	20	KED
|	**Zn**	**66**	**0.240**	ug/L	0.021	8	27	180	7	KED
|	**Zn**	**67**	**0.259**	ug/L	0.093	36	8	36	27	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.001	21	3	2	10	KED
	Y	**89**		ug/L			375682	380402	0	Standard
	Kr	**83**		ug/L			51	60	13	Standard
⌈>	**In-1**	**115**		ug/L			10677	10903	3	KED
|	**Cd**	**111**	**0.003**	ug/L	0.006	233	4	5	39	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.003	278	3	4	60	KED
⌈>	**In**	**115**		ug/L			621777	608737	3	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.000	10	111	76	6	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1463084	1	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.000	4	229	871	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 23:47:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	43693	2	Standard
⌈>	**Sc**	**45**		ug/L			754240	788763	1	Standard
|	**Cr**	**52**	**47.604**	ug/L	0.574	1	19104	1258488	1	Standard
|	**Cr**	**53**	**47.706**	ug/L	0.636	1	152	145041	1	Standard
|	**Fe**	**54**	**5041.793**	ug/L	8.455	0	83156	12835462	1	Standard
|	**Fe**	**57**	**5087.654**	ug/L	126.747	2	19734	5261887	2	Standard
⌊	**Mn**	**55**	**48.478**	ug/L	0.614	1	501	1940728	2	Standard
⌈>	**Ge**	**72**		ug/L			46335	46992	0	KED
|	**Cu**	**63**	**51.757**	ug/L	1.061	2	52	244899	1	KED
|	**Cu**	**65**	**51.697**	ug/L	1.264	2	27	125748	2	KED
|	**Zn**	**66**	**51.270**	ug/L	0.615	1	27	32400	1	KED
|	**Zn**	**67**	**50.706**	ug/L	0.279	0	8	5427	0	KED
⌊	**As**	**75**	**49.520**	ug/L	0.216	0	3	16670	0	KED
	Y	**89**		ug/L			375682	385160	2	Standard
	Kr	**83**		ug/L			51	68	10	Standard
⌈>	**In-1**	**115**		ug/L			10677	11015	1	KED
|	**Cd**	**111**	**50.465**	ug/L	0.986	1	4	17227	1	KED
⌊	**Cd**	**114**	**49.802**	ug/L	0.374	0	3	43933	0	KED
⌈>	**In**	**115**		ug/L			621777	576943	2	Standard
⌊	**Ag**	**107**	**51.733**	ug/L	2.190	4	111	978462	1	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1480504	0	Standard
⌊	**Pb**	**208**	**52.452**	ug/L	0.226	0	229	4741381	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 23:54:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	42281	1	Standard
⌈>	**Sc**	**45**		ug/L			754240	774404	1	Standard
|	**Cr**	**52**	**0.011**	ug/L	0.012	110	19104	19895	2	Standard
|	**Cr**	**53**	**0.000**	ug/L	0.002	716	152	157	5	Standard
|	**Fe**	**54**	**-0.136**	ug/L	0.150	110	83156	85046	2	Standard
|	**Fe**	**57**	**0.966**	ug/L	0.354	36	19734	21241	3	Standard
⌊	**Mn**	**55**	**0.000**	ug/L	0.000	105	501	527	3	Standard
⌈>	**Ge**	**72**		ug/L			46335	47371	1	KED
|	**Cu**	**63**	**0.002**	ug/L	0.002	75	52	64	12	KED
|	**Cu**	**65**	**0.001**	ug/L	0.002	273	27	30	16	KED
|	**Zn**	**66**	**0.007**	ug/L	0.008	108	27	33	13	KED
|	**Zn**	**67**	**-0.031**	ug/L	0.055	178	8	5	114	KED
⌊	**As**	**75**	**0.002**	ug/L	0.004	190	3	4	29	KED
	Y	**89**		ug/L			375682	381014	3	Standard
	Kr	**83**		ug/L			51	58	10	Standard
⌈>	**In-1**	**115**		ug/L			10677	11304	1	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.004	657	4	4	35	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.003	81	3	6	33	KED
⌈>	**In**	**115**		ug/L			621777	597369	1	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	481	111	113	24	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1456658	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	35	229	324	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0672-08
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 01, 2023 23:59:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	72481	0	Standard
>	Sc	45		ug/L			754240	885075	0	Standard
	Cr	52	0.093	ug/L	0.031	32	19104	25145	3	Standard
	Cr	53	0.261	ug/L	0.026	10	152	1068	7	Standard
	Fe	54	7.932	ug/L	2.213	27	83156	120070	4	Standard
	Fe	57	11.767	ug/L	2.680	22	19734	36754	8	Standard
	Mn	55	0.762	ug/L	0.043	5	501	34801	5	Standard
>	Ge	72		ug/L			46335	47606	2	KED
	Cu	63	7.805	ug/L	0.230	2	52	37443	1	KED
	Cu	65	7.855	ug/L	0.167	2	27	19375	1	KED
	Zn	66	2.932	ug/L	0.175	5	27	1902	3	KED
	Zn	67	2.637	ug/L	0.051	1	8	293	0	KED
	As	75	0.161	ug/L	0.013	7	3	58	6	KED
	Y	89		ug/L			375682	390322	3	Standard
	Kr	83		ug/L			51	50	27	Standard
>	In-1	115		ug/L			10677	11169	0	KED
	Cd	111	-0.001	ug/L	0.006	384	4	3	50	KED
	Cd	114	-0.001	ug/L	0.006	840	3	3	159	KED
>	In	115		ug/L			621777	614473	0	Standard
	Ag	107	0.015	ug/L	0.025	171	111	405	124	Standard
>	Tb	159		ug/L			1460500	1489017	2	Standard
	Pb	208	0.126	ug/L	0.028	22	229	11621	19	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0672-09
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 00:03:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	73528	2	Standard
>	Sc	45		ug/L			754240	889722	1	Standard
	Cr	52	0.085	ug/L	0.019	22	19104	25033	2	Standard
	Cr	53	0.286	ug/L	0.015	5	152	1161	5	Standard
	Fe	54	7.631	ug/L	0.375	4	83156	119858	1	Standard
	Fe	57	10.501	ug/L	1.254	11	19734	35480	4	Standard
	Mn	55	0.804	ug/L	0.025	3	501	36893	3	Standard
>	Ge	72		ug/L			46335	47979	2	KED
	Cu	63	25.639	ug/L	0.402	1	52	123886	2	KED
	Cu	65	25.358	ug/L	0.848	3	27	62968	2	KED
	Zn	66	2.901	ug/L	0.048	1	27	1899	3	KED
	Zn	67	2.788	ug/L	0.415	14	8	312	13	KED
	As	75	0.145	ug/L	0.008	5	3	53	4	KED
	Y	89		ug/L			375682	393861	0	Standard
	Kr	83		ug/L			51	43	29	Standard
>	In-1	115		ug/L			10677	9375	31	KED
	Cd	111	0.002	ug/L	0.011	612	4	3	41	KED
	Cd	114	0.004	ug/L	0.016	353	3	4	185	KED
>	In	115		ug/L			621777	624552	0	Standard
	Ag	107	-0.001	ug/L	0.001	68	111	90	15	Standard
>	Tb	159		ug/L			1460500	1507056	1	Standard
	Pb	208	0.032	ug/L	0.000	1	229	3142	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0672-10
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 00:07:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	76242	2	Standard
>	Sc	45		ug/L			754240	856464	1	Standard
	Cr	52	0.191	ug/L	0.011	6	19104	27076	0	Standard
	Cr	53	0.437	ug/L	0.003	0	152	1615	1	Standard
	Fe	54	19.076	ug/L	0.737	3	83156	146799	1	Standard
	Fe	57	27.769	ug/L	1.041	3	19734	53467	1	Standard
	Mn	55	0.795	ug/L	0.018	2	501	35097	1	Standard
>	Ge	72		ug/L			46335	47960	1	KED
	Cu	63	15.149	ug/L	0.285	1	52	73188	1	KED
	Cu	65	14.720	ug/L	0.172	1	27	36561	1	KED
	Zn	66	1.678	ug/L	0.129	7	27	1109	6	KED
	Zn	67	1.633	ug/L	0.232	14	8	186	13	KED
	As	75	0.360	ug/L	0.023	6	3	127	4	KED
	Y	89		ug/L			375682	394987	1	Standard
	Kr	83		ug/L			51	44	16	Standard
>	In-1	115		ug/L			10677	11305	0	KED
	Cd	111	-0.004	ug/L	0.000	1	4	2	0	KED
	Cd	114	0.003	ug/L	0.003	110	3	6	43	KED
>	In	115		ug/L			621777	617651	2	Standard
	Ag	107	0.001	ug/L	0.000	20	111	138	6	Standard
>	Tb	159		ug/L			1460500	1496712	1	Standard
	Pb	208	0.061	ug/L	0.002	2	229	5832	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0672-11
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 00:12:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	74659	2	Standard
>	Sc	45		ug/L			754240	998583	1	Standard
	Cr	52	-0.078	ug/L	0.020	25	19104	22702	1	Standard
	Cr	53	0.453	ug/L	0.019	4	152	1943	4	Standard
	Fe	54	-0.907	ug/L	0.537	59	83156	107171	0	Standard
	Fe	57	23.744	ug/L	1.819	7	19734	57070	2	Standard
	Mn	55	0.068	ug/L	0.001	2	501	4130	2	Standard
>	Ge	72		ug/L			46335	46466	0	KED
	Cu	63	87.712	ug/L	0.730	0	52	410349	0	KED
	Cu	65	86.340	ug/L	1.146	1	27	207651	1	KED
	Zn	66	7.025	ug/L	0.244	3	27	4414	3	KED
	Zn	67	6.207	ug/L	0.183	2	8	664	2	KED
	As	75	1.849	ug/L	0.061	3	3	619	3	KED
	Y	89		ug/L			375682	394577	2	Standard
	Kr	83		ug/L			51	59	27	Standard
>	In-1	115		ug/L			10677	10624	0	KED
	Cd	111	0.000	ug/L	0.007	10863	4	4	58	KED
	Cd	114	0.004	ug/L	0.005	131	3	6	59	KED
>	In	115		ug/L			621777	623740	0	Standard
	Ag	107	0.002	ug/L	0.001	46	111	159	14	Standard
>	Tb	159		ug/L			1460500	1502770	0	Standard
	Pb	208	0.093	ug/L	0.002	1	229	8773	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0672-12
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 00:16:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	75534	1	Standard
>	Sc	45		ug/L			754240	861225	1	Standard
	Cr	52	0.170	ug/L	0.017	9	19104	26648	2	Standard
	Cr	53	0.412	ug/L	0.007	1	152	1541	0	Standard
	Fe	54	26.865	ug/L	0.450	1	83156	169115	1	Standard
	Fe	57	35.942	ug/L	1.091	3	19734	62970	2	Standard
	Mn	55	1.551	ug/L	0.016	1	501	68357	1	Standard
>	Ge	72		ug/L			46335	47843	0	KED
	Cu	63	139.798	ug/L	0.756	0	52	673382	0	KED
	Cu	65	138.292	ug/L	1.714	1	27	342431	1	KED
	Zn	66	17.497	ug/L	0.396	2	27	11276	1	KED
	Zn	67	16.406	ug/L	0.559	3	8	1793	3	KED
	As	75	0.338	ug/L	0.039	11	3	119	10	KED
	Y	89		ug/L			375682	394590	0	Standard
	Kr	83		ug/L			51	48	18	Standard
>	In-1	115		ug/L			10677	11119	2	KED
	Cd	111	-0.002	ug/L	0.006	235	4	3	56	KED
	Cd	114	0.002	ug/L	0.005	276	3	5	76	KED
>	In	115		ug/L			621777	618614	1	Standard
	Ag	107	0.009	ug/L	0.000	3	111	300	1	Standard
>	Tb	159		ug/L			1460500	1542144	1	Standard
	Pb	208	0.432	ug/L	0.009	2	229	40877	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0672-15
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 00:21:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	73809	1	Standard
>	Sc	45		ug/L			754240	969116	0	Standard
	Cr	52	0.202	ug/L	0.010	4	19104	31016	1	Standard
	Cr	53	0.644	ug/L	0.029	4	152	2600	4	Standard
	Fe	54	0.347	ug/L	0.190	54	83156	107922	0	Standard
	Fe	57	33.926	ug/L	0.650	1	19734	68305	1	Standard
	Mn	55	0.042	ug/L	0.002	3	501	2700	2	Standard
>	Ge	72		ug/L			46335	45691	1	KED
	Cu	63	169.526	ug/L	1.999	1	52	779874	1	KED
	Cu	65	167.896	ug/L	1.078	0	27	397015	0	KED
	Zn	66	3.544	ug/L	0.031	0	27	2203	0	KED
	Zn	67	3.381	ug/L	0.132	3	8	359	2	KED
	As	75	1.006	ug/L	0.041	4	3	332	3	KED
	Y	89		ug/L			375682	382679	0	Standard
	Kr	83		ug/L			51	46	8	Standard
>	In-1	115		ug/L			10677	10714	3	KED
	Cd	111	0.009	ug/L	0.009	93	4	7	41	KED
	Cd	114	0.011	ug/L	0.010	83	3	13	58	KED
>	In	115		ug/L			621777	592882	1	Standard
	Ag	107	0.004	ug/L	0.001	25	111	189	11	Standard
>	Tb	159		ug/L			1460500	1470076	0	Standard
	Pb	208	0.084	ug/L	0.002	2	229	7811	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0672-16
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 00:27:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40288	70848	1	Standard
>	Sc	45		ug/L			754240	972491	0	Standard
	Cr	52	0.078	ug/L	0.018	22	19104	27139	2	Standard
	Cr	53	0.517	ug/L	0.014	2	152	2133	2	Standard
	Fe	54	-2.218	ug/L	0.135	6	83156	100305	0	Standard
	Fe	57	30.564	ug/L	1.013	3	19734	64269	2	Standard
	Mn	55	0.044	ug/L	0.000	0	501	2800	0	Standard
>	Ge	72		ug/L			46335	45312	0	KED
	Cu	63	148.779	ug/L	0.980	0	52	678719	0	KED
	Cu	65	144.877	ug/L	1.582	1	27	339772	1	KED
	Zn	66	20.252	ug/L	0.269	1	27	12356	0	KED
	Zn	67	18.618	ug/L	0.776	4	8	1927	4	KED
	As	75	1.035	ug/L	0.018	1	3	339	1	KED
	Y	89		ug/L			375682	387219	4	Standard
	Kr	83		ug/L			51	50	5	Standard
>	In-1	115		ug/L			10677	10801	4	KED
	Cd	111	0.002	ug/L	0.002	135	4	4	20	KED
	Cd	114	0.005	ug/L	0.003	46	3	8	28	KED
>	In	115		ug/L			621777	590449	1	Standard
	Ag	107	0.008	ug/L	0.001	14	111	252	8	Standard
>	Tb	159		ug/L			1460500	1499014	1	Standard
	Pb	208	0.102	ug/L	0.005	4	229	9572	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0370-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 00:35:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	83058	1	Standard
⌈>	**Sc**	**45**		ug/L			754240	911842	3	Standard
|	**Cr**	**52**	**0.563**	ug/L	0.035	6	19104	40007	2	Standard
|	**Cr**	**53**	**22.171**	ug/L	0.327	1	152	78024	3	Standard
|	**Fe**	**54**	**154.559**	ug/L	4.719	3	83156	552151	3	Standard
|	**Fe**	**57**	**210.106**	ug/L	6.790	3	19734	273902	0	Standard
⌊	**Mn**	**55**	**29.748**	ug/L	0.704	2	501	1376392	2	Standard
⌈>	**Ge**	**72**		ug/L			46335	42392	0	KED
|	**Cu**	**63**	**1.719**	ug/L	0.021	1	52	7384	2	KED
|	**Cu**	**65**	**1.690**	ug/L	0.051	3	27	3733	2	KED
|	**Zn**	**66**	**24.000**	ug/L	0.079	0	27	13695	0	KED
|	**Zn**	**67**	**22.604**	ug/L	0.653	2	8	2186	2	KED
⌊	**As**	**75**	**0.568**	ug/L	0.020	3	3	176	3	KED
	Y	**89**		ug/L			375682	358967	2	Standard
	Kr	**83**		ug/L			51	83	22	Standard
⌈>	**In-1**	**115**		ug/L			10677	9871	1	KED
|	**Cd**	**111**	**0.043**	ug/L	0.007	16	4	16	13	KED
⌊	**Cd**	**114**	**0.038**	ug/L	0.002	5	3	33	3	KED
⌈>	**In**	**115**		ug/L			621777	515854	3	Standard
⌊	**Ag**	**107**	**0.035**	ug/L	0.002	5	111	679	5	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1413611	0	Standard
⌊	**Pb**	**208**	**0.111**	ug/L	0.002	1	229	9824	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0370-03
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 02, 2023 00:40:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	59464	0	Standard
⌈>	**Sc**	**45**		ug/L			754240	814095	2	Standard
|	**Cr**	**52**	**0.095**	ug/L	0.032	33	19104	23160	1	Standard
|	**Cr**	**53**	**0.658**	ug/L	0.028	4	152	2227	1	Standard
|	**Fe**	**54**	**2.601**	ug/L	1.119	43	83156	96506	2	Standard
|	**Fe**	**57**	**9.207**	ug/L	0.653	7	19734	31081	1	Standard
⌊	**Mn**	**55**	**0.476**	ug/L	0.016	3	501	20173	1	Standard
⌈>	**Ge**	**72**		ug/L			46335	47608	1	KED
|	**Cu**	**63**	**26.945**	ug/L	0.235	0	52	129199	1	KED
|	**Cu**	**65**	**27.267**	ug/L	0.297	1	27	67204	1	KED
|	**Zn**	**66**	**5.694**	ug/L	0.100	1	27	3670	0	KED
|	**Zn**	**67**	**5.043**	ug/L	0.301	5	8	554	4	KED
⌊	**As**	**75**	**0.122**	ug/L	0.009	7	3	45	8	KED
	Y	**89**		ug/L			375682	381717	2	Standard
	Kr	**83**		ug/L			51	48	16	Standard
⌈>	**In-1**	**115**		ug/L			10677	11110	1	KED
|	**Cd**	**111**	**0.015**	ug/L	0.011	70	4	9	40	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.001	15	3	9	11	KED
⌈>	**In**	**115**		ug/L			621777	614901	1	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.001	19	111	220	7	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1489918	0	Standard
⌊	**Pb**	**208**	**0.355**	ug/L	0.011	2	229	32529	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLA
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 00:44:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	48162	1	Standard
⌈>	**Sc**	**45**		ug/L			754240	787272	2	Standard
|	**Cr**	**52**	**0.049**	ug/L	0.023	47	19104	21203	2	Standard
|	**Cr**	**53**	**0.299**	ug/L	0.016	5	152	1066	5	Standard
|	**Fe**	**54**	**0.565**	ug/L	0.895	158	83156	88191	0	Standard
|	**Fe**	**57**	**3.023**	ug/L	0.147	4	19734	23706	2	Standard
⌊	**Mn**	**55**	**0.016**	ug/L	0.001	5	501	1157	3	Standard
⌈>	**Ge**	**72**		ug/L			46335	46776	1	KED
|	**Cu**	**63**	**0.038**	ug/L	0.018	47	52	233	36	KED
|	**Cu**	**65**	**0.034**	ug/L	0.016	48	27	109	35	KED
|	**Zn**	**66**	**0.271**	ug/L	0.028	10	27	198	10	KED
|	**Zn**	**67**	**0.184**	ug/L	0.057	30	8	27	21	KED
⌊	**As**	**75**	**-0.003**	ug/L	0.005	157	3	2	66	KED
	Y	**89**		ug/L			375682	378479	2	Standard
	Kr	**83**		ug/L			51	47	10	Standard
⌈>	**In-1**	**115**		ug/L			10677	11040	0	KED
|	**Cd**	**111**	**-0.000**	ug/L	0.002	392	4	4	13	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.001	377	3	4	26	KED
⌈>	**In**	**115**		ug/L			621777	608723	3	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.001	43	111	62	32	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1472432	2	Standard
⌊	**Pb**	**208**	**0.008**	ug/L	0.000	4	229	920	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 00:49:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	44629	0	Standard
⌈>	**Sc**	**45**		ug/L			754240	801292	0	Standard
|	**Cr**	**52**	**47.945**	ug/L	0.256	0	19104	1287682	0	Standard
|	**Cr**	**53**	**47.423**	ug/L	0.327	0	152	146481	0	Standard
|	**Fe**	**54**	**5020.040**	ug/L	47.712	0	83156	12983300	0	Standard
|	**Fe**	**57**	**5006.182**	ug/L	54.898	1	19734	5260870	1	Standard
⌊	**Mn**	**55**	**49.333**	ug/L	1.274	2	501	2006255	2	Standard
⌈>	**Ge**	**72**		ug/L			46335	46743	2	KED
|	**Cu**	**63**	**51.986**	ug/L	0.474	0	52	244651	1	KED
|	**Cu**	**65**	**50.736**	ug/L	0.953	1	27	122725	0	KED
|	**Zn**	**66**	**51.486**	ug/L	1.483	2	27	32350	0	KED
|	**Zn**	**67**	**52.014**	ug/L	0.602	1	8	5536	1	KED
⌊	**As**	**75**	**50.038**	ug/L	1.202	2	3	16749	0	KED
	Y	**89**		ug/L			375682	391387	1	Standard
	Kr	**83**		ug/L			51	60	35	Standard
⌈>	**In-1**	**115**		ug/L			10677	10887	1	KED
|	**Cd**	**111**	**50.859**	ug/L	1.255	2	4	17157	0	KED
⌊	**Cd**	**114**	**50.848**	ug/L	0.909	1	3	44330	1	KED
⌈>	**In**	**115**		ug/L			621777	602259	0	Standard
⌊	**Ag**	**107**	**51.025**	ug/L	0.837	1	111	1008254	2	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1481138	0	Standard
⌊	**Pb**	**208**	**53.509**	ug/L	0.718	1	229	4838668	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 00:56:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40288	42353	1	Standard
⌈>	**Sc**	**45**		ug/L			754240	777937	1	Standard
|	**Cr**	**52**	**0.026**	ug/L	0.015	56	19104	20382	2	Standard
|	**Cr**	**53**	**0.121**	ug/L	0.003	2	152	518	2	Standard
|	**Fe**	**54**	**0.966**	ug/L	0.077	7	83156	88176	1	Standard
|	**Fe**	**57**	**-0.773**	ug/L	0.422	54	19734	19568	2	Standard
⌊	**Mn**	**55**	**0.001**	ug/L	0.000	14	501	558	2	Standard
⌈>	**Ge**	**72**		ug/L			46335	47706	0	KED
|	**Cu**	**63**	**0.002**	ug/L	0.003	143	52	63	22	KED
|	**Cu**	**65**	**0.002**	ug/L	0.002	79	27	33	11	KED
|	**Zn**	**66**	**0.010**	ug/L	0.009	95	27	34	16	KED
|	**Zn**	**67**	**0.009**	ug/L	0.017	182	8	9	20	KED
⌊	**As**	**75**	**0.001**	ug/L	0.009	1609	3	4	76	KED
	Y	**89**		ug/L			375682	376300	2	Standard
	Kr	**83**		ug/L			51	48	23	Standard
⌈>	**In-1**	**115**		ug/L			10677	11325	2	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.007	422	4	3	66	KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.001	31	3	0	295	KED
⌈>	**In**	**115**		ug/L			621777	612120	0	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	263	111	120	22	Standard
⌈>	**Tb**	**159**		ug/L			1460500	1465584	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	25	229	273	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 01:01:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				41950	2	Standard
>	**Sc**	**45**		ug/L				787622	0	Standard
	Cr	**52**		ug/L				20663	0	Standard
	Cr	**53**		ug/L				443	3	Standard
	Fe	**54**		ug/L				87170	1	Standard
	Fe	**57**		ug/L				19734	3	Standard
	Mn	**55**		ug/L				543	3	Standard
>	**Ge**	**72**		ug/L				47594	1	KED
	Cu	**63**		ug/L				50	11	KED
	Cu	**65**		ug/L				27	21	KED
	Zn	**66**		ug/L				27	40	KED
	Zn	**67**		ug/L				7	43	KED
	As	**75**		ug/L				4	35	KED
	Y	**89**		ug/L				383646	1	Standard
	Kr	**83**		ug/L				57	13	Standard
>	**In-1**	**115**		ug/L				11160	1	KED
	Cd	**111**		ug/L				5	53	KED
	Cd	**114**		ug/L				4	100	KED
>	**In**	**115**		ug/L				610701	1	Standard
	Ag	**107**		ug/L				85	6	Standard
>	**Tb**	**159**		ug/L				1474680	0	Standard
	Pb	**208**		ug/L				274	16	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 01:05:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	43821	3	Standard
⌈>	**Sc**	**45**		ug/L			787622	786100	1	Standard
|	**Cr**	**52**	**48.303**	ug/L	0.693	1	20663	1273234	1	Standard
|	**Cr**	**53**	**47.844**	ug/L	0.887	1	443	145276	2	Standard
|	**Fe**	**54**	**5131.292**	ug/L	121.720	2	87170	13020460	3	Standard
|	**Fe**	**57**	**5168.725**	ug/L	53.074	1	19734	5326899	1	Standard
⌊	**Mn**	**55**	**49.300**	ug/L	1.791	3	543	1967447	4	Standard
⌈>	**Ge**	**72**		ug/L			47594	47362	1	KED
|	**Cu**	**63**	**51.543**	ug/L	0.547	1	50	245795	0	KED
|	**Cu**	**65**	**50.710**	ug/L	0.703	1	27	124311	0	KED
|	**Zn**	**66**	**51.106**	ug/L	1.092	2	27	32546	1	KED
|	**Zn**	**67**	**50.282**	ug/L	0.888	1	7	5423	0	KED
⌊	**As**	**75**	**49.974**	ug/L	0.548	1	4	16954	0	KED
	Y	**89**		ug/L			383646	387524	1	Standard
	Kr	**83**		ug/L			57	67	25	Standard
⌈>	**In-1**	**115**		ug/L			11160	10916	0	KED
|	**Cd**	**111**	**51.728**	ug/L	0.257	0	5	17502	0	KED
⌊	**Cd**	**114**	**51.384**	ug/L	0.606	1	4	44923	1	KED
⌈>	**In**	**115**		ug/L			610701	599658	0	Standard
⌊	**Ag**	**107**	**51.004**	ug/L	0.653	1	85	1003440	1	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1476487	2	Standard
⌊	**Pb**	**208**	**52.766**	ug/L	0.916	1	274	4755758	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 01:12:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	42292	0	Standard
⌈>	**Sc**	**45**		ug/L			787622	777618	0	Standard
|	**Cr**	**52**	**-0.008**	ug/L	0.015	195	20663	20207	2	Standard
|	**Cr**	**53**	**-0.038**	ug/L	0.006	14	443	323	6	Standard
|	**Fe**	**54**	**0.561**	ug/L	0.112	19	87170	87463	1	Standard
|	**Fe**	**57**	**0.756**	ug/L	0.133	17	19734	20251	0	Standard
⌊	**Mn**	**55**	**0.000**	ug/L	0.000	142	543	548	2	Standard
⌈>	**Ge**	**72**		ug/L			47594	47806	0	KED
|	**Cu**	**63**	**0.003**	ug/L	0.002	88	50	62	16	KED
|	**Cu**	**65**	**0.003**	ug/L	0.004	129	27	34	26	KED
|	**Zn**	**66**	**-0.005**	ug/L	0.012	229	27	24	29	KED
|	**Zn**	**67**	**0.005**	ug/L	0.036	675	7	8	48	KED
⌊	**As**	**75**	**0.000**	ug/L	0.003	674	4	4	22	KED
	Y	**89**		ug/L			383646	375748	2	Standard
	Kr	**83**		ug/L			57	48	8	Standard
⌈>	**In-1**	**115**		ug/L			11160	11417	0	KED
|	**Cd**	**111**	**-0.000**	ug/L	0.011	2673	5	5	71	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.000	9	4	3	2	KED
⌈>	**In**	**115**		ug/L			610701	599607	3	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	34	85	126	14	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1469831	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	8	274	339	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 01:17:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	54463	1	Standard
⌈>	**Sc**	**45**		ug/L			787622	819467	1	Standard
|	**Cr**	**52**	**0.007**	ug/L	0.014	196	20663	21691	1	Standard
|	**Cr**	**53**	**0.056**	ug/L	0.008	14	443	637	4	Standard
|	**Fe**	**54**	**196.417**	ug/L	3.539	1	87170	606648	1	Standard
|	**Fe**	**57**	**199.475**	ug/L	2.496	1	19734	234045	1	Standard
⌊	**Mn**	**55**	**64.862**	ug/L	0.840	1	543	2697155	0	Standard
⌈>	**Ge**	**72**		ug/L			47594	47382	1	KED
|	**Cu**	**63**	**0.018**	ug/L	0.002	11	50	137	7	KED
|	**Cu**	**65**	**0.020**	ug/L	0.004	17	27	76	10	KED
|	**Zn**	**66**	**0.049**	ug/L	0.008	17	27	58	8	KED
|	**Zn**	**67**	**0.314**	ug/L	0.126	40	7	41	31	KED
⌊	**As**	**75**	**0.045**	ug/L	0.009	20	4	19	14	KED
	Y	**89**		ug/L			383646	391579	1	Standard
	Kr	**83**		ug/L			57	49	6	Standard
⌈>	**In-1**	**115**		ug/L			11160	11208	1	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.010	218	5	3	90	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.002	320	4	4	44	KED
⌈>	**In**	**115**		ug/L			610701	611243	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	137	85	100	21	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1494825	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	42	274	297	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 01:22:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	52963	1	Standard
⌈>	**Sc**	**45**		ug/L			787622	804387	1	Standard
|	**Cr**	**52**	**0.029**	ug/L	0.014	48	20663	21874	0	Standard
|	**Cr**	**53**	**0.062**	ug/L	0.013	20	443	644	5	Standard
|	**Fe**	**54**	**197.148**	ug/L	1.464	0	87170	597417	1	Standard
|	**Fe**	**57**	**196.253**	ug/L	1.744	0	19734	226355	1	Standard
⌊	**Mn**	**55**	**63.816**	ug/L	0.756	1	543	2605074	1	Standard
⌈>	**Ge**	**72**		ug/L			47594	47132	0	KED
|	**Cu**	**63**	**0.024**	ug/L	0.006	26	50	161	18	KED
|	**Cu**	**65**	**0.023**	ug/L	0.007	32	27	83	21	KED
|	**Zn**	**66**	**0.085**	ug/L	0.009	10	27	80	7	KED
|	**Zn**	**67**	**0.279**	ug/L	0.039	14	7	37	11	KED
⌊	**As**	**75**	**0.057**	ug/L	0.005	9	4	23	8	KED
	Y	**89**		ug/L			383646	383717	1	Standard
	Kr	**83**		ug/L			57	44	13	Standard
⌈>	**In-1**	**115**		ug/L			11160	11078	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.004	161	5	4	32	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.001	614	4	4	23	KED
⌈>	**In**	**115**		ug/L			610701	605649	2	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.000	604	85	86	7	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1486626	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	41	274	326	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-13
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 01:26:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	53836	0	Standard
>	**Sc**	**45**		ug/L			787622	800768	0	Standard
	Cr	**52**	**0.130**	ug/L	0.020	15	20663	24448	1	Standard
	Cr	**53**	**0.074**	ug/L	0.012	16	443	678	5	Standard
	Fe	**54**	**66.136**	ug/L	1.378	2	87170	258403	1	Standard
	Fe	**57**	**67.942**	ug/L	2.030	2	19734	91137	2	Standard
	Mn	**55**	**47.620**	ug/L	0.804	1	543	1935495	2	Standard
>	**Ge**	**72**		ug/L			47594	47569	0	KED
	Cu	**63**	**0.195**	ug/L	0.003	1	50	984	2	KED
	Cu	**65**	**0.199**	ug/L	0.012	6	27	517	5	KED
	Zn	**66**	**0.640**	ug/L	0.009	1	27	436	1	KED
	Zn	**67**	**0.733**	ug/L	0.128	17	7	86	16	KED
	As	**75**	**0.023**	ug/L	0.010	42	4	11	28	KED
	Y	**89**		ug/L			383646	383928	0	Standard
	Kr	**83**		ug/L			57	56	10	Standard
>	**In-1**	**115**		ug/L			11160	11150	0	KED
	Cd	**111**	**0.006**	ug/L	0.002	31	5	7	7	KED
	Cd	**114**	**0.006**	ug/L	0.002	38	4	9	20	KED
>	**In**	**115**		ug/L			610701	609413	1	Standard
	Ag	**107**	**-0.000**	ug/L	0.001	514	85	82	17	Standard
>	**Tb**	**159**		ug/L			1474680	1477688	1	Standard
	Pb	**208**	**0.027**	ug/L	0.001	4	274	2718	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-05
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 01:31:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41950	89284	2	Standard
>	Sc	45		ug/L			787622	871508	7	Standard
	Cr	52	0.256	ug/L	0.025	9	20663	30183	5	Standard
	Cr	53	0.212	ug/L	0.010	4	443	1201	8	Standard
	Fe	54	102.216	ug/L	0.985	0	87170	381969	7	Standard
	Fe	57	242.655	ug/L	2.375	0	19734	297937	6	Standard
	Mn	55	7.836	ug/L	0.098	1	543	347007	6	Standard
>	Ge	72		ug/L			47594	43125	1	KED
	Cu	63	3.338	ug/L	0.082	2	50	14533	1	KED
	Cu	65	3.378	ug/L	0.171	5	27	7558	3	KED
	Zn	66	2.391	ug/L	0.088	3	27	1409	1	KED
	Zn	67	3.327	ug/L	0.096	2	7	333	4	KED
	As	75	0.703	ug/L	0.038	5	4	220	3	KED
	Y	89		ug/L			383646	356561	7	Standard
	Kr	83		ug/L			57	47	18	Standard
>	In-1	115		ug/L			11160	10577	1	KED
	Cd	111	0.006	ug/L	0.004	73	5	6	20	KED
	Cd	114	0.016	ug/L	0.010	65	4	17	49	KED
>	In	115		ug/L			610701	522614	7	Standard
	Ag	107	0.003	ug/L	0.001	33	85	130	7	Standard
>	Tb	159		ug/L			1474680	1365296	7	Standard
	Pb	208	0.144	ug/L	0.001	0	274	12284	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-07
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 01:35:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	77013	0	Standard
⌈>	**Sc**	**45**		ug/L			787622	883799	3	Standard
|	**Cr**	**52**	**0.182**	ug/L	0.021	11	20663	28482	1	Standard
|	**Cr**	**53**	**2.294**	ug/L	0.066	2	443	8302	3	Standard
|	**Fe**	**54**	**11.328**	ug/L	1.145	10	87170	129842	0	Standard
|	**Fe**	**57**	**127.682**	ug/L	5.805	4	19734	169468	3	Standard
⌊	**Mn**	**55**	**4.099**	ug/L	0.066	1	543	184361	2	Standard
⌈>	**Ge**	**72**		ug/L			47594	40413	0	KED
|	**Cu**	**63**	**1.078**	ug/L	0.013	1	50	4429	0	KED
|	**Cu**	**65**	**1.096**	ug/L	0.043	3	27	2315	3	KED
|	**Zn**	**66**	**17.321**	ug/L	0.354	2	27	9427	1	KED
|	**Zn**	**67**	**17.623**	ug/L	0.736	4	7	1626	3	KED
⌊	**As**	**75**	**1.313**	ug/L	0.071	5	4	383	4	KED
	Y	**89**		ug/L			383646	369296	1	Standard
	Kr	**83**		ug/L			57	46	15	Standard
⌈>	**In-1**	**115**		ug/L			11160	9676	2	KED
|	**Cd**	**111**	**0.195**	ug/L	0.022	11	5	63	12	KED
⌊	**Cd**	**114**	**0.193**	ug/L	0.027	14	4	152	12	KED
⌈>	**In**	**115**		ug/L			610701	516301	0	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.000	10	85	153	6	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1388715	1	Standard
⌊	**Pb**	**208**	**2.023**	ug/L	0.027	1	274	171754	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-09
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 01:40:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	74204	1	Standard
⌈>	**Sc**	**45**		ug/L			787622	892148	1	Standard
|	**Cr**	**52**	**1.813**	ug/L	0.022	1	20663	76750	2	Standard
|	**Cr**	**53**	**6.479**	ug/L	0.052	0	443	22760	2	Standard
|	**Fe**	**54**	**5.476**	ug/L	1.013	18	87170	114382	2	Standard
|	**Fe**	**57**	**76.145**	ug/L	0.340	0	19734	111092	2	Standard
⌊	**Mn**	**55**	**0.278**	ug/L	0.001	0	543	13207	1	Standard
⌈>	**Ge**	**72**		ug/L			47594	42184	0	KED
|	**Cu**	**63**	**0.746**	ug/L	0.003	0	50	3211	0	KED
|	**Cu**	**65**	**0.721**	ug/L	0.020	2	27	1598	2	KED
|	**Zn**	**66**	**1.852**	ug/L	0.054	2	27	1073	2	KED
|	**Zn**	**67**	**3.027**	ug/L	0.228	7	7	297	7	KED
⌊	**As**	**75**	**0.574**	ug/L	0.016	2	4	177	2	KED
	Y	**89**		ug/L			383646	373335	2	Standard
	Kr	**83**		ug/L			57	60	16	Standard
⌈>	**In-1**	**115**		ug/L			11160	9761	1	KED
|	**Cd**	**111**	**0.087**	ug/L	0.015	17	5	31	14	KED
⌊	**Cd**	**114**	**0.097**	ug/L	0.018	18	4	79	16	KED
⌈>	**In**	**115**		ug/L			610701	556489	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.002	177	85	95	32	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1418293	2	Standard
⌊	**Pb**	**208**	**0.029**	ug/L	0.001	5	274	2771	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-11
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 01:46:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	76276	4	Standard
⌈>	**Sc**	**45**		ug/L			787622	817098	3	Standard
|	**Cr**	**52**	**0.739**	ug/L	0.029	3	20663	41330	1	Standard
|	**Cr**	**53**	**10.095**	ug/L	0.148	1	443	32226	4	Standard
|	**Fe**	**54**	**27.581**	ug/L	1.061	3	87170	162636	2	Standard
|	**Fe**	**57**	**188.996**	ug/L	2.464	1	19734	222173	3	Standard
⌊	**Mn**	**55**	**4.025**	ug/L	0.088	2	543	167359	2	Standard
⌈>	**Ge**	**72**		ug/L			47594	38303	0	KED
|	**Cu**	**63**	**1.411**	ug/L	0.020	1	50	5481	1	KED
|	**Cu**	**65**	**1.432**	ug/L	0.006	0	27	2859	0	KED
|	**Zn**	**66**	**4.415**	ug/L	0.161	3	27	2294	3	KED
|	**Zn**	**67**	**6.132**	ug/L	0.291	4	7	540	4	KED
⌊	**As**	**75**	**0.570**	ug/L	0.045	7	4	159	7	KED
	Y	**89**		ug/L			383646	357121	2	Standard
	Kr	**83**		ug/L			57	81	19	Standard
⌈>	**In-1**	**115**		ug/L			11160	8842	0	KED
|	**Cd**	**111**	**0.582**	ug/L	0.012	2	5	163	1	KED
⌊	**Cd**	**114**	**0.590**	ug/L	0.060	10	4	421	9	KED
⌈>	**In**	**115**		ug/L			610701	501669	3	Standard
⌊	**Ag**	**107**	**0.008**	ug/L	0.000	5	85	208	1	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1362725	1	Standard
⌊	**Pb**	**208**	**0.127**	ug/L	0.002	1	274	10785	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0215-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 02, 2023 01:54:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41950	69650	1	Standard
>	Sc	45		ug/L			787622	798401	1	Standard
	Cr	52	47.181	ug/L	0.707	1	20663	1263769	2	Standard
	Cr	53	51.923	ug/L	0.475	0	443	160083	2	Standard
	Fe	54	102.008	ug/L	2.502	2	87170	349410	1	Standard
	Fe	57	100.888	ug/L	2.658	2	19734	125204	2	Standard
	Mn	55	2.652	ug/L	0.021	0	543	107986	0	Standard
>	Ge	72		ug/L			47594	44501	1	KED
	Cu	63	11.194	ug/L	0.225	2	50	50187	0	KED
	Cu	65	11.087	ug/L	0.170	1	27	25556	0	KED
	Zn	66	32.850	ug/L	0.762	2	27	19663	0	KED
	Zn	67	30.046	ug/L	1.930	6	7	3046	5	KED
	As	75	0.122	ug/L	0.011	8	4	42	7	KED
	Y	89		ug/L			383646	383844	2	Standard
	Kr	83		ug/L			57	52	4	Standard
>	In-1	115		ug/L			11160	10176	0	KED
	Cd	111	0.780	ug/L	0.058	7	5	250	7	KED
	Cd	114	0.823	ug/L	0.030	3	4	674	3	KED
>	In	115		ug/L			610701	587968	2	Standard
	Ag	107	0.020	ug/L	0.002	8	85	467	8	Standard
>	Tb	159		ug/L			1474680	1498174	0	Standard
	Pb	208	0.254	ug/L	0.006	2	274	23513	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0248-01
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, May 02, 2023 01:58:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	57966	0	Standard
⌈>	**Sc**	**45**		ug/L			787622	753873	1	Standard
|	**Cr**	**52**	**0.008**	ug/L	0.014	161	20663	19988	2	Standard
|	**Cr**	**53**	**0.325**	ug/L	0.015	4	443	1368	2	Standard
|	**Fe**	**54**	**2.494**	ug/L	0.141	5	87170	89463	1	Standard
|	**Fe**	**57**	**16.116**	ug/L	0.806	5	19734	34754	2	Standard
⌊	**Mn**	**55**	**6.403**	ug/L	0.100	1	543	245429	1	Standard
⌈>	**Ge**	**72**		ug/L			47594	44815	1	KED
|	**Cu**	**63**	**0.016**	ug/L	0.002	15	50	120	10	KED
|	**Cu**	**65**	**0.014**	ug/L	0.006	42	27	57	22	KED
|	**Zn**	**66**	**0.246**	ug/L	0.022	8	27	173	7	KED
|	**Zn**	**67**	**0.254**	ug/L	0.013	5	7	33	3	KED
⌊	**As**	**75**	**46.209**	ug/L	0.827	1	4	14832	0	KED
	Y	**89**		ug/L			383646	381204	1	Standard
	Kr	**83**		ug/L			57	45	38	Standard
⌈>	**In-1**	**115**		ug/L			11160	10076	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.005	156	5	3	43	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.006	294	4	5	91	KED
⌈>	**In**	**115**		ug/L			610701	605536	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	35	85	59	14	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1475725	1	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	15	274	236	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 02:03:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	47601	1	Standard
⌈>	**Sc**	**45**		ug/L			787622	706417	7	Standard
|	**Cr**	**52**	**0.021**	ug/L	0.058	274	20663	18961	0	Standard
|	**Cr**	**53**	**0.148**	ug/L	0.033	22	443	796	3	Standard
|	**Fe**	**54**	**1.555**	ug/L	4.318	277	87170	81241	4	Standard
|	**Fe**	**57**	**3.233**	ug/L	1.897	58	19734	20599	1	Standard
⌊	**Mn**	**55**	**0.016**	ug/L	0.003	21	543	1041	6	Standard
⌈>	**Ge**	**72**		ug/L			47594	43929	0	KED
|	**Cu**	**63**	**0.028**	ug/L	0.002	8	50	170	5	KED
|	**Cu**	**65**	**0.017**	ug/L	0.007	43	27	62	26	KED
|	**Zn**	**66**	**0.264**	ug/L	0.028	10	27	180	10	KED
|	**Zn**	**67**	**0.266**	ug/L	0.048	18	7	33	14	KED
⌊	**As**	**75**	**0.003**	ug/L	0.006	250	4	4	43	KED
	Y	**89**		ug/L			383646	356884	6	Standard
	Kr	**83**		ug/L			57	46	18	Standard
⌈>	**In-1**	**115**		ug/L			11160	9925	2	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.008	173	5	3	68	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.002	717	4	3	52	KED
⌈>	**In**	**115**		ug/L			610701	569837	3	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.001	45	85	47	34	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1366995	8	Standard
⌊	**Pb**	**208**	**0.008**	ug/L	0.000	1	274	919	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVC
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 02:07:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	43981	1	Standard
⌈>	**Sc**	**45**		ug/L			787622	754130	2	Standard
|	**Cr**	**52**	**46.959**	ug/L	1.238	2	20663	1187741	1	Standard
|	**Cr**	**53**	**46.982**	ug/L	0.326	0	443	136844	1	Standard
|	**Fe**	**54**	**4997.460**	ug/L	13.985	0	87170	12164600	1	Standard
|	**Fe**	**57**	**4973.962**	ug/L	113.126	2	19734	4918042	2	Standard
⌊	**Mn**	**55**	**48.421**	ug/L	0.655	1	543	1852952	0	Standard
⌈>	**Ge**	**72**		ug/L			47594	44533	1	KED
|	**Cu**	**63**	**52.184**	ug/L	0.641	1	50	234018	2	KED
|	**Cu**	**65**	**51.053**	ug/L	1.060	2	27	117661	0	KED
|	**Zn**	**66**	**51.764**	ug/L	1.366	2	27	30991	1	KED
|	**Zn**	**67**	**49.859**	ug/L	2.628	5	7	5054	3	KED
⌊	**As**	**75**	**49.712**	ug/L	0.857	1	4	15856	0	KED
	Y	**89**		ug/L			383646	387349	2	Standard
	Kr	**83**		ug/L			57	54	8	Standard
⌈>	**In-1**	**115**		ug/L			11160	10156	1	KED
|	**Cd**	**111**	**51.943**	ug/L	0.865	1	5	16349	0	KED
⌊	**Cd**	**114**	**51.574**	ug/L	0.676	1	4	41945	0	KED
⌈>	**In**	**115**		ug/L			610701	607340	0	Standard
⌊	**Ag**	**107**	**50.527**	ug/L	1.090	2	85	1006876	2	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1487228	1	Standard
⌊	**Pb**	**208**	**54.526**	ug/L	0.335	0	274	4951062	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBC
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 02:15:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	41729	0	Standard
⌈>	**Sc**	**45**		ug/L			787622	751761	1	Standard
|	**Cr**	**52**	**-0.055**	ug/L	0.021	37	20663	18351	2	Standard
|	**Cr**	**53**	**0.018**	ug/L	0.009	52	443	474	5	Standard
|	**Fe**	**54**	**-1.009**	ug/L	0.605	60	87170	80757	0	Standard
|	**Fe**	**57**	**-1.542**	ug/L	0.605	39	19734	17316	2	Standard
⌊	**Mn**	**55**	**-0.001**	ug/L	0.001	90	543	483	5	Standard
⌈>	**Ge**	**72**		ug/L			47594	45384	0	KED
|	**Cu**	**63**	**0.002**	ug/L	0.002	76	50	57	13	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.001	61	27	21	13	KED
|	**Zn**	**66**	**0.004**	ug/L	0.017	418	27	28	37	KED
|	**Zn**	**67**	**-0.009**	ug/L	0.047	533	7	6	75	KED
⌊	**As**	**75**	**0.001**	ug/L	0.005	845	4	4	40	KED
	Y	**89**		ug/L			383646	383272	1	Standard
	Kr	**83**		ug/L			57	40	20	Standard
⌈>	**In-1**	**115**		ug/L			11160	10772	1	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.008	132	5	3	86	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.002	125	4	2	88	KED
⌈>	**In**	**115**		ug/L			610701	606261	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	39	85	104	5	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1465539	2	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	40	274	306	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-14
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 02:19:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	82555	1	Standard
⌈>	**Sc**	**45**		ug/L			787622	884849	1	Standard
|	**Cr**	**52**	**0.288**	ug/L	0.023	7	20663	31617	2	Standard
|	**Cr**	**53**	**0.457**	ug/L	0.023	5	443	2054	3	Standard
|	**Fe**	**54**	**3.669**	ug/L	0.432	11	87170	108351	2	Standard
|	**Fe**	**57**	**79.125**	ug/L	1.311	1	19734	113624	2	Standard
⌊	**Mn**	**55**	**514.471**	ug/L	2.782	0	543	23097035	1	Standard
⌈>	**Ge**	**72**		ug/L			47594	42528	1	KED
|	**Cu**	**63**	**2.145**	ug/L	0.041	1	50	9227	0	KED
|	**Cu**	**65**	**2.099**	ug/L	0.002	0	27	4644	1	KED
|	**Zn**	**66**	**1.150**	ug/L	0.038	3	27	681	3	KED
|	**Zn**	**67**	**2.263**	ug/L	0.323	14	7	225	12	KED
⌊	**As**	**75**	**0.359**	ug/L	0.026	7	4	112	5	KED
	Y	**89**		ug/L			383646	382315	0	Standard
	Kr	**83**		ug/L			57	70	8	Standard
⌈>	**In-1**	**115**		ug/L			11160	9909	3	KED
|	**Cd**	**111**	**0.082**	ug/L	0.014	16	5	29	11	KED
⌊	**Cd**	**114**	**0.088**	ug/L	0.018	20	4	73	15	KED
⌈>	**In**	**115**		ug/L			610701	595441	0	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.000	71	85	80	2	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1453852	0	Standard
⌊	**Pb**	**208**	**0.014**	ug/L	0.000	0	274	1493	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-15
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 02:24:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	84763	0	Standard
⌈>	**Sc**	**45**		ug/L			787622	863966	5	Standard
|	**Cr**	**52**	**0.107**	ug/L	0.047	43	20663	25666	3	Standard
|	**Cr**	**53**	**0.235**	ug/L	0.021	8	443	1267	1	Standard
|	**Fe**	**54**	**223.362**	ug/L	15.830	7	87170	712859	2	Standard
|	**Fe**	**57**	**450.154**	ug/L	23.694	5	19734	528907	3	Standard
⌊	**Mn**	**55**	**190.059**	ug/L	9.740	5	543	8318768	2	Standard
⌈>	**Ge**	**72**		ug/L			47594	38871	0	KED
|	**Cu**	**63**	**0.580**	ug/L	0.028	4	50	2311	4	KED
|	**Cu**	**65**	**0.577**	ug/L	0.037	6	27	1184	6	KED
|	**Zn**	**66**	**5.800**	ug/L	0.193	3	27	3051	3	KED
|	**Zn**	**67**	**7.707**	ug/L	0.557	7	7	687	7	KED
⌊	**As**	**75**	**0.673**	ug/L	0.011	1	4	190	1	KED
	Y	**89**		ug/L			383646	370116	6	Standard
	Kr	**83**		ug/L			57	83	17	Standard
⌈>	**In-1**	**115**		ug/L			11160	9289	1	KED
|	**Cd**	**111**	**0.385**	ug/L	0.034	8	5	115	7	KED
⌊	**Cd**	**114**	**0.377**	ug/L	0.053	14	4	283	13	KED
⌈>	**In**	**115**		ug/L			610701	500106	5	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.001	36	85	128	11	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1324882	5	Standard
⌊	**Pb**	**208**	**0.522**	ug/L	0.023	4	274	42410	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-16
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 02:28:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	82587	1	Standard
⌈>	**Sc**	**45**		ug/L			787622	902789	1	Standard
|	**Cr**	**52**	**0.011**	ug/L	0.017	149	20663	24017	1	Standard
|	**Cr**	**53**	**0.190**	ug/L	0.005	2	443	1167	1	Standard
|	**Fe**	**54**	**17.965**	ug/L	0.529	2	87170	151918	2	Standard
|	**Fe**	**57**	**247.450**	ug/L	3.210	1	19734	314442	2	Standard
⌊	**Mn**	**55**	**178.870**	ug/L	3.928	2	543	8192445	0	Standard
⌈>	**Ge**	**72**		ug/L			47594	39215	0	KED
|	**Cu**	**63**	**0.219**	ug/L	0.006	2	50	906	2	KED
|	**Cu**	**65**	**0.207**	ug/L	0.016	7	27	443	7	KED
|	**Zn**	**66**	**1.333**	ug/L	0.075	5	27	725	5	KED
|	**Zn**	**67**	**3.156**	ug/L	0.355	11	7	287	10	KED
⌊	**As**	**75**	**0.460**	ug/L	0.032	7	4	132	6	KED
	Y	**89**		ug/L			383646	379024	0	Standard
	Kr	**83**		ug/L			57	78	19	Standard
⌈>	**In-1**	**115**		ug/L			11160	9488	0	KED
|	**Cd**	**111**	**0.154**	ug/L	0.044	28	5	49	25	KED
⌊	**Cd**	**114**	**0.164**	ug/L	0.007	4	4	128	4	KED
⌈>	**In**	**115**		ug/L			610701	535637	2	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.000	101	85	68	9	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1386285	1	Standard
⌊	**Pb**	**208**	**0.035**	ug/L	0.001	1	274	3254	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-17
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 02:33:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	83719	2	Standard
⌈>	**Sc**	**45**		ug/L			787622	931521	3	Standard
|	**Cr**	**52**	**0.135**	ug/L	0.021	15	20663	28568	1	Standard
|	**Cr**	**53**	**1.590**	ug/L	0.022	1	443	6228	2	Standard
|	**Fe**	**54**	**99.054**	ug/L	1.747	1	87170	398795	2	Standard
|	**Fe**	**57**	**185.883**	ug/L	2.760	1	19734	249439	2	Standard
⌊	**Mn**	**55**	**245.733**	ug/L	7.412	3	543	11607146	0	Standard
⌈>	**Ge**	**72**		ug/L			47594	41142	2	KED
|	**Cu**	**63**	**0.862**	ug/L	0.016	1	50	3615	2	KED
|	**Cu**	**65**	**0.873**	ug/L	0.022	2	27	1882	1	KED
|	**Zn**	**66**	**1.142**	ug/L	0.029	2	27	654	1	KED
|	**Zn**	**67**	**3.172**	ug/L	0.192	6	7	303	6	KED
⌊	**As**	**75**	**3.991**	ug/L	0.127	3	4	1179	4	KED
	Y	**89**		ug/L			383646	376237	2	Standard
	Kr	**83**		ug/L			57	69	27	Standard
⌈>	**In-1**	**115**		ug/L			11160	9678	2	KED
|	**Cd**	**111**	**0.011**	ug/L	0.011	99	5	7	38	KED
⌊	**Cd**	**114**	**0.016**	ug/L	0.003	20	4	16	13	KED
⌈>	**In**	**115**		ug/L			610701	564278	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	65	85	102	14	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1441097	1	Standard
⌊	**Pb**	**208**	**0.024**	ug/L	0.001	4	274	2363	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-18
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 02:37:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	82617	1	Standard
⌈>	**Sc**	**45**		ug/L			787622	944514	1	Standard
|	**Cr**	**52**	**0.078**	ug/L	0.022	28	20663	27216	3	Standard
|	**Cr**	**53**	**1.589**	ug/L	0.019	1	443	6312	1	Standard
|	**Fe**	**54**	**56.444**	ug/L	0.900	1	87170	275455	1	Standard
|	**Fe**	**57**	**147.228**	ug/L	0.664	0	19734	205300	0	Standard
⌊	**Mn**	**55**	**241.000**	ug/L	1.598	0	543	11550462	1	Standard
⌈>	**Ge**	**72**		ug/L			47594	40978	0	KED
|	**Cu**	**63**	**0.877**	ug/L	0.007	0	50	3660	1	KED
|	**Cu**	**65**	**0.881**	ug/L	0.009	0	27	1892	1	KED
|	**Zn**	**66**	**0.600**	ug/L	0.047	7	27	353	7	KED
|	**Zn**	**67**	**2.553**	ug/L	0.241	9	7	244	8	KED
⌊	**As**	**75**	**3.641**	ug/L	0.105	2	4	1072	2	KED
	Y	**89**		ug/L			383646	375192	2	Standard
	Kr	**83**		ug/L			57	78	8	Standard
⌈>	**In-1**	**115**		ug/L			11160	9566	2	KED
|	**Cd**	**111**	**0.007**	ug/L	0.009	127	5	6	37	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.004	89	4	6	42	KED
⌈>	**In**	**115**		ug/L			610701	576488	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	61	85	93	9	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1431514	0	Standard
⌊	**Pb**	**208**	**0.014**	ug/L	0.001	4	274	1515	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-19
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 02:42:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	82189	3	Standard
⌈>	**Sc**	**45**		ug/L			787622	946641	2	Standard
|	**Cr**	**52**	**0.109**	ug/L	0.023	21	20663	28238	3	Standard
|	**Cr**	**53**	**1.604**	ug/L	0.015	0	443	6381	3	Standard
|	**Fe**	**54**	**78.436**	ug/L	0.886	1	87170	342822	3	Standard
|	**Fe**	**57**	**167.239**	ug/L	3.058	1	19734	230509	2	Standard
⌊	**Mn**	**55**	**241.578**	ug/L	1.986	0	543	11603028	2	Standard
⌈>	**Ge**	**72**		ug/L			47594	40859	0	KED
|	**Cu**	**63**	**0.881**	ug/L	0.003	0	50	3665	0	KED
|	**Cu**	**65**	**0.875**	ug/L	0.043	4	27	1872	3	KED
|	**Zn**	**66**	**1.492**	ug/L	0.061	4	27	842	4	KED
|	**Zn**	**67**	**3.141**	ug/L	0.148	4	7	298	4	KED
⌊	**As**	**75**	**3.912**	ug/L	0.018	0	4	1148	1	KED
	Y	**89**		ug/L			383646	382460	2	Standard
	Kr	**83**		ug/L			57	75	23	Standard
⌈>	**In-1**	**115**		ug/L			11160	9477	0	KED
|	**Cd**	**111**	**0.002**	ug/L	0.010	596	5	5	57	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.006	50	4	12	35	KED
⌈>	**In**	**115**		ug/L			610701	581480	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	50	85	101	8	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1474870	0	Standard
⌊	**Pb**	**208**	**0.027**	ug/L	0.002	8	274	2711	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0584-20
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 02:48:28
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	82700	1	Standard
⌈>	**Sc**	**45**		ug/L			787622	927597	1	Standard
|	**Cr**	**52**	**0.074**	ug/L	0.012	15	20663	26608	1	Standard
|	**Cr**	**53**	**1.563**	ug/L	0.016	0	443	6106	2	Standard
|	**Fe**	**54**	**51.053**	ug/L	0.559	1	87170	254476	1	Standard
|	**Fe**	**57**	**140.572**	ug/L	1.821	1	19734	193547	1	Standard
⌊	**Mn**	**55**	**238.171**	ug/L	4.714	1	543	11208033	0	Standard
⌈>	**Ge**	**72**		ug/L			47594	41684	0	KED
|	**Cu**	**63**	**0.821**	ug/L	0.002	0	50	3488	0	KED
|	**Cu**	**65**	**0.818**	ug/L	0.036	4	27	1789	4	KED
|	**Zn**	**66**	**0.449**	ug/L	0.024	5	27	275	5	KED
|	**Zn**	**67**	**2.468**	ug/L	0.251	10	7	240	9	KED
⌊	**As**	**75**	**3.638**	ug/L	0.070	1	4	1089	2	KED
	Y	**89**		ug/L			383646	383764	1	Standard
	Kr	**83**		ug/L			57	80	20	Standard
⌈>	**In-1**	**115**		ug/L			11160	9708	1	KED
|	**Cd**	**111**	**-0.008**	ug/L	0.002	22	5	2	24	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.006	90	4	9	55	KED
⌈>	**In**	**115**		ug/L			610701	569725	1	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	234	85	86	16	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1433105	0	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.000	6	274	709	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0211-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 02:56:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	83786	0	Standard
⌈>	**Sc**	**45**		ug/L			787622	778933	1	Standard
|	**Cr**	**52**	**0.487**	ug/L	0.019	3	20663	32942	2	Standard
|	**Cr**	**53**	**0.685**	ug/L	0.015	2	443	2492	0	Standard
|	**Fe**	**54**	**207.189**	ug/L	3.006	1	87170	603590	2	Standard
|	**Fe**	**57**	**195.612**	ug/L	2.431	1	19734	218513	0	Standard
⌊	**Mn**	**55**	**7.053**	ug/L	0.067	0	543	279286	2	Standard
⌈>	**Ge**	**72**		ug/L			47594	45482	0	KED
|	**Cu**	**63**	**2.454**	ug/L	0.006	0	50	11282	0	KED
|	**Cu**	**65**	**2.392**	ug/L	0.048	1	27	5656	2	KED
|	**Zn**	**66**	**76.816**	ug/L	1.389	1	27	46967	1	KED
|	**Zn**	**67**	**70.301**	ug/L	0.133	0	7	7279	0	KED
⌊	**As**	**75**	**0.135**	ug/L	0.027	19	4	47	18	KED
	Y	**89**		ug/L			383646	389222	3	Standard
	Kr	**83**		ug/L			57	45	12	Standard
⌈>	**In-1**	**115**		ug/L			11160	10616	0	KED
|	**Cd**	**111**	**0.024**	ug/L	0.010	42	5	13	25	KED
⌊	**Cd**	**114**	**0.019**	ug/L	0.008	40	4	20	32	KED
⌈>	**In**	**115**		ug/L			610701	616981	1	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.000	12	85	160	6	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1490655	1	Standard
⌊	**Pb**	**208**	**1.101**	ug/L	0.016	1	274	100455	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0211-02
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 03:00:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	82981	1	Standard
⌈>	**Sc**	**45**		ug/L			787622	777931	1	Standard
|	**Cr**	**52**	**0.277**	ug/L	0.018	6	20663	27509	3	Standard
|	**Cr**	**53**	**0.378**	ug/L	0.012	3	443	1571	1	Standard
|	**Fe**	**54**	**107.420**	ug/L	0.658	0	87170	353994	2	Standard
|	**Fe**	**57**	**102.121**	ug/L	2.340	2	19734	123272	3	Standard
⌊	**Mn**	**55**	**3.332**	ug/L	0.029	0	543	132041	2	Standard
⌈>	**Ge**	**72**		ug/L			47594	45249	0	KED
|	**Cu**	**63**	**2.159**	ug/L	0.016	0	50	9883	0	KED
|	**Cu**	**65**	**2.210**	ug/L	0.055	2	27	5202	2	KED
|	**Zn**	**66**	**51.487**	ug/L	0.649	1	27	31328	1	KED
|	**Zn**	**67**	**45.203**	ug/L	0.811	1	7	4659	1	KED
⌊	**As**	**75**	**0.164**	ug/L	0.019	11	4	56	10	KED
	Y	**89**		ug/L			383646	385350	2	Standard
	Kr	**83**		ug/L			57	49	15	Standard
⌈>	**In-1**	**115**		ug/L			11160	10372	0	KED
|	**Cd**	**111**	**0.010**	ug/L	0.011	113	5	8	43	KED
⌊	**Cd**	**114**	**0.016**	ug/L	0.019	113	4	17	88	KED
⌈>	**In**	**115**		ug/L			610701	628530	3	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.000	13	85	124	7	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1474197	2	Standard
⌊	**Pb**	**208**	**0.248**	ug/L	0.008	3	274	22573	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLC
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 03:05:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	46797	0	Standard
⌈>	**Sc**	**45**		ug/L			787622	749874	2	Standard
|	**Cr**	**52**	**-0.042**	ug/L	0.014	33	20663	18629	1	Standard
|	**Cr**	**53**	**0.014**	ug/L	0.006	44	443	463	6	Standard
|	**Fe**	**54**	**-0.055**	ug/L	0.300	549	87170	82855	2	Standard
|	**Fe**	**57**	**-2.246**	ug/L	0.222	9	19734	16593	4	Standard
⌊	**Mn**	**55**	**0.018**	ug/L	0.000	2	543	1218	3	Standard
⌈>	**Ge**	**72**		ug/L			47594	43615	0	KED
|	**Cu**	**63**	**0.028**	ug/L	0.003	10	50	168	7	KED
|	**Cu**	**65**	**0.021**	ug/L	0.008	38	27	71	25	KED
|	**Zn**	**66**	**0.293**	ug/L	0.033	11	27	196	9	KED
|	**Zn**	**67**	**0.249**	ug/L	0.149	59	7	31	46	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.002	34	4	2	20	KED
	Y	**89**		ug/L			383646	376714	3	Standard
	Kr	**83**		ug/L			57	39	23	Standard
⌈>	**In-1**	**115**		ug/L			11160	10247	1	KED
|	**Cd**	**111**	**-0.010**	ug/L	0.000	0	5	1		KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.001	127	4	2	41	KED
⌈>	**In**	**115**		ug/L			610701	593683	2	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.000	25	85	52	12	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1454069	1	Standard
⌊	**Pb**	**208**	**0.008**	ug/L	0.001	7	274	982	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVD
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 03:10:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	44593	0	Standard
>	**Sc**	**45**		ug/L			787622	764845	1	Standard
	Cr	**52**	**46.776**	ug/L	0.683	1	20663	1200225	1	Standard
	Cr	**53**	**47.362**	ug/L	0.878	1	443	139908	2	Standard
	Fe	**54**	**4970.904**	ug/L	26.299	0	87170	12273336	2	Standard
	Fe	**57**	**4877.807**	ug/L	34.447	0	19734	4892664	2	Standard
	Mn	**55**	**48.149**	ug/L	0.578	1	543	1868984	1	Standard
>	**Ge**	**72**		ug/L			47594	44420	1	KED
	Cu	**63**	**52.822**	ug/L	1.017	1	50	236230	1	KED
	Cu	**65**	**51.990**	ug/L	1.108	2	27	119533	2	KED
	Zn	**66**	**52.593**	ug/L	0.472	0	27	31412	1	KED
	Zn	**67**	**51.696**	ug/L	0.582	1	7	5230	2	KED
	As	**75**	**50.098**	ug/L	0.781	1	4	15939	1	KED
	Y	**89**		ug/L			383646	378207	1	Standard
	Kr	**83**		ug/L			57	51	18	Standard
>	**In-1**	**115**		ug/L			11160	10315	1	KED
	Cd	**111**	**50.547**	ug/L	0.191	0	5	16161	1	KED
	Cd	**114**	**50.962**	ug/L	0.760	1	4	42096	0	KED
>	**In**	**115**		ug/L			610701	590785	2	Standard
	Ag	**107**	**50.049**	ug/L	0.796	1	85	969880	1	Standard
>	**Tb**	**159**		ug/L			1474680	1477490	1	Standard
	Pb	**208**	**54.781**	ug/L	1.068	1	274	4941230	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBD
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 03:17:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	43797	1	Standard
⌈>	**Sc**	**45**		ug/L			787622	770461	1	Standard
|	**Cr**	**52**	**-0.052**	ug/L	0.020	37	20663	18876	0	Standard
|	**Cr**	**53**	**-0.043**	ug/L	0.011	26	443	307	10	Standard
|	**Fe**	**54**	**-0.728**	ug/L	0.603	82	87170	83473	2	Standard
|	**Fe**	**57**	**-2.026**	ug/L	0.098	4	19734	17264	1	Standard
⌊	**Mn**	**55**	**0.003**	ug/L	0.001	25	543	660	4	Standard
⌈>	**Ge**	**72**		ug/L			47594	46198	0	KED
|	**Cu**	**63**	**0.000**	ug/L	0.000	118	50	50	4	KED
|	**Cu**	**65**	**0.001**	ug/L	0.004	279	27	29	31	KED
|	**Zn**	**66**	**0.005**	ug/L	0.013	240	27	29	26	KED
|	**Zn**	**67**	**-0.004**	ug/L	0.011	278	7	6	15	KED
⌊	**As**	**75**	**-0.002**	ug/L	0.006	387	4	3	55	KED
	Y	**89**		ug/L			383646	382510	4	Standard
	Kr	**83**		ug/L			57	43	35	Standard
⌈>	**In-1**	**115**		ug/L			11160	11025	1	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.004	78	5	3	41	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.007	281	4	6	94	KED
⌈>	**In**	**115**		ug/L			610701	607383	1	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.000	16	85	121	6	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1462819	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	41	274	325	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0396-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 03:21:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41950	84963	1	Standard
>	Sc	45		ug/L			787622	787023	1	Standard
	Cr	52	0.009	ug/L	0.007	83	20663	20874	1	Standard
	Cr	53	-0.040	ug/L	0.009	21	443	321	8	Standard
	Fe	54	6.257	ug/L	1.504	24	87170	102902	4	Standard
	Fe	57	-1.555	ug/L	0.141	9	19734	18122	1	Standard
	Mn	55	0.016	ug/L	0.003	19	543	1170	11	Standard
>	Ge	72		ug/L			47594	46869	3	KED
	Cu	63	0.291	ug/L	0.026	8	50	1419	6	KED
	Cu	65	0.279	ug/L	0.012	4	27	702	3	KED
	Zn	66	0.086	ug/L	0.018	21	27	80	11	KED
	Zn	67	0.092	ug/L	0.067	72	7	17	38	KED
	As	75	-0.005	ug/L	0.003	63	4	2	39	KED
	Y	89		ug/L			383646	387123	1	Standard
	Kr	83		ug/L			57	53	15	Standard
>	In-1	115		ug/L			11160	10730	0	KED
	Cd	111	-0.004	ug/L	0.003	68	5	3	25	KED
	Cd	114	-0.003	ug/L	0.004	142	4	1	186	KED
>	In	115		ug/L			610701	626417	2	Standard
	Ag	107	0.018	ug/L	0.004	23	85	460	20	Standard
>	Tb	159		ug/L			1474680	1490563	1	Standard
	Pb	208	0.004	ug/L	0.004	92	274	640	53	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0396-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 03:26:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41950	82298	0	Standard
>	Sc	45		ug/L			787622	786095	2	Standard
	Cr	52	24.141	ug/L	0.388	1	20663	646523	1	Standard
	Cr	53	24.164	ug/L	0.417	1	443	73572	2	Standard
	Fe	54	8.289	ug/L	0.212	2	87170	107899	3	Standard
	Fe	57	-1.982	ug/L	0.563	28	19734	17661	4	Standard
	Mn	55	25.007	ug/L	0.488	1	543	997844	2	Standard
>	Ge	72		ug/L			47594	45818	0	KED
	Cu	63	28.281	ug/L	0.411	1	50	130500	1	KED
	Cu	65	28.212	ug/L	0.171	0	27	66920	0	KED
	Zn	66	83.933	ug/L	0.344	0	27	51697	0	KED
	Zn	67	77.284	ug/L	1.402	1	7	8060	1	KED
	As	75	24.816	ug/L	0.191	0	4	8147	0	KED
	Y	89		ug/L			383646	387543	1	Standard
	Kr	83		ug/L			57	52	24	Standard
>	In-1	115		ug/L			11160	10775	1	KED
	Cd	111	25.771	ug/L	0.348	1	5	8609	1	KED
	Cd	114	25.580	ug/L	0.358	1	4	22078	2	KED
>	In	115		ug/L			610701	627921	3	Standard
	Ag	107	26.561	ug/L	0.643	2	85	546886	2	Standard
>	Tb	159		ug/L			1474680	1499920	1	Standard
	Pb	208	28.285	ug/L	0.130	0	274	2590404	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0062-02
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 03:31:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	81105	2	Standard
>	**Sc**	**45**		ug/L			787622	885231	2	Standard
	Cr	**52**	**0.020**	ug/L	0.031	155	20663	23787	1	Standard
	Cr	**53**	**0.313**	ug/L	0.010	3	443	1564	3	Standard
	Fe	**54**	**21.839**	ug/L	0.189	0	87170	159949	2	Standard
	Fe	**57**	**39.903**	ug/L	1.707	4	19734	68303	2	Standard
	Mn	**55**	**3.739**	ug/L	0.146	3	543	168463	1	Standard
>	**Ge**	**72**		ug/L			47594	45199	0	KED
	Cu	**63**	**0.178**	ug/L	0.009	5	50	859	4	KED
	Cu	**65**	**0.178**	ug/L	0.006	3	27	443	3	KED
	Zn	**66**	**1.611**	ug/L	0.201	12	27	1004	12	KED
	Zn	**67**	**1.455**	ug/L	0.161	11	7	156	10	KED
	As	**75**	**0.207**	ug/L	0.026	12	4	70	12	KED
	Y	**89**		ug/L			383646	384340	1	Standard
	Kr	**83**		ug/L			57	45	20	Standard
>	**In-1**	**115**		ug/L			11160	10624	0	KED
	Cd	**111**	**-0.001**	ug/L	0.010	907	5	4	72	KED
	Cd	**114**	**-0.001**	ug/L	0.004	516	4	3	104	KED
>	**In**	**115**		ug/L			610701	621278	1	Standard
	Ag	**107**	**0.002**	ug/L	0.002	82	85	130	27	Standard
>	**Tb**	**159**		ug/L			1474680	1489911	1	Standard
	Pb	**208**	**0.022**	ug/L	0.001	6	274	2306	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0062-04
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 03:35:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	79295	0	Standard
⌈>	**Sc**	**45**		ug/L			787622	905580	0	Standard
|	**Cr**	**52**	**0.153**	ug/L	0.015	9	20663	28340	2	Standard
|	**Cr**	**53**	**0.424**	ug/L	0.012	2	443	1988	2	Standard
|	**Fe**	**54**	**24.350**	ug/L	0.481	1	87170	170920	1	Standard
|	**Fe**	**57**	**50.789**	ug/L	1.867	3	19734	82778	3	Standard
⌊	**Mn**	**55**	**1.205**	ug/L	0.009	0	543	55989	0	Standard
⌈>	**Ge**	**72**		ug/L			47594	44448	1	KED
|	**Cu**	**63**	**0.346**	ug/L	0.013	3	50	1596	2	KED
|	**Cu**	**65**	**0.346**	ug/L	0.007	2	27	820	0	KED
|	**Zn**	**66**	**2.336**	ug/L	0.225	9	27	1419	7	KED
|	**Zn**	**67**	**2.223**	ug/L	0.101	4	7	231	2	KED
⌊	**As**	**75**	**0.467**	ug/L	0.022	4	4	152	2	KED
	Y	**89**		ug/L			383646	392601	3	Standard
	Kr	**83**		ug/L			57	51	29	Standard
⌈>	**In-1**	**115**		ug/L			11160	10449	1	KED
|	**Cd**	**111**	**0.004**	ug/L	0.007	181	5	6	37	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.006	89	4	9	55	KED
⌈>	**In**	**115**		ug/L			610701	606347	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	49	85	101	5	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1481377	1	Standard
⌊	**Pb**	**208**	**0.048**	ug/L	0.001	1	274	4660	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0062-06
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 03:40:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	87051	1	Standard
⌈>	**Sc**	**45**		ug/L			787622	903313	2	Standard
|	**Cr**	**52**	**0.251**	ug/L	0.023	9	20663	31161	1	Standard
|	**Cr**	**53**	**0.493**	ug/L	0.028	5	443	2222	2	Standard
|	**Fe**	**54**	**36.239**	ug/L	0.190	0	87170	204913	2	Standard
|	**Fe**	**57**	**59.935**	ug/L	0.623	1	19734	93341	1	Standard
⌊	**Mn**	**55**	**0.887**	ug/L	0.022	2	543	41256	2	Standard
⌈>	**Ge**	**72**		ug/L			47594	44692	1	KED
|	**Cu**	**63**	**0.746**	ug/L	0.019	2	50	3402	3	KED
|	**Cu**	**65**	**0.767**	ug/L	0.004	0	27	1800	1	KED
|	**Zn**	**66**	**1.802**	ug/L	0.049	2	27	1107	3	KED
|	**Zn**	**67**	**1.838**	ug/L	0.453	24	7	193	22	KED
⌊	**As**	**75**	**0.496**	ug/L	0.034	6	4	162	5	KED
	Y	**89**		ug/L			383646	388246	1	Standard
	Kr	**83**		ug/L			57	55	46	Standard
⌈>	**In-1**	**115**		ug/L			11160	10451	0	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.006	104	5	3	62	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.007	276	4	5	94	KED
⌈>	**In**	**115**		ug/L			610701	614669	3	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	127	85	95	14	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1495891	1	Standard
⌊	**Pb**	**208**	**0.064**	ug/L	0.002	3	274	6118	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0062-08
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 03:44:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	70601	1	Standard
⌈>	**Sc**	**45**		ug/L			787622	770380	2	Standard
|	**Cr**	**52**	**0.092**	ug/L	0.023	24	20663	22542	2	Standard
|	**Cr**	**53**	**0.051**	ug/L	0.002	3	443	584	2	Standard
|	**Fe**	**54**	**4.338**	ug/L	0.802	18	87170	95952	1	Standard
|	**Fe**	**57**	**-2.776**	ug/L	0.235	8	19734	16506	1	Standard
⌊	**Mn**	**55**	**0.338**	ug/L	0.008	2	543	13732	0	Standard
⌈>	**Ge**	**72**		ug/L			47594	45609	1	KED
|	**Cu**	**63**	**0.390**	ug/L	0.004	1	50	1840	3	KED
|	**Cu**	**65**	**0.379**	ug/L	0.012	3	27	921	4	KED
|	**Zn**	**66**	**0.827**	ug/L	0.024	2	27	532	2	KED
|	**Zn**	**67**	**0.690**	ug/L	0.139	20	7	78	17	KED
⌊	**As**	**75**	**0.010**	ug/L	0.001	10	4	7	6	KED
	Y	**89**		ug/L			383646	379385	2	Standard
	Kr	**83**		ug/L			57	46	19	Standard
⌈>	**In-1**	**115**		ug/L			11160	10615	1	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.008	114	5	2	88	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.005	622	4	3	114	KED
⌈>	**In**	**115**		ug/L			610701	623513	1	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.000	849	85	88	6	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1468397	1	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.000	4	274	886	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0439-DUP2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 03:49:01
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	72094	2	Standard
⌈>	**Sc**	**45**		ug/L			787622	777904	2	Standard
|	**Cr**	**52**	**0.083**	ug/L	0.003	3	20663	22527	2	Standard
|	**Cr**	**53**	**0.045**	ug/L	0.004	9	443	571	4	Standard
|	**Fe**	**54**	**3.674**	ug/L	0.621	16	87170	95244	1	Standard
|	**Fe**	**57**	**-2.476**	ug/L	0.610	24	19734	16973	3	Standard
⌊	**Mn**	**55**	**0.108**	ug/L	0.003	2	543	4815	2	Standard
⌈>	**Ge**	**72**		ug/L			47594	46219	1	KED
|	**Cu**	**63**	**0.372**	ug/L	0.020	5	50	1780	4	KED
|	**Cu**	**65**	**0.357**	ug/L	0.022	6	27	880	5	KED
|	**Zn**	**66**	**0.737**	ug/L	0.027	3	27	483	2	KED
|	**Zn**	**67**	**0.721**	ug/L	0.048	6	7	83	6	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.006	537	4	3	49	KED
	Y	**89**		ug/L			383646	385040	3	Standard
	Kr	**83**		ug/L			57	39	7	Standard
⌈>	**In-1**	**115**		ug/L			11160	10635	1	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.003	66	5	3	25	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.001	642	4	4	25	KED
⌈>	**In**	**115**		ug/L			610701	614495	2	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	22	85	56	14	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1473792	1	Standard
⌊	**Pb**	**208**	**0.009**	ug/L	0.001	5	274	1075	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0439-MS2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 03:53:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			41950	72725	0	Standard
> Sc	45		ug/L			787622	799356	2	Standard
Cr	52	24.564	ug/L	0.290	1	20663	668654	1	Standard
Cr	53	24.198	ug/L	0.643	2	443	74903	0	Standard
Fe	54	5103.647	ug/L	68.267	1	87170	13165368	1	Standard
Fe	57	5062.206	ug/L	150.776	2	19734	5303398	1	Standard
Mn	55	24.606	ug/L	0.107	0	543	998602	2	Standard
> Ge	72		ug/L			47594	45729	0	KED
Cu	63	27.557	ug/L	0.290	1	50	126916	1	KED
Cu	65	27.342	ug/L	0.647	2	27	64726	1	KED
Zn	66	86.547	ug/L	1.288	1	27	53199	1	KED
Zn	67	80.141	ug/L	2.010	2	7	8342	2	KED
As	75	25.496	ug/L	0.201	0	4	8353	0	KED
Y	89		ug/L			383646	388124	3	Standard
Kr	83		ug/L			57	58	23	Standard
> In-1	115		ug/L			11160	10695	0	KED
Cd	111	26.113	ug/L	0.057	0	5	8659	0	KED
Cd	114	26.027	ug/L	0.495	1	4	22296	1	KED
> In	115		ug/L			610701	603958	5	Standard
Ag	107	25.722	ug/L	1.150	4	85	509167	4	Standard
> Tb	159		ug/L			1474680	1470595	2	Standard
Pb	208	27.494	ug/L	0.821	2	274	2468351	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0439-MSD2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 03:59:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	70030	4	Standard
⌈>	**Sc**	**45**		ug/L			787622	750840	6	Standard
|	**Cr**	**52**	**24.410**	ug/L	0.408	1	20663	624603	7	Standard
|	**Cr**	**53**	**24.687**	ug/L	0.706	2	443	71872	8	Standard
|	**Fe**	**54**	**5139.877**	ug/L	107.740	2	87170	12457977	7	Standard
|	**Fe**	**57**	**5090.238**	ug/L	73.936	1	19734	5009681	5	Standard
⌊	**Mn**	**55**	**25.099**	ug/L	0.247	0	543	956913	6	Standard
⌈>	**Ge**	**72**		ug/L			47594	46279	0	KED
|	**Cu**	**63**	**27.360**	ug/L	0.309	1	50	127515	0	KED
|	**Cu**	**65**	**27.187**	ug/L	0.111	0	27	65139	0	KED
|	**Zn**	**66**	**84.555**	ug/L	0.234	0	27	52604	0	KED
|	**Zn**	**67**	**79.043**	ug/L	0.659	0	7	8326	0	KED
⌊	**As**	**75**	**25.521**	ug/L	0.268	1	4	8462	1	KED
	Y	**89**		ug/L			383646	367558	8	Standard
	Kr	**83**		ug/L			57	57	42	Standard
⌈>	**In-1**	**115**		ug/L			11160	10976	2	KED
|	**Cd**	**111**	**25.809**	ug/L	0.968	3	5	8778	1	KED
⌊	**Cd**	**114**	**26.004**	ug/L	0.454	1	4	22857	1	KED
⌈>	**In**	**115**		ug/L			610701	585220	9	Standard
⌊	**Ag**	**107**	**25.604**	ug/L	0.215	0	85	491740	9	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1418214	4	Standard
⌊	**Pb**	**208**	**27.474**	ug/L	0.182	0	274	2379639	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLD
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 04:04:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	46415	2	Standard
⌈>	**Sc**	**45**		ug/L			787622	776764	1	Standard
|	**Cr**	**52**	**-0.027**	ug/L	0.005	17	20663	19699	2	Standard
|	**Cr**	**53**	**-0.075**	ug/L	0.007	9	443	213	11	Standard
|	**Fe**	**54**	**1.566**	ug/L	0.157	10	87170	89872	2	Standard
|	**Fe**	**57**	**0.653**	ug/L	0.705	107	19734	20130	4	Standard
⌊	**Mn**	**55**	**0.017**	ug/L	0.002	10	543	1221	6	Standard
⌈>	**Ge**	**72**		ug/L			47594	45835	0	KED
|	**Cu**	**63**	**0.030**	ug/L	0.008	27	50	187	20	KED
|	**Cu**	**65**	**0.029**	ug/L	0.008	26	27	95	19	KED
|	**Zn**	**66**	**0.301**	ug/L	0.043	14	27	211	12	KED
|	**Zn**	**67**	**0.258**	ug/L	0.048	18	7	34	14	KED
⌊	**As**	**75**	**0.006**	ug/L	0.004	73	4	5	23	KED
	Y	**89**		ug/L			383646	382297	2	Standard
	Kr	**83**		ug/L			57	43	18	Standard
⌈>	**In-1**	**115**		ug/L			11160	10951	1	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.005	111	5	3	43	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.003	188	4	2	78	KED
⌈>	**In**	**115**		ug/L			610701	612836	2	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.004	91	85	167	44	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1454881	1	Standard
⌊	**Pb**	**208**	**0.013**	ug/L	0.006	43	274	1399	33	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 04:08:57
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	45894	1	Standard
⌈>	**Sc**	**45**		ug/L			787622	784912	2	Standard
|	**Cr**	**52**	**47.424**	ug/L	0.176	0	20663	1248504	1	Standard
|	**Cr**	**53**	**47.964**	ug/L	0.174	0	443	145408	2	Standard
|	**Fe**	**54**	**5012.072**	ug/L	62.510	1	87170	12700625	3	Standard
|	**Fe**	**57**	**4963.421**	ug/L	115.119	2	19734	5107054	1	Standard
⌊	**Mn**	**55**	**47.963**	ug/L	1.067	2	543	1910070	0	Standard
⌈>	**Ge**	**72**		ug/L			47594	47030	0	KED
|	**Cu**	**63**	**51.160**	ug/L	0.986	1	50	242263	1	KED
|	**Cu**	**65**	**49.839**	ug/L	0.612	1	27	121323	0	KED
|	**Zn**	**66**	**51.262**	ug/L	0.769	1	27	32417	0	KED
|	**Zn**	**67**	**50.613**	ug/L	1.496	2	7	5420	2	KED
⌊	**As**	**75**	**49.593**	ug/L	0.633	1	4	16707	0	KED
	Y	**89**		ug/L			383646	380589	1	Standard
	Kr	**83**		ug/L			57	49	10	Standard
⌈>	**In-1**	**115**		ug/L			11160	11028	1	KED
|	**Cd**	**111**	**50.764**	ug/L	1.227	2	5	17347	0	KED
⌊	**Cd**	**114**	**50.110**	ug/L	0.382	0	4	44256	1	KED
⌈>	**In**	**115**		ug/L			610701	595779	1	Standard
⌊	**Ag**	**107**	**51.508**	ug/L	0.601	1	85	1006679	0	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1468973	0	Standard
⌊	**Pb**	**208**	**54.504**	ug/L	0.707	1	274	4888139	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 04:16:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	43545	2	Standard
⌈>	**Sc**	**45**		ug/L			787622	785465	1	Standard
|	**Cr**	**52**	**-0.046**	ug/L	0.005	11	20663	19420	1	Standard
|	**Cr**	**53**	**-0.088**	ug/L	0.004	4	443	175	7	Standard
|	**Fe**	**54**	**-0.543**	ug/L	0.669	123	87170	85575	2	Standard
|	**Fe**	**57**	**0.055**	ug/L	0.345	626	19734	19739	2	Standard
⌊	**Mn**	**55**	**0.001**	ug/L	0.000	42	543	582	3	Standard
⌈>	**Ge**	**72**		ug/L			47594	48017	0	KED
|	**Cu**	**63**	**0.002**	ug/L	0.004	247	50	59	35	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.003	379	27	25	31	KED
|	**Zn**	**66**	**0.051**	ug/L	0.007	13	27	60	6	KED
|	**Zn**	**67**	**-0.006**	ug/L	0.011	166	7	6	15	KED
⌊	**As**	**75**	**-0.002**	ug/L	0.002	78	4	3	15	KED
	Y	**89**		ug/L			383646	381655	2	Standard
	Kr	**83**		ug/L			57	48	19	Standard
⌈>	**In-1**	**115**		ug/L			11160	11436	1	KED
|	**Cd**	**111**	**0.026**	ug/L	0.056	216	5	14	134	KED
⌊	**Cd**	**114**	**0.025**	ug/L	0.049	199	4	26	167	KED
⌈>	**In**	**115**		ug/L			610701	613870	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	44	85	100	7	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1466022	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	50	274	326	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0452-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 04:20:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			41950	84608	1	Standard
> Sc	45		ug/L			787622	790806	0	Standard
Cr	52	0.022	ug/L	0.018	81	20663	21315	2	Standard
Cr	53	-0.080	ug/L	0.007	8	443	202	11	Standard
Fe	54	6.556	ug/L	0.133	2	87170	104145	1	Standard
Fe	57	0.313	ug/L	0.085	27	19734	20138	1	Standard
Mn	55	0.009	ug/L	0.001	12	543	913	5	Standard
> Ge	72		ug/L			47594	47075	1	KED
Cu	63	0.302	ug/L	0.011	3	50	1482	2	KED
Cu	65	0.300	ug/L	0.013	4	27	758	4	KED
Zn	66	0.138	ug/L	0.015	10	27	114	7	KED
Zn	67	0.060	ug/L	0.044	73	7	13	34	KED
As	75	-0.006	ug/L	0.002	39	4	2	32	KED
Y	89		ug/L			383646	381726	1	Standard
Kr	83		ug/L			57	51	18	Standard
> In-1	115		ug/L			11160	11183	0	KED
Cd	111	-0.002	ug/L	0.003	143	5	4	20	KED
Cd	114	0.001	ug/L	0.001	199	4	4	26	KED
> In	115		ug/L			610701	629168	0	Standard
Ag	107	0.015	ug/L	0.002	15	85	400	11	Standard
> Tb	159		ug/L			1474680	1487842	1	Standard
Pb	208	0.001	ug/L	0.001	55	274	387	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0452-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 04:25:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41950	81504	0	Standard
>	Sc	45		ug/L			787622	804564	0	Standard
	Cr	52	24.176	ug/L	0.396	1	20663	662769	1	Standard
	Cr	53	24.016	ug/L	0.497	2	443	74852	1	Standard
	Fe	54	7.750	ug/L	0.611	7	87170	109041	2	Standard
	Fe	57	-1.180	ug/L	0.176	14	19734	18918	1	Standard
	Mn	55	24.968	ug/L	0.090	0	543	1019793	0	Standard
>	Ge	72		ug/L			47594	46328	2	KED
	Cu	63	28.173	ug/L	0.770	2	50	131390	0	KED
	Cu	65	27.941	ug/L	0.522	1	27	66997	0	KED
	Zn	66	83.320	ug/L	1.880	2	27	51873	0	KED
	Zn	67	76.732	ug/L	2.954	3	7	8088	2	KED
	As	75	24.915	ug/L	0.515	2	4	8267	0	KED
	Y	89		ug/L			383646	388880	1	Standard
	Kr	83		ug/L			57	58	6	Standard
>	In-1	115		ug/L			11160	10734	1	KED
	Cd	111	26.416	ug/L	0.611	2	5	8790	1	KED
	Cd	114	25.765	ug/L	0.270	1	4	22153	2	KED
>	In	115		ug/L			610701	623250	2	Standard
	Ag	107	26.387	ug/L	0.174	0	85	539618	2	Standard
>	Tb	159		ug/L			1474680	1489864	1	Standard
	Pb	208	27.834	ug/L	0.217	0	274	2532227	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0658-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 04:29:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	75191	0	Standard
⌈>	**Sc**	**45**		ug/L			787622	790804	2	Standard
|	**Cr**	**52**	**0.103**	ug/L	0.030	29	20663	23427	2	Standard
|	**Cr**	**53**	**1.096**	ug/L	0.017	1	443	3784	4	Standard
|	**Fe**	**54**	**-1.965**	ug/L	0.933	47	87170	82549	4	Standard
|	**Fe**	**57**	**-0.973**	ug/L	0.309	31	19734	18807	2	Standard
⌊	**Mn**	**55**	**0.029**	ug/L	0.001	3	543	1722	4	Standard
⌈>	**Ge**	**72**		ug/L			47594	44736	1	KED
|	**Cu**	**63**	**0.036**	ug/L	0.006	17	50	210	13	KED
|	**Cu**	**65**	**0.033**	ug/L	0.005	15	27	102	12	KED
|	**Zn**	**66**	**0.156**	ug/L	0.015	9	27	119	8	KED
|	**Zn**	**67**	**0.117**	ug/L	0.002	1	7	19	0	KED
⌊	**As**	**75**	**6.964**	ug/L	0.037	0	4	2235	1	KED
	Y	**89**		ug/L			383646	380218	0	Standard
	Kr	**83**		ug/L			57	46	8	Standard
⌈>	**In-1**	**115**		ug/L			11160	10187	1	KED
|	**Cd**	**111**	**0.012**	ug/L	0.025	213	5	8	90	KED
⌊	**Cd**	**114**	**0.019**	ug/L	0.026	134	4	19	107	KED
⌈>	**In**	**115**		ug/L			610701	603592	0	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	41	85	125	14	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1458957	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	5	274	492	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0658-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 04:34:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	69702	0	Standard
⌈>	**Sc**	**45**		ug/L			787622	779918	2	Standard
|	**Cr**	**52**	**0.028**	ug/L	0.019	66	20663	21174	1	Standard
|	**Cr**	**53**	**-0.023**	ug/L	0.002	10	443	368	4	Standard
|	**Fe**	**54**	**-0.175**	ug/L	0.741	423	87170	85852	0	Standard
|	**Fe**	**57**	**-0.754**	ug/L	0.227	30	19734	18772	2	Standard
⌊	**Mn**	**55**	**0.010**	ug/L	0.001	7	543	934	5	Standard
⌈>	**Ge**	**72**		ug/L			47594	45938	0	KED
|	**Cu**	**63**	**0.025**	ug/L	0.004	16	50	163	10	KED
|	**Cu**	**65**	**0.025**	ug/L	0.002	9	27	86	5	KED
|	**Zn**	**66**	**0.156**	ug/L	0.014	9	27	122	7	KED
|	**Zn**	**67**	**0.124**	ug/L	0.036	29	7	20	19	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.003	498	4	3	21	KED
	Y	**89**		ug/L			383646	382114	0	Standard
	Kr	**83**		ug/L			57	48	14	Standard
⌈>	**In-1**	**115**		ug/L			11160	10882	2	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.003	98	5	4	26	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.004	765	4	3	103	KED
⌈>	**In**	**115**		ug/L			610701	612421	2	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.000	58	85	81	1	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1473383	0	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	23	274	466	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0690-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 04:40:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	52201	1	Standard
⌈>	**Sc**	**45**		ug/L			787622	774957	0	Standard
|	**Cr**	**52**	**13.023**	ug/L	0.048	0	20663	353268	0	Standard
|	**Cr**	**53**	**13.492**	ug/L	0.041	0	443	40696	0	Standard
|	**Fe**	**54**	**0.039**	ug/L	0.872	2250	87170	85872	3	Standard
|	**Fe**	**57**	**0.564**	ug/L	0.504	89	19734	19990	3	Standard
⌊	**Mn**	**55**	**0.014**	ug/L	0.001	5	543	1096	3	Standard
⌈>	**Ge**	**72**		ug/L			47594	44955	0	KED
|	**Cu**	**63**	**0.051**	ug/L	0.008	15	50	277	13	KED
|	**Cu**	**65**	**0.053**	ug/L	0.005	8	27	148	6	KED
|	**Zn**	**66**	**0.064**	ug/L	0.017	26	27	64	15	KED
|	**Zn**	**67**	**0.041**	ug/L	0.036	88	7	11	33	KED
⌊	**As**	**75**	**3.016**	ug/L	0.037	1	4	975	1	KED
	Y	**89**		ug/L			383646	380484	1	Standard
	Kr	**83**		ug/L			57	58	16	Standard
⌈>	**In-1**	**115**		ug/L			11160	10527	1	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.003	40	5	2	33	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.003	726	4	4	66	KED
⌈>	**In**	**115**		ug/L			610701	603280	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.001	38	85	58	17	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1470659	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	12	274	403	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 04:45:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	47265	2	Standard
⌈>	**Sc**	**45**		ug/L			787622	772902	2	Standard
|	**Cr**	**52**	**-0.008**	ug/L	0.008	104	20663	20079	2	Standard
|	**Cr**	**53**	**-0.043**	ug/L	0.003	6	443	307	5	Standard
|	**Fe**	**54**	**-0.368**	ug/L	0.844	229	87170	84592	1	Standard
|	**Fe**	**57**	**0.137**	ug/L	0.107	78	19734	19504	3	Standard
⌊	**Mn**	**55**	**0.015**	ug/L	0.001	3	543	1112	2	Standard
⌈>	**Ge**	**72**		ug/L			47594	45902	2	KED
|	**Cu**	**63**	**0.022**	ug/L	0.002	8	50	150	6	KED
|	**Cu**	**65**	**0.022**	ug/L	0.008	37	27	77	22	KED
|	**Zn**	**66**	**0.305**	ug/L	0.018	5	27	214	4	KED
|	**Zn**	**67**	**0.320**	ug/L	0.053	16	7	40	10	KED
⌊	**As**	**75**	**-0.005**	ug/L	0.002	29	4	2	24	KED
	Y	**89**		ug/L			383646	384880	2	Standard
	Kr	**83**		ug/L			57	47	10	Standard
⌈>	**In-1**	**115**		ug/L			11160	10808	1	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.007	120	5	3	75	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.002	262	4	3	48	KED
⌈>	**In**	**115**		ug/L			610701	601931	2	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	38	85	69	10	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1457028	0	Standard
⌊	**Pb**	**208**	**0.008**	ug/L	0.000	4	274	984	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0137-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 02, 2023 04:50:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	63757	0	Standard
⌈>	**Sc**	**45**		ug/L			787622	882545	0	Standard
|	**Cr**	**52**	**-0.056**	ug/L	0.011	20	20663	21517	2	Standard
|	**Cr**	**53**	**0.128**	ug/L	0.016	12	443	930	5	Standard
|	**Fe**	**54**	**1782.500**	ug/L	28.230	1	87170	5141074	2	Standard
|	**Fe**	**57**	**1767.437**	ug/L	58.868	3	19734	2059910	4	Standard
⌊	**Mn**	**55**	**19.783**	ug/L	0.128	0	543	886467	1	Standard
⌈>	**Ge**	**72**		ug/L			47594	45883	1	KED
|	**Cu**	**63**	**0.420**	ug/L	0.013	3	50	1987	1	KED
|	**Cu**	**65**	**0.420**	ug/L	0.019	4	27	1024	4	KED
|	**Zn**	**66**	**2.565**	ug/L	0.054	2	27	1607	3	KED
|	**Zn**	**67**	**2.432**	ug/L	0.145	5	7	260	4	KED
⌊	**As**	**75**	**0.049**	ug/L	0.008	16	4	20	14	KED
	Y	**89**		ug/L			383646	394520	4	Standard
	Kr	**83**		ug/L			57	41	25	Standard
⌈>	**In-1**	**115**		ug/L			11160	10601	1	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.000	15	5	4	0	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.004	675	4	3	107	KED
⌈>	**In**	**115**		ug/L			610701	616589	3	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.001	490	85	82	18	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1484404	0	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	23	274	424	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0592-DUP4
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 02, 2023 04:54:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	63022	1	Standard
>	**Sc**	**45**		ug/L			787622	879269	2	Standard
	Cr	**52**	**-0.040**	ug/L	0.014	35	20663	21907	0	Standard
	Cr	**53**	**0.132**	ug/L	0.008	6	443	940	2	Standard
	Fe	**54**	**1867.572**	ug/L	31.579	1	87170	5360384	1	Standard
	Fe	**57**	**1867.992**	ug/L	20.001	1	19734	2167169	1	Standard
	Mn	**55**	**20.966**	ug/L	0.303	1	543	935790	0	Standard
>	**Ge**	**72**		ug/L			47594	45836	0	KED
	Cu	**63**	**0.635**	ug/L	0.022	3	50	2978	3	KED
	Cu	**65**	**0.628**	ug/L	0.014	2	27	1515	2	KED
	Zn	**66**	**2.910**	ug/L	0.079	2	27	1818	2	KED
	Zn	**67**	**2.353**	ug/L	0.236	10	7	252	10	KED
	As	**75**	**0.055**	ug/L	0.005	9	4	21	7	KED
	Y	**89**		ug/L			383646	383771	2	Standard
	Kr	**83**		ug/L			57	54	26	Standard
>	**In-1**	**115**		ug/L			11160	10787	1	KED
	Cd	**111**	**-0.014**	ug/L	0.002	12	5	0	86	KED
	Cd	**114**	**0.003**	ug/L	0.003	105	4	6	36	KED
>	**In**	**115**		ug/L			610701	622385	1	Standard
	Ag	**107**	**0.000**	ug/L	0.001	309	85	90	12	Standard
>	**Tb**	**159**		ug/L			1474680	1508952	1	Standard
	Pb	**208**	**0.012**	ug/L	0.000	3	274	1386	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0592-MS4
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 02, 2023 04:59:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	64312	0	Standard
⌈>	**Sc**	**45**		ug/L			787622	896228	0	Standard
|	**Cr**	**52**	**10.807**	ug/L	0.257	2	20663	343066	3	Standard
|	**Cr**	**53**	**10.837**	ug/L	0.183	1	443	37909	2	Standard
|	**Fe**	**54**	**1744.720**	ug/L	0.895	0	87170	5111910	0	Standard
|	**Fe**	**57**	**1731.163**	ug/L	38.944	2	19734	2049300	3	Standard
⌊	**Mn**	**55**	**31.133**	ug/L	0.397	1	543	1416428	1	Standard
⌈>	**Ge**	**72**		ug/L			47594	47146	0	KED
|	**Cu**	**63**	**14.093**	ug/L	0.269	1	50	66940	2	KED
|	**Cu**	**65**	**13.968**	ug/L	0.073	0	27	34107	0	KED
|	**Zn**	**66**	**44.972**	ug/L	0.779	1	27	28514	1	KED
|	**Zn**	**67**	**43.110**	ug/L	0.870	2	7	4629	1	KED
⌊	**As**	**75**	**12.592**	ug/L	0.179	1	4	4255	1	KED
	Y	**89**		ug/L			383646	396745	1	Standard
	Kr	**83**		ug/L			57	52	21	Standard
⌈>	**In-1**	**115**		ug/L			11160	10890	3	KED
|	**Cd**	**111**	**13.270**	ug/L	0.601	4	5	4479	1	KED
⌊	**Cd**	**114**	**13.058**	ug/L	0.384	2	4	11385	0	KED
⌈>	**In**	**115**		ug/L			610701	624977	2	Standard
⌊	**Ag**	**107**	**13.063**	ug/L	0.314	2	85	267873	2	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1532864	1	Standard
⌊	**Pb**	**208**	**13.698**	ug/L	0.090	0	274	1282169	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLF
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 05:04:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	46870	0	Standard
⌈>	**Sc**	**45**		ug/L			787622	781104	1	Standard
|	**Cr**	**52**	**-0.034**	ug/L	0.004	12	20663	19610	1	Standard
|	**Cr**	**53**	**-0.065**	ug/L	0.008	11	443	243	7	Standard
|	**Fe**	**54**	**-0.081**	ug/L	1.150	1415	87170	86212	1	Standard
|	**Fe**	**57**	**-0.249**	ug/L	0.291	116	19734	19313	0	Standard
⌊	**Mn**	**55**	**0.023**	ug/L	0.011	46	543	1448	27	Standard
⌈>	**Ge**	**72**		ug/L			47594	45872	0	KED
|	**Cu**	**63**	**0.024**	ug/L	0.003	13	50	157	9	KED
|	**Cu**	**65**	**0.023**	ug/L	0.006	24	27	81	16	KED
|	**Zn**	**66**	**0.274**	ug/L	0.020	7	27	194	5	KED
|	**Zn**	**67**	**0.210**	ug/L	0.022	10	7	29	7	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.003	68	4	2	39	KED
	Y	**89**		ug/L			383646	383196	1	Standard
	Kr	**83**		ug/L			57	50	15	Standard
⌈>	**In-1**	**115**		ug/L			11160	10459	3	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.002	73	5	4	13	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.002	136	4	5	36	KED
⌈>	**In**	**115**		ug/L			610701	615975	0	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.004	111	85	153	48	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1472981	0	Standard
⌊	**Pb**	**208**	**0.011**	ug/L	0.003	25	274	1265	20	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVF
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 05:08:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	44448	0	Standard
⌈>	**Sc**	**45**		ug/L			787622	791060	2	Standard
|	**Cr**	**52**	**47.134**	ug/L	0.286	0	20663	1250677	2	Standard
|	**Cr**	**53**	**47.145**	ug/L	0.330	0	443	144059	2	Standard
|	**Fe**	**54**	**5041.824**	ug/L	48.757	0	87170	12871226	1	Standard
|	**Fe**	**57**	**4890.910**	ug/L	27.940	0	19734	5073201	2	Standard
⌊	**Mn**	**55**	**48.018**	ug/L	0.799	1	543	1927316	1	Standard
⌈>	**Ge**	**72**		ug/L			47594	46311	0	KED
|	**Cu**	**63**	**51.990**	ug/L	0.699	1	50	242431	1	KED
|	**Cu**	**65**	**51.555**	ug/L	0.823	1	27	123579	1	KED
|	**Zn**	**66**	**52.603**	ug/L	0.684	1	27	32758	1	KED
|	**Zn**	**67**	**50.387**	ug/L	1.140	2	7	5314	2	KED
⌊	**As**	**75**	**50.150**	ug/L	0.183	0	4	16637	0	KED
	Y	**89**		ug/L			383646	387989	2	Standard
	Kr	**83**		ug/L			57	67	9	Standard
⌈>	**In-1**	**115**		ug/L			11160	10549	2	KED
|	**Cd**	**111**	**51.832**	ug/L	1.110	2	5	16943	0	KED
⌊	**Cd**	**114**	**51.931**	ug/L	0.775	1	4	43865	0	KED
⌈>	**In**	**115**		ug/L			610701	604534	1	Standard
⌊	**Ag**	**107**	**50.625**	ug/L	1.081	2	85	1004099	3	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1495189	1	Standard
⌊	**Pb**	**208**	**54.509**	ug/L	0.742	1	274	4975422	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBF
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 05:16:01
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41950	43809	0	Standard
⌈>	**Sc**	**45**		ug/L			787622	796829	0	Standard
|	**Cr**	**52**	**-0.051**	ug/L	0.012	23	20663	19558	0	Standard
|	**Cr**	**53**	**-0.088**	ug/L	0.003	3	443	179	4	Standard
|	**Fe**	**54**	**-0.237**	ug/L	0.978	412	87170	87587	3	Standard
|	**Fe**	**57**	**1.102**	ug/L	0.027	2	19734	21112	0	Standard
⌊	**Mn**	**55**	**0.001**	ug/L	0.000	21	543	588	0	Standard
⌈>	**Ge**	**72**		ug/L			47594	47794	2	KED
|	**Cu**	**63**	**-0.000**	ug/L	0.002	6656	50	50	13	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.003	1248	27	26	31	KED
|	**Zn**	**66**	**0.043**	ug/L	0.012	28	27	55	13	KED
|	**Zn**	**67**	**0.011**	ug/L	0.027	236	7	8	32	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.007	722	4	3	57	KED
	Y	**89**		ug/L			383646	393487	1	Standard
	Kr	**83**		ug/L			57	48	17	Standard
⌈>	**In-1**	**115**		ug/L			11160	11300	0	KED
|	**Cd**	**111**	**-0.009**	ug/L	0.002	17	5	2	24	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.003	4025	4	4	67	KED
⌈>	**In**	**115**		ug/L			610701	614601	0	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	54	85	106	11	Standard
⌈>	**Tb**	**159**		ug/L			1474680	1501941	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	84	274	305	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 05:20:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				44209	2	Standard
>	**Sc**	**45**		ug/L				782863	1	Standard
	Cr	**52**		ug/L				19712	2	Standard
	Cr	**53**		ug/L				193	7	Standard
	Fe	**54**		ug/L				85331	0	Standard
	Fe	**57**		ug/L				21088	0	Standard
	Mn	**55**		ug/L				544	4	Standard
>	**Ge**	**72**		ug/L				46611	1	KED
	Cu	**63**		ug/L				60	32	KED
	Cu	**65**		ug/L				30	6	KED
	Zn	**66**		ug/L				33	6	KED
	Zn	**67**		ug/L				4	89	KED
	As	**75**		ug/L				2	32	KED
	Y	**89**		ug/L				391138	2	Standard
	Kr	**83**		ug/L				46	14	Standard
>	**In-1**	**115**		ug/L				10762	0	KED
	Cd	**111**		ug/L				5	65	KED
	Cd	**114**		ug/L				4	22	KED
>	**In**	**115**		ug/L				626853	1	Standard
	Ag	**107**		ug/L				83	4	Standard
>	**Tb**	**159**		ug/L				1475140	1	Standard
	Pb	**208**		ug/L				279	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVG
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 05:25:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	44306	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	786307	2	Standard
|	**Cr**	**52**	**47.018**	ug/L	0.880	1	19712	1239066	0	Standard
|	**Cr**	**53**	**46.790**	ug/L	0.524	1	193	141838	1	Standard
|	**Fe**	**54**	**5033.104**	ug/L	109.259	2	85331	12768314	0	Standard
|	**Fe**	**57**	**5013.969**	ug/L	30.214	0	21088	5170499	1	Standard
⌊	**Mn**	**55**	**48.902**	ug/L	0.330	0	544	1951381	1	Standard
⌈>	**Ge**	**72**		ug/L			46611	46625	0	KED
|	**Cu**	**63**	**51.422**	ug/L	0.797	1	60	241420	1	KED
|	**Cu**	**65**	**51.625**	ug/L	0.066	0	30	124598	0	KED
|	**Zn**	**66**	**51.727**	ug/L	0.547	1	33	32436	0	KED
|	**Zn**	**67**	**50.741**	ug/L	1.057	2	4	5385	2	KED
⌊	**As**	**75**	**49.968**	ug/L	0.578	1	2	16687	0	KED
	Y	**89**		ug/L			391138	385430	3	Standard
	Kr	**83**		ug/L			46	57	18	Standard
⌈>	**In-1**	**115**		ug/L			10762	11021	1	KED
|	**Cd**	**111**	**49.812**	ug/L	1.152	2	5	17012	1	KED
⌊	**Cd**	**114**	**49.221**	ug/L	1.028	2	4	43436	0	KED
⌈>	**In**	**115**		ug/L			626853	612201	2	Standard
⌊	**Ag**	**107**	**49.947**	ug/L	1.435	2	83	1002608	0	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1481830	1	Standard
⌊	**Pb**	**208**	**54.129**	ug/L	0.777	1	279	4896971	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBG
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 05:32:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	43491	3	Standard
⌈>	**Sc**	**45**		ug/L			782863	784161	2	Standard
|	**Cr**	**52**	**-0.012**	ug/L	0.013	106	19712	19421	0	Standard
|	**Cr**	**53**	**-0.009**	ug/L	0.001	14	193	165	4	Standard
|	**Fe**	**54**	**0.528**	ug/L	0.270	51	85331	86789	1	Standard
|	**Fe**	**57**	**-0.763**	ug/L	0.280	36	21088	20338	0	Standard
⌊	**Mn**	**55**	**0.000**	ug/L	0.000	623	544	547	1	Standard
⌈>	**Ge**	**72**		ug/L			46611	47476	1	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.002	88	60	52	18	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.003	438	30	29	26	KED
|	**Zn**	**66**	**0.030**	ug/L	0.010	34	33	52	11	KED
|	**Zn**	**67**	**0.046**	ug/L	0.001	2	4	9	0	KED
⌊	**As**	**75**	**0.007**	ug/L	0.004	60	2	4	31	KED
	Y	**89**		ug/L			391138	390802	1	Standard
	Kr	**83**		ug/L			46	49	17	Standard
⌈>	**In-1**	**115**		ug/L			10762	11287	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.002	49	5	4	13	KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.002	54	4	1	112	KED
⌈>	**In**	**115**		ug/L			626853	607956	0	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.000	8	83	125	2	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1477351	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	45	279	316	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0504-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 05:36:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	82184	0	Standard
>	Sc	45		ug/L			782863	791261	1	Standard
	Cr	52	0.056	ug/L	0.003	6	19712	21378	0	Standard
	Cr	53	0.002	ug/L	0.002	106	193	200	3	Standard
	Fe	54	4.978	ug/L	0.167	3	85331	98870	0	Standard
	Fe	57	1.441	ug/L	0.247	17	21088	22804	1	Standard
	Mn	55	0.015	ug/L	0.001	6	544	1150	4	Standard
>	Ge	72		ug/L			46611	47256	0	KED
	Cu	63	0.287	ug/L	0.014	4	60	1426	4	KED
	Cu	65	0.280	ug/L	0.018	6	30	716	6	KED
	Zn	66	0.055	ug/L	0.011	19	33	68	10	KED
	Zn	67	0.023	ug/L	0.041	177	4	6	62	KED
	As	75	0.005	ug/L	0.006	139	2	3	57	KED
	Y	89		ug/L			391138	392248	1	Standard
	Kr	83		ug/L			46	48	42	Standard
>	In-1	115		ug/L			10762	10948	2	KED
	Cd	111	0.001	ug/L	0.003	486	5	5	20	KED
	Cd	114	-0.007	ug/L	0.006	85	4	0	550	KED
>	In	115		ug/L			626853	627923	2	Standard
	Ag	107	0.005	ug/L	0.000	8	83	195	2	Standard
>	Tb	159		ug/L			1475140	1465017	1	Standard
	Pb	208	0.001	ug/L	0.000	6	279	343	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0504-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 05:41:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	80631	0	Standard
>	Sc	45		ug/L			782863	795059	0	Standard
	Cr	52	24.562	ug/L	0.375	1	19712	664189	0	Standard
	Cr	53	24.747	ug/L	0.429	1	193	75964	2	Standard
	Fe	54	7.032	ug/L	0.455	6	85331	104589	2	Standard
	Fe	57	-1.074	ug/L	0.154	14	21088	20302	1	Standard
	Mn	55	25.193	ug/L	0.246	0	544	1016890	1	Standard
>	Ge	72		ug/L			46611	46499	0	KED
	Cu	63	28.341	ug/L	0.675	2	60	132724	2	KED
	Cu	65	28.343	ug/L	0.538	1	30	68233	1	KED
	Zn	66	84.157	ug/L	1.628	1	33	52612	2	KED
	Zn	67	78.550	ug/L	1.393	1	4	8311	2	KED
	As	75	24.987	ug/L	0.057	0	2	8323	0	KED
	Y	89		ug/L			391138	390472	4	Standard
	Kr	83		ug/L			46	45	7	Standard
>	In-1	115		ug/L			10762	11016	2	KED
	Cd	111	25.585	ug/L	0.673	2	5	8735	0	KED
	Cd	114	25.497	ug/L	0.739	2	4	22489	1	KED
>	In	115		ug/L			626853	626761	2	Standard
	Ag	107	26.065	ug/L	0.470	1	83	535865	1	Standard
>	Tb	159		ug/L			1475140	1485321	1	Standard
	Pb	208	27.975	ug/L	0.715	2	279	2536651	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0715-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 05:46:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	51414	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	780169	1	Standard
|	**Cr**	**52**	**17.258**	ug/L	0.408	2	19712	463696	0	Standard
|	**Cr**	**53**	**17.573**	ug/L	0.011	0	193	52985	1	Standard
|	**Fe**	**54**	**1.174**	ug/L	0.534	45	85331	87986	3	Standard
|	**Fe**	**57**	**-1.229**	ug/L	0.305	24	21088	19765	2	Standard
⌊	**Mn**	**55**	**1.418**	ug/L	0.010	0	544	56674	2	Standard
⌈>	**Ge**	**72**		ug/L			46611	44764	0	KED
|	**Cu**	**63**	**0.071**	ug/L	0.004	5	60	378	4	KED
|	**Cu**	**65**	**0.077**	ug/L	0.006	7	30	208	6	KED
|	**Zn**	**66**	**0.206**	ug/L	0.028	13	33	155	9	KED
|	**Zn**	**67**	**0.332**	ug/L	0.064	19	4	38	18	KED
⌊	**As**	**75**	**2.566**	ug/L	0.072	2	2	824	3	KED
	Y	**89**		ug/L			391138	389260	2	Standard
	Kr	**83**		ug/L			46	48	11	Standard
⌈>	**In-1**	**115**		ug/L			10762	10309	2	KED
|	**Cd**	**111**	**-0.000**	ug/L	0.006	2587	5	4	40	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.004	139	4	6	41	KED
⌈>	**In**	**115**		ug/L			626853	613056	3	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	44	83	121	11	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1475589	1	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.000	8	279	753	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0715-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 05:51:01
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	52799	3	Standard
⌈>	**Sc**	**45**		ug/L			782863	783436	1	Standard
|	**Cr**	**52**	**7.362**	ug/L	0.162	2	19712	209989	2	Standard
|	**Cr**	**53**	**8.117**	ug/L	0.065	0	193	24682	2	Standard
|	**Fe**	**54**	**-0.416**	ug/L	0.436	104	85331	84355	2	Standard
|	**Fe**	**57**	**-1.132**	ug/L	0.452	39	21088	19940	0	Standard
⌊	**Mn**	**55**	**0.062**	ug/L	0.001	1	544	3025	2	Standard
⌈>	**Ge**	**72**		ug/L			46611	45079	1	KED
|	**Cu**	**63**	**0.062**	ug/L	0.006	9	60	339	7	KED
|	**Cu**	**65**	**0.059**	ug/L	0.000	0	30	166	0	KED
|	**Zn**	**66**	**0.023**	ug/L	0.031	136	33	45	41	KED
|	**Zn**	**67**	**0.088**	ug/L	0.038	42	4	13	28	KED
⌊	**As**	**75**	**3.051**	ug/L	0.050	1	2	987	2	KED
	Y	**89**		ug/L			391138	392473	0	Standard
	Kr	**83**		ug/L			46	50	18	Standard
⌈>	**In-1**	**115**		ug/L			10762	10356	0	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.004	260	5	4	24	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.001	48	4	2	47	KED
⌈>	**In**	**115**		ug/L			626853	606096	1	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.000	261	83	83	9	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1498680	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	170	279	308	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0715-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 05:56:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	52859	2	Standard
⌈>	**Sc**	**45**		ug/L			782863	784279	1	Standard
|	**Cr**	**52**	**7.014**	ug/L	0.207	2	19712	201172	1	Standard
|	**Cr**	**53**	**7.835**	ug/L	0.173	2	193	23856	3	Standard
|	**Fe**	**54**	**-0.402**	ug/L	0.857	213	85331	84496	4	Standard
|	**Fe**	**57**	**0.316**	ug/L	0.436	138	21088	21448	2	Standard
⌊	**Mn**	**55**	**0.058**	ug/L	0.001	1	544	2857	1	Standard
⌈>	**Ge**	**72**		ug/L			46611	44879	0	KED
|	**Cu**	**63**	**0.047**	ug/L	0.004	8	60	269	6	KED
|	**Cu**	**65**	**0.049**	ug/L	0.001	2	30	142	2	KED
|	**Zn**	**66**	**0.080**	ug/L	0.014	17	33	80	9	KED
|	**Zn**	**67**	**0.138**	ug/L	0.045	32	4	18	26	KED
⌊	**As**	**75**	**2.953**	ug/L	0.113	3	2	951	3	KED
	Y	**89**		ug/L			391138	388832	2	Standard
	Kr	**83**		ug/L			46	45	16	Standard
⌈>	**In-1**	**115**		ug/L			10762	10192	1	KED
|	**Cd**	**111**	**-0.010**	ug/L	0.002	16	5	1	34	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.003	62	4	8	26	KED
⌈>	**In**	**115**		ug/L			626853	613807	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.001	55	83	61	19	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1481521	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	104	279	314	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLG
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 06:01:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	44136	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	768808	2	Standard
|	**Cr**	**52**	**0.033**	ug/L	0.013	39	19712	20181	1	Standard
|	**Cr**	**53**	**0.031**	ug/L	0.002	6	193	280	4	Standard
|	**Fe**	**54**	**0.301**	ug/L	0.687	228	85331	84513	0	Standard
|	**Fe**	**57**	**1.467**	ug/L	0.139	9	21088	22181	2	Standard
⌊	**Mn**	**55**	**0.005**	ug/L	0.000	7	544	730	2	Standard
⌈>	**Ge**	**72**		ug/L			46611	45763	1	KED
|	**Cu**	**63**	**0.145**	ug/L	0.005	3	60	727	3	KED
|	**Cu**	**65**	**0.142**	ug/L	0.011	7	30	365	8	KED
|	**Zn**	**66**	**0.234**	ug/L	0.015	6	33	176	5	KED
|	**Zn**	**67**	**0.251**	ug/L	0.021	8	4	30	6	KED
⌊	**As**	**75**	**0.002**	ug/L	0.002	118	2	2	28	KED
	Y	**89**		ug/L			391138	387773	1	Standard
	Kr	**83**		ug/L			46	40	18	Standard
⌈>	**In-1**	**115**		ug/L			10762	10298	0	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.005	62	5	2	57	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.003	115	4	2	79	KED
⌈>	**In**	**115**		ug/L			626853	619481	1	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.000	23	83	47	16	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1470810	0	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.000	5	279	700	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0135-02
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 06:06:28
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	75219	3	Standard
⌈>	**Sc**	**45**		ug/L			782863	958323	3	Standard
|	**Cr**	**52**	**0.143**	ug/L	0.038	26	19712	28634	2	Standard
|	**Cr**	**53**	**0.772**	ug/L	0.038	4	193	3081	1	Standard
|	**Fe**	**54**	**185.590**	ug/L	10.889	5	85331	673948	2	Standard
|	**Fe**	**57**	**199.365**	ug/L	7.583	3	21088	275182	1	Standard
⌊	**Mn**	**55**	**26.051**	ug/L	0.489	1	544	1266889	1	Standard
⌈>	**Ge**	**72**		ug/L			46611	44811	1	KED
|	**Cu**	**63**	**0.547**	ug/L	0.019	3	60	2527	2	KED
|	**Cu**	**65**	**0.558**	ug/L	0.048	8	30	1321	7	KED
|	**Zn**	**66**	**1.606**	ug/L	0.017	1	33	998	1	KED
|	**Zn**	**67**	**1.759**	ug/L	0.126	7	4	183	5	KED
⌊	**As**	**75**	**0.774**	ug/L	0.081	10	2	250	9	KED
	Y	**89**		ug/L			391138	383705	7	Standard
	Kr	**83**		ug/L			46	58	9	Standard
⌈>	**In-1**	**115**		ug/L			10762	10323	1	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.008	181	5	3	68	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	323	4	5	63	KED
⌈>	**In**	**115**		ug/L			626853	598243	6	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	61	83	97	5	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1463985	4	Standard
⌊	**Pb**	**208**	**0.066**	ug/L	0.005	7	279	6133	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0509-DUP3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 06:10:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	78843	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	961929	1	Standard
|	**Cr**	**52**	**0.143**	ug/L	0.004	3	19712	28744	1	Standard
|	**Cr**	**53**	**0.772**	ug/L	0.013	1	193	3098	2	Standard
|	**Fe**	**54**	**176.433**	ug/L	2.728	1	85331	648964	2	Standard
|	**Fe**	**57**	**194.146**	ug/L	3.376	1	21088	269884	2	Standard
⌊	**Mn**	**55**	**24.881**	ug/L	0.467	1	544	1215203	2	Standard
⌈>	**Ge**	**72**		ug/L			46611	44497	0	KED
|	**Cu**	**63**	**0.392**	ug/L	0.026	6	60	1814	5	KED
|	**Cu**	**65**	**0.390**	ug/L	0.020	5	30	927	5	KED
|	**Zn**	**66**	**1.476**	ug/L	0.122	8	33	913	7	KED
|	**Zn**	**67**	**1.703**	ug/L	0.071	4	4	176	3	KED
⌊	**As**	**75**	**0.723**	ug/L	0.028	3	2	232	3	KED
	Y	**89**		ug/L			391138	406283	2	Standard
	Kr	**83**		ug/L			46	49	30	Standard
⌈>	**In-1**	**115**		ug/L			10762	10330	0	KED
|	**Cd**	**111**	**0.004**	ug/L	0.002	47	5	6	9	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.004	308	4	3	80	KED
⌈>	**In**	**115**		ug/L			626853	616074	1	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.000	167	83	85	6	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1510143	2	Standard
⌊	**Pb**	**208**	**0.064**	ug/L	0.002	2	279	6185	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0509-MS3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 06:15:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			44209	73667	0	Standard
> Sc	45		ug/L			782863	979920	1	Standard
Cr	52	19.442	ug/L	0.132	0	19712	653127	1	Standard
Cr	53	20.078	ug/L	0.078	0	193	76000	1	Standard
Fe	54	172.847	ug/L	1.223	0	85331	649759	1	Standard
Fe	57	190.836	ug/L	4.710	2	21088	270720	3	Standard
Mn	55	45.782	ug/L	0.350	0	544	2277152	2	Standard
> Ge	72		ug/L			46611	44936	1	KED
Cu	63	28.770	ug/L	0.238	0	60	130204	0	KED
Cu	65	27.938	ug/L	0.426	1	30	64993	0	KED
Zn	66	85.195	ug/L	1.131	1	33	51465	0	KED
Zn	67	79.658	ug/L	2.507	3	4	8143	2	KED
As	75	26.763	ug/L	0.543	2	2	8614	0	KED
Y	89		ug/L			391138	404391	2	Standard
Kr	83		ug/L			46	48	15	Standard
> In-1	115		ug/L			10762	10491	0	KED
Cd	111	26.188	ug/L	0.255	0	5	8518	0	KED
Cd	114	26.050	ug/L	0.182	0	4	21890	0	KED
> In	115		ug/L			626853	620006	3	Standard
Ag	107	25.817	ug/L	0.333	1	83	525025	2	Standard
> Tb	159		ug/L			1475140	1508093	2	Standard
Pb	208	28.293	ug/L	0.657	2	279	2604344	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLH
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 06:20:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	44868	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	770860	0	Standard
|	**Cr**	**52**	**0.028**	ug/L	0.019	67	19712	20133	2	Standard
|	**Cr**	**53**	**0.025**	ug/L	0.007	29	193	264	7	Standard
|	**Fe**	**54**	**0.401**	ug/L	0.544	135	85331	85013	1	Standard
|	**Fe**	**57**	**-1.703**	ug/L	0.465	27	21088	19051	2	Standard
⌊	**Mn**	**55**	**0.007**	ug/L	0.000	4	544	827	1	Standard
⌈>	**Ge**	**72**		ug/L			46611	45845	0	KED
|	**Cu**	**63**	**0.148**	ug/L	0.006	4	60	744	3	KED
|	**Cu**	**65**	**0.145**	ug/L	0.004	2	30	373	2	KED
|	**Zn**	**66**	**0.263**	ug/L	0.039	14	33	194	12	KED
|	**Zn**	**67**	**0.153**	ug/L	0.059	38	4	20	30	KED
⌊	**As**	**75**	**0.006**	ug/L	0.005	81	2	4	40	KED
	Y	**89**		ug/L			391138	387381	0	Standard
	Kr	**83**		ug/L			46	50	15	Standard
⌈>	**In-1**	**115**		ug/L			10762	10595	2	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.009	334	5	4	66	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.002	182	4	6	36	KED
⌈>	**In**	**115**		ug/L			626853	626279	2	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	41	83	114	10	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1476212	1	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.001	10	279	773	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVH
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 06:24:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	44825	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	782717	1	Standard
|	**Cr**	**52**	**46.808**	ug/L	0.503	1	19712	1228356	1	Standard
|	**Cr**	**53**	**47.294**	ug/L	0.818	1	193	142729	1	Standard
|	**Fe**	**54**	**4970.349**	ug/L	58.585	1	85331	12557303	1	Standard
|	**Fe**	**57**	**4970.155**	ug/L	53.230	1	21088	5102905	2	Standard
⌊	**Mn**	**55**	**48.162**	ug/L	0.819	1	544	1913054	0	Standard
⌈>	**Ge**	**72**		ug/L			46611	45569	1	KED
|	**Cu**	**63**	**52.940**	ug/L	1.034	1	60	242889	1	KED
|	**Cu**	**65**	**52.713**	ug/L	1.399	2	30	124315	1	KED
|	**Zn**	**66**	**53.364**	ug/L	1.447	2	33	32698	1	KED
|	**Zn**	**67**	**52.135**	ug/L	0.689	1	4	5407	1	KED
⌊	**As**	**75**	**50.190**	ug/L	0.676	1	2	16380	0	KED
	Y	**89**		ug/L			391138	395417	1	Standard
	Kr	**83**		ug/L			46	43	4	Standard
⌈>	**In-1**	**115**		ug/L			10762	10563	2	KED
|	**Cd**	**111**	**51.290**	ug/L	0.853	1	5	16788	0	KED
⌊	**Cd**	**114**	**50.907**	ug/L	0.282	0	4	43065	2	KED
⌈>	**In**	**115**		ug/L			626853	612165	0	Standard
⌊	**Ag**	**107**	**49.777**	ug/L	1.017	2	83	999623	1	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1492732	0	Standard
⌊	**Pb**	**208**	**54.598**	ug/L	0.321	0	279	4976072	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBH
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 06:32:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	43548	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	787020	2	Standard
|	**Cr**	**52**	**-0.017**	ug/L	0.014	81	19712	19359	2	Standard
|	**Cr**	**53**	**0.000**	ug/L	0.006	2032	193	194	6	Standard
|	**Fe**	**54**	**-0.058**	ug/L	0.761	1320	85331	85606	0	Standard
|	**Fe**	**57**	**-0.461**	ug/L	0.364	78	21088	20720	0	Standard
⌊	**Mn**	**55**	**0.002**	ug/L	0.003	136	544	620	13	Standard
⌈>	**Ge**	**72**		ug/L			46611	46321	0	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.001	89	60	55	9	KED
|	**Cu**	**65**	**0.001**	ug/L	0.003	529	30	31	24	KED
|	**Zn**	**66**	**0.020**	ug/L	0.019	94	33	45	25	KED
|	**Zn**	**67**	**0.024**	ug/L	0.038	155	4	6	56	KED
⌊	**As**	**75**	**0.005**	ug/L	0.003	60	2	3	25	KED
	Y	**89**		ug/L			391138	390951	2	Standard
	Kr	**83**		ug/L			46	43	15	Standard
⌈>	**In-1**	**115**		ug/L			10762	11091	3	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.008	264	5	4	66	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.003	4694	4	4	44	KED
⌈>	**In**	**115**		ug/L			626853	616482	2	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.001	50	83	137	19	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1475071	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.002	87	279	444	34	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0202-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 06:36:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	77540	0	Standard
⌈>	**Sc**	**45**		ug/L			782863	813985	1	Standard
|	**Cr**	**52**	**0.290**	ug/L	0.006	2	19712	28284	1	Standard
|	**Cr**	**53**	**0.529**	ug/L	0.021	3	193	1859	4	Standard
|	**Fe**	**54**	**26.684**	ug/L	0.219	0	85331	158356	1	Standard
|	**Fe**	**57**	**26.065**	ug/L	0.452	1	21088	49637	1	Standard
⌊	**Mn**	**55**	**1.335**	ug/L	0.018	1	544	55720	2	Standard
⌈>	**Ge**	**72**		ug/L			46611	46667	1	KED
|	**Cu**	**63**	**30.596**	ug/L	0.395	1	60	143790	0	KED
|	**Cu**	**65**	**30.033**	ug/L	0.340	1	30	72560	1	KED
|	**Zn**	**66**	**88.110**	ug/L	1.258	1	33	55273	0	KED
|	**Zn**	**67**	**79.599**	ug/L	1.399	1	4	8452	2	KED
⌊	**As**	**75**	**0.467**	ug/L	0.017	3	2	158	2	KED
	Y	**89**		ug/L			391138	403660	1	Standard
	Kr	**83**		ug/L			46	38	13	Standard
⌈>	**In-1**	**115**		ug/L			10762	10831	1	KED
|	**Cd**	**111**	**0.098**	ug/L	0.018	18	5	38	17	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.001	1	4	92	1	KED
⌈>	**In**	**115**		ug/L			626853	646126	4	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.000	2	83	200	5	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1523812	1	Standard
⌊	**Pb**	**208**	**0.176**	ug/L	0.004	2	279	16696	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0659-DUP2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 06:41:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	78898	0	Standard
⌈>	**Sc**	**45**		ug/L			782863	809705	2	Standard
|	**Cr**	**52**	**0.263**	ug/L	0.026	9	19712	27400	0	Standard
|	**Cr**	**53**	**0.528**	ug/L	0.007	1	193	1845	1	Standard
|	**Fe**	**54**	**28.589**	ug/L	0.987	3	85331	162428	0	Standard
|	**Fe**	**57**	**28.230**	ug/L	1.442	5	21088	51646	0	Standard
⌊	**Mn**	**55**	**0.431**	ug/L	0.012	2	544	18272	0	Standard
⌈>	**Ge**	**72**		ug/L			46611	46638	0	KED
|	**Cu**	**63**	**31.114**	ug/L	0.660	2	60	146143	1	KED
|	**Cu**	**65**	**31.150**	ug/L	0.281	0	30	75215	1	KED
|	**Zn**	**66**	**91.226**	ug/L	1.173	1	33	57198	1	KED
|	**Zn**	**67**	**81.467**	ug/L	1.665	2	4	8645	2	KED
⌊	**As**	**75**	**0.476**	ug/L	0.040	8	2	161	8	KED
	Y	**89**		ug/L			391138	403410	0	Standard
	Kr	**83**		ug/L			46	54	21	Standard
⌈>	**In-1**	**115**		ug/L			10762	11052	1	KED
|	**Cd**	**111**	**0.119**	ug/L	0.015	12	5	46	11	KED
⌊	**Cd**	**114**	**0.108**	ug/L	0.007	6	4	100	5	KED
⌈>	**In**	**115**		ug/L			626853	640897	4	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.001	12	83	184	10	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1531993	1	Standard
⌊	**Pb**	**208**	**0.181**	ug/L	0.005	2	279	17247	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0659-MS2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 06:46:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	74970	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	805085	1	Standard
|	**Cr**	**52**	**23.332**	ug/L	0.411	1	19712	639995	2	Standard
|	**Cr**	**53**	**24.100**	ug/L	0.463	1	193	74902	1	Standard
|	**Fe**	**54**	**27.298**	ug/L	0.476	1	85331	158217	2	Standard
|	**Fe**	**57**	**25.076**	ug/L	1.354	5	21088	48072	4	Standard
⌊	**Mn**	**55**	**24.458**	ug/L	0.363	1	544	999601	1	Standard
⌈>	**Ge**	**72**		ug/L			46611	46588	2	KED
|	**Cu**	**63**	**56.395**	ug/L	1.043	1	60	264528	1	KED
|	**Cu**	**65**	**55.785**	ug/L	1.237	2	30	134491	0	KED
|	**Zn**	**66**	**166.767**	ug/L	2.942	1	33	104406	1	KED
|	**Zn**	**67**	**152.569**	ug/L	4.734	3	4	16164	1	KED
⌊	**As**	**75**	**25.007**	ug/L	0.526	2	2	8344	0	KED
	Y	**89**		ug/L			391138	403261	2	Standard
	Kr	**83**		ug/L			46	48	8	Standard
⌈>	**In-1**	**115**		ug/L			10762	11075	1	KED
|	**Cd**	**111**	**24.689**	ug/L	0.358	1	5	8478	1	KED
⌊	**Cd**	**114**	**24.728**	ug/L	0.463	1	4	21933	0	KED
⌈>	**In**	**115**		ug/L			626853	638250	1	Standard
⌊	**Ag**	**107**	**24.944**	ug/L	0.288	1	83	522315	1	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1520099	0	Standard
⌊	**Pb**	**208**	**27.568**	ug/L	0.218	0	279	2558701	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 06:50:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	44809	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	782630	0	Standard
|	**Cr**	**52**	**0.013**	ug/L	0.020	163	19712	20030	2	Standard
|	**Cr**	**53**	**0.018**	ug/L	0.007	38	193	248	8	Standard
|	**Fe**	**54**	**0.255**	ug/L	0.794	311	85331	85941	2	Standard
|	**Fe**	**57**	**-3.905**	ug/L	0.559	14	21088	17087	2	Standard
⌊	**Mn**	**55**	**0.006**	ug/L	0.000	0	544	773	0	Standard
⌈>	**Ge**	**72**		ug/L			46611	46182	0	KED
|	**Cu**	**63**	**0.149**	ug/L	0.015	10	60	753	8	KED
|	**Cu**	**65**	**0.159**	ug/L	0.009	5	30	409	4	KED
|	**Zn**	**66**	**0.292**	ug/L	0.028	9	33	213	9	KED
|	**Zn**	**67**	**0.254**	ug/L	0.054	21	4	31	18	KED
⌊	**As**	**75**	**0.010**	ug/L	0.001	7	2	5	5	KED
	Y	**89**		ug/L			391138	384735	0	Standard
	Kr	**83**		ug/L			46	48	2	Standard
⌈>	**In-1**	**115**		ug/L			10762	10964	2	KED
|	**Cd**	**111**	**0.009**	ug/L	0.006	71	5	8	29	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.005	141	4	7	49	KED
⌈>	**In**	**115**		ug/L			626853	627405	3	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.000	7	83	147	5	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1489432	0	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.000	6	279	899	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 06:55:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			44209	90049	1	Standard
> Sc	45		ug/L			782863	930968	1	Standard
Cr	52	10.181	ug/L	0.173	1	19712	336099	1	Standard
Cr	53	10.273	ug/L	0.116	1	193	37055	1	Standard
Fe	54	12274.710	ug/L	107.332	0	85331	36735660	2	Standard
Fe	57	12198.321	ug/L	266.193	2	21088	14857906	2	Standard
Mn	55	132.247	ug/L	0.756	0	544	6247575	1	Standard
> Ge	72		ug/L			46611	46148	0	KED
Cu	63	23.228	ug/L	0.446	1	60	107966	1	KED
Cu	65	22.806	ug/L	0.156	0	30	54496	0	KED
Zn	66	53.532	ug/L	0.320	0	33	33225	0	KED
Zn	67	50.558	ug/L	0.997	1	4	5310	2	KED
As	75	4.882	ug/L	0.060	1	2	1615	1	KED
Y	89		ug/L			391138	644474	0	Standard
Kr	83		ug/L			46	103	10	Standard
> In-1	115		ug/L			10762	10816	0	KED
Cd	111	0.065	ug/L	0.012	18	5	26	14	KED
Cd	114	0.075	ug/L	0.004	5	4	70	4	KED
> In	115		ug/L			626853	610986	1	Standard
Ag	107	0.151	ug/L	0.005	3	83	3104	4	Standard
> Tb	159		ug/L			1475140	1530671	0	Standard
Pb	208	15.568	ug/L	0.172	1	279	1455068	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0396-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 06:59:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	91725	1	Standard
>	Sc	45		ug/L			782863	937039	1	Standard
	Cr	52	11.795	ug/L	0.112	0	19712	388185	1	Standard
	Cr	53	11.842	ug/L	0.061	0	193	42960	0	Standard
	Fe	54	14316.923	ug/L	286.626	2	85331	43103540	1	Standard
	Fe	57	14070.503	ug/L	114.065	0	21088	17246338	0	Standard
	Mn	55	146.047	ug/L	1.923	1	544	6943703	0	Standard
>	Ge	72		ug/L			46611	45776	0	KED
	Cu	63	43.617	ug/L	1.357	3	60	201042	2	KED
	Cu	65	42.890	ug/L	0.705	1	30	101635	1	KED
	Zn	66	59.148	ug/L	0.386	0	33	36413	1	KED
	Zn	67	56.302	ug/L	0.233	0	4	5865	0	KED
	As	75	5.109	ug/L	0.180	3	2	1677	3	KED
	Y	89		ug/L			391138	654981	3	Standard
	Kr	83		ug/L			46	101	15	Standard
>	In-1	115		ug/L			10762	10575	1	KED
	Cd	111	0.101	ug/L	0.017	16	5	38	13	KED
	Cd	114	0.088	ug/L	0.024	27	4	79	27	KED
>	In	115		ug/L			626853	601301	1	Standard
	Ag	107	0.139	ug/L	0.004	2	83	2830	2	Standard
>	Tb	159		ug/L			1475140	1514796	1	Standard
	Pb	208	20.648	ug/L	0.348	1	279	1909564	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0396-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 07:04:28
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	88850	1	Standard
>	Sc	45		ug/L			782863	929092	1	Standard
	Cr	52	32.819	ug/L	1.115	3	19712	1028876	1	Standard
	Cr	53	32.105	ug/L	0.253	0	193	115083	1	Standard
	Fe	54	13411.509	ug/L	100.215	0	85331	40049580	2	Standard
	Fe	57	13348.747	ug/L	55.226	0	21088	16225729	2	Standard
	Mn	55	165.524	ug/L	4.294	2	544	7803979	3	Standard
>	Ge	72		ug/L			46611	45779	0	KED
	Cu	63	50.519	ug/L	0.735	1	60	232889	1	KED
	Cu	65	49.305	ug/L	0.605	1	30	116833	0	KED
	Zn	66	136.228	ug/L	2.335	1	33	83831	2	KED
	Zn	67	131.049	ug/L	2.425	1	4	13647	1	KED
	As	75	29.420	ug/L	0.398	1	2	9647	0	KED
	Y	89		ug/L			391138	646574	2	Standard
	Kr	83		ug/L			46	119	20	Standard
>	In-1	115		ug/L			10762	10786	1	KED
	Cd	111	25.393	ug/L	0.610	2	5	8490	0	KED
	Cd	114	24.934	ug/L	0.264	1	4	21541	0	KED
>	In	115		ug/L			626853	615072	3	Standard
	Ag	107	20.474	ug/L	0.145	0	83	413136	2	Standard
>	Tb	159		ug/L			1475140	1519329	1	Standard
	Pb	208	44.113	ug/L	0.731	1	279	4091401	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0396-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 07:09:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	82408	0	Standard
>	Sc	45		ug/L			782863	921389	1	Standard
	Cr	52	30.323	ug/L	0.670	2	19712	944746	1	Standard
	Cr	53	30.043	ug/L	0.462	1	193	106810	1	Standard
	Fe	54	12445.798	ug/L	26.273	0	85331	36862370	1	Standard
	Fe	57	12518.990	ug/L	202.111	1	21088	15092457	2	Standard
	Mn	55	153.448	ug/L	1.729	1	544	7173969	1	Standard
>	Ge	72		ug/L			46611	45841	1	KED
	Cu	63	48.901	ug/L	1.091	2	60	225690	1	KED
	Cu	65	48.716	ug/L	0.824	1	30	115583	0	KED
	Zn	66	134.433	ug/L	1.308	0	33	82828	1	KED
	Zn	67	126.404	ug/L	1.693	1	4	13181	0	KED
	As	75	28.693	ug/L	0.321	1	2	9421	0	KED
	Y	89		ug/L			391138	618564	3	Standard
	Kr	83		ug/L			46	117	12	Standard
>	In-1	115		ug/L			10762	10746	0	KED
	Cd	111	25.081	ug/L	0.335	1	5	8356	0	KED
	Cd	114	24.466	ug/L	0.394	1	4	21057	1	KED
>	In	115		ug/L			626853	617431	2	Standard
	Ag	107	23.871	ug/L	0.593	2	83	483387	0	Standard
>	Tb	159		ug/L			1475140	1518274	0	Standard
	Pb	208	42.138	ug/L	0.344	0	279	3906166	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0396-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 07:13:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	92548	2	Standard
⌈>	**Sc**	**45**		ug/L			782863	929120	2	Standard
|	**Cr**	**52**	**30.703**	ug/L	0.270	0	19712	964396	2	Standard
|	**Cr**	**53**	**30.923**	ug/L	0.679	2	193	110826	0	Standard
|	**Fe**	**54**	**12399.211**	ug/L	168.579	1	85331	37026508	1	Standard
|	**Fe**	**57**	**12252.104**	ug/L	256.637	2	21088	14893325	2	Standard
⌊	**Mn**	**55**	**155.348**	ug/L	2.260	1	544	7323007	1	Standard
⌈>	**Ge**	**72**		ug/L			46611	45978	1	KED
|	**Cu**	**63**	**50.027**	ug/L	0.705	1	60	231581	0	KED
|	**Cu**	**65**	**48.386**	ug/L	0.616	1	30	115147	0	KED
|	**Zn**	**66**	**134.274**	ug/L	1.766	1	33	82971	0	KED
|	**Zn**	**67**	**125.284**	ug/L	3.330	2	4	13101	0	KED
⌊	**As**	**75**	**29.737**	ug/L	0.451	1	2	9793	1	KED
	Y	**89**		ug/L			391138	652105	3	Standard
	Kr	**83**		ug/L			46	102	11	Standard
⌈>	**In-1**	**115**		ug/L			10762	10670	1	KED
|	**Cd**	**111**	**25.362**	ug/L	0.265	1	5	8390	1	KED
⌊	**Cd**	**114**	**25.575**	ug/L	0.325	1	4	21857	1	KED
⌈>	**In**	**115**		ug/L			626853	625891	2	Standard
⌊	**Ag**	**107**	**25.057**	ug/L	0.612	2	83	514454	2	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1533450	0	Standard
⌊	**Pb**	**208**	**43.882**	ug/L	0.316	0	279	4108573	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLJ
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 07:18:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	45644	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	778438	1	Standard
|	**Cr**	**52**	**-0.014**	ug/L	0.004	29	19712	19253	1	Standard
|	**Cr**	**53**	**-0.013**	ug/L	0.005	38	193	153	8	Standard
|	**Fe**	**54**	**0.761**	ug/L	0.221	29	85331	86742	1	Standard
|	**Fe**	**57**	**0.476**	ug/L	0.638	133	21088	21457	4	Standard
⌊	**Mn**	**55**	**0.006**	ug/L	0.001	10	544	778	4	Standard
⌈>	**Ge**	**72**		ug/L			46611	45609	1	KED
|	**Cu**	**63**	**0.183**	ug/L	0.060	32	60	902	32	KED
|	**Cu**	**65**	**0.190**	ug/L	0.061	32	30	480	32	KED
|	**Zn**	**66**	**0.349**	ug/L	0.154	44	33	246	40	KED
|	**Zn**	**67**	**0.343**	ug/L	0.160	46	4	40	42	KED
⌊	**As**	**75**	**0.030**	ug/L	0.048	161	2	12	132	KED
	Y	**89**		ug/L			391138	383408	2	Standard
	Kr	**83**		ug/L			46	50	9	Standard
⌈>	**In-1**	**115**		ug/L			10762	10756	0	KED
|	**Cd**	**111**	**-0.009**	ug/L	0.004	51	5	2	65	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.002	80	4	7	27	KED
⌈>	**In**	**115**		ug/L			626853	612630	1	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.000	6	83	149	1	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1459579	0	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.001	8	279	783	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 07:22:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	45497	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	802285	1	Standard
|	**Cr**	**52**	**46.981**	ug/L	0.595	1	19712	1263500	1	Standard
|	**Cr**	**53**	**46.976**	ug/L	0.627	1	193	145299	0	Standard
|	**Fe**	**54**	**4955.094**	ug/L	20.884	0	85331	12831624	1	Standard
|	**Fe**	**57**	**4950.044**	ug/L	53.932	1	21088	5209407	2	Standard
⌊	**Mn**	**55**	**47.708**	ug/L	0.161	0	544	1942700	2	Standard
⌈>	**Ge**	**72**		ug/L			46611	45258	2	KED
|	**Cu**	**63**	**52.829**	ug/L	0.771	1	60	240760	2	KED
|	**Cu**	**65**	**52.264**	ug/L	0.516	0	30	122424	1	KED
|	**Zn**	**66**	**52.120**	ug/L	1.127	2	33	31717	0	KED
|	**Zn**	**67**	**52.430**	ug/L	2.373	4	4	5397	2	KED
⌊	**As**	**75**	**50.312**	ug/L	0.504	1	2	16308	1	KED
	Y	**89**		ug/L			391138	388132	1	Standard
	Kr	**83**		ug/L			46	48	23	Standard
⌈>	**In-1**	**115**		ug/L			10762	10847	1	KED
|	**Cd**	**111**	**50.207**	ug/L	0.800	1	5	16879	0	KED
⌊	**Cd**	**114**	**49.668**	ug/L	0.681	1	4	43153	2	KED
⌈>	**In**	**115**		ug/L			626853	617028	2	Standard
⌊	**Ag**	**107**	**49.780**	ug/L	1.420	2	83	1007254	0	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1517301	1	Standard
⌊	**Pb**	**208**	**53.812**	ug/L	0.261	0	279	4985043	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 07:29:57
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	44736	0	Standard
⌈>	**Sc**	**45**		ug/L			782863	788946	2	Standard
|	**Cr**	**52**	**-0.017**	ug/L	0.012	68	19712	19411	1	Standard
|	**Cr**	**53**	**-0.018**	ug/L	0.001	7	193	139	1	Standard
|	**Fe**	**54**	**0.168**	ug/L	0.771	459	85331	86414	2	Standard
|	**Fe**	**57**	**0.380**	ug/L	0.395	104	21088	21639	1	Standard
⌊	**Mn**	**55**	**0.001**	ug/L	0.000	37	544	584	3	Standard
⌈>	**Ge**	**72**		ug/L			46611	47009	0	KED
|	**Cu**	**63**	**0.007**	ug/L	0.016	227	60	93	78	KED
|	**Cu**	**65**	**0.011**	ug/L	0.017	147	30	58	69	KED
|	**Zn**	**66**	**0.035**	ug/L	0.030	85	33	55	33	KED
|	**Zn**	**67**	**0.047**	ug/L	0.001	1	4	9	0	KED
⌊	**As**	**75**	**0.006**	ug/L	0.006	103	2	4	48	KED
	Y	**89**		ug/L			391138	390421	0	Standard
	Kr	**83**		ug/L			46	37	2	Standard
⌈>	**In-1**	**115**		ug/L			10762	11037	1	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.003	137	5	4	24	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.002	123	4	3	50	KED
⌈>	**In**	**115**		ug/L			626853	626706	2	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	44	83	118	11	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1459379	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	113	279	331	18	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0262-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 07:34:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	78208	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	940884	1	Standard
|	**Cr**	**52**	**0.081**	ug/L	0.006	7	19712	26211	0	Standard
|	**Cr**	**53**	**1.224**	ug/L	0.023	1	193	4668	2	Standard
|	**Fe**	**54**	**206.699**	ug/L	2.391	1	85331	726037	1	Standard
|	**Fe**	**57**	**253.858**	ug/L	1.932	0	21088	337349	1	Standard
⌊	**Mn**	**55**	**186.776**	ug/L	0.613	0	544	8917424	1	Standard
⌈>	**Ge**	**72**		ug/L			46611	42892	0	KED
|	**Cu**	**63**	**0.530**	ug/L	0.014	2	60	2343	3	KED
|	**Cu**	**65**	**0.533**	ug/L	0.023	4	30	1210	4	KED
|	**Zn**	**66**	**5.019**	ug/L	0.115	2	33	2922	2	KED
|	**Zn**	**67**	**5.888**	ug/L	0.067	1	4	578	0	KED
⌊	**As**	**75**	**0.592**	ug/L	0.043	7	2	183	6	KED
	Y	**89**		ug/L			391138	388659	0	Standard
	Kr	**83**		ug/L			46	62	8	Standard
⌈>	**In-1**	**115**		ug/L			10762	10062	3	KED
|	**Cd**	**111**	**0.020**	ug/L	0.008	40	5	11	26	KED
⌊	**Cd**	**114**	**0.019**	ug/L	0.012	62	4	20	49	KED
⌈>	**In**	**115**		ug/L			626853	600558	1	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	30	83	112	7	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1478863	1	Standard
⌊	**Pb**	**208**	**0.034**	ug/L	0.002	4	279	3340	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0717-DUP3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 07:39:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	76290	1	Standard
>	Sc	45		ug/L			782863	923572	1	Standard
	Cr	52	0.015	ug/L	0.015	96	19712	23724	2	Standard
	Cr	53	1.164	ug/L	0.018	1	193	4367	2	Standard
	Fe	54	197.293	ug/L	2.685	1	85331	684784	1	Standard
	Fe	57	246.472	ug/L	6.066	2	21088	322215	2	Standard
	Mn	55	181.486	ug/L	4.444	2	544	8505315	2	Standard
>	Ge	72		ug/L			46611	43203	0	KED
	Cu	63	0.466	ug/L	0.010	2	60	2082	1	KED
	Cu	65	0.490	ug/L	0.024	4	30	1123	4	KED
	Zn	66	2.605	ug/L	0.144	5	33	1542	5	KED
	Zn	67	3.564	ug/L	0.136	3	4	354	2	KED
	As	75	0.561	ug/L	0.017	3	2	175	2	KED
	Y	89		ug/L			391138	389960	2	Standard
	Kr	83		ug/L			46	76	15	Standard
>	In-1	115		ug/L			10762	9934	1	KED
	Cd	111	0.025	ug/L	0.009	35	5	12	20	KED
	Cd	114	0.019	ug/L	0.002	10	4	19	6	KED
>	In	115		ug/L			626853	602081	2	Standard
	Ag	107	0.001	ug/L	0.001	48	83	102	10	Standard
>	Tb	159		ug/L			1475140	1456266	1	Standard
	Pb	208	0.027	ug/L	0.001	2	279	2634	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0717-MS3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 07:44:01
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			44209	73767	2	Standard
> Sc	45		ug/L			782863	912240	1	Standard
Cr	52	19.897	ug/L	0.524	2	19712	621694	2	Standard
Cr	53	20.789	ug/L	0.240	1	193	73246	0	Standard
Fe	54	4310.584	ug/L	52.325	1	85331	12705402	1	Standard
Fe	57	4304.385	ug/L	62.530	1	21088	5153703	1	Standard
Mn STL	55	202.995	ug/L	3.715	1	544	9395947	1	Standard
> Ge	72		ug/L			46611	41140	0	KED
Cu	63	27.696	ug/L	0.215	0	60	114761	1	KED
Cu	65	27.289	ug/L	0.408	1	30	58125	1	KED
Zn	66	84.566	ug/L	1.396	1	33	46771	1	KED
Zn	67	80.150	ug/L	0.865	1	4	7502	0	KED
As	75	27.203	ug/L	0.152	0	2	8017	0	KED
Y	89		ug/L			391138	385084	2	Standard
Kr	83		ug/L			46	100	15	Standard
> In-1	115		ug/L			10762	9733	1	KED
Cd	111	26.047	ug/L	0.304	1	5	7859	0	KED
Cd	114	25.821	ug/L	0.294	1	4	20129	0	KED
> In	115		ug/L			626853	575626	1	Standard
Ag	107	25.011	ug/L	0.375	1	83	472296	0	Standard
> Tb	159		ug/L			1475140	1462366	0	Standard
Pb	208	27.415	ug/L	0.192	0	279	2447928	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLK
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 07:48:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	44067	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	755560	3	Standard
|	**Cr**	**52**	**0.013**	ug/L	0.017	134	19712	19331	1	Standard
|	**Cr**	**53**	**0.045**	ug/L	0.004	10	193	316	2	Standard
|	**Fe**	**54**	**0.374**	ug/L	0.821	219	85331	83219	0	Standard
|	**Fe**	**57**	**-3.641**	ug/L	0.682	18	21088	16751	3	Standard
⌊	**Mn**	**55**	**0.011**	ug/L	0.001	10	544	931	5	Standard
⌈>	**Ge**	**72**		ug/L			46611	44382	0	KED
|	**Cu**	**63**	**0.172**	ug/L	0.028	16	60	824	14	KED
|	**Cu**	**65**	**0.184**	ug/L	0.036	19	30	452	17	KED
|	**Zn**	**66**	**0.305**	ug/L	0.063	20	33	213	17	KED
|	**Zn**	**67**	**0.304**	ug/L	0.128	41	4	34	36	KED
⌊	**As**	**75**	**0.022**	ug/L	0.026	117	2	9	89	KED
	Y	**89**		ug/L			391138	376709	3	Standard
	Kr	**83**		ug/L			46	46	11	Standard
⌈>	**In-1**	**115**		ug/L			10762	10521	2	KED
|	**Cd**	**111**	**0.001**	ug/L	0.005	341	5	5	26	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.001	49	4	6	15	KED
⌈>	**In**	**115**		ug/L			626853	620911	1	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.000	6	83	134	4	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1471260	0	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.001	10	279	808	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 07:53:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	86321	0	Standard
>	Sc	45		ug/L			782863	922068	2	Standard
	Cr	52	11.488	ug/L	0.177	1	19712	372598	1	Standard
	Cr	53	11.529	ug/L	0.166	1	193	41153	1	Standard
	Fe	54	12556.364	ug/L	56.391	0	85331	37218560	2	Standard
	Fe	57	12388.224	ug/L	220.811	1	21088	14948811	3	Standard
	Mn	55	208.452	ug/L	2.043	0	544	9751543	1	Standard
>	Ge	72		ug/L			46611	45717	1	KED
	Cu	63	38.643	ug/L	0.692	1	60	177880	0	KED
	Cu	65	38.107	ug/L	0.866	2	30	90168	0	KED
	Zn	66	180.958	ug/L	3.939	2	33	111167	1	KED
	Zn	67	165.782	ug/L	5.369	3	4	17237	2	KED
	As	75	11.461	ug/L	0.243	2	2	3754	0	KED
	Y	89		ug/L			391138	638311	3	Standard
	Kr	83		ug/L			46	122	11	Standard
>	In-1	115		ug/L			10762	10745	0	KED
	Cd	111	0.128	ug/L	0.027	21	5	47	18	KED
	Cd	114	0.153	ug/L	0.019	12	4	136	12	KED
>	In	115		ug/L			626853	630346	1	Standard
	Ag	107	0.108	ug/L	0.005	4	83	2318	3	Standard
>	Tb	159		ug/L			1475140	1512215	1	Standard
	Pb	208	19.625	ug/L	0.204	1	279	1811994	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0452-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 07:57:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	85823	2	Standard
>	Sc	45		ug/L			782863	904541	2	Standard
	Cr	52	25.543	ug/L	0.216	0	19712	785014	2	Standard
	Cr	53	25.658	ug/L	0.076	0	193	89589	1	Standard
	Fe	54	14820.033	ug/L	267.454	1	85331	43064722	1	Standard
	Fe	57	14726.806	ug/L	87.408	0	21088	17424273	2	Standard
	Mn	55	185.979	ug/L	1.497	0	544	8536214	2	Standard
>	Ge	72		ug/L			46611	44578	1	KED
	Cu	63	48.963	ug/L	0.693	1	60	219757	0	KED
	Cu	65	48.513	ug/L	0.857	1	30	111924	0	KED
	Zn	66	177.302	ug/L	2.982	1	33	106212	0	KED
	Zn	67	163.623	ug/L	4.679	2	4	16588	1	KED
	As	75	13.589	ug/L	0.171	1	2	4340	1	KED
	Y	89		ug/L			391138	616917	2	Standard
	Kr	83		ug/L			46	105	13	Standard
>	In-1	115		ug/L			10762	10862	0	KED
	Cd	111	0.154	ug/L	0.035	22	5	56	20	KED
	Cd	114	0.131	ug/L	0.026	20	4	119	19	KED
>	In	115		ug/L			626853	633092	1	Standard
	Ag	107	0.108	ug/L	0.004	3	83	2328	4	Standard
>	Tb	159		ug/L			1475140	1498304	1	Standard
	Pb	208	18.997	ug/L	0.558	2	279	1737406	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0452-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 08:02:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			44209	83051	2	Standard
> Sc	45		ug/L			782863	890921	3	Standard
Cr	52	39.415	ug/L	0.456	1	19712	1180614	1	Standard
Cr	53	39.313	ug/L	0.499	1	193	135058	2	Standard
Fe	54	18376.517	ug/L	395.701	2	85331	52574933	3	Standard
Fe	57	18344.085	ug/L	215.296	1	21088	21368481	2	Standard
Mn	55	231.010	ug/L	4.707	2	544	10439944	1	Standard
> Ge	72		ug/L			46611	45065	0	KED
Cu	63	92.583	ug/L	0.716	0	60	420081	0	KED
Cu	65	91.049	ug/L	0.803	0	30	212368	0	KED
Zn	66	277.907	ug/L	1.013	0	33	168310	0	KED
Zn	67	259.386	ug/L	4.359	1	4	26588	1	KED
As	75	39.273	ug/L	0.197	0	2	12678	0	KED
Y	89		ug/L			391138	605034	2	Standard
Kr	83		ug/L			46	114	10	Standard
> In-1	115		ug/L			10762	10765	0	KED
Cd	111	25.018	ug/L	0.091	0	5	8351	1	KED
Cd	114	24.925	ug/L	0.248	0	4	21494	1	KED
> In	115		ug/L			626853	635734	3	Standard
Ag	107	24.136	ug/L	0.353	1	83	503282	2	Standard
> Tb	159		ug/L			1475140	1499336	0	Standard
Pb	208	51.079	ug/L	0.006	0	279	4675977	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0452-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 08:06:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	79431	1	Standard
>	Sc	45		ug/L			782863	912358	2	Standard
	Cr	52	32.743	ug/L	0.229	0	19712	1008351	1	Standard
	Cr	53	32.954	ug/L	0.878	2	193	115964	1	Standard
	Fe	54	13638.083	ug/L	341.307	2	85331	39977565	1	Standard
	Fe	57	13504.503	ug/L	303.741	2	21088	16116100	2	Standard
	Mn	55	225.742	ug/L	6.373	2	544	10446459	0	Standard
>	Ge	72		ug/L			46611	44448	1	KED
	Cu	63	69.173	ug/L	1.236	1	60	309594	2	KED
	Cu	65	67.275	ug/L	0.436	0	30	154782	1	KED
	Zn	66	301.876	ug/L	2.148	0	33	180307	0	KED
	Zn	67	279.608	ug/L	3.798	1	4	28272	2	KED
	As	75	46.204	ug/L	0.172	0	2	14710	0	KED
	Y	89		ug/L			391138	658505	2	Standard
	Kr	83		ug/L			46	108	9	Standard
>	In-1	115		ug/L			10762	10772	1	KED
	Cd	111	24.734	ug/L	0.636	2	5	8258	1	KED
	Cd	114	24.479	ug/L	0.203	0	4	21123	2	KED
>	In	115		ug/L			626853	627191	2	Standard
	Ag	107	23.987	ug/L	0.660	2	83	493390	1	Standard
>	Tb	159		ug/L			1475140	1502909	0	Standard
	Pb	208	54.281	ug/L	0.556	1	279	4980648	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0452-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 08:11:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	87816	1	Standard
>	Sc	45		ug/L			782863	936205	1	Standard
	Cr	52	31.890	ug/L	0.358	1	19712	1008455	1	Standard
	Cr	53	32.163	ug/L	0.203	0	193	116173	0	Standard
	Fe	54	12569.347	ug/L	335.076	2	85331	37827094	3	Standard
	Fe	57	12264.960	ug/L	59.858	0	21088	15024179	1	Standard
	Mn	55	228.174	ug/L	3.540	1	544	10840138	2	Standard
>	Ge	72		ug/L			46611	45297	0	KED
	Cu	63	65.414	ug/L	1.274	1	60	298336	1	KED
	Cu	65	65.022	ug/L	1.336	2	30	152437	1	KED
	Zn	66	257.735	ug/L	3.580	1	33	156885	0	KED
	Zn	67	236.625	ug/L	4.216	1	4	24379	1	KED
	As	75	35.715	ug/L	0.472	1	2	11588	0	KED
	Y	89		ug/L			391138	657842	0	Standard
	Kr	83		ug/L			46	114	5	Standard
>	In-1	115		ug/L			10762	10978	1	KED
	Cd	111	24.704	ug/L	0.306	1	5	8408	1	KED
	Cd	114	24.875	ug/L	0.124	0	4	21874	0	KED
>	In	115		ug/L			626853	637898	1	Standard
	Ag	107	25.270	ug/L	0.058	0	83	528856	1	Standard
>	Tb	159		ug/L			1475140	1527328	0	Standard
	Pb	208	47.730	ug/L	0.527	1	279	4450781	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLL
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 08:15:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	45690	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	776655	0	Standard
|	**Cr**	**52**	**-0.045**	ug/L	0.014	31	19712	18412	1	Standard
|	**Cr**	**53**	**-0.005**	ug/L	0.006	119	193	176	9	Standard
|	**Fe**	**54**	**1.526**	ug/L	1.600	104	85331	88458	4	Standard
|	**Fe**	**57**	**2.547**	ug/L	1.033	40	21088	23506	4	Standard
⌊	**Mn**	**55**	**0.021**	ug/L	0.021	97	544	1385	59	Standard
⌈>	**Ge**	**72**		ug/L			46611	45722	2	KED
|	**Cu**	**63**	**0.160**	ug/L	0.005	3	60	794	3	KED
|	**Cu**	**65**	**0.148**	ug/L	0.003	2	30	379	3	KED
|	**Zn**	**66**	**0.286**	ug/L	0.028	9	33	208	10	KED
|	**Zn**	**67**	**0.208**	ug/L	0.070	33	4	26	29	KED
⌊	**As**	**75**	**0.007**	ug/L	0.004	56	2	4	29	KED
	Y	**89**		ug/L			391138	389877	2	Standard
	Kr	**83**		ug/L			46	43	10	Standard
⌈>	**In-1**	**115**		ug/L			10762	10718	2	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.005	75	5	2	57	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.001	55	4	2	44	KED
⌈>	**In**	**115**		ug/L			626853	633154	2	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.003	72	83	177	36	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1490532	1	Standard
⌊	**Pb**	**208**	**0.009**	ug/L	0.005	53	279	1091	40	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVJ
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 08:20:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	45964	2	Standard
>	**Sc**	**45**		ug/L			782863	791124	2	Standard
	Cr	**52**	**47.239**	ug/L	1.325	2	19712	1252252	0	Standard
	Cr	**53**	**47.505**	ug/L	1.226	2	193	144854	0	Standard
	Fe	**54**	**4929.345**	ug/L	123.595	2	85331	12583217	1	Standard
	Fe	**57**	**4906.690**	ug/L	61.872	1	21088	5090866	1	Standard
	Mn	**55**	**48.385**	ug/L	1.458	3	544	1942185	2	Standard
>	**Ge**	**72**		ug/L			46611	45985	0	KED
	Cu	**63**	**52.248**	ug/L	0.526	1	60	241940	1	KED
	Cu	**65**	**51.448**	ug/L	0.267	0	30	122469	1	KED
	Zn	**66**	**51.599**	ug/L	0.428	0	33	31913	0	KED
	Zn	**67**	**51.141**	ug/L	0.834	1	4	5352	1	KED
	As	**75**	**49.587**	ug/L	0.867	1	2	16332	1	KED
	Y	**89**		ug/L			391138	394472	1	Standard
	Kr	**83**		ug/L			46	49	7	Standard
>	**In-1**	**115**		ug/L			10762	10556	1	KED
	Cd	**111**	**51.000**	ug/L	1.255	2	5	16682	1	KED
	Cd	**114**	**51.192**	ug/L	0.639	1	4	43280	2	KED
>	**In**	**115**		ug/L			626853	618363	0	Standard
	Ag	**107**	**51.661**	ug/L	0.651	1	83	1048054	1	Standard
>	**Tb**	**159**		ug/L			1475140	1519479	1	Standard
	Pb	**208**	**54.584**	ug/L	0.779	1	279	5063309	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBJ
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 08:27:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	44698	2	Standard
⌈>	**Sc**	**45**		ug/L			782863	785067	0	Standard
|	**Cr**	**52**	**-0.023**	ug/L	0.020	85	19712	19170	3	Standard
|	**Cr**	**53**	**-0.016**	ug/L	0.001	5	193	146	1	Standard
|	**Fe**	**54**	**0.324**	ug/L	0.484	149	85331	86386	1	Standard
|	**Fe**	**57**	**0.523**	ug/L	0.789	150	21088	21685	4	Standard
⌊	**Mn**	**55**	**0.004**	ug/L	0.004	117	544	692	24	Standard
⌈>	**Ge**	**72**		ug/L			46611	45993	1	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.002	139	60	53	16	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.001	349	30	29	9	KED
|	**Zn**	**66**	**0.016**	ug/L	0.018	111	33	42	25	KED
|	**Zn**	**67**	**0.025**	ug/L	0.042	169	4	6	62	KED
⌊	**As**	**75**	**0.006**	ug/L	0.002	29	2	4	13	KED
	Y	**89**		ug/L			391138	386613	1	Standard
	Kr	**83**		ug/L			46	59	14	Standard
⌈>	**In-1**	**115**		ug/L			10762	10882	1	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.002	29	5	3	17	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.004	133	4	7	42	KED
⌈>	**In**	**115**		ug/L			626853	617181	2	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	43	83	122	13	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1464885	0	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.002	110	279	452	42	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0375-02
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 08:32:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	78092	0	Standard
>	Sc	45		ug/L			782863	822227	1	Standard
	Cr	52	1.138	ug/L	0.051	4	19712	51547	2	Standard
	Cr	53	1.200	ug/L	0.029	2	193	4000	2	Standard
	Fe	54	569.506	ug/L	9.796	1	85331	1590961	3	Standard
	Fe	57	543.820	ug/L	9.733	1	21088	606224	2	Standard
	Mn	55	94.855	ug/L	2.012	2	544	3957541	2	Standard
>	Ge	72		ug/L			46611	45881	0	KED
	Cu	63	2.508	ug/L	0.057	2	60	11642	1	KED
	Cu	65	2.551	ug/L	0.036	1	30	6085	0	KED
	Zn	66	40.141	ug/L	0.597	1	33	24776	0	KED
	Zn	67	38.753	ug/L	1.420	3	4	4048	3	KED
	As	75	0.556	ug/L	0.022	4	2	184	3	KED
	Y	89		ug/L			391138	404034	0	Standard
	Kr	83		ug/L			46	46	9	Standard
>	In-1	115		ug/L			10762	10853	1	KED
	Cd	111	0.059	ug/L	0.015	24	5	24	17	KED
	Cd	114	0.062	ug/L	0.011	17	4	59	14	KED
>	In	115		ug/L			626853	643451	1	Standard
	Ag	107	0.005	ug/L	0.002	38	83	194	22	Standard
>	Tb	159		ug/L			1475140	1520929	1	Standard
	Pb	208	0.476	ug/L	0.012	2	279	44517	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0018-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 08:36:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	76775	1	Standard
⌈>	Sc	45		ug/L			782863	813826	2	Standard
|	Cr	52	1.089	ug/L	0.042	3	19712	49715	1	Standard
|	Cr	53	1.133	ug/L	0.008	0	193	3750	2	Standard
|	Fe	54	552.830	ug/L	3.862	0	85331	1530859	2	Standard
|	Fe	57	523.409	ug/L	0.452	0	21088	578323	2	Standard
⌊	Mn	55	89.542	ug/L	2.477	2	544	3696160	0	Standard
⌈>	Ge	72		ug/L			46611	46271	1	KED
|	Cu	63	2.390	ug/L	0.037	1	60	11190	1	KED
|	Cu	65	2.396	ug/L	0.015	0	30	5766	1	KED
|	Zn	66	37.516	ug/L	0.046	0	33	23356	1	KED
|	Zn	67	35.393	ug/L	1.148	3	4	3728	2	KED
⌊	As	75	0.545	ug/L	0.024	4	2	182	3	KED
	Y	89		ug/L			391138	406147	2	Standard
	Kr	83		ug/L			46	48	30	Standard
⌈>	In-1	115		ug/L			10762	10639	1	KED
|	Cd	111	0.050	ug/L	0.004	8	5	21	6	KED
⌊	Cd	114	0.045	ug/L	0.005	11	4	43	10	KED
⌈>	In	115		ug/L			626853	641956	2	Standard
⌊	Ag	107	0.005	ug/L	0.001	13	83	200	6	Standard
⌈>	Tb	159		ug/L			1475140	1537365	1	Standard
⌊	Pb	208	0.462	ug/L	0.011	2	279	43632	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0018-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 08:41:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	73687	1	Standard
>	Sc	45		ug/L			782863	813772	2	Standard
	Cr	52	25.545	ug/L	0.221	0	19712	706276	2	Standard
	Cr	53	25.666	ug/L	0.494	1	193	80603	0	Standard
	Fe	54	5425.496	ug/L	24.041	0	85331	14242691	2	Standard
	Fe	57	5372.611	ug/L	91.155	1	21088	5731416	0	Standard
	Mn	55	114.816	ug/L	1.215	1	544	4741713	2	Standard
>	Ge	72		ug/L			46611	44602	1	KED
	Cu	63	30.397	ug/L	0.283	0	60	136535	0	KED
	Cu	65	29.930	ug/L	0.631	2	30	69103	0	KED
	Zn	66	123.388	ug/L	3.168	2	33	73963	1	KED
	Zn	67	115.922	ug/L	1.942	1	4	11763	2	KED
	As	75	25.919	ug/L	0.471	1	2	8280	0	KED
	Y	89		ug/L			391138	402236	2	Standard
	Kr	83		ug/L			46	54	16	Standard
>	In-1	115		ug/L			10762	10010	2	KED
	Cd	111	26.753	ug/L	0.358	1	5	8305	4	KED
	Cd	114	26.470	ug/L	0.374	1	4	21230	4	KED
>	In	115		ug/L			626853	618785	2	Standard
	Ag	107	26.328	ug/L	0.368	1	83	534463	1	Standard
>	Tb	159		ug/L			1475140	1520052	0	Standard
	Pb	208	28.352	ug/L	0.185	0	279	2631440	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLM
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 08:46:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	44470	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	772637	3	Standard
|	**Cr**	**52**	**-0.016**	ug/L	0.027	172	19712	19037	1	Standard
|	**Cr**	**53**	**-0.008**	ug/L	0.005	67	193	166	6	Standard
|	**Fe**	**54**	**0.741**	ug/L	0.394	53	85331	86029	2	Standard
|	**Fe**	**57**	**-4.777**	ug/L	0.300	6	21088	15985	1	Standard
⌊	**Mn**	**55**	**0.009**	ug/L	0.001	9	544	882	6	Standard
⌈>	**Ge**	**72**		ug/L			46611	46269	0	KED
|	**Cu**	**63**	**0.140**	ug/L	0.009	6	60	711	5	KED
|	**Cu**	**65**	**0.148**	ug/L	0.022	14	30	383	13	KED
|	**Zn**	**66**	**0.223**	ug/L	0.038	17	33	171	13	KED
|	**Zn**	**67**	**0.266**	ug/L	0.053	19	4	32	17	KED
⌊	**As**	**75**	**0.010**	ug/L	0.005	53	2	5	32	KED
	Y	**89**		ug/L			391138	395251	1	Standard
	Kr	**83**		ug/L			46	50	21	Standard
⌈>	**In-1**	**115**		ug/L			10762	10450	1	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.004	59	5	2	57	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.007	335	4	6	88	KED
⌈>	**In**	**115**		ug/L			626853	613885	2	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	40	83	128	13	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1480365	2	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.000	4	279	843	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 08:50:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	95288	1	Standard
>	Sc	45		ug/L			782863	975443	2	Standard
	Cr	52	13.264	ug/L	0.119	0	19712	451316	2	Standard
	Cr	53	13.335	ug/L	0.188	1	193	50317	1	Standard
	Fe	54	14644.290	ug/L	143.430	0	85331	45897594	2	Standard
	Fe	57	14539.469	ug/L	143.499	0	21088	18550414	2	Standard
	Mn	55	140.124	ug/L	2.123	1	544	6934073	1	Standard
>	Ge	72		ug/L			46611	45153	1	KED
	Cu	63	37.300	ug/L	0.427	1	60	169615	1	KED
	Cu	65	37.105	ug/L	0.409	1	30	86738	1	KED
	Zn	66	64.757	ug/L	0.707	1	33	39316	0	KED
	Zn	67	62.449	ug/L	0.139	0	4	6417	1	KED
	As	75	6.926	ug/L	0.106	1	2	2242	2	KED
	Y	89		ug/L			391138	719143	2	Standard
	Kr	83		ug/L			46	113	9	Standard
>	In-1	115		ug/L			10762	10749	0	KED
	Cd	111	0.186	ug/L	0.016	8	5	66	7	KED
	Cd	114	0.165	ug/L	0.022	13	4	147	12	KED
>	In	115		ug/L			626853	614533	2	Standard
	Ag	107	0.207	ug/L	0.004	1	83	4257	1	Standard
>	Tb	159		ug/L			1475140	1503069	1	Standard
	Pb	208	17.413	ug/L	0.179	1	279	1598057	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0504-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 08:55:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	96285	2	Standard
>	Sc	45		ug/L			782863	960899	1	Standard
	Cr	52	17.442	ug/L	0.189	1	19712	577069	1	Standard
	Cr	53	17.210	ug/L	0.313	1	193	63921	2	Standard
	Fe	54	16237.783	ug/L	192.755	1	85331	50129218	2	Standard
	Fe	57	16124.525	ug/L	205.609	1	21088	20266404	2	Standard
	Mn	55	165.814	ug/L	0.841	0	544	8084500	1	Standard
>	Ge	72		ug/L			46611	45455	1	KED
	Cu	63	39.694	ug/L	1.004	2	60	181646	0	KED
	Cu	65	39.122	ug/L	0.992	2	30	92033	1	KED
	Zn	66	69.732	ug/L	1.338	1	33	42611	0	KED
	Zn	67	66.708	ug/L	2.417	3	4	6897	1	KED
	As	75	7.194	ug/L	0.131	1	2	2343	1	KED
	Y	89		ug/L			391138	727460	3	Standard
	Kr	83		ug/L			46	126	4	Standard
>	In-1	115		ug/L			10762	10621	0	KED
	Cd	111	0.211	ug/L	0.031	14	5	74	13	KED
	Cd	114	0.191	ug/L	0.041	21	4	167	20	KED
>	In	115		ug/L			626853	611638	3	Standard
	Ag	107	0.204	ug/L	0.002	1	83	4179	3	Standard
>	Tb	159		ug/L			1475140	1522067	1	Standard
	Pb	208	17.296	ug/L	0.124	0	279	1607454	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0504-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 08:59:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	85459	1	Standard
>	Sc	45		ug/L			782863	950769	1	Standard
	Cr	52	33.782	ug/L	0.316	0	19712	1083478	1	Standard
	Cr	53	33.172	ug/L	0.157	0	193	121676	0	Standard
	Fe	54	14545.525	ug/L	131.659	0	85331	44439968	1	Standard
	Fe	57	14242.770	ug/L	322.964	2	21088	17716299	3	Standard
	Mn	55	160.895	ug/L	1.259	0	544	7762196	0	Standard
>	Ge	72		ug/L			46611	45538	0	KED
	Cu	63	64.207	ug/L	0.829	1	60	294392	0	KED
	Cu	65	64.123	ug/L	1.407	2	30	151133	1	KED
	Zn	66	149.281	ug/L	1.752	1	33	91366	0	KED
	Zn	67	140.955	ug/L	0.841	0	4	14603	1	KED
	As	75	30.968	ug/L	0.048	0	2	10102	0	KED
	Y	89		ug/L			391138	703098	1	Standard
	Kr	83		ug/L			46	125	9	Standard
>	In-1	115		ug/L			10762	10409	2	KED
	Cd	111	25.896	ug/L	1.010	3	5	8352	1	KED
	Cd	114	25.665	ug/L	0.465	1	4	21393	1	KED
>	In	115		ug/L			626853	606955	3	Standard
	Ag	107	24.930	ug/L	0.516	2	83	496330	3	Standard
>	Tb	159		ug/L			1475140	1523907	1	Standard
	Pb	208	46.457	ug/L	0.684	1	279	4321815	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0504-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 09:04:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	85438	2	Standard
>	Sc	45		ug/L			782863	956897	1	Standard
	Cr	52	34.390	ug/L	0.111	0	19712	1109652	0	Standard
	Cr	53	34.574	ug/L	0.415	1	193	127621	0	Standard
	Fe	54	15235.403	ug/L	281.411	1	85331	46839538	2	Standard
	Fe	57	15211.440	ug/L	164.826	1	21088	19040395	2	Standard
	Mn	55	172.505	ug/L	2.353	1	544	8377030	2	Standard
>	Ge	72		ug/L			46611	45123	0	KED
	Cu	63	66.845	ug/L	0.780	1	60	303701	1	KED
	Cu	65	66.299	ug/L	0.757	1	30	154844	0	KED
	Zn	66	147.340	ug/L	1.712	1	33	89359	1	KED
	Zn	67	139.472	ug/L	1.530	1	4	14317	0	KED
	As	75	30.475	ug/L	0.177	0	2	9850	0	KED
	Y	89		ug/L			391138	722048	3	Standard
	Kr	83		ug/L			46	130	0	Standard
>	In-1	115		ug/L			10762	10360	1	KED
	Cd	111	25.688	ug/L	0.291	1	5	8250	0	KED
	Cd	114	25.402	ug/L	0.436	1	4	21077	0	KED
>	In	115		ug/L			626853	609924	1	Standard
	Ag	107	19.996	ug/L	0.392	1	83	400187	2	Standard
>	Tb	159		ug/L			1475140	1526033	0	Standard
	Pb	208	45.310	ug/L	0.235	0	279	4221737	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0504-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 09:08:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			44209	97193	2	Standard
> Sc	45		ug/L			782863	980244	1	Standard
Cr	52	33.017	ug/L	0.158	0	19712	1092328	1	Standard
Cr	53	33.024	ug/L	0.156	0	193	124894	1	Standard
Fe	54	14923.218	ug/L	201.847	1	85331	47004243	2	Standard
Fe	57	14566.864	ug/L	24.739	0	21088	18678118	1	Standard
Mn	55	161.712	ug/L	1.924	1	544	8044220	2	Standard
> Ge	72		ug/L			46611	45085	0	KED
Cu	63	64.325	ug/L	0.823	1	60	292010	0	KED
Cu	65	63.679	ug/L	0.450	0	30	148605	0	KED
Zn	66	143.589	ug/L	0.653	0	33	87014	0	KED
Zn	67	138.441	ug/L	2.072	1	4	14199	1	KED
As	75	31.385	ug/L	0.160	0	2	10136	0	KED
Y	89		ug/L			391138	728627	1	Standard
Kr	83		ug/L			46	130	10	Standard
> In-1	115		ug/L			10762	10617	1	KED
Cd	111	25.614	ug/L	0.671	2	5	8429	0	KED
Cd	114	25.520	ug/L	0.813	3	4	21695	1	KED
> In	115		ug/L			626853	624642	2	Standard
Ag	107	26.013	ug/L	0.772	2	83	532899	2	Standard
> Tb	159		ug/L			1475140	1519977	0	Standard
Pb	208	45.918	ug/L	0.686	1	279	4261216	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLN
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 09:13:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	46185	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	781681	0	Standard
|	**Cr**	**52**	**-0.037**	ug/L	0.007	19	19712	18718	1	Standard
|	**Cr**	**53**	**-0.007**	ug/L	0.008	117	193	173	13	Standard
|	**Fe**	**54**	**2.284**	ug/L	2.385	104	85331	90934	6	Standard
|	**Fe**	**57**	**4.285**	ug/L	2.060	48	21088	25436	8	Standard
⌊	**Mn**	**55**	**0.034**	ug/L	0.041	119	544	1894	85	Standard
⌈>	**Ge**	**72**		ug/L			46611	45425	1	KED
|	**Cu**	**63**	**0.159**	ug/L	0.004	2	60	786	2	KED
|	**Cu**	**65**	**0.148**	ug/L	0.011	7	30	377	8	KED
|	**Zn**	**66**	**0.252**	ug/L	0.018	7	33	186	4	KED
|	**Zn**	**67**	**0.296**	ug/L	0.040	13	4	34	11	KED
⌊	**As**	**75**	**0.009**	ug/L	0.006	67	2	5	37	KED
	Y	**89**		ug/L			391138	391020	2	Standard
	Kr	**83**		ug/L			46	57	12	Standard
⌈>	**In-1**	**115**		ug/L			10762	10606	0	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.000	1	5	3	0	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.002	308	4	4	50	KED
⌈>	**In**	**115**		ug/L			626853	611894	1	Standard
⌊	**Ag**	**107**	**0.006**	ug/L	0.005	90	83	197	54	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1473542	1	Standard
⌊	**Pb**	**208**	**0.011**	ug/L	0.007	65	279	1241	50	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVK
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 09:18:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	46450	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	786514	2	Standard
|	**Cr**	**52**	**47.650**	ug/L	0.904	1	19712	1255992	2	Standard
|	**Cr**	**53**	**46.870**	ug/L	0.107	0	193	142142	2	Standard
|	**Fe**	**54**	**5020.312**	ug/L	13.132	0	85331	12743515	2	Standard
|	**Fe**	**57**	**4990.017**	ug/L	88.920	1	21088	5146352	0	Standard
⌊	**Mn**	**55**	**48.620**	ug/L	0.047	0	544	1940799	2	Standard
⌈>	**Ge**	**72**		ug/L			46611	45656	1	KED
|	**Cu**	**63**	**52.725**	ug/L	0.713	1	60	242360	0	KED
|	**Cu**	**65**	**52.268**	ug/L	0.682	1	30	123510	0	KED
|	**Zn**	**66**	**51.988**	ug/L	0.367	0	33	31922	1	KED
|	**Zn**	**67**	**51.121**	ug/L	1.762	3	4	5311	2	KED
⌊	**As**	**75**	**49.807**	ug/L	0.903	1	2	16285	0	KED
	Y	**89**		ug/L			391138	402448	3	Standard
	Kr	**83**		ug/L			46	50	18	Standard
⌈>	**In-1**	**115**		ug/L			10762	10362	0	KED
|	**Cd**	**111**	**52.045**	ug/L	0.180	0	5	16716	0	KED
⌊	**Cd**	**114**	**51.748**	ug/L	0.079	0	4	42946	0	KED
⌈>	**In**	**115**		ug/L			626853	615543	2	Standard
⌊	**Ag**	**107**	**50.620**	ug/L	0.465	0	83	1022353	3	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1509062	1	Standard
⌊	**Pb**	**208**	**54.350**	ug/L	0.582	1	279	5007230	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBK
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 09:25:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	45265	3	Standard
⌈>	**Sc**	**45**		ug/L			782863	787425	0	Standard
|	**Cr**	**52**	**-0.024**	ug/L	0.015	63	19712	19198	1	Standard
|	**Cr**	**53**	**-0.020**	ug/L	0.006	27	193	134	13	Standard
|	**Fe**	**54**	**-0.571**	ug/L	0.261	45	85331	84385	1	Standard
|	**Fe**	**57**	**1.003**	ug/L	0.328	32	21088	22244	2	Standard
⌊	**Mn**	**55**	**0.001**	ug/L	0.000	34	544	590	1	Standard
⌈>	**Ge**	**72**		ug/L			46611	45832	2	KED
|	**Cu**	**63**	**0.001**	ug/L	0.000	45	60	64	5	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.003	141	30	25	26	KED
|	**Zn**	**66**	**0.043**	ug/L	0.023	54	33	59	26	KED
|	**Zn**	**67**	**0.056**	ug/L	0.039	69	4	10	39	KED
⌊	**As**	**75**	**0.006**	ug/L	0.002	35	2	4	19	KED
	Y	**89**		ug/L			391138	390346	2	Standard
	Kr	**83**		ug/L			46	43	38	Standard
⌈>	**In-1**	**115**		ug/L			10762	10937	1	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.009	430	5	4	65	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.006	208	4	7	68	KED
⌈>	**In**	**115**		ug/L			626853	609085	2	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.000	9	83	131	2	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1472633	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	19	279	318	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0736-04
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 09:29:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	86647	2	Standard
⌈>	**Sc**	**45**		ug/L			782863	828287	3	Standard
|	**Cr**	**52**	**0.557**	ug/L	0.004	0	19712	36083	3	Standard
|	**Cr**	**53**	**0.726**	ug/L	0.002	0	193	2521	3	Standard
|	**Fe**	**54**	**-1.443**	ug/L	0.253	17	85331	86455	3	Standard
|	**Fe**	**57**	**236.313**	ug/L	4.852	2	21088	277915	2	Standard
⌊	**Mn**	**55**	**6.151**	ug/L	0.078	1	544	259029	1	Standard
⌈>	**Ge**	**72**		ug/L			46611	38994	0	KED
|	**Cu**	**63**	**0.634**	ug/L	0.009	1	60	2538	1	KED
|	**Cu**	**65**	**0.597**	ug/L	0.029	4	30	1231	4	KED
|	**Zn**	**66**	**1.530**	ug/L	0.047	3	33	829	2	KED
|	**Zn**	**67**	**4.661**	ug/L	0.314	6	4	417	7	KED
⌊	**As**	**75**	**1.565**	ug/L	0.007	0	2	439	0	KED
	Y	**89**		ug/L			391138	380911	2	Standard
	Kr	**83**		ug/L			46	52	9	Standard
⌈>	**In-1**	**115**		ug/L			10762	9336	1	KED
|	**Cd**	**111**	**0.026**	ug/L	0.013	47	5	12	31	KED
⌊	**Cd**	**114**	**0.041**	ug/L	0.015	37	4	34	31	KED
⌈>	**In**	**115**		ug/L			626853	554247	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	106	83	83	13	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1427218	1	Standard
⌊	**Pb**	**208**	**0.017**	ug/L	0.000	2	279	1719	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0736-06
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 09:34:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	85605	2	Standard
⌈>	**Sc**	**45**		ug/L			782863	819619	3	Standard
|	**Cr**	**52**	**0.136**	ug/L	0.026	19	19712	24295	0	Standard
|	**Cr**	**53**	**0.319**	ug/L	0.020	6	193	1206	2	Standard
|	**Fe**	**54**	**0.405**	ug/L	0.528	130	85331	90384	2	Standard
|	**Fe**	**57**	**188.281**	ug/L	3.792	2	21088	223580	1	Standard
⌊	**Mn**	**55**	**0.378**	ug/L	0.007	1	544	16301	2	Standard
⌈>	**Ge**	**72**		ug/L			46611	38239	0	KED
|	**Cu**	**63**	**4.728**	ug/L	0.093	1	60	18247	1	KED
|	**Cu**	**65**	**4.634**	ug/L	0.128	2	30	9194	1	KED
|	**Zn**	**66**	**8.473**	ug/L	0.202	2	33	4379	1	KED
|	**Zn**	**67**	**9.422**	ug/L	0.356	3	4	822	2	KED
⌊	**As**	**75**	**1.014**	ug/L	0.049	4	2	279	3	KED
	Y	**89**		ug/L			391138	382815	4	Standard
	Kr	**83**		ug/L			46	47	4	Standard
⌈>	**In-1**	**115**		ug/L			10762	8899	1	KED
|	**Cd**	**111**	**0.026**	ug/L	0.007	24	5	11	14	KED
⌊	**Cd**	**114**	**0.015**	ug/L	0.003	21	4	14	14	KED
⌈>	**In**	**115**		ug/L			626853	570111	2	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.000	16	83	114	3	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1436009	1	Standard
⌊	**Pb**	**208**	**0.235**	ug/L	0.004	1	279	20878	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0736-08
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 09:38:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	78492	2	Standard
⌈>	**Sc**	**45**		ug/L			782863	749261	3	Standard
|	**Cr**	**52**	**0.035**	ug/L	0.011	32	19712	19728	2	Standard
|	**Cr**	**53**	**0.150**	ug/L	0.004	2	193	617	3	Standard
|	**Fe**	**54**	**26.827**	ug/L	1.241	4	85331	146073	3	Standard
|	**Fe**	**57**	**293.657**	ug/L	4.635	1	21088	307640	4	Standard
⌊	**Mn**	**55**	**95.897**	ug/L	0.783	0	544	3645536	2	Standard
⌈>	**Ge**	**72**		ug/L			46611	36644	1	KED
|	**Cu**	**63**	**0.282**	ug/L	0.006	1	60	1087	2	KED
|	**Cu**	**65**	**0.268**	ug/L	0.005	1	30	532	1	KED
|	**Zn**	**66**	**1.575**	ug/L	0.033	2	33	801	2	KED
|	**Zn**	**67**	**2.747**	ug/L	0.028	1	4	232		KED
⌊	**As**	**75**	**0.180**	ug/L	0.004	2	2	49	3	KED
	Y	**89**		ug/L			391138	363448	2	Standard
	Kr	**83**		ug/L			46	59	32	Standard
⌈>	**In-1**	**115**		ug/L			10762	8539	0	KED
|	**Cd**	**111**	**0.023**	ug/L	0.008	36	5	10	21	KED
⌊	**Cd**	**114**	**0.026**	ug/L	0.008	31	4	21	25	KED
⌈>	**In**	**115**		ug/L			626853	539001	1	Standard
⌊	**Ag**	**107**	**0.007**	ug/L	0.012	174	83	196	111	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1393896	2	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.000	5	279	728	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0736-10
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 09:43:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	82279	4	Standard
>	**Sc**	**45**		ug/L			782863	727851	7	Standard
	Cr	**52**	**0.083**	ug/L	0.057	68	19712	20260	3	Standard
	Cr	**53**	**0.202**	ug/L	0.035	17	193	741	6	Standard
	Fe	**54**	**272.677**	ug/L	23.769	8	85331	713379	4	Standard
	Fe	**57**	**469.269**	ug/L	33.707	7	21088	464452	3	Standard
	Mn	**55**	**77.926**	ug/L	5.352	6	544	2871619	5	Standard
>	**Ge**	**72**		ug/L			46611	36531	1	KED
	Cu	**63**	**0.251**	ug/L	0.012	4	60	972	5	KED
	Cu	**65**	**0.242**	ug/L	0.017	6	30	481	5	KED
	Zn	**66**	**8.154**	ug/L	0.074	0	33	4027	0	KED
	Zn	**67**	**8.632**	ug/L	0.381	4	4	720	4	KED
	As	**75**	**0.557**	ug/L	0.039	7	2	147	7	KED
	Y	**89**		ug/L			391138	356776	10	Standard
	Kr	**83**		ug/L			46	67	11	Standard
>	**In-1**	**115**		ug/L			10762	8207	1	KED
	Cd	**111**	**0.008**	ug/L	0.008	91	5	6	32	KED
	Cd	**114**	**0.005**	ug/L	0.004	94	4	6	42	KED
>	**In**	**115**		ug/L			626853	523601	9	Standard
	Ag	**107**	**0.000**	ug/L	0.002	770	83	74	46	Standard
>	**Tb**	**159**		ug/L			1475140	1357879	9	Standard
	Pb	**208**	**0.029**	ug/L	0.004	13	279	2652	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0736-12
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 09:48:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	79251	2	Standard
⌈>	**Sc**	**45**		ug/L			782863	734918	2	Standard
|	**Cr**	**52**	**0.042**	ug/L	0.007	16	19712	19526	2	Standard
|	**Cr**	**53**	**0.151**	ug/L	0.003	1	193	609	1	Standard
|	**Fe**	**54**	**263.442**	ug/L	4.806	1	85331	700580	1	Standard
|	**Fe**	**57**	**462.937**	ug/L	8.289	1	21088	464044	1	Standard
⌊	**Mn**	**55**	**75.152**	ug/L	1.161	1	544	2802062	1	Standard
⌈>	**Ge**	**72**		ug/L			46611	36152	0	KED
|	**Cu**	**63**	**0.140**	ug/L	0.011	7	60	555	7	KED
|	**Cu**	**65**	**0.137**	ug/L	0.014	10	30	279	9	KED
|	**Zn**	**66**	**7.598**	ug/L	0.164	2	33	3716	1	KED
|	**Zn**	**67**	**7.934**	ug/L	0.195	2	4	655	3	KED
⌊	**As**	**75**	**0.608**	ug/L	0.031	5	2	159	4	KED
	Y	**89**		ug/L			391138	362828	0	Standard
	Kr	**83**		ug/L			46	50	13	Standard
⌈>	**In-1**	**115**		ug/L			10762	8440	0	KED
|	**Cd**	**111**	**0.008**	ug/L	0.004	52	5	6	18	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.004	83	4	6	35	KED
⌈>	**In**	**115**		ug/L			626853	541453	1	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.000	1664	83	71	1	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1383942	0	Standard
⌊	**Pb**	**208**	**0.021**	ug/L	0.001	3	279	2010	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0736-02
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 09:52:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	78253	2	Standard
⌈>	**Sc**	**45**		ug/L			782863	784179	4	Standard
|	**Cr**	**52**	**0.444**	ug/L	0.033	7	19712	31215	2	Standard
|	**Cr**	**53**	**0.724**	ug/L	0.006	0	193	2378	4	Standard
|	**Fe**	**54**	**-4.956**	ug/L	0.805	16	85331	72952	2	Standard
|	**Fe**	**57**	**225.738**	ug/L	5.765	2	21088	252158	2	Standard
⌊	**Mn**	**55**	**0.109**	ug/L	0.005	4	544	4878	1	Standard
⌈>	**Ge**	**72**		ug/L			46611	35645	1	KED
|	**Cu**	**63**	**5.523**	ug/L	0.101	1	60	19862	1	KED
|	**Cu**	**65**	**5.468**	ug/L	0.074	1	30	10109	0	KED
|	**Zn**	**66**	**14.293**	ug/L	0.129	0	33	6870	2	KED
|	**Zn**	**67**	**15.718**	ug/L	0.257	1	4	1277	0	KED
⌊	**As**	**75**	**1.115**	ug/L	0.045	4	2	286	3	KED
	Y	**89**		ug/L			391138	356076	2	Standard
	Kr	**83**		ug/L			46	55	3	Standard
⌈>	**In-1**	**115**		ug/L			10762	8208	1	KED
|	**Cd**	**111**	**0.078**	ug/L	0.012	14	5	23	12	KED
⌊	**Cd**	**114**	**0.089**	ug/L	0.022	25	4	62	22	KED
⌈>	**In**	**115**		ug/L			626853	521474	2	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	50	83	96	13	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1365773	2	Standard
⌊	**Pb**	**208**	**1.084**	ug/L	0.018	1	279	90610	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0381-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 09:57:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	81559	2	Standard
⌈>	**Sc**	**45**		ug/L			782863	802458	3	Standard
|	**Cr**	**52**	**0.456**	ug/L	0.030	6	19712	32265	1	Standard
|	**Cr**	**53**	**0.739**	ug/L	0.039	5	193	2478	2	Standard
|	**Fe**	**54**	**-4.663**	ug/L	0.597	12	85331	75446	2	Standard
|	**Fe**	**57**	**231.161**	ug/L	6.166	2	21088	263761	1	Standard
⌊	**Mn**	**55**	**0.107**	ug/L	0.001	0	544	4929	2	Standard
⌈>	**Ge**	**72**		ug/L			46611	35670	0	KED
|	**Cu**	**63**	**5.556**	ug/L	0.005	0	60	19999	0	KED
|	**Cu**	**65**	**5.438**	ug/L	0.108	1	30	10060	1	KED
|	**Zn**	**66**	**14.363**	ug/L	0.534	3	33	6908	3	KED
|	**Zn**	**67**	**16.464**	ug/L	0.262	1	4	1339	1	KED
⌊	**As**	**75**	**1.101**	ug/L	0.057	5	2	283	4	KED
	Y	**89**		ug/L			391138	359224	2	Standard
	Kr	**83**		ug/L			46	48	9	Standard
⌈>	**In-1**	**115**		ug/L			10762	8375	2	KED
|	**Cd**	**111**	**0.080**	ug/L	0.016	19	5	24	17	KED
⌊	**Cd**	**114**	**0.078**	ug/L	0.003	3	4	56	6	KED
⌈>	**In**	**115**		ug/L			626853	531315	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	81	83	95	21	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1384590	0	Standard
⌊	**Pb**	**208**	**1.087**	ug/L	0.015	1	279	92172	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0381-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 10:01:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	82866	3	Standard
⌈>	**Sc**	**45**		ug/L			782863	818106	2	Standard
|	**Cr**	**52**	**17.893**	ug/L	0.245	1	19712	503396	1	Standard
|	**Cr**	**53**	**18.243**	ug/L	0.369	2	193	57659	2	Standard
|	**Fe**	**54**	**-5.704**	ug/L	0.342	5	85331	74197	1	Standard
|	**Fe**	**57**	**227.022**	ug/L	2.737	1	21088	264690	3	Standard
⌊	**Mn**	**55**	**18.331**	ug/L	0.427	2	544	761178	0	Standard
⌈>	**Ge**	**72**		ug/L			46611	35968	2	KED
|	**Cu**	**63**	**31.359**	ug/L	0.424	1	60	113579	1	KED
|	**Cu**	**65**	**31.019**	ug/L	0.646	2	30	57747	0	KED
|	**Zn**	**66**	**90.459**	ug/L	2.910	3	33	43723	1	KED
|	**Zn**	**67**	**86.233**	ug/L	2.356	2	4	7055	1	KED
⌊	**As**	**75**	**26.852**	ug/L	0.101	0	2	6918	2	KED
	Y	**89**		ug/L			391138	370509	3	Standard
	Kr	**83**		ug/L			46	53	2	Standard
⌈>	**In-1**	**115**		ug/L			10762	8164	1	KED
|	**Cd**	**111**	**25.144**	ug/L	0.307	1	5	6363	0	KED
⌊	**Cd**	**114**	**25.072**	ug/L	0.442	1	4	16393	0	KED
⌈>	**In**	**115**		ug/L			626853	543374	2	Standard
⌊	**Ag**	**107**	**22.725**	ug/L	0.529	2	83	405063	2	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1392141	1	Standard
⌊	**Pb**	**208**	**29.171**	ug/L	0.279	0	279	2479436	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0381-MSD1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 10:06:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	81278	3	Standard
⌈>	**Sc**	**45**		ug/L			782863	777584	4	Standard
|	**Cr**	**52**	**19.074**	ug/L	1.291	6	19712	507842	2	Standard
|	**Cr**	**53**	**19.320**	ug/L	0.906	4	193	57959	2	Standard
|	**Fe**	**54**	**-3.383**	ug/L	2.755	81	85331	76106	4	Standard
|	**Fe**	**57**	**241.224**	ug/L	15.364	6	21088	265486	2	Standard
⌊	**Mn**	**55**	**19.284**	ug/L	0.861	4	544	760297	1	Standard
⌈>	**Ge**	**72**		ug/L			46611	35668	0	KED
|	**Cu**	**63**	**31.924**	ug/L	0.028	0	60	114679	0	KED
|	**Cu**	**65**	**31.375**	ug/L	0.444	1	30	57935	1	KED
|	**Zn**	**66**	**93.240**	ug/L	0.983	1	33	44708	0	KED
|	**Zn**	**67**	**91.094**	ug/L	1.709	1	4	7393	1	KED
⌊	**As**	**75**	**27.396**	ug/L	0.458	1	2	7000	1	KED
	Y	**89**		ug/L			391138	353540	8	Standard
	Kr	**83**		ug/L			46	60	3	Standard
⌈>	**In-1**	**115**		ug/L			10762	8209	0	KED
|	**Cd**	**111**	**25.498**	ug/L	0.441	1	5	6490	1	KED
⌊	**Cd**	**114**	**25.428**	ug/L	0.064	0	4	16720	0	KED
⌈>	**In**	**115**		ug/L			626853	507711	4	Standard
⌊	**Ag**	**107**	**24.390**	ug/L	1.359	5	83	405616	1	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1320259	6	Standard
⌊	**Pb**	**208**	**30.796**	ug/L	2.128	6	279	2475633	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLO
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 10:11:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	43354	2	Standard
⌈>	**Sc**	**45**		ug/L			782863	696054	2	Standard
|	**Cr**	**52**	**-0.061**	ug/L	0.011	17	19712	16114	0	Standard
|	**Cr**	**53**	**-0.006**	ug/L	0.004	67	193	154	7	Standard
|	**Fe**	**54**	**-0.980**	ug/L	0.189	19	85331	73678	1	Standard
|	**Fe**	**57**	**-1.366**	ug/L	0.290	21	21088	17510	3	Standard
⌊	**Mn**	**55**	**0.005**	ug/L	0.001	22	544	668	5	Standard
⌈>	**Ge**	**72**		ug/L			46611	40383	0	KED
|	**Cu**	**63**	**0.156**	ug/L	0.008	5	60	685	4	KED
|	**Cu**	**65**	**0.155**	ug/L	0.017	11	30	349	10	KED
|	**Zn**	**66**	**0.267**	ug/L	0.034	12	33	173	10	KED
|	**Zn**	**67**	**0.338**	ug/L	0.053	15	4	34	13	KED
⌊	**As**	**75**	**0.003**	ug/L	0.003	94	2	2	26	KED
	Y	**89**		ug/L			391138	367545	0	Standard
	Kr	**83**		ug/L			46	44	13	Standard
⌈>	**In-1**	**115**		ug/L			10762	9094	0	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.005	957	5	4	35	KED
⌊	**Cd**	**114**	**0.006**	ug/L	0.004	64	4	8	32	KED
⌈>	**In**	**115**		ug/L			626853	583135	1	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.002	56	83	135	22	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1390617	1	Standard
⌊	**Pb**	**208**	**0.008**	ug/L	0.000	3	279	924	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVL
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 10:15:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			44209	43857	3	Standard
>	Sc	45		ug/L			782863	721194	1	Standard
	Cr	52	45.229	ug/L	0.590	1	19712	1094156	1	Standard
	Cr	53	45.723	ug/L	0.907	1	193	127144	2	Standard
	Fe	54	4849.361	ug/L	64.870	1	85331	11288800	1	Standard
	Fe	57	4820.297	ug/L	90.489	1	21088	4560290	2	Standard
	Mn	55	47.366	ug/L	0.919	1	544	1733446	1	Standard
>	Ge	72		ug/L			46611	40550	3	KED
	Cu	63	54.957	ug/L	2.603	4	60	224157	1	KED
	Cu	65	54.116	ug/L	2.526	4	30	113470	1	KED
	Zn	66	55.062	ug/L	1.745	3	33	30010	1	KED
	Zn	67	52.256	ug/L	2.932	5	4	4817	3	KED
	As	75	51.186	ug/L	2.643	5	2	14849	1	KED
	Y	89		ug/L			391138	381015	4	Standard
	Kr	83		ug/L			46	54	17	Standard
>	In-1	115		ug/L			10762	9442	1	KED
	Cd	111	51.589	ug/L	1.118	2	5	15096	1	KED
	Cd	114	52.177	ug/L	0.320	0	4	39456	0	KED
>	In	115		ug/L			626853	590628	3	Standard
	Ag	107	49.862	ug/L	1.048	2	83	966015	3	Standard
>	Tb	159		ug/L			1475140	1471535	1	Standard
	Pb	208	57.530	ug/L	0.981	1	279	5168138	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBL
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 10:22:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	42795	0	Standard
⌈>	**Sc**	**45**		ug/L			782863	726933	3	Standard
|	**Cr**	**52**	**-0.083**	ug/L	0.013	15	19712	16299	2	Standard
|	**Cr**	**53**	**-0.017**	ug/L	0.003	18	193	132	3	Standard
|	**Fe**	**54**	**-1.123**	ug/L	0.676	60	85331	76581	2	Standard
|	**Fe**	**57**	**-4.792**	ug/L	0.144	2	21088	15029	3	Standard
⌊	**Mn**	**55**	**0.000**	ug/L	0.000	204	544	509	5	Standard
⌈>	**Ge**	**72**		ug/L			46611	43256	0	KED
|	**Cu**	**63**	**0.001**	ug/L	0.004	444	60	60	27	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.004	210	30	23	41	KED
|	**Zn**	**66**	**0.047**	ug/L	0.022	46	33	57	21	KED
|	**Zn**	**67**	**0.023**	ug/L	0.012	51	4	6	17	KED
⌊	**As**	**75**	**0.006**	ug/L	0.006	99	2	3	45	KED
	Y	**89**		ug/L			391138	379225	2	Standard
	Kr	**83**		ug/L			46	41	4	Standard
⌈>	**In-1**	**115**		ug/L			10762	9829	1	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.008	426	5	4	58	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.002	206	4	3	49	KED
⌈>	**In**	**115**		ug/L			626853	604245	3	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	60	83	122	24	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1430515	0	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.001	50	279	414	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 10:27:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	47638	0	Standard
⌈>	**Sc**	**45**		ug/L			782863	813520	1	Standard
|	**Cr**	**52**	**-0.090**	ug/L	0.009	9	19712	18069	1	Standard
|	**Cr**	**53**	**-0.024**	ug/L	0.003	11	193	125	5	Standard
|	**Fe**	**54**	**67.868**	ug/L	0.461	0	85331	265667	1	Standard
|	**Fe**	**57**	**-5.664**	ug/L	0.163	2	21088	15896	2	Standard
⌊	**Mn**	**55**	**0.017**	ug/L	0.000	0	544	1252	1	Standard
⌈>	**Ge**	**72**		ug/L			46611	43225	1	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.001	64	60	48	8	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.006	7707	30	27	50	KED
|	**Zn**	**66**	**0.030**	ug/L	0.024	79	33	48	29	KED
|	**Zn**	**67**	**0.029**	ug/L	0.040	137	4	6	56	KED
⌊	**As**	**75**	**0.003**	ug/L	0.001	56	2	2	16	KED
	Y	**89**		ug/L			391138	426364	3	Standard
	Kr	**83**		ug/L			46	41	20	Standard
⌈>	**In-1**	**115**		ug/L			10762	10486	2	KED
|	**Cd**	**111**	**-0.009**	ug/L	0.005	54	5	1	86	KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.000	3	4	1	6	KED
⌈>	**In**	**115**		ug/L			626853	673479	0	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	1	83	116	0	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1559324	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	13	279	366	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 10:32:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	47196	2	Standard
⌈>	**Sc**	**45**		ug/L			782863	821082	1	Standard
|	**Cr**	**52**	**-0.098**	ug/L	0.011	11	19712	18015	1	Standard
|	**Cr**	**53**	**-0.021**	ug/L	0.003	15	193	137	9	Standard
|	**Fe**	**54**	**68.018**	ug/L	0.681	1	85331	268542	2	Standard
|	**Fe**	**57**	**-6.079**	ug/L	0.465	7	21088	15593	2	Standard
⌊	**Mn**	**55**	**0.017**	ug/L	0.001	4	544	1271	2	Standard
⌈>	**Ge**	**72**		ug/L			46611	43713	1	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.003	133	60	48	23	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.005	1536	30	27	37	KED
|	**Zn**	**66**	**0.008**	ug/L	0.007	93	33	35	11	KED
|	**Zn**	**67**	**0.034**	ug/L	0.037	108	4	7	50	KED
⌊	**As**	**75**	**0.001**	ug/L	0.003	217	2	2	39	KED
	Y	**89**		ug/L			391138	427408	1	Standard
	Kr	**83**		ug/L			46	41	18	Standard
⌈>	**In-1**	**115**		ug/L			10762	10611	1	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.004	93	5	3	41	KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.001	31	4	1	107	KED
⌈>	**In**	**115**		ug/L			626853	678366	3	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	603	83	93	21	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1574181	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	45	279	346	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 10:36:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	47974	2	Standard
⌈>	**Sc**	**45**		ug/L			782863	827750	1	Standard
|	**Cr**	**52**	**-0.086**	ug/L	0.016	19	19712	18496	0	Standard
|	**Cr**	**53**	**-0.024**	ug/L	0.004	18	193	128	10	Standard
|	**Fe**	**54**	**68.183**	ug/L	1.692	2	85331	271140	1	Standard
|	**Fe**	**57**	**-5.600**	ug/L	0.117	2	21088	16242	1	Standard
⌊	**Mn**	**55**	**0.016**	ug/L	0.001	4	544	1258	1	Standard
⌈>	**Ge**	**72**		ug/L			46611	43828	1	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.003	134	60	47	28	KED
|	**Cu**	**65**	**0.002**	ug/L	0.002	97	30	32	11	KED
|	**Zn**	**66**	**0.006**	ug/L	0.015	260	33	34	24	KED
|	**Zn**	**67**	**0.003**	ug/L	0.030	1018	4	4	65	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.002	2329	2	2	35	KED
	Y	**89**		ug/L			391138	435305	1	Standard
	Kr	**83**		ug/L			46	47	22	Standard
⌈>	**In-1**	**115**		ug/L			10762	10751	1	KED
|	**Cd**	**111**	**-0.009**	ug/L	0.002	20	5	2	24	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.001	65	4	3	40	KED
⌈>	**In**	**115**		ug/L			626853	671505	2	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.001	322	83	83	18	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1569748	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	73	279	338	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 10:41:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	45351	1	Standard
⌈>	**Sc**	**45**		ug/L			782863	706384	2	Standard
|	**Cr**	**52**	**-0.053**	ug/L	0.011	20	19712	16546	0	Standard
|	**Cr**	**53**	**-0.018**	ug/L	0.004	21	193	124	8	Standard
|	**Fe**	**54**	**-20.227**	ug/L	0.488	2	85331	31188	3	Standard
|	**Fe**	**57**	**-5.067**	ug/L	0.301	5	21088	14349	0	Standard
⌊	**Mn**	**55**	**-0.007**	ug/L	0.000	3	544	233	2	Standard
⌈>	**Ge**	**72**		ug/L			46611	42750	1	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.001	55	60	46	10	KED
|	**Cu**	**65**	**-0.004**	ug/L	0.001	33	30	19	14	KED
|	**Zn**	**66**	**-0.021**	ug/L	0.007	33	33	18	21	KED
|	**Zn**	**67**	**0.004**	ug/L	0.031	767	4	4	65	KED
⌊	**As**	**75**	**0.001**	ug/L	0.005	767	2	2	65	KED
	Y	**89**		ug/L			391138	353225	2	Standard
	Kr	**83**		ug/L			46	48	11	Standard
⌈>	**In-1**	**115**		ug/L			10762	9979	6	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.002	60	5	3	15	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.003	299	4	3	52	KED
⌈>	**In**	**115**		ug/L			626853	573351	4	Standard
⌊	**Ag**	**107**	**-0.003**	ug/L	0.000	5	83	26	7	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1371052	1	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	12	279	171	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 10:45:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	45830	2	Standard
⌈>	**Sc**	**45**		ug/L			782863	712677	1	Standard
|	**Cr**	**52**	**-0.059**	ug/L	0.018	30	19712	16564	3	Standard
|	**Cr**	**53**	**-0.020**	ug/L	0.002	8	193	120	3	Standard
|	**Fe**	**54**	**-20.288**	ug/L	0.139	0	85331	31331	2	Standard
|	**Fe**	**57**	**-4.743**	ug/L	0.272	5	21088	14782	2	Standard
⌊	**Mn**	**55**	**-0.008**	ug/L	0.000	5	544	219	8	Standard
⌈>	**Ge**	**72**		ug/L			46611	42740	0	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.002	235	60	52	14	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.003	85	30	20	32	KED
|	**Zn**	**66**	**-0.023**	ug/L	0.003	13	33	17	11	KED
|	**Zn**	**67**	**0.010**	ug/L	0.011	106	4	5	21	KED
⌊	**As**	**75**	**0.002**	ug/L	0.004	240	2	2	47	KED
	Y	**89**		ug/L			391138	350344	1	Standard
	Kr	**83**		ug/L			46	40	37	Standard
⌈>	**In-1**	**115**		ug/L			10762	9842	1	KED
|	**Cd**	**111**	**-0.008**	ug/L	0.004	45	5	2	49	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.005	515	4	3	99	KED
⌈>	**In**	**115**		ug/L			626853	576098	0	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.001	31	83	33	41	Standard
⌈>	**Tb**	**159**		ug/L			1475140	1371208	1	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	13	279	162	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 10:50:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050123A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			44209	46314	2	Standard
>	**Sc**	**45**		ug/L			782863	715511	0	Standard
	Cr	**52**	**-0.047**	ug/L	0.010	22	19712	16912	1	Standard
	Cr	**53**	**-0.017**	ug/L	0.005	30	193	131	10	Standard
	Fe	**54**	**-20.343**	ug/L	0.261	1	85331	31327	1	Standard
	Fe	**57**	**-4.821**	ug/L	0.115	2	21088	14769	0	Standard
	Mn	**55**	**-0.007**	ug/L	0.000	2	544	234	1	Standard
>	**Ge**	**72**		ug/L			46611	42949	0	KED
	Cu	**63**	**-0.003**	ug/L	0.002	75	60	43	22	KED
	Cu	**65**	**-0.005**	ug/L	0.001	22	30	17	12	KED
	Zn	**66**	**-0.026**	ug/L	0.003	11	33	15	12	KED
	Zn	**67**	**0.023**	ug/L	0.030	130	4	6	45	KED
	As	**75**	**0.002**	ug/L	0.003	152	2	2	36	KED
	Y	**89**		ug/L			391138	359793	1	Standard
	Kr	**83**		ug/L			46	45	21	Standard
>	**In-1**	**115**		ug/L			10762	10007	2	KED
	Cd	**111**	**-0.005**	ug/L	0.004	70	5	3	34	KED
	Cd	**114**	**-0.002**	ug/L	0.002	77	4	3	39	KED
>	**In**	**115**		ug/L			626853	573009	0	Standard
	Ag	**107**	**-0.002**	ug/L	0.000	13	83	31	18	Standard
>	**Tb**	**159**		ug/L			1475140	1351369	0	Standard
	Pb	**208**	**-0.001**	ug/L	0.000	13	279	143	9	Standard

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00013	Instrument:	ICPMS1
Calibration Date:	05/02/2023 13:47		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Silver-107	0	0	0.2	19455	10	19540.1	20	19118.6	50	17879.82	100	17551.85
Chromium-52	0	0	0.5	61716	10	28950.8	20	26638.15	50	25172.96	100	25541.16
Chromium-53	0	0	0.5	3378	10	3078.8	20	3013.7	50	2877.66	100	2858.88
Lead-208	0	0	0.1	101420	10	98241.6	20	96060.95	50	92245.5	100	91035.03

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC
Instrument: ICPMS1
Calibration: GE00013
Calibration Date: 5/2/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Silver-107	15590.9	49.3	0.9996		0.998	
Chromium-52	28003.18	70.3	0.9998		0.998	
Chromium-53	2534.507	49.5	0.9999		0.998	
Lead-208	79833.85	49.2	0.9998		0.998	

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00013	Instrument:	ICPMS1
Calibration Date:	05/02/2023 13:47		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Arsenic-75a	0	0	0.2	380	10	394.2	20	383.3	50	369.32	100	371.34
Cadmium-111	0	0	0.1	390	10	383.8	20	373.2	50	357.5	100	352.24
Cadmium-114	0	0	0.1	1090	10	975.7	20	937.95	50	897.84	100	895.02
Copper-63	0	0	0.5	6052	10	5565.6	20	5405.75	50	5108.7	100	5028.46
Copper-65	0	0	0.5	3040	10	2847.7	20	2758.8	50	2613.5	100	2576.83
Zinc-66	0	0	6	793.6667	10	795.8	20	784.6	50	734.36	100	725.14
Zinc-67	0	0	6	122	10	130.1	20	129.5	50	120.28	100	117.57

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Instrument: ICPMS1
Calibration: GE00013
Calibration Date: 5/2/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Arsenic-75a	316.36	49.1	0.9999		0.998	
Cadmium-111	309.4567	49.2	0.9998		0.998	
Cadmium-114	799.4183	49.8	0.9999		0.998	
Copper-63	4526.752	49.7	0.9997		0.998	
Copper-65	2306.138	49.5	0.9998		0.998	
Zinc-66	638.9278	49.2	0.9998		0.998	
Zinc-67	103.2417	49.2	0.9996		0.998	

Analytical Resources, Incorporated
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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/2/23 **Analyst:** MB **Sequence:** SLEΦΦ43 **Cal:** GEΦΦΦ13

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
	✓	SEQ-CAL1	—		
		-CAL2			
		-CAL3			
		-CAL4			
		-CAL5			
		-CAL6			Std Mode noisy
		-IBL1	—		
		SEQ-CAL1	L484Φ		
		-CAL2	L4627		
		-CAL3	L4628		
		-CAL4	L4629		
		-CAL5	L4889		
		-CAL6	L463Φ		
		-IBL1	—		
		-ICV1	L3575		
		-ICB1	L484Φ		
		-CCV1	L4889		
		-CCB1	L484Φ		
	✓	-CRL1	—		Cu↑
		-CRL1	L4627		
		-IFA1	L4688		Cr53↑
		-IFB1	L4689		
		-ICV1	L478Φ		
		-ICV2	L4781		Pb↑ - Pb<200

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/2/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-IBL2			(Pb↑ +noisy / Std mode s/. noisy)
		-IBL3			
	✓	-CCV2			Std Mode noisy
		-CCV2			
		-CCB2			
		BLD0517-BLK1	REN		
		-BS1			
		BLE0054-BLK1			
	✓	-BS1			Std Mode noisy
		-BS1			
		23E0005-01		5	
		23D0631-01		2	
		23D0102-01		↓	
		SEQ-IBL4			
		-CCV3			
		-CCB3			
	✓	-CAL1			Mn Removed
		-CCV4			
		-CCB4			
		23A0417-02	SWN	20	
		-03			Sc↑ No Co
		-04			
		-05			
		-06			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/2/23 **Analyst:** MS **Sequence:** ~~~~ **Cal:** ~~~~

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23AΦ417-Φ7	SWN	20	
		-Φ8	↓	↓	Sc↑/Zn↑ No Cr, Zn
		-Φ9			
		-1Φ			
		↓ -11			
		SEQ-CCV5			
		↓ -CCB5			
		23AΦ417-12	SWN	20	
		-13	↓	↓	
		-14			Sc↑ No Cr
		↓ -15			
		23AΦ42Φ-Φ1			Sc↑ No Cr
		-Φ7			↓ ↓
		-Φ8			
		↓ -Φ9			Sc↑ No Cr
		23AΦ419-Φ2			↓ ↕
		↓ -Φ3	↓	↓	Std Mode noisy No Ag, Cr, Pb
		SEQ-CCV6			
		↓ -CCB6			
		23AΦ419-Φ1	SWN	100	Zn only
		BLDΦ452-DUP2	↓	↓	↓
		-MS2			
		-MSD2			Zn %R↑
	✓	↓ -PS2	↓	↓	No spike ↓

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/2/23 **Analyst:** MB **Sequence:** ~~~~ **Cal:** ~~~~

All corrections made by analyst unless otherwise noted. MB 5/2/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23AΦ420-Φ4	SWN	20	As only
		23AΦ419-Φ4	↓	↓	
		-Φ5			
		-Φ6			
		-Φ7			In-1 noisy - %R ΦAnalytes OK
		SEQ-CCV7			
		↓ -CCB7			
		23AΦ419-Φ8	SWN	20	Sc, In, Tb noisy No Ag, Cr, Pb
		-Φ9	↓	↓	
		-10			
		-11			
		-12			
		23CΦ752-Φ1			
		-Φ2			
		-Φ3			
		-Φ4			
Φ5→Φ6		~~Φ5~~ Φ6			
		SEQ-CCV8			
		↓ -CCB8			
		23AΦ455-Φ2	SWN	20	No As, Cu, Zn
		-Φ3	↓	↓	↓
		-Φ4			
		-Φ5			
		-Φ6			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/2/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted. MB 5/2/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23A0455-07	SWN	20	No As, Cr, Zn
		-08	↓	↓	↓
	✓	-09			Sc, In, Tb noisy
		-10			No As, Cr, Zn
		-11	↓	↓	↓
		SEQ-CCV9			Ge noisy
		-CCB9			
	✓	-CAL1			
		-CCVA			
		-CCBA			
		23A0455-12	SWN	20	Sc↑ No Cr, Pb
		-13	↓	↓	↓ ↓
		-14			↓ ↓
		-15			Ge noisy No As, Cu, Zn, Pb
		-16			No Pb
		-17			↓
		-18	↓	↓	Sc, In, Tb noisy No Ag, Cr, Pb
		2300099-01	REN	5	No Pb
		2300072-01	↓	100	↓
		SEQ-IBL5			
		-CCVB			Pb↑
		-CCBB			
		2300593-01	REN	52	No Pb
		↓ -02	↓	↓	↓

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/2/23 **Analyst:** MB **Sequence:** —— **Cal:** ——

All corrections made by analyst unless otherwise noted. MB 5/2/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		230ϕ593-ϕ3	REN	ϕ2	No Pb
		↓ -ϕ4	↓	↓	↓
		SEQ-IBL6			
		230ϕϕ64-ϕ3	REN		
		↓ -ϕ1			Sc, In, Tb/Cd noisy / noisy No Cd, Cr, Pb
		BLDϕ517-DUP1			↓
		↓ -MS1	↓		
		SEQ-IBL7			
		-CCVC			
		↓ -CCBC			
		230ϕ1ϕ1-ϕ1	REN	2	No Pb
		230ϕ111-ϕ2	↓		↓
		230ϕ113-ϕ1		20	
		230ϕ114-ϕ1			
		230ϕ115-ϕ1			
		230ϕ442-ϕ2			Sc↑ No Cr, Pb
		BLEϕϕ54-DUP1			↓ ↓
		↓ -MS1			
		↓ -MSD1	↓		↓ ↓
		SEQ-IBL8			
		-CCVD			Pb↑
		↓ -CCBD			
		BLDϕ643-BCK1	REN		No Pb
		↓ -BS1	↓		

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/2/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		230ϕϕ73-ϕ1	REN		No Pb
		230ϕϕ75-ϕ1	↓		
		-ϕ2			
	✓	-ϕ3			Gel↓
		-ϕ4			
		-ϕ5			
		230ϕ197-ϕ1			
		SEQ-IBL9			
		-CCVE			Pb↑
		-CCBE			
	✓	-CAL1			
		-CCVF			Pb↑
		-CCBF			
		230ϕ147-ϕ1	REN		Sc↑/Sc,Th,Tb noisy No Pb
		-ϕ3			
		230ϕ152-ϕ1			
		230ϕ155-ϕ1			
		230ϕ156-ϕ1			
		230ϕ162-ϕ3			
		-ϕ1		2	
		-ϕ5		↓	
		230ϕ168-ϕ1			
		SEQ-IBLA			
		-CCVG			Pb↑

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/2/23 **Analyst:** MB **Sequence:** ~~_____~~ **Cal:** ~~_____~~

All corrections made by analyst unless otherwise noted. MB 5/2/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCBG			
		230Φ177-Φ1	REN		No Pb
		↓ -Φ3	↓		↓
		↓ -Φ5	↓		Ge sl. noisy No Cu, Pb, Zn
		↓ -Φ7	↓		No Pb
		230Φ178-Φ1	↓		
		230Φ179-Φ1	↓		
		↓ -Φ2	↓		
		230Φ2Φ1-Φ1	↓		No Pb
		↓ -Φ2	↓		↓
		SEQ-IBLB			
		↓ -CCVH			Pb? / Sc, In, Tb sl. noisy - ISR & Analytes OK
		↓ -CCBH			
		~~230Φ2Φ3-Φ1~~	~~REN~~		
		↓ -Φ4	↓		
		230Φ218-Φ1	↓		
		230Φ22Φ-Φ1	↓		
		230Φ221-Φ1	↓		
		230Φ225-Φ1	↓	MB 5/2/23	
		230Φ245-Φ1	↓		
		↓ -Φ2	↓		
		230Φ251-Φ1	↓		
		SEQ-IBLC			
		↓ -CCVH			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/2/23 **Analyst:** MS **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted. MS 5/2/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
—		SEQ-CCBH		MS 5/2/23	
		230Φ203-Φ1	REN		
		↓ -Φ4	↓		
		230Φ218-Φ1			No Pb
		230Φ220-Φ1			
		230Φ221-Φ1			No Pb
		230Φ225-Φ1			Sc↑ - Not Needed
		230Φ245-Φ1			Cu↑ No Cu
		↓ -Φ2			
		230Φ251-Φ1	↓		
		SEQ-IBLC			
		↓ -CCVI			Pb↑
		↓ -CCBI			
		230Φ253-Φ1	REN		
		230Φ254-Φ1			No Pb
		230Φ264-Φ1			
	✓	230Φ266-Φ1			Cu, Zn↑
		230Φ278-Φ1			No Pb
		230Φ301-Φ1			
		↓ -Φ2			
		230Φ368-Φ1			
		↓ -Φ2	↓		
		SEQ-IBLD			
		↓ -CCVS			Pb↑

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/2/23 **Analyst:** MS **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCBJ			
		BL0Φ561-BLK1	REN		Cu↑ (0.570/0.560) - Samples ×10x
		↓ -BS1	↓		
		230Φ298-Φ1			
	✓	230Φ2Φ5-Φ2			Ge noisy / Cu ×10x BLK cont.
		↓ -Φ4			↓
		↓ -Φ6			
		230Φ2Φ6-Φ2			
		↓ -Φ4			
		↓ -Φ6	↓		
		SEQ-IBLE			
		↓ -CCVK			Pb↑
		↓ -CCBK			Sc,In noisy - %R + Analytes OK
		Rinse/DI			
			MS 5/2/23		

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Tuesday, May 02, 2023 12:21:47
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.095
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	10126.8	10126.788	123.067	1.2	Standard
	In	114.9	97144.5	-529708.759	1736.228	0.3	Standard
	U	238.1	110073.9	110073.909	1558.589	1.4	Standard
⌈	CeO	155.9	3834.4	0.029	0.000	1.6	Standard
| >	Ce	139.9	133460.6	133460.555	1996.858	1.5	Standard
⌊	Ce++	70.0	1802.0	0.014	0.000	3.2	Standard
	Bkgd	220.0	2.1	2.100	1.234	58.8	Standard

Current Conditions File Data

Current Value	Description
0.92	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.92	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Tuesday, May 02, 2023 12:31:49
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.102
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	9961.7	9961.740	175.425	1.8	Standard
	In	114.9	88987.2	88987.184	905.258	1.0	Standard
	U	238.1	105364.0	105363.978	2055.927	2.0	Standard
⌈	CeO	155.9	2970.1	0.024	0.000	1.8	Standard
| >	Ce	139.9	123241.3	123241.263	824.730	0.7	Standard
⌊	Ce++	70.0	1481.3	0.012	0.001	5.5	Standard
	Bkgd	220.0	1.2	1.167	0.354	30.3	Standard

Current Conditions File Data

Current Value	Description
0.91	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.91	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Start Time: 5/2/2023 12:21:46 PM
End Time: 5/2/2023 12:33:53 PM

STD Performance Check - [Failed]
Obtained Intensity (Be 9): 10126.79
Obtained Intensity (In 115): 97144.53
Obtained Intensity (U 238): 110073.91
Obtained Intensity (Bkgd 220): 2.10
Obtained Formula (Ce++ 70 / Ce 140): 0.014 (=1802.05 / 133460.56)
Obtained Formula (CeO 156 / Ce 140): 0.029 (=3834.38 / 133460.56) - <Target not achieved>
Obtained RSD (Be 9): 0.0122
Obtained RSD (In 115): 0.0033
Obtained RSD (U 238): 0.0142

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.85 mm	0.80 mm	104569.32

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 0.91
Obtained Intensity (In 115): 93685.19
Obtained Formula (CeO 156 / Ce 140): 0.0239 (=3079.33 / 128703.16)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.690)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.699)
Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.703)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.694)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.998; Intercept = -13.63

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.991; Intercept = -14.90

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 9961.74
Obtained Intensity (In 115): 88987.18
Obtained Intensity (U 238): 105363.98
Obtained Intensity (Bkgd 220): 1.17
Obtained Formula (Ce++ 70 / Ce 140): 0.012 (=1481.28 / 123241.26)
Obtained Formula (CeO 156 / Ce 140): 0.024 (=2970.11 / 123241.26)
Obtained RSD (Be 9): 0.0176
Obtained RSD (In 115): 0.0102
Obtained RSD (U 238): 0.0195

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Optimization Status

Start Time: 5/2/2023 12:21:46 PM

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 5
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 10126.79
		Obtained Intensity (In 115): 97144.53
		Obtained Intensity (U 238): 110073.91
		Obtained Intensity (Bkgd 220): 2.10
		Obtained Formula (Ce++ 70 / Ce 140): 0.014 (=1802.05 / 133460.56)
		Obtained Formula (CeO 156 / Ce 140): 0.029 (=3834.38 / 133460.56) - <Target not achieved>
		Obtained RSD (Be 9): 0.0122
		Obtained RSD (In 115): 0.0033
		Obtained RSD (U 238): 0.0142

		[Failed]
[Failed]

Torch Alignment
	Optimization Settings:
		Method: Torch Alignment.mth.
		Intensity Criterion: In 115 Maximum

	Optimization Results:
		Vertical	Horizontal	Intensity
[Passed]	0.85 mm	0.80 mm	104569.32

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 0.89/0.96/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 93685.19
		Obtained Formula (CeO 156 / Ce 140): 0.0239 (=3079.33 / 128703.16)
[Passed] Optimum value(s): 0.91

Mass Calibration and Resolution
	Optimization Settings:
		Method: Tuning.mth.
		MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
		Iterations: 6
		Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
		Peak height (%) for Res. Opt.: 10

	Optimization Results:
	Initial Try
		Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.714)
		Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.687)
		Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.712)
		Target/Obtained mass (238.05/238.125), Target/Obtained resolution (0.7/0.705) - <Target not achieved>
		[Failed]
	Retry 1
		Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.690)
		Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.699)
		Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.703)
		Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.694)
[Passed] Optimum value(s): N/A

QID STD/DRC
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 0.998; Intercept = -13.63

	Analyte	Mass	Points	DAC	MaxIntensity

		Li	7	41	-14	48983.8
		Mg	24	41	-14.5	62982.5
		In	115	41	-11.5	88243.7
		Ce	140	41	-11	131825
		Pb	208	41	-11	66598.9
		U	238	41	-11.5	107551

KED Mode QID
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 0.991; Intercept = -14.90

	Analyte	Mass	Points	DAC	MaxIntensity

		Li	7	41	-14.5	32456.8
		Mg	24	41	-13.5	70481.4
		In	115	41	-12	130885
		Ce	140	41	-11	132544
		Pb	208	41	-10	57318.8

```
            U       238        41       -10         126494

STD Performance Check
        Optimization Settings:
                Method: STD Performance Check.mth.
                Intensity Criterion: Be 9 > 2000
                Intensity Criterion: In 115 > 40000
                Intensity Criterion: U 238 > 30000
                Intensity Criterion: Bkgd 220 <= 5
                Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
                Formula Criterion: CeO 156 / Ce 140 <= 0.025
                RSD Criterion: Be 9.0122 < 0.05
                RSD Criterion: In 114.904 < 0.05
                RSD Criterion: U 238.05 < 0.05

        Optimization Results:
        Initial Try
                Obtained Intensity (Be 9): 9961.74
                Obtained Intensity (In 115): 88987.18
                Obtained Intensity (U 238): 105363.98
                Obtained Intensity (Bkgd 220): 1.17
                Obtained Formula (Ce++ 70 / Ce 140): 0.012 (=1481.28 / 123241.26)
                Obtained Formula (CeO 156 / Ce 140): 0.024 (=2970.11 / 123241.26)
                Obtained RSD (Be 9): 0.0176
                Obtained RSD (In 115): 0.0102
                Obtained RSD (U 238): 0.0195

[Passed]  Optimum value(s): N/A

End Time: 5/2/2023 12:33:53 PM
```

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 13:08:02

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				41052	1	Standard
	Cl	**37**		ug/L				6862762	2	Standard
>	**Sc**	**45**		ug/L				744790	1	Standard
	Cr	**52**		ug/L				17916	2	Standard
	Cr	**53**		ug/L				193	12	Standard
	Mn	**55**		ug/L				1339	5	Standard
>	**Ge**	**72**		ug/L				52201	1	KED
	Ni	**60**		ug/L				76	13	KED
	Ni	**62**		ug/L				14	65	KED
	Cu	**63**		ug/L				45	7	KED
	Cu	**65**		ug/L				26	4	KED
	Zn	**66**		ug/L				37	19	KED
	Zn	**67**		ug/L				5	33	KED
	As	**75**		ug/L				3	30	KED
	Y	**89**		ug/L				349986	1	Standard
	Kr	**83**		ug/L				59	25	Standard
>	**In-1**	**115**		ug/L				11206	0	KED
	Cd	**111**		ug/L				6	8	KED
	Cd	**114**		ug/L				6	64	KED
>	**In**	**115**		ug/L				519240	2	Standard
	Ag	**107**		ug/L				62	17	Standard
>	**Tb**	**159**		ug/L				1339656	1	Standard
	Pb	**208**		ug/L				179	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Tuesday, May 02, 2023 13:12:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41052	40707	2	Standard
	Cl	**37**		ug/L			6862762	6868023	2	Standard
⌈>	**Sc**	**45**		ug/L			744790	724927	2	Standard
|	**Cr**	**52**	**0.500**	ug/L	0.047	9	17916	30509	1	Standard
|	**Cr**	**53**	**0.500**	ug/L	0.013	2	193	1627	0	Standard
⌊	**Mn**	**55**	**0.500**	ug/L	0.026	5	1339	20769	3	Standard
⌈>	**Ge**	**72**		ug/L			52201	50444	1	KED
|	**Ni**	**60**	**0.500**	ug/L	0.032	6	76	1042	5	KED
|	**Ni**	**62**	**0.500**	ug/L	0.059	11	14	161	11	KED
|	**Cu**	**63**	**0.500**	ug/L	0.018	3	45	2861	1	KED
|	**Cu**	**65**	**0.500**	ug/L	0.028	5	26	1472	5	KED
|	**Zn**	**66**	**6.000**	ug/L	0.185	3	37	4652	1	KED
|	**Zn**	**67**	**6.000**	ug/L	0.155	2	5	704	3	KED
⌊	**As**	**75**	**0.200**	ug/L	0.042	21	3	80	20	KED
	Y	**89**		ug/L			349986	352045	1	Standard
	Kr	**83**		ug/L			59	51	13	Standard
⌈>	**In-1**	**115**		ug/L			11206	10603	1	KED
|	**Cd**	**111**	**0.100**	ug/L	0.018	17	6	38	15	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.014	14	6	90	14	KED
⌈>	**In**	**115**		ug/L			519240	521992	1	Standard
⌊	**Ag**	**107**	**0.200**	ug/L	0.003	1	62	3884	0	Standard
⌈>	**Tb**	**159**		ug/L			1339656	1307960	1	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.003	2	179	9994	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Tuesday, May 02, 2023 13:17:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41052	56420	0	Standard
	Cl	**37**		ug/L			6862762	6789313	2	Standard
⌈>	**Sc**	**45**		ug/L			744790	745757	3	Standard
|	**Cr**	**52**	**10.000**	ug/L	0.372	3	17916	284616	0	Standard
|	**Cr**	**53**	**10.001**	ug/L	0.263	2	193	30655	1	Standard
⌊	**Mn**	**55**	**10.000**	ug/L	0.303	3	1339	398670	0	Standard
⌈>	**Ge**	**72**		ug/L			52201	51456	0	KED
|	**Ni**	**60**	**10.000**	ug/L	0.077	0	76	19615	1	KED
|	**Ni**	**62**	**10.001**	ug/L	0.340	3	14	3131	3	KED
|	**Cu**	**63**	**9.999**	ug/L	0.059	0	45	55232	0	KED
|	**Cu**	**65**	**9.999**	ug/L	0.111	1	26	28556	1	KED
|	**Zn**	**66**	**9.982**	ug/L	0.085	0	37	7835	1	KED
|	**Zn**	**67**	**10.182**	ug/L	0.370	3	5	1279	3	KED
⌊	**As**	**75**	**10.000**	ug/L	0.134	1	3	3851	1	KED
	Y	**89**		ug/L			349986	360621	2	Standard
	Kr	**83**		ug/L			59	55	5	Standard
⌈>	**In-1**	**115**		ug/L			11206	10856	1	KED
|	**Cd**	**111**	**10.000**	ug/L	0.424	4	6	3717	4	KED
⌊	**Cd**	**114**	**10.000**	ug/L	0.357	3	6	9342	4	KED
⌈>	**In**	**115**		ug/L			519240	514693	2	Standard
⌊	**Ag**	**107**	**10.000**	ug/L	0.217	2	62	198974	2	Standard
⌈>	**Tb**	**159**		ug/L			1339656	1329055	0	Standard
⌊	**Pb**	**208**	**10.000**	ug/L	0.155	1	179	979325	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Tuesday, May 02, 2023 13:21:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41052	57000	0	Standard
	Cl	**37**		ug/L			6862762	6736871	1	Standard
⌈>	**Sc**	**45**		ug/L			744790	749664	1	Standard
|	**Cr**	**52**	**19.901**	ug/L	0.244	1	17916	541576	0	Standard
|	**Cr**	**53**	**19.977**	ug/L	0.466	2	193	61099	1	Standard
⌊	**Mn**	**55**	**19.977**	ug/L	0.370	1	1339	795919	0	Standard
⌈>	**Ge**	**72**		ug/L			52201	50963	1	KED
|	**Ni**	**60**	**19.985**	ug/L	0.345	1	76	38630	0	KED
|	**Ni**	**62**	**20.007**	ug/L	0.794	3	14	6199	3	KED
|	**Cu**	**63**	**19.997**	ug/L	0.398	1	45	109269	1	KED
|	**Cu**	**65**	**19.912**	ug/L	0.192	0	26	55323	2	KED
|	**Zn**	**66**	**20.032**	ug/L	0.201	1	37	15609	0	KED
|	**Zn**	**67**	**20.331**	ug/L	0.159	0	5	2653	1	KED
⌊	**As**	**75**	**20.024**	ug/L	0.134	0	3	7670	0	KED
	Y	**89**		ug/L			349986	368685	1	Standard
	Kr	**83**		ug/L			59	58	22	Standard
⌈>	**In-1**	**115**		ug/L			11206	10685	1	KED
|	**Cd**	**111**	**19.991**	ug/L	0.185	0	6	7295	0	KED
⌊	**Cd**	**114**	**20.119**	ug/L	0.293	1	6	18941	1	KED
⌈>	**In**	**115**		ug/L			519240	513679	1	Standard
⌊	**Ag**	**107**	**19.924**	ug/L	0.606	3	62	389617	2	Standard
⌈>	**Tb**	**159**		ug/L			1339656	1324921	1	Standard
⌊	**Pb**	**208**	**19.962**	ug/L	0.248	1	179	1933754	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 13:26:36

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41052	39647	1	Standard
	Cl	**37**		ug/L			6862762	6754087	3	Standard
⌈>	**Sc**	**45**		ug/L			744790	729554	0	Standard
|	**Cr**	**52**	**49.796**	ug/L	0.357	0	17916	1267054	0	Standard
|	**Cr**	**53**	**49.913**	ug/L	0.445	0	193	147039	1	Standard
⌊	**Mn**	**55**	**49.972**	ug/L	0.344	0	1339	1930633	0	Standard
⌈>	**Ge**	**72**		ug/L			52201	49853	0	KED
|	**Ni**	**60**	**49.817**	ug/L	1.077	2	76	92413	2	KED
|	**Ni**	**62**	**49.762**	ug/L	0.427	0	14	14713	0	KED
|	**Cu**	**63**	**49.781**	ug/L	0.703	1	45	260366	1	KED
|	**Cu**	**65**	**49.661**	ug/L	0.607	1	26	130513	1	KED
|	**Zn**	**66**	**49.705**	ug/L	0.546	1	37	36824	0	KED
|	**Zn**	**67**	**49.433**	ug/L	0.201	0	5	5987	0	KED
⌊	**As**	**75**	**49.906**	ug/L	0.396	0	3	18523	0	KED
	Y	**89**		ug/L			349986	347798	2	Standard
	Kr	**83**		ug/L			59	62	21	Standard
⌈>	**In-1**	**115**		ug/L			11206	10637	0	KED
|	**Cd**	**111**	**49.791**	ug/L	0.513	1	6	17710	0	KED
⌊	**Cd**	**114**	**49.660**	ug/L	0.517	1	6	45008	0	KED
⌈>	**In**	**115**		ug/L			519240	501648	1	Standard
⌊	**Ag**	**107**	**49.599**	ug/L	1.441	2	62	910684	2	Standard
⌈>	**Tb**	**159**		ug/L			1339656	1315700	1	Standard
⌊	**Pb**	**208**	**49.780**	ug/L	0.801	1	179	4685423	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Tuesday, May 02, 2023 13:33:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41052	52708	1	Standard
	Cl	37		ug/L			6862762	6804754	1	Standard
>	Sc	45		ug/L			744790	667791	12	Standard
	Cr	52	102.377	ug/L	14.900	14	17916	2539827	1	Standard
	Cr	53	101.766	ug/L	14.282	14	193	288049	1	Standard
	Mn	55	101.592	ug/L	11.523	11	1339	3757788	1	Standard
>	Ge	72		ug/L			52201	49560	1	KED
	Ni	60	99.713	ug/L	1.485	1	76	182039	0	KED
	Ni	62	99.738	ug/L	1.964	1	14	29048	2	KED
	Cu	63	99.232	ug/L	1.890	1	45	502973	1	KED
	Cu	65	99.692	ug/L	1.881	1	26	257728	0	KED
	Zn	66	99.339	ug/L	1.189	1	37	71571	1	KED
	Zn	67	99.602	ug/L	0.414	0	5	11831	1	KED
	As	75	99.879	ug/L	1.298	1	3	36696	0	KED
	Y	89		ug/L			349986	327327	11	Standard
	Kr	83		ug/L			59	82	8	Standard
>	In-1	115		ug/L			11206	10633	1	KED
	Cd	111	100.085	ug/L	1.256	1	6	35678	0	KED
	Cd	114	99.871	ug/L	0.857	0	6	90082	0	KED
>	In	115		ug/L			519240	461910	11	Standard
	Ag	107	101.258	ug/L	12.666	12	62	1770314	0	Standard
>	Tb	159		ug/L			1339656	1196263	12	Standard
	Pb	208	101.888	ug/L	14.118	13	179	9197404	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 13:40:21

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41052	41799	2	Standard
	Cl	**37**		ug/L			6862762	6822899	2	Standard
>	**Sc**	**45**		ug/L			744790	745014	1	Standard
	Cr	**52**	**0.022**	ug/L	0.019	86	17916	18526	2	Standard
	Cr	**53**	**-0.010**	ug/L	0.002	21	193	162	4	Standard
	Mn	**55**	**-0.005**	ug/L	0.001	16	1339	1136	1	Standard
>	**Ge**	**72**		ug/L			52201	52447	1	KED
	Ni	**60**	**-0.016**	ug/L	0.005	33	76	46	22	KED
	Ni	**62**	**-0.029**	ug/L	0.013	43	14	5	66	KED
	Cu	**63**	**0.001**	ug/L	0.002	154	45	51	16	KED
	Cu	**65**	**0.003**	ug/L	0.001	23	26	34	5	KED
	Zn	**66**	**-0.003**	ug/L	0.010	340	37	35	21	KED
	Zn	**67**	**0.010**	ug/L	0.018	180	5	6	31	KED
	As	**75**	**0.011**	ug/L	0.002	19	3	8	11	KED
	Y	**89**		ug/L			349986	363901	3	Standard
	Kr	**83**		ug/L			59	51	9	Standard
>	**In-1**	**115**		ug/L			11206	11105	0	KED
	Cd	**111**	**-0.003**	ug/L	0.006	194	6	5	47	KED
	Cd	**114**	**-0.003**	ug/L	0.003	95	6	3	94	KED
>	**In**	**115**		ug/L			519240	517699	2	Standard
	Ag	**107**	**0.004**	ug/L	0.000	1	62	150	1	Standard
>	**Tb**	**159**		ug/L			1339656	1343120	1	Standard
	Pb	**208**	**0.001**	ug/L	0.000	21	179	315	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 13:47:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				42077	2	Standard
	Cl	**37**		ug/L				6747174	2	Standard
⎡>	**Sc**	**45**		ug/L				731768	2	Standard
⎢	**Cr**	**52**		ug/L				18236	1	Standard
⎢	**Cr**	**53**		ug/L				187	5	Standard
⎣	**Mn**	**55**		ug/L				1693	3	Standard
⎡>	**Ge**	**72**		ug/L				52881	1	KED
⎢	**Ni**	**60**		ug/L				58	21	KED
⎢	**Ni**	**62**		ug/L				7	50	KED
⎢	**Cu**	**63**		ug/L				56	13	KED
⎢	**Cu**	**65**		ug/L				28	6	KED
⎢	**Zn**	**66**		ug/L				29	7	KED
⎢	**Zn**	**67**		ug/L				3	124	KED
⎣	**As**	**75**		ug/L				5	18	KED
	Y	**89**		ug/L				361102	2	Standard
	Kr	**83**		ug/L				70	16	Standard
⎡>	**In-1**	**115**		ug/L				11213	2	KED
⎢	**Cd**	**111**		ug/L				2	57	KED
⎣	**Cd**	**114**		ug/L				3	50	KED
⎡>	**In**	**115**		ug/L				510451	2	Standard
⎣	**Ag**	**107**		ug/L				76	6	Standard
⎡>	**Tb**	**159**		ug/L				1318959	1	Standard
⎣	**Pb**	**208**		ug/L				239	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 13:52:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	40546	0	Standard
	Cl	**37**		ug/L			6747174	6746097	2	Standard
⌈>	**Sc**	**45**		ug/L			731768	691788	4	Standard
|	**Cr**	**52**	**0.500**	ug/L	0.038	7	18236	30858	3	Standard
|	**Cr**	**53**	**0.500**	ug/L	0.020	4	187	1689	3	Standard
⌊	**Mn**	**55**	**0.500**	ug/L	0.030	5	1693	20975	2	Standard
⌈>	**Ge**	**72**		ug/L			52881	52144	0	KED
|	**Ni**	**60**	**0.500**	ug/L	0.021	4	58	1032	4	KED
|	**Ni**	**62**	**0.500**	ug/L	0.037	7	7	159	7	KED
|	**Cu**	**63**	**0.500**	ug/L	0.006	1	56	3026	0	KED
|	**Cu**	**65**	**0.500**	ug/L	0.013	2	28	1520	3	KED
|	**Zn**	**66**	**6.000**	ug/L	0.076	1	29	4762	1	KED
|	**Zn**	**67**	**6.000**	ug/L	0.316	5	3	732	5	KED
⌊	**As**	**75**	**0.200**	ug/L	0.020	10	5	76	8	KED
	Y	**89**		ug/L			361102	342641	5	Standard
	Kr	**83**		ug/L			70	73	23	Standard
⌈>	**In-1**	**115**		ug/L			11213	10899	1	KED
|	**Cd**	**111**	**0.100**	ug/L	0.009	9	2	39	9	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.040	39	3	109	37	KED
⌈>	**In**	**115**		ug/L			510451	472311	4	Standard
⌊	**Ag**	**107**	**0.200**	ug/L	0.003	1	76	3891	3	Standard
⌈>	**Tb**	**159**		ug/L			1318959	1236206	5	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.005	5	239	10142	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 13:56:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	57110	2	Standard
	Cl	**37**		ug/L			6747174	6789692	3	Standard
⌈>	**Sc**	**45**		ug/L			731768	731452	2	Standard
|	**Cr**	**52**	**9.998**	ug/L	0.141	1	18236	289508	1	Standard
|	**Cr**	**53**	**9.999**	ug/L	0.141	1	187	30788	1	Standard
⌊	**Mn**	**55**	**10.000**	ug/L	0.179	1	1693	406020	1	Standard
⌈>	**Ge**	**72**		ug/L			52881	52186	1	KED
|	**Ni**	**60**	**10.000**	ug/L	0.140	1	58	19770	0	KED
|	**Ni**	**62**	**10.001**	ug/L	0.221	2	7	3131	1	KED
|	**Cu**	**63**	**9.998**	ug/L	0.126	1	56	55656	1	KED
|	**Cu**	**65**	**9.999**	ug/L	0.071	0	28	28477	2	KED
|	**Zn**	**66**	**10.012**	ug/L	0.093	0	29	7958	0	KED
|	**Zn**	**67**	**10.170**	ug/L	0.175	1	3	1301	2	KED
⌊	**As**	**75**	**10.000**	ug/L	0.078	0	5	3942	0	KED
	Y	**89**		ug/L			361102	361203	2	Standard
	Kr	**83**		ug/L			70	58	9	Standard
⌈>	**In-1**	**115**		ug/L			11213	10842	1	KED
|	**Cd**	**111**	**10.000**	ug/L	0.265	2	2	3838	1	KED
⌊	**Cd**	**114**	**10.000**	ug/L	0.200	2	3	9757	0	KED
⌈>	**In**	**115**		ug/L			510451	511490	2	Standard
⌊	**Ag**	**107**	**10.000**	ug/L	0.177	1	76	195401	1	Standard
⌈>	**Tb**	**159**		ug/L			1318959	1335581	1	Standard
⌊	**Pb**	**208**	**10.000**	ug/L	0.166	1	239	982416	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 14:01:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	56073	1	Standard
	Cl	**37**		ug/L			6747174	6840212	1	Standard
⌈>	**Sc**	**45**		ug/L			731768	736117	1	Standard
|	**Cr**	**52**	**19.755**	ug/L	0.337	1	18236	532763	1	Standard
|	**Cr**	**53**	**19.899**	ug/L	0.219	1	187	60274	1	Standard
⌊	**Mn**	**55**	**19.863**	ug/L	0.297	1	1693	788845	3	Standard
⌈>	**Ge**	**72**		ug/L			52881	51507	0	KED
|	**Ni**	**60**	**19.970**	ug/L	0.360	1	58	38680	2	KED
|	**Ni**	**62**	**20.101**	ug/L	0.828	4	7	6330	3	KED
|	**Cu**	**63**	**19.937**	ug/L	0.413	2	56	108115	1	KED
|	**Cu**	**65**	**19.927**	ug/L	0.140	0	28	55176	1	KED
|	**Zn**	**66**	**20.009**	ug/L	0.319	1	29	15692	1	KED
|	**Zn**	**67**	**20.135**	ug/L	0.378	1	3	2590	1	KED
⌊	**As**	**75**	**19.942**	ug/L	0.156	0	5	7666	0	KED
	Y	**89**		ug/L			361102	364524	0	Standard
	Kr	**83**		ug/L			70	75	8	Standard
⌈>	**In-1**	**115**		ug/L			11213	11079	2	KED
|	**Cd**	**111**	**19.801**	ug/L	0.740	3	2	7464	1	KED
⌊	**Cd**	**114**	**19.754**	ug/L	0.828	4	3	18759	1	KED
⌈>	**In**	**115**		ug/L			510451	508421	1	Standard
⌊	**Ag**	**107**	**19.938**	ug/L	0.886	4	76	382372	3	Standard
⌈>	**Tb**	**159**		ug/L			1318959	1326120	0	Standard
⌊	**Pb**	**208**	**19.938**	ug/L	0.201	1	239	1921219	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 14:06:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	41136	1	Standard
	Cl	**37**		ug/L			6747174	6939319	2	Standard
⌈>	**Sc**	**45**		ug/L			731768	725257	0	Standard
|	**Cr**	**52**	**49.717**	ug/L	0.782	1	18236	1258648	1	Standard
|	**Cr**	**53**	**49.708**	ug/L	1.202	2	187	143883	2	Standard
⌊	**Mn**	**55**	**49.646**	ug/L	0.626	1	1693	1873508	1	Standard
⌈>	**Ge**	**72**		ug/L			52881	50008	0	KED
|	**Ni**	**60**	**49.831**	ug/L	0.303	0	58	92069	0	KED
|	**Ni**	**62**	**49.758**	ug/L	1.257	2	7	14850	2	KED
|	**Cu**	**63**	**49.748**	ug/L	0.823	1	56	255435	1	KED
|	**Cu**	**65**	**49.765**	ug/L	0.400	0	28	130675	0	KED
|	**Zn**	**66**	**49.687**	ug/L	0.624	1	29	36718	0	KED
|	**Zn**	**67**	**49.670**	ug/L	0.413	0	3	6014	0	KED
⌊	**As**	**75**	**49.915**	ug/L	0.099	0	5	18466	0	KED
	Y	**89**		ug/L			361102	361029	1	Standard
	Kr	**83**		ug/L			70	80	24	Standard
⌈>	**In-1**	**115**		ug/L			11213	10603	1	KED
|	**Cd**	**111**	**49.920**	ug/L	0.621	1	2	17875	1	KED
⌊	**Cd**	**114**	**49.892**	ug/L	0.373	0	3	44892	1	KED
⌈>	**In**	**115**		ug/L			510451	490489	1	Standard
⌊	**Ag**	**107**	**49.710**	ug/L	0.477	0	76	893991	0	Standard
⌈>	**Tb**	**159**		ug/L			1318959	1294467	1	Standard
⌊	**Pb**	**208**	**49.838**	ug/L	0.691	1	239	4612275	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 14:12:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	52472	1	Standard
	Cl	**37**		ug/L			6747174	6947027	2	Standard
⌈>	**Sc**	**45**		ug/L			731768	712789	0	Standard
|	**Cr**	**52**	**100.770**	ug/L	0.759	0	18236	2554116	1	Standard
|	**Cr**	**53**	**100.130**	ug/L	2.001	1	187	285888	1	Standard
⌊	**Mn**	**55**	**100.357**	ug/L	2.076	2	1693	3765051	1	Standard
⌈>	**Ge**	**72**		ug/L			52881	50088	1	KED
|	**Ni**	**60**	**99.612**	ug/L	1.205	1	58	181907	0	KED
|	**Ni**	**62**	**99.730**	ug/L	1.704	1	7	29535	1	KED
|	**Cu**	**63**	**99.484**	ug/L	1.460	1	56	502846	0	KED
|	**Cu**	**65**	**99.529**	ug/L	1.150	1	28	257683	1	KED
|	**Zn**	**66**	**99.529**	ug/L	0.934	0	29	72514	1	KED
|	**Zn**	**67**	**99.282**	ug/L	1.746	1	3	11757	0	KED
⌊	**As**	**75**	**100.058**	ug/L	1.741	1	5	37134	0	KED
	Y	**89**		ug/L			361102	354333	1	Standard
	Kr	**83**		ug/L			70	89	17	Standard
⌈>	**In-1**	**115**		ug/L			11213	10529	1	KED
|	**Cd**	**111**	**99.788**	ug/L	2.060	2	2	35224	0	KED
⌊	**Cd**	**114**	**100.042**	ug/L	1.013	1	3	89502	0	KED
⌈>	**In**	**115**		ug/L			510451	480950	3	Standard
⌊	**Ag**	**107**	**99.896**	ug/L	1.598	1	76	1755185	2	Standard
⌈>	**Tb**	**159**		ug/L			1318959	1260153	1	Standard
⌊	**Pb**	**208**	**100.241**	ug/L	1.773	1	239	9103503	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 14:19:57
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	42910	1	Standard
	Cl	**37**		ug/L			6747174	6933874	2	Standard
⌈>	**Sc**	**45**		ug/L			731768	729780	0	Standard
|	**Cr**	**52**	**0.001**	ug/L	0.004	298	18236	18223	1	Standard
|	**Cr**	**53**	**-0.005**	ug/L	0.003	71	187	173	6	Standard
⌊	**Mn**	**55**	**-0.004**	ug/L	0.001	29	1693	1522	3	Standard
⌈>	**Ge**	**72**		ug/L			52881	52259	0	KED
|	**Ni**	**60**	**0.030**	ug/L	0.027	89	58	114	44	KED
|	**Ni**	**62**	**0.029**	ug/L	0.035	120	7	16	65	KED
|	**Cu**	**63**	**0.016**	ug/L	0.029	182	56	139	109	KED
|	**Cu**	**65**	**0.015**	ug/L	0.031	204	28	69	120	KED
|	**Zn**	**66**	**0.018**	ug/L	0.028	154	29	42	49	KED
|	**Zn**	**67**	**0.067**	ug/L	0.016	23	3	11	16	KED
⌊	**As**	**75**	**0.027**	ug/L	0.033	123	5	15	81	KED
	Y	**89**		ug/L			361102	358796	3	Standard
	Kr	**83**		ug/L			70	66	17	Standard
⌈>	**In-1**	**115**		ug/L			11213	11206	2	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.005	658	2	2	78	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.003	56	3	8	33	KED
⌈>	**In**	**115**		ug/L			510451	506583	0	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.000	15	76	133	5	Standard
⌈>	**Tb**	**159**		ug/L			1318959	1291739	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	41	239	320	10	Standard

Sample Information

Sample Date/Time: Tuesday, May 02, 2023 14:12:44
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.m
Mass Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

Calibration

Analyte	Mass	**r Corr Coef**	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Cl	37							
Sc	45							
Cr	52	**0.9999**	0.035	0.50	10	20	50	100
Cr	53	**1.0000**	0.004	0.50	10	20	50	100
Mn	55	**0.9999**	0.053	0.50	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.036	0.50	10	20	50	100
Ni	62	**1.0000**	0.006	0.50	10	20	50	100
Cu	63	**0.9999**	0.101	0.50	10	20	50	100
Cu	65	**0.9999**	0.052	0.50	10	20	50	100
Zn	66	**0.9999**	0.015	6.00	10	20	50	100
Zn	67	**0.9999**	0.002	6.00	10	20	50	100
As	75	**1.0000**	0.007	0.20	10	20	50	100
Y	89							
Kr	83							
In-1	115							
Cd	111	**1.0000**	0.034	0.10	10	20	50	100
Cd	114	**1.0000**	0.085	0.10	10	20	50	100
In	115							
Ag	107	**1.0000**	0.037	0.20	10	20	50	100
Tb	159							
Pb	208	**1.0000**	0.072	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 14:30:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	50649	0	Standard
	Cl	**37**		ug/L			6747174	6975719	1	Standard
⌈>	**Sc**	**45**		ug/L			731768	728760	1	Standard
|	**Cr**	**52**	**50.629**	ug/L	0.703	1	18236	1321081	2	Standard
|	**Cr**	**53**	**51.490**	ug/L	0.357	0	187	150412	1	Standard
⌊	**Mn**	**55**	**52.556**	ug/L	1.171	2	1693	2017110	3	Standard
⌈>	**Ge**	**72**		ug/L			52881	51738	1	KED
|	**Ni**	**60**	**52.295**	ug/L	0.933	1	58	98674	0	KED
|	**Ni**	**62**	**52.344**	ug/L	1.075	2	7	16017	1	KED
|	**Cu**	**63**	**52.854**	ug/L	0.832	1	56	275996	0	KED
|	**Cu**	**65**	**51.970**	ug/L	0.537	1	28	138999	0	KED
|	**Zn**	**66**	**50.401**	ug/L	0.566	1	29	37946	1	KED
|	**Zn**	**67**	**52.618**	ug/L	2.262	4	3	6438	3	KED
⌊	**As**	**75**	**48.927**	ug/L	0.984	2	5	18761	1	KED
	Y	**89**		ug/L			361102	350751	1	Standard
	Kr	**83**		ug/L			70	73	12	Standard
⌈>	**In-1**	**115**		ug/L			11213	11303	2	KED
|	**Cd**	**111**	**50.207**	ug/L	1.486	2	2	19021	0	KED
⌊	**Cd**	**114**	**50.151**	ug/L	1.529	3	3	48149	1	KED
⌈>	**In**	**115**		ug/L			510451	499264	0	Standard
⌊	**Ag**	**107**	**52.269**	ug/L	1.028	1	76	953483	1	Standard
⌈>	**Tb**	**159**		ug/L			1318959	1286516	2	Standard
⌊	**Pb**	**208**	**51.470**	ug/L	1.448	2	239	4770356	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 14:37:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	43843	1	Standard
	Cl	**37**		ug/L			6747174	6920232	1	Standard
⎡>	**Sc**	**45**		ug/L			731768	727210	1	Standard
⎢	**Cr**	**52**	**0.011**	ug/L	0.004	36	18236	18407	1	Standard
⎢	**Cr**	**53**	**-0.009**	ug/L	0.003	28	187	159	5	Standard
⎣	**Mn**	**55**	**-0.009**	ug/L	0.002	20	1693	1348	5	Standard
⎡>	**Ge**	**72**		ug/L			52881	52631	1	KED
⎢	**Ni**	**60**	**0.022**	ug/L	0.012	56	58	100	22	KED
⎢	**Ni**	**62**	**0.027**	ug/L	0.020	72	7	15	36	KED
⎢	**Cu**	**63**	**0.003**	ug/L	0.006	234	56	70	46	KED
⎢	**Cu**	**65**	**0.002**	ug/L	0.006	423	28	32	52	KED
⎢	**Zn**	**66**	**0.010**	ug/L	0.014	135	29	36	28	KED
⎢	**Zn**	**67**	**0.041**	ug/L	0.010	23	3	8	13	KED
⎣	**As**	**75**	**0.007**	ug/L	0.009	124	5	8	40	KED
	Y	**89**		ug/L			361102	352406	3	Standard
	Kr	**83**		ug/L			70	88	10	Standard
⎡>	**In-1**	**115**		ug/L			11213	11501	0	KED
⎢	**Cd**	**111**	**0.003**	ug/L	0.007	228	2	4	66	KED
⎣	**Cd**	**114**	**0.002**	ug/L	0.002	110	3	5	35	KED
⎡>	**In**	**115**		ug/L			510451	499318	1	Standard
⎣	**Ag**	**107**	**0.003**	ug/L	0.001	44	76	126	17	Standard
⎡>	**Tb**	**159**		ug/L			1318959	1301409	2	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	17	239	323	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 14:42:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	41846	2	Standard
	Cl	**37**		ug/L			6747174	7017038	2	Standard
⎡>	**Sc**	**45**		ug/L			731768	723357	1	Standard
⎢	**Cr**	**52**	**49.056**	ug/L	0.429	0	18236	1271050	1	Standard
⎢	**Cr**	**53**	**50.027**	ug/L	0.497	0	187	145058	1	Standard
⎣	**Mn**	**55**	**49.844**	ug/L	0.594	1	1693	1898456	0	Standard
⎡>	**Ge**	**72**		ug/L			52881	51168	0	KED
⎢	**Ni**	**60**	**49.395**	ug/L	0.540	1	58	92191	1	KED
⎢	**Ni**	**62**	**49.216**	ug/L	0.459	0	7	14895	0	KED
⎢	**Cu**	**63**	**50.261**	ug/L	0.349	0	56	259602	0	KED
⎢	**Cu**	**65**	**50.259**	ug/L	0.334	0	28	132951	0	KED
⎢	**Zn**	**66**	**50.239**	ug/L	0.684	1	29	37408	1	KED
⎢	**Zn**	**67**	**50.993**	ug/L	1.108	2	3	6172	2	KED
⎣	**As**	**75**	**49.718**	ug/L	0.476	0	5	18856	0	KED
	Y	**89**		ug/L			361102	357447	1	Standard
	Kr	**83**		ug/L			70	105	15	Standard
⎡>	**In-1**	**115**		ug/L			11213	10744	1	KED
⎢	**Cd**	**111**	**49.685**	ug/L	0.283	0	2	17901	0	KED
⎣	**Cd**	**114**	**50.173**	ug/L	0.571	1	3	45807	0	KED
⎡>	**In**	**115**		ug/L			510451	497121	1	Standard
⎣	**Ag**	**107**	**49.855**	ug/L	1.561	3	76	905506	2	Standard
⎡>	**Tb**	**159**		ug/L			1318959	1275518	2	Standard
⎣	**Pb**	**208**	**50.490**	ug/L	1.559	3	239	4639658	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 14:49:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	43021	1	Standard
	Cl	**37**		ug/L			6747174	6974080	2	Standard
⎡>	**Sc**	**45**		ug/L			731768	726667	0	Standard
⎢	**Cr**	**52**	**0.005**	ug/L	0.024	470	18236	18242	3	Standard
⎢	**Cr**	**53**	**-0.010**	ug/L	0.005	45	187	157	8	Standard
⎣	**Mn**	**55**	**-0.017**	ug/L	0.001	4	1693	1032	2	Standard
⎡>	**Ge**	**72**		ug/L			52881	52264	1	KED
⎢	**Ni**	**60**	**-0.006**	ug/L	0.004	73	58	46	19	KED
⎢	**Ni**	**62**	**0.011**	ug/L	0.025	237	7	10	71	KED
⎢	**Cu**	**63**	**0.001**	ug/L	0.003	233	56	62	23	KED
⎢	**Cu**	**65**	**-0.002**	ug/L	0.002	99	28	22	22	KED
⎢	**Zn**	**66**	**0.006**	ug/L	0.004	57	29	33	8	KED
⎢	**Zn**	**67**	**0.026**	ug/L	0.024	92	3	6	45	KED
⎣	**As**	**75**	**0.005**	ug/L	0.004	93	5	7	24	KED
	Y	**89**		ug/L			361102	354877	0	Standard
	Kr	**83**		ug/L			70	83	15	Standard
⎡>	**In-1**	**115**		ug/L			11213	10974	0	KED
⎢	**Cd**	**111**	**0.011**	ug/L	0.003	24	2	6	14	KED
⎣	**Cd**	**114**	**0.002**	ug/L	0.005	238	3	5	89	KED
⎡>	**In**	**115**		ug/L			510451	503778	2	Standard
⎣	**Ag**	**107**	**0.002**	ug/L	0.001	29	76	120	10	Standard
⎡>	**Tb**	**159**		ug/L			1318959	1289588	2	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	26	239	292	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 14:58:48

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	54440	2	Standard
	Cl	**37**		ug/L			6747174	6915863	2	Standard
⌈>	**Sc**	**45**		ug/L			731768	722267	0	Standard
|	**Cr**	**52**	**0.521**	ug/L	0.015	2	18236	31283	2	Standard
|	**Cr**	**53**	**0.498**	ug/L	0.016	3	187	1625	3	Standard
⌊	**Mn**	**55**	**0.479**	ug/L	0.014	2	1693	19866	3	Standard
⌈>	**Ge**	**72**		ug/L			52881	53016	1	KED
|	**Ni**	**60**	**0.452**	ug/L	0.010	2	58	932	3	KED
|	**Ni**	**62**	**0.511**	ug/L	0.034	6	7	167	4	KED
|	**Cu**	**63**	**0.903**	ug/L	0.026	2	56	4889	1	KED
|	**Cu**	**65**	**0.933**	ug/L	0.037	3	28	2584	3	KED
|	**Zn**	**66**	**6.050**	ug/L	0.119	1	29	4692	0	KED
|	**Zn**	**67**	**5.771**	ug/L	0.283	4	3	726	4	KED
⌊	**As**	**75**	**0.193**	ug/L	0.017	8	5	81	9	KED
	Y	**89**		ug/L			361102	357576	1	Standard
	Kr	**83**		ug/L			70	100	3	Standard
⌈>	**In-1**	**115**		ug/L			11213	11072	1	KED
|	**Cd**	**111**	**0.104**	ug/L	0.015	14	2	41	11	KED
⌊	**Cd**	**114**	**0.099**	ug/L	0.007	7	3	96	7	KED
⌈>	**In**	**115**		ug/L			510451	510169	2	Standard
⌊	**Ag**	**107**	**0.205**	ug/L	0.017	8	76	3887	6	Standard
⌈>	**Tb**	**159**		ug/L			1318959	1286408	1	Standard
⌊	**Pb**	**208**	**0.103**	ug/L	0.003	3	239	9794	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 15:04:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	41609	1	Standard
	Cl	**37**		ug/L			6747174	6871265	1	Standard
⌈>	**Sc**	**45**		ug/L			731768	714277	2	Standard
|	**Cr**	**52**	**0.518**	ug/L	0.012	2	18236	30849	2	Standard
|	**Cr**	**53**	**0.521**	ug/L	0.004	0	187	1674	2	Standard
⌊	**Mn**	**55**	**0.505**	ug/L	0.003	0	1693	20630	2	Standard
⌈>	**Ge**	**72**		ug/L			52881	51683	1	KED
|	**Ni**	**60**	**0.512**	ug/L	0.038	7	58	1021	6	KED
|	**Ni**	**62**	**0.558**	ug/L	0.074	13	7	177	11	KED
|	**Cu**	**63**	**0.556**	ug/L	0.014	2	56	2956	1	KED
|	**Cu**	**65**	**0.557**	ug/L	0.024	4	28	1516	3	KED
|	**Zn**	**66**	**6.269**	ug/L	0.058	0	29	4740	1	KED
|	**Zn**	**67**	**6.007**	ug/L	0.336	5	3	737	5	KED
⌊	**As**	**75**	**0.215**	ug/L	0.039	18	5	87	17	KED
	Y	**89**		ug/L			361102	354921	4	Standard
	Kr	**83**		ug/L			70	97	7	Standard
⌈>	**In-1**	**115**		ug/L			11213	10778	1	KED
|	**Cd**	**111**	**0.116**	ug/L	0.012	9	2	44	9	KED
⌊	**Cd**	**114**	**0.106**	ug/L	0.026	24	3	100	24	KED
⌈>	**In**	**115**		ug/L			510451	495734	1	Standard
⌊	**Ag**	**107**	**0.216**	ug/L	0.010	4	76	3989	3	Standard
⌈>	**Tb**	**159**		ug/L			1318959	1274951	2	Standard
⌊	**Pb**	**208**	**0.105**	ug/L	0.002	2	239	9882	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 15:08:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	171883	0	Standard
	Cl	**37**		ug/L			6747174	13301432	5	Standard
⌈>	**Sc**	**45**		ug/L			731768	719287	1	Standard
|	**Cr**	**52**	**0.671**	ug/L	0.035	5	18236	34974	3	Standard
|	**Cr**	**53**	**4.459**	ug/L	0.088	1	187	13025	3	Standard
⌊	**Mn**	**55**	**0.101**	ug/L	0.002	1	1693	5505	2	Standard
⌈>	**Ge**	**72**		ug/L			52881	45089	0	KED
|	**Ni**	**60**	**0.098**	ug/L	0.014	13	58	211	10	KED
|	**Ni**	**62**	**0.211**	ug/L	0.029	13	7	62	12	KED
|	**Cu**	**63**	**0.050**	ug/L	0.003	6	56	276	6	KED
|	**Cu**	**65**	**0.053**	ug/L	0.008	15	28	148	13	KED
|	**Zn**	**66**	**0.497**	ug/L	0.061	12	29	350	10	KED
|	**Zn**	**67**	**0.552**	ug/L	0.014	2	3	61	1	KED
⌊	**As**	**75**	**0.037**	ug/L	0.002	5	5	16	3	KED
	Y	**89**		ug/L			361102	324899	3	Standard
	Kr	**83**		ug/L			70	165	3	Standard
⌈>	**In-1**	**115**		ug/L			11213	9712	1	KED
|	**Cd**	**111**	**0.096**	ug/L	0.028	29	2	33	27	KED
⌊	**Cd**	**114**	**0.058**	ug/L	0.013	22	3	51	21	KED
⌈>	**In**	**115**		ug/L			510451	485143	2	Standard
⌊	**Ag**	**107**	**0.015**	ug/L	0.001	7	76	337	4	Standard
⌈>	**Tb**	**159**		ug/L			1318959	1217565	1	Standard
⌊	**Pb**	**208**	**0.037**	ug/L	0.002	5	239	3506	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 15:13:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	167575	1	Standard
	Cl	**37**		ug/L			6747174	13335838	3	Standard
⎡>	**Sc**	**45**		ug/L			731768	719975	1	Standard
⎢	**Cr**	**52**	**19.543**	ug/L	0.265	1	18236	514711	0	Standard
⎢	**Cr**	**53**	**23.879**	ug/L	0.568	2	187	69003	2	Standard
⎣	**Mn**	**55**	**19.494**	ug/L	0.392	2	1693	739940	0	Standard
⎡>	**Ge**	**72**		ug/L			52881	43882	0	KED
⎢	**Ni**	**60**	**20.131**	ug/L	0.413	2	58	32248	1	KED
⎢	**Ni**	**62**	**20.584**	ug/L	0.181	0	7	5346	0	KED
⎢	**Cu**	**63**	**20.099**	ug/L	0.410	2	56	89049	1	KED
⎢	**Cu**	**65**	**20.164**	ug/L	0.143	0	28	45760	1	KED
⎢	**Zn**	**66**	**18.958**	ug/L	0.033	0	29	12121	0	KED
⎢	**Zn**	**67**	**18.252**	ug/L	0.765	4	3	1895	3	KED
⎣	**As**	**75**	**19.382**	ug/L	0.255	1	5	6307	1	KED
	Y	**89**		ug/L			361102	330165	0	Standard
	Kr	**83**		ug/L			70	154	7	Standard
⎡>	**In-1**	**115**		ug/L			11213	9465	2	KED
⎢	**Cd**	**111**	**19.617**	ug/L	0.211	1	2	6227	1	KED
⎣	**Cd**	**114**	**19.821**	ug/L	0.054	0	3	15946	2	KED
⎡>	**In**	**115**		ug/L			510451	502583	2	Standard
⎣	**Ag**	**107**	**18.302**	ug/L	0.662	3	76	335994	1	Standard
⎡>	**Tb**	**159**		ug/L			1318959	1219299	1	Standard
⎣	**Pb**	**208**	**0.020**	ug/L	0.001	5	239	2011	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 15:18:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	49735	1	Standard
	Cl	**37**		ug/L			6747174	6768206	3	Standard
⎡>	**Sc**	**45**		ug/L			731768	691376	2	Standard
⎢	**Cr**	**52**	**194.213**	ug/L	4.027	2	18236	4756985	0	Standard
⎢	**Cr**	**53**	**196.208**	ug/L	2.392	1	187	543131	1	Standard
⎣	**Mn**	**55**	**196.261**	ug/L	4.399	2	1693	7138417	1	Standard
⎡>	**Ge**	**72**		ug/L			52881	42820	1	KED
⎢	**Ni**	**60**	**202.666**	ug/L	1.824	0	58	316365	0	KED
⎢	**Ni**	**62**	**200.971**	ug/L	3.040	1	7	50873	0	KED
⎢	**Cu**	**63**	**200.082**	ug/L	3.673	1	56	864497	0	KED
⎢	**Cu**	**65**	**199.518**	ug/L	3.473	1	28	441523	0	KED
⎢	**Zn**	**66**	**195.526**	ug/L	2.316	1	29	121754	0	KED
⎢	**Zn**	**67**	**195.149**	ug/L	3.066	1	3	19755	0	KED
⎣	**As**	**75**	**202.383**	ug/L	3.029	1	5	64211	0	KED
	Y	**89**		ug/L			361102	322742	0	Standard
	Kr	**83**		ug/L			70	156	9	Standard
⎡>	**In-1**	**115**		ug/L			11213	9411	3	KED
⎢	**Cd**	**111**	**200.656**	ug/L	5.436	2	2	63277	1	KED
⎣	**Cd**	**114**	**200.293**	ug/L	8.803	4	3	160007	0	KED
⎡>	**In**	**115**		ug/L			510451	477270	3	Standard
⎣	**Ag**	**107**	**189.340**	ug/L	4.920	2	76	3300387	2	Standard
⎡>	**Tb**	**159**		ug/L			1318959	1186633	1	Standard
⎣	**Pb**	**208**	**211.895**	ug/L	2.971	1	239	18119477	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 15:22:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	52515	0	Standard
	Cl	**37**		ug/L			6747174	6732124	3	Standard
⌈>	**Sc**	**45**		ug/L			731768	671835	1	Standard
|	**Cr**	**52**	**303.419**	ug/L	2.203	0	18236	7214785	1	Standard
|	**Cr**	**53**	**300.250**	ug/L	3.401	1	187	807761	2	Standard
⌊	**Mn**	**55**	**299.216**	ug/L	3.608	1	1693	10578989	2	Standard
⌈>	**Ge**	**72**		ug/L			52881	42369	1	KED
|	**Ni**	**60**	**304.830**	ug/L	6.834	2	58	470748	0	KED
|	**Ni**	**62**	**303.177**	ug/L	4.967	1	7	75935	0	KED
|	**Cu**	**63**	**295.198**	ug/L	3.318	1	56	1262137	0	KED
|	**Cu**	**65**	**296.309**	ug/L	4.935	1	28	648814	0	KED
|	**Zn**	**66**	**285.507**	ug/L	7.567	2	29	175877	1	KED
|	**Zn**	**67**	**288.547**	ug/L	0.774	0	3	28906	1	KED
⌊	**As**	**75**	**303.738**	ug/L	3.479	1	5	95355	0	KED
	Y	**89**		ug/L			361102	310500	2	Standard
	Kr	**83**		ug/L			70	246	7	Standard
⌈>	**In-1**	**115**		ug/L			11213	9348	1	KED
|	**Cd**	**111**	**293.019**	ug/L	2.044	0	2	91843	0	KED
⌊	**Cd**	**114**	**292.386**	ug/L	6.045	2	3	232221	0	KED
⌈>	**In**	**115**		ug/L			510451	451206	2	Standard
⌊	**Ag**	**107**	**293.213**	ug/L	1.622	0	76	4834070	2	Standard
⌈>	**Tb**	**159**		ug/L			1318959	1090213	1	Standard
⌊	**Pb**	**208**	**337.350**	ug/L	3.206	0	239	26506699	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 15:31:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	51674	2	Standard
	Cl	**37**		ug/L			6747174	6950465	3	Standard
⌈>	**Sc**	**45**		ug/L			731768	725515	2	Standard
|	**Cr**	**52**	**0.100**	ug/L	0.163	162	18236	20698	22	Standard
|	**Cr**	**53**	**0.131**	ug/L	0.160	121	187	573	83	Standard
⌊	**Mn**	**55**	**0.092**	ug/L	0.162	175	1693	5279	120	Standard
⌈>	**Ge**	**72**		ug/L			52881	50152	0	KED
|	**Ni**	**60**	**-0.009**	ug/L	0.005	50	58	38	22	KED
|	**Ni**	**62**	**0.016**	ug/L	0.004	24	7	12	9	KED
|	**Cu**	**63**	**0.003**	ug/L	0.003	91	56	68	20	KED
|	**Cu**	**65**	**0.004**	ug/L	0.002	65	28	36	16	KED
|	**Zn**	**66**	**0.025**	ug/L	0.007	28	29	45	11	KED
|	**Zn**	**67**	**0.028**	ug/L	0.037	131	3	6	69	KED
⌊	**As**	**75**	**0.014**	ug/L	0.002	13	5	10	7	KED
	Y	**89**		ug/L			361102	348089	0	Standard
	Kr	**83**		ug/L			70	75	15	Standard
⌈>	**In-1**	**115**		ug/L			11213	10880	1	KED
|	**Cd**	**111**	**0.009**	ug/L	0.008	90	2	6	48	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.006	67	3	11	45	KED
⌈>	**In**	**115**		ug/L			510451	509125	1	Standard
⌊	**Ag**	**107**	**0.113**	ug/L	0.146	129	76	2187	125	Standard
⌈>	**Tb**	**159**		ug/L			1318959	1292453	0	Standard
⌊	**Pb**	**208**	**0.113**	ug/L	0.135	119	239	10751	117	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 15:37:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	51870	1	Standard
	Cl	**37**		ug/L			6747174	6898355	1	Standard
⎡>	**Sc**	**45**		ug/L			731768	735776	0	Standard
⎢	**Cr**	**52**	**-0.011**	ug/L	0.006	51	18236	18044	1	Standard
⎢	**Cr**	**53**	**0.016**	ug/L	0.005	30	187	236	5	Standard
⎣	**Mn**	**55**	**-0.020**	ug/L	0.000	1	1693	940	1	Standard
⎡>	**Ge**	**72**		ug/L			52881	49953	1	KED
⎢	**Ni**	**60**	**-0.001**	ug/L	0.005	377	58	52	18	KED
⎢	**Ni**	**62**	**0.004**	ug/L	0.026	707	7	8	93	KED
⎢	**Cu**	**63**	**0.002**	ug/L	0.003	137	56	62	21	KED
⎢	**Cu**	**65**	**0.006**	ug/L	0.004	72	28	41	25	KED
⎢	**Zn**	**66**	**0.029**	ug/L	0.002	8	29	48	4	KED
⎢	**Zn**	**67**	**0.039**	ug/L	0.016	40	3	7	25	KED
⎣	**As**	**75**	**-0.000**	ug/L	0.002	4491	5	5	14	KED
	Y	**89**		ug/L			361102	346173	2	Standard
	Kr	**83**		ug/L			70	78	15	Standard
⎡>	**In-1**	**115**		ug/L			11213	10875	0	KED
⎢	**Cd**	**111**	**0.005**	ug/L	0.005	97	2	4	40	KED
⎣	**Cd**	**114**	**0.001**	ug/L	0.005	751	3	4	116	KED
⎡>	**In**	**115**		ug/L			510451	515787	2	Standard
⎣	**Ag**	**107**	**0.004**	ug/L	0.001	25	76	148	11	Standard
⎡>	**Tb**	**159**		ug/L			1318959	1283679	2	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.000	13	239	426	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 15:43:08

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42077	42549	2	Standard
	Cl	37		ug/L			6747174	6997865	4	Standard
>	Sc	45		ug/L			731768	665715	14	Standard
	Cr	52	54.160	ug/L	6.821	12	18236	1274412	3	Standard
	Cr	53	55.249	ug/L	8.059	14	187	145357	1	Standard
	Mn	55	54.389	ug/L	7.634	14	1693	1880878	1	Standard
>	Ge	72		ug/L			52881	48712	1	KED
	Ni	60	50.083	ug/L	0.939	1	58	88966	0	KED
	Ni	62	49.890	ug/L	0.789	1	7	14373	1	KED
	Cu	63	51.960	ug/L	0.673	1	56	255453	0	KED
	Cu	65	50.952	ug/L	1.492	2	28	128270	1	KED
	Zn	66	50.151	ug/L	0.101	0	29	35550	1	KED
	Zn	67	50.033	ug/L	0.310	0	3	5764	1	KED
	As	75	50.009	ug/L	0.762	1	5	18053	0	KED
	Y	89		ug/L			361102	322609	15	Standard
	Kr	83		ug/L			70	104	7	Standard
>	In-1	115		ug/L			11213	10353	1	KED
	Cd	111	50.644	ug/L	0.206	0	2	17582	1	KED
	Cd	114	50.318	ug/L	1.076	2	3	44261	0	KED
>	In	115		ug/L			510451	451854	17	Standard
	Ag	107	56.653	ug/L	9.704	17	76	916817	2	Standard
>	Tb	159		ug/L			1318959	1182152	15	Standard
	Pb	208	56.631	ug/L	9.156	16	239	4742510	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 15:50:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	43204	1	Standard
	Cl	**37**		ug/L			6747174	7137129	2	Standard
⎡>	**Sc**	**45**		ug/L			731768	718725	2	Standard
⎢	**Cr**	**52**	**49.373**	ug/L	0.682	1	18236	1270847	2	Standard
⎢	**Cr**	**53**	**49.265**	ug/L	0.668	1	187	141908	2	Standard
⎣	**Mn**	**55**	**50.613**	ug/L	1.192	2	1693	1914732	0	Standard
⎡>	**Ge**	**72**		ug/L			52881	49573	1	KED
⎢	**Ni**	**60**	**49.869**	ug/L	1.370	2	58	90140	0	KED
⎢	**Ni**	**62**	**49.631**	ug/L	0.658	1	7	14550	0	KED
⎢	**Cu**	**63**	**50.303**	ug/L	0.749	1	56	251667	0	KED
⎢	**Cu**	**65**	**49.379**	ug/L	0.682	1	28	126533	1	KED
⎢	**Zn**	**66**	**49.907**	ug/L	0.394	0	29	36000	1	KED
⎢	**Zn**	**67**	**51.349**	ug/L	1.708	3	3	6020	3	KED
⎣	**As**	**75**	**49.452**	ug/L	0.755	1	5	18167	0	KED
	Y	**89**		ug/L			361102	344606	3	Standard
	Kr	**83**		ug/L			70	91	20	Standard
⎡>	**In-1**	**115**		ug/L			11213	10451	0	KED
⎢	**Cd**	**111**	**50.384**	ug/L	0.642	1	2	17657	0	KED
⎣	**Cd**	**114**	**50.381**	ug/L	0.660	1	3	44743	0	KED
⎡>	**In**	**115**		ug/L			510451	493203	2	Standard
⎣	**Ag**	**107**	**49.290**	ug/L	0.473	0	76	888268	1	Standard
⎡>	**Tb**	**159**		ug/L			1318959	1263310	1	Standard
⎣	**Pb**	**208**	**52.110**	ug/L	0.630	1	239	4744541	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 15:57:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	44225	1	Standard
	Cl	**37**		ug/L			6747174	7018812	2	Standard
⌈>	**Sc**	**45**		ug/L			731768	713569	1	Standard
|	**Cr**	**52**	**-0.010**	ug/L	0.003	31	18236	17518	0	Standard
|	**Cr**	**53**	**0.004**	ug/L	0.002	39	187	195	1	Standard
⌊	**Mn**	**55**	**-0.019**	ug/L	0.004	21	1693	922	16	Standard
⌈>	**Ge**	**72**		ug/L			52881	49375	0	KED
|	**Ni**	**60**	**-0.008**	ug/L	0.005	68	58	40	23	KED
|	**Ni**	**62**	**0.004**	ug/L	0.010	254	7	8	35	KED
|	**Cu**	**63**	**0.004**	ug/L	0.001	25	56	71	6	KED
|	**Cu**	**65**	**0.004**	ug/L	0.005	107	28	37	31	KED
|	**Zn**	**66**	**0.024**	ug/L	0.003	13	29	44	4	KED
|	**Zn**	**67**	**0.067**	ug/L	0.034	50	3	10	36	KED
⌊	**As**	**75**	**0.011**	ug/L	0.006	55	5	8	24	KED
	Y	**89**		ug/L			361102	341514	0	Standard
	Kr	**83**		ug/L			70	86	24	Standard
⌈>	**In-1**	**115**		ug/L			11213	10621	0	KED
|	**Cd**	**111**	**0.005**	ug/L	0.003	62	2	4	24	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.005	181	3	6	80	KED
⌈>	**In**	**115**		ug/L			510451	504632	1	Standard
⌊	**Ag**	**107**	**0.006**	ug/L	0.002	41	76	185	26	Standard
⌈>	**Tb**	**159**		ug/L			1318959	1275559	0	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.003	92	239	511	51	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0517-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 16:03:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42077	96782	2	Standard
	Cl	37		ug/L			6747174	6903971	2	Standard
⌈>	Sc	45		ug/L			731768	722773	1	Standard
|	Cr	52	0.085	ug/L	0.008	9	18236	20181	1	Standard
|	Cr	53	0.046	ug/L	0.004	9	187	319	5	Standard
⌊	Mn	55	0.051	ug/L	0.002	4	1693	3616	3	Standard
⌈>	Ge	72		ug/L			52881	50474	0	KED
|	Ni	60	0.005	ug/L	0.007	127	58	65	18	KED
|	Ni	62	0.029	ug/L	0.010	33	7	15	18	KED
|	Cu	63	0.030	ug/L	0.002	7	56	206	5	KED
|	Cu	65	0.031	ug/L	0.003	10	28	109	8	KED
|	Zn	66	0.347	ug/L	0.022	6	29	282	6	KED
|	Zn	67	0.411	ug/L	0.191	46	3	52	44	KED
⌊	As	75	0.003	ug/L	0.007	231	5	6	43	KED
	Y	89		ug/L			361102	338395	3	Standard
	Kr	83		ug/L			70	84	2	Standard
⌈>	In-1	115		ug/L			11213	10739	1	KED
|	Cd	111	0.001	ug/L	0.002	131	2	3	17	KED
⌊	Cd	114	0.006	ug/L	0.002	35	3	9	23	KED
⌈>	In	115		ug/L			510451	506073	1	Standard
⌊	Ag	107	0.003	ug/L	0.001	36	76	137	14	Standard
⌈>	Tb	159		ug/L			1318959	1292704	1	Standard
⌊	Pb	208	0.004	ug/L	0.000	2	239	644	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0517-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 16:08:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42077	107616	2	Standard
	Cl	37		ug/L			6747174	7100631	2	Standard
>	Sc	45		ug/L			731768	726822	1	Standard
	Cr	52	26.831	ug/L	0.698	2	18236	706628	1	Standard
	Cr	53	27.268	ug/L	0.341	1	187	79521	0	Standard
	Mn	55	27.441	ug/L	0.683	2	1693	1051097	3	Standard
>	Ge	72		ug/L			52881	48487	0	KED
	Ni	60	28.085	ug/L	0.360	1	58	49693	1	KED
	Ni	62	27.537	ug/L	0.632	2	7	7899	1	KED
	Cu	63	28.235	ug/L	0.149	0	56	138210	0	KED
	Cu	65	28.118	ug/L	0.268	0	28	70491	0	KED
	Zn	66	90.188	ug/L	1.058	1	29	63612	0	KED
	Zn	67	87.109	ug/L	1.350	1	3	9988	1	KED
	As	75	27.367	ug/L	0.337	1	5	9837	0	KED
	Y	89		ug/L			361102	344740	0	Standard
	Kr	83		ug/L			70	107	2	Standard
>	In-1	115		ug/L			11213	10021	1	KED
	Cd	111	28.485	ug/L	0.178	0	2	9574	1	KED
	Cd	114	28.194	ug/L	0.294	1	3	24011	0	KED
>	In	115		ug/L			510451	489243	1	Standard
	Ag	107	27.668	ug/L	0.721	2	76	494508	0	Standard
>	Tb	159		ug/L			1318959	1255045	1	Standard
	Pb	208	27.684	ug/L	0.439	1	239	2504176	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0054-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 16:12:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42077	60969	1	Standard
	Cl	37		ug/L			6747174	6949046	2	Standard
⌈>	Sc	45		ug/L			731768	716795	1	Standard
|	Cr	52	0.027	ug/L	0.017	61	18236	18541	0	Standard
|	Cr	53	0.010	ug/L	0.003	33	187	212	2	Standard
⌊	Mn	55	-0.001	ug/L	0.000	18	1693	1622	1	Standard
⌈>	Ge	72		ug/L			52881	48947	1	KED
|	Ni	60	-0.010	ug/L	0.008	79	58	36	39	KED
|	Ni	62	0.006	ug/L	0.016	259	7	8	53	KED
|	Cu	63	0.042	ug/L	0.007	15	56	259	11	KED
|	Cu	65	0.043	ug/L	0.003	6	28	134	5	KED
|	Zn	66	0.162	ug/L	0.027	16	29	142	13	KED
|	Zn	67	0.172	ug/L	0.018	10	3	22	8	KED
⌊	As	75	-0.004	ug/L	0.002	40	5	3	15	KED
	Y	89		ug/L			361102	343845	1	Standard
	Kr	83		ug/L			70	60	4	Standard
⌈>	In-1	115		ug/L			11213	10337	0	KED
|	Cd	111	-0.001	ug/L	0.002	137	2	2	24	KED
⌊	Cd	114	0.004	ug/L	0.001	32	3	6	16	KED
⌈>	In	115		ug/L			510451	501067	1	Standard
⌊	Ag	107	0.002	ug/L	0.000	14	76	120	6	Standard
⌈>	Tb	159		ug/L			1318959	1270786	2	Standard
⌊	Pb	208	0.009	ug/L	0.000	3	239	1027	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0054-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 16:17:02

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	62013	1	Standard
	Cl	**37**		ug/L			6747174	7000667	2	Standard
>	**Sc**	**45**		ug/L			731768	662016	10	Standard
	Cr	**52**	**28.993**	ug/L	2.547	8	18236	690265	2	Standard
	Cr	**53**	**28.831**	ug/L	2.835	9	187	76071	2	Standard
	Mn	**55**	**29.042**	ug/L	2.703	9	1693	1006724	2	Standard
>	**Ge**	**72**		ug/L			52881	48954	0	KED
	Ni	**60**	**26.357**	ug/L	0.151	0	58	47089	0	KED
	Ni	**62**	**26.848**	ug/L	0.181	0	7	7777	1	KED
	Cu	**63**	**26.948**	ug/L	0.415	1	56	133183	1	KED
	Cu	**65**	**26.797**	ug/L	0.310	1	28	67826	0	KED
	Zn	**66**	**84.114**	ug/L	0.964	1	29	59901	0	KED
	Zn	**67**	**81.625**	ug/L	1.695	2	3	9449	1	KED
	As	**75**	**25.818**	ug/L	0.314	1	5	9370	0	KED
	Y	**89**		ug/L			361102	317800	10	Standard
	Kr	**83**		ug/L			70	100	14	Standard
>	**In-1**	**115**		ug/L			11213	10322	1	KED
	Cd	**111**	**26.058**	ug/L	0.468	1	2	9021	2	KED
	Cd	**114**	**25.959**	ug/L	0.352	1	3	22771	1	KED
>	**In**	**115**		ug/L			510451	451242	10	Standard
	Ag	**107**	**28.607**	ug/L	2.571	8	76	469071	4	Standard
>	**Tb**	**159**		ug/L			1318959	1164738	11	Standard
	Pb	**208**	**29.254**	ug/L	3.322	11	239	2434119	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0054-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 16:23:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42077	60934	1	Standard
	Cl	37		ug/L			6747174	7181874	2	Standard
>	Sc	45		ug/L			731768	718845	2	Standard
	Cr	52	26.723	ug/L	0.391	1	18236	696095	1	Standard
	Cr	53	26.766	ug/L	0.298	1	187	77224	3	Standard
	Mn	55	26.677	ug/L	0.491	1	1693	1010417	2	Standard
>	Ge	72		ug/L			52881	49459	1	KED
	Ni	60	26.700	ug/L	0.473	1	58	48188	0	KED
	Ni	62	26.672	ug/L	0.365	1	7	7805	0	KED
	Cu	63	27.011	ug/L	0.729	2	56	134851	1	KED
	Cu	65	27.042	ug/L	0.421	1	28	69155	1	KED
	Zn	66	85.522	ug/L	0.510	0	29	61537	1	KED
	Zn	67	81.527	ug/L	2.886	3	3	9535	3	KED
	As	75	25.954	ug/L	0.222	0	5	9516	0	KED
	Y	89		ug/L			361102	347707	2	Standard
	Kr	83		ug/L			70	77	5	Standard
>	In-1	115		ug/L			11213	10498	1	KED
	Cd	111	26.785	ug/L	0.254	0	2	9432	1	KED
	Cd	114	26.783	ug/L	0.471	1	3	23893	0	KED
>	In	115		ug/L			510451	481786	1	Standard
	Ag	107	27.020	ug/L	0.485	1	76	475642	1	Standard
>	Tb	159		ug/L			1318959	1240596	0	Standard
	Pb	208	27.681	ug/L	0.166	0	239	2475273	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0005-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 02, 2023 16:28:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42077	232302	0	Standard
	Cl	37		ug/L			6747174	6976967	2	Standard
>	Sc	45		ug/L			731768	732323	3	Standard
	Cr	52	18.407	ug/L	0.605	3	18236	493931	0	Standard
	Cr	53	18.867	ug/L	0.350	1	187	55481	1	Standard
	Mn	55	50.963	ug/L	1.624	3	1693	1964146	1	Standard
>	Ge	72		ug/L			52881	46706	1	KED
	Ni	60	2.269	ug/L	0.050	2	58	3916	3	KED
	Ni	62	2.377	ug/L	0.146	6	7	662	5	KED
	Cu	63	0.940	ug/L	0.010	1	56	4479	1	KED
	Cu	65	0.927	ug/L	0.043	4	28	2263	5	KED
	Zn	66	30.796	ug/L	0.642	2	29	20938	1	KED
	Zn	67	29.595	ug/L	0.960	3	3	3270	2	KED
	As	75	0.127	ug/L	0.018	14	5	48	12	KED
	Y	89		ug/L			361102	328190	0	Standard
	Kr	83		ug/L			70	73	12	Standard
>	In-1	115		ug/L			11213	10081	0	KED
	Cd	111	0.468	ug/L	0.042	9	2	160	9	KED
	Cd	114	0.441	ug/L	0.084	18	3	381	19	KED
>	In	115		ug/L			510451	495499	0	Standard
	Ag	107	0.020	ug/L	0.001	6	76	432	5	Standard
>	Tb	159		ug/L			1318959	1273098	0	Standard
	Pb	208	0.053	ug/L	0.000	0	239	5090	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0631-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 02, 2023 16:37:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	139351	3	Standard
	Cl	**37**		ug/L			6747174	12698935	2	Standard
⌈>	**Sc**	**45**		ug/L			731768	809508	2	Standard
|	**Cr**	**52**	**2.381**	ug/L	0.055	2	18236	88203	1	Standard
|	**Cr**	**53**	**3.764**	ug/L	0.131	3	187	12400	2	Standard
⌊	**Mn**	**55**	**415.672**	ug/L	3.106	0	1693	17704480	2	Standard
⌈>	**Ge**	**72**		ug/L			52881	44599	0	KED
|	**Ni**	**60**	**2.331**	ug/L	0.019	0	58	3839	0	KED
|	**Ni**	**62**	**2.309**	ug/L	0.216	9	7	615	9	KED
|	**Cu**	**63**	**6.889**	ug/L	0.052	0	56	31055	1	KED
|	**Cu**	**65**	**6.759**	ug/L	0.116	1	28	15604	1	KED
|	**Zn**	**66**	**52.593**	ug/L	1.276	2	29	34129	1	KED
|	**Zn**	**67**	**53.974**	ug/L	1.210	2	3	5693	2	KED
⌊	**As**	**75**	**1.406**	ug/L	0.051	3	5	469	3	KED
	Y	**89**		ug/L			361102	344953	1	Standard
	Kr	**83**		ug/L			70	208	9	Standard
⌈>	**In-1**	**115**		ug/L			11213	10040	1	KED
|	**Cd**	**111**	**0.427**	ug/L	0.035	8	2	146	7	KED
⌊	**Cd**	**114**	**0.452**	ug/L	0.031	6	3	388	7	KED
⌈>	**In**	**115**		ug/L			510451	456108	1	Standard
⌊	**Ag**	**107**	**0.020**	ug/L	0.002	11	76	397	8	Standard
⌈>	**Tb**	**159**		ug/L			1318959	1227359	0	Standard
⌊	**Pb**	**208**	**2.236**	ug/L	0.024	1	239	198007	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0102-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 02, 2023 16:42:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42077	73338	1	Standard
	Cl	37		ug/L			6747174	10170167	2	Standard
>	Sc	45		ug/L			731768	751579	3	Standard
	Cr	52	57.384	ug/L	1.185	2	18236	1541005	1	Standard
	Cr	53	61.075	ug/L	1.033	1	187	183895	1	Standard
	Mn	55	4.319	ug/L	0.097	2	1693	172440	1	Standard
>	Ge	72		ug/L			52881	47705	0	KED
	Ni	60	1.957	ug/L	0.014	0	58	3456	0	KED
	Ni	62	2.037	ug/L	0.208	10	7	580	9	KED
	Cu	63	11.029	ug/L	0.106	0	56	53146	0	KED
	Cu	65	11.055	ug/L	0.237	2	28	27281	1	KED
	Zn	66	19.165	ug/L	0.098	0	29	13321	0	KED
	Zn	67	18.028	ug/L	0.631	3	3	2036	3	KED
	As	75	0.147	ug/L	0.006	3	5	56	3	KED
	Y	89		ug/L			361102	335599	1	Standard
	Kr	83		ug/L			70	73	9	Standard
>	In-1	115		ug/L			11213	9904	1	KED
	Cd	111	0.765	ug/L	0.049	6	2	256	6	KED
	Cd	114	0.768	ug/L	0.018	2	3	649	2	KED
>	In	115		ug/L			510451	476659	0	Standard
	Ag	107	0.009	ug/L	0.002	23	76	231	17	Standard
>	Tb	159		ug/L			1318959	1241367	2	Standard
	Pb	208	0.160	ug/L	0.004	2	239	14501	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 16:49:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	46749	2	Standard
	Cl	**37**		ug/L			6747174	7210627	2	Standard
⎡>	**Sc**	**45**		ug/L			731768	704329	1	Standard
⎢	**Cr**	**52**	**-0.008**	ug/L	0.010	123	18236	17348	1	Standard
⎢	**Cr**	**53**	**0.082**	ug/L	0.007	9	187	412	6	Standard
⎣	**Mn**	**55**	**-0.016**	ug/L	0.000	1	1693	1025	1	Standard
⎡>	**Ge**	**72**		ug/L			52881	50336	1	KED
⎢	**Ni**	**60**	**-0.014**	ug/L	0.005	35	58	29	32	KED
⎢	**Ni**	**62**	**-0.005**	ug/L	0.011	210	7	5	57	KED
⎢	**Cu**	**63**	**0.003**	ug/L	0.002	55	56	68	11	KED
⎢	**Cu**	**65**	**0.005**	ug/L	0.002	50	28	40	17	KED
⎢	**Zn**	**66**	**0.055**	ug/L	0.013	23	29	67	14	KED
⎢	**Zn**	**67**	**0.060**	ug/L	0.049	81	3	10	57	KED
⎣	**As**	**75**	**-0.006**	ug/L	0.005	73	5	2	60	KED
	Y	**89**		ug/L			361102	338062	1	Standard
	Kr	**83**		ug/L			70	63	12	Standard
⎡>	**In-1**	**115**		ug/L			11213	10599	1	KED
⎢	**Cd**	**111**	**-0.000**	ug/L	0.001	311	2	2	21	KED
⎣	**Cd**	**114**	**-0.002**	ug/L	0.004	198	3	1	193	KED
⎡>	**In**	**115**		ug/L			510451	493978	0	Standard
⎣	**Ag**	**107**	**-0.001**	ug/L	0.000	43	76	64	6	Standard
⎡>	**Tb**	**159**		ug/L			1318959	1245640	0	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.000	10	239	421	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 16:54:01
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	44664	1	Standard
	Cl	**37**		ug/L			6747174	7163619	2	Standard
⎡>	**Sc**	**45**		ug/L			731768	717567	1	Standard
⎢	**Cr**	**52**	**48.606**	ug/L	0.747	1	18236	1249583	2	Standard
⎢	**Cr**	**53**	**49.362**	ug/L	0.393	0	187	141991	2	Standard
⎣	**Mn**	**55**	**49.433**	ug/L	0.829	1	1693	1868140	3	Standard
⎡>	**Ge**	**72**		ug/L			52881	48316	0	KED
⎢	**Ni**	**60**	**51.163**	ug/L	0.536	1	58	90160	0	KED
⎢	**Ni**	**62**	**50.135**	ug/L	0.503	1	7	14327	1	KED
⎢	**Cu**	**63**	**50.949**	ug/L	0.547	1	56	248463	0	KED
⎢	**Cu**	**65**	**50.969**	ug/L	0.830	1	28	127299	0	KED
⎢	**Zn**	**66**	**50.200**	ug/L	0.624	1	29	35293	0	KED
⎢	**Zn**	**67**	**51.330**	ug/L	0.287	0	3	5866	1	KED
⎣	**As**	**75**	**50.075**	ug/L	0.623	1	5	17931	0	KED
	Y	**89**		ug/L			361102	340699	3	Standard
	Kr	**83**		ug/L			70	78	8	Standard
⎡>	**In-1**	**115**		ug/L			11213	10284	1	KED
⎢	**Cd**	**111**	**50.688**	ug/L	1.234	2	2	17478	1	KED
⎣	**Cd**	**114**	**50.493**	ug/L	0.731	1	3	44126	0	KED
⎡>	**In**	**115**		ug/L			510451	488685	3	Standard
⎣	**Ag**	**107**	**49.073**	ug/L	1.703	3	76	875576	0	Standard
⎡>	**Tb**	**159**		ug/L			1318959	1254641	3	Standard
⎣	**Pb**	**208**	**50.711**	ug/L	1.989	3	239	4582326	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 17:01:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42077	44843	2	Standard
	Cl	**37**		ug/L			6747174	7126924	2	Standard
⎡>	**Sc**	**45**		ug/L			731768	711143	1	Standard
⎢	**Cr**	**52**	**-0.016**	ug/L	0.014	87	18236	17329	2	Standard
⎢	**Cr**	**53**	**0.018**	ug/L	0.008	41	187	235	9	Standard
⎣	**Mn**	**55**	**-0.022**	ug/L	0.001	2	1693	819	1	Standard
⎡>	**Ge**	**72**		ug/L			52881	50208	1	KED
⎢	**Ni**	**60**	**-0.016**	ug/L	0.007	42	58	26	47	KED
⎢	**Ni**	**62**	**-0.005**	ug/L	0.013	253	7	5	66	KED
⎢	**Cu**	**63**	**0.001**	ug/L	0.001	83	56	60	7	KED
⎢	**Cu**	**65**	**-0.001**	ug/L	0.002	137	28	24	16	KED
⎢	**Zn**	**66**	**0.024**	ug/L	0.010	41	29	45	14	KED
⎢	**Zn**	**67**	**0.060**	ug/L	0.008	13	3	10	10	KED
⎣	**As**	**75**	**-0.001**	ug/L	0.001	159	5	4	5	KED
	Y	**89**		ug/L			361102	348649	0	Standard
	Kr	**83**		ug/L			70	71	24	Standard
⎡>	**In-1**	**115**		ug/L			11213	10750	1	KED
⎢	**Cd**	**111**	**0.004**	ug/L	0.011	283	2	4	96	KED
⎣	**Cd**	**114**	**0.006**	ug/L	0.002	34	3	9	21	KED
⎡>	**In**	**115**		ug/L			510451	492668	2	Standard
⎣	**Ag**	**107**	**0.003**	ug/L	0.001	24	76	120	10	Standard
⎡>	**Tb**	**159**		ug/L			1318959	1245027	1	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.001	39	239	342	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 17:06:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				43168	2	Standard
	Cl	**37**		ug/L				7031855	2	Standard
⎡>	**Sc**	**45**		ug/L				700785	1	Standard
⎢	**Cr**	**52**		ug/L				17028	1	Standard
⎣	**Cr**	**53**		ug/L				213	0	Standard
⎡>	**Ge**	**72**		ug/L				49353	1	KED
⎢	**Ni**	**60**		ug/L				16	24	KED
⎢	**Ni**	**62**		ug/L				8	66	KED
⎢	**Cu**	**63**		ug/L				50	8	KED
⎢	**Cu**	**65**		ug/L				26	37	KED
⎢	**Zn**	**66**		ug/L				28	11	KED
⎢	**Zn**	**67**		ug/L				3	50	KED
⎣	**As**	**75**		ug/L				3	45	KED
	Y	**89**		ug/L				329848	1	Standard
	Kr	**83**		ug/L				67	5	Standard
⎡>	**In-1**	**115**		ug/L				10660	1	KED
⎢	**Cd**	**111**		ug/L				4	66	KED
⎣	**Cd**	**114**		ug/L				3	38	KED
⎡>	**In**	**115**		ug/L				476658	2	Standard
⎣	**Ag**	**107**		ug/L				62	26	Standard
⎡>	**Tb**	**159**		ug/L				1242145	1	Standard
⎣	**Pb**	**208**		ug/L				218	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 17:11:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	42470	1	Standard
	Cl	**37**		ug/L			7031855	7126129	2	Standard
⌈>	**Sc**	**45**		ug/L			700785	705382	0	Standard
|	**Cr**	**52**	**50.003**	ug/L	0.934	1	17028	1262645	2	Standard
⌊	**Cr**	**53**	**50.206**	ug/L	1.183	2	213	141986	2	Standard
⌈>	**Ge**	**72**		ug/L			49353	49121	2	KED
|	**Ni**	**60**	**50.305**	ug/L	0.630	1	16	90083	1	KED
|	**Ni**	**62**	**50.067**	ug/L	1.956	3	8	14539	1	KED
|	**Cu**	**63**	**51.184**	ug/L	0.297	0	50	253771	1	KED
|	**Cu**	**65**	**50.473**	ug/L	0.868	1	26	128154	1	KED
|	**Zn**	**66**	**50.352**	ug/L	0.897	1	28	35987	1	KED
|	**Zn**	**67**	**49.859**	ug/L	1.506	3	3	5791	1	KED
⌊	**As**	**75**	**49.987**	ug/L	1.033	2	3	18193	0	KED
	Y	**89**		ug/L			329848	344602	2	Standard
	Kr	**83**		ug/L			67	83	15	Standard
⌈>	**In-1**	**115**		ug/L			10660	10612	1	KED
|	**Cd**	**111**	**49.068**	ug/L	1.181	2	4	17459	1	KED
⌊	**Cd**	**114**	**49.283**	ug/L	1.424	2	3	44429	1	KED
⌈>	**In**	**115**		ug/L			476658	486900	1	Standard
⌊	**Ag**	**107**	**50.135**	ug/L	0.934	1	62	891890	1	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1245636	0	Standard
⌊	**Pb**	**208**	**51.968**	ug/L	0.414	0	218	4665809	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 17:18:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	42138	2	Standard
	Cl	**37**		ug/L			7031855	6994146	2	Standard
⌈>	**Sc**	**45**		ug/L			700785	713644	3	Standard
|	**Cr**	**52**	**0.000**	ug/L	0.010	9439	17028	17338	1	Standard
⌊	**Cr**	**53**	**-0.006**	ug/L	0.000	6	213	200	3	Standard
⌈>	**Ge**	**72**		ug/L			49353	51167	1	KED
|	**Ni**	**60**	**0.016**	ug/L	0.006	39	16	47	24	KED
|	**Ni**	**62**	**-0.001**	ug/L	0.013	1510	8	8	48	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.001	57	50	41	13	KED
|	**Cu**	**65**	**0.002**	ug/L	0.003	134	26	33	23	KED
|	**Zn**	**66**	**-0.003**	ug/L	0.008	253	28	27	22	KED
|	**Zn**	**67**	**0.036**	ug/L	0.008	23	3	8	13	KED
⌊	**As**	**75**	**0.008**	ug/L	0.005	56	3	7	24	KED
	Y	**89**		ug/L			329848	346450	0	Standard
	Kr	**83**		ug/L			67	55	19	Standard
⌈>	**In-1**	**115**		ug/L			10660	10846	1	KED
|	**Cd**	**111**	**0.009**	ug/L	0.011	125	4	7	52	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.004	134	3	5	60	KED
⌈>	**In**	**115**		ug/L			476658	491605	0	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.001	30	62	120	13	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1255360	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	32	218	292	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 17:24:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	95960	1	Standard
	Cl	37		ug/L			7031855	6601743	2	Standard
>	Sc	45		ug/L			700785	874559	1	Standard
	Cr	52	11.850	ug/L	0.199	1	17028	387159	1	Standard
	Cr	53	11.934	ug/L	0.097	0	213	42047	1	Standard
>	Ge	72		ug/L			49353	49944	0	KED
	Ni	60	11.127	ug/L	0.307	2	16	20275	2	KED
	Ni	62	11.043	ug/L	0.197	1	8	3268	1	KED
	Cu	63	28.693	ug/L	0.147	0	50	144673	0	KED
	Cu	65	28.721	ug/L	0.234	0	26	74169	0	KED
	Zn	66	52.703	ug/L	0.101	0	28	38304	0	KED
	Zn	67	52.533	ug/L	0.706	1	3	6207	1	KED
	As	75	8.005	ug/L	0.132	1	3	2966	1	KED
	Y	89		ug/L			329848	583079	2	Standard
	Kr	83		ug/L			67	99	8	Standard
>	In-1	115		ug/L			10660	10539	3	KED
	Cd	111	0.154	ug/L	0.009	6	4	58	8	KED
	Cd	114	0.177	ug/L	0.001	0	3	161	3	KED
>	In	115		ug/L			476658	487193	3	Standard
	Ag	107	0.140	ug/L	0.006	4	62	2553	2	Standard
>	Tb	159		ug/L			1242145	1258281	0	Standard
	Pb	208	13.380	ug/L	0.113	0	218	1213652	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 17:28:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43168	99614	0	Standard
Cl	37		ug/L			7031855	6563557	3	Standard
> Sc	45		ug/L			700785	879266	4	Standard
Cr	52	11.424	ug/L	0.141	1	17028	375922	3	Standard
Cr	53	11.667	ug/L	0.118	1	213	41326	3	Standard
> Ge	72		ug/L			49353	48968	1	KED
Ni	60	11.149	ug/L	0.211	1	16	19914	1	KED
Ni	62	10.964	ug/L	0.148	1	8	3181	1	KED
Cu	63	30.483	ug/L	1.061	3	50	150635	1	KED
Cu	65	30.523	ug/L	0.535	1	26	77271	1	KED
Zn	66	71.742	ug/L	0.753	1	28	51109	1	KED
Zn	67	69.825	ug/L	1.032	1	3	8086	0	KED
As	75	5.920	ug/L	0.134	2	3	2152	3	KED
Y	89		ug/L			329848	585362	4	Standard
Kr	83		ug/L			67	121	12	Standard
> In-1	115		ug/L			10660	10292	2	KED
Cd	111	0.169	ug/L	0.016	9	4	62	7	KED
Cd	114	0.145	ug/L	0.015	10	3	129	12	KED
> In	115		ug/L			476658	489627	1	Standard
Ag	107	0.138	ug/L	0.005	3	62	2532	4	Standard
> Tb	159		ug/L			1242145	1250939	3	Standard
Pb	208	13.133	ug/L	0.145	1	218	1184160	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 17:32:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	91496	0	Standard
	Cl	37		ug/L			7031855	6503371	2	Standard
>	Sc	45		ug/L			700785	859091	0	Standard
	Cr	52	11.388	ug/L	0.232	2	17028	366364	2	Standard
	Cr	53	11.548	ug/L	0.151	1	213	39978	2	Standard
>	Ge	72		ug/L			49353	47723	0	KED
	Ni	60	11.896	ug/L	0.207	1	16	20710	1	KED
	Ni	62	11.511	ug/L	0.071	0	8	3255	0	KED
	Cu	63	26.130	ug/L	0.179	0	50	125898	0	KED
	Cu	65	25.732	ug/L	0.251	0	26	63499	1	KED
	Zn	66	52.229	ug/L	0.932	1	28	36272	1	KED
	Zn	67	51.156	ug/L	0.792	1	3	5775	1	KED
	As	75	6.607	ug/L	0.138	2	3	2340	2	KED
	Y	89		ug/L			329848	585791	1	Standard
	Kr	83		ug/L			67	97	24	Standard
>	In-1	115		ug/L			10660	10295	2	KED
	Cd	111	0.154	ug/L	0.012	7	4	57	7	KED
	Cd	114	0.135	ug/L	0.017	12	3	120	10	KED
>	In	115		ug/L			476658	479415	2	Standard
	Ag	107	0.121	ug/L	0.002	1	62	2174	2	Standard
>	Tb	159		ug/L			1242145	1265075	2	Standard
	Pb	208	11.323	ug/L	0.057	0	218	1032537	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 17:37:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	95342	0	Standard
	Cl	37		ug/L			7031855	6591331	2	Standard
>	Sc	45		ug/L			700785	831020	1	Standard
	Cr	52	10.977	ug/L	0.182	1	17028	342368	2	Standard
	Cr	53	11.018	ug/L	0.019	0	213	36906	1	Standard
>	Ge	72		ug/L			49353	49006	1	KED
	Ni	60	9.366	ug/L	0.229	2	16	16743	0	KED
	Ni	62	9.505	ug/L	0.382	4	8	2760	2	KED
	Cu	63	22.142	ug/L	0.609	2	50	109526	1	KED
	Cu	65	22.463	ug/L	0.602	2	26	56911	1	KED
	Zn	66	54.208	ug/L	0.724	1	28	38653	1	KED
	Zn	67	52.445	ug/L	0.311	0	3	6080	2	KED
	As	75	5.229	ug/L	0.224	4	3	1902	2	KED
	Y	89		ug/L			329848	553431	2	Standard
	Kr	83		ug/L			67	99	15	Standard
>	In-1	115		ug/L			10660	10293	3	KED
	Cd	111	0.111	ug/L	0.030	27	4	41	21	KED
	Cd	114	0.083	ug/L	0.004	5	3	75	5	KED
>	In	115		ug/L			476658	492346	1	Standard
	Ag	107	0.090	ug/L	0.010	11	62	1678	10	Standard
>	Tb	159		ug/L			1242145	1278802	1	Standard
	Pb	208	21.395	ug/L	0.528	2	218	1971819	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 17:41:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	100567	0	Standard
	Cl	37		ug/L			7031855	6527866	2	Standard
⌈>	Sc	45		ug/L			700785	875807	1	Standard
|	Cr	52	13.064	ug/L	0.115	0	17028	425327	2	Standard
⌊	Cr	53	13.249	ug/L	0.225	1	213	46717	2	Standard
⌈>	Ge	72		ug/L			49353	48365	0	KED
|	Ni	60	12.632	ug/L	0.200	1	16	22287	1	KED
|	Ni	62	12.978	ug/L	0.210	1	8	3718	1	KED
|	Cu	63	33.516	ug/L	0.638	1	50	163622	1	KED
|	Cu	65	33.456	ug/L	0.129	0	26	83658	0	KED
|	Zn	66	59.467	ug/L	0.526	0	28	41849	0	KED
|	Zn	67	58.639	ug/L	0.569	0	3	6708	0	KED
⌊	As	75	7.547	ug/L	0.083	1	3	2708	0	KED
	Y	89		ug/L			329848	610626	2	Standard
	Kr	83		ug/L			67	109	13	Standard
⌈>	In-1	115		ug/L			10660	10185	1	KED
|	Cd	111	0.193	ug/L	0.020	10	4	69	11	KED
⌊	Cd	114	0.195	ug/L	0.031	15	3	171	13	KED
⌈>	In	115		ug/L			476658	492804	1	Standard
⌊	Ag	107	0.146	ug/L	0.005	3	62	2701	3	Standard
⌈>	Tb	159		ug/L			1242145	1260103	2	Standard
⌊	Pb	208	13.268	ug/L	0.310	2	218	1204797	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 17:46:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	89872	0	Standard
	Cl	37		ug/L			7031855	6567350	3	Standard
>	Sc	45		ug/L			700785	809820	1	Standard
	Cr	52	10.989	ug/L	0.212	1	17028	333908	1	Standard
	Cr	53	11.306	ug/L	0.084	0	213	36899	1	Standard
>	Ge	72		ug/L			49353	49124	1	KED
	Ni	60	9.652	ug/L	0.079	0	16	17301	1	KED
	Ni	62	9.582	ug/L	0.561	5	8	2789	4	KED
	Cu	63	23.190	ug/L	0.271	1	50	115007	0	KED
	Cu	65	23.411	ug/L	0.707	3	26	59463	2	KED
	Zn	66	62.035	ug/L	1.218	1	28	44335	1	KED
	Zn	67	59.724	ug/L	1.307	2	3	6939	1	KED
	As	75	4.841	ug/L	0.023	0	3	1765	0	KED
	Y	89		ug/L			329848	519034	2	Standard
	Kr	83		ug/L			67	99	10	Standard
>	In-1	115		ug/L			10660	10130	0	KED
	Cd	111	0.135	ug/L	0.018	13	4	49	12	KED
	Cd	114	0.135	ug/L	0.024	17	3	119	18	KED
>	In	115		ug/L			476658	490753	3	Standard
	Ag	107	0.087	ug/L	0.003	3	62	1629	1	Standard
>	Tb	159		ug/L			1242145	1260385	2	Standard
	Pb	208	15.778	ug/L	0.417	2	218	1432924	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 17:50:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43168	88251	1	Standard
Cl	37		ug/L			7031855	6553597	3	Standard
> Sc	45		ug/L			700785	908055	1	Standard
Cr	52	13.463	ug/L	0.248	1	17028	453747	2	Standard
Cr	53	13.738	ug/L	0.218	1	213	50214	2	Standard
> Ge	72		ug/L			49353	48257	0	KED
Ni	60	14.732	ug/L	0.125	0	16	25932	0	KED
Ni	62	14.797	ug/L	0.685	4	8	4229	4	KED
Cu	63	25.351	ug/L	0.411	1	50	123508	1	KED
Cu	65	25.486	ug/L	0.322	1	26	63593	0	KED
Zn	66	444.270	ug/L	7.981	1	28	311780	1	KED
Zn	67	420.329	ug/L	0.594	0	3	47961	0	KED
As	75	5.896	ug/L	0.155	2	3	2112	2	KED
Y	89		ug/L			329848	670298	1	Standard
Kr	83		ug/L			67	115	24	Standard
> In-1	115		ug/L			10660	10220	1	KED
Cd	111	0.221	ug/L	0.006	2	4	79	3	KED
Cd	114	0.207	ug/L	0.033	15	3	182	15	KED
> In	115		ug/L			476658	477216	2	Standard
Ag	107	0.167	ug/L	0.008	5	62	2966	4	Standard
> Tb	159		ug/L			1242145	1238084	0	Standard
Pb	208	9.598	ug/L	0.074	0	218	856699	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 17:55:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	94537	1	Standard
	Cl	37		ug/L			7031855	6579120	3	Standard
⌈>	Sc	45		ug/L			700785	864601	2	Standard
|	Cr	52	12.698	ug/L	0.190	1	17028	408604	1	Standard
⌊	Cr	53	13.013	ug/L	0.230	1	213	45289	0	Standard
⌈>	Ge	72		ug/L			49353	48108	0	KED
|	Ni	60	12.878	ug/L	0.268	2	16	22596	1	KED
|	Ni	62	12.630	ug/L	0.207	1	8	3599	1	KED
|	Cu	63	26.186	ug/L	0.303	1	50	127176	0	KED
|	Cu	65	26.040	ug/L	0.341	1	26	64774	1	KED
|	Zn	66	53.414	ug/L	0.463	0	28	37392	0	KED
|	Zn	67	52.639	ug/L	1.158	2	3	5990	1	KED
⌊	As	75	5.773	ug/L	0.009	0	3	2061	0	KED
	Y	89		ug/L			329848	584595	0	Standard
	Kr	83		ug/L			67	100	4	Standard
⌈>	In-1	115		ug/L			10660	10105	0	KED
|	Cd	111	0.170	ug/L	0.018	10	4	61	9	KED
⌊	Cd	114	0.163	ug/L	0.011	6	3	142	7	KED
⌈>	In	115		ug/L			476658	469214	1	Standard
⌊	Ag	107	0.136	ug/L	0.005	3	62	2393	2	Standard
⌈>	Tb	159		ug/L			1242145	1237152	1	Standard
⌊	Pb	208	11.204	ug/L	0.201	1	218	998987	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 17:59:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	95532	1	Standard
	Cl	37		ug/L			7031855	6573896	2	Standard
>	Sc	45		ug/L			700785	861664	2	Standard
	Cr	52	12.982	ug/L	0.331	2	17028	415772	0	Standard
	Cr	53	13.331	ug/L	0.282	2	213	46233	1	Standard
>	Ge	72		ug/L			49353	47244	0	KED
	Ni	60	13.098	ug/L	0.111	0	16	22572	1	KED
	Ni	62	12.858	ug/L	0.280	2	8	3599	2	KED
	Cu	63	26.927	ug/L	0.196	0	50	128432	0	KED
	Cu	65	27.062	ug/L	0.301	1	26	66109	1	KED
	Zn	66	54.350	ug/L	1.121	2	28	37364	1	KED
	Zn	67	53.951	ug/L	0.440	0	3	6029	0	KED
	As	75	6.841	ug/L	0.058	0	3	2398	0	KED
	Y	89		ug/L			329848	582325	1	Standard
	Kr	83		ug/L			67	95	4	Standard
>	In-1	115		ug/L			10660	9827	2	KED
	Cd	111	0.176	ug/L	0.011	6	4	61	8	KED
	Cd	114	0.174	ug/L	0.015	8	3	147	10	KED
>	In	115		ug/L			476658	484247	3	Standard
	Ag	107	0.128	ug/L	0.006	4	62	2334	1	Standard
>	Tb	159		ug/L			1242145	1227953	0	Standard
	Pb	208	11.225	ug/L	0.167	1	218	993631	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-11
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 18:03:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	95171	1	Standard
	Cl	37		ug/L			7031855	6564487	2	Standard
>	Sc	45		ug/L			700785	868553	1	Standard
	Cr	52	12.804	ug/L	0.036	0	17028	413785	1	Standard
	Cr	53	12.998	ug/L	0.138	1	213	45456	0	Standard
>	Ge	72		ug/L			49353	48006	1	KED
	Ni	60	12.890	ug/L	0.110	0	16	22572	0	KED
	Ni	62	13.142	ug/L	0.335	2	8	3738	3	KED
	Cu	63	24.910	ug/L	0.476	1	50	120714	0	KED
	Cu	65	24.797	ug/L	0.747	3	26	61539	1	KED
	Zn	66	54.620	ug/L	1.124	2	28	38150	1	KED
	Zn	67	55.005	ug/L	1.803	3	3	6245	2	KED
	As	75	5.300	ug/L	0.089	1	3	1889	2	KED
	Y	89		ug/L			329848	588581	2	Standard
	Kr	83		ug/L			67	114	11	Standard
>	In-1	115		ug/L			10660	10225	2	KED
	Cd	111	0.139	ug/L	0.024	16	4	51	13	KED
	Cd	114	0.130	ug/L	0.010	7	3	115	10	KED
>	In	115		ug/L			476658	471908	1	Standard
	Ag	107	0.121	ug/L	0.003	2	62	2150	1	Standard
>	Tb	159		ug/L			1242145	1235243	0	Standard
	Pb	208	10.473	ug/L	0.032	0	218	932653	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 18:09:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	44158	1	Standard
	Cl	**37**		ug/L			7031855	6928613	2	Standard
⌈>	**Sc**	**45**		ug/L			700785	700572	1	Standard
|	**Cr**	**52**	**49.828**	ug/L	1.489	2	17028	1249418	1	Standard
⌊	**Cr**	**53**	**50.648**	ug/L	1.249	2	213	142255	2	Standard
⌈>	**Ge**	**72**		ug/L			49353	48242	0	KED
|	**Ni**	**60**	**50.382**	ug/L	0.314	0	16	88615	0	KED
|	**Ni**	**62**	**50.212**	ug/L	0.621	1	8	14329	1	KED
|	**Cu**	**63**	**50.400**	ug/L	0.213	0	50	245426	0	KED
|	**Cu**	**65**	**51.098**	ug/L	0.597	1	26	127441	1	KED
|	**Zn**	**66**	**50.454**	ug/L	0.314	0	28	35421	0	KED
|	**Zn**	**67**	**52.177**	ug/L	0.460	0	3	5954	0	KED
⌊	**As**	**75**	**49.756**	ug/L	0.104	0	3	17790	0	KED
	Y	**89**		ug/L			329848	326601	1	Standard
	Kr	**83**		ug/L			67	74	6	Standard
⌈>	**In-1**	**115**		ug/L			10660	10321	3	KED
|	**Cd**	**111**	**50.599**	ug/L	1.817	3	4	17499	0	KED
⌊	**Cd**	**114**	**50.631**	ug/L	1.131	2	3	44383	1	KED
⌈>	**In**	**115**		ug/L			476658	468865	1	Standard
⌊	**Ag**	**107**	**50.669**	ug/L	0.541	1	62	868000	1	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1251233	0	Standard
⌊	**Pb**	**208**	**51.493**	ug/L	1.034	2	218	4643803	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 18:16:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	42970	2	Standard
	Cl	**37**		ug/L			7031855	6817699	3	Standard
⌈>	**Sc**	**45**		ug/L			700785	691908	3	Standard
|	**Cr**	**52**	**0.008**	ug/L	0.013	161	17028	17001	1	Standard
⌊	**Cr**	**53**	**-0.015**	ug/L	0.003	20	213	168	7	Standard
⌈>	**Ge**	**72**		ug/L			49353	50027	0	KED
|	**Ni**	**60**	**-0.000**	ug/L	0.001	982	16	16	13	KED
|	**Ni**	**62**	**0.002**	ug/L	0.016	912	8	8	53	KED
|	**Cu**	**63**	**0.001**	ug/L	0.003	355	50	55	28	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.001	85	26	24	7	KED
|	**Zn**	**66**	**0.013**	ug/L	0.019	149	28	38	36	KED
|	**Zn**	**67**	**0.016**	ug/L	0.016	103	3	5	33	KED
⌊	**As**	**75**	**0.001**	ug/L	0.001	102	3	4	6	KED
	Y	**89**		ug/L			329848	331031	3	Standard
	Kr	**83**		ug/L			67	59	7	Standard
⌈>	**In-1**	**115**		ug/L			10660	10673	1	KED
|	**Cd**	**111**	**-0.008**	ug/L	0.002	18	4	1	43	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.003	90	3	6	46	KED
⌈>	**In**	**115**		ug/L			476658	483566	3	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.000	19	62	92	6	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1235342	2	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	57	218	281	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-12
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 18:24:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	87923	2	Standard
	Cl	37		ug/L			7031855	6578117	2	Standard
>	Sc	45		ug/L			700785	807054	0	Standard
	Cr	52	10.671	ug/L	0.087	0	17028	323729	1	Standard
	Cr	53	10.973	ug/L	0.058	0	213	35698	1	Standard
>	Ge	72		ug/L			49353	49732	0	KED
	Ni	60	10.456	ug/L	0.076	0	16	18972	0	KED
	Ni	62	10.248	ug/L	0.092	0	8	3021	1	KED
	Cu	63	18.881	ug/L	0.165	0	50	94813	1	KED
	Cu	65	18.816	ug/L	0.094	0	26	48393	0	KED
	Zn	66	42.137	ug/L	0.422	1	28	30499	0	KED
	Zn	67	39.711	ug/L	0.524	1	3	4673	1	KED
	As	75	5.191	ug/L	0.098	1	3	1916	1	KED
	Y	89		ug/L			329848	515095	2	Standard
	Kr	83		ug/L			67	80	13	Standard
>	In-1	115		ug/L			10660	10716	2	KED
	Cd	111	0.049	ug/L	0.028	56	4	21	45	KED
	Cd	114	0.044	ug/L	0.017	38	3	42	35	KED
>	In	115		ug/L			476658	474444	2	Standard
	Ag	107	0.075	ug/L	0.004	5	62	1354	4	Standard
>	Tb	159		ug/L			1242145	1224088	3	Standard
	Pb	208	15.885	ug/L	0.581	3	218	1400613	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-13
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 18:28:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	87938	1	Standard
	Cl	37		ug/L			7031855	6560400	3	Standard
>	Sc	45		ug/L			700785	841709	1	Standard
	Cr	52	15.207	ug/L	0.199	1	17028	472397	0	Standard
	Cr	53	15.133	ug/L	0.290	1	213	51240	0	Standard
>	Ge	72		ug/L			49353	47802	0	KED
	Ni	60	14.402	ug/L	0.254	1	16	25109	1	KED
	Ni	62	14.297	ug/L	0.260	1	8	4048	1	KED
	Cu	63	39.912	ug/L	0.385	0	50	192582	0	KED
	Cu	65	39.720	ug/L	0.144	0	26	98164	0	KED
	Zn	66	62.090	ug/L	0.966	1	28	43186	1	KED
	Zn	67	62.194	ug/L	1.427	2	3	7032	2	KED
	As	75	7.737	ug/L	0.094	1	3	2744	0	KED
	Y	89		ug/L			329848	564938	0	Standard
	Kr	83		ug/L			67	86	14	Standard
>	In-1	115		ug/L			10660	10355	3	KED
	Cd	111	0.156	ug/L	0.015	9	4	58	5	KED
	Cd	114	0.156	ug/L	0.013	8	3	140	11	KED
>	In	115		ug/L			476658	469011	1	Standard
	Ag	107	0.142	ug/L	0.002	1	62	2496	2	Standard
>	Tb	159		ug/L			1242145	1225538	1	Standard
	Pb	208	14.577	ug/L	0.184	1	218	1287714	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-14
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 18:33:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43168	76341	0	Standard
Cl	37		ug/L			7031855	6519950	2	Standard
Sc	45		ug/L			700785	906516	2	Standard
Cr	52	14.484	ug/L	0.205	1	17028	485579	1	Standard
Cr	53	14.839	ug/L	0.035	0	213	54125	2	Standard
Ge	72		ug/L			49353	47075	0	KED
Ni	60	14.362	ug/L	0.185	1	16	24660	0	KED
Ni	62	14.352	ug/L	0.365	2	8	4002	2	KED
Cu	63	28.388	ug/L	0.201	0	50	134912	0	KED
Cu	65	28.108	ug/L	0.476	1	26	68421	2	KED
Zn	66	55.935	ug/L	0.796	1	28	38318	1	KED
Zn	67	55.876	ug/L	0.704	1	3	6222	0	KED
As	75	7.054	ug/L	0.218	3	3	2464	2	KED
Y	89		ug/L			329848	685123	1	Standard
Kr	83		ug/L			67	112	21	Standard
In-1	115		ug/L			10660	9917	5	KED
Cd	111	0.329	ug/L	0.030	9	4	113	5	KED
Cd	114	0.312	ug/L	0.026	8	3	264	3	KED
In	115		ug/L			476658	485391	1	Standard
Ag	107	0.230	ug/L	0.002	0	62	4147	0	Standard
Tb	159		ug/L			1242145	1213344	1	Standard
Pb	208	12.315	ug/L	0.207	1	218	1077008	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0417-15
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 18:37:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	81461	0	Standard
	Cl	37		ug/L			7031855	6766151	2	Standard
>	Sc	45		ug/L			700785	797531	0	Standard
	Cr	52	11.575	ug/L	0.251	2	17028	345329	1	Standard
	Cr	53	11.774	ug/L	0.129	1	213	37834	1	Standard
>	Ge	72		ug/L			49353	46906	1	KED
	Ni	60	9.266	ug/L	0.261	2	16	15856	2	KED
	Ni	62	9.044	ug/L	0.173	1	8	2516	3	KED
	Cu	63	22.313	ug/L	0.203	0	50	105665	1	KED
	Cu	65	22.681	ug/L	0.275	1	26	55016	2	KED
	Zn	66	50.982	ug/L	0.714	1	28	34795	0	KED
	Zn	67	49.186	ug/L	1.477	3	3	5459	4	KED
	As	75	4.068	ug/L	0.101	2	3	1417	1	KED
	Y	89		ug/L			329848	539381	1	Standard
	Kr	83		ug/L			67	90	16	Standard
>	In-1	115		ug/L			10660	10225	1	KED
	Cd	111	0.105	ug/L	0.011	10	4	40	8	KED
	Cd	114	0.104	ug/L	0.021	20	3	93	20	KED
>	In	115		ug/L			476658	469773	1	Standard
	Ag	107	0.098	ug/L	0.003	3	62	1741	1	Standard
>	Tb	159		ug/L			1242145	1239543	1	Standard
	Pb	208	14.442	ug/L	0.232	1	218	1290225	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0420-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 18:42:01
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43168	94366	1	Standard
Cl	37		ug/L			7031855	6433201	3	Standard
Sc	45		ug/L			700785	887486	2	Standard
Cr	52	13.328	ug/L	0.227	1	17028	439170	1	Standard
Cr	53	13.596	ug/L	0.091	0	213	48575	2	Standard
Ge	72		ug/L			49353	47534	0	KED
Ni	60	13.587	ug/L	0.230	1	16	23559	1	KED
Ni	62	13.652	ug/L	0.489	3	8	3844	3	KED
Cu	63	28.772	ug/L	0.273	0	50	138069	0	KED
Cu	65	28.960	ug/L	0.268	0	26	71174	0	KED
Zn	66	57.442	ug/L	1.117	1	28	39732	2	KED
Zn	67	56.608	ug/L	2.056	3	3	6364	3	KED
As	75	6.442	ug/L	0.102	1	3	2272	1	KED
Y	89		ug/L			329848	629311	2	Standard
Kr	83		ug/L			67	104	16	Standard
In-1	115		ug/L			10660	9911	3	KED
Cd	111	0.176	ug/L	0.019	10	4	62	11	KED
Cd	114	0.150	ug/L	0.022	14	3	128	11	KED
In	115		ug/L			476658	469624	1	Standard
Ag	107	0.147	ug/L	0.004	2	62	2590	1	Standard
Tb	159		ug/L			1242145	1238433	2	Standard
Pb	208	12.474	ug/L	0.249	1	218	1113304	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0420-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 18:46:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43168	79899	0	Standard
Cl	37		ug/L			7031855	6442377	2	Standard
> Sc	45		ug/L			700785	925774	2	Standard
Cr	52	14.934	ug/L	0.241	1	17028	510614	1	Standard
Cr	53	15.453	ug/L	0.059	0	213	57552	2	Standard
> Ge	72		ug/L			49353	47822	1	KED
Ni	60	15.047	ug/L	0.302	2	16	26242	0	KED
Ni	62	15.287	ug/L	0.472	3	8	4328	1	KED
Cu	63	41.462	ug/L	0.401	0	50	200146	1	KED
Cu	65	40.613	ug/L	0.705	1	26	100407	1	KED
Zn	66	71.078	ug/L	0.777	1	28	49451	0	KED
Zn	67	71.147	ug/L	0.097	0	3	8047	1	KED
As	75	8.650	ug/L	0.253	2	3	3068	1	KED
Y	89		ug/L			329848	667202	3	Standard
Kr	83		ug/L			67	119	21	Standard
> In-1	115		ug/L			10660	10113	0	KED
Cd	111	0.225	ug/L	0.032	14	4	80	13	KED
Cd	114	0.228	ug/L	0.014	6	3	198	6	KED
> In	115		ug/L			476658	477300	1	Standard
Ag	107	0.220	ug/L	0.007	3	62	3893	3	Standard
> Tb	159		ug/L			1242145	1227898	1	Standard
Pb	208	20.636	ug/L	0.151	0	218	1826441	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0420-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 18:50:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	87629	1	Standard
	Cl	37		ug/L			7031855	6385397	2	Standard
>	Sc	45		ug/L			700785	868004	2	Standard
	Cr	52	13.091	ug/L	0.066	0	17028	422351	2	Standard
	Cr	53	13.470	ug/L	0.111	0	213	47072	2	Standard
>	Ge	72		ug/L			49353	47347	1	KED
	Ni	60	12.975	ug/L	0.377	2	16	22406	1	KED
	Ni	62	13.334	ug/L	0.358	2	8	3739	1	KED
	Cu	63	32.593	ug/L	0.472	1	50	155772	0	KED
	Cu	65	32.427	ug/L	0.300	0	26	79378	0	KED
	Zn	66	60.429	ug/L	0.771	1	28	41628	0	KED
	Zn	67	59.313	ug/L	0.926	1	3	6642	1	KED
	As	75	5.822	ug/L	0.145	2	3	2046	1	KED
	Y	89		ug/L			329848	604269	4	Standard
	Kr	83		ug/L			67	107	13	Standard
>	In-1	115		ug/L			10660	10255	0	KED
	Cd	111	0.175	ug/L	0.012	7	4	64	7	KED
	Cd	114	0.167	ug/L	0.030	18	3	148	18	KED
>	In	115		ug/L			476658	483869	4	Standard
	Ag	107	0.167	ug/L	0.003	1	62	3023	4	Standard
>	Tb	159		ug/L			1242145	1244306	1	Standard
	Pb	208	15.001	ug/L	0.162	1	218	1345626	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0420-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 18:55:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43168	88144	1	Standard
Cl	37		ug/L			7031855	6381041	4	Standard
> Sc	45		ug/L			700785	892538	3	Standard
Cr	52	13.684	ug/L	0.603	4	17028	452609	2	Standard
Cr	53	13.865	ug/L	0.215	1	213	49798	1	Standard
> Ge	72		ug/L			49353	46888	1	KED
Ni	60	13.559	ug/L	0.381	2	16	23185	1	KED
Ni	62	13.327	ug/L	0.418	3	8	3700	1	KED
Cu	63	26.232	ug/L	0.451	1	50	124152	0	KED
Cu	65	26.429	ug/L	0.738	2	26	64071	2	KED
Zn	66	56.226	ug/L	0.709	1	28	38357	0	KED
Zn	67	56.986	ug/L	0.493	0	3	6321	2	KED
As	75	6.230	ug/L	0.082	1	3	2167	0	KED
Y	89		ug/L			329848	673235	4	Standard
Kr	83		ug/L			67	110	13	Standard
> In-1	115		ug/L			10660	10240	0	KED
Cd	111	0.279	ug/L	0.014	5	4	99	5	KED
Cd	114	0.286	ug/L	0.053	18	3	251	18	KED
> In	115		ug/L			476658	473130	2	Standard
Ag	107	0.238	ug/L	0.003	1	62	4180	2	Standard
> Tb	159		ug/L			1242145	1232547	0	Standard
Pb	208	49.390	ug/L	0.149	0	218	4387862	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 18:59:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43168	96310	1	Standard
Cl	37		ug/L			7031855	6419215	2	Standard
> Sc	45		ug/L			700785	884359	2	Standard
Cr	52	12.542	ug/L	0.221	1	17028	413059	0	Standard
Cr	53	12.638	ug/L	0.108	0	213	45015	2	Standard
> Ge	72		ug/L			49353	47157	1	KED
Ni	60	12.730	ug/L	0.416	3	16	21891	1	KED
Ni	62	12.833	ug/L	0.050	0	8	3585	2	KED
Cu	63	29.098	ug/L	0.436	1	50	138509	0	KED
Cu	65	29.100	ug/L	0.591	2	26	70940	0	KED
Zn	66	56.419	ug/L	1.185	2	28	38706	0	KED
Zn	67	55.009	ug/L	1.207	2	3	6137	3	KED
As	75	5.761	ug/L	0.060	1	3	2016	0	KED
Y	89		ug/L			329848	598904	2	Standard
Kr	83		ug/L			67	110	19	Standard
> In-1	115		ug/L			10660	10244	2	KED
Cd	111	0.190	ug/L	0.023	12	4	69	11	KED
Cd	114	0.159	ug/L	0.007	4	3	141	6	KED
> In	115		ug/L			476658	487488	2	Standard
Ag	107	0.137	ug/L	0.003	2	62	2504	2	Standard
> Tb	159		ug/L			1242145	1245240	2	Standard
Pb	208	13.068	ug/L	0.269	2	218	1172717	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 19:04:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	89693	1	Standard
	Cl	37		ug/L			7031855	6363948	2	Standard
>	Sc	45		ug/L			700785	816616	9	Standard
	Cr	52	13.126	ug/L	1.303	9	17028	395975	0	Standard
	Cr	53	13.463	ug/L	1.427	10	213	43975	2	Standard
>	Ge	72		ug/L			49353	47244	0	KED
	Ni	60	12.207	ug/L	0.122	1	16	21039	1	KED
	Ni	62	12.269	ug/L	0.167	1	8	3434	0	KED
	Cu	63	37.810	ug/L	0.497	1	50	180318	1	KED
	Cu	65	37.707	ug/L	0.269	0	26	92105	1	KED
	Zn	66	57.594	ug/L	1.065	1	28	39591	1	KED
	Zn	67	56.299	ug/L	1.837	3	3	6292	3	KED
	As	75	7.246	ug/L	0.195	2	3	2540	2	KED
	Y	89		ug/L			329848	550728	3	Standard
	Kr	83		ug/L			67	95	7	Standard
>	In-1	115		ug/L			10660	10090	0	KED
	Cd	111	0.069	ug/L	0.011	16	4	27	14	KED
	Cd	114	0.075	ug/L	0.027	35	3	66	34	KED
>	In	115		ug/L			476658	458702	14	Standard
	Ag	107	0.152	ug/L	0.026	16	62	2572	4	Standard
>	Tb	159		ug/L			1242145	1166371	12	Standard
	Pb	208	14.607	ug/L	1.854	12	218	1215687	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 19:09:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	43252	1	Standard
	Cl	**37**		ug/L			7031855	6882962	3	Standard
⌈>	**Sc**	**45**		ug/L			700785	692389	1	Standard
|	**Cr**	**52**	**49.570**	ug/L	0.858	1	17028	1228516	0	Standard
⌊	**Cr**	**53**	**50.281**	ug/L	0.764	1	213	139562	1	Standard
⌈>	**Ge**	**72**		ug/L			49353	47740	0	KED
|	**Ni**	**60**	**51.415**	ug/L	0.949	1	16	89487	1	KED
|	**Ni**	**62**	**50.132**	ug/L	1.012	2	8	14155	1	KED
|	**Cu**	**63**	**51.222**	ug/L	0.305	0	50	246833	1	KED
|	**Cu**	**65**	**51.219**	ug/L	0.482	0	26	126408	0	KED
|	**Zn**	**66**	**50.224**	ug/L	0.674	1	28	34891	0	KED
|	**Zn**	**67**	**50.673**	ug/L	0.414	0	3	5723	0	KED
⌊	**As**	**75**	**50.466**	ug/L	0.524	1	3	17855	0	KED
	Y	**89**		ug/L			329848	322231	1	Standard
	Kr	**83**		ug/L			67	59	8	Standard
⌈>	**In-1**	**115**		ug/L			10660	10202	1	KED
|	**Cd**	**111**	**51.329**	ug/L	1.106	2	4	17557	0	KED
⌊	**Cd**	**114**	**51.243**	ug/L	0.846	1	3	44417	0	KED
⌈>	**In**	**115**		ug/L			476658	469676	2	Standard
⌊	**Ag**	**107**	**50.668**	ug/L	1.418	2	62	869329	1	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1223410	0	Standard
⌊	**Pb**	**208**	**52.675**	ug/L	0.260	0	218	4644927	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 19:16:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	41382	0	Standard
	Cl	**37**		ug/L			7031855	6750526	1	Standard
⌈>	**Sc**	**45**		ug/L			700785	699928	1	Standard
|	**Cr**	**52**	**-0.014**	ug/L	0.008	57	17028	16656	1	Standard
⌊	**Cr**	**53**	**-0.023**	ug/L	0.001	5	213	149	1	Standard
⌈>	**Ge**	**72**		ug/L			49353	48310	1	KED
|	**Ni**	**60**	**0.007**	ug/L	0.001	17	16	28	6	KED
|	**Ni**	**62**	**-0.010**	ug/L	0.010	100	8	5	57	KED
|	**Cu**	**63**	**0.001**	ug/L	0.002	197	50	53	18	KED
|	**Cu**	**65**	**0.002**	ug/L	0.002	113	26	30	16	KED
|	**Zn**	**66**	**0.021**	ug/L	0.014	65	28	42	21	KED
|	**Zn**	**67**	**0.040**	ug/L	0.010	24	3	8	13	KED
⌊	**As**	**75**	**0.000**	ug/L	0.003	1684	3	3	33	KED
	Y	**89**		ug/L			329848	316768	1	Standard
	Kr	**83**		ug/L			67	60	37	Standard
⌈>	**In-1**	**115**		ug/L			10660	10535	0	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.007	410	4	3	68	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.005	381	3	4	111	KED
⌈>	**In**	**115**		ug/L			476658	494224	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	116	62	74	16	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1245986	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	38	218	284	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-01
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, May 02, 2023 19:21:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	51156	0	Standard
	Cl	**37**		ug/L			7031855	6674691	3	Standard
⌈>	**Sc**	**45**		ug/L			700785	736662	1	Standard
|	**Cr**	**52**	**2.683**	ug/L	0.018	0	17028	87688	0	Standard
⌊	**Cr**	**53**	**2.717**	ug/L	0.044	1	213	8236	2	Standard
⌈>	**Ge**	**72**		ug/L			49353	49049	0	KED
|	**Ni**	**60**	**3.755**	ug/L	0.089	2	16	6730	1	KED
|	**Ni**	**62**	**3.787**	ug/L	0.163	4	8	1106	3	KED
|	**Cu**	**63**	**7.373**	ug/L	0.079	1	50	36547	0	KED
|	**Cu**	**65**	**7.446**	ug/L	0.114	1	26	18902	1	KED
|	**Zn**	**66**	**36.211**	ug/L	0.338	0	28	25855	0	KED
|	**Zn**	**67**	**35.111**	ug/L	0.374	1	3	4075	1	KED
⌊	**As**	**75**	**2.281**	ug/L	0.042	1	3	832	1	KED
	Y	**89**		ug/L			329848	378154	5	Standard
	Kr	**83**		ug/L			67	48	32	Standard
⌈>	**In-1**	**115**		ug/L			10660	10513	3	KED
|	**Cd**	**111**	**0.040**	ug/L	0.009	23	4	18	18	KED
⌊	**Cd**	**114**	**0.022**	ug/L	0.008	37	3	22	33	KED
⌈>	**In**	**115**		ug/L			476658	487915	0	Standard
⌊	**Ag**	**107**	**0.014**	ug/L	0.000	2	62	320	1	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1227304	1	Standard
⌊	**Pb**	**208**	**3.756**	ug/L	0.049	1	218	332407	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0452-DUP2
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, May 02, 2023 19:25:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	51105	1	Standard
	Cl	**37**		ug/L			7031855	6728845	2	Standard
⌈>	**Sc**	**45**		ug/L			700785	734386	1	Standard
|	**Cr**	**52**	**5.883**	ug/L	0.070	1	17028	170382	1	Standard
⌊	**Cr**	**53**	**6.035**	ug/L	0.094	1	213	17966	2	Standard
⌈>	**Ge**	**72**		ug/L			49353	48989	1	KED
|	**Ni**	**60**	**8.396**	ug/L	0.170	2	16	15008	1	KED
|	**Ni**	**62**	**8.589**	ug/L	0.493	5	8	2496	6	KED
|	**Cu**	**63**	**9.460**	ug/L	0.054	0	50	46816	0	KED
|	**Cu**	**65**	**9.516**	ug/L	0.230	2	26	24118	1	KED
|	**Zn**	**66**	**35.625**	ug/L	0.676	1	28	25404	1	KED
|	**Zn**	**67**	**34.303**	ug/L	0.789	2	3	3976	1	KED
⌊	**As**	**75**	**2.731**	ug/L	0.079	2	3	995	1	KED
	Y	**89**		ug/L			329848	373469	1	Standard
	Kr	**83**		ug/L			67	55	16	Standard
⌈>	**In-1**	**115**		ug/L			10660	10547	2	KED
|	**Cd**	**111**	**0.032**	ug/L	0.005	15	4	15	12	KED
⌊	**Cd**	**114**	**0.024**	ug/L	0.006	24	3	24	18	KED
⌈>	**In**	**115**		ug/L			476658	496773	0	Standard
⌊	**Ag**	**107**	**0.016**	ug/L	0.001	8	62	351	6	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1264510	1	Standard
⌊	**Pb**	**208**	**3.577**	ug/L	0.051	1	218	326198	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0452-MS2
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, May 02, 2023 19:30:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	52082	0	Standard
	Cl	**37**		ug/L			7031855	6788921	2	Standard
⌈>	**Sc**	**45**		ug/L			700785	726491	1	Standard
|	**Cr**	**52**	**9.158**	ug/L	0.135	1	17028	252575	1	Standard
⌊	**Cr**	**53**	**9.260**	ug/L	0.261	2	213	27147	1	Standard
⌈>	**Ge**	**72**		ug/L			49353	49304	1	KED
|	**Ni**	**60**	**8.902**	ug/L	0.138	1	16	16014	1	KED
|	**Ni**	**62**	**9.150**	ug/L	0.240	2	8	2675	3	KED
|	**Cu**	**63**	**17.844**	ug/L	0.168	0	50	88832	0	KED
|	**Cu**	**65**	**17.792**	ug/L	0.397	2	26	45360	1	KED
|	**Zn**	**66**	**55.759**	ug/L	1.434	2	28	39996	1	KED
|	**Zn**	**67**	**53.234**	ug/L	0.495	0	3	6208	1	KED
⌊	**As**	**75**	**7.857**	ug/L	0.083	1	3	2874	0	KED
	Y	**89**		ug/L			329848	372250	2	Standard
	Kr	**83**		ug/L			67	45	28	Standard
⌈>	**In-1**	**115**		ug/L			10660	9965	9	KED
|	**Cd**	**111**	**5.479**	ug/L	0.645	11	4	1821	2	KED
⌊	**Cd**	**114**	**5.411**	ug/L	0.469	8	3	4561	1	KED
⌈>	**In**	**115**		ug/L			476658	498486	1	Standard
⌊	**Ag**	**107**	**4.960**	ug/L	0.037	0	62	90397	0	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1237993	1	Standard
⌊	**Pb**	**208**	**9.571**	ug/L	0.223	2	218	854015	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0452-MSD2
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, May 02, 2023 19:34:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	50390	1	Standard
	Cl	37		ug/L			7031855	6718286	2	Standard
⌈>	Sc	45		ug/L			700785	731324	2	Standard
|	Cr	52	7.800	ug/L	0.026	0	17028	219207	2	Standard
⌊	Cr	53	8.018	ug/L	0.123	1	213	23693	2	Standard
⌈>	Ge	72		ug/L			49353	48464	2	KED
|	Ni	60	8.211	ug/L	0.116	1	16	14522	2	KED
|	Ni	62	8.174	ug/L	0.305	3	8	2349	3	KED
|	Cu	63	13.700	ug/L	0.490	3	50	67022	1	KED
|	Cu	65	13.628	ug/L	0.422	3	26	34148	1	KED
|	Zn	66	62.170	ug/L	1.147	1	28	43830	0	KED
|	Zn	67	59.149	ug/L	2.352	3	3	6777	1	KED
⌊	As	75	9.563	ug/L	0.178	1	3	3437	0	KED
	Y	89		ug/L			329848	385710	2	Standard
	Kr	83		ug/L			67	50	2	Standard
⌈>	In-1	115		ug/L			10660	10348	2	KED
|	Cd	111	4.995	ug/L	0.093	1	4	1736	0	KED
⌊	Cd	114	5.092	ug/L	0.080	1	3	4479	1	KED
⌈>	In	115		ug/L			476658	498121	1	Standard
⌊	Ag	107	4.861	ug/L	0.053	1	62	88537	1	Standard
⌈>	Tb	159		ug/L			1242145	1264788	0	Standard
⌊	Pb	208	10.093	ug/L	0.066	0	218	920337	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0452-PS2
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, May 02, 2023 19:38:58

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	53480	1	Standard
	Cl	**37**		ug/L			7031855	6708681	2	Standard
⌈>	**Sc**	**45**		ug/L			700785	734416	1	Standard
|	**Cr**	**52**	**2.708**	ug/L	0.031	1	17028	88076	2	Standard
⌊	**Cr**	**53**	**2.751**	ug/L	0.054	1	213	8310	0	Standard
⌈>	**Ge**	**72**		ug/L			49353	48750	1	KED
|	**Ni**	**60**	**3.704**	ug/L	0.078	2	16	6597	1	KED
|	**Ni**	**62**	**3.756**	ug/L	0.121	3	8	1090	3	KED
|	**Cu**	**63**	**7.570**	ug/L	0.064	0	50	37291	0	KED
|	**Cu**	**65**	**7.637**	ug/L	0.161	2	26	19268	1	KED
|	**Zn**	**66**	**36.679**	ug/L	0.617	1	28	26026	0	KED
|	**Zn**	**67**	**34.752**	ug/L	0.628	1	3	4008	0	KED
⌊	**As**	**75**	**2.285**	ug/L	0.063	2	3	829	2	KED
	Y	**89**		ug/L			329848	374951	3	Standard
	Kr	**83**		ug/L			67	57	19	Standard
⌈>	**In-1**	**115**		ug/L			10660	10339	0	KED
|	**Cd**	**111**	**0.043**	ug/L	0.007	15	4	19	13	KED
⌊	**Cd**	**114**	**0.036**	ug/L	0.004	12	3	34	11	KED
⌈>	**In**	**115**		ug/L			476658	487587	1	Standard
⌊	**Ag**	**107**	**0.017**	ug/L	0.000	2	62	363	2	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1269427	1	Standard
⌊	**Pb**	**208**	**3.648**	ug/L	0.041	1	218	333987	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0420-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 19:43:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	87230	2	Standard
	Cl	**37**		ug/L			7031855	6496788	2	Standard
⌈>	**Sc**	**45**		ug/L			700785	808715	0	Standard
|	**Cr**	**52**	**16.535**	ug/L	0.125	0	17028	491840	0	Standard
⌊	**Cr**	**53**	**16.763**	ug/L	0.329	1	213	54517	1	Standard
⌈>	**Ge**	**72**		ug/L			49353	46218	0	KED
|	**Ni**	**60**	**23.807**	ug/L	0.125	0	16	40124	0	KED
|	**Ni**	**62**	**23.685**	ug/L	0.341	1	8	6479	1	KED
|	**Cu**	**63**	**39.144**	ug/L	0.604	1	50	182626	1	KED
|	**Cu**	**65**	**39.236**	ug/L	0.242	0	26	93756	0	KED
|	**Zn**	**66**	**142.816**	ug/L	0.780	0	28	96008	0	KED
|	**Zn**	**67**	**135.430**	ug/L	0.687	0	3	14802	0	KED
⌊	**As**	**75**	**16.491**	ug/L	0.125	0	3	5651	0	KED
	Y	**89**		ug/L			329848	505125	4	Standard
	Kr	**83**		ug/L			67	151	8	Standard
⌈>	**In-1**	**115**		ug/L			10660	10024	2	KED
|	**Cd**	**111**	**0.235**	ug/L	0.014	5	4	82	4	KED
⌊	**Cd**	**114**	**0.205**	ug/L	0.018	8	3	177	8	KED
⌈>	**In**	**115**		ug/L			476658	478419	2	Standard
⌊	**Ag**	**107**	**0.122**	ug/L	0.003	2	62	2188	1	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1174954	1	Standard
⌊	**Pb**	**208**	**39.797**	ug/L	0.424	1	218	3370000	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 19:47:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	76434	1	Standard
	Cl	37		ug/L			7031855	6425664	2	Standard
⌈>	Sc	45		ug/L			700785	813508	3	Standard
|	Cr	52	10.740	ug/L	0.271	2	17028	328105	1	Standard
⌊	Cr	53	10.807	ug/L	0.398	3	213	35411	0	Standard
⌈>	Ge	72		ug/L			49353	46965	1	KED
|	Ni	60	9.476	ug/L	0.158	1	16	16238	1	KED
|	Ni	62	9.216	ug/L	0.154	1	8	2566	2	KED
|	Cu	63	36.699	ug/L	0.887	2	50	173957	1	KED
|	Cu	65	36.506	ug/L	0.794	2	26	88625	0	KED
|	Zn	66	47.690	ug/L	0.932	1	28	32590	0	KED
|	Zn	67	46.214	ug/L	0.536	1	3	5134	1	KED
⌊	As	75	2.338	ug/L	0.065	2	3	817	1	KED
	Y	89		ug/L			329848	542199	0	Standard
	Kr	83		ug/L			67	76	12	Standard
⌈>	In-1	115		ug/L			10660	10208	1	KED
|	Cd	111	0.059	ug/L	0.009	14	4	24	13	KED
⌊	Cd	114	0.046	ug/L	0.007	15	3	42	13	KED
⌈>	In	115		ug/L			476658	495385	1	Standard
⌊	Ag	107	0.076	ug/L	0.002	3	62	1448	4	Standard
⌈>	Tb	159		ug/L			1242145	1271998	1	Standard
⌊	Pb	208	13.242	ug/L	0.302	2	218	1213923	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 19:52:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	74879	1	Standard
	Cl	37		ug/L			7031855	6435024	3	Standard
>	Sc	45		ug/L			700785	793912	0	Standard
	Cr	52	9.778	ug/L	0.046	0	17028	293396	0	Standard
	Cr	53	9.796	ug/L	0.166	1	213	31375	2	Standard
>	Ge	72		ug/L			49353	47815	1	KED
	Ni	60	8.374	ug/L	0.142	1	16	14610	0	KED
	Ni	62	8.610	ug/L	0.430	4	8	2441	4	KED
	Cu	63	21.224	ug/L	0.374	1	50	102453	0	KED
	Cu	65	21.023	ug/L	0.122	0	26	51982	1	KED
	Zn	66	38.479	ug/L	0.966	2	28	26777	1	KED
	Zn	67	37.777	ug/L	0.212	0	3	4274	1	KED
	As	75	5.090	ug/L	0.062	1	3	1807	1	KED
	Y	89		ug/L			329848	524952	1	Standard
	Kr	83		ug/L			67	73	10	Standard
>	In-1	115		ug/L			10660	10219	1	KED
	Cd	111	0.050	ug/L	0.014	28	4	20	22	KED
	Cd	114	0.054	ug/L	0.007	13	3	49	11	KED
>	In	115		ug/L			476658	489130	3	Standard
	Ag	107	0.057	ug/L	0.004	6	62	1081	3	Standard
>	Tb	159		ug/L			1242145	1224750	0	Standard
	Pb	208	15.988	ug/L	0.180	1	218	1411480	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 19:56:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	74999	0	Standard
	Cl	37		ug/L			7031855	6492432	2	Standard
>	Sc	45		ug/L			700785	802317	1	Standard
	Cr	52	10.814	ug/L	0.256	2	17028	325792	0	Standard
	Cr	53	11.033	ug/L	0.062	0	213	35680	1	Standard
>	Ge	72		ug/L			49353	46871	0	KED
	Ni	60	11.142	ug/L	0.054	0	16	19053	0	KED
	Ni	62	11.368	ug/L	0.220	1	8	3157	1	KED
	Cu	63	19.049	ug/L	0.219	1	50	90150	0	KED
	Cu	65	19.039	ug/L	0.553	2	26	46142	2	KED
	Zn	66	180.599	ug/L	3.191	1	28	123107	1	KED
	Zn	67	172.129	ug/L	2.271	1	3	19077	0	KED
	As	75	7.737	ug/L	0.062	0	3	2690	1	KED
	Y	89		ug/L			329848	573025	0	Standard
	Kr	83		ug/L			67	78	11	Standard
>	In-1	115		ug/L			10660	9995	0	KED
	Cd	111	0.098	ug/L	0.014	14	4	36	12	KED
	Cd	114	0.085	ug/L	0.015	17	3	75	17	KED
>	In	115		ug/L			476658	477498	2	Standard
	Ag	107	0.065	ug/L	0.002	2	62	1189	5	Standard
>	Tb	159		ug/L			1242145	1242845	0	Standard
	Pb	208	15.499	ug/L	0.186	1	218	1388540	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 20:00:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	83981	1	Standard
	Cl	37		ug/L			7031855	6427022	1	Standard
>	Sc	45		ug/L			700785	844697	2	Standard
	Cr	52	12.260	ug/L	0.121	0	17028	386169	1	Standard
	Cr	53	12.470	ug/L	0.382	3	213	42404	0	Standard
>	Ge	72		ug/L			49353	46772	0	KED
	Ni	60	11.751	ug/L	0.151	1	16	20051	1	KED
	Ni	62	11.929	ug/L	0.307	2	8	3306	2	KED
	Cu	63	26.327	ug/L	0.268	1	50	124317	1	KED
	Cu	65	26.280	ug/L	0.458	1	26	63555	1	KED
	Zn	66	59.860	ug/L	0.264	0	28	40738	0	KED
	Zn	67	57.855	ug/L	0.609	1	3	6401	1	KED
	As	75	8.708	ug/L	0.173	1	3	3022	2	KED
	Y	89		ug/L			329848	565433	4	Standard
	Kr	83		ug/L			67	89	7	Standard
>	In-1	115		ug/L			10660	8022	36	KED
	Cd	111	0.168	ug/L	0.093	55	4	42	17	KED
	Cd	114	0.146	ug/L	0.067	45	3	91	7	KED
>	In	115		ug/L			476658	480225	1	Standard
	Ag	107	0.110	ug/L	0.003	2	62	1995	2	Standard
>	Tb	159		ug/L			1242145	1198866	1	Standard
	Pb	208	12.769	ug/L	0.209	1	218	1103459	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 20:06:30
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	43071	0	Standard
	Cl	**37**		ug/L			7031855	6830705	3	Standard
⌈>	**Sc**	**45**		ug/L			700785	687411	2	Standard
|	**Cr**	**52**	**50.001**	ug/L	0.876	1	17028	1230153	1	Standard
⌊	**Cr**	**53**	**50.570**	ug/L	0.748	1	213	139345	0	Standard
⌈>	**Ge**	**72**		ug/L			49353	46918	0	KED
|	**Ni**	**60**	**51.884**	ug/L	0.660	1	16	88749	0	KED
|	**Ni**	**62**	**50.905**	ug/L	1.026	2	8	14128	2	KED
|	**Cu**	**63**	**51.690**	ug/L	0.492	0	50	244784	0	KED
|	**Cu**	**65**	**51.839**	ug/L	0.390	0	26	125740	1	KED
|	**Zn**	**66**	**51.220**	ug/L	0.592	1	28	34973	1	KED
|	**Zn**	**67**	**52.400**	ug/L	0.489	0	3	5816	1	KED
⌊	**As**	**75**	**50.674**	ug/L	0.076	0	3	17621	0	KED
	Y	**89**		ug/L			329848	318323	4	Standard
	Kr	**83**		ug/L			67	60	21	Standard
⌈>	**In-1**	**115**		ug/L			10660	10062	1	KED
|	**Cd**	**111**	**51.035**	ug/L	0.858	1	4	17221	0	KED
⌊	**Cd**	**114**	**51.938**	ug/L	0.583	1	3	44410	0	KED
⌈>	**In**	**115**		ug/L			476658	462314	4	Standard
⌊	**Ag**	**107**	**51.495**	ug/L	1.896	3	62	868901	1	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1199108	1	Standard
⌊	**Pb**	**208**	**54.242**	ug/L	0.494	0	218	4687733	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 20:13:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	42264	2	Standard
	Cl	**37**		ug/L			7031855	6762076	1	Standard
⌈>	**Sc**	**45**		ug/L			700785	692196	2	Standard
|	**Cr**	**52**	**0.007**	ug/L	0.010	150	17028	16978	2	Standard
⌊	**Cr**	**53**	**-0.019**	ug/L	0.009	48	213	158	13	Standard
⌈>	**Ge**	**72**		ug/L			49353	49359	1	KED
|	**Ni**	**60**	**0.006**	ug/L	0.005	78	16	27	31	KED
|	**Ni**	**62**	**0.002**	ug/L	0.014	622	8	8	44	KED
|	**Cu**	**63**	**0.002**	ug/L	0.003	143	50	59	22	KED
|	**Cu**	**65**	**0.000**	ug/L	0.001	145	26	27	7	KED
|	**Zn**	**66**	**0.004**	ug/L	0.019	442	28	31	44	KED
|	**Zn**	**67**	**0.016**	ug/L	0.017	102	3	5	33	KED
⌊	**As**	**75**	**0.006**	ug/L	0.005	83	3	6	29	KED
	Y	**89**		ug/L			329848	326281	2	Standard
	Kr	**83**		ug/L			67	55	22	Standard
⌈>	**In-1**	**115**		ug/L			10660	10410	2	KED
|	**Cd**	**111**	**0.003**	ug/L	0.011	358	4	5	75	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.001	190	3	2	53	KED
⌈>	**In**	**115**		ug/L			476658	483975	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	99	62	73	12	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1231454	2	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	37	218	317	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 20:18:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	78494	1	Standard
	Cl	37		ug/L			7031855	6535721	3	Standard
>	Sc	45		ug/L			700785	782870	7	Standard
	Cr	52	14.043	ug/L	1.023	7	17028	405759	1	Standard
	Cr	53	14.122	ug/L	0.842	5	213	44362	2	Standard
>	Ge	72		ug/L			49353	47315	1	KED
	Ni	60	13.436	ug/L	0.410	3	16	23181	1	KED
	Ni	62	13.636	ug/L	0.442	3	8	3821	2	KED
	Cu	63	27.459	ug/L	0.698	2	50	131123	0	KED
	Cu	65	27.686	ug/L	0.409	1	26	67722	0	KED
	Zn	66	58.555	ug/L	1.305	2	28	40303	0	KED
	Zn	67	57.684	ug/L	1.747	3	3	6454	2	KED
	As	75	6.219	ug/L	0.069	1	3	2184	2	KED
	Y	89		ug/L			329848	513733	7	Standard
	Kr	83		ug/L			67	94	6	Standard
>	In-1	115		ug/L			10660	10196	1	KED
	Cd	111	0.047	ug/L	0.003	5	4	20	4	KED
	Cd	114	0.073	ug/L	0.010	14	3	65	12	KED
>	In	115		ug/L			476658	453614	10	Standard
	Ag	107	0.089	ug/L	0.005	5	62	1531	11	Standard
>	Tb	159		ug/L			1242145	1145928	9	Standard
	Pb	208	23.046	ug/L	2.344	10	218	1890855	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 20:22:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	79927	1	Standard
	Cl	37		ug/L			7031855	6578533	3	Standard
>	Sc	45		ug/L			700785	836218	1	Standard
	Cr	52	17.228	ug/L	0.236	1	17028	528956	0	Standard
	Cr	53	17.351	ug/L	0.091	0	213	58335	0	Standard
>	Ge	72		ug/L			49353	47646	0	KED
	Ni	60	13.689	ug/L	0.106	0	16	23791	0	KED
	Ni	62	13.471	ug/L	0.596	4	8	3801	3	KED
	Cu	63	30.529	ug/L	0.063	0	50	146842	0	KED
	Cu	65	30.556	ug/L	0.279	0	26	75272	0	KED
	Zn	66	81.756	ug/L	0.605	0	28	56670	0	KED
	Zn	67	79.430	ug/L	1.663	2	3	8950	1	KED
	As	75	6.315	ug/L	0.099	1	3	2233	1	KED
	Y	89		ug/L			329848	566533	0	Standard
	Kr	83		ug/L			67	102	3	Standard
>	In-1	115		ug/L			10660	10017	2	KED
	Cd	111	0.174	ug/L	0.019	10	4	62	9	KED
	Cd	114	0.143	ug/L	0.006	3	3	124	6	KED
>	In	115		ug/L			476658	493791	2	Standard
	Ag	107	0.149	ug/L	0.004	2	62	2760	3	Standard
>	Tb	159		ug/L			1242145	1220076	1	Standard
	Pb	208	20.069	ug/L	0.260	1	218	1764746	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 20:26:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	75591	1	Standard
	Cl	37		ug/L			7031855	6454551	2	Standard
>	Sc	45		ug/L			700785	811395	2	Standard
	Cr	52	9.765	ug/L	0.237	2	17028	299381	1	Standard
	Cr	53	10.052	ug/L	0.186	1	213	32886	0	Standard
>	Ge	72		ug/L			49353	47628	1	KED
	Ni	60	9.842	ug/L	0.277	2	16	17099	1	KED
	Ni	62	9.972	ug/L	0.365	3	8	2814	2	KED
	Cu	63	16.542	ug/L	0.469	2	50	79542	2	KED
	Cu	65	16.576	ug/L	0.458	2	26	40820	1	KED
	Zn	66	36.017	ug/L	0.998	2	28	24964	1	KED
	Zn	67	35.759	ug/L	1.069	2	3	4029	1	KED
	As	75	5.427	ug/L	0.149	2	3	1918	2	KED
	Y	89		ug/L			329848	537371	2	Standard
	Kr	83		ug/L			67	82	10	Standard
>	In-1	115		ug/L			10660	10257	1	KED
	Cd	111	0.044	ug/L	0.017	39	4	19	30	KED
	Cd	114	0.038	ug/L	0.008	20	3	36	18	KED
>	In	115		ug/L			476658	489574	1	Standard
	Ag	107	0.075	ug/L	0.004	4	62	1412	2	Standard
>	Tb	159		ug/L			1242145	1240123	0	Standard
	Pb	208	14.153	ug/L	0.069	0	218	1265190	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-11
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 20:31:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	81276	1	Standard
	Cl	37		ug/L			7031855	6446721	2	Standard
>	Sc	45		ug/L			700785	865510	1	Standard
	Cr	52	12.149	ug/L	0.257	2	17028	392264	0	Standard
	Cr	53	12.297	ug/L	0.127	1	213	42874	2	Standard
>	Ge	72		ug/L			49353	46836	1	KED
	Ni	60	12.601	ug/L	0.690	5	16	21519	4	KED
	Ni	62	12.760	ug/L	0.696	5	8	3538	3	KED
	Cu	63	24.986	ug/L	1.124	4	50	118095	3	KED
	Cu	65	24.694	ug/L	1.085	4	26	59777	2	KED
	Zn	66	50.562	ug/L	2.279	4	28	34445	2	KED
	Zn	67	50.347	ug/L	3.023	6	3	5575	4	KED
	As	75	6.057	ug/L	0.316	5	3	2104	4	KED
	Y	89		ug/L			329848	590990	3	Standard
	Kr	83		ug/L			67	102	23	Standard
>	In-1	115		ug/L			10660	9812	2	KED
	Cd	111	0.179	ug/L	0.017	9	4	62	7	KED
	Cd	114	0.159	ug/L	0.019	11	3	135	10	KED
>	In	115		ug/L			476658	474859	2	Standard
	Ag	107	0.121	ug/L	0.002	1	62	2169	1	Standard
>	Tb	159		ug/L			1242145	1197106	1	Standard
	Pb	208	10.847	ug/L	0.344	3	218	935731	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0419-12
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 20:35:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	81517	1	Standard
	Cl	37		ug/L			7031855	6413954	3	Standard
⌈>	Sc	45		ug/L			700785	843417	1	Standard
|	Cr	52	12.935	ug/L	0.265	2	17028	405803	3	Standard
⌊	Cr	53	13.225	ug/L	0.115	0	213	44913	1	Standard
⌈>	Ge	72		ug/L			49353	46142	1	KED
|	Ni	60	11.528	ug/L	0.166	1	16	19401	0	KED
|	Ni	62	11.440	ug/L	0.290	2	8	3127	0	KED
|	Cu	63	33.178	ug/L	0.126	0	50	154542	1	KED
|	Cu	65	33.199	ug/L	0.314	0	26	79194	0	KED
|	Zn	66	63.286	ug/L	1.562	2	28	42475	0	KED
|	Zn	67	61.650	ug/L	1.747	2	3	6729	3	KED
⌊	As	75	7.786	ug/L	0.098	1	3	2665	0	KED
	Y	89		ug/L			329848	562053	0	Standard
	Kr	83		ug/L			67	93	9	Standard
⌈>	In-1	115		ug/L			10660	9939	1	KED
|	Cd	111	0.236	ug/L	0.024	10	4	82	11	KED
⌊	Cd	114	0.243	ug/L	0.011	4	3	208	2	KED
⌈>	In	115		ug/L			476658	481510	1	Standard
⌊	Ag	107	0.157	ug/L	0.009	5	62	2826	5	Standard
⌈>	Tb	159		ug/L			1242145	1220437	2	Standard
⌊	Pb	208	16.356	ug/L	0.307	1	218	1438565	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0752-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 20:40:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	101687	0	Standard
	Cl	37		ug/L			7031855	6469968	3	Standard
>	Sc	45		ug/L			700785	852549	3	Standard
	Cr	52	14.192	ug/L	0.526	3	17028	447611	0	Standard
	Cr	53	14.428	ug/L	0.277	1	213	49480	1	Standard
>	Ge	72		ug/L			49353	46411	0	KED
	Ni	60	13.847	ug/L	0.300	2	16	23438	1	KED
	Ni	62	13.882	ug/L	0.134	0	8	3816	0	KED
	Cu	63	38.584	ug/L	0.424	1	50	180756	0	KED
	Cu	65	38.099	ug/L	0.217	0	26	91415	0	KED
	Zn	66	72.651	ug/L	1.535	2	28	49052	1	KED
	Zn	67	71.136	ug/L	1.474	2	3	7808	1	KED
	As	75	8.926	ug/L	0.028	0	3	3073	0	KED
	Y	89		ug/L			329848	593025	3	Standard
	Kr	83		ug/L			67	106	13	Standard
>	In-1	115		ug/L			10660	9934	1	KED
	Cd	111	0.247	ug/L	0.034	13	4	86	11	KED
	Cd	114	0.213	ug/L	0.015	7	3	182	5	KED
>	In	115		ug/L			476658	481127	2	Standard
	Ag	107	0.189	ug/L	0.003	1	62	3390	4	Standard
>	Tb	159		ug/L			1242145	1221274	0	Standard
	Pb	208	19.476	ug/L	0.322	1	218	1714466	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0752-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 20:44:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	95785	0	Standard
	Cl	37		ug/L			7031855	6466175	1	Standard
>	Sc	45		ug/L			700785	838845	2	Standard
	Cr	52	14.034	ug/L	0.242	1	17028	435964	0	Standard
	Cr	53	14.181	ug/L	0.229	1	213	47864	1	Standard
>	Ge	72		ug/L			49353	46189	0	KED
	Ni	60	12.434	ug/L	0.078	0	16	20951	0	KED
	Ni	62	12.429	ug/L	0.087	0	8	3401	1	KED
	Cu	63	33.218	ug/L	0.351	1	50	154879	0	KED
	Cu	65	32.905	ug/L	0.417	1	26	78585	1	KED
	Zn	66	62.074	ug/L	0.299	0	28	41717	0	KED
	Zn	67	61.297	ug/L	0.681	1	3	6697	1	KED
	As	75	5.235	ug/L	0.076	1	3	1795	2	KED
	Y	89		ug/L			329848	570141	3	Standard
	Kr	83		ug/L			67	113	11	Standard
>	In-1	115		ug/L			10660	9916	3	KED
	Cd	111	0.178	ug/L	0.019	10	4	62	6	KED
	Cd	114	0.194	ug/L	0.020	10	3	166	10	KED
>	In	115		ug/L			476658	490303	1	Standard
	Ag	107	0.148	ug/L	0.002	1	62	2716	2	Standard
>	Tb	159		ug/L			1242145	1214711	0	Standard
	Pb	208	22.330	ug/L	0.159	0	218	1955213	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0752-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 20:49:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	96614	0	Standard
	Cl	37		ug/L			7031855	6424024	2	Standard
>	Sc	45		ug/L			700785	832930	2	Standard
	Cr	52	12.152	ug/L	0.130	1	17028	377629	1	Standard
	Cr	53	12.251	ug/L	0.107	0	213	41102	1	Standard
>	Ge	72		ug/L			49353	45895	1	KED
	Ni	60	11.929	ug/L	0.204	1	16	19970	0	KED
	Ni	62	11.760	ug/L	0.073	0	8	3198	1	KED
	Cu	63	27.446	ug/L	0.206	0	50	127171	1	KED
	Cu	65	27.746	ug/L	0.462	1	26	65835	0	KED
	Zn	66	59.834	ug/L	1.392	2	28	39954	2	KED
	Zn	67	58.147	ug/L	0.727	1	3	6313	1	KED
	As	75	5.407	ug/L	0.081	1	3	1842	1	KED
	Y	89		ug/L			329848	558845	3	Standard
	Kr	83		ug/L			67	98	6	Standard
>	In-1	115		ug/L			10660	10005	2	KED
	Cd	111	0.164	ug/L	0.017	10	4	58	8	KED
	Cd	114	0.175	ug/L	0.018	10	3	151	8	KED
>	In	115		ug/L			476658	484425	0	Standard
	Ag	107	0.125	ug/L	0.005	4	62	2272	3	Standard
>	Tb	159		ug/L			1242145	1219626	2	Standard
	Pb	208	13.902	ug/L	0.237	1	218	1221944	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0752-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 20:53:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	98249	2	Standard
	Cl	37		ug/L			7031855	6484014	2	Standard
>	Sc	45		ug/L			700785	851651	0	Standard
	Cr	52	14.552	ug/L	0.121	0	17028	458341	1	Standard
	Cr	53	14.780	ug/L	0.182	1	213	50645	0	Standard
>	Ge	72		ug/L			49353	45942	1	KED
	Ni	60	15.191	ug/L	0.389	2	16	25449	1	KED
	Ni	62	15.313	ug/L	0.572	3	8	4165	1	KED
	Cu	63	39.989	ug/L	0.524	1	50	185430	0	KED
	Cu	65	39.537	ug/L	0.425	1	26	93899	0	KED
	Zn	66	86.668	ug/L	1.405	1	28	57926	2	KED
	Zn	67	83.181	ug/L	2.077	2	3	9037	2	KED
	As	75	7.717	ug/L	0.061	0	3	2630	1	KED
	Y	89		ug/L			329848	600251	1	Standard
	Kr	83		ug/L			67	102	18	Standard
>	In-1	115		ug/L			10660	9986	1	KED
	Cd	111	0.199	ug/L	0.020	10	4	70	9	KED
	Cd	114	0.165	ug/L	0.013	7	3	142	8	KED
>	In	115		ug/L			476658	473992	1	Standard
	Ag	107	0.156	ug/L	0.004	2	62	2758	0	Standard
>	Tb	159		ug/L			1242145	1204293	1	Standard
	Pb	208	17.900	ug/L	0.330	1	218	1553653	0	Standard

ICP-MS Quantitative Analysis - Summary Report

06

Sample ID: 23C0752-05

Sample Dil Factor: 20

Comments:

Sample Date/Time: Tuesday, May 02, 2023 20:58:02

MB 5/2/23

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	97044	0	Standard
	Cl	37		ug/L			7031855	6411935	3	Standard
⌈>	Sc	45		ug/L			700785	839198	2	Standard
|	Cr	52	13.441	ug/L	0.432	3	17028	418471	0	Standard
⌊	Cr	53	13.489	ug/L	0.346	2	213	45553	1	Standard
⌈>	Ge	72		ug/L			49353	45817	0	KED
|	Ni	60	12.962	ug/L	0.093	0	16	21664	1	KED
|	Ni	62	12.663	ug/L	0.359	2	8	3437	2	KED
|	Cu	63	32.728	ug/L	0.186	0	50	151375	0	KED
|	Cu	65	32.986	ug/L	0.306	0	26	78142	1	KED
|	Zn	66	66.855	ug/L	0.625	0	28	44565	0	KED
|	Zn	67	65.426	ug/L	0.748	1	3	7090	1	KED
⌊	As	75	8.200	ug/L	0.172	2	3	2787	1	KED
	Y	89		ug/L			329848	579237	3	Standard
	Kr	83		ug/L			67	107	14	Standard
⌈>	In-1	115		ug/L			10660	9850	2	KED
|	Cd	111	0.189	ug/L	0.035	18	4	66	15	KED
⌊	Cd	114	0.168	ug/L	0.017	10	3	143	9	KED
⌈>	In	115		ug/L			476658	469874	1	Standard
⌊	Ag	107	0.144	ug/L	0.001	0	62	2537	0	Standard
⌈>	Tb	159		ug/L			1242145	1208988	0	Standard
⌊	Pb	208	15.886	ug/L	0.071	0	218	1384432	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 21:03:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	41936	1	Standard
	Cl	**37**		ug/L			7031855	6773602	2	Standard
⌈>	**Sc**	**45**		ug/L			700785	673000	1	Standard
|	**Cr**	**52**	**49.657**	ug/L	0.597	1	17028	1196436	1	Standard
⌊	**Cr**	**53**	**50.329**	ug/L	0.330	0	213	135795	1	Standard
⌈>	**Ge**	**72**		ug/L			49353	46381	0	KED
|	**Ni**	**60**	**51.188**	ug/L	0.680	1	16	86557	0	KED
|	**Ni**	**62**	**50.346**	ug/L	0.696	1	8	13812	1	KED
|	**Cu**	**63**	**51.178**	ug/L	0.746	1	50	239589	1	KED
|	**Cu**	**65**	**51.173**	ug/L	0.781	1	26	122697	0	KED
|	**Zn**	**66**	**51.152**	ug/L	0.153	0	28	34525	0	KED
|	**Zn**	**67**	**51.913**	ug/L	0.286	0	3	5696	0	KED
⌊	**As**	**75**	**50.853**	ug/L	0.490	0	3	17481	0	KED
	Y	**89**		ug/L			329848	314013	1	Standard
	Kr	**83**		ug/L			67	62	12	Standard
⌈>	**In-1**	**115**		ug/L			10660	10004	1	KED
|	**Cd**	**111**	**50.849**	ug/L	1.353	2	4	17055	0	KED
⌊	**Cd**	**114**	**51.129**	ug/L	0.962	1	3	43458	0	KED
⌈>	**In**	**115**		ug/L			476658	468319	2	Standard
⌊	**Ag**	**107**	**50.746**	ug/L	1.807	3	62	867878	0	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1195813	1	Standard
⌊	**Pb**	**208**	**54.508**	ug/L	1.282	2	218	4696678	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 21:10:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	41159	2	Standard
	Cl	**37**		ug/L			7031855	6738927	1	Standard
⌈>	**Sc**	**45**		ug/L			700785	681844	1	Standard
|	**Cr**	**52**	**-0.021**	ug/L	0.006	30	17028	16066	1	Standard
⌊	**Cr**	**53**	**-0.025**	ug/L	0.001	4	213	138	2	Standard
⌈>	**Ge**	**72**		ug/L			49353	47223	1	KED
|	**Ni**	**60**	**0.014**	ug/L	0.010	73	16	40	45	KED
|	**Ni**	**62**	**-0.010**	ug/L	0.008	75	8	5	43	KED
|	**Cu**	**63**	**0.001**	ug/L	0.001	57	50	53	5	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.002	393	26	24	22	KED
|	**Zn**	**66**	**0.005**	ug/L	0.004	72	28	31	9	KED
|	**Zn**	**67**	**0.035**	ug/L	0.029	81	3	7	43	KED
⌊	**As**	**75**	**0.003**	ug/L	0.003	86	3	4	20	KED
	Y	**89**		ug/L			329848	311837	2	Standard
	Kr	**83**		ug/L			67	49	10	Standard
⌈>	**In-1**	**115**		ug/L			10660	10542	1	KED
|	**Cd**	**111**	**0.000**	ug/L	0.003	2680	4	4	26	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.004	152	3	5	68	KED
⌈>	**In**	**115**		ug/L			476658	475119	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	88	62	71	10	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1203274	0	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	23	218	367	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 21:15:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	74680	1	Standard
	Cl	37		ug/L			7031855	6466187	3	Standard
>	Sc	45		ug/L			700785	859316	2	Standard
	Cr	52	15.081	ug/L	0.343	2	17028	478325	0	Standard
	Cr	53	15.418	ug/L	0.131	0	213	53292	1	Standard
>	Ge	72		ug/L			49353	45221	0	KED
	Ni	60	14.143	ug/L	0.280	1	16	23326	1	KED
	Ni	62	14.516	ug/L	0.603	4	8	3888	4	KED
	Cu	63	42.056	ug/L	0.166	0	50	191975	0	KED
	Cu	65	42.302	ug/L	0.566	1	26	98892	0	KED
	Zn	66	71.565	ug/L	0.421	0	28	47085	0	KED
	Zn	67	70.063	ug/L	1.743	2	3	7495	3	KED
	As	75	8.072	ug/L	0.168	2	3	2708	2	KED
	Y	89		ug/L			329848	608496	2	Standard
	Kr	83		ug/L			67	109	7	Standard
>	In-1	115		ug/L			10660	9747	1	KED
	Cd	111	0.258	ug/L	0.013	5	4	87	5	KED
	Cd	114	0.226	ug/L	0.020	8	3	189	9	KED
>	In	115		ug/L			476658	470380	1	Standard
	Ag	107	0.200	ug/L	0.004	1	62	3503	1	Standard
>	Tb	159		ug/L			1242145	1212981	0	Standard
	Pb	208	20.025	ug/L	0.147	0	218	1750867	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 21:19:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	78424	0	Standard
	Cl	37		ug/L			7031855	6414639	2	Standard
>	Sc	45		ug/L			700785	872180	1	Standard
	Cr	52	14.497	ug/L	0.232	1	17028	467610	0	Standard
	Cr	53	14.947	ug/L	0.174	1	213	52450	0	Standard
>	Ge	72		ug/L			49353	43263	5	KED
	Ni	60	15.273	ug/L	0.758	4	16	24054	1	KED
	Ni	62	14.903	ug/L	0.983	6	8	3809	1	KED
	Cu	63	41.142	ug/L	1.510	3	50	179416	2	KED
	Cu	65	41.740	ug/L	2.224	5	26	93171	1	KED
	Zn	66	72.755	ug/L	3.350	4	28	45713	1	KED
	Zn	67	71.452	ug/L	3.492	4	3	7298	1	KED
	As	75	7.317	ug/L	0.384	5	3	2344	1	KED
	Y	89		ug/L			329848	620086	3	Standard
	Kr	83		ug/L			67	109	9	Standard
>	In-1	115		ug/L			10660	9584	0	KED
	Cd	111	0.238	ug/L	0.007	2	4	80	2	KED
	Cd	114	0.228	ug/L	0.030	13	3	188	12	KED
>	In	115		ug/L			476658	475752	2	Standard
	Ag	107	0.189	ug/L	0.008	4	62	3354	5	Standard
>	Tb	159		ug/L			1242145	1202262	0	Standard
	Pb	208	23.229	ug/L	0.294	1	218	2013049	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 21:24:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	67261	0	Standard
	Cl	37		ug/L			7031855	6534963	2	Standard
>	Sc	45		ug/L			700785	836145	1	Standard
	Cr	52	14.402	ug/L	0.128	0	17028	445554	1	Standard
	Cr	53	14.743	ug/L	0.024	0	213	49602	1	Standard
>	Ge	72		ug/L			49353	45284	0	KED
	Ni	60	16.871	ug/L	0.056	0	16	27865	0	KED
	Ni	62	16.866	ug/L	0.437	2	8	4522	2	KED
	Cu	63	34.593	ug/L	0.656	1	50	158131	1	KED
	Cu	65	34.628	ug/L	0.258	0	26	81074	0	KED
	Zn	66	72.144	ug/L	0.887	1	28	47531	0	KED
	Zn	67	72.277	ug/L	1.046	1	3	7741	1	KED
	As	75	6.349	ug/L	0.064	1	3	2133	1	KED
	Y	89		ug/L			329848	590463	2	Standard
	Kr	83		ug/L			67	102	15	Standard
>	In-1	115		ug/L			10660	9925	1	KED
	Cd	111	0.201	ug/L	0.012	5	4	70	5	KED
	Cd	114	0.151	ug/L	0.006	3	3	129	3	KED
>	In	115		ug/L			476658	462050	1	Standard
	Ag	107	0.159	ug/L	0.006	3	62	2737	3	Standard
>	Tb	159		ug/L			1242145	1208260	1	Standard
	Pb	208	18.474	ug/L	0.309	1	218	1608787	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 21:28:28
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	65286	1	Standard
	Cl	37		ug/L			7031855	6400813	2	Standard
>	Sc	45		ug/L			700785	751347	2	Standard
	Cr	52	8.259	ug/L	0.209	2	17028	237281	0	Standard
	Cr	53	8.261	ug/L	0.137	1	213	25068	1	Standard
>	Ge	72		ug/L			49353	45542	0	KED
	Ni	60	7.113	ug/L	0.115	1	16	11823	0	KED
	Ni	62	7.177	ug/L	0.113	1	8	1939	1	KED
	Cu	63	9.634	ug/L	0.164	1	50	44323	1	KED
	Cu	65	9.693	ug/L	0.235	2	26	22839	1	KED
	Zn	66	21.759	ug/L	0.332	1	28	14435	0	KED
	Zn	67	21.437	ug/L	1.044	4	3	2311	4	KED
	As	75	2.020	ug/L	0.052	2	3	685	1	KED
	Y	89		ug/L			329848	474871	2	Standard
	Kr	83		ug/L			67	78	21	Standard
>	In-1	115		ug/L			10660	9783	1	KED
	Cd	111	0.035	ug/L	0.015	41	4	15	32	KED
	Cd	114	0.033	ug/L	0.020	60	3	30	53	KED
>	In	115		ug/L			476658	482983	1	Standard
	Ag	107	0.039	ug/L	0.002	6	62	757	6	Standard
>	Tb	159		ug/L			1242145	1225904	1	Standard
	Pb	208	3.262	ug/L	0.057	1	218	288391	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 21:32:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	75063	2	Standard
	Cl	37		ug/L			7031855	6392028	2	Standard
>	Sc	45		ug/L			700785	852159	2	Standard
	Cr	52	14.136	ug/L	0.076	0	17028	446113	2	Standard
	Cr	53	14.526	ug/L	0.327	2	213	49799	1	Standard
>	Ge	72		ug/L			49353	44813	1	KED
	Ni	60	13.727	ug/L	0.245	1	16	22438	1	KED
	Ni	62	13.634	ug/L	0.393	2	8	3620	3	KED
	Cu	63	38.459	ug/L	0.755	1	50	173949	0	KED
	Cu	65	38.212	ug/L	0.118	0	26	88533	1	KED
	Zn	66	66.485	ug/L	1.132	1	28	43343	0	KED
	Zn	67	65.490	ug/L	1.854	2	3	6940	1	KED
	As	75	8.287	ug/L	0.170	2	3	2754	1	KED
	Y	89		ug/L			329848	601650	1	Standard
	Kr	83		ug/L			67	113	11	Standard
>	In-1	115		ug/L			10660	9548	1	KED
	Cd	111	0.271	ug/L	0.039	14	4	90	13	KED
	Cd	114	0.280	ug/L	0.039	13	3	229	12	KED
>	In	115		ug/L			476658	472175	3	Standard
	Ag	107	0.196	ug/L	0.002	1	62	3449	4	Standard
>	Tb	159		ug/L			1242145	1188920	0	Standard
	Pb	208	19.979	ug/L	0.213	1	218	1712135	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 21:37:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	73029	0	Standard
	Cl	37		ug/L			7031855	6348923	3	Standard
⌈>	Sc	45		ug/L			700785	833503	2	Standard
|	Cr	52	14.798	ug/L	0.152	1	17028	455740	1	Standard
⌊	Cr	53	14.804	ug/L	0.027	0	213	49651	2	Standard
⌈>	Ge	72		ug/L			49353	44892	1	KED
|	Ni	60	13.791	ug/L	0.160	1	16	22581	0	KED
|	Ni	62	13.832	ug/L	0.370	2	8	3677	1	KED
|	Cu	63	35.235	ug/L	0.213	0	50	159674	1	KED
|	Cu	65	35.248	ug/L	0.495	1	26	81801	0	KED
|	Zn	66	63.829	ug/L	0.826	1	28	41688	0	KED
|	Zn	67	62.037	ug/L	0.636	1	3	6587	0	KED
⌊	As	75	7.416	ug/L	0.163	2	3	2470	1	KED
	Y	89		ug/L			329848	592125	3	Standard
	Kr	83		ug/L			67	100	3	Standard
⌈>	In-1	115		ug/L			10660	9586	3	KED
|	Cd	111	0.281	ug/L	0.031	10	4	93	7	KED
⌊	Cd	114	0.209	ug/L	0.001	0	3	173	3	KED
⌈>	In	115		ug/L			476658	463320	2	Standard
⌊	Ag	107	0.180	ug/L	0.007	4	62	3108	3	Standard
⌈>	Tb	159		ug/L			1242145	1188516	0	Standard
⌊	Pb	208	18.007	ug/L	0.367	2	218	1542687	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 21:41:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	70495	1	Standard
	Cl	37		ug/L			7031855	6359360	3	Standard
>	Sc	45		ug/L			700785	827471	1	Standard
	Cr	52	12.598	ug/L	0.257	2	17028	388177	1	Standard
	Cr	53	12.890	ug/L	0.135	1	213	42951	1	Standard
>	Ge	72		ug/L			49353	44830	0	KED
	Ni	60	12.719	ug/L	0.172	1	16	20801	1	KED
	Ni	62	12.750	ug/L	0.420	3	8	3386	3	KED
	Cu	63	29.836	ug/L	0.404	1	50	135026	1	KED
	Cu	65	29.679	ug/L	0.638	2	26	68791	1	KED
	Zn	66	56.320	ug/L	0.639	1	28	36738	0	KED
	Zn	67	55.352	ug/L	1.578	2	3	5870	3	KED
	As	75	6.145	ug/L	0.101	1	3	2044	1	KED
	Y	89		ug/L			329848	570479	1	Standard
	Kr	83		ug/L			67	125	14	Standard
>	In-1	115		ug/L			10660	9715	1	KED
	Cd	111	0.208	ug/L	0.037	17	4	71	17	KED
	Cd	114	0.173	ug/L	0.031	17	3	145	16	KED
>	In	115		ug/L			476658	469997	0	Standard
	Ag	107	0.154	ug/L	0.003	1	62	2697	1	Standard
>	Tb	159		ug/L			1242145	1186906	2	Standard
	Pb	208	14.549	ug/L	0.356	2	218	1244364	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 21:46:12

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	73713	1	Standard
	Cl	37		ug/L			7031855	6298048	3	Standard
>	Sc	45		ug/L			700785	844054	7	Standard
	Cr	52	12.557	ug/L	0.938	7	17028	393381	0	Standard
	Cr	53	12.902	ug/L	0.932	7	213	43693	0	Standard
>	Ge	72		ug/L			49353	44288	1	KED
	Ni	60	14.000	ug/L	0.176	1	16	22615	1	KED
	Ni	62	14.068	ug/L	0.248	1	8	3691	2	KED
	Cu	63	24.607	ug/L	0.399	1	50	110014	0	KED
	Cu	65	24.839	ug/L	0.262	1	26	56883	1	KED
	Zn	66	50.245	ug/L	0.581	1	28	32382	0	KED
	Zn	67	50.594	ug/L	1.240	2	3	5301	2	KED
	As	75	5.810	ug/L	0.144	2	3	1909	1	KED
	Y	89		ug/L			329848	613727	4	Standard
	Kr	83		ug/L			67	123	5	Standard
>	In-1	115		ug/L			10660	9599	0	KED
	Cd	111	0.140	ug/L	0.018	12	4	48	11	KED
	Cd	114	0.136	ug/L	0.025	18	3	113	18	KED
>	In	115		ug/L			476658	440059	10	Standard
	Ag	107	0.121	ug/L	0.012	10	62	1987	2	Standard
>	Tb	159		ug/L			1242145	1123461	8	Standard
	Pb	208	9.463	ug/L	0.825	8	218	762770	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 21:50:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	73268	3	Standard
	Cl	37		ug/L			7031855	6322947	3	Standard
>	Sc	45		ug/L			700785	832933	0	Standard
	Cr	52	13.501	ug/L	0.250	1	17028	417358	2	Standard
	Cr	53	13.914	ug/L	0.099	0	213	46650	1	Standard
>	Ge	72		ug/L			49353	44016	0	KED
	Ni	60	12.902	ug/L	0.179	1	16	20716	1	KED
	Ni	62	12.610	ug/L	0.286	2	8	3288	2	KED
	Cu	63	33.974	ug/L	0.440	1	50	150958	1	KED
	Cu	65	34.194	ug/L	0.564	1	26	77816	1	KED
	Zn	66	63.259	ug/L	1.020	1	28	40513	1	KED
	Zn	67	62.902	ug/L	1.679	2	3	6549	2	KED
	As	75	7.726	ug/L	0.217	2	3	2523	2	KED
	Y	89		ug/L			329848	554204	2	Standard
	Kr	83		ug/L			67	95	23	Standard
>	In-1	115		ug/L			10660	9606	0	KED
	Cd	111	0.257	ug/L	0.045	17	4	86	16	KED
	Cd	114	0.280	ug/L	0.033	11	3	231	11	KED
>	In	115		ug/L			476658	466094	3	Standard
	Ag	107	0.211	ug/L	0.008	3	62	3659	4	Standard
>	Tb	159		ug/L			1242145	1191577	0	Standard
	Pb	208	18.296	ug/L	0.256	1	218	1571495	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-11
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 21:55:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	81519	0	Standard
	Cl	37		ug/L			7031855	6326361	3	Standard
>	Sc	45		ug/L			700785	836405	2	Standard
	Cr	52	13.579	ug/L	0.323	2	17028	421204	0	Standard
	Cr	53	13.895	ug/L	0.247	1	213	46769	1	Standard
>	Ge	72		ug/L			49353	44685	0	KED
	Ni	60	13.441	ug/L	0.130	0	16	21908	1	KED
	Ni	62	13.556	ug/L	0.473	3	8	3588	3	KED
	Cu	63	32.035	ug/L	0.536	1	50	144509	1	KED
	Cu	65	32.310	ug/L	0.170	0	26	74647	0	KED
	Zn	66	62.596	ug/L	0.673	1	28	40698	0	KED
	Zn	67	62.383	ug/L	1.566	2	3	6593	2	KED
	As	75	6.457	ug/L	0.170	2	3	2141	2	KED
	Y	89		ug/L			329848	583268	3	Standard
	Kr	83		ug/L			67	97	20	Standard
>	In-1	115		ug/L			10660	9574	0	KED
	Cd	111	0.223	ug/L	0.044	19	4	75	17	KED
	Cd	114	0.205	ug/L	0.025	11	3	169	12	KED
>	In	115		ug/L			476658	466152	2	Standard
	Ag	107	0.151	ug/L	0.002	1	62	2641	3	Standard
>	Tb	159		ug/L			1242145	1176959	0	Standard
	Pb	208	15.721	ug/L	0.003	0	218	1333795	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 22:00:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43168	42084	2	Standard
	Cl	37		ug/L			7031855	6710553	2	Standard
⌈>	Sc	45		ug/L			700785	652072	1	Standard
|	Cr	52	50.587	ug/L	0.221	0	17028	1180656	1	Standard
⌊	Cr	53	51.179	ug/L	0.622	1	213	133794	1	Standard
⌈>	Ge	72		ug/L			49353	41913	10	KED
|	Ni	60	55.234	ug/L	5.595	10	16	83803	1	KED
|	Ni	62	53.906	ug/L	5.127	9	8	13274	1	KED
|	Cu	63	55.128	ug/L	5.646	10	50	231547	1	KED
|	Cu	65	55.475	ug/L	6.760	12	26	119173	1	KED
|	Zn	66	54.054	ug/L	5.892	10	28	32718	1	KED
|	Zn	67	54.746	ug/L	3.459	6	3	5404	4	KED
⌊	As	75	54.166	ug/L	5.409	9	3	16708	1	KED
	Y	89		ug/L			329848	311046	1	Standard
	Kr	83		ug/L			67	69	14	Standard
⌈>	In-1	115		ug/L			10660	9761	0	KED
|	Cd	111	51.266	ug/L	0.805	1	4	16781	1	KED
⌊	Cd	114	51.379	ug/L	1.364	2	3	42613	2	KED
⌈>	In	115		ug/L			476658	458937	1	Standard
⌊	Ag	107	50.789	ug/L	0.798	1	62	851570	0	Standard
⌈>	Tb	159		ug/L			1242145	1191357	0	Standard
⌊	Pb	208	54.506	ug/L	0.731	1	218	4680501	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 22:07:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43168	41351	2	Standard
	Cl	**37**		ug/L			7031855	6652998	3	Standard
⌈>	**Sc**	**45**		ug/L			700785	662881	2	Standard
|	**Cr**	**52**	**-0.013**	ug/L	0.024	183	17028	15799	1	Standard
⌊	**Cr**	**53**	**-0.028**	ug/L	0.004	13	213	126	8	Standard
⌈>	**Ge**	**72**		ug/L			49353	45783	0	KED
|	**Ni**	**60**	**0.013**	ug/L	0.010	75	16	37	43	KED
|	**Ni**	**62**	**-0.002**	ug/L	0.004	163	8	6	15	KED
|	**Cu**	**63**	**0.001**	ug/L	0.002	126	50	53	16	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.004	224	26	20	41	KED
|	**Zn**	**66**	**0.023**	ug/L	0.005	23	28	41	7	KED
|	**Zn**	**67**	**0.026**	ug/L	0.045	170	3	6	75	KED
⌊	**As**	**75**	**0.003**	ug/L	0.002	66	3	4	15	KED
	Y	**89**		ug/L			329848	311690	1	Standard
	Kr	**83**		ug/L			67	55	14	Standard
⌈>	**In-1**	**115**		ug/L			10660	10139	2	KED
|	**Cd**	**111**	**0.003**	ug/L	0.006	170	4	5	39	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.001	183	3	2	46	KED
⌈>	**In**	**115**		ug/L			476658	471194	0	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.003	108	62	112	48	Standard
⌈>	**Tb**	**159**		ug/L			1242145	1199932	0	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.004	132	218	499	75	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 22:12:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				40446	1	Standard
	Cl	**37**		ug/L				6595246	2	Standard
⌈>	**Sc**	**45**		ug/L				655530	0	Standard
|	**Cr**	**52**		ug/L				15680	0	Standard
⌊	**Cr**	**53**		ug/L				119	9	Standard
⌈>	**Ge**	**72**		ug/L				45192	1	KED
|	**Ni**	**60**		ug/L				27	25	KED
|	**Ni**	**62**		ug/L				3	50	KED
|	**Cu**	**63**		ug/L				59	16	KED
|	**Cu**	**65**		ug/L				19	56	KED
|	**Zn**	**66**		ug/L				38	12	KED
|	**Zn**	**67**		ug/L				8	44	KED
⌊	**As**	**75**		ug/L				3	54	KED
	Y	**89**		ug/L				311569	2	Standard
	Kr	**83**		ug/L				69	11	Standard
⌈>	**In-1**	**115**		ug/L				9412	1	KED
|	**Cd**	**111**		ug/L				3	41	KED
⌊	**Cd**	**114**		ug/L				4	93	KED
⌈>	**In**	**115**		ug/L				462006	2	Standard
⌊	**Ag**	**107**		ug/L				43	18	Standard
⌈>	**Tb**	**159**		ug/L				1183725	0	Standard
⌊	**Pb**	**208**		ug/L				262	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 22:16:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	41690	1	Standard
	Cl	**37**		ug/L			6595246	6797351	2	Standard
⌈>	**Sc**	**45**		ug/L			655530	662554	1	Standard
|	**Cr**	**52**	**49.982**	ug/L	0.369	0	15680	1185132	0	Standard
⌊	**Cr**	**53**	**50.449**	ug/L	0.608	1	119	133921	1	Standard
⌈>	**Ge**	**72**		ug/L			45192	45786	1	KED
|	**Ni**	**60**	**50.494**	ug/L	0.730	1	27	84297	1	KED
|	**Ni**	**62**	**50.538**	ug/L	0.414	0	3	13683	1	KED
|	**Cu**	**63**	**50.964**	ug/L	0.895	1	59	235509	0	KED
|	**Cu**	**65**	**50.928**	ug/L	0.728	1	19	120529	0	KED
|	**Zn**	**66**	**50.265**	ug/L	1.656	3	38	33493	1	KED
|	**Zn**	**67**	**50.969**	ug/L	0.894	1	8	5525	0	KED
⌊	**As**	**75**	**49.914**	ug/L	1.143	2	3	16934	0	KED
	Y	**89**		ug/L			311569	312652	2	Standard
	Kr	**83**		ug/L			69	72	17	Standard
⌈>	**In-1**	**115**		ug/L			9412	9779	0	KED
|	**Cd**	**111**	**50.837**	ug/L	0.506	0	3	16672	1	KED
⌊	**Cd**	**114**	**51.103**	ug/L	0.777	1	4	42467	1	KED
⌈>	**In**	**115**		ug/L			462006	460019	1	Standard
⌊	**Ag**	**107**	**50.522**	ug/L	1.221	2	43	849051	1	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1198528	0	Standard
⌊	**Pb**	**208**	**53.620**	ug/L	0.167	0	262	4632082	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 22:23:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	40040	0	Standard
	Cl	**37**		ug/L			6595246	6760315	2	Standard
⌈>	**Sc**	**45**		ug/L			655530	671678	0	Standard
|	**Cr**	**52**	**-0.011**	ug/L	0.015	134	15680	15796	2	Standard
⌊	**Cr**	**53**	**0.004**	ug/L	0.001	19	119	133	0	Standard
⌈>	**Ge**	**72**		ug/L			45192	46112	0	KED
|	**Ni**	**60**	**-0.003**	ug/L	0.001	26	27	24	4	KED
|	**Ni**	**62**	**0.014**	ug/L	0.007	52	3	7	25	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.002	76	59	48	17	KED
|	**Cu**	**65**	**0.004**	ug/L	0.001	20	19	29	7	KED
|	**Zn**	**66**	**-0.001**	ug/L	0.009	755	38	38	15	KED
|	**Zn**	**67**	**-0.042**	ug/L	0.010	24	8	4	24	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.006	2260	3	3	54	KED
	Y	**89**		ug/L			311569	317214	2	Standard
	Kr	**83**		ug/L			69	59	19	Standard
⌈>	**In-1**	**115**		ug/L			9412	10206	0	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.006	160	3	2	78	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.001	110	4	4	25	KED
⌈>	**In**	**115**		ug/L			462006	471033	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	65	43	66	22	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1205492	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	49	262	299	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-12
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 22:28:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			40446	71111	0	Standard
Cl	37		ug/L			6595246	6480026	3	Standard
> Sc	45		ug/L			655530	833559	1	Standard
Cr	52	13.216	ug/L	0.161	1	15680	408989	2	Standard
Cr	53	13.385	ug/L	0.196	1	119	44820	2	Standard
> Ge	72		ug/L			45192	44891	0	KED
Ni	60	13.402	ug/L	0.117	0	27	21959	0	KED
Ni	62	13.317	ug/L	0.221	1	3	3538	2	KED
Cu	63	30.005	ug/L	0.559	1	59	135981	1	KED
Cu	65	29.876	ug/L	0.165	0	19	69339	0	KED
Zn	66	59.314	ug/L	1.306	2	38	38756	2	KED
Zn	67	58.222	ug/L	0.941	1	8	6188	1	KED
As	75	6.697	ug/L	0.088	1	3	2231	0	KED
Y	89		ug/L			311569	573378	2	Standard
Kr	83		ug/L			69	99	23	Standard
> In-1	115		ug/L			9412	9653	1	KED
Cd	111	0.175	ug/L	0.018	10	3	60	8	KED
Cd	114	0.174	ug/L	0.018	10	4	148	11	KED
> In	115		ug/L			462006	473716	3	Standard
Ag	107	0.133	ug/L	0.006	4	43	2351	3	Standard
> Tb	159		ug/L			1183725	1198926	2	Standard
Pb	208	13.341	ug/L	0.205	1	262	1152837	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-13
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 22:32:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			40446	64625	1	Standard
Cl	37		ug/L			6595246	6378814	3	Standard
Sc	45		ug/L			655530	835235	1	Standard
Cr	52	13.034	ug/L	0.124	0	15680	404443	2	Standard
Cr	53	12.992	ug/L	0.111	0	119	43587	0	Standard
Ge	72		ug/L			45192	44873	1	KED
Ni	60	12.941	ug/L	0.256	1	27	21191	0	KED
Ni	62	13.076	ug/L	0.252	1	3	3473	3	KED
Cu	63	29.892	ug/L	0.504	1	59	135415	1	KED
Cu	65	30.400	ug/L	0.623	2	19	70515	0	KED
Zn	66	57.261	ug/L	0.491	0	38	37398	0	KED
Zn	67	56.155	ug/L	1.413	2	8	5965	1	KED
As	75	6.112	ug/L	0.101	1	3	2035	1	KED
Y	89		ug/L			311569	579292	1	Standard
Kr	83		ug/L			69	90	31	Standard
In-1	115		ug/L			9412	9689	0	KED
Cd	111	0.186	ug/L	0.014	7	3	64	7	KED
Cd	114	0.195	ug/L	0.006	3	4	165	3	KED
In	115		ug/L			462006	472566	1	Standard
Ag	107	0.149	ug/L	0.006	4	43	2622	3	Standard
Tb	159		ug/L			1183725	1197318	3	Standard
Pb	208	13.943	ug/L	0.461	3	262	1202612	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-14
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 22:37:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			40446	65830	1	Standard
Cl	37		ug/L			6595246	6346598	2	Standard
> Sc	45		ug/L			655530	831459	1	Standard
Cr	52	12.617	ug/L	0.169	1	15680	390275	0	Standard
Cr	53	12.893	ug/L	0.094	0	119	43063	1	Standard
> Ge	72		ug/L			45192	45283	0	KED
Ni	60	12.272	ug/L	0.229	1	27	20286	1	KED
Ni	62	12.123	ug/L	0.205	1	3	3249	1	KED
Cu	63	30.421	ug/L	0.343	1	59	139076	0	KED
Cu	65	30.308	ug/L	0.664	2	19	70952	1	KED
Zn	66	57.397	ug/L	0.417	0	38	37832	0	KED
Zn	67	56.440	ug/L	0.224	0	8	6051	0	KED
As	75	6.603	ug/L	0.119	1	3	2219	1	KED
Y	89		ug/L			311569	557377	1	Standard
Kr	83		ug/L			69	104	35	Standard
> In-1	115		ug/L			9412	9857	0	KED
Cd	111	0.211	ug/L	0.032	15	3	73	14	KED
Cd	114	0.168	ug/L	0.026	15	4	145	15	KED
> In	115		ug/L			462006	466208	2	Standard
Ag	107	0.170	ug/L	0.008	4	43	2942	5	Standard
> Tb	159		ug/L			1183725	1192154	1	Standard
Pb	208	16.027	ug/L	0.308	1	262	1377159	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-15
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 22:41:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	76971	2	Standard
	Cl	37		ug/L			6595246	6422495	3	Standard
>	Sc	45		ug/L			655530	766659	3	Standard
	Cr	52	14.026	ug/L	0.368	2	15680	397925	2	Standard
	Cr	53	14.465	ug/L	0.350	2	119	44514	1	Standard
>	Ge	72		ug/L			45192	40364	18	KED
	Ni	60	18.556	ug/L	4.142	22	27	26556	0	KED
	Ni	62	18.314	ug/L	3.740	20	3	4260	1	KED
	Cu	63	34.049	ug/L	7.719	22	59	134772	1	KED
	Cu	65	33.913	ug/L	7.137	21	19	68897	2	KED
	Zn	66	144.543	ug/L	29.669	20	38	82672	1	KED
	Zn	67	137.025	ug/L	28.064	20	8	12746	1	KED
	As	75	5.274	ug/L	1.240	23	3	1533	1	KED
	Y	89		ug/L			311569	470144	1	Standard
	Kr	83		ug/L			69	88	6	Standard
>	In-1	115		ug/L			9412	9619	1	KED
	Cd	111	0.210	ug/L	0.021	9	3	71	10	KED
	Cd	114	0.197	ug/L	0.023	11	4	165	10	KED
>	In	115		ug/L			462006	472151	1	Standard
	Ag	107	0.084	ug/L	0.001	0	43	1498	1	Standard
>	Tb	159		ug/L			1183725	1192217	1	Standard
	Pb	208	32.232	ug/L	0.230	0	262	2769820	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-16
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 22:45:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	69146	1	Standard
	Cl	37		ug/L			6595246	6318029	3	Standard
>	Sc	45		ug/L			655530	809568	0	Standard
	Cr	52	13.977	ug/L	0.194	1	15680	418941	1	Standard
	Cr	53	14.197	ug/L	0.160	1	119	46159	1	Standard
>	Ge	72		ug/L			45192	43911	0	KED
	Ni	60	13.266	ug/L	0.172	1	27	21263	1	KED
	Ni	62	13.557	ug/L	0.165	1	3	3522	0	KED
	Cu	63	31.255	ug/L	0.127	0	59	138562	0	KED
	Cu	65	31.375	ug/L	0.269	0	19	71229	1	KED
	Zn	66	62.165	ug/L	0.311	0	38	39732	1	KED
	Zn	67	60.848	ug/L	1.905	3	8	6325	3	KED
	As	75	6.577	ug/L	0.096	1	3	2143	1	KED
	Y	89		ug/L			311569	574461	1	Standard
	Kr	83		ug/L			69	97	4	Standard
>	In-1	115		ug/L			9412	9618	0	KED
	Cd	111	0.192	ug/L	0.011	5	3	65	5	KED
	Cd	114	0.191	ug/L	0.010	4	4	161	4	KED
>	In	115		ug/L			462006	475745	1	Standard
	Ag	107	0.141	ug/L	0.002	1	43	2489	2	Standard
>	Tb	159		ug/L			1183725	1186851	2	Standard
	Pb	208	16.100	ug/L	0.308	1	262	1377092	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-17
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 22:50:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	72641	1	Standard
	Cl	37		ug/L			6595246	6354576	3	Standard
>	Sc	45		ug/L			655530	790000	1	Standard
	Cr	52	11.836	ug/L	0.137	1	15680	349109	2	Standard
	Cr	53	11.960	ug/L	0.081	0	119	37972	2	Standard
>	Ge	72		ug/L			45192	44341	0	KED
	Ni	60	10.992	ug/L	0.035	0	27	17794	0	KED
	Ni	62	10.608	ug/L	0.235	2	3	2784	1	KED
	Cu	63	30.316	ug/L	0.677	2	59	135708	1	KED
	Cu	65	30.052	ug/L	0.491	1	19	68890	1	KED
	Zn	66	67.172	ug/L	1.505	2	38	43345	1	KED
	Zn	67	64.970	ug/L	1.301	2	8	6820	2	KED
	As	75	9.137	ug/L	0.016	0	3	3005	0	KED
	Y	89		ug/L			311569	536244	1	Standard
	Kr	83		ug/L			69	92	10	Standard
>	In-1	115		ug/L			9412	9446	0	KED
	Cd	111	0.136	ug/L	0.018	12	3	46	12	KED
	Cd	114	0.158	ug/L	0.010	6	4	131	5	KED
>	In	115		ug/L			462006	462731	2	Standard
	Ag	107	0.132	ug/L	0.003	2	43	2282	3	Standard
>	Tb	159		ug/L			1183725	1196486	1	Standard
	Pb	208	14.930	ug/L	0.256	1	262	1287605	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0455-18
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 02, 2023 22:54:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	62268	0	Standard
	Cl	37		ug/L			6595246	6441839	4	Standard
>	Sc	45		ug/L			655530	742967	8	Standard
	Cr	52	17.360	ug/L	1.375	7	15680	471134	1	Standard
	Cr	53	17.731	ug/L	1.308	7	119	52649	1	Standard
>	Ge	72		ug/L			45192	44154	0	KED
	Ni	60	22.195	ug/L	0.451	2	27	35749	1	KED
	Ni	62	22.390	ug/L	0.492	2	3	5848	2	KED
	Cu	63	35.120	ug/L	0.199	0	59	156551	0	KED
	Cu	65	34.932	ug/L	0.572	1	19	79736	1	KED
	Zn	66	90.432	ug/L	1.135	1	38	58097	0	KED
	Zn	67	88.339	ug/L	1.659	1	8	9230	2	KED
	As	75	7.013	ug/L	0.122	1	3	2297	1	KED
	Y	89		ug/L			311569	486476	9	Standard
	Kr	83		ug/L			69	94	11	Standard
>	In-1	115		ug/L			9412	9561	1	KED
	Cd	111	0.093	ug/L	0.015	16	3	33	14	KED
	Cd	114	0.088	ug/L	0.012	13	4	76	11	KED
>	In	115		ug/L			462006	440271	11	Standard
	Ag	107	0.073	ug/L	0.012	15	43	1195	6	Standard
>	Tb	159		ug/L			1183725	1092292	10	Standard
	Pb	208	17.108	ug/L	1.891	11	262	1336358	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0099-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 02, 2023 22:59:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	166461	1	Standard
	Cl	37		ug/L			6595246	6224844	3	Standard
⌈>	Sc	45		ug/L			655530	657867	1	Standard
|	Cr	52	7.075	ug/L	0.129	1	15680	180065	1	Standard
⌊	Cr	53	7.082	ug/L	0.033	0	119	18770	1	Standard
⌈>	Ge	72		ug/L			45192	41650	1	KED
|	Ni	60	4.441	ug/L	0.033	0	27	6769	2	KED
|	Ni	62	4.335	ug/L	0.290	6	3	1070	6	KED
|	Cu	63	0.584	ug/L	0.014	2	59	2510	1	KED
|	Cu	65	0.594	ug/L	0.026	4	19	1295	3	KED
|	Zn	66	18.911	ug/L	0.375	1	38	11488	1	KED
|	Zn	67	18.275	ug/L	0.203	1	8	1807	1	KED
⌊	As	75	0.098	ug/L	0.013	13	3	33	11	KED
	Y	89		ug/L			311569	307425	2	Standard
	Kr	83		ug/L			69	46	19	Standard
⌈>	In-1	115		ug/L			9412	8971	2	KED
|	Cd	111	0.082	ug/L	0.018	21	3	27	20	KED
⌊	Cd	114	0.086	ug/L	0.017	20	4	70	17	KED
⌈>	In	115		ug/L			462006	470907	1	Standard
⌊	Ag	107	0.004	ug/L	0.001	25	43	107	14	Standard
⌈>	Tb	159		ug/L			1183725	1186788	1	Standard
⌊	Pb	208	0.041	ug/L	0.002	4	262	3788	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0072-01
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, May 02, 2023 23:03:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	85571	0	Standard
	Cl	37		ug/L			6595246	6497742	3	Standard
>	Sc	45		ug/L			655530	657247	2	Standard
	Cr	52	1.383	ug/L	0.032	2	15680	47817	0	Standard
	Cr	53	1.391	ug/L	0.016	1	119	3779	2	Standard
>	Ge	72		ug/L			45192	43732	0	KED
	Ni	60	0.135	ug/L	0.015	10	27	241	9	KED
	Ni	62	0.209	ug/L	0.055	26	3	57	24	KED
	Cu	63	1.165	ug/L	0.060	5	59	5197	4	KED
	Cu	65	1.170	ug/L	0.013	1	19	2663	1	KED
	Zn	66	73.558	ug/L	1.216	1	38	46811	0	KED
	Zn	67	69.874	ug/L	0.689	0	8	7232	0	KED
	As	75	0.002	ug/L	0.003	162	3	4	24	KED
	Y	89		ug/L			311569	311554	0	Standard
	Kr	83		ug/L			69	60	24	Standard
>	In-1	115		ug/L			9412	9503	0	KED
	Cd	111	0.221	ug/L	0.008	3	3	73	3	KED
	Cd	114	0.205	ug/L	0.016	7	4	170	7	KED
>	In	115		ug/L			462006	483866	1	Standard
	Ag	107	0.000	ug/L	0.001	333	43	48	19	Standard
>	Tb	159		ug/L			1183725	1208072	0	Standard
	Pb	208	0.023	ug/L	0.000	1	262	2274	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 23:07:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	40321	3	Standard
	Cl	**37**		ug/L			6595246	6564707	2	Standard
⌈>	**Sc**	**45**		ug/L			655530	642187	1	Standard
|	**Cr**	**52**	**-0.020**	ug/L	0.010	50	15680	14897	0	Standard
⌊	**Cr**	**53**	**-0.011**	ug/L	0.003	28	119	87	9	Standard
⌈>	**Ge**	**72**		ug/L			45192	42526	0	KED
|	**Ni**	**60**	**-0.002**	ug/L	0.002	98	27	22	14	KED
|	**Ni**	**62**	**0.016**	ug/L	0.027	169	3	7	90	KED
|	**Cu**	**63**	**0.001**	ug/L	0.005	387	59	60	34	KED
|	**Cu**	**65**	**0.009**	ug/L	0.006	61	19	39	32	KED
|	**Zn**	**66**	**0.039**	ug/L	0.015	39	38	60	16	KED
|	**Zn**	**67**	**0.069**	ug/L	0.034	49	8	15	21	KED
⌊	**As**	**75**	**-0.003**	ug/L	0.004	120	3	2	52	KED
	Y	**89**		ug/L			311569	310586	2	Standard
	Kr	**83**		ug/L			69	54	17	Standard
⌈>	**In-1**	**115**		ug/L			9412	9447	0	KED
|	**Cd**	**111**	**0.003**	ug/L	0.003	113	3	4	24	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.004	163	4	3	96	KED
⌈>	**In**	**115**		ug/L			462006	483249	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.001	40	43	23	39	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1192899	0	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	19	262	443	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 23:12:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	40304	2	Standard
	Cl	**37**		ug/L			6595246	6549890	4	Standard
⌈>	**Sc**	**45**		ug/L			655530	640044	1	Standard
|	**Cr**	**52**	**50.066**	ug/L	0.602	1	15680	1146718	1	Standard
⌊	**Cr**	**53**	**50.852**	ug/L	0.122	0	119	130411	1	Standard
⌈>	**Ge**	**72**		ug/L			45192	42904	2	KED
|	**Ni**	**60**	**50.515**	ug/L	0.895	1	27	79011	0	KED
|	**Ni**	**62**	**51.389**	ug/L	1.385	2	3	13033	0	KED
|	**Cu**	**63**	**51.835**	ug/L	1.423	2	59	224410	0	KED
|	**Cu**	**65**	**51.695**	ug/L	0.677	1	19	114634	0	KED
|	**Zn**	**66**	**51.341**	ug/L	1.695	3	38	32052	1	KED
|	**Zn**	**67**	**51.518**	ug/L	1.531	2	8	5232	2	KED
⌊	**As**	**75**	**50.164**	ug/L	1.071	2	3	15947	0	KED
	Y	**89**		ug/L			311569	308293	2	Standard
	Kr	**83**		ug/L			69	67	12	Standard
⌈>	**In-1**	**115**		ug/L			9412	9503	0	KED
|	**Cd**	**111**	**50.816**	ug/L	0.723	1	3	16194	0	KED
⌊	**Cd**	**114**	**50.673**	ug/L	0.744	1	4	40921	0	KED
⌈>	**In**	**115**		ug/L			462006	455164	2	Standard
⌊	**Ag**	**107**	**49.943**	ug/L	1.687	3	43	830255	1	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1172495	0	Standard
⌊	**Pb**	**208**	**55.443**	ug/L	0.234	0	262	4685507	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 23:19:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	39370	1	Standard
	Cl	**37**		ug/L			6595246	6627352	2	Standard
⌈>	**Sc**	**45**		ug/L			655530	638303	2	Standard
|	**Cr**	**52**	**-0.031**	ug/L	0.011	35	15680	14567	1	Standard
⌊	**Cr**	**53**	**-0.007**	ug/L	0.006	94	119	98	16	Standard
⌈>	**Ge**	**72**		ug/L			45192	43602	0	KED
|	**Ni**	**60**	**0.000**	ug/L	0.004	1693	27	27	21	KED
|	**Ni**	**62**	**-0.009**	ug/L	0.004	45	3	1	86	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.001	60	59	46	13	KED
|	**Cu**	**65**	**0.006**	ug/L	0.001	22	19	31	9	KED
|	**Zn**	**66**	**-0.002**	ug/L	0.011	581	38	36	18	KED
|	**Zn**	**67**	**-0.003**	ug/L	0.028	901	8	8	35	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.002	209	3	3	22	KED
	Y	**89**		ug/L			311569	303774	2	Standard
	Kr	**83**		ug/L			69	58	19	Standard
⌈>	**In-1**	**115**		ug/L			9412	9752	3	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.005	142	3	2	57	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.001	103	4	4	22	KED
⌈>	**In**	**115**		ug/L			462006	463900	3	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	55	43	66	17	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1203302	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	38	262	295	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0593-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 02, 2023 23:23:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	57222	1	Standard
	Cl	37		ug/L			6595246	6073907	3	Standard
⌈>	Sc	45		ug/L			655530	613955	1	Standard
|	Cr	52	3.448	ug/L	0.036	1	15680	89439	1	Standard
⌊	Cr	53	3.540	ug/L	0.012	0	119	8812	1	Standard
⌈>	Ge	72		ug/L			45192	36816	1	KED
|	Ni	60	0.535	ug/L	0.016	2	27	740	1	KED
|	Ni	62	0.553	ug/L	0.105	18	3	123	20	KED
|	Cu	63	5.346	ug/L	0.137	2	59	19906	0	KED
|	Cu	65	5.252	ug/L	0.105	1	19	10007	0	KED
|	Zn	66	2.751	ug/L	0.029	1	38	1504	2	KED
|	Zn	67	2.607	ug/L	0.275	10	8	234	10	KED
⌊	As	75	0.051	ug/L	0.009	18	3	16	14	KED
	Y	89		ug/L			311569	300485	2	Standard
	Kr	83		ug/L			69	55	7	Standard
⌈>	In-1	115		ug/L			9412	8356	1	KED
|	Cd	111	0.004	ug/L	0.004	111	3	4	26	KED
⌊	Cd	114	0.008	ug/L	0.004	48	4	9	26	KED
⌈>	In	115		ug/L			462006	444748	3	Standard
⌊	Ag	107	0.000	ug/L	0.000	365	43	43	11	Standard
⌈>	Tb	159		ug/L			1183725	1137255	1	Standard
⌊	Pb	208	0.011	ug/L	0.000	1	262	1117	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0593-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 02, 2023 23:28:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	53522	2	Standard
	Cl	37		ug/L			6595246	5971888	3	Standard
>	Sc	45		ug/L			655530	595598	2	Standard
	Cr	52	5.176	ug/L	0.073	1	15680	123102	2	Standard
	Cr	53	5.510	ug/L	0.088	1	119	13243	0	Standard
>	Ge	72		ug/L			45192	35741	0	KED
	Ni	60	0.371	ug/L	0.004	1	27	505	0	KED
	Ni	62	0.376	ug/L	0.076	20	3	82	19	KED
	Cu	63	4.428	ug/L	0.030	0	59	16018	0	KED
	Cu	65	4.505	ug/L	0.039	0	19	8337	1	KED
	Zn	66	3.235	ug/L	0.102	3	38	1711	2	KED
	Zn	67	3.073	ug/L	0.243	7	8	266	7	KED
	As	75	0.044	ug/L	0.004	10	3	14	8	KED
	Y	89		ug/L			311569	291669	3	Standard
	Kr	83		ug/L			69	53	20	Standard
>	In-1	115		ug/L			9412	8168	1	KED
	Cd	111	0.004	ug/L	0.005	135	3	4	35	KED
	Cd	114	0.007	ug/L	0.005	74	4	9	42	KED
>	In	115		ug/L			462006	433631	1	Standard
	Ag	107	-0.001	ug/L	0.001	107	43	32	26	Standard
>	Tb	159		ug/L			1183725	1107810	0	Standard
	Pb	208	0.012	ug/L	0.000	3	262	1203	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0593-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 02, 2023 23:33:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	51632	3	Standard
	Cl	37		ug/L			6595246	5945717	4	Standard
>	Sc	45		ug/L			655530	601623	2	Standard
	Cr	52	18.674	ug/L	0.705	3	15680	410821	0	Standard
	Cr	53	19.117	ug/L	0.083	0	119	46149	2	Standard
>	Ge	72		ug/L			45192	34963	1	KED
	Ni	60	0.469	ug/L	0.007	1	27	619	1	KED
	Ni	62	0.431	ug/L	0.031	7	3	92	6	KED
	Cu	63	4.349	ug/L	0.048	1	59	15388	0	KED
	Cu	65	4.299	ug/L	0.033	0	19	7783	0	KED
	Zn	66	4.496	ug/L	0.058	1	38	2315	2	KED
	Zn	67	4.317	ug/L	0.255	5	8	363	6	KED
	As	75	0.060	ug/L	0.012	20	3	18	16	KED
	Y	89		ug/L			311569	295566	3	Standard
	Kr	83		ug/L			69	57	19	Standard
>	In-1	115		ug/L			9412	8000	0	KED
	Cd	111	0.023	ug/L	0.011	48	3	9	31	KED
	Cd	114	0.018	ug/L	0.003	17	4	16	12	KED
>	In	115		ug/L			462006	430523	2	Standard
	Ag	107	-0.000	ug/L	0.001	165	43	34	34	Standard
>	Tb	159		ug/L			1183725	1122216	1	Standard
	Pb	208	0.025	ug/L	0.001	4	262	2238	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0593-04
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 02, 2023 23:38:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	51159	2	Standard
	Cl	37		ug/L			6595246	5931622	4	Standard
⌈>	Sc	45		ug/L			655530	599045	1	Standard
|	Cr	52	7.961	ug/L	0.075	0	15680	182717	0	Standard
⌊	Cr	53	8.136	ug/L	0.102	1	119	19623	2	Standard
⌈>	Ge	72		ug/L			45192	34682	0	KED
|	Ni	60	0.365	ug/L	0.007	1	27	482	0	KED
|	Ni	62	0.463	ug/L	0.094	20	3	97	19	KED
|	Cu	63	4.142	ug/L	0.017	0	59	14543	0	KED
|	Cu	65	4.121	ug/L	0.100	2	19	7401	2	KED
|	Zn	66	5.227	ug/L	0.253	4	38	2665	4	KED
|	Zn	67	4.973	ug/L	0.027	0	8	414	0	KED
⌊	As	75	0.043	ug/L	0.006	14	3	13	12	KED
	Y	89		ug/L			311569	297101	3	Standard
	Kr	83		ug/L			69	53	6	Standard
⌈>	In-1	115		ug/L			9412	8043	1	KED
|	Cd	111	0.003	ug/L	0.004	120	3	3	25	KED
⌊	Cd	114	0.007	ug/L	0.002	33	4	9	19	KED
⌈>	In	115		ug/L			462006	435587	0	Standard
⌊	Ag	107	-0.000	ug/L	0.000	154	43	37	16	Standard
⌈>	Tb	159		ug/L			1183725	1131870	1	Standard
⌊	Pb	208	0.015	ug/L	0.001	7	262	1469	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 23:43:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	36958	1	Standard
	Cl	**37**		ug/L			6595246	6295723	3	Standard
⌈>	**Sc**	**45**		ug/L			655530	605680	2	Standard
|	**Cr**	**52**	**0.035**	ug/L	0.021	60	15680	15222	1	Standard
⌊	**Cr**	**53**	**0.012**	ug/L	0.009	71	119	139	12	Standard
⌈>	**Ge**	**72**		ug/L			45192	38507	0	KED
|	**Ni**	**60**	**-0.007**	ug/L	0.002	30	27	14	19	KED
|	**Ni**	**62**	**0.033**	ug/L	0.005	14	3	10	10	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.006	284	59	41	56	KED
|	**Cu**	**65**	**0.005**	ug/L	0.002	35	19	26	12	KED
|	**Zn**	**66**	**0.041**	ug/L	0.035	86	38	55	34	KED
|	**Zn**	**67**	**-0.034**	ug/L	0.024	69	8	4	49	KED
⌊	**As**	**75**	**-0.005**	ug/L	0.003	48	3	1	45	KED
	Y	**89**		ug/L			311569	299053	3	Standard
	Kr	**83**		ug/L			69	53	16	Standard
⌈>	**In-1**	**115**		ug/L			9412	8796	1	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.003	69	3	1	50	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.003	136	4	2	74	KED
⌈>	**In**	**115**		ug/L			462006	464156	2	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	28	43	20	32	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1133694	2	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	22	262	426	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0064-03
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 23:47:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	69545	0	Standard
	Cl	**37**		ug/L			6595246	6346696	3	Standard
⌈>	**Sc**	**45**		ug/L			655530	622246	1	Standard
|	**Cr**	**52**	**0.841**	ug/L	0.026	3	15680	33356	2	Standard
⌊	**Cr**	**53**	**1.021**	ug/L	0.030	2	119	2656	3	Standard
⌈>	**Ge**	**72**		ug/L			45192	39032	1	KED
|	**Ni**	**60**	**0.724**	ug/L	0.010	1	27	1054	1	KED
|	**Ni**	**62**	**0.751**	ug/L	0.108	14	3	176	14	KED
|	**Cu**	**63**	**5.931**	ug/L	0.189	3	59	23407	1	KED
|	**Cu**	**65**	**5.909**	ug/L	0.113	1	19	11935	1	KED
|	**Zn**	**66**	**90.430**	ug/L	1.542	1	38	51351	0	KED
|	**Zn**	**67**	**86.342**	ug/L	2.231	2	8	7974	1	KED
⌊	**As**	**75**	**0.602**	ug/L	0.030	4	3	177	5	KED
	Y	**89**		ug/L			311569	308425	3	Standard
	Kr	**83**		ug/L			69	43	19	Standard
⌈>	**In-1**	**115**		ug/L			9412	8987	1	KED
|	**Cd**	**111**	**0.044**	ug/L	0.023	52	3	16	40	KED
⌊	**Cd**	**114**	**0.038**	ug/L	0.016	43	4	33	38	KED
⌈>	**In**	**115**		ug/L			462006	468993	1	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.001	11	43	121	5	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1158976	1	Standard
⌊	**Pb**	**208**	**1.124**	ug/L	0.015	1	262	94177	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0064-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 23:52:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	80475	0	Standard
	Cl	37		ug/L			6595246	7299248	3	Standard
>	Sc	45		ug/L			655530	649737	9	Standard
	Cr	52	2.215	ug/L	0.228	10	15680	66023	2	Standard
	Cr	53	2.945	ug/L	0.228	7	119	7740	2	Standard
>	Ge	72		ug/L			45192	37662	0	KED
	Ni	60	3.660	ug/L	0.124	3	27	5047	2	KED
	Ni	62	3.731	ug/L	0.173	4	3	833	3	KED
	Cu	63	21.231	ug/L	0.344	1	59	80737	0	KED
	Cu	65	21.140	ug/L	0.089	0	19	41168	0	KED
	Zn	66	152.509	ug/L	0.985	0	38	83551	0	KED
	Zn	67	145.238	ug/L	3.091	2	8	12938	1	KED
	As	75	4.246	ug/L	0.061	1	3	1187	0	KED
	Y	89		ug/L			311569	286915	9	Standard
	Kr	83		ug/L			69	55	38	Standard
>	In-1	115		ug/L			9412	8452	1	KED
	Cd	111	2.614	ug/L	0.225	8	3	743	8	KED
	Cd	114	2.645	ug/L	0.068	2	4	1904	3	KED
>	In	115		ug/L			462006	424532	11	Standard
	Ag	107	0.011	ug/L	0.001	6	43	206	9	Standard
>	Tb	159		ug/L			1183725	1089788	9	Standard
	Pb	208	2.988	ug/L	0.323	10	262	233388	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0517-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 02, 2023 23:57:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	87756	0	Standard
	Cl	37		ug/L			6595246	7518886	3	Standard
>	Sc	45		ug/L			655530	699710	3	Standard
	Cr	52	2.100	ug/L	0.053	2	15680	68584	1	Standard
	Cr	53	2.827	ug/L	0.033	1	119	8043	2	Standard
>	Ge	72		ug/L			45192	38329	0	KED
	Ni	60	3.849	ug/L	0.076	1	27	5401	1	KED
	Ni	62	3.847	ug/L	0.135	3	3	874	3	KED
	Cu	63	22.019	ug/L	0.151	0	59	85223	0	KED
	Cu	65	21.907	ug/L	0.036	0	19	43418	0	KED
	Zn	66	158.707	ug/L	2.054	1	38	88489	1	KED
	Zn	67	153.928	ug/L	2.771	1	8	13956	1	KED
	As	75	4.562	ug/L	0.143	3	3	1298	3	KED
	Y	89		ug/L			311569	300506	3	Standard
	Kr	83		ug/L			69	53	41	Standard
>	In-1	115		ug/L			9412	8774	2	KED
	Cd	111	2.904	ug/L	0.100	3	3	857	1	KED
	Cd	114	2.837	ug/L	0.136	4	4	2119	4	KED
>	In	115		ug/L			462006	455979	0	Standard
	Ag	107	0.010	ug/L	0.001	15	43	205	11	Standard
>	Tb	159		ug/L			1183725	1135269	1	Standard
	Pb	208	2.932	ug/L	0.024	0	262	240132	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0517-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 00:02:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	82992	1	Standard
	Cl	37		ug/L			6595246	7419094	3	Standard
⌈>	Sc	45		ug/L			655530	687100	2	Standard
|	Cr	52	25.364	ug/L	0.222	0	15680	631763	1	Standard
⌊	Cr	53	26.131	ug/L	0.446	1	119	71986	0	Standard
⌈>	Ge	72		ug/L			45192	39113	1	KED
|	Ni	60	31.024	ug/L	0.823	2	27	44248	1	KED
|	Ni	62	30.836	ug/L	0.630	2	3	7132	1	KED
|	Cu	63	47.705	ug/L	0.960	2	59	188335	1	KED
|	Cu	65	47.769	ug/L	0.896	1	19	96572	0	KED
|	Zn	66	231.252	ug/L	6.373	2	38	131520	1	KED
|	Zn	67	222.232	ug/L	5.284	2	8	20554	1	KED
⌊	As	75	30.878	ug/L	0.580	1	3	8950	0	KED
	Y	89		ug/L			311569	304413	0	Standard
	Kr	83		ug/L			69	69	30	Standard
⌈>	In-1	115		ug/L			9412	8843	3	KED
|	Cd	111	28.627	ug/L	0.840	2	3	8486	1	KED
⌊	Cd	114	29.639	ug/L	0.781	2	4	22263	0	KED
⌈>	In	115		ug/L			462006	438590	1	Standard
⌊	Ag	107	25.122	ug/L	0.523	2	43	402679	3	Standard
⌈>	Tb	159		ug/L			1183725	1143161	1	Standard
⌊	Pb	208	31.432	ug/L	0.919	2	262	2589258	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 00:07:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	39397	0	Standard
	Cl	**37**		ug/L			6595246	6569723	3	Standard
⌈>	**Sc**	**45**		ug/L			655530	613888	1	Standard
|	**Cr**	**52**	**-0.021**	ug/L	0.003	15	15680	14236	1	Standard
⌊	**Cr**	**53**	**0.029**	ug/L	0.006	20	119	184	7	Standard
⌈>	**Ge**	**72**		ug/L			45192	41189	1	KED
|	**Ni**	**60**	**-0.009**	ug/L	0.002	23	27	12	24	KED
|	**Ni**	**62**	**0.004**	ug/L	0.019	442	3	4	98	KED
|	**Cu**	**63**	**0.003**	ug/L	0.004	119	59	67	23	KED
|	**Cu**	**65**	**0.004**	ug/L	0.005	111	19	27	38	KED
|	**Zn**	**66**	**0.057**	ug/L	0.007	11	38	69	4	KED
|	**Zn**	**67**	**0.061**	ug/L	0.032	53	8	13	20	KED
⌊	**As**	**75**	**-0.002**	ug/L	0.004	180	3	2	40	KED
	Y	**89**		ug/L			311569	295829	3	Standard
	Kr	**83**		ug/L			69	34	5	Standard
⌈>	**In-1**	**115**		ug/L			9412	9195	1	KED
|	**Cd**	**111**	**0.002**	ug/L	0.005	208	3	4	35	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.003	1486	4	4	43	KED
⌈>	**In**	**115**		ug/L			462006	449638	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	59	43	57	16	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1140541	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	10	262	530	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVC
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 00:11:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	39756	2	Standard
	Cl	**37**		ug/L			6595246	6517209	3	Standard
⌈>	**Sc**	**45**		ug/L			655530	623287	2	Standard
|	**Cr**	**52**	**50.080**	ug/L	1.332	2	15680	1116574	0	Standard
⌊	**Cr**	**53**	**50.494**	ug/L	1.296	2	119	126044	0	Standard
⌈>	**Ge**	**72**		ug/L			45192	41434	1	KED
|	**Ni**	**60**	**51.375**	ug/L	0.738	1	27	77615	0	KED
|	**Ni**	**62**	**50.551**	ug/L	0.960	1	3	12384	0	KED
|	**Cu**	**63**	**51.394**	ug/L	0.500	0	59	214944	0	KED
|	**Cu**	**65**	**51.869**	ug/L	0.734	1	19	111088	0	KED
|	**Zn**	**66**	**52.039**	ug/L	1.107	2	38	31383	0	KED
|	**Zn**	**67**	**51.047**	ug/L	1.217	2	8	5007	1	KED
⌊	**As**	**75**	**50.646**	ug/L	1.425	2	3	15550	1	KED
	Y	**89**		ug/L			311569	295413	0	Standard
	Kr	**83**		ug/L			69	63	14	Standard
⌈>	**In-1**	**115**		ug/L			9412	9054	1	KED
|	**Cd**	**111**	**51.885**	ug/L	0.808	1	3	15753	0	KED
⌊	**Cd**	**114**	**51.919**	ug/L	1.581	3	4	39941	1	KED
⌈>	**In**	**115**		ug/L			462006	452468	2	Standard
⌊	**Ag**	**107**	**49.258**	ug/L	1.374	2	43	813975	0	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1160391	2	Standard
⌊	**Pb**	**208**	**55.425**	ug/L	1.632	2	262	4633966	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBC
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 00:18:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	39430	2	Standard
	Cl	**37**		ug/L			6595246	6608681	3	Standard
⌈>	**Sc**	**45**		ug/L			655530	627074	2	Standard
|	**Cr**	**52**	**-0.045**	ug/L	0.014	31	15680	13990	1	Standard
⌊	**Cr**	**53**	**0.011**	ug/L	0.002	19	119	141	5	Standard
⌈>	**Ge**	**72**		ug/L			45192	42221	0	KED
|	**Ni**	**60**	**0.001**	ug/L	0.009	720	27	27	47	KED
|	**Ni**	**62**	**0.006**	ug/L	0.012	191	3	5	57	KED
|	**Cu**	**63**	**0.004**	ug/L	0.012	263	59	73	65	KED
|	**Cu**	**65**	**0.010**	ug/L	0.015	155	19	39	82	KED
|	**Zn**	**66**	**-0.002**	ug/L	0.027	1362	38	34	47	KED
|	**Zn**	**67**	**-0.045**	ug/L	0.033	72	8	3	86	KED
⌊	**As**	**75**	**0.010**	ug/L	0.010	92	3	6	44	KED
	Y	**89**		ug/L			311569	291219	2	Standard
	Kr	**83**		ug/L			69	50	28	Standard
⌈>	**In-1**	**115**		ug/L			9412	9479	1	KED
|	**Cd**	**111**	**0.003**	ug/L	0.006	210	3	4	44	KED
⌊	**Cd**	**114**	**-0.005**	ug/L	0.001	31	4	1	97	KED
⌈>	**In**	**115**		ug/L			462006	458881	0	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	11	43	64	4	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1162137	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	12	262	326	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0101-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 03, 2023 00:23:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	1172532	2	Standard
	Cl	37		ug/L			6595246	6069038	4	Standard
>	Sc	45		ug/L			655530	579749	2	Standard
	Cr	52	2.828	ug/L	0.035	1	15680	71751	1	Standard
	Cr	53	0.881	ug/L	0.022	2	119	2150	2	Standard
>	Ge	72		ug/L			45192	34089	1	KED
	Ni	60	20.282	ug/L	0.443	2	27	25219	0	KED
	Ni	62	19.942	ug/L	0.648	3	3	4020	2	KED
	Cu	63	0.986	ug/L	0.047	4	59	3435	3	KED
	Cu	65	1.029	ug/L	0.006	0	19	1828	1	KED
	Zn	66	10.534	ug/L	0.020	0	38	5251	1	KED
	Zn	67	10.823	ug/L	0.467	4	8	878	3	KED
	As	75	0.075	ug/L	0.014	18	3	21	17	KED
	Y	89		ug/L			311569	286901	1	Standard
	Kr	83		ug/L			69	42	24	Standard
>	In-1	115		ug/L			9412	7926	1	KED
	Cd	111	0.034	ug/L	0.006	16	3	12	12	KED
	Cd	114	0.027	ug/L	0.001	3	4	22	2	KED
>	In	115		ug/L			462006	416475	3	Standard
	Ag	107	0.000	ug/L	0.001	128	43	45	18	Standard
>	Tb	159		ug/L			1183725	1096671	1	Standard
	Pb	208	0.106	ug/L	0.002	2	262	8658	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0111-02
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 00:27:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	80966	1	Standard
	Cl	37		ug/L			6595246	6227254	3	Standard
>	Sc	45		ug/L			655530	622993	1	Standard
	Cr	52	2.609	ug/L	0.004	0	15680	72296	2	Standard
	Cr	53	2.803	ug/L	0.057	2	119	7103	1	Standard
>	Ge	72		ug/L			45192	36906	1	KED
	Ni	60	1.429	ug/L	0.066	4	27	1944	3	KED
	Ni	62	1.443	ug/L	0.093	6	3	318	7	KED
	Cu	63	10.530	ug/L	0.065	0	59	39269	1	KED
	Cu	65	10.555	ug/L	0.197	1	19	20148	0	KED
	Zn	66	60.867	ug/L	1.060	1	38	32691	0	KED
	Zn	67	58.599	ug/L	1.409	2	8	5119	1	KED
	As	75	0.584	ug/L	0.043	7	3	162	6	KED
	Y	89		ug/L			311569	295366	3	Standard
	Kr	83		ug/L			69	40	28	Standard
>	In-1	115		ug/L			9412	8253	1	KED
	Cd	111	0.043	ug/L	0.028	65	3	14	51	KED
	Cd	114	0.034	ug/L	0.008	22	4	27	17	KED
>	In	115		ug/L			462006	459705	2	Standard
	Ag	107	0.012	ug/L	0.001	9	43	237	6	Standard
>	Tb	159		ug/L			1183725	1147171	1	Standard
	Pb	208	0.937	ug/L	0.008	0	262	77764	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0113-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 03, 2023 00:31:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	49362	2	Standard
	Cl	37		ug/L			6595246	6239661	4	Standard
>	Sc	45		ug/L			655530	638547	0	Standard
	Cr	52	15.848	ug/L	0.142	0	15680	372634	1	Standard
	Cr	53	16.371	ug/L	0.040	0	119	41964	0	Standard
>	Ge	72		ug/L			45192	39359	1	KED
	Ni	60	2.821	ug/L	0.079	2	27	4070	1	KED
	Ni	62	2.870	ug/L	0.027	0	3	671	1	KED
	Cu	63	34.610	ug/L	0.573	1	59	137511	1	KED
	Cu	65	34.629	ug/L	0.142	0	19	70468	1	KED
	Zn	66	233.126	ug/L	3.855	1	38	133439	0	KED
	Zn	67	218.354	ug/L	3.629	1	8	20323	0	KED
	As	75	0.416	ug/L	0.033	7	3	124	7	KED
	Y	89		ug/L			311569	311823	4	Standard
	Kr	83		ug/L			69	40	28	Standard
>	In-1	115		ug/L			9412	8908	0	KED
	Cd	111	0.158	ug/L	0.006	3	3	50	3	KED
	Cd	114	0.139	ug/L	0.006	4	4	109	4	KED
>	In	115		ug/L			462006	472163	2	Standard
	Ag	107	0.024	ug/L	0.002	7	43	461	4	Standard
>	Tb	159		ug/L			1183725	1171679	1	Standard
	Pb	208	146.615	ug/L	0.618	0	262	12381963	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0114-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 00:37:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	69021	2	Standard
	Cl	37		ug/L			6595246	6361648	3	Standard
⌈>	Sc	45		ug/L			655530	619895	1	Standard
|	Cr	52	0.372	ug/L	0.006	1	15680	22968	1	Standard
⌊	Cr	53	0.444	ug/L	0.007	1	119	1213	3	Standard
⌈>	Ge	72		ug/L			45192	39522	1	KED
|	Ni	60	1.035	ug/L	0.027	2	27	1515	1	KED
|	Ni	62	1.201	ug/L	0.065	5	3	283	4	KED
|	Cu	63	51.623	ug/L	0.412	0	59	205955	1	KED
|	Cu	65	50.964	ug/L	0.232	0	19	104122	0	KED
|	Zn	66	116.644	ug/L	1.580	1	38	67064	0	KED
|	Zn	67	110.033	ug/L	0.506	0	8	10289	1	KED
⌊	As	75	0.695	ug/L	0.010	1	3	206	0	KED
	Y	89		ug/L			311569	308522	1	Standard
	Kr	83		ug/L			69	39	16	Standard
⌈>	In-1	115		ug/L			9412	9069	0	KED
|	Cd	111	0.169	ug/L	0.037	22	3	54	20	KED
⌊	Cd	114	0.168	ug/L	0.008	4	4	133	5	KED
⌈>	In	115		ug/L			462006	469373	0	Standard
⌊	Ag	107	0.008	ug/L	0.001	15	43	179	11	Standard
⌈>	Tb	159		ug/L			1183725	1174150	0	Standard
⌊	Pb	208	0.091	ug/L	0.001	1	262	7944	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0115-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 00:42:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	74291	2	Standard
	Cl	**37**		ug/L			6595246	6333176	3	Standard
⌈>	**Sc**	**45**		ug/L			655530	644262	2	Standard
|	**Cr**	**52**	**1.487**	ug/L	0.015	0	15680	49236	1	Standard
⌊	**Cr**	**53**	**1.611**	ug/L	0.021	1	119	4270	1	Standard
⌈>	**Ge**	**72**		ug/L			45192	39350	0	KED
|	**Ni**	**60**	**1.781**	ug/L	0.043	2	27	2578	2	KED
|	**Ni**	**62**	**1.747**	ug/L	0.144	8	3	409	7	KED
|	**Cu**	**63**	**7.439**	ug/L	0.114	1	59	29591	1	KED
|	**Cu**	**65**	**7.435**	ug/L	0.068	0	19	15138	0	KED
|	**Zn**	**66**	**86.042**	ug/L	1.068	1	38	49264	0	KED
|	**Zn**	**67**	**81.091**	ug/L	2.266	2	8	7551	2	KED
⌊	**As**	**75**	**0.391**	ug/L	0.002	0	3	117	1	KED
	Y	**89**		ug/L			311569	310710	2	Standard
	Kr	**83**		ug/L			69	46	29	Standard
⌈>	**In-1**	**115**		ug/L			9412	8752	1	KED
|	**Cd**	**111**	**0.056**	ug/L	0.009	16	3	19	13	KED
⌊	**Cd**	**114**	**0.040**	ug/L	0.003	8	4	34	7	KED
⌈>	**In**	**115**		ug/L			462006	467386	1	Standard
⌊	**Ag**	**107**	**0.013**	ug/L	0.000	3	43	269	3	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1148048	1	Standard
⌊	**Pb**	**208**	**2.445**	ug/L	0.029	1	262	202573	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0442-02
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 00:46:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			40446	64220	0	Standard
Cl	37		ug/L			6595246	6302502	3	Standard
> Sc	45		ug/L			655530	1034272	2	Standard
Cr	52	0.125	ug/L	0.038	30	15680	29276	2	Standard
Cr	53	0.588	ug/L	0.006	1	119	2624	2	Standard
> Ge	72		ug/L			45192	36846	0	KED
Ni	60	0.288	ug/L	0.029	9	27	410	9	KED
Ni	62	0.368	ug/L	0.065	17	3	83	16	KED
Cu	63	0.064	ug/L	0.012	18	59	286	15	KED
Cu	65	0.079	ug/L	0.014	18	19	166	16	KED
Zn	66	0.368	ug/L	0.021	5	38	228	4	KED
Zn	67	0.748	ug/L	0.042	5	8	72	5	KED
As	75	8.648	ug/L	0.058	0	3	2364	0	KED
Y	89		ug/L			311569	322719	1	Standard
Kr	83		ug/L			69	46	31	Standard
> In-1	115		ug/L			9412	8169	1	KED
Cd	111	0.004	ug/L	0.015	361	3	4	96	KED
Cd	114	0.003	ug/L	0.003	102	4	6	34	KED
> In	115		ug/L			462006	429792	0	Standard
Ag	107	0.010	ug/L	0.001	7	43	193	5	Standard
> Tb	159		ug/L			1183725	994443	2	Standard
Pb	208	0.010	ug/L	0.001	7	262	909	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0054-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 00:50:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			40446	64309	2	Standard
Cl	37		ug/L			6595246	6298207	3	Standard
> Sc	45		ug/L			655530	1046822	1	Standard
Cr	52	0.117	ug/L	0.016	13	15680	29373	0	Standard
Cr	53	0.552	ug/L	0.009	1	119	2505	3	Standard
> Ge	72		ug/L			45192	37795	0	KED
Ni	60	0.294	ug/L	0.027	9	27	427	8	KED
Ni	62	0.273	ug/L	0.029	10	3	64	10	KED
Cu	63	0.085	ug/L	0.003	3	59	372	2	KED
Cu	65	0.091	ug/L	0.011	11	19	194	11	KED
Zn	66	0.450	ug/L	0.043	9	38	280	8	KED
Zn	67	0.763	ug/L	0.185	24	8	75	21	KED
As	75	8.443	ug/L	0.062	0	3	2367	1	KED
Y	89		ug/L			311569	323068	2	Standard
Kr	83		ug/L			69	44	13	Standard
> In-1	115		ug/L			9412	8233	1	KED
Cd	111	0.004	ug/L	0.009	224	3	4	58	KED
Cd	114	0.005	ug/L	0.010	182	4	7	84	KED
> In	115		ug/L			462006	427719	1	Standard
Ag	107	0.009	ug/L	0.001	13	43	180	8	Standard
> Tb	159		ug/L			1183725	1010039	1	Standard
Pb	208	0.012	ug/L	0.000	3	262	1097	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0054-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 00:55:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			40446	62812	0	Standard
Cl	37		ug/L			6595246	6116805	3	Standard
> Sc	45		ug/L			655530	1004164	1	Standard
Cr	52	15.265	ug/L	0.207	1	15680	565282	1	Standard
Cr	53	15.868	ug/L	0.388	2	119	63961	1	Standard
> Ge	72		ug/L			45192	36589	2	KED
Ni	60	27.400	ug/L	0.899	3	27	36548	0	KED
Ni	62	27.061	ug/L	0.241	0	3	5855	1	KED
Cu	63	26.736	ug/L	0.906	3	59	98717	0	KED
Cu	65	27.043	ug/L	1.046	3	19	51126	1	KED
Zn	66	79.672	ug/L	1.337	1	38	42408	0	KED
Zn	67	77.399	ug/L	3.048	3	8	6698	2	KED
As	75	33.707	ug/L	0.540	1	3	9139	0	KED
Y	89		ug/L			311569	317224	2	Standard
Kr	83		ug/L			69	62	19	Standard
> In-1	115		ug/L			9412	8318	0	KED
Cd	111	26.059	ug/L	0.219	0	3	7271	0	KED
Cd	114	25.874	ug/L	0.414	1	4	18293	1	KED
> In	115		ug/L			462006	420028	1	Standard
Ag	107	24.968	ug/L	0.663	2	43	383165	2	Standard
> Tb	159		ug/L			1183725	985295	1	Standard
Pb	208	32.284	ug/L	0.144	0	262	2292819	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0054-MSD1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 01:01:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			40446	62208	1	Standard
Cl	37		ug/L			6595246	6168842	3	Standard
> Sc	45		ug/L			655530	1020201	1	Standard
Cr	52	14.907	ug/L	0.164	1	15680	561468	2	Standard
Cr	53	15.451	ug/L	0.109	0	119	63290	1	Standard
> Ge	72		ug/L			45192	37622	0	KED
Ni	60	26.251	ug/L	0.324	1	27	36025	1	KED
Ni	62	26.124	ug/L	0.352	1	3	5813	1	KED
Cu	63	26.070	ug/L	0.097	0	59	99034	0	KED
Cu	65	26.097	ug/L	0.252	0	19	50763	0	KED
Zn	66	77.197	ug/L	0.767	0	38	42265	1	KED
Zn	67	74.068	ug/L	1.424	1	8	6595	1	KED
As	75	33.480	ug/L	0.029	0	3	9337	0	KED
Y	89		ug/L			311569	322199	1	Standard
Kr	83		ug/L			69	66	28	Standard
> In-1	115		ug/L			9412	8491	0	KED
Cd	111	25.369	ug/L	0.414	1	3	7226	1	KED
Cd	114	25.357	ug/L	0.040	0	4	18301	0	KED
> In	115		ug/L			462006	409569	1	Standard
Ag	107	25.268	ug/L	0.210	0	43	378140	1	Standard
> Tb	159		ug/L			1183725	977718	1	Standard
Pb	208	32.211	ug/L	0.134	0	262	2270046	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL8
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 01:06:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	38655	1	Standard
	Cl	**37**		ug/L			6595246	6076391	3	Standard
⎡>	**Sc**	**45**		ug/L			655530	594559	1	Standard
⎢	**Cr**	**52**	**-0.043**	ug/L	0.011	25	15680	13329	3	Standard
⎣	**Cr**	**53**	**0.020**	ug/L	0.001	6	119	154	1	Standard
⎡>	**Ge**	**72**		ug/L			45192	39767	1	KED
⎢	**Ni**	**60**	**-0.007**	ug/L	0.001	19	27	14	15	KED
⎢	**Ni**	**62**	**0.010**	ug/L	0.008	77	3	5	33	KED
⎢	**Cu**	**63**	**0.001**	ug/L	0.000	46	59	55	5	KED
⎢	**Cu**	**65**	**0.003**	ug/L	0.004	107	19	24	31	KED
⎢	**Zn**	**66**	**0.040**	ug/L	0.018	44	38	57	18	KED
⎢	**Zn**	**67**	**0.045**	ug/L	0.044	98	8	12	36	KED
⎣	**As**	**75**	**0.001**	ug/L	0.003	353	3	3	28	KED
	Y	**89**		ug/L			311569	289531	3	Standard
	Kr	**83**		ug/L			69	37	11	Standard
⎡>	**In-1**	**115**		ug/L			9412	8909	1	KED
⎢	**Cd**	**111**	**0.007**	ug/L	0.008	113	3	5	44	KED
⎣	**Cd**	**114**	**0.001**	ug/L	0.005	411	4	5	68	KED
⎡>	**In**	**115**		ug/L			462006	447284	3	Standard
⎣	**Ag**	**107**	**0.001**	ug/L	0.001	62	43	64	17	Standard
⎡>	**Tb**	**159**		ug/L			1183725	1138164	0	Standard
⎣	**Pb**	**208**	**0.003**	ug/L	0.000	2	262	499	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVD
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 01:10:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	39414	1	Standard
	Cl	**37**		ug/L			6595246	6345289	2	Standard
⌈>	**Sc**	**45**		ug/L			655530	605241	1	Standard
|	**Cr**	**52**	**49.773**	ug/L	0.690	1	15680	1078190	1	Standard
⌊	**Cr**	**53**	**50.984**	ug/L	1.200	2	119	123655	3	Standard
⌈>	**Ge**	**72**		ug/L			45192	40061	2	KED
|	**Ni**	**60**	**51.444**	ug/L	0.786	1	27	75136	0	KED
|	**Ni**	**62**	**50.688**	ug/L	1.042	2	3	12005	0	KED
|	**Cu**	**63**	**51.110**	ug/L	1.406	2	59	206612	0	KED
|	**Cu**	**65**	**51.529**	ug/L	1.191	2	19	106684	0	KED
|	**Zn**	**66**	**51.100**	ug/L	1.437	2	38	29792	1	KED
|	**Zn**	**67**	**51.436**	ug/L	2.234	4	8	4878	3	KED
⌊	**As**	**75**	**50.441**	ug/L	1.162	2	3	14972	0	KED
	Y	**89**		ug/L			311569	291099	3	Standard
	Kr	**83**		ug/L			69	64	16	Standard
⌈>	**In-1**	**115**		ug/L			9412	8690	0	KED
|	**Cd**	**111**	**52.352**	ug/L	0.382	0	3	15257	1	KED
⌊	**Cd**	**114**	**52.461**	ug/L	0.572	1	4	38741	0	KED
⌈>	**In**	**115**		ug/L			462006	451362	2	Standard
⌊	**Ag**	**107**	**49.561**	ug/L	1.170	2	43	817439	3	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1150528	1	Standard
⌊	**Pb**	**208**	**56.308**	ug/L	1.132	2	262	4668652	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBD
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 01:17:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	37549	0	Standard
	Cl	**37**		ug/L			6595246	6334889	3	Standard
⌈>	**Sc**	**45**		ug/L			655530	609006	3	Standard
|	**Cr**	**52**	**-0.036**	ug/L	0.021	58	15680	13773	0	Standard
⌊	**Cr**	**53**	**0.009**	ug/L	0.002	22	119	131	6	Standard
⌈>	**Ge**	**72**		ug/L			45192	41516	1	KED
|	**Ni**	**60**	**-0.004**	ug/L	0.003	74	27	20	19	KED
|	**Ni**	**62**	**0.004**	ug/L	0.012	309	3	4	65	KED
|	**Cu**	**63**	**-0.000**	ug/L	0.004	5175	59	53	33	KED
|	**Cu**	**65**	**0.001**	ug/L	0.003	276	19	20	30	KED
|	**Zn**	**66**	**-0.007**	ug/L	0.015	200	38	31	30	KED
|	**Zn**	**67**	**-0.025**	ug/L	0.051	205	8	5	88	KED
⌊	**As**	**75**	**0.001**	ug/L	0.002	252	3	3	19	KED
	Y	**89**		ug/L			311569	289946	1	Standard
	Kr	**83**		ug/L			69	44	12	Standard
⌈>	**In-1**	**115**		ug/L			9412	9037	1	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.002	49	3	2	24	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.010	151	4	9	79	KED
⌈>	**In**	**115**		ug/L			462006	449182	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	77	43	66	27	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1135023	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	5	262	274	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0643-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 01:22:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	57961	1	Standard
	Cl	37		ug/L			6595246	6275021	3	Standard
⌈>	Sc	45		ug/L			655530	623844	2	Standard
|	Cr	52	0.146	ug/L	0.037	25	15680	18120	3	Standard
⌊	Cr	53	0.171	ug/L	0.009	5	119	539	2	Standard
⌈>	Ge	72		ug/L			45192	40291	0	KED
|	Ni	60	-0.004	ug/L	0.003	90	27	19	24	KED
|	Ni	62	-0.004	ug/L	0.005	127	3	2	43	KED
|	Cu	63	0.028	ug/L	0.006	23	59	166	15	KED
|	Cu	65	0.041	ug/L	0.009	21	19	102	18	KED
|	Zn	66	0.260	ug/L	0.049	18	38	186	15	KED
|	Zn	67	0.310	ug/L	0.013	4	8	37	2	KED
⌊	As	75	0.003	ug/L	0.004	137	3	4	29	KED
	Y	89		ug/L			311569	291016	2	Standard
	Kr	83		ug/L			69	48	17	Standard
⌈>	In-1	115		ug/L			9412	9130	3	KED
|	Cd	111	0.002	ug/L	0.002	86	3	4	13	KED
⌊	Cd	114	0.001	ug/L	0.004	775	4	5	62	KED
⌈>	In	115		ug/L			462006	452205	1	Standard
⌊	Ag	107	-0.000	ug/L	0.001	166	43	36	29	Standard
⌈>	Tb	159		ug/L			1183725	1143266	1	Standard
⌊	Pb	208	0.004	ug/L	0.000	9	262	547	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0643-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 01:26:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	60594	2	Standard
	Cl	37		ug/L			6595246	6425749	3	Standard
>	Sc	45		ug/L			655530	622484	0	Standard
	Cr	52	25.424	ug/L	0.121	0	15680	573707	0	Standard
	Cr	53	25.917	ug/L	0.117	0	119	64700	1	Standard
>	Ge	72		ug/L			45192	39686	0	KED
	Ni	60	26.626	ug/L	0.143	0	27	38543	0	KED
	Ni	62	26.367	ug/L	0.865	3	3	6189	3	KED
	Cu	63	27.075	ug/L	0.360	1	59	108496	1	KED
	Cu	65	26.928	ug/L	0.405	1	19	55252	1	KED
	Zn	66	84.693	ug/L	0.817	0	38	48910	1	KED
	Zn	67	82.633	ug/L	1.163	1	8	7761	1	KED
	As	75	26.072	ug/L	0.251	0	3	7670	1	KED
	Y	89		ug/L			311569	291816	1	Standard
	Kr	83		ug/L			69	57	11	Standard
>	In-1	115		ug/L			9412	8602	2	KED
	Cd	111	27.163	ug/L	0.763	2	3	7834	0	KED
	Cd	114	27.389	ug/L	0.596	2	4	20019	1	KED
>	In	115		ug/L			462006	447083	3	Standard
	Ag	107	25.057	ug/L	0.110	0	43	409333	2	Standard
>	Tb	159		ug/L			1183725	1135560	1	Standard
	Pb	208	28.648	ug/L	0.445	1	262	2344568	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0073-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 01:30:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	66964	0	Standard
	Cl	37		ug/L			6595246	7069932	3	Standard
>	Sc	45		ug/L			655530	763830	2	Standard
	Cr	52	0.008	ug/L	0.016	185	15680	18491	0	Standard
	Cr	53	1.086	ug/L	0.037	3	119	3460	2	Standard
>	Ge	72		ug/L			45192	37065	0	KED
	Ni	60	2.799	ug/L	0.074	2	27	3805	2	KED
	Ni	62	2.828	ug/L	0.112	3	3	622	3	KED
	Cu	63	0.438	ug/L	0.038	8	59	1687	8	KED
	Cu	65	0.439	ug/L	0.030	6	19	857	6	KED
	Zn	66	2.095	ug/L	0.048	2	38	1160	1	KED
	Zn	67	2.662	ug/L	0.232	8	8	240	8	KED
	As	75	0.543	ug/L	0.013	2	3	152	2	KED
	Y	89		ug/L			311569	290431	1	Standard
	Kr	83		ug/L			69	57	18	Standard
>	In-1	115		ug/L			9412	8386	1	KED
	Cd	111	0.030	ug/L	0.006	20	3	11	14	KED
	Cd	114	0.023	ug/L	0.011	46	4	20	36	KED
>	In	115		ug/L			462006	438166	1	Standard
	Ag	107	0.002	ug/L	0.001	38	43	74	15	Standard
>	Tb	159		ug/L			1183725	1109432	0	Standard
	Pb	208	0.018	ug/L	0.001	6	262	1713	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0075-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 01:33:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	64832	0	Standard
	Cl	37		ug/L			6595246	6554343	4	Standard
⌈>	Sc	45		ug/L			655530	627384	2	Standard
|	Cr	52	0.561	ug/L	0.033	5	15680	27421	1	Standard
⌊	Cr	53	0.773	ug/L	0.036	4	119	2055	2	Standard
⌈>	Ge	72		ug/L			45192	38961	1	KED
|	Ni	60	0.854	ug/L	0.025	2	27	1236	1	KED
|	Ni	62	0.844	ug/L	0.093	10	3	197	9	KED
|	Cu	63	3.295	ug/L	0.012	0	59	13008	1	KED
|	Cu	65	3.235	ug/L	0.040	1	19	6532	2	KED
|	Zn	66	50.767	ug/L	0.270	0	38	28796	1	KED
|	Zn	67	49.150	ug/L	1.395	2	8	4534	2	KED
⌊	As	75	0.120	ug/L	0.012	9	3	37	9	KED
	Y	89		ug/L			311569	296484	3	Standard
	Kr	83		ug/L			69	44	21	Standard
⌈>	In-1	115		ug/L			9412	8722	1	KED
|	Cd	111	0.036	ug/L	0.007	20	3	13	14	KED
⌊	Cd	114	0.028	ug/L	0.008	27	4	25	24	KED
⌈>	In	115		ug/L			462006	446955	2	Standard
⌊	Ag	107	0.006	ug/L	0.000	3	43	140	3	Standard
⌈>	Tb	159		ug/L			1183725	1141647	3	Standard
⌊	Pb	208	0.873	ug/L	0.022	2	262	72022	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0075-02
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 01:37:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	65896	1	Standard
	Cl	37		ug/L			6595246	6482362	3	Standard
⌈>	Sc	45		ug/L			655530	648236	0	Standard
|	Cr	52	0.599	ug/L	0.012	1	15680	29213	1	Standard
⌊	Cr	53	0.844	ug/L	0.008	0	119	2308	0	Standard
⌈>	Ge	72		ug/L			45192	38569	1	KED
|	Ni	60	0.777	ug/L	0.041	5	27	1116	5	KED
|	Ni	62	0.768	ug/L	0.096	12	3	178	13	KED
|	Cu	63	5.057	ug/L	0.027	0	59	19736	1	KED
|	Cu	65	5.068	ug/L	0.108	2	19	10118	1	KED
|	Zn	66	54.921	ug/L	1.138	2	38	30830	0	KED
|	Zn	67	54.188	ug/L	1.539	2	8	4948	3	KED
⌊	As	75	0.421	ug/L	0.014	3	3	123	3	KED
	Y	89		ug/L			311569	302296	4	Standard
	Kr	83		ug/L			69	48	4	Standard
⌈>	In-1	115		ug/L			9412	8586	2	KED
|	Cd	111	0.036	ug/L	0.009	24	3	13	20	KED
⌊	Cd	114	0.045	ug/L	0.014	30	4	37	25	KED
⌈>	In	115		ug/L			462006	466041	1	Standard
⌊	Ag	107	0.004	ug/L	0.002	36	43	114	22	Standard
⌈>	Tb	159		ug/L			1183725	1161227	0	Standard
⌊	Pb	208	0.902	ug/L	0.009	1	262	75750	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0075-03
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Wednesday, May 03, 2023 01:41:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	102436	3	Standard
	Cl	**37**		ug/L			6595246	39000528	8	Standard
⌈>	**Sc**	**45**		ug/L			655530	661961	2	Standard
|	**Cr**	**52**	**1.661**	ug/L	0.017	1	15680	54655	2	Standard
⌊	**Cr**	**53**	**23.917**	ug/L	0.143	0	119	63508	3	Standard
⌈>	**Ge**	**72**		ug/L			45192	29850	1	KED
|	**Ni**	**60**	**1.516**	ug/L	0.072	4	27	1667	3	KED
|	**Ni**	**62**	**1.689**	ug/L	0.183	10	3	300	9	KED
|	**Cu**	**63**	**3.035**	ug/L	0.010	0	59	9183	1	KED
|	**Cu**	**65**	**3.052**	ug/L	0.045	1	19	4722	2	KED
|	**Zn**	**66**	**14.356**	ug/L	0.125	0	38	6257	1	KED
|	**Zn**	**67**	**15.045**	ug/L	0.443	2	8	1067	1	KED
⌊	**As**	**75**	**1.431**	ug/L	0.012	0	3	318	0	KED
	Y	**89**		ug/L			311569	246519	3	Standard
	Kr	**83**		ug/L			69	495	15	Standard
⌈>	**In-1**	**115**		ug/L			9412	6709	1	KED
|	**Cd**	**111**	**0.024**	ug/L	0.013	55	3	7	36	KED
⌊	**Cd**	**114**	**0.015**	ug/L	0.001	6	4	12	3	KED
⌈>	**In**	**115**		ug/L			462006	331016	0	Standard
⌊	**Ag**	**107**	**0.008**	ug/L	0.002	20	43	133	15	Standard
⌈>	**Tb**	**159**		ug/L			1183725	941226	0	Standard
⌊	**Pb**	**208**	**0.371**	ug/L	0.002	0	262	25390	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0075-04
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 01:45:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			40446	72922	2	Standard
	Cl	37		ug/L			6595246	7522826	2	Standard
⌈>	Sc	45		ug/L			655530	669967	1	Standard
|	Cr	52	1.210	ug/L	0.045	3	15680	44648	1	Standard
⌊	Cr	53	2.677	ug/L	0.074	2	119	7298	0	Standard
⌈>	Ge	72		ug/L			45192	42366	1	KED
|	Ni	60	1.121	ug/L	0.049	4	27	1756	3	KED
|	Ni	62	1.213	ug/L	0.017	1	3	307	0	KED
|	Cu	63	4.819	ug/L	0.138	2	59	20654	1	KED
|	Cu	65	4.764	ug/L	0.093	1	19	10449	1	KED
|	Zn	66	83.118	ug/L	1.295	1	38	51236	0	KED
|	Zn	67	82.831	ug/L	1.340	1	8	8304	0	KED
⌊	As	75	0.205	ug/L	0.022	10	3	67	9	KED
	Y	89		ug/L			311569	297016	1	Standard
	Kr	83		ug/L			69	43	10	Standard
⌈>	In-1	115		ug/L			9412	9161	0	KED
|	Cd	111	0.045	ug/L	0.006	13	3	17	11	KED
⌊	Cd	114	0.025	ug/L	0.009	35	4	24	28	KED
⌈>	In	115		ug/L			462006	457687	1	Standard
⌊	Ag	107	0.007	ug/L	0.000	6	43	160	5	Standard
⌈>	Tb	159		ug/L			1183725	1161799	1	Standard
⌊	Pb	208	1.682	ug/L	0.018	1	262	141139	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0075-05
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 01:48:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	77787	1	Standard
	Cl	**37**		ug/L			6595246	11317030	2	Standard
⌈>	**Sc**	**45**		ug/L			655530	733109	2	Standard
|	**Cr**	**52**	**0.745**	ug/L	0.051	6	15680	36786	1	Standard
⌊	**Cr**	**53**	**4.425**	ug/L	0.083	1	119	13118	2	Standard
⌈>	**Ge**	**72**		ug/L			45192	38901	1	KED
|	**Ni**	**60**	**0.914**	ug/L	0.077	8	27	1320	8	KED
|	**Ni**	**62**	**0.869**	ug/L	0.075	8	3	203	8	KED
|	**Cu**	**63**	**4.328**	ug/L	0.020	0	59	17040	1	KED
|	**Cu**	**65**	**4.276**	ug/L	0.110	2	19	8612	1	KED
|	**Zn**	**66**	**59.099**	ug/L	0.969	1	38	33456	0	KED
|	**Zn**	**67**	**58.578**	ug/L	0.405	0	8	5395	2	KED
⌊	**As**	**75**	**1.701**	ug/L	0.044	2	3	493	3	KED
	Y	**89**		ug/L			311569	289241	1	Standard
	Kr	**83**		ug/L			69	43	42	Standard
⌈>	**In-1**	**115**		ug/L			9412	8445	1	KED
|	**Cd**	**111**	**0.042**	ug/L	0.008	18	3	14	13	KED
⌊	**Cd**	**114**	**0.044**	ug/L	0.019	42	4	35	36	KED
⌈>	**In**	**115**		ug/L			462006	418844	1	Standard
⌊	**Ag**	**107**	**0.007**	ug/L	0.001	13	43	143	9	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1123355	0	Standard
⌊	**Pb**	**208**	**0.952**	ug/L	0.014	1	262	77341	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0197-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 01:52:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	71374	3	Standard
	Cl	**37**		ug/L			6595246	6980711	3	Standard
⌈>	**Sc**	**45**		ug/L			655530	642955	1	Standard
|	**Cr**	**52**	**0.230**	ug/L	0.025	10	15680	20600	1	Standard
⌊	**Cr**	**53**	**0.682**	ug/L	0.024	3	119	1873	2	Standard
⌈>	**Ge**	**72**		ug/L			45192	41370	0	KED
|	**Ni**	**60**	**0.122**	ug/L	0.004	3	27	210	2	KED
|	**Ni**	**62**	**0.123**	ug/L	0.036	28	3	33	26	KED
|	**Cu**	**63**	**1.458**	ug/L	0.014	0	59	6139	0	KED
|	**Cu**	**65**	**1.432**	ug/L	0.028	1	19	3079	2	KED
|	**Zn**	**66**	**22.921**	ug/L	0.112	0	38	13823	0	KED
|	**Zn**	**67**	**21.521**	ug/L	0.285	1	8	2113	1	KED
⌊	**As**	**75**	**0.074**	ug/L	0.023	30	3	26	26	KED
	Y	**89**		ug/L			311569	296989	2	Standard
	Kr	**83**		ug/L			69	46	18	Standard
⌈>	**In-1**	**115**		ug/L			9412	9064	2	KED
|	**Cd**	**111**	**0.014**	ug/L	0.011	79	3	7	45	KED
⌊	**Cd**	**114**	**0.009**	ug/L	0.004	41	4	11	24	KED
⌈>	**In**	**115**		ug/L			462006	462820	3	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.000	10	43	88	3	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1170231	2	Standard
⌊	**Pb**	**208**	**0.085**	ug/L	0.004	4	262	7434	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL9
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 01:56:30
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	41121	3	Standard
	Cl	**37**		ug/L			6595246	6982020	2	Standard
⎡>	**Sc**	**45**		ug/L			655530	617640	2	Standard
⎢	**Cr**	**52**	**-0.001**	ug/L	0.007	702	15680	14754	2	Standard
⎣	**Cr**	**53**	**0.325**	ug/L	0.004	1	119	915	2	Standard
⎡>	**Ge**	**72**		ug/L			45192	41279	1	KED
⎢	**Ni**	**60**	**-0.010**	ug/L	0.003	29	27	10	43	KED
⎢	**Ni**	**62**	**0.017**	ug/L	0.028	165	3	7	90	KED
⎢	**Cu**	**63**	**0.001**	ug/L	0.002	132	59	59	12	KED
⎢	**Cu**	**65**	**0.002**	ug/L	0.004	258	19	21	43	KED
⎢	**Zn**	**66**	**0.056**	ug/L	0.012	21	38	69	9	KED
⎢	**Zn**	**67**	**0.067**	ug/L	0.100	149	8	14	65	KED
⎣	**As**	**75**	**0.001**	ug/L	0.005	460	3	3	39	KED
	Y	**89**		ug/L			311569	289259	4	Standard
	Kr	**83**		ug/L			69	39	7	Standard
⎡>	**In-1**	**115**		ug/L			9412	8817	0	KED
⎢	**Cd**	**111**	**0.001**	ug/L	0.002	255	3	3	15	KED
⎣	**Cd**	**114**	**-0.005**	ug/L	0.001	31	4	1	99	KED
⎡>	**In**	**115**		ug/L			462006	446180	1	Standard
⎣	**Ag**	**107**	**-0.001**	ug/L	0.001	83	43	27	44	Standard
⎡>	**Tb**	**159**		ug/L			1183725	1140816	1	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.000	10	262	415	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 02:00:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	40377	0	Standard
	Cl	**37**		ug/L			6595246	6787710	3	Standard
⌈>	**Sc**	**45**		ug/L			655530	625093	0	Standard
|	**Cr**	**52**	**49.976**	ug/L	0.611	1	15680	1118097	1	Standard
⌊	**Cr**	**53**	**50.587**	ug/L	0.616	1	119	126706	1	Standard
⌈>	**Ge**	**72**		ug/L			45192	41391	0	KED
|	**Ni**	**60**	**51.021**	ug/L	0.288	0	27	77007	0	KED
|	**Ni**	**62**	**50.404**	ug/L	0.345	0	3	12337	0	KED
|	**Cu**	**63**	**51.389**	ug/L	0.680	1	59	214709	0	KED
|	**Cu**	**65**	**51.871**	ug/L	1.051	2	19	110985	1	KED
|	**Zn**	**66**	**51.284**	ug/L	0.707	1	38	30904	1	KED
|	**Zn**	**67**	**50.730**	ug/L	0.976	1	8	4972	2	KED
⌊	**As**	**75**	**50.388**	ug/L	0.508	1	3	15457	0	KED
	Y	**89**		ug/L			311569	293290	2	Standard
	Kr	**83**		ug/L			69	55	24	Standard
⌈>	**In-1**	**115**		ug/L			9412	8746	2	KED
|	**Cd**	**111**	**53.140**	ug/L	1.484	2	3	15579	1	KED
⌊	**Cd**	**114**	**53.410**	ug/L	1.457	2	4	39679	0	KED
⌈>	**In**	**115**		ug/L			462006	441409	2	Standard
⌊	**Ag**	**107**	**49.987**	ug/L	0.485	0	43	806120	1	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1146109	0	Standard
⌊	**Pb**	**208**	**55.331**	ug/L	0.625	1	262	4570617	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 02:06:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			40446	39381	1	Standard
	Cl	**37**		ug/L			6595246	6828429	2	Standard
⌈>	**Sc**	**45**		ug/L			655530	617611	0	Standard
|	**Cr**	**52**	**-0.038**	ug/L	0.001	3	15680	13934	0	Standard
⌊	**Cr**	**53**	**0.133**	ug/L	0.005	4	119	441	3	Standard
⌈>	**Ge**	**72**		ug/L			45192	42036	2	KED
|	**Ni**	**60**	**-0.007**	ug/L	0.003	39	27	14	32	KED
|	**Ni**	**62**	**0.006**	ug/L	0.009	139	3	5	43	KED
|	**Cu**	**63**	**-0.000**	ug/L	0.001	920	59	54	8	KED
|	**Cu**	**65**	**0.003**	ug/L	0.004	132	19	24	33	KED
|	**Zn**	**66**	**-0.008**	ug/L	0.009	111	38	31	19	KED
|	**Zn**	**67**	**-0.045**	ug/L	0.050	110	8	3	132	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.002	173	3	3	24	KED
	Y	**89**		ug/L			311569	290860	0	Standard
	Kr	**83**		ug/L			69	33	6	Standard
⌈>	**In-1**	**115**		ug/L			9412	9256	2	KED
|	**Cd**	**111**	**0.005**	ug/L	0.007	126	3	5	43	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.003	99	4	6	32	KED
⌈>	**In**	**115**		ug/L			462006	447558	3	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.000	23	43	73	7	Standard
⌈>	**Tb**	**159**		ug/L			1183725	1142488	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	40	262	271	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 02:10:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				39923	1	Standard
	Cl	**37**		ug/L				6850428	3	Standard
⌈>	**Sc**	**45**		ug/L				616697	1	Standard
|	**Cr**	**52**		ug/L				14221	3	Standard
⌊	**Cr**	**53**		ug/L				394	4	Standard
⌈>	**Ge**	**72**		ug/L				40908	1	KED
|	**Ni**	**60**		ug/L				10	21	KED
|	**Ni**	**62**		ug/L				5	33	KED
|	**Cu**	**63**		ug/L				45	6	KED
|	**Cu**	**65**		ug/L				22	22	KED
|	**Zn**	**66**		ug/L				41	17	KED
|	**Zn**	**67**		ug/L				8	35	KED
⌊	**As**	**75**		ug/L				3	60	KED
	Y	**89**		ug/L				284905	2	Standard
	Kr	**83**		ug/L				45	6	Standard
⌈>	**In-1**	**115**		ug/L				8791	4	KED
|	**Cd**	**111**		ug/L				4	72	KED
⌊	**Cd**	**114**		ug/L				3	71	KED
⌈>	**In**	**115**		ug/L				445913	1	Standard
⌊	**Ag**	**107**		ug/L				41	4	Standard
⌈>	**Tb**	**159**		ug/L				1137421	2	Standard
⌊	**Pb**	**208**		ug/L				280	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVF
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 02:14:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	39096	2	Standard
	Cl	**37**		ug/L			6850428	6757659	2	Standard
⌈>	**Sc**	**45**		ug/L			616697	614660	1	Standard
|	**Cr**	**52**	**51.010**	ug/L	0.136	0	14221	1121354	1	Standard
⌊	**Cr**	**53**	**50.751**	ug/L	0.021	0	394	125274	1	Standard
⌈>	**Ge**	**72**		ug/L			40908	40697	1	KED
|	**Ni**	**60**	**51.983**	ug/L	0.376	0	10	77125	0	KED
|	**Ni**	**62**	**51.441**	ug/L	1.648	3	5	12381	2	KED
|	**Cu**	**63**	**52.394**	ug/L	0.239	0	45	215231	0	KED
|	**Cu**	**65**	**52.378**	ug/L	0.422	0	22	110198	0	KED
|	**Zn**	**66**	**51.767**	ug/L	0.830	1	41	30679	2	KED
|	**Zn**	**67**	**51.764**	ug/L	1.168	2	8	4989	2	KED
⌊	**As**	**75**	**51.117**	ug/L	0.406	0	3	15420	1	KED
	Y	**89**		ug/L			284905	287706	3	Standard
	Kr	**83**		ug/L			45	52	25	Standard
⌈>	**In-1**	**115**		ug/L			8791	8690	1	KED
|	**Cd**	**111**	**52.925**	ug/L	0.292	0	4	15426	1	KED
⌊	**Cd**	**114**	**52.728**	ug/L	0.517	0	3	38942	1	KED
⌈>	**In**	**115**		ug/L			445913	444640	0	Standard
⌊	**Ag**	**107**	**49.073**	ug/L	1.326	2	41	797249	2	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1124639	2	Standard
⌊	**Pb**	**208**	**56.177**	ug/L	1.801	3	280	4551251	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBF
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 02:20:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	38321	2	Standard
	Cl	**37**		ug/L			6850428	6791331	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	613828	2	Standard
|	**Cr**	**52**	**0.004**	ug/L	0.003	88	14221	14236	2	Standard
⌊	**Cr**	**53**	**-0.027**	ug/L	0.003	9	394	325	4	Standard
⌈>	**Ge**	**72**		ug/L			40908	41414	1	KED
|	**Ni**	**60**	**0.001**	ug/L	0.001	53	10	12	9	KED
|	**Ni**	**62**	**-0.016**	ug/L	0.008	49	5	1	100	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.005	637	45	42	45	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.004	615	22	21	41	KED
|	**Zn**	**66**	**-0.035**	ug/L	0.003	7	41	20	9	KED
|	**Zn**	**67**	**-0.027**	ug/L	0.020	75	8	5	33	KED
⌊	**As**	**75**	**0.007**	ug/L	0.004	57	3	6	18	KED
	Y	**89**		ug/L			284905	285876	4	Standard
	Kr	**83**		ug/L			45	44	13	Standard
⌈>	**In-1**	**115**		ug/L			8791	9019	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.005	182	4	4	35	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.002	73	3	5	33	KED
⌈>	**In**	**115**		ug/L			445913	441162	2	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	37	41	68	12	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1116913	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	3078	280	275	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0147-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 02:24:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	63008	2	Standard
	Cl	37		ug/L			6850428	6718726	4	Standard
>	Sc	45		ug/L			616697	874436	8	Standard
	Cr	52	0.119	ug/L	0.075	62	14221	23721	1	Standard
	Cr	53	0.330	ug/L	0.024	7	394	1708	3	Standard
>	Ge	72		ug/L			40908	39462	0	KED
	Ni	60	1.899	ug/L	0.048	2	10	2740	1	KED
	Ni	62	1.813	ug/L	0.064	3	5	428	4	KED
	Cu	63	1.631	ug/L	0.045	2	45	6536	1	KED
	Cu	65	1.632	ug/L	0.055	3	22	3350	2	KED
	Zn	66	22.812	ug/L	0.328	1	41	13129	0	KED
	Zn	67	22.875	ug/L	0.756	3	8	2142	3	KED
	As	75	6.876	ug/L	0.125	1	3	2014	1	KED
	Y	89		ug/L			284905	286404	9	Standard
	Kr	83		ug/L			45	48	30	Standard
>	In-1	115		ug/L			8791	8789	2	KED
	Cd	111	0.393	ug/L	0.037	9	4	120	8	KED
	Cd	114	0.483	ug/L	0.079	16	3	363	15	KED
>	In	115		ug/L			445913	419526	10	Standard
	Ag	107	0.003	ug/L	0.001	46	41	88	32	Standard
>	Tb	159		ug/L			1137421	1074735	9	Standard
	Pb	208	0.456	ug/L	0.049	10	280	35377	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0147-03
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 02:27:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	71918	2	Standard
	Cl	**37**		ug/L			6850428	7739968	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	698275	3	Standard
|	**Cr**	**52**	**0.446**	ug/L	0.011	2	14221	27098	2	Standard
⌊	**Cr**	**53**	**1.397**	ug/L	0.030	2	394	4350	3	Standard
⌈>	**Ge**	**72**		ug/L			40908	38651	1	KED
|	**Ni**	**60**	**1.294**	ug/L	0.059	4	10	1831	3	KED
|	**Ni**	**62**	**1.313**	ug/L	0.074	5	5	305	5	KED
|	**Cu**	**63**	**2.950**	ug/L	0.042	1	45	11547	0	KED
|	**Cu**	**65**	**2.911**	ug/L	0.083	2	22	5835	1	KED
|	**Zn**	**66**	**43.529**	ug/L	0.568	1	41	24501	0	KED
|	**Zn**	**67**	**41.624**	ug/L	0.796	1	8	3811	1	KED
⌊	**As**	**75**	**0.507**	ug/L	0.040	7	3	149	8	KED
	Y	**89**		ug/L			284905	297234	2	Standard
	Kr	**83**		ug/L			45	52	7	Standard
⌈>	**In-1**	**115**		ug/L			8791	8650	1	KED
|	**Cd**	**111**	**0.015**	ug/L	0.009	59	4	8	26	KED
⌊	**Cd**	**114**	**0.028**	ug/L	0.010	35	3	23	29	KED
⌈>	**In**	**115**		ug/L			445913	429216	3	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	20	41	79	9	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1125942	2	Standard
⌊	**Pb**	**208**	**0.303**	ug/L	0.003	0	280	24878	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0152-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 02:31:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	68627	0	Standard
	Cl	37		ug/L			6850428	7752509	2	Standard
⌈>	Sc	45		ug/L			616697	641002	1	Standard
|	Cr	52	0.276	ug/L	0.017	6	14221	21021	1	Standard
⌊	Cr	53	0.994	ug/L	0.020	1	394	2959	1	Standard
⌈>	Ge	72		ug/L			40908	39791	3	KED
|	Ni	60	1.494	ug/L	0.102	6	10	2176	6	KED
|	Ni	62	1.384	ug/L	0.103	7	5	330	6	KED
|	Cu	63	1.349	ug/L	0.062	4	45	5455	1	KED
|	Cu	65	1.359	ug/L	0.096	7	22	2812	3	KED
|	Zn	66	15.019	ug/L	0.484	3	41	8724	0	KED
|	Zn	67	15.779	ug/L	0.166	1	8	1492	4	KED
⌊	As	75	0.087	ug/L	0.008	9	3	29	4	KED
	Y	89		ug/L			284905	299193	2	Standard
	Kr	83		ug/L			45	41	25	Standard
⌈>	In-1	115		ug/L			8791	8105	15	KED
|	Cd	111	0.058	ug/L	0.029	48	4	20	47	KED
⌊	Cd	114	0.075	ug/L	0.040	53	3	52	41	KED
⌈>	In	115		ug/L			445913	441649	1	Standard
⌊	Ag	107	0.003	ug/L	0.001	20	41	92	11	Standard
⌈>	Tb	159		ug/L			1137421	1144488	1	Standard
⌊	Pb	208	0.216	ug/L	0.004	1	280	18059	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0155-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 02:34:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	66484	1	Standard
	Cl	**37**		ug/L			6850428	7042806	2	Standard
⌈>	**Sc**	**45**		ug/L			616697	652143	2	Standard
|	**Cr**	**52**	**0.146**	ug/L	0.007	5	14221	18401	2	Standard
⌊	**Cr**	**53**	**0.761**	ug/L	0.020	2	394	2402	0	Standard
⌈>	**Ge**	**72**		ug/L			40908	39884	1	KED
|	**Ni**	**60**	**0.337**	ug/L	0.036	10	10	499	9	KED
|	**Ni**	**62**	**0.286**	ug/L	0.016	5	5	73	3	KED
|	**Cu**	**63**	**5.041**	ug/L	0.022	0	45	20331	1	KED
|	**Cu**	**65**	**5.037**	ug/L	0.080	1	22	10405	1	KED
|	**Zn**	**66**	**27.926**	ug/L	0.376	1	41	16235	1	KED
|	**Zn**	**67**	**26.404**	ug/L	0.742	2	8	2497	2	KED
⌊	**As**	**75**	**0.126**	ug/L	0.010	8	3	41	6	KED
	Y	**89**		ug/L			284905	291206	6	Standard
	Kr	**83**		ug/L			45	31	21	Standard
⌈>	**In-1**	**115**		ug/L			8791	8478	1	KED
|	**Cd**	**111**	**0.024**	ug/L	0.009	38	4	11	22	KED
⌊	**Cd**	**114**	**0.027**	ug/L	0.008	29	3	22	25	KED
⌈>	**In**	**115**		ug/L			445913	432246	2	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.001	21	41	97	14	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1132561	2	Standard
⌊	**Pb**	**208**	**0.052**	ug/L	0.001	1	280	4541	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0156-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 02:38:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	68174	0	Standard
	Cl	37		ug/L			6850428	6795137	3	Standard
⌈>	Sc	45		ug/L			616697	629609	1	Standard
|	Cr	52	0.331	ug/L	0.008	2	14221	21885	1	Standard
⌊	Cr	53	0.361	ug/L	0.031	8	394	1311	6	Standard
⌈>	Ge	72		ug/L			40908	41217	1	KED
|	Ni	60	0.541	ug/L	0.004	0	10	823	1	KED
|	Ni	62	0.571	ug/L	0.045	7	5	144	6	KED
|	Cu	63	14.292	ug/L	0.047	0	45	59496	1	KED
|	Cu	65	14.089	ug/L	0.453	3	22	30029	2	KED
|	Zn	66	27.070	ug/L	0.147	0	41	16265	1	KED
|	Zn	67	26.306	ug/L	1.290	4	8	2570	3	KED
⌊	As	75	0.193	ug/L	0.006	3	3	63	1	KED
	Y	89		ug/L			284905	296584	3	Standard
	Kr	83		ug/L			45	34	24	Standard
⌈>	In-1	115		ug/L			8791	8925	1	KED
|	Cd	111	0.023	ug/L	0.008	35	4	11	20	KED
⌊	Cd	114	0.038	ug/L	0.011	30	3	31	27	KED
⌈>	In	115		ug/L			445913	455003	2	Standard
⌊	Ag	107	0.005	ug/L	0.001	18	41	128	10	Standard
⌈>	Tb	159		ug/L			1137421	1179168	2	Standard
⌊	Pb	208	0.716	ug/L	0.009	1	280	61173	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0162-03
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 02:42:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	80172	2	Standard
	Cl	**37**		ug/L			6850428	10026756	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	686800	2	Standard
|	**Cr**	**52**	**6.824**	ug/L	0.269	3	14221	181237	1	Standard
⌊	**Cr**	**53**	**9.197**	ug/L	0.251	2	394	25712	0	Standard
⌈>	**Ge**	**72**		ug/L			40908	38717	1	KED
|	**Ni**	**60**	**3.368**	ug/L	0.021	0	10	4762	1	KED
|	**Ni**	**62**	**3.324**	ug/L	0.077	2	5	766	2	KED
|	**Cu**	**63**	**21.768**	ug/L	0.577	2	45	85078	1	KED
|	**Cu**	**65**	**21.900**	ug/L	0.407	1	22	43840	0	KED
|	**Zn**	**66**	**67.812**	ug/L	0.707	1	41	38213	0	KED
|	**Zn**	**67**	**65.076**	ug/L	1.945	2	8	5965	3	KED
⌊	**As**	**75**	**1.882**	ug/L	0.141	7	3	543	6	KED
	Y	**89**		ug/L			284905	284040	1	Standard
	Kr	**83**		ug/L			45	43	11	Standard
⌈>	**In-1**	**115**		ug/L			8791	8176	1	KED
|	**Cd**	**111**	**0.067**	ug/L	0.003	4	4	22	4	KED
⌊	**Cd**	**114**	**0.067**	ug/L	0.008	12	3	49	12	KED
⌈>	**In**	**115**		ug/L			445913	422094	1	Standard
⌊	**Ag**	**107**	**0.019**	ug/L	0.001	6	41	336	7	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1108563	0	Standard
⌊	**Pb**	**208**	**2.806**	ug/L	0.057	2	280	224449	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0162-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 03, 2023 02:45:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	65188	1	Standard
	Cl	37		ug/L			6850428	8362727	3	Standard
⌈>	Sc	45		ug/L			616697	660332	0	Standard
|	Cr	52	4.765	ug/L	0.016	0	14221	126326	0	Standard
⌊	Cr	53	5.959	ug/L	0.054	0	394	16174	1	Standard
⌈>	Ge	72		ug/L			40908	39295	0	KED
|	Ni	60	2.722	ug/L	0.086	3	10	3908	2	KED
|	Ni	62	2.870	ug/L	0.266	9	5	671	8	KED
|	Cu	63	18.645	ug/L	0.159	0	45	73981	0	KED
|	Cu	65	18.691	ug/L	0.239	1	22	37981	0	KED
|	Zn	66	62.002	ug/L	0.577	0	41	35466	0	KED
|	Zn	67	59.087	ug/L	1.090	1	8	5496	1	KED
⌊	As	75	1.259	ug/L	0.072	5	3	370	4	KED
	Y	89		ug/L			284905	293320	3	Standard
	Kr	83		ug/L			45	38	51	Standard
⌈>	In-1	115		ug/L			8791	8365	1	KED
|	Cd	111	0.044	ug/L	0.014	31	4	16	23	KED
⌊	Cd	114	0.059	ug/L	0.012	20	3	44	17	KED
⌈>	In	115		ug/L			445913	425642	2	Standard
⌊	Ag	107	0.018	ug/L	0.001	7	41	312	6	Standard
⌈>	Tb	159		ug/L			1137421	1125170	3	Standard
⌊	Pb	208	3.943	ug/L	0.086	2	280	319878	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0162-05
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 03, 2023 02:49:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	64858	2	Standard
	Cl	**37**		ug/L			6850428	8263461	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	674566	0	Standard
|	**Cr**	**52**	**4.897**	ug/L	0.082	1	14221	132194	1	Standard
⌊	**Cr**	**53**	**6.104**	ug/L	0.061	1	394	16916	1	Standard
⌈>	**Ge**	**72**		ug/L			40908	39249	0	KED
|	**Ni**	**60**	**3.489**	ug/L	0.057	1	10	5001	1	KED
|	**Ni**	**62**	**3.618**	ug/L	0.413	11	5	845	11	KED
|	**Cu**	**63**	**18.996**	ug/L	0.380	1	45	75286	1	KED
|	**Cu**	**65**	**18.717**	ug/L	0.250	1	22	37993	1	KED
|	**Zn**	**66**	**61.747**	ug/L	0.381	0	41	35280	0	KED
|	**Zn**	**67**	**61.301**	ug/L	0.369	0	8	5696	0	KED
⌊	**As**	**75**	**1.293**	ug/L	0.051	3	3	379	4	KED
	Y	**89**		ug/L			284905	291147	2	Standard
	Kr	**83**		ug/L			45	42	24	Standard
⌈>	**In-1**	**115**		ug/L			8791	8425	1	KED
|	**Cd**	**111**	**0.044**	ug/L	0.028	62	4	17	47	KED
⌊	**Cd**	**114**	**0.045**	ug/L	0.020	44	3	35	39	KED
⌈>	**In**	**115**		ug/L			445913	430915	3	Standard
⌊	**Ag**	**107**	**0.020**	ug/L	0.002	9	41	354	8	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1131978	1	Standard
⌊	**Pb**	**208**	**3.884**	ug/L	0.056	1	280	317139	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0168-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 02:53:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	71682	1	Standard
	Cl	**37**		ug/L			6850428	6717124	4	Standard
⌈>	**Sc**	**45**		ug/L			616697	628262	2	Standard
|	**Cr**	**52**	**0.877**	ug/L	0.026	2	14221	33941	0	Standard
⌊	**Cr**	**53**	**0.973**	ug/L	0.036	3	394	2847	3	Standard
⌈>	**Ge**	**72**		ug/L			40908	40369	0	KED
|	**Ni**	**60**	**1.064**	ug/L	0.004	0	10	1575	0	KED
|	**Ni**	**62**	**1.104**	ug/L	0.082	7	5	269	7	KED
|	**Cu**	**63**	**10.101**	ug/L	0.131	1	45	41196	1	KED
|	**Cu**	**65**	**9.888**	ug/L	0.091	0	22	20654	1	KED
|	**Zn**	**66**	**61.995**	ug/L	0.871	1	41	36431	1	KED
|	**Zn**	**67**	**59.760**	ug/L	0.887	1	8	5712	2	KED
⌊	**As**	**75**	**0.273**	ug/L	0.010	3	3	85	4	KED
	Y	**89**		ug/L			284905	295923	2	Standard
	Kr	**83**		ug/L			45	45	15	Standard
⌈>	**In-1**	**115**		ug/L			8791	8686	0	KED
|	**Cd**	**111**	**0.054**	ug/L	0.012	23	4	20	18	KED
⌊	**Cd**	**114**	**0.063**	ug/L	0.020	32	3	49	31	KED
⌈>	**In**	**115**		ug/L			445913	448579	1	Standard
⌊	**Ag**	**107**	**0.022**	ug/L	0.001	3	41	399	5	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1153197	1	Standard
⌊	**Pb**	**208**	**1.995**	ug/L	0.039	1	280	166086	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLA
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 02:56:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	39825	0	Standard
	Cl	**37**		ug/L			6850428	6815668	2	Standard
⌈>	**Sc**	**45**		ug/L			616697	612665	2	Standard
|	**Cr**	**52**	**-0.007**	ug/L	0.016	222	14221	13971	1	Standard
⌊	**Cr**	**53**	**0.029**	ug/L	0.007	23	394	463	0	Standard
⌈>	**Ge**	**72**		ug/L			40908	39902	0	KED
|	**Ni**	**60**	**-0.003**	ug/L	0.002	45	10	5	43	KED
|	**Ni**	**62**	**-0.007**	ug/L	0.008	108	5	3	50	KED
|	**Cu**	**63**	**0.004**	ug/L	0.002	39	45	60	11	KED
|	**Cu**	**65**	**0.004**	ug/L	0.005	105	22	31	30	KED
|	**Zn**	**66**	**0.042**	ug/L	0.006	14	41	64	5	KED
|	**Zn**	**67**	**0.029**	ug/L	0.084	288	8	10	73	KED
⌊	**As**	**75**	**-0.002**	ug/L	0.005	219	3	3	48	KED
	Y	**89**		ug/L			284905	284921	3	Standard
	Kr	**83**		ug/L			45	38	13	Standard
⌈>	**In-1**	**115**		ug/L			8791	8563	1	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.005	283	4	4	35	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.004	54	3	8	35	KED
⌈>	**In**	**115**		ug/L			445913	437172	2	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	40	41	26	23	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1128039	0	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.002	60	280	514	26	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVG
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 03:00:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	39893	2	Standard
	Cl	**37**		ug/L			6850428	6720452	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	614975	2	Standard
|	**Cr**	**52**	**49.723**	ug/L	0.444	0	14221	1093781	1	Standard
⌊	**Cr**	**53**	**50.652**	ug/L	1.013	1	394	125063	1	Standard
⌈>	**Ge**	**72**		ug/L			40908	39356	0	KED
|	**Ni**	**60**	**52.673**	ug/L	0.581	1	10	75574	0	KED
|	**Ni**	**62**	**52.177**	ug/L	1.255	2	5	12144	1	KED
|	**Cu**	**63**	**53.281**	ug/L	0.786	1	45	211669	1	KED
|	**Cu**	**65**	**53.602**	ug/L	0.209	0	22	109059	0	KED
|	**Zn**	**66**	**52.271**	ug/L	0.804	1	41	29952	1	KED
|	**Zn**	**67**	**53.834**	ug/L	1.491	2	8	5016	2	KED
⌊	**As**	**75**	**51.602**	ug/L	0.789	1	3	15052	0	KED
	Y	**89**		ug/L			284905	287560	2	Standard
	Kr	**83**		ug/L			45	50	15	Standard
⌈>	**In-1**	**115**		ug/L			8791	8902	1	KED
|	**Cd**	**111**	**51.263**	ug/L	1.008	1	4	15303	0	KED
⌊	**Cd**	**114**	**51.105**	ug/L	0.266	0	3	38662	1	KED
⌈>	**In**	**115**		ug/L			445913	435481	0	Standard
⌊	**Ag**	**107**	**49.472**	ug/L	1.055	2	41	787196	1	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1116953	1	Standard
⌊	**Pb**	**208**	**56.617**	ug/L	1.006	1	280	4557625	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBG
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 03:06:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	39462	0	Standard
	Cl	**37**		ug/L			6850428	6839294	2	Standard
⌈>	**Sc**	**45**		ug/L			616697	606751	1	Standard
|	**Cr**	**52**	**0.011**	ug/L	0.010	86	14221	14230	1	Standard
⌊	**Cr**	**53**	**-0.049**	ug/L	0.010	20	394	268	8	Standard
⌈>	**Ge**	**72**		ug/L			40908	40804	1	KED
|	**Ni**	**60**	**-0.002**	ug/L	0.001	70	10	6	31	KED
|	**Ni**	**62**	**-0.013**	ug/L	0.012	92	5	2	114	KED
|	**Cu**	**63**	**0.003**	ug/L	0.002	55	45	56	11	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.001	108	22	20	9	KED
|	**Zn**	**66**	**-0.026**	ug/L	0.013	49	41	26	29	KED
|	**Zn**	**67**	**-0.053**	ug/L	0.030	56	8	3	91	KED
⌊	**As**	**75**	**-0.003**	ug/L	0.003	106	3	3	32	KED
	Y	**89**		ug/L			284905	288490	0	Standard
	Kr	**83**		ug/L			45	36	29	Standard
⌈>	**In-1**	**115**		ug/L			8791	9293	0	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.011	273	4	3	86	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	253	3	4	67	KED
⌈>	**In**	**115**		ug/L			445913	444900	3	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.000	20	41	68	12	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1120135	0	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	71	280	240	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0177-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 03:10:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	60121	1	Standard
	Cl	37		ug/L			6850428	6728099	3	Standard
⌈>	Sc	45		ug/L			616697	645613	1	Standard
|	Cr	52	1.735	ug/L	0.030	1	14221	54426	0	Standard
⌊	Cr	53	1.697	ug/L	0.028	1	394	4798	0	Standard
⌈>	Ge	72		ug/L			40908	40455	0	KED
|	Ni	60	1.394	ug/L	0.040	2	10	2066	2	KED
|	Ni	62	1.572	ug/L	0.009	0	5	381	0	KED
|	Cu	63	53.429	ug/L	0.487	0	45	218177	0	KED
|	Cu	65	53.343	ug/L	0.986	1	22	111555	1	KED
|	Zn	66	42.243	ug/L	0.314	0	41	24890	0	KED
|	Zn	67	40.358	ug/L	1.174	2	8	3867	2	KED
⌊	As	75	0.317	ug/L	0.021	6	3	99	5	KED
	Y	89		ug/L			284905	288035	2	Standard
	Kr	83		ug/L			45	38	2	Standard
⌈>	In-1	115		ug/L			8791	8848	1	KED
|	Cd	111	0.012	ug/L	0.005	39	4	8	17	KED
⌊	Cd	114	0.006	ug/L	0.005	70	3	7	43	KED
⌈>	In	115		ug/L			445913	449716	1	Standard
⌊	Ag	107	0.004	ug/L	0.002	36	41	110	22	Standard
⌈>	Tb	159		ug/L			1137421	1129704	0	Standard
⌊	Pb	208	0.700	ug/L	0.001	0	280	57303	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0177-03
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 03:14:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	60639	0	Standard
	Cl	37		ug/L			6850428	6579340	2	Standard
⌈>	Sc	45		ug/L			616697	655234	1	Standard
|	Cr	52	1.927	ug/L	0.011	0	14221	59702	1	Standard
⌊	Cr	53	1.891	ug/L	0.036	1	394	5379	1	Standard
⌈>	Ge	72		ug/L			40908	40694	0	KED
|	Ni	60	2.055	ug/L	0.100	4	10	3058	4	KED
|	Ni	62	2.003	ug/L	0.154	7	5	487	7	KED
|	Cu	63	60.985	ug/L	0.601	0	45	250501	0	KED
|	Cu	65	60.685	ug/L	0.053	0	22	127667	0	KED
|	Zn	66	53.611	ug/L	0.329	0	41	31765	0	KED
|	Zn	67	51.866	ug/L	1.320	2	8	4998	2	KED
⌊	As	75	0.486	ug/L	0.048	9	3	150	9	KED
	Y	89		ug/L			284905	294534	5	Standard
	Kr	83		ug/L			45	40	9	Standard
⌈>	In-1	115		ug/L			8791	8801	1	KED
|	Cd	111	0.004	ug/L	0.012	263	4	6	55	KED
⌊	Cd	114	0.012	ug/L	0.012	104	3	11	76	KED
⌈>	In	115		ug/L			445913	452921	1	Standard
⌊	Ag	107	0.005	ug/L	0.001	17	41	125	12	Standard
⌈>	Tb	159		ug/L			1137421	1143454	0	Standard
⌊	Pb	208	0.595	ug/L	0.011	1	280	49275	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0177-05
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 03:17:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	59181	1	Standard
	Cl	**37**		ug/L			6850428	6560865	2	Standard
⌈>	**Sc**	**45**		ug/L			616697	664945	4	Standard
|	**Cr**	**52**	**2.041**	ug/L	0.093	4	14221	63188	1	Standard
⌊	**Cr**	**53**	**2.042**	ug/L	0.075	3	394	5855	1	Standard
⌈>	**Ge**	**72**		ug/L			40908	37435	7	KED
|	**Ni**	**60**	**2.317**	ug/L	0.230	9	10	3155	2	KED
|	**Ni**	**62**	**2.438**	ug/L	0.340	13	5	540	7	KED
|	**Cu**	**63**	**68.116**	ug/L	4.925	7	45	256450	1	KED
|	**Cu**	**65**	**68.392**	ug/L	4.565	6	22	131910	0	KED
|	**Zn**	**66**	**63.650**	ug/L	4.211	6	41	34575	2	KED
|	**Zn**	**67**	**60.210**	ug/L	4.867	8	8	5315	1	KED
⌊	**As**	**75**	**0.493**	ug/L	0.030	6	3	140	3	KED
	Y	**89**		ug/L			284905	298272	1	Standard
	Kr	**83**		ug/L			45	34	3	Standard
⌈>	**In-1**	**115**		ug/L			8791	8713	0	KED
|	**Cd**	**111**	**0.019**	ug/L	0.004	21	4	10	10	KED
⌊	**Cd**	**114**	**0.015**	ug/L	0.004	25	3	13	19	KED
⌈>	**In**	**115**		ug/L			445913	454297	2	Standard
⌊	**Ag**	**107**	**0.006**	ug/L	0.001	14	41	147	10	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1169613	1	Standard
⌊	**Pb**	**208**	**0.686**	ug/L	0.006	0	280	58119	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0177-07
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 03:21:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	59713	0	Standard
	Cl	37		ug/L			6850428	6673835	2	Standard
⌈>	Sc	45		ug/L			616697	680539	1	Standard
|	Cr	52	7.031	ug/L	0.062	0	14221	184643	0	Standard
⌊	Cr	53	7.067	ug/L	0.116	1	394	19688	2	Standard
⌈>	Ge	72		ug/L			40908	39739	0	KED
|	Ni	60	5.645	ug/L	0.184	3	10	8186	2	KED
|	Ni	62	5.988	ug/L	0.275	4	5	1412	4	KED
|	Cu	63	154.335	ug/L	2.649	1	45	618951	1	KED
|	Cu	65	154.940	ug/L	0.657	0	22	318265	0	KED
|	Zn	66	118.397	ug/L	0.523	0	41	68456	0	KED
|	Zn	67	112.418	ug/L	1.600	1	8	10569	1	KED
⌊	As	75	0.837	ug/L	0.021	2	3	250	3	KED
	Y	89		ug/L			284905	313344	2	Standard
	Kr	83		ug/L			45	51	16	Standard
⌈>	In-1	115		ug/L			8791	8815	3	KED
|	Cd	111	0.575	ug/L	0.046	7	4	174	5	KED
⌊	Cd	114	0.537	ug/L	0.031	5	3	405	7	KED
⌈>	In	115		ug/L			445913	456682	0	Standard
⌊	Ag	107	0.037	ug/L	0.003	7	41	652	6	Standard
⌈>	Tb	159		ug/L			1137421	1156166	0	Standard
⌊	Pb	208	1.938	ug/L	0.013	0	280	161784	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0178-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 03:25:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	70345	1	Standard
	Cl	**37**		ug/L			6850428	13982003	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	600870	1	Standard
|	**Cr**	**52**	**0.552**	ug/L	0.013	2	14221	25566	2	Standard
⌊	**Cr**	**53**	**5.338**	ug/L	0.136	2	394	13225	3	Standard
⌈>	**Ge**	**72**		ug/L			40908	34981	1	KED
|	**Ni**	**60**	**0.318**	ug/L	0.011	3	10	413	1	KED
|	**Ni**	**62**	**0.342**	ug/L	0.055	16	5	75	15	KED
|	**Cu**	**63**	**10.825**	ug/L	0.088	0	45	38252	1	KED
|	**Cu**	**65**	**10.878**	ug/L	0.183	1	22	19685	1	KED
|	**Zn**	**66**	**8.688**	ug/L	0.135	1	41	4454	0	KED
|	**Zn**	**67**	**8.141**	ug/L	0.421	5	8	680	3	KED
⌊	**As**	**75**	**0.228**	ug/L	0.004	1	3	62	2	KED
	Y	**89**		ug/L			284905	283465	1	Standard
	Kr	**83**		ug/L			45	52	11	Standard
⌈>	**In-1**	**115**		ug/L			8791	7676	2	KED
|	**Cd**	**111**	**0.007**	ug/L	0.008	110	4	6	32	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.005	235	3	1	276	KED
⌈>	**In**	**115**		ug/L			445913	399080	1	Standard
⌊	**Ag**	**107**	**0.010**	ug/L	0.001	11	41	182	8	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1073515	0	Standard
⌊	**Pb**	**208**	**0.347**	ug/L	0.001	0	280	27086	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0179-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 03:28:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	65079	1	Standard
	Cl	**37**		ug/L			6850428	6403970	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	662497	2	Standard
|	**Cr**	**52**	**1.506**	ug/L	0.036	2	14221	50490	1	Standard
⌊	**Cr**	**53**	**1.612**	ug/L	0.023	1	394	4698	4	Standard
⌈>	**Ge**	**72**		ug/L			40908	35796	2	KED
|	**Ni**	**60**	**3.373**	ug/L	0.030	0	10	4410	1	KED
|	**Ni**	**62**	**3.382**	ug/L	0.148	4	5	720	4	KED
|	**Cu**	**63**	**1.211**	ug/L	0.035	2	45	4414	1	KED
|	**Cu**	**65**	**1.251**	ug/L	0.031	2	22	2334	3	KED
|	**Zn**	**66**	**3.071**	ug/L	0.175	5	41	1633	4	KED
|	**Zn**	**67**	**3.959**	ug/L	0.222	5	8	342	5	KED
⌊	**As**	**75**	**1.735**	ug/L	0.041	2	3	463	3	KED
	Y	**89**		ug/L			284905	327182	1	Standard
	Kr	**83**		ug/L			45	38	15	Standard
⌈>	**In-1**	**115**		ug/L			8791	7966	1	KED
|	**Cd**	**111**	**0.002**	ug/L	0.004	216	4	4	20	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.006	54	3	10	41	KED
⌈>	**In**	**115**		ug/L			445913	427227	2	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.000	15	41	80	10	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1104191	0	Standard
⌊	**Pb**	**208**	**0.108**	ug/L	0.002	1	280	8874	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0179-02
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 03:32:30
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	65908	0	Standard
	Cl	**37**		ug/L			6850428	6506980	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	616989	2	Standard
|	**Cr**	**52**	**0.385**	ug/L	0.016	4	14221	22612	2	Standard
⌊	**Cr**	**53**	**0.408**	ug/L	0.024	5	394	1401	5	Standard
⌈>	**Ge**	**72**		ug/L			40908	38147	0	KED
|	**Ni**	**60**	**0.217**	ug/L	0.011	5	10	311	4	KED
|	**Ni**	**62**	**0.264**	ug/L	0.007	2	5	64	2	KED
|	**Cu**	**63**	**1.292**	ug/L	0.046	3	45	5017	3	KED
|	**Cu**	**65**	**1.298**	ug/L	0.080	6	22	2581	6	KED
|	**Zn**	**66**	**7.911**	ug/L	0.071	0	41	4426	0	KED
|	**Zn**	**67**	**7.652**	ug/L	0.132	1	8	697	1	KED
⌊	**As**	**75**	**0.448**	ug/L	0.013	2	3	130	2	KED
	Y	**89**		ug/L			284905	296052	0	Standard
	Kr	**83**		ug/L			45	40	12	Standard
⌈>	**In-1**	**115**		ug/L			8791	8470	1	KED
|	**Cd**	**111**	**0.013**	ug/L	0.005	41	4	8	17	KED
⌊	**Cd**	**114**	**0.015**	ug/L	0.006	39	3	13	29	KED
⌈>	**In**	**115**		ug/L			445913	463289	0	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	46	41	69	17	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1150592	1	Standard
⌊	**Pb**	**208**	**0.180**	ug/L	0.005	2	280	15206	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0201-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 03:36:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	65168	2	Standard
	Cl	37		ug/L			6850428	6218408	3	Standard
⌈>	Sc	45		ug/L			616697	625462	1	Standard
|	Cr	52	0.933	ug/L	0.029	3	14221	35031	1	Standard
⌊	Cr	53	0.933	ug/L	0.027	2	394	2736	3	Standard
⌈>	Ge	72		ug/L			40908	38102	1	KED
|	Ni	60	0.663	ug/L	0.019	2	10	929	2	KED
|	Ni	62	0.681	ug/L	0.046	6	5	158	5	KED
|	Cu	63	5.305	ug/L	0.157	2	45	20434	1	KED
|	Cu	65	5.312	ug/L	0.098	1	22	10481	1	KED
|	Zn	66	37.119	ug/L	0.402	1	41	20603	1	KED
|	Zn	67	34.914	ug/L	0.420	1	8	3152	1	KED
⌊	As	75	0.392	ug/L	0.035	8	3	114	7	KED
	Y	89		ug/L			284905	302837	2	Standard
	Kr	83		ug/L			45	45	6	Standard
⌈>	In-1	115		ug/L			8791	8581	0	KED
|	Cd	111	0.033	ug/L	0.016	48	4	14	33	KED
⌊	Cd	114	0.032	ug/L	0.004	12	3	25	10	KED
⌈>	In	115		ug/L			445913	458615	1	Standard
⌊	Ag	107	0.005	ug/L	0.001	11	41	128	7	Standard
⌈>	Tb	159		ug/L			1137421	1149377	0	Standard
⌊	Pb	208	1.457	ug/L	0.026	1	280	120988	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0201-02
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 03:39:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	74313	1	Standard
	Cl	37		ug/L			6850428	6396494	4	Standard
>	Sc	45		ug/L			616697	728387	0	Standard
	Cr	52	0.832	ug/L	0.032	3	14221	38204	2	Standard
	Cr	53	1.126	ug/L	0.037	3	394	3750	3	Standard
>	Ge	72		ug/L			40908	36249	1	KED
	Ni	60	2.687	ug/L	0.096	3	10	3557	2	KED
	Ni	62	2.579	ug/L	0.161	6	5	557	5	KED
	Cu	63	6.589	ug/L	0.136	2	45	24138	1	KED
	Cu	65	6.491	ug/L	0.146	2	22	12179	1	KED
	Zn	66	10.399	ug/L	0.117	1	41	5517	2	KED
	Zn	67	10.489	ug/L	0.189	1	8	906	0	KED
	As	75	1.477	ug/L	0.013	0	3	400	0	KED
	Y	89		ug/L			284905	309345	2	Standard
	Kr	83		ug/L			45	38	33	Standard
>	In-1	115		ug/L			8791	8034	0	KED
	Cd	111	0.043	ug/L	0.004	9	4	15	6	KED
	Cd	114	0.038	ug/L	0.012	31	3	28	28	KED
>	In	115		ug/L			445913	424443	2	Standard
	Ag	107	0.018	ug/L	0.000	1	41	325	3	Standard
>	Tb	159		ug/L			1137421	1122427	1	Standard
	Pb	208	1.139	ug/L	0.011	0	280	92384	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 03:43:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	38854	2	Standard
	Cl	**37**		ug/L			6850428	6413869	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	599936	1	Standard
|	**Cr**	**52**	**0.001**	ug/L	0.005	908	14221	13845	1	Standard
⌊	**Cr**	**53**	**-0.022**	ug/L	0.006	27	394	331	5	Standard
⌈>	**Ge**	**72**		ug/L			40908	38417	0	KED
|	**Ni**	**60**	**0.002**	ug/L	0.002	67	10	12	17	KED
|	**Ni**	**62**	**-0.012**	ug/L	0.005	39	5	2	43	KED
|	**Cu**	**63**	**0.003**	ug/L	0.005	148	45	55	36	KED
|	**Cu**	**65**	**0.002**	ug/L	0.005	305	22	24	40	KED
|	**Zn**	**66**	**0.055**	ug/L	0.008	15	41	69	6	KED
|	**Zn**	**67**	**-0.008**	ug/L	0.032	376	8	6	41	KED
⌊	**As**	**75**	**-0.006**	ug/L	0.002	32	3	2	26	KED
	Y	**89**		ug/L			284905	289329	3	Standard
	Kr	**83**		ug/L			45	36	31	Standard
⌈>	**In-1**	**115**		ug/L			8791	8409	0	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.007	144	4	3	62	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.005	499	3	3	103	KED
⌈>	**In**	**115**		ug/L			445913	446593	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	5	41	17	6	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1134666	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	13	280	435	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVH
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 03:47:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	38645	3	Standard
	Cl	**37**		ug/L			6850428	6420671	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	574441	6	Standard
|	**Cr**	**52**	**52.708**	ug/L	4.556	8	14221	1078095	1	Standard
⌊	**Cr**	**53**	**53.373**	ug/L	4.042	7	394	122673	0	Standard
⌈>	**Ge**	**72**		ug/L			40908	38335	2	KED
|	**Ni**	**60**	**51.709**	ug/L	0.502	0	10	72261	1	KED
|	**Ni**	**62**	**52.277**	ug/L	2.135	4	5	11846	1	KED
|	**Cu**	**63**	**52.956**	ug/L	1.489	2	45	204831	0	KED
|	**Cu**	**65**	**52.277**	ug/L	1.864	3	22	103557	1	KED
|	**Zn**	**66**	**51.319**	ug/L	0.825	1	41	28639	0	KED
|	**Zn**	**67**	**51.096**	ug/L	0.907	1	8	4637	0	KED
⌊	**As**	**75**	**50.977**	ug/L	1.033	2	3	14480	1	KED
	Y	**89**		ug/L			284905	272482	8	Standard
	Kr	**83**		ug/L			45	44	6	Standard
⌈>	**In-1**	**115**		ug/L			8791	8482	1	KED
|	**Cd**	**111**	**52.276**	ug/L	0.655	1	4	14871	1	KED
⌊	**Cd**	**114**	**53.012**	ug/L	0.889	1	3	38212	1	KED
⌈>	**In**	**115**		ug/L			445913	414845	8	Standard
⌊	**Ag**	**107**	**52.823**	ug/L	4.075	7	41	797290	1	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1070296	7	Standard
⌊	**Pb**	**208**	**60.145**	ug/L	4.260	7	280	4623746	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBH
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 03:53:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	37598	0	Standard
	Cl	**37**		ug/L			6850428	6484308	2	Standard
⌈>	**Sc**	**45**		ug/L			616697	609487	2	Standard
|	**Cr**	**52**	**-0.018**	ug/L	0.013	75	14221	13669	1	Standard
⌊	**Cr**	**53**	**-0.067**	ug/L	0.012	18	394	225	11	Standard
⌈>	**Ge**	**72**		ug/L			40908	39340	2	KED
|	**Ni**	**60**	**-0.003**	ug/L	0.001	20	10	5	21	KED
|	**Ni**	**62**	**-0.005**	ug/L	0.012	263	5	4	65	KED
|	**Cu**	**63**	**0.001**	ug/L	0.000	21	45	48	2	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.001	64	22	17	16	KED
|	**Zn**	**66**	**-0.019**	ug/L	0.005	27	41	28	11	KED
|	**Zn**	**67**	**0.016**	ug/L	0.081	505	8	9	80	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.003	265	3	3	20	KED
	Y	**89**		ug/L			284905	289294	2	Standard
	Kr	**83**		ug/L			45	38	30	Standard
⌈>	**In-1**	**115**		ug/L			8791	8946	2	KED
|	**Cd**	**111**	**-0.008**	ug/L	0.004	52	4	2	43	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.003	2071	3	2	73	KED
⌈>	**In**	**115**		ug/L			445913	445161	3	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	41	41	62	13	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1133602	1	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	46	280	245	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0203-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 03:57:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	63515	3	Standard
	Cl	**37**		ug/L			6850428	6524477	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	609306	1	Standard
|	**Cr**	**52**	**0.406**	ug/L	0.004	1	14221	22788	0	Standard
⌊	**Cr**	**53**	**0.330**	ug/L	0.008	2	394	1194	1	Standard
⌈>	**Ge**	**72**		ug/L			40908	39735	1	KED
|	**Ni**	**60**	**0.149**	ug/L	0.024	16	10	224	14	KED
|	**Ni**	**62**	**0.128**	ug/L	0.043	33	5	35	26	KED
|	**Cu**	**63**	**1.064**	ug/L	0.021	1	45	4308	1	KED
|	**Cu**	**65**	**1.080**	ug/L	0.046	4	22	2239	2	KED
|	**Zn**	**66**	**18.964**	ug/L	0.404	2	41	10995	1	KED
|	**Zn**	**67**	**18.120**	ug/L	0.643	3	8	1709	2	KED
⌊	**As**	**75**	**0.047**	ug/L	0.004	8	3	17	5	KED
	Y	**89**		ug/L			284905	291651	2	Standard
	Kr	**83**		ug/L			45	43	24	Standard
⌈>	**In-1**	**115**		ug/L			8791	8660	1	KED
|	**Cd**	**111**	**0.019**	ug/L	0.013	70	4	10	37	KED
⌊	**Cd**	**114**	**0.015**	ug/L	0.007	44	3	14	34	KED
⌈>	**In**	**115**		ug/L			445913	451577	0	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	42	41	63	14	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1142441	1	Standard
⌊	**Pb**	**208**	**0.190**	ug/L	0.002	1	280	15963	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0203-04
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 04:00:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	67371	0	Standard
	Cl	37		ug/L			6850428	6415765	3	Standard
>	Sc	45		ug/L			616697	636288	2	Standard
	Cr	52	0.923	ug/L	0.053	5	14221	35397	0	Standard
	Cr	53	0.902	ug/L	0.017	1	394	2704	3	Standard
>	Ge	72		ug/L			40908	39628	1	KED
	Ni	60	0.613	ug/L	0.034	5	10	894	5	KED
	Ni	62	0.660	ug/L	0.111	16	5	160	16	KED
	Cu	63	3.165	ug/L	0.124	3	45	12696	2	KED
	Cu	65	3.160	ug/L	0.074	2	22	6492	1	KED
	Zn	66	43.529	ug/L	1.208	2	41	25121	3	KED
	Zn	67	40.747	ug/L	1.298	3	8	3825	3	KED
	As	75	0.601	ug/L	0.022	3	3	180	2	KED
	Y	89		ug/L			284905	296294	3	Standard
	Kr	83		ug/L			45	47	31	Standard
>	In-1	115		ug/L			8791	8595	1	KED
	Cd	111	0.058	ug/L	0.005	8	4	21	5	KED
	Cd	114	0.065	ug/L	0.008	13	3	50	11	KED
>	In	115		ug/L			445913	457461	3	Standard
	Ag	107	0.003	ug/L	0.000	5	41	94	4	Standard
>	Tb	159		ug/L			1137421	1150615	0	Standard
	Pb	208	1.860	ug/L	0.009	0	280	154536	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0218-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 04:04:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	411591	1	Standard
	Cl	37		ug/L			6850428	5982900	4	Standard
>	Sc	45		ug/L			616697	620500	2	Standard
	Cr	52	38.842	ug/L	1.139	2	14221	865012	0	Standard
	Cr	53	38.881	ug/L	0.585	1	394	96959	0	Standard
>	Ge	72		ug/L			40908	31818	1	KED
	Ni	60	19.529	ug/L	0.292	1	10	22657	1	KED
	Ni	62	18.878	ug/L	0.442	2	5	3554	0	KED
	Cu	63	5.551	ug/L	0.018	0	45	17860	1	KED
	Cu	65	5.664	ug/L	0.059	1	22	9333	1	KED
	Zn	66	89.023	ug/L	0.810	0	41	41218	0	KED
	Zn	67	86.152	ug/L	2.666	3	8	6485	1	KED
	As	75	0.561	ug/L	0.062	11	3	135	10	KED
	Y	89		ug/L			284905	276333	1	Standard
	Kr	83		ug/L			45	52	18	Standard
>	In-1	115		ug/L			8791	7403	4	KED
	Cd	111	1.477	ug/L	0.053	3	4	370	3	KED
	Cd	114	1.521	ug/L	0.100	6	3	957	4	KED
>	In	115		ug/L			445913	398396	3	Standard
	Ag	107	0.038	ug/L	0.003	7	41	585	5	Standard
>	Tb	159		ug/L			1137421	1044908	1	Standard
	Pb	208	0.298	ug/L	0.008	2	280	22716	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0220-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 04:08:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	144843	2	Standard
	Cl	**37**		ug/L			6850428	6171693	4	Standard
⌈>	**Sc**	**45**		ug/L			616697	575093	3	Standard
|	**Cr**	**52**	**0.919**	ug/L	0.023	2	14221	31914	2	Standard
⌊	**Cr**	**53**	**0.728**	ug/L	0.009	1	394	2044	4	Standard
⌈>	**Ge**	**72**		ug/L			40908	35315	2	KED
|	**Ni**	**60**	**0.615**	ug/L	0.047	7	10	800	6	KED
|	**Ni**	**62**	**0.512**	ug/L	0.032	6	5	111	4	KED
|	**Cu**	**63**	**3.436**	ug/L	0.030	0	45	12285	1	KED
|	**Cu**	**65**	**3.358**	ug/L	0.072	2	22	6147	1	KED
|	**Zn**	**66**	**36.149**	ug/L	0.016	0	41	18599	2	KED
|	**Zn**	**67**	**34.403**	ug/L	0.600	1	8	2879	2	KED
⌊	**As**	**75**	**0.157**	ug/L	0.005	2	3	44	4	KED
	Y	**89**		ug/L			284905	289315	2	Standard
	Kr	**83**		ug/L			45	35	12	Standard
⌈>	**In-1**	**115**		ug/L			8791	8108	1	KED
|	**Cd**	**111**	**0.069**	ug/L	0.015	22	4	23	18	KED
⌊	**Cd**	**114**	**0.070**	ug/L	0.007	10	3	50	10	KED
⌈>	**In**	**115**		ug/L			445913	453979	2	Standard
⌊	**Ag**	**107**	**0.007**	ug/L	0.001	13	41	157	7	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1111651	0	Standard
⌊	**Pb**	**208**	**0.420**	ug/L	0.005	1	280	33956	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0221-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 04:11:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	63217	1	Standard
	Cl	**37**		ug/L			6850428	6132491	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	610456	2	Standard
|	**Cr**	**52**	**0.356**	ug/L	0.024	6	14221	21747	1	Standard
⌊	**Cr**	**53**	**0.364**	ug/L	0.035	9	394	1278	6	Standard
⌈>	**Ge**	**72**		ug/L			40908	35414	1	KED
|	**Ni**	**60**	**0.381**	ug/L	0.045	11	10	500	10	KED
|	**Ni**	**62**	**0.413**	ug/L	0.056	13	5	91	11	KED
|	**Cu**	**63**	**1.334**	ug/L	0.020	1	45	4807	1	KED
|	**Cu**	**65**	**1.348**	ug/L	0.117	8	22	2486	8	KED
|	**Zn**	**66**	**55.082**	ug/L	0.381	0	41	28400	1	KED
|	**Zn**	**67**	**52.736**	ug/L	1.883	3	8	4421	2	KED
⌊	**As**	**75**	**0.204**	ug/L	0.017	8	3	56	8	KED
	Y	**89**		ug/L			284905	295637	2	Standard
	Kr	**83**		ug/L			45	40	14	Standard
⌈>	**In-1**	**115**		ug/L			8791	8072	1	KED
|	**Cd**	**111**	**0.008**	ug/L	0.010	122	4	6	42	KED
⌊	**Cd**	**114**	**0.010**	ug/L	0.003	31	3	9	21	KED
⌈>	**In**	**115**		ug/L			445913	454709	0	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	71	41	65	24	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1121190	1	Standard
⌊	**Pb**	**208**	**0.272**	ug/L	0.005	1	280	22286	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0225-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 04:15:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	62640	2	Standard
	Cl	37		ug/L			6850428	6899798	4	Standard
>	Sc	45		ug/L			616697	793724	1	Standard
	Cr	52	0.029	ug/L	0.005	16	14221	19102	1	Standard
	Cr	53	1.207	ug/L	0.023	1	394	4343	2	Standard
>	Ge	72		ug/L			40908	33775	0	KED
	Ni	60	0.275	ug/L	0.011	3	10	346	3	KED
	Ni	62	0.288	ug/L	0.083	28	5	62	26	KED
	Cu	63	9.370	ug/L	0.014	0	45	31976	0	KED
	Cu	65	9.565	ug/L	0.178	1	22	16716	1	KED
	Zn	66	8.728	ug/L	0.235	2	41	4320	2	KED
	Zn	67	8.304	ug/L	0.450	5	8	669	5	KED
	As	75	0.449	ug/L	0.046	10	3	115	9	KED
	Y	89		ug/L			284905	287532	4	Standard
	Kr	83		ug/L			45	39	20	Standard
>	In-1	115		ug/L			8791	7635	1	KED
	Cd	111	0.013	ug/L	0.015	108	4	7	50	KED
	Cd	114	0.017	ug/L	0.008	45	3	13	35	KED
>	In	115		ug/L			445913	432383	1	Standard
	Ag	107	0.005	ug/L	0.002	32	41	125	22	Standard
>	Tb	159		ug/L			1137421	1106851	1	Standard
	Pb	208	0.592	ug/L	0.006	1	280	47528	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0245-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 04:18:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	60805	1	Standard
	Cl	37		ug/L			6850428	6135415	4	Standard
⌈>	Sc	45		ug/L			616697	594025	1	Standard
|	Cr	52	0.995	ug/L	0.010	1	14221	34573	1	Standard
⌊	Cr	53	1.066	ug/L	0.011	1	394	2914	1	Standard
⌈>	Ge	72		ug/L			40908	36051	0	KED
|	Ni	60	1.780	ug/L	0.045	2	10	2347	1	KED
|	Ni	62	2.106	ug/L	0.099	4	5	453	5	KED
|	Cu	63	276.260	ug/L	4.762	1	45	1005101	1	KED
|	Cu	65	275.494	ug/L	1.456	0	22	513363	0	KED
|	Zn	66	186.800	ug/L	0.844	0	41	97965	1	KED
|	Zn	67	179.333	ug/L	3.709	2	8	15291	1	KED
⌊	As	75	0.421	ug/L	0.023	5	3	115	5	KED
	Y	89		ug/L			284905	305336	2	Standard
	Kr	83		ug/L			45	41	12	Standard
⌈>	In-1	115		ug/L			8791	7899	2	KED
|	Cd	111	0.228	ug/L	0.025	10	4	64	10	KED
⌊	Cd	114	0.253	ug/L	0.052	20	3	172	18	KED
⌈>	In	115		ug/L			445913	447984	2	Standard
⌊	Ag	107	0.008	ug/L	0.000	3	41	180	4	Standard
⌈>	Tb	159		ug/L			1137421	1133203	1	Standard
⌊	Pb	208	21.230	ug/L	0.327	1	280	1733935	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0245-02
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 04:22:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	63818	3	Standard
	Cl	37		ug/L			6850428	6841068	4	Standard
>	Sc	45		ug/L			616697	605217	2	Standard
	Cr	52	0.446	ug/L	0.012	2	14221	23495	2	Standard
	Cr	53	1.034	ug/L	0.031	3	394	2892	3	Standard
>	Ge	72		ug/L			40908	35526	1	KED
	Ni	60	1.372	ug/L	0.078	5	10	1786	6	KED
	Ni	62	1.497	ug/L	0.223	14	5	319	14	KED
	Cu	63	94.289	ug/L	0.980	1	45	338088	1	KED
	Cu	65	94.873	ug/L	0.429	0	22	174226	1	KED
	Zn	66	113.608	ug/L	0.630	0	41	58725	1	KED
	Zn	67	109.761	ug/L	0.227	0	8	9226	1	KED
	As	75	0.378	ug/L	0.011	2	3	103	3	KED
	Y	89		ug/L			284905	291225	2	Standard
	Kr	83		ug/L			45	38	5	Standard
>	In-1	115		ug/L			8791	8049	0	KED
	Cd	111	0.124	ug/L	0.015	12	4	37	10	KED
	Cd	114	0.136	ug/L	0.015	10	3	95	9	KED
>	In	115		ug/L			445913	446900	1	Standard
	Ag	107	0.007	ug/L	0.001	11	41	151	7	Standard
>	Tb	159		ug/L			1137421	1127163	0	Standard
	Pb	208	3.270	ug/L	0.030	0	280	265936	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0251-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 04:26:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	60014	1	Standard
	Cl	37		ug/L			6850428	6275131	2	Standard
>	Sc	45		ug/L			616697	686399	1	Standard
	Cr	52	0.259	ug/L	0.009	3	14221	22107	1	Standard
	Cr	53	0.482	ug/L	0.005	1	394	1764	0	Standard
>	Ge	72		ug/L			40908	35008	1	KED
	Ni	60	0.900	ug/L	0.018	2	10	1156	2	KED
	Ni	62	0.906	ug/L	0.121	13	5	192	12	KED
	Cu	63	2.703	ug/L	0.069	2	45	9588	2	KED
	Cu	65	2.773	ug/L	0.036	1	22	5037	2	KED
	Zn	66	8.712	ug/L	0.123	1	41	4469	1	KED
	Zn	67	8.448	ug/L	0.461	5	8	706	4	KED
	As	75	3.392	ug/L	0.122	3	3	883	2	KED
	Y	89		ug/L			284905	313652	3	Standard
	Kr	83		ug/L			45	48	16	Standard
>	In-1	115		ug/L			8791	8014	2	KED
	Cd	111	-0.002	ug/L	0.010	507	4	3	66	KED
	Cd	114	0.005	ug/L	0.005	101	3	5	51	KED
>	In	115		ug/L			445913	448062	2	Standard
	Ag	107	0.004	ug/L	0.001	29	41	106	17	Standard
>	Tb	159		ug/L			1137421	1136372	1	Standard
	Pb	208	0.096	ug/L	0.001	1	280	8120	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLC
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 04:29:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	36473	1	Standard
	Cl	**37**		ug/L			6850428	6265710	4	Standard
⌈>	**Sc**	**45**		ug/L			616697	576525	3	Standard
|	**Cr**	**52**	**-0.008**	ug/L	0.010	122	14221	13117	1	Standard
⌊	**Cr**	**53**	**-0.060**	ug/L	0.008	12	394	230	4	Standard
⌈>	**Ge**	**72**		ug/L			40908	35915	1	KED
|	**Ni**	**60**	**0.001**	ug/L	0.004	293	10	10	50	KED
|	**Ni**	**62**	**-0.006**	ug/L	0.018	313	5	3	100	KED
|	**Cu**	**63**	**0.032**	ug/L	0.042	130	45	156	97	KED
|	**Cu**	**65**	**0.029**	ug/L	0.045	156	22	73	112	KED
|	**Zn**	**66**	**0.090**	ug/L	0.036	40	41	83	22	KED
|	**Zn**	**67**	**0.078**	ug/L	0.083	105	8	13	51	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.005	115	3	2	52	KED
	Y	**89**		ug/L			284905	282597	0	Standard
	Kr	**83**		ug/L			45	40	5	Standard
⌈>	**In-1**	**115**		ug/L			8791	8243	2	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.007	290	4	3	50	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.006	250	3	4	89	KED
⌈>	**In**	**115**		ug/L			445913	444768	4	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.001	60	41	22	49	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1099958	0	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	5	280	454	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVI
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 04:33:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	37261	0	Standard
	Cl	**37**		ug/L			6850428	6292726	4	Standard
⌈>	**Sc**	**45**		ug/L			616697	583050	3	Standard
|	**Cr**	**52**	**49.309**	ug/L	1.044	2	14221	1028214	1	Standard
⌊	**Cr**	**53**	**50.078**	ug/L	0.697	1	394	117242	2	Standard
⌈>	**Ge**	**72**		ug/L			40908	36140	0	KED
|	**Ni**	**60**	**52.415**	ug/L	1.089	2	10	69055	1	KED
|	**Ni**	**62**	**51.827**	ug/L	1.691	3	5	11077	3	KED
|	**Cu**	**63**	**52.720**	ug/L	0.162	0	45	192321	0	KED
|	**Cu**	**65**	**52.849**	ug/L	0.798	1	22	98741	1	KED
|	**Zn**	**66**	**52.538**	ug/L	1.259	2	41	27645	2	KED
|	**Zn**	**67**	**52.498**	ug/L	1.094	2	8	4492	1	KED
⌊	**As**	**75**	**50.531**	ug/L	0.862	1	3	13535	1	KED
	Y	**89**		ug/L			284905	283872	4	Standard
	Kr	**83**		ug/L			45	39	24	Standard
⌈>	**In-1**	**115**		ug/L			8791	7964	0	KED
|	**Cd**	**111**	**54.034**	ug/L	0.668	1	4	14434	1	KED
⌊	**Cd**	**114**	**54.395**	ug/L	0.529	0	3	36814	0	KED
⌈>	**In**	**115**		ug/L			445913	437274	2	Standard
⌊	**Ag**	**107**	**48.994**	ug/L	0.463	0	41	782796	2	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1120456	1	Standard
⌊	**Pb**	**208**	**58.424**	ug/L	0.596	1	280	4718303	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBI
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 04:39:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	36779	2	Standard
	Cl	**37**		ug/L			6850428	6369222	4	Standard
⌈>	**Sc**	**45**		ug/L			616697	582881	1	Standard
|	**Cr**	**52**	**-0.015**	ug/L	0.014	93	14221	13137	1	Standard
⌊	**Cr**	**53**	**-0.095**	ug/L	0.006	6	394	151	7	Standard
⌈>	**Ge**	**72**		ug/L			40908	36921	2	KED
|	**Ni**	**60**	**0.002**	ug/L	0.004	171	10	12	39	KED
|	**Ni**	**62**	**-0.006**	ug/L	0.008	133	5	3	50	KED
|	**Cu**	**63**	**-0.000**	ug/L	0.005	1307	45	39	51	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.003	365	22	19	26	KED
|	**Zn**	**66**	**-0.013**	ug/L	0.009	72	41	30	16	KED
|	**Zn**	**67**	**-0.027**	ug/L	0.051	188	8	5	86	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.003	384	3	3	24	KED
	Y	**89**		ug/L			284905	289007	2	Standard
	Kr	**83**		ug/L			45	33	26	Standard
⌈>	**In-1**	**115**		ug/L			8791	8610	2	KED
|	**Cd**	**111**	**-0.010**	ug/L	0.006	66	4	1	100	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.003	64	3	6	34	KED
⌈>	**In**	**115**		ug/L			445913	445858	2	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	65	41	71	26	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1120212	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	100	280	345	19	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0253-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 04:43:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	61018	0	Standard
	Cl	**37**		ug/L			6850428	6405952	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	635360	3	Standard
|	**Cr**	**52**	**0.653**	ug/L	0.025	3	14221	29285	1	Standard
⌊	**Cr**	**53**	**0.669**	ug/L	0.021	3	394	2107	3	Standard
⌈>	**Ge**	**72**		ug/L			40908	36360	0	KED
|	**Ni**	**60**	**1.113**	ug/L	0.007	0	10	1484	0	KED
|	**Ni**	**62**	**1.131**	ug/L	0.077	6	5	248	7	KED
|	**Cu**	**63**	**4.408**	ug/L	0.105	2	45	16215	1	KED
|	**Cu**	**65**	**4.490**	ug/L	0.035	0	22	8458	0	KED
|	**Zn**	**66**	**45.741**	ug/L	1.200	2	41	24218	1	KED
|	**Zn**	**67**	**45.139**	ug/L	1.198	2	8	3887	2	KED
⌊	**As**	**75**	**0.777**	ug/L	0.048	6	3	212	6	KED
	Y	**89**		ug/L			284905	297891	1	Standard
	Kr	**83**		ug/L			45	41	16	Standard
⌈>	**In-1**	**115**		ug/L			8791	8273	5	KED
|	**Cd**	**111**	**0.067**	ug/L	0.015	22	4	23	22	KED
⌊	**Cd**	**114**	**0.065**	ug/L	0.018	27	3	48	20	KED
⌈>	**In**	**115**		ug/L			445913	446106	1	Standard
⌊	**Ag**	**107**	**0.009**	ug/L	0.006	69	41	191	54	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1113038	2	Standard
⌊	**Pb**	**208**	**0.461**	ug/L	0.005	0	280	37231	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0254-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 04:47:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	65539	3	Standard
	Cl	**37**		ug/L			6850428	6280600	4	Standard
⌈>	**Sc**	**45**		ug/L			616697	649876	1	Standard
|	**Cr**	**52**	**0.224**	ug/L	0.010	4	14221	20115	1	Standard
⌊	**Cr**	**53**	**0.373**	ug/L	0.021	5	394	1385	4	Standard
⌈>	**Ge**	**72**		ug/L			40908	36476	1	KED
|	**Ni**	**60**	**0.585**	ug/L	0.032	5	10	786	4	KED
|	**Ni**	**62**	**0.541**	ug/L	0.088	16	5	121	17	KED
|	**Cu**	**63**	**4.437**	ug/L	0.051	1	45	16370	0	KED
|	**Cu**	**65**	**4.385**	ug/L	0.051	1	22	8288	2	KED
|	**Zn**	**66**	**14.796**	ug/L	0.556	3	41	7881	2	KED
|	**Zn**	**67**	**13.753**	ug/L	0.814	5	8	1193	5	KED
⌊	**As**	**75**	**0.733**	ug/L	0.061	8	3	201	6	KED
	Y	**89**		ug/L			284905	287617	3	Standard
	Kr	**83**		ug/L			45	51	26	Standard
⌈>	**In-1**	**115**		ug/L			8791	8179	1	KED
|	**Cd**	**111**	**0.071**	ug/L	0.004	6	4	23	4	KED
⌊	**Cd**	**114**	**0.059**	ug/L	0.002	4	3	43	5	KED
⌈>	**In**	**115**		ug/L			445913	447232	2	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	573	41	43	23	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1138039	0	Standard
⌊	**Pb**	**208**	**0.405**	ug/L	0.003	0	280	33511	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0264-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 04:50:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	70140	1	Standard
	Cl	**37**		ug/L			6850428	6458846	4	Standard
>	**Sc**	**45**		ug/L			616697	608190	2	Standard
	Cr	**52**	**0.276**	ug/L	0.016	5	14221	19944	3	Standard
	Cr	**53**	**0.205**	ug/L	0.015	7	394	888	1	Standard
>	**Ge**	**72**		ug/L			40908	35858	0	KED
	Ni	**60**	**1.198**	ug/L	0.019	1	10	1575	0	KED
	Ni	**62**	**1.243**	ug/L	0.067	5	5	268	5	KED
	Cu	**63**	**2.483**	ug/L	0.084	3	45	9021	2	KED
	Cu	**65**	**2.461**	ug/L	0.021	0	22	4581	0	KED
	Zn	**66**	**1.850**	ug/L	0.107	5	41	1000	4	KED
	Zn	**67**	**2.078**	ug/L	0.417	20	8	183	19	KED
	As	**75**	**0.280**	ug/L	0.031	10	3	77	11	KED
	Y	**89**		ug/L			284905	286686	2	Standard
	Kr	**83**		ug/L			45	46	38	Standard
>	**In-1**	**115**		ug/L			8791	8106	2	KED
	Cd	**111**	**-0.002**	ug/L	0.006	259	4	3	43	KED
	Cd	**114**	**0.002**	ug/L	0.006	222	3	4	84	KED
>	**In**	**115**		ug/L			445913	447332	2	Standard
	Ag	**107**	**0.007**	ug/L	0.001	13	41	159	8	Standard
>	**Tb**	**159**		ug/L			1137421	1115924	1	Standard
	Pb	**208**	**0.062**	ug/L	0.001	1	280	5254	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0266-01
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Wednesday, May 03, 2023 04:54:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	58459	3	Standard
	Cl	**37**		ug/L			6850428	6228367	4	Standard
⌈>	**Sc**	**45**		ug/L			616697	646815	2	Standard
|	**Cr**	**52**	**2.629**	ug/L	0.047	1	14221	74953	1	Standard
⌊	**Cr**	**53**	**2.823**	ug/L	0.096	3	394	7718	1	Standard
⌈>	**Ge**	**72**		ug/L			40908	36818	3	KED
|	**Ni**	**60**	**5.361**	ug/L	0.153	2	10	7200	0	KED
|	**Ni**	**62**	**5.974**	ug/L	0.069	1	5	1305	3	KED
|	**Cu**	**63**	**436.857**	ug/L	9.467	2	45	1622529	0	KED
|	**Cu**	**65**	**433.200**	ug/L	13.604	3	22	823888	0	KED
|	**Zn**	**66**	**309.297**	ug/L	2.606	0	41	165599	2	KED
|	**Zn**	**67**	**289.324**	ug/L	1.351	0	8	25191	2	KED
⌊	**As**	**75**	**0.964**	ug/L	0.067	6	3	266	3	KED
	Y	**89**		ug/L			284905	306269	1	Standard
	Kr	**83**		ug/L			45	32	17	Standard
⌈>	**In-1**	**115**		ug/L			8791	8233	0	KED
|	**Cd**	**111**	**0.258**	ug/L	0.043	16	4	75	15	KED
⌊	**Cd**	**114**	**0.287**	ug/L	0.015	5	3	203	5	KED
⌈>	**In**	**115**		ug/L			445913	444025	1	Standard
⌊	**Ag**	**107**	**0.036**	ug/L	0.002	6	41	632	4	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1138412	1	Standard
⌊	**Pb**	**208**	**22.490**	ug/L	0.446	1	280	1845291	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0278-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 04:58:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	60703	1	Standard
	Cl	**37**		ug/L			6850428	6332736	4	Standard
⌈>	**Sc**	**45**		ug/L			616697	608954	0	Standard
|	**Cr**	**52**	**0.320**	ug/L	0.008	2	14221	20930	1	Standard
⌊	**Cr**	**53**	**0.278**	ug/L	0.010	3	394	1067	3	Standard
⌈>	**Ge**	**72**		ug/L			40908	36368	0	KED
|	**Ni**	**60**	**0.753**	ug/L	0.015	2	10	1007	1	KED
|	**Ni**	**62**	**0.724**	ug/L	0.112	15	5	160	14	KED
|	**Cu**	**63**	**1.145**	ug/L	0.015	1	45	4243	1	KED
|	**Cu**	**65**	**1.151**	ug/L	0.028	2	22	2183	1	KED
|	**Zn**	**66**	**248.111**	ug/L	2.348	0	41	131247	0	KED
|	**Zn**	**67**	**236.250**	ug/L	3.148	1	8	20321	1	KED
⌊	**As**	**75**	**0.266**	ug/L	0.010	3	3	75	2	KED
	Y	**89**		ug/L			284905	291012	2	Standard
	Kr	**83**		ug/L			45	42	9	Standard
⌈>	**In-1**	**115**		ug/L			8791	8343	4	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.006	220	4	3	43	KED
⌊	**Cd**	**114**	**0.020**	ug/L	0.015	75	3	17	64	KED
⌈>	**In**	**115**		ug/L			445913	443690	0	Standard
⌊	**Ag**	**107**	**0.006**	ug/L	0.001	24	41	137	17	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1117151	1	Standard
⌊	**Pb**	**208**	**0.193**	ug/L	0.004	2	280	15798	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0301-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 05:01:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	68323	2	Standard
	Cl	37		ug/L			6850428	22661811	3	Standard
>	Sc	45		ug/L			616697	603513	2	Standard
	Cr	52	1.958	ug/L	0.050	2	14221	55634	1	Standard
	Cr	53	16.741	ug/L	0.173	1	394	40832	3	Standard
>	Ge	72		ug/L			40908	31643	1	KED
	Ni	60	1.161	ug/L	0.009	0	10	1347	1	KED
	Ni	62	1.260	ug/L	0.167	13	5	240	12	KED
	Cu	63	5.853	ug/L	0.113	1	45	18722	0	KED
	Cu	65	5.859	ug/L	0.158	2	22	9598	1	KED
	Zn	66	69.215	ug/L	1.355	1	41	31875	0	KED
	Zn	67	66.568	ug/L	2.071	3	8	4986	2	KED
	As	75	0.761	ug/L	0.052	6	3	181	7	KED
	Y	89		ug/L			284905	273432	1	Standard
	Kr	83		ug/L			45	122	8	Standard
>	In-1	115		ug/L			8791	7213	0	KED
	Cd	111	0.060	ug/L	0.016	26	4	18	20	KED
	Cd	114	0.038	ug/L	0.007	18	3	26	17	KED
>	In	115		ug/L			445913	386984	3	Standard
	Ag	107	0.011	ug/L	0.002	15	41	186	10	Standard
>	Tb	159		ug/L			1137421	1048828	0	Standard
	Pb	208	2.224	ug/L	0.040	1	280	168330	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0301-02
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 05:05:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	65097	2	Standard
	Cl	37		ug/L			6850428	6409892	3	Standard
⌈>	Sc	45		ug/L			616697	646100	1	Standard
|	Cr	52	3.441	ug/L	0.093	2	14221	93378	1	Standard
⌊	Cr	53	4.037	ug/L	0.051	1	394	10856	2	Standard
⌈>	Ge	72		ug/L			40908	37801	0	KED
|	Ni	60	2.733	ug/L	0.040	1	10	3774	0	KED
|	Ni	62	2.935	ug/L	0.145	4	5	660	4	KED
|	Cu	63	9.983	ug/L	0.136	1	45	38121	0	KED
|	Cu	65	10.100	ug/L	0.256	2	22	19752	2	KED
|	Zn	66	224.154	ug/L	2.653	1	41	123242	0	KED
|	Zn	67	213.907	ug/L	3.295	1	8	19124	1	KED
⌊	As	75	0.534	ug/L	0.025	4	3	153	4	KED
	Y	89		ug/L			284905	313103	2	Standard
	Kr	83		ug/L			45	41	38	Standard
⌈>	In-1	115		ug/L			8791	8315	4	KED
|	Cd	111	0.121	ug/L	0.013	10	4	38	6	KED
⌊	Cd	114	0.103	ug/L	0.022	21	3	75	22	KED
⌈>	In	115		ug/L			445913	457686	1	Standard
⌊	Ag	107	0.020	ug/L	0.001	6	41	370	5	Standard
⌈>	Tb	159		ug/L			1137421	1145066	1	Standard
⌊	Pb	208	6.342	ug/L	0.116	1	280	523658	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0368-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 05:08:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	70532	0	Standard
	Cl	**37**		ug/L			6850428	6380197	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	615958	2	Standard
|	**Cr**	**52**	**0.534**	ug/L	0.020	3	14221	25801	1	Standard
⌊	**Cr**	**53**	**0.567**	ug/L	0.019	3	394	1792	0	Standard
⌈>	**Ge**	**72**		ug/L			40908	38210	2	KED
|	**Ni**	**60**	**1.053**	ug/L	0.034	3	10	1474	0	KED
|	**Ni**	**62**	**1.086**	ug/L	0.095	8	5	250	9	KED
|	**Cu**	**63**	**4.718**	ug/L	0.161	3	45	18225	1	KED
|	**Cu**	**65**	**4.695**	ug/L	0.134	2	22	9288	0	KED
|	**Zn**	**66**	**15.462**	ug/L	0.437	2	41	8625	0	KED
|	**Zn**	**67**	**14.923**	ug/L	0.953	6	8	1354	5	KED
⌊	**As**	**75**	**0.191**	ug/L	0.019	10	3	57	10	KED
	Y	**89**		ug/L			284905	297806	2	Standard
	Kr	**83**		ug/L			45	29	3	Standard
⌈>	**In-1**	**115**		ug/L			8791	8494	0	KED
|	**Cd**	**111**	**0.031**	ug/L	0.012	40	4	13	25	KED
⌊	**Cd**	**114**	**0.033**	ug/L	0.016	48	3	26	42	KED
⌈>	**In**	**115**		ug/L			445913	456563	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	29	41	62	9	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1154388	0	Standard
⌊	**Pb**	**208**	**0.820**	ug/L	0.005	0	280	68535	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0368-02
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 05:12:28
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	205489	0	Standard
	Cl	37		ug/L			6850428	9034390	3	Standard
>	Sc	45		ug/L			616697	584867	1	Standard
	Cr	52	0.494	ug/L	0.008	1	14221	23690	2	Standard
	Cr	53	3.487	ug/L	0.028	0	394	8538	1	Standard
>	Ge	72		ug/L			40908	31379	1	KED
	Ni	60	0.165	ug/L	0.024	14	10	196	12	KED
	Ni	62	0.182	ug/L	0.049	26	5	38	21	KED
	Cu	63	15.614	ug/L	0.169	1	45	49476	1	KED
	Cu	65	15.610	ug/L	0.245	1	22	25334	1	KED
	Zn	66	8.733	ug/L	0.230	2	41	4015	1	KED
	Zn	67	8.702	ug/L	0.886	10	8	652	11	KED
	As	75	1.190	ug/L	0.046	3	3	279	2	KED
	Y	89		ug/L			284905	256281	2	Standard
	Kr	83		ug/L			45	50	21	Standard
>	In-1	115		ug/L			8791	7048	1	KED
	Cd	111	0.017	ug/L	0.003	16	4	7	6	KED
	Cd	114	0.007	ug/L	0.007	89	3	6	56	KED
>	In	115		ug/L			445913	370462	2	Standard
	Ag	107	0.003	ug/L	0.001	33	41	71	17	Standard
>	Tb	159		ug/L			1137421	985728	0	Standard
	Pb	208	1.675	ug/L	0.008	0	280	119250	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLD
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 05:16:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	42725	1	Standard
	Cl	**37**		ug/L			6850428	6599896	4	Standard
⌈>	**Sc**	**45**		ug/L			616697	605429	1	Standard
|	**Cr**	**52**	**0.078**	ug/L	0.020	25	14221	15623	4	Standard
⌊	**Cr**	**53**	**0.080**	ug/L	0.013	15	394	580	6	Standard
⌈>	**Ge**	**72**		ug/L			40908	38626	0	KED
|	**Ni**	**60**	**-0.001**	ug/L	0.003	339	10	8	53	KED
|	**Ni**	**62**	**-0.001**	ug/L	0.021	1395	5	5	94	KED
|	**Cu**	**63**	**0.004**	ug/L	0.003	71	45	56	17	KED
|	**Cu**	**65**	**0.005**	ug/L	0.005	98	22	31	30	KED
|	**Zn**	**66**	**0.003**	ug/L	0.011	378	41	40	15	KED
|	**Zn**	**67**	**-0.030**	ug/L	0.032	106	8	5	57	KED
⌊	**As**	**75**	**-0.002**	ug/L	0.004	192	3	3	34	KED
	Y	**89**		ug/L			284905	289036	1	Standard
	Kr	**83**		ug/L			45	38	7	Standard
⌈>	**In-1**	**115**		ug/L			8791	8358	1	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.002	36	4	3	17	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.002	33	3	6	17	KED
⌈>	**In**	**115**		ug/L			445913	449505	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.001	86	41	28	40	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1129588	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	73	280	355	16	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVJ
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 05:21:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	39498	1	Standard
	Cl	**37**		ug/L			6850428	6487391	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	615287	2	Standard
|	**Cr**	**52**	**49.707**	ug/L	1.314	2	14221	1093853	1	Standard
⌊	**Cr**	**53**	**50.156**	ug/L	0.721	1	394	123912	0	Standard
⌈>	**Ge**	**72**		ug/L			40908	37951	1	KED
|	**Ni**	**60**	**52.928**	ug/L	0.690	1	10	73221	0	KED
|	**Ni**	**62**	**52.374**	ug/L	1.192	2	5	11754	1	KED
|	**Cu**	**63**	**53.235**	ug/L	1.604	3	45	203862	1	KED
|	**Cu**	**65**	**53.216**	ug/L	0.852	1	22	104394	1	KED
|	**Zn**	**66**	**53.400**	ug/L	1.336	2	41	29499	0	KED
|	**Zn**	**67**	**52.611**	ug/L	0.893	1	8	4728	2	KED
⌊	**As**	**75**	**51.712**	ug/L	0.671	1	3	14544	0	KED
	Y	**89**		ug/L			284905	288000	1	Standard
	Kr	**83**		ug/L			45	39	36	Standard
⌈>	**In-1**	**115**		ug/L			8791	8498	2	KED
|	**Cd**	**111**	**52.616**	ug/L	1.740	3	4	14990	1	KED
⌊	**Cd**	**114**	**53.310**	ug/L	2.037	3	3	38476	1	KED
⌈>	**In**	**115**		ug/L			445913	440347	3	Standard
⌊	**Ag**	**107**	**49.247**	ug/L	1.831	3	41	791803	0	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1122923	3	Standard
⌊	**Pb**	**208**	**57.915**	ug/L	2.278	3	280	4682926	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBJ
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 05:27:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	38711	3	Standard
	Cl	**37**		ug/L			6850428	6528221	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	600736	1	Standard
|	**Cr**	**52**	**-0.003**	ug/L	0.006	196	14221	13784	2	Standard
⌊	**Cr**	**53**	**-0.052**	ug/L	0.005	9	394	259	4	Standard
⌈>	**Ge**	**72**		ug/L			40908	39005	2	KED
|	**Ni**	**60**	**0.012**	ug/L	0.013	110	10	26	67	KED
|	**Ni**	**62**	**0.013**	ug/L	0.036	280	5	8	96	KED
|	**Cu**	**63**	**0.020**	ug/L	0.031	152	45	121	97	KED
|	**Cu**	**65**	**0.024**	ug/L	0.032	136	22	68	91	KED
|	**Zn**	**66**	**0.009**	ug/L	0.070	793	41	43	87	KED
|	**Zn**	**67**	**-0.009**	ug/L	0.026	278	8	6	31	KED
⌊	**As**	**75**	**0.016**	ug/L	0.026	157	3	8	85	KED
	Y	**89**		ug/L			284905	285907	2	Standard
	Kr	**83**		ug/L			45	38	49	Standard
⌈>	**In-1**	**115**		ug/L			8791	8786	0	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.008	358	4	4	53	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.004	154	3	4	58	KED
⌈>	**In**	**115**		ug/L			445913	438947	1	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.000	30	41	67	10	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1101683	0	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	99	280	247	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0561-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 05:31:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	57024	0	Standard
	Cl	37		ug/L			6850428	6540933	2	Standard
>	Sc	45		ug/L			616697	619007	1	Standard
	Cr	52	0.060	ug/L	0.017	28	14221	15580	2	Standard
	Cr	53	-0.011	ug/L	0.002	20	394	367	2	Standard
>	Ge	72		ug/L			40908	38922	1	KED
	Ni	60	0.016	ug/L	0.003	18	10	33	13	KED
	Ni	62	0.012	ug/L	0.018	142	5	8	48	KED
	Cu	63	0.570	ug/L	0.007	1	45	2283	2	KED
	Cu	65	0.560	ug/L	0.018	3	22	1147	2	KED
	Zn	66	0.730	ug/L	0.066	9	41	452	7	KED
	Zn	67	0.708	ug/L	0.115	16	8	73	15	KED
	As	75	-0.004	ug/L	0.002	58	3	2	28	KED
	Y	89		ug/L			284905	287659	4	Standard
	Kr	83		ug/L			45	35	16	Standard
>	In-1	115		ug/L			8791	8562	0	KED
	Cd	111	0.003	ug/L	0.010	362	4	5	50	KED
	Cd	114	0.000	ug/L	0.003	651	3	3	63	KED
>	In	115		ug/L			445913	452728	4	Standard
	Ag	107	0.001	ug/L	0.002	237	41	57	60	Standard
>	Tb	159		ug/L			1137421	1123610	0	Standard
	Pb	208	0.006	ug/L	0.002	34	280	759	21	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0561-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 05:35:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	58819	1	Standard
	Cl	37		ug/L			6850428	6477248	3	Standard
⌈>	Sc	45		ug/L			616697	608071	2	Standard
|	Cr	52	27.064	ug/L	0.993	3	14221	594764	1	Standard
⌊	Cr	53	27.334	ug/L	0.761	2	394	66900	1	Standard
⌈>	Ge	72		ug/L			40908	38164	1	KED
|	Ni	60	28.498	ug/L	0.089	0	10	39656	0	KED
|	Ni	62	28.732	ug/L	0.550	1	5	6488	2	KED
|	Cu	63	28.515	ug/L	0.171	0	45	109867	1	KED
|	Cu	65	28.700	ug/L	0.198	0	22	56632	0	KED
|	Zn	66	89.938	ug/L	0.768	0	41	49948	0	KED
|	Zn	67	88.136	ug/L	2.120	2	8	7959	1	KED
⌊	As	75	27.240	ug/L	0.242	0	3	7707	1	KED
	Y	89		ug/L			284905	287719	0	Standard
	Kr	83		ug/L			45	49	11	Standard
⌈>	In-1	115		ug/L			8791	8211	1	KED
|	Cd	111	28.311	ug/L	0.918	3	4	7796	1	KED
⌊	Cd	114	28.369	ug/L	0.273	0	3	19797	1	KED
⌈>	In	115		ug/L			445913	439767	2	Standard
⌊	Ag	107	26.813	ug/L	0.642	2	41	430714	0	Standard
⌈>	Tb	159		ug/L			1137421	1116334	1	Standard
⌊	Pb	208	30.350	ug/L	0.459	1	280	2441982	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0298-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 05:38:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	70219	1	Standard
	Cl	**37**		ug/L			6850428	6410235	2	Standard
⌈>	**Sc**	**45**		ug/L			616697	621408	2	Standard
|	**Cr**	**52**	**0.960**	ug/L	0.002	0	14221	35392	2	Standard
⌊	**Cr**	**53**	**0.907**	ug/L	0.034	3	394	2651	2	Standard
⌈>	**Ge**	**72**		ug/L			40908	38591	0	KED
|	**Ni**	**60**	**0.667**	ug/L	0.041	6	10	947	5	KED
|	**Ni**	**62**	**0.659**	ug/L	0.083	12	5	155	11	KED
|	**Cu**	**63**	**3.022**	ug/L	0.094	3	45	11811	2	KED
|	**Cu**	**65**	**3.014**	ug/L	0.048	1	22	6033	1	KED
|	**Zn**	**66**	**18.742**	ug/L	0.387	2	41	10555	1	KED
|	**Zn**	**67**	**17.815**	ug/L	0.351	1	8	1633	1	KED
⌊	**As**	**75**	**0.545**	ug/L	0.013	2	3	159	1	KED
	Y	**89**		ug/L			284905	297966	2	Standard
	Kr	**83**		ug/L			45	43	4	Standard
⌈>	**In-1**	**115**		ug/L			8791	8397	1	KED
|	**Cd**	**111**	**0.028**	ug/L	0.019	66	4	12	39	KED
⌊	**Cd**	**114**	**0.028**	ug/L	0.011	38	3	22	34	KED
⌈>	**In**	**115**		ug/L			445913	454799	2	Standard
⌊	**Ag**	**107**	**0.008**	ug/L	0.001	11	41	168	6	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1155217	1	Standard
⌊	**Pb**	**208**	**4.041**	ug/L	0.017	0	280	336729	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0205-02
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Wednesday, May 03, 2023 05:42:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	76896	2	Standard
	Cl	**37**		ug/L			6850428	8907350	4	Standard
⌈>	**Sc**	**45**		ug/L			616697	663452	3	Standard
|	**Cr**	**52**	**5.525**	ug/L	0.152	2	14221	144674	0	Standard
⌊	**Cr**	**53**	**7.255**	ug/L	0.129	1	394	19695	4	Standard
⌈>	**Ge**	**72**		ug/L			40908	33355	9	KED
|	**Ni**	**60**	**3.233**	ug/L	0.325	10	10	3916	4	KED
|	**Ni**	**62**	**3.400**	ug/L	0.243	7	5	672	3	KED
|	**Cu**	**63**	**12.093**	ug/L	1.177	9	45	40503	2	KED
|	**Cu**	**65**	**12.202**	ug/L	1.284	10	22	20919	1	KED
|	**Zn**	**66**	**30.223**	ug/L	2.598	8	41	14615	1	KED
|	**Zn**	**67**	**31.061**	ug/L	3.096	9	8	2441	1	KED
⌊	**As**	**75**	**1.663**	ug/L	0.135	8	3	412	1	KED
	Y	**89**		ug/L			284905	286139	1	Standard
	Kr	**83**		ug/L			45	50	8	Standard
⌈>	**In-1**	**115**		ug/L			8791	7907	2	KED
|	**Cd**	**111**	**0.047**	ug/L	0.017	36	4	16	27	KED
⌊	**Cd**	**114**	**0.031**	ug/L	0.012	37	3	23	32	KED
⌈>	**In**	**115**		ug/L			445913	420581	0	Standard
⌊	**Ag**	**107**	**0.008**	ug/L	0.001	16	41	164	12	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1122709	2	Standard
⌊	**Pb**	**208**	**0.768**	ug/L	0.019	2	280	62430	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0205-04
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 05:46:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	75491	1	Standard
	Cl	**37**		ug/L			6850428	8949085	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	657446	0	Standard
|	**Cr**	**52**	**6.010**	ug/L	0.067	1	14221	154678	0	Standard
⌊	**Cr**	**53**	**8.264**	ug/L	0.112	1	394	22170	1	Standard
⌈>	**Ge**	**72**		ug/L			40908	36161	1	KED
|	**Ni**	**60**	**2.924**	ug/L	0.074	2	10	3862	2	KED
|	**Ni**	**62**	**3.042**	ug/L	0.393	12	5	654	11	KED
|	**Cu**	**63**	**12.153**	ug/L	0.122	1	45	44395	2	KED
|	**Cu**	**65**	**12.108**	ug/L	0.037	0	22	22650	1	KED
|	**Zn**	**66**	**35.431**	ug/L	1.073	3	41	18662	1	KED
|	**Zn**	**67**	**34.284**	ug/L	0.948	2	8	2938	2	KED
⌊	**As**	**75**	**1.483**	ug/L	0.008	0	3	400	1	KED
	Y	**89**		ug/L			284905	288000	1	Standard
	Kr	**83**		ug/L			45	48	15	Standard
⌈>	**In-1**	**115**		ug/L			8791	7866	1	KED
|	**Cd**	**111**	**0.051**	ug/L	0.016	30	4	17	22	KED
⌊	**Cd**	**114**	**0.034**	ug/L	0.009	26	3	25	22	KED
⌈>	**In**	**115**		ug/L			445913	421164	2	Standard
⌊	**Ag**	**107**	**0.009**	ug/L	0.001	10	41	171	7	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1100250	1	Standard
⌊	**Pb**	**208**	**0.861**	ug/L	0.019	2	280	68536	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0205-06
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 05:50:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	74817	0	Standard
	Cl	**37**		ug/L			6850428	9139345	2	Standard
⌈>	**Sc**	**45**		ug/L			616697	679113	1	Standard
|	**Cr**	**52**	**5.649**	ug/L	0.069	1	14221	151116	1	Standard
⌊	**Cr**	**53**	**8.109**	ug/L	0.105	1	394	22478	1	Standard
⌈>	**Ge**	**72**		ug/L			40908	35736	0	KED
|	**Ni**	**60**	**3.145**	ug/L	0.102	3	10	4104	2	KED
|	**Ni**	**62**	**3.314**	ug/L	0.171	5	5	705	5	KED
|	**Cu**	**63**	**11.903**	ug/L	0.010	0	45	42966	0	KED
|	**Cu**	**65**	**11.827**	ug/L	0.234	1	22	21864	1	KED
|	**Zn**	**66**	**29.661**	ug/L	0.621	2	41	15448	1	KED
|	**Zn**	**67**	**29.896**	ug/L	0.601	2	8	2532	1	KED
⌊	**As**	**75**	**1.599**	ug/L	0.010	0	3	426	1	KED
	Y	**89**		ug/L			284905	281951	1	Standard
	Kr	**83**		ug/L			45	42	13	Standard
⌈>	**In-1**	**115**		ug/L			8791	8016	2	KED
|	**Cd**	**111**	**0.046**	ug/L	0.009	18	4	16	16	KED
⌊	**Cd**	**114**	**0.034**	ug/L	0.004	12	3	25	11	KED
⌈>	**In**	**115**		ug/L			445913	431539	1	Standard
⌊	**Ag**	**107**	**0.007**	ug/L	0.000	7	41	149	7	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1123436	2	Standard
⌊	**Pb**	**208**	**0.851**	ug/L	0.015	1	280	69169	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0206-02
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 05:53:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			39923	74520	1	Standard
	Cl	37		ug/L			6850428	9162054	2	Standard
>	Sc	45		ug/L			616697	667924	1	Standard
	Cr	52	4.510	ug/L	0.084	1	14221	121759	2	Standard
	Cr	53	7.158	ug/L	0.101	1	394	19563	0	Standard
>	Ge	72		ug/L			40908	34976	1	KED
	Ni	60	2.858	ug/L	0.115	4	10	3651	2	KED
	Ni	62	2.821	ug/L	0.192	6	5	587	6	KED
	Cu	63	9.560	ug/L	0.071	0	45	33780	0	KED
	Cu	65	9.663	ug/L	0.100	1	22	17488	1	KED
	Zn	66	25.353	ug/L	0.265	1	41	12928	0	KED
	Zn	67	26.456	ug/L	0.414	1	8	2194	0	KED
	As	75	1.591	ug/L	0.024	1	3	415	1	KED
	Y	89		ug/L			284905	285574	3	Standard
	Kr	83		ug/L			45	42	26	Standard
>	In-1	115		ug/L			8791	7891	3	KED
	Cd	111	0.021	ug/L	0.004	20	4	9	14	KED
	Cd	114	0.020	ug/L	0.012	59	3	16	52	KED
>	In	115		ug/L			445913	426386	1	Standard
	Ag	107	0.006	ug/L	0.001	8	41	139	6	Standard
>	Tb	159		ug/L			1137421	1108863	1	Standard
	Pb	208	1.383	ug/L	0.038	2	280	110762	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0206-04
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 05:57:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	74720	1	Standard
	Cl	**37**		ug/L			6850428	9124284	5	Standard
⌈>	**Sc**	**45**		ug/L			616697	663830	1	Standard
|	**Cr**	**52**	**3.339**	ug/L	0.092	2	14221	93559	1	Standard
⌊	**Cr**	**53**	**5.869**	ug/L	0.056	0	394	16020	1	Standard
⌈>	**Ge**	**72**		ug/L			40908	36432	0	KED
|	**Ni**	**60**	**5.627**	ug/L	0.091	1	10	7482	2	KED
|	**Ni**	**62**	**5.687**	ug/L	0.019	0	5	1229	0	KED
|	**Cu**	**63**	**8.005**	ug/L	0.088	1	45	29472	1	KED
|	**Cu**	**65**	**8.032**	ug/L	0.080	0	22	15145	1	KED
|	**Zn**	**66**	**11.079**	ug/L	0.321	2	41	5905	2	KED
|	**Zn**	**67**	**12.137**	ug/L	0.111	0	8	1052	0	KED
⌊	**As**	**75**	**0.509**	ug/L	0.064	12	3	140	11	KED
	Y	**89**		ug/L			284905	283668	2	Standard
	Kr	**83**		ug/L			45	45	14	Standard
⌈>	**In-1**	**115**		ug/L			8791	7885	1	KED
|	**Cd**	**111**	**0.026**	ug/L	0.009	34	4	11	19	KED
⌊	**Cd**	**114**	**0.014**	ug/L	0.008	55	3	12	43	KED
⌈>	**In**	**115**		ug/L			445913	426975	1	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.000	8	41	125	4	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1127340	0	Standard
⌊	**Pb**	**208**	**0.857**	ug/L	0.005	0	280	69928	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0206-06
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 06:01:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	76858	2	Standard
	Cl	**37**		ug/L			6850428	9180701	4	Standard
⌈>	**Sc**	**45**		ug/L			616697	668010	3	Standard
|	**Cr**	**52**	**4.607**	ug/L	0.067	1	14221	124034	2	Standard
⌊	**Cr**	**53**	**7.424**	ug/L	0.156	2	394	20272	2	Standard
⌈>	**Ge**	**72**		ug/L			40908	35687	1	KED
|	**Ni**	**60**	**7.330**	ug/L	0.111	1	10	9544	1	KED
|	**Ni**	**62**	**7.214**	ug/L	0.354	4	5	1526	3	KED
|	**Cu**	**63**	**9.735**	ug/L	0.079	0	45	35096	0	KED
|	**Cu**	**65**	**9.679**	ug/L	0.145	1	22	17871	1	KED
|	**Zn**	**66**	**24.892**	ug/L	0.597	2	41	12952	2	KED
|	**Zn**	**67**	**24.483**	ug/L	0.851	3	8	2072	2	KED
⌊	**As**	**75**	**1.518**	ug/L	0.109	7	3	404	5	KED
	Y	**89**		ug/L			284905	286061	1	Standard
	Kr	**83**		ug/L			45	43	37	Standard
⌈>	**In-1**	**115**		ug/L			8791	7952	1	KED
|	**Cd**	**111**	**0.010**	ug/L	0.005	51	4	6	20	KED
⌊	**Cd**	**114**	**0.017**	ug/L	0.011	62	3	14	50	KED
⌈>	**In**	**115**		ug/L			445913	427797	1	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.001	20	41	117	13	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1116511	2	Standard
⌊	**Pb**	**208**	**1.480**	ug/L	0.040	2	280	119288	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 06:04:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	39538	0	Standard
	Cl	**37**		ug/L			6850428	6631806	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	598754	2	Standard
|	**Cr**	**52**	**0.027**	ug/L	0.019	68	14221	14380	0	Standard
⌊	**Cr**	**53**	**0.266**	ug/L	0.006	2	394	1020	2	Standard
⌈>	**Ge**	**72**		ug/L			40908	37757	0	KED
|	**Ni**	**60**	**0.004**	ug/L	0.003	64	10	15	25	KED
|	**Ni**	**62**	**-0.009**	ug/L	0.005	52	5	3	34	KED
|	**Cu**	**63**	**0.008**	ug/L	0.003	39	45	70	16	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.003	250	22	19	26	KED
|	**Zn**	**66**	**-0.011**	ug/L	0.030	258	41	31	51	KED
|	**Zn**	**67**	**0.000**	ug/L	0.021	503542	8	7	25	KED
⌊	**As**	**75**	**-0.005**	ug/L	0.002	38	3	2	24	KED
	Y	**89**		ug/L			284905	284892	3	Standard
	Kr	**83**		ug/L			45	40	31	Standard
⌈>	**In-1**	**115**		ug/L			8791	8349	1	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.005	135	4	3	41	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.001	42	3	0	210	KED
⌈>	**In**	**115**		ug/L			445913	447695	2	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	21	41	22	19	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1117686	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	199	280	295	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVK
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 06:08:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	38854	0	Standard
	Cl	**37**		ug/L			6850428	6586033	2	Standard
⌈>	**Sc**	**45**		ug/L			616697	599958	2	Standard
|	**Cr**	**52**	**50.478**	ug/L	1.132	2	14221	1082812	0	Standard
⌊	**Cr**	**53**	**51.816**	ug/L	1.300	2	394	124784	0	Standard
⌈>	**Ge**	**72**		ug/L			40908	37680	1	KED
|	**Ni**	**60**	**52.771**	ug/L	0.766	1	10	72483	0	KED
|	**Ni**	**62**	**53.289**	ug/L	1.726	3	5	11871	1	KED
|	**Cu**	**63**	**52.563**	ug/L	0.820	1	45	199891	0	KED
|	**Cu**	**65**	**53.143**	ug/L	1.732	3	22	103489	2	KED
|	**Zn**	**66**	**52.355**	ug/L	1.326	2	41	28715	0	KED
|	**Zn**	**67**	**52.281**	ug/L	0.945	1	8	4665	2	KED
⌊	**As**	**75**	**51.242**	ug/L	0.626	1	3	14309	0	KED
	Y	**89**		ug/L			284905	285607	0	Standard
	Kr	**83**		ug/L			45	58	10	Standard
⌈>	**In-1**	**115**		ug/L			8791	8373	2	KED
|	**Cd**	**111**	**51.712**	ug/L	0.267	0	4	14521	1	KED
⌊	**Cd**	**114**	**52.933**	ug/L	0.968	1	3	37655	1	KED
⌈>	**In**	**115**		ug/L			445913	433940	2	Standard
⌊	**Ag**	**107**	**49.798**	ug/L	0.988	1	41	789425	1	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1120096	1	Standard
⌊	**Pb**	**208**	**57.810**	ug/L	1.283	2	280	4666350	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBK
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 06:12:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	38682	0	Standard
	Cl	**37**		ug/L			6850428	6587171	4	Standard
>	**Sc**	**45**		ug/L			616697	569124	11	Standard
	Cr	**52**	**0.051**	ug/L	0.109	214	14221	13988	4	Standard
	Cr	**53**	**0.050**	ug/L	0.049	96	394	470	10	Standard
>	**Ge**	**72**		ug/L			40908	38105	1	KED
	Ni	**60**	**0.014**	ug/L	0.010	67	10	29	44	KED
	Ni	**62**	**0.007**	ug/L	0.005	62	5	6	15	KED
	Cu	**63**	**0.017**	ug/L	0.010	61	45	106	36	KED
	Cu	**65**	**0.012**	ug/L	0.013	111	22	45	59	KED
	Zn	**66**	**-0.006**	ug/L	0.007	110	41	34	11	KED
	Zn	**67**	**-0.029**	ug/L	0.049	171	8	5	86	KED
	As	**75**	**0.013**	ug/L	0.006	41	3	7	20	KED
	Y	**89**		ug/L			284905	266129	9	Standard
	Kr	**83**		ug/L			45	51	9	Standard
>	**In-1**	**115**		ug/L			8791	8200	1	KED
	Cd	**111**	**-0.001**	ug/L	0.009	700	4	4	58	KED
	Cd	**114**	**-0.001**	ug/L	0.004	616	3	2	124	KED
>	**In**	**115**		ug/L			445913	422747	9	Standard
	Ag	**107**	**0.025**	ug/L	0.037	148	41	387	128	Standard
>	**Tb**	**159**		ug/L			1137421	1064670	7	Standard
	Pb	**208**	**0.032**	ug/L	0.053	167	280	2491	148	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 06:15:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	41146	0	Standard
	Cl	**37**		ug/L			6850428	6480858	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	649137	1	Standard
|	**Cr**	**52**	**-0.001**	ug/L	0.005	548	14221	14946	0	Standard
⌊	**Cr**	**53**	**-0.028**	ug/L	0.012	45	394	343	9	Standard
⌈>	**Ge**	**72**		ug/L			40908	37789	0	KED
|	**Ni**	**60**	**0.001**	ug/L	0.001	91	10	11	16	KED
|	**Ni**	**62**	**-0.015**	ug/L	0.000	0	5	1		KED
|	**Cu**	**63**	**0.003**	ug/L	0.002	59	45	52	11	KED
|	**Cu**	**65**	**0.002**	ug/L	0.003	186	22	24	27	KED
|	**Zn**	**66**	**0.001**	ug/L	0.017	1645	41	38	24	KED
|	**Zn**	**67**	**-0.028**	ug/L	0.065	228	8	5	114	KED
⌊	**As**	**75**	**-0.002**	ug/L	0.005	230	3	3	48	KED
	Y	**89**		ug/L			284905	328513	2	Standard
	Kr	**83**		ug/L			45	43	19	Standard
⌈>	**In-1**	**115**		ug/L			8791	8717	3	KED
|	**Cd**	**111**	**0.002**	ug/L	0.002	102	4	5	10	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.003	164	3	1	100	KED
⌈>	**In**	**115**		ug/L			445913	495595	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	40	41	61	9	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1216393	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	10	280	418	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 06:19:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	40590	0	Standard
	Cl	**37**		ug/L			6850428	6476612	4	Standard
⌈>	**Sc**	**45**		ug/L			616697	651821	2	Standard
|	**Cr**	**52**	**-0.010**	ug/L	0.009	95	14221	14807	0	Standard
⌊	**Cr**	**53**	**-0.043**	ug/L	0.009	21	394	305	8	Standard
⌈>	**Ge**	**72**		ug/L			40908	37522	1	KED
|	**Ni**	**60**	**0.002**	ug/L	0.008	321	10	12	85	KED
|	**Ni**	**62**	**-0.018**	ug/L	0.010	55	5	1	173	KED
|	**Cu**	**63**	**-0.000**	ug/L	0.001	4208	45	41	14	KED
|	**Cu**	**65**	**0.004**	ug/L	0.004	105	22	27	25	KED
|	**Zn**	**66**	**0.002**	ug/L	0.011	743	41	38	17	KED
|	**Zn**	**67**	**0.023**	ug/L	0.096	416	8	9	87	KED
⌊	**As**	**75**	**-0.006**	ug/L	0.004	63	3	2	48	KED
	Y	**89**		ug/L			284905	325903	1	Standard
	Kr	**83**		ug/L			45	45	2	Standard
⌈>	**In-1**	**115**		ug/L			8791	8888	2	KED
|	**Cd**	**111**	**-0.011**	ug/L	0.005	45	4	1	91	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.001	164	3	2	46	KED
⌈>	**In**	**115**		ug/L			445913	484849	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	18	41	27	10	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1209869	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	65	280	355	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 06:23:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	40508	1	Standard
	Cl	**37**		ug/L			6850428	6458944	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	647090	2	Standard
|	**Cr**	**52**	**-0.010**	ug/L	0.007	64	14221	14683	1	Standard
⌊	**Cr**	**53**	**-0.051**	ug/L	0.005	10	394	282	4	Standard
⌈>	**Ge**	**72**		ug/L			40908	37770	1	KED
|	**Ni**	**60**	**0.000**	ug/L	0.004	3990	10	9	52	KED
|	**Ni**	**62**	**0.005**	ug/L	0.013	270	5	6	45	KED
|	**Cu**	**63**	**0.003**	ug/L	0.003	134	45	51	25	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.002	3500	22	20	18	KED
|	**Zn**	**66**	**0.001**	ug/L	0.017	1377	41	38	23	KED
|	**Zn**	**67**	**0.007**	ug/L	0.053	749	8	8	58	KED
⌊	**As**	**75**	**-0.005**	ug/L	0.005	102	3	2	52	KED
	Y	**89**		ug/L			284905	319967	2	Standard
	Kr	**83**		ug/L			45	43	16	Standard
⌈>	**In-1**	**115**		ug/L			8791	8819	1	KED
|	**Cd**	**111**	**0.001**	ug/L	0.007	732	4	5	43	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.003	108	3	4	42	KED
⌈>	**In**	**115**		ug/L			445913	492232	3	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	15	41	22	17	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1189835	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	28	280	346	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 06:27:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	38577	1	Standard
	Cl	**37**		ug/L			6850428	6446635	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	569641	1	Standard
|	**Cr**	**52**	**-0.009**	ug/L	0.018	194	14221	12944	2	Standard
⌊	**Cr**	**53**	**-0.036**	ug/L	0.012	33	394	281	11	Standard
⌈>	**Ge**	**72**		ug/L			40908	36616	1	KED
|	**Ni**	**60**	**-0.003**	ug/L	0.002	46	10	4	49	KED
|	**Ni**	**62**	**0.003**	ug/L	0.009	314	5	5	33	KED
|	**Cu**	**63**	**-0.000**	ug/L	0.002	879	45	39	22	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.002	43	22	13	20	KED
|	**Zn**	**66**	**-0.029**	ug/L	0.005	18	41	21	13	KED
|	**Zn**	**67**	**-0.019**	ug/L	0.059	314	8	5	88	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.003	68	3	2	34	KED
	Y	**89**		ug/L			284905	269254	2	Standard
	Kr	**83**		ug/L			45	36	23	Standard
⌈>	**In-1**	**115**		ug/L			8791	8109	0	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.002	215	4	4	13	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.004	137	3	4	60	KED
⌈>	**In**	**115**		ug/L			445913	411886	0	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	35	41	18	39	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1077311	1	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	19	280	158	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 06:30:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	38851	2	Standard
	Cl	**37**		ug/L			6850428	6477016	3	Standard
⎡>	**Sc**	**45**		ug/L			616697	558868	2	Standard
⎢	**Cr**	**52**	**0.009**	ug/L	0.011	120	14221	13058	0	Standard
⎣	**Cr**	**53**	**-0.033**	ug/L	0.008	25	394	283	7	Standard
⎡>	**Ge**	**72**		ug/L			40908	36678	0	KED
⎢	**Ni**	**60**	**-0.002**	ug/L	0.001	53	10	6	15	KED
⎢	**Ni**	**62**	**-0.012**	ug/L	0.005	42	5	2	43	KED
⎢	**Cu**	**63**	**0.000**	ug/L	0.002	457	45	41	16	KED
⎢	**Cu**	**65**	**-0.000**	ug/L	0.002	524	22	19	22	KED
⎢	**Zn**	**66**	**-0.024**	ug/L	0.004	16	41	24	9	KED
⎢	**Zn**	**67**	**-0.027**	ug/L	0.046	171	8	5	78	KED
⎣	**As**	**75**	**-0.004**	ug/L	0.003	71	3	2	28	KED
	Y	**89**		ug/L			284905	260581	0	Standard
	Kr	**83**		ug/L			45	33	8	Standard
⎡>	**In-1**	**115**		ug/L			8791	8034	1	KED
⎢	**Cd**	**111**	**-0.009**	ug/L	0.006	68	4	1	86	KED
⎣	**Cd**	**114**	**0.002**	ug/L	0.003	138	3	4	48	KED
⎡>	**In**	**115**		ug/L			445913	411998	2	Standard
⎣	**Ag**	**107**	**-0.001**	ug/L	0.001	72	41	25	38	Standard
⎡>	**Tb**	**159**		ug/L			1137421	1051311	2	Standard
⎣	**Pb**	**208**	**-0.002**	ug/L	0.000	2	280	134	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 03, 2023 06:34:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050223A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			39923	38271	3	Standard
	Cl	**37**		ug/L			6850428	6476685	3	Standard
⌈>	**Sc**	**45**		ug/L			616697	555202	2	Standard
|	**Cr**	**52**	**0.008**	ug/L	0.018	222	14221	12954	1	Standard
⌊	**Cr**	**53**	**-0.049**	ug/L	0.001	1	394	246	1	Standard
⌈>	**Ge**	**72**		ug/L			40908	37042	1	KED
|	**Ni**	**60**	**-0.004**	ug/L	0.002	35	10	3	69	KED
|	**Ni**	**62**	**-0.015**	ug/L	0.000	1	5	1		KED
|	**Cu**	**63**	**-0.001**	ug/L	0.001	163	45	38	10	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.002	85	22	15	24	KED
|	**Zn**	**66**	**-0.027**	ug/L	0.003	10	41	22	8	KED
|	**Zn**	**67**	**-0.042**	ug/L	0.037	87	8	3	86	KED
⌊	**As**	**75**	**-0.005**	ug/L	0.004	85	3	2	53	KED
	Y	**89**		ug/L			284905	257783	2	Standard
	Kr	**83**		ug/L			45	30	12	Standard
⌈>	**In-1**	**115**		ug/L			8791	8024	2	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.004	143	4	3	31	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.005	86	3	6	46	KED
⌈>	**In**	**115**		ug/L			445913	414701	2	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.001	39	41	14	61	Standard
⌈>	**Tb**	**159**		ug/L			1137421	1048012	1	Standard
⌊	**Pb**	**208**	**-0.002**	ug/L	0.000	14	280	135	13	Standard

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00007
Control Limt: +/- 10.00%
Sequence: SLE0017

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0017-ICV1	Arsenic-75a	50.000	48.1	96.3	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	53.2	106	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.1	102	ug/L	PA 6020B UCT-KE
SLE0017-CCV1	Arsenic-75a	50.000	49.7	99.3	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.7	99.5	ug/L	PA 6020B UCT-KE
SLE0017-CCV2	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.1	102	ug/L	PA 6020B UCT-KE
SLE0017-CCV3	Arsenic-75a	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.2	104	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.7	105	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.4	103	ug/L	PA 6020B UCT-KE
SLE0017-CCV4	Arsenic-75a	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.9	106	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	53.0	106	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.3	105	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00007
Control Limt: +/- 10.00%
Sequence: SLE0017

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0017-CCV4	Zinc-67	50.000	51.8	104	ug/L	PA 6020B UCT-KE
SLE0017-CCV5	Arsenic-75a	50.000	49.3	98.7	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	53.1	106	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.2	100	ug/L	PA 6020B UCT-KE
SLE0017-CCV6	Arsenic-75a	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.4	103	ug/L	PA 6020B UCT-KE
SLE0017-CCV7	Arsenic-75a	50.000	49.5	99.1	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.2	104	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.7	101	ug/L	PA 6020B UCT-KE
SLE0017-CCV8	Arsenic-75a	50.000	49.6	99.1	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.7	101	ug/L	PA 6020B UCT-KE
SLE0017-CCV9	Arsenic-75a	50.000	49.5	99.0	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.7	103	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00007
Control Limt: +/- 10.00%
Sequence: SLE0017

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0017-CCV9	Zinc-66	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.7	101	ug/L	PA 6020B UCT-KE
SLE0017-CCVA	Arsenic-75a	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.0	104	ug/L	PA 6020B UCT-KE
SLE0017-CCVB	Arsenic-75a	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.3	101	ug/L	PA 6020B UCT-KE
SLE0017-CCVC	Arsenic-75a	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.2	104	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.9	99.7	ug/L	PA 6020B UCT-KE
SLE0017-CCVD	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.8	106	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.6	105	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.7	103	ug/L	PA 6020B UCT-KE
SLE0017-CCVE	Arsenic-75a	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.2	102	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00007
Control Limt: +/- 10.00%
Sequence: SLE0017

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0017-CCVE	Copper-65	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.6	101	ug/L	PA 6020B UCT-KE
SLE0017-CCVF	Arsenic-75a	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.6	105	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.4	101	ug/L	PA 6020B UCT-KE
SLE0017-CCVG	Arsenic-75a	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.7	101	ug/L	PA 6020B UCT-KE
SLE0017-CCVH	Arsenic-75a	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.9	106	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.7	105	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	53.4	107	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.1	104	ug/L	PA 6020B UCT-KE
SLE0017-CCVI	Arsenic-75a	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.7	99.3	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.8	106	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.1	104	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.4	105	ug/L	PA 6020B UCT-KE
SLE0017-CCVJ	Arsenic-75a	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.2	102	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00007
Control Limt: +/- 10.00%
Sequence: SLE0017

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0017-CCVJ	Copper-63	50.000	52.2	104	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.1	102	ug/L	PA 6020B UCT-KE
SLE0017-CCVK	Arsenic-75a	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.7	105	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.1	102	ug/L	PA 6020B UCT-KE
SLE0017-CCVL	Arsenic-75a	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.2	104	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	55.0	110	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	54.1	108	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	55.1	110	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.3	105	ug/L	PA 6020B UCT-KE

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Control Limt: +/- 10.00%

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00013
Sequence: SLE0043

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0043-ICV1	Arsenic-75a	50.000	48.9	97.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.9	106	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.6	105	ug/L	PA 6020B UCT-KE
SLE0043-CCV1	Arsenic-75a	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.0	102	ug/L	PA 6020B UCT-KE
SLE0043-CCV2	Arsenic-75a	50.000	49.5	98.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.3	103	ug/L	PA 6020B UCT-KE
SLE0043-CCV3	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.3	103	ug/L	PA 6020B UCT-KE
SLE0043-CCV4	Arsenic-75a	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.1	98.1	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.4	101	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00013
Control Limt: +/- 10.00%
Sequence: SLE0043

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0043-CCV4	Zinc-67	50.000	49.9	99.7	ug/L	PA 6020B UCT-KE
SLE0043-CCV5	Arsenic-75a	50.000	49.8	99.5	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.2	104	ug/L	PA 6020B UCT-KE
SLE0043-CCV6	Arsenic-75a	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.7	101	ug/L	PA 6020B UCT-KE
SLE0043-CCV7	Arsenic-75a	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.4	105	ug/L	PA 6020B UCT-KE
SLE0043-CCV8	Arsenic-75a	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.9	104	ug/L	PA 6020B UCT-KE
SLE0043-CCV9	Arsenic-75a	50.000	54.2	108	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	55.1	110	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	55.5	111	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Control Limt: +/- 10.00%

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00013
Sequence: SLE0043

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0043-CCV9	Zinc-66	50.000	54.1	108	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	54.7	109	ug/L	PA 6020B UCT-KE
SLE0043-CCVA	Arsenic-75a	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.0	102	ug/L	PA 6020B UCT-KE
SLE0043-CCVB	Arsenic-75a	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.5	103	ug/L	PA 6020B UCT-KE
SLE0043-CCVC	Arsenic-75a	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.0	102	ug/L	PA 6020B UCT-KE
SLE0043-CCVD	Arsenic-75a	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.4	105	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.5	105	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.4	103	ug/L	PA 6020B UCT-KE
SLE0043-CCVE	Arsenic-75a	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	53.1	106	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	53.4	107	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.4	103	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00013
Control Limt: +/- 10.00%
Sequence: SLE0043

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0043-CCVE	Copper-65	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.7	101	ug/L	PA 6020B UCT-KE
SLE0043-CCVF	Arsenic-75a	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.9	106	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.7	105	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.4	105	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.4	105	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.8	104	ug/L	PA 6020B UCT-KE
SLE0043-CCVG	Arsenic-75a	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	53.3	107	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	53.6	107	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	53.8	108	ug/L	PA 6020B UCT-KE
SLE0043-CCVH	Arsenic-75a	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	53.0	106	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	53.0	106	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.1	102	ug/L	PA 6020B UCT-KE
SLE0043-CCVI	Arsenic-75a	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	54.0	108	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	54.4	109	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.7	105	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.8	106	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.5	105	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.5	105	ug/L	PA 6020B UCT-KE
SLE0043-CCVJ	Arsenic-75a	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.6	105	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	53.3	107	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00013
Control Limt: +/- 10.00%
Sequence: SLE0043

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0043-CCVJ	Copper-63	50.000	53.2	106	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	53.2	106	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	53.4	107	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.6	105	ug/L	PA 6020B UCT-KE
SLE0043-CCVK	Arsenic-75a	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.9	106	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.6	105	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	53.1	106	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.4	105	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.3	105	ug/L	PA 6020B UCT-KE

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Date Analyzed: 05/01/23 15:43

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0017-IBL1	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLE0017-IBL1	Cadmium-111	0.00	0.03	0.100	ug/L	
SLE0017-IBL1	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0017-IBL1	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0017-IBL1	Copper-65	0.00500	0.35	0.500	ug/L	
SLE0017-IBL1	Zinc-66	0.0300	2.92	6.00	ug/L	
SLE0017-IBL1	Zinc-67	0.0100	0.94	6.00	ug/L	
SLE0017-ICB1	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLE0017-ICB1	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0017-ICB1	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0017-ICB1	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0017-ICB1	Copper-65	0.00	0.35	0.500	ug/L	
SLE0017-ICB1	Zinc-66	0.0160	2.92	6.00	ug/L	
SLE0017-ICB1	Zinc-67	-0.0390	0.94	6.00	ug/L	
SLE0017-CCB1	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLE0017-CCB1	Cadmium-111	0.0260	0.03	0.100	ug/L	
SLE0017-CCB1	Cadmium-114	0.0260	0.04	0.100	ug/L	
SLE0017-CCB1	Copper-63	-0.00300	0.173	0.500	ug/L	
SLE0017-CCB1	Copper-65	0.00	0.35	0.500	ug/L	
SLE0017-CCB1	Zinc-66	0.0360	2.92	6.00	ug/L	
SLE0017-CCB1	Zinc-67	-0.0030	0.94	6.00	ug/L	
SLE0017-IBL2	Arsenic-75a	0.0630	0.0373	0.200	ug/L	
SLE0017-IBL2	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLE0017-IBL2	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLE0017-IBL2	Copper-63	-0.0100	0.173	0.500	ug/L	
SLE0017-IBL2	Copper-65	-0.0120	0.35	0.500	ug/L	
SLE0017-IBL2	Zinc-66	-0.0510	2.92	6.00	ug/L	
SLE0017-IBL2	Zinc-67	-0.0920	0.94	6.00	ug/L	
SLE0017-CCB2	Arsenic-75a	0.0200	0.0373	0.200	ug/L	
SLE0017-CCB2	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0017-CCB2	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0017-CCB2	Copper-63	-0.00400	0.173	0.500	ug/L	
SLE0017-CCB2	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0017-CCB2	Zinc-66	0.0080	2.92	6.00	ug/L	
SLE0017-CCB2	Zinc-67	-0.0340	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Date Analyzed: 05/01/23 18:00

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0017-IBL3	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0017-IBL3	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLE0017-IBL3	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0017-IBL3	Copper-63	0.0280	0.173	0.500	ug/L	
SLE0017-IBL3	Copper-65	0.0280	0.35	0.500	ug/L	
SLE0017-IBL3	Zinc-66	0.419	2.92	6.00	ug/L	
SLE0017-IBL3	Zinc-67	0.492	0.94	6.00	ug/L	
SLE0017-CCB3	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLE0017-CCB3	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0017-CCB3	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0017-CCB3	Copper-63	0.00	0.173	0.500	ug/L	
SLE0017-CCB3	Copper-65	-0.00200	0.35	0.500	ug/L	
SLE0017-CCB3	Zinc-66	0.0450	2.92	6.00	ug/L	
SLE0017-CCB3	Zinc-67	0.0320	0.94	6.00	ug/L	
SLE0017-IBL4	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0017-IBL4	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLE0017-IBL4	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0017-IBL4	Copper-63	-0.00600	0.173	0.500	ug/L	
SLE0017-IBL4	Copper-65	-0.00700	0.35	0.500	ug/L	
SLE0017-IBL4	Zinc-66	0.0830	2.92	6.00	ug/L	
SLE0017-IBL4	Zinc-67	0.0370	0.94	6.00	ug/L	
SLE0017-CCB4	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLE0017-CCB4	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLE0017-CCB4	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0017-CCB4	Copper-63	-0.00400	0.173	0.500	ug/L	
SLE0017-CCB4	Copper-65	-0.00200	0.35	0.500	ug/L	
SLE0017-CCB4	Zinc-66	-0.0060	2.92	6.00	ug/L	
SLE0017-CCB4	Zinc-67	-0.0110	0.94	6.00	ug/L	
SLE0017-IBL5	Arsenic-75a	-0.00700	0.0373	0.200	ug/L	
SLE0017-IBL5	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLE0017-IBL5	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0017-IBL5	Copper-63	-0.00300	0.173	0.500	ug/L	
SLE0017-IBL5	Copper-65	-0.00300	0.35	0.500	ug/L	
SLE0017-IBL5	Zinc-66	0.0480	2.92	6.00	ug/L	
SLE0017-IBL5	Zinc-67	0.0530	0.94	6.00	ug/L	
SLE0017-CCB5	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Date Analyzed: 05/01/23 20:21

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0017-CCB5	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLE0017-CCB5	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0017-CCB5	Copper-63	-0.0110	0.173	0.500	ug/L	
SLE0017-CCB5	Copper-65	-0.0110	0.35	0.500	ug/L	
SLE0017-CCB5	Zinc-66	-0.0370	2.92	6.00	ug/L	
SLE0017-CCB5	Zinc-67	-0.0630	0.94	6.00	ug/L	
SLE0017-CCB6	Arsenic-75a	0.0240	0.0373	0.200	ug/L	
SLE0017-CCB6	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0017-CCB6	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0017-CCB6	Copper-63	0.0220	0.173	0.500	ug/L	
SLE0017-CCB6	Copper-65	0.0230	0.35	0.500	ug/L	
SLE0017-CCB6	Zinc-66	0.0260	2.92	6.00	ug/L	
SLE0017-CCB6	Zinc-67	0.0280	0.94	6.00	ug/L	
SLE0017-IBL6	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLE0017-IBL6	Cadmium-111	-0.00800	0.03	0.100	ug/L	
SLE0017-IBL6	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0017-IBL6	Copper-63	0.0100	0.173	0.500	ug/L	
SLE0017-IBL6	Copper-65	0.0110	0.35	0.500	ug/L	
SLE0017-IBL6	Zinc-66	0.143	2.92	6.00	ug/L	
SLE0017-IBL6	Zinc-67	0.0960	0.94	6.00	ug/L	
SLE0017-IBL7	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0017-IBL7	Cadmium-111	0.00600	0.03	0.100	ug/L	
SLE0017-IBL7	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0017-IBL7	Copper-63	0.0270	0.173	0.500	ug/L	
SLE0017-IBL7	Copper-65	0.0210	0.35	0.500	ug/L	
SLE0017-IBL7	Zinc-66	0.265	2.92	6.00	ug/L	
SLE0017-IBL7	Zinc-67	0.229	0.94	6.00	ug/L	
SLE0017-CCB7	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0017-CCB7	Cadmium-111	0.00	0.03	0.100	ug/L	
SLE0017-CCB7	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0017-CCB7	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0017-CCB7	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0017-CCB7	Zinc-66	0.0150	2.92	6.00	ug/L	
SLE0017-CCB7	Zinc-67	-0.0250	0.94	6.00	ug/L	
SLE0017-IBL8	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLE0017-IBL8	Cadmium-111	-0.00600	0.03	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Date Analyzed: 05/01/23 22:43

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0017-IBL8	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0017-IBL8	Copper-63	0.0310	0.173	0.500	ug/L	
SLE0017-IBL8	Copper-65	0.0380	0.35	0.500	ug/L	
SLE0017-IBL8	Zinc-66	0.310	2.92	6.00	ug/L	
SLE0017-IBL8	Zinc-67	0.240	0.94	6.00	ug/L	
SLE0017-CCB8	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLE0017-CCB8	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0017-CCB8	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0017-CCB8	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0017-CCB8	Copper-65	-0.00200	0.35	0.500	ug/L	
SLE0017-CCB8	Zinc-66	0.0040	2.92	6.00	ug/L	
SLE0017-CCB8	Zinc-67	-0.0380	0.94	6.00	ug/L	
SLE0017-IBL9	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0017-IBL9	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLE0017-IBL9	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0017-IBL9	Copper-63	0.0230	0.173	0.500	ug/L	
SLE0017-IBL9	Copper-65	0.0210	0.35	0.500	ug/L	
SLE0017-IBL9	Zinc-66	0.240	2.92	6.00	ug/L	
SLE0017-IBL9	Zinc-67	0.259	0.94	6.00	ug/L	
SLE0017-CCB9	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLE0017-CCB9	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLE0017-CCB9	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0017-CCB9	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0017-CCB9	Copper-65	0.00100	0.35	0.500	ug/L	
SLE0017-CCB9	Zinc-66	0.0070	2.92	6.00	ug/L	
SLE0017-CCB9	Zinc-67	-0.0310	0.94	6.00	ug/L	
SLE0017-IBLA	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLE0017-IBLA	Cadmium-111	0.00	0.03	0.100	ug/L	
SLE0017-IBLA	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0017-IBLA	Copper-63	0.0380	0.173	0.500	ug/L	
SLE0017-IBLA	Copper-65	0.0340	0.35	0.500	ug/L	
SLE0017-IBLA	Zinc-66	0.271	2.92	6.00	ug/L	
SLE0017-IBLA	Zinc-67	0.184	0.94	6.00	ug/L	
SLE0017-CCBA	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLE0017-CCBA	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0017-CCBA	Cadmium-114	-0.00400	0.04	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Date Analyzed: 05/02/23 00:56

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0017-CCBA	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0017-CCBA	Copper-65	0.00200	0.35	0.500	ug/L	
SLE0017-CCBA	Zinc-66	0.0100	2.92	6.00	ug/L	
SLE0017-CCBA	Zinc-67	0.0090	0.94	6.00	ug/L	
SLE0017-CCBB	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0017-CCBB	Cadmium-111	0.00	0.03	0.100	ug/L	
SLE0017-CCBB	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0017-CCBB	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0017-CCBB	Copper-65	0.00300	0.35	0.500	ug/L	
SLE0017-CCBB	Zinc-66	-0.0050	2.92	6.00	ug/L	
SLE0017-CCBB	Zinc-67	0.0050	0.94	6.00	ug/L	
SLE0017-IBLB	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLE0017-IBLB	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0017-IBLB	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0017-IBLB	Copper-63	0.0280	0.173	0.500	ug/L	
SLE0017-IBLB	Copper-65	0.0170	0.35	0.500	ug/L	
SLE0017-IBLB	Zinc-66	0.264	2.92	6.00	ug/L	
SLE0017-IBLB	Zinc-67	0.266	0.94	6.00	ug/L	
SLE0017-CCBC	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLE0017-CCBC	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLE0017-CCBC	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0017-CCBC	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0017-CCBC	Copper-65	-0.00200	0.35	0.500	ug/L	
SLE0017-CCBC	Zinc-66	0.0040	2.92	6.00	ug/L	
SLE0017-CCBC	Zinc-67	-0.0090	0.94	6.00	ug/L	
SLE0017-IBLC	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0017-IBLC	Cadmium-111	-0.0100	0.03	0.100	ug/L	
SLE0017-IBLC	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0017-IBLC	Copper-63	0.0280	0.173	0.500	ug/L	
SLE0017-IBLC	Copper-65	0.0210	0.35	0.500	ug/L	
SLE0017-IBLC	Zinc-66	0.293	2.92	6.00	ug/L	
SLE0017-IBLC	Zinc-67	0.249	0.94	6.00	ug/L	
SLE0017-CCBD	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLE0017-CCBD	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLE0017-CCBD	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0017-CCBD	Copper-63	0.00	0.173	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Date Analyzed: 05/02/23 03:17

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0017-CCBD	Copper-65	0.00100	0.35	0.500	ug/L	
SLE0017-CCBD	Zinc-66	0.0050	2.92	6.00	ug/L	
SLE0017-CCBD	Zinc-67	-0.0040	0.94	6.00	ug/L	
SLE0017-IBLD	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLE0017-IBLD	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0017-IBLD	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0017-IBLD	Copper-63	0.0300	0.173	0.500	ug/L	
SLE0017-IBLD	Copper-65	0.0290	0.35	0.500	ug/L	
SLE0017-IBLD	Zinc-66	0.301	2.92	6.00	ug/L	
SLE0017-IBLD	Zinc-67	0.258	0.94	6.00	ug/L	
SLE0017-CCBE	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLE0017-CCBE	Cadmium-111	0.0260	0.03	0.100	ug/L	
SLE0017-CCBE	Cadmium-114	0.0250	0.04	0.100	ug/L	
SLE0017-CCBE	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0017-CCBE	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0017-CCBE	Zinc-66	0.0510	2.92	6.00	ug/L	
SLE0017-CCBE	Zinc-67	-0.0060	0.94	6.00	ug/L	
SLE0017-IBLE	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLE0017-IBLE	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLE0017-IBLE	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0017-IBLE	Copper-63	0.0220	0.173	0.500	ug/L	
SLE0017-IBLE	Copper-65	0.0220	0.35	0.500	ug/L	
SLE0017-IBLE	Zinc-66	0.305	2.92	6.00	ug/L	
SLE0017-IBLE	Zinc-67	0.320	0.94	6.00	ug/L	
SLE0017-IBLF	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0017-IBLF	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0017-IBLF	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0017-IBLF	Copper-63	0.0240	0.173	0.500	ug/L	
SLE0017-IBLF	Copper-65	0.0230	0.35	0.500	ug/L	
SLE0017-IBLF	Zinc-66	0.274	2.92	6.00	ug/L	
SLE0017-IBLF	Zinc-67	0.210	0.94	6.00	ug/L	
SLE0017-CCBF	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLE0017-CCBF	Cadmium-111	-0.00900	0.03	0.100	ug/L	
SLE0017-CCBF	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0017-CCBF	Copper-63	0.00	0.173	0.500	ug/L	
SLE0017-CCBF	Copper-65	0.00	0.35	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Date Analyzed: 05/02/23 05:16

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0017-CCBF	Zinc-66	0.0430	2.92	6.00	ug/L	
SLE0017-CCBF	Zinc-67	0.0110	0.94	6.00	ug/L	
SLE0017-CCBG	Arsenic-75a	0.00700	0.0373	0.200	ug/L	
SLE0017-CCBG	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0017-CCBG	Cadmium-114	-0.00400	0.04	0.100	ug/L	
SLE0017-CCBG	Copper-63	-0.00200	0.173	0.500	ug/L	
SLE0017-CCBG	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0017-CCBG	Zinc-66	0.0300	2.92	6.00	ug/L	
SLE0017-CCBG	Zinc-67	0.0460	0.94	6.00	ug/L	
SLE0017-IBLG	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLE0017-IBLG	Cadmium-111	-0.00700	0.03	0.100	ug/L	
SLE0017-IBLG	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0017-IBLG	Copper-63	0.145	0.173	0.500	ug/L	
SLE0017-IBLG	Copper-65	0.142	0.35	0.500	ug/L	
SLE0017-IBLG	Zinc-66	0.234	2.92	6.00	ug/L	
SLE0017-IBLG	Zinc-67	0.251	0.94	6.00	ug/L	
SLE0017-IBLH	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLE0017-IBLH	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0017-IBLH	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0017-IBLH	Copper-63	0.148	0.173	0.500	ug/L	
SLE0017-IBLH	Copper-65	0.145	0.35	0.500	ug/L	
SLE0017-IBLH	Zinc-66	0.263	2.92	6.00	ug/L	
SLE0017-IBLH	Zinc-67	0.153	0.94	6.00	ug/L	
SLE0017-CCBH	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLE0017-CCBH	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0017-CCBH	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0017-CCBH	Copper-63	-0.00100	0.173	0.500	ug/L	
SLE0017-CCBH	Copper-65	0.00100	0.35	0.500	ug/L	
SLE0017-CCBH	Zinc-66	0.0200	2.92	6.00	ug/L	
SLE0017-CCBH	Zinc-67	0.0240	0.94	6.00	ug/L	
SLE0017-IBLI	Arsenic-75a	0.0100	0.0373	0.200	ug/L	
SLE0017-IBLI	Cadmium-111	0.00900	0.03	0.100	ug/L	
SLE0017-IBLI	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0017-IBLI	Copper-63	0.149	0.173	0.500	ug/L	
SLE0017-IBLI	Copper-65	0.159	0.35	0.500	ug/L	
SLE0017-IBLI	Zinc-66	0.292	2.92	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Date Analyzed: 05/02/23 06:50

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0017-IBLI	Zinc-67	0.254	0.94	6.00	ug/L	
SLE0017-IBLJ	Arsenic-75a	0.0300	0.0373	0.200	ug/L	
SLE0017-IBLJ	Cadmium-111	-0.00900	0.03	0.100	ug/L	
SLE0017-IBLJ	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0017-IBLJ	Copper-63	0.183	0.173	0.500	ug/L	
SLE0017-IBLJ	Copper-65	0.190	0.35	0.500	ug/L	
SLE0017-IBLJ	Zinc-66	0.349	2.92	6.00	ug/L	
SLE0017-IBLJ	Zinc-67	0.343	0.94	6.00	ug/L	
SLE0017-CCBI	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLE0017-CCBI	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0017-CCBI	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0017-CCBI	Copper-63	0.00700	0.173	0.500	ug/L	
SLE0017-CCBI	Copper-65	0.0110	0.35	0.500	ug/L	
SLE0017-CCBI	Zinc-66	0.0350	2.92	6.00	ug/L	
SLE0017-CCBI	Zinc-67	0.0470	0.94	6.00	ug/L	
SLE0017-IBLK	Arsenic-75a	0.0220	0.0373	0.200	ug/L	
SLE0017-IBLK	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLE0017-IBLK	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0017-IBLK	Copper-63	0.172	0.173	0.500	ug/L	
SLE0017-IBLK	Copper-65	0.184	0.35	0.500	ug/L	
SLE0017-IBLK	Zinc-66	0.305	2.92	6.00	ug/L	
SLE0017-IBLK	Zinc-67	0.304	0.94	6.00	ug/L	
SLE0017-IBLL	Arsenic-75a	0.00700	0.0373	0.200	ug/L	
SLE0017-IBLL	Cadmium-111	-0.00700	0.03	0.100	ug/L	
SLE0017-IBLL	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLE0017-IBLL	Copper-63	0.160	0.173	0.500	ug/L	
SLE0017-IBLL	Copper-65	0.148	0.35	0.500	ug/L	
SLE0017-IBLL	Zinc-66	0.286	2.92	6.00	ug/L	
SLE0017-IBLL	Zinc-67	0.208	0.94	6.00	ug/L	
SLE0017-CCBJ	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLE0017-CCBJ	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLE0017-CCBJ	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0017-CCBJ	Copper-63	-0.00100	0.173	0.500	ug/L	
SLE0017-CCBJ	Copper-65	0.00	0.35	0.500	ug/L	
SLE0017-CCBJ	Zinc-66	0.0160	2.92	6.00	ug/L	
SLE0017-CCBJ	Zinc-67	0.0250	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00007
Date Analyzed: 05/02/23 08:46

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0017-IBLM	Arsenic-75a	0.0100	0.0373	0.200	ug/L	
SLE0017-IBLM	Cadmium-111	-0.00700	0.03	0.100	ug/L	
SLE0017-IBLM	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0017-IBLM	Copper-63	0.140	0.173	0.500	ug/L	
SLE0017-IBLM	Copper-65	0.148	0.35	0.500	ug/L	
SLE0017-IBLM	Zinc-66	0.223	2.92	6.00	ug/L	
SLE0017-IBLM	Zinc-67	0.266	0.94	6.00	ug/L	
SLE0017-IBLN	Arsenic-75a	0.00900	0.0373	0.200	ug/L	
SLE0017-IBLN	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0017-IBLN	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0017-IBLN	Copper-63	0.159	0.173	0.500	ug/L	
SLE0017-IBLN	Copper-65	0.148	0.35	0.500	ug/L	
SLE0017-IBLN	Zinc-66	0.252	2.92	6.00	ug/L	
SLE0017-IBLN	Zinc-67	0.296	0.94	6.00	ug/L	
SLE0017-CCBK	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLE0017-CCBK	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0017-CCBK	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0017-CCBK	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0017-CCBK	Copper-65	-0.00200	0.35	0.500	ug/L	
SLE0017-CCBK	Zinc-66	0.0430	2.92	6.00	ug/L	
SLE0017-CCBK	Zinc-67	0.0560	0.94	6.00	ug/L	
SLE0017-IBLO	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLE0017-IBLO	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLE0017-IBLO	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLE0017-IBLO	Copper-63	0.156	0.173	0.500	ug/L	
SLE0017-IBLO	Copper-65	0.155	0.35	0.500	ug/L	
SLE0017-IBLO	Zinc-66	0.267	2.92	6.00	ug/L	
SLE0017-IBLO	Zinc-67	0.338	0.94	6.00	ug/L	
SLE0017-CCBL	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLE0017-CCBL	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0017-CCBL	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0017-CCBL	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0017-CCBL	Copper-65	-0.00200	0.35	0.500	ug/L	
SLE0017-CCBL	Zinc-66	0.0470	2.92	6.00	ug/L	
SLE0017-CCBL	Zinc-67	0.0230	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0043

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00013
Date Analyzed: 05/02/23 14:19

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0043-IBL1	Arsenic-75a	0.0270	0.0373	0.200	ug/L	
SLE0043-IBL1	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLE0043-IBL1	Cadmium-114	0.00500	0.04	0.100	ug/L	
SLE0043-IBL1	Copper-63	0.0160	0.173	0.500	ug/L	
SLE0043-IBL1	Copper-65	0.0150	0.35	0.500	ug/L	
SLE0043-IBL1	Zinc-66	0.0180	2.92	6.00	ug/L	
SLE0043-IBL1	Zinc-67	0.0670	0.94	6.00	ug/L	
SLE0043-ICB1	Arsenic-75a	0.00700	0.0373	0.200	ug/L	
SLE0043-ICB1	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLE0043-ICB1	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0043-ICB1	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0043-ICB1	Copper-65	0.00200	0.35	0.500	ug/L	
SLE0043-ICB1	Zinc-66	0.0100	2.92	6.00	ug/L	
SLE0043-ICB1	Zinc-67	0.0410	0.94	6.00	ug/L	
SLE0043-CCB1	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLE0043-CCB1	Cadmium-111	0.0110	0.03	0.100	ug/L	
SLE0043-CCB1	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0043-CCB1	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0043-CCB1	Copper-65	-0.00200	0.35	0.500	ug/L	
SLE0043-CCB1	Zinc-66	0.0060	2.92	6.00	ug/L	
SLE0043-CCB1	Zinc-67	0.0260	0.94	6.00	ug/L	
SLE0043-IBL2	Arsenic-75a	0.0140	0.0373	0.200	ug/L	
SLE0043-IBL2	Cadmium-111	0.00900	0.03	0.100	ug/L	
SLE0043-IBL2	Cadmium-114	0.00800	0.04	0.100	ug/L	
SLE0043-IBL2	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0043-IBL2	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0043-IBL2	Zinc-66	0.0250	2.92	6.00	ug/L	
SLE0043-IBL2	Zinc-67	0.0280	0.94	6.00	ug/L	
SLE0043-IBL3	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0043-IBL3	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLE0043-IBL3	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0043-IBL3	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0043-IBL3	Copper-65	0.00600	0.35	0.500	ug/L	
SLE0043-IBL3	Zinc-66	0.0290	2.92	6.00	ug/L	
SLE0043-IBL3	Zinc-67	0.0390	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0043

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00013
Date Analyzed: 05/02/23 15:57

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0043-CCB2	Arsenic-75a	0.0110	0.0373	0.200	ug/L	
SLE0043-CCB2	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLE0043-CCB2	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0043-CCB2	Copper-63	0.00400	0.173	0.500	ug/L	
SLE0043-CCB2	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0043-CCB2	Zinc-66	0.0240	2.92	6.00	ug/L	
SLE0043-CCB2	Zinc-67	0.0670	0.94	6.00	ug/L	
SLE0043-IBL4	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLE0043-IBL4	Cadmium-111	0.00	0.03	0.100	ug/L	
SLE0043-IBL4	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0043-IBL4	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0043-IBL4	Copper-65	0.00500	0.35	0.500	ug/L	
SLE0043-IBL4	Zinc-66	0.0550	2.92	6.00	ug/L	
SLE0043-IBL4	Zinc-67	0.0600	0.94	6.00	ug/L	
SLE0043-CCB3	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLE0043-CCB3	Cadmium-111	0.00400	0.03	0.100	ug/L	
SLE0043-CCB3	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLE0043-CCB3	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0043-CCB3	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0043-CCB3	Zinc-66	0.0240	2.92	6.00	ug/L	
SLE0043-CCB3	Zinc-67	0.0600	0.94	6.00	ug/L	
SLE0043-CCB4	Arsenic-75a	0.00800	0.0373	0.200	ug/L	
SLE0043-CCB4	Cadmium-111	0.00900	0.03	0.100	ug/L	
SLE0043-CCB4	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0043-CCB4	Copper-63	-0.00200	0.173	0.500	ug/L	
SLE0043-CCB4	Copper-65	0.00200	0.35	0.500	ug/L	
SLE0043-CCB4	Zinc-66	-0.0030	2.92	6.00	ug/L	
SLE0043-CCB4	Zinc-67	0.0360	0.94	6.00	ug/L	
SLE0043-CCB5	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLE0043-CCB5	Cadmium-111	-0.00800	0.03	0.100	ug/L	
SLE0043-CCB5	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0043-CCB5	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0043-CCB5	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0043-CCB5	Zinc-66	0.0130	2.92	6.00	ug/L	
SLE0043-CCB5	Zinc-67	0.0160	0.94	6.00	ug/L	
SLE0043-CCB6	Arsenic-75a	0.00	0.0373	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0043

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00013
Date Analyzed: 05/02/23 19:16

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0043-CCB6	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0043-CCB6	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0043-CCB6	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0043-CCB6	Copper-65	0.00200	0.35	0.500	ug/L	
SLE0043-CCB6	Zinc-66	0.0210	2.92	6.00	ug/L	
SLE0043-CCB6	Zinc-67	0.0400	0.94	6.00	ug/L	
SLE0043-CCB7	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLE0043-CCB7	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLE0043-CCB7	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0043-CCB7	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0043-CCB7	Copper-65	0.00	0.35	0.500	ug/L	
SLE0043-CCB7	Zinc-66	0.0040	2.92	6.00	ug/L	
SLE0043-CCB7	Zinc-67	0.0160	0.94	6.00	ug/L	
SLE0043-CCB8	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLE0043-CCB8	Cadmium-111	0.00	0.03	0.100	ug/L	
SLE0043-CCB8	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0043-CCB8	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0043-CCB8	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0043-CCB8	Zinc-66	0.0050	2.92	6.00	ug/L	
SLE0043-CCB8	Zinc-67	0.0350	0.94	6.00	ug/L	
SLE0043-CCB9	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLE0043-CCB9	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLE0043-CCB9	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0043-CCB9	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0043-CCB9	Copper-65	-0.00200	0.35	0.500	ug/L	
SLE0043-CCB9	Zinc-66	0.0230	2.92	6.00	ug/L	
SLE0043-CCB9	Zinc-67	0.0260	0.94	6.00	ug/L	
SLE0043-CCBA	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0043-CCBA	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0043-CCBA	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0043-CCBA	Copper-63	-0.00200	0.173	0.500	ug/L	
SLE0043-CCBA	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0043-CCBA	Zinc-66	-0.0010	2.92	6.00	ug/L	
SLE0043-CCBA	Zinc-67	-0.0420	0.94	6.00	ug/L	
SLE0043-IBL5	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLE0043-IBL5	Cadmium-111	0.00300	0.03	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0043

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00013
Date Analyzed: 05/02/23 23:07

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0043-IBL5	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0043-IBL5	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0043-IBL5	Copper-65	0.00900	0.35	0.500	ug/L	
SLE0043-IBL5	Zinc-66	0.0390	2.92	6.00	ug/L	
SLE0043-IBL5	Zinc-67	0.0690	0.94	6.00	ug/L	
SLE0043-CCBB	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLE0043-CCBB	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0043-CCBB	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0043-CCBB	Copper-63	-0.00200	0.173	0.500	ug/L	
SLE0043-CCBB	Copper-65	0.00600	0.35	0.500	ug/L	
SLE0043-CCBB	Zinc-66	-0.0020	2.92	6.00	ug/L	
SLE0043-CCBB	Zinc-67	-0.0030	0.94	6.00	ug/L	
SLE0043-IBL6	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLE0043-IBL6	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLE0043-IBL6	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0043-IBL6	Copper-63	-0.00200	0.173	0.500	ug/L	
SLE0043-IBL6	Copper-65	0.00500	0.35	0.500	ug/L	
SLE0043-IBL6	Zinc-66	0.0410	2.92	6.00	ug/L	
SLE0043-IBL6	Zinc-67	-0.0340	0.94	6.00	ug/L	
SLE0043-IBL7	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLE0043-IBL7	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLE0043-IBL7	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0043-IBL7	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0043-IBL7	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0043-IBL7	Zinc-66	0.0570	2.92	6.00	ug/L	
SLE0043-IBL7	Zinc-67	0.0610	0.94	6.00	ug/L	
SLE0043-CCBC	Arsenic-75a	0.0100	0.0373	0.200	ug/L	
SLE0043-CCBC	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLE0043-CCBC	Cadmium-114	-0.00500	0.04	0.100	ug/L	
SLE0043-CCBC	Copper-63	0.00400	0.173	0.500	ug/L	
SLE0043-CCBC	Copper-65	0.0100	0.35	0.500	ug/L	
SLE0043-CCBC	Zinc-66	-0.0020	2.92	6.00	ug/L	
SLE0043-CCBC	Zinc-67	-0.0450	0.94	6.00	ug/L	
SLE0043-IBL8	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLE0043-IBL8	Cadmium-111	0.00700	0.03	0.100	ug/L	
SLE0043-IBL8	Cadmium-114	0.00100	0.04	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0043

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00013
Date Analyzed: 05/03/23 01:06

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0043-IBL8	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0043-IBL8	Copper-65	0.00300	0.35	0.500	ug/L	
SLE0043-IBL8	Zinc-66	0.0400	2.92	6.00	ug/L	
SLE0043-IBL8	Zinc-67	0.0450	0.94	6.00	ug/L	
SLE0043-CCBD	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLE0043-CCBD	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0043-CCBD	Cadmium-114	0.00700	0.04	0.100	ug/L	
SLE0043-CCBD	Copper-63	0.00	0.173	0.500	ug/L	
SLE0043-CCBD	Copper-65	0.00100	0.35	0.500	ug/L	
SLE0043-CCBD	Zinc-66	-0.0070	2.92	6.00	ug/L	
SLE0043-CCBD	Zinc-67	-0.0250	0.94	6.00	ug/L	
SLE0043-IBL9	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLE0043-IBL9	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLE0043-IBL9	Cadmium-114	-0.00500	0.04	0.100	ug/L	
SLE0043-IBL9	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0043-IBL9	Copper-65	0.00200	0.35	0.500	ug/L	
SLE0043-IBL9	Zinc-66	0.0560	2.92	6.00	ug/L	
SLE0043-IBL9	Zinc-67	0.0670	0.94	6.00	ug/L	
SLE0043-CCBE	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLE0043-CCBE	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLE0043-CCBE	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0043-CCBE	Copper-63	0.00	0.173	0.500	ug/L	
SLE0043-CCBE	Copper-65	0.00300	0.35	0.500	ug/L	
SLE0043-CCBE	Zinc-66	-0.0080	2.92	6.00	ug/L	
SLE0043-CCBE	Zinc-67	-0.0450	0.94	6.00	ug/L	
SLE0043-CCBF	Arsenic-75a	0.00700	0.0373	0.200	ug/L	
SLE0043-CCBF	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0043-CCBF	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0043-CCBF	Copper-63	-0.00100	0.173	0.500	ug/L	
SLE0043-CCBF	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0043-CCBF	Zinc-66	-0.0350	2.92	6.00	ug/L	
SLE0043-CCBF	Zinc-67	-0.0270	0.94	6.00	ug/L	
SLE0043-IBLA	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLE0043-IBLA	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0043-IBLA	Cadmium-114	0.00700	0.04	0.100	ug/L	
SLE0043-IBLA	Copper-63	0.00400	0.173	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0043

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00013
Date Analyzed: 05/03/23 02:56

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0043-IBLA	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0043-IBLA	Zinc-66	0.0420	2.92	6.00	ug/L	
SLE0043-IBLA	Zinc-67	0.0290	0.94	6.00	ug/L	
SLE0043-CCBG	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLE0043-CCBG	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0043-CCBG	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0043-CCBG	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0043-CCBG	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0043-CCBG	Zinc-66	-0.0260	2.92	6.00	ug/L	
SLE0043-CCBG	Zinc-67	-0.0530	0.94	6.00	ug/L	
SLE0043-IBLB	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLE0043-IBLB	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLE0043-IBLB	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0043-IBLB	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0043-IBLB	Copper-65	0.00200	0.35	0.500	ug/L	
SLE0043-IBLB	Zinc-66	0.0550	2.92	6.00	ug/L	
SLE0043-IBLB	Zinc-67	-0.0080	0.94	6.00	ug/L	
SLE0043-CCBH	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLE0043-CCBH	Cadmium-111	-0.00800	0.03	0.100	ug/L	
SLE0043-CCBH	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0043-CCBH	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0043-CCBH	Copper-65	-0.00200	0.35	0.500	ug/L	
SLE0043-CCBH	Zinc-66	-0.0190	2.92	6.00	ug/L	
SLE0043-CCBH	Zinc-67	0.0160	0.94	6.00	ug/L	
SLE0043-IBLC	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0043-IBLC	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0043-IBLC	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0043-IBLC	Copper-63	0.0320	0.173	0.500	ug/L	
SLE0043-IBLC	Copper-65	0.0290	0.35	0.500	ug/L	
SLE0043-IBLC	Zinc-66	0.0900	2.92	6.00	ug/L	
SLE0043-IBLC	Zinc-67	0.0780	0.94	6.00	ug/L	
SLE0043-CCBI	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLE0043-CCBI	Cadmium-111	-0.0100	0.03	0.100	ug/L	
SLE0043-CCBI	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLE0043-CCBI	Copper-63	0.00	0.173	0.500	ug/L	
SLE0043-CCBI	Copper-65	-0.00100	0.35	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0043

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: GE00013
Date Analyzed: 05/03/23 04:39

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0043-CCBI	Zinc-66	-0.0130	2.92	6.00	ug/L	
SLE0043-CCBI	Zinc-67	-0.0270	0.94	6.00	ug/L	
SLE0043-IBLD	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLE0043-IBLD	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLE0043-IBLD	Cadmium-114	0.00500	0.04	0.100	ug/L	
SLE0043-IBLD	Copper-63	0.00400	0.173	0.500	ug/L	
SLE0043-IBLD	Copper-65	0.00500	0.35	0.500	ug/L	
SLE0043-IBLD	Zinc-66	0.0030	2.92	6.00	ug/L	
SLE0043-IBLD	Zinc-67	-0.0300	0.94	6.00	ug/L	
SLE0043-CCBJ	Arsenic-75a	0.0160	0.0373	0.200	ug/L	
SLE0043-CCBJ	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0043-CCBJ	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0043-CCBJ	Copper-63	0.0200	0.173	0.500	ug/L	
SLE0043-CCBJ	Copper-65	0.0240	0.35	0.500	ug/L	
SLE0043-CCBJ	Zinc-66	0.0090	2.92	6.00	ug/L	
SLE0043-CCBJ	Zinc-67	-0.0090	0.94	6.00	ug/L	
SLE0043-IBLE	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLE0043-IBLE	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0043-IBLE	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLE0043-IBLE	Copper-63	0.00800	0.173	0.500	ug/L	
SLE0043-IBLE	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0043-IBLE	Zinc-66	-0.0110	2.92	6.00	ug/L	
SLE0043-IBLE	Zinc-67	0.00	0.94	6.00	ug/L	
SLE0043-CCBK	Arsenic-75a	0.0130	0.0373	0.200	ug/L	
SLE0043-CCBK	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLE0043-CCBK	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0043-CCBK	Copper-63	0.0170	0.173	0.500	ug/L	
SLE0043-CCBK	Copper-65	0.0120	0.35	0.500	ug/L	
SLE0043-CCBK	Zinc-66	-0.0060	2.92	6.00	ug/L	
SLE0043-CCBK	Zinc-67	-0.0290	0.94	6.00	ug/L	

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0017	Instrument:	ICPMS1
		Calibration:	GE00007

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLE0017-CAL1	XDT_m1230501-013	NA	05/01/23 15:09
CAL 1 - LOW CHECK	SLE0017-CAL2	XDT_m1230501-014	NA	05/01/23 15:14
CAL 2	SLE0017-CAL3	XDT_m1230501-015	NA	05/01/23 15:19
CAL 3	SLE0017-CAL4	XDT_m1230501-016	NA	05/01/23 15:24
CAL 4	SLE0017-CAL5	XDT_m1230501-017	NA	05/01/23 15:29
CAL 5	SLE0017-CAL6	XDT_m1230501-018	NA	05/01/23 15:36
RINSE	SLE0017-IBL1	XDT_m1230501-019	NA	05/01/23 15:43
Initial Cal Check	SLE0017-ICV1	XDT_m1230501-021	NA	05/01/23 15:49
Initial Cal Blank	SLE0017-ICB1	XDT_m1230501-022	NA	05/01/23 15:57
Calibration Check	SLE0017-CCV1	XDT_m1230501-023	NA	05/01/23 16:02
Calibration Blank	SLE0017-CCB1	XDT_m1230501-024	NA	05/01/23 16:09
Instrument RL Check	SLE0017-CRL1	XDT_m1230501-027	NA	05/01/23 16:29
Interference Check A	SLE0017-IFA1	XDT_m1230501-028	NA	05/01/23 16:34
Interference Check B	SLE0017-IFB1	XDT_m1230501-029	NA	05/01/23 16:38
LR200	SLE0017-HCV1	XDT_m1230501-030	NA	05/01/23 16:43
LR300	SLE0017-HCV2	XDT_m1230501-031	NA	05/01/23 16:48
Instrument Blank	SLE0017-IBL2	XDT_m1230501-032	NA	05/01/23 16:55
Calibration Check	SLE0017-CCV2	XDT_m1230501-033	NA	05/01/23 17:02
Calibration Blank	SLE0017-CCB2	XDT_m1230501-034	NA	05/01/23 17:09
Instrument Blank	SLE0017-IBL3	XDT_m1230501-044	NA	05/01/23 18:00
Calibration Check	SLE0017-CCV3	XDT_m1230501-045	NA	05/01/23 18:05
Calibration Blank	SLE0017-CCB3	XDT_m1230501-046	NA	05/01/23 18:12
Instrument Blank	SLE0017-IBL4	XDT_m1230501-056	NA	05/01/23 19:03
Calibration Check	SLE0017-CCV4	XDT_m1230501-057	NA	05/01/23 19:08
Calibration Blank	SLE0017-CCB4	XDT_m1230501-058	NA	05/01/23 19:15
ZZZZZ	23D0525-11	XDT_m1230501_PRE-067	Water	05/01/23 20:04
Instrument Blank	SLE0017-IBL5	XDT_m1230501-068	NA	05/01/23 20:09
Calibration Check	SLE0017-CCV5	XDT_m1230501-069	NA	05/01/23 20:13
Calibration Blank	SLE0017-CCB5	XDT_m1230501-070	NA	05/01/23 20:21

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0017

SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00007

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Check	SLE0017-CCV6	XDT_m1230501-073	NA	05/01/23 20:42
Calibration Blank	SLE0017-CCB6	XDT_m1230501-074	NA	05/01/23 20:49
Instrument Blank	SLE0017-IBL6	XDT_m1230501-078	NA	05/01/23 21:14
Instrument Blank	SLE0017-IBL7	XDT_m1230501-084	NA	05/01/23 21:44
Calibration Check	SLE0017-CCV7	XDT_m1230501-085	NA	05/01/23 21:49
Calibration Blank	SLE0017-CCB7	XDT_m1230501-086	NA	05/01/23 21:56
Instrument Blank	SLE0017-IBL8	XDT_m1230501-096	NA	05/01/23 22:43
Calibration Check	SLE0017-CCV8	XDT_m1230501-097	NA	05/01/23 22:48
Calibration Blank	SLE0017-CCB8	XDT_m1230501-098	NA	05/01/23 22:55
Instrument Blank	SLE0017-IBL9	XDT_m1230501-108	NA	05/01/23 23:42
Calibration Check	SLE0017-CCV9	XDT_m1230501-109	NA	05/01/23 23:47
Calibration Blank	SLE0017-CCB9	XDT_m1230501-110	NA	05/01/23 23:54
Instrument Blank	SLE0017-IBLA	XDT_m1230501-120	NA	05/02/23 00:44
Calibration Check	SLE0017-CCVA	XDT_m1230501-121	NA	05/02/23 00:49
Calibration Blank	SLE0017-CCBA	XDT_m1230501-122	NA	05/02/23 00:56
Calibration Check	SLE0017-CCVB	XDT_m1230501-124	NA	05/02/23 01:05
Calibration Blank	SLE0017-CCBB	XDT_m1230501-125	NA	05/02/23 01:12
Instrument Blank	SLE0017-IBLB	XDT_m1230501-135	NA	05/02/23 02:03
Calibration Check	SLE0017-CCVC	XDT_m1230501-136	NA	05/02/23 02:07
Calibration Blank	SLE0017-CCBC	XDT_m1230501-137	NA	05/02/23 02:15
Instrument Blank	SLE0017-IBLC	XDT_m1230501-147	NA	05/02/23 03:05
Calibration Check	SLE0017-CCVD	XDT_m1230501-148	NA	05/02/23 03:10
Calibration Blank	SLE0017-CCBD	XDT_m1230501-149	NA	05/02/23 03:17
Blank	BLD0396-BLK1	XDT_m1230501-150	Solid	05/02/23 03:21
LCS	BLD0396-BS1	XDT_m1230501-151	Solid	05/02/23 03:26
Instrument Blank	SLE0017-IBLD	XDT_m1230501-159	NA	05/02/23 04:04
Calibration Check	SLE0017-CCVE	XDT_m1230501-160	NA	05/02/23 04:08
Calibration Blank	SLE0017-CCBE	XDT_m1230501-161	NA	05/02/23 04:16
ZZZZZ	BLD0452-BLK1	XDT_m1230501-162	Solid	05/02/23 04:20

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0017
SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00007

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	BLD0452-BS1	XDT_m1230501-163	Solid	05/02/23 04:25
Instrument Blank	SLE0017-IBLE	XDT_m1230501-167	NA	05/02/23 04:45
Instrument Blank	SLE0017-IBLF	XDT_m1230501-171	NA	05/02/23 05:04
Calibration Check	SLE0017-CCVF	XDT_m1230501-172	NA	05/02/23 05:08
Calibration Blank	SLE0017-CCBF	XDT_m1230501-173	NA	05/02/23 05:16
Calibration Check	SLE0017-CCVG	XDT_m1230501-175	NA	05/02/23 05:25
Calibration Blank	SLE0017-CCBG	XDT_m1230501-176	NA	05/02/23 05:32
ZZZZZ	BLD0504-BLK1	XDT_m1230501-177	Solid	05/02/23 05:36
ZZZZZ	BLD0504-BS1	XDT_m1230501-178	Solid	05/02/23 05:41
Instrument Blank	SLE0017-IBLG	XDT_m1230501-182	NA	05/02/23 06:01
Instrument Blank	SLE0017-IBLH	XDT_m1230501-186	NA	05/02/23 06:20
Calibration Check	SLE0017-CCVH	XDT_m1230501-187	NA	05/02/23 06:24
Calibration Blank	SLE0017-CCBH	XDT_m1230501-188	NA	05/02/23 06:32
Instrument Blank	SLE0017-IBLI	XDT_m1230501-192	NA	05/02/23 06:50
ZZZZZ	23A0417-01	XDT_m1230501-193	Solid	05/02/23 06:55
ZZZZZ	23A0417-01	XDT_m1230501-193	Solid	05/02/23 06:55
ZZZZZ	23A0417-01	XDT_m1230501-193	Solid	05/02/23 06:55
ZZZZZ	23A0417-01	XDT_m1230501-193	Solid	05/02/23 06:55
Instrument Blank	SLE0017-IBLJ	XDT_m1230501-198	NA	05/02/23 07:18
Calibration Check	SLE0017-CCVI	XDT_m1230501-199	NA	05/02/23 07:22
Calibration Blank	SLE0017-CCBI	XDT_m1230501-200	NA	05/02/23 07:29
Instrument Blank	SLE0017-IBLK	XDT_m1230501-204	NA	05/02/23 07:48
ZZZZZ	23A0419-01	XDT_m1230501-205	Solid	05/02/23 07:53
ZZZZZ	23A0419-01	XDT_m1230501-205	Solid	05/02/23 07:53
ZZZZZ	23A0419-01	XDT_m1230501-205	Solid	05/02/23 07:53
ZZZZZ	BLD0452-DUP1	XDT_m1230501-206	Solid	05/02/23 07:57
ZZZZZ	BLD0452-MS1	XDT_m1230501-207	Solid	05/02/23 08:02
ZZZZZ	BLD0452-MSD1	XDT_m1230501-208	Solid	05/02/23 08:06
ZZZZZ	BLD0452-PS1	XDT_m1230501-209	Solid	05/02/23 08:11

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0017
Instrument: ICPMS1
Calibration: GE00007

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLE0017-IBLL	XDT_m1230501-210	NA	05/02/23 08:15
Calibration Check	SLE0017-CCVJ	XDT_m1230501-211	NA	05/02/23 08:20
Calibration Blank	SLE0017-CCBJ	XDT_m1230501-212	NA	05/02/23 08:27
Instrument Blank	SLE0017-IBLM	XDT_m1230501-216	NA	05/02/23 08:46
ZZZZZ	23A0455-01	XDT_m1230501-217	Solid	05/02/23 08:50
ZZZZZ	23A0455-01	XDT_m1230501-217	Solid	05/02/23 08:50
ZZZZZ	23A0455-01	XDT_m1230501-217	Solid	05/02/23 08:50
ZZZZZ	23A0455-01	XDT_m1230501-217	Solid	05/02/23 08:50
ZZZZZ	BLD0504-DUP1	XDT_m1230501-218	Solid	05/02/23 08:55
ZZZZZ	BLD0504-MS1	XDT_m1230501-219	Solid	05/02/23 08:59
ZZZZZ	BLD0504-MSD1	XDT_m1230501-220	Solid	05/02/23 09:04
Instrument Blank	SLE0017-IBLN	XDT_m1230501-222	NA	05/02/23 09:13
Calibration Check	SLE0017-CCVK	XDT_m1230501-223	NA	05/02/23 09:18
Calibration Blank	SLE0017-CCBK	XDT_m1230501-224	NA	05/02/23 09:25
Instrument Blank	SLE0017-IBLO	XDT_m1230501-234	NA	05/02/23 10:11
Calibration Check	SLE0017-CCVL	XDT_m1230501-235	NA	05/02/23 10:15
Calibration Blank	SLE0017-CCBL	XDT_m1230501-236	NA	05/02/23 10:22

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0043
Instrument: ICPMS1
Calibration: GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLE0043-CAL1	XDT_m1230502-013	NA	05/02/23 13:47
CAL 1 - LOW CHECK	SLE0043-CAL2	XDT_m1230502-014	NA	05/02/23 13:52
CAL 2	SLE0043-CAL3	XDT_m1230502-015	NA	05/02/23 13:56
CAL 3	SLE0043-CAL4	XDT_m1230502-016	NA	05/02/23 14:01
CAL 4	SLE0043-CAL5	XDT_m1230502-017	NA	05/02/23 14:06
CAL 5	SLE0043-CAL6	XDT_m1230502-018	NA	05/02/23 14:12
RINSE	SLE0043-IBL1	XDT_m1230502-019	NA	05/02/23 14:19
Initial Cal Check	SLE0043-ICV1	XDT_m1230502-021	NA	05/02/23 14:30
Initial Cal Blank	SLE0043-ICB1	XDT_m1230502-022	NA	05/02/23 14:37
Calibration Check	SLE0043-CCV1	XDT_m1230502-023	NA	05/02/23 14:42
Calibration Blank	SLE0043-CCB1	XDT_m1230502-024	NA	05/02/23 14:49
Instrument RL Check	SLE0043-CRL1	XDT_m1230502-026	NA	05/02/23 15:04
Interference Check A	SLE0043-IFA1	XDT_m1230502-027	NA	05/02/23 15:08
Interference Check B	SLE0043-IFB1	XDT_m1230502-028	NA	05/02/23 15:13
LR200	SLE0043-HCV1	XDT_m1230502-029	NA	05/02/23 15:18
LR300	SLE0043-HCV2	XDT_m1230502-030	NA	05/02/23 15:22
Instrument Blank	SLE0043-IBL2	XDT_m1230502-031	NA	05/02/23 15:31
Instrument Blank	SLE0043-IBL3	XDT_m1230502-032	NA	05/02/23 15:37
Calibration Check	SLE0043-CCV2	XDT_m1230502-034	NA	05/02/23 15:50
Calibration Blank	SLE0043-CCB2	XDT_m1230502-035	NA	05/02/23 15:57
ZZZZZ	BLE0054-BLK1	XDT_m1230502-038	Water	05/02/23 16:12
ZZZZZ	BLE0054-BS1	XDT_m1230502-040	Water	05/02/23 16:23
Instrument Blank	SLE0043-IBL4	XDT_m1230502-044	NA	05/02/23 16:49
Calibration Check	SLE0043-CCV3	XDT_m1230502-045	NA	05/02/23 16:54
Calibration Blank	SLE0043-CCB3	XDT_m1230502-046	NA	05/02/23 17:01
Calibration Check	SLE0043-CCV4	XDT_m1230502-048	NA	05/02/23 17:11
Calibration Blank	SLE0043-CCB4	XDT_m1230502-049	NA	05/02/23 17:18
ZZZZZ	23A0417-02	XDT_m1230502-050	Solid	05/02/23 17:24
ZZZZZ	23A0417-02	XDT_m1230502-050	Solid	05/02/23 17:24

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0043
SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0417-02	XDT_m1230502-050	Solid	05/02/23 17:24
ZZZZZ	23A0417-02	XDT_m1230502-050	Solid	05/02/23 17:24
ZZZZZ	23A0417-03	XDT_m1230502-051	Solid	05/02/23 17:28
ZZZZZ	23A0417-03	XDT_m1230502-051	Solid	05/02/23 17:28
ZZZZZ	23A0417-03	XDT_m1230502-051	Solid	05/02/23 17:28
ZZZZZ	23A0417-03	XDT_m1230502-051	Solid	05/02/23 17:28
ZZZZZ	23A0417-04	XDT_m1230502-052	Solid	05/02/23 17:32
ZZZZZ	23A0417-04	XDT_m1230502-052	Solid	05/02/23 17:32
ZZZZZ	23A0417-04	XDT_m1230502-052	Solid	05/02/23 17:32
ZZZZZ	23A0417-04	XDT_m1230502-052	Solid	05/02/23 17:32
ZZZZZ	23A0417-05	XDT_m1230502-053	Solid	05/02/23 17:37
ZZZZZ	23A0417-05	XDT_m1230502-053	Solid	05/02/23 17:37
ZZZZZ	23A0417-05	XDT_m1230502-053	Solid	05/02/23 17:37
ZZZZZ	23A0417-05	XDT_m1230502-053	Solid	05/02/23 17:37
ZZZZZ	23A0417-06	XDT_m1230502-054	Solid	05/02/23 17:41
ZZZZZ	23A0417-06	XDT_m1230502-054	Solid	05/02/23 17:41
ZZZZZ	23A0417-06	XDT_m1230502-054	Solid	05/02/23 17:41
ZZZZZ	23A0417-06	XDT_m1230502-054	Solid	05/02/23 17:41
ZZZZZ	23A0417-07	XDT_m1230502-055	Solid	05/02/23 17:46
ZZZZZ	23A0417-07	XDT_m1230502-055	Solid	05/02/23 17:46
ZZZZZ	23A0417-07	XDT_m1230502-055	Solid	05/02/23 17:46
ZZZZZ	23A0417-07	XDT_m1230502-055	Solid	05/02/23 17:46
ZZZZZ	23A0417-08	XDT_m1230502-056	Solid	05/02/23 17:50
ZZZZZ	23A0417-08	XDT_m1230502-056	Solid	05/02/23 17:50
ZZZZZ	23A0417-08	XDT_m1230502-056	Solid	05/02/23 17:50
ZZZZZ	23A0417-09	XDT_m1230502-057	Solid	05/02/23 17:55
ZZZZZ	23A0417-09	XDT_m1230502-057	Solid	05/02/23 17:55
ZZZZZ	23A0417-09	XDT_m1230502-057	Solid	05/02/23 17:55
ZZZZZ	23A0417-09	XDT_m1230502-057	Solid	05/02/23 17:55

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0043
SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0417-10	XDT_m1230502-058	Solid	05/02/23 17:59
ZZZZZ	23A0417-10	XDT_m1230502-058	Solid	05/02/23 17:59
ZZZZZ	23A0417-10	XDT_m1230502-058	Solid	05/02/23 17:59
ZZZZZ	23A0417-10	XDT_m1230502-058	Solid	05/02/23 17:59
ZZZZZ	23A0417-11	XDT_m1230502-059	Solid	05/02/23 18:03
ZZZZZ	23A0417-11	XDT_m1230502-059	Solid	05/02/23 18:03
ZZZZZ	23A0417-11	XDT_m1230502-059	Solid	05/02/23 18:03
ZZZZZ	23A0417-11	XDT_m1230502-059	Solid	05/02/23 18:03
Calibration Check	SLE0043-CCV5	XDT_m1230502-060	NA	05/02/23 18:09
Calibration Blank	SLE0043-CCB5	XDT_m1230502-061	NA	05/02/23 18:16
ZZZZZ	23A0417-12	XDT_m1230502-062	Solid	05/02/23 18:24
ZZZZZ	23A0417-12	XDT_m1230502-062	Solid	05/02/23 18:24
ZZZZZ	23A0417-12	XDT_m1230502-062	Solid	05/02/23 18:24
ZZZZZ	23A0417-12	XDT_m1230502-062	Solid	05/02/23 18:24
ZZZZZ	23A0417-13	XDT_m1230502-063	Solid	05/02/23 18:28
ZZZZZ	23A0417-13	XDT_m1230502-063	Solid	05/02/23 18:28
ZZZZZ	23A0417-13	XDT_m1230502-063	Solid	05/02/23 18:28
ZZZZZ	23A0417-13	XDT_m1230502-063	Solid	05/02/23 18:28
ZZZZZ	23A0417-14	XDT_m1230502-064	Solid	05/02/23 18:33
ZZZZZ	23A0417-14	XDT_m1230502-064	Solid	05/02/23 18:33
ZZZZZ	23A0417-14	XDT_m1230502-064	Solid	05/02/23 18:33
ZZZZZ	23A0417-14	XDT_m1230502-064	Solid	05/02/23 18:33
ZZZZZ	23A0417-15	XDT_m1230502-065	Solid	05/02/23 18:37
ZZZZZ	23A0417-15	XDT_m1230502-065	Solid	05/02/23 18:37
ZZZZZ	23A0417-15	XDT_m1230502-065	Solid	05/02/23 18:37
ZZZZZ	23A0417-15	XDT_m1230502-065	Solid	05/02/23 18:37
LDW23-SC1045	23A0420-01	XDT_m1230502-066	Solid	05/02/23 18:42
LDW23-SC1045	23A0420-01	XDT_m1230502-066	Solid	05/02/23 18:42
LDW23-SC1045	23A0420-01	XDT_m1230502-066	Solid	05/02/23 18:42

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0043
Instrument: ICPMS1
Calibration: GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LDW23-SC1045	23A0420-01	XDT_m1230502-066	Solid	05/02/23 18:42
LDW23-SC1003	23A0420-07	XDT_m1230502-067	Solid	05/02/23 18:46
LDW23-SC1003	23A0420-07	XDT_m1230502-067	Solid	05/02/23 18:46
LDW23-SC1003	23A0420-07	XDT_m1230502-067	Solid	05/02/23 18:46
LDW23-SC1003	23A0420-07	XDT_m1230502-067	Solid	05/02/23 18:46
LDW23-SC1004	23A0420-08	XDT_m1230502-068	Solid	05/02/23 18:50
LDW23-SC1004	23A0420-08	XDT_m1230502-068	Solid	05/02/23 18:50
LDW23-SC1004	23A0420-08	XDT_m1230502-068	Solid	05/02/23 18:50
LDW23-SC1004	23A0420-08	XDT_m1230502-068	Solid	05/02/23 18:50
LDW23-SC1082	23A0420-09	XDT_m1230502-069	Solid	05/02/23 18:55
LDW23-SC1082	23A0420-09	XDT_m1230502-069	Solid	05/02/23 18:55
LDW23-SC1082	23A0420-09	XDT_m1230502-069	Solid	05/02/23 18:55
LDW23-SC1082	23A0420-09	XDT_m1230502-069	Solid	05/02/23 18:55
ZZZZZ	23A0419-02	XDT_m1230502-070	Solid	05/02/23 18:59
ZZZZZ	23A0419-02	XDT_m1230502-070	Solid	05/02/23 18:59
ZZZZZ	23A0419-02	XDT_m1230502-070	Solid	05/02/23 18:59
ZZZZZ	23A0419-02	XDT_m1230502-070	Solid	05/02/23 18:59
ZZZZZ	23A0419-03	XDT_m1230502-071	Solid	05/02/23 19:04
ZZZZZ	23A0419-03	XDT_m1230502-071	Solid	05/02/23 19:04
ZZZZZ	23A0419-03	XDT_m1230502-071	Solid	05/02/23 19:04
ZZZZZ	23A0419-03	XDT_m1230502-071	Solid	05/02/23 19:04
Calibration Check	SLE0043-CCV6	XDT_m1230502-072	NA	05/02/23 19:09
Calibration Blank	SLE0043-CCB6	XDT_m1230502-073	NA	05/02/23 19:16
ZZZZZ	23A0419-01	XDT_m1230502-074	Solid	05/02/23 19:21
ZZZZZ	BLD0452-DUP2	XDT_m1230502-075	Solid	05/02/23 19:25
ZZZZZ	BLD0452-MS2	XDT_m1230502-076	Solid	05/02/23 19:30
ZZZZZ	BLD0452-MSD2	XDT_m1230502-077	Solid	05/02/23 19:34
LDW23-IT1051	23A0420-04	XDT_m1230502-079	Solid	05/02/23 19:43
ZZZZZ	23A0419-04	XDT_m1230502-080	Solid	05/02/23 19:47

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0043
SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0419-04	XDT_m1230502-080	Solid	05/02/23 19:47
ZZZZZ	23A0419-04	XDT_m1230502-080	Solid	05/02/23 19:47
ZZZZZ	23A0419-04	XDT_m1230502-080	Solid	05/02/23 19:47
ZZZZZ	23A0419-05	XDT_m1230502-081	Solid	05/02/23 19:52
ZZZZZ	23A0419-05	XDT_m1230502-081	Solid	05/02/23 19:52
ZZZZZ	23A0419-05	XDT_m1230502-081	Solid	05/02/23 19:52
ZZZZZ	23A0419-05	XDT_m1230502-081	Solid	05/02/23 19:52
ZZZZZ	23A0419-06	XDT_m1230502-082	Solid	05/02/23 19:56
ZZZZZ	23A0419-06	XDT_m1230502-082	Solid	05/02/23 19:56
ZZZZZ	23A0419-06	XDT_m1230502-082	Solid	05/02/23 19:56
ZZZZZ	23A0419-06	XDT_m1230502-082	Solid	05/02/23 19:56
ZZZZZ	23A0419-07	XDT_m1230502-083	Solid	05/02/23 20:00
ZZZZZ	23A0419-07	XDT_m1230502-083	Solid	05/02/23 20:00
ZZZZZ	23A0419-07	XDT_m1230502-083	Solid	05/02/23 20:00
ZZZZZ	23A0419-07	XDT_m1230502-083	Solid	05/02/23 20:00
Calibration Check	SLE0043-CCV7	XDT_m1230502-084	NA	05/02/23 20:06
Calibration Blank	SLE0043-CCB7	XDT_m1230502-085	NA	05/02/23 20:13
ZZZZZ	23A0419-08	XDT_m1230502-086	Solid	05/02/23 20:18
ZZZZZ	23A0419-08	XDT_m1230502-086	Solid	05/02/23 20:18
ZZZZZ	23A0419-08	XDT_m1230502-086	Solid	05/02/23 20:18
ZZZZZ	23A0419-08	XDT_m1230502-086	Solid	05/02/23 20:18
ZZZZZ	23A0419-09	XDT_m1230502-087	Solid	05/02/23 20:22
ZZZZZ	23A0419-09	XDT_m1230502-087	Solid	05/02/23 20:22
ZZZZZ	23A0419-09	XDT_m1230502-087	Solid	05/02/23 20:22
ZZZZZ	23A0419-09	XDT_m1230502-087	Solid	05/02/23 20:22
ZZZZZ	23A0419-10	XDT_m1230502-088	Solid	05/02/23 20:26
ZZZZZ	23A0419-10	XDT_m1230502-088	Solid	05/02/23 20:26
ZZZZZ	23A0419-10	XDT_m1230502-088	Solid	05/02/23 20:26
ZZZZZ	23A0419-10	XDT_m1230502-088	Solid	05/02/23 20:26

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0043
Instrument: ICPMS1
Calibration: GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0419-11	XDT_m1230502-089	Solid	05/02/23 20:31
ZZZZZ	23A0419-11	XDT_m1230502-089	Solid	05/02/23 20:31
ZZZZZ	23A0419-11	XDT_m1230502-089	Solid	05/02/23 20:31
ZZZZZ	23A0419-11	XDT_m1230502-089	Solid	05/02/23 20:31
ZZZZZ	23A0419-12	XDT_m1230502-090	Solid	05/02/23 20:35
ZZZZZ	23A0419-12	XDT_m1230502-090	Solid	05/02/23 20:35
ZZZZZ	23A0419-12	XDT_m1230502-090	Solid	05/02/23 20:35
ZZZZZ	23A0419-12	XDT_m1230502-090	Solid	05/02/23 20:35
ZZZZZ	23C0752-01	XDT_m1230502-091	Solid	05/02/23 20:40
ZZZZZ	23C0752-01	XDT_m1230502-091	Solid	05/02/23 20:40
ZZZZZ	23C0752-01	XDT_m1230502-091	Solid	05/02/23 20:40
ZZZZZ	23C0752-01	XDT_m1230502-091	Solid	05/02/23 20:40
ZZZZZ	23C0752-02	XDT_m1230502-092	Solid	05/02/23 20:44
ZZZZZ	23C0752-02	XDT_m1230502-092	Solid	05/02/23 20:44
ZZZZZ	23C0752-02	XDT_m1230502-092	Solid	05/02/23 20:44
ZZZZZ	23C0752-02	XDT_m1230502-092	Solid	05/02/23 20:44
ZZZZZ	23C0752-03	XDT_m1230502-093	Solid	05/02/23 20:49
ZZZZZ	23C0752-03	XDT_m1230502-093	Solid	05/02/23 20:49
ZZZZZ	23C0752-03	XDT_m1230502-093	Solid	05/02/23 20:49
ZZZZZ	23C0752-03	XDT_m1230502-093	Solid	05/02/23 20:49
ZZZZZ	23C0752-04	XDT_m1230502-094	Solid	05/02/23 20:53
ZZZZZ	23C0752-04	XDT_m1230502-094	Solid	05/02/23 20:53
ZZZZZ	23C0752-04	XDT_m1230502-094	Solid	05/02/23 20:53
ZZZZZ	23C0752-04	XDT_m1230502-094	Solid	05/02/23 20:53
ZZZZZ	23C0752-06	XDT_m1230502-095	Solid	05/02/23 20:58
ZZZZZ	23C0752-06	XDT_m1230502-095	Solid	05/02/23 20:58
ZZZZZ	23C0752-06	XDT_m1230502-095	Solid	05/02/23 20:58
ZZZZZ	23C0752-06	XDT_m1230502-095	Solid	05/02/23 20:58
Calibration Check	SLE0043-CCV8	XDT_m1230502-096	NA	05/02/23 21:03

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0043
Instrument: ICPMS1
Calibration: GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLE0043-CCB8	XDT_m1230502-097	NA	05/02/23 21:10
ZZZZZ	23A0455-02	XDT_m1230502-098	Solid	05/02/23 21:15
ZZZZZ	23A0455-03	XDT_m1230502-099	Solid	05/02/23 21:19
ZZZZZ	23A0455-04	XDT_m1230502-100	Solid	05/02/23 21:24
ZZZZZ	23A0455-05	XDT_m1230502-101	Solid	05/02/23 21:28
ZZZZZ	23A0455-06	XDT_m1230502-102	Solid	05/02/23 21:32
ZZZZZ	23A0455-07	XDT_m1230502-103	Solid	05/02/23 21:37
ZZZZZ	23A0455-08	XDT_m1230502-104	Solid	05/02/23 21:41
ZZZZZ	23A0455-10	XDT_m1230502-106	Solid	05/02/23 21:50
ZZZZZ	23A0455-11	XDT_m1230502-107	Solid	05/02/23 21:55
Calibration Check	SLE0043-CCV9	XDT_m1230502-108	NA	05/02/23 22:00
Calibration Blank	SLE0043-CCB9	XDT_m1230502-109	NA	05/02/23 22:07
Calibration Check	SLE0043-CCVA	XDT_m1230502-111	NA	05/02/23 22:16
Calibration Blank	SLE0043-CCBA	XDT_m1230502-112	NA	05/02/23 22:23
ZZZZZ	23A0455-12	XDT_m1230502-113	Solid	05/02/23 22:28
ZZZZZ	23A0455-12	XDT_m1230502-113	Solid	05/02/23 22:28
ZZZZZ	23A0455-12	XDT_m1230502-113	Solid	05/02/23 22:28
ZZZZZ	23A0455-12	XDT_m1230502-113	Solid	05/02/23 22:28
ZZZZZ	23A0455-13	XDT_m1230502-114	Solid	05/02/23 22:32
ZZZZZ	23A0455-13	XDT_m1230502-114	Solid	05/02/23 22:32
ZZZZZ	23A0455-13	XDT_m1230502-114	Solid	05/02/23 22:32
ZZZZZ	23A0455-13	XDT_m1230502-114	Solid	05/02/23 22:32
ZZZZZ	23A0455-14	XDT_m1230502-115	Solid	05/02/23 22:37
ZZZZZ	23A0455-14	XDT_m1230502-115	Solid	05/02/23 22:37
ZZZZZ	23A0455-14	XDT_m1230502-115	Solid	05/02/23 22:37
ZZZZZ	23A0455-14	XDT_m1230502-115	Solid	05/02/23 22:37
ZZZZZ	23A0455-15	XDT_m1230502-116	Solid	05/02/23 22:41
ZZZZZ	23A0455-16	XDT_m1230502-117	Solid	05/02/23 22:45
ZZZZZ	23A0455-16	XDT_m1230502-117	Solid	05/02/23 22:45

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0043
SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0455-16	XDT_m1230502-117	Solid	05/02/23 22:45
ZZZZZ	23A0455-16	XDT_m1230502-117	Solid	05/02/23 22:45
ZZZZZ	23A0455-17	XDT_m1230502-118	Solid	05/02/23 22:50
ZZZZZ	23A0455-17	XDT_m1230502-118	Solid	05/02/23 22:50
ZZZZZ	23A0455-17	XDT_m1230502-118	Solid	05/02/23 22:50
ZZZZZ	23A0455-17	XDT_m1230502-118	Solid	05/02/23 22:50
ZZZZZ	23A0455-18	XDT_m1230502-119	Solid	05/02/23 22:54
ZZZZZ	23A0455-18	XDT_m1230502-119	Solid	05/02/23 22:54
ZZZZZ	23A0455-18	XDT_m1230502-119	Solid	05/02/23 22:54
ZZZZZ	23A0455-18	XDT_m1230502-119	Solid	05/02/23 22:54
Instrument Blank	SLE0043-IBL5	XDT_m1230502-122	NA	05/02/23 23:07
Calibration Check	SLE0043-CCVB	XDT_m1230502-123	NA	05/02/23 23:12
Calibration Blank	SLE0043-CCBB	XDT_m1230502-124	NA	05/02/23 23:19
Instrument Blank	SLE0043-IBL6	XDT_m1230502-129	NA	05/02/23 23:43
Instrument Blank	SLE0043-IBL7	XDT_m1230502-134	NA	05/03/23 00:07
Calibration Check	SLE0043-CCVC	XDT_m1230502-135	NA	05/03/23 00:11
Calibration Blank	SLE0043-CCBC	XDT_m1230502-136	NA	05/03/23 00:18
ZZZZZ	23D0442-02	XDT_m1230502-142	Water	05/03/23 00:46
ZZZZZ	BLE0054-DUP1	XDT_m1230502-143	Water	05/03/23 00:50
ZZZZZ	BLE0054-MS1	XDT_m1230502-144	Water	05/03/23 00:55
ZZZZZ	BLE0054-MSD1	XDT_m1230502-145	Water	05/03/23 01:01
Instrument Blank	SLE0043-IBL8	XDT_m1230502-146	NA	05/03/23 01:06
Calibration Check	SLE0043-CCVD	XDT_m1230502-147	NA	05/03/23 01:10
Calibration Blank	SLE0043-CCBD	XDT_m1230502-148	NA	05/03/23 01:17
Instrument Blank	SLE0043-IBL9	XDT_m1230502-158	NA	05/03/23 01:56
Calibration Check	SLE0043-CCVE	XDT_m1230502-159	NA	05/03/23 02:00
Calibration Blank	SLE0043-CCBE	XDT_m1230502-160	NA	05/03/23 02:06
Calibration Check	SLE0043-CCVF	XDT_m1230502-162	NA	05/03/23 02:14
Calibration Blank	SLE0043-CCBF	XDT_m1230502-163	NA	05/03/23 02:20

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0043

SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00013

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLE0043-IBLA	XDT_m1230502-173	NA	05/03/23 02:56
Calibration Check	SLE0043-CCVG	XDT_m1230502-174	NA	05/03/23 03:00
Calibration Blank	SLE0043-CCBG	XDT_m1230502-175	NA	05/03/23 03:06
Instrument Blank	SLE0043-IBLB	XDT_m1230502-185	NA	05/03/23 03:43
Calibration Check	SLE0043-CCVH	XDT_m1230502-186	NA	05/03/23 03:47
Calibration Blank	SLE0043-CCBH	XDT_m1230502-187	NA	05/03/23 03:53
Instrument Blank	SLE0043-IBLC	XDT_m1230502-197	NA	05/03/23 04:29
Calibration Check	SLE0043-CCVI	XDT_m1230502-198	NA	05/03/23 04:33
Calibration Blank	SLE0043-CCBI	XDT_m1230502-199	NA	05/03/23 04:39
Instrument Blank	SLE0043-IBLD	XDT_m1230502-209	NA	05/03/23 05:16
Calibration Check	SLE0043-CCVJ	XDT_m1230502-210	NA	05/03/23 05:21
Calibration Blank	SLE0043-CCBJ	XDT_m1230502-211	NA	05/03/23 05:27
Instrument Blank	SLE0043-IBLE	XDT_m1230502-221	NA	05/03/23 06:04
Calibration Check	SLE0043-CCVK	XDT_m1230502-222	NA	05/03/23 06:08
Calibration Blank	SLE0043-CCBK	XDT_m1230502-223	NA	05/03/23 06:12

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00007
Sequence: SLE0017
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0017-IFA1	Arsenic-75a	0	0.0280		ug/L
	Cadmium-111	0	0.0770		ug/L
	Cadmium-114	0	0.0680		ug/L
	Copper-63	0	0.0280		ug/L
	Copper-65	0	0.0360		ug/L
	Zinc-66	0	0.3360		ug/L
	Zinc-67	0	0.3840		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00007
Sequence: SLE0017
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0017-IFB1	Arsenic-75a	20.000	19.287	96.4	ug/L
	Cadmium-111	20.000	19.912	99.6	ug/L
	Cadmium-114	20.000	19.692	98.5	ug/L
	Copper-63	20.000	20.681	103	ug/L
	Copper-65	20.000	20.452	102	ug/L
	Zinc-66	20.000	19.307	96.5	ug/L
	Zinc-67	20.000	17.401	87.0	ug/L

* Indicates %R outside of QC limits
NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00013
Sequence: SLE0043
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0043-IFA1	Arsenic-75a	0	0.0370		ug/L
	Cadmium-111	0	0.0960		ug/L
	Cadmium-114	0	0.0580		ug/L
	Copper-63	0	0.0500		ug/L
	Copper-65	0	0.0530		ug/L
	Zinc-66	0	0.4970		ug/L
	Zinc-67	0	0.5520		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00013
Sequence: SLE0043
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0043-IFB1	Arsenic-75a	20.000	19.382	96.9	ug/L
	Cadmium-111	20.000	19.617	98.1	ug/L
	Cadmium-114	20.000	19.821	99.1	ug/L
	Copper-63	20.000	20.099	100	ug/L
	Copper-65	20.000	20.164	101	ug/L
	Zinc-66	20.000	18.958	94.8	ug/L
	Zinc-67	20.000	18.252	91.3	ug/L

* Indicates %R outside of QC limits
NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

DETECTION LEVEL STANDARD
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00007
Sequence: SLE0017
Lab Sample ID: SLE0017-CRL1

Analyte	True	Found	%R	Units	QC Limts
Arsenic-75a	0.20000	0.190	95.0	ug/L	50 - 150
Cadmium-111	0.10000	0.0890	89.0	ug/L	50 - 150
Cadmium-114	0.10000	0.0930	93.0	ug/L	50 - 150
Copper-63	0.50000	0.495	99.0	ug/L	50 - 150
Copper-65	0.50000	0.507	101	ug/L	50 - 150
Zinc-66	6.0000	6.00	100	ug/L	50 - 150
Zinc-67	6.0000	5.19	86.5	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00013
Sequence: SLE0043
Lab Sample ID: SLE0043-CRL1

Analyte	True	Found	%R	Units	QC Limts
Arsenic-75a	0.20000	0.215	108	ug/L	50 - 150
Cadmium-111	0.10000	0.116	116	ug/L	50 - 150
Cadmium-114	0.10000	0.106	106	ug/L	50 - 150
Copper-63	0.50000	0.556	111	ug/L	50 - 150
Copper-65	0.50000	0.557	111	ug/L	50 - 150
Zinc-66	6.0000	6.27	104	ug/L	50 - 150
Zinc-67	6.0000	6.01	100	ug/L	50 - 150

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00007
Laboratory ID: SLE0017-HCV1
Sequence: SLE0017
Standard ID: L004780

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	200.00	195	-2.4	10.00
Cadmium-111	200.00	201	0.7	10.00
Cadmium-114	200.00	200	0.1	10.00
Copper-63	200.00	198	-1.0	10.00
Copper-65	200.00	194	-3.0	10.00
Zinc-66	200.00	198	-1.0	10.00
Zinc-67	200.00	190	-5.1	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00007
Laboratory ID: SLE0017-HCV2
Sequence: SLE0017
Standard ID: L004781

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	300.00	298	-0.5	10.00
Cadmium-111	300.00	303	1.1	10.00
Cadmium-114	300.00	300	-0.09	10.00
Copper-63	300.00	297	-0.9	10.00
Copper-65	300.00	295	-1.5	10.00
Zinc-66	300.00	289	-3.8	10.00
Zinc-67	300.00	285	-4.8	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00013
Laboratory ID: SLE0043-HCV1
Sequence: SLE0043
Standard ID: L004780

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	200.00	202	1.2	10.00
Cadmium-111	200.00	201	0.3	10.00
Cadmium-114	200.00	200	0.1	10.00
Copper-63	200.00	200	0.04	10.00
Copper-65	200.00	200	-0.2	10.00
Zinc-66	200.00	196	-2.2	10.00
Zinc-67	200.00	195	-2.4	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00013
Laboratory ID: SLE0043-HCV2
Sequence: SLE0043
Standard ID: L004781

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	300.00	304	1.2	10.00
Cadmium-111	300.00	293	-2.3	10.00
Cadmium-114	300.00	292	-2.5	10.00
Copper-63	300.00	295	-1.6	10.00
Copper-65	300.00	296	-1.2	10.00
Zinc-66	300.00	286	-4.8	10.00
Zinc-67	300.00	289	-3.8	10.00

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC SDG: 23A0420

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1045 23A0420-01	01/19/23 08:10	01/19/23 15:55	04/18/23 16:53	89	180	05/02/23 18:42	103	180	
LDW23-IT1051 23A0420-04	01/19/23 09:55	01/19/23 15:55	04/18/23 16:53	89	180	05/02/23 19:43	103	180	
LDW23-SC1003 23A0420-07	01/19/23 12:25	01/19/23 15:55	04/18/23 16:53	89	180	05/02/23 18:46	103	180	
LDW23-SC1004 23A0420-08	01/19/23 11:55	01/19/23 15:55	04/18/23 16:53	89	180	05/02/23 18:50	103	180	
LDW23-SC1082 23A0420-09	01/19/23 13:40	01/19/23 15:55	04/18/23 16:53	89	180	05/02/23 18:55	103	180	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ICPMS1

Analyte	MDL	RL	Units
Arsenic-75a	0.04	0.20	mg/kg
Cadmium-111	0.03	0.10	mg/kg
Cadmium-114	0.04	0.10	mg/kg
Copper-63	0.17	0.50	mg/kg
Copper-65	0.35	0.50	mg/kg
Zinc-66	2.9	6.0	mg/kg
Zinc-67	0.9	6.0	mg/kg

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCU10
Lot Number:	P2-CU682108
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Copper
Starting Material:	Cu Metal
Starting Material Lot#:	2095
Starting Material Purity:	99.9996%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10013 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9977 ± 50 µg/mL**
ICP Assay NIST SRM 3114 Lot Number: 121207

Assay Method #2 **10024 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10007 ± 46 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.007542	M	Eu	<	0.000942	O	Na		0.001434	M	Se	<	0.016971	M	Zn	<	0.005657
O	Al	<	0.000609	O	Fe		0.008700	M	Nb	<	0.000942	O	Si		0.003052	M	Zr	<	0.000942
M	As	<	0.010371	M	Ga	<	0.000942	M	Nd	<	0.000942	M	Sm	<	0.000942				
M	Au	<	0.001885	M	Gd	<	0.000942	M	Ni		0.003781	M	Sn	<	0.005657				
O	B		0.003663	M	Ge	<	0.005657	M	Os	<	0.000942	M	Sr	<	0.000942				
M	Ba		0.004253	M	Hf	<	0.000942	O	P	<	0.031668	M	Ta	<	0.000942				
M	Be	<	0.000942	O	Hg	<	0.007064	M	Pb		0.005789	M	Tb	<	0.000942				
M	Bi	<	0.000942	M	Ho	<	0.000942	M	Pd	<	0.000942	M	Te	<	0.004714				
O	Ca		0.002304	M	In	<	0.000942	M	Pr	<	0.000942	M	Th	<	0.000942				
M	Cd	<	0.000942	M	Ir	<	0.000942	M	Pt	<	0.000942	O	Ti	<	0.002801				
M	Ce	<	0.000942	O	K		0.000763	M	Rb	<	0.000942	M	Tl	<	0.000942				
M	Co		0.001890	M	La	<	0.000942	M	Re	<	0.000942	M	Tm	<	0.000942				
M	Cr	<	0.005657	O	Li	<	0.000243	i	Rh	<		M	U	<	0.000942				
M	Cs	<	0.000942	M	Lu	<	0.000942	M	Ru	<	0.039588	M	V	<	0.003771				
s	Cu	<		O	Mg		0.000320	O	S		0.007174	M	W	<	0.005657				
M	Dy	<	0.000942	O	Mn		0.000793	M	Sb	<	0.001885	M	Y	<	0.000942				
M	Er	<	0.000942	M	Mo	<	0.005657	M	Sc	<	0.000942	M	Yb	<	0.000942				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 63.55 +2 6 $Cu(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cu Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 63 amu	10 ppt	n/a	40Ar23Na 47Ti16O, 14N12C37Cl, 16O12C35Cl, 23Na40Ca
ICP-OES 219.958 nm	0.01/.002 µg/mL	1	Th, Ta, Nb, U, Hf
ICP-OES 224.700 nm	0.01/.001 µg/mL	1	Pb, Ir, Ni, W
ICP-OES 324.754 nm	0.06/.001 µg/mL		Nb, U, Th, Mo, Hf

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 24, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 24, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

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Refine your results. Redefine your industry.

Certificate of Analysis

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Christiansburg, VA 24073 USA
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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGPB10
Lot Number:	S2-PB713228
Matrix:	0.5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Lead
Starting Material:	Lead Nitrate
Starting Material Lot#:	2343
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10042 ± 31 µg/mL

Density: 1.015 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10024 ± 41 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

Assay Method #2 **10054 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	M	Na		0.001470	M	Se	<	0.009100	O	Zn	0.006155
O	Al		0.017098	O	Fe		0.002496	M	Nb	<	0.000310	O	Si		0.003761	O	Zr	< 0.001700
M	As	<	0.003100	M	Ga	<	0.000310	M	Nd	<	0.000310	M	Sm	<	0.000310			
M	Au	<	0.000910	M	Gd	<	0.000310	O	Ni		0.001709	M	Sn	<	0.001300			
O	B	<	0.005600	M	Ge	<	0.002200	M	Os	<	0.000310	O	Sr		0.000444			
O	Ba		0.007865	M	Hf	<	0.000310	O	P	<	0.038000	M	Ta	<	0.000310			
O	Be	<	0.000320	M	Hg	<	0.002200	s	Pb	<		M	Tb	<	0.000610			
M	Bi	<	0.028000	M	Ho	<	0.000310	M	Pd	<	0.000610	M	Te	<	0.000310			
O	Ca		0.019834	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.000310			
O	Cd	<	0.000630	M	Ir	<	0.000310	M	Pt	<	0.000910	O	Ti		0.005129			
M	Ce		0.004787	O	K		0.008207	M	Rb	<	0.006700	M	Tl	<	0.016000			
M	Co	<	0.000610	M	La	<	0.001900	M	Re	<	0.000310	M	Tm	<	0.000310			
O	Cr	<	0.001500	O	Li	<	0.000110	O	Rh	<	0.007700	M	U	<	0.000310			
M	Cs	<	0.006100	M	Lu	<	0.000310	M	Ru	<	0.001300	M	V	<	0.001600			
M	Cu	<	0.001600	O	Mg		0.003317	O	S	<	0.052000	M	W	<	0.000910			
M	Dy	<	0.000310	O	Mn	<	0.001600	O	Sb	<	0.015000	M	Y	<	0.000310			
M	Er	<	0.000310	M	Mo	<	0.000610	O	Sc	<	0.000630	M	Yb	<	0.000310			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 $Pb(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, HF and HNO_3. Avoid H_2SO_4. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.

Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H_2O / HNO_3); Oxides (The many different Pb oxides are soluble in HNO_3 with the exception of PbO_2 which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H_2O / HNO_3); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

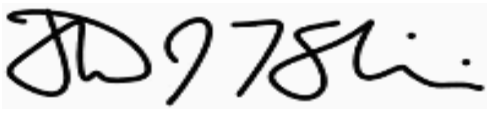
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGZN10
Lot Number:	S2-ZN711249
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Zinc
Starting Material:	Zinc Metal
Starting Material Lot#:	2349
Starting Material Purity:	99.9988%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9981 ± 56 µg/mL**
ICP Assay NIST SRM 3168a Lot Number: 120629

Assay Method #2 **9987 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10002 ± 32 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002000	M	Eu	<	0.000500	O	Na		0.008713	M	Se	<	0.048000	s	Zn	<	
O	Al	<	0.011000	O	Fe		0.015467	M	Nb	<	0.000500	O	Si		0.007842	M	Zr	<	0.000500
O	As	<	0.012000	M	Ga	<	0.004900	M	Nd	<	0.000500	M	Sm	<	0.000500				
M	Au	<	0.006500	M	Gd	<	0.000500	O	Ni		0.003049	M	Sn		0.002614				
O	B	<	0.019000	M	Ge	<	0.009100	M	Os	<	0.000500	M	Sr	<	0.000500				
M	Ba	<	0.000500	M	Hf	<	0.000500	O	P	<	0.059000	M	Ta	<	0.000500				
O	Be	<	0.000230	O	Hg	<	0.003800	M	Pb		0.016774	M	Tb	<	0.000500				
M	Bi	<	0.002400	M	Ho	<	0.000500	M	Pd	<	0.001000	M	Te	<	0.017000				
O	Ca		0.052283	M	In	<	0.003500	M	Pr	<	0.000500	M	Th	<	0.000500				
O	Cd		0.000588	M	Ir	<	0.001000	M	Pt	<	0.000500	M	Ti	<	0.002000				
M	Ce	<	0.000500	O	K		0.017209	M	Rb	<	0.002500	M	Tl	<	0.000500				
M	Co		0.000653	M	La	<	0.000500	M	Re	<	0.000500	M	Tm	<	0.000500				
O	Cr		0.001089	O	Li	<	0.000230	M	Rh	<	0.000500	M	U	<	0.000500				
M	Cs	<	0.000500	M	Lu	<	0.000500	M	Ru	<	0.005000	M	V	<	0.000500				
O	Cu		0.001938	O	Mg		0.000871	O	S	<	0.048000	M	W	<	0.001000				
M	Dy	<	0.000500	O	Mn		0.000172	M	Sb	<	0.004300	M	Y	<	0.000500				
M	Er	<	0.000500	M	Mo	<	0.001500	O	Sc	<	0.000900	M	Yb	<	0.000500				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 65.39 +2 4 Zn(OH)(aq)1+
Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media forming insoluble carbonate and hydroxide. Stable with most metals and inorganic anions in acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
Zn Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3); Organic based (dry ash at 4500C and dissolve ash in HCl) (sulfuric/peroxide acid digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 66 amu	7 ppt	N/A	50Ti16O,50Cr16O, 50V16O, 34S16O2, 32S16O18O, 32S17O2, 33S16O17O, 32S34S, 33S2
ICP-OES 202.548 nm	0.004/0.0002 µg/mL	1	Nb, Cu, Co, Hf
ICP-OES 206.200 nm	0.006/0.0006 µg/mL	1	Sb, Ta, Bi, Os
ICP-OES 213.856 nm	0.002/0.0004 µg/mL	1	Ni, Cu, V

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 22, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

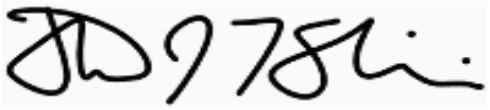
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSE10
Lot Number:	S2-SE711004
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Selenium
Starting Material:	Se Metal
Starting Material Lot#:	1962
Starting Material Purity:	99.9991%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9955 ± 61 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9955 ± 50 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002242	M	Eu	<	0.000373	O	Na		0.013654	s	Se	<		O	Zn		0.002374
M	Al		0.004450	M	Fe		0.008478	O	Nb	<	0.002975	O	Si		0.006249	M	Zr	<	0.001868
O	As	<	0.022040	M	Ga	<	0.000373	M	Nd	<	0.000373	M	Sm	<	0.000373				
M	Au	<	0.000373	M	Gd	<	0.000373	O	Ni		0.001843	M	Sn		0.000847				
O	B	<	0.007714	M	Ge	<	0.002616	M	Os	<	0.000373	M	Sr	<	0.001121				
M	Ba	<	0.001495	M	Hf	<	0.000373	O	P	<	0.022040	M	Ta	<	0.000373				
M	Be	<	0.001495	M	Hg	<	0.002240	M	Pb		0.006358	M	Tb	<	0.006353				
M	Bi	<	0.000373	M	Ho	<	0.000373	M	Pd	<	0.000373	M	Te	<	0.012707				
O	Ca		0.006530	M	In	<	0.000373	M	Pr	<	0.001495	M	Th	<	0.002990				
M	Cd		0.001165	M	Ir	<	0.000373	M	Pt	<	0.000373	M	Ti	<	0.003363				
M	Ce	<	0.000373	O	K		0.001999	M	Rb	<	0.001868	M	Tl		0.008584				
M	Co	<	0.000373	M	La	<	0.001121	M	Re	<	0.000373	M	Tm	<	0.000373				
M	Cr		0.002861	O	Li		0.000062	M	Rh	<	0.000373	M	U	<	0.000373				
M	Cs	<	0.001121	M	Lu	<	0.000373	M	Ru	<	0.001493	M	V	<	0.000747				
M	Cu	<	0.000747	O	Mg		0.001156	O	S		0.024591	M	W	<	0.002242				
M	Dy	<	0.000373	M	Mn	<	0.000373	M	Sb	<	0.002242	M	Y	<	0.000373				
M	Er	<	0.000373	O	Mo	<	0.003195	M	Sc	<	0.001121	M	Yb	<	0.000373				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H_2SeO_3

Chemical Compatibility -Soluble in HCl, HNO_3,H_3PO_4, H_2SO_4 and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO_3or HNO_3 / HF); Organic Matrices (acid digestion with hot concentrated H_2SO_4 accompanied by the careful dropwise addition of H_2O_2 until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 17, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO10
Lot Number:	S2-MO706255
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	10 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10026 ± 47 µg/mL

Density: 1.011 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10032 ± 68 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

Assay Method #2 **10020 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.008739	M	Se	<	0.008000	M	Zn		0.005942
M	Al		0.005592	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.001747				
M	Ba		0.016778	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.062920	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Ti	<	0.032000				
M	Ce	<	0.008300	M	K		1.293372	M	Rb		0.045442	M	Tl		0.012584				
M	Co		0.005942	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.005243	O	Li		0.000594	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.005243	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.022371	M	Mg		0.005592	i	S	<		M	W		0.873900				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.015031	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br16O,190Os2+,190Pt2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 04, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 04, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTL10
Lot Number:	T2-TL714687
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Thallium
Starting Material:	TlNO3
Starting Material Lot#:	2118
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10030 ± 42 µg/mL

Density: 1.036 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10040 ± 43 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 151215

Assay Method #2 **10010 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL(

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000200	O	Na		0.002489	M	Se	<	0.011019	O	Zn		0.002298
O	Al	<	0.004184	O	Fe	<	0.002824	M	Nb	<	0.000200	O	Si		0.003760	M	Zr	<	0.000200
M	As	<	0.002003	M	Ga	<	0.000200	M	Nd	<	0.000200	M	Sm	<	0.000200				
O	Au	<	0.002824	M	Gd	<	0.000200	M	Ni		0.001724	M	Sn	<	0.000601				
O	B	<	0.004184	M	Ge	<	0.000801	M	Os	<	0.000198	O	Sr	<	0.000313				
M	Ba	<	0.000400	M	Hf	<	0.000200	O	P	<	0.010460	M	Ta	<	0.000200				
O	Be	<	0.000104	M	Hg	<	0.000794	M	Pb		0.000811	M	Tb	<	0.000200				
M	Bi	<	0.005209	M	Ho	<	0.000200	M	Pd	<	0.000400	M	Te	<	0.005008				
O	Ca		0.002436	M	In	<	0.000200	M	Pr	<	0.000200	M	Th	<	0.000200				
M	Cd		0.001318	M	Ir	<	0.000198	M	Pt	<	0.000801	O	Ti	<	0.001255				
M	Ce	<	0.000200	O	K		0.006175	M	Rb	<	0.000200	s	Tl	<					
M	Co	<	0.000601	M	La	<	0.000200	M	Re	<	0.000200	M	Tm	<	0.000200				
M	Cr	<	0.000801	O	Li	<	0.000177	M	Rh	<	0.000200	M	U	<	0.000200				
M	Cs	<	0.003606	M	Lu	<	0.000200	M	Ru	<	0.000397	M	V	<	0.002203				
M	Cu	<	0.001001	O	Mg		0.000529	O	S	<	0.015690	M	W	<	0.000601				
M	Dy	<	0.000200	M	Mn	<	0.000801	M	Sb	<	0.000400	M	Y	<	0.000200				
M	Er	<	0.000200	M	Mo	<	0.001202	O	Sc	<	0.000711	M	Yb	<	0.000200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Tl(H2O)61+
Chemical Compatibility - Soluble in HCl, HNO3, and H2SO4. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Tl Containing Samples)Preparation and Solution) -Metal (Best dissolved in HNO3 which forms chiefly the Tl1+ ion.); Oxide (The thallous oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 08, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **February 08, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

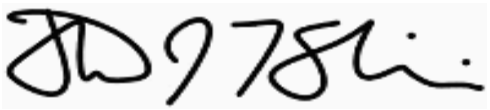
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCD10
Lot Number:	S2-CD710508
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cadmium
Starting Material:	Cd Metal
Starting Material Lot#:	1953
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10008 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10010 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #2 **10011 ± 30 µg/mL**
ICP Assay NIST SRM 3108 Lot Number: 130116

Assay Method #3 **10003 ± 30 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag	<	0.003200	O	Eu	<	0.002500	O	Na		0.005499	M	Se	<	0.005700	O	Zn	<	0.001100
O	Al		0.008903	O	Fe		0.000602	M	Nb	<	0.000400	O	Si		0.016758	O	Zr	<	0.002600
M	As	<	0.003600	M	Ga	<	0.001200	M	Nd	<	0.000800	M	Sm	<	0.000400				
M	Au	<	0.000810	M	Gd	<	0.000400	M	Ni	<	0.003600	M	Sn	<	0.003200				
O	B		0.004189	O	Ge	<	0.012000	M	Os	<	0.000810	O	Sr	<	0.000330				
M	Ba	<	0.002400	M	Hf	<	0.000400	O	P	<	0.022000	M	Ta	<	0.000800				
M	Be	<	0.000400	M	Hg	<	0.001700	M	Pb	<	0.002400	M	Tb	<	0.000400				
M	Bi	<	0.000400	M	Ho	<	0.000400	M	Pd	<	0.001200	M	Te	<	0.008000				
O	Ca		0.011259	O	In	<	0.013000	M	Pr	<	0.000400	M	Th	<	0.000400				
s	Cd	<		M	Ir	<	0.000410	M	Pt	<	0.000400	O	Ti		0.000602				
M	Ce	<	0.000400	O	K		0.005237	M	Rb	<	0.004400	M	Tl		0.000523				
M	Co	<	0.000400	M	La	<	0.000400	M	Re	<	0.000400	M	Tm	<	0.000400				
O	Cr	<	0.005100	O	Li	<	0.000054	M	Rh	<	0.000400	M	U	<	0.000400				
M	Cs	<	0.002400	M	Lu	<	0.000400	M	Ru	<	0.002500	M	V	<	0.002000				
O	Cu	<	0.004800	O	Mg		0.000288	O	S	<	0.022000	M	W	<	0.000400				
M	Dy	<	0.000400	O	Mn	<	0.000860	O	Sb	<	0.018000	M	Y	<	0.000400				
M	Er	<	0.000400	M	Mo	<	0.001600	O	Sc	<	0.000430	M	Yb	<	0.000400				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 112.41 +2 4 Cd2(OH) (aq)3+ and Cd(OH)(aq)

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 , and HF. Avoid basic media forming insoluble carbonate and hydroxide.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO3 / LDPE container.

Cd Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (soluble in HCl or HNO3); Ores (dissolve in HCl /HNO3 then take to fumes with H2SO4. The silica and lead sulfate are filtered off after the addition of water); Organic based (dry ash at 450°C and dissolve ash in HCl), (sulfuric / peroxide acid digestion).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 111 amu	11 ppt	n/a	95Mo16O
ICP-OES 214.438 nm	0.003 / 0.0003 µg/mL	1	Pt, Ir
ICP-OES 226.502 nm	0.003 / 0.0003 µg/mL	1	Ir
ICP-OES 228.802 nm	0.003 / 0.0003 µg/mL	1	Co, Ir, As, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 01, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 01, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMN10
Lot Number:	S2-MN704240
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Manganese
Starting Material:	Mn Metal
Starting Material Lot#:	2275
Starting Material Purity:	99.9909%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10011 ± 30 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9989 ± 69 µg/mL**
ICP Assay NIST SRM 3132 Lot Number: 050429

Assay Method #2 **10011 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10024 ± 47 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001500	M	Eu	<	0.000730	O	Na		0.176097	M	Se	<	0.006600	M	Zn		0.009925
O	Al		0.004322	M	Fe	<	0.650000	M	Nb	<	0.000730	O	Si		0.097654	M	Zr	<	0.000730
M	As	<	0.008000	M	Ga		0.004322	M	Nd	<	0.001500	M	Sm	<	0.000730				
M	Au	<	0.000730	M	Gd	<	0.000730	M	Ni		0.024013	M	Sn	<	0.002200				
M	B		0.068838	M	Ge	<	0.004400	M	Os	<	0.000730	O	Sr		0.000928				
M	Ba	<	0.001500	M	Hf	<	0.000730	i	P	<		M	Ta	<	0.000730				
M	Be	<	0.000730	M	Hg	<	0.002200	M	Pb		0.007364	M	Tb	<	0.000730				
M	Bi	<	0.003000	M	Ho	<	0.000730	M	Pd	<	0.000730	M	Te	<	0.019000				
O	Ca		0.062434	M	In	<	0.003000	M	Pr	<	0.000730	M	Th	<	0.000730				
M	Cd	<	0.001500	M	Ir	<	0.000730	M	Pt	<	0.000730	O	Ti	<	0.006500				
M	Ce	<	0.007300	O	K		0.006403	M	Rb	<	0.006600	M	Tl	<	0.000730				
O	Co		0.014728	M	La	<	0.003000	M	Re	<	0.000730	M	Tm	<	0.000730				
O	Cr		0.272151	O	Li		0.000416	M	Rh	<	0.003000	M	U	<	0.001500				
M	Cs	<	0.000730	M	Lu	<	0.000730	M	Ru	<	0.004400	M	V	<	0.000730				
O	Cu		0.007684	O	Mg		0.320177	i	S	<		M	W	<	0.004400				
M	Dy	<	0.001500	s	Mn	<		M	Sb	<	0.021000	O	Y		0.001360				
M	Er	<	0.001500	M	Mo		0.010245	O	Sc	<	0.004100	M	Yb	<	0.000730				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 54.94 +2 6 $Mn(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO_3/LDPE container.

Mn Containing Samples (Preparation and Solution) -Metal (Soluble in dilute acids); Oxides (Soluble in dilute acids); Ores (Dissolve with HCl. If silica is present add HF and then fume off silica by adding H_2SO_4 and heat to SO_3 fumes - dense white fumes).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 55 amu	10 ppt	n/a	40Ar14N1H,39K16O,37Cl18O,40Ar15N,38Ar17O,36Ar18O1H ,38Ar16O1H,37Cl17O1H,23Na32S
ICP-OES 257.610 nm	0.0014 / 0.00002 µg/mL	1	Ce, W, Re
ICP-OES 259.373 nm	0.0016 / 0.00002 µg/mL	1	U, Ta, Mo, Fe, Nb
ICP-OES 260.569 nm	0.0021 / 0.00002 µg/mL	1	Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 17, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSB10
Lot Number:	R2-SB688559
Matrix:	3% (v/v) HNO3 3% (w/v) tartaric acid
Value / Analyte(s):	10 000 µg/mL ea: Antimony
Starting Material:	Antimony Metal
Starting Material Lot#:	1857
Starting Material Purity:	99.9894%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10003 ± 47 µg/mL

Density: 1.061 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10003 ± 41 µg/mL**
ICP Assay NIST SRM 3102a Lot Number: 140911

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000300	O	Na		0.140000	M	Se	<	0.007300	O	Zn		0.005000
M	Al		0.003200	O	Fe		0.060000	M	Nb	<	0.000100	O	Si		0.150000	O	Zr	<	0.006300
M	As	<	0.004400	M	Ga	<	0.000400	M	Nd	<	0.000100	M	Sm	<	0.000100				
M	Au	<	0.000210	M	Gd	<	0.000100	O	Ni		0.004800	M	Sn	<	0.001800				
M	B	<	0.011000	M	Ge	<	0.000600	M	Os	<	0.000110	O	Sr		0.000750				
O	Ba	<	0.004900	M	Hf	<	0.000100	O	P		0.540000	M	Ta		0.003300				
M	Be	<	0.000400	M	Hg	<	0.000110	M	Pb	<	0.000400	M	Tb	<	0.000100				
M	Bi	<	0.000200	M	Ho	<	0.000100	M	Pd	<	0.000210	M	Te	<	0.000600				
O	Ca		0.110000	M	In	<	0.000100	M	Pr	<	0.001600	M	Th	<	0.000100				
M	Cd	<	0.000200	M	Ir	<	0.000110	M	Pt	<	0.000600	M	Ti	<	0.002800				
M	Ce		0.006500	O	K		0.020000	M	Rb	<	0.001000	M	Tl	<	0.000100				
M	Co	<	0.000200	O	La	<	0.016000	M	Re	<	0.000100	M	Tm	<	0.000100				
M	Cr		0.006900	O	Li	<	0.000430	M	Rh	<	0.000300	M	U	<	0.000100				
M	Cs	<	0.000200	M	Lu	<	0.000100	M	Ru	<	0.000310	M	V	<	0.000800				
M	Cu	<	0.000600	O	Mg		0.021000	n	S	<		M	W	<	0.000200				
M	Dy	<	0.000100	O	Mn		0.001900	s	Sb	<		M	Y	<	0.000100				
M	Er	<	0.000100	M	Mo	<	0.000500	O	Sc	<	0.002300	M	Yb	<	0.000100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO3 / LDPE container.

Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H2O / HF / HNO3 mixture); Oxides (Soluble in HCl and tartaric acid or H2O / HF / HNO3 mixtures); Ores (fusion with Na2CO3 in Pt0 followed by dissolving the fuseate in a H2O / HF / HNO3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 30, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 30, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAS10
Lot Number:	T2-AS718260
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Arsenic
Starting Material:	As Metal
Starting Material Lot#:	2208
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10060 ± 40 µg/mL

Density: 1.037 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10062 ± 46 µg/mL**
ICP Assay NIST SRM 3103a Lot Number: 100818

Assay Method #2 **10055 ± 76 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.003200	M	Eu	< 0.000530	O	Na	0.032544	M	Se	< 0.006300	O	Zn	0.001952			
M	Al	0.007593	O	Fe	0.001475	O	Nb	< 0.012000	O	Si	0.238658	O	Zr	< 0.004100			
s	As	<	M	Ga	< 0.000530	M	Nd	< 0.000530	M	Sm	< 0.000530						
M	Au	< 0.003100	M	Gd	< 0.000530	M	Ni	< 0.002100	M	Sn	< 0.000530						
M	B	0.026035	M	Ge	< 0.001600	M	Os	< 0.000520	M	Sr	< 0.000530						
M	Ba	< 0.000530	M	Hf	< 0.000530	O	P	< 0.043000	M	Ta	< 0.000530						
O	Be	< 0.000360	M	Hg	< 0.001600	M	Pb	< 0.002100	M	Tb	< 0.000530						
M	Bi	< 0.000530	M	Ho	< 0.000530	M	Pd	< 0.001100	M	Te	< 0.004700						
O	Ca	0.004339	M	In	< 0.023000	M	Pr	< 0.005300	M	Th	< 0.000530						
M	Cd	< 0.001100	M	Ir	< 0.000520	M	Pt	< 0.000530	O	Ti	< 0.002300						
M	Ce	< 0.000530	O	K	0.002061	M	Rb	< 0.000530	M	Tl	< 0.000530						
M	Co	< 0.000530	M	La	< 0.001100	M	Re	< 0.000530	M	Tm	< 0.000530						
O	Cr	< 0.001800	O	Li	< 0.000120	M	Rh	< 0.000530	M	U	< 0.000530						
M	Cs	< 0.005300	M	Lu	< 0.000530	M	Ru	< 0.000520	M	V	< 0.002700						
M	Cu	< 0.001600	O	Mg	0.000154	O	S	0.028205	M	W	< 0.012000						
M	Dy	< 0.000530	O	Mn	0.000154	M	Sb	< 0.000530	M	Y	< 0.000530						
M	Er	< 0.000530	M	Mo	< 0.000530	O	Sc	< 0.001700	M	Yb	< 0.000530						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphic form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37Cl,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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300 Technology Drive
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CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBA10
Lot Number:	R2-BA692576
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Barium
Starting Material:	Barium Nitrate
Starting Material Lot#:	1969
Starting Material Purity:	99.9982%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.025 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10018 ± 50 µg/mL** ICP Assay NIST SRM 3104a Lot Number: 140909
Assay Method #2	**10023 ± 31 µg/mL** Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #3	**10023 ± 30 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000410	O	Eu	<	0.005200	O	Na		0.004610	M	Se	<	0.003700	O	Zn		0.000658
M	Al	<	0.003100	O	Fe		0.015707	M	Nb	<	0.000210	O	Si		0.005573	M	Zr	<	0.001300
M	As	<	0.001300	M	Ga	<	0.000210	M	Nd	<	0.000210	O	Sm	<	0.021000				
M	Au	<	0.001300	M	Gd	<	0.000210	M	Ni	<	0.000810	M	Sn	<	0.000410				
O	B	<	0.005200	M	Ge	<	0.002500	M	Os	<	0.000410	O	Sr		0.003850				
s	Ba	<		M	Hf	<	0.000810	O	P	<	0.026000	M	Ta	<	0.000410				
O	Be	<	0.000320	M	Hg	<	0.000210	M	Pb	<	0.002300	M	Tb	<	0.000210				
M	Bi	<	0.000210	M	Ho	<	0.000210	M	Pd	<	0.000210	M	Te	<	0.001900				
O	Ca		0.007093	M	In	<	0.000210	M	Pr	<	0.000210	M	Th	<	0.000210				
M	Cd	<	0.000210	M	Ir	<	0.000210	M	Pt	<	0.000210	M	Ti	<	0.002100				
M	Ce	<	0.001300	O	K		0.035467	M	Rb	<	0.002100	M	Tl	<	0.000210				
M	Co	<	0.000410	O	La	<	0.005200	M	Re	<	0.000210	M	Tm	<	0.000410				
M	Cr	<	0.001700	O	Li	<	0.000630	M	Rh	<	0.000210	M	U	<	0.000210				
M	Cs	<	0.003300	M	Lu	<	0.001700	M	Ru	<	0.000210	O	V	<	0.005200				
M	Cu	<	0.001300	O	Mg		0.000861	O	S		0.268539	M	W	<	0.000410				
M	Dy	<	0.000210	M	Mn	<	0.000410	M	Sb	<	0.001300	O	Y	<	0.005200				
M	Er	<	0.001300	M	Mo	<	0.000410	M	Sc	<	0.000410	M	Yb	<	0.001300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 137.33 +2 6 $Ba(H_2O)_6^{+2}$
Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, iodate, molybdate, sulfite and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1 -10,000 ppm solutions chemically stable for years in 1-3.5% HNO_3 / LDPE container.
Ba Containing Samples (Preparation and Solution) -Metal(is best dissolved in diluted HNO_3); Ores(Carbonate fusion in Pt0 followed by HCl dissolution. If sulfate is present dissolve the fuseate using HCl / tartaric acid to prevent $BaSO_4$ precipitate); Organic Matrices (dry ash and dissolve in dilute HCl.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 138 amu	1 ppt	N/A	122Sn16O, 122Te16O
ICP-OES 230.424 nm	0.004/0.0005 µg/mL	1	Mo, Ir, Co
ICP-OES 233.527 nm	0.004/0.0003 µg/mL	1	
ICP-OES 455.403 nm	0.002/0.0001 µg/mL	1	Zr, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 11, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 11, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBE10
Lot Number:	R2-BE692992
Matrix:	6% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Beryllium
Starting Material:	Beryllium Acetate
Starting Material Lot#:	2281
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10032 ± 41 µg/mL

Density: 1.128 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10042 ± 67 µg/mL**
ICP Assay NIST SRM 3105a Lot Number: 090514

Assay Method #2 **10025 ± 51 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001100	M	Eu	<	0.000270	O	Na		0.040962	M	Se	<	0.005000	M	Zn		0.013054
O	Al		0.016205	O	Fe		0.015754	M	Nb	<	0.000270	O	Si		0.024307	O	Zr	<	0.001900
M	As	<	0.002900	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270				
M	Au	<	0.000520	M	Gd	<	0.000270	M	Ni	<	0.003700	M	Sn	<	0.000790				
M	B	<	0.091000	M	Ge	<	0.000270	M	Os	<	0.000260	M	Sr		0.000630				
M	Ba		0.002700	M	Hf	<	0.000270	O	P	<	0.066000	M	Ta	<	0.000270				
s	Be	<		M	Hg	<	0.000520	M	Pb	<	0.000270	M	Tb	<	0.000270				
M	Bi	<	0.000530	M	Ho	<	0.000270	M	Pd	<	0.000520	M	Te	<	0.003700				
O	Ca		0.072022	M	In	<	0.000790	M	Pr	<	0.000270	M	Th	<	0.000270				
M	Cd	<	0.000790	M	Ir	<	0.000260	M	Pt	<	0.000270	O	Ti	<	0.000400				
M	Ce	<	0.000270	O	K		0.045014	M	Rb	<	0.000270	M	Tl	<	0.000790				
O	Co	<	0.003200	M	La	<	0.000270	M	Re	<	0.000270	M	Tm	<	0.000270				
O	Cr	<	0.001800	O	Li	<	0.000660	M	Rh	<	0.001100	M	U	<	0.000270				
M	Cs		0.001440	M	Lu	<	0.000270	M	Ru	<	0.000260	M	V	<	0.000790				
M	Cu	<	0.002100	O	Mg		0.016205	i	S	<		M	W	<	0.000530				
M	Dy	<	0.000270	M	Mn		0.001215	M	Sb	<	0.000270	M	Y	<	0.000270				
M	Er	<	0.000270	M	Mo	<	0.000530	O	Sc	<	0.000930	M	Yb	<	0.000270				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 9.01 +2 4 $Be(H_2O)_4^{+2}$

Chemical Compatibility -Soluble in HCl, HNO_3, H_2SO_4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1 % HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 5-10 % HNO_3 / LDPE container.

Be Containing Samples (Preparation and Solution) - Meta l(is best dissolved in diluted H_2SO_4); BeO (boiling nitric, hydrochloric, or sulfuric acids or KHSO4 fusion); Ores (H_2SO_4/HF digestion or carbonate fusion in Pt0); Organic Matrices (sulfuric/peroxide digestion or nitric/sulfuric/perchloric acid decomposition, or dry ash and dissolution according to the BeO procedure above).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 9 amu	4 ppt	N/A	
ICP-OES 234.861 nm	0.0003/0.00016 µg/mL	1	Fe, Ta, Mo
ICP-OES 313.042 nm	0.0003/0.00009 µg/mL	1	V, Ce, U
ICP-OES 313.107 nm	0.0007/0.0005 µg/mL	1	Ce, Th, Tm

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

11.1 Certification Issue Date

May 13, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 13, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.4 Revision Status

- Revision 1 - Revised on Thursday, Jan 14, 2021 by utruong. Revision was made for the following reason: Modified Section 7 Chemical Form in Solution.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCO10
Lot Number:	R2-CO695285
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cobalt
Starting Material:	Co Metal
Starting Material Lot#:	2326
Starting Material Purity:	99.9934%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10012 ± 31 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10031 ± 67 µg/mL**
ICP Assay NIST SRM 3113 Lot Number: 190630

Assay Method #2 **10019 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10000 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	0.014660	M	Eu	<	0.000590	O	Na	0.007534	M	Se	<	0.019000	M	Zn	0.003461	
M	Al	< 0.024000	M	Fe	0.050905	M	Nb	<	0.000590	O	Si	0.075340	M	Zr	<	0.001200	
i	As	<	M	Ga	<	0.000590	M	Nd	<	0.000590	M	Sm	<	0.000590			
M	Au	< 0.004100	M	Gd	<	0.000590	O	Ni	0.427608	M	Sn	<	0.001200				
M	B	< 0.031000	M	Ge	<	0.003000	M	Os	<	0.000590	O	Sr	<	0.000260			
M	Ba	< 0.000590	M	Hf	<	0.000590	n	P	<		M	Ta	<	0.001200			
O	Be	< 0.001300	M	Hg	<	0.001800	M	Pb	0.003257	M	Tb	<	0.000590				
M	Bi	< 0.003000	M	Ho	<	0.000590	M	Pd	<	0.000590	M	Te	<	0.005300			
O	Ca	0.010588	M	In	<	0.001200	M	Pr	<	0.000590	M	Th	<	0.000590			
M	Cd	< 0.004700	M	Ir	<	0.001200	M	Pt	<	0.002400	M	Ti	<	0.014000			
M	Ce	< 0.000590	O	K	0.008144	M	Rb	<	0.000590	M	Tl	0.002647					
s	Co	<	M	La	<	0.000590	M	Re	<	0.000590	M	Tm	<	0.000590			
M	Cr	< 0.021000	O	Li	<	0.000130	M	Rh	<	0.000590	M	U	<	0.000590			
M	Cs	< 0.002400	M	Lu	<	0.000590	M	Ru	<	0.007100	O	V	<	0.000880			
M	Cu	0.189369	O	Mg	0.001893	n	S	<		M	W	<	0.000590				
M	Dy	< 0.000590	M	Mn	<	0.001800	M	Sb	<	0.003600	M	Y	<	0.000590			
M	Er	< 0.000590	M	Mo	<	0.002400	O	Sc	<	0.001600	M	Yb	<	0.000590			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.93 +2 6 $Co(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Co Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 59 amu	2 ppt	n/a	42Ca16O1H , 40Ar18O1H , 36Ar23Na, 43Ca16O, 24Mg35Cl
ICP-OES 228.616 nm	0.01/0.001 µg/mL	1	
ICP-OES 237.862 nm	0.01/0.002 µg/mL	1	W, Re, Al, Ta
ICP-OES 238.892 nm	0.01/0.002 µg/mL	1	Fe, W, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 04, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 04, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAG10
Lot Number:	S2-AG712977
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Silver
Starting Material:	Ag Shot
Starting Material Lot#:	2289
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10051 ± 30 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10051 ± 52 µg/mL** ICP Assay NIST SRM 3151 Lot Number: 160729
Assay Method #2	**10051 ± 19 µg/mL** Volhard NIST SRM 999c Lot Number: 999c
Assay Method #3	**10049 ± 31 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s	Ag	<		M	Eu	<	0.000260	O	Na		0.003811	M	Se	<	0.003900	O	Zn		0.048146
M	Al		0.002688	O	Fe		0.006419	M	Nb	<	0.000260	O	Si		0.005215	M	Zr	<	0.000260
M	As	<	0.001100	M	Ga	<	0.000260	M	Nd	<	0.000260	M	Sm	<	0.000260				
M	Au	<	0.000260	M	Gd	<	0.000260	O	Ni		0.001765	M	Sn		0.020060				
O	B	<	0.004300	M	Ge	<	0.002300	M	Os	<	0.001100	O	Sr	<	0.000110				
M	Ba	<	0.000520	M	Hf	<	0.000260	O	P	<	0.017000	M	Ta	<	0.000260				
O	Be	<	0.001100	M	Hg	<	0.000770	M	Pb	<	0.003600	M	Tb	<	0.000260				
M	Bi		0.004814	M	Ho	<	0.000260	M	Pd		0.044134	M	Te	<	0.009000				
O	Ca		0.005215	M	In		0.003691	M	Pr	<	0.000260	M	Th	<	0.000260				
M	Cd	<	0.000260	M	Ir	<	0.000520	M	Pt	<	0.001100	O	Ti	<	0.000440				
M	Ce	<	0.002100	O	K	<	0.008700	M	Rb	<	0.001100	M	Tl	<	0.004100				
O	Co	<	0.000330	M	La	<	0.000260	M	Re	<	0.000260	M	Tm	<	0.000260				
O	Cr	<	0.002500	O	Li	<	0.000110	M	Rh	<	0.000520	M	U	<	0.000260				
M	Cs	<	0.002600	M	Lu	<	0.000260	M	Ru	<	0.000260	M	V	<	0.000260				
O	Cu		0.357085	O	Mg		0.001203	O	S	<	0.017000	M	W	<	0.000260				
M	Dy	<	0.000260	O	Mn	<	0.000220	M	Sb	<	0.014000	M	Y	<	0.000260				
M	Er	<	0.000260	M	Mo	<	0.000260	O	Sc	<	0.000220	M	Yb	<	0.000260				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 107.87 +1 6 $Ag(H_2O)_6^+$

Chemical Compatibility -Stable in HNO_3, and HF. Avoid basic media. Ag forms more insoluble salts than any other metal. It also is subject to photochemical reduction to the metal in HCl media although 10 µg/mL solutions in 10% HCl [$AgCl_{x1-x}$] are commonly used in the analytical laboratory. The most common solubility problems exist with arsenate, arsenite , bromide, chloride, iodide, carbonate , chromate, cyanide, iodate, oxalate, oxide, sulfate, sulfide, tartrate, and thiocyanate in aqueous media. The addition of nitric acid renders many of these salts soluble.

Stability - 2-100 ppb levels stable for 75+ days when mixed with equivalent levels of all other elements including the precious metals (where chloride is present) when in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Ag Containing Samples (Preparation and Solution) -Metal (Soluble in HNO_3); Oxides (Soluble in HNO_3); Ores (Digestion with conc. HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 107 amu	1 ppt	N/A	91Zr16O
ICP-OES 243.779 nm	0.12/0.01 µg/mL	1	Mn, Th, Ni, Rh
ICP-OES 328.068 nm	0.007/0.0007 µg/mL	1	Ce, Rh, V
ICP-OES 338.289 nm	0.013/0.001 µg/mL	1	Ce, Cr, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCR(3)10
Lot Number:	S2-CR709784
Matrix:	10% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Chromium
Starting Material:	Cr Metal
Starting Material Lot#:	2328
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10027 ± 41 µg/mL

Density: 1.072 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10027 ± 40 µg/mL**
ICP Assay NIST SRM 3112a Lot Number: 170630

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001700	M	Eu	<	0.003400	O	Na		0.090372	M	Se	<	0.012000	O	Zn	<	0.006100
M	Al		0.034916	O	Fe		0.246471	M	Nb	<	0.017000	n	Si	<		M	Zr	<	0.007800
M	As	<	0.028000	O	Ga	<	0.013000	M	Nd	<	0.013000	M	Sm	<	0.006900				
M	Au	<	0.001700	M	Gd	<	0.000560	M	Ni		0.016020	M	Sn		0.006983				
O	B	<	0.025000	O	Ge	<	0.014000	M	Os	<	0.000560	M	Sr		0.006367				
M	Ba	<	0.008900	M	Hf	<	0.000560	i	P	<		M	Ta	<	0.000560				
M	Be	<	0.013000	M	Hg	<	0.001700	M	Pb		0.010064	M	Tb	<	0.000560				
M	Bi	<	0.002300	M	Ho	<	0.000560	M	Pd	<	0.021000	M	Te	<	0.010000				
O	Ca		0.075995	M	In	<	0.000560	M	Pr	<	0.001700	M	Th	<	0.000560				
M	Cd	<	0.000560	M	Ir	<	0.000560	M	Pt	<	0.001200	O	Ti		0.013555				
M	Ce	<	0.001200	O	K		0.043132	i	Rb	<		M	Tl	<	0.000560				
M	Co	<	0.002600	M	La	<	0.001200	M	Re	<	0.001200	O	Tm	<	0.013000				
s	Cr	<		O	Li		0.000390	M	Rh	<	0.095000	M	U	<	0.000560				
M	Cs	<	0.007800	M	Lu	<	0.000560	M	Ru	<	0.087000	O	V		0.014993				
O	Cu		0.007599	O	Mg		0.000883	i	S	<		M	W	<	0.049000				
M	Dy	<	0.000560	M	Mn		0.008626	M	Sb	<	0.003400	M	Y	<	0.001700				
M	Er	<	0.019000	M	Mo	<	0.032000	M	Sc		0.003080	M	Yb	<	0.000560				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 52.00 +3 6 $Cr(H_2O)_6^{3+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cr3 Containing Samples (Preparation and Solution) -Metal (soluble in HCl); Oxides/Ores (Chrome ore/oxides are very difficult to dissolve. The following procedures [A-D] are commonly used: A. Fusion with $KHSO_4$ and extraction with hot KCl. The residue fused with Na_2CO_3 and $KClO_3$, 3:1. B. Fusion with $NaKSO_4$ and NaF 2:1, C. Fusion with magnesia or lime and sodium or potassium carbonates, 4:1. D. Fusion with Na_2O_2 or NaOH and KNO_3 or NaOH and Na_2O_2. Nickel, iron, copper, or silver crucibles should be used for D. Platinum may be used for A, <, C); Organic Matrices (ash at 4500C followed by one of the fusion methods above or sulfuric/hydrogen peroxide acid digestions may be applicable to non oxide containing samples).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 52 amu	40 ppt	N/A	36S16O, 36Ar16O - The 50Cr, 53Cr, 54Cr lines suffer from many more potential interferences from sulfur, chlorine and argon compounds of oxygen, nitrogen and carbon.
ICP-OES 205.552 nm	0.006/0.0008 µg/mL	1	Os
ICP-OES 276.654 nm	0.01/0.001 µg/mL	1	Cu, Ta, V
ICP-OES 284.325 nm	0.008/0.0007 µg/mL	1	

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 26, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 26, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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300 Technology Drive
Christiansburg, VA 24073 · USA
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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNI10
Lot Number:	P2-NI686384
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Nickel
Starting Material:	Ni Metal
Starting Material Lot#:	2277 and 2282
Starting Material Purity:	99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9979 ± 30 µg/mL

Density: 1.038 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9971 ± 54 µg/mL**
ICP Assay NIST SRM 3136 Lot Number: 120619

Assay Method #2 **9970 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **9993 ± 33 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.002606	M	Eu	<	0.001100	O	Na		0.004965	O	Se	<	0.067000	M	Zn		0.006578
M	Al	<	0.013000	O	Fe		0.018618	M	Nb	<	0.001100	O	Si		0.010923	M	Zr	<	0.001100
O	As	<	0.067000	M	Ga	<	0.001100	M	Nd	<	0.001100	M	Sm	<	0.001100				
M	Au	<	0.002100	M	Gd	<	0.001100	s	Ni	<		M	Sn	<	0.016000				
M	B	<	0.017000	M	Ge	<	0.004200	M	Os		0.002110	O	Sr	<	0.000940				
M	Ba	<	0.001100	M	Hf	<	0.001100	i	P	<		M	Ta	<	0.001100				
O	Be	<	0.000410	M	Hg		0.014895	M	Pb		0.006578	M	Tb	<	0.001100				
M	Bi	<	0.004200	M	Ho	<	0.001100	M	Pd	<	0.001100	M	Te	<	0.015000				
O	Ca		0.003351	M	In	<	0.001100	M	Pr	<	0.001100	M	Th	<	0.001100				
M	Cd		0.001365	M	Ir		0.004716	M	Pt	<	0.001100	M	Ti	<	0.004200				
M	Ce	<	0.001100	O	K		0.004716	M	Rb	<	0.001100	M	Tl	<	0.001100				
O	Co		0.017377	M	La	<	0.001100	M	Re		0.001737	M	Tm	<	0.001100				
O	Cr	<	0.006700	O	Li	<	0.000140	M	Rh	<	0.006300	M	U	<	0.001100				
M	Cs	<	0.007300	M	Lu	<	0.001100	M	Ru	<	0.019000	M	V	<	0.002100				
M	Cu		0.004096	O	Mg		0.000372	i	S	<		M	W	<	0.006300				
M	Dy	<	0.001100	O	Mn	<	0.001900	M	Sb		0.005833	O	Y	<	0.000540				
M	Er	<	0.001100	M	Mo	<	0.008400	M	Sc	<	0.002100	M	Yb	<	0.001100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.69 +2 6 Ni(H2O)62+

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Ni Containing Samples (Preparation and Solution) -Metal (Soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 60 amu	100 ppt	n/a	43Ca16O1H , 44Ca16O, 23Na37Cl
ICP-OES 221.647 nm	0.01 / 0.0009 µg/mL	1	Si
ICP-OES 231.604 nm	0.02 / 0.002 µg/mL	1	Sb, Ta, Co
ICP-OES 232.003 nm	0.02 / 0.006 µg/mL	1	Cr, Re, Os, Nb, Ag, Pt, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 02, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 02, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGV10
Lot Number:	S2-V711005
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Vanadium
Starting Material:	Vanadium Pentoxide
Starting Material Lot#:	1782
Starting Material Purity:	99.9877%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10014 ± 30 µg/mL

Density: 1.104 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10017 ± 42 µg/mL**
ICP Assay NIST SRM 3165 Lot Number: 160906

Assay Method #2 **10013 ± 30 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000110	M	Eu	<	0.000110	O	Na		0.120000	M	Se	<	0.009400	M	Zn		0.009400
O	Al		0.120000	O	Fe		0.460000	M	Nb	<	0.001300	O	Si		0.270000	M	Zr	<	0.002900
M	As	<	0.000210	M	Ga	<	0.009300	M	Nd	<	0.000610	M	Sm	<	0.000110				
M	Au	<	0.004700	M	Gd	<	0.000110	M	Ni		0.012000	M	Sn		0.003900				
M	B		0.051000	M	Ge	<	0.000410	M	Os	<	0.000110	O	Sr		0.007100				
M	Ba		0.003600	M	Hf	<	0.000110	O	P	<	0.034000	M	Ta	<	0.000110				
O	Be	<	0.000560	M	Hg	<	0.000410	M	Pb		0.001400	M	Tb	<	0.000110				
M	Bi	<	0.000210	M	Ho	<	0.000110	M	Pd	<	0.000410	M	Te	<	0.000110				
O	Ca		0.730000	M	In	<	0.000110	M	Pr	<	0.000110	M	Th	<	0.000210				
M	Cd	<	0.000610	M	Ir	<	0.000110	M	Pt	<	0.000110	M	Ti		0.017000				
M	Ce	<	0.000610	M	K		0.052000	M	Rb	<	0.000310	M	Tl	<	0.000110				
M	Co	<	0.001300	M	La	<	0.000410	M	Re		0.001700	M	Tm	<	0.000110				
O	Cr		0.170000	M	Li	<	0.000810	M	Rh	<	0.000110	M	U	<	0.000410				
M	Cs		0.005600	M	Lu	<	0.000110	M	Ru	<	0.000110	s	V	<					
M	Cu	<	0.001300	M	Mg		0.053000	i	S	<		M	W		0.002000				
M	Dy	<	0.000110	M	Mn		0.007900	M	Sb		0.078000	M	Y	<	0.000110				
M	Er	<	0.000110	M	Mo		0.094000	M	Sc	<	0.000410	M	Yb	<	0.000110				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 50.94 +5 6 H2V10O284-

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4, HF, H3PO4 and strong basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

V Containing Samples (Preparation and Solution) -Metal (Fusion with NaOH or KOH in Ni0 or Na2CO3 / KNO3); Oxides (V2O3 - use HCl, V2O4 - use HCl or HNO3, V2O5 - use concentrated acids); Ores (Na2CO3 / KNO3 in Pt0 caution - nitrates attack Pto followed by water extraction of fuseate); Organic Matrices (Ash at 450 EC followed by dissolving according to V2O5 above) .

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 51 amu	4 ppt	N/A	34S16O1H, 35Cl16O, 38Ar13C, 36Ar15N, 36Ar14N1H, 37Cl14N,36S15N, 33S18O, 34S17O, 102Ru+2,02Pd+2
ICP-OES 290.882 nm	0.008 / 0.0008 µg/mL	1	Hf, Nb
ICP-OES 292.402 nm	0.006 / 0.001 µg/mL	1	Th
ICP-OES 309.311 nm	0.005 / 0.001 µg/mL	1	Mg, U, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

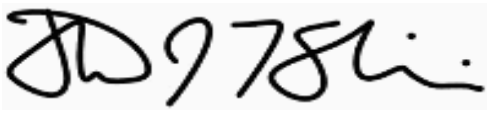
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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Christiansburg, VA 24073 USA
inorganicventures.com

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F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAL10
Lot Number:	T2-AL716102
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Aluminum
Starting Material:	Aluminum Nitrate Nonahydrate
Starting Material Lot#:	2460
Starting Material Purity:	99.9938%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10049 ± 31 µg/mL

Density: 1.087 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10059 ± 40 µg/mL** ICP Assay NIST SRM 3101a Lot Number: 140903
Assay Method #2	**10044 ± 26 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10049 ± 35 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002100	M	Eu	<	0.002100	O	Na		0.352819	M	Se	<	0.005200	M	Zn	0.006018
s	Al	<		O	Fe		0.074714	M	Nb	<	0.000520	O	Si		0.017848	O	Zr	0.004358
M	As		0.008716	O	Ga		0.112072	M	Nd	<	0.000520	M	Sm	<	0.000520			
M	Au	<	0.008400	M	Gd	<	0.001100	O	Ni	<	0.006000	M	Sn		0.000747			
O	B	<	0.014000	M	Ge	<	0.005200	M	Os	<	0.000650	O	Sr		0.000518			
O	Ba		0.012867	M	Hf	<	0.004100	n	P	<		M	Ta	<	0.000520			
O	Be	<	0.000270	M	Hg	<	0.002000	M	Pb		0.002282	M	Tb	<	0.000520			
M	Bi		0.001930	M	Ho	<	0.000520	M	Pd	<	0.000520	M	Te	<	0.001100			
O	Ca		0.076790	M	In	<	0.002100	M	Pr	<	0.000520	M	Th	<	0.000520			
M	Cd	<	0.000520	M	Ir	<	0.000650	M	Pt	<	0.000520	O	Ti		0.001930			
M	Ce	<	0.001100	O	K		0.043583	M	Rb	<	0.000520	M	Tl	<	0.000520			
O	Co	<	0.005400	M	La	<	0.002100	M	Re	<	0.000520	M	Tm	<	0.000520			
O	Cr		0.006018	O	Li		0.000112	M	Rh	<	0.000520	M	U	<	0.000520			
M	Cs		0.000643	M	Lu	<	0.000520	M	Ru	<	0.002000	M	V		0.001286			
O	Cu	<	0.008300	O	Mg		0.068488	i	S	<		M	W	<	0.009800			
M	Dy	<	0.002100	O	Mn		0.000913	M	Sb	<	0.003100	M	Y	<	0.001100			
M	Er	<	0.000520	M	Mo		0.005396	O	Sc	<	0.000950	M	Yb	<	0.000520			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H2O)6+3
Chemical Compatibility -Soluble in HCl, HNO3, v F and v 2SO4. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)4(H2O)21- species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); a- Al2O3 (Na2CO3 fusion in Pt0);
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 22, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

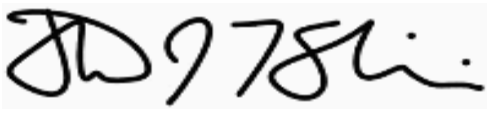
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGK10
Lot Number:	S2-K711973
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Potassium
Starting Material:	KNO3
Starting Material Lot#:	2313
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.024 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**9987 ± 24 µg/mL** Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #2	**10004 ± 84 µg/mL** ICP Assay NIST SRM 3141a Lot Number: 140813
Assay Method #3	**10007 ± 45 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001400	M	Eu	<	0.000660	O	Na		0.246220	M	Se	<	0.007900	O	Zn		0.018056
O	Al		0.001592	O	Fe		0.005909	M	Nb	<	0.000660	O	Si		0.011490	O	Zr	<	0.001600
M	As	<	0.005300	M	Ga	<	0.000660	M	Nd	<	0.000660	M	Sm	<	0.000660				
M	Au	<	0.002000	M	Gd	<	0.000660	O	Ni	<	0.004900	M	Sn	<	0.000660				
O	B	<	0.005600	M	Ge	<	0.002000	M	Os	<	0.003300	O	Sr		0.000055				
O	Ba	<	0.000860	M	Hf	<	0.000660	O	P	<	0.032000	M	Ta	<	0.000660				
O	Be	<	0.000082	M	Hg	<	0.002000	M	Pb	<	0.002300	M	Tb	<	0.000660				
M	Bi	<	0.006600	M	Ho	<	0.000660	M	Pd	<	0.000660	M	Te	<	0.017000				
O	Ca		0.031187	M	In	<	0.000660	M	Pr	<	0.000660	M	Th	<	0.000660				
O	Cd	<	0.000450	M	Ir	<	0.000660	M	Pt	<	0.002700	M	Ti	<	0.000660				
M	Ce	<	0.000660	s	K	<		M	Rb		0.476026	M	Tl	<	0.000660				
O	Co	<	0.000780	M	La	<	0.000660	M	Re	<	0.000660	M	Tm	<	0.000660				
O	Cr		0.000541	O	Li	<	0.000084	M	Rh	<	0.000660	M	U	<	0.000660				
M	Cs	<	0.000660	M	Lu	<	0.000660	M	Ru	<	0.000660	O	V	<	0.001100				
M	Cu	<	0.002700	O	Mg		0.006237	O	S		0.027905	M	W	<	0.000660				
M	Dy	<	0.000660	O	Mn		0.000476	M	Sb	<	0.000660	M	Y	<	0.000660				
M	Er	<	0.000660	M	Mo	<	0.000660	O	Sc	<	0.000340	O	Yb	<	0.000270				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 39.10 +1 (6) K+(aq)
Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Avoid use of HClO4 due to insolubility of the perchlorate. Stable with all metals and inorganic anions except ClO4-.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
K Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Sodium carbonate fusion in Pt0 followed by HCl dissolution-blank levels of K in sodium carbonate critical); Organic Matrices (Sulfuric/peroxide digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 39 amu	10 ppt	n/a	38ArH, 23Na16O, 78Se
ICP-OES 404.721 nm	1.1 / 0.05 µg/mL	1	U, Ce
ICP-OES 766.490 nm	0.4 / 0.001 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 771.531 nm	1.0 / 0.03 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 10, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 10, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

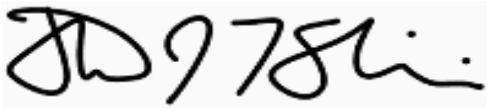
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMG10
Lot Number:	S2-MG704239
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Magnesium
Starting Material:	Magnesium Metal
Starting Material Lot#:	2168
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10053 ± 30 µg/mL

Density: 1.053 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10022 ± 62 µg/mL**
ICP Assay NIST SRM 3131a Lot Number: 140110

Assay Method #2 **10078 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10033 ± 26 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.002106	M	Eu	<	0.000910	O	Na		0.071075	O	Se	<	0.048000	O	Zn		0.003299
M	Al		0.003553	M	Fe		0.002538	M	Nb	<	0.000460	O	Si	<	0.032000	O	Zr	<	0.002700
M	As	<	0.001400	M	Ga	<	0.000460	M	Nd	<	0.000910	M	Sm	<	0.000460				
M	Au	<	0.001400	M	Gd	<	0.000460	O	Ni	<	0.001600	M	Sn	<	0.002300				
O	B		0.006853	M	Ge	<	0.001400	M	Os	<	0.000460	O	Sr		0.000279				
O	Ba		0.000964	M	Hf	<	0.000460	O	P		0.015230	M	Ta	<	0.000460				
O	Be	<	0.000120	M	Hg	<	0.000460	M	Pb	<	0.000460	M	Tb	<	0.000460				
M	Bi	<	0.000460	M	Ho	<	0.000460	M	Pd	<	0.003200	M	Te	<	0.007300				
O	Ca		0.053306	M	In	<	0.000460	M	Pr	<	0.000460	M	Th	<	0.000460				
O	Cd	<	0.000360	M	Ir	<	0.000460	M	Pt	<	0.001900	O	Ti	<	0.001700				
M	Ce	<	0.002300	M	K		0.048229	M	Rb		0.002411	M	Tl		0.003046				
M	Co	<	0.000910	M	La	<	0.002800	M	Re	<	0.000460	M	Tm	<	0.000460				
M	Cr	<	0.002300	O	Li		0.027922	M	Rh	<	0.000460	M	U	<	0.000460				
M	Cs		0.001040	M	Lu	<	0.000460	M	Ru	<	0.000460	M	V	<	0.000460				
O	Cu	<	0.003000	s	Mg	<		O	S	<	0.190000	M	W	<	0.000460				
M	Dy	<	0.000460	O	Mn		0.015230	M	Sb		0.020814	O	Y	<	0.000720				
M	Er	<	0.000460	M	Mo	<	0.000910	O	Sc	<	0.000480	M	Yb	<	0.000460				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 24.31 +2 6 Mg(H2O)6+2
Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4 avoid HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicates, carbonates, hydroxides, oxides, and tungstates in neutral and slightly acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.
Mg Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO3); Oxide (Readily soluble in above compatible aqueous acidic solutions); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric / peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 24 amu	42 ppt	n/a	7Li17O, 48Ti+2 , 48Ca+2
ICP-OES 279.553 nm	0.0002 / 0.00003 µg/mL	1	Th
ICP-OES 280.270 nm	0.0003 / 0.00005 µg/mL	1	U, V
ICP-OES 285.213 nm	0.002 / 0.00003 µg/mL	1	U, Hf, Cr, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 23, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 23, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCA10
Lot Number:	T2-CA716103
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Calcium
Starting Material:	CaCO3
Starting Material Lot#:	2472
Starting Material Purity:	99.9950%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10005 ± 30 µg/mL

Density: 1.039 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10005 ± 45 µg/mL**
ICP Assay NIST SRM 3109a Lot Number: 130213

Assay Method #2 **10005 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10005 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001200	M	Eu	<	0.001200	O	Na		0.006112	M	Se	<	0.024000	M	Zn		0.005362
M	Al		0.065419	O	Fe		0.009115	M	Nb	<	0.001200	O	Si		0.139417	O	Zr	<	0.006700
O	As	<	0.013000	M	Ga	<	0.015000	M	Nd	<	0.020000	M	Sm	<	0.001200				
M	Au	<	0.017000	M	Gd	<	0.004800	O	Ni		0.000793	M	Sn	<	0.003600				
O	B		0.001179	M	Ge	<	0.003600	M	Os	<	0.001200	M	Sr		0.081505				
O	Ba		0.002788	M	Hf	<	0.001200	O	P	<	0.041000	M	Ta	<	0.001200				
O	Be	<	0.000410	M	Hg	<	0.004800	M	Pb		0.001608	M	Tb	<	0.001200				
M	Bi		0.001608	M	Ho	<	0.001200	M	Pd	<	0.001200	M	Te	<	0.003600				
s	Ca	<		M	In	<	0.001200	M	Pr		0.000257	M	Th	<	0.001200				
O	Cd	<	0.001300	M	Ir	<	0.001200	M	Pt	<	0.003600	O	Ti	<	0.001900				
M	Ce		0.001029	O	K		0.009759	M	Rb	<	0.001200	M	Tl	<	0.001200				
O	Co		0.000418	M	La		0.001823	M	Re	<	0.001200	M	Tm	<	0.001200				
O	Cr		0.003324	O	Li	<	0.007300	M	Rh	<	0.001200	M	U		0.002144				
M	Cs		0.007399	M	Lu		0.000128	M	Ru	<	0.001200	M	V		0.001286				
O	Cu	<	0.011000	M	Mg		1.286934	O	S		0.055767	O	W	<	0.024000				
M	Dy	<	0.002400	O	Mn		0.004611	M	Sb	<	0.009600	O	Y		0.000536				
M	Er	<	0.002400	M	Mo		0.003539	O	Sc	<	0.001400	M	Yb	<	0.001200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 40.08 +2 6 Ca(H2O)6+2
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H2SO4, vF, v3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.
Ca Containing Samples)Preparation and Solution) -Metal (best dissolved in diluted HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (dry ash and dissolution in dilute HCl. Do not heat when dissolving to avoid precipitation of SiO2). The oxide, hydroxide, carbonate, phosphate, and fluoride of calcium are soluble in % levels of HCl or HNO3. The sulfates (gypsum, anhydrite, etc.), certain silicates, and complex compounds require fusion with Na2CO3 followed by HCl / water dissolution. Note that contamination is a very real problem when analyzing for trace levels.
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 44 amu	1200 ppt	n/a	16O212C, 28Si16O, 88Sr
ICP-OES 393.366 nm	0.0002 / 0.00004 µg/mL	1	U, Ce
ICP-OES 396.847 nm	0.0005 / 0.00006 µg/mL	1	Th
ICP-OES 422.673 nm	0.01 / 0.001 µg/mL	1	Ge

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 14, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 14, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

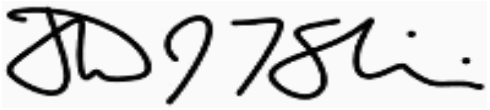
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNA10
Lot Number:	T2-NA717221
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Sodium
Starting Material:	Na2CO3
Starting Material Lot#:	2358 and 2453
Starting Material Purity:	99.9977%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9977 ± 30 µg/mL

Density: 1.033 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9974 ± 18 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **9977 ± 34 µg/mL**
ICP Assay NIST SRM 3152a Lot Number: 200413

Assay Method #3 **9987 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000930	M	Eu	<	0.000930	s	Na	<		M	Se	<	0.003800	O	Zn		0.000138
M	Al		0.004409	O	Fe		0.002393	M	Nb	<	0.000930	O	Si		0.056696	O	Zr	<	0.003200
O	As	<	0.023000	M	Ga	<	0.000930	M	Nd	<	0.000930	M	Sm	<	0.000930				
O	Au	<	0.004100	M	Gd	<	0.000930	O	Ni	<	0.003000	M	Sn	<	0.002800				
O	B		0.001385	M	Ge	<	0.004700	M	Os	<	0.000930	O	Sr		0.000251				
M	Ba		0.004031	M	Hf	<	0.000930	O	P		0.010205	M	Ta	<	0.000930				
O	Be	<	0.000130	M	Hg	<	0.000930	M	Pb	<	0.000930	M	Tb	<	0.000930				
M	Bi	<	0.000930	M	Ho	<	0.000930	M	Pd	<	0.000930	M	Te	<	0.001900				
O	Ca		0.176388	M	In	<	0.000930	M	Pr	<	0.000930	M	Th		0.000352				
O	Cd	<	0.000860	M	Ir	<	0.000930	M	Pt	<	0.000930	O	Ti		0.000592				
M	Ce	<	0.001900	O	K		0.302380	M	Rb	<	0.000930	M	Tl	<	0.000930				
O	Co	<	0.001800	O	La	<	0.002100	M	Re	<	0.000930	M	Tm	<	0.000930				
M	Cr	<	0.002800	O	Li		0.000031	M	Rh	<	0.000930	M	U	<	0.000930				
M	Cs	<	0.000930	M	Lu	<	0.000930	M	Ru	<	0.001900	O	V	<	0.001600				
O	Cu	<	0.003900	O	Mg		0.026458	O	S		0.040317	O	W	<	0.028000				
M	Dy	<	0.000930	O	Mn	<	0.000740	M	Sb	<	0.000930	O	Y	<	0.000860				
M	Er	<	0.000930	O	Mo	<	0.003600	O	Sc	<	0.000610	O	Yb	<	0.000250				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 20, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 20, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

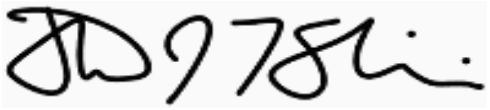
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGU1
Lot Number:	S2-U707914
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Uranium
Starting Material:	Uranyl Nitrate Hexahydrate
Starting Material Lot#:	P2-2322
Starting Material Purity:	99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 5 µg/mL

Density: 1.010 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3164 Lot Number: 080521

Assay Method #2 **1001 ± 6 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000270	M	Eu	<	0.000270	M	Na	<	0.011000	M	Se	<	0.009300	M	Zn	0.002358
M	Al	<	0.011000	M	Fe		0.003222	M	Nb	<	0.000270	M	Si	<	0.160000	M	Zr	< 0.001100
M	As	<	0.002400	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270			
M	Au	<	0.000270	M	Gd	<	0.000270	M	Ni	<	0.020000	M	Sn	<	0.011000			
M	B	<	0.000270	M	Ge	<	0.000800	M	Os	<	0.001900	M	Sr	<	0.000270			
M	Ba	<	0.003800	M	Hf	<	0.000270	i	P	<		M	Ta	<	0.000270			
M	Be	<	0.000270	M	Hg	<	0.000540	M	Pb	<	0.002200	M	Tb	<	0.000270			
M	Bi	<	0.000270	M	Ho	<	0.000270	M	Pd	<	0.000540	M	Te	<	0.003800			
M	Ca	<	0.140000	M	In	<	0.000270	M	Pr	<	0.000270	M	Th		0.000129			
M	Cd	<	0.000270	M	Ir	<	0.000270	M	Pt	<	0.000270	M	Ti	<	0.002700			
M	Ce	<	0.000540	O	K	<	0.250000	M	Rb	<	0.000800	M	Tl	<	0.000270			
M	Co	<	0.000800	M	La		0.000117	M	Re	<	0.064000	M	Tm	<	0.000270			
M	Cr		0.000943	M	Li	<	0.003000	M	Rh	<	0.000270	s	U	<				
M	Cs		0.000106	M	Lu	<	0.000270	M	Ru	<	0.000540	M	V	<	0.000540			
M	Cu	<	0.001100	M	Mg	<	0.003000	i	S	<		M	W	<	0.000540			
M	Dy	<	0.000270	M	Mn	<	0.006900	M	Sb	<	0.000270	M	Y	<	0.000270			
M	Er	<	0.000270	M	Mo	<	0.006400	M	Sc	<	0.000540	M	Yb	<	0.000270			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 238.03 +6 8 UO22+(uranyl)
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H3PO4. H2SO4 and HF matrices should not be a problem depending upon [U]. Although the UO22+ ion is distinctly basic, any U+4 will precipitate in basic media. UO22+salts are generally soluble in water and UO22+ is stable with most metals and inorganic anions. The uranyl phosphate is insoluble in water. UF4 and UF6 are water soluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
U Containing Samples (Preparation and Solution) -Metal (Dissolves rapidly in HCl and HNO3); Oxide (Soluble in HNO3); Ores (Digest for 1-2 hours with 1 gram of ore to 30 mL 1:1 HNO3. Silica insolubles are removed by filtration after bringing the sample to fumes with conc. H2SO4.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 238 amu	2 ppt	N/A	206Pb16O2
ICP-OES 263.553 nm	0.3 / 0.01 µg/mL	1	Ce, Ir, Th, Rh, W, Zr, Ta, Ti, V, Hf, Fe, Re, Ru
ICP-OES 367.007 nm	0.3 / 0.02 µg/mL	1	Th, Ce
ICP-OES 385.958 nm	0.3 / 0.01 µg/mL	1	Th, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-2
Lot Number:	T2-MEB719895
Matrix:	3% (v/v) HNO3 tr. HF
Value / Analyte(s):	2.5 µg/mL ea: Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**2.499 ± 0.015 µg/mL**	**Molybdenum, Mo**	**2.500 ± 0.017 µg/mL**

Density: 1.014 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sb	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

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11.3 Period of Validity

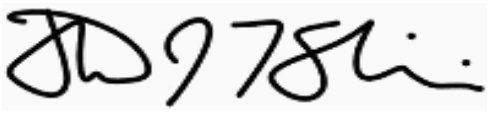
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Certificate of Analysis

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-3
Lot Number:	T2-MEB719896
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	250 µg/mL ea:

Aluminum, Calcium,
Iron, Potassium,
Magnesium, Sodium,

4 µg/mL ea:
Selenium,

2.5 µg/mL ea:

Thorium,	Thallium,
Uranium,	Vanadium,
Zinc,	Manganese,
Cadmium,	Cobalt,
Chromium,	Copper,
Arsenic,	Barium,
Beryllium,	Nickel,
Lead,	Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	250.0 ± 0.9 µg/mL	Arsenic, As	2.500 ± 0.018 µg/mL
Barium, Ba	2.501 ± 0.013 µg/mL	Beryllium, Be	2.501 ± 0.015 µg/mL
Cadmium, Cd	2.501 ± 0.013 µg/mL	Calcium, Ca	250.0 ± 1.3 µg/mL
Chromium, Cr	2.500 ± 0.015 µg/mL	Cobalt, Co	2.500 ± 0.014 µg/mL
Copper, Cu	2.500 ± 0.014 µg/mL	Iron, Fe	250.0 ± 1.0 µg/mL
Lead, Pb	2.500 ± 0.013 µg/mL	Magnesium, Mg	250.0 ± 1.3 µg/mL
Manganese, Mn	2.500 ± 0.014 µg/mL	Nickel, Ni	2.500 ± 0.014 µg/mL
Potassium, K	250.0 ± 1.2 µg/mL	Selenium, Se	4.002 ± 0.024 µg/mL
Silver, Ag	2.501 ± 0.017 µg/mL	Sodium, Na	250.0 ± 1.2 µg/mL
Thallium, Tl	2.500 ± 0.017 µg/mL	Thorium, Th	2.499 ± 0.013 µg/mL
Uranium, U	2.501 ± 0.015 µg/mL	Vanadium, V	2.500 ± 0.014 µg/mL
Zinc, Zn	2.500 ± 0.014 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2

V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
Zn	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

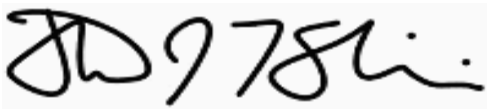
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-6020ICS-0A10
Lot Number:	T2-MEB719898
Matrix:	1.4% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Chloride,
	200 µg/mL ea: Carbon,
	100 µg/mL ea: Calcium, Aluminum, Iron, Potassium, Magnesium, Sodium, Phosphorus, Sulfur,
	2 µg/mL ea: Titanium, Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**100.0 ± 0.4 µg/mL**	**Calcium, Ca**	**100.0 ± 0.5 µg/mL**
Carbon, C	**200.1 ± 0.5 µg/mL**	**Chloride, Cl**	**1 000 ± 5 µg/mL**
Iron, Fe	**100.0 ± 0.5 µg/mL**	**Magnesium, Mg**	**100.0 ± 0.5 µg/mL**
Molybdenum, Mo	**2.001 ± 0.014 µg/mL**	**Phosphorus, P**	**100.0 ± 0.6 µg/mL**
Potassium, K	**100.0 ± 0.5 µg/mL**	**Sodium, Na**	**100.0 ± 0.5 µg/mL**
Sulfur, S	**100.0 ± 0.5 µg/mL**	**Titanium, Ti**	**2.001 ± 0.015 µg/mL**

Density: 1.009 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

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X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

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$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

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Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

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X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

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- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

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- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

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- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 07, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 07, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

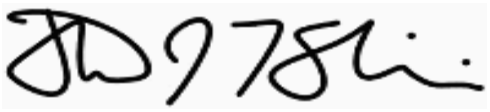
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1045

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-01 D	SDG:	23A0420
Sampled:	01/19/23 08:10	Prepared:	01/23/23 09:55	File ID:	CubeData_01262023@1133-313
% Solids:	51.63	Preparation:	Plumb 1981	Analyzed:	01/25/23 04:06
Batch:	BLA0527	Sequence:	SLA0248	Initial/Final:	0.5579 g Wet / 0.5579 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.51	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1052

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-02 C	SDG:	23A0420
Sampled:	01/19/23 08:37	Prepared:	01/24/23 10:30	File ID:	CubeData_01262023@1133-320
% Solids:	50.93	Preparation:	Plumb 1981	Analyzed:	01/25/23 07:40
Batch:	BLA0536	Sequence:	SLA0248	Initial/Final:	0.5387 g Wet / 0.5387 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.78	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1057

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-03 C	SDG:	23A0420
Sampled:	01/19/23 09:16	Prepared:	01/24/23 10:30	File ID:	CubeData_01262023@1133-323
% Solids:	54.25	Preparation:	Plumb 1981	Analyzed:	01/25/23 09:11
Batch:	BLA0536	Sequence:	SLA0248	Initial/Final:	0.5086 g Wet / 0.5086 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.97	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-IT1051

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-04 D	SDG:	23A0420
Sampled:	01/19/23 09:55	Prepared:	01/24/23 10:30	File ID:	CubeData_01262023@1133-324
% Solids:	67.13	Preparation:	Plumb 1981	Analyzed:	01/25/23 09:42
Batch:	BLA0536	Sequence:	SLA0248	Initial/Final:	0.5124 g Wet / 0.5124 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.09	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1125

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-05 C	SDG:	23A0420
Sampled:	01/19/23 10:32	Prepared:	01/24/23 10:30	File ID:	CubeData_01262023@1133-325
% Solids:	54.72	Preparation:	Plumb 1981	Analyzed:	01/25/23 10:12
Batch:	BLA0536	Sequence:	SLA0248	Initial/Final:	0.5507 g Wet / 0.5507 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.06	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1132

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-06 C	SDG:	23A0420
Sampled:	01/19/23 10:46	Prepared:	01/24/23 10:30	File ID:	CubeData_01262023@1133-326
% Solids:	54.86	Preparation:	Plumb 1981	Analyzed:	01/25/23 10:43
Batch:	BLA0536	Sequence:	SLA0248	Initial/Final:	0.5516 g Wet / 0.5516 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.08	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1003

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-07 D	SDG:	23A0420
Sampled:	01/19/23 12:25	Prepared:	01/24/23 10:30	File ID:	CubeData_01262023@1133-327
% Solids:	50.97	Preparation:	Plumb 1981	Analyzed:	01/25/23 11:13
Batch:	BLA0536	Sequence:	SLA0248	Initial/Final:	0.576 g Wet / 0.576 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.94	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1004

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-08 D	SDG:	23A0420
Sampled:	01/19/23 11:55	Prepared:	01/24/23 10:30	File ID:	CubeData_01262023@1133-001
% Solids:	57.39	Preparation:	Plumb 1981	Analyzed:	01/25/23 12:44
Batch:	BLA0536	Sequence:	SLA0248	Initial/Final:	0.5315 g Wet / 0.5315 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.62	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1082

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0420-09 D	SDG:	23A0420
Sampled:	01/19/23 13:40	Prepared:	01/24/23 10:30	File ID:	CubeData_01262023@1133-006
% Solids:	56.61	Preparation:	Plumb 1981	Analyzed:	01/25/23 13:14
Batch:	BLA0536	Sequence:	SLA0248	Initial/Final:	0.5957 g Wet / 0.5957 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	3.28	1	0.02	0.02	

PREPARATION BATCH SUMMARY

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0527 Batch Matrix: Solid
Preparation: Plumb 1981

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1045	23A0420-01	eData_01262023@1133-	01/23/23 09:55	
Blank	BLA0527-BLK1	eData_01262023@1133-	01/23/23 09:55	
LCS	BLA0527-BS1	eData_01262023@1133-	01/23/23 09:55	
MRL Check	BLA0527-MRL1	eData_01262023@1133-	01/23/23 09:55	
Reference	BLA0527-SRM1	eData_01262023@1133-	01/23/23 09:55	

PREPARATION BATCH SUMMARY

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0536 Batch Matrix: Solid
Preparation: Plumb 1981

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1052	23A0420-02	eData_01262023@1133-	01/24/23 10:30	
LDW23-SC1057	23A0420-03	eData_01262023@1133-	01/24/23 10:30	
LDW23-IT1051	23A0420-04	eData_01262023@1133-	01/24/23 10:30	
LDW23-SC1125	23A0420-05	eData_01262023@1133-	01/24/23 10:30	
LDW23-SC1132	23A0420-06	eData_01262023@1133-	01/24/23 10:30	
LDW23-SC1003	23A0420-07	eData_01262023@1133-	01/24/23 10:30	
LDW23-SC1004	23A0420-08	eData_01262023@1133-	01/24/23 10:30	
LDW23-SC1082	23A0420-09	eData_01262023@1133-	01/24/23 10:30	
Blank	BLA0536-BLK1	eData_01262023@1133-	01/24/23 10:30	
LCS	BLA0536-BS1	eData_01262023@1133-	01/24/23 10:30	
LDW23-SC1052	BLA0536-DUP1	eData_01262023@1133-	01/24/23 10:30	
MRL Check	BLA0536-MRL1	eData_01262023@1133-	01/24/23 10:30	
LDW23-SC1052	BLA0536-MS1	eData_01262023@1133-	01/24/23 10:30	
Reference	BLA0536-SRM1	eData_01262023@1133-	01/24/23 10:30	

Form I

METHOD BLANK DATA SHEET

EPA 9060A m

TotalAnalytes

Blank

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0527
Laboratory ID: BLA0527-BLK1
Prepared: 01/23/23 09:55
Matrix: Solid
Preparation: Plumb 1981
Analyzed: 01/24/23 12:23
Sequence: SLA0248
Calibration: FD00070
Instrument: TOC Cube

CAS NO.	Analyte	Concentration (% wet)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	ND	1	0.02	0.02	U

Form I

METHOD BLANK DATA SHEET

EPA 9060A m

TotalAnalytes

Blank

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0536
Laboratory ID: BLA0536-BLK1
Prepared: 01/24/23 10:30
Matrix: Solid
Preparation: Plumb 1981
Analyzed: 01/25/23 05:07
Sequence: SLA0248
Calibration: FD00070
Instrument: TOC Cube

CAS NO.	Analyte	Concentration (% wet)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	ND	1	0.02	0.02	U

LCS / LCS DUPLICATE RECOVERY

EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	01/24/23 12:54
Batch:	BLA0527	Laboratory ID:	BLA0527-BS1
Preparation:	Plumb 1981	Sequence Name:	LCS
Initial/Final:	0.0204 g / 0.0204 g		

COMPOUND	SPIKE ADDED (% wet)	LCS CONCENTRATION (% wet)	Q	LCS % REC. #	QC LIMITS REC.
Total Organic Carbon	44.4	44.1		99.2	80 - 120

* Indicates values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	01/25/23 06:38
Batch:	BLA0536	Laboratory ID:	BLA0536-BS1
Preparation:	Plumb 1981	Sequence Name:	LCS
Initial/Final:	0.0197 g / 0.0197 g		

COMPOUND	SPIKE ADDED (% wet)	LCS CONCENTRATION (% wet)	Q	LCS % REC. #	QC LIMITS REC.
Total Organic Carbon	44.4	44.8		101	80 - 120

* Indicates values outside of QC limits

DUPLICATES

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0536-DUP1
Batch: BLA0536
Lab Source ID: 23A0420-02
Preparation: Plumb 1981
Initial/Final: 0.5171 g / 0.5171 g
Source Sample Name: LDW23-SC1052
% Solids: 50.93

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Total Organic Carbon	20	2.78	2.63	5.22	

*: Values outside of QC limits
L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1052

MS / MS DUPLICATE RECOVERY
EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	01/25/23 08:41
Batch:	BLA0536	Laboratory ID:	BLA0536-MS1
Preparation:	Plumb 1981	Sequence Name:	Matrix Spike
Initial/Final:	0.5207 g / 0.5207 g	Source Sample:	LDW23-SC1052

COMPOUND	SPIKE ADDED (% dry)	SAMPLE CONCENTRATION (% dry)	Q	MS CONCENTRATION (% dry)	Q	MS % REC. #	QC LIMITS REC.
Total Organic Carbon	1.58	2.78		4.45		106	75 - 125

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SKD0371	Instrument:	TOC Cube
		Calibration:	FD00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SKD0371-CAL1	CubeData_04272022@1136-001	NA	04/26/22 12:30
Cal Standard	SKD0371-CAL2	CubeData_04272022@1136-002	NA	04/26/22 13:00
Cal Standard	SKD0371-CAL3	CubeData_04272022@1136-003	NA	04/26/22 13:30
Cal Standard	SKD0371-CAL4	CubeData_04272022@1136-004	NA	04/26/22 14:00
Cal Standard	SKD0371-CAL5	CubeData_04272022@1136-005	NA	04/26/22 14:30
Cal Standard	SKD0371-CAL6	CubeData_04272022@1136-006	NA	04/26/22 15:00
Cal Standard	SKD0371-CAL7	CubeData_04272022@1136-007	NA	04/26/22 15:30
Cal Standard	SKD0371-CAL8	CubeData_04272022@1136-008	NA	04/26/22 16:00
Cal Standard	SKD0371-CAL9	CubeData_04272022@1136-009	NA	04/26/22 16:30
Cal Standard	SKD0371-CALA	CubeData_04272022@1136-010	NA	04/26/22 17:00
Cal Standard	SKD0371-CALB	CubeData_04272022@1136-011	NA	04/26/22 17:30
Cal Standard	SKD0371-CALC	CubeData_04272022@1136-012	NA	04/26/22 18:00
Cal Standard	SKD0371-CALD	CubeData_04272022@1136-013	NA	04/26/22 18:30
Cal Standard	SKD0371-CALE	CubeData_04272022@1136-014	NA	04/26/22 19:00
Cal Standard	SKD0371-CALF	CubeData_04272022@1136-015	NA	04/26/22 19:31
Cal Standard	SKD0371-CALG	CubeData_04272022@1136-016	NA	04/26/22 20:01
Cal Standard	SKD0371-CALH	CubeData_04272022@1136-017	NA	04/26/22 20:31
Cal Standard	SKD0371-CALI	CubeData_04272022@1136-018	NA	04/26/22 21:01
Cal Standard	SKD0371-CALJ	CubeData_04272022@1136-019	NA	04/26/22 21:31
Cal Standard	SKD0371-CALK	CubeData_04272022@1136-020	NA	04/26/22 22:01
Initial Cal Check	SKD0371-ICV1	CubeData_04272022@1136-027	NA	04/27/22 02:03
Initial Cal Blank	SKD0371-ICB1	CubeData_04272022@1136-028	NA	04/27/22 02:33
Cal Standard	SKD0371-CALL	CubeData_04272022@1136-021	NA	04/27/22 11:08
Cal Standard	SKD0371-CALM	CubeData_04272022@1136-022	NA	04/27/22 11:08
Cal Standard	SKD0371-CALN	CubeData_04272022@1136-023	NA	04/27/22 11:09
Cal Standard	SKD0371-CALO	CubeData_04272022@1136-024	NA	04/27/22 11:09

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLA0248
Instrument: TOC Cube
Calibration: FD00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLA0248-ICV1	CubeData_01262023@1133-019	NA	01/23/23 17:12
Initial Cal Blank	SLA0248-ICB1	CubeData_01262023@1133-025	NA	01/23/23 17:43
Calibration Check	SLA0248-CCV1	CubeData_01262023@1133-089	NA	01/23/23 23:16
Calibration Blank	SLA0248-CCB1	CubeData_01262023@1133-096	NA	01/23/23 23:46
Calibration Check	SLA0248-CCV2	CubeData_01262023@1133-173	NA	01/24/23 05:19
Calibration Blank	SLA0248-CCB2	CubeData_01262023@1133-180	NA	01/24/23 05:49
MRL Check	BLA0527-MRL1	CubeData_01262023@1133-241	Solid	01/24/23 10:53
Calibration Check	SLA0248-CCV3	CubeData_01262023@1133-247	NA	01/24/23 11:23
Calibration Blank	SLA0248-CCB3	CubeData_01262023@1133-253	NA	01/24/23 11:53
Blank	BLA0527-BLK1	CubeData_01262023@1133-258	Solid	01/24/23 12:23
LCS	BLA0527-BS1	CubeData_01262023@1133-265	Solid	01/24/23 12:54
Reference	BLA0527-SRM1	CubeData_01262023@1133-273	Solid	01/24/23 13:24
Calibration Check	SLA0248-CCV4	CubeData_01262023@1133-292	NA	01/24/23 17:28
Calibration Blank	SLA0248-CCB4	CubeData_01262023@1133-293	NA	01/24/23 17:59
Calibration Check	SLA0248-CCV5	CubeData_01262023@1133-304	NA	01/24/23 23:33
Calibration Blank	SLA0248-CCB5	CubeData_01262023@1133-305	NA	01/25/23 00:03
LDW23-SC1045	23A0420-01	CubeData_01262023@1133-313	Solid	01/25/23 04:06
MRL Check	BLA0536-MRL1	CubeData_01262023@1133-314	Solid	01/25/23 04:37
Blank	BLA0536-BLK1	CubeData_01262023@1133-315	Solid	01/25/23 05:07
Calibration Check	SLA0248-CCV6	CubeData_01262023@1133-316	NA	01/25/23 05:38
Calibration Blank	SLA0248-CCB6	CubeData_01262023@1133-317	NA	01/25/23 06:08
LCS	BLA0536-BS1	CubeData_01262023@1133-318	Solid	01/25/23 06:38
Reference	BLA0536-SRM1	CubeData_01262023@1133-319	Solid	01/25/23 07:09
LDW23-SC1052	23A0420-02	CubeData_01262023@1133-320	Solid	01/25/23 07:40
LDW23-SC1052	BLA0536-DUP1	CubeData_01262023@1133-321	Solid	01/25/23 08:10
LDW23-SC1052	BLA0536-MS1	CubeData_01262023@1133-322	Solid	01/25/23 08:41
LDW23-SC1057	23A0420-03	CubeData_01262023@1133-323	Solid	01/25/23 09:11
LDW23-IT1051	23A0420-04	CubeData_01262023@1133-324	Solid	01/25/23 09:42
LDW23-SC1125	23A0420-05	CubeData_01262023@1133-325	Solid	01/25/23 10:12

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

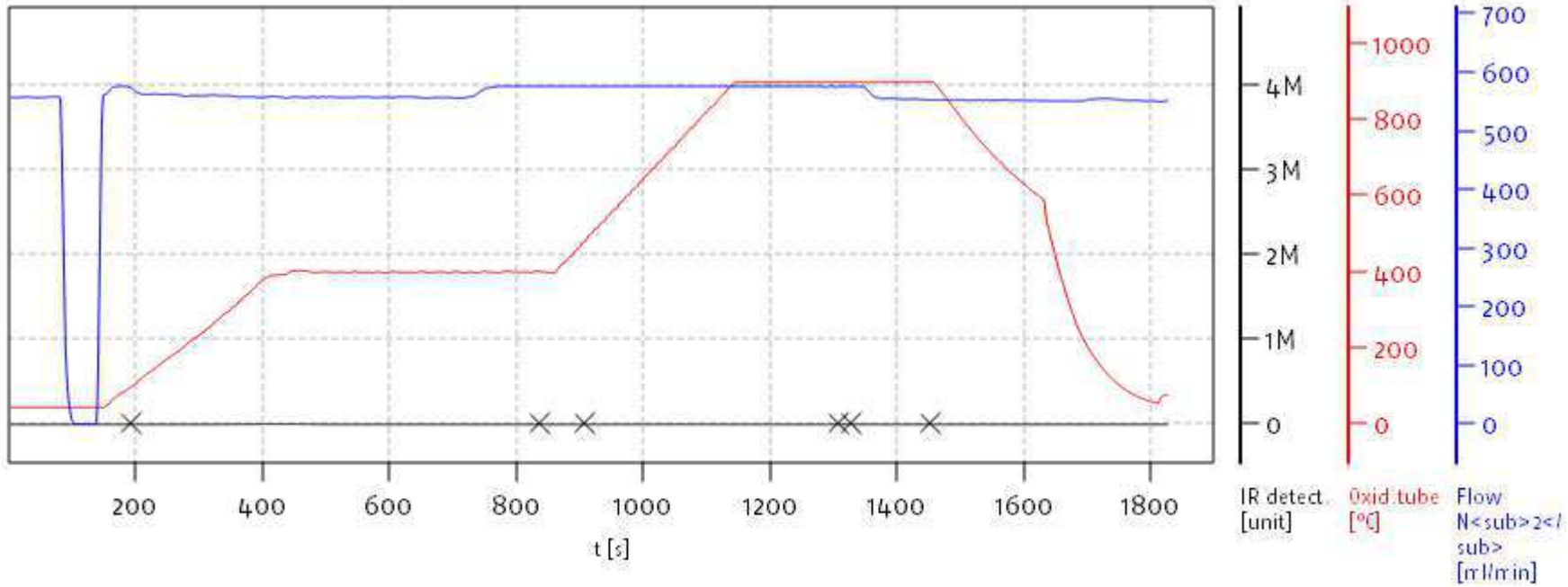
Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLA0248

SDG: 23A0420
Project: AOC5 MR Phase 1
Instrument: TOC Cube
Calibration: FD00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LDW23-SC1132	23A0420-06	CubeData_01262023@1133-326	Solid	01/25/23 10:43
LDW23-SC1003	23A0420-07	CubeData_01262023@1133-327	Solid	01/25/23 11:13
Calibration Check	SLA0248-CCV7	CubeData_01262023@1133-328	NA	01/25/23 11:43
Calibration Blank	SLA0248-CCB7	CubeData_01262023@1133-329	NA	01/25/23 12:14
LDW23-SC1004	23A0420-08	CubeData_01262023@1133-001	Solid	01/25/23 12:44
LDW23-SC1082	23A0420-09	CubeData_01262023@1133-006	Solid	01/25/23 13:14
Calibration Check	SLA0248-CCV8	CubeData_01262023@1133-057	NA	01/25/23 17:47
Calibration Blank	SLA0248-CCB8	CubeData_01262023@1133-062	NA	01/25/23 18:18
Calibration Check	SLA0248-CCV9	CubeData_01262023@1133-135	NA	01/25/23 23:50
Calibration Blank	SLA0248-CCB9	CubeData_01262023@1133-143	NA	01/26/23 00:21
Calibration Check	SLA0248-CCVA	CubeData_01262023@1133-213	NA	01/26/23 05:54
Calibration Blank	SLA0248-CCBA	CubeData_01262023@1133-219	NA	01/26/23 06:25
Calibration Check	SLA0248-CCVB	CubeData_01262023@1133-280	NA	01/26/23 10:59
Calibration Blank	SLA0248-CCBB	CubeData_01262023@1133-286	NA	01/26/23 11:29

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
1	1	BLANK	1.00		CARBON	1/ 23/2023 3:42 PM	bl	0.000	24 254	0.000	0.000	1 654	10 157	0.000	0.000	1.0000	1.0000



Name:

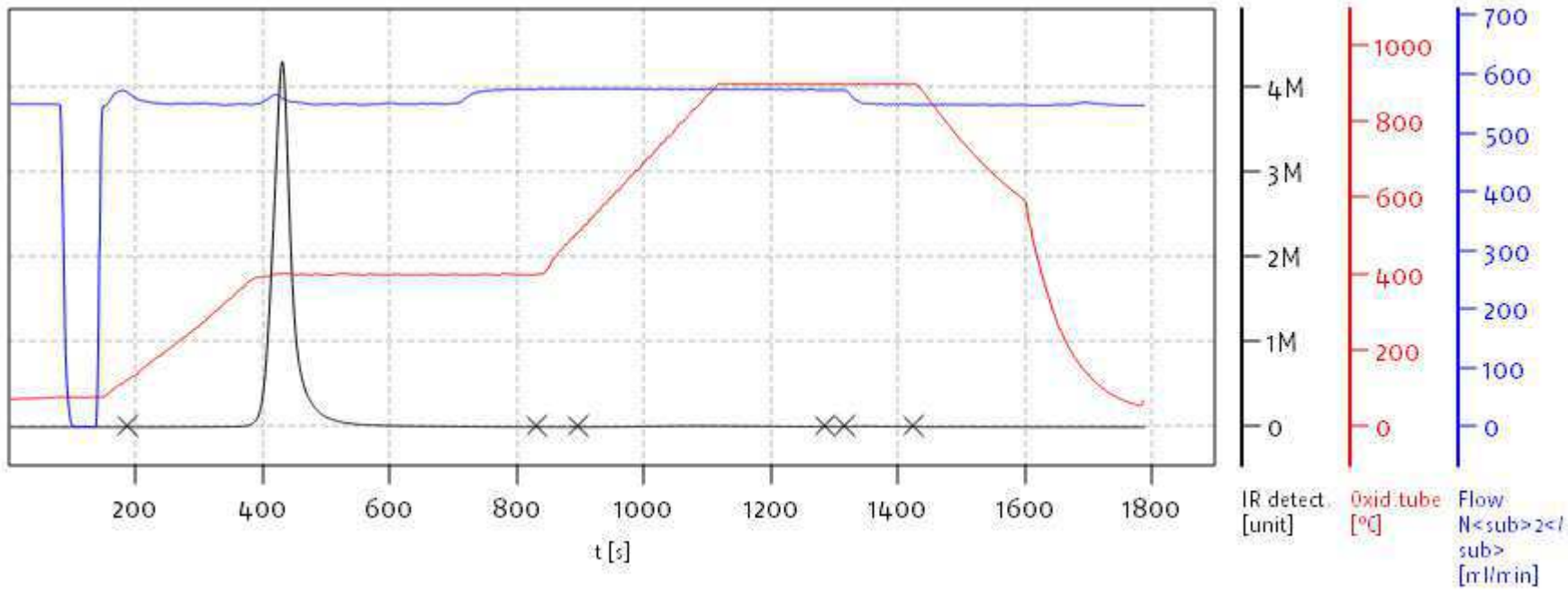
Access: soliTOC superuser

Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
2	2	Dfactor	19.50		CARBON	1/23/2023 4:12 PM	bl	44.446	5 763 756	45.134	0.000	24 224	113 253	44.446	0.688	0.9758	1.0000



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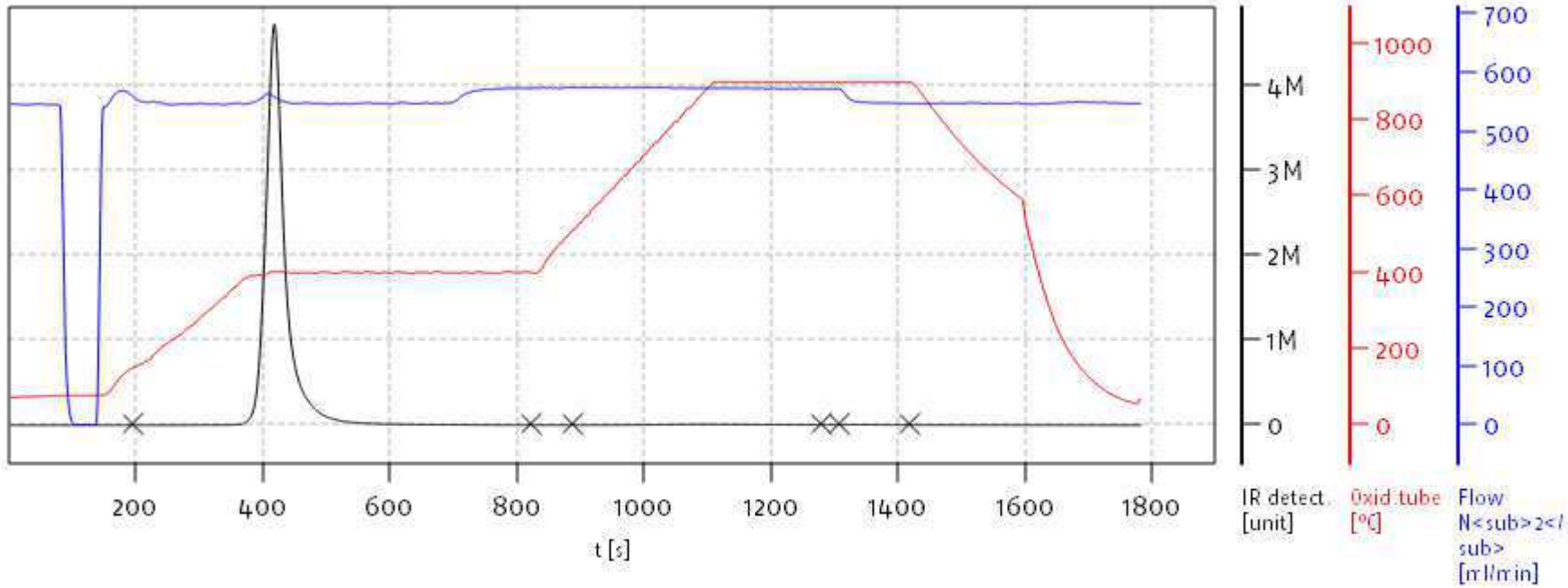
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
3	3	Dfactor	21.10		CARBON	1/23/2023 4:42 PM	bl	44.446	6 292 641	44.834	0.000	18 059	79 449	44.446	0.388	0.9668	1.0000



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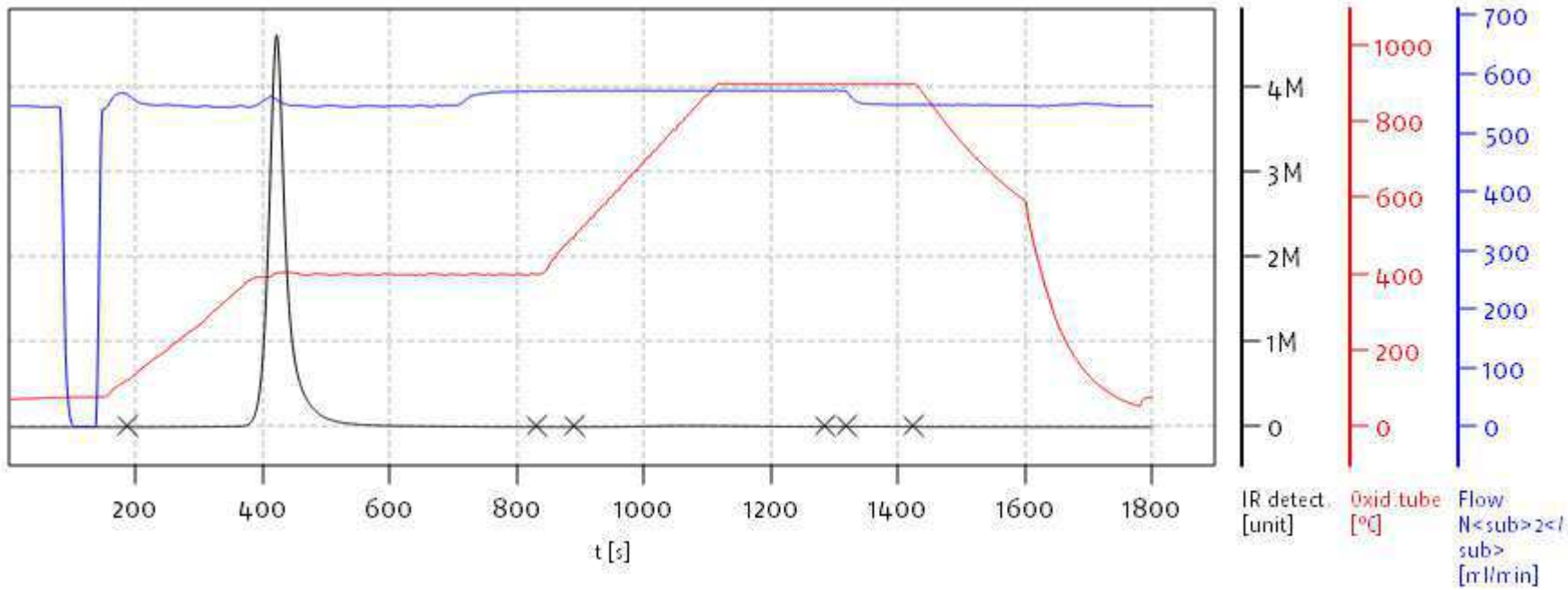
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
4	4	SLA0248-ICV1	20.00		CARBON	1/23/2023 5:12 PM	bl	44.260	5 913 547	44.988	0.000	19 586	120 634	44.260	0.728	0.9713	1.0000



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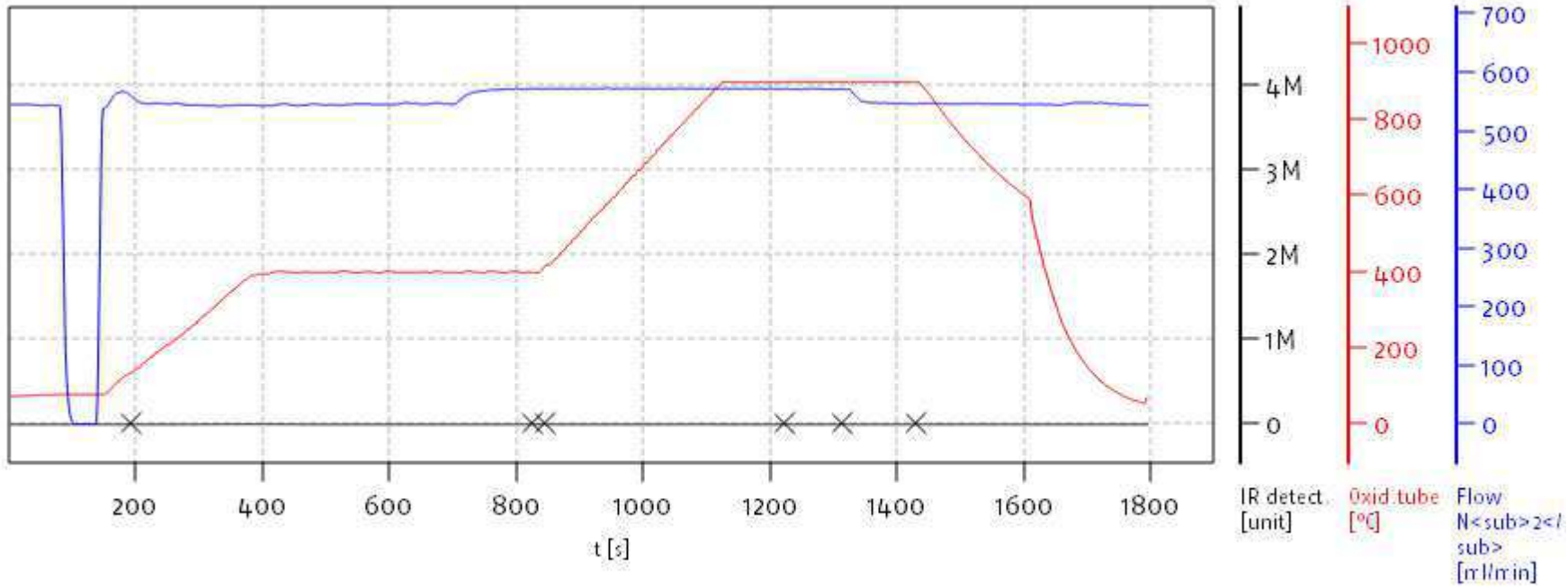
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
5	5	SLA0248-ICB1	500.70		CARBON	1/23/2023 5:43 PM	bl,C2u	0.000	13 139	0.000	0.000	1 222	3 531	0.000	0.000	0.9713	1.0000



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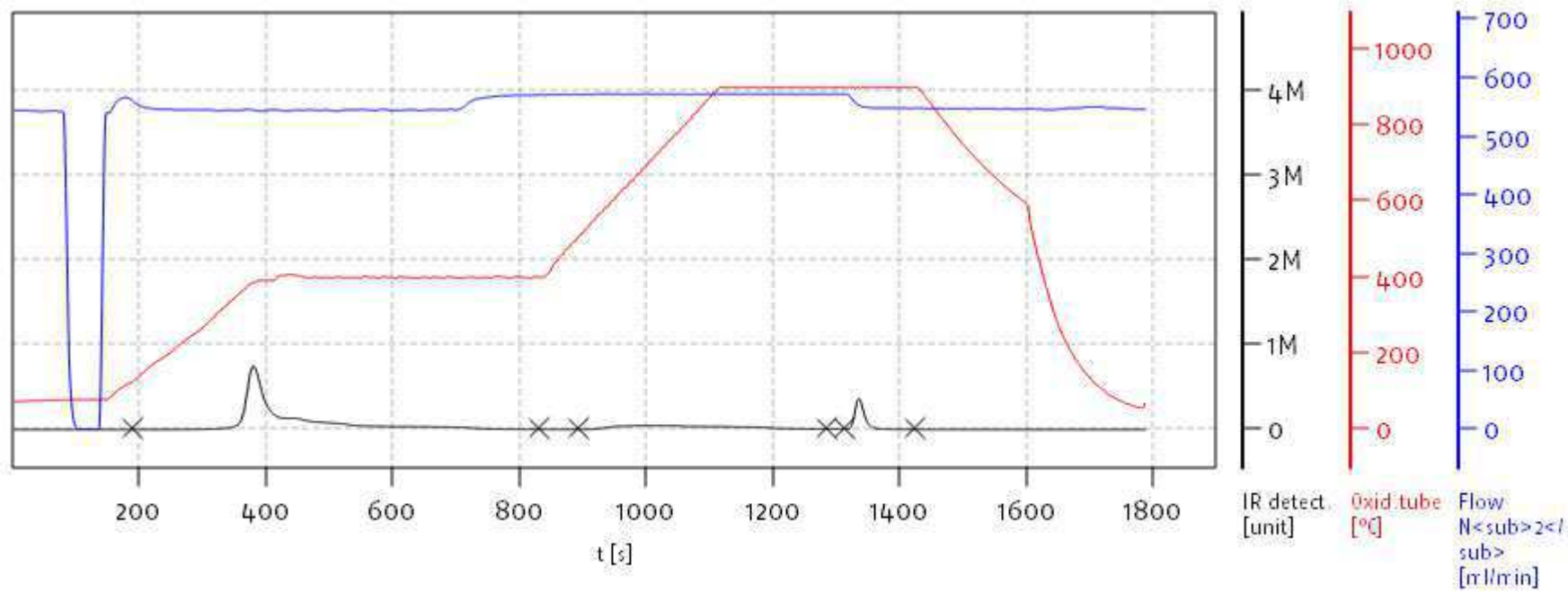
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
6	6	23A0328-03RE1	227.90		CARBON	1/23/2023 6:13 PM	bl	1.203	1 625 125	1.456	0.149	245 212	398 003	1.055	0.252	0.9713	1.0000



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elementar
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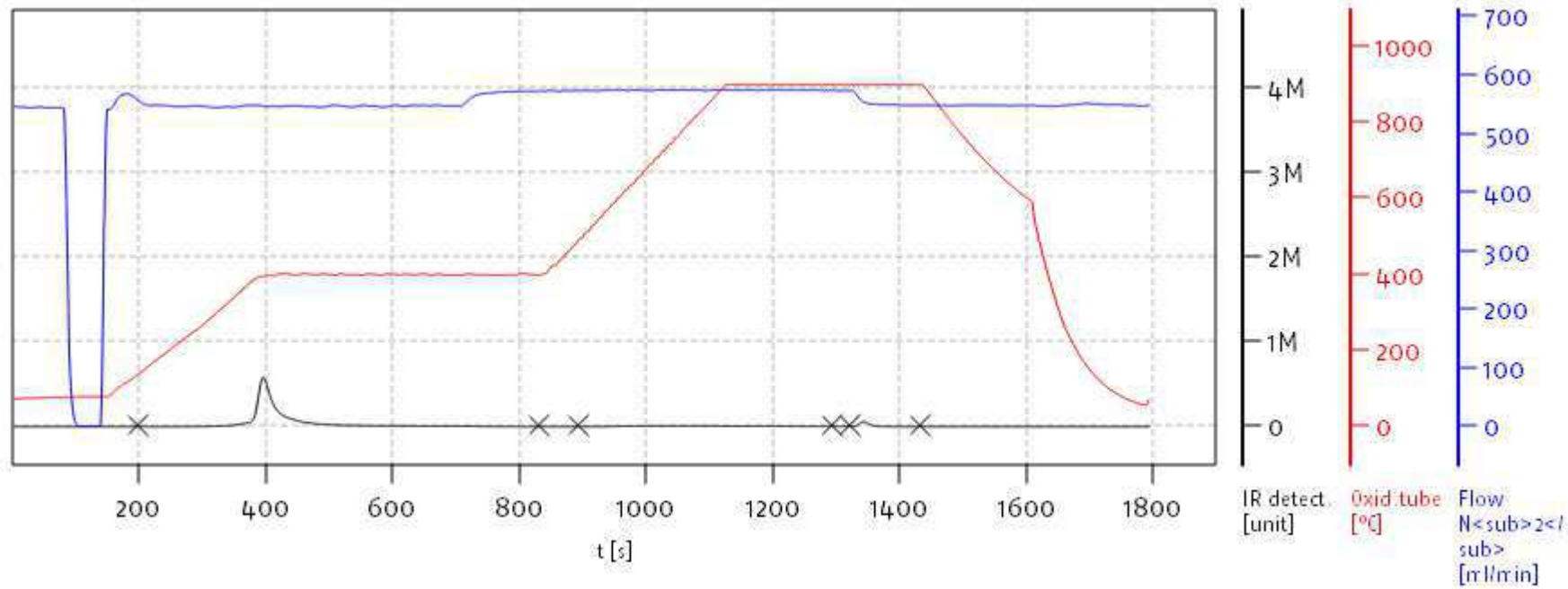
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
7	7	23A0385-01RE1	109.10		CARBON	1/23/2023 6:43 PM	bl	1.190	874 784	1.273	0.021	41 338	85 265	1.169	0.083	0.9713	1.0000



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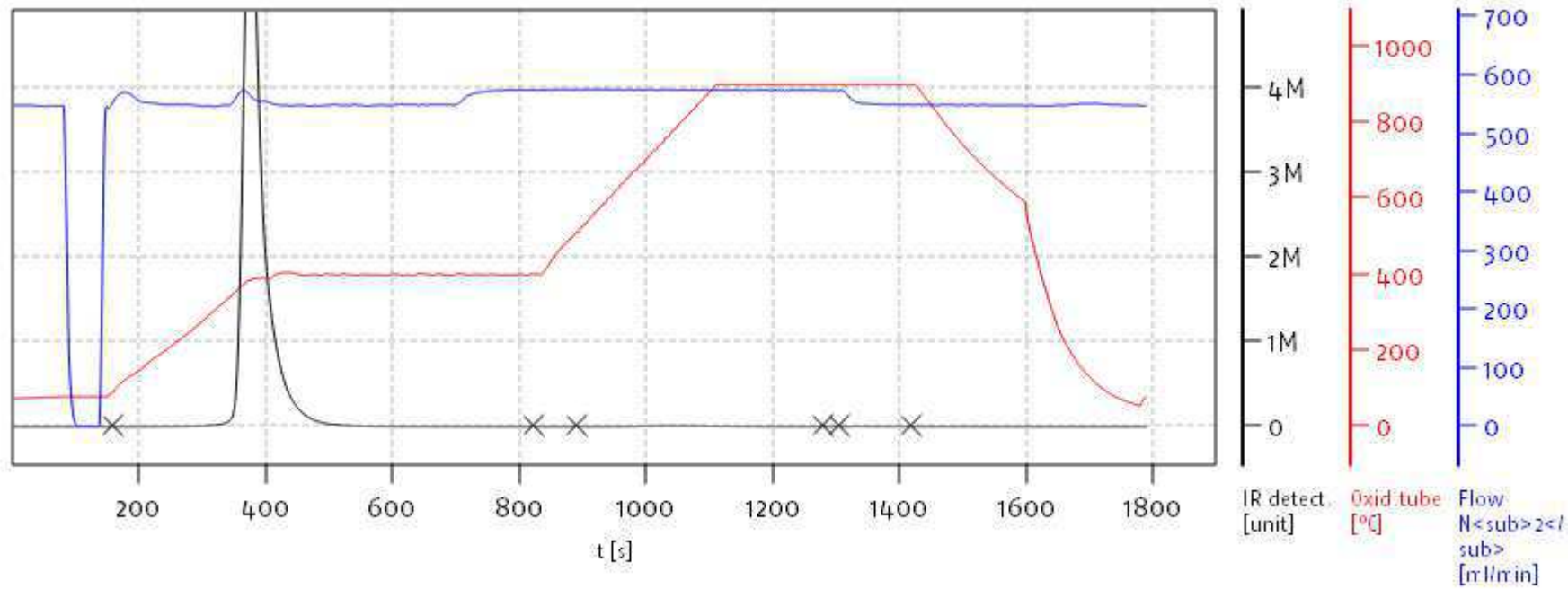
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
8	8	23A0385-02RE1	129.10		CARBON	1/23/2023 7:13 PM	bl	10.269	8 843 651	10.303	0.000	8 633	54 806	10.269	0.034	0.9713	1.0000



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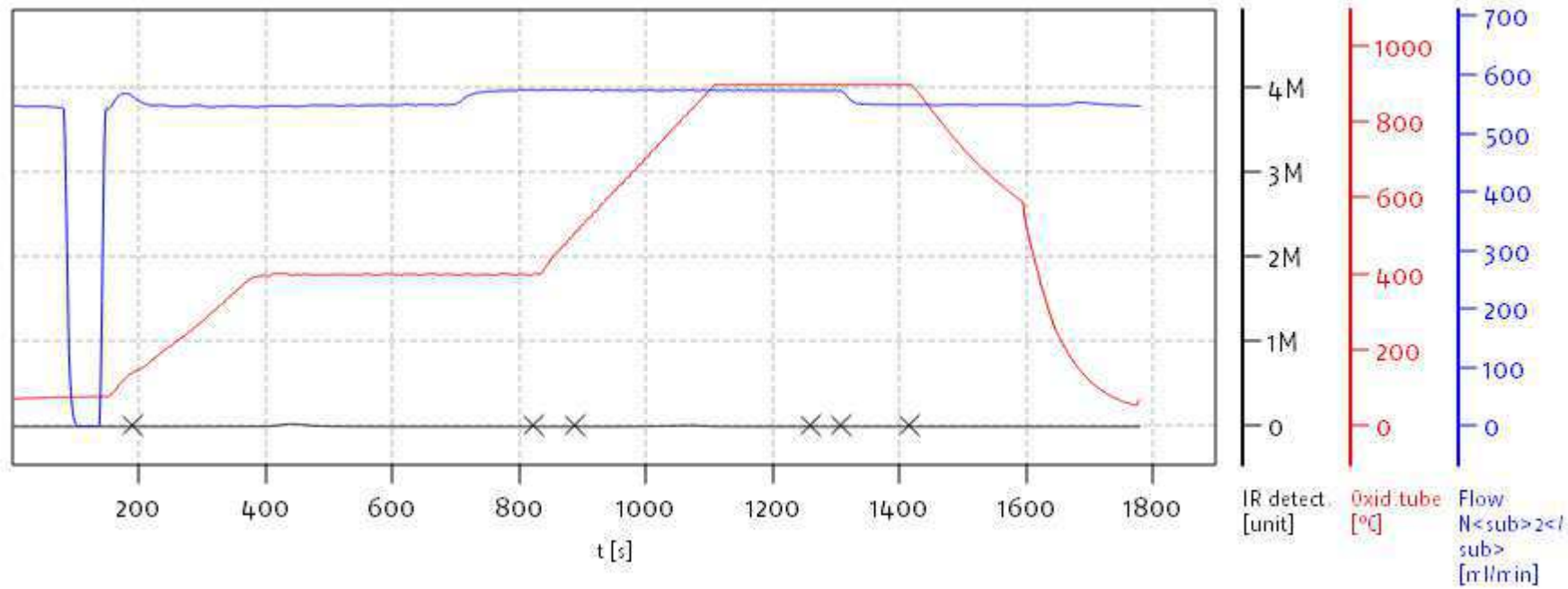
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
9	9	BLA0526-MRL1	509.40		CARBON	1/23/2023 7:43 PM	bl,C2u	0.014	72 656	0.016	0.000	537	35 766	0.014	0.003	0.9713	1.0000



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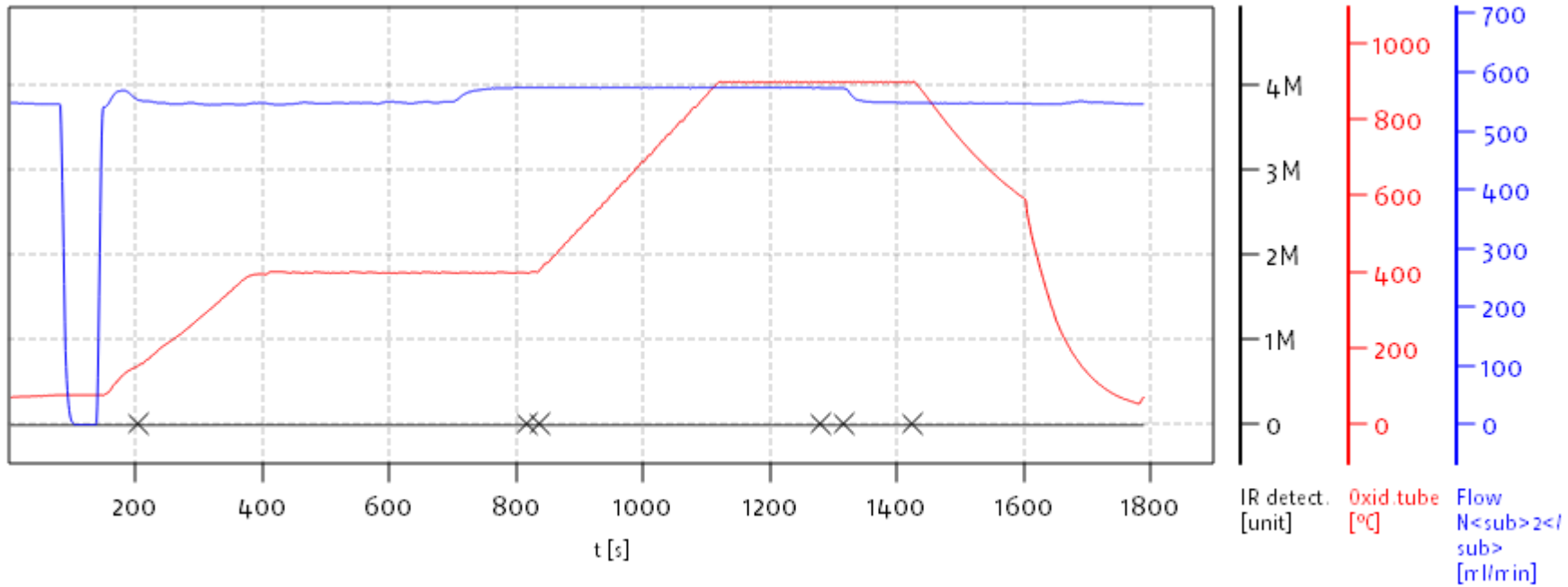
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
10	10	BLA0526-BLK1	527.90		CARBON	1/23/2023 8:14 PM	bl,C2u	0.000	5 941	0.000	0.000	480	4 113	0.000	0.000	0.9713	1.0000



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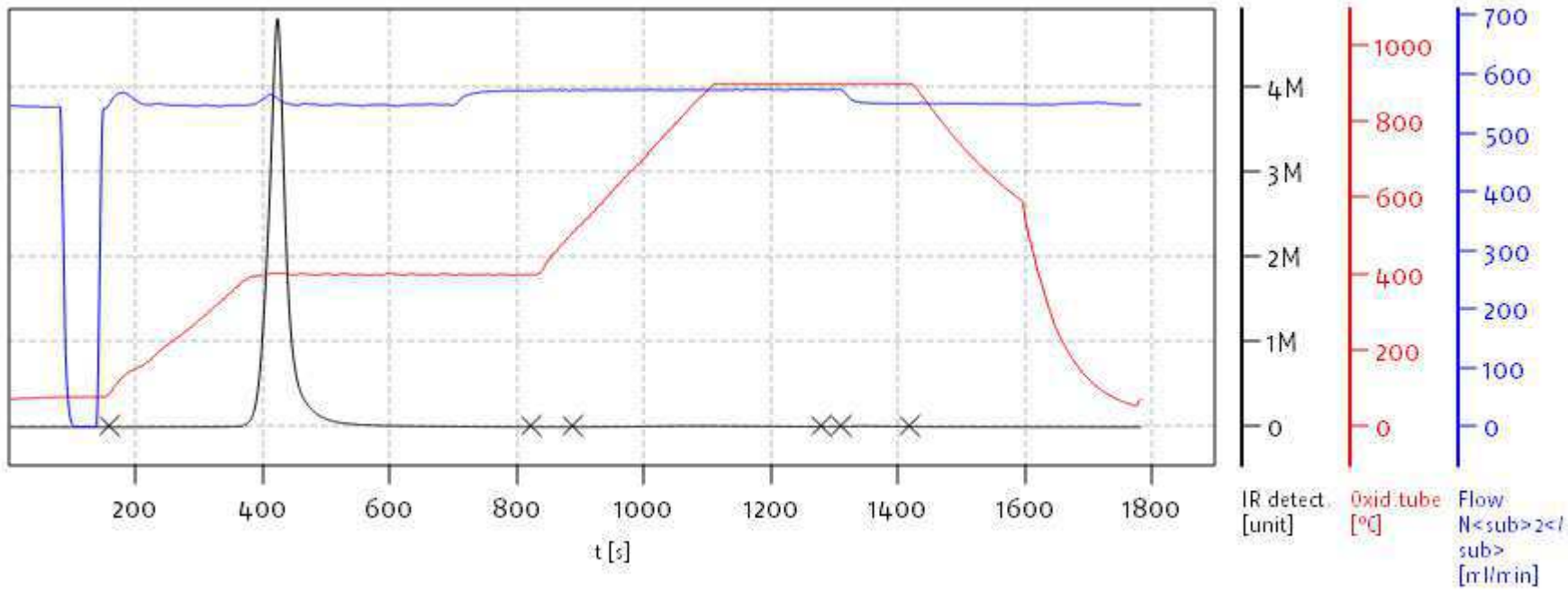
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
11	11	BLA0526-BS1	21.00		CARBON	1/23/2023 8:44 PM	bl	43.970	6 163 353	44.615	0.029	30 531	114 084	43.941	0.645	0.9713	1.0000



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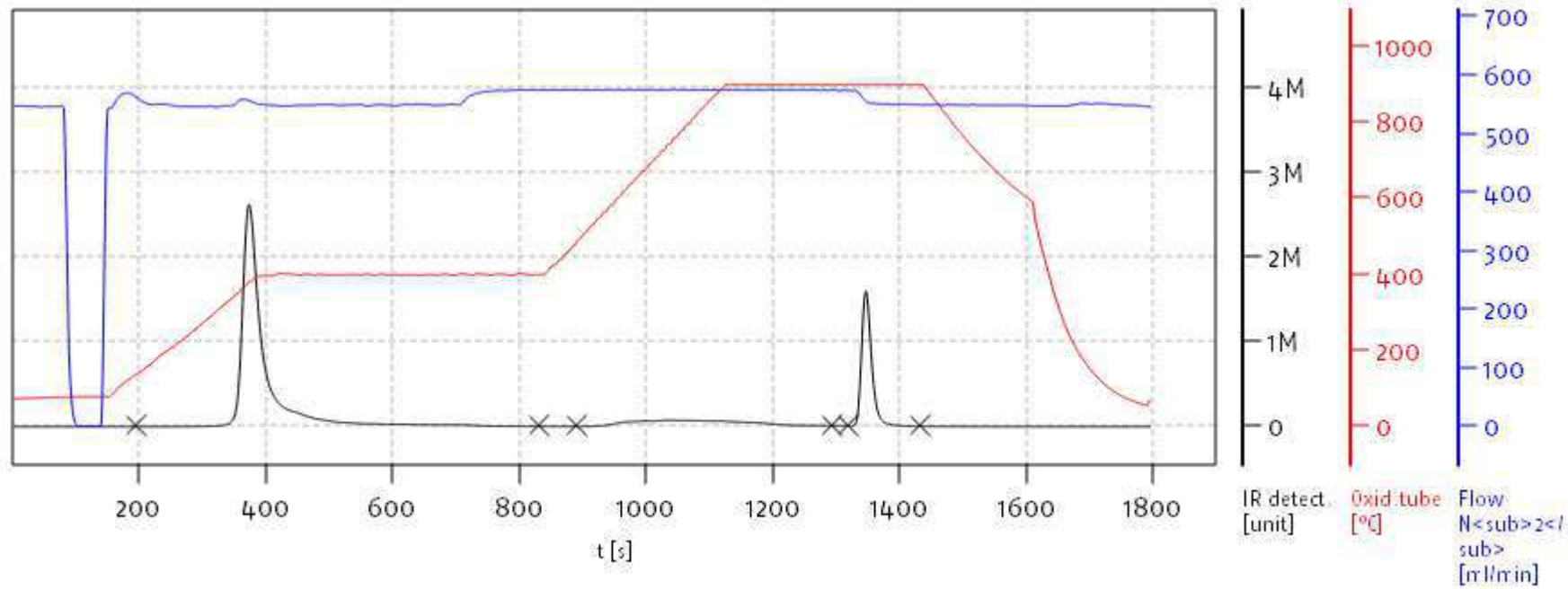
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
12	12	BLA0526-SRM1	250.90		CARBON	1/23/2023 9:14 PM	bl	2.913	3 763 037	3.297	0.674	1 119 165	647 738	2.239	0.383	0.9713	1.0000



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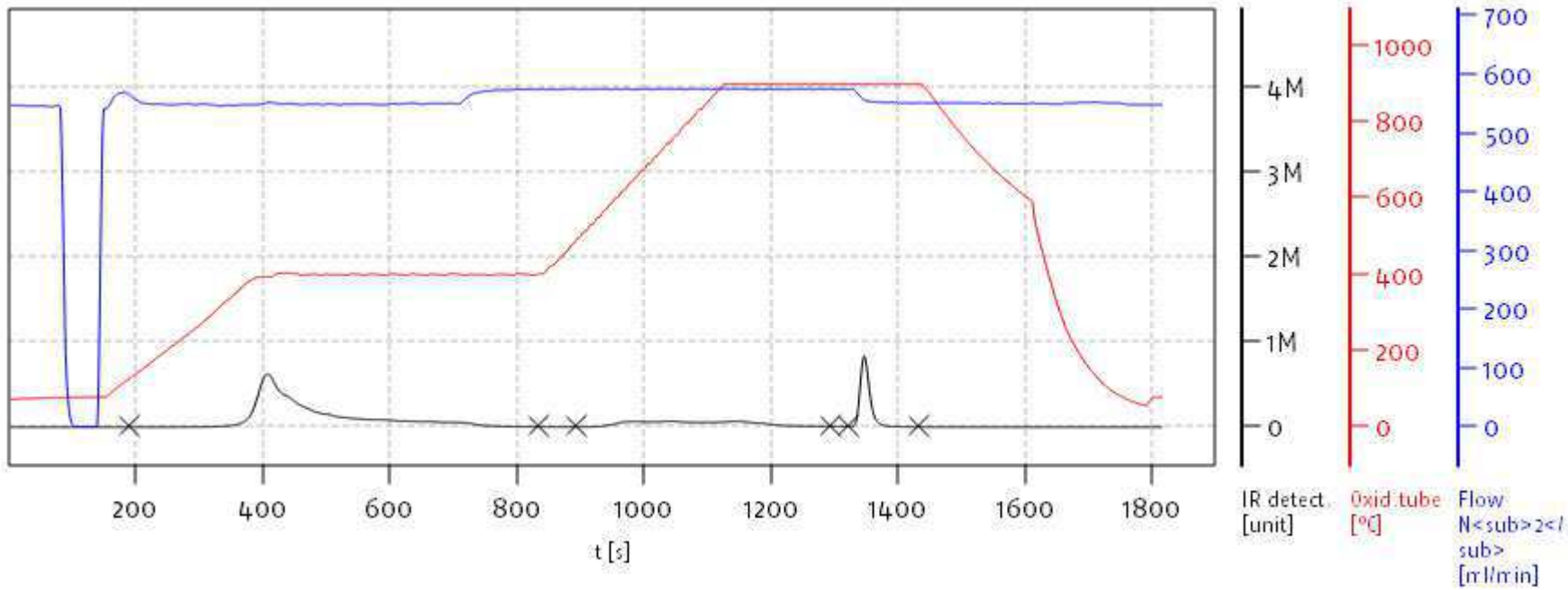
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
13	13	23A0417-01	520.30		CARBON	1/23/2023 9:45 PM	bl	0.822	2 322 424	0.995	0.158	558 783	608 457	0.663	0.173	0.9713	1.0000



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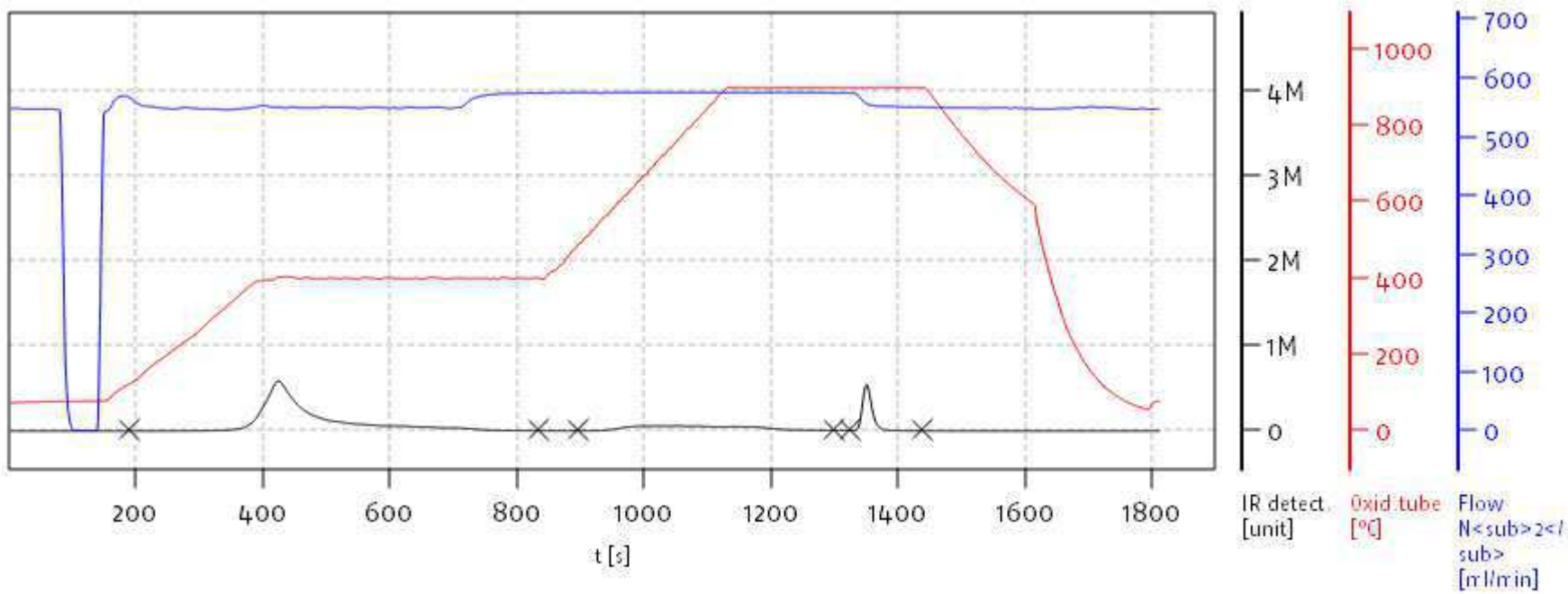
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
14	14	BLA0526-DUP1	531.00		CARBON	1/23/2023 10:15 PM	bl	0.660	2 010 977	0.808	0.099	364 598	531 554	0.562	0.147	0.9713	1.0000



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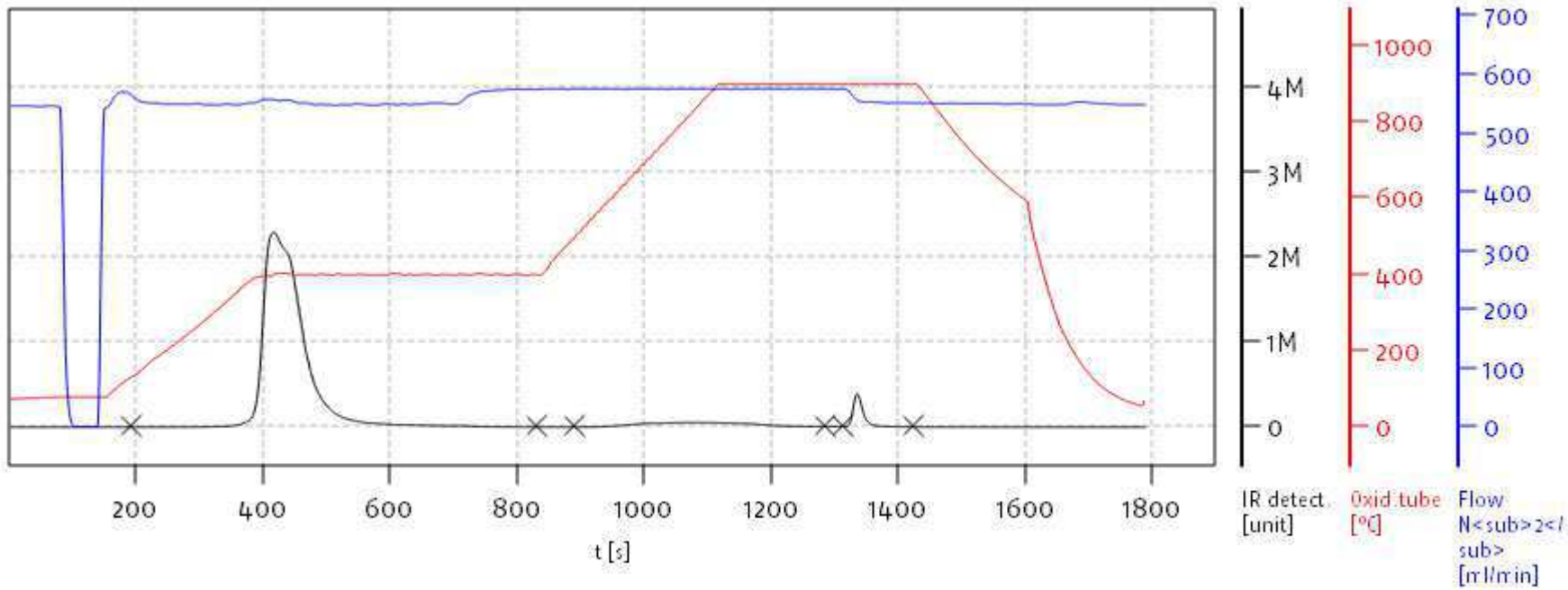
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
15	15	BLA0526-MS1	537.10	0.0088	CARBON	1/23/2023 10:46 PM	bl	1.780	6 130 764	1.896	0.071	274 209	427 181	1.709	0.115	0.9713	1.0000



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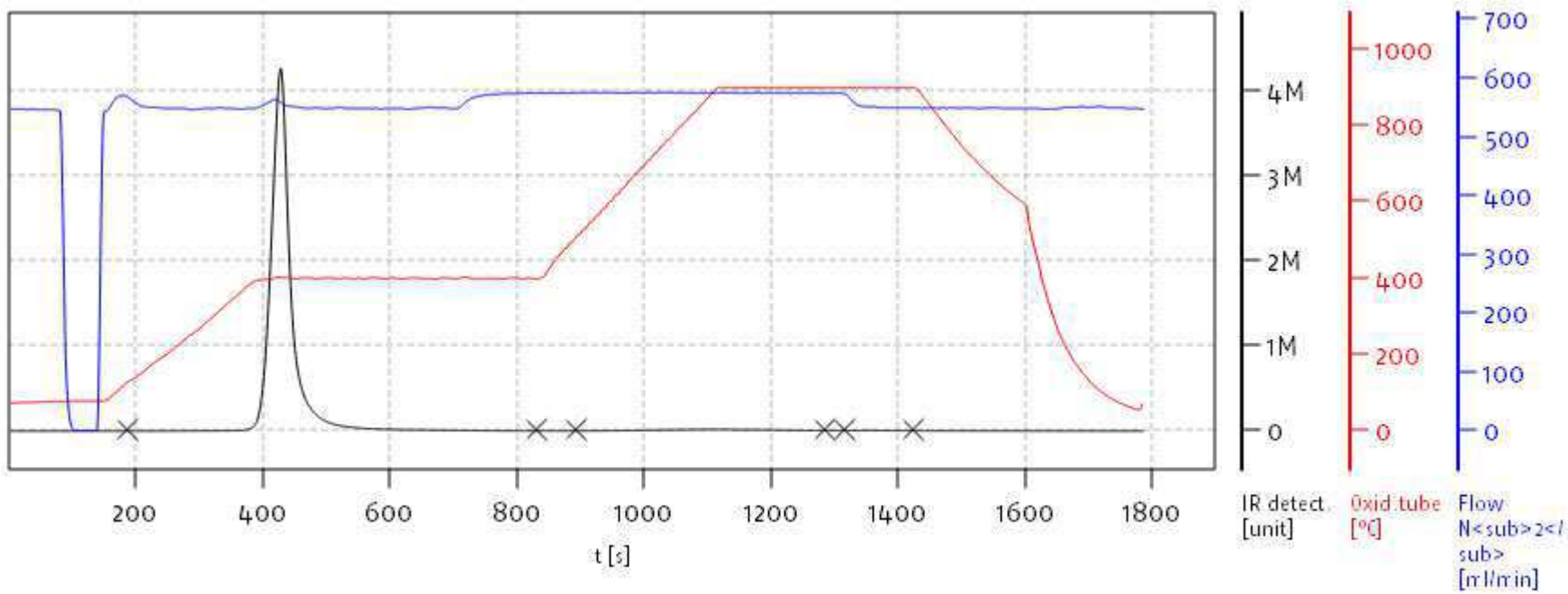
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
16	16	SLA0248-CCV1	19.60		CARBON	1/23/2023 11:16 PM	bl	43.638	5 714 757	44.632	0.000	22 126	152 433	43.638	0.994	0.9713	1.0000



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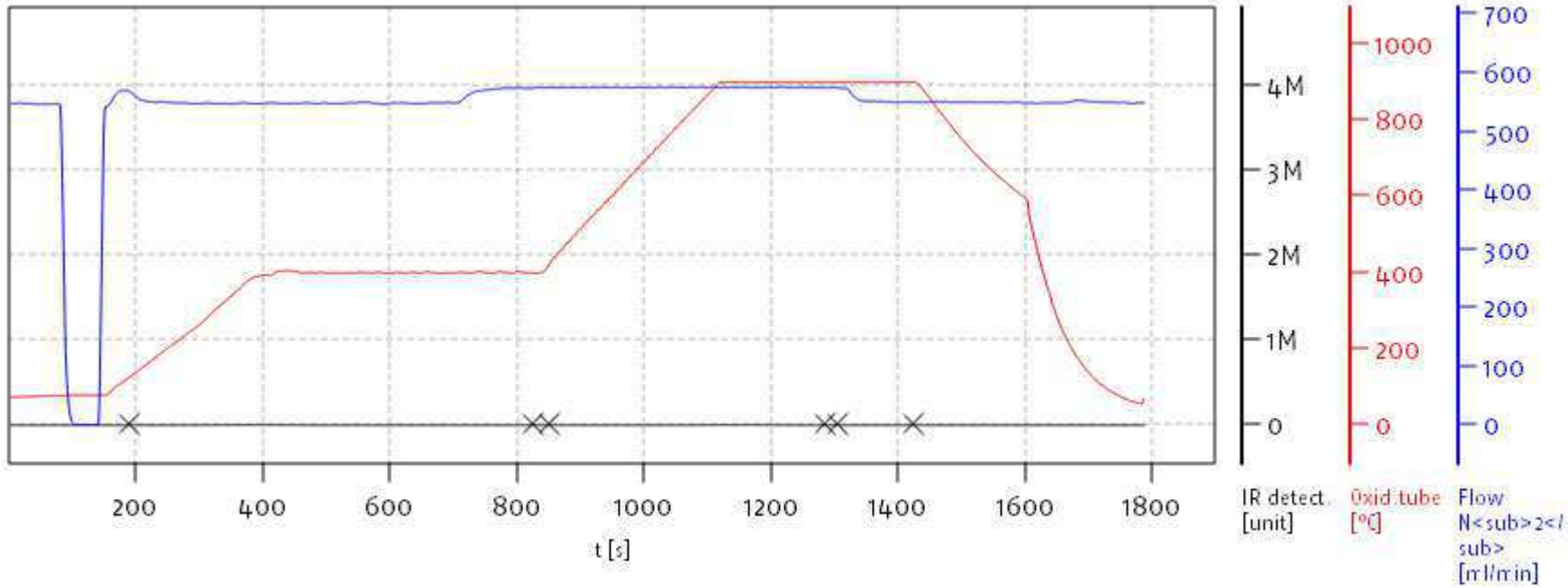
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
17	17	SLA0248-CCB1	513.30		CARBON	1/23/2023 11:46 PM	bl,C2u	0.000	12 790	0.000	0.000	675	11 783	0.000	0.000	0.9713	1.0000



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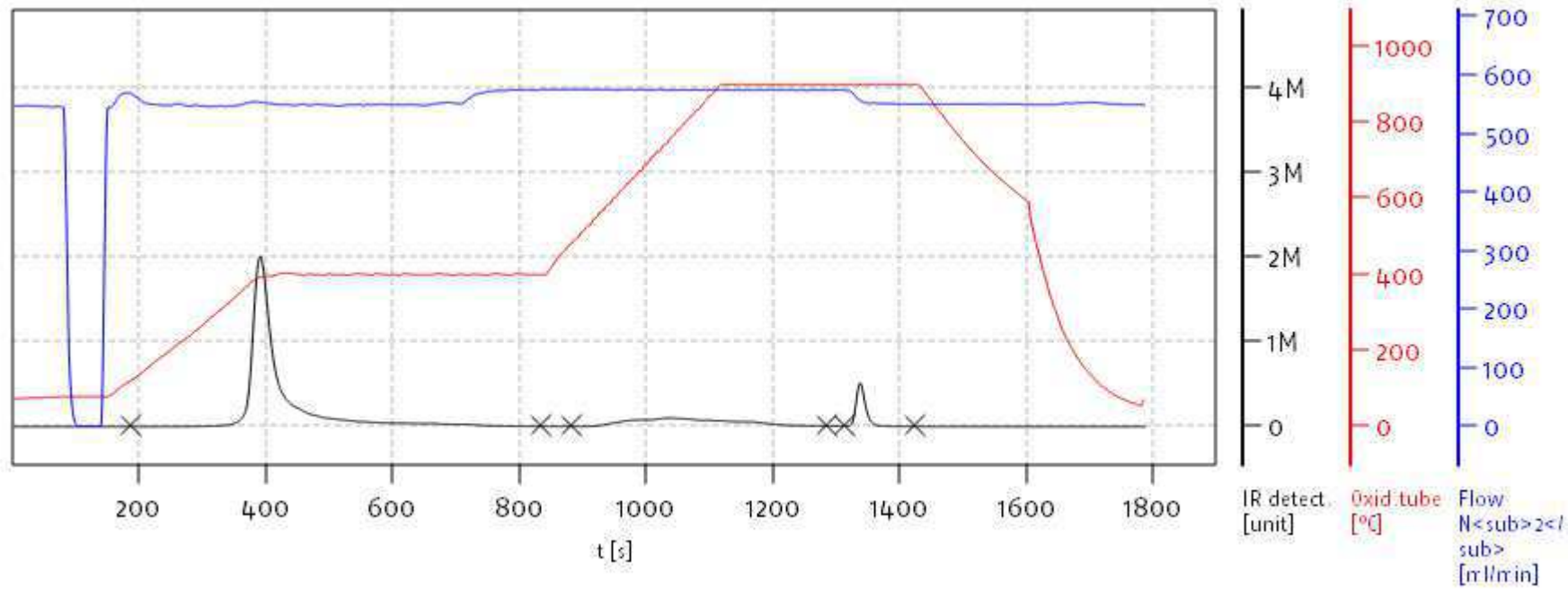
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
18	18	23A0417-02	527.20		CARBON	1/24/2023 12:16 AM	bl	1.063	3 437 301	1.276	0.091	335 182	751 689	0.973	0.213	0.9713	1.0000



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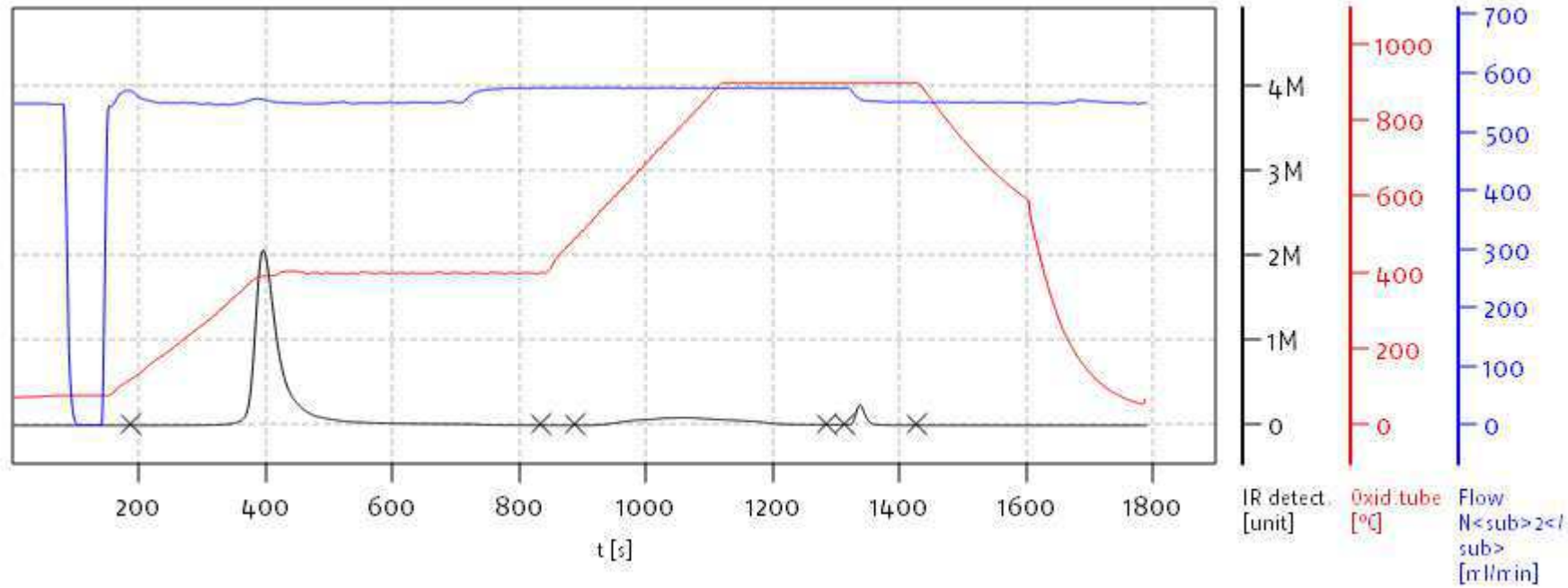
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
19	19	23A0417-03	520.30		CARBON	1/24/2023 12:46 AM	bl	1.074	3 605 237	1.264	0.040	161 637	664 150	1.034	0.190	0.9713	1.0000



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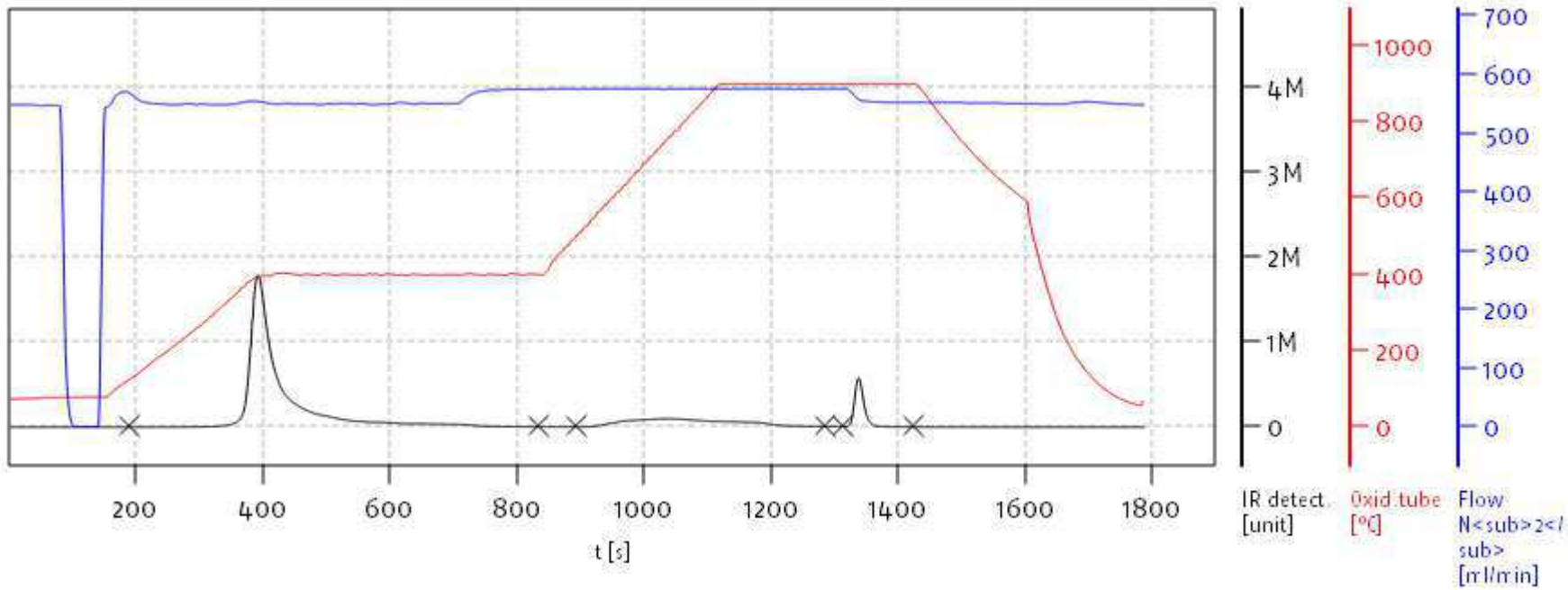
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
20	20	23A0417-04	527.80		CARBON	1/24/2023 1:17 AM	bl	1.083	3 472 766	1.301	0.102	373 179	769 424	0.982	0.218	0.9713	1.0000



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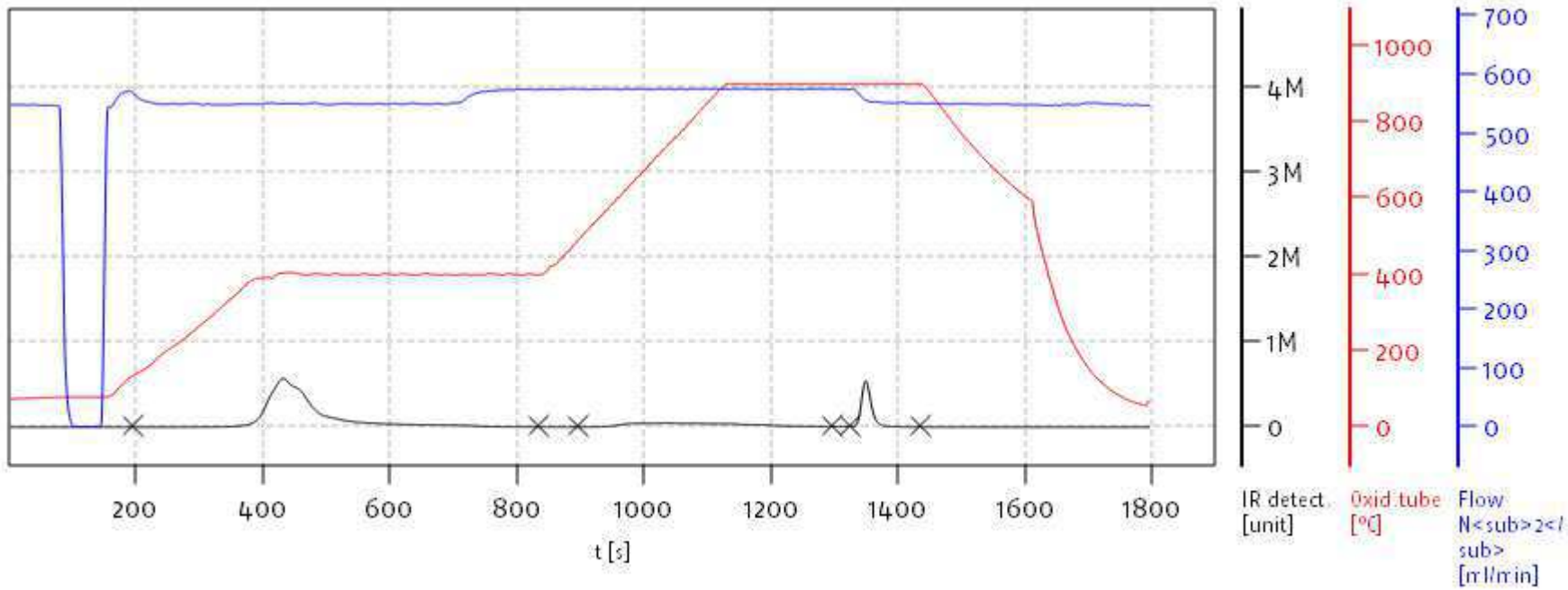
Access: soliTOC superuser

Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
21	21	23A0417-05	502.00		CARBON	1/24/2023 1:47 AM	bl	0.654	1 855 876	0.770	0.106	371 856	400 241	0.548	0.115	0.9713	1.0000



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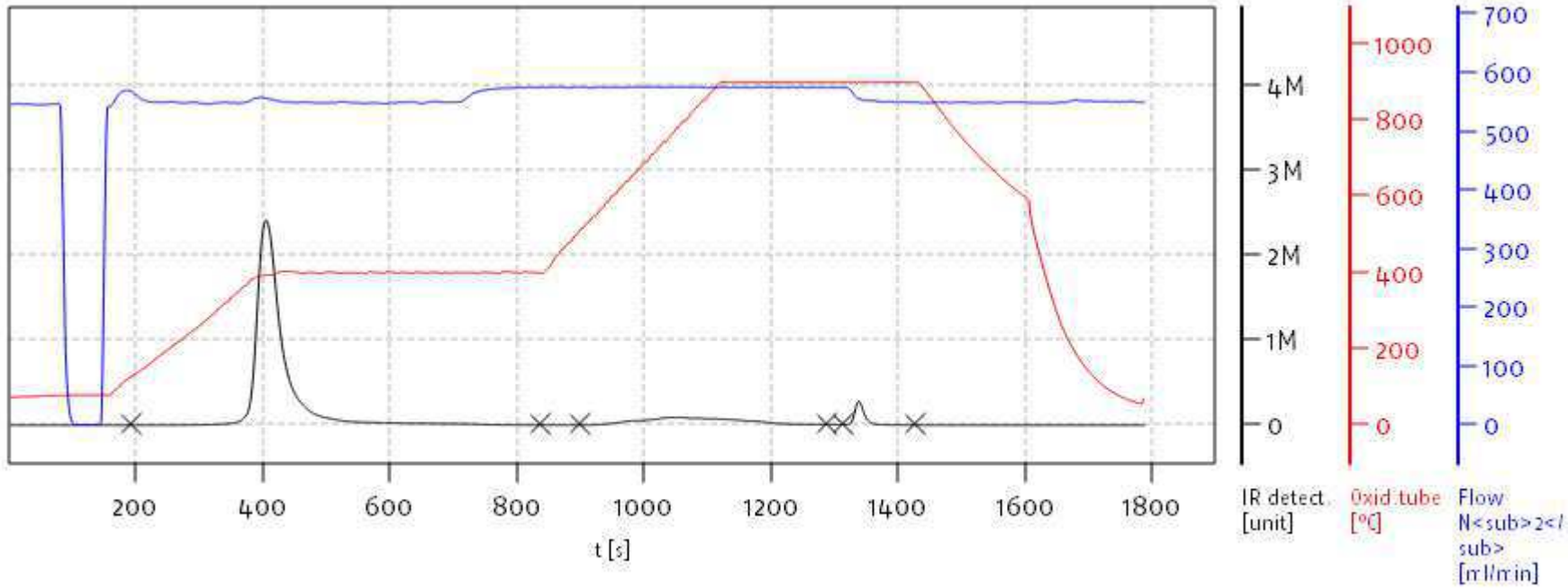
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
22	22	23A0417-06	527.80		CARBON	1/24/2023 2:17 AM	bl	1.245	4 227 598	1.426	0.048	189 628	646 254	1.197	0.182	0.9713	1.0000



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Soli TOC Cube, Carbon
Balance: BAL3
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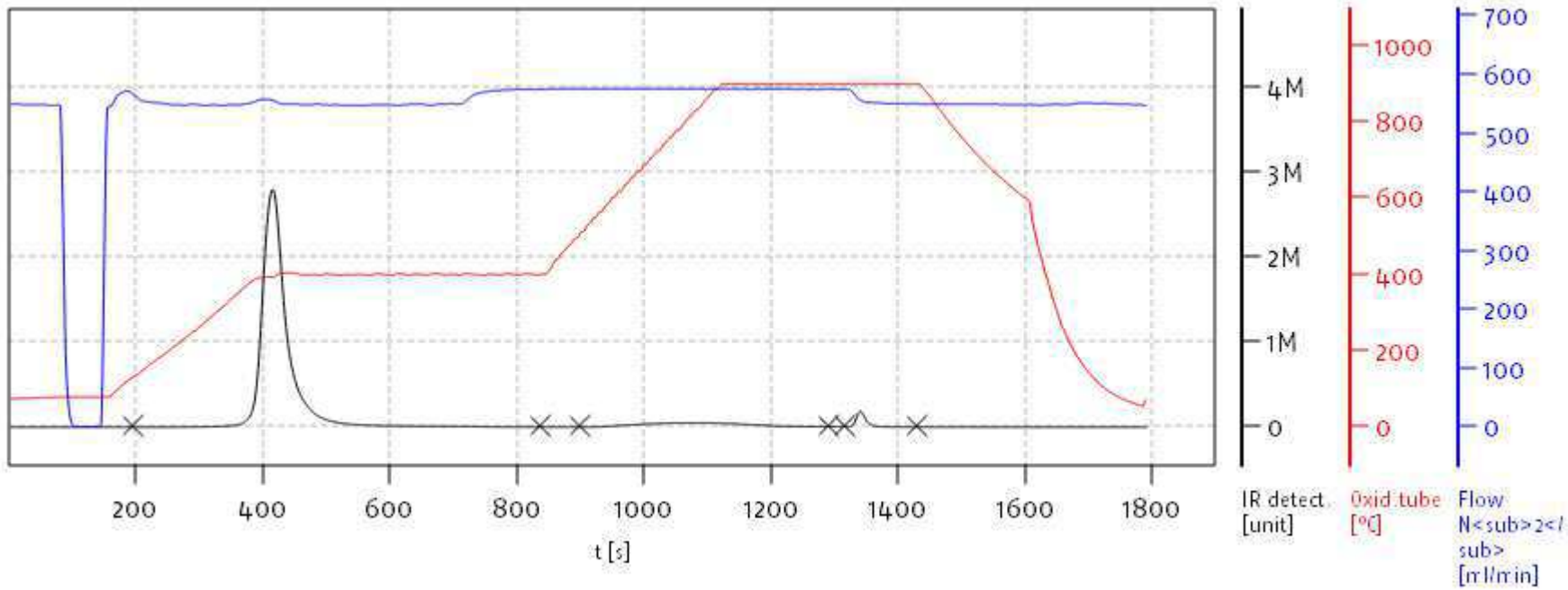
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
23	23	23A0417-07	534.10		CARBON	1/24/2023 2:47 AM	bl	1.330	4 649 871	1.433	0.029	125 835	380 375	1.302	0.103	0.9713	1.0000



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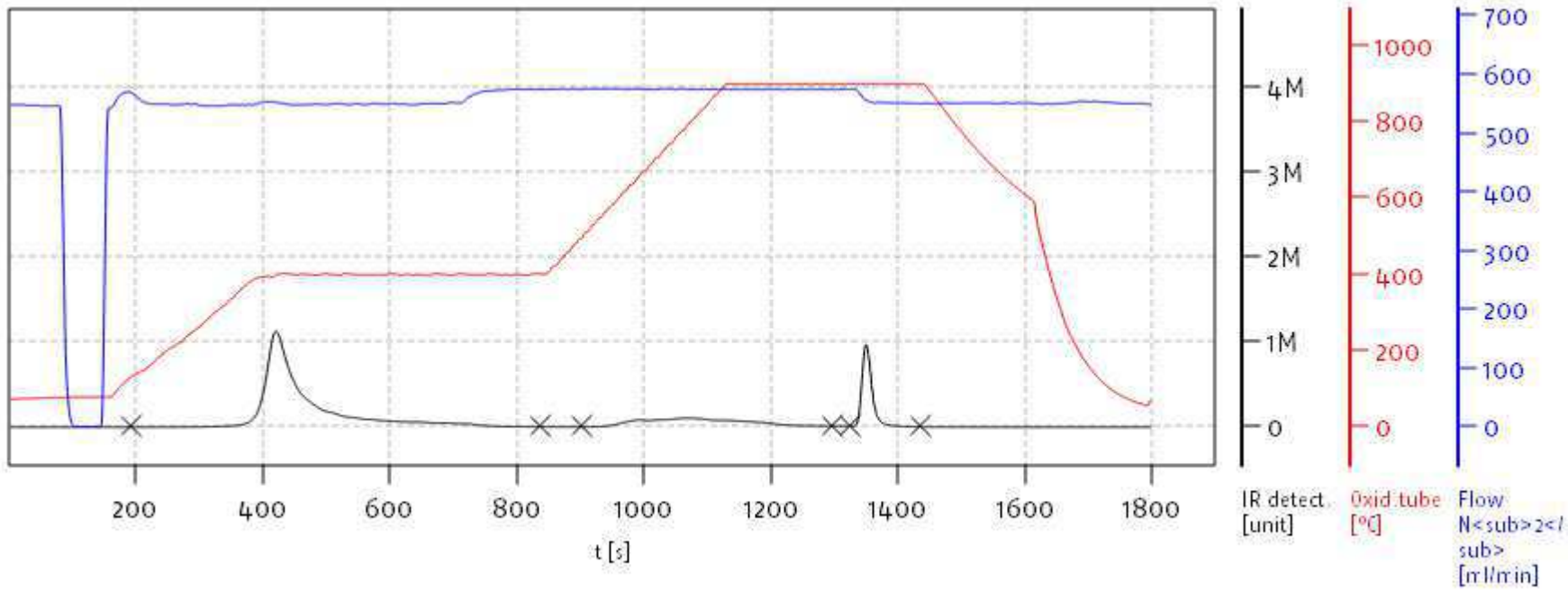
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
24	24	23A0417-08	520.90		CARBON	1/24/2023 3:18 AM	bl	1.056	3 013 492	1.290	0.194	679 922	811 733	0.862	0.233	0.9713	1.0000



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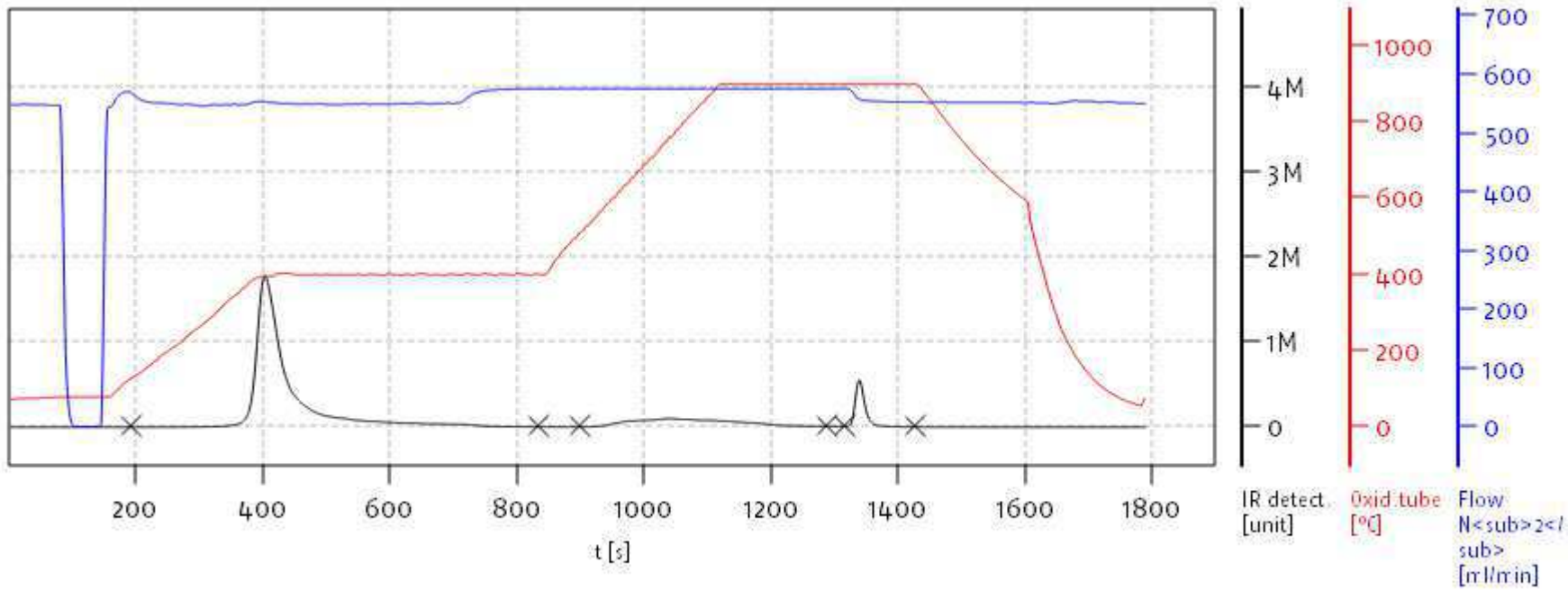
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
25	25	23A0417-09	533.50		CARBON	1/24/2023 3:48 AM	bl	1.135	3 692 506	1.344	0.101	375 619	750 032	1.033	0.210	0.9713	1.0000



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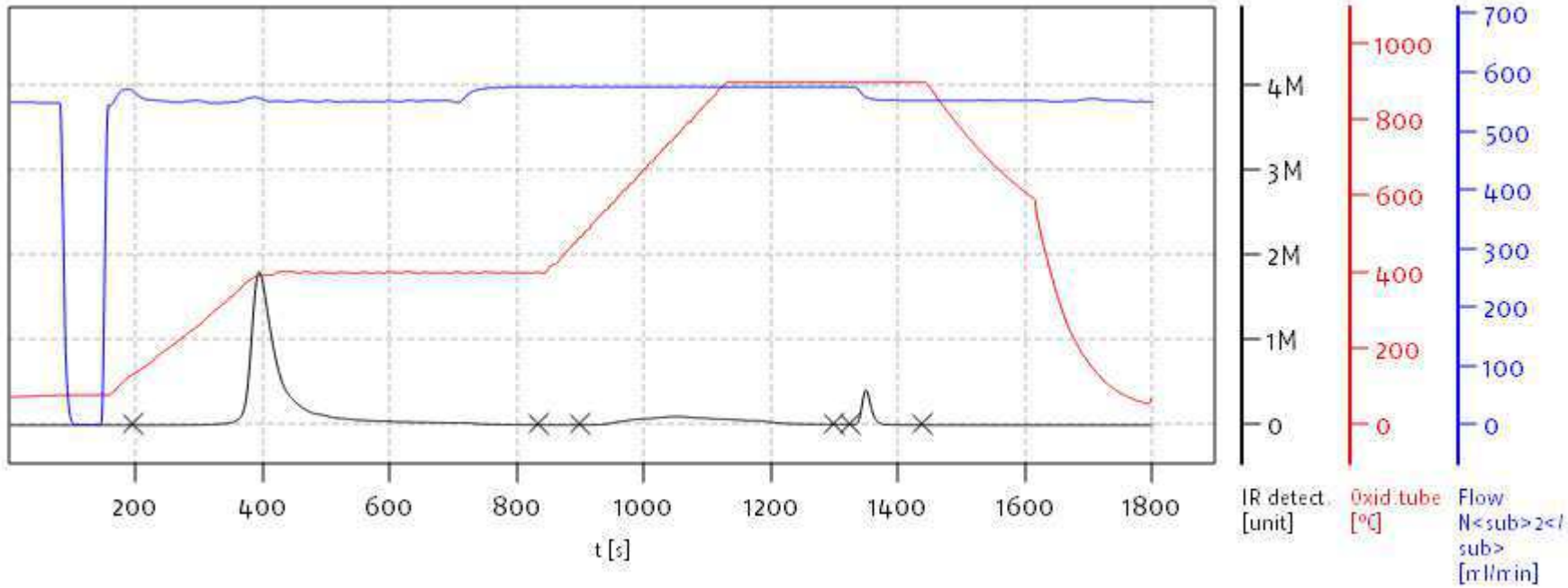
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
26	26	23A0417-10	507.60		CARBON	1/24/2023 4:18 AM	bl	1.121	3 560 683	1.337	0.074	269 169	736 051	1.047	0.216	0.9713	1.0000



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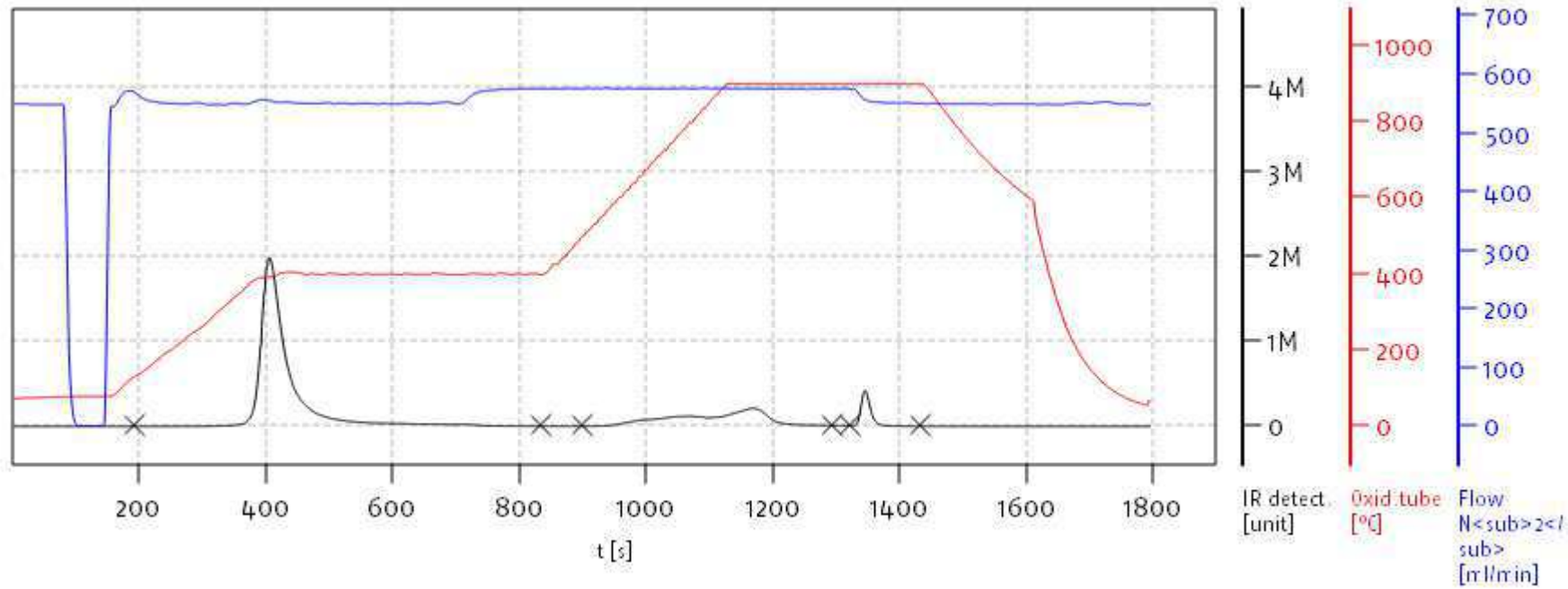
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
27	27	23A0417-11	535.30		CARBON	1/24/2023 4:49 AM	bl	1.083	3 620 348	1.409	0.074	281 788	1 154 369	1.009	0.326	0.9713	1.0000



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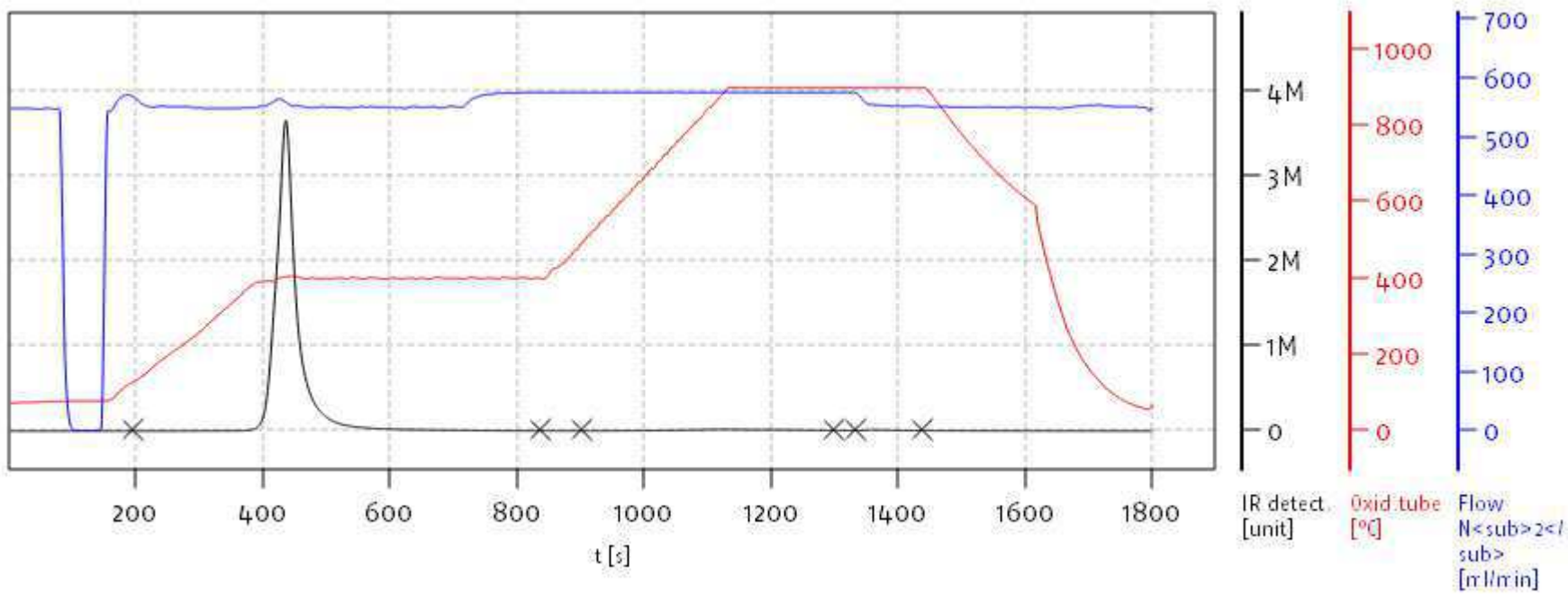
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
28	28	SLA0248-CCV2	18.30		CARBON	1/24/2023 5:19 AM	bl	42.411	5 180 950	43.456	0.059	33 558	150 104	42.352	1.045	0.9713	1.0000



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Soli TOC Cube, Carbon
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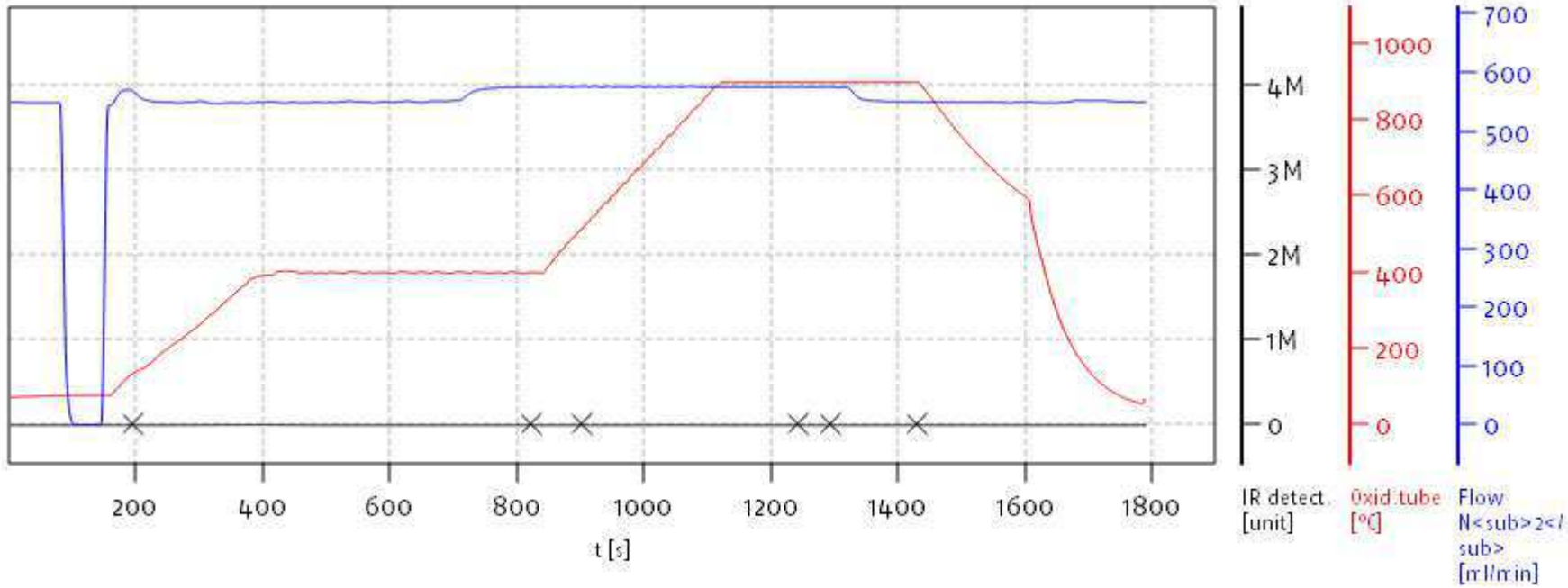
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
29	29	SLA0248-CCB2	507.20		CARBON	1/24/2023 5:49 AM	bl,C2u	0.000	21 088	0.000	0.000	755	5 520	0.000	0.000	0.9713	1.0000



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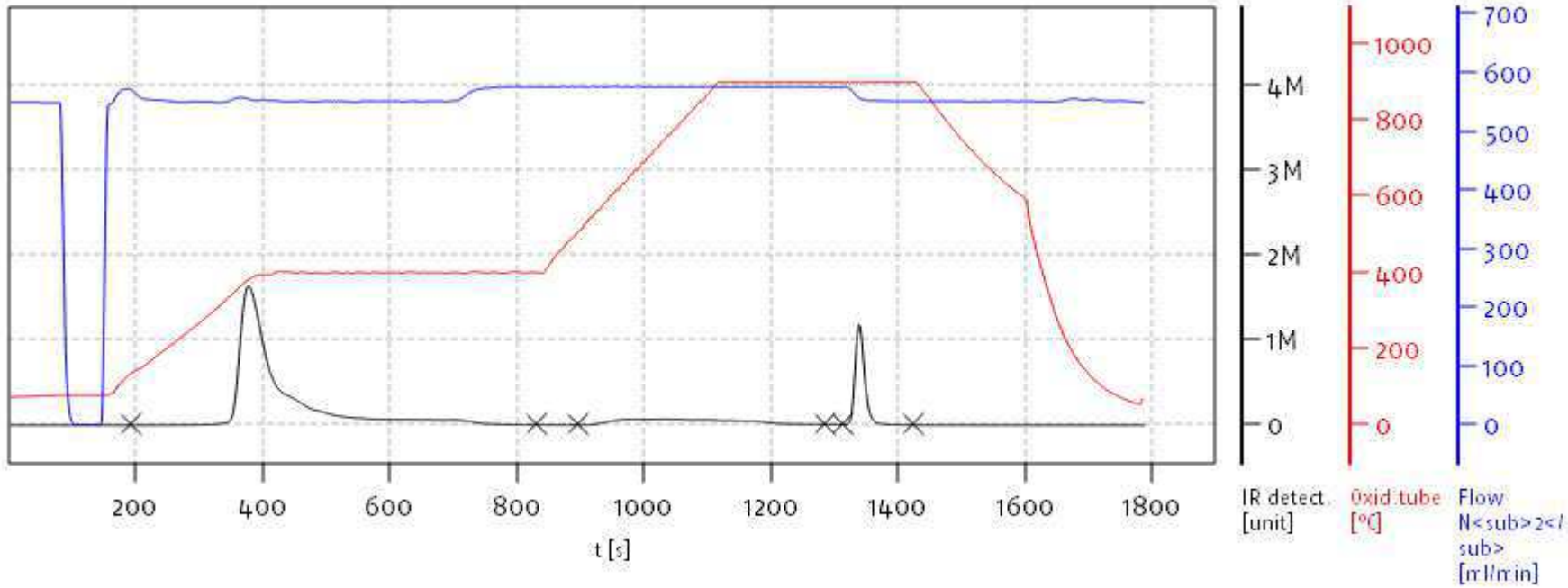
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
30	30	23A0417-12	603.80		CARBON	1/24/2023 6:19 AM	bl	1.211	4 113 045	1.367	0.193	779 716	637 049	1.018	0.157	0.9713	1.0000



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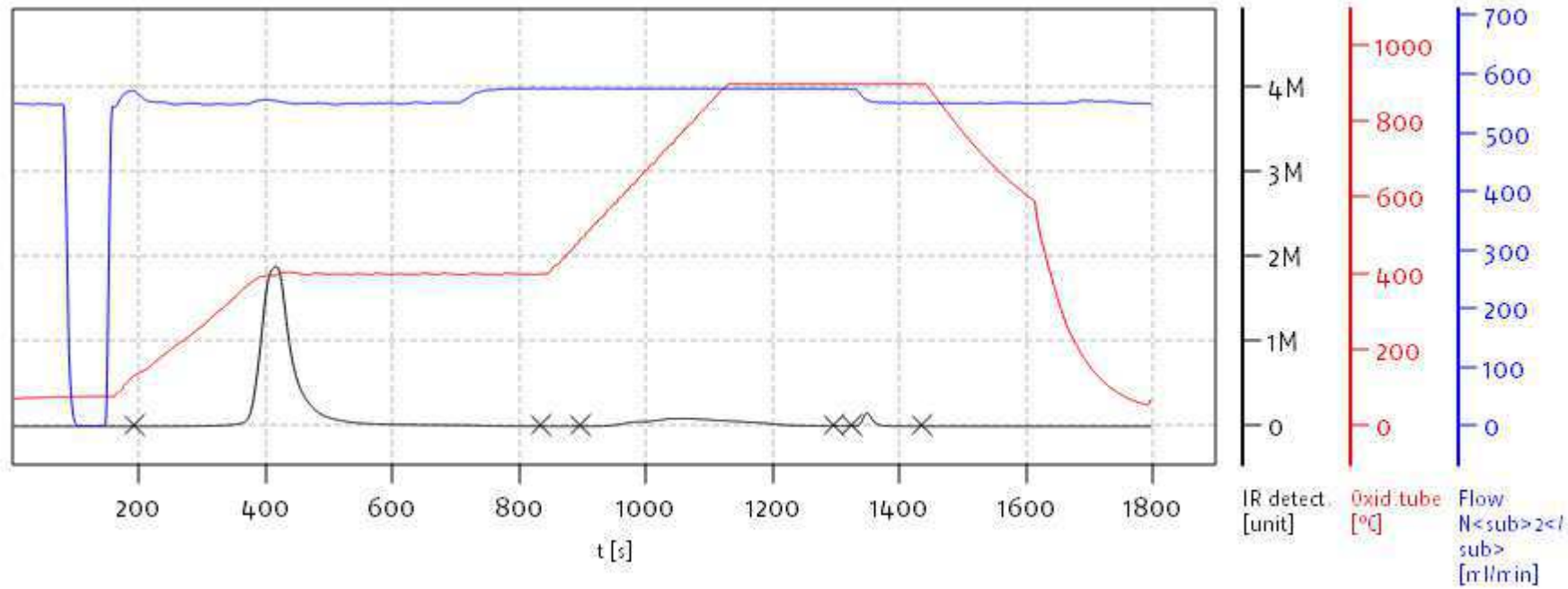
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
31	31	23A0417-13	561.40		CARBON	1/24/2023 6:50 AM	bl	1.128	4 151 942	1.297	0.023	109 546	639 394	1.105	0.169	0.9713	1.0000



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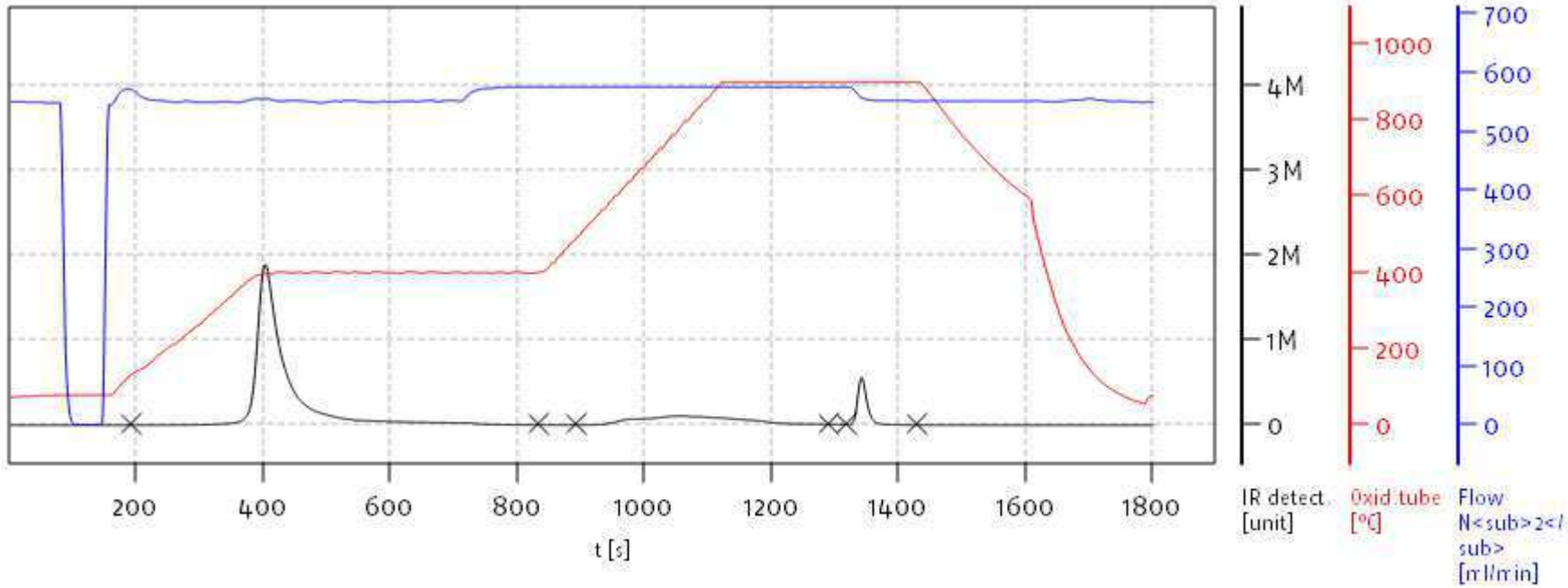
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
32	32	23A0417-14	504.30		CARBON	1/24/2023 7:20 AM	bl	1.181	3 632 357	1.419	0.106	370 920	801 586	1.075	0.238	0.9713	1.0000



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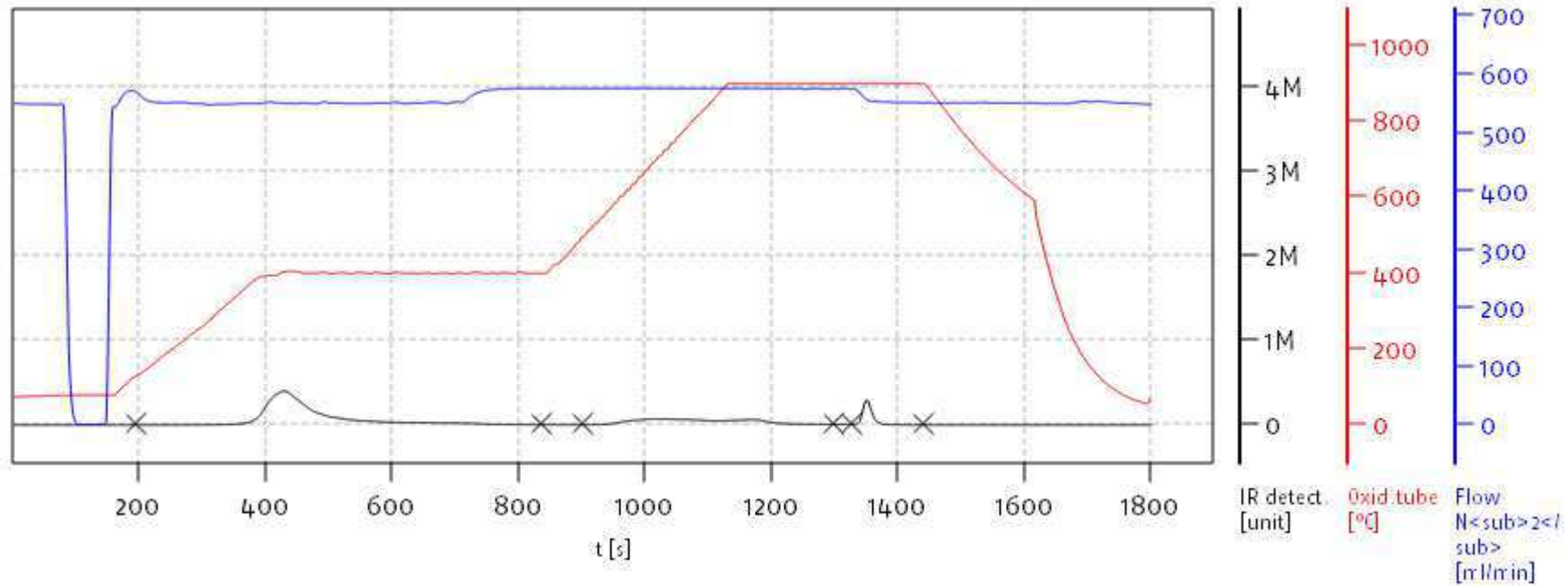
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
33	33	23A0417-15	522.10		CARBON	1/24/2023 7:51 AM	bl	0.462	1 461 072	0.625	0.049	192 083	575 350	0.413	0.163	0.9713	1.0000



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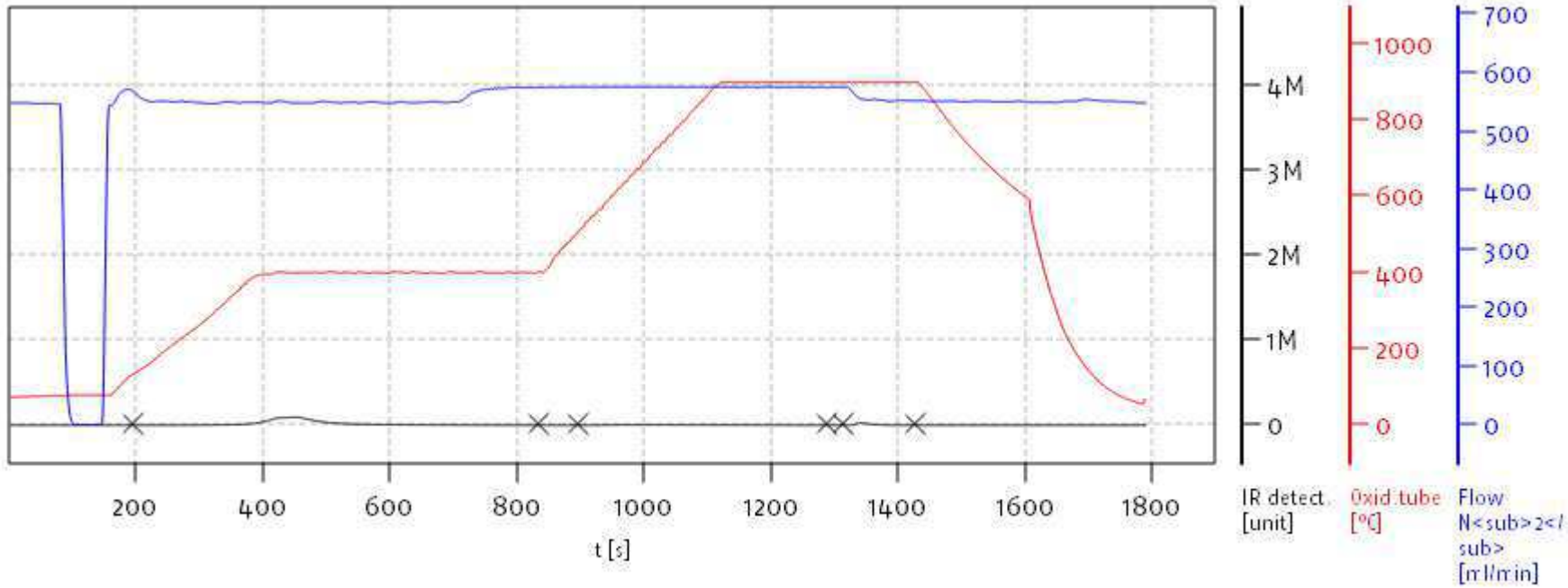
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
34	34	23A0418-01	584.30		CARBON	1/24/2023 8:21 AM	bl	0.090	375 658	0.091	0.000	24 619	31 807	0.090	0.001	0.9713	1.0000



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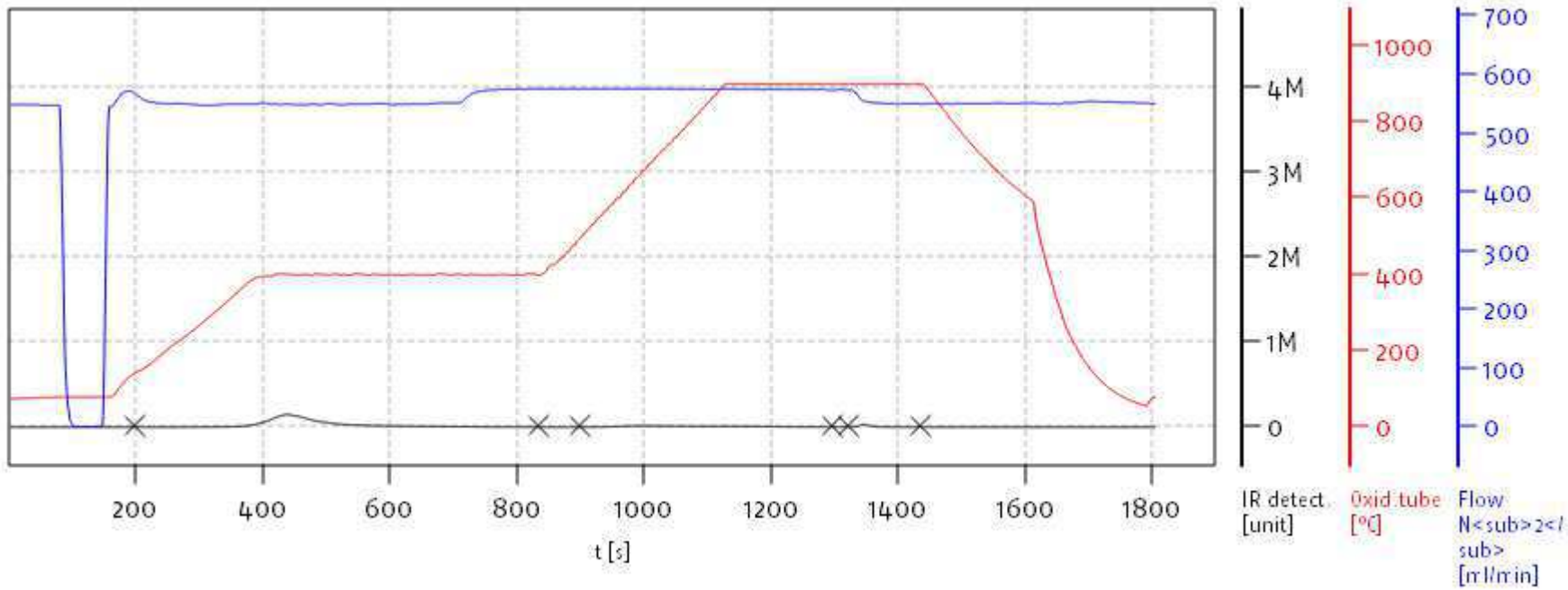
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
35	35	23A0418-02	568.90		CARBON	1/24/2023 8:51 AM	bl	0.145	576 504	0.169	0.000	25 191	111 873	0.145	0.023	0.9713	1.0000



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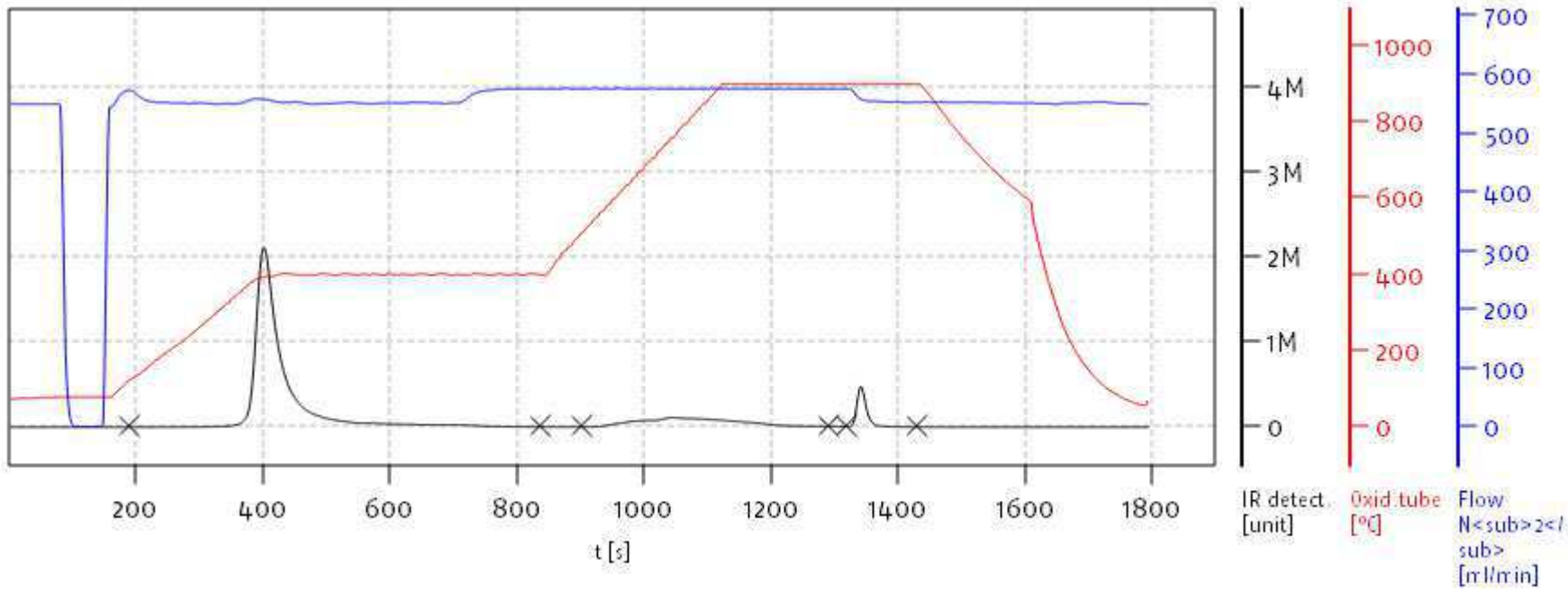
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
36	36	23A0418-03	525.30		CARBON	1/24/2023 9:22 AM	bl	1.158	3 773 077	1.377	0.085	315 974	770 874	1.072	0.219	0.9713	1.0000



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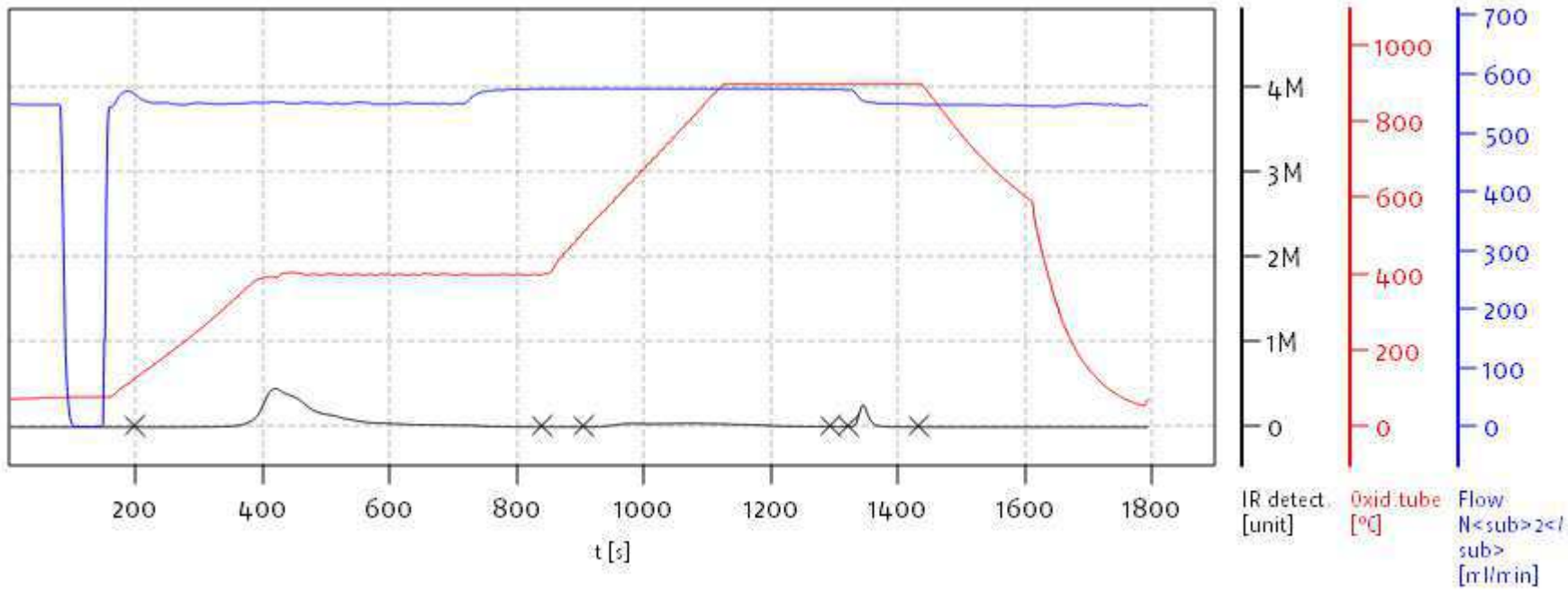
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
37	37	23A0418-04	501.00		CARBON	1/24/2023 9:52 AM		0.574	1 786 164	0.680	0.046	175 502	369 065	0.528	0.106	0.9713	1.0000



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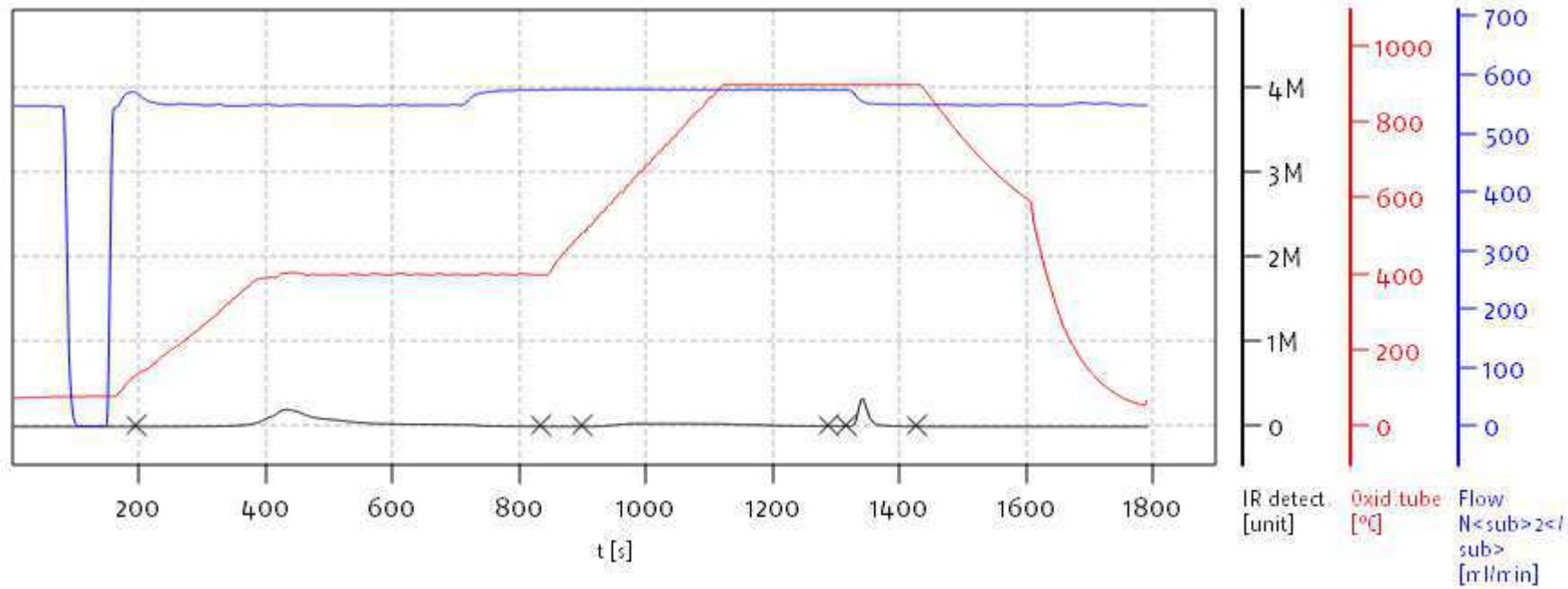
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
38	38	23A0418-05	505.00		CARBON	1/24/2023 10:22 AM	bl	0.336	940 508	0.422	0.064	233 922	307 987	0.272	0.086	0.9713	1.0000



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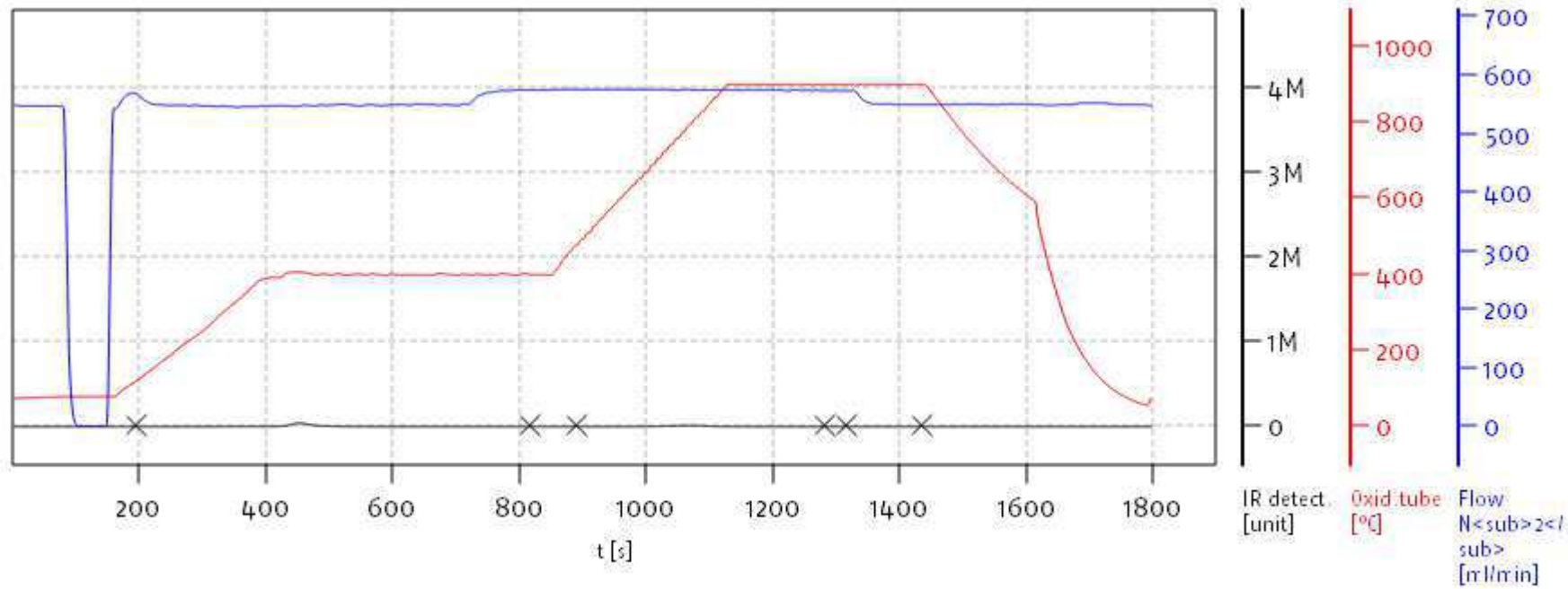
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
39	39	BLA0527-MRL1	518.90		CARBON	1/24/2023 10:53 AM	bl,C2u	0.013	71 947	0.016	0.000	281	35 716	0.013	0.003	0.9713	1.0000



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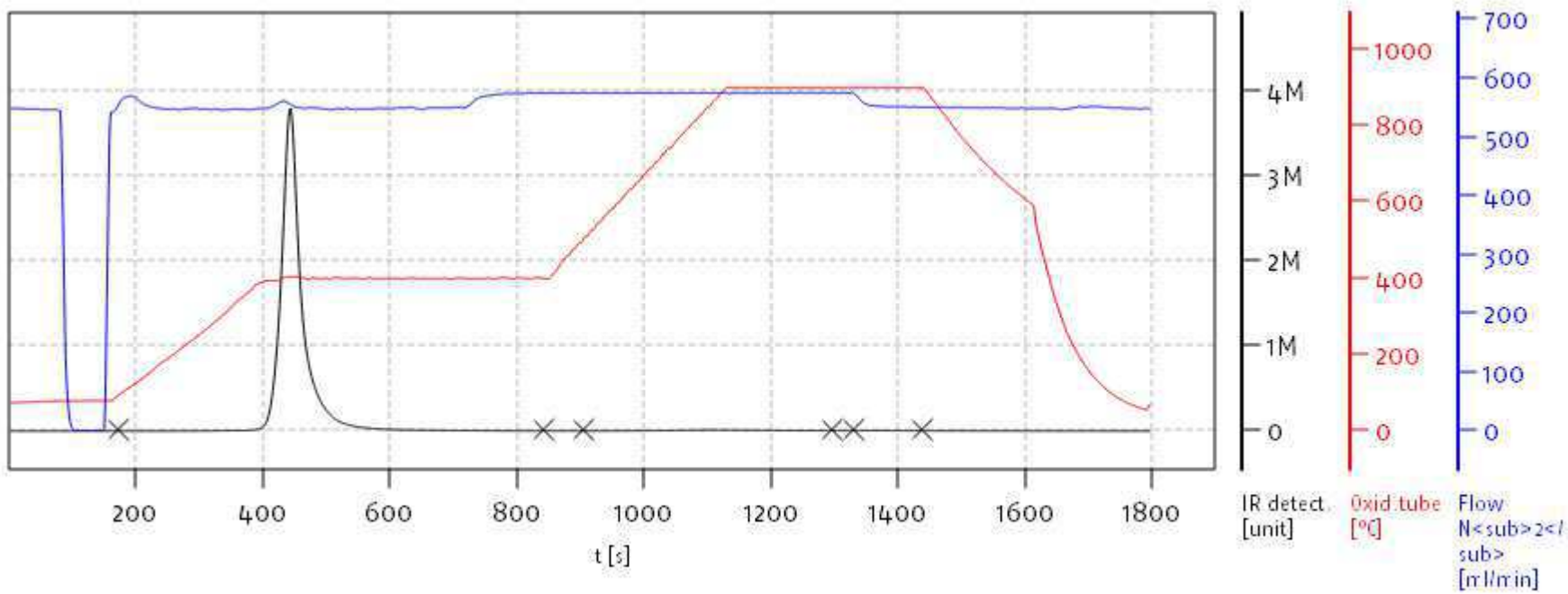
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
40	40	SLA0248-CCV3	18.40		CARBON	1/24/2023 11:23 AM	bl	43.515	5 351 464	44.093	0.000	20 432	95 190	43.515	0.578	0.9713	1.0000



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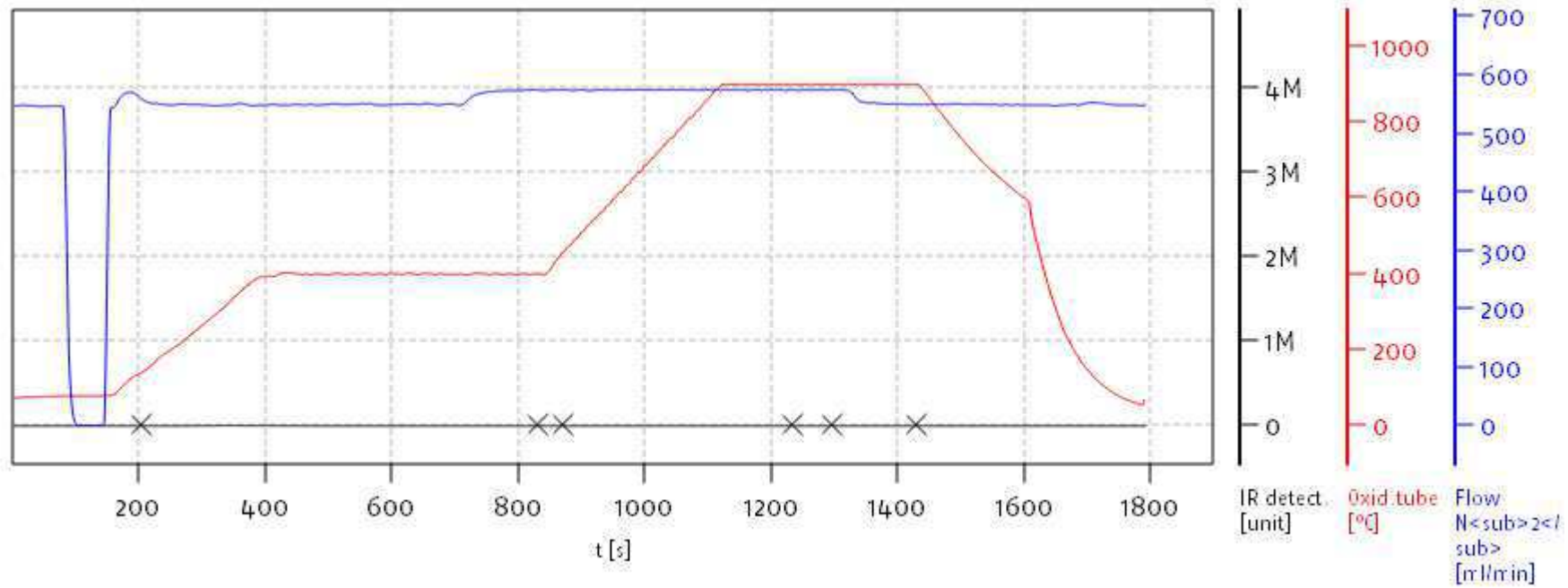
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
41	41	SLA0248-CCB3	509.40		CARBON	1/24/2023 11:53 AM	bl,C3u,C2u	0.000	17 668	0.000	0.000	566	2 045	0.000	0.000	0.9713	1.0000



Name:

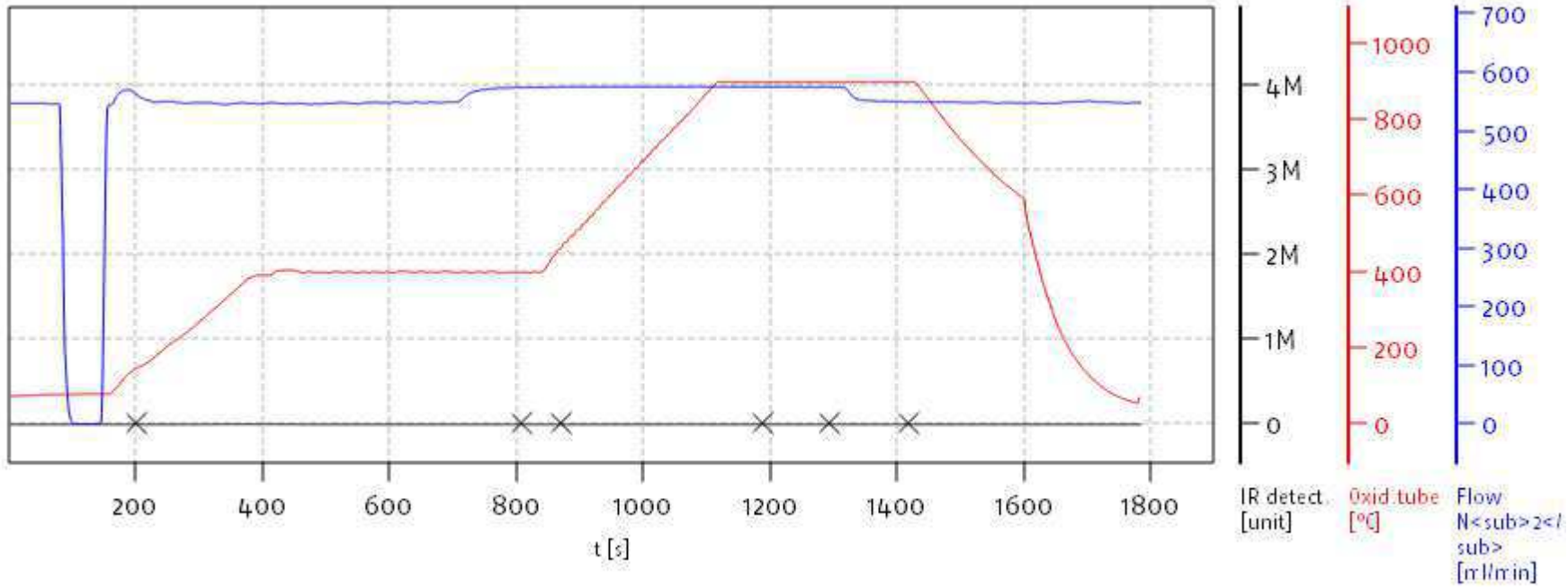
Access: soliTOC superuser

Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
42	42	BLA0527-BLK1	520.40		CARBON	1/24/2023 12:23 PM	bl,C2u	0.000	13 395	0.000	0.000	786	2 876	0.000	0.000	0.9713	1.0000



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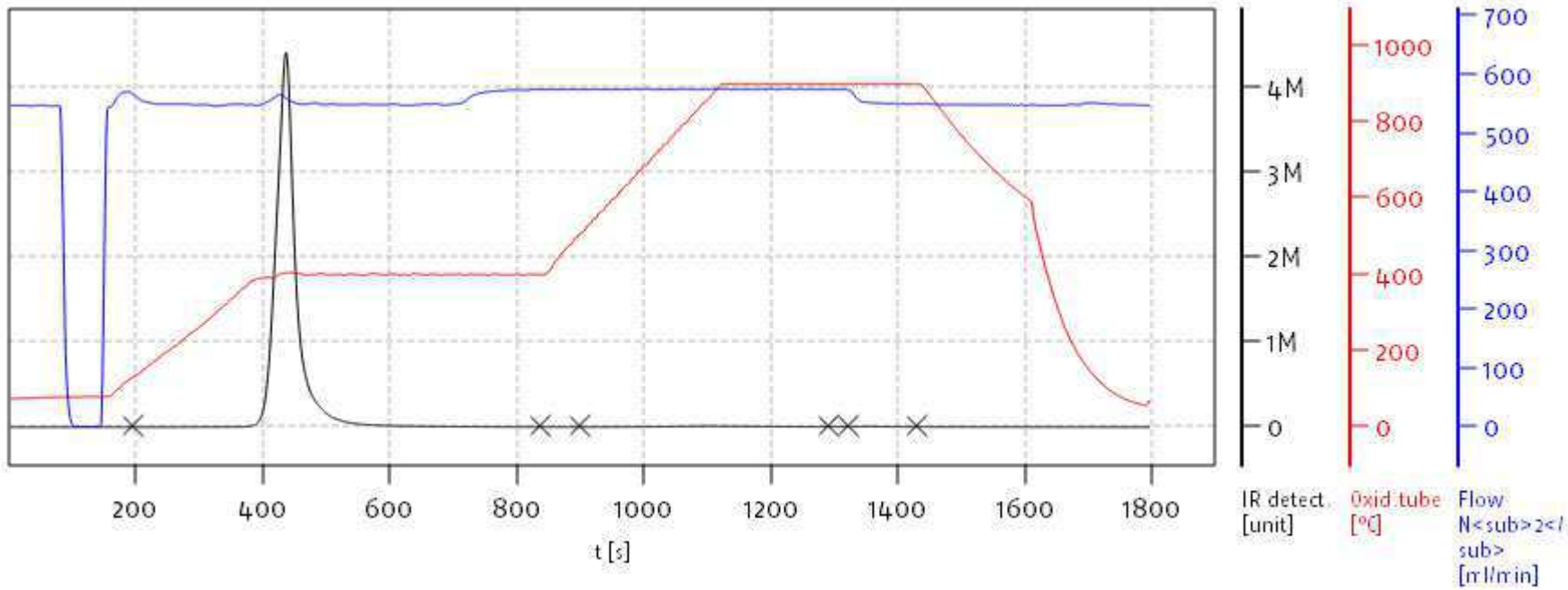
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
43	43	BLA0527-BS1	20.40		CARBON	1/24/2023 12:54 PM	bl	44.081	6 007 097	44.568	0.000	21 666	90 617	44.081	0.486	0.9713	1.0000



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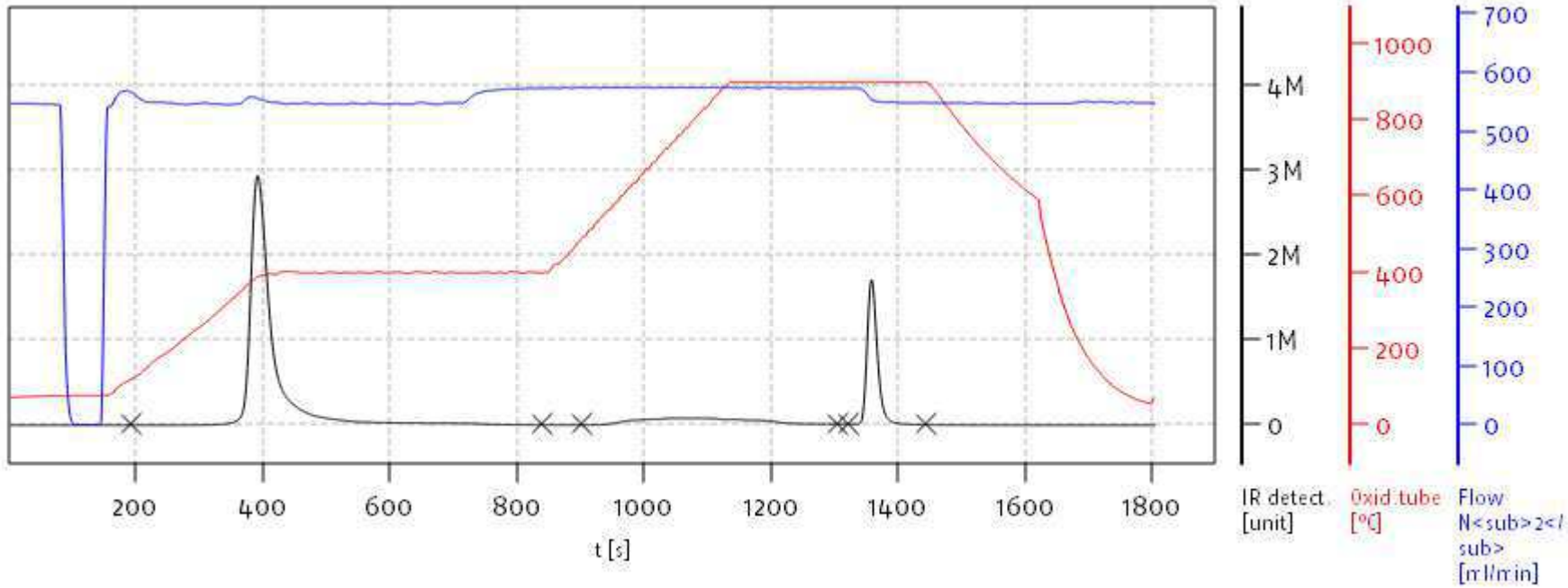
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
44	44	BLA0527-SRM1	281.80		CARBON	1/24/2023 1:24 PM	bl	2.940	4 308 791	3.314	0.655	1 219 661	706 221	2.285	0.373	0.9713	1.0000



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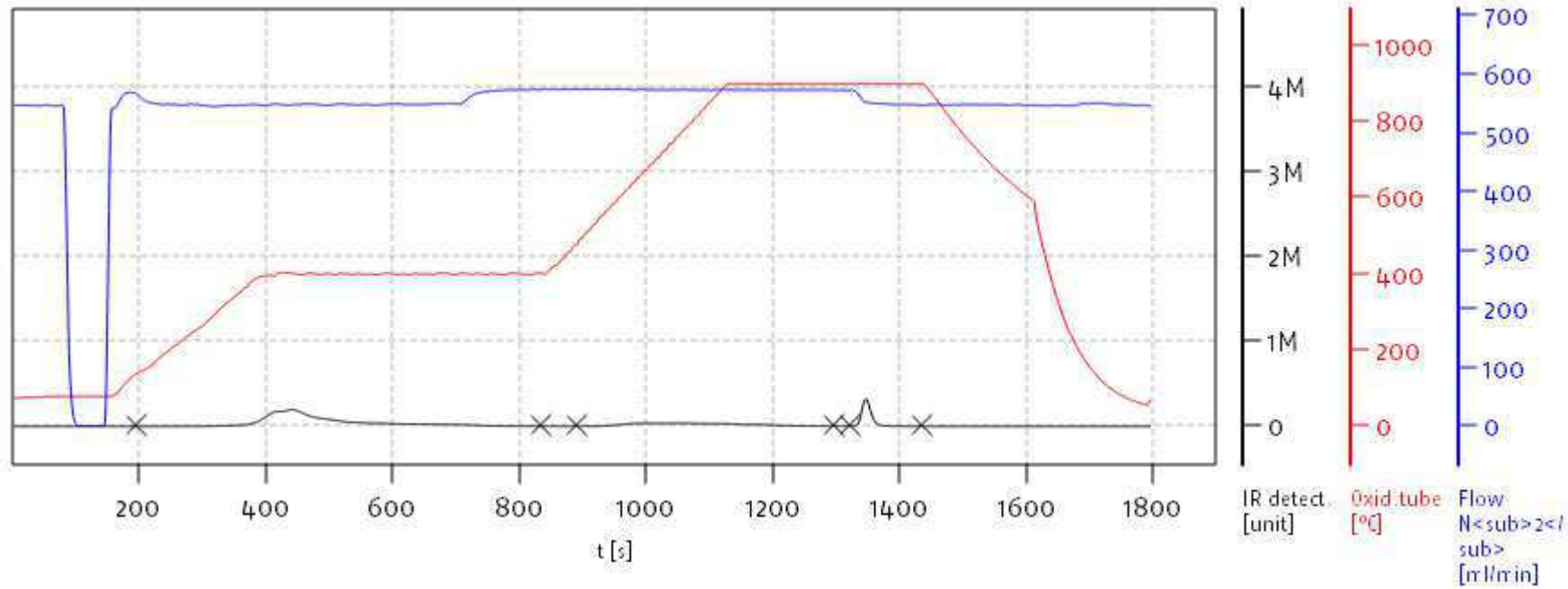
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
45	45	23A0418-06	547.90		CARBON	1/24/2023 1:54 PM	bl	0.306	951 233	0.388	0.052	211 425	318 302	0.254	0.082	0.9713	1.0000



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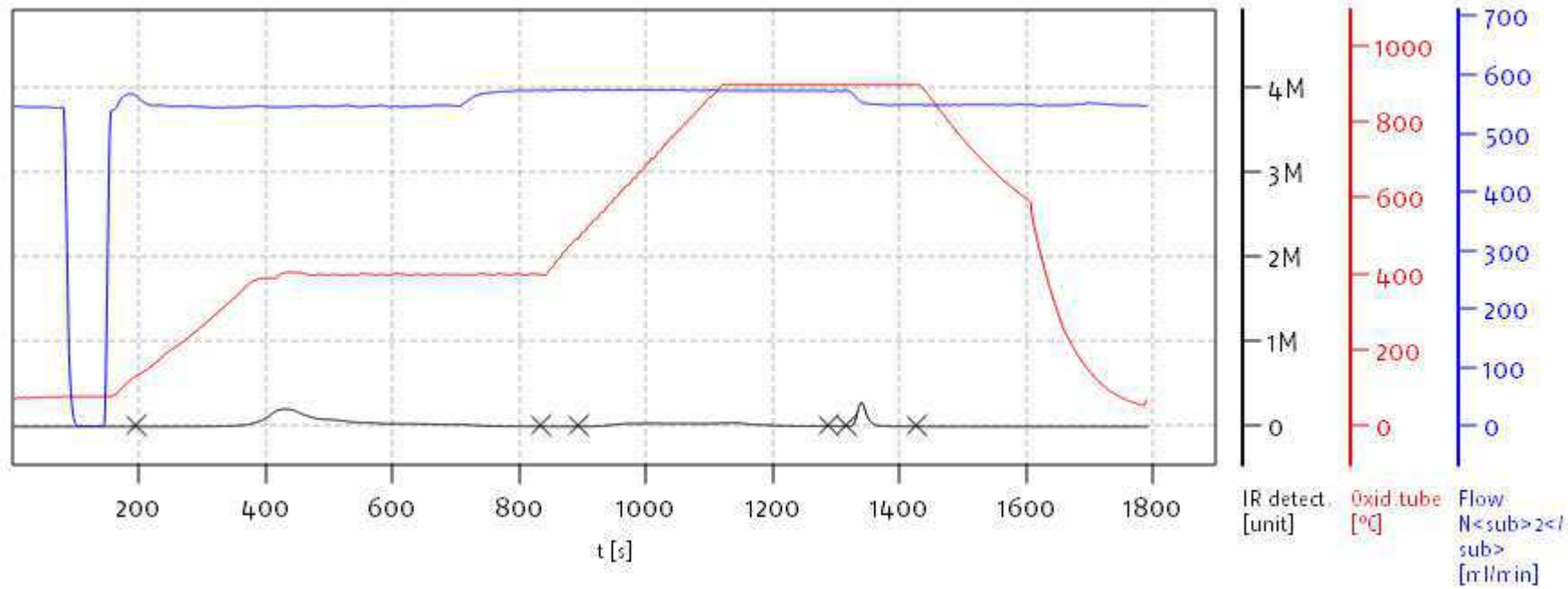
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
46	46	BLA0527-DUP1	532.60		CARBON	1/24/2023 2:25 PM	bl	0.319	985 884	0.417	0.049	193 745	361 729	0.271	0.097	0.9713	1.0000



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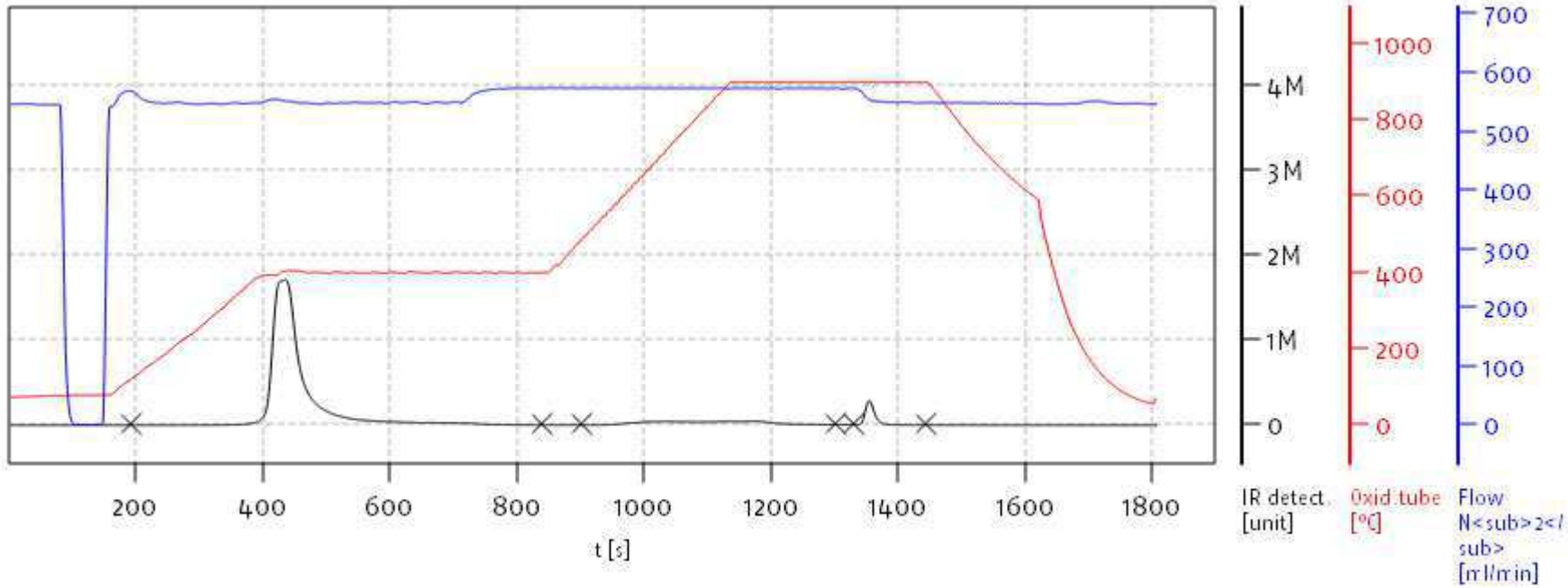
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
47	47	BLA0527-MS1	529.60	0.0086	CARBON	1/24/2023 2:55 PM	bl	1.031	3 488 160	1.139	0.048	189 968	395 784	0.983	0.108	0.9713	1.0000



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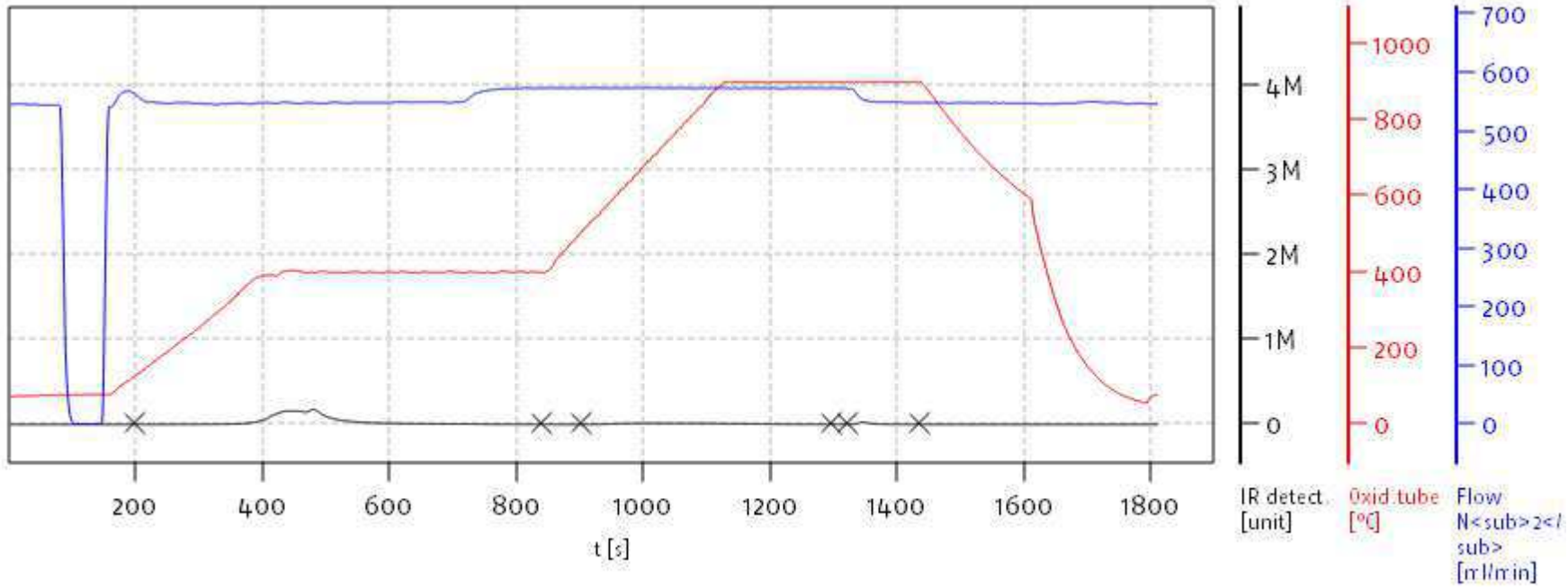
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
48	48	23A0418-07	509.40		CARBON	1/24/2023 3:26 PM	bl	0.207	729 140	0.233	0.000	24 008	110 588	0.207	0.026	0.9713	1.0000



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Balance: BAL3
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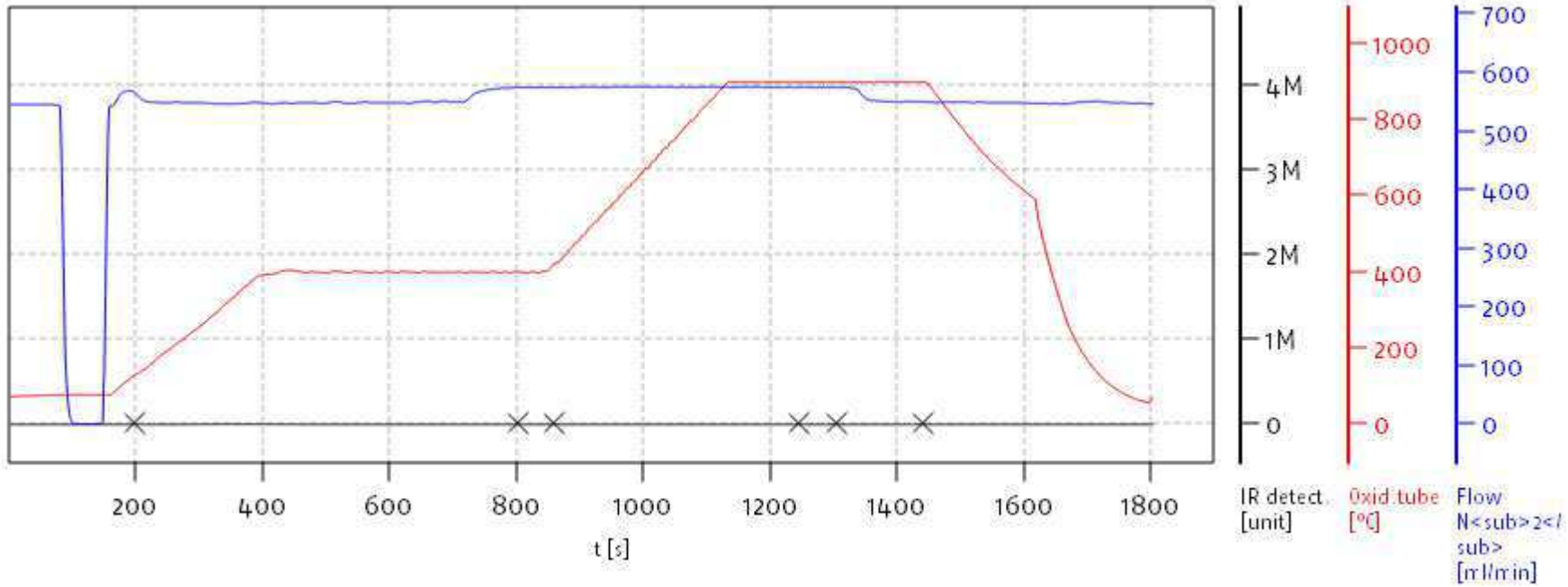
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
49	49	BLANK	1.00		CARBON	1/ 24/2023 3:56 PM	bl	0.000	15 215	0.000	0.000	501	1 464	0.000	0.000	0.9713	1.0000



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Soli TOC Cube, Carbon
Balance: BAL3
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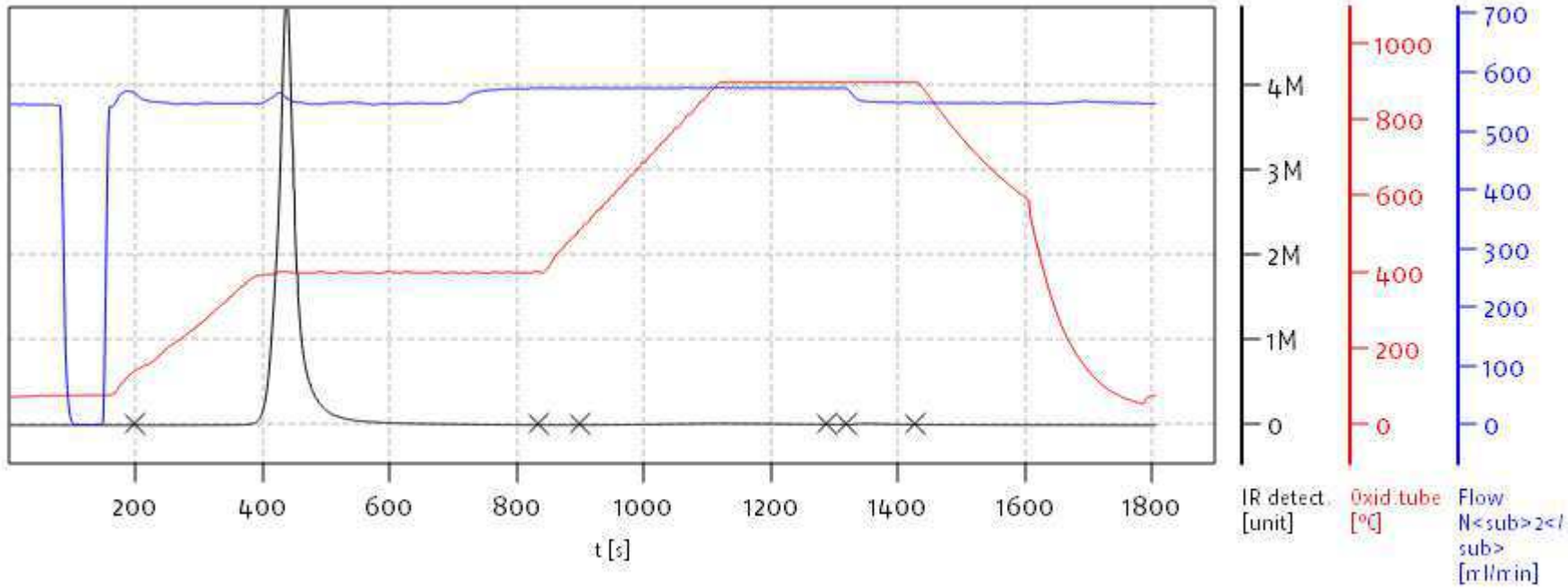
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
50	50	Dfactor	22.40		CARBON	1/24/2023 4:27 PM	bl	44.577	6 396 545	45.551	0.131	45 479	167 520	44.446	0.974	1.0096	1.0000



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Balance: BAL3
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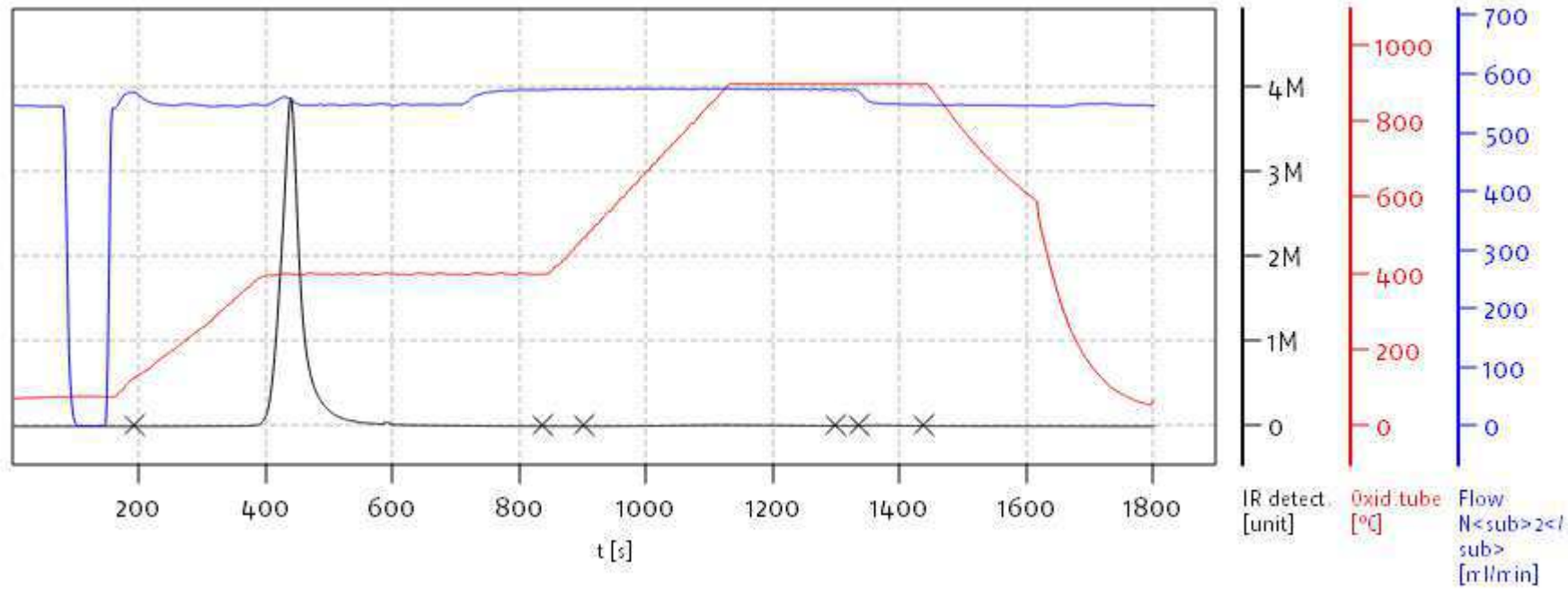
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
51	51	Dfactor	19.00		CARBON	1/24/2023 4:57 PM	bl	44.463	5 474 613	45.280	0.018	28 723	126 814	44.446	0.817	1.0013	1.0000



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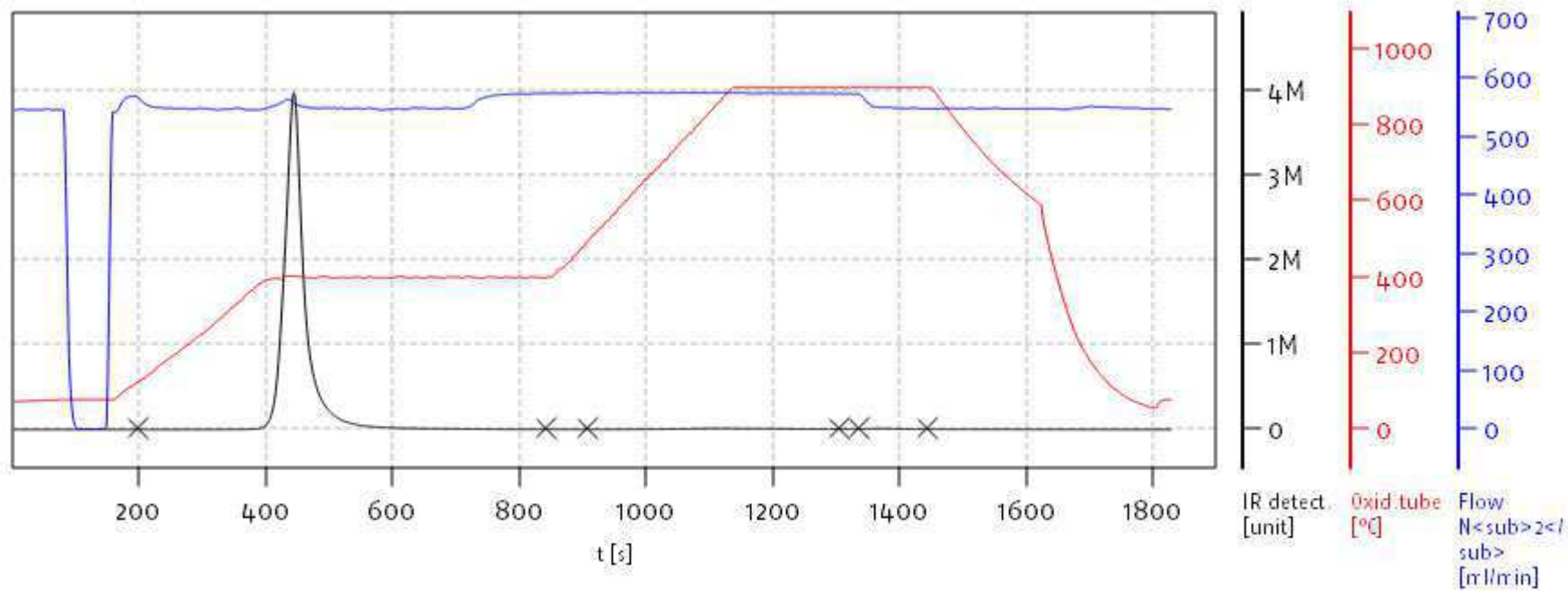
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
52	52	SLA0248-CCV4	19.00		CARBON	1/24/2023 5:28 PM	bl	44.940	5 509 997	45.534	0.019	28 915	99 472	44.920	0.594	1.0055	1.0000



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Balance: BAL3
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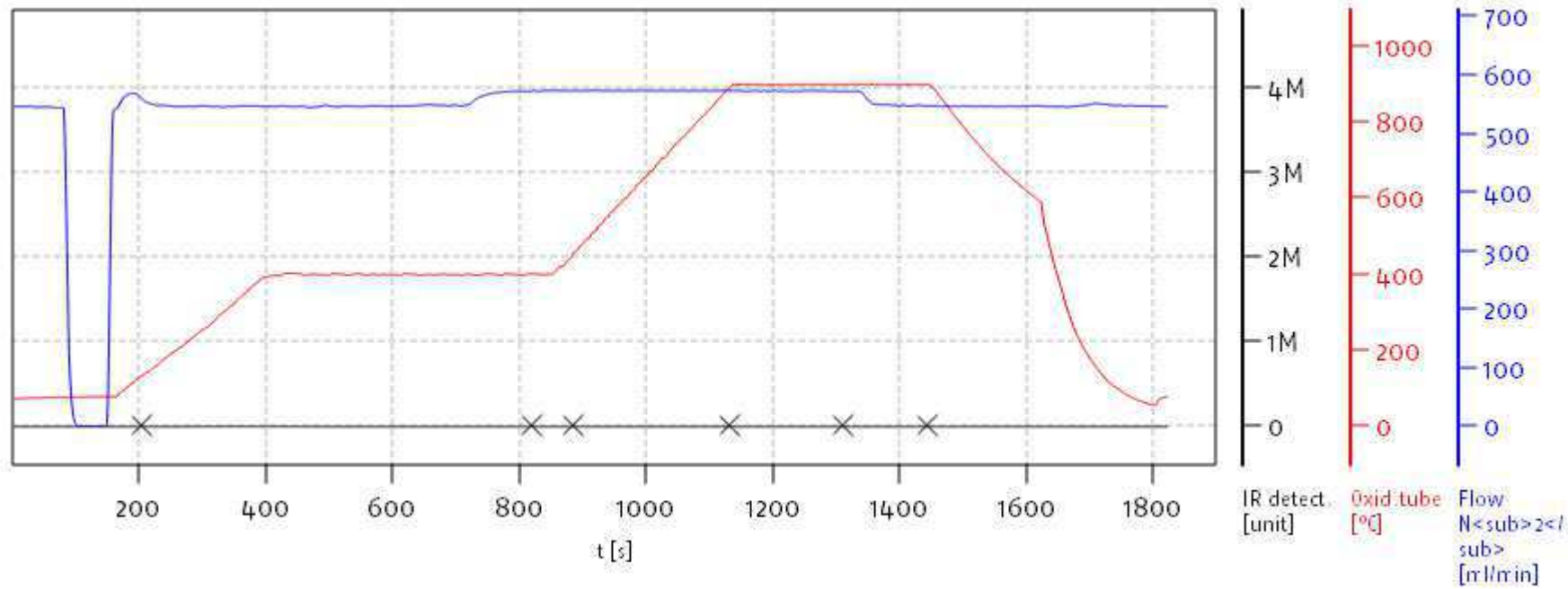
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
53	53	SLA0248-CCB4	532.30		CARBON	1/24/2023 5:59 PM	bl,C3u,C2u	0.000	12 484	0.000	0.000	1 627	827	0.000	0.000	1.0055	1.0000



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soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

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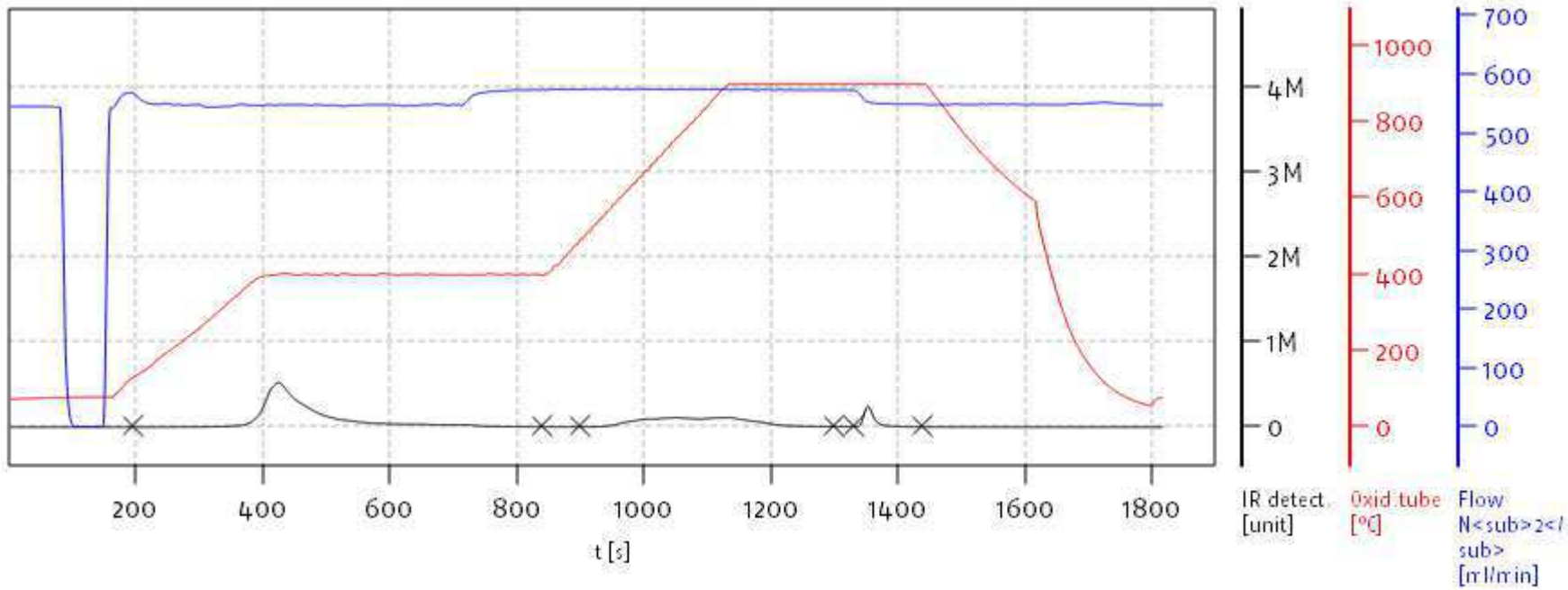
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
54	54	23A0418-08	550.80		CARBON	1/24/2023 6:30 PM	bl	0.536	1 768 321	0.776	0.044	182 546	881 633	0.492	0.240	1.0055	1.0000



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Balance: BAL3
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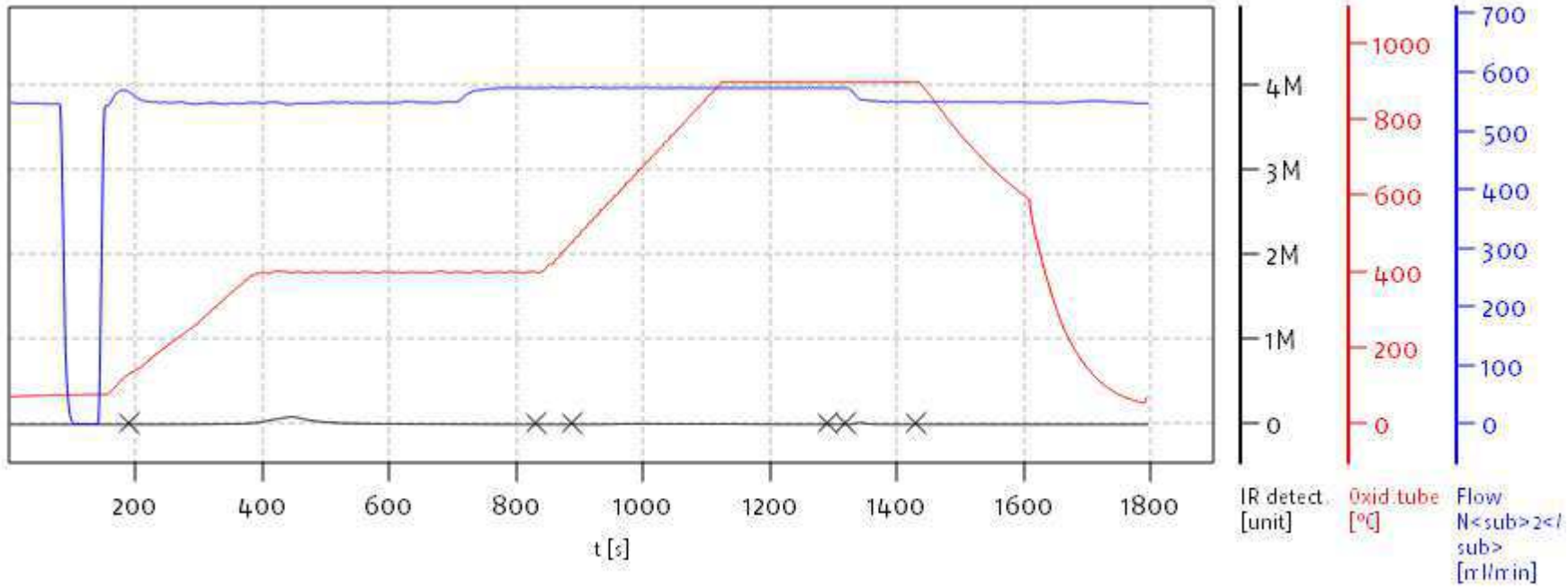
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
55	55	23A0418-09	537.80		CARBON	1/24/2023 7:00 PM	bl	0.087	327 798	0.096	0.000	16 307	57 203	0.087	0.009	1.0055	1.0000



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Soli TOC Cube, Carbon
Balance: BAL3
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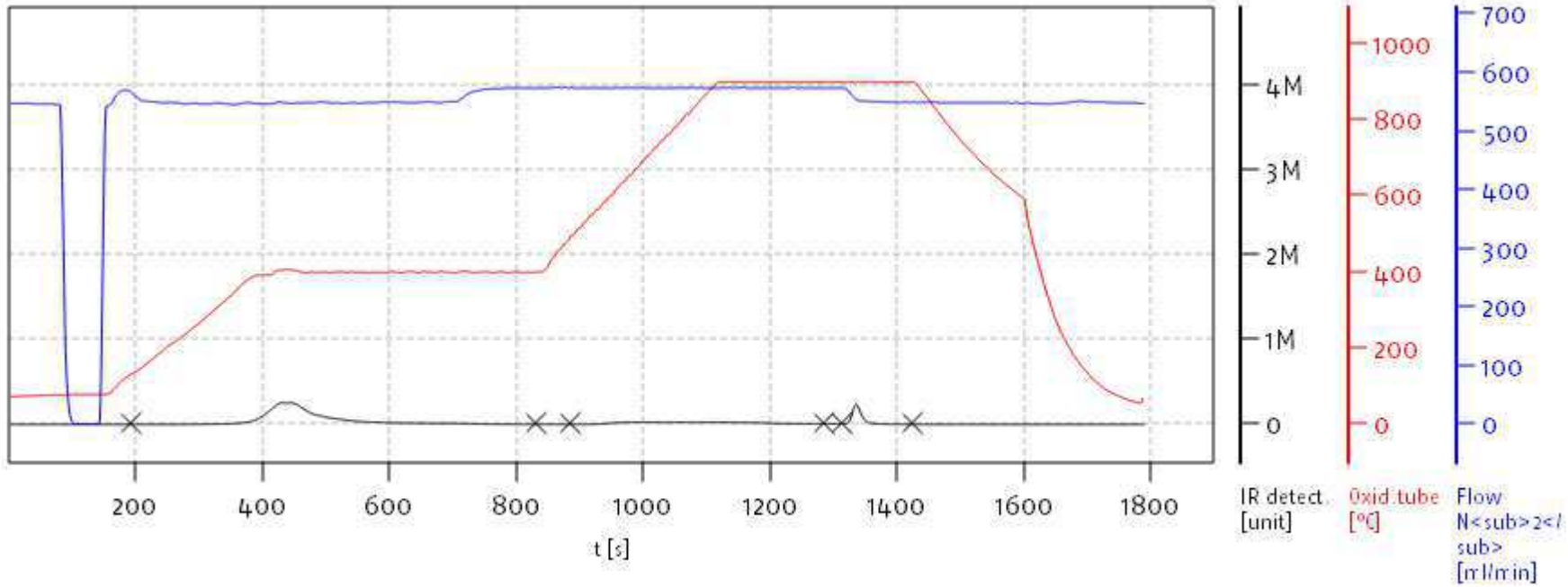
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
56	56	23A0418-10	503.50		CARBON	1/24/2023 7:30 PM	bl	0.340	996 939	0.412	0.040	158 102	259 903	0.300	0.072	1.0055	1.0000



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Balance: BAL3
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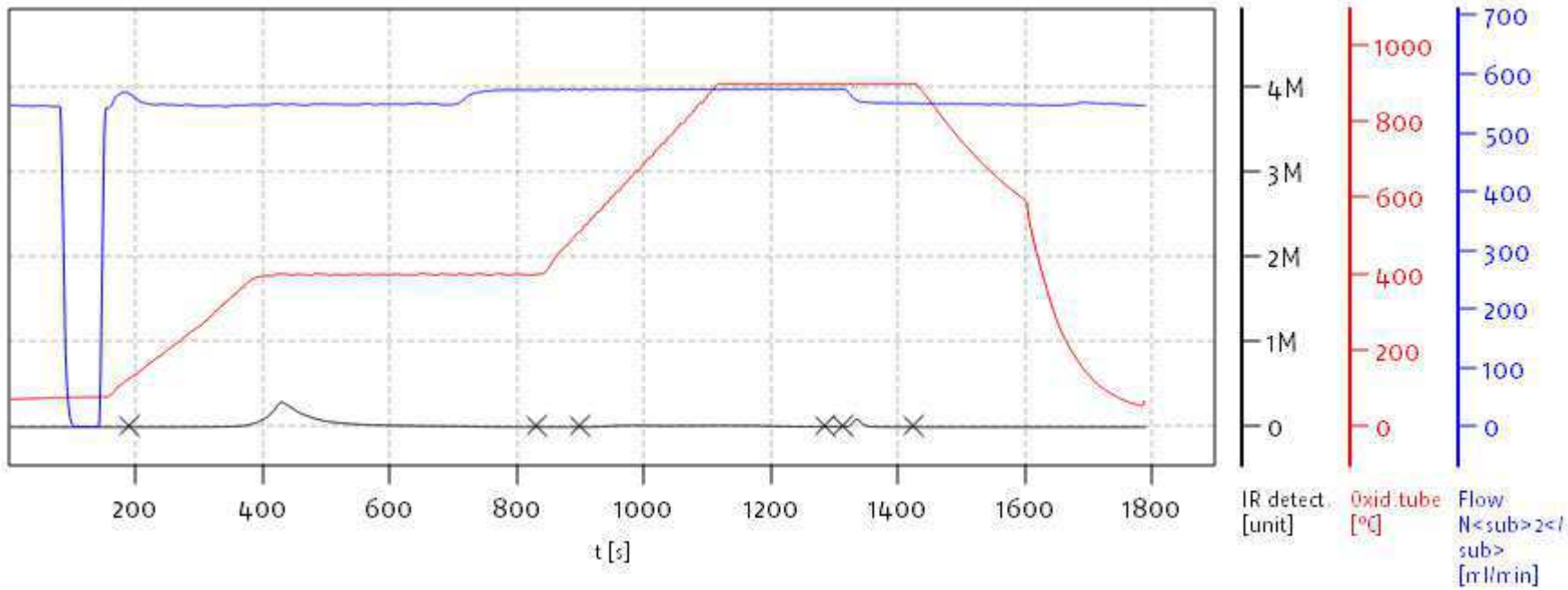
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
57	57	23A0418-11	532.10		CARBON	1/24/2023 8:00 PM	bl	0.267	901 035	0.311	0.011	64 384	180 068	0.256	0.045	1.0055	1.0000



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Balance: BAL3
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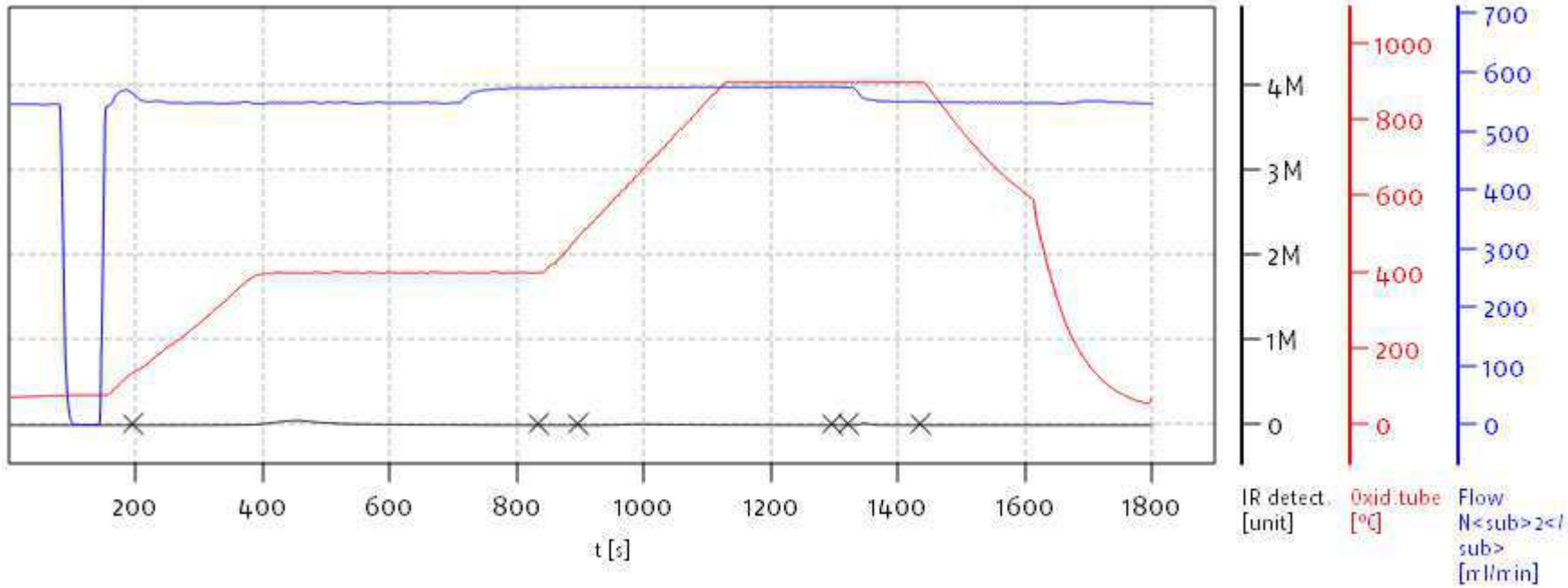
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
58	58	23A0418-12	545.40		CARBON	1/24/2023 8:31 PM	bl	0.060	235 333	0.067	0.000	14 871	51 112	0.060	0.007	1.0055	1.0000



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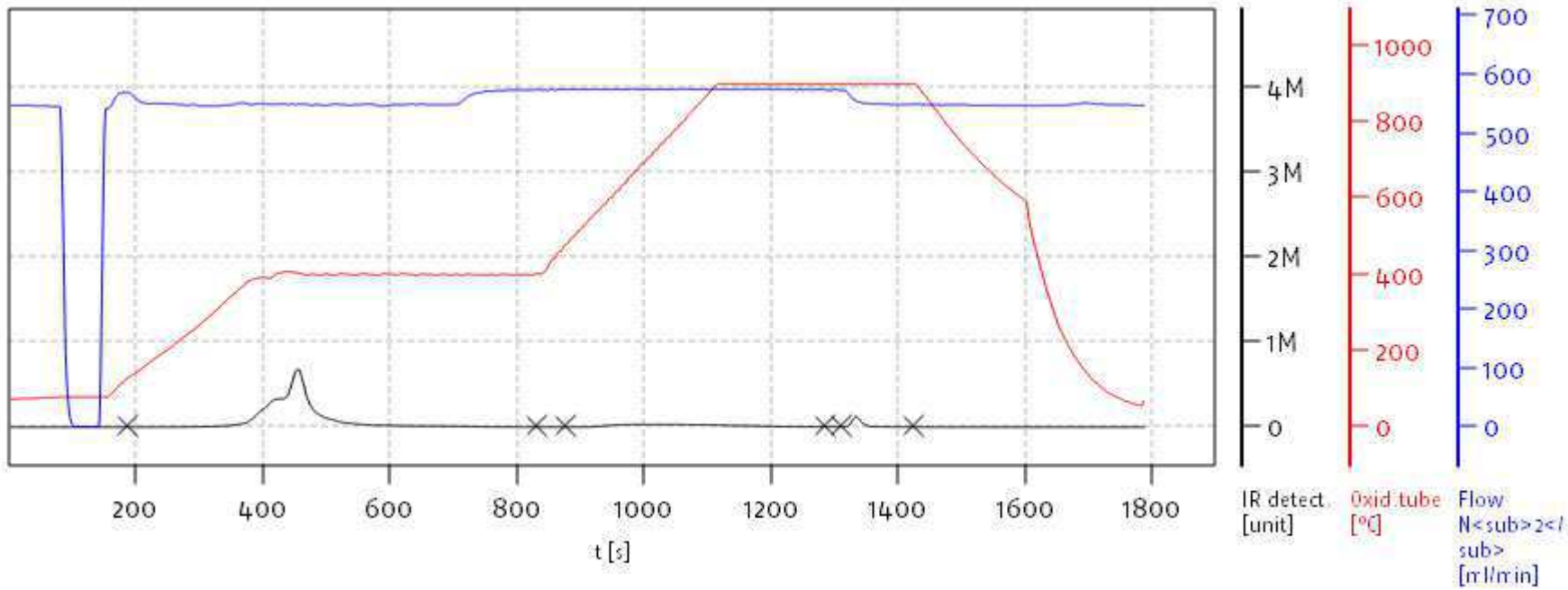
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
59	59	23A0419-01	515.30		CARBON	1/24/2023 9:01 PM	bl	0.521	1 692 132	0.591	0.018	86 928	258 431	0.503	0.070	1.0055	1.0000



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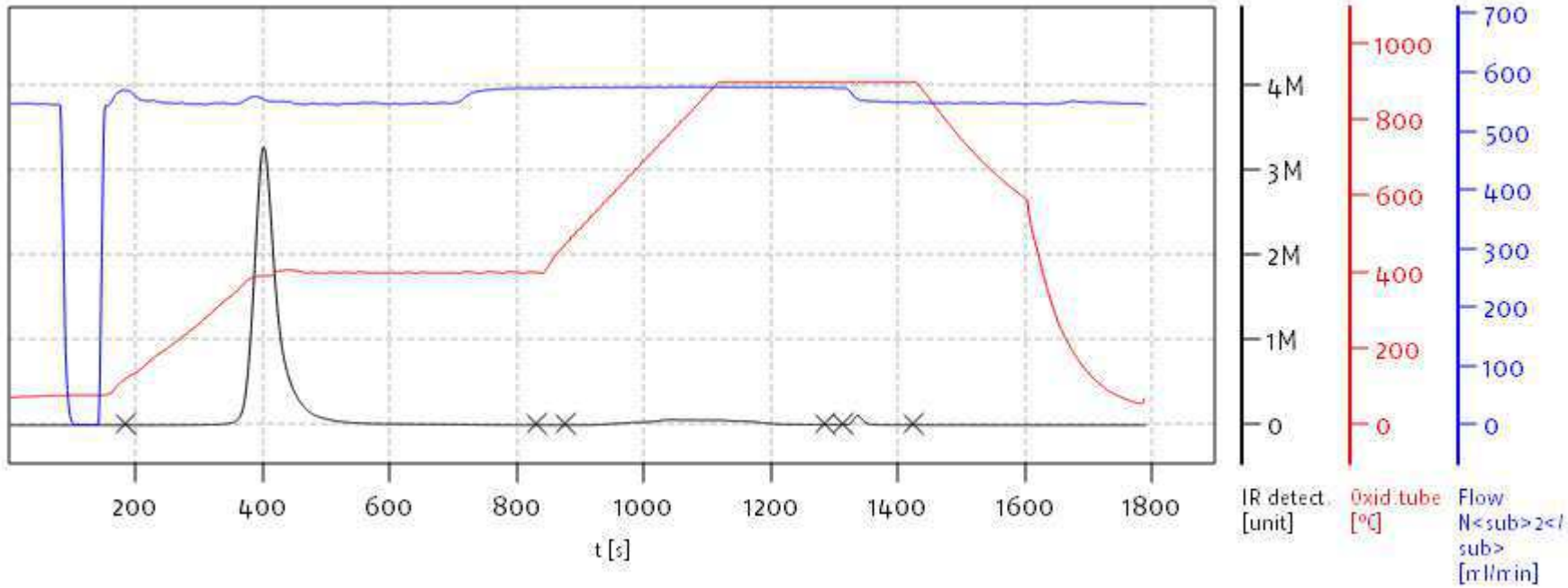
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
60	60	23A0419-02	550.60		CARBON	1/24/2023 9:31 PM	bl	1.522	5 357 359	1.644	0.015	79 872	462 306	1.507	0.123	1.0055	1.0000



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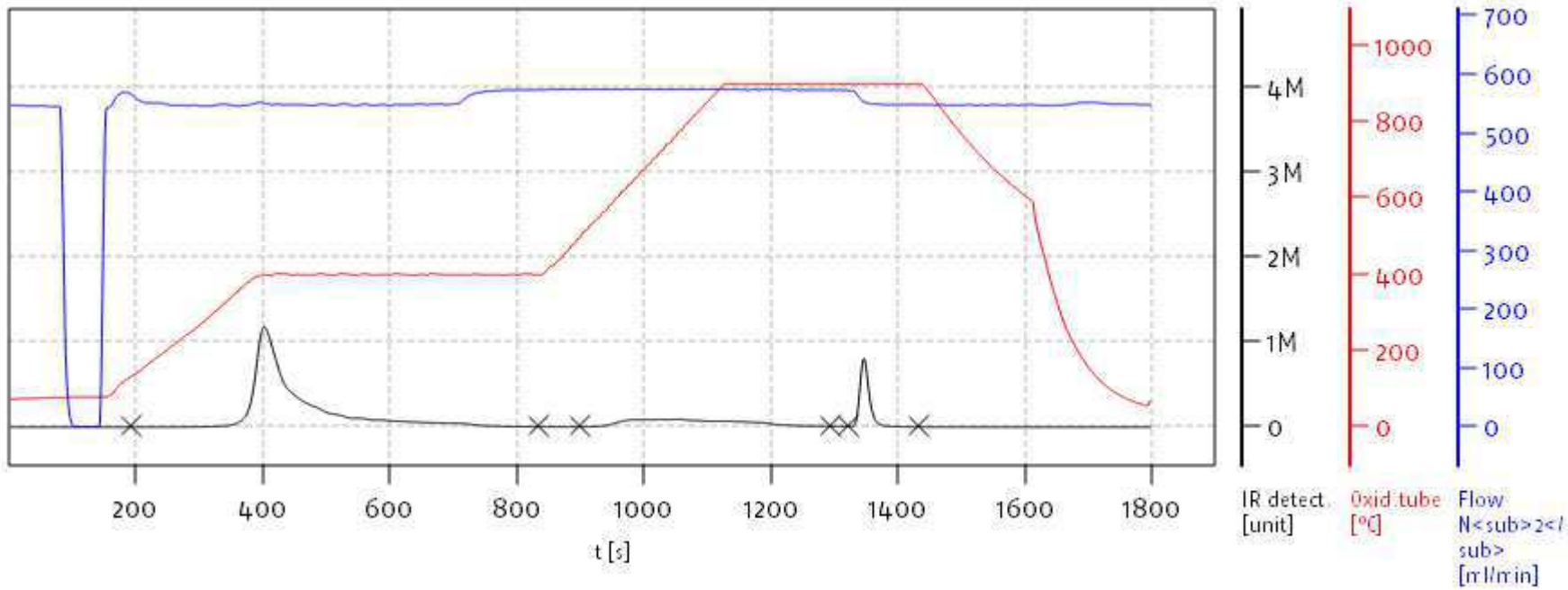
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
61	61	23A0419-03	613.30		CARBON	1/24/2023 10:02 PM	bl	0.944	3 249 770	1.133	0.126	526 318	773 639	0.818	0.189	1.0055	1.0000



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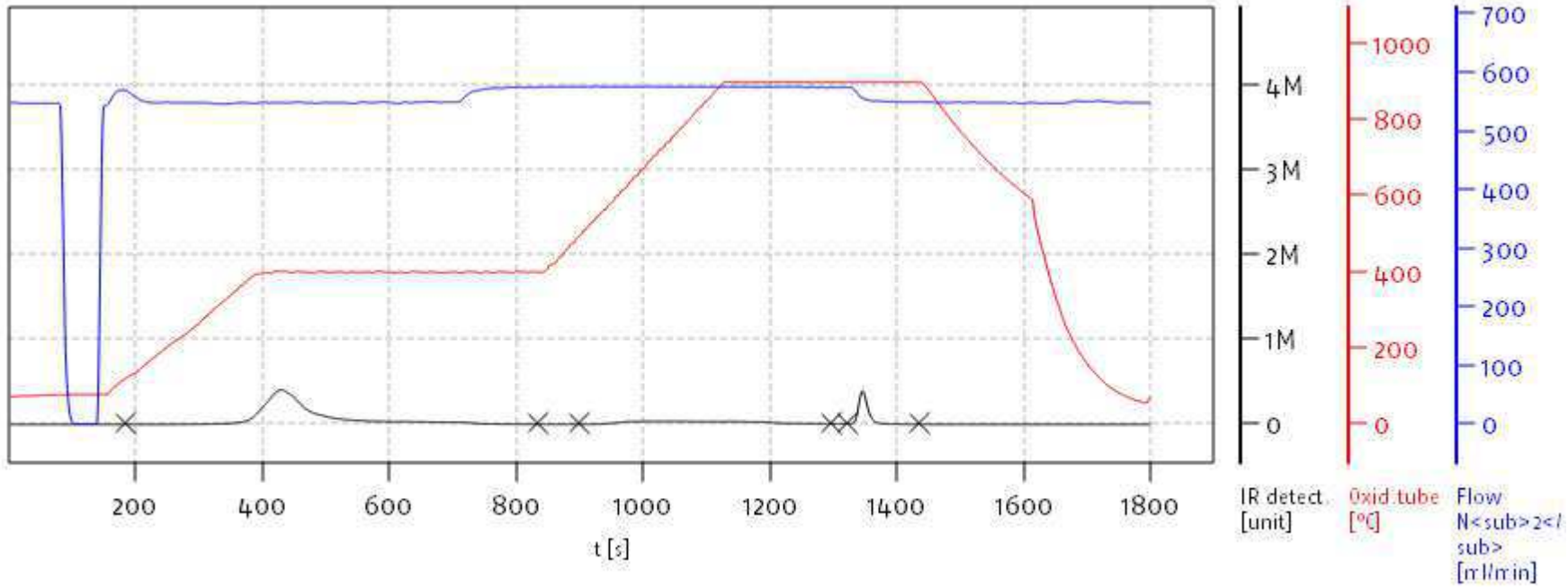
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
62	62	23A0419-04	545.90		CARBON	1/24/2023 10:32 PM	bl	0.473	1 454 308	0.565	0.066	258 009	352 785	0.407	0.093	1.0055	1.0000



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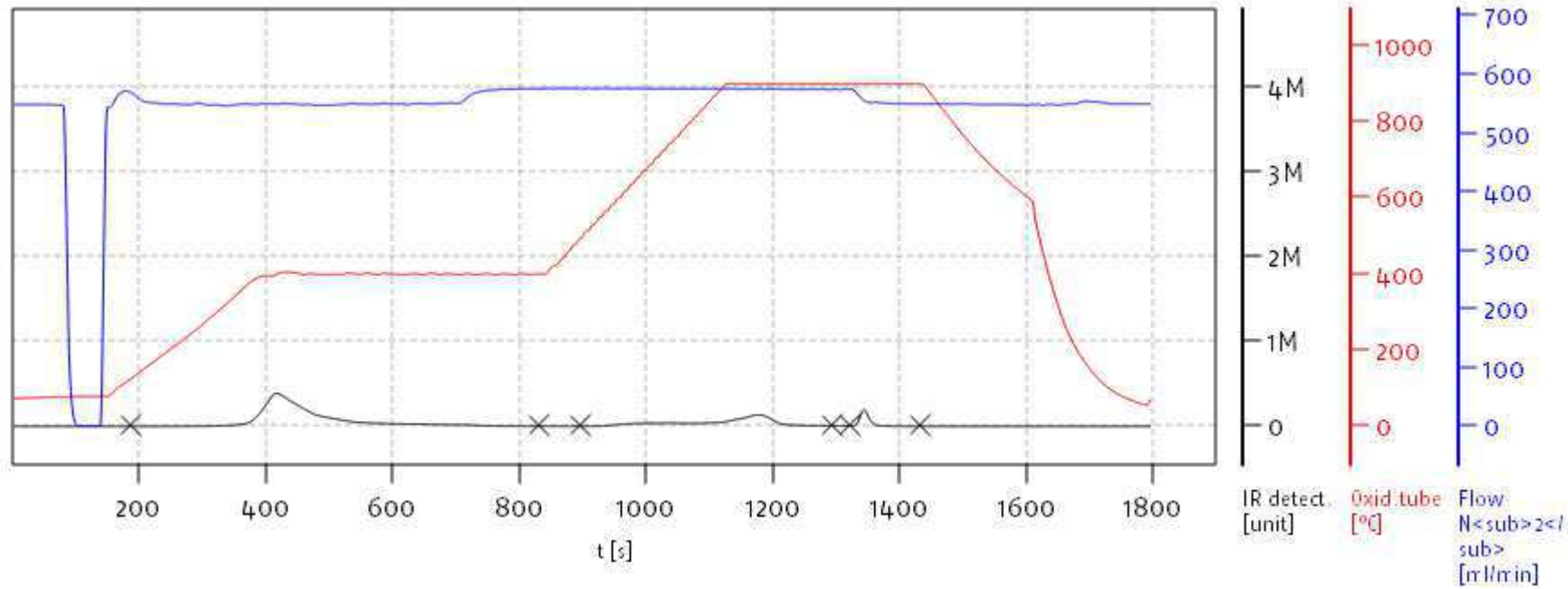
Access: soliTOC superuser

Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
63	63	23A0419-05	506.80		CARBON	1/24/2023 11:02 PM	bl	0.458	1 417 466	0.632	0.031	128 482	594 540	0.427	0.173	1.0055	1.0000



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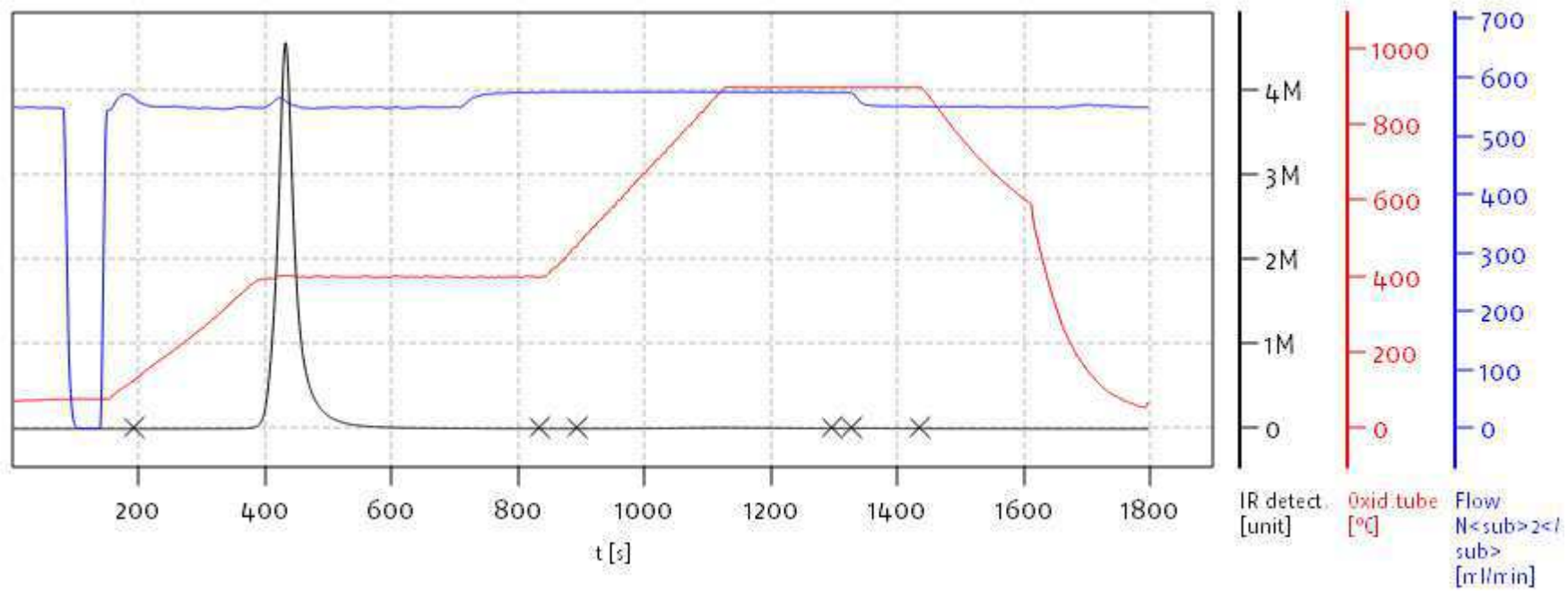
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
64	64	SLA0248-CCV5	20.20		CARBON	1/24/2023 11:33 PM	bl	45.627	5 948 035	46.215	0.000	18 294	103 230	45.627	0.588	1.0055	1.0000



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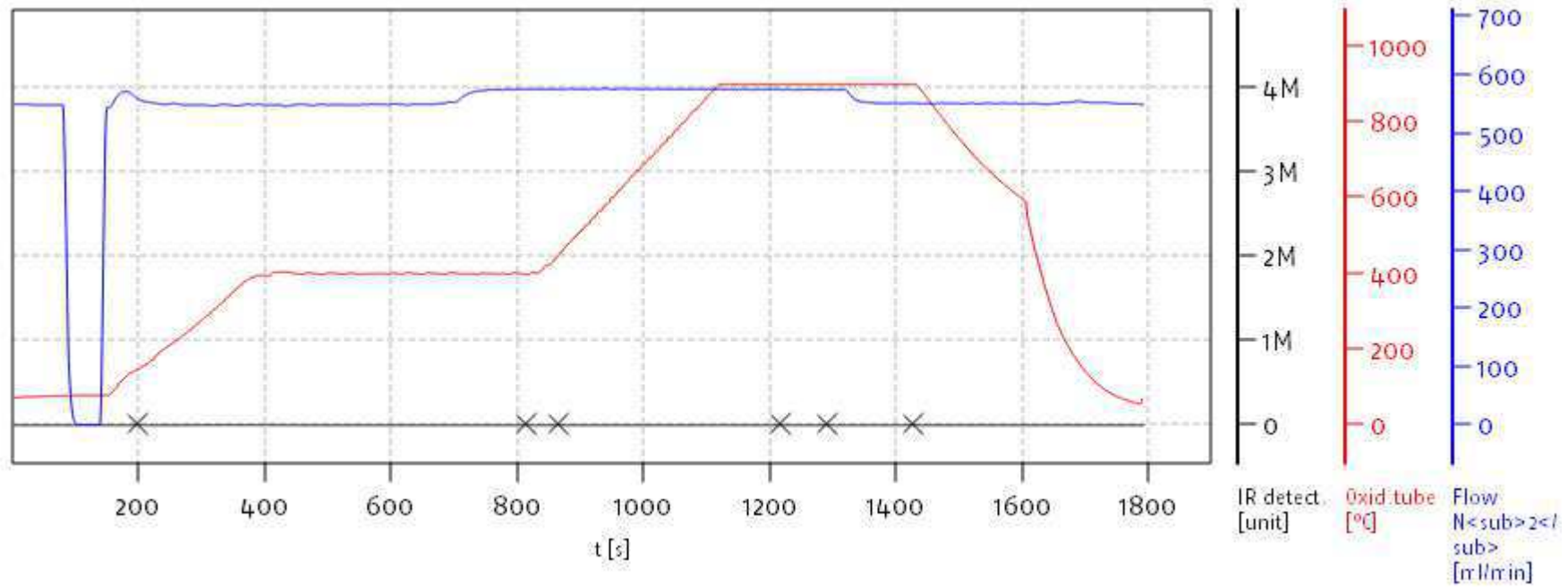
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
65	65	SLA0248-CCB5	513.30		CARBON	1/25/2023 12:03 AM	bl,C3u,C2u	0.000	9 871	0.000	0.000	593	1 761	0.000	0.000	1.0055	1.0000



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Serial No: 0300.181017
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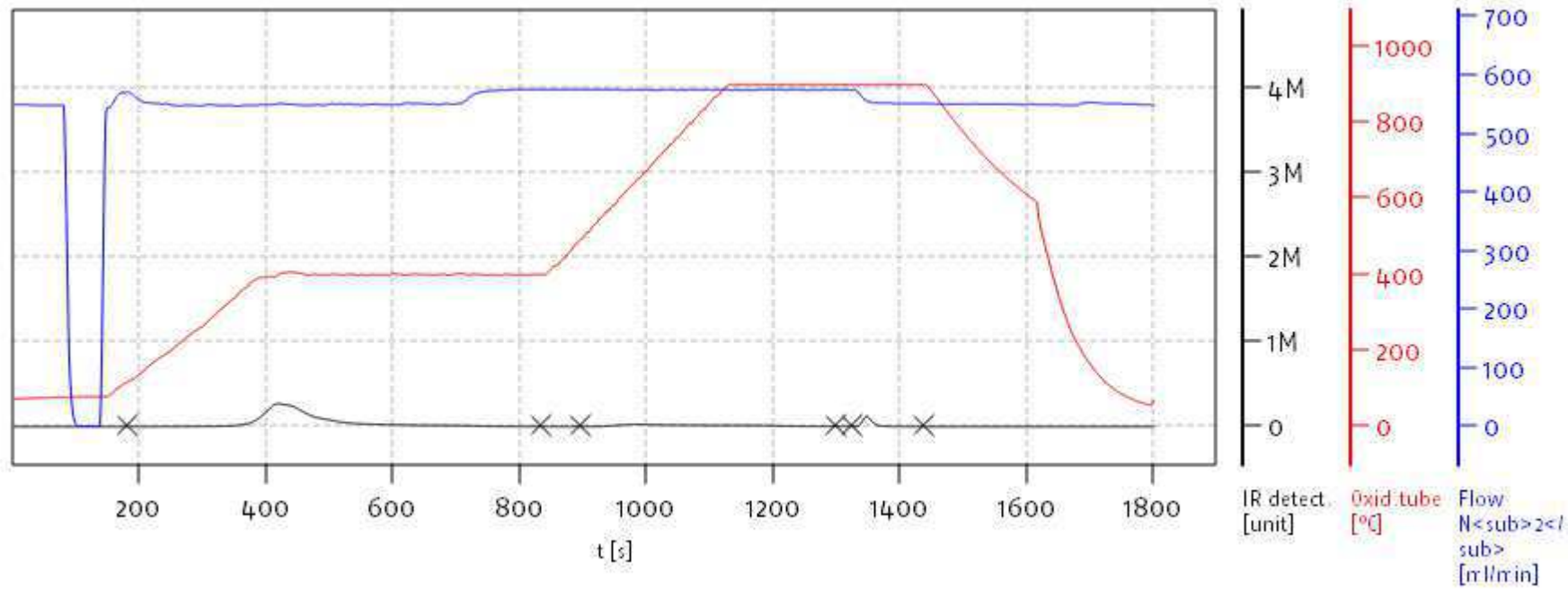
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
66	66	23A0419-06	630.20		CARBON	1/25/2023 12:33 AM	bl	0.270	1 061 559	0.310	0.014	83 788	189 582	0.256	0.040	1.0055	1.0000



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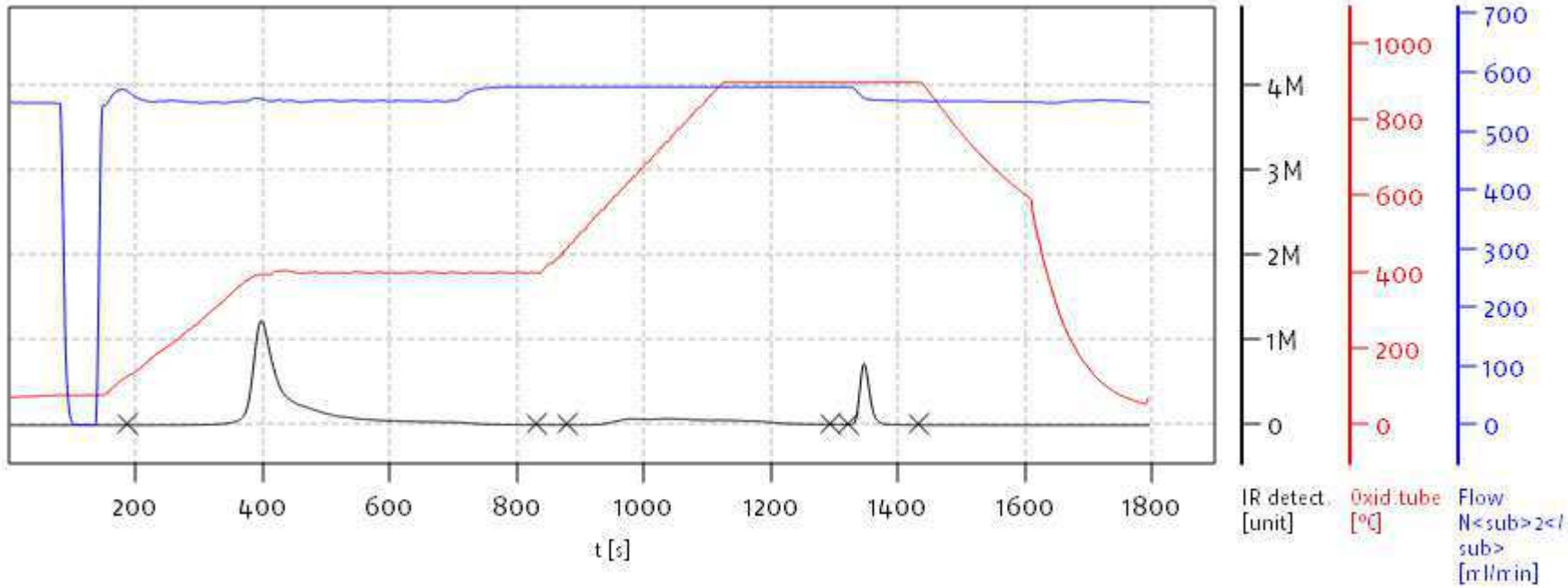
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
67	67	23A0419-07	537.70		CARBON	1/25/2023 1:04 AM	bl	0.951	2 835 937	1.129	0.138	505 685	645 187	0.813	0.178	1.0055	1.0000



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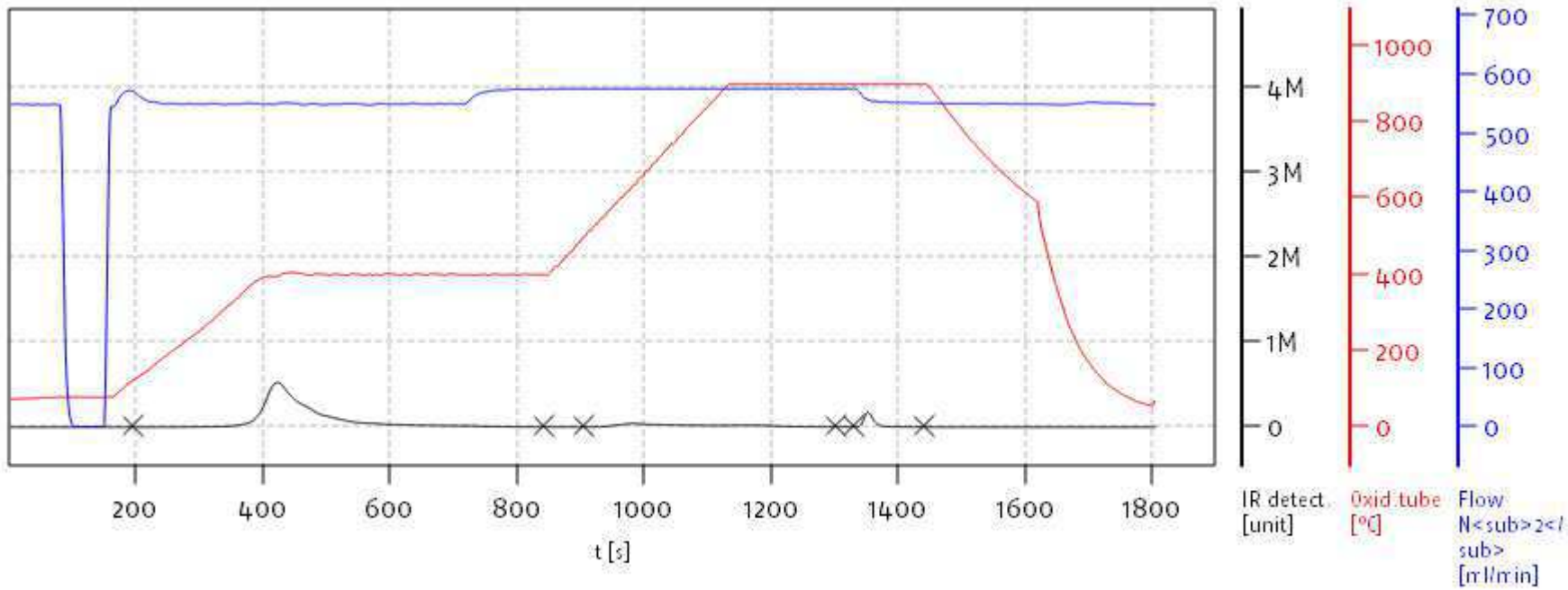
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
68	68	23A0419-08	537.60		CARBON	1/25/2023 1:34 AM	bl	0.515	1 711 460	0.583	0.027	121 660	261 895	0.488	0.068	1.0055	1.0000



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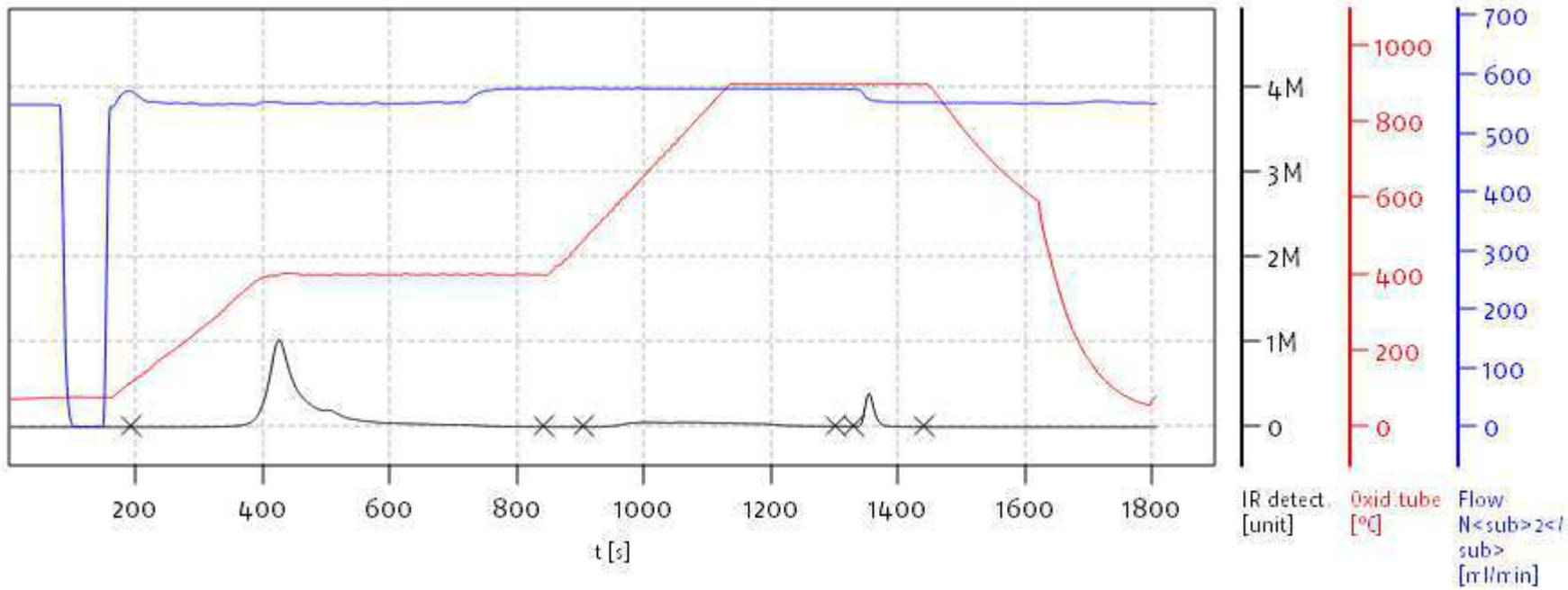
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
69	69	23A0419-09	509.30		CARBON	1/25/2023 2:05 AM	bl	0.857	2 595 167	0.999	0.072	264 304	493 561	0.785	0.142	1.0055	1.0000



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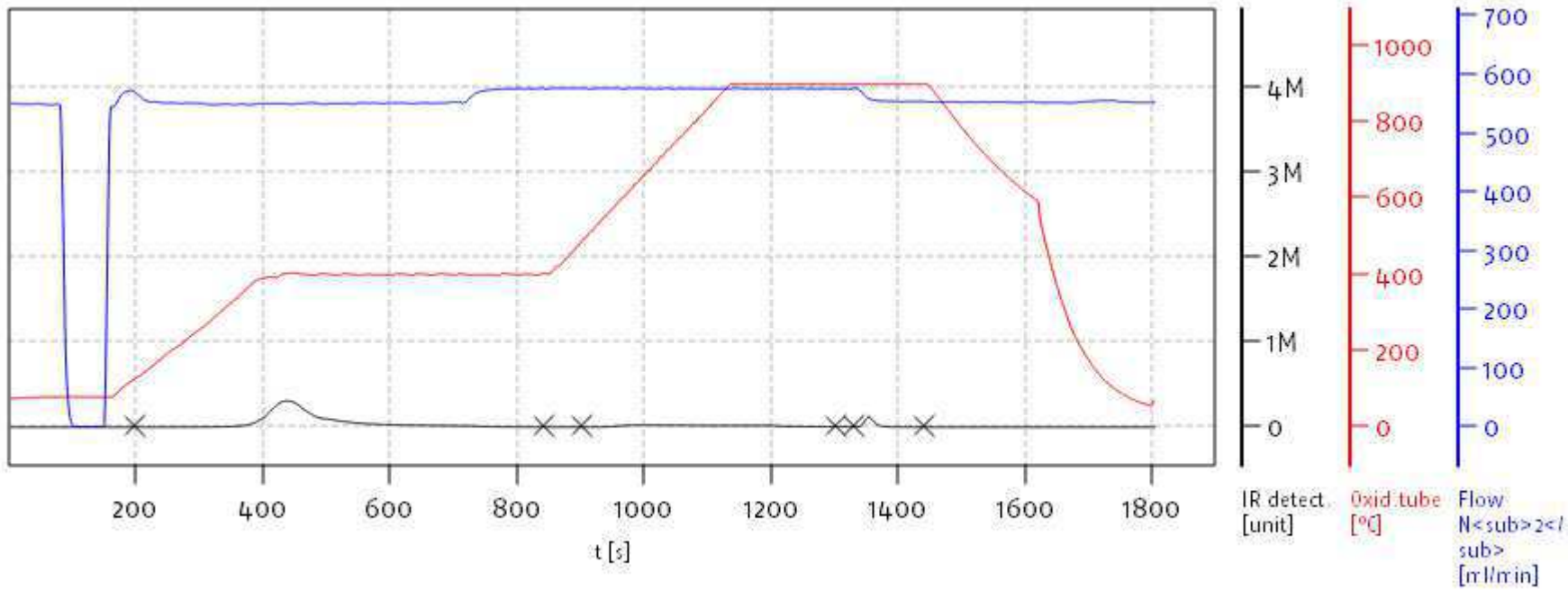
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
70	70	23A0419-10	504.20		CARBON	1/25/2023 2:35 AM	bl	0.369	1 165 099	0.427	0.018	84 367	215 101	0.351	0.058	1.0055	1.0000



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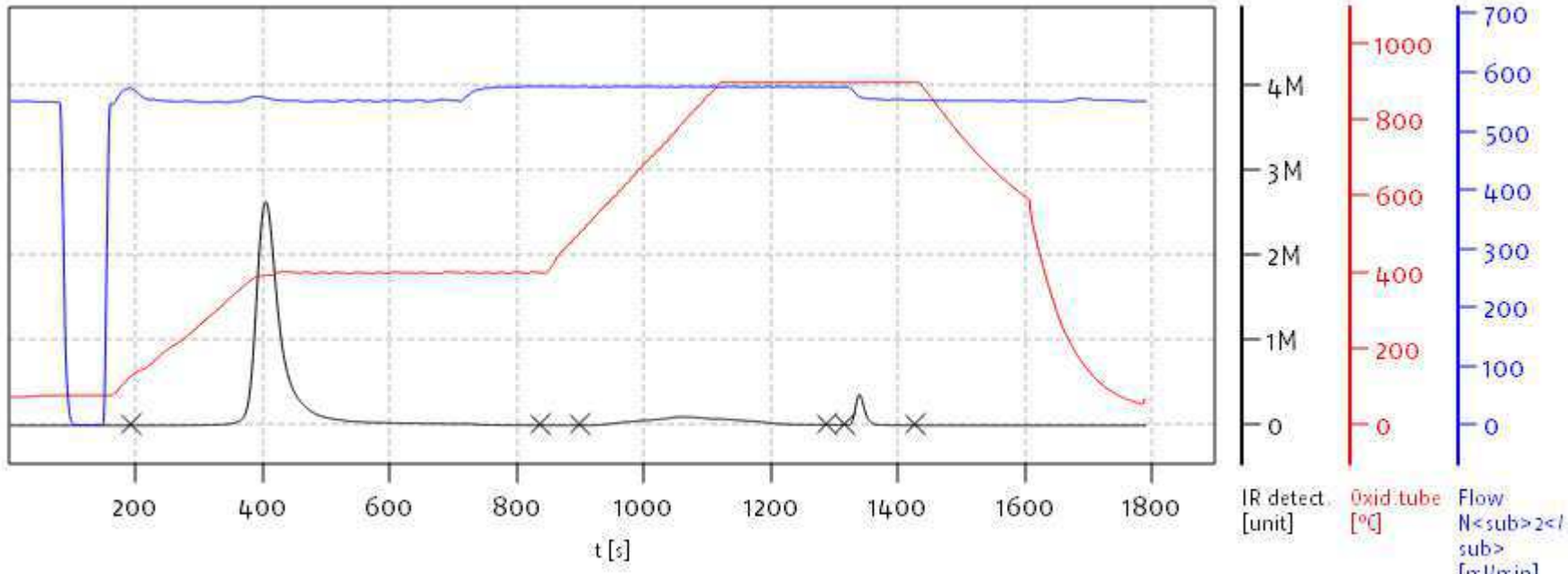
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
71	71	23A0419-11	531.70		CARBON	1/25/2023 3:05 AM	bl	1.405	4 616 787	1.594	0.061	236 679	675 880	1.344	0.189	1.0055	1.0000



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Soli TOC Cube, Carbon
Balance: BAL3
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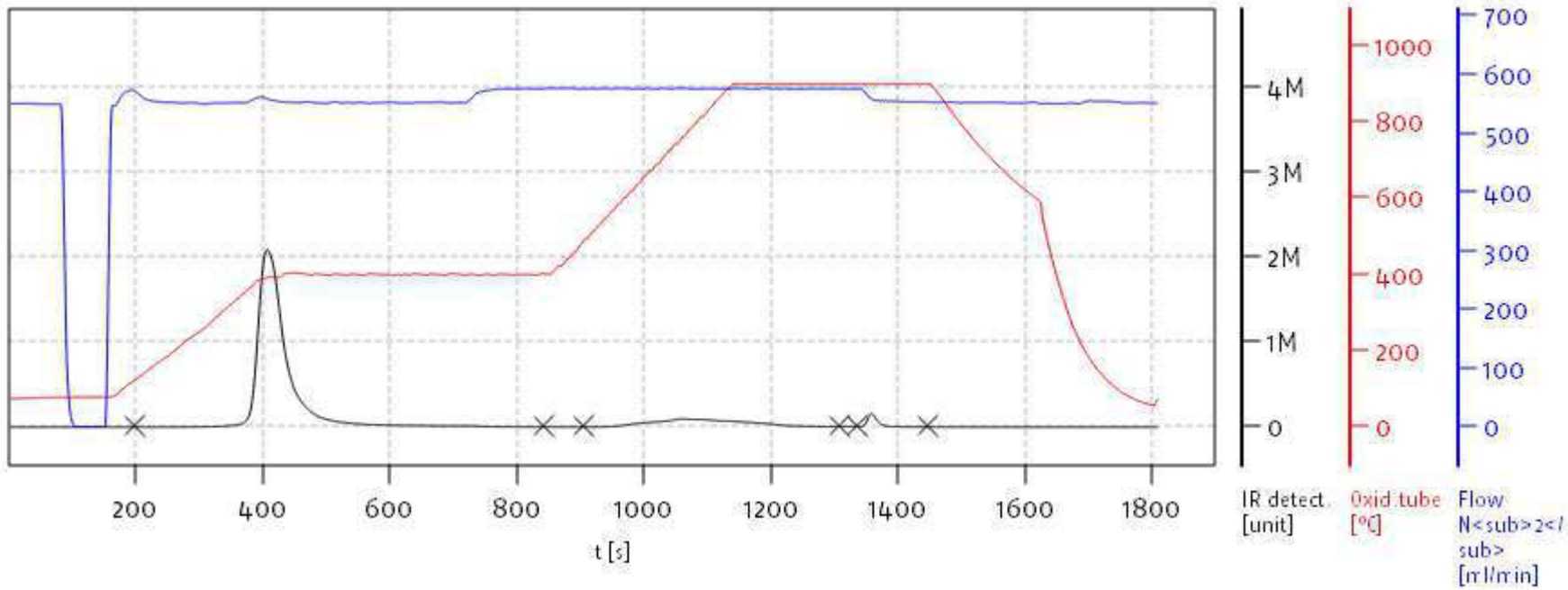
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
72	72	23A0419-12	521.80		CARBON	1/25/2023 3:36 AM	bl	1.214	4 010 810	1.396	0.026	113 948	638 461	1.188	0.182	1.0055	1.0000



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Soli TOC Cube, Carbon
Balance: BAL3
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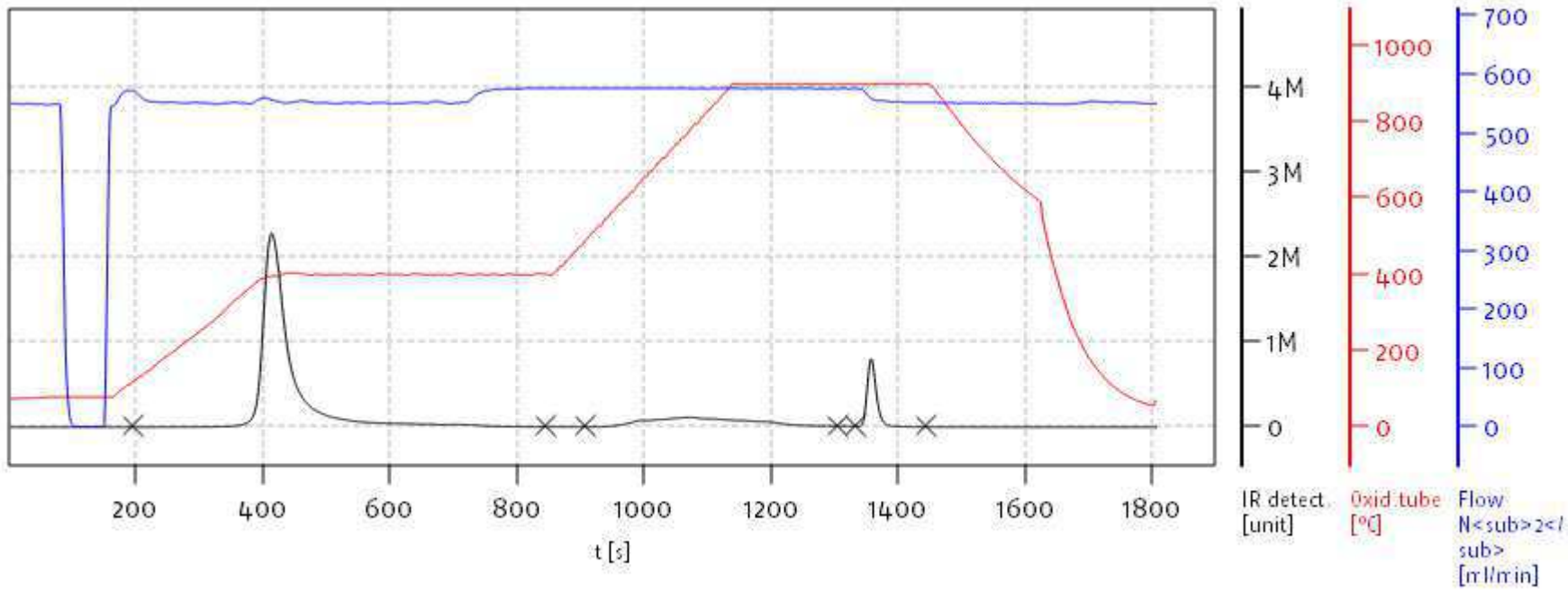
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
73	73	23A0420-01	557.90		CARBON	1/25/2023 4:06 AM	bl	1.297	4 183 421	1.527	0.137	519 608	857 047	1.160	0.230	1.0055	1.0000



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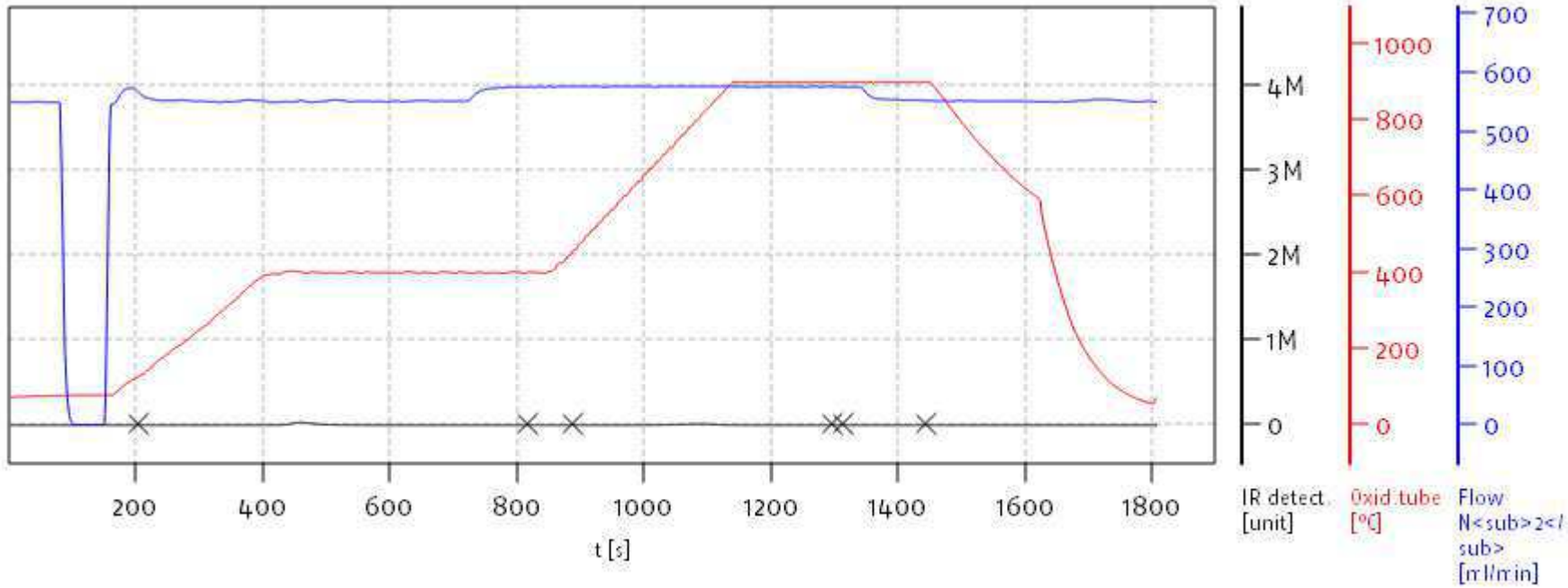
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
74	74	BLA0536-MRL1	527.70		CARBON	1/25/2023 4:37 AM	bl,C2u	0.009	58 025	0.012	0.000	345	35 521	0.009	0.003	1.0055	1.0000



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soliTOC V2.0.2 (31015f9) 2018-11-19
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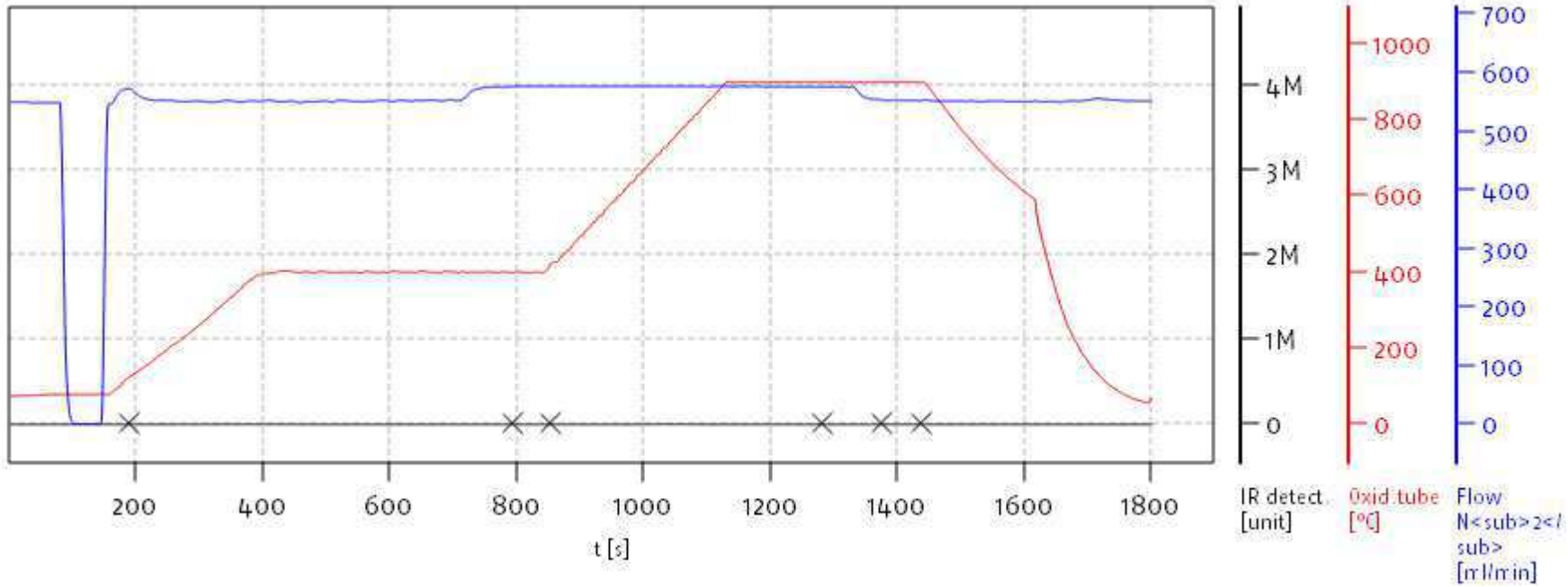
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
75	75	BLA0536-BLK1	519.40		CARBON	1/25/2023 5:07 AM	bl,C2u	0.000	8 243	0.000	0.000	238	6 505	0.000	0.000	1.0055	1.0000



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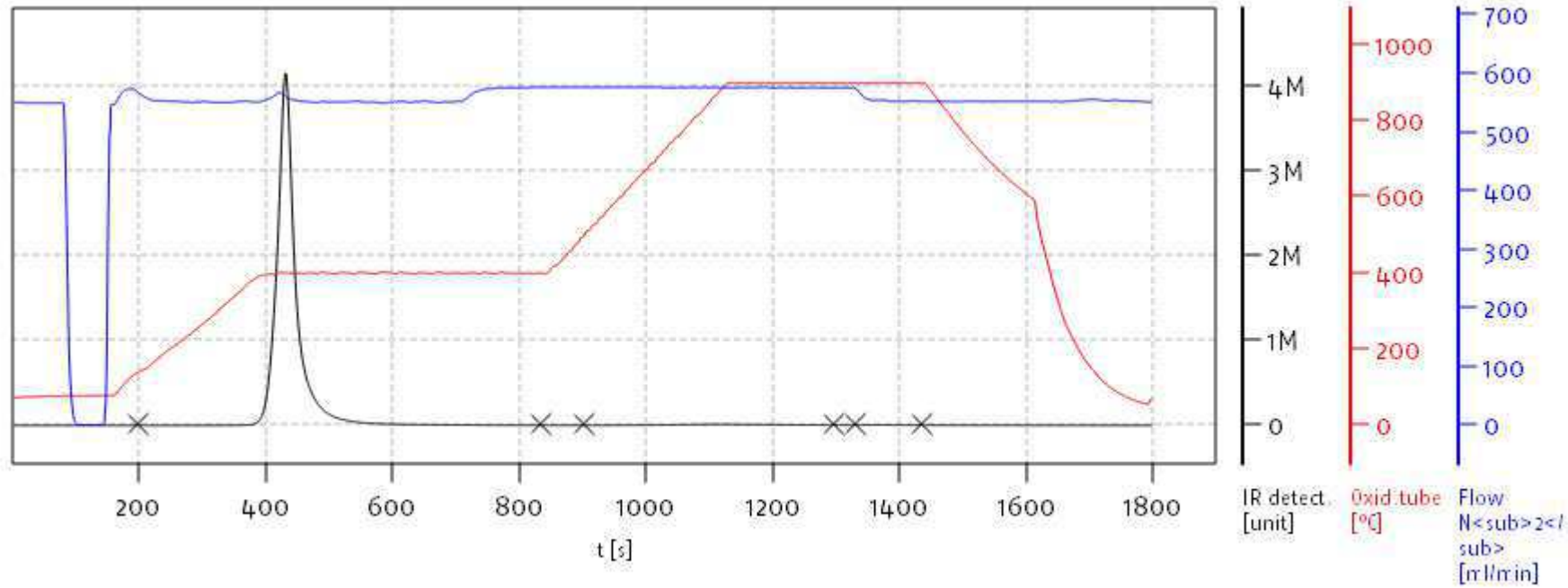
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
76	76	SLA0248-CCV6	18.60		CARBON	1/25/2023 5:38 AM	bl	44.707	5 369 056	45.302	0.000	19 465	97 995	44.707	0.595	1.0055	1.0000



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Soli TOC Cube, Carbon
Balance: BAL3
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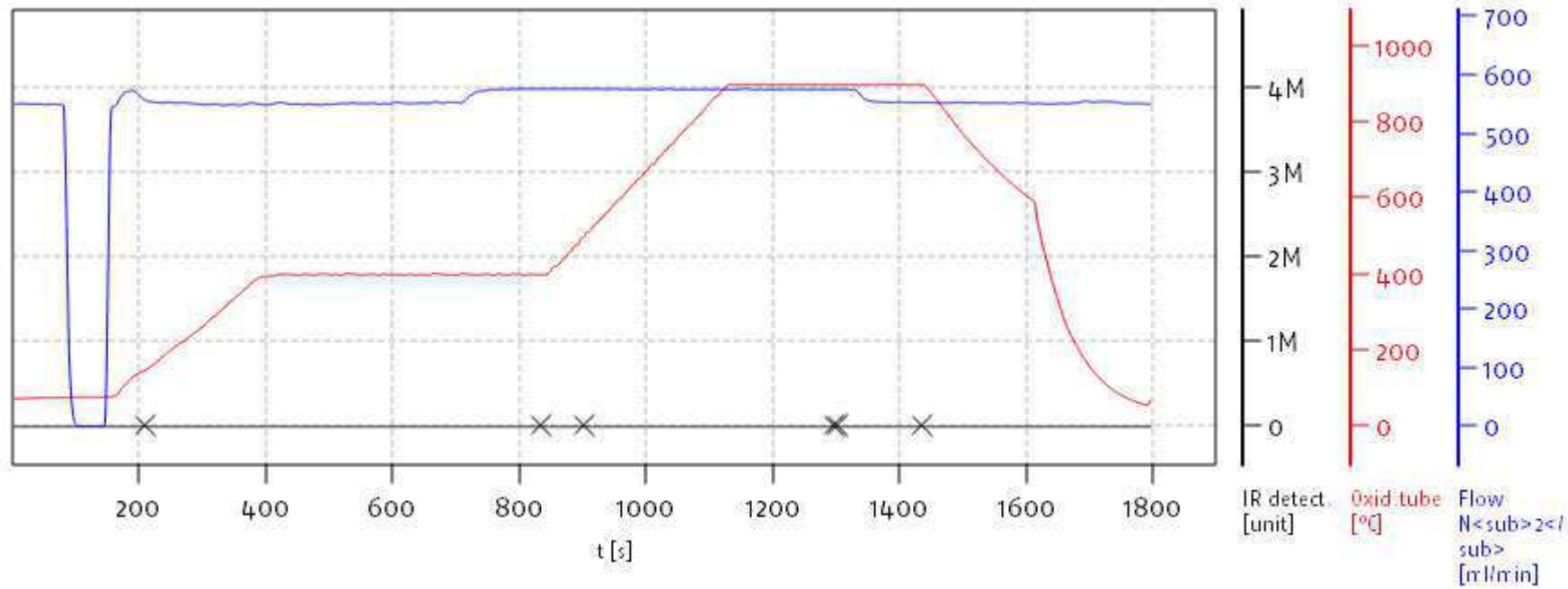
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
77	77	SLA0248-CCB6	523.50		CARBON	1/25/2023 6:08 AM	bl,C3u,C2u	0.000	4 357	0.000	0.000	597	177	0.000	0.000	1.0055	1.0000



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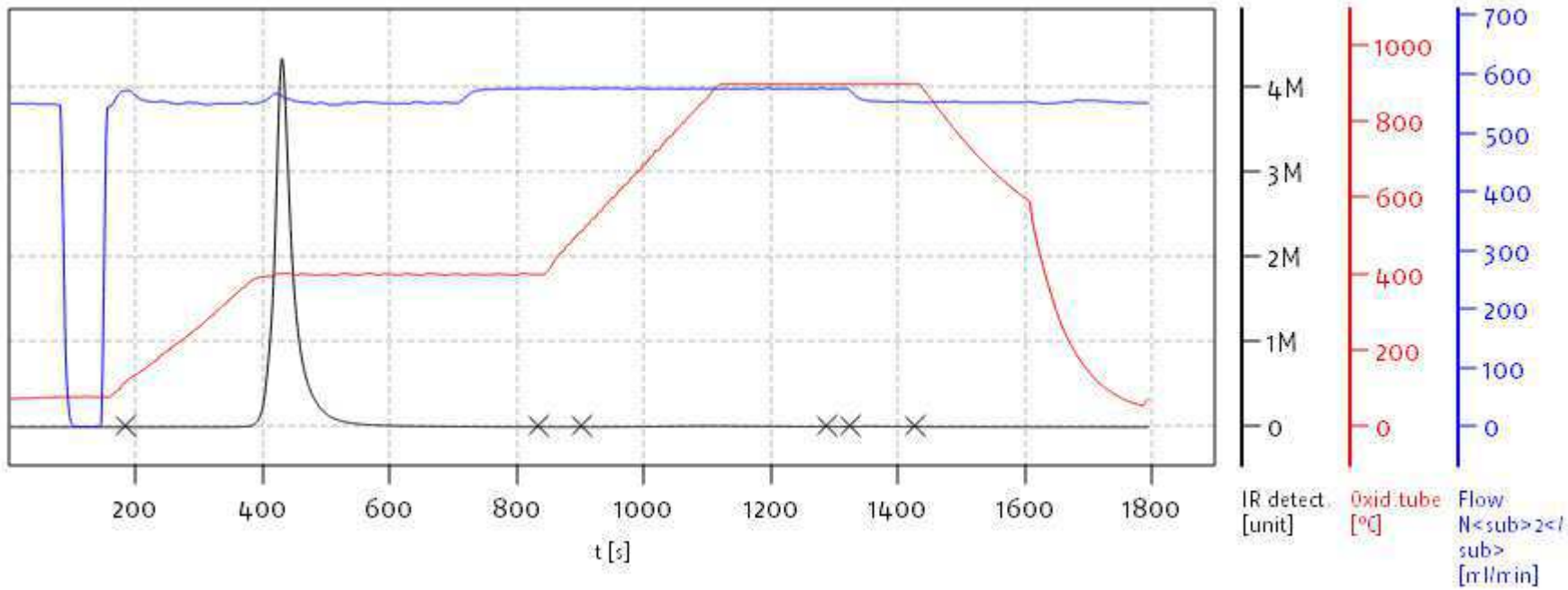
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
78	78	BLA0536-BS1	19.70		CARBON	1/25/2023 6:38 AM	bl	44.843	5 702 289	45.465	0.000	23 176	105 684	44.843	0.622	1.0055	1.0000



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Balance: BAL3
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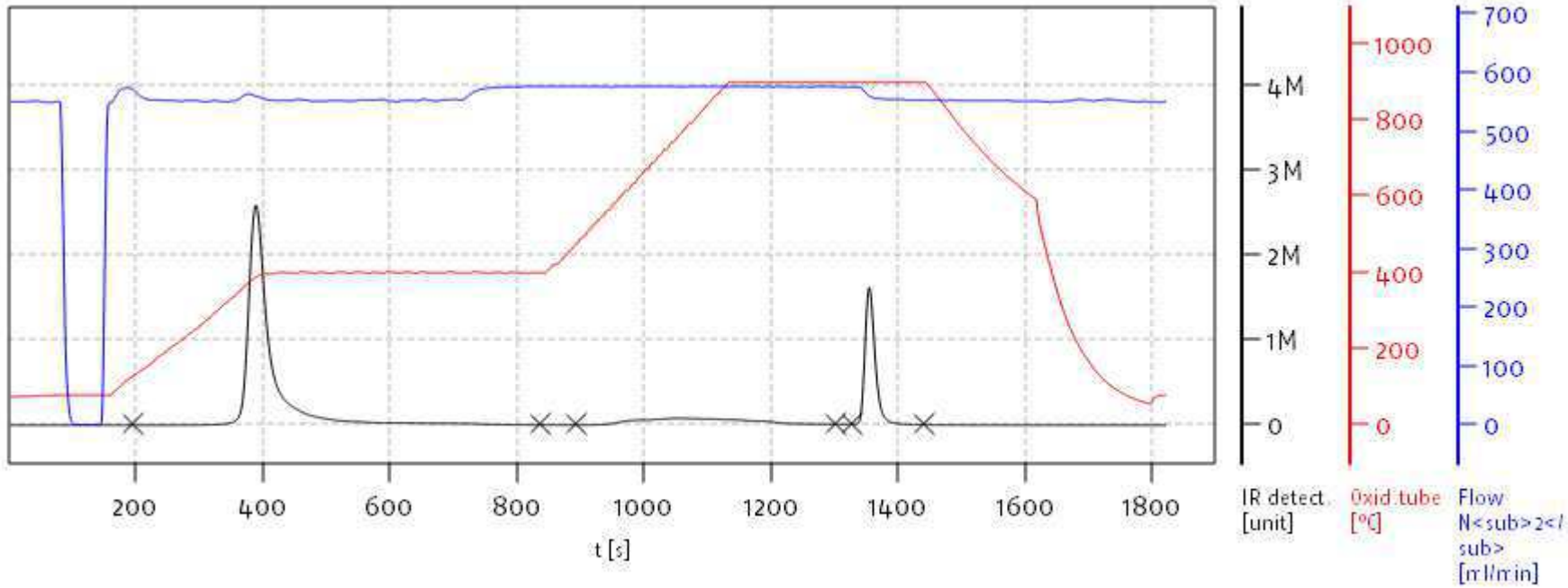
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
79	79	BLA0536-SRM1	257.50		CARBON	1/25/2023 7:09 AM	bl	2.969	3 828 148	3.354	0.671	1 143 426	666 051	2.298	0.384	1.0055	1.0000



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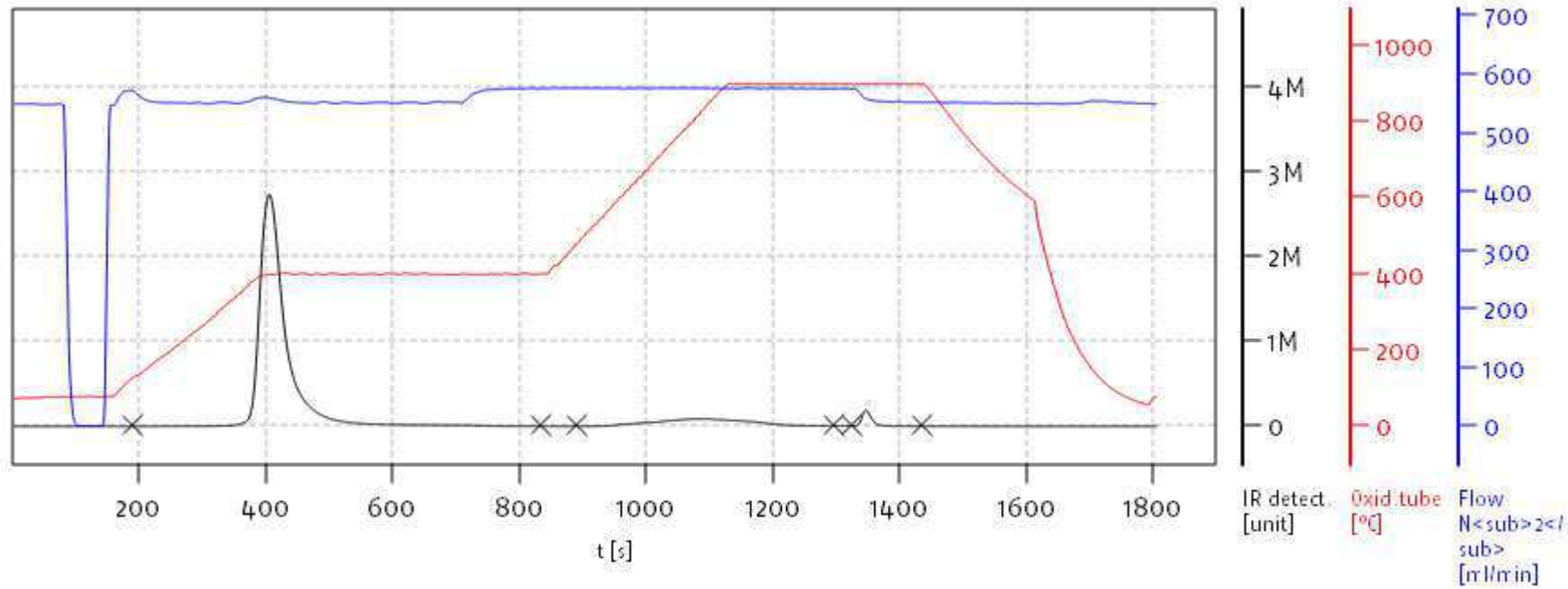
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
80	80	23A0420-02	538.70		CARBON	1/25/2023 7:40 AM	bl	1.414	4 815 615	1.580	0.031	133 189	603 826	1.384	0.166	1.0055	1.0000



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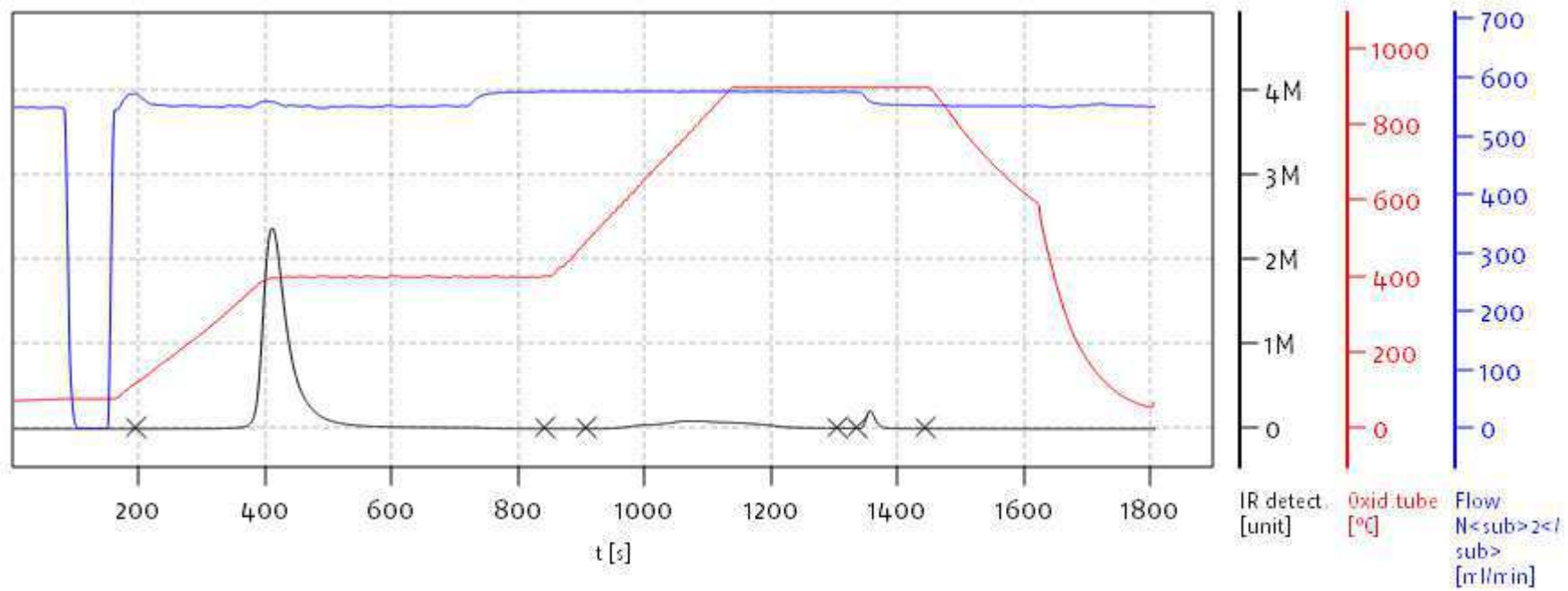
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
81	81	BLA0536-DUP1	517.10		CARBON	1/25/2023 8:10 AM	bl	1.342	4 366 419	1.523	0.035	144 427	634 068	1.306	0.182	1.0055	1.0000



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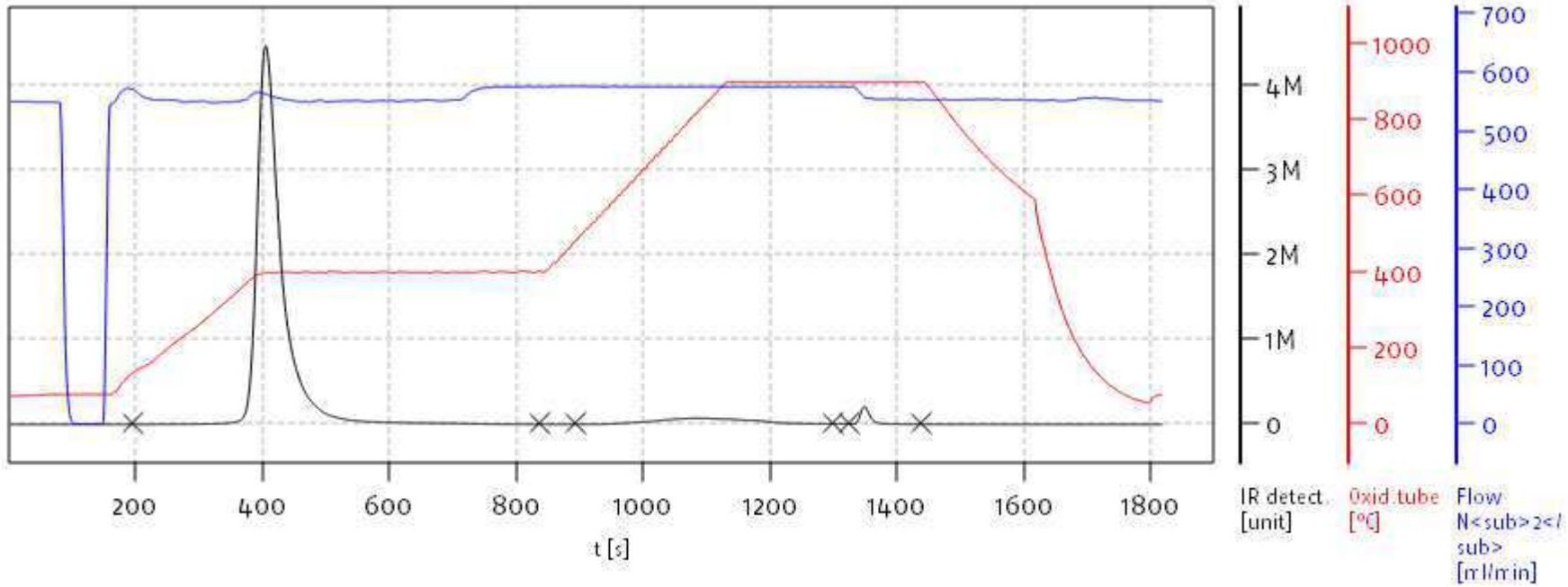
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
82	82	BLA0536-MS1	520.70	0.0094	CARBON	1/25/2023 8:41 AM	bl	2.268	7 493 431	2.410	0.036	147 574	505 750	2.232	0.142	1.0055	1.0000



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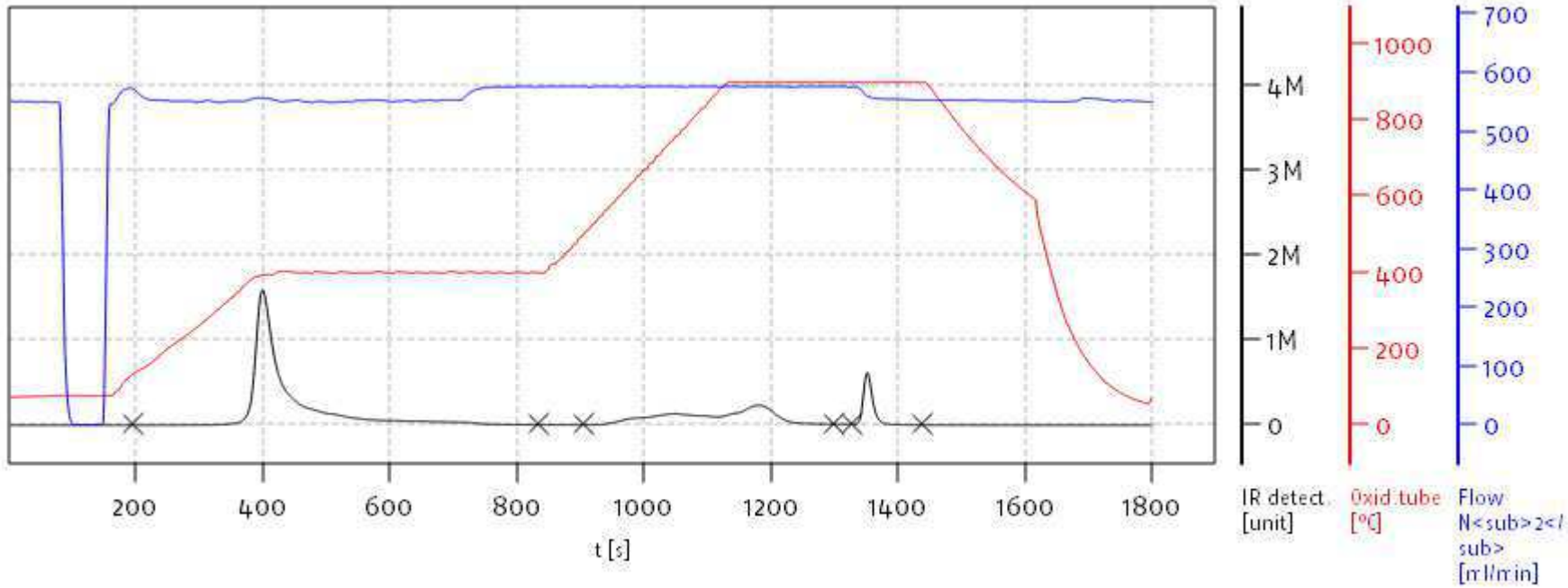
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
83	83	23A0420-03	508.60		CARBON	1/25/2023 9:11 AM	bl	1.071	3 147 291	1.467	0.116	406 097	1 327 970	0.955	0.396	1.0055	1.0000



Name:

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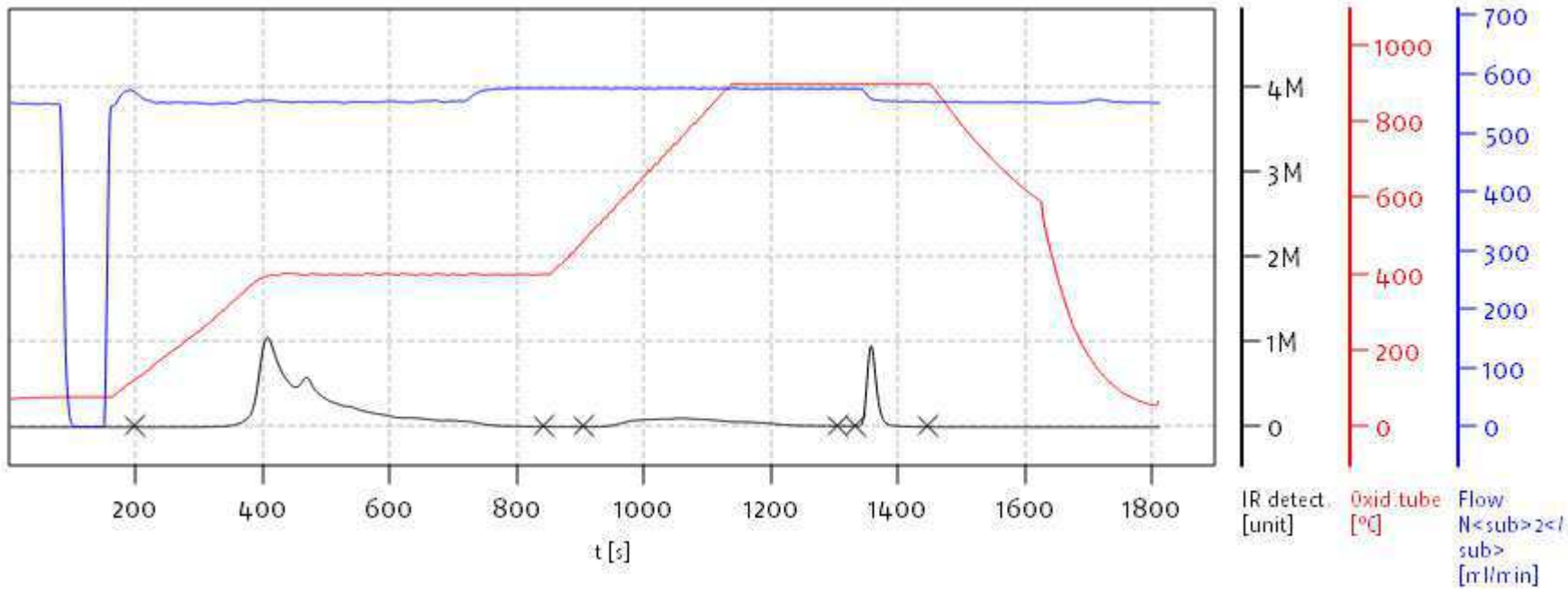
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
84	84	23A0420-04	512.40		CARBON	1/25/2023 9:42 AM	bl	1.401	4 027 952	1.634	0.185	640 119	798 657	1.215	0.233	1.0055	1.0000



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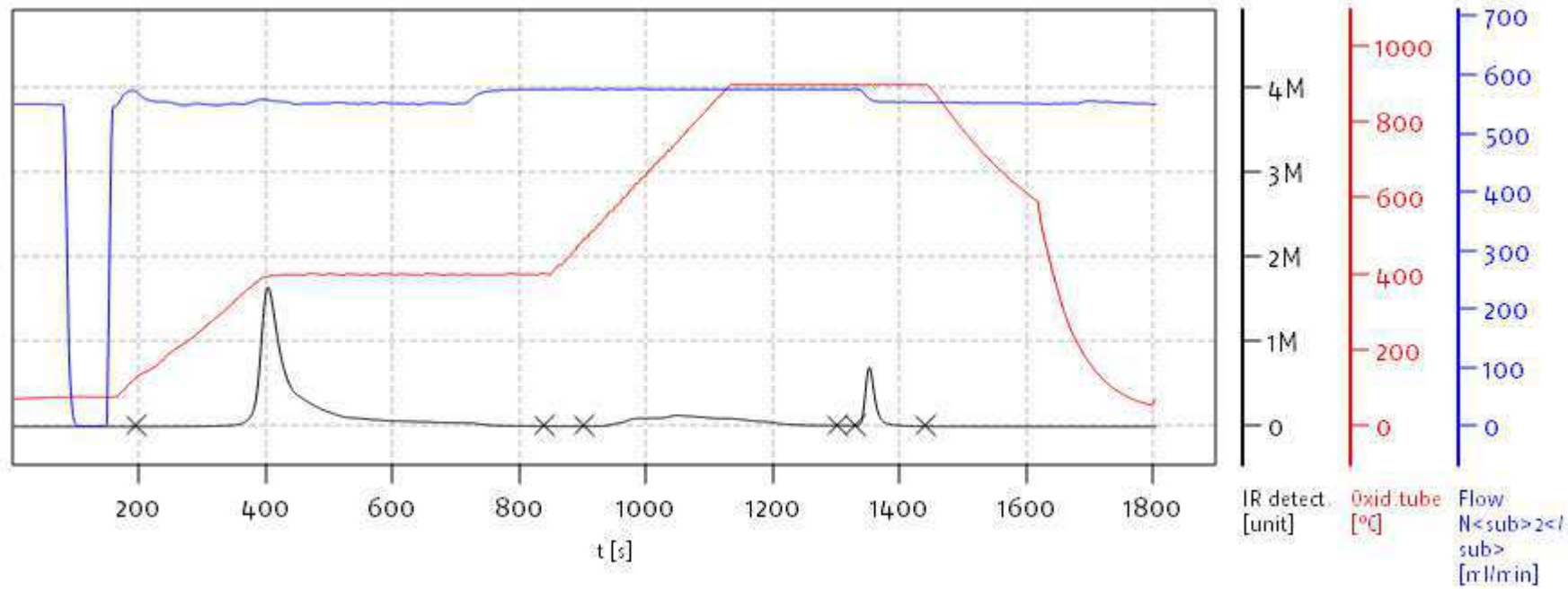
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
85	85	23A0420-05	550.70		CARBON	1/25/2023 10:12 AM	bl	1.127	3 559 043	1.391	0.129	484 909	965 035	0.998	0.264	1.0055	1.0000



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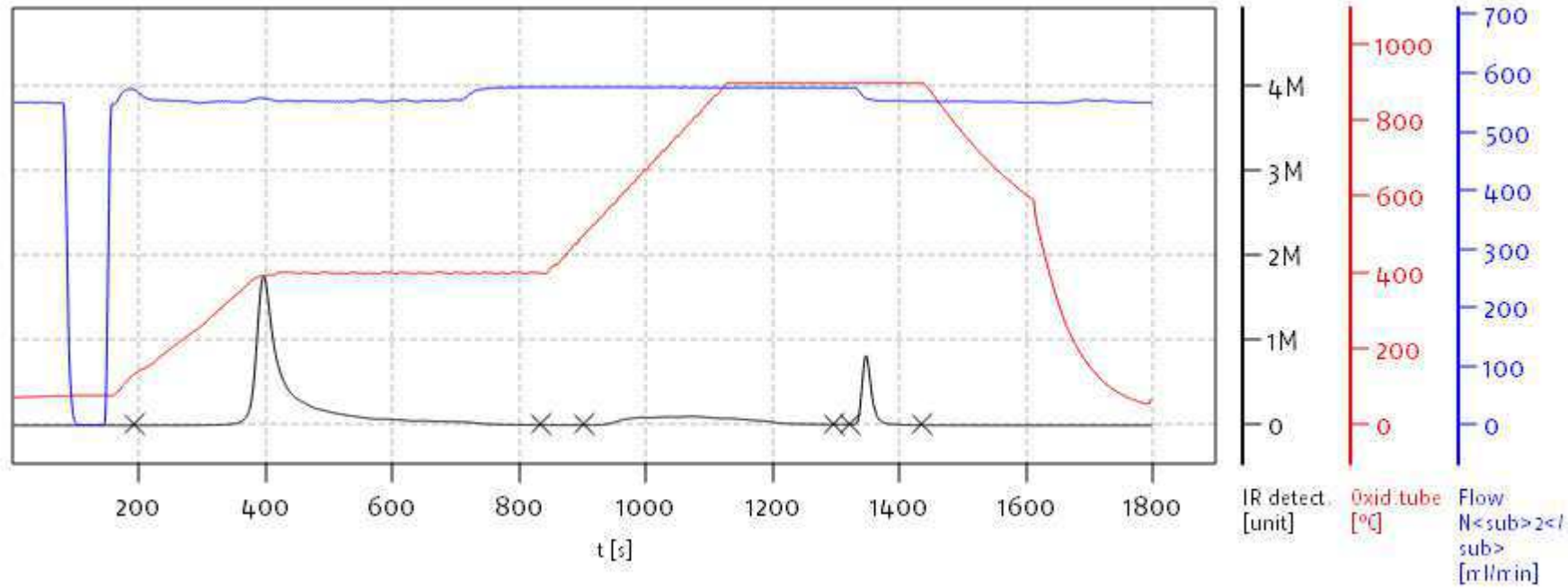
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
86	86	23A0420-06	551.60		CARBON	1/25/2023 10:43 AM	bl	1.143	3 548 920	1.378	0.149	557 915	864 692	0.994	0.235	1.0055	1.0000



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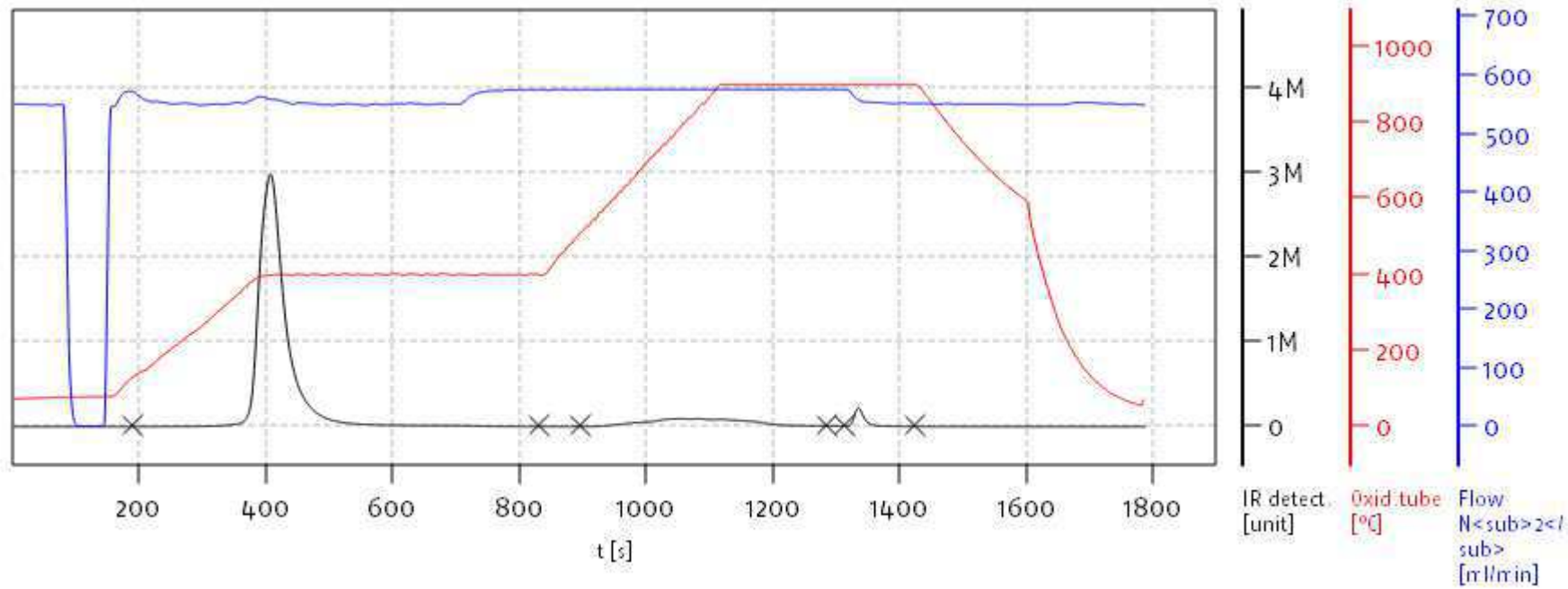
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
87	87	23A0420-07	576.00		CARBON	1/25/2023 11:13 AM	bl	1.499	5 441 719	1.677	0.035	157 829	691 486	1.463	0.179	1.0055	1.0000



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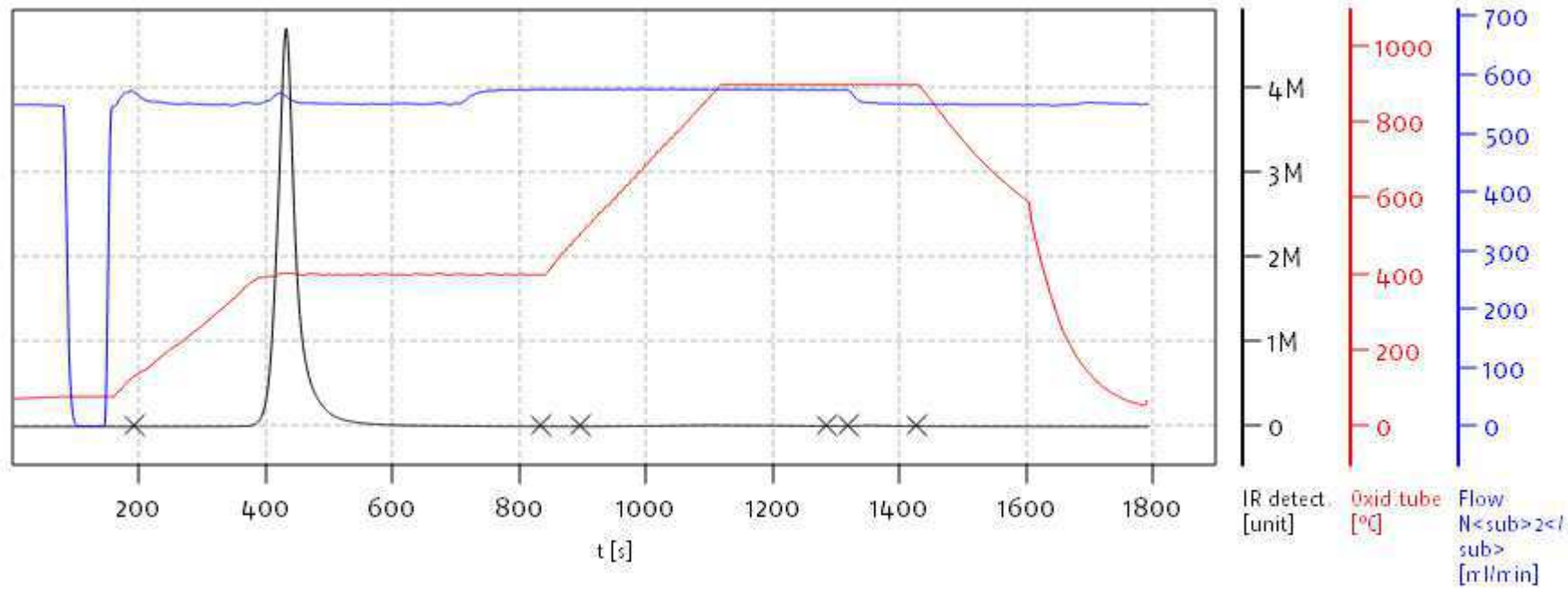
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
88	88	SLA0248-CCV7	22.20		CARBON	1/25/2023 11:43 AM	bl	44.445	6 360 834	45.184	0.034	31 436	132 487	44.411	0.739	1.0055	1.0000



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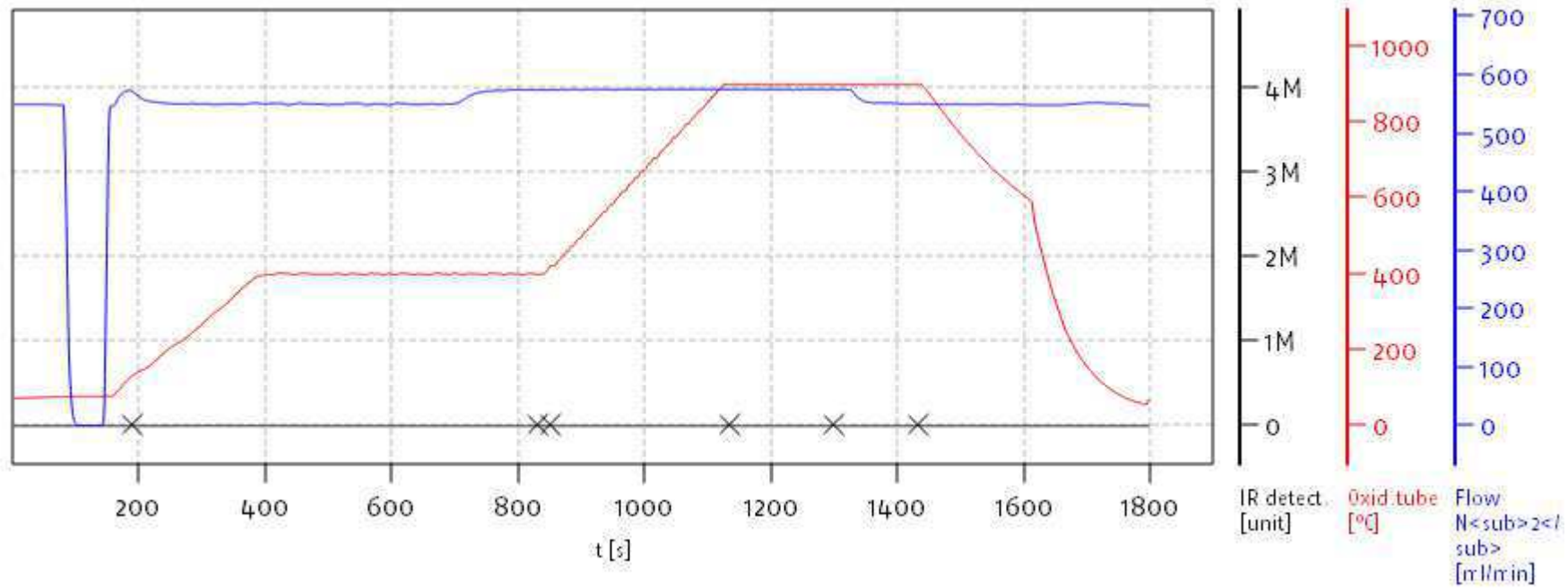
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
89	89	SLA0248-CCB7	510.40		CARBON	1/25/2023 12:14 PM	bl,C3u,C2u	0.000	9 173	0.000	0.000	755	173	0.000	0.000	1.0055	1.0000



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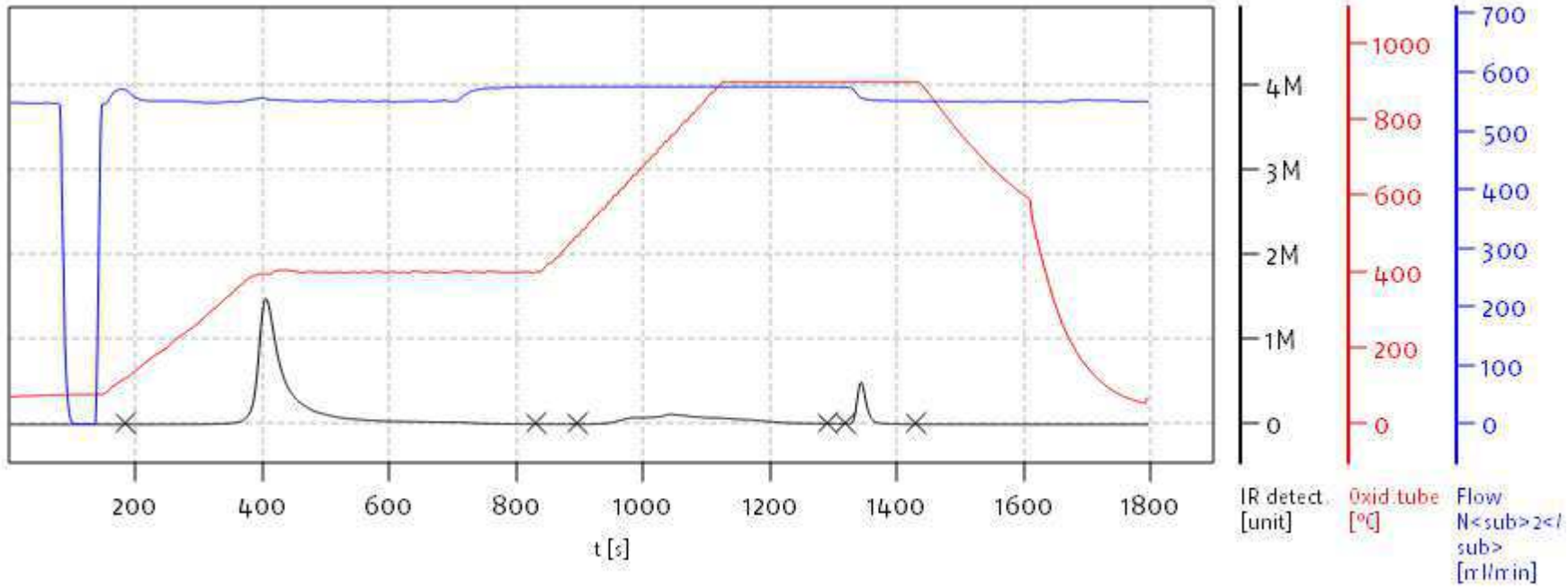
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
90	1	23A0420-08	531.50		CARBON	1/25/2023 12:44 PM	bl	0.932	2 908 752	1.150	0.088	330 034	774 946	0.844	0.218	1.0055	1.0000



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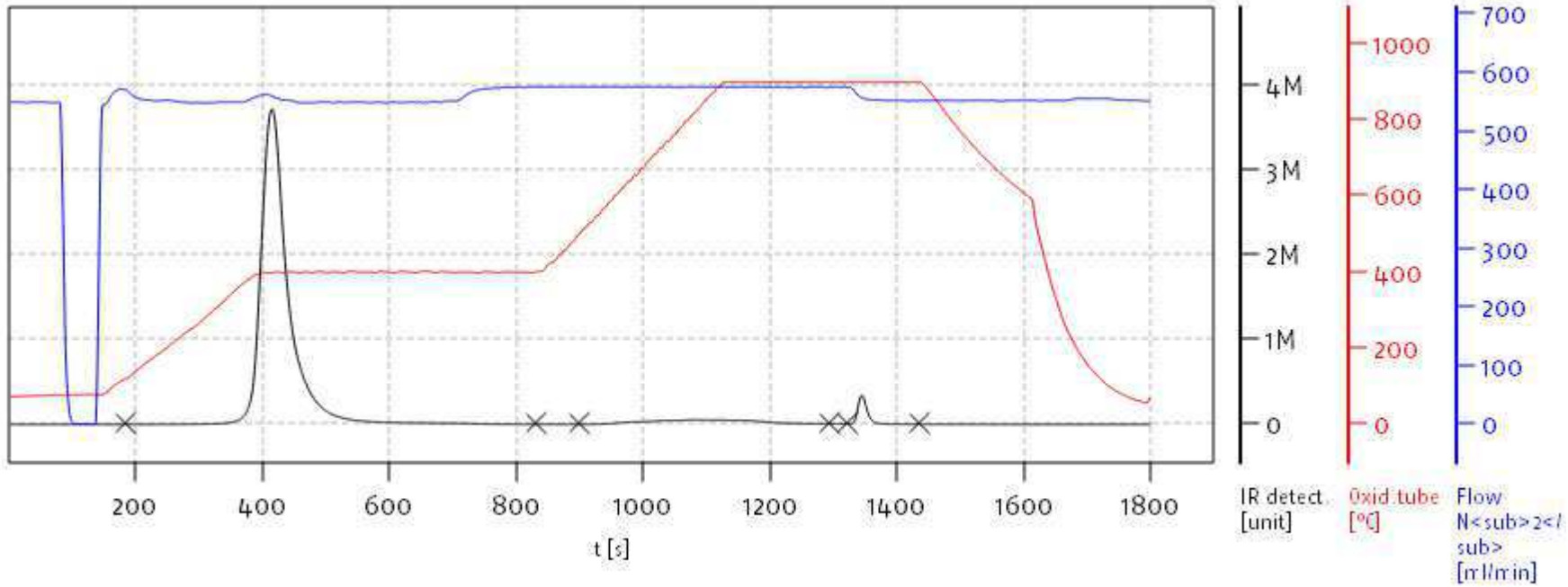
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
91	2	23A0420-09	595.70		CARBON	1/25/2023 1:14 PM	bl	1.856	6 930 831	1.963	0.052	226 221	440 193	1.804	0.107	1.0055	1.0000



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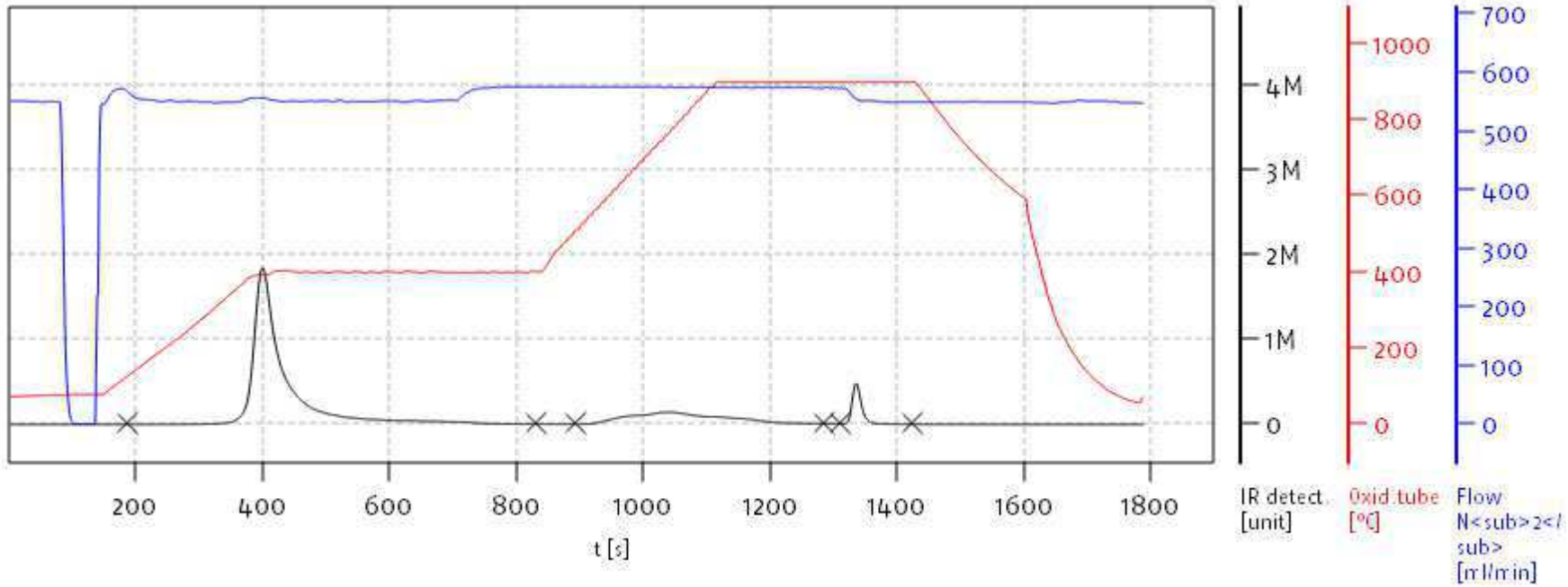
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
92	3	23A0455-01	643.80		CARBON	1/25/2023 1:45 PM	bl	0.978	3 780 275	1.208	0.070	319 720	982 408	0.908	0.230	1.0055	1.0000



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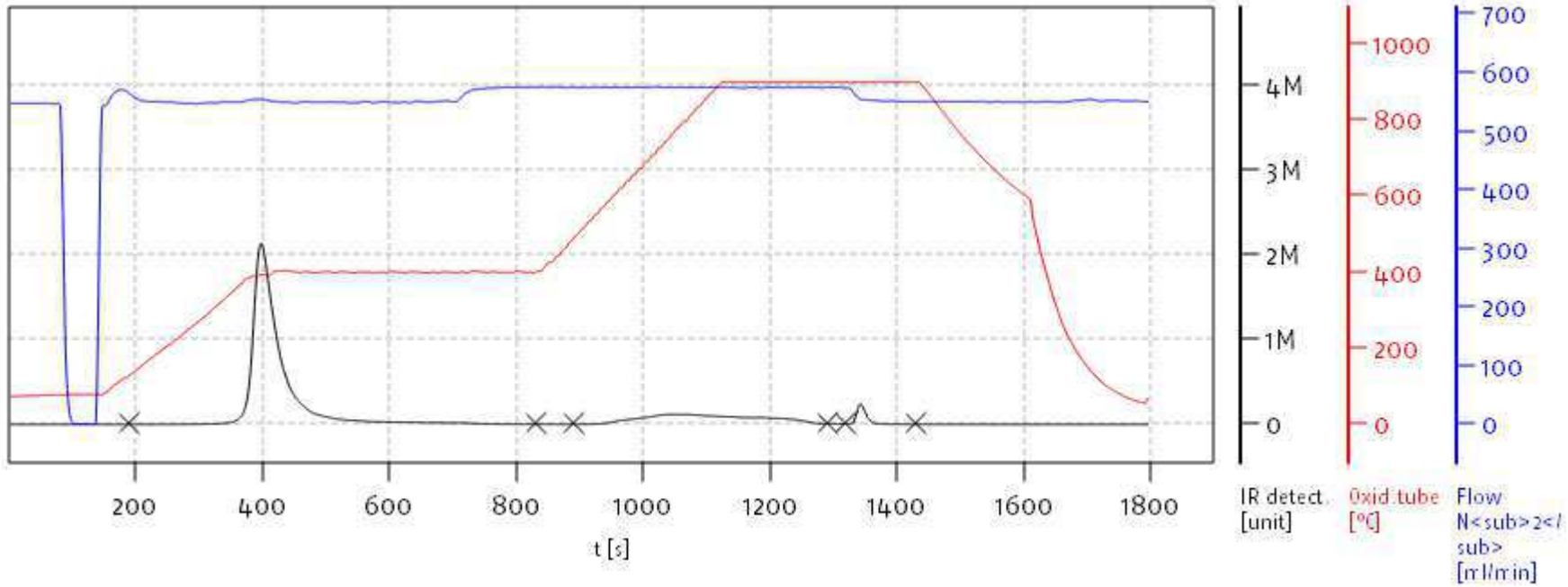
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
93	4	23A0455-02	544.10		CARBON	1/25/2023 2:15 PM	bl	1.155	3 928 863	1.434	0.038	161 622	1 007 942	1.116	0.279	1.0055	1.0000



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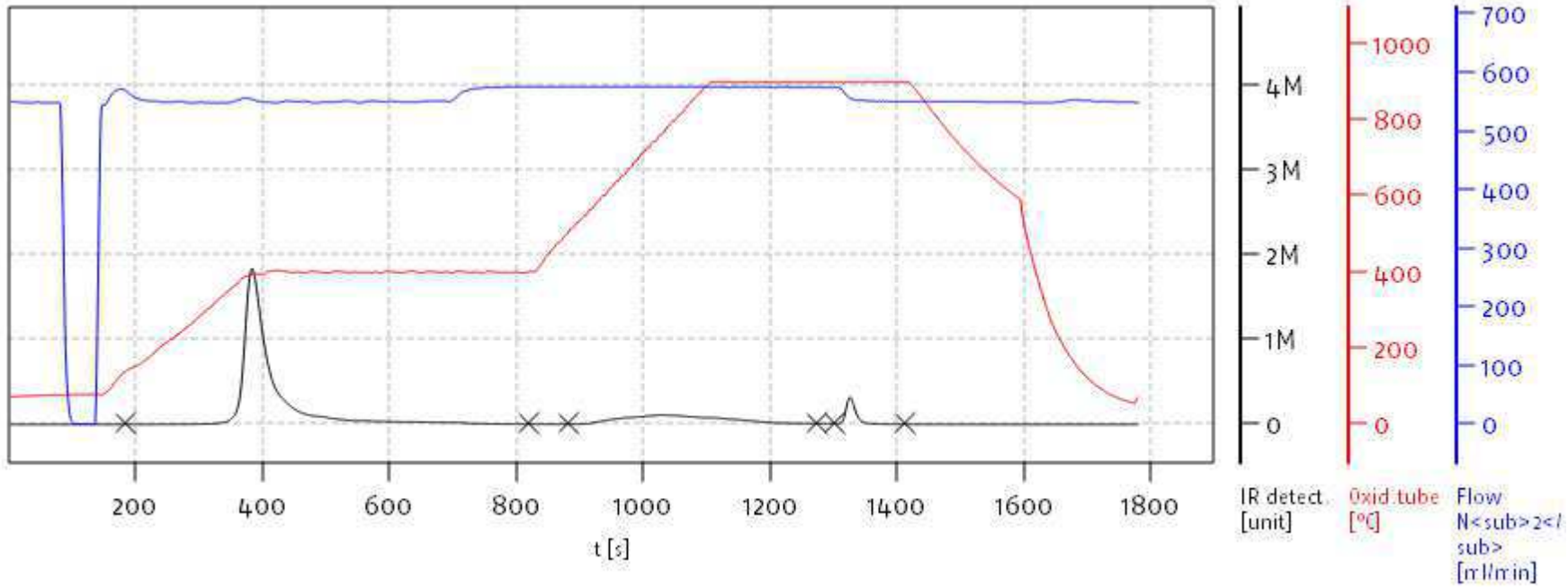
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
94	5	23A0455-03	533.10		CARBON	1/25/2023 2:45 PM	bl	1.006	3 280 902	1.233	0.055	217 577	811 013	0.950	0.228	1.0055	1.0000



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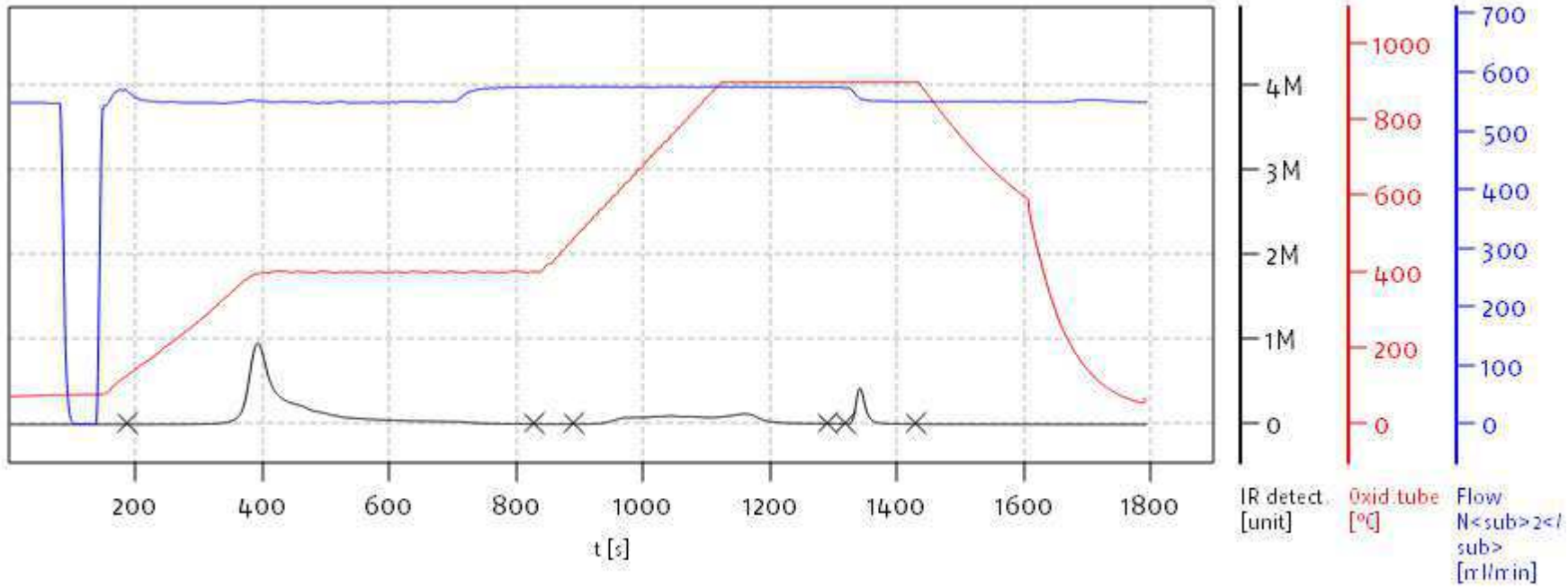
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
95	6	23A0455-04	505.70		CARBON	1/25/2023 3:15 PM	bl	0.839	2 483 236	1.107	0.083	296 855	901 894	0.756	0.268	1.0055	1.0000



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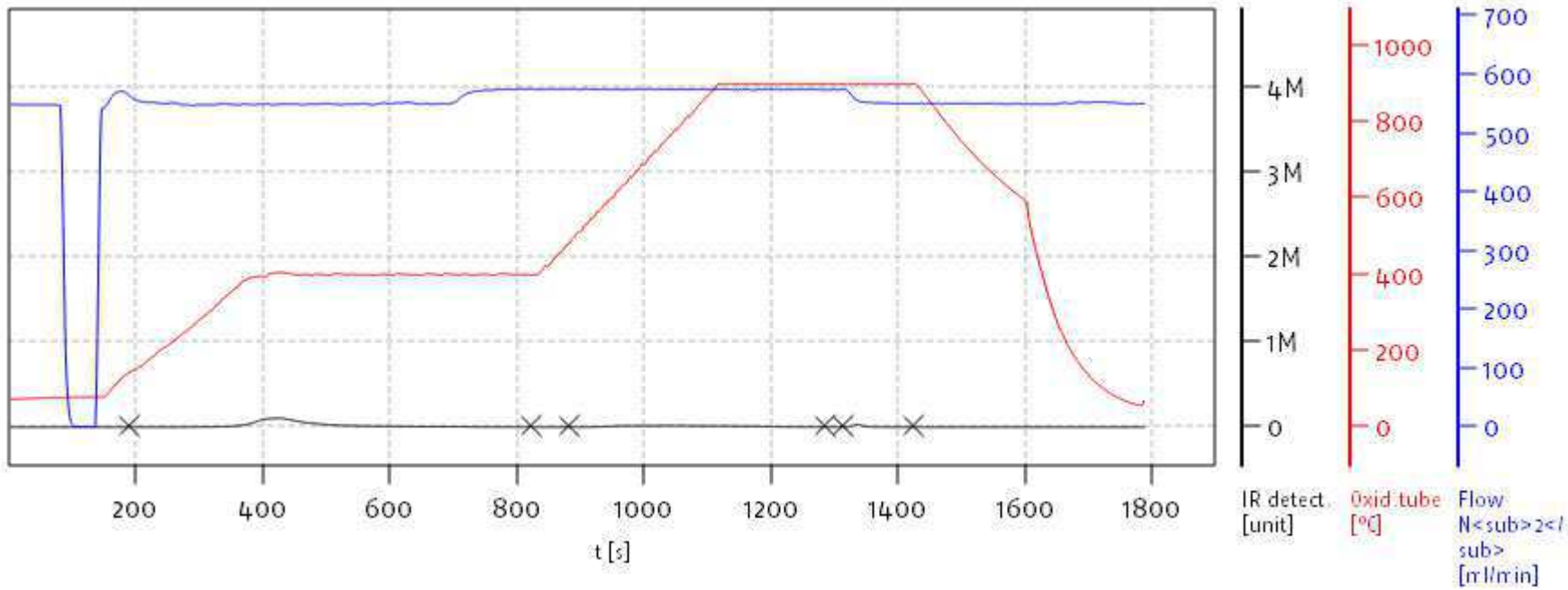
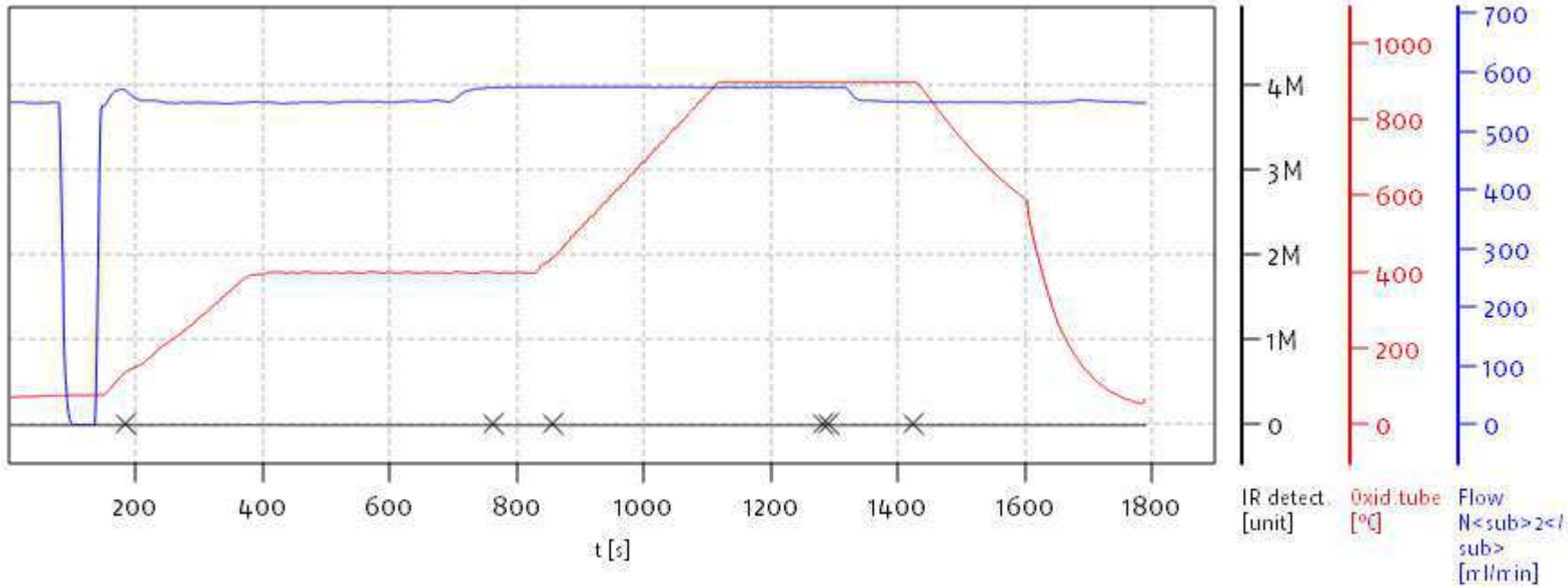
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
96	7	23A0455-05	578.50		CARBON	1/25/2023 3:45 PM	bl	0.114	448 511	0.143	0.000	21 176	135 200	0.114	0.029	1.0055	1.0000



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
97	8	BLANK	1.00		CARBON	1/ 25/2023 4:16 PM	bl	0.000	9 690	0.000	0.000	398	1 467	0.000	0.000	1.0055	1.0000



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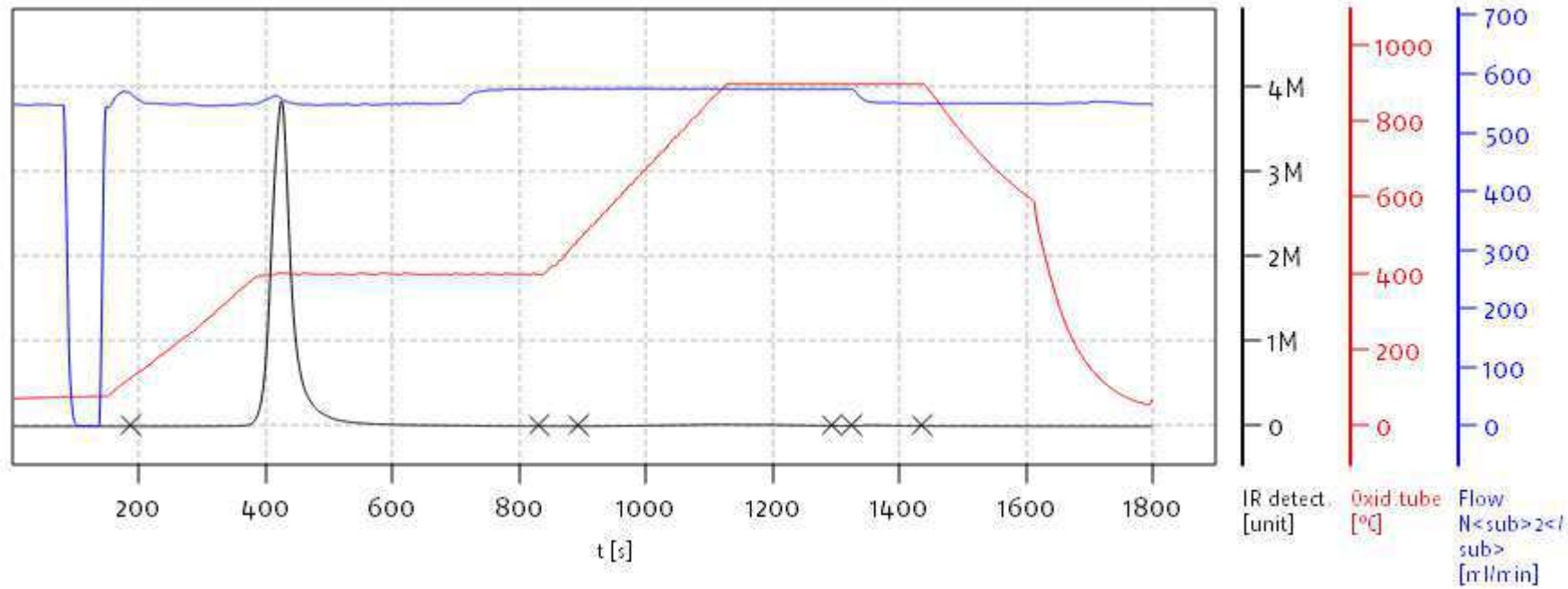
98	9	Dfactor	19.70		CARBON	1/25/2023 4:46 PM	bl	44.493	5 581 097	45.733	0.047	32 519	184 433	44.446	1.241	1.0183	1.0000



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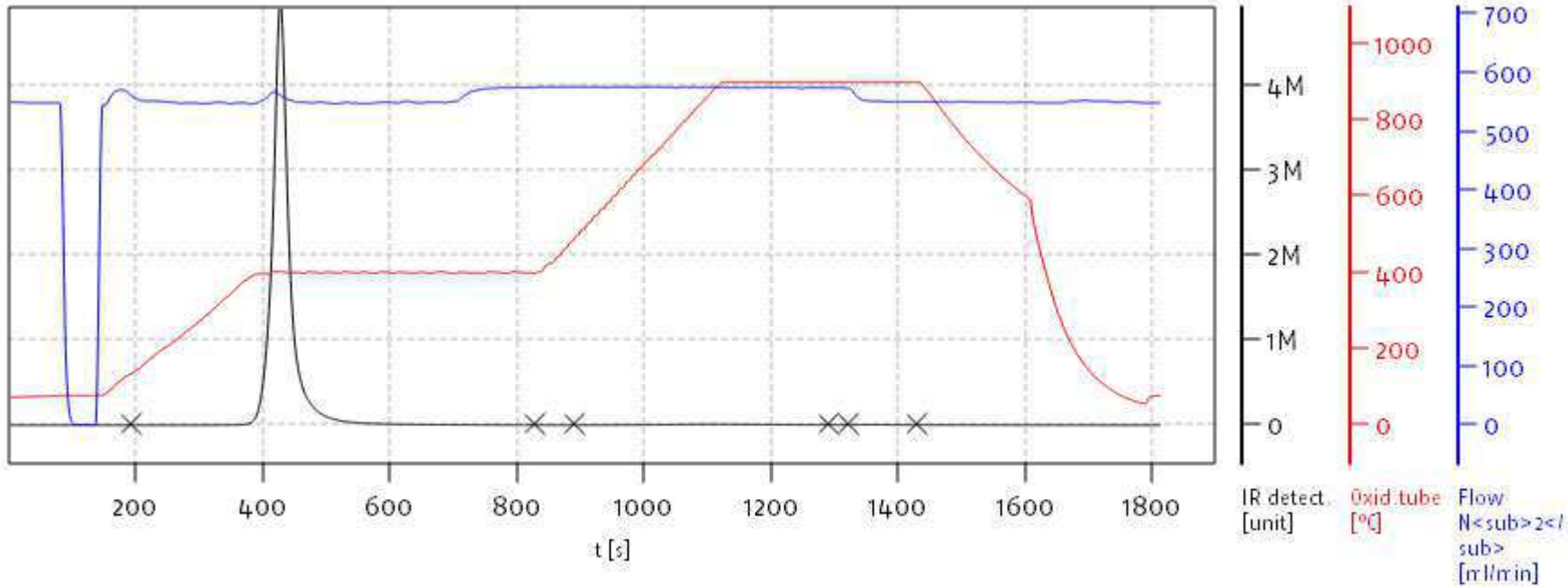
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
99	10	Dfactor	19.70		CARBON	1/25/2023 5:17 PM	bl	44.446	5 816 436	44.894	0.000	17 042	83 614	44.446	0.449	0.9769	1.0000



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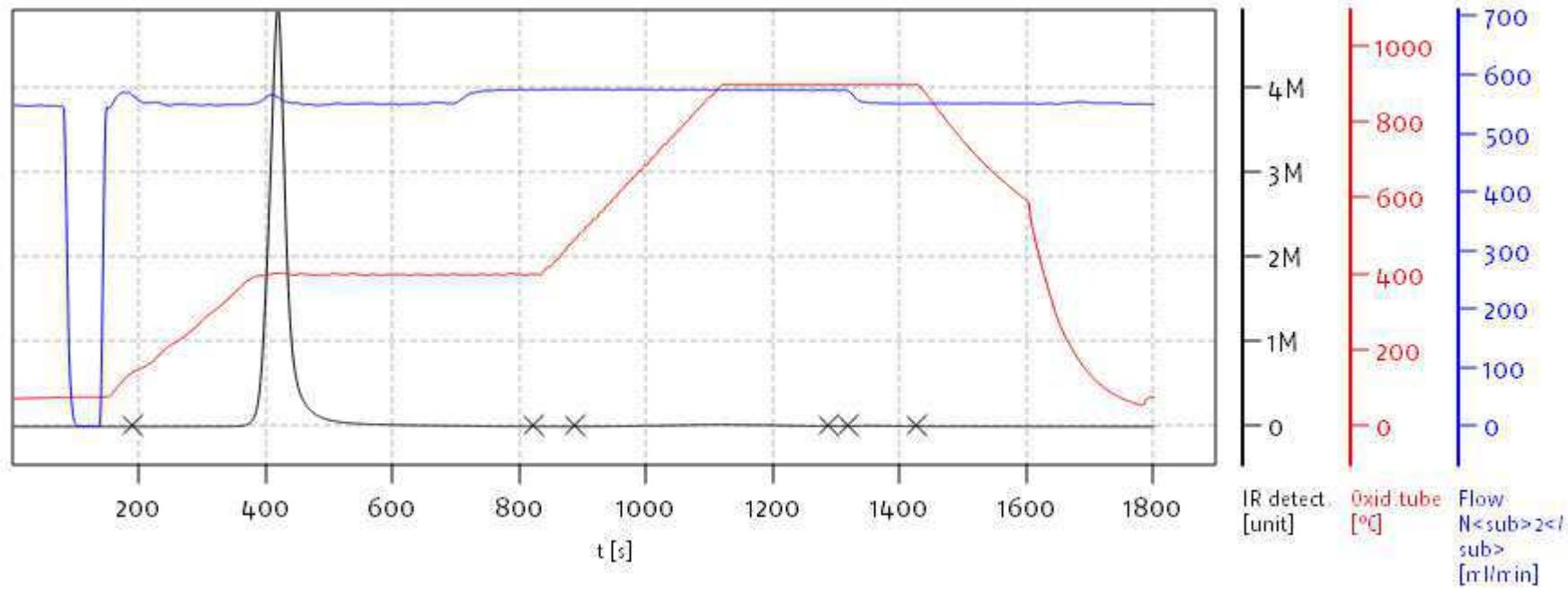
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
100	11	SLA0248-CCV8	21.00		CARBON	1/25/2023 5:47 PM	bl	44.971	6 141 719	46.160	0.001	26 726	187 870	44.970	1.189	0.9976	1.0000



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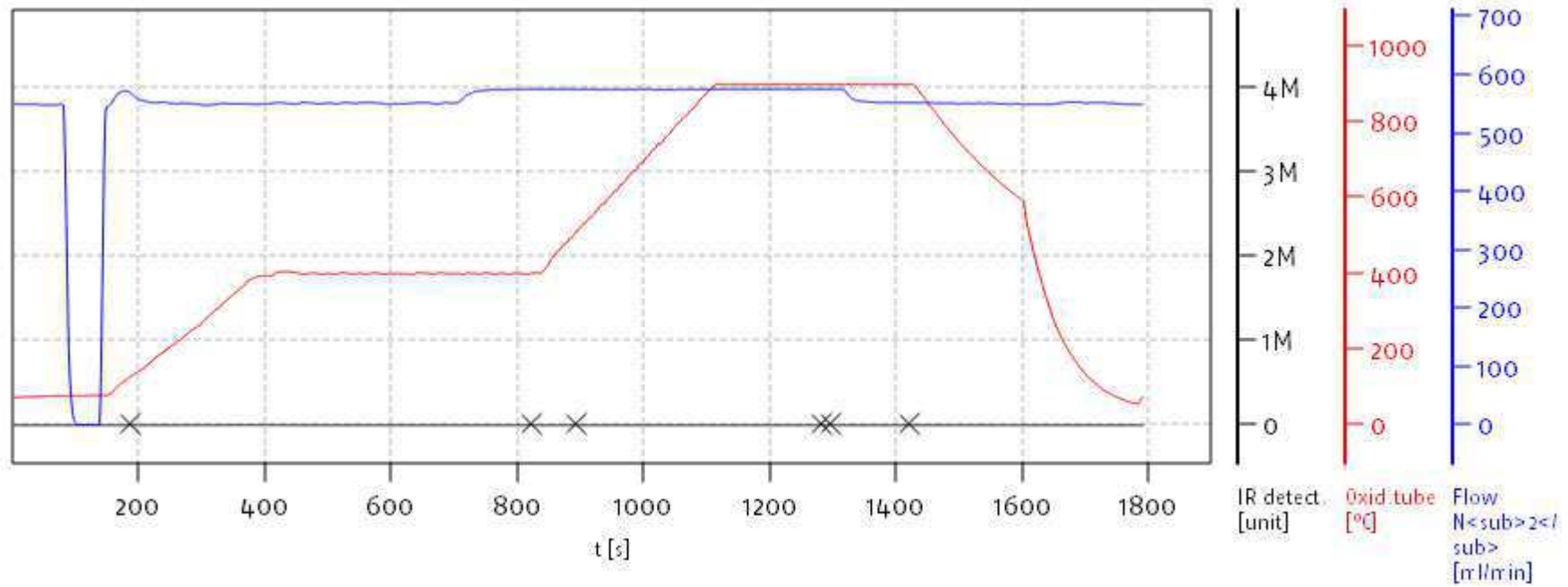
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
101	12	SLA0248-CCB8	506.50		CARBON	1/25/2023 6:18 PM	bl,C3u,C2u	0.000	9 854	0.000	0.000	1 317	874	0.000	0.000	0.9976	1.0000



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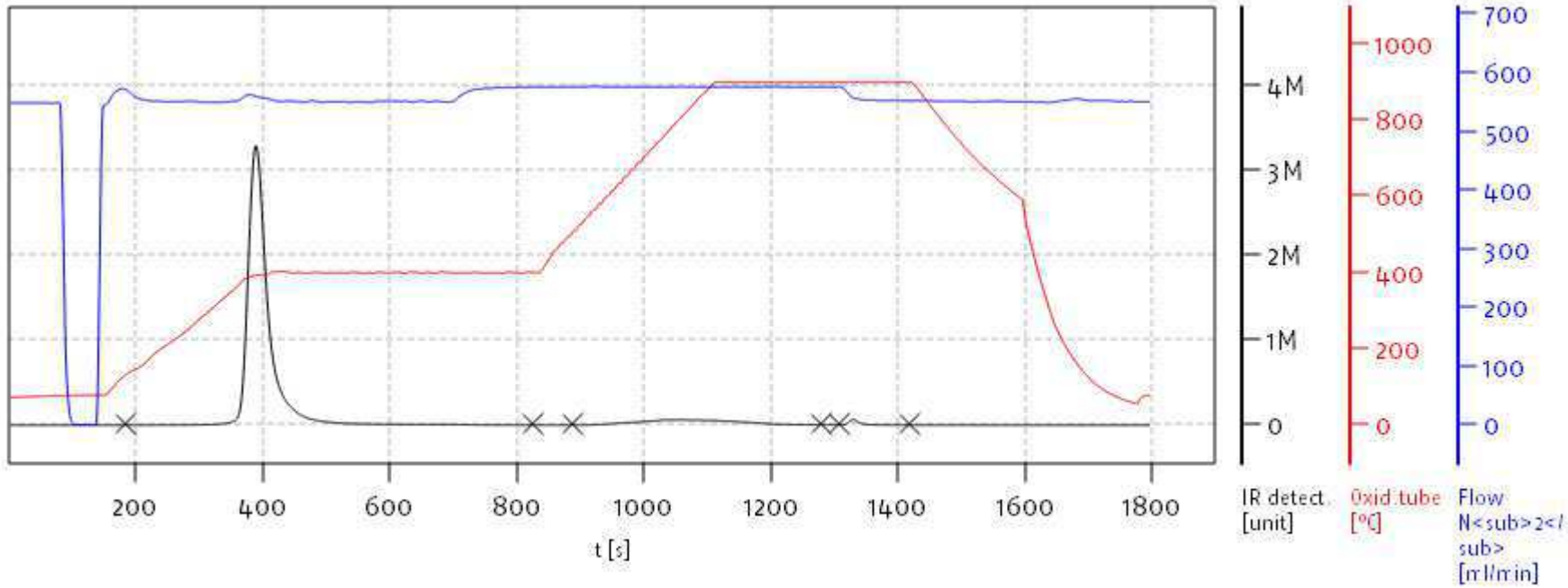
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
102	13	23A0455-06	506.40		CARBON	1/25/2023 6:48 PM	bl	1.383	4 536 741	1.513	0.008	52 336	450 457	1.375	0.130	0.9976	1.0000



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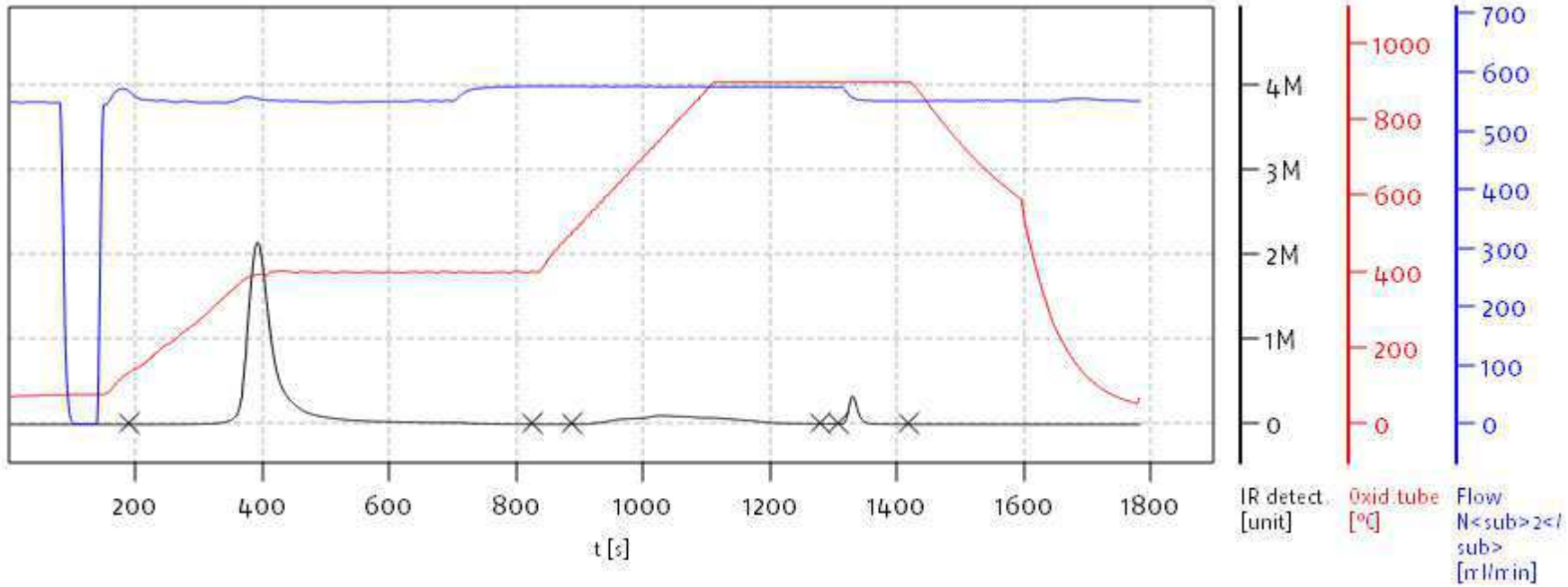
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
103	14	23A0455-07	506.40		CARBON	1/25/2023 7:18 PM	bl	1.265	3 983 520	1.480	0.058	215 698	731 107	1.207	0.215	0.9976	1.0000



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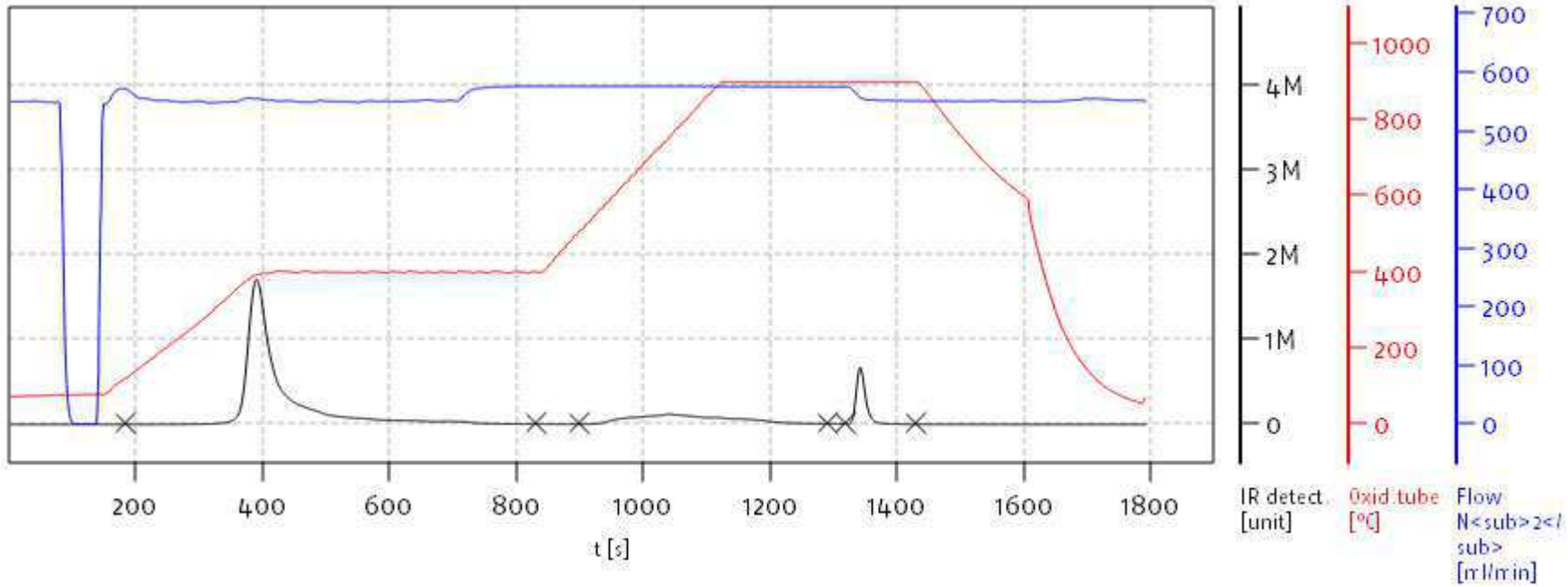
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
104	15	23A0455-08	529.90		CARBON	1/25/2023 7:48 PM	bl	1.147	3 547 390	1.386	0.121	440 173	845 635	1.026	0.239	0.9976	1.0000



Name:

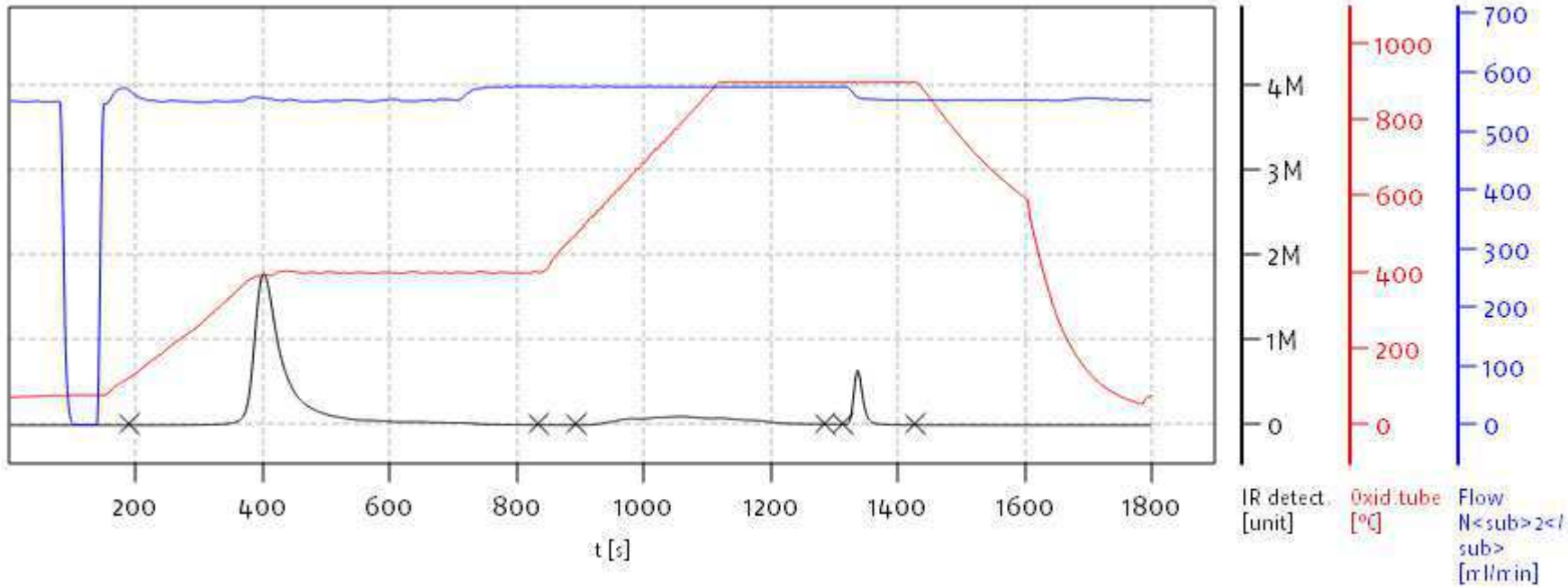
Access: soliTOC superuser

Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
105	16	23A0455-09	526.50		CARBON	1/25/2023 8:19 PM	bl	1.234	3 839 753	1.461	0.115	419 247	800 429	1.118	0.228	0.9976	1.0000



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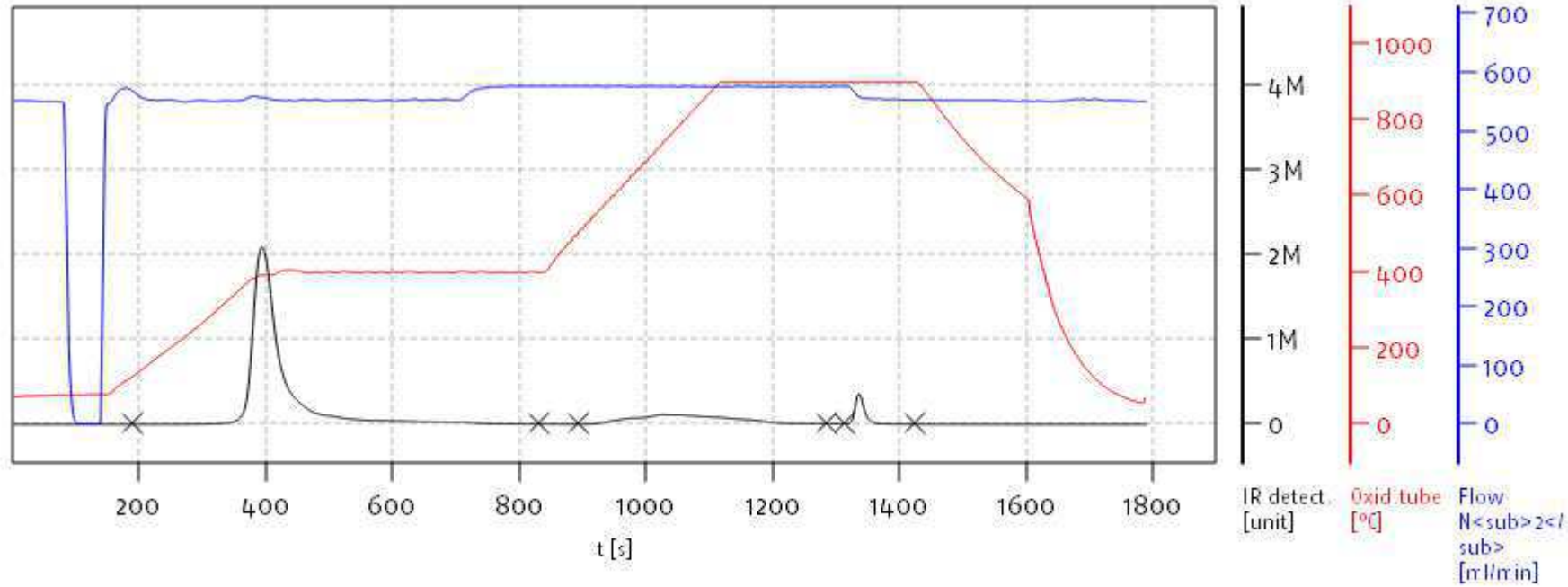
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
106	17	23A0455-10	522.30		CARBON	1/25/2023 8:49 PM	bl	1.245	4 025 520	1.479	0.063	238 642	814 813	1.182	0.234	0.9976	1.0000



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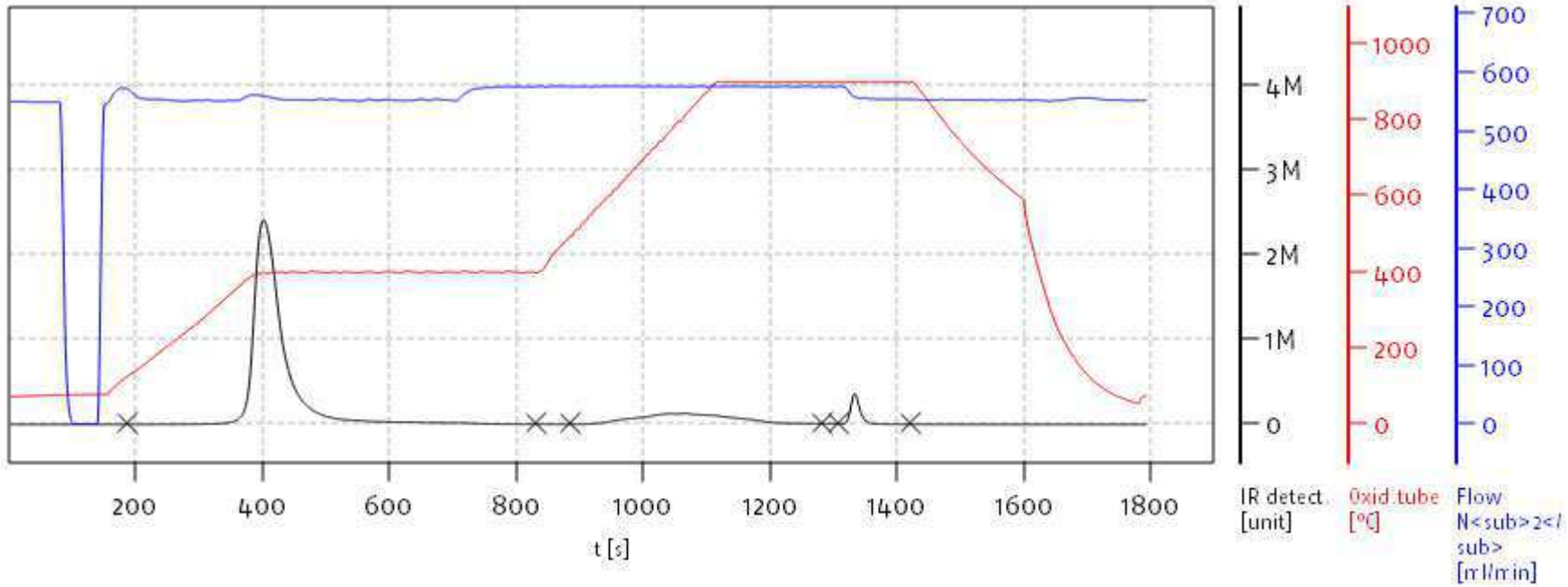
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
107	18	23A0455-11	617.70		CARBON	1/25/2023 9:19 PM	bl	1.235	4 759 248	1.453	0.052	235 130	895 715	1.183	0.218	0.9976	1.0000



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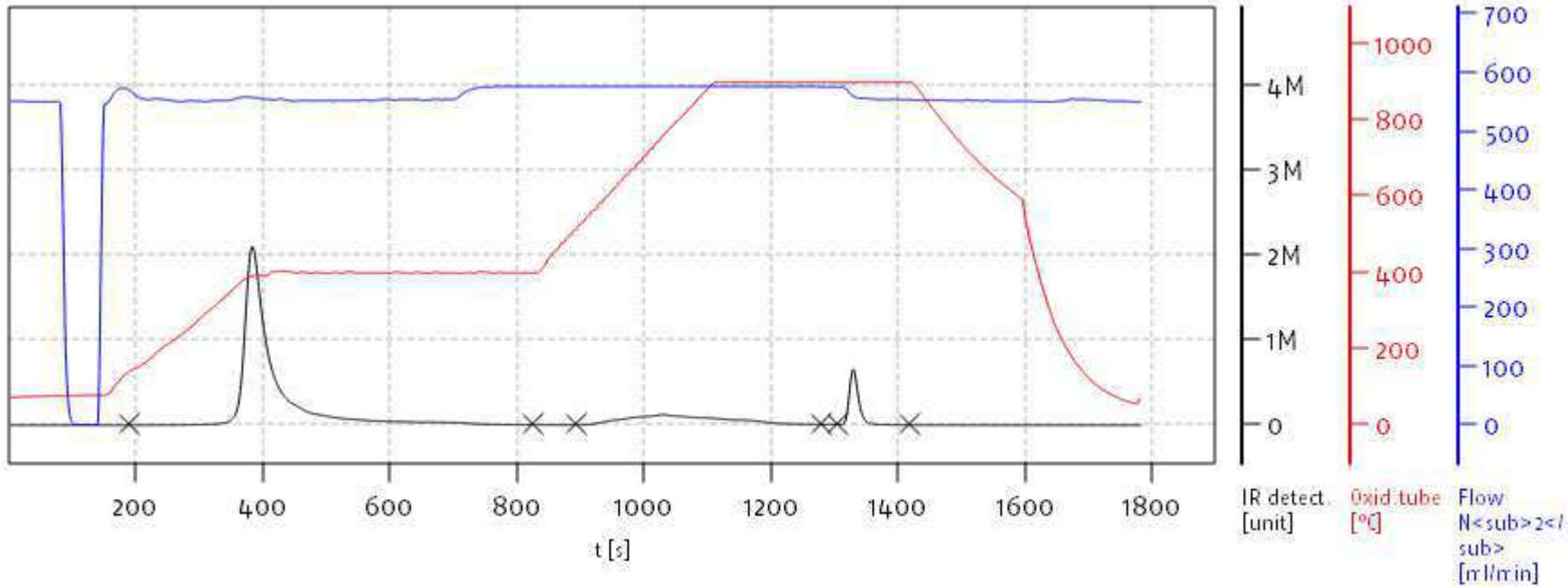
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
108	19	23A0455-12	516.20		CARBON	1/25/2023 9:49 PM	bl	1.278	3 901 605	1.525	0.119	423 387	848 229	1.159	0.246	0.9976	1.0000



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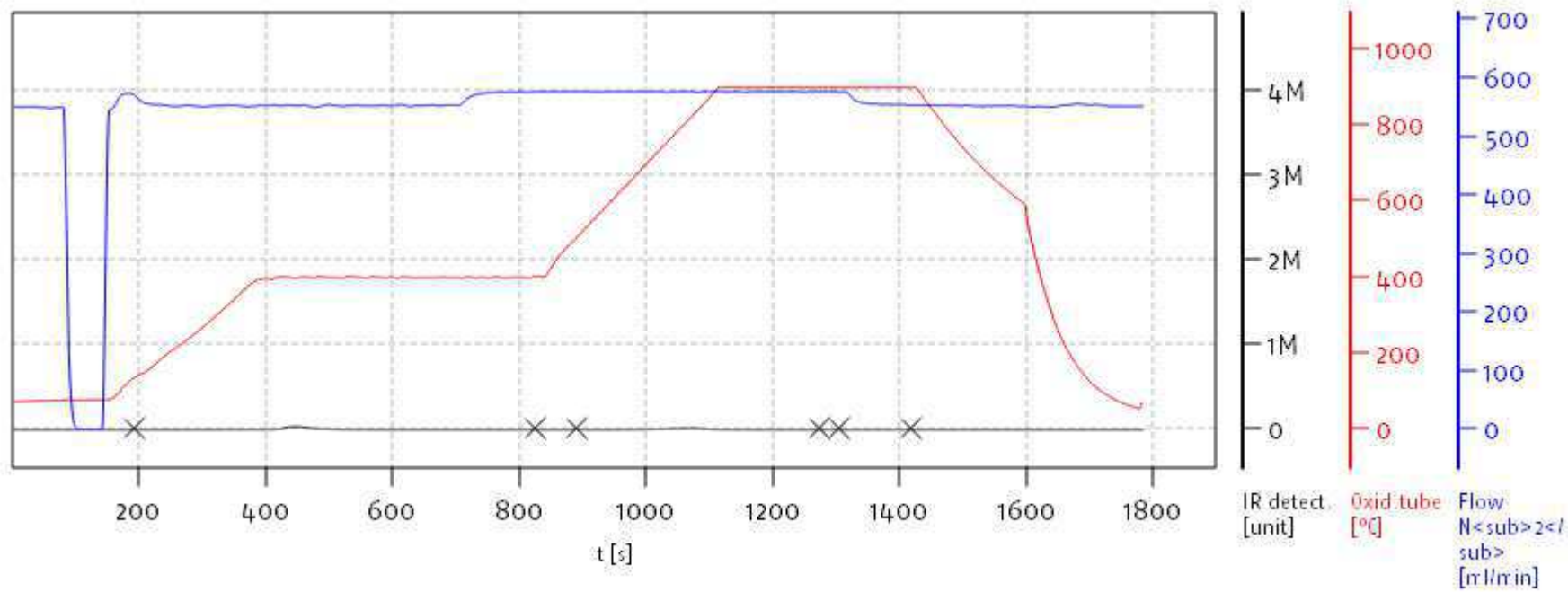
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
109	20	BLA0567-MRL1	603.30		CARBON	1/25/2023 10:19 PM	bl,C2u	0.012	72 784	0.016	0.000	458	41 440	0.012	0.004	0.9976	1.0000



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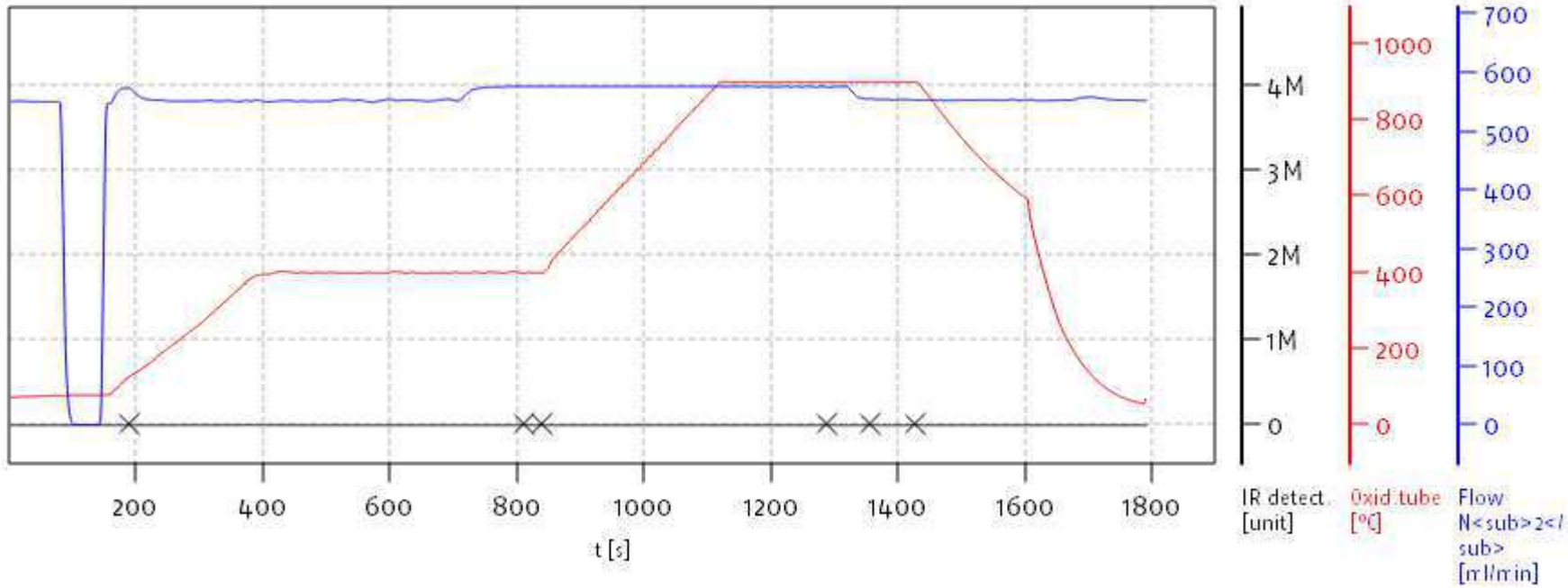
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
110	21	BLA0567-BLK1	511.60		CARBON	1/25/2023 10:50 PM	bl,C2u	0.000	9 802	0.000	0.000	280	3 832	0.000	0.000	0.9976	1.0000



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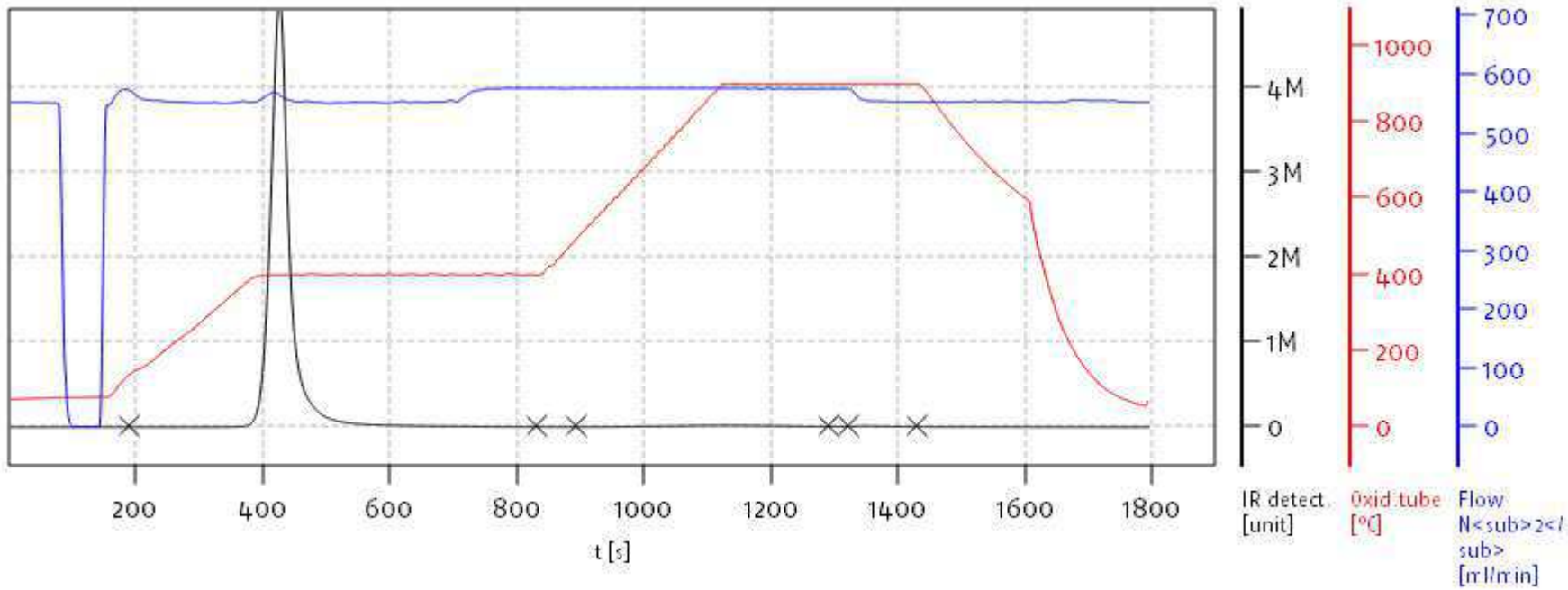
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
111	22	BLA0567-BS1	22.80		CARBON	1/25/2023 11:20 PM	bl	44.786	6 634 985	45.708	0.026	30 346	162 281	44.760	0.922	0.9976	1.0000



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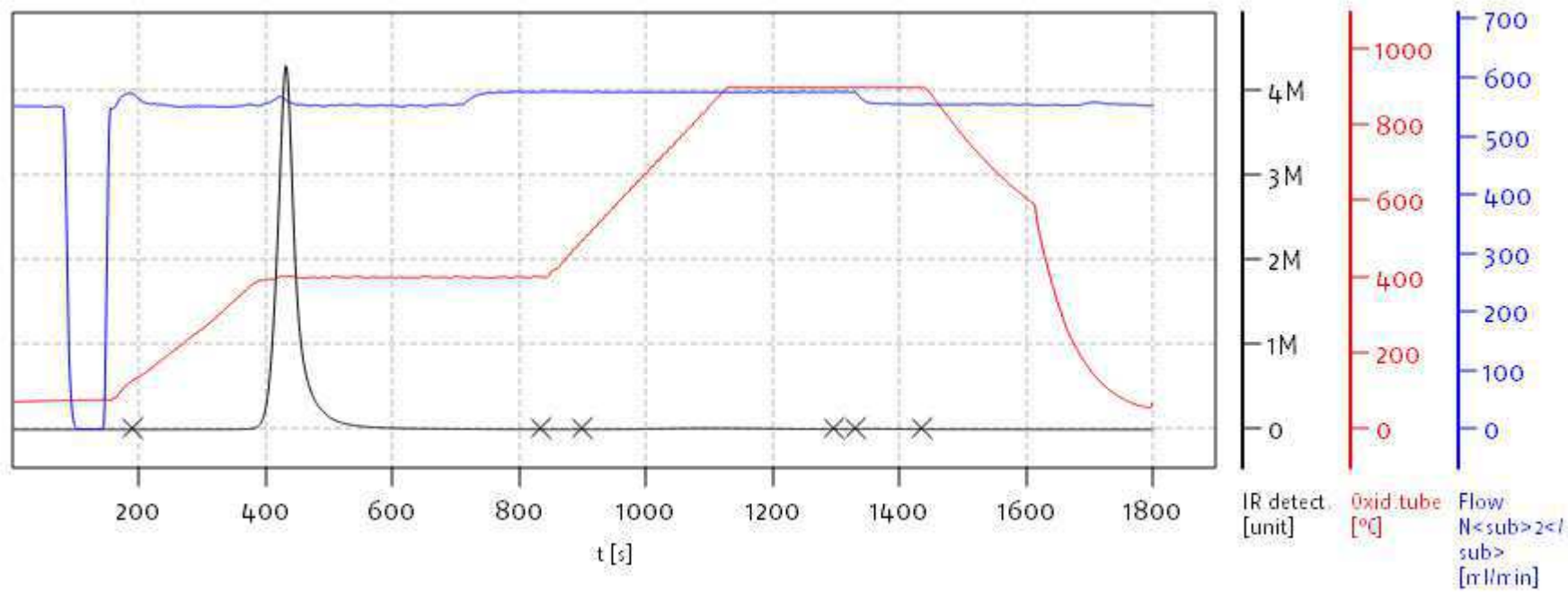
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
112	23	SLA0248-CCV9	19.90		CARBON	1/25/2023 11:50 PM	bl	44.500	5 760 928	45.261	0.000	22 135	124 339	44.500	0.761	0.9976	1.0000



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soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

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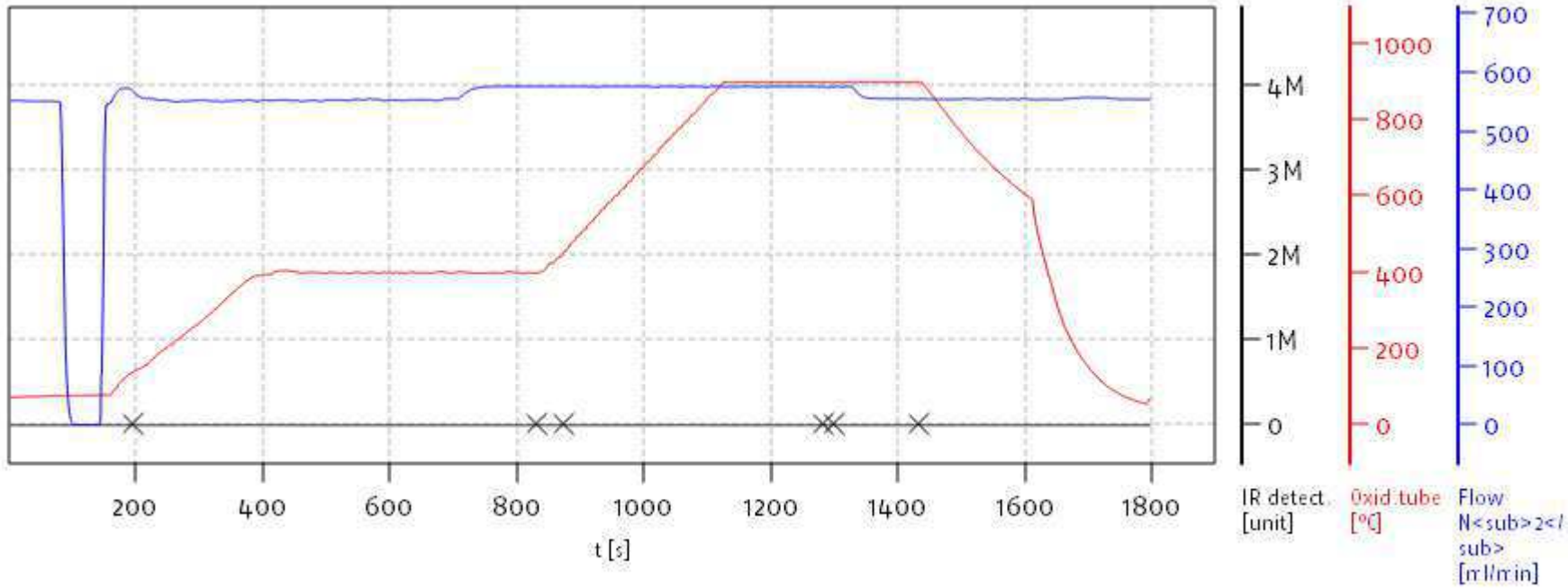
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
113	24	SLA0248-CCB9	513.80		CARBON	1/26/2023 12:21 AM	bl,C2u	0.000	7 942	0.000	0.000	1 083	4 655	0.000	0.000	0.9976	1.0000



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Balance: BAL3
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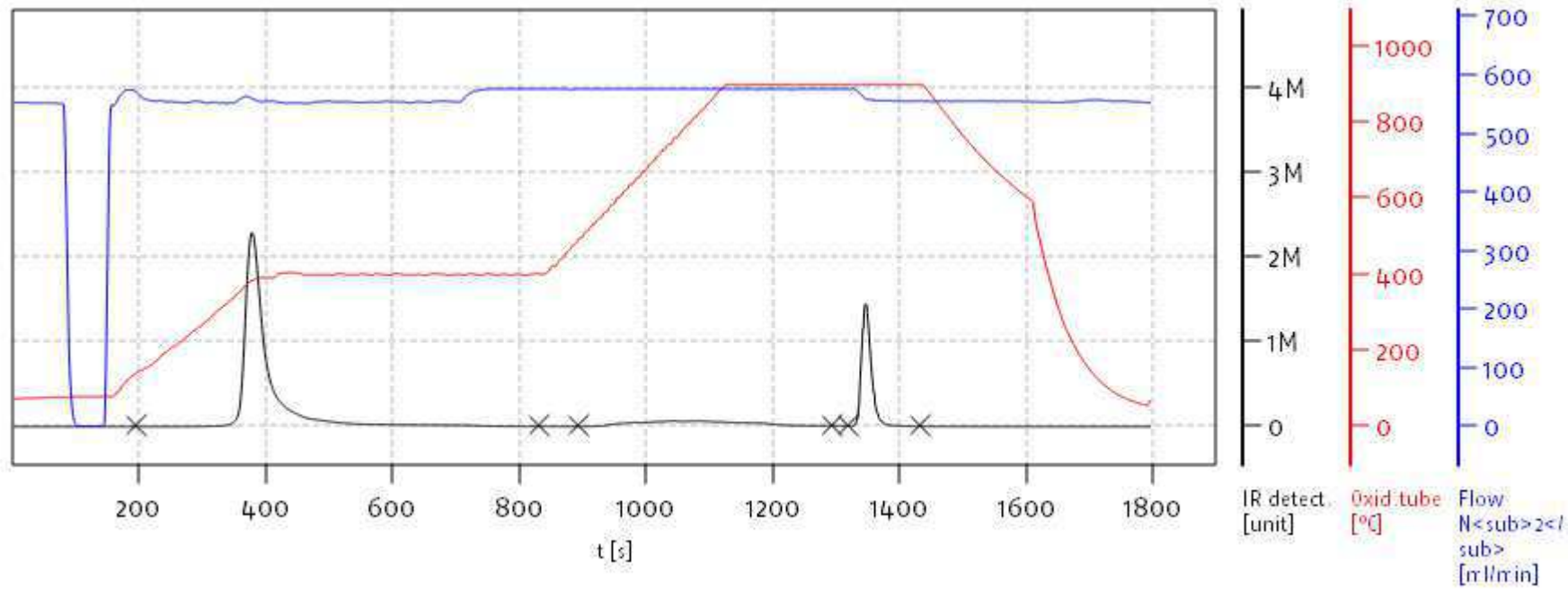
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
114	25	BLA0567-SRM1	226.10		CARBON	1/26/2023 12:51 AM	bl	2.944	3 377 549	3.306	0.655	983 463	555 249	2.289	0.362	0.9976	1.0000



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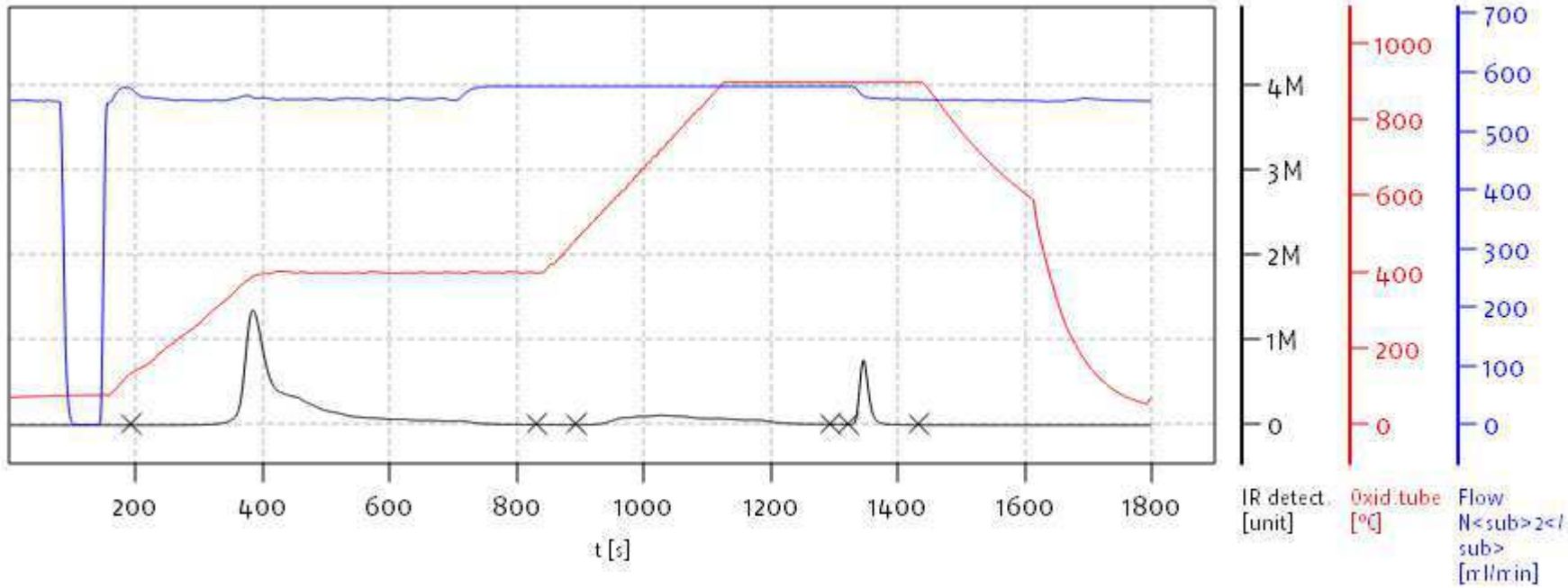
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
115	26	23A0455-13	565.70		CARBON	1/26/2023 1:22 AM	bl	1.077	3 504 412	1.313	0.128	493 953	887 488	0.949	0.236	0.9976	1.0000



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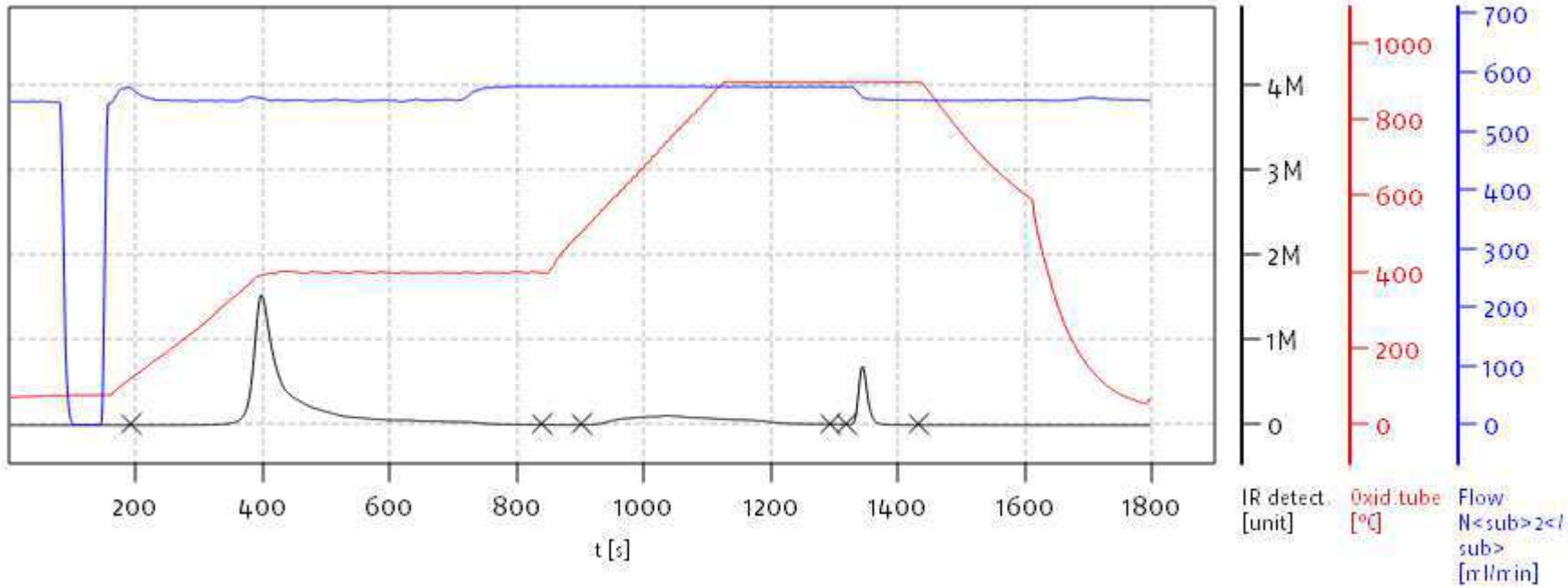
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
116	27	BLA0567-DUP1	532.30		CARBON	1/26/2023 1:52 AM	bl	1.082	3 342 670	1.319	0.120	438 124	843 486	0.962	0.238	0.9976	1.0000



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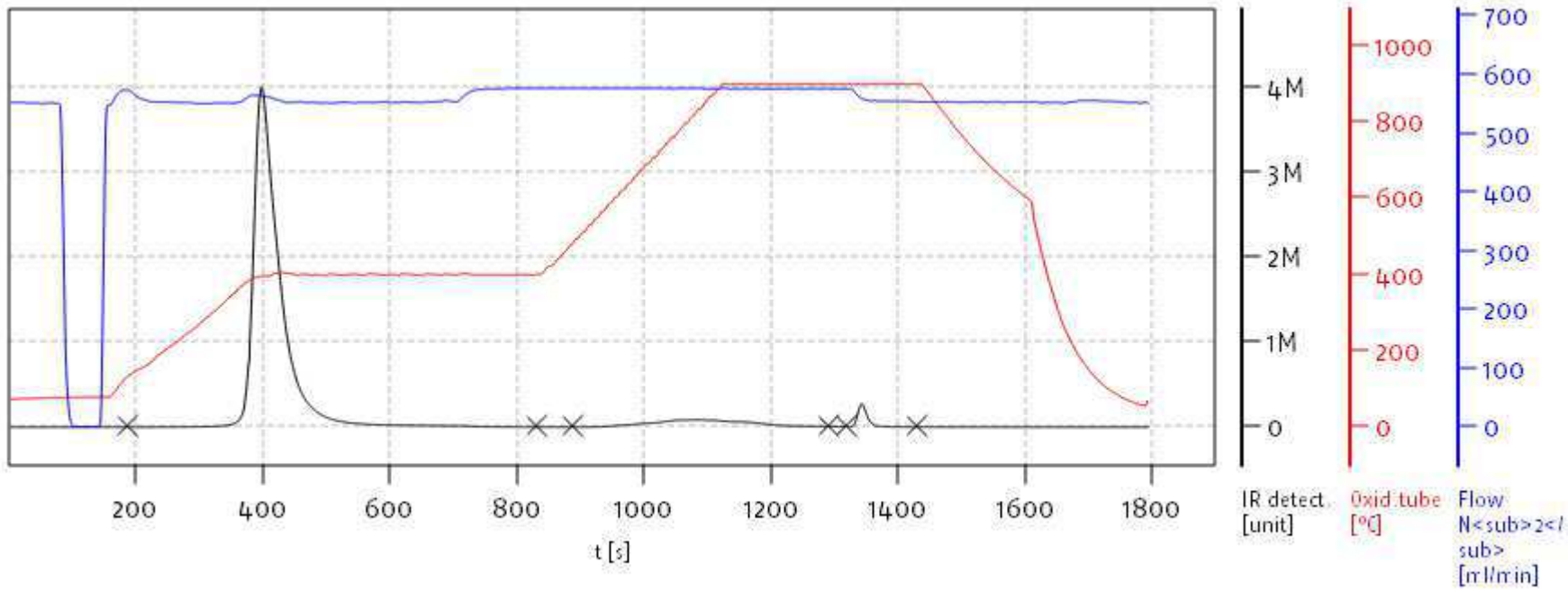
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
117	28	BLA0567-MS1	566.00	0.0092	CARBON	1/26/2023 2:22 AM	bl	1.988	7 155 402	2.145	0.043	183 953	598 965	1.945	0.157	0.9976	1.0000



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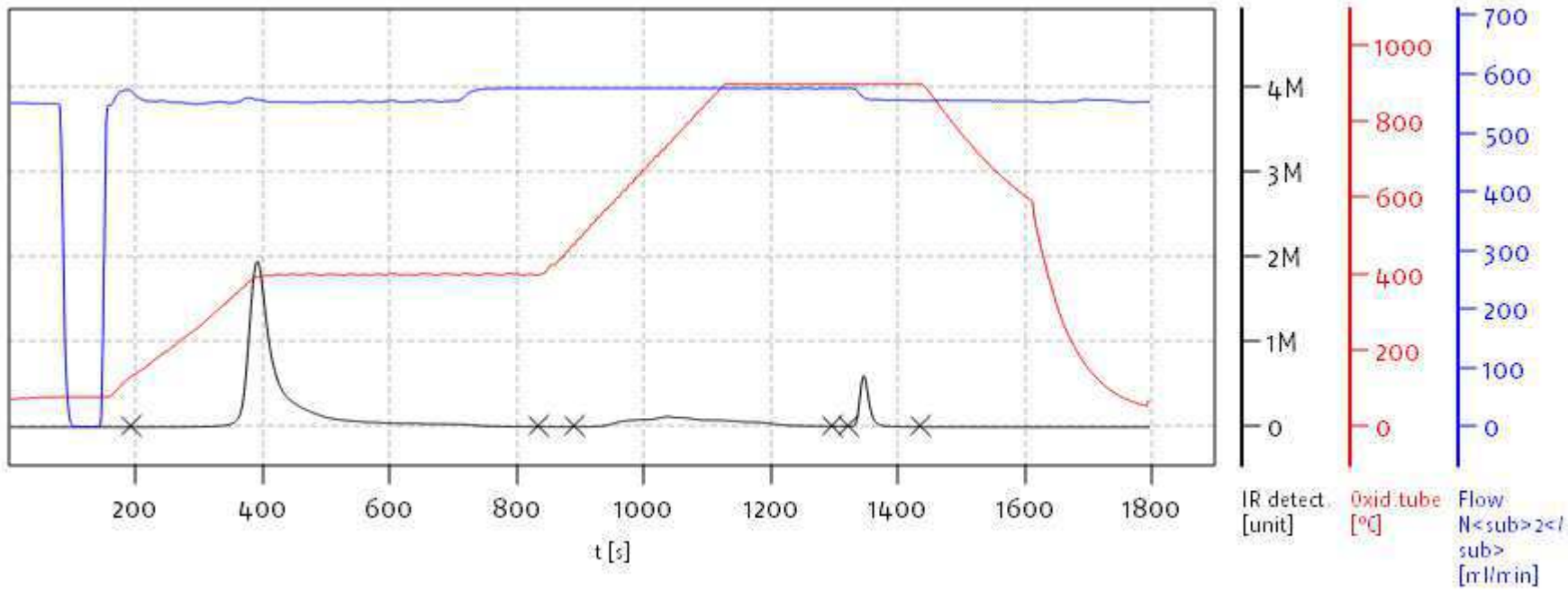
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
118	29	23A0455-14	511.80		CARBON	1/26/2023 2:53 AM	bl	1.250	3 799 218	1.501	0.112	396 470	856 358	1.138	0.251	0.9976	1.0000



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Balance: BAL3
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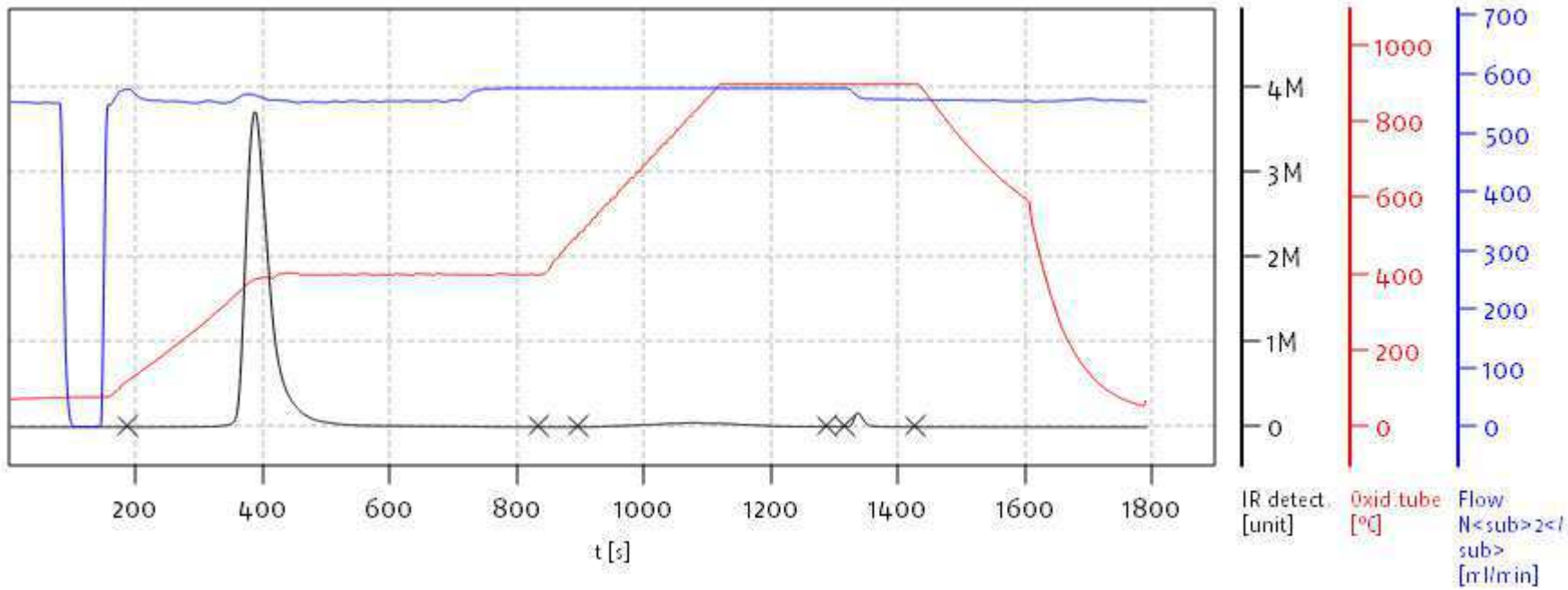
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
119	30	23A0455-15	505.10		CARBON	1/26/2023 3:23 AM	bl	1.907	6 176 062	2.002	0.027	115 337	334 881	1.880	0.095	0.9976	1.0000



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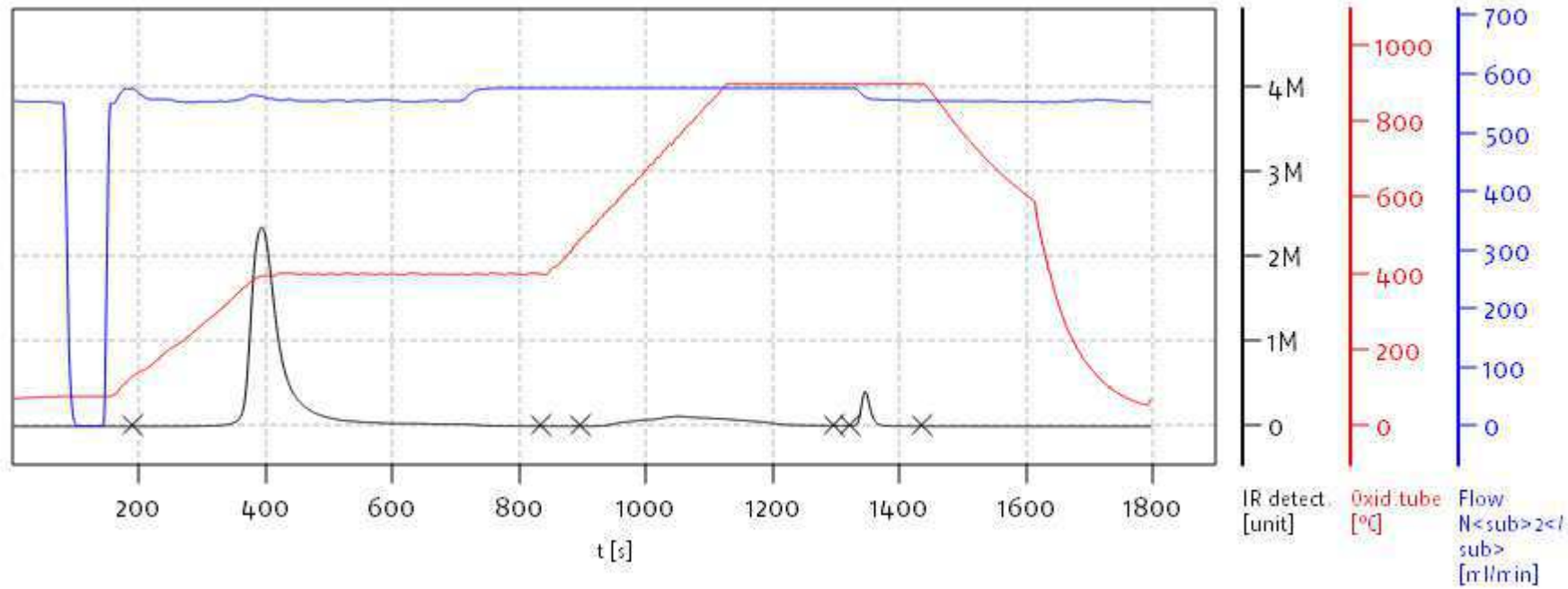
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
120	31	23A0455-16	535.40		CARBON	1/26/2023 3:53 AM	bl	1.447	4 805 329	1.677	0.068	263 268	822 780	1.378	0.230	0.9976	1.0000



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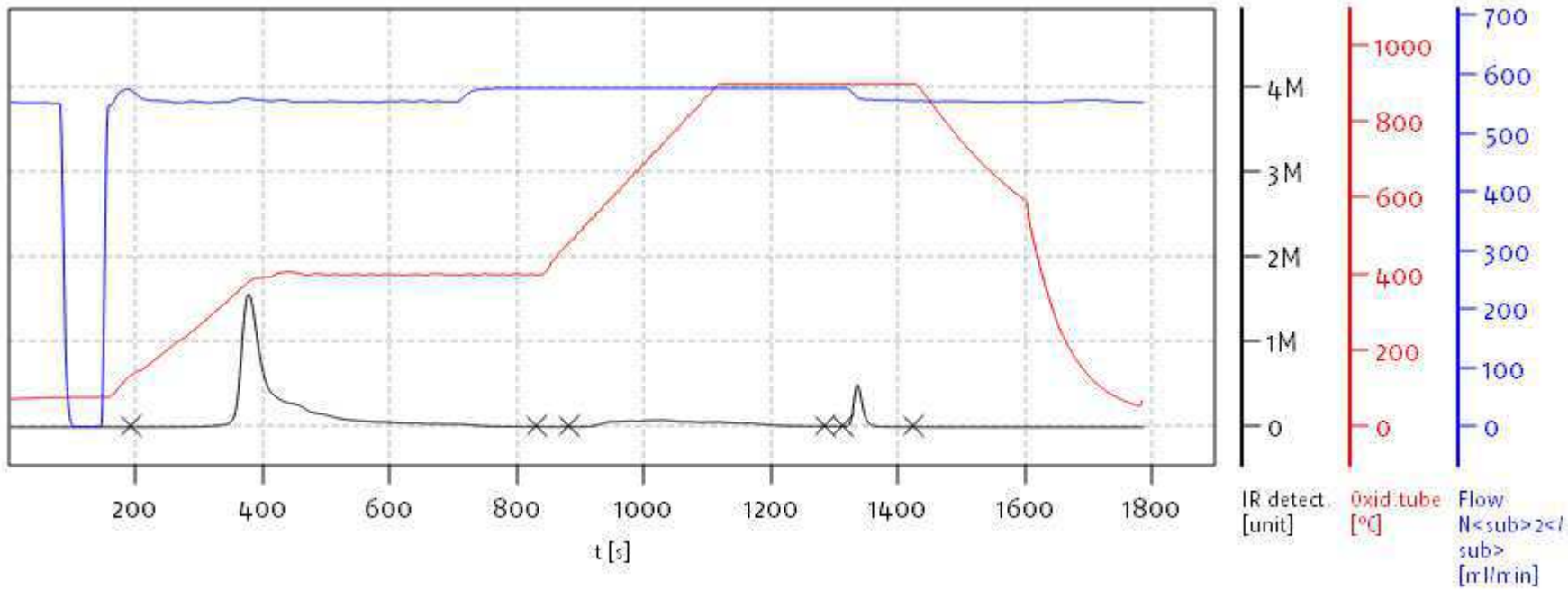
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
121	32	23A0455-17	517.70		CARBON	1/26/2023 4:23 AM	bl	1.081	3 366 692	1.271	0.085	309 721	661 069	0.996	0.190	0.9976	1.0000



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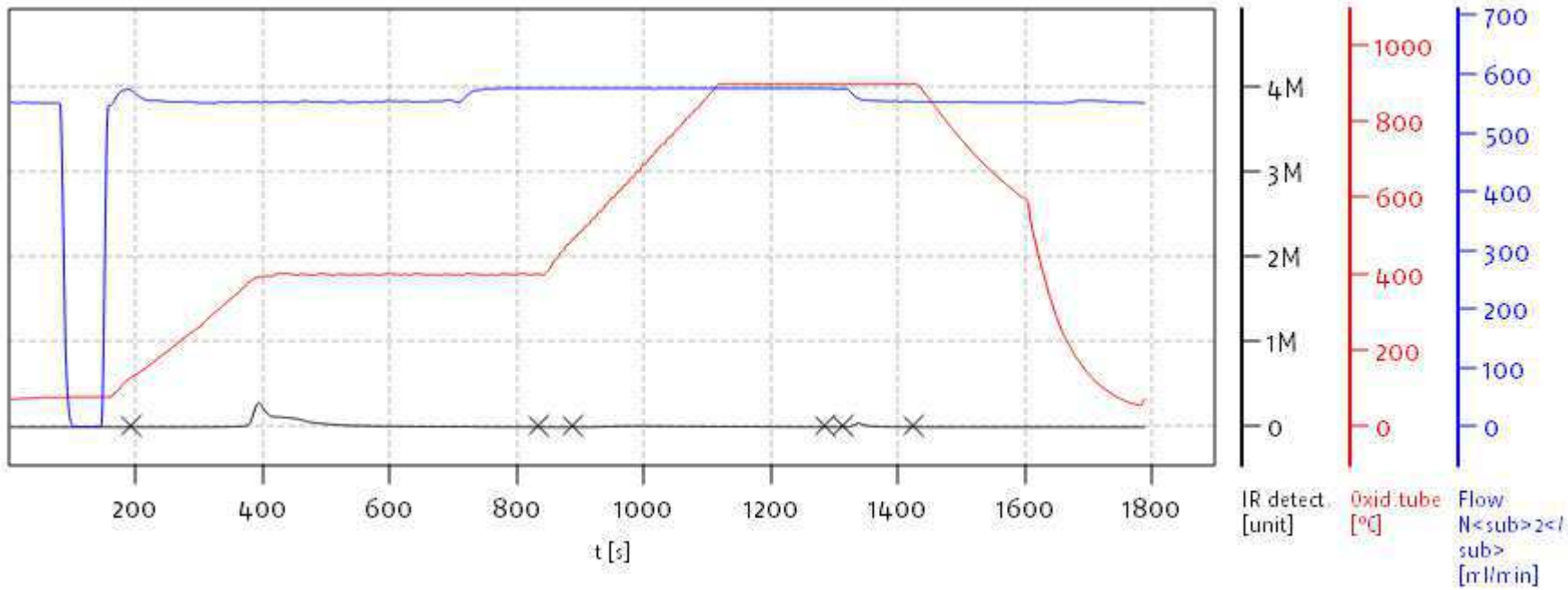
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
122	33	23A0455-18	517.00		CARBON	1/26/2023 4:54 AM	bl	0.188	643 350	0.205	0.004	39 263	82 950	0.184	0.017	0.9976	1.0000



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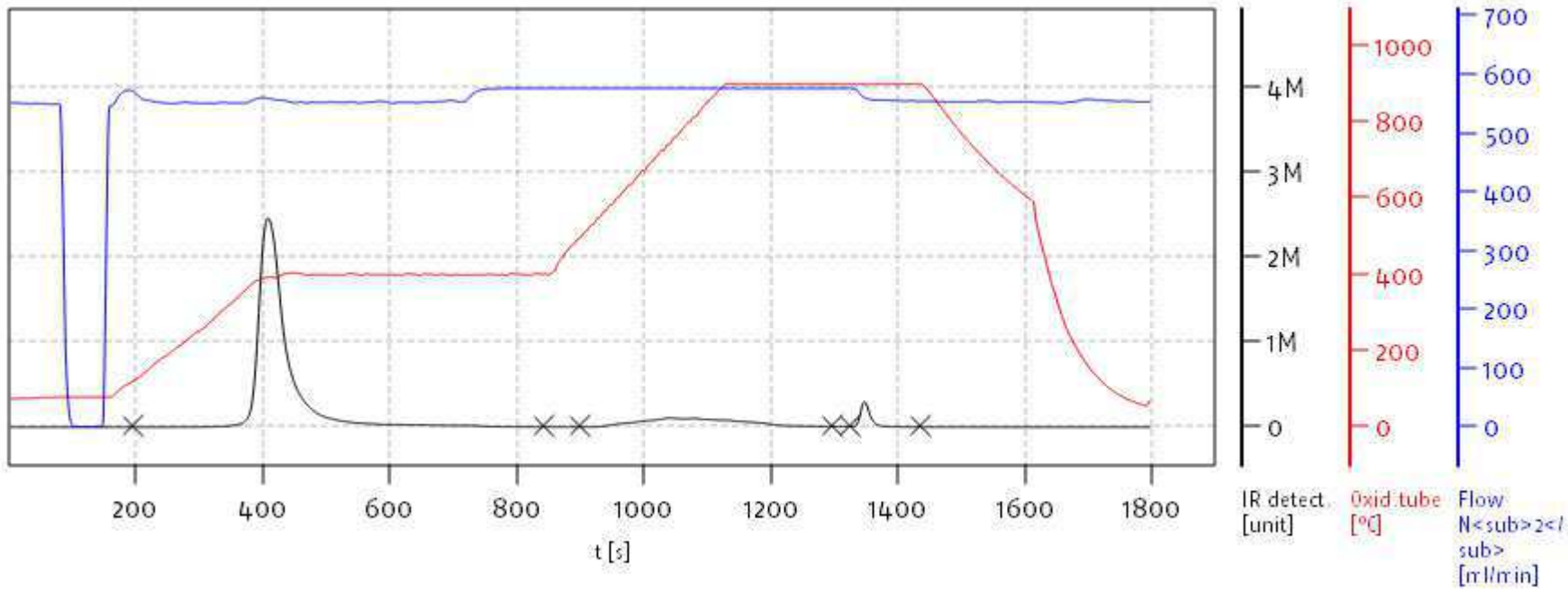
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
123	34	23A0467-01	569.40		CARBON	1/26/2023 5:24 AM	bl	1.293	4 617 765	1.493	0.048	202 181	762 625	1.245	0.200	0.9976	1.0000



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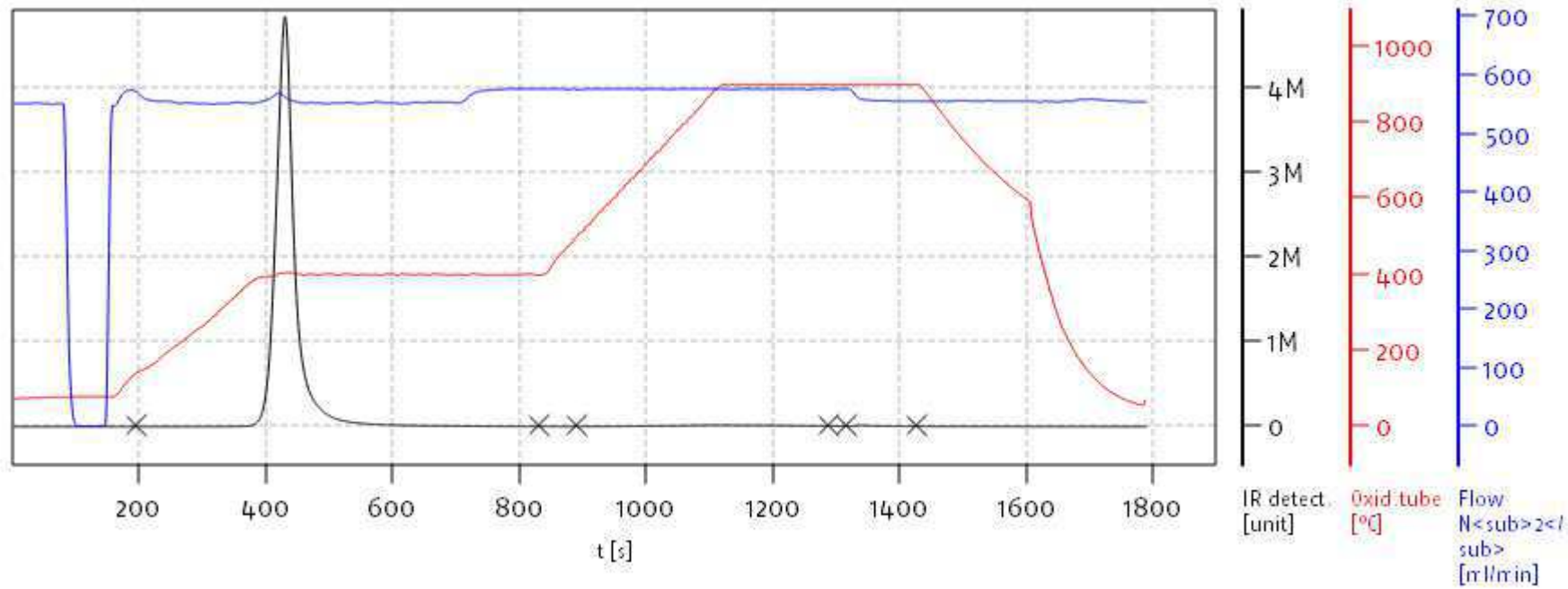
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
124	35	SLA0248-CCVA	21.80		CARBON	1/26/2023 5:54 AM	bl	44.607	6 318 367	45.452	0.036	31 650	145 591	44.571	0.845	0.9976	1.0000



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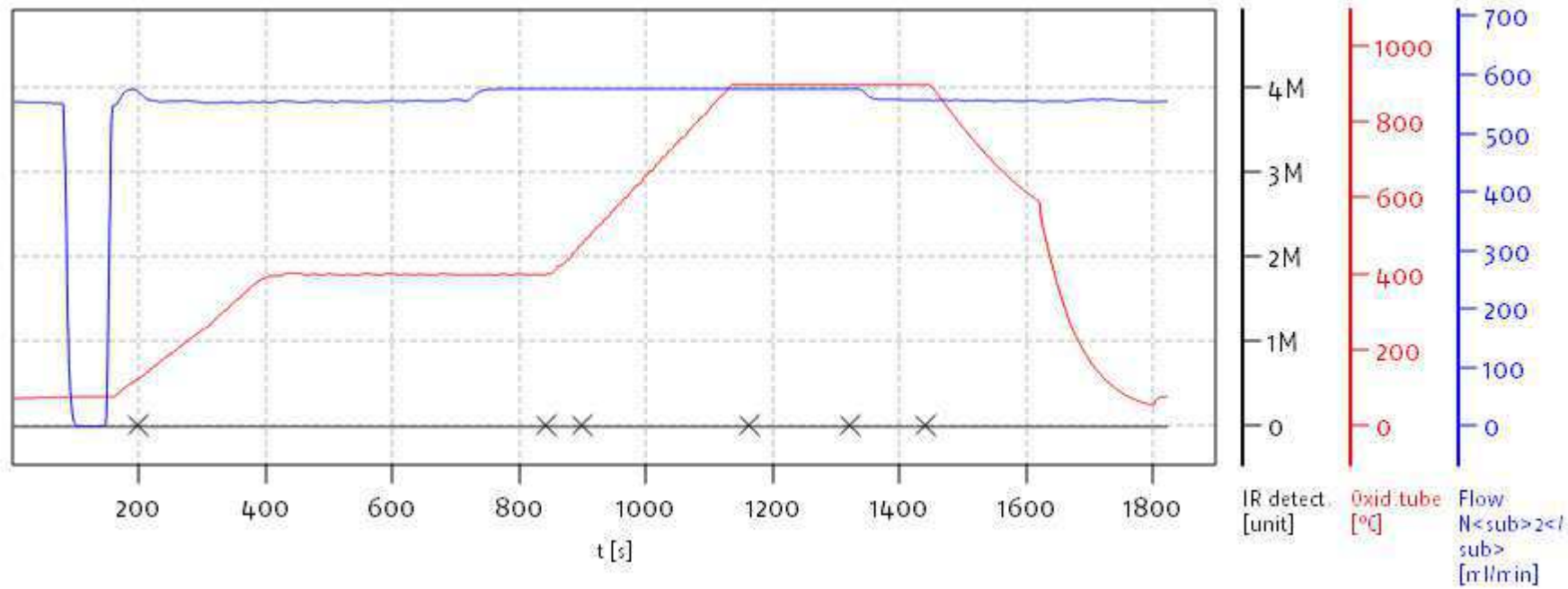
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
125	36	SLA0248-CCBA	524.10		CARBON	1/26/2023 6:25 AM	bl,C3u,C2u	0.000	9 643	0.000	0.000	554	531	0.000	0.000	0.9976	1.0000



Name:

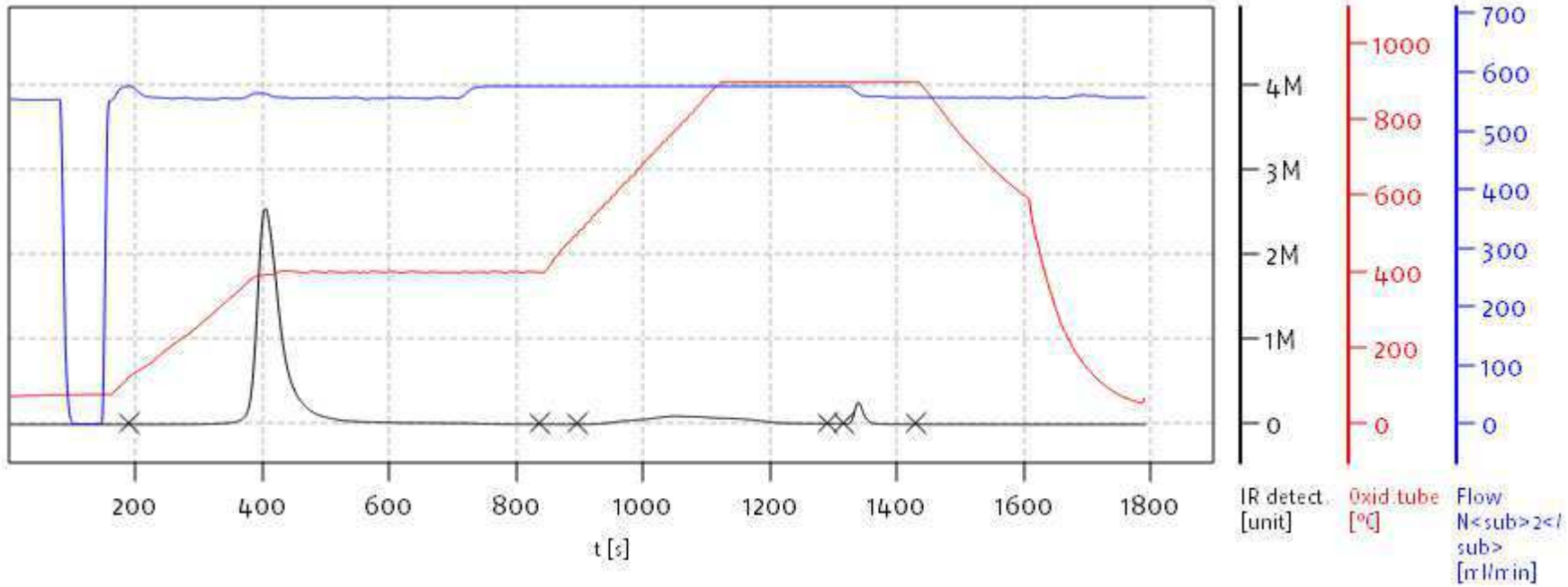
Access: soliTOC superuser

Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
126	37	23A0467-02	545.80		CARBON	1/26/2023 6:55 AM	bl	1.274	4 383 555	1.463	0.041	171 156	694 640	1.233	0.189	0.9976	1.0000



Name:

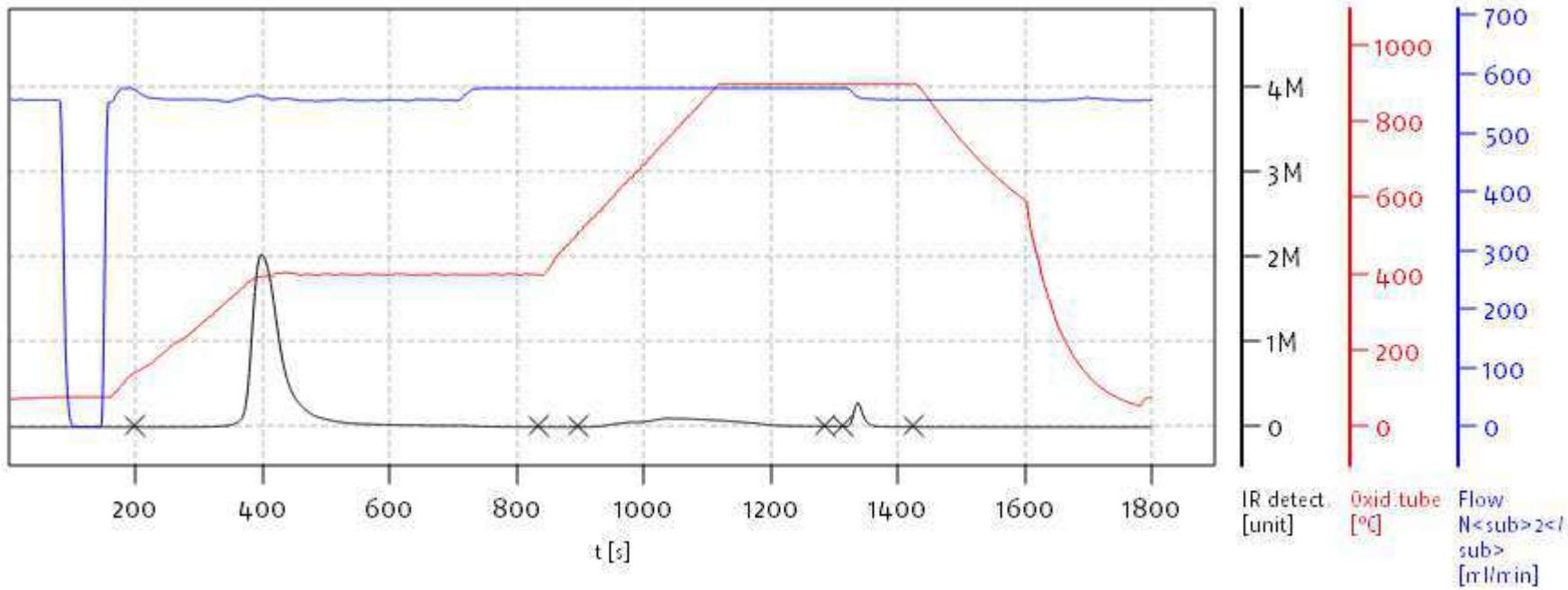
Access: soliTOC superuser

Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
127	38	23A0467-03	530.40		CARBON	1/26/2023 7:26 AM	bl	1.264	4 199 050	1.467	0.049	195 335	722 943	1.215	0.203	0.9976	1.0000



Name:

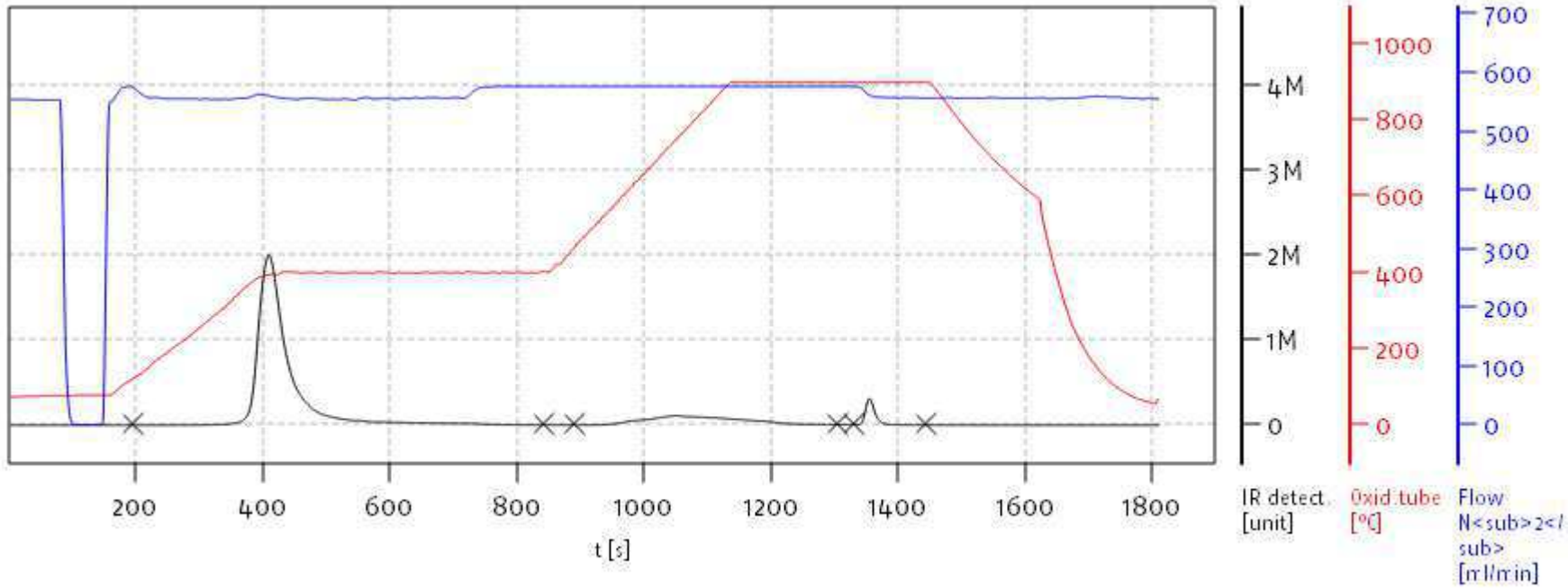
Access: soliTOC superuser

Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
128	39	23A0467-04	544.00		CARBON	1/26/2023 7:56 AM	bl	1.195	4 052 849	1.398	0.052	208 257	740 768	1.143	0.203	0.9976	1.0000



Name:

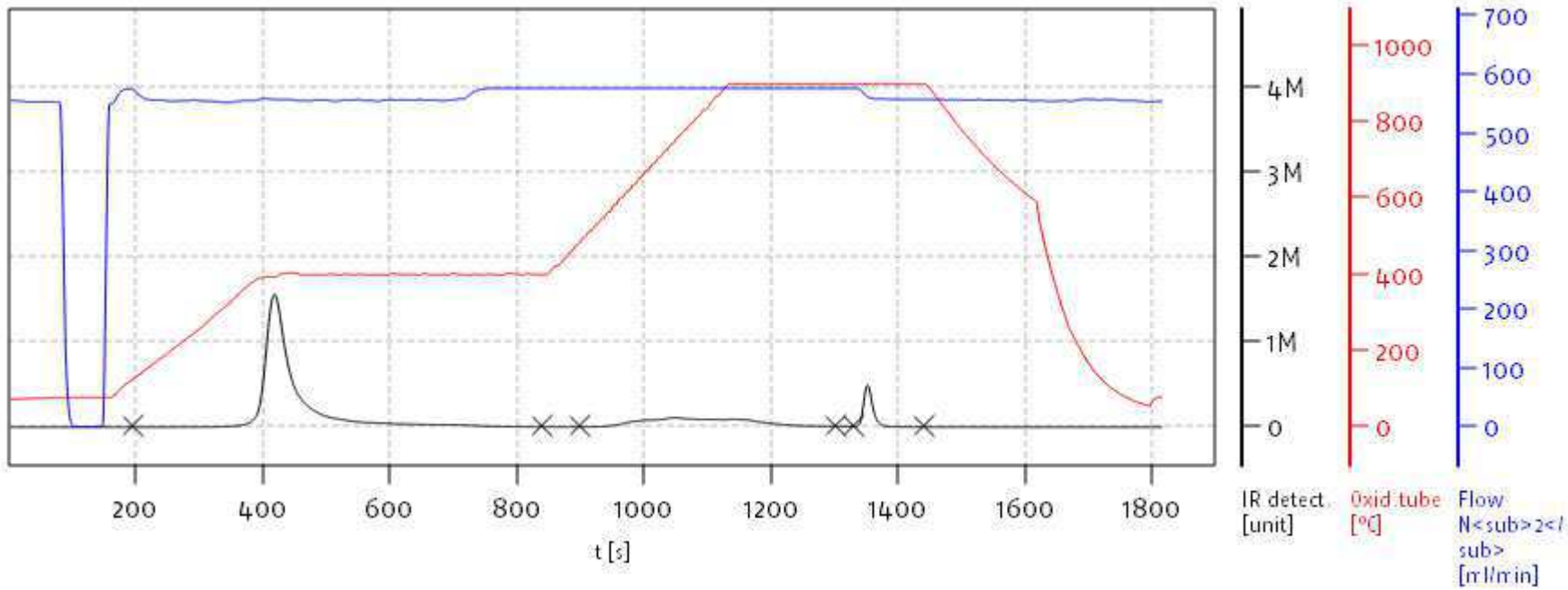
Access: soliTOC superuser

Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
129	40	23A0467-05	527.70		CARBON	1/26/2023 8:27 AM	bl	0.968	3 043 531	1.204	0.085	315 557	833 183	0.883	0.237	0.9976	1.0000



Name:

Access: soliTOC superuser

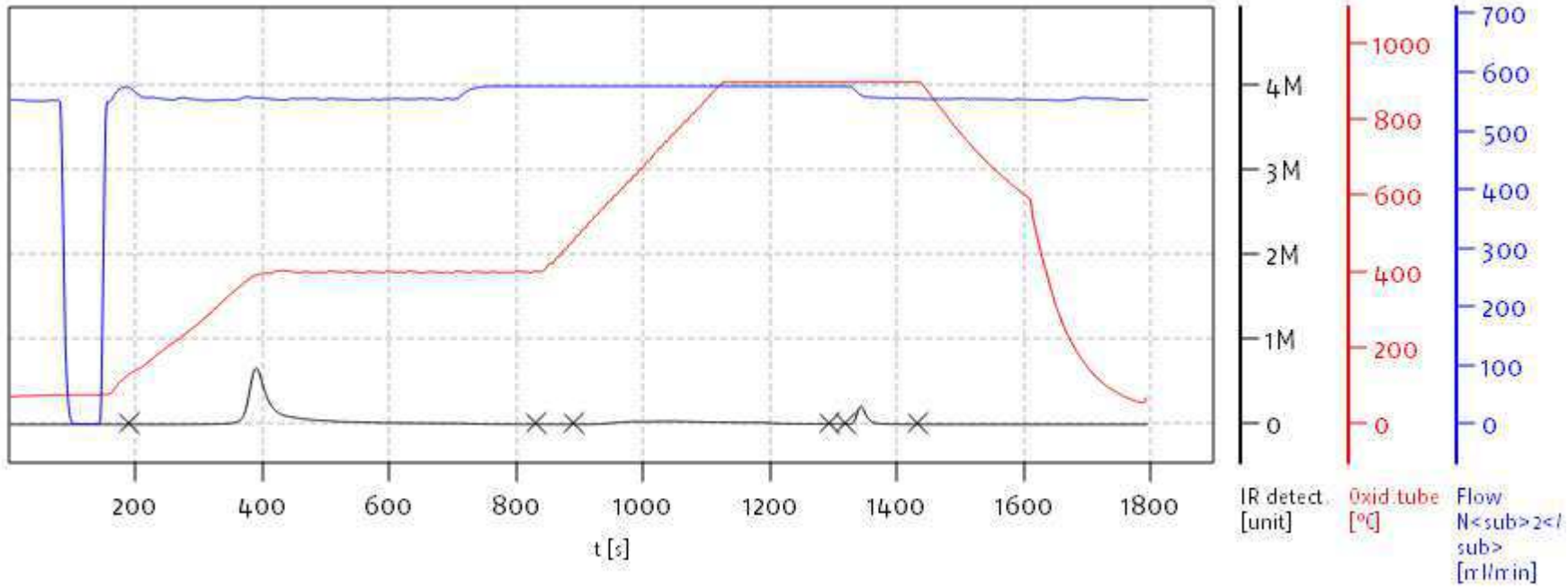
Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
130	41	23A0467-06	183.00		CARBON	1/26/2023 8:57 AM	bl	1.092	1 202 027	1.325	0.100	145 294	301 990	0.992	0.233	0.9976	1.0000



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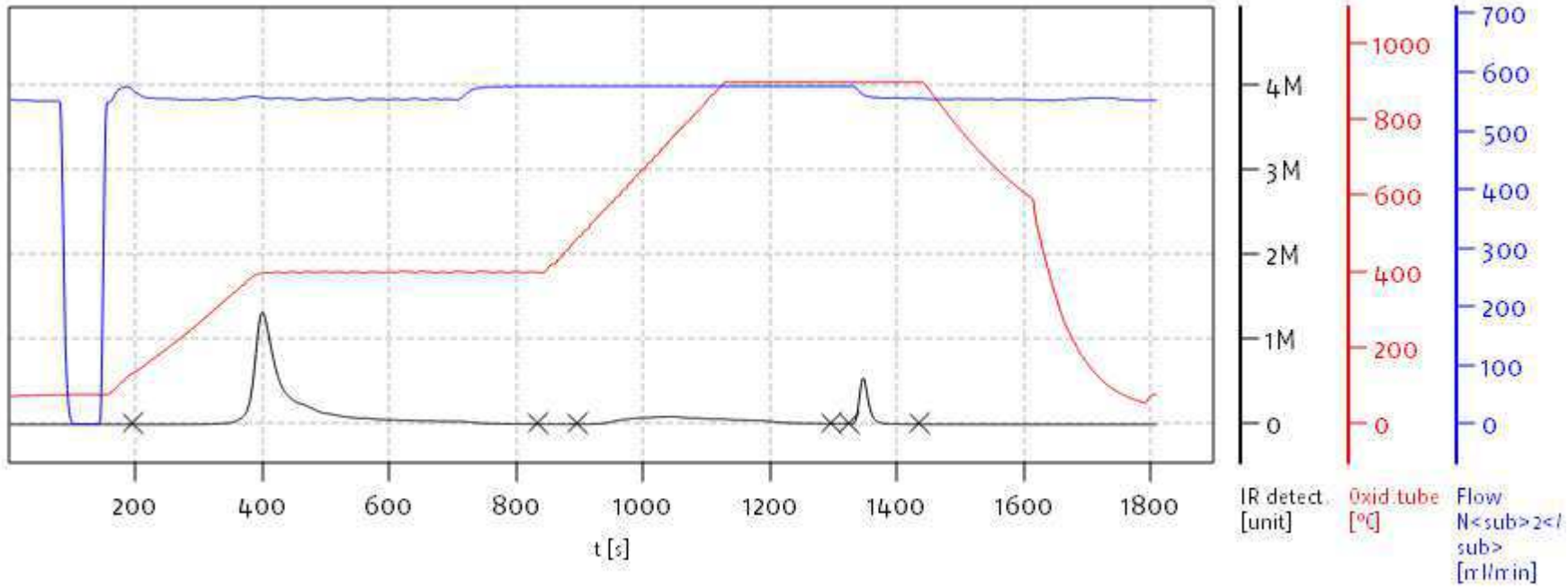
Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
131	42	23A0467-07	507.10		CARBON	1/26/2023 9:28 AM	bl	0.980	2 914 148	1.185	0.100	355 083	699 820	0.879	0.206	0.9976	1.0000



Name:

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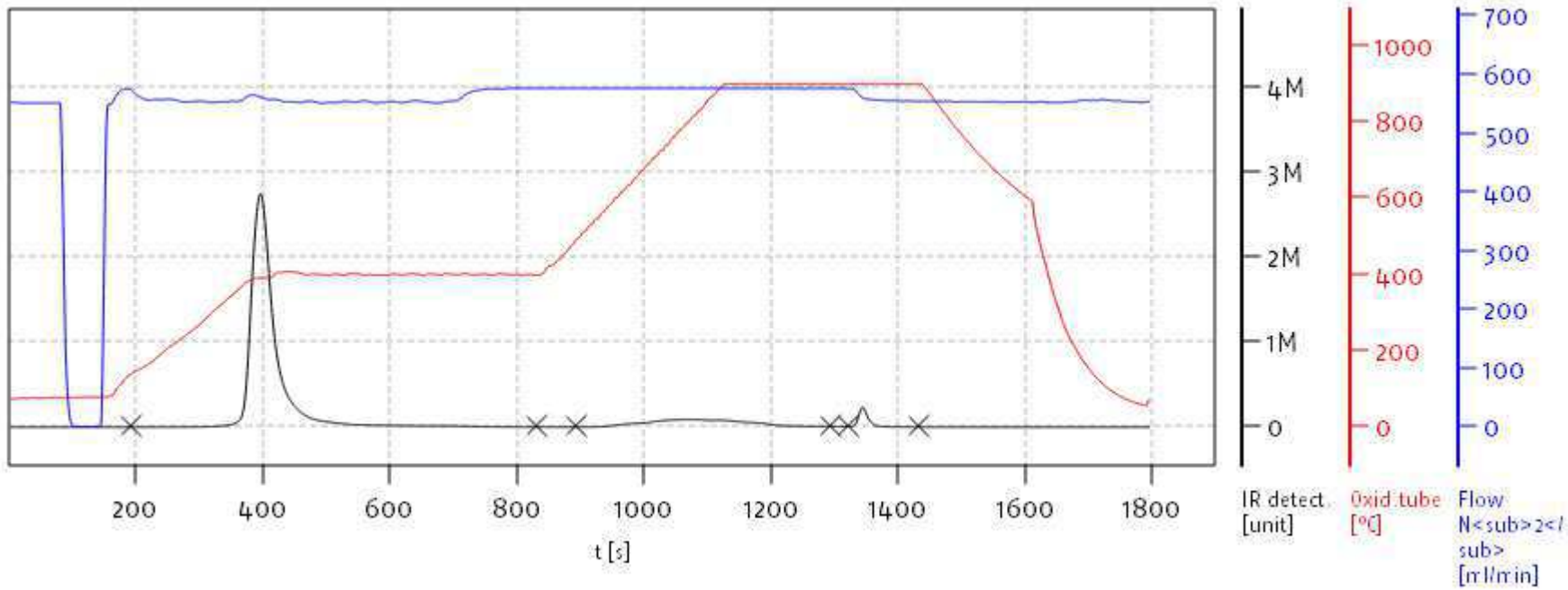
Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
132	43	23A0467-08	523.50		CARBON	1/26/2023 9:58 AM	bl	1.325	4 390 162	1.511	0.038	155 894	654 584	1.287	0.186	0.9976	1.0000



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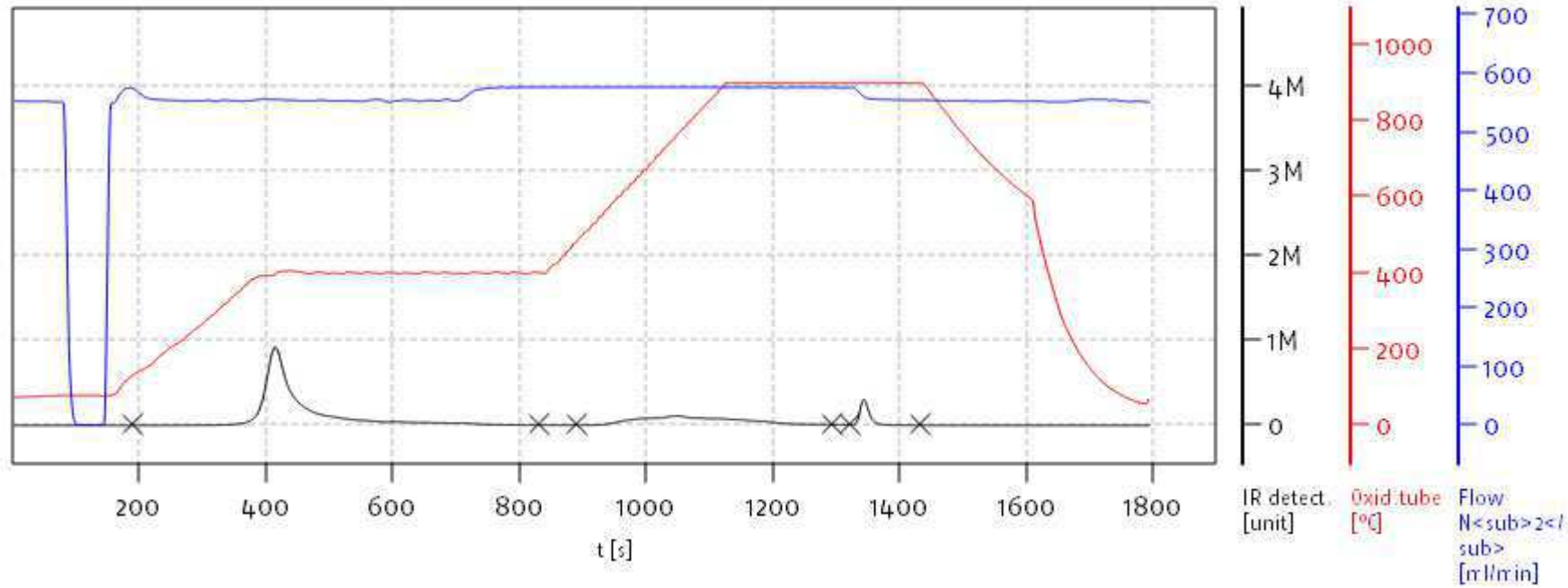
Access: soliTOC superuser

Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
133	44	23A0467-09	558.50		CARBON	1/26/2023 10:29 AM	bl	0.627	2 115 762	0.835	0.049	203 167	779 790	0.578	0.209	0.9976	1.0000



Name:

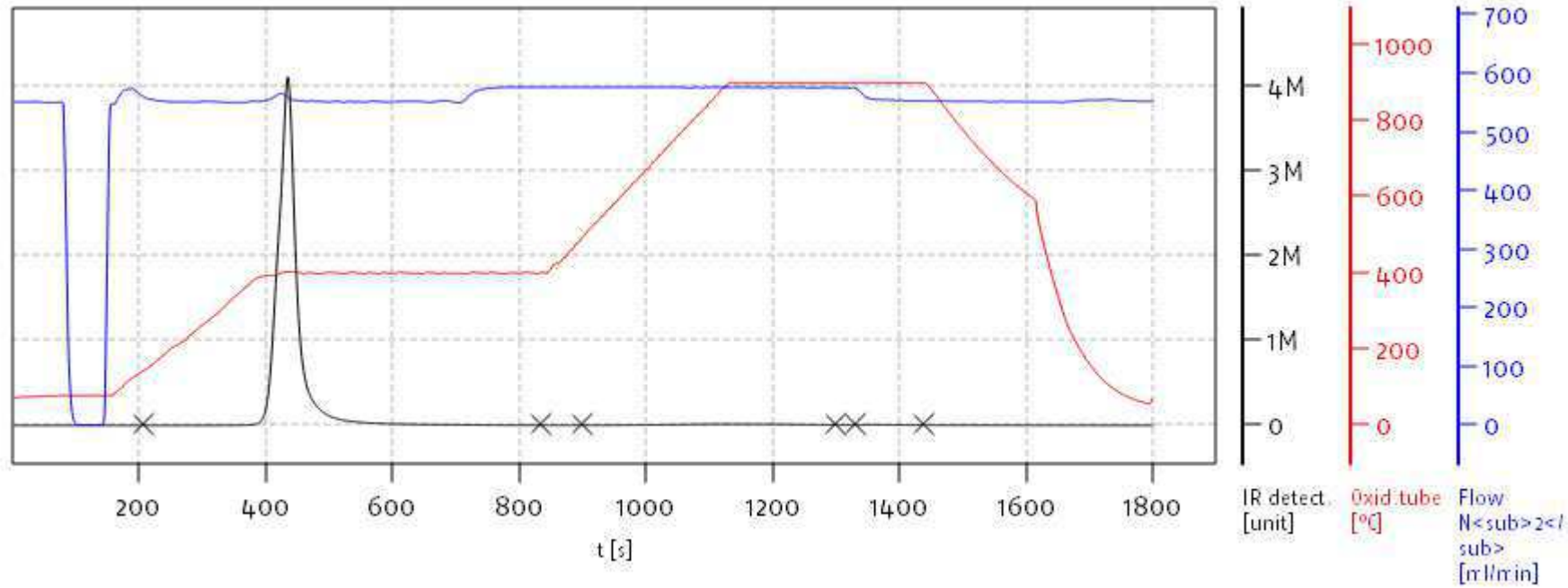
Access: soliTOC superuser

Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
134	45	SLA0248-CCVB	18.50		CARBON	1/26/2023 10:59 AM	bl	44.025	5 300 584	44.939	0.000	22 577	135 761	44.025	0.914	0.9976	1.0000



Name:

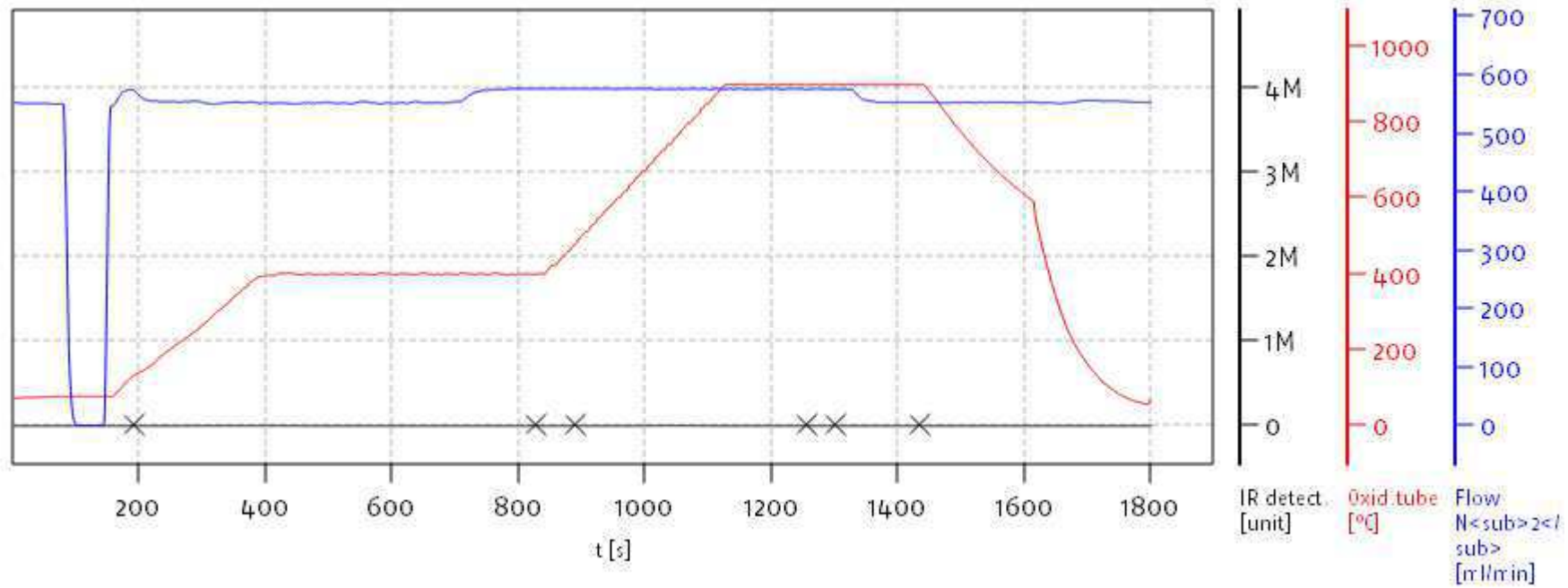
Access: soliTOC superuser

Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
135	46	SLA0248-CCBB	520.00		CARBON	1/26/2023 11:29 AM	bl,C2u	0.000	11 812	0.000	0.000	673	9 902	0.000	0.000	0.9976	1.0000



Name:

Access: soliTOC superuser

Date: Thu Jan 26 11:30:20 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: FD00070
Instrument: TOC Cube
Calibration Date: 04/26/2022 11:29

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085
Total Carbon	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085
Total Inorganic Carbon	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085
% Soot	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: FD00070
Instrument: TOC Cube
Calibration Date: 04/26/2022 11:29

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135
Total Carbon	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135
Total Inorganic Carbon	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135
% Soot	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: FD00070
Instrument: TOC Cube
Calibration Date: 04/26/2022 11:29

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882
Total Carbon	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882
Total Inorganic Carbon	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882
% Soot	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: FD00070
Instrument: TOC Cube
Calibration Date: 04/26/2022 11:29

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408
Total Carbon	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408
Total Inorganic Carbon	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408
% Soot	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408

INITIAL CALIBRATION DATA

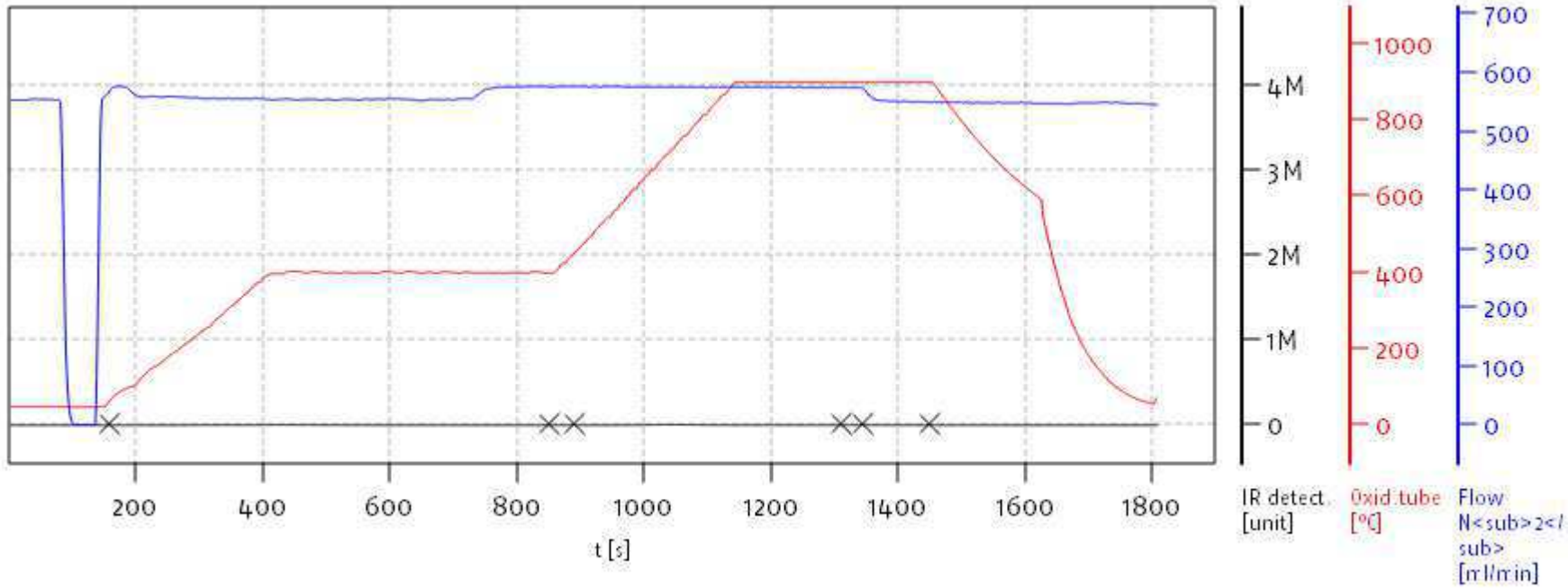
EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23A0420
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FD00070	Instrument:	TOC Cube
Calibration Date:	04/26/2022 11:29		

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Total Organic Carbon	1424064	15.9	0.9988			
Total Carbon	1424064	15.9	0.9988			
Total Inorganic Carbon	1424064	15.9	0.9988			
% Soot	1424064	15.9	0.9988			

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
1	1	BLANK	1.00		1.00	CARBON	4/26/2022 11:29 AM	0.000	0.000	0.000	bl	29 049	30 612	3 899	1.0000	1.0000



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:07:12 2022

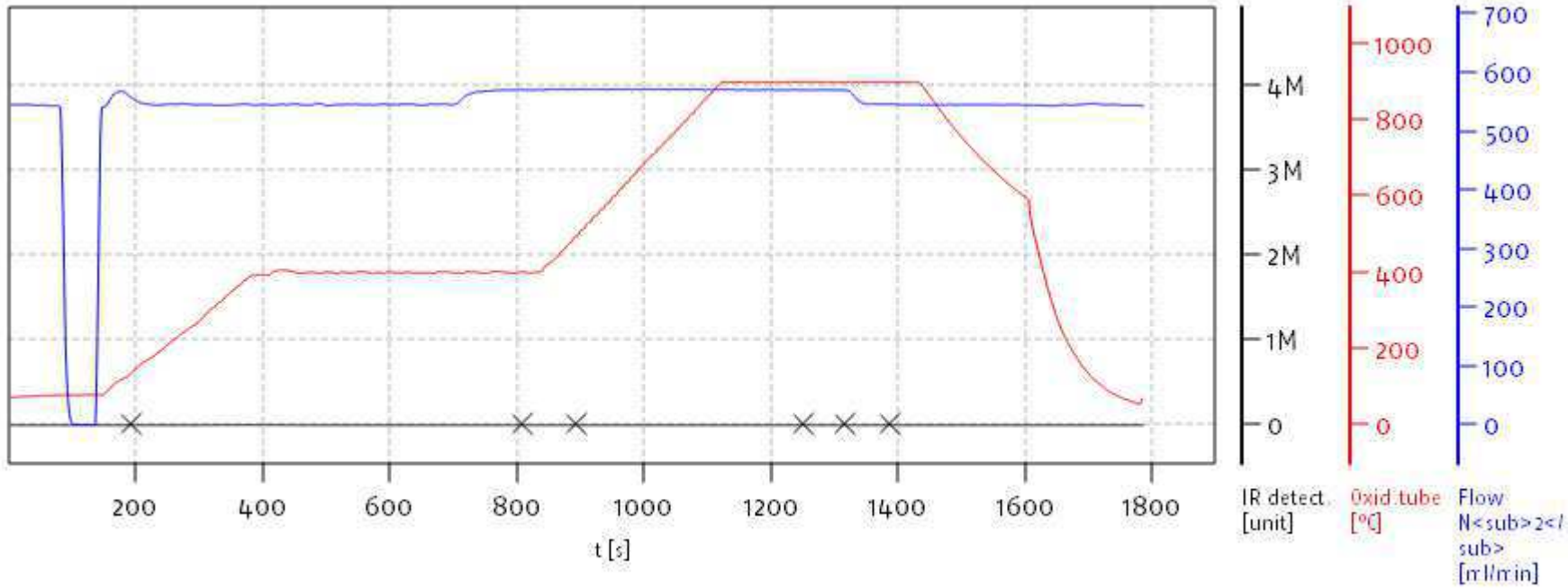
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: 4/27/2022 11:05 AM

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
2	2	BLANK	1.00		1.00	CARBON	4/26/2022 12:00 PM	0.000	0.000	0.000	bl	11 115	60	8	1.0000	1.0000



Name:

Access: soliTOC superuser

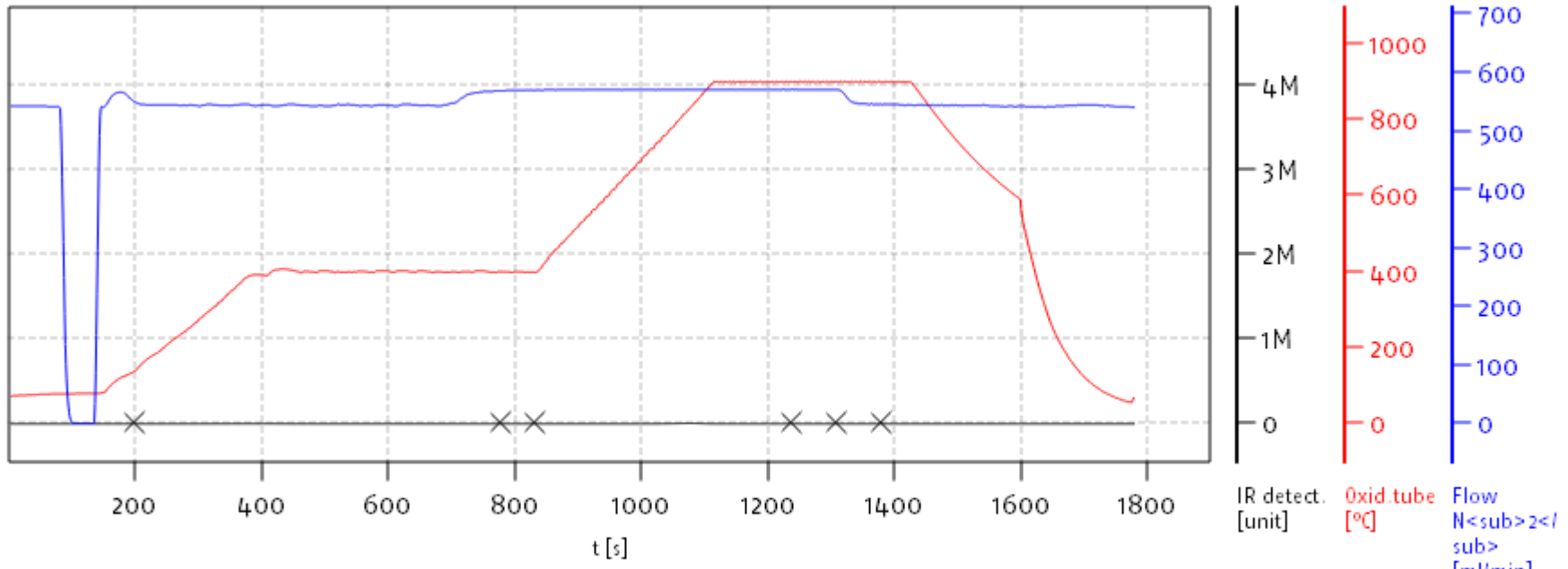
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
3	3	SEQ-CAL1	200.00	0.0027	1.00	CARBON	4/26/2022 12:30 PM	0.010	0.008	0.018	bl,C1u,C2u	7 294	11 739	22	1.0000	0.7425



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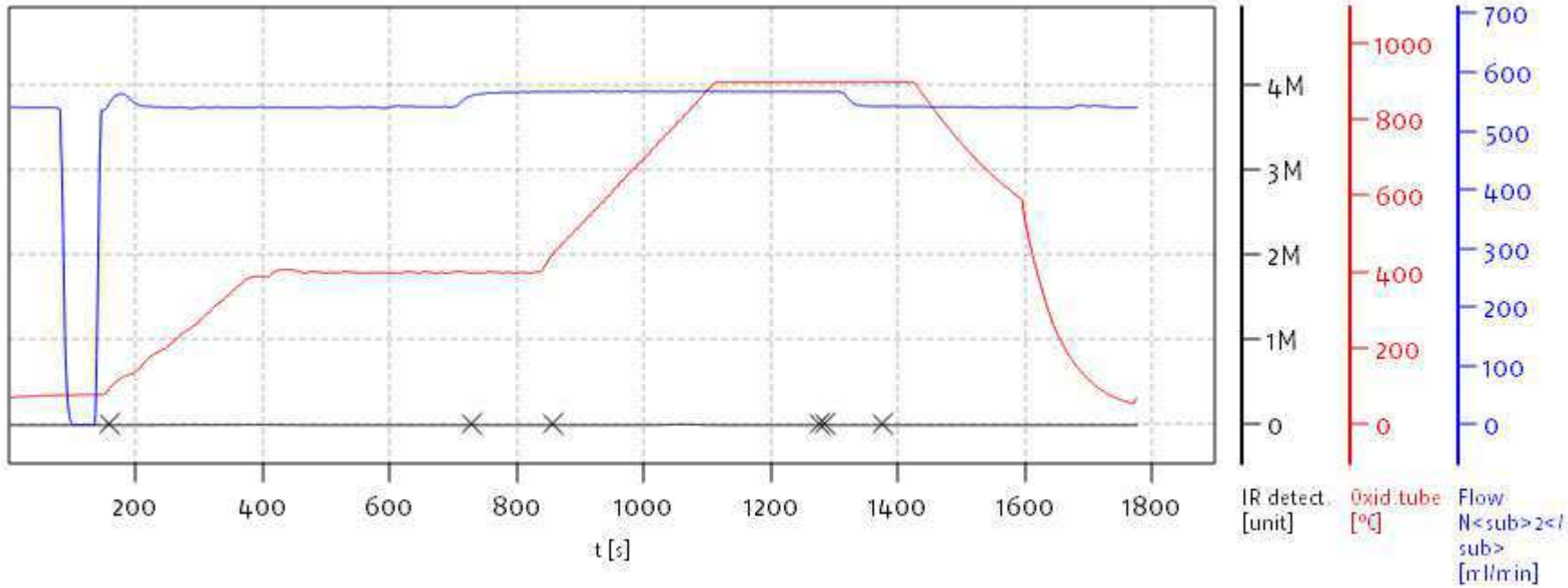
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
4	4	SEQ-CAL2	200.00	0.0049	1.00	CARBON	4/26/2022 1:00 PM	0.023	0.015	0.038	bl,C2u	23 296	19 107	47	1.0000	0.8936



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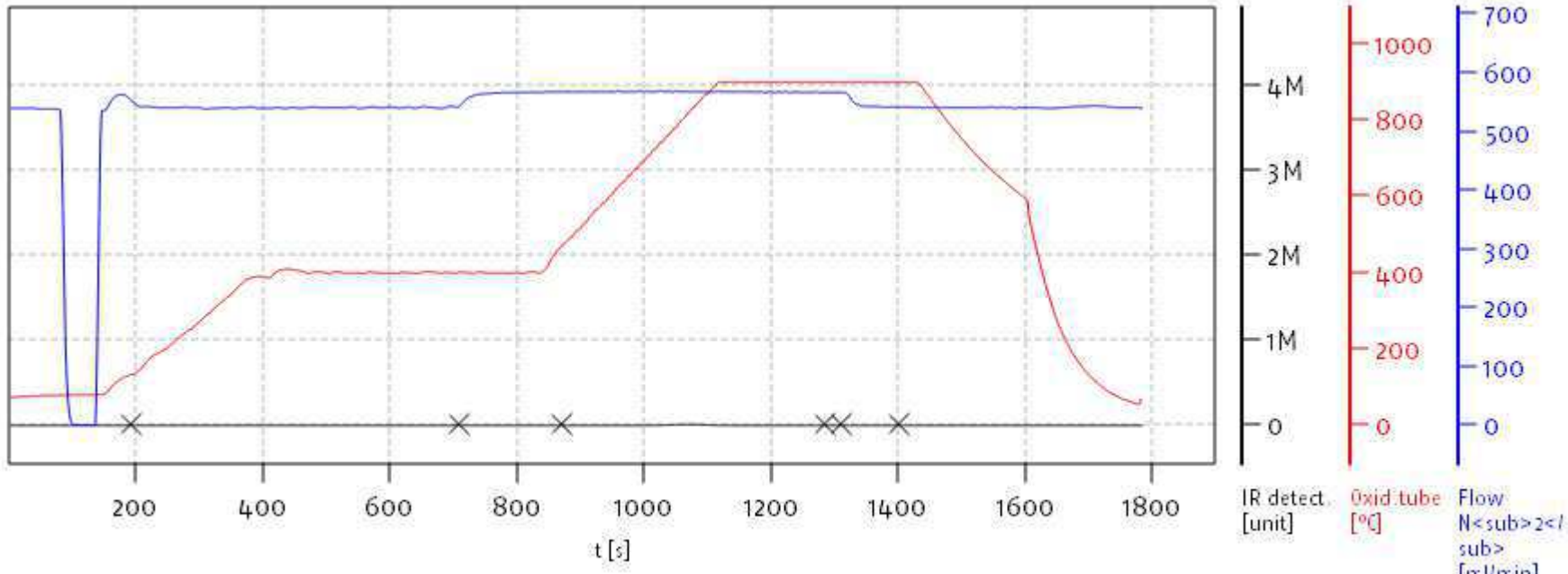
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
5	5	SEQ-CAL3	200.00	0.0071	1.00	CARBON	4/26/2022 1:30 PM	0.006	0.022	0.028	bl,C1u,C2u	2 319	27 530	170	1.0000	0.9343



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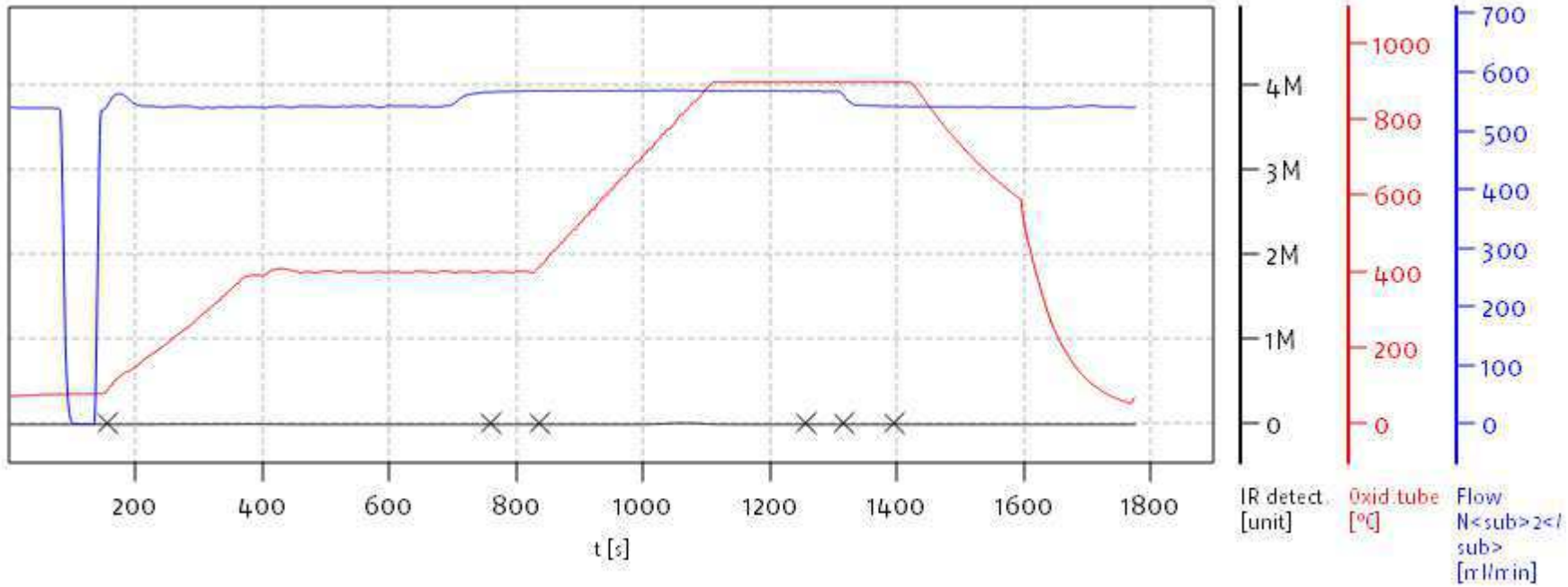
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
6	6	SEQ-CAL4	200.00	0.0098	1.00	CARBON	4/26/2022 2:00 PM	0.020	0.030	0.050	bl,C2u	19 746	38 017	109	1.0000	0.9461



Name:

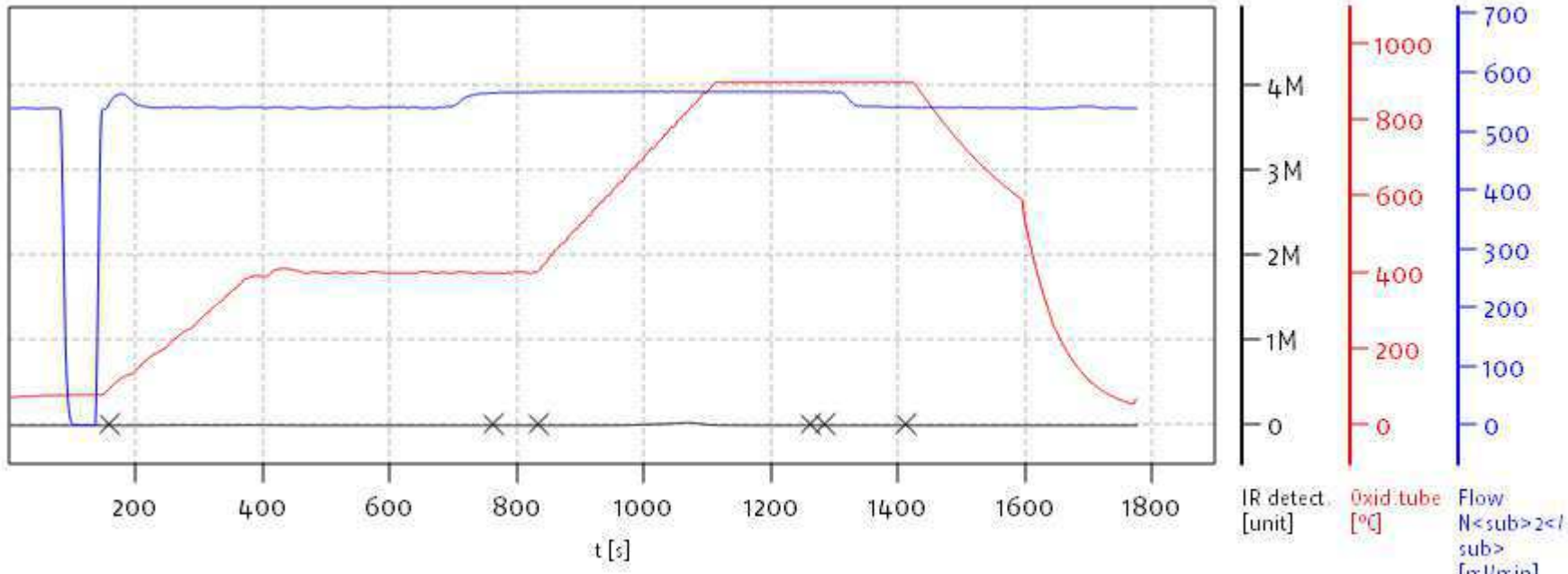
Access: soliTOC superuser

Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
7	7	SEQ-CAL5	200.00	0.0148	1.00	CARBON	4/26/2022 2:30 PM	0.021	0.045	0.066	bl,C2u	20 951	92 945	236	1.0000	0.5975



Name:

Access: soliTOC superuser

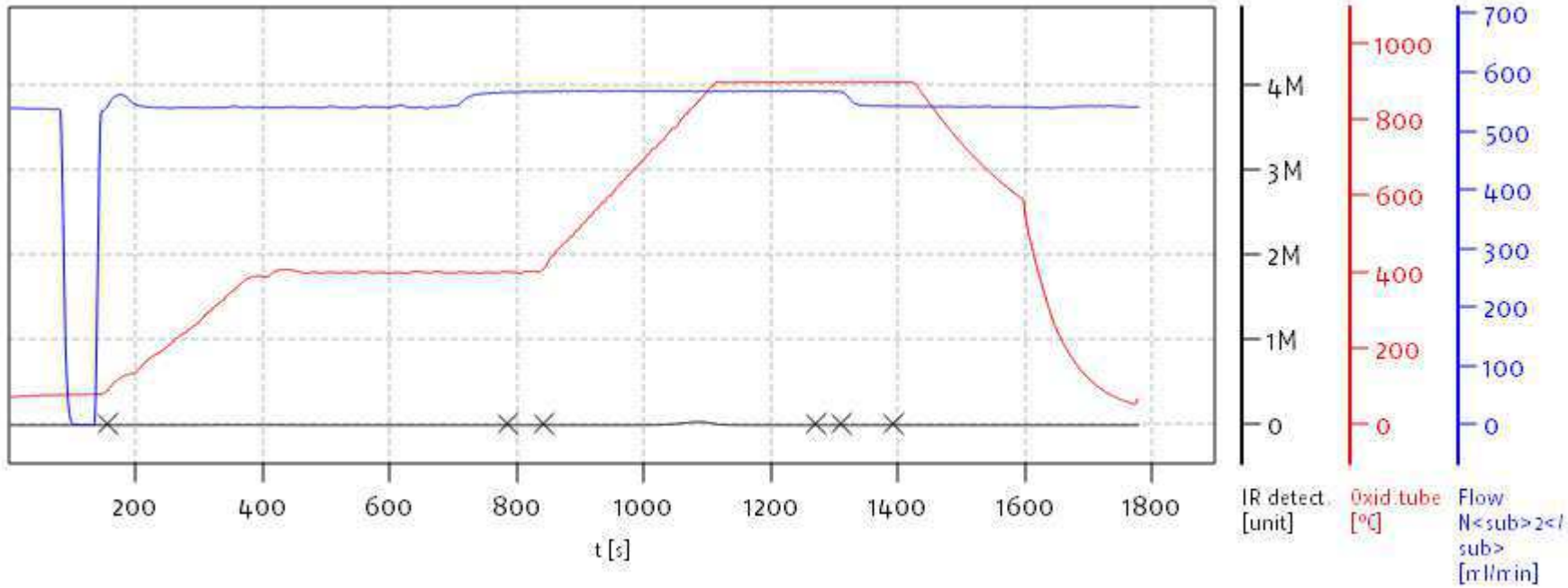
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
8	8	SEQ-CAL6	200.00	0.0196	1.00	CARBON	4/26/2022 3:00 PM	0.012	0.061	0.073	bl,C2u	10 118	82 297	59	1.0000	0.9144



Name:

Access: soliTOC superuser

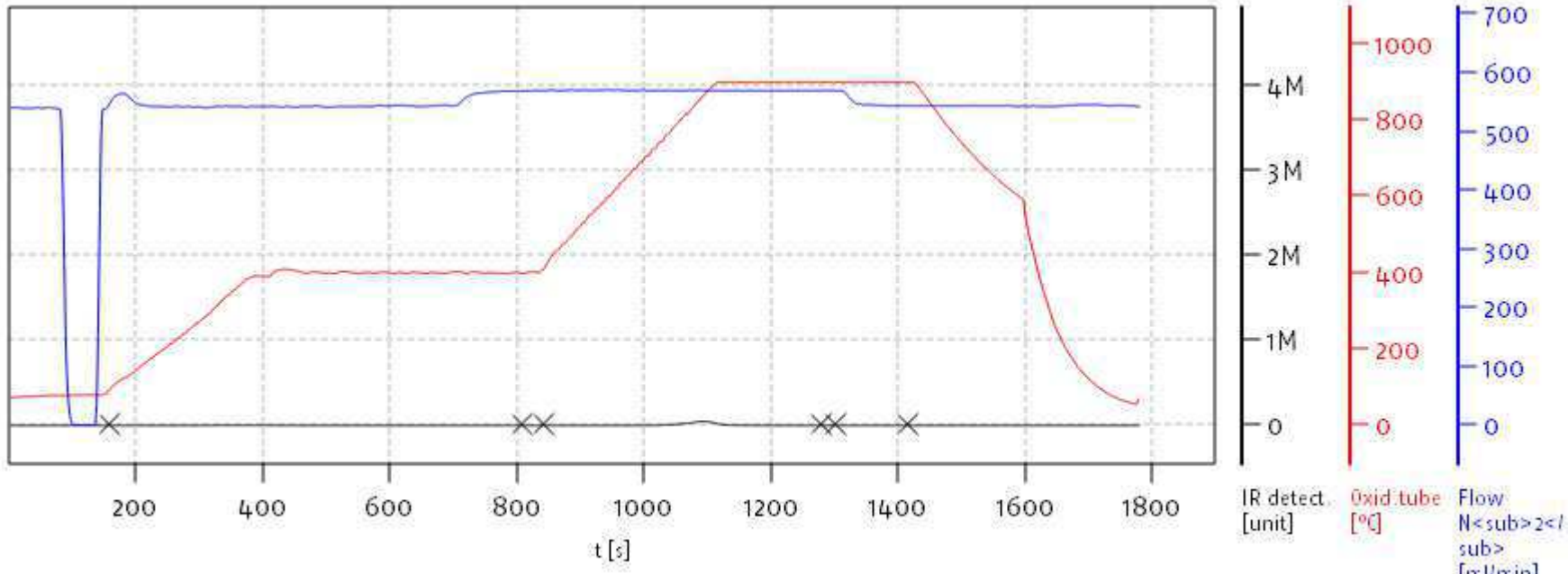
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
9	9	SEQ-CAL7	200.00	0.0247	1.00	CARBON	4/26/2022 3:30 PM	0.013	0.075	0.088	bl,C2u	10 555	101 530	292	1.0000	0.9173



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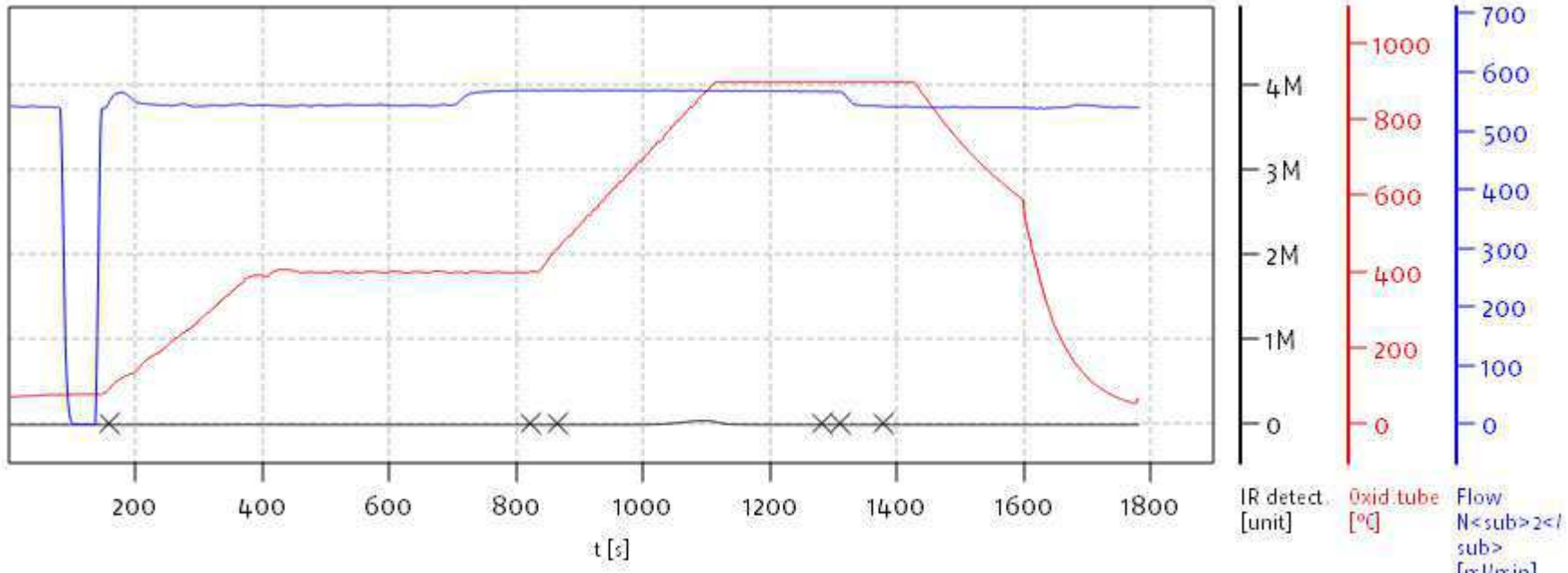
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
10	10	SEQ-CAL8	200.00	0.0298	1.00	CARBON	4/26/2022 4:00 PM	0.009	0.091	0.100	bl,C1u,C2u	6 668	120 822	116	1.0000	0.9312



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Access: soliTOC superuser

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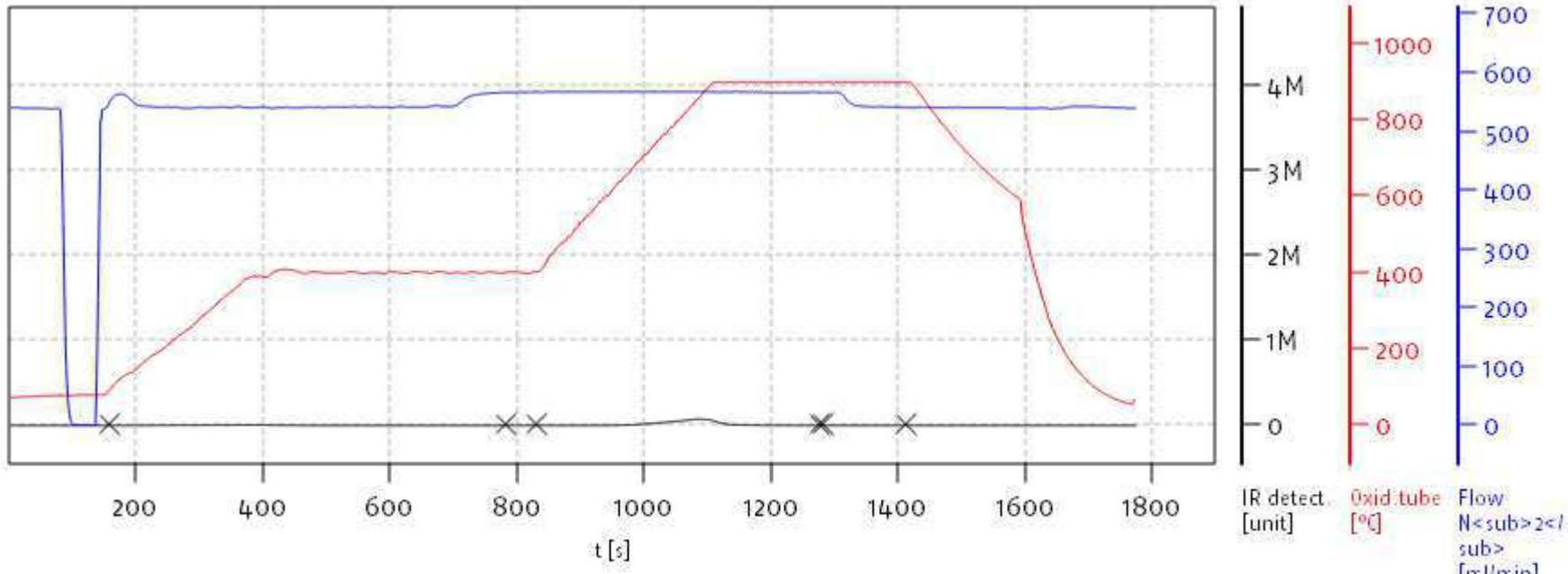
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
11	11	SEQ-CAL9	200.00	0.0402	1.00	CARBON	4/26/2022 4:30 PM	0.031	0.120	0.151	bl,C2u	32 999	260 234	1 044	1.0000	0.5792



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Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
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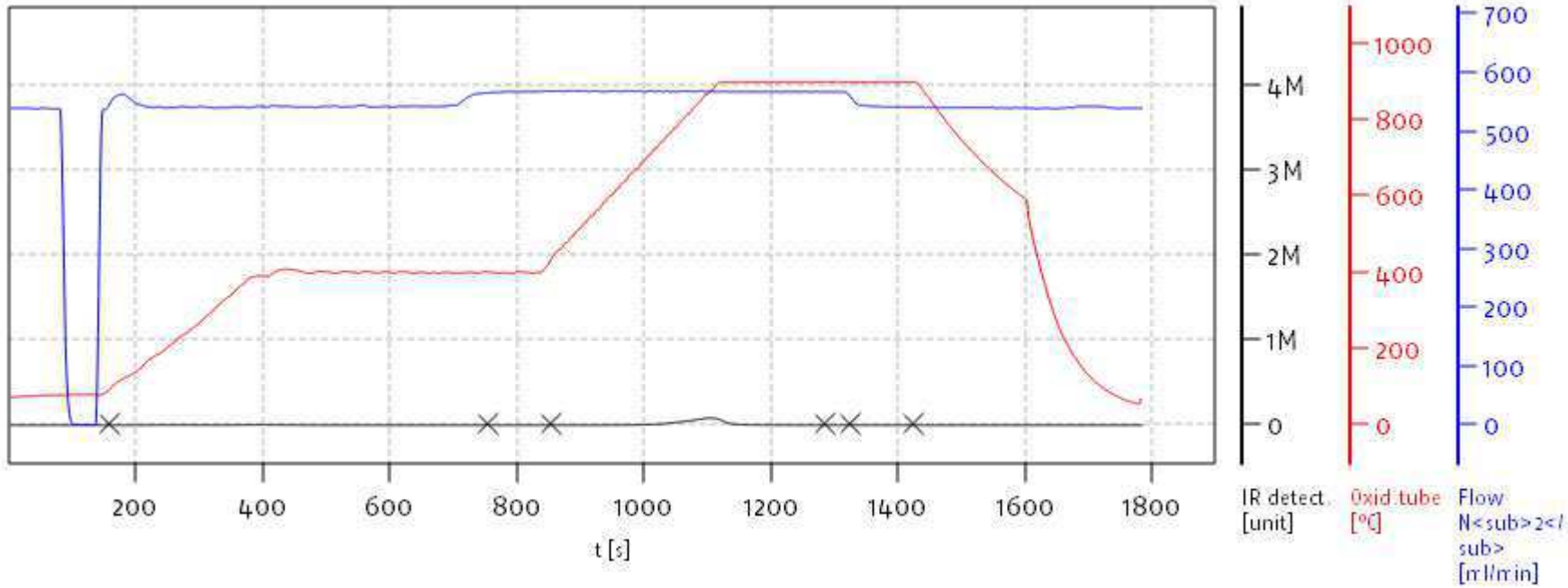
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
12	12	SEQ-CALA	200.00	0.0500	1.00	CARBON	4/26/2022 5:00 PM	0.021	0.151	0.172	bl,C2u	20 147	233 779	913	1.0000	0.8099



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Access: soliTOC superuser

Date: Wed Apr 27 11:07:12 2022

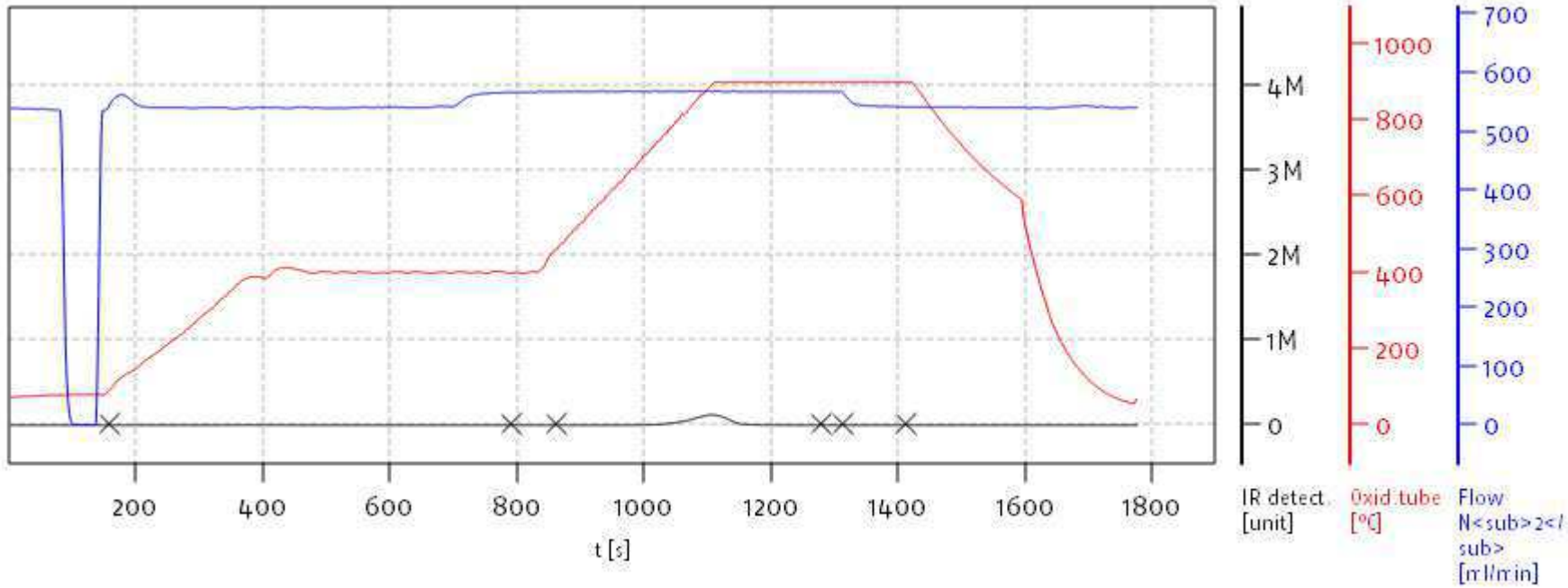
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: 4/27/2022 11:05 AM

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
13	13	SEQ-CALB	200.00	0.0040	1.00	CARBON	4/26/2022 5:30 PM	0.010	0.258	0.268	bl,C1u,C2u	7 070	323 151	663	1.0000	1.0048



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Access: soliTOC superuser

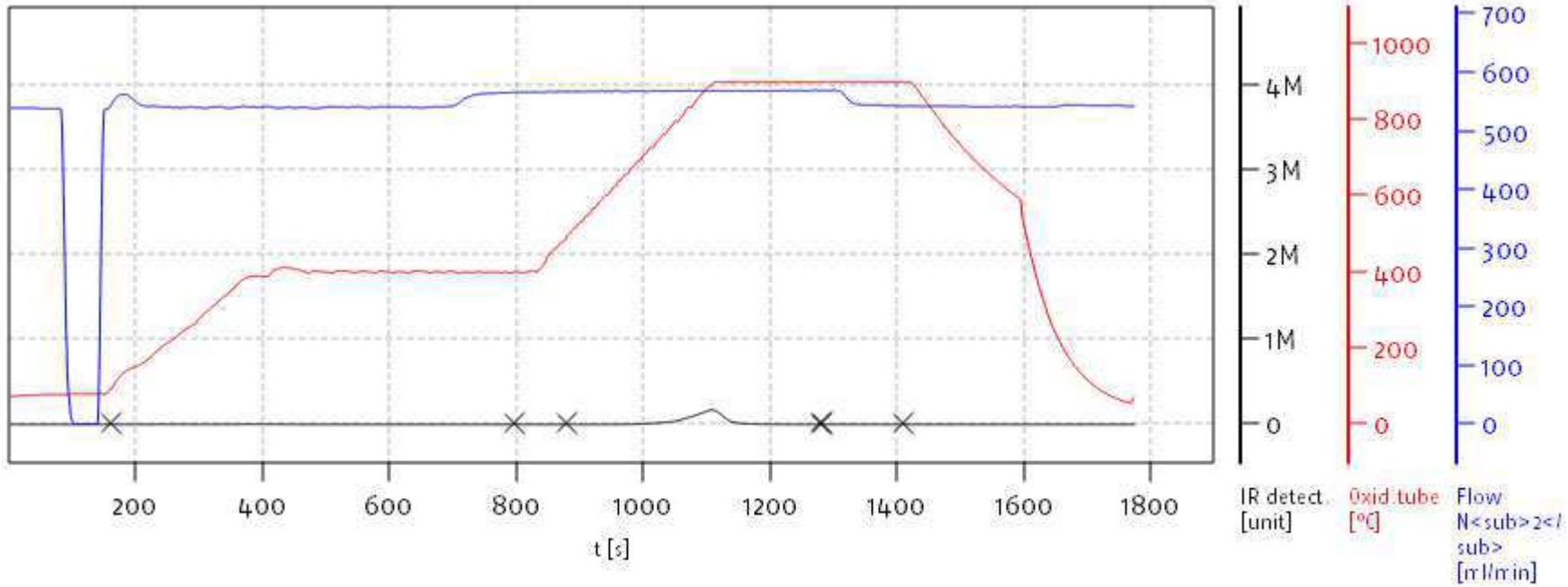
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
14	14	SEQ-CALC	200.00	0.0048	1.00	CARBON	4/26/2022 6:00 PM	0.015	0.324	0.339	bl,C2u	13 785	411 879	575	1.0000	0.9917



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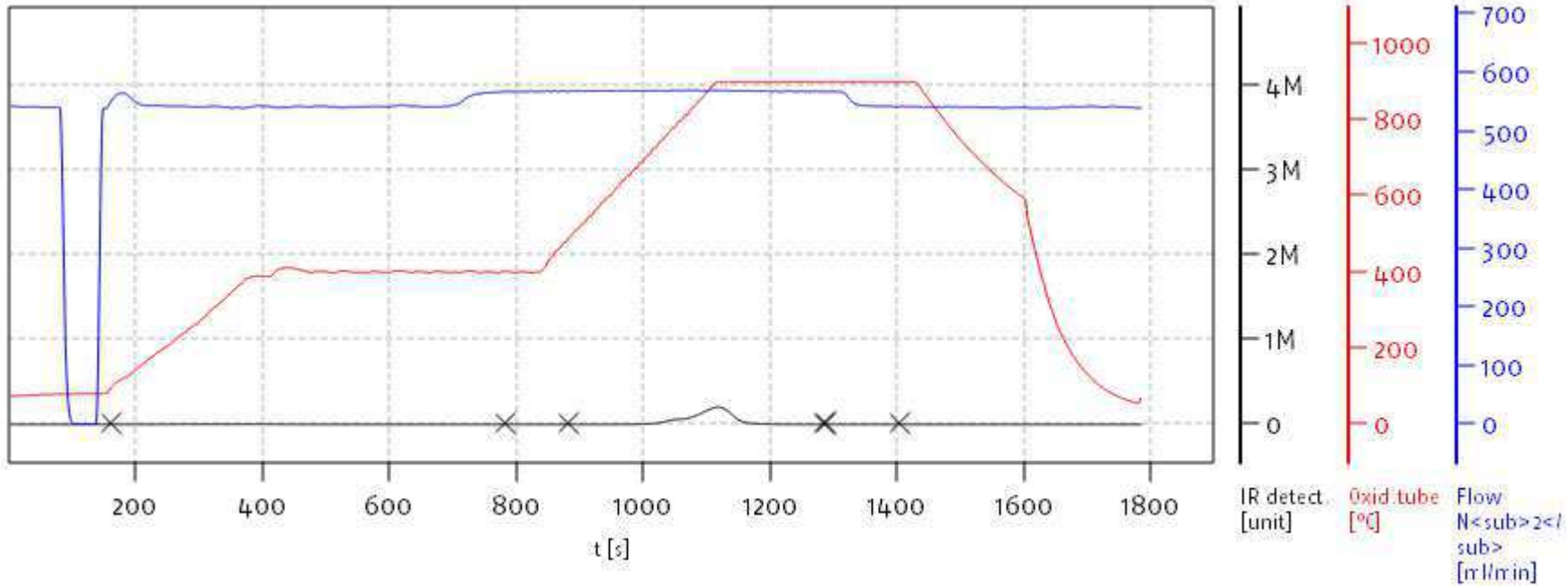
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
15	15	SEQ-CALD	200.00	0.0069	1.00	CARBON	4/26/2022 6:30 PM	0.019	0.444	0.463	bl,C2u	18 465	553 540	263	1.0000	1.0129



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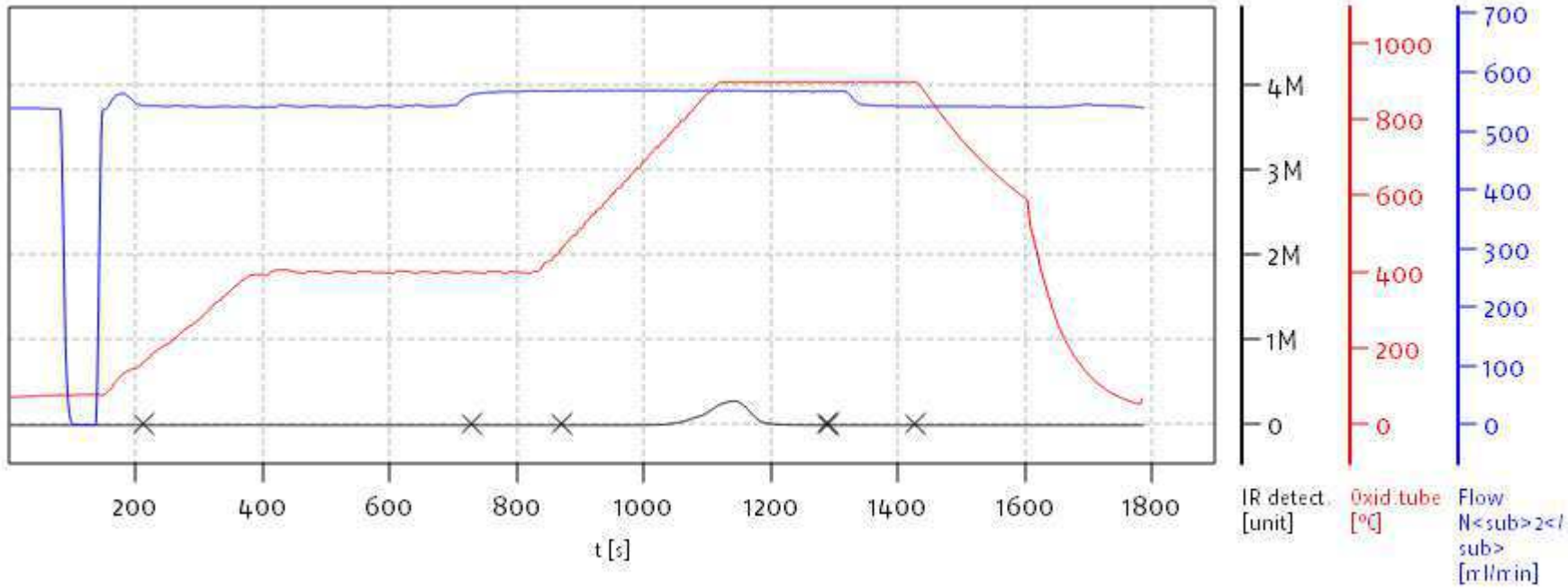
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
16	16	SEQ-CALE	200.00	0.0101	1.00	CARBON	4/26/2022 7:00 PM	0.009	0.600	0.609	bl,C1u,C2u	5 485	839 878	536	1.0000	0.9036



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Serial No: 0300.181017
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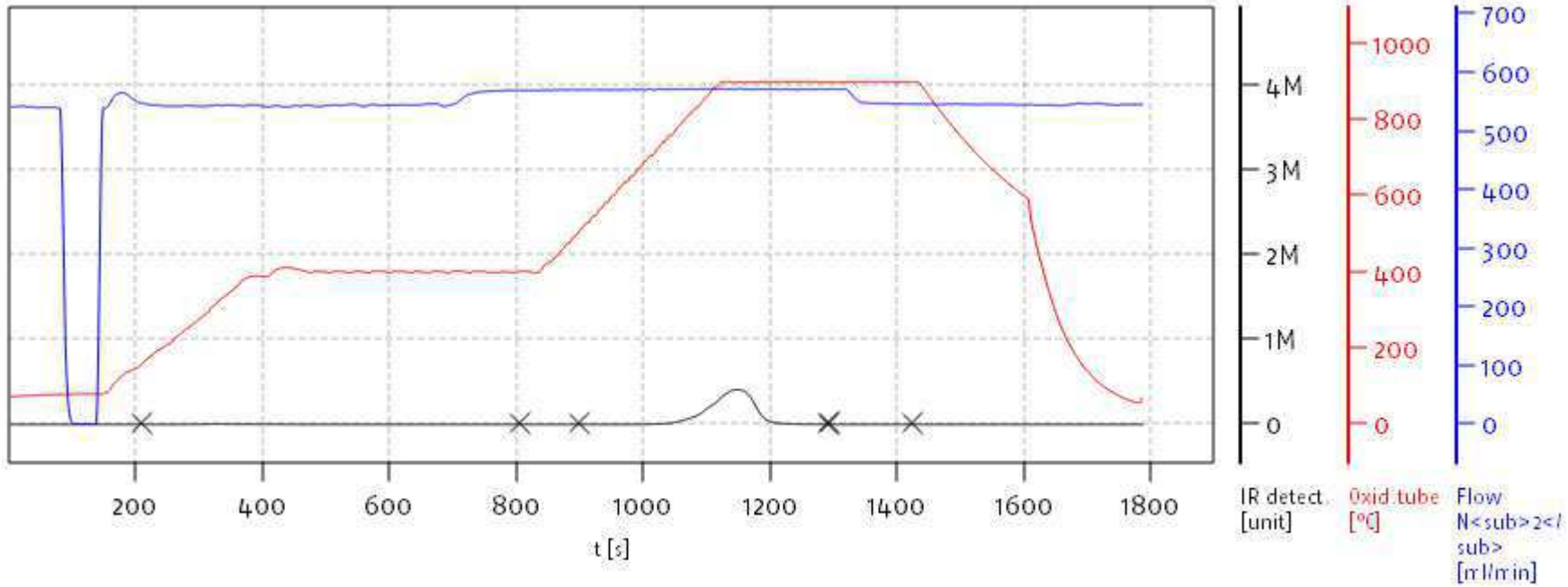
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
17	17	SEQ-CALF	200.00	0.0149	1.00	CARBON	4/26/2022 7:31 PM	0.019	0.906	0.925	bl,C2u	17 439	1 236 200	814	1.0000	0.9279



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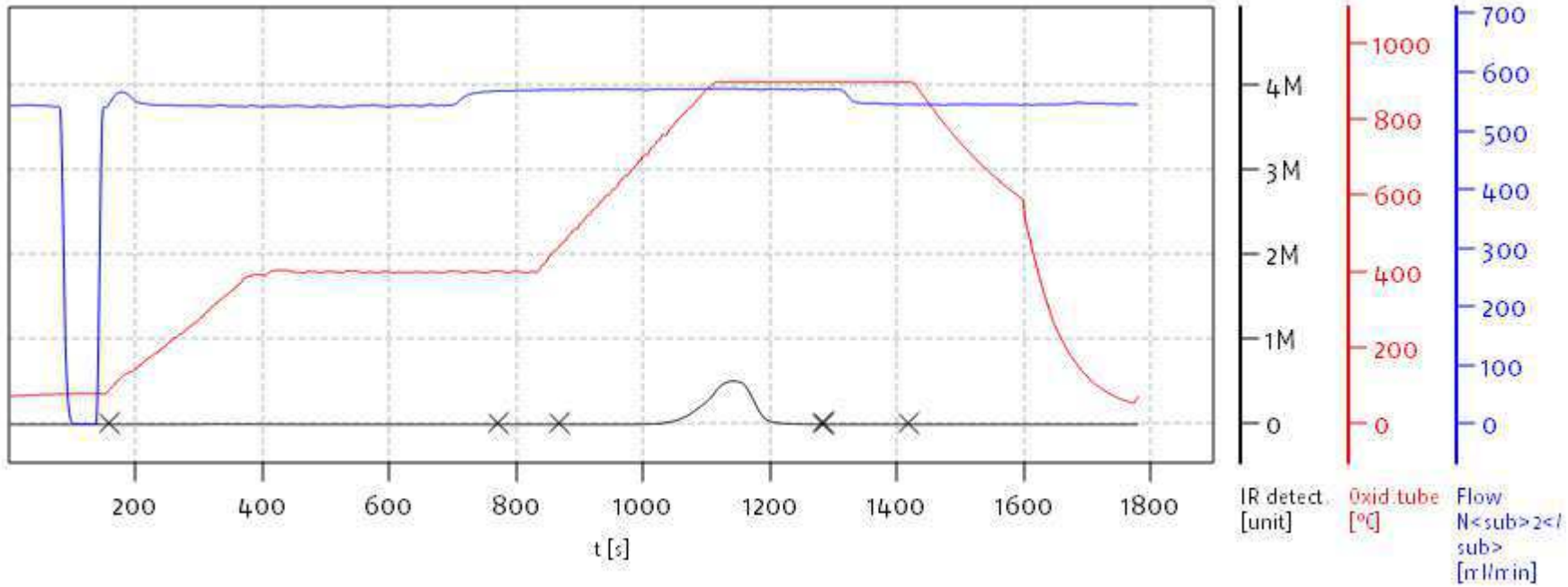
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
18	18	SEQ-CALG	200.00	0.0198	1.00	CARBON	4/26/2022 8:01 PM	0.015	1.206	1.221	bl,C2u	12 557	1 639 190	1 295	1.0000	0.9320



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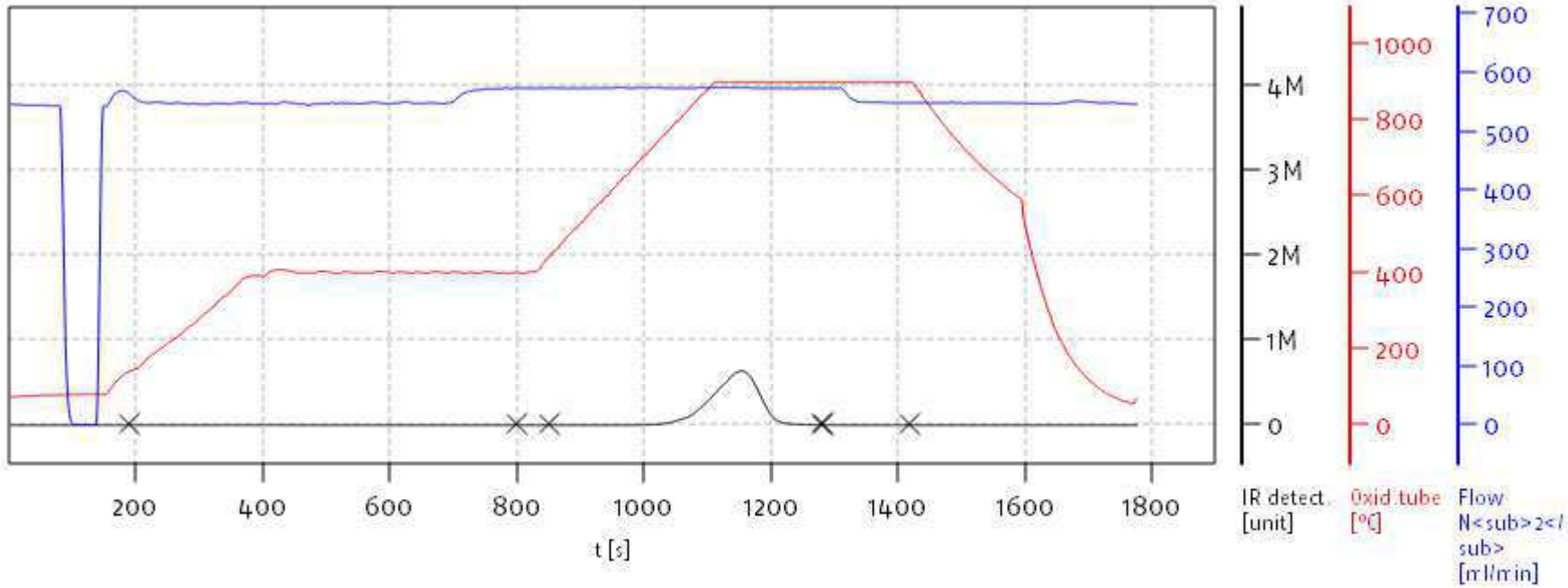
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
19	19	SEQ-CALH	200.00	0.0250	1.00	CARBON	4/26/2022 8:31 PM	0.009	1.524	1.533	bl,C1u,C2u	4 029	2 063 890	2 225	1.0000	0.9357



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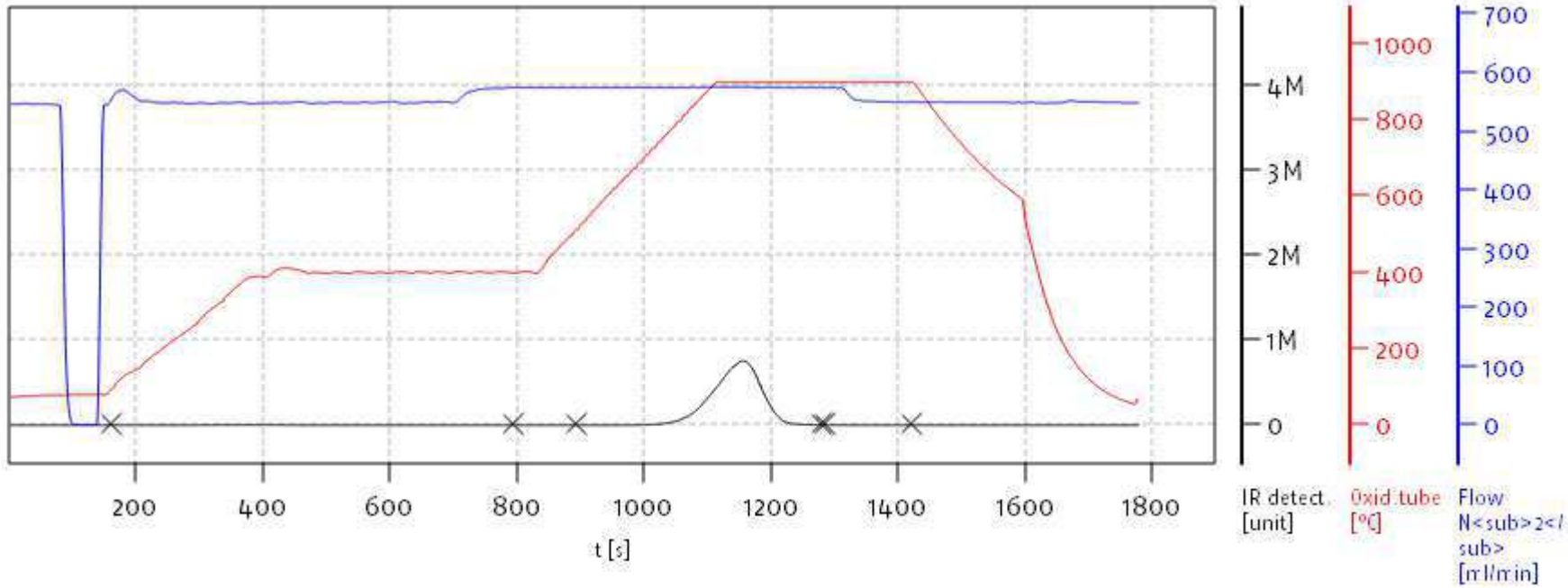
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
20	20	SEQ-CALI	200.00	0.0303	1.00	CARBON	4/26/2022 9:01 PM	0.017	1.800	1.817	bl,C2u	13 926	2 495 900	2 903	1.0000	0.9140



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Date: Wed Apr 27 11:07:12 2022

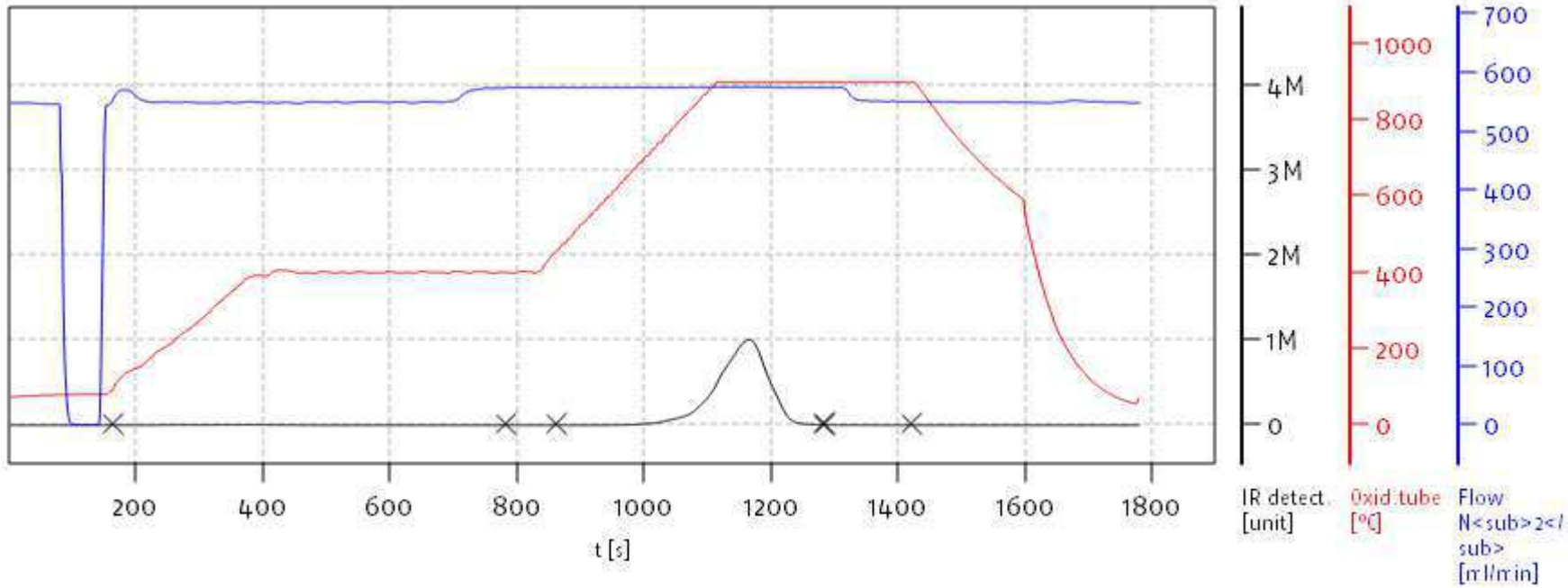
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: 4/27/2022 11:05 AM

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
21	21	SEQ-CALJ	200.00	0.0415	1.00	CARBON	4/26/2022 9:31 PM	0.031	2.400	2.431	bl,C2u	28 786	3 482 530	5 351	1.0000	0.8737



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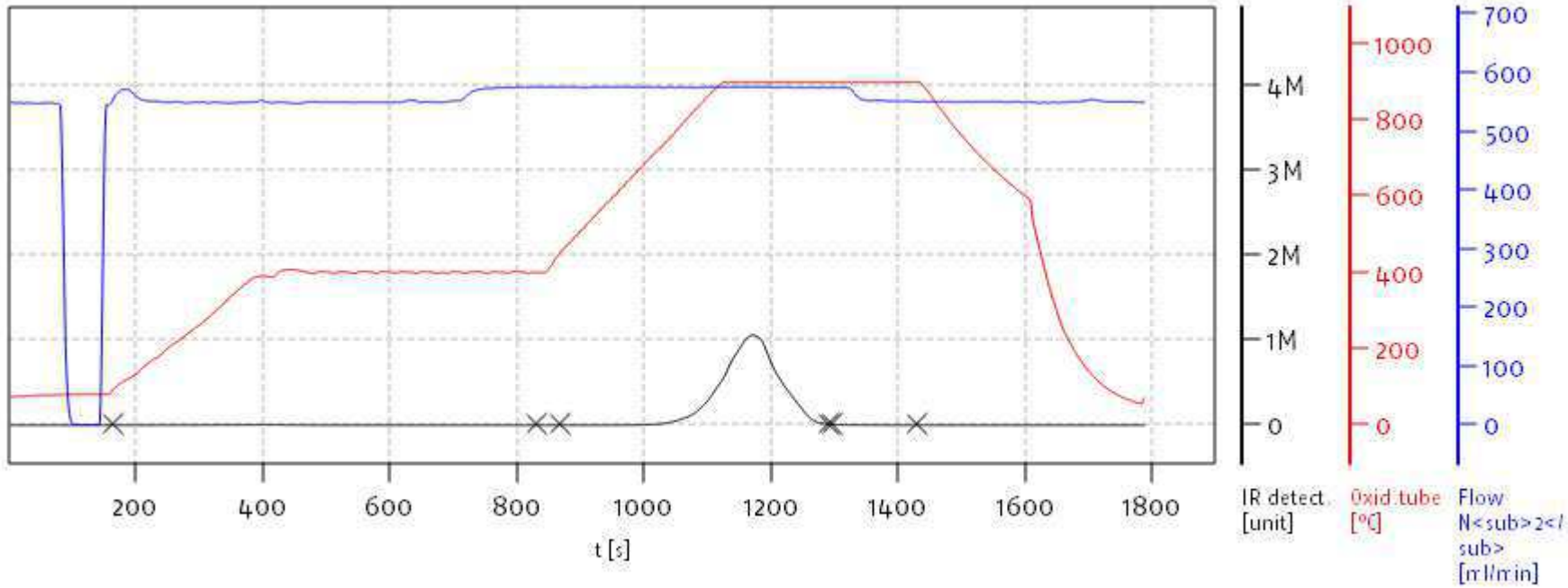
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
22	22	SEQ-CALK	200.00	0.0497	1.00	CARBON	4/26/2022 10:01 PM	0.031	3.012	3.043	bl	23 732	4 105 830	9 736	1.0000	0.9301



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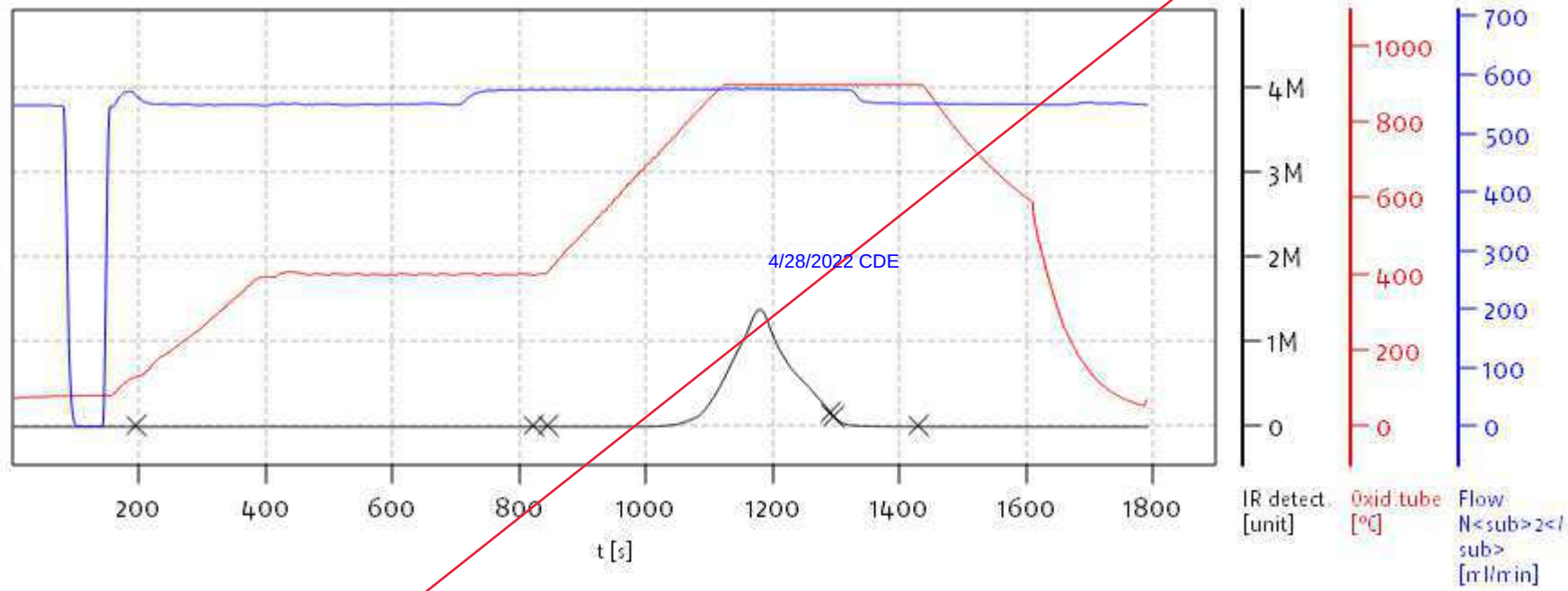
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
23	23	SEQ-CALL	200.00	0.0698	1.00	CARBON	4/26/2022 10:31 PM	0.005	3.805	3.810	bl,C1u	3 605	5 648 620	71 970	1.0000	0.9443



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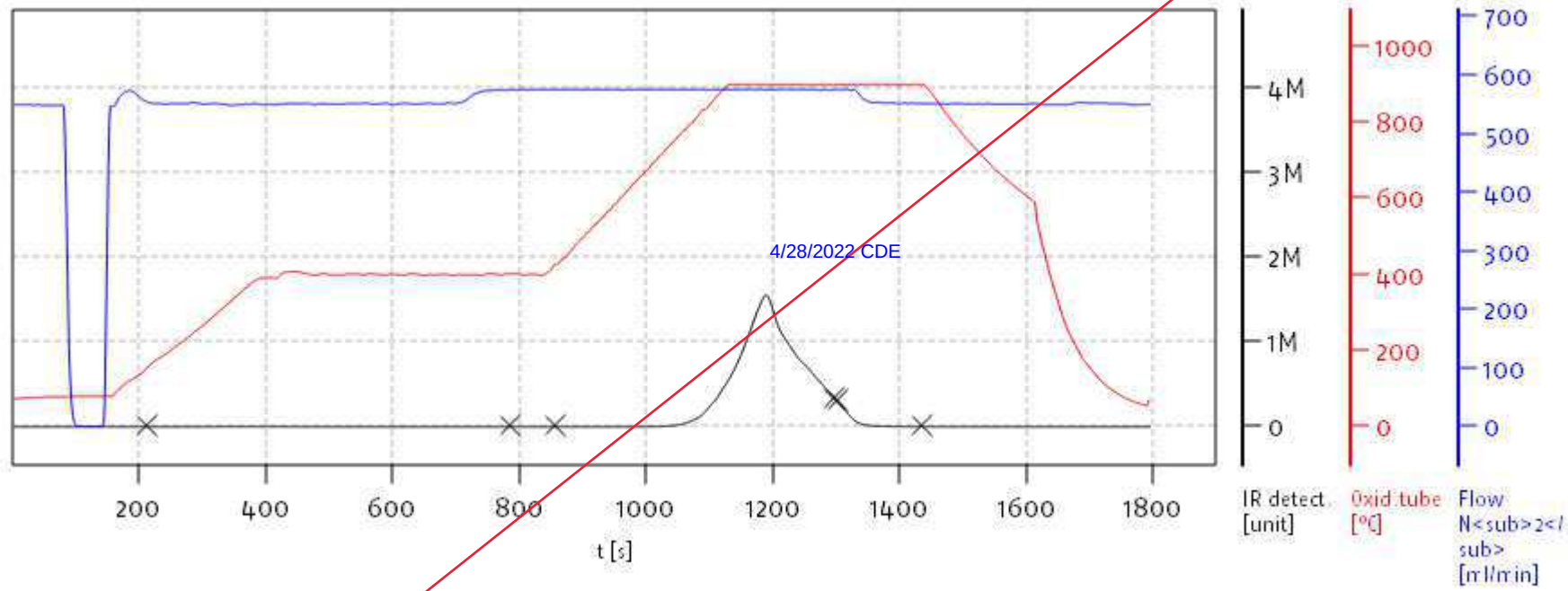
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
24	24	SEQ-CALM	200.00	0.0803	1.00	CARBON	4/26/2022 11:02 PM	0.010	4.637	4.647	bl	10 023	6 397 530	228 171	1.0000	0.9539



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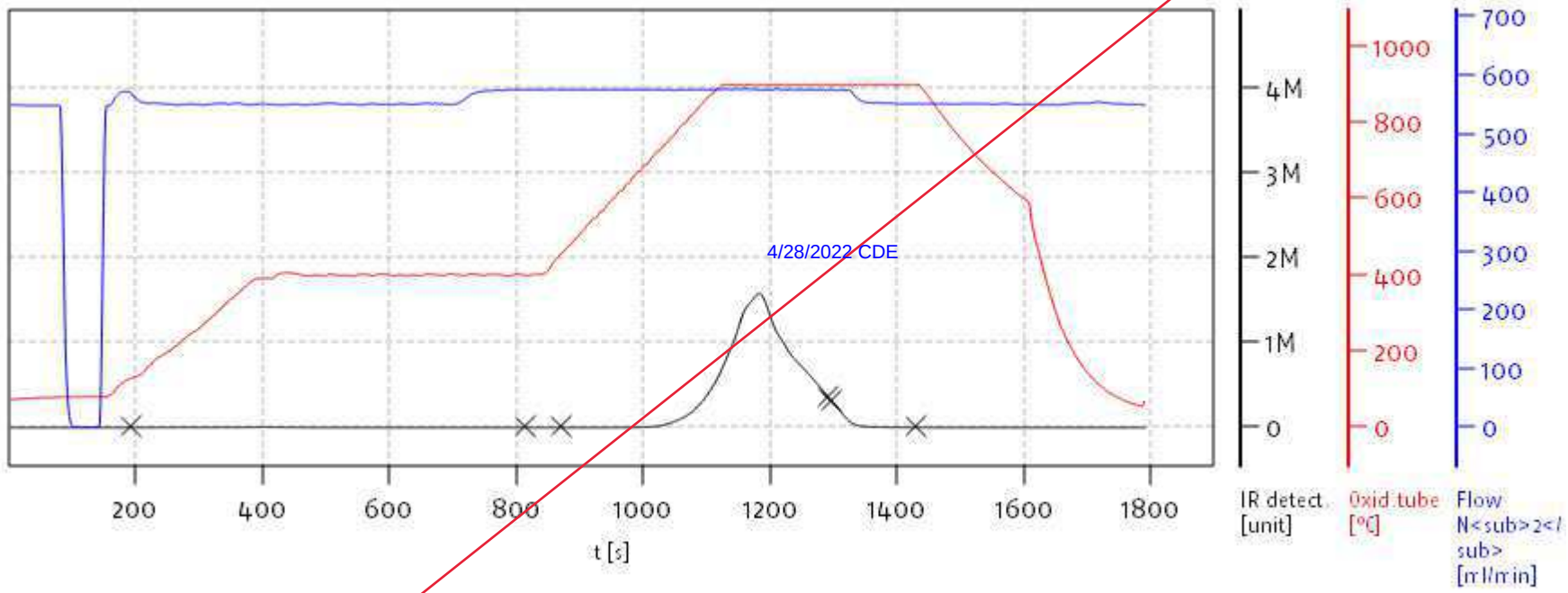
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
25	25	SEQ-CALN	200.00	0.0901	1.00	CARBON	4/26/2022 11:32 PM	0.020	5.219	5.239	bl	23 354	7 186 580	239 986	1.0000	0.9540



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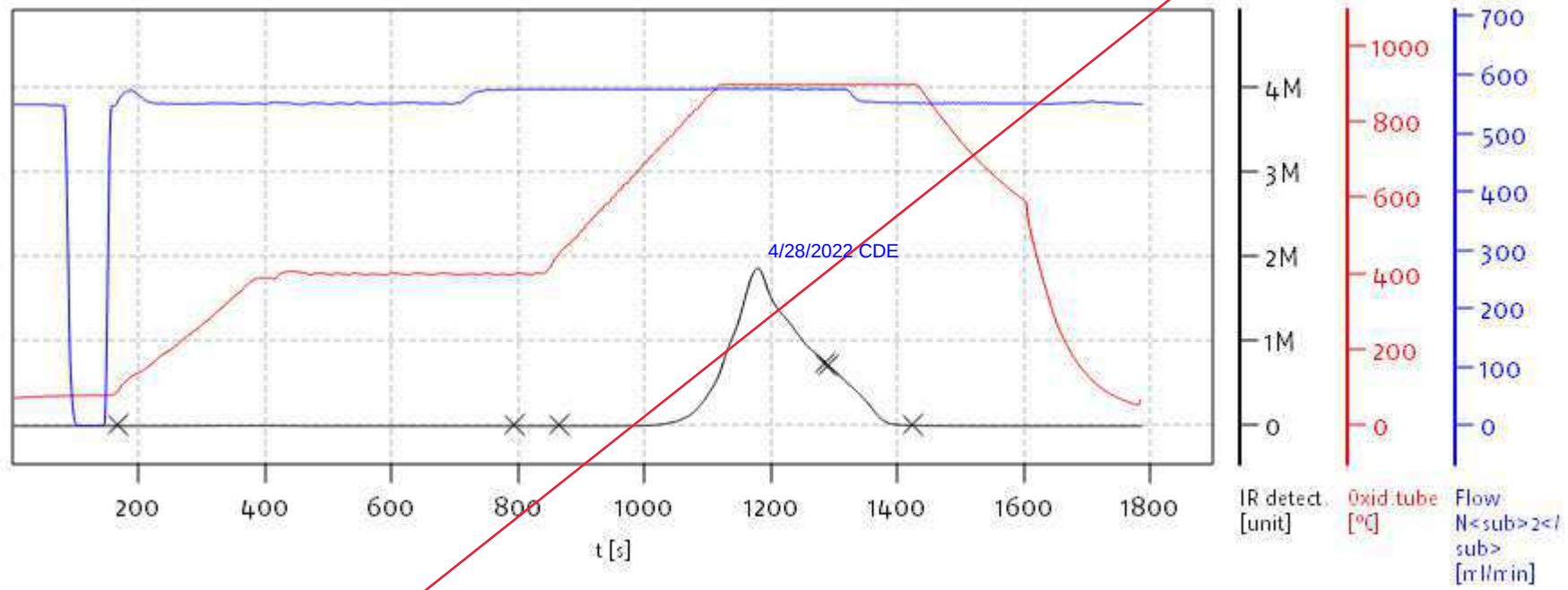
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
26	26	SEQ-CALO	200.00	0.1200	1.00	CARBON	4/27/2022 12:02 AM	0.019	7.915	7.934	bl,C3o	21 248	8 544 610	1 334 580	1.0000	1.0714



Name:

Access: soliTOC superuser

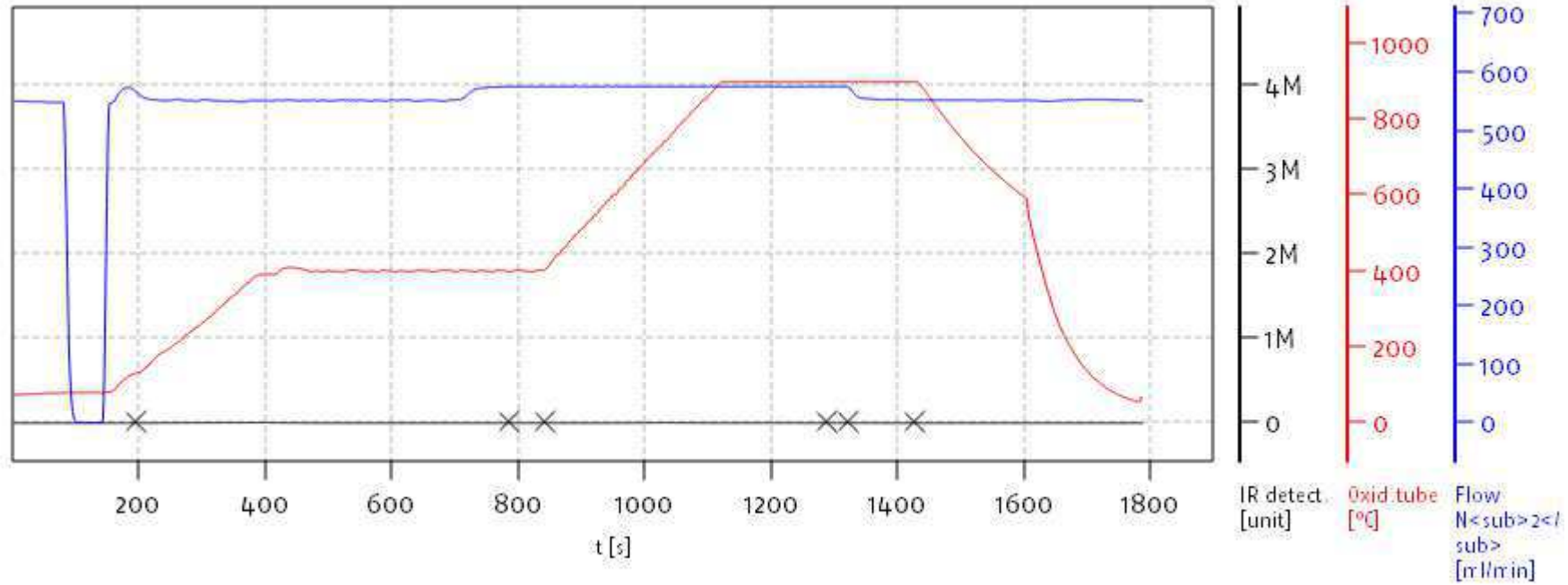
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
27	27	BLANK	1.00		1.00	CARBON	4/27/2022 12:32 AM	0.000	0.000	0.000	bl	29 766	19 596	1 205	1.0000	0.9007



Name:

Access: soliTOC superuser

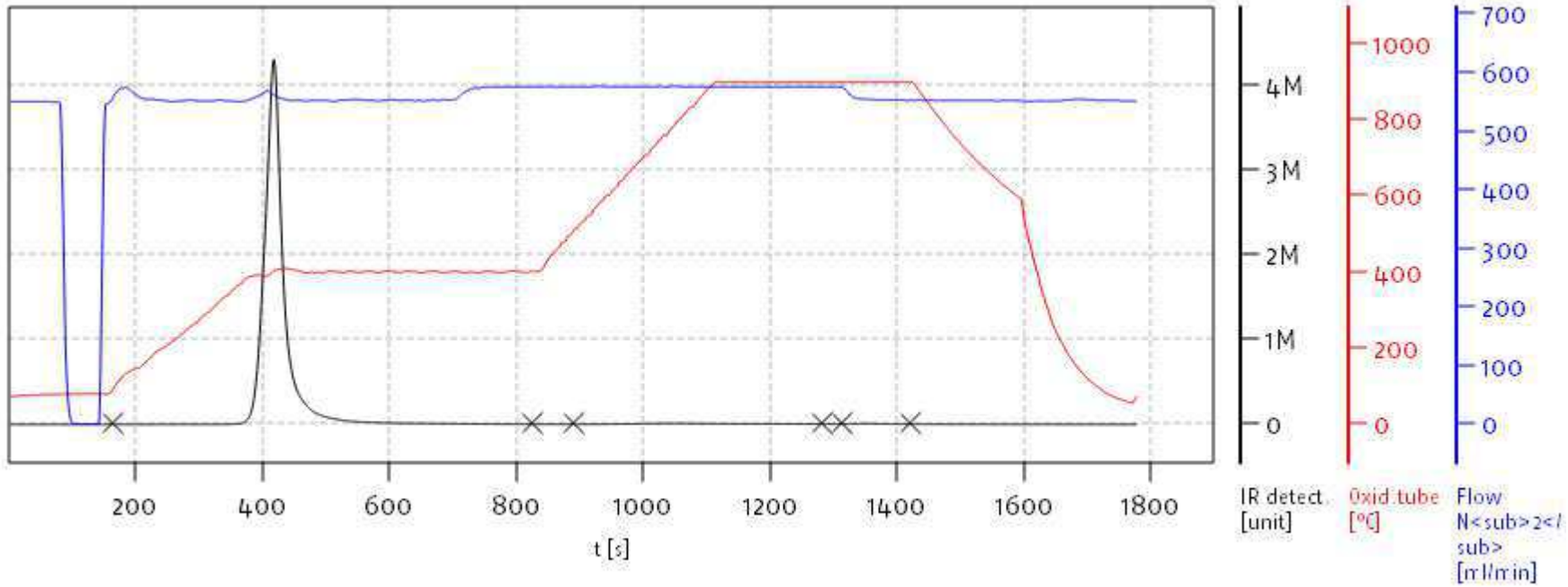
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
28	28	Dfactor	19.00		1.00	CARBON	4/27/2022 1:02 AM	44.678	0.893	45.571	bl	5 588 680	104 999	25 384	0.9581	1.0000



Name:

Access: soliTOC superuser

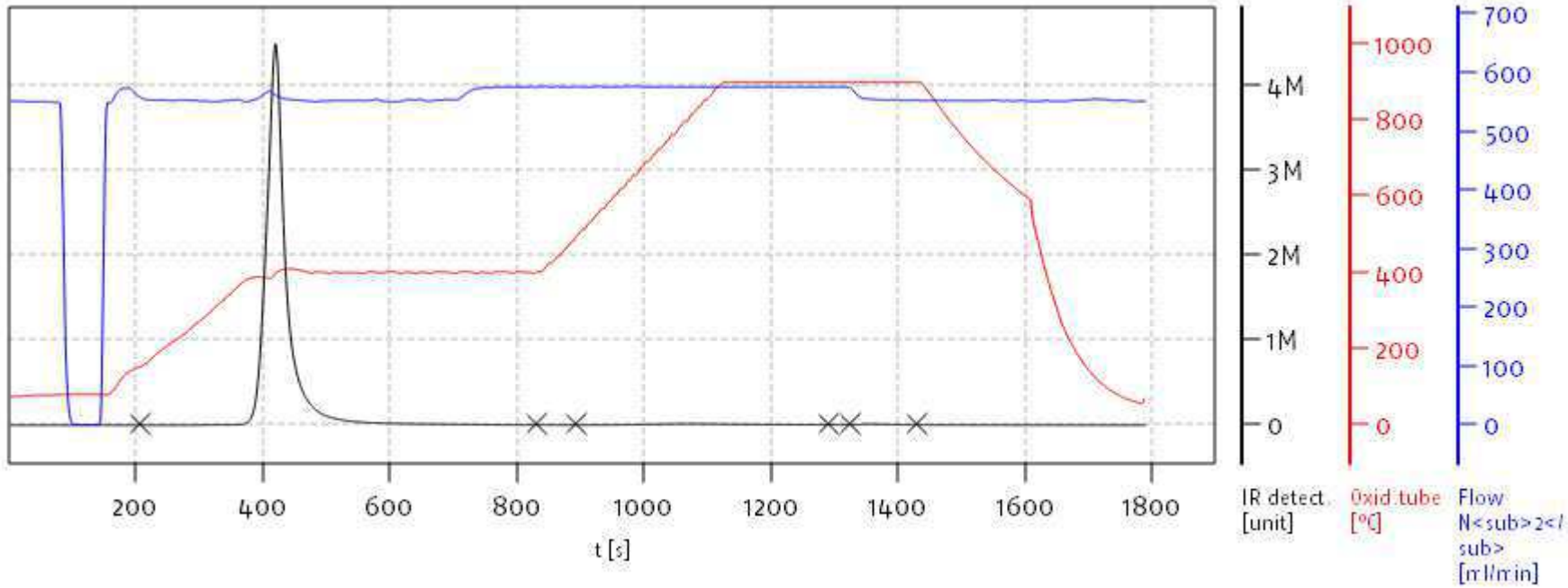
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
29	29	Dfactor	20.80		1.00	CARBON	4/27/2022 1:32 AM	44.694	0.937	45.631	bl	6 076 750	120 961	30 224	0.9647	1.0000



Name:

Access: soliTOC superuser

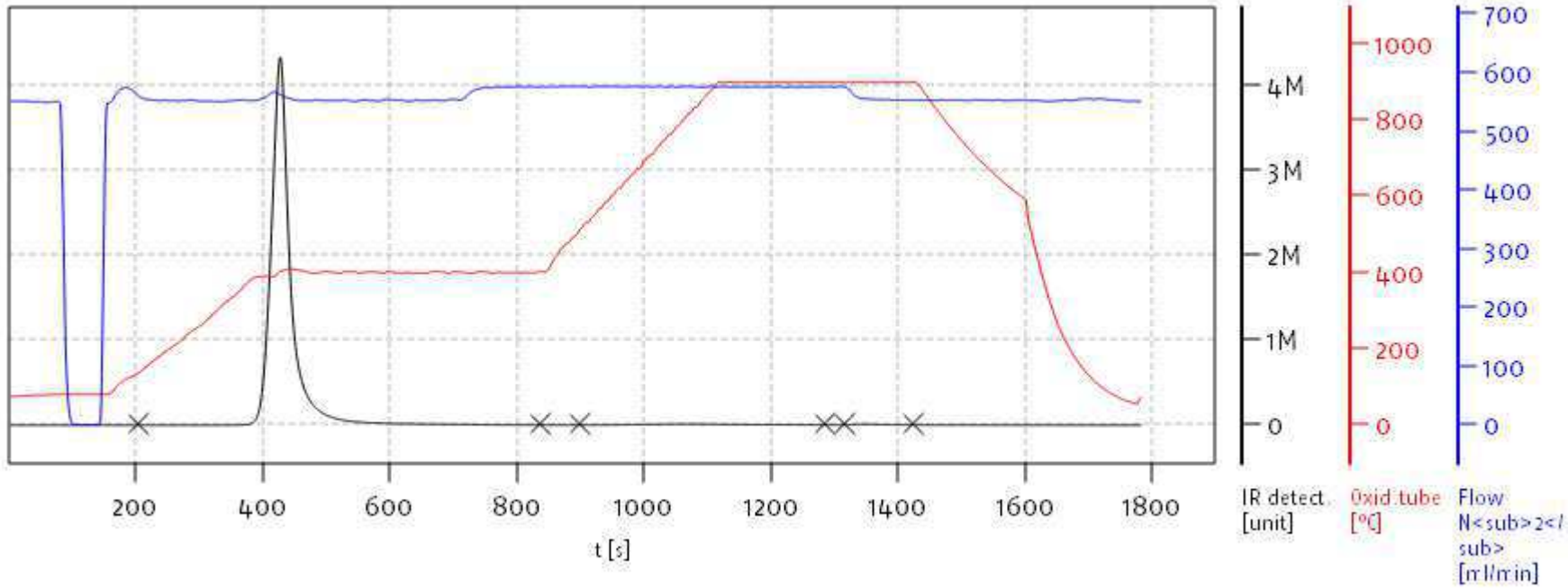
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
30	30	SEQ-ICV1	19.40		1.00	CARBON	4/27/2022 2:03 AM	44.964	0.742	45.706	bl	5 722 450	98 735	27 054	0.9614	0.9007



Name:

Access: soliTOC superuser

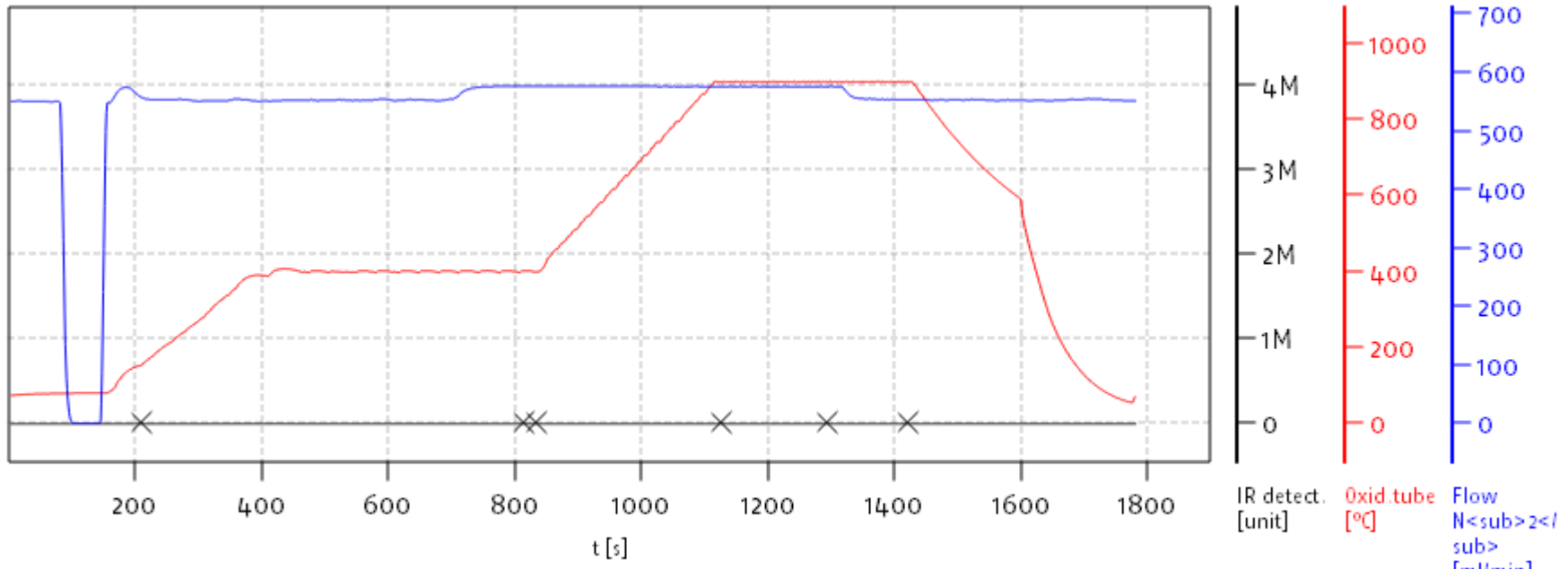
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
31	31	SEQ-ICB1	501.10		1.00	CARBON	4/27/2022 2:33 AM	0.002	0.001	0.003	bl,C1u,C3u,C2u	2 158	225	165	0.9614	0.9007



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:07:12 2022

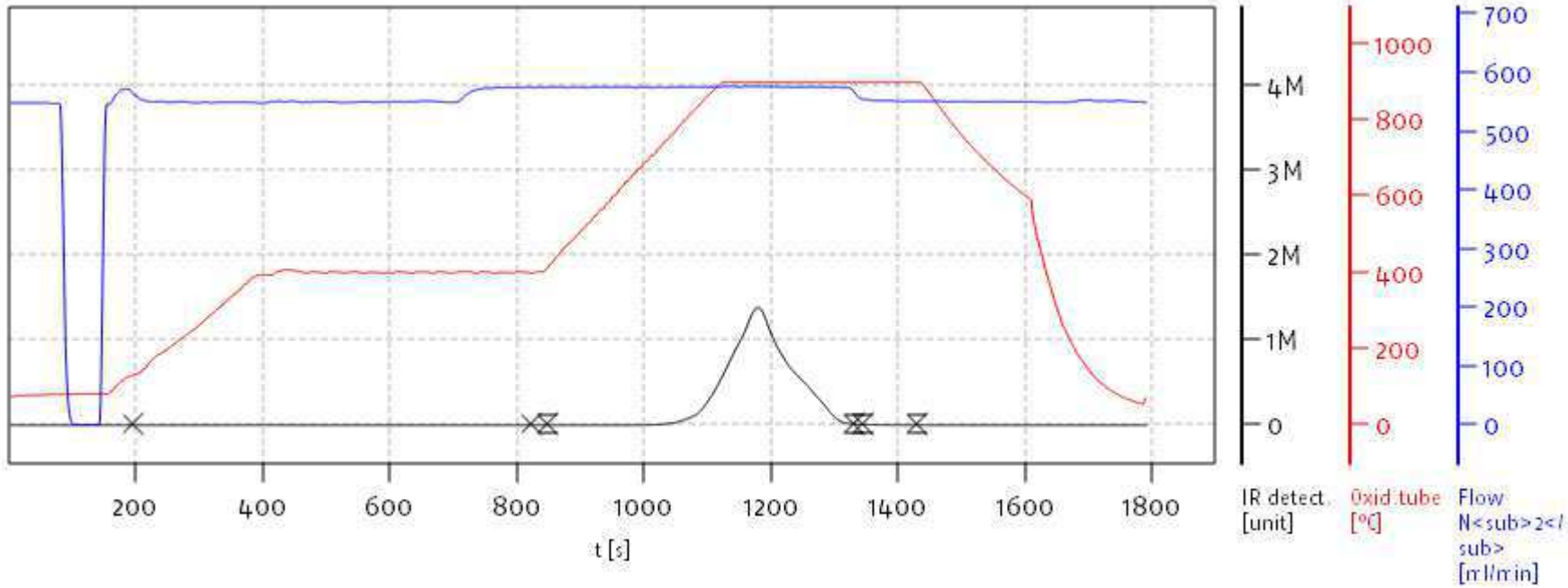
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

Analytical Resources, Incorporated
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
23	23	SEQ-CALL	200.00	0.0698	1.00	CARBON	4/27/2022 11:08 AM	0.005	3.917	3.922	bl,C1u	3 605	**5 260 365**	**0**	1.0000	0.9443



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:10:16 2022

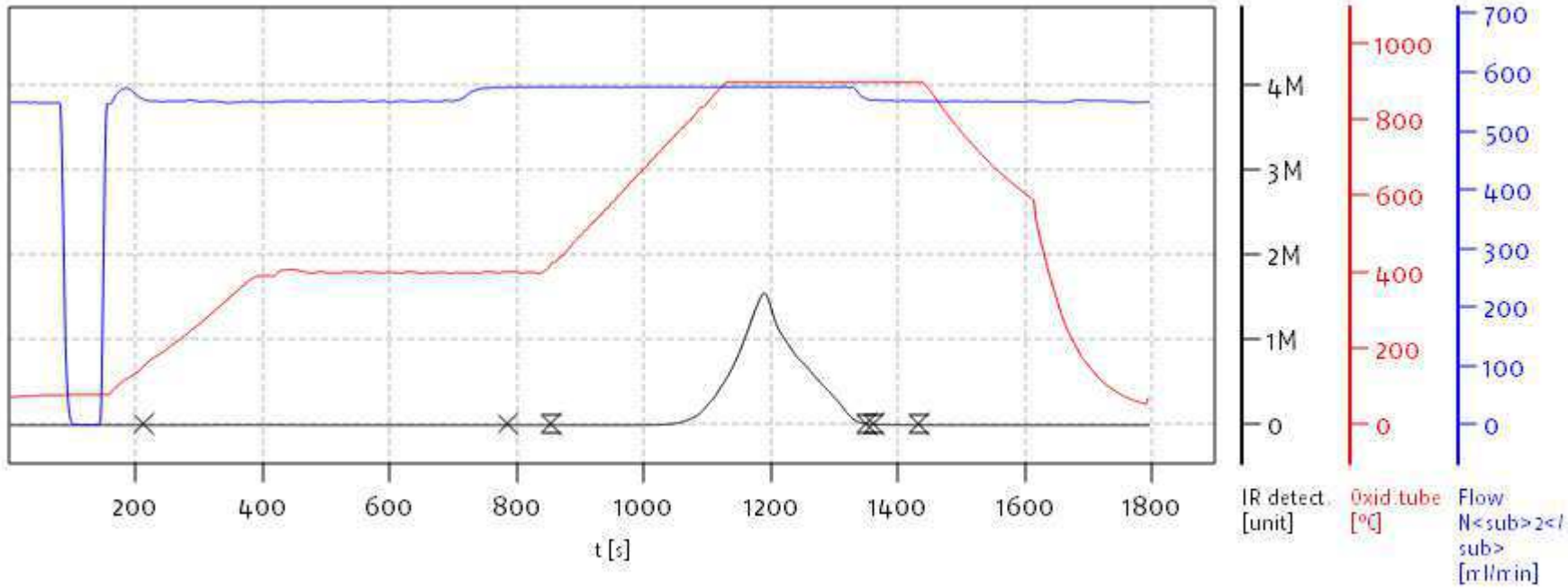
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
24	24	SEQ-CALM	200.00	0.0803	1.00	CARBON	4/27/2022 11:08 AM	0.010	4.637	4.647	bl	10 023	**6 164 833**	**0**	1.0000	0.9539



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:10:16 2022

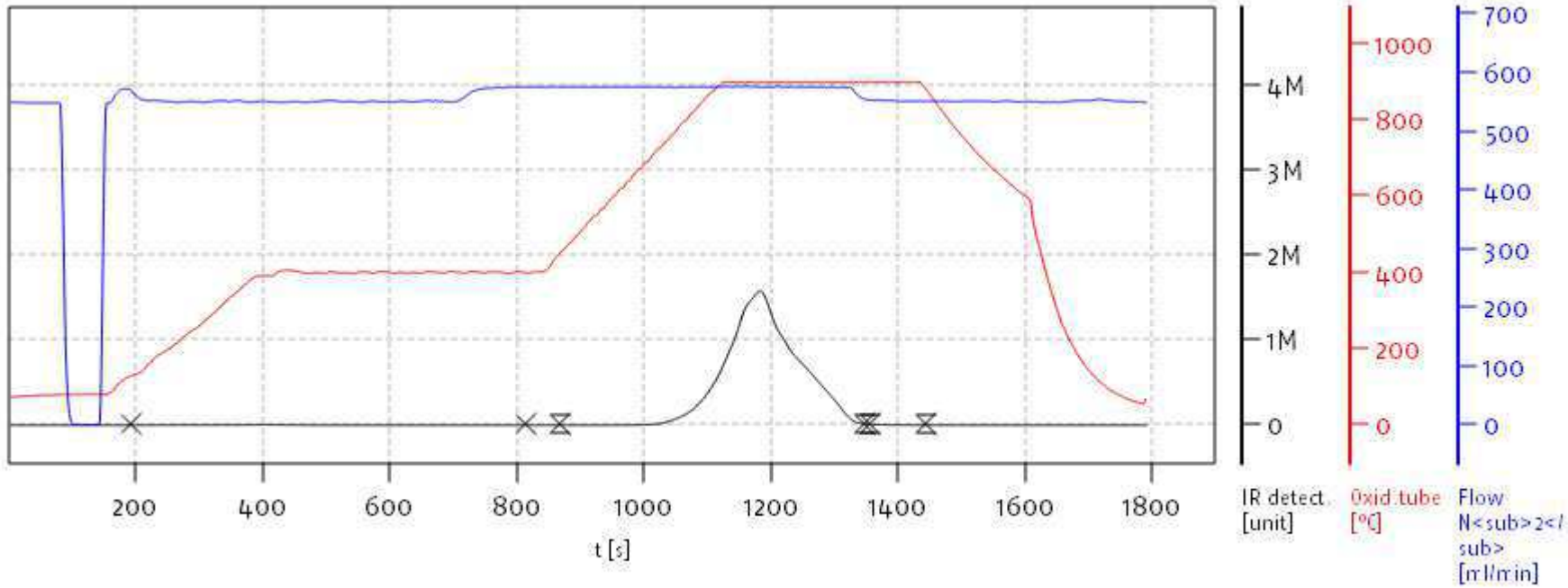
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
25	25	SEQ-CALN	200.00	0.0901	1.00	CARBON	4/27/2022 11:09 AM	0.020	5.219	5.239	bl	23 354	**6 937 833**	**0**	1.0000	0.9540



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:10:16 2022

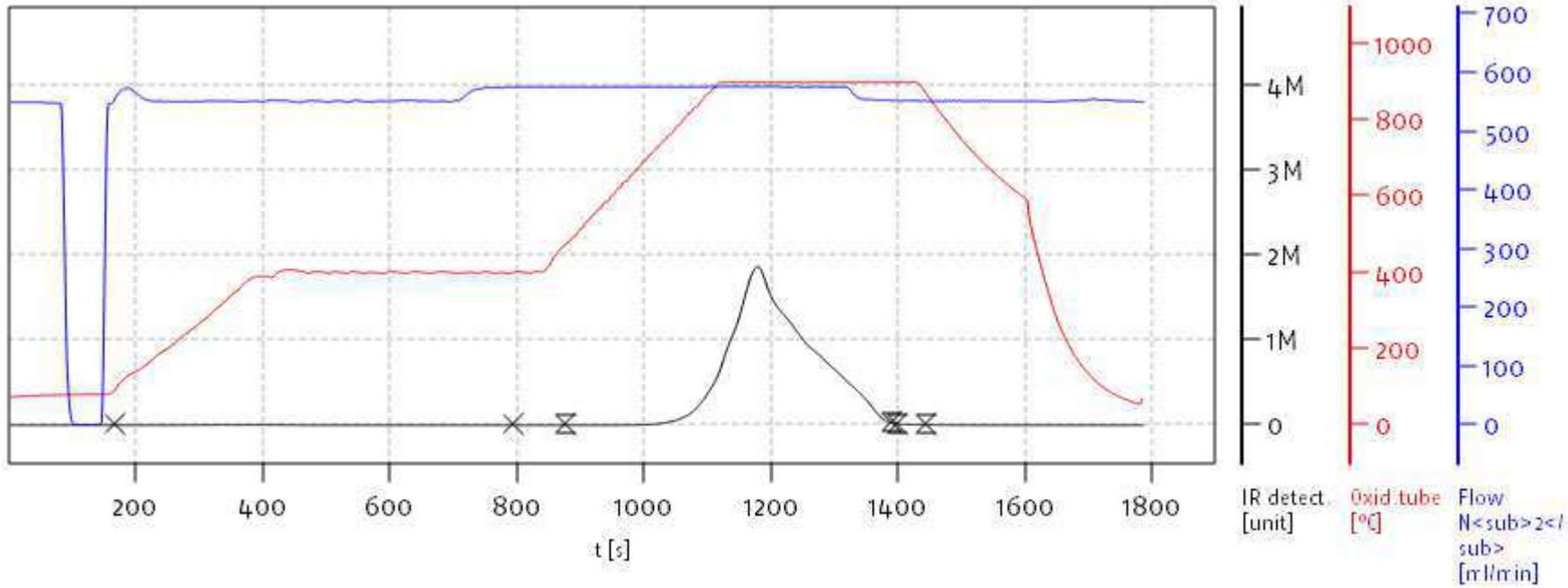
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
26	26	SEQ-CALO	200.00	0.1200	1.00	CARBON	4/27/2022 11:09 AM	0.019	7.915	7.934	bl,C3o	21 248	9 370 139	0	1.0000	1.0714



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:10:16 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

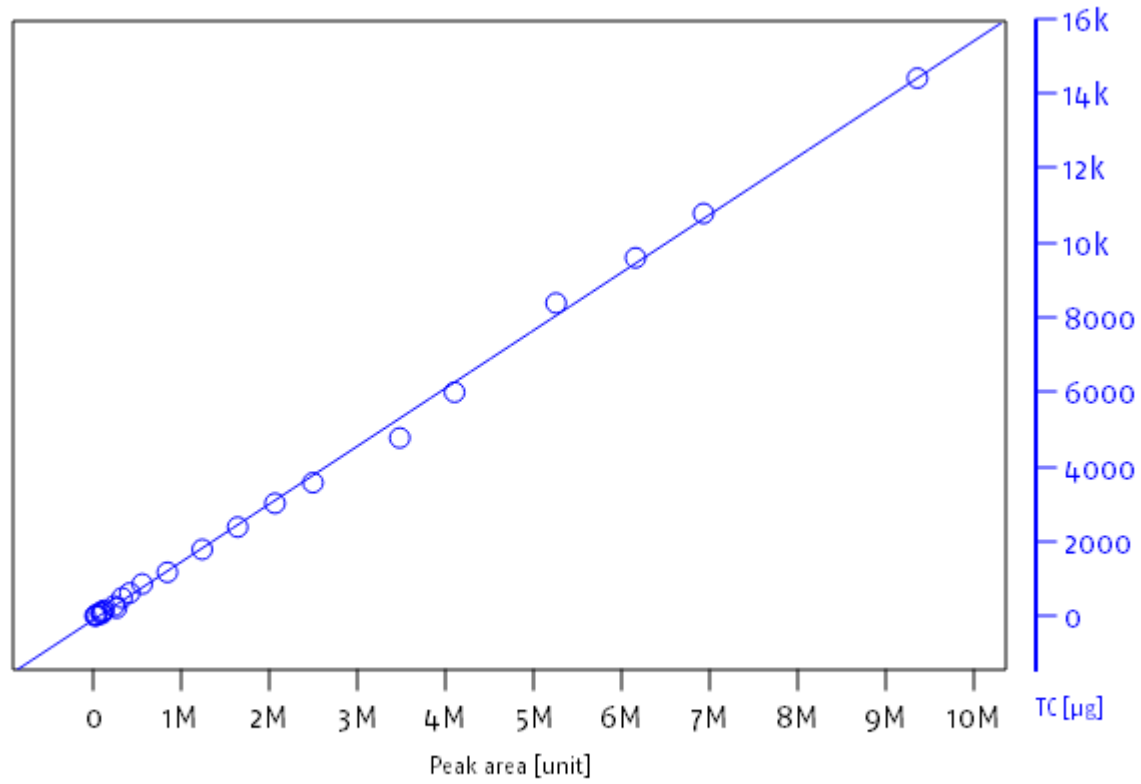
elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: --.--.-- (modified)

Calibration parameters TC, Whole range

a	-4.107546e-02
b	+1.548032e-06
c	+0.000000e+00
d	+0.000000e+00
e	+0.000000e+00
r	0.998372
r_old	0.998372
Proc.-SD	166.070255 µg

Calibration graph TC, Whole range



INSTRUMENT BLANKS
EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: TOC Cube
Calibration: FD00070
Sequence: SKD0371
Date Analyzed: 04/27/22 02:33

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SKD0371-ICB1	Total Organic Carbon	0.00	0.02	0.02	%	

INSTRUMENT BLANKS
EPA 9060A m

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: TOC Cube
Sequence: SLA0248

SDG: 23A0420
Project: AOC5 MR Phase 1
Calibration: FD00070
Date Analyzed: 01/23/23 17:43

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLA0248-ICB1	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0248-CCB1	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0248-CCB2	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0248-CCB3	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0248-CCB4	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0248-CCB5	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0248-CCB6	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0248-CCB7	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0248-CCB8	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0248-CCB9	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0248-CCBA	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0248-CCBB	Total Organic Carbon	0.00	0.02	0.02	%	

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: TOC Cube
Calibration: FD00070
Control Limt: +/- 10.00%
Sequence: SKD0371

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SKD0371-ICV1	Total Organic Carbon	44.446	43.7	98.3	%	EPA 9060A m
	Total Carbon	44.446	44.1	99.2	%	EPA 9060A m
	Total Inorganic Carbon	0.0000	0.40		%	EPA 9060A m
	% Soot	0.0000	0.004		%	EPA 9060A m

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: TOC Cube
Calibration: FD00070
Control Limt: +/- 10.00%
Sequence: SLA0248

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLA0248-ICV1	Total Organic Carbon	44.446	44.3	99.6	%	EPA 9060A m
SLA0248-CCV1	Total Organic Carbon	44.446	43.6	98.2	%	EPA 9060A m
SLA0248-CCV2	Total Organic Carbon	44.446	42.4	95.4	%	EPA 9060A m
SLA0248-CCV3	Total Organic Carbon	44.446	43.5	97.9	%	EPA 9060A m
SLA0248-CCV4	Total Organic Carbon	44.446	44.9	101	%	EPA 9060A m
SLA0248-CCV5	Total Organic Carbon	44.446	45.6	103	%	EPA 9060A m
SLA0248-CCV6	Total Organic Carbon	44.446	44.7	101	%	EPA 9060A m
SLA0248-CCV7	Total Organic Carbon	44.446	44.4	100	%	EPA 9060A m
SLA0248-CCV8	Total Organic Carbon	44.446	45.0	101	%	EPA 9060A m
SLA0248-CCV9	Total Organic Carbon	44.446	44.5	100	%	EPA 9060A m
SLA0248-CCVA	Total Organic Carbon	44.446	44.6	100	%	EPA 9060A m
SLA0248-CCVB	Total Organic Carbon	44.446	44.0	99.1	%	EPA 9060A m

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0527-SRM1
Batch: BLA0527
Initial/Final: 0.2818 g / 0.2818 g
Preparation: Plumb 1981
Analyzed: 01/24/2023 13:24
Standard ID: L000299
Expires: 01/11/2024
Standard Lot#: NA
Description: 1941B - Organics in Marine Sediment (Conv

ANALYTE	TRUE (% wet)	FOUND (% wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Total Organic Carbon	2.9900	2.94	0.02	0.02		98.3	80 - 120

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0536-SRM1
Batch: BLA0536
Initial/Final: 0.2575 g / 0.2575 g
Preparation: Plumb 1981
Analyzed: 01/25/2023 7:09
Standard ID: L000299
Expires: 01/11/2024
Standard Lot#: NA
Description: 1941B - Organics in Marine Sediment (Conv

ANALYTE	TRUE (% wet)	FOUND (% wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Total Organic Carbon	2.9900	2.97	0.02	0.02		99.3	80 - 120

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1045 23A0420-01	01/19/23 08:10	01/19/23 15:55	01/23/23 09:55	4	180	01/25/23 04:06			
LDW23-SC1052 23A0420-02	01/19/23 08:37	01/19/23 15:55	01/24/23 10:30	5	180	01/25/23 07:40			
LDW23-SC1057 23A0420-03	01/19/23 09:16	01/19/23 15:55	01/24/23 10:30	5	180	01/25/23 09:11			
LDW23-IT1051 23A0420-04	01/19/23 09:55	01/19/23 15:55	01/24/23 10:30	5	180	01/25/23 09:42			
LDW23-SC1125 23A0420-05	01/19/23 10:32	01/19/23 15:55	01/24/23 10:30	4	180	01/25/23 10:12			
LDW23-SC1132 23A0420-06	01/19/23 10:46	01/19/23 15:55	01/24/23 10:30	4	180	01/25/23 10:43			
LDW23-SC1003 23A0420-07	01/19/23 12:25	01/19/23 15:55	01/24/23 10:30	4	180	01/25/23 11:13			
LDW23-SC1004 23A0420-08	01/19/23 11:55	01/19/23 15:55	01/24/23 10:30	4	180	01/25/23 12:44			
LDW23-SC1082 23A0420-09	01/19/23 13:40	01/19/23 15:55	01/24/23 10:30	4	180	01/25/23 13:14			
Duplicate BLA0536-DUP1	01/19/23 08:37	01/19/23 15:55	01/24/23 10:30	5	180	01/25/23 08:10			
Matrix Spike BLA0536-MS1	01/19/23 08:37	01/19/23 15:55	01/24/23 10:30	5	180	01/25/23 08:41			

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: TOC Cube

Analyte	MDL	RL	Units
Total Organic Carbon	0.02	0.02	%

National Institute of Standards & Technology

Certificate of Analysis

Standard Reference Material® 1941b

Organics in Marine Sediment

This Standard Reference Material (SRM) is marine sediment collected at the mouth of the Baltimore (MD) Harbor. SRM 1941b is intended for use in evaluating analytical methods for the determination of selected polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and chlorinated pesticides in marine sediment and similar matrices. Information values are also provided for total organic carbon (TOC), total carbon, hydrogen, and nitrogen. All of the constituents for which certified, reference, and information values are provided in SRM 1941b were naturally present in the sediment before processing. A unit of SRM 1941b consists of a bottle containing 50 g of radiation-sterilized, freeze-dried sediment.

Certified Mass Fraction Values: Certified mass fraction values for PAHs, PCB congeners, and chlorinated pesticides are provided in Table 1 through Table 3. The certified values for the PAHs, PCB congeners, and chlorinated pesticides are based on the agreement of results obtained at NIST from two or more chemically independent analytical techniques along with results from an interlaboratory comparison study [1]. A NIST certified value is a value for which NIST has the highest confidence in its accuracy in that all known or suspected sources of bias have been investigated or taken into account [1].

Reference Mass Fraction Values: Reference mass fraction values for additional PAHs (some in combination), additional PCB congeners, and additional chlorinated pesticides are provided in Table 4 through Table 7. Reference values for alkylated PAH groups are provided in Table 8 and for selected hopanes and steranes in Table 9. A reference value for total organic carbon is provided in Table 10. Reference values are noncertified values that are the best estimate of the true value; however, the values do not meet the NIST criteria for certification and are provided with associated uncertainties that may reflect only measurement precision, may not include all sources of uncertainty, or may reflect a lack of sufficient statistical agreement among multiple analytical methods [1].

Information Mass Fraction Values: Information mass fraction values are provided in Table 11 for carbon, hydrogen, and nitrogen. An information value is considered to be a value that will be of use to the SRM user, but insufficient information is available to assess the uncertainty associated with the value [1]. Information values cannot be used to establish metrological traceability.

Expiration of Certification: The certification of **SRM 1941b** is valid, within the measurement uncertainty specified, until **01 October 2020**, provided the SRM is handled and stored in accordance with the instructions given in this certificate (see "Instructions for Handling, Storage, and Use"). This certification is nullified if the SRM is damaged, contaminated, or otherwise modified.

Maintenance of SRM Certification: NIST will monitor this SRM over the period of its certification. If substantive technical changes occur that affect the certification before the expiration of this certificate, NIST will notify the purchaser. Registration (see attached sheet or register online) will facilitate notification.

Coordination of the technical measurements leading to the certification of this material was under the leadership of M.M. Schantz and S.A. Wise of the NIST Chemical Sciences Division.

Analytical measurements for the certification of SRM 1941b were performed at NIST by J.R. Kucklick, B.J. Porter, D.L. Poster, M.M. Schantz, P. Schubert, S. Tutschku, and L.L. Yu of the NIST Chemical Sciences Division.

Carlos A. Gonzalez, Chief
Chemical Sciences Division

Gaithersburg, MD 20899
Certificate Issue Date: 16 January 2015

Robert L. Watters, Jr., Director
Office of Reference Materials

Measurements for TOC were provided by a commercial laboratory and T.L. Wade of the Geochemical and Environmental Research Group, Texas A&M University (College Station, TX). The carbon, hydrogen, and nitrogen data were provided by a commercial laboratory. Results for the PAHs, PCBs, and chlorinated pesticides from 38 laboratories (see Appendix A) that participated in an interlaboratory comparison exercise coordinated by NIST were used. Results for the alkylated PAH groups, hopanes, and steranes from 33 laboratories (see Appendix B) that participated in another interlaboratory comparison exercise coordinated by NIST were also used.

Collection and preparation of SRM 1941b were performed by M.P. Cronise and C.N. Fales of the NIST Office of Reference Materials and B.J. Porter and M.M. Schantz of the NIST Chemical Sciences Division. The sediment material was collected with the assistance of G.G. Lauenstein, J. Collier, and J. Lewis (National Oceanic and Atmospheric Administration, Silver Spring, MD).

Consultation on the statistical design of the experimental work and evaluation of the data were provided by S.D. Leigh and J.H. Yen of the NIST Statistical Engineering Division.

Support aspects involved in the issuance of this SRM were coordinated through the NIST Office of Reference Materials.

INSTRUCTIONS FOR HANDLING, STORAGE, AND USE

Handling: This material is naturally occurring marine sediment from an urban area and may contain constituents of unknown toxicities; therefore, caution and care should be exercised during its handling and use.

Storage: SRM 1941b must be stored in its original bottle at temperatures less than 30 °C and away from direct sunlight.

Use: Prior to removal of subsamples for analysis, the contents of the bottle should be mixed. The mass fractions of constituents in SRM 1941b are reported on a dry-mass basis. The SRM, as received, contains a mass fraction of approximately 2.4 % moisture (see "Conversion to Dry-Mass Basis"). The sediment sample should be dried to a constant mass before weighing for analysis; or a separate subsample of the sediment should be removed from the bottle at the time of analysis and dried to determine the mass fraction on a dry-mass basis. If the constituents of interest are volatile, then the moisture must be determined with a separate subsample.

PREPARATION AND ANALYSIS[1]

Sample Collection and Preparation: The sediment used to prepare this SRM was collected from the Chesapeake Bay at the mouth of the Baltimore (MD) Harbor near the Francis Scott Key Bridge (39°12.3'N and 76°31.4'W). This location is very near the site where SRM 1941 and SRM 1941a were collected. The sediment was collected using a Kynar-coated modified Van Veen-type grab sampler. A total of approximately 3300 kg of wet sediment was collected from the site. The sediment was freeze-dried, sieved at 150 μm (100 % passing), homogenized in a cone blender, radiation sterilized (^{60}Co), and then packaged in screw-capped amber glass bottles each containing approximately 50 g.

Conversion to Dry-Mass Basis: The results for the constituents in SRM 1941b are reported on a dry-mass basis; however, the material "as received" contains residual moisture. The amount of moisture in SRM 1941b was determined by measuring the mass loss after freeze-drying subsamples of 1.1 g to 1.3 g for four days at 1 Pa with a –10 °C shelf temperature and a –50 °C condenser temperature. The moisture content in SRM 1941b at the time of the certification analyses was 2.39 % ± 0.08 % (95 % confidence level). Analytical results for the organic constituents were determined on an as-received basis and then converted to a dry-mass basis by dividing by the conversion factor of 0.9761 (gram dry mass per gram as-received mass).

Polycyclic Aromatic Hydrocarbons: The general approach used for the value assignment of the PAHs in SRM 1941b was similar to that reported in detail elsewhere [2]. The approach consisted of combining results from analyses using various combinations of different extraction techniques and solvents, clean-up/isolation procedures, and chromatographic separation and detection techniques: Soxhlet extraction and pressurized-fluid extraction (PFE) using dichloromethane (DCM) or a hexane/acetone mixture, cleanup of the extracts using solid-phase extraction (SPE) or normal-phase liquid chromatography (LC), followed by analysis using the following techniques: (1) reversed-phase liquid chromatography with fluorescence detection (LC-FL) analysis of the total PAH fraction, (2) reversed-phase

[1] Certain commercial equipment, instruments or materials are identified in this certificate to adequately specify the experimental procedure. Such identification does not imply recommendation or endorsement by the National Institute of Standards

LC-FL analysis of isomeric PAH fractions isolated by normal-phase LC (i.e., multidimensional LC), (3) gas chromatography/mass spectrometry (GC/MS) analysis of the PAH fraction on three stationary phases of different selectivity, i.e., a 5 % (all column compositions are given as mole fractions in %) phenyl-substituted methylpolysiloxane phase, a 50 % phenyl-substituted methylpolysiloxane phase, and a relatively non-polar proprietary phase.

Three sets of GC/MS results, designated as GC/MS (I), GC/MS (II), and GC/MS (III), were obtained using three columns with different selectivities for the separation of PAHs. For GC/MS (I) analyses, duplicate subsamples of approximately 1 g from ten bottles of SRM 1941b were extracted using PFE with DCM. Copper powder was added to the extract to remove elemental sulfur. The concentrated extract was passed through an aminopropyl SPE cartridge and eluted with 2 % DCM in hexane (all solvent concentrations are given as volume fractions in %). The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5 MS, J&W Scientific, Folsom, CA). The GC/MS (II) analyses were performed using 5 g subsamples from six bottles of SRM 1941b. These samples were extracted using PFE with DCM. The high molecular mass compounds were removed from the extracts using size exclusion chromatography (SEC) with a preparative-scale divinylbenzene-polystyrene column (10 μm particle size with 10 nm diameter pores), and the sulfur was removed from the extracts by adding copper powder. The concentrated extract was passed through an aminopropyl SPE cartridge and eluted with 10 % DCM in hexane. The analysis was by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 50 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-17 MS, J&W Scientific). For the GC/MS (III), 9 g subsamples from six bottles of SRM 1941b were Soxhlet-extracted for 18 h with 250 mL of a mixture of 50 % hexane/50 % acetone. Copper powder was added to the extract to remove elemental sulfur, and the concentrated extract was passed through a silica SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a relatively non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific).

Two sets of LC-FL results, designated as LC-FL (total) and LC-FL (isomer), were used in the certification process. For the LC-FL (total), subsamples of approximately 1 g from six bottles of SRM 1941b were extracted using PFE with a mixture of 50 % hexane/50 % acetone. The extracts were concentrated and then processed through an aminopropylsilane SPE cartridge using 2 % DCM in hexane to obtain the total PAH fraction. For the LC-FL (isomer), a 5 g subsample from the six bottles was extracted using PFE with DCM and processed through an aminopropylsilane SPE cartridge using 10 % DCM in hexane; the PAH fraction was then fractionated further on a semi-preparative aminopropylsilane column (μBondapak NH_2, 9 mm i.d. × 30 cm, Waters Associates, Milford, MA) to isolate isomeric PAH fractions as described previously [3–6]. The total PAH fraction and the isomeric PAH fractions were analyzed using a 5 μm particle-size polymeric octadecylsilane (C_{18}) column (4.6 mm i.d. × 25 cm, Hypersil-PAH, Keystone Scientific, Inc., Bellefonte, PA) with wavelength-programmed fluorescence detection [4,5].

For the GC/MS and LC-FL measurements described above, selected perdeuterated PAHs were added to the sediment prior to solvent extraction for use as internal standards for quantification purposes.

In addition to the analyses performed at NIST, SRM 1941b was used in an interlaboratory comparison exercise in 1999 as part of the NIST Intercomparison Exercise Program for Organic Contaminants in the Marine Environment [7]. Results from 38 laboratories that participated in this exercise were used as the sixth data set in the determination of the certified values for PAHs in SRM 1941b. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest.

Homogeneity Assessment for PAHs: The homogeneity of SRM 1941b was assessed by analyzing duplicate samples of approximately 1 g from ten bottles selected by stratified random sampling. Samples were extracted, processed, and analyzed as described above for GC/MS (I). No statistically significant differences among bottles were observed for the PAHs at this sample size.

PAH Isomers of Molecular Mass 300 and 302: For the determination of the molecular mass 300 and 302 isomers, three subsamples of approximately 5 g each were extracted using PFE with DCM. The extracts were then concentrated with a solvent change to hexane and passed through an aminopropyl SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 50 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-17MS, J&W Scientific). Perdeuterated dibenzo[*a,i*]pyrene was added to the sediment prior to extraction for use as an internal standard [8].

PCBs and Chlorinated Pesticides: The general approach used for the determination of PCBs and chlorinated pesticides in SRM 1941b consisted of combining results from analyses using various combinations of different extraction techniques and solvents, cleanup/isolation procedures, and chromatographic separation and detection techniques. Techniques and solvents included Soxhlet extraction and PFE using DCM or a hexane/acetone mixture.

clean-up/isolation using SPE or LC, followed by analysis using GC/MS and gas chromatography with electron capture detection (GC-ECD) on two columns with different selectivity for the separation of PCBs and chlorinated pesticides. The analytical methods are described in detail elsewhere [2].

Six sets of results were obtained and designated as GC-ECD (I) A and B, GC/MS (I) A and B, GC/MS (II), and Interlaboratory Comparison Exercise. For the GC-ECD (I) analyses, approximately 10 g subsamples from six bottles of SRM 1941b were extracted using PFE with DCM. Copper powder was added to the extract to remove elemental sulfur, and SEC, as described above, was used to remove the high molecular mass compounds. The concentrated extract was then fractionated on a semi-preparative aminopropylsilane column to isolate two fractions containing: (1) the PCBs and lower-polarity pesticides and (2) the more polar pesticides. GC-ECD analyses of the two fractions were performed on two columns of different selectivities for PCB separations: 0.25 mm × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5, J&W Scientific), and a 0.25 mm × 60 m fused silica capillary column with a non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific). The results from the 5 % phenyl phase are designated as GC-ECD (IA) and the results from the proprietary phase are designated as GC-ECD (IB). For the GC-ECD analyses, two PCB congeners that are not significantly present in the sediment extract (PCB 103 and PCB 198 [9,10]) and endosulfan I-d_4, 4,4'-DDE-d_8, 4,4'-DD-d_8, and 4,4'-DDT-d_8 were added to the sediment prior to extraction for use as internal standards for quantification purposes.

Two sets of results were obtained by GC/MS. For GC/MS (I), approximately 9 g subsamples from six bottles were Soxhlet- extracted with a mixture of 50 % hexane/50 % acetone for approximately 18 h. Copper powder was added to the extract to remove elemental sulfur, and the concentrated extract was passed through a silica SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS with two ionization modes, electron impact (EI) and negative ion chemical ionization (NICI). The GC/MS EI method, GC/MS (IA), used a 0.25 mm i.d. × 60 m fused silica capillary column with a relatively non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific). The GC/MS NICI method, GC/MS (IB), used a 0.25 mm i.d. × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5MS, J&W Scientific). The GC/MS (II) results were obtained in the same manner as the GC/MS (IA) analyses except that three subsamples were Soxhlet-extracted with DCM for approximately 18 h. For the GC/MS analyses, selected carbon-13 labeled PCB congeners and chlorinated pesticides were added to the sediment prior to extraction for use as internal standards for quantification purposes.

In addition to the analyses performed at NIST, SRM 1941b was used in an interlaboratory comparison exercise in 1999 as part of the NIST Intercomparison Exercise Program for Organic Contaminants in the Marine Environment [7]. Results from 38 laboratories that participated in this exercise were used as the sixth data set in the determination of the certified values for PCB congeners and chlorinated pesticides in SRM 1941b. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest.

The reference value for PCB 77 was determined from a separate fraction. The samples were extracted and processed as for GC-ECD (I) above. The first (PCB and lower-polarity pesticide) fraction from the semi-preparative aminopropylsilane column was further fractionated using a Cosmosil PYE (pyrenylethyl group bonded) column (5 μm particle size, 4.6 mm i.d. × 25 cm ; Phenomenex, Torrance, CA) [11]. Three fractions were collected: the first fraction contained the pesticides and multi-*ortho* PCBs, the second fraction contained the polychlorinated naphthalenes, non-*ortho* PCB congeners, and some mono-*ortho* PCB congeners, and the third fraction removed the residual planar compounds from the column. The second fraction was analyzed by GC/MS NICI using the same column as GC/MS (IB) above. Carbon-13 labeled PCB 77 was used as an internal standard for quantification purposes.

Alkylated PAH Groups, Hopanes, and Steranes: SRM 1941b was used in an interlaboratory comparison exercise in 2011 [12]. Results from 33 laboratories that participated in this exercise were used in the determination of the reference values for alkylated PAH groups, hopanes, and steranes in SRM 1941b. Note that not all laboratories returned data for each analyte. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest. For the alkylated PAHs, the majority of the laboratories (>90 %) used the parent PAH for determination of the response factor for the corresponding alkylated group.

Total Organic Carbon (TOC): Two laboratories provided results for TOC using similar procedures. Briefly, subsamples of approximately 200 mg were reacted with 6 mol/L hydrochloric acid and rinsed with deionized water prior to combustion in a gas fusion furnace. The carbon monoxide and carbon dioxide produced were measured and compared to a blank for calculation of the percent TOC. Each laboratory analyzed subsamples from three bottles of SRM 1941b. One of the laboratories also analyzed three subsamples from three bottles of SRM 1941b for carbon, hydrogen, and nitrogen.

Table 1. Certified Mass Fraction Values for PAHs in SRM 1941b

PAHs	Mass Fractions[a] (µg/kg)		
Naphthalene[b,c,d,e,f,g]	848	±	95[h]
Fluorene[b,c,d,e,f,g]	85	±	15[h]
Phenanthrene[b,c,d,e,f,g]	406	±	44[h]
Anthracene[b,c,d,e,f,g]	184	±	18[h]
3-Methylphenanthrene[b,c,d]	105	±	13[h]
2-Methylphenathrene[b,c,d]	128	±	14[h]
1-Methylphenanthrene[b,c,d,g]	73.2	±	5.9[h]
Fluoranthene[b,c,d,e,f,g]	651	±	50[h]
Pyrene[b,c,d,e,f,g]	581	±	39[h]
Benz[*a*]anthracene[b,c,d,e,f,g]	335	±	25[h]
Chrysene[d,f]	291	±	31[h]
Triphenylene[d,f]	108	±	5[i]
Benzo[*b*]fluoranthene[c,e]	453	±	21[h]
Benzo[*k*]fluoranthene[b,c,d,e]	225	±	18[h]
Benzo[*e*]pyrene[b,c,d,g]	325	±	25[h]
Benzo[*a*]pyrene[b,c,d,f,g]	358	±	17[h]
Perylene[b,c,d,f,g]	397	±	45[h]
Benzo[*ghi*]perylene[b,c,d,f,g]	307	±	45[h]
Indeno[1,2,3-*cd*]pyrene[b,c,d,f,g]	341	±	57[h]
Dibenz[*a,j*]anthracene[b,c,d,f]	48.9	±	4.6[h]
Dibenz[*a,c*]anthracene[c,f]	36.7	±	5.2[h]
Dibenz[*a,h*]anthracene[c,f]	53	±	10[h]
Benzo[*b*]chrysene[b,c,d,f]	53	±	12[h]
Picene[b,c,d]	46.6	±	4.7[h]

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] GC/MS (I) on 5 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.
[c] GC/MS (II) on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.
[d] GC/MS (III) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.
[e] LC-FL (total) of total PAH fraction after PFE with DCM.
[f] LC-FL (isomer) of isomeric PAH fractions after PFE with DCM.
[g] 1999 Interlaboratory Comparison Study [7] with 21 to 29 laboratories submitting data for each PAH.
[h] Certified values are weighted means of the results from two to six analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[i] The certified value is an unweighted mean of the results from two analytical methods. The uncertainty listed with the value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the value is metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 2. Certified Mass Fraction Values for PCB Congeners[a] in SRM 1941b

PCB Congeners			Mass Fractions[b] (µg/kg)		
PCB	8	(2,4'-Dichlorobiphenyl)[c,d,e,f,g]	1.65	±	0.19[h]
PCB	18	(2,2',5-Trichlorobiphenyl)[c,d,e,f,g]	2.39	±	0.29[h]
PCB	28	(2,4,4'-Trichlorobiphenyl)[c,d,e,f,g]	4.52	±	0.57[h]
PCB	31	(2,4',5-Trichlorobiphenyl)[c,e,f]	3.18	±	0.41[h]
PCB	44	(2,2'3,5'-Tetrachlorobiphenyl)[c,d,e,f,g]	3.85	±	0.20[i]
PCB	49	(2,2'4,5'-Tetrachlorobiphenyl)[c,d,e,f]	4.34	±	0.28[i]
PCB	52	(2,2',5,5'-Tetrachlorobiphenyl)[c,d,e,f,g]	5.24	±	0.28[i]
PCB	66	(2,3',4,4'-Tetrachlorobiphenyl)[c,e,f,g,j]	4.96	±	0.53[i]
PCB	87	(2,2',3,4,5'-Pentachlorobiphenyl)[c,d,f,j]	1.14	±	0.16[h]
PCB	95	(2,2',3,5',6-Pentachlorobiphenyl)[c,e,f,g]	3.93	±	0.62[i]
PCB	99	(2,2',4,4',5-Pentachlorobiphenyl)[c,d,e,f,g]	2.90	±	0.36[i]
PCB	101	(2,2',4,5,5'-Pentachlorobiphenyl)[c,e,f,g,j]	5.11	±	0.34[i]
PCB	105	(2,3,3',4,4'-Pentachlorobiphenyl)[c,d,e,f,g,j]	1.43	±	0.10[i]
PCB	110	(2,3,3',4',6-Pentachlorobiphenyl)[c,e,f,j]	4.62	±	0.36[i]
PCB	118	(2,3',4,4',5-Pentachlorobiphenyl)[c,d,e,f,g,j]	4.23	±	0.19[i]
PCB	128	(2,2',3,3',4,4'-Hexachlorobiphenyl)[c,d,e,f,g,j]	0.696	±	0.044[i]
PCB	138	(2,2',3,4,4',5'-Hexachlorobiphenyl)[c,e,f,j]	3.60	±	0.28[i]
PCB	149	(2,2',3,4',5',6-Hexachlorobiphenyl)[c,d,e,j]	4.35	±	0.26[h]
PCB	153	(2,2',4,4',5,5'-Hexachlorobiphenyl)[c,d,e,f,g,j]	5.47	±	0.32[i]
PCB	156	(2,3,3',4,4',5-Hexachlorobiphenyl)[c,d,e,f,j]	0.507	±	0.090[h]
PCB	170	(2,2',3,3',4,4',5-Heptachlorobiphenyl)[c,d,e,f,g,j]	1.35	±	0.09[i]
PCB	180	(2,2',3,4,4',5,5'-Heptachlorobiphenyl)[c,d,e,f,g,j]	3.24	±	0.51[i]
PCB	183	(2,2',3,4,4',5',6-Heptachlorobiphenyl)[c,d,e,j]	0.979	±	0.087[h]
PCB	187	(2,2',3,4',5,5',6-Heptachlorobiphenyl)[c,d,e,f,g,j]	2.17	±	0.22[i]
PCB	194	(2,2',3,3',4,4',5,5'-Octachlorobiphenyl)[c,d,e,j]	1.04	±	0.06[h]
PCB	195	(2,2',3,3',4,4',5,6-Octachlorbiphenyl)[c,e,g,j]	0.645	±	0.060[i]
PCB	201	(2,2',3,3',4,5',6,6'-Octachlorobiphenyl)[c,e,j]	0.777	±	0.034[h]
PCB	206	(2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl)[c,e,f,g,j]	2.42	±	0.19[i]
PCB	209	Decachlorobiphenyl[c,d,e,f,g,j]	4.86	±	0.45[i]

[a] PCB congeners are numbered according to the scheme proposed by Ballschmiter and Zell [9] and later revised by Schulte and Malisch [10] to conform to IUPAC rules, except PCB 201. Under the Ballschmiter and Zell numbering system, the IUPAC PCB 201 is listed as PCB 200.

[b] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

[c] GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

[d] GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.

[e] GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).

[f] GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.

[g] 1999 Interlaboratory Comparison Study [7] with 13 to 31 laboratories submitting data for each PCB congener.

[h] Certified values are unweighted means of the results from three to five analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

[i] Certified values are weighted means of the results from three to six analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

[j] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

Table 3. Certified Mass Fraction Values for Chlorinated Pesticides in SRM 1941b

Chlorinated Pesticides	Mass Fractions[a] (µg/kg)
Hexachlorobenzene[b,c,d,e]	5.83 ± 0.38[f]
cis-Chlordane[b,c,d,e,g]	0.85 ± 0.11[h]
trans-Chlordane[b,c,e]	0.566 ± 0.093[f]
cis-Nonachlor[b,e,g]	0.378 ± 0.053[h]
trans-Nonachlor[b,c,d,e,g]	0.438 ± 0.073[f]
4,4'-DDE[b,d,e,g]	3.22 ± 0.28[h]
4,4'-DDD[b,d,e,g]	4.66 ± 0.46[h]

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.
[c] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).
[d] GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.
[e] 1999 Interlaboratory Comparison Study [7] with 13 to 31 laboratories submitting data for each pesticide.
[f] Certified values are unweighted means of the results from three to five analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[g] GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.
[h] Certified values are weighted means of the results from three to five analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the chlorinated pesticides listed and the values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 4. Reference Mass Fraction Values for PAHs in SRM 1941b

PAHs	Mass Fractions[a] (µg/kg)		
1-Methylnaphthalene[b,c,d,e]	127	±	14[f]
2-Methylnaphthalene[b,c,d,e]	276	±	53[f]
2,6-Dimethylnaphthalene[b,c,d,e]	75.9	±	4.5[f]
2,3,5-Trimethylnaphthalene[b,c,d,e]	25.5	±	5.1[f]
Biphenyl[b,c,d,e]	74.0	±	8.0[f]
Acenaphthylene[b,c,d,e]	53.3	±	6.4[f]
Acenaphthene[b,c,d,e]	38.4	±	5.2[f]
9-Methylphenanthrene[c]	63.5	±	2.5[g]
4-Methylphenanthrene and 9-Methylphenanthrene[b,d]	80.1	±	4.8[f]
2-Methylanthracene[c,d]	36	±	15[f]
8-Methylfluoranthene[b]	49.5	±	2.7[g]
7-Methylfluoranthene[b]	45.4	±	1.5[g]
1-Methylfluoranthene[b]	42.4	±	2.1[g]
3-Methylfluoranthene[b]	28.8	±	1.3[g]
2-Methylpyrene[b]	78.7	±	4.0[g]
4-Methylpyrene[b]	66.4	±	2.6[g]
1-Methylpyrene[b]	52.5	±	2.3[g]
Acephenanthrene[d]	30.5	±	1.9[g]
Benzo[*c*]phenanthrene[b,c,d]	58	±	15[f]
Benzo[*a*]fluoranthene[b,c,d]	73	±	18[f]
Benzo[*j*]fluoranthene[c]	217	±	5[g]
Indeno[1,2,3-*cd*]fluoranthene[d]	9.63	±	0.34[g]
Pentaphene[d]	25.3	±	1.0[g]

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

[b] GC/MS (I) on 5 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.

[c] GC/MS (II) on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.

[d] GC/MS (III) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

[e] 1999 Interlaboratory Comparison Study [7] with 14 to 26 laboratories submitting data for each PAH.

[f] Reference values are weighted means of the results from two to four analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of PAHs listed as determined by the methods indicted. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

[g] Reference values are the means of results obtained by NIST using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k, is determined from the Student's t-distribution for the associated degrees of freedom (19 for footnote b and 5 for footnotes c and d) and 95 % confidence level for each analyte. The measurand is the total mass fraction of the PAHs listed as determined by the method indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 5. Reference Mass Fraction Values for PAHs of Molecular Mass 300 and 302 in SRM 1941b

PAHs of Molecular Mass 300 and 302	Mass Fractions[a,b,c] (µg/kg)		
Coronene	72.6	±	4.7
Dibenzo[*b,e*]fluoranthene	10.3	±	0.3
Naphtho[1,2-*b*]fluoranthene	91.0	±	3.1
Naphtho[1,2-*k*]fluoranthene and Naphtho[2,3-*j*]fluoranthene	79.8	±	2.5
Naphtho[2,3-*b*]fluoranthene	23.5	±	0.3
Dibenzo[*b,k*]fluoranthene	95.6	±	3.1
Dibenzo[*a,k*]fluoranthene	26.6	±	0.4
Dibenzo[*j,l*]fluoranthene	63.8	±	1.8
Dibenzo[*a,l*]pyrene	11.1	±	1.0
Naphtho[2,3-*k*]fluoranthene	10.7	±	0.6
Naphtho[1,2-*a*]pyrene	16.7	±	1.4
Naphtho[2,3-*e*]pyrene	33.2	±	2.3
Dibenzo[*a,e*]pyrene	76.1	±	3.6
Naphtho[2,1-*a*]pyrene	59.2	±	1.8
Dibenzo[*e,i*]pyrene	35.0	±	2.4
Naphtho[2,3-*a*]pyrene	16.5	±	0.6
Benzo[*b*]perylene	38.2	±	1.2
Dibenzo[*a,i*]pyrene	25.5	±	1.0
Dibenzo[*a,h*]pyrene	6.94	±	0.29

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

[b] Reference values are the means of results obtained by NIST using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k, is determined from the Student's t-distribution for two degrees of freedom and 95 % confidence level for each analyte. The measurand is the total mass fraction of the constituent listed as determined by the method indicted. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

[c] GC/MS on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM [8].

Table 6. Reference Mass Fraction Values for PCB Congeners[a] in SRM 1941b

PCB Congeners			Mass Fractions[b,c] (µg/kg)		
PCB	45	(2,2',3,6-Tetrachlorobiphenyl)[d,e]	0.73	±	0.12
PCB	56	(2,3,3',4'-Tetrachlorobiphenyl)[d,f,g]	1.21	±	0.11
PCB	63	(2,3,4',5-Tetrachlorobiphenyl)[e,f,g]	0.213	±	0.040
PCB	70	(2,3',4',5-Tetrachlorobiphenyl)[e,f,g]	4.99	±	0.29
PCB	74	(2,4,4',5-Tetrachlorobiphenyl)[e,f,g]	2.04	±	0.15
PCB	77	(3,3',4,4'-Tetrachlorobiphenyl)[h]	0.31	±	0.03
PCB	107	(2,3,3',4',5-Pentachlorobiphenyl)[d,e,f,g]	0.628	±	0.028
PCB	132	(2,2',3,3',4,6'-Hexachlorobiphenyl)[d,f,g]	1.28	±	0.27
PCB	146	(2,2',3,4',5,5'-Hexachlorobiphenyl)[e,f,g]	1.22	±	0.12
PCB	158	(2,3,3',4,4',6-Hexachlorobiphenyl)[d,e,f,g]	0.65	±	0.15
PCB	163	(2,3,3',4',5,6-Hexachlorobiphenyl)[e,f,g]	1.28	±	0.06
PCB	174	(2,2',3,3',4,5,6'-Heptachlorobiphenyl)[d,e,f,g]	1.51	±	0.39
PCB	193	(2,3,3',4',5,5',6-Heptachlorobiphenyl)[d,e,f,g]	0.292	±	0.075

[a] PCB congeners are numbered according to the scheme proposed by Ballschmiter and Zell [9] and later revised by Schulte and Malisch [10] to conform with IUPAC rules, except PCB 107. Under the Ballschmiter and Zell numbering system, the IUPAC PCB 107 is listed as PCB 108.

[b] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

[c] For these PCB congeners except PCB 77, the reference values are unweighted means of the results from two to four analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled within-method variance following the ISO/JCGM Guide [14,15]. For PCB 77, the reference value is the mean of results obtained by NIST using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k, is determined from the Student's t-distribution corresponding to two degrees of freedom and 95 % confidence level for PCB 77. The measurand is the total mass fraction of the PCB Congeners listed as determined by the method or methods indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as microgram per kilogram on a dry-mass basis.

[d] GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.

[e] GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).

[f] GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

[g] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

[h] GC/MS NICI on a 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC-ECD (I) fractionated using a PYE column.

Table 7. Reference Mass Fraction Values for Selected Chlorinated Pesticides in SRM 1941b

Chlorinated Pesticides	Mass Fractions[a,b] (µg/kg)		
2,4'-DDE[c,d]	0.38	±	0.12
4,4'-DDT[e,f]	1.12	±	0.42

[a] Mass Fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] The reference values are unweighted means of the results from two analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the chlorinated pesticides listed as determined by the methods indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[c] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).
[d] GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).
[e] GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.
[f] 1999 Interlaboratory Comparison Study [7] with 10 laboratories submitting data for 4,4'-DDT.

Table 8. Reference Mass Fraction Values for Alkylated PAH Groups in SRM 1941b

Alkylated PAH Group	Mass Fraction[a,b] (µg/kg)		
C2-decalins	18	±	5
C4-decalins	41	±	4
C2-naphthalenes	187	±	53
C3-naphthalenes	158	±	42
C1-benzothiophenes	25	±	14
C2-benzothiophenes	20	±	11
C3-benzothiophenes	22	±	13
C4-benzothiophenes	18	±	5
C1-fluorenes	57	±	18
C2-fluorenes	122	±	43
C3-fluorenes	128	±	31
C1-phenanthrenes/anthracenes	313	±	99
C2-phenanthrenes/anthracenes	247	±	62
C3-phenanthrenes/anthracenes	165	±	46
C4-phenanthrenes/anthracenes	87	±	36
C1-dibenzothiophenes	54	±	13
C2-dibenzothiophenes	91	±	18
C3-dibenzothiophenes	84	±	15
C4-dibenzothiophenes	57	±	13
C1-fluoranthenes/pyrenes	252	±	48
C2-fluoranthenes/pyrenes	205	±	38
C3-fluoranthenes/pyrenes	102	±	22
C4-fluoranthenes/pyrenes	121	±	59
C1-benzanthraces/chrysenes/triphenylenes	208	±	43
C2-benzanthraces/chrysenes/triphenylenes	120	±	24
C3-benzanthraces/chrysenes/triphenylenes	73	±	31
C4-benzanthraces/chrysenes/triphenylenes	41	±	11

[a] The reference mass fraction value reported on a dry-mass basis is the median of results using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the median, and the coverage factor, $k = 2$. The measurand is the total mass fraction of the alkylated PAH groups listed as determined by the interlaboratory study methods. The values listed are metrologically traceable to the SI unit of mass fraction, expressed as micrograms per kilogram on a dry-mass basis.
[b] Data from the interlaboratory study [12].

Table 9. Reference Mass Fraction Values for Hopanes and Steranes in SRM 1941b

Hopane or Sterane	Mass Fraction[a,b] (µg/kg)
17α(H)-22,29,30-Trisnorhopane	54 ± 18
17α(H)-21β(H)-30-Norhopane	137 ± 21
17α(H)-21β(H)-30-Hopane	215 ± 44
17α(H)-21β(H)-22R-Homohopane	44 ± 10
17α(H)-21β(H)-22S-Homohopane	48 ± 13
5α(H)-14α(H),17α(H)-Cholestane 20R	41 ± 11
5α(H)-14β(H),17β(H)-Cholestane 20R	27 ± 6
5α(H)-14β(H),17β(H)-24-Methylcholestane 20R	21 ± 8
5α(H)-14α(H),17α(H)-24-Ethylcholestane 20R	19 ± 5
5α(H)-14β(H),17β(H)-24-Ethylcholestane 20R	41 ± 9

[a] The reference mass fraction value reported on a dry-mass basis is the median of results using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the median, and the coverage factor, $k = 2$. The measurand is the total mass fraction of the constituent listed as determined by the methods used during the interlaboratory study. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[b] Data from the interlaboratory study [12].

Table 10. Reference Mass Fraction Value for Total Organic Carbon in SRM 1941b

Total Organic Carbon (TOC)	2.99 % ± 0.24 %[a,b]

[a] Mass fraction is reported on a dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] The reference value for total organic carbon is a weighted mean value from routine measurements made by two laboratories [21]. The uncertainty listed is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance. The reporting follows the ISO/JCGM Guides [2]. The measurand is the total mass fraction of TOC listed as determined by the methods indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as a percent on a dry-mass basis.

Table 11. Information Mass Fraction Values for Carbon, Hydrogen, and Nitrogen in SRM 1941b

Elements	Mass Fractions[a] (%)
Carbon	3.3
Hydrogen	1.2
Nitrogen	<0.5

[a] Mass fraction is reported on a dry-mass basis; material as received contains approximately 2.4 % moisture.

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Certificate Revision History: 16 January 2015 (Corrected IUPAC name for PCB-56 and PCB-107; editorial changes); 10 June 2014 (Units corrected from mg/kg to µg/kg in Tables 8 and 9; editorial changes); 10 April 2012 (Reference value added for alkylated PAH groups, hopanes, and steranes; extension of certification period; editorial changes); 16 August 2004 (Reference values for the butyl tins removed; editorial changes); 15 July 2002 (Original certificate date).

Users of this SRM should ensure that the Certificate of Analysis in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail srminfo@nist.gov; or via the Internet at http://www.nist.gov/srm.

APPENDIX A

The laboratories listed below performed measurements that contributed to the certification of PAHs, PCBs, and chlorinated pesticides in SRM 1941b Organics in Marine Sediment.

Arthur D. Little, Inc; Cambridge, MA
Axys Analytical Services; Sidney, BC, Canada
B & B Laboratories; College Station, TX
Battelle Ocean Sciences; Duxbury, MA
Bedford Institute of Oceanography; Dartmouth, NS, Canada
California Department of Fish and Game; Rancho Cordova, CA
Central Contra Costa Sanitary District; Martinez, CA
Chesapeake Biological Laboratory; Solomons, MD
Centro de Investigacionies Energeticas Medioambientales y Tecnologicas; Madrid, Spain
City of Los Angeles Environmental Monitoring Division; Playa del Rey, CA
City of San Jose Environmental Services Department; San Jose, CA
Columbia Analytical Services; Kelso, WA
East Bay Municipal Utility District; Oakland, CA
Florida Department of Environmental Protection; Tallahassee, FL
Manchester Environmental Laboratory; Port Orchard, WA
Murray State University; Murray, KY
Massachusetts Water Resources Authority Central Lab; Winthrop, MA
National Research Council of Canada; Ottawa, Ontario, Canada
National Oceanic and Atmospheric Association (NOAA), National Marine Fisheries Service (NMFS), Auke Bay Laboratory; Juneau, AK
NOAA, National Ocean Service/Center for Coastal Environmental Health and Biomolecular Research; Charleston, SC
NOAA, NMFS, Sandy Hook Marine Laboratory; Highlands, NJ
NOAA, NMFS, Northwest Fisheries Science Center; Seattle, WA
Orange County Sanitation District; Fountain Valley, CA
Philip Analytical Services; Burlington, Ontario, Canada
Serv de Hidrografia Naval; Buenos Aires, Argentina
Skidaway Institute of Technology; Savannah, GA
Southwest Laboratory of Oklahoma; Broken Arrow, OK
Severn Trent Knoxville Laboratory; Knoxville, TN
Texas A&M University, Geochemical and Environmental Research Group; College Station, TX
Texas Parks and Wildlife Department; San Marcos, TX
University of California at Los Angeles, Institute of Geophysics and Planetary Physics; Los Angeles, CA
University of Connecticut, Environmental Research Institute; Storrs, CT
University of Rhode Island, Graduate School of Oceanography; Narragansett, RI
US Department of Agriculture, Environmental Chemistry Laboratory; Beltsville, MD
US Environmental Protection Agency, Atlantic Ecology Division; Narragansett, RI
US Geological Survey, National Water Quality Laboratory; Denver, CO
Woods Hole Group Environmental Lab; Raynham, MA
Wright State University; Dayton, OH

APPENDIX B

The laboratories listed below performed measurements that contributed to the certification of alkylated PAH groups, hopanes, and steranes in SRM 1941b Organics in Marine Sediment.

Alpha Analytical, Inc.; Mansfield, MA
Analytical Resources, Inc.; Tukwila, WA
Axys Analytical Services; Sydney, BC, Canada
Battelle Analytical & Environmental Chemistry Laboratory; Duxbury, MA
Center for Laboratory Sciences; Pasco, WA
Columbia Analytical Services; Jacksonville, FL
Columbia Analytical Services; Rochester, NY
Columbia Analytical Services, Kelso, WA
Florida Department of Environmental Protection; Tallahassee, FL
Florida International University; North Miami, FL
Michigan Department of Natural Resources and Environment; Lansing, MI
Mississippi State Chemical Laboratory; Mississippi State, MS
NIST; Charleston, SC
NIST; Gaithersburg, MD
NOAA/NCCOS/NOS; Charleston, SC
NOAA/NMFS/Alaska Fisheries Science Center; Juneau, AK
NY State Department of Health; Albany, NY
Pace Analytical Services, Inc. Minneapolis; Minneapolis, MN
RJ Lee Group, Inc; Monroeville, PA
TDI/B&B Laboratories, Inc.; College Station, TX
TestAmerica Laboratories; Mobile, AL
TestAmerica Laboratories; West Sacramento, CA
TestAmerica Laboratories; University Park, IL
TestAmerica Laboratories; Schriever, LA
TestAmerica Laboratories; Edison, NJ
TestAmerica Laboratories; Knoxville, TN
TestAmerica Laboratories; Pittsburgh, PA
TestAmerica Laboratories; South Burlington, VT
TestAmerica Laboratories; Tacoma, WA
US Army Engineer Research and Development Center; Vicksburg, MS
USGS Columbia Environmental Research Center; Columbia, MO
University of Iowa, State Hygienic Laboratory; Iowa City, IO
Washington State Public Health Laboratories; Shoreline, WA

NIST

Date of Issue:
31 March 2014

SAFETY DATA SHEET

1. Substance and Source Identification

Product Identifier

SRM Number: 1941b
SRM Name: Organics in Marine Sediment
Other Means of Identification: Not applicable.

Recommended Use of This Material and Restrictions of Use

This Standard Reference Material (SRM) is marine sediment collected at the mouth of the Baltimore (MD) Harbor. SRM 1941b is intended for use in evaluating analytical methods for the determination of selected polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and chlorinated pesticides in marine sediment and similar matrices. All of the constituents for which certified, reference, and information values are provided in SRM 1941b were naturally present in the sediment before processing. A unit of SRM 1941b consists of a bottle containing 50 g of radiation-sterilized, freeze-dried sediment.

Company Information

National Institute of Standards and Technology
Standard Reference Materials Program
100 Bureau Drive, Stop 2300
Gaithersburg, Maryland 20899-2300

Telephone: 301-975-2200
FAX: 301-948-3730
E-mail: SRMMSDS@nist.gov
Website: http://www.nist.gov/srm

Emergency Telephone ChemTrec:
1-800-424-9300 (North America)
+1-703-527-3887 (International)

2. Hazards Identification

Classification

Physical Hazard: Not classified.
Health Hazard: Not classified.

Label Elements
Symbol
No Symbol/Pictogram

Signal Word
Not applicable.

Hazard Statement(s): Not applicable.

Precautionary Statement(s): Not applicable.

Hazards Not Otherwise Classified: Not applicable.

Ingredients(s) with Unknown Acute Toxicity: Not applicable.

3. Composition and Information on Hazardous Ingredients

Substance: Marine sediment

Other Designations: Sediment.

This material is naturally occurring marine sediment from an urban area. The material contains trace amounts of polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and should be handled with care. Components are listed in compliance with OSHA's 29 CFR 1910.1200; for the actual values see the Certificate of Analysis.

Hazardous Component(s)	CAS Number	EC Number (EINECS)	Nominal Mass Concentration (%)
Marine Sediment	Not available	Not available	100

4. First Aid Measures

Description of First Aid Measures:

Inhalation: If adverse effects occur, remove to uncontaminated area. If not breathing, give artificial respiration or oxygen by qualified personnel. Seek immediate medical attention.

Skin Contact: Wash skin with soap and water.

Eye Contact: Flush eyes with water for at least 15 minutes. If necessary, seek medical attention.

Ingestion: If adverse effects occur after ingestion, seek medical treatment.

Most Important Symptoms/Effects, Acute and Delayed: May cause irritation.

Indication of any immediate medical attention and special treatment needed, if necessary: If any of the above symptoms are present, seek medical attention if needed.

5. Fire Fighting Measures

Fire and Explosion Hazards: Negligible fire hazard. Avoid generating dust. See Section 9, "Physical and Chemical Properties" for flammability properties.

Extinguishing Media:
Suitable: Use extinguishing media appropriate for surrounding fire.
Unsuitable: None listed.

Specific Hazards Arising from the Chemical: None listed.

Special Protective Equipment and Precautions for Fire-Fighters: Avoid inhalation of material or combustion byproducts. Wear full protective clothing and NIOSH approved self-contained breathing apparatus (SCBA).

NFPA Ratings (0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe)

Health = 1 Fire = 0 Reactivity = 0

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Any accumulated material on surfaces should be removed and properly disposed of. Use suitable protective equipment; see Section 8, "Exposure Controls and Personal Protection".

Methods and Materials for Containment and Clean up: Collect spilled material in appropriate container for disposal. Keep out of water supplies and sewers. Keep unnecessary people away, isolate hazard area and deny entry.

7. Handling and Storage

Safe Handling Precautions: Minimize dust generation and accumulation on surfaces. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. See Section 8, "Exposure Controls and Personal Protection".

Storage: Store and handling in accordance with all current regulations and standards.

8. Exposure Controls and Personal Protection

Exposure Limits: No occupational exposure limits have been established for marine sediment. This material is a particulate matter and adequate inhalation/respiratory protection should be used to minimize exposure. The exposure limits for Particulates Not Otherwise Regulated (PNOR) are applicable.

OSHA (PEL): 15 mg/m^3 (TWA, total particulates not otherwise regulated)
OSHA (PEL) 5 mg/m^3 (TWA, respirable particulates not otherwise regulated)

NIOSH (REL): 10 mg/m^3 (TWA, total particulates not otherwise regulated, 8 h)
NIOSH (REL): 5 mg/m^3 (TWA, respirable particulates not otherwise regulated)

Engineering Controls: Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

Personal Protection: In accordance with OSHA 29 CFR 1910.132, subpart I, wear appropriate Personal Protective Equipment (PPE) to minimize exposure to this material.

Respiratory Protection: If workplace conditions warrant a respirator, a respiratory protection program that meets OSHA 29CFR 1910.134 must be followed. Refer to NIOSH 42 CFR 84 for applicable certified respirators.

Eye/Face Protection: Wear splash resistant safety goggles with a face shield. An eye wash station should be readily available near areas of use.

Skin and Body Protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Chemical-resistant gloves should be worn at all times when handling chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

Descriptive Properties:

Appearance (physical state, color, etc.):	amorphous powder
Molecular Formula:	not applicable
Molar Mass (g/mol):	not applicable
Odor:	not available
Odor threshold:	not available
pH:	not available
Evaporation rate:	not applicable
Melting point/freezing point (°C):	not available
Specific Gravity (water=1)	not available
Vapor Pressure (mmHg):	not applicable
Vapor Density (air = 1):	not applicable
Viscosity (cP):	not applicable
Solubility(ies):	not available
Partition coefficient (n-octanol/water):	not available
Particle Size:	<150 µm

Thermal Stability Properties:

Autoignition Temperature (°C):	not available
Thermal Decomposition (°C):	not available
Initial boiling point and boiling range (°C):	not available
Explosive Limits, LEL (Volume %):	not available
Explosive Limits, UEL (Volume %):	not available
Flash Point (°C):	not available
Flammability (solid, gas):	not available

10. STABILITY AND REACTIVITY

Reactivity: Stable at normal temperatures and pressure.

Stability: X Stable _____ Unstable

Possible Hazardous Reactions: None listed.

Conditions to Avoid: Avoid generating dust.

Incompatible Materials: None listed.

Fire/Explosion Information: See Section 5, "Fire Fighting Measures".

Hazardous Decomposition: Thermal decomposition will produce oxides of carbon.

Hazardous Polymerization: _____ Will Occur X Will Not Occur

11. TOXICOLOGICAL INFORMATION

Route of Exposure: __X__ Inhalation __X__ Skin _____ Ingestion

Symptoms Related to the Physical, Chemical and Toxicological Characteristics: Generated dust may cause irritation if inhaled.

Potential Health Effects (Acute, Chronic and Delayed):

Inhalation: Generated dust may cause irritation.

Skin Contact: May cause mechanical irritation.

Eye Contact: May cause mechanical irritation.

Ingestion: No data available.

Numerical Measures of Toxicity:

Acute Toxicity: Not classified; no data available.

Skin Corrosion/Irritation: Not classified; no data available.

Serious Eye damage/ Eye irritation: Not classified; no data available.

Respiratory Sensitization: Not classified; no data available.

Skin Sensitization: Not classified; no data available.

Germ Cell Mutagenicity: Not classified; no data available.

Carcinogenicity: Not classified.

Listed as a Carcinogen/Potential Carcinogen _____ Yes __X__ No
Marine sediment is not listed by NTP, IARC or OSHA as a carcinogen.

Reproductive Toxicity: Not classified; no data available.

Specific Target Organ Toxicity, Single Exposure: Not classified; no data available.

Specific Target Organ Toxicity, Repeated Exposure: Not classified; no data available.

Aspiration Hazard: Not classified; no data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Data: No data available.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other Adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of waste in accordance with all applicable federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT and IATA: Not regulated by DOT or IATA.

15. REGULATORY INFORMATION

U.S. Regulations:

CERCLA Sections 102a/103 (40 CFR 302.4): Not regulated.

SARA Title III Section 302 (40 CFR 355.30): Not regulated.

SARA Title III Section 304 (40 CFR 355.40): Not regulated.

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21):

ACUTE HEALTH:	No.
CHRONIC HEALTH:	No.
FIRE:	No.
REACTIVE:	No.
PRESSURE:	No.

State Regulations:
California Proposition 65: Not listed.

U.S. TSCA Inventory: Not listed.

TSCA 12(b), Export Notification: Not listed.

Canadian Regulations:
WHMIS Information: Not provided for this material.

16. OTHER INFORMATION

Issue Date: 31 March 2014

Sources: 29 CFR Occupational Health and Safety Office (OSHA) 1910.1000, *Limits for Air Contaminants*, Table Z-1; available at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9992 (accessed Mar 2014).

Center for Disease Control (CDC) NIOSH Pocket Guide to Chemical Hazards, *Particulates not otherwise regulated*; available at http://www.cdc.gov/niosh/npg/npgd0480.html (accessed Mar 2014).

Key of Acronyms:

ACGIH	American Conference of Governmental Industrial Hygienists	NRC	Nuclear Regulatory Commission
ALI	Annual Limit on Intake	NTP	National Toxicology Program
CAS	Chemical Abstracts Service	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
CFR	Code of Federal Regulations	RCRA	Resource Conservation and Recovery Act
DOT	Department of Transportation	REL	Recommended Exposure Limit
EC50	Effective Concentration, 50 %	RM	Reference Material
EINECS	European Inventory of Existing Commercial Chemical Substances	RQ	Reportable Quantity
EPCRA	Emergency Planning and Community Right-to-Know Act	RTECS	Registry of Toxic Effects of Chemical Substances
IARC	International Agency for Research on Cancer	SARA	Superfund Amendments and Reauthorization Act
IATA	International Air Transportation Agency	SCBA	Self-Contained Breathing Apparatus
IDLH	Immediately Dangerous to Life and Health	SRM	Standard Reference Material
LC50	Lethal Concentration, 50 %	STEL	Short Term Exposure Limit
LD50	Lethal Dose, 50 %	TLV	Threshold Limit Value
LEL	Lower Explosive Limit	TPQ	Threshold Planning Quantity
MSDS	Material Safety Data Sheet	TSCA	Toxic Substances Control Act
NFPA	National Fire Protection Association	TWA	Time Weighted Average
NIOSH	National Institute for Occupational Safety and Health	UEL	Upper Explosive Limit
NIST	National Institute of Standards and Technology	WHMIS	Workplace Hazardous Materials Information System

Disclaimer: Physical and chemical data contained in this SDS are provided only for use in assessing the hazardous nature of the material. The SDS was prepared carefully, using current references; however, NIST does not certify the data in the SDS. The certified values for this material are given in the NIST Certificate of Analysis.

Users of this SRM should ensure that the SDS in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail srminfo@nist.gov; Internet at http://www.nist.gov/srm.

Bill to:	68455	Ship to:	68456
	DAVE MITCHELL ANALYTICAL RESOURCES INC 4611 S 134TH PLACE SUITE 100 TUKWILA, WA 98168-3240 1 (206)695-6205		DAVE MITCHELL ANALYTICAL RESOURCES INC 4611 S 134TH PLACE SUITE 100 TUKWILA, WA 98168-3240 1 (206)695-6205

Ship via	UPS Ground	Description		Ship from	
Salesmen	MCMIDM2	Instructions		Blanket	
Contact	DAVE MITCHELL	Pro#		Truck#	

Order discrepancies (other than back ordered items) must be reported to our Customer Relations Department at 301-975-6776 within 5 days of receipt of shipment or this order will be considered complete. NIST SRMs/RMs are generally not returnable - with the exception of defective goods or shipments made in error by NIST. To return a SRM/RM, please call for instructions and a Return SRM/RM Authorization Number before shipment. Returns WILL NOT BE ACCEPTED without prior authorization.

Order	UOM	Ship	UOM	B/O	UOM	Item	Description
1	EACH	1	EACH	0	EACH	1941B	Organics in Marine Sediment
						Total qty:	1 / EACH
							NOT FOR HUMAN CONSUMPTION, LABORATORY USE ONLY.

9/21/16
04:04 PM

1700101

Picked by	
Packed by	
# of pieces	
Weight	

MP Biomedicals, LLC

29525 Fountain Parkway
Solon, Ohio 44139

Telephone: 440/337-1200
Toll Free: 800/854-0530

Fax: 440/337-1180
web: www.mpbio.com

Certificate of Analysis

Product Description: Microcrystalline Cellulose Powder_
Catalog Number: 191499_
Lot: Q9483_

Formula: $(C_6H_{10}O_5)n$	**Formula Weight:** N/A
CAS #: 9004-34-6	**Storage:** 15 - 30°C
Physical Description: White Powder	

Test	Specification	Result
Identity Test	Passes	Passes
Purity	97.0 - 102.0%	97.0 - 102.0%
Moisture	<5.0%	3.4%
Particle Size/Mesh +60 mesh +200 mesh	Wt % <8% >45%	 <1% 55%
pH	5 - 7	6.73
Residue on Ignition	<0.05%	<0.05%
Water Soluble Substances	<12.0 mg/5 g	4.5 mg/5 g
Heavy Metals	<10 ppm	<10 ppm

H001822
Microcrystalline Cellulose Powder (TOC)
Expires 11/30/2022
Prepared By Casey English 2/22/2019

Identification A & B: Passes
Bulk Density: 0.29 g/ml
Bulk Density (graduated cylinder): 0.31 g/ml
Conductivity: 18 µS/cm
Starch: Negative
Ether Soluble Substances: 0.01%
Total Aerobic microbial Count: 100 cfu/g
Total Mold and Yeast Count: 20 cfu/g
Staphylococcus aureus: Absent/1 g
Pseudomonas aeruginosa: Absent/1 g
E. coli: Absent/1 g
Salmonella: Absent/10 g
Particle size:

- 450 mesh: 77%
- d10: 37 um
- d50: 139 um
- d90: 271 um

TUP: <9/600 cm^2
Degree of brightness: >88%
Powder flow-angle of repose: <42°
Recommended Retest Date: 11/30/2022

07/26/2018 - *John Huang, PhD*
MP Biomedicals, LLC.
Quality Control Manager

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PREPARATION BATCH SUMMARY

ASTM D2216

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0399 Batch Matrix: Solid
Preparation: No Prep-Organics

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1045	23A0420-01		02/08/23 12:12	
LDW23-IT1051	23A0420-04		02/08/23 12:12	
LDW23-SC1004	23A0420-08		02/08/23 12:12	

HOLDING TIME SUMMARY

Analysis: ASTM D2216

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1045 23A0420-01	01/19/23 08:10	01/19/23 15:55	02/08/23 12:12	20	180	02/09/23 05:08	21	180	
LDW23-IT1051 23A0420-04	01/19/23 09:55	01/19/23 15:55	02/08/23 12:12	20	180	02/09/23 05:08	21	180	
LDW23-SC1004 23A0420-08	01/19/23 11:55	01/19/23 15:55	02/08/23 12:12	20	180	02/09/23 05:08	21	180	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

ASTM D2216

Laboratory: Analytical Resources, LLC
SDG: 23A0420
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument:

Analyte	MDL	RL	Units
Total Solids		0.01	%

TOTAL SOLIDS BENCHSHEET							Batch:	BLB0154
Method: PSEP 1986							Date:	2/7/2023 10:16
(dry at 103-105 C)							Analyst:	YL
Instrumentation							Drying Oven:	15
							Analytical Balance:	B146462614

Batch drying time						
Record times as mm/dd/yy hh:mm			Oven Temp, C	TS (%) calculated as:	Oven Temps, °C	
Date/time in oven:	2/14/2023 13:35		106	Final dry wt (g) = (Dry Wt - Tare Wt)	Start Temp:	106
Date/time out:	2/15/2023 9:34		106	TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)	End Temp:	106
Elapsed hrs:	20.0					

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23A0420-01	0.8400	12.6300	7.2900	6.45	**54.71%**	Yes
23A0420-02	0.8300	12.3500	7.0000	6.17	**53.56%**	Yes
23A0420-03	0.8200	12.3500	7.2700	6.45	**55.94%**	Yes
23A0420-04	0.7900	12.0200	8.7100	7.92	**70.53%**	Yes
23A0420-05	0.7900	12.5300	7.2100	6.42	**54.68%**	Yes
23A0420-06	0.7800	12.4500	7.4600	6.68	**57.24%**	Yes
23A0420-07	0.8500	12.1400	6.6400	5.79	**51.28%**	Yes
23A0420-08	0.8100	12.0800	7.5600	6.75	**59.89%**	Yes
23A0420-09	0.8100	11.9200	7.3500	6.54	**58.87%**	Yes

Done

TOTAL SOLIDS BENCHSHEET

Method: PSEP 1986

(dry at 103-105 C)

Batch:	BLB0154
Date:	2/7/2023 10:16
Analyst:	LE 2/9/23 ~~MC ER~~ MC 2/14/23
Drying Oven:	Φ15
Analytical Balance:	Bi4646614

Instrumentation

Batch drying time

Record times as mm/dd/yy hh:mm

Date/time in oven:	~~2/10/23~~ 2/14/23	13:35	106
Date/time out:	2/15/23	9:34	
Elapsed hrs:	0.0		

Oven Temp, C

TS (%) calculated as:

Final dry wt (g) = (Dry Wt - Tare Wt)

TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)

Oven Temps, °C	
Start Temp:	106
End Temp:	106

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23A0420-01	0.74	12.63	7.29			No ~~Yes~~
23A0420-02	0.83	12.35	7.00			No ~~Yes~~
23A0420-03	0.82	12.35	7.27			No ~~Yes~~
23A0420-04	0.79	12.02	8.71			No ~~Yes~~
23A0420-05	0.79	12.53	7.21			No ~~Yes~~
23A0420-06	0.78	12.45	7.46			No ~~Yes~~
23A0420-07	0.75	12.14	6.64			No ~~Yes~~
23A0420-08	0.81	12.08	7.56			No ~~Yes~~
23A0420-09	0.81	11.92	7.35			No ~~Yes~~

T/S + Screens

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